



MOTOROLA



TESTING CERT: 2518.01

**FCC ID: LO6-DVRS800
DECLARATION OF COMPLIANCE MPE ASSESSMENT**

Networks & Enterprise
EME Test Laboratory
8000 West Sunrise Blvd
Fort Lauderdale, FL. 33322

Date of Report: March 29, 2007
Report Revision: Rev. O
Report ID: FCC MPE rpt_DVR 800 XTL
UHF R2 Rev O_070329_SR3629

Responsible Engineer: Stephen Whalen (EME Principle Staff Eng.)
Date/s Tested: 3/9/2006 & 5/8/2006
Manufacturer/Location: Futurecom Systems Group Inc., Concord, Ontario, Canada
Date submitted for test: 2/16/06 (DVR)
DUT Description: 800MHz DVRS
Test TX mode(s): CW
Max. Power output: 10W (conducted into antenna), 100% Duty Cycle
TX Frequency Bands: 806-825MHz and 851-870MHz
Signaling type: FM; APCO 25
Model(s) Tested: DQPM DVR8000P
Model(s) Certified: DQPM DVR8000P
Serial Number(s): 05091244
Classification: Occupational Controlled (Operator); General Population/Uncontrolled (Passengers/Bystanders)
Rule Part(s): 2.1091 (d)



Approved Accessories:
Antenna(s):
HAF4016A (764-870MHz ¼ wave trunk mount antenna; 0dBd gain)

Companion Mobiles and Antennas:

| FCC ID | Mobile Description | Antenna(s) |
|-------------|--|--|
| AZ492FT4867 | Motorola XTL5000 Model M20SSS9PW1AN, 450-512MHz Mobile, Transmit conducted power up to 45W (nominal), 50% transmit duty cycle. | HAE6016A (450-512MHz; ¼ wave Roof mount; 0dBd gain) HAE4003A (450-470MHz; ¼ wave Roof mount; 0dBd gain) HAE4011A (445-470MHz; ½ wave Roof mount; 3.5dBd gain) HAE4012A (470-495MHz; ¼ wave Roof mount; 3.5dBd gain) HAE4013A (494-512MHz; ¼ wave Roof mount; 3.5dBd gain) HAE4004A (470-512MHz; ¼ wave Roof mount; 0dBd gain) |

Final RF Exposure Results:
Combined 800MHz DVR and UHF Mobile max calculated power density % of limit = 51.0%

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 EME Laboratory.

Signature on file
Deanna Zakharia NE EME Lab Senior Resource Manager,
Laboratory Director,

Approval Date: 3/29/2007

Certification Date:

Certification No.:

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REVISION HISTORY

| Date | Revision | Comments |
|----------|----------|------------------|
| 03/29/07 | O | Original release |

1.0 Product and System Description

FCC ID: LO6-DVRS800 is a MOBEXCOM Digital Vehicular Repeater (DVR) manufactured by FUTURECOM Systems Group. The DVR, in addition to standalone operation, is capable of interfacing to a companion mobile radio using serial data protocol for audio and control. The full duplex DVR provides local area coverage for portable to portable communication in the 806-825 and 851-870MHz band while the companion mobile radio provides wide-area coverage extension.

The system can operate in the following modes: Mobile mode - where the vehicular repeat function is off but receives emergency and mode change commands from portable devices; Local mode - with portable to portable repeat and network monitoring capabilities; and System mode - with portable to portable repeat functions with full network interconnect. Furthermore, the DVRS offers a busy lockout feature where a simulcast prevention algorithm is used for seamless multi-vehicle operation on the same channel. Moreover, the system supports emergency calls in the MDC1200 signaling format. Other system features include field programmability, seamless interface to a mobile radio through the control head bus, controllability via a mobile radio control head, as well as remotely by a dispatcher or portable user. The DVR supports up to 64 channels and 255 talk groups, MDC1200, DTMF, EIA, CCIR signaling as well as PL and DPL. The DVR supports programmability of leading and/or trailing tones, and audio and TX priorities per mode as well as talk group steering.

This test report covers the RF Exposure performance of the 800MHz 10 watts DVR interfaced with, and transmitting simultaneously with, companion UHF(450-512MHz) mobile radio with maximum transmit powers up to 54 watts (450-500MHz) and 48 watts (500-512MHz) and with both units, installed in a typical vehicle.

The DVR transmit frequency ranges are 806-825 and 851-870MHz at transmit duty cycle up to 100%. The UHF mobile transmit frequency range is 450-512MHz at transmit duty cycle up to 50%. The DVR antenna is limited to $\frac{1}{4}\lambda$ (0dBd gain) mounted at the center of the trunk, and the UHF mobile antennas are limited to $\frac{1}{4}\lambda$ and $\frac{1}{2}\lambda$ (0dBd and 3.5dBd gain) mounted at the center of the roof. The maximum conducted power delivered to the DVR antenna is 10 watts.

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 "By-standers" as used herein mean people other than operator)

2.0 Additional Options and Accessories:

NA

3.0 Measurement and Limit Standards

Measurements were performed according to the recommended guidelines in IEEE/ANSI C95.3-2002 and compared to FCC Limits Per 47 CFR 2.1091 (d) for General Population/Uncontrolled RF Exposure.

For test frequencies ranging from 806-870MHz and 450-512MHz the MPE (Maximum Permissible Exposure) limit to electromagnetic energy in equivalent plane wave free-space power density is 0.54-0.58mW/cm² and 0.30-0.34mW/cm² respectively and calculated using the formula $f/1500$.

4.0 Data Collection Consideration

Power density testing was performed with DUT installed in a 1991 Ford Taurus (4-door). Measurement data was taken with the vehicles' electrical system powered by an equivalent source equal to the car running at idle and the vehicle battery measuring 13.8-14.0 volts.

5.0 Measurement System Uncertainty Levels

The information below presents an estimate of the possible errors that are associated with the measurement system.

Uncertainty Budget for Near Field Probe Measurements

| | Tol. (± %) | Prob. Dist. | Divisor | u_i (±%) |
|--------------------------------------|---------------|----------------|---------|---------------|
| Measurement System | | | | |
| Survey Meter Calibration | 3.0 | N | 1.00 | 3.0 |
| Repeatability Accuracy | 7.0 | N | 1.00 | 7.0 |
| Combined Standard Uncertainty | | RSS | | 7.6 |
| Expanded Uncertainty | | $k=2$ | | 15 |

6.0 Method of Measurement

MPE measurements were conducted for each transmitter individually per the procedures described in the following sections. Percent of Limit was calculated for each transmitter individually for each position. Final results representing the maximum combined exposure of DVR and mobile radio were obtained by summing the highest percent of limit results from each transmitter.

6.1 DVR 800MHz EME measurements made with trunk mounted antenna(s)
(For reference, see Illustration of antenna location and test distances in APPENDIX A)

6.1.1 External vehicle EME measurement
(Antenna mounted at trunk center)

MPE measurements for by-stander conditions are determined by taking the average of (10) measurements in a 2m vertical line for each of the (5) test locations indicated in APPENDIX A with 20cm increments at the test distance of 90cm from the test vehicle's body, as stated in the user manual. The measurement probe sensor is rotated 180° at each of the ten incremental measurements to ensure the highest result is captured. These measurements are representative of persons other than the operator standing next to the vehicle.

The DVR antenna mounted at the center of the trunk was assessed across the TX band for the (5) by-stander conditions presented in APPENDIX A.

6.1.2 Internal vehicle EME measurement
(Antenna mounted at trunk center)

While rotating survey meter probe through 180 degrees to ensure that the highest level is found, scans were performed inside of the vehicle, at both front and back seating areas, across the TX band to ascertain the highest level at the head. After the highest level is found, scans were performed vertically making two (2) additional measurements within an area approximately 40cm wide (representing the width of a person) so as to have a total of three (3) measured points, indicated below, that are averaged.

- a) Head area
- b) Chest area
- c) Lower Trunk area

6.2 Mobile UHF EME measurements made with roof mounted antenna(s)
(For reference, see Illustration of antenna location and test distances in APPENDIX A).

6.2.1 External vehicle EME measurement
(Antenna mounted at roof center)

MPE measurements for by-stander conditions are determined by taking the average of (10) measurements in a 2m vertical line for each of the (5) test locations indicated in APPENDIX A with 20cm increments at the test distance of 90cm from the test vehicle's body, as stated in the user manual. The measurement probe sensor is rotated 180° at each of the ten incremental measurements to ensure the highest result is captured. These measurements are representative of persons other than the operator standing next to the vehicle.

The mobile antennas mounted at the center of the roof were assessed across the TX band for the (5) by-stander conditions presented in APPENDIX A.

6.2.2 Internal vehicle EME measurement
 (Antenna mounted at roof center)

While rotating survey meter probe through 180 degrees to ensure that the highest level is found, scans were performed inside of the vehicle, both at the front and back seating areas, across the TX band to ascertain the highest level in each location. After the highest level is found, two (2) additional measurements were performed vertically within an area approximately 40cm wide (representing the width of a person) so as to have a total of three (3) measured points as indicated below that are averaged.

- a) Head area
- b) Chest area
- c) Lower Trunk area

7.0 Test Site

The test site is the Motorola open area test site located at 8000 W. Sunrise Blvd., Plantation, FL. 33322.

8.0 Measurement System/Equipment

| Equipment Type | Model # | SN | Calibration Due Date |
|------------------------------------|--------------------------|-------|----------------------|
| Automobile | 1991 Ford Taurus, 4-Door | | |
| *Survey Meter | NARDA Model 8718 | 01108 | 5/17/06 |
| *Probe - E-Field (Electric Field) | NARDA Model 8722B | 13001 | 2/28/07 |
| **Survey Meter | NARDA Model 8718 | 01108 | 5/17/06 |
| **Probe – E-Field (Electric Field) | NARDA Model 8722B | 13001 | 2/28/07 |

* Equipment used during DVR 800MHz (test date 3/9/2006)

** Equipment used during UHF mobile (test date 5/8/2006)

9.0 Test Unit Description

Power density measurements were performed on a representative sample of the DVR 800MHz 10 watt radio with serial number 05091244.

Power density measurements were performed on the following representative sample of the Motorola XTL5000 UHF 54 watts (450-500MHz) and 48 watts (500-512MHz) radio with serial number X09240157.

Presented below is a summary of the tested frequencies and associated power outputs for each DUT.

| DVR DQPM DVR8000P | | Mobile M20SSS9PW1AN | |
|------------------------------|---------------|--------------------------------|---------------|
| Frequency (MHz) | Po (W) | Frequency (MHz) | Po (W) |
| 806 | 10.0 | 450.0250 | 53.1 |
| 815 | 9.98 | 460.0250 | 53.5 |
| 824 | 9.95 | 470.0250 | 53.7 |
| 851 | 10.0 | 481.0250 | 53.7 |
| 860 | 9.98 | 494.0250 | 53.9 |
| 869 | 10.0 | 511.9875 | 47.6 |

10.0 Test Set-Up Description

The following are the mobile antenna test configurations used for this product.
(for reference, see Illustration of antenna location and test distances in the APPENDIX A)

Mobile - The ¼ and ½ wave antennas (HAE6016A 0dBd, HAE4003A 0dBd, HAE4011A 3.5dBd, HAE4012A 3.5dBd, HAE4013A 3.5dBd and HAE4004A 0dBd) were assessed while mounted at the center of the roof of the test vehicle.

DVR - The ¼ wave antenna (HAF4016A 0dBd) was assessed while mounted at the trunk.

Assessments were made internal and external to the test vehicle at the specified distances and test locations indicated in sections 6.0, 11.0, and the APPENDIX A.

11.0 Test Results Summary

APPENDIX E presents detailed MPE measurement information for each test configuration; person external or internal to the vehicle, TX frequency, antenna (location, model and gain), distance from antenna to probe sensor, E field measurements, calibration factor, MPE average over body, initial power, power density calc, power density max calc, IEEE/FCC controlled and uncontrolled limits, and maximum output power.

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

MPE results are based on a DVR 100% duty cycle and Mobile 50% duty cycle which is in accordance with the User Manual instructions.

Below is an explanation of how the MPE results are calculated.

External to vehicle - 10 measurements are averaged over the body (*Body_Avg*).

Internal to vehicle - 3 measurements are averaged over the body (*Body_Avg*).

Narda Survey Meter measures in percent of the controlled limit. Therefore the averages over the body used in the calculations below reflect percentages.

Therefore;

$$Average_over_Body = Body_Avg * Controlled_Limit$$

$$Pwr_Density_Calc = Average_over_Body * Duty_Cycle$$

$$Pwr_Density_Max_Calc = Pwr_Density_Calc * \frac{Max_Output_Power}{Initial_Output_Power}$$

Note; For $Initial\ Output\ Power > Max_Output_Power$, $Max_Output_Power / Initial\ Output\ Power = 1$

The tables below summarize the highest MPE results of the E field test configurations for the UHF mobile, DVR 800MHz, and combined assessments. See APPENDICES A and E respectively for the indicated test locations and detailed MPE measurement data.

Table 1 – UHF mobile M20SSS9PW1AN Assessments – Highest MPE result per test position

| Tables | Antenna Model | Antenna Location | Test Frequency (MHz) | E/H Field | Passenger/By-Stander Pos. | Max Calc Pwr Density (mW/cm ²) | % of Uncontrolled limit |
|----------|---------------|------------------|----------------------|-----------|---------------------------|--|-------------------------|
| Table 6 | HAE4004A | Roof | 481.025 | E | Passenger | 0.11 | 34.3% |
| Table 9 | HAE4011A | Roof | 450.025 | E | By-Stander Pos. #1 | 0.06 | 20.0% |
| Table 31 | HAE4011A | Roof | 450.025 | E | By-Stander Pos. #2 | 0.04 | 13.3% |
| Table 41 | HAE4003A | Roof | 460.025 | E | By-Stander Pos. #3 | 0.05 | 16.3% |
| Table 57 | HAE4011A | Roof | 450.025 | E | By-Stander Pos. #4 | 0.03 | 10.0% |
| Table 70 | HAE4011A | Roof | 450.025 | E | By-Stander Pos. #5 | 0.03 | 10.0% |

Table 2 – DVR 800MHz DQPM8000P Assessments - Highest MPE result per test position

| Tables | Antenna Model | Antenna Location | Test Frequency (MHz) | E/H Field | Passenger/By-Stander Pos. | Max Calc Pwr Density (mW/cm ²) | % of Uncontrolled limit |
|----------|---------------|------------------|----------------------|-----------|---------------------------|--|-------------------------|
| Table 2 | HAF4016A | Trunk | 806 | E | Passenger | 0.09 | 16.7% |
| Table 5 | HAF4016A | Trunk | 824 | E | By-Stander Pos. #1 | 0.03 | 5.5% |
| Table 14 | HAF4016A | Trunk | 815 | E | By-Stander Pos. #2 | 0.04 | 7.4% |
| Table 20 | HAF4016A | Trunk | 815 | E | By-Stander Pos. #3 | 0.04 | 7.4% |
| Table 26 | HAF4016A | Trunk | 815 | E | By-Stander Pos. #4 | 0.04 | 7.4% |
| Table 35 | HAF4016A | Trunk | 860 | E | By-Stander Pos. #5 | 0.06 | 10.5% |

**Table 3 - Combined UHF Mobile M20SSS9PW1AN and DVR 800MHz DQPM DVR8000P
(Calculated % of limit performance)**

| Test Position | Percentage of Limit | | |
|---------------|----------------------------|---|-------------------------|
| | UHF Mobile (450-512MHz) | DVR 800MHz (806-824 and 851-870MHz) | Combined Percentages |
| Passenger | 34.3% | 16.7% | 51.0% |
| By-Stander #1 | 20.0% | 5.5% | 25.5% |
| By-Stander #2 | 13.3% | 7.4% | 20.7% |
| By-Stander #3 | 16.3% | 7.4% | 23.7% |
| By-Stander #4 | 10.0% | 7.4% | 17.4% |
| By-Stander #5 | 10.0% | 10.5% | 20.5% |

12.0 Conclusion

Because the signals emitted by each individual transmitter are statistically uncorrelated, the collective compliance of the transmitters is determined by summing the individual ratios between actual (S) and maximum allowed MPE exposure. Compliance is achieved if the total exposure level (T) is less than one:

Formula:

$$T = \frac{S_1}{MPE_1} + \frac{S_2}{MPE_2} + \dots < 1$$

Depending on the test frequency, the mobile assessments were performed with an output power range of 47.6W – 53.9W (M20SSS9PW1AN). The DVR output power range across the TX band is 9.95 – 10.00W. The highest power density results for the XTL5000 UHF mobile device scaled to the maximum allowable power output is 0.11mW/cm² internal to the vehicle and 0.06mW/cm² external to the vehicle. The highest power density results for the DVR 800MHz device scaled to the maximum allowable power output is 0.09mW/cm² internal to the vehicle and 0.06mW/cm² external to the vehicle. The highest combined passenger power density performance is 51.0% and highest combined by-stander power density performance is 25.5% (refer to table 3 test position 1) of the FCC/IEEE MPE limits using the methodology and formula below.

Therefore:

| | | | |
|------------|--|---|-------------|
| Passenger | | $T = \frac{0.11}{0.32} + \frac{0.09}{0.54} = 0.510 < 1$ | (compliant) |
| By-stander | | $T = \frac{0.06}{0.30} + \frac{0.03}{0.55} = 0.255 < 1$ | (compliant) |

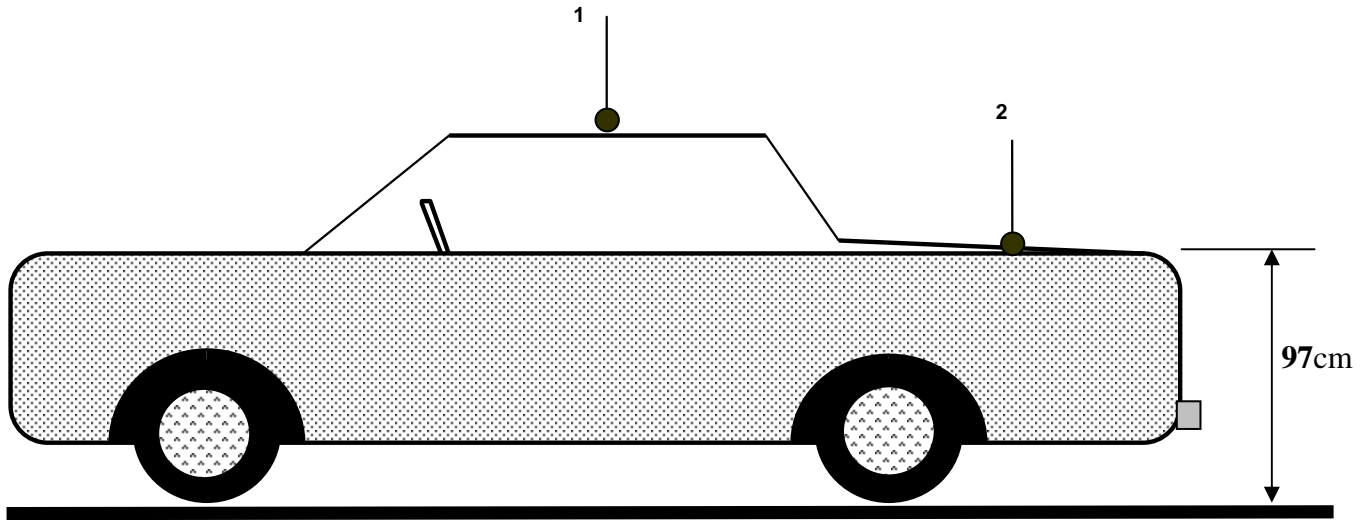
The MPE results presented herein demonstrate compliance to the applicable FCC/IEEE Occupational/Controlled exposure limit of 2.69-2.90mW/cm² for the 806-870MHz frequency range and 1.50-1.71mW/cm² for the 450-512MHz frequency range. FCC/IEEE Occupational/Controlled exposure limits are calculated by f/300 for the frequency range of 300-1500MHz.

Compliance to the FCC/IEEE General population/Uncontrolled exposure limits of 0.54-0.58mW/cm² for the frequency range of 806-870MHz and 0.30-0.34mW/cm² for frequency range of 450-512MHz, using formula $f/1500$, is demonstrated herein for both passengers and bystanders.

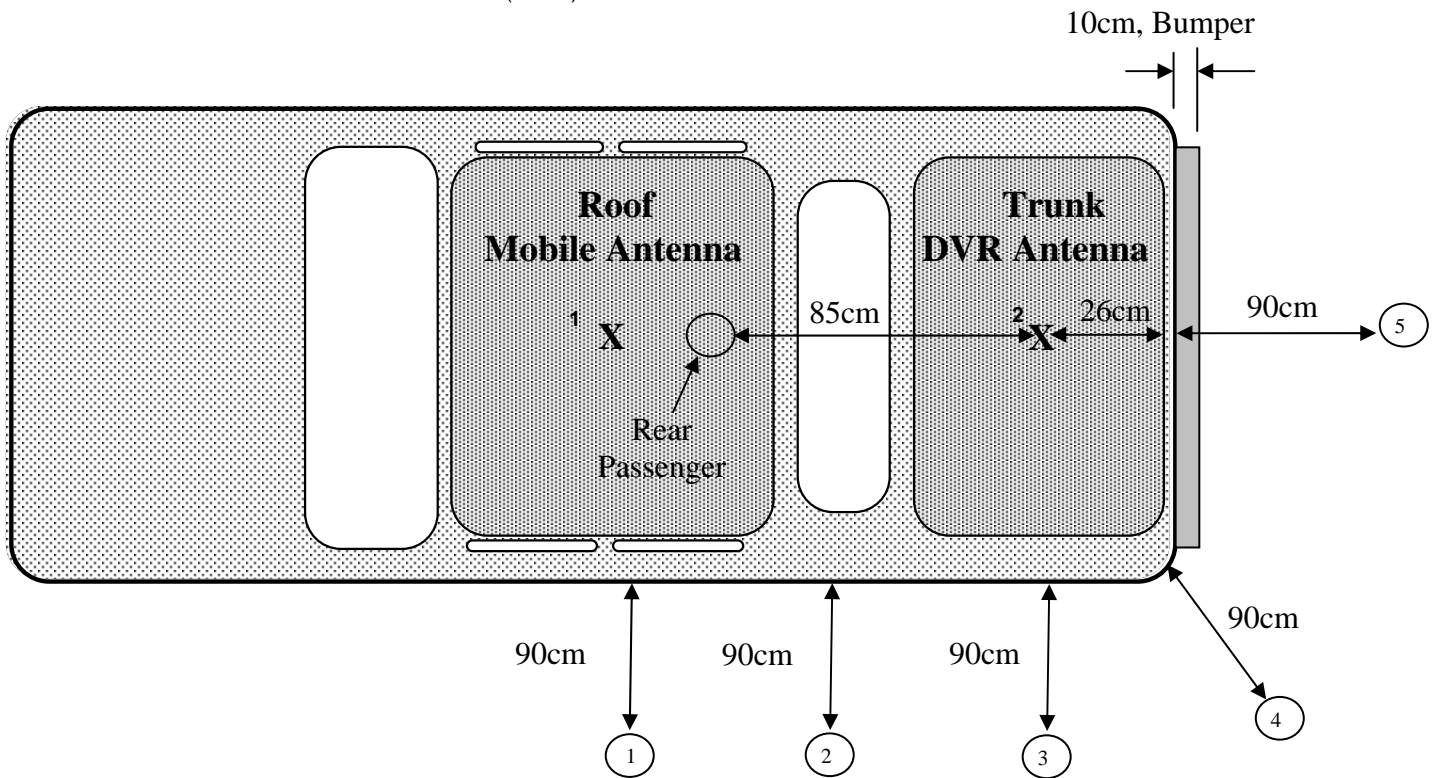
APPENDIX A

Illustration of Antenna Locations and Test Distances

Illustration of Antenna Locations and Test Distances



1 - Roof (center)
2 - Trunk (center)



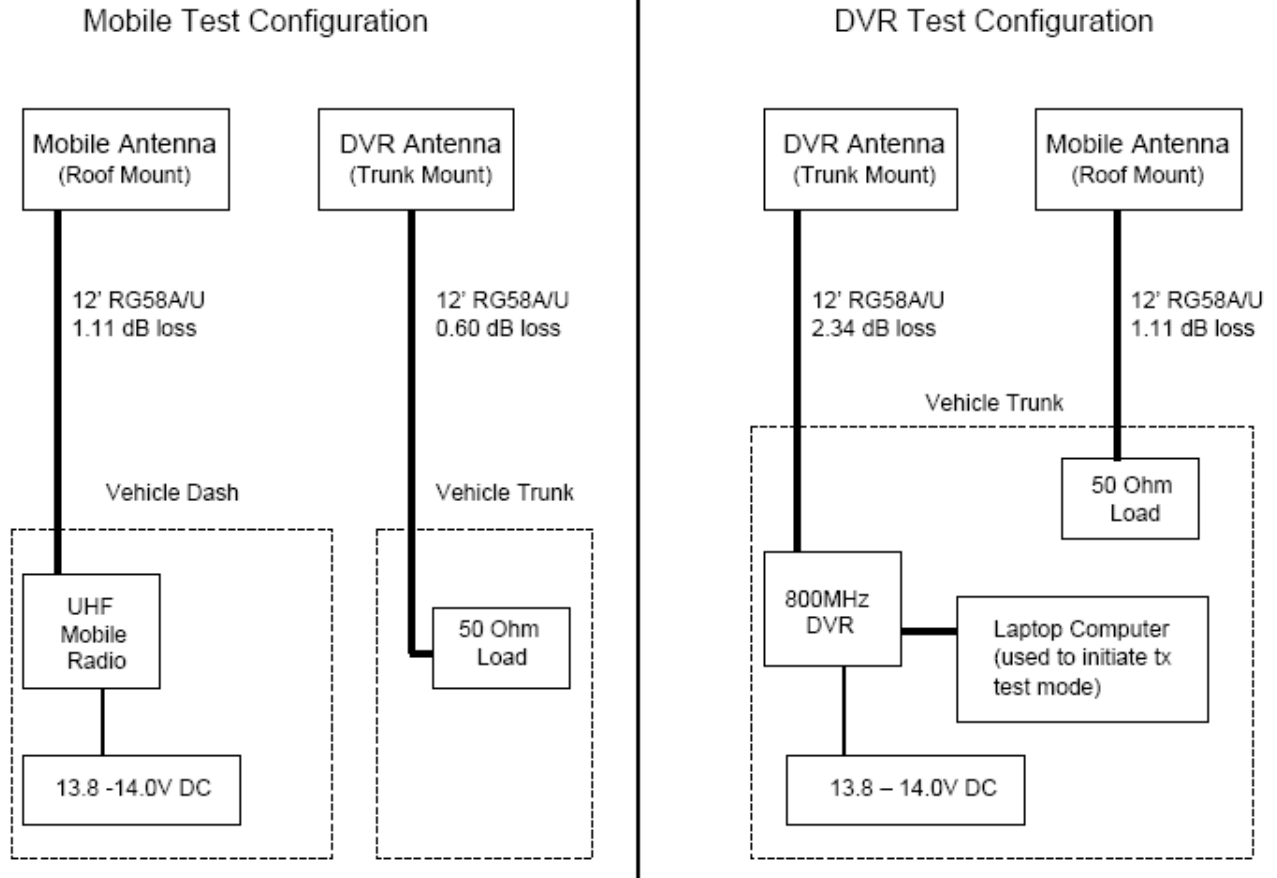
Notes

- 1) Assessments were performed at each test position for each offered antenna
- 2) By-stander positions (1-5) are 90cm from the vehicle body
- 3) By-stander position 2 is located at the mid point between the two antennas
- 4) Total distance between by-stander position 1 and roof mount antenna is 180cm
- 5) Total distance between by-stander position 5 and trunk mount antenna is 119.5cm
- 6) Total distance between trunk mount antenna and rear passenger is 85cm

APPENDIX B

Block Diagram of MPE Test Configuration

MPE Test Configuration



APPENDIX C

Meter/Probe Calibration Certificates



NARDA MICROWAVE-EAST
 CALIBRATED IN ACCORDANCE
 WITH ANSI Z540
 CAL DATE 5-17-05 BY [Signature]
 CAL DUE 5-17-06
 MOD. 8718-10 SN. 01108

Certificate of Calibration

L-3 Communications, Narda Microwave-East, hereby certifies that the referenced RF Radiation Hazard monitoring equipment has been calibrated in accordance with MIL-STD-45662A, ANSI Z540, ISO 10012 and ISO 9001: 2000.

The measured values were determined by comparison with our standards, which are traceable to the National Institute of Standards and Technology to the extent allowed by NIST's calibration facilities.

Customer: MOTOROLA Certificate #: 56219 1
 SCHAUMBURG, IL 60168-0429
 Model #: 8718-10 Serial #: 01108
 Description: METER W/CABLE PO #: NP1819669
 Date Calibrated: 05/17/2005 R.O. #: 56219

Vince Donovan
 Vince Donovan
 Manager of Instruments Assembly and Test

John C. Stine
 John C. Stine
 Director of Quality Assurance

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Certificate of Calibration

L-3 Communications, Narda Microwave-East, hereby certifies that the referenced RF Radiation Hazard monitoring equipment has been calibrated in accordance with MIL-STD-45662A, ANSI Z540, ISO 10012 and ISO 9001: 2000.

The measured values were determined by comparison with our standards, which are traceable to the National Institute of Standards and Technology to the extent allowed by NIST's calibration facilities.

Customer: MOTOROLA
PLANTATION, FL 33322

Certificate #: 63648 1

Model #: 8722B

Serial #: 13001

Description: PROBE

PO #: NP2316554

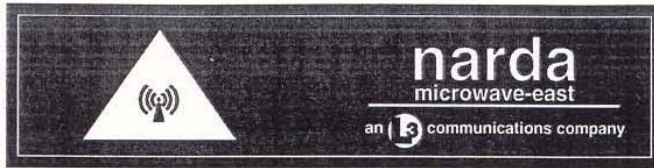
Date Calibrated: 02-28-06

R.O. #: 63648


Vince Donovan
Manufacturing


Ken Peck
Quality Assurance

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DATE 28-Feb-2006
 REL HUMIDITY 25%

RELEASE # R63648
 TEMP 20 DEG. C

NARDA MICROWAVE - EAST

MODEL # 8722B
 SERIAL # 13001

Recal Probe - Date of Previous Probe Data = 07/21/2005

| FREQ MHZ | PRE-CAL DATA | FINAL CAL DATA | ELLIPSE RATIO, dB | FINAL CORR. FACTOR | DEVIATION DELTA DB | PREVIOUS FINAL CORR. |
|-------------|-----------------|-------------------|----------------------|-----------------------|-----------------------|-------------------------|
| .30 | 0.95 | 0.83 | +/- 0.69 | 1.20 | +1.06 | 1.34 |
| 3.00 | 1.74 | 1.53 | +/- 0.91 | 0.65 | +1.26 | 0.77 |
| 10.00 | 0.98 | 0.86 | +/- 0.72 | 1.16 | +0.04 | 1.03 |
| 30.00 | 0.75 | 0.65 | +/- 0.68 | 1.53 | -0.13 | 1.30 |
| 100.00 | 1.20 | 1.05 | +/- 0.36 | 0.95 | -0.16 | 0.80 |
| 300.00 | 0.75 | 0.66 | +/- 0.47 | 1.52 | -0.74 | 1.13 |
| 750.00 | 1.35 | 1.19 | +/- 0.16 | 0.84 | +0.89 | 0.91 |
| 1000.00 | 1.16 | 1.02 | +/- 0.38 | 0.98 | -0.32 | 0.80 |
| 1700.00 | 0.79 | 0.69 | +/- 0.39 | 1.44 | -0.44 | 1.14 |
| 2450.00 | 1.13 | 1.19 | +/- 0.29 | 0.84 | -0.43 | 0.81 |
| 4000.00 | 0.81 | 0.86 | +/- 0.32 | 1.16 | -0.37 | 1.13 |
| 8200.00 | 1.00 | 1.06 | +/- 0.55 | 0.95 | -0.33 | 0.93 |
| 10000.00 | 0.99 | 1.05 | +/- 0.49 | 0.95 | -0.17 | 0.97 |
| 18000.00 | 1.11 | 1.18 | +/- 0.75 | 0.85 | -0.34 | 0.83 |
| 26500.00 | 1.03 | 1.09 | +/- 0.93 | 0.92 | -0.10 | 0.95 |
| 40000.00 | 0.79 | 0.84 | +/- 0.67 | 1.19 | -0.08 | 1.24 |

LOW FREQUENCY MULTIPLIER = 0.878 HIGH FREQUENCY MULTIPLIER = 1.061

FREQ. DEV. (3-40000 MHZ) = 3.684 DB

FREQ. DEV. (0.3-40000 MHZ) = 3.68 DB

MAX. ELLIPSE RATIO (0.3-40000 MHZ) = +/- 0.93 DB

PRE-CAL DATA REFLECTS THE MEAN ELLIPSE RATIO OF PROBE AS RECEIVED BY NARDA CALIBRATION DEPARTMENT, OR IS THE INITIAL, UN-ADJUSTED RATIO.

(PRE-CAL x OLD CORR. FACTOR) - 1 = DEVIATION FROM PREVIOUS (OLD)

CALIBRATION DATA. NOTE: NOT APPLICABLE FOR NEW PROBES.

FINAL CAL DATA IS THE RATIO OF THE DISPLAYED TO THE APPLIED FIELD STRENGTH.

FINAL CORR. FACTOR IS THE RECIPROCAL OF FINAL CAL DATA.

FINAL CORR. FACTOR MULTIPLIED BY THE DISPLAYED FIELD STRENGTH READING

GIVES THE ACTUAL ("CORRECTED") FIELD STRENGTH.

ELLIPSE RATIO IS EXPRESSED IN dB DEVIATION FROM THE MEAN DATA

RMS Uncertainty = +/- 0.5db. ATP # = 502120 REV J

TESTER C.V.

Q.A. APPROVAL [Stamp]



APPENDIX D

Photos of Assessed Antennas



**Antenna kit numbers, from left to right;
DVR HAF4016A, XTL5000 HAE6016A, HAE4003A, HAE4004A, HAE4011A, HAE4012A, HAE4013A**

APPENDIX E
Detailed MPE Measurement Data

800MHZ DVR DQPM DVR8000P

BS-Position 1

Table 1

| External Vehicle MPE Assessment @ 806 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.87 | 0.024 | 10.0 | 0.024 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.6% | | 6 | 120 | 1.3% | | 2.69 | 0.54 |
| 2 | 40 | 0.6% | | 7 | 140 | 1.1% | | | |
| 3 | 60 | 0.7% | | 8 | 160 | 1.0% | | | |
| 4 | 80 | 0.6% | | 9 | 180 | 1.0% | | | |
| 5 | 100 | 1.0% | | 10 | 200 | 0.9% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 10.0 | |

P-Position 1

Table 2

| Internal Vehicle MPE Assessment @ 806 MHz | | | | | | | | | | |
|---|---------------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Trunk (cnt) | HAF4016A | 2.15 | Highest Reading | E | 0.87 | 0.089 | 0.031 | 10.0 | 0.089 | 0.09 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 2.69 |
| Back Seat | | 3.9% | | 3.3% | | 2.7% | | IEEE Uncontrolled Limit: | | 0.54 |
| Front Seat | | 1.4% | | 0.8% | | 1.3% | | RF Po (*Max): | | 10.0 |

BS-Position 1

Table 3

| External Vehicle MPE Assessment @ 815 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.023 | 9.98 | 0.023 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 1.1% | | 2.72 | 0.54 |
| 2 | 40 | 0.6% | | 7 | 140 | 1.1% | | | |
| 3 | 60 | 0.8% | | 8 | 160 | 1.1% | | | |
| 4 | 80 | 0.8% | | 9 | 180 | 0.8% | | | |
| 5 | 100 | 0.8% | | 10 | 200 | 0.7% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 10.0 | |

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P-Position 1

Table 4

| Internal Vehicle MPE Assessment @ 815 MHz | | | | | | | | | | |
|---|-------------------------|------------|--------------------------|-----------|--------------------------------|--|--------------------------|-------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Trunk (cnt) | HAF4016A | 2.15 | Highest Reading | E | 0.88 | 0.062 | 0.054 | 9.98 | 0.062 | 0.06 |
| Measurement Grid | | | | | | | | | | |
| Test Position | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 2.72 | |
| Back Seat | 3.2% | | 1.8% | | 1.9% | | IEEE Uncontrolled Limit: | | 0.54 | |
| Front Seat | 2.9% | | 1.5% | | 1.6% | | RF Po (*Max): | | 10.0 | |

BS-Position 1

Table 5

| External Vehicle MPE Assessment @ 824 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.029 | 9.95 | 0.029 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 1.2% | | 2.75 | 0.55 |
| 2 | 40 | 1.0% | | 7 | 140 | 1.1% | | RF Po (*Max) | 10.0 |
| 3 | 60 | 1.0% | | 8 | 160 | 1.1% | | | |
| 4 | 80 | 1.0% | | 9 | 180 | 1.0% | | | |
| 5 | 100 | 1.2% | | 10 | 200 | 1.0% | | | |

P-Position 1

Table 6

| Internal Vehicle MPE Assessment @ 824 MHz | | | | | | | | | | |
|---|-------------------------|------------|--------------------------|-----------|--------------------------------|--|--------------------------|-------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Trunk (cnt) | HAF4016A | 2.15 | Highest Reading | E | 0.88 | 0.050 | 0.036 | 9.95 | 0.050 | 0.05 |
| Measurement Grid | | | | | | | | | | |
| Test Position | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 2.75 | |
| Back Seat | 2.2% | | 1.5% | | 1.8% | | IEEE Uncontrolled Limit: | | 0.55 | |
| Front Seat | 1.3% | | 1.3% | | 1.3% | | RF Po (*Max): | | 10.0 | |

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BS-Position 1

Table 7

| External Vehicle MPE Assessment @ 851 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.026 | 10.0 | 0.026 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 1.3% | | 2.84 | 0.57 |
| 2 | 40 | 0.7% | | 7 | 140 | 1.0% | | | |
| 3 | 60 | 0.8% | | 8 | 160 | 0.9% | | | |
| 4 | 80 | 0.7% | | 9 | 180 | 1.0% | | | |
| 5 | 100 | 1.1% | | 10 | 200 | 1.0% | | | |

P-Position 1

Table 8

| Internal Vehicle MPE Assessment @ 851 MHz | | | | | | | | | | |
|---|---------------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Trunk (cnt) | HAF4016A | 2.15 | Highest Reading | E | 0.9 | 0.042 | 0.032 | 10.0 | 0.042 | 0.04 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 2.84 |
| Back Seat | | 1.2% | | 1.5% | | 1.7% | | IEEE Uncontrolled Limit: | | 0.57 |
| Front Seat | | 1.8% | | 0.8% | | 0.8% | | RF Po (*Max): | | 10.0 |

BS-Position 1

Table 9

| External Vehicle MPE Assessment @ 860 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.026 | 9.98 | 0.026 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 1.1% | | 2.87 | 0.57 |
| 2 | 40 | 0.8% | | 7 | 140 | 1.0% | | | |
| 3 | 60 | 0.8% | | 8 | 160 | 0.9% | | | |
| 4 | 80 | 0.9% | | 9 | 180 | 0.9% | | | |
| 5 | 100 | 1.1% | | 10 | 200 | 0.9% | | | |

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P-Position 1

Table 10

| Internal Vehicle MPE Assessment @ 860 MHz | | | | | | | | | | |
|---|-------------------------|------------|--------------------------|-----------|--------------------------------|--|--------------------------|-------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Trunk (cnt) | HAF4016A | 2.15 | Highest Reading | E | 0.9 | 0.049 | 0.047 | 9.98 | 0.049 | 0.05 |
| Measurement Grid | | | | | | | | | | |
| Test Position | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 2.87 | |
| Back Seat | 2.1% | | 1.6% | | 1.4% | | IEEE Uncontrolled Limit: | | 0.57 | |
| Front Seat | 3.4% | | 0.8% | | 0.7% | | RF Po (*Max): | | 10.0 | |

BS-Position 1

Table 11

| External Vehicle MPE Assessment @ 869 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.91 | 0.026 | 10.0 | 0.026 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 1.1% | | 2.90 | 0.58 |
| 2 | 40 | 0.8% | | 7 | 140 | 0.9% | | | |
| 3 | 60 | 1.0% | | 8 | 160 | 0.8% | | | |
| 4 | 80 | 1.1% | | 9 | 180 | 0.8% | | | |
| 5 | 100 | 1.1% | | 10 | 200 | 0.7% | | | |

P-Position 1

Table 12

| Internal Vehicle MPE Assessment @ 869 MHz | | | | | | | | | | |
|---|-------------------------|------------|--------------------------|-----------|--------------------------------|--|--------------------------|-------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Trunk (cnt) | HAF4016A | 2.15 | Highest Reading | E | 0.91 | 0.042 | 0.027 | 10.0 | 0.042 | 0.04 |
| Measurement Grid | | | | | | | | | | |
| Test Position | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 2.90 | |
| Back Seat | 2.0% | | 1.4% | | 0.9% | | IEEE Uncontrolled Limit: | | 0.58 | |
| Front Seat | 1.7% | | 0.6% | | 0.5% | | RF Po (*Max): | | 10.0 | |

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BS-Position 2

Table 13

| External Vehicle MPE Assessment @ 806 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.87 | 0.029 | 10.0 | 0.029 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 0.8% | 6 | 120 | 1.1% | 2.69 | 0.54 | | |
| 2 | 40 | 0.9% | 7 | 140 | 1.3% | | | | |
| 3 | 60 | 0.7% | 8 | 160 | 1.4% | | | | |
| 4 | 80 | 0.9% | 9 | 180 | 1.5% | | | | |
| 5 | 100 | 1.0% | 10 | 200 | 1.3% | | | RF Po (*Max) | 10.0 |

BS-Position 2

Table 14

| External Vehicle MPE Assessment @ 815 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.035 | 9.98 | 0.035 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 0.8% | 6 | 120 | 1.8% | 2.72 | 0.54 | | |
| 2 | 40 | 0.7% | 7 | 140 | 1.6% | | | | |
| 3 | 60 | 1.1% | 8 | 160 | 1.6% | | | | |
| 4 | 80 | 1.0% | 9 | 180 | 1.8% | | | | |
| 5 | 100 | 1.2% | 10 | 200 | 1.4% | | | RF Po (*Max) | 10.0 |

BS-Position 2

Table 15

| External Vehicle MPE Assessment @ 824 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.031 | 9.95 | 0.031 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 0.9% | 6 | 120 | 1.4% | 2.75 | 0.55 | | |
| 2 | 40 | 0.7% | 7 | 140 | 1.4% | | | | |
| 3 | 60 | 0.9% | 8 | 160 | 1.4% | | | | |
| 4 | 80 | 0.9% | 9 | 180 | 1.3% | | | | |
| 5 | 100 | 1.1% | 10 | 200 | 1.2% | | | RF Po (*Max) | 10.0 |

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BS-Position 2

Table 16

| External Vehicle MPE Assessment @ 851 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.029 | 10.0 | 0.029 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.6% | 6 | 120 | 1.3% | | | 2.84 | 0.57 |
| 2 | 40 | 0.8% | 7 | 140 | 1.3% | | | | |
| 3 | 60 | 0.8% | 8 | 160 | 1.1% | | | | |
| 4 | 80 | 0.8% | 9 | 180 | 1.4% | | | | |
| 5 | 100 | 1.0% | 10 | 200 | 1.1% | | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 2

Table 17

| External Vehicle MPE Assessment @ 860 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.032 | 9.98 | 0.032 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | 6 | 120 | 1.3% | | | 2.87 | 0.57 |
| 2 | 40 | 0.5% | 7 | 140 | 1.3% | | | | |
| 3 | 60 | 1.0% | 8 | 160 | 1.3% | | | | |
| 4 | 80 | 1.1% | 9 | 180 | 1.3% | | | | |
| 5 | 100 | 1.4% | 10 | 200 | 1.2% | | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 2

Table 18

| External Vehicle MPE Assessment @ 869 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.91 | 0.030 | 10.0 | 0.030 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.6% | 6 | 120 | 1.2% | | | 2.90 | 0.58 |
| 2 | 40 | 0.6% | 7 | 140 | 1.2% | | | | |
| 3 | 60 | 1.0% | 8 | 160 | 1.3% | | | | |
| 4 | 80 | 1.0% | 9 | 180 | 1.2% | | | | |
| 5 | 100 | 1.0% | 10 | 200 | 1.2% | | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

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BS-Position 3

Table 19

| External Vehicle MPE Assessment @ 806 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.87 | 0.029 | 10.0 | 0.029 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.9% | | 6 | 120 | 1.3% | | 2.69 | 0.54 |
| 2 | 40 | 1.0% | | 7 | 140 | 1.2% | | | |
| 3 | 60 | 0.9% | | 8 | 160 | 1.2% | | | |
| 4 | 80 | 0.8% | | 9 | 180 | 1.2% | | | |
| 5 | 100 | 1.2% | | 10 | 200 | 1.0% | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 3

Table 20

| External Vehicle MPE Assessment @ 815 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.038 | 9.98 | 0.038 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.9% | | 6 | 120 | 1.6% | | 2.72 | 0.54 |
| 2 | 40 | 0.9% | | 7 | 140 | 1.7% | | | |
| 3 | 60 | 0.9% | | 8 | 160 | 1.8% | | | |
| 4 | 80 | 1.4% | | 9 | 180 | 1.9% | | | |
| 5 | 100 | 1.4% | | 10 | 200 | 1.4% | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 3

Table 21

| External Vehicle MPE Assessment @ 824 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.033 | 9.95 | 0.033 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.9% | | 6 | 120 | 1.5% | | 2.75 | 0.55 |
| 2 | 40 | 1.0% | | 7 | 140 | 1.4% | | | |
| 3 | 60 | 1.0% | | 8 | 160 | 1.5% | | | |
| 4 | 80 | 0.8% | | 9 | 180 | 1.4% | | | |
| 5 | 100 | 1.3% | | 10 | 200 | 1.2% | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

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Table 22

| External Vehicle MPE Assessment @ 851 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.034 | 10.0 | 0.034 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | 6 | 120 | 1.3% | | | 2.84 | 0.57 |
| 2 | 40 | 0.7% | 7 | 140 | 1.6% | | | | |
| 3 | 60 | 1.0% | 8 | 160 | 1.5% | | | | |
| 4 | 80 | 1.3% | 9 | 180 | 1.3% | | | | |
| 5 | 100 | 1.3% | 10 | 200 | 1.1% | | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 10.0 | |

BS-Position 3

Table 23

| External Vehicle MPE Assessment @ 860 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.034 | 9.98 | 0.034 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.7% | 6 | 120 | 1.5% | | | 2.87 | 0.57 |
| 2 | 40 | 0.8% | 7 | 140 | 1.6% | | | | |
| 3 | 60 | 0.9% | 8 | 160 | 1.6% | | | | |
| 4 | 80 | 1.0% | 9 | 180 | 1.3% | | | | |
| 5 | 100 | 1.1% | 10 | 200 | 1.2% | | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 10.0 | |

BS-Position 3

Table 24

| External Vehicle MPE Assessment @ 869 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.91 | 0.031 | 10.0 | 0.031 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.7% | 6 | 120 | 1.3% | | | 2.90 | 0.58 |
| 2 | 40 | 0.7% | 7 | 140 | 1.3% | | | | |
| 3 | 60 | 0.8% | 8 | 160 | 1.7% | | | | |
| 4 | 80 | 0.9% | 9 | 180 | 1.3% | | | | |
| 5 | 100 | 0.9% | 10 | 200 | 1.0% | | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 10.0 | |

800MHZ DVR DQPM DVR8000P

BS-Position 4

Table 25

| External Vehicle MPE Assessment @ 806 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.87 | 0.033 | 10.0 | 0.033 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 1.2% | 6 | 120 | 1.6% | 2.69 | 0.54 | | |
| 2 | 40 | 0.8% | 7 | 140 | 1.4% | | | | |
| 3 | 60 | 0.9% | 8 | 160 | 1.2% | | | | |
| 4 | 80 | 1.3% | 9 | 180 | 1.2% | | | | |
| 5 | 100 | 1.4% | 10 | 200 | 1.1% | | | | |
| | | | | | | | RF Po (*Max) | | 10.0 |

BS-Position 4

Table 26

| External Vehicle MPE Assessment @ 815 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.038 | 9.98 | 0.038 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 1.0% | 6 | 120 | 2.0% | 2.72 | 0.54 | | |
| 2 | 40 | 0.8% | 7 | 140 | 1.8% | | | | |
| 3 | 60 | 1.0% | 8 | 160 | 1.5% | | | | |
| 4 | 80 | 1.5% | 9 | 180 | 1.4% | | | | |
| 5 | 100 | 1.6% | 10 | 200 | 1.5% | | | | |
| | | | | | | | RF Po (*Max) | | 10.0 |

BS-Position 4

Table 27

| External Vehicle MPE Assessment @ 824 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.033 | 9.95 | 0.033 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 0.9% | 6 | 120 | 1.5% | 2.75 | 0.55 | | |
| 2 | 40 | 0.8% | 7 | 140 | 1.4% | | | | |
| 3 | 60 | 1.1% | 8 | 160 | 1.3% | | | | |
| 4 | 80 | 1.2% | 9 | 180 | 1.2% | | | | |
| 5 | 100 | 1.3% | 10 | 200 | 1.3% | | | | |
| | | | | | | | RF Po (*Max) | | 10.0 |

800MHZ DVR DQPM DVR8000P

BS-Position 4

Table 28

| External Vehicle MPE Assessment @ 851 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.035 | 10.0 | 0.035 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | | IEEE Uncontrolled Limit | |
| 1 | 20 | 0.7% | 6 | 120 | 1.6% | 2.84 | | 10.0 | |
| 2 | 40 | 0.7% | 7 | 140 | 1.6% | | | | |
| 3 | 60 | 1.0% | 8 | 160 | 1.6% | | | | |
| 4 | 80 | 1.0% | 9 | 180 | 1.5% | | | | |
| 5 | 100 | 1.5% | 10 | 200 | 1.2% | | | | |

BS-Position 4

Table 29

| External Vehicle MPE Assessment @ 860 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.042 | 9.98 | 0.042 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | | IEEE Uncontrolled Limit | |
| 1 | 20 | 0.7% | 6 | 120 | 1.9% | 2.87 | | 10.0 | |
| 2 | 40 | 0.8% | 7 | 140 | 2.0% | | | | |
| 3 | 60 | 1.0% | 8 | 160 | 2.1% | | | | |
| 4 | 80 | 1.1% | 9 | 180 | 1.7% | | | | |
| 5 | 100 | 1.8% | 10 | 200 | 1.4% | | | | |

BS-Position 4

Table 30

| External Vehicle MPE Assessment @ 869 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.91 | 0.038 | 10.0 | 0.038 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | | IEEE Uncontrolled Limit | |
| 1 | 20 | 0.8% | 6 | 120 | 1.8% | 2.90 | | 10.0 | |
| 2 | 40 | 1.0% | 7 | 140 | 1.6% | | | | |
| 3 | 60 | 1.0% | 8 | 160 | 1.5% | | | | |
| 4 | 80 | 1.3% | 9 | 180 | 1.3% | | | | |
| 5 | 100 | 1.6% | 10 | 200 | 1.1% | | | | |

800MHZ DVR DQPM DVR8000P

BS-Position 5

Table 31

| External Vehicle MPE Assessment @ 806 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.87 | 0.038 | 10.0 | 0.038 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.6% | | 6 | 120 | 1.9% | | 2.69 | 0.54 |
| 2 | 40 | 0.9% | | 7 | 140 | 1.7% | | | |
| 3 | 60 | 1.1% | | 8 | 160 | 1.6% | | | |
| 4 | 80 | 1.5% | | 9 | 180 | 1.5% | | | |
| 5 | 100 | 2.2% | | 10 | 200 | 1.3% | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 5

Table 32

| External Vehicle MPE Assessment @ 815 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.054 | 9.98 | 0.054 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 3.3% | | 2.72 | 0.54 |
| 2 | 40 | 1.3% | | 7 | 140 | 2.4% | | | |
| 3 | 60 | 1.4% | | 8 | 160 | 1.9% | | | |
| 4 | 80 | 2.1% | | 9 | 180 | 1.8% | | | |
| 5 | 100 | 3.1% | | 10 | 200 | 1.4% | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 5

Table 33

| External Vehicle MPE Assessment @ 824 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.88 | 0.051 | 9.95 | 0.051 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 2.8% | | 2.75 | 0.55 |
| 2 | 40 | 0.9% | | 7 | 140 | 2.5% | | | |
| 3 | 60 | 1.7% | | 8 | 160 | 2.0% | | | |
| 4 | 80 | 2.0% | | 9 | 180 | 1.6% | | | |
| 5 | 100 | 2.9% | | 10 | 200 | 1.5% | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

800MHZ DVR DQPM DVR8000P

BS-Position 5

Table 34

| External Vehicle MPE Assessment @ 851 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.041 | 10.0 | 0.041 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 0.7% | 6 | 120 | 1.9% | 2.84 | 0.57 | | |
| 2 | 40 | 1.0% | 7 | 140 | 1.9% | | | | |
| 3 | 60 | 1.1% | 8 | 160 | 1.8% | | | | |
| 4 | 80 | 1.6% | 9 | 180 | 1.5% | | | | |
| 5 | 100 | 1.8% | 10 | 200 | 1.3% | | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 5

Table 35

| External Vehicle MPE Assessment @ 860 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.9 | 0.057 | 9.98 | 0.057 | 0.06 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 0.9% | 6 | 120 | 2.9% | 2.87 | 0.57 | | |
| 2 | 40 | 0.8% | 7 | 140 | 2.7% | | | | |
| 3 | 60 | 1.5% | 8 | 160 | 2.6% | | | | |
| 4 | 80 | 2.2% | 9 | 180 | 2.0% | | | | |
| 5 | 100 | 2.7% | 10 | 200 | 1.5% | | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

BS-Position 5

Table 36

| External Vehicle MPE Assessment @ 869 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Trunk (cnt) | HAF4016A | 2.15 | 90 | E | 0.91 | 0.042 | 10.0 | 0.042 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | |
| 1 | 20 | 0.9% | 6 | 120 | 2.1% | 2.90 | 0.58 | | |
| 2 | 40 | 0.9% | 7 | 140 | 1.9% | | | | |
| 3 | 60 | 1.3% | 8 | 160 | 1.9% | | | | |
| 4 | 80 | 1.4% | 9 | 180 | 1.3% | | | | |
| 5 | 100 | 1.8% | 10 | 200 | 1.0% | | | | |
| | | | | | | | | RF Po (*Max) | 10.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 1

Table 1

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.29 | 0.080 | 53.1 | 0.040 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 7.7% | | 1.50 | 0.30 |
| 2 | 40 | 2.0% | | 7 | 140 | 9.8% | | | |
| 3 | 60 | 3.1% | | 8 | 160 | 11.9% | | | |
| 4 | 80 | 5.9% | | 9 | 180 | 14.6% | | | |
| 5 | 100 | 6.0% | | 10 | 200 | 17.0% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

P-Position 1

Table 2

| Internal Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | | |
|---|---------------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4003A | 2.15 | Highest Reading | E | 1.29 | 0.112 | 0.092 | 53.1 | 0.056 | 0.06 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.50 |
| Back Seat | | 5.0% | | 7.0% | | 10.3% | | IEEE Uncontrolled Limit: | | 0.30 |
| Front Seat | | 5.0% | | 6.6% | | 6.7% | | RF Po (*Max): | | 54.0 |

BS-Position 1

Table 3

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.28 | 0.124 | 53.5 | 0.062 | 0.06 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.5% | | 6 | 120 | 7.2% | | 1.53 | 0.31 |
| 2 | 40 | 1.9% | | 7 | 140 | 9.8% | | | |
| 3 | 60 | 2.1% | | 8 | 160 | 13.5% | | | |
| 4 | 80 | 3.9% | | 9 | 180 | 17.4% | | | |
| 5 | 100 | 4.8% | | 10 | 200 | 18.9% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

UHF Mobile M20SSS9PW1AN

P-Position 1

Table 4

| Internal Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | | |
|---|-------------------------|--------------------------|--------------------------------|--------------------------|--------------------|--|-------|-------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4003A | 2.15 | Highest Reading | E | 1.28 | 0.141 | 0.136 | 53.5 | 0.071 | 0.07 |
| Measurement Grid | | | | | | | | | | |
| Test Position | % of Control Limit Head | % of Control Limit Chest | % of Control Limit Lower Trunk | IEEE Controlled Limit: | | 1.53 | | | | |
| Back Seat | 9.5% | 8.3% | 9.8% | IEEE Uncontrolled Limit: | | 0.31 | | | | |
| Front Seat | 6.5% | 6.8% | 13.4% | RF Po (*Max): | | 54.0 | | | | |

BS-Position 1

Table 5

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | | |
|---|---------------|--------------------|---------------------|-------------|--------------------|---|-------------------------|--|--|------|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) | |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.25 | 0.125 | 53.7 | 0.063 | 0.06 | |
| Measurement Grid | | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | Test Position | Height (cm) | % of Control Limit | IEEE Controlled Limit | IEEE Uncontrolled Limit | | | |
| 1 | 20 | 1.6% | 6 | 120 | 7.7% | 1.60 | 0.32 | | | |
| 2 | 40 | 2.3% | 7 | 140 | 10.3% | | | | | |
| 3 | 60 | 3.9% | 8 | 160 | 12.9% | | | | | |
| 4 | 80 | 3.9% | 9 | 180 | 14.9% | | | | | |
| 5 | 100 | 4.7% | 10 | 200 | 16.0% | | | RF Po (*Max): | | 54.0 |

P-Position 1

Table 6

| Internal Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | | |
|---|-------------------------|--------------------------|--------------------------------|--------------------------|--------------------|--|-------|-------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4004A | 2.15 | Highest Reading | E | 1.25 | 0.220 | 0.079 | 53.7 | 0.110 | 0.11 |
| Measurement Grid | | | | | | | | | | |
| Test Position | % of Control Limit Head | % of Control Limit Chest | % of Control Limit Lower Trunk | IEEE Controlled Limit: | | 1.60 | | | | |
| Back Seat | 11.3% | 15.3% | 14.6% | IEEE Uncontrolled Limit: | | 0.32 | | | | |
| Front Seat | 3.3% | 4.8% | 6.7% | RF Po (*Max): | | 54.0 | | | | |

UHF Mobile M20SSS9PW1AN

BS-Position 1

Table 7

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.20 | 0.091 | 47.6 | 0.045 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.3% | | 6 | 120 | 6.3% | | 1.71 | 0.34 |
| 2 | 40 | 1.7% | | 7 | 140 | 7.6% | | | |
| 3 | 60 | 1.9% | | 8 | 160 | 9.1% | | | |
| 4 | 80 | 2.5% | | 9 | 180 | 10.4% | | | |
| 5 | 100 | 3.7% | | 10 | 200 | 8.6% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

P-Position 1

Table 8

| Internal Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | | |
|--|---------------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4004A | 2.15 | Highest Reading | E | 1.20 | 0.109 | 0.049 | 47.6 | 0.054 | 0.05 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.71 |
| Back Seat | | 7.5% | | 6.5% | | 5.1% | | IEEE Uncontrolled Limit: | | 0.34 |
| Front Seat | | 2.5% | | 2.7% | | 3.4% | | RF Po (*Max): | | 48.0 |

BS-Position 1

Table 9

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.29 | 0.113 | 53.1 | 0.056 | 0.06 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.3% | | 6 | 120 | 5.8% | | 1.50 | 0.30 |
| 2 | 40 | 1.1% | | 7 | 140 | 11.0% | | | |
| 3 | 60 | 1.7% | | 8 | 160 | 15.5% | | | |
| 4 | 80 | 2.6% | | 9 | 180 | 15.7% | | | |
| 5 | 100 | 3.8% | | 10 | 200 | 16.5% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

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P-Position 1

Table 10

| Internal Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | | |
|---|----------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4011A | 5.65 | Highest Reading | E | 1.29 | 0.023 | 0.022 | 53.1 | 0.012 | 0.01 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.50 |
| Back Seat | | 1.3% | | 1.2% | | 2.1% | | IEEE Uncontrolled Limit: | | 0.30 |
| Front Seat | | 1.2% | | 1.4% | | 1.7% | | RF Po (*Max): | | 54.0 |

BS-Position 1

Table 11

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | | | | |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.5% | | 6 | 120 | 6.3% | | 1.53 | 0.31 |
| 2 | 40 | 0.8% | | 7 | 140 | 9.6% | | | |
| 3 | 60 | 1.4% | | 8 | 160 | 14.2% | | | |
| 4 | 80 | 2.4% | | 9 | 180 | 17.8% | | | |
| 5 | 100 | 3.9% | | 10 | 200 | 16.9% | | | |

P-Position 1

Table 12

| Internal Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | | |
|---|----------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4011A | 5.65 | Highest Reading | E | 1.28 | 0.020 | 0.020 | 53.5 | 0.010 | 0.01 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.53 |
| Back Seat | | 1.2% | | 1.1% | | 1.6% | | IEEE Uncontrolled Limit: | | 0.31 |
| Front Seat | | 0.9% | | 1.1% | | 2.0% | | RF Po (*Max): | | 54.0 |

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BS-Position 1

Table 13

| External Vehicle MPE Assessment @ 470.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.26 | 0.119 | 53.7 | 0.060 | 0.06 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 6.6% | | 1.57 | 0.31 |
| 2 | 40 | 1.1% | | 7 | 140 | 12.3% | | | |
| 3 | 60 | 2.2% | | 8 | 160 | 15.3% | | | |
| 4 | 80 | 3.3% | | 9 | 180 | 15.1% | | | |
| 5 | 100 | 4.9% | | 10 | 200 | 14.5% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

P-Position 1

Table 14

| Internal Vehicle MPE Assessment @ 470.025 MHz | | | | | | | | | | |
|---|---------------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4012A | 5.65 | Highest Reading | E | 1.26 | 0.025 | 0.028 | 53.7 | 0.014 | 0.01 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.57 |
| Back Seat | | 1.7% | | 1.6% | | 1.5% | | IEEE Uncontrolled Limit: | | 0.31 |
| Front Seat | | 0.4% | | 1.5% | | 3.4% | | RF Po (*Max): | | 54.0 |

BS-Position 1

Table 15

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.25 | 0.101 | 53.7 | 0.051 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 6.4% | | 1.60 | 0.32 |
| 2 | 40 | 1.1% | | 7 | 140 | 8.9% | | | |
| 3 | 60 | 1.7% | | 8 | 160 | 11.5% | | | |
| 4 | 80 | 2.5% | | 9 | 180 | 13.9% | | | |
| 5 | 100 | 3.8% | | 10 | 200 | 12.5% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

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P-Position 1

Table 16

| Internal Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | | |
|---|----------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4012A | 5.65 | Highest Reading | E | 1.25 | 0.043 | 0.018 | 53.7 | 0.022 | 0.02 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.60 |
| Back Seat | | 2.7% | | 2.4% | | 3.0% | | IEEE Uncontrolled Limit: | | 0.32 |
| Front Seat | | 0.9% | | 0.9% | | 1.6% | | RF Po (*Max): | | 54.0 |

BS-Position 1

Table 17

| External Vehicle MPE Assessment @ 494.025 MHz | | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|------------|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) | |
| | | | | | | | | | | Roof (cnt) |
| Measurement Grid | | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit | |
| 1 | 20 | 1.0% | | 6 | 120 | 7.7% | | 1.65 | 0.33 | |
| 2 | 40 | 1.3% | | 7 | 140 | 9.8% | | | | |
| 3 | 60 | 3.0% | | 8 | 160 | 12.3% | | | | |
| 4 | 80 | 3.6% | | 9 | 180 | 12.8% | | | | |
| 5 | 100 | 5.2% | | 10 | 200 | 11.0% | | | | |
| | | | | | | | | RF Po (*Max): | | 54.0 |

P-Position 1

Table 18

| Internal Vehicle MPE Assessment @ 494.025 MHz | | | | | | | | | | |
|---|----------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4013A | 5.65 | Highest Reading | E | 1.23 | 0.060 | 0.023 | 53.9 | 0.030 | 0.03 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.65 |
| Back Seat | | 3.0% | | 4.1% | | 3.9% | | IEEE Uncontrolled Limit: | | 0.33 |
| Front Seat | | 0.8% | | 1.5% | | 1.9% | | RF Po (*Max): | | 54.0 |

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BS-Position 1

Table 19

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.20 | 0.082 | 47.6 | 0.041 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.1% | | 6 | 120 | 5.3% | | 1.71 | 0.34 |
| 2 | 40 | 1.5% | | 7 | 140 | 6.8% | | | |
| 3 | 60 | 1.9% | | 8 | 160 | 8.0% | | | |
| 4 | 80 | 3.0% | | 9 | 180 | 9.0% | | | |
| 5 | 100 | 3.6% | | 10 | 200 | 7.8% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

P-Position 1

Table 20

| Internal Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | | |
|--|---------------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE4013A | 5.65 | Highest Reading | E | 1.20 | 0.035 | 0.021 | 47.6 | 0.018 | 0.02 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.71 |
| Back Seat | | 2.4% | | 2.1% | | 1.7% | | IEEE Uncontrolled Limit: | | 0.34 |
| Front Seat | | 1.5% | | 1.4% | | 0.8% | | RF Po (*Max): | | 48.0 |

BS-Position 1

Table 21

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.29 | 0.098 | 53.1 | 0.049 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.6% | | 6 | 120 | 6.5% | | 1.50 | 0.30 |
| 2 | 40 | 2.3% | | 7 | 140 | 9.0% | | | |
| 3 | 60 | 3.1% | | 8 | 160 | 10.8% | | | |
| 4 | 80 | 3.9% | | 9 | 180 | 11.4% | | | |
| 5 | 100 | 4.0% | | 10 | 200 | 12.4% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

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P-Position 1

Table 22

| Internal Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | | |
|---|----------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE6016A | 2.15 | Highest Reading | E | 1.29 | 0.087 | 0.058 | 53.1 | 0.044 | 0.04 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.50 |
| Back Seat | | 3.7% | | 6.4% | | 7.3% | | IEEE Uncontrolled Limit: | | 0.30 |
| Front Seat | | 3.9% | | 3.4% | | 4.3% | | RF Po (*Max): | | 54.0 |

BS-Position 1

Table 23

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|------------|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) | |
| | | | | | | | | | | Roof (cnt) |
| Measurement Grid | | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit | |
| 1 | 20 | 1.2% | | 6 | 120 | 6.4% | | 1.60 | 0.32 | |
| 2 | 40 | 2.0% | | 7 | 140 | 9.0% | | | | |
| 3 | 60 | 3.0% | | 8 | 160 | 11.2% | | | | |
| 4 | 80 | 3.7% | | 9 | 180 | 13.0% | | | | |
| 5 | 100 | 4.4% | | 10 | 200 | 12.8% | | | | |
| | | | | | | | | RF Po (*Max): | | 54.0 |

P-Position 1

Table 24

| Internal Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | | |
|---|----------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE6016A | 2.15 | Highest Reading | E | 1.25 | 0.148 | 0.072 | 53.7 | 0.074 | 0.07 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.60 |
| Back Seat | | 6.5% | | 10.3% | | 10.9% | | IEEE Uncontrolled Limit: | | 0.32 |
| Front Seat | | 4.7% | | 2.9% | | 5.8% | | RF Po (*Max): | | 54.0 |

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BS-Position 1

Table 25

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.20 | 0.094 | 47.6 | 0.047 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.7% | | 6 | 120 | 5.6% | | 1.71 | 0.34 |
| 2 | 40 | 2.1% | | 7 | 140 | 7.3% | | | |
| 3 | 60 | 2.6% | | 8 | 160 | 9.3% | | | |
| 4 | 80 | 3.0% | | 9 | 180 | 9.7% | | | |
| 5 | 100 | 5.1% | | 10 | 200 | 9.6% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

P-Position 1

Table 26

| Internal Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | | |
|--|---------------|-------------------------|---------------------|--------------------------|--------------------|--|-------|--------------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Head, Chest, Lower Trunk Back/Front seats (mW/cm ²) | | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| | | | | | | Back | Front | | | |
| Roof (cnt) | HAE6016A | 2.15 | Highest Reading | E | 1.20 | 0.095 | 0.038 | 47.6 | 0.048 | 0.05 |
| Measurement Grid | | | | | | | | | | |
| Test Position | | % of Control Limit Head | | % of Control Limit Chest | | % of Control Limit Lower Trunk | | IEEE Controlled Limit: | | 1.71 |
| Back Seat | | 5.6% | | 5.5% | | 5.6% | | IEEE Uncontrolled Limit: | | 0.34 |
| Front Seat | | 1.3% | | 2.5% | | 2.8% | | RF Po (*Max): | | 48.0 |

BS-Position 2

Table 27

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.29 | 0.054 | 53.1 | 0.027 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.5% | | 6 | 120 | 5.7% | | 1.50 | 0.30 |
| 2 | 40 | 1.5% | | 7 | 140 | 7.0% | | | |
| 3 | 60 | 2.1% | | 8 | 160 | 8.2% | | | |
| 4 | 80 | 3.4% | | 9 | 180 | 9.0% | | | |
| 5 | 100 | 4.4% | | 10 | 200 | 11.3% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

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BS-Position 2

Table 28

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.28 | 0.079 | 53.5 | 0.039 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 5.6% | | 1.53 | 0.31 |
| 2 | 40 | 1.9% | | 7 | 140 | 6.3% | | | |
| 3 | 60 | 2.6% | | 8 | 160 | 7.2% | | | |
| 4 | 80 | 3.3% | | 9 | 180 | 8.6% | | | |
| 5 | 100 | 4.0% | | 10 | 200 | 10.0% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 2

Table 29

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.25 | 0.081 | 53.7 | 0.041 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.5% | | 6 | 120 | 4.8% | | 1.60 | 0.32 |
| 2 | 40 | 1.5% | | 7 | 140 | 6.6% | | | |
| 3 | 60 | 1.9% | | 8 | 160 | 8.2% | | | |
| 4 | 80 | 2.9% | | 9 | 180 | 9.3% | | | |
| 5 | 100 | 3.7% | | 10 | 200 | 10.3% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 2

Table 30

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.20 | 0.064 | 47.6 | 0.032 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.6% | | 6 | 120 | 3.1% | | 1.71 | 0.34 |
| 2 | 40 | 1.6% | | 7 | 140 | 4.4% | | | |
| 3 | 60 | 1.8% | | 8 | 160 | 6.1% | | | |
| 4 | 80 | 1.9% | | 9 | 180 | 6.1% | | | |
| 5 | 100 | 2.8% | | 10 | 200 | 7.9% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 2

Table 31

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | | | |
|---|---------------|--------------------|---------------------|-----------|--------------------|---|--------------------|--|--|-----------------------|-------------------------|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) | | |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.29 | 0.085 | 53.1 | 0.043 | 0.04 | | |
| Measurement Grid | | | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.6% | | | 6 | 120 | 5.7% | | | 1.50 | 0.30 |
| 2 | 40 | 0.5% | | | 7 | 140 | 7.6% | | | RF Po (*Max) | 54.0 |
| 3 | 60 | 0.8% | | | 8 | 160 | 10.8% | | | | |
| 4 | 80 | 1.0% | | | 9 | 180 | 13.9% | | | | |
| 5 | 100 | 4.3% | | | 10 | 200 | 11.5% | | | | |

BS-Position 2

Table 32

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | | | |
|---|---------------|--------------------|---------------------|-----------|--------------------|---|--------------------|--|--|-----------------------|-------------------------|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) | | |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.28 | 0.070 | 53.5 | 0.035 | 0.04 | | |
| Measurement Grid | | | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.7% | | | 6 | 120 | 3.9% | | | 1.53 | 0.31 |
| 2 | 40 | 0.7% | | | 7 | 140 | 6.7% | | | RF Po (*Max) | 54.0 |
| 3 | 60 | 0.9% | | | 8 | 160 | 8.7% | | | | |
| 4 | 80 | 1.2% | | | 9 | 180 | 10.2% | | | | |
| 5 | 100 | 2.7% | | | 10 | 200 | 9.9% | | | | |

BS-Position 2

Table 33

| External Vehicle MPE Assessment @ 470.025 MHz | | | | | | | | | | | |
|---|---------------|--------------------|---------------------|-----------|--------------------|---|--------------------|--|--|-----------------------|-------------------------|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) | | |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.26 | 0.081 | 53.7 | 0.040 | 0.04 | | |
| Measurement Grid | | | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | | Test Position | Height (cm) | % of Control Limit | | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | | 6 | 120 | 5.7% | | | 1.57 | 0.31 |
| 2 | 40 | 0.9% | | | 7 | 140 | 6.9% | | | RF Po (*Max) | 54.0 |
| 3 | 60 | 1.5% | | | 8 | 160 | 8.6% | | | | |
| 4 | 80 | 1.7% | | | 9 | 180 | 10.5% | | | | |
| 5 | 100 | 3.5% | | | 10 | 200 | 11.3% | | | | |

UHF Mobile M20SSS9PW1AN

BS-Position 2

Table 34

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.25 | 0.069 | 53.7 | 0.034 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 3.7% | | 1.60 | 0.32 |
| 2 | 40 | 0.8% | | 7 | 140 | 5.7% | | | |
| 3 | 60 | 1.3% | | 8 | 160 | 7.7% | | | |
| 4 | 80 | 1.8% | | 9 | 180 | 8.7% | | | |
| 5 | 100 | 2.6% | | 10 | 200 | 9.7% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 2

Table 35

| External Vehicle MPE Assessment @ 494.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.23 | 0.086 | 53.9 | 0.043 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 4.3% | | 1.65 | 0.33 |
| 2 | 40 | 1.3% | | 7 | 140 | 6.3% | | | |
| 3 | 60 | 1.5% | | 8 | 160 | 9.3% | | | |
| 4 | 80 | 2.3% | | 9 | 180 | 11.5% | | | |
| 5 | 100 | 3.3% | | 10 | 200 | 11.7% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 2

Table 36

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.20 | 0.064 | 47.6 | 0.032 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.8% | | 6 | 120 | 3.5% | | 1.71 | 0.34 |
| 2 | 40 | 1.0% | | 7 | 140 | 4.3% | | | |
| 3 | 60 | 1.3% | | 8 | 160 | 7.0% | | | |
| 4 | 80 | 1.5% | | 9 | 180 | 7.7% | | | |
| 5 | 100 | 2.6% | | 10 | 200 | 8.0% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 2

Table 37

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.29 | 0.077 | 53.1 | 0.039 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.6% | | 6 | 120 | 5.1% | | 1.50 | 0.30 |
| 2 | 40 | 1.3% | | 7 | 140 | 6.2% | | | |
| 3 | 60 | 2.6% | | 8 | 160 | 7.7% | | | |
| 4 | 80 | 3.3% | | 9 | 180 | 9.2% | | | |
| 5 | 100 | 4.4% | | 10 | 200 | 10.0% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

BS-Position 2

Table 38

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.25 | 0.064 | 53.7 | 0.032 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.2% | | 6 | 120 | 4.4% | | 1.60 | 0.32 |
| 2 | 40 | 1.4% | | 7 | 140 | 5.2% | | | |
| 3 | 60 | 2.0% | | 8 | 160 | 6.3% | | | |
| 4 | 80 | 2.1% | | 9 | 180 | 6.5% | | | |
| 5 | 100 | 3.3% | | 10 | 200 | 7.5% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

BS-Position 2

Table 39

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.20 | 0.057 | 47.6 | 0.028 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 3.6% | | 1.71 | 0.34 |
| 2 | 40 | 1.1% | | 7 | 140 | 3.9% | | | |
| 3 | 60 | 1.3% | | 8 | 160 | 5.2% | | | |
| 4 | 80 | 1.3% | | 9 | 180 | 5.4% | | | |
| 5 | 100 | 2.5% | | 10 | 200 | 8.0% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 48.0 | |

UHF Mobile M20SSS9PW1AN

BS-Position 3

Table 40

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.29 | 0.062 | 53.1 | 0.031 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 3.3% | | 6 | 120 | 6.8% | | 1.50 | 0.30 |
| 2 | 40 | 4.9% | | 7 | 140 | 6.8% | | | |
| 3 | 60 | 5.4% | | 8 | 160 | 7.5% | | | |
| 4 | 80 | 7.0% | | 9 | 180 | 7.7% | | | |
| 5 | 100 | 6.5% | | 10 | 200 | 6.4% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

BS-Position 3

Table 41

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.28 | 0.100 | 53.5 | 0.050 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 3.9% | | 6 | 120 | 7.6% | | 1.53 | 0.31 |
| 2 | 40 | 4.5% | | 7 | 140 | 7.2% | | | |
| 3 | 60 | 5.3% | | 8 | 160 | 7.9% | | | |
| 4 | 80 | 6.6% | | 9 | 180 | 8.4% | | | |
| 5 | 100 | 6.6% | | 10 | 200 | 7.4% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

BS-Position 3

Table 42

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.25 | 0.097 | 53.7 | 0.048 | 0.05 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 3.4% | | 6 | 120 | 5.8% | | 1.60 | 0.32 |
| 2 | 40 | 3.8% | | 7 | 140 | 5.8% | | | |
| 3 | 60 | 6.6% | | 8 | 160 | 7.6% | | | |
| 4 | 80 | 6.6% | | 9 | 180 | 7.1% | | | |
| 5 | 100 | 6.5% | | 10 | 200 | 7.1% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

UHF Mobile M20SSS9PW1AN

BS-Position 3

Table 43

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.20 | 0.073 | 47.6 | 0.036 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.5% | | 6 | 120 | 4.5% | | 1.71 | 0.34 |
| 2 | 40 | 1.7% | | 7 | 140 | 4.5% | | | |
| 3 | 60 | 3.3% | | 8 | 160 | 6.2% | | | |
| 4 | 80 | 4.0% | | 9 | 180 | 6.7% | | | |
| 5 | 100 | 3.8% | | 10 | 200 | 6.4% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 48.0 | |

BS-Position 3

Table 44

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.29 | 0.067 | 53.1 | 0.033 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.3% | | 6 | 120 | 4.3% | | 1.50 | 0.30 |
| 2 | 40 | 1.8% | | 7 | 140 | 5.7% | | | |
| 3 | 60 | 3.6% | | 8 | 160 | 6.9% | | | |
| 4 | 80 | 3.4% | | 9 | 180 | 7.6% | | | |
| 5 | 100 | 4.0% | | 10 | 200 | 5.9% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

BS-Position 3

Table 45

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.28 | 0.067 | 53.5 | 0.033 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.3% | | 6 | 120 | 4.9% | | 1.53 | 0.31 |
| 2 | 40 | 1.4% | | 7 | 140 | 5.7% | | | |
| 3 | 60 | 2.6% | | 8 | 160 | 5.9% | | | |
| 4 | 80 | 3.1% | | 9 | 180 | 7.9% | | | |
| 5 | 100 | 3.8% | | 10 | 200 | 7.0% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

UHF Mobile M20SSS9PW1AN

BS-Position 3

Table 46

| External Vehicle MPE Assessment @ 470.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.26 | 0.067 | 53.7 | 0.034 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 4.4% | | 1.57 | 0.31 |
| 2 | 40 | 1.1% | | 7 | 140 | 5.2% | | | |
| 3 | 60 | 1.8% | | 8 | 160 | 6.6% | | | |
| 4 | 80 | 3.5% | | 9 | 180 | 8.0% | | | |
| 5 | 100 | 3.9% | | 10 | 200 | 7.3% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 3

Table 47

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.25 | 0.063 | 53.7 | 0.032 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.2% | | 6 | 120 | 4.3% | | 1.60 | 0.32 |
| 2 | 40 | 1.5% | | 7 | 140 | 5.9% | | | |
| 3 | 60 | 3.2% | | 8 | 160 | 5.7% | | | |
| 4 | 80 | 2.9% | | 9 | 180 | 6.4% | | | |
| 5 | 100 | 3.2% | | 10 | 200 | 5.3% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 3

Table 48

| External Vehicle MPE Assessment @ 494.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.23 | 0.070 | 53.9 | 0.035 | 0.04 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.6% | | 6 | 120 | 4.3% | | 1.65 | 0.33 |
| 2 | 40 | 1.9% | | 7 | 140 | 5.1% | | | |
| 3 | 60 | 3.1% | | 8 | 160 | 7.1% | | | |
| 4 | 80 | 3.5% | | 9 | 180 | 6.3% | | | |
| 5 | 100 | 4.1% | | 10 | 200 | 5.7% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

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BS-Position 3

Table 49

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.20 | 0.050 | 47.6 | 0.025 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.2% | | 6 | 120 | 2.8% | | 1.71 | 0.34 |
| 2 | 40 | 1.3% | | 7 | 140 | 3.3% | | | |
| 3 | 60 | 1.8% | | 8 | 160 | 4.1% | | | |
| 4 | 80 | 2.1% | | 9 | 180 | 4.7% | | | |
| 5 | 100 | 3.6% | | 10 | 200 | 4.6% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

BS-Position 3

Table 50

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.29 | 0.069 | 53.1 | 0.034 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 3.1% | | 6 | 120 | 4.9% | | 1.50 | 0.30 |
| 2 | 40 | 4.0% | | 7 | 140 | 4.7% | | | |
| 3 | 60 | 4.6% | | 8 | 160 | 5.8% | | | |
| 4 | 80 | 4.2% | | 9 | 180 | 5.7% | | | |
| 5 | 100 | 4.4% | | 10 | 200 | 4.4% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 3

Table 51

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.25 | 0.065 | 53.7 | 0.032 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.4% | | 6 | 120 | 4.1% | | 1.60 | 0.32 |
| 2 | 40 | 2.8% | | 7 | 140 | 4.1% | | | |
| 3 | 60 | 4.3% | | 8 | 160 | 4.5% | | | |
| 4 | 80 | 4.6% | | 9 | 180 | 4.9% | | | |
| 5 | 100 | 3.8% | | 10 | 200 | 4.9% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 3

Table 52

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.20 | 0.053 | 47.6 | 0.027 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 3.4% | | 1.71 | 0.34 |
| 2 | 40 | 1.6% | | 7 | 140 | 3.2% | | | |
| 3 | 60 | 3.0% | | 8 | 160 | 4.1% | | | |
| 4 | 80 | 2.8% | | 9 | 180 | 4.1% | | | |
| 5 | 100 | 2.7% | | 10 | 200 | 4.6% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

BS-Position 4

Table 53

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.29 | 0.032 | 53.1 | 0.016 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.2% | | 6 | 120 | 3.5% | | 1.50 | 0.30 |
| 2 | 40 | 2.0% | | 7 | 140 | 3.9% | | | |
| 3 | 60 | 2.6% | | 8 | 160 | 3.5% | | | |
| 4 | 80 | 2.9% | | 9 | 180 | 4.2% | | | |
| 5 | 100 | 2.9% | | 10 | 200 | 4.1% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 4

Table 54

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.28 | 0.052 | 53.5 | 0.026 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.0% | | 6 | 120 | 3.7% | | 1.53 | 0.31 |
| 2 | 40 | 2.3% | | 7 | 140 | 3.5% | | | |
| 3 | 60 | 3.0% | | 8 | 160 | 3.4% | | | |
| 4 | 80 | 4.0% | | 9 | 180 | 4.1% | | | |
| 5 | 100 | 4.3% | | 10 | 200 | 3.8% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 4

Table 55

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.25 | 0.048 | 53.7 | 0.024 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 3.3% | | 1.60 | 0.32 |
| 2 | 40 | 1.5% | | 7 | 140 | 3.8% | | | |
| 3 | 60 | 2.3% | | 8 | 160 | 3.4% | | | |
| 4 | 80 | 3.2% | | 9 | 180 | 3.3% | | | |
| 5 | 100 | 3.3% | | 10 | 200 | 3.8% | | | RF Po (*Max) |
| | | | | | | | | | 54.0 |

BS-Position 4

Table 56

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.20 | 0.031 | 47.6 | 0.015 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.6% | | 6 | 120 | 1.4% | | 1.71 | 0.34 |
| 2 | 40 | 1.0% | | 7 | 140 | 1.6% | | | |
| 3 | 60 | 1.5% | | 8 | 160 | 1.8% | | | |
| 4 | 80 | 1.9% | | 9 | 180 | 2.8% | | | |
| 5 | 100 | 1.6% | | 10 | 200 | 2.8% | | | RF Po (*Max) |
| | | | | | | | | | 48.0 |

BS-Position 4

Table 57

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.29 | 0.051 | 53.1 | 0.026 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.5% | | 6 | 120 | 3.9% | | 1.50 | 0.30 |
| 2 | 40 | 1.6% | | 7 | 140 | 3.6% | | | |
| 3 | 60 | 2.5% | | 8 | 160 | 4.4% | | | |
| 4 | 80 | 2.9% | | 9 | 180 | 5.1% | | | |
| 5 | 100 | 3.4% | | 10 | 200 | 5.1% | | | RF Po (*Max) |
| | | | | | | | | | 54.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 4

Table 58

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.28 | 0.046 | 53.5 | 0.023 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 3.5% | | 1.53 | 0.31 |
| 2 | 40 | 1.1% | | 7 | 140 | 3.6% | | | |
| 3 | 60 | 1.5% | | 8 | 160 | 3.9% | | | |
| 4 | 80 | 2.4% | | 9 | 180 | 4.6% | | | |
| 5 | 100 | 3.5% | | 10 | 200 | 5.1% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 4

Table 59

| External Vehicle MPE Assessment @ 470.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.26 | 0.046 | 53.7 | 0.023 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 3.2% | | 1.57 | 0.31 |
| 2 | 40 | 1.0% | | 7 | 140 | 3.5% | | | |
| 3 | 60 | 1.7% | | 8 | 160 | 3.9% | | | |
| 4 | 80 | 2.6% | | 9 | 180 | 4.5% | | | |
| 5 | 100 | 2.8% | | 10 | 200 | 4.9% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 4

Table 60

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.25 | 0.045 | 53.7 | 0.022 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.0% | | 6 | 120 | 3.5% | | 1.60 | 0.32 |
| 2 | 40 | 0.9% | | 7 | 140 | 3.5% | | | |
| 3 | 60 | 1.6% | | 8 | 160 | 3.8% | | | |
| 4 | 80 | 2.0% | | 9 | 180 | 3.8% | | | |
| 5 | 100 | 3.2% | | 10 | 200 | 4.7% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 4

Table 61

| External Vehicle MPE Assessment @ 494.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.23 | 0.051 | 53.9 | 0.025 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.2% | | 6 | 120 | 4.0% | | 1.65 | 0.33 |
| 2 | 40 | 1.2% | | 7 | 140 | 3.4% | | | |
| 3 | 60 | 2.0% | | 8 | 160 | 3.9% | | | |
| 4 | 80 | 3.4% | | 9 | 180 | 4.0% | | | |
| 5 | 100 | 3.3% | | 10 | 200 | 4.4% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

BS-Position 4

Table 62

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.20 | 0.035 | 47.6 | 0.018 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 0.7% | | 6 | 120 | 2.5% | | 1.71 | 0.34 |
| 2 | 40 | 1.0% | | 7 | 140 | 2.3% | | | |
| 3 | 60 | 1.2% | | 8 | 160 | 2.5% | | | |
| 4 | 80 | 1.8% | | 9 | 180 | 3.1% | | | |
| 5 | 100 | 2.0% | | 10 | 200 | 3.6% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 48.0 | |

BS-Position 4

Table 63

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.29 | 0.049 | 53.1 | 0.024 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.1% | | 6 | 120 | 3.8% | | 1.50 | 0.30 |
| 2 | 40 | 2.3% | | 7 | 140 | 3.9% | | | |
| 3 | 60 | 2.4% | | 8 | 160 | 3.4% | | | |
| 4 | 80 | 3.5% | | 9 | 180 | 3.5% | | | |
| 5 | 100 | 3.7% | | 10 | 200 | 3.8% | | | |
| | | | | | | | | RF Po (*Max) | |
| | | | | | | | | 54.0 | |

UHF Mobile M20SSS9PW1AN

BS-Position 4

Table 64

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.25 | 0.042 | 53.7 | 0.021 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 2.8% | | 1.60 | 0.32 |
| 2 | 40 | 1.6% | | 7 | 140 | 3.2% | | | |
| 3 | 60 | 2.2% | | 8 | 160 | 2.8% | | | |
| 4 | 80 | 2.9% | | 9 | 180 | 2.8% | | | |
| 5 | 100 | 2.6% | | 10 | 200 | 3.7% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 4

Table 65

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.20 | 0.042 | 47.6 | 0.021 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.3% | | 6 | 120 | 3.1% | | 1.71 | 0.34 |
| 2 | 40 | 1.3% | | 7 | 140 | 3.0% | | | |
| 3 | 60 | 1.7% | | 8 | 160 | 2.8% | | | |
| 4 | 80 | 2.5% | | 9 | 180 | 3.3% | | | |
| 5 | 100 | 2.3% | | 10 | 200 | 3.2% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

BS-Position 5

Table 66

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.29 | 0.028 | 53.1 | 0.014 | 0.01 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.7% | | 6 | 120 | 3.0% | | 1.50 | 0.30 |
| 2 | 40 | 1.9% | | 7 | 140 | 3.2% | | | |
| 3 | 60 | 2.0% | | 8 | 160 | 3.3% | | | |
| 4 | 80 | 2.0% | | 9 | 180 | 3.5% | | | |
| 5 | 100 | 2.8% | | 10 | 200 | 4.1% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 5

Table 67

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4003A | 2.15 | 90 | E | 1.28 | 0.051 | 53.5 | 0.026 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.0% | | 6 | 120 | 3.5% | | 1.53 | 0.31 |
| 2 | 40 | 2.4% | | 7 | 140 | 3.8% | | | |
| 3 | 60 | 2.6% | | 8 | 160 | 4.0% | | | |
| 4 | 80 | 2.7% | | 9 | 180 | 4.2% | | | |
| 5 | 100 | 3.3% | | 10 | 200 | 4.8% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 68

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.25 | 0.053 | 53.7 | 0.027 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.1% | | 6 | 120 | 3.5% | | 1.60 | 0.32 |
| 2 | 40 | 2.2% | | 7 | 140 | 4.1% | | | |
| 3 | 60 | 2.4% | | 8 | 160 | 4.2% | | | |
| 4 | 80 | 2.5% | | 9 | 180 | 4.5% | | | |
| 5 | 100 | 2.9% | | 10 | 200 | 4.8% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 69

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4004A | 2.15 | 90 | E | 1.20 | 0.050 | 47.6 | 0.025 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.9% | | 6 | 120 | 3.1% | | 1.71 | 0.34 |
| 2 | 40 | 2.1% | | 7 | 140 | 3.2% | | | |
| 3 | 60 | 2.3% | | 8 | 160 | 3.6% | | | |
| 4 | 80 | 2.7% | | 9 | 180 | 3.8% | | | |
| 5 | 100 | 2.8% | | 10 | 200 | 3.8% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 5

Table 70

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.29 | 0.057 | 53.1 | 0.029 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.0% | | 6 | 120 | 4.1% | | 1.50 | 0.30 |
| 2 | 40 | 2.1% | | 7 | 140 | 4.8% | | | |
| 3 | 60 | 2.5% | | 8 | 160 | 4.5% | | | |
| 4 | 80 | 2.6% | | 9 | 180 | 5.6% | | | |
| 5 | 100 | 3.0% | | 10 | 200 | 6.8% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 71

| External Vehicle MPE Assessment @ 460.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4011A | 5.65 | 90 | E | 1.28 | 0.065 | 53.5 | 0.033 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 4.4% | | 1.53 | 0.31 |
| 2 | 40 | 2.3% | | 7 | 140 | 4.8% | | | |
| 3 | 60 | 2.7% | | 8 | 160 | 5.2% | | | |
| 4 | 80 | 3.5% | | 9 | 180 | 6.2% | | | |
| 5 | 100 | 4.0% | | 10 | 200 | 7.7% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 72

| External Vehicle MPE Assessment @ 470.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.26 | 0.060 | 53.7 | 0.030 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 3.2% | | 1.57 | 0.31 |
| 2 | 40 | 2.2% | | 7 | 140 | 3.7% | | | |
| 3 | 60 | 2.5% | | 8 | 160 | 4.9% | | | |
| 4 | 80 | 2.9% | | 9 | 180 | 6.1% | | | |
| 5 | 100 | 3.1% | | 10 | 200 | 7.8% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 5

Table 73

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4012A | 5.65 | 90 | E | 1.25 | 0.058 | 53.7 | 0.029 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.8% | | 6 | 120 | 3.9% | | 1.60 | 0.32 |
| 2 | 40 | 2.1% | | 7 | 140 | 4.1% | | | |
| 3 | 60 | 2.2% | | 8 | 160 | 4.5% | | | |
| 4 | 80 | 2.5% | | 9 | 180 | 5.4% | | | |
| 5 | 100 | 2.8% | | 10 | 200 | 6.7% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 74

| External Vehicle MPE Assessment @ 494.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.23 | 0.069 | 53.9 | 0.034 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.9% | | 6 | 120 | 4.6% | | 1.65 | 0.33 |
| 2 | 40 | 2.8% | | 7 | 140 | 4.7% | | | |
| 3 | 60 | 2.9% | | 8 | 160 | 4.9% | | | |
| 4 | 80 | 3.3% | | 9 | 180 | 5.2% | | | |
| 5 | 100 | 3.9% | | 10 | 200 | 7.5% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 75

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE4013A | 5.65 | 90 | E | 1.20 | 0.056 | 47.6 | 0.028 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.9% | | 6 | 120 | 3.5% | | 1.71 | 0.34 |
| 2 | 40 | 2.2% | | 7 | 140 | 3.5% | | | |
| 3 | 60 | 2.3% | | 8 | 160 | 4.1% | | | |
| 4 | 80 | 2.6% | | 9 | 180 | 4.3% | | | |
| 5 | 100 | 3.2% | | 10 | 200 | 5.4% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |

UHF Mobile M20SSS9PW1AN

BS-Position 5

Table 76

| External Vehicle MPE Assessment @ 450.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.29 | 0.047 | 53.1 | 0.023 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.0% | | 6 | 120 | 3.1% | | 1.50 | 0.30 |
| 2 | 40 | 2.4% | | 7 | 140 | 3.2% | | | |
| 3 | 60 | 2.7% | | 8 | 160 | 3.6% | | | |
| 4 | 80 | 3.2% | | 9 | 180 | 3.5% | | | |
| 5 | 100 | 3.0% | | 10 | 200 | 4.4% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 77

| External Vehicle MPE Assessment @ 481.025 MHz | | | | | | | | | |
|---|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.25 | 0.052 | 53.7 | 0.026 | 0.03 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 1.9% | | 6 | 120 | 3.6% | | 1.60 | 0.32 |
| 2 | 40 | 2.0% | | 7 | 140 | 4.0% | | | |
| 3 | 60 | 2.5% | | 8 | 160 | 4.0% | | | |
| 4 | 80 | 2.5% | | 9 | 180 | 4.4% | | | |
| 5 | 100 | 2.8% | | 10 | 200 | 4.5% | | | |
| | | | | | | | | RF Po (*Max) | 54.0 |

BS-Position 5

Table 78

| External Vehicle MPE Assessment @ 511.9875 MHz | | | | | | | | | |
|--|---------------|--------------------|---------------------|---------------|--------------------|---|-------------------|--|--|
| Antenna Location | Antenna Model | Gain (dBi) | Meas. Distance (cm) | E/H Field | Calibration Factor | Average over Body (mW/cm ²) | Initial Power (W) | Pwr. Density Calc. (mW/cm ²) | Pwr. Density Max Calc. (mW/cm ²) |
| Roof (cnt) | HAE6016A | 2.15 | 90 | E | 1.20 | 0.048 | 47.6 | 0.024 | 0.02 |
| Measurement Grid | | | | | | | | | |
| Test Position | Height (cm) | % of Control Limit | | Test Position | Height (cm) | % of Control Limit | | IEEE Controlled Limit | IEEE Uncontrolled Limit |
| 1 | 20 | 2.0% | | 6 | 120 | 3.2% | | 1.71 | 0.34 |
| 2 | 40 | 2.1% | | 7 | 140 | 3.3% | | | |
| 3 | 60 | 2.3% | | 8 | 160 | 3.1% | | | |
| 4 | 80 | 2.5% | | 9 | 180 | 3.2% | | | |
| 5 | 100 | 2.7% | | 10 | 200 | 3.8% | | | |
| | | | | | | | | RF Po (*Max) | 48.0 |