

**MOTOROLA SOLUTIONS**

TESTING CERT # 2518.01

DECLARATION OF COMPLIANCE: MPE/SAR ASSESSMENT**EME Test Laboratory**8000 West Sunrise Blvd
Fort Lauderdale, FL. 33322**Date of Report:** December 5, 2011**Report Revision:** O**Report ID:** SR9831 MPE Auto rpt XPR5550/5350 30W VHF
Rev O 111205

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Date(s) Tested: Test dates - 9/1/2011, 9/2/2011; 9/6/2011, 9/7/2011, 11/4/2011, 11/11/2011, 11/14/2011 & 11/16/2011
Manufacturer/Location: Motorola Solutions, Penang
Date submitted for test: 07/27/2011
DUT Description: XPR 5550/5350 VHF (136-174MHz) Mobile Radio with internal GPS and Bluetooth
Test TX mode(s): CW
Max. Power output: 30W (VHF), 10mW (BT)
TX Frequency Bands: 136-174MHz & 2402-2480MHz (BT)
Signaling type: FM and TDMA 1:2 (F2), FHSS(BT)
Model(s) Tested: PMUD2566A
Model(s) Certified: PMUD2566A
Serial Number(s): 511TMM0227
Classification: Occupational/Controlled Environment
FCC ID: ABZ99FT3086 Part 90 VHF (150.8-173.4MHz)
 Results outside FCC bands are not applicable for FCC compliance demonstration.

IC: 109AB-99FT3086
 IC band; VHF (138-174MHz)
 Results outside IC band are not applicable for IC compliance demonstration.

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

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

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

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

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Document Revision History

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12/05/2011	O	Initial release

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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 and Specific Absorption Rate (SAR) simulations for product model PMUD2566A.

2.0 Abbreviations / Definitions

BS: Bystander
 BT: Bluetooth
 4FSK: 4-Level Frequency Shift Keying
 CNR: Calibration Not Required
 CW: Continuous Wave
 DUT: Device Under Test
 EME: Electromagnetic Energy
 FHSS: Frequency Hopping Spread Spectrum
 FM: Frequency Modulation
 GPS: Global Positioning System
 MPE: Maximum Permissible Exposure
 NA: Not Applicable
 PB: Passenger Backseat
 PF: Passenger Front seat
 PTT: Push to Talk
 SAR: Specific Absorption Rate
 TDMA: Time Division Multiple Access

3.0 Referenced Standards and Guidelines

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

- United States Federal Communications Commission, Code of Federal Regulations; Rule Part 47CFR § 1.1310, § 2.1091 (d) and § 2.1093 for RF Exposure, where applicable.
- Federal Communications Commission, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields", OET Bulletin 65, Supplement C (Edition 01-01), FCC, Washington, D.C.: June 2001.
- 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 (2009), Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz

4.0 Power Density Limits

Table 1 – Occupational / Controlled Exposure Limits

Frequency Range (MHz)	FCC OET Bulletin 65 Supplement C	ICNIRP	IEEE C95.1 1992/1999	IEEE C95.1 2005	RSS 102 issue 4 - 2010
	mW/cm ²	W/m ²	mW/cm ²	W/m ²	W/m ²
30 - 300	1.0				*10.0
10 - 400		10.0			
100 - 300			1.0	10.0	
300 - 1,500	f/300				f/30
300 - 3,000			f/300	f/30	
400 - 2,000		f/40			
1,500 - 15,000					50.0
1,500 - 100,000	5.0				
2,000 – 300,000		50.0			
3,000 - 300,000			10.0	100.0	

*Power density limit is applicable at frequencies greater than 100MHz

Table 2 – General Population / Uncontrolled Exposure Limits

Frequency Range (MHz)	FCC OET Bulletin 65 Supplement C	ICNIRP	IEEE C95.1 1992/1999	IEEE C95.1 2005	RSS 102 issue 4 – 2010
	mW/cm ²	W/m ²	mW/cm ²	W/m ²	W/m ²
30 – 300	0.2				*2.0
10 – 400		2.0			
100 – 300			0.2		
100 – 400				2.0	
300 – 1,500	f/1,500				f/150
400 – 2,000		f/200		f/200	
300 – 15,000			f/1,500		
1,500 – 15,000					10.0
1,500 – 100,000	1.0				
2,000 – 100,000				10.0	
2,000 – 300,000		10.0			

*Power density limit is applicable at frequencies greater than 100MHz

5.0 N_c Test Channels

The number of test channels are 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

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

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.

6.0 Measurement Equipment

Table 3 - Equipment

Equipment Type	Model #	SN	Calibration Date	Calibration Due Date
Automobile	2003 Ford Crown Victoria, 4-Door	NA	NA	NA
Survey Meter	ETS Model HI-2200	00086887	05/10/2011	05/10/2012
Probe – E-Field	ETS Model E100	00126277		
Probe – H-Field	ETS Model H200	00084225		

E-field measurements are in mW/cm².

H-field measurements are in A/m

7.0 Measurement System Uncertainty Levels

Table 4 - Uncertainty Budget for Near Field Probe Measurements

	Tol. (± %)	Prob. Dist.	Divisor	u_i (± %)	v_i
Measurement System					
Probe Calibration	6.0	N	1.00	6.0	∞
Survey Meter Calibration	3.0	N	1.00	3.0	∞
Hemispherical Isotropy	8.0	R	1.73	4.6	∞
Linearity	5.0	R	1.73	2.9	∞
Pulse Response	1.0	R	1.73	0.6	∞
RF Ambient Noise	3.0	R	1.73	1.7	∞
RF Reflections	8.0	R	1.73	4.6	∞
Probe Positioning	10.0	R	1.73	5.8	∞
Test sample Related					
Antenna Positioning	3.0	N	1.00	3.0	∞
Power drift	5.0	R	1.73	2.9	∞
Combined Standard Uncertainty		RSS		12.2	∞
Expanded Uncertainty (95% CONFIDENCE LEVEL)		$k=2$		24	

8.0 Product and System Description

Model PMUD2566A is a mobile transceiver that utilizes analog and digital two-way radio communications, Bluetooth and GPS technologies. The analog modulation scheme uses narrowband Frequency Modulation (FM). The digital modulatory scheme is 4 Level Frequency Shift Keying (4FSK) and Time Division Multiple Access (TDMA). The system can accommodate 2-voice channels in a standard 12.5 kHz channel as used in two-way radio. The TDMA 1:2 protocol allocates portions of the RF signal by dividing time into two slots (2 slots TDMA). Transmission from a unit or base station is accommodated in time-slot lengths of 30 milliseconds and frame lengths of 60 milliseconds. This product also incorporates a Class 1 (10mW max power) BT modem which uses Frequency Hopping Spread Spectrum (FHSS) technology. The Bluetooth radio modem is used to link wireless audio accessories. The maximum transmission duty cycle of 29.3% is imposed by the Bluetooth standard.

The maximum duty cycle for TDMA is 1:2 (50%) and is controlled by software. The FM signal is continuous. However, because of hand shaking or Push-To-Talk (PTT) between users and/or base stations a conservative 50% duty cycle is applied. The TDMA mode was not tested because its duty cycle is inherently 50% and would include an additional 50% duty cycle for PTT.

The intended use of the radio is PTT while the device is properly installed in a vehicle with an external antenna mounted at the roof or trunk.

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)

9.0 Additional Options and Accessories

Refer to Table 5 for complete list of tested antennas.

PMAN4004B - Optional GPS base.

Below are additional antenna kits which include the tested antennas in Table 5 and optional GPS base.

RAD4214A – Includes GPS base and tested antenna RAD4226A.
 RAD4215A - Includes GPS base and tested antenna RAD4225A.
 RAD4216A - Includes GPS base and tested antenna RAD4224A.
 RAD4217A - Includes GPS base and tested antenna RAD4223A.
 RAD4218A - Includes GPS base and tested antenna RAD4227A.

10.0 Test Set-Up Description

Assessments were performed with mobile radio installed in the test vehicle while engine was at idle, at the specified distances and test locations indicated in sections 11.0, 12.0 and Appendix A.

All antennas described in Table 5 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.

11.0 Method of Measurement with trunk mounted antenna(s)

11.1 External/Bystander vehicle MPE measurements

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 antenna to probe sensor separation distances of 62 cm directly behind vehicle, 104 cm (45 degree radial) and 110.5 cm (90 degree radial). The separation distance used for testing is defined from the antenna where as the RF safety booklet defines the same distance from the vehicle body to ensure that the assessment is applicable to other vehicles. 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 45° radial at the corner of the trunk, and 90° radial at the side of the trunk.

Note: The distance from the centered trunk-mounted antenna to the rear edge of the vehicle is 42cm and the distance from the rear edge of the vehicle to the survey probe sensor is 20cm.

11.2 Internal/Passenger vehicle MPE measurements

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

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

The backseat is a bench seat and therefore each position (Head, Chest & Lower Trunk) were scanned across (horizontally) the seat starting from the middle of the seat to the edge of the seat stopping 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.

12.0 Method of Measurement with roof mounted antenna(s)

12.1 External/Bystander vehicle MPE measurements

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

MPE measurements for bystander (BS) conditions are determined by taking the average of (10) measurements in a 2m vertical line for the test location indicated in Appendix A with 20cm increments at the test distance of 117cm from the antenna under test. 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.

Note: Actual test distance was approximately 117cm from centered roof-mounted antenna to the probe element (97cm from antenna to edge of car door and 20cm from the edge of the car door to the survey probe sensor); this is the closest distance that can be achieved to a centered roof-mounted antenna used for MPE compliance assessment herein.

12.2 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.

13.0 MPE Calculations

The final MPE results for this mobile radio are presented in section 15.0 Tables 6 - 9. These results are based on 50% duty cycle for PTT.

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

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.*)

$$\text{Calc._P.D.} = (\text{Avg_over_body}) * (\text{probe_frequency_cal_factor}) * (\text{duty_cycle})$$

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/cm²) 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/cm²) using the equation 3. H-field measurements are only applicable to frequencies below 300MHz.

Equation 3 – Converting A/m to mW/cm²

$$mW/cm^2 = (A/m)^2 * 37.699$$

Equation 4 – Power Density Maximum Calculation

$$Max_Calc._P.D. = P.D._calc * \frac{\text{max_output_power}}{\text{initial_output_power}}$$

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

14.0 Antenna Summary

Table 5 below summarizes the tested antennas and their descriptions, mount location (roof/trunk), overlap of FCC bands, number of test channels per FCC KDB 447498 (FCC N_c) and actual number of tested channels (Actual N_c). This information was used to determine the test configurations presented in this report.

Table 5

#	Antenna Model	Frequency Range (MHz)	Physical Length (cm)	Gain (dBi)	Remarks	Mount Location (Roof/Trunk)	Overlap FCC Bands	FCC N _c	Actual N _c
1	HAD4006A	136-144	52.0	2.15	1/4 wave, wire	R/T	NA	3	3
2	HAD4007A	146-150.8	49.0	2.15	1/4 wave, wire	R/T	150.8	2	3
3	HAD4008A	150.8-162	45.5	2.15	1/4 wave, wire	R/T	150.8-162	3	3
4	HAD4009A	162-174	43.0	2.15	1/4 wave, wire	R/T	162-173.4	3	3
5	*HAD4022A	132-174	130.0 118.3 113.8 102.7 96.5 89.9	5.15	5/8 wave, wire	R/T	150.8-173.4	5	6
6	RAD4226A	136-144	50.4	2.15	1/4 wave, wire	R/T	NA	3	3
7	RAD4225A	146-150.8	47.5	2.15	1/4 wave, wire	R/T	150.8	2	3
8	RAD4224A	150.8-162	44.2	2.15	1/4 wave, wire	R/T	150.8-162	3	3
9	RAD4223A	162-174	41.0	2.15	1/4 wave, wire	R/T	162-173.4	3	3
10	RAD4227A	146-172	88.0	5.15	5/8 wave, wire	R/T	150.8-172	4	5

* Antennas trimmed per test frequency.

15.0 Test Results Summary

The following tables below summarize the MPE results for each test configuration: antenna location, test positions (BS-Bystander, PB-Passenger Backseat, PF-Passenger Front seat), E/H field measurements, angle, antenna model & freq. range, maximum output power, initial power, TX frequency, max calculated power density results, applicable FCC/IEEE/ICNIRP specification limits and % of the applicable specification limits.

Table 6

Bystander MPE assessment to General Pop. / Uncontrolled Exposure Limits for roof mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm ²)	FCC & ICNIRP Limit	% To Spec Limit
Roof	BS	E	0	HAD4006A (136-144MHz)	30	28.7	136.0125	0.04	0.20	18.4%
						28.7	140.0125	0.04	0.20	18.6%
						28.8	143.9875	0.03	0.20	15.9%
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.03	0.20	15.3%
						28.9	148.4000	0.03	0.20	15.6%
						28.8	150.8000	0.03	0.20	15.9%
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.03	0.20	14.8%
						28.8	156.4000	0.04	0.20	19.9%
						28.8	161.9875	0.04	0.20	19.3%
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.04	0.20	18.7%
						28.8	167.7000	0.04	0.20	19.4%
						28.9	173.4000	0.04	0.20	18.9%
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.02	0.20	11.9%
						28.8	143.9875	0.02	0.20	11.7%
						28.8	150.8000	0.02	0.20	10.9%
						28.5	158.3000	0.03	0.20	14.3%
						28.6	165.9875	0.03	0.20	17.2%
						28.9	173.4000	0.03	0.20	16.1%
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.03	0.20	14.7%
						28.7	140.0125	0.03	0.20	16.5%
						28.8	143.9875	0.03	0.20	15.1%
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.03	0.20	14.0%
						28.9	148.4000	0.03	0.20	13.8%
						28.8	150.8000	0.03	0.20	13.8%
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.02	0.20	11.7%
						28.8	156.4000	0.03	0.20	16.2%
						28.8	161.9875	0.04	0.20	18.8%
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.02	0.20	9.8%
						28.8	167.7000	0.03	0.20	15.6%
						28.9	173.4000	0.03	0.20	15.9%
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.02	0.20	12.5%
						28.8	150.8000	0.02	0.20	12.1%
						28.9	157.9875	0.03	0.20	17.0%
						28.8	164.9875	0.03	0.20	15.1%
						29.1	171.9875	0.02	0.20	11.8%

Table 7

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for roof mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Roof	PB	E	NA	HAD4006A, (136-144MHz)	30	28.7	136.0125	0.05	0.20	23.3
						28.7	140.0125	0.10	0.20	48.8
						28.8	143.9875	0.06	0.20	28.6
				HAD4007A, (146-150.8MHz)	30	28.9	146.0125	0.03	0.20	15.6
						28.9	148.4000	0.02	0.20	8.7
						28.8	150.8000	0.03	0.20	16.5
				HAD4008A, (150.8-162MHz)	30	28.8	150.8000	0.03	0.20	15.6
						28.8	156.4000	0.02	0.20	9.5
						28.8	161.9875	0.04	0.20	18.9
				HAD4009A, (162-174MHz)	30	28.7	162.0125	0.04	0.20	19.0
						28.8	167.7000	0.04	0.20	20.4
						28.9	173.4000	0.02	0.20	11.7
				HAD4022A, (132-174MHz)	30	28.7	136.0125	0.01	0.20	6.9
						28.8	143.9875	0.02	0.20	12.2
						28.8	150.8000	0.01	0.20	6.1
						28.5	158.3000	0.01	0.20	3.5
						28.6	165.9875	0.03	0.20	12.8
						28.9	173.4000	0.02	0.20	9.2
				RAD4226A, (136-144MHz)	30	28.7	136.0125	0.04	0.20	18.1
						28.7	140.0125	0.07	0.20	34.8
						28.8	143.9875	0.06	0.20	28.6
				RAD4225A, (146-150.8MHz)	30	28.9	146.0125	0.03	0.20	15.6
						28.9	148.4000	0.02	0.20	9.5
						28.8	150.8000	0.03	0.20	16.5
				RAD4224A, (150.8-162MHz)	30	28.8	150.8000	0.03	0.20	14.8
						28.8	156.4000	0.02	0.20	11.2
						28.8	161.9875	0.04	0.20	20.6
				RAD4223A, (162-174MHz)	30	28.7	162.0125	0.02	0.20	10.3
						28.8	167.7000	0.04	0.20	17.9
						28.9	173.4000	0.02	0.20	9.2
				RAD4227A, (146-172MHz)	30	28.9	146.0125	0.02	0.20	11.2
						28.8	150.8000	0.03	0.20	13.9
						28.9	157.9875	0.01	0.20	3.4
						28.8	164.9875	0.03	0.20	12.8
						29.1	171.9875	0.02	0.20	7.5

Table 7 (continued)

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for roof mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Roof	PF	E	NA	HAD4006A, (136-144MHz)	30	28.7	136.0125	0.01	0.20	6.0
						28.7	140.0125	0.02	0.20	9.6
						28.8	143.9875	0.02	0.20	9.5
				HAD4007A, (146-150.8MHz)	30	28.9	146.0125	0.02	0.20	10.4
						28.9	148.4000	0.02	0.20	11.2
						28.8	150.8000	0.02	0.20	12.2
				HAD4008A, (150.8-162MHz)	30	28.8	150.8000	0.02	0.20	7.8
						28.8	156.4000	0.01	0.20	6.0
						28.8	161.9875	0.02	0.20	8.6
				HAD4009A, (162-174MHz)	30	28.7	162.0125	0.02	0.20	7.8
						28.8	167.7000	0.01	0.20	5.1
						28.9	173.4000	0.01	0.20	3.4
				HAD4022A, (132-174MHz)	30	28.7	136.0125	0.01	0.20	2.6
						28.8	143.9875	0.01	0.20	3.5
						28.8	150.8000	0.01	0.20	4.3
						28.5	158.3000	0.01	0.20	3.5
						28.6	165.9875	0.01	0.20	4.3
						28.9	173.4000	0.01	0.20	2.5
				RAD4226A, (136-144MHz)	30	28.7	136.0125	0.01	0.20	6.9
						28.7	140.0125	0.02	0.20	8.7
						28.8	143.9875	0.02	0.20	9.5
				RAD4225A, (146-150.8MHz)	30	28.9	146.0125	0.02	0.20	9.5
						28.9	148.4000	0.02	0.20	11.2
						28.8	150.8000	0.03	0.20	13.0
				RAD4224A, (150.8-162MHz)	30	28.8	150.8000	0.02	0.20	10.4
						28.8	156.4000	0.01	0.20	5.2
						28.8	161.9875	0.02	0.20	7.7
				RAD4223A, (162-174MHz)	30	28.7	162.0125	0.01	0.20	4.3
						28.8	167.7000	0.01	0.20	5.1
						28.9	173.4000	0.01	0.20	3.4
				RAD4227A, (146-172MHz)	30	28.9	146.0125	0.02	0.20	7.8
						28.8	150.8000	0.03	0.20	15.6
						28.9	157.9875	0.01	0.20	4.3
						28.8	164.9875	0.01	0.20	3.4
						29.1	171.9875	0.01	0.20	2.5

Table 8

Bystander MPE assessment to General Pop. / Uncontrolled Exposure Limits for roof mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Roof	BS	H	0	HAD4006A (136-144MHz)	30	28.7	136.0125	0.04	0.20	18.7%
						28.7	140.0125	0.04	0.20	21.1%
						28.8	143.9875	0.04	0.20	21.8%
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.04	0.20	18.9%
						28.9	148.4000	0.04	0.20	18.9%
						28.8	150.8000	0.04	0.20	18.3%
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.03	0.20	15.4%
						28.8	156.4000	0.04	0.20	19.3%
						28.8	161.9875	0.04	0.20	18.6%
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.04	0.20	18.6%
						28.8	167.7000	0.04	0.20	18.2%
						28.9	173.4000	0.04	0.20	22.2%
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.02	0.20	9.6%
						28.8	143.9875	0.02	0.20	12.4%
						28.8	150.8000	0.02	0.20	11.6%
						28.5	158.3000	0.03	0.20	14.5%
						28.6	165.9875	0.03	0.20	14.8%
						28.9	173.4000	0.04	0.20	18.4%
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.03	0.20	17.2%
						28.7	140.0125	0.04	0.20	18.0%
						28.8	143.9875	0.05	0.20	22.7%
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.04	0.20	18.9%
						28.9	148.4000	0.04	0.20	18.2%
						28.8	150.8000	0.04	0.20	18.3%
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.03	0.20	14.7%
						28.8	156.4000	0.04	0.20	18.6%
						28.8	161.9875	0.04	0.20	19.3%
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.02	0.20	10.2%
						28.8	167.7000	0.03	0.20	16.0%
						28.9	173.4000	0.04	0.20	19.9%
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.03	0.20	15.3%
						28.8	150.8000	0.03	0.20	14.7%
						28.9	157.9875	0.04	0.20	17.8%
						28.8	164.9875	0.03	0.20	14.1%
						29.1	171.9875	0.03	0.20	13.0%

Table 9

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for roof mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Roof	PB	H	NA	HAD4006A, (136-144MHz)	30	28.7	136.0125	0.03	0.20	14.7
						28.7	140.0125	0.03	0.20	17.0
						28.8	143.9875	0.04	0.20	19.4
				HAD4007A, (146-150.8MHz)	30	28.9	146.0125	0.05	0.20	27.3
						28.9	148.4000	0.02	0.20	8.4
						28.8	150.8000	0.06	0.20	30.5
				HAD4008A, (150.8-162MHz)	30	28.8	150.8000	0.05	0.20	27.4
						28.8	156.4000	0.02	0.20	10.0
						28.8	161.9875	0.02	0.20	8.3
				HAD4009A, (162-174MHz)	30	28.7	162.0125	0.02	0.20	8.3
						28.8	167.7000	0.09	0.20	46.5
						28.9	173.4000	0.03	0.20	15.4
				HAD4022A, (132-174MHz)	30	28.7	136.0125	0.01	0.20	5.5
						28.8	143.9875	0.03	0.20	16.9
						28.8	150.8000	0.01	0.20	4.1
						28.5	158.3000	0.00	0.20	1.3
						28.6	165.9875	0.04	0.20	18.3
						28.9	173.4000	0.02	0.20	9.5
				RAD4226A, (136-144MHz)	30	28.7	136.0125	0.08	0.20	38.2
						28.7	140.0125	0.03	0.20	17.0
						28.8	143.9875	0.08	0.20	41.8
				RAD4225A, (146-150.8MHz)	30	28.9	146.0125	0.11	0.20	56.9
						28.9	148.4000	0.05	0.20	24.3
						28.8	150.8000	0.10	0.20	48.7
				RAD4224A, (150.8-162MHz)	30	28.8	150.8000	0.06	0.20	30.5
						28.8	156.4000	0.03	0.20	14.0
						28.8	161.9875	0.02	0.20	8.3
				RAD4223A, (162-174MHz)	30	28.7	162.0125	0.02	0.20	11.9
						28.8	167.7000	0.07	0.20	35.6
						28.9	173.4000	0.02	0.20	9.5
				RAD4227A, (146-172MHz)	30	28.9	146.0125	0.03	0.20	14.2
						28.8	150.8000	0.06	0.20	30.5
						28.9	157.9875	0.00	0.20	1.3
						28.8	164.9875	0.04	0.20	18.2
						29.1	171.9875	0.01	0.20	6.3

Table 9 (continued)

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for roof mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Roof	PF	H	NA	HAD4006A, (136-144MHz)	30	28.7	136.0125	0.01	0.20	4.2
						28.7	140.0125	0.02	0.20	10.5
						28.8	143.9875	0.02	0.20	10.5
				HAD4007A, (146-150.8MHz)	30	28.9	146.0125	0.02	0.20	12.1
						28.9	148.4000	0.03	0.20	14.2
						28.8	150.8000	0.03	0.20	16.6
				HAD4008A, (150.8-162MHz)	30	28.8	150.8000	0.01	0.20	6.8
						28.8	156.4000	0.01	0.20	4.0
						28.8	161.9875	0.02	0.20	8.3
				HAD4009A, (162-174MHz)	30	28.7	162.0125	0.01	0.20	6.7
						28.8	167.7000	0.01	0.20	2.9
						28.9	173.4000	0.00	0.20	1.3
				HAD4022A, (132-174MHz)	30	28.7	136.0125	0.00	0.20	0.8
						28.8	143.9875	0.00	0.20	1.4
						28.8	150.8000	0.00	0.20	2.1
						28.5	158.3000	0.00	0.20	1.3
						28.6	165.9875	0.00	0.20	2.0
						28.9	173.4000	0.00	0.20	0.7
				RAD4226A, (136-144MHz)	30	28.7	136.0125	0.01	0.20	5.5
						28.7	140.0125	0.02	0.20	8.7
						28.8	143.9875	0.02	0.20	10.5
				RAD4225A, (146-150.8MHz)	30	28.9	146.0125	0.02	0.20	10.2
						28.9	148.4000	0.03	0.20	14.2
						28.8	150.8000	0.04	0.20	19.0
				RAD4224A, (150.8-162MHz)	30	28.8	150.8000	0.02	0.20	12.2
						28.8	156.4000	0.01	0.20	3.3
						28.8	161.9875	0.01	0.20	6.7
				RAD4223A, (162-174MHz)	30	28.7	162.0125	0.00	0.20	2.1
						28.8	167.7000	0.01	0.20	2.9
						28.9	173.4000	0.00	0.20	1.3
				RAD4227A, (146-172MHz)	30	28.9	146.0125	0.01	0.20	6.8
						28.8	150.8000	0.01	0.20	6.8
						28.9	157.9875	0.00	0.20	2.1
						28.8	164.9875	0.00	0.20	1.3
						29.1	171.9875	0.00	0.20	0.7

Table 10

Bystander MPE assessment to General Pop. / Uncontrolled Exposure Limits for trunk mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Trunk	BS	E	0	HAD4006A (136-144MHz)	30	28.7	136.0125	0.14	0.20	70.1%
						28.7	140.0125	0.16	0.20	80.5%
						28.8	143.9875	0.16	0.20	78.4%
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.14	0.20	71.1%
						28.9	148.4000	0.13	0.20	67.5%
						28.8	150.8000	0.13	0.20	63.8%
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.11	0.20	56.3%
						28.8	156.4000	0.12	0.20	61.1%
						28.8	161.9875	0.13	0.20	63.4%
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.11	0.20	56.1%
						28.8	167.7000	0.13	0.20	65.1%
						28.9	173.4000	0.13	0.20	67.0%
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.11	0.20	55.9%
						28.8	143.9875	0.12	0.20	57.8%
						28.8	150.8000	0.10	0.20	51.6%
						28.5	158.3000	0.10	0.20	51.6%
						28.6	165.9875	0.12	0.20	60.1%
						28.9	173.4000	0.12	0.20	61.4%
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.12	0.20	60.3%
						28.7	140.0125	0.14	0.20	68.7%
						28.8	143.9875	0.16	0.20	81.0%
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.14	0.20	69.0%
						28.9	148.4000	0.13	0.20	65.7%
						28.8	150.8000	0.13	0.20	63.3%
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.10	0.20	51.0%
						28.8	156.4000	0.11	0.20	55.2%
						28.8	161.9875	0.13	0.20	63.4%
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.04	0.20	18.6%
						28.8	167.7000	0.11	0.20	56.9%
						28.9	173.4000	0.12	0.20	60.4%
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.12	0.20	58.9%
						28.8	150.8000	0.11	0.20	54.7%
						28.9	157.9875	0.10	0.20	49.8%
						28.8	164.9875	0.10	0.20	47.7%
						29.1	171.9875	0.08	0.20	40.8%
			45	RAD4226A (136-144MHz)	30	28.8	143.9875	0.12	0.20	57.8%
				HAD4009A (162-174MHz)		28.9	173.4000	0.09	0.20	44.8%
			90	RAD4226A (136-144MHz)	30	28.8	143.9875	0.09	0.20	44.8%
				HAD4009A (162-174MHz)		28.9	173.4000	0.08	0.20	40.0%

Table 11

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for trunk mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Trunk	PB	E	NA	HAD4006A (136-144MHz)	30	28.7	136.0125	0.38	0.20	191.4*
						28.7	140.0125	0.59	0.20	294.4*
						28.8	143.9875	0.44	0.20	217.9*
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.49	0.20	243.1*
						28.9	148.4000	0.46	0.20	229.2*
						28.8	150.8000	0.46	0.20	230.9*
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.39	0.20	197.0*
						28.8	156.4000	0.53	0.20	265.5*
						28.8	161.9875	0.45	0.20	226.9*
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.42	0.20	208.7*
						28.8	167.7000	0.44	0.20	222.0*
						28.9	173.4000	0.25	0.20	126.7*
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.01	0.20	6.9
						28.8	143.9875	0.10	0.20	47.7
						28.8	150.8000	0.10	0.20	51.2
						28.5	158.3000	0.18	0.20	89.4
						28.6	165.9875	0.28	0.20	137.9*
						28.9	173.4000	0.17	0.20	87.3
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.34	0.20	171.6*
						28.7	140.0125	0.53	0.20	263.1*
						28.8	143.9875	0.45	0.20	226.6*
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.44	0.20	218.9*
						28.9	148.4000	0.43	0.20	213.7*
						28.8	150.8000	0.44	0.20	217.9*
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.35	0.20	172.7*
						28.8	156.4000	0.53	0.20	263.0*
						28.8	161.9875	0.43	0.20	216.6*
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.18	0.20	88.8
						28.8	167.7000	0.41	0.20	205.9*
						28.9	173.4000	0.26	0.20	127.5*
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.27	0.20	136.7*
						28.8	150.8000	0.30	0.20	148.4*
						28.9	157.9875	0.33	0.20	166.1*
						28.8	164.9875	0.31	0.20	154.8*
						29.1	171.9875	0.10	0.20	48.8

* Test configuration exceeds MPE spec limit.

Table 11 (continued)

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for trunk mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Trunk	PF	E	NA	HAD4006A (136-144MHz)	30	28.7	136.0125	0.01	0.20	6.9
						28.7	140.0125	0.02	0.20	12.2
						28.8	143.9875	0.03	0.20	16.5
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.04	0.20	20.8
						28.9	148.4000	0.06	0.20	29.4
						28.8	150.8000	0.07	0.20	37.3
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.06	0.20	30.4
						28.8	156.4000	0.08	0.20	38.7
						28.8	161.9875	0.06	0.20	27.5
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.06	0.20	28.5
						28.8	167.7000	0.10	0.20	51.0
						28.9	173.4000	0.07	0.20	36.9
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.01	0.20	2.6
						28.8	143.9875	0.01	0.20	2.6
						28.8	150.8000	0.01	0.20	6.1
						28.5	158.3000	0.02	0.20	11.3
						28.6	165.9875	0.05	0.20	26.6
						28.9	173.4000	0.05	0.20	23.5
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.01	0.20	2.6
						28.7	140.0125	0.05	0.20	23.5
						28.8	143.9875	0.03	0.20	13.9
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.03	0.20	15.6
						28.9	148.4000	0.05	0.20	26.0
						28.8	150.8000	0.07	0.20	33.0
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.06	0.20	28.6
						28.8	156.4000	0.08	0.20	38.7
						28.8	161.9875	0.06	0.20	27.5
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.02	0.20	11.2
						28.8	167.7000	0.09	0.20	45.9
						28.9	173.4000	0.08	0.20	37.8
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.02	0.20	8.7
						28.8	150.8000	0.04	0.20	20.8
						28.9	157.9875	0.04	0.20	18.8
						28.8	164.9875	0.05	0.20	26.4
						29.1	171.9875	0.04	0.20	17.5

Table 12

Bystander MPE assessment to General Pop. / Uncontrolled Exposure Limits for trunk mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Trunk	BS	H	0	HAD4006A (136-144MHz)	30	28.7	136.0125	0.12	0.20	61.8%
						28.7	140.0125	0.14	0.20	70.4%
						28.8	143.9875	0.15	0.20	73.2%
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.15	0.20	72.8%
						28.9	148.4000	0.13	0.20	66.9%
						28.8	150.8000	0.13	0.20	64.3%
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.12	0.20	57.5%
						28.8	156.4000	0.12	0.20	60.2%
						28.8	161.9875	0.12	0.20	60.2%
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.11	0.20	55.1%
						28.8	167.7000	0.13	0.20	65.5%
						28.9	173.4000	0.14	0.20	69.3%
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.10	0.20	51.2%
						28.8	143.9875	0.13	0.20	63.0%
						28.8	150.8000	0.12	0.20	57.5%
						28.5	158.3000	0.12	0.20	62.2%
						28.6	165.9875	0.13	0.20	63.2%
						28.9	173.4000	0.14	0.20	69.3%
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.10	0.20	52.5%
						28.7	140.0125	0.11	0.20	56.4%
						28.8	143.9875	0.15	0.20	76.2%
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.13	0.20	65.5%
						28.9	148.4000	0.13	0.20	66.9%
						28.8	150.8000	0.13	0.20	63.0%
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.09	0.20	42.8%
						28.8	156.4000	0.11	0.20	53.7%
						28.8	161.9875	0.12	0.20	58.9%
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.04	0.20	18.6%
						28.8	167.7000	0.11	0.20	53.7%
						28.9	173.4000	0.13	0.20	65.1%
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.12	0.20	61.4%
						28.8	150.8000	0.11	0.20	53.6%
						28.9	157.9875	0.11	0.20	56.0%
						28.8	164.9875	0.10	0.20	51.2%
						29.1	171.9875	0.09	0.20	47.2%
			45	RAD4226A (136-144MHz)	30	28.8	143.9875	0.12	0.20	57.5%
				HAD4009A (162-174MHz)		28.9	173.4000	0.10	0.20	52.3%
			90	RAD4226A (136-144MHz)	30	28.8	143.9875	0.12	0.20	57.5%
				HAD4009A (162-174MHz)		28.9	173.4000	0.10	0.20	47.5%

Table 13

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for trunk mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Trunk	PB	H	NA	HAD4006A (136-144MHz)	30	28.7	136.0125	0.15	0.20	72.9
						28.7	140.0125	0.21	0.20	106.2*
						28.8	143.9875	0.24	0.20	118.3*
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.28	0.20	141.5*
						28.9	148.4000	0.23	0.20	115.2*
						28.8	150.8000	0.17	0.20	86.5
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.15	0.20	76.0
						28.8	156.4000	0.26	0.20	132.1*
						28.8	161.9875	0.25	0.20	125.6*
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.21	0.20	107.4*
						28.8	167.7000	0.42	0.20	209.8*
						28.9	173.4000	0.22	0.20	107.5*
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.03	0.20	14.7
						28.8	143.9875	0.04	0.20	19.4
						28.8	150.8000	0.05	0.20	24.4
						28.5	158.3000	0.11	0.20	56.4
						28.6	165.9875	0.22	0.20	111.2*
						28.9	173.4000	0.14	0.20	70.7
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.12	0.20	58.6
						28.7	140.0125	0.24	0.20	118.7*
						28.8	143.9875	0.28	0.20	138.2*
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.21	0.20	103.1*
						28.9	148.4000	0.21	0.20	103.1*
						28.8	150.8000	0.14	0.20	71.0
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.11	0.20	57.1
						28.8	156.4000	0.21	0.20	107.0*
						28.8	161.9875	0.19	0.20	95.4
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.08	0.20	40.1
						28.8	167.7000	0.30	0.20	149.2*
						28.9	173.4000	0.20	0.20	101.8*
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.14	0.20	70.8
						28.8	150.8000	0.11	0.20	57.1
						28.9	157.9875	0.17	0.20	84.3
						28.8	164.9875	0.20	0.20	98.8
						29.1	171.9875	0.08	0.20	37.8

* Test configuration exceeds MPE spec limit.

Table 13 (continued)

Passenger MPE assessment to General Pop. / Uncontrolled Exposure Limits for trunk mounted antennas

Trunk/ Roof	Test Position	E/H field	Angle (Degree)	Antenna Model	Max Pwr (W)	Initial Pwr (W)	Tx Freq (MHz)	Max Calc. P.D. (mW/ cm^2)	FCC & ICNIRP Limit	% To Spec Limit
Trunk	PF	H	NA	HAD4006A (136-144MHz)	30	28.7	136.0125	0.03	0.20	17.0
						28.7	140.0125	0.07	0.20	34.7
						28.8	143.9875	0.05	0.20	25.0
				HAD4007A (146-150.8MHz)	30	28.9	146.0125	0.07	0.20	33.7
						28.9	148.4000	0.09	0.20	44.5
						28.8	150.8000	0.09	0.20	44.7
				HAD4008A (150.8-162MHz)	30	28.8	150.8000	0.09	0.20	44.7
						28.8	156.4000	0.05	0.20	26.8
						28.8	161.9875	0.03	0.20	14.0
				HAD4009A (162-174MHz)	30	28.7	162.0125	0.03	0.20	14.0
						28.8	167.7000	0.05	0.20	23.3
						28.9	173.4000	0.05	0.20	22.7
				HAD4022A (132-174MHz)	30	28.7	136.0125	0.00	0.20	1.4
						28.8	143.9875	0.01	0.20	5.5
						28.8	150.8000	0.02	0.20	10.2
						28.5	158.3000	0.02	0.20	8.3
						28.6	165.9875	0.03	0.20	13.7
						28.9	173.4000	0.04	0.20	17.7
				RAD4226A (136-144MHz)	30	28.7	136.0125	0.02	0.20	8.7
						28.7	140.0125	0.02	0.20	12.5
						28.8	143.9875	0.05	0.20	25.0
				RAD4225A (146-150.8MHz)	30	28.9	146.0125	0.06	0.20	30.4
						28.9	148.4000	0.07	0.20	37.1
						28.8	150.8000	0.07	0.20	33.8
				RAD4224A (150.8-162MHz)	30	28.8	150.8000	0.07	0.20	33.8
						28.8	156.4000	0.07	0.20	36.4
						28.8	161.9875	0.04	0.20	18.6
				RAD4223A (162-174MHz)	30	28.7	162.0125	0.01	0.20	6.7
						28.8	167.7000	0.05	0.20	23.3
						28.9	173.4000	0.05	0.20	22.7
				RAD4227A (146-172MHz)	30	28.9	146.0125	0.04	0.20	18.9
						28.8	150.8000	0.05	0.20	24.4
						28.9	157.9875	0.04	0.20	18.5
						28.8	164.9875	0.03	0.20	13.6
						29.1	171.9875	0.02	0.20	7.8

16.0 Conclusion

The assessments for this device were performed with an output power range as indicated in section 15.0 Tables 6 - 13. The maximum allowable output power is equal to the upper limit of the final test factory transmit power specification of 30W (136-174MHz). The highest power density results for the mobile device scaled to the maximum allowable power output are indicated in the Tables 14, 15 and 16 for internal/passenger to the vehicle, and external/bystander to the vehicle.

Table 14: RF Exposure Results for FCC

	150.8-173.4MHz
Passenger - Max Calculated Power Density	*0.53mW/cm ²
Bystander - Max Calculated Power Density	0.14mW/cm ²

Table 15: RF Exposure Results for IC

	138-174MHz
Passenger - Max Calculated Power Density	*0.59mW/cm ²
Bystander - Max Calculated Power Density	0.16mW/cm ²

Table 16: RF Exposure Results

	136-174MHz
Passenger - Max Calculated Power Density	*0.59mW/cm ²
Bystander - Max Calculated Power Density	0.16mW/cm ²

These MPE results herein demonstrate compliance to the FCC/IEEE/ICNIRP Occupational/Controlled Exposure limit. FCC rules require compliance for Passengers and Bystanders to the FCC General Population/Uncontrolled limits. Although MPE is a convenient method of demonstrating compliance, SAR is recognized as the "basic restriction". For those configurations exceeding the MPE limit noted * in section 15 Tables 6 thru 13, compliance to the FCC SAR General Population/ Uncontrolled limit of 1.6mW/g is demonstrated in Appendix E via SAR computational analysis.

The computational results show that this device, when used with the offered antennas in accordance with the user manual instructions, exhibits the maximum peak 1-g average SAR values as indicated in the table below.

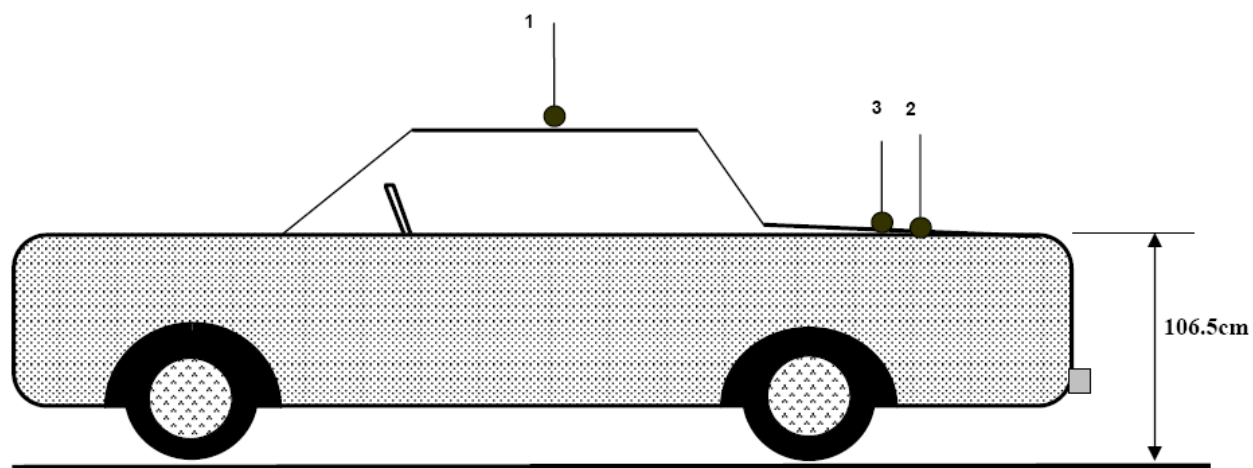
Maximum peak 1g average SAR	
Frequency (MHz)	SAR
173.4	0.72mW/g

Bluetooth assessment for this device is not required per the guidelines in KDB447498, section 8. Note that the BT device and BT antenna are internal to the vehicular dash mount mobile radio while the UHF antennas are installed externally on the roof or trunk of a vehicle. The separation distance between the BT antenna and UHF antennas greatly exceed 20cm.

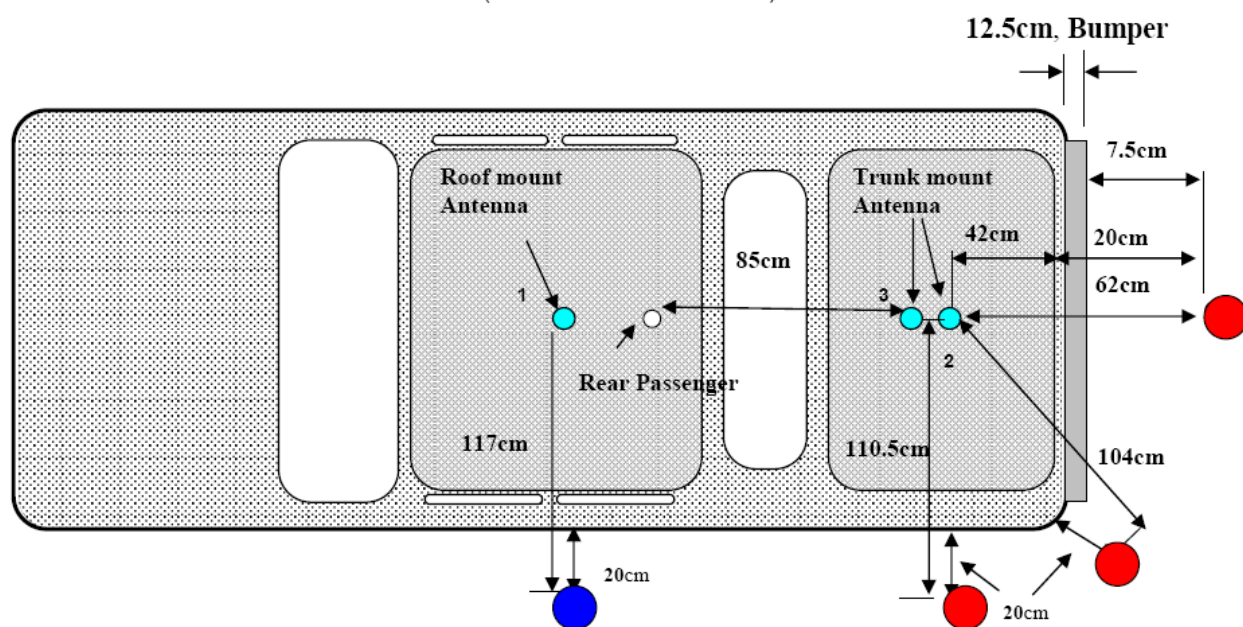
The average output power of the BT device is 2.93mW; 10mW (max power) * 29.3% (max duty cycle).

Appendix A - Illustration of Antenna Locations and Test Distances

62cm Trunk Distance



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



By-Stander Test Locations

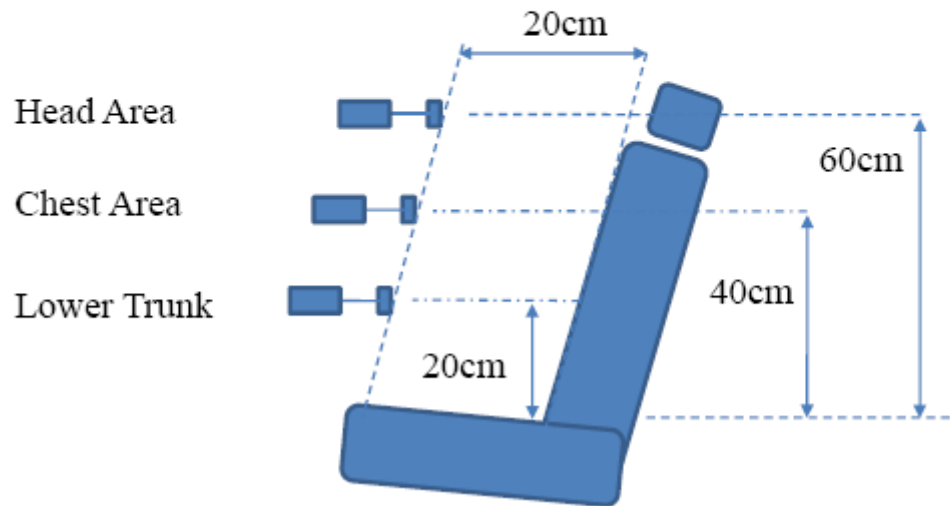
-  Roof Mount
-  Trunk Mount

Note: The distance from the centered trunk-mounted antenna to the edge of the vehicle is 42cm and the distance from the edge of the vehicle to the survey probe sensor is 20cm.

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

Meter - Probe

 Probe diameter is 5.5cm



Appendix B - Probe Calibration Certificates

Service Test Report

QAF 1126, 03/11

Report ID: 84882



An ESCO Technologies Company

 1301 Arrow Point Drive
 Cedar Park, Texas 78613
 (512) 531-6498


An ESCO Technologies Company

Tracking #: 5000022195

Equipment Check
 Attended by RS Date: 10-May-11
 www.ets-lindgren.com
Certificate of Test Conformance

Page 1 of 1

Reference: S 000022195

Customer: AGILENT/MOTOROLA (FL)

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 17025-2005 and ANSI/NCSL Z540-1-1994 using ETS-Lindgren Quality Management System internal procedures.

Manufacturer ETS-LindgrenInstrument Type RF Survey MeterModel HI-2200Serial Number/ID 00086887Status In

In Tolerance

Date Completed

10-May-11

Status Out

Compliant with Internal Quality Standards

Remarks

Calibrated with E100 S/N 00126277 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,

A handwritten signature in blue ink that reads "Richard Goodlow".

Richard Goodlow

Calibration Supervisor

Date Attested: 10-May-11



Cert I.D.: 84880

Certificate of Calibration Conformance

Page 1 of 4

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

IEEE 1309 - 2005, 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 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:	00126277	Date Code:	
Tracking Number:	S000022195	Alternate ID:	
Date Completed:	10-May-11	Customer:	AGILENT/MOTOROLA (FL)
Test Type:	Standard Field, Field Strength		
Calibration Uncertainty:	Std Field Method	10kHz - 18000 MHz, +/-0.7 dB, 26.5GHz - 40GHz, +/- 0.95 dB	
k=2, (95% Confidence Level)			

Test Remarks: Special Cal; Calibrated to customer specified frequencies. Calibrated with HI-2200 S/N 00086887.

Calibration Traceability: All Measuring and Test Equipment (MTE) identified below are traceable to the SI units through the National Institute for Standards and Technology (NIST). Calibration Laboratory and Quality System controls are compliant with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994.

Standards and Equipment Used:

Make / Model / Name / S/N / Recall Date

Agilent	8648C	Signal Generator	3623A03573	24-Feb-12
Beconlon	9200C	RF Voltmeter	324501AE	11-Oct-11
Hewlett Packard	437B	HP Power Meter	3125U12370	15-Jun-11
Marconi	2022	Signal Generator	119019/077	23-Sep-11
Rohde & Schwarz	857.8008.02	Power Meter NRVD	100451	17-Mar-12
Hewlett Packard	83650L	Synthesized Sweep Gen	3844A00422	08-Dec-11

Condition of Instrument

Upon Receipt:

In Tolerance to Internal Quality Standards

On Release:

In Tolerance to Internal Quality Standards

Calibration Completed By
Maynard Reich, Calibration Technician

Attested and Issued on 10-May-11
Richard Goodlow, Calibration Supervisor

This document provides traceability of measurements to recognized national standards using controlled processes at the ETS-Lindgren Calibration Laboratory. Uncertainties listed are derived from the methods described by NIST Tech Note 1297. This certificate and report may not be reproduced, except in full, without the written approval of ETS-Lindgren Calibration Laboratory in accordance with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994, QAF 1127 (03/11)



Frequency Response Calibration Factors
Model E100 Serial Number 00126277
Date of Calibration 10 May 2011

Frequency (MHz)	Applied V/m	Probe Reading			Correction Factor			Avg
		X	Y	Z	X	Y	Z	
0.10	7.99	4.55	4.13	4.47	1.76	1.93	1.79	1.83
0.10	20.05	11.31	10.10	11.15	1.77	1.99	1.80	1.85
0.10	70.05	38.46	35.55	39.18	1.81	1.98	1.79	1.86
0.10	123.92	69.33	62.16	68.17	1.79	1.99	1.82	1.87
0.50	7.97	6.16	6.16	6.16	1.30	1.29	1.29	1.29
0.50	20.08	15.52	15.43	15.57	1.29	1.30	1.29	1.29
0.50	70.00	52.90	52.80	53.09	1.33	1.32	1.32	1.32
0.50	124.71	93.40	93.05	93.77	1.34	1.34	1.33	1.34
1.00	7.96	6.83	6.80	6.82	1.17	1.17	1.17	1.17
1.00	20.05	17.11	16.94	17.09	1.17	1.18	1.17	1.18
1.00	70.03	58.97	58.45	58.86	1.19	1.20	1.18	1.19
1.00	125.51	104.76	103.90	104.84	1.20	1.21	1.19	1.20
10.00	7.98	7.82	7.52	7.77	1.02	1.06	1.03	1.04
10.00	19.93	19.47	19.22	19.28	1.02	1.04	1.04	1.03
10.00	69.72	67.45	66.64	67.02	1.03	1.05	1.04	1.04
10.00	125.53	120.59	119.32	120.28	1.04	1.05	1.05	1.05
15.00	8.03	8.05	7.93	7.97	1.00	1.01	1.01	1.01
15.00	20.05	19.95	19.69	19.73	1.00	1.02	1.02	1.01
15.00	69.93	68.85	68.09	68.36	1.02	1.03	1.02	1.02
15.00	125.49	122.99	121.80	121.94	1.02	1.03	1.03	1.03
20.00	8.03	8.30	8.20	8.21	0.97	0.98	0.98	0.98
20.00	20.10	20.60	20.40	20.40	0.98	0.99	0.98	0.98
20.00	70.12	71.17	70.42	70.70	0.99	1.00	0.99	0.99
20.00	125.42	126.75	125.82	126.10	0.99	1.00	0.99	0.99
30.00	8.02	8.20	8.10	8.14	0.98	0.99	0.98	0.98
30.00	20.02	20.30	20.06	20.13	0.99	1.00	0.99	0.99
30.00	70.17	70.60	69.70	70.04	1.00	1.00	1.00	1.00
30.00	125.13	124.97	124.08	124.40	1.00	1.01	1.00	1.01
50.00	8.01	8.23	8.13	8.18	0.98	0.98	0.98	0.98
50.00	20.02	20.54	20.32	20.36	0.98	0.98	0.98	0.98
50.00	70.06	71.48	70.67	71.04	0.98	0.99	0.98	0.99
50.00	125.31	127.59	126.47	127.04	0.98	0.99	0.99	0.99
75.00	7.97	8.17	8.10	8.10	0.97	0.99	0.98	0.98
75.00	20.02	20.53	20.42	20.34	0.97	0.98	0.99	0.98
75.00	69.50	70.77	70.23	70.26	0.99	0.99	0.99	0.99
75.00	124.45	126.26	125.57	125.35	0.99	0.99	0.99	0.99
100.00	7.97	8.19	8.11	8.13	0.97	0.98	0.98	0.98
100.00	20.13	20.56	20.42	20.42	0.98	0.99	0.99	0.98
100.00	69.91	70.80	70.21	70.40	0.99	1.00	0.99	0.99
100.00	124.52	126.26	125.53	125.60	0.98	0.99	0.99	0.99
150.00	8.01	8.16	8.11	8.12	0.98	0.99	0.99	0.99
150.00	19.95	20.21	20.08	20.01	0.99	0.99	1.00	0.99
150.00	69.83	70.46	70.04	69.84	0.99	1.00	1.00	1.00
150.00	124.55	125.17	124.64	124.25	1.00	1.00	1.00	1.00
200.00	7.97	8.38	8.36	8.23	0.95	0.95	0.97	0.96
200.00	19.92	20.88	20.81	20.41	0.95	0.96	0.98	0.96
200.00	69.59	72.50	72.39	71.23	0.96	0.96	0.98	0.97
200.00	124.56	128.97	129.29	127.06	0.97	0.96	0.98	0.97



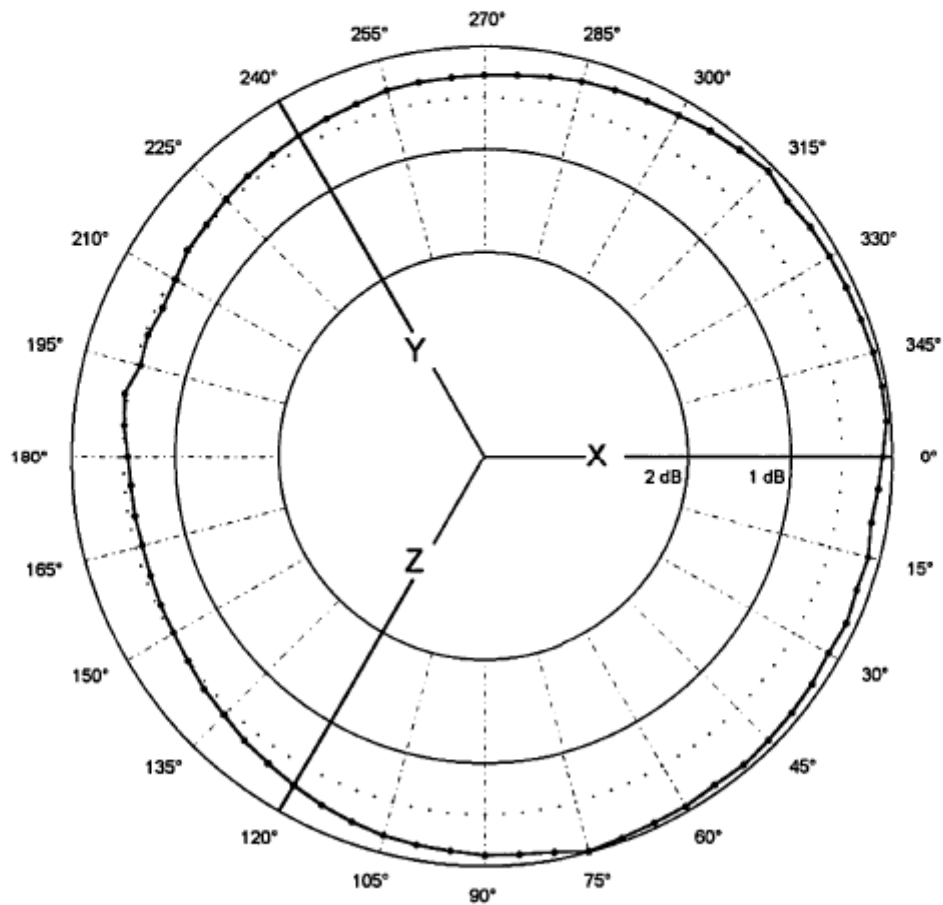
Frequency Response Calibration Factors
Model E100 Serial Number 00126277
Date of Calibration 10 May 2011

Frequency (MHz)	Applied V/m	Probe Reading			Correction Factor			
		X	Y	Z	X	Y	Z	Avg
250.00	8.04	8.29	8.13	8.30	0.97	0.99	0.97	0.98
250.00	20.12	20.73	20.34	20.65	0.97	0.99	0.97	0.98
250.00	70.27	72.21	70.78	72.10	0.97	1.00	0.97	0.98
250.00	125.50	128.72	126.86	129.06	0.98	0.99	0.97	0.98
300.00	8.00	8.27	8.12	8.23	0.97	0.98	0.97	0.98
300.00	19.94	20.56	20.23	20.41	0.97	0.99	0.98	0.98
300.00	70.30	71.90	70.76	71.68	0.98	0.99	0.98	0.98
300.00	124.48	127.44	125.62	127.05	0.97	0.99	0.98	0.98
400.00	8.00	8.24	8.12	8.19	0.97	0.98	0.98	0.98
400.00	20.03	20.53	20.22	20.35	0.98	0.99	0.98	0.98
400.00	69.79	71.15	70.05	70.76	0.98	1.00	0.98	0.99
400.00	125.03	126.95	125.67	126.40	0.99	0.99	0.99	0.99
500.00	7.99	8.11	8.06	8.02	0.99	0.99	1.00	0.99
500.00	20.12	20.38	20.30	20.12	0.98	0.99	1.00	0.99
500.00	70.18	70.78	70.48	70.18	0.99	1.00	1.00	1.00
500.00	124.55	125.52	125.09	124.30	0.99	1.00	1.00	1.00
600.00	7.96	7.84	7.74	7.79	1.02	1.03	1.02	1.02
600.00	20.01	19.61	19.36	19.48	1.02	1.03	1.03	1.03
600.00	70.18	68.55	67.62	68.29	1.02	1.04	1.03	1.03
600.00	124.97	121.80	120.20	121.54	1.03	1.04	1.03	1.03
700.00	7.96	7.62	7.44	7.57	1.05	1.07	1.05	1.06
700.00	20.04	19.05	18.59	18.95	1.06	1.08	1.06	1.06
700.00	69.61	66.10	64.43	65.93	1.05	1.08	1.06	1.06
700.00	125.08	118.72	115.95	118.71	1.05	1.08	1.05	1.06
800.00	7.97	7.55	7.45	7.48	1.05	1.07	1.07	1.06
800.00	19.99	18.86	18.59	18.64	1.06	1.08	1.07	1.07
800.00	70.27	66.19	65.37	65.58	1.06	1.08	1.07	1.07
800.00	124.83	117.02	116.10	116.53	1.06	1.08	1.07	1.07
900.00	7.99	8.05	7.99	7.90	0.99	1.00	1.01	1.00
900.00	19.87	19.97	19.80	19.51	1.00	1.00	1.02	1.01
900.00	70.33	70.31	69.68	69.09	1.00	1.01	1.02	1.01
900.00	124.88	125.13	123.25	121.99	1.00	1.01	1.02	1.01
1000.00	7.99	8.35	8.07	8.29	0.95	0.99	0.96	0.97
1000.00	19.91	20.73	20.02	20.50	0.96	1.00	0.97	0.98
1000.00	69.88	72.46	70.03	72.02	0.96	1.00	0.97	0.98
1000.00	124.64	128.78	124.85	128.46	0.97	1.00	0.97	0.98
2000.00	20.13	20.27	18.83	19.96	0.99	1.07	1.01	1.02
2450.00	20.07	19.16	19.30	19.68	1.05	1.04	1.02	1.04
3000.00	20.01	19.48	18.46	19.39	1.03	1.08	1.03	1.05
3500.00	19.72	20.68	19.85	19.85	0.95	0.99	0.99	0.98
4000.00	20.03	19.85	18.92	20.20	1.01	1.06	0.99	1.02
5000.00	19.74	13.37	13.95	14.54	1.48	1.41	1.36	1.42
5500.00	19.99	15.19	13.96	13.30	1.32	1.43	1.50	1.42
6000.00	20.07	12.82	14.90	15.21	1.57	1.35	1.32	1.41



PROBE ROTATIONAL RESPONSE

Model E100
S/N 00126277
Date 10-May-2011
Time 13:43:11
Variation 0.57 dB



• Isotropic response measured in a 20 V/m field at 400 MHz



ETS-LINDGREN
An ESCO Technologies Company
1301 Arrow Point Drive
Cedar Park, Texas 78613
(512) 531-6498

ETS-LINDGREN
An ESCO Technologies Company
Track# S000022195 Ltd Cal ☐
By MR Date 10-May-11
Next Cal Due
www.ets-lindgren.com

Cert I.D.: 84881

Certificate of Calibration Conformance

Page 1 of 2

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

IEEE 1309 - 2005, 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 and an RF Shielded EMC Chamber which is conducive to maintaining accurate and reliable measurement quality.

Manufacturer:	ETS-Lindgren	Operating Range:	5-300MHz / 30mA/m-10A/m
Model Number:	H200	Instrument Type:	Isotropic Magnetic Field Probe (2)
Serial Number/ ID:	00084225	Date Code:	
Tracking Number:	S000022195	Alternate ID:	
Date Completed:	10-May-11	Customer:	AGILENT/MOTOROLA (FL)
Test Type:	Standard Field, Field Strength		

Calibration Uncertainty: Direct Field Method 1.15dB
k=2, (95% Confidence Level)

Test Remarks: Special Cal: Calibrated to customer specified frequencies. Calibrated with HI-2200 S/N 00086887.

Calibration Traceability: All Measuring and Test Equipment (MTE) identified below are traceable to the SI units through the National Institute for Standards and Technology (NIST). Calibration Laboratory and Quality System controls are compliant with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994.

Standards and Equipment Used:

Make / Model / Name / S/N / Recall Date					Condition of Instrument Upon Receipt:
Agilent	8648C	Signal Generator	3623A03573	24-Feb-12	In Tolerance to Internal Quality Standards
Boonton	9200C	RF Voltmeter	324501AE	11-Oct-11	
Hewlett Packard	437B	HP Power Meter	3125U12370	15-Jun-11	On Release:
Marconi	2022	Signal Generator	119019/077	23-Sep-11	In Tolerance to Internal Quality Standards


Calibration Completed By
Maynard Reich, Calibration Technician


Attested and Issued on 10-May-11
Richard Goodlow, Calibration Supervisor

This document provides traceability of measurements to recognized national standards using controlled processes at the ETS-Lindgren Calibration Laboratory. Uncertainties listed are derived from the methods described by NIST Tech Note 1297. This certificate and report may not be reproduced, except in full, without the written approval of ETS-Lindgren Calibration Laboratory in accordance with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994. OAF 1127 (03/11)



Frequency Response Calibration Factors
ETS-Lindgren Model H200 Serial Number 00084225
Date of Calibration 10 May 2011

Frequency (MHz)	Applied Field (A/m)			Indicated Field (A/m)			Correction Factor				Error (dB)		
	X	Y	Z	X	Y	Z	X	Y	Z	AVG	X	Y	Z
10.00	0.079	0.080	0.079	0.076	0.077	0.076	1.04	1.04	1.05	1.04	-0.37	-0.36	-0.39
15.00	0.079	0.080	0.079	0.079	0.080	0.079	1.00	1.00	1.00	1.00	-0.03	-0.03	-0.04
30.00	0.079	0.079	0.079	0.080	0.080	0.079	1.00	0.99	1.00	0.99	0.04	0.06	0.04
50.00	0.080	0.080	0.080	0.081	0.082	0.082	0.98	0.98	0.98	0.98	0.16	0.18	0.20
75.00	0.080	0.080	0.080	0.082	0.083	0.083	0.97	0.96	0.96	0.96	0.26	0.37	0.39
100.00	0.079	0.079	0.079	0.084	0.085	0.086	0.95	0.93	0.92	0.93	0.45	0.63	0.69
150.00	0.080	0.080	0.079	0.086	0.093	0.093	0.94	0.86	0.85	0.88	0.56	1.31	1.42
175.00	0.079	0.079	0.079	0.086	0.095	0.099	0.93	0.83	0.80	0.85	0.66	1.62	1.90
200.00	0.080	0.080	0.080	0.089	0.101	0.109	0.89	0.79	0.73	0.80	0.99	2.08	2.70
250.00	0.080	0.080	0.080	0.101	0.115	0.143	0.79	0.69	0.56	0.68	2.02	3.19	5.07
300.00	0.080	0.080	0.080	0.134	0.116	0.145	0.59	0.68	0.55	0.61	4.54	3.30	5.18

Appendix C - Photos of Assessed Antennas
(Refer to Exhibit 7B)

Appendix D – MPE Measurement Results

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.											DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions													
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Roof	HAD4006A (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	BS	0.02	0.06	0.06	0.06	0.05	0.06	0.09	0.10	0.11	0.10	0.5	0.071	0.035	0.04
Roof	HAD4006A (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	BS	0.03	0.06	0.07	0.06	0.04	0.05	0.08	0.10	0.11	0.11	0.5	0.071	0.036	0.04
Roof	HAD4006A (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	BS	0.02	0.05	0.05	0.04	0.02	0.05	0.07	0.10	0.11	0.10	0.5	0.061	0.031	0.03
Roof	HAD4007A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	BS	0.02	0.04	0.04	0.02	0.02	0.04	0.08	0.11	0.11	0.11	0.5	0.059	0.030	0.03
Roof	HAD4007A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	BS	0.02	0.03	0.03	0.02	0.02	0.05	0.09	0.11	0.12	0.11	0.5	0.060	0.030	0.03
Roof	HAD4007A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.01	0.02	0.02	0.01	0.03	0.07	0.10	0.12	0.12	0.11	0.5	0.061	0.031	0.03
Roof	HAD4008A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.01	0.02	0.02	0.01	0.03	0.06	0.10	0.11	0.11	0.10	0.5	0.057	0.029	0.03
Roof	HAD4008A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	BS	0.02	0.03	0.02	0.02	0.05	0.09	0.13	0.15	0.14	0.12	0.5	0.077	0.038	0.04
Roof	HAD4008A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	BS	0.01	0.02	0.02	0.03	0.06	0.10	0.13	0.14	0.13	0.11	0.5	0.075	0.037	0.04
Roof	HAD4009A (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	BS	0.01	0.02	0.02	0.02	0.06	0.09	0.13	0.14	0.12	0.11	0.5	0.072	0.036	0.04
Roof	HAD4009A (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	BS	0.01	0.02	0.01	0.02	0.06	0.10	0.13	0.14	0.14	0.13	0.5	0.076	0.037	0.04
Roof	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	BS	0.01	0.01	0.01	0.03	0.09	0.10	0.12	0.12	0.13	0.13	0.5	0.075	0.036	0.04
Roof	HAD4022A (132-174MHz)	5.15	136.0125	30	28.7	CW	E	0.99	BS	0.01	0.02	0.02	0.02	0.02	0.03	0.05	0.08	0.10	0.11	0.5	0.046	0.023	0.02
Roof	HAD4022A (132-174MHz)	5.15	143.9875	30	28.8	CW	E	1.00	BS	0.01	0.03	0.03	0.02	0.02	0.02	0.04	0.07	0.10	0.11	0.5	0.045	0.023	0.02
Roof	HAD4022A (132-174MHz)	5.15	150.8000	30	28.8	CW	E	1.00	BS	0.01	0.02	0.02	0.01	0.01	0.02	0.05	0.08	0.10	0.10	0.5	0.042	0.021	0.02
Roof	HAD4022A (132-174MHz)	5.15	158.3000	30	28.5	CW	E	0.99	BS	0.01	0.01	0.01	0.01	0.02	0.05	0.09	0.11	0.12	0.12	0.5	0.055	0.027	0.03
Roof	HAD4022A (132-174MHz)	5.15	165.9875	30	28.6	CW	E	0.98	BS	0.01	0.01	0.01	0.02	0.04	0.07	0.10	0.13	0.14	0.14	0.5	0.067	0.033	0.03
Roof	HAD4022A (132-174MHz)	5.15	173.4000	30	28.9	CW	E	0.97	BS	0.01	0.01	0.01	0.02	0.04	0.07	0.10	0.12	0.12	0.14	0.5	0.064	0.031	0.03

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.											DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions													
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Roof	RAD4226A (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	BS	0.02	0.04	0.05	0.04	0.04	0.06	0.07	0.08	0.08	0.09	0.5	0.057	0.028	0.03
Roof	RAD4226A (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	BS	0.02	0.04	0.05	0.05	0.05	0.05	0.08	0.09	0.10	0.10	0.5	0.063	0.032	0.03
Roof	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	BS	0.02	0.05	0.05	0.04	0.04	0.04	0.07	0.09	0.09	0.09	0.5	0.058	0.029	0.03
Roof	RAD4225A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	BS	0.02	0.04	0.04	0.03	0.03	0.04	0.07	0.09	0.09	0.09	0.5	0.054	0.027	0.03
Roof	RAD4225A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	BS	0.02	0.03	0.03	0.02	0.03	0.04	0.08	0.09	0.09	0.10	0.5	0.053	0.027	0.03
Roof	RAD4225A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.01	0.02	0.02	0.01	0.03	0.05	0.09	0.10	0.10	0.10	0.5	0.053	0.027	0.03
Roof	RAD4224A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.01	0.02	0.02	0.01	0.03	0.05	0.07	0.07	0.09	0.08	0.5	0.045	0.023	0.02
Roof	RAD4224A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	BS	0.02	0.02	0.02	0.02	0.04	0.07	0.11	0.11	0.11	0.11	0.5	0.063	0.031	0.03
Roof	RAD4224A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	BS	0.01	0.02	0.02	0.03	0.07	0.09	0.12	0.13	0.13	0.11	0.5	0.073	0.036	0.04
Roof	RAD4223A (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	BS	0.01	0.01	0.01	0.01	0.03	0.05	0.06	0.07	0.07	0.06	0.5	0.038	0.019	0.02
Roof	RAD4223A (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	BS	0.01	0.01	0.01	0.02	0.05	0.07	0.10	0.11	0.12	0.11	0.5	0.061	0.030	0.03
Roof	RAD4223A (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	BS	0.01	0.01	0.01	0.03	0.05	0.08	0.10	0.11	0.11	0.12	0.5	0.063	0.031	0.03
Roof	RAD4227A (146-172MHz)	5.15	146.0125	30	28.9	CW	E	1.00	BS	0.02	0.04	0.04	0.03	0.03	0.03	0.05	0.07	0.08	0.09	0.5	0.048	0.024	0.02
Roof	RAD4227A (146-172MHz)	5.15	150.8000	30	28.8	CW	E	1.00	BS	0.01	0.02	0.02	0.01	0.02	0.04	0.07	0.08	0.09	0.10	0.5	0.046	0.023	0.02
Roof	RAD4227A (146-172MHz)	5.15	157.9875	30	28.9	CW	E	0.99	BS	0.01	0.02	0.01	0.01	0.04	0.07	0.12	0.13	0.13	0.12	0.5	0.066	0.033	0.03
Roof	RAD4227A (146-172MHz)	5.15	164.9875	30	28.8	CW	E	0.98	BS	0.01	0.01	0.01	0.02	0.04	0.06	0.10	0.11	0.11	0.12	0.5	0.059	0.029	0.03
Roof	RAD4227A (146-172MHz)	5.15	171.9875	30	29.1	CW	E	0.97	BS	0.00	0.01	0.01	0.02	0.03	0.05	0.07	0.09	0.09	0.10	0.5	0.047	0.023	0.02

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Roof	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PB	0.11	0.10	0.06	0.5	0.090	0.045	0.05
Roof	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PB	0.18	0.21	0.17	0.5	0.187	0.093	0.10
Roof	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PB	0.11	0.11	0.11	0.5	0.110	0.055	0.06
Roof	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PB	0.05	0.07	0.06	0.5	0.060	0.030	0.03
Roof	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PB	0.02	0.04	0.04	0.5	0.033	0.017	0.02
Roof	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.05	0.07	0.07	0.5	0.063	0.032	0.03
Roof	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.05	0.06	0.07	0.5	0.060	0.030	0.03
Roof	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PB	0.02	0.05	0.04	0.5	0.037	0.018	0.02
Roof	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PB	0.08	0.07	0.07	0.5	0.073	0.036	0.04
Roof	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PB	0.08	0.07	0.07	0.5	0.073	0.036	0.04
Roof	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PB	0.05	0.07	0.12	0.5	0.080	0.039	0.04
Roof	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PB	0.05	0.02	0.07	0.5	0.047	0.023	0.02
Roof	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	E	0.99	PB	0.02	0.03	0.03	0.5	0.027	0.013	0.01
Roof	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	E	1.00	PB	0.03	0.06	0.05	0.5	0.047	0.023	0.02
Roof	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PB	0.02	0.03	0.02	0.5	0.023	0.012	0.01
Roof	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	E	0.99	PB	0.02	0.01	0.01	0.5	0.013	0.007	0.01
Roof	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	E	0.98	PB	0.03	0.05	0.07	0.5	0.050	0.025	0.03
Roof	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	E	0.97	PB	0.03	0.02	0.06	0.5	0.037	0.018	0.02

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Roof	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PB	0.07	0.08	0.06	0.5	0.070	0.035	0.04
Roof	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PB	0.13	0.14	0.13	0.5	0.133	0.067	0.07
Roof	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PB	0.12	0.12	0.09	0.5	0.110	0.055	0.06
Roof	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PB	0.06	0.07	0.05	0.5	0.060	0.030	0.03
Roof	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PB	0.03	0.04	0.04	0.5	0.037	0.018	0.02
Roof	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.05	0.07	0.07	0.5	0.063	0.032	0.03
Roof	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.05	0.06	0.06	0.5	0.057	0.028	0.03
Roof	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PB	0.03	0.06	0.04	0.5	0.043	0.021	0.02
Roof	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PB	0.08	0.08	0.08	0.5	0.080	0.040	0.04
Roof	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PB	0.04	0.04	0.04	0.5	0.040	0.020	0.02
Roof	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PB	0.05	0.07	0.09	0.5	0.070	0.034	0.04
Roof	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PB	0.03	0.02	0.06	0.5	0.037	0.018	0.02
Roof	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	E	1.00	PB	0.04	0.05	0.04	0.5	0.043	0.022	0.02
Roof	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PB	0.04	0.06	0.06	0.5	0.053	0.027	0.03
Roof	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	E	0.99	PB	0.02	0.01	0.01	0.5	0.013	0.007	0.01
Roof	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	E	0.98	PB	0.03	0.05	0.07	0.5	0.050	0.025	0.03
Roof	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	E	0.97	PB	0.02	0.02	0.05	0.5	0.030	0.015	0.02

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Roof	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PF	0.02	0.03	0.02	0.5	0.023	0.012	0.01
Roof	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PF	0.04	0.03	0.04	0.5	0.037	0.018	0.02
Roof	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PF	0.03	0.04	0.04	0.5	0.037	0.018	0.02
Roof	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PF	0.02	0.04	0.06	0.5	0.040	0.020	0.02
Roof	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PF	0.03	0.04	0.06	0.5	0.043	0.022	0.02
Roof	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.02	0.05	0.07	0.5	0.047	0.023	0.02
Roof	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.02	0.04	0.03	0.5	0.030	0.015	0.02
Roof	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PF	0.01	0.03	0.03	0.5	0.023	0.012	0.01
Roof	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PF	0.02	0.03	0.05	0.5	0.033	0.017	0.02
Roof	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PF	0.01	0.03	0.05	0.5	0.030	0.015	0.02
Roof	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PF	0.01	0.02	0.03	0.5	0.020	0.010	0.01
Roof	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PF	0.01	0.02	0.01	0.5	0.013	0.006	0.01
Roof	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	E	0.99	PF	0.01	0.01	0.01	0.5	0.010	0.005	0.01
Roof	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	E	1.00	PF	0.01	0.01	0.02	0.5	0.013	0.007	0.01
Roof	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PF	0.01	0.02	0.02	0.5	0.017	0.008	0.01
Roof	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	E	0.99	PF	0.01	0.02	0.01	0.5	0.013	0.007	0.01
Roof	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	E	0.98	PF	0.01	0.02	0.02	0.5	0.017	0.008	0.01
Roof	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	E	0.97	PF	0.01	0.01	0.01	0.5	0.010	0.005	0.01

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Roof	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PF	0.03	0.03	0.02	0.5	0.027	0.013	0.01
Roof	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PF	0.04	0.03	0.03	0.5	0.033	0.017	0.02
Roof	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PF	0.03	0.04	0.04	0.5	0.037	0.018	0.02
Roof	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PF	0.02	0.04	0.05	0.5	0.037	0.018	0.02
Roof	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PF	0.03	0.05	0.05	0.5	0.043	0.022	0.02
Roof	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.02	0.05	0.08	0.5	0.050	0.025	0.03
Roof	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.02	0.04	0.06	0.5	0.040	0.020	0.02
Roof	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PF	0.01	0.02	0.03	0.5	0.020	0.010	0.01
Roof	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PF	0.01	0.03	0.05	0.5	0.030	0.015	0.02
Roof	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PF	0.01	0.02	0.02	0.5	0.017	0.008	0.01
Roof	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PF	0.01	0.02	0.03	0.5	0.020	0.010	0.01
Roof	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PF	0.01	0.02	0.01	0.5	0.013	0.006	0.01
Roof	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	E	1.00	PF	0.02	0.03	0.04	0.5	0.030	0.015	0.02
Roof	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PF	0.10	0.03	0.05	0.5	0.060	0.030	0.03
Roof	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	E	0.99	PF	0.01	0.02	0.02	0.5	0.017	0.008	0.01
Roof	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	E	0.98	PF	0.01	0.01	0.02	0.5	0.013	0.007	0.01
Roof	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	E	0.97	PF	0.01	0.01	0.01	0.5	0.010	0.005	0.01

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.											DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions													
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Roof	HAD4006A (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.5	0.049	0.036	0.04
Roof	HAD4006A (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.5	0.052	0.040	0.04
Roof	HAD4006A (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	BS	0.02	0.03	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.5	0.053	0.042	0.04
Roof	HAD4007A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.06	0.5	0.050	0.036	0.04
Roof	HAD4007A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	BS	0.02	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.5	0.050	0.036	0.04
Roof	HAD4007A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.5	0.049	0.035	0.04
Roof	HAD4008A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.5	0.045	0.030	0.03
Roof	HAD4008A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.5	0.051	0.037	0.04
Roof	HAD4008A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	BS	0.02	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.5	0.050	0.036	0.04
Roof	HAD4009A (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	BS	0.02	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.5	0.050	0.036	0.04
Roof	HAD4009A (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	BS	0.02	0.03	0.03	0.04	0.05	0.06	0.06	0.07	0.07	0.07	0.5	0.050	0.035	0.04
Roof	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	BS	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.5	0.056	0.043	0.04
Roof	HAD4022A (132-174MHz)	5.15	136.0125	30	28.7	CW	H	0.89	BS	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.07	0.5	0.035	0.018	0.02
Roof	HAD4022A (132-174MHz)	5.15	143.9875	30	28.8	CW	H	0.89	BS	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.07	0.5	0.040	0.024	0.02
Roof	HAD4022A (132-174MHz)	5.15	150.8000	30	28.8	CW	H	0.88	BS	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.5	0.039	0.022	0.02
Roof	HAD4022A (132-174MHz)	5.15	158.3000	30	28.5	CW	H	0.87	BS	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.5	0.044	0.028	0.03
Roof	HAD4022A (132-174MHz)	5.15	165.9875	30	28.6	CW	H	0.86	BS	0.02	0.02	0.03	0.04	0.04	0.04	0.05	0.06	0.07	0.08	0.5	0.045	0.028	0.03
Roof	HAD4022A (132-174MHz)	5.15	173.4000	30	28.9	CW	H	0.85	BS	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.5	0.051	0.035	0.04

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.											DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions													
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Roof	RAD4226A (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	BS	0.02	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.5	0.047	0.033	0.03
Roof	RAD4226A (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	BS	0.02	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.5	0.048	0.034	0.04
Roof	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	BS	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.07	0.07	0.07	0.5	0.054	0.044	0.05
Roof	RAD4225A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	BS	0.02	0.03	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.5	0.050	0.036	0.04
Roof	RAD4225A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.5	0.049	0.035	0.04
Roof	RAD4225A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.02	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.07	0.07	0.5	0.049	0.035	0.04
Roof	RAD4224A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.02	0.02	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.5	0.044	0.028	0.03
Roof	RAD4224A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.5	0.050	0.036	0.04
Roof	RAD4224A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.5	0.051	0.037	0.04
Roof	RAD4223A (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	BS	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.5	0.037	0.020	0.02
Roof	RAD4223A (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	BS	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.07	0.07	0.5	0.047	0.031	0.03
Roof	RAD4223A (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	BS	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.5	0.053	0.038	0.04
Roof	RAD4227A (146-172MHz)	5.15	146.0125	30	28.9	CW	H	0.88	BS	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.5	0.045	0.030	0.03
Roof	RAD4227A (146-172MHz)	5.15	150.8000	30	28.8	CW	H	0.88	BS	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.5	0.044	0.028	0.03
Roof	RAD4227A (146-172MHz)	5.15	157.9875	30	28.9	CW	H	0.87	BS	0.02	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.5	0.049	0.034	0.04
Roof	RAD4227A (146-172MHz)	5.15	164.9875	30	28.8	CW	H	0.86	BS	0.02	0.02	0.03	0.04	0.04	0.04	0.05	0.06	0.07	0.07	0.5	0.044	0.027	0.03
Roof	RAD4227A (146-172MHz)	5.15	171.9875	30	29.1	CW	H	0.85	BS	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.07	0.5	0.043	0.025	0.03

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.	Passenger Positions			DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head	Chest	Lower Trunk				
Roof	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PB	0.05	0.04	0.04	0.5	0.043	0.028	0.03
Roof	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PB	0.05	0.05	0.04	0.5	0.047	0.033	0.03
Roof	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PB	0.05	0.05	0.05	0.5	0.050	0.037	0.04
Roof	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PB	0.05	0.07	0.06	0.5	0.060	0.053	0.05
Roof	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PB	0.02	0.04	0.04	0.5	0.033	0.016	0.02
Roof	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.05	0.07	0.07	0.5	0.063	0.059	0.06
Roof	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.05	0.06	0.07	0.5	0.060	0.053	0.05
Roof	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PB	0.02	0.05	0.04	0.5	0.037	0.019	0.02
Roof	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PB	0.04	0.03	0.03	0.5	0.033	0.016	0.02
Roof	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PB	0.04	0.04	0.02	0.5	0.033	0.016	0.02
Roof	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PB	0.05	0.07	0.12	0.5	0.080	0.089	0.09
Roof	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PB	0.05	0.02	0.07	0.5	0.047	0.030	0.03
Roof	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	H	0.89	PB	0.02	0.03	0.03	0.5	0.027	0.011	0.01
Roof	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	H	0.89	PB	0.03	0.06	0.05	0.5	0.047	0.033	0.03
Roof	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PB	0.02	0.03	0.02	0.5	0.023	0.008	0.01
Roof	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	H	0.87	PB	0.02	0.01	0.01	0.5	0.013	0.003	0.00
Roof	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	H	0.86	PB	0.03	0.05	0.07	0.5	0.050	0.035	0.04
Roof	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	H	0.85	PB	0.03	0.02	0.06	0.5	0.037	0.018	0.02

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Roof	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PB	0.07	0.08	0.06	0.5	0.070	0.073	0.08
Roof	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PB	0.05	0.05	0.04	0.5	0.047	0.033	0.03
Roof	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PB	0.06	0.11	0.05	0.5	0.073	0.080	0.08
Roof	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PB	0.09	0.11	0.06	0.5	0.087	0.110	0.11
Roof	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PB	0.04	0.09	0.04	0.5	0.057	0.047	0.05
Roof	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.07	0.13	0.04	0.5	0.080	0.093	0.10
Roof	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.04	0.06	0.09	0.5	0.063	0.059	0.06
Roof	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PB	0.03	0.06	0.04	0.5	0.043	0.027	0.03
Roof	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PB	0.04	0.03	0.03	0.5	0.033	0.016	0.02
Roof	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PB	0.04	0.04	0.04	0.5	0.040	0.023	0.02
Roof	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PB	0.05	0.07	0.09	0.5	0.070	0.068	0.07
Roof	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PB	0.03	0.02	0.06	0.5	0.037	0.018	0.02
Roof	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	H	0.88	PB	0.04	0.05	0.04	0.5	0.043	0.027	0.03
Roof	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PB	0.04	0.09	0.06	0.5	0.063	0.059	0.06
Roof	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	H	0.87	PB	0.02	0.01	0.01	0.5	0.013	0.003	0.00
Roof	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	H	0.86	PB	0.03	0.05	0.07	0.5	0.050	0.035	0.04
Roof	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	H	0.85	PB	0.02	0.02	0.05	0.5	0.030	0.012	0.01

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.	Passenger Positions			DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head	Chest	Lower Trunk				
Roof	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PF	0.02	0.03	0.02	0.5	0.023	0.008	0.01
Roof	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PF	0.04	0.03	0.04	0.5	0.037	0.020	0.02
Roof	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PF	0.03	0.04	0.04	0.5	0.037	0.020	0.02
Roof	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PF	0.02	0.04	0.06	0.5	0.040	0.023	0.02
Roof	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PF	0.03	0.04	0.06	0.5	0.043	0.027	0.03
Roof	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.02	0.05	0.07	0.5	0.047	0.032	0.03
Roof	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.02	0.04	0.03	0.5	0.030	0.013	0.01
Roof	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PF	0.01	0.03	0.03	0.5	0.023	0.008	0.01
Roof	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PF	0.02	0.03	0.05	0.5	0.033	0.016	0.02
Roof	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PF	0.01	0.03	0.05	0.5	0.030	0.013	0.01
Roof	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PF	0.01	0.02	0.03	0.5	0.020	0.006	0.01
Roof	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PF	0.01	0.02	0.01	0.5	0.013	0.002	0.00
Roof	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	H	0.89	PF	0.01	0.01	0.01	0.5	0.010	0.001	0.00
Roof	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	H	0.89	PF	0.01	0.01	0.02	0.5	0.013	0.003	0.00
Roof	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PF	0.01	0.02	0.02	0.5	0.017	0.004	0.00
Roof	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	H	0.87	PF	0.01	0.02	0.01	0.5	0.013	0.003	0.00
Roof	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	H	0.86	PF	0.01	0.02	0.02	0.5	0.017	0.004	0.00
Roof	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	H	0.85	PF	0.01	0.01	0.01	0.5	0.010	0.001	0.00

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Roof	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PF	0.03	0.03	0.02	0.5	0.027	0.011	0.01
Roof	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PF	0.04	0.03	0.03	0.5	0.033	0.017	0.02
Roof	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PF	0.03	0.04	0.04	0.5	0.037	0.020	0.02
Roof	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PF	0.02	0.04	0.05	0.5	0.037	0.020	0.02
Roof	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PF	0.03	0.05	0.05	0.5	0.043	0.027	0.03
Roof	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.02	0.05	0.08	0.5	0.050	0.036	0.04
Roof	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.02	0.04	0.06	0.5	0.040	0.023	0.02
Roof	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PF	0.01	0.02	0.03	0.5	0.021	0.006	0.01
Roof	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PF	0.01	0.03	0.05	0.5	0.030	0.013	0.01
Roof	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PF	0.01	0.02	0.02	0.5	0.017	0.004	0.00
Roof	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PF	0.01	0.02	0.03	0.5	0.020	0.006	0.01
Roof	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PF	0.01	0.02	0.01	0.5	0.013	0.002	0.00
Roof	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	H	0.88	PF	0.02	0.03	0.04	0.5	0.030	0.013	0.01
Roof	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PF	0.01	0.03	0.05	0.5	0.030	0.013	0.01
Roof	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	H	0.87	PF	0.01	0.02	0.02	0.5	0.017	0.004	0.00
Roof	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	H	0.86	PF	0.01	0.01	0.02	0.5	0.013	0.002	0.00
Roof	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	H	0.85	PF	0.01	0.01	0.01	0.5	0.010	0.001	0.00

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.											DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions													
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Trunk	HAD4006A (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	BS	0.05	0.08	0.14	0.29	0.38	0.41	0.46	0.43	0.30	0.17	0.5	0.271	0.134	0.14
Trunk	HAD4006A (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	BS	0.06	0.12	0.18	0.36	0.44	0.45	0.48	0.46	0.33	0.20	0.5	0.308	0.154	0.16
Trunk	HAD4006A (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	BS	0.06	0.12	0.17	0.30	0.37	0.42	0.50	0.49	0.36	0.22	0.5	0.301	0.151	0.16
Trunk	HAD4007A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	BS	0.06	0.12	0.16	0.25	0.37	0.42	0.45	0.42	0.31	0.18	0.5	0.274	0.137	0.14
Trunk	HAD4007A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	BS	0.06	0.11	0.14	0.23	0.35	0.40	0.43	0.42	0.28	0.18	0.5	0.260	0.130	0.13
Trunk	HAD4007A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.06	0.11	0.12	0.22	0.34	0.39	0.41	0.38	0.26	0.16	0.5	0.245	0.123	0.13
Trunk	HAD4008A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.05	0.09	0.11	0.19	0.30	0.35	0.37	0.34	0.23	0.13	0.5	0.216	0.108	0.11
Trunk	HAD4008A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	BS	0.05	0.06	0.08	0.23	0.37	0.41	0.41	0.36	0.26	0.14	0.5	0.237	0.117	0.12
Trunk	HAD4008A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	BS	0.04	0.08	0.10	0.24	0.39	0.42	0.44	0.36	0.25	0.14	0.5	0.246	0.122	0.13
Trunk	HAD4009A (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	BS	0.04	0.06	0.09	0.21	0.35	0.38	0.39	0.33	0.21	0.11	0.5	0.217	0.107	0.11
Trunk	HAD4009A (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	BS	0.04	0.05	0.09	0.32	0.46	0.47	0.42	0.34	0.23	0.13	0.5	0.255	0.125	0.13
Trunk	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	BS	0.06	0.07	0.13	0.29	0.43	0.49	0.44	0.36	0.24	0.15	0.5	0.266	0.129	0.13
Trunk	HAD4022A (132-174MHz)	5.15	136.0125	30	28.7	CW	E	0.99	BS	0.01	0.02	0.03	0.05	0.11	0.33	0.51	0.45	0.30	0.35	0.5	0.216	0.107	0.11
Trunk	HAD4022A (132-174MHz)	5.15	143.9875	30	28.8	CW	E	1.00	BS	0.01	0.03	0.05	0.08	0.14	0.34	0.46	0.38	0.32	0.41	0.5	0.222	0.111	0.12
Trunk	HAD4022A (132-174MHz)	5.15	150.8000	30	28.8	CW	E	1.00	BS	0.02	0.03	0.05	0.06	0.11	0.29	0.42	0.34	0.28	0.38	0.5	0.198	0.099	0.10
Trunk	HAD4022A (132-174MHz)	5.15	158.3000	30	28.5	CW	E	0.99	BS	0.02	0.03	0.04	0.06	0.14	0.30	0.37	0.34	0.32	0.36	0.5	0.198	0.098	0.10
Trunk	HAD4022A (132-174MHz)	5.15	165.9875	30	28.6	CW	E	0.98	BS	0.02	0.03	0.03	0.07	0.19	0.39	0.43	0.36	0.39	0.43	0.5	0.234	0.115	0.12
Trunk	HAD4022A (132-174MHz)	5.15	173.4000	30	28.9	CW	E	0.97	BS	0.02	0.03	0.04	0.10	0.22	0.41	0.44	0.39	0.40	0.39	0.5	0.244	0.118	0.12

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.	Bystander (BS) Positions										DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
										Trunk	RAD4226A (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	BS	0.05			
Trunk	RAD4226A (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	BS	0.06	0.10	0.15	0.31	0.40	0.38	0.40	0.38	0.28	0.17	0.5	0.263	0.132	0.14
Trunk	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	BS	0.07	0.12	0.18	0.36	0.44	0.43	0.49	0.47	0.34	0.21	0.5	0.311	0.156	0.16
Trunk	RAD4225A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	BS	0.06	0.10	0.15	0.28	0.35	0.38	0.44	0.42	0.30	0.18	0.5	0.266	0.133	0.14
Trunk	RAD4225A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	BS	0.06	0.09	0.13	0.24	0.31	0.37	0.44	0.42	0.29	0.18	0.5	0.253	0.127	0.13
Trunk	RAD4225A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.05	0.09	0.12	0.21	0.32	0.38	0.43	0.40	0.27	0.16	0.5	0.243	0.122	0.13
Trunk	RAD4224A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	BS	0.04	0.07	0.09	0.17	0.26	0.31	0.36	0.33	0.21	0.12	0.5	0.196	0.098	0.10
Trunk	RAD4224A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	BS	0.04	0.06	0.08	0.21	0.32	0.36	0.39	0.34	0.22	0.12	0.5	0.214	0.106	0.11
Trunk	RAD4224A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	BS	0.05	0.07	0.10	0.23	0.37	0.44	0.45	0.38	0.24	0.13	0.5	0.246	0.122	0.13
Trunk	RAD4223A (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	BS	0.01	0.02	0.03	0.07	0.11	0.13	0.13	0.11	0.07	0.04	0.5	0.072	0.036	0.04
Trunk	RAD4223A (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	BS	0.04	0.07	0.11	0.25	0.40	0.41	0.36	0.29	0.19	0.11	0.5	0.223	0.109	0.11
Trunk	RAD4223A (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	BS	0.05	0.06	0.10	0.25	0.40	0.45	0.41	0.33	0.22	0.13	0.5	0.240	0.116	0.12
Trunk	RAD4227A (146-172MHz)	5.15	146.0125	30	28.9	CW	E	1.00	BS	0.04	0.07	0.11	0.21	0.28	0.31	0.30	0.33	0.34	0.28	0.5	0.227	0.114	0.12
Trunk	RAD4227A (146-172MHz)	5.15	150.8000	30	28.8	CW	E	1.00	BS	0.04	0.07	0.10	0.15	0.21	0.30	0.32	0.31	0.33	0.27	0.5	0.210	0.105	0.11
Trunk	RAD4227A (146-172MHz)	5.15	157.9875	30	28.9	CW	E	0.99	BS	0.03	0.04	0.06	0.13	0.22	0.23	0.34	0.30	0.32	0.27	0.5	0.194	0.096	0.10
Trunk	RAD4227A (146-172MHz)	5.15	164.9875	30	28.8	CW	E	0.98	BS	0.02	0.03	0.05	0.10	0.23	0.32	0.30	0.30	0.28	0.24	0.5	0.187	0.092	0.10
Trunk	RAD4227A (146-172MHz)	5.15	171.9875	30	29.1	CW	E	0.97	BS	0.02	0.03	0.04	0.08	0.17	0.27	0.27	0.25	0.26	0.24	0.5	0.163	0.079	0.08

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.											DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)				
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions																	
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm								
45 (corner)																											
Trunk	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	BS	0.15	0.23	0.24	0.27	0.26	0.26	0.25	0.22	0.19	0.15	0.5	0.222	0.111	0.12				
Trunk	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	BS	0.11	0.20	0.21	0.21	0.22	0.21	0.19	0.17	0.14	0.12	0.5	0.178	0.086	0.09				
90 (side)																											
Trunk	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	BS	0.11	0.20	0.21	0.17	0.18	0.18	0.19	0.19	0.16	0.13	0.5	0.172	0.086	0.09				
Trunk	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	BS	0.09	0.14	0.12	0.15	0.22	0.22	0.20	0.17	0.15	0.13	0.5	0.159	0.077	0.08				

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.	Passenger Positions			DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Head	Chest	Lower Trunk				
Trunk	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PB	0.91	0.77	0.54	0.5	0.740	0.366	0.38
Trunk	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PB	1.26	1.20	0.92	0.5	1.127	0.563	0.59
Trunk	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PB	0.80	0.90	0.81	0.5	0.837	0.418	0.44
Trunk	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PB	0.90	1.00	0.91	0.5	0.937	0.468	0.49
Trunk	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PB	0.87	0.95	0.83	0.5	0.883	0.442	0.46
Trunk	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.87	0.99	0.80	0.5	0.887	0.443	0.46
Trunk	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.74	0.86	0.67	0.5	0.757	0.378	0.39
Trunk	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PB	1.02	1.19	0.88	0.5	1.030	0.510	0.53
Trunk	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PB	0.74	1.04	0.86	0.5	0.880	0.436	0.45
Trunk	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PB	0.68	0.95	0.79	0.5	0.807	0.399	0.42
Trunk	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PB	0.54	0.92	1.15	0.5	0.870	0.426	0.44
Trunk	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PB	0.48	0.41	0.62	0.5	0.503	0.244	0.25
Trunk	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	E	0.99	PB	0.03	0.03	0.02	0.5	0.027	0.013	0.01
Trunk	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	E	1.00	PB	0.20	0.21	0.14	0.5	0.183	0.092	0.10
Trunk	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PB	0.17	0.23	0.19	0.5	0.197	0.098	0.10
Trunk	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	E	0.99	PB	0.31	0.41	0.31	0.5	0.343	0.170	0.18
Trunk	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	E	0.98	PB	0.35	0.60	0.66	0.5	0.537	0.263	0.28
Trunk	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	E	0.97	PB	0.34	0.29	0.41	0.5	0.347	0.168	0.17

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.	Passenger Positions			DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Trunk	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PB	0.82	0.70	0.47	0.5	0.663	0.328	0.34
Trunk	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PB	1.08	1.09	0.85	0.5	1.007	0.503	0.53
Trunk	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PB	0.84	0.93	0.84	0.5	0.870	0.435	0.45
Trunk	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PB	0.84	0.89	0.80	0.5	0.843	0.422	0.44
Trunk	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PB	0.83	0.88	0.76	0.5	0.823	0.412	0.43
Trunk	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.84	0.94	0.73	0.5	0.837	0.418	0.44
Trunk	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PB	0.67	0.75	0.57	0.5	0.663	0.332	0.35
Trunk	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PB	1.00	1.18	0.88	0.5	1.020	0.505	0.53
Trunk	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PB	0.70	1.00	0.82	0.5	0.840	0.416	0.43
Trunk	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PB	0.29	0.41	0.33	0.5	0.343	0.170	0.18
Trunk	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PB	0.51	0.85	1.06	0.5	0.807	0.395	0.41
Trunk	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PB	0.48	0.41	0.63	0.5	0.507	0.246	0.26
Trunk	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	E	1.00	PB	0.51	0.57	0.50	0.5	0.527	0.263	0.27
Trunk	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PB	0.53	0.66	0.52	0.5	0.570	0.285	0.30
Trunk	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	E	0.99	PB	0.59	0.77	0.58	0.5	0.647	0.320	0.33
Trunk	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	E	0.98	PB	0.43	0.69	0.70	0.5	0.607	0.297	0.31
Trunk	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	E	0.97	PB	0.24	0.15	..21	0.5	0.195	0.095	0.10

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Trunk	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PF	0.03	0.03	0.02	0.5	0.027	0.013	0.01
Trunk	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PF	0.05	0.04	0.05	0.5	0.047	0.023	0.02
Trunk	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PF	0.08	0.04	0.07	0.5	0.063	0.032	0.03
Trunk	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PF	0.11	0.03	0.10	0.5	0.080	0.040	0.04
Trunk	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PF	0.15	0.05	0.14	0.5	0.113	0.057	0.06
Trunk	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.18	0.10	0.15	0.5	0.143	0.072	0.07
Trunk	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.15	0.08	0.12	0.5	0.117	0.058	0.06
Trunk	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PF	0.14	0.15	0.16	0.5	0.150	0.074	0.08
Trunk	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PF	0.10	0.13	0.09	0.5	0.107	0.053	0.06
Trunk	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PF	0.10	0.13	0.10	0.5	0.110	0.054	0.06
Trunk	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PF	0.21	0.23	0.16	0.5	0.200	0.098	0.10
Trunk	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PF	0.14	0.19	0.11	0.5	0.147	0.071	0.07
Trunk	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	E	0.99	PF	0.01	0.01	0.01	0.5	0.010	0.005	0.01
Trunk	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	E	1.00	PF	0.01	0.01	0.01	0.5	0.010	0.005	0.01
Trunk	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PF	0.03	0.02	0.02	0.5	0.023	0.012	0.01
Trunk	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	E	0.99	PF	0.05	0.05	0.03	0.5	0.043	0.021	0.02
Trunk	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	E	0.98	PF	0.10	0.13	0.08	0.5	0.103	0.051	0.05
Trunk	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	E	0.97	PF	0.09	0.11	0.08	0.5	0.093	0.045	0.05

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Trunk	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	E	0.99	PF	0.01	0.01	0.01	0.5	0.010	0.005	0.01
Trunk	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	E	1.00	PF	0.12	0.08	0.07	0.5	0.090	0.045	0.05
Trunk	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	E	1.00	PF	0.10	0.02	0.04	0.5	0.053	0.027	0.03
Trunk	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	E	1.00	PF	0.10	0.02	0.06	0.5	0.060	0.030	0.03
Trunk	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	E	1.00	PF	0.15	0.04	0.11	0.5	0.100	0.050	0.05
Trunk	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.17	0.09	0.12	0.5	0.127	0.063	0.07
Trunk	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	E	1.00	PF	0.15	0.08	0.10	0.5	0.110	0.055	0.06
Trunk	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	E	0.99	PF	0.14	0.15	0.16	0.5	0.150	0.074	0.08
Trunk	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	E	0.99	PF	0.10	0.13	0.09	0.5	0.107	0.053	0.06
Trunk	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	E	0.99	PF	0.04	0.05	0.04	0.5	0.043	0.021	0.02
Trunk	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	E	0.98	PF	0.19	0.22	0.13	0.5	0.180	0.088	0.09
Trunk	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	E	0.97	PF	0.16	0.19	0.10	0.5	0.150	0.073	0.08
Trunk	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	E	1.00	PF	0.05	0.01	0.04	0.5	0.033	0.017	0.02
Trunk	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	E	1.00	PF	0.11	0.06	0.07	0.5	0.080	0.040	0.04
Trunk	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	E	0.99	PF	0.08	0.08	0.06	0.5	0.073	0.036	0.04
Trunk	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	E	0.98	PF	0.10	0.13	0.08	0.5	0.103	0.051	0.05
Trunk	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	E	0.97	PF	0.07	0.09	0.05	0.5	0.070	0.034	0.04

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.	Bystander (BS) Positions									DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)	
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions													
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Trunk	HAD4006A (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	BS	0.05	0.05	0.06	0.09	0.12	0.14	0.13	0.11	0.08	0.06	0.5	0.089	0.118	0.12
Trunk	HAD4006A (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	BS	0.05	0.05	0.06	0.10	0.13	0.15	0.14	0.11	0.09	0.07	0.5	0.095	0.135	0.14
Trunk	HAD4006A (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	BS	0.06	0.05	0.06	0.10	0.13	0.15	0.14	0.12	0.09	0.07	0.5	0.097	0.140	0.15
Trunk	HAD4007A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	BS	0.06	0.05	0.06	0.10	0.13	0.14	0.14	0.12	0.10	0.08	0.5	0.098	0.140	0.15
Trunk	HAD4007A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	BS	0.05	0.04	0.06	0.10	0.13	0.14	0.14	0.12	0.09	0.07	0.5	0.094	0.129	0.13
Trunk	HAD4007A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.05	0.04	0.06	0.10	0.13	0.14	0.13	0.11	0.09	0.07	0.5	0.092	0.124	0.13
Trunk	HAD4008A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.04	0.04	0.06	0.10	0.12	0.13	0.13	0.11	0.08	0.06	0.5	0.087	0.110	0.12
Trunk	HAD4008A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	BS	0.04	0.04	0.06	0.10	0.13	0.14	0.13	0.11	0.08	0.07	0.5	0.090	0.116	0.12
Trunk	HAD4008A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	BS	0.03	0.03	0.06	0.11	0.13	0.14	0.13	0.11	0.09	0.07	0.5	0.090	0.116	0.12
Trunk	HAD4009A (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	BS	0.03	0.03	0.06	0.10	0.13	0.14	0.13	0.10	0.08	0.06	0.5	0.086	0.106	0.11
Trunk	HAD4009A (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	BS	0.03	0.05	0.08	0.12	0.14	0.14	0.13	0.11	0.09	0.06	0.5	0.095	0.126	0.13
Trunk	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	BS	0.04	0.05	0.08	0.11	0.14	0.15	0.14	0.12	0.09	0.07	0.5	0.099	0.133	0.14
Trunk	HAD4022A (132-174MHz)	5.15	136.0125	30	28.7	CW	H	0.89	BS	0.02	0.02	0.02	0.03	0.05	0.08	0.12	0.15	0.16	0.16	0.5	0.081	0.098	0.10
Trunk	HAD4022A (132-174MHz)	5.15	143.9875	30	28.8	CW	H	0.89	BS	0.03	0.03	0.03	0.05	0.06	0.10	0.13	0.16	0.16	0.15	0.5	0.090	0.121	0.13
Trunk	HAD4022A (132-174MHz)	5.15	150.8000	30	28.8	CW	H	0.88	BS	0.03	0.03	0.04	0.05	0.06	0.09	0.13	0.15	0.15	0.14	0.5	0.087	0.110	0.12
Trunk	HAD4022A (132-174MHz)	5.15	158.3000	30	28.5	CW	H	0.87	BS	0.03	0.03	0.04	0.06	0.07	0.11	0.14	0.15	0.15	0.13	0.5	0.091	0.118	0.12
Trunk	HAD4022A (132-174MHz)	5.15	165.9875	30	28.6	CW	H	0.86	BS	0.02	0.03	0.04	0.06	0.08	0.12	0.15	0.16	0.15	0.12	0.5	0.093	0.121	0.13
Trunk	HAD4022A (132-174MHz)	5.15	173.4000	30	28.9	CW	H	0.85	BS	0.02	0.03	0.05	0.07	0.09	0.13	0.16	0.16	0.15	0.13	0.5	0.099	0.133	0.14

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.	Bystander (BS) Positions									DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)	
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor															
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
Trunk	RAD4226A (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	BS	0.04	0.04	0.05	0.09	0.12	0.12	0.12	0.10	0.08	0.06	0.5	0.082	0.100	0.10
Trunk	RAD4226A (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	BS	0.04	0.04	0.06	0.10	0.12	0.13	0.12	0.10	0.08	0.06	0.5	0.085	0.108	0.11
Trunk	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	BS	0.05	0.05	0.06	0.11	0.14	0.15	0.14	0.12	0.10	0.07	0.5	0.099	0.146	0.15
Trunk	RAD4225A (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	BS	0.05	0.04	0.06	0.10	0.13	0.14	0.14	0.11	0.09	0.07	0.5	0.093	0.126	0.13
Trunk	RAD4225A (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	BS	0.05	0.04	0.06	0.11	0.13	0.14	0.14	0.11	0.09	0.07	0.5	0.094	0.129	0.13
Trunk	RAD4225A (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.04	0.04	0.06	0.10	0.13	0.14	0.13	0.11	0.09	0.07	0.5	0.091	0.121	0.13
Trunk	RAD4224A (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	BS	0.03	0.03	0.05	0.09	0.11	0.12	0.11	0.09	0.07	0.05	0.5	0.075	0.082	0.09
Trunk	RAD4224A (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	BS	0.04	0.04	0.06	0.10	0.12	0.13	0.12	0.10	0.08	0.06	0.5	0.085	0.103	0.11
Trunk	RAD4224A (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	BS	0.03	0.04	0.06	0.11	0.13	0.14	0.13	0.11	0.08	0.06	0.5	0.089	0.113	0.12
Trunk	RAD4223A (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	BS	0.02	0.02	0.03	0.06	0.07	0.08	0.07	0.06	0.05	0.04	0.5	0.050	0.036	0.04
Trunk	RAD4223A (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	BS	0.03	0.04	0.07	0.11	0.13	0.13	0.12	0.10	0.07	0.06	0.5	0.086	0.103	0.11
Trunk	RAD4223A (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	BS	0.04	0.05	0.07	0.12	0.13	0.14	0.14	0.11	0.09	0.07	0.5	0.096	0.126	0.13
Trunk	RAD4227A (146-172MHz)	5.15	146.0125	30	28.9	CW	H	0.88	BS	0.04	0.03	0.05	0.08	0.11	0.13	0.13	0.13	0.11	0.09	0.5	0.090	0.118	0.12
Trunk	RAD4227A (146-172MHz)	5.15	150.8000	30	28.8	CW	H	0.88	BS	0.03	0.03	0.05	0.08	0.10	0.12	0.13	0.12	0.10	0.08	0.5	0.084	0.103	0.11
Trunk	RAD4227A (146-172MHz)	5.15	157.9875	30	28.9	CW	H	0.87	BS	0.03	0.03	0.05	0.08	0.10	0.12	0.13	0.13	0.11	0.09	0.5	0.087	0.108	0.11
Trunk	RAD4227A (146-172MHz)	5.15	164.9875	30	28.8	CW	H	0.86	BS	0.02	0.03	0.05	0.07	0.09	0.12	0.13	0.13	0.11	0.09	0.5	0.084	0.098	0.10
Trunk	RAD4227A (146-172MHz)	5.15	171.9875	30	29.1	CW	H	0.85	BS	0.02	0.03	0.05	0.06	0.08	0.11	0.13	0.13	0.12	0.09	0.5	0.082	0.092	0.09

MPE calculations are defined in section 13.0.

MPE measurement data for Bystander

D.U.T. Info.							Probe Info.		Test Pos.	Bystander (BS) Positions									DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)	
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Bystander (BS) Positions													
										20 cm	40 cm	60 cm	80 cm	100 cm	120 cm	140 cm	160 cm	180 cm	200 cm				
45 (corner)																							
Trunk	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	BS	0.05	0.07	0.08	0.10	0.11	0.11	0.10	0.09	0.08	0.07	0.5	0.086	0.110	0.12
Trunk	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	BS	0.06	0.08	0.09	0.10	0.10	0.10	0.09	0.09	0.08	0.07	0.5	0.086	0.101	0.10
90 (side)																							
Trunk	RAD4226A (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	BS	0.05	0.07	0.09	0.10	0.11	0.10	0.10	0.09	0.08	0.07	0.5	0.086	0.110	0.12
Trunk	HAD4009A (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	BS	0.05	0.08	0.09	0.10	0.10	0.09	0.09	0.08	0.07	0.07	0.5	0.082	0.092	0.10

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Trunk	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PB	0.13	0.09	0.07	0.5	0.097	0.140	0.15
Trunk	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PB	0.16	0.11	0.08	0.5	0.117	0.203	0.21
Trunk	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PB	0.15	0.12	0.10	0.5	0.123	0.227	0.24
Trunk	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PB	0.17	0.13	0.11	0.5	0.137	0.273	0.28
Trunk	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PB	0.15	0.12	0.10	0.5	0.123	0.222	0.23
Trunk	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.13	0.10	0.09	0.5	0.107	0.166	0.17
Trunk	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.12	0.10	0.08	0.5	0.100	0.146	0.15
Trunk	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PB	0.17	0.13	0.10	0.5	0.133	0.254	0.26
Trunk	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PB	0.18	0.12	0.09	0.5	0.130	0.241	0.25
Trunk	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PB	0.16	0.11	0.09	0.5	0.120	0.205	0.21
Trunk	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PB	0.22	0.18	0.11	0.5	0.170	0.403	0.42
Trunk	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PB	0.15	0.14	0.08	0.5	0.123	0.207	0.22
Trunk	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	H	0.89	PB	0.03	0.07	0.03	0.5	0.043	0.028	0.03
Trunk	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	H	0.89	PB	0.06	0.06	0.03	0.5	0.050	0.037	0.04
Trunk	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PB	0.07	0.06	0.04	0.5	0.057	0.047	0.05
Trunk	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	H	0.87	PB	0.11	0.08	0.07	0.5	0.087	0.107	0.11
Trunk	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	H	0.86	PB	0.16	0.13	0.08	0.5	0.123	0.212	0.22
Trunk	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	H	0.85	PB	0.12	0.11	0.07	0.5	0.100	0.136	0.14

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Trunk	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PB	0.12	0.08	0.06	0.5	0.087	0.112	0.12
Trunk	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PB	0.16	0.11	0.10	0.5	0.123	0.227	0.24
Trunk	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PB	0.17	0.13	0.10	0.5	0.133	0.265	0.28
Trunk	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PB	0.15	0.11	0.09	0.5	0.117	0.199	0.21
Trunk	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PB	0.14	0.11	0.10	0.5	0.117	0.199	0.21
Trunk	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.12	0.09	0.08	0.5	0.097	0.136	0.14
Trunk	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PB	0.11	0.08	0.07	0.5	0.087	0.110	0.11
Trunk	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PB	0.15	0.11	0.10	0.5	0.120	0.205	0.21
Trunk	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PB	0.15	0.11	0.08	0.5	0.113	0.183	0.19
Trunk	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PB	0.10	0.07	0.05	0.5	0.073	0.077	0.08
Trunk	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PB	0.18	0.15	0.10	0.5	0.143	0.286	0.30
Trunk	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PB	0.15	0.13	0.08	0.5	0.120	0.196	0.20
Trunk	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	H	0.88	PB	0.12	0.09	0.08	0.5	0.097	0.136	0.14
Trunk	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PB	0.11	0.08	0.07	0.5	0.087	0.110	0.11
Trunk	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	H	0.87	PB	0.13	0.10	0.09	0.5	0.107	0.162	0.17
Trunk	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	H	0.86	PB	0.15	0.12	0.08	0.5	0.117	0.190	0.20
Trunk	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	H	0.85	PB	0.09	0.08	0.05	0.5	0.073	0.073	0.08

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Trunk	HAD4006A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PF	0.05	0.05	0.04	0.5	0.047	0.033	0.03
Trunk	HAD4006A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PF	0.08	0.07	0.05	0.5	0.067	0.066	0.07
Trunk	HAD4006A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PF	0.06	0.06	0.05	0.5	0.057	0.048	0.05
Trunk	HAD4007A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PF	0.07	0.07	0.06	0.5	0.067	0.065	0.07
Trunk	HAD4007A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PF	0.08	0.08	0.07	0.5	0.077	0.086	0.09
Trunk	HAD4007A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.08	0.08	0.07	0.5	0.077	0.086	0.09
Trunk	HAD4008A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.08	0.08	0.07	0.5	0.077	0.086	0.09
Trunk	HAD4008A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PF	0.06	0.06	0.06	0.5	0.060	0.051	0.05
Trunk	HAD4008A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PF	0.04	0.04	0.05	0.5	0.043	0.027	0.03
Trunk	HAD4009A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PF	0.04	0.04	0.05	0.5	0.043	0.027	0.03
Trunk	HAD4009A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PF	0.06	0.05	0.06	0.5	0.057	0.045	0.05
Trunk	HAD4009A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PF	0.06	0.05	0.06	0.5	0.057	0.044	0.05
Trunk	HAD4022A, (132-174MHz)	5.15	136.0125	30	28.7	CW	H	0.89	PF	0.01	0.01	0.02	0.5	0.013	0.003	0.00
Trunk	HAD4022A, (132-174MHz)	5.15	143.9875	30	28.8	CW	H	0.89	PF	0.03	0.03	0.02	0.5	0.027	0.011	0.01
Trunk	HAD4022A, (132-174MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PF	0.03	0.04	0.04	0.5	0.037	0.020	0.02
Trunk	HAD4022A, (132-174MHz)	5.15	158.3000	30	28.5	CW	H	0.87	PF	0.03	0.03	0.04	0.5	0.033	0.016	0.02
Trunk	HAD4022A, (132-174MHz)	5.15	165.9875	30	28.6	CW	H	0.86	PF	0.04	0.04	0.05	0.5	0.043	0.026	0.03
Trunk	HAD4022A, (132-174MHz)	5.15	173.4000	30	28.9	CW	H	0.85	PF	0.05	0.05	0.05	0.5	0.050	0.034	0.04

MPE calculations are defined in section 13.0.

MPE measurement data for Passenger

D.U.T. Info.							Probe Info.		Test Pos.				DUT Max. TX Factor	Avg. over Body (mW/ cm2)	Calc. P.D. (mW/ cm2)	Max Calc. P.D. (mW/ cm2)
Ant Loc.	Ant. Model/ Desc.	Ant. Gain (dBi)	Tx Freq (MHz)	Max Pwr (W)	Initial Pwr (W)	Test Mode	E/H Field	Probe Cal. Factor		Passenger Positions						
										Head	Chest	Lower Trunk				
Trunk	RAD4226A, (136-144MHz)	2.15	136.0125	30	28.7	CW	H	0.89	PF	0.04	0.03	0.03	0.5	0.033	0.017	0.02
Trunk	RAD4226A, (136-144MHz)	2.15	140.0125	30	28.7	CW	H	0.89	PF	0.04	0.04	0.04	0.5	0.040	0.024	0.02
Trunk	RAD4226A, (136-144MHz)	2.15	143.9875	30	28.8	CW	H	0.89	PF	0.06	0.06	0.05	0.5	0.057	0.048	0.05
Trunk	RAD4225A, (146-150.8MHz)	2.15	146.0125	30	28.9	CW	H	0.88	PF	0.07	0.06	0.06	0.5	0.063	0.059	0.06
Trunk	RAD4225A, (146-150.8MHz)	2.15	148.4000	30	28.9	CW	H	0.88	PF	0.07	0.07	0.07	0.5	0.070	0.072	0.07
Trunk	RAD4225A, (146-150.8MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.07	0.07	0.06	0.5	0.067	0.065	0.07
Trunk	RAD4224A, (150.8-162MHz)	2.15	150.8000	30	28.8	CW	H	0.88	PF	0.07	0.06	0.07	0.5	0.067	0.065	0.07
Trunk	RAD4224A, (150.8-162MHz)	2.15	156.4000	30	28.8	CW	H	0.87	PF	0.07	0.07	0.07	0.5	0.070	0.070	0.07
Trunk	RAD4224A, (150.8-162MHz)	2.15	161.9875	30	28.8	CW	H	0.87	PF	0.05	0.05	0.05	0.5	0.050	0.036	0.04
Trunk	RAD4223A, (162-174MHz)	2.15	162.0125	30	28.7	CW	H	0.87	PF	0.03	0.03	0.03	0.5	0.030	0.013	0.01
Trunk	RAD4223A, (162-174MHz)	2.15	167.7000	30	28.8	CW	H	0.86	PF	0.06	0.05	0.06	0.5	0.057	0.045	0.05
Trunk	RAD4223A, (162-174MHz)	2.15	173.4000	30	28.9	CW	H	0.85	PF	0.06	0.05	0.06	0.5	0.057	0.044	0.05
Trunk	RAD4227A, (146-172MHz)	5.15	146.0125	30	28.9	CW	H	0.88	PF	0.05	0.05	0.05	0.5	0.050	0.036	0.04
Trunk	RAD4227A, (146-172MHz)	5.15	150.8000	30	28.8	CW	H	0.88	PF	0.06	0.06	0.05	0.5	0.057	0.047	0.05
Trunk	RAD4227A, (146-172MHz)	5.15	157.9875	30	28.9	CW	H	0.87	PF	0.05	0.05	0.05	0.5	0.050	0.036	0.04
Trunk	RAD4227A, (146-172MHz)	5.15	164.9875	30	28.8	CW	H	0.86	PF	0.04	0.04	0.05	0.5	0.043	0.026	0.03
Trunk	RAD4227A, (146-172MHz)	5.15	171.9875	30	29.1	CW	H	0.85	PF	0.04	0.03	0.03	0.5	0.033	0.015	0.02

MPE calculations are defined in section 13.0.

Appendix E - SAR Simulation Report