

	 	  <p style="color: blue; font-weight: bold; font-size: small;">CERTIFICATE 2518.05</p>
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**DECLARATION OF COMPLIANCE: MPE ASSESSMENT Part 2 of 2**

<p><b>Motorola Solutions Inc.</b>  <b>EME Test Laboratory</b>                  Motorola Solutions Malaysia Sdn Bhd                  Plot 2A, Medan Bayan Lepas,                  Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.</p>	<p><b>Date of Report:</b> 01/30/2020  <b>Report Revision:</b> A</p>
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<b>Responsible Engineer:</b>	Saw Sun Hock (EME Engineer)
<b>Report author:</b>	Saw Sun Hock (EME Engineer)
<b>Date(s) Tested:</b>	3/8/2017-3/20/2017; 11/26/2019-11/29/2019, 12/2/2019-12/3/2019, 12/9/2019,12/10/2019-12/13/2019,12/16/2019-12/17/2019
<b>Manufacturer:</b>	Futurecom Systems Group
<b>Date submitted for test:</b>	01/13/2017; 11/26/2019
<b>DUT Description:</b>	DVR 800MHz (806-870 MHz), Digital Vehicular Repeater Companion Mobile: APX4500 VHF
<b>Test TX mode(s):</b>	CW
<b>Max. Power output:</b>	<b>DVR:</b> 10W (100% duty cycle) <b>Companion Mobile:</b> 60W (50% duty cycle)
<b>TX Frequency Bands:</b>	<b>DVR:</b> 806-825 MHz, 851-870 MHz <b>Companion Mobile:</b> 136-174 MHz
<b>Signaling type:</b>	FM, TDMA
<b>Model(s) Tested:</b>	<b>DVR:</b> MOBEXCOM DVRS 800 (DQPM DVRS8000P) <b>Companion Mobile:</b> M22KSS9PW1AN (MUD3222C)
<b>Model(s) Certified:</b>	MOBEXCOM DVRS 800 (DQPM DVRS8000P), M22KSS9PW1AN (MUD3222C)
<b>Serial Number(s):</b>	17010530 (DVR) , WKE0NK03JZ (Companion Mobile)
<b>Classification:</b>	Occupational/Controlled Environment
<b>FCC ID:</b>	<b>DVR:</b> LO6-DVRS800 (806-824 MHz, 851-869 MHz) <b>Companion Mobile:</b> FCC ID: AZ492FT3826 (150.8-173.4 MHz) This report contains results that are immaterial for FCC equipment approval, which are clearly identified.
<b>IC:</b>	<b>DVR:</b> 2098B-DVRS800 (806-824 MHz, 851-869 MHz) <b>Companion Mobile:</b> 109U-92FT3826 (138-144, 148-174) This report contains results that are immaterial for ISED Canada equipment approval, which are clearly identified.

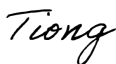
The MPE results clearly demonstrate compliance with FCC Occupational/Controlled RF Exposure limits. FCC rules require compliance for Passengers and Bystanders to the FCC General Population/Uncontrolled limits.

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 4.0 of this report (no deviation from standard methods). 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.

 <p><b>Tiong Nguk Ing</b>                  Deputy Technical Manager (Approved Signatory)                  Approval Date: 2/5/2020</p>	
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## **Appendix D – MPE Test Results Summary for DVR 800**

**Table D.1**

MPE assessment for DVR 800 - trunk mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Trunk	BS1	E	1	HAF4016A, 1/4 Wave (764-870MHz)	10.0	10.00	806.0000	0.005	0.54	0.9	0.25	2.0
						9.95	815.0000	0.006	0.54	1.0	0.26	2.2
						9.85	824.0000	0.005	0.55	0.8	0.26	1.8
						9.91	851.0000	0.004	0.57	0.7	0.26	1.6
						10.00	860.0000	0.003	0.57	0.5	0.27	1.1
						10.00	869.0000	0.004	0.58	0.6	0.27	1.3
Trunk	BS2	E	1	HAF4016A, 1/4 Wave (764-870MHz)	10.0	10.00	806.0000	0.015	0.54	2.8	0.25	5.9
						9.95	815.0000	0.016	0.54	2.9	0.26	6.1
						9.85	824.0000	0.012	0.55	2.2	0.26	4.6
						9.91	851.0000	0.015	0.57	2.7	0.26	5.7
						10.00	860.0000	0.012	0.57	2.1	0.27	4.6
						10.00	869.0000	0.011	0.58	1.8	0.27	4.0
Trunk	BS3	E	1	HAF4016A, 1/4 Wave (764-870MHz)	10.0	10.00	806.0000	0.014	0.54	2.6	0.25	5.5
						9.95	815.0000	0.016	0.54	3.0	0.26	6.4
						9.85	824.0000	0.016	0.55	2.9	0.26	6.1
						9.91	851.0000	0.016	0.57	2.8	0.26	6.1
						10.00	860.0000	0.012	0.57	2.2	0.27	4.7
						10.00	869.0000	0.012	0.58	2.0	0.27	4.3
Trunk	BS4	E	1	HAF4016A, 1/4 Wave (764-870MHz)	10.0	10.00	806.0000	0.019	0.54	3.5	0.25	7.3
						9.95	815.0000	0.024	0.54	4.4	0.26	9.3
						9.85	824.0000	0.022	0.55	4.0	0.26	8.6
						9.91	851.0000	0.028	0.57	<b>4.9</b>	0.26	<b>10.5</b>
						10.00	860.0000	0.018	0.57	3.1	0.27	6.7
						10.00	869.0000	0.019	0.58	3.3	0.27	7.2
Trunk	BS5	E	1	HAF4016A, 1/4 Wave (764-870MHz)	10.0	10.00	806.0000	0.016	0.54	3.0	0.25	6.4
						9.95	815.0000	0.016	0.54	3.0	0.26	6.3
						9.85	824.0000	0.012	0.55	2.2	0.26	4.6
						9.91	851.0000	0.013	0.57	2.3	0.26	4.9
						10.00	860.0000	0.009	0.57	1.6	0.27	3.5
						10.00	869.0000	0.010	0.58	1.7	0.27	3.7

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

**Table D.2**

MPE assessment for DVR 800– trunk mounted antenna – Passenger

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	ISED Limit	% To ISED Spec Limit
Trunk	PB	E	1	HAF4016A, 1/4 Wave (764-870MHz)	10.0	10.00	806.0000	0.056	0.54	10.4	0.25	21.9
						9.95	815.0000	0.060	0.54	<b>11.1</b>	0.26	<b>23.5</b>
						9.85	824.0000	0.048	0.55	8.7	0.26	18.6
						9.91	851.0000	0.045	0.57	7.9	0.26	17.0
						10.00	860.0000	0.039	0.57	6.8	0.27	14.7
						10.00	869.0000	0.023	0.58	4.0	0.27	8.7
Trunk	PF	E	1	HAF4016A, 1/4 Wave (764-870MHz)	10.0	10.00	806.0000	0.026	0.54	4.7	0.25	10.1
						9.95	815.0000	0.026	0.54	4.8	0.26	10.2
						9.85	824.0000	0.024	0.55	4.4	0.26	9.3
						9.91	851.0000	0.031	0.57	5.5	0.26	11.9
						10.00	860.0000	0.028	0.57	4.9	0.27	10.6
						10.00	869.0000	0.034	0.58	5.8	0.27	12.7

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

**Table D.3**  
**DVR 800 MPE Results for FCC**

Pmax (W)	10	Pinitial (W)	10.00	9.95	9.85	9.91	10.00	10.00
			FCCLimit (mW/cm <sup>2</sup> )	0.54	0.54	0.55	0.57	0.57

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f3	f4	f5	f6
						806.0000	815.0000	824.0000	851.0000	860.0000	869.0000
D.1	BS1		Trunk	E	1	0.005	0.006	0.005	0.004	0.003	0.004
D.1	BS2		Trunk	E	1	0.015	0.016	0.012	0.015	0.012	0.011
D.1	BS3		Trunk	E	1	0.014	0.016	0.016	0.016	0.012	0.012
D.1	BS4		Trunk	E	1	0.019	0.024	0.022	0.028	0.018	0.019
D.1	BS5		Trunk	E	1	0.016	0.016	0.012	0.013	0.009	0.010
D.2	PB		Trunk	E	1	0.056	0.060	0.047	0.044	0.039	0.023
D.2	PF		Trunk	E	1	0.026	0.026	0.024	0.031	0.028	0.034

**Appendix E – MPE Test Results Summary for Companion Mobile APX4500 VHF**

**Table E.1**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS1	E	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.04	0.20	19.5	0.13	30.1
						59.3	144.0000	0.04	0.20	22.1	0.13	34.3
						58.8	150.8000	0.03	0.20	12.6	0.13	19.5
						58.8	156.2000	0.03	0.20	14.2	0.13	22.0
						58.8	162.0000	0.02	0.20	9.8	0.13	15.2
Roof	BS1	H	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.03	0.20	16.6	0.13	25.6
						59.3	144.0000	0.05	0.20	24.6	0.13	38.2
						58.8	150.8000	0.04	0.20	22.2	0.13	34.4
						58.8	156.2000	0.04	0.20	19.7	0.13	30.4
						58.8	162.0000	0.04	0.20	18.7	0.13	29.0
Roof	BS2	E	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.04	0.20	17.9	0.13	27.7
						59.3	144.0000	0.05	0.20	24.5	0.13	38.0
						58.8	150.8000	0.02	0.20	10.5	0.13	16.3
						58.8	156.2000	0.04	0.20	21.2	0.13	32.9
						58.8	162.0000	0.03	0.20	16.3	0.13	25.3
Roof	BS2	H	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.03	0.20	14.0	0.13	21.7
						59.3	144.0000	0.05	0.20	26.7	0.13	41.3
						58.8	150.8000	0.05	0.20	22.7	0.13	35.1
						58.8	156.2000	0.05	0.20	25.1	0.13	38.9
						58.8	162.0000	0.04	0.20	18.1	0.13	28.0
Roof	BS3	E	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.02	0.20	11.9	0.13	18.4
						59.3	144.0000	0.02	0.20	9.8	0.13	15.1
						58.8	150.8000	0.04	0.20	17.5	0.13	27.2
						58.8	156.2000	0.03	0.20	17.0	0.13	26.4
						58.8	162.0000	0.02	0.20	9.5	0.13	14.7

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS3	H	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.04	0.20	21.1	0.13	32.7
						59.3	144.0000	0.03	0.20	17.3	0.13	26.8
						58.8	150.8000	0.05	0.20	22.9	0.13	35.5
						58.8	156.2000	0.05	0.20	24.4	0.13	37.8
						58.8	162.0000	0.03	0.20	17.5	0.13	27.1
Roof	BS4	E	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.03	0.20	12.8	0.13	19.8
						59.3	144.0000	0.01	0.20	5.6	0.13	8.6
						58.8	150.8000	0.03	0.20	13.3	0.13	20.6
						58.8	156.2000	0.03	0.20	13.7	0.13	21.2
						58.8	162.0000	0.02	0.20	10.4	0.13	16.2
Roof	BS4	H	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.05	0.20	24.0	0.13	37.2
						59.3	144.0000	0.03	0.20	16.0	0.13	24.8
						58.8	150.8000	0.05	0.20	27.2	0.13	42.1
						58.8	156.2000	0.05	0.20	27.0	0.13	41.8
						58.8	162.0000	0.04	0.20	18.2	0.13	28.2
Roof	BS5	E	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.02	0.20	8.3	0.13	12.8
						59.3	144.0000	0.01	0.20	4.7	0.13	7.4
						58.8	150.8000	0.03	0.20	13.5	0.13	20.9
						58.8	156.2000	0.02	0.20	7.9	0.13	12.3
						58.8	162.0000	0.02	0.20	9.3	0.13	14.4
Roof	BS5	H	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.03	0.20	16.5	0.13	25.5
						59.3	144.0000	0.02	0.20	12.5	0.13	19.3
						58.8	150.8000	0.03	0.20	14.8	0.13	23.0
						58.8	156.2000	0.03	0.20	15.5	0.13	24.0
						58.8	162.0000	0.04	0.20	19.6	0.13	30.4

Note:

Blue fonts: Frequencies not regulated by FCC.



**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS1	E	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.04	0.20	18.3	0.13	28.3
						58.8	150.8000	0.02	0.20	11.8	0.13	18.3
						59.0	158.3000	0.03	0.20	13.4	0.13	20.8
						58.7	165.9000	0.02	0.20	12.0	0.13	18.6
						59.0	173.4000	0.03	0.20	12.9	0.13	20.0
Roof	BS1	H	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.03	0.20	15.8	0.13	24.5
						58.8	150.8000	0.04	0.20	20.5	0.13	31.8
						59.0	158.3000	0.04	0.20	20.6	0.13	32.0
						58.7	165.9000	0.04	0.20	18.3	0.13	28.4
						59.0	173.4000	0.04	0.20	21.0	0.13	32.6
Roof	BS2	E	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.03	0.20	16.6	0.13	25.7
						58.8	150.8000	0.02	0.20	10.6	0.13	16.4
						59.0	158.3000	0.04	0.20	18.6	0.13	28.9
						58.7	165.9000	0.04	0.20	19.6	0.13	30.3
						59.0	173.4000	0.04	0.20	20.6	0.13	31.9
Roof	BS2	H	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.03	0.20	15.1	0.13	23.4
						58.8	150.8000	0.04	0.20	18.8	0.13	29.2
						59.0	158.3000	0.05	0.20	23.4	0.13	36.2
						58.7	165.9000	0.05	0.20	22.6	0.13	34.9
						59.0	173.4000	0.05	0.20	24.0	0.13	37.2
Roof	BS3	E	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.01	0.20	6.2	0.13	9.7
						58.8	150.8000	0.03	0.20	13.2	0.13	20.5
						59.0	158.3000	0.03	0.20	13.9	0.13	21.6
						58.7	165.9000	0.03	0.20	14.6	0.13	22.6
						59.0	173.4000	0.03	0.20	12.9	0.13	20.0

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS3	H	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.02	0.20	10.9	0.13	16.9
						58.8	150.8000	0.04	0.20	17.6	0.13	27.3
						59.0	158.3000	0.04	0.20	19.5	0.13	30.2
						58.7	165.9000	0.04	0.20	22.1	0.13	34.3
						59.0	173.4000	0.04	0.20	21.5	0.13	33.3
Roof	BS4	E	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.01	0.20	3.7	0.13	5.8
						58.8	150.8000	0.02	0.20	10.3	0.13	15.9
						59.0	158.3000	0.02	0.20	10.8	0.13	16.8
						58.7	165.9000	0.03	0.20	17.1	0.13	26.4
						59.0	173.4000	0.02	0.20	9.8	0.13	15.1
Roof	BS4	H	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.03	0.20	14.7	0.13	22.8
						58.8	150.8000	0.04	0.20	21.9	0.13	33.9
						59.0	158.3000	0.04	0.20	19.6	0.13	30.3
						58.7	165.9000	0.05	0.20	25.8	0.13	40.0
						59.0	173.4000	0.03	0.20	17.3	0.13	26.8
Roof	BS5	E	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.01	0.20	4.0	0.13	6.2
						58.8	150.8000	0.02	0.20	10.3	0.13	15.9
						59.0	158.3000	0.01	0.20	7.3	0.13	11.4
						58.7	165.9000	0.02	0.20	12.1	0.13	18.8
						59.0	173.4000	0.01	0.20	7.3	0.13	11.2
Roof	BS5	H	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.02	0.20	9.8	0.13	15.2
						58.8	150.8000	0.03	0.20	14.9	0.13	23.1
						59.0	158.3000	0.03	0.20	14.7	0.13	22.8
						58.7	165.9000	0.04	0.20	20.5	0.13	31.8
						59.0	173.4000	0.03	0.20	13.4	0.13	20.8

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS1	E	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.04	0.20	18.1	0.13	28.0
						59.0	140.0000	0.03	0.20	14.2	0.13	22.1
						59.3	144.0000	0.04	0.20	19.5	0.13	30.2
						58.8	150.8000	0.02	0.20	11.7	0.13	18.2
						59.0	158.3000	0.03	0.20	12.9	0.13	20.0
						58.7	165.9000	0.02	0.20	10.1	0.13	15.6
						59.0	173.4000	0.02	0.20	11.5	0.13	17.8
Roof	BS1	H	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.03	0.20	16.6	0.13	25.7
						59.0	140.0000	0.03	0.20	15.8	0.13	24.5
						59.3	144.0000	0.03	0.20	14.3	0.13	22.1
						58.8	150.8000	0.03	0.20	16.2	0.13	25.1
						59.0	158.3000	0.04	0.20	17.7	0.13	27.4
						58.7	165.9000	0.03	0.20	13.1	0.13	20.3
						59.0	173.4000	0.03	0.20	15.0	0.13	23.2
Roof	BS2	E	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.02	0.20	9.4	0.13	14.5
						59.0	140.0000	0.03	0.20	16.9	0.13	26.2
						59.3	144.0000	0.04	0.20	22.1	0.13	34.3
						58.8	150.8000	0.03	0.20	16.4	0.13	25.4
						59.0	158.3000	0.04	0.20	22.2	0.13	34.5
						58.7	165.9000	0.03	0.20	16.6	0.13	25.7
						59.0	173.4000	0.04	0.20	17.8	0.13	27.6
Roof	BS2	H	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.05	0.20	24.2	0.13	37.4
						59.0	140.0000	0.04	0.20	21.0	0.13	32.5
						59.3	144.0000	0.04	0.20	18.0	0.13	27.9
						58.8	150.8000	0.04	0.20	18.5	0.13	28.6
						59.0	158.3000	0.04	0.20	20.7	0.13	32.1
						58.7	165.9000	0.04	0.20	19.4	0.13	30.1
						59.0	173.4000	0.04	0.20	20.7	0.13	32.1

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS3	E	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.02	0.20	11.3	0.13	17.4
						59.0	140.0000	0.02	0.20	10.4	0.13	16.1
						59.3	144.0000	0.02	0.20	8.0	0.13	12.4
						58.8	150.8000	0.03	0.20	15.0	0.13	23.2
						59.0	158.3000	0.03	0.20	13.5	0.13	21.0
						58.7	165.9000	0.03	0.20	12.8	0.13	19.8
						59.0	173.4000	0.02	0.20	10.5	0.13	16.2
Roof	BS3	H	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.03	0.20	14.1	0.13	21.9
						59.0	140.0000	0.02	0.20	11.7	0.13	18.1
						59.3	144.0000	0.02	0.20	12.1	0.13	18.8
						58.8	150.8000	0.04	0.20	19.7	0.13	30.6
						59.0	158.3000	0.04	0.20	20.1	0.13	31.2
						58.7	165.9000	0.04	0.20	20.3	0.13	31.5
						59.0	173.4000	0.03	0.20	16.8	0.13	26.0
Roof	BS4	E	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.03	0.20	12.8	0.13	19.8
						59.0	140.0000	0.02	0.20	10.8	0.13	16.7
						59.3	144.0000	0.01	0.20	4.6	0.13	7.1
						58.8	150.8000	0.02	0.20	11.9	0.13	18.5
						59.0	158.3000	0.02	0.20	10.5	0.13	16.3
						58.7	165.9000	0.03	0.20	12.9	0.13	19.9
						59.0	173.4000	0.02	0.20	8.1	0.13	12.5
Roof	BS4	H	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.04	0.20	22.1	0.13	34.2
						59.0	140.0000	0.04	0.20	21.0	0.13	32.5
						59.3	144.0000	0.03	0.20	15.4	0.13	23.9
						58.8	150.8000	0.03	0.20	15.3	0.13	23.7
						59.0	158.3000	0.04	0.20	19.5	0.13	30.2
						58.7	165.9000	0.05	0.20	24.2	0.13	37.5
						59.0	173.4000	0.03	0.20	16.5	0.13	25.6

Note:  
Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS5	E	7	HAD4021A, 1/4 Wave (136-174MHz)	60.0	59.0	136.0000	0.01	0.20	6.9	0.13	10.8
						59.0	140.0000	0.01	0.20	6.1	0.13	9.4
						59.3	144.0000	0.01	0.20	4.9	0.13	7.6
						58.8	150.8000	0.03	0.20	12.9	0.13	20.0
						59.0	158.3000	0.01	0.20	7.2	0.13	11.2
						58.7	165.9000	0.02	0.20	9.9	0.13	15.4
						59.0	173.4000	0.01	0.20	6.6	0.13	10.3
Roof	BS5	H	7	HAD4021A, 1/4 Wave (136-174MHz)	60.0	59.0	136.0000	0.02	0.20	9.0	0.13	13.9
						59.0	140.0000	0.02	0.20	11.7	0.13	18.2
						59.3	144.0000	0.02	0.20	11.3	0.13	17.6
						58.8	150.8000	0.03	0.20	15.6	0.13	24.2
						59.0	158.3000	0.03	0.20	13.2	0.13	20.4
						58.7	165.9000	0.03	0.20	14.6	0.13	22.7
						59.0	173.4000	0.02	0.20	11.4	0.13	17.7
Roof	BS1	E	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.04	0.20	21.0	0.13	32.5
						59.0	140.0000	0.03	0.20	16.0	0.13	24.8
						59.3	144.0000	0.04	0.20	21.8	0.13	33.8
Roof	BS1	H	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.03	0.20	14.9	0.13	23.0
						59.0	140.0000	0.04	0.20	21.1	0.13	32.7
						59.3	144.0000	0.05	0.20	27.3	0.13	42.3
Roof	BS2	E	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.04	0.20	20.3	0.13	31.4
						59.0	140.0000	0.04	0.20	22.3	0.13	34.5
						59.3	144.0000	0.05	0.20	26.3	0.13	40.7
Roof	BS2	H	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.04	0.20	18.6	0.13	28.8
						59.0	140.0000	0.05	0.20	27.0	0.13	41.9
						59.3	144.0000	0.07	0.20	36.5	0.13	<b>56.5</b>
Roof	BS3	E	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.03	0.20	13.1	0.13	20.4
						59.0	140.0000	0.03	0.20	13.5	0.13	21.0
						59.3	144.0000	0.02	0.20	11.1	0.13	17.2

Note:

Blue fonts: Frequencies not regulated by FCC.

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

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

Trunk/ Roof	Test Post.	E/H Field	Antenn a 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	ISED Limit	% To ISED Spec Limit
Roof	BS3	H	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.04	0.20	20.9	0.13	32.4
						59.0	140.0000	0.04	0.20	18.9	0.13	29.3
						59.3	144.0000	0.03	0.20	16.9	0.13	26.2
Roof	BS4	E	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.03	0.20	13.9	0.13	21.5
						59.0	140.0000	0.02	0.20	8.9	0.13	13.8
						59.3	144.0000	0.01	0.20	6.6	0.13	10.2
Roof	BS4	H	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.05	0.20	22.6	0.13	34.9
						59.0	140.0000	0.04	0.20	20.4	0.13	31.6
						59.3	144.0000	0.03	0.20	16.4	0.13	25.5
Roof	BS5	E	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.02	0.20	9.0	0.13	14.0
						59.0	140.0000	0.01	0.20	5.6	0.13	8.7
						59.3	144.0000	0.01	0.20	5.5	0.13	8.5
Roof	BS5	H	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.03	0.20	16.3	0.13	25.2
						59.0	140.0000	0.03	0.20	13.4	0.13	20.7
						59.3	144.0000	0.03	0.20	13.0	0.13	20.1
Roof	BS1	E	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.04	0.20	21.9	0.13	33.9
						59.1	148.0000	0.04	0.20	19.8	0.13	30.7
						58.8	150.8000	0.03	0.20	12.6	0.13	19.6
Roof	BS1	H	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.05	0.20	25.3	0.13	39.3
						59.1	148.0000	0.06	0.20	27.9	0.13	43.2
						58.8	150.8000	0.05	0.20	23.7	0.13	36.8
Roof	BS2	E	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.05	0.20	25.5	0.13	39.5
						59.1	148.0000	0.03	0.20	15.4	0.13	23.9
						58.8	150.8000	0.02	0.20	11.3	0.13	17.5
Roof	BS2	H	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.05	0.20	27.2	0.13	42.1
						59.1	148.0000	0.06	0.20	29.9	0.13	46.3
						58.8	150.8000	0.06	0.20	27.9	0.13	43.2

Note:

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**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS3	E	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.02	0.20	10.2	0.13	15.7
						59.1	148.0000	0.03	0.20	14.7	0.13	22.7
						58.8	150.8000	0.04	0.20	18.6	0.13	28.9
Roof	BS3	H	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.03	0.20	13.8	0.13	21.3
						59.1	148.0000	0.05	0.20	22.9	0.13	35.5
						58.8	150.8000	0.05	0.20	26.5	0.13	41.0
Roof	BS4	E	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.01	0.20	5.8	0.13	8.9
						59.1	148.0000	0.02	0.20	12.1	0.13	18.8
						58.8	150.8000	0.03	0.20	13.9	0.13	21.5
Roof	BS4	H	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.03	0.20	15.6	0.13	24.2
						59.1	148.0000	0.05	0.20	23.7	0.13	36.6
						58.8	150.8000	0.06	0.20	28.1	0.13	43.5
Roof	BS5	E	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.01	0.20	5.0	0.13	7.8
						59.1	148.0000	0.02	0.20	9.5	0.13	14.7
						58.8	150.8000	0.03	0.20	13.9	0.13	21.5
Roof	BS5	H	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.03	0.20	12.6	0.13	19.5
						59.1	148.0000	0.03	0.20	14.4	0.13	22.3
						58.8	150.8000	0.04	0.20	18.5	0.13	28.7
Roof	BS1	E	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.03	0.20	13.4	0.13	20.8
						58.8	156.2000	0.04	0.20	17.8	0.13	27.6
						58.8	162.0000	0.02	0.20	12.2	0.13	18.8
Roof	BS1	H	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.05	0.20	22.5	0.13	34.9
						58.8	156.2000	0.05	0.20	23.9	0.13	37.1
						58.8	162.0000	0.05	0.20	26.9	0.13	41.7
Roof	BS2	E	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.02	0.20	9.8	0.13	15.2
						58.8	156.2000	0.05	0.20	22.6	0.13	35.1
						58.8	162.0000	0.04	0.20	21.3	0.13	33.0

Note:

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**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS2	H	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.05	0.20	23.6	0.13	36.5
						58.8	156.2000	0.06	0.20	28.7	0.13	44.4
						58.8	162.0000	0.05	0.20	26.5	0.13	41.0
Roof	BS3	E	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.03	0.20	15.0	0.13	23.2
						58.8	156.2000	0.04	0.20	17.6	0.13	27.3
						58.8	162.0000	0.03	0.20	12.7	0.13	19.7
Roof	BS3	H	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.04	0.20	21.9	0.13	34.0
						58.8	156.2000	0.06	0.20	<b>29.0</b>	0.13	44.9
						58.8	162.0000	0.05	0.20	24.7	0.13	38.3
Roof	BS4	E	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.02	0.20	11.6	0.13	18.0
						58.8	156.2000	0.03	0.20	13.4	0.13	20.8
						58.8	162.0000	0.03	0.20	13.7	0.13	21.2
Roof	BS4	H	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.04	0.20	22.2	0.13	34.4
						58.8	156.2000	0.04	0.20	18.6	0.13	28.8
						58.8	162.0000	0.05	0.20	22.6	0.13	35.0
Roof	BS5	E	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.02	0.20	11.0	0.13	17.1
						58.8	156.2000	0.02	0.20	8.6	0.13	13.4
						58.8	162.0000	0.03	0.20	14.5	0.13	22.5
Roof	BS5	H	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.03	0.20	17.5	0.13	27.0
						58.8	156.2000	0.03	0.20	16.0	0.13	24.8
						58.8	162.0000	0.04	0.20	21.3	0.13	33.1
Roof	BS1	E	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.02	0.20	10.5	0.13	16.2
						58.7	167.7000	0.02	0.20	10.3	0.13	16.0
						59.0	173.4000	0.03	0.20	13.7	0.13	21.2
Roof	BS1	H	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.05	0.20	24.5	0.13	37.9
						58.7	167.7000	0.04	0.20	20.9	0.13	32.4
						59.0	173.4000	0.05	0.20	23.5	0.13	36.4

Note:

Blue fonts: Frequencies not regulated by FCC.

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



**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

Trunk/ Roof	Test Post.	E/H Field	Antenn a 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	ISED Limit	% To ISED Spec Limit
Roof	BS2	E	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.04	0.20	18.7	0.13	28.9
						58.7	167.7000	0.04	0.20	18.3	0.13	28.3
						59.0	173.4000	0.04	0.20	21.0	0.13	32.5
Roof	BS2	H	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.05	0.20	27.0	0.13	41.8
						58.7	167.7000	0.05	0.20	24.2	0.13	37.5
						59.0	173.4000	0.05	0.20	26.3	0.13	40.7
Roof	BS3	E	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.02	0.20	11.7	0.13	18.1
						58.7	167.7000	0.03	0.20	14.9	0.13	23.1
						59.0	173.4000	0.03	0.20	14.3	0.13	22.1
Roof	BS3	H	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.04	0.20	22.1	0.13	34.3
						58.7	167.7000	0.05	0.20	24.1	0.13	37.3
						59.0	173.4000	0.04	0.20	21.0	0.13	32.5
Roof	BS4	E	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.03	0.20	12.8	0.13	19.8
						58.7	167.7000	0.03	0.20	15.3	0.13	23.7
						59.0	173.4000	0.02	0.20	10.3	0.13	15.9
Roof	BS4	H	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.04	0.20	22.1	0.13	34.2
						58.7	167.7000	0.04	0.20	19.4	0.13	30.1
						59.0	173.4000	0.03	0.20	14.9	0.13	23.0
Roof	BS5	E	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.03	0.20	12.8	0.13	19.8
						58.7	167.7000	0.02	0.20	8.9	0.13	13.7
						59.0	173.4000	0.02	0.20	7.8	0.13	12.0
Roof	BS5	H	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.04	0.20	20.6	0.13	31.9
						58.7	167.7000	0.03	0.20	14.4	0.13	22.3
						59.0	173.4000	0.03	0.20	15.1	0.13	23.4

Note:

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**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS1	E	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.03	0.20	16.0	0.13	24.8
						59.0	140.0000	0.02	0.20	11.1	0.13	17.2
						59.3	144.0000	0.03	0.20	13.8	0.13	21.3
						58.8	150.8000	0.02	0.20	11.7	0.13	18.1
						59.0	158.3000	0.03	0.20	14.4	0.13	22.3
						58.7	165.9000	0.03	0.20	16.7	0.13	25.9
						59.0	173.4000	0.03	0.20	15.2	0.13	23.6
Roof	BS1	H	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.03	0.20	17.1	0.13	26.5
						59.0	140.0000	0.04	0.20	17.9	0.13	27.8
						59.3	144.0000	0.04	0.20	17.8	0.13	27.6
						58.8	150.8000	0.03	0.20	14.2	0.13	21.9
						59.0	158.3000	0.04	0.20	18.0	0.13	27.9
						58.7	165.9000	0.03	0.20	17.3	0.13	26.8
						59.0	173.4000	0.04	0.20	19.9	0.13	30.8
Roof	BS2	E	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.02	0.20	11.0	0.13	17.0
						59.0	140.0000	0.02	0.20	11.2	0.13	17.3
						59.3	144.0000	0.03	0.20	17.1	0.13	26.5
						58.8	150.8000	0.02	0.20	9.4	0.13	14.5
						59.0	158.3000	0.04	0.20	20.7	0.13	32.1
						58.7	165.9000	0.04	0.20	18.6	0.13	28.8
						59.0	173.4000	0.04	0.20	19.7	0.13	30.5
Roof	BS2	H	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.03	0.20	13.3	0.13	20.5
						59.0	140.0000	0.03	0.20	13.1	0.13	20.2
						59.3	144.0000	0.04	0.20	19.8	0.13	30.7
						58.8	150.8000	0.03	0.20	16.8	0.13	26.0
						59.0	158.3000	0.05	0.20	23.4	0.13	36.3
						58.7	165.9000	0.04	0.20	21.7	0.13	33.7
						59.0	173.4000	0.05	0.20	23.8	0.13	36.9

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS3	E	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.01	0.20	6.5	0.13	10.0
						59.0	140.0000	0.02	0.20	9.1	0.13	14.0
						59.3	144.0000	0.02	0.20	8.9	0.13	13.8
						58.8	150.8000	0.02	0.20	9.9	0.13	15.4
						59.0	158.3000	0.03	0.20	15.6	0.13	24.1
						58.7	165.9000	0.03	0.20	15.3	0.13	23.7
						59.0	173.4000	0.03	0.20	13.5	0.13	20.9
Roof	BS3	H	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.02	0.20	12.0	0.13	18.5
						59.0	140.0000	0.03	0.20	14.3	0.13	22.1
						59.3	144.0000	0.02	0.20	12.3	0.13	19.0
						58.8	150.8000	0.03	0.20	14.2	0.13	22.0
						59.0	158.3000	0.04	0.20	21.4	0.13	33.2
						58.7	165.9000	0.04	0.20	20.0	0.13	30.9
						59.0	173.4000	0.04	0.20	18.8	0.13	29.2
Roof	BS4	E	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.02	0.20	9.6	0.13	14.8
						59.0	140.0000	0.01	0.20	7.1	0.13	10.9
						59.3	144.0000	0.01	0.20	6.7	0.13	10.3
						58.8	150.8000	0.02	0.20	9.6	0.13	14.8
						59.0	158.3000	0.02	0.20	10.9	0.13	16.8
						58.7	165.9000	0.03	0.20	14.6	0.13	22.6
						59.0	173.4000	0.02	0.20	9.7	0.13	15.0
Roof	BS4	H	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.04	0.20	21.1	0.13	32.8
						59.0	140.0000	0.03	0.20	16.8	0.13	26.0
						59.3	144.0000	0.03	0.20	15.5	0.13	24.0
						58.8	150.8000	0.04	0.20	18.5	0.13	28.6
						59.0	158.3000	0.04	0.20	19.5	0.13	30.2
						58.7	165.9000	0.05	0.20	25.7	0.13	39.8
						59.0	173.4000	0.03	0.20	17.3	0.13	26.8

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS5	E	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.01	0.20	5.9	0.13	9.1
						59.0	140.0000	0.01	0.20	6.0	0.13	9.2
						59.3	144.0000	0.01	0.20	4.6	0.13	7.1
						58.8	150.8000	0.02	0.20	10.3	0.13	16.0
						59.0	158.3000	0.01	0.20	5.7	0.13	8.9
						58.7	165.9000	0.02	0.20	10.4	0.13	16.1
						59.0	173.4000	0.01	0.20	6.5	0.13	10.0
Roof	BS5	H	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.03	0.20	12.7	0.13	19.6
						59.0	140.0000	0.02	0.20	11.3	0.13	17.5
						59.3	144.0000	0.02	0.20	11.6	0.13	18.0
						58.8	150.8000	0.03	0.20	14.8	0.13	22.9
						59.0	158.3000	0.03	0.20	12.7	0.13	19.7
						58.7	165.9000	0.03	0.20	16.3	0.13	25.3
						59.0	173.4000	0.02	0.20	11.5	0.13	17.8
Roof	BS1	E	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.02	0.20	11.1	0.13	17.2
						59.0	140.0000	0.02	0.20	10.1	0.13	15.7
						59.3	144.0000	0.02	0.20	11.1	0.13	17.3
						58.8	150.8000	0.02	0.20	9.9	0.13	15.4
						59.0	158.3000	0.02	0.20	10.4	0.13	16.1
						58.7	165.9000	0.03	0.20	13.0	0.13	20.1
						59.0	173.4000	0.03	0.20	17.4	0.13	27.0
Roof	BS1	H	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.02	0.20	10.6	0.13	16.5
						59.0	140.0000	0.02	0.20	10.5	0.13	16.3
						59.3	144.0000	0.03	0.20	13.9	0.13	21.6
						58.8	150.8000	0.02	0.20	10.1	0.13	15.6
						59.0	158.3000	0.03	0.20	14.7	0.13	22.8
						58.7	165.9000	0.03	0.20	17.0	0.13	26.4
						59.0	173.4000	0.04	0.20	22.0	0.13	34.1

Note:  
Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS2	E	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.02	0.20	9.1	0.13	14.1
						59.0	140.0000	0.02	0.20	8.4	0.13	13.0
						59.3	144.0000	0.02	0.20	10.9	0.13	16.9
						58.8	150.8000	0.02	0.20	9.2	0.13	14.3
						59.0	158.3000	0.03	0.20	16.9	0.13	26.1
						58.7	165.9000	0.03	0.20	12.5	0.13	19.4
						59.0	173.4000	0.04	0.20	19.8	0.13	30.7
Roof	BS2	H	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.02	0.20	11.2	0.13	17.4
						59.0	140.0000	0.02	0.20	10.8	0.13	16.7
						59.3	144.0000	0.02	0.20	10.9	0.13	16.8
						58.8	150.8000	0.03	0.20	12.7	0.13	19.6
						59.0	158.3000	0.03	0.20	16.8	0.13	26.0
						58.7	165.9000	0.03	0.20	14.1	0.13	21.8
						59.0	173.4000	0.04	0.20	20.7	0.13	32.1
Roof	BS3	E	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.01	0.20	4.5	0.13	7.0
						59.0	140.0000	0.01	0.20	5.3	0.13	8.2
						59.3	144.0000	0.01	0.20	5.8	0.13	8.9
						58.8	150.8000	0.01	0.20	6.0	0.13	9.3
						59.0	158.3000	0.03	0.20	12.9	0.13	20.0
						58.7	165.9000	0.02	0.20	8.4	0.13	13.0
						59.0	173.4000	0.03	0.20	13.3	0.13	20.6
Roof	BS3	H	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.02	0.20	9.4	0.13	14.6
						59.0	140.0000	0.02	0.20	10.3	0.13	15.9
						59.3	144.0000	0.02	0.20	10.1	0.13	15.7
						58.8	150.8000	0.02	0.20	9.6	0.13	14.9
						59.0	158.3000	0.03	0.20	16.0	0.13	24.7
						58.7	165.9000	0.03	0.20	12.5	0.13	19.4
						59.0	173.4000	0.04	0.20	17.7	0.13	27.4

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.1 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Bystander

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	ISED Limit	% To ISED Spec Limit
Roof	BS4	E	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.01	0.20	5.5	0.13	8.5
						59.0	140.0000	0.01	0.20	4.5	0.13	7.0
						59.3	144.0000	0.01	0.20	4.6	0.13	7.2
						58.8	150.8000	0.01	0.20	5.4	0.13	8.3
						59.0	158.3000	0.02	0.20	9.4	0.13	14.5
						58.7	165.9000	0.02	0.20	7.6	0.13	11.8
						59.0	173.4000	0.02	0.20	9.4	0.13	14.6
Roof	BS4	H	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.03	0.20	16.1	0.13	24.9
						59.0	140.0000	0.03	0.20	16.5	0.13	25.5
						59.3	144.0000	0.04	0.20	18.0	0.13	27.9
						58.8	150.8000	0.03	0.20	16.7	0.13	25.8
						59.0	158.3000	0.04	0.20	18.2	0.13	28.2
						58.7	165.9000	0.03	0.20	15.6	0.13	24.2
						59.0	173.4000	0.04	0.20	18.4	0.13	28.5
Roof	BS5	E	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.01	0.20	3.3	0.13	5.1
						59.0	140.0000	0.01	0.20	3.8	0.13	5.9
						59.3	144.0000	0.01	0.20	3.4	0.13	5.2
						58.8	150.8000	0.01	0.20	4.5	0.13	7.0
						59.0	158.3000	0.01	0.20	3.7	0.13	5.7
						58.7	165.9000	0.01	0.20	6.0	0.13	9.3
						59.0	173.4000	0.01	0.20	5.9	0.13	9.2
Roof	BS5	H	13	RAD4010ARB 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.02	0.20	9.6	0.13	14.8
						59.0	140.0000	0.02	0.20	10.3	0.13	16.0
						59.3	144.0000	0.02	0.20	10.2	0.13	15.8
						58.8	150.8000	0.02	0.20	12.1	0.13	18.8
						59.0	158.3000	0.02	0.20	10.9	0.13	16.9
						58.7	165.9000	0.02	0.20	10.7	0.13	16.6
						59.0	173.4000	0.02	0.20	10.6	0.13	16.5

Note:  
Blue fonts: Frequencies not regulated by FCC.

**Table E.2**

MPE assessment for APX4500 VHF - roof mounted antenna – Passenger

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	ISED Limit	% To ISED Spec Limit
Roof	PB	E	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.14	0.20	70.4	0.13	109.1
						59.3	144.0000	0.12	0.20	60.7	0.13	94.1
						58.8	150.8000	0.15	0.20	76.3	0.13	118.2
						58.8	156.2000	0.15	0.20	77.4	0.13	119.9
						58.8	162.0000	0.14	0.20	72.2	0.13	111.8
Roof	PB	H	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.05	0.20	22.7	0.13	35.1
						59.3	144.0000	0.06	0.20	28.9	0.13	44.8
						58.8	150.8000	0.08	0.20	37.5	0.13	58.2
						58.8	156.2000	0.07	0.20	32.9	0.13	51.0
						58.8	162.0000	0.05	0.20	26.1	0.13	40.4
Roof	PB	E	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.07	0.20	36.4	0.13	56.3
						58.8	150.8000	0.12	0.20	59.3	0.13	91.9
						59.0	158.3000	0.15	0.20	75.9	0.13	117.6
						58.7	165.9000	0.15	0.20	76.2	0.13	118.0
						59.0	173.4000	0.06	0.20	31.6	0.13	49.0
Roof	PB	H	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.03	0.20	17.2	0.13	26.6
						58.8	150.8000	0.06	0.20	28.3	0.13	43.8
						59.0	158.3000	0.07	0.20	32.8	0.13	50.8
						58.7	165.9000	0.07	0.20	34.1	0.13	52.9
						59.0	173.4000	0.05	0.20	24.7	0.13	38.3
Roof	PB	E	7	HAD4021A, 1/4 Wave (136 -174MHz)	60.0	59.0	136.0000	0.10	0.20	49.0	0.13	75.9
						59.0	140.0000	0.16	0.20	77.7	0.13	120.4
						59.3	144.0000	0.15	0.20	72.6	0.13	112.5
						58.8	150.8000	0.16	0.20	80.5	0.13	124.7
						59.0	158.3000	0.16	0.20	78.2	0.13	121.2
						58.7	165.9000	0.12	0.20	57.9	0.13	89.6
						59.0	173.4000	0.06	0.20	28.9	0.13	44.7

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.2 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Passenger

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	ISED Limit	% To ISED Spec Limit
Roof	PB	H	7	HAD4021A, 1/4 Wave (136-174MHz)	60.0	59.0	136.0000	0.06	0.20	28.8	0.13	44.7
						59.0	140.0000	0.05	0.20	26.8	0.13	41.5
						59.3	144.0000	0.04	0.20	22.0	0.13	34.2
						58.8	150.8000	0.06	0.20	31.2	0.13	48.4
						59.0	158.3000	0.04	0.20	22.2	0.13	34.4
						58.7	165.9000	0.06	0.20	28.2	0.13	43.7
						59.0	173.4000	0.04	0.20	20.7	0.13	32.0
Roof	PB	E	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.18	0.20	90.9	0.13	140.8
						59.0	140.0000	0.14	0.20	69.9	0.13	108.3
						59.3	144.0000	0.12	0.20	59.3	0.13	91.8
Roof	PB	H	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.07	0.20	33.6	0.13	52.0
						59.0	140.0000	0.07	0.20	33.7	0.13	52.2
						59.3	144.0000	0.07	0.20	33.5	0.13	51.9
Roof	PB	E	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.11	0.20	54.7	0.13	84.7
						59.1	148.0000	0.16	0.20	81.0	0.13	125.5
						58.8	150.8000	0.17	0.20	85.4	0.13	132.4
Roof	PB	H	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.05	0.20	26.6	0.13	41.3
						59.1	148.0000	0.07	0.20	37.4	0.13	57.9
						58.8	150.8000	0.08	0.20	41.8	0.13	64.8
Roof	PB	E	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.13	0.20	65.6	0.13	101.6
						58.8	156.2000	0.18	0.20	90.3	0.13	139.9
						58.8	162.0000	0.20	0.20	98.9	0.13	153.2
Roof	PB	H	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.08	0.20	37.5	0.13	58.2
						58.8	156.2000	0.08	0.20	39.5	0.13	61.2
						58.8	162.0000	0.08	0.20	38.2	0.13	59.1
Roof	PB	E	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.20	0.20	<b>99.9</b>	0.13	<b>154.8</b>
						58.7	167.7000	0.13	0.20	65.2	0.13	100.9
						59.0	173.4000	0.09	0.20	44.9	0.13	69.5

Note:

Blue fonts: Frequencies not regulated by FCC.

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



**Table E.2 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Passenger

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	ISED Limit	% To ISED Spec Limit
Roof	PB	H	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.07	0.20	34.9	0.13	54.1
						58.7	167.7000	0.06	0.20	31.4	0.13	48.6
						59.0	173.4000	0.06	0.20	30.5	0.13	47.2
Roof	PB	E	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.04	0.20	18.4	0.13	28.5
						59.0	140.0000	0.04	0.20	19.1	0.13	29.6
						59.3	144.0000	0.04	0.20	20.6	0.13	31.8
						58.8	150.8000	0.06	0.20	27.7	0.13	42.9
						59.0	158.3000	0.07	0.20	35.6	0.13	55.2
						58.7	165.9000	0.08	0.20	38.4	0.13	59.5
						59.0	173.4000	0.04	0.20	19.4	0.13	30.0
Roof	PB	H	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.02	0.20	10.6	0.13	16.4
						59.0	140.0000	0.03	0.20	16.2	0.13	25.0
						59.3	144.0000	0.03	0.20	14.0	0.13	21.7
						58.8	150.8000	0.02	0.20	10.2	0.13	15.8
						59.0	158.3000	0.03	0.20	12.5	0.13	19.4
						58.7	165.9000	0.04	0.20	21.3	0.13	33.0
						59.0	173.4000	0.03	0.20	13.9	0.13	21.5
Roof	PB	E	13	RAD4010AR 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.01	0.20	6.5	0.13	10.0
						59.0	140.0000	0.02	0.20	12.2	0.13	18.9
						59.3	144.0000	0.03	0.20	13.6	0.13	21.1
						58.8	150.8000	0.02	0.20	8.7	0.13	13.4
						59.0	158.3000	0.03	0.20	15.4	0.13	23.8
						58.7	165.9000	0.03	0.20	13.6	0.13	21.0
						59.0	173.4000	0.02	0.20	11.6	0.13	17.9
Roof	PB	E	13	RAD4010AR 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.03	0.20	13.5	0.13	20.9
						59.0	140.0000	0.02	0.20	9.9	0.13	15.4
						59.3	144.0000	0.02	0.20	12.4	0.13	19.2
						58.8	150.8000	0.02	0.20	9.7	0.13	15.1
						59.0	158.3000	0.03	0.20	13.4	0.13	20.8
						58.7	165.9000	0.03	0.20	13.9	0.13	21.5
						59.0	173.4000	0.02	0.20	9.8	0.13	15.2

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.2 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Passenger

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	ISED Limit	% To ISED Spec Limit
Roof	PF	E	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.04	0.20	18.1	0.13	28.0
						59.3	144.0000	0.06	0.20	29.8	0.13	46.2
						58.8	150.8000	0.03	0.20	15.4	0.13	23.8
						58.8	156.2000	0.04	0.20	19.2	0.13	29.7
						58.8	162.0000	0.04	0.20	21.1	0.13	32.7
Roof	PF	H	5	HAD4016A, 1/4 Wave (136-162 MHz)	60.0	59.0	136.0000	0.05	0.20	24.4	0.13	37.8
						59.3	144.0000	0.04	0.20	18.1	0.13	28.0
						58.8	150.8000	0.04	0.20	18.4	0.13	28.4
						58.8	156.2000	0.04	0.20	21.3	0.13	33.0
						58.8	162.0000	0.04	0.20	21.5	0.13	33.4
Roof	PF	E	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.05	0.20	26.5	0.13	41.1
						58.8	150.8000	0.04	0.20	17.6	0.13	27.3
						59.0	158.3000	0.04	0.20	22.5	0.13	34.8
						58.7	165.9000	0.06	0.20	28.3	0.13	43.9
						59.0	173.4000	0.07	0.20	34.8	0.13	54.0
Roof	PF	H	6	HAD4017A, 1/4 Wave (146-174 MHz)	60.0	59.6	146.0000	0.02	0.20	11.7	0.13	18.1
						58.8	150.8000	0.03	0.20	13.8	0.13	21.4
						59.0	158.3000	0.05	0.20	24.8	0.13	38.4
						58.7	165.9000	0.06	0.20	30.0	0.13	46.4
						59.0	173.4000	0.03	0.20	13.6	0.13	21.0
Roof	PF	E	7	HAD4021A, 1/4 Wave (136-174MHz)	60.0	59.0	136.0000	0.03	0.20	16.3	0.13	25.3
						59.0	140.0000	0.05	0.20	26.5	0.13	41.0
						59.3	144.0000	0.03	0.20	14.7	0.13	22.8
						58.8	150.8000	0.02	0.20	12.5	0.13	19.3
						59.0	158.3000	0.05	0.20	24.1	0.13	37.4
						58.7	165.9000	0.03	0.20	14.2	0.13	22.1
						59.0	173.4000	0.03	0.20	15.0	0.13	23.2

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.2 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Passenger

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	ISED Limit	% To ISED Spec Limit
Roof	PF	H	7	HAD4021A, 1/4 Wave (136-174MHz)	60.0	59.0	136.0000	0.07	0.20	33.7	0.13	52.2
						59.0	140.0000	0.07	0.20	35.2	0.13	54.5
						59.3	144.0000	0.04	0.20	21.2	0.13	32.9
						58.8	150.8000	0.03	0.20	17.4	0.13	27.0
						59.0	158.3000	0.03	0.20	16.2	0.13	25.0
						58.7	165.9000	0.02	0.20	9.2	0.13	14.3
						59.0	173.4000	0.02	0.20	10.6	0.13	16.4
Roof	PF	E	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.07	0.20	35.1	0.13	54.4
						59.0	140.0000	0.05	0.20	24.7	0.13	38.3
						59.3	144.0000	0.07	0.20	35.3	0.13	54.8
Roof	PF	H	8	HAD4006A, 1/4 Wave (136-144 MHz)	60.0	59.0	136.0000	0.07	0.20	35.9	0.13	55.7
						59.0	140.0000	0.05	0.20	26.2	0.13	40.6
						59.3	144.0000	0.04	0.20	20.1	0.13	31.1
Roof	PF	E	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.07	0.20	34.7	0.13	53.8
						59.1	148.0000	0.06	0.20	29.1	0.13	45.1
						58.8	150.8000	0.05	0.20	25.8	0.13	40.0
Roof	PF	H	9	HAD4007A, 1/4 Wave (144-150.8 MHz)	60.0	59.3	144.0000	0.04	0.20	19.4	0.13	30.1
						59.1	148.0000	0.04	0.20	17.5	0.13	27.2
						58.8	150.8000	0.04	0.20	20.2	0.13	31.3
Roof	PF	E	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.04	0.20	21.8	0.13	33.7
						58.8	156.2000	0.06	0.20	27.7	0.13	42.9
						58.8	162.0000	0.05	0.20	24.5	0.13	38.0
Roof	PF	H	10	HAD4008A, 1/4 Wave (150.8-162 MHz)	60.0	58.8	150.8000	0.03	0.20	15.9	0.13	24.6
						58.8	156.2000	0.03	0.20	17.3	0.13	26.7
						58.8	162.0000	0.03	0.20	15.5	0.13	24.0
Roof	PF	E	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.08	0.20	<b>39.7</b>	0.13	<b>61.5</b>
						58.7	167.7000	0.08	0.20	38.1	0.13	59.0
						59.0	173.4000	0.07	0.20	34.1	0.13	52.8

Note:

Blue fonts: Frequencies not regulated by FCC.

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

**Table E.2 (Continued)**

MPE assessment for APX4500 VHF - roof mounted antenna – Passenger

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	ISED Limit	% To ISED Spec Limit
Roof	PF	H	11	HAD4009A, 1/4 Wave (162-174 MHz)	60.0	58.8	162.0000	0.04	0.20	17.5	0.13	27.2
						58.7	167.7000	0.03	0.20	14.4	0.13	22.2
						59.0	173.4000	0.04	0.20	19.1	0.13	29.7
Roof	PF	E	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.02	0.20	11.3	0.13	17.6
						59.0	140.0000	0.05	0.20	26.4	0.13	40.8
						59.3	144.0000	0.04	0.20	17.7	0.13	27.4
						58.8	150.8000	0.06	0.20	32.1	0.13	49.7
						59.0	158.3000	0.04	0.20	19.1	0.13	29.6
						58.7	165.9000	0.04	0.20	17.8	0.13	27.6
						59.0	173.4000	0.04	0.20	17.7	0.13	27.5
Roof	PF	H	12	HAD4022A, 5/8 Wave (132 -174 MHz)	60.0	59.0	136.0000	0.06	0.20	28.5	0.13	44.2
						59.0	140.0000	0.05	0.20	27.2	0.13	42.1
						59.3	144.0000	0.02	0.20	11.9	0.13	18.4
						58.8	150.8000	0.02	0.20	8.9	0.13	13.8
						59.0	158.3000	0.02	0.20	11.4	0.13	17.7
						58.7	165.9000	0.03	0.20	17.1	0.13	26.6
						59.0	173.4000	0.02	0.20	12.5	0.13	19.3
Roof	PF	E	13	RAD4010AR 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.04	0.20	19.4	0.13	30.0
						59.0	140.0000	0.01	0.20	6.7	0.13	10.3
						59.3	144.0000	0.03	0.20	12.6	0.13	19.5
						58.8	150.8000	0.01	0.20	6.2	0.13	9.7
						59.0	158.3000	0.05	0.20	25.6	0.13	39.6
						58.7	165.9000	0.05	0.20	26.5	0.13	41.1
						59.0	173.4000	0.03	0.20	13.8	0.13	21.4
Roof	PF	E	13	RAD4010AR 1/2 wave (136-174 MHz)	60.0	59.0	136.0000	0.06	0.20	29.2	0.13	45.3
						59.0	140.0000	0.02	0.20	10.4	0.13	16.2
						59.3	144.0000	0.03	0.20	13.4	0.13	20.8
						58.8	150.8000	0.01	0.20	5.9	0.13	9.1
						59.0	158.3000	0.02	0.20	8.9	0.13	13.8
						58.7	165.9000	0.03	0.20	14.1	0.13	21.9
						59.0	173.4000	0.02	0.20	10.6	0.13	16.4

Note:

Blue fonts: Frequencies not regulated by FCC.

**Table E.3**  
**Companion Mobile LMR VHF MPE Results for FCC**

Note:

Blue fonts: Frequencies not regulated by FCC.

Pmax (W) 60	Pinitial (W)	59.0	59.0	59.3	59.6	59.1	58.8	58.8	59.0	58.8	58.7	58.7	59.0
		FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Trunk / Roof	E/H Field	Antenna No.	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
					136.0000	140.0000	144.0000	146.0000	148.0000	150.8000	156.2000	158.3000	162.0000	165.9000	167.7000	173.4000
E.1	BS1	Roof	E	5	0.04		0.04			0.03	0.03		0.02			
E.1	BS2	Roof	E	5	0.04		0.05			0.02	0.04		0.03			
E.1	BS3	Roof	E	5	0.02		0.02			0.04	0.03		0.02			
E.1	BS4	Roof	E	5	0.03		0.01			0.03	0.03		0.02			
E.1	BS5	Roof	E	5	0.02		0.01			0.03	0.02		0.02			
E.1	BS1	Roof	H	5	0.03		0.05			0.04	0.04		0.04			
E.1	BS2	Roof	H	5	0.03		0.05			0.05	0.05		0.04			
E.1	BS3	Roof	H	5	0.04		0.03			0.05	0.05		0.03			
E.1	BS4	Roof	H	5	0.05		0.03			0.05	0.05		0.04			
E.1	BS5	Roof	H	5	0.03		0.02			0.03	0.03		0.04			
E.1	BS1	Roof	E	6				0.04		0.02		0.03		0.02		0.03
E.1	BS2	Roof	E	6				0.03		0.02		0.04		0.04		0.04
E.1	BS3	Roof	E	6				0.01		0.03		0.03		0.03		0.03
E.1	BS4	Roof	E	6				0.01		0.02		0.02		0.03		0.02
E.1	BS5	Roof	E	6				0.01		0.02		0.01		0.02		0.01
E.1	BS1	Roof	H	6				0.03		0.04		0.04		0.04		0.04
E.1	BS2	Roof	H	6				0.03		0.04		0.05		0.05		0.05
E.1	BS3	Roof	H	6				0.02		0.04		0.04		0.04		0.04
E.1	BS4	Roof	H	6				0.03		0.04		0.04		0.05		0.05
E.1	BS5	Roof	H	6				0.02		0.03		0.03		0.04		0.03
E.1	BS1	Roof	E	7	0.04	0.03	0.04			0.02		0.03		0.02		0.02
E.1	BS2	Roof	E	7	0.02	0.03	0.04			0.03		0.04		0.03		0.04
E.1	BS3	Roof	E	7	0.02	0.02	0.02			0.03		0.03		0.03		0.02
E.1	BS4	Roof	E	7	0.03	0.02	0.01			0.02		0.02		0.03		0.02
E.1	BS5	Roof	E	7	0.01	0.01	0.01			0.03		0.01		0.02		0.01
E.1	BS1	Roof	H	7	0.03	0.03	0.03			0.03		0.04		0.03		0.03
E.1	BS2	Roof	H	7	0.05	0.04	0.04			0.04		0.04		0.04		0.04
E.1	BS3	Roof	H	7	0.03	0.02	0.02			0.04		0.04		0.04		0.03
E.1	BS4	Roof	H	7	0.04	0.04	0.03			0.03		0.04		0.05		0.03
E.1	BS5	Roof	H	7	0.02	0.02	0.02			0.03		0.03		0.03		0.02
E.1	BS1	Roof	E	8	0.04	0.03	0.04									
E.1	BS2	Roof	E	8	0.04	0.04	0.05									
E.1	BS3	Roof	E	8	0.03	0.03	0.02									
E.1	BS4	Roof	E	8	0.03	0.02	0.01									
E.1	BS5	Roof	E	8	0.02	0.01	0.01									

**Table E.3**  
**Companion Mobile LMR VHF MPE Results for FCC**

Note:

Blue fonts: Frequencies not regulated by FCC.

Pmax (W) 60	Pinitial (W)	59.0	59.0	59.3	59.6	59.1	58.8	58.8	59.0	58.8	58.7	58.7	59.0
	FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Trunk / Roof	E/H Field	Antenna No.	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
					136.0000	140.0000	144.0000	146.0000	148.0000	150.8000	156.2000	158.3000	162.0000	165.9000	167.7000	173.4000
E.1	BS1	Roof	H	8	0.03	0.04	0.05									
E.1	BS2	Roof	H	8	0.04	0.05	0.07									
E.1	BS3	Roof	H	8	0.04	0.04	0.03									
E.1	BS4	Roof	H	8	0.05	0.04	0.03									
E.1	BS5	Roof	H	8	0.03	0.03	0.03									
E.1	BS1	Roof	E	9			0.04		0.04	0.03						
E.1	BS2	Roof	E	9			0.05		0.03	0.02						
E.1	BS3	Roof	E	9			0.02		0.03	0.04						
E.1	BS4	Roof	E	9			0.01		0.02	0.03						
E.1	BS5	Roof	E	9			0.01		0.02	0.03						
E.1	BS1	Roof	H	9			0.05		0.06	0.05						
E.1	BS2	Roof	H	9			0.05		0.06	0.06						
E.1	BS3	Roof	H	9			0.03		0.05	0.05						
E.1	BS4	Roof	H	9			0.03		0.05	0.06						
E.1	BS5	Roof	H	9			0.03		0.03	0.04						
E.1	BS1	Roof	E	10						0.05	0.05		0.05			
E.1	BS2	Roof	E	10						0.05	0.06		0.05			
E.1	BS3	Roof	E	10						0.04	0.06		0.05			
E.1	BS4	Roof	E	10						0.02	0.03		0.03			
E.1	BS5	Roof	E	10						0.02	0.02		0.03			
E.1	BS1	Roof	H	10						0.05	0.05		0.05			
E.1	BS2	Roof	H	10						0.05	0.06		0.05			
E.1	BS3	Roof	H	10						0.04	0.06		0.05			
E.1	BS4	Roof	H	10						0.04	0.04		0.05			
E.1	BS5	Roof	H	10						0.03	0.03		0.04			
E.1	BS1	Roof	E	11									0.02		0.02	0.03
E.1	BS2	Roof	E	11									0.04		0.04	0.04
E.1	BS3	Roof	E	11									0.02		0.03	0.03
E.1	BS4	Roof	E	11									0.03		0.03	0.02
E.1	BS5	Roof	E	11									0.03		0.02	0.02
E.1	BS1	Roof	H	11									0.05		0.04	0.05
E.1	BS2	Roof	H	11									0.05		0.05	0.05
E.1	BS3	Roof	H	11									0.04		0.05	0.04
E.1	BS4	Roof	H	11									0.04		0.04	0.03
E.1	BS5	Roof	H	11									0.04		0.03	0.03

**Table E.3**  
**Companion Mobile LMR VHF MPE Results for FCC**

Note:

Blue fonts: Frequencies not regulated by FCC.

Pmax (W) 60	Pinitial (W)	59.0	59.0	59.3	59.6	59.1	58.8	58.8	59.0	58.8	58.7	58.7	59.0
	FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Trunk / Roof	E/H Field	Antenna No.	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
					136.0000	140.0000	144.0000	146.0000	148.0000	150.8000	156.2000	158.3000	162.0000	165.9000	167.7000	173.4000
E.1	BS1	Roof	E	12	0.03	0.02	0.03			0.02		0.03		0.03		0.03
E.1	BS2	Roof	E	12	0.02	0.02	0.03			0.02		0.04		0.04		0.04
E.1	BS3	Roof	E	12	0.01	0.02	0.02			0.02		0.03		0.03		0.03
E.1	BS4	Roof	E	12	0.02	0.01	0.01			0.02		0.02		0.03		0.02
E.1	BS5	Roof	E	12	0.01	0.01	0.01			0.02		0.01		0.02		0.01
E.1	BS1	Roof	H	12	0.03	0.04	0.04			0.03		0.04		0.03		0.04
E.1	BS2	Roof	H	12	0.03	0.03	0.04			0.03		0.05		0.04		0.05
E.1	BS3	Roof	H	12	0.02	0.03	0.02			0.03		0.04		0.04		0.04
E.1	BS4	Roof	H	12	0.04	0.03	0.03			0.04		0.04		0.05		0.03
E.1	BS5	Roof	H	12	0.03	0.02	0.02			0.03		0.03		0.03		0.02
E.1	BS1	Roof	E	13	0.02	0.02	0.02			0.02		0.02		0.03		0.03
E.1	BS2	Roof	E	13	0.02	0.02	0.02			0.02		0.03		0.03		0.04
E.1	BS3	Roof	E	13	0.01	0.01	0.01			0.01		0.03		0.02		0.03
E.1	BS4	Roof	E	13	0.01	0.01	0.01			0.01		0.02		0.02		0.02
E.1	BS5	Roof	E	13	0.01	0.01	0.01			0.01		0.01		0.01		0.01
E.1	BS1	Roof	H	13	0.02	0.02	0.03			0.02		0.03		0.03		0.04
E.1	BS2	Roof	H	13	0.02	0.02	0.02			0.03		0.03		0.03		0.04
E.1	BS3	Roof	H	13	0.02	0.02	0.02			0.02		0.03		0.03		0.04
E.1	BS4	Roof	H	13	0.03	0.03	0.04			0.03		0.04		0.03		0.04
E.1	BS5	Roof	H	13	0.02	0.02	0.02			0.02		0.02		0.02		0.02
E.2	PB	Roof	E	5	0.14		0.12			0.15	0.15		0.14			
E.2	PB	Roof	H	5	0.05		0.06			0.08	0.07		0.05			
E.2	PB	Roof	E	6				0.07		0.12		0.15		0.15		0.06
E.2	PB	Roof	H	6				0.03		0.06		0.07		0.07		0.05
E.2	PB	Roof	E	7	0.10	0.16	0.15			0.16		0.16		0.12		0.06
E.2	PB	Roof	H	7	0.06	0.05	0.04			0.06		0.04		0.06		0.04
E.2	PB	Roof	E	8	0.18	0.14	0.12									
E.2	PB	Roof	H	8	0.07	0.07	0.07									
E.2	PB	Roof	E	9			0.11		0.16	0.17						
E.2	PB	Roof	H	9			0.05		0.07	0.08						
E.2	PB	Roof	E	10						0.13	0.18		0.20			
E.2	PB	Roof	H	10						0.08	0.08		0.08			
E.2	PB	Roof	E	11									0.20		0.13	0.09
E.2	PB	Roof	H	11									0.07		0.06	0.06
E.2	PB	Roof	E	12	0.04	0.04	0.04			0.06		0.07		0.08		0.04
E.2	PB	Roof	H	12	0.02	0.03	0.03			0.02		0.03		0.04		0.03
E.2	PB	Roof	E	13	0.01	0.02	0.03			0.02		0.03		0.03		0.02
E.2	PB	Roof	H	13	0.03	0.02	0.02			0.02		0.03		0.03		0.02

**Table E.3**  
**Companion Mobile LMR VHF MPE Results for FCC**

Note:

Blue fonts: Frequencies not regulated by FCC.

Pmax (W) 60	Pinitial (W)	59.0	59.0	59.3	59.6	59.1	58.8	58.8	59.0	58.8	58.7	58.7	59.0
	FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Trunk / Roof	E/H Field	Antenna No.	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
					136.0000	140.0000	144.0000	146.0000	148.0000	150.8000	156.2000	158.3000	162.0000	165.9000	167.7000	173.4000
E.2	PF	Roof	E	5	0.04		0.06			0.03	0.04		0.04			
E.2	PF	Roof	H	5	0.05		0.04			0.04	0.04		0.04			
E.2	PF	Roof	E	6				0.05		0.04		0.04		0.06		0.07
E.2	PF	Roof	H	6				0.02		0.03		0.05		0.06		0.03
E.2	PF	Roof	E	7	0.03	0.05	0.03			0.02		0.05		0.03		0.03
E.2	PF	Roof	H	7	0.07	0.07	0.04			0.03		0.03		0.02		0.02
E.2	PF	Roof	E	8	0.07	0.05	0.07									
E.2	PF	Roof	H	8	0.07	0.05	0.04									
E.2	PF	Roof	E	9			0.07		0.06	0.05						
E.2	PF	Roof	H	9			0.04		0.04	0.04						
E.2	PF	Roof	E	10						0.04	0.06		0.05			
E.2	PF	Roof	H	10						0.03	0.03		0.03			
E.2	PF	Roof	E	11									0.08		0.08	0.07
E.2	PF	Roof	H	11									0.04		0.03	0.04
E.2	PF	Roof	E	12	0.02	0.05	0.04			0.06		0.04		0.04		0.04
E.2	PF	Roof	H	12	0.06	0.05	0.02			0.02		0.02		0.03		0.02
E.2	PF	Roof	E	13	0.04	0.01	0.03			0.01		0.05		0.05		0.03
E.2	PF	Roof	H	13	0.06	0.02	0.03			0.01		0.02		0.03		0.02





## **Appendix F – MPE Measurement Results for DVR 800**

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

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

MPE calculations are defined in section 14.0.

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

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

MPE calculations are defined in section 14.0.

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

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

MPE calculations are defined in section 14.0.

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

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

MPE calculations are defined in section 14.0.

**Appendix G – MPE Measurement Results for APX4500 VHF**

**Table G.1**

**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS1	0.042	0.062	0.072	0.068	0.064	0.071	0.072	0.082	0.081	0.077	0.5	0.071	0.036	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS1	0.038	0.06	0.068	0.062	0.057	0.049	0.05	0.056	0.056	0.053	0.5	0.056	0.028	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS1	0.055	0.082	0.087	0.08	0.074	0.071	0.076	0.08	0.079	0.071	0.5	0.077	0.039	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS1	0.04	0.055	0.055	0.045	0.04	0.037	0.042	0.046	0.047	0.044	0.5	0.046	0.023	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS1	0.041	0.058	0.056	0.045	0.04	0.08	0.044	0.046	0.044	0.043	0.5	0.051	0.025	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS1	0.045	0.057	0.03	0.034	0.03	0.03	0.035	0.037	0.04	0.048	0.5	0.039	0.020	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS1	0.04	0.051	0.046	0.035	0.027	0.031	0.04	0.048	0.056	0.068	0.5	0.045	0.023	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS2	0.014	0.028	0.039	0.041	0.041	0.04	0.04	0.041	0.04	0.034	0.5	0.037	0.018	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS2	0.031	0.053	0.069	0.071	0.072	0.07	0.07	0.075	0.071	0.071	0.5	0.067	0.033	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS2	0.043	0.067	0.081	0.085	0.087	0.09	0.097	0.104	0.104	0.1	0.5	0.088	0.044	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS2	0.037	0.058	0.07	0.075	0.07	0.066	0.07	0.064	0.063	0.058	0.5	0.064	0.032	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS2	0.054	0.081	0.099	0.088	0.084	0.084	0.091	0.094	0.092	0.091	0.5	0.088	0.044	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS2	0.046	0.06	0.059	0.063	0.062	0.065	0.072	0.073	0.07	0.067	0.5	0.065	0.03	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS2	0.045	0.06	0.067	0.061	0.066	0.071	0.078	0.081	0.08	0.078	0.5	0.070	0.04	0.04		

Notes:

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



**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.										Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions														
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm					
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS3	0.016	0.037	0.05	0.055	0.053	0.05	0.05	0.04	0.043	0.036	0.5	0.044	0.02	0.02	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS3	0.02	0.034	0.037	0.047	0.048	0.048	0.043	0.042	0.043	0.04	0.5	0.041	0.02	0.02	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS3	0.016	0.026	0.032	0.03	0.032	0.031	0.032	0.034	0.038	0.038	0.5	0.032	0.016	0.02	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS3	0.026	0.044	0.055	0.06	0.06	0.062	0.064	0.068	0.07	0.066	0.5	0.059	0.029	0.03	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS3	0.025	0.041	0.047	0.048	0.05	0.055	0.06	0.063	0.067	0.066	0.5	0.053	0.027	0.03	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS3	0.027	0.038	0.042	0.044	0.049	0.055	0.058	0.06	0.061	0.057	0.5	0.050	0.025	0.03	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS3	0.02	0.022	0.042	0.046	0.044	0.046	0.047	0.048	0.046	0.042	0.5	0.041	0.021	0.02	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS4	0.022	0.022	0.037	0.049	0.055	0.059	0.062	0.062	0.059	0.06	0.5	0.050	0.025	0.03	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS4	0.02	0.031	0.039	0.043	0.046	0.044	0.05	0.05	0.046	0.047	0.5	0.042	0.021	0.02	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS4	0.008	0.012	0.017	0.018	0.018	0.02	0.02	0.021	0.021	0.023	0.5	0.018	0.009	0.01	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS4	0.026	0.041	0.052	0.057	0.055	0.045	0.051	0.043	0.045	0.043	0.5	0.047	0.02	0.02	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS4	0.023	0.036	0.043	0.050	0.047	0.044	0.044	0.041	0.042	0.036	0.5	0.041	0.02	0.02	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS4	0.028	0.043	0.055	0.044	0.065	0.060	0.058	0.053	0.048	0.04	0.5	0.050	0.03	0.03	
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS4	0.023	0.035	0.043	0.04	0.037	0.034	0.029	0.029	0.022	0.02	0.5	0.032	0.016	0.02	

Notes:

MPE calculations are defined in section 15.0  
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**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS5	0.02	0.033	0.037	0.035	0.027	0.02	0.02	0.021	0.025	0.027	0.5	0.027	0.014	0.01		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS5	0.016	0.026	0.03	0.028	0.022	0.020	0.019	0.021	0.025	0.027	0.5	0.024	0.01	0.01		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS5	0.009	0.015	0.019	0.019	0.017	0.019	0.02	0.023	0.025	0.025	0.5	0.019	0.010	0.01		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS5	0.026	0.045	0.051	0.05	0.051	0.051	0.056	0.057	0.056	0.053	0.5	0.051	0.03	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS5	0.022	0.031	0.032	0.029	0.026	0.028	0.03	0.03	0.027	0.024	0.5	0.028	0.01	0.01		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS5	0.035	0.051	0.051	0.041	0.038	0.03	0.031	0.035	0.035	0.034	0.5	0.039	0.02	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS5	0.027	0.036	0.035	0.027	0.024	0.023	0.023	0.025	0.021	0.015	0.5	0.026	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS1	0.015	0.03	0.036	0.032	0.03	0.028	0.037	0.055	0.074	0.088	0.5	0.044	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS1	0.022	0.035	0.04	0.032	0.023	0.021	0.031	0.045	0.065	0.076	0.5	0.040	0.020	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS1	0.016	0.028	0.03	0.025	0.02	0.024	0.042	0.063	0.087	0.097	0.5	0.044	0.022	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS1	0.024	0.035	0.036	0.027	0.025	0.022	0.03	0.045	0.061	0.076	0.5	0.039	0.019	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS1	0.026	0.035	0.038	0.03	0.028	0.025	0.036	0.05	0.061	0.072	0.5	0.041	0.020	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS1	0.026	0.034	0.03	0.028	0.026	0.032	0.05	0.067	0.092	0.114	0.5	0.051	0.025	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS1	0.042	0.05	0.041	0.03	0.03	0.044	0.07	0.099	0.122	0.144	0.5	0.069	0.034	0.03		

Notes:

MPE calculations are defined in section 15.0  
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**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS2	0.014	0.025	0.031	0.03	0.025	0.028	0.041	0.04	0.052	0.061	0.5	0.036	0.018	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS2	0.01	0.021	0.026	0.024	0.019	0.021	0.032	0.045	0.058	0.068	0.5	0.033	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS2	0.008	0.022	0.031	0.031	0.033	0.038	0.048	0.06	0.072	0.079	0.5	0.043	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS2	0.02	0.03	0.037	0.031	0.028	0.032	0.037	0.044	0.048	0.048	0.5	0.036	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS2	0.034	0.054	0.061	0.054	0.05	0.054	0.065	0.084	0.088	0.106	0.5	0.066	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS2	0.029	0.042	0.042	0.036	0.031	0.038	0.048	0.062	0.071	0.082	0.5	0.049	0.02	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS2	0.036	0.053	0.056	0.057	0.061	0.073	0.089	0.106	0.112	0.121	0.5	0.078	0.04	0.04		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS3	0.01	0.017	0.021	0.019	0.016	0.012	0.014	0.016	0.022	0.025	0.5	0.018	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS3	0.008	0.011	0.015	0.017	0.016	0.018	0.022	0.028	0.033	0.036	0.5	0.021	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS3	0.009	0.015	0.019	0.022	0.02	0.022	0.024	0.028	0.031	0.033	0.5	0.023	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS3	0.011	0.018	0.02	0.022	0.02	0.021	0.022	0.029	0.032	0.035	0.5	0.023	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS3	0.024	0.032	0.038	0.04	0.045	0.047	0.06	0.068	0.072	0.073	0.5	0.051	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS3	0.017	0.023	0.025	0.027	0.028	0.031	0.037	0.041	0.047	0.046	0.5	0.033	0.02	0.02		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS4	0.008	0.014	0.019	0.019	0.019	0.023	0.024	0.025	0.028	0.031	0.5	0.022	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS4	0.007	0.013	0.019	0.02	0.019	0.019	0.017	0.02	0.021	0.02	0.5	0.018	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS4	0.009	0.013	0.019	0.017	0.018	0.019	0.021	0.021	0.02	0.022	0.5	0.018	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS4	0.010	0.02	0.022	0.023	0.021	0.023	0.022	0.023	0.023	0.02	0.5	0.021	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS4	0.021	0.033	0.039	0.042	0.04	0.038	0.038	0.038	0.036	0.036	0.5	0.037	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS4	0.02	0.027	0.033	0.033	0.035	0.031	0.029	0.028	0.029	0.026	0.5	0.030	0.015	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS4	0.03	0.04	0.046	0.045	0.048	0.042	0.032	0.028	0.025	0.027	0.5	0.037	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS5	0.007	0.009	0.009	0.008	0.007	0.008	0.011	0.018	0.023	0.025	0.5	0.013	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS5	0.008	0.015	0.016	0.015	0.011	0.012	0.013	0.017	0.018	0.023	0.5	0.015	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS5	0.01	0.016	0.017	0.013	0.011	0.01	0.011	0.01	0.014	0.019	0.5	0.013	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS5	0.007	0.015	0.012	0.012	0.015	0.017	0.021	0.024	0.026	0.025	0.5	0.018	0.009	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS5	0.011	0.014	0.01	0.014	0.014	0.014	0.014	0.016	0.018	0.016	0.5	0.014	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS5	0.022	0.025	0.024	0.022	0.019	0.02	0.024	0.025	0.025	0.024	0.5	0.023	0.01	0.01		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS5	0.027	0.029	0.025	0.019	0.017	0.018	0.024	0.024	0.023	0.022	0.5	0.023	0.01	0.01		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS1	0.032	0.041	0.052	0.06	0.056	0.046	0.055	0.073	0.096	0.1	0.5	0.063	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS1	0.025	0.038	0.042	0.036	0.03	0.03	0.036	0.051	0.065	0.075	0.5	0.044	0.022	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS1	0.024	0.04	0.046	0.044	0.04	0.04	0.054	0.067	0.082	0.097	0.5	0.054	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS1	0.023	0.036	0.041	0.034	0.03	0.034	0.046	0.054	0.071	0.080	0.5	0.046	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS1	0.045	0.06	0.056	0.042	0.034	0.04	0.054	0.065	0.074	0.086	0.5	0.057	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS1	0.052	0.064	0.057	0.04	0.033	0.038	0.054	0.080	0.101	0.123	0.5	0.065	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS1	0.041	0.048	0.041	0.03	0.03	0.041	0.058	0.081	0.101	0.117	0.5	0.060	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS2	0.015	0.025	0.032	0.027	0.036	0.039	0.044	0.055	0.069	0.077	0.5	0.043	0.022	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS2	0.009	0.023	0.031	0.031	0.033	0.038	0.047	0.062	0.072	0.084	0.5	0.044	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS2	0.024	0.039	0.05	0.058	0.062	0.067	0.077	0.087	0.095	0.105	0.5	0.068	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS2	0.015	0.028	0.036	0.033	0.032	0.034	0.04	0.043	0.049	0.05	0.5	0.037	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS2	0.042	0.063	0.074	0.073	0.075	0.078	0.088	0.097	0.101	0.109	0.5	0.082	0.041	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS2	0.043	0.064	0.068	0.062	0.063	0.07	0.08	0.087	0.084	0.093	0.5	0.073	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS2	0.04	0.058	0.063	0.068	0.067	0.072	0.085	0.093	0.106	0.106	0.5	0.077	0.04	0.04		

Notes:

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

Table G.1 (Continued)

APX4500 VHF - MPE measurement data for Bystander

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS3	0.01	0.015	0.019	0.022	0.022	0.024	0.026	0.029	0.037	0.043	0.5	0.025	0.013	0.01		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS3	0.01	0.018	0.027	0.031	0.033	0.035	0.04	0.046	0.053	0.056	0.5	0.036	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS3	0.016	0.025	0.028	0.032	0.033	0.035	0.037	0.043	0.046	0.05	0.5	0.035	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS3	0.016	0.026	0.03	0.035	0.037	0.041	0.043	0.048	0.052	0.054	0.5	0.039	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS3	0.029	0.04	0.048	0.05	0.052	0.061	0.074	0.082	0.087	0.078	0.5	0.061	0.031	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS3	0.027	0.035	0.042	0.045	0.058	0.069	0.071	0.08	0.083	0.078	0.5	0.060	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS3	0.032	0.042	0.045	0.049	0.053	0.057	0.061	0.06	0.062	0.059	0.5	0.053	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS4	0.016	0.022	0.029	0.032	0.038	0.039	0.042	0.046	0.049	0.053	0.5	0.038	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS4	0.013	0.021	0.025	0.027	0.03	0.032	0.027	0.03	0.033	0.034	0.5	0.028	0.01	0.01		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS4	0.009	0.024	0.021	0.023	0.026	0.025	0.031	0.032	0.033	0.034	0.5	0.026	0.01	0.01		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS4	0.02	0.029	0.037	0.039	0.04	0.041	0.042	0.041	0.04	0.039	0.5	0.038	0.019	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS4	0.026	0.035	0.044	0.046	0.049	0.049	0.04	0.047	0.04	0.043	0.5	0.043	0.021	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS4	0.033	0.05	0.063	0.065	0.064	0.068	0.057	0.059	0.055	0.046	0.5	0.057	0.029	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS4	0.027	0.04	0.05	0.041	0.047	0.042	0.033	0.034	0.032	0.028	0.5	0.038	0.019	0.02		

Notes:

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

Table G.1 (Continued)

APX4500 VHF - MPE measurement data for Bystander

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	E	1.03	BS5	0.014	0.02	0.024	0.021	0.019	0.017	0.021	0.024	0.03	0.034	0.5	0.023	0.012	0.01		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	E	1.02	BS5	0.013	0.023	0.028	0.026	0.021	0.019	0.02	0.022	0.027	0.031	0.5	0.023	0.012	0.01		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	E	1.02	BS5	0.015	0.018	0.022	0.018	0.014	0.013	0.015	0.019	0.021	0.022	0.5	0.018	0.009	0.01		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	E	1.02	BS5	0.021	0.027	0.033	0.037	0.037	0.044	0.05	0.051	0.048	0.048	0.5	0.040	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	E	1.02	BS5	0.017	0.022	0.022	0.022	0.022	0.024	0.025	0.025	0.022	0.02	0.5	0.023	0.01	0.01		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	E	1.02	BS5	0.037	0.049	0.049	0.04	0.035	0.034	0.038	0.038	0.041	0.037	0.5	0.041	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	E	1.02	BS5	0.027	0.034	0.032	0.023	0.022	0.021	0.023	0.026	0.024	0.018	0.5	0.026	0.01	0.01		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS1	0.045	0.065	0.078	0.081	0.075	0.072	0.077	0.082	0.086	0.082	0.5	0.077	0.04	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS1	0.058	0.089	0.106	0.104	0.085	0.076	0.083	0.088	0.086	0.082	0.5	0.087	0.044	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS1	0.04	0.055	0.06	0.052	0.042	0.042	0.045	0.05	0.05	0.047	0.5	0.049	0.02	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS1	0.049	0.07	0.074	0.06	0.048	0.048	0.049	0.049	0.05	0.048	0.5	0.056	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS1	0.036	0.051	0.053	0.041	0.035	0.033	0.03	0.033	0.032	0.034	0.5	0.039	0.02	0.02		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS2	0.028	0.054	0.074	0.08	0.08	0.072	0.072	0.076	0.076	0.07	0.5	0.070	0.04	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS2	0.045	0.075	0.091	0.101	0.1	0.103	0.11	0.106	0.107	0.113	0.5	0.097	0.049	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS2	0.022	0.036	0.044	0.046	0.044	0.042	0.044	0.045	0.043	0.039	0.5	0.041	0.02	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS2	0.051	0.074	0.085	0.086	0.084	0.087	0.092	0.087	0.089	0.08	0.5	0.083	0.04	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS2	0.049	0.068	0.071	0.065	0.06	0.063	0.065	0.067	0.06	0.06	0.5	0.064	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS3	0.018	0.033	0.048	0.054	0.056	0.055	0.056	0.045	0.043	0.046	0.5	0.047	0.02	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS3	0.022	0.033	0.037	0.042	0.038	0.039	0.04	0.041	0.043	0.043	0.5	0.039	0.019	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS3	0.03	0.049	0.064	0.07	0.074	0.077	0.079	0.08	0.079	0.072	0.5	0.069	0.03	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS3	0.03	0.048	0.06	0.058	0.061	0.067	0.077	0.082	0.086	0.086	0.5	0.067	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS3	0.022	0.032	0.036	0.038	0.035	0.038	0.042	0.039	0.04	0.042	0.5	0.037	0.02	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS4	0.021	0.038	0.046	0.054	0.057	0.055	0.053	0.057	0.054	0.053	0.5	0.050	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS4	0.011	0.016	0.018	0.022	0.022	0.022	0.021	0.024	0.03	0.03	0.5	0.022	0.01	0.01		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS4	0.031	0.046	0.06	0.054	0.054	0.062	0.051	0.051	0.049	0.054	0.5	0.052	0.026	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS4	0.031	0.046	0.058	0.062	0.058	0.05	0.053	0.05	0.06	0.059	0.5	0.054	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS4	0.025	0.038	0.044	0.05	0.049	0.044	0.045	0.041	0.036	0.029	0.5	0.041	0.02	0.02		

Notes:

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



**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm <sup>2</sup> )	Calc. P.D. (mW/cm <sup>2</sup> )	Max Calc. P.D. (mW/cm <sup>2</sup> )
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS5	0.022	0.035	0.043	0.041	0.033	0.028	0.025	0.028	0.03	0.031	0.5	0.033	0.016	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS5	0.006	0.015	0.018	0.018	0.018	0.018	0.02	0.023	0.023	0.025	0.5	0.019	0.01	0.01		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS5	0.025	0.041	0.051	0.055	0.056	0.056	0.059	0.063	0.058	0.055	0.5	0.053	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS5	0.02	0.029	0.033	0.031	0.031	0.036	0.034	0.032	0.031	0.028	0.5	0.031	0.016	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS5	0.026	0.033	0.035	0.033	0.032	0.036	0.041	0.042	0.042	0.038	0.5	0.037	0.018	0.02		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	E	1.02	BS1	0.048	0.079	0.086	0.08	0.074	0.07	0.067	0.072	0.07	0.065	0.5	0.073	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS1	0.03	0.055	0.055	0.054	0.037	0.041	0.04	0.044	0.049	0.048	0.5	0.046	0.023	0.02		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS1	0.052	0.064	0.064	0.054	0.046	0.046	0.05	0.05	0.047	0.044	0.5	0.053	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS1	0.056	0.062	0.054	0.04	0.033	0.036	0.04	0.041	0.046	0.052	0.5	0.047	0.02	0.02		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS1	0.05	0.06	0.054	0.04	0.032	0.033	0.044	0.052	0.06	0.072	0.5	0.051	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	E	1.02	BS2	0.035	0.054	0.062	0.065	0.065	0.066	0.07	0.074	0.078	0.076	0.5	0.066	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS2	0.024	0.04	0.045	0.05	0.046	0.044	0.041	0.041	0.04	0.036	0.5	0.042	0.021	0.02		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS2	0.048	0.07	0.081	0.076	0.073	0.072	0.076	0.075	0.074	0.074	0.5	0.073	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS2	0.055	0.075	0.087	0.07	0.071	0.072	0.08	0.084	0.08	0.077	0.5	0.077	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS2	0.051	0.072	0.075	0.076	0.075	0.083	0.09	0.09	0.092	0.09	0.5	0.081	0.04	0.04		

Notes:

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

Table G.1 (Continued)

APX4500 VHF - MPE measurement data for Bystander

D.U.T. Info.											MPE Measurements													
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions										DUT Max. TX Factor	Avg. over Body (mW/cm <sup>2</sup> )	Calc. P.D. (mW/cm <sup>2</sup> )	Max Calc. P.D. (mW/cm <sup>2</sup> )
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	E	1.02	BS3	0.006	0.021	0.026	0.026	0.024	0.023	0.023	0.024	0.026	0.026	0.5	0.023	0.01	0.01
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	E	1.02	BS3	0.012	0.02	0.025	0.026	0.023	0.025	0.027	0.027	0.03	0.028	0.5	0.025	0.01	0.01
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS3	0.024	0.037	0.048	0.054	0.056	0.055	0.06	0.061	0.059	0.055	0.5	0.052	0.026	0.03
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS3	0.031	0.04	0.049	0.051	0.051	0.057	0.062	0.068	0.064	0.064	0.5	0.055	0.03	0.03
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS3	0.032	0.042	0.049	0.054	0.057	0.063	0.068	0.07	0.065	0.06	0.5	0.057	0.03	0.03
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS3	0.031	0.041	0.052	0.051	0.057	0.055	0.056	0.06	0.05	0.046	0.5	0.051	0.03	0.03
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	E	1.02	BS4	0.008	0.014	0.016	0.018	0.016	0.014	0.015	0.014	0.016	0.014	0.5	0.015	0.01	0.01
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS4	0.024	0.035	0.042	0.044	0.043	0.047	0.047	0.043	0.035	0.034	0.5	0.040	0.02	0.02
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS4	0.028	0.037	0.046	0.053	0.048	0.046	0.039	0.043	0.044	0.034	0.5	0.043	0.021	0.02
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS4	0.039	0.059	0.071	0.082	0.083	0.068	0.067	0.071	0.062	0.053	0.5	0.067	0.03	0.03
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS4	0.026	0.044	0.049	0.051	0.048	0.041	0.035	0.031	0.028	0.024	0.5	0.038	0.02	0.02
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	E	1.02	BS5	0.006	0.015	0.016	0.018	0.017	0.018	0.016	0.018	0.017	0.016	0.5	0.016	0.008	0.01
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS5	0.019	0.032	0.041	0.042	0.043	0.042	0.045	0.044	0.044	0.042	0.5	0.040	0.02	0.02
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	E	1.02	BS5	0.023	0.029	0.031	0.029	0.029	0.031	0.031	0.031	0.027	0.022	0.5	0.029	0.01	0.01
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	E	1.02	BS5	0.042	0.058	0.06	0.052	0.046	0.039	0.041	0.044	0.041	0.042	0.5	0.047	0.024	0.02
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS5	0.029	0.04	0.039	0.033	0.027	0.025	0.024	0.023	0.022	0.018	0.5	0.029	0.014	0.01

Notes:

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

**Table G.1 (Continued)**

**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm <sup>2</sup> )	Calc. P.D. (mW/cm <sup>2</sup> )	Max Calc. P.D. (mW/cm <sup>2</sup> )
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS1	0.053	0.073	0.087	0.087	0.077	0.071	0.08	0.09	0.094	0.09	0.5	0.083	0.04	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS1	0.042	0.071	0.087	0.071	0.056	0.051	0.053	0.06	0.064	0.062	0.5	0.063	0.03	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS1	0.06	0.086	0.097	0.102	0.084	0.076	0.082	0.087	0.088	0.084	0.5	0.086	0.043	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS2	0.034	0.063	0.083	0.088	0.088	0.082	0.085	0.086	0.085	0.08	0.5	0.080	0.040	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS2	0.042	0.052	0.092	0.1	0.097	0.096	0.098	0.096	0.096	0.091	0.5	0.088	0.044	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS2	0.052	0.08	0.101	0.105	0.105	0.106	0.115	0.12	0.12	0.115	0.5	0.104	0.052	0.05		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS3	0.019	0.037	0.056	0.057	0.066	0.061	0.05	0.052	0.054	0.05	0.5	0.052	0.026	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS3	0.026	0.04	0.055	0.058	0.06	0.06	0.056	0.056	0.056	0.055	0.5	0.053	0.027	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS3	0.021	0.037	0.042	0.041	0.037	0.043	0.047	0.051	0.056	0.056	0.5	0.044	0.022	0.02		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS4	0.022	0.036	0.053	0.061	0.064	0.059	0.059	0.059	0.059	0.057	0.5	0.054	0.027	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS4	0.015	0.026	0.036	0.036	0.04	0.037	0.043	0.04	0.035	0.035	0.5	0.035	0.017	0.02		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS4	0.013	0.019	0.023	0.024	0.025	0.025	0.025	0.03	0.034	0.037	0.5	0.026	0.013	0.01		

Notes:

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

Table G.1 (Continued)

APX4500 VHF - MPE measurement data for Bystander

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	E	1.03	BS5	0.023	0.04	0.046	0.045	0.035	0.029	0.027	0.03	0.034	0.036	0.5	0.036	0.018	0.02		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	E	1.02	BS5	0.019	0.025	0.028	0.025	0.019	0.016	0.017	0.019	0.023	0.026	0.5	0.022	0.011	0.01		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS5	0.006	0.017	0.021	0.021	0.02	0.022	0.023	0.025	0.028	0.029	0.5	0.022	0.011	0.01		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS1	0.061	0.087	0.1	0.097	0.077	0.075	0.084	0.09	0.092	0.084	0.5	0.086	0.043	0.04		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	E	1.02	BS1	0.058	0.083	0.092	0.08	0.065	0.06	0.076	0.081	0.083	0.088	0.5	0.078	0.039	0.04		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS1	0.04	0.055	0.055	0.047	0.038	0.044	0.05	0.052	0.053	0.051	0.5	0.049	0.025	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS2	0.05	0.08	0.1	0.102	0.102	0.103	0.109	0.116	0.115	0.111	0.5	0.101	0.050	0.05		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	E	1.02	BS2	0.031	0.052	0.064	0.064	0.06	0.06	0.061	0.067	0.067	0.07	0.5	0.061	0.030	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS2	0.023	0.041	0.052	0.05	0.048	0.045	0.047	0.046	0.042	0.04	0.5	0.044	0.022	0.02		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS3	0.022	0.034	0.041	0.042	0.04	0.04	0.041	0.041	0.046	0.047	0.5	0.040	0.020	0.02		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	E	1.02	BS3	0.028	0.049	0.06	0.062	0.064	0.057	0.062	0.063	0.062	0.059	0.5	0.058	0.029	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS3	0.037	0.057	0.07	0.073	0.078	0.08	0.078	0.087	0.08	0.076	0.5	0.073	0.04	0.04		

Notes:

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

Table G.1 (Continued)

APX4500 VHF - MPE measurement data for Bystander

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS4	0.011	0.018	0.023	0.025	0.02	0.022	0.022	0.025	0.026	0.031	0.5	0.023	0.01	0.01		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	E	1.02	BS4	0.029	0.032	0.055	0.056	0.057	0.052	0.052	0.045	0.043	0.048	0.5	0.048	0.02	0.02		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS4	0.031	0.046	0.057	0.063	0.059	0.052	0.065	0.056	0.05	0.054	0.5	0.054	0.03	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	E	1.02	BS5	0.008	0.015	0.016	0.02	0.017	0.019	0.021	0.024	0.026	0.028	0.5	0.020	0.010	0.01		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	E	1.02	BS5	0.021	0.037	0.045	0.047	0.044	0.041	0.039	0.035	0.031	0.027	0.5	0.037	0.019	0.02		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS5	0.026	0.043	0.054	0.055	0.057	0.06	0.062	0.061	0.061	0.055	0.5	0.054	0.027	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS1	0.044	0.062	0.062	0.053	0.043	0.047	0.044	0.054	0.055	0.051	0.5	0.053	0.026	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS1	0.068	0.088	0.09	0.069	0.061	0.061	0.066	0.064	0.062	0.056	0.5	0.070	0.035	0.04		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS1	0.048	0.063	0.061	0.052	0.043	0.04	0.04	0.04	0.04	0.04	0.5	0.048	0.024	0.02		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS2	0.020	0.034	0.046	0.041	0.043	0.041	0.040	0.04	0.036	0.035	0.5	0.038	0.02	0.02		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS2	0.054	0.081	0.092	0.092	0.095	0.092	0.092	0.097	0.09	0.085	0.5	0.089	0.04	0.05		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS2	0.061	0.09	0.097	0.083	0.077	0.078	0.087	0.085	0.08	0.08	0.5	0.083	0.04	0.04		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS3	0.028	0.045	0.054	0.061	0.061	0.063	0.067	0.068	0.066	0.063	0.5	0.059	0.03	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS3	0.035	0.05	0.063	0.063	0.061	0.074	0.074	0.085	0.087	0.085	0.5	0.069	0.035	0.04		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS3	0.037	0.041	0.041	0.048	0.049	0.053	0.051	0.06	0.057	0.052	0.5	0.050	0.02	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS4	0.025	0.041	0.048	0.05	0.05	0.05	0.045	0.044	0.049	0.044	0.5	0.045	0.02	0.02		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS4	0.033	0.042	0.053	0.059	0.06	0.061	0.053	0.053	0.053	0.049	0.5	0.053	0.03	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS4	0.035	0.05	0.061	0.066	0.061	0.061	0.056	0.048	0.045	0.044	0.5	0.054	0.03	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	E	1.02	BS5	0.022	0.034	0.041	0.048	0.048	0.047	0.048	0.047	0.046	0.042	0.5	0.043	0.02	0.02		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	E	1.02	BS5	0.023	0.033	0.038	0.038	0.035	0.036	0.034	0.034	0.031	0.03	0.5	0.034	0.02	0.02		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS5	0.038	0.051	0.054	0.056	0.056	0.057	0.061	0.062	0.064	0.06	0.5	0.057	0.029	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS1	0.041	0.051	0.052	0.043	0.034	0.038	0.038	0.037	0.035	0.034	0.5	0.041	0.021	0.02		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	E	1.02	BS1	0.044	0.045	0.04	0.03	0.025	0.033	0.036	0.042	0.046	0.056	0.5	0.040	0.020	0.02		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS1	0.054	0.062	0.051	0.04	0.034	0.04	0.048	0.057	0.065	0.076	0.5	0.054	0.027	0.03		

Notes:

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

**Table G.1 (Continued)**

**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS2	0.054	0.078	0.084	0.077	0.07	0.072	0.072	0.072	0.073	0.066	0.5	0.073	0.037	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	E	1.02	BS2	0.051	0.067	0.072	0.063	0.069	0.07	0.077	0.08	0.077	0.075	0.5	0.072	0.036	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS2	0.056	0.074	0.061	0.081	0.076	0.085	0.091	0.096	0.094	0.094	0.5	0.082	0.04	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS3	0.029	0.037	0.045	0.043	0.045	0.047	0.051	0.054	0.051	0.048	0.5	0.046	0.02	0.02		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	E	1.02	BS3	0.032	0.043	0.052	0.056	0.059	0.063	0.066	0.069	0.069	0.063	0.5	0.058	0.03	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS3	0.038	0.049	0.051	0.054	0.061	0.061	0.062	0.068	0.055	0.052	0.5	0.056	0.03	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS4	0.031	0.05	0.057	0.059	0.066	0.058	0.05	0.044	0.039	0.037	0.5	0.050	0.025	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	E	1.02	BS4	0.034	0.056	0.066	0.069	0.067	0.061	0.069	0.055	0.059	0.051	0.5	0.060	0.03	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS4	0.028	0.047	0.05	0.054	0.047	0.044	0.035	0.034	0.03	0.028	0.5	0.040	0.02	0.02		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	E	1.02	BS5	0.034	0.044	0.052	0.047	0.047	0.048	0.055	0.056	0.055	0.052	0.5	0.050	0.02	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	E	1.02	BS5	0.028	0.041	0.044	0.039	0.031	0.031	0.032	0.033	0.03	0.031	0.5	0.035	0.02	0.02		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	E	1.02	BS5	0.033	0.042	0.04	0.032	0.029	0.027	0.028	0.027	0.024	0.017	0.5	0.030	0.02	0.02		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS1	0.035	0.037	0.042	0.04	0.051	0.058	0.055	0.059	0.058	0.04	0.5	0.065	0.033	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS1	0.032	0.037	0.043	0.047	0.057	0.05	0.056	0.057	0.044	0.048	0.5	0.062	0.031	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS1	0.037	0.03	0.036	0.044	0.048	0.045	0.041	0.051	0.059	0.056	0.5	0.056	0.028	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS1	0.04	0.04	0.042	0.05	0.055	0.052	0.06	0.055	0.044	0.046	0.5	0.063	0.032	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS1	0.035	0.037	0.047	0.047	0.059	0.055	0.064	0.055	0.054	0.057	0.5	0.070	0.035	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS1	0.032	0.039	0.042	0.047	0.05	0.04	0.045	0.049	0.051	0.056	0.5	0.051	0.026	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS1	0.039	0.041	0.045	0.046	0.047	0.042	0.047	0.053	0.06	0.067	0.5	0.059	0.029	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS2	0.04	0.042	0.045	0.051	0.057	0.067	0.068	0.07	0.067	0.066	0.5	0.095	0.048	0.05		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS2	0.04	0.04	0.041	0.041	0.05	0.065	0.065	0.065	0.067	0.064	0.5	0.083	0.041	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS2	0.04	0.04	0.046	0.043	0.051	0.056	0.055	0.057	0.06	0.058	0.5	0.071	0.036	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS2	0.04	0.04	0.044	0.045	0.053	0.061	0.058	0.05	0.062	0.062	0.5	0.072	0.036	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS2	0.04	0.046	0.046	0.05	0.058	0.053	0.063	0.065	0.067	0.065	0.5	0.082	0.041	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS2	0.04	0.04	0.045	0.05	0.057	0.063	0.065	0.06	0.065	0.061	0.5	0.076	0.04	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS2	0.044	0.047	0.047	0.052	0.058	0.067	0.066	0.066	0.064	0.064	0.5	0.082	0.04	0.04		

Notes:

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



**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS3	0.034	0.035	0.034	0.041	0.047	0.041	0.043	0.052	0.056	0.056	0.5	0.056	0.03	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS3	0.037	0.032	0.035	0.04	0.047	0.041	0.04	0.052	0.043	0.04	0.5	0.046	0.02	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS3	0.036	0.038	0.038	0.04	0.043	0.05	0.047	0.045	0.048	0.031	0.5	0.048	0.024	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS3	0.034	0.039	0.047	0.048	0.058	0.063	0.063	0.058	0.062	0.058	0.5	0.077	0.039	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS3	0.043	0.044	0.04	0.05	0.06	0.064	0.063	0.06	0.06	0.061	0.5	0.079	0.040	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS3	0.045	0.047	0.057	0.056	0.063	0.061	0.061	0.06	0.058	0.056	0.5	0.079	0.040	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS3	0.032	0.044	0.05	0.051	0.057	0.064	0.06	0.056	0.047	0.055	0.5	0.066	0.033	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS4	0.052	0.048	0.051	0.054	0.059	0.058	0.059	0.06	0.057	0.059	0.5	0.087	0.043	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS4	0.052	0.047	0.05	0.054	0.056	0.06	0.058	0.061	0.052	0.059	0.5	0.083	0.041	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS4	0.051	0.04	0.041	0.042	0.047	0.059	0.05	0.048	0.048	0.044	0.5	0.061	0.030	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS4	0.047	0.046	0.047	0.042	0.046	0.054	0.048	0.044	0.049	0.051	0.5	0.060	0.03	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS4	0.049	0.046	0.055	0.050	0.062	0.058	0.051	0.056	0.059	0.055	0.5	0.077	0.04	0.04		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS4	0.049	0.055	0.057	0.066	0.07	0.071	0.066	0.065	0.06	0.056	0.5	0.095	0.05	0.05		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS4	0.052	0.045	0.059	0.057	0.056	0.059	0.051	0.046	0.049	0.042	0.5	0.065	0.033	0.03		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS5	0.033	0.032	0.032	0.035	0.037	0.037	0.038	0.031	0.041	0.038	0.5	0.035	0.018	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS5	0.036	0.034	0.035	0.041	0.04	0.046	0.047	0.041	0.046	0.043	0.5	0.046	0.02	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS5	0.033	0.034	0.039	0.036	0.039	0.043	0.044	0.044	0.047	0.044	0.5	0.045	0.022	0.02		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS5	0.036	0.039	0.04	0.047	0.047	0.057	0.059	0.057	0.047	0.045	0.5	0.061	0.03	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS5	0.035	0.039	0.039	0.047	0.044	0.051	0.054	0.048	0.043	0.043	0.5	0.052	0.03	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS5	0.038	0.044	0.044	0.049	0.049	0.055	0.052	0.052	0.051	0.045	0.5	0.057	0.03	0.03		
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS5	0.035	0.037	0.037	0.05	0.051	0.049	0.048	0.04	0.042	0.039	0.5	0.045	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS1	0.038	0.03	0.031	0.03	0.035	0.036	0.039	0.047	0.05	0.045	0.5	0.042	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS1	0.031	0.03	0.031	0.031	0.031	0.036	0.042	0.042	0.049	0.057	0.5	0.041	0.021	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS1	0.023	0.028	0.028	0.036	0.039	0.046	0.055	0.053	0.055	0.066	0.5	0.055	0.028	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS1	0.028	0.03	0.034	0.033	0.035	0.04	0.042	0.04	0.047	0.05	0.5	0.039	0.020	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS1	0.032	0.033	0.04	0.045	0.04	0.043	0.051	0.05	0.057	0.069	0.5	0.058	0.029	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS1	0.03	0.034	0.039	0.043	0.044	0.05	0.054	0.059	0.07	0.076	0.5	0.067	0.033	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS1	0.039	0.041	0.041	0.043	0.051	0.054	0.059	0.069	0.083	0.092	0.5	0.086	0.043	0.04		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS2	0.031	0.032	0.034	0.036	0.038	0.038	0.042	0.043	0.051	0.048	0.5	0.044	0.022	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS2	0.033	0.03	0.03	0.034	0.04	0.04	0.041	0.04	0.047	0.053	0.5	0.042	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS2	0.03	0.03	0.034	0.032	0.034	0.038	0.042	0.045	0.05	0.054	0.5	0.043	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS2	0.034	0.035	0.038	0.04	0.042	0.043	0.042	0.047	0.05	0.056	0.5	0.050	0.02	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS2	0.037	0.04	0.043	0.046	0.048	0.055	0.053	0.056	0.058	0.062	0.5	0.066	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS2	0.034	0.04	0.044	0.045	0.047	0.045	0.044	0.046	0.054	0.066	0.5	0.055	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS2	0.04	0.042	0.047	0.051	0.053	0.064	0.066	0.067	0.072	0.068	0.5	0.081	0.04	0.04		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS3	0.034	0.04	0.036	0.034	0.038	0.038	0.038	0.030	0.033	0.042	0.5	0.037	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS3	0.034	0.037	0.035	0.03	0.033	0.04	0.04	0.040	0.05	0.042	0.5	0.040	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS3	0.035	0.036	0.04	0.033	0.038	0.046	0.041	0.036	0.040	0.037	0.5	0.040	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS3	0.036	0.033	0.04	0.036	0.036	0.038	0.041	0.035	0.04	0.041	0.5	0.038	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS3	0.038	0.033	0.05	0.05	0.05	0.06	0.055	0.048	0.05	0.052	0.5	0.063	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS3	0.035	0.039	0.037	0.043	0.052	0.05	0.046	0.046	0.043	0.051	0.5	0.049	0.02	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS3	0.042	0.048	0.048	0.048	0.057	0.061	0.061	0.044	0.062	0.061	0.5	0.070	0.035	0.04		

Notes:

MPE calculations are defined in section 15.0  
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**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS4	0.048	0.043	0.046	0.046	0.051	0.054	0.047	0.05	0.047	0.043	0.5	0.063	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS4	0.048	0.043	0.049	0.046	0.057	0.056	0.051	0.044	0.049	0.042	0.5	0.065	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS4	0.046	0.048	0.057	0.057	0.053	0.06	0.054	0.046	0.044	0.043	0.5	0.071	0.04	0.04		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS4	0.053	0.044	0.052	0.044	0.057	0.061	0.05	0.046	0.043	0.042	0.5	0.065	0.03	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS4	0.047	0.045	0.053	0.05	0.058	0.06	0.058	0.05	0.05	0.052	0.5	0.072	0.04	0.04		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS4	0.045	0.041	0.05	0.047	0.063	0.058	0.053	0.042	0.049	0.045	0.5	0.061	0.031	0.03		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS4	0.056	0.059	0.054	0.057	0.061	0.06	0.054	0.05	0.046	0.048	0.5	0.072	0.04	0.04		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS5	0.036	0.034	0.035	0.037	0.037	0.038	0.038	0.04	0.038	0.034	0.5	0.038	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS5	0.036	0.035	0.036	0.039	0.04	0.04	0.041	0.039	0.041	0.039	0.5	0.041	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS5	0.038	0.034	0.034	0.037	0.038	0.041	0.041	0.041	0.043	0.037	0.5	0.040	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS5	0.039	0.038	0.038	0.042	0.043	0.043	0.046	0.047	0.044	0.042	0.5	0.048	0.024	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS5	0.035	0.041	0.037	0.042	0.046	0.042	0.041	0.041	0.043	0.037	0.5	0.043	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS5	0.037	0.039	0.042	0.042	0.043	0.042	0.042	0.042	0.044	0.038	0.5	0.042	0.02	0.02		
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS5	0.038	0.037	0.043	0.047	0.041	0.044	0.044	0.042	0.044	0.035	0.5	0.042	0.02	0.02		

Notes:

MPE calculations are defined in section 15.0  
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**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS1	0.032	0.033	0.032	0.036	0.048	0.047	0.046	0.054	0.065	0.077	0.5	0.067	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS1	0.036	0.033	0.04	0.043	0.043	0.058	0.057	0.057	0.062	0.067	0.5	0.070	0.035	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS1	0.034	0.03	0.031	0.033	0.032	0.048	0.07	0.061	0.07	0.070	0.5	0.070	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS1	0.03	0.033	0.038	0.042	0.04	0.042	0.051	0.053	0.053	0.064	0.5	0.056	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS1	0.035	0.034	0.037	0.048	0.054	0.052	0.06	0.057	0.062	0.070	0.5	0.071	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS1	0.031	0.036	0.038	0.045	0.046	0.048	0.046	0.062	0.072	0.078	0.5	0.068	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS1	0.04	0.04	0.041	0.052	0.042	0.055	0.054	0.068	0.076	0.082	0.5	0.078	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS2	0.03	0.031	0.034	0.038	0.042	0.043	0.05	0.05	0.052	0.054	0.5	0.052	0.026	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS2	0.031	0.033	0.032	0.04	0.048	0.053	0.051	0.05	0.041	0.048	0.5	0.051	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS2	0.036	0.04	0.04	0.05	0.056	0.062	0.05	0.06	0.066	0.066	0.5	0.078	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS2	0.035	0.038	0.042	0.047	0.048	0.054	0.057	0.056	0.056	0.058	0.5	0.066	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS2	0.04	0.045	0.043	0.055	0.056	0.068	0.066	0.069	0.068	0.074	0.5	0.092	0.046	0.05		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS2	0.044	0.048	0.05	0.052	0.058	0.062	0.063	0.065	0.068	0.07	0.5	0.085	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS2	0.04	0.042	0.05	0.051	0.063	0.07	0.07	0.072	0.075	0.076	0.5	0.094	0.05	0.05		

Notes:

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**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS3	0.031	0.036	0.034	0.034	0.039	0.044	0.046	0.045	0.049	0.048	0.5	0.047	0.024	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS3	0.038	0.037	0.038	0.038	0.046	0.051	0.052	0.049	0.05	0.051	0.5	0.056	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS3	0.034	0.036	0.043	0.037	0.043	0.044	0.039	0.048	0.045	0.05	0.5	0.048	0.02	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS3	0.04	0.045	0.04	0.036	0.044	0.049	0.053	0.048	0.049	0.051	0.5	0.056	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS3	0.04	0.044	0.051	0.051	0.059	0.066	0.066	0.064	0.061	0.061	0.5	0.084	0.042	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS3	0.04	0.045	0.054	0.055	0.06	0.064	0.063	0.061	0.062	0.053	0.5	0.078	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS3	0.04	0.047	0.05	0.056	0.062	0.06	0.059	0.06	0.058	0.058	0.5	0.074	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS4	0.056	0.048	0.05	0.054	0.057	0.064	0.058	0.058	0.05	0.049	0.5	0.083	0.04	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS4	0.048	0.042	0.046	0.048	0.054	0.06	0.052	0.044	0.049	0.047	0.5	0.066	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS4	0.045	0.04	0.046	0.045	0.049	0.057	0.046	0.049	0.048	0.047	0.5	0.061	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS4	0.045	0.042	0.046	0.052	0.053	0.062	0.06	0.06	0.055	0.042	0.5	0.072	0.036	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS4	0.042	0.042	0.046	0.053	0.059	0.071	0.06	0.055	0.057	0.052	0.5	0.077	0.038	0.04		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS4	0.052	0.057	0.069	0.064	0.072	0.079	0.069	0.063	0.05	0.056	0.5	0.100	0.050	0.05		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS4	0.047	0.049	0.051	0.056	0.064	0.054	0.057	0.051	0.049	0.051	0.5	0.068	0.034	0.03		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	136.0000	60.0	59.0	CW	H	0.86	BS5	0.033	0.04	0.04	0.042	0.043	0.044	0.046	0.045	0.048	0.04	0.5	0.050	0.025	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	140.0000	60.0	59.0	CW	H	0.85	BS5	0.04	0.041	0.04	0.04	0.042	0.037	0.038	0.041	0.041	0.044	0.5	0.045	0.022	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	144.0000	60.0	59.3	CW	H	0.85	BS5	0.036	0.035	0.036	0.039	0.04	0.042	0.048	0.046	0.044	0.043	0.5	0.046	0.023	0.02		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	150.8000	60.0	58.8	CW	H	0.84	BS5	0.04	0.036	0.042	0.048	0.053	0.05	0.052	0.053	0.048	0.041	0.5	0.058	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	158.3000	60.0	59.0	CW	H	0.83	BS5	0.039	0.039	0.04	0.044	0.048	0.049	0.044	0.045	0.046	0.044	0.5	0.050	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	165.9000	60.0	58.7	CW	H	0.81	BS5	0.048	0.044	0.052	0.053	0.055	0.068	0.054	0.051	0.041	0.035	0.5	0.064	0.03	0.03		
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	90	173.4000	60.0	59.0	CW	H	0.80	BS5	0.035	0.042	0.044	0.046	0.049	0.048	0.046	0.042	0.041	0.038	0.5	0.045	0.02	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS1	0.04	0.04	0.04	0.044	0.05	0.057	0.057	0.05	0.048	0.053	0.5	0.065	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS1	0.051	0.042	0.043	0.054	0.062	0.07	0.072	0.066	0.067	0.062	0.5	0.097	0.049	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS1	0.043	0.04	0.055	0.05	0.062	0.067	0.071	0.061	0.053	0.062	0.5	0.087	0.04	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS1	0.04	0.04	0.046	0.053	0.062	0.061	0.068	0.06	0.05	0.057	0.5	0.077	0.04	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS1	0.041	0.048	0.052	0.06	0.051	0.055	0.064	0.06	0.053	0.05	0.5	0.073	0.04	0.04		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm <sup>2</sup> )	Calc. P.D. (mW/cm <sup>2</sup> )	Max Calc. P.D. (mW/cm <sup>2</sup> )
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS2	0.03	0.035	0.038	0.042	0.046	0.044	0.04	0.056	0.05	0.056	0.5	0.055	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS2	0.034	0.048	0.05	0.06	0.066	0.068	0.07	0.071	0.071	0.072	0.5	0.105	0.053	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS2	0.042	0.045	0.047	0.054	0.06	0.064	0.067	0.066	0.064	0.062	0.5	0.089	0.04	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS2	0.036	0.047	0.048	0.055	0.065	0.073	0.07	0.071	0.07	0.068	0.5	0.098	0.05	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS2	0.043	0.045	0.047	0.045	0.058	0.054	0.05	0.06	0.061	0.061	0.5	0.071	0.04	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS3	0.04	0.045	0.047	0.047	0.06	0.06	0.059	0.062	0.061	0.059	0.5	0.083	0.04	0.04		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS3	0.037	0.046	0.044	0.045	0.047	0.053	0.053	0.054	0.06	0.058	0.5	0.069	0.034	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS3	0.044	0.041	0.053	0.059	0.06	0.065	0.065	0.064	0.063	0.061	0.5	0.090	0.04	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS3	0.044	0.052	0.057	0.05	0.062	0.071	0.066	0.065	0.066	0.068	0.5	0.096	0.05	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS3	0.036	0.041	0.045	0.051	0.055	0.063	0.057	0.056	0.056	0.054	0.5	0.069	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS4	0.044	0.045	0.058	0.053	0.069	0.072	0.064	0.061	0.056	0.053	0.5	0.094	0.05	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS4	0.045	0.05	0.054	0.049	0.051	0.048	0.047	0.047	0.044	0.046	0.5	0.063	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS4	0.054	0.048	0.052	0.059	0.072	0.07	0.072	0.069	0.067	0.064	0.5	0.106	0.053	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS4	0.052	0.05	0.066	0.061	0.07	0.072	0.066	0.068	0.067	0.062	0.5	0.106	0.05	0.05		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS4	0.049	0.043	0.053	0.05	0.054	0.059	0.063	0.057	0.052	0.048	0.5	0.071	0.04	0.04		

Notes:

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



**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS5	0.042	0.037	0.038	0.041	0.049	0.057	0.052	0.056	0.054	0.051	0.5	0.065	0.032	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS5	0.043	0.039	0.04	0.042	0.046	0.044	0.043	0.045	0.042	0.041	0.5	0.049	0.02	0.02		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS5	0.04	0.038	0.04	0.043	0.046	0.056	0.052	0.05	0.053	0.046	0.5	0.058	0.03	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS5	0.038	0.035	0.043	0.047	0.055	0.054	0.056	0.054	0.052	0.044	0.5	0.061	0.030	0.03		
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS5	0.04	0.05	0.052	0.055	0.054	0.064	0.067	0.06	0.055	0.049	0.5	0.077	0.038	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	H	0.84	BS1	0.04	0.04	0.041	0.043	0.048	0.05	0.05	0.054	0.055	0.06	0.5	0.063	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS1	0.04	0.04	0.047	0.05	0.057	0.06	0.07	0.063	0.06	0.055	0.5	0.080	0.040	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS1	0.047	0.046	0.041	0.057	0.068	0.062	0.065	0.055	0.055	0.057	0.5	0.081	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS1	0.043	0.04	0.047	0.056	0.061	0.05	0.06	0.06	0.055	0.061	0.5	0.072	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS1	0.042	0.045	0.05	0.052	0.058	0.066	0.065	0.062	0.068	0.07	0.5	0.083	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	H	0.84	BS2	0.035	0.037	0.043	0.045	0.042	0.053	0.053	0.052	0.054	0.056	0.5	0.060	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS2	0.041	0.04	0.046	0.045	0.052	0.051	0.06	0.064	0.061	0.06	0.5	0.074	0.037	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS2	0.036	0.048	0.047	0.057	0.06	0.067	0.067	0.065	0.07	0.068	0.5	0.092	0.05	0.05		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS2	0.048	0.045	0.044	0.053	0.06	0.065	0.066	0.07	0.068	0.07	0.5	0.088	0.04	0.05		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS2	0.044	0.047	0.046	0.056	0.062	0.071	0.073	0.074	0.07	0.072	0.5	0.095	0.05	0.05		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	H	0.84	BS3	0.036	0.038	0.043	0.041	0.04	0.043	0.041	0.041	0.039	0.041	0.5	0.043	0.02	0.02		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS3	0.036	0.04	0.046	0.054	0.057	0.06	0.056	0.057	0.052	0.046	0.5	0.069	0.035	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS3	0.032	0.04	0.04	0.056	0.06	0.068	0.061	0.061	0.054	0.06	0.5	0.077	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS3	0.035	0.057	0.059	0.06	0.064	0.065	0.063	0.063	0.06	0.06	0.5	0.087	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS3	0.043	0.054	0.055	0.057	0.065	0.066	0.064	0.062	0.061	0.061	0.5	0.084	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	H	0.84	BS4	0.044	0.046	0.051	0.044	0.046	0.056	0.05	0.044	0.044	0.042	0.5	0.058	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS4	0.05	0.043	0.052	0.055	0.06	0.064	0.064	0.055	0.059	0.062	0.5	0.086	0.04	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS4	0.047	0.041	0.05	0.049	0.054	0.07	0.061	0.057	0.055	0.055	0.5	0.077	0.038	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS4	0.05	0.052	0.07	0.064	0.07	0.071	0.069	0.068	0.061	0.06	0.5	0.101	0.05	0.05		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS4	0.047	0.046	0.048	0.061	0.064	0.065	0.052	0.051	0.048	0.044	0.5	0.068	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	146.0000	60.0	59.6	CW	H	0.84	BS5	0.042	0.043	0.04	0.04	0.038	0.037	0.035	0.035	0.036	0.036	0.5	0.039	0.020	0.02		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS5	0.034	0.042	0.04	0.04	0.051	0.051	0.05	0.05	0.055	0.051	0.5	0.058	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	158.3000	60.0	59.0	CW	H	0.83	BS5	0.041	0.045	0.044	0.046	0.055	0.052	0.055	0.046	0.039	0.046	0.5	0.058	0.03	0.03		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	165.9000	60.0	58.7	CW	H	0.81	BS5	0.047	0.048	0.047	0.057	0.067	0.065	0.065	0.06	0.058	0.051	0.5	0.080	0.040	0.04		
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS5	0.047	0.049	0.045	0.054	0.057	0.05	0.044	0.041	0.043	0.034	0.5	0.053	0.026	0.03		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS1	0.041	0.05	0.04	0.044	0.048	0.052	0.05	0.046	0.045	0.04	0.5	0.058	0.03	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS1	0.042	0.04	0.04	0.05	0.061	0.063	0.068	0.064	0.06	0.055	0.5	0.083	0.04	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS1	0.045	0.043	0.044	0.047	0.068	0.073	0.077	0.073	0.074	0.07	0.5	0.108	0.054	0.05		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS2	0.034	0.035	0.04	0.04	0.045	0.061	0.06	0.06	0.064	0.06	0.5	0.073	0.037	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS2	0.048	0.048	0.051	0.055	0.06	0.068	0.072	0.073	0.072	0.07	0.5	0.106	0.053	0.05		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS2	0.06	0.057	0.06	0.065	0.074	0.082	0.08	0.08	0.082	0.081	0.5	0.144	0.072	0.07		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS3	0.036	0.043	0.046	0.04	0.04	0.065	0.064	0.066	0.064	0.065	0.5	0.082	0.041	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS3	0.038	0.04	0.04	0.044	0.053	0.06	0.061	0.061	0.06	0.057	0.5	0.074	0.037	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS3	0.034	0.037	0.042	0.04	0.048	0.055	0.058	0.055	0.06	0.058	0.5	0.067	0.033	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS4	0.049	0.044	0.044	0.057	0.059	0.066	0.064	0.063	0.054	0.059	0.5	0.089	0.044	0.05		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS4	0.046	0.044	0.048	0.053	0.067	0.059	0.063	0.058	0.05	0.05	0.5	0.080	0.040	0.04		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS4	0.045	0.042	0.045	0.046	0.052	0.055	0.05	0.05	0.052	0.05	0.5	0.065	0.032	0.03		

Notes:

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

**Table G.1 (Continued)**

**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	136.0000	60.0	59.0	CW	H	0.86	BS5	0.044	0.042	0.042	0.044	0.047	0.047	0.055	0.05	0.055	0.051	0.5	0.064	0.032	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	140.0000	60.0	59.0	CW	H	0.85	BS5	0.039	0.038	0.041	0.04	0.047	0.048	0.053	0.041	0.049	0.041	0.5	0.053	0.026	0.03		
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS5	0.037	0.041	0.042	0.038	0.044	0.046	0.049	0.043	0.048	0.044	0.5	0.051	0.026	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS1	0.044	0.04	0.048	0.054	0.063	0.071	0.075	0.071	0.068	0.061	0.5	0.100	0.050	0.05		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	H	0.84	BS1	0.05	0.043	0.051	0.064	0.067	0.071	0.072	0.072	0.073	0.071	0.5	0.110	0.055	0.06		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS1	0.043	0.045	0.047	0.056	0.065	0.068	0.067	0.066	0.065	0.062	0.5	0.093	0.047	0.05		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS2	0.048	0.044	0.045	0.051	0.067	0.071	0.072	0.073	0.073	0.072	0.5	0.107	0.054	0.05		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	H	0.84	BS2	0.051	0.05	0.054	0.057	0.066	0.077	0.073	0.078	0.077	0.073	0.5	0.118	0.059	0.06		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS2	0.047	0.046	0.053	0.066	0.063	0.072	0.074	0.072	0.07	0.07	0.5	0.109	0.055	0.06		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS3	0.037	0.038	0.041	0.044	0.05	0.046	0.04	0.046	0.052	0.05	0.5	0.054	0.027	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	H	0.84	BS3	0.042	0.043	0.046	0.056	0.066	0.072	0.067	0.063	0.062	0.057	0.5	0.090	0.045	0.05		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS3	0.046	0.048	0.057	0.06	0.068	0.07	0.07	0.07	0.065	0.065	0.5	0.104	0.05	0.05		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS4	0.045	0.04	0.043	0.044	0.05	0.054	0.049	0.05	0.049	0.05	0.5	0.062	0.03	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	H	0.84	BS4	0.049	0.048	0.059	0.06	0.062	0.068	0.062	0.062	0.062	0.057	0.5	0.093	0.05	0.05		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS4	0.053	0.05	0.054	0.061	0.073	0.072	0.073	0.067	0.069	0.066	0.5	0.110	0.06	0.06		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	144.0000	60.0	59.3	CW	H	0.85	BS5	0.038	0.04	0.04	0.041	0.043	0.049	0.047	0.046	0.04	0.042	0.5	0.050	0.025	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	148.0000	60.0	59.1	CW	H	0.84	BS5	0.04	0.043	0.045	0.044	0.048	0.044	0.049	0.05	0.05	0.048	0.5	0.057	0.028	0.03		
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS5	0.037	0.047	0.052	0.05	0.054	0.058	0.063	0.055	0.057	0.045	0.5	0.073	0.036	0.04		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS1	0.048	0.043	0.047	0.054	0.063	0.068	0.068	0.061	0.055	0.063	0.5	0.088	0.044	0.05		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS1	0.04	0.043	0.047	0.062	0.067	0.068	0.078	0.064	0.061	0.06	0.5	0.094	0.047	0.05		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS1	0.046	0.05	0.052	0.07	0.074	0.075	0.075	0.065	0.067	0.063	0.5	0.106	0.053	0.05		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS2	0.040	0.04	0.048	0.05	0.060	0.07	0.070	0.07	0.065	0.065	0.5	0.092	0.05	0.05		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS2	0.054	0.05	0.057	0.060	0.066	0.074	0.073	0.074	0.072	0.072	0.5	0.112	0.06	0.06		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS2	0.041	0.048	0.056	0.058	0.071	0.075	0.071	0.075	0.07	0.065	0.5	0.104	0.05	0.05		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS3	0.042	0.042	0.052	0.056	0.061	0.063	0.065	0.063	0.061	0.058	0.5	0.086	0.04	0.04		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS3	0.05	0.057	0.057	0.064	0.071	0.07	0.072	0.072	0.073	0.071	0.5	0.114	0.057	0.06		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS3	0.043	0.053	0.057	0.061	0.065	0.072	0.07	0.065	0.064	0.063	0.5	0.097	0.05	0.05		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS4	0.049	0.049	0.05	0.056	0.064	0.065	0.065	0.054	0.058	0.059	0.5	0.087	0.04	0.04		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS4	0.046	0.042	0.041	0.053	0.057	0.058	0.066	0.05	0.051	0.06	0.5	0.073	0.04	0.04		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS4	0.048	0.048	0.047	0.06	0.066	0.074	0.07	0.063	0.051	0.057	0.5	0.089	0.04	0.05		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	150.8000	60.0	58.8	CW	H	0.84	BS5	0.042	0.046	0.047	0.046	0.05	0.055	0.056	0.054	0.056	0.053	0.5	0.068	0.03	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	156.2000	60.0	58.8	CW	H	0.83	BS5	0.043	0.049	0.043	0.04	0.053	0.05	0.052	0.05	0.056	0.053	0.5	0.063	0.03	0.03		
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS5	0.042	0.051	0.044	0.058	0.066	0.066	0.068	0.059	0.06	0.054	0.5	0.084	0.042	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS1	0.046	0.048	0.053	0.064	0.072	0.072	0.068	0.063	0.063	0.06	0.5	0.096	0.048	0.05		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	H	0.81	BS1	0.044	0.054	0.051	0.054	0.06	0.064	0.064	0.06	0.06	0.061	0.5	0.082	0.041	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS1	0.042	0.047	0.05	0.058	0.06	0.07	0.066	0.067	0.074	0.075	0.5	0.092	0.046	0.05		

Notes:

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

**Table G.1 (Continued)**  
**APX4500 VHF - MPE measurement data for Bystander**

D.U.T. Info.											Probe Info.		MPE Measurements										DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Bystander (BS) Positions															
											20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm						
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS2	0.056	0.05	0.053	0.068	0.065	0.082	0.07	0.068	0.065	0.063	0.5	0.106	0.053	0.05		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	H	0.81	BS2	0.043	0.048	0.052	0.05	0.06	0.07	0.07	0.072	0.072	0.072	0.5	0.095	0.047	0.05		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS2	0.053	0.05	0.051	0.053	0.065	0.077	0.072	0.072	0.076	0.076	0.5	0.103	0.05	0.05		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS3	0.043	0.048	0.056	0.058	0.063	0.064	0.064	0.062	0.063	0.06	0.5	0.087	0.04	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	H	0.81	BS3	0.056	0.056	0.058	0.063	0.068	0.063	0.064	0.064	0.062	0.062	0.5	0.094	0.05	0.05		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS3	0.044	0.052	0.055	0.058	0.063	0.064	0.064	0.06	0.062	0.06	0.5	0.083	0.04	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS4	0.051	0.054	0.056	0.061	0.064	0.067	0.063	0.055	0.056	0.055	0.5	0.086	0.043	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	H	0.81	BS4	0.045	0.056	0.049	0.05	0.058	0.05	0.068	0.057	0.059	0.059	0.5	0.076	0.04	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS4	0.046	0.051	0.04	0.04	0.042	0.052	0.061	0.055	0.053	0.048	0.5	0.058	0.03	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	162.0000	60.0	58.8	CW	H	0.82	BS5	0.045	0.052	0.048	0.055	0.067	0.065	0.063	0.057	0.057	0.051	0.5	0.081	0.04	0.04		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	167.7000	60.0	58.7	CW	H	0.81	BS5	0.043	0.043	0.046	0.051	0.052	0.045	0.045	0.052	0.051	0.048	0.5	0.056	0.03	0.03		
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	90	173.4000	60.0	59.0	CW	H	0.80	BS5	0.04	0.051	0.047	0.054	0.06	0.055	0.056	0.046	0.044	0.039	0.5	0.059	0.03	0.03		

Notes:

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

**Table G.2**

**APX4500 VHF - MPE measurement data for Passenger**

D.U.T. Info.								Probe Info.		Test Pos.	MPE Measurements Passenger/Operator (MC) Positions			DUT Max. TX Factor	Avg. over Body (mW/cm <sup>2</sup> )	Calc. P.D. (mW/cm <sup>2</sup> )	Max Calc. P.D. (mW/cm <sup>2</sup> )
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	136.0000	60.0	59.0	CW	E	1.03		PB	0.287	0.175				
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	140.0000	60.0	59.0	CW	E	1.02	PB	0.42	0.308	0.171	0.5	0.306	0.15	0.16
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PB	0.388	0.272	0.184	0.5	0.287	0.14	0.15
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PB	0.351	0.341	0.236	0.5	0.316	0.16	0.16
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	158.3000	60.0	59.0	CW	E	1.02	PB	0.322	0.317	0.266	0.5	0.308	0.154	0.16
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	165.9000	60.0	58.7	CW	E	1.02	PB	0.174	0.268	0.224	0.5	0.226	0.11	0.12
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	173.4000	60.0	59.0	CW	E	1.02	PB	0.071	0.12	0.143	0.5	0.114	0.06	0.06
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	E	1.03	PB	0.036	0.021	0.017	0.5	0.025	0.01	0.01
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	E	1.02	PB	0.059	0.048	0.034	0.5	0.048	0.02	0.02
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	E	1.02	PB	0.055	0.056	0.047	0.5	0.054	0.027	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	E	1.02	PB	0.051	0.03	0.019	0.5	0.034	0.02	0.02
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	E	1.02	PB	0.05	0.059	0.069	0.5	0.061	0.03	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	E	1.02	PB	0.035	0.066	0.055	0.5	0.053	0.03	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	E	1.02	PB	0.029	0.041	0.064	0.5	0.046	0.02	0.02

Notes:

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



**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	D.U.T. Info.							Probe Info.		Test Pos.	MPE Measurements Passenger/Operator (MC) Positions			DUT Max. TX Factor	Avg. over Body (mW/cm <sup>2</sup> )	Calc. P.D. (mW/cm <sup>2</sup> )	Max Calc. P.D. (mW/cm <sup>2</sup> )
	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
	Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	E		1.03	PB	0.122				
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	E	1.02	PB	0.101	0.079	0.041	0.5	0.075	0.04	0.04
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	E	1.02	PB	0.114	0.085	0.04	0.5	0.081	0.04	0.04
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	E	1.02	PB	0.12	0.121	0.078	0.5	0.108	0.05	0.06
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	E	1.02	PB	0.134	0.145	0.133	0.5	0.140	0.07	0.07
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	E	1.02	PB	0.108	0.157	0.177	0.5	0.150	0.08	0.08
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	E	1.02	PB	0.049	0.084	0.091	0.5	0.076	0.04	0.04
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	136.0000	60.0	59.0	CW	E	1.03	PB	0.342	0.312	0.153	0.5	0.277	0.14	0.14
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PB	0.285	0.252	0.169	0.5	0.240	0.12	0.12
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PB	0.347	0.328	0.205	0.5	0.299	0.15	0.15
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	E	1.02	PB	0.332	0.314	0.246	0.5	0.303	0.152	0.15
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	E	1.02	PB	0.234	0.335	0.263	0.5	0.283	0.14	0.14

Notes:

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

**Table G.2 (Continued)**

**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	Ant. Model/ Desc.	D.U.T. Info.						Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
		Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	146.0000	60.0	59.6	CW	E	1.02	PB	0.164	0.149	0.112	0.5	0.145	0.072	0.07
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PB	0.26	0.248	0.176	0.5	0.233	0.116	0.12
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	158.3000	60.0	59.0	CW	E	1.02	PB	0.269	0.335	0.274	0.5	0.299	0.15	0.15
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	165.9000	60.0	58.7	CW	E	1.02	PB	0.252	0.394	0.231	0.5	0.298	0.15	0.15
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	E	1.02	PB	0.091	0.142	0.133	0.5	0.124	0.06	0.06
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	136.0000	60.0	59.0	CW	E	1.03	PB	0.504	0.332	0.205	0.5	0.357	0.18	0.18
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	140.0000	60.0	59.0	CW	E	1.02	PB	0.329	0.272	0.208	0.5	0.275	0.14	0.14
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PB	0.262	0.254	0.173	0.5	0.234	0.12	0.12
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PB	0.267	0.205	0.164	0.5	0.216	0.11	0.11
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	148.0000	60.0	59.1	CW	E	1.02	PB	0.396	0.303	0.24	0.5	0.319	0.16	0.16
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PB	0.383	0.34	0.262	0.5	0.335	0.167	0.17

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	Ant. Model/ Desc.	D.U.T. Info.						Probe Info.			MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
		Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PB	0.285	0.281	0.190	0.5	0.257	0.129	0.13
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	E	1.02	PB	0.373	0.383	0.285	0.5	0.354	0.177	0.18
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	E	1.02	PB	0.345	0.392	0.403	0.5	0.388	0.194	0.20
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	162.0000	60.0	58.8	CW	E	1.02	PB	0.392	0.421	0.339	0.5	0.392	0.196	0.20
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	167.7000	60.0	58.7	CW	E	1.02	PB	0.199	0.324	0.227	0.5	0.255	0.128	0.13
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	E	1.02	PB	0.113	0.211	0.195	0.5	0.176	0.09	0.09
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	136.0000	60.0	59.0	CW	H	0.86	PB	0.09	0.04	0.05	0.5	0.113	0.06	0.06
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	140.0000	60.0	59.0	CW	H	0.85	PB	0.08	0.06	0.04	0.5	0.105	0.05	0.05
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PB	0.08	0.04	0.04	0.5	0.087	0.04	0.04
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PB	0.08	0.07	0.05	0.5	0.122	0.06	0.06
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	158.3000	60.0	59.0	CW	H	0.83	PB	0.070	0.060	0.040	0.5	0.087	0.044	0.04
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	165.9000	60.0	58.7	CW	H	0.81	PB	0.07	0.07	0.06	0.5	0.110	0.06	0.06
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	173.4000	60.0	59.0	CW	H	0.80	PB	0.07	0.06	0.04	0.5	0.081	0.04	0.04

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

D.U.T. Info.								Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	H	0.86	PB	0.05	0.04	0.04	0.5	0.053	0.03	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	H	0.85	PB	0.050	0.03	0.03	0.5	0.039	0.02	0.02
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	H	0.85	PB	0.06	0.03	0.03	0.5	0.049	0.025	0.02
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	H	0.84	PB	0.05	0.03	0.03	0.5	0.038	0.02	0.02
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	H	0.83	PB	0.06	0.040	0.03	0.5	0.053	0.03	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	H	0.81	PB	0.05	0.050	0.04	0.5	0.054	0.03	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	H	0.80	PB	0.04	0.04	0.04	0.5	0.039	0.02	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	H	0.86	PB	0.048	0.033	0.033	0.5	0.042	0.021	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	H	0.85	PB	0.06	0.05	0.03	0.5	0.064	0.03	0.03
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	H	0.85	PB	0.06	0.04	0.03	0.5	0.055	0.03	0.03
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	H	0.84	PB	0.05	0.04	0.02	0.5	0.040	0.02	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	H	0.83	PB	0.05	0.04	0.04	0.5	0.049	0.02	0.03
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	H	0.81	PB	0.07	0.06	0.04	0.5	0.083	0.04	0.04
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	H	0.80	PB	0.060	0.040	0.040	0.5	0.055	0.03	0.03

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	D.U.T. Info.							Probe Info.		Test Pos.	MPE Measurements Passenger/Operator (MC) Positions			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
	Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	136.0000	60.0	59.0	CW	H		0.86	PB	0.08				
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PB	0.090	0.060	0.030	0.5	0.114	0.06	0.06
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PB	0.090	0.070	0.060	0.5	0.147	0.07	0.08
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	H	0.83	PB	0.08	0.07	0.06	0.5	0.129	0.064	0.07
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	H	0.82	PB	0.07	0.06	0.06	0.5	0.102	0.05	0.05
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	146.0000	60.0	59.6	CW	H	0.84	PB	0.06	0.05	0.04	0.5	0.068	0.034	0.03
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PB	0.08	0.06	0.05	0.5	0.111	0.055	0.06
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	158.3000	60.0	59.0	CW	H	0.83	PB	0.08	0.07	0.06	0.5	0.129	0.06	0.07
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	165.9000	60.0	58.7	CW	H	0.81	PB	0.080	0.07	0.07	0.5	0.134	0.07	0.07
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	H	0.80	PB	0.07	0.06	0.06	0.5	0.097	0.05	0.05
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	136.0000	60.0	59.0	CW	H	0.86	PB	0.09	0.060	0.05	0.5	0.132	0.07	0.07
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	140.0000	60.0	59.0	CW	H	0.85	PB	0.090	0.070	0.040	0.5	0.133	0.07	0.07
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PB	0.090	0.07	0.04	0.5	0.133	0.07	0.07

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

D.U.T. Info.								Probe Info.			MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PB	0.08	0.06	0.04	0.5	0.105	0.05	0.05
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	148.0000	60.0	59.1	CW	H	0.84	PB	0.09	0.07	0.06	0.5	0.147	0.07	0.07
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PB	0.100	0.07	0.06	0.5	0.164	0.082	0.08
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PB	0.09	0.07	0.06	0.5	0.147	0.074	0.08
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	H	0.83	PB	0.090	0.070	0.070	0.5	0.155	0.077	0.08
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	H	0.82	PB	0.08	0.08	0.07	0.5	0.150	0.075	0.08
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	162.0000	60.0	58.8	CW	H	0.82	PB	0.080	0.070	0.070	0.5	0.137	0.068	0.07
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	167.7000	60.0	58.7	CW	H	0.81	PB	0.08	0.07	0.06	0.5	0.123	0.061	0.06
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	H	0.80	PB	0.08	0.07	0.06	0.5	0.120	0.06	0.06

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	Ant. Model/ Desc.	D.U.T. Info.						Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
		Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	136.0000	60.0	59.0	CW	E	1.03	PF	0.062	0.077	0.048	0.5	0.064	0.03	0.03
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	140.0000	60.0	59.0	CW	E	1.02	PF	0.160	0.054	0.092	0.5	0.104	0.05	0.05
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PF	0.056	0.066	0.049	0.5	0.058	0.03	0.03
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PF	0.053	0.051	0.040	0.5	0.049	0.02	0.02
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	158.3000	60.0	59.0	CW	E	1.02	PF	0.088	0.130	0.061	0.5	0.095	0.047	0.05
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	165.9000	60.0	58.7	CW	E	1.02	PF	0.054	0.059	0.051	0.5	0.056	0.03	0.03
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	173.4000	60.0	59.0	CW	E	1.02	PF	0.057	0.066	0.050	0.5	0.059	0.03	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	E	1.03	PF	0.044	0.055	0.123	0.5	0.076	0.04	0.04
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	E	1.02	PF	0.026	0.038	0.013	0.5	0.026	0.01	0.01
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	E	1.02	PF	0.035	0.074	0.037	0.5	0.050	0.025	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	E	1.02	PF	0.022	0.027	0.023	0.5	0.024	0.01	0.01
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	E	1.02	PF	0.034	0.093	0.169	0.5	0.101	0.05	0.05
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	E	1.02	PF	0.041	0.123	0.141	0.5	0.104	0.05	0.05
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	E	1.02	PF	0.048	0.053	0.059	0.5	0.054	0.03	0.03

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	Ant. Model/ Desc.	D.U.T. Info.						Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
		Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	E	1.03	PF	0.037	0.026	0.067	0.5	0.045	0.022	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	E	1.02	PF	0.096	0.149	0.060	0.5	0.104	0.05	0.05
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	E	1.02	PF	0.046	0.100	0.060	0.5	0.070	0.04	0.04
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	E	1.02	PF	0.051	0.157	0.162	0.5	0.126	0.06	0.06
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	E	1.02	PF	0.033	0.087	0.101	0.5	0.075	0.04	0.04
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	E	1.02	PF	0.039	0.074	0.092	0.5	0.070	0.03	0.04
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	E	1.02	PF	0.060	0.086	0.059	0.5	0.070	0.03	0.04
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	136.0000	60.0	59.0	CW	E	1.03	PF	0.069	0.099	0.039	0.5	0.071	0.04	0.04
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PF	0.104	0.142	0.101	0.5	0.118	0.06	0.06
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PF	0.055	0.067	0.055	0.5	0.060	0.03	0.03
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	E	1.02	PF	0.060	0.103	0.058	0.5	0.075	0.038	0.04
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	E	1.02	PF	0.044	0.094	0.105	0.5	0.083	0.04	0.04

Notes:

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**Table G.2 (Continued)**

**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	Ant. Model/ Desc.	D.U.T. Info.						Probe Info.		Test Pos.	MPE Measurements Passenger/Operator (MC) Positions			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
		Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	146.0000	60.0	59.6	CW	E	1.02	PF	0.085	0.113	0.112	0.5	0.105	0.053	0.05
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PF	0.048	0.062	0.093	0.5	0.069	0.035	0.04
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	158.3000	60.0	59.0	CW	E	1.02	PF	0.063	0.108	0.089	0.5	0.088	0.04	0.04
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	165.9000	60.0	58.7	CW	E	1.02	PF	0.073	0.137	0.116	0.5	0.111	0.06	0.06
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	E	1.02	PF	0.130	0.121	0.152	0.5	0.137	0.07	0.07
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	136.0000	60.0	59.0	CW	E	1.03	PF	0.116	0.171	0.115	0.5	0.138	0.07	0.07
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	140.0000	60.0	59.0	CW	E	1.02	PF	0.060	0.099	0.127	0.5	0.097	0.05	0.05
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PF	0.114	0.155	0.142	0.5	0.140	0.07	0.07
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	144.0000	60.0	59.3	CW	E	1.02	PF	0.100	0.174	0.130	0.5	0.137	0.07	0.07
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	148.0000	60.0	59.1	CW	E	1.02	PF	0.090	0.118	0.129	0.5	0.115	0.06	0.06
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PF	0.069	0.110	0.119	0.5	0.101	0.051	0.05

Notes:

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

**APX4500 VHF - MPE measurement data for Passenger**

D.U.T. Info.								Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	E	1.02	PF	0.062	0.093	0.096	0.5	0.085	0.043	0.04
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	E	1.02	PF	0.067	0.136	0.116	0.5	0.108	0.054	0.06
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	E	1.02	PF	0.062	0.086	0.135	0.5	0.096	0.048	0.05
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	162.0000	60.0	58.8	CW	E	1.02	PF	0.069	0.177	0.212	0.5	0.156	0.078	0.08
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	167.7000	60.0	58.7	CW	E	1.02	PF	0.102	0.164	0.172	0.5	0.149	0.074	0.08
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	E	1.02	PF	0.131	0.128	0.135	0.5	0.134	0.07	0.07
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	136.0000	60.0	59.0	CW	H	0.86	PF	0.066	0.083	0.055	0.5	0.133	0.07	0.07
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	140.0000	60.0	59.0	CW	H	0.85	PF	0.076	0.084	0.049	0.5	0.138	0.07	0.07
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PF	0.064	0.055	0.046	0.5	0.084	0.04	0.04
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PF	0.050	0.053	0.049	0.5	0.068	0.03	0.03
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	158.3000	60.0	59.0	CW	H	0.83	PF	0.045	0.054	0.049	0.5	0.064	0.032	0.03
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	165.9000	60.0	58.7	CW	H	0.81	PF	0.035	0.036	0.043	0.5	0.036	0.02	0.02
Roof	HAD4021A, 1/4 Wave (136-174MHz)	2.15	NA	173.4000	60.0	59.0	CW	H	0.80	PF	0.039	0.047	0.038	0.5	0.042	0.02	0.02

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	Ant. Model/ Desc.	D.U.T. Info.						Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm <sup>2</sup> )	Calc. P.D. (mW/cm <sup>2</sup> )	Max Calc. P.D. (mW/cm <sup>2</sup> )
		Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	H	0.86	PF	0.063	0.071	0.058	0.5	0.115	0.06	0.06
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	H	0.85	PF	0.041	0.044	0.030	0.5	0.041	0.02	0.02
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	H	0.85	PF	0.044	0.048	0.040	0.5	0.053	0.027	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	H	0.84	PF	0.029	0.026	0.033	0.5	0.023	0.01	0.01
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	H	0.83	PF	0.038	0.039	0.033	0.5	0.035	0.02	0.02
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	H	0.81	PF	0.047	0.056	0.037	0.5	0.055	0.03	0.03
Roof	RAD4010ARB, 1/2 wave (136-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	H	0.80	PF	0.045	0.048	0.029	0.5	0.042	0.02	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	136.0000	60.0	59.0	CW	H	0.86	PF	0.064	0.067	0.059	0.5	0.112	0.056	0.06
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	140.0000	60.0	59.0	CW	H	0.85	PF	0.063	0.070	0.054	0.5	0.107	0.05	0.05
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	144.0000	60.0	59.3	CW	H	0.85	PF	0.044	0.049	0.029	0.5	0.047	0.02	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	150.8000	60.0	58.8	CW	H	0.84	PF	0.036	0.041	0.031	0.5	0.035	0.02	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	158.3000	60.0	59.0	CW	H	0.83	PF	0.041	0.047	0.036	0.5	0.045	0.02	0.02
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	165.9000	60.0	58.7	CW	H	0.81	PF	0.051	0.060	0.044	0.5	0.067	0.03	0.03
Roof	HAD4022A, 5/8 Wave (132-174 MHz)	5.15	NA	173.4000	60.0	59.0	CW	H	0.80	PF	0.048	0.050	0.036	0.5	0.049	0.02	0.02

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

Ant Loc.	Ant. Model/ Desc.	D.U.T. Info.						Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
		Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	136.0000	60.0	59.0	CW	H	0.86	PF	0.069	0.067	0.033	0.5	0.096	0.05	0.05
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PF	0.056	0.058	0.037	0.5	0.071	0.04	0.04
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PF	0.047	0.063	0.044	0.5	0.072	0.04	0.04
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	H	0.83	PF	0.055	0.069	0.043	0.5	0.083	0.042	0.04
Roof	HAD4016A, 1/4 Wave (136-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	H	0.82	PF	0.048	0.072	0.050	0.5	0.084	0.04	0.04
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	146.0000	60.0	59.6	CW	H	0.84	PF	0.046	0.047	0.030	0.5	0.046	0.023	0.02
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PF	0.047	0.051	0.036	0.5	0.054	0.027	0.03
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	158.3000	60.0	59.0	CW	H	0.83	PF	0.055	0.073	0.054	0.5	0.098	0.05	0.05
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	165.9000	60.0	58.7	CW	H	0.81	PF	0.051	0.082	0.070	0.5	0.117	0.06	0.06
Roof	HAD4017A, 1/4 Wave (146-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	H	0.80	PF	0.040	0.046	0.054	0.5	0.053	0.03	0.03
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	136.0000	60.0	59.0	CW	H	0.86	PF	0.083	0.082	0.040	0.5	0.141	0.07	0.07
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	140.0000	60.0	59.0	CW	H	0.85	PF	0.066	0.073	0.041	0.5	0.103	0.05	0.05
Roof	HAD4006A, 1/4 Wave (136-144 MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PF	0.064	0.059	0.034	0.5	0.079	0.04	0.04

Notes:

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**Table G.2 (Continued)**  
**APX4500 VHF - MPE measurement data for Passenger**

D.U.T. Info.								Probe Info.			MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/cm2)	Calc. P.D. (mW/cm2)	Max Calc. P.D. (mW/cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Passenger/Operator (MC) Positions						
											Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	144.0000	60.0	59.3	CW	H	0.85	PF	0.057	0.062	0.037	0.5	0.077	0.04	0.04
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	148.0000	60.0	59.1	CW	H	0.84	PF	0.050	0.062	0.038	0.5	0.069	0.03	0.04
Roof	HAD4007A, 1/4 Wave (144-150.8 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PF	0.053	0.064	0.045	0.5	0.079	0.040	0.04
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	150.8000	60.0	58.8	CW	H	0.84	PF	0.052	0.052	0.040	0.5	0.062	0.031	0.03
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	156.2000	60.0	58.8	CW	H	0.83	PF	0.049	0.053	0.051	0.5	0.068	0.034	0.03
Roof	HAD4008A, 1/4 Wave (150.8-162 MHz)	2.15	NA	162.0000	60.0	58.8	CW	H	0.82	PF	0.042	0.049	0.055	0.5	0.061	0.030	0.03
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	162.0000	60.0	58.8	CW	H	0.82	PF	0.056	0.049	0.051	0.5	0.069	0.034	0.04
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	167.7000	60.0	58.7	CW	H	0.81	PF	0.055	0.045	0.042	0.5	0.056	0.028	0.03
Roof	HAD4009A, 1/4 Wave (162-174 MHz)	2.15	NA	173.4000	60.0	59.0	CW	H	0.80	PF	0.054	0.062	0.051	0.5	0.075	0.04	0.04

Notes:

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