



**MOTOROLA SOLUTIONS**



**MS ISO/IEC 17025  
TESTING  
SAMM No.0826**

**DECLARATION OF COMPLIANCE: MPE ASSESSMENT Report Part 2 of 3**

**Motorola Solutions  
EME Test Laboratory**  
Motorola Solutions Malaysia Sdn Bhd (Innoplex)  
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Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.

**Date of Report:** 7/09/2018  
**Report Revision:** A

**Responsible Engineer:** Saw Sun Hock (EME Engineer)  
**Report author:** Saw Sun Hock (EME Engineer)  
**Date(s) Tested:** 4/25/2018-6/29/2018  
**Manufacturer:** Motorola Solutions Inc.  
**Date submitted for test:** 12/4/2018  
**DUT Description:** APX8500 mobile All Bands (VHF, UHF, 7/800)  
**Test TX mode(s):** CW  
**Max. Power output:** 120W (136-174 MHz), 120 W (380-484 MHz), 48W (485-512 MHz), 30W (512-520 MHz), 36W (764-805 MHz), 42W (806-870 MHz); 63.1 mW (WLAN 2.4 GHz 802.11b), 25 mW (WLAN 2.4 GHz 802.11g/n) ; 31.6 mW (WLAN 5 GHz 802.11 a/n/ac)  
**TX Frequency Bands:** 136-174 MHz; 380-520 MHz; 764-805 MHz; 806-870 MHz; WLAN 2400-2483.5 MHz; WLAN 5180-5825 MHz  
**Signaling type:** FM, TDMA, FHSS (Bluetooth), 802.11b/g/n (WLAN 2.4 GHz), 802.11 a/n/ac (WLAN 5 GHz)  
**Model(s) Tested:** M37TXS9PW1AN (HUW1001A)  
**Model(s) Certified:** M37TXS9PW1AN (HUW1001A)  
**Serial Number(s):** 681P3A0098  
**Classification:** Occupational/Controlled Environment  
**FCC ID:** AZ492FT7118; 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.

*Tiong*

**Tiong Nguk Ing**  
Deputy Technical Manager  
Approval Date: 7/9/2018

## **Appendix D – MPE Test Results Summary for VHF**

**Table D.1**

MPE assessment for LMR VHF- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 117             | 136.0000      | 0.23                                 | 0.20      | 114.8               |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.26                                 | 0.20      | 129.3               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.27                                 | 0.20      | *132.7              |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.25                                 | 0.20      | *125.5              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.18                                 | 0.20      | 89.0                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.24                                 | 0.20      | *120.6              |
| Roof         | BS         | E         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz)  | 120         | 117             | 136.0000      | 0.17                                 | 0.20      | 83.9                |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.17                                 | 0.20      | 86.4                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.17                                 | 0.20      | 86.0                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.17                                 | 0.20      | 86.9                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.16                                 | 0.20      | 78.1                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.23                                 | 0.20      | *115.0              |
| Roof         | BS         | E         | 8           | HAD4022A, 5/8 Wave (132-174MHz)    | 120         | 117             | 136.0000      | 0.18                                 | 0.20      | 88.8                |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.18                                 | 0.20      | 90.5                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.18                                 | 0.20      | 91.8                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.19                                 | 0.20      | 94.2                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.17                                 | 0.20      | 85.8                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.23                                 | 0.20      | *116.3              |
| Roof         | BS         | E         | 1           | HAD4016A, 1/4 Wave (136-162MHz)    | 120         | 117             | 136.0000      | 0.25                                 | 0.20      | 125.8               |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.30                                 | 0.20      | 149.1               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.27                                 | 0.20      | *136.3              |
|              |            |           |             |                                    |             | 119             | 156.4000      | 0.23                                 | 0.20      | *114.6              |
|              |            |           |             |                                    |             | 115             | 162.0000      | 0.23                                 | 0.20      | *117.1              |
| Roof         | BS         | E         | 2           | HAD4017A, 1/4 Wave (146-174MHz)    | 120         | 112             | 146.0000      | 0.18                                 | 0.20      | 91.1                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.17                                 | 0.20      | 86.7                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.26                                 | 0.20      | *129.5              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.23                                 | 0.20      | *114.7              |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.23                                 | 0.20      | *113.6              |

**Table D.1 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | E         | 3           | HAD4021A, 1/4 Wave (136-174MHz)    | 120         | 117             | 136.0000      | 0.20                                 | 0.20      | 100.7               |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.26                                 | 0.20      | 127.7               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.24                                 | 0.20      | *120.4              |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.22                                 | 0.20      | *107.8              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.15                                 | 0.20      | 76.3                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.18                                 | 0.20      | 88.7                |
| Roof         | BS         | E         | 4           | HAD4006A, 1/4 Wave (136-144MHz)    | 120         | 117             | 136.0000      | 0.30                                 | 0.20      | 147.6               |
|              |            |           |             |                                    |             | 115             | 140.0000      | 0.27                                 | 0.20      | 136.4               |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.29                                 | 0.20      | 145.2               |
| Roof         | BS         | E         | 5           | HAD4007A, 1/4 Wave (144-150.8MHz)  | 120         | 113             | 144.0000      | 0.28                                 | 0.20      | 138.6               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.28                                 | 0.20      | *141.7              |
| Roof         | BS         | E         | 6           | HAD4008A, 1/4 Wave (150.8-162MHz)  | 120         | 110             | 150.8000      | 0.22                                 | 0.20      | *108.6              |
|              |            |           |             |                                    |             | 119             | 156.4000      | 0.25                                 | 0.20      | *123.2              |
|              |            |           |             |                                    |             | 115             | 162.0000      | 0.24                                 | 0.20      | *119.1              |
| Roof         | BS         | E         | 7           | HAD4009A, 1/4 Wave (162-174MHz)    | 120         | 115             | 162.0000      | 0.19                                 | 0.20      | 96.5                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.19                                 | 0.20      | 92.9                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.22                                 | 0.20      | *110.6              |
| Roof         | BS         | H         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 117             | 136.0000      | 0.28                                 | 0.20      | 142.1               |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.33                                 | 0.20      | 166.7               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.33                                 | 0.20      | #167.1              |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.33                                 | 0.20      | #166.9              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.26                                 | 0.20      | *129.3              |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.32                                 | 0.20      | #158.2              |
| Roof         | BS         | H         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz)  | 120         | 117             | 136.0000      | 0.11                                 | 0.20      | 57.2                |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.14                                 | 0.20      | 70.3                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.14                                 | 0.20      | 69.6                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.17                                 | 0.20      | 85.4                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.17                                 | 0.20      | 84.3                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.25                                 | 0.20      | #127.1              |

**Table D.1 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | H         | 8           | HAD4022A, 5/8 Wave (132-174MHz)   | 120         | 117             | 136.0000      | 0.13                                 | 0.20      | 66.1                |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.17                                 | 0.20      | 85.6                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.17                                 | 0.20      | 83.5                |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.22                                 | 0.20      | *110.9              |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.23                                 | 0.20      | *114.2              |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.30                                 | 0.20      | #148.8              |
| Roof         | BS         | H         | 1           | HAD4016A, 1/4 Wave (136-162MHz)   | 120         | 117             | 136.0000      | 0.32                                 | 0.20      | 157.7               |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.33                                 | 0.20      | 164.8               |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.37                                 | 0.20      | #187.4              |
|              |            |           |             |                                   |             | 119             | 156.4000      | 0.31                                 | 0.20      | #156.0              |
|              |            |           |             |                                   |             | 115             | 162.0000      | 0.32                                 | 0.20      | #158.9              |
| Roof         | BS         | H         | 2           | HAD4017A, 1/4 Wave (146-174MHz)   | 120         | 112             | 146.0000      | 0.25                                 | 0.20      | 123.1               |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.25                                 | 0.20      | *122.6              |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.34                                 | 0.20      | #168.8              |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.29                                 | 0.20      | #143.2              |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.31                                 | 0.20      | #156.5              |
| Roof         | BS         | H         | 3           | HAD4021A, 1/4 Wave (136-174MHz)   | 120         | 117             | 136.0000      | 0.28                                 | 0.20      | 140.9               |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.35                                 | 0.20      | 177.0               |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.34                                 | 0.20      | #168.0              |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.29                                 | 0.20      | #147.3              |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.24                                 | 0.20      | *117.8              |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.22                                 | 0.20      | *109.8              |
| Roof         | BS         | H         | 4           | HAD4006A, 1/4 Wave (136-144MHz)   | 120         | 117             | 136.0000      | 0.39                                 | 0.20      | 195.1               |
|              |            |           |             |                                   |             | 115             | 140.0000      | 0.39                                 | 0.20      | 194.9               |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.39                                 | 0.20      | 197.1               |
| Roof         | BS         | H         | 5           | HAD4007A, 1/4 Wave (144-150.8MHz) | 120         | 113             | 144.0000      | 0.37                                 | 0.20      | 186.2               |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.41                                 | 0.20      | #202.8              |

**Table D.1 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | H         | 6           | HAD4008A, 1/4 Wave (150.8-162MHz) | 120         | 110             | 150.8000      | 0.29                                 | 0.20      | #144.5              |
|              |            |           |             |                                   |             | 119             | 156.4000      | 0.36                                 | 0.20      | #180.0              |
|              |            |           |             |                                   |             | 115             | 162.0000      | 0.34                                 | 0.20      | #168.5              |
| Roof         | BS         | H         | 7           | HAD4009A, 1/4 Wave (162-174MHz)   | 120         | 115             | 162.0000      | 0.28                                 | 0.20      | *140.2              |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.31                                 | 0.20      | *152.9              |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.32                                 | 0.20      | #159.1              |

**Table D.2**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 117             | 136.0000      | 0.23                                 | 0.20      | 115.6               |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.29                                 | 0.20      | 144.3               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.29                                 | 0.20      | *142.7              |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.37                                 | 0.20      | *185.7              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.35                                 | 0.20      | *175.2              |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.13                                 | 0.20      | 62.8                |
| Roof         | PB         | E         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz)  | 120         | 117             | 136.0000      | 0.05                                 | 0.20      | 24.1                |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.05                                 | 0.20      | 23.0                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.06                                 | 0.20      | 29.8                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.09                                 | 0.20      | 45.6                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.06                                 | 0.20      | 31.2                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.07                                 | 0.20      | 34.1                |
| Roof         | PB         | E         | 8           | HAD4022A, 5/8 Wave (132-174MHz)    | 120         | 117             | 136.0000      | 0.03                                 | 0.20      | 15.8                |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.09                                 | 0.20      | 43.4                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.11                                 | 0.20      | 55.8                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.15                                 | 0.20      | 74.0                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.16                                 | 0.20      | 82.3                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.09                                 | 0.20      | 44.0                |
| Roof         | PB         | E         | 1           | HAD4016A, 1/4 Wave (136-162MHz)    | 120         | 117             | 136.0000      | 0.24                                 | 0.20      | 119.0               |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.32                                 | 0.20      | 157.8               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.30                                 | 0.20      | *150.8              |
|              |            |           |             |                                    |             | 119             | 156.4000      | 0.32                                 | 0.20      | *160.8              |
|              |            |           |             |                                    |             | 115             | 162.0000      | 0.34                                 | 0.20      | *171.0              |
| Roof         | PB         | E         | 2           | HAD4017A, 1/4 Wave (146-174MHz)    | 120         | 112             | 146.0000      | 0.25                                 | 0.20      | 123.4               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.22                                 | 0.20      | *107.9              |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.36                                 | 0.20      | *179.0              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.37                                 | 0.20      | *183.1              |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.15                                 | 0.20      | 73.1                |

**Table D.2 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | E         | 3           | HAD4021A, 1/4 Wave (136-174MHz)    | 120         | 117             | 136.0000      | 0.25                                 | 0.20      | 125.0               |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.33                                 | 0.20      | 164.7               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.32                                 | 0.20      | *158.1              |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.33                                 | 0.20      | *164.9              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.28                                 | 0.20      | *138.7              |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.10                                 | 0.20      | 49.5                |
| Roof         | PB         | E         | 4           | HAD4006A, 1/4 Wave (136-144MHz)    | 120         | 117             | 136.0000      | 0.32                                 | 0.20      | 160.8               |
|              |            |           |             |                                    |             | 115             | 140.0000      | 0.38                                 | 0.20      | 190.1               |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.39                                 | 0.20      | 193.2               |
| Roof         | PB         | E         | 5           | HAD4007A, 1/4 Wave (144-150.8MHz)  | 120         | 113             | 144.0000      | 0.37                                 | 0.20      | 185.2               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.37                                 | 0.20      | *184.9              |
| Roof         | PB         | E         | 6           | HAD4008A, 1/4 Wave (150.8-162MHz)  | 120         | 110             | 150.8000      | 0.25                                 | 0.20      | *125.1              |
|              |            |           |             |                                    |             | 119             | 156.4000      | 0.35                                 | 0.20      | *174.8              |
|              |            |           |             |                                    |             | 115             | 162.0000      | 0.34                                 | 0.20      | *170.5              |
| Roof         | PB         | E         | 7           | HAD4009A, 1/4 Wave (162-174MHz)    | 120         | 115             | 162.0000      | 0.28                                 | 0.20      | *142.2              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.35                                 | 0.20      | *173.1              |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.10                                 | 0.20      | 47.6                |
| Roof         | PB         | H         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 117             | 136.0000      | 0.26                                 | 0.20      | 131.2               |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.28                                 | 0.20      | 139.0               |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.25                                 | 0.20      | #122.9              |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.30                                 | 0.20      | #151.5              |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.26                                 | 0.20      | #132.2              |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.08                                 | 0.20      | 40.7                |
| Roof         | PB         | H         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz)  | 120         | 117             | 136.0000      | 0.06                                 | 0.20      | 30.4                |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.05                                 | 0.20      | 25.7                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.05                                 | 0.20      | 26.9                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.08                                 | 0.20      | 40.1                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.04                                 | 0.20      | 18.7                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.04                                 | 0.20      | 20.3                |



**Table D.2 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | H         | 8           | HAD4022A, 5/8 Wave (132-174MHz)   | 120         | 117             | 136.0000      | 0.06                                 | 0.20      | 32.2                |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.09                                 | 0.20      | 46.0                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.09                                 | 0.20      | 43.5                |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.15                                 | 0.20      | 73.5                |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.17                                 | 0.20      | 85.0                |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.09                                 | 0.20      | 44.1                |
| Roof         | PB         | H         | 1           | HAD4016A, 1/4 Wave (136-162MHz)   | 120         | 117             | 136.0000      | 0.23                                 | 0.20      | 115.0               |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.29                                 | 0.20      | 144.8               |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.27                                 | 0.20      | #134.8              |
|              |            |           |             |                                   |             | 119             | 156.4000      | 0.29                                 | 0.20      | #144.1              |
|              |            |           |             |                                   |             | 115             | 162.0000      | 0.32                                 | 0.20      | #160.0              |
| Roof         | PB         | H         | 2           | HAD4017A, 1/4 Wave (146-174MHz)   | 120         | 112             | 146.0000      | 0.15                                 | 0.20      | 76.8                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.18                                 | 0.20      | 90.8                |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.30                                 | 0.20      | #152.4              |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.42                                 | 0.20      | #212.1              |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.14                                 | 0.20      | 71.2                |
| Roof         | PB         | H         | 3           | HAD4021A, 1/4 Wave (136-174MHz)   | 120         | 117             | 136.0000      | 0.26                                 | 0.20      | 130.5               |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.28                                 | 0.20      | 140.6               |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.25                                 | 0.20      | #126.4              |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.27                                 | 0.20      | #133.0              |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.25                                 | 0.20      | #123.5              |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.09                                 | 0.20      | 46.8                |
| Roof         | PB         | H         | 4           | HAD4006A, 1/4 Wave (136-144MHz)   | 120         | 117             | 136.0000      | 0.32                                 | 0.20      | 158.6               |
|              |            |           |             |                                   |             | 115             | 140.0000      | 0.39                                 | 0.20      | 192.9               |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.34                                 | 0.20      | 168.9               |
| Roof         | PB         | H         | 5           | HAD4007A, 1/4 Wave (144-150.8MHz) | 120         | 113             | 144.0000      | 0.32                                 | 0.20      | 157.6               |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.27                                 | 0.20      | #133.5              |

**Table D.2 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

\*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | H         | 6           | HAD4008A, 1/4 Wave (150.8-162MHz) | 120         | 110             | 150.8000      | 0.21                                 | 0.20      | #105.8              |
|              |            |           |             |                                   |             | 119             | 156.4000      | 0.32                                 | 0.20      | #157.5              |
|              |            |           |             |                                   |             | 115             | 162.0000      | 0.36                                 | 0.20      | #182.0              |
| Roof         | PB         | H         | 7           | HAD4009A, 1/4 Wave (162-174MHz)   | 120         | 115             | 162.0000      | 0.29                                 | 0.20      | #143.8              |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.28                                 | 0.20      | #139.4              |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.11                                 | 0.20      | 56.2                |

**Table D.3**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PF         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 117             | 136.0000      | 0.06                                 | 0.20      | 31.8                |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.09                                 | 0.20      | 42.6                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.08                                 | 0.20      | 38.3                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.09                                 | 0.20      | 42.6                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.08                                 | 0.20      | 41.4                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.10                                 | 0.20      | 49.8                |
| Roof         | PF         | E         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz)  | 120         | 117             | 136.0000      | 0.01                                 | 0.20      | 5.5                 |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.02                                 | 0.20      | 11.7                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.02                                 | 0.20      | 8.8                 |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.005                                | 0.20      | 2.3                 |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.01                                 | 0.20      | 5.0                 |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.02                                 | 0.20      | 8.6                 |
| Roof         | PF         | E         | 8           | HAD4022A, 5/8 Wave (132-174MHz)    | 120         | 117             | 136.0000      | 0.02                                 | 0.20      | 9.5                 |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.02                                 | 0.20      | 10.8                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.04                                 | 0.20      | 18.5                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.02                                 | 0.20      | 9.3                 |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.04                                 | 0.20      | 21.5                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.03                                 | 0.20      | 15.8                |
| Roof         | PF         | E         | 1           | HAD4016A, 1/4 Wave (136-162MHz)    | 120         | 117             | 136.0000      | 0.08                                 | 0.20      | 38.9                |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.08                                 | 0.20      | 42.1                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.09                                 | 0.20      | 47.0                |
|              |            |           |             |                                    |             | 119             | 156.4000      | 0.07                                 | 0.20      | 32.9                |
|              |            |           |             |                                    |             | 115             | 162.0000      | 0.10                                 | 0.20      | 51.6                |
| Roof         | PF         | E         | 2           | HAD4017A, 1/4 Wave (146-174MHz)    | 120         | 112             | 146.0000      | 0.07                                 | 0.20      | 36.2                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.06                                 | 0.20      | 29.6                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.08                                 | 0.20      | 41.9                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.10                                 | 0.20      | 47.7                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.10                                 | 0.20      | 48.6                |

**Table D.3 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PF         | E         | 3           | HAD4021A, 1/4 Wave (136-174MHz)    | 120         | 117             | 136.0000      | 0.06                                 | 0.20      | 30.0                |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.08                                 | 0.20      | 37.8                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.07                                 | 0.20      | 34.9                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.08                                 | 0.20      | 38.3                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.08                                 | 0.20      | 39.6                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.07                                 | 0.20      | 36.4                |
| Roof         | PF         | E         | 4           | HAD4006A, 1/4 Wave (136-144MHz)    | 120         | 117             | 136.0000      | 0.10                                 | 0.20      | 48.3                |
|              |            |           |             |                                    |             | 115             | 140.0000      | 0.08                                 | 0.20      | 40.8                |
|              |            |           |             |                                    |             | 113             | 144.0000      | 0.09                                 | 0.20      | 46.4                |
| Roof         | PF         | E         | 5           | HAD4007A, 1/4 Wave (144-150.8MHz)  | 120         | 113             | 144.0000      | 0.09                                 | 0.20      | 42.8                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.08                                 | 0.20      | 41.9                |
| Roof         | PF         | E         | 6           | HAD4008A, 1/4 Wave (150.8-162MHz)  | 120         | 110             | 150.8000      | 0.07                                 | 0.20      | 33.2                |
|              |            |           |             |                                    |             | 119             | 156.4000      | 0.08                                 | 0.20      | 37.5                |
|              |            |           |             |                                    |             | 115             | 162.0000      | 0.11                                 | 0.20      | 53.7                |
| Roof         | PF         | E         | 7           | HAD4009A, 1/4 Wave (162-174MHz)    | 120         | 115             | 162.0000      | 0.10                                 | 0.20      | 47.7                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.11                                 | 0.20      | 52.6                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.12                                 | 0.20      | 58.6                |
| Roof         | PF         | H         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 117             | 136.0000      | 0.10                                 | 0.20      | 52.0                |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.09                                 | 0.20      | 46.2                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.09                                 | 0.20      | 44.9                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.11                                 | 0.20      | 53.6                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.12                                 | 0.20      | 57.9                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.12                                 | 0.20      | 58.8                |
| Roof         | PF         | H         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz)  | 120         | 117             | 136.0000      | 0.03                                 | 0.20      | 14.8                |
|              |            |           |             |                                    |             | 112             | 146.0000      | 0.03                                 | 0.20      | 15.0                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.03                                 | 0.20      | 15.4                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.02                                 | 0.20      | 9.0                 |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.03                                 | 0.20      | 15.8                |
|              |            |           |             |                                    |             | 115             | 173.0125      | 0.04                                 | 0.20      | 18.4                |

**Table D.3 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PF         | H         | 8           | HAD4022A, 5/8 Wave (132-174MHz)   | 120         | 117             | 136.0000      | 0.04                                 | 0.20      | 19.4                |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.03                                 | 0.20      | 14.8                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.04                                 | 0.20      | 20.0                |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.03                                 | 0.20      | 15.5                |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.06                                 | 0.20      | 30.0                |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.06                                 | 0.20      | 29.2                |
| Roof         | PF         | H         | 1           | HAD4016A, 1/4 Wave (136-162MHz)   | 120         | 117             | 136.0000      | 0.10                                 | 0.20      | 50.4                |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.08                                 | 0.20      | 40.3                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.09                                 | 0.20      | 44.0                |
|              |            |           |             |                                   |             | 119             | 156.4000      | 0.06                                 | 0.20      | 31.9                |
|              |            |           |             |                                   |             | 115             | 162.0000      | 0.12                                 | 0.20      | 60.4                |
| Roof         | PF         | H         | 2           | HAD4017A, 1/4 Wave (146-174MHz)   | 120         | 112             | 146.0000      | 0.08                                 | 0.20      | 39.2                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.07                                 | 0.20      | 34.6                |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.10                                 | 0.20      | 49.4                |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.15                                 | 0.20      | 73.0                |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.13                                 | 0.20      | 66.1                |
| Roof         | PF         | H         | 3           | HAD4021A, 1/4 Wave (136-174MHz)   | 120         | 117             | 136.0000      | 0.10                                 | 0.20      | 48.9                |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.07                                 | 0.20      | 35.4                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.10                                 | 0.20      | 47.7                |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.09                                 | 0.20      | 47.3                |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.13                                 | 0.20      | 63.8                |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.10                                 | 0.20      | 50.9                |
| Roof         | PF         | H         | 4           | HAD4006A, 1/4 Wave (136-144MHz)   | 120         | 117             | 136.0000      | 0.10                                 | 0.20      | 52.0                |
|              |            |           |             |                                   |             | 115             | 140.0000      | 0.09                                 | 0.20      | 45.4                |
|              |            |           |             |                                   |             | 113             | 144.0000      | 0.10                                 | 0.20      | 52.0                |
| Roof         | PF         | H         | 5           | HAD4007A, 1/4 Wave (144-150.8MHz) | 120         | 113             | 144.0000      | 0.08                                 | 0.20      | 40.1                |
|              |            |           |             |                                   |             | 110             | 150.8000      | 0.11                                 | 0.20      | 53.3                |

**Table D.3 (Continued)**

MPE assessment for LMR VHF- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PF         | H         | 6           | HAD4008A, 1/4 Wave (150.8-162MHz) | 120         | 110             | 150.8000      | 0.09                                 | 0.20      | 43.2                |
|              |            |           |             |                                   |             | 119             | 156.4000      | 0.10                                 | 0.20      | 49.5                |
|              |            |           |             |                                   |             | 115             | 162.0000      | 0.16                                 | 0.20      | 79.7                |
| Roof         | PF         | H         | 7           | HAD4009A, 1/4 Wave (162-174MHz)   | 120         | 115             | 162.0000      | 0.16                                 | 0.20      | 78.6                |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.18                                 | 0.20      | <b>88.0</b>         |
|              |            |           |             |                                   |             | 115             | 173.0125      | 0.11                                 | 0.20      | 53.2                |

**Table D.4**  
**LMR VHF MPE Results for FCC**

Note:  
Blue fonts: Frequencies not regulated by FCC.

|          |     |              |                                |       |       |       |       |       |       |       |       |       |
|----------|-----|--------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pmax (W) | 120 | Pinitial (W) | 117.0                          | 113.0 | 112.0 | 110.0 | 119.0 | 120.0 | 115.0 | 114.0 | 115.0 | 115.0 |
|          |     |              | FCCLimit (mW/cm <sup>2</sup> ) | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  |

| Table | Test Post | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       | f6       | f7       | f8       | f9       | f10      |
|-------|-----------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |           |       |              |           |             | 136.0000 | 140.0000 | 144.0000 | 146.0000 | 150.8000 | 156.4000 | 158.0125 | 162.0000 | 165.0125 | 173.0125 |
| D.1   | BS        |       | Roof         | E         | 29          | 0.23     |          |          | 0.26     | 0.27     |          | 0.25     |          | 0.18     | 0.24     |
| D.1   | BS        |       | Roof         | E         | 9           | 0.17     |          |          | 0.17     | 0.17     |          | 0.17     |          | 0.16     | 0.23     |
| D.1   | BS        |       | Roof         | E         | 8           | 0.18     |          | 0.18     |          | 0.18     |          | 0.19     |          | 0.17     | 0.20     |
| D.1   | BS        |       | Roof         | E         | 1           | 0.25     |          | 0.30     |          | 0.27     | 0.23     |          | 0.23     |          |          |
| D.1   | BS        |       | Roof         | E         | 2           |          |          |          | 0.18     | 0.17     |          | 0.26     |          | 0.23     | 0.23     |
| D.1   | BS        |       | Roof         | E         | 3           | 0.20     |          | 0.26     |          | 0.24     |          | 0.22     |          | 0.15     | 0.18     |
| D.1   | BS        |       | Roof         | E         | 4           | 0.30     | 0.27     | 0.29     |          |          |          |          |          |          |          |
| D.1   | BS        |       | Roof         | E         | 5           |          |          | 0.28     |          | 0.28     |          |          |          |          |          |
| D.1   | BS        |       | Roof         | E         | 6           |          |          |          |          | 0.22     | 0.25     |          | 0.24     |          |          |
| D.1   | BS        |       | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.19     | 0.19     | 0.22     |
| D.1   | BS        |       | Roof         | H         | 29          | 0.28     |          |          | 0.33     | 0.33     |          | 0.33     |          | 0.26     | 0.32     |
| D.1   | BS        |       | Roof         | H         | 9           | 0.11     |          |          | 0.14     | 0.14     |          | 0.17     |          | 0.17     | 0.25     |
| D.1   | BS        |       | Roof         | H         | 8           | 0.13     |          | 0.17     |          | 0.17     |          | 0.22     |          | 0.23     | 0.30     |
| D.1   | BS        |       | Roof         | H         | 1           | 0.32     |          | 0.33     |          | 0.37     | 0.31     |          | 0.32     |          |          |
| D.1   | BS        |       | Roof         | H         | 2           |          |          |          | 0.25     | 0.25     |          | 0.34     |          | 0.29     | 0.31     |
| D.1   | BS        |       | Roof         | H         | 3           | 0.28     |          | 0.35     |          | 0.34     |          | 0.29     |          | 0.24     | 0.22     |
| D.1   | BS        |       | Roof         | H         | 4           | 0.39     | 0.39     | 0.39     |          |          |          |          |          |          |          |
| D.1   | BS        |       | Roof         | H         | 5           |          |          | 0.37     |          | 0.41     |          |          |          |          |          |
| D.1   | BS        |       | Roof         | H         | 6           |          |          |          |          | 0.29     | 0.36     |          | 0.34     |          |          |
| D.1   | BS        |       | Roof         | H         | 7           |          |          |          |          |          |          |          | 0.28     | 0.31     | 0.32     |
| D.2   | PB        |       | Roof         | E         | 29          | 0.23     |          |          | 0.29     | 0.29     |          | 0.37     |          | 0.35     | 0.13     |
| D.2   | PB        |       | Roof         | E         | 9           | 0.05     |          |          | 0.05     | 0.06     |          | 0.09     |          | 0.06     | 0.07     |
| D.2   | PB        |       | Roof         | E         | 8           | 0.03     |          | 0.09     |          | 0.11     |          | 0.15     |          | 0.16     | 0.09     |
| D.2   | PB        |       | Roof         | E         | 1           | 0.24     |          | 0.32     |          | 0.30     | 0.32     |          | 0.34     |          |          |
| D.2   | PB        |       | Roof         | E         | 2           |          |          |          | 0.25     | 0.22     |          | 0.36     |          | 0.37     | 0.15     |
| D.2   | PB        |       | Roof         | E         | 3           | 0.25     |          | 0.33     |          | 0.32     |          | 0.33     |          | 0.28     | 0.10     |
| D.2   | PB        |       | Roof         | E         | 4           | 0.32     | 0.38     | 0.39     |          |          |          |          |          |          |          |
| D.2   | PB        |       | Roof         | E         | 5           |          |          | 0.37     |          | 0.37     |          |          |          |          |          |
| D.2   | PB        |       | Roof         | E         | 6           |          |          |          |          | 0.25     | 0.35     |          | 0.34     |          |          |
| D.2   | PB        |       | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.28     | 0.35     | 0.10     |

### Table D.4 (Continued) LMR VHF MPE Results for FCC

Note:  
Blue fonts: Frequencies not regulated by FCC.

|          |     |              |                                |       |       |       |       |       |       |       |       |       |
|----------|-----|--------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pmax (W) | 120 | Pinitial (W) | 117.0                          | 113.0 | 112.0 | 110.0 | 119.0 | 120.0 | 115.0 | 114.0 | 115.0 | 115.0 |
|          |     |              | FCCLimit (mW/cm <sup>2</sup> ) | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  | 0.20  |

| Table | Test Post | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       | f6       | f7       | f8       | f9       | f10      |
|-------|-----------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |           |       |              |           |             | 136.0000 | 140.0000 | 144.0000 | 146.0000 | 150.8000 | 156.4000 | 158.0125 | 162.0000 | 165.0125 | 173.0125 |
| D.2   | PB        |       | Roof         | H         | 29          | 0.26     |          |          | 0.28     | 0.25     |          | 0.30     |          | 0.26     | 0.08     |
| D.2   | PB        |       | Roof         | H         | 9           | 0.06     |          |          | 0.05     | 0.05     |          | 0.08     |          | 0.04     | 0.04     |
| D.2   | PB        |       | Roof         | H         | 8           | 0.06     |          | 0.09     |          | 0.09     |          | 0.15     |          | 0.17     | 0.09     |
| D.2   | PB        |       | Roof         | H         | 1           | 0.23     |          | 0.29     |          | 0.27     | 0.29     |          | 0.32     |          |          |
| D.2   | PB        |       | Roof         | H         | 2           |          |          |          | 0.15     | 0.18     |          | 0.30     |          | 0.42     | 0.14     |
| D.2   | PB        |       | Roof         | H         | 3           | 0.26     |          | 0.28     |          | 0.25     |          | 0.27     |          | 0.25     | 0.09     |
| D.2   | PB        |       | Roof         | H         | 4           | 0.32     | 0.39     | 0.34     |          |          |          |          |          |          |          |
| D.2   | PB        |       | Roof         | H         | 5           |          |          | 0.32     |          | 0.27     |          |          |          |          |          |
| D.2   | PB        |       | Roof         | H         | 6           |          |          |          |          | 0.21     | 0.32     |          | 0.36     |          |          |
| D.2   | PB        |       | Roof         | H         | 7           |          |          |          |          |          |          |          | 0.29     | 0.28     | 0.11     |
| D.3   | PF        |       | Roof         | E         | 29          | 0.06     |          |          | 0.09     | 0.08     |          | 0.09     |          | 0.08     | 0.10     |
| D.3   | PF        |       | Roof         | E         | 9           | 0.01     |          |          | 0.02     | 0.02     |          | 0.005    |          | 0.01     | 0.02     |
| D.3   | PF        |       | Roof         | E         | 8           | 0.02     |          | 0.02     |          | 0.04     |          | 0.02     |          | 0.04     | 0.03     |
| D.3   | PF        |       | Roof         | E         | 1           | 0.08     |          | 0.08     |          | 0.09     | 0.07     |          | 0.10     |          |          |
| D.3   | PF        |       | Roof         | E         | 2           |          |          |          | 0.07     | 0.06     |          | 0.08     |          | 0.10     | 0.10     |
| D.3   | PF        |       | Roof         | E         | 3           | 0.06     |          | 0.08     |          | 0.07     |          | 0.08     |          | 0.08     | 0.07     |
| D.3   | PF        |       | Roof         | E         | 4           | 0.10     | 0.08     | 0.09     |          |          |          |          |          |          |          |
| D.3   | PF        |       | Roof         | E         | 5           |          |          | 0.09     |          | 0.08     |          |          |          |          |          |
| D.3   | PF        |       | Roof         | E         | 6           |          |          |          |          | 0.07     | 0.08     |          | 0.11     |          |          |
| D.3   | PF        |       | Roof         | E         | 7           |          |          |          |          |          |          |          | 0.10     | 0.11     | 0.12     |
| D.3   | PF        |       | Roof         | H         | 29          | 0.10     |          |          | 0.09     | 0.09     |          | 0.11     |          | 0.12     | 0.12     |
| D.3   | PF        |       | Roof         | H         | 9           | 0.03     |          |          | 0.03     | 0.03     |          | 0.02     |          | 0.03     | 0.04     |
| D.3   | PF        |       | Roof         | H         | 8           | 0.04     |          | 0.03     |          | 0.04     |          | 0.03     |          | 0.20     | 0.20     |
| D.3   | PF        |       | Roof         | H         | 1           | 0.10     |          | 0.08     |          | 0.09     | 0.06     |          | 0.12     |          |          |
| D.3   | PF        |       | Roof         | H         | 2           |          |          |          | 0.08     | 0.07     |          | 0.10     |          | 0.15     | 0.13     |
| D.3   | PF        |       | Roof         | H         | 3           | 0.10     |          | 0.07     |          | 0.10     |          | 0.09     |          | 0.13     | 0.10     |
| D.3   | PF        |       | Roof         | H         | 4           | 0.10     | 0.09     | 0.10     |          |          |          |          |          |          |          |
| D.3   | PF        |       | Roof         | H         | 5           |          |          | 0.08     |          | 0.11     |          |          |          |          |          |
| D.3   | PF        |       | Roof         | H         | 6           |          |          |          |          | 0.09     | 0.10     |          | 0.16     |          |          |
| D.3   | PF        |       | Roof         | H         | 7           |          |          |          |          |          |          |          | 0.16     | 0.18     | 0.11     |



**Table D.5**  
**LMR VHF MPE Variability Test**

Notes:

\*Configuration required SAR simulations.

|   |
|---|
| Bystander measurement at initial mounting location                          |
| Bystander measurement at 10cm antenna offset from initial mounting location |

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | MPE Variability (%) |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|---------------------|
| Roof         | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 114             | 165.0125      | 0.18                                 | 0.20      | 89.0                | -16.3               |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.15                                 | 0.20      | 74.5                |                     |
| Roof         | BS         | E         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz)  | 120         | 110             | 150.8000      | 0.17                                 | 0.20      | 86.0                | 16.3                |
|              |            |           |             |                                    |             | 110             | 150.8000      | 0.20                                 | 0.20      | *100.0              |                     |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.17                                 | 0.20      | 86.9                | 15.6                |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.20                                 | 0.20      | *100.4              |                     |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.16                                 | 0.20      | 78.1                |                     |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.18                                 | 0.20      | 89.5                |                     |
| Roof         | BS         | E         | 8           | HAD4022A, 5/8 Wave (132-174MHz)    | 120         | 110             | 150.8000      | 0.18                                 | 0.20      | 91.8                | 5.7                 |
|              |            |           |             |                                    |             | 110             | 150.800       | 0.19                                 | 0.20      | 97.0                |                     |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.19                                 | 0.20      | 94.2                | 4.2                 |
|              |            |           |             |                                    |             | 120             | 158.0125      | 0.196                                | 0.20      | 98.1                |                     |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.17                                 | 0.20      | 85.8                | -2.2                |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.17                                 | 0.20      | 83.9                |                     |
| Roof         | BS         | E         | 2           | HAD4017A, 1/4 Wave (146-174MHz)    | 120         | 110             | 150.8000      | 0.17                                 | 0.20      | 86.7                | -8.8                |
|              |            |           |             |                                    |             | 117             | 150.8000      | 0.16                                 | 0.20      | 79.1                |                     |
| Roof         | BS         | E         | 3           | HAD4021A, 1/4 Wave (136-174MHz)    | 120         | 115             | 173.0125      | 0.18                                 | 0.20      | 88.7                | -6.0                |
|              |            |           |             |                                    |             | 119             | 173.0125      | 0.17                                 | 0.20      | 83.4                |                     |
| Roof         | BS         | E         | 7           | HAD4009A, 1/4 Wave (162-174MHz)    | 120         | 115             | 162.0000      | 0.19                                 | 0.20      | 96.5                | -3.9                |
|              |            |           |             |                                    |             | 118             | 162.0000      | 0.185                                | 0.20      | 92.7                |                     |
|              |            |           |             |                                    |             | 114             | 165.0125      | 0.19                                 | 0.20      | 92.9                | -9.6                |
|              |            |           |             |                                    |             | 119             | 165.0125      | 0.17                                 | 0.20      | 83.9                |                     |

**Table D.5 (Continued)**  
**LMR VHF MPE Variability Test**

Notes:

\*Configuration required SAR simulations.

|   |
|---|
| Bystander measurement at initial mounting location                          |
| Bystander measurement at 10cm antenna offset from initial mounting location |

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | MPE Variability (%) |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|---------------------|
| Roof         | BS         | H         | 9           | RAD4010ARB, 1/2 Wave (136-174MHz) | 120         | 110             | 150.8000      | 0.14                                 | 0.20      | 69.6                | 28.6                |
|              |            |           |             |                                   |             | 117             | 150.8000      | 0.18                                 | 0.20      | 89.7                |                     |
|              |            |           |             |                                   |             | 120             | 158.0125      | 0.17                                 | 0.20      | 85.4                | 10.3                |
|              |            |           |             |                                   |             | 116             | 158.0125      | 0.19                                 | 0.20      | 94.2                |                     |
|              |            |           |             |                                   |             | 114             | 165.0125      | 0.17                                 | 0.20      | 84.3                | -1.3                |
|              |            |           |             |                                   |             | 119             | 165.0125      | 0.17                                 | 0.20      | 83.1                |                     |
| Roof         | BS         | H         | 8           | HAD4022A, 5/8 Wave (132-174MHz)   | 120         | 110             | 150.8000      | 0.17                                 | 0.20      | 83.5                | 28.8                |
|              |            |           |             |                                   |             | 117             | 150.8000      | 0.22                                 | 0.20      | *107.6              |                     |

## **Appendix E – MPE Test Results Summary for UHF R1**

**Table E.1**

MPE assessment for LMR UHF R1- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 115.0           | 380.0125      | 0.09                                 | 0.25      | 36.3                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.11                                 | 0.26      | 43.9                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.16                                 | 0.27      | 60.3                |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.16                                 | 0.28      | 57.9                |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.16                                 | 0.29      | 55.5                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.16                                 | 0.30      | 54.8                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.14                                 | 0.31      | 44.8                |
| Roof         | BS         | E         | 10          | HAE6010A, 1/2 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.08                                 | 0.25      | 32.7                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.11                                 | 0.26      | 43.6                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.13                                 | 0.27      | 48.4                |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.14                                 | 0.28      | 51.6                |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.13                                 | 0.29      | 46.6                |
| Roof         | BS         | E         | 11          | HAE6011A, 5/8 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.09                                 | 0.25      | 33.8                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.13                                 | 0.26      | 48.0                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.17                                 | 0.27      | 62.9                |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.17                                 | 0.28      | 59.8                |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.17                                 | 0.29      | 58.0                |
| Roof         | BS         | E         | 12          | HAE6012A, 1/4 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.04                                 | 0.25      | 14.6                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.05                                 | 0.26      | 18.3                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.04                                 | 0.27      | 16.4                |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.06                                 | 0.28      | 22.2                |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.05                                 | 0.29      | 17.2                |
| Roof         | BS         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 115.0           | 380.0125      | 0.13                                 | 0.25      | 52.3                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.18                                 | 0.26      | 69.9                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.21                                 | 0.27      | 78.1                |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.24                                 | 0.28      | 84.7                |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.25                                 | 0.29      | 86.7                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.19                                 | 0.30      | 64.4                |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.17                                 | 0.31      | 56.7                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.16                                 | 0.31      | 49.5                |

**Table E.1 (Continued)**

MPE assessment for LMR UHF R1- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)   | 120         | 115.0           | 380.0125      | 0.16                                 | 0.25      | 63.4                |
|              |            |           |             |                                   |             | 120.0           | 393.0125      | 0.16                                 | 0.26      | 62.0                |
|              |            |           |             |                                   |             | 118.0           | 406.5000      | 0.18                                 | 0.27      | 66.1                |
|              |            |           |             |                                   |             | 111.0           | 422.0125      | 0.23                                 | 0.28      | 83.1                |
|              |            |           |             |                                   |             | 108.0           | 438.0125      | 0.20                                 | 0.29      | 70.1                |
|              |            |           |             |                                   |             | 119.0           | 450.0125      | 0.25                                 | 0.30      | 83.8                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.21                                 | 0.31      | 66.4                |
| Roof         | BS         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz) | 120         | 119.0           | 450.0125      | 0.12                                 | 0.30      | 41.5                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.11                                 | 0.31      | 36.5                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.18                                 | 0.31      | 55.7                |
| Roof         | BS         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)   | 120         | 119.0           | 450.0125      | 0.18                                 | 0.30      | 60.1                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.13                                 | 0.31      | 44.0                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.19                                 | 0.31      | 59.8                |
| Roof         | BS         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)   | 120         | 119.0           | 450.0125      | 0.22                                 | 0.30      | 73.5                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.19                                 | 0.31      | 61.8                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.21                                 | 0.31      | 67.0                |
| Roof         | BS         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz)   | 120         | 119.0           | 450.0125      | 0.27                                 | 0.30      | <b>89.9</b>         |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.22                                 | 0.31      | 72.9                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.23                                 | 0.31      | 72.4                |
| Roof         | BS         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz)   | 120         | 119.0           | 450.0125      | 0.11                                 | 0.30      | 36.9                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.10                                 | 0.31      | 32.3                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.18                                 | 0.31      | 56.2                |

**Table E.2**

MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 115.0           | 380.0125      | 0.11                                 | 0.25      | 45.4                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.10                                 | 0.26      | 39.7                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.11                                 | 0.27      | 39.7                |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.07                                 | 0.28      | 23.8                |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.09                                 | 0.29      | 32.3                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.09                                 | 0.30      | 31.5                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.08                                 | 0.31      | 24.1                |
| Roof         | PB         | E         | 10          | HAE6010A, 1/2 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.11                                 | 0.25      | 42.1                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.11                                 | 0.26      | 42.2                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.12                                 | 0.27      | <b>45.4</b>         |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.07                                 | 0.28      | 23.5                |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.09                                 | 0.29      | 29.8                |
| Roof         | PB         | E         | 11          | HAE6011A, 5/8 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.01                                 | 0.25      | 5.3                 |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.03                                 | 0.26      | 11.0                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.03                                 | 0.27      | 11.1                |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.02                                 | 0.28      | 8.5                 |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.03                                 | 0.29      | 9.3                 |
| Roof         | PB         | E         | 12          | HAE6012A, 1/4 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.15                                 | 0.25      | 59.6                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.15                                 | 0.26      | 56.3                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.07                                 | 0.27      | 26.7                |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.07                                 | 0.28      | 23.8                |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.04                                 | 0.29      | 12.4                |
| Roof         | PB         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 115.0           | 380.0125      | 0.10                                 | 0.25      | 38.6                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.11                                 | 0.26      | 42.4                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.12                                 | 0.27      | 43.1                |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.06                                 | 0.28      | 22.0                |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.10                                 | 0.29      | 34.0                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.11                                 | 0.30      | 37.1                |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.05                                 | 0.31      | 15.9                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.05                                 | 0.31      | 17.4                |

**Table E.2 (Continued)**

MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)   | 120         | 115.0           | 380.0125      | 0.12                                 | 0.25      | 48.2                |
|              |            |           |             |                                   |             | 120.0           | 393.0125      | 0.11                                 | 0.26      | 43.8                |
|              |            |           |             |                                   |             | 118.0           | 406.5000      | 0.11                                 | 0.27      | 40.5                |
|              |            |           |             |                                   |             | 111.0           | 422.0125      | 0.07                                 | 0.28      | 25.1                |
|              |            |           |             |                                   |             | 108.0           | 438.0125      | 0.10                                 | 0.29      | 35.6                |
|              |            |           |             |                                   |             | 119.0           | 450.0125      | 0.11                                 | 0.30      | 35.0                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.07                                 | 0.31      | 23.4                |
| Roof         | PB         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz) | 120         | 119.0           | 450.0125      | 0.01                                 | 0.30      | 4.8                 |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.01                                 | 0.31      | 3.8                 |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.03                                 | 0.31      | 9.0                 |
| Roof         | PB         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)   | 120         | 119.0           | 450.0125      | 0.03                                 | 0.30      | 8.5                 |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.01                                 | 0.31      | 4.9                 |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.03                                 | 0.31      | 10.0                |
| Roof         | PB         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)   | 120         | 119.0           | 450.0125      | 0.02                                 | 0.30      | 6.2                 |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.02                                 | 0.31      | 7.0                 |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.02                                 | 0.31      | 5.8                 |
| Roof         | PB         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz)   | 120         | 119.0           | 450.0125      | 0.10                                 | 0.30      | 32.3                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.07                                 | 0.31      | 22.2                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.07                                 | 0.31      | 23.1                |
| Roof         | PB         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz)   | 120         | 119.0           | 450.0125      | 0.08                                 | 0.30      | 25.1                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.07                                 | 0.31      | 22.2                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.08                                 | 0.31      | 24.1                |

**Table E.3**

MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PF         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 115.0           | 380.0125      | 0.05                                 | 0.25      | 20.0                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.05                                 | 0.26      | 19.3                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.03                                 | 0.27      | 12.2                |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.04                                 | 0.28      | 14.8                |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.04                                 | 0.29      | 14.2                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.06                                 | 0.30      | 19.8                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.04                                 | 0.31      | 11.4                |
| Roof         | PF         | E         | 10          | HAE6010A, 1/2 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.04                                 | 0.25      | 14.6                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.07                                 | 0.26      | 27.5                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.03                                 | 0.27      | 12.1                |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.04                                 | 0.28      | 15.8                |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.06                                 | 0.29      | 20.2                |
| Roof         | PF         | E         | 11          | HAE6011A, 5/8 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.01                                 | 0.25      | 3.0                 |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.02                                 | 0.26      | 7.6                 |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.01                                 | 0.27      | 4.4                 |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.02                                 | 0.28      | 6.6                 |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.02                                 | 0.29      | 7.2                 |
| Roof         | PF         | E         | 12          | HAE6012A, 1/4 Wave (380-433MHz)    | 120         | 115.0           | 380.0125      | 0.01                                 | 0.25      | 5.6                 |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.01                                 | 0.26      | 5.6                 |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.01                                 | 0.27      | 2.9                 |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.02                                 | 0.28      | 6.1                 |
|              |            |           |             |                                    |             | 108.0           | 432.9875      | 0.01                                 | 0.29      | 5.2                 |
| Roof         | PF         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 115.0           | 380.0125      | 0.04                                 | 0.25      | 14.3                |
|              |            |           |             |                                    |             | 120.0           | 393.0125      | 0.06                                 | 0.26      | 23.6                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.03                                 | 0.27      | 11.7                |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.04                                 | 0.28      | 13.7                |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.05                                 | 0.29      | 18.2                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.04                                 | 0.30      | 14.9                |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.02                                 | 0.31      | 7.7                 |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.04                                 | 0.31      | 12.0                |



**Table E.3 (Continued)**

MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PF         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)   | 120         | 115.0           | 380.0125      | 0.05                                 | 0.25      | 18.6                |
|              |            |           |             |                                   |             | 120.0           | 393.0125      | 0.05                                 | 0.26      | 20.7                |
|              |            |           |             |                                   |             | 118.0           | 406.5000      | 0.03                                 | 0.27      | 11.2                |
|              |            |           |             |                                   |             | 111.0           | 422.0125      | 0.06                                 | 0.28      | <b>22.7</b>         |
|              |            |           |             |                                   |             | 108.0           | 438.0125      | 0.06                                 | 0.29      | 19.4                |
|              |            |           |             |                                   |             | 119.0           | 450.0125      | 0.07                                 | 0.30      | 21.7                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.05                                 | 0.31      | 16.0                |
| Roof         | PF         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz) | 120         | 119.0           | 450.0125      | 0.01                                 | 0.30      | 3.8                 |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.01                                 | 0.31      | 3.5                 |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.003                                | 0.31      | 0.8                 |
| Roof         | PF         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)   | 120         | 119.0           | 450.0125      | 0.01                                 | 0.30      | 3.1                 |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.01                                 | 0.31      | 2.5                 |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.01                                 | 0.31      | 3.6                 |
| Roof         | PF         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)   | 120         | 119.0           | 450.0125      | 0.01                                 | 0.30      | 4.9                 |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.02                                 | 0.31      | 5.4                 |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.01                                 | 0.31      | 2.2                 |
| Roof         | PF         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz)   | 120         | 119.0           | 450.0125      | 0.06                                 | 0.30      | 19.5                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.04                                 | 0.31      | 13.1                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.04                                 | 0.31      | 13.0                |
| Roof         | PF         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz)   | 120         | 119.0           | 450.0125      | 0.07                                 | 0.30      | 22.6                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.04                                 | 0.31      | 13.7                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.03                                 | 0.31      | 11.0                |

**Table E.4**  
**LMR UHF R1 MPE Results for FCC**

Note:  
Blue fonts: Frequencies not regulated by FCC.

|                      |     |                          |                                |       |       |       |       |       |       |       |       |       |
|----------------------|-----|--------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| P <sub>max</sub> (W) | 120 | P <sub>initial</sub> (W) | 115.0                          | 120.0 | 118.0 | 113.0 | 111.0 | 108.0 | 108.0 | 119.0 | 120.0 | 116.0 |
|                      |     |                          | FCCLimit (mW/cm <sup>2</sup> ) | 0.25  | 0.26  | 0.27  | 0.28  | 0.28  | 0.29  | 0.29  | 0.30  | 0.31  |

| Table | Test Post | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       | f6       | f7       | f8       | f9       | f10      |
|-------|-----------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |           |       |              |           |             | 380.0125 | 393.0125 | 406.5000 | 419.5000 | 422.0125 | 432.9875 | 438.0125 | 450.0125 | 460.0000 | 469.9875 |
| E.1   | BS        |       | Roof         | E         | 29          | 0.09     | 0.11     | 0.14     |          | 0.17     |          | 0.20     | 0.16     |          | 0.19     |
| E.1   | BS        |       | Roof         | E         | 10          | 0.08     | 0.11     | 0.13     | 0.14     |          | 0.13     |          |          |          |          |
| E.1   | BS        |       | Roof         | E         | 11          | 0.09     | 0.13     | 0.17     | 0.17     |          | 0.17     |          |          |          |          |
| E.1   | BS        |       | Roof         | E         | 12          | 0.04     | 0.05     | 0.04     | 0.06     |          | 0.05     |          |          |          |          |
| E.1   | BS        |       | Roof         | E         | 13          | 0.13     | 0.18     | 0.21     |          | 0.24     |          | 0.25     | 0.27     | 0.17     | 0.23     |
| E.1   | BS        |       | Roof         | E         | 14          | 0.16     | 0.16     | 0.18     |          | 0.23     |          | 0.29     | 0.23     |          | 0.27     |
| E.1   | BS        |       | Roof         | E         | 19          |          |          |          |          |          |          |          | 0.12     | 0.11     | 0.17     |
| E.1   | BS        |       | Roof         | E         | 16          |          |          |          |          |          |          |          | 0.18     | 0.13     | 0.19     |
| E.1   | BS        |       | Roof         | E         | 15          |          |          |          |          |          |          |          | 0.22     | 0.19     | 0.21     |
| E.1   | BS        |       | Roof         | E         | 17          |          |          |          |          |          |          |          | 0.27     | 0.22     | 0.28     |
| E.1   | BS        |       | Roof         | E         | 18          |          |          |          |          |          |          |          | 0.11     | 0.10     | 0.18     |
| E.2   | PB        |       | Roof         | E         | 29          | 0.11     | 0.10     | 0.11     |          | 0.07     |          | 0.09     | 0.09     |          | 0.08     |
| E.2   | PB        |       | Roof         | E         | 10          | 0.11     | 0.11     | 0.12     | 0.07     |          | 0.09     |          |          |          |          |
| E.2   | PB        |       | Roof         | E         | 11          | 0.01     | 0.03     | 0.03     | 0.02     |          | 0.03     |          |          |          |          |
| E.2   | PB        |       | Roof         | E         | 12          | 0.15     | 0.15     | 0.07     | 0.07     |          | 0.04     |          |          |          |          |
| E.2   | PB        |       | Roof         | E         | 13          | 0.10     | 0.11     | 0.12     |          | 0.06     |          | 0.10     | 0.11     | 0.05     | 0.05     |
| E.2   | PB        |       | Roof         | E         | 14          | 0.12     | 0.11     | 0.11     |          | 0.07     |          | 0.10     | 0.11     |          | 0.07     |
| E.2   | PB        |       | Roof         | E         | 19          |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.03     |
| E.2   | PB        |       | Roof         | E         | 16          |          |          |          |          |          |          |          | 0.03     | 0.01     | 0.03     |
| E.2   | PB        |       | Roof         | E         | 15          |          |          |          |          |          |          |          | 0.02     | 0.02     | 0.02     |
| E.2   | PB        |       | Roof         | E         | 17          |          |          |          |          |          |          |          | 0.10     | 0.07     | 0.07     |
| E.2   | PB        |       | Roof         | E         | 18          |          |          |          |          |          |          |          | 0.08     | 0.07     | 0.08     |
| E.3   | PF        |       | Roof         | E         | 29          | 0.05     | 0.05     | 0.03     |          | 0.04     |          | 0.04     | 0.06     |          | 0.04     |
| E.3   | PF        |       | Roof         | E         | 10          | 0.04     | 0.07     | 0.03     | 0.04     |          | 0.06     |          |          |          |          |
| E.3   | PF        |       | Roof         | E         | 11          | 0.01     | 0.02     | 0.01     | 0.02     |          | 0.02     |          |          |          |          |
| E.3   | PF        |       | Roof         | E         | 12          | 0.01     | 0.01     | 0.01     | 0.02     |          | 0.01     |          |          |          |          |
| E.3   | PF        |       | Roof         | E         | 13          | 0.04     | 0.06     | 0.03     |          | 0.04     |          | 0.05     | 0.04     | 0.02     | 0.04     |
| E.3   | PF        |       | Roof         | E         | 14          | 0.05     | 0.05     | 0.03     |          | 0.06     |          | 0.06     | 0.07     |          | 0.05     |
| E.3   | PF        |       | Roof         | E         | 19          |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.003    |
| E.3   | PF        |       | Roof         | E         | 16          |          |          |          |          |          |          |          | 0.01     | 0.01     | 0.01     |
| E.3   | PF        |       | Roof         | E         | 15          |          |          |          |          |          |          |          | 0.01     | 0.02     | 0.01     |
| E.3   | PF        |       | Roof         | E         | 17          |          |          |          |          |          |          |          | 0.06     | 0.04     | 0.04     |
| E.3   | PF        |       | Roof         | E         | 18          |          |          |          |          |          |          |          | 0.07     | 0.04     | 0.03     |

**Table E.5**  
**LMR UHF R1 MPE Variability Test**

Notes:

\*Configuration required SAR simulations.

|   |
|---|
| Bystander measurement at initial mounting location                          |
| Bystander measurement at 10cm antenna offset from initial mounting location |

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | MPE Variability (%) |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|---------------------|
| Roof         | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 118.0           | 406.5000      | 0.16                                 | 0.27      | 60.3                | 0.16                |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.164                                | 0.27      | 60.4                |                     |
| Roof         | BS         | E         | 10          | HAE6010A, 1/2 Wave (380-433MHz)    | 120         | 113.0           | 419.5000      | 0.14                                 | 0.28      | 51.6                | 3.23                |
|              |            |           |             |                                    |             | 113.0           | 419.5000      | 0.149                                | 0.28      | 53.2                |                     |
| Roof         | BS         | E         | 11          | HAE6011A, 5/8 Wave (380-433MHz)    | 120         | 118.0           | 406.5000      | 0.17                                 | 0.27      | 62.9                | -0.68               |
|              |            |           |             |                                    |             | 118.0           | 406.5000      | 0.169                                | 0.27      | 62.4                |                     |
| Roof         | BS         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 111.0           | 422.0125      | 0.24                                 | 0.28      | 84.7                | 3.12                |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.246                                | 0.28      | 87.3                |                     |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.25                                 | 0.29      | 86.7                | -13.74              |
|              |            |           |             |                                    |             | 108.0           | 438.0125      | 0.218                                | 0.29      | 74.8                |                     |
| Roof         | BS         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)    | 120         | 111.0           | 422.0125      | 0.23                                 | 0.28      | 83.1                | -6.11               |
|              |            |           |             |                                    |             | 111.0           | 422.0125      | 0.220                                | 0.28      | 78.0                |                     |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.25                                 | 0.30      | 83.8                | -6.75               |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.234                                | 0.30      | 78.1                |                     |
| Roof         | BS         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz)  | 120         | 116.0           | 469.9875      | 0.18                                 | 0.31      | 55.7                | -2.30               |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.171                                | 0.31      | 54.4                |                     |
| Roof         | BS         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.18                                 | 0.30      | 60.1                | -8.37               |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.165                                | 0.30      | 55.0                |                     |
| Roof         | BS         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.22                                 | 0.30      | 73.5                | 3.01                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.227                                | 0.30      | 75.7                |                     |

**Table E.5 (Continued)**  
**LMR UHF R1 MPE Variability Test**

Notes:

\*Configuration required SAR simulations.

|   |
|---|
| Bystander measurement at initial mounting location                          |
| Bystander measurement at 10cm antenna offset from initial mounting location |

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | MPE Variability (%) |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|---------------------|
| Roof         | BS         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz) | 120         | 119.0           | 450.0125      | 0.27                                 | 0.30      | 89.9                | -12.43              |
|              |            |           |             |                                 |             | 119.0           | 450.0125      | 0.236                                | 0.30      | 78.7                |                     |
| Roof         | BS         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz) | 120         | 116.0           | 469.9875      | 0.18                                 | 0.31      | 56.2                | -5.06               |
|              |            |           |             |                                 |             | 116.0           | 469.9875      | 0.167                                | 0.31      | 53.3                |                     |

**Appendix F – MPE Test Results Summary for UHF R2**

**Table F.1**

MPE assessment for LMR UHF R2- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 119.0           | 450.0125      | 0.164                                | 0.30      | 54.8                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.140                                | 0.31      | 44.8                |
|              |            |           |             |                                    |             | 118.0           | 482.5000      | 0.168                                | 0.32      | 52.1                |
|              |            |           |             |                                    | 48          | 47.4            | 496.5000      | 0.068                                | 0.33      | 20.5                |
|              |            |           |             |                                    |             | 47.9            | 511.9875      | 0.063                                | 0.34      | 18.5                |
|              |            |           |             |                                    |             | 30              | 29.9          | 519.9875                             | 0.038     | 0.35                |
| Roof         | BS         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 119             | 450.0125      | 0.193                                | 0.30      | 64.4                |
|              |            |           |             |                                    |             | 120             | 460.0000      | 0.174                                | 0.31      | 56.7                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.16                                 | 0.31      | 49.5                |
| Roof         | BS         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)    | 120         | 119.0           | 450.0125      | 0.251                                | 0.30      | 83.8                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.208                                | 0.31      | 66.4                |
|              |            |           |             |                                    |             | 118.0           | 482.5000      | 0.250                                | 0.32      | 77.8                |
|              |            |           |             |                                    | 48          | 47.4            | 496.5000      | 0.097                                | 0.33      | 29.3                |
|              |            |           |             |                                    |             | 47.9            | 511.9875      | 0.111                                | 0.34      | 32.5                |
|              |            |           |             |                                    | 30          | 29.9            | 519.9875      | 0.043                                | 0.35      | 12.3                |
| Roof         | BS         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz)  | 120         | 119.0           | 450.0125      | 0.125                                | 0.30      | 41.5                |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.112                                | 0.31      | 36.5                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.175                                | 0.31      | 55.7                |
| Roof         | BS         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.180                                | 0.30      | 60.1                |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.135                                | 0.31      | 44.0                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.187                                | 0.31      | 59.8                |
| Roof         | BS         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.221                                | 0.30      | 73.5                |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.190                                | 0.31      | 61.8                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.210                                | 0.31      | 67.0                |

**Table F.1 (Continued)**

MPE assessment for LMR UHF R2- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | BS         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz)   | 120         | 119.0           | 450.0125      | 0.27                                 | 0.30      | <b>89.9</b>         |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.224                                | 0.31      | 72.9                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.23                                 | 0.31      | 72.4                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.249                                | 0.32      | 77.3                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.108                                | 0.33      | 32.6                |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.104                                | 0.34      | 30.4                |
|              |            |           |             |                                   | 30          | 29.9            | 519.9875      | 0.049                                | 0.35      | 14.1                |
| Roof         | BS         | E         | 21          | HAE4012A, 1/2 Wave (470-495MHz)   | 120         | 116.0           | 470.0125      | 0.170                                | 0.31      | 54.1                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.152                                | 0.32      | 47.3                |
|              |            |           |             |                                   | 48          | 47.4            | 494.9875      | 0.051                                | 0.33      | 15.6                |
| Roof         | BS         | E         | 20          | HAE4004A, 1/4 Wave (470-512MHz)   | 120         | 116.0           | 470.0125      | 0.045                                | 0.31      | 14.4                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.096                                | 0.32      | 29.7                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.090                                | 0.33      | 27.3                |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.058                                | 0.34      | 17.0                |
| Roof         | BS         | E         | 22          | HAE4013A, 1/2 Wave (494-512MHz)   | 48          | 47.4            | 494.9875      | 0.096                                | 0.33      | 29.0                |
|              |            |           |             |                                   |             | 47.8            | 503.0000      | 0.074                                | 0.34      | 22.2                |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.069                                | 0.34      | 20.1                |
| Roof         | BS         | E         | 24          | RAE4016ARB, 5/8 Wave (494-512MHz) | 48          | 47.4            | 494.9875      | 0.042                                | 0.33      | 12.8                |
|              |            |           |             |                                   |             | 47.8            | 503.0000      | 0.056                                | 0.34      | 16.8                |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.060                                | 0.34      | 17.5                |
| Roof         | BS         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz)   | 120         | 119.0           | 450.0125      | 0.111                                | 0.30      | 36.9                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.099                                | 0.31      | 32.3                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.176                                | 0.31      | 56.2                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.182                                | 0.32      | 56.5                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.066                                | 0.33      | 19.9                |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.078                                | 0.34      | 22.9                |
| Roof         | BS         | E         | 23          | RAE4015ARM, 5/8 Wave (470-494MHz) | 120         | 116.0           | 470.0125      | 0.149                                | 0.31      | 47.4                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.131                                | 0.32      | 40.8                |
|              |            |           |             |                                   | 48          | 47.3            | 493.9875      | 0.023                                | 0.33      | 6.9                 |

**Table F.2**

**MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz)   | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit    | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|-----------------|--------------------------------------|--------------|---------------------|
| Roof         | PB         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 119.0           | 450.0125        | 0.094                                | 0.30         | 31.5                |
|              |            |           |             |                                    |             | 116.0           | 469.9875        | 0.075                                | 0.31         | 24.1                |
|              |            |           |             |                                    |             | 118.0           | 482.5000        | 0.088                                | 0.32         | 27.4                |
|              |            |           |             |                                    | 48          | 47.4            | 496.5000        | 0.032                                | 0.33         | 9.7                 |
|              |            |           |             |                                    |             | 47.9            | 511.9875        | 0.020                                | 0.34         | 5.9                 |
|              |            |           |             |                                    |             | 30              | <b>29.9</b>     | <b>519.9875</b>                      | <b>0.013</b> | <b>0.35</b>         |
| Roof         | PB         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 119             | 450.0125        | 0.111                                | 0.30         | <b>37.1</b>         |
|              |            |           |             |                                    |             | 120             | 460.0000        | 0.049                                | 0.31         | 15.9                |
|              |            |           |             |                                    |             | 116             | 469.9875        | 0.055                                | 0.31         | 17.4                |
| Roof         | PB         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)    | 120         | 119.0           | 450.0125        | 0.105                                | 0.30         | 35.0                |
|              |            |           |             |                                    |             | 116.0           | 469.9875        | 0.073                                | 0.31         | 23.4                |
|              |            |           |             |                                    |             | 118.0           | 482.5000        | 0.102                                | 0.32         | 31.6                |
|              |            |           |             |                                    | 48          | 47.4            | 496.5000        | 0.030                                | 0.33         | 9.0                 |
|              |            |           |             |                                    |             | 47.9            | 511.9875        | 0.018                                | 0.34         | 5.2                 |
|              |            |           |             |                                    | 30          | <b>29.9</b>     | <b>519.9875</b> | <b>0.009</b>                         | <b>0.35</b>  | <b>2.6</b>          |
| Roof         | PB         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz)  | 120         | 119.0           | 450.0125        | 0.014                                | 0.30         | 4.8                 |
|              |            |           |             |                                    |             | 120.0           | 460.0000        | 0.012                                | 0.31         | 3.8                 |
|              |            |           |             |                                    |             | 116.0           | 469.9875        | 0.028                                | 0.31         | 9.0                 |
| Roof         | PB         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)    | 120         | 119.0           | 450.0125        | 0.026                                | 0.30         | 8.5                 |
|              |            |           |             |                                    |             | 120.0           | 460.0000        | 0.015                                | 0.31         | 4.9                 |
|              |            |           |             |                                    |             | 116.0           | 469.9875        | 0.031                                | 0.31         | 10.0                |
| Roof         | PB         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)    | 120         | 119.0           | 450.0125        | 0.019                                | 0.30         | 6.2                 |
|              |            |           |             |                                    |             | 120.0           | 460.0000        | 0.022                                | 0.31         | 7.0                 |
|              |            |           |             |                                    |             | 116.0           | 469.9875        | 0.018                                | 0.31         | 5.8                 |



**Table F.2 (Continued)**

MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz)   | 120         | 119.0           | 450.0125      | 0.097                                | 0.30      | 32.3                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.068                                | 0.31      | 22.2                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.072                                | 0.31      | 23.1                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.095                                | 0.32      | 29.7                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.033                                | 0.33      | 10.1                |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.019                                | 0.34      | 5.5                 |
| 30           | 29.9       | 519.9875  | 0.010       | 0.35                              | 2.9         |                 |               |                                      |           |                     |
| Roof         | PB         | E         | 21          | HAE4012A, 1/2 Wave (470-495MHz)   | 120         | 116.0           | 470.0125      | 0.041                                | 0.31      | 13.1                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.037                                | 0.32      | 11.6                |
|              |            |           |             |                                   | 48          | 47.4            | 494.9875      | 0.009                                | 0.33      | 2.8                 |
| Roof         | PB         | E         | 20          | HAE4004A, 1/4 Wave (470-512MHz)   | 120         | 116.0           | 470.0125      | 0.024                                | 0.31      | 7.7                 |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.051                                | 0.32      | 15.9                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.027                                | 0.33      | 8.2                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.011                                | 0.34      | 3.2                 |
| Roof         | PB         | E         | 22          | HAE4013A, 1/2 Wave (494-512MHz)   | 48          | 47.4            | 494.9875      | 0.012                                | 0.33      | 3.8                 |
|              |            |           |             |                                   |             | 47.8            | 503.0000      | 0.005                                | 0.34      | 1.6                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.003                                | 0.34      | 0.9                 |
| Roof         | PB         | E         | 24          | RAE4016ARB, 5/8 Wave (494-512MHz) | 48          | 47.4            | 494.9875      | 0.008                                | 0.33      | 2.5                 |
|              |            |           |             |                                   |             | 47.8            | 503.0000      | 0.004                                | 0.34      | 1.3                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.003                                | 0.34      | 1.0                 |
| Roof         | PB         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz)   | 120         | 119.0           | 450.0125      | 0.075                                | 0.30      | 25.1                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.068                                | 0.31      | 22.2                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.075                                | 0.31      | 24.1                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.075                                | 0.32      | 23.4                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.034                                | 0.33      | 10.3                |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.014                                | 0.34      | 4.0                 |
| Roof         | PB         | E         | 23          | RAE4015ARM, 5/8 Wave (470-494MHz) | 120         | 116.0           | 470.0125      | 0.011                                | 0.31      | 3.6                 |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.017                                | 0.32      | 5.4                 |
|              |            |           |             |                                   | 48          | 47.3            | 493.9875      | 0.001                                | 0.33      | 0.4                 |

**Table F.3**

MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 120         | 119.0           | 450.0125      | 0.059                                | 0.30      | 19.8                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.036                                | 0.31      | 11.4                |
|              |            |           |             |                                    |             | 118.0           | 482.5000      | 0.045                                | 0.32      | 14.0                |
|              |            |           |             |                                    | 48          | 47.4            | 496.5000      | 0.026                                | 0.33      | 7.7                 |
|              |            |           |             |                                    |             | 47.9            | 511.9875      | 0.025                                | 0.34      | 7.2                 |
|              |            |           |             |                                    |             | 30              | 29.9          | 519.9875                             | 0.017     | 0.35                |
| Roof         | PB         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 119             | 450.0125      | 0.045                                | 0.30      | 14.9                |
|              |            |           |             |                                    |             | 120             | 460.0000      | 0.024                                | 0.31      | 7.7                 |
|              |            |           |             |                                    |             | 116             | 469.9875      | 0.038                                | 0.31      | 12.0                |
| Roof         | PB         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)    | 120         | 119.0           | 450.0125      | 0.065                                | 0.30      | 21.7                |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.050                                | 0.31      | 16.0                |
|              |            |           |             |                                    |             | 118.0           | 482.5000      | 0.065                                | 0.32      | 20.2                |
|              |            |           |             |                                    | 48          | 47.4            | 496.5000      | 0.025                                | 0.33      | 7.4                 |
|              |            |           |             |                                    |             | 47.9            | 511.9875      | 0.025                                | 0.34      | 7.2                 |
|              |            |           |             |                                    |             | 30              | 29.9          | 519.9875                             | 0.011     | 0.35                |
| Roof         | PB         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz)  | 120         | 119.0           | 450.0125      | 0.011                                | 0.30      | 3.8                 |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.011                                | 0.31      | 3.5                 |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.003                                | 0.31      | 0.8                 |
| Roof         | PB         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.009                                | 0.30      | 3.1                 |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.008                                | 0.31      | 2.5                 |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.011                                | 0.31      | 3.6                 |
| Roof         | PB         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.015                                | 0.30      | 4.9                 |
|              |            |           |             |                                    |             | 120.0           | 460.0000      | 0.017                                | 0.31      | 5.4                 |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.007                                | 0.31      | 2.2                 |

**Table F.6 (Continued)**

MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                     | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|-----------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|
| Roof         | PB         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz)   | 120         | 119.0           | 450.0125      | 0.059                                | 0.30      | 19.5                |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.040                                | 0.31      | 13.1                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.041                                | 0.31      | 13.0                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.050                                | 0.32      | 15.4                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.022                                | 0.33      | 6.7                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.020                                | 0.34      | 6.0                 |
| 30           | 29.9       | 519.9875  | 0.014       | 0.35                              | 3.9         |                 |               |                                      |           |                     |
| Roof         | PB         | E         | 21          | HAE4012A, 1/2 Wave (470-495MHz)   | 120         | 116.0           | 470.0125      | 0.021                                | 0.31      | 6.8                 |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.013                                | 0.32      | 4.0                 |
|              |            |           |             |                                   | 48          | 47.4            | 494.9875      | 0.005                                | 0.33      | 1.5                 |
| Roof         | PB         | E         | 20          | HAE4004A, 1/4 Wave (470-512MHz)   | 120         | 116.0           | 470.0125      | 0.009                                | 0.31      | 2.8                 |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.023                                | 0.32      | 7.1                 |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.007                                | 0.33      | 2.2                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.002                                | 0.34      | 0.7                 |
| Roof         | PB         | E         | 22          | HAE4013A, 1/2 Wave (494-512MHz)   | 48          | 47.4            | 494.9875      | 0.008                                | 0.33      | 2.4                 |
|              |            |           |             |                                   |             | 47.8            | 503.0000      | 0.009                                | 0.34      | 2.7                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.004                                | 0.34      | 1.2                 |
| Roof         | PB         | E         | 24          | RAE4016ARB, 5/8 Wave (494-512MHz) | 48          | 47.4            | 494.9875      | 0.004                                | 0.33      | 1.2                 |
|              |            |           |             |                                   |             | 47.8            | 503.0000      | 0.007                                | 0.34      | 2.1                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.004                                | 0.34      | 1.2                 |
| Roof         | PB         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz)   | 120         | 119.0           | 450.0125      | 0.068                                | 0.30      | <b>22.6</b>         |
|              |            |           |             |                                   |             | 120.0           | 460.0000      | 0.042                                | 0.31      | 13.7                |
|              |            |           |             |                                   |             | 116.0           | 469.9875      | 0.034                                | 0.31      | 11.0                |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.039                                | 0.32      | 12.1                |
|              |            |           |             |                                   | 48          | 47.4            | 496.5000      | 0.019                                | 0.33      | 5.9                 |
|              |            |           |             |                                   |             | 47.9            | 511.9875      | 0.025                                | 0.34      | 7.4                 |
| Roof         | PB         | E         | 23          | RAE4015ARM, 5/8 Wave (470-494MHz) | 120         | 116.0           | 470.0125      | 0.017                                | 0.31      | 5.3                 |
|              |            |           |             |                                   |             | 118.0           | 482.5000      | 0.009                                | 0.32      | 2.7                 |
|              |            |           |             |                                   | 48          | 47.3            | 493.9875      | 0.001                                | 0.33      | 0.4                 |

**Table F.4**  
**LMR UHF R2 MPE Results for FCC**

Note:  
Blue fonts: Frequencies not regulated by FCC.

|          |           |              |                                |       |       |       |       |      |      |      |      |      |      |
|----------|-----------|--------------|--------------------------------|-------|-------|-------|-------|------|------|------|------|------|------|
| Pmax (W) | 120/48/30 | Pinitial (W) | 119.0                          | 120.0 | 116.0 | 116.0 | 118.0 | 47.3 | 47.4 | 47.4 | 47.8 | 47.9 | 29.9 |
|          |           |              | FCCLimit (mW/cm <sup>2</sup> ) | 0.25  | 0.26  | 0.27  | 0.28  | 0.28 | 0.29 | 0.29 | 0.30 | 0.31 | 0.31 |

| Table | Test Post | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       | f6       | f7       | f8       | f9       | f10      | f11      |
|-------|-----------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |           |       |              |           |             | 450.0125 | 460.0000 | 469.9875 | 470.0125 | 482.5000 | 493.9875 | 494.9875 | 496.5000 | 503.0000 | 511.9875 | 519.9875 |
| F.1   | BS        |       | Roof         | E         | 29          | 0.158    |          | 0.186    |          | 0.168    |          |          | 0.068    |          | 0.063    | 0.038    |
| F.1   | BS        |       | Roof         | E         | 13          | 0.271    | 0.174    | 0.234    |          |          |          |          |          |          |          |          |
| F.1   | BS        |       | Roof         | E         | 14          | 0.234    |          | 0.268    |          | 0.250    |          |          | 0.097    |          | 0.111    | 0.043    |
| F.1   | BS        |       | Roof         | E         | 19          | 0.125    | 0.112    | 0.175    |          |          |          |          |          |          |          |          |
| F.1   | BS        |       | Roof         | E         | 16          | 0.180    | 0.135    | 0.187    |          |          |          |          |          |          |          |          |
| F.1   | BS        |       | Roof         | E         | 15          | 0.221    | 0.190    | 0.210    |          |          |          |          |          |          |          |          |
| F.1   | BS        |       | Roof         | E         | 17          | 0.270    | 0.244    | 0.284    |          | 0.249    |          |          | 0.108    |          | 0.104    | 0.049    |
| F.1   | BS        |       | Roof         | E         | 21          |          |          |          | 0.241    | 0.166    | 0.058    |          |          |          |          |          |
| F.1   | BS        |       | Roof         | E         | 20          |          |          |          | 0.045    | 0.096    |          |          | 0.090    |          | 0.058    |          |
| F.1   | BS        |       | Roof         | E         | 22          |          |          |          |          |          |          | 0.096    |          | 0.074    | 0.069    |          |
| F.1   | BS        |       | Roof         | E         | 24          |          |          |          |          |          |          | 0.042    |          | 0.056    | 0.060    |          |
| F.1   | BS        |       | Roof         | E         | 18          | 0.111    | 0.099    | 0.176    |          | 0.182    |          |          | 0.066    |          | 0.078    |          |
| F.1   | BS        |       | Roof         | E         | 23          |          |          |          | 0.149    | 0.131    | 0.023    |          |          |          |          |          |
| F.2   | PB        |       | Roof         | E         | 29          | 0.094    |          | 0.075    |          | 0.088    |          |          | 0.032    |          | 0.020    | 0.013    |
| F.2   | PB        |       | Roof         | E         | 13          | 0.111    | 0.049    | 0.055    |          |          |          |          |          |          |          |          |
| F.2   | PB        |       | Roof         | E         | 14          | 0.105    |          | 0.073    |          | 0.102    |          |          | 0.030    |          | 0.018    | 0.009    |
| F.2   | PB        |       | Roof         | E         | 19          | 0.014    | 0.012    | 0.028    |          |          |          |          |          |          |          |          |
| F.2   | PB        |       | Roof         | E         | 16          | 0.026    | 0.015    | 0.031    |          |          |          |          |          |          |          |          |
| F.2   | PB        |       | Roof         | E         | 15          | 0.019    | 0.022    | 0.018    |          |          |          |          |          |          |          |          |
| F.2   | PB        |       | Roof         | E         | 17          | 0.097    | 0.068    | 0.072    |          | 0.095    |          |          | 0.033    |          | 0.019    | 0.010    |
| F.2   | PB        |       | Roof         | E         | 21          |          |          |          | 0.041    | 0.037    |          | 0.009    |          |          |          |          |
| F.2   | PB        |       | Roof         | E         | 20          |          |          |          | 0.024    | 0.051    |          |          | 0.027    |          | 0.011    |          |
| F.2   | PB        |       | Roof         | E         | 22          |          |          |          |          |          |          | 0.012    |          | 0.005    | 0.003    |          |
| F.2   | PB        |       | Roof         | E         | 24          |          |          |          |          |          |          | 0.008    |          | 0.004    | 0.003    |          |
| F.2   | PB        |       | Roof         | E         | 18          | 0.075    | 0.068    | 0.075    |          | 0.075    |          |          | 0.034    |          | 0.014    |          |
| F.2   | PB        |       | Roof         | E         | 23          |          |          |          | 0.011    | 0.017    | 0.001    |          |          |          |          |          |

**Table F.4 (Continued)**  
**LMR UHF R2 MPE Results for FCC**

Note:  
Blue fonts: Frequencies not regulated by FCC.

|          |           |              |                                |       |       |       |       |      |      |      |      |      |      |
|----------|-----------|--------------|--------------------------------|-------|-------|-------|-------|------|------|------|------|------|------|
| Pmax (W) | 120/48/30 | Pinitial (W) | 119.0                          | 120.0 | 116.0 | 116.0 | 118.0 | 47.3 | 47.4 | 47.4 | 47.8 | 47.9 | 29.9 |
|          |           |              | FCCLimit (mW/cm <sup>2</sup> ) | 0.25  | 0.26  | 0.27  | 0.28  | 0.28 | 0.29 | 0.29 | 0.30 | 0.31 | 0.31 |

| Table | Test Post | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       | f6       | f7       | f8       | f9       | f10      | f11      |
|-------|-----------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |           |       |              |           |             | 450.0125 | 460.0000 | 469.9875 | 470.0125 | 482.5000 | 493.9875 | 494.9875 | 496.5000 | 503.0000 | 511.9875 | 519.9875 |
| F.6   | PF        |       | Roof         | E         | 29          | 0.059    |          | 0.036    |          | 0.045    |          |          | 0.026    |          | 0.025    | 0.017    |
| F.6   | PF        |       | Roof         | E         | 13          | 0.045    | 0.024    | 0.038    |          |          |          |          |          |          |          |          |
| F.6   | PF        |       | Roof         | E         | 14          | 0.065    |          | 0.050    |          | 0.065    |          |          | 0.025    |          | 0.025    | 0.011    |
| F.6   | PF        |       | Roof         | E         | 19          | 0.011    | 0.011    | 0.003    |          |          |          |          |          |          |          |          |
| F.6   | PF        |       | Roof         | E         | 16          | 0.009    | 0.008    | 0.011    |          |          |          |          |          |          |          |          |
| F.6   | PF        |       | Roof         | E         | 15          | 0.015    | 0.017    | 0.007    |          |          |          |          |          |          |          |          |
| F.6   | PF        |       | Roof         | E         | 17          | 0.059    | 0.040    | 0.041    |          | 0.050    |          |          | 0.022    |          | 0.020    | 0.014    |
| F.6   | PF        |       | Roof         | E         | 21          |          |          |          | 0.021    | 0.013    |          | 0.005    |          |          |          |          |
| F.6   | PF        |       | Roof         | E         | 20          |          |          |          | 0.009    | 0.023    |          |          | 0.007    |          | 0.002    |          |
| F.6   | PF        |       | Roof         | E         | 22          |          |          |          |          |          |          | 0.008    |          | 0.009    | 0.004    |          |
| F.6   | PF        |       | Roof         | E         | 24          |          |          |          |          |          |          | 0.004    |          | 0.007    | 0.004    |          |
| F.6   | PF        |       | Roof         | E         | 18          | 0.068    | 0.042    | 0.034    |          | 0.039    |          |          | 0.019    |          | 0.025    |          |
| F.6   | PF        |       | Roof         | E         | 23          |          |          |          | 0.017    | 0.009    | 0.001    |          |          |          |          |          |

**Table F.5**  
**LMR UHF R2 MPE Variability Test**

Notes:

\*Configuration required SAR simulations.

|   |
|---|
| Bystander measurement at initial mounting location                          |
| Bystander measurement at 10cm antenna offset from initial mounting location |

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit | % To FCC Spec Limit | MPE Variability (%) |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|-----------|---------------------|---------------------|
| Roof         | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | Roof        | 119.0           | 450.0125      | 0.164                                | 0.30      | 54.8                | -5.35               |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.156                                | 0.30      | 51.8                |                     |
| Roof         | BS         | E         | 13          | HAE6013A, 1/2 Wave (380-470MHz)    | 120         | 119             | 450.0125      | 0.193                                | 0.30      | 64.4                | 1.36                |
|              |            |           |             |                                    |             | 119             | 450.0125      | 0.196                                | 0.30      | 65.3                |                     |
| Roof         | BS         | E         | 14          | HAE6031A, 1/2 Wave (380-520MHz)    | Roof        | 119.0           | 450.0125      | 0.251                                | 0.30      | 83.8                | -6.75               |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.234                                | 0.30      | 78.1                |                     |
| Roof         | BS         | E         | 19          | RAE4014ARB, 5/8 Wave (445-470MHz)  | 120         | 116.0           | 469.9875      | 0.175                                | 0.31      | 55.7                | -2.30               |
|              |            |           |             |                                    |             | 116.0           | 469.9875      | 0.171                                | 0.31      | 54.4                |                     |
| Roof         | BS         | E         | 16          | HAE4011A, 1/2 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.180                                | 0.30      | 60.1                | -8.37               |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.165                                | 0.30      | 55.0                |                     |
| Roof         | BS         | E         | 15          | HAE4003A, 1/4 Wave (450-470MHz)    | 120         | 119.0           | 450.0125      | 0.221                                | 0.30      | 73.5                | 3.01                |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.227                                | 0.30      | 75.7                |                     |
| Roof         | BS         | E         | 17          | HAE6015A, 1/2 Wave (450-520MHz)    | 120         | 119.0           | 450.0125      | 0.27                                 | 0.30      | 89.9                | -12.43              |
|              |            |           |             |                                    |             | 119.0           | 450.0125      | 0.236                                | 0.30      | 78.7                |                     |
| Roof         | BS         | E         | 21          | HAE4012A, 1/2 Wave (470-495MHz)    | 120         | 116.0           | 470.0125      | 0.170                                | 0.31      | 54.1                | -4.23               |
|              |            |           |             |                                    |             | 116.0           | 470.0125      | 0.162                                | 0.31      | 51.8                |                     |
| Roof         | BS         | E         | 18          | HAE6016A, 1/4 Wave (450-512MHz)    | 120         | 118.0           | 482.5000      | 0.182                                | 0.32      | 56.5                | 5.08                |
|              |            |           |             |                                    |             | 118.0           | 482.5000      | 0.191                                | 0.32      | 59.4                |                     |

**Appendix G – MPE Test Results Summary for 7/800 band**

**Table G.1**

MPE assessment for LMR 7/800 band - trunk mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Trunk        | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 36          | 35.4            | 764.0875      | 0.076                                | 0.51                            | 14.9                |
|              |            |           |             |                                    |             | 35.8            | 770.0125      | 0.070                                | 0.51                            | 13.6                |
|              |            |           |             |                                    |             | 34.9            | 775.9125      | 0.081                                | 0.52                            | 15.7                |
|              |            |           |             |                                    |             | 35.9            | 794.0875      | 0.072                                | 0.53                            | 13.5                |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.072                                | 0.54                            | 13.5                |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.058                                | 0.55                            | 10.6                |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.031                                | 0.57                            | 5.5                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.037                                | 0.57                            | 6.5                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.032                                | 0.58                            | 5.5                 |
|              |            |           |             |                                    | Trunk       | BS              | E             | 25                                   | HAF4013A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.070     | 0.51        | 13.5                               |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.072     | 0.52        | 13.9                               |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.073     | 0.53        | 13.8                               |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.078       | 0.54                               |             |                 |               |                                      |                                 | 14.6                |
|              | 41.6       | 823.9875  | 0.060       | 0.55                               |             |                 |               |                                      |                                 | 10.9                |
|              | 41.7       | 851.0125  | 0.062       | 0.57                               |             |                 |               |                                      |                                 | 11.0                |
|              | 41.7       | 862.0125  | 0.063       | 0.57                               |             |                 |               |                                      |                                 | 11.0                |
|              | 41.8       | 868.8875  | 0.063       | 0.58                               |             |                 |               |                                      |                                 | 10.9                |
| Trunk        | BS         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz)    |             |                 |               |                                      |                                 | 36                  |
|              |            |           |             |                                    | 35.8        | 770.0125        | 0.043         | 0.51                                 | 8.5                             |                     |
|              |            |           |             |                                    | 34.9        | 775.9125        | 0.041         | 0.52                                 | 7.9                             |                     |
|              |            |           |             |                                    | 35.9        | 794.0875        | 0.055         | 0.53                                 | 10.5                            |                     |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.062                                | 0.54                            | 11.6                |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.082                                | 0.55                            | 15.0                |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.101                                | 0.57                            | 17.8                |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.099                                | 0.57                            | 17.2                |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.081                                | 0.58                            | 14.1                |



**Table G.1 (Continued)**

MPE assessment for LMR 7/800 band - trunk mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Trunk        | BS         | E         | 27          | HAF4016A, 1/4 Wave (764-870MHz) | 36          | 35.4            | 764.0875      | 0.073                                | 0.51                            | 14.3                |
|              |            |           |             |                                 |             | 35.8            | 770.0125      | 0.065                                | 0.51                            | 12.7                |
|              |            |           |             |                                 |             | 34.9            | 775.9125      | 0.067                                | 0.52                            | 12.9                |
|              |            |           |             |                                 |             | 35.9            | 794.0875      | 0.069                                | 0.53                            | 13.1                |
|              |            |           |             |                                 | 42          | 41.2            | 806.0125      | 0.077                                | 0.54                            | 14.4                |
|              |            |           |             |                                 |             | 41.6            | 823.9875      | 0.058                                | 0.55                            | 10.5                |
|              |            |           |             |                                 |             | 41.7            | 851.0125      | 0.057                                | 0.57                            | 10.0                |
|              |            |           |             |                                 |             | 41.7            | 862.0125      | 0.059                                | 0.57                            | 10.3                |
|              |            |           |             |                                 |             | 41.8            | 868.8875      | 0.057                                | 0.58                            | 9.8                 |
|              |            |           |             |                                 | Trunk       | BS              | E             | 28                                   | HAF4017A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.049     | 0.51        | 9.6                             |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.055     | 0.52        | 10.7                            |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.061     | 0.53        | 11.4                            |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.069       | 0.54                            |             |                 |               |                                      |                                 | 12.9                |
|              | 41.6       | 823.9875  | 0.054       | 0.55                            |             |                 |               |                                      |                                 | 9.8                 |
|              | 41.7       | 851.0125  | 0.057       | 0.57                            |             |                 |               |                                      |                                 | 10.0                |
|              | 41.7       | 862.0125  | 0.059       | 0.57                            |             |                 |               |                                      |                                 | 10.2                |
|              | 41.8       | 868.8875  | 0.051       | 0.58                            |             |                 |               |                                      |                                 | 8.8                 |
| 45 Degree    |            |           |             |                                 |             |                 |               |                                      |                                 |                     |
| Trunk        | BS         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz) | 42          | 41.7            | 851.0125      | 0.088                                | 0.57                            | 15.5                |
| 90 Degree    |            |           |             |                                 |             |                 |               |                                      |                                 |                     |
| Trunk        | BS         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz) | 42          | 41.7            | 851.0125      | 0.130                                | 0.57                            | <b>22.9</b>         |

**Table G.2**

MPE assessment for LMR 7/800 band - roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Roof         | BS         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 36          | 35.4            | 764.0875      | 0.047                                | 0.51                            | 9.3                 |
|              |            |           |             |                                    |             | 35.8            | 770.0125      | 0.046                                | 0.51                            | 8.9                 |
|              |            |           |             |                                    |             | 34.9            | 775.9125      | 0.048                                | 0.52                            | 9.3                 |
|              |            |           |             |                                    |             | 35.9            | 794.0875      | 0.050                                | 0.53                            | 9.5                 |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.054                                | 0.54                            | 10.1                |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.049                                | 0.55                            | 8.9                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.034                                | 0.57                            | 6.0                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.031                                | 0.57                            | 5.3                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.023                                | 0.58                            | 4.0                 |
|              |            |           |             |                                    | Roof        | BS              | E             | 25                                   | HAF4013A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.033     | 0.51        | 6.5                                |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.033     | 0.52        | 6.3                                |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.041     | 0.53        | 7.7                                |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.048       | 0.54                               |             |                 |               |                                      |                                 | 8.9                 |
|              | 41.6       | 823.9875  | 0.043       | 0.55                               |             |                 |               |                                      |                                 | 7.9                 |
|              | 41.7       | 851.0125  | 0.045       | 0.57                               |             |                 |               |                                      |                                 | 7.9                 |
|              | 41.7       | 862.0125  | 0.046       | 0.57                               |             |                 |               |                                      |                                 | 8.1                 |
|              | 41.8       | 868.8875  | 0.043       | 0.58                               |             |                 |               |                                      |                                 | 7.5                 |
| Roof         | BS         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz)    |             |                 |               |                                      |                                 | 36                  |
|              |            |           |             |                                    | 35.8        | 770.0125        | 0.032         | 0.51                                 | 6.3                             |                     |
|              |            |           |             |                                    | 34.9        | 775.9125        | 0.028         | 0.52                                 | 5.5                             |                     |
|              |            |           |             |                                    | 35.9        | 794.0875        | 0.039         | 0.53                                 | 7.3                             |                     |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.054                                | 0.54                            | 10.0                |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.052                                | 0.55                            | 9.5                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.052                                | 0.57                            | 9.2                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.053                                | 0.57                            | 9.3                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.045                                | 0.58                            | 7.7                 |

**Table G.2 (Continued)**

MPE assessment for LMR 7/800 band - roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Roof         | BS         | E         | 27          | HAF4016A, 1/4 Wave (764-870MHz) | 36          | 35.4            | 764.0875      | 0.047                                | 0.51                            | 9.3                 |
|              |            |           |             |                                 |             | 35.8            | 770.0125      | 0.044                                | 0.51                            | 8.5                 |
|              |            |           |             |                                 |             | 34.9            | 775.9125      | 0.041                                | 0.52                            | 7.9                 |
|              |            |           |             |                                 |             | 35.9            | 794.0875      | 0.045                                | 0.53                            | 8.6                 |
|              |            |           |             |                                 | 42          | 41.2            | 806.0125      | 0.056                                | 0.54                            | 10.4                |
|              |            |           |             |                                 |             | 41.6            | 823.9875      | 0.051                                | 0.55                            | 9.2                 |
|              |            |           |             |                                 |             | 41.7            | 851.0125      | 0.051                                | 0.57                            | 9.0                 |
|              |            |           |             |                                 |             | 41.7            | 862.0125      | 0.051                                | 0.57                            | 8.9                 |
|              |            |           |             |                                 |             | 41.8            | 868.8875      | 0.045                                | 0.58                            | 7.7                 |
|              |            |           |             |                                 | Roof        | BS              | E             | 28                                   | HAF4017A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.049     | 0.51        | 9.5                             |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.046     | 0.52        | 8.9                             |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.053     | 0.53        | 10.0                            |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.06        | 0.54                            |             |                 |               |                                      |                                 | 12.1                |
|              | 41.6       | 823.9875  | 0.056       | 0.55                            |             |                 |               |                                      |                                 | 10.1                |
|              | 41.7       | 851.0125  | 0.048       | 0.57                            |             |                 |               |                                      |                                 | 8.4                 |
|              | 41.7       | 862.0125  | 0.047       | 0.57                            |             |                 |               |                                      |                                 | 8.2                 |
|              | 41.8       | 868.8875  | 0.042       | 0.58                            |             |                 |               |                                      |                                 | 7.2                 |

**Table G.3**

MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Trunk        | PB         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 36          | 35.4            | 764.0875      | 0.019                                | 0.51                            | 3.7                 |
|              |            |           |             |                                    |             | 35.8            | 770.0125      | 0.023                                | 0.51                            | 4.5                 |
|              |            |           |             |                                    |             | 34.9            | 775.9125      | 0.035                                | 0.52                            | 6.8                 |
|              |            |           |             |                                    |             | 35.9            | 794.0875      | 0.039                                | 0.53                            | 7.3                 |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.044                                | 0.54                            | 8.1                 |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.035                                | 0.55                            | 6.3                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.026                                | 0.57                            | 4.7                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.026                                | 0.57                            | 4.5                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.016                                | 0.58                            | 2.8                 |
|              |            |           |             |                                    | Trunk       | PB              | E             | 25                                   | HAF4013A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.033     | 0.51        | 6.5                                |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.031     | 0.52        | 6.1                                |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.046     | 0.53        | 8.6                                |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.060       | 0.54                               |             |                 |               |                                      |                                 | 11.2                |
|              | 41.6       | 823.9875  | 0.051       | 0.55                               |             |                 |               |                                      |                                 | 9.3                 |
|              | 41.7       | 851.0125  | 0.056       | 0.57                               |             |                 |               |                                      |                                 | 9.9                 |
|              | 41.7       | 862.0125  | 0.057       | 0.57                               |             |                 |               |                                      |                                 | 9.9                 |
|              | 41.8       | 868.8875  | 0.064       | 0.58                               |             |                 |               |                                      |                                 | 11.0                |
| Trunk        | PB         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz)    |             |                 |               |                                      |                                 | 36                  |
|              |            |           |             |                                    | 35.8        | 770.0125        | 0.021         | 0.51                                 | 4.0                             |                     |
|              |            |           |             |                                    | 34.9        | 775.9125        | 0.023         | 0.52                                 | 4.5                             |                     |
|              |            |           |             |                                    | 35.9        | 794.0875        | 0.030         | 0.53                                 | 5.7                             |                     |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.072                                | 0.54                            | 13.4                |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.087                                | 0.55                            | 15.8                |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.108                                | 0.57                            | 19.0                |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.088                                | 0.57                            | 15.3                |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.058                                | 0.58                            | 10.0                |

**Table G.3 (Continued)**

MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Trunk        | PB         | E         | 27          | HAF4016A, 1/4 Wave (764-870MHz) | 36          | 35.4            | 764.0875      | 0.040                                | 0.51                            | 7.9                 |
|              |            |           |             |                                 |             | 35.8            | 770.0125      | 0.037                                | 0.51                            | 7.2                 |
|              |            |           |             |                                 |             | 34.9            | 775.9125      | 0.039                                | 0.52                            | 7.6                 |
|              |            |           |             |                                 |             | 35.9            | 794.0875      | 0.054                                | 0.53                            | 10.3                |
|              |            |           |             |                                 | 42          | 41.2            | 806.0125      | 0.0076                               | 0.54                            | 14.1                |
|              |            |           |             |                                 |             | 41.6            | 823.9875      | 0.055                                | 0.55                            | 10.0                |
|              |            |           |             |                                 |             | 41.7            | 851.0125      | 0.041                                | 0.57                            | 7.3                 |
|              |            |           |             |                                 |             | 41.7            | 862.0125      | 0.062                                | 0.57                            | 10.7                |
|              |            |           |             |                                 |             | 41.8            | 868.8875      | 0.046                                | 0.58                            | 7.9                 |
|              |            |           |             |                                 | Trunk       | PB              | E             | 28                                   | HAF4017A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.072     | 0.51        | 14.0                            |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.083     | 0.52        | 16.0                            |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.077     | 0.53        | 14.5                            |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.127       | 0.54                            |             |                 |               |                                      |                                 | <b>23.6</b>         |
|              | 41.6       | 823.9875  | 0.094       | 0.55                            |             |                 |               |                                      |                                 | 17.2                |
|              | 41.7       | 851.0125  | 0.103       | 0.57                            |             |                 |               |                                      |                                 | 18.2                |
|              | 41.7       | 862.0125  | 0.083       | 0.57                            |             |                 |               |                                      |                                 | 14.4                |
|              | 41.8       | 868.8875  | 0.064       | 0.58                            |             |                 |               |                                      |                                 | 11.1                |

**Table G.4**

MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Roof         | PB         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 36          | 35.4            | 764.0875      | 0.012                                | 0.51                            | 2.4                 |
|              |            |           |             |                                    |             | 35.8            | 770.0125      | 0.014                                | 0.51                            | 2.7                 |
|              |            |           |             |                                    |             | 34.9            | 775.9125      | 0.020                                | 0.52                            | 3.9                 |
|              |            |           |             |                                    |             | 35.9            | 794.0875      | 0.016                                | 0.53                            | 2.9                 |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.017                                | 0.54                            | 3.2                 |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.013                                | 0.55                            | 2.4                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.009                                | 0.57                            | 1.6                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.008                                | 0.57                            | 1.4                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.006                                | 0.58                            | 1.1                 |
|              |            |           |             |                                    | Roof        | PB              | E             | 25                                   | HAF4013A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.012     | 0.51        | 2.4                                |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.016     | 0.52        | 3.1                                |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.013     | 0.53        | 2.5                                |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.015       | 0.54                               |             |                 |               |                                      |                                 | 2.8                 |
|              | 41.6       | 823.9875  | 0.012       | 0.55                               |             |                 |               |                                      |                                 | 2.1                 |
|              | 41.7       | 851.0125  | 0.006       | 0.57                               |             |                 |               |                                      |                                 | 1.1                 |
|              | 41.7       | 862.0125  | 0.007       | 0.57                               |             |                 |               |                                      |                                 | 1.2                 |
|              | 41.8       | 868.8875  | 0.011       | 0.58                               |             |                 |               |                                      |                                 | 1.9                 |
| Roof         | PB         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz)    |             |                 |               |                                      |                                 | 36                  |
|              |            |           |             |                                    | 35.8        | 770.0125        | 0.001         | 0.51                                 | 0.1                             |                     |
|              |            |           |             |                                    | 34.9        | 775.9125        | 0.001         | 0.52                                 | 0.3                             |                     |
|              |            |           |             |                                    | 35.9        | 794.0875        | 0.003         | 0.53                                 | 0.6                             |                     |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.005                                | 0.54                            | 0.9                 |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.010                                | 0.55                            | 1.9                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.010                                | 0.57                            | 1.7                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.006                                | 0.57                            | 1.1                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.008                                | 0.58                            | 1.4                 |

**Table G.4 (Continued)**

MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Back

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Roof         | PB         | E         | 27          | HAF4016A, 1/4 Wave (764-870MHz) | 36          | 35.4            | 764.0875      | 0.015                                | 0.51                            | 3.0                 |
|              |            |           |             |                                 |             | 35.8            | 770.0125      | 0.017                                | 0.51                            | 3.3                 |
|              |            |           |             |                                 |             | 34.9            | 775.9125      | 0.019                                | 0.52                            | 3.7                 |
|              |            |           |             |                                 |             | 35.9            | 794.0875      | 0.015                                | 0.53                            | 2.9                 |
|              |            |           |             |                                 | 42          | 41.2            | 806.0125      | 0.016                                | 0.54                            | 3.1                 |
|              |            |           |             |                                 |             | 41.6            | 823.9875      | 0.013                                | 0.55                            | 2.4                 |
|              |            |           |             |                                 |             | 41.7            | 851.0125      | 0.006                                | 0.57                            | 1.1                 |
|              |            |           |             |                                 |             | 41.7            | 862.0125      | 0.007                                | 0.57                            | 1.2                 |
|              |            |           |             |                                 |             | 41.8            | 868.8875      | 0.008                                | 0.58                            | 1.3                 |
|              |            |           |             |                                 | Roof        | PB              | E             | 28                                   | HAF4017A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.039     | 0.51        | 7.6                             |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.04      | 0.52        | 8.4                             |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.032     | 0.53        | 6.1                             |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.030       | 0.54                            |             |                 |               |                                      |                                 | 5.5                 |
|              | 41.6       | 823.9875  | 0.020       | 0.55                            |             |                 |               |                                      |                                 | 3.7                 |
|              | 41.7       | 851.0125  | 0.010       | 0.57                            |             |                 |               |                                      |                                 | 1.8                 |
|              | 41.7       | 862.0125  | 0.007       | 0.57                            |             |                 |               |                                      |                                 | 1.2                 |
|              | 41.8       | 868.8875  | 0.012       | 0.58                            |             |                 |               |                                      |                                 | 2.0                 |

**Table G.5**

MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Trunk        | PF         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 36          | 35.4            | 764.0875      | 0.045                                | 0.51                            | 8.9                 |
|              |            |           |             |                                    |             | 35.8            | 770.0125      | 0.062                                | 0.51                            | 12.1                |
|              |            |           |             |                                    |             | 34.9            | 775.9125      | 0.058                                | 0.52                            | 11.3                |
|              |            |           |             |                                    |             | 35.9            | 794.0875      | 0.054                                | 0.53                            | 10.3                |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.045                                | 0.54                            | 8.3                 |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.041                                | 0.55                            | 7.5                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.018                                | 0.57                            | 3.2                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.013                                | 0.57                            | 2.3                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.009                                | 0.58                            | 1.6                 |
|              |            |           |             |                                    | Trunk       | PF              | E             | 25                                   | HAF4013A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.042     | 0.51        | 8.2                                |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.038     | 0.52        | 7.3                                |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.049     | 0.53        | 9.3                                |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.040       | 0.54                               |             |                 |               |                                      |                                 | 7.4                 |
|              | 41.6       | 823.9875  | 0.041       | 0.55                               |             |                 |               |                                      |                                 | 7.5                 |
|              | 41.7       | 851.0125  | 0.030       | 0.57                               |             |                 |               |                                      |                                 | 5.2                 |
|              | 41.7       | 862.0125  | 0.032       | 0.57                               |             |                 |               |                                      |                                 | 5.5                 |
|              | 41.8       | 868.8875  | 0.028       | 0.58                               |             |                 |               |                                      |                                 | 4.9                 |
| Trunk        | PF         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz)    |             |                 |               |                                      |                                 | 36                  |
|              |            |           |             |                                    | 35.8        | 770.0125        | 0.033         | 0.51                                 | 6.4                             |                     |
|              |            |           |             |                                    | 34.9        | 775.9125        | 0.028         | 0.52                                 | 5.3                             |                     |
|              |            |           |             |                                    | 35.9        | 794.0875        | 0.047         | 0.53                                 | 8.9                             |                     |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.057                                | 0.54                            | 10.7                |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.076                                | 0.55                            | 13.8                |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.055                                | 0.57                            | 9.7                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.055                                | 0.57                            | 9.6                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.046                                | 0.58                            | 7.9                 |



**Table G.5 (Continued)**

MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

Results in bold font are configurations with highest percentage of limits.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Trunk        | PF         | E         | 27          | HAF4016A, 1/4 Wave (764-870MHz) | 36          | 35.4            | 764.0875      | 0.047                                | 0.51                            | 9.3                 |
|              |            |           |             |                                 |             | 35.8            | 770.0125      | 0.058                                | 0.51                            | 11.4                |
|              |            |           |             |                                 |             | 34.9            | 775.9125      | 0.057                                | 0.52                            | 11.0                |
|              |            |           |             |                                 |             | 35.9            | 794.0875      | 0.065                                | 0.53                            | 12.3                |
|              |            |           |             |                                 | 42          | 41.2            | 806.0125      | 0.059                                | 0.54                            | 10.9                |
|              |            |           |             |                                 |             | 41.6            | 823.9875      | 0.058                                | 0.55                            | 10.5                |
|              |            |           |             |                                 |             | 41.7            | 851.0125      | 0.038                                | 0.57                            | 6.6                 |
|              |            |           |             |                                 |             | 41.7            | 862.0125      | 0.036                                | 0.57                            | 6.2                 |
|              |            |           |             |                                 |             | 41.8            | 868.8875      | 0.033                                | 0.58                            | 5.6                 |
|              |            |           |             |                                 | Trunk       | PF              | E             | 28                                   | HAF4017A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.094     | 0.51        | 18.2                            |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.087     | 0.52        | 16.9                            |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.111     | 0.53        | <b>20.9</b>                     |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.099       | 0.54                            |             |                 |               |                                      |                                 | 18.3                |
|              | 41.6       | 823.9875  | 0.099       | 0.55                            |             |                 |               |                                      |                                 | 18.0                |
|              | 41.7       | 851.0125  | 0.051       | 0.57                            |             |                 |               |                                      |                                 | 9.0                 |
|              | 41.7       | 862.0125  | 0.057       | 0.57                            |             |                 |               |                                      |                                 | 9.9                 |
|              | 41.8       | 868.8875  | 0.046       | 0.58                            |             |                 |               |                                      |                                 | 7.9                 |

**Table G.6**

MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                      | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|------------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Roof         | PF         | E         | 29          | AN000131A01, 1/4 wave (136-870MHz) | 36          | 35.4            | 764.0875      | 0.011                                | 0.51                            | 2.2                 |
|              |            |           |             |                                    |             | 35.8            | 770.0125      | 0.009                                | 0.51                            | 1.8                 |
|              |            |           |             |                                    |             | 34.9            | 775.9125      | 0.007                                | 0.52                            | 1.4                 |
|              |            |           |             |                                    |             | 35.9            | 794.0875      | 0.014                                | 0.53                            | 2.7                 |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.014                                | 0.54                            | 2.6                 |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.017                                | 0.55                            | 3.2                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.010                                | 0.57                            | 1.8                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.007                                | 0.57                            | 1.3                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.004                                | 0.58                            | 0.7                 |
|              |            |           |             |                                    | Roof        | PF              | E             | 25                                   | HAF4013A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.006     | 0.51        | 1.1                                |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.005     | 0.52        | 1.0                                |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.010     | 0.53        | 1.9                                |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.013       | 0.54                               |             |                 |               |                                      |                                 | 2.5                 |
|              | 41.6       | 823.9875  | 0.012       | 0.55                               |             |                 |               |                                      |                                 | 2.3                 |
|              | 41.7       | 851.0125  | 0.009       | 0.57                               |             |                 |               |                                      |                                 | 1.6                 |
|              | 41.7       | 862.0125  | 0.009       | 0.57                               |             |                 |               |                                      |                                 | 1.6                 |
|              | 41.8       | 868.8875  | 0.007       | 0.58                               |             |                 |               |                                      |                                 | 1.2                 |
| Roof         | PF         | E         | 26          | HAF4014A, 1/4 Wave (764-870MHz)    |             |                 |               |                                      |                                 | 36                  |
|              |            |           |             |                                    | 35.8        | 770.0125        | 0.002         | 0.51                                 | 0.3                             |                     |
|              |            |           |             |                                    | 34.9        | 775.9125        | 0.001         | 0.52                                 | 0.1                             |                     |
|              |            |           |             |                                    | 35.9        | 794.0875        | 0.004         | 0.53                                 | 0.8                             |                     |
|              |            |           |             |                                    | 42          | 41.2            | 806.0125      | 0.007                                | 0.54                            | 1.3                 |
|              |            |           |             |                                    |             | 41.6            | 823.9875      | 0.008                                | 0.55                            | 1.5                 |
|              |            |           |             |                                    |             | 41.7            | 851.0125      | 0.013                                | 0.57                            | 2.3                 |
|              |            |           |             |                                    |             | 41.7            | 862.0125      | 0.010                                | 0.57                            | 1.7                 |
|              |            |           |             |                                    |             | 41.8            | 868.8875      | 0.009                                | 0.58                            | 1.5                 |

**Table G.6 (Continued)**

MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Front

Notes:

Blue fonts: Frequencies not regulated by FCC.

| Trunk / Roof | Test Post. | E/H Field | Antenna No. | Antenna Model                   | Max Pwr (W) | Initial Pwr (W) | Tx Freq (MHz) | Max Calc. P.D. (mW/cm <sup>2</sup> ) | FCC Limit                       | % To FCC Spec Limit |
|--------------|------------|-----------|-------------|---------------------------------|-------------|-----------------|---------------|--------------------------------------|---------------------------------|---------------------|
| Roof         | PF         | E         | 27          | HAF4016A, 1/4 Wave (764-870MHz) | 36          | 35.4            | 764.0875      | 0.011                                | 0.51                            | 2.1                 |
|              |            |           |             |                                 |             | 35.8            | 770.0125      | 0.010                                | 0.51                            | 2.0                 |
|              |            |           |             |                                 |             | 34.9            | 775.9125      | 0.007                                | 0.52                            | 1.3                 |
|              |            |           |             |                                 |             | 35.9            | 794.0875      | 0.012                                | 0.53                            | 2.3                 |
|              |            |           |             |                                 | 42          | 41.2            | 806.0125      | 0.018                                | 0.54                            | 3.3                 |
|              |            |           |             |                                 |             | 41.6            | 823.9875      | 0.013                                | 0.55                            | 2.4                 |
|              |            |           |             |                                 |             | 41.7            | 851.0125      | 0.010                                | 0.57                            | 1.8                 |
|              |            |           |             |                                 |             | 41.7            | 862.0125      | 0.011                                | 0.57                            | 1.9                 |
|              |            |           |             |                                 |             | 41.8            | 868.8875      | 0.008                                | 0.58                            | 1.5                 |
|              |            |           |             |                                 | Roof        | PF              | E             | 28                                   | HAF4017A, 1/4 Wave (764-870MHz) | 36                  |
| 35.8         | 770.0125   | 0.016     | 0.51        | 3.2                             |             |                 |               |                                      |                                 |                     |
| 34.9         | 775.9125   | 0.013     | 0.52        | 2.6                             |             |                 |               |                                      |                                 |                     |
| 35.9         | 794.0875   | 0.023     | 0.53        | 4.4                             |             |                 |               |                                      |                                 |                     |
| 42           | 41.2       | 806.0125  | 0.027       | 0.54                            |             |                 |               |                                      |                                 | 5.0                 |
|              | 41.6       | 823.9875  | 0.018       | 0.55                            |             |                 |               |                                      |                                 | 3.3                 |
|              | 41.7       | 851.0125  | 0.016       | 0.57                            |             |                 |               |                                      |                                 | 2.8                 |
|              | 41.7       | 862.0125  | 0.012       | 0.57                            |             |                 |               |                                      |                                 | 2.1                 |
|              | 41.8       | 868.8875  | 0.008       | 0.58                            |             |                 |               |                                      |                                 | 1.4                 |

### Table G.7 LMR 7/800 band MPE Results for FCC

Note:  
Blue fonts: Frequencies not regulated by FCC.

|          |       |                                |      |      |      |      |      |      |      |      |      |
|----------|-------|--------------------------------|------|------|------|------|------|------|------|------|------|
| Pmax (W) | 36/42 | Pinitial (W)                   | 35.4 | 35.8 | 34.9 | 35.9 | 41.2 | 41.6 | 41.7 | 41.7 | 41.8 |
|          |       | FCCLimit (mW/cm <sup>2</sup> ) | 0.51 | 0.51 | 0.52 | 0.53 | 0.54 | 0.55 | 0.57 | 0.57 | 0.58 |

| Table | Test Post | Angle | Trunk / Roof | E/H Field | Antenna No. | f1       | f2       | f3       | f4       | f5       | f6       | f7       | f8       | f9       |
|-------|-----------|-------|--------------|-----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|       |           |       |              |           |             | 764.0875 | 770.0125 | 775.9125 | 794.0875 | 806.0125 | 823.9875 | 851.0125 | 862.0125 | 868.8875 |
| G.1   | BS        |       | Trunk        | E         | 29          | 0.076    | 0.070    | 0.081    | 0.072    | 0.072    | 0.058    | 0.031    | 0.037    | 0.032    |
| G.1   | BS        |       | Trunk        | E         | 25          | 0.076    | 0.070    | 0.072    | 0.073    | 0.078    | 0.060    | 0.062    | 0.063    | 0.063    |
| G.1   | BS        |       | Trunk        | E         | 26          | 0.041    | 0.043    | 0.041    | 0.055    | 0.062    | 0.082    | 0.101    | 0.099    | 0.081    |
| G.1   | BS        |       | Trunk        | E         | 27          | 0.073    | 0.065    | 0.067    | 0.069    | 0.077    | 0.058    | 0.057    | 0.059    | 0.057    |
| G.1   | BS        |       | Trunk        | E         | 28          | 0.057    | 0.049    | 0.055    | 0.061    | 0.069    | 0.054    | 0.057    | 0.057    | 0.058    |
| G.1   | BS        | 45    | Trunk        | E         | 26          |          |          |          |          |          |          | 0.057    |          |          |
| G.1   | BS        | 90    | Trunk        | E         | 26          |          |          |          |          |          |          | 0.057    |          |          |
| G.2   | BS        |       | Roof         | E         | 29          | 0.056    | 0.054    | 0.057    | 0.060    | 0.065    | 0.057    | 0.039    | 0.035    | 0.026    |
| G.2   | BS        |       | Roof         | E         | 25          | 0.045    | 0.039    | 0.039    | 0.048    | 0.057    | 0.051    | 0.051    | 0.052    | 0.049    |
| G.2   | BS        |       | Roof         | E         | 26          | 0.037    | 0.038    | 0.033    | 0.046    | 0.064    | 0.061    | 0.060    | 0.061    | 0.050    |
| G.2   | BS        |       | Roof         | E         | 27          | 0.055    | 0.051    | 0.048    | 0.054    | 0.067    | 0.059    | 0.058    | 0.058    | 0.050    |
| G.2   | BS        |       | Roof         | E         | 28          | 0.057    | 0.057    | 0.054    | 0.063    | 0.077    | 0.065    | 0.054    | 0.053    | 0.047    |
| G.3   | PB        |       | Trunk        | E         | 29          | 0.019    | 0.023    | 0.035    | 0.039    | 0.044    | 0.035    | 0.026    | 0.026    | 0.016    |
| G.3   | PB        |       | Trunk        | E         | 25          | 0.038    | 0.033    | 0.031    | 0.046    | 0.060    | 0.051    | 0.056    | 0.057    | 0.064    |
| G.3   | PB        |       | Trunk        | E         | 26          | 0.018    | 0.021    | 0.023    | 0.030    | 0.072    | 0.087    | 0.108    | 0.088    | 0.058    |
| G.3   | PB        |       | Trunk        | E         | 27          | 0.040    | 0.037    | 0.039    | 0.054    | 0.076    | 0.055    | 0.041    | 0.062    | 0.046    |
| G.3   | PB        |       | Trunk        | E         | 28          | 0.078    | 0.072    | 0.083    | 0.077    | 0.130    | 0.094    | 0.103    | 0.083    | 0.064    |
| G.4   | PB        |       | Roof         | E         | 29          | 0.012    | 0.014    | 0.020    | 0.016    | 0.017    | 0.013    | 0.009    | 0.008    | 0.006    |
| G.4   | PB        |       | Roof         | E         | 25          | 0.015    | 0.012    | 0.016    | 0.013    | 0.015    | 0.012    | 0.006    | 0.007    | 0.011    |
| G.4   | PB        |       | Roof         | E         | 26          | 0.001    | 0.001    | 0.001    | 0.003    | 0.005    | 0.010    | 0.010    | 0.006    | 0.008    |
| G.4   | PB        |       | Roof         | E         | 27          | 0.015    | 0.017    | 0.019    | 0.015    | 0.016    | 0.013    | 0.006    | 0.007    | 0.008    |
| G.4   | PB        |       | Roof         | E         | 28          | 0.032    | 0.039    | 0.040    | 0.032    | 0.030    | 0.020    | 0.010    | 0.007    | 0.012    |
| G.5   | PF        |       | Trunk        | E         | 29          | 0.045    | 0.062    | 0.058    | 0.054    | 0.045    | 0.041    | 0.018    | 0.013    | 0.009    |
| G.5   | PF        |       | Trunk        | E         | 25          | 0.033    | 0.042    | 0.038    | 0.049    | 0.040    | 0.041    | 0.030    | 0.032    | 0.028    |
| G.5   | PF        |       | Trunk        | E         | 26          | 0.026    | 0.033    | 0.028    | 0.047    | 0.057    | 0.076    | 0.055    | 0.055    | 0.046    |
| G.5   | PF        |       | Trunk        | E         | 27          | 0.047    | 0.058    | 0.057    | 0.065    | 0.059    | 0.058    | 0.038    | 0.036    | 0.033    |
| G.5   | PF        |       | Trunk        | E         | 28          | 0.080    | 0.094    | 0.087    | 0.111    | 0.099    | 0.099    | 0.051    | 0.057    | 0.046    |
| G.6   | PF        |       | Roof         | E         | 29          | 0.011    | 0.009    | 0.007    | 0.014    | 0.014    | 0.017    | 0.010    | 0.007    | 0.004    |
| G.6   | PF        |       | Roof         | E         | 25          | 0.007    | 0.006    | 0.005    | 0.010    | 0.013    | 0.012    | 0.009    | 0.009    | 0.007    |
| G.6   | PF        |       | Roof         | E         | 26          | 0.001    | 0.002    | 0.001    | 0.004    | 0.007    | 0.008    | 0.013    | 0.010    | 0.009    |
| G.6   | PF        |       | Roof         | E         | 27          | 0.011    | 0.010    | 0.007    | 0.012    | 0.018    | 0.013    | 0.010    | 0.011    | 0.008    |
| G.6   | PF        |       | Roof         | E         | 28          | 0.018    | 0.016    | 0.013    | 0.023    | 0.027    | 0.018    | 0.016    | 0.012    | 0.008    |