



**MOTOROLA SOLUTIONS**



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

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

**Motorola Solutions  
EME Test Laboratory**  
Motorola Solutions Malaysia Sdn Bhd (Innoplex)  
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**Date of Report:** 2/5/2018  
**Report Revision:** B

**Responsible Engineer:** Saw Sun Hock (EME Engineer)  
**Report author:** Saw Sun Hock (EME Engineer)  
**Date(s) Tested:** 3/8/2017-3/20/2017  
**Manufacturer:** Futurecom Systems Group  
**Date submitted for test:** 01/13/2017  
**DUT Description:** DVR 800 (806 - 870 MHz), Digital Vehicular Repeater  
Companion Mobile: APX8500 mobile All Bands (VHF, UHF, 7/800)  
**Test TX mode(s):** CW (for FM), 802.11 b/g/n (for WLAN)  
**Max. Power output:** **DVR:** 10W (100% duty cycle)  
**Companion Mobile:** 50% duty cycle, PTT with below maximum output power  
60W (136-174 MHz), 54W (380-484 MHz), 48W (485-512 MHz), 30W (512-520 MHz),  
36W (764-805 MHz), 42W (806-870 MHz); 10mW (Bluetooth); 2.5mW (Bluetooth LE);  
63.1 mW (WLAN 802.11b), 20 mW (WLAN 802.11g/n)  
**TX Frequency Bands:** **DVR:** 806-825 MHz, 851-870 MHz  
**Companion Mobile:**  
136-174 MHz; 380-520 MHz; 764-805 MHz; 806-870 MHz; WLAN 2400-2483.5 MHz;  
Bluetooth 2402-2480 MHz  
**Signaling type:** FM, TDMA, 802.11b/g/n (WLAN)  
**Model(s) Tested:** **DVR:** MOBEXCOM DVRS 800 (DQPM DVRS8000P)  
**Companion Mobile:** M37TSS9PW1AN  
**Model(s) Certified:** MOBEXCOM DVRS 800 (DQPM DVRS8000P)  
**Serial Number(s):** 17010530 (DVR) , KLDORDDUC (Companion Mobile)  
**Classification:** Occupational/Controlled Environment  
**FCC ID:** **DVR:** LO6-DVRS800  
806-824 MHz, 851-869 MHz  
**Companion Mobile:** AZ492FT7089  
150.8-173.4 MHz, 406.1-512 MHz, 769-775 MHz, 799-824 MHz, 851-869 MHz,  
2402-2480 MHz, 2412-2462 MHz  
This report contains results that are immaterial for FCC equipment approval, which are clearly  
identified.  
**IC:** **DVR:**2098B-DVRS800  
**Companion Mobile:**109U-92FT7089  
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 3.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc. EME Laboratory.

I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements.  
This reporting format is consistent with the suggested guidelines of the TIA TSB-159 April 2006  
The results and statements contained in this report pertain only to the device(s) evaluated herein.

*Tiong*

**Tiong Nguk Ing  
Deputy Technical Manager  
Approval Date: 2/10/2018**

## **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 LMR VHF**

**Table E.1**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS1	E	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.031	0.20	15.6	0.13	24.1
						58.6	150.8000	0.035	0.20	17.4	0.13	26.9
						58.6	158.0125	0.040	0.20	19.9	0.13	30.9
						59.0	165.0125	0.031	0.20	15.7	0.13	24.4
						59.3	173.0125	0.050	0.20	24.9	0.13	38.5
Roof	BS1	H	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.028	0.20	14.2	0.13	22.0
						58.6	150.8000	0.032	0.20	15.9	0.13	24.7
						58.6	158.0125	0.040	0.20	20.0	0.13	31.1
						59.0	165.0125	0.034	0.20	16.9	0.13	26.2
						59.3	173.0125	0.055	0.20	27.3	0.13	42.3
Roof	BS2	E	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.027	0.20	13.3	0.13	20.7
						58.6	150.8000	0.029	0.20	14.5	0.13	22.5
						58.6	158.0125	0.033	0.20	16.5	0.13	25.6
						59.0	165.0125	0.029	0.20	14.4	0.13	22.2
						59.3	173.0125	0.039	0.20	19.4	0.13	30.0
Roof	BS2	H	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.020	0.20	9.8	0.13	15.2
						58.6	150.8000	0.018	0.20	9.1	0.13	14.1
						58.6	158.0125	0.029	0.20	14.6	0.13	22.7
						59.0	165.0125	0.025	0.20	12.3	0.13	19.1
						59.3	173.0125	0.035	0.20	17.6	0.13	27.3
Roof	BS3	E	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.024	0.20	11.9	0.13	18.5
						58.6	150.8000	0.024	0.20	11.9	0.13	18.4
						58.6	158.0125	0.025	0.20	12.7	0.13	19.7
						59.0	165.0125	0.027	0.20	13.3	0.13	20.6
						59.3	173.0125	0.036	0.20	18.2	0.13	28.3
Roof	BS3	H	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.020	0.20	9.9	0.13	15.3
						58.6	150.8000	0.015	0.20	7.3	0.13	11.3
						58.6	158.0125	0.020	0.20	9.8	0.13	15.1
						59.0	165.0125	0.018	0.20	8.8	0.13	13.6
						59.3	173.0125	0.022	0.20	11.0	0.13	17.1

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS4	E	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.018	0.20	8.8	0.13	13.6
						58.6	150.8000	0.016	0.20	7.9	0.13	12.3
						58.6	158.0125	0.028	0.20	14.0	0.13	21.6
						59.0	165.0125	0.017	0.20	8.7	0.13	13.4
						59.3	173.0125	0.027	0.20	13.5	0.13	20.9
Roof	BS4	H	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.015	0.20	7.3	0.13	11.3
						58.6	150.8000	0.009	0.20	4.3	0.13	6.7
						58.6	158.0125	0.014	0.20	6.8	0.13	10.5
						59.0	165.0125	0.010	0.20	5.0	0.13	7.8
						59.3	173.0125	0.019	0.20	9.5	0.13	14.7
Roof	BS5	E	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.017	0.20	8.3	0.13	12.9
						58.6	150.8000	0.011	0.20	5.3	0.13	8.2
						58.6	158.0125	0.022	0.20	10.9	0.13	16.9
						59.0	165.0125	0.009	0.20	4.6	0.13	7.2
						59.3	173.0125	0.018	0.20	9.2	0.13	14.3
Roof	BS5	H	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.015	0.20	7.6	0.13	11.7
						58.6	150.8000	0.009	0.20	4.3	0.13	6.7
						58.6	158.0125	0.028	0.20	14.0	0.13	21.7
						59.0	165.0125	0.011	0.20	5.4	0.13	8.4
						59.3	173.0125	0.014	0.20	7.2	0.13	11.2
Roof	BS1	E	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.039	0.20	19.4	0.13	30.1
						58.6	150.8000	0.043	0.20	21.4	0.13	33.1
						58.6	158.0125	0.042	0.20	21.2	0.13	32.9
						59.0	165.0125	0.039	0.20	19.4	0.13	30.0
						59.3	173.0125	0.046	0.20	23.0	0.13	35.7
Roof	BS1	H	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.048	0.20	24.0	0.13	37.1
						58.6	150.8000	0.049	0.20	24.7	0.13	38.3
						58.6	158.0125	0.049	0.20	24.7	0.13	38.2
						59.0	165.0125	0.052	0.20	25.9	0.13	40.0
						59.3	173.0125	0.053	0.20	26.4	0.13	40.8

Note:



**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:  
Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS2	E	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.039	0.20	19.7	0.13	30.5
						58.6	150.8000	0.048	0.20	23.8	0.13	36.8
						58.6	158.0125	0.040	0.20	19.9	0.13	30.9
						59.0	165.0125	0.049	0.20	24.4	0.13	37.8
						59.3	173.0125	0.038	0.20	19.2	0.13	29.7
Roof	BS2	H	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.038	0.20	18.8	0.13	29.2
						58.6	150.8000	0.044	0.20	21.9	0.13	34.0
						58.6	158.0125	0.059	0.20	29.3	0.13	45.4
						59.0	165.0125	0.060	0.20	30.0	0.13	46.4
						59.3	173.0125	0.067	0.20	33.3	0.13	51.7
Roof	BS3	E	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.035	0.20	17.6	0.13	27.2
						58.6	150.8000	0.029	0.20	14.5	0.13	22.4
						58.6	158.0125	0.038	0.20	18.9	0.13	29.2
						59.0	165.0125	0.043	0.20	21.3	0.13	33.0
						59.3	173.0125	0.043	0.20	21.7	0.13	33.6
Roof	BS3	H	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.029	0.20	14.6	0.13	22.6
						58.6	150.8000	0.022	0.20	11.0	0.13	17.0
						58.6	158.0125	0.029	0.20	14.3	0.13	22.1
						59.0	165.0125	0.028	0.20	14.0	0.13	21.7
						59.3	173.0125	0.028	0.20	14.1	0.13	21.8
Roof	BS4	E	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.027	0.20	13.5	0.13	20.9
						58.6	150.8000	0.020	0.20	10.1	0.13	15.7
						58.6	158.0125	0.038	0.20	18.8	0.13	29.1
						59.0	165.0125	0.026	0.20	12.9	0.13	20.0
						59.3	173.0125	0.042	0.20	21.2	0.13	32.8
Roof	BS4	H	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.022	0.20	10.8	0.13	16.7
						58.6	150.8000	0.016	0.20	8.2	0.13	12.8
						58.6	158.0125	0.019	0.20	9.7	0.13	15.0
						59.0	165.0125	0.021	0.20	10.5	0.13	16.2
						59.3	173.0125	0.024	0.20	12.1	0.13	18.7

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS5	E	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.022	0.20	11.1	0.13	17.2
						58.6	150.8000	0.015	0.20	7.7	0.13	11.9
						58.6	158.0125	0.030	0.20	15.0	0.13	23.3
						59.0	165.0125	0.015	0.20	7.4	0.13	11.4
						59.3	173.0125	0.019	0.20	9.5	0.13	14.7
Roof	BS5	H	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.017	0.20	8.6	0.13	13.4
						58.6	150.8000	0.018	0.20	9.0	0.13	13.9
						58.6	158.0125	0.031	0.20	15.3	0.13	23.7
						59.0	165.0125	0.024	0.20	12.2	0.13	18.9
						59.3	173.0125	0.018	0.20	9.2	0.13	14.3
Roof	BS1	E	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.059	0.20	29.3	0.13	45.4
						58.6	150.8000	0.073	0.20	36.5	0.13	56.5
						58.7	156.4000	0.058	0.20	29.2	0.13	45.3
						59.0	162.0000	0.044	0.20	21.8	0.13	33.7
Roof	BS1	H	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.088	0.20	44.1	0.13	68.4
						58.6	150.8000	0.095	0.20	47.7	0.13	73.9
						58.7	156.4000	0.070	0.20	35.2	0.13	54.5
						59.0	162.0000	0.060	0.20	29.9	0.13	46.4
Roof	BS2	E	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.070	0.20	34.9	0.13	54.1
						58.6	150.8000	0.072	0.20	35.9	0.13	55.6
						58.7	156.4000	0.065	0.20	32.6	0.13	50.4
						59.0	162.0000	0.053	0.20	26.6	0.13	41.2
Roof	BS2	H	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.074	0.20	36.8	0.13	57.1
						58.6	150.8000	0.069	0.20	34.4	0.13	53.2
						58.7	156.4000	0.071	0.20	35.4	0.13	54.9
						59.0	162.0000	0.068	0.20	34.0	0.13	52.7

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS3	E	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.062	0.20	31.1	0.13	48.2
						58.6	150.8000	0.045	0.20	22.6	0.13	35.1
						58.7	156.4000	0.047	0.20	23.4	0.13	36.2
						59.0	162.0000	0.042	0.20	20.9	0.13	32.3
Roof	BS3	H	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.045	0.20	22.3	0.13	34.6
						58.6	150.8000	0.033	0.20	16.4	0.13	25.4
						58.7	156.4000	0.036	0.20	18.2	0.13	28.1
						59.0	162.0000	0.031	0.20	15.7	0.13	24.4
Roof	BS4	E	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.039	0.20	19.7	0.13	30.5
						58.6	150.8000	0.035	0.20	17.7	0.13	27.4
						58.7	156.4000	0.050	0.20	25.0	0.13	38.7
						59.0	162.0000	0.030	0.20	14.8	0.13	22.9
Roof	BS4	H	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.029	0.20	14.4	0.13	22.4
						58.6	150.8000	0.034	0.20	17.0	0.13	26.4
						58.7	156.4000	0.028	0.20	14.0	0.13	21.8
						59.0	162.0000	0.021	0.20	10.5	0.13	16.2
Roof	BS5	E	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.020	0.20	10.2	0.13	15.7
						58.6	150.8000	0.018	0.20	8.9	0.13	13.8
						58.7	156.4000	0.030	0.20	15.1	0.13	23.5
						59.0	162.0000	0.018	0.20	9.2	0.13	14.3
Roof	BS5	H	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.014	0.20	7.2	0.13	11.2
						58.6	150.8000	0.030	0.20	14.8	0.13	22.9
						58.7	156.4000	0.032	0.20	16.1	0.13	25.0
						59.0	162.0000	0.020	0.20	10.1	0.13	15.6
						58.4	144.0000	0.014	0.20	7.2	0.13	11.2

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:  
Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS1	E	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.036	0.20	18.2	0.13	28.3
						58.6	150.8000	0.051	0.20	25.4	0.13	39.3
						58.6	158.0125	0.039	0.20	19.6	0.13	30.4
						59.0	165.0125	0.039	0.20	19.3	0.13	30.0
						59.3	173.0125	0.038	0.20	19.1	0.13	29.5
Roof	BS1	H	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.055	0.20	27.5	0.13	42.6
						58.6	150.8000	0.067	0.20	33.3	0.13	51.6
						58.6	158.0125	0.063	0.20	31.3	0.13	48.5
						59.0	165.0125	0.065	0.20	32.6	0.13	50.5
						59.3	173.0125	0.053	0.20	26.7	0.13	41.4
Roof	BS2	E	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.055	0.20	27.3	0.13	42.3
						58.6	150.8000	0.054	0.20	26.8	0.13	41.5
						58.6	158.0125	0.069	0.20	34.6	0.13	53.6
						59.0	165.0125	0.066	0.20	32.9	0.13	51.0
						59.3	173.0125	0.045	0.20	22.7	0.13	35.1
Roof	BS2	H	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.051	0.20	25.4	0.13	39.3
						58.6	150.8000	0.040	0.20	20.0	0.13	31.0
						58.6	158.0125	0.064	0.20	31.8	0.13	49.2
						59.0	165.0125	0.050	0.20	24.9	0.13	38.6
						59.3	173.0125	0.080	0.20	40.2	0.13	62.3
Roof	BS3	E	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.043	0.20	21.4	0.13	33.1
						58.6	150.8000	0.034	0.20	17.0	0.13	26.3
						58.6	158.0125	0.051	0.20	25.5	0.13	39.5
						59.0	165.0125	0.057	0.20	28.7	0.13	44.4
						59.3	173.0125	0.053	0.20	26.4	0.13	41.0
Roof	BS3	H	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.027	0.20	13.3	0.13	20.5
						58.6	150.8000	0.025	0.20	12.7	0.13	19.7
						58.6	158.0125	0.032	0.20	16.2	0.13	25.1
						59.0	165.0125	0.028	0.20	14.1	0.13	21.8
						59.3	173.0125	0.035	0.20	17.3	0.13	26.8

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:  
Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS4	E	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.025	0.20	12.5	0.13	19.4
						58.6	150.8000	0.024	0.20	12.1	0.13	18.7
						58.6	158.0125	0.041	0.20	20.6	0.13	31.9
						59.0	165.0125	0.029	0.20	14.4	0.13	22.4
						59.3	173.0125	0.046	0.20	23.0	0.13	35.7
Roof	BS4	H	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.020	0.20	10.2	0.13	15.7
						58.6	150.8000	0.032	0.20	16.1	0.13	25.0
						58.6	158.0125	0.032	0.20	16.2	0.13	25.2
						59.0	165.0125	0.042	0.20	20.9	0.13	32.5
						59.3	173.0125	0.040	0.20	20.0	0.13	31.0
Roof	BS5	E	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.014	0.20	6.8	0.13	10.6
						58.6	150.8000	0.015	0.20	7.3	0.13	11.4
						58.6	158.0125	0.029	0.20	14.4	0.13	22.4
						59.0	165.0125	0.018	0.20	9.1	0.13	14.2
						59.3	173.0125	0.020	0.20	10.0	0.13	15.5
Roof	BS5	H	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.008	0.20	3.9	0.13	6.1
						58.6	150.8000	0.014	0.20	7.2	0.13	11.1
						58.6	158.0125	0.018	0.20	8.9	0.13	13.8
						59.0	165.0125	0.020	0.20	9.9	0.13	15.3
						59.3	173.0125	0.013	0.20	6.6	0.13	10.2
Roof	BS1	E	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.058	0.20	29.2	0.13	45.2
						58.6	150.8000	0.070	0.20	35.0	0.13	54.2
						58.6	158.0125	0.055	0.20	27.6	0.13	42.7
						59.0	165.0125	0.042	0.20	20.8	0.13	32.2
						59.3	173.0125	0.037	0.20	18.5	0.13	28.7
Roof	BS1	H	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.068	0.20	33.9	0.13	52.5
						58.6	150.8000	0.075	0.20	37.4	0.13	58.0
						58.6	158.0125	0.051	0.20	25.4	0.13	39.4
						59.0	165.0125	0.056	0.20	27.8	0.13	43.1
						59.3	173.0125	0.042	0.20	20.9	0.13	32.3

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:  
Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS2	E	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.071	0.20	35.5	0.13	55.0
						58.6	150.8000	0.068	0.20	34.0	0.13	52.7
						58.6	158.0125	0.057	0.20	28.5	0.13	44.2
						59.0	165.0125	0.054	0.20	27.1	0.13	42.0
						59.3	173.0125	0.035	0.20	17.6	0.13	27.2
Roof	BS2	H	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.060	0.20	30.2	0.13	46.8
						58.6	150.8000	0.057	0.20	28.3	0.13	43.8
						58.6	158.0125	0.053	0.20	26.7	0.13	41.4
						59.0	165.0125	0.047	0.20	23.3	0.13	36.1
						59.3	173.0125	0.048	0.20	23.8	0.13	36.9
Roof	BS3	E	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.062	0.20	31.2	0.13	48.4
						58.6	150.8000	0.043	0.20	21.6	0.13	33.5
						58.6	158.0125	0.047	0.20	23.7	0.13	36.7
						59.0	165.0125	0.050	0.20	25.2	0.13	39.1
						59.3	173.0125	0.039	0.20	19.3	0.13	29.8
Roof	BS3	H	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.043	0.20	21.4	0.13	33.1
						58.6	150.8000	0.034	0.20	17.2	0.13	26.6
						58.6	158.0125	0.038	0.20	19.1	0.13	29.6
						59.0	165.0125	0.028	0.20	13.9	0.13	21.5
						59.3	173.0125	0.029	0.20	14.6	0.13	22.6
Roof	BS4	E	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.034	0.20	17.1	0.13	26.5
						58.6	150.8000	0.031	0.20	15.7	0.13	24.3
						58.6	158.0125	0.043	0.20	21.3	0.13	32.9
						59.0	165.0125	0.026	0.20	13.2	0.13	20.4
						59.3	173.0125	0.030	0.20	14.9	0.13	23.1
Roof	BS4	H	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.027	0.20	13.6	0.13	21.0
						58.6	150.8000	0.033	0.20	16.5	0.13	25.6
						58.6	158.0125	0.024	0.20	11.8	0.13	18.2
						59.0	165.0125	0.022	0.20	10.9	0.13	16.9
						59.3	173.0125	0.022	0.20	11.1	0.13	17.2

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS5	E	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.014	0.20	6.8	0.13	10.5
						58.6	150.8000	0.019	0.20	9.5	0.13	14.7
						58.6	158.0125	0.022	0.20	10.8	0.13	16.7
						59.0	165.0125	0.014	0.20	6.8	0.13	10.5
						59.3	173.0125	0.013	0.20	6.5	0.13	10.0
Roof	BS5	H	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.010	0.20	5.2	0.13	8.1
						58.6	150.8000	0.019	0.20	9.7	0.13	15.0
						58.6	158.0125	0.019	0.20	9.3	0.13	14.4
						59.0	165.0125	0.019	0.20	9.4	0.13	14.5
						59.3	173.0125	0.011	0.20	5.3	0.13	8.2
Roof	BS1	E	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.059	0.20	29.4	0.13	45.5
						58.4	144.0000	0.064	0.20	31.9	0.13	49.4
Roof	BS1	H	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.072	0.20	35.9	0.13	55.5
						58.4	144.0000	0.072	0.20	35.9	0.13	55.6
Roof	BS2	E	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.070	0.20	35.1	0.13	54.4
						58.4	144.0000	0.092	0.20	45.9	0.13	71.1
Roof	BS2	H	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.056	0.20	27.9	0.13	43.2
						58.4	144.0000	0.062	0.20	30.9	0.13	47.8
Roof	BS3	E	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.061	0.20	30.5	0.13	47.3
						58.4	144.0000	0.058	0.20	29.0	0.13	44.9
Roof	BS3	H	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.044	0.20	22.2	0.13	34.4
						58.4	144.0000	0.042	0.20	20.8	0.13	32.3
Roof	BS4	E	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.043	0.20	21.3	0.13	33.1
						58.4	144.0000	0.033	0.20	16.4	0.13	25.4
Roof	BS4	H	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.025	0.20	12.6	0.13	19.5
						58.4	144.0000	0.018	0.20	9.2	0.13	14.3
Roof	BS5	E	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.021	0.20	10.3	0.13	16.0
						58.4	144.0000	0.011	0.20	5.5	0.13	8.5

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Bystander

Note:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS5	H	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.018	0.20	8.9	0.13	13.8
						58.4	144.0000	0.009	0.20	4.6	0.13	7.1
Roof	BS1	E	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.064	0.20	32.2	0.13	49.9
						58.6	150.8000	0.065	0.20	32.5	0.13	50.4
Roof	BS1	H	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.067	0.20	33.3	0.13	51.6
						58.6	150.8000	0.052	0.20	26.0	0.13	40.3
Roof	BS2	E	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.085	0.20	42.5	0.13	65.8
						58.6	150.8000	0.073	0.20	36.6	0.13	56.7
Roof	BS2	H	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.062	0.20	30.8	0.13	47.7
						58.6	150.8000	0.057	0.20	28.7	0.13	44.5
Roof	BS3	E	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.058	0.20	28.9	0.13	44.8
						58.6	150.8000	0.047	0.20	23.4	0.13	36.2
Roof	BS3	H	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.036	0.20	18.2	0.13	28.3
						58.6	150.8000	0.038	0.20	18.8	0.13	29.1
Roof	BS4	E	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.029	0.20	14.4	0.13	22.4
						58.6	150.8000	0.061	0.20	30.3	0.13	47.0
Roof	BS4	H	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.021	0.20	10.5	0.13	16.2
						58.6	150.8000	0.033	0.20	16.7	0.13	25.9
Roof	BS5	E	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.011	0.20	5.6	0.13	8.6
						58.6	150.8000	0.028	0.20	13.8	0.13	21.4
Roof	BS5	H	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.009	0.20	4.5	0.13	6.9
						58.6	150.8000	0.024	0.20	12.1	0.13	18.7
Roof	BS1	E	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.059	0.20	29.3	0.13	45.4
						58.7	156.4000	0.044	0.20	21.8	0.13	33.8
						58.7	162.0000	0.048	0.20	24.2	0.13	37.5
Roof	BS1	H	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.048	0.20	24.0	0.13	37.2
						58.7	156.4000	0.045	0.20	22.7	0.13	35.1
						59.0	162.0000	0.044	0.20	21.8	0.13	33.7



**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR 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	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.070	0.20	35.1	0.13	54.3
						58.7	156.4000	0.084	0.20	42.1	0.13	65.3
						58.7	162.0000	0.059	0.20	29.6	0.13	45.8
Roof	BS2	H	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.050	0.20	25.1	0.13	38.9
						58.7	156.4000	0.055	0.20	27.4	0.13	42.4
						59.0	162.0000	0.042	0.20	21.2	0.13	32.9
Roof	BS3	E	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.046	0.20	23.1	0.13	35.8
						58.7	156.4000	0.071	0.20	35.7	0.13	55.2
						58.7	162.0000	0.043	0.20	21.6	0.13	33.5
Roof	BS3	H	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.032	0.20	16.0	0.13	24.8
						58.7	156.4000	0.046	0.20	22.9	0.13	35.5
						59.0	162.0000	0.033	0.20	16.7	0.13	25.8
Roof	BS4	E	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.052	0.20	26.1	0.13	40.4
						58.7	156.4000	0.045	0.20	22.6	0.13	35.0
						58.7	162.0000	0.036	0.20	18.1	0.13	28.0
Roof	BS4	H	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.025	0.20	12.3	0.13	19.0
						58.7	156.4000	0.026	0.20	13.2	0.13	20.4
						59.0	162.0000	0.025	0.20	12.7	0.13	19.7
Roof	BS5	E	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.024	0.20	11.9	0.13	18.5
						58.7	156.4000	0.026	0.20	13.0	0.13	20.1
						58.7	162.0000	0.023	0.20	11.5	0.13	17.8
Roof	BS5	H	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.016	0.20	8.1	0.13	12.5
						58.7	156.4000	0.020	0.20	9.8	0.13	15.2
						59.0	162.0000	0.019	0.20	9.5	0.13	14.8
Roof	BS1	E	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.050	0.20	24.9	0.13	38.6
						59.3	165.0125	0.046	0.20	23.0	0.13	35.7
						59.3	173.0125	0.032	0.20	15.9	0.13	24.6

**Table E.1 (Continued)**

MPE assessment for Companion Mobile LMR 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	H	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.041	0.20	20.7	0.13	32.0
						59.3	165.0125	0.036	0.20	18.0	0.13	27.9
						59.3	173.0125	0.040	0.20	20.1	0.13	31.2
Roof	BS2	E	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.059	0.20	29.5	0.13	45.6
						59.3	165.0125	0.052	0.20	26.2	0.13	40.5
						59.3	173.0125	0.073	0.20	36.4	0.13	56.4
Roof	BS2	H	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.044	0.20	21.9	0.13	33.9
						59.3	165.0125	0.044	0.20	22.0	0.13	34.1
						59.3	173.0125	0.052	0.20	26.2	0.13	40.6
Roof	BS3	E	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.047	0.20	23.7	0.13	36.7
						59.3	165.0125	0.054	0.20	27.1	0.13	42.0
						59.3	173.0125	0.055	0.20	27.6	0.13	42.7
Roof	BS3	H	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.031	0.20	15.7	0.13	24.3
						59.3	165.0125	0.037	0.20	18.5	0.13	28.6
						59.3	173.0125	0.035	0.20	17.4	0.13	27.0
Roof	BS4	E	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.041	0.20	20.6	0.13	31.9
						59.3	165.0125	0.051	0.20	25.4	0.13	39.4
						59.3	173.0125	0.045	0.20	22.7	0.13	35.1
Roof	BS4	H	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.028	0.20	14.0	0.13	21.7
						59.3	165.0125	0.031	0.20	15.5	0.13	24.1
						59.3	173.0125	0.037	0.20	18.5	0.13	28.7
Roof	BS5	E	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.026	0.20	13.1	0.13	20.3
						59.3	165.0125	0.024	0.20	12.0	0.13	18.6
						59.3	173.0125	0.017	0.20	8.3	0.13	12.9
Roof	BS5	H	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.017	0.20	8.7	0.13	13.5
						59.3	165.0125	0.020	0.20	10.1	0.13	15.6
						59.3	173.0125	0.015	0.20	7.4	0.13	11.4

**Table E.2**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Passenger

Note:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PB	E	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.028	0.20	14.1	0.13	21.8
						58.6	150.8000	0.021	0.20	10.7	0.13	16.6
						58.6	158.0125	0.031	0.20	15.3	0.13	23.7
						59.0	165.0125	0.011	0.20	5.4	0.13	8.4
						59.3	173.0125	0.021	0.20	10.3	0.13	16.0
Roof	PB	H	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.014	0.20	7.1	0.13	10.9
						58.6	150.8000	0.008	0.20	4.0	0.13	6.2
						58.6	158.0125	0.017	0.20	8.4	0.13	13.0
						59	165.0125	0.007	0.20	3.7	0.13	5.7
						59.3	173.0125	0.012	0.20	5.8	0.13	9.0
Roof	PB	E	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.041	0.20	20.3	0.13	31.5
						58.6	150.8000	0.039	0.20	19.5	0.13	30.2
						58.6	158.0125	0.061	0.20	30.4	0.13	47.1
						59.0	165.0125	0.043	0.20	21.7	0.13	33.5
						59.3	173.0125	0.047	0.20	23.6	0.13	36.5
Roof	PB	H	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.023	0.20	11.7	0.13	18.2
						58.6	150.8000	0.019	0.20	9.5	0.13	14.7
						58.6	158.0125	0.045	0.20	22.6	0.13	35.1
						59.0	165.0125	0.030	0.20	15.1	0.13	23.4
						59.3	173.0125	0.017	0.20	8.7	0.13	13.5
Roof	PB	E	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.111	0.20	55.3	0.13	85.6
						58.6	150.8000	0.116	0.20	57.8	0.13	89.5
						58.7	156.4000	0.129	0.20	64.4	0.13	99.7
						59.0	162.0000	0.094	0.20	46.9	0.13	72.7
Roof	PB	H	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.113	0.20	56.3	0.13	87.3
						58.6	150.8000	0.099	0.20	49.5	0.13	76.7
						58.7	156.4000	0.123	0.20	61.6	0.13	95.5
						59.0	162.0000	0.098	0.20	49.2	0.13	76.3

**Table E.2 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Passenger

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PB	E	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.092	0.20	46.2	0.13	71.6
						58.6	150.8000	0.100	0.20	49.8	0.13	77.1
						58.6	158.0125	0.096	0.20	48.2	0.13	74.7
						59.0	165.0125	0.076	0.20	37.9	0.13	58.7
						59.3	173.0125	0.047	0.20	23.3	0.13	36.1
Roof	PB	H	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.083	0.20	41.7	0.13	64.5
						58.6	150.8000	0.074	0.20	37.2	0.13	57.6
						58.6	158.0125	0.124	0.20	62.2	0.13	96.3
						59.0	165.0125	0.087	0.20	43.6	0.13	67.5
						59.3	173.0125	0.022	0.20	10.9	0.13	17.0
Roof	PB	E	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.139	0.20	69.6	0.13	107.8
						58.6	150.8000	0.082	0.20	41.0	0.13	63.5
						58.6	158.0125	0.139	0.20	69.3	0.13	107.3
						59.0	165.0125	0.061	0.20	30.6	0.13	47.5
						59.3	173.0125	0.036	0.20	18.1	0.13	28.0
Roof	PB	H	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.122	0.20	61.1	0.13	94.7
						58.6	150.8000	0.085	0.20	42.6	0.13	65.9
						58.6	158.0125	0.113	0.20	56.5	0.13	87.6
						59.0	165.0125	0.076	0.20	37.9	0.13	58.7
						59.3	173.0125	0.015	0.20	7.6	0.13	11.8
Roof	PB	E	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.186	0.20	93.0	0.13	144.1
						59.0	144.0000	0.149	0.20	74.3	0.13	115.2
Roof	PB	H	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.127	0.20	63.7	0.13	98.7
						58.4	144.0000	0.097	0.20	48.5	0.13	75.1
Roof	PB	E	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.152	0.20	76.2	0.13	118.1
						58.6	150.8000	0.180	0.20	89.9	0.13	139.3
Roof	PB	H	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.108	0.20	54.2	0.13	84.0
						58.6	150.8000	0.130	0.20	65.0	0.13	100.7

**Table E.2 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Passenger

Note:  
Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PB	E	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.171	0.20	85.6	0.13	132.5
						58.7	156.4000	0.166	0.20	83.2	0.13	128.9
						59.0	162.0000	0.179	0.20	89.4	0.13	138.5
Roof	PB	H	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.110	0.20	54.9	0.13	85.0
						58.7	156.4000	0.139	0.20	69.4	0.13	107.5
						59.0	162.0000	0.139	0.20	69.5	0.13	107.6
Roof	PB	E	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.165	0.20	82.4	0.13	127.6
						59.3	165.0125	0.137	0.20	68.6	0.13	106.3
						59.3	173.0125	0.094	0.20	46.8	0.13	72.6
Roof	PB	H	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.152	0.20	76.2	0.13	118.0
						59.3	165.0125	0.129	0.20	64.4	0.13	99.7
						59.3	173.0125	0.072	0.20	36.2	0.13	56.1
Roof	PF	E	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.003	0.20	1.3	0.13	2.0
						58.6	150.8000	0.005	0.20	2.6	0.13	4.0
						58.6	158.0125	0.002	0.20	1.2	0.13	1.9
						59.0	165.0125	0.006	0.20	3.0	0.13	4.6
						59.3	173.0125	0.007	0.20	3.4	0.13	5.3
Roof	PF	H	10	RAD4010ARB, 1/2 Wave (136-174MHz)	60.0	58.3	146.0000	0.003	0.20	1.7	0.13	2.6
						58.6	150.8000	0.005	0.20	2.6	0.13	4.1
						58.6	158.0125	0.004	0.20	1.8	0.13	2.7
						59.0	165.0125	0.006	0.20	3.0	0.13	4.6
						59.3	173.0125	0.008	0.20	4.0	0.13	6.2
Roof	PF	E	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.009	0.20	4.3	0.13	6.6
						58.6	150.8000	0.006	0.20	2.9	0.13	4.4
						58.6	158.0125	0.013	0.20	6.4	0.13	10.0
						59.0	165.0125	0.022	0.20	11.2	0.13	17.4
						59.3	173.0125	0.012	0.20	6.0	0.13	9.4

**Table E.2 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Passenger

Note:  
Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PF	H	9	HAD4022A, 5/8 Wave (132-174MHz)	60.0	58.4	144.0000	0.007	0.20	3.5	0.13	5.5
						58.6	150.8000	0.008	0.20	4.0	0.13	6.2
						58.6	158.0125	0.016	0.20	7.9	0.13	12.3
						59.0	165.0125	0.026	0.20	12.8	0.13	19.8
						59.3	173.0125	0.017	0.20	8.6	0.13	13.3
Roof	PF	E	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.049	0.20	24.4	0.13	37.7
						58.6	150.8000	0.041	0.20	20.3	0.13	31.4
						58.7	156.4000	0.055	0.20	27.5	0.13	42.7
						59.0	162.0000	0.049	0.20	24.5	0.13	38.0
Roof	PF	H	2	HAD4016A, 1/4 Wave (136-162MHz)	60.0	58.4	144.0000	0.047	0.20	23.5	0.13	36.5
						58.6	150.8000	0.057	0.20	28.4	0.13	44.0
						58.7	156.4000	0.052	0.20	25.9	0.13	40.2
						59.0	162.0000	0.064	0.20	31.8	0.13	49.3
Roof	PF	E	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.029	0.20	14.3	0.13	22.1
						58.6	150.8000	0.021	0.20	10.6	0.13	16.4
						58.6	158.0125	0.053	0.20	26.3	0.13	40.7
						59.0	165.0125	0.061	0.20	30.3	0.13	46.9
						59.3	173.0125	0.033	0.20	16.3	0.13	25.2
Roof	PF	H	3	HAD4017A, 1/4 Wave (146-174MHz)	60.0	58.3	146.0000	0.038	0.20	19.1	0.13	29.6
						58.6	150.8000	0.036	0.20	17.8	0.13	27.5
						58.6	158.0125	0.054	0.20	26.8	0.13	41.6
						59.0	165.0125	0.086	0.20	42.9	0.13	66.4
						59.3	173.0125	0.054	0.20	27.0	0.13	41.8
Roof	PF	E	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.043	0.20	21.3	0.13	33.0
						58.6	150.8000	0.044	0.20	21.8	0.13	33.8
						58.6	158.0125	0.036	0.20	17.8	0.13	27.5
						59.0	165.0125	0.044	0.20	22.1	0.13	34.2
						59.3	173.0125	0.018	0.20	9.2	0.13	14.2

**Table E.2 (Continued)**

MPE assessment for Companion Mobile LMR VHF- roof mounted antenna – Passenger

Note:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm <sup>2</sup> )	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PF	H	4	HAD4021A, 1/4 Wave (136-174MHz)	60.0	58.4	144.0000	0.046	0.20	23.0	0.13	35.6
						58.6	150.8000	0.071	0.20	35.4	0.13	54.9
						58.6	158.0125	0.060	0.20	29.8	0.13	46.2
						59.0	165.0125	0.046	0.20	23.0	0.13	35.7
						59.3	173.0125	0.033	0.20	16.6	0.13	25.7
Roof	PF	E	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.040	0.20	20.1	0.13	31.2
						58.4	144.0000	0.060	0.20	29.8	0.13	46.1
Roof	PF	H	5	HAD4006A, 1/4 Wave (136-144MHz)	60.0	59.0	140.0000	0.038	0.20	19.1	0.13	29.5
						58.4	144.0000	0.054	0.20	27.0	0.13	41.8
Roof	PF	E	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.067	0.20	33.3	0.13	51.5
						58.6	150.8000	0.037	0.20	18.4	0.13	28.4
Roof	PF	H	6	HAD4007A, 1/4 Wave (144-150.8MHz)	60.0	58.4	144.0000	0.055	0.20	27.3	0.13	42.2
						58.6	150.8000	0.038	0.20	19.2	0.13	29.8
Roof	PF	E	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.032	0.20	15.8	0.13	24.5
						58.7	156.4000	0.037	0.20	18.6	0.13	28.8
						59.0	162.0000	0.061	0.20	30.5	0.13	47.3
Roof	PF	H	7	HAD4008A, 1/4 Wave (150.8-162MHz)	60.0	58.6	150.8000	0.036	0.20	17.8	0.13	27.5
						58.7	156.4000	0.044	0.20	21.8	0.13	33.8
						59.0	162.0000	0.066	0.20	32.8	0.13	50.8
Roof	PF	E	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.061	0.20	30.6	0.13	47.4
						59.3	165.0125	0.048	0.20	23.9	0.13	37.1
						59.3	173.0125	0.023	0.20	11.5	0.13	17.8
Roof	PF	H	8	HAD4009A, 1/4 Wave (162-174MHz)	60.0	59.0	162.0000	0.070	0.20	35.1	0.13	54.3
						59.3	165.0125	0.059	0.20	29.4	0.13	45.6
						59.3	173.0125	0.051	0.20	25.6	0.13	39.6

**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	58.4	58.3	58.6	58.7	58.6	59.0	59.0	59.3
			FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f3	f4	f5	f6	f7	f8	f9
						140.0000	144.0000	146.0000	150.8000	156.4000	158.0125	162.0000	165.0125	173.0125
E.1	BS1		Roof	E	10			0.031	0.035		0.040		0.031	0.050
E.1	BS2		Roof	E	10			0.027	0.029		0.033		0.029	0.039
E.1	BS3		Roof	E	10			0.024	0.024		0.025		0.027	0.036
E.1	BS4		Roof	E	10			0.018	0.016		0.028		0.017	0.027
E.1	BS5		Roof	E	10			0.017	0.011		0.022		0.009	0.018
E.1	BS1		Roof	H	10			0.028	0.032		0.040		0.034	0.055
E.1	BS2		Roof	H	10			0.020	0.018		0.029		0.025	0.035
E.1	BS3		Roof	H	10			0.020	0.015		0.020		0.018	0.022
E.1	BS4		Roof	H	10			0.015	0.009		0.014		0.010	0.019
E.1	BS5		Roof	H	10			0.015	0.009		0.028		0.011	0.014
E.1	BS1		Roof	E	9		0.039		0.043		0.042		0.039	0.046
E.1	BS2		Roof	E	9		0.039		0.048		0.040		0.049	0.038
E.1	BS3		Roof	E	9		0.035		0.029		0.038		0.043	0.043
E.1	BS4		Roof	E	9		0.027		0.020		0.038		0.026	0.042
E.1	BS5		Roof	E	9		0.022		0.015		0.030		0.015	0.019
E.1	BS1		Roof	H	9		0.048		0.049		0.049		0.052	0.053
E.1	BS2		Roof	H	9		0.038		0.044		0.059		0.060	0.067
E.1	BS3		Roof	H	9		0.029		0.022		0.029		0.028	0.028
E.1	BS4		Roof	H	9		0.022		0.016		0.019		0.021	0.024
E.1	BS5		Roof	H	9		0.017		0.018		0.031		0.024	0.018
E.1	BS1		Roof	E	2		0.059		0.073	0.058		0.044		
E.1	BS2		Roof	E	2		0.070		0.072	0.065		0.053		
E.1	BS3		Roof	E	2		0.062		0.045	0.047		0.042		
E.1	BS4		Roof	E	2		0.039		0.035	0.050		0.030		
E.1	BS5		Roof	E	2		0.020		0.018	0.030		0.018		
E.1	BS1		Roof	H	2		0.088		0.095	0.070		0.060		
E.1	BS2		Roof	H	2		0.074		0.069	0.071		0.068		
E.1	BS3		Roof	H	2		0.045		0.033	0.036		0.031		
E.1	BS4		Roof	H	2		0.029		0.034	0.028		0.021		
E.1	BS5		Roof	H	2		0.014		0.030	0.032		0.020		
E.1	BS1		Roof	E	3		0.036		0.051		0.039		0.039	0.038
E.1	BS2		Roof	E	3		0.055		0.054		0.069		0.066	0.045
E.1	BS3		Roof	E	3		0.043		0.034		0.051		0.057	0.053
E.1	BS4		Roof	E	3		0.025		0.024		0.041		0.029	0.046
E.1	BS5		Roof	E	3		0.014		0.015		0.029		0.018	0.020



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

Note:  
 Blue fonts: Frequencies not regulated by FCC.

Pmax (W)	60	Pinitial (W)	59.0	58.4	58.3	58.6	58.7	58.6	59.0	59.0	59.3
			FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f3	f4	f5	f6	f7	f8	f9
						140.0000	144.0000	146.0000	150.8000	156.4000	158.0125	162.0000	165.0125	173.0125
E.1	BS1		Roof	H	3			0.055	0.067		0.063		0.065	0.053
E.1	BS2		Roof	H	3			0.051	0.040		0.064		0.050	0.080
E.1	BS3		Roof	H	3			0.027	0.025		0.032		0.028	0.035
E.1	BS4		Roof	H	3			0.020	0.032		0.032		0.042	0.040
E.1	BS5		Roof	H	3			0.008	0.014		0.018		0.020	0.013
E.1	BS1		Roof	E	4		0.058		0.070		0.055		0.042	0.037
E.1	BS2		Roof	E	4		0.071		0.068		0.057		0.054	0.035
E.1	BS3		Roof	E	4		0.062		0.043		0.047		0.050	0.039
E.1	BS4		Roof	E	4		0.034		0.031		0.043		0.026	0.030
E.1	BS5		Roof	E	4		0.014		0.019		0.022		0.014	0.013
E.1	BS1		Roof	H	4		0.068		0.075		0.051		0.056	0.042
E.1	BS2		Roof	H	4		0.060		0.057		0.053		0.047	0.048
E.1	BS3		Roof	H	4		0.043		0.034		0.038		0.028	0.029
E.1	BS4		Roof	H	4		0.027		0.033		0.024		0.022	0.022
E.1	BS5		Roof	H	4		0.010		0.019		0.019		0.019	0.011
E.1	BS1		Roof	E	5	0.059	0.064							
E.1	BS2		Roof	E	5	0.070	0.092							
E.1	BS3		Roof	E	5	0.061	0.058							
E.1	BS4		Roof	E	5	0.043	0.033							
E.1	BS5		Roof	E	5	0.021	0.011							
E.1	BS1		Roof	H	5	0.072	0.072							
E.1	BS2		Roof	H	5	0.056	0.062							
E.1	BS3		Roof	H	5	0.044	0.042							
E.1	BS4		Roof	H	5	0.025	0.018							
E.1	BS5		Roof	H	5	0.018	0.009							
E.1	BS1		Roof	E	6		0.064		0.065					
E.1	BS2		Roof	E	6		0.085		0.073					
E.1	BS3		Roof	E	6		0.058		0.047					
E.1	BS4		Roof	E	6		0.029		0.061					
E.1	BS5		Roof	E	6		0.011		0.028					
E.1	BS1		Roof	H	6		0.067		0.052					
E.1	BS2		Roof	H	6		0.062		0.057					
E.1	BS3		Roof	H	6		0.036		0.038					
E.1	BS4		Roof	H	6		0.021		0.033					
E.1	BS5		Roof	H	6		0.009		0.024					

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

Note:  
 Blue fonts: Frequencies not regulated by FCC.

Pmax (W)	60	Pinitial (W)	59.0	58.4	58.3	58.6	58.7	58.6	59.0	59.0	59.3
		FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f3	f4	f5	f6	f7	f8	f9
						140.0000	144.0000	146.0000	150.8000	156.4000	158.0125	162.0000	165.0125	173.0125
E.1	BS1		Roof	E	7				0.053	0.044		0.048		
E.1	BS2		Roof	E	7				0.070	0.084		0.059		
E.1	BS3		Roof	E	7				0.046	0.071		0.043		
E.1	BS4		Roof	E	7				0.052	0.045		0.036		
E.1	BS5		Roof	E	7				0.024	0.026		0.023		
E.1	BS1		Roof	H	7				0.048	0.045		0.044		
E.1	BS2		Roof	H	7				0.050	0.055		0.042		
E.1	BS3		Roof	H	7				0.032	0.046		0.033		
E.1	BS4		Roof	H	7				0.025	0.026		0.025		
E.1	BS5		Roof	H	7				0.016	0.020		0.019		
E.1	BS1		Roof	E	8							0.050	0.046	0.032
E.1	BS2		Roof	E	8							0.059	0.052	0.073
E.1	BS3		Roof	E	8							0.047	0.054	0.055
E.1	BS4		Roof	E	8							0.041	0.051	0.045
E.1	BS5		Roof	E	8							0.026	0.024	0.017
E.1	BS1		Roof	H	8							0.041	0.036	0.040
E.1	BS2		Roof	H	8							0.044	0.044	0.052
E.1	BS3		Roof	H	8							0.031	0.037	0.035
E.1	BS4		Roof	H	8							0.028	0.031	0.037
E.1	BS5		Roof	H	8							0.017	0.020	0.015
E.2	PB		Roof	E	10			0.028	0.021		0.031		0.011	0.021
E.2	PB		Roof	H	10			0.014	0.008		0.017		0.007	0.012
E.2	PB		Roof	E	9		0.041		0.039		0.061		0.043	0.047
E.2	PB		Roof	H	9		0.023		0.019		0.045		0.030	0.017
E.2	PB		Roof	E	2		0.111		0.116	0.129		0.094		
E.2	PB		Roof	H	2		0.113		0.099	0.123		0.098		
E.2	PB		Roof	E	3			0.092	0.100		0.096		0.076	0.047
E.2	PB		Roof	H	3			0.083	0.074		0.124		0.087	0.022
E.2	PB		Roof	E	4		0.1439		0.082		0.139		0.061	0.036
E.2	PB		Roof	H	4		0.122		0.085		0.113		0.076	0.015
E.2	PB		Roof	E	5	0.186	0.149							
E.2	PB		Roof	H	5	0.127	0.097							
E.2	PB		Roof	E	6		0.152		0.180					
E.2	PB		Roof	H	6		0.108		0.130					
E.2	PB		Roof	E	7				0.171	0.166		0.179		

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

Note:  
 Blue fonts: Frequencies not regulated by FCC.

Pmax (W)	60	Pinitial (W)	59.0	58.4	58.3	58.6	58.7	58.6	59.0	59.0	59.3
			FCCLimit (mW/cm <sup>2</sup> )	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f3	f4	f5	f6	f7	f8	f9
						140.0000	144.0000	146.0000	150.8000	156.4000	158.0125	162.0000	165.0125	173.0125
E.2	PB		Roof	H	7				0.110	0.139		0.139		
E.2	PB		Roof	E	8							0.165	0.137	0.094
E.2	PB		Roof	H	8							0.152	0.129	0.072
E.2	PF		Roof	E	10			0.003	0.005		0.002		0.006	0.007
E.2	PF		Roof	H	10			0.003	0.005		0.004		0.006	0.008
E.2	PF		Roof	E	9		0.009		0.006		0.013		0.022	0.012
E.2	PF		Roof	H	9		0.007		0.008		0.016		0.026	0.017
E.2	PF		Roof	E	2		0.049		0.041	0.055		0.049		
E.2	PF		Roof	H	2		0.047		0.057	0.052		0.064		
E.2	PF		Roof	E	3			0.029	0.021		0.053		0.061	0.033
E.2	PF		Roof	H	3			0.038	0.036		0.054		0.086	0.054
E.2	PF		Roof	E	4		0.043		0.044		0.036		0.044	0.018
E.2	PF		Roof	H	4		0.046		0.071		0.060		0.046	0.033
E.2	PF		Roof	E	5	0.040	0.060							
E.2	PF		Roof	H	5	0.038	0.054							
E.2	PF		Roof	E	6		0.067		0.037					
E.2	PF		Roof	H	6		0.055		0.038					
E.2	PF		Roof	E	7				0.032	0.037		0.061		
E.2	PF		Roof	H	7				0.036	0.044		0.066		
E.2	PF		Roof	E	8							0.061	0.048	0.023
E.2	PF		Roof	H	8							0.070	0.059	0.051

**Appendix F – MPE Test Results Summary for Companion Mobile LMR UHF R1**

**Table F.1**

MPE assessment for Companion Mobile LMR UHF1- 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	11	HAE6010A, 1/2 Wave (380-433MHz)	54.0	53.4	406.5000	0.021	0.27	7.6	0.16	12.9
						53.5	419.5000	0.026	0.28	9.3	0.16	16.1
						53.1	432.9875	0.040	0.29	13.8	NA	NA
Roof	BS2	E	11	HAE6010A, 1/2 Wave (380-433MHz)	54.0	53.4	406.5000	0.018	0.27	6.8	0.16	11.6
						53.5	419.5000	0.014	0.28	4.9	0.16	8.5
						53.1	432.9875	0.020	0.29	6.9	NA	NA
Roof	BS3	E	11	HAE6010A, 1/2 Wave (380-433MHz)	54.0	53.4	406.5000	0.015	0.27	5.4	0.16	9.2
						53.5	419.5000	0.013	0.28	4.5	0.16	7.8
						53.1	432.9875	0.019	0.29	6.5	NA	NA
Roof	BS4	E	11	HAE6010A, 1/2 Wave (380-433MHz)	54.0	53.4	406.5000	0.014	0.27	5.0	0.16	8.6
						53.5	419.5000	0.009	0.28	3.4	0.16	5.8
						53.1	432.9875	0.011	0.29	3.8	NA	NA
Roof	BS5	E	11	HAE6010A, 1/2 Wave (380-433MHz)	54.0	53.4	406.5000	0.004	0.27	1.5	0.16	2.5
						53.5	419.5000	0.004	0.28	1.3	0.16	2.2
						53.1	432.9875	0.008	0.29	2.7	NA	NA
Roof	BS1	E	12	HAE6011A, 5/8 Wave (380-433MHz)	54.0	53.4	406.5000	0.038	0.27	14.1	0.16	24.0
						53.5	419.5000	0.034	0.28	12.1	0.16	20.8
						53.1	432.9875	0.040	0.29	13.8	NA	NA
Roof	BS2	E	12	HAE6011A, 5/8 Wave (380-433MHz)	54.0	53.4	406.5000	0.032	0.27	11.7	0.16	20.0
						53.5	419.5000	0.030	0.28	10.8	0.16	18.6
						53.1	432.9875	0.036	0.29	12.5	NA	NA
Roof	BS3	E	12	HAE6011A, 5/8 Wave (380-433MHz)	54.0	53.4	406.5000	0.034	0.27	12.6	0.16	21.5
						53.5	419.5000	0.015	0.28	5.5	0.16	9.5
						53.1	432.9875	0.017	0.29	5.7	NA	NA
Roof	BS4	E	12	HAE6011A, 5/8 Wave (380-433MHz)	54.0	53.4	406.5000	0.018	0.27	6.5	0.16	11.0
						53.5	419.5000	0.013	0.28	4.7	0.16	8.1
						53.1	432.9875	0.014	0.29	4.9	NA	NA
Roof	BS5	E	12	HAE6011A, 5/8 Wave (380-433MHz)	54.0	53.4	406.5000	0.015	0.27	5.5	0.16	9.4
						53.5	419.5000	0.006	0.28	2.1	0.16	3.5
						53.1	432.9875	0.006	0.29	2.2	NA	NA

**Table F.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF1- 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	13	HAE6012A, 1/4 Wave (380-433MHz)	54.0	53.4	406.5000	0.035	0.27	12.7	0.16	21.7
						53.5	419.5000	0.047	0.28	16.9	0.16	29.1
						53.1	432.9875	0.047	0.29	16.4	NA	NA
Roof	BS2	E	13	HAE6012A, 1/4 Wave (380-433MHz)	54.0	53.4	406.5000	0.027	0.27	10.0	0.16	17.1
						53.5	419.5000	0.030	0.28	10.7	0.16	18.5
						53.1	432.9875	0.033	0.29	11.6	NA	NA
Roof	BS3	E	13	HAE6012A, 1/4 Wave (380-433MHz)	54.0	53.4	406.5000	0.031	0.27	11.3	0.16	19.3
						53.5	419.5000	0.029	0.28	10.2	0.16	17.6
						53.1	432.9875	0.023	0.29	8.0	NA	NA
Roof	BS4	E	13	HAE6012A, 1/4 Wave (380-433MHz)	54.0	53.4	406.5000	0.015	0.27	5.4	0.16	9.1
						53.5	419.5000	0.016	0.28	5.8	0.16	9.9
						53.1	432.9875	0.018	0.29	6.1	NA	NA
Roof	BS5	E	13	HAE6012A, 1/4 Wave (380-433MHz)	54.0	53.4	406.5000	0.013	0.27	4.8	0.16	8.2
						53.5	419.5000	0.008	0.28	3.0	0.16	5.2
						53.1	432.9875	0.010	0.29	3.5	NA	NA
Roof	BS1	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.4	406.5000	0.043	0.27	15.7	0.16	26.8
						53.5	422.0125	0.050	0.28	17.7	0.16	30.6
						53.0	438.0125	0.057	0.29	19.5	NA	NA
						53.2	450.0125	0.043	0.30	14.4	0.17	25.4
						53.1	460.0000	0.071	0.31	<b>23.3</b>	0.17	<b>41.3</b>
						53.3	469.9875	0.039	0.31	12.4	0.18	22.2
Roof	BS2	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.4	406.5000	0.030	0.27	11.0	0.16	18.8
						53.5	422.0125	0.028	0.28	9.8	0.16	16.9
						53.0	438.0125	0.037	0.29	12.7	NA	NA
						53.2	450.0125	0.031	0.30	10.5	0.17	18.4
						53.1	460.0000	0.045	0.31	14.8	0.17	26.2
						53.3	469.9875	0.024	0.31	7.8	0.18	13.9

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

**Table F.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF1- 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	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.4	406.5000	0.029	0.27	10.9	0.16	18.6
						53.5	422.0125	0.027	0.28	9.7	0.16	16.7
						53.0	438.0125	0.033	0.29	11.2	NA	NA
						53.2	450.0125	0.022	0.30	7.5	0.17	13.2
						53.1	460.0000	0.030	0.31	9.8	0.17	17.4
						53.3	469.9875	0.022	0.31	6.9	0.18	12.4
Roof	BS4	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.4	406.5000	0.018	0.27	6.8	0.16	11.5
						53.5	422.0125	0.018	0.28	6.5	0.16	11.2
						53.0	438.0125	0.018	0.29	6.1	NA	NA
						53.2	450.0125	0.015	0.30	5.1	0.17	9.0
						53.1	460.0000	0.024	0.31	7.9	0.17	14.0
						53.3	469.9875	0.015	0.31	4.7	0.18	8.3
Roof	BS5	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.4	406.5000	0.009	0.27	3.4	0.16	5.9
						53.5	422.0125	0.011	0.28	3.8	0.16	6.5
						53.0	438.0125	0.012	0.29	4.2	NA	NA
						53.2	450.0125	0.010	0.30	3.2	0.17	5.6
						53.1	460.0000	0.014	0.31	4.5	0.17	7.9
						53.3	469.9875	0.012	0.31	3.9	0.18	7.0
Roof	BS1	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.4	406.5000	0.039	0.27	14.2	0.16	24.3
						53.5	422.0125	0.056	0.28	19.8	0.16	34.2
						53.0	438.0125	0.057	0.29	19.6	NA	NA
						53.2	450.0125	0.049	0.30	16.3	0.17	28.8
						53.3	469.9875	0.055	0.31	17.5	0.18	31.3
						53.4	406.5000	0.027	0.27	10.1	0.16	17.3
Roof	BS2	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.5	422.0125	0.028	0.28	9.9	0.16	17.1
						53.0	438.0125	0.038	0.29	13.0	NA	NA
						53.2	450.0125	0.036	0.30	12.1	0.17	21.2
						53.3	469.9875	0.035	0.31	11.2	0.18	20.0
						53.4	406.5000	0.027	0.27	10.1	0.16	17.3

**Table F.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF1- 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	% To ISED Spec Limit
Roof	BS3	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.4	406.5000	0.027	0.27	10.0	0	17.0
						53.5	422.0125	0.030	0.28	10.8	0	18.6
						53.0	438.0125	0.034	0.29	11.7	NA	NA
						53.2	450.0125	0.025	0.30	8.3	0	14.6
						53.3	469.9875	0.031	0.31	9.8	0	17.4
Roof	BS4	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.4	406.5000	0.015	0.27	5.6	0	9.5
						53.5	422.0125	0.019	0.28	6.7	0	11.6
						53.0	438.0125	0.019	0.29	6.6	NA	NA
						53.2	450.0125	0.018	0.30	6.1	0	10.8
						53.3	469.9875	0.018	0.31	5.7	0	10.1
Roof	BS5	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.4	406.5000	0.008	0.27	3.0	0	5.1
						53.5	422.0125	0.011	0.28	3.7	0	6.5
						53.0	438.0125	0.014	0.29	4.9	NA	NA
						53.2	450.0125	0.012	0.30	3.9	0	6.9
						53.3	469.9875	0.014	0.31	4.4	0	7.9
Roof	BS1	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.038	0.30	12.6	0	22.1
						53.1	460.0000	0.053	0.31	17.1	0	30.4
						53.3	469.9875	0.044	0.31	14.2	0	25.3
Roof	BS2	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.029	0.30	9.8	0	17.3
						53.1	460.0000	0.039	0.31	12.8	0	22.8
						53.3	469.9875	0.030	0.31	9.5	0	16.9
Roof	BS3	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.015	0.30	4.8	0	8.5
						53.1	460.0000	0.025	0.31	8.0	0	14.2
						53.3	469.9875	0.030	0.31	9.6	0	17.1
Roof	BS4	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.017	0.30	5.7	0	10.0
						53.1	460.0000	0.025	0.31	8.1	0	14.4
						53.3	469.9875	0.021	0.31	6.7	0	12.0
Roof	BS5	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.009	0.30	3.0	0	5.3
						53.1	460.0000	0.017	0.31	5.6	0	10.0
						53.3	469.9875	0.020	0.31	6.5	0	11.6



**Table F.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF1- 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	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.041	0.30	13.5	0.17	23.8
						53.1	460.0000	0.051	0.31	16.5	0.17	29.2
						53.3	469.9875	0.027	0.31	8.7	0.18	15.5
Roof	BS2	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.040	0.30	13.4	0.17	23.6
						53.1	460.0000	0.045	0.31	14.7	0.17	26.0
						53.3	469.9875	0.022	0.31	6.9	0.18	12.4
Roof	BS3	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.024	0.30	8.0	0.17	14.1
						53.1	460.0000	0.027	0.31	8.9	0.17	15.8
						53.3	469.9875	0.020	0.31	6.4	0.18	11.5
Roof	BS4	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.021	0.30	6.9	0.17	12.1
						53.1	460.0000	0.023	0.31	7.5	0.17	13.3
						53.3	469.9875	0.013	0.31	4.3	0.18	7.6
Roof	BS5	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.013	0.30	4.2	0.17	7.4
						53.1	460.0000	0.017	0.31	5.5	0.17	9.7
						53.3	469.9875	0.012	0.31	3.9	0.18	6.9
Roof	BS1	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.046	0.30	15.5	0.17	27.3
						53.1	460.0000	0.061	0.31	19.8	0.17	35.0
						53.3	469.9875	0.052	0.31	16.5	0.18	29.4
Roof	BS2	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.029	0.30	9.8	0.17	17.3
						53.1	460.0000	0.038	0.31	12.5	0.17	22.2
						53.3	469.9875	0.033	0.31	10.5	0.18	18.7
Roof	BS3	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.025	0.30	8.4	0.17	14.9
						53.1	460.0000	0.029	0.31	9.4	0.17	16.7
						53.3	469.9875	0.032	0.31	10.3	0.18	18.4
Roof	BS4	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.017	0.30	5.7	0.17	10.0
						53.1	460.0000	0.022	0.31	7.2	0.17	12.7
						53.3	469.9875	0.019	0.31	6.0	0.18	10.7
Roof	BS5	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.010	0.30	3.2	0.17	5.7
						53.1	460.0000	0.011	0.31	3.7	0.17	6.6
						53.3	469.9875	0.011	0.31	3.6	0.18	6.4

**Table F.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF1- 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	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.016	0.30	5.2	0.17	9.2
						53.1	460.0000	0.016	0.31	5.2	0.17	9.1
						53.3	469.9875	0.021	0.31	6.8	0.18	12.2
Roof	BS2	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.007	0.30	2.4	0.17	4.3
						53.1	460.0000	0.015	0.31	4.7	0.17	8.4
						53.3	469.9875	0.009	0.31	3.0	0.18	5.3
Roof	BS3	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.016	0.30	5.4	0.17	9.5
						53.1	460.0000	0.014	0.31	4.7	0.17	8.3
						53.3	469.9875	0.012	0.31	3.7	0.18	6.6
Roof	BS4	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.004	0.30	1.3	0.17	2.3
						53.1	460.0000	0.008	0.31	2.6	0.17	4.5
						53.3	469.9875	0.005	0.31	1.7	0.18	3.1
Roof	BS5	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.007	0.30	2.5	0.17	4.4
						53.1	460.0000	0.009	0.31	3.0	0.17	5.3
						53.3	469.9875	0.012	0.31	4.0	0.18	7.1
Roof	BS1	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.047	0.30	15.8	0.17	27.8
						53.1	460.0000	0.064	0.31	21.0	0.17	37.3
						53.3	469.9875	0.056	0.31	18.0	0.18	32.2
Roof	BS2	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.034	0.30	11.3	0.17	19.9
						53.1	460.0000	0.044	0.31	14.3	0.17	25.4
						53.3	469.9875	0.035	0.31	11.0	0.18	19.7
Roof	BS3	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.029	0.30	9.7	0.17	17.2
						53.1	460.0000	0.031	0.31	10.2	0.17	18.1
						53.3	469.9875	0.032	0.31	10.3	0.18	18.3
Roof	BS4	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.019	0.30	6.4	0.17	11.3
						53.1	460.0000	0.025	0.31	8.0	0.17	14.2
						53.3	469.9875	0.021	0.31	6.6	0.18	11.7
Roof	BS5	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.011	0.30	3.5	0.17	6.2
						53.1	460.0000	0.013	0.31	4.2	0.17	7.4
						53.3	469.9875	0.014	0.31	4.5	0.18	8.1

**Table F.2**

MPE assessment for Companion Mobile LMR UHF1- 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	11	HAE6010A, 1/2 Wave (380-433MHz)	54.0	53.4	406.5000	0.063	0.27	<b>23.3</b>	0.16	<b>39.8</b>
						53.5	419.5000	0.034	0.28	12.3	0.16	21.1
						53.1	432.9875	0.029	0.29	10.2	NA	NA
Roof	PB	E	12	HAE6011A, 5/8 Wave (380-433MHz)	54.0	53.4	406.5000	0.014	0.27	5.0	0.16	8.6
						53.5	419.5000	0.009	0.28	3.2	0.16	5.5
						53.1	432.9875	0.007	0.29	2.6	NA	NA
Roof	PB	E	13	HAE6012A, 1/4 Wave (380-433MHz)	54.0	53.4	406.5000	0.054	0.27	19.9	0.16	34.0
						53.5	419.5000	0.020	0.28	7.3	0.16	12.5
						53.1	432.9875	0.035	0.29	12.1	NA	NA
Roof	PB	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.4	406.5000	0.047	0.27	17.3	0.16	29.5
						53.5	422.0125	0.020	0.28	6.9	0.16	12.0
						53.0	438.0125	0.055	0.29	18.7	NA	NA
						53.2	450.0125	0.040	0.30	13.2	0.17	23.3
						53.1	460.0000	0.025	0.31	8.1	0.17	14.3
						53.3	469.9875	0.045	0.31	14.4	0.18	25.7
Roof	PB	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.4	406.5000	0.058	0.27	21.5	0.16	36.6
						53.5	422.0125	0.027	0.28	9.7	0.16	16.8
						53.0	438.0125	0.046	0.29	15.8	NA	NA
						53.2	450.0125	0.054	0.30	18.1	0.17	31.9
						53.3	469.9875	0.045	0.31	14.5	0.18	25.8
Roof	PB	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.008	0.30	2.8	0.17	4.9
						53.1	460.0000	0.004	0.31	1.3	0.17	2.2
						53.3	469.9875	0.009	0.31	3.0	0.18	5.3
Roof	PB	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.011	0.30	3.7	0.17	6.6
						53.1	460.0000	0.009	0.31	3.1	0.17	5.5
						53.3	469.9875	0.014	0.31	4.6	0.18	8.2
Roof	PB	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.037	0.30	12.4	0.17	21.9
						53.1	460.0000	0.025	0.31	8.3	0.17	14.6
						53.3	469.9875	0.028	0.31	8.8	0.18	15.7

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

**Table F.2 (Continued)**

MPE assessment for Companion Mobile LMR UHF1- 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	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.039	0.30	13.0	0.17	22.9
						53.1	460.0000	0.037	0.31	12.0	0.17	21.3
						53.3	469.9875	0.043	0.31	13.7	0.18	24.5
Roof	PB	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.046	0.30	15.2	0.17	26.7
						53.1	460.0000	0.036	0.31	11.9	0.17	21.1
						53.3	469.9875	0.044	0.31	14.2	0.18	25.3
Roof	PF	E	11	HAE6010A, 1/2 Wave (380-433MHz)	54.0	53.4	406.5000	0.020	0.27	7.5	0.16	12.8
						53.5	419.5000	0.026	0.28	9.3	0.16	16.1
						53.1	432.9875	0.020	0.29	6.9	NA	NA
Roof	PF	E	12	HAE6011A, 5/8 Wave (380-433MHz)	54.0	53.4	406.5000	0.004	0.27	1.6	0.16	2.7
						53.5	419.5000	0.008	0.28	2.8	0.16	4.8
						53.1	432.9875	0.003	0.29	1.1	NA	NA
Roof	PF	E	13	HAE6012A, 1/4 Wave (380-433MHz)	54.0	53.4	406.5000	0.023	0.27	8.5	0.16	14.5
						53.5	419.5000	0.026	0.28	9.3	0.16	16.0
						53.1	432.9875	0.023	0.29	7.9	NA	NA
Roof	PF	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.4	406.5000	0.016	0.27	5.9	0.16	10.1
						53.5	422.0125	0.027	0.28	9.6	0.16	16.6
						53.0	438.0125	0.031	0.29	10.5	NA	NA
						53.2	450.0125	0.038	0.30	12.7	0.17	22.3
						53.1	460.0000	0.023	0.31	7.4	0.17	13.1
						53.3	469.9875	0.022	0.31	7.2	0.18	12.8
Roof	PF	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.4	406.5000	0.017	0.27	6.3	0.16	10.7
						53.5	422.0125	0.023	0.28	8.0	0.16	13.8
						53.0	438.0125	0.027	0.29	9.3	NA	NA
						53.2	450.0125	0.052	0.30	17.5	0.17	30.8
						53.3	469.9875	0.032	0.31	10.3	0.18	18.4
Roof	PF	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.007	0.30	2.4	0.17	4.2
						53.1	460.0000	0.009	0.31	3.0	0.17	5.2
						53.3	469.9875	0.006	0.31	1.8	0.18	3.3

**Table F.2 (Continued)**

MPE assessment for Companion Mobile LMR UHF1- 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	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.016	0.30	5.2	0.17	9.1
						53.1	460.0000	0.011	0.31	3.5	0.17	6.3
						53.3	469.9875	0.007	0.31	2.4	0.18	4.2
Roof	PF	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.035	0.30	11.7	0.17	20.6
						53.1	460.0000	0.031	0.31	10.1	0.17	17.9
						53.3	469.9875	0.030	0.31	9.6	0.18	17.1
Roof	PF	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.027	0.30	9.0	0.17	15.9
						53.1	460.0000	0.032	0.31	10.3	0.17	18.3
						53.3	469.9875	0.023	0.31	7.3	0.18	13.0
Roof	PF	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.048	0.30	15.9	0.17	28.0
						53.1	460.0000	0.036	0.31	11.8	0.17	20.9
						53.3	469.9875	0.034	0.31	11.0	0.18	19.6

**Table F.3**  
**Companion Mobile LMR UHF1 MPE Results for FCC**

Pmax (W)	54	Pinitial (W)	53.4	53.5	53.5	53.1	53.0	53.2	53.1	53.3
			FCCLimit (mW/cm <sup>2</sup> )	0.27	0.28	0.28	0.29	0.29	0.30	0.31

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f1	f2	f1	f3	f4	f5
						406.5000	419.5000	422.0125	432.9875	438.0125	450.0125	460.0000	469.9875
F.1	BS1		Roof	E	11	0.021	0.026		0.040				
F.1	BS2		Roof	E	11	0.018	0.014		0.020				
F.1	BS3		Roof	E	11	0.015	0.013		0.019				
F.1	BS4		Roof	E	11	0.014	0.009		0.011				
F.1	BS5		Roof	E	11	0.004	0.004		0.008				
F.1	BS1		Roof	E	12	0.038	0.034		0.040				
F.1	BS2		Roof	E	12	0.032	0.030		0.036				
F.1	BS3		Roof	E	12	0.034	0.015		0.017				
F.1	BS4		Roof	E	12	0.018	0.013		0.014				
F.1	BS5		Roof	E	12	0.015	0.006		0.006				
F.1	BS1		Roof	E	13	0.035	0.047		0.047				
F.1	BS2		Roof	E	13	0.027	0.030		0.033				
F.1	BS3		Roof	E	13	0.031	0.029		0.023				
F.1	BS4		Roof	E	13	0.015	0.016		0.018				
F.1	BS5		Roof	E	13	0.013	0.008		0.010				
F.1	BS1		Roof	E	14	0.043		0.050		0.057	0.043	0.071	0.039
F.1	BS2		Roof	E	14	0.030		0.028		0.037	0.031	0.045	0.024
F.1	BS3		Roof	E	14	0.029		0.027		0.033	0.022	0.030	0.022
F.1	BS4		Roof	E	14	0.018		0.018		0.018	0.015	0.024	0.015
F.1	BS5		Roof	E	14	0.009		0.011		0.012	0.010	0.014	0.012
F.1	BS1		Roof	E	15	0.039		0.056		0.057	0.049		0.055
F.1	BS2		Roof	E	15	0.027		0.028		0.038	0.036		0.035
F.1	BS3		Roof	E	15	0.027		0.030		0.034	0.025		0.031
F.1	BS4		Roof	E	15	0.015		0.019		0.019	0.018		0.018
F.1	BS5		Roof	E	15	0.008		0.011		0.014	0.012		0.014
F.1	BS1		Roof	E	20						0.038	0.053	0.044
F.1	BS2		Roof	E	20						0.029	0.039	0.030
F.1	BS3		Roof	E	20						0.015	0.025	0.030
F.1	BS4		Roof	E	20						0.017	0.025	0.021
F.1	BS5		Roof	E	20						0.009	0.017	0.020
F.1	BS1		Roof	E	17						0.041	0.051	0.027
F.1	BS2		Roof	E	17						0.040	0.045	0.022
F.1	BS3		Roof	E	17						0.024	0.027	0.020
F.1	BS4		Roof	E	17						0.021	0.023	0.013
F.1	BS5		Roof	E	17						0.013	0.017	0.012

**Table F.3 (Continued)**  
**Companion Mobile LMR UHF1 MPE Results for FCC**

Pmax (W)	54	Pinitial (W)	53.4	53.5	53.5	53.1	53.0	53.2	53.1	53.3
			FCCLimit (mW/cm <sup>2</sup> )	0.27	0.28	0.28	0.29	0.29	0.30	0.31

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f1	f2	f1	f3	f4	f5
						406.5000	419.5000	422.0125	432.9875	438.0125	450.0125	460.0000	469.9875
F.1	BS1		Roof	E	16						0.046	0.061	0.052
F.1	BS2		Roof	E	16						0.029	0.038	0.033
F.1	BS3		Roof	E	16						0.025	0.029	0.032
F.1	BS4		Roof	E	16						0.017	0.022	0.019
F.1	BS5		Roof	E	16						0.010	0.011	0.011
F.1	BS1		Roof	E	19						0.016	0.016	0.021
F.1	BS2		Roof	E	19						0.007	0.015	0.009
F.1	BS3		Roof	E	19						0.016	0.014	0.012
F.1	BS4		Roof	E	19						0.004	0.008	0.005
F.1	BS5		Roof	E	19						0.007	0.009	0.012
F.1	BS1		Roof	E	18						0.047	0.064	0.056
F.1	BS2		Roof	E	18						0.034	0.044	0.035
F.1	BS3		Roof	E	18						0.029	0.031	0.032
F.1	BS4		Roof	E	18						0.019	0.025	0.021
F.1	BS5		Roof	E	18						0.011	0.013	0.014
F.2	PB		Roof	E	11	0.063	0.034		0.029				
F.2	PB		Roof	E	12	0.014	0.009		0.007				
F.2	PB		Roof	E	13	0.054	0.020		0.035				
F.2	PB		Roof	E	14	0.047		0.020		0.055	0.040	0.025	0.045
F.2	PB		Roof	E	15	0.058		0.027		0.046	0.054		0.045
F.2	PB		Roof	E	20						0.008	0.004	0.009
F.2	PB		Roof	E	17						0.011	0.009	0.014
F.2	PB		Roof	E	16						0.037	0.025	0.028
F.2	PB		Roof	E	19						0.039	0.037	0.043
F.2	PB		Roof	E	18						0.046	0.036	0.044
F.2	PF		Roof	E	11	0.020	0.026		0.020				
F.2	PF		Roof	E	12	0.004	0.008		0.003				
F.2	PF		Roof	E	13	0.023	0.026		0.023				
F.2	PF		Roof	E	14	0.016		0.027		0.031	0.038	0.023	0.022
F.2	PF		Roof	E	15	0.017		0.023		0.027	0.052		0.032
F.2	PF		Roof	E	20						0.007	0.009	0.006
F.2	PF		Roof	E	17						0.016	0.011	0.007
F.2	PF		Roof	E	16						0.035	0.031	0.030
F.2	PF		Roof	E	19						0.027	0.032	0.023
F.2	PF		Roof	E	18						0.048	0.036	0.034

## **Appendix G – MPE Test Results Summary for Companion Mobile LMR UHF R2**



**Table G.1**

MPE assessment for Companion Mobile LMR UHF2- 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	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.2	450.0125	0.043	0.30	14.4	0.17	25.4
						53.1	460.0000	0.071	0.31	<b>23.3</b>	0.17	<b>41.3</b>
						53.3	469.9875	0.039	0.31	12.4	0.18	22.2
Roof	BS2	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.2	450.0125	0.031	0.30	10.5	0.17	18.4
						53.1	460.0000	0.045	0.31	14.8	0.17	26.2
						53.3	469.9875	0.024	0.31	7.8	0.18	13.9
Roof	BS3	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.2	450.0125	0.022	0.30	7.5	0.17	13.2
						53.1	460.0000	0.030	0.31	9.8	0.17	17.4
						53.3	469.9875	0.022	0.31	6.9	0.18	12.4
Roof	BS4	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.2	450.0125	0.015	0.30	5.1	0.17	9.0
						53.1	460.0000	0.024	0.31	7.9	0.17	14.0
						53.3	469.9875	0.015	0.31	4.7	0.18	8.3
Roof	BS5	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.2	450.0125	0.010	0.30	3.2	0.17	5.6
						53.1	460.0000	0.014	0.31	4.5	0.17	7.9
						53.3	469.9875	0.012	0.31	3.9	0.18	7.0
Roof	BS1	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.2	450.0125	0.049	0.30	16.3	0.17	28.8
						53.3	469.9875	0.055	0.31	17.5	0.18	31.3
						53.5	482.5000	0.056	0.32	17.6	NA	NA
					48.0	46.7	496.5000	0.048	0.33	14.6	NA	NA
						47.5	511.9875	0.057	0.34	16.7	NA	NA
Roof	BS2	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.2	450.0125	0.036	0.30	12.1	0.17	21.2
						53.3	469.9875	0.035	0.31	11.2	0.18	20.0
						53.5	482.5000	0.043	0.32	13.3	NA	NA
					48.0	46.7	496.5000	0.038	0.33	11.4	NA	NA
						47.5	511.9875	0.040	0.34	11.8	NA	NA
Roof	BS3	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.2	450.0125	0.025	0.30	8.3	0.17	14.6
						53.3	469.9875	0.031	0.31	9.8	0.18	17.4
						53.5	482.5000	0.037	0.32	11.4	NA	NA
					48.0	46.7	496.5000	0.027	0.33	8.1	NA	NA
						47.5	511.9875	0.025	0.34	7.4	NA	NA

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

**Table G.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.2	450.0125	0.018	0.30	6.1	0.17	10.8
						53.3	469.9875	0.018	0.31	5.7	0.18	10.1
						53.5	482.5000	0.019	0.32	5.9	NA	NA
					48.0	46.7	496.5000	0.017	0.33	5.0	NA	NA
						47.5	511.9875	0.018	0.34	5.2	NA	NA
Roof	BS5	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.2	450.0125	0.012	0.30	3.9	0.17	6.9
						53.3	469.9875	0.014	0.31	4.4	0.18	7.9
						53.5	482.5000	0.016	0.32	5.0	NA	NA
					48.0	46.7	496.5000	0.014	0.33	4.1	NA	NA
						47.5	511.9875	0.015	0.34	4.5	NA	NA
Roof	BS1	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.038	0.30	12.6	0.17	22.1
						53.1	460.0000	0.053	0.31	17.1	0.17	30.4
						53.3	469.9875	0.044	0.31	14.2	0.18	25.3
Roof	BS2	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.029	0.30	9.8	0.17	17.3
						53.1	460.0000	0.039	0.31	12.8	0.17	22.8
						53.3	469.9875	0.030	0.31	9.5	0.18	16.9
Roof	BS3	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.015	0.30	4.8	0.17	8.5
						53.1	460.0000	0.025	0.31	8.0	0.17	14.2
						53.3	469.9875	0.030	0.31	9.6	0.18	17.1
Roof	BS4	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.017	0.30	5.7	0.17	10.0
						53.1	460.0000	0.025	0.31	8.1	0.17	14.4
						53.3	469.9875	0.021	0.31	6.7	0.18	12.0
Roof	BS5	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.009	0.30	3.0	0.17	5.3
						53.1	460.0000	0.017	0.31	5.6	0.17	10.0
						53.3	469.9875	0.020	0.31	6.5	0.18	11.6
Roof	BS1	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.041	0.30	13.5	0.17	23.8
						53.1	460.0000	0.051	0.31	16.5	0.17	29.2
						53.3	469.9875	0.027	0.31	8.7	0.18	15.5

**Table G.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.040	0.30	13.4	0.17	23.6
						53.1	460.0000	0.045	0.31	14.7	0.17	26.0
						53.3	469.9875	0.022	0.31	6.9	0.18	12.4
Roof	BS3	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.024	0.30	8.0	0.17	14.1
						53.1	460.0000	0.027	0.31	8.9	0.17	15.8
						53.3	469.9875	0.020	0.31	6.4	0.18	11.5
Roof	BS4	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.021	0.30	6.9	0.17	12.1
						53.1	460.0000	0.023	0.31	7.5	0.17	13.3
						53.3	469.9875	0.013	0.31	4.3	0.18	7.6
Roof	BS5	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.013	0.30	4.2	0.17	7.4
						53.1	460.0000	0.017	0.31	5.5	0.17	9.7
						53.3	469.9875	0.012	0.31	3.9	0.18	6.9
Roof	BS1	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.046	0.30	15.5	0.17	27.3
						53.1	460.0000	0.061	0.31	19.8	0.17	35.0
						53.3	469.9875	0.052	0.31	16.5	0.18	29.4
Roof	BS2	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.029	0.30	9.8	0.17	17.3
						53.1	460.0000	0.038	0.31	12.5	0.17	22.2
						53.3	469.9875	0.033	0.31	10.5	0.18	18.7
Roof	BS3	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.025	0.30	8.4	0.17	14.9
						53.1	460.0000	0.029	0.31	9.4	0.17	16.7
						53.3	469.9875	0.032	0.31	10.3	0.18	18.4
Roof	BS4	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.017	0.30	5.7	0.17	10.0
						53.1	460.0000	0.022	0.31	7.2	0.17	12.7
						53.3	469.9875	0.019	0.31	6.0	0.18	10.7
Roof	BS5	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.010	0.30	3.2	0.17	5.7
						53.1	460.0000	0.011	0.31	3.7	0.17	6.6
						53.3	469.9875	0.011	0.31	3.6	0.18	6.4

**Table G.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.016	0.30	5.2	0.17	9.2
						53.1	460.0000	0.016	0.31	5.2	0.17	9.1
						53.3	469.9875	0.021	0.31	6.8	0.18	12.2
						53.5	482.5000	0.017	0.32	5.4	NA	NA
					48.0	46.7	496.5000	0.025	0.33	7.4	NA	NA
						47.5	511.9875	0.020	0.34	5.8	NA	NA
Roof	BS2	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.007	0.30	2.4	0.17	4.3
						53.1	460.0000	0.015	0.31	4.7	0.17	8.4
						53.3	469.9875	0.009	0.31	3.0	0.18	5.3
						53.5	482.5000	0.013	0.32	4.0	NA	NA
					48.0	46.7	496.5000	0.013	0.33	4.0	NA	NA
						47.5	511.9875	0.019	0.34	5.5	NA	NA
Roof	BS3	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.016	0.30	5.4	0.17	9.5
						53.1	460.0000	0.014	0.31	4.7	0.17	8.3
						53.3	469.9875	0.012	0.31	3.7	0.18	6.6
						53.5	482.5000	0.017	0.32	5.4	NA	NA
					48.0	46.7	496.5000	0.011	0.33	3.3	NA	NA
						47.5	511.9875	0.016	0.34	4.6	NA	NA
Roof	BS4	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.004	0.30	1.3	0.17	2.3
						53.1	460.0000	0.008	0.31	2.6	0.17	4.5
						53.3	469.9875	0.005	0.31	1.7	0.18	3.1
						53.5	482.5000	0.006	0.32	1.7	NA	NA
					48.0	46.7	496.5000	0.005	0.33	1.5	NA	NA
						47.5	511.9875	0.008	0.34	2.4	NA	NA
Roof	BS5	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.007	0.30	2.5	0.17	4.4
						53.1	460.0000	0.009	0.31	3.0	0.17	5.3
						53.3	469.9875	0.012	0.31	4.0	0.18	7.1
						53.5	482.5000	0.011	0.32	3.6	NA	NA
					48.0	46.7	496.5000	0.010	0.33	3.1	NA	NA
						47.5	511.9875	0.009	0.34	2.8	NA	NA

**Table G.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.047	0.30	15.8	0.17	27.8
						53.1	460.0000	0.064	0.31	21.0	0.17	37.3
						53.3	469.9875	0.056	0.31	18.0	0.18	32.2
						53.5	482.5000	0.050	0.32	15.6	NA	NA
					48.0	46.7	496.5000	0.050	0.33	15.2	NA	NA
						47.5	511.9875	0.048	0.34	14.2	NA	NA
Roof	BS2	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.034	0.30	11.3	0.17	19.9
						53.1	460.0000	0.044	0.31	14.3	0.17	25.4
						53.3	469.9875	0.035	0.31	11.0	0.18	19.7
						53.5	482.5000	0.042	0.32	13.0	NA	NA
					48.0	46.7	496.5000	0.041	0.33	12.4	NA	NA
						47.5	511.9875	0.045	0.34	13.3	NA	NA
Roof	BS3	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.029	0.30	9.7	0.17	17.2
						53.1	460.0000	0.031	0.31	10.2	0.17	18.1
						53.3	469.9875	0.032	0.31	10.3	0.18	18.3
						53.5	482.5000	0.044	0.32	13.8	NA	NA
					48.0	46.7	496.5000	0.028	0.33	8.4	NA	NA
						47.5	511.9875	0.032	0.34	9.5	NA	NA
Roof	BS4	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.019	0.30	6.4	0.17	11.3
						53.1	460.0000	0.025	0.31	8.0	0.17	14.2
						53.3	469.9875	0.021	0.31	6.6	0.18	11.7
						53.5	482.5000	0.017	0.32	5.3	NA	NA
					48.0	46.7	496.5000	0.016	0.33	4.7	NA	NA
						47.5	511.9875	0.019	0.34	5.5	NA	NA
Roof	BS5	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.011	0.30	3.5	0.17	6.2
						53.1	460.0000	0.013	0.31	4.2	0.17	7.4
						53.3	469.9875	0.014	0.31	4.5	0.18	8.1
						53.5	482.5000	0.015	0.32	4.6	NA	NA
					48.0	46.7	496.5000	0.011	0.33	3.4	NA	NA
						47.5	511.9875	0.016	0.34	4.6	NA	NA

**Table G.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	22	HAE4012A, 1/2 Wave (470-495MHz)	54.0	53.2	470.0125	0.054	0.31	17.1	NA	NA	
						53.5	482.5000	0.043	0.32	13.4	NA	NA	
						48.0	494.9875	0.036	0.33	11.0	NA	NA	
Roof	BS2	E	22	HAE4012A, 1/2 Wave (470-495MHz)	54.0	53.2	470.0125	0.033	0.31	10.4	NA	NA	
						53.5	482.5000	0.039	0.32	12.1	NA	NA	
						48.0	494.9875	0.033	0.33	10.0	NA	NA	
Roof	BS3	E	22	HAE4012A, 1/2 Wave (470-495MHz)	54.0	53.2	470.0125	0.031	0.31	9.8	NA	NA	
						53.5	482.5000	0.036	0.32	11.1	NA	NA	
						48.0	494.9875	0.023	0.33	7.0	NA	NA	
Roof	BS4	E	22	HAE4012A, 1/2 Wave (470-495MHz)	54.0	53.2	470.0125	0.020	0.31	6.4	NA	NA	
						53.5	482.5000	0.017	0.32	5.3	NA	NA	
						48.0	494.9875	0.012	0.33	3.7	NA	NA	
Roof	BS5	E	22	HAE4012A, 1/2 Wave (470-495MHz)	54.0	53.2	470.0125	0.002	0.31	0.6	NA	NA	
						53.5	482.5000	0.003	0.32	1.0	NA	NA	
						48.0	494.9875	0.002	0.33	0.7	NA	NA	
Roof	BS1	E	21	HAE4004A, 1/4 Wave (470-512MHz)	54.0	53.2	470.0125	0.056	0.31	18.0	NA	NA	
						53.5	482.5000	0.051	0.32	15.8	NA	NA	
						48.0	46.7	496.5000	0.046	0.33	14.0	NA	NA
							47.5	511.9875	0.041	0.34	12.0	NA	NA
Roof	BS2	E	21	HAE4004A, 1/4 Wave (470-512MHz)	54.0	53.2	470.0125	0.030	0.31	9.4	NA	NA	
						53.5	482.5000	0.036	0.32	11.2	NA	NA	
						48.0	46.7	496.5000	0.038	0.33	11.5	NA	NA
							47.5	511.9875	0.034	0.34	10.0	NA	NA
Roof	BS3	E	21	HAE4004A, 1/4 Wave (470-512MHz)	54.0	53.2	470.0125	0.029	0.31	9.2	NA	NA	
						53.5	482.5000	0.040	0.32	12.4	NA	NA	
						48.0	46.7	496.5000	0.029	0.33	8.7	NA	NA
							47.5	511.9875	0.025	0.34	7.2	NA	NA

**Table G.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	21	HAE4004A, 1/4 Wave (470-512MHz)	54.0	53.2	470.0125	0.018	0.31	5.6	NA	NA
						53.5	482.5000	0.015	0.32	4.6	NA	NA
					48.0	46.7	496.5000	0.014	0.33	4.3	NA	NA
						47.5	511.9875	0.014	0.34	4.0	NA	NA
Roof	BS5	E	21	HAE4004A, 1/4 Wave (470-512MHz)	54.0	53.2	470.0125	0.010	0.31	3.2	NA	NA
						53.5	482.5000	0.013	0.32	3.9	NA	NA
					48.0	46.7	496.5000	0.011	0.33	3.3	NA	NA
						47.5	511.9875	0.012	0.34	3.4	NA	NA
Roof	BS1	E	24	RAE4015ARM, 5/8 Wave (470-494MHz)	54.0	53.2	470.0125	0.031	0.31	9.9	NA	NA
						53.5	482.5000	0.036	0.32	11.2	NA	NA
					48.0	46.4	493.9875	0.035	0.33	10.5	NA	NA
Roof	BS2	E	24	RAE4015ARM, 5/8 Wave (470-494MHz)	54.0	53.2	470.0125	0.025	0.31	7.8	NA	NA
						53.5	482.5000	0.032	0.32	9.8	NA	NA
					48.0	46.4	493.9875	0.042	0.33	12.7	NA	NA
Roof	BS3	E	24	RAE4015ARM, 5/8 Wave (470-494MHz)	54.0	53.2	470.0125	0.021	0.31	6.7	NA	NA
						53.5	482.5000	0.025	0.32	7.9	NA	NA
					48.0	46.4	493.9875	0.027	0.33	8.2	NA	NA
Roof	BS4	E	24	RAE4015ARM, 5/8 Wave (470-494MHz)	54.0	53.2	470.0125	0.015	0.31	4.8	NA	NA
						53.5	482.5000	0.015	0.32	4.6	NA	NA
					48.0	46.4	493.9875	0.020	0.33	6.2	NA	NA
Roof	BS5	E	24	RAE4015ARM, 5/8 Wave (470-494MHz)	54.0	53.2	470.0125	0.012	0.31	4.0	NA	NA
						53.5	482.5000	0.013	0.32	4.1	NA	NA
					48.0	46.4	493.9875	0.014	0.33	4.2	NA	NA
Roof	BS1	E	23	HAE4013A, 1/2 Wave (494-512MHz)	48.0	46.6	494.9875	0.053	0.33	16.1	NA	NA
						47.1	503.0000	0.046	0.34	13.6	NA	NA
						47.5	511.9875	0.033	0.34	9.8	NA	NA
Roof	BS2	E	23	HAE4013A, 1/2 Wave (494-512MHz)	48.0	46.6	494.9875	0.042	0.33	12.7	NA	NA
						47.1	503.0000	0.034	0.34	10.0	NA	NA
						47.5	511.9875	0.036	0.34	10.6	NA	NA

**Table G.1 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	23	HAE4013A, 1/2 Wave (494-512MHz)	48.0	46.6	494.9875	0.034	0.33	10.4	NA	NA
						47.1	503.0000	0.028	0.34	8.2	NA	NA
						47.5	511.9875	0.027	0.34	7.8	NA	NA
Roof	BS4	E	23	HAE4013A, 1/2 Wave (494-512MHz)	48.0	46.6	494.9875	0.020	0.33	6.0	NA	NA
						47.1	503.0000	0.020	0.34	6.1	NA	NA
						47.5	511.9875	0.019	0.34	5.4	NA	NA
Roof	BS5	E	23	HAE4013A, 1/2 Wave (494-512MHz)	48.0	46.6	494.9875	0.016	0.33	4.9	NA	NA
						47.1	503.0000	0.013	0.34	3.9	NA	NA
						47.5	511.9875	0.015	0.34	4.4	NA	NA
Roof	BS1	E	25	RAE4016ARB, 5/8 Wave (494-512MHz)	48.0	46.6	494.9875	0.038	0.33	11.4	NA	NA
						47.1	503.0000	0.032	0.34	9.6	NA	NA
						47.5	511.9875	0.038	0.34	11.2	NA	NA
Roof	BS2	E	25	RAE4016ARB, 5/8 Wave (494-512MHz)	48.0	46.6	494.9875	0.038	0.33	11.4	NA	NA
						47.1	503.0000	0.023	0.34	7.0	NA	NA
						47.5	511.9875	0.038	0.34	11.1	NA	NA
Roof	BS3	E	25	RAE4016ARB, 5/8 Wave (494-512MHz)	48.0	46.6	494.9875	0.023	0.33	7.1	NA	NA
						47.1	503.0000	0.024	0.34	7.3	NA	NA
						47.5	511.9875	0.029	0.34	8.4	NA	NA
Roof	BS4	E	25	RAE4016ARB, 5/8 Wave (494-512MHz)	48.0	46.6	494.9875	0.015	0.33	4.6	NA	NA
						47.1	503.0000	0.012	0.34	3.7	NA	NA
						47.5	511.9875	0.015	0.34	4.5	NA	NA
Roof	BS5	E	25	RAE4016ARB, 5/8 Wave (494-512MHz)	48.0	46.6	494.9875	0.012	0.33	3.6	NA	NA
						47.1	503.0000	0.010	0.34	3.0	NA	NA
						47.5	511.9875	0.017	0.34	5.0	NA	NA



**Table G.2**

MPE assessment for Companion Mobile LMR UHF2- 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	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.2	450.0125	0.040	0.30	13.2	0.17	23.3
						53.1	460.0000	0.025	0.31	8.1	0.17	14.3
						53.3	469.9875	0.045	0.31	14.4	0.18	25.7
Roof	PB	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.2	450.0125	0.054	0.30	<b>18.1</b>	0.17	<b>31.9</b>
						53.3	469.9875	0.045	0.31	14.5	0.18	25.8
						53.5	482.5000	0.036	0.32	11.3	NA	NA
					48.0	46.7	496.5000	0.020	0.33	6.1	NA	NA
						47.5	511.9875	0.015	0.34	4.3	NA	NA
Roof	PB	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.008	0.30	2.8	0.17	4.9
						53.1	460.0000	0.004	0.31	1.3	0.17	2.2
						53.3	469.9875	0.009	0.31	3.0	0.18	5.3
Roof	PB	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.011	0.30	3.7	0.17	6.6
						53.1	460.0000	0.009	0.31	3.1	0.17	5.5
						53.3	469.9875	0.014	0.31	4.6	0.18	8.2
Roof	PB	E	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.037	0.30	12.4	0.17	21.9
						53.1	460.0000	0.025	0.31	8.3	0.17	14.6
						53.3	469.9875	0.028	0.31	8.8	0.18	15.7
Roof	PB	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.039	0.30	13.0	0.17	22.9
						53.1	460.0000	0.037	0.31	12.0	0.17	21.3
						53.3	469.9875	0.043	0.31	13.7	0.18	24.5
						53.5	482.5000	0.041	0.32	12.6	NA	NA
					48.0	46.7	496.5000	0.017	0.33	5.0	NA	NA
						47.5	511.9875	0.021	0.34	6.1	NA	NA
Roof	PB	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.046	0.30	15.2	0.17	26.7
						53.1	460.0000	0.036	0.31	11.9	0.17	21.1
						53.3	469.9875	0.044	0.31	14.2	0.18	25.3
						53.5	482.5000	0.039	0.32	12.0	NA	NA
					48.0	46.7	496.5000	0.024	0.33	7.4	NA	NA
						47.5	511.9875	0.019	0.34	5.4	NA	NA

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

**Table G.2 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	22	HAE4012A, 1/2 Wave (470-495MHz)	54.0	53.2	470.0125	0.014	0.31	4.4	NA	NA	
						53.5	482.5000	0.013	0.32	4.1	NA	NA	
						48.0	46.6	494.9875	0.009	0.33	2.6	NA	NA
Roof	PB	E	21	HAE4004A, 1/4 Wave (470-512MHz)	54.0	53.2	470.0125	0.010	0.31	3.3	NA	NA	
						53.5	482.5000	0.005	0.32	1.7	NA	NA	
						48.0	46.7	496.5000	0.019	0.33	5.6	NA	NA
							47.5	511.9875	0.018	0.34	5.2	NA	NA
Roof	PB	E	24	RAE4015ARM, 5/8 Wave (470-494MHz)	54.0	53.2	470.0125	0.004	0.31	1.4	NA	NA	
						53.5	482.5000	0.006	0.32	1.8	NA	NA	
						48.0	46.4	493.9875	0.003	0.33	1.1	NA	NA
Roof	PB	E	23	HAE4013A, 1/2 Wave (494-512MHz)	48.0	46.6	494.9875	0.013	0.33	4.0	NA	NA	
						47.1	503.0000	0.002	0.34	0.5	NA	NA	
						47.5	511.9875	0.005	0.34	1.6	NA	NA	
Roof	PB	E	25	RAE4016ARB, 5/8 Wave (494-512MHz)	48.0	46.6	494.9875	0.004	0.33	1.2	NA	NA	
						47.1	503.0000	0.006	0.34	1.9	NA	NA	
						46.4	511.9875	0.006	0.34	1.7	NA	NA	
Roof	PF	E	14	HAE6013A, 1/2 Wave (380-470MHz)	54.0	53.2	450.0125	0.038	0.30	12.7	0.17	22.3	
						53.1	460.0000	0.023	0.31	7.4	0.17	13.1	
						53.3	469.9875	0.022	0.31	7.2	0.18	12.8	
Roof	PF	E	15	HAE6031A, 1/2 Wave (380-520MHz)	54.0	53.2	450.0125	0.052	0.30	17.5	0.17	30.8	
						53.3	469.9875	0.032	0.31	10.3	0.18	18.4	
						53.5	482.5000	0.022	0.32	6.7	NA	NA	
						48.0	46.7	496.5000	0.038	0.33	11.5	NA	NA
							47.5	511.9875	0.026	0.34	7.5	NA	NA
Roof	PF	E	20	RAE4014ARB, 5/8 Wave (445-470MHz)	54.0	53.2	450.0125	0.007	0.30	2.4	0.17	4.2	
						53.1	460.0000	0.009	0.31	3.0	0.17	5.2	
						53.3	469.9875	0.006	0.31	1.8	0.18	3.3	
Roof	PF	E	17	HAE4011A, 1/2 Wave (450-470MHz)	54.0	53.2	450.0125	0.016	0.30	5.2	0.17	9.1	
						53.1	460.0000	0.011	0.31	3.5	0.17	6.3	
						53.3	469.9875	0.007	0.31	2.4	0.18	4.2	

**Table G.2 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	16	HAE4003A, 1/4 Wave (450-470MHz)	54.0	53.2	450.0125	0.035	0.30	11.7	0.17	20.6
						53.1	460.0000	0.031	0.31	10.1	0.17	17.9
						53.3	469.9875	0.030	0.31	9.6	0.18	17.1
Roof	PF	E	19	HAE6016A, 1/4 Wave (450-512MHz)	54.0	53.2	450.0125	0.027	0.30	9.0	0.17	15.9
						53.1	460.0000	0.032	0.31	10.3	0.17	18.3
						53.3	469.9875	0.023	0.31	7.3	0.18	13.0
						53.5	482.5000	0.030	0.32	9.3	NA	NA
					48.0	46.7	496.5000	0.036	0.33	10.8	NA	NA
						47.5	511.9875	0.026	0.34	7.6	NA	NA
Roof	PF	E	18	HAE6015A, 1/2 Wave (450-520MHz)	54.0	53.2	450.0125	0.048	0.30	15.9	0.17	28.0
						53.1	460.0000	0.036	0.31	11.8	0.17	20.9
						53.3	469.9875	0.034	0.31	11.0	0.18	19.6
						53.5	482.5000	0.023	0.32	7.0	NA	NA
					48.0	46.7	496.5000	0.042	0.33	12.8	NA	NA
						47.5	511.9875	0.026	0.34	7.7	NA	NA
Roof	PF	E	22	HAE4012A, 1/2 Wave (470-495MHz)	54.0	53.2	470.0125	0.011	0.31	3.6	NA	NA
						53.5	482.5000	0.009	0.32	2.7	NA	NA
					48.0	46.6	494.9875	0.012	0.33	3.7	NA	NA
Roof	PF	E	21	HAE4004A, 1/4 Wave (470-512MHz)	54.0	53.2	470.0125	0.031	0.31	9.9	NA	NA
						53.5	482.5000	0.032	0.32	10.0	NA	NA
					48.0	46.7	496.5000	0.037	0.33	11.2	NA	NA
						47.5	511.9875	0.020	0.34	5.8	NA	NA
Roof	PF	E	24	RAE4015ARM, 5/8 Wave (470-494MHz)	54.0	53.2	470.0125	0.001	0.31	0.4	NA	NA
						53.5	482.5000	0.003	0.32	1.0	NA	NA
					48.0	46.4	493.9875	0.005	0.33	1.5	NA	NA
Roof	PF	E	23	HAE4013A, 1/2 Wave (494-512MHz)	48.0	46.6	494.9875	0.009	0.33	2.9	NA	NA
						47.1	503.0000	0.012	0.34	3.5	NA	NA
						47.5	511.9875	0.006	0.34	1.7	NA	NA

**Table G.2 (Continued)**

MPE assessment for Companion Mobile LMR UHF2- 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	25	RAE4016ARB, 5/8 Wave (494-512MHz)	48.0	46.6	494.9875	0.004	0.33	1.2	NA	NA
						47.1	503.0000	0.008	0.34	2.4	NA	NA
						46.4	511.9875	0.005	0.34	1.6	NA	NA

**Table G.3**  
**Companion Mobile LMR UHF2 MPE Results for FCC**

Pmax (W)	54/48	PinitiaI (W)	53.2	53.1	53.3	53.2	53.5	46.4	46.6	53.5	47.1	47.5
		FCCLimit (mW/cm <sup>2</sup> )	0.30	0.31	0.31	0.31	0.32	0.33	0.33	0.33	0.34	0.34

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f3	f4	f5	f6	f7	f8	f9	f10
						450.0125	460.0000	469.9875	470.0125	482.5000	493.9875	494.9875	496.5000	503.0000	511.9875
G.1	BS1		Roof	E	14	0.043	0.071	0.039							
G.1	BS2		Roof	E	14	0.031	0.045	0.024							
G.1	BS3		Roof	E	14	0.022	0.030	0.022							
G.1	BS4		Roof	E	14	0.015	0.024	0.015							
G.1	BS5		Roof	E	14	0.010	0.014	0.012							
G.1	BS1		Roof	E	15	0.049		0.055		0.056			0.048		0.057
G.1	BS2		Roof	E	15	0.036		0.035		0.043			0.038		0.040
G.1	BS3		Roof	E	15	0.025		0.031		0.037			0.027		0.025
G.1	BS4		Roof	E	15	0.018		0.018		0.019			0.017		0.018
G.1	BS5		Roof	E	15	0.012		0.014		0.016			0.014		0.015
G.1	BS1		Roof	E	20	0.038	0.053	0.044							
G.1	BS2		Roof	E	20	0.029	0.039	0.030							
G.1	BS3		Roof	E	20	0.015	0.025	0.030							
G.1	BS4		Roof	E	20	0.017	0.025	0.021							
G.1	BS5		Roof	E	20	0.009	0.017	0.020							
G.1	BS1		Roof	E	17	0.041	0.051	0.027							
G.1	BS2		Roof	E	17	0.040	0.045	0.022							
G.1	BS3		Roof	E	17	0.024	0.027	0.020							
G.1	BS4		Roof	E	17	0.021	0.023	0.013							
G.1	BS5		Roof	E	17	0.013	0.017	0.012							
G.1	BS1		Roof	E	16	0.046	0.061	0.052							
G.1	BS2		Roof	E	16	0.029	0.038	0.033							
G.1	BS3		Roof	E	16	0.025	0.029	0.032							
G.1	BS4		Roof	E	16	0.017	0.022	0.019							
G.1	BS5		Roof	E	16	0.010	0.011	0.011							
G.1	BS1		Roof	E	19	0.016	0.016	0.021		0.017			0.025		0.020
G.1	BS2		Roof	E	19	0.007	0.015	0.009		0.013			0.013		0.019
G.1	BS3		Roof	E	19	0.016	0.014	0.012		0.017			0.011		0.016
G.1	BS4		Roof	E	19	0.004	0.008	0.005		0.006			0.005		0.008
G.1	BS5		Roof	E	19	0.007	0.009	0.012		0.011			0.010		0.009
G.1	BS1		Roof	E	18	0.047	0.064	0.056		0.050			0.050		0.048
G.1	BS2		Roof	E	18	0.034	0.044	0.035		0.042			0.041		0.045
G.1	BS3		Roof	E	18	0.029	0.031	0.032		0.044			0.028		0.032
G.1	BS4		Roof	E	18	0.019	0.025	0.021		0.017			0.016		0.019
G.1	BS5		Roof	E	18	0.011	0.013	0.014		0.015			0.011		0.016
G.1	BS1		Roof	E	22				0.054	0.043		0.036			
G.1	BS2		Roof	E	22				0.033	0.039		0.033			
G.1	BS3		Roof	E	22				0.031	0.036		0.023			
G.1	BS4		Roof	E	22				0.020	0.017		0.012			
G.1	BS5		Roof	E	22				0.002	0.003		0.002			

**Table G.3 (Continued)**  
**Companion Mobile LMR UHF2 MPE Results for FCC**

P <sub>max</sub> (W)	54/48	P <sub>initial</sub> (W)	53.2	53.1	53.3	53.2	53.5	46.4	46.6	53.5	47.1	47.5
			FCCLimit (mW/cm <sup>2</sup> )	0.30	0.31	0.31	0.31	0.32	0.33	0.33	0.33	0.34

Table	Test Post.	Angle	Trunk / Roof	E/H Field	Antenna No.	f1	f2	f3	f4	f5	f6	f7	f8	f9	f10
						450.0125	460.0000	469.9875	470.0125	482.5000	493.9875	494.9875	496.5000	503.0000	511.9875
G.1	BS1		Roof	E	21				0.056	0.051			0.046		0.041
G.1	BS2		Roof	E	21				0.030	0.036			0.038		0.034
G.1	BS3		Roof	E	21				0.029	0.040			0.029		0.025
G.1	BS4		Roof	E	21				0.018	0.015			0.014		0.014
G.1	BS5		Roof	E	21				0.010	0.013			0.011		0.012
G.1	BS1		Roof	E	24				0.031	0.036	0.035				
G.1	BS2		Roof	E	24				0.025	0.032	0.042				
G.1	BS3		Roof	E	24				0.021	0.025	0.027				
G.1	BS4		Roof	E	24				0.015	0.015	0.020				
G.1	BS5		Roof	E	24				0.012	0.013	0.014				
G.1	BS1		Roof	E	23							0.053		0.046	0.033
G.1	BS2		Roof	E	23							0.042		0.034	0.036
G.1	BS3		Roof	E	23							0.034		0.028	0.027
G.1	BS4		Roof	E	23							0.020		0.020	0.019
G.1	BS5		Roof	E	23							0.016		0.013	0.015
G.1	BS1		Roof	E	25							0.038		0.032	0.038
G.1	BS2		Roof	E	25							0.038		0.023	0.038
G.1	BS3		Roof	E	25							0.023		0.024	0.029
G.1	BS4		Roof	E	25							0.015		0.012	0.015
G.1	BS5		Roof	E	25							0.012		0.010	0.017
G.2	PB		Roof	E	14	0.040	0.025	0.045							
G.2	PB		Roof	E	15	0.054		0.045		0.036			0.020		0.011
G.2	PB		Roof	E	20	0.008	0.004	0.009							
G.2	PB		Roof	E	17	0.011	0.009	0.014							
G.2	PB		Roof	E	16	0.037	0.025	0.028							
G.2	PB		Roof	E	19	0.039	0.037	0.043		0.041			0.017		0.021
G.2	PB		Roof	E	18	0.046	0.036	0.044		0.039			0.024		0.019
G.2	PB		Roof	E	22				0.014	0.013		0.009			
G.2	PB		Roof	E	21				0.010	0.005			0.019		0.018
G.2	PB		Roof	E	24				0.004	0.006	0.003				
G.2	PB		Roof	E	23							0.013		0.002	0.005
G.2	PB		Roof	E	25							0.004		0.006	0.006
G.2	PF		Roof	E	14	0.038	0.023	0.022							
G.1	PF		Roof	E	15	0.052		0.032		0.022			0.038		0.026
G.2	PF		Roof	E	20	0.007	0.009	0.006							
G.1	PF		Roof	E	17	0.016	0.011	0.007							
G.2	PF		Roof	E	16	0.035	0.031	0.030							
G.1	PF		Roof	E	19	0.027	0.032	0.023		0.030			0.036		0.026
G.2	PF		Roof	E	18	0.048	0.036	0.034		0.023			0.042		0.026
G.1	PF		Roof	E	22				0.011	0.009		0.012			
G.2	PF		Roof	E	21				0.031	0.032			0.037		0.020
G.1	PF		Roof	E	24				0.001	0.003	0.005				
G.2	PF		Roof	E	23							0.009		0.012	0.006
G.1	PF		Roof	E	25							0.004		0.008	0.005

## **Appendix H – MPE Test Results Summary for Companion Mobile LMR 7/800**

**Table H.1**

MPE assessment for Companion Mobile LMR 7/800- 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	26	HAF4013A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.022	0.51	4.3	0.25	8.9
						36.0	775.9125	0.026	0.52	5.0	0.25	10.5
					42.0	41.6	806.0125	0.009	0.54	1.7	0.25	3.6
						41.0	823.9875	0.007	0.55	1.3	0.26	2.8
						40.3	851.0125	0.006	0.57	1.1	0.26	2.3
						40.0	862.0125	0.009	0.57	1.5	0.27	3.2
						40.1	868.8875	0.004	0.58	0.8	0.27	1.7
Roof	BS2	E	26	HAF4013A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.019	0.51	3.7	0.25	7.7
						36.0	775.9125	0.025	0.52	4.8	0.25	10.0
					42.0	41.6	806.0125	0.007	0.54	1.3	0.25	2.7
						41.0	823.9875	0.005	0.55	1.0	0.26	2.1
						40.3	851.0125	0.004	0.57	0.7	0.26	1.5
						40.0	862.0125	0.005	0.57	0.9	0.27	1.9
						40.1	868.8875	0.003	0.58	0.5	0.27	1.1
Roof	BS3	E	26	HAF4013A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.013	0.51	2.5	0.25	5.3
						36.0	775.9125	0.013	0.52	2.6	0.25	5.4
					42.0	41.6	806.0125	0.006	0.54	1.2	0.25	2.5
						41.0	823.9875	0.003	0.55	0.5	0.26	1.1
						40.3	851.0125	0.003	0.57	0.5	0.26	1.1
						40.0	862.0125	0.002	0.57	0.4	0.27	0.8
						40.1	868.8875	0.001	0.58	0.2	0.27	0.5
Roof	BS4	E	26	HAF4013A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.007	0.51	1.4	0.25	3.0
						36.0	775.9125	0.010	0.52	2.0	0.25	4.1
					42.0	41.6	806.0125	0.003	0.54	0.5	0.25	1.1
						41.0	823.9875	0.004	0.55	0.8	0.26	1.6
						40.3	851.0125	0.004	0.57	0.8	0.26	1.7
						40.0	862.0125	0.004	0.57	0.6	0.27	1.3
						40.1	868.8875	0.004	0.58	0.6	0.27	1.4



**Table H.1 (Continued)**

MPE assessment for Companion Mobile LMR 7/800- 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	26	HAF4013A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.006	0.51	1.2	0.25	2.5
						36.0	775.9125	0.006	0.52	1.2	0.25	2.6
					42.0	41.6	806.0125	0.009	0.54	1.6	0.25	3.5
						41.0	823.9875	0.007	0.55	1.3	0.26	2.9
						40.3	851.0125	0.006	0.57	1.1	0.26	2.4
						40.0	862.0125	0.007	0.57	1.3	0.27	2.8
						40.1	868.8875	0.006	0.58	1.0	0.27	2.1
Roof	BS1	E	27	HAF4014A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.014	0.51	2.8	0.25	5.9
						36.0	775.9125	0.020	0.52	3.8	0.25	7.9
					42.0	41.6	806.0125	0.014	0.54	2.5	0.25	5.4
						41.0	823.9875	0.014	0.55	2.5	0.26	5.3
						40.3	851.0125	0.016	0.57	2.7	0.26	5.9
						40.0	862.0125	0.019	0.57	3.3	0.27	7.2
						40.1	868.8875	0.017	0.58	3.0	0.27	6.5
Roof	BS2	E	27	HAF4014A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.013	0.51	2.4	0.25	5.1
						36.0	775.9125	0.018	0.52	3.4	0.25	7.1
					42.0	41.6	806.0125	0.012	0.54	2.3	0.25	4.8
						41.0	823.9875	0.009	0.55	1.6	0.26	3.4
						40.3	851.0125	0.008	0.57	1.5	0.26	3.2
						40.0	862.0125	0.006	0.57	1.1	0.27	2.4
						40.1	868.8875	0.005	0.58	0.9	0.27	2.0
Roof	BS3	E	27	HAF4014A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.004	0.51	0.9	0.25	1.8
						36.0	775.9125	0.008	0.52	1.6	0.25	3.4
					42.0	41.6	806.0125	0.005	0.54	1.0	0.25	2.1
						41.0	823.9875	0.005	0.55	0.9	0.26	2.0
						40.3	851.0125	0.004	0.57	0.6	0.26	1.4
						40.0	862.0125	0.003	0.57	0.5	0.27	1.1
						40.1	868.8875	0.002	0.58	0.4	0.27	0.9

**Table H.1 (Continued)**

MPE assessment for Companion Mobile LMR 7/800- 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	27	HAF4014A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.003	0.51	0.6	0.25	1.3
						36.0	775.9125	0.006	0.52	1.1	0.25	2.4
					42.0	41.6	806.0125	0.005	0.54	1.0	0.25	2.1
						41.0	823.9875	0.005	0.55	0.9	0.26	2.0
						40.3	851.0125	0.004	0.57	0.6	0.26	1.4
						40.0	862.0125	0.003	0.57	0.5	0.27	1.1
						40.1	868.8875	0.002	0.58	0.4	0.27	0.9
Roof	BS5	E	27	HAF4014A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.005	0.51	0.9	0.25	2.0
						36.0	775.9125	0.003	0.52	0.7	0.25	1.4
					42.0	41.6	806.0125	0.015	0.54	2.8	0.25	5.9
						41.0	823.9875	0.017	0.55	3.1	0.26	6.5
						40.3	851.0125	0.015	0.57	2.7	0.26	5.8
						40.0	862.0125	0.015	0.57	2.6	0.27	5.7
						40.1	868.8875	0.013	0.58	2.2	0.27	4.7
Roof	BS1	E	28	HAF4016A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.027	0.51	5.2	0.25	10.9
						36.0	775.9125	0.027	0.52	5.1	0.25	10.7
					42.0	41.6	806.0125	0.010	0.54	1.9	0.25	3.9
						41.0	823.9875	0.010	0.55	1.8	0.26	3.8
						40.3	851.0125	0.012	0.57	2.1	0.26	4.6
						40.0	862.0125	0.016	0.57	2.8	0.27	6.2
						40.1	868.8875	0.009	0.58	1.5	0.27	3.3
Roof	BS2	E	28	HAF4016A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.019	0.51	3.7	0.25	7.7
						36.0	775.9125	0.024	0.52	4.6	0.25	9.7
					42.0	41.6	806.0125	0.008	0.54	1.4	0.25	3.1
						41.0	823.9875	0.006	0.55	1.0	0.26	2.2
						40.3	851.0125	0.004	0.57	0.7	0.26	1.4
						40.0	862.0125	0.005	0.57	0.8	0.27	1.8
						40.1	868.8875	0.003	0.58	0.5	0.27	1.1

**Table H.1 (Continued)**

MPE assessment for Companion Mobile LMR 7/800- 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	28	HAF4016A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.013	0.51	2.5	0.25	5.3
						36.0	775.9125	0.016	0.52	3.1	0.25	6.5
					42.0	41.6	806.0125	0.005	0.54	1.0	0.25	2.1
						41.0	823.9875	0.005	0.55	0.8	0.26	1.8
						40.3	851.0125	0.005	0.57	0.8	0.26	1.8
						40.0	862.0125	0.005	0.57	0.8	0.27	1.7
						40.1	868.8875	0.004	0.58	0.7	0.27	1.5
Roof	BS4	E	28	HAF4016A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.007	0.51	1.4	0.25	3.0
						36.0	775.9125	0.010	0.52	2.0	0.25	4.2
					42.0	41.6	806.0125	0.003	0.54	0.6	0.25	1.2
						41.0	823.9875	0.005	0.55	0.9	0.26	1.8
						40.3	851.0125	0.004	0.57	0.7	0.26	1.6
						40.0	862.0125	0.003	0.57	0.5	0.27	1.2
						40.1	868.8875	0.003	0.58	0.6	0.27	1.3
Roof	BS5	E	28	HAF4016A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.006	0.51	1.1	0.25	2.2
						36.0	775.9125	0.006	0.52	1.2	0.25	2.4
					42.0	41.6	806.0125	0.010	0.54	1.8	0.25	3.9
						41.0	823.9875	0.007	0.55	1.3	0.26	2.9
						40.3	851.0125	0.007	0.57	1.2	0.26	2.5
						40.0	862.0125	0.008	0.57	1.4	0.27	3.0
						40.1	868.8875	0.005	0.58	0.9	0.27	2.1
Roof	BS1	E	29	HAF4017A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.045	0.51	<b>8.8</b>	0.25	<b>18.3</b>
						36.0	775.9125	0.045	0.52	8.7	0.25	18.3
					42.0	41.6	806.0125	0.017	0.54	3.1	0.25	6.6
						41.0	823.9875	0.014	0.55	2.6	0.26	5.6
						40.3	851.0125	0.016	0.57	2.9	0.26	6.2
						40.0	862.0125	0.021	0.57	3.6	0.27	7.9
						40.1	868.8875	0.013	0.58	2.3	0.27	4.9

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

**Table H.1 (Continued)**

MPE assessment for Companion Mobile LMR 7/800- 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	29	HAF4017A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.030	0.51	5.8	0.25	12.0
						36.0	775.9125	0.042	0.52	8.0	0.25	16.8
					42.0	41.6	806.0125	0.014	0.54	2.5	0.25	5.4
						41.0	823.9875	0.007	0.55	1.2	0.26	2.6
						40.3	851.0125	0.005	0.57	0.8	0.26	1.8
						40.0	862.0125	0.006	0.57	1.0	0.27	2.3
						40.1	868.8875	0.003	0.58	0.6	0.27	1.3
Roof	BS3	E	29	HAF4017A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.020	0.51	3.9	0.25	8.2
						36.0	775.9125	0.028	0.52	5.5	0.25	11.5
					42.0	41.6	806.0125	0.008	0.54	1.4	0.25	3.1
						41.0	823.9875	0.009	0.55	1.6	0.26	3.3
						40.3	851.0125	0.006	0.57	1.1	0.26	2.4
						40.0	862.0125	0.006	0.57	1.1	0.27	2.3
						40.1	868.8875	0.007	0.58	1.2	0.27	2.5
Roof	BS4	E	29	HAF4017A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.015	0.51	2.9	0.25	6.1
						36.0	775.9125	0.023	0.52	4.4	0.25	9.2
					42.0	41.6	806.0125	0.006	0.54	1.1	0.25	2.3
						41.0	823.9875	0.008	0.55	1.4	0.26	3.0
						40.3	851.0125	0.007	0.57	1.2	0.26	2.6
						40.0	862.0125	0.005	0.57	0.9	0.27	1.9
						40.1	868.8875	0.005	0.58	0.9	0.27	1.9
Roof	BS5	E	29	HAF4017A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.011	0.51	2.2	0.25	4.7
						36.0	775.9125	0.012	0.52	2.4	0.25	5.0
					42.0	41.6	806.0125	0.019	0.54	3.5	0.25	7.4
						41.0	823.9875	0.014	0.55	2.5	0.26	5.4
						40.3	851.0125	0.010	0.57	1.7	0.26	3.7
						40.0	862.0125	0.014	0.57	2.4	0.27	5.3
						40.1	868.8875	0.008	0.58	1.4	0.27	3.1

**Table H.2**

MPE assessment for Companion Mobile LMR 7/800- 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	26	HAF4013A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.019	0.51	3.7	0.25	7.7
						36.0	775.9125	0.020	0.52	4.0	0.25	8.3
					42.0	41.6	806.0125	0.023	0.54	4.2	0.25	8.9
						41.0	823.9875	0.025	0.55	4.6	0.26	9.8
						40.3	851.0125	0.018	0.57	3.2	0.26	7.0
						40.0	862.0125	0.007	0.57	1.3	0.27	2.8
						40.1	868.8875	0.015	0.58	2.6	0.27	5.6
Roof	PB	E	27	HAF4014A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.001	0.51	0.2	0.25	0.4
						36.0	775.9125	0.001	0.52	0.1	0.25	0.3
					42.0	41.6	806.0125	0.012	0.54	2.3	0.25	4.8
						41.0	823.9875	0.012	0.55	2.3	0.26	4.8
						40.3	851.0125	0.009	0.57	1.6	0.26	3.4
						40.0	862.0125	0.022	0.57	3.9	0.27	8.3
						40.1	868.8875	0.008	0.58	1.4	0.27	3.1
Roof	PB	E	28	HAF4016A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.017	0.51	3.4	0.25	7.1
						36.0	775.9125	0.022	0.52	4.2	0.25	8.8
					42.0	41.6	806.0125	0.023	0.54	4.3	0.25	9.0
						41.0	823.9875	0.023	0.55	4.2	0.26	9.0
						40.3	851.0125	0.010	0.57	1.8	0.26	3.9
						40.0	862.0125	0.016	0.57	2.8	0.27	6.2
						40.1	868.8875	0.012	0.58	2.0	0.27	4.3
Roof	PB	E	29	HAF4017A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.039	0.51	7.7	0.25	16.0
						36.0	775.9125	0.048	0.52	9.3	0.25	19.6
					42.0	41.6	806.0125	0.055	0.54	<b>10.2</b>	0.25	<b>21.7</b>
						41.0	823.9875	0.026	0.55	4.8	0.26	10.2
						40.3	851.0125	0.019	0.57	3.4	0.26	7.4
						40.0	862.0125	0.013	0.57	2.3	0.27	5.0
						40.1	868.8875	0.013	0.58	2.2	0.27	4.8

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

**Table H.2 (Continued)**

MPE assessment for Companion Mobile LMR 7/800- 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	26	HAF4013A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.002	0.51	0.3	0.25	0.6
						36.0	775.9125	0.002	0.52	0.4	0.25	0.9
					42.0	41.6	806.0125	0.006	0.54	1.1	0.25	2.3
						41.0	823.9875	0.004	0.55	0.6	0.26	1.4
						40.3	851.0125	0.007	0.57	1.2	0.26	2.6
						40.0	862.0125	0.008	0.57	1.3	0.27	2.8
						40.1	868.8875	0.017	0.58	2.9	0.27	6.3
Roof	PF	E	27	HAF4014A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.0004	0.51	0.1	0.25	0.2
						36.0	775.9125	0.001	0.52	0.1	0.25	0.2
					42.0	41.6	806.0125	0.004	0.54	0.7	0.25	1.5
						41.0	823.9875	0.004	0.55	0.7	0.26	1.5
						40.3	851.0125	0.010	0.57	1.7	0.26	3.7
						40.0	862.0125	0.012	0.57	2.0	0.27	4.3
						40.1	868.8875	0.013	0.58	2.2	0.27	4.7
Roof	PF	E	28	HAF4016A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.002	0.51	0.4	0.25	0.9
						36.0	775.9125	0.005	0.52	1.0	0.25	2.0
					42.0	41.6	806.0125	0.012	0.54	2.1	0.25	4.5
						41.0	823.9875	0.005	0.55	0.9	0.26	2.0
						40.3	851.0125	0.007	0.57	1.2	0.26	2.5
						40.0	862.0125	0.008	0.57	1.3	0.27	2.8
						40.1	868.8875	0.010	0.58	1.7	0.27	3.7
Roof	PF	E	29	HAF4017A, 1/4 Wave (764-870MHz)	36.0	36.0	770.0125	0.008	0.51	1.5	0.25	3.2
						36.0	775.9125	0.008	0.52	1.5	0.25	3.1
					42.0	41.6	806.0125	0.021	0.54	3.9	0.25	8.2
						41.0	823.9875	0.010	0.55	1.8	0.26	3.9
						40.3	851.0125	0.011	0.57	2.0	0.26	4.3
						40.0	862.0125	0.010	0.57	1.7	0.27	3.6
						40.1	868.8875	0.021	0.58	3.7	0.27	8.0

**Table H.3**  
**Companion Mobile LMR 7/800 MPE Results for FCC**

Pmax (W)	36/42	Pinitial (W)	36.0	36.0	41.6	41.0	40.3	40.0	40.1
			FCCLimit (mW/cm <sup>2</sup> )	0.51	0.52	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	f7
						770.0125	775.9125	806.0125	823.9875	851.0125	862.0125	868.8875
H.1	BS1		Roof	E	26	0.022	0.026	0.009	0.007	0.006	0.009	0.004
H.1	BS2		Roof	E	26	0.019	0.025	0.007	0.005	0.004	0.005	0.003
H.1	BS3		Roof	E	26	0.013	0.013	0.006	0.003	0.003	0.002	0.001
H.1	BS4		Roof	E	26	0.007	0.010	0.003	0.004	0.004	0.004	0.004
H.1	BS5		Roof	E	26	0.006	0.006	0.009	0.007	0.006	0.007	0.006
H.1	BS1		Roof	E	27	0.014	0.020	0.014	0.014	0.016	0.019	0.017
H.1	BS2		Roof	E	27	0.013	0.018	0.012	0.009	0.008	0.006	0.005
H.1	BS3		Roof	E	27	0.004	0.008	0.005	0.005	0.004	0.003	0.002
H.1	BS4		Roof	E	27	0.003	0.006	0.005	0.005	0.004	0.003	0.002
H.1	BS5		Roof	E	27	0.005	0.003	0.015	0.017	0.015	0.015	0.013
H.1	BS1		Roof	E	28	0.027	0.027	0.010	0.010	0.012	0.016	0.009
H.1	BS2		Roof	E	28	0.019	0.024	0.008	0.006	0.004	0.005	0.003
H.1	BS3		Roof	E	28	0.013	0.016	0.005	0.005	0.005	0.005	0.004
H.1	BS4		Roof	E	28	0.007	0.010	0.003	0.005	0.004	0.003	0.003
H.1	BS5		Roof	E	28	0.006	0.006	0.010	0.007	0.007	0.008	0.005
H.1	BS1		Roof	E	29	0.045	0.045	0.017	0.014	0.016	0.021	0.013
H.1	BS2		Roof	E	29	0.030	0.042	0.014	0.007	0.005	0.006	0.003
H.1	BS3		Roof	E	29	0.020	0.028	0.008	0.009	0.006	0.006	0.007
H.1	BS4		Roof	E	29	0.015	0.023	0.006	0.008	0.007	0.005	0.005
H.1	BS5		Roof	E	29	0.011	0.012	0.019	0.014	0.010	0.014	0.008
H.2	PB		Roof	E	26	0.019	0.020	0.023	0.025	0.018	0.007	0.015
H.2	PB		Roof	E	27	0.001	0.001	0.012	0.012	0.009	0.022	0.008
H.2	PB		Roof	E	28	0.017	0.022	0.023	0.023	0.010	0.016	0.012
H.2	PB		Roof	E	29	0.039	0.048	0.055	0.026	0.019	0.013	0.013
H.2	PF		Roof	E	26	0.002	0.002	0.006	0.004	0.007	0.008	0.017
H.2	PF		Roof	E	27	0.0004	0.001	0.004	0.004	0.010	0.012	0.013
H.2	PF		Roof	E	28	0.002	0.005	0.012	0.005	0.007	0.008	0.010
H.2	PF		Roof	E	29	0.008	0.008	0.021	0.010	0.011	0.010	0.021