

**MOTOROLA SOLUTIONS**
**MS ISO/IEC 17025**  
**TESTING**  
**SAMM No.0826**
**DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2**
**Motorola Solutions Inc.**  
**EME Test Laboratory**

 Motorola Solutions Malaysia Sdn Bhd (Innoplex)  
 Plot 2A, Medan Bayan Lepas,  
 Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.

**Date of Report:** 8/3/2018  
**Report Revision:** A

**Responsible Engineer:** Lee Kin Kting  
**Report Author:** Lee Kin Kting  
**Date/s Tested:** 7/3/2018 - 7/6/2018, 7/9/2018-7/10/2018 & 7/17/2018, 7/30/2018-8/1/2018  
**Manufacturer:** Motorola Solutions Inc.  
**DUT Description:** Handheld Portable T800 FRS Consumer Radio 462-467 MHz Blue  
**Test TX mode(s):** CW (PTT) & BT  
**Max. Power output:** 2.00 W (462.5500 – 462.7250 MHz), 0.60 W (467.5625- 467.7125MHz)  
 2.51 mW (2402-2480MHz)  
**Nominal Power:** 1.80 W (462.5500 – 462.7250 MHz), 0.50 W (467.5625– 467.7125MHz)  
 2.34 mW (2402-2480MHz)  
**Tx Frequency Bands:** 462.5500 – 462.7250 MHz, 467.5625- 467.7125MHz, 2402-2480MHz  
**Signaling type:** FM, GFSK (Bluetooth)  
**Model(s) Tested:** T800 (PMUE5381A)  
**Model(s) Certified:** T800 (PMUE5381A), T801 (PMUE5446A)  
**Serial Number(s):** 1751UL8544, 1751UL6476  
**Classification:** General Population / Uncontrolled Environment  
**FCC ID:** AZ489FT4947  
**IC:** 109U-89FT4947  
**ISED Test Site registration:** 109AK  
**FCC Test Firm Registration Number:** 823256

The test results clearly demonstrate compliance with General Population / Uncontrolled Environment RF Exposure limits of 1.6 W/kg averaged over 1 gram per the requirements of FCC 47 CFR § 2.1093 and ISED RSS-102 (Issue 5).

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 Nguk Ing**  
**Deputy Technical Manager (Approved Signatory)**  
**Approval Date: 8/9/2018**

## **Appendix E**

### **System Verification Check Scans**

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/3/2018 9:24:00 PM

Robot#: DASY5-PG-3 | Run#: AN-SYSP-450B-180703-01  
 Dipole Model# D450V3  
 Phantom#: ELI5 1147  
 Tissue Temp: 20.4 (C)  
 Serial#: 1054  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.034 dB  
 Adjusted SAR (1W): 4.72 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 54.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 450 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):**

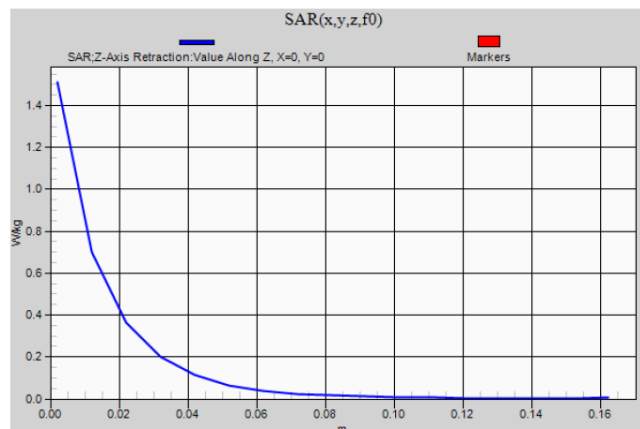
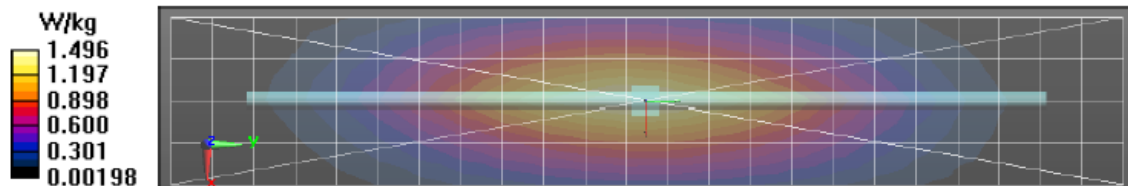
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 40.28 V/m; Power Drift = -0.03 dB  
 Fast SAR: SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.850 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.50 W/kg

**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 = 40.28 V/m; Power Drift = -0.03 dB  
 Peak SAR (extrapolated) = 1.80 W/kg  
 SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.796 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) = 1.51 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/4/2018 10:14:18 PM

Robot#: DASY5-PG-3 | Run#: AN-SYSP-450B-180704-14  
 Dipole Model# D450V3  
 Phantom#: ELI5 1147  
 Tissue Temp: 21.9 (C)  
 Serial#: 1054  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.032 dB  
 Adjusted SAR (1W): 4.60 mW/g (1g)

## Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.95$  S/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7486, Frequency: 450 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018

Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):**

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

Reference Value = 39.86 V/m; Power Drift = -0.01 dB

Fast SAR: SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.836 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.48 W/kg

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

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

Reference Value = 39.86 V/m; Power Drift = -0.01 dB

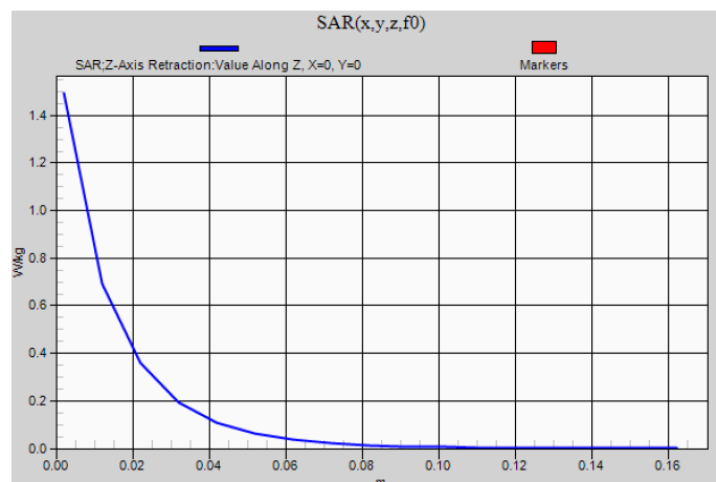
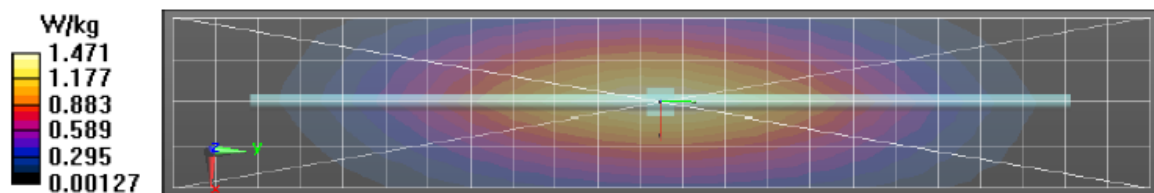
Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.777 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.49 W/kg

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

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



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/5/2018 10:32:35 PM

Robot#: DASY5-PG-3 | Run#: AN-SYSP-450B-180705-17  
 Dipole Model#: D450V3  
 Phantom#: ELI5 1147  
 Tissue Temp: 21.4 (C)  
 Serial#: 1054  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.030 dB  
 Adjusted SAR (1W): 4.72 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 450 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):**

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

Reference Value = 40.50 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.855 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.50 W/kg

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

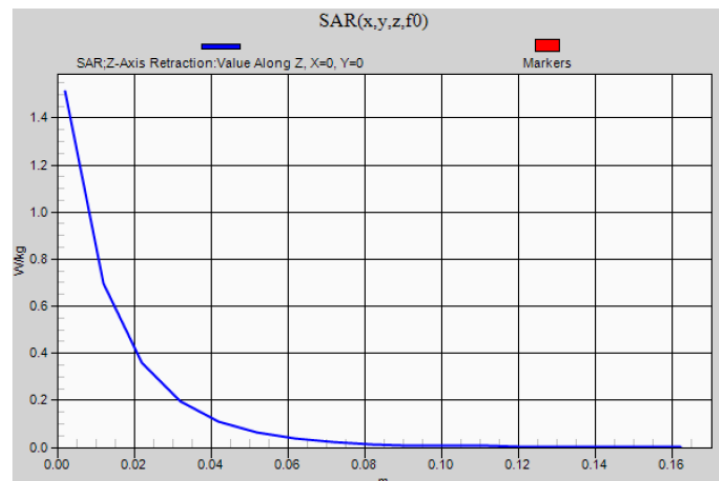
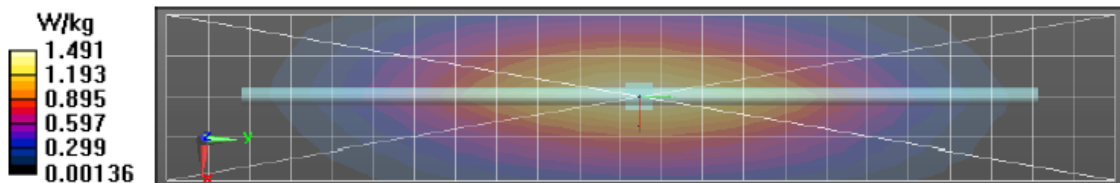
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 40.50 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.795 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.51 W/kg

**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: 7/9/2018 8:04:43 AM

Robot#: DASY5-PG-3 | Run#: AN-SYSP-450B-180709-01  
 Dipole Model# D450V3  
 Phantom#: ELI5 1147  
 Tissue Temp: 21.5 (C)  
 Serial#: 1054  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.027 dB  
 Adjusted SAR (1W): 4.72 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.95$  S/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7486, Frequency: 450 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018

Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):**

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

Reference Value = 40.60 V/m; Power Drift = -0.05 dB

Fast SAR: SAR(1 g) = 1.24 W/kg; SAR(10 g) = 0.862 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.52 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

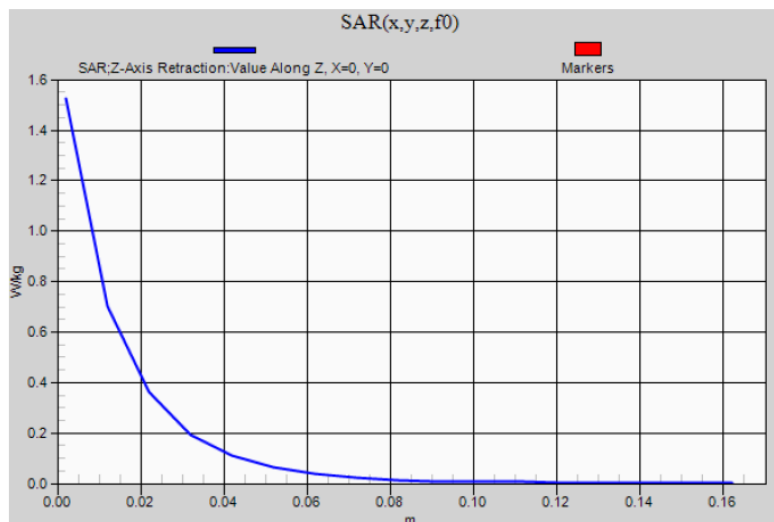
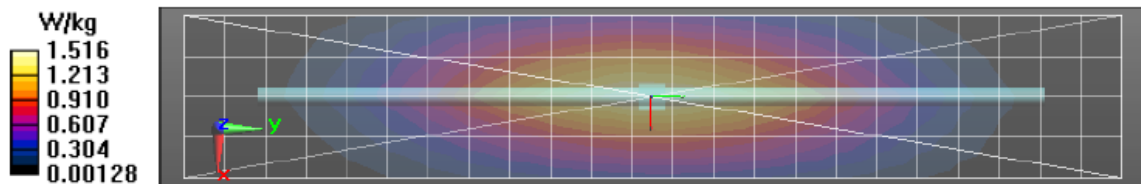
Reference Value = 40.60 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.83 W/kg

SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.796 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: 7/10/2018 8:12:37 AM

Robot#: DASY5-PG-3 | Run#: AN-SYSP-450B-180710-06  
 Dipole Model# D450V3  
 Phantom#: ELI5 1147  
 Tissue Temp: 22.2 (C)  
 Serial#: 1054  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.032 dB  
 Adjusted SAR (1W): 4.64 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.97$  S/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, , Frequency: 450 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):**

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

Reference Value = 39.85 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.843 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.52 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 = 39.85 V/m; Power Drift = 0.01 dB

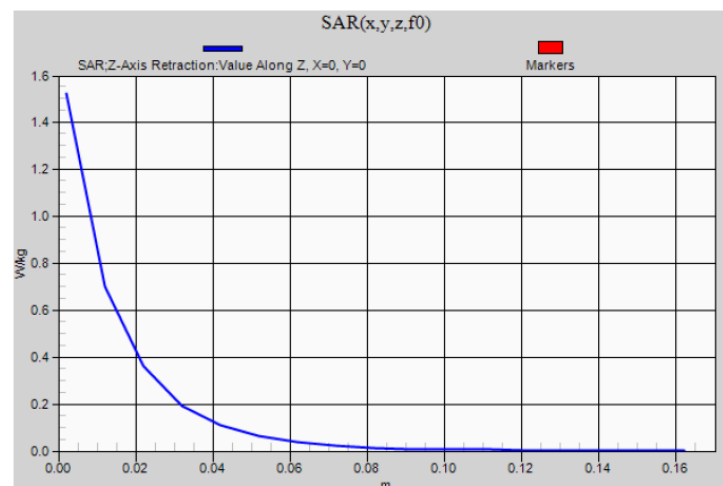
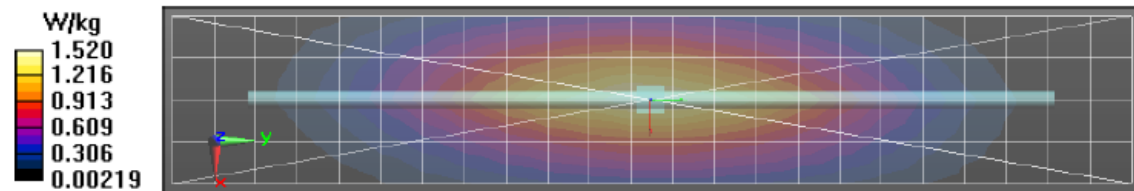
Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.780 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.52 W/kg

**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: 7/10/2018 2:13:47 PM

Robot#: DASY5-PG-3 | Run#: AN-SYSP-450H-180710-11  
 Dipole Model# D450V3  
 Phantom#: ELI4 1016  
 Tissue Temp: 22.2 (C)  
 Serial#: 1054  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.051 dB  
 Adjusted SAR (1W): 4.56 mW/g (1g)

**Comments:**

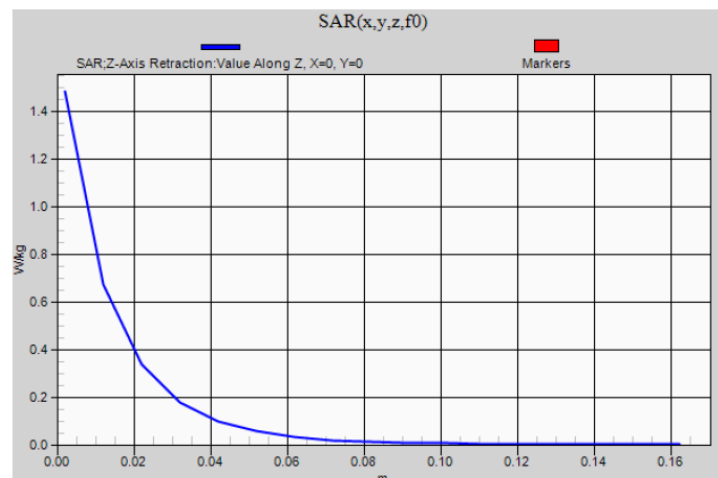
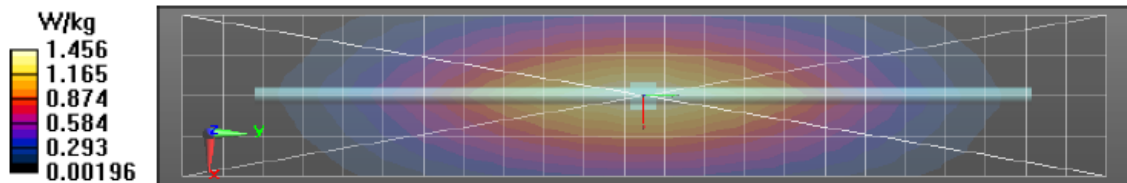
Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 450 MHz, ConvF(11.43, 11.43, 11.43); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):**

Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
 Reference Value = 41.36 V/m; Power Drift = -0.04 dB  
 Fast SAR: SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.822 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.47 W/kg

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

Measurement grid:  $dx=7.5$ mm,  $dy=7.5$ mm,  $dz=5$ mm  
 Reference Value = 41.36 V/m; Power Drift = -0.04 dB  
 Peak SAR (extrapolated) = 1.77 W/kg  
 SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.760 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.48 W/kg

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

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/17/2018 4:30:51 PM

Robot#: DASY5-PG-3 | Run#: FD-SYSP-450B-180717-09  
 Dipole Model#: D450V3  
 Phantom#: ELI5 1147  
 Tissue Temp: 20.8 (C)  
 Serial#: 1054  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.039 dB  
 Adjusted SAR (1W): 4.68 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.95$  S/m;  $\epsilon_r = 54.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7486, Frequency: 450 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018

Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):**

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

Reference Value = 40.23 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.845 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.50 W/kg

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

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

Reference Value = 40.23 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.80 W/kg

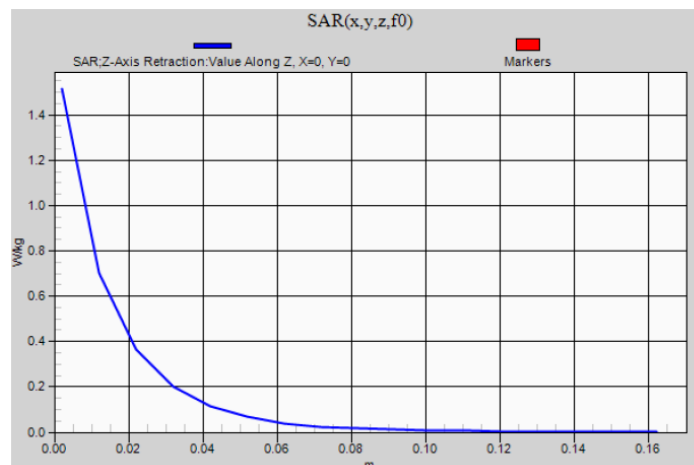
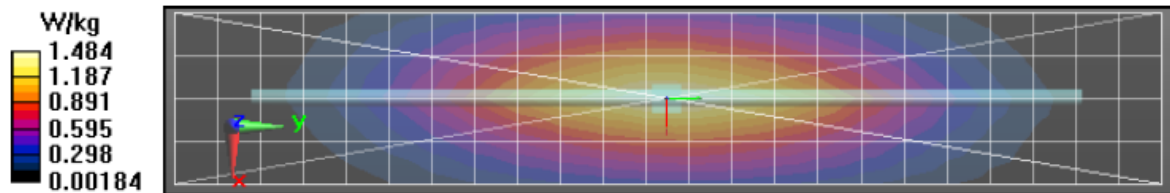
SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.791 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.50 W/kg

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

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

Maximum value of SAR (measured) = 1.51 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 7/30/2018 9:52:08 PM

Robot#: DASY5-PG-3 | Run#: AN-SYSP-2450B-180730-08  
 Dipole Model#: D2450V2  
 Phantom#: ELI4 1090  
 Tissue Temp: 21.3 (C)  
 Serial#: 782  
 Test Freq: 2450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.053 dB  
 Adjusted SAR (1W): 52.00 mW/g (1g)

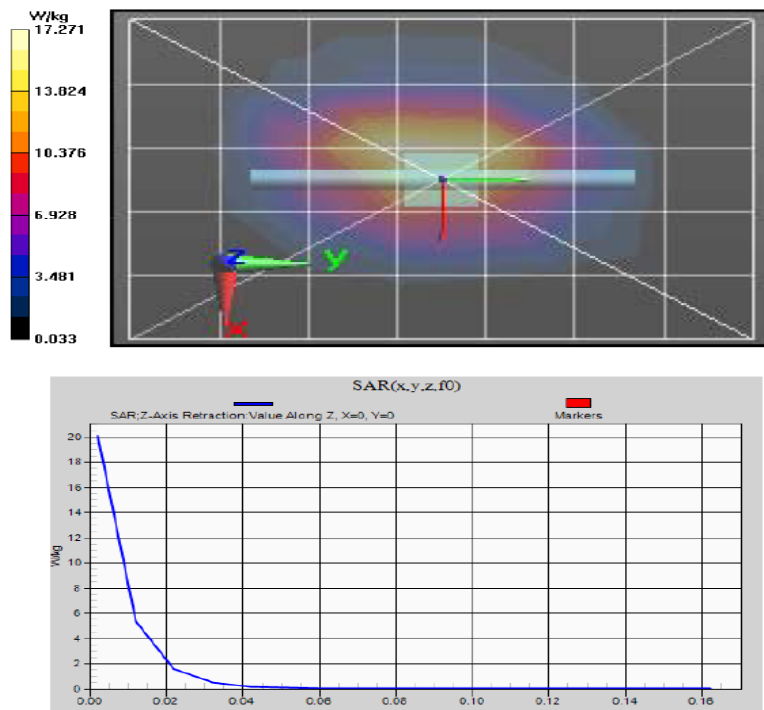
**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.96$  S/m;  $\epsilon_r = 48.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 2450 MHz, ConvF(7.77, 7.77, 7.77); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x71x1):** Interpolated grid:  
 $dx=1.200$  mm,  $dy=1.200$  mm  
 Reference Value = 102.6 V/m; Power Drift = -0.01 dB  
 Fast SAR: SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.07 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 21.7 W/kg

**2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:** Measurement  
 grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm  
 Reference Value = 102.6 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 26.7 W/kg  
 SAR(1 g) = 13 W/kg; SAR(10 g) = 6.12 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 20.0 W/kg

**2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid:  
 $dx=20$ mm,  $dy=20$ mm,  $dz=10$ mm  
 Maximum value of SAR (measured) = 20.1 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 8/1/2018 7:55:38 AM

Robot#: DASY5-PG-3 | Run#: FD-SYSP-2450B-180801-03  
 Dipole Model#: D2450V2  
 Phantom#: ELI4 1090  
 Tissue Temp: 21.1 (C)  
 Serial#: 782  
 Test Freq: 2450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.058 dB  
 Adjusted SAR (1W): 51.60 mW/g (1g)

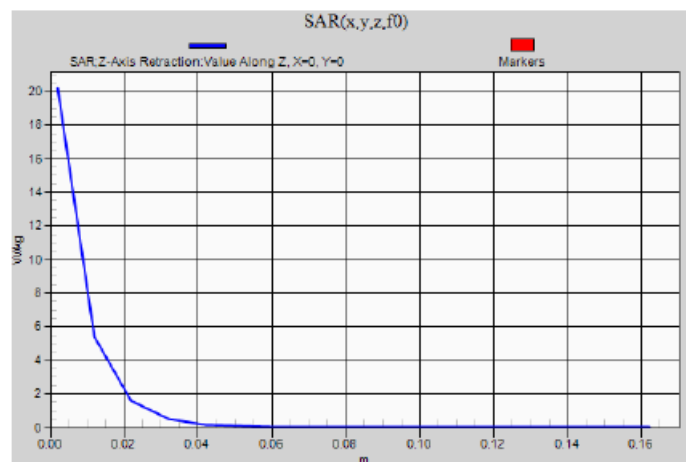
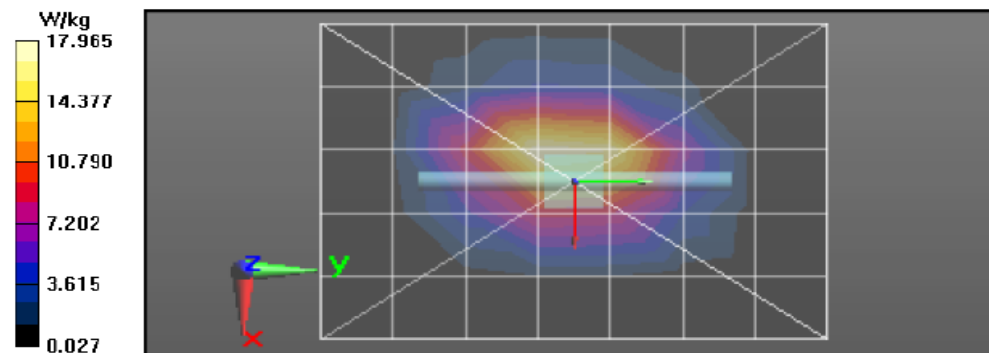
**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.98$  S/m;  $\epsilon_r = 48.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 2450 MHz, ConvF(7.77, 7.77, 7.77); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x71x1):** Interpolated grid:  
 dx=1.200 mm, dy=1.200 mm  
 Reference Value = 102.6 V/m; Power Drift = -0.09 dB  
 Fast SAR: SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.08 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 21.8 W/kg

**2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:** Measurement  
 grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 102.6 V/m; Power Drift = -0.09 dB  
 Peak SAR (extrapolated) = 26.8 W/kg  
 SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6.1 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 20.1 W/kg

**2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid:  
 dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 20.2 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
**Date/Time: 7/31/2018 2:47:51 AM**

Robot#: DASY5-PG-3 | Run#: AN-SYSP-2450H-180731-04#  
 Dipole Model#: D2450V2  
 Phantom#: ELI4 1011  
 Tissue Temp: 21.4 (C)  
 Serial#: 782  
 Test Freq: 2450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.055 dB  
 Adjusted SAR (1W): 51.60 mW/g (1g)

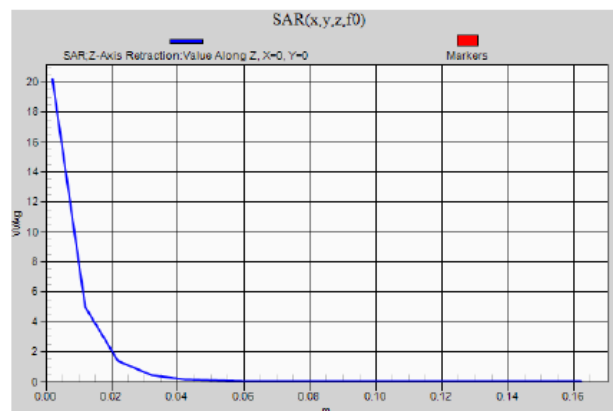
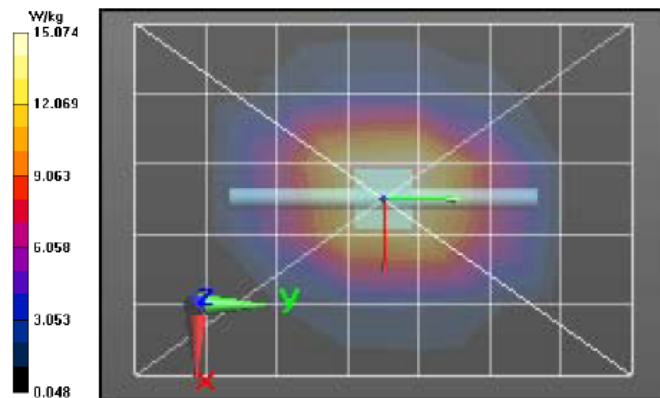
**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.79$  S/m;  $\epsilon_r = 35.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 2450 MHz, ConvF(7.72, 7.72, 7.72); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x71x1):** Interpolated grid:  
 dx=1.200 mm, dy=1.200 mm  
 Reference Value = 107.5 V/m; Power Drift = -0.12 dB  
**Fast SAR: SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.33 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 21.8 W/kg

**2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:** Measurement  
 grid: dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 107.5 V/m; Power Drift = -0.12 dB  
 Peak SAR (extrapolated) = 26.7 W/kg  
**SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6.08 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 20.0 W/kg

**2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid:  
 dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 20.2 W/kg



## **Appendix F**

### **DUT Scans**

**Assessment at the Body with Body worn PMLN7957A for band (462.5500 – 462.7250MHz)****Table 18****Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/5/2018 10:14:58 AM

Robot#: DASY5-PG-3 | Run#: FD-AB-180705-06#  
 Model#: PMUE5381A  
 Phantom#: ELI5 1147  
 Tissue Temp: 21.5 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenn  
 Test Freq: 462.6375 (MHz)  
 Battery: KEBT-1300  
 Carry Acc: PMLN7957A  
 Audio Acc: NTN8867A (53724C)  
 Start Power: 1.32 (W)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 463$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 462.637 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 45.62 V/m; Power Drift = -0.60 dB

Fast SAR: SAR(1 g) = 1.86 W/kg; SAR(10 g) = 1.33 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.21 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 = 45.62 V/m; Power Drift = -0.77 dB

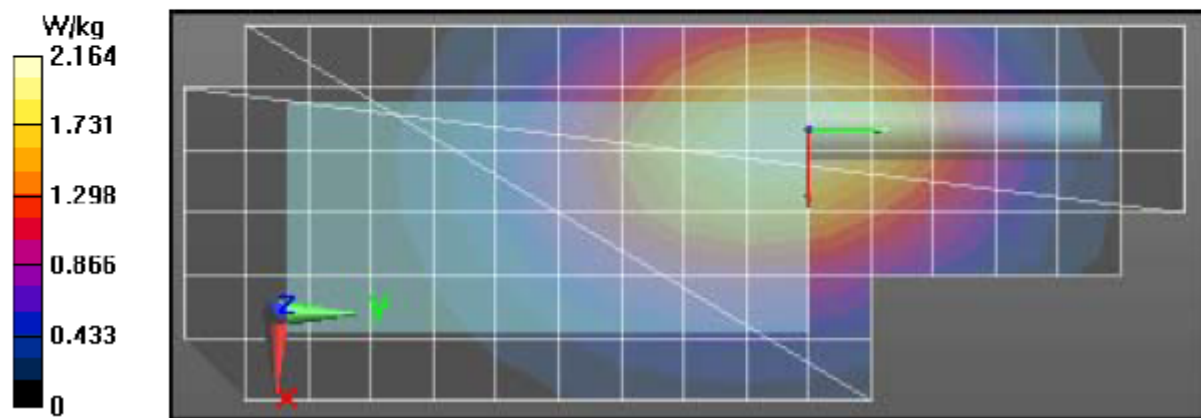
Peak SAR (extrapolated) = 2.41 W/kg

SAR(1 g) = 1.73 W/kg; SAR(10 g) = 1.25 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.09 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) = 2.03 W/kg



**Assessment at the Body with Body worn PMLN7706A for band (462.5500 – 462.7250MHz)****Table 19****Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/4/2018 2:44:29 PM

Robot#: DASY5-PG-3 | Run#: FD-AB-180704-08#  
 Model#: PMUE5381A  
 Phantom#: ELI5 1147  
 Tissue Temp: 22.1 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenna  
 Test Freq: 462.6375 (MHz)  
 Battery: KEBT-1300  
 Carry Acc: PMLN7706A  
 Audio Acc: NTN8867A (53724C)  
 Start Power: 1.32 (W)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 463$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 462.637 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 m

Reference Value = 44.13 V/m; Power Drift = -0.55 dB

Fast SAR: SAR(1 g) = 1.8 W/kg; SAR(10 g) = 1.28 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.15 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 = 44.13 V/m; Power Drift = -0.69 dB

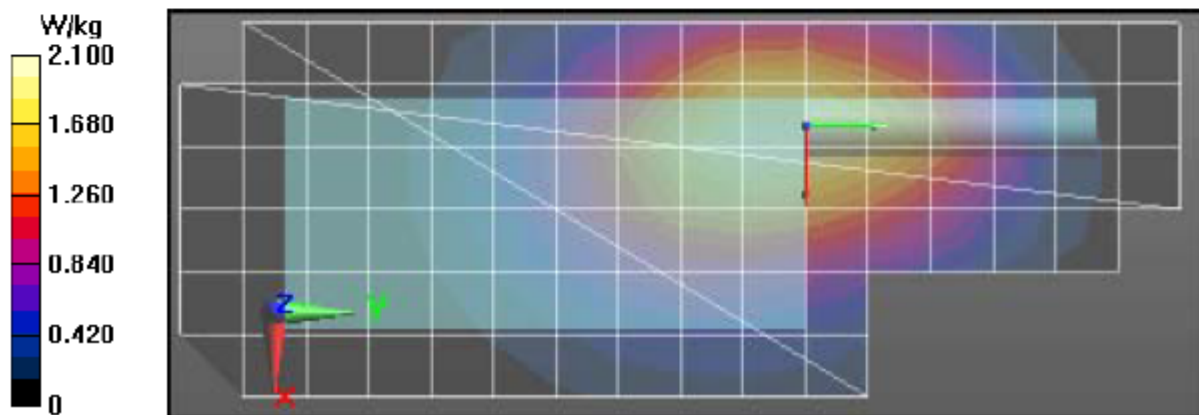
Peak SAR (extrapolated) = 2.37 W/kg

SAR(1 g) = 1.66 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.04 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) = 1.99 W/kg



**Assessment at the Body with other audio accessories for band (462.5500 – 462.7250MHz)****Table 20****Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/5/2018 11:25:59 AM

Robot#: DASY5-PG-3 | Run#: FD-AB-180705-08#  
 Model#: PMUE5381A  
 Phantom#: ELI5 1147  
 Tissue Temp: 21.6 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenna  
 Test Freq: 462.6375 (MHz)  
 Battery: KEBT-1300  
 Carry Acc: PMLN7957A  
 Audio Acc: NTN8868C (53725C)  
 Start Power: 1.32 (W)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 463$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, , Frequency: 462.637 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 43.83 V/m; Power Drift = -0.44 dB

Fast SAR: SAR(1 g) = 1.73 W/kg; SAR(10 g) = 1.24 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.06 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 = 43.83 V/m; Power Drift = -0.53 dB

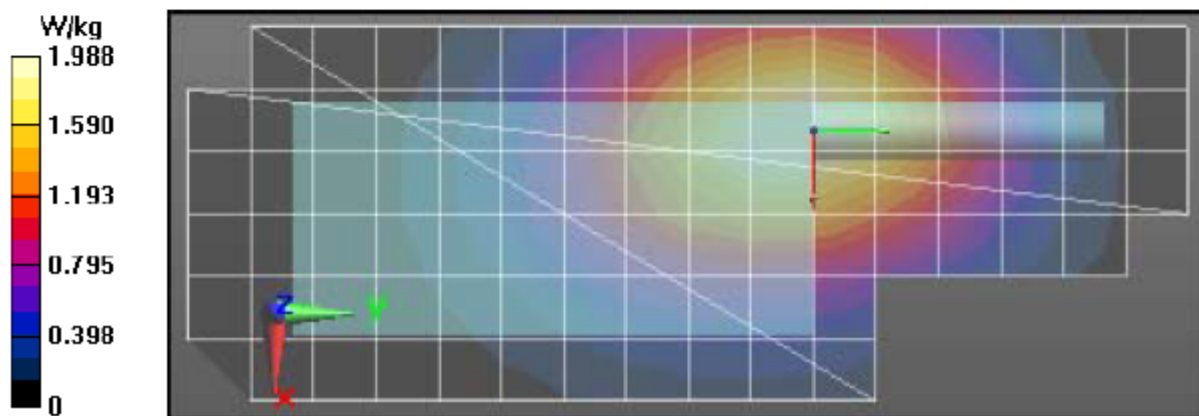
Peak SAR (extrapolated) = 2.33 W/kg

SAR(1 g) = 1.67 W/kg; SAR(10 g) = 1.2 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.02 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) = 1.98 W/kg



## Assessments at the Face for band (462.5500 – 462.7250MHz)

### Table 22

#### Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/10/2018 8:16:13 PM

Robot#: DASY5-PG-3 | Run#: BL(FD)-FACE-180710-16  
 Model#: PMUE5381A  
 Phantom#: ELI4 1016  
 Tissue Temp: 21.8 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenna  
 Test Freq: 462.6375 (MHz)  
 Battery: KEBT-1300  
 Carry Acc: Radio at front  
 Audio Acc: None  
 Start Power: 1.32 (W)

#### Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 463 \text{ MHz}$ ;  $\sigma = 0.9 \text{ S/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: EX3DV4 - SN7486, , Frequency: 462.637 MHz, ConvF(11.43, 11.43, 11.43); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Face Scan/1-Area Scan (61x161x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value = 39.32 V/m; Power Drift = -0.58 dB

Fast SAR: SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.989 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.62 W/kg

**Below 2 GHz-Rev.2/Face 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 = 39.32 V/m; Power Drift = -0.65 dB

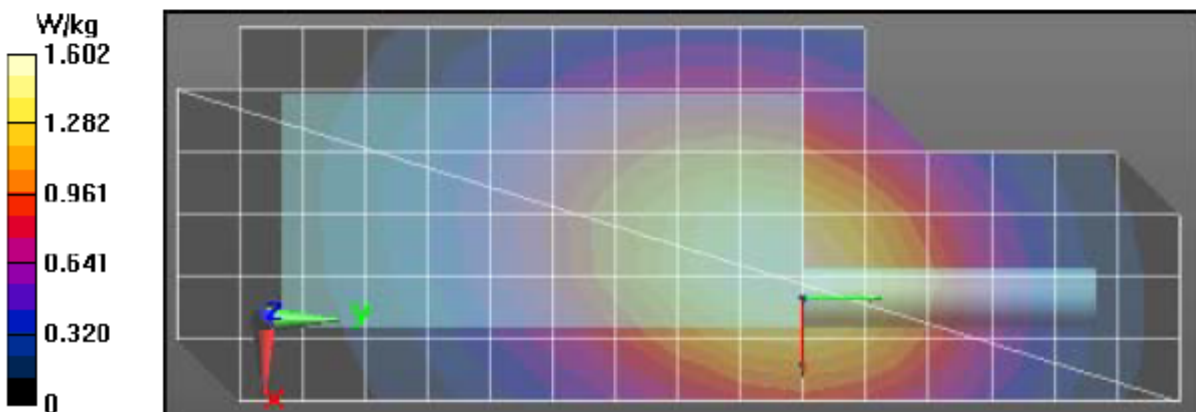
Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.929 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.51 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) = 1.50 W/kg



**Assessment at the Body with Body worn PMLN7957A for band (467.5625-467.7125 MHz)****Table 24****Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/17/2018 6:24:42 PM

Robot#: DASY5-PG-3 | Run#: FD-AB-180717-12  
 Model#: PMUE5381A  
 Phantom#: ELI5 1147  
 Tissue Temp: 21.5 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenna  
 Test Freq: 467.6375 (MHz)  
 Battery: PMNN4477A  
 Carry Acc: PMLN7957A  
 Audio Acc: NTN8867A (53724C)  
 Start Power: 0.545 (W)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 468$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 54.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, Frequency: 467.637 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 35.10 V/m; Power Drift = -0.50 dB

Fast SAR: SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.788 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.31 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 = 35.10 V/m; Power Drift = -0.56 dB

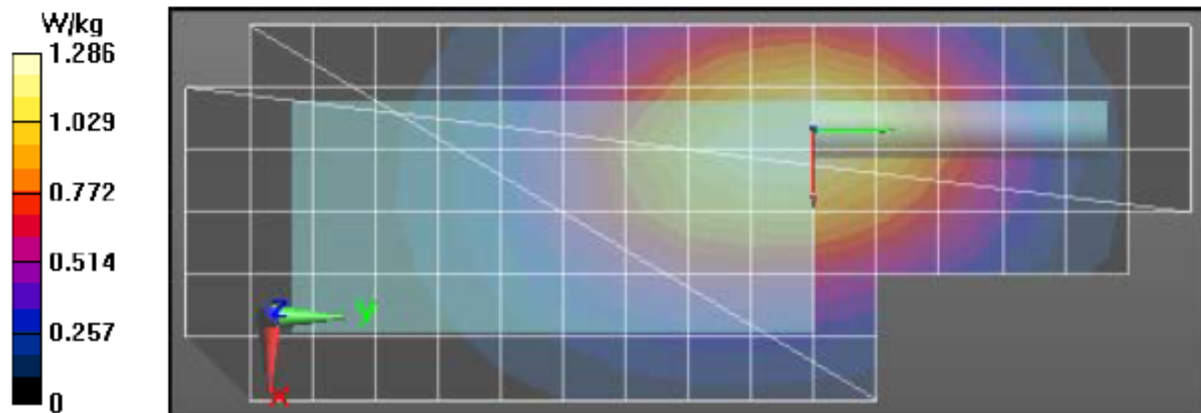
Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.767 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.28 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) = 1.27 W/kg



**Assessment at the Body with Body worn PMLN7706A for band (467.5625-467.7125 MHz)****Table 25****Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/10/2018 11:15:16 PM

Robot#: DASY5-PG-3 | Run#: BL(FD)-AB-180710-19  
 Model#: PMUE5381A  
 Phantom#: ELI5 1147  
 Tissue Temp: 22.1 (C)  
 Serial#: 1751UL6476  
 Antenna: Fixed Antenna  
 Test Freq: 467.6375 (MHz)  
 Battery: AA ALKALINE  
 Carry Acc: PMLN7706A  
 Audio Acc: NTN8867A (53724C)  
 Start Power: 0.56 (W)

**Comments:**Duty Cycle: 1:1, Medium parameters used:  $f = 468$  MHz;  $\sigma = 0.98$  S/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7486, Frequency: 467.637 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018

Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 38.60 V/m; Power Drift = -0.57 dB

Fast SAR: SAR(1 g) = 1.45 W/kg; SAR(10 g) = 1.03 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.75 W/kg

**Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.60 V/m; Power Drift = -0.79 dB

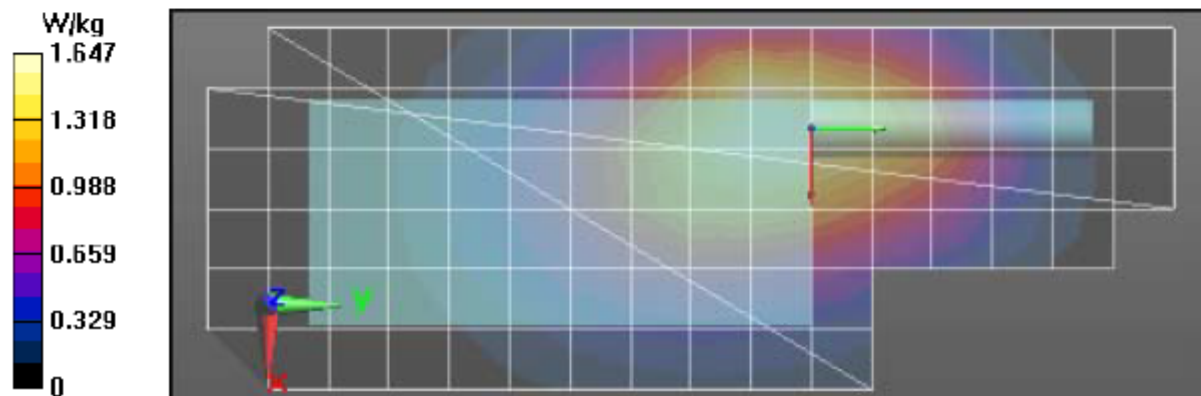
Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.932 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.59 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) = 1.53 W/kg



**Assessment at the Body with other audio accessories for band (467.5625-467.7125 MHz)****Table 26****Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/10/2018 9:23:13 AM

Robot#: DASY5-PG-3 | Run#: AN-AB-180710-07  
 Model#: PMUE5381A  
 Phantom#: ELI5 1147  
 Tissue Temp: 22.3 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenna  
 Test Freq: 467.6375 (MHz)  
 Battery: AA ALKALINE  
 Carry Acc: PMLN7706A  
 Audio Acc: GU6443A (1518)  
 Start Power: 0.556 (W)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 468$  MHz;  $\sigma = 0.98$  S/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, , Frequency: 467.637 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 36.85 V/m; Power Drift = -0.78 dB

Fast SAR: SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.958 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.61 W/kg

**Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 36.85 V/m; Power Drift = -0.86 dB

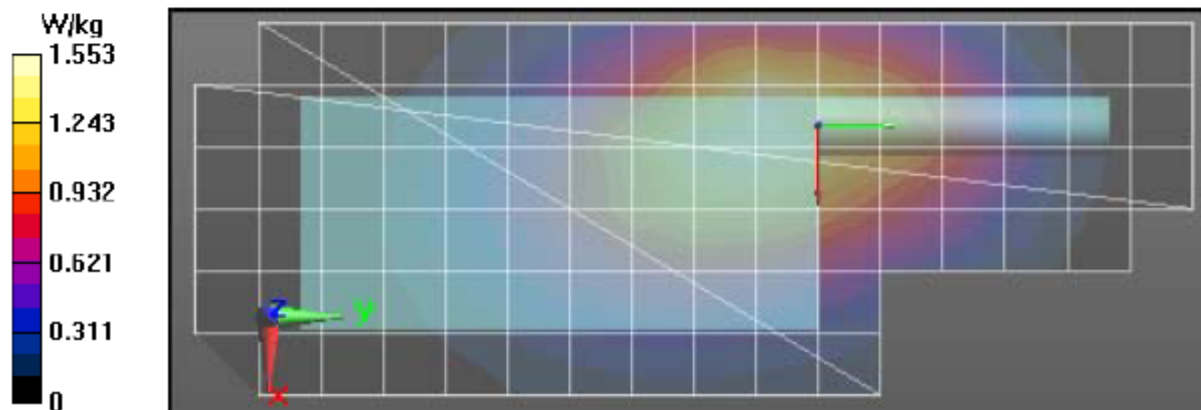
Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.874 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.47 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) = 1.36 W/kg



## Assessments at the Face for band (467.5625-467.7125 MHz)

### Table 28

#### Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/10/2018 3:01:54 PM

Robot#: DASY5-PG-3 | Run#: AN-FACE-180710-12  
 Model#: PMUE5381A  
 Phantom#: ELI4 1016  
 Tissue Temp: 22.0 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenna  
 Test Freq: 467.6375 (MHz)  
 Battery: AA ALKALINE  
 Carry Acc: Radio at front  
 Audio Acc: None  
 Start Power: 0.556 (W)

#### Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 468$  MHz;  $\sigma = 0.91$  S/m;  $\epsilon_r = 41.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7486, , Frequency: 467.637 MHz, ConvF(11.43, 11.43, 11.43); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Face Scan/1-Area Scan (61x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 33.48 V/m; Power Drift = -0.59 dB

Fast SAR: SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.765 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.25 W/kg

**Below 2 GHz-Rev.2/Face Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 33.48 V/m; Power Drift = -0.76 dB

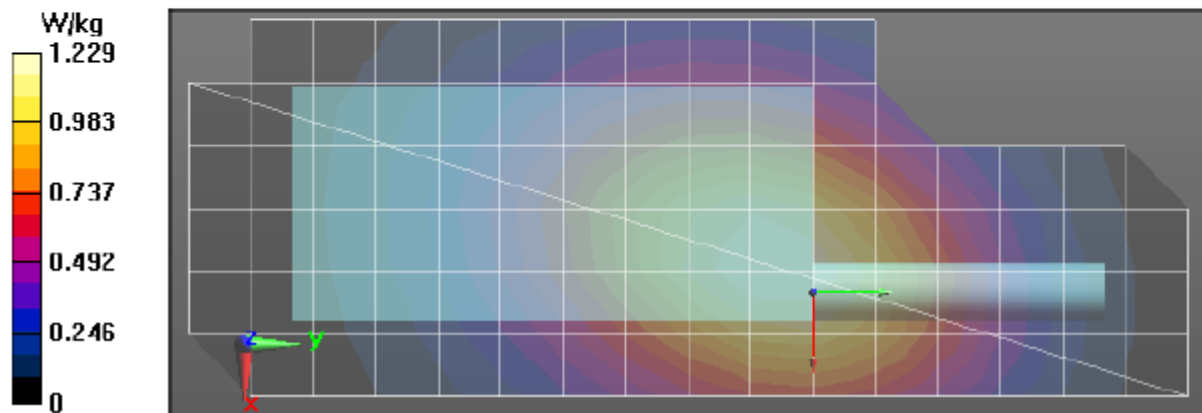
Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.956 W/kg; SAR(10 g) = 0.696 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.14 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) = 1.11 W/kg



## **APPENDIX G**

### **Shortened Scan of Highest SAR configuration**

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/6/2018 3:04:25 PM

Robot#: DASY5-PG-3 | Run#: FD-AB-180706-08#  
 Model#: PMUE5381A  
 Phantom#: ELI5 1147  
 Tissue Temp: 21.7 (C)  
 Serial#: 1751UL8544  
 Antenna: Fixed Antenna  
 Test Freq: 462.6375 (MHz)  
 Battery: KEBT-1300  
 Carry Acc: PMLN7957A  
 Audio Acc: NTN8867A (53724C)  
 Start Power: 1.32 (W)

Comments: Shorten Scan

Duty Cycle: 1:1, Medium parameters used:  $f = 463 \text{ MHz}$ ;  $\sigma = 0.95 \text{ S/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: EX3DV4 - SN7486, , Frequency: 462.637 MHz, ConvF(11.68, 11.68, 11.68); Calibrated: 3/20/2018  
 Electronics: DAE4 Sn1488, Calibrated: 3/9/2018

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x161x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value = 44.12 V/m; Power Drift = -0.42 dB

Fast SAR: SAR(1 g) = 1.74 W/kg; SAR(10 g) = 1.25 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.07 W/kg

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

Reference Value = 44.12 V/m; Power Drift = -0.42 dB

Fast SAR: SAR(1 g) = 1.75 W/kg; SAR(10 g) = 1.27 W/kg (SAR corrected for target medium)

**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) = 2.04 W/kg

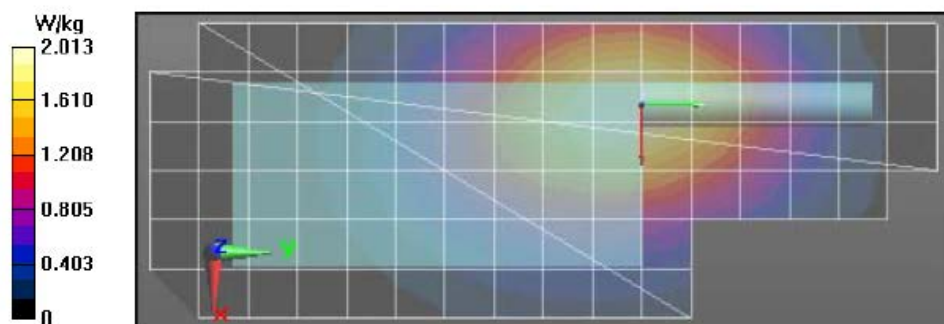
**Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  
 $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 50.37 V/m; Power Drift = -0.35 dB

Peak SAR (extrapolated) = 2.58 W/kg

SAR(1 g) = 1.87 W/kg; SAR(10 g) = 1.35 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.25 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) |
|-------------------------|------------------|------------------|---------------|
| Shorten scan (zoom)     | 34               | 7                | 1.54          |
| Full scan (area & zoom) | 18               | 20               | 1.56          |

## **APPENDIX H**

### **DUT Test Position Photos**

**Photos available in Exhibit 7B**

**APPENDIX I**  
**DUT, Body worn and audio accessories Photos**

Photos available in Exhibit 7B