MOTOROLA SOLUTIONS

MS ISO/IEC 17025 TESTING SAMM No. 0826

ACCREDITED CERTIFICATE 2518.05

DECLARATION OF COMPLIANCE: MPE ASSESSMENT

Motorola Solutions Inc.
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Date of Report: 08/04/2022
Report Revision: B

Responsible Engineer:	Saw Sun Hock (EME Engineer)
Report author:	Sin Keng LEE (EME Engineer)
Date(s) Tested:	1/25/2021 - 1/31/2021
Manufacturer:	Motorola Solutions Inc.
Date submitted for test:	1/22/2021
DUT Description:	APX 6500 8/900MHz - Multiple HW Encryption WiFi Interoperability Data Modem Tethering via WiFi or Cable
Test TX mode(s):	CW
Max. Power output:	Refer to Table 6
TX Frequency Bands:	Refer to Table 6
Signaling type:	FM, TDMA, FHSS (Bluetooth / Bluetooth LE), 802.11b/g/n (WLAN 2.4 GHz), 802.11 a/n/ac (WLAN 5 GHz)
Model(s) Tested:	M25VRS9PW1CN (PMUF1980A)
Model(s) Certified:	M25VRS9PW1CN (PMUF1980A), M22VRS9PW1CN (PMUF1980A)
Serial Number(s):	471TX81927
Classification:	Occupational/Controlled Environment
Applicant Name:	Motorola Solutions Inc.
Applicant Address:	8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
FCC ID:	AZ492FT7141 LMR 806-824 MHz, 851-869 MHz, 896-901 MHz, 935-940 MHz, Bluetooth 2402-2480 MHz, WLAN 2412-2462 MHz; WLAN 5180-5825 MHz This report contains results that are immaterial for FCC equipment approval, which are clearly identified.
IC:	109U-92FT7141 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. The test results clearly demonstrate compliance with ICNIRP Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz) and Health Canada Safety Code 6 (2015). Limits of Human Exposure to Radio frequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz.

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 4.0 of this report (no deviation from standard methods). This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc. EME Laboratory.
I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements.
This reporting format is consistent with the suggested guidelines of the TIA TSB-159 April 2006
The results and statements contained in this report pertain only to the device(s) evaluated herein.

Saw Sun Hock (Approved Signatory) Approval Date: 8/9/2022

Document Revision History

Date	Revision	Comments
04/21/2022	A	Initial release
08/04/2022	B	Update the Model Name

Table of Contents

1.0 Introduction

This report details the test setup, test equipment and test results of Maximum Permissible Exposure (MPE) performed at Motorola Solutions' outside test site for product model M25VRS9PW1CN (PMUF1980A).

2.0 FCC MPE Summary

Table 1

Equipment Class	Frequency band (MHz)	Trunk Mounted Antennas				Roof Mounted Antennas			
		Passenger		Bystander		Passenger		Bystander	
		Power Density (mW/cm^2)	Percentage of Limit (%)	Power Density (mW/cm^2)	Percentage of Limit (%)	Power Density (mW/cm^2)	Percentage of Limit (%)	Power Density (mW/cm^2)	Percentage of Limit (%)
TNB	806-824, 851-869, 896-901, 935-940 (LMR 8/900)	0.211	38.9	0.107	19.9	0.035	6.40	0.067	12.5
DTS	2412 – 2462 (WLAN 2.4 GHz)	0.018	1.77	0.018	1.77	0.018	1.77	0.018	1.77
NII	5180 - 5825 (WLAN 5 GHz)	0.007	0.67	0.007	0.67	0.007	0.67	0.007	0.67
DSS	2402-2480 (Bluetooth)	0.005	0.50	0.005	0.50	0.005	0.50	0.005	0.50
Simultaneous (Highest Combined Percentage of Limit)			40.7		21.7		8.2		14.3

3.0 Abbreviations / Definitions

BT: Bluetooth
CNR: Calibration Not Required
CW: Continuous Wave
DUT: Device Under Test
EME: Electromagnetic Energy
FHSS: Frequency Hopping Spread Spectrum
FM: Frequency Modulation
MPE: Maximum Permissible Exposure
GPS: Global Positioning System
LMR: Land Mobile Radio
NA: Not Applicable
BS: Bystander
PB: Passenger Back seat
PF: Passenger Front seat
PTT: Push to Talk
WLAN: Wireless Local Area Network
TDMA: Time Division Multiple Access

4.0 Referenced Standards and Guidelines

This product is designed to comply with the following applicable national and international standards and guidelines.

- United States Federal Communications Commission, Code of Federal Regulations; Rule Part 47CFR § 1.1310, § 2.1091 (d) and § 2.1093 for RF Exposure, where applicable.
- Federal Communications Commission, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields", OET Bulletin 65 (Edition 97-01), FCC, Washington, D.C.: August 1997.
- Institute of Electrical and Electronics Engineers (IEEE) C95. 1-2019
- American National Standards Institute (ANSI) / Institute of Electrical and Electronics Engineers (IEEE) C95. 1-1992. Specific to FCC rules and regulations.
- Institute of Electrical and Electronics Engineers (IEEE) C95.3-2002
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada) Safety Code 6 (2015), Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz
- RSS-102 (Issue 5) – Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)
- FCC KDB – 447498 D01 General RF Exposure Guidance v06
- FCC KDB – 865664 D02 RF Exposure Reporting v01r02
- EN 62311:2008 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz).

5.0 Power Density Limits

Table 2 – Occupational / Controlled Exposure Limits

Frequency Range (MHz)	FCC OET Bulletin 65/ 47CFR § 1.1310	ICNIRP	IEEE C95.1 2019	RSS-102 Issue 5 2015
	mW/cm^2	W/m^2	W/m^2	W/m^2
10 – 20				10.0
20 – 48				$44.72 / f^{0.5}$
30 – 300	1.0			
48 – 100				6.455
10 – 400		10.0		
100 – 400			10.0	
100 – 6,000				$0.6455 f^{0.5}$
300 – 1,500	f/300			

Table 2 – Occupational / Controlled Exposure Limits (Con't.)

Frequency Range (MHz)	FCC OET Bulletin 65/ 47CFR § 1.1310 mW/cm^2	ICNIRP W/m^2	IEEE C95.1 2019 W/m^2	RSS-102 Issue 5 2015 W/m^2
400 – 2,000		f/40	f/40	
1,500 – 100,000	5.0			
2,000 – 300,000		50.0	50.0	
6,000 – 15,000				50.0
15000 – 150,000				50.0
150000 –300,000				$3.33\times10^{-4}\ f$

Table 3 – General Population / Uncontrolled Exposure Limits

Frequency Range (MHz)	FCC OET Bulletin 65/ 47CFR § 1.1310 mW/cm^2	ICNIRP W/m^2	IEEE C95.1 2019 W/m^2	RSS-102 Issue 5 2015 W/m^2
10 – 20				2.0
20 – 48				$8.944 / f^{0.5}$
30 – 300	0.2			
48 – 300				1.291
10 – 400		2.0		
100 – 300				
100 – 400			2.0	
300 – 1,500	f/1,500			
300 – 6000				$0.02619\ f^{0.6834}$
400 – 2,000		f/200	f/200	
1,500 – 100,000	1.0			
2,000 – 300,000		10.0	10.0	
6,000 – 15,000				10.0
15,000 – 150,000				10.0
150,000 – 300,000				$6.67\times10^{-5}\ f$

6.0 N_c Test Channels

The number of test channels is determined by using Equation 1 below. This equation is available in FCC's KDB 447498. The test channels are appropriately spaced across the antenna's frequency range.

Equation 1 – Number of test channels

$N_c = \text{Round } \{[100(f_{high} - f_{low})/f_c]^{0.5} \times (f_c / 100)^{0.2}\}$

where N_c is the number of test channels, f_{high} and f_{low} are the highest and lowest frequencies within the transmission band, f_c is the mid-band frequency, and frequencies are in MHz.

7.0 Measurement Equipment

Table 4 – Equipment

Equipment Type	Model #	SN	Calibration Date	Calibration Due Date
Automobile	Volvo 240-1988	NA	NA	NA
Survey Meter Probe – E-Field	ETS Model HI-2200 ETS Model E100	00086887 00224511	05/06/2020	05/06/2021

E-field measurements are in mW/cm^2.

8.0 Measurement System Uncertainty Levels

Table 5 – Uncertainty Budget for Near Field Probe Measurements

	Tol. (± %)	Prob. Dist.	Divisor	u_i (±%)		v_i
Measurement System						
Probe Calibration	7.1	N	1.00	7.1	50.4	∞
Survey Meter Calibration	0.0	N	1.00	0.0	0.0	¥
Hemispherical Isotropy	8.0	R	1.73	4.6	21.33	∞
Linearity	5.0	R	1.73	2.9	8.33	∞
Pulse Response	1.0	R	1.73	0.6	0.33	∞
RF Ambient Noise	3.0	R	1.73	1.7	3.00	∞
RF Reflections	8.0	R	1.73	4.6	21.33	∞
Probe Positioning	10.0	R	1.73	5.8	33.333	∞
Test sample Related					0.00	
Antenna Positioning	3.0	N	1.00	3.0	9.0	∞
Power drift	5.0	R	1.73	2.9	8.33	∞
Bystander measurement uncertainty	4.8	N	1.00	4.8	23.04	∞
Passenger measurement uncertainty	8.1	N	1.00	8.1	65.61	∞
Combined Standard Uncertainty		RSS		15.6	15.6	∞
Expanded Uncertainty (95% CONFIDENCE LEVEL)		*k*=2		31	31	

9.0 Product and System Description

This mobile device operates in the LMR bands using either frequency modulation (FM) with 100% transmit duty cycle or TDMA signals with maximum of 50% transmit duty cycle. For conservative assessment, FM signal was tested. A duty factor of 50% applies for PTT operation mode.

This device also incorporates a Class 1 Bluetooth device which is a Frequency Hopping Spread Spectrum (FHSS) technology. The Bluetooth radio modem is used to wireless link audio accessories. The maximum actual transmission duty cycle is imposed by the Bluetooth standard. The maximum duty cycle for BT is 100%. Bluetooth Low Energy (BT LE) intended to reduce power consumption.

This device also contains WLAN technology for data capabilities over 802.11b/g/n 2.4 GHz and 802.11 a/n/ac 5 GHz wireless networks.

Table 6 below summarizes the technologies, bands, maximum duty cycles and maximum output powers. Maximum output powers are defined as upper limit of the production line final test station.

Table 6

Technologies	Bands (MHz)	Duty Cycle (%)	Max Power
LMR	806-825, 851-870	50 (PTT)	42W
	896-901; 935-940		36W
	901-902; 940-941		4W
BT	2402-2480	100	11.2mW
BT LE	2402-2480	100	6.3mW
WLAN	2412 – 2462 (802.11b/g/n)	100	39.8mW (802.11b)
			7.079mW (802.11g – Channel 1 and 11), 15.8mW (802.11g – Channel 2-10)
			7.079mW (802.11n – Channel 1 and 11), 12.58mW (802.11n – Channel 2-10)
	5180-5825 (802.11 a/n/ac)	100	15.84mW

This device will be marketed to and used by employees solely for work-related operations, such as public safety agencies, e.g. police, fire and emergency medical. User training is the responsibility of these agencies which can be expected to employ the usage instructions, safety information and operational cautions set forth in the user's manual, instructional sessions or other means.

Accordingly this product is classified as Occupational/Controlled Exposure. However, in accordance with FCC requirements, the passengers inside the vehicle and the bystanders external to the vehicle are evaluated to the General Population/Uncontrolled Exposure Limits.

(Note that “Bystanders” as used herein are people other than operator)

10.0 Additional Options and Accessories

Not available.

11.0 Test Set-Up Description

Assessments were performed with mobile radio installed in the test vehicle, at the specified distances and test locations indicated in Sections 12.0, 13.0 and Appendix A.

All antennas described in Table 7 were considered in order to develop the test plan for this product. Antennas were installed and tested per their appropriate mount locations (Roof / Trunk) and defined test channels.

The system was tested using a low-loss 16' Teflon RG58A/U cable attaching the radio to the transmit antenna. This cable is shorter and lower attenuation than the 17' RG58A/U cables supplied in the customer kits for connecting the radio to the transmit antenna. The cable used in the test setup also has lower attenuation over the test frequency range than the cable provided in the customer kits. The use of a shorter cable with lower attenuation in the test setup ensures that the test data is more conservative with regards to the actual installation. Cable losses are reported in Appendix A.

12.0 Method of Measurement with trunk mounted antenna(s)

12.1 External/Bystander vehicle MPE measurements

Initially the antenna is located at the center of the trunk. Refer to Appendix A for antenna location and distance.

MPE measurements for bystander (BS) conditions are determined by taking the average of (10) measurements in a 2m vertical line for each of the (3) bystander test locations indicated in Appendix A with 20cm height increments, with the distance between the antenna and the geometric center of the probe sensor equal to 60cm (for 8/900MHz band). The measurement probe is positioned orthogonal to antenna (typically parallel to ground with a vertically mounted antenna) and aimed directly at the antenna's axis. These measurements are representative of persons other than the operator standing next to the vehicle.

Each of the offered antennas mounted at the center of the trunk were assessed at the rear of the vehicle while maintaining a minimum of twenty (20) centimeter separation distance between the probe sensor and vehicle body. The worst case antenna was then tested at a 45º radial at the corner of the trunk, and 90º radial at the side of the trunk.

Tests for the 90º radial direction where conducted with the antenna displaced towards the "bystander on the side of the trunk" test location in order to attain 60cm (42cm antenna displacement) distances from that test location. In this way, the antenna is closer to the test location, and the MPE is higher, than it would be if the antenna was left at the center of the trunk.

12.2 Internal/Passenger vehicle MPE measurements

Antenna is located toward the center of the trunk at a minimum 85cm from backseat passenger. Users are instructed, per installation manual, to mount antennas on the roof only if a minimum 85cm cannot be achieved. Refer to Appendix A for antenna location and distance.

MPE measurements for passenger front seat (PF) and backseat (PB) conditions are determined by taking the average of the (3) measurements (Head, Chest, and Lower Trunk) inside the vehicle for both the front and back seats.

The backseat is a bench seat and therefore each position (Head, Chest & Lower Trunk) were scanned across (horizontally) the seat starting from the middle of the seat to the edge of the seat stopping 20cm from the vehicle door. Similar process was used in the front bucket seat.

The probe handle is oriented parallel (horizontal) to the ground and pointed towards the back of the vehicle. The probe handle is not oriented normal to the seat surface. The probe head (incorporating the field sensors) is scanned continuously (using the max-hold function available in the meter) along three test axes which are parallel to the seat angle (intended as the line determined by the intersection of the plane of the seat and the plane of the backrest) and are 20cm from the seat surface. One test axis is at the Head height, another is at the Chest height, and another is at the Lower Trunk height. The maximum field level value recorded for each test axis is logged. The MPE is determined by averaging these three maximum values regardless of the geometrical location where they were observed. For instance, the locations of the three maxima may lie on different vertical (relative to ground) lines.

This approach leads to results that are representative of the exposure of vehicle occupants since it is based on an average across the body portions closest to the antenna for both trunk and roof mount positions, and is conservatively biased because the highest results for each test axis are combined, e.g. the highest head exposure could be in the middle of the seat while the highest lower trunk exposure could be closer to the door.

13.0 Method of Measurement with roof mounted antenna(s)

13.1 External/Bystander vehicle MPE measurements

Antenna is located at the center of the roof. Refer to Appendix A for antenna location and distance.

MPE measurements for bystander (BS) conditions are determined by taking the average of (10) measurements in a 2m vertical line for the test location indicated in Appendix A with 20cm height increments, with the distance between the antenna and the geometric center of the probe sensor equal to 60cm (for 8/900MHz band). The measurement probe is positioned orthogonal to antenna (typically parallel to ground with a vertically mounted antenna) and aimed directly at the antenna's axis. These measurements are representative of persons other than the operator standing next to the vehicle.

13.2 Internal/Passenger vehicle MPE measurements

Antenna is located at the center of the roof. Refer to Appendix A for antenna location and distance.

MPE measurements for passenger front seat (PF) and backseat (PB) conditions are determined by taking the average of the (3) measurements (Head, Chest, and Lower Trunk) inside the vehicle for both the front and back seats.

The backseat is a bench seat and therefore each position (Head, Chest & Lower Trunk) were scanned across (horizontally) the seat starting from the middle of the seat to the edge of the seat stopping 20cm from the vehicle door. Similar process was used in the front bucket seat.
The probe handle is oriented parallel (horizontal) to the ground and pointed towards the back of the vehicle. The probe handle is not oriented normal to the seat surface. The probe head (incorporating the field sensors) is scanned continuously (using the max-hold function available in the meter) along three test axes which are parallel to the seat angle (intended as the line determined by the intersection of the plane of the seat and the plane of the backrest) and are 20cm from the seat surface. One test axis is at the Head height, another is at the Chest height, and another is at the Lower Trunk height. The maximum field level value recorded for each test axis is logged. The MPE is determined by averaging these three maximum values regardless of the geometrical location where they were observed. For instance, the locations of the three maxima may lie on different vertical (relative to ground) lines.

This approach leads to results that are representative of the exposure of vehicle occupants since it is based on an average across the body portions closest to the antenna for both trunk and roof mount positions, and is conservatively biased because the highest results for each test axis are combined, e.g. the highest head exposure could be in the middle of the seat while the highest lower trunk exposure could be closer to the door.

14.0 MPE Variability Requirement for External/Bystander vehicle MPE measurement

If all the MPE bystander measurements for a particular antenna are below 50% of the FCC MPE limit, no variability testing for that antenna is required.

If one or more MPE bystander measurements for a particular is between 50-80% of the FCC MPE limit, with no results > 80%, variability testing shall be done on the single worst case for that antenna.

For any MPE bystander measurement above 80% of the MPE limit, variability testing shall be done for all of such configuration. When SAR simulation is performed for a particular antenna configuration to determine compliance, variability measurements are not required for that antenna configuration.

15.0 MPE Calculations

The final MPE results for this mobile radio are presented in Section 16.0. These results are based on 50% duty cycle for PTT for LMR bands.

Below is an explanation of how the MPE results are calculated. Refer to Appendix D for MPE measurement results and calculations for LMR band.

External to vehicle (Bystander) - 10 measurements are averaged over the body (*Avg_over_body*).
Internal to vehicle (Passengers) - 3 measurements are averaged over the body (*Avg_over_body*).

The Average over Body test methodology is consistent with IEEE/ANSI C95.3-2002 guidelines.

Therefore;

Equation 2 – Power Density Calculation *(Calc._P.D.)*

$$Calc.\_P.D. = (Avg\_over\_body) * (probe\_frequency\_cal\_factor) * (duty\_cycle)$$

Note 1: The highest "average" cal factors from the calibration certificates were selected for the applicable frequency range. Linear interpretation was used to determine "probe_frequency_cal_factor" for the specific test frequencies.

Note 2: The E-field probe calibration certificate's frequency cal factors were determined by measuring V/m. The survey meter's results were measured in power density (mW/cm^2) and therefore the "probe_frequency_cal_factor" was squared in equation 2 to account for these results.

Note 3: The H-field probe calibration certificate's frequency cal factors were determined by measuring A/m. The survey meter's results were measured in A/m and therefore the "Avg_over_body" A/m results were converted to power density (mW/cm^2) using the equation 3. H-field measurements are only applicable to frequencies below 300MHz.

Equation 3 – Converting A/m to mW/cm^2

$$mW/cm\text{^}2 = (A/m)\text{^}2 * 37.699$$

Equation 4 – Power Density Maximum Calculation

$$Max\_Calc.\_P.D. = P.D.\_calc * \frac{\max\_output\_power}{initial\_output\_power}$$

Note 4: For initial output power> max_output_power; max_output_power / initial output power = 1

16.0 Antenna Summary

Table below summarizes the tested or evaluated antennas and their descriptions, mount location (roof/trunk), overlap of FCC bands, number of test channels per FCC KDB 447498 (FCC N_c) and actual number of tested channels (Actual N_c). This information was used to determine the test configurations presented in this report.

Table 7

Antenna No.	Antenna Model	Frequency Range (MHz)	Physical Length (cm)	Gain (dBi)	Remarks	Mount Location (Roof/ Trunk)	Overlap FCC Bands (MHz)	FCC N_c	Actual N_c
1	HAF4013A	806 - 941	6.1	5.15	1/4 wave	R/T	806-941	14	14
2	HAF4036A	806 - 941	8.4	2.14	1/4 wave	R/T	806-941	14	14
3	HAF4037A	806 - 941	28.5	3.00	1/2 wave	R/T	806-941	14	14
BT/WLAN									
4	PMAN5100A	2400-2500	5.7 (L) x 1.9 (W)	3.0		Glass mount	2412-2462	3	3
5	PMAN5101A	2400-2500 / 4900-5900	5.4 (L) x 1.32 (W)	2.7 / 0.2		Glass mount	2412-2462 ; 5180-5825	3	3
6	AN000163A01	2400-2500 / 4900-5900	7	3.5 / 3.3	Monopole	Roof/ Trunk	2412-2462 ; 5180-5825	3	3
7	AN000163A05	2400-2500 / 4900-5900	7	2.5 / 1.6	Monopole	Roof/ Trunk	2412-2462 ; 5180-5825	3	3

17.0 Test Results Summary

17.1 MPE Test Results Summary for LMR

Table 8

MPE assessment for LMR 8/900MHz - trunk mounted antenna – Bystander

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Trunk	BS	E	0	HAF4013A, 806-941MHz	42	42	806.0000	0.102	0.54	18.9	0.40	25.2	0.25	40.1
						42	815.0000	0.096	0.54	17.7	0.41	23.6	0.26	37.7
						42	824.0000	0.092	0.55	16.7	0.41	22.2	0.26	35.6
						42	851.0000	0.093	0.57	16.4	0.43	21.9	0.26	35.3
						42	860.0000	0.093	0.57	16.3	0.43	21.7	0.27	35.2
						42	869.0000	0.088	0.58	15.2	0.43	20.2	0.27	32.9
					36	36	896.0000	0.066	0.60	11.0	0.45	14.7	0.27	24.2
						36	898.5000	0.060	0.60	10.0	0.45	13.4	0.27	22.0
						36	900.0000	0.059	0.60	9.9	0.45	13.2	0.27	21.7
						36	935.0000	0.062	0.62	9.9	0.47	13.3	0.28	22.1
						36	937.5000	0.056	0.63	8.9	0.47	11.9	0.28	19.9
						36	939.0000	0.056	0.63	8.9	0.47	11.9	0.28	19.8
					4	4	901.5000	0.006	0.60	1.0	0.45	1.3	0.27	2.2
						4	940.5000	0.006	0.63	0.9	0.47	1.2	0.28	2.0
			0	HAF4036A, 806-941MHz	42	42	806.0000	0.100	0.54	18.6	0.40	24.8	0.25	39.4
						42	815.0000	0.090	0.54	16.5	0.41	22.0	0.26	35.1
						42	824.0000	0.080	0.55	14.6	0.41	19.5	0.26	31.2
						42	851.0000	0.077	0.57	13.5	0.43	18.0	0.26	29.1
						42	860.0000	0.076	0.57	13.3	0.43	17.7	0.27	28.7
						42	869.0000	0.073	0.58	12.6	0.43	16.8	0.27	27.3
					36	36	896.0000	0.051	0.60	8.5	0.45	11.3	0.27	18.5
						36	898.5000	0.046	0.60	7.7	0.45	10.3	0.27	16.9
						36	900.0000	0.047	0.60	7.9	0.45	10.5	0.27	17.2
						36	935.0000	0.049	0.62	7.9	0.47	10.5	0.28	17.5
						36	937.5000	0.044	0.63	7.1	0.47	9.5	0.28	15.8
						36	939.0000	0.043	0.63	6.8	0.47	9.1	0.28	15.2
					4	4	901.5000	0.005	0.60	0.8	0.45	1.1	0.27	1.9
						4	940.5000	0.005	0.63	0.7	0.47	1.0	0.28	1.6

Table 8 (Continued)

MPE assessment for LMR 8900MHz - trunk mounted antenna – Bystander

Results highlight in Bold are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Trunk	BS	E	0	HAF4037A, 806-941MHz	42	42	806.0000	0.107	0.54	**19.9**	0.40	**26.5**	0.25	**42.2**
						42	815.0000	0.089	0.54	16.3	0.41	21.8	0.26	34.7
						42	824.0000	0.088	0.55	16.0	0.41	21.3	0.26	34.0
						42	851.0000	0.091	0.57	16.1	0.43	21.5	0.26	34.7
						42	860.0000	0.085	0.57	14.9	0.43	19.8	0.27	32.2
						42	869.0000	0.093	0.58	16.1	0.43	21.5	0.27	35.0
					36	36	896.0000	0.058	0.60	9.8	0.45	13.0	0.27	21.4
						36	898.5000	0.054	0.60	8.9	0.45	11.9	0.27	19.6
						36	900.0000	0.054	0.60	9.0	0.45	11.9	0.27	19.6
						36	935.0000	0.081	0.62	13.0	0.47	17.3	0.28	28.8
						36	937.5000	0.077	0.63	12.3	0.47	16.4	0.28	27.4
						36	939.0000	0.074	0.63	11.8	0.47	15.7	0.28	26.2
					4	4	901.5000	0.006	0.60	0.9	0.45	1.3	0.27	2.1
						4	940.5000	0.009	0.63	1.4	0.47	1.9	0.28	3.0
			45	HAF4037A, 806-941MHz	42	42.0	806.0000	0.089	0.54	16.6	0.40	22.1	0.25	35.1
			90	HAF4037A, 806-941MHz	42	42.0	806.0000	0.106	0.54	19.7	0.40	26.2	0.25	41.7

Table 9

MPE assessment for LMR 8900MHz - roof mounted antenna – Bystander

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS	E	0	HAF4013A, 806-941MHz	42	42	806.0000	0.051	0.54	9.6	0.40	12.7	0.25	20.2
						42	815.0000	0.045	0.54	8.4	0.41	11.1	0.26	17.8
						42	824.0000	0.050	0.55	9.1	0.41	12.1	0.26	19.3
						42	851.0000	0.047	0.57	8.3	0.43	11.1	0.26	18.0
						42	860.0000	0.041	0.57	7.2	0.43	9.6	0.27	15.6
						42	869.0000	0.044	0.58	7.6	0.43	10.1	0.27	16.5
					36	36	896.0000	0.033	0.60	5.6	0.45	7.4	0.27	12.2
						36	898.5000	0.030	0.60	4.9	0.45	6.6	0.27	10.8
						36	900.0000	0.031	0.60	5.2	0.45	6.9	0.27	11.4
						36	935.0000	0.026	0.62	4.2	0.47	5.6	0.28	9.4
						36	937.5000	0.028	0.63	4.5	0.47	5.9	0.28	9.9
						36	939.0000	0.029	0.63	4.6	0.47	6.1	0.28	10.1
					4	4	901.5000	0.003	0.60	0.5	0.45	0.7	0.27	1.2
						4	940.5000	0.003	0.63	0.5	0.47	0.6	0.28	1.0
			0	HAF4036A, 806-941MHz	42	42	806.0000	0.050	0.54	9.2	0.40	12.3	0.25	19.6
						42	815.0000	0.044	0.54	8.0	0.41	10.7	0.26	17.1
						42	824.0000	0.048	0.55	8.8	0.41	11.7	0.26	18.8
						42	851.0000	0.040	0.57	7.1	0.43	9.4	0.26	15.3
						42	860.0000	0.042	0.57	7.3	0.43	9.7	0.27	15.7
						42	869.0000	0.038	0.58	6.6	0.43	8.8	0.27	14.4
					36	36	896.0000	0.028	0.60	4.7	0.45	6.2	0.27	10.2
						36	898.5000	0.025	0.60	4.1	0.45	5.5	0.27	9.0
						36	900.0000	0.025	0.60	4.2	0.45	5.6	0.27	9.3
						36	935.0000	0.023	0.62	3.6	0.47	4.8	0.28	8.0
						36	937.5000	0.023	0.63	3.7	0.47	4.9	0.28	8.1
						36	939.0000	0.022	0.63	3.6	0.47	4.8	0.28	8.0
					4	4	901.5000	0.002	0.60	0.4	0.45	0.5	0.27	0.9
						4	940.5000	0.002	0.63	0.4	0.47	0.5	0.28	0.9

Table 9 (Continued)

MPE assessment for LMR 8/900MHz - roof mounted antenna – Bystander

Results highlight in Bold are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Trunk	BS	E	0	HAF4037A, 806-941MHz	42	42	806.0000	0.067	0.54	**12.5**	0.40	**16.7**	0.25	**26.5**
						42	815.0000	0.057	0.54	10.4	0.41	13.9	0.26	22.2
						42	824.0000	0.062	0.55	11.4	0.41	15.2	0.26	24.3
						42	851.0000	0.054	0.57	9.5	0.43	12.6	0.26	20.4
						42	860.0000	0.055	0.57	9.6	0.43	12.8	0.27	20.8
						42	869.0000	0.052	0.58	8.9	0.43	11.9	0.27	19.3
					36	36	896.0000	0.044	0.60	7.4	0.45	9.9	0.27	16.2
						36	898.5000	0.035	0.60	5.8	0.45	7.7	0.27	12.7
						36	900.0000	0.039	0.60	6.5	0.45	8.7	0.27	14.2
						36	935.0000	0.038	0.62	6.1	0.47	8.1	0.28	13.5
						36	937.5000	0.039	0.63	6.3	0.47	8.4	0.28	14.0
						36	939.0000	0.039	0.63	6.2	0.47	8.2	0.28	13.7
					4	4	901.5000	0.005	0.60	0.9	0.45	1.2	0.27	2.0
						4	940.5000	0.005	0.63	0.8	0.47	1.0	0.28	1.7

Table 10

MPE assessment for LMR 8900MHz - trunk mounted antenna – Passenger Back

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Trunk	PB	E	0	HAF4013A, 806-941MHz	42	42	806.0000	0.096	0.54	17.9	0.40	23.9	0.25	38.0
						42	815.0000	0.107	0.54	19.7	0.41	26.3	0.26	42.0
						42	824.0000	0.074	0.55	13.5	0.41	17.9	0.26	28.7
						42	851.0000	0.055	0.57	9.6	0.43	12.8	0.26	20.7
						42	860.0000	0.059	0.57	10.4	0.43	13.8	0.27	22.4
						42	869.0000	0.044	0.58	7.5	0.43	10.1	0.27	16.4
					36	36	896.0000	0.038	0.60	6.3	0.45	8.5	0.27	13.9
						36	898.5000	0.031	0.60	5.1	0.45	6.8	0.27	11.2
						36	900.0000	0.030	0.60	5.0	0.45	6.7	0.27	11.1
						36	935.0000	0.029	0.62	4.6	0.47	6.2	0.28	10.3
						36	937.5000	0.025	0.63	3.9	0.47	5.2	0.28	8.7
						36	939.0000	0.033	0.63	5.3	0.47	7.0	0.28	11.7
					4	4	901.5000	0.002	0.60	0.4	0.45	0.5	0.27	0.8
						4	940.5000	0.003	0.63	0.4	0.47	0.6	0.28	0.9
			0	HAF4036A, 806-941MHz	42	42	806.0000	0.117	0.54	21.7	0.40	28.9	0.25	46.0
						42	815.0000	0.097	0.54	17.8	0.41	23.7	0.26	37.8
						42	824.0000	0.057	0.55	10.3	0.41	13.7	0.26	22.0
						42	851.0000	0.049	0.57	8.6	0.43	11.5	0.26	18.6
						42	860.0000	0.023	0.57	4.0	0.43	5.3	0.27	8.6
						42	869.0000	0.016	0.58	2.8	0.43	3.8	0.27	6.1
					36	36	896.0000	0.019	0.60	3.2	0.45	4.3	0.27	7.0
						36	898.5000	0.024	0.60	4.1	0.45	5.4	0.27	8.9
						36	900.0000	0.023	0.60	3.9	0.45	5.2	0.27	8.5
						36	935.0000	0.021	0.62	3.4	0.47	4.5	0.28	7.5
						36	937.5000	0.022	0.63	3.6	0.47	4.8	0.28	8.0
						36	939.0000	0.018	0.63	2.9	0.47	3.8	0.28	6.4
					4	4	901.5000	0.002	0.60	0.3	0.45	0.4	0.27	0.6
						4	940.5000	0.001	0.63	0.2	0.47	0.3	0.28	0.5

Table 10 (Continued)

MPE assessment for LMR 8900MHz - trunk mounted antenna – Passenger Back

Results highlight in Bold are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Trunk	PB	E	0	HAF4037A, 806-941MHz	42	42	806.0000	0.188	0.54	34.9	0.40	46.6	0.25	73.9
						42	815.0000	0.211	0.54	**38.9**	0.41	**51.8**	0.26	**82.6**
						42	824.0000	0.177	0.55	32.2	0.41	43.0	0.26	68.7
						42	851.0000	0.101	0.57	17.7	0.43	23.6	0.26	38.2
						42	860.0000	0.121	0.57	21.0	0.43	28.1	0.27	45.5
						42	869.0000	0.078	0.58	13.4	0.43	17.9	0.27	29.1
					36	36	896.0000	0.045	0.60	7.6	0.45	10.1	0.27	16.6
						36	898.5000	0.067	0.60	11.3	0.45	15.0	0.27	24.7
						36	900.0000	0.059	0.60	9.9	0.45	13.2	0.27	21.6
						36	935.0000	0.076	0.62	12.2	0.47	16.2	0.28	27.0
						36	937.5000	0.093	0.63	14.8	0.47	19.8	0.28	33.0
						36	939.0000	0.083	0.63	13.3	0.47	17.8	0.28	29.6
					4	4	901.5000	0.006	0.60	1.0	0.45	1.4	0.27	2.3
						4	940.5000	0.010	0.63	1.5	0.47	2.0	0.28	3.3

Table 11

MPE assessment for LMR 8900MHz - roof mounted antenna – Passenger Back

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PB	E	0	HAF4013A, 806-941MHz	42	42	806.0000	0.015	0.54	2.8	0.40	3.7	0.25	5.9
						42	815.0000	0.011	0.54	1.9	0.41	2.6	0.26	4.1
						42	824.0000	0.005	0.55	0.8	0.41	1.1	0.26	1.8
						42	851.0000	0.006	0.57	1.1	0.43	1.5	0.26	2.4
						42	860.0000	0.009	0.57	1.6	0.43	2.1	0.27	3.4
						42	869.0000	0.007	0.58	1.2	0.43	1.6	0.27	2.6
					36	36	896.0000	0.008	0.60	1.3	0.45	1.7	0.27	2.8
						36	898.5000	0.006	0.60	1.1	0.45	1.4	0.27	2.3
						36	900.0000	0.007	0.60	1.1	0.45	1.5	0.27	2.5
						36	935.0000	0.004	0.62	0.7	0.47	0.9	0.28	1.5
						36	937.5000	0.004	0.63	0.6	0.47	0.8	0.28	1.3
						36	939.0000	0.003	0.63	0.5	0.47	0.7	0.28	1.2
					4	4	901.5000	0.001	0.60	0.1	0.45	0.2	0.27	0.3
						4	940.5000	0.001	0.63	0.1	0.47	0.1	0.28	0.2
			0	HAF4036A, 806-941MHz	42	42	806.0000	0.015	0.54	2.8	0.40	3.7	0.25	5.9
						42	815.0000	0.015	0.54	2.8	0.41	3.7	0.26	6.0
						42	824.0000	0.010	0.55	1.8	0.41	2.3	0.26	3.7
						42	851.0000	0.007	0.57	1.3	0.43	1.7	0.26	2.8
						42	860.0000	0.010	0.57	1.7	0.43	2.3	0.27	3.7
						42	869.0000	0.009	0.58	1.5	0.43	2.0	0.27	3.3
					36	36	896.0000	0.008	0.60	1.3	0.45	1.8	0.27	2.9
						36	898.5000	0.007	0.60	1.2	0.45	1.6	0.27	2.7
						36	900.0000	0.008	0.60	1.3	0.45	1.8	0.27	2.9
						36	935.0000	0.006	0.62	0.9	0.47	1.3	0.28	2.1
						36	937.5000	0.004	0.63	0.6	0.47	0.8	0.28	1.3
						36	939.0000	0.003	0.63	0.5	0.47	0.6	0.28	1.0
					4	4	901.5000	0.001	0.60	0.1	0.45	0.1	0.27	0.2
						4	940.5000	0.001	0.63	0.1	0.47	0.1	0.28	0.2

Table 11 (Continued)

MPE assessment for LMR 8900MHz - roof mounted antenna – Passenger Back

Results highlight in Bold are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PB	E	0	HAF4037A, 806-941MHz	42	42	806.0000	0.035	0.54	**6.4**	0.40	**8.6**	0.25	**13.6**
						42	815.0000	0.025	0.54	4.6	0.41	6.2	0.26	9.9
						42	824.0000	0.017	0.55	3.1	0.41	4.2	0.26	6.6
						42	851.0000	0.018	0.57	3.2	0.43	4.2	0.26	6.8
						42	860.0000	0.021	0.57	3.6	0.43	4.8	0.27	7.7
						42	869.0000	0.027	0.58	4.7	0.43	6.2	0.27	10.1
					36	36	896.0000	0.017	0.60	2.8	0.45	3.8	0.27	6.2
						36	898.5000	0.017	0.60	2.9	0.45	3.8	0.27	6.3
						36	900.0000	0.018	0.60	3.0	0.45	4.0	0.27	6.6
						36	935.0000	0.017	0.62	2.8	0.47	3.7	0.28	6.2
						36	937.5000	0.011	0.63	1.8	0.47	2.4	0.28	4.0
						36	939.0000	0.009	0.63	1.4	0.47	1.8	0.28	3.1
					4	4	901.5000	0.001	0.60	0.2	0.45	0.3	0.27	0.5
						4	940.5000	0.001	0.63	0.2	0.47	0.2	0.28	0.4

Table 12

MPE assessment for LMR 8900MHz - trunk mounted antenna – Passenger Front

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Trunk	PF	E	0	HAF4013A, 806-941MHz	42	42	806.0000	0.053	0.54	9.9	0.40	13.2	0.25	21.0
						42	815.0000	0.056	0.54	10.3	0.41	13.7	0.26	21.8
						42	824.0000	0.055	0.55	10.1	0.41	13.5	0.26	21.5
						42	851.0000	0.039	0.57	6.8	0.43	9.1	0.26	14.6
						42	860.0000	0.043	0.57	7.4	0.43	9.9	0.27	16.0
						42	869.0000	0.023	0.58	3.9	0.43	5.2	0.27	8.5
					36	36	896.0000	0.033	0.60	5.5	0.45	7.4	0.27	12.1
						36	898.5000	0.035	0.60	5.9	0.45	7.8	0.27	12.9
						36	900.0000	0.030	0.60	5.0	0.45	6.7	0.27	11.1
						36	935.0000	0.026	0.62	4.2	0.47	5.6	0.28	9.3
						36	937.5000	0.019	0.63	3.0	0.47	4.0	0.28	6.6
						36	939.0000	0.021	0.63	3.4	0.47	4.5	0.28	7.5
					4	4	901.5000	0.002	0.60	0.4	0.45	0.5	0.27	0.8
						4	940.5000	0.001	0.63	0.2	0.47	0.3	0.28	0.4
			0	HAF4036A, 806-941MHz	42	42	806.0000	0.052	0.54	9.7	0.40	13.0	0.25	20.6
						42	815.0000	0.051	0.54	9.4	0.41	12.5	0.26	19.9
						42	824.0000	0.061	0.55	11.0	0.41	14.7	0.26	23.5
						42	851.0000	0.038	0.57	6.8	0.43	9.0	0.26	14.6
						42	860.0000	0.034	0.57	5.9	0.43	7.9	0.27	12.8
						42	869.0000	0.034	0.58	5.8	0.43	7.7	0.27	12.6
					36	36	896.0000	0.034	0.60	5.8	0.45	7.7	0.27	12.6
						36	898.5000	0.036	0.60	6.1	0.45	8.1	0.27	13.3
						36	900.0000	0.026	0.60	4.3	0.45	5.8	0.27	9.5
						36	935.0000	0.017	0.62	2.7	0.47	3.5	0.28	5.9
						36	937.5000	0.017	0.63	2.7	0.47	3.7	0.28	6.1
						36	939.0000	0.012	0.63	2.0	0.47	2.6	0.28	4.4
					4	4	901.5000	0.002	0.60	0.3	0.45	0.4	0.27	0.7
						4	940.5000	0.001	0.63	0.1	0.47	0.2	0.28	0.3

Table 12 (continued)

MPE assessment for LMR 8900MHz - trunk mounted antenna – Passenger Front

Results highlight in Bold are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Trunk	PF	E	0	HAF4037A, 806-941MHz	42	42	806.0000	0.107	0.54	20.0	0.40	26.7	0.25	42.3
						42	815.0000	0.116	0.54	21.3	0.41	28.4	0.26	45.2
						42	824.0000	0.133	0.55	**24.2**	0.41	**32.3**	0.26	**51.7**
						42	851.0000	0.059	0.57	10.4	0.43	13.9	0.26	22.4
						42	860.0000	0.047	0.57	8.2	0.43	11.0	0.27	17.8
						42	869.0000	0.043	0.58	7.3	0.43	9.8	0.27	15.9
					36	36	896.0000	0.049	0.60	8.2	0.45	10.9	0.27	17.9
						36	898.5000	0.051	0.60	8.6	0.45	11.4	0.27	18.8
						36	900.0000	0.050	0.60	8.3	0.45	11.0	0.27	18.1
						36	935.0000	0.047	0.62	7.6	0.47	10.1	0.28	16.9
						36	937.5000	0.039	0.63	6.2	0.47	8.2	0.28	13.7
						36	939.0000	0.040	0.63	6.3	0.47	8.4	0.28	14.1
					4	4	901.5000	0.004	0.60	0.7	0.45	1.0	0.27	1.7
						4	940.5000	0.003	0.63	0.5	0.47	0.7	0.28	1.1

Table 13

MPE assessment for LMR 8900MHz - roof mounted antenna – Passenger Front

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PF	E	0	HAF4013A, 806-941MHz	42	42	806.0000	0.011	0.54	2.0	0.40	2.7	0.25	4.3
						42	815.0000	0.006	0.54	1.2	0.41	1.6	0.26	2.5
						42	824.0000	0.006	0.55	1.1	0.41	1.5	0.26	2.4
						42	851.0000	0.004	0.57	0.8	0.43	1.0	0.26	1.7
						42	860.0000	0.004	0.57	0.7	0.43	0.9	0.27	1.4
						42	869.0000	0.004	0.58	0.7	0.43	0.9	0.27	1.5
					36	36	896.0000	0.007	0.60	1.2	0.45	1.6	0.27	2.6
						36	898.5000	0.004	0.60	0.7	0.45	0.9	0.27	1.5
						36	900.0000	0.006	0.60	0.9	0.45	1.2	0.27	2.0
						36	935.0000	0.004	0.62	0.6	0.47	0.8	0.28	1.4
						36	937.5000	0.002	0.63	0.4	0.47	0.5	0.28	0.9
						36	939.0000	0.003	0.63	0.4	0.47	0.6	0.28	0.9
					4	4	901.5000	0.000	0.60	0.1	0.45	0.1	0.27	0.1
						4	940.5000	0.000	0.63	0.0	0.47	0.0	0.28	0.1
			0	HAF4036A, 806-941MHz	42	42	806.0000	0.014	0.54	2.5	0.40	3.4	0.25	5.4
						42	815.0000	0.008	0.54	1.4	0.41	1.9	0.26	3.0
						42	824.0000	0.006	0.55	1.1	0.41	1.4	0.26	2.3
						42	851.0000	0.003	0.57	0.5	0.43	0.7	0.26	1.2
						42	860.0000	0.005	0.57	0.8	0.43	1.1	0.27	1.8
						42	869.0000	0.003	0.58	0.5	0.43	0.7	0.27	1.1
					36	36	896.0000	0.007	0.60	1.1	0.45	1.5	0.27	2.4
						36	898.5000	0.003	0.60	0.6	0.45	0.7	0.27	1.2
						36	900.0000	0.004	0.60	0.7	0.45	0.9	0.27	1.5
						36	935.0000	0.002	0.62	0.4	0.47	0.5	0.28	0.8
						36	937.5000	0.004	0.63	0.6	0.47	0.8	0.28	1.3
						36	939.0000	0.002	0.63	0.3	0.47	0.4	0.28	0.6
					4	4	901.5000	0.000	0.60	0.0	0.45	0.0	0.27	0.1
						4	940.5000	0.000	0.63	0.0	0.47	0.0	0.28	0.1

Table 13 (continued)

MPE assessment for LMR 8900MHz - trunk mounted antenna – Passenger Front

Results highlight in Bold are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ICNIRP Limit	% To ICNIRP Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PF	E	0	HAF4037A, 806-941MHz	42	42	806.0000	0.025	0.54	**4.6**	0.40	**6.2**	0.25	**9.8**
						42	815.0000	0.021	0.54	3.9	0.41	5.3	0.26	8.4
						42	824.0000	0.013	0.55	2.4	0.41	3.2	0.26	5.1
						42	851.0000	0.011	0.57	2.0	0.43	2.6	0.26	4.2
						42	860.0000	0.017	0.57	3.0	0.43	4.0	0.27	6.5
						42	869.0000	0.013	0.58	2.2	0.43	2.9	0.27	4.8
					36	36	896.0000	0.015	0.60	2.5	0.45	3.4	0.27	5.6
						36	898.5000	0.013	0.60	2.1	0.45	2.8	0.27	4.6
						36	900.0000	0.012	0.60	1.9	0.45	2.6	0.27	4.2
						36	935.0000	0.011	0.62	1.8	0.47	2.4	0.28	3.9
						36	937.5000	0.008	0.63	1.3	0.47	1.7	0.28	2.9
						36	939.0000	0.010	0.63	1.7	0.47	2.2	0.28	3.7
					4	4	901.5000	0.001	0.60	0.1	0.45	0.2	0.27	0.3
						4	940.5000	0.001	0.63	0.1	0.47	0.2	0.28	0.3

17.2 MPE Test Results for Bluetooth and WLAN

Antenna PMAN5100A and PMAN5101A was intended for mounting on the windshield of the vehicle. These antennas should be installed close to the top, and on the front windshield only. Antennas AN000163A01 and AN000163A05 support WLAN 2.4 GHz / 5 GHz should be installed at roof or trunk of the vehicle. WLAN 2.4 GHz and 5 GHz will not transmit simultaneously.

MPE calculation was use to determine power density for these transmitters due to lower power. According to FCC's OET Bulletin 65 Edition 97-01 Section 2, calculations can be made to predict RF field strength and power density levels around typical RF sources. Equation (5) is generally accurate in far-field of an antenna.

$$S = \frac{P_t G}{4\Pi d^2} F \qquad (5)$$

Equation (5) accounts for the maximum duty cycle of the signal, and the factor, F, to provide a conservative power density prediction per FCC OET Bulletin 65, Edition 97-01 1997.

Where: S = power density
P_t = maximum output power scaled by the maximum duty cycle of the signal
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
d = distance from antenna
F = Enhancement factor [1 or 2.56 for predicting ground-level field strength]

Table 14 summarized the MPE calculation for each standalone transmitter bands, Bluetooth and WLAN.

Table 14

Antenna #	Max Power (W)	Duty Cycle (%)	Tx Frequency (MHz)	Antenna Gain (dBi)	Cable Loss, L (dB)	Dist., d (cm)	[4]Enhance Factor, F	Max Calc. MPE (mW/cm^2)	MPE Spec Limit (mW/cm^2)					
									FCC	% To FCC Spec Limit	ICNIRP	% To ICNIRP Spec Limit	ISED limit	% To ISED Spec Limit
WLAN 2.4 GHz														
AN000163A01	0.040	100%	2412.0	3.50	0.00	20	1.00	0.018	1.00	1.77	1.00	1.77	0.54	3.30
AN000163A01	0.040	100%	2437.0	3.50	0.00	20	1.00	0.018	1.00	1.77	1.00	1.77	0.54	3.28
AN000163A01	0.040	100%	2462.0	3.50	0.00	20	1.00	0.018	1.00	1.77	1.00	1.77	0.54	3.26
AN000163A05	0.040	100%	2412.0	2.50	0.00	20	1.00	0.014	1.00	1.41	1.00	1.41	0.54	2.62
AN000163A05	0.040	100%	2437.0	2.50	0.00	20	1.00	0.014	1.00	1.41	1.00	1.41	0.54	2.61
AN000163A05	0.040	100%	2462.0	2.50	0.00	20	1.00	0.014	1.00	1.41	1.00	1.41	0.54	2.59
PMAN5100A	0.040	100%	2412.0	3.00	0.00	20	1.00	0.016	1.00	1.58	1.00	1.58	0.54	2.94
PMAN5100A	0.040	100%	2437.0	3.00	0.00	20	1.00	0.016	1.00	1.58	1.00	1.58	0.54	2.92
PMAN5100A	0.040	100%	2462.0	3.00	0.00	20	1.00	0.016	1.00	1.58	1.00	1.58	0.54	2.90
PMAN5101A	0.040	100%	2412.0	2.70	0.00	20	1.00	0.015	1.00	1.47	1.00	1.47	0.54	2.75
PMAN5101A	0.040	100%	2437.0	2.70	0.00	20	1.00	0.015	1.00	1.47	1.00	1.47	0.54	2.73
PMAN5101A	0.040	100%	2462.0	2.70	0.00	20	1.00	0.015	1.00	1.47	1.00	1.47	0.54	2.71
WLAN 5 GHz														
AN000163A01	0.016	100%	5180.0	3.30	0.00	20	1.00	0.007	1.00	0.67	1.00	0.67	0.90	0.75
AN000163A01	0.016	100%	5502.5	3.30	0.00	20	1.00	0.007	1.00	0.67	1.00	0.67	0.94	0.71
AN000163A01	0.016	100%	5825.0	3.30	0.00	20	1.00	0.007	1.00	0.67	1.00	0.67	0.98	0.69
AN000163A05	0.016	100%	5180.0	1.60	0.00	20	1.00	0.005	1.00	0.46	1.00	0.46	0.90	0.50
AN000163A05	0.016	100%	5502.5	1.60	0.00	20	1.00	0.005	1.00	0.46	1.00	0.46	0.94	0.48
AN000163A05	0.016	100%	5825.0	1.60	0.00	20	1.00	0.005	1.00	0.46	1.00	0.46	0.98	0.46
PMAN5101A	0.016	100%	5180.0	0.20	0.00	20	1.00	0.003	1.00	0.33	1.00	0.33	0.90	0.36
PMAN5101A	0.016	100%	5502.5	0.20	0.00	20	1.00	0.003	1.00	0.33	1.00	0.33	0.94	0.35
PMAN5101A	0.016	100%	5825.0	0.20	0.00	20	1.00	0.003	1.00	0.33	1.00	0.33	0.98	0.34
Bluetooth 2.4 GHz														
AN000163A01	0.011	100%	2402.0	3.50	0.00	20	1.00	0.005	1.00	0.50	1.00	0.50	0.54	0.93
AN000163A01	0.011	100%	2441.0	3.50	0.00	20	1.00	0.005	1.00	0.50	1.00	0.50	0.54	0.92
AN000163A01	0.011	100%	2480.0	3.50	0.00	20	1.00	0.005	1.00	0.50	1.00	0.50	0.55	0.91
AN000163A05	0.011	100%	2402.0	2.50	0.00	20	1.00	0.004	1.00	0.40	1.00	0.40	0.54	0.74
AN000163A05	0.011	100%	2441.0	2.50	0.00	20	1.00	0.004	1.00	0.40	1.00	0.40	0.54	0.73
AN000163A05	0.011	100%	2480.0	2.50	0.00	20	1.00	0.004	1.00	0.40	1.00	0.40	0.55	0.73
PMAN5100A	0.011	100%	2402.0	3.00	0.00	20	1.00	0.004	1.00	0.45	1.00	0.45	0.54	0.83
PMAN5100A	0.011	100%	2441.0	3.00	0.00	20	1.00	0.004	1.00	0.45	1.00	0.45	0.54	0.82
PMAN5100A	0.011	100%	2480.0	3.00	0.00	20	1.00	0.004	1.00	0.45	1.00	0.45	0.55	0.81
PMAN5101A	0.011	100%	2402.0	2.70	0.00	20	1.00	0.004	1.00	0.42	1.00	0.42	0.54	0.78
PMAN5101A	0.011	100%	2441.0	2.70	0.00	20	1.00	0.004	1.00	0.42	1.00	0.42	0.54	0.77
PMAN5101A	0.011	100%	2480.0	2.70	0.00	20	1.00	0.004	1.00	0.42	1.00	0.42	0.55	0.76

Notes:

1) Distance from antenna (d), 20cm for more conservative estimation.
2) Cable loss (L), all cable loss include in antenna gain, so should be 0 dB.
3) Enhancement Factor (F), 1 (Ground reflection already factor in during antenna characterization)

17.3 Simultaneous Transmission

LMR bands can transmit simultaneously with Bluetooth or WLAN 2.4 GHz or WLAN 5 GHz. Bluetooth and WLAN 2.4 GHz or WLAN 5 GHz transmitters cannot transmit at the same time.

The highest percentage of limit for each standalone transmitters indicated in Table 15.

Table 15

Transmitters	Frequency Band (MHz)	Highest Percentage of Limit (%)		
		Passenger, Front Seat (PF)	Passenger, Back Seat (PB)	Bystander (BS)
FCC US				
LMR 8/900MHz	806-824, 851-869, 896-901, 935-940	24.2 %	38.9 %	19.9 %
Bluetooth	2402 - 2480	0.50 %	0.50 %	0.50 %
WLAN 2.4 GHz	2412 - 2462	1.77 %	1.77 %	1.77 %
WLAN 5 GHz	5180 - 5825	0.67 %	0.67 %	0.67 %
ISED Canada				
LMR 8/900MHz	806-824, 851-869, 896-901, 935-940	51.7 %	82.6 %	42.2 %
Bluetooth	2402 - 2480	0.93 %	0.93 %	0.93 %
WLAN 2.4 GHz	2412 - 2462	3.30 %	3.30 %	3.30 %
WLAN 5 GHz	5180 - 5825	0.75 %	0.75 %	0.75 %
ICNIRP				
LMR 8/900MHz	806-825, 851-870, 896-901, 935-940	32.3 %	51.8 %	26.5 %
Bluetooth	2402 - 2480	0.50 %	0.50 %	0.50 %
WLAN 2.4 GHz	2412 - 2462	1.77 %	1.77 %	1.77 %
WLAN 5 GHz	5180 - 5825	0.67 %	0.67 %	0.67 %

Per KDB 447498 D01, simultaneous transmission MPE test exclusion applies when the sum of MPE ratios for all simultaneous transmitting antennas incorporated in a host device is ≤ 1.0, according to calculated/estimated, numerically modeled, or measured field strengths or power density.

Calculated Maximum Power density for WLAN 2.4 GHz is greater than WLAN 5 GHz and Bluetooth. WLAN 2.4 GHz, WLAN 5 GHz and Bluetooth transmitters cannot transmit at the same time. Thus, WLAN 2.4 GHz will be used to evaluate simultaneous transmission test exclusion. The highest combined power density percentage for simultaneous transmission indicated in Table 16.

Table 16

Designator	Simultaneous Transmission Scenario	Highest Combined Percentage of Limit (%)		
		Passenger, Front Seat (PF)	Passenger, Back Seat (PB)	Bystander (BS)
FCC US	LMR 8/900MHz and WLAN	26.0 %	40.7 %	21.7 %
ISED Canada	LMR 8/900MHz and WLAN	55.0 %	85.9 %	45.5 %
ICNIRP	LMR 8/900MHz and WLAN	34.1 %	53.6 %	28.3 %

18.0 Conclusion

The assessments for this device were performed with an output power range as indicated in Section 17.1 (for LMR) and 17.2 (for BT/WLAN). The maximum allowable output power is equal to the upper limit of the final test factory transmit power specification listed in Table 6. The highest power density results for LMR and BT/WLAN transmitters scaled to maximum allowable power output are indicated in Table 17 and 18 for internal/passenger to the vehicle, and external/bystander to the vehicle.

Table 17: Maximum MPE RF Exposure Summary (LMR)

Designator	Transmitters	Frequency Band (MHz)	Passenger (mW/cm^2)	Bystander (mW/cm^2)
FCC US	LMR 8/900MHz	806-824, 851-869, 896-901, 935-940	0.211	0.107
ISED Canada	LMR 8/900MHz	806-824, 851-869, 896-901, 935-940	0.211	0.107
ICNIRP	LMR 8/900MHz	806-825, 851-870, 896-901, 935-940	0.211	0.107

Table 18: Maximum MPE RF Exposure Summary (BT/WLAN)

Designator	Transmitters	Frequency Band (MHz)	Passenger (mW/cm^2)	Bystander (mW/cm^2)
FCC US / ISED Canada / ICNIRP	Bluetooth	2402-2480	0.005	0.005
	WLAN	2412-2462	0.018	0.018
	WLAN	5180-5825	0.007	0.007

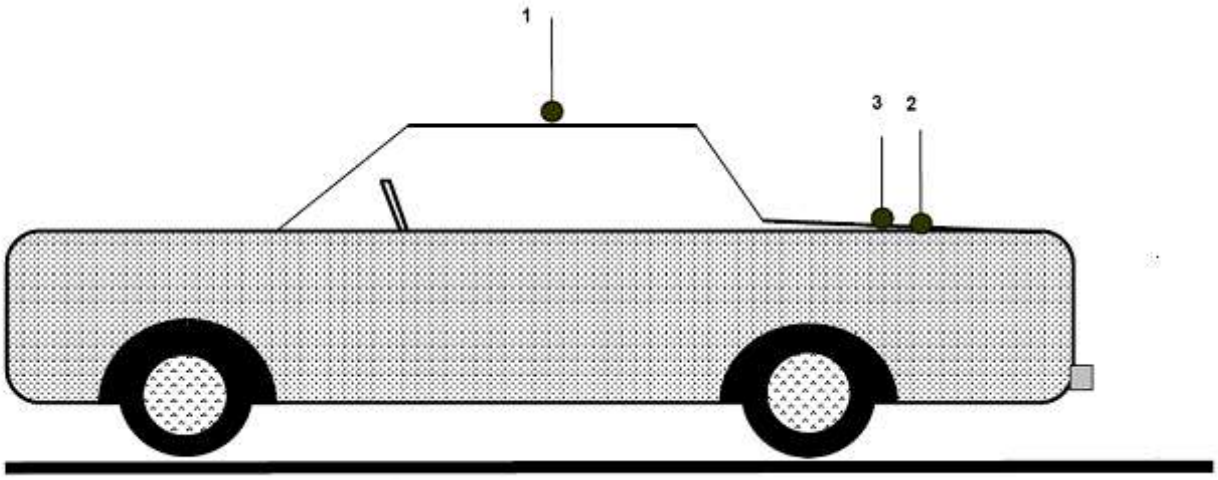
These MPE results herein demonstrate compliance to the FCC US, ISED Canada and ICNIRP Occupational/Controlled Exposure limit. FCC rules require compliance for Passengers and Bystanders to the FCC General Population/Uncontrolled limits.

19.0 User Instructions Considerations

In order to facilitate the task of professional users, the Safety Manual for this radio requires that bystanders be kept at least 2 ft (60 cm) from the vehicle Body.

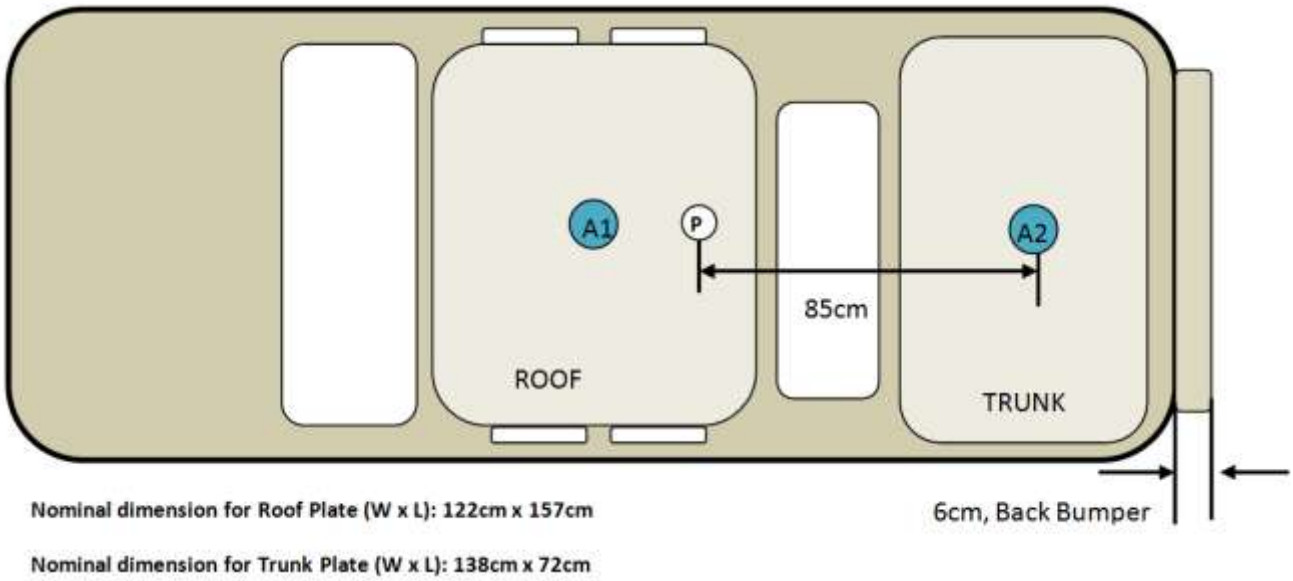
Appendix A - Antenna Locations, Test Distances, and Cable Losses

Antenna locations



1. Roof (20cm from center)
2. Trunk (85cm from back of the back seat)
3. Trunk (center)

Passenger Antenna mounting (8/900MHz)



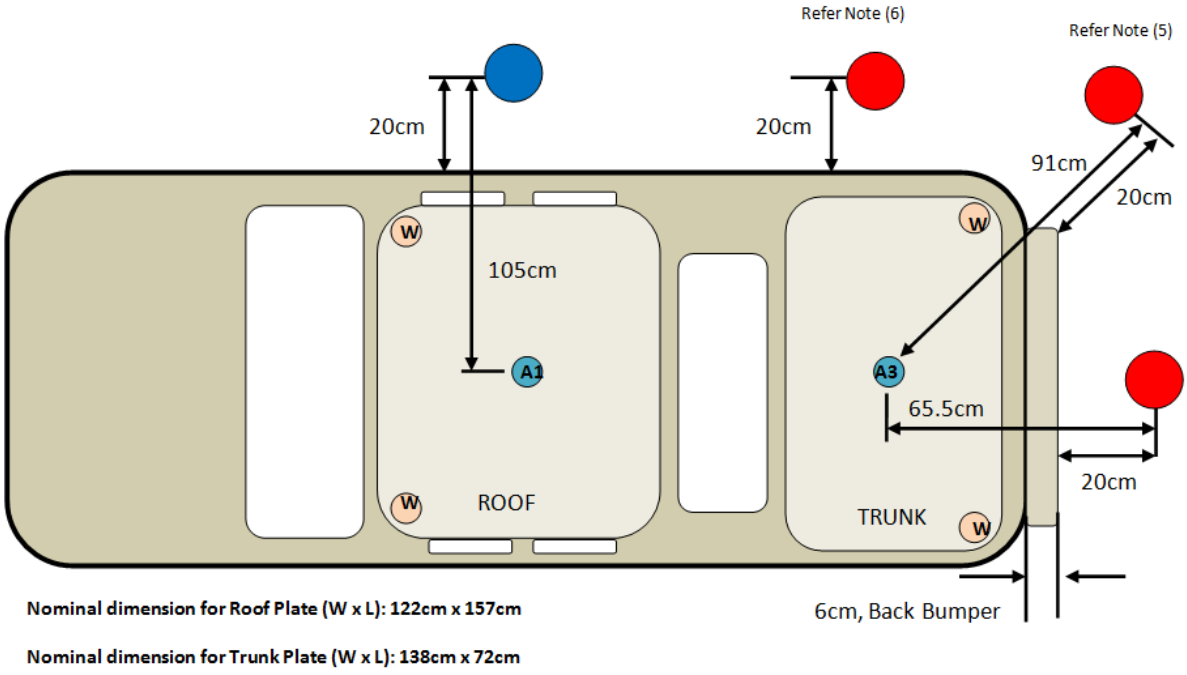
Notes:

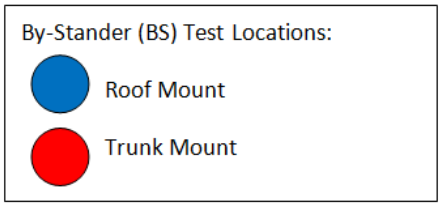
1.) Antenna location A1: APX 6500 mobile radio roof antenna mounting locations for front and back passenger testing (8/900MHz)

2.) Antenna location A2: APX 6500 mobile trunk antenna mounting locations for front and back passenger testing (8/900MHz)

3.) Total distance between trunk mount antenna and rear passenger is 85cm.

Bystander Antenna mounting (8/900MHz)

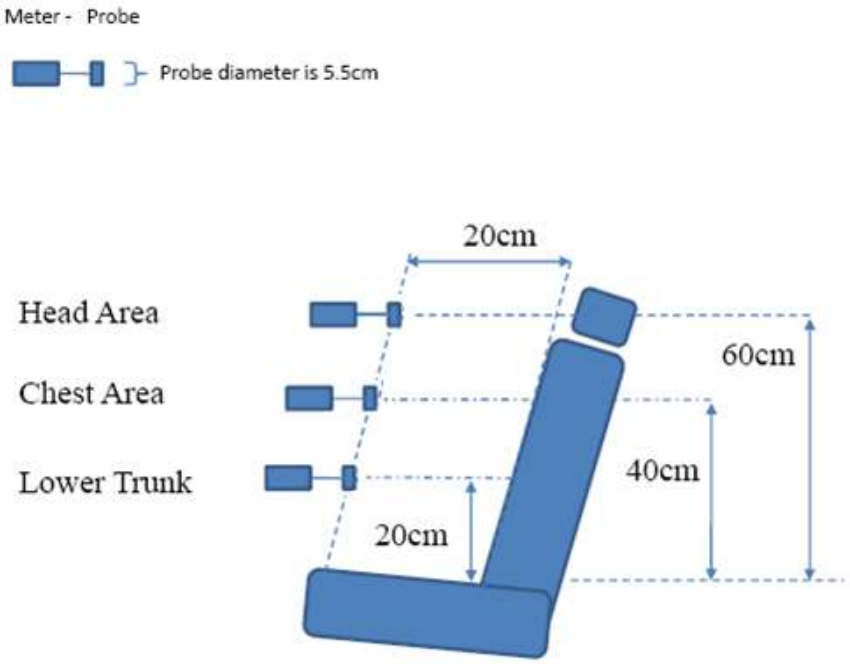




Notes:

1) Antenna location A1: APX 6500 mobile radio roof antenna mounting location.
2) Antenna location A3: APX 6500 mobile radio trunk antenna mounting location for bystander testing.
3) Antenna locations W: Four total locations identified for BT/WLAN/WWAN antenna mounting. (if LMR antennas installed at trunk, BT/WLAN/WWAN antennas should be installed on the roof and vice versa).
4) Total distance between Bystander 45 degree angles from the centered-trunk mount antenna is 91cm to maintain a minimum 20cm separation between probe sensor and vehicle body.
5) Total distance between Bystander 90 degree angle from the centered-trunk mount antenna is 60cm (by moving antenna location A3 42cm from center of the trunk).

Seat scan areas
(Applicable to both front and back seats)



Cable Losses

Test Cable

Teflon RG58A/U Loss Per 100 Feet

160 MHz - 5 dB

450 MHz - 9 dB

1 GHz - 13.8 dB

Customer Cable

RG-58A/U Loss Per 100 Feet (For LMR)

136 MHz – 5.5 dB

450 MHz – 9.6 dB

900 MHz – 13.9 dB

PFP 240 Loss Per 100 Feet (For BT/WLAN)

2500 MHz - 12.9 dB

5800 MHz -20.4 dB

Appendix B - Probe Calibration Certificates

Service Test Report
QAF 1126, 03/11
Report ID: 134653

ETS-LINDGREN™
An ESCO Technologies Company
1301 Arrow Point Drive
Cedar Park, Texas 78613
(512) 531-6400

ETS-LINDGREN
Tracking # S000048638
Equipment Check
Attested by GC Date: 06-May-20
www.ets-lindgren.com

Certificate of Test Conformance

Page 1 of 1

Reference: S 000048638

Customer: Motorola Solutions Malaysia Sdn Bhd - Plot 2A, Medan Bayan Lepas, Mukim 12 S.W.D. - Bayan Lepas - Penang 11900 - Malaysia

The instrument listed below has been tested and verified to Internal Quality Standards. Test data is Attached. Equipment used during instrument testing is controlled by laboratory compliance with ISO/IEC 17025-2017 and ANSI/NCSL Z540-1-1994 using ETS-Lindgren Quality Management System internal procedures.

Manufacturer	ETS-Lindgren
Instrument Type	RF Survey Meter
Model	HI-2200
Serial Number/ID	00086887

Status In
In Tolerance
Date Completed
06-May-20
Status Out
Compliant with Internal Quality Standards

Remarks
Performed funtional test with E100 sn 00224511 and H200 sn 00224521. Unit had Firmware #2.32 Upgrade. Alt ID: MS10201.

I would like to take this opportunity to express our appreciation for using ETS-Lindgren for your EMI test equipment services and I am looking forward to continued business with your organization. Please feel free to contact our offices at (512) 531-6400, if you have any questions regarding this report.

Sincerely,

George Cisneros
Calibration Supervisor

Date Attested: 06-May-20

ACCREDITED Calibration Laboratory Certificate 1307.01

ETS-LINDGREN
An ESCO Technologies Company
1301 Arrow Point Drive
Cedar Park, Texas 78613
(512) 531-6400

ETS-LINDGREN
Track# S000048638 Ltd Cal ☐
By JAA Date 06-May-20
Next Cal Due
www.ets-lindgren.com

Cert I.D.: 134651

Certificate of Calibration Conformance

The instrument identified below has been individually calibrated in compliance with the following standard(s):

IEEE 1309 - 2013, Institute of Electrical and Electronics Engineers, Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas from 9 kHz to 40 GHz

Environment: Laboratory MTE is maintained in a temperature controlled environment with ambient conditions from 18 to 28 C, relative humidity less than 90%. The instrument under test has been calibrated in a suitable environment using an EMCO TEM Cell 5101C, GTEM 5305/5402 and an RF Shielded EMC Chamber which is conducive to maintaining accurate and reliable measurement quality.

Manufacturer:	ETS-Lindgren	**Operating Range:**	100kHz - 5GHz
Model Number:	E100	**Instrument Type:**	Isotropic Probe > 1 GHz
Serial Number/ ID:	*00224511*	**Date Code:**	
Tracking Number:	**S 000048638**	**Alternate ID:**	MS10428
Date Completed:	06-May-20	**Customer:**	Motorola Solutions Malaysia Sdn Bhd - Plot 2A, Medan Bayan Lepas, Mukim 12 S.W.D. - Bayan Lepas - Penang 11900 - Malaysia
Test Type:	Standard Field, Field Strength		

Calibration Uncertainty: Std Field Method 100kHz - 6 GHz, +/-0.64 dB, Linearity +/- 0.95 dB, Isotropicity +/- 0.86

k=2, (95% Confidence Level)

Test Remarks: Probe received in tolerance thus before and after data are the same. Calibration performed with customer's HI-2200 sn 00086887.

Calibration Traceability: All Measuring and Test Equipment (M/TE) identified below are traceable to the SI units through the National Institute for Standards and Technology (NIST) or other recognized National Metrology Institute. Calibration Laboratory and Quality System controls are compliant with ISO/IEC 17025-2017 and ANSI/NCSL Z540-1-1994.

Standards and Equipment Used:
Make / Model / Name / S/N / Calibration Date

HP	8648C	Signal Generator	3836U02236	04-May-21
Keysight	E9304A	Power Sensor	MY56100039	16-Apr-21
Hewlett Packard	E4422B	Signal Generator	US40050591	09-Aug-20
Agilent	E9304A	Power Sensor	MY41499013	16-Apr-21
Agilent	E9304A	Power Sensor	MY41499012	16-Apr-21
Rohde & Schwarz	NRP-Z91	Power Sensor	100733	06-Mar-21
Agilent	E4419B	Power Meter	MY40510693	08-Aug-20
Agilent	N1913A	Power Meter	MY50000415	16-Mar-21
Marconi	2024	Signal Generator	112343/043	04-May-21
Rohde & Schwarz	NRVD	Power Meter	828110/019	09-Jan-21
Hewlett Packard	E4419B	Power Meter	US39250717	14-Aug-20
Keysight	E9304A	Power Sensor	MY56100005	16-Apr-21
Rohde & Schwarz	NRV-Z55	Thermal Power Sensor	100352	20-Sep-20
Rohde & Schwarz	NRV-Z55	Thermal Power Sensor	100037	22-Oct-20
Rohde & Schwarz	NRP-Z91	Power Sensor	100734	01-Aug-20
Keysight	N5183B	MXG Analog Signal Gener	MY53270789	08-Feb-21

Condition of Instrument
Upon Receipt:
In Tolerance to Internal Quality Standards

On Release:
In Tolerance to Internal Quality Standards

Calibration Completed By
Julio A. Aquino, Calibration Technician

Attested and Issued on 06-May-20
George C[illegible]eros, Calibration Supervisor

CALIBRATION REPORT

Electric Field Sensor

Model	S/N
E100	00224511
HI-2200	00086887

Date: 06 May 2020

_ New Instrument
_ Other
_ Out of Tolerance
X Within Tolerance

Frequency Response

Frequency Response		Nominal Field	Cal Factor*	Deviation
	MHz	V/m	(Eapplied/Eindicated)	dB
1	0.1	20	1.45	-3.22
2	0.5	20	1.12	-1.01
3	1	20	1.05	-0.43
4	3	20	1.00	-0.03
5	15	20	1.00	0.00
6	27.12	20	1.01	-0.05
7	30	20	1.00	-0.04
8	75	20	1.01	-0.07
9	100	20	1.01	-0.11
10	150	20	1.01	-0.10
11	200	20	1.00	-0.03
12	250	20	1.00	-0.04
13	300	20	0.99	0.08
14	400	20	1.01	-0.05
15	500	20	1.05	-0.46
16	600	20	1.05	-0.43
17	700	20	1.08	-0.65
18	800	20	1.10	-0.81
19	900	20	1.05	-0.39
20	1000	20	1.00	0.00
21	2000	20	1.04	-0.32
22	2450	20	1.04	-0.38
23	3000	20	0.96	0.39
24	3500	20	0.90	0.91
25	4000	20	0.99	0.10
26	5000	20	1.01	-0.08
27	5500	20	1.25	-1.93
28	6000	20	1.33	-2.47

* Corrected electric field values (V/m) can be obtained by multiplying the Cal Factor with the indicated E field readings.

Linearity

maximum linearity deviation is 0.42 dB

(measurements taken from 0.3 V/m to 800 V/m at 27.12 MHz)

Test Conditions

Calibration performed at ambient room temperature: 23 ±3°C

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ETS·LINDGREN™
An ESCO Technologies Company

PROBE ROTATIONAL RESPONSE

Model	E100
S/N	00224511
Report	S00048638
Date	Date of Calibration 06 May 2020
Time	08:45:13 AM
Isotropy *	+ 0.308 dB/ -0.308 dB

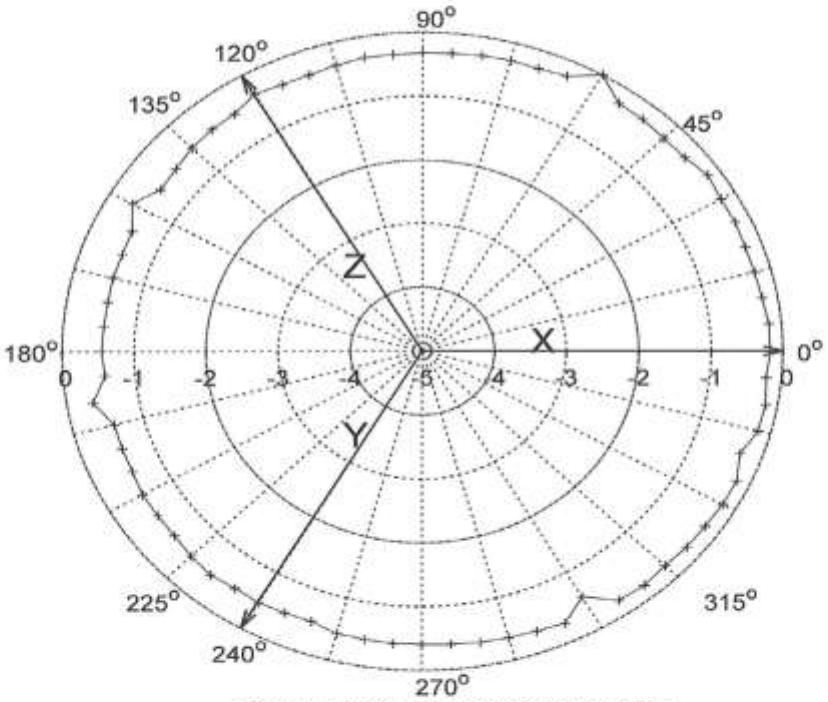

Figure 1: Probe Isotropic Response Chart.

Isotropic response is measured in a 20 V/m field at 400 MHz
*Isotropy is the maximum deviation from the geometric mean as defined by IEEE 1309-2013.

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Appendix C - Photos of Assessed Antennas

(Refer to Exhibit 7B)

Appendix D - MPE Measurement Results

Table D.1
MPE Measurement Data for Bystander

D.U.T. Info.							Probe Info.			MPE Measurements														
										Bystander (BS) Positions														
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4013A, 806-941MHz	5.15	806.0000	42.0	42	CW	E	1.20	BS	0.015	0.027	0.017	0.138	0.223	0.402	0.404	0.248	0.131	0.090	0.5	0.203	0.102	0.102
Trunk	HAF4013A, 806-941MHz	5.15	815.0000	42.0	42	CW	E	1.19	BS	0.013	0.027	0.021	0.122	0.236	0.382	0.357	0.241	0.138	0.081	0.5	0.193	0.096	0.096
Trunk	HAF4013A, 806-941MHz	5.15	824.0000	42.0	42	CW	E	1.18	BS	0.013	0.021	0.020	0.122	0.244	0.341	0.333	0.233	0.151	0.074	0.5	0.183	0.092	0.092
Trunk	HAF4013A, 806-941MHz	5.15	851.0000	42.0	42	CW	E	1.15	BS	0.017	0.017	0.030	0.165	0.268	0.435	0.344	0.165	0.109	0.068	0.5	0.186	0.093	0.093
Trunk	HAF4013A, 806-941MHz	5.15	860.0000	42.0	42	CW	E	1.14	BS	0.018	0.022	0.039	0.165	0.290	0.437	0.341	0.176	0.087	0.065	0.5	0.187	0.093	0.093
Trunk	HAF4013A, 806-941MHz	5.15	869.0000	42.0	42	CW	E	1.14	BS	0.019	0.014	0.038	0.146	0.240	0.478	0.340	0.148	0.063	0.055	0.5	0.176	0.088	0.088
Trunk	HAF4013A, 806-941MHz	5.15	896.0000	36.0	36	CW	E	1.11	BS	0.008	0.002	0.037	0.093	0.179	0.359	0.288	0.148	0.064	0.010	0.5	0.132	0.066	0.066
Trunk	HAF4013A, 806-941MHz	5.15	898.5000	36.0	36	CW	E	1.10	BS	0.006	0.004	0.029	0.088	0.151	0.326	0.244	0.171	0.064	0.009	0.5	0.120	0.060	0.060
Trunk	HAF4013A, 806-941MHz	5.15	900.0000	36.0	36	CW	E	1.10	BS	0.006	0.005	0.028	0.089	0.160	0.305	0.255	0.162	0.062	0.008	0.5	0.119	0.059	0.059
Trunk	HAF4013A, 806-941MHz	5.15	935.0000	36.0	36	CW	E	1.07	BS	0.008	0.011	0.033	0.109	0.208	0.321	0.258	0.123	0.063	0.025	0.5	0.124	0.062	0.062
Trunk	HAF4013A, 806-941MHz	5.15	937.5000	36.0	36	CW	E	1.06	BS	0.008	0.008	0.038	0.097	0.177	0.303	0.230	0.118	0.054	0.021	0.5	0.112	0.056	0.056
Trunk	HAF4013A, 806-941MHz	5.15	939.0000	36.0	36	CW	E	1.06	BS	0.007	0.008	0.030	0.099	0.180	0.304	0.233	0.116	0.050	0.025	0.5	0.112	0.056	0.056
Trunk	HAF4013A, 806-941MHz	5.15	901.5000	4.0	4	CW	E	1.10	BS	0.000	0.000	0.003	0.011	0.015	0.028	0.027	0.019	0.005	0.002	0.5	0.012	0.006	0.006
Trunk	HAF4013A, 806-941MHz	5.15	940.5000	4.0	4	CW	E	1.06	BS	0.001	0.001	0.003	0.010	0.020	0.029	0.023	0.011	0.005	0.002	0.5	0.011	0.006	0.006

MPE calculations are defined in Section 15.0

Table D.1 (Continued)
MPE Measurement Data for Bystander

D.U.T. Info.							Probe Info.			MPE Measurements														
										Bystander (BS) Positions														
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4036A, 806-941MHz	2.14	806.0000	42.0	42	CW	E	1.20	BS	0.011	0.028	0.024	0.125	0.279	0.407	0.381	0.220	0.108	0.083	0.5	0.200	0.100	0.100
Trunk	HAF4036A, 806-941MHz	2.14	815.0000	42.0	42	CW	E	1.19	BS	0.016	0.028	0.023	0.131	0.242	0.352	0.327	0.211	0.113	0.066	0.5	0.180	0.090	0.090
Trunk	HAF4036A, 806-941MHz	2.14	824.0000	42.0	42	CW	E	1.18	BS	0.013	0.022	0.020	0.128	0.219	0.297	0.298	0.190	0.122	0.053	0.5	0.161	0.080	0.080
Trunk	HAF4036A, 806-941MHz	2.14	851.0000	42.0	42	CW	E	1.15	BS	0.013	0.016	0.032	0.129	0.225	0.362	0.296	0.134	0.074	0.050	0.5	0.153	0.077	0.077
Trunk	HAF4036A, 806-941MHz	2.14	860.0000	42.0	42	CW	E	1.14	BS	0.016	0.024	0.039	0.152	0.216	0.343	0.298	0.136	0.067	0.046	0.5	0.152	0.076	0.076
Trunk	HAF4036A, 806-941MHz	2.14	869.0000	42.0	42	CW	E	1.14	BS	0.017	0.010	0.033	0.138	0.214	0.371	0.301	0.115	0.042	0.036	0.5	0.146	0.073	0.073
Trunk	HAF4036A, 806-941MHz	2.14	896.0000	36.0	36	CW	E	1.11	BS	0.005	0.004	0.023	0.083	0.139	0.280	0.236	0.104	0.032	0.004	0.5	0.101	0.051	0.051
Trunk	HAF4036A, 806-941MHz	2.14	898.5000	36.0	36	CW	E	1.10	BS	0.004	0.004	0.028	0.085	0.138	0.231	0.189	0.120	0.037	0.005	0.5	0.093	0.046	0.046
Trunk	HAF4036A, 806-941MHz	2.14	900.0000	36.0	36	CW	E	1.10	BS	0.003	0.005	0.026	0.095	0.135	0.261	0.193	0.098	0.035	0.006	0.5	0.094	0.047	0.047
Trunk	HAF4036A, 806-941MHz	2.14	935.0000	36.0	36	CW	E	1.07	BS	0.007	0.011	0.030	0.094	0.166	0.282	0.204	0.078	0.036	0.012	0.5	0.098	0.049	0.049
Trunk	HAF4036A, 806-941MHz	2.14	937.5000	36.0	36	CW	E	1.06	BS	0.007	0.009	0.028	0.084	0.155	0.256	0.179	0.075	0.031	0.013	0.5	0.089	0.044	0.044
Trunk	HAF4036A, 806-941MHz	2.14	939.0000	36.0	36	CW	E	1.06	BS	0.007	0.007	0.030	0.086	0.147	0.245	0.173	0.071	0.028	0.013	0.5	0.086	0.043	0.043
Trunk	HAF4036A, 806-941MHz	2.14	901.5000	4.0	4	CW	E	1.10	BS	0.000	0.001	0.003	0.010	0.015	0.028	0.021	0.013	0.004	0.001	0.5	0.011	0.005	0.005
Trunk	HAF4036A, 806-941MHz	2.14	940.5000	4.0	4	CW	E	1.06	BS	0.001	0.001	0.003	0.009	0.019	0.026	0.019	0.003	0.003	0.001	0.5	0.009	0.005	0.005

MPE calculations are defined in Section 15.0

Table D.1 (Continued)
MPE Measurement Data for Bystander

D.U.T. Info.							Probe Info.			MPE Measurements														
										Bystander (BS) Positions														
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	BS	0.036	0.071	0.062	0.241	0.541	0.396	0.069	0.104	0.148	0.115	0.5	0.214	0.107	0.107
Trunk	HAF4037A, 806-941MHz	3	815.0000	42.0	42	CW	E	1.19	BS	0.027	0.052	0.070	0.232	0.451	0.343	0.062	0.064	0.106	0.083	0.5	0.177	0.089	0.089
Trunk	HAF4037A, 806-941MHz	3	824.0000	42.0	42	CW	E	1.18	BS	0.027	0.051	0.045	0.236	0.440	0.368	0.074	0.077	0.090	0.078	0.5	0.175	0.088	0.088
Trunk	HAF4037A, 806-941MHz	3	851.0000	42.0	42	CW	E	1.15	BS	0.023	0.027	0.041	0.214	0.497	0.541	0.119	0.021	0.056	0.049	0.5	0.183	0.091	0.091
Trunk	HAF4037A, 806-941MHz	3	860.0000	42.0	42	CW	E	1.14	BS	0.025	0.032	0.047	0.226	0.415	0.510	0.139	0.013	0.029	0.060	0.5	0.171	0.085	0.085
Trunk	HAF4037A, 806-941MHz	3	869.0000	42.0	42	CW	E	1.14	BS	0.029	0.019	0.030	0.238	0.492	0.578	0.165	0.011	0.032	0.045	0.5	0.187	0.093	0.093
Trunk	HAF4037A, 806-941MHz	3	896.0000	36.0	36	CW	E	1.11	BS	0.012	0.006	0.057	0.147	0.319	0.384	0.106	0.015	0.003	0.003	0.5	0.117	0.058	0.058
Trunk	HAF4037A, 806-941MHz	3	898.5000	36.0	36	CW	E	1.10	BS	0.010	0.006	0.053	0.144	0.291	0.367	0.076	0.021	0.004	0.002	0.5	0.107	0.054	0.054
Trunk	HAF4037A, 806-941MHz	3	900.0000	36.0	36	CW	E	1.10	BS	0.008	0.007	0.048	0.167	0.292	0.351	0.082	0.014	0.007	0.001	0.5	0.107	0.054	0.054
Trunk	HAF4037A, 806-941MHz	3	935.0000	36.0	36	CW	E	1.07	BS	0.016	0.026	0.066	0.237	0.463	0.543	0.134	0.006	0.015	0.007	0.5	0.162	0.081	0.081
Trunk	HAF4037A, 806-941MHz	3	937.5000	36.0	36	CW	E	1.06	BS	0.017	0.018	0.062	0.203	0.449	0.530	0.144	0.009	0.011	0.009	0.5	0.154	0.077	0.077
Trunk	HAF4037A, 806-941MHz	3	939.0000	36.0	36	CW	E	1.06	BS	0.015	0.016	0.062	0.208	0.428	0.491	0.143	0.011	0.011	0.008	0.5	0.148	0.074	0.074
Trunk	HAF4037A, 806-941MHz	3	901.5000	4.0	4	CW	E	1.10	BS	0.001	0.001	0.005	0.020	0.032	0.038	0.007	0.002	0.001	0.000	0.5	0.012	0.006	0.006
Trunk	HAF4037A, 806-941MHz	3	940.5000	4.0	4	CW	E	1.06	BS	0.002	0.001	0.006	0.024	0.053	0.060	0.015	0.000	0.000	0.000	0.5	0.017	0.009	0.009

MPE calculations are defined in Section 15.0

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.			MPE Measurements														
										Bystander (BS) Positions														
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
45 Degree																							
Trunk	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	BS	0.016	0.036	0.068	0.290	0.435	0.426	0.132	0.035	0.019	0.026	0.5	0.178	0.089	0.089
90 Degree																							
Trunk	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	BS	0.020	0.067	0.106	0.338	0.515	0.460	0.066	0.090	0.069	0.031	0.5	0.211	0.106	0.106

MPE calculations are defined in Section 15.0

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.			MPE Measurements														
										Bystander (BS) Positions														
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4013A, 806-941MHz	5.15	806.0000	42.0	42	CW	E	1.20	BS	0.003	0.004	0.008	0.012	0.020	0.039	0.093	0.215	0.278	0.184	0.5	0.103	0.051	0.051
Roof	HAF4013A, 806-941MHz	5.15	815.0000	42.0	42	CW	E	1.19	BS	0.002	0.002	0.007	0.013	0.016	0.031	0.101	0.198	0.236	0.157	0.5	0.091	0.045	0.045
Roof	HAF4013A, 806-941MHz	5.15	824.0000	42.0	42	CW	E	1.18	BS	0.003	0.004	0.008	0.010	0.014	0.052	0.112	0.216	0.231	0.194	0.5	0.100	0.050	0.050
Roof	HAF4013A, 806-941MHz	5.15	851.0000	42.0	42	CW	E	1.15	BS	0.003	0.005	0.006	0.009	0.016	0.048	0.088	0.203	0.256	0.188	0.5	0.095	0.047	0.047
Roof	HAF4013A, 806-941MHz	5.15	860.0000	42.0	42	CW	E	1.14	BS	0.003	0.004	0.006	0.011	0.019	0.038	0.091	0.197	0.226	0.130	0.5	0.083	0.041	0.041
Roof	HAF4013A, 806-941MHz	5.15	869.0000	42.0	42	CW	E	1.14	BS	0.005	0.004	0.003	0.008	0.024	0.038	0.100	0.209	0.211	0.171	0.5	0.088	0.044	0.044
Roof	HAF4013A, 806-941MHz	5.15	896.0000	36.0	36	CW	E	1.11	BS	0.002	0.004	0.006	0.006	0.011	0.027	0.079	0.152	0.180	0.132	0.5	0.066	0.033	0.033
Roof	HAF4013A, 806-941MHz	5.15	898.5000	36.0	36	CW	E	1.10	BS	0.001	0.003	0.006	0.007	0.012	0.021	0.060	0.106	0.175	0.147	0.5	0.059	0.030	0.030
Roof	HAF4013A, 806-941MHz	5.15	900.0000	36.0	36	CW	E	1.10	BS	0.001	0.004	0.005	0.008	0.011	0.022	0.057	0.135	0.180	0.143	0.5	0.062	0.031	0.031
Roof	HAF4013A, 806-941MHz	5.15	935.0000	36.0	36	CW	E	1.07	BS	0.001	0.001	0.004	0.003	0.009	0.018	0.066	0.093	0.150	0.148	0.5	0.053	0.026	0.026
Roof	HAF4013A, 806-941MHz	5.15	937.5000	36.0	36	CW	E	1.06	BS	0.001	0.002	0.004	0.005	0.011	0.029	0.077	0.096	0.165	0.135	0.5	0.056	0.028	0.028
Roof	HAF4013A, 806-941MHz	5.15	939.0000	36.0	36	CW	E	1.06	BS	0.001	0.002	0.003	0.005	0.012	0.028	0.088	0.116	0.153	0.131	0.5	0.057	0.029	0.029
Roof	HAF4013A, 806-941MHz	5.15	901.5000	4.0	4	CW	E	1.10	BS	0.000	0.000	0.000	0.001	0.001	0.002	0.006	0.013	0.019	0.017	0.5	0.006	0.003	0.003
Roof	HAF4013A, 806-941MHz	5.15	940.5000	4.0	4	CW	E	1.06	BS	0.000	0.000	0.000	0.000	0.001	0.003	0.009	0.014	0.016	0.012	0.5	0.006	0.003	0.003

MPE calculations are defined in Section 15.0

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.			MPE Measurements														
										Bystander (BS) Positions														
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4036A, 806-941MHz	2.14	806.0000	42.0	42	CW	E	1.20	BS	0.003	0.004	0.008	0.012	0.017	0.042	0.089	0.202	0.263	0.188	0.5	0.099	0.050	0.050
Roof	HAF4036A, 806-941MHz	2.14	815.0000	42.0	42	CW	E	1.19	BS	0.003	0.002	0.007	0.017	0.015	0.030	0.104	0.190	0.224	0.143	0.5	0.087	0.044	0.044
Roof	HAF4036A, 806-941MHz	2.14	824.0000	42.0	42	CW	E	1.18	BS	0.003	0.003	0.008	0.010	0.016	0.050	0.127	0.203	0.224	0.176	0.5	0.097	0.048	0.048
Roof	HAF4036A, 806-941MHz	2.14	851.0000	42.0	42	CW	E	1.15	BS	0.002	0.004	0.004	0.009	0.014	0.043	0.082	0.173	0.214	0.154	0.5	0.080	0.040	0.040
Roof	HAF4036A, 806-941MHz	2.14	860.0000	42.0	42	CW	E	1.14	BS	0.003	0.003	0.006	0.009	0.016	0.048	0.093	0.195	0.215	0.143	0.5	0.083	0.042	0.042
Roof	HAF4036A, 806-941MHz	2.14	869.0000	42.0	42	CW	E	1.14	BS	0.004	0.003	0.003	0.007	0.021	0.033	0.098	0.192	0.172	0.141	0.5	0.077	0.038	0.038
Roof	HAF4036A, 806-941MHz	2.14	896.0000	36.0	36	CW	E	1.11	BS	0.001	0.003	0.005	0.006	0.009	0.025	0.073	0.125	0.148	0.108	0.5	0.056	0.028	0.028
Roof	HAF4036A, 806-941MHz	2.14	898.5000	36.0	36	CW	E	1.10	BS	0.001	0.002	0.004	0.006	0.009	0.018	0.049	0.103	0.138	0.118	0.5	0.049	0.025	0.025
Roof	HAF4036A, 806-941MHz	2.14	900.0000	36.0	36	CW	E	1.10	BS	0.001	0.003	0.004	0.008	0.008	0.018	0.048	0.110	0.145	0.116	0.5	0.051	0.025	0.025
Roof	HAF4036A, 806-941MHz	2.14	935.0000	36.0	36	CW	E	1.07	BS	0.001	0.001	0.004	0.003	0.008	0.018	0.056	0.093	0.124	0.114	0.5	0.045	0.023	0.023
Roof	HAF4036A, 806-941MHz	2.14	937.5000	36.0	36	CW	E	1.06	BS	0.001	0.002	0.003	0.004	0.008	0.024	0.062	0.096	0.131	0.100	0.5	0.046	0.023	0.023
Roof	HAF4036A, 806-941MHz	2.14	939.0000	36.0	36	CW	E	1.06	BS	0.001	0.001	0.002	0.003	0.009	0.023	0.067	0.097	0.121	0.099	0.5	0.045	0.022	0.022
Roof	HAF4036A, 806-941MHz	2.14	901.5000	4.0	4	CW	E	1.10	BS	0.000	0.000	0.000	0.001	0.001	0.001	0.005	0.010	0.015	0.013	0.5	0.005	0.003	0.003
Roof	HAF4036A, 806-941MHz	2.14	940.5000	4.0	4	CW	E	1.06	BS	0.000	0.000	0.000	0.000	0.001	0.002	0.008	0.011	0.013	0.009	0.5	0.005	0.002	0.002

MPE calculations are defined in Section 15.0

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.			MPE Measurements													
										Bystander (BS) Positions													
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	BS	0.008	0.009	0.016	0.032	0.043	0.134	0.259	0.413	0.177	0.029	0.5	0.134	0.067	0.067
Roof	HAF4037A, 806-941MHz	3	815.0000	42.0	42	CW	E	1.19	BS	0.006	0.006	0.014	0.026	0.038	0.086	0.266	0.343	0.141	0.027	0.5	0.113	0.057	0.057
Roof	HAF4037A, 806-941MHz	3	824.0000	42.0	42	CW	E	1.18	BS	0.006	0.008	0.017	0.020	0.038	0.129	0.295	0.332	0.176	0.038	0.5	0.125	0.062	0.062
Roof	HAF4037A, 806-941MHz	3	851.0000	42.0	42	CW	E	1.15	BS	0.004	0.009	0.007	0.020	0.035	0.099	0.180	0.312	0.202	0.066	0.5	0.107	0.054	0.054
Roof	HAF4037A, 806-941MHz	3	860.0000	42.0	42	CW	E	1.14	BS	0.006	0.006	0.015	0.017	0.031	0.075	0.214	0.341	0.205	0.059	0.5	0.110	0.055	0.055
Roof	HAF4037A, 806-941MHz	3	869.0000	42.0	42	CW	E	1.14	BS	0.008	0.006	0.009	0.014	0.048	0.072	0.179	0.312	0.189	0.069	0.5	0.103	0.052	0.052
Roof	HAF4037A, 806-941MHz	3	896.0000	36.0	36	CW	E	1.11	BS	0.003	0.007	0.012	0.020	0.020	0.069	0.160	0.247	0.195	0.065	0.5	0.089	0.044	0.044
Roof	HAF4037A, 806-941MHz	3	898.5000	36.0	36	CW	E	1.10	BS	0.003	0.006	0.013	0.016	0.020	0.056	0.132	0.203	0.135	0.048	0.5	0.070	0.035	0.035
Roof	HAF4037A, 806-941MHz	3	900.0000	36.0	36	CW	E	1.10	BS	0.003	0.005	0.011	0.014	0.020	0.051	0.134	0.226	0.192	0.052	0.5	0.078	0.039	0.039
Roof	HAF4037A, 806-941MHz	3	935.0000	36.0	36	CW	E	1.07	BS	0.004	0.003	0.016	0.006	0.027	0.045	0.162	0.242	0.161	0.042	0.5	0.076	0.038	0.038
Roof	HAF4037A, 806-941MHz	3	937.5000	36.0	36	CW	E	1.06	BS	0.002	0.004	0.009	0.010	0.024	0.059	0.159	0.238	0.185	0.054	0.5	0.079	0.039	0.039
Roof	HAF4037A, 806-941MHz	3	939.0000	36.0	36	CW	E	1.06	BS	0.004	0.005	0.008	0.010	0.026	0.053	0.139	0.250	0.164	0.070	0.5	0.077	0.039	0.039
Roof	HAF4037A, 806-941MHz	3	901.5000	4.0	4	CW	E	1.10	BS	0.000	0.000	0.001	0.001	0.002	0.004	0.013	0.052	0.019	0.006	0.5	0.011	0.005	0.005
Roof	HAF4037A, 806-941MHz	3	940.5000	4.0	4	CW	E	1.06	BS	0.000	0.000	0.000	0.001	0.003	0.007	0.021	0.032	0.021	0.00	0.5	0.009	0.005	0.005

MPE calculations are defined in Section 15.0

Table D.2

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4013A, 806-941MHz	5.15	806.0000	42.0	42	CW	E	1.20	PB	0.174	0.165	0.143	0.5	0.193	0.096	0.096
Trunk	HAF4013A, 806-941MHz	5.15	815.0000	42.0	42	CW	E	1.19	PB	0.233	0.203	0.105	0.5	0.215	0.107	0.107
Trunk	HAF4013A, 806-941MHz	5.15	824.0000	42.0	42	CW	E	1.18	PB	0.152	0.135	0.089	0.5	0.148	0.074	0.074
Trunk	HAF4013A, 806-941MHz	5.15	851.0000	42.0	42	CW	E	1.15	PB	0.140	0.066	0.079	0.5	0.109	0.055	0.055
Trunk	HAF4013A, 806-941MHz	5.15	860.0000	42.0	42	CW	E	1.14	PB	0.135	0.092	0.086	0.5	0.119	0.059	0.059
Trunk	HAF4013A, 806-941MHz	5.15	869.0000	42.0	42	CW	E	1.14	PB	0.109	0.064	0.057	0.5	0.087	0.044	0.044
Trunk	HAF4013A, 806-941MHz	5.15	896.0000	36.0	36	CW	E	1.11	PB	0.109	0.063	0.033	0.5	0.076	0.038	0.038
Trunk	HAF4013A, 806-941MHz	5.15	898.5000	36.0	36	CW	E	1.10	PB	0.093	0.043	0.031	0.5	0.061	0.031	0.031
Trunk	HAF4013A, 806-941MHz	5.15	900.0000	36.0	36	CW	E	1.10	PB	0.093	0.042	0.03	0.5	0.061	0.030	0.030
Trunk	HAF4013A, 806-941MHz	5.15	935.0000	36.0	36	CW	E	1.07	PB	0.060	0.050	0.052	0.5	0.058	0.029	0.029
Trunk	HAF4013A, 806-941MHz	5.15	937.5000	36.0	36	CW	E	1.06	PB	0.055	0.043	0.041	0.5	0.049	0.025	0.025
Trunk	HAF4013A, 806-941MHz	5.15	939.0000	36.0	36	CW	E	1.06	PB	0.075	0.052	0.06	0.5	0.066	0.033	0.033
Trunk	HAF4013A, 806-941MHz	5.15	901.5000	4.0	4	CW	E	1.10	PB	0.007	0.002	0.003	0.5	0.004	0.002	0.002
Trunk	HAF4013A, 806-941MHz	5.15	940.5000	4.0	4	CW	E	1.06	PB	0.006	0.005	0.004	0.5	0.005	0.003	0.003

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4036A, 806-941MHz	2.14	806.0000	42.0	42	CW	E	1.20	PB	0.240	0.197	0.146	0.5	0.233	0.117	0.117
Trunk	HAF4036A, 806-941MHz	2.14	815.0000	42.0	42	CW	E	1.19	PB	0.224	0.163	0.100	0.5	0.193	0.097	0.097
Trunk	HAF4036A, 806-941MHz	2.14	824.0000	42.0	42	CW	E	1.18	PB	0.143	0.070	0.075	0.5	0.113	0.057	0.057
Trunk	HAF4036A, 806-941MHz	2.14	851.0000	42.0	42	CW	E	1.15	PB	0.123	0.051	0.082	0.5	0.098	0.049	0.049
Trunk	HAF4036A, 806-941MHz	2.14	860.0000	42.0	42	CW	E	1.14	PB	0.051	0.042	0.027	0.5	0.046	0.023	0.023
Trunk	HAF4036A, 806-941MHz	2.14	869.0000	42.0	42	CW	E	1.14	PB	0.043	0.026	0.017	0.5	0.033	0.016	0.016
Trunk	HAF4036A, 806-941MHz	2.14	896.0000	36.0	36	CW	E	1.11	PB	0.065	0.020	0.018	0.5	0.038	0.019	0.019
Trunk	HAF4036A, 806-941MHz	2.14	898.5000	36.0	36	CW	E	1.10	PB	0.09	0.025	0.018	0.5	0.049	0.024	0.024
Trunk	HAF4036A, 806-941MHz	2.14	900.0000	36.0	36	CW	E	1.10	PB	0.077	0.025	0.025	0.5	0.047	0.023	0.023
Trunk	HAF4036A, 806-941MHz	2.14	935.0000	36.0	36	CW	E	1.07	PB	0.054	0.024	0.040	0.5	0.042	0.021	0.021
Trunk	HAF4036A, 806-941MHz	2.14	937.5000	36.0	36	CW	E	1.06	PB	0.063	0.030	0.034	0.5	0.045	0.022	0.022
Trunk	HAF4036A, 806-941MHz	2.14	939.0000	36.0	36	CW	E	1.06	PB	0.039	0.025	0.038	0.5	0.036	0.018	0.018
Trunk	HAF4036A, 806-941MHz	2.14	901.5000	4.0	4	CW	E	1.10	PB	0.005	0.002	0.002	0.5	0.003	0.002	0.002
Trunk	HAF4036A, 806-941MHz	2.14	940.5000	4.0	4	CW	E	1.06	PB	0.003	0.003	0.002	0.5	0.003	0.001	0.001

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	PB	0.381	0.265	0.292	0.5	0.375	0.188	0.188
Trunk	HAF4037A, 806-941MHz	3	815.0000	42.0	42	CW	E	1.19	PB	0.495	0.320	0.250	0.5	0.422	0.211	0.211
Trunk	HAF4037A, 806-941MHz	3	824.0000	42.0	42	CW	E	1.18	PB	0.361	0.323	0.216	0.5	0.354	0.177	0.177
Trunk	HAF4037A, 806-941MHz	3	851.0000	42.0	42	CW	E	1.15	PB	0.345	0.113	0.067	0.5	0.201	0.101	0.101
Trunk	HAF4037A, 806-941MHz	3	860.0000	42.0	42	CW	E	1.14	PB	0.217	0.187	0.231	0.5	0.241	0.121	0.121
Trunk	HAF4037A, 806-941MHz	3	869.0000	42.0	42	CW	E	1.14	PB	0.154	0.167	0.088	0.5	0.155	0.078	0.078
Trunk	HAF4037A, 806-941MHz	3	896.0000	36.0	36	CW	E	1.11	PB	0.097	0.078	0.070	0.5	0.091	0.045	0.045
Trunk	HAF4037A, 806-941MHz	3	898.5000	36.0	36	CW	E	1.10	PB	0.212	0.094	0.062	0.5	0.135	0.067	0.067
Trunk	HAF4037A, 806-941MHz	3	900.0000	36.0	36	CW	E	1.10	PB	0.187	0.081	0.055	0.5	0.118	0.059	0.059
Trunk	HAF4037A, 806-941MHz	3	935.0000	36.0	36	CW	E	1.07	PB	0.172	0.131	0.122	0.5	0.152	0.076	0.076
Trunk	HAF4037A, 806-941MHz	3	937.5000	36.0	36	CW	E	1.06	PB	0.219	0.173	0.133	0.5	0.186	0.093	0.093
Trunk	HAF4037A, 806-941MHz	3	939.0000	36.0	36	CW	E	1.06	PB	0.163	0.18	0.129	0.5	0.167	0.083	0.083
Trunk	HAF4037A, 806-941MHz	3	901.5000	4.0	4	CW	E	1.10	PB	0.018	0.007	0.010	0.5	0.013	0.006	0.006
Trunk	HAF4037A, 806-941MHz	3	940.5000	4.0	4	CW	E	1.06	PB	0.02	0.019	0.013	0.5	0.018	0.009	0.009

MPE calculations are defined in Section 15.

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.	MPE Measurements			DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3				
Trunk	HAF4013A, 806-941MHz	5.15	806.0000	42.0	42	CW	E	1.20	PF	0.152	0.076	0.038	0.5	0.106	0.053	0.053
Trunk	HAF4013A, 806-941MHz	5.15	815.0000	42.0	42	CW	E	1.19	PF	0.149	0.045	0.087	0.5	0.111	0.056	0.056
Trunk	HAF4013A, 806-941MHz	5.15	824.0000	42.0	42	CW	E	1.18	PF	0.16	0.037	0.085	0.5	0.111	0.055	0.055
Trunk	HAF4013A, 806-941MHz	5.15	851.0000	42.0	42	CW	E	1.15	PF	0.133	0.025	0.043	0.5	0.077	0.039	0.039
Trunk	HAF4013A, 806-941MHz	5.15	860.0000	42.0	42	CW	E	1.14	PF	0.143	0.034	0.047	0.5	0.085	0.043	0.043
Trunk	HAF4013A, 806-941MHz	5.15	869.0000	42.0	42	CW	E	1.14	PF	0.071	0.018	0.03	0.5	0.045	0.023	0.023
Trunk	HAF4013A, 806-941MHz	5.15	896.0000	36.0	36	CW	E	1.11	PF	0.118	0.041	0.020	0.5	0.066	0.033	0.033
Trunk	HAF4013A, 806-941MHz	5.15	898.5000	36.0	36	CW	E	1.10	PF	0.138	0.037	0.017	0.5	0.070	0.035	0.035
Trunk	HAF4013A, 806-941MHz	5.15	900.0000	36.0	36	CW	E	1.10	PF	0.115	0.032	0.018	0.5	0.061	0.030	0.030
Trunk	HAF4013A, 806-941MHz	5.15	935.0000	36.0	36	CW	E	1.07	PF	0.078	0.038	0.030	0.5	0.052	0.026	0.026
Trunk	HAF4013A, 806-941MHz	5.15	937.5000	36.0	36	CW	E	1.06	PF	0.053	0.027	0.025	0.5	0.037	0.019	0.019
Trunk	HAF4013A, 806-941MHz	5.15	939.0000	36.0	36	CW	E	1.06	PF	0.062	0.033	0.024	0.5	0.042	0.021	0.021
Trunk	HAF4013A, 806-941MHz	5.15	901.5000	4.0	4	CW	E	1.10	PF	0.008	0.003	0.001	0.5	0.004	0.002	0.002
Trunk	HAF4013A, 806-941MHz	5.15	940.5000	4.0	4	CW	E	1.06	PF	0.005	0.001	0.001	0.5	0.002	0.001	0.001

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4036A, 806-941MHz	2.14	806.0000	42.0	42	CW	E	1.20	PF	0.146	0.068	0.047	0.5	0.104	0.052	0.052
Trunk	HAF4036A, 806-941MHz	2.14	815.0000	42.0	42	CW	E	1.19	PF	0.129	0.046	0.082	0.5	0.102	0.051	0.051
Trunk	HAF4036A, 806-941MHz	2.14	824.0000	42.0	42	CW	E	1.18	PF	0.162	0.048	0.098	0.5	0.121	0.061	0.061
Trunk	HAF4036A, 806-941MHz	2.14	851.0000	42.0	42	CW	E	1.15	PF	0.134	0.023	0.043	0.5	0.077	0.038	0.038
Trunk	HAF4036A, 806-941MHz	2.14	860.0000	42.0	42	CW	E	1.14	PF	0.104	0.027	0.047	0.5	0.068	0.034	0.034
Trunk	HAF4036A, 806-941MHz	2.14	869.0000	42.0	42	CW	E	1.14	PF	0.123	0.017	0.037	0.5	0.067	0.034	0.034
Trunk	HAF4036A, 806-941MHz	2.14	896.0000	36.0	36	CW	E	1.11	PF	0.128	0.040	0.018	0.5	0.069	0.034	0.034
Trunk	HAF4036A, 806-941MHz	2.14	898.5000	36.0	36	CW	E	1.10	PF	0.144	0.03	0.024	0.5	0.073	0.036	0.036
Trunk	HAF4036A, 806-941MHz	2.14	900.0000	36.0	36	CW	E	1.10	PF	0.103	0.023	0.016	0.5	0.052	0.026	0.026
Trunk	HAF4036A, 806-941MHz	2.14	935.0000	36.0	36	CW	E	1.07	PF	0.047	0.033	0.013	0.5	0.033	0.017	0.017
Trunk	HAF4036A, 806-941MHz	2.14	937.5000	36.0	36	CW	E	1.06	PF	0.050	0.036	0.011	0.5	0.034	0.017	0.017
Trunk	HAF4036A, 806-941MHz	2.14	939.0000	36.0	36	CW	E	1.06	PF	0.036	0.026	0.008	0.5	0.025	0.012	0.012
Trunk	HAF4036A, 806-941MHz	2.14	901.5000	4.0	4	CW	E	1.10	PF	0.008	0.002	0.001	0.5	0.004	0.002	0.002
Trunk	HAF4036A, 806-941MHz	2.14	940.5000	4.0	4	CW	E	1.06	PF	0.002	0.002	0.001	0.5	0.002	0.001	0.001

MPE calculations are defined in Section 15.

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Trunk	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	PF	0.295	0.138	0.104	0.5	0.215	0.107	0.107
Trunk	HAF4037A, 806-941MHz	3	815.0000	42.0	42	CW	E	1.19	PF	0.275	0.136	0.172	0.5	0.231	0.116	0.116
Trunk	HAF4037A, 806-941MHz	3	824.0000	42.0	42	CW	E	1.18	PF	0.325	0.140	0.212	0.5	0.266	0.133	0.133
Trunk	HAF4037A, 806-941MHz	3	851.0000	42.0	42	CW	E	1.15	PF	0.171	0.058	0.079	0.5	0.118	0.059	0.059
Trunk	HAF4037A, 806-941MHz	3	860.0000	42.0	42	CW	E	1.14	PF	0.148	0.066	0.034	0.5	0.094	0.047	0.047
Trunk	HAF4037A, 806-941MHz	3	869.0000	42.0	42	CW	E	1.14	PF	0.136	0.040	0.048	0.5	0.085	0.043	0.043
Trunk	HAF4037A, 806-941MHz	3	896.0000	36.0	36	CW	E	1.11	PF	0.188	0.053	0.023	0.5	0.098	0.049	0.049
Trunk	HAF4037A, 806-941MHz	3	898.5000	36.0	36	CW	E	1.10	PF	0.218	0.034	0.028	0.5	0.103	0.051	0.051
Trunk	HAF4037A, 806-941MHz	3	900.0000	36.0	36	CW	E	1.10	PF	0.209	0.037	0.024	0.5	0.099	0.050	0.050
Trunk	HAF4037A, 806-941MHz	3	935.0000	36.0	36	CW	E	1.07	PF	0.110	0.096	0.060	0.5	0.095	0.047	0.047
Trunk	HAF4037A, 806-941MHz	3	937.5000	36.0	36	CW	E	1.06	PF	0.104	0.056	0.058	0.5	0.077	0.039	0.039
Trunk	HAF4037A, 806-941MHz	3	939.0000	36.0	36	CW	E	1.06	PF	0.086	0.097	0.041	0.5	0.079	0.040	0.040
Trunk	HAF4037A, 806-941MHz	3	901.5000	4.0	4	CW	E	1.10	PF	0.019	0.003	0.003	0.5	0.009	0.005	0.005
Trunk	HAF4037A, 806-941MHz	3	940.5000	4.0	4	CW	E	1.06	PF	0.007	0.006	0.004	0.5	0.006	0.003	0.003

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4013A, 806-941MHz	5.15	806.0000	42.0	42	CW	E	1.20	PB	0.026	0.022	0.027	0.5	0.030	0.015	0.015
Roof	HAF4013A, 806-941MHz	5.15	815.0000	42.0	42	CW	E	1.19	PB	0.015	0.014	0.024	0.5	0.021	0.011	0.011
Roof	HAF4013A, 806-941MHz	5.15	824.0000	42.0	42	CW	E	1.18	PB	0.009	0.006	0.008	0.5	0.009	0.005	0.005
Roof	HAF4013A, 806-941MHz	5.15	851.0000	42.0	42	CW	E	1.15	PB	0.012	0.008	0.013	0.5	0.013	0.006	0.006
Roof	HAF4013A, 806-941MHz	5.15	860.0000	42.0	42	CW	E	1.14	PB	0.026	0.007	0.015	0.5	0.018	0.009	0.009
Roof	HAF4013A, 806-941MHz	5.15	869.0000	42.0	42	CW	E	1.14	PB	0.021	0.005	0.011	0.5	0.014	0.007	0.007
Roof	HAF4013A, 806-941MHz	5.15	896.0000	36.0	36	CW	E	1.11	PB	0.020	0.011	0.011	0.5	0.016	0.008	0.008
Roof	HAF4013A, 806-941MHz	5.15	898.5000	36.0	36	CW	E	1.10	PB	0.016	0.012	0.007	0.5	0.013	0.006	0.006
Roof	HAF4013A, 806-941MHz	5.15	900.0000	36.0	36	CW	E	1.10	PB	0.017	0.008	0.012	0.5	0.014	0.007	0.007
Roof	HAF4013A, 806-941MHz	5.15	935.0000	36.0	36	CW	E	1.07	PB	0.005	0.006	0.013	0.5	0.009	0.004	0.004
Roof	HAF4013A, 806-941MHz	5.15	937.5000	36.0	36	CW	E	1.06	PB	0.004	0.004	0.012	0.5	0.007	0.004	0.004
Roof	HAF4013A, 806-941MHz	5.15	939.0000	36.0	36	CW	E	1.06	PB	0.004	0.005	0.010	0.5	0.007	0.003	0.003
Roof	HAF4013A, 806-941MHz	5.15	901.5000	4.0	4	CW	E	1.10	PB	0.002	0.001	0.001	0.5	0.001	0.001	0.001
Roof	HAF4013A, 806-941MHz	5.15	940.5000	4.0	4	CW	E	1.06	PB	0.001	0.001	0.001	0.5	0.001	0.001	0.001

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4036A, 806-941MHz	2.14	806.0000	42.0	42	CW	E	1.20	PB	0.027	0.022	0.026	0.5	0.030	0.015	0.015
Roof	HAF4036A, 806-941MHz	2.14	815.0000	42.0	42	CW	E	1.19	PB	0.023	0.014	0.040	0.5	0.031	0.015	0.015
Roof	HAF4036A, 806-941MHz	2.14	824.0000	42.0	42	CW	E	1.18	PB	0.012	0.007	0.03	0.5	0.019	0.010	0.010
Roof	HAF4036A, 806-941MHz	2.14	851.0000	42.0	42	CW	E	1.15	PB	0.015	0.009	0.014	0.5	0.015	0.007	0.007
Roof	HAF4036A, 806-941MHz	2.14	860.0000	42.0	42	CW	E	1.14	PB	0.023	0.014	0.015	0.5	0.020	0.010	0.010
Roof	HAF4036A, 806-941MHz	2.14	869.0000	42.0	42	CW	E	1.14	PB	0.018	0.014	0.014	0.5	0.017	0.009	0.009
Roof	HAF4036A, 806-941MHz	2.14	896.0000	36.0	36	CW	E	1.11	PB	0.018	0.011	0.014	0.5	0.016	0.008	0.008
Roof	HAF4036A, 806-941MHz	2.14	898.5000	36.0	36	CW	E	1.10	PB	0.018	0.011	0.011	0.5	0.015	0.007	0.007
Roof	HAF4036A, 806-941MHz	2.14	900.0000	36.0	36	CW	E	1.10	PB	0.018	0.012	0.014	0.5	0.016	0.008	0.008
Roof	HAF4036A, 806-941MHz	2.14	935.0000	36.0	36	CW	E	1.07	PB	0.006	0.006	0.021	0.5	0.012	0.006	0.006
Roof	HAF4036A, 806-941MHz	2.14	937.5000	36.0	36	CW	E	1.06	PB	0.004	0.003	0.013	0.5	0.007	0.004	0.004
Roof	HAF4036A, 806-941MHz	2.14	939.0000	36.0	36	CW	E	1.06	PB	0.003	0.003	0.01	0.5	0.006	0.003	0.003
Roof	HAF4036A, 806-941MHz	2.14	901.5000	4.0	4	CW	E	1.10	PB	0.001	0.001	0.001	0.5	0.001	0.001	0.001
Roof	HAF4036A, 806-941MHz	2.14	940.5000	4.0	4	CW	E	1.06	PB	0.001	0.001	0.001	0.5	0.001	0.001	0.001

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	PB	0.065	0.049	0.059	0.5	0.069	0.035	0.035
Roof	HAF4037A, 806-941MHz	3	815.0000	42.0	42	CW	E	1.19	PB	0.051	0.041	0.035	0.5	0.050	0.025	0.025
Roof	HAF4037A, 806-941MHz	3	824.0000	42.0	42	CW	E	1.18	PB	0.026	0.03	0.031	0.5	0.034	0.017	0.017
Roof	HAF4037A, 806-941MHz	3	851.0000	42.0	42	CW	E	1.15	PB	0.041	0.022	0.031	0.5	0.036	0.018	0.018
Roof	HAF4037A, 806-941MHz	3	860.0000	42.0	42	CW	E	1.14	PB	0.049	0.020	0.039	0.5	0.041	0.021	0.021
Roof	HAF4037A, 806-941MHz	3	869.0000	42.0	42	CW	E	1.14	PB	0.068	0.038	0.036	0.5	0.054	0.027	0.027
Roof	HAF4037A, 806-941MHz	3	896.0000	36.0	36	CW	E	1.11	PB	0.047	0.024	0.020	0.5	0.034	0.017	0.017
Roof	HAF4037A, 806-941MHz	3	898.5000	36.0	36	CW	E	1.10	PB	0.041	0.024	0.029	0.5	0.034	0.017	0.017
Roof	HAF4037A, 806-941MHz	3	900.0000	36.0	36	CW	E	1.10	PB	0.042	0.027	0.030	0.5	0.036	0.018	0.018
Roof	HAF4037A, 806-941MHz	3	935.0000	36.0	36	CW	E	1.07	PB	0.017	0.023	0.058	0.5	0.035	0.017	0.017
Roof	HAF4037A, 806-941MHz	3	937.5000	36.0	36	CW	E	1.06	PB	0.015	0.024	0.025	0.5	0.023	0.011	0.011
Roof	HAF4037A, 806-941MHz	3	939.0000	36.0	36	CW	E	1.06	PB	0.012	0.009	0.028	0.5	0.017	0.009	0.009
Roof	HAF4037A, 806-941MHz	3	901.5000	4.0	4	CW	E	1.10	PB	0.004	0.001	0.002	0.5	0.003	0.001	0.001
Roof	HAF4037A, 806-941MHz	3	940.5000	4.0	4	CW	E	1.06	PB	0.001	0.002	0.003	0.5	0.002	0.001	0.001

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4013A, 806-941MHz	5.15	806.0000	42.0	42	CW	E	1.20	PF	0.021	0.013	0.020	0.5	0.022	0.011	0.011
Roof	HAF4013A, 806-941MHz	5.15	815.0000	42.0	42	CW	E	1.19	PF	0.006	0.010	0.016	0.5	0.013	0.006	0.006
Roof	HAF4013A, 806-941MHz	5.15	824.0000	42.0	42	CW	E	1.18	PF	0.013	0.005	0.013	0.5	0.012	0.006	0.006
Roof	HAF4013A, 806-941MHz	5.15	851.0000	42.0	42	CW	E	1.15	PF	0.009	0.008	0.006	0.5	0.009	0.004	0.004
Roof	HAF4013A, 806-941MHz	5.15	860.0000	42.0	42	CW	E	1.14	PF	0.004	0.008	0.008	0.5	0.008	0.004	0.004
Roof	HAF4013A, 806-941MHz	5.15	869.0000	42.0	42	CW	E	1.14	PF	0.004	0.004	0.013	0.5	0.008	0.004	0.004
Roof	HAF4013A, 806-941MHz	5.15	896.0000	36.0	36	CW	E	1.11	PF	0.010	0.008	0.021	0.5	0.014	0.007	0.007
Roof	HAF4013A, 806-941MHz	5.15	898.5000	36.0	36	CW	E	1.10	PF	0.003	0.005	0.015	0.5	0.008	0.004	0.004
Roof	HAF4013A, 806-941MHz	5.15	900.0000	36.0	36	CW	E	1.10	PF	0.006	0.006	0.018	0.5	0.011	0.006	0.006
Roof	HAF4013A, 806-941MHz	5.15	935.0000	36.0	36	CW	E	1.07	PF	0.007	0.011	0.004	0.5	0.008	0.004	0.004
Roof	HAF4013A, 806-941MHz	5.15	937.5000	36.0	36	CW	E	1.06	PF	0.004	0.005	0.005	0.5	0.005	0.002	0.002
Roof	HAF4013A, 806-941MHz	5.15	939.0000	36.0	36	CW	E	1.06	PF	0.004	0.005	0.006	0.5	0.005	0.003	0.003
Roof	HAF4013A, 806-941MHz	5.15	901.5000	4.0	4	CW	E	1.10	PF	0.000	0.001	0.001	0.5	0.001	0.000	0.000
Roof	HAF4013A, 806-941MHz	5.15	940.5000	4.0	4	CW	E	1.06	PF	0.001	0	0	0.5	0.000	0.000	0.000

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4036A, 806-941MHz	2.14	806.0000	42.0	42	CW	E	1.20	PF	0.025	0.014	0.029	0.5	0.027	0.014	0.014
Roof	HAF4036A, 806-941MHz	2.14	815.0000	42.0	42	CW	E	1.19	PF	0.008	0.014	0.017	0.5	0.015	0.008	0.008
Roof	HAF4036A, 806-941MHz	2.14	824.0000	42.0	42	CW	E	1.18	PF	0.011	0.006	0.013	0.5	0.012	0.006	0.006
Roof	HAF4036A, 806-941MHz	2.14	851.0000	42.0	42	CW	E	1.15	PF	0.004	0.006	0.006	0.5	0.006	0.003	0.003
Roof	HAF4036A, 806-941MHz	2.14	860.0000	42.0	42	CW	E	1.14	PF	0.014	0.005	0.006	0.5	0.010	0.005	0.005
Roof	HAF4036A, 806-941MHz	2.14	869.0000	42.0	42	CW	E	1.14	PF	0.004	0.004	0.008	0.5	0.006	0.003	0.003
Roof	HAF4036A, 806-941MHz	2.14	896.0000	36.0	36	CW	E	1.11	PF	0.004	0.010	0.022	0.5	0.013	0.007	0.007
Roof	HAF4036A, 806-941MHz	2.14	898.5000	36.0	36	CW	E	1.10	PF	0.004	0.009	0.005	0.5	0.007	0.003	0.003
Roof	HAF4036A, 806-941MHz	2.14	900.0000	36.0	36	CW	E	1.10	PF	0.002	0.007	0.014	0.5	0.008	0.004	0.004
Roof	HAF4036A, 806-941MHz	2.14	935.0000	36.0	36	CW	E	1.07	PF	0.004	0.005	0.004	0.5	0.005	0.002	0.002
Roof	HAF4036A, 806-941MHz	2.14	937.5000	36.0	36	CW	E	1.06	PF	0.007	0.011	0.003	0.5	0.007	0.004	0.004
Roof	HAF4036A, 806-941MHz	2.14	939.0000	36.0	36	CW	E	1.06	PF	0.003	0.004	0.003	0.5	0.004	0.002	0.002
Roof	HAF4036A, 806-941MHz	2.14	901.5000	4.0	4	CW	E	1.10	PF	0.000	0.000	0.001	0.5	0.000	0.000	0.000
Roof	HAF4036A, 806-941MHz	2.14	940.5000	4.0	4	CW	E	1.06	PF	0	0	0.001	0.5	0.000	0.000	0.000

MPE calculations are defined in Section 15.0

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.			MPE Measurements						
										Passenger/Operator (MC) Positions						
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor	Test Pos.	Head/ Top 1/3	Chest/ Middle 1/3	Lower Trunk/ Bottom 1/3	DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Roof	HAF4037A, 806-941MHz	3	806.0000	42.0	42	CW	E	1.20	PF	0.038	0.027	0.059	0.5	0.050	0.025	0.025
Roof	HAF4037A, 806-941MHz	3	815.0000	42.0	42	CW	E	1.19	PF	0.039	0.035	0.034	0.5	0.043	0.021	0.021
Roof	HAF4037A, 806-941MHz	3	824.0000	42.0	42	CW	E	1.18	PF	0.027	0.02	0.02	0.5	0.026	0.013	0.013
Roof	HAF4037A, 806-941MHz	3	851.0000	42.0	42	CW	E	1.15	PF	0.022	0.014	0.022	0.5	0.022	0.011	0.011
Roof	HAF4037A, 806-941MHz	3	860.0000	42.0	42	CW	E	1.14	PF	0.052	0.022	0.017	0.5	0.035	0.017	0.017
Roof	HAF4037A, 806-941MHz	3	869.0000	42.0	42	CW	E	1.14	PF	0.015	0.019	0.033	0.5	0.025	0.013	0.013
Roof	HAF4037A, 806-941MHz	3	896.0000	36.0	36	CW	E	1.11	PF	0.026	0.016	0.040	0.5	0.030	0.015	0.015
Roof	HAF4037A, 806-941MHz	3	898.5000	36.0	36	CW	E	1.10	PF	0.019	0.016	0.034	0.5	0.025	0.013	0.013
Roof	HAF4037A, 806-941MHz	3	900.0000	36.0	36	CW	E	1.10	PF	0.011	0.024	0.028	0.5	0.023	0.012	0.012
Roof	HAF4037A, 806-941MHz	3	935.0000	36.0	36	CW	E	1.07	PF	0.021	0.026	0.015	0.5	0.022	0.011	0.011
Roof	HAF4037A, 806-941MHz	3	937.5000	36.0	36	CW	E	1.06	PF	0.016	0.02	0.01	0.5	0.016	0.008	0.008
Roof	HAF4037A, 806-941MHz	3	939.0000	36.0	36	CW	E	1.06	PF	0.026	0.02	0.013	0.5	0.021	0.010	0.010
Roof	HAF4037A, 806-941MHz	3	901.5000	4.0	4	CW	E	1.10	PF	0.001	0.002	0.002	0.5	0.002	0.001	0.001
Roof	HAF4037A, 806-941MHz	3	940.5000	4.0	4	CW	E	1.06	PF	0.002	0.001	0.001	0.5	0.001	0.001	0.001

MPE calculations are defined in Section 15.0

Table D.3

LMR 8/900MHz MPE Results for FCC

Pmax (W) 42/36/4	P initial (W)	42	42	42	42	42	42	36	36	36	36	36	36	4	4
	FCC Limit (mW/cm^2)	0.54	0.54	0.55	0.57	0.57	0.58	0.60	0.60	0.60	0.62	0.63	0.63	0.60	0.63

Test Pos	Angle (deg)	Trunk/ Roof	E/H Field	Antenna no.	f1	f2	f3	f4	f5	f6	f7	f8	f9	f10	f11	f12	f13	f14
					806.0000	815.0000	824.0000	851.0000	860.0000	869.0000	896.0000	898.5000	900.0000	935.0000	937.5000	939.0000	901.5000	940.5000
BS	0	Roof	E	1	0.051	0.045	0.050	0.047	0.041	0.044	0.033	0.030	0.031	0.026	0.028	0.029	0.003	0.003
BS	0	Roof	E	2	0.050	0.044	0.048	0.040	0.042	0.038	0.028	0.025	0.025	0.023	0.023	0.022	0.003	0.002
BS	0	Roof	E	3	0.067	0.057	0.062	0.054	0.055	0.052	0.044	0.035	0.039	0.038	0.039	0.039	0.005	0.005
BS	0	Trunk	E	1	0.102	0.096	0.092	0.093	0.093	0.088	0.066	0.060	0.059	0.062	0.056	0.056	0.006	0.006
BS	0	Trunk	E	2	0.100	0.090	0.080	0.077	0.076	0.073	0.051	0.046	0.047	0.049	0.044	0.043	0.005	0.005
BS	0	Trunk	E	3	0.107	0.089	0.088	0.091	0.085	0.093	0.058	0.054	0.054	0.081	0.077	0.074	0.006	0.009
BS	45	Trunk	E	3	0.089													
BS	90	Trunk	E	3	0.106													
PB	0	Roof	E	1	0.015	0.011	0.005	0.006	0.009	0.007	0.008	0.006	0.007	0.004	0.004	0.003	0.001	0.001
PB	0	Roof	E	2	0.015	0.015	0.010	0.007	0.010	0.009	0.008	0.007	0.008	0.006	0.004	0.003	0.001	0.001
PB	0	Roof	E	3	0.035	0.025	0.017	0.018	0.021	0.027	0.017	0.017	0.018	0.017	0.011	0.009	0.001	0.001
PB	0	Trunk	E	1	0.096	0.107	0.074	0.055	0.059	0.044	0.038	0.031	0.030	0.029	0.025	0.033	0.002	0.003
PB	0	Trunk	E	2	0.117	0.097	0.057	0.049	0.023	0.016	0.019	0.024	0.023	0.021	0.022	0.018	0.002	0.001
PB	0	Trunk	E	3	0.188	0.211	0.177	0.101	0.121	0.078	0.045	0.067	0.059	0.076	0.093	0.083	0.006	0.009
PF	0	Roof	E	1	0.011	0.006	0.006	0.004	0.004	0.004	0.007	0.004	0.006	0.004	0.002	0.003	0.000	0.000
PF	0	Roof	E	2	0.014	0.008	0.006	0.003	0.005	0.003	0.007	0.003	0.004	0.002	0.004	0.002	0.000	0.000
PF	0	Roof	E	3	0.025	0.021	0.013	0.011	0.017	0.013	0.015	0.013	0.012	0.011	0.008	0.010	0.001	0.001
PF	0	Trunk	E	1	0.053	0.056	0.055	0.039	0.043	0.023	0.033	0.035	0.030	0.026	0.019	0.021	0.002	0.001
PF	0	Trunk	E	2	0.052	0.051	0.061	0.038	0.034	0.034	0.034	0.036	0.026	0.017	0.017	0.012	0.002	0.001
PF	0	Trunk	E	3	0.107	0.116	0.133	0.059	0.047	0.043	0.049	0.051	0.050	0.047	0.039	0.040	0.005	0.003