MOTOROLA SOLUTIONS

MS ISO/IEC 17025 TESTING SAMM No. 0826

CERTIFICATE 2518.05

DECLARATION OF COMPLIANCE: MPE ASSESSMENT

Motorola Solutions Inc.
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Date of Report: 1/10/2023
Report Revision: C

Responsible Engineer:	Puteri Alifah Ilyana Binti Nor Rahim (EME Engineer)
Report author:	Hamidi Bin Ismail (EME Senior Technician)
Date(s) Tested:	11/3/2022-11/8/2022, 11/24/2022-11/25/2022
Manufacturer:	Motorola Solutions Inc.
Date submitted for test:	11/3/2022
DUT Description:	XPR 5580e 8/900M 35W GOB GNSS CD
Test TX mode(s):	CW
Max. Power output:	Refer to Table 6
TX Frequency Bands:	806-941 MHz
Signaling type:	FM, TDMA
Model(s) Tested:	AAM28UMN9RA1AN-1 (PMUF2011A) (IC Model: PMUF2011ABUNWA)
Model(s) Certified:	AAM28UMN9RA1AN-1 (PMUF2011A) (IC Model: PMUF2011ABUNWA), AAM28UMC9RA1AN-1 (PMUF2011A) (IC Model: PMUF2011ABTNWA), AAM28UMN9WA1AN-1 (PMUF2011A) (IC Model: PMUF2011ABUNYA)
Serial Number(s):	203TYT0045
Firmware Version:	D02.22.02.3002
Applicant Name:	Motorola Solutions Inc.
Applicant Address:	8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
Classification:	Occupational/Controlled Environment
FCC ID:	AZ492FT7170
IC:	109U-92FT7170
ISED Test Site registration:	24843
FCC Test Firm Registration Number:	823256

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

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

Saw Sun Hock (Approved Signatory)
Approval Date: 1/10/2023

Document Revision History

Date	Revision	Comments
11/25/2022	A	Initial release
12/15/2022	B	Update the cover page model number
1/10/2023	C	Update the Table 1 & 14

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 AAM28UMN9RA1AN-1 (PMUF2011A) (IC Model: PMUF2011ABUNWA).

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	806-940 (LMR 8/900)	0.201	37.5	0.115	20.9	0.028	5.2	0.046	8.4

3.0 Abbreviations / Definitions

CNR: Calibration Not Required
CW: Continuous Wave
DUT: Device Under Test
EME: Electromagnetic Energy
FM: Frequency Modulation
MPE: Maximum Permissible Exposure
LMR: Land Mobile Radio
NA: Not Applicable
BS: Bystander
PB: Passenger Back seat
PF: Passenger Front seat
PTT: Push to Talk
TDMA: Time Division Multiple Access

4.0 Referenced Standards and Guidelines

This product is design 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.
- American National Standards Institute (ANSI) / Institute of Electrical and Electronics Engineers (IEEE) C95. 1-1999
- 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 mW/cm^2	ICNIRP W/m^2	IEEE C95.1 1992/1999 mW/cm^2	IEEE C95.1 2005 W/m^2	RSS-102 Issue 5 2015 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 – 300			1.0	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 mW/cm^2	ICNIRP W/m^2	IEEE C95.1 1992/1999 mW/cm^2	IEEE C95.1 2005 W/m^2	RSS-102 Issue 5 2015 W/m^2
300 – 3,000			f/300	f/30	
400 – 2,000		f/40			
1,500 – 15,000					
1,500 – 100,000	5.0				
2,000 – 300,000		50.0			
3,000 – 300,000			10.0	100.0	
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 mW/cm^2	ICNIRP W/m^2	IEEE C95.1 1992/1999 mW/cm^2	IEEE C95.1 2005 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			0.2		
100 – 400				2.0	
300 – 1,500	f/1,500				
300 – 6000					$0.02619\,f^{0.6834}$
400 – 2,000		f/200		f/200	
300 – 15,000			f/1,500		
1,500 – 15,000					
1,500 – 100,000	1.0				
2,000 – 100,000				10.0	
2,000 – 300,000		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	00206805 00237361	01/27/2022	01/27/2023

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.

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 (W)
LMR	806-824, 851-870	50	42
	896-901, 935-940		36
	901-902, 940-941		8

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

Refer to Table 7 for complete list of tested antennas.

Below are additional antenna kits that are electrically identical to the tested antennas or have a BNC connector or optional GPS Base:

No.	Antenna Models	Description	Selected for test	Tested	Comments
1	HAF4025A	806-941 MHz, 1/2 Wave, 2.14dBi	Yes	No	By similarity to HAF4019A
2	HAF4029A	806-941 MHz, 1/2 Wave, 2.14dBi	Yes	No	By similarity to HAF4019A
3	HAF4026A	806-941 MHz, 1/2 Wave, 3dBi	Yes	No	By similarity to HAF4020A
4	HAF4030A	806-941 MHz, 1/4 Wave, 3dBi	Yes	No	By similarity to HAF4022A
5	HAF4027A	806-941 MHz, 1/2 Wave, 5dBi	Yes	No	By similarity to HAF4023A
6	HAF4033A	806-941 MHz, 1/2 Wave, 5dBi	Yes	No	By similarity to HAF4023A
7	HAF4013A	806-941 MHz, 1/4 Wave, 3dBi	Yes	No	By similarity to HAF4022A
8	HAF4032A	806-941 MHz, 1/4 Wave, 3dBi	Yes	No	By similarity to HAF4022A

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 2 m vertical line for each of the (3) bystander test locations indicated in Appendix A with 20 cm height increments, with the distance between the antenna and the geometric center of the probe sensor equal to 60 cm (for 8/900 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 60 cm (42 cm 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 85 cm 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 20 cm 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 20 cm 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 20 cm height increments, with the distance between the antenna and the geometric center of the probe sensor equal to 60 cm (for 8/900 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 20 cm 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 20 cm 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 is use 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	HAF4019A	806-941	7.7	2.14	1/4 wave	R/T	806-940	13	14
2	HAF4020A	806-941	33.5	3.0	1/2 wave	R/T	806-940	9	12
3	*HAF4022A	806-941	6.2	3.0	1/2 wave	R/T	806-940	9	12
4	HAF4023A	806-941	56.0	5.0	1/2 wave	R/T	806-940	9	12

Note:* HAF4022A is not offer but was test because the radiating element in the kits that is being offer as HAF4013A, HAF4030A and HAF4032A.

Per FCC requirement, the ERP power for the frequency bands 901-902 MHz and 940-941 MHz cannot exceed 7W. Therefore, data indicated in these bands is limited to the HAF4019A antenna.

17.0 Test Results Summary

17.1 MPE Test Results Summary for LMR

Table 8

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

Notes:
Blue fonts: Frequencies regulated by FCC/ISED for 900MHz band

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Trunk	BS	E	0	1	HAF4019A (806 - 941 MHz)	42.0	41.6	806.0125	0.07	0.54	13.8	0.25	29.1
							41.9	815.5000	0.08	0.54	14.8	0.26	31.5
							41.2	823.9875	0.08	0.55	14.6	0.26	31.2
							40.2	851.0125	0.09	0.57	16.2	0.26	34.9
							39.9	860.5000	0.10	0.57	16.5	0.27	35.7
							40.3	868.9875	0.08	0.58	14.6	0.27	31.6
							34.4	896.0125	0.07	0.60	11.0	0.27	24.2
							34.9	899.0000	0.07	0.60	11.4	0.27	24.9
							35.5	900.9875	0.07	0.60	11.7	0.27	25.7
							35.5	935.0125	0.09	0.62	14.9	0.28	33.0
							36.0	938.0000	0.09	0.63	14.5	0.28	32.2
							35.9	939.9875	0.08	0.63	13.0	0.28	28.9
							7.8	901.5125	0.02	0.60	2.5	0.27	5.5
							7.8	940.5125	0.02	0.63	2.6	0.28	5.8
				2	HAF4020A (806 - 941 MHz)	42.0	41.6	806.0125	0.10	0.54	19.1	0.25	40.4
							41.9	815.5000	0.10	0.54	18.3	0.26	39.0
							41.2	823.9875	0.10	0.55	18.6	0.26	39.6
							40.2	851.0125	0.09	0.57	16.3	0.26	35.2
							39.9	860.5000	0.09	0.57	15.9	0.27	34.4
							40.3	868.9875	0.08	0.58	13.1	0.27	28.4
							34.4	896.0125	0.06	0.60	9.6	0.27	21.1
							34.9	899.0000	0.06	0.60	10.2	0.27	22.3
							35.5	900.9875	0.07	0.60	11.0	0.27	24.1
							35.5	935.0125	0.10	0.62	16.6	0.28	36.8
							36.0	938.0000	0.10	0.63	16.5	0.28	36.7
							35.9	939.9875	0.10	0.63	16.1	0.28	35.9

Table 8 (Continued)

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

Notes:
Results highlight in yellow are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Angle (Degree)	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Trunk	BS	E	0	3	HAF4022A (806 - 941 MHz)	42.0	41.6	806.0125	0.11	0.54	19.9	0.25	42.2
							41.9	815.5000	0.10	0.54	18.0	0.26	38.2
							41.2	823.9875	0.10	0.55	17.3	0.26	37.0
							40.2	851.0125	0.09	0.57	15.6	0.26	33.5
							39.9	860.5000	0.09	0.57	15.7	0.27	34.0
							40.3	868.9875	0.08	0.58	13.6	0.27	29.6
							34.4	896.0125	0.06	0.60	10.1	0.27	22.0
							34.9	899.0000	0.06	0.60	10.3	0.27	22.5
							35.5	900.9875	0.05	0.60	7.5	0.27	16.4
							35.5	935.0125	0.05	0.62	8.1	0.28	18.0
							36.0	938.0000	0.05	0.63	8.3	0.28	18.4
							35.9	939.9875	0.05	0.63	7.6	0.28	17.0
				4	HAF4023A (806 - 941 MHz)	42.0	41.6	806.0125	0.10	0.54	18.8	0.25	39.8
							41.9	815.5000	0.10	0.54	18.5	0.26	39.3
							41.2	823.9875	0.12	0.55	**20.9**	0.26	**44.6**
							40.2	851.0125	0.09	0.57	16.0	0.26	34.5
							39.9	860.5000	0.09	0.57	15.2	0.27	32.9
							40.3	868.9875	0.08	0.58	13.0	0.27	28.3
							34.4	896.0125	0.06	0.60	9.5	0.27	20.8
							34.9	899.0000	0.06	0.60	9.8	0.27	21.5
							35.5	900.9875	0.06	0.60	10.4	0.27	22.8
							35.5	935.0125	0.10	0.62	15.5	0.28	34.5
							36.0	938.0000	0.09	0.63	14.9	0.28	33.1
							35.9	939.9875	0.09	0.63	14.5	0.28	32.3
							41.2	823.9875	0.12	0.55	20.9	0.26	44.6
							41.2	823.9875	0.12	0.55	20.9	0.26	44.6
Trunk	BS	E	45	4	HAF4023A (806 - 941 MHz)	42.0	41.2	823.9875	0.05	0.55	9.8	0.26	20.9
Trunk	BS	E	90	4	HAF4023A (806 - 941 MHz)	42.0	41.2	823.9875	0.08	0.55	13.8	0.26	29.5

Table 9

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

Notes:
Blue fonts: Frequencies regulated by FCC/ISED for 900MHz band

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	BS	E	1	HAF4019A (806 - 941 MHz)	42.0	41.6	806.0125	0.03	0.54	4.6	0.25	9.7
						41.9	815.5000	0.03	0.54	5.3	0.26	11.4
						41.2	823.9875	0.03	0.55	4.8	0.26	10.2
						40.2	851.0125	0.03	0.57	5.4	0.26	11.6
						39.9	860.5000	0.03	0.57	5.7	0.27	12.4
						40.3	868.9875	0.03	0.58	4.3	0.27	9.4
						34.4	896.0125	0.02	0.60	3.6	0.27	7.8
						34.9	899.0000	0.02	0.60	3.9	0.27	8.6
						35.5	900.9875	0.03	0.60	4.3	0.27	9.3
						35.5	935.0125	0.03	0.62	4.5	0.28	10.1
						36.0	938.0000	0.03	0.63	4.5	0.28	10.0
						35.9	939.9875	0.03	0.63	4.2	0.28	9.3
						7.8	901.5125	0.01	0.60	1.2	0.27	2.7
						7.8	940.5125	0.01	0.63	1.0	0.28	2.3
			2	HAF4020A (806 - 941 MHz)	42.0	41.6	806.0125	0.04	0.54	6.7	0.25	14.2
						41.9	815.5000	0.04	0.54	7.7	0.26	16.4
						41.2	823.9875	0.04	0.55	6.4	0.26	13.7
						40.2	851.0125	0.03	0.57	5.6	0.26	12.2
						39.9	860.5000	0.04	0.57	6.2	0.27	13.3
						40.3	868.9875	0.03	0.58	4.4	0.27	9.6
						34.4	896.0125	0.02	0.60	3.7	0.27	8.1
						34.9	899.0000	0.03	0.60	4.1	0.27	9.1
						35.5	900.9875	0.03	0.60	4.6	0.27	10.1
						35.5	935.0125	0.04	0.62	5.8	0.28	12.9
						36.0	938.0000	0.04	0.63	5.7	0.28	12.6
						35.9	939.9875	0.03	0.63	5.4	0.28	11.9

Table 9 (Continued)

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

Notes:
Results highlight in yellow are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Roof	BS	E	3	HAF4022A (806 - 941 MHz)	42.0	41.6	806.0125	0.03	0.54	5.6	0.25	11.8
						41.9	815.5000	0.03	0.54	6.1	0.26	13.0
						41.2	823.9875	0.03	0.55	4.8	0.26	10.3
						40.2	851.0125	0.03	0.57	4.6	0.26	9.9
						39.9	860.5000	0.03	0.57	5.0	0.27	10.7
						40.3	868.9875	0.02	0.58	3.5	0.27	7.5
						34.4	896.0125	0.02	0.60	2.5	0.27	5.5
						34.9	899.0000	0.02	0.60	2.8	0.27	6.2
						35.5	900.9875	0.02	0.60	3.0	0.27	6.7
						35.5	935.0125	0.02	0.62	3.1	0.28	7.0
						36.0	938.0000	0.02	0.63	3.1	0.28	6.9
						35.9	939.9875	0.02	0.63	2.9	0.28	6.6
			4	HAF4023A (806 - 941 MHz)	42.0	41.6	806.0125	0.04	0.54	7.6	0.25	16.0
						41.9	815.5000	0.05	0.54	**8.4**	0.26	**17.8**
						41.2	823.9875	0.04	0.55	7.3	0.26	15.6
						40.2	851.0125	0.04	0.57	6.5	0.26	14.0
						39.9	860.5000	0.04	0.57	6.7	0.27	14.5
						40.3	868.9875	0.03	0.58	4.7	0.27	10.2
						34.4	896.0125	0.02	0.60	3.9	0.27	8.6
						34.9	899.0000	0.03	0.60	4.2	0.27	9.2
						35.5	900.9875	0.03	0.60	4.8	0.27	10.5
						35.5	935.0125	0.04	0.62	5.9	0.28	13.0
						36.0	938.0000	0.04	0.63	5.7	0.28	12.7
						35.9	939.9875	0.04	0.63	5.5	0.28	12.2

Table 10

MPE assessment for LMR 8/900 - trunk mounted antenna – Passenger Back

Notes:
Blue fonts: Frequencies regulated by FCC/ISED for 900MHz band

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Trunk	PB	E	1	HAF4019A (806 - 941 MHz)	42.0	41.6	806.0125	0.07	0.54	12.1	0.25	25.7
						41.9	815.5000	0.04	0.54	7.5	0.26	15.9
						41.2	823.9875	0.04	0.55	6.6	0.26	14.0
						40.2	851.0125	0.03	0.57	5.4	0.26	11.6
						39.9	860.5000	0.03	0.57	5.9	0.27	12.8
						40.3	868.9875	0.03	0.58	5.7	0.27	12.3
						34.4	896.0125	0.02	0.60	3.6	0.27	7.9
						34.9	899.0000	0.02	0.60	3.9	0.27	8.5
						35.5	900.9875	0.03	0.60	4.6	0.27	10.0
						35.5	935.0125	0.04	0.62	6.0	0.28	13.4
						36.0	938.0000	0.04	0.63	5.7	0.28	12.6
						35.9	939.9875	0.04	0.63	6.1	0.28	13.5
						7.8	901.5125	0.01	0.60	1.2	0.27	2.7
						7.8	940.5125	0.01	0.63	1.3	0.28	2.9
			2	HAF4020A (806 - 941 MHz)	42.0	41.6	806.0125	0.19	0.54	34.4	0.25	72.8
						41.9	815.5000	0.19	0.54	34.3	0.26	72.9
						41.2	823.9875	0.13	0.55	23.0	0.26	49.0
						40.2	851.0125	0.10	0.57	17.8	0.26	38.4
						39.9	860.5000	0.12	0.57	20.6	0.27	44.6
						40.3	868.9875	0.09	0.58	15.2	0.27	33.0
						34.4	896.0125	0.07	0.60	11.0	0.27	24.0
						34.9	899.0000	0.07	0.60	11.7	0.27	25.6
						35.5	900.9875	0.07	0.60	12.2	0.27	26.7
						35.5	935.0125	0.09	0.62	15.0	0.28	33.2
						36.0	938.0000	0.10	0.63	15.2	0.28	33.9
						35.9	939.9875	0.11	0.63	17.4	0.28	38.7

Table 10 (Continued)

MPE assessment for LMR 8/900 - trunk mounted antenna – Passenger Back

Notes:
Results highlight in yellow are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Trunk	PB	E	3	HAF4022A (806 - 941 MHz)	42.0	41.6	806.0125	0.09	0.54	15.8	0.25	33.6
						41.9	815.5000	0.05	0.54	8.5	0.26	18.1
						41.2	823.9875	0.04	0.55	7.9	0.26	16.8
						40.2	851.0125	0.03	0.57	5.8	0.26	12.4
						39.9	860.5000	0.04	0.57	6.0	0.27	13.1
						40.3	868.9875	0.03	0.58	5.3	0.27	11.5
						34.4	896.0125	0.02	0.60	3.0	0.27	6.5
						34.9	899.0000	0.02	0.60	3.1	0.27	6.8
						35.5	900.9875	0.02	0.60	3.7	0.27	8.1
						35.5	935.0125	0.03	0.62	4.3	0.28	9.6
						36.0	938.0000	0.03	0.63	4.5	0.28	9.9
						35.9	939.9875	0.03	0.63	3.9	0.28	8.7
			4	HAF4023A (806 - 941 MHz)	42.0	41.6	806.0125	0.20	0.54	**37.5**	0.25	**79.3**
						41.9	815.5000	0.14	0.54	26.0	0.26	55.3
						41.2	823.9875	0.13	0.55	23.7	0.26	50.4
						40.2	851.0125	0.07	0.57	12.1	0.26	26.1
						39.9	860.5000	0.06	0.57	10.8	0.27	23.4
						40.3	868.9875	0.06	0.58	9.8	0.27	21.2
						34.4	896.0125	0.05	0.60	8.5	0.27	18.6
						34.9	899.0000	0.05	0.60	7.7	0.27	17.0
						35.5	900.9875	0.05	0.60	7.4	0.27	16.3
						35.5	935.0125	0.04	0.62	6.8	0.28	15.0
						36.0	938.0000	0.06	0.63	10.3	0.28	22.8
						35.9	939.9875	0.06	0.63	10.1	0.28	22.4

Table 11

MPE assessment for LMR 8/900 - roof mounted antenna – Passenger Back

Notes:
Blue fonts: Frequencies regulated by FCC/ISED for 900MHz band

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PB	E	1	HAF4019A (806 - 941 MHz)	42.0	41.6	806.0125	0.01	0.54	1.7	0.25	3.5
						41.9	815.5000	0.01	0.54	2.1	0.26	4.4
						41.2	823.9875	0.01	0.55	1.6	0.26	3.4
						40.2	851.0125	0.01	0.57	1.9	0.26	4.0
						39.9	860.5000	0.01	0.57	1.4	0.27	3.1
						40.3	868.9875	0.01	0.58	1.9	0.27	4.0
						34.4	896.0125	0.01	0.60	1.6	0.27	3.6
						34.9	899.0000	0.01	0.60	1.7	0.27	3.8
						35.5	900.9875	0.01	0.60	1.9	0.27	4.2
						35.5	935.0125	0.01	0.62	1.0	0.28	2.3
						36.0	938.0000	0.01	0.63	0.8	0.28	1.8
						35.9	939.9875	0.01	0.63	1.0	0.28	2.3
						7.8	901.5125	0.00	0.60	0.3	0.27	0.6
						7.8	940.5125	0.00	0.63	0.1	0.28	0.2
			2	HAF4020A (806 - 941 MHz)	42.0	41.6	806.0125	0.02	0.54	3.9	0.25	8.2
						41.9	815.5000	0.02	0.54	4.0	0.26	8.5
						41.2	823.9875	0.02	0.55	2.8	0.26	6.0
						40.2	851.0125	0.01	0.57	2.5	0.26	5.4
						39.9	860.5000	0.01	0.57	1.8	0.27	4.0
						40.3	868.9875	0.01	0.58	2.2	0.27	4.8
						34.4	896.0125	0.01	0.60	2.3	0.27	5.1
						34.9	899.0000	0.01	0.60	2.2	0.27	4.7
						35.5	900.9875	0.02	0.60	2.7	0.27	6.0
						35.5	935.0125	0.01	0.62	1.5	0.28	3.4
						36.0	938.0000	0.01	0.63	1.6	0.28	3.5
						35.9	939.9875	0.01	0.63	1.4	0.28	3.0

Table 11 (Continued)

MPE assessment for LMR 8/900 - roof mounted antenna – Passenger Back

Notes:
Results highlight in yellow are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Roof	PB	E	3	HAF4022A (806 - 941 MHz)	42.0	41.6	806.0125	0.01	0.54	1.9	0.25	4.0
						41.9	815.5000	0.01	0.54	2.0	0.26	4.3
						41.2	823.9875	0.01	0.55	1.8	0.26	3.8
						40.2	851.0125	0.01	0.57	1.1	0.26	2.4
						39.9	860.5000	0.01	0.57	1.2	0.27	2.7
						40.3	868.9875	0.01	0.58	1.5	0.27	3.2
						34.4	896.0125	0.01	0.60	1.4	0.27	3.1
						34.9	899.0000	0.01	0.60	1.4	0.27	3.0
						35.5	900.9875	0.01	0.60	1.6	0.27	3.5
						35.5	935.0125	0.01	0.62	0.8	0.28	1.7
						36.0	938.0000	0.00	0.63	0.6	0.28	1.3
						35.9	939.9875	0.00	0.63	0.5	0.28	1.1
			4	HAF4023A (806 - 941 MHz)	42.0	41.6	806.0125	0.03	0.54	**5.2**	0.25	**11.1**
						41.9	815.5000	0.02	0.54	4.2	0.26	8.9
						41.2	823.9875	0.01	0.55	2.1	0.26	4.5
						40.2	851.0125	0.01	0.57	1.5	0.26	3.2
						39.9	860.5000	0.01	0.57	2.1	0.27	4.5
						40.3	868.9875	0.02	0.58	2.7	0.27	5.8
						34.4	896.0125	0.01	0.60	1.7	0.27	3.7
						34.9	899.0000	0.01	0.60	1.8	0.27	4.0
						35.5	900.9875	0.01	0.60	2.1	0.27	4.6
						35.5	935.0125	0.01	0.62	1.1	0.28	2.5
						36.0	938.0000	0.01	0.63	1.3	0.28	2.9
						35.9	939.9875	0.01	0.63	1.3	0.28	2.9

Table 12

MPE assessment for LMR 8/900 - trunk mounted antenna – Passenger Front

Notes:
Blue fonts: Frequencies regulated by FCC/ISED for 900MHz band

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Trunk	PF	E	1	HAF4019A (806 - 941 MHz)	42.0	41.6	806.0125	0.03	0.54	6.2	0.25	13.2
						41.9	815.5000	0.05	0.54	8.4	0.26	17.8
						41.2	823.9875	0.04	0.55	7.2	0.26	15.3
						40.2	851.0125	0.03	0.57	4.3	0.26	9.3
						39.9	860.5000	0.02	0.57	3.7	0.27	8.0
						40.3	868.9875	0.02	0.58	4.0	0.27	8.7
						34.4	896.0125	0.03	0.60	4.9	0.27	10.7
						34.9	899.0000	0.03	0.60	5.0	0.27	10.9
						35.5	900.9875	0.03	0.60	5.0	0.27	10.9
						35.5	935.0125	0.04	0.62	6.6	0.28	14.6
						36.0	938.0000	0.03	0.63	5.3	0.28	11.7
						35.9	939.9875	0.03	0.63	5.0	0.28	11.1
						7.8	901.5125	0.01	0.60	1.4	0.27	3.2
						7.8	940.5125	0.01	0.63	1.1	0.28	2.4
			2	HAF4020A (806 - 941 MHz)	42.0	41.6	806.0125	0.06	0.54	11.7	0.25	24.7
						41.9	815.5000	0.09	0.54	16.5	0.26	35.0
						41.2	823.9875	0.06	0.55	10.2	0.26	21.8
						40.2	851.0125	0.03	0.57	6.0	0.26	12.8
						39.9	860.5000	0.03	0.57	6.0	0.27	12.9
						40.3	868.9875	0.03	0.58	5.9	0.27	12.8
						34.4	896.0125	0.05	0.60	7.5	0.27	16.5
						34.9	899.0000	0.04	0.60	7.1	0.27	15.5
						35.5	900.9875	0.05	0.60	8.4	0.27	18.5
						35.5	935.0125	0.06	0.62	9.9	0.28	21.9
						36.0	938.0000	0.06	0.63	9.4	0.28	21.0
						35.9	939.9875	0.05	0.63	8.3	0.28	18.6

Table 12 (Continued)

MPE assessment for LMR 8/900 - trunk mounted antenna – Passenger Front

Notes:
Results highlight in yellow are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Trunk	PF	E	3	HAF4022A (806 - 941 MHz)	42.0	41.6	806.0125	0.04	0.54	6.7	0.25	14.2
						41.9	815.5000	0.05	0.54	8.6	0.26	18.2
						41.2	823.9875	0.04	0.55	6.6	0.26	14.0
						40.2	851.0125	0.03	0.57	4.8	0.26	10.3
						39.9	860.5000	0.02	0.57	3.2	0.27	7.0
						40.3	868.9875	0.02	0.58	3.4	0.27	7.3
						34.4	896.0125	0.03	0.60	4.1	0.27	9.1
						34.9	899.0000	0.03	0.60	4.8	0.27	10.6
						35.5	900.9875	0.03	0.60	4.1	0.27	9.1
						35.5	935.0125	0.03	0.62	4.5	0.28	10.1
						36.0	938.0000	0.03	0.63	4.1	0.28	9.1
						35.9	939.9875	0.02	0.63	3.6	0.28	8.0
			4	HAF4023A (806 - 941 MHz)	42.0	41.6	806.0125	0.10	0.54	18.0	0.25	38.1
						41.9	815.5000	0.11	0.54	**19.2**	0.26	**40.9**
						41.2	823.9875	0.07	0.55	12.4	0.26	26.5
						40.2	851.0125	0.04	0.57	7.8	0.26	16.8
						39.9	860.5000	0.04	0.57	7.5	0.27	16.3
						40.3	868.9875	0.05	0.58	7.9	0.27	17.1
						34.4	896.0125	0.05	0.60	8.4	0.27	18.4
						34.9	899.0000	0.05	0.60	8.3	0.27	18.3
						35.5	900.9875	0.06	0.60	10.6	0.27	23.3
						35.5	935.0125	0.06	0.62	9.4	0.28	20.9
						36.0	938.0000	0.06	0.63	9.7	0.28	21.5
						35.9	939.9875	0.05	0.63	8.5	0.28	18.9

Table 13

MPE assessment for LMR 8/900 - roof mounted antenna – Passenger Front

Notes:
Blue fonts: Frequencies regulated by FCC/ISED for 900MHz band

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	%To FCC Spec Limit	ISED Limit	%To ISED Spec Limit
Roof	PF	E	1	HAF4019A (806 - 941 MHz)	42.0	41.6	806.0125	0.00	0.54	0.7	0.25	1.5
						41.9	815.5000	0.01	0.54	1.0	0.26	2.1
						41.2	823.9875	0.01	0.55	0.8	0.26	1.8
						40.2	851.0125	0.01	0.57	0.8	0.26	1.7
						39.9	860.5000	0.01	0.57	0.9	0.27	2.0
						40.3	868.9875	0.00	0.58	0.6	0.27	1.4
						34.4	896.0125	0.01	0.60	0.9	0.27	1.9
						34.9	899.0000	0.01	0.60	0.8	0.27	1.8
						35.5	900.9875	0.01	0.60	0.8	0.27	1.7
						35.5	935.0125	0.01	0.62	0.9	0.28	2.0
						36.0	938.0000	0.01	0.63	0.8	0.28	1.9
						35.9	939.9875	0.01	0.63	0.9	0.28	1.9
						7.8	901.5125	0.00	0.60	0.2	0.27	0.5
						7.8	940.5125	0.00	0.63	0.1	0.28	0.2
			2	HAF4020A (806 - 941 MHz)	42.0	41.6	806.0125	0.01	0.54	1.6	0.25	3.3
						41.9	815.5000	0.01	0.54	1.7	0.26	3.6
						41.2	823.9875	0.01	0.55	1.4	0.26	3.0
						40.2	851.0125	0.01	0.57	1.2	0.26	2.6
						39.9	860.5000	0.01	0.57	1.3	0.27	2.8
						40.3	868.9875	0.01	0.58	1.5	0.27	3.3
						34.4	896.0125	0.01	0.60	1.1	0.27	2.4
						34.9	899.0000	0.01	0.60	0.9	0.27	2.1
						35.5	900.9875	0.01	0.60	0.9	0.27	1.9
						35.5	935.0125	0.01	0.62	0.8	0.28	1.9
						36.0	938.0000	0.01	0.63	0.8	0.28	1.7
						35.9	939.9875	0.01	0.63	0.8	0.28	1.9

Table 13 (Continued)

MPE assessment for LMR 8/900 - roof mounted antenna – Passenger Front

Notes:
Results highlight in yellow are configurations with highest percentage of limits

Trunk/ Roof	Test Position	E/H Field	Antenna No.	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC Limit	% To FCC Spec Limit	ISED Limit	% To ISED Spec Limit
Roof	PF	E	3	HAF4022A (806 - 941 MHz)	42.0	41.6	806.0125	0.01	0.54	1.2	0.25	2.5
						41.9	815.5000	0.01	0.54	1.3	0.26	2.8
						41.2	823.9875	0.01	0.55	1.4	0.26	3.1
						40.2	851.0125	0.01	0.57	0.9	0.26	2.0
						39.9	860.5000	0.01	0.57	0.9	0.27	2.0
						40.3	868.9875	0.00	0.58	0.6	0.27	1.4
						34.4	896.0125	0.00	0.60	0.5	0.27	1.1
						34.9	899.0000	0.00	0.60	0.6	0.27	1.2
						35.5	900.9875	0.00	0.60	0.5	0.27	1.1
						35.5	935.0125	0.00	0.62	0.5	0.28	1.2
						36.0	938.0000	0.00	0.63	0.4	0.28	1.0
						35.9	939.9875	0.00	0.63	0.6	0.28	1.3
			4	HAF4023A (806 - 941 MHz)	42.0	41.6	806.0125	0.01	0.54	1.7	0.25	3.5
						41.9	815.5000	0.01	0.54	**1.8**	0.26	**3.9**
						41.2	823.9875	0.01	0.55	1.8	0.26	3.9
						40.2	851.0125	0.01	0.57	1.6	0.26	3.4
						39.9	860.5000	0.01	0.57	1.6	0.27	3.5
						40.3	868.9875	0.01	0.58	1.4	0.27	3.1
						34.4	896.0125	0.01	0.60	1.1	0.27	2.4
						34.9	899.0000	0.00	0.60	0.6	0.27	1.4
						35.5	900.9875	0.00	0.60	0.7	0.27	1.5
						35.5	935.0125	0.01	0.62	0.8	0.28	1.7
						36.0	938.0000	0.01	0.63	0.8	0.28	1.9
						35.9	939.9875	0.00	0.63	0.7	0.28	1.5

18.0 Conclusion

The assessments for this device were performed with an output power range as indicated in section 17.1. 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 transmitters scaled to maximum allowable power output are indicated in Table 14.

Table 14: Maximum MPE RF Exposure Summary (LMR)

Designator	Transmitters	Frequency Band (MHz)	Passenger (mW/cm^2)	Bystander (mW/cm^2)
FCC	LMR 8/900	806-940	0.201	0.115
ISED Canada	LMR 8/900	806-940	0.201	0.115

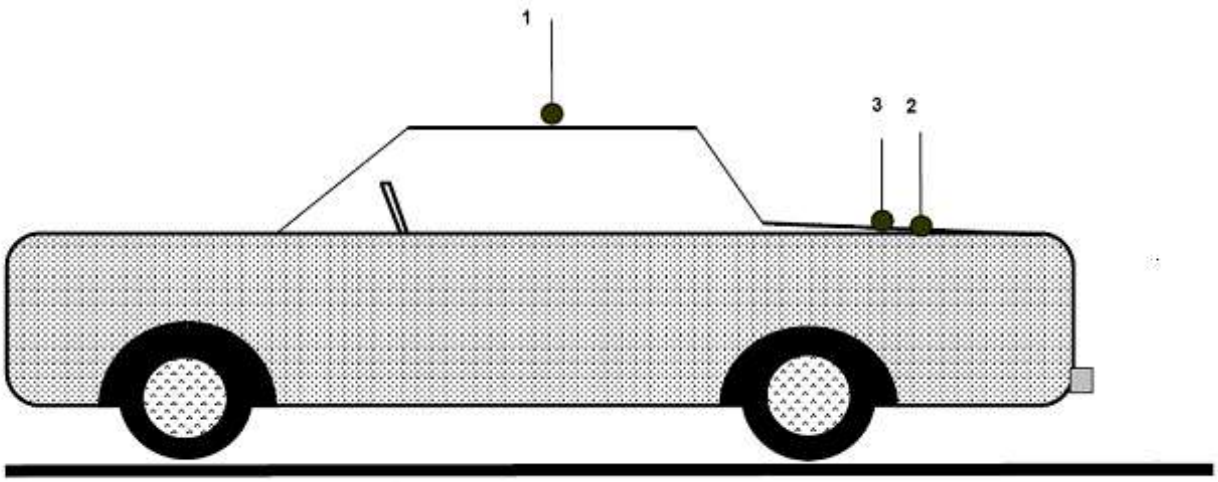
These MPE results herein demonstrate compliance to the FCC and ISED Canada Occupational/Controlled Exposure limit. FCC/ISED rules require compliance for Passengers and Bystanders to the FCC/ISED General Population/Uncontrolled limits.

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.

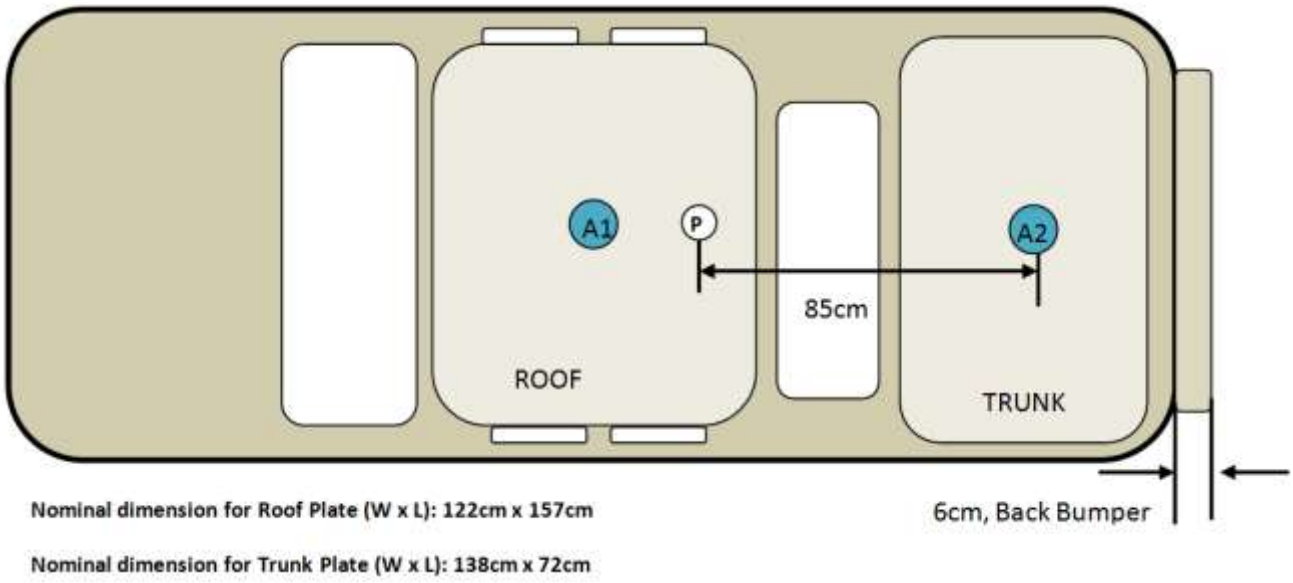
Appendix A - Antenna Locations, Test Distances, and Cable Losses

Antenna locations



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

Passenger Antenna mounting
(8/900)



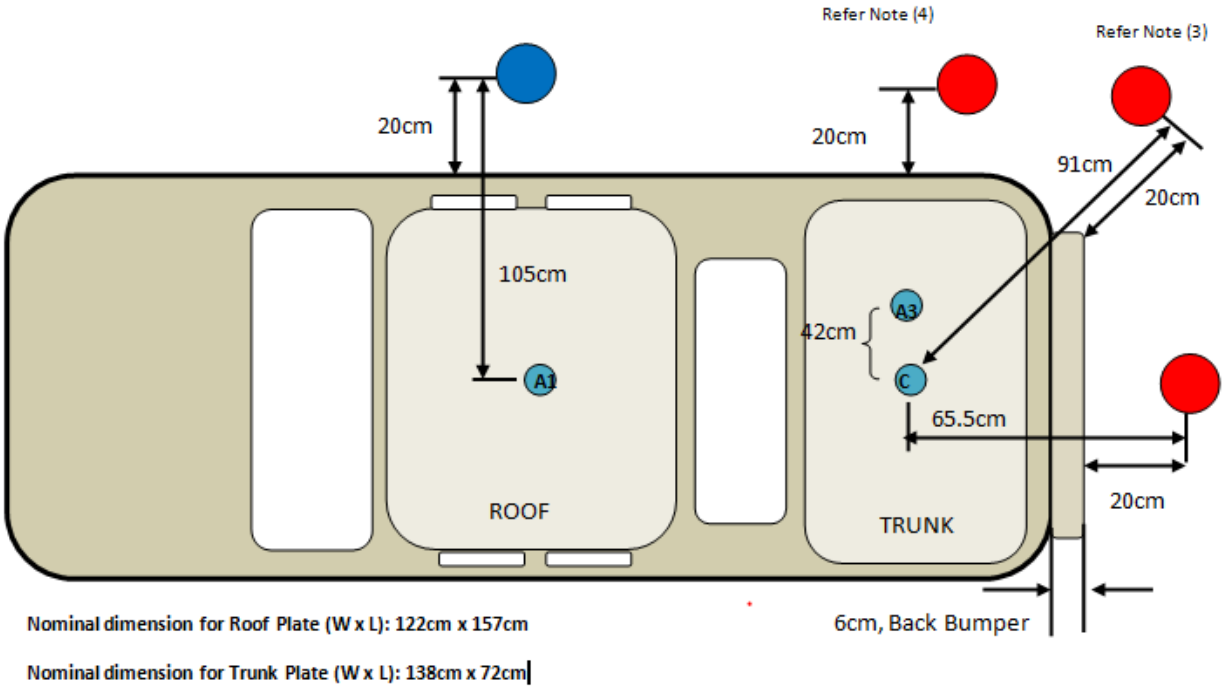
Notes:

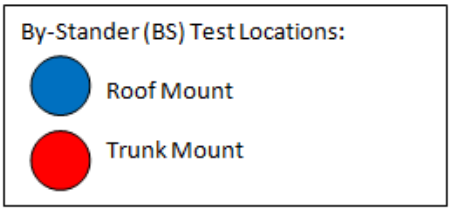
1.) Antenna location A1: Bali Refresh mobile radio roof antenna mounting locations for passenger back and front testing (8/900)

2.) Antenna location A2: Bali Refresh radio trunk antenna mounting locations for passenger back and front testing (8/900)

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

Bystander Antenna mounting
(8/900)

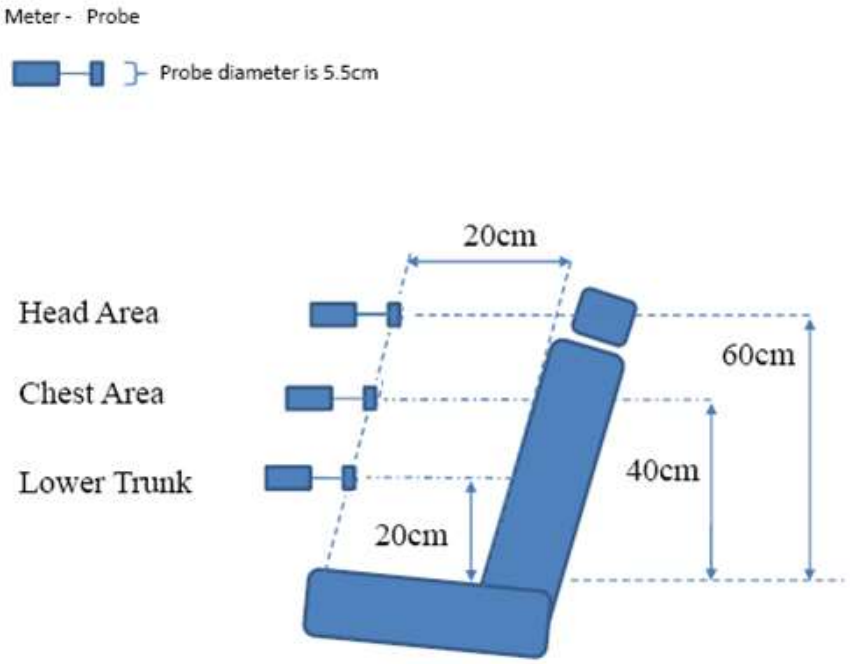




Notes:

1) Antenna location A1: LMR antennas roof mount
2) Antenna location A3: LMR antennas trunk mount for bystander testing.
3) Antenna location W: Total 4 locations identified for BT/WLAN antenna mounting. (If LMR antennas installed at trunk, BT/WLAN should install at 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 90cm (by moving antenna location A3 12cm 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

Appendix B - Probe Calibration Certificates

Service Test Report
QAF 1126, 03/11
Report ID: 143586
Lab ID:1207.01-Calibration

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

ETS-LINDGREN
Tracking # 000053304
Equipment Check
Attested by GC Date 27-Jan-22
www.ets-lindgren.com

Certificate of Test Conformance

Page 1 of 1

Reference: S 000053304

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 Not Applicable. 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	00206805

Status In
In Tolerance
Date Completed
27-Jan-22
Status Out
Compliant with Internal Quality Standards

Remarks
Functional test performed with customer's E100 S/N: 00237361 and H200 S/N: 00084225.

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: 27-Jan-22

ilac-MRA ACCREDITED Calibration Laboratory Certificate 1307.01

Cert I.D.: 143584

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

ETS·LINDGREN
Track# S000053304 Ltd Cal ☐
By SB Date 27-Jan-22
Next Cal Due
www.ets-lindgren.com

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:	*00237361*	**Date Code:**	
Tracking Number:	**S 000053304**	**Alternate ID:**	
Date Completed:	27-Jan-22	**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. Additional frequency data provided per customer. Functional test performed with customer's HI-2200 S/N: 00206805.

Calibration Traceability: This document provides traceability of measurements to recognized national standards to using controlled processes. Any uncertainties listed are derived from the methods described in NIST Tech Note 1297 and other guides to the uncertainty of measurement. This certificate and any reported data may not be reproduced, except in ful, without the written approval of ETS-Lindgren Calibration Laboratory in accordance with ISO/IEC 17025-2017 and ANSI/NCSL Z540-1-1994. The results in this document relate only to the item(s) listed and should not be considered representative of a populations unless otherwise noted.

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

HP	8648C	Signal Generator	3836U02236	07-May-22
Keysight	E9304A	Power Sensor	MY56100039	15-Apr-22
Rohde & Schwarz	SMB 100A	Signal Generator	101558	16-Nov-22
Agilent	N5181B	MXG Signal Generator	MY51350051	07-Apr-22
Agilent	E9304A	Power Sensor	MY41499013	15-Apr-22
Agilent	E9304A	Power Sensor	MY41499012	15-Apr-22
Rohde & Schwarz	NRP-Z91	Power Sensor	100734	21-Oct-22
Rohde & Schwarz	NRP-Z91	Power Sensor	100246	06-Aug-22
Rohde & Schwarz	NRP-Z91	Power Sensor	100732	06-Aug-22
Agilent	E4419B	Power Meter	MY40510693	04-Aug-22
Agilent	E4419B	Power Meter	GB40202754	08-Apr-22
ETS-Lindgren	Probe Chamber	Probe Chamber	CL504	05-Nov-22
Rohde & Schwarz	NRVD	Power Meter	828110/019	09-Apr-22
Keysight	E9304A	Power Sensor	MY56100005	15-Apr-22
Rohde & Schwarz	NRV-Z55	Thermal Power Sensor	100352	21-Oct-22
Rohde & Schwarz	NRV-Z55	Thermal Power Sensor	100362	06-Aug-22
Agilent	N5181A	Signal Generator	MY50140851	06-Aug-22
Keysight	N5183B	MXG Analog Signal Gener	MY53270789	16-Apr-22

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

On Release:
In Tolerance to Internal Quality Standards

Calibration Completed By
Shane Bennett, Calibration Technician

Attested and Issued on 27-Jan-22
George Cismaros, Calibration Supervisor

CALIBRATION REPORT

Electric Field Sensor

Model	*S/N*
E100	00237361
HI-2200	00206805

Date: 27 Jan 2022

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	1	20	1.04	-0.33
2	15	20	1.02	-0.16
3	30	20	1.02	-0.13
4	75	20	1.02	-0.21
5	100	20	1.03	-0.26
6	150	20	1.03	-0.27
7	200	20	1.02	-0.18
8	250	20	1.02	-0.19
9	300	20	1.01	-0.07
10	400	20	1.04	-0.38
11	500	20	0.94	0.50
12	600	20	0.94	0.55
13	700	20	0.99	0.07
14	800	20	1.00	0.02
15	900	20	1.03	-0.28
16	1000	20	1.02	-0.14
17	2000	20	0.97	0.28
18	2450	20	0.97	0.29
19	3000	20	1.01	-0.11
20	3500	20	0.96	0.38
21	4000	20	0.96	0.33
22	5000	20	1.08	-0.66
23	5500	20	1.25	-1.91
24	6000	20	1.36	-2.69

* 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 0.23 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

ETS·LINDGREN
An ESCO Technologies Company

PROBE ROTATIONAL RESPONSE

Model	E100
S/N	00237361
Report	S000053304
Date	Date of Calibration 27 January 2022
Isotropy *	+ 0.1 dB/ -0.1 dB

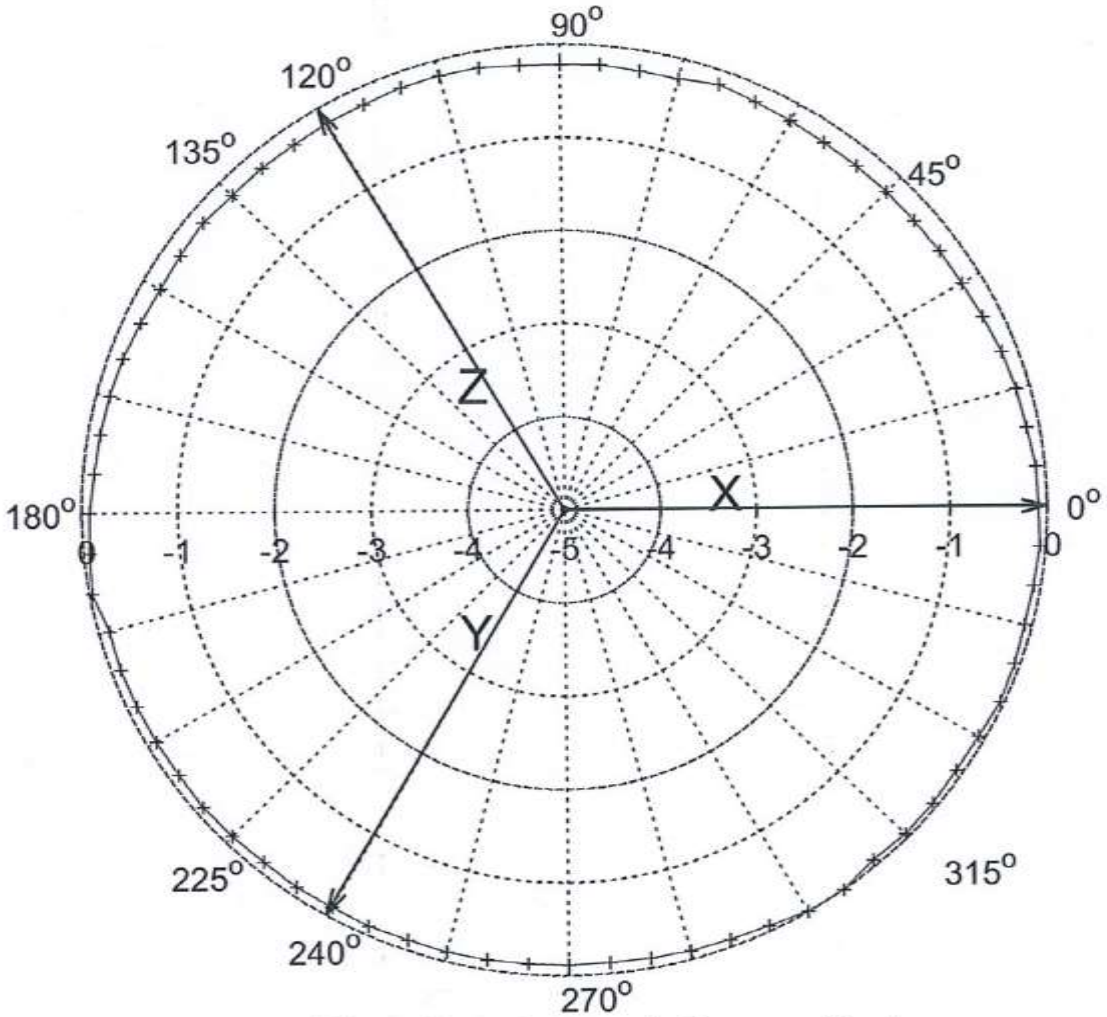


Figure 1: Probe Isotropic Response Chart.

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.

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												
(2)Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	(6) Meas. Unit	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	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.003	0.005	0.006	0.005	0.009	0.024	0.059	0.133	0.137	0.106	0.5	0.049	0.024	0.025
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.004	0.004	0.006	0.011	0.009	0.028	0.081	0.148	0.173	0.113	0.5	0.058	0.029	0.029
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.003	0.003	0.004	0.009	0.009	0.023	0.060	0.125	0.159	0.117	0.5	0.052	0.026	0.026
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.003	0.003	0.002	0.007	0.021	0.039	0.052	0.122	0.180	0.146	0.5	0.058	0.029	0.030
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.002	0.003	0.006	0.011	0.017	0.044	0.049	0.122	0.196	0.164	0.5	0.063	0.031	0.033
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.002	0.002	0.004	0.011	0.014	0.018	0.038	0.102	0.154	0.125	0.5	0.048	0.024	0.025
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.001	0.003	0.006	0.009	0.009	0.012	0.039	0.083	0.120	0.115	0.5	0.041	0.020	0.021
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.001	0.002	0.006	0.011	0.005	0.010	0.047	0.102	0.129	0.130	0.5	0.046	0.023	0.024
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.003	0.004	0.007	0.009	0.005	0.015	0.052	0.109	0.149	0.137	0.5	0.050	0.025	0.026
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.002	0.006	0.006	0.007	0.005	0.023	0.073	0.136	0.144	0.142	0.5	0.056	0.028	0.028
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.003	0.005	0.007	0.007	0.008	0.024	0.071	0.131	0.163	0.131	0.5	0.056	0.028	0.028
Roof	HAF4019A (806 - 941 MHz)	2.14	60cm (actual 117cm)	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.003	0.004	0.007	0.005	0.007	0.017	0.059	0.120	0.162	0.125	0.5	0.052	0.026	0.026

MPE calculations is define in section 15.0.

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.								Probe Info.			MPE Measurements														
												Bystander (BS) Positions													
[2]Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	[3] Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	[4] Probe Cal. Factor	[5] Test Pos.	[6] Meas. Unit	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	HAF4019A (806 - 941 MHz)	2.14	20 (actual 117cm)	901.5125	8.0	7.8	CW	E	1.030	BS	2	0.001	0.002	0.001	0.001	0.002	0.005	0.017	0.034	0.043	0.035	0.5	0.015	0.007	0.007
Roof	HAF4019A (806 - 941 MHz)	2.14	20 (actual 117cm)	940.5125	8.0	7.8	CW	E	1.030	BS	2	0.001	0.001	0.001	0.001	0.002	0.004	0.012	0.026	0.044	0.030	0.5	0.013	0.006	0.006
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.006	0.010	0.013	0.012	0.021	0.060	0.147	0.273	0.138	0.033	0.5	0.071	0.036	0.036
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.008	0.007	0.010	0.022	0.020	0.053	0.194	0.290	0.182	0.048	0.5	0.084	0.042	0.042
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.005	0.004	0.007	0.015	0.019	0.052	0.145	0.224	0.166	0.048	0.5	0.069	0.035	0.035
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.004	0.005	0.004	0.010	0.034	0.064	0.091	0.186	0.147	0.059	0.5	0.061	0.031	0.032
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.004	0.005	0.006	0.020	0.028	0.077	0.100	0.197	0.165	0.058	0.5	0.067	0.034	0.035
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.004	0.004	0.007	0.015	0.027	0.036	0.071	0.156	0.122	0.040	0.5	0.049	0.025	0.026
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.002	0.004	0.011	0.015	0.018	0.022	0.070	0.117	0.105	0.045	0.5	0.042	0.021	0.022
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.002	0.004	0.011	0.019	0.012	0.020	0.096	0.144	0.117	0.041	0.5	0.048	0.024	0.025
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.002	0.006	0.012	0.017	0.007	0.024	0.105	0.168	0.141	0.045	0.5	0.054	0.027	0.028
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.002	0.007	0.011	0.014	0.009	0.046	0.164	0.241	0.150	0.050	0.5	0.071	0.036	0.036
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.003	0.007	0.010	0.012	0.012	0.050	0.155	0.239	0.160	0.043	0.5	0.071	0.035	0.035
Roof	HAF4020A (806 - 941 MHz)	3.00	60cm (actual 117cm)	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.004	0.007	0.011	0.012	0.012	0.041	0.143	0.216	0.162	0.046	0.5	0.067	0.034	0.034

MPE calculations is define in section 15.0.

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.								Probe Info.			MPE Measurements													
												Bystander (BS) Positions												
(2)Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	(6) Meas. Unit	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	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.003	0.005	0.007	0.005	0.012	0.029	0.070	0.163	0.166	0.134	0.5	0.060	0.030	0.030
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.004	0.005	0.006	0.013	0.012	0.033	0.091	0.168	0.197	0.132	0.5	0.066	0.033	0.033
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.003	0.003	0.004	0.009	0.008	0.023	0.060	0.126	0.157	0.122	0.5	0.052	0.026	0.026
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.002	0.002	0.002	0.006	0.016	0.031	0.044	0.106	0.155	0.128	0.5	0.050	0.025	0.026
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.001	0.003	0.005	0.011	0.014	0.036	0.044	0.108	0.170	0.139	0.5	0.054	0.027	0.028
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.002	0.001	0.003	0.010	0.011	0.015	0.030	0.083	0.123	0.100	0.5	0.039	0.019	0.020
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.001	0.002	0.004	0.007	0.006	0.008	0.028	0.058	0.084	0.083	0.5	0.029	0.014	0.015
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.001	0.002	0.004	0.008	0.003	0.007	0.034	0.072	0.092	0.094	0.5	0.033	0.016	0.017
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.001	0.002	0.004	0.008	0.006	0.010	0.037	0.077	0.105	0.099	0.5	0.036	0.018	0.018
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.001	0.004	0.004	0.005	0.003	0.017	0.049	0.094	0.100	0.099	0.5	0.039	0.019	0.020
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.002	0.004	0.005	0.005	0.005	0.016	0.048	0.090	0.114	0.091	0.5	0.039	0.019	0.019
Roof	HAF4022A (806 - 941 MHz)	3.00	60cm (actual 117cm)	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.002	0.003	0.004	0.003	0.005	0.011	0.040	0.086	0.116	0.089	0.5	0.037	0.018	0.018

MPE calculations is define in section 15.0.

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.								Probe Info.			MPE Measurements														
												Bystander (BS) Positions													
[2]Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	[3] Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	[4] Probe Cal. Factor	[5] Test Pos.	[6] Meas. Unit	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	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.009	0.013	0.014	0.016	0.022	0.084	0.217	0.319	0.092	0.017	0.5	0.080	0.040	0.041
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.007	0.007	0.010	0.020	0.023	0.055	0.262	0.356	0.143	0.021	0.5	0.091	0.045	0.046
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.005	0.004	0.005	0.012	0.021	0.065	0.198	0.293	0.155	0.022	0.5	0.079	0.039	0.040
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.003	0.004	0.005	0.010	0.032	0.074	0.122	0.245	0.162	0.039	0.5	0.071	0.035	0.037
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.003	0.003	0.005	0.018	0.025	0.084	0.121	0.243	0.176	0.039	0.5	0.073	0.037	0.038
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.003	0.003	0.007	0.012	0.027	0.035	0.076	0.189	0.131	0.028	0.5	0.052	0.026	0.027
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.001	0.003	0.011	0.012	0.017	0.022	0.071	0.138	0.122	0.037	0.5	0.045	0.022	0.023
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.001	0.004	0.008	0.015	0.012	0.013	0.088	0.169	0.128	0.033	0.5	0.048	0.024	0.025
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.001	0.005	0.010	0.013	0.006	0.021	0.101	0.199	0.158	0.034	0.5	0.056	0.028	0.029
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.001	0.006	0.008	0.010	0.005	0.029	0.150	0.271	0.179	0.042	0.5	0.072	0.036	0.036
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.002	0.006	0.006	0.008	0.009	0.035	0.149	0.267	0.178	0.035	0.5	0.071	0.036	0.036
Roof	HAF4023A (806 - 941 MHz)	5.00	60cm (actual 117cm)	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.003	0.005	0.007	0.008	0.008	0.034	0.135	0.248	0.186	0.037	0.5	0.069	0.034	0.035

MPE calculations is define in section 15.0.

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.								Probe Info.			MPE Measurements														
												Bystander (BS) Positions													
(2)Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	(6) Meas. Unit	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	HAF4019A (806 - 941 MHz)	2.14	60	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.008	0.017	0.029	0.119	0.264	0.353	0.282	0.194	0.118	0.077	0.5	0.146	0.073	0.074
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.009	0.017	0.028	0.132	0.250	0.363	0.374	0.207	0.137	0.085	0.5	0.161	0.080	0.081
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.006	0.017	0.028	0.150	0.294	0.384	0.291	0.186	0.123	0.085	0.5	0.158	0.079	0.080
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.014	0.016	0.040	0.158	0.258	0.433	0.433	0.221	0.087	0.073	0.5	0.176	0.088	0.092
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.016	0.023	0.041	0.162	0.256	0.434	0.394	0.263	0.109	0.071	0.5	0.180	0.090	0.095
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.026	0.020	0.050	0.143	0.183	0.406	0.382	0.221	0.095	0.062	0.5	0.162	0.081	0.084
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.007	0.017	0.037	0.091	0.163	0.307	0.306	0.202	0.072	0.022	0.5	0.126	0.063	0.066
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.008	0.018	0.041	0.117	0.191	0.319	0.305	0.182	0.082	0.019	0.5	0.132	0.066	0.068
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.013	0.025	0.045	0.122	0.223	0.327	0.300	0.184	0.078	0.029	0.5	0.139	0.069	0.070
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.017	0.022	0.038	0.185	0.298	0.530	0.411	0.171	0.071	0.038	0.5	0.183	0.091	0.093
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.016	0.020	0.037	0.196	0.320	0.518	0.391	0.168	0.064	0.038	0.5	0.181	0.091	0.091
Trunk	HAF4019A (806 - 941 MHz)	2.14	60	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.012	0.018	0.038	0.160	0.278	0.488	0.339	0.155	0.062	0.031	0.5	0.162	0.081	0.081
Trunk	HAF4019A (806 - 941 MHz)	2.14	20 (actual 35.5 cm)	901.5125	8.0	7.8	CW	E	1.030	BS	2	0.001	0.003	0.006	0.025	0.044	0.077	0.069	0.035	0.016	0.009	0.5	0.029	0.015	0.015
Trunk	HAF4019A (806 - 941 MHz)	2.14	20 (actual 35.5 cm)	940.5125	8.0	7.8	CW	E	1.030	BS	2	0.002	0.004	0.003	0.029	0.053	0.094	0.074	0.033	0.013	0.006	0.5	0.032	0.016	0.016
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.037	0.057	0.050	0.211	0.618	0.644	0.142	0.050	0.102	0.115	0.5	0.203	0.101	0.102
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.036	0.046	0.042	0.221	0.315	0.704	0.375	0.063	0.083	0.095	0.5	0.199	0.099	0.100
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.022	0.028	0.032	0.230	0.598	0.682	0.182	0.060	0.096	0.057	0.5	0.200	0.100	0.102
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.014	0.012	0.043	0.240	0.469	0.629	0.223	0.013	0.041	0.061	0.5	0.177	0.089	0.093
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.013	0.013	0.041	0.215	0.500	0.624	0.202	0.016	0.029	0.048	0.5	0.173	0.087	0.091
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.016	0.016	0.057	0.211	0.368	0.535	0.153	0.012	0.018	0.040	0.5	0.146	0.073	0.076
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.008	0.012	0.057	0.122	0.309	0.415	0.108	0.023	0.012	0.003	0.5	0.110	0.055	0.058
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.009	0.013	0.051	0.128	0.346	0.444	0.121	0.018	0.014	0.003	0.5	0.118	0.059	0.061
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.011	0.025	0.062	0.134	0.380	0.482	0.126	0.013	0.019	0.009	0.5	0.130	0.065	0.066
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.021	0.036	0.050	0.232	0.599	0.815	0.210	0.011	0.005	0.006	0.5	0.204	0.102	0.103
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.021	0.031	0.054	0.239	0.614	0.809	0.225	0.008	0.006	0.008	0.5	0.207	0.103	0.103
Trunk	HAF4020A (806 - 941 MHz)	3.00	60	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.017	0.036	0.046	0.244	0.607	0.791	0.199	0.012	0.004	0.009	0.5	0.202	0.101	0.101

MPE calculations is define in section 15.0

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.								Probe Info.			MPE Measurements													
												Bystander (BS) Positions												
[2]Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	[3] Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	[4] Probe Cal. Factor	[5] Test Pos.	[6] Meas. Unit	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	HAF4023A (806 - 941 MHz)	5.00	60	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.025	0.044	0.035	0.131	0.602	0.608	0.198	0.248	0.083	0.025	0.5	0.200	0.100	0.101
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.024	0.034	0.024	0.129	0.616	0.624	0.184	0.247	0.104	0.012	0.5	0.201	0.100	0.101
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.018	0.021	0.016	0.157	0.683	0.826	0.202	0.190	0.109	0.015	0.5	0.225	0.113	0.115
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.006	0.006	0.031	0.185	0.515	0.734	0.159	0.035	0.031	0.012	0.5	0.174	0.087	0.091
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.008	0.009	0.034	0.163	0.472	0.683	0.144	0.058	0.046	0.013	0.5	0.166	0.083	0.087
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.009	0.011	0.042	0.164	0.366	0.609	0.129	0.047	0.035	0.007	0.5	0.145	0.072	0.075
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.005	0.010	0.040	0.101	0.251	0.455	0.096	0.059	0.029	0.006	0.5	0.108	0.054	0.057
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.007	0.010	0.039	0.096	0.282	0.476	0.106	0.059	0.029	0.003	0.5	0.114	0.057	0.059
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.009	0.022	0.049	0.112	0.309	0.513	0.103	0.044	0.027	0.009	0.5	0.123	0.062	0.063
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.016	0.027	0.030	0.151	0.546	0.879	0.164	0.017	0.013	0.016	0.5	0.191	0.095	0.097
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.010	0.018	0.026	0.134	0.480	0.874	0.225	0.019	0.019	0.011	0.5	0.186	0.093	0.093
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.012	0.024	0.030	0.165	0.490	0.870	0.142	0.016	0.014	0.008	0.5	0.182	0.091	0.091
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	806.0125	42.0	41.6	CW	E	1.000	BS	2	0.014	0.025	0.028	0.152	0.333	0.527	0.461	0.293	0.168	0.118	0.5	0.212	0.106	0.107
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	815.5000	42.0	41.9	CW	E	1.000	BS	2	0.015	0.021	0.023	0.124	0.301	0.457	0.467	0.268	0.163	0.102	0.5	0.195	0.098	0.098
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.010	0.020	0.022	0.156	0.340	0.458	0.375	0.213	0.161	0.100	0.5	0.187	0.093	0.095
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	851.0125	42.0	40.2	CW	E	1.020	BS	2	0.011	0.014	0.034	0.145	0.233	0.436	0.439	0.183	0.095	0.074	0.5	0.169	0.084	0.088
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	860.5000	42.0	39.9	CW	E	1.020	BS	2	0.012	0.017	0.036	0.152	0.230	0.427	0.406	0.239	0.107	0.058	0.5	0.171	0.086	0.090
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	868.9875	42.0	40.3	CW	E	1.020	BS	2	0.017	0.016	0.040	0.135	0.178	0.391	0.367	0.200	0.094	0.047	0.5	0.152	0.076	0.079
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	896.0125	36.0	34.4	CW	E	1.030	BS	2	0.005	0.010	0.036	0.092	0.144	0.265	0.292	0.180	0.071	0.021	0.5	0.115	0.057	0.060
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	899.0000	36.0	34.9	CW	E	1.030	BS	2	0.005	0.011	0.036	0.091	0.174	0.298	0.283	0.166	0.078	0.018	0.5	0.119	0.060	0.062
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	900.9875	36.0	35.5	CW	E	1.030	BS	2	0.008	0.014	0.029	0.065	0.151	0.219	0.192	0.111	0.054	0.016	0.5	0.088	0.044	0.045
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	935.0125	36.0	35.5	CW	E	1.030	BS	2	0.009	0.010	0.024	0.095	0.164	0.294	0.206	0.104	0.043	0.023	0.5	0.100	0.050	0.051
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	938.0000	36.0	36.0	CW	E	1.030	BS	2	0.009	0.009	0.024	0.105	0.191	0.287	0.215	0.101	0.042	0.026	0.5	0.104	0.052	0.052
Trunk	HAF4022A (806 - 941 MHz)	3.00	60	939.9875	36.0	35.9	CW	E	1.030	BS	2	0.006	0.009	0.022	0.086	0.179	0.287	0.186	0.090	0.042	0.022	0.5	0.095	0.048	0.048

MPE calculations is define in section 15.0.

Table D.1 (Continued)

MPE measurement data for Bystander

D.U.T. Info.								Probe Info.			MPE Measurements														
												Bystander (BS) Positions													
(2)Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	(6) Meas. Unit	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	HAF4023A (806 - 941 MHz)	5.00	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.018	0.021	0.016	0.157	0.683	0.826	0.202	0.190	0.109	0.015	0.5	0.225	0.113	0.115
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.018	0.021	0.016	0.157	0.683	0.826	0.202	0.190	0.109	0.015	0.5	0.225	0.113	0.115
	45 degrees																								
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.008	0.021	0.036	0.121	0.271	0.333	0.133	0.024	0.049	0.053	0.5	0.106	0.053	0.054
	90 degrees																								
Trunk	HAF4023A (806 - 941 MHz)	5.00	60	823.9875	42.0	41.2	CW	E	1.010	BS	2	0.008	0.021	0.036	0.121	0.271	0.333	0.133	0.024	0.049	0.053	0.5	0.106	0.053	0.054

MPE calculations is define in section 15.0.

Table D.2

MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			(6) Meas. Unit							
(2) Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	MPE Measurements	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	HAF4019A (806 - 941 MHz)	2.14	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.018	0.016	0.019	0.5	0.018	0.009	0.009
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.022	0.022	0.023	0.5	0.022	0.011	0.011
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.019	0.012	0.020	0.5	0.017	0.009	0.009
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.022	0.023	0.015	0.5	0.020	0.010	0.011
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.022	0.016	0.008	0.5	0.016	0.008	0.008
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.031	0.018	0.012	0.5	0.021	0.010	0.011
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.029	0.016	0.009	0.5	0.019	0.009	0.010
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.036	0.011	0.012	0.5	0.020	0.010	0.010
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.033	0.020	0.013	0.5	0.023	0.011	0.011
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.015	0.004	0.018	0.5	0.013	0.006	0.006
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.013	0.003	0.014	0.5	0.010	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.016	0.006	0.016	0.5	0.013	0.006	0.007
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	901.5125	8.0	7.8	CW	E	1.030	PB	2	0.003	0.004	0.003	0.5	0.003	0.002	0.002
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	940.5125	8.0	7.8	CW	E	1.030	PB	2	0.001	0.001	0.002	0.5	0.001	0.001	0.001
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.038	0.038	0.047	0.5	0.041	0.021	0.021
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.037	0.048	0.045	0.5	0.044	0.022	0.022
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.031	0.024	0.035	0.5	0.030	0.015	0.015
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.036	0.028	0.016	0.5	0.027	0.014	0.014
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.024	0.021	0.014	0.5	0.020	0.010	0.011
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.031	0.026	0.016	0.5	0.025	0.012	0.013
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.039	0.020	0.018	0.5	0.026	0.013	0.014
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.038	0.014	0.021	0.5	0.025	0.013	0.013
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.045	0.023	0.026	0.5	0.032	0.016	0.016
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.016	0.008	0.031	0.5	0.019	0.009	0.010
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.023	0.007	0.027	0.5	0.019	0.010	0.010
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.020	0.007	0.023	0.5	0.017	0.009	0.009

MPE calculations is define in section 15.0.

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			(6) Meas. Unit							
(2)Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	MPE Measurements	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	HAF4022A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.023	0.014	0.023	0.5	0.020	0.010	0.010
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.023	0.013	0.029	0.5	0.022	0.011	0.011
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.020	0.008	0.029	0.5	0.019	0.010	0.010
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.018	0.009	0.009	0.5	0.012	0.006	0.006
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.019	0.009	0.012	0.5	0.014	0.007	0.007
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.021	0.013	0.014	0.5	0.016	0.008	0.009
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.019	0.016	0.012	0.5	0.016	0.008	0.008
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.017	0.013	0.016	0.5	0.016	0.008	0.008
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.024	0.014	0.017	0.5	0.019	0.009	0.010
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.005	0.009	0.014	0.5	0.010	0.005	0.005
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.004	0.006	0.012	0.5	0.008	0.004	0.004
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.004	0.004	0.010	0.5	0.006	0.003	0.003
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.045	0.053	0.069	0.5	0.056	0.028	0.028
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.051	0.028	0.056	0.5	0.045	0.023	0.023
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.022	0.010	0.036	0.5	0.023	0.011	0.012
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.022	0.011	0.015	0.5	0.016	0.008	0.008
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.029	0.016	0.022	0.5	0.023	0.011	0.012
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.050	0.013	0.024	0.5	0.030	0.015	0.015
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.019	0.018	0.019	0.5	0.019	0.010	0.010
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.025	0.016	0.020	0.5	0.021	0.010	0.011
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.029	0.020	0.024	0.5	0.025	0.013	0.013
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.009	0.008	0.023	0.5	0.014	0.007	0.007
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.007	0.012	0.028	0.5	0.016	0.008	0.008
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.011	0.009	0.027	0.5	0.016	0.008	0.008

MPE calculations is define in section 15.0.

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			[6] Meas. Unit							
[2]Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	[3] Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	[4] Probe Cal. Factor	[5] Test Pos.	MPE Measurements	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	HAF4019A (806 - 941 MHz)	2.14	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.155	0.115	0.117	0.5	0.129	0.065	0.065
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.096	0.071	0.076	0.5	0.081	0.041	0.041
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.102	0.062	0.047	0.5	0.071	0.035	0.036
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.074	0.054	0.045	0.5	0.059	0.029	0.031
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.084	0.068	0.038	0.5	0.064	0.032	0.034
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.093	0.056	0.037	0.5	0.063	0.032	0.033
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.067	0.026	0.027	0.5	0.041	0.021	0.022
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.069	0.024	0.039	0.5	0.045	0.023	0.023
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.066	0.044	0.048	0.5	0.054	0.027	0.028
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.092	0.066	0.059	0.5	0.074	0.037	0.038
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.092	0.058	0.057	0.5	0.071	0.035	0.035
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.071	0.084	0.067	0.5	0.076	0.038	0.038
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	901.5125	8.0	7.8	CW	E	1.030	PB	2	0.017	0.007	0.018	0.5	0.014	0.007	0.007
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	940.5125	8.0	7.8	CW	E	1.030	PB	2	0.020	0.015	0.011	0.5	0.016	0.008	0.008
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.323	0.452	0.321	0.5	0.366	0.183	0.185
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.433	0.374	0.304	0.5	0.372	0.186	0.186
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.379	0.200	0.159	0.5	0.248	0.124	0.126
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.297	0.138	0.137	0.5	0.194	0.097	0.101
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.281	0.227	0.155	0.5	0.225	0.113	0.118
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.218	0.128	0.151	0.5	0.169	0.085	0.088
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.188	0.086	0.091	0.5	0.125	0.063	0.065
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.220	0.082	0.094	0.5	0.136	0.068	0.070
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.215	0.111	0.094	0.5	0.144	0.072	0.073
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.257	0.160	0.121	0.5	0.184	0.092	0.093
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.240	0.193	0.124	0.5	0.191	0.095	0.095
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.304	0.201	0.131	0.5	0.217	0.109	0.109

MPE calculations is define in section 15.0.

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			[6] Meas. Unit							
[2] Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	[3] Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	[4] Probe Cal. Factor	[5] Test Pos.	MPE Measurements	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	HAF4022A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.177	0.196	0.132	0.5	0.169	0.084	0.085
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.115	0.086	0.075	0.5	0.092	0.046	0.046
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.130	0.074	0.049	0.5	0.085	0.042	0.043
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.081	0.057	0.047	0.5	0.063	0.031	0.033
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.068	0.067	0.059	0.5	0.066	0.033	0.035
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.076	0.051	0.047	0.5	0.059	0.030	0.031
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.038	0.022	0.039	0.5	0.034	0.017	0.018
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.041	0.022	0.042	0.5	0.036	0.018	0.019
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.046	0.036	0.046	0.5	0.044	0.022	0.022
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.070	0.044	0.041	0.5	0.053	0.027	0.027
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.065	0.052	0.046	0.5	0.056	0.028	0.028
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.052	0.049	0.042	0.5	0.049	0.024	0.025
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	806.0125	42.0	41.6	CW	E	1.000	PB	2	0.412	0.503	0.279	0.5	0.399	0.199	0.201
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	815.5000	42.0	41.9	CW	E	1.000	PB	2	0.318	0.260	0.264	0.5	0.282	0.141	0.141
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	823.9875	42.0	41.2	CW	E	1.010	PB	2	0.306	0.228	0.225	0.5	0.255	0.127	0.130
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	851.0125	42.0	40.2	CW	E	1.020	PB	2	0.175	0.140	0.073	0.5	0.131	0.066	0.069
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	860.5000	42.0	39.9	CW	E	1.020	PB	2	0.133	0.129	0.086	0.5	0.118	0.059	0.062
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	868.9875	42.0	40.3	CW	E	1.020	PB	2	0.140	0.105	0.075	0.5	0.109	0.054	0.057
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	896.0125	36.0	34.4	CW	E	1.030	PB	2	0.144	0.085	0.053	0.5	0.097	0.048	0.051
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	899.0000	36.0	34.9	CW	E	1.030	PB	2	0.137	0.057	0.068	0.5	0.090	0.045	0.046
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	900.9875	36.0	35.5	CW	E	1.030	PB	2	0.128	0.075	0.054	0.5	0.088	0.044	0.045
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	935.0125	36.0	35.5	CW	E	1.030	PB	2	0.102	0.081	0.060	0.5	0.083	0.042	0.042
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	938.0000	36.0	36.0	CW	E	1.030	PB	2	0.168	0.112	0.095	0.5	0.128	0.064	0.064
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	939.9875	36.0	35.9	CW	E	1.030	PB	2	0.171	0.113	0.084	0.5	0.126	0.063	0.063

MPE calculations is define in section 15.0.

Table D.2 (Continued)

MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			[6] Meas. Unit							
[2] Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	[3] Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	[4] Probe Cal. Factor	[5] Test Pos.	MPE Measurements	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	HAF4019A (806 - 941 MHz)	2.14	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.007	0.007	0.009	0.5	0.008	0.004	0.004
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.009	0.011	0.012	0.5	0.011	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.012	0.007	0.008	0.5	0.009	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.011	0.008	0.007	0.5	0.009	0.004	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.009	0.011	0.009	0.5	0.010	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.007	0.008	0.006	0.5	0.007	0.004	0.004
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.010	0.012	0.007	0.5	0.010	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.009	0.013	0.006	0.5	0.010	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.007	0.011	0.008	0.5	0.009	0.004	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.010	0.013	0.009	0.5	0.011	0.005	0.006
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.011	0.012	0.008	0.5	0.011	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.011	0.010	0.011	0.5	0.011	0.005	0.005
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	901.5125	8.0	7.8	CW	E	1.030	PF	2	0.003	0.002	0.002	0.5	0.002	0.001	0.001
Roof	HAF4019A (806 - 941 MHz)	2.14	NA	940.5125	8.0	7.8	CW	E	1.030	PF	2	0.001	0.002	0.001	0.5	0.001	0.001	0.001
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.015	0.016	0.019	0.5	0.017	0.008	0.008
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.017	0.017	0.021	0.5	0.018	0.009	0.009
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.015	0.012	0.018	0.5	0.015	0.008	0.008
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.013	0.010	0.015	0.5	0.013	0.006	0.007
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.012	0.013	0.017	0.5	0.014	0.007	0.008
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.014	0.016	0.019	0.5	0.017	0.008	0.009
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.010	0.012	0.015	0.5	0.013	0.006	0.007
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.009	0.011	0.012	0.5	0.011	0.005	0.006
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.007	0.010	0.013	0.5	0.010	0.005	0.005
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.008	0.010	0.012	0.5	0.010	0.005	0.005
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.007	0.009	0.012	0.5	0.010	0.005	0.005
Roof	HAF4020A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.008	0.010	0.013	0.5	0.011	0.005	0.005

MPE calculations is define in section 15.0.

Table D.2 (Continued)
MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			(6) Meas. Unit							
(2)Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	MPE Measurements	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	HAF4022A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.008	0.010	0.019	0.5	0.012	0.006	0.006
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.009	0.012	0.021	0.5	0.014	0.007	0.007
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.017	0.013	0.016	0.5	0.015	0.008	0.008
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.009	0.010	0.011	0.5	0.010	0.005	0.005
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.007	0.016	0.006	0.5	0.010	0.005	0.005
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.006	0.010	0.005	0.5	0.007	0.004	0.004
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.005	0.007	0.004	0.5	0.005	0.003	0.003
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.007	0.007	0.005	0.5	0.007	0.003	0.003
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.007	0.007	0.004	0.5	0.006	0.003	0.003
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.005	0.006	0.008	0.5	0.007	0.003	0.003
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.004	0.005	0.007	0.5	0.005	0.003	0.003
Roof	HAF4022A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.004	0.006	0.012	0.5	0.008	0.004	0.004
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.015	0.020	0.018	0.5	0.018	0.009	0.009
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.016	0.024	0.019	0.5	0.020	0.010	0.010
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.018	0.021	0.019	0.5	0.019	0.010	0.010
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.015	0.019	0.017	0.5	0.017	0.009	0.009
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.016	0.018	0.018	0.5	0.018	0.009	0.009
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.014	0.017	0.015	0.5	0.016	0.008	0.008
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.010	0.015	0.012	0.5	0.013	0.006	0.007
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.005	0.010	0.007	0.5	0.008	0.004	0.004
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.007	0.009	0.007	0.5	0.008	0.004	0.004
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.008	0.010	0.010	0.5	0.010	0.005	0.005
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.009	0.012	0.010	0.5	0.011	0.005	0.005
Roof	HAF4023A (806 - 941 MHz)	5.00	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.006	0.009	0.010	0.5	0.009	0.004	0.004

MPE calculations is define in section 15.0.

Table D.2 (Continued)
MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			[6] Meas. Unit							
[2]Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	[3] Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	[4] Probe Cal. Factor	[5] Test Pos.	MPE Measurements	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	HAF4019A (806 - 941 MHz)	2.14	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.064	0.097	0.038	0.5	0.066	0.033	0.034
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.093	0.133	0.045	0.5	0.091	0.045	0.045
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.095	0.097	0.038	0.5	0.077	0.039	0.039
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.066	0.045	0.028	0.5	0.047	0.024	0.025
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.056	0.035	0.028	0.5	0.040	0.020	0.021
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.060	0.051	0.020	0.5	0.045	0.022	0.023
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.086	0.061	0.016	0.5	0.056	0.028	0.029
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.100	0.056	0.013	0.5	0.058	0.029	0.030
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.095	0.063	0.014	0.5	0.059	0.030	0.030
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.163	0.050	0.023	0.5	0.081	0.040	0.041
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.132	0.042	0.018	0.5	0.066	0.033	0.033
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.116	0.044	0.023	0.5	0.063	0.031	0.031
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	901.5125	8.0	7.8	CW	E	1.030	PF	2	0.030	0.016	0.003	0.5	0.017	0.008	0.009
Trunk	HAF4019A (806 - 941 MHz)	2.14	NA	940.5125	8.0	7.8	CW	E	1.030	PF	2	0.020	0.016	0.003	0.5	0.013	0.007	0.007
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.115	0.201	0.056	0.5	0.124	0.062	0.063
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.209	0.261	0.063	0.5	0.178	0.089	0.089
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.142	0.144	0.042	0.5	0.110	0.055	0.056
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.071	0.058	0.062	0.5	0.065	0.032	0.034
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.079	0.068	0.045	0.5	0.065	0.033	0.034
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.092	0.062	0.039	0.5	0.066	0.033	0.034
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.121	0.091	0.039	0.5	0.086	0.043	0.045
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.102	0.095	0.042	0.5	0.082	0.041	0.042
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.172	0.092	0.027	0.5	0.100	0.050	0.051
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.224	0.096	0.035	0.5	0.121	0.061	0.062
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.212	0.103	0.030	0.5	0.118	0.059	0.059
Trunk	HAF4020A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.150	0.122	0.033	0.5	0.104	0.052	0.052

MPE calculations is define in section 15.0.

Table D.2 (Continued)
MPE measurement data for Passenger

D.U.T. Info.								Probe Info.			(6) Meas. Unit							
(2)Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Ant. Meas. Dist. (cm)	Tx Freq (MHz)	(3) Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	(4) Probe Cal. Factor	(5) Test Pos.	MPE Measurements	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	HAF4022A (806 - 941 MHz)	3.00	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.071	0.101	0.042	0.5	0.071	0.036	0.036
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.099	0.148	0.031	0.5	0.093	0.047	0.047
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.091	0.089	0.031	0.5	0.071	0.035	0.036
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.056	0.068	0.029	0.5	0.052	0.026	0.027
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.041	0.028	0.035	0.5	0.035	0.018	0.019
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.050	0.034	0.026	0.5	0.037	0.019	0.020
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.093	0.025	0.020	0.5	0.047	0.024	0.025
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.099	0.039	0.026	0.5	0.056	0.028	0.029
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.083	0.039	0.021	0.5	0.049	0.025	0.025
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.097	0.038	0.028	0.5	0.056	0.028	0.028
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.091	0.036	0.022	0.5	0.051	0.025	0.025
Trunk	HAF4022A (806 - 941 MHz)	3.00	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.073	0.034	0.024	0.5	0.045	0.022	0.022
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	806.0125	42.0	41.6	CW	E	1.000	PF	2	0.188	0.300	0.086	0.5	0.192	0.096	0.097
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	815.5000	42.0	41.9	CW	E	1.000	PF	2	0.235	0.313	0.075	0.5	0.209	0.104	0.105
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	823.9875	42.0	41.2	CW	E	1.010	PF	2	0.158	0.168	0.073	0.5	0.134	0.067	0.068
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	851.0125	42.0	40.2	CW	E	1.020	PF	2	0.100	0.062	0.088	0.5	0.085	0.042	0.044
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	860.5000	42.0	39.9	CW	E	1.020	PF	2	0.098	0.068	0.076	0.5	0.082	0.041	0.043
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	868.9875	42.0	40.3	CW	E	1.020	PF	2	0.124	0.080	0.053	0.5	0.087	0.044	0.046
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	896.0125	36.0	34.4	CW	E	1.030	PF	2	0.143	0.099	0.038	0.5	0.096	0.048	0.050
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	899.0000	36.0	34.9	CW	E	1.030	PF	2	0.162	0.080	0.040	0.5	0.097	0.048	0.050
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	900.9875	36.0	35.5	CW	E	1.030	PF	2	0.178	0.108	0.080	0.5	0.126	0.063	0.064
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	935.0125	36.0	35.5	CW	E	1.030	PF	2	0.192	0.105	0.042	0.5	0.116	0.058	0.059
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	938.0000	36.0	36.0	CW	E	1.030	PF	2	0.218	0.103	0.033	0.5	0.121	0.061	0.061
Trunk	HAF4023A (806 - 941 MHz)	5.00	NA	939.9875	36.0	35.9	CW	E	1.030	PF	2	0.150	0.129	0.032	0.5	0.106	0.053	0.053

MPE calculations is define in section 15.0.

Table D.3

LMR 8/900 MPE Results for FCC

Pmax (W)	42														
		P initial (W)	41.6	41.9	41.2	40.2	39.9	40.3	34.4	34.9	35.5	7.8	35.5	36	35.9	7.8
		FCC Limit (mW/cm^2)	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

Test Pos	Angle	Trunk/ Roof	E/H Field	Antenna no.	f1	f2	f3	f4	f5	f6	f7	f8	f9	f10	f11	f12	f13	f14
					806.0125	815.5000	823.9875	851.0125	860.5000	868.9875	896.0125	899.0000	900.9875	901.5125	935.0125	938.0000	939.9875	940.5125
BS	0	Roof	E	1	0.025	0.029	0.026	0.03	0.033	0.025	0.021	0.024	0.026	0.007	0.028	0.028	0.026	0.006
BS	0	Roof	E	2	0.036	0.042	0.035	0.032	0.035	0.026	0.022	0.025	0.028		0.036	0.035	0.034	
BS	0	Roof	E	3	0.03	0.033	0.026	0.026	0.028	0.02	0.015	0.017	0.018		0.02	0.019	0.018	
BS	0	Roof	E	4	0.041	0.046	0.04	0.037	0.038	0.027	0.023	0.025	0.029		0.036	0.036	0.035	
BS	0	Trunk	E	1	0.074	0.081	0.08	0.092	0.095	0.084	0.066	0.068	0.07	0.015	0.093	0.091	0.081	0.016
BS	0	Trunk	E	2	0.102	0.1	0.102	0.093	0.091	0.076	0.058	0.061	0.066		0.103	0.103	0.101	
BS	0	Trunk	E	3	0.107	0.098	0.095	0.088	0.09	0.079	0.06	0.062	0.045		0.051	0.052	0.048	
BS	0	Trunk	E	4	0.101	0.101	0.115	0.091	0.087	0.075	0.057	0.059	0.063		0.097	0.093	0.091	
BS	45	Trunk	E	4			0.054											
BS	90	Trunk	E	4			0.076											
PB	0	Roof	E	1	0.009	0.011	0.009	0.011	0.008	0.011	0.01	0.01	0.011	0.002	0.006	0.005	0.007	0.001
PB	0	Roof	E	2	0.021	0.022	0.015	0.014	0.011	0.013	0.014	0.013	0.016		0.01	0.01	0.009	
PB	0	Roof	E	3	0.01	0.011	0.01	0.006	0.007	0.009	0.008	0.008	0.01		0.005	0.004	0.003	
PB	0	Roof	E	4	0.028	0.023	0.012	0.008	0.012	0.015	0.01	0.011	0.013		0.007	0.008	0.008	
PB	0	Trunk	E	1	0.065	0.041	0.036	0.031	0.034	0.033	0.022	0.023	0.028	0.007	0.038	0.035	0.038	0.008
PB	0	Trunk	E	2	0.185	0.186	0.126	0.101	0.118	0.088	0.065	0.07	0.073		0.093	0.095	0.109	
PB	0	Trunk	E	3	0.085	0.046	0.043	0.033	0.035	0.031	0.018	0.019	0.022		0.027	0.028	0.025	
PB	0	Trunk	E	4	0.201	0.141	0.13	0.069	0.062	0.057	0.051	0.046	0.045		0.042	0.064	0.063	
PF	0	Roof	E	1	0.004	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.001	0.006	0.005	0.005	0.001
PF	0	Roof	E	2	0.008	0.009	0.008	0.007	0.008	0.009	0.007	0.006	0.005		0.005	0.005	0.005	
PF	0	Roof	E	3	0.006	0.007	0.008	0.005	0.005	0.004	0.003	0.003	0.003		0.003	0.003	0.004	
PF	0	Roof	E	4	0.009	0.01	0.01	0.009	0.009	0.008	0.007	0.004	0.004		0.005	0.005	0.004	
PF	0	Trunk	E	1	0.034	0.045	0.039	0.025	0.021	0.023	0.029	0.03	0.03	0.009	0.041	0.033	0.031	0.007
PF	0	Trunk	E	2	0.063	0.089	0.056	0.034	0.034	0.034	0.045	0.042	0.051		0.062	0.059	0.052	
PF	0	Trunk	E	3	0.036	0.047	0.036	0.027	0.019	0.02	0.025	0.029	0.025		0.028	0.025	0.022	
PF	0	Trunk	E	4	0.097	0.105	0.068	0.044	0.043	0.046	0.05	0.05	0.064		0.059	0.061	0.053	