

**MOTOROLA SOLUTIONS**

CERTIFICATE 2518.01

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

Motorola Solutions Inc.
EME Test Laboratory
 8000 West Sunrise Blvd
 Fort Lauderdale, FL. 33322

Date of Report: 3/10/2016
Report Revision: B

Responsible Engineer: Tiong Nguk Ing
Report Author: Tiong Nguk Ing
Date/s Tested: 09/26/2015, 09/29/2015, 10/12/2015, 10/16/2015, 1/28/2016
Manufacturer: Motorola Solutions Inc.
DUT Description: 450-520 MHz 1-5W, 136-174 MHz 1-6W, 6.25K/12.5K/25
 Basic Top Display Model W/GPS. Capable of digital and analog
 FM transmission. Also capable of TDMA transmission
Test TX mode(s): CW (PTT)
Max. Power output: 5.6 W (UHF R2), 6.6 W (VHF)
Nominal Power: 5.0 W (UHF R2), 6.0 W (VHF)
Tx Frequency Bands: 450-520 MHz (UHF R2), 136-174 MHz (VHF)
Signaling type: FM, TDMA
Model(s) Tested: H97TGD9PW1AN (MNUT1015A)
Model(s) Certified: H97TGD9PW1AN (MNUT1015A)
Serial Number(s): CA11004W9P
Classification: Occupational/Controlled
FCC ID: AZ489FT4893 ; UHF R2 450-512 MHz, VHF 150.8-173.4 MHz
 This report contains results that are immaterial for FCC equipment approval, which are
 clearly identified.
IC: 109U-89FT4893; This report contains results that are immaterial for IC equipment
 approval, which are identified.

The test results clearly demonstrate compliance with FCC General Population/Uncontrolled RF Exposure limits of 1.6 W/kg averaged over 1 gram per the requirements of OET Bulletin 65. The 10 grams result is not applicable to FCC filing. The test results clearly demonstrate compliance with ICNIRP (1998) Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz), Health Physics 74, 494-522 RF Exposure limits of 2 W/kg averaged over 10grams of contiguous tissue.

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 4.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc EME Laboratory. I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. This reporting format is consistent with the suggested guidelines of the TIA TSB-150 December 2004. The results and statements contained in this report pertain only to the device(s) evaluated.

Tiong
Tiong Nguk Ing
Deputy Technical Manager
Approval Date: 3/10/2016

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 06:30:22 +0800

Certification Date: 2/16/2016**Certification No.:** 160104AD

Appendix D

System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 10/12/2015 7:26:54 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-150B-151012-01
 Dipole Model# CLA150
 Phantom#: OVAL1109
 Tissue Temp: 22.4 (C)
 Serial#: 4005
 Test Freq: 150 (MHz)
 Start Power: 1000 (mW)
 Rotation (1D): 0.140 dB
 Adjusted SAR (1W): 3.84 mW/g (1g)

Comments:

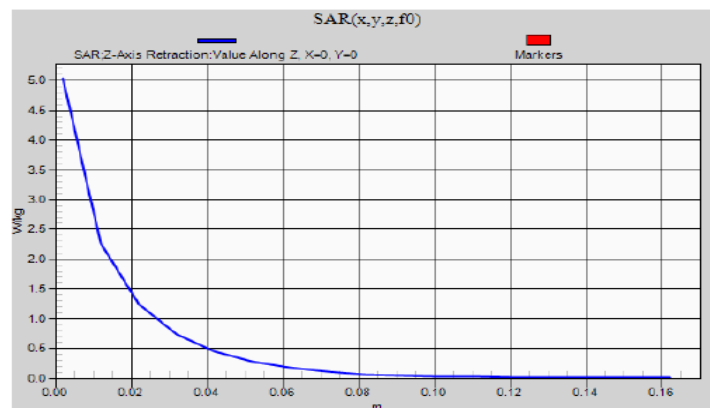
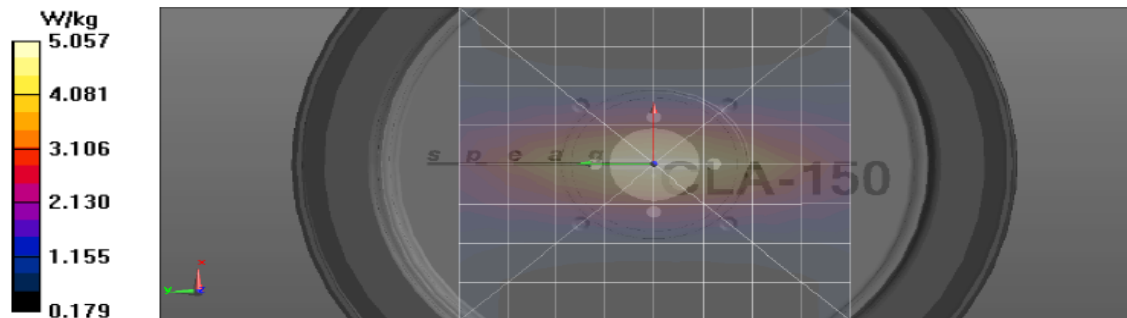
Duty Cycle: 1:1, Medium parameters used: $f = 150$ MHz; $\sigma = 0.81$ S/m; $\epsilon_r = 59.8$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN3638, Frequency: 150 MHz, ConvF(11.55, 11.55, 11.55); Calibrated: 1/26/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (81x81x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 78.00 V/m; Power Drift = 0.01 dB
 Fast SAR: SAR(1 g) = 4.23 W/kg; SAR(10 g) = 3.01 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 5.06 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 78.00 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 6.24 W/kg
 SAR(1 g) = 3.84 W/kg; SAR(10 g) = 2.55 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 5.03 W/kg

Below 2 GHz-Rev.1/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Motorola Solutions, Inc. EME Laboratory

Date/Time: 10/16/2015 8:25:41 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-150H-151016-01
 Dipole Model#: CLA150
 Phantom#: OVAL1108
 Tissue Temp: 22.0 (C)
 Serial#: 4005
 Test Freq: 150 (MHz)
 Start Power: 1000 (mW)
 Rotation (1D): 0.140 dB
 Adjusted SAR (1W): 3.57 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 150$ MHz; $\sigma = 0.77$ S/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN3638, , Frequency: 150 MHz, ConvF(12.32, 12.32, 12.32); Calibrated: 1/26/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (81x81x1):

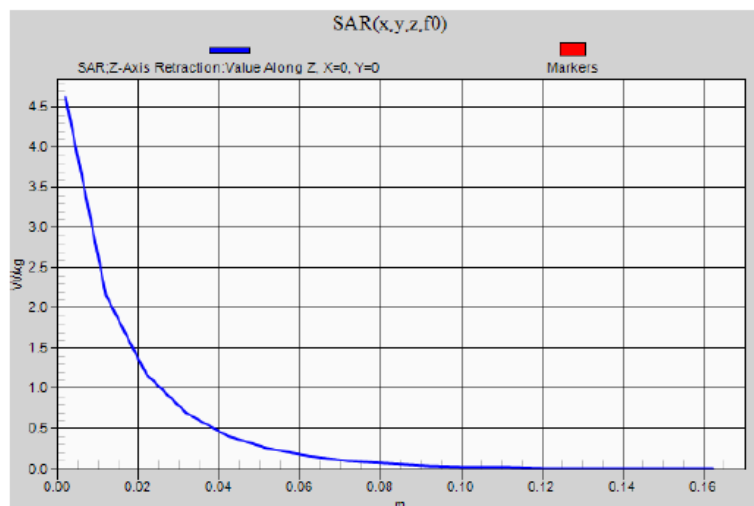
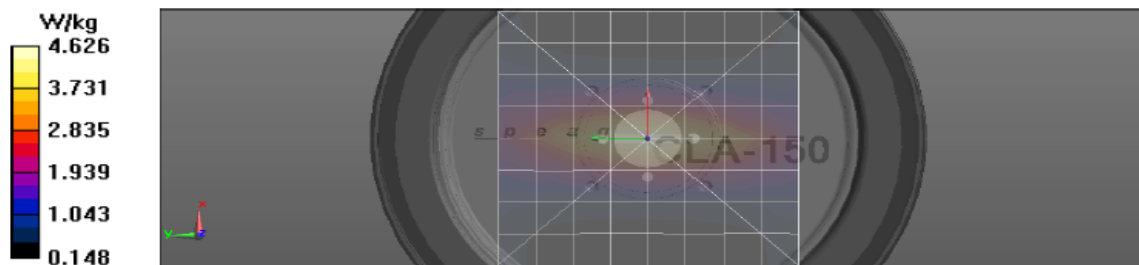
Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
 Reference Value = 77.37 V/m; Power Drift = -0.02 dB
 Fast SAR: SAR(1 g) = 3.91 W/kg; SAR(10 g) = 2.78 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 4.63 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
 Reference Value = 77.37 V/m; Power Drift = -0.02 dB
 Peak SAR (extrapolated) = 5.59 W/kg
 SAR(1 g) = 3.57 W/kg; SAR(10 g) = 2.39 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 4.60 W/kg

Below 2 GHz-Rev.1/System Performance Check/Z-Axis Retraction (1x1x17): Measurement

grid: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm
 Maximum value of SAR (measured) = 4.62 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/26/2015 5:24:03 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450B-150926-01
 Dipole Model#: D450V3
 Phantom#: OVAL1021
 Tissue Temp: 22.4 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.052 dB
 Adjusted SAR (1W): 4.52 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3147, , Frequency: 450 MHz, ConvF(6.96, 6.96, 6.96); Calibrated: 5/27/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x81x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 38.37 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.814 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.28 W/kg

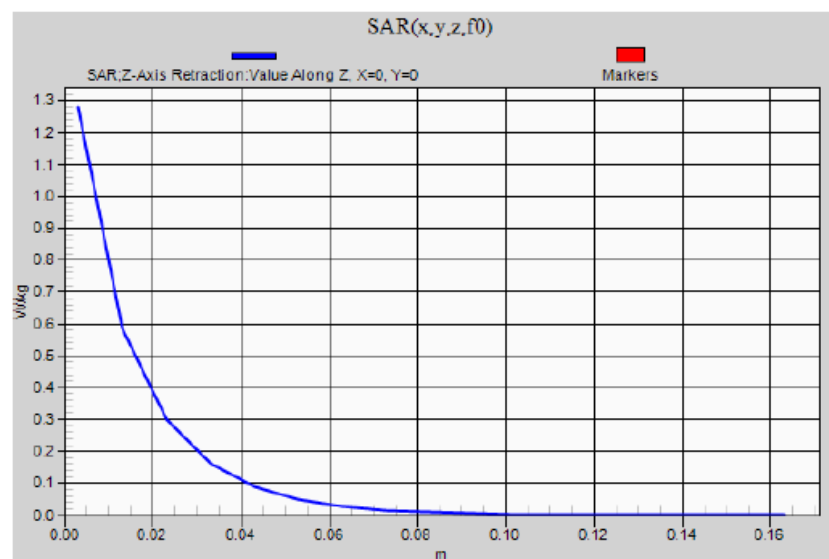
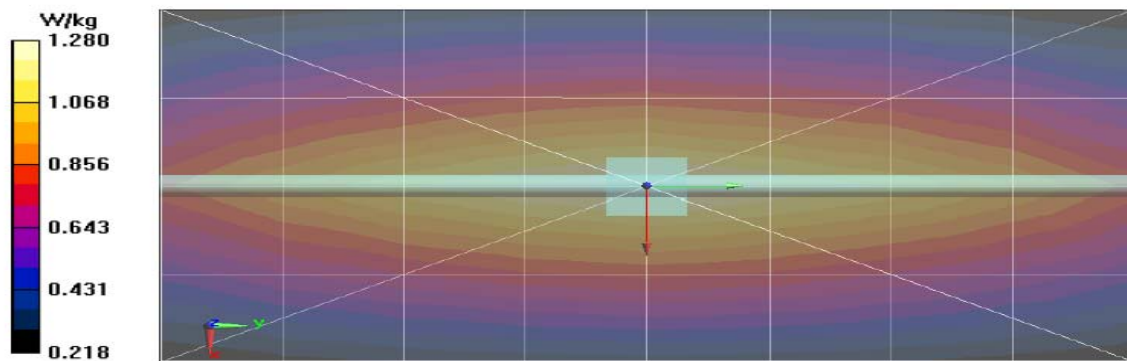
Below 2 GHz-Rev.2/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.37 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.752 W/kg (SAR corrected for target medium)

Below 2 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/28/2016 8:30:20 AM

Robot#: DASY5-FL-3 | Run#: PS-SYSP-450B-160128-01
 Dipole Model#: D450V3
 Phantom#: OVAL1018
 Tissue Temp: 20.9 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.045 dB
 Adjusted SAR (1W): 4.52 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3147, , Frequency: 450 MHz, ConvF(6.96, 6.96, 6.96); Calibrated: 5/27/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.34 W/kg

Below 2 GHz-Rev.2/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.13 V/m; Power Drift = -0.04 dB

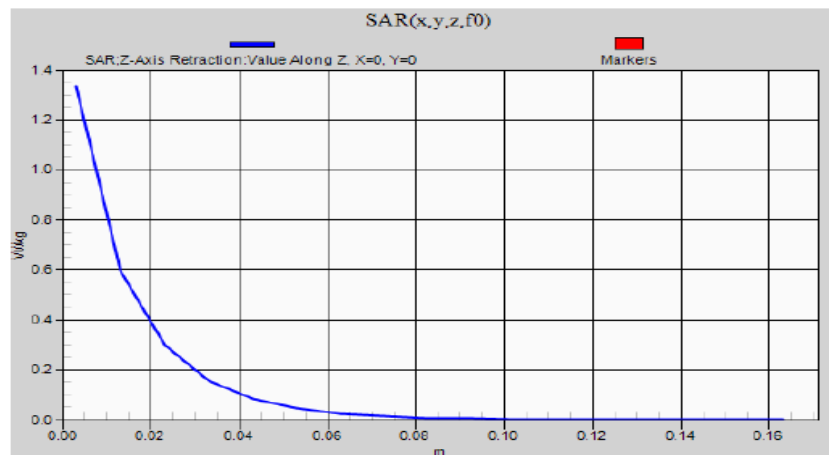
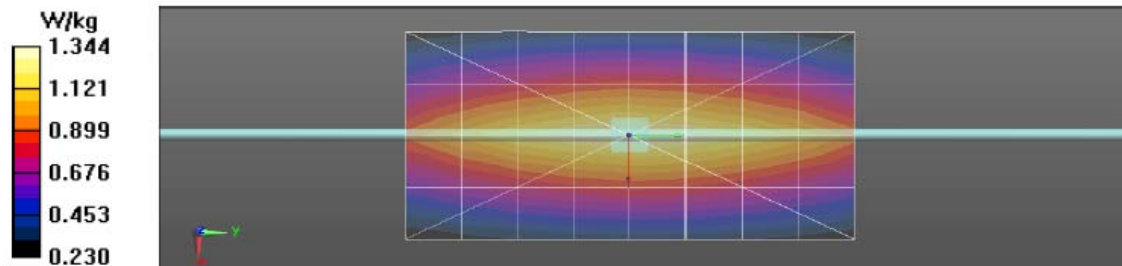
Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.744 W/kg (SAR corrected for target medium)

Below 2 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement

grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.33 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/29/2015 7:29:43 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450H-150929-01
 Dipole Model#: D450V3
 Phantom#: OVAL1022
 Tissue Temp: 21.1 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.042 dB
 Adjusted SAR (1W): 4.40 mW/g (1g)

Comments:

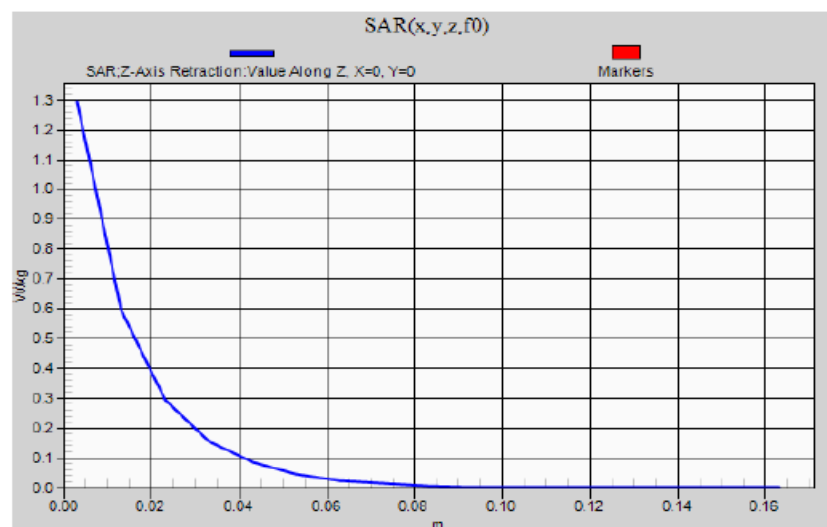
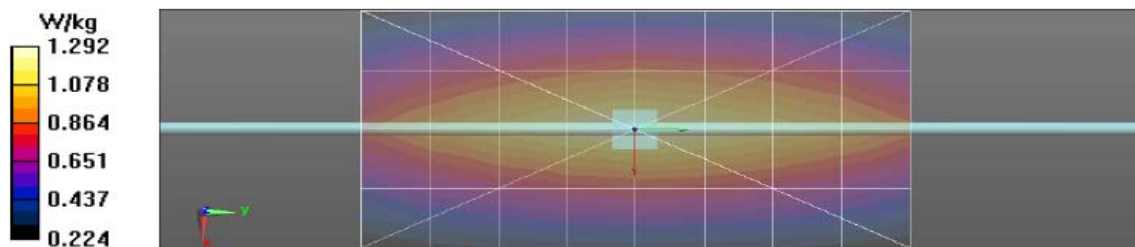
Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 44.5$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3147, , Frequency: 450 MHz, ConvF(6.72, 6.72, 6.72); Calibrated: 5/27/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x81x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 39.62 V/m; Power Drift = 0.00 dB
 Fast SAR: SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.794 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.29 W/kg

Below 2 GHz-Rev.2/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 39.62 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 1.61 W/kg
 SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.735 W/kg (SAR corrected for target medium)

Below 2 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Appendix E

DUT Scans

Assessments at the Body for VHF

Table 16

Motorola Solutions, Inc. EME Laboratory

Date/Time: 10/12/2015 1:13:09 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-151012-07
 Model#: H97TGD9PW1AN(MNUT1015A)
 Phantom#: OVAL1109
 Tissue Temp: 21.8 (C)
 Serial#: CAI1004W9P
 Antenna: PMAT4001A
 Test Freq: 173.4000 (MHz)
 Battery: PMNN4485A
 Carry Acc: HLN6875A
 Audio Acc: RMN5058A
 Start Power: 6.35 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 173$ MHz; $\sigma = 0.82$ S/m; $\epsilon_r = 59$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN3638, Frequency: 173.4 MHz, ConvF(11.55, 11.55, 11.55); Calibrated: 1/26/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x321x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 41.74 V/m; Power Drift = -0.35 dB

Fast SAR: SAR(1 g) = 5.6 W/kg; SAR(10 g) = 3.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.56 W/kg

Below 2 GHz-Rev.2/Ab Scan/2-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.01 V/m; Power Drift = -0.28 dB

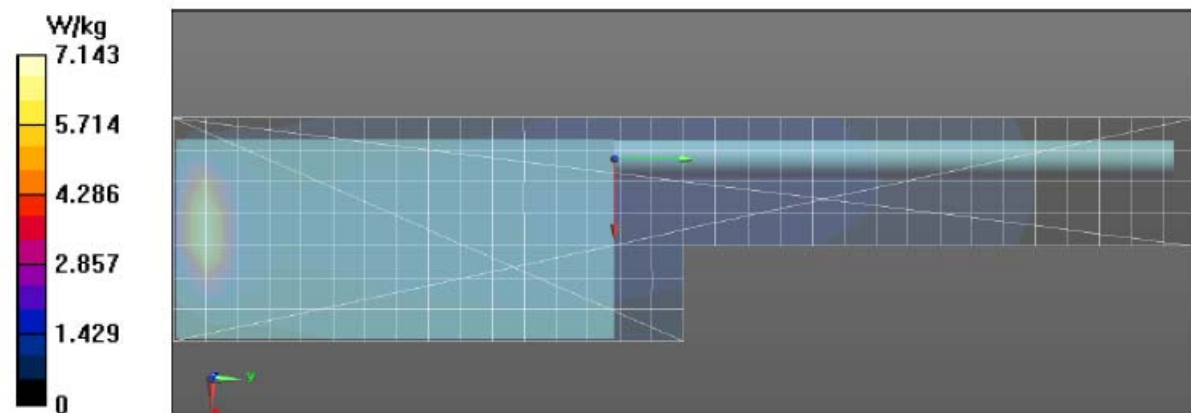
Peak SAR (extrapolated) = 13.6 W/kg

SAR(1 g) = 3.77 W/kg; SAR(10 g) = 1.67 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.35 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 6.82 W/kg



Assessments at the Face for VHF

Table 16

Motorola Solutions, Inc. EME Laboratory

Date/Time: 10/16/2015 12:54:35 PM

Robot#: DASY5-FL-3 | Run#: HvH-Face-151016-05
 Model#: H97TGD9PW1AN(MNUT1015A)
 Phantom#: OVAL1108
 Tissue Temp: 21.7 (C)
 Serial#: CAI1004W9P
 Antenna: PMAT4001A (136-174, 380-520, GPS)
 Test Freq: 173.4000 (MHz)
 Battery: PMNN4485A
 Carry Acc: None, Front facing phantom
 Audio Acc: None
 Start Power: 6.34 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 173 \text{ MHz}$; $\sigma = 0.79 \text{ S/m}$; $\epsilon_r = 52.1$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN3638, , Frequency: 173.4 MHz, ConvF(12.32, 12.32, 12.32); Calibrated: 1/26/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (71x321x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Reference Value = 51.75 V/m; Power Drift = -0.41 dB

Fast SAR: SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.51 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.29 W/kg

Below 2 GHz-Rev.2/Face Scan/2-Zoom Scan (61x61x1)/Cube 0: Interpolated grid: $dx=0.5000 \text{ mm}$, $dy=0.5000 \text{ mm}$, $dz=1.000 \text{ mm}$

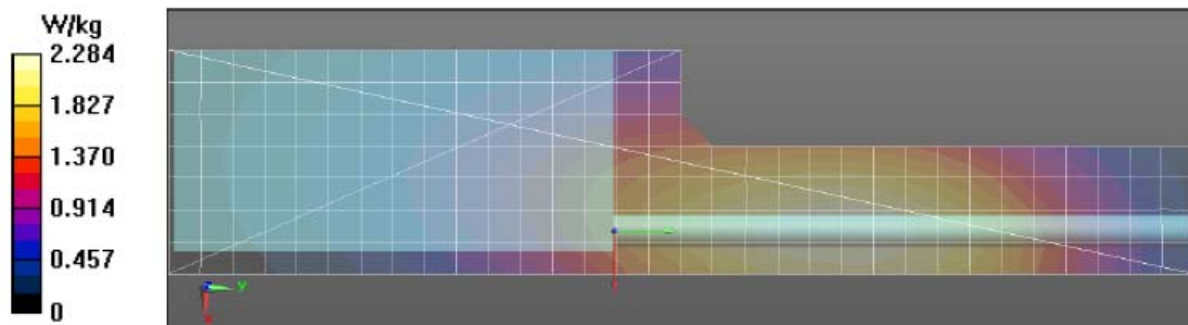
Reference Value = 51.75 V/m; Power Drift = -0.54 dB

Fast SAR: SAR(1 g) = 1.78 W/kg; SAR(10 g) = 1.35 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.09 W/kg

Below 2 GHz-Rev.2/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$

Maximum value of SAR (measured) = 2.06 W/kg



Assessments at the Body for UHF R2

Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/28/2016 1:58:10 PM

Robot#: DASY5-FL-3 | Run#: PS-AB-160128-06
 Model#: H97TGD9PW1AN(MNUT1015A)
 Phantom#: OVAL1018
 Tissue Temp: 21.1 (C)
 Serial#: CAI1004W9P
 Antenna: PMAE4065A
 Test Freq: 450.0000 (MHz)
 Battery: PMNN4485A
 Carry Acc: AY000222A01
 Audio Acc: None
 Start Power: 5.29 (W)

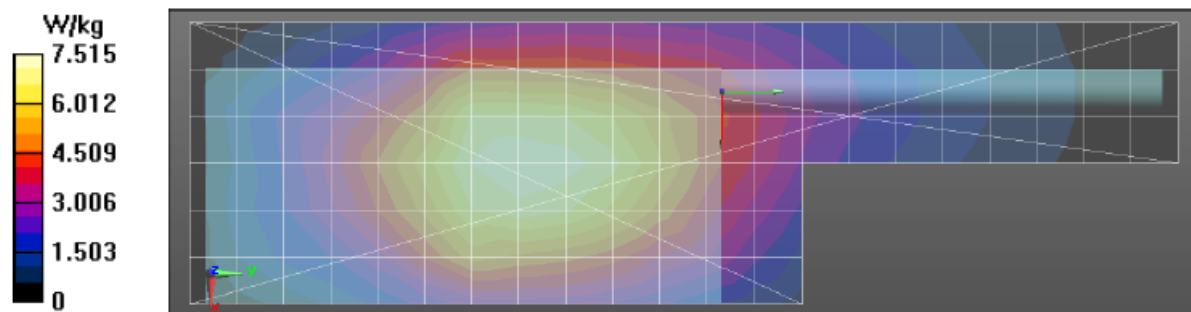
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3147, , Frequency: 450 MHz, ConvF(6.96, 6.96, 6.96); Calibrated: 5/27/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (7x22x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 7.51 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 90.38 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 9.09 W/kg
 SAR(1 g) = 6.72 W/kg; SAR(10 g) = 4.99 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 7.49 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 7.47 W/kg



Assessments at the Face for UHF R2

Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/29/2015 11:39:09 AM

Robot#: DASY5-FL-3 | Run#: HvH-Face-150929-04
 Model#: H97TGD9PW1AN(MNUT1015A)
 Phantom#: OVAL1022
 Tissue Temp: 21.4 (C)
 Serial#: CAI1004W9P
 Antenna: PMAE4065A (380-520, GPS)
 Test Freq: 465.5000 (MHz)
 Battery: PMNN4485A
 Carry Acc: None; PSM's front facing phantom
 Audio Acc: PMMN4059B
 Start Power: 5.52 (W)

Duty Cycle: 1:1, Medium parameters used: $f = 466$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 44.2$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3147, , Frequency: 465.5 MHz, ConvF(6.72, 6.72, 6.72); Calibrated: 5/27/2015

Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (51x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 67.67 V/m; Power Drift = -0.08 dB

Fast SAR: SAR(1 g) = 4.29 W/kg; SAR(10 g) = 3.12 W/kg (SAR corrected for target medium)

Below 2 GHz-Rev.2/Face Scan/2-Volume Scan 2D (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm

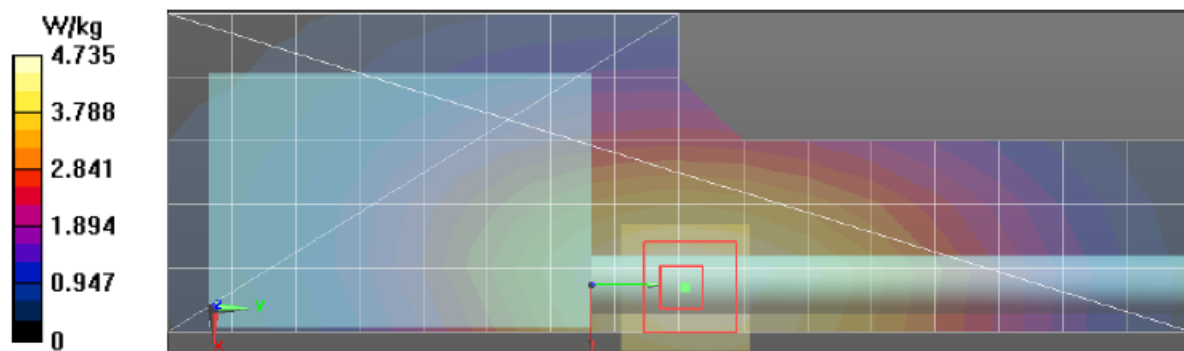
Reference Value = 67.67 V/m; Power Drift = -0.10 dB

Fast SAR: SAR(1 g) = 4.31 W/kg; SAR(10 g) = 3.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 4.77 W/kg

Below 2 GHz-Rev.2/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 4.76 W/kg



Assessments at the Body for Outside FCC Part 90

Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/26/2015 9:48:30 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-150926-07
 Model#: H97TGD9PW1AN(MNUT1015A)
 Phantom#: OVAL1021
 Tissue Temp: 21.8 (C)
 Serial#: CAI1004W9P
 Antenna: PMAE4065A
 Test Freq: 520.0000 (MHz)
 Battery: PMNN4485A
 Carry Acc: RLN4570A
 Audio Acc: NONE
 Start Power: 5.59 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 520$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3147, , Frequency: 520 MHz, ConvF(6.96, 6.96, 6.96); Calibrated: 5/27/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 88.48 V/m; Power Drift = -0.00 dB

Fast SAR: SAR(1 g) = 13 W/kg; SAR(10 g) = 9.37 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 14.5 W/kg

Below 2 GHz-Rev.2/Ab Scan/2-Volume 2D Scan (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm

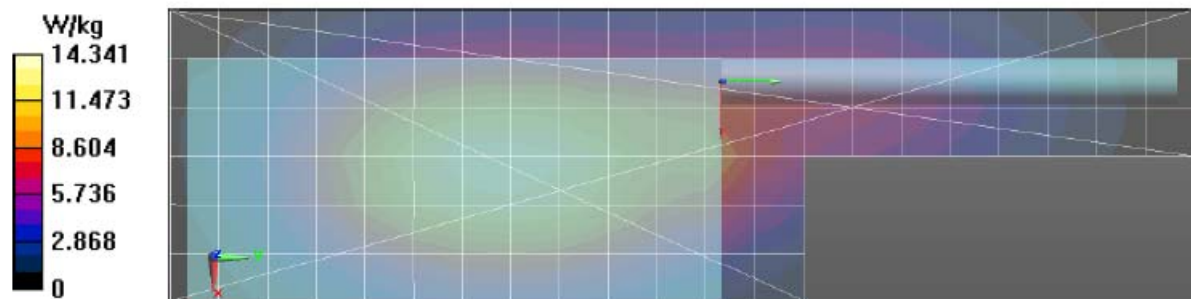
Reference Value = 88.48 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 13.2 W/kg; SAR(10 g) = 9.64 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 14.7 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 14.6 W/kg



Assessments at the Face for Outside FCC Part 90

Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/29/2015 1:59:00 PM

Robot#: DASY5-FL-3 | Run#: HvH-Face-150929-06
 Model#: H97TGD9PW1AN(MNUT1015A)
 Phantom#: OVAL1022
 Tissue Temp: 21.6 (C)
 Serial#: CAI1004W9P
 Antenna: PMAE4065A (380-520, GPS)
 Test Freq: 520.0000 (MHz)
 Battery: PMNN4485A
 Carry Acc: None, Back facing phantom
 Audio Acc: None
 Start Power: 5.59 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 520 \text{ MHz}$; $\sigma = 0.92 \text{ S/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3147, , Frequency: 520 MHz, ConvF(6.72, 6.72, 6.72); Calibrated: 5/27/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (61x211x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 65.26 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = **4.14 W/kg**; SAR(10 g) = 3.02 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 4.62 W/kg

Below 2 GHz-Rev.2/Face Scan/2-Volume Scan 2D (41x41x1): Interpolated grid: $dx=0.7500 \text{ mm}$, $dy=0.7500 \text{ mm}$, $dz=1.000 \text{ mm}$

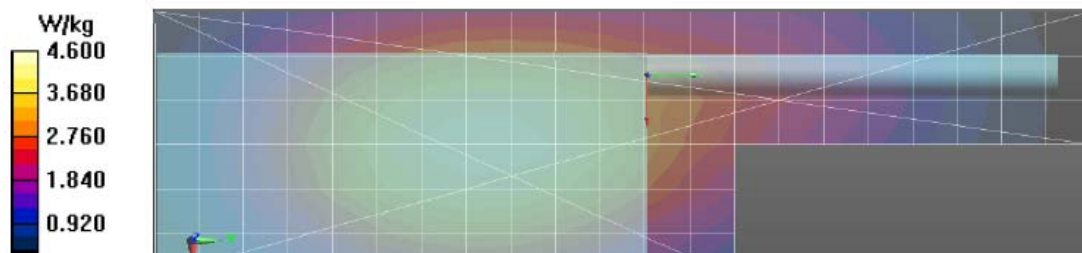
Reference Value = 65.26 V/m; Power Drift = 0.04 dB

Fast SAR: SAR(1 g) = 4.2 W/kg; SAR(10 g) = 3.11 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 4.67 W/kg

Below 2 GHz-Rev.2/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$

Maximum value of SAR (measured) = 4.72 W/kg



APPENDIX F

Shortened Scan of Highest SAR configuration

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/28/2016 2:27:39 PM

Robot#: DASY5-FL-3 | Run#: PS-AB-160128-07
 Model#: H97TGD9PW1AN(MNUT1015A)
 Phantom#: OVAL1018
 Tissue Temp: 21.0 (C)
 Serial#: CAI1004W9P
 Antenna: PMAE4065A
 Test Freq: 450.0000 (MHz)
 Battery: PMNN4485A
 Carry Acc: AY000222A01
 Audio Acc: None
 Start Power: 5.30 (W)

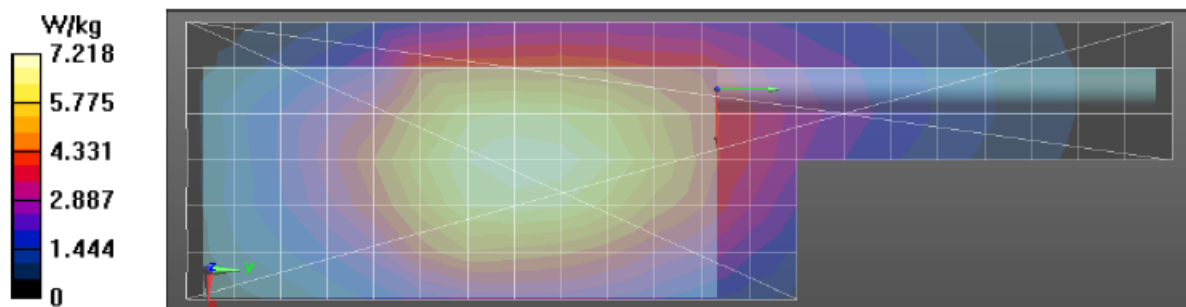
Comments: Shorten scan

Duty Cycle: 1:1, Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3147, , Frequency: 450 MHz, ConvF(6.96, 6.96, 6.96); Calibrated: 5/27/2015
 Electronics: DAE4 Sn729, Calibrated: 4/27/2015

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (7x22x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 7.22 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$,
 $dy=7.5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 89.86 V/m; Power Drift = -0.02 dB
 Peak SAR (extrapolated) = 8.95 W/kg
 SAR(1 g) = 6.6 W/kg; SAR(10 g) = 4.91 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 7.36 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$,
 $dz=10\text{mm}$
 Maximum value of SAR (measured) = 7.17 W/kg



Shortened scan reflects highest SAR producing configuration and is compared to the full scan.

Scan Description	Referenced Table	Test Time (min.)	SAR 1g (W/kg)	SAR 10g (W/kg)
Shorten scan (zoom)	19	7	3.50	2.61
Full scan (area & zoom)	17	32	3.58	2.66

APPENDIX G

DUT Test Position Photos

Body (Highest SAR configuration)

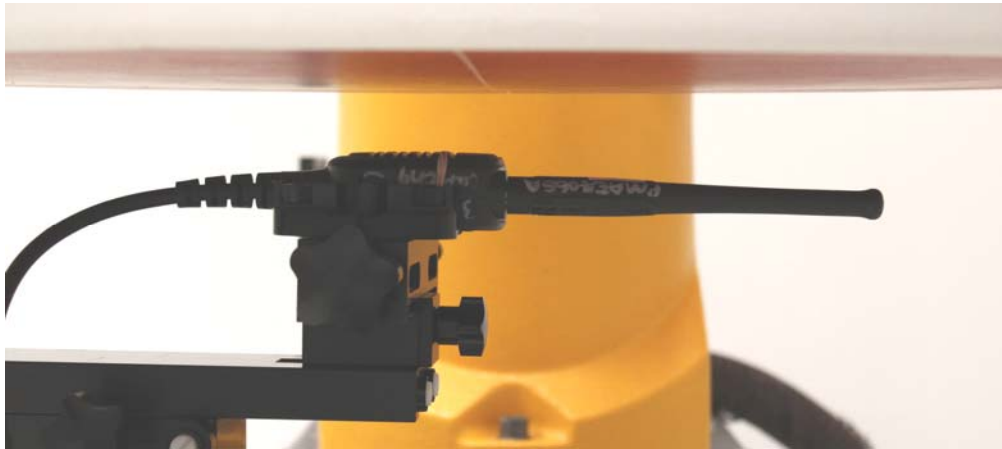
DUT w/ antenna PMAE4065A with new offered battery PMNN4485A and body worn accessory AY000222A01 again phantom without audio accessory.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
PMAE4065A	0	38	55

Face (Highest SAR configuration)

PMMN4059B PSM with front side separated 2.5cm from phantom with antenna PMAE4065A and battery PMNN4485A.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
PMAE4065A	32	34	39

Face (Degraded SAR configuration required PCII filling)

DUT with front side separated 2.5cm from phantom with antenna PMAT4001A and battery PMNN4485A without audio accessory attached.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
PMAT4001A	26	34	47

APPENDIX H

Battery accessory Photo



New offered battery PMNN4485A (front, side and back view)

For photos of other previously approved accessories please refer to previous filling report.