

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

DECLARATION OF COMPLIANCE: MPE ASSESSMENT Report Part 2 of 3

**Motorola Solutions
EME Test Laboratory**

Motorola Solutions Malaysia Sdn Bhd (Innoplex)
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Date of Report: 7/09/2018
Report Revision: A

Responsible Engineer: Saw Sun Hock (EME Engineer)
Report author: Saw Sun Hock (EME Engineer)
Date(s) Tested: 4/25/2018-6/29/2018
Manufacturer: Motorola Solutions Inc.
Date submitted for test: 12/4/2018
DUT Description: APX8500 mobile All Bands (VHF, UHF, 7/800)
Test TX mode(s): CW
Max. Power output: 120W (136-174 MHz), 120 W (380-484 MHz), 48W (485-512 MHz), 30W (512-520 MHz), 36W (764-805 MHz), 42W (806-870 MHz); 63.1 mW (WLAN 2.4 GHz 802.11b), 25 mW (WLAN 2.4 GHz 802.11g/n) ; 31.6 mW (WLAN 5 GHz 802.11 a/n/ac)
TX Frequency Bands: 136-174 MHz; 380-520 MHz; 764-805 MHz; 806-870 MHz; WLAN 2400-2483.5 MHz; WLAN 5180-5825 MHz
Signaling type: FM, TDMA, FHSS (Bluetooth), 802.11b/g/n (WLAN 2.4 GHz), 802.11 a/n/ac (WLAN 5 GHz)
Model(s) Tested: M37TXS9PW1AN (HUW1001A)
Model(s) Certified: M37TXS9PW1AN (HUW1001A)
Serial Number(s): 681P3A0098
Classification: Occupational/Controlled Environment
FCC ID: AZ492FT7118; 150.8-173.4 MHz, 406.1-512 MHz, 769-775 MHz, 799-824 MHz, 851-869 MHz, 2412-2462 MHz, 5180-5825 MHz

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

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 3.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc. EME Laboratory.

I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements.

This reporting format is consistent with the suggested guidelines of the TIA TSB-159 April 2006

The results and statements contained in this report pertain only to the device(s) evaluated herein.

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

Appendix D – MPE Test Results Summary for VHF

Table D.1**MPE assessment for LMR VHF- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations

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

Table D.1 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

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

Table D.1 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

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

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

Table D.1 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

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

Table D.2**MPE assessment for LMR VHF- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations.

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

Table D.2 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

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

Table D.2 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field,

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

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

Table D.2 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

*Configuration required SAR simulations.

#SAR simulation Configuration same as E Field.

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

Table D.3**MPE assessment for LMR VHF- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Table D.3 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Table D.3 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Table D.3 (Continued)**MPE assessment for LMR VHF- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

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

Table D.4
LMR VHF MPE Results for FCC

Note:

Blue fonts: Frequencies not regulated by FCC.

P_{max} (W)	120	P_{initial} (W)	117.0	113.0	112.0	110.0	119.0	120.0	115.0	114.0	115.0	115.0
FCCLimit (mW/cm²)			0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

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

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

Note:

Blue fonts: Frequencies not regulated by FCC.

P_{max} (W)	120	P_{initial} (W)	117.0	113.0	112.0	110.0	119.0	120.0	115.0	114.0	115.0	115.0
FCCLimit (mW/cm²)			0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20

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

Table D.5
LMR VHF MPE Variability Test

Notes:

*Configuration required SAR simulations.

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

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm ²)	FCC Limit	% To FCC Spec Limit	MPE Variability (%)
Roof	BS	E	29	AN000131A01, 1/4 wave (136-870MHz)	120	114	165.0125	0.18	0.20	89.0	-16.3
						114	165.0125	0.15	0.20	74.5	
Roof	BS	E	9	RAD4010ARB, 1/2 Wave (136-174MHz)	120	110	150.8000	0.17	0.20	86.0	16.3
						110	150.8000	0.20	0.20	*100.0	
						120	158.0125	0.17	0.20	86.9	15.6
						120	158.0125	0.20	0.20	*100.4	
						114	165.0125	0.16	0.20	78.1	14.6
						114	165.0125	0.18	0.20	89.5	
Roof	BS	E	8	HAD4022A, 5/8 Wave (132-174MHz)	120	110	150.8000	0.18	0.20	91.8	5.7
						110	150.800	0.19	0.20	97.0	
						120	158.0125	0.19	0.20	94.2	4.2
						120	158.0125	0.196	0.20	98.1	
						114	165.0125	0.17	0.20	85.8	-2.2
						114	165.0125	0.17	0.20	83.9	
Roof	BS	E	2	HAD4017A, 1/4 Wave (146-174MHz)	120	110	150.8000	0.17	0.20	86.7	-8.8
						117	150.8000	0.16	0.20	79.1	
Roof	BS	E	3	HAD4021A, 1/4 Wave (136-174MHz)	120	115	173.0125	0.18	0.20	88.7	-6.0
						119	173.0125	0.17	0.20	83.4	
Roof	BS	E	7	HAD4009A, 1/4 Wave (162-174MHz)	120	115	162.0000	0.19	0.20	96.5	-3.9
						118	162.0000	0.185	0.20	92.7	
						114	165.0125	0.19	0.20	92.9	-9.6
						119	165.0125	0.17	0.20	83.9	

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

Notes:

*Configuration required SAR simulations.

Bystander measurement at initial mounting location

Bystander measurement at 10cm antenna offset from initial mounting location

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

Appendix E – MPE Test Results Summary for UHF R1

Table E.1**MPE assessment for LMR UHF R1- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Table E.1 (Continued)**MPE assessment for LMR UHF R1- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

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

Table E.2**MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

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

Table E.2 (Continued)**MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Table E.3**MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Table E.3 (Continued)**MPE assessment for LMR UHF R1- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

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

Table E.4
LMR UHF R1 MPE Results for FCC

Note:

Blue fonts: Frequencies not regulated by FCC.

P_{max} (W)	120	P_{initial} (W)	115.0	120.0	118.0	113.0	111.0	108.0	108.0	119.0	120.0	116.0
		FCCLimit (mW/cm ²)	0.25	0.26	0.27	0.28	0.28	0.29	0.29	0.30	0.31	0.31

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

Table E.5
LMR UHF R1 MPE Variability Test

Notes:

*Configuration required SAR simulations.

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

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

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

Notes:

*Configuration required SAR simulations.

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

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

Appendix F – MPE Test Results Summary for UHF R2

Table F.1**MPE assessment for LMR UHF R2- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Roof	BS	E	29	AN000131A01, 1/4 wave (136-870MHz)	120	119.0	450.0125	0.164	0.30	54.8
						116.0	469.9875	0.140	0.31	44.8
						118.0	482.5000	0.168	0.32	52.1
					48	47.4	496.5000	0.068	0.33	20.5
						47.9	511.9875	0.063	0.34	18.5
					30	29.9	519.9875	0.038	0.35	11.0
Roof	BS	E	13	HAE6013A, 1/2 Wave (380-470MHz)	120	119	450.0125	0.193	0.30	64.4
						120	460.0000	0.174	0.31	56.7
						116.0	469.9875	0.16	0.31	49.5
Roof	BS	E	14	HAE6031A, 1/2 Wave (380-520MHz)	120	119.0	450.0125	0.251	0.30	83.8
						116.0	469.9875	0.208	0.31	66.4
						118.0	482.5000	0.250	0.32	77.8
					48	47.4	496.5000	0.097	0.33	29.3
						47.9	511.9875	0.111	0.34	32.5
					30	29.9	519.9875	0.043	0.35	12.3
Roof	BS	E	19	RAE4014ARB, 5/8 Wave (445-470MHz)	120	119.0	450.0125	0.125	0.30	41.5
						120.0	460.0000	0.112	0.31	36.5
						116.0	469.9875	0.175	0.31	55.7
Roof	BS	E	16	HAE4011A, 1/2 Wave (450-470MHz)	120	119.0	450.0125	0.180	0.30	60.1
						120.0	460.0000	0.135	0.31	44.0
						116.0	469.9875	0.187	0.31	59.8
Roof	BS	E	15	HAE4003A, 1/4 Wave (450-470MHz)	120	119.0	450.0125	0.221	0.30	73.5
						120.0	460.0000	0.190	0.31	61.8
						116.0	469.9875	0.210	0.31	67.0

Table F.1 (Continued)**MPE assessment for LMR UHF R2- roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

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

Table F.2**MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

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

Table F.2 (Continued)**MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Table F.3**MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm ²)	FCC Limit	% To FCC Spec Limit
Roof	PB	E	29	AN000131A01, 1/4 wave (136-870MHz)	120	119.0	450.0125	0.059	0.30	19.8
						116.0	469.9875	0.036	0.31	11.4
						118.0	482.5000	0.045	0.32	14.0
					48	47.4	496.5000	0.026	0.33	7.7
						47.9	511.9875	0.025	0.34	7.2
					30	29.9	519.9875	0.017	0.35	4.8
Roof	PB	E	13	HAE6013A, 1/2 Wave (380-470MHz)	120	119	450.0125	0.045	0.30	14.9
						120	460.0000	0.024	0.31	7.7
						116	469.9875	0.038	0.31	12.0
Roof	PB	E	14	HAE6031A, 1/2 Wave (380-520MHz)	120	119.0	450.0125	0.065	0.30	21.7
						116.0	469.9875	0.050	0.31	16.0
						118.0	482.5000	0.065	0.32	20.2
					48	47.4	496.5000	0.025	0.33	7.4
						47.9	511.9875	0.025	0.34	7.2
					30	29.9	519.9875	0.011	0.35	3.3
Roof	PB	E	19	RAE4014ARB, 5/8 Wave (445-470MHz)	120	119.0	450.0125	0.011	0.30	3.8
						120.0	460.0000	0.011	0.31	3.5
						116.0	469.9875	0.003	0.31	0.8
Roof	PB	E	16	HAE4011A, 1/2 Wave (450-470MHz)	120	119.0	450.0125	0.009	0.30	3.1
						120.0	460.0000	0.008	0.31	2.5
						116.0	469.9875	0.011	0.31	3.6
Roof	PB	E	15	HAE4003A, 1/4 Wave (450-470MHz)	120	119.0	450.0125	0.015	0.30	4.9
						120.0	460.0000	0.017	0.31	5.4
						116.0	469.9875	0.007	0.31	2.2

Table F.6 (Continued)**MPE assessment for LMR UHF R2- roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

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

Table F.4
LMR UHF R2 MPE Results for FCC

Note:

Blue fonts: Frequencies not regulated by FCC.

P_{max} (W)	120/48/30	P_{initial} (W)	119.0	120.0	116.0	116.0	118.0	47.3	47.4	47.4	47.8	47.9	29.9
		FCCLimit (mW/cm ²)	0.25	0.26	0.27	0.28	0.28	0.29	0.29	0.30	0.31	0.31	0.31

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

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

Note:

Blue fonts: Frequencies not regulated by FCC.

P_{max} (W)	120/48/30	P_{initial} (W)	119.0	120.0	116.0	116.0	118.0	47.3	47.4	47.4	47.8	47.9	29.9
		FCCLimit (mW/cm ²)	0.25	0.26	0.27	0.28	0.28	0.29	0.29	0.30	0.31	0.31	0.31

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

Table F.5
LMR UHF R2 MPE Variability Test

Notes:

*Configuration required SAR simulations.

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

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

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

Table G.1**MPE assessment for LMR 7/800 band - trunk mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Trunk	BS	E	29	AN000131A01, 1/4 wave (136-870MHz)	36	35.4	764.0875	0.076	0.51	14.9
						35.8	770.0125	0.070	0.51	13.6
						34.9	775.9125	0.081	0.52	15.7
						35.9	794.0875	0.072	0.53	13.5
					42	41.2	806.0125	0.072	0.54	13.5
						41.6	823.9875	0.058	0.55	10.6
						41.7	851.0125	0.031	0.57	5.5
						41.7	862.0125	0.037	0.57	6.5
						41.8	868.8875	0.032	0.58	5.5
Trunk	BS	E	25	HAF4013A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.076	0.51	14.9
						35.8	770.0125	0.070	0.51	13.5
						34.9	775.9125	0.072	0.52	13.9
						35.9	794.0875	0.073	0.53	13.8
					42	41.2	806.0125	0.078	0.54	14.6
						41.6	823.9875	0.060	0.55	10.9
						41.7	851.0125	0.062	0.57	11.0
						41.7	862.0125	0.063	0.57	11.0
						41.8	868.8875	0.063	0.58	10.9
Trunk	BS	E	26	HAF4014A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.041	0.51	8.0
						35.8	770.0125	0.043	0.51	8.5
						34.9	775.9125	0.041	0.52	7.9
						35.9	794.0875	0.055	0.53	10.5
					42	41.2	806.0125	0.062	0.54	11.6
						41.6	823.9875	0.082	0.55	15.0
						41.7	851.0125	0.101	0.57	17.8
						41.7	862.0125	0.099	0.57	17.2
						41.8	868.8875	0.081	0.58	14.1

Table G.1 (Continued)**MPE assessment for LMR 7/800 band - trunk mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Trunk	BS	E	27	HAF4016A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.073	0.51	14.3
						35.8	770.0125	0.065	0.51	12.7
						34.9	775.9125	0.067	0.52	12.9
						35.9	794.0875	0.069	0.53	13.1
					42	41.2	806.0125	0.077	0.54	14.4
						41.6	823.9875	0.058	0.55	10.5
						41.7	851.0125	0.057	0.57	10.0
						41.7	862.0125	0.059	0.57	10.3
						41.8	868.8875	0.057	0.58	9.8
Trunk	BS	E	28	HAF4017A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.057	0.51	11.2
						35.8	770.0125	0.049	0.51	9.6
						34.9	775.9125	0.055	0.52	10.7
						35.9	794.0875	0.061	0.53	11.4
					42	41.2	806.0125	0.069	0.54	12.9
						41.6	823.9875	0.054	0.55	9.8
						41.7	851.0125	0.057	0.57	10.0
						41.7	862.0125	0.059	0.57	10.2
						41.8	868.8875	0.051	0.58	8.8
45 Degree										
Trunk	BS	E	26	HAF4014A, 1/4 Wave (764-870MHz)	42	41.7	851.0125	0.088	0.57	15.5
90 Degree										
Trunk	BS	E	26	HAF4014A, 1/4 Wave (764-870MHz)	42	41.7	851.0125	0.130	0.57	22.9

Table G.2**MPE assessment for LMR 7/800 band - roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Roof	BS	E	29	AN000131A01, 1/4 wave (136-870MHz)	36	35.4	764.0875	0.047	0.51	9.3
						35.8	770.0125	0.046	0.51	8.9
						34.9	775.9125	0.048	0.52	9.3
						35.9	794.0875	0.050	0.53	9.5
					42	41.2	806.0125	0.054	0.54	10.1
						41.6	823.9875	0.049	0.55	8.9
						41.7	851.0125	0.034	0.57	6.0
						41.7	862.0125	0.031	0.57	5.3
						41.8	868.8875	0.023	0.58	4.0
Roof	BS	E	25	HAF4013A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.038	0.51	7.5
						35.8	770.0125	0.033	0.51	6.5
						34.9	775.9125	0.033	0.52	6.3
						35.9	794.0875	0.041	0.53	7.7
					42	41.2	806.0125	0.048	0.54	8.9
						41.6	823.9875	0.043	0.55	7.9
						41.7	851.0125	0.045	0.57	7.9
						41.7	862.0125	0.046	0.57	8.1
						41.8	868.8875	0.043	0.58	7.5
Roof	BS	E	26	HAF4014A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.032	0.51	6.2
						35.8	770.0125	0.032	0.51	6.3
						34.9	775.9125	0.028	0.52	5.5
						35.9	794.0875	0.039	0.53	7.3
					42	41.2	806.0125	0.054	0.54	10.0
						41.6	823.9875	0.052	0.55	9.5
						41.7	851.0125	0.052	0.57	9.2
						41.7	862.0125	0.053	0.57	9.3
						41.8	868.8875	0.045	0.58	7.7

Table G.2 (Continued)**MPE assessment for LMR 7/800 band - roof mounted antenna – Bystander**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Roof	BS	E	27	HAF4016A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.047	0.51	9.3
						35.8	770.0125	0.044	0.51	8.5
						34.9	775.9125	0.041	0.52	7.9
						35.9	794.0875	0.045	0.53	8.6
					42	41.2	806.0125	0.056	0.54	10.4
						41.6	823.9875	0.051	0.55	9.2
						41.7	851.0125	0.051	0.57	9.0
						41.7	862.0125	0.051	0.57	8.9
						41.8	868.8875	0.045	0.58	7.7
Roof	BS	E	28	HAF4017A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.049	0.51	9.6
						35.8	770.0125	0.049	0.51	9.5
						34.9	775.9125	0.046	0.52	8.9
						35.9	794.0875	0.053	0.53	10.0
					42	41.2	806.0125	0.06	0.54	12.1
						41.6	823.9875	0.056	0.55	10.1
						41.7	851.0125	0.048	0.57	8.4
						41.7	862.0125	0.047	0.57	8.2
						41.8	868.8875	0.042	0.58	7.2

Table G.3**MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Trunk	PB	E	29	AN000131A01, 1/4 wave (136-870MHz)	36	35.4	764.0875	0.019	0.51	3.7
						35.8	770.0125	0.023	0.51	4.5
						34.9	775.9125	0.035	0.52	6.8
						35.9	794.0875	0.039	0.53	7.3
					42	41.2	806.0125	0.044	0.54	8.1
						41.6	823.9875	0.035	0.55	6.3
						41.7	851.0125	0.026	0.57	4.7
						41.7	862.0125	0.026	0.57	4.5
						41.8	868.8875	0.016	0.58	2.8
Trunk	PB	E	25	HAF4013A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.038	0.51	7.4
						35.8	770.0125	0.033	0.51	6.5
						34.9	775.9125	0.031	0.52	6.1
						35.9	794.0875	0.046	0.53	8.6
					42	41.2	806.0125	0.060	0.54	11.2
						41.6	823.9875	0.051	0.55	9.3
						41.7	851.0125	0.056	0.57	9.9
						41.7	862.0125	0.057	0.57	9.9
						41.8	868.8875	0.064	0.58	11.0
Trunk	PB	E	26	HAF4014A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.018	0.51	3.6
						35.8	770.0125	0.021	0.51	4.0
						34.9	775.9125	0.023	0.52	4.5
						35.9	794.0875	0.030	0.53	5.7
					42	41.2	806.0125	0.072	0.54	13.4
						41.6	823.9875	0.087	0.55	15.8
						41.7	851.0125	0.108	0.57	19.0
						41.7	862.0125	0.088	0.57	15.3
						41.8	868.8875	0.058	0.58	10.0

Table G.3 (Continued)**MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm ²)	FCC Limit	% To FCC Spec Limit
Trunk	PB	E	27	HAF4016A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.040	0.51	7.9
						35.8	770.0125	0.037	0.51	7.2
						34.9	775.9125	0.039	0.52	7.6
						35.9	794.0875	0.054	0.53	10.3
					42	41.2	806.0125	0.0076	0.54	14.1
						41.6	823.9875	0.055	0.55	10.0
						41.7	851.0125	0.041	0.57	7.3
						41.7	862.0125	0.062	0.57	10.7
						41.8	868.8875	0.046	0.58	7.9
Trunk	PB	E	28	HAF4017A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.078	0.51	15.3
						35.8	770.0125	0.072	0.51	14.0
						34.9	775.9125	0.083	0.52	16.0
						35.9	794.0875	0.077	0.53	14.5
					42	41.2	806.0125	0.127	0.54	23.6
						41.6	823.9875	0.094	0.55	17.2
						41.7	851.0125	0.103	0.57	18.2
						41.7	862.0125	0.083	0.57	14.4
						41.8	868.8875	0.064	0.58	11.1

Table G.4**MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Roof	PB	E	29	AN000131A01, 1/4 wave (136-870MHz)	36	35.4	764.0875	0.012	0.51	2.4
						35.8	770.0125	0.014	0.51	2.7
						34.9	775.9125	0.020	0.52	3.9
						35.9	794.0875	0.016	0.53	2.9
					42	41.2	806.0125	0.017	0.54	3.2
						41.6	823.9875	0.013	0.55	2.4
						41.7	851.0125	0.009	0.57	1.6
						41.7	862.0125	0.008	0.57	1.4
						41.8	868.8875	0.006	0.58	1.1
Roof	PB	E	25	HAF4013A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.015	0.51	2.9
						35.8	770.0125	0.012	0.51	2.4
						34.9	775.9125	0.016	0.52	3.1
						35.9	794.0875	0.013	0.53	2.5
					42	41.2	806.0125	0.015	0.54	2.8
						41.6	823.9875	0.012	0.55	2.1
						41.7	851.0125	0.006	0.57	1.1
						41.7	862.0125	0.007	0.57	1.2
						41.8	868.8875	0.011	0.58	1.9
Roof	PB	E	26	HAF4014A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.001	0.51	0.2
						35.8	770.0125	0.001	0.51	0.1
						34.9	775.9125	0.001	0.52	0.3
						35.9	794.0875	0.003	0.53	0.6
					42	41.2	806.0125	0.005	0.54	0.9
						41.6	823.9875	0.010	0.55	1.9
						41.7	851.0125	0.010	0.57	1.7
						41.7	862.0125	0.006	0.57	1.1
						41.8	868.8875	0.008	0.58	1.4

Table G.4 (Continued)**MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Back**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm ²)	FCC Limit	% To FCC Spec Limit
Roof	PB	E	27	HAF4016A, 1/4 Wave (764- 870MHz)	36	35.4	764.0875	0.015	0.51	3.0
						35.8	770.0125	0.017	0.51	3.3
						34.9	775.9125	0.019	0.52	3.7
						35.9	794.0875	0.015	0.53	2.9
					42	41.2	806.0125	0.016	0.54	3.1
						41.6	823.9875	0.013	0.55	2.4
						41.7	851.0125	0.006	0.57	1.1
						41.7	862.0125	0.007	0.57	1.2
						41.8	868.8875	0.008	0.58	1.3
Roof	PB	E	28	HAF4017A, 1/4 Wave (764- 870MHz)	36	35.4	764.0875	0.032	0.51	6.3
						35.8	770.0125	0.039	0.51	7.6
						34.9	775.9125	0.04	0.52	8.4
						35.9	794.0875	0.032	0.53	6.1
					42	41.2	806.0125	0.030	0.54	5.5
						41.6	823.9875	0.020	0.55	3.7
						41.7	851.0125	0.010	0.57	1.8
						41.7	862.0125	0.007	0.57	1.2
						41.8	868.8875	0.012	0.58	2.0

Table G.5**MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Trunk	PF	E	29	AN000131A01, 1/4 wave (136-870MHz)	36	35.4	764.0875	0.045	0.51	8.9
						35.8	770.0125	0.062	0.51	12.1
						34.9	775.9125	0.058	0.52	11.3
						35.9	794.0875	0.054	0.53	10.3
					42	41.2	806.0125	0.045	0.54	8.3
						41.6	823.9875	0.041	0.55	7.5
						41.7	851.0125	0.018	0.57	3.2
						41.7	862.0125	0.013	0.57	2.3
						41.8	868.8875	0.009	0.58	1.6
Trunk	PF	E	25	HAF4013A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.033	0.51	6.5
						35.8	770.0125	0.042	0.51	8.2
						34.9	775.9125	0.038	0.52	7.3
						35.9	794.0875	0.049	0.53	9.3
					42	41.2	806.0125	0.040	0.54	7.4
						41.6	823.9875	0.041	0.55	7.5
						41.7	851.0125	0.030	0.57	5.2
						41.7	862.0125	0.032	0.57	5.5
						41.8	868.8875	0.028	0.58	4.9
Trunk	PF	E	26	HAF4014A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.026	0.51	5.2
						35.8	770.0125	0.033	0.51	6.4
						34.9	775.9125	0.028	0.52	5.3
						35.9	794.0875	0.047	0.53	8.9
					42	41.2	806.0125	0.057	0.54	10.7
						41.6	823.9875	0.076	0.55	13.8
						41.7	851.0125	0.055	0.57	9.7
						41.7	862.0125	0.055	0.57	9.6
						41.8	868.8875	0.046	0.58	7.9

Table G.5 (Continued)**MPE assessment for LMR 7/800 band - trunk mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

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

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Trunk	PF	E	27	HAF4016A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.047	0.51	9.3
						35.8	770.0125	0.058	0.51	11.4
						34.9	775.9125	0.057	0.52	11.0
						35.9	794.0875	0.065	0.53	12.3
					42	41.2	806.0125	0.059	0.54	10.9
						41.6	823.9875	0.058	0.55	10.5
						41.7	851.0125	0.038	0.57	6.6
						41.7	862.0125	0.036	0.57	6.2
						41.8	868.8875	0.033	0.58	5.6
Trunk	PF	E	28	HAF4017A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.080	0.51	15.8
						35.8	770.0125	0.094	0.51	18.2
						34.9	775.9125	0.087	0.52	16.9
						35.9	794.0875	0.111	0.53	20.9
					42	41.2	806.0125	0.099	0.54	18.3
						41.6	823.9875	0.099	0.55	18.0
						41.7	851.0125	0.051	0.57	9.0
						41.7	862.0125	0.057	0.57	9.9
						41.8	868.8875	0.046	0.58	7.9

Table G.6**MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Roof	PF	E	29	AN000131A01, 1/4 wave (136-870MHz)	36	35.4	764.0875	0.011	0.51	2.2
						35.8	770.0125	0.009	0.51	1.8
						34.9	775.9125	0.007	0.52	1.4
						35.9	794.0875	0.014	0.53	2.7
					42	41.2	806.0125	0.014	0.54	2.6
						41.6	823.9875	0.017	0.55	3.2
						41.7	851.0125	0.010	0.57	1.8
						41.7	862.0125	0.007	0.57	1.3
						41.8	868.8875	0.004	0.58	0.7
Roof	PF	E	25	HAF4013A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.007	0.51	1.4
						35.8	770.0125	0.006	0.51	1.1
						34.9	775.9125	0.005	0.52	1.0
						35.9	794.0875	0.010	0.53	1.9
					42	41.2	806.0125	0.013	0.54	2.5
						41.6	823.9875	0.012	0.55	2.3
						41.7	851.0125	0.009	0.57	1.6
						41.7	862.0125	0.009	0.57	1.6
						41.8	868.8875	0.007	0.58	1.2
Roof	PF	E	26	HAF4014A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.001	0.51	0.2
						35.8	770.0125	0.002	0.51	0.3
						34.9	775.9125	0.001	0.52	0.1
						35.9	794.0875	0.004	0.53	0.8
					42	41.2	806.0125	0.007	0.54	1.3
						41.6	823.9875	0.008	0.55	1.5
						41.7	851.0125	0.013	0.57	2.3
						41.7	862.0125	0.010	0.57	1.7
						41.8	868.8875	0.009	0.58	1.5

Table G.6 (Continued)**MPE assessment for LMR 7/800 band - roof mounted antenna – Passenger Front**

Notes:

Blue fonts: Frequencies not regulated by FCC.

Trunk / Roof	Test Post.	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/cm^2)	FCC Limit	% To FCC Spec Limit
Roof	PF	E	27	HAF4016A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.011	0.51	2.1
						35.8	770.0125	0.010	0.51	2.0
						34.9	775.9125	0.007	0.52	1.3
						35.9	794.0875	0.012	0.53	2.3
					42	41.2	806.0125	0.018	0.54	3.3
						41.6	823.9875	0.013	0.55	2.4
						41.7	851.0125	0.010	0.57	1.8
						41.7	862.0125	0.011	0.57	1.9
						41.8	868.8875	0.008	0.58	1.5
Roof	PF	E	28	HAF4017A, 1/4 Wave (764-870MHz)	36	35.4	764.0875	0.018	0.51	3.5
						35.8	770.0125	0.016	0.51	3.2
						34.9	775.9125	0.013	0.52	2.6
						35.9	794.0875	0.023	0.53	4.4
					42	41.2	806.0125	0.027	0.54	5.0
						41.6	823.9875	0.018	0.55	3.3
						41.7	851.0125	0.016	0.57	2.8
						41.7	862.0125	0.012	0.57	2.1
						41.8	868.8875	0.008	0.58	1.4

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

Note:

Blue fonts: Frequencies not regulated by FCC.

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

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