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|  <b>MOTOROLA SOLUTIONS</b> | <br><b>MS ISO/IEC 17025<br/>TESTING<br/>SAMM No.0826</b> |
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**DECLARATION OF COMPLIANCE: MPE ASSESSMENT Report Part 3 of 3**

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| <b>Motorola Solutions<br/>EME Test Laboratory</b><br>Motorola Solutions Malaysia Sdn Bhd (Innoplex)<br>Plot 2A, Medan Bayan Lepas,<br>Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia. | <b>Date of Report:</b> 9/27/2018<br><b>Report Revision:</b> A |
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| <b>Responsible Engineer:</b>    | Saw Sun Hock (EME Engineer)  |
| <b>Report author:</b>           | Saw Sun Hock (EME Engineer)  |
| <b>Date(s) Tested:</b>          | 2/17/2017-3/17/2017; 7/27/2018-9/26/2018   |
| <b>Manufacturer:</b>            | Futurecom Systems Group  |
| <b>Date submitted for test:</b> | 01/13/2017   |
| <b>DUT Description:</b>         | DVR 800 (806 - 870 MHz), Digital Vehicular Repeater<br>Companion Mobile: APX8500 HP mobile All Bands (VHF, UHF, 7/800)   |
| <b>Test TX mode(s):</b>         | CW (for FM), 802.11 b/g/n (for WLAN)   |
| <b>Max. Power output:</b>       | <b>DVR:</b> 10W (100% duty cycle)<br><b>Companion Mobile:</b> 50% duty cycle, PTT with below maximum output power<br>120W (136-174 MHz), 120W (380-484 MHz), 48W (485-512 MHz), 30W (512-520 MHz),<br>36W (764-805 MHz), 42W (806-870 MHz); 63.1 mW (WLAN 2.4 GHz 802.11b),<br>25 mW (WLAN 2.4 GHz 802.11g/n) ; 31.6 mW (WLAN 5 GHz 802.11 a/n/ac) |
| <b>TX Frequency Bands:</b>      | <b>DVR:</b> 806-825 MHz, 851-870 MHz<br><b>Companion Mobile:</b><br>136-174 MHz; 380-520 MHz; 764-805 MHz; 806-870 MHz; WLAN 2400-2483.5 MHz;<br>WLAN 5180-5825 MHz  |
| <b>Signaling type:</b>          | FM, TDMA, 802.11b/g/n (WLAN 2.4 GHz), 802.11 a/n/ac (WLAN 5 GHz)   |
| <b>Model(s) Tested:</b>         | <b>DVR:</b> MOBEXCOM DVRS 800 (DQPM DVRS8000P)<br><b>Companion Mobile:</b> M37T XS9PW1AN (HUW1001A)  |
| <b>Model(s) Certified:</b>      | MOBEXCOM DVRS 800 (DQPM DVRS8000P)   |
| <b>Serial Number(s):</b>        | 17010530 (DVR) , 681P3A0098 & 681P3A0116 (Companion Mobile)  |
| <b>Classification:</b>          | Occupational/Controlled Environment  |
| <b>FCC ID:</b>                  | <b>DVR:</b> LO6-DVRS800<br>806-824 MHz, 851-869 MHz<br><b>Companion Mobile:</b> AZ492FT7118<br>150.8-173.4 MHz, 406.1-512 MHz, 769-775 MHz, 799-824 MHz, 851-869 MHz, 2412-2462 MHz, 5180-5825 MHz   |

The MPE results clearly demonstrate compliance with FCC Occupational/Controlled RF Exposure limits. FCC rules require compliance for Passengers and Bystanders to the FCC General Population/Uncontrolled limits.

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 3.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc. EME Laboratory. I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. This reporting format is consistent with the suggested guidelines of the TIA TSB-159 April 2006. The results and statements contained in this report pertain only to the device(s) evaluated herein.

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| <br><b>Tiong Nguk Ing</b><br>Deputy Technical Manager (Approved Signatory)<br>Approval Date: 10/31/2018 |  |
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**Appendix I – MPE Measurement Results for DVR 800**

**Table I.1**  
**DVR 800 - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | (5) Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|---------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |               | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |               | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0000      | 10.00       | 10.00           | CW        | E           | 1.16              | BS1           | 0.001                    | 0.001 | 0.001 | 0.002 | 0.002  | 0.002  | 0.004  | 0.008  | 0.010  | 0.012  | 1.0                | 0.004                   | 0.005               | 0.005                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 815.0000      | 10.00       | 9.95            | CW        | E           | 1.15              | BS1           | 0.001                    | 0.002 | 0.002 | 0.001 | 0.002  | 0.003  | 0.006  | 0.006  | 0.012  | 0.013  | 1.0                | 0.005                   | 0.006               | 0.006                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 824.0000      | 10.00       | 9.85            | CW        | E           | 1.14              | BS1           | 0.001                    | 0.001 | 0.001 | 0.001 | 0.002  | 0.003  | 0.007  | 0.007  | 0.008  | 0.009  | 1.0                | 0.004                   | 0.005               | 0.005                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0000      | 10.00       | 9.91            | CW        | E           | 1.11              | BS1           | 0.001                    | 0.002 | 0.001 | 0.002 | 0.002  | 0.002  | 0.004  | 0.007  | 0.007  | 0.009  | 1.0                | 0.004                   | 0.004               | 0.004                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 860.0000      | 10.00       | 10.00           | CW        | E           | 1.10              | BS1           | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.002  | 0.003  | 0.003  | 0.008  | 0.006  | 1.0                | 0.003                   | 0.003               | 0.003                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 869.0000      | 10.00       | 10.00           | CW        | E           | 1.09              | BS1           | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.004  | 0.004  | 0.004  | 0.007  | 0.006  | 1.0                | 0.003                   | 0.004               | 0.004                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0000      | 10.00       | 10.00           | CW        | E           | 1.16              | BS2           | 0.002                    | 0.002 | 0.003 | 0.006 | 0.009  | 0.012  | 0.023  | 0.025  | 0.028  | 0.018  | 1.0                | 0.013                   | 0.015               | 0.015                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 815.0000      | 10.00       | 9.95            | CW        | E           | 1.15              | BS2           | 0.002                    | 0.002 | 0.003 | 0.003 | 0.007  | 0.012  | 0.025  | 0.026  | 0.027  | 0.029  | 1.0                | 0.014                   | 0.016               | 0.016                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 824.0000      | 10.00       | 9.85            | CW        | E           | 1.14              | BS2           | 0.002                    | 0.002 | 0.002 | 0.003 | 0.005  | 0.007  | 0.020  | 0.022  | 0.022  | 0.018  | 1.0                | 0.010                   | 0.012               | 0.012                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0000      | 10.00       | 9.91            | CW        | E           | 1.11              | BS2           | 0.003                    | 0.004 | 0.004 | 0.008 | 0.009  | 0.013  | 0.020  | 0.027  | 0.029  | 0.018  | 1.0                | 0.014                   | 0.015               | 0.015                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 860.0000      | 10.00       | 10.00           | CW        | E           | 1.10              | BS2           | 0.002                    | 0.003 | 0.003 | 0.006 | 0.007  | 0.010  | 0.015  | 0.020  | 0.022  | 0.024  | 1.0                | 0.011                   | 0.012               | 0.012                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 869.0000      | 10.00       | 10.00           | CW        | E           | 1.09              | BS2           | 0.002                    | 0.002 | 0.002 | 0.005 | 0.005  | 0.008  | 0.013  | 0.018  | 0.020  | 0.023  | 1.0                | 0.010                   | 0.011               | 0.011                   |

MPE calculations are defined in section 15.0.

**Table I.1 (Continued)**  
**DVR 800 - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | (5) Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|---------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |               | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |               | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0000      | 10.00       | 10.00           | CW        | E           | 1.16              | BS3           | 0.001                    | 0.001 | 0.002 | 0.004 | 0.008  | 0.011  | 0.022  | 0.025  | 0.025  | 0.022  | 1.0                | 0.012                                | 0.014                            | 0.014                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 815.0000      | 10.00       | 9.95            | CW        | E           | 1.15              | BS3           | 0.001                    | 0.003 | 0.005 | 0.005 | 0.009  | 0.012  | 0.026  | 0.027  | 0.031  | 0.023  | 1.0                | 0.014                                | 0.016                            | 0.016                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 824.0000      | 10.00       | 9.85            | CW        | E           | 1.14              | BS3           | 0.001                    | 0.002 | 0.004 | 0.006 | 0.011  | 0.020  | 0.020  | 0.027  | 0.027  | 0.018  | 1.0                | 0.014                                | 0.016                            | 0.016                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0000      | 10.00       | 9.91            | CW        | E           | 1.11              | BS3           | 0.002                    | 0.003 | 0.006 | 0.008 | 0.016  | 0.018  | 0.020  | 0.030  | 0.021  | 0.019  | 1.0                | 0.014                                | 0.016                            | 0.016                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 860.0000      | 10.00       | 10.00           | CW        | E           | 1.10              | BS3           | 0.002                    | 0.003 | 0.006 | 0.005 | 0.008  | 0.011  | 0.018  | 0.027  | 0.020  | 0.013  | 1.0                | 0.011                                | 0.012                            | 0.012                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 869.0000      | 10.00       | 10.00           | CW        | E           | 1.09              | BS3           | 0.001                    | 0.003 | 0.004 | 0.006 | 0.008  | 0.012  | 0.016  | 0.024  | 0.022  | 0.010  | 1.0                | 0.011                                | 0.012                            | 0.012                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0000      | 10.00       | 10.00           | CW        | E           | 1.16              | BS4           | 0.003                    | 0.005 | 0.008 | 0.012 | 0.017  | 0.020  | 0.022  | 0.026  | 0.025  | 0.022  | 1.0                | 0.016                                | 0.019                            | 0.019                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 815.0000      | 10.00       | 9.95            | CW        | E           | 1.15              | BS4           | 0.003                    | 0.006 | 0.010 | 0.016 | 0.027  | 0.033  | 0.023  | 0.038  | 0.026  | 0.023  | 1.0                | 0.021                                | 0.024                            | 0.024                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 824.0000      | 10.00       | 9.85            | CW        | E           | 1.14              | BS4           | 0.003                    | 0.006 | 0.008 | 0.016 | 0.024  | 0.030  | 0.022  | 0.032  | 0.030  | 0.021  | 1.0                | 0.019                                | 0.022                            | 0.022                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0000      | 10.00       | 9.91            | CW        | E           | 1.11              | BS4           | 0.004                    | 0.009 | 0.012 | 0.022 | 0.032  | 0.033  | 0.030  | 0.039  | 0.041  | 0.026  | 1.0                | 0.025                                | 0.028                            | 0.028                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 860.0000      | 10.00       | 10.00           | CW        | E           | 1.10              | BS4           | 0.004                    | 0.007 | 0.010 | 0.009 | 0.011  | 0.014  | 0.019  | 0.032  | 0.027  | 0.028  | 1.0                | 0.016                                | 0.018                            | 0.018                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 869.0000      | 10.00       | 10.00           | CW        | E           | 1.09              | BS4           | 0.005                    | 0.007 | 0.007 | 0.008 | 0.014  | 0.022  | 0.026  | 0.033  | 0.030  | 0.024  | 1.0                | 0.018                                | 0.019                            | 0.019                                |

MPE calculations are defined in section 15.0.

**Table I.1 (Continued)**  
**DVR 800 - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | <sup>(5)</sup> Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|--------------------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |                          | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |                          | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0000      | 10.00       | 10.00           | CW        | E           | 1.16              | BS5                      | 0.003                    | 0.003 | 0.007 | 0.012 | 0.014  | 0.015  | 0.016  | 0.023  | 0.022  | 0.026  | 1.0                | 0.014                                | 0.016                            | 0.016                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 815.0000      | 10.00       | 9.95            | CW        | E           | 1.15              | BS5                      | 0.004                    | 0.004 | 0.010 | 0.012 | 0.013  | 0.015  | 0.020  | 0.018  | 0.022  | 0.022  | 1.0                | 0.014                                | 0.016                            | 0.016                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 824.0000      | 10.00       | 9.85            | CW        | E           | 1.14              | BS5                      | 0.003                    | 0.004 | 0.006 | 0.007 | 0.007  | 0.013  | 0.011  | 0.019  | 0.018  | 0.015  | 1.0                | 0.010                                | 0.012                            | 0.012                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0000      | 10.00       | 9.91            | CW        | E           | 1.11              | BS5                      | 0.003                    | 0.004 | 0.008 | 0.012 | 0.012  | 0.015  | 0.011  | 0.018  | 0.019  | 0.014  | 1.0                | 0.012                                | 0.013                            | 0.013                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 860.0000      | 10.00       | 10.00           | CW        | E           | 1.10              | BS5                      | 0.002                    | 0.003 | 0.003 | 0.007 | 0.010  | 0.011  | 0.008  | 0.014  | 0.015  | 0.011  | 1.0                | 0.008                                | 0.009                            | 0.009                                |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 869.0000      | 10.00       | 10.00           | CW        | E           | 1.09              | BS5                      | 0.001                    | 0.003 | 0.006 | 0.008 | 0.012  | 0.011  | 0.010  | 0.017  | 0.012  | 0.010  | 1.0                | 0.009                                | 0.010                            | 0.010                                |

MPE calculations are defined in section 15.0.

**Table I.2**  
**DVR 800 - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |                          | MPE Measurement                   |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|--------------------------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | <sup>(5)</sup> Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |                          | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0000      | 10.00       | 10.00           | CW        | E           | 1.16              | PB                       | 0.064                             | 0.053             | 0.027                   | 1.0                | 0.048                   | 0.056               | 0.056                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 815.0000      | 10.00       | 9.95            | CW        | E           | 1.15              | PB                       | 0.069                             | 0.049             | 0.038                   | 1.0                | 0.052                   | 0.060               | 0.060                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 824.0000      | 10.00       | 9.85            | CW        | E           | 1.14              | PB                       | 0.048                             | 0.042             | 0.034                   | 1.0                | 0.041                   | 0.047               | 0.048                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0000      | 10.00       | 9.91            | CW        | E           | 1.11              | PB                       | 0.058                             | 0.032             | 0.03                    | 1.0                | 0.040                   | 0.044               | 0.045                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 860.0000      | 10.00       | 10.00           | CW        | E           | 1.10              | PB                       | 0.044                             | 0.03              | 0.032                   | 1.0                | 0.035                   | 0.039               | 0.039                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 869.0000      | 10.00       | 10.00           | CW        | E           | 1.09              | PB                       | 0.028                             | 0.021             | 0.015                   | 1.0                | 0.021                   | 0.023               | 0.023                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0000      | 10.00       | 10.00           | CW        | E           | 1.16              | PF                       | 0.022                             | 0.026             | 0.018                   | 1.0                | 0.022                   | 0.026               | 0.026                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 815.0000      | 10.00       | 9.95            | CW        | E           | 1.15              | PF                       | 0.025                             | 0.027             | 0.016                   | 1.0                | 0.023                   | 0.026               | 0.026                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 824.0000      | 10.00       | 9.85            | CW        | E           | 1.14              | PF                       | 0.020                             | 0.027             | 0.015                   | 1.0                | 0.021                   | 0.024               | 0.024                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0000      | 10.00       | 9.91            | CW        | E           | 1.11              | PF                       | 0.046                             | 0.021             | 0.017                   | 1.0                | 0.028                   | 0.031               | 0.031                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 860.0000      | 10.00       | 10.00           | CW        | E           | 1.10              | PF                       | 0.049                             | 0.019             | 0.009                   | 1.0                | 0.026                   | 0.028               | 0.028                   |
| Trunk        | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 869.0000      | 10.00       | 10.00           | CW        | E           | 1.09              | PF                       | 0.048                             | 0.035             | 0.010                   | 1.0                | 0.031                   | 0.034               | 0.034                   |

MPE calculations are defined in section 15.0.

**Appendix J – MPE Measurement Results for LMR VHF**

**Table J.1**

**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS1       | 0.146                    | 0.158 | 0.187 | 0.178 | 0.154  | 0.148  | 0.161  | 0.140  | 0.144  | 0.163  | 0.5                | 0.155                   | 0.077               | 0.087                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS1       | 0.171                    | 0.258 | 0.285 | 0.252 | 0.196  | 0.195  | 0.213  | 0.229  | 0.220  | 0.191  | 0.5                | 0.217                   | 0.108               | 0.110                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.196                    | 0.245 | 0.230 | 0.183 | 0.142  | 0.139  | 0.143  | 0.133  | 0.118  | 0.103  | 0.5                | 0.160                   | 0.080               | 0.082                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS1       | 0.211                    | 0.255 | 0.239 | 0.185 | 0.152  | 0.155  | 0.164  | 0.162  | 0.143  | 0.125  | 0.5                | 0.176                   | 0.088               | 0.091                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.167                    | 0.196 | 0.168 | 0.117 | 0.092  | 0.099  | 0.113  | 0.118  | 0.127  | 0.143  | 0.5                | 0.130                   | 0.065               | 0.066                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.089                    | 0.100 | 0.081 | 0.054 | 0.050  | 0.062  | 0.078  | 0.094  | 0.113  | 0.146  | 0.5                | 0.084                   | 0.042               | 0.042                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS2       | 0.069                    | 0.133 | 0.144 | 0.155 | 0.144  | 0.139  | 0.143  | 0.152  | 0.151  | 0.137  | 0.5                | 0.134                   | 0.067               | 0.075                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS2       | 0.173                    | 0.261 | 0.318 | 0.332 | 0.316  | 0.312  | 0.316  | 0.320  | 0.304  | 0.272  | 0.5                | 0.287                   | 0.143               | 0.146                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.166                    | 0.247 | 0.288 | 0.285 | 0.262  | 0.243  | 0.250  | 0.244  | 0.234  | 0.215  | 0.5                | 0.239                   | 0.119               | 0.122                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS2       | 0.172                    | 0.263 | 0.297 | 0.284 | 0.257  | 0.254  | 0.257  | 0.250  | 0.228  | 0.197  | 0.5                | 0.241                   | 0.120               | 0.125                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.136                    | 0.199 | 0.213 | 0.194 | 0.179  | 0.178  | 0.186  | 0.175  | 0.161  | 0.147  | 0.5                | 0.171                   | 0.086               | 0.086                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.095                    | 0.137 | 0.154 | 0.148 | 0.148  | 0.175  | 0.189  | 0.187  | 0.176  | 0.158  | 0.5                | 0.152                   | 0.076               | 0.077                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS3       | 0.050                    | 0.084 | 0.114 | 0.130 | 0.128  | 0.121  | 0.117  | 0.116  | 0.115  | 0.112  | 0.5                | 0.107                                | 0.053                            | 0.060                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS3       | 0.083                    | 0.123 | 0.157 | 0.164 | 0.162  | 0.155  | 0.156  | 0.165  | 0.168  | 0.162  | 0.5                | 0.147                                | 0.073                            | 0.074                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.084                    | 0.127 | 0.156 | 0.163 | 0.161  | 0.156  | 0.156  | 0.159  | 0.152  | 0.135  | 0.5                | 0.142                                | 0.071                            | 0.073                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS3       | 0.125                    | 0.166 | 0.196 | 0.203 | 0.209  | 0.214  | 0.224  | 0.229  | 0.215  | 0.198  | 0.5                | 0.194                                | 0.097                            | 0.100                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.084                    | 0.106 | 0.121 | 0.128 | 0.134  | 0.140  | 0.145  | 0.141  | 0.132  | 0.124  | 0.5                | 0.122                                | 0.061                            | 0.061                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.077                    | 0.111 | 0.142 | 0.160 | 0.173  | 0.176  | 0.178  | 0.175  | 0.168  | 0.162  | 0.5                | 0.148                                | 0.074                            | 0.074                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS4       | 0.026                    | 0.044 | 0.059 | 0.068 | 0.065  | 0.064  | 0.060  | 0.056  | 0.054  | 0.051  | 0.5                | 0.054                                | 0.027                            | 0.030                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS4       | 0.037                    | 0.059 | 0.074 | 0.082 | 0.081  | 0.080  | 0.079  | 0.080  | 0.081  | 0.084  | 0.5                | 0.072                                | 0.036                            | 0.037                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.059                    | 0.091 | 0.120 | 0.132 | 0.130  | 0.127  | 0.121  | 0.117  | 0.107  | 0.093  | 0.5                | 0.108                                | 0.054                            | 0.055                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS4       | 0.060                    | 0.089 | 0.113 | 0.128 | 0.131  | 0.127  | 0.133  | 0.135  | 0.133  | 0.128  | 0.5                | 0.115                                | 0.058                            | 0.060                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.061                    | 0.093 | 0.117 | 0.123 | 0.119  | 0.113  | 0.107  | 0.098  | 0.091  | 0.079  | 0.5                | 0.097                                | 0.049                            | 0.049                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.071                    | 0.103 | 0.121 | 0.127 | 0.115  | 0.108  | 0.096  | 0.086  | 0.075  | 0.067  | 0.5                | 0.094                                | 0.047                            | 0.047                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS5       | 0.023                    | 0.038 | 0.046 | 0.047 | 0.042  | 0.038  | 0.035  | 0.036  | 0.039  | 0.040  | 0.5                | 0.038                   | 0.019               | 0.021                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS5       | 0.024                    | 0.038 | 0.044 | 0.042 | 0.038  | 0.039  | 0.043  | 0.050  | 0.058  | 0.064  | 0.5                | 0.043                   | 0.022               | 0.022                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS5       | 0.050                    | 0.070 | 0.076 | 0.069 | 0.063  | 0.058  | 0.063  | 0.066  | 0.071  | 0.070  | 0.5                | 0.064                   | 0.032               | 0.033                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS5       | 0.049                    | 0.070 | 0.079 | 0.077 | 0.075  | 0.076  | 0.085  | 0.092  | 0.098  | 0.100  | 0.5                | 0.078                   | 0.039               | 0.041                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.063                    | 0.085 | 0.099 | 0.097 | 0.110  | 0.112  | 0.114  | 0.108  | 0.094  | 0.079  | 0.5                | 0.093                   | 0.047               | 0.047                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.048                    | 0.061 | 0.063 | 0.058 | 0.056  | 0.057  | 0.060  | 0.058  | 0.054  | 0.043  | 0.5                | 0.054                   | 0.027               | 0.027                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS1       | 0.035                    | 0.062 | 0.069 | 0.059 | 0.039  | 0.052  | 0.102  | 0.173  | 0.242  | 0.294  | 0.5                | 0.110                   | 0.055               | 0.062                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS1       | 0.039                    | 0.066 | 0.065 | 0.047 | 0.041  | 0.068  | 0.129  | 0.198  | 0.255  | 0.286  | 0.5                | 0.117                   | 0.059               | 0.059                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.056                    | 0.087 | 0.084 | 0.058 | 0.049  | 0.076  | 0.138  | 0.212  | 0.273  | 0.315  | 0.5                | 0.132                   | 0.066               | 0.068                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS1       | 0.085                    | 0.115 | 0.105 | 0.067 | 0.049  | 0.078  | 0.140  | 0.203  | 0.254  | 0.297  | 0.5                | 0.137                   | 0.068               | 0.071                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.059                    | 0.065 | 0.047 | 0.025 | 0.036  | 0.084  | 0.146  | 0.202  | 0.256  | 0.301  | 0.5                | 0.118                   | 0.059               | 0.060                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.080                    | 0.098 | 0.074 | 0.052 | 0.062  | 0.110  | 0.179  | 0.246  | 0.305  | 0.360  | 0.5                | 0.152                   | 0.076               | 0.077                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                         |                     |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS2       | 0.034                    | 0.063 | 0.078 | 0.073 | 0.061  | 0.059  | 0.076  | 0.112  | 0.150  | 0.173  | 0.5 | 0.086              | 0.043                   | 0.048               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS2       | 0.039                    | 0.071 | 0.089 | 0.087 | 0.082  | 0.088  | 0.110  | 0.149  | 0.175  | 0.207  | 0.5 | 0.108              | 0.054                   | 0.055               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.063                    | 0.095 | 0.111 | 0.100 | 0.088  | 0.095  | 0.115  | 0.141  | 0.170  | 0.201  | 0.5 | 0.116              | 0.058                   | 0.059               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS2       | 0.074                    | 0.115 | 0.126 | 0.106 | 0.087  | 0.094  | 0.119  | 0.151  | 0.178  | 0.206  | 0.5 | 0.123              | 0.062                   | 0.064               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.055                    | 0.083 | 0.082 | 0.067 | 0.060  | 0.073  | 0.100  | 0.121  | 0.141  | 0.165  | 0.5 | 0.092              | 0.046                   | 0.046               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.063                    | 0.087 | 0.089 | 0.082 | 0.096  | 0.133  | 0.176  | 0.209  | 0.237  | 0.255  | 0.5 | 0.138              | 0.069                   | 0.070               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS3       | 0.030                    | 0.050 | 0.063 | 0.065 | 0.057  | 0.051  | 0.051  | 0.059  | 0.073  | 0.087  | 0.5 | 0.057              | 0.029                   | 0.032               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS3       | 0.036                    | 0.059 | 0.071 | 0.070 | 0.063  | 0.061  | 0.067  | 0.084  | 0.100  | 0.110  | 0.5 | 0.071              | 0.035                   | 0.036               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.035                    | 0.049 | 0.053 | 0.049 | 0.043  | 0.048  | 0.058  | 0.071  | 0.084  | 0.095  | 0.5 | 0.057              | 0.029                   | 0.029               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS3       | 0.042                    | 0.052 | 0.060 | 0.064 | 0.074  | 0.090  | 0.115  | 0.127  | 0.135  | 0.138  | 0.5 | 0.088              | 0.044                   | 0.045               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.051                    | 0.065 | 0.070 | 0.066 | 0.062  | 0.066  | 0.072  | 0.076  | 0.078  | 0.084  | 0.5 | 0.067              | 0.033                   | 0.034               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.044                    | 0.059 | 0.073 | 0.109 | 0.111  | 0.135  | 0.151  | 0.165  | 0.170  | 0.179  | 0.5 | 0.116              | 0.058                   | 0.058               |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                         |                     |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS4       | 0.019                    | 0.028 | 0.035 | 0.037 | 0.034  | 0.033  | 0.033  | 0.034  | 0.035  | 0.038  | 0.5 | 0.032              | 0.016                   | 0.018               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS4       | 0.030                    | 0.045 | 0.054 | 0.059 | 0.059  | 0.059  | 0.062  | 0.063  | 0.065  | 0.063  | 0.5 | 0.055              | 0.027                   | 0.028               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.017                    | 0.025 | 0.031 | 0.032 | 0.031  | 0.031  | 0.028  | 0.031  | 0.031  | 0.030  | 0.5 | 0.028              | 0.014                   | 0.014               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS4       | 0.047                    | 0.065 | 0.080 | 0.088 | 0.092  | 0.094  | 0.096  | 0.095  | 0.093  | 0.090  | 0.5 | 0.082              | 0.041                   | 0.043               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.030                    | 0.041 | 0.047 | 0.047 | 0.041  | 0.037  | 0.033  | 0.031  | 0.030  | 0.031  | 0.5 | 0.036              | 0.018                   | 0.018               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.048                    | 0.070 | 0.081 | 0.083 | 0.081  | 0.077  | 0.075  | 0.069  | 0.067  | 0.070  | 0.5 | 0.070              | 0.035                   | 0.035               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS5       | 0.015                    | 0.020 | 0.020 | 0.018 | 0.015  | 0.015  | 0.021  | 0.030  | 0.039  | 0.047  | 0.5 | 0.024              | 0.012                   | 0.013               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS5       | 0.021                    | 0.030 | 0.032 | 0.030 | 0.029  | 0.034  | 0.044  | 0.050  | 0.057  | 0.060  | 0.5 | 0.038              | 0.019                   | 0.019               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS5       | 0.012                    | 0.015 | 0.014 | 0.013 | 0.014  | 0.017  | 0.022  | 0.027  | 0.030  | 0.029  | 0.5 | 0.019              | 0.009                   | 0.010               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS5       | 0.042                    | 0.055 | 0.057 | 0.052 | 0.049  | 0.052  | 0.060  | 0.067  | 0.072  | 0.073  | 0.5 | 0.057              | 0.028                   | 0.029               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.027                    | 0.031 | 0.031 | 0.030 | 0.030  | 0.034  | 0.038  | 0.038  | 0.038  | 0.035  | 0.5 | 0.032              | 0.016                   | 0.016               |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.041                    | 0.052 | 0.051 | 0.052 | 0.053  | 0.057  | 0.061  | 0.066  | 0.069  | 0.068  | 0.5 | 0.055              | 0.028                   | 0.028               |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS1       | 0.037                    | 0.065 | 0.080 | 0.079 | 0.075  | 0.087  | 0.123  | 0.184  | 0.240  | 0.233  | 0.5                | 0.118                   | 0.059               | 0.066                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS1       | 0.048                    | 0.075 | 0.088 | 0.101 | 0.147  | 0.167  | 0.161  | 0.235  | 0.241  | 0.258  | 0.5                | 0.149                   | 0.075               | 0.075                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.080                    | 0.124 | 0.135 | 0.119 | 0.106  | 0.124  | 0.177  | 0.243  | 0.298  | 0.237  | 0.5                | 0.161                   | 0.081               | 0.083                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS1       | 0.111                    | 0.157 | 0.153 | 0.113 | 0.094  | 0.111  | 0.155  | 0.199  | 0.226  | 0.256  | 0.5                | 0.154                   | 0.077               | 0.080                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.103                    | 0.124 | 0.115 | 0.085 | 0.078  | 0.104  | 0.150  | 0.193  | 0.229  | 0.239  | 0.5                | 0.138                   | 0.069               | 0.069                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.085                    | 0.100 | 0.084 | 0.057 | 0.055  | 0.082  | 0.121  | 0.164  | 0.208  | 0.253  | 0.5                | 0.117                   | 0.059               | 0.059                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS2       | 0.033                    | 0.058 | 0.076 | 0.083 | 0.084  | 0.096  | 0.122  | 0.156  | 0.188  | 0.212  | 0.5                | 0.109                   | 0.054               | 0.061                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS2       | 0.050                    | 0.088 | 0.119 | 0.144 | 0.158  | 0.176  | 0.161  | 0.232  | 0.256  | 0.270  | 0.5                | 0.162                   | 0.081               | 0.082                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.083                    | 0.122 | 0.144 | 0.150 | 0.152  | 0.155  | 0.176  | 0.193  | 0.207  | 0.226  | 0.5                | 0.158                   | 0.079               | 0.081                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS2       | 0.102                    | 0.154 | 0.177 | 0.171 | 0.153  | 0.155  | 0.167  | 0.186  | 0.184  | 0.181  | 0.5                | 0.160                   | 0.080               | 0.083                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.082                    | 0.125 | 0.141 | 0.134 | 0.126  | 0.124  | 0.147  | 0.156  | 0.163  | 0.182  | 0.5                | 0.134                   | 0.067               | 0.067                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.073                    | 0.107 | 0.123 | 0.124 | 0.130  | 0.152  | 0.173  | 0.198  | 0.210  | 0.223  | 0.5                | 0.147                   | 0.073               | 0.074                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                         |                     |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS3       | 0.032                    | 0.047 | 0.061 | 0.070 | 0.074  | 0.081  | 0.093  | 0.104  | 0.119  | 0.128  | 0.5 | 0.079              | 0.040                   | 0.044               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS3       | 0.050                    | 0.080 | 0.101 | 0.111 | 0.111  | 0.119  | 0.130  | 0.146  | 0.159  | 0.168  | 0.5 | 0.115              | 0.058                   | 0.058               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.039                    | 0.056 | 0.065 | 0.068 | 0.072  | 0.081  | 0.094  | 0.107  | 0.118  | 0.121  | 0.5 | 0.080              | 0.040                   | 0.041               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS3       | 0.069                    | 0.088 | 0.101 | 0.119 | 0.129  | 0.149  | 0.172  | 0.185  | 0.186  | 0.182  | 0.5 | 0.135              | 0.068                   | 0.070               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.067                    | 0.082 | 0.092 | 0.096 | 0.103  | 0.115  | 0.125  | 0.130  | 0.129  | 0.128  | 0.5 | 0.103              | 0.052                   | 0.052               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.055                    | 0.079 | 0.102 | 0.124 | 0.143  | 0.165  | 0.177  | 0.183  | 0.188  | 0.186  | 0.5 | 0.136              | 0.068                   | 0.069               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS4       | 0.018                    | 0.030 | 0.039 | 0.045 | 0.049  | 0.050  | 0.052  | 0.059  | 0.060  | 0.062  | 0.5 | 0.045              | 0.023                   | 0.025               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS4       | 0.038                    | 0.056 | 0.074 | 0.082 | 0.085  | 0.088  | 0.089  | 0.089  | 0.089  | 0.084  | 0.5 | 0.076              | 0.038                   | 0.038               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.031                    | 0.046 | 0.058 | 0.060 | 0.061  | 0.061  | 0.058  | 0.061  | 0.061  | 0.058  | 0.5 | 0.054              | 0.027                   | 0.028               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS4       | 0.058                    | 0.082 | 0.102 | 0.116 | 0.126  | 0.130  | 0.137  | 0.132  | 0.126  | 0.118  | 0.5 | 0.110              | 0.055                   | 0.057               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.049                    | 0.069 | 0.085 | 0.092 | 0.089  | 0.085  | 0.081  | 0.076  | 0.069  | 0.058  | 0.5 | 0.073              | 0.037                   | 0.037               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.072                    | 0.104 | 0.125 | 0.131 | 0.128  | 0.119  | 0.109  | 0.100  | 0.091  | 0.083  | 0.5 | 0.103              | 0.052                   | 0.052               |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                         |                     |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS5       | 0.021                    | 0.032 | 0.037 | 0.036 | 0.032  | 0.033  | 0.036  | 0.044  | 0.053  | 0.062  | 0.5 | 0.038              | 0.019                   | 0.021               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS5       | 0.024                    | 0.036 | 0.040 | 0.038 | 0.036  | 0.039  | 0.049  | 0.059  | 0.067  | 0.073  | 0.5 | 0.045              | 0.023                   | 0.023               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS5       | 0.027                    | 0.031 | 0.032 | 0.028 | 0.027  | 0.030  | 0.037  | 0.043  | 0.047  | 0.048  | 0.5 | 0.034              | 0.017                   | 0.018               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS5       | 0.047                    | 0.065 | 0.069 | 0.067 | 0.063  | 0.064  | 0.070  | 0.080  | 0.086  | 0.090  | 0.5 | 0.069              | 0.034                   | 0.036               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.049                    | 0.062 | 0.064 | 0.073 | 0.077  | 0.082  | 0.083  | 0.078  | 0.074  | 0.061  | 0.5 | 0.068              | 0.034                   | 0.034               |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.048                    | 0.062 | 0.063 | 0.061 | 0.060  | 0.065  | 0.068  | 0.068  | 0.063  | 0.054  | 0.5 | 0.059              | 0.030                   | 0.030               |                         |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS1       | 0.117                    | 0.178 | 0.212 | 0.206 | 0.193  | 0.189  | 0.201  | 0.215  | 0.216  | 0.206  | 0.5 | 0.189              | 0.095                   | 0.106               |                         |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS1       | 0.180                    | 0.262 | 0.289 | 0.260 | 0.220  | 0.206  | 0.221  | 0.228  | 0.215  | 0.160  | 0.5 | 0.220              | 0.110                   | 0.111               |                         |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.182                    | 0.231 | 0.212 | 0.168 | 0.128  | 0.130  | 0.132  | 0.122  | 0.110  | 0.095  | 0.5 | 0.148              | 0.074                   | 0.076               |                         |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS1       | 0.208                    | 0.269 | 0.263 | 0.209 | 0.163  | 0.162  | 0.166  | 0.160  | 0.132  | 0.117  | 0.5 | 0.181              | 0.091                   | 0.094               |                         |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS1       | 0.152                    | 0.184 | 0.164 | 0.113 | 0.087  | 0.089  | 0.099  | 0.102  | 0.089  | 0.086  | 0.5 | 0.114              | 0.057                   | 0.058               |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS2       | 0.070                    | 0.111 | 0.146 | 0.150 | 0.142  | 0.141  | 0.148  | 0.159  | 0.158  | 0.144  | 0.5                | 0.134                                | 0.067                            | 0.075                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS2       | 0.147                    | 0.246 | 0.310 | 0.327 | 0.316  | 0.307  | 0.306  | 0.304  | 0.293  | 0.262  | 0.5                | 0.276                                | 0.138                            | 0.139                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.152                    | 0.240 | 0.283 | 0.280 | 0.260  | 0.247  | 0.252  | 0.246  | 0.234  | 0.217  | 0.5                | 0.236                                | 0.118                            | 0.121                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS2       | 0.169                    | 0.265 | 0.303 | 0.284 | 0.252  | 0.240  | 0.236  | 0.225  | 0.200  | 0.168  | 0.5                | 0.230                                | 0.115                            | 0.119                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS2       | 0.133                    | 0.198 | 0.226 | 0.218 | 0.198  | 0.204  | 0.205  | 0.198  | 0.181  | 0.164  | 0.5                | 0.189                                | 0.094                            | 0.096                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS3       | 0.054                    | 0.091 | 0.122 | 0.137 | 0.137  | 0.131  | 0.127  | 0.127  | 0.127  | 0.124  | 0.5                | 0.115                                | 0.058                            | 0.065                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS3       | 0.092                    | 0.145 | 0.190 | 0.201 | 0.178  | 0.188  | 0.183  | 0.191  | 0.166  | 0.183  | 0.5                | 0.168                                | 0.084                            | 0.085                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.089                    | 0.133 | 0.149 | 0.172 | 0.169  | 0.162  | 0.162  | 0.153  | 0.157  | 0.143  | 0.5                | 0.146                                | 0.073                            | 0.075                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS3       | 0.119                    | 0.157 | 0.185 | 0.193 | 0.194  | 0.219  | 0.221  | 0.221  | 0.209  | 0.187  | 0.5                | 0.187                                | 0.093                            | 0.097                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS3       | 0.100                    | 0.131 | 0.154 | 0.159 | 0.159  | 0.161  | 0.162  | 0.165  | 0.150  | 0.136  | 0.5                | 0.145                                | 0.072                            | 0.074                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS4       | 0.023                    | 0.049 | 0.065 | 0.074 | 0.074  | 0.074  | 0.071  | 0.067  | 0.065  | 0.061  | 0.5                | 0.061                                | 0.031                            | 0.034                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS4       | 0.047                    | 0.075 | 0.097 | 0.107 | 0.108  | 0.108  | 0.101  | 0.105  | 0.103  | 0.107  | 0.5                | 0.094                                | 0.047                            | 0.047                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.067                    | 0.104 | 0.130 | 0.142 | 0.144  | 0.136  | 0.126  | 0.122  | 0.113  | 0.101  | 0.5                | 0.116                                | 0.058                            | 0.060                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS4       | 0.061                    | 0.094 | 0.121 | 0.137 | 0.147  | 0.148  | 0.152  | 0.151  | 0.144  | 0.137  | 0.5                | 0.127                                | 0.063                            | 0.065                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS4       | 0.050                    | 0.078 | 0.093 | 0.101 | 0.093  | 0.093  | 0.092  | 0.089  | 0.084  | 0.076  | 0.5                | 0.083                                | 0.042                            | 0.042                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BSS       | 0.023                    | 0.038 | 0.046 | 0.047 | 0.043  | 0.037  | 0.035  | 0.035  | 0.037  | 0.039  | 0.5                | 0.037                                | 0.019                            | 0.021                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BSS       | 0.030                    | 0.051 | 0.061 | 0.058 | 0.050  | 0.046  | 0.049  | 0.053  | 0.061  | 0.067  | 0.5                | 0.052                                | 0.026                            | 0.026                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BSS       | 0.046                    | 0.067 | 0.072 | 0.064 | 0.057  | 0.055  | 0.061  | 0.066  | 0.068  | 0.067  | 0.5                | 0.061                                | 0.031                            | 0.031                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BSS       | 0.054                    | 0.078 | 0.087 | 0.087 | 0.080  | 0.078  | 0.088  | 0.099  | 0.104  | 0.111  | 0.5                | 0.085                                | 0.042                            | 0.044                                |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BSS       | 0.047                    | 0.059 | 0.067 | 0.069 | 0.067  | 0.066  | 0.072  | 0.070  | 0.060  | 0.051  | 0.5                | 0.062                                | 0.031                            | 0.031                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS1       | 0.139                    | 0.200 | 0.216 | 0.187 | 0.152  | 0.141  | 0.154  | 0.152  | 0.135  | 0.114  | 0.5                | 0.156                   | 0.078               | 0.079                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.145                    | 0.198 | 0.206 | 0.177 | 0.147  | 0.148  | 0.158  | 0.157  | 0.141  | 0.119  | 0.5                | 0.156                   | 0.078               | 0.080                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS1       | 0.208                    | 0.257 | 0.240 | 0.186 | 0.148  | 0.140  | 0.148  | 0.133  | 0.106  | 0.087  | 0.5                | 0.162                   | 0.081               | 0.084                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.173                    | 0.215 | 0.187 | 0.123 | 0.089  | 0.093  | 0.111  | 0.132  | 0.141  | 0.165  | 0.5                | 0.139                   | 0.069               | 0.070                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.098                    | 0.103 | 0.082 | 0.061 | 0.064  | 0.085  | 0.104  | 0.117  | 0.136  | 0.171  | 0.5                | 0.099                   | 0.050               | 0.050                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS2       | 0.098                    | 0.154 | 0.189 | 0.190 | 0.184  | 0.180  | 0.181  | 0.182  | 0.171  | 0.152  | 0.5                | 0.165                   | 0.082               | 0.084                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.098                    | 0.152 | 0.185 | 0.179 | 0.164  | 0.152  | 0.153  | 0.155  | 0.145  | 0.131  | 0.5                | 0.148                   | 0.074               | 0.076                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS2       | 0.154                    | 0.236 | 0.269 | 0.258 | 0.234  | 0.236  | 0.242  | 0.233  | 0.211  | 0.184  | 0.5                | 0.221                   | 0.111               | 0.114                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.164                    | 0.236 | 0.254 | 0.234 | 0.218  | 0.223  | 0.226  | 0.221  | 0.206  | 0.189  | 0.5                | 0.211                   | 0.105               | 0.106                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.133                    | 0.184 | 0.194 | 0.168 | 0.177  | 0.193  | 0.211  | 0.208  | 0.158  | 0.166  | 0.5                | 0.174                   | 0.087               | 0.088                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS3       | 0.057                    | 0.083 | 0.103 | 0.106 | 0.102  | 0.099  | 0.096  | 0.104  | 0.105  | 0.105  | 0.5                | 0.094                                | 0.047                            | 0.048                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.064                    | 0.097 | 0.118 | 0.125 | 0.125  | 0.123  | 0.122  | 0.121  | 0.115  | 0.101  | 0.5                | 0.109                                | 0.054                            | 0.056                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS3       | 0.125                    | 0.166 | 0.198 | 0.205 | 0.207  | 0.218  | 0.229  | 0.237  | 0.222  | 0.193  | 0.5                | 0.196                                | 0.098                            | 0.101                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.093                    | 0.122 | 0.145 | 0.150 | 0.153  | 0.156  | 0.168  | 0.155  | 0.142  | 0.129  | 0.5                | 0.137                                | 0.069                            | 0.069                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.100                    | 0.146 | 0.188 | 0.209 | 0.220  | 0.227  | 0.221  | 0.215  | 0.199  | 0.186  | 0.5                | 0.185                                | 0.093                            | 0.093                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS4       | 0.025                    | 0.044 | 0.050 | 0.054 | 0.054  | 0.052  | 0.051  | 0.052  | 0.054  | 0.052  | 0.5                | 0.048                                | 0.024                            | 0.024                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.044                    | 0.066 | 0.084 | 0.090 | 0.093  | 0.088  | 0.083  | 0.078  | 0.070  | 0.063  | 0.5                | 0.074                                | 0.037                            | 0.038                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS4       | 0.064                    | 0.097 | 0.126 | 0.139 | 0.144  | 0.143  | 0.143  | 0.141  | 0.138  | 0.124  | 0.5                | 0.123                                | 0.062                            | 0.064                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.075                    | 0.111 | 0.140 | 0.150 | 0.148  | 0.134  | 0.139  | 0.129  | 0.118  | 0.100  | 0.5                | 0.121                                | 0.060                            | 0.061                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.090                    | 0.133 | 0.160 | 0.167 | 0.160  | 0.143  | 0.128  | 0.114  | 0.100  | 0.090  | 0.5                | 0.125                                | 0.062                            | 0.063                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS5       | 0.016                    | 0.025 | 0.030 | 0.029 | 0.027  | 0.026  | 0.029  | 0.033  | 0.037  | 0.039  | 0.5                | 0.029                   | 0.014               | 0.015                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS5       | 0.034                    | 0.050 | 0.052 | 0.049 | 0.039  | 0.037  | 0.038  | 0.041  | 0.042  | 0.041  | 0.5                | 0.041                   | 0.021               | 0.021                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS5       | 0.043                    | 0.058 | 0.065 | 0.066 | 0.064  | 0.063  | 0.066  | 0.072  | 0.077  | 0.081  | 0.5                | 0.064                   | 0.032               | 0.033                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.066                    | 0.085 | 0.096 | 0.095 | 0.099  | 0.103  | 0.105  | 0.100  | 0.088  | 0.078  | 0.5                | 0.089                   | 0.044               | 0.045                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.053                    | 0.070 | 0.072 | 0.063 | 0.058  | 0.057  | 0.061  | 0.056  | 0.051  | 0.047  | 0.5                | 0.057                   | 0.029               | 0.029                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS1       | 0.123                    | 0.176 | 0.204 | 0.198 | 0.180  | 0.173  | 0.185  | 0.199  | 0.201  | 0.183  | 0.5                | 0.179                   | 0.089               | 0.100                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS1       | 0.159                    | 0.230 | 0.239 | 0.208 | 0.169  | 0.164  | 0.177  | 0.184  | 0.172  | 0.144  | 0.5                | 0.181                   | 0.090               | 0.091                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.198                    | 0.272 | 0.279 | 0.245 | 0.208  | 0.205  | 0.220  | 0.221  | 0.207  | 0.180  | 0.5                | 0.219                   | 0.110               | 0.112                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS1       | 0.181                    | 0.227 | 0.214 | 0.168 | 0.132  | 0.140  | 0.135  | 0.123  | 0.103  | 0.084  | 0.5                | 0.148                   | 0.074               | 0.076                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.135                    | 0.172 | 0.148 | 0.103 | 0.081  | 0.077  | 0.091  | 0.102  | 0.111  | 0.131  | 0.5                | 0.112                   | 0.056               | 0.056                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.073                    | 0.080 | 0.064 | 0.047 | 0.050  | 0.065  | 0.080  | 0.092  | 0.107  | 0.134  | 0.5                | 0.077                   | 0.038               | 0.039                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS2       | 0.063                    | 0.102 | 0.127 | 0.132 | 0.128  | 0.127  | 0.132  | 0.138  | 0.136  | 0.127  | 0.5                | 0.119                   | 0.059               | 0.067                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS2       | 0.131                    | 0.218 | 0.273 | 0.282 | 0.260  | 0.253  | 0.254  | 0.250  | 0.236  | 0.211  | 0.5                | 0.232                   | 0.116               | 0.117                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.156                    | 0.230 | 0.268 | 0.264 | 0.245  | 0.235  | 0.240  | 0.236  | 0.224  | 0.202  | 0.5                | 0.225                   | 0.113               | 0.116                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS2       | 0.135                    | 0.207 | 0.239 | 0.227 | 0.207  | 0.208  | 0.209  | 0.204  | 0.187  | 0.163  | 0.5                | 0.195                   | 0.097               | 0.101                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.129                    | 0.149 | 0.199 | 0.187 | 0.174  | 0.173  | 0.178  | 0.175  | 0.159  | 0.151  | 0.5                | 0.162                   | 0.081               | 0.082                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.097                    | 0.137 | 0.143 | 0.132 | 0.131  | 0.144  | 0.156  | 0.157  | 0.145  | 0.126  | 0.5                | 0.133                   | 0.066               | 0.067                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS3       | 0.052                    | 0.083 | 0.118 | 0.133 | 0.132  | 0.124  | 0.118  | 0.116  | 0.114  | 0.112  | 0.5                | 0.108                   | 0.054               | 0.061                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS3       | 0.089                    | 0.137 | 0.166 | 0.180 | 0.174  | 0.169  | 0.167  | 0.172  | 0.172  | 0.171  | 0.5                | 0.157                   | 0.078               | 0.079                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.083                    | 0.124 | 0.155 | 0.164 | 0.162  | 0.157  | 0.157  | 0.160  | 0.150  | 0.133  | 0.5                | 0.142                   | 0.071               | 0.073                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS3       | 0.107                    | 0.141 | 0.165 | 0.172 | 0.179  | 0.182  | 0.191  | 0.194  | 0.188  | 0.166  | 0.5                | 0.165                   | 0.083               | 0.085                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.073                    | 0.096 | 0.111 | 0.116 | 0.119  | 0.123  | 0.125  | 0.121  | 0.114  | 0.104  | 0.5                | 0.107                   | 0.053               | 0.054                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.070                    | 0.102 | 0.129 | 0.145 | 0.157  | 0.158  | 0.155  | 0.151  | 0.144  | 0.131  | 0.5                | 0.130                   | 0.065               | 0.066                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS4       | 0.023                    | 0.048 | 0.063 | 0.073 | 0.073  | 0.072  | 0.067  | 0.065  | 0.062  | 0.060  | 0.5                | 0.059                   | 0.030               | 0.033                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS4       | 0.041                    | 0.067 | 0.089 | 0.094 | 0.100  | 0.094  | 0.093  | 0.091  | 0.092  | 0.087  | 0.5                | 0.083                   | 0.042               | 0.042                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.062                    | 0.095 | 0.122 | 0.134 | 0.132  | 0.126  | 0.117  | 0.106  | 0.099  | 0.092  | 0.5                | 0.106                   | 0.053               | 0.055                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BS4       | 0.056                    | 0.086 | 0.110 | 0.123 | 0.126  | 0.127  | 0.127  | 0.128  | 0.122  | 0.116  | 0.5                | 0.110                   | 0.055               | 0.057                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.064                    | 0.100 | 0.127 | 0.127 | 0.125  | 0.115  | 0.116  | 0.109  | 0.092  | 0.082  | 0.5                | 0.103                   | 0.051               | 0.052                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.067                    | 0.098 | 0.117 | 0.122 | 0.116  | 0.108  | 0.097  | 0.085  | 0.075  | 0.067  | 0.5                | 0.092                   | 0.046               | 0.047                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BSS       | 0.019                    | 0.033 | 0.040 | 0.041 | 0.037  | 0.036  | 0.035  | 0.036  | 0.036  | 0.037  | 0.5                | 0.034                   | 0.017               | 0.019                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BSS       | 0.029                    | 0.046 | 0.054 | 0.054 | 0.049  | 0.048  | 0.050  | 0.054  | 0.061  | 0.065  | 0.5                | 0.050                   | 0.025               | 0.025                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BSS       | 0.049                    | 0.068 | 0.074 | 0.069 | 0.059  | 0.054  | 0.055  | 0.060  | 0.061  | 0.060  | 0.5                | 0.060                   | 0.030               | 0.031                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | E           | 0.98              | BSS       | 0.040                    | 0.056 | 0.064 | 0.060 | 0.061  | 0.060  | 0.064  | 0.068  | 0.073  | 0.074  | 0.5                | 0.061                   | 0.030               | 0.031                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BSS       | 0.053                    | 0.071 | 0.078 | 0.079 | 0.080  | 0.083  | 0.084  | 0.078  | 0.072  | 0.062  | 0.5                | 0.072                   | 0.036               | 0.036                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BSS       | 0.039                    | 0.054 | 0.053 | 0.047 | 0.044  | 0.042  | 0.044  | 0.043  | 0.040  | 0.034  | 0.5                | 0.043                   | 0.021               | 0.022                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                         |                     |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS1       | 0.175                    | 0.250 | 0.296 | 0.285 | 0.259  | 0.247  | 0.261  | 0.277  | 0.278  | 0.258  | 0.5 | 0.253              | 0.127                   | 0.142               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.189                    | 0.286 | 0.289 | 0.271 | 0.223  | 0.206  | 0.217  | 0.239  | 0.239  | 0.209  | 0.5 | 0.232              | 0.116                   | 0.119               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS1       | 0.176                    | 0.268 | 0.270 | 0.236 | 0.193  | 0.183  | 0.204  | 0.213  | 0.200  | 0.164  | 0.5 | 0.206              | 0.103                   | 0.104               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS2       | 0.095                    | 0.160 | 0.201 | 0.212 | 0.202  | 0.204  | 0.210  | 0.220  | 0.218  | 0.200  | 0.5 | 0.188              | 0.094                   | 0.106               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.115                    | 0.201 | 0.258 | 0.271 | 0.261  | 0.247  | 0.245  | 0.237  | 0.223  | 0.197  | 0.5 | 0.221              | 0.110                   | 0.113               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS2       | 0.152                    | 0.248 | 0.311 | 0.322 | 0.310  | 0.298  | 0.294  | 0.291  | 0.273  | 0.244  | 0.5 | 0.269              | 0.134                   | 0.136               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS3       | 0.073                    | 0.123 | 0.168 | 0.189 | 0.170  | 0.174  | 0.164  | 0.166  | 0.165  | 0.161  | 0.5 | 0.152              | 0.076                   | 0.085               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.093                    | 0.160 | 0.209 | 0.230 | 0.221  | 0.208  | 0.200  | 0.192  | 0.183  | 0.166  | 0.5 | 0.182              | 0.091                   | 0.094               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS3       | 0.101                    | 0.154 | 0.197 | 0.208 | 0.200  | 0.188  | 0.179  | 0.194  | 0.164  | 0.193  | 0.5 | 0.174              | 0.087                   | 0.088               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS4       | 0.036                    | 0.061 | 0.081 | 0.091 | 0.092  | 0.089  | 0.080  | 0.074  | 0.071  | 0.067  | 0.5 | 0.073              | 0.036                   | 0.041               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.053                    | 0.083 | 0.106 | 0.117 | 0.122  | 0.121  | 0.119  | 0.118  | 0.122  | 0.120  | 0.5 | 0.106              | 0.053                   | 0.054               |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS4       | 0.044                    | 0.074 | 0.096 | 0.107 | 0.106  | 0.102  | 0.096  | 0.096  | 0.094  | 0.093  | 0.5 | 0.089              | 0.044                   | 0.045               |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 136.0000      | 120.0       | 107             | CW        | E           | 0.98              | BS5       | 0.026                    | 0.044 | 0.055 | 0.057 | 0.052  | 0.048  | 0.050  | 0.048  | 0.050  | 0.053  | 0.5                | 0.047                   | 0.024               | 0.027                   |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 140.0000      | 120.0       | 117             | CW        | E           | 0.98              | BS5       | 0.044                    | 0.072 | 0.086 | 0.084 | 0.076  | 0.073  | 0.074  | 0.077  | 0.082  | 0.085  | 0.5                | 0.074                   | 0.037               | 0.038                   |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS5       | 0.032                    | 0.053 | 0.065 | 0.063 | 0.057  | 0.054  | 0.057  | 0.064  | 0.072  | 0.075  | 0.5                | 0.058                   | 0.029               | 0.029                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS1       | 0.171                    | 0.244 | 0.266 | 0.234 | 0.192  | 0.182  | 0.197  | 0.207  | 0.192  | 0.156  | 0.5                | 0.200                   | 0.100               | 0.101                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.199                    | 0.280 | 0.298 | 0.257 | 0.218  | 0.216  | 0.233  | 0.236  | 0.221  | 0.198  | 0.5                | 0.231                   | 0.115               | 0.118                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS2       | 0.148                    | 0.237 | 0.300 | 0.314 | 0.298  | 0.287  | 0.286  | 0.280  | 0.263  | 0.240  | 0.5                | 0.260                   | 0.130               | 0.131                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.155                    | 0.234 | 0.280 | 0.276 | 0.259  | 0.254  | 0.252  | 0.247  | 0.237  | 0.218  | 0.5                | 0.236                   | 0.118               | 0.121                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS3       | 0.105                    | 0.154 | 0.167 | 0.203 | 0.187  | 0.194  | 0.195  | 0.196  | 0.197  | 0.169  | 0.5                | 0.173                   | 0.087               | 0.087                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.099                    | 0.149 | 0.181 | 0.192 | 0.190  | 0.185  | 0.179  | 0.186  | 0.176  | 0.157  | 0.5                | 0.166                   | 0.083               | 0.085                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS4       | 0.043                    | 0.069 | 0.099 | 0.100 | 0.099  | 0.096  | 0.092  | 0.091  | 0.091  | 0.091  | 0.5                | 0.085                   | 0.043               | 0.043                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.068                    | 0.106 | 0.138 | 0.153 | 0.156  | 0.148  | 0.140  | 0.135  | 0.125  | 0.114  | 0.5                | 0.126                   | 0.063               | 0.064                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | E           | 0.98              | BS5       | 0.031                    | 0.051 | 0.061 | 0.061 | 0.054  | 0.053  | 0.057  | 0.063  | 0.069  | 0.075  | 0.5                | 0.056                                | 0.028                            | 0.028                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS5       | 0.054                    | 0.077 | 0.087 | 0.073 | 0.065  | 0.062  | 0.061  | 0.065  | 0.068  | 0.067  | 0.5                | 0.067                                | 0.033                            | 0.034                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS1       | 0.156                    | 0.216 | 0.226 | 0.196 | 0.163  | 0.164  | 0.176  | 0.179  | 0.166  | 0.149  | 0.5                | 0.176                                | 0.088                            | 0.090                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS1       | 0.192                    | 0.250 | 0.243 | 0.193 | 0.154  | 0.156  | 0.162  | 0.148  | 0.124  | 0.105  | 0.5                | 0.169                                | 0.085                            | 0.088                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS1       | 0.177                    | 0.214 | 0.195 | 0.144 | 0.117  | 0.123  | 0.131  | 0.132  | 0.118  | 0.110  | 0.5                | 0.143                                | 0.072                            | 0.073                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS2       | 0.120                    | 0.188 | 0.220 | 0.218 | 0.197  | 0.187  | 0.188  | 0.183  | 0.175  | 0.153  | 0.5                | 0.179                                | 0.090                            | 0.092                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS2       | 0.172                    | 0.267 | 0.309 | 0.296 | 0.262  | 0.253  | 0.252  | 0.236  | 0.208  | 0.172  | 0.5                | 0.238                                | 0.119                            | 0.123                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS2       | 0.187                    | 0.278 | 0.305 | 0.279 | 0.258  | 0.260  | 0.269  | 0.268  | 0.252  | 0.228  | 0.5                | 0.253                                | 0.127                            | 0.129                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS3       | 0.074                    | 0.111 | 0.139 | 0.146 | 0.140  | 0.137  | 0.136  | 0.134  | 0.127  | 0.115  | 0.5                | 0.123                                | 0.062                            | 0.063                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS3       | 0.130                    | 0.177 | 0.206 | 0.219 | 0.217  | 0.231  | 0.240  | 0.242  | 0.191  | 0.210  | 0.5                | 0.202                                | 0.101                            | 0.105                                |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS3       | 0.121                    | 0.170 | 0.196 | 0.206 | 0.204  | 0.201  | 0.202  | 0.196  | 0.183  | 0.168  | 0.5                | 0.181                                | 0.091                            | 0.092                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS4       | 0.053                    | 0.082 | 0.106 | 0.118 | 0.119  | 0.114  | 0.106  | 0.100  | 0.092  | 0.083  | 0.5                | 0.095                   | 0.048               | 0.049                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS4       | 0.067                    | 0.100 | 0.128 | 0.144 | 0.148  | 0.148  | 0.149  | 0.145  | 0.142  | 0.132  | 0.5                | 0.128                   | 0.064               | 0.066                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS4       | 0.071                    | 0.110 | 0.136 | 0.141 | 0.136  | 0.133  | 0.130  | 0.119  | 0.111  | 0.105  | 0.5                | 0.117                   | 0.058               | 0.059                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | E           | 0.98              | BS5       | 0.040                    | 0.061 | 0.066 | 0.056 | 0.049  | 0.047  | 0.049  | 0.051  | 0.052  | 0.051  | 0.5                | 0.051                   | 0.026               | 0.026                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | E           | 0.98              | BS5       | 0.058                    | 0.082 | 0.096 | 0.090 | 0.085  | 0.084  | 0.092  | 0.100  | 0.106  | 0.111  | 0.5                | 0.089                   | 0.044               | 0.046                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS5       | 0.071                    | 0.091 | 0.103 | 0.104 | 0.106  | 0.109  | 0.108  | 0.104  | 0.092  | 0.079  | 0.5                | 0.095                   | 0.047               | 0.048                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS1       | 0.156                    | 0.197 | 0.177 | 0.124 | 0.102  | 0.108  | 0.119  | 0.116  | 0.106  | 0.099  | 0.5                | 0.128                   | 0.064               | 0.065                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.163                    | 0.206 | 0.187 | 0.132 | 0.098  | 0.104  | 0.121  | 0.132  | 0.146  | 0.166  | 0.5                | 0.141                   | 0.071               | 0.071                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS1       | 0.097                    | 0.105 | 0.085 | 0.064 | 0.065  | 0.072  | 0.085  | 0.094  | 0.110  | 0.148  | 0.5                | 0.090                   | 0.045               | 0.045                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS2       | 0.163                    | 0.234 | 0.258 | 0.239 | 0.228  | 0.235  | 0.242  | 0.241  | 0.222  | 0.187  | 0.5                | 0.220                   | 0.110               | 0.112                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.172                    | 0.244 | 0.260 | 0.241 | 0.226  | 0.230  | 0.236  | 0.230  | 0.212  | 0.192  | 0.5                | 0.218                   | 0.109               | 0.110                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS2       | 0.149                    | 0.169 | 0.222 | 0.209 | 0.207  | 0.216  | 0.236  | 0.226  | 0.203  | 0.181  | 0.5                | 0.196                   | 0.098               | 0.099                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS3       | 0.107                    | 0.148 | 0.174 | 0.183 | 0.178  | 0.179  | 0.179  | 0.176  | 0.164  | 0.150  | 0.5                | 0.161                   | 0.080               | 0.082                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.089                    | 0.117 | 0.138 | 0.144 | 0.145  | 0.148  | 0.153  | 0.147  | 0.135  | 0.125  | 0.5                | 0.130                   | 0.065               | 0.066                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS3       | 0.099                    | 0.143 | 0.190 | 0.208 | 0.211  | 0.219  | 0.218  | 0.210  | 0.196  | 0.185  | 0.5                | 0.182                   | 0.091               | 0.092                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS4       | 0.064                    | 0.095 | 0.119 | 0.123 | 0.123  | 0.117  | 0.111  | 0.105  | 0.095  | 0.086  | 0.5                | 0.102                   | 0.051               | 0.052                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.081                    | 0.120 | 0.151 | 0.163 | 0.153  | 0.146  | 0.135  | 0.124  | 0.113  | 0.097  | 0.5                | 0.124                   | 0.062               | 0.063                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS4       | 0.098                    | 0.141 | 0.171 | 0.172 | 0.160  | 0.145  | 0.129  | 0.113  | 0.100  | 0.089  | 0.5                | 0.128                   | 0.064               | 0.064                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | E           | 0.98              | BS5       | 0.061                    | 0.081 | 0.091 | 0.092 | 0.091  | 0.094  | 0.096  | 0.090  | 0.080  | 0.069  | 0.5                | 0.083                   | 0.041               | 0.042                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.069                    | 0.096 | 0.108 | 0.111 | 0.117  | 0.120  | 0.120  | 0.116  | 0.104  | 0.084  | 0.5                | 0.101                   | 0.051               | 0.051                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | E           | 0.97              | BS5       | 0.058                    | 0.072 | 0.074 | 0.064 | 0.058  | 0.056  | 0.058  | 0.055  | 0.051  | 0.046  | 0.5                | 0.057                   | 0.029               | 0.029                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS1       | 0.087                    | 0.082 | 0.077 | 0.080 | 0.087  | 0.098  | 0.106  | 0.107  | 0.103  | 0.093  | 0.5                | 0.228                   | 0.114               | 0.128                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS1       | 0.109                    | 0.104 | 0.097 | 0.095 | 0.106  | 0.115  | 0.119  | 0.115  | 0.104  | 0.091  | 0.5                | 0.291                   | 0.146               | 0.148                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS1       | 0.110                    | 0.104 | 0.095 | 0.098 | 0.110  | 0.119  | 0.121  | 0.116  | 0.106  | 0.096  | 0.5                | 0.295                   | 0.147               | 0.151                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS1       | 0.112                    | 0.103 | 0.091 | 0.093 | 0.104  | 0.107  | 0.105  | 0.093  | 0.085  | 0.075  | 0.5                | 0.229                   | 0.114               | 0.118                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS1       | 0.100                    | 0.092 | 0.083 | 0.084 | 0.092  | 0.093  | 0.089  | 0.082  | 0.083  | 0.087  | 0.5                | 0.185                   | 0.092               | 0.093                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS1       | 0.075                    | 0.064 | 0.060 | 0.069 | 0.078  | 0.082  | 0.083  | 0.084  | 0.089  | 0.095  | 0.5                | 0.138                   | 0.069               | 0.070                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS2       | 0.075                    | 0.073 | 0.072 | 0.074 | 0.082  | 0.091  | 0.098  | 0.096  | 0.095  | 0.088  | 0.5                | 0.192                   | 0.096               | 0.108                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS2       | 0.097                    | 0.094 | 0.088 | 0.091 | 0.100  | 0.112  | 0.120  | 0.114  | 0.113  | 0.108  | 0.5                | 0.282                   | 0.141               | 0.143                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS2       | 0.095                    | 0.092 | 0.085 | 0.091 | 0.103  | 0.114  | 0.119  | 0.115  | 0.110  | 0.102  | 0.5                | 0.270                   | 0.135               | 0.138                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS2       | 0.104                    | 0.099 | 0.095 | 0.101 | 0.114  | 0.124  | 0.130  | 0.124  | 0.118  | 0.105  | 0.5                | 0.303                   | 0.151               | 0.157                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS2       | 0.094                    | 0.087 | 0.081 | 0.091 | 0.102  | 0.109  | 0.108  | 0.101  | 0.097  | 0.087  | 0.5                | 0.217                   | 0.109               | 0.110                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS2       | 0.087                    | 0.088 | 0.091 | 0.101 | 0.113  | 0.118  | 0.119  | 0.108  | 0.106  | 0.099  | 0.5                | 0.240                   | 0.120               | 0.121                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS3       | 0.066                    | 0.070 | 0.071 | 0.072 | 0.074  | 0.076  | 0.079  | 0.080  | 0.082  | 0.078  | 0.5                | 0.149                   | 0.075               | 0.084                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS3       | 0.080                    | 0.084 | 0.085 | 0.087 | 0.090  | 0.094  | 0.095  | 0.097  | 0.096  | 0.092  | 0.5                | 0.211                   | 0.106               | 0.107                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS3       | 0.081                    | 0.082 | 0.084 | 0.086 | 0.088  | 0.093  | 0.097  | 0.095  | 0.090  | 0.083  | 0.5                | 0.197                   | 0.098               | 0.101                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS3       | 0.087                    | 0.088 | 0.087 | 0.093 | 0.100  | 0.106  | 0.110  | 0.108  | 0.104  | 0.097  | 0.5                | 0.233                   | 0.117               | 0.121                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS3       | 0.078                    | 0.081 | 0.082 | 0.083 | 0.087  | 0.092  | 0.093  | 0.088  | 0.084  | 0.078  | 0.5                | 0.169                   | 0.084               | 0.085                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS3       | 0.081                    | 0.086 | 0.086 | 0.088 | 0.090  | 0.093  | 0.095  | 0.093  | 0.088  | 0.085  | 0.5                | 0.175                   | 0.088               | 0.088                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS4       | 0.054                    | 0.056 | 0.046 | 0.053 | 0.058  | 0.059  | 0.063  | 0.064  | 0.062  | 0.060  | 0.5                | 0.089                   | 0.044               | 0.050                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS4       | 0.070                    | 0.072 | 0.068 | 0.070 | 0.069  | 0.074  | 0.075  | 0.077  | 0.075  | 0.076  | 0.5                | 0.137                   | 0.069               | 0.070                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS4       | 0.075                    | 0.074 | 0.073 | 0.075 | 0.079  | 0.084  | 0.083  | 0.082  | 0.080  | 0.075  | 0.5                | 0.155                   | 0.077               | 0.079                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS4       | 0.071                    | 0.075 | 0.071 | 0.074 | 0.081  | 0.084  | 0.088  | 0.087  | 0.084  | 0.085  | 0.5                | 0.155                   | 0.078               | 0.080                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS4       | 0.083                    | 0.082 | 0.083 | 0.087 | 0.089  | 0.091  | 0.092  | 0.090  | 0.085  | 0.079  | 0.5                | 0.175                   | 0.087               | 0.088                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS4       | 0.090                    | 0.090 | 0.089 | 0.090 | 0.092  | 0.093  | 0.095  | 0.090  | 0.082  | 0.080  | 0.5                | 0.178                   | 0.089               | 0.090                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           |           |                   |           | Probe Info.              |       | MPE Measurements |       |        |        |        |        |        |        |     |       | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|------------------|-------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |                  |       |        |        |        |        |        |        |     |       |                    |                                      |                                  |                                      |
|              |                                    |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm            | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |       |                    |                                      |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H         | 0.84              | BS5       | 0.042                    | 0.047 | 0.043            | 0.045 | 0.052  | 0.062  | 0.060  | 0.050  | 0.053  | 0.049  | 0.5 | 0.068 | 0.034              | 0.038                                |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H         | 0.83              | BS5       | 0.050                    | 0.049 | 0.052            | 0.053 | 0.064  | 0.067  | 0.066  | 0.063  | 0.062  | 0.061  | 0.5 | 0.091 | 0.045              | 0.046                                |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H         | 0.82              | BS5       | 0.060                    | 0.057 | 0.058            | 0.063 | 0.061  | 0.081  | 0.079  | 0.081  | 0.075  | 0.074  | 0.5 | 0.123 | 0.061              | 0.063                                |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H         | 0.80              | BS5       | 0.060                    | 0.061 | 0.062            | 0.069 | 0.078  | 0.072  | 0.081  | 0.084  | 0.081  | 0.082  | 0.5 | 0.131 | 0.065              | 0.068                                |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H         | 0.79              | BS5       | 0.066                    | 0.067 | 0.062            | 0.068 | 0.079  | 0.086  | 0.085  | 0.082  | 0.075  | 0.076  | 0.5 | 0.132 | 0.066              | 0.067                                |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H         | 0.77              | BS5       | 0.056                    | 0.058 | 0.059            | 0.060 | 0.070  | 0.077  | 0.071  | 0.072  | 0.061  | 0.052  | 0.5 | 0.092 | 0.046              | 0.046                                |                                  |                                      |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 136.0000      | 120.0       | 107             | CW        | H         | 0.84              | BS1       | 0.061                    | 0.054 | 0.045            | 0.051 | 0.034  | 0.057  | 0.054  | 0.051  | 0.063  | 0.074  | 0.5 | 0.081 | 0.041              | 0.046                                |                                  |                                      |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 146.0000      | 120.0       | 118             | CW        | H         | 0.83              | BS1       | 0.057                    | 0.054 | 0.047            | 0.040 | 0.054  | 0.047  | 0.063  | 0.068  | 0.080  | 0.095  | 0.5 | 0.102 | 0.051              | 0.052                                |                                  |                                      |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 150.8000      | 120.0       | 117             | CW        | H         | 0.82              | BS1       | 0.062                    | 0.050 | 0.044            | 0.055 | 0.061  | 0.067  | 0.070  | 0.072  | 0.084  | 0.100  | 0.5 | 0.118 | 0.059              | 0.061                                |                                  |                                      |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 158.0125      | 120.0       | 116             | CW        | H         | 0.80              | BS1       | 0.077                    | 0.071 | 0.050            | 0.069 | 0.072  | 0.074  | 0.073  | 0.077  | 0.091  | 0.108  | 0.5 | 0.145 | 0.072              | 0.075                                |                                  |                                      |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 165.0125      | 120.0       | 119             | CW        | H         | 0.79              | BS1       | 0.063                    | 0.057 | 0.051            | 0.056 | 0.061  | 0.064  | 0.067  | 0.076  | 0.093  | 0.109  | 0.5 | 0.121 | 0.061              | 0.061                                |                                  |                                      |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 173.0125      | 120.0       | 119             | CW        | H         | 0.77              | BS1       | 0.076                    | 0.064 | 0.056            | 0.066 | 0.075  | 0.083  | 0.090  | 0.102  | 0.119  | 0.137  | 0.5 | 0.182 | 0.091              | 0.092                                |                                  |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS2       | 0.044                    | 0.046 | 0.039 | 0.045 | 0.055  | 0.056  | 0.060  | 0.058  | 0.067  | 0.071  | 0.5                | 0.080                   | 0.040               | 0.045                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS2       | 0.056                    | 0.054 | 0.050 | 0.051 | 0.060  | 0.062  | 0.065  | 0.064  | 0.068  | 0.075  | 0.5                | 0.097                   | 0.048               | 0.049                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS2       | 0.059                    | 0.055 | 0.045 | 0.040 | 0.041  | 0.068  | 0.068  | 0.069  | 0.074  | 0.081  | 0.5                | 0.096                   | 0.048               | 0.049                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS2       | 0.069                    | 0.065 | 0.060 | 0.065 | 0.074  | 0.080  | 0.083  | 0.079  | 0.088  | 0.091  | 0.5                | 0.140                   | 0.070               | 0.072                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS2       | 0.064                    | 0.062 | 0.056 | 0.061 | 0.067  | 0.071  | 0.069  | 0.066  | 0.075  | 0.083  | 0.5                | 0.108                   | 0.054               | 0.055                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS2       | 0.065                    | 0.066 | 0.067 | 0.078 | 0.090  | 0.096  | 0.097  | 0.094  | 0.105  | 0.109  | 0.5                | 0.174                   | 0.087               | 0.088                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS3       | 0.049                    | 0.052 | 0.041 | 0.046 | 0.051  | 0.052  | 0.055  | 0.056  | 0.057  | 0.058  | 0.5                | 0.072                   | 0.036               | 0.040                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS3       | 0.054                    | 0.055 | 0.053 | 0.055 | 0.058  | 0.061  | 0.062  | 0.063  | 0.062  | 0.063  | 0.5                | 0.090                   | 0.045               | 0.046                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS3       | 0.055                    | 0.056 | 0.053 | 0.054 | 0.057  | 0.060  | 0.063  | 0.060  | 0.059  | 0.060  | 0.5                | 0.085                   | 0.042               | 0.043                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS3       | 0.056                    | 0.057 | 0.054 | 0.055 | 0.063  | 0.067  | 0.070  | 0.068  | 0.069  | 0.070  | 0.5                | 0.096                   | 0.048               | 0.050                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS3       | 0.062                    | 0.061 | 0.056 | 0.057 | 0.061  | 0.062  | 0.061  | 0.057  | 0.059  | 0.058  | 0.5                | 0.083                   | 0.042               | 0.042                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS3       | 0.066                    | 0.068 | 0.069 | 0.072 | 0.077  | 0.078  | 0.080  | 0.081  | 0.078  | 0.079  | 0.5                | 0.126                   | 0.063               | 0.063                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS4       | 0.053                    | 0.049 | 0.046 | 0.046 | 0.052  | 0.054  | 0.058  | 0.050  | 0.051  | 0.052  | 0.5                | 0.070                   | 0.035               | 0.039                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS4       | 0.062                    | 0.059 | 0.058 | 0.059 | 0.063  | 0.066  | 0.072  | 0.069  | 0.066  | 0.063  | 0.5                | 0.106                   | 0.053               | 0.054                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS4       | 0.055                    | 0.051 | 0.047 | 0.048 | 0.053  | 0.059  | 0.060  | 0.056  | 0.052  | 0.050  | 0.5                | 0.072                   | 0.036               | 0.037                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS4       | 0.062                    | 0.055 | 0.056 | 0.059 | 0.065  | 0.072  | 0.076  | 0.073  | 0.069  | 0.066  | 0.5                | 0.104                   | 0.052               | 0.054                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS4       | 0.061                    | 0.058 | 0.050 | 0.058 | 0.066  | 0.069  | 0.071  | 0.067  | 0.061  | 0.060  | 0.5                | 0.092                   | 0.046               | 0.046                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS4       | 0.077                    | 0.079 | 0.076 | 0.077 | 0.082  | 0.084  | 0.083  | 0.079  | 0.075  | 0.070  | 0.5                | 0.137                   | 0.069               | 0.069                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS5       | 0.042                    | 0.047 | 0.043 | 0.044 | 0.058  | 0.057  | 0.051  | 0.049  | 0.048  | 0.050  | 0.5                | 0.064                   | 0.032               | 0.036                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS5       | 0.042                    | 0.054 | 0.045 | 0.048 | 0.060  | 0.063  | 0.065  | 0.064  | 0.061  | 0.063  | 0.5                | 0.085                   | 0.042               | 0.043                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS5       | 0.043                    | 0.046 | 0.045 | 0.047 | 0.051  | 0.057  | 0.058  | 0.057  | 0.050  | 0.057  | 0.5                | 0.067                   | 0.033               | 0.034                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS5       | 0.059                    | 0.061 | 0.054 | 0.055 | 0.072  | 0.080  | 0.067  | 0.074  | 0.068  | 0.067  | 0.5                | 0.106                   | 0.053               | 0.055                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS5       | 0.054                    | 0.055 | 0.040 | 0.050 | 0.064  | 0.065  | 0.061  | 0.054  | 0.046  | 0.052  | 0.5                | 0.070                   | 0.035               | 0.035                   |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS5       | 0.050                    | 0.052 | 0.048 | 0.055 | 0.066  | 0.070  | 0.066  | 0.062  | 0.058  | 0.053  | 0.5                | 0.076                   | 0.038               | 0.039                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS1       | 0.055                    | 0.047 | 0.048 | 0.052 | 0.061  | 0.068  | 0.076  | 0.078  | 0.086  | 0.090  | 0.5                | 0.122                   | 0.061               | 0.069                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS1       | 0.065                    | 0.057 | 0.059 | 0.068 | 0.078  | 0.085  | 0.089  | 0.091  | 0.096  | 0.097  | 0.5                | 0.165                   | 0.083               | 0.083                   |
|              | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS1       | 0.070                    | 0.065 | 0.062 | 0.068 | 0.080  | 0.088  | 0.093  | 0.095  | 0.101  | 0.118  | 0.5                | 0.186                   | 0.093               | 0.096                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS1       | 0.087                    | 0.081 | 0.076 | 0.078 | 0.087  | 0.090  | 0.088  | 0.085  | 0.092  | 0.108  | 0.5                | 0.185                   | 0.093               | 0.096                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS1       | 0.085                    | 0.077 | 0.074 | 0.076 | 0.083  | 0.087  | 0.088  | 0.089  | 0.099  | 0.112  | 0.5                | 0.181                   | 0.090               | 0.091                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS1       | 0.076                    | 0.065 | 0.058 | 0.068 | 0.078  | 0.084  | 0.088  | 0.093  | 0.106  | 0.119  | 0.5                | 0.163                   | 0.081               | 0.082                   |
|              |                                 |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS2       | 0.048                    | 0.047 | 0.048 | 0.054 | 0.066  | 0.073  | 0.082  | 0.083  | 0.089  | 0.090  | 0.5                | 0.130                   | 0.065               | 0.073                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS2       | 0.060                    | 0.059 | 0.060 | 0.070 | 0.077  | 0.082  | 0.090  | 0.089  | 0.099  | 0.100  | 0.5                | 0.166                   | 0.083               | 0.084                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS2       | 0.064                    | 0.062 | 0.057 | 0.065 | 0.076  | 0.085  | 0.091  | 0.090  | 0.093  | 0.096  | 0.5                | 0.159                   | 0.079               | 0.081                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS2       | 0.081                    | 0.077 | 0.072 | 0.079 | 0.090  | 0.101  | 0.108  | 0.103  | 0.102  | 0.101  | 0.5                | 0.205                   | 0.103               | 0.106                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS2       | 0.076                    | 0.073 | 0.069 | 0.077 | 0.085  | 0.093  | 0.096  | 0.091  | 0.096  | 0.094  | 0.5                | 0.172                   | 0.086               | 0.087                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS2       | 0.075                    | 0.076 | 0.080 | 0.092 | 0.105  | 0.111  | 0.112  | 0.105  | 0.110  | 0.108  | 0.5                | 0.217                   | 0.108               | 0.109                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS3       | 0.047                    | 0.049 | 0.050 | 0.051 | 0.055  | 0.061  | 0.067  | 0.072  | 0.073  | 0.074  | 0.5                | 0.098                   | 0.049               | 0.055                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS3       | 0.059                    | 0.063 | 0.064 | 0.066 | 0.072  | 0.075  | 0.080  | 0.081  | 0.082  | 0.081  | 0.5                | 0.138                   | 0.069               | 0.069                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS3       | 0.064                    | 0.061 | 0.060 | 0.061 | 0.067  | 0.073  | 0.077  | 0.075  | 0.076  | 0.075  | 0.5                | 0.121                   | 0.061               | 0.062                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS3       | 0.066                    | 0.067 | 0.068 | 0.071 | 0.080  | 0.086  | 0.091  | 0.090  | 0.087  | 0.085  | 0.5                | 0.153                   | 0.077               | 0.079                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS3       | 0.070                    | 0.071 | 0.072 | 0.073 | 0.078  | 0.081  | 0.083  | 0.080  | 0.078  | 0.075  | 0.5                | 0.137                   | 0.068               | 0.069                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS3       | 0.071                    | 0.077 | 0.078 | 0.080 | 0.084  | 0.087  | 0.088  | 0.086  | 0.085  | 0.084  | 0.5                | 0.151                   | 0.075               | 0.076                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS4       | 0.054                    | 0.052 | 0.046 | 0.053 | 0.054  | 0.056  | 0.062  | 0.059  | 0.060  | 0.059  | 0.5                | 0.082                   | 0.041               | 0.046                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS4       | 0.063                    | 0.064 | 0.065 | 0.066 | 0.070  | 0.072  | 0.080  | 0.079  | 0.078  | 0.077  | 0.5                | 0.133                   | 0.067               | 0.067                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS4       | 0.062                    | 0.055 | 0.056 | 0.057 | 0.059  | 0.064  | 0.067  | 0.065  | 0.064  | 0.060  | 0.5                | 0.094                   | 0.047               | 0.048                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS4       | 0.064                    | 0.060 | 0.061 | 0.065 | 0.071  | 0.074  | 0.082  | 0.081  | 0.079  | 0.077  | 0.5                | 0.125                   | 0.062               | 0.064                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS4       | 0.075                    | 0.069 | 0.074 | 0.071 | 0.078  | 0.082  | 0.087  | 0.085  | 0.080  | 0.077  | 0.5                | 0.143                   | 0.072               | 0.072                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS4       | 0.082                    | 0.087 | 0.083 | 0.089 | 0.087  | 0.086  | 0.089  | 0.084  | 0.079  | 0.076  | 0.5                | 0.159                   | 0.079               | 0.080                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS5       | 0.047                    | 0.046 | 0.038 | 0.046 | 0.053  | 0.062  | 0.063  | 0.065  | 0.057  | 0.053  | 0.5                | 0.077                   | 0.038               | 0.043                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS5       | 0.049                    | 0.051 | 0.049 | 0.053 | 0.057  | 0.069  | 0.074  | 0.069  | 0.070  | 0.067  | 0.5                | 0.098                   | 0.049               | 0.050                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS5       | 0.052                    | 0.054 | 0.046 | 0.054 | 0.063  | 0.069  | 0.070  | 0.067  | 0.063  | 0.066  | 0.5                | 0.094                   | 0.047               | 0.048                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS5       | 0.056                    | 0.062 | 0.051 | 0.063 | 0.069  | 0.077  | 0.079  | 0.076  | 0.073  | 0.072  | 0.5                | 0.113                   | 0.056               | 0.058                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS5       | 0.060                    | 0.058 | 0.056 | 0.065 | 0.076  | 0.082  | 0.078  | 0.077  | 0.068  | 0.067  | 0.5                | 0.113                   | 0.056               | 0.057                   |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS5       | 0.059                    | 0.058 | 0.050 | 0.061 | 0.073  | 0.077  | 0.075  | 0.070  | 0.065  | 0.066  | 0.5                | 0.097                   | 0.049               | 0.049                   |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS1       | 0.090                    | 0.085 | 0.081 | 0.084 | 0.091  | 0.100  | 0.105  | 0.103  | 0.100  | 0.091  | 0.5                | 0.232                   | 0.116               | 0.130                   |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS1       | 0.103                    | 0.095 | 0.090 | 0.093 | 0.105  | 0.116  | 0.122  | 0.118  | 0.109  | 0.096  | 0.5                | 0.288                   | 0.144               | 0.145                   |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS1       | 0.113                    | 0.106 | 0.099 | 0.101 | 0.113  | 0.122  | 0.124  | 0.117  | 0.108  | 0.097  | 0.5                | 0.309                   | 0.154               | 0.158                   |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H           | 0.81              | BS1       | 0.116                    | 0.106 | 0.096 | 0.098 | 0.106  | 0.110  | 0.106  | 0.094  | 0.084  | 0.078  | 0.5                | 0.247                   | 0.124               | 0.128                   |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS1       | 0.097                    | 0.087 | 0.080 | 0.084 | 0.094  | 0.097  | 0.092  | 0.083  | 0.081  | 0.079  | 0.5                | 0.185                   | 0.093               | 0.094                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           |           |                   |           | Probe Info.              |       | MPE Measurements |       |        |        |        |        |        |        |     |       | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|------------------|-------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |                  |       |        |        |        |        |        |        |     |       |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm            | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |       |                    |                                      |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H         | 0.84              | BS2       | 0.078                    | 0.079 | 0.075            | 0.078 | 0.088  | 0.096  | 0.103  | 0.099  | 0.096  | 0.090  | 0.5 | 0.209 | 0.105              | 0.117                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H         | 0.83              | BS2       | 0.092                    | 0.091 | 0.089            | 0.092 | 0.099  | 0.107  | 0.113  | 0.111  | 0.110  | 0.104  | 0.5 | 0.266 | 0.133              | 0.134                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H         | 0.82              | BS2       | 0.096                    | 0.092 | 0.090            | 0.096 | 0.106  | 0.117  | 0.122  | 0.116  | 0.115  | 0.103  | 0.5 | 0.284 | 0.142              | 0.146                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H         | 0.81              | BS2       | 0.104                    | 0.098 | 0.092            | 0.098 | 0.108  | 0.119  | 0.122  | 0.115  | 0.109  | 0.098  | 0.5 | 0.282 | 0.141              | 0.146                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H         | 0.80              | BS2       | 0.092                    | 0.088 | 0.085            | 0.091 | 0.101  | 0.108  | 0.109  | 0.102  | 0.098  | 0.091  | 0.5 | 0.226 | 0.113              | 0.115                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H         | 0.84              | BS3       | 0.068                    | 0.072 | 0.073            | 0.074 | 0.075  | 0.078  | 0.079  | 0.081  | 0.084  | 0.082  | 0.5 | 0.157 | 0.078              | 0.088                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H         | 0.83              | BS3       | 0.084                    | 0.088 | 0.090            | 0.091 | 0.093  | 0.096  | 0.099  | 0.100  | 0.101  | 0.095  | 0.5 | 0.229 | 0.114              | 0.115                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H         | 0.82              | BS3       | 0.081                    | 0.085 | 0.086            | 0.087 | 0.091  | 0.095  | 0.098  | 0.095  | 0.092  | 0.087  | 0.5 | 0.205 | 0.102              | 0.105                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H         | 0.81              | BS3       | 0.086                    | 0.089 | 0.090            | 0.092 | 0.098  | 0.103  | 0.106  | 0.104  | 0.101  | 0.093  | 0.5 | 0.230 | 0.115              | 0.119                                |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H         | 0.80              | BS3       | 0.083                    | 0.084 | 0.085            | 0.087 | 0.090  | 0.093  | 0.094  | 0.092  | 0.088  | 0.081  | 0.5 | 0.186 | 0.093              | 0.095                                |                                  |                                      |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           |           |                   |           | Probe Info.              | MPE Measurements |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|------------------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |                  |       |       |        |        |        |        |        |        |     |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm            | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                                      |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H         | 0.84              | BS4       | 0.061                    | 0.057            | 0.058 | 0.062 | 0.066  | 0.072  | 0.070  | 0.064  | 0.061  | 0.058  | 0.5 | 0.106              | 0.053                                | 0.059                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H         | 0.83              | BS4       | 0.074                    | 0.071            | 0.072 | 0.076 | 0.077  | 0.078  | 0.080  | 0.082  | 0.083  | 0.084  | 0.5 | 0.157              | 0.079                                | 0.079                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H         | 0.82              | BS4       | 0.072                    | 0.074            | 0.072 | 0.073 | 0.078  | 0.080  | 0.085  | 0.083  | 0.078  | 0.075  | 0.5 | 0.151              | 0.075                                | 0.077                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H         | 0.81              | BS4       | 0.072                    | 0.077            | 0.071 | 0.073 | 0.080  | 0.081  | 0.087  | 0.088  | 0.087  | 0.085  | 0.5 | 0.160              | 0.080                                | 0.083                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H         | 0.80              | BS4       | 0.071                    | 0.070            | 0.069 | 0.070 | 0.072  | 0.074  | 0.082  | 0.079  | 0.075  | 0.072  | 0.5 | 0.130              | 0.065                                | 0.066                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H         | 0.84              | BS5       | 0.047                    | 0.043            | 0.040 | 0.044 | 0.050  | 0.053  | 0.058  | 0.057  | 0.055  | 0.054  | 0.5 | 0.068              | 0.034                                | 0.038                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H         | 0.83              | BS5       | 0.052                    | 0.049            | 0.044 | 0.045 | 0.056  | 0.065  | 0.063  | 0.064  | 0.065  | 0.066  | 0.5 | 0.086              | 0.043                                | 0.043                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H         | 0.82              | BS5       | 0.058                    | 0.063            | 0.056 | 0.059 | 0.069  | 0.078  | 0.077  | 0.081  | 0.073  | 0.070  | 0.5 | 0.120              | 0.060                                | 0.062                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H         | 0.81              | BS5       | 0.065                    | 0.068            | 0.063 | 0.068 | 0.077  | 0.084  | 0.084  | 0.087  | 0.085  | 0.084  | 0.5 | 0.147              | 0.073                                | 0.076                            |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H         | 0.80              | BS5       | 0.061                    | 0.065            | 0.056 | 0.061 | 0.072  | 0.078  | 0.077  | 0.076  | 0.069  | 0.068  | 0.5 | 0.114              | 0.057                                | 0.058                            |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS1       | 0.088                    | 0.082 | 0.077 | 0.081 | 0.088  | 0.096  | 0.099  | 0.093  | 0.086  | 0.072  | 0.5                | 0.195                   | 0.097               | 0.099                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS1       | 0.093                    | 0.087 | 0.080 | 0.084 | 0.093  | 0.104  | 0.103  | 0.097  | 0.089  | 0.079  | 0.5                | 0.211                   | 0.106               | 0.108                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS1       | 0.112                    | 0.101 | 0.090 | 0.092 | 0.101  | 0.105  | 0.104  | 0.092  | 0.082  | 0.075  | 0.5                | 0.222                   | 0.111               | 0.115                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS1       | 0.107                    | 0.098 | 0.087 | 0.088 | 0.096  | 0.101  | 0.096  | 0.091  | 0.089  | 0.091  | 0.5                | 0.211                   | 0.105               | 0.106                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS1       | 0.079                    | 0.069 | 0.065 | 0.074 | 0.087  | 0.088  | 0.086  | 0.081  | 0.085  | 0.091  | 0.5                | 0.146                   | 0.073               | 0.074                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS2       | 0.081                    | 0.079 | 0.076 | 0.078 | 0.085  | 0.094  | 0.097  | 0.092  | 0.093  | 0.083  | 0.5                | 0.193                   | 0.096               | 0.098                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS2       | 0.082                    | 0.080 | 0.075 | 0.082 | 0.089  | 0.096  | 0.099  | 0.093  | 0.089  | 0.083  | 0.5                | 0.192                   | 0.096               | 0.099                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS2       | 0.100                    | 0.097 | 0.091 | 0.097 | 0.109  | 0.119  | 0.122  | 0.115  | 0.109  | 0.097  | 0.5                | 0.272                   | 0.136               | 0.140                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS2       | 0.098                    | 0.091 | 0.085 | 0.094 | 0.107  | 0.115  | 0.113  | 0.106  | 0.100  | 0.090  | 0.5                | 0.237                   | 0.118               | 0.119                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS2       | 0.090                    | 0.091 | 0.093 | 0.103 | 0.113  | 0.118  | 0.116  | 0.106  | 0.099  | 0.095  | 0.5                | 0.237                   | 0.118               | 0.119                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS3       | 0.067                    | 0.069 | 0.070 | 0.071 | 0.073  | 0.076  | 0.080  | 0.081  | 0.079  | 0.077  | 0.5                | 0.144                                | 0.072                            | 0.073                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS3       | 0.072                    | 0.073 | 0.074 | 0.075 | 0.078  | 0.079  | 0.082  | 0.079  | 0.077  | 0.072  | 0.5                | 0.147                                | 0.074                            | 0.075                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS3       | 0.085                    | 0.089 | 0.090 | 0.094 | 0.097  | 0.104  | 0.107  | 0.106  | 0.101  | 0.093  | 0.5                | 0.226                                | 0.113                            | 0.117                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS3       | 0.083                    | 0.086 | 0.087 | 0.088 | 0.092  | 0.094  | 0.096  | 0.093  | 0.086  | 0.079  | 0.5                | 0.184                                | 0.092                            | 0.093                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS3       | 0.085                    | 0.089 | 0.091 | 0.093 | 0.095  | 0.097  | 0.099  | 0.093  | 0.091  | 0.087  | 0.5                | 0.190                                | 0.095                            | 0.096                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS4       | 0.056                    | 0.061 | 0.062 | 0.061 | 0.066  | 0.061  | 0.071  | 0.067  | 0.065  | 0.063  | 0.5                | 0.104                                | 0.052                            | 0.053                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS4       | 0.063                    | 0.067 | 0.064 | 0.068 | 0.069  | 0.075  | 0.074  | 0.071  | 0.068  | 0.064  | 0.5                | 0.119                                | 0.059                            | 0.061                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS4       | 0.077                    | 0.072 | 0.075 | 0.074 | 0.080  | 0.083  | 0.089  | 0.087  | 0.082  | 0.081  | 0.5                | 0.155                                | 0.077                            | 0.080                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS4       | 0.083                    | 0.085 | 0.088 | 0.089 | 0.092  | 0.094  | 0.098  | 0.091  | 0.088  | 0.084  | 0.5                | 0.188                                | 0.094                            | 0.095                                |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS4       | 0.092                    | 0.095 | 0.096 | 0.095 | 0.097  | 0.098  | 0.092  | 0.089  | 0.083  | 0.079  | 0.5                | 0.188                                | 0.094                            | 0.095                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 118             | CW        | H           | 0.83              | BS5       | 0.040                    | 0.049 | 0.041 | 0.042 | 0.046  | 0.060  | 0.050  | 0.049  | 0.048  | 0.049  | 0.5                | 0.059                   | 0.030               | 0.030                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS5       | 0.049                    | 0.054 | 0.049 | 0.051 | 0.063  | 0.067  | 0.065  | 0.066  | 0.061  | 0.060  | 0.5                | 0.088                   | 0.044               | 0.045                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS5       | 0.059                    | 0.060 | 0.056 | 0.065 | 0.071  | 0.075  | 0.076  | 0.080  | 0.074  | 0.076  | 0.5                | 0.117                   | 0.059               | 0.061                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS5       | 0.065                    | 0.066 | 0.063 | 0.070 | 0.081  | 0.087  | 0.085  | 0.083  | 0.076  | 0.075  | 0.5                | 0.134                   | 0.067               | 0.068                   |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS5       | 0.062                    | 0.064 | 0.054 | 0.060 | 0.070  | 0.078  | 0.073  | 0.069  | 0.062  | 0.063  | 0.5                | 0.097                   | 0.048               | 0.049                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS1       | 0.088                    | 0.084 | 0.079 | 0.082 | 0.088  | 0.098  | 0.103  | 0.101  | 0.097  | 0.090  | 0.5                | 0.222                   | 0.111               | 0.124                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS1       | 0.100                    | 0.095 | 0.089 | 0.092 | 0.101  | 0.112  | 0.116  | 0.112  | 0.103  | 0.091  | 0.5                | 0.268                   | 0.134               | 0.135                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS1       | 0.109                    | 0.102 | 0.093 | 0.098 | 0.108  | 0.118  | 0.120  | 0.112  | 0.103  | 0.093  | 0.5                | 0.285                   | 0.142               | 0.146                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS1       | 0.107                    | 0.097 | 0.086 | 0.089 | 0.096  | 0.101  | 0.095  | 0.087  | 0.078  | 0.074  | 0.5                | 0.202                   | 0.101               | 0.105                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS1       | 0.098                    | 0.088 | 0.080 | 0.082 | 0.088  | 0.083  | 0.089  | 0.083  | 0.084  | 0.086  | 0.5                | 0.175                   | 0.087               | 0.088                   |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS1       | 0.073                    | 0.063 | 0.058 | 0.067 | 0.076  | 0.078  | 0.074  | 0.073  | 0.078  | 0.073  | 0.5                | 0.115                   | 0.057               | 0.058                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                                      |                                  |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS2       | 0.075                    | 0.076 | 0.072 | 0.077 | 0.085  | 0.091  | 0.100  | 0.095  | 0.096  | 0.089  | 0.5 | 0.197              | 0.099                                | 0.111                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS2       | 0.093                    | 0.092 | 0.088 | 0.094 | 0.101  | 0.111  | 0.116  | 0.111  | 0.114  | 0.102  | 0.5 | 0.274              | 0.137                                | 0.138                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS2       | 0.097                    | 0.092 | 0.087 | 0.093 | 0.101  | 0.114  | 0.118  | 0.112  | 0.106  | 0.096  | 0.5 | 0.264              | 0.132                                | 0.135                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS2       | 0.098                    | 0.093 | 0.086 | 0.093 | 0.104  | 0.113  | 0.116  | 0.109  | 0.103  | 0.098  | 0.5 | 0.250              | 0.125                                | 0.129                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS2       | 0.087                    | 0.081 | 0.076 | 0.086 | 0.094  | 0.104  | 0.102  | 0.095  | 0.091  | 0.086  | 0.5 | 0.193              | 0.097                                | 0.097                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS2       | 0.078                    | 0.079 | 0.089 | 0.091 | 0.100  | 0.104  | 0.101  | 0.093  | 0.089  | 0.086  | 0.5 | 0.187              | 0.093                                | 0.094                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS3       | 0.065                    | 0.069 | 0.070 | 0.072 | 0.073  | 0.076  | 0.078  | 0.079  | 0.083  | 0.079  | 0.5 | 0.148              | 0.074                                | 0.083                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS3       | 0.079                    | 0.084 | 0.087 | 0.089 | 0.090  | 0.093  | 0.095  | 0.096  | 0.098  | 0.093  | 0.5 | 0.213              | 0.107                                | 0.107                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS3       | 0.079                    | 0.082 | 0.083 | 0.084 | 0.088  | 0.092  | 0.095  | 0.093  | 0.090  | 0.084  | 0.5 | 0.193              | 0.096                                | 0.099                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS3       | 0.083                    | 0.085 | 0.084 | 0.083 | 0.094  | 0.098  | 0.103  | 0.100  | 0.097  | 0.088  | 0.5 | 0.203              | 0.102                                | 0.105                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS3       | 0.075                    | 0.076 | 0.078 | 0.081 | 0.082  | 0.085  | 0.086  | 0.083  | 0.080  | 0.072  | 0.5 | 0.150              | 0.075                                | 0.076                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS3       | 0.074                    | 0.080 | 0.081 | 0.082 | 0.085  | 0.086  | 0.086  | 0.084  | 0.082  | 0.078  | 0.5 | 0.150              | 0.075                                | 0.076                            |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                                      |                                  |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS4       | 0.054                    | 0.055 | 0.056 | 0.057 | 0.059  | 0.060  | 0.058  | 0.061  | 0.057  | 0.056  | 0.5 | 0.087              | 0.044                                | 0.049                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS4       | 0.068                    | 0.070 | 0.071 | 0.072 | 0.075  | 0.078  | 0.080  | 0.082  | 0.077  | 0.076  | 0.5 | 0.146              | 0.073                                | 0.074                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS4       | 0.071                    | 0.074 | 0.075 | 0.073 | 0.075  | 0.078  | 0.080  | 0.081  | 0.077  | 0.072  | 0.5 | 0.145              | 0.073                                | 0.074                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS4       | 0.066                    | 0.067 | 0.068 | 0.070 | 0.072  | 0.075  | 0.078  | 0.078  | 0.078  | 0.077  | 0.5 | 0.129              | 0.064                                | 0.067                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS4       | 0.078                    | 0.083 | 0.082 | 0.080 | 0.084  | 0.086  | 0.085  | 0.083  | 0.080  | 0.075  | 0.5 | 0.157              | 0.078                                | 0.079                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS4       | 0.081                    | 0.085 | 0.083 | 0.083 | 0.083  | 0.084  | 0.082  | 0.078  | 0.074  | 0.069  | 0.5 | 0.144              | 0.072                                | 0.073                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS5       | 0.050                    | 0.048 | 0.042 | 0.048 | 0.053  | 0.058  | 0.059  | 0.057  | 0.053  | 0.059  | 0.5 | 0.075              | 0.037                                | 0.042                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS5       | 0.051                    | 0.058 | 0.045 | 0.056 | 0.055  | 0.067  | 0.069  | 0.063  | 0.065  | 0.064  | 0.5 | 0.093              | 0.046                                | 0.047                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS5       | 0.060                    | 0.059 | 0.055 | 0.070 | 0.071  | 0.079  | 0.081  | 0.074  | 0.073  | 0.072  | 0.5 | 0.124              | 0.062                                | 0.063                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 116             | CW        | H           | 0.80              | BS5       | 0.059                    | 0.065 | 0.054 | 0.064 | 0.069  | 0.077  | 0.085  | 0.075  | 0.073  | 0.074  | 0.5 | 0.118              | 0.059                                | 0.061                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS5       | 0.059                    | 0.065 | 0.060 | 0.068 | 0.076  | 0.084  | 0.085  | 0.076  | 0.075  | 0.070  | 0.5 | 0.123              | 0.062                                | 0.062                            |                                      |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS5       | 0.061                    | 0.068 | 0.054 | 0.062 | 0.072  | 0.074  | 0.072  | 0.066  | 0.062  | 0.063  | 0.5 | 0.096              | 0.048                                | 0.049                            |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS1       | 0.103                    | 0.098 | 0.092 | 0.096 | 0.103  | 0.114  | 0.121  | 0.119  | 0.115  | 0.104  | 0.5                | 0.304                                | 0.152                            | 0.171                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | H           | 0.84              | BS1       | 0.106                    | 0.102 | 0.094 | 0.095 | 0.104  | 0.115  | 0.119  | 0.117  | 0.111  | 0.101  | 0.5                | 0.303                                | 0.152                            | 0.155                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS1       | 0.107                    | 0.101 | 0.095 | 0.096 | 0.106  | 0.118  | 0.123  | 0.119  | 0.111  | 0.096  | 0.5                | 0.301                                | 0.150                            | 0.152                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS2       | 0.086                    | 0.087 | 0.085 | 0.088 | 0.096  | 0.107  | 0.115  | 0.111  | 0.109  | 0.104  | 0.5                | 0.263                                | 0.131                            | 0.147                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | H           | 0.84              | BS2       | 0.091                    | 0.090 | 0.088 | 0.092 | 0.102  | 0.110  | 0.117  | 0.111  | 0.108  | 0.101  | 0.5                | 0.274                                | 0.137                            | 0.140                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS2       | 0.100                    | 0.098 | 0.095 | 0.101 | 0.108  | 0.117  | 0.122  | 0.120  | 0.118  | 0.109  | 0.5                | 0.310                                | 0.155                            | 0.156                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS3       | 0.077                    | 0.081 | 0.081 | 0.082 | 0.083  | 0.086  | 0.090  | 0.092  | 0.092  | 0.087  | 0.5                | 0.193                                | 0.097                            | 0.108                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | H           | 0.84              | BS3       | 0.080                    | 0.088 | 0.090 | 0.095 | 0.097  | 0.098  | 0.100  | 0.101  | 0.098  | 0.091  | 0.5                | 0.235                                | 0.118                            | 0.121                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS3       | 0.084                    | 0.090 | 0.093 | 0.094 | 0.096  | 0.099  | 0.102  | 0.103  | 0.102  | 0.097  | 0.5                | 0.240                                | 0.120                            | 0.121                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS4       | 0.062                    | 0.063 | 0.064 | 0.065 | 0.069  | 0.068  | 0.069  | 0.070  | 0.065  | 0.064  | 0.5                | 0.116                                | 0.058                            | 0.065                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 140.0000      | 120.0       | 117             | CW        | H           | 0.84              | BS4       | 0.070                    | 0.073 | 0.075 | 0.077 | 0.078  | 0.080  | 0.086  | 0.083  | 0.080  | 0.079  | 0.5                | 0.163                                | 0.081                            | 0.083                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS4       | 0.072                    | 0.074 | 0.075 | 0.076 | 0.079  | 0.080  | 0.082  | 0.082  | 0.082  | 0.083  | 0.5                | 0.160                                | 0.080                            | 0.081                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 136.0000      | 120.0       | 107             | CW        | H           | 0.84              | BS5       | 0.049                    | 0.052 | 0.047 | 0.051 | 0.056  | 0.065  | 0.068  | 0.067  | 0.066  | 0.070  | 0.5                | 0.095                                | 0.047                            | 0.053                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 140.0000      | 120.0       | 117             | CW        | H           | 0.84              | BS5       | 0.055                    | 0.058 | 0.048 | 0.051 | 0.069  | 0.074  | 0.078  | 0.076  | 0.079  | 0.081  | 0.5                | 0.123                                | 0.061                            | 0.063                                |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS5       | 0.049                    | 0.061 | 0.048 | 0.056 | 0.058  | 0.067  | 0.070  | 0.068  | 0.071  | 0.072  | 0.5                | 0.102                                | 0.051                            | 0.051                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS1       | 0.110                    | 0.104 | 0.096 | 0.097 | 0.111  | 0.123  | 0.124  | 0.121  | 0.110  | 0.096  | 0.5                | 0.312                                | 0.156                            | 0.158                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS1       | 0.120                    | 0.113 | 0.102 | 0.107 | 0.117  | 0.128  | 0.130  | 0.122  | 0.111  | 0.097  | 0.5                | 0.336                                | 0.168                            | 0.172                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS2       | 0.098                    | 0.096 | 0.093 | 0.096 | 0.104  | 0.113  | 0.121  | 0.117  | 0.116  | 0.109  | 0.5                | 0.296                                | 0.148                            | 0.149                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS2       | 0.101                    | 0.097 | 0.094 | 0.098 | 0.108  | 0.117  | 0.124  | 0.117  | 0.111  | 0.102  | 0.5                | 0.292                                | 0.146                            | 0.150                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS3       | 0.085                    | 0.091 | 0.093 | 0.094 | 0.098  | 0.100  | 0.103  | 0.103  | 0.102  | 0.098  | 0.5                | 0.244                                | 0.122                            | 0.123                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS3       | 0.085                    | 0.089 | 0.090 | 0.092 | 0.095  | 0.100  | 0.102  | 0.100  | 0.097  | 0.089  | 0.5                | 0.224                                | 0.112                            | 0.115                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS4       | 0.073                    | 0.072 | 0.073 | 0.074 | 0.076  | 0.078  | 0.080  | 0.082  | 0.081  | 0.080  | 0.5                | 0.154                                | 0.077                            | 0.078                                |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS4       | 0.081                    | 0.077 | 0.078 | 0.079 | 0.081  | 0.083  | 0.085  | 0.086  | 0.081  | 0.076  | 0.5                | 0.165                                | 0.083                            | 0.085                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 119             | CW        | H           | 0.83              | BS5       | 0.055                    | 0.054 | 0.040 | 0.055 | 0.059  | 0.068  | 0.070  | 0.065  | 0.069  | 0.067  | 0.5                | 0.096                   | 0.048               | 0.049                   |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS5       | 0.065                    | 0.069 | 0.058 | 0.067 | 0.071  | 0.086  | 0.081  | 0.080  | 0.077  | 0.071  | 0.5                | 0.135                   | 0.067               | 0.069                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS1       | 0.101                    | 0.095 | 0.088 | 0.090 | 0.101  | 0.111  | 0.112  | 0.105  | 0.097  | 0.086  | 0.5                | 0.248                   | 0.124               | 0.127                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H           | 0.81              | BS1       | 0.116                    | 0.107 | 0.097 | 0.101 | 0.108  | 0.110  | 0.107  | 0.093  | 0.083  | 0.076  | 0.5                | 0.250                   | 0.125               | 0.129                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS1       | 0.107                    | 0.097 | 0.089 | 0.091 | 0.101  | 0.106  | 0.101  | 0.091  | 0.088  | 0.087  | 0.5                | 0.223                   | 0.111               | 0.113                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS2       | 0.089                    | 0.086 | 0.083 | 0.088 | 0.095  | 0.104  | 0.110  | 0.102  | 0.098  | 0.091  | 0.5                | 0.229                   | 0.114               | 0.117                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H           | 0.81              | BS2       | 0.108                    | 0.103 | 0.096 | 0.098 | 0.108  | 0.119  | 0.120  | 0.115  | 0.108  | 0.098  | 0.5                | 0.286                   | 0.143               | 0.148                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS2       | 0.100                    | 0.097 | 0.091 | 0.097 | 0.109  | 0.118  | 0.121  | 0.112  | 0.108  | 0.100  | 0.5                | 0.270                   | 0.135               | 0.137                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS3       | 0.074                    | 0.078 | 0.077 | 0.079 | 0.083  | 0.086  | 0.090  | 0.087  | 0.084  | 0.077  | 0.5                | 0.169                   | 0.085               | 0.087                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H           | 0.81              | BS3       | 0.088                    | 0.091 | 0.092 | 0.094 | 0.100  | 0.107  | 0.110  | 0.107  | 0.103  | 0.097  | 0.5                | 0.243                   | 0.122               | 0.126                   |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS3       | 0.091                    | 0.091 | 0.094 | 0.096 | 0.099  | 0.102  | 0.103  | 0.100  | 0.095  | 0.086  | 0.5                | 0.222                   | 0.111               | 0.113                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                                      |                                  |                                      |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS4       | 0.070                    | 0.071 | 0.068 | 0.067 | 0.069  | 0.072  | 0.075  | 0.074  | 0.071  | 0.069  | 0.5 | 0.126              | 0.063                                | 0.065                            |                                      |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H           | 0.81              | BS4       | 0.078                    | 0.079 | 0.077 | 0.078 | 0.084  | 0.085  | 0.090  | 0.093  | 0.090  | 0.089  | 0.5 | 0.177              | 0.088                                | 0.091                            |                                      |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS4       | 0.081                    | 0.083 | 0.080 | 0.081 | 0.083  | 0.085  | 0.090  | 0.091  | 0.089  | 0.082  | 0.5 | 0.173              | 0.086                                | 0.088                            |                                      |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 117             | CW        | H           | 0.82              | BS5       | 0.059                    | 0.073 | 0.051 | 0.057 | 0.059  | 0.072  | 0.074  | 0.070  | 0.069  | 0.066  | 0.5 | 0.109              | 0.054                                | 0.056                            |                                      |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 116             | CW        | H           | 0.81              | BS5       | 0.067                    | 0.069 | 0.061 | 0.068 | 0.073  | 0.081  | 0.085  | 0.082  | 0.083  | 0.085  | 0.5 | 0.142              | 0.071                                | 0.074                            |                                      |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS5       | 0.063                    | 0.066 | 0.060 | 0.071 | 0.078  | 0.082  | 0.083  | 0.081  | 0.077  | 0.075  | 0.5 | 0.132              | 0.066                                | 0.067                            |                                      |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS1       | 0.104                    | 0.093 | 0.084 | 0.088 | 0.098  | 0.103  | 0.099  | 0.090  | 0.085  | 0.083  | 0.5 | 0.209              | 0.104                                | 0.106                            |                                      |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS1       | 0.108                    | 0.100 | 0.088 | 0.093 | 0.103  | 0.104  | 0.098  | 0.091  | 0.092  | 0.093  | 0.5 | 0.222              | 0.111                                | 0.112                            |                                      |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS1       | 0.084                    | 0.075 | 0.068 | 0.078 | 0.089  | 0.093  | 0.086  | 0.082  | 0.089  | 0.093  | 0.5 | 0.158              | 0.079                                | 0.080                            |                                      |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS2       | 0.098                    | 0.092 | 0.089 | 0.095 | 0.108  | 0.117  | 0.120  | 0.110  | 0.104  | 0.096  | 0.5 | 0.258              | 0.129                                | 0.131                            |                                      |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS2       | 0.099                    | 0.093 | 0.087 | 0.096 | 0.109  | 0.117  | 0.118  | 0.108  | 0.102  | 0.095  | 0.5 | 0.249              | 0.124                                | 0.126                            |                                      |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS2       | 0.094                    | 0.096 | 0.097 | 0.108 | 0.120  | 0.124  | 0.125  | 0.110  | 0.105  | 0.098  | 0.5 | 0.262              | 0.131                                | 0.132                            |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.1 (Continued)**  
**VHF band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements         |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS3       | 0.085                    | 0.087 | 0.088 | 0.090 | 0.095  | 0.096  | 0.099  | 0.094  | 0.091  | 0.084  | 0.5                | 0.200                   | 0.100               | 0.102                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS3       | 0.081                    | 0.082 | 0.083 | 0.085 | 0.087  | 0.091  | 0.091  | 0.087  | 0.083  | 0.073  | 0.5                | 0.168                   | 0.084               | 0.085                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS3       | 0.085                    | 0.090 | 0.094 | 0.095 | 0.098  | 0.099  | 0.100  | 0.095  | 0.092  | 0.088  | 0.5                | 0.196                   | 0.098               | 0.099                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS4       | 0.078                    | 0.085 | 0.078 | 0.078 | 0.078  | 0.083  | 0.086  | 0.085  | 0.084  | 0.081  | 0.5                | 0.161                   | 0.080               | 0.082                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS4       | 0.085                    | 0.095 | 0.087 | 0.090 | 0.088  | 0.092  | 0.096  | 0.093  | 0.091  | 0.085  | 0.5                | 0.192                   | 0.096               | 0.097                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS4       | 0.091                    | 0.096 | 0.094 | 0.093 | 0.092  | 0.093  | 0.092  | 0.090  | 0.086  | 0.082  | 0.5                | 0.185                   | 0.093               | 0.093                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 162.0000      | 120.0       | 118             | CW        | H           | 0.80              | BS5       | 0.060                    | 0.068 | 0.065 | 0.069 | 0.072  | 0.080  | 0.079  | 0.074  | 0.072  | 0.070  | 0.5                | 0.122                   | 0.061               | 0.062                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 165.0125      | 120.0       | 119             | CW        | H           | 0.79              | BS5       | 0.069                    | 0.072 | 0.064 | 0.070 | 0.078  | 0.087  | 0.088  | 0.084  | 0.078  | 0.073  | 0.5                | 0.138                   | 0.069               | 0.070                   |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz) | 2.15            | 173.0125      | 120.0       | 119             | CW        | H           | 0.77              | BS5       | 0.061                    | 0.070 | 0.056 | 0.070 | 0.071  | 0.081  | 0.078  | 0.068  | 0.043  | 0.062  | 0.5                | 0.100                   | 0.050               | 0.050                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.2**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |   |                    |                  |                   |                       |              | Probe Info.  |                         |              | MPE Measurements<br>Passenger/Operator (MC)<br>Positions |                         |                                  | DUT<br>Max.<br>TX<br>Factor | Avg. over<br>Body (mW/<br>cm2) | Calc.<br>P.D.<br>(mW/<br>cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |
|--------------|---|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|--------------|--|-------------------------|----------------------------------|-----------------------------|--------------------------------|-------------------------------|-----------------------------------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.                      | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor | Test<br>Pos. | Head/<br>Top 1/3   | Chest/<br>Middle<br>1/3 | Lower<br>Trunk/<br>Bottom<br>1/3 |                             |                                |                               |                                   |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 136.0000         | 120.0             | 117                   | CW           | E            | 1.01                    | PB           | 0.732  | 0.400                   | 0.207                            | 0.5                         | 0.451                          | 0.23                          | 0.23                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 146.0000         | 120.0             | 112                   | CW           | E            | 1.02                    | PB           | 0.684  | 0.510                   | 0.390                            | 0.5                         | 0.539                          | 0.27                          | 0.29                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 150.8000         | 120.0             | 110                   | CW           | E            | 1.02                    | PB           | 0.640  | 0.544                   | 0.355                            | 0.5                         | 0.523                          | 0.26                          | 0.29                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 158.0125         | 120.0             | 120                   | CW           | E            | 1.01                    | PB           | 0.764  | 0.750                   | 0.692                            | 0.5                         | 0.743                          | 0.37                          | 0.37                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 165.0125         | 120.0             | 114                   | CW           | E            | 1.00                    | PB           | 0.447  | 0.755                   | 0.795                            | 0.5                         | 0.666                          | 0.33                          | 0.35                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 173.0125         | 120.0             | 115                   | CW           | E            | 0.99                    | PB           | 0.147  | 0.253                   | 0.329                            | 0.5                         | 0.241                          | 0.12                          | 0.13                              |
| Roof         | RAD4010ARB,<br>1/2 Wave (136-<br>174MHz)  | 5.15               | 136.0000         | 120.0             | 117                   | CW           | E            | 1.01                    | PB           | 0.139  | 0.089                   | 0.051                            | 0.5                         | 0.094                          | 0.047                         | 0.05                              |
| Roof         | RAD4010ARB,<br>1/2 Wave (136-<br>174MHz)  | 5.15               | 146.0000         | 120.0             | 112                   | CW           | E            | 1.02                    | PB           | 0.096  | 0.092                   | 0.064                            | 0.5                         | 0.086                          | 0.043                         | 0.05                              |
| Roof         | RAD4010ARB,<br>1/2 Wave (136-<br>174MHz)  | 5.15               | 150.8000         | 120.0             | 110                   | CW           | E            | 1.02                    | PB           | 0.129  | 0.117                   | 0.075                            | 0.5                         | 0.109                          | 0.055                         | 0.06                              |
| Roof         | RAD4010ARB,<br>1/2 Wave (136-<br>174MHz)  | 5.15               | 158.0125         | 120.0             | 120                   | CW           | E            | 1.01                    | PB           | 0.171  | 0.199                   | 0.172                            | 0.5                         | 0.182                          | 0.091                         | 0.09                              |
| Roof         | RAD4010ARB,<br>1/2 Wave (136-<br>174MHz)  | 5.15               | 165.0125         | 120.0             | 114                   | CW           | E            | 1.00                    | PB           | 0.069  | 0.142                   | 0.145                            | 0.5                         | 0.119                          | 0.059                         | 0.06                              |
| Roof         | RAD4010ARB,<br>1/2 Wave (136-<br>174MHz)  | 5.15               | 173.0125         | 120.0             | 115                   | CW           | E            | 0.99                    | PB           | 0.072  | 0.156                   | 0.168                            | 0.5                         | 0.131                          | 0.065                         | 0.07                              |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PB        | 0.049                             | 0.081             | 0.053                   | 0.5                | 0.062                                | 0.03                             | 0.03                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PB        | 0.221                             | 0.150             | 0.110                   | 0.5                | 0.164                                | 0.08                             | 0.09                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PB        | 0.242                             | 0.220             | 0.14                    | 0.5                | 0.205                                | 0.10                             | 0.11                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.01              | PB        | 0.304                             | 0.310             | 0.265                   | 0.5                | 0.296                                | 0.15                             | 0.15                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.05              | PB        | 0.220                             | 0.347             | 0.326                   | 0.5                | 0.313                                | 0.16                             | 0.16                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz) | 5.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PB        | 0.087                             | 0.175             | 0.249                   | 0.5                | 0.169                                | 0.08                             | 0.09                                 |
|              |                                 |                 |               |             |                 |           |             |                   |           |                                   |                   |                         |                    |                                      |                                  |                                      |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PB        | 0.752                             | 0.434             | 0.193                   | 0.5                | 0.464                                | 0.23                             | 0.24                                 |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PB        | 0.828                             | 0.564             | 0.356                   | 0.5                | 0.594                                | 0.30                             | 0.32                                 |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PB        | 0.642                             | 0.598             | 0.386                   | 0.5                | 0.553                                | 0.28                             | 0.30                                 |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 119             | CW        | E           | 1.01              | PB        | 0.579                             | 0.719             | 0.592                   | 0.5                | 0.638                                | 0.32                             | 0.32                                 |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 115             | CW        | E           | 1.01              | PB        | 0.520                             | 0.727             | 0.695                   | 0.5                | 0.655                                | 0.33                             | 0.34                                 |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**

**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 112             | CW        | E           | 1.05              | PB        | 0.592                             | 0.431             | 0.293                   | 0.5                | 0.461                                | 0.23                             | 0.25                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.05              | PB        | 0.441                             | 0.394             | 0.295                   | 0.5                | 0.396                                | 0.20                             | 0.22                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.05              | PB        | 0.617                             | 0.782             | 0.647                   | 0.5                | 0.716                                | 0.36                             | 0.36                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.05              | PB        | 0.469                             | 0.805             | 0.714                   | 0.5                | 0.696                                | 0.35                             | 0.37                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | E           | 1.05              | PB        | 0.209                             | 0.313             | 0.279                   | 0.5                | 0.280                                | 0.14                             | 0.15                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PB        | 0.793                             | 0.436             | 0.219                   | 0.5                | 0.487                                | 0.24                             | 0.25                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PB        | 0.83                              | 0.588             | 0.407                   | 0.5                | 0.621                                | 0.31                             | 0.33                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PB        | 0.699                             | 0.568             | 0.438                   | 0.5                | 0.580                                | 0.29                             | 0.32                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.01              | PB        | 0.672                             | 0.691             | 0.596                   | 0.5                | 0.660                                | 0.33                             | 0.33                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PB        | 0.340                             | 0.622             | 0.619                   | 0.5                | 0.527                                | 0.26                             | 0.28                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PB        | 0.130                             | 0.216             | 0.229                   | 0.5                | 0.190                                | 0.09                             | 0.10                                 |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| Ant Loc. | Ant. Model/ Desc.                 | D.U.T. Info.    |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                   | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|          |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof     | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PB        | 1.016                             | 0.578             | 0.269                   | 0.5                | 0.627                   | 0.31                | 0.32                    |
| Roof     | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 140.0000      | 120.0       | 115             | CW        | E           | 1.02              | PB        | 1.030                             | 0.659             | 0.457                   | 0.5                | 0.729                   | 0.36                | 0.38                    |
| Roof     | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PB        | 0.932                             | 0.727             | 0.485                   | 0.5                | 0.728                   | 0.36                | 0.39                    |
| Roof     | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PB        | 0.864                             | 0.698             | 0.493                   | 0.5                | 0.698                   | 0.35                | 0.37                    |
| Roof     | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PB        | 0.823                             | 0.665             | 0.509                   | 0.5                | 0.678                   | 0.34                | 0.37                    |
| Roof     | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PB        | 0.55                              | 0.436             | 0.365                   | 0.5                | 0.459                   | 0.23                | 0.25                    |
| Roof     | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 119             | CW        | E           | 1.01              | PB        | 0.684                             | 0.714             | 0.657                   | 0.5                | 0.693                   | 0.35                | 0.35                    |
| Roof     | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 115             | CW        | E           | 1.01              | PB        | 0.560                             | 0.720             | 0.657                   | 0.5                | 0.654                   | 0.33                | 0.34                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)    | 2.15            | 162.0000      | 120.0       | 115             | CW        | E           | 1.01              | PB        | 0.393                             | 0.608             | 0.614                   | 0.5                | 0.545                   | 0.27                | 0.28                    |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)    | 2.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PB        | 0.514                             | 0.719             | 0.736                   | 0.5                | 0.658                   | 0.33                | 0.35                    |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)    | 2.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PB        | 0.2                               | 0.176             | 0.176                   | 0.5                | 0.183                   | 0.09                | 0.10                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PF        | 0.117                             | 0.169             | 0.082                   | 0.5                | 0.124                   | 0.062               | 0.06                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 112             | CW        | E           | 1.02              | PF        | 0.108                             | 0.215             | 0.145                   | 0.5                | 0.159                   | 0.080               | 0.09                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.092                             | 0.197             | 0.124                   | 0.5                | 0.140                   | 0.070               | 0.08                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.01              | PF        | 0.101                             | 0.231             | 0.174                   | 0.5                | 0.170                   | 0.085               | 0.09                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PF        | 0.106                             | 0.207             | 0.159                   | 0.5                | 0.157                   | 0.079               | 0.08                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PF        | 0.196                             | 0.202             | 0.180                   | 0.5                | 0.191                   | 0.095               | 0.10                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PF        | 0.021                             | 0.019             | 0.024                   | 0.5                | 0.022                                | 0.011                            | 0.01                                 |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 112             | CW        | E           | 1.02              | PF        | 0.039                             | 0.049             | 0.041                   | 0.5                | 0.044                                | 0.022                            | 0.02                                 |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.017                             | 0.033             | 0.045                   | 0.5                | 0.032                                | 0.016                            | 0.02                                 |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.01              | PF        | 0.009                             | 0.006             | 0.012                   | 0.5                | 0.009                                | 0.005                            | 0.00                                 |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PF        | 0.014                             | 0.022             | 0.021                   | 0.5                | 0.019                                | 0.010                            | 0.01                                 |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PF        | 0.022                             | 0.028             | 0.05                    | 0.5                | 0.033                                | 0.017                            | 0.02                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PF        | 0.039                             | 0.041             | 0.030                   | 0.5                | 0.037                                | 0.019                            | 0.02                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PF        | 0.032                             | 0.046             | 0.042                   | 0.5                | 0.041                                | 0.020                            | 0.02                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.045                             | 0.084             | 0.070                   | 0.5                | 0.068                                | 0.034                            | 0.04                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.01              | PF        | 0.027                             | 0.053             | 0.030                   | 0.5                | 0.037                                | 0.019                            | 0.02                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PF        | 0.049                             | 0.112             | 0.084                   | 0.5                | 0.082                                | 0.041                            | 0.04                                 |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PF        | 0.047                             | 0.063             | 0.074                   | 0.5                | 0.061                                | 0.030                            | 0.03                                 |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC

**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| Ant Loc. | Ant. Model/ Desc.               | D.U.T. Info.    |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|          |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof     | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PF        | 0.147                             | 0.206             | 0.098                   | 0.5                | 0.152                   | 0.076               | 0.08                    |
| Roof     | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PF        | 0.112                             | 0.190             | 0.164                   | 0.5                | 0.158                   | 0.079               | 0.08                    |
| Roof     | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.109                             | 0.21              | 0.188                   | 0.5                | 0.172                   | 0.086               | 0.09                    |
| Roof     | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 119             | CW        | E           | 1.01              | PF        | 0.087                             | 0.160             | 0.141                   | 0.5                | 0.131                   | 0.065               | 0.07                    |
| Roof     | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 115             | CW        | E           | 1.01              | PF        | 0.142                             | 0.296             | 0.15                    | 0.5                | 0.198                   | 0.099               | 0.10                    |
| Roof     | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 112             | CW        | E           | 1.02              | PF        | 0.088                             | 0.177             | 0.132                   | 0.5                | 0.135                   | 0.07                | 0.07                    |
| Roof     | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.070                             | 0.148             | 0.101                   | 0.5                | 0.108                   | 0.05                | 0.06                    |
| Roof     | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.01              | PF        | 0.108                             | 0.180             | 0.210                   | 0.5                | 0.168                   | 0.08                | 0.08                    |
| Roof     | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PF        | 0.127                             | 0.255             | 0.162                   | 0.5                | 0.181                   | 0.09                | 0.10                    |
| Roof     | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PF        | 0.210                             | 0.169             | 0.185                   | 0.5                | 0.186                   | 0.09                | 0.10                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz)   | 2.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PF        | 0.099                             | 0.177             | 0.072                   | 0.5                | 0.117                   | 0.059               | 0.06                    |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz)   | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PF        | 0.087                             | 0.185             | 0.147                   | 0.5                | 0.142                   | 0.071               | 0.08                    |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz)   | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.085                             | 0.170             | 0.121                   | 0.5                | 0.128                   | 0.064               | 0.07                    |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz)   | 2.15            | 158.0125      | 120.0       | 120             | CW        | E           | 1.01              | PF        | 0.098                             | 0.201             | 0.156                   | 0.5                | 0.153                   | 0.077               | 0.08                    |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz)   | 2.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PF        | 0.105                             | 0.190             | 0.156                   | 0.5                | 0.150                   | 0.075               | 0.08                    |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz)   | 2.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PF        | 0.163                             | 0.156             | 0.104                   | 0.5                | 0.140                   | 0.070               | 0.07                    |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 136.0000      | 120.0       | 117             | CW        | E           | 1.01              | PF        | 0.157                             | 0.282             | 0.121                   | 0.5                | 0.189                   | 0.094               | 0.10                    |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 140.0000      | 120.0       | 115             | CW        | E           | 1.02              | PF        | 0.117                             | 0.212             | 0.131                   | 0.5                | 0.156                   | 0.078               | 0.08                    |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PF        | 0.116                             | 0.227             | 0.171                   | 0.5                | 0.175                   | 0.087               | 0.09                    |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | E           | 1.02              | PF        | 0.103                             | 0.215             | 0.156                   | 0.5                | 0.161                   | 0.081               | 0.09                    |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.110                             | 0.217             | 0.125                   | 0.5                | 0.154                   | 0.077               | 0.08                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | E           | 1.02              | PF        | 0.070                             | 0.169             | 0.119                   | 0.5                | 0.122                                | 0.061                            | 0.07                                 |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 119             | CW        | E           | 1.01              | PF        | 0.105                             | 0.212             | 0.127                   | 0.5                | 0.149                                | 0.074                            | 0.08                                 |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 115             | CW        | E           | 1.01              | PF        | 0.129                             | 0.263             | 0.222                   | 0.5                | 0.206                                | 0.103                            | 0.11                                 |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 162.0000      | 120.0       | 115             | CW        | E           | 1.01              | PF        | 0.123                             | 0.224             | 0.199                   | 0.5                | 0.183                                | 0.09                             | 0.10                                 |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 165.0125      | 120.0       | 114             | CW        | E           | 1.00              | PF        | 0.169                             | 0.242             | 0.187                   | 0.5                | 0.200                                | 0.10                             | 0.11                                 |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 173.0125      | 120.0       | 115             | CW        | E           | 0.99              | PF        | 0.242                             | 0.235             | 0.202                   | 0.5                | 0.225                                | 0.11                             | 0.12                                 |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.89              | PB        | 0.158                             | 0.127             | 0.104                   | 0.5                | 0.512                   | 0.26                | 0.26                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 112             | CW        | H           | 0.88              | PB        | 0.146                             | 0.132             | 0.120                   | 0.5                | 0.519                   | 0.26                | 0.28                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PB        | 0.132                             | 0.128             | 0.111                   | 0.5                | 0.451                   | 0.23                | 0.25                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.87              | PB        | 0.139                             | 0.154             | 0.142                   | 0.5                | 0.606                   | 0.30                | 0.30                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PB        | 0.115                             | 0.135             | 0.147                   | 0.5                | 0.502                   | 0.25                | 0.26                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PB        | 0.093                             | 0.062             | 0.065                   | 0.5                | 0.156                   | 0.08                | 0.08                    |
|              |                                    |                 |               |             |                 |           |             |                   |           |                                   |                   |                         |                    |                         |                     |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.90              | PB        | 0.076                             | 0.059             | 0.049                   | 0.5                | 0.119                   | 0.059               | 0.06                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 146.0000      | 120.0       | 112             | CW        | H           | 0.88              | PB        | 0.064                             | 0.056             | 0.051                   | 0.5                | 0.096                   | 0.048               | 0.05                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PB        | 0.061                             | 0.058             | 0.055                   | 0.5                | 0.099                   | 0.049               | 0.05                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.87              | PB        | 0.074                             | 0.078             | 0.072                   | 0.5                | 0.161                   | 0.080               | 0.08                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PB        | 0.052                             | 0.051             | 0.047                   | 0.5                | 0.071                   | 0.036               | 0.04                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz)  | 5.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PB        | 0.053                             | 0.044             | 0.06                    | 0.5                | 0.078                   | 0.039               | 0.04                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.2 (Continued)**

**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |  |                    |                  |                   |                       |              | Probe Info.  |                         | Test Pos. | MPE Measurements<br>Passenger/Operator (MC)<br>Positions |                         |                                  | DUT<br>Max.<br>TX<br>Factor | Avg. over<br>Body (mW/<br>cm2) | Calc.<br>P.D.<br>(mW/<br>cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |
|--------------|--|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|-----------|--|-------------------------|----------------------------------|-----------------------------|--------------------------------|-------------------------------|-----------------------------------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.                   | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor |           | Head/<br>Top 1/3   | Chest/<br>Middle<br>1/3 | Lower<br>Trunk/<br>Bottom<br>1/3 |                             |                                |                               |                                   |
| Roof         | HAD4022A, 5/8<br>Wave (132-<br>174MHz) | 5.15               | 136.0000         | 120.0             | 117                   | CW           | H            | 0.89                    |           | PB   | 0.078                   | 0.062                            |                             |                                |                               |                                   |
| Roof         | HAD4022A, 5/8<br>Wave (132-<br>174MHz) | 5.15               | 144.0000         | 120.0             | 113                   | CW           | H            | 0.88                    | PB        | 0.083  | 0.079                   | 0.068                            | 0.5                         | 0.173                          | 0.09                          | 0.09                              |
| Roof         | HAD4022A, 5/8<br>Wave (132-<br>174MHz) | 5.15               | 150.8000         | 120.0             | 110                   | CW           | H            | 0.88                    | PB        | 0.075  | 0.078                   | 0.068                            | 0.5                         | 0.160                          | 0.08                          | 0.09                              |
| Roof         | HAD4022A, 5/8<br>Wave (132-<br>174MHz) | 5.15               | 158.0125         | 120.0             | 120                   | CW           | H            | 0.86                    | PB        | 0.103  | 0.106                   | 0.099                            | 0.5                         | 0.294                          | 0.15                          | 0.15                              |
| Roof         | HAD4022A, 5/8<br>Wave (132-<br>174MHz) | 5.15               | 165.0125         | 120.0             | 114                   | CW           | H            | 0.87                    | PB        | 0.087  | 0.108                   | 0.122                            | 0.5                         | 0.323                          | 0.16                          | 0.17                              |
| Roof         | HAD4022A, 5/8<br>Wave (132-<br>174MHz) | 5.15               | 173.0125         | 120.0             | 115                   | CW           | H            | 0.86                    | PB        | 0.061  | 0.077                   | 0.092                            | 0.5                         | 0.169                          | 0.08                          | 0.09                              |
| Roof         | HAD4016A, 1/4<br>Wave (136-<br>162MHz) | 2.15               | 136.0000         | 120.0             | 117                   | CW           | H            | 0.89                    | PB        | 0.142  | 0.117                   | 0.108                            | 0.5                         | 0.449                          | 0.22                          | 0.23                              |
| Roof         | HAD4016A, 1/4<br>Wave (136-<br>162MHz) | 2.15               | 144.0000         | 120.0             | 113                   | CW           | H            | 0.88                    | PB        | 0.149  | 0.138                   | 0.122                            | 0.5                         | 0.545                          | 0.27                          | 0.29                              |
| Roof         | HAD4016A, 1/4<br>Wave (136-<br>162MHz) | 2.15               | 150.8000         | 120.0             | 110                   | CW           | H            | 0.88                    | PB        | 0.138  | 0.132                   | 0.12                             | 0.5                         | 0.494                          | 0.25                          | 0.27                              |
| Roof         | HAD4016A, 1/4<br>Wave (136-<br>162MHz) | 2.15               | 156.4000         | 120.0             | 119                   | CW           | H            | 0.87                    | PB        | 0.139  | 0.149                   | 0.136                            | 0.5                         | 0.571                          | 0.29                          | 0.29                              |
| Roof         | HAD4016A, 1/4<br>Wave (136-<br>162MHz) | 2.15               | 162.0000         | 120.0             | 115                   | CW           | H            | 0.87                    | PB        | 0.129  | 0.150                   | 0.159                            | 0.5                         | 0.613                          | 0.31                          | 0.32                              |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 112             | CW        | H           | 0.88              | PB        | 0.106                             | 0.101             | 0.089                   | 0.5                | 0.287                                | 0.14                             | 0.15                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PB        | 0.119                             | 0.107             | 0.093                   | 0.5                | 0.333                                | 0.17                             | 0.18                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.87              | PB        | 0.145                             | 0.155             | 0.139                   | 0.5                | 0.609                                | 0.30                             | 0.30                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PB        | 0.140                             | 0.179             | 0.183                   | 0.5                | 0.806                                | 0.40                             | 0.42                                 |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.83              | PB        | 0.111                             | 0.101             | 0.095                   | 0.5                | 0.273                                | 0.14                             | 0.14                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.89              | PB        | 0.155                             | 0.128             | 0.106                   | 0.5                | 0.509                                | 0.25                             | 0.26                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | H           | 0.88              | PB        | 0.145                             | 0.138             | 0.119                   | 0.5                | 0.530                                | 0.26                             | 0.28                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PB        | 0.135                             | 0.13              | 0.111                   | 0.5                | 0.463                                | 0.23                             | 0.25                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.86              | PB        | 0.132                             | 0.147             | 0.135                   | 0.5                | 0.532                                | 0.27                             | 0.27                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PB        | 0.112                             | 0.133             | 0.139                   | 0.5                | 0.469                                | 0.23                             | 0.25                                 |
| Roof         | HAD4021A, 1/4 Wave (136-174MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PB        | 0.072                             | 0.077             | 0.09                    | 0.5                | 0.179                                | 0.09                             | 0.09                                 |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.89              | PB        | 0.177                             | 0.139             | 0.11                    | 0.5                | 0.618                   | 0.31                | 0.32                    |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 140.0000      | 120.0       | 115             | CW        | H           | 0.88              | PB        | 0.184                             | 0.158             | 0.13                    | 0.5                | 0.740                   | 0.37                | 0.39                    |
| Roof         | HAD4006A, 1/4 Wave (136-144MHz)   | 2.15            | 144.0000      | 120.0       | 113             | CW        | H           | 0.88              | PB        | 0.162                             | 0.15              | 0.128                   | 0.5                | 0.636                   | 0.32                | 0.34                    |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | H           | 0.88              | PB        | 0.157                             | 0.144             | 0.124                   | 0.5                | 0.593                   | 0.30                | 0.32                    |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PB        | 0.136                             | 0.133             | 0.118                   | 0.5                | 0.489                   | 0.24                | 0.27                    |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PB        | 0.122                             | 0.119             | 0.104                   | 0.5                | 0.388                   | 0.19                | 0.21                    |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 119             | CW        | H           | 0.87              | PB        | 0.147                             | 0.155             | 0.139                   | 0.5                | 0.625                   | 0.31                | 0.32                    |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 115             | CW        | H           | 0.87              | PB        | 0.132                             | 0.165             | 0.167                   | 0.5                | 0.698                   | 0.35                | 0.36                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)    | 2.15            | 162.0000      | 120.0       | 115             | CW        | H           | 0.87              | PB        | 0.12                              | 0.147             | 0.146                   | 0.5                | 0.551                   | 0.28                | 0.29                    |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)    | 2.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PB        | 0.110                             | 0.143             | 0.153                   | 0.5                | 0.530                   | 0.26                | 0.28                    |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)    | 2.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PB        | 0.078                             | 0.086             | 0.098                   | 0.5                | 0.215                   | 0.11                | 0.11                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.89              | PF        | 0.096                             | 0.083             | 0.067                   | 0.5                | 0.203                   | 0.101               | 0.10                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 146.0000      | 120.0       | 112             | CW        | H           | 0.88              | PF        | 0.079                             | 0.084             | 0.066                   | 0.5                | 0.172                   | 0.086               | 0.09                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PF        | 0.079                             | 0.08              | 0.065                   | 0.5                | 0.165                   | 0.082               | 0.09                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.87              | PF        | 0.086                             | 0.089             | 0.084                   | 0.5                | 0.215                   | 0.107               | 0.11                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.85              | PF        | 0.094                             | 0.101             | 0.072                   | 0.5                | 0.220                   | 0.110               | 0.12                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PF        | 0.096                             | 0.086             | 0.087                   | 0.5                | 0.226                   | 0.113               | 0.12                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**  
**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.89              | PF        | 0.049                             | 0.04              | 0.043                   | 0.5                | 0.058                   | 0.029               | 0.03                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 146.0000      | 120.0       | 112             | CW        | H           | 0.88              | PF        | 0.045                             | 0.046             | 0.04                    | 0.5                | 0.056                   | 0.028               | 0.03                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PF        | 0.049                             | 0.042             | 0.04                    | 0.5                | 0.056                   | 0.028               | 0.03                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.86              | PF        | 0.041                             | 0.035             | 0.031                   | 0.5                | 0.036                   | 0.018               | 0.02                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PF        | 0.050                             | 0.048             | 0.039                   | 0.5                | 0.060                   | 0.030               | 0.03                    |
| Roof         | RAD4010ARB, 1/2 Wave (136-174MHz) | 5.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PF        | 0.052                             | 0.043             | 0.055                   | 0.5                | 0.071                   | 0.035               | 0.04                    |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.89              | PF        | 0.056                             | 0.045             | 0.050                   | 0.5                | 0.076                   | 0.038               | 0.04                    |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 144.0000      | 120.0       | 113             | CW        | H           | 0.88              | PF        | 0.045                             | 0.042             | 0.044                   | 0.5                | 0.056                   | 0.028               | 0.03                    |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PF        | 0.052                             | 0.048             | 0.050                   | 0.5                | 0.073                   | 0.037               | 0.04                    |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.87              | PF        | 0.048                             | 0.049             | 0.042                   | 0.5                | 0.062                   | 0.031               | 0.03                    |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PF        | 0.067                             | 0.068             | 0.054                   | 0.5                | 0.114                   | 0.057               | 0.06                    |
| Roof         | HAD4022A, 5/8 Wave (132-174MHz)   | 5.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PF        | 0.07                              | 0.056             | 0.063                   | 0.5                | 0.112                   | 0.056               | 0.06                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table J.2 (Continued)**

**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 136.0000      | 120.0       | 117             | CW        | H           | 0.89              | PF        | 0.102                             | 0.082             | 0.053                   | 0.5                | 0.196                   | 0.098               | 0.10                    |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | H           | 0.88              | PF        | 0.077                             | 0.075             | 0.063                   | 0.5                | 0.152                   | 0.076               | 0.08                    |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PF        | 0.079                             | 0.081             | 0.061                   | 0.5                | 0.161                   | 0.081               | 0.09                    |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 156.4000      | 120.0       | 119             | CW        | H           | 0.87              | PF        | 0.068                             | 0.073             | 0.057                   | 0.5                | 0.127                   | 0.063               | 0.06                    |
| Roof         | HAD4016A, 1/4 Wave (136-162MHz) | 2.15            | 162.0000      | 120.0       | 115             | CW        | H           | 0.87              | PF        | 0.095                             | 0.099             | 0.075                   | 0.5                | 0.231                   | 0.116               | 0.12                    |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 146.0000      | 120.0       | 112             | CW        | H           | 0.88              | PF        | 0.074                             | 0.07              | 0.068                   | 0.5                | 0.147                   | 0.07                | 0.08                    |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.87              | PF        | 0.069                             | 0.068             | 0.063                   | 0.5                | 0.127                   | 0.06                | 0.07                    |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 158.0125      | 120.0       | 120             | CW        | H           | 0.86              | PF        | 0.087                             | 0.088             | 0.077                   | 0.5                | 0.197                   | 0.10                | 0.10                    |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.85              | PF        | 0.102                             | 0.109             | 0.091                   | 0.5                | 0.278                   | 0.14                | 0.15                    |
| Roof         | HAD4017A, 1/4 Wave (146-174MHz) | 2.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.83              | PF        | 0.101                             | 0.114             | 0.078                   | 0.5                | 0.253                   | 0.13                | 0.13                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table J.2 (Continued)**

**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |  |                    |                  |                   |                       |              | Probe Info.  |                         | MPE Measurements<br>Passenger/Operator (MC)<br>Positions |                  |                         | DUT<br>Max.<br>TX<br>Factor | Avg. over<br>Body (mW/<br>cm2) | Calc.<br>P.D.<br>(mW/<br>cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |                                  |
|--------------|--|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|--|------------------|-------------------------|-----------------------------|--------------------------------|-------------------------------|-----------------------------------|----------------------------------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.                   | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor | Test<br>Pos.   | Head/<br>Top 1/3 | Chest/<br>Middle<br>1/3 |                             |                                |                               |                                   | Lower<br>Trunk/<br>Bottom<br>1/3 |
| Roof         | HAD4021A, 1/4<br>Wave (136-<br>174MHz) | 2.15               | 136.0000         | 120.0             | 117                   | CW           | H            | 0.89                    | PF   | 0.098            | 0.084                   | 0.052                       | 0.5                            | 0.191                         | 0.095                             | 0.10                             |
| Roof         | HAD4021A, 1/4<br>Wave (136-<br>174MHz) | 2.15               | 144.0000         | 120.0             | 113                   | CW           | H            | 0.88                    | PF   | 0.07             | 0.075                   | 0.056                       | 0.5                            | 0.133                         | 0.067                             | 0.07                             |
| Roof         | HAD4021A, 1/4<br>Wave (136-<br>174MHz) | 2.15               | 150.8000         | 120.0             | 110                   | CW           | H            | 0.88                    | PF   | 0.08             | 0.083                   | 0.068                       | 0.5                            | 0.175                         | 0.087                             | 0.10                             |
| Roof         | HAD4021A, 1/4<br>Wave (136-<br>174MHz) | 2.15               | 158.0125         | 120.0             | 120                   | CW           | H            | 0.87                    | PF   | 0.081            | 0.086                   | 0.076                       | 0.5                            | 0.189                         | 0.095                             | 0.09                             |
| Roof         | HAD4021A, 1/4<br>Wave (136-<br>174MHz) | 2.15               | 165.0125         | 120.0             | 114                   | CW           | H            | 0.87                    | PF   | 0.093            | 0.102                   | 0.081                       | 0.5                            | 0.243                         | 0.121                             | 0.13                             |
| Roof         | HAD4021A, 1/4<br>Wave (136-<br>174MHz) | 2.15               | 173.0125         | 120.0             | 115                   | CW           | H            | 0.86                    | PF   | 0.090            | 0.089                   | 0.070                       | 0.5                            | 0.195                         | 0.098                             | 0.10                             |
| Roof         | HAD4006A, 1/4<br>Wave (136-<br>144MHz) | 2.15               | 136.0000         | 120.0             | 117                   | CW           | H            | 0.89                    | PF   | 0.094            | 0.086                   | 0.066                       | 0.5                            | 0.203                         | 0.101                             | 0.10                             |
| Roof         | HAD4006A, 1/4<br>Wave (136-<br>144MHz) | 2.15               | 140.0000         | 120.0             | 115                   | CW           | H            | 0.88                    | PF   | 0.087            | 0.074                   | 0.069                       | 0.5                            | 0.174                         | 0.087                             | 0.09                             |
| Roof         | HAD4006A, 1/4<br>Wave (136-<br>144MHz) | 2.15               | 144.0000         | 120.0             | 113                   | CW           | H            | 0.88                    | PF   | 0.091            | 0.083                   | 0.070                       | 0.5                            | 0.196                         | 0.098                             | 0.10                             |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table J.2 (Continued)**

**VHF band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements<br>Passenger/Operator (MC)<br>Positions |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Head/ Top 1/3  | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 144.0000      | 120.0       | 113             | CW        | H           | 0.88              |           | PF   | 0.078             | 0.076                   |                    |                                      |                                  |                                      |
| Roof         | HAD4007A, 1/4 Wave (144-150.8MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PF        | 0.087  | 0.086             | 0.071                   | 0.5                | 0.195                                | 0.098                            | 0.11                                 |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 150.8000      | 120.0       | 110             | CW        | H           | 0.88              | PF        | 0.073  | 0.08              | 0.067                   | 0.5                | 0.158                                | 0.079                            | 0.09                                 |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 156.4000      | 120.0       | 119             | CW        | H           | 0.87              | PF        | 0.080  | 0.097             | 0.068                   | 0.5                | 0.197                                | 0.098                            | 0.10                                 |
| Roof         | HAD4008A, 1/4 Wave (150.8-162MHz) | 2.15            | 162.0000      | 120.0       | 115             | CW        | H           | 0.85              | PF        | 0.112  | 0.109             | 0.096                   | 0.5                | 0.305                                | 0.15                             | 0.16                                 |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 162.0000      | 120.0       | 115             | CW        | H           | 0.87              | PF        | 0.097  | 0.119             | 0.088                   | 0.5                | 0.301                                | 0.15                             | 0.16                                 |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 165.0125      | 120.0       | 114             | CW        | H           | 0.87              | PF        | 0.109  | 0.123             | 0.088                   | 0.5                | 0.334                                | 0.17                             | 0.18                                 |
| Roof         | HAD4009A, 1/4 Wave (162-174MHz)   | 2.15            | 173.0125      | 120.0       | 115             | CW        | H           | 0.86              | PF        | 0.094  | 0.091             | 0.069                   | 0.5                | 0.204                                | 0.10                             | 0.11                                 |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Appendix K – MPE Measurement Results for LMR UHF R1**

**Table K.1**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS1       | 0.040                    | 0.020 | 0.030 | 0.040 | 0.050  | 0.070  | 0.060  | 0.060  | 0.070  | 0.110  | 0.5                | 0.058                   | 0.029               | 0.030                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS1       | 0.010                    | 0.040 | 0.030 | 0.050 | 0.080  | 0.100  | 0.090  | 0.070  | 0.080  | 0.140  | 0.5                | 0.074                   | 0.037               | 0.037                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS1       | 0.010                    | 0.010 | 0.030 | 0.050 | 0.080  | 0.120  | 0.150  | 0.110  | 0.080  | 0.140  | 0.5                | 0.083                   | 0.042               | 0.042                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS1       | 0.020                    | 0.040 | 0.070 | 0.080 | 0.110  | 0.120  | 0.120  | 0.100  | 0.080  | 0.090  | 0.5                | 0.085                   | 0.043               | 0.046                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS1       | 0.040                    | 0.060 | 0.100 | 0.120 | 0.150  | 0.130  | 0.090  | 0.070  | 0.090  | 0.150  | 0.5                | 0.100                   | 0.050               | 0.056                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.060                    | 0.060 | 0.110 | 0.140 | 0.170  | 0.140  | 0.120  | 0.110  | 0.140  | 0.210  | 0.5                | 0.122                   | 0.061               | 0.062                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.060                    | 0.070 | 0.100 | 0.110 | 0.100  | 0.090  | 0.080  | 0.070  | 0.110  | 0.170  | 0.5                | 0.089                   | 0.045               | 0.046                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS2       | 0.037                    | 0.036 | 0.033 | 0.034 | 0.030  | 0.041  | 0.051  | 0.050  | 0.045  | 0.054  | 0.5                | 0.043                   | 0.022               | 0.023                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS2       | 0.044                    | 0.038 | 0.040 | 0.051 | 0.048  | 0.057  | 0.060  | 0.058  | 0.061  | 0.080  | 0.5                | 0.057                   | 0.029               | 0.029                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS2       | 0.058                    | 0.047 | 0.053 | 0.052 | 0.045  | 0.050  | 0.054  | 0.055  | 0.065  | 0.073  | 0.5                | 0.059                   | 0.030               | 0.030                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS2       | 0.041                    | 0.035 | 0.041 | 0.036 | 0.037  | 0.045  | 0.049  | 0.043  | 0.048  | 0.090  | 0.5                | 0.048                   | 0.024               | 0.026                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS2       | 0.030                    | 0.016 | 0.020 | 0.022 | 0.031  | 0.043  | 0.061  | 0.085  | 0.106  | 0.110  | 0.5                | 0.052                   | 0.026               | 0.029                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.034                    | 0.028 | 0.026 | 0.028 | 0.042  | 0.065  | 0.091  | 0.113  | 0.121  | 0.113  | 0.5                | 0.064                   | 0.032               | 0.032                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.023                    | 0.016 | 0.022 | 0.027 | 0.043  | 0.060  | 0.075  | 0.071  | 0.067  | 0.097  | 0.5                | 0.047                   | 0.023               | 0.024                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS3       | 0.046                    | 0.050 | 0.031 | 0.051 | 0.050  | 0.030  | 0.031  | 0.032  | 0.033  | 0.036  | 0.5                | 0.041                                | 0.020                            | 0.021                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS3       | 0.063                    | 0.070 | 0.062 | 0.079 | 0.061  | 0.035  | 0.034  | 0.033  | 0.040  | 0.050  | 0.5                | 0.056                                | 0.028                            | 0.028                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS3       | 0.058                    | 0.064 | 0.060 | 0.069 | 0.047  | 0.031  | 0.022  | 0.021  | 0.035  | 0.066  | 0.5                | 0.051                                | 0.025                            | 0.026                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS3       | 0.028                    | 0.026 | 0.031 | 0.045 | 0.039  | 0.042  | 0.049  | 0.050  | 0.045  | 0.050  | 0.5                | 0.042                                | 0.021                            | 0.023                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS3       | 0.033                    | 0.036 | 0.045 | 0.048 | 0.038  | 0.040  | 0.039  | 0.038  | 0.051  | 0.059  | 0.5                | 0.043                                | 0.021                            | 0.024                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.038                    | 0.045 | 0.059 | 0.056 | 0.046  | 0.040  | 0.039  | 0.049  | 0.058  | 0.065  | 0.5                | 0.048                                | 0.024                            | 0.024                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.042                    | 0.039 | 0.046 | 0.045 | 0.038  | 0.041  | 0.048  | 0.055  | 0.054  | 0.056  | 0.5                | 0.043                                | 0.022                            | 0.022                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS4       | 0.030                    | 0.041 | 0.029 | 0.023 | 0.027  | 0.030  | 0.026  | 0.019  | 0.012  | 0.010  | 0.5                | 0.026                                | 0.013                            | 0.014                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS4       | 0.050                    | 0.062 | 0.037 | 0.038 | 0.043  | 0.045  | 0.035  | 0.024  | 0.018  | 0.017  | 0.5                | 0.039                                | 0.020                            | 0.020                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS4       | 0.034                    | 0.046 | 0.037 | 0.048 | 0.064  | 0.061  | 0.039  | 0.015  | 0.007  | 0.013  | 0.5                | 0.039                                | 0.019                            | 0.020                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS4       | 0.033                    | 0.030 | 0.019 | 0.022 | 0.030  | 0.035  | 0.036  | 0.025  | 0.016  | 0.012  | 0.5                | 0.027                                | 0.013                            | 0.014                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS4       | 0.030                    | 0.033 | 0.030 | 0.031 | 0.033  | 0.026  | 0.017  | 0.012  | 0.016  | 0.027  | 0.5                | 0.026                                | 0.013                            | 0.014                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.037                    | 0.039 | 0.031 | 0.032 | 0.037  | 0.033  | 0.026  | 0.015  | 0.018  | 0.027  | 0.5                | 0.029                                | 0.014                            | 0.014                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.023                    | 0.022 | 0.015 | 0.025 | 0.024  | 0.019  | 0.012  | 0.013  | 0.020  | 0.036  | 0.5                | 0.019                                | 0.010                            | 0.010                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS5       | 0.004                    | 0.002 | 0.003 | 0.004 | 0.006  | 0.010  | 0.010  | 0.005  | 0.001  | 0.004  | 0.5                | 0.005                                | 0.003                            | 0.003                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS5       | 0.003                    | 0.002 | 0.004 | 0.007 | 0.011  | 0.014  | 0.010  | 0.003  | 0.002  | 0.005  | 0.5                | 0.007                                | 0.003                            | 0.003                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS5       | 0.002                    | 0.002 | 0.001 | 0.001 | 0.005  | 0.007  | 0.010  | 0.013  | 0.012  | 0.009  | 0.5                | 0.007                                | 0.003                            | 0.003                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS5       | 0.002                    | 0.004 | 0.006 | 0.011 | 0.012  | 0.011  | 0.012  | 0.014  | 0.020  | 0.022  | 0.5                | 0.012                                | 0.006                            | 0.006                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS5       | 0.002                    | 0.003 | 0.005 | 0.008 | 0.014  | 0.020  | 0.019  | 0.018  | 0.017  | 0.020  | 0.5                | 0.013                                | 0.006                            | 0.007                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.002                    | 0.003 | 0.005 | 0.008 | 0.017  | 0.023  | 0.026  | 0.021  | 0.018  | 0.023  | 0.5                | 0.014                                | 0.007                            | 0.007                                |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.006                    | 0.004 | 0.009 | 0.015 | 0.025  | 0.029  | 0.025  | 0.018  | 0.011  | 0.013  | 0.5                | 0.014                                | 0.007                            | 0.007                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS1       | 0.040                    | 0.030 | 0.040 | 0.060 | 0.080  | 0.110  | 0.100  | 0.080  | 0.080  | 0.100  | 0.5                | 0.076                                | 0.038                            | 0.039                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS1       | 0.040                    | 0.030 | 0.060 | 0.060 | 0.090  | 0.120  | 0.090  | 0.060  | 0.030  | 0.080  | 0.5                | 0.071                                | 0.035                            | 0.035                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS1       | 0.020                    | 0.010 | 0.040 | 0.050 | 0.120  | 0.190  | 0.210  | 0.120  | 0.030  | 0.060  | 0.5                | 0.091                                | 0.045                            | 0.046                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS1       | 0.020                    | 0.030 | 0.070 | 0.100 | 0.150  | 0.160  | 0.140  | 0.080  | 0.020  | 0.030  | 0.5                | 0.083                                | 0.042                            | 0.044                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS1       | 0.030                    | 0.040 | 0.080 | 0.090 | 0.110  | 0.110  | 0.090  | 0.060  | 0.020  | 0.010  | 0.5                | 0.065                                | 0.032                            | 0.036                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS2       | 0.046                    | 0.047 | 0.049 | 0.051 | 0.048  | 0.066  | 0.074  | 0.067  | 0.052  | 0.060  | 0.5                | 0.059                   | 0.029               | 0.031                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS2       | 0.059                    | 0.047 | 0.050 | 0.062 | 0.067  | 0.087  | 0.085  | 0.062  | 0.044  | 0.055  | 0.5                | 0.066                   | 0.033               | 0.033                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS2       | 0.069                    | 0.057 | 0.071 | 0.064 | 0.065  | 0.070  | 0.051  | 0.034  | 0.025  | 0.026  | 0.5                | 0.057                   | 0.028               | 0.029                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS2       | 0.051                    | 0.047 | 0.060 | 0.054 | 0.065  | 0.074  | 0.059  | 0.032  | 0.011  | 0.010  | 0.5                | 0.048                   | 0.024               | 0.026                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS2       | 0.039                    | 0.041 | 0.046 | 0.041 | 0.064  | 0.065  | 0.078  | 0.049  | 0.015  | 0.009  | 0.5                | 0.045                   | 0.023               | 0.025                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS3       | 0.057                    | 0.058 | 0.040 | 0.063 | 0.056  | 0.031  | 0.030  | 0.029  | 0.030  | 0.031  | 0.5                | 0.045                   | 0.022               | 0.023                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS3       | 0.079                    | 0.082 | 0.073 | 0.093 | 0.065  | 0.034  | 0.026  | 0.021  | 0.024  | 0.028  | 0.5                | 0.056                   | 0.028               | 0.028                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS3       | 0.072                    | 0.076 | 0.075 | 0.088 | 0.059  | 0.040  | 0.028  | 0.016  | 0.014  | 0.023  | 0.5                | 0.053                   | 0.026               | 0.027                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS3       | 0.037                    | 0.039 | 0.045 | 0.058 | 0.051  | 0.047  | 0.042  | 0.034  | 0.021  | 0.015  | 0.5                | 0.040                   | 0.020               | 0.021                   |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS3       | 0.037                    | 0.029 | 0.041 | 0.052 | 0.041  | 0.044  | 0.040  | 0.033  | 0.021  | 0.012  | 0.5                | 0.035                   | 0.018               | 0.020                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**

**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS4       | 0.034                    | 0.047 | 0.030 | 0.028 | 0.036  | 0.035  | 0.029  | 0.019  | 0.010  | 0.006  | 0.5                | 0.029                                | 0.014                            | 0.015                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS4       | 0.054                    | 0.064 | 0.041 | 0.042 | 0.044  | 0.042  | 0.030  | 0.015  | 0.007  | 0.004  | 0.5                | 0.037                                | 0.018                            | 0.018                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS4       | 0.036                    | 0.047 | 0.038 | 0.048 | 0.057  | 0.047  | 0.026  | 0.006  | 0.002  | 0.001  | 0.5                | 0.033                                | 0.016                            | 0.017                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS4       | 0.028                    | 0.027 | 0.021 | 0.027 | 0.033  | 0.032  | 0.020  | 0.008  | 0.003  | 0.002  | 0.5                | 0.021                                | 0.010                            | 0.011                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS4       | 0.034                    | 0.033 | 0.024 | 0.029 | 0.028  | 0.024  | 0.011  | 0.006  | 0.010  | 0.009  | 0.5                | 0.021                                | 0.011                            | 0.012                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS5       | 0.007                    | 0.003 | 0.004 | 0.008 | 0.013  | 0.019  | 0.017  | 0.005  | 0.004  | 0.001  | 0.5                | 0.009                                | 0.004                            | 0.004                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS5       | 0.001                    | 0.003 | 0.006 | 0.011 | 0.018  | 0.024  | 0.021  | 0.012  | 0.006  | 0.005  | 0.5                | 0.011                                | 0.006                            | 0.006                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS5       | 0.004                    | 0.005 | 0.007 | 0.008 | 0.010  | 0.014  | 0.018  | 0.015  | 0.010  | 0.004  | 0.5                | 0.010                                | 0.005                            | 0.005                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS5       | 0.002                    | 0.007 | 0.010 | 0.011 | 0.016  | 0.017  | 0.015  | 0.011  | 0.006  | 0.005  | 0.5                | 0.010                                | 0.005                            | 0.006                                |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz) | 5.65            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS5       | 0.007                    | 0.013 | 0.016 | 0.023 | 0.032  | 0.033  | 0.025  | 0.015  | 0.011  | 0.012  | 0.5                | 0.019                                | 0.009                            | 0.010                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS1       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.020  | 0.060  | 0.170  | 0.300  | 0.400  | 0.380  | 0.5                | 0.140                                | 0.070                            | 0.073                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS1       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.020  | 0.080  | 0.200  | 0.380  | 0.490  | 0.500  | 0.5                | 0.179                                | 0.089                            | 0.089                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS1       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.060  | 0.170  | 0.300  | 0.410  | 0.440  | 0.5                | 0.149                                | 0.074                            | 0.076                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS1       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.030  | 0.060  | 0.120  | 0.220  | 0.300  | 0.310  | 0.5                | 0.109                                | 0.055                            | 0.058                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS1       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.020  | 0.070  | 0.120  | 0.170  | 0.180  | 0.5                | 0.058                                | 0.029                            | 0.032                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS2       | 0.004                    | 0.005 | 0.009 | 0.020 | 0.045  | 0.100  | 0.183  | 0.290  | 0.367  | 0.370  | 0.5                | 0.146                                | 0.073                            | 0.076                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS2       | 0.004                    | 0.003 | 0.003 | 0.012 | 0.037  | 0.095  | 0.212  | 0.359  | 0.477  | 0.491  | 0.5                | 0.181                                | 0.091                            | 0.091                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS2       | 0.006                    | 0.005 | 0.006 | 0.008 | 0.016  | 0.050  | 0.133  | 0.241  | 0.337  | 0.339  | 0.5                | 0.122                                | 0.061                            | 0.062                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS2       | 0.002                    | 0.003 | 0.005 | 0.007 | 0.016  | 0.034  | 0.076  | 0.145  | 0.215  | 0.151  | 0.5                | 0.068                                | 0.034                            | 0.036                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS2       | 0.003                    | 0.002 | 0.002 | 0.002 | 0.007  | 0.019  | 0.044  | 0.082  | 0.117  | 0.111  | 0.5                | 0.039                                | 0.020                            | 0.022                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS3       | 0.008                    | 0.015 | 0.020 | 0.035 | 0.047  | 0.059  | 0.093  | 0.151  | 0.211  | 0.209  | 0.5                | 0.089                                | 0.045                            | 0.046                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS3       | 0.008                    | 0.012 | 0.020 | 0.035 | 0.050  | 0.064  | 0.088  | 0.131  | 0.142  | 0.140  | 0.5                | 0.074                                | 0.037                            | 0.037                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS3       | 0.008                    | 0.011 | 0.016 | 0.027 | 0.038  | 0.056  | 0.088  | 0.134  | 0.186  | 0.210  | 0.5                | 0.083                                | 0.041                            | 0.042                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS3       | 0.004                    | 0.005 | 0.009 | 0.016 | 0.025  | 0.038  | 0.060  | 0.088  | 0.122  | 0.133  | 0.5                | 0.052                                | 0.026                            | 0.028                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS3       | 0.002                    | 0.003 | 0.004 | 0.011 | 0.019  | 0.030  | 0.044  | 0.064  | 0.081  | 0.086  | 0.5                | 0.035                                | 0.017                            | 0.019                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS4       | 0.011                    | 0.015 | 0.016 | 0.027 | 0.043  | 0.064  | 0.079  | 0.094  | 0.125  | 0.155  | 0.5                | 0.066                                | 0.033                            | 0.034                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS4       | 0.010                    | 0.020 | 0.024 | 0.041 | 0.073  | 0.101  | 0.115  | 0.127  | 0.152  | 0.175  | 0.5                | 0.090                                | 0.045                            | 0.045                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS4       | 0.014                    | 0.018 | 0.019 | 0.025 | 0.032  | 0.044  | 0.057  | 0.073  | 0.092  | 0.120  | 0.5                | 0.053                                | 0.026                            | 0.027                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS4       | 0.005                    | 0.006 | 0.007 | 0.009 | 0.020  | 0.026  | 0.028  | 0.032  | 0.038  | 0.046  | 0.5                | 0.023                                | 0.011                            | 0.012                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS4       | 0.003                    | 0.006 | 0.007 | 0.014 | 0.019  | 0.023  | 0.029  | 0.031  | 0.035  | 0.040  | 0.5                | 0.021                                | 0.010                            | 0.012                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS5       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.030  | 0.040  | 0.060  | 0.060  | 0.080  | 0.110  | 0.5                | 0.044                                | 0.022                            | 0.023                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS5       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.020  | 0.040  | 0.060  | 0.080  | 0.110  | 0.160  | 0.5                | 0.055                                | 0.027                            | 0.027                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS5       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.020  | 0.040  | 0.050  | 0.060  | 0.070  | 0.090  | 0.5                | 0.036                                | 0.018                            | 0.018                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.030  | 0.050  | 0.060  | 0.070  | 0.090  | 0.5                | 0.032                                | 0.016                            | 0.017                                |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.010  | 0.020  | 0.030  | 0.040  | 0.060  | 0.5                | 0.017                                | 0.009                            | 0.010                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS1       | 0.030                    | 0.010 | 0.020 | 0.040 | 0.060  | 0.110  | 0.190  | 0.280  | 0.330  | 0.300  | 0.5                | 0.144                                | 0.072                            | 0.075                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS1       | 0.030                    | 0.020 | 0.030 | 0.040 | 0.080  | 0.140  | 0.190  | 0.240  | 0.300  | 0.330  | 0.5                | 0.150                                | 0.075                            | 0.075                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS1       | 0.000                    | 0.000 | 0.020 | 0.040 | 0.090  | 0.170  | 0.250  | 0.280  | 0.300  | 0.330  | 0.5                | 0.158                                | 0.079                            | 0.081                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS1       | 0.010                    | 0.030 | 0.070 | 0.110 | 0.170  | 0.220  | 0.240  | 0.260  | 0.280  | 0.310  | 0.5                | 0.177                                | 0.088                            | 0.094                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS1       | 0.030                    | 0.040 | 0.060 | 0.070 | 0.090  | 0.140  | 0.180  | 0.230  | 0.270  | 0.260  | 0.5                | 0.138                                | 0.069                            | 0.077                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS2       | 0.046                    | 0.053 | 0.054 | 0.058 | 0.064  | 0.104  | 0.150  | 0.191  | 0.210  | 0.221  | 0.5                | 0.121                                | 0.060                            | 0.063                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS2       | 0.040                    | 0.039 | 0.041 | 0.059 | 0.074  | 0.106  | 0.147  | 0.196  | 0.238  | 0.258  | 0.5                | 0.128                                | 0.064                            | 0.064                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS2       | 0.048                    | 0.041 | 0.048 | 0.055 | 0.068  | 0.097  | 0.135  | 0.199  | 0.252  | 0.241  | 0.5                | 0.127                                | 0.063                            | 0.064                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS2       | 0.031                    | 0.029 | 0.033 | 0.038 | 0.049  | 0.072  | 0.102  | 0.154  | 0.214  | 0.215  | 0.5                | 0.097                                | 0.049                            | 0.052                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS2       | 0.035                    | 0.034 | 0.033 | 0.028 | 0.046  | 0.077  | 0.114  | 0.148  | 0.182  | 0.200  | 0.5                | 0.091                                | 0.045                            | 0.050                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS3       | 0.050                    | 0.055 | 0.044 | 0.075 | 0.085  | 0.071  | 0.088  | 0.117  | 0.153  | 0.164  | 0.5                | 0.095                                | 0.047                            | 0.049                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS3       | 0.057                    | 0.060 | 0.054 | 0.079 | 0.075  | 0.062  | 0.076  | 0.107  | 0.134  | 0.156  | 0.5                | 0.092                                | 0.046                            | 0.046                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS3       | 0.055                    | 0.061 | 0.060 | 0.073 | 0.055  | 0.046  | 0.057  | 0.080  | 0.125  | 0.181  | 0.5                | 0.085                                | 0.042                            | 0.043                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS3       | 0.028                    | 0.032 | 0.041 | 0.053 | 0.050  | 0.056  | 0.069  | 0.083  | 0.115  | 0.145  | 0.5                | 0.070                                | 0.035                            | 0.037                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS3       | 0.030                    | 0.027 | 0.041 | 0.058 | 0.059  | 0.065  | 0.077  | 0.098  | 0.133  | 0.161  | 0.5                | 0.076                                | 0.038                            | 0.042                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS4       | 0.034                    | 0.052 | 0.042 | 0.043 | 0.061  | 0.071  | 0.068  | 0.064  | 0.060  | 0.067  | 0.5                | 0.059                                | 0.030                            | 0.031                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS4       | 0.047                    | 0.065 | 0.054 | 0.066 | 0.090  | 0.105  | 0.095  | 0.082  | 0.080  | 0.085  | 0.5                | 0.082                                | 0.041                            | 0.041                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS4       | 0.043                    | 0.050 | 0.045 | 0.056 | 0.070  | 0.075  | 0.063  | 0.044  | 0.042  | 0.056  | 0.5                | 0.058                                | 0.029                            | 0.030                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS4       | 0.024                    | 0.029 | 0.026 | 0.040 | 0.059  | 0.060  | 0.050  | 0.035  | 0.028  | 0.033  | 0.5                | 0.040                                | 0.020                            | 0.021                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS4       | 0.034                    | 0.041 | 0.032 | 0.045 | 0.059  | 0.062  | 0.052  | 0.038  | 0.032  | 0.047  | 0.5                | 0.045                                | 0.022                            | 0.025                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS5       | 0.015                    | 0.010 | 0.011 | 0.012 | 0.015  | 0.027  | 0.032  | 0.028  | 0.032  | 0.048  | 0.5                | 0.024                                | 0.012                            | 0.013                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS5       | 0.006                    | 0.003 | 0.006 | 0.016 | 0.026  | 0.039  | 0.047  | 0.048  | 0.065  | 0.104  | 0.5                | 0.039                                | 0.019                            | 0.019                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS5       | 0.004                    | 0.005 | 0.006 | 0.008 | 0.022  | 0.028  | 0.042  | 0.047  | 0.058  | 0.068  | 0.5                | 0.031                                | 0.015                            | 0.016                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.04              | BS5       | 0.003                    | 0.004 | 0.006 | 0.013 | 0.024  | 0.042  | 0.053  | 0.056  | 0.055  | 0.065  | 0.5                | 0.033                                | 0.017                            | 0.018                                |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.01              | BS5       | 0.004                    | 0.006 | 0.007 | 0.013 | 0.020  | 0.032  | 0.042  | 0.047  | 0.057  | 0.072  | 0.5                | 0.030                                | 0.015                            | 0.017                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS1       | 0.030                    | 0.020 | 0.030 | 0.060 | 0.090  | 0.140  | 0.230  | 0.310  | 0.340  | 0.320  | 0.5                | 0.165                                | 0.082                            | 0.086                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS1       | 0.030                    | 0.020 | 0.030 | 0.040 | 0.070  | 0.130  | 0.190  | 0.250  | 0.300  | 0.330  | 0.5                | 0.149                                | 0.074                            | 0.074                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS1       | 0.010                    | 0.010 | 0.020 | 0.060 | 0.120  | 0.230  | 0.330  | 0.370  | 0.410  | 0.400  | 0.5                | 0.210                                | 0.105                            | 0.107                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS1       | 0.020                    | 0.040 | 0.070 | 0.100 | 0.150  | 0.210  | 0.260  | 0.290  | 0.310  | 0.300  | 0.5                | 0.180                                | 0.090                            | 0.097                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS1       | 0.030                    | 0.060 | 0.100 | 0.130 | 0.180  | 0.200  | 0.220  | 0.270  | 0.350  | 0.400  | 0.5                | 0.194                                | 0.097                            | 0.108                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.050                    | 0.060 | 0.080 | 0.130 | 0.180  | 0.220  | 0.250  | 0.340  | 0.410  | 0.400  | 0.5                | 0.206                                | 0.103                            | 0.104                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.055                    | 0.077 | 0.114 | 0.138 | 0.165  | 0.163  | 0.188  | 0.176  | 0.234  | 0.311  | 0.5                | 0.154                                | 0.077                            | 0.077                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.030                    | 0.030 | 0.060 | 0.090 | 0.110  | 0.120  | 0.150  | 0.220  | 0.290  | 0.320  | 0.5                | 0.132                                | 0.066                            | 0.068                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS2       | 0.034                    | 0.038 | 0.046 | 0.060 | 0.077  | 0.122  | 0.170  | 0.209  | 0.231  | 0.237  | 0.5                | 0.129                                | 0.064                            | 0.067                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS2       | 0.034                    | 0.031 | 0.036 | 0.052 | 0.078  | 0.123  | 0.171  | 0.221  | 0.254  | 0.262  | 0.5                | 0.135                                | 0.068                            | 0.068                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS2       | 0.034                    | 0.030 | 0.041 | 0.044 | 0.055  | 0.086  | 0.128  | 0.184  | 0.223  | 0.213  | 0.5                | 0.111                                | 0.056                            | 0.056                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS2       | 0.042                    | 0.049 | 0.068 | 0.070 | 0.081  | 0.107  | 0.145  | 0.198  | 0.144  | 0.291  | 0.5                | 0.123                                | 0.062                            | 0.067                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS2       | 0.027                    | 0.022 | 0.028 | 0.040 | 0.071  | 0.116  | 0.190  | 0.276  | 0.317  | 0.321  | 0.5                | 0.141                                | 0.070                            | 0.078                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.031                    | 0.033 | 0.032 | 0.039 | 0.068  | 0.113  | 0.171  | 0.178  | 0.230  | 0.195  | 0.5                | 0.106                                | 0.053                            | 0.053                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.024                    | 0.022 | 0.026 | 0.035 | 0.065  | 0.110  | 0.155  | 0.196  | 0.147  | 0.118  | 0.5                | 0.085                                | 0.043                            | 0.043                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.016                    | 0.017 | 0.019 | 0.026 | 0.047  | 0.076  | 0.113  | 0.149  | 0.169  | 0.196  | 0.5                | 0.077                                | 0.039                            | 0.040                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           |           |                   |           | Probe Info.              |       | MPE Measurement |       |        |        |        |        |        |        |     |       | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|-----------------|-------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |                 |       |        |        |        |        |        |        |     |       |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm           | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |       |                    |                         |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E         | 1.05              | BS3       | 0.051                    | 0.056 | 0.043           | 0.072 | 0.083  | 0.071  | 0.088  | 0.123  | 0.156  | 0.161  | 0.5 | 0.095 | 0.047              | 0.050                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E         | 1.07              | BS3       | 0.054                    | 0.058 | 0.051           | 0.078 | 0.074  | 0.063  | 0.074  | 0.107  | 0.141  | 0.150  | 0.5 | 0.091 | 0.045              | 0.045                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E         | 1.07              | BS3       | 0.051                    | 0.057 | 0.056           | 0.066 | 0.050  | 0.044  | 0.056  | 0.080  | 0.121  | 0.172  | 0.5 | 0.081 | 0.040              | 0.041                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E         | 1.03              | BS3       | 0.034                    | 0.035 | 0.047           | 0.065 | 0.068  | 0.083  | 0.103  | 0.119  | 0.132  | 0.149  | 0.5 | 0.086 | 0.043              | 0.046                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E         | 1.00              | BS3       | 0.033                    | 0.036 | 0.054           | 0.065 | 0.058  | 0.075  | 0.097  | 0.125  | 0.157  | 0.164  | 0.5 | 0.086 | 0.043              | 0.048                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS3       | 0.031                    | 0.034 | 0.051           | 0.062 | 0.067  | 0.079  | 0.092  | 0.111  | 0.133  | 0.149  | 0.5 | 0.078 | 0.039              | 0.040                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E         | 0.95              | BS3       | 0.052                    | 0.061 | 0.083           | 0.089 | 0.082  | 0.090  | 0.113  | 0.164  | 0.229  | 0.258  | 0.5 | 0.116 | 0.058              | 0.058                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS3       | 0.030                    | 0.035 | 0.045           | 0.054 | 0.052  | 0.059  | 0.076  | 0.092  | 0.110  | 0.113  | 0.5 | 0.062 | 0.031              | 0.032                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E         | 1.05              | BS4       | 0.038                    | 0.057 | 0.045           | 0.050 | 0.067  | 0.081  | 0.080  | 0.074  | 0.068  | 0.073  | 0.5 | 0.066 | 0.033              | 0.035                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E         | 1.07              | BS4       | 0.054                    | 0.070 | 0.045           | 0.052 | 0.082  | 0.097  | 0.092  | 0.083  | 0.082  | 0.088  | 0.5 | 0.080 | 0.040              | 0.040                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E         | 1.07              | BS4       | 0.047                    | 0.055 | 0.051           | 0.066 | 0.078  | 0.081  | 0.065  | 0.044  | 0.038  | 0.053  | 0.5 | 0.062 | 0.031              | 0.031                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E         | 1.03              | BS4       | 0.043                    | 0.047 | 0.043           | 0.068 | 0.093  | 0.107  | 0.104  | 0.090  | 0.094  | 0.120  | 0.5 | 0.083 | 0.042              | 0.045                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E         | 1.00              | BS4       | 0.053                    | 0.062 | 0.053           | 0.059 | 0.071  | 0.077  | 0.065  | 0.057  | 0.073  | 0.113  | 0.5 | 0.068 | 0.034              | 0.038                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS4       | 0.051                    | 0.062 | 0.054           | 0.056 | 0.068  | 0.069  | 0.061  | 0.059  | 0.073  | 0.107  | 0.5 | 0.064 | 0.032              | 0.032                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E         | 0.95              | BS4       | 0.060                    | 0.061 | 0.037           | 0.043 | 0.058  | 0.054  | 0.045  | 0.033  | 0.041  | 0.070  | 0.5 | 0.048 | 0.024              | 0.024                   |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS4       | 0.031                    | 0.026 | 0.016           | 0.032 | 0.042  | 0.043  | 0.044  | 0.045  | 0.073  | 0.123  | 0.5 | 0.044 | 0.022              | 0.023                   |                     |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| Ant Loc. | Ant. Model/ Desc.               | D.U.T. Info.    |               |             |                 |           | Probe Info. |                   |                          | Test Pos. | MPE Measurement |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|--------------------------|-----------|-----------------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Bystander (BS) Positions |           |                 |       |       |        |        |        |        |        |        |     |                    |                         |                     |                         |
|          |                                 |                 |               |             |                 |           |             |                   | 20 cm                    |           | 40 cm           | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                         |                     |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BSS                      | 0.012     | 0.008           | 0.009 | 0.010 | 0.016  | 0.027  | 0.032  | 0.030  | 0.032  | 0.043  | 0.5 | 0.023              | 0.011                   | 0.012               |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BSS                      | 0.006     | 0.005           | 0.008 | 0.012 | 0.023  | 0.030  | 0.039  | 0.044  | 0.064  | 0.098  | 0.5 | 0.035              | 0.018                   | 0.018               |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BSS                      | 0.005     | 0.004           | 0.006 | 0.011 | 0.023  | 0.030  | 0.037  | 0.041  | 0.047  | 0.062  | 0.5 | 0.028              | 0.014                   | 0.014               |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BSS                      | 0.004     | 0.005           | 0.009 | 0.015 | 0.022  | 0.030  | 0.041  | 0.052  | 0.064  | 0.081  | 0.5 | 0.033              | 0.017                   | 0.018               |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BSS                      | 0.004     | 0.006           | 0.010 | 0.021 | 0.038  | 0.053  | 0.065  | 0.077  | 0.092  | 0.120  | 0.5 | 0.049              | 0.024                   | 0.027               |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BSS                      | 0.005     | 0.006           | 0.011 | 0.021 | 0.032  | 0.051  | 0.059  | 0.060  | 0.064  | 0.078  | 0.5 | 0.038              | 0.019                   | 0.019               |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BSS                      | 0.016     | 0.020           | 0.028 | 0.032 | 0.049  | 0.067  | 0.076  | 0.070  | 0.067  | 0.095  | 0.5 | 0.049              | 0.025                   | 0.025               |                         |
| Roof     | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BSS                      | 0.005     | 0.006           | 0.008 | 0.016 | 0.023  | 0.032  | 0.038  | 0.033  | 0.030  | 0.038  | 0.5 | 0.021              | 0.011                   | 0.011               |                         |
| Roof     | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.05              | BS1                      | 0.032     | 0.023           | 0.022 | 0.041 | 0.062  | 0.113  | 0.189  | 0.274  | 0.313  | 0.290  | 0.5 | 0.143              | 0.071                   | 0.074               |                         |
| Roof     | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.07              | BS1                      | 0.046     | 0.034           | 0.044 | 0.066 | 0.094  | 0.147  | 0.192  | 0.303  | 0.361  | 0.134  | 0.5 | 0.152              | 0.076                   | 0.076               |                         |
| Roof     | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | BS1                      | 0.017     | 0.011           | 0.025 | 0.042 | 0.085  | 0.160  | 0.245  | 0.149  | 0.335  | 0.348  | 0.5 | 0.152              | 0.076                   | 0.077               |                         |
| Roof     | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.03              | BS1                      | 0.014     | 0.024           | 0.047 | 0.066 | 0.098  | 0.144  | 0.166  | 0.235  | 0.245  | 0.103  | 0.5 | 0.118              | 0.059                   | 0.064               |                         |
| Roof     | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.00              | BS1                      | 0.034     | 0.047           | 0.072 | 0.092 | 0.131  | 0.172  | 0.229  | 0.294  | 0.360  | 0.352  | 0.5 | 0.178              | 0.089                   | 0.099               |                         |
| Roof     | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1                      | 0.056     | 0.060           | 0.096 | 0.134 | 0.181  | 0.220  | 0.262  | 0.324  | 0.360  | 0.338  | 0.5 | 0.197              | 0.099                   | 0.099               |                         |
| Roof     | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1                      | 0.049     | 0.052           | 0.085 | 0.112 | 0.146  | 0.171  | 0.196  | 0.291  | 0.384  | 0.426  | 0.5 | 0.178              | 0.089                   | 0.092               |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           |           |                   |           | Probe Info.              |       | MPE Measurement |       |        |        |        |        |        |        |       |       | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|-----------------|-------|--------|--------|--------|--------|--------|--------|-------|-------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |                 |       |        |        |        |        |        |        |       |       |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm           | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |       |       |                    |                         |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E         | 1.05              | BS2       | 0.040                    | 0.040 | 0.040           | 0.050 | 0.060  | 0.090  | 0.150  | 0.180  | 0.210  | 0.220  | 0.5   | 0.113 | 0.057              | 0.059                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E         | 1.07              | BS2       | 0.030                    | 0.030 | 0.030           | 0.060 | 0.090  | 0.130  | 0.180  | 0.240  | 0.280  | 0.300  | 0.5   | 0.147 | 0.073              | 0.073                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E         | 1.07              | BS2       | 0.040                    | 0.040 | 0.040           | 0.050 | 0.070  | 0.110  | 0.160  | 0.230  | 0.290  | 0.290  | 0.5   | 0.141 | 0.071              | 0.072                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E         | 1.03              | BS2       | 0.040                    | 0.040 | 0.060           | 0.060 | 0.070  | 0.100  | 0.130  | 0.190  | 0.250  | 0.280  | 0.5   | 0.126 | 0.063              | 0.068                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E         | 1.00              | BS2       | 0.020                    | 0.020 | 0.020           | 0.020 | 0.040  | 0.090  | 0.160  | 0.240  | 0.290  | 0.300  | 0.5   | 0.120 | 0.060              | 0.067                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS2       | 0.040                    | 0.040 | 0.040           | 0.060 | 0.100  | 0.150  | 0.190  | 0.210  | 0.310  | 0.280  | 0.5   | 0.138 | 0.069              | 0.069                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS2       | 0.020                    | 0.020 | 0.020           | 0.030 | 0.080  | 0.120  | 0.160  | 0.200  | 0.220  | 0.250  | 0.5   | 0.104 | 0.052              | 0.054                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E         | 1.05              | BS3       | 0.050                    | 0.050 | 0.040           | 0.060 | 0.060  | 0.090  | 0.130  | 0.140  | 0.150  | 0.5    | 0.087 | 0.044 | 0.045              |                         |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E         | 1.07              | BS3       | 0.040                    | 0.040 | 0.050           | 0.080 | 0.080  | 0.070  | 0.090  | 0.110  | 0.150  | 0.160  | 0.5   | 0.093 | 0.047              | 0.047                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E         | 1.07              | BS3       | 0.050                    | 0.050 | 0.050           | 0.070 | 0.050  | 0.050  | 0.080  | 0.110  | 0.160  | 0.200  | 0.5   | 0.093 | 0.047              | 0.047                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E         | 1.03              | BS3       | 0.030                    | 0.030 | 0.040           | 0.050 | 0.060  | 0.080  | 0.120  | 0.120  | 0.130  | 0.150  | 0.5   | 0.083 | 0.042              | 0.045                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E         | 1.00              | BS3       | 0.020                    | 0.020 | 0.040           | 0.050 | 0.050  | 0.070  | 0.080  | 0.100  | 0.120  | 0.150  | 0.5   | 0.070 | 0.035              | 0.039                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS3       | 0.020                    | 0.040 | 0.060           | 0.070 | 0.070  | 0.090  | 0.100  | 0.130  | 0.160  | 0.180  | 0.5   | 0.089 | 0.045              | 0.045                   |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS3       | 0.040                    | 0.050 | 0.060           | 0.060 | 0.050  | 0.050  | 0.080  | 0.120  | 0.120  | 0.140  | 0.5   | 0.072 | 0.036              | 0.037                   |                     |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           |           |                   |           | Probe Info.              |       | MPE Measurement |       |        |        |        |        |        |        |     |       | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|-----------------|-------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |                 |       |        |        |        |        |        |        |     |       |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm           | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |       |                    |                                      |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E         | 1.05              | BS4       | 0.036                    | 0.054 | 0.038           | 0.040 | 0.059  | 0.067  | 0.072  | 0.067  | 0.068  | 0.079  | 0.5 | 0.061 | 0.030              | 0.032                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E         | 1.07              | BS4       | 0.051                    | 0.068 | 0.050           | 0.061 | 0.090  | 0.103  | 0.097  | 0.090  | 0.086  | 0.088  | 0.5 | 0.084 | 0.042              | 0.042                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E         | 1.07              | BS4       | 0.044                    | 0.059 | 0.055           | 0.071 | 0.086  | 0.088  | 0.073  | 0.043  | 0.042  | 0.059  | 0.5 | 0.066 | 0.033              | 0.034                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E         | 1.03              | BS4       | 0.029                    | 0.035 | 0.031           | 0.046 | 0.062  | 0.073  | 0.065  | 0.055  | 0.051  | 0.062  | 0.5 | 0.052 | 0.026              | 0.028                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E         | 1.00              | BS4       | 0.039                    | 0.046 | 0.033           | 0.038 | 0.050  | 0.052  | 0.047  | 0.041  | 0.052  | 0.082  | 0.5 | 0.048 | 0.024              | 0.027                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS4       | 0.046                    | 0.057 | 0.051           | 0.053 | 0.063  | 0.060  | 0.050  | 0.048  | 0.057  | 0.090  | 0.5 | 0.056 | 0.028              | 0.028                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS4       | 0.032                    | 0.028 | 0.016           | 0.030 | 0.043  | 0.051  | 0.053  | 0.061  | 0.091  | 0.146  | 0.5 | 0.051 | 0.026              | 0.027                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E         | 1.05              | BSS5      | 0.011                    | 0.005 | 0.007           | 0.008 | 0.015  | 0.026  | 0.031  | 0.028  | 0.031  | 0.042  | 0.5 | 0.021 | 0.011              | 0.011                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E         | 1.07              | BSS5      | 0.007                    | 0.006 | 0.007           | 0.013 | 0.023  | 0.039  | 0.043  | 0.050  | 0.071  | 0.120  | 0.5 | 0.041 | 0.020              | 0.020                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E         | 1.07              | BSS5      | 0.005                    | 0.004 | 0.005           | 0.009 | 0.023  | 0.036  | 0.041  | 0.048  | 0.053  | 0.072  | 0.5 | 0.032 | 0.016              | 0.016                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E         | 1.03              | BSS5      | 0.002                    | 0.005 | 0.007           | 0.010 | 0.017  | 0.027  | 0.034  | 0.044  | 0.057  | 0.069  | 0.5 | 0.028 | 0.014              | 0.015                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E         | 1.00              | BSS5      | 0.004                    | 0.005 | 0.009           | 0.018 | 0.033  | 0.047  | 0.057  | 0.066  | 0.078  | 0.106  | 0.5 | 0.042 | 0.021              | 0.024                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BSS5      | 0.008                    | 0.009 | 0.013           | 0.017 | 0.036  | 0.053  | 0.065  | 0.067  | 0.069  | 0.091  | 0.5 | 0.042 | 0.021              | 0.021                                |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BSS5      | 0.007                    | 0.009 | 0.013           | 0.021 | 0.030  | 0.041  | 0.047  | 0.040  | 0.035  | 0.051  | 0.5 | 0.027 | 0.014              | 0.014                                |                                  |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.011                    | 0.006 | 0.005 | 0.004 | 0.003  | 0.026  | 0.098  | 0.240  | 0.379  | 0.373  | 0.5                | 0.111                   | 0.056               | 0.056                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.015                    | 0.014 | 0.015 | 0.013 | 0.020  | 0.054  | 0.128  | 0.279  | 0.432  | 0.179  | 0.5                | 0.109                   | 0.055               | 0.055                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.012                    | 0.008 | 0.010 | 0.014 | 0.029  | 0.080  | 0.167  | 0.335  | 0.488  | 0.487  | 0.5                | 0.152                   | 0.076               | 0.078                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.030  | 0.100  | 0.230  | 0.340  | 0.370  | 0.5                | 0.104                   | 0.052               | 0.052                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.030  | 0.030  | 0.090  | 0.190  | 0.300  | 0.330  | 0.5                | 0.093                   | 0.047               | 0.047                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.030  | 0.070  | 0.140  | 0.250  | 0.330  | 0.360  | 0.5                | 0.111                   | 0.055               | 0.057                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.001                    | 0.001 | 0.003 | 0.008 | 0.024  | 0.050  | 0.083  | 0.123  | 0.163  | 0.146  | 0.5                | 0.058                   | 0.029               | 0.029                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.005                    | 0.004 | 0.003 | 0.007 | 0.020  | 0.051  | 0.112  | 0.211  | 0.312  | 0.182  | 0.5                | 0.086                   | 0.043               | 0.043                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.006                    | 0.007 | 0.010 | 0.020 | 0.031  | 0.051  | 0.082  | 0.121  | 0.164  | 0.177  | 0.5                | 0.062                   | 0.031               | 0.032                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.001                    | 0.003 | 0.010 | 0.017 | 0.026  | 0.038  | 0.055  | 0.088  | 0.129  | 0.128  | 0.5                | 0.048                   | 0.024               | 0.024                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.007                    | 0.011 | 0.015 | 0.022 | 0.037  | 0.050  | 0.060  | 0.075  | 0.097  | 0.124  | 0.5                | 0.047                   | 0.024               | 0.024                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.010                    | 0.012 | 0.009 | 0.021 | 0.040  | 0.062  | 0.094  | 0.126  | 0.175  | 0.199  | 0.5                | 0.070                   | 0.035               | 0.036                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.003                    | 0.006 | 0.014 | 0.025 | 0.034  | 0.043  | 0.049  | 0.064  | 0.092  | 0.136  | 0.5                | 0.045                                | 0.023                            | 0.023                                |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.006                    | 0.010 | 0.018 | 0.024 | 0.033  | 0.047  | 0.069  | 0.089  | 0.128  | 0.171  | 0.5                | 0.057                                | 0.028                            | 0.028                                |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.003                    | 0.003 | 0.005 | 0.017 | 0.030  | 0.047  | 0.056  | 0.065  | 0.081  | 0.110  | 0.5                | 0.039                                | 0.019                            | 0.020                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.020  | 0.040  | 0.070  | 0.100  | 0.110  | 0.5                | 0.038                                | 0.019                            | 0.019                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.030  | 0.060  | 0.120  | 0.160  | 0.170  | 0.5                | 0.056                                | 0.028                            | 0.028                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.020  | 0.030  | 0.040  | 0.050  | 0.060  | 0.5                | 0.023                                | 0.012                            | 0.012                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.003                    | 0.006 | 0.007 | 0.015 | 0.035  | 0.079  | 0.158  | 0.211  | 0.298  | 0.259  | 0.5                | 0.104                                | 0.052                            | 0.052                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.002                    | 0.003 | 0.005 | 0.010 | 0.018  | 0.046  | 0.098  | 0.161  | 0.206  | 0.139  | 0.5                | 0.065                                | 0.033                            | 0.033                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.001                    | 0.002 | 0.003 | 0.005 | 0.023  | 0.055  | 0.102  | 0.153  | 0.192  | 0.202  | 0.5                | 0.069                                | 0.034                            | 0.036                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.010                    | 0.015 | 0.024 | 0.036 | 0.057  | 0.081  | 0.106  | 0.136  | 0.161  | 0.174  | 0.5                | 0.078                                | 0.039                            | 0.039                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.009                    | 0.013 | 0.020 | 0.027 | 0.035  | 0.053  | 0.087  | 0.152  | 0.204  | 0.208  | 0.5                | 0.077                                | 0.038                            | 0.038                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.005                    | 0.006 | 0.010 | 0.019 | 0.025  | 0.035  | 0.054  | 0.072  | 0.087  | 0.094  | 0.5                | 0.038                                | 0.019                            | 0.020                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.010                    | 0.011 | 0.012 | 0.016 | 0.022  | 0.032  | 0.041  | 0.055  | 0.082  | 0.104  | 0.5                | 0.037                                | 0.019                            | 0.019                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.019                    | 0.026 | 0.025 | 0.031 | 0.039  | 0.042  | 0.040  | 0.041  | 0.053  | 0.076  | 0.5                | 0.037                                | 0.019                            | 0.019                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.011                    | 0.012 | 0.010 | 0.016 | 0.023  | 0.039  | 0.053  | 0.054  | 0.081  | 0.107  | 0.5                | 0.038                                | 0.019                            | 0.020                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.011                    | 0.015 | 0.023 | 0.035 | 0.065  | 0.086  | 0.094  | 0.095  | 0.101  | 0.109  | 0.5                | 0.061                                | 0.031                            | 0.031                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.006                    | 0.016 | 0.022 | 0.029 | 0.039  | 0.055  | 0.063  | 0.058  | 0.066  | 0.098  | 0.5                | 0.043                                | 0.021                            | 0.021                                |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.003                    | 0.004 | 0.005 | 0.016 | 0.025  | 0.033  | 0.036  | 0.037  | 0.038  | 0.051  | 0.5                | 0.023                                | 0.012                            | 0.012                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.030  | 0.040  | 0.050  | 0.060  | 0.080  | 0.090  | 0.5                | 0.040                                | 0.020                            | 0.020                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.020 | 0.030 | 0.030 | 0.040  | 0.050  | 0.060  | 0.080  | 0.090  | 0.120  | 0.5                | 0.050                                | 0.025                            | 0.025                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.020  | 0.030  | 0.040  | 0.050  | 0.090  | 0.100  | 0.5                | 0.036                                | 0.018                            | 0.019                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.032                    | 0.034 | 0.030 | 0.036 | 0.060  | 0.109  | 0.180  | 0.190  | 0.254  | 0.231  | 0.5                | 0.112                                | 0.056                            | 0.057                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.019                    | 0.014 | 0.019 | 0.028 | 0.048  | 0.078  | 0.108  | 0.135  | 0.150  | 0.118  | 0.5                | 0.068                                | 0.034                            | 0.034                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.019                    | 0.015 | 0.015 | 0.028 | 0.059  | 0.101  | 0.154  | 0.192  | 0.232  | 0.272  | 0.5                | 0.101                                | 0.051                            | 0.052                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.010  | 0.010  | 0.020  | 0.020  | 0.030  | 0.030  | 0.5                | 0.014                   | 0.007               | 0.007                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.010                    | 0.020 | 0.020 | 0.020 | 0.020  | 0.020  | 0.030  | 0.050  | 0.070  | 0.080  | 0.5                | 0.032                   | 0.016               | 0.016                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.010  | 0.020  | 0.020  | 0.020  | 0.030  | 0.5                | 0.014                   | 0.007               | 0.007                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.043                    | 0.050 | 0.042 | 0.045 | 0.057  | 0.059  | 0.050  | 0.045  | 0.058  | 0.086  | 0.5                | 0.052                   | 0.026               | 0.026                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.038                    | 0.042 | 0.032 | 0.035 | 0.044  | 0.037  | 0.027  | 0.020  | 0.023  | 0.042  | 0.5                | 0.032                   | 0.016               | 0.016                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.028                    | 0.023 | 0.013 | 0.026 | 0.027  | 0.030  | 0.033  | 0.041  | 0.067  | 0.098  | 0.5                | 0.036                   | 0.018               | 0.019                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.030  | 0.050  | 0.060  | 0.070  | 0.070  | 0.090  | 0.5                | 0.038                   | 0.019               | 0.019                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.000                    | 0.010 | 0.010 | 0.020 | 0.030  | 0.040  | 0.050  | 0.040  | 0.030  | 0.050  | 0.5                | 0.027                   | 0.013               | 0.013                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.030  | 0.030  | 0.030  | 0.020  | 0.030  | 0.5                | 0.017                   | 0.008               | 0.009                   |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.040  | 0.050  | 0.070  | 0.080  | 0.110  | 0.120  | 0.5                | 0.052                   | 0.026               | 0.026                   |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.020 | 0.020 | 0.030 | 0.040  | 0.050  | 0.060  | 0.080  | 0.100  | 0.110  | 0.5                | 0.049                   | 0.025               | 0.025                   |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.040  | 0.050  | 0.050  | 0.070  | 0.120  | 0.130  | 0.5                | 0.049                   | 0.025               | 0.025                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           |           |                   |           | Probe Info.              |       | MPE Measurement |       |        |        |        |        |        |        |     |       | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|-----------------|-------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |                 |       |        |        |        |        |        |        |     |       |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm           | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |       |                    |                                      |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS2       | 0.000                    | 0.000 | 0.010           | 0.010 | 0.020  | 0.030  | 0.050  | 0.070  | 0.070  | 0.060  | 0.5 | 0.031 | 0.016              | 0.016                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E         | 0.95              | BS2       | 0.000                    | 0.000 | 0.000           | 0.010 | 0.010  | 0.020  | 0.040  | 0.040  | 0.050  | 0.060  | 0.5 | 0.022 | 0.011              | 0.011                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS2       | 0.000                    | 0.000 | 0.000           | 0.010 | 0.010  | 0.020  | 0.040  | 0.050  | 0.050  | 0.060  | 0.5 | 0.022 | 0.011              | 0.012                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS3       | 0.035                    | 0.039 | 0.058           | 0.071 | 0.076  | 0.092  | 0.106  | 0.123  | 0.149  | 0.174  | 0.5 | 0.090 | 0.045              | 0.045                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E         | 0.95              | BS3       | 0.050                    | 0.056 | 0.071           | 0.069 | 0.067  | 0.075  | 0.099  | 0.159  | 0.226  | 0.136  | 0.5 | 0.096 | 0.048              | 0.048                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS3       | 0.044                    | 0.047 | 0.065           | 0.080 | 0.075  | 0.081  | 0.095  | 0.118  | 0.140  | 0.165  | 0.5 | 0.085 | 0.042              | 0.044                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS4       | 0.047                    | 0.053 | 0.045           | 0.051 | 0.064  | 0.066  | 0.058  | 0.053  | 0.067  | 0.098  | 0.5 | 0.058 | 0.029              | 0.029                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E         | 0.95              | BS4       | 0.049                    | 0.056 | 0.042           | 0.051 | 0.065  | 0.053  | 0.041  | 0.030  | 0.033  | 0.060  | 0.5 | 0.046 | 0.023              | 0.023                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS4       | 0.036                    | 0.029 | 0.019           | 0.034 | 0.043  | 0.047  | 0.050  | 0.062  | 0.093  | 0.143  | 0.5 | 0.052 | 0.026              | 0.027                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E         | 0.97              | BS5       | 0.000                    | 0.000 | 0.010           | 0.010 | 0.030  | 0.060  | 0.070  | 0.080  | 0.080  | 0.100  | 0.5 | 0.043 | 0.021              | 0.022                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E         | 0.95              | BS5       | 0.000                    | 0.010 | 0.020           | 0.030 | 0.040  | 0.060  | 0.060  | 0.050  | 0.040  | 0.070  | 0.5 | 0.036 | 0.018              | 0.018                                |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E         | 0.93              | BS5       | 0.000                    | 0.010 | 0.010           | 0.020 | 0.030  | 0.040  | 0.040  | 0.030  | 0.030  | 0.050  | 0.5 | 0.024 | 0.012              | 0.013                                |                                  |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant. Loc.    | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.020  | 0.030  | 0.040  | 0.060  | 0.070  | 0.5                | 0.028                                | 0.014                            | 0.014                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.020 | 0.020 | 0.030 | 0.040  | 0.040  | 0.050  | 0.070  | 0.090  | 0.110  | 0.5                | 0.046                                | 0.023                            | 0.023                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.030  | 0.040  | 0.050  | 0.070  | 0.090  | 0.140  | 0.5                | 0.046                                | 0.023                            | 0.024                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.031                    | 0.029 | 0.025 | 0.029 | 0.051  | 0.092  | 0.152  | 0.211  | 0.228  | 0.206  | 0.5                | 0.102                                | 0.051                            | 0.052                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.019                    | 0.014 | 0.018 | 0.027 | 0.045  | 0.074  | 0.108  | 0.137  | 0.163  | 0.121  | 0.5                | 0.069                                | 0.034                            | 0.034                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.017                    | 0.011 | 0.012 | 0.022 | 0.049  | 0.083  | 0.126  | 0.017  | 0.199  | 0.235  | 0.5                | 0.072                                | 0.036                            | 0.037                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.032                    | 0.036 | 0.051 | 0.057 | 0.061  | 0.076  | 0.094  | 0.114  | 0.130  | 0.151  | 0.5                | 0.078                                | 0.039                            | 0.039                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.039                    | 0.045 | 0.058 | 0.054 | 0.049  | 0.054  | 0.072  | 0.119  | 0.179  | 0.197  | 0.5                | 0.082                                | 0.041                            | 0.041                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.047                    | 0.048 | 0.059 | 0.069 | 0.057  | 0.064  | 0.082  | 0.111  | 0.130  | 0.153  | 0.5                | 0.076                                | 0.038                            | 0.039                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.043                    | 0.050 | 0.041 | 0.042 | 0.054  | 0.057  | 0.046  | 0.043  | 0.054  | 0.081  | 0.5                | 0.050                                | 0.025                            | 0.025                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.046                    | 0.050 | 0.036 | 0.042 | 0.048  | 0.041  | 0.030  | 0.021  | 0.025  | 0.045  | 0.5                | 0.036                                | 0.018                            | 0.018                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.035                    | 0.027 | 0.017 | 0.031 | 0.036  | 0.038  | 0.040  | 0.054  | 0.083  | 0.107  | 0.5                | 0.044                                | 0.022                            | 0.023                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.1 (Continued)**  
**UHF R1 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.003                    | 0.008 | 0.009 | 0.016 | 0.031  | 0.043  | 0.059  | 0.063  | 0.069  | 0.084  | 0.5                | 0.037                                | 0.019                            | 0.019                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.006                    | 0.013 | 0.015 | 0.021 | 0.030  | 0.043  | 0.049  | 0.042  | 0.040  | 0.057  | 0.5                | 0.030                                | 0.015                            | 0.015                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.007                    | 0.008 | 0.013 | 0.022 | 0.037  | 0.049  | 0.048  | 0.040  | 0.035  | 0.046  | 0.5                | 0.028                                | 0.014                            | 0.015                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table K.2**  
**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |   |                    |                  |                   |                       |              | Probe Info.  |                         |              | MPE Measurements<br>Passenger/Operator (MC)<br>Positions |                         |                                  | DUT<br>Max.<br>TX<br>Factor | Avg. over<br>Body (mW/<br>cm2) | Calc.<br>P.D.<br>(mW/<br>cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |
|--------------|---|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|--------------|--|-------------------------|----------------------------------|-----------------------------|--------------------------------|-------------------------------|-----------------------------------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.                      | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor | Test<br>Pos. | Head/<br>Top 1/3   | Chest/<br>Middle<br>1/3 | Lower<br>Trunk/<br>Bottom<br>1/3 |                             |                                |                               |                                   |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 380.0125         | 120.0             | 115.0                 | CW           | E            | 1.00                    | PB           | 0.209  | 0.099                   | 0.353                            | 0.5                         | 0.220                          | 0.11                          | 0.11                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 393.0125         | 120.0             | 120.0                 | CW           | E            | 1.00                    | PB           | 0.229  | 0.083                   | 0.312                            | 0.5                         | 0.208                          | 0.10                          | 0.10                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 406.5000         | 120.0             | 118.0                 | CW           | E            | 1.01                    | PB           | 0.166  | 0.242                   | 0.220                            | 0.5                         | 0.211                          | 0.11                          | 0.11                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 422.0125         | 120.0             | 111.0                 | CW           | E            | 1.02                    | PB           | 0.095  | 0.161                   | 0.108                            | 0.5                         | 0.124                          | 0.06                          | 0.07                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 438.0125         | 120.0             | 108.0                 | CW           | E            | 1.03                    | PB           | 0.127  | 0.164                   | 0.203                            | 0.5                         | 0.170                          | 0.08                          | 0.09                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 450.0125         | 120.0             | 119.0                 | CW           | E            | 1.04                    | PB           | 0.117  | 0.147                   | 0.276                            | 0.5                         | 0.187                          | 0.09                          | 0.09                              |
| Roof         | AN000131A01,<br>1/4 wave (136-<br>870MHz) | 2.15               | 469.9875         | 120.0             | 116.0                 | CW           | E            | 1.06                    | PB           | 0.063  | 0.142                   | 0.208                            | 0.5                         | 0.146                          | 0.07                          | 0.08                              |
| Roof         | HAE6010A, 1/2<br>Wave (380-<br>433MHz)    | 5.65               | 380.0125         | 120.0             | 115.0                 | CW           | E            | 1.00                    | PB           | 0.198  | 0.099                   | 0.316                            | 0.5                         | 0.204                          | 0.10                          | 0.11                              |
| Roof         | HAE6010A, 1/2<br>Wave (380-<br>433MHz)    | 5.65               | 393.0125         | 120.0             | 120.0                 | CW           | E            | 1.00                    | PB           | 0.246  | 0.080                   | 0.337                            | 0.5                         | 0.221                          | 0.11                          | 0.11                              |
| Roof         | HAE6010A, 1/2<br>Wave (380-<br>433MHz)    | 5.65               | 406.5000         | 120.0             | 118.0                 | CW           | E            | 1.01                    | PB           | 0.186  | 0.278                   | 0.254                            | 0.5                         | 0.242                          | 0.12                          | 0.12                              |
| Roof         | HAE6010A, 1/2<br>Wave (380-<br>433MHz)    | 5.65               | 419.5000         | 120.0             | 113.0                 | CW           | E            | 1.02                    | PB           | 0.100  | 0.197                   | 0.067                            | 0.5                         | 0.124                          | 0.06                          | 0.07                              |
| Roof         | HAE6010A, 1/2<br>Wave (380-<br>433MHz)    | 5.65               | 432.9875         | 120.0             | 108.0                 | CW           | E            | 1.03                    | PB           | 0.149  | 0.179                   | 0.123                            | 0.5                         | 0.155                          | 0.08                          | 0.09                              |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.2 (Continued)**  
**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |  |                    |                  |                   |                       |              | Probe Info.  |                         |              | MPE Measurements<br>Passenger/Operator (MC)<br>Positions |                         |                                  | DUT<br>Max.<br>TX<br>Factor | Avg. over<br>Body (mW/<br>cm2) | Calc.<br>P.D.<br>(mW/<br>cm2) | Max<br>Calc. P.D.<br>(mW/<br>cm2) |
|--------------|--|--------------------|------------------|-------------------|-----------------------|--------------|--------------|-------------------------|--------------|--|-------------------------|----------------------------------|-----------------------------|--------------------------------|-------------------------------|-----------------------------------|
| Ant<br>Loc.  | Ant. Model/<br>Desc.                   | Ant. Gain<br>(dBi) | Tx Freq<br>(MHz) | Max<br>Pwr<br>(W) | Initial<br>Pwr<br>(W) | Test<br>Mode | E/H<br>Field | Probe<br>Cal.<br>Factor | Test<br>Pos. | Head/<br>Top 1/3   | Chest/<br>Middle<br>1/3 | Lower<br>Trunk/<br>Bottom<br>1/3 |                             |                                |                               |                                   |
| Roof         | HAE6011A, 5/8<br>Wave (380-<br>433MHz) | 7.15               | 380.0125         | 120.0             | 115.0                 | CW           | E            | 1.00                    | PB           | 0.030  | 0.019                   | 0.028                            | 0.5                         | 0.026                          | 0.01                          | 0.01                              |
| Roof         | HAE6011A, 5/8<br>Wave (380-<br>433MHz) | 7.15               | 393.0125         | 120.0             | 120.0                 | CW           | E            | 1.00                    | PB           | 0.081  | 0.029                   | 0.063                            | 0.5                         | 0.058                          | 0.03                          | 0.03                              |
| Roof         | HAE6011A, 5/8<br>Wave (380-<br>433MHz) | 7.15               | 406.5000         | 120.0             | 118.0                 | CW           | E            | 1.01                    | PB           | 0.049  | 0.055                   | 0.072                            | 0.5                         | 0.059                          | 0.03                          | 0.03                              |
| Roof         | HAE6011A, 5/8<br>Wave (380-<br>433MHz) | 7.15               | 419.5000         | 120.0             | 113.0                 | CW           | E            | 1.02                    | PB           | 0.042  | 0.050                   | 0.040                            | 0.5                         | 0.045                          | 0.02                          | 0.02                              |
| Roof         | HAE6011A, 5/8<br>Wave (380-<br>433MHz) | 7.15               | 432.9875         | 120.0             | 108.0                 | CW           | E            | 1.03                    | PB           | 0.049  | 0.038                   | 0.054                            | 0.5                         | 0.048                          | 0.02                          | 0.03                              |
| Roof         | HAE6012A, 1/4<br>Wave (380-<br>433MHz) | 2.15               | 380.0125         | 120.0             | 115.0                 | CW           | E            | 1.03                    | PB           | 0.289  | 0.135                   | 0.419                            | 0.5                         | 0.289                          | 0.14                          | 0.15                              |
| Roof         | HAE6012A, 1/4<br>Wave (380-<br>433MHz) | 2.15               | 393.0125         | 120.0             | 120.0                 | CW           | E            | 1.03                    | PB           | 0.284  | 0.117                   | 0.459                            | 0.5                         | 0.295                          | 0.15                          | 0.15                              |
| Roof         | HAE6012A, 1/4<br>Wave (380-<br>433MHz) | 2.15               | 406.5000         | 120.0             | 118.0                 | CW           | E            | 1.02                    | PB           | 0.125  | 0.120                   | 0.174                            | 0.5                         | 0.142                          | 0.07                          | 0.07                              |
| Roof         | HAE6012A, 1/4<br>Wave (380-<br>433MHz) | 2.15               | 419.5000         | 120.0             | 113.0                 | CW           | E            | 1.02                    | PB           | 0.104  | 0.118                   | 0.146                            | 0.5                         | 0.125                          | 0.06                          | 0.07                              |
| Roof         | HAE6012A, 1/4<br>Wave (380-<br>433MHz) | 2.15               | 432.9875         | 120.0             | 108.0                 | CW           | E            | 1.02                    | PB           | 0.046  | 0.077                   | 0.067                            | 0.5                         | 0.065                          | 0.03                          | 0.04                              |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.2 (Continued)**  
**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.00              | PB        | 0.198                             | 0.076             | 0.288                   | 0.5                | 0.187                   | 0.09                | 0.10                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.00              | PB        | 0.248                             | 0.081             | 0.337                   | 0.5                | 0.222                   | 0.11                | 0.11                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.01              | PB        | 0.177                             | 0.257             | 0.249                   | 0.5                | 0.230                   | 0.11                | 0.12                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.02              | PB        | 0.096                             | 0.173             | 0.068                   | 0.5                | 0.115                   | 0.06                | 0.06                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.03              | PB        | 0.220                             | 0.134             | 0.166                   | 0.5                | 0.179                   | 0.09                | 0.10                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.126                             | 0.197             | 0.313                   | 0.5                | 0.220                   | 0.11                | 0.11                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PB        | 0.073                             | 0.081             | 0.124                   | 0.5                | 0.097                   | 0.05                | 0.05                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.067                             | 0.064             | 0.168                   | 0.5                | 0.106                   | 0.05                | 0.05                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.00              | PB        | 0.237                             | 0.098             | 0.367                   | 0.5                | 0.234                   | 0.12                | 0.12                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.00              | PB        | 0.253                             | 0.087             | 0.349                   | 0.5                | 0.230                   | 0.11                | 0.11                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.01              | PB        | 0.170                             | 0.234             | 0.237                   | 0.5                | 0.216                   | 0.11                | 0.11                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.02              | PB        | 0.106                             | 0.205             | 0.074                   | 0.5                | 0.131                   | 0.07                | 0.07                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.03              | PB        | 0.211                             | 0.149             | 0.185                   | 0.5                | 0.187                   | 0.09                | 0.10                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.124                             | 0.169             | 0.308                   | 0.5                | 0.208                   | 0.10                | 0.11                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.082                             | 0.125             | 0.195                   | 0.5                | 0.142                   | 0.07                | 0.07                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.2 (Continued)**

**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PB        | 0.020                             | 0.024             | 0.040                   | 0.5                | 0.029                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PB        | 0.018                             | 0.012             | 0.039                   | 0.5                | 0.023                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PB        | 0.028                             | 0.045             | 0.088                   | 0.5                | 0.055                   | 0.03                | 0.03                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.028                             | 0.045             | 0.073                   | 0.5                | 0.051                   | 0.03                | 0.03                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PB        | 0.012                             | 0.023             | 0.050                   | 0.5                | 0.030                   | 0.01                | 0.01                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.024                             | 0.050             | 0.098                   | 0.5                | 0.061                   | 0.03                | 0.03                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz)   | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PB        | 0.029                             | 0.037             | 0.042                   | 0.5                | 0.037                   | 0.02                | 0.02                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz)   | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PB        | 0.020                             | 0.042             | 0.065                   | 0.5                | 0.043                   | 0.02                | 0.02                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz)   | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PB        | 0.015                             | 0.036             | 0.052                   | 0.5                | 0.035                   | 0.02                | 0.02                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz)   | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.095                             | 0.183             | 0.276                   | 0.5                | 0.192                   | 0.10                | 0.10                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz)   | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PB        | 0.112                             | 0.093             | 0.184                   | 0.5                | 0.136                   | 0.07                | 0.07                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz)   | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.074                             | 0.125             | 0.197                   | 0.5                | 0.140                   | 0.07                | 0.07                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.2 (Continued)**  
**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)    | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.098                             | 0.153             | 0.180                   | 0.5                | 0.149                   | 0.07                | 0.08                    |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)    | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PB        | 0.136                             | 0.116             | 0.137                   | 0.5                | 0.136                   | 0.07                | 0.07                    |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)    | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.061                             | 0.103             | 0.249                   | 0.5                | 0.146                   | 0.07                | 0.08                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.00              | PF        | 0.138                             | 0.084             | 0.070                   | 0.5                | 0.097                   | 0.05                | 0.05                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.00              | PF        | 0.128                             | 0.106             | 0.069                   | 0.5                | 0.101                   | 0.05                | 0.05                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.01              | PF        | 0.066                             | 0.046             | 0.081                   | 0.5                | 0.065                   | 0.03                | 0.03                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.02              | PF        | 0.092                             | 0.059             | 0.075                   | 0.5                | 0.077                   | 0.04                | 0.04                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.03              | PF        | 0.094                             | 0.047             | 0.077                   | 0.5                | 0.075                   | 0.04                | 0.04                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.092                             | 0.159             | 0.089                   | 0.5                | 0.118                   | 0.06                | 0.06                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.055                             | 0.049             | 0.092                   | 0.5                | 0.069                   | 0.03                | 0.04                    |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.00              | PF        | 0.078                             | 0.073             | 0.061                   | 0.5                | 0.071                   | 0.04                | 0.04                    |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.00              | PF        | 0.172                             | 0.169             | 0.092                   | 0.5                | 0.144                   | 0.07                | 0.07                    |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.01              | PF        | 0.064                             | 0.041             | 0.086                   | 0.5                | 0.064                   | 0.03                | 0.03                    |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.02              | PF        | 0.109                             | 0.052             | 0.084                   | 0.5                | 0.083                   | 0.04                | 0.04                    |
| Roof         | HAE6010A, 1/2 Wave (380-433MHz)    | 5.65            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.03              | PF        | 0.105                             | 0.071             | 0.129                   | 0.5                | 0.105                   | 0.05                | 0.06                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.2 (Continued)**

**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.00              | PF        | 0.009                             | 0.019             | 0.015                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.00              | PF        | 0.023                             | 0.060             | 0.037                   | 0.5                | 0.040                   | 0.02                | 0.02                    |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.01              | PF        | 0.020                             | 0.024             | 0.026                   | 0.5                | 0.024                   | 0.01                | 0.01                    |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.02              | PF        | 0.050                             | 0.020             | 0.032                   | 0.5                | 0.035                   | 0.02                | 0.02                    |
| Roof         | HAE6011A, 5/8 Wave (380-433MHz) | 7.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.03              | PF        | 0.029                             | 0.023             | 0.057                   | 0.5                | 0.037                   | 0.02                | 0.02                    |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.03              | PF        | 0.038                             | 0.018             | 0.023                   | 0.5                | 0.027                   | 0.01                | 0.01                    |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.03              | PF        | 0.046                             | 0.022             | 0.017                   | 0.5                | 0.029                   | 0.01                | 0.01                    |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.02              | PF        | 0.015                             | 0.017             | 0.014                   | 0.5                | 0.016                   | 0.01                | 0.01                    |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 419.5000      | 120.0       | 113.0           | CW        | E           | 1.02              | PF        | 0.035                             | 0.033             | 0.026                   | 0.5                | 0.032                   | 0.02                | 0.02                    |
| Roof         | HAE6012A, 1/4 Wave (380-433MHz) | 2.15            | 432.9875      | 120.0       | 108.0           | CW        | E           | 1.02              | PF        | 0.033                             | 0.013             | 0.033                   | 0.5                | 0.027                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.2 (Continued)**  
**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.00              | PF        | 0.069                             | 0.080             | 0.059                   | 0.5                | 0.069                   | 0.03                | 0.04                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.00              | PF        | 0.142                             | 0.144             | 0.085                   | 0.5                | 0.124                   | 0.06                | 0.06                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.01              | PF        | 0.061                             | 0.059             | 0.065                   | 0.5                | 0.062                   | 0.03                | 0.03                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.02              | PF        | 0.078                             | 0.051             | 0.080                   | 0.5                | 0.071                   | 0.04                | 0.04                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.03              | PF        | 0.076                             | 0.061             | 0.142                   | 0.5                | 0.096                   | 0.05                | 0.05                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.058                             | 0.112             | 0.085                   | 0.5                | 0.088                   | 0.04                | 0.04                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PF        | 0.035                             | 0.052             | 0.048                   | 0.5                | 0.047                   | 0.02                | 0.02                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.053                             | 0.024             | 0.129                   | 0.5                | 0.073                   | 0.04                | 0.04                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 380.0125      | 120.0       | 115.0           | CW        | E           | 1.00              | PF        | 0.093                             | 0.104             | 0.074                   | 0.5                | 0.090                   | 0.05                | 0.05                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 393.0125      | 120.0       | 120.0           | CW        | E           | 1.00              | PF        | 0.110                             | 0.141             | 0.074                   | 0.5                | 0.108                   | 0.05                | 0.05                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 406.5000      | 120.0       | 118.0           | CW        | E           | 1.01              | PF        | 0.064                             | 0.059             | 0.054                   | 0.5                | 0.060                   | 0.03                | 0.03                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 422.0125      | 120.0       | 111.0           | CW        | E           | 1.02              | PF        | 0.100                             | 0.101             | 0.147                   | 0.5                | 0.118                   | 0.06                | 0.06                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 438.0125      | 120.0       | 108.0           | CW        | E           | 1.03              | PF        | 0.084                             | 0.059             | 0.154                   | 0.5                | 0.102                   | 0.05                | 0.06                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.080                             | 0.161             | 0.131                   | 0.5                | 0.129                   | 0.06                | 0.07                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.062                             | 0.049             | 0.163                   | 0.5                | 0.097                   | 0.05                | 0.05                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table K.2 (Continued)**

**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PF        | 0.019                             | 0.034             | 0.013                   | 0.5                | 0.022                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PF        | 0.020                             | 0.027             | 0.016                   | 0.5                | 0.021                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PF        | 0.007                             | 0.006             | 0.002                   | 0.5                | 0.005                   | 0.00                | 0.00                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.016                             | 0.020             | 0.018                   | 0.5                | 0.019                   | 0.01                | 0.01                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PF        | 0.013                             | 0.013             | 0.017                   | 0.5                | 0.015                   | 0.01                | 0.01                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.019                             | 0.012             | 0.030                   | 0.5                | 0.022                   | 0.01                | 0.01                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz)   | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PF        | 0.022                             | 0.038             | 0.025                   | 0.5                | 0.029                   | 0.01                | 0.01                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz)   | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PF        | 0.032                             | 0.034             | 0.032                   | 0.5                | 0.033                   | 0.02                | 0.02                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz)   | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PF        | 0.011                             | 0.009             | 0.019                   | 0.5                | 0.013                   | 0.01                | 0.01                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz)   | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.106                             | 0.096             | 0.133                   | 0.5                | 0.116                   | 0.06                | 0.06                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz)   | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PF        | 0.039                             | 0.093             | 0.097                   | 0.5                | 0.080                   | 0.04                | 0.04                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz)   | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.064                             | 0.046             | 0.113                   | 0.5                | 0.079                   | 0.04                | 0.04                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table K.2 (Continued)**  
**UHF R1 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.087                             | 0.186             | 0.115                   | 0.5                | 0.135                   | 0.07                | 0.07                    |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PF        | 0.062                             | 0.085             | 0.093                   | 0.5                | 0.084                   | 0.04                | 0.04                    |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.089                             | 0.033             | 0.066                   | 0.5                | 0.066                   | 0.03                | 0.03                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Appendix L – MPE Measurement Results for LMR UHF R2**

**Table L.1**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.060                    | 0.060 | 0.110 | 0.140 | 0.170  | 0.140  | 0.120  | 0.110  | 0.140  | 0.210  | 0.5                | 0.122                   | 0.061               | 0.062                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.060                    | 0.070 | 0.100 | 0.110 | 0.100  | 0.090  | 0.080  | 0.070  | 0.110  | 0.170  | 0.5                | 0.089                   | 0.045               | 0.046                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS1       | 0.060                    | 0.070 | 0.090 | 0.100 | 0.110  | 0.100  | 0.100  | 0.120  | 0.180  | 0.190  | 0.5                | 0.101                   | 0.050               | 0.051                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS1       | 0.010                    | 0.020 | 0.030 | 0.040 | 0.040  | 0.040  | 0.040  | 0.040  | 0.040  | 0.040  | 0.5                | 0.030                   | 0.015               | 0.015                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS1       | 0.020                    | 0.030 | 0.040 | 0.040 | 0.050  | 0.050  | 0.040  | 0.040  | 0.030  | 0.050  | 0.5                | 0.034                   | 0.017               | 0.017                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS1       | 0.011                    | 0.014 | 0.018 | 0.026 | 0.027  | 0.023  | 0.021  | 0.020  | 0.019  | 0.016  | 0.5                | 0.017                   | 0.008               | 0.008                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.034                    | 0.028 | 0.026 | 0.028 | 0.042  | 0.065  | 0.091  | 0.113  | 0.121  | 0.113  | 0.5                | 0.064                   | 0.032               | 0.032                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.023                    | 0.016 | 0.022 | 0.027 | 0.043  | 0.060  | 0.075  | 0.071  | 0.067  | 0.097  | 0.5                | 0.047                   | 0.023               | 0.024                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS2       | 0.020                    | 0.010 | 0.030 | 0.040 | 0.060  | 0.090  | 0.110  | 0.100  | 0.090  | 0.110  | 0.5                | 0.059                   | 0.030               | 0.030                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS2       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.030  | 0.030  | 0.040  | 0.050  | 0.040  | 0.040  | 0.5                | 0.023                   | 0.011               | 0.011                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS2       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.040  | 0.060  | 0.060  | 0.050  | 0.040  | 0.050  | 0.5                | 0.031                   | 0.015               | 0.016                   |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.030  | 0.030  | 0.030  | 0.020  | 0.020  | 0.020  | 0.5                | 0.015                   | 0.008               | 0.008                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                                      |                                  |                                      |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                                      |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.038                    | 0.045 | 0.059 | 0.056 | 0.046  | 0.040  | 0.039  | 0.049  | 0.058  | 0.065  | 0.5 | 0.048              | 0.024                                | 0.024                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.042                    | 0.039 | 0.046 | 0.045 | 0.038  | 0.041  | 0.048  | 0.055  | 0.054  | 0.056  | 0.5 | 0.043              | 0.022                                | 0.022                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS3       | 0.050                    | 0.050 | 0.060 | 0.060 | 0.060  | 0.060  | 0.060  | 0.070  | 0.090  | 0.100  | 0.5 | 0.059              | 0.030                                | 0.030                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS3       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.020  | 0.020  | 0.020  | 0.020  | 0.020  | 0.030  | 0.5 | 0.017              | 0.008                                | 0.008                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS3       | 0.020                    | 0.020 | 0.030 | 0.030 | 0.030  | 0.030  | 0.020  | 0.020  | 0.010  | 0.020  | 0.5 | 0.020              | 0.010                                | 0.010                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS3       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.010  | 0.010  | 0.010  | 0.010  | 0.010  | 0.5 | 0.009              | 0.004                                | 0.004                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.037                    | 0.039 | 0.031 | 0.032 | 0.037  | 0.033  | 0.026  | 0.015  | 0.018  | 0.027  | 0.5 | 0.029              | 0.014                                | 0.014                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.023                    | 0.022 | 0.015 | 0.025 | 0.024  | 0.019  | 0.012  | 0.013  | 0.020  | 0.036  | 0.5 | 0.019              | 0.010                                | 0.010                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS4       | 0.026                    | 0.025 | 0.029 | 0.044 | 0.046  | 0.031  | 0.015  | 0.011  | 0.017  | 0.033  | 0.5 | 0.025              | 0.012                                | 0.013                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS4       | 0.010                    | 0.009 | 0.010 | 0.016 | 0.022  | 0.020  | 0.015  | 0.008  | 0.006  | 0.012  | 0.5 | 0.011              | 0.006                                | 0.006                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS4       | 0.014                    | 0.010 | 0.013 | 0.021 | 0.019  | 0.013  | 0.007  | 0.006  | 0.028  | 0.016  | 0.5 | 0.013              | 0.006                                | 0.006                            |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS4       | 0.004                    | 0.002 | 0.003 | 0.006 | 0.009  | 0.008  | 0.006  | 0.005  | 0.004  | 0.006  | 0.5 | 0.005              | 0.002                                | 0.002                            |                                      |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        |     | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |     |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.002                    | 0.003 | 0.005 | 0.008 | 0.017  | 0.023  | 0.026  | 0.021  | 0.018  | 0.023  | 0.5 | 0.014              | 0.007                   | 0.007               |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.006                    | 0.004 | 0.009 | 0.015 | 0.025  | 0.029  | 0.025  | 0.018  | 0.011  | 0.013  | 0.5 | 0.014              | 0.007                   | 0.007               |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS5       | 0.003                    | 0.004 | 0.009 | 0.014 | 0.029  | 0.028  | 0.022  | 0.012  | 0.010  | 0.020  | 0.5 | 0.014              | 0.007                   | 0.007               |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS5       | 0.001                    | 0.002 | 0.004 | 0.008 | 0.012  | 0.015  | 0.012  | 0.006  | 0.003  | 0.007  | 0.5 | 0.006              | 0.003                   | 0.003               |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS5       | 0.001                    | 0.004 | 0.006 | 0.014 | 0.018  | 0.017  | 0.012  | 0.006  | 0.005  | 0.009  | 0.5 | 0.008              | 0.004                   | 0.004               |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS5       | 0.001                    | 0.002 | 0.004 | 0.008 | 0.010  | 0.009  | 0.006  | 0.003  | 0.004  | 0.008  | 0.5 | 0.005              | 0.002                   | 0.002               |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.050                    | 0.060 | 0.080 | 0.130 | 0.180  | 0.220  | 0.250  | 0.340  | 0.410  | 0.400  | 0.5 | 0.206              | 0.103                   | 0.104               |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.055                    | 0.077 | 0.114 | 0.138 | 0.165  | 0.163  | 0.188  | 0.176  | 0.234  | 0.311  | 0.5 | 0.154              | 0.077                   | 0.077               |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.030                    | 0.030 | 0.060 | 0.090 | 0.110  | 0.120  | 0.150  | 0.220  | 0.290  | 0.320  | 0.5 | 0.132              | 0.066                   | 0.068               |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.031                    | 0.033 | 0.032 | 0.039 | 0.068  | 0.113  | 0.171  | 0.178  | 0.230  | 0.195  | 0.5 | 0.106              | 0.053                   | 0.053               |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.024                    | 0.022 | 0.026 | 0.035 | 0.065  | 0.110  | 0.155  | 0.196  | 0.147  | 0.118  | 0.5 | 0.085              | 0.043                   | 0.043               |                         |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.016                    | 0.017 | 0.019 | 0.026 | 0.047  | 0.076  | 0.113  | 0.149  | 0.169  | 0.196  | 0.5 | 0.077              | 0.039                   | 0.040               |                         |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.031                    | 0.034 | 0.051 | 0.062 | 0.067  | 0.079  | 0.092  | 0.111  | 0.133  | 0.149  | 0.5                | 0.078                                | 0.039                            | 0.040                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.052                    | 0.061 | 0.083 | 0.089 | 0.082  | 0.090  | 0.113  | 0.164  | 0.229  | 0.258  | 0.5                | 0.116                                | 0.058                            | 0.058                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.030                    | 0.035 | 0.045 | 0.054 | 0.052  | 0.059  | 0.076  | 0.092  | 0.110  | 0.113  | 0.5                | 0.062                                | 0.031                            | 0.032                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.051                    | 0.062 | 0.054 | 0.056 | 0.068  | 0.069  | 0.061  | 0.059  | 0.073  | 0.107  | 0.5                | 0.064                                | 0.032                            | 0.032                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.060                    | 0.061 | 0.037 | 0.043 | 0.058  | 0.054  | 0.045  | 0.033  | 0.041  | 0.070  | 0.5                | 0.048                                | 0.024                            | 0.024                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.031                    | 0.026 | 0.016 | 0.032 | 0.042  | 0.043  | 0.044  | 0.045  | 0.073  | 0.123  | 0.5                | 0.044                                | 0.022                            | 0.023                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.005                    | 0.006 | 0.011 | 0.021 | 0.032  | 0.051  | 0.059  | 0.060  | 0.064  | 0.078  | 0.5                | 0.038                                | 0.019                            | 0.019                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.016                    | 0.020 | 0.028 | 0.032 | 0.049  | 0.067  | 0.076  | 0.070  | 0.067  | 0.095  | 0.5                | 0.049                                | 0.025                            | 0.025                                |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.005                    | 0.006 | 0.008 | 0.016 | 0.023  | 0.032  | 0.038  | 0.033  | 0.030  | 0.038  | 0.5                | 0.021                                | 0.011                            | 0.011                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.056                    | 0.060 | 0.096 | 0.134 | 0.181  | 0.220  | 0.262  | 0.324  | 0.360  | 0.338  | 0.5                | 0.197                                | 0.099                            | 0.099                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.049                    | 0.052 | 0.085 | 0.112 | 0.146  | 0.171  | 0.196  | 0.291  | 0.384  | 0.426  | 0.5                | 0.178                                | 0.089                            | 0.092                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS1       | 0.050                    | 0.070 | 0.090 | 0.100 | 0.140  | 0.170  | 0.250  | 0.380  | 0.480  | 0.450  | 0.5                | 0.196                                | 0.098                            | 0.100                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS1       | 0.010                    | 0.020 | 0.030 | 0.040 | 0.050  | 0.070  | 0.100  | 0.130  | 0.150  | 0.120  | 0.5                | 0.063                                | 0.031                            | 0.032                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS1       | 0.020                    | 0.030 | 0.030 | 0.030 | 0.040  | 0.060  | 0.070  | 0.090  | 0.110  | 0.110  | 0.5                | 0.051                                | 0.025                            | 0.025                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.030  | 0.040  | 0.050  | 0.070  | 0.080  | 0.070  | 0.5                | 0.035                                | 0.018                            | 0.018                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.040                    | 0.040 | 0.040 | 0.060 | 0.100  | 0.150  | 0.190  | 0.210  | 0.310  | 0.280  | 0.5                | 0.138                                | 0.069                            | 0.069                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.020                    | 0.020 | 0.020 | 0.030 | 0.080  | 0.120  | 0.160  | 0.200  | 0.220  | 0.250  | 0.5                | 0.104                                | 0.052                            | 0.054                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS2       | 0.020                    | 0.020 | 0.030 | 0.040 | 0.070  | 0.120  | 0.190  | 0.240  | 0.280  | 0.290  | 0.5                | 0.117                                | 0.059                            | 0.059                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.030  | 0.050  | 0.090  | 0.140  | 0.150  | 0.013  | 0.5                | 0.043                                | 0.021                            | 0.022                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.040  | 0.060  | 0.080  | 0.100  | 0.110  | 0.110  | 0.5                | 0.046                                | 0.023                            | 0.023                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.030  | 0.040  | 0.050  | 0.060  | 0.060  | 0.060  | 0.5                | 0.028                                | 0.014                            | 0.014                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.020                    | 0.040 | 0.060 | 0.070 | 0.070  | 0.090  | 0.100  | 0.130  | 0.160  | 0.180  | 0.5                | 0.089                                | 0.045                            | 0.045                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.040                    | 0.050 | 0.060 | 0.060 | 0.050  | 0.050  | 0.080  | 0.120  | 0.120  | 0.140  | 0.5                | 0.072                                | 0.036                            | 0.037                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS3       | 0.040                    | 0.040 | 0.060 | 0.070 | 0.080  | 0.100  | 0.130  | 0.180  | 0.220  | 0.240  | 0.5                | 0.104                                | 0.052                            | 0.053                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS3       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.030  | 0.030  | 0.040  | 0.050  | 0.060  | 0.060  | 0.5                | 0.029                                | 0.014                            | 0.015                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS3       | 0.010                    | 0.020 | 0.030 | 0.030 | 0.030  | 0.030  | 0.030  | 0.040  | 0.040  | 0.040  | 0.5                | 0.026                                | 0.013                            | 0.013                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS3       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.020  | 0.030  | 0.040  | 0.050  | 0.050  | 0.5                | 0.022                                | 0.011                            | 0.011                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.046                    | 0.057 | 0.051 | 0.053 | 0.063  | 0.060  | 0.050  | 0.048  | 0.057  | 0.090  | 0.5                | 0.056                                | 0.028                            | 0.028                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.032                    | 0.028 | 0.016 | 0.030 | 0.043  | 0.051  | 0.053  | 0.061  | 0.091  | 0.146  | 0.5                | 0.051                                | 0.026                            | 0.027                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS4       | 0.030                    | 0.030 | 0.040 | 0.060 | 0.070  | 0.060  | 0.050  | 0.050  | 0.070  | 0.110  | 0.5                | 0.051                                | 0.026                            | 0.026                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS4       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.040  | 0.040  | 0.030  | 0.030  | 0.030  | 0.060  | 0.5                | 0.024                                | 0.012                            | 0.012                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS4       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.010  | 0.010  | 0.010  | 0.020  | 0.050  | 0.5                | 0.015                                | 0.007                            | 0.007                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.010  | 0.010  | 0.010  | 0.010  | 0.020  | 0.5                | 0.007                                | 0.003                            | 0.003                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.008                    | 0.009 | 0.013 | 0.017 | 0.036  | 0.053  | 0.065  | 0.067  | 0.069  | 0.091  | 0.5                | 0.042                                | 0.021                            | 0.021                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.007                    | 0.009 | 0.013 | 0.021 | 0.030  | 0.041  | 0.047  | 0.040  | 0.035  | 0.051  | 0.5                | 0.027                                | 0.014                            | 0.014                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS5       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.030  | 0.040  | 0.040  | 0.030  | 0.040  | 0.060  | 0.5                | 0.024                                | 0.012                            | 0.012                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.020  | 0.020  | 0.010  | 0.020  | 0.030  | 0.5                | 0.010                                | 0.005                            | 0.005                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS5       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.010  | 0.010  | 0.010  | 0.010  | 0.030  | 0.5                | 0.008                                | 0.004                            | 0.004                                |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.010  | 0.010  | 0.010  | 0.010  | 0.030  | 0.5                | 0.007                                | 0.003                            | 0.003                                |
|              |                                   |                 |               |             |                 |           |             |                   |           |                          |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.011                    | 0.006 | 0.005 | 0.004 | 0.003  | 0.026  | 0.098  | 0.240  | 0.379  | 0.373  | 0.5                | 0.111                                | 0.056                            | 0.056                                |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.015                    | 0.014 | 0.015 | 0.013 | 0.020  | 0.054  | 0.128  | 0.279  | 0.432  | 0.179  | 0.5                | 0.109                                | 0.055                            | 0.055                                |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.012                    | 0.008 | 0.010 | 0.014 | 0.029  | 0.080  | 0.167  | 0.335  | 0.488  | 0.487  | 0.5                | 0.152                                | 0.076                            | 0.078                                |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.030  | 0.100  | 0.230  | 0.340  | 0.370  | 0.5                | 0.104                                | 0.052                            | 0.052                                |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.030  | 0.030  | 0.090  | 0.190  | 0.300  | 0.330  | 0.5                | 0.093                                | 0.047                            | 0.047                                |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.030  | 0.070  | 0.140  | 0.250  | 0.330  | 0.360  | 0.5                | 0.111                                | 0.055                            | 0.057                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.001                    | 0.001 | 0.003 | 0.008 | 0.024  | 0.050  | 0.083  | 0.123  | 0.163  | 0.146  | 0.5                | 0.058                   | 0.029               | 0.029                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.005                    | 0.004 | 0.003 | 0.007 | 0.020  | 0.051  | 0.112  | 0.211  | 0.312  | 0.182  | 0.5                | 0.086                   | 0.043               | 0.043                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.006                    | 0.007 | 0.010 | 0.020 | 0.031  | 0.051  | 0.082  | 0.121  | 0.164  | 0.177  | 0.5                | 0.062                   | 0.031               | 0.032                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.001                    | 0.003 | 0.010 | 0.017 | 0.026  | 0.038  | 0.055  | 0.088  | 0.129  | 0.128  | 0.5                | 0.048                   | 0.024               | 0.024                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.007                    | 0.011 | 0.015 | 0.022 | 0.037  | 0.050  | 0.060  | 0.075  | 0.097  | 0.124  | 0.5                | 0.047                   | 0.024               | 0.024                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.010                    | 0.012 | 0.009 | 0.021 | 0.040  | 0.062  | 0.094  | 0.126  | 0.175  | 0.199  | 0.5                | 0.070                   | 0.035               | 0.036                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.003                    | 0.006 | 0.014 | 0.025 | 0.034  | 0.043  | 0.049  | 0.064  | 0.092  | 0.136  | 0.5                | 0.045                   | 0.023               | 0.023                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.006                    | 0.010 | 0.018 | 0.024 | 0.033  | 0.047  | 0.069  | 0.089  | 0.128  | 0.171  | 0.5                | 0.057                   | 0.028               | 0.028                   |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.003                    | 0.003 | 0.005 | 0.017 | 0.030  | 0.047  | 0.056  | 0.065  | 0.081  | 0.110  | 0.5                | 0.039                   | 0.019               | 0.020                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.020  | 0.040  | 0.070  | 0.100  | 0.110  | 0.5                | 0.038                   | 0.019               | 0.019                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.030  | 0.060  | 0.120  | 0.160  | 0.170  | 0.5                | 0.056                   | 0.028               | 0.028                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.020  | 0.030  | 0.040  | 0.050  | 0.060  | 0.5                | 0.023                   | 0.012               | 0.012                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.003                    | 0.006 | 0.007 | 0.015 | 0.035  | 0.079  | 0.158  | 0.211  | 0.298  | 0.259  | 0.5                | 0.104                   | 0.052               | 0.052                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.002                    | 0.003 | 0.005 | 0.010 | 0.018  | 0.046  | 0.098  | 0.161  | 0.206  | 0.139  | 0.5                | 0.065                   | 0.033               | 0.033                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.001                    | 0.002 | 0.003 | 0.005 | 0.023  | 0.055  | 0.102  | 0.153  | 0.192  | 0.202  | 0.5                | 0.069                   | 0.034               | 0.036                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.010                    | 0.015 | 0.024 | 0.036 | 0.057  | 0.081  | 0.106  | 0.136  | 0.161  | 0.174  | 0.5                | 0.078                   | 0.039               | 0.039                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.009                    | 0.013 | 0.020 | 0.027 | 0.035  | 0.053  | 0.087  | 0.152  | 0.204  | 0.208  | 0.5                | 0.077                   | 0.038               | 0.038                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.005                    | 0.006 | 0.010 | 0.019 | 0.025  | 0.035  | 0.054  | 0.072  | 0.087  | 0.094  | 0.5                | 0.038                   | 0.019               | 0.020                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.010                    | 0.011 | 0.012 | 0.016 | 0.022  | 0.032  | 0.041  | 0.055  | 0.082  | 0.104  | 0.5                | 0.037                   | 0.019               | 0.019                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.019                    | 0.026 | 0.025 | 0.031 | 0.039  | 0.042  | 0.040  | 0.041  | 0.053  | 0.076  | 0.5                | 0.037                   | 0.019               | 0.019                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.011                    | 0.012 | 0.010 | 0.016 | 0.023  | 0.039  | 0.053  | 0.054  | 0.081  | 0.107  | 0.5                | 0.038                   | 0.019               | 0.020                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.011                    | 0.015 | 0.023 | 0.035 | 0.065  | 0.086  | 0.094  | 0.095  | 0.101  | 0.109  | 0.5                | 0.061                   | 0.031               | 0.031                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.006                    | 0.016 | 0.022 | 0.029 | 0.039  | 0.055  | 0.063  | 0.058  | 0.066  | 0.098  | 0.5                | 0.043                   | 0.021               | 0.021                   |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz) | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.003                    | 0.004 | 0.005 | 0.016 | 0.025  | 0.033  | 0.036  | 0.037  | 0.038  | 0.051  | 0.5                | 0.023                   | 0.012               | 0.012                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.030  | 0.040  | 0.050  | 0.060  | 0.080  | 0.090  | 0.5                | 0.040                   | 0.020               | 0.020                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.020 | 0.030 | 0.030 | 0.040  | 0.050  | 0.060  | 0.080  | 0.090  | 0.120  | 0.5                | 0.050                   | 0.025               | 0.025                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.020  | 0.030  | 0.040  | 0.050  | 0.090  | 0.100  | 0.5                | 0.036                   | 0.018               | 0.019                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.032                    | 0.034 | 0.030 | 0.036 | 0.060  | 0.109  | 0.180  | 0.190  | 0.254  | 0.231  | 0.5                | 0.112                   | 0.056               | 0.057                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.019                    | 0.014 | 0.019 | 0.028 | 0.048  | 0.078  | 0.108  | 0.135  | 0.150  | 0.118  | 0.5                | 0.068                   | 0.034               | 0.034                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.019                    | 0.015 | 0.015 | 0.028 | 0.059  | 0.101  | 0.154  | 0.192  | 0.232  | 0.272  | 0.5                | 0.101                   | 0.051               | 0.052                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.010  | 0.010  | 0.020  | 0.020  | 0.030  | 0.030  | 0.5                | 0.014                   | 0.007               | 0.007                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.010                    | 0.020 | 0.020 | 0.020 | 0.020  | 0.020  | 0.030  | 0.050  | 0.070  | 0.080  | 0.5                | 0.032                   | 0.016               | 0.016                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.010  | 0.010  | 0.020  | 0.020  | 0.020  | 0.030  | 0.5                | 0.014                   | 0.007               | 0.007                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.043                    | 0.050 | 0.042 | 0.045 | 0.057  | 0.059  | 0.050  | 0.045  | 0.058  | 0.086  | 0.5                | 0.052                   | 0.026               | 0.026                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.038                    | 0.042 | 0.032 | 0.035 | 0.044  | 0.037  | 0.027  | 0.020  | 0.023  | 0.042  | 0.5                | 0.032                   | 0.016               | 0.016                   |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.028                    | 0.023 | 0.013 | 0.026 | 0.027  | 0.030  | 0.033  | 0.041  | 0.067  | 0.098  | 0.5                | 0.036                   | 0.018               | 0.019                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.030  | 0.050  | 0.060  | 0.070  | 0.070  | 0.090  | 0.5                | 0.038                                | 0.019                            | 0.019                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.000                    | 0.010 | 0.010 | 0.020 | 0.030  | 0.040  | 0.050  | 0.040  | 0.030  | 0.050  | 0.5                | 0.027                                | 0.013                            | 0.013                                |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.030  | 0.030  | 0.030  | 0.020  | 0.030  | 0.5                | 0.017                                | 0.008                            | 0.009                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.040  | 0.050  | 0.070  | 0.080  | 0.110  | 0.120  | 0.5                | 0.052                                | 0.026                            | 0.026                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.020 | 0.020 | 0.030 | 0.040  | 0.050  | 0.060  | 0.080  | 0.100  | 0.110  | 0.5                | 0.049                                | 0.025                            | 0.025                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.040  | 0.050  | 0.050  | 0.070  | 0.120  | 0.130  | 0.5                | 0.049                                | 0.025                            | 0.025                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS1       | 0.050                    | 0.060 | 0.080 | 0.090 | 0.130  | 0.170  | 0.240  | 0.370  | 0.470  | 0.440  | 0.5                | 0.189                                | 0.095                            | 0.096                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS1       | 0.010                    | 0.020 | 0.030 | 0.040 | 0.050  | 0.060  | 0.090  | 0.120  | 0.140  | 0.120  | 0.5                | 0.059                                | 0.030                            | 0.030                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS1       | 0.020                    | 0.030 | 0.030 | 0.040 | 0.050  | 0.060  | 0.080  | 0.100  | 0.120  | 0.130  | 0.5                | 0.057                                | 0.028                            | 0.028                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.030  | 0.030  | 0.040  | 0.060  | 0.070  | 0.060  | 0.5                | 0.031                                | 0.015                            | 0.016                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.030  | 0.050  | 0.070  | 0.070  | 0.060  | 0.5                | 0.031                                | 0.016                            | 0.016                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.020  | 0.040  | 0.040  | 0.050  | 0.060  | 0.5                | 0.022                                | 0.011                            | 0.011                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.020  | 0.040  | 0.050  | 0.050  | 0.060  | 0.5                | 0.022                                | 0.011                            | 0.012                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS2       | 0.020                    | 0.020 | 0.030 | 0.040 | 0.070  | 0.120  | 0.190  | 0.240  | 0.280  | 0.290  | 0.5                | 0.117                                | 0.059                            | 0.059                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.030  | 0.050  | 0.090  | 0.130  | 0.150  | 0.130  | 0.5                | 0.052                                | 0.026                            | 0.026                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.010 | 0.010 | 0.020 | 0.040  | 0.070  | 0.090  | 0.110  | 0.130  | 0.130  | 0.5                | 0.052                                | 0.026                            | 0.026                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.030  | 0.040  | 0.050  | 0.050  | 0.050  | 0.5                | 0.022                                | 0.011                            | 0.011                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.035                    | 0.039 | 0.058 | 0.071 | 0.076  | 0.092  | 0.106  | 0.123  | 0.149  | 0.174  | 0.5                | 0.090                                | 0.045                            | 0.045                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.050                    | 0.056 | 0.071 | 0.069 | 0.067  | 0.075  | 0.099  | 0.159  | 0.226  | 0.136  | 0.5                | 0.096                                | 0.048                            | 0.048                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.044                    | 0.047 | 0.065 | 0.080 | 0.075  | 0.081  | 0.095  | 0.118  | 0.140  | 0.165  | 0.5                | 0.085                                | 0.042                            | 0.044                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS3       | 0.040                    | 0.040 | 0.060 | 0.070 | 0.080  | 0.100  | 0.130  | 0.180  | 0.220  | 0.230  | 0.5                | 0.104                                | 0.052                            | 0.053                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS3       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.030  | 0.030  | 0.030  | 0.050  | 0.060  | 0.060  | 0.5                | 0.028                                | 0.014                            | 0.014                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS3       | 0.010                    | 0.020 | 0.030 | 0.030 | 0.030  | 0.030  | 0.040  | 0.040  | 0.050  | 0.050  | 0.5                | 0.028                                | 0.014                            | 0.014                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS3       | 0.010                    | 0.010 | 0.010 | 0.010 | 0.020  | 0.020  | 0.020  | 0.030  | 0.040  | 0.040  | 0.5                | 0.018                                | 0.009                            | 0.009                                |

Notes:

MPE calculations are defined in section 15.0  
Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.047                    | 0.053 | 0.045 | 0.051 | 0.064  | 0.066  | 0.058  | 0.053  | 0.067  | 0.098  | 0.5                | 0.058                                | 0.029                            | 0.029                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.049                    | 0.056 | 0.042 | 0.051 | 0.065  | 0.053  | 0.041  | 0.030  | 0.033  | 0.060  | 0.5                | 0.046                                | 0.023                            | 0.023                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.036                    | 0.029 | 0.019 | 0.034 | 0.043  | 0.047  | 0.050  | 0.062  | 0.093  | 0.143  | 0.5                | 0.052                                | 0.026                            | 0.027                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS4       | 0.030                    | 0.030 | 0.040 | 0.060 | 0.070  | 0.050  | 0.040  | 0.040  | 0.070  | 0.110  | 0.5                | 0.049                                | 0.024                            | 0.025                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS4       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.030  | 0.040  | 0.030  | 0.020  | 0.030  | 0.050  | 0.5                | 0.022                                | 0.011                            | 0.011                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS4       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.020  | 0.010  | 0.010  | 0.020  | 0.050  | 0.5                | 0.015                                | 0.008                            | 0.008                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.010  | 0.010  | 0.010  | 0.010  | 0.020  | 0.5                | 0.006                                | 0.003                            | 0.003                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.030  | 0.060  | 0.070  | 0.080  | 0.080  | 0.100  | 0.5                | 0.043                                | 0.021                            | 0.022                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.000                    | 0.010 | 0.020 | 0.030 | 0.040  | 0.060  | 0.060  | 0.050  | 0.040  | 0.070  | 0.5                | 0.036                                | 0.018                            | 0.018                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.000                    | 0.010 | 0.010 | 0.020 | 0.030  | 0.040  | 0.040  | 0.030  | 0.030  | 0.050  | 0.5                | 0.024                                | 0.012                            | 0.013                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS5       | 0.000                    | 0.010 | 0.010 | 0.020 | 0.050  | 0.070  | 0.060  | 0.050  | 0.050  | 0.080  | 0.5                | 0.036                                | 0.018                            | 0.018                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.020  | 0.020  | 0.010  | 0.010  | 0.030  | 0.5                | 0.009                                | 0.004                            | 0.004                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS5       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.020  | 0.020  | 0.020  | 0.010  | 0.010  | 0.030  | 0.5                | 0.010                                | 0.005                            | 0.005                                |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 0.86              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.010  | 0.010  | 0.010  | 0.020  | 0.040  | 0.5                | 0.009                                | 0.004                            | 0.004                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.009                    | 0.008 | 0.017 | 0.038 | 0.079  | 0.143  | 0.237  | 0.353  | 0.418  | 0.351  | 0.5                | 0.154                   | 0.077               | 0.080                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS1       | 0.008                    | 0.007 | 0.014 | 0.025 | 0.063  | 0.142  | 0.216  | 0.401  | 0.441  | 0.336  | 0.5                | 0.149                   | 0.074               | 0.076                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS1       | 0.003                    | 0.005 | 0.007 | 0.008 | 0.016  | 0.033  | 0.057  | 0.080  | 0.084  | 0.065  | 0.5                | 0.032                   | 0.016               | 0.016                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.000                    | 0.000 | 0.010 | 0.030 | 0.070  | 0.120  | 0.180  | 0.240  | 0.250  | 0.220  | 0.5                | 0.104                   | 0.052               | 0.054                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS2       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.040  | 0.110  | 0.200  | 0.280  | 0.310  | 0.290  | 0.5                | 0.113                   | 0.057               | 0.058                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS2       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.020  | 0.050  | 0.070  | 0.080  | 0.070  | 0.5                | 0.026                   | 0.013               | 0.013                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.010                    | 0.020 | 0.030 | 0.040 | 0.050  | 0.070  | 0.100  | 0.130  | 0.140  | 0.120  | 0.5                | 0.066                   | 0.033               | 0.034                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS3       | 0.010                    | 0.010 | 0.030 | 0.050 | 0.070  | 0.100  | 0.130  | 0.170  | 0.180  | 0.160  | 0.5                | 0.082                   | 0.041               | 0.042                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS3       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.020  | 0.030  | 0.040  | 0.040  | 0.030  | 0.5                | 0.016                   | 0.008               | 0.008                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.020                    | 0.020 | 0.030 | 0.040 | 0.050  | 0.060  | 0.060  | 0.070  | 0.110  | 0.170  | 0.5                | 0.059                   | 0.029               | 0.030                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS4       | 0.020                    | 0.020 | 0.040 | 0.060 | 0.070  | 0.060  | 0.050  | 0.050  | 0.080  | 0.120  | 0.5                | 0.051                   | 0.026               | 0.026                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS4       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.020  | 0.020  | 0.020  | 0.020  | 0.030  | 0.5                | 0.011                   | 0.006               | 0.006                   |

Notes:

MPE calculations are defined in section 15.0  
Blue fonts: Frequencies not regulated by FCC.



**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.010  | 0.010  | 0.050  | 0.060  | 0.070  | 0.5                | 0.020                   | 0.010               | 0.010                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.020  | 0.020  | 0.020  | 0.020  | 0.030  | 0.5                | 0.011                   | 0.005               | 0.005                   |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS5       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.010  | 0.010  | 0.010  | 0.010  | 0.020  | 0.5                | 0.005                   | 0.003               | 0.003                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.040                    | 0.050 | 0.090 | 0.110 | 0.130  | 0.130  | 0.170  | 0.250  | 0.360  | 0.410  | 0.5                | 0.162                   | 0.081               | 0.084                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS1       | 0.050                    | 0.060 | 0.080 | 0.090 | 0.120  | 0.150  | 0.220  | 0.340  | 0.470  | 0.450  | 0.5                | 0.183                   | 0.091               | 0.093                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS1       | 0.010                    | 0.020 | 0.030 | 0.030 | 0.040  | 0.050  | 0.070  | 0.100  | 0.120  | 0.110  | 0.5                | 0.050                   | 0.025               | 0.026                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS1       | 0.020                    | 0.020 | 0.020 | 0.030 | 0.040  | 0.060  | 0.070  | 0.080  | 0.110  | 0.120  | 0.5                | 0.049                   | 0.025               | 0.025                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.020                    | 0.010 | 0.020 | 0.030 | 0.060  | 0.100  | 0.140  | 0.180  | 0.210  | 0.250  | 0.5                | 0.095                   | 0.047               | 0.049                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS2       | 0.020                    | 0.010 | 0.030 | 0.030 | 0.060  | 0.110  | 0.180  | 0.230  | 0.250  | 0.280  | 0.5                | 0.108                   | 0.054               | 0.055                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.040  | 0.070  | 0.110  | 0.130  | 0.120  | 0.5                | 0.044                   | 0.022               | 0.022                   |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.030  | 0.060  | 0.080  | 0.100  | 0.110  | 0.120  | 0.5                | 0.046                   | 0.023               | 0.023                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.040                    | 0.040 | 0.040 | 0.050 | 0.060  | 0.070  | 0.080  | 0.110  | 0.130  | 0.150  | 0.5                | 0.072                                | 0.036                            | 0.037                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS3       | 0.040                    | 0.040 | 0.060 | 0.060 | 0.070  | 0.090  | 0.110  | 0.150  | 0.190  | 0.220  | 0.5                | 0.093                                | 0.046                            | 0.047                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS3       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.020  | 0.030  | 0.040  | 0.050  | 0.050  | 0.5                | 0.023                                | 0.011                            | 0.011                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS3       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.030  | 0.030  | 0.040  | 0.030  | 0.040  | 0.040  | 0.5                | 0.023                                | 0.012                            | 0.012                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.020                    | 0.020 | 0.020 | 0.020 | 0.030  | 0.030  | 0.030  | 0.030  | 0.050  | 0.080  | 0.5                | 0.031                                | 0.015                            | 0.016                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS4       | 0.030                    | 0.030 | 0.040 | 0.060 | 0.070  | 0.050  | 0.040  | 0.040  | 0.060  | 0.100  | 0.5                | 0.047                                | 0.023                            | 0.024                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS4       | 0.000                    | 0.000 | 0.000 | 0.020 | 0.030  | 0.030  | 0.020  | 0.020  | 0.020  | 0.040  | 0.5                | 0.016                                | 0.008                            | 0.008                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.010  | 0.010  | 0.010  | 0.010  | 0.020  | 0.040  | 0.5                | 0.011                                | 0.006                            | 0.006                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.007                    | 0.009 | 0.012 | 0.018 | 0.027  | 0.038  | 0.045  | 0.042  | 0.042  | 0.056  | 0.5                | 0.028                                | 0.014                            | 0.014                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS5       | 0.006                    | 0.007 | 0.015 | 0.021 | 0.042  | 0.046  | 0.038  | 0.028  | 0.033  | 0.062  | 0.5                | 0.027                                | 0.013                            | 0.014                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS5       | 0.001                    | 0.001 | 0.004 | 0.009 | 0.016  | 0.021  | 0.019  | 0.013  | 0.014  | 0.024  | 0.5                | 0.011                                | 0.005                            | 0.005                                |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS5       | 0.001                    | 0.003 | 0.005 | 0.011 | 0.016  | 0.017  | 0.016  | 0.013  | 0.015  | 0.029  | 0.5                | 0.011                                | 0.005                            | 0.005                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS1       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.030  | 0.050  | 0.100  | 0.130  | 0.140  | 0.110  | 0.5                | 0.052                   | 0.026               | 0.026                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS1       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.040  | 0.070  | 0.110  | 0.140  | 0.160  | 0.130  | 0.5                | 0.058                   | 0.029               | 0.029                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS1       | 0.000                    | 0.010 | 0.010 | 0.010 | 0.030  | 0.050  | 0.080  | 0.120  | 0.130  | 0.110  | 0.5                | 0.047                   | 0.024               | 0.024                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.020  | 0.040  | 0.070  | 0.110  | 0.120  | 0.110  | 0.5                | 0.042                   | 0.021               | 0.021                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.020  | 0.050  | 0.080  | 0.100  | 0.110  | 0.120  | 0.5                | 0.041                   | 0.021               | 0.021                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.020  | 0.050  | 0.080  | 0.110  | 0.120  | 0.120  | 0.5                | 0.044                   | 0.022               | 0.022                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS3       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.030  | 0.050  | 0.060  | 0.060  | 0.050  | 0.5                | 0.026                   | 0.013               | 0.013                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS3       | 0.000                    | 0.000 | 0.010 | 0.020 | 0.020  | 0.040  | 0.060  | 0.070  | 0.080  | 0.070  | 0.5                | 0.032                   | 0.016               | 0.016                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS3       | 0.000                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.030  | 0.030  | 0.040  | 0.040  | 0.050  | 0.5                | 0.022                   | 0.011               | 0.011                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS4       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.020  | 0.030  | 0.030  | 0.040  | 0.050  | 0.5                | 0.021                   | 0.011               | 0.011                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.020  | 0.020  | 0.020  | 0.030  | 0.040  | 0.5                | 0.013                   | 0.006               | 0.006                   |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz) | 5.65            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.010  | 0.020  | 0.020  | 0.030  | 0.050  | 0.5                | 0.013                   | 0.006               | 0.006                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS5       | 0.003                    | 0.006 | 0.009 | 0.011 | 0.015  | 0.020  | 0.023  | 0.025  | 0.033  | 0.053  | 0.5                | 0.017                                | 0.009                            | 0.009                                |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS5       | 0.003                    | 0.005 | 0.007 | 0.014 | 0.024  | 0.032  | 0.031  | 0.032  | 0.043  | 0.058  | 0.5                | 0.021                                | 0.011                            | 0.011                                |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS5       | 0.003                    | 0.003 | 0.004 | 0.007 | 0.013  | 0.015  | 0.016  | 0.017  | 0.020  | 0.035  | 0.5                | 0.011                                | 0.006                            | 0.006                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS1       | 0.012                    | 0.007 | 0.004 | 0.005 | 0.007  | 0.009  | 0.035  | 0.088  | 0.137  | 0.107  | 0.5                | 0.036                                | 0.018                            | 0.018                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS1       | 0.004                    | 0.002 | 0.003 | 0.004 | 0.006  | 0.017  | 0.054  | 0.113  | 0.164  | 0.159  | 0.5                | 0.045                                | 0.023                            | 0.023                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS1       | 0.008                    | 0.007 | 0.004 | 0.003 | 0.005  | 0.020  | 0.048  | 0.096  | 0.135  | 0.124  | 0.5                | 0.039                                | 0.019                            | 0.019                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS2       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.010  | 0.020  | 0.060  | 0.110  | 0.120  | 0.5                | 0.028                                | 0.014                            | 0.014                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.010  | 0.030  | 0.070  | 0.120  | 0.140  | 0.5                | 0.032                                | 0.016                            | 0.016                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.020  | 0.060  | 0.120  | 0.160  | 0.160  | 0.5                | 0.045                                | 0.022                            | 0.022                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS3       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.010  | 0.030  | 0.050  | 0.060  | 0.070  | 0.5                | 0.019                                | 0.010                            | 0.010                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS3       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.020  | 0.040  | 0.070  | 0.080  | 0.080  | 0.5                | 0.025                                | 0.012                            | 0.013                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS3       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.020  | 0.030  | 0.040  | 0.050  | 0.060  | 0.070  | 0.5                | 0.024                                | 0.012                            | 0.012                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS4       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.010  | 0.020  | 0.030  | 0.040  | 0.050  | 0.5                | 0.013                                | 0.007                            | 0.007                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.010  | 0.010  | 0.020  | 0.030  | 0.040  | 0.5                | 0.009                                | 0.005                            | 0.005                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.020  | 0.020  | 0.030  | 0.040  | 0.060  | 0.080  | 0.5                | 0.022                                | 0.011                            | 0.011                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 494.9875      | 48.0        | 47.4            | CW        | E           | 0.88              | BS5       | 0.003                    | 0.005 | 0.008 | 0.011 | 0.013  | 0.015  | 0.017  | 0.022  | 0.033  | 0.050  | 0.5                | 0.016                                | 0.008                            | 0.008                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 503.0000      | 48.0        | 47.8            | CW        | E           | 0.86              | BS5       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.009  | 0.017  | 0.019  | 0.025  | 0.039  | 0.048  | 0.5                | 0.014                                | 0.007                            | 0.007                                |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS5       | 0.002                    | 0.004 | 0.004 | 0.004 | 0.007  | 0.010  | 0.015  | 0.021  | 0.035  | 0.053  | 0.5                | 0.013                                | 0.007                            | 0.007                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS1       | 0.010                    | 0.010 | 0.010 | 0.020 | 0.020  | 0.020  | 0.030  | 0.040  | 0.060  | 0.070  | 0.5                | 0.028                                | 0.014                            | 0.014                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS1       | 0.010                    | 0.020 | 0.020 | 0.030 | 0.040  | 0.040  | 0.050  | 0.070  | 0.090  | 0.110  | 0.5                | 0.046                                | 0.023                            | 0.023                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.010 | 0.020 | 0.030 | 0.030  | 0.040  | 0.050  | 0.070  | 0.090  | 0.140  | 0.5                | 0.046                                | 0.023                            | 0.024                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS1       | 0.040                    | 0.050 | 0.060 | 0.070 | 0.100  | 0.130  | 0.210  | 0.330  | 0.440  | 0.420  | 0.5                | 0.167                                | 0.083                            | 0.085                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS1       | 0.010                    | 0.020 | 0.030 | 0.030 | 0.050  | 0.060  | 0.090  | 0.120  | 0.150  | 0.130  | 0.5                | 0.060                                | 0.030                            | 0.030                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS1       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.030  | 0.040  | 0.050  | 0.070  | 0.090  | 0.100  | 0.5                | 0.038                                | 0.019                            | 0.019                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS2       | 0.031                    | 0.029 | 0.025 | 0.029 | 0.051  | 0.092  | 0.152  | 0.211  | 0.228  | 0.206  | 0.5                | 0.102                                | 0.051                            | 0.052                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS2       | 0.019                    | 0.014 | 0.018 | 0.027 | 0.045  | 0.074  | 0.108  | 0.137  | 0.163  | 0.121  | 0.5                | 0.069                                | 0.034                            | 0.034                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.017                    | 0.011 | 0.012 | 0.022 | 0.049  | 0.083  | 0.126  | 0.017  | 0.199  | 0.235  | 0.5                | 0.072                                | 0.036                            | 0.037                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS2       | 0.020                    | 0.010 | 0.020 | 0.030 | 0.050  | 0.090  | 0.160  | 0.200  | 0.240  | 0.260  | 0.5                | 0.097                                | 0.049                            | 0.049                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.040  | 0.080  | 0.120  | 0.140  | 0.130  | 0.5                | 0.048                                | 0.024                            | 0.024                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS2       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.020  | 0.040  | 0.060  | 0.070  | 0.080  | 0.090  | 0.5                | 0.033                                | 0.016                            | 0.016                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS3       | 0.032                    | 0.036 | 0.051 | 0.057 | 0.061  | 0.076  | 0.094  | 0.114  | 0.130  | 0.151  | 0.5                | 0.078                                | 0.039                            | 0.039                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS3       | 0.039                    | 0.045 | 0.058 | 0.054 | 0.049  | 0.054  | 0.072  | 0.119  | 0.179  | 0.197  | 0.5                | 0.082                                | 0.041                            | 0.041                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.047                    | 0.048 | 0.059 | 0.069 | 0.057  | 0.064  | 0.082  | 0.111  | 0.130  | 0.153  | 0.5                | 0.076                                | 0.038                            | 0.039                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS3       | 0.030                    | 0.040 | 0.050 | 0.050 | 0.060  | 0.090  | 0.110  | 0.160  | 0.200  | 0.210  | 0.5                | 0.090                                | 0.045                            | 0.046                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS3       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.020  | 0.030  | 0.030  | 0.050  | 0.060  | 0.070  | 0.5                | 0.028                                | 0.014                            | 0.014                                |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS3       | 0.010                    | 0.010 | 0.020 | 0.020 | 0.020  | 0.020  | 0.020  | 0.020  | 0.030  | 0.030  | 0.5                | 0.017                                | 0.009                            | 0.009                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS4       | 0.043                    | 0.050 | 0.041 | 0.042 | 0.054  | 0.057  | 0.046  | 0.043  | 0.054  | 0.081  | 0.5                | 0.050                   | 0.025               | 0.025                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS4       | 0.046                    | 0.050 | 0.036 | 0.042 | 0.048  | 0.041  | 0.030  | 0.021  | 0.025  | 0.045  | 0.5                | 0.036                   | 0.018               | 0.018                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.035                    | 0.027 | 0.017 | 0.031 | 0.036  | 0.038  | 0.040  | 0.054  | 0.083  | 0.107  | 0.5                | 0.044                   | 0.022               | 0.023                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS4       | 0.020                    | 0.020 | 0.030 | 0.050 | 0.060  | 0.050  | 0.040  | 0.030  | 0.050  | 0.080  | 0.5                | 0.039                   | 0.019               | 0.020                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS4       | 0.000                    | 0.000 | 0.010 | 0.010 | 0.030  | 0.030  | 0.020  | 0.020  | 0.020  | 0.040  | 0.5                | 0.016                   | 0.008               | 0.008                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS4       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.010  | 0.010  | 0.010  | 0.010  | 0.010  | 0.030  | 0.5                | 0.008                   | 0.004               | 0.004                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 0.97              | BS5       | 0.003                    | 0.008 | 0.009 | 0.016 | 0.031  | 0.043  | 0.059  | 0.063  | 0.069  | 0.084  | 0.5                | 0.037                   | 0.019               | 0.019                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 0.95              | BS5       | 0.006                    | 0.013 | 0.015 | 0.021 | 0.030  | 0.043  | 0.049  | 0.042  | 0.040  | 0.057  | 0.5                | 0.030                   | 0.015               | 0.015                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.007                    | 0.008 | 0.013 | 0.022 | 0.037  | 0.049  | 0.048  | 0.040  | 0.035  | 0.046  | 0.5                | 0.028                   | 0.014               | 0.015                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS5       | 0.003                    | 0.004 | 0.006 | 0.011 | 0.024  | 0.030  | 0.028  | 0.023  | 0.022  | 0.034  | 0.5                | 0.017                   | 0.008               | 0.008                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 0.87              | BS5       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.007  | 0.011  | 0.010  | 0.008  | 0.009  | 0.015  | 0.5                | 0.006                   | 0.003               | 0.003                   |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 0.86              | BS5       | 0.001                    | 0.001 | 0.002 | 0.005 | 0.010  | 0.009  | 0.008  | 0.007  | 0.009  | 0.016  | 0.5                | 0.006                   | 0.003               | 0.003                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                                      |                                  |                                      |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS1       | 0.010                    | 0.006 | 0.008 | 0.005 | 0.003  | 0.030  | 0.108  | 0.247  | 0.394  | 0.414  | 0.5                | 0.114                                | 0.057                            | 0.059                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS1       | 0.006                    | 0.004 | 0.002 | 0.003 | 0.010  | 0.052  | 0.151  | 0.307  | 0.413  | 0.184  | 0.5                | 0.102                                | 0.051                            | 0.052                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 493.9875      | 48.0        | 47.3            | CW        | E           | 0.88              | BS1       | 0.004                    | 0.004 | 0.004 | 0.005 | 0.009  | 0.025  | 0.061  | 0.104  | 0.128  | 0.107  | 0.5                | 0.040                                | 0.020                            | 0.020                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS2       | 0.005                    | 0.002 | 0.004 | 0.003 | 0.009  | 0.031  | 0.088  | 0.175  | 0.271  | 0.333  | 0.5                | 0.086                                | 0.043                            | 0.044                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS2       | 0.002                    | 0.003 | 0.004 | 0.005 | 0.010  | 0.045  | 0.140  | 0.276  | 0.386  | 0.389  | 0.5                | 0.113                                | 0.057                            | 0.058                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 493.9875      | 48.0        | 47.3            | CW        | E           | 0.88              | BS2       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.008  | 0.019  | 0.044  | 0.077  | 0.102  | 0.106  | 0.5                | 0.032                                | 0.016                            | 0.016                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS3       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.010  | 0.020  | 0.040  | 0.070  | 0.120  | 0.140  | 0.5                | 0.037                                | 0.019                            | 0.019                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS3       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.030  | 0.060  | 0.110  | 0.170  | 0.200  | 0.200  | 0.5                | 0.070                                | 0.035                            | 0.036                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 493.9875      | 48.0        | 47.3            | CW        | E           | 0.88              | BS3       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.020  | 0.030  | 0.050  | 0.050  | 0.050  | 0.5                | 0.018                                | 0.009                            | 0.009                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS4       | 0.000                    | 0.000 | 0.000 | 0.010 | 0.030  | 0.040  | 0.060  | 0.100  | 0.130  | 0.160  | 0.5                | 0.049                                | 0.025                            | 0.025                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS4       | 0.000                    | 0.000 | 0.010 | 0.030 | 0.040  | 0.050  | 0.050  | 0.070  | 0.100  | 0.130  | 0.5                | 0.043                                | 0.022                            | 0.022                                |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 493.9875      | 48.0        | 47.3            | CW        | E           | 0.88              | BS4       | 0.000                    | 0.000 | 0.000 | 0.000 | 0.000  | 0.000  | 0.010  | 0.020  | 0.030  | 0.040  | 0.5                | 0.009                                | 0.004                            | 0.004                                |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table L.1 (Continued)**  
**UHF R2 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 0.93              | BS5       | 0.004                    | 0.005 | 0.007 | 0.010 | 0.019  | 0.029  | 0.036  | 0.052  | 0.077  | 0.096  | 0.5                | 0.031                   | 0.016               | 0.016                   |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 0.90              | BS5       | 0.004                    | 0.007 | 0.010 | 0.015 | 0.027  | 0.043  | 0.051  | 0.053  | 0.071  | 0.097  | 0.5                | 0.034                   | 0.017               | 0.017                   |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 493.9875      | 48.0        | 47.3            | CW        | E           | 0.88              | BS5       | 0.002                    | 0.003 | 0.007 | 0.009 | 0.014  | 0.017  | 0.019  | 0.023  | 0.034  | 0.053  | 0.5                | 0.016                   | 0.008               | 0.008                   |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.2 (Continued)**  
**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.117                             | 0.147             | 0.276                   | 0.5                | 0.187                   | 0.09                | 0.09                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.063                             | 0.142             | 0.208                   | 0.5                | 0.146                   | 0.07                | 0.08                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PB        | 0.097                             | 0.180             | 0.209                   | 0.5                | 0.173                   | 0.09                | 0.09                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.08              | PB        | 0.082                             | 0.035             | 0.060                   | 0.5                | 0.064                   | 0.03                | 0.03                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PB        | 0.035                             | 0.044             | 0.033                   | 0.5                | 0.040                   | 0.02                | 0.02                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 1.09              | PB        | 0.017                             | 0.036             | 0.020                   | 0.5                | 0.027                   | 0.01                | 0.01                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 450.0125      | 120.0       | 119             | CW        | E           | 1.04              | PB        | 0.126                             | 0.197             | 0.313                   | 0.5                | 0.220                   | 0.11                | 0.11                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 460.0000      | 120.0       | 120             | CW        | E           | 1.05              | PB        | 0.073                             | 0.081             | 0.124                   | 0.5                | 0.097                   | 0.05                | 0.05                    |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 469.9875      | 120.0       | 116             | CW        | E           | 1.06              | PB        | 0.067                             | 0.064             | 0.168                   | 0.5                | 0.106                   | 0.05                | 0.05                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table L.2 (Continued)**  
**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.124                             | 0.169             | 0.308                   | 0.5                | 0.208                   | 0.10                | 0.11                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.082                             | 0.125             | 0.195                   | 0.5                | 0.142                   | 0.07                | 0.07                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PB        | 0.106                             | 0.200             | 0.254                   | 0.5                | 0.200                   | 0.10                | 0.10                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.08              | PB        | 0.038                             | 0.091             | 0.035                   | 0.5                | 0.059                   | 0.03                | 0.03                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PB        | 0.036                             | 0.033             | 0.030                   | 0.5                | 0.036                   | 0.02                | 0.02                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 1.09              | PB        | 0.014                             | 0.023             | 0.012                   | 0.5                | 0.018                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PB        | 0.020                             | 0.024             | 0.040                   | 0.5                | 0.029                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PB        | 0.018                             | 0.012             | 0.039                   | 0.5                | 0.023                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PB        | 0.028                             | 0.045             | 0.088                   | 0.5                | 0.055                   | 0.03                | 0.03                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.028                             | 0.045             | 0.073                   | 0.5                | 0.051                   | 0.03                | 0.03                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PB        | 0.012                             | 0.023             | 0.050                   | 0.5                | 0.030                   | 0.01                | 0.01                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.024                             | 0.050             | 0.098                   | 0.5                | 0.061                   | 0.03                | 0.03                    |

Notes:

MPE calculations are defined in section 15.0  
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**Table L.2 (Continued)**

**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PB        | 0.029                             | 0.037             | 0.042                   | 0.5                | 0.037                   | 0.02                | 0.02                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PB        | 0.020                             | 0.042             | 0.065                   | 0.5                | 0.043                   | 0.02                | 0.02                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PB        | 0.015                             | 0.036             | 0.052                   | 0.5                | 0.035                   | 0.02                | 0.02                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.095                             | 0.183             | 0.276                   | 0.5                | 0.192                   | 0.10                | 0.10                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PB        | 0.112                             | 0.093             | 0.184                   | 0.5                | 0.136                   | 0.07                | 0.07                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.074                             | 0.125             | 0.197                   | 0.5                | 0.140                   | 0.07                | 0.07                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PB        | 0.105                             | 0.169             | 0.252                   | 0.5                | 0.188                   | 0.09                | 0.10                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.08              | PB        | 0.043                             | 0.086             | 0.054                   | 0.5                | 0.066                   | 0.03                | 0.03                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PB        | 0.040                             | 0.030             | 0.034                   | 0.5                | 0.037                   | 0.02                | 0.02                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 1.09              | PB        | 0.015                             | 0.027             | 0.014                   | 0.5                | 0.020                   | 0.01                | 0.01                    |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 470.0125      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.041                             | 0.079             | 0.104                   | 0.5                | 0.079                   | 0.04                | 0.04                    |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PB        | 0.034                             | 0.045             | 0.126                   | 0.5                | 0.073                   | 0.04                | 0.04                    |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 1.08              | PB        | 0.016                             | 0.012             | 0.023                   | 0.5                | 0.018                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.2 (Continued)**

**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 1.02              | PB        | 0.018                             | 0.042             | 0.077                   | 0.5                | 0.047                                | 0.02                             | 0.02                                 |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.02              | PB        | 0.053                             | 0.113             | 0.129                   | 0.5                | 0.100                                | 0.05                             | 0.05                                 |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.02              | PB        | 0.038                             | 0.048             | 0.071                   | 0.5                | 0.053                                | 0.03                             | 0.03                                 |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.02              | PB        | 0.030                             | 0.016             | 0.019                   | 0.5                | 0.022                                | 0.01                             | 0.01                                 |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 1.08              | PB        | 0.019                             | 0.018             | 0.031                   | 0.5                | 0.024                                | 0.01                             | 0.01                                 |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 503.0000      | 48.0        | 47.8            | CW        | E           | 1.08              | PB        | 0.008                             | 0.010             | 0.012                   | 0.5                | 0.011                                | 0.01                             | 0.01                                 |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PB        | 0.008                             | 0.003             | 0.006                   | 0.5                | 0.006                                | 0.00                             | 0.00                                 |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 494.9875      | 48.0        | 47.4            | CW        | E           | 1.08              | PB        | 0.010                             | 0.025             | 0.011                   | 0.5                | 0.017                                | 0.01                             | 0.01                                 |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 503.0000      | 48.0        | 47.8            | CW        | E           | 1.08              | PB        | 0.007                             | 0.010             | 0.007                   | 0.5                | 0.009                                | 0.00                             | 0.00                                 |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PB        | 0.005                             | 0.006             | 0.008                   | 0.5                | 0.007                                | 0.00                             | 0.00                                 |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.2 (Continued)**  
**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PB        | 0.098                             | 0.153             | 0.180                   | 0.5                | 0.149                                | 0.07                             | 0.08                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PB        | 0.136                             | 0.116             | 0.137                   | 0.5                | 0.136                                | 0.07                             | 0.07                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.061                             | 0.103             | 0.249                   | 0.5                | 0.146                                | 0.07                             | 0.08                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.02              | PB        | 0.095                             | 0.145             | 0.195                   | 0.5                | 0.148                                | 0.07                             | 0.08                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.02              | PB        | 0.043                             | 0.072             | 0.083                   | 0.5                | 0.067                                | 0.03                             | 0.03                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.02              | PB        | 0.025                             | 0.032             | 0.024                   | 0.5                | 0.028                                | 0.01                             | 0.01                                 |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 1.06              | PB        | 0.015                             | 0.018             | 0.029                   | 0.5                | 0.022                                | 0.01                             | 0.01                                 |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PB        | 0.013                             | 0.024             | 0.058                   | 0.5                | 0.034                                | 0.02                             | 0.02                                 |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 493.9875      | 48.0        | 47.3            | CW        | E           | 1.08              | PB        | 0.001                             | 0.003             | 0.003                   | 0.5                | 0.003                                | 0.00                             | 0.00                                 |

Notes:

MPE calculations are defined in section 15.0  
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**Table L.2 (Continued)**  
**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.092                             | 0.159             | 0.089                   | 0.5                | 0.118                                | 0.06                             | 0.06                                 |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.055                             | 0.049             | 0.092                   | 0.5                | 0.069                                | 0.03                             | 0.04                                 |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PF        | 0.056                             | 0.101             | 0.092                   | 0.5                | 0.089                                | 0.04                             | 0.05                                 |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.08              | PF        | 0.056                             | 0.047             | 0.037                   | 0.5                | 0.050                                | 0.03                             | 0.03                                 |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PF        | 0.052                             | 0.047             | 0.038                   | 0.5                | 0.049                                | 0.02                             | 0.02                                 |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 1.09              | PF        | 0.046                             | 0.029             | 0.017                   | 0.5                | 0.033                                | 0.02                             | 0.02                                 |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 450.0125      | 120.0       | 119             | CW        | E           | 1.04              | PF        | 0.058                             | 0.112             | 0.085                   | 0.5                | 0.088                                | 0.04                             | 0.04                                 |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 460.0000      | 120.0       | 120             | CW        | E           | 1.05              | PF        | 0.035                             | 0.052             | 0.048                   | 0.5                | 0.047                                | 0.02                             | 0.02                                 |
| Roof         | HAE6013A, 1/2 Wave (380-470MHz)    | 4.15            | 469.9875      | 120.0       | 116             | CW        | E           | 1.06              | PF        | 0.053                             | 0.024             | 0.129                   | 0.5                | 0.073                                | 0.04                             | 0.04                                 |

Notes:

MPE calculations are defined in section 15.0  
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**Table L.2 (Continued)**  
**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.080                             | 0.161             | 0.131                   | 0.5                | 0.129                   | 0.06                | 0.07                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.062                             | 0.049             | 0.163                   | 0.5                | 0.097                   | 0.05                | 0.05                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PF        | 0.099                             | 0.107             | 0.152                   | 0.5                | 0.128                   | 0.06                | 0.06                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.08              | PF        | 0.051                             | 0.037             | 0.047                   | 0.5                | 0.049                   | 0.02                | 0.02                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PF        | 0.054                             | 0.046             | 0.037                   | 0.5                | 0.049                   | 0.02                | 0.02                    |
| Roof         | HAE6031A, 1/2 Wave (380-520MHz)   | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 1.09              | PF        | 0.026                             | 0.016             | 0.021                   | 0.5                | 0.023                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PF        | 0.019                             | 0.034             | 0.013                   | 0.5                | 0.022                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PF        | 0.020                             | 0.027             | 0.016                   | 0.5                | 0.021                   | 0.01                | 0.01                    |
| Roof         | RAE4014ARB, 5/8 Wave (445-470MHz) | 7.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PF        | 0.007                             | 0.006             | 0.002                   | 0.5                | 0.005                   | 0.00                | 0.00                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.016                             | 0.020             | 0.018                   | 0.5                | 0.019                   | 0.01                | 0.01                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PF        | 0.013                             | 0.013             | 0.017                   | 0.5                | 0.015                   | 0.01                | 0.01                    |
| Roof         | HAE4011A, 1/2 Wave (450-470MHz)   | 5.65            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.019                             | 0.012             | 0.030                   | 0.5                | 0.022                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.



**Table L.2 (Continued)**

**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.02              | PF        | 0.022                             | 0.038             | 0.025                   | 0.5                | 0.029                   | 0.01                | 0.01                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.02              | PF        | 0.032                             | 0.034             | 0.032                   | 0.5                | 0.033                   | 0.02                | 0.02                    |
| Roof         | HAE4003A, 1/4 Wave (450-470MHz) | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.02              | PF        | 0.011                             | 0.009             | 0.019                   | 0.5                | 0.013                   | 0.01                | 0.01                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.106                             | 0.096             | 0.133                   | 0.5                | 0.116                   | 0.06                | 0.06                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PF        | 0.039                             | 0.093             | 0.097                   | 0.5                | 0.080                   | 0.04                | 0.04                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.064                             | 0.046             | 0.113                   | 0.5                | 0.079                   | 0.04                | 0.04                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PF        | 0.080                             | 0.098             | 0.096                   | 0.5                | 0.098                   | 0.05                | 0.05                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.08              | PF        | 0.044                             | 0.059             | 0.018                   | 0.5                | 0.044                   | 0.02                | 0.02                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PF        | 0.047                             | 0.035             | 0.031                   | 0.5                | 0.041                   | 0.02                | 0.02                    |
| Roof         | HAE6015A, 1/2 Wave (450-520MHz) | 4.15            | 519.9875      | 30.0        | 29.9            | CW        | E           | 1.09              | PF        | 0.045                             | 0.013             | 0.017                   | 0.5                | 0.027                   | 0.01                | 0.01                    |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 470.0125      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.043                             | 0.013             | 0.060                   | 0.5                | 0.041                   | 0.02                | 0.02                    |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PF        | 0.018                             | 0.023             | 0.030                   | 0.5                | 0.025                   | 0.01                | 0.01                    |
| Roof         | HAE4012A, 1/2 Wave (470-495MHz) | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 1.08              | PF        | 0.011                             | 0.010             | 0.006                   | 0.5                | 0.010                   | 0.00                | 0.00                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.2 (Continued)**

**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 1.02              | PF        | 0.014                             | 0.009             | 0.026                   | 0.5                | 0.017                   | 0.01                | 0.01                    |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.02              | PF        | 0.044                             | 0.059             | 0.029                   | 0.5                | 0.045                   | 0.02                | 0.02                    |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.02              | PF        | 0.016                             | 0.012             | 0.014                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | HAE4004A, 1/4 Wave (470-512MHz)   | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.02              | PF        | 0.005                             | 0.003             | 0.006                   | 0.5                | 0.005                   | 0.00                | 0.00                    |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 494.9875      | 48.0        | 47.4            | CW        | E           | 1.08              | PF        | 0.014                             | 0.013             | 0.017                   | 0.5                | 0.016                   | 0.01                | 0.01                    |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 503.0000      | 48.0        | 47.8            | CW        | E           | 1.08              | PF        | 0.022                             | 0.015             | 0.014                   | 0.5                | 0.018                   | 0.01                | 0.01                    |
| Roof         | HAE4013A, 1/2 Wave (494-512MHz)   | 5.65            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PF        | 0.009                             | 0.005             | 0.008                   | 0.5                | 0.008                   | 0.00                | 0.00                    |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 494.9875      | 48.0        | 47.4            | CW        | E           | 1.08              | PF        | 0.009                             | 0.007             | 0.006                   | 0.5                | 0.008                   | 0.00                | 0.00                    |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 503.0000      | 48.0        | 47.8            | CW        | E           | 1.08              | PF        | 0.018                             | 0.015             | 0.006                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | RAE4016ARB, 5/8 Wave (494-512MHz) | 7.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.08              | PF        | 0.011                             | 0.005             | 0.007                   | 0.5                | 0.008                   | 0.00                | 0.00                    |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Table L.2 (Continued)**  
**UHF R2 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                   |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm <sup>2</sup> ) | Calc. P.D. (mW/cm <sup>2</sup> ) | Max Calc. P.D. (mW/cm <sup>2</sup> ) |
|--------------|-----------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|--------------------------------------|----------------------------------|--------------------------------------|
| Ant Loc.     | Ant. Model/ Desc.                 | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                                      |                                  |                                      |
|              |                                   |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                                      |                                  |                                      |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 450.0125      | 120.0       | 119.0           | CW        | E           | 1.04              | PF        | 0.087                             | 0.186             | 0.115                   | 0.5                | 0.135                                | 0.07                             | 0.07                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 460.0000      | 120.0       | 120.0           | CW        | E           | 1.05              | PF        | 0.062                             | 0.085             | 0.093                   | 0.5                | 0.084                                | 0.04                             | 0.04                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 469.9875      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.089                             | 0.033             | 0.066                   | 0.5                | 0.066                                | 0.03                             | 0.03                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.02              | PF        | 0.054                             | 0.077             | 0.094                   | 0.5                | 0.077                                | 0.04                             | 0.04                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 496.5000      | 48.0        | 47.4            | CW        | E           | 1.02              | PF        | 0.041                             | 0.042             | 0.030                   | 0.5                | 0.038                                | 0.02                             | 0.02                                 |
| Roof         | HAE6016A, 1/4 Wave (450-512MHz)   | 2.15            | 511.9875      | 48.0        | 47.9            | CW        | E           | 1.02              | PF        | 0.052                             | 0.061             | 0.035                   | 0.5                | 0.050                                | 0.03                             | 0.03                                 |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 470.0125      | 120.0       | 116.0           | CW        | E           | 1.06              | PF        | 0.031                             | 0.011             | 0.049                   | 0.5                | 0.032                                | 0.02                             | 0.02                                 |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 482.5000      | 120.0       | 118.0           | CW        | E           | 1.07              | PF        | 0.022                             | 0.006             | 0.020                   | 0.5                | 0.017                                | 0.01                             | 0.01                                 |
| Roof         | RAE4015ARM, 5/8 Wave (470-494MHz) | 7.15            | 493.9875      | 48.0        | 47.3            | CW        | E           | 1.08              | PF        | 0.003                             | 0.002             | 0.002                   | 0.5                | 0.003                                | 0.00                             | 0.00                                 |

Notes:

MPE calculations are defined in section 15.0  
 Blue fonts: Frequencies not regulated by FCC.

**Appendix K – MPE Measurement Results for LMR 7/800 Band**

**Table M.1**  
**7/800 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   | MPE Measurement |                          |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |  |  |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|--|--|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos.       | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |  |  |
|              |                                    |                 |               |             |                 |           |             |                   |                 | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 0.99              | BS1             | 0.009                    | 0.012 | 0.009 | 0.007 | 0.007  | 0.017  | 0.053  | 0.090  | 0.149  | 0.147  | 0.5                | 0.049                   | 0.025               | 0.025                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 0.99              | BS1             | 0.007                    | 0.007 | 0.012 | 0.019 | 0.024  | 0.028  | 0.047  | 0.087  | 0.126  | 0.115  | 0.5                | 0.047                   | 0.023               | 0.023                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 0.99              | BS1             | 0.008                    | 0.016 | 0.021 | 0.012 | 0.006  | 0.014  | 0.042  | 0.062  | 0.083  | 0.087  | 0.5                | 0.035                   | 0.017               | 0.018                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | BS1             | 0.005                    | 0.011 | 0.013 | 0.008 | 0.011  | 0.023  | 0.050  | 0.085  | 0.135  | 0.103  | 0.5                | 0.044                   | 0.022               | 0.022                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 1.00              | BS1             | 0.012                    | 0.019 | 0.027 | 0.019 | 0.011  | 0.018  | 0.040  | 0.083  | 0.163  | 0.122  | 0.5                | 0.052                   | 0.026               | 0.026                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 1.01              | BS1             | 0.010                    | 0.015 | 0.020 | 0.012 | 0.011  | 0.011  | 0.028  | 0.091  | 0.142  | 0.148  | 0.5                | 0.050                   | 0.025               | 0.025                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 1.03              | BS1             | 0.014                    | 0.012 | 0.018 | 0.015 | 0.012  | 0.008  | 0.012  | 0.053  | 0.094  | 0.113  | 0.5                | 0.036                   | 0.018               | 0.018                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 1.04              | BS1             | 0.006                    | 0.015 | 0.014 | 0.015 | 0.018  | 0.017  | 0.011  | 0.044  | 0.104  | 0.123  | 0.5                | 0.038                   | 0.019               | 0.019                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 1.04              | BS1             | 0.009                    | 0.008 | 0.014 | 0.010 | 0.010  | 0.008  | 0.003  | 0.024  | 0.059  | 0.080  | 0.5                | 0.023                   | 0.012               | 0.012                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 0.99              | BS2             | 0.005                    | 0.008 | 0.010 | 0.006 | 0.006  | 0.007  | 0.029  | 0.047  | 0.066  | 0.096  | 0.5                | 0.028                   | 0.014               | 0.014                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 0.99              | BS2             | 0.003                    | 0.005 | 0.005 | 0.005 | 0.005  | 0.012  | 0.033  | 0.072  | 0.086  | 0.071  | 0.5                | 0.029                   | 0.015               | 0.015                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 0.99              | BS2             | 0.004                    | 0.005 | 0.007 | 0.006 | 0.005  | 0.007  | 0.027  | 0.055  | 0.092  | 0.127  | 0.5                | 0.033                   | 0.017               | 0.017                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | BS2             | 0.003                    | 0.008 | 0.011 | 0.007 | 0.006  | 0.013  | 0.034  | 0.063  | 0.094  | 0.101  | 0.5                | 0.034                   | 0.017               | 0.017                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 1.00              | BS2             | 0.003                    | 0.008 | 0.012 | 0.011 | 0.016  | 0.023  | 0.053  | 0.091  | 0.115  | 0.128  | 0.5                | 0.046                   | 0.023               | 0.024                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 1.01              | BS2             | 0.004                    | 0.009 | 0.018 | 0.020 | 0.013  | 0.011  | 0.033  | 0.068  | 0.095  | 0.120  | 0.5                | 0.040                   | 0.020               | 0.020                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 1.03              | BS2             | 0.007                    | 0.012 | 0.012 | 0.014 | 0.010  | 0.008  | 0.015  | 0.036  | 0.074  | 0.096  | 0.5                | 0.029                   | 0.015               | 0.015                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 1.04              | BS2             | 0.004                    | 0.011 | 0.013 | 0.006 | 0.007  | 0.008  | 0.008  | 0.040  | 0.071  | 0.073  | 0.5                | 0.025                   | 0.013               | 0.013                   |  |  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 1.04              | BS2             | 0.005                    | 0.008 | 0.012 | 0.011 | 0.006  | 0.005  | 0.004  | 0.021  | 0.039  | 0.060  | 0.5                | 0.018                   | 0.009               | 0.009                   |  |  |

Notes:

MPE calculations are defined in section 15.0  
Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

|          |                                    | D.U.T. Info.    |               |             |                 |           |           | Probe Info.       |           |                          | MPE Measurement |       |       |        |        |        |        |        |        |     |       | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-----------------|-------|-------|--------|--------|--------|--------|--------|--------|-----|-------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc. | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |                 |       |       |        |        |        |        |        |        |     |       |                    |                         |                     |                         |
|          |                                    |                 |               |             |                 |           |           |                   |           | 20 cm                    | 40 cm           | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |     |       |                    |                         |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E         | 0.99              | BS3       | 0.005                    | 0.007           | 0.006 | 0.012 | 0.008  | 0.008  | 0.016  | 0.032  | 0.050  | 0.057  | 0.5 | 0.020 | 0.010              | 0.010                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E         | 0.99              | BS3       | 0.015                    | 0.011           | 0.008 | 0.006 | 0.006  | 0.009  | 0.018  | 0.031  | 0.036  | 0.039  | 0.5 | 0.018 | 0.009              | 0.009                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E         | 0.99              | BS3       | 0.006                    | 0.006           | 0.001 | 0.006 | 0.016  | 0.018  | 0.023  | 0.050  | 0.064  | 0.057  | 0.5 | 0.024 | 0.012              | 0.013                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E         | 1.00              | BS3       | 0.006                    | 0.009           | 0.007 | 0.009 | 0.008  | 0.007  | 0.017  | 0.031  | 0.050  | 0.065  | 0.5 | 0.021 | 0.010              | 0.010                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E         | 1.00              | BS3       | 0.010                    | 0.013           | 0.004 | 0.006 | 0.006  | 0.010  | 0.025  | 0.048  | 0.058  | 0.074  | 0.5 | 0.025 | 0.013              | 0.013                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E         | 1.01              | BS3       | 0.007                    | 0.006           | 0.006 | 0.004 | 0.006  | 0.009  | 0.022  | 0.035  | 0.057  | 0.065  | 0.5 | 0.022 | 0.011              | 0.011                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E         | 1.03              | BS3       | 0.007                    | 0.008           | 0.006 | 0.009 | 0.004  | 0.004  | 0.013  | 0.028  | 0.049  | 0.068  | 0.5 | 0.020 | 0.010              | 0.010                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E         | 1.04              | BS3       | 0.007                    | 0.009           | 0.004 | 0.002 | 0.003  | 0.003  | 0.011  | 0.025  | 0.042  | 0.058  | 0.5 | 0.017 | 0.009              | 0.009                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E         | 1.04              | BS3       | 0.005                    | 0.011           | 0.008 | 0.002 | 0.001  | 0.002  | 0.004  | 0.012  | 0.024  | 0.042  | 0.5 | 0.012 | 0.006              | 0.006                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E         | 0.99              | BS4       | 0.002                    | 0.002           | 0.002 | 0.004 | 0.005  | 0.005  | 0.005  | 0.011  | 0.023  | 0.033  | 0.5 | 0.009 | 0.005              | 0.005                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E         | 0.99              | BS4       | 0.003                    | 0.003           | 0.006 | 0.006 | 0.006  | 0.005  | 0.010  | 0.015  | 0.018  | 0.023  | 0.5 | 0.009 | 0.005              | 0.005                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E         | 0.99              | BS4       | 0.003                    | 0.001           | 0.001 | 0.004 | 0.010  | 0.012  | 0.015  | 0.021  | 0.032  | 0.036  | 0.5 | 0.013 | 0.007              | 0.007                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E         | 1.00              | BS4       | 0.003                    | 0.001           | 0.003 | 0.003 | 0.010  | 0.010  | 0.013  | 0.026  | 0.051  | 0.055  | 0.5 | 0.017 | 0.009              | 0.009                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E         | 1.00              | BS4       | 0.003                    | 0.003           | 0.002 | 0.002 | 0.003  | 0.005  | 0.013  | 0.032  | 0.044  | 0.050  | 0.5 | 0.016 | 0.008              | 0.008                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E         | 1.01              | BS4       | 0.002                    | 0.002           | 0.005 | 0.007 | 0.007  | 0.010  | 0.016  | 0.020  | 0.039  | 0.050  | 0.5 | 0.016 | 0.008              | 0.008                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E         | 1.03              | BS4       | 0.002                    | 0.002           | 0.002 | 0.003 | 0.003  | 0.005  | 0.008  | 0.018  | 0.037  | 0.042  | 0.5 | 0.013 | 0.006              | 0.006                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E         | 1.04              | BS4       | 0.002                    | 0.001           | 0.001 | 0.001 | 0.002  | 0.003  | 0.006  | 0.010  | 0.022  | 0.024  | 0.5 | 0.007 | 0.004              | 0.004                   |                     |                         |
| Roof     | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E         | 1.04              | BS4       | 0.001                    | 0.002           | 0.002 | 0.002 | 0.002  | 0.002  | 0.003  | 0.008  | 0.020  | 0.028  | 0.5 | 0.007 | 0.004              | 0.004                   |                     |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                    | Probe Info.     |               | MPE Measurement |                 |           |           |                   |           |                          |       |       |       |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |        |        |        |        |
|--------------|------------------------------------|-----------------|---------------|-----------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|--------|--------|--------|--------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W)     | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |                    |                         |                     |                         |        |        |        |        |
|              |                                    |                 |               |                 |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm |                    |                         |                     |                         | 140 cm | 160 cm | 180 cm | 200 cm |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 764.0875      | 36.0            | 35.4            | CW        | E         | 0.99              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.004  | 0.009  | 0.010              | 0.016                   | 0.025               | 0.028                   | 0.5    | 0.009  | 0.005  | 0.005  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 770.0125      | 36.0            | 35.8            | CW        | E         | 0.99              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.004  | 0.012  | 0.014              | 0.019                   | 0.033               | 0.042                   | 0.5    | 0.013  | 0.006  | 0.006  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 775.9125      | 36.0            | 34.9            | CW        | E         | 0.99              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.002  | 0.003              | 0.007                   | 0.015               | 0.038                   | 0.5    | 0.007  | 0.003  | 0.004  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 794.0875      | 36.0            | 35.9            | CW        | E         | 1.00              | BS5       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.005  | 0.008  | 0.009              | 0.014                   | 0.025               | 0.028                   | 0.5    | 0.009  | 0.005  | 0.005  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 806.0125      | 42.0            | 41.2            | CW        | E         | 1.00              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.003  | 0.008  | 0.011              | 0.012                   | 0.033               | 0.042                   | 0.5    | 0.011  | 0.006  | 0.006  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 823.9875      | 42.0            | 41.6            | CW        | E         | 1.01              | BS5       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.006  | 0.006  | 0.018              | 0.027                   | 0.038               | 0.049                   | 0.5    | 0.015  | 0.008  | 0.008  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 851.0125      | 42.0            | 41.7            | CW        | E         | 1.03              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.002  | 0.004              | 0.004                   | 0.014               | 0.030                   | 0.5    | 0.006  | 0.003  | 0.003  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 862.0125      | 42.0            | 41.7            | CW        | E         | 1.04              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.001  | 0.001              | 0.001                   | 0.008               | 0.030                   | 0.5    | 0.005  | 0.002  | 0.002  |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 868.8875      | 42.0            | 41.8            | CW        | E         | 1.04              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.002  | 0.005              | 0.007                   | 0.015               | 0.024                   | 0.5    | 0.006  | 0.003  | 0.003  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 764.0875      | 36.0            | 35.4            | CW        | E         | 0.99              | BS1       | 0.006                    | 0.010 | 0.010 | 0.008 | 0.017  | 0.031  | 0.051              | 0.062                   | 0.105               | 0.111                   | 0.5    | 0.041  | 0.020  | 0.021  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 770.0125      | 36.0            | 35.8            | CW        | E         | 0.99              | BS1       | 0.005                    | 0.006 | 0.010 | 0.026 | 0.039  | 0.045  | 0.052              | 0.060                   | 0.070               | 0.087                   | 0.5    | 0.040  | 0.020  | 0.020  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 775.9125      | 36.0            | 34.9            | CW        | E         | 0.99              | BS1       | 0.006                    | 0.011 | 0.018 | 0.018 | 0.016  | 0.026  | 0.046              | 0.050                   | 0.057               | 0.066                   | 0.5    | 0.031  | 0.016  | 0.016  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 794.0875      | 36.0            | 35.9            | CW        | E         | 1.00              | BS1       | 0.004                    | 0.007 | 0.013 | 0.012 | 0.018  | 0.036  | 0.050              | 0.060                   | 0.086               | 0.082                   | 0.5    | 0.037  | 0.018  | 0.018  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 806.0125      | 42.0            | 41.2            | CW        | E         | 1.00              | BS1       | 0.008                    | 0.012 | 0.018 | 0.022 | 0.020  | 0.029  | 0.042              | 0.057                   | 0.096               | 0.088                   | 0.5    | 0.039  | 0.020  | 0.020  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 823.9875      | 42.0            | 41.6            | CW        | E         | 1.01              | BS1       | 0.008                    | 0.010 | 0.018 | 0.015 | 0.014  | 0.027  | 0.043              | 0.070                   | 0.095               | 0.114                   | 0.5    | 0.042  | 0.021  | 0.021  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 851.0125      | 42.0            | 41.7            | CW        | E         | 1.03              | BS1       | 0.009                    | 0.010 | 0.012 | 0.011 | 0.016  | 0.029  | 0.042              | 0.067                   | 0.078               | 0.091                   | 0.5    | 0.038  | 0.019  | 0.019  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 862.0125      | 42.0            | 41.7            | CW        | E         | 1.04              | BS1       | 0.002                    | 0.009 | 0.012 | 0.011 | 0.020  | 0.055  | 0.076              | 0.087                   | 0.089               | 0.121                   | 0.5    | 0.050  | 0.025  | 0.025  |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz)    | 5.15            | 868.8875      | 42.0            | 41.8            | CW        | E         | 1.04              | BS1       | 0.009                    | 0.006 | 0.010 | 0.010 | 0.016  | 0.030  | 0.042              | 0.057                   | 0.075               | 0.098                   | 0.5    | 0.037  | 0.018  | 0.018  |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| Ant Loc. |                                 | D.U.T. Info.      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Model/ Desc. | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|          |                                 |                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS2               | 0.003     | 0.005                    | 0.009 | 0.007 | 0.012 | 0.019  | 0.036  | 0.037  | 0.042  | 0.069  | 0.5    | 0.024              | 0.012                   | 0.012               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS2               | 0.005     | 0.005                    | 0.009 | 0.007 | 0.013 | 0.020  | 0.034  | 0.055  | 0.056  | 0.050  | 0.5    | 0.025              | 0.013                   | 0.013               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS2               | 0.003     | 0.004                    | 0.005 | 0.006 | 0.010 | 0.017  | 0.029  | 0.036  | 0.056  | 0.082  | 0.5    | 0.025              | 0.012                   | 0.013               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS2               | 0.001     | 0.005                    | 0.010 | 0.013 | 0.019 | 0.025  | 0.036  | 0.043  | 0.056  | 0.055  | 0.5    | 0.026              | 0.013                   | 0.013               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS2               | 0.001     | 0.005                    | 0.007 | 0.010 | 0.020 | 0.033  | 0.048  | 0.053  | 0.065  | 0.061  | 0.5    | 0.030              | 0.015                   | 0.015               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS2               | 0.003     | 0.006                    | 0.013 | 0.022 | 0.026 | 0.031  | 0.051  | 0.061  | 0.063  | 0.082  | 0.5    | 0.036              | 0.018                   | 0.018               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS2               | 0.003     | 0.010                    | 0.010 | 0.010 | 0.020 | 0.031  | 0.039  | 0.044  | 0.048  | 0.068  | 0.5    | 0.029              | 0.015                   | 0.015               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS2               | 0.003     | 0.006                    | 0.010 | 0.007 | 0.010 | 0.029  | 0.036  | 0.051  | 0.072  | 0.066  | 0.5    | 0.030              | 0.015                   | 0.015               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS2               | 0.003     | 0.008                    | 0.011 | 0.014 | 0.018 | 0.029  | 0.046  | 0.051  | 0.050  | 0.068  | 0.5    | 0.031              | 0.016                   | 0.016               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS3               | 0.007     | 0.008                    | 0.011 | 0.019 | 0.014 | 0.009  | 0.010  | 0.022  | 0.031  | 0.041  | 0.5    | 0.017              | 0.008                   | 0.009               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS3               | 0.016     | 0.014                    | 0.013 | 0.010 | 0.011 | 0.012  | 0.021  | 0.027  | 0.025  | 0.025  | 0.5    | 0.017              | 0.009                   | 0.009               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS3               | 0.009     | 0.011                    | 0.004 | 0.012 | 0.016 | 0.018  | 0.021  | 0.038  | 0.043  | 0.040  | 0.5    | 0.021              | 0.010                   | 0.011               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS3               | 0.008     | 0.010                    | 0.007 | 0.014 | 0.013 | 0.011  | 0.018  | 0.023  | 0.027  | 0.038  | 0.5    | 0.017              | 0.008                   | 0.008               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS3               | 0.009     | 0.012                    | 0.007 | 0.009 | 0.011 | 0.015  | 0.024  | 0.028  | 0.027  | 0.040  | 0.5    | 0.018              | 0.009                   | 0.009               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS3               | 0.007     | 0.007                    | 0.009 | 0.011 | 0.014 | 0.017  | 0.030  | 0.023  | 0.032  | 0.039  | 0.5    | 0.019              | 0.010                   | 0.010               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS3               | 0.006     | 0.009                    | 0.007 | 0.014 | 0.017 | 0.017  | 0.024  | 0.025  | 0.032  | 0.046  | 0.5    | 0.020              | 0.010                   | 0.010               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS3               | 0.006     | 0.011                    | 0.007 | 0.007 | 0.011 | 0.011  | 0.023  | 0.033  | 0.037  | 0.049  | 0.5    | 0.020              | 0.010                   | 0.010               |                         |
| Roof     | HAF4013A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS3               | 0.007     | 0.010                    | 0.010 | 0.012 | 0.012 | 0.017  | 0.023  | 0.027  | 0.029  | 0.042  | 0.5    | 0.020              | 0.010                   | 0.010               |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.



**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 | Probe Info.     |               | MPE Measurement |                 |           |           |                   |           |                          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-----------------|-----------------|-----------|-----------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W)     | Initial Pwr (W) | Test Mode | E/H Field | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |                 |                 |           |           |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0            | 35.4            | CW        | E         | 0.99              | BS4       | 0.000                    | 0.000 | 0.001 | 0.001 | 0.001  | 0.001  | 0.001  | 0.003  | 0.005  | 0.008  | 0.5                | 0.002                   | 0.001               | 0.001                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0            | 35.8            | CW        | E         | 0.99              | BS4       | 0.001                    | 0.001 | 0.002 | 0.002 | 0.001  | 0.001  | 0.002  | 0.003  | 0.004  | 0.006  | 0.5                | 0.002                   | 0.001               | 0.001                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0            | 34.9            | CW        | E         | 0.99              | BS4       | 0.000                    | 0.000 | 0.000 | 0.001 | 0.001  | 0.001  | 0.001  | 0.002  | 0.006  | 0.006  | 0.5                | 0.002                   | 0.001               | 0.001                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0            | 35.9            | CW        | E         | 1.00              | BS4       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.004  | 0.002  | 0.002  | 0.006  | 0.011  | 0.012  | 0.5                | 0.004                   | 0.002               | 0.002                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0            | 41.2            | CW        | E         | 1.00              | BS4       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.002  | 0.004  | 0.008  | 0.011  | 0.008  | 0.5                | 0.004                   | 0.002               | 0.002                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0            | 41.6            | CW        | E         | 1.01              | BS4       | 0.001                    | 0.001 | 0.002 | 0.002 | 0.002  | 0.002  | 0.002  | 0.003  | 0.006  | 0.007  | 0.5                | 0.003                   | 0.001               | 0.001                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0            | 41.7            | CW        | E         | 1.03              | BS4       | 0.001                    | 0.001 | 0.001 | 0.003 | 0.003  | 0.003  | 0.005  | 0.011  | 0.014  | 0.011  | 0.5                | 0.005                   | 0.003               | 0.003                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0            | 41.7            | CW        | E         | 1.04              | BS4       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.003  | 0.004  | 0.010  | 0.011  | 0.006  | 0.5                | 0.004                   | 0.002               | 0.002                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0            | 41.8            | CW        | E         | 1.04              | BS4       | 0.001                    | 0.001 | 0.002 | 0.002 | 0.002  | 0.003  | 0.004  | 0.004  | 0.008  | 0.006  | 0.5                | 0.003                   | 0.002               | 0.002                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0            | 35.4            | CW        | E         | 0.99              | BS5       | 0.001                    | 0.001 | 0.002 | 0.005 | 0.009  | 0.013  | 0.011  | 0.011  | 0.019  | 0.023  | 0.5                | 0.009                   | 0.005               | 0.005                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0            | 35.8            | CW        | E         | 0.99              | BS5       | 0.001                    | 0.001 | 0.002 | 0.005 | 0.009  | 0.012  | 0.013  | 0.015  | 0.025  | 0.038  | 0.5                | 0.012                   | 0.006               | 0.006                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0            | 34.9            | CW        | E         | 0.99              | BS5       | 0.001                    | 0.002 | 0.004 | 0.007 | 0.007  | 0.007  | 0.006  | 0.006  | 0.013  | 0.034  | 0.5                | 0.009                   | 0.004               | 0.004                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0            | 35.9            | CW        | E         | 1.00              | BS5       | 0.001                    | 0.002 | 0.003 | 0.007 | 0.010  | 0.010  | 0.009  | 0.012  | 0.021  | 0.022  | 0.5                | 0.010                   | 0.005               | 0.005                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0            | 41.2            | CW        | E         | 1.00              | BS5       | 0.001                    | 0.003 | 0.004 | 0.005 | 0.008  | 0.01   | 0.009  | 0.009  | 0.024  | 0.030  | 0.5                | 0.010                   | 0.005               | 0.005                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0            | 41.6            | CW        | E         | 1.01              | BS5       | 0.001                    | 0.001 | 0.002 | 0.008 | 0.012  | 0.014  | 0.017  | 0.025  | 0.035  | 0.033  | 0.5                | 0.015                   | 0.008               | 0.008                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0            | 41.7            | CW        | E         | 1.03              | BS5       | 0.001                    | 0.002 | 0.003 | 0.004 | 0.007  | 0.010  | 0.010  | 0.012  | 0.021  | 0.024  | 0.5                | 0.010                   | 0.005               | 0.005                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0            | 41.7            | CW        | E         | 1.04              | BS5       | 0.001                    | 0.001 | 0.004 | 0.008 | 0.01   | 0.015  | 0.011  | 0.012  | 0.019  | 0.035  | 0.5                | 0.012                   | 0.006               | 0.006                   |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0            | 41.8            | CW        | E         | 1.04              | BS5       | 0.001                    | 0.001 | 0.001 | 0.004 | 0.006  | 0.006  | 0.009  | 0.017  | 0.033  | 0.036  | 0.5                | 0.012                   | 0.006               | 0.006                   |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| Ant Loc. |                                 | D.U.T. Info.      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Model/ Desc. | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|          |                                 |                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS1               | 0.002     | 0.000                    | 0.002 | 0.001 | 0.000 | 0.005  | 0.022  | 0.052  | 0.104  | 0.123  | 0.5    | 0.031              | 0.015                   | 0.016               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS1               | 0.000     | 0.000                    | 0.001 | 0.003 | 0.002 | 0.005  | 0.022  | 0.056  | 0.084  | 0.096  | 0.5    | 0.027              | 0.013                   | 0.013               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS1               | 0.000     | 0.002                    | 0.003 | 0.004 | 0.004 | 0.007  | 0.026  | 0.046  | 0.070  | 0.069  | 0.5    | 0.023              | 0.011                   | 0.012               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS1               | 0.000     | 0.000                    | 0.003 | 0.005 | 0.005 | 0.020  | 0.050  | 0.095  | 0.109  | 0.088  | 0.5    | 0.037              | 0.019                   | 0.019               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS1               | 0.002     | 0.002                    | 0.007 | 0.018 | 0.021 | 0.028  | 0.061  | 0.100  | 0.120  | 0.099  | 0.5    | 0.046              | 0.023                   | 0.023               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS1               | 0.003     | 0.004                    | 0.012 | 0.020 | 0.022 | 0.052  | 0.094  | 0.142  | 0.157  | 0.098  | 0.5    | 0.061              | 0.031                   | 0.031               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS1               | 0.005     | 0.011                    | 0.010 | 0.015 | 0.025 | 0.059  | 0.111  | 0.134  | 0.108  | 0.087  | 0.5    | 0.058              | 0.029                   | 0.029               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS1               | 0.004     | 0.011                    | 0.016 | 0.017 | 0.020 | 0.055  | 0.121  | 0.142  | 0.122  | 0.091  | 0.5    | 0.062              | 0.031                   | 0.031               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS1               | 0.006     | 0.008                    | 0.007 | 0.016 | 0.038 | 0.079  | 0.092  | 0.090  | 0.075  | 0.038  | 0.5    | 0.047              | 0.023                   | 0.023               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS2               | 0.000     | 0.001                    | 0.001 | 0.001 | 0.001 | 0.003  | 0.010  | 0.022  | 0.04   | 0.064  | 0.5    | 0.014              | 0.007                   | 0.007               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS2               | 0.000     | 0.000                    | 0.000 | 0.000 | 0.002 | 0.005  | 0.014  | 0.033  | 0.042  | 0.046  | 0.5    | 0.014              | 0.007                   | 0.007               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS2               | 0.000     | 0.000                    | 0.000 | 0.001 | 0.002 | 0.007  | 0.019  | 0.036  | 0.062  | 0.076  | 0.5    | 0.020              | 0.010                   | 0.010               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS2               | 0.001     | 0.001                    | 0.000 | 0.006 | 0.011 | 0.018  | 0.036  | 0.061  | 0.073  | 0.065  | 0.5    | 0.027              | 0.014                   | 0.014               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS2               | 0.001     | 0.001                    | 0.002 | 0.004 | 0.013 | 0.033  | 0.068  | 0.094  | 0.095  | 0.085  | 0.5    | 0.040              | 0.020                   | 0.020               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS2               | 0.002     | 0.006                    | 0.004 | 0.014 | 0.033 | 0.048  | 0.075  | 0.088  | 0.089  | 0.077  | 0.5    | 0.044              | 0.022                   | 0.022               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS2               | 0.004     | 0.018                    | 0.016 | 0.012 | 0.030 | 0.051  | 0.077  | 0.078  | 0.068  | 0.061  | 0.5    | 0.043              | 0.021                   | 0.022               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS2               | 0.009     | 0.011                    | 0.022 | 0.017 | 0.017 | 0.055  | 0.093  | 0.103  | 0.075  | 0.060  | 0.5    | 0.048              | 0.024                   | 0.024               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS2               | 0.003     | 0.010                    | 0.011 | 0.015 | 0.033 | 0.069  | 0.070  | 0.063  | 0.061  | 0.049  | 0.5    | 0.040              | 0.020                   | 0.020               |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| Ant Loc. |                                 | D.U.T. Info.      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Model/ Desc. | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|          |                                 |                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS3               | 0.00      | 0.00                     | 0.00  | 0.00  | 0.00  | 0.001  | 0.002  | 0.004  | 0.006  | 0.008  | 0.5    | 0.002              | 0.001                   | 0.001               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS3               | 0.00      | 0.00                     | 0.00  | 0.00  | 0.00  | 0.001  | 0.003  | 0.006  | 0.009  | 0.011  | 0.5    | 0.003              | 0.001                   | 0.001               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS3               | 0.00      | 0.00                     | 0.00  | 0.00  | 0.001 | 0.003  | 0.006  | 0.009  | 0.010  | 0.012  | 0.5    | 0.004              | 0.002                   | 0.002               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS3               | 0.00      | 0.00                     | 0.00  | 0.001 | 0.005 | 0.010  | 0.014  | 0.017  | 0.020  | 0.021  | 0.5    | 0.009              | 0.004                   | 0.004               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS3               | 0.001     | 0.002                    | 0.002 | 0.001 | 0.002 | 0.006  | 0.013  | 0.014  | 0.016  | 0.016  | 0.5    | 0.007              | 0.004                   | 0.004               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS3               | 0.003     | 0.003                    | 0.002 | 0.005 | 0.008 | 0.013  | 0.018  | 0.020  | 0.019  | 0.017  | 0.5    | 0.011              | 0.005                   | 0.006               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS3               | 0.003     | 0.005                    | 0.002 | 0.003 | 0.010 | 0.014  | 0.020  | 0.022  | 0.022  | 0.017  | 0.5    | 0.012              | 0.006                   | 0.006               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS3               | 0.004     | 0.007                    | 0.009 | 0.007 | 0.012 | 0.020  | 0.030  | 0.029  | 0.024  | 0.014  | 0.5    | 0.016              | 0.008                   | 0.008               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS3               | 0.003     | 0.005                    | 0.005 | 0.006 | 0.007 | 0.008  | 0.018  | 0.019  | 0.015  | 0.017  | 0.5    | 0.011              | 0.005                   | 0.005               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS4               | 0.001     | 0.001                    | 0.001 | 0.001 | 0.002 | 0.004  | 0.008  | 0.012  | 0.016  | 0.018  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS4               | 0.001     | 0.001                    | 0.001 | 0.001 | 0.002 | 0.004  | 0.007  | 0.011  | 0.010  | 0.013  | 0.5    | 0.005              | 0.003                   | 0.003               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS4               | 0.001     | 0.001                    | 0.001 | 0.001 | 0.003 | 0.007  | 0.013  | 0.019  | 0.023  | 0.021  | 0.5    | 0.009              | 0.004                   | 0.005               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS4               | 0.002     | 0.002                    | 0.004 | 0.006 | 0.012 | 0.015  | 0.023  | 0.032  | 0.035  | 0.030  | 0.5    | 0.016              | 0.008                   | 0.008               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS4               | 0.007     | 0.009                    | 0.005 | 0.002 | 0.007 | 0.019  | 0.039  | 0.048  | 0.047  | 0.036  | 0.5    | 0.022              | 0.011                   | 0.011               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS4               | 0.007     | 0.006                    | 0.003 | 0.014 | 0.024 | 0.032  | 0.040  | 0.057  | 0.055  | 0.041  | 0.5    | 0.028              | 0.014                   | 0.014               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS4               | 0.012     | 0.008                    | 0.009 | 0.011 | 0.018 | 0.027  | 0.040  | 0.041  | 0.040  | 0.016  | 0.5    | 0.023              | 0.011                   | 0.012               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS4               | 0.008     | 0.013                    | 0.018 | 0.015 | 0.016 | 0.021  | 0.029  | 0.036  | 0.027  | 0.017  | 0.5    | 0.021              | 0.010                   | 0.010               |                         |
| Roof     | HAF4014A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS4               | 0.007     | 0.008                    | 0.011 | 0.020 | 0.022 | 0.020  | 0.027  | 0.045  | 0.034  | 0.019  | 0.5    | 0.022              | 0.011                   | 0.011               |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 0.99              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.004  | 0.005  | 0.009  | 0.011  | 0.014  | 0.5                | 0.005                   | 0.002               | 0.002                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 0.99              | BS5       | 0.001                    | 0.001 | 0.001 | 0.001 | 0.003  | 0.007  | 0.010  | 0.019  | 0.026  | 0.024  | 0.5                | 0.009                   | 0.005               | 0.005                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 0.99              | BS5       | 0.001                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.003  | 0.003  | 0.008  | 0.016  | 0.022  | 0.5                | 0.006                   | 0.003               | 0.003                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | BS5       | 0.001                    | 0.001 | 0.001 | 0.004 | 0.006  | 0.006  | 0.011  | 0.019  | 0.025  | 0.026  | 0.5                | 0.010                   | 0.005               | 0.005                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 1.00              | BS5       | 0.001                    | 0.003 | 0.003 | 0.008 | 0.013  | 0.014  | 0.015  | 0.023  | 0.039  | 0.031  | 0.5                | 0.015                   | 0.008               | 0.008                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 1.01              | BS5       | 0.001                    | 0.001 | 0.006 | 0.012 | 0.016  | 0.021  | 0.029  | 0.041  | 0.062  | 0.038  | 0.5                | 0.023                   | 0.012               | 0.012                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 1.03              | BS5       | 0.001                    | 0.002 | 0.010 | 0.012 | 0.015  | 0.017  | 0.016  | 0.026  | 0.038  | 0.032  | 0.5                | 0.017                   | 0.009               | 0.009                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 1.04              | BS5       | 0.001                    | 0.003 | 0.007 | 0.016 | 0.022  | 0.020  | 0.019  | 0.031  | 0.046  | 0.035  | 0.5                | 0.021                   | 0.010               | 0.010                   |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 1.04              | BS5       | 0.001                    | 0.003 | 0.009 | 0.013 | 0.017  | 0.023  | 0.029  | 0.045  | 0.061  | 0.037  | 0.5                | 0.025                   | 0.012               | 0.012                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 0.99              | BS1       | 0.007                    | 0.009 | 0.010 | 0.008 | 0.015  | 0.030  | 0.050  | 0.065  | 0.102  | 0.103  | 0.5                | 0.039                   | 0.020               | 0.020                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 0.99              | BS1       | 0.005                    | 0.007 | 0.011 | 0.024 | 0.038  | 0.047  | 0.057  | 0.063  | 0.067  | 0.079  | 0.5                | 0.039                   | 0.020               | 0.020                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 0.99              | BS1       | 0.007                    | 0.008 | 0.019 | 0.017 | 0.013  | 0.028  | 0.047  | 0.048  | 0.059  | 0.065  | 0.5                | 0.031                   | 0.015               | 0.016                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | BS1       | 0.005                    | 0.008 | 0.015 | 0.013 | 0.017  | 0.036  | 0.056  | 0.070  | 0.092  | 0.073  | 0.5                | 0.038                   | 0.019               | 0.019                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 1.00              | BS1       | 0.009                    | 0.011 | 0.017 | 0.022 | 0.018  | 0.033  | 0.046  | 0.060  | 0.089  | 0.085  | 0.5                | 0.039                   | 0.020               | 0.020                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 1.01              | BS1       | 0.009                    | 0.010 | 0.017 | 0.014 | 0.016  | 0.030  | 0.047  | 0.075  | 0.097  | 0.118  | 0.5                | 0.044                   | 0.022               | 0.022                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 1.03              | BS1       | 0.009                    | 0.010 | 0.011 | 0.012 | 0.018  | 0.033  | 0.044  | 0.067  | 0.084  | 0.096  | 0.5                | 0.040                   | 0.020               | 0.020                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 1.04              | BS1       | 0.002                    | 0.010 | 0.013 | 0.012 | 0.019  | 0.047  | 0.072  | 0.092  | 0.101  | 0.122  | 0.5                | 0.051                   | 0.025               | 0.026                   |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 1.04              | BS1       | 0.009                    | 0.007 | 0.011 | 0.013 | 0.014  | 0.026  | 0.041  | 0.060  | 0.085  | 0.101  | 0.5                | 0.038                   | 0.019               | 0.019                   |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| Ant Loc. |                                 | D.U.T. Info.      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Model/ Desc. | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|          |                                 |                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS2               | 0.004     | 0.006                    | 0.008 | 0.007 | 0.013 | 0.022  | 0.038  | 0.041  | 0.044  | 0.074  | 0.5    | 0.025              | 0.013                   | 0.013               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS2               | 0.005     | 0.006                    | 0.008 | 0.011 | 0.013 | 0.019  | 0.034  | 0.054  | 0.058  | 0.054  | 0.5    | 0.026              | 0.013                   | 0.013               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS2               | 0.004     | 0.006                    | 0.007 | 0.008 | 0.012 | 0.020  | 0.036  | 0.043  | 0.062  | 0.091  | 0.5    | 0.029              | 0.014                   | 0.015               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS2               | 0.001     | 0.005                    | 0.010 | 0.013 | 0.018 | 0.026  | 0.040  | 0.046  | 0.060  | 0.059  | 0.5    | 0.028              | 0.014                   | 0.014               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS2               | 0.002     | 0.006                    | 0.007 | 0.012 | 0.022 | 0.033  | 0.050  | 0.053  | 0.062  | 0.064  | 0.5    | 0.031              | 0.016                   | 0.016               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS2               | 0.004     | 0.006                    | 0.012 | 0.022 | 0.027 | 0.031  | 0.054  | 0.064  | 0.061  | 0.075  | 0.5    | 0.036              | 0.018                   | 0.018               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS2               | 0.004     | 0.011                    | 0.011 | 0.011 | 0.021 | 0.034  | 0.043  | 0.043  | 0.053  | 0.069  | 0.5    | 0.031              | 0.015                   | 0.016               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS2               | 0.003     | 0.007                    | 0.010 | 0.007 | 0.012 | 0.031  | 0.042  | 0.055  | 0.072  | 0.070  | 0.5    | 0.032              | 0.016                   | 0.016               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS2               | 0.005     | 0.009                    | 0.010 | 0.015 | 0.020 | 0.029  | 0.042  | 0.048  | 0.048  | 0.063  | 0.5    | 0.030              | 0.015                   | 0.015               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS3               | 0.002     | 0.003                    | 0.002 | 0.006 | 0.004 | 0.004  | 0.005  | 0.007  | 0.013  | 0.015  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS3               | 0.005     | 0.005                    | 0.004 | 0.002 | 0.003 | 0.003  | 0.006  | 0.009  | 0.006  | 0.008  | 0.5    | 0.005              | 0.003                   | 0.003               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS3               | 0.001     | 0.002                    | 0.001 | 0.001 | 0.002 | 0.003  | 0.004  | 0.008  | 0.008  | 0.007  | 0.5    | 0.004              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS3               | 0.004     | 0.004                    | 0.003 | 0.006 | 0.007 | 0.007  | 0.010  | 0.010  | 0.013  | 0.018  | 0.5    | 0.008              | 0.004                   | 0.004               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS3               | 0.003     | 0.003                    | 0.002 | 0.002 | 0.002 | 0.003  | 0.006  | 0.008  | 0.009  | 0.012  | 0.5    | 0.005              | 0.003                   | 0.003               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS3               | 0.002     | 0.002                    | 0.002 | 0.002 | 0.003 | 0.004  | 0.006  | 0.006  | 0.008  | 0.009  | 0.5    | 0.004              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS3               | 0.003     | 0.003                    | 0.002 | 0.005 | 0.008 | 0.008  | 0.012  | 0.012  | 0.015  | 0.019  | 0.5    | 0.009              | 0.004                   | 0.005               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS3               | 0.003     | 0.005                    | 0.003 | 0.003 | 0.004 | 0.005  | 0.008  | 0.014  | 0.015  | 0.018  | 0.5    | 0.008              | 0.004                   | 0.004               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS3               | 0.002     | 0.003                    | 0.003 | 0.003 | 0.003 | 0.005  | 0.006  | 0.008  | 0.009  | 0.013  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| Ant Loc. |                                 | D.U.T. Info.      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Model/ Desc. | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|          |                                 |                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS4               | 0.001     | 0.001                    | 0.002 | 0.002 | 0.002 | 0.002  | 0.002  | 0.002  | 0.005  | 0.008  | 0.5    | 0.003              | 0.001                   | 0.001               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS4               | 0.001     | 0.001                    | 0.002 | 0.002 | 0.002 | 0.002  | 0.003  | 0.006  | 0.006  | 0.006  | 0.5    | 0.003              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS4               | 0.00      | 0.00                     | 0.00  | 0.001 | 0.002 | 0.002  | 0.002  | 0.003  | 0.004  | 0.005  | 0.5    | 0.002              | 0.001                   | 0.001               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS4               | 0.001     | 0.001                    | 0.002 | 0.002 | 0.004 | 0.003  | 0.003  | 0.006  | 0.012  | 0.013  | 0.5    | 0.005              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS4               | 0.001     | 0.001                    | 0.001 | 0.001 | 0.001 | 0.001  | 0.003  | 0.007  | 0.009  | 0.007  | 0.5    | 0.003              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS4               | 0.001     | 0.001                    | 0.002 | 0.002 | 0.002 | 0.002  | 0.002  | 0.003  | 0.006  | 0.006  | 0.5    | 0.003              | 0.001                   | 0.001               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS4               | 0.001     | 0.002                    | 0.001 | 0.001 | 0.003 | 0.002  | 0.004  | 0.009  | 0.011  | 0.010  | 0.5    | 0.005              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS4               | 0.001     | 0.001                    | 0.002 | 0.002 | 0.003 | 0.004  | 0.005  | 0.009  | 0.011  | 0.006  | 0.5    | 0.005              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS4               | 0.001     | 0.001                    | 0.002 | 0.003 | 0.003 | 0.003  | 0.003  | 0.005  | 0.007  | 0.006  | 0.5    | 0.004              | 0.002                   | 0.002               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS5               | 0.001     | 0.001                    | 0.001 | 0.004 | 0.008 | 0.011  | 0.009  | 0.013  | 0.018  | 0.024  | 0.5    | 0.009              | 0.004                   | 0.005               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS5               | 0.001     | 0.001                    | 0.002 | 0.006 | 0.008 | 0.013  | 0.012  | 0.016  | 0.027  | 0.038  | 0.5    | 0.012              | 0.006                   | 0.006               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS5               | 0.001     | 0.002                    | 0.003 | 0.007 | 0.008 | 0.006  | 0.006  | 0.005  | 0.014  | 0.035  | 0.5    | 0.009              | 0.004                   | 0.004               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS5               | 0.001     | 0.001                    | 0.002 | 0.007 | 0.009 | 0.009  | 0.009  | 0.012  | 0.022  | 0.020  | 0.5    | 0.009              | 0.005                   | 0.005               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS5               | 0.001     | 0.002                    | 0.004 | 0.005 | 0.005 | 0.010  | 0.009  | 0.008  | 0.025  | 0.031  | 0.5    | 0.010              | 0.005                   | 0.005               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS5               | 0.001     | 0.002                    | 0.002 | 0.009 | 0.009 | 0.014  | 0.015  | 0.024  | 0.036  | 0.032  | 0.5    | 0.015              | 0.007                   | 0.007               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS5               | 0.001     | 0.002                    | 0.003 | 0.004 | 0.008 | 0.009  | 0.006  | 0.010  | 0.020  | 0.023  | 0.5    | 0.009              | 0.004                   | 0.004               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS5               | 0.001     | 0.001                    | 0.004 | 0.008 | 0.008 | 0.013  | 0.010  | 0.010  | 0.018  | 0.032  | 0.5    | 0.011              | 0.005                   | 0.005               |                         |
| Roof     | HAF4016A, 1/4 Wave (764-870MHz) | 2.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS5               | 0.001     | 0.001                    | 0.001 | 0.004 | 0.007 | 0.008  | 0.009  | 0.016  | 0.035  | 0.039  | 0.5    | 0.013              | 0.006                   | 0.006               |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| Ant Loc. |                                 | D.U.T. Info.      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Model/ Desc. | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|          |                                 |                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS1               | 0.008     | 0.016                    | 0.017 | 0.019 | 0.036 | 0.061  | 0.088  | 0.105  | 0.115  | 0.082  | 0.5    | 0.054              | 0.027                   | 0.027               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS1               | 0.007     | 0.009                    | 0.013 | 0.031 | 0.053 | 0.091  | 0.100  | 0.092  | 0.089  | 0.065  | 0.5    | 0.054              | 0.027                   | 0.027               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS1               | 0.009     | 0.014                    | 0.030 | 0.037 | 0.030 | 0.056  | 0.078  | 0.080  | 0.076  | 0.049  | 0.5    | 0.045              | 0.023                   | 0.023               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS1               | 0.009     | 0.010                    | 0.025 | 0.022 | 0.028 | 0.067  | 0.105  | 0.119  | 0.096  | 0.069  | 0.5    | 0.055              | 0.027                   | 0.028               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS1               | 0.012     | 0.013                    | 0.024 | 0.040 | 0.033 | 0.054  | 0.087  | 0.102  | 0.096  | 0.075  | 0.5    | 0.054              | 0.027                   | 0.027               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS1               | 0.010     | 0.011                    | 0.027 | 0.029 | 0.025 | 0.055  | 0.086  | 0.132  | 0.144  | 0.115  | 0.5    | 0.064              | 0.032                   | 0.032               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS1               | 0.009     | 0.012                    | 0.012 | 0.017 | 0.027 | 0.045  | 0.076  | 0.099  | 0.108  | 0.086  | 0.5    | 0.051              | 0.025                   | 0.025               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS1               | 0.001     | 0.019                    | 0.015 | 0.015 | 0.022 | 0.063  | 0.111  | 0.141  | 0.136  | 0.099  | 0.5    | 0.065              | 0.032                   | 0.033               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS1               | 0.008     | 0.005                    | 0.009 | 0.016 | 0.021 | 0.045  | 0.069  | 0.090  | 0.095  | 0.070  | 0.5    | 0.045              | 0.022                   | 0.022               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS2               | 0.006     | 0.007                    | 0.013 | 0.021 | 0.028 | 0.040  | 0.063  | 0.064  | 0.044  | 0.043  | 0.5    | 0.032              | 0.016                   | 0.016               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS2               | 0.007     | 0.009                    | 0.017 | 0.018 | 0.026 | 0.046  | 0.069  | 0.082  | 0.070  | 0.044  | 0.5    | 0.038              | 0.019                   | 0.019               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS2               | 0.007     | 0.010                    | 0.010 | 0.015 | 0.027 | 0.041  | 0.052  | 0.061  | 0.075  | 0.075  | 0.5    | 0.037              | 0.018                   | 0.019               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS2               | 0.002     | 0.007                    | 0.016 | 0.029 | 0.038 | 0.046  | 0.068  | 0.073  | 0.074  | 0.059  | 0.5    | 0.041              | 0.021                   | 0.021               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS2               | 0.006     | 0.009                    | 0.011 | 0.016 | 0.037 | 0.059  | 0.089  | 0.090  | 0.081  | 0.063  | 0.5    | 0.046              | 0.023                   | 0.024               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS2               | 0.008     | 0.009                    | 0.014 | 0.030 | 0.044 | 0.051  | 0.079  | 0.095  | 0.092  | 0.085  | 0.5    | 0.051              | 0.026                   | 0.026               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS2               | 0.003     | 0.011                    | 0.013 | 0.013 | 0.024 | 0.046  | 0.068  | 0.069  | 0.067  | 0.068  | 0.5    | 0.039              | 0.020                   | 0.020               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS2               | 0.006     | 0.008                    | 0.015 | 0.014 | 0.014 | 0.039  | 0.058  | 0.074  | 0.085  | 0.069  | 0.5    | 0.040              | 0.020                   | 0.020               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS2               | 0.002     | 0.009                    | 0.010 | 0.013 | 0.026 | 0.047  | 0.066  | 0.074  | 0.073  | 0.061  | 0.5    | 0.040              | 0.020                   | 0.020               |                         |

Notes:

MPE calculations are defined in section 15.0

Blue fonts: Frequencies not regulated by FCC.

**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| Ant Loc. |                                 | D.U.T. Info.      |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|----------|---------------------------------|-------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
|          |                                 | Ant. Model/ Desc. | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|          |                                 |                   |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS3               | 0.005     | 0.006                    | 0.004 | 0.011 | 0.011 | 0.011  | 0.010  | 0.018  | 0.019  | 0.018  | 0.5    | 0.011              | 0.006                   | 0.006               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS3               | 0.005     | 0.009                    | 0.009 | 0.009 | 0.006 | 0.008  | 0.014  | 0.016  | 0.010  | 0.008  | 0.5    | 0.009              | 0.005                   | 0.005               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS3               | 0.003     | 0.004                    | 0.002 | 0.003 | 0.005 | 0.008  | 0.007  | 0.012  | 0.011  | 0.008  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS3               | 0.005     | 0.005                    | 0.004 | 0.009 | 0.014 | 0.015  | 0.018  | 0.022  | 0.020  | 0.022  | 0.5    | 0.013              | 0.007                   | 0.007               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS3               | 0.004     | 0.004                    | 0.002 | 0.002 | 0.004 | 0.006  | 0.010  | 0.010  | 0.009  | 0.011  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS3               | 0.002     | 0.002                    | 0.002 | 0.004 | 0.004 | 0.007  | 0.011  | 0.009  | 0.009  | 0.009  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS3               | 0.002     | 0.003                    | 0.002 | 0.004 | 0.008 | 0.009  | 0.013  | 0.015  | 0.017  | 0.017  | 0.5    | 0.009              | 0.005                   | 0.005               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS3               | 0.004     | 0.007                    | 0.006 | 0.005 | 0.007 | 0.011  | 0.017  | 0.021  | 0.020  | 0.020  | 0.5    | 0.012              | 0.006                   | 0.006               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS3               | 0.001     | 0.003                    | 0.003 | 0.003 | 0.003 | 0.005  | 0.009  | 0.009  | 0.009  | 0.011  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 764.0875        | 36.0          | 35.4        | CW              | E         | 0.99        | BS4               | 0.003     | 0.003                    | 0.005 | 0.006 | 0.006 | 0.004  | 0.004  | 0.007  | 0.009  | 0.011  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 770.0125        | 36.0          | 35.8        | CW              | E         | 0.99        | BS4               | 0.002     | 0.003                    | 0.004 | 0.004 | 0.005 | 0.005  | 0.007  | 0.010  | 0.010  | 0.008  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 775.9125        | 36.0          | 34.9        | CW              | E         | 0.99        | BS4               | 0.001     | 0.001                    | 0.001 | 0.002 | 0.004 | 0.004  | 0.004  | 0.007  | 0.008  | 0.007  | 0.5    | 0.004              | 0.002                   | 0.002               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 794.0875        | 36.0          | 35.9        | CW              | E         | 1.00        | BS4               | 0.003     | 0.002                    | 0.004 | 0.005 | 0.010 | 0.010  | 0.011  | 0.018  | 0.026  | 0.020  | 0.5    | 0.011              | 0.005                   | 0.005               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 806.0125        | 42.0          | 41.2        | CW              | E         | 1.00        | BS4               | 0.002     | 0.002                    | 0.002 | 0.002 | 0.002 | 0.004  | 0.008  | 0.013  | 0.014  | 0.010  | 0.5    | 0.006              | 0.003                   | 0.003               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 823.9875        | 42.0          | 41.6        | CW              | E         | 1.01        | BS4               | 0.001     | 0.001                    | 0.003 | 0.005 | 0.005 | 0.003  | 0.003  | 0.005  | 0.008  | 0.007  | 0.5    | 0.004              | 0.002                   | 0.002               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 851.0125        | 42.0          | 41.7        | CW              | E         | 1.03        | BS4               | 0.003     | 0.003                    | 0.003 | 0.004 | 0.005 | 0.006  | 0.010  | 0.016  | 0.017  | 0.010  | 0.5    | 0.008              | 0.004                   | 0.004               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 862.0125        | 42.0          | 41.7        | CW              | E         | 1.04        | BS4               | 0.002     | 0.002                    | 0.004 | 0.006 | 0.007 | 0.008  | 0.008  | 0.015  | 0.016  | 0.007  | 0.5    | 0.008              | 0.004                   | 0.004               |                         |
| Roof     | HAF4017A, 1/4 Wave (764-870MHz) | 5.15              | 868.8875        | 42.0          | 41.8        | CW              | E         | 1.04        | BS4               | 0.001     | 0.002                    | 0.003 | 0.004 | 0.004 | 0.004  | 0.005  | 0.009  | 0.011  | 0.008  | 0.5    | 0.005              | 0.003                   | 0.003               |                         |

Notes:

MPE calculations are defined in section 15.0

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**Table M.1 (Continued)**  
**7/800 band - MPE measurement data for Bystander**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurement          |       |       |       |        |        |        |        |        |        | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Bystander (BS) Positions |       |       |       |        |        |        |        |        |        |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | 20 cm                    | 40 cm | 60 cm | 80 cm | 100 cm | 120 cm | 140 cm | 160 cm | 180 cm | 200 cm |                    |                         |                     |                         |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 0.99              | BS5       | 0.003                    | 0.003 | 0.003 | 0.011 | 0.018  | 0.026  | 0.023  | 0.025  | 0.035  | 0.037  | 0.5                | 0.018                   | 0.009               | 0.009                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 0.99              | BS5       | 0.002                    | 0.004 | 0.006 | 0.014 | 0.020  | 0.028  | 0.025  | 0.032  | 0.052  | 0.063  | 0.5                | 0.024                   | 0.012               | 0.012                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 0.99              | BS5       | 0.002                    | 0.004 | 0.009 | 0.015 | 0.020  | 0.017  | 0.012  | 0.017  | 0.032  | 0.049  | 0.5                | 0.018                   | 0.009               | 0.009                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | BS5       | 0.002                    | 0.003 | 0.005 | 0.014 | 0.018  | 0.017  | 0.018  | 0.027  | 0.045  | 0.039  | 0.5                | 0.019                   | 0.009               | 0.009                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 1.00              | BS5       | 0.001                    | 0.006 | 0.009 | 0.011 | 0.018  | 0.019  | 0.018  | 0.022  | 0.050  | 0.046  | 0.5                | 0.020                   | 0.010               | 0.010                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 1.01              | BS5       | 0.001                    | 0.002 | 0.005 | 0.017 | 0.022  | 0.026  | 0.029  | 0.038  | 0.066  | 0.052  | 0.5                | 0.026                   | 0.013               | 0.013                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 1.03              | BS5       | 0.001                    | 0.004 | 0.005 | 0.008 | 0.014  | 0.016  | 0.014  | 0.020  | 0.033  | 0.032  | 0.5                | 0.015                   | 0.008               | 0.008                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 1.04              | BS5       | 0.001                    | 0.002 | 0.006 | 0.013 | 0.017  | 0.020  | 0.016  | 0.020  | 0.036  | 0.039  | 0.5                | 0.018                   | 0.009               | 0.009                   |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 1.04              | BS5       | 0.001                    | 0.002 | 0.006 | 0.008 | 0.014  | 0.016  | 0.018  | 0.029  | 0.057  | 0.047  | 0.5                | 0.021                   | 0.010               | 0.010                   |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PB        | 0.026                             | 0.029             | 0.017                   | 0.5                | 0.024                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PB        | 0.037                             | 0.025             | 0.022                   | 0.5                | 0.028                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PB        | 0.048                             | 0.040             | 0.030                   | 0.5                | 0.039                   | 0.02                | 0.02                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PB        | 0.020                             | 0.033             | 0.040                   | 0.5                | 0.031                   | 0.02                | 0.02                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PB        | 0.044                             | 0.029             | 0.028                   | 0.5                | 0.033                   | 0.02                | 0.02                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PB        | 0.030                             | 0.022             | 0.028                   | 0.5                | 0.026                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.024                             | 0.015             | 0.014                   | 0.5                | 0.017                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.017                             | 0.014             | 0.016                   | 0.5                | 0.016                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PB        | 0.021                             | 0.010             | 0.008                   | 0.5                | 0.013                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PB        | 0.032                             | 0.031             | 0.023                   | 0.5                | 0.029                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PB        | 0.037                             | 0.022             | 0.015                   | 0.5                | 0.025                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PB        | 0.043                             | 0.029             | 0.020                   | 0.5                | 0.031                   | 0.02                | 0.02                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PB        | 0.026                             | 0.025             | 0.028                   | 0.5                | 0.026                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PB        | 0.037                             | 0.026             | 0.028                   | 0.5                | 0.030                   | 0.02                | 0.02                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PB        | 0.022                             | 0.025             | 0.023                   | 0.5                | 0.023                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.015                             | 0.011             | 0.013                   | 0.5                | 0.013                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.014                             | 0.018             | 0.010                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PB        | 0.032                             | 0.020             | 0.016                   | 0.5                | 0.022                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PB        | 0.002                             | 0.003             | 0.002                   | 0.5                | 0.002                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PB        | 0.001                             | 0.001             | 0.001                   | 0.5                | 0.001                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PB        | 0.003                             | 0.003             | 0.002                   | 0.5                | 0.003                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PB        | 0.009                             | 0.005             | 0.004                   | 0.5                | 0.006                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PB        | 0.014                             | 0.008             | 0.007                   | 0.5                | 0.010                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PB        | 0.019                             | 0.021             | 0.023                   | 0.5                | 0.021                   | 0.01                | 0.01                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.022                             | 0.019             | 0.017                   | 0.5                | 0.019                   | 0.01                | 0.01                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.012                             | 0.014             | 0.013                   | 0.5                | 0.013                   | 0.01                | 0.01                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PB        | 0.019                             | 0.013             | 0.016                   | 0.5                | 0.016                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PB        | 0.033                             | 0.030             | 0.027                   | 0.5                | 0.030                   | 0.02                | 0.02                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PB        | 0.049                             | 0.029             | 0.023                   | 0.5                | 0.034                   | 0.02                | 0.02                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PB        | 0.051                             | 0.036             | 0.025                   | 0.5                | 0.037                   | 0.02                | 0.02                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PB        | 0.027                             | 0.031             | 0.033                   | 0.5                | 0.030                   | 0.02                | 0.02                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PB        | 0.041                             | 0.029             | 0.028                   | 0.5                | 0.032                   | 0.02                | 0.02                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PB        | 0.025                             | 0.027             | 0.028                   | 0.5                | 0.026                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.011                             | 0.017             | 0.011                   | 0.5                | 0.013                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.014                             | 0.017             | 0.010                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PB        | 0.019                             | 0.012             | 0.015                   | 0.5                | 0.015                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PB        | 0.085                             | 0.056             | 0.047                   | 0.5                | 0.063                   | 0.03                | 0.03                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PB        | 0.124                             | 0.065             | 0.044                   | 0.5                | 0.078                   | 0.04                | 0.04                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PB        | 0.113                             | 0.098             | 0.042                   | 0.5                | 0.084                   | 0.04                | 0.04                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PB        | 0.079                             | 0.063             | 0.052                   | 0.5                | 0.065                   | 0.03                | 0.03                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PB        | 0.077                             | 0.044             | 0.056                   | 0.5                | 0.058                   | 0.03                | 0.03                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PB        | 0.048                             | 0.033             | 0.040                   | 0.5                | 0.040                   | 0.02                | 0.02                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.019                             | 0.025             | 0.018                   | 0.5                | 0.020                   | 0.01                | 0.01                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PB        | 0.013                             | 0.019             | 0.010                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PB        | 0.033                             | 0.024             | 0.014                   | 0.5                | 0.023                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                    |                 |               |             |                 |           | Probe Info. |                   | Test Pos. | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|------------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.                  | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor |           | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                    |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PF        | 0.016                             | 0.027             | 0.022                   | 0.5                | 0.022                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PF        | 0.017                             | 0.021             | 0.016                   | 0.5                | 0.018                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PF        | 0.011                             | 0.016             | 0.016                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PF        | 0.018                             | 0.030             | 0.036                   | 0.5                | 0.028                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PF        | 0.019                             | 0.034             | 0.029                   | 0.5                | 0.027                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PF        | 0.027                             | 0.054             | 0.024                   | 0.5                | 0.035                   | 0.02                | 0.02                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.029                             | 0.022             | 0.012                   | 0.5                | 0.021                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.016                             | 0.019             | 0.009                   | 0.5                | 0.015                   | 0.01                | 0.01                    |
| Roof         | AN000131A01, 1/4 wave (136-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PF        | 0.009                             | 0.011             | 0.006                   | 0.5                | 0.009                   | 0.00                | 0.00                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PF        | 0.010                             | 0.016             | 0.015                   | 0.5                | 0.014                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PF        | 0.010                             | 0.018             | 0.007                   | 0.5                | 0.012                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PF        | 0.006                             | 0.014             | 0.011                   | 0.5                | 0.010                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PF        | 0.019                             | 0.019             | 0.021                   | 0.5                | 0.020                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PF        | 0.021                             | 0.037             | 0.021                   | 0.5                | 0.026                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PF        | 0.015                             | 0.047             | 0.013                   | 0.5                | 0.025                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.017                             | 0.032             | 0.006                   | 0.5                | 0.018                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.020                             | 0.029             | 0.008                   | 0.5                | 0.019                   | 0.01                | 0.01                    |
| Roof         | HAF4013A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PF        | 0.020                             | 0.015             | 0.007                   | 0.5                | 0.014                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PF        | 0.003                             | 0.001             | 0.003                   | 0.5                | 0.002                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PF        | 0.003                             | 0.004             | 0.002                   | 0.5                | 0.003                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PF        | 0.001                             | 0.002             | 0.001                   | 0.5                | 0.001                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PF        | 0.012                             | 0.007             | 0.006                   | 0.5                | 0.008                   | 0.00                | 0.00                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PF        | 0.012                             | 0.018             | 0.010                   | 0.5                | 0.013                   | 0.01                | 0.01                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PF        | 0.009                             | 0.029             | 0.012                   | 0.5                | 0.017                   | 0.01                | 0.01                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.030                             | 0.032             | 0.016                   | 0.5                | 0.026                   | 0.01                | 0.01                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.024                             | 0.026             | 0.008                   | 0.5                | 0.019                   | 0.01                | 0.01                    |
| Roof         | HAF4014A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PF        | 0.024                             | 0.022             | 0.007                   | 0.5                | 0.017                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PF        | 0.015                             | 0.023             | 0.024                   | 0.5                | 0.021                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PF        | 0.021                             | 0.024             | 0.015                   | 0.5                | 0.020                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PF        | 0.010                             | 0.013             | 0.017                   | 0.5                | 0.013                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PF        | 0.028                             | 0.019             | 0.027                   | 0.5                | 0.025                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PF        | 0.032                             | 0.044             | 0.029                   | 0.5                | 0.035                   | 0.02                | 0.02                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PF        | 0.017                             | 0.049             | 0.013                   | 0.5                | 0.026                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.026                             | 0.029             | 0.006                   | 0.5                | 0.020                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.028                             | 0.027             | 0.011                   | 0.5                | 0.022                   | 0.01                | 0.01                    |
| Roof         | HAF4016A, 1/4 Wave (764-870MHz) | 2.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PF        | 0.027                             | 0.017             | 0.007                   | 0.5                | 0.017                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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**Table M.2 (Continued)**  
**7/800 band - MPE measurement data for Passenger**

| D.U.T. Info. |                                 |                 |               |             |                 |           | Probe Info. |                   |           | MPE Measurements                  |                   |                         | DUT Max. TX Factor | Avg. over Body (mW/cm2) | Calc. P.D. (mW/cm2) | Max Calc. P.D. (mW/cm2) |
|--------------|---------------------------------|-----------------|---------------|-------------|-----------------|-----------|-------------|-------------------|-----------|-----------------------------------|-------------------|-------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Ant Loc.     | Ant. Model/ Desc.               | Ant. Gain (dBi) | Tx Freq (MHz) | Max Pwr (W) | Initial Pwr (W) | Test Mode | E/H Field   | Probe Cal. Factor | Test Pos. | Passenger/Operator (MC) Positions |                   |                         |                    |                         |                     |                         |
|              |                                 |                 |               |             |                 |           |             |                   |           | Head/ Top 1/3                     | Chest/ Middle 1/3 | Lower Trunk/ Bottom 1/3 |                    |                         |                     |                         |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 764.0875      | 36.0        | 35.4            | CW        | E           | 1.00              | PF        | 0.028                             | 0.039             | 0.038                   | 0.5                | 0.035                   | 0.02                | 0.02                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 770.0125      | 36.0        | 35.8            | CW        | E           | 1.00              | PF        | 0.031                             | 0.043             | 0.023                   | 0.5                | 0.032                   | 0.02                | 0.02                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 775.9125      | 36.0        | 34.9            | CW        | E           | 1.00              | PF        | 0.021                             | 0.034             | 0.023                   | 0.5                | 0.026                   | 0.01                | 0.01                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 794.0875      | 36.0        | 35.9            | CW        | E           | 1.00              | PF        | 0.061                             | 0.033             | 0.044                   | 0.5                | 0.046                   | 0.02                | 0.02                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 806.0125      | 42.0        | 41.2            | CW        | E           | 0.99              | PF        | 0.049                             | 0.079             | 0.033                   | 0.5                | 0.053                   | 0.03                | 0.03                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 823.9875      | 42.0        | 41.6            | CW        | E           | 0.99              | PF        | 0.025                             | 0.061             | 0.024                   | 0.5                | 0.036                   | 0.02                | 0.02                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 851.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.039                             | 0.040             | 0.015                   | 0.5                | 0.031                   | 0.02                | 0.02                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 862.0125      | 42.0        | 41.7            | CW        | E           | 0.99              | PF        | 0.025                             | 0.038             | 0.011                   | 0.5                | 0.024                   | 0.01                | 0.01                    |
| Roof         | HAF4017A, 1/4 Wave (764-870MHz) | 5.15            | 868.8875      | 42.0        | 41.8            | CW        | E           | 0.99              | PF        | 0.026                             | 0.017             | 0.006                   | 0.5                | 0.016                   | 0.01                | 0.01                    |

Notes:

MPE calculations are defined in section 15.0

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