

**DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2**

<b>Motorola Solutions Inc.</b> <b>EME Test Laboratory</b> 8000 West Sunrise Blvd Fort Lauderdale, FL. 33322	<b>Date of Report:</b> 5/15/2013 <b>Report Revision:</b> O <b>Report ID:</b> SR11193 APX3000 U2 Rev O 130515
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**Responsible Engineer:** Michael Sailsman( Senior Staff EME Engineer)  
**Report Author:** Michael Sailsman (Senior Staff EME Engineer)  
**Date/s Tested:** 2/15/13-2/26/13; 4/23/13  
**Manufacturer/Location:** Motorola, Penang  
**Sector/Group/Div.:** AESS – Astro Engineering Subscriber Solutions  
**Date submitted for test:** 2/5/13  
**DUT Description:** 450-520MHz, 5.0W rated power, 6.25kHz/12.5kHz/25kHz, Capable of digital and analog FM transmission. Also capable of TDMA and Bluetooth transmissions  
**Test TX mode(s):** CW (PTT); CW (Bluetooth)  
**Max. Power output:** 5.6W (450-520 MHz); 10 mW Bluetooth  
**Nominal Power:** 5.0W (450-520 MHz); 10 mW Bluetooth  
**Tx Frequency Bands:** 450-520 MHz; 2.402-2.480 GHz (Bluetooth)  
**Signaling type:** FM, TDMA, FHSS (Bluetooth)  
**Model(s) Tested:** H59SDD9PW4AN  
**Model(s) Certified:** H59SDD9PW4AN  
**Serial Number(s):** 536TPB0026, 536TPB0097  
**Classification:** Occupational/Controlled  
**FCC ID:** AZ489FT4912; Rule Part 90 (450-512 MHz); Rule Part 15 (2402 – 2480 MHz) Results outside FCC bands are not applicable for FCC compliance demonstration.  
**Responsible Engineer:** Michael Sailsman( Senior Staff EME Engineer)

\* Refer to section 15 of part 1 for highest SAR summary results.

The test results clearly demonstrate compliance with FCC Occupational/Controlled RF Exposure limits of 8 W/kg averaged over 1 gram per the requirements of 47 CFR 2.1093(d). The 10 grams result is not applicable to FCC filing. Results outside FCC bands are not applicable for FCC compliance demonstration. 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 10 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 3.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc EME Laboratory. I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. This reporting format is consistent with the suggested guidelines of the TIA TSB-150 December 2004. The results and statements contained in this report pertain only to the device(s) evaluated.

 <b>Deanna Zakharia</b> EMS EME Lab Senior Resource Manager, Laboratory Director Approval Date: 5/20/2013	<b>Certification Date:</b> 5/20/2013  <b>Certification No.:</b> L1130513P
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**APPENDIX D**  
**System Check Scans**

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 2/19/2013 10:18:30 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP 450B-130219-01  
 Dipole Model# D450V3  
 Phantom#: OVAL1011  
 Tissue Temp: 20.3 (C)  
 Serial#: 1075  
 Test Freq: 450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.024 dB  
 Adjusted SAR (1W): 4.52 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 56.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x9x1):**

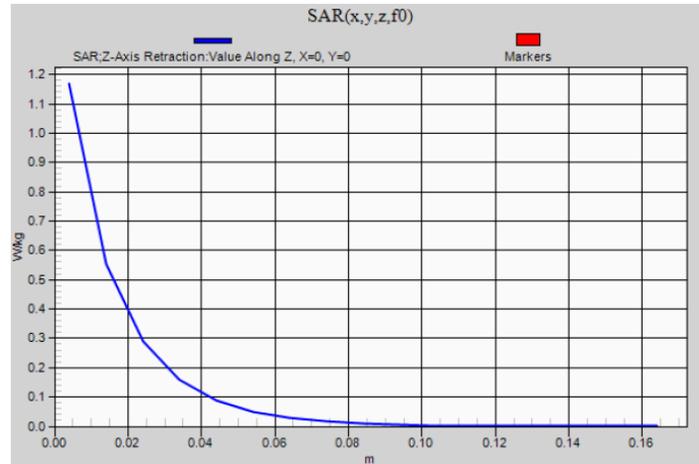
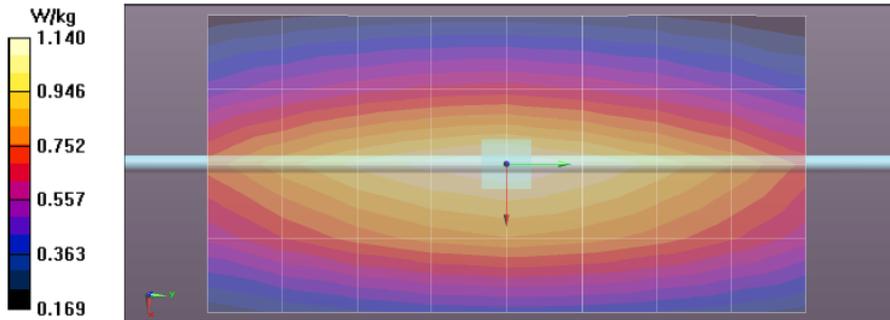
Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.14 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:**

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 35.917 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 1.663 mW/g  
 SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.754 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.17 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):**

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



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 2/20/2013 5:25:11 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP 450B-130220-01  
 Dipole Model#: D450V3  
 Phantom#: OVAL1011  
 Tissue Temp: 20.1 (C)  
 Serial#: 1075  
 Test Freq: 450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.027 dB  
 Adjusted SAR (1W): 4.48 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 56.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x9x1):**

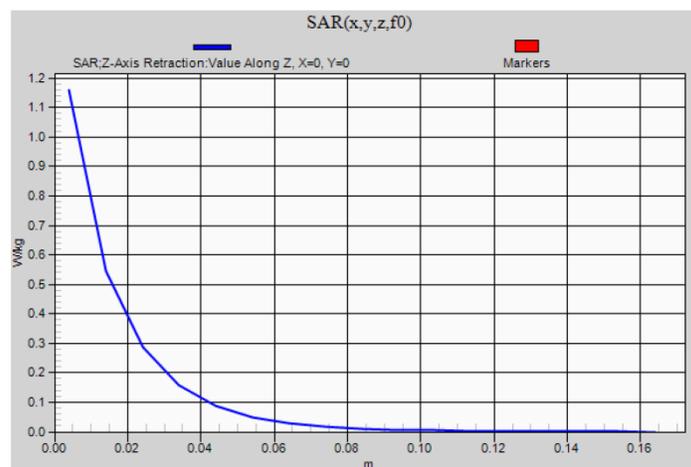
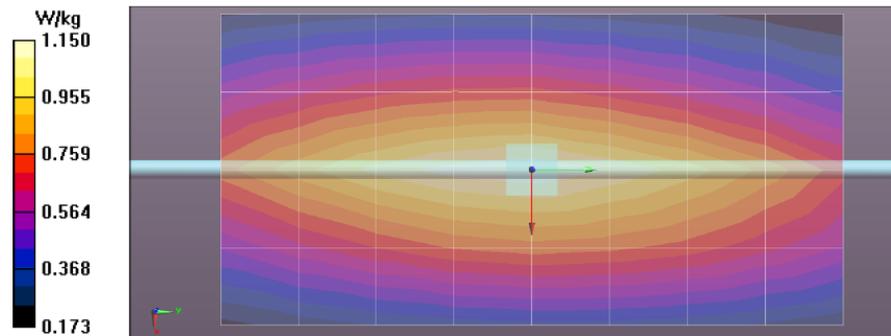
Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.15 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:**

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 35.754 V/m; Power Drift = 0.01 dB  
 Peak SAR (extrapolated) = 1.645 mW/g  
 SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.745 mW/g (SAR corrected for target medium)

**Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):**

Measurement grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 1.16 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 2/21/2013 5:43:29 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP 450B-130221-01  
 Dipole Model#: D450V3  
 Phantom#: OVAL1011  
 Tissue Temp: 20.4 (C)  
 Serial#: 1075  
 Test Freq: 450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.029 dB  
 Adjusted SAR (1W): 4.56 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.91$  mho/m;  $\epsilon_r = 57.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x9x1):**

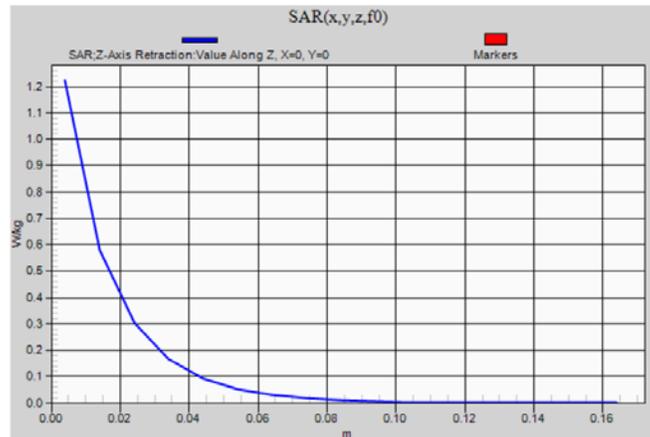
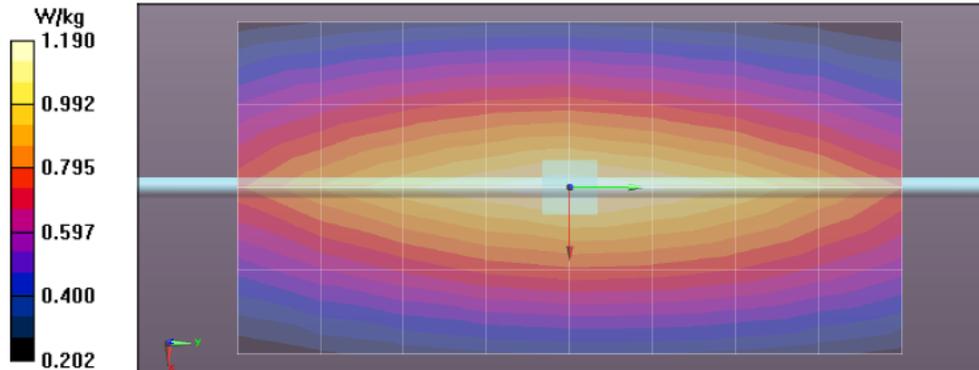
Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.19 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:**

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 36.066 V/m; Power Drift = 0.00 dB  
 Peak SAR (extrapolated) = 1.696 mW/g  
 SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.762 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.20 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):**

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



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 2/22/2013 5:17:49 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP 450B-130222-01  
 Dipole Model#: D450V3  
 Phantom#: OVAL1011  
 Tissue Temp: 20.6 (C)  
 Serial#: 1075  
 Test Freq: 450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.033 dB  
 Adjusted SAR (1W): 4.60 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.94$  mho/m;  $\epsilon_r = 56.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x9x1):**

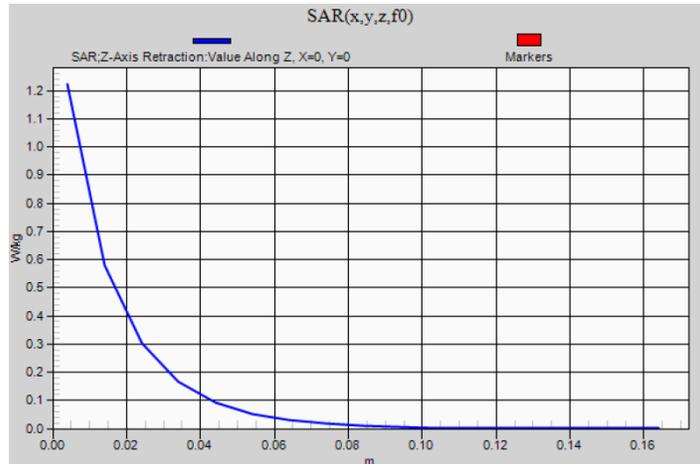
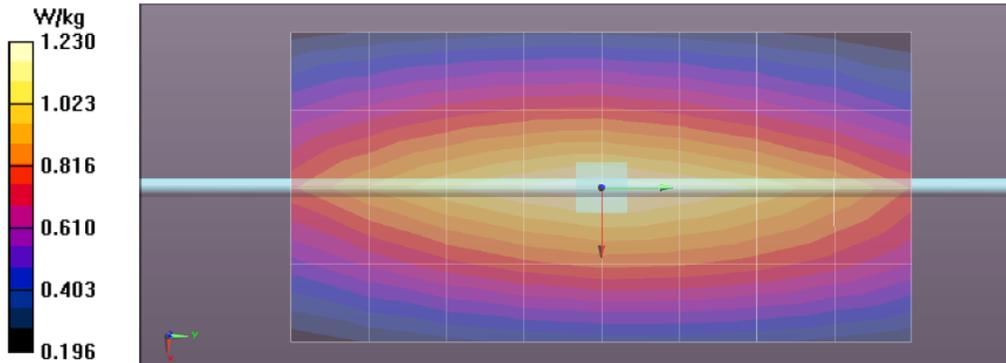
Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.23 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:**

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 36.143 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 1.751 mW/g  
 SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.771 mW/g (SAR corrected for target medium)

**Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):**

Measurement grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 1.22 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 2/25/2013 7:01:46 AM

Robot#: DASY5-FL-3 | Run#: JsT-SYSP-450B-130225-01  
 Dipole Model#: D450V3  
 Phantom#: OVAL1011  
 Tissue Temp: 21.1 (C)  
 Serial#: 1075  
 Test Freq: 450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.025 dB  
 Adjusted SAR (1W): 4.52 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.91$  mho/m;  $\epsilon_r = 56.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, . ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x9x1):**

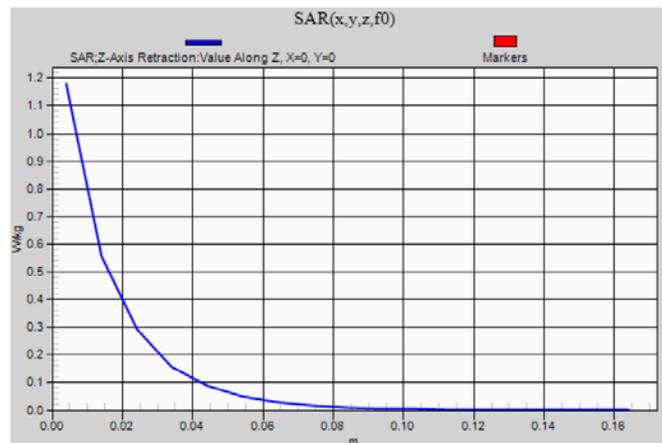
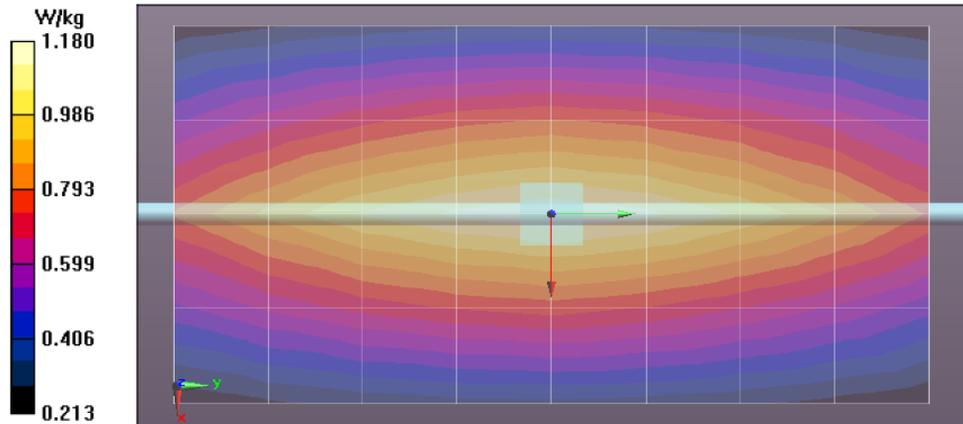
Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.18 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:**

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 35.822 V/m; Power Drift = 0.01 dB  
 Peak SAR (extrapolated) = 1.680 mW/g  
 SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.756 mW/g (SAR corrected for target medium)

**Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):**

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



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 2/26/2013 5:41:31 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP 450B-130226-01  
 Dipole Model#: D450V3  
 Phantom#: OVAL1011  
 Tissue Temp: 20.1 (C)  
 Serial#: 1075  
 Test Freq: 450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.028 dB  
 Adjusted SAR (1W): 4.56 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 57.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x9x1):**

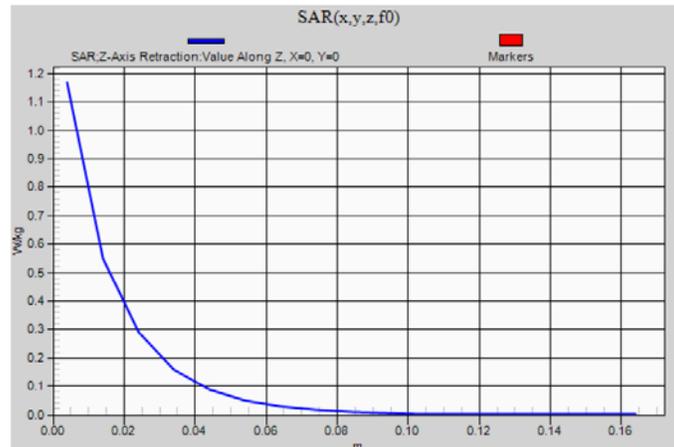
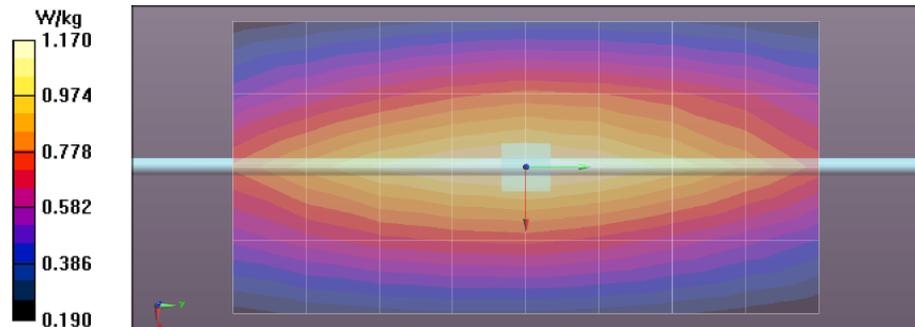
Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.17 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:**

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 36.052 V/m; Power Drift = 0.01 dB  
 Peak SAR (extrapolated) = 1.671 mW/g  
 SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.757 mW/g (SAR corrected for target medium)

**Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):**

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



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 4/23/2013 6:27:55 AM

Robot#: DASY5-FL-1 | Run#: ErC-SYSP-450B-130423-01  
 Dipole Model# D450V3  
 Phantom#: OVAL1011  
 Tissue Temp: 21.1 (C)  
 Serial#: 1075  
 Test Freq: 450 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.12 dB  
 Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.89$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3147, , ConvF(7.04, 7.04, 7.04); Calibrated: 1/28/2013  
 Electronics: DAE4 Sn850, Calibrated: 7/18/2012

**Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x9x1):**

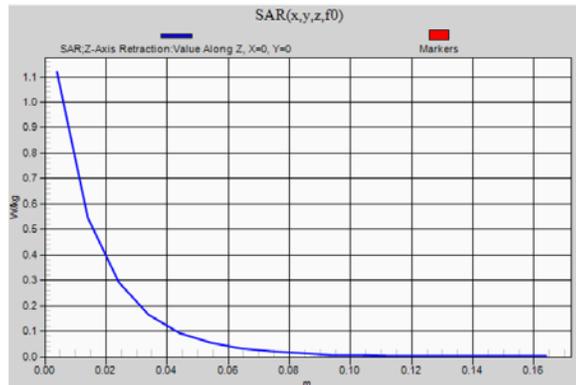
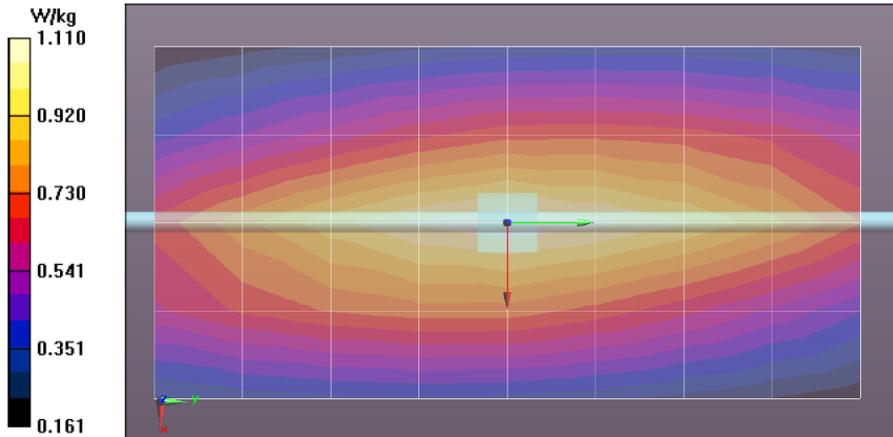
Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 1.11 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:**

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 35.591 V/m; Power Drift = 0.01 dB  
 Peak SAR (extrapolated) = 1.532 mW/g  
 SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.733 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.12 W/kg

**Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):**

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



**APPENDIX E**  
**DUT Scans (Shortened Scan and Highest SAR configurations)**

## Shortened Scan Result Table 20

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 4/23/2013 7:46:58 AM

Robot#: DASY5-FL-1 | Run#: ErC-Ab-130423-02  
 Model#: H59SDD9PW4AN  
 Phantom#: OVAL1011  
 Tissue Temp: 21.2 (C)  
 Serial#: 536TPB0097  
 Antenna: FAF5260A  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN7008A  
 Audio Acc: BT Pod  
 Start Power: 5.51 (W)

Comments: Short Scan

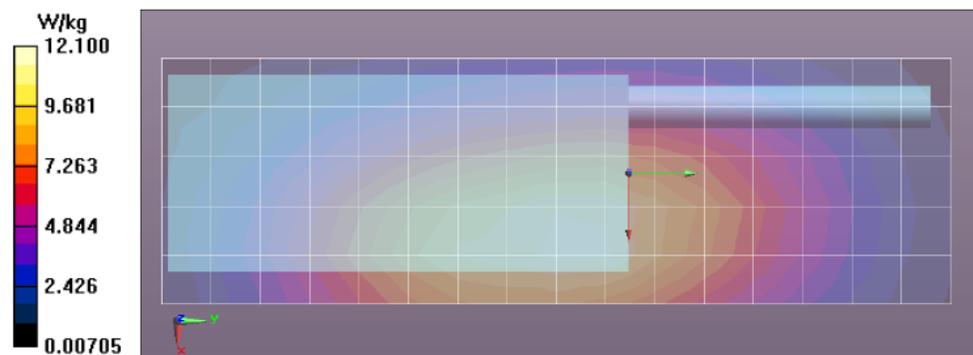
Duty Cycle: 1:1, Medium parameters used:  $f = 450 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 55.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3147, ConvF(7.04, 7.04, 7.04); Calibrated: 1/28/2013  
 Electronics: DAE4 Sn850, Calibrated: 7/18/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x161x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 100.4 V/m; Power Drift = -0.23 dB  
 Fast SAR: SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.68 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 12.0 W/kg

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (6x17x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (measured) = 11.6 W/kg

**Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  
 $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 108.2 V/m; Power Drift = -0.30 dB  
 Peak SAR (extrapolated) = 15.998 mW/g  
 SAR(1 g) = 12.3 mW/g; SAR(10 g) = 9.01 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 12.4 W/kg

**Below 3 GHz-Rev.5/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) = 12.1 W/kg



**Shortened scan reflect highest SAR producing configuration; approximate run time is 7 minutes.**

**Representative full scan run time was 22 minutes.**

**“Shortened” scan max calculated SAR using SAR drift: 1-g Avg. = 6.70 mW/g; 10-g Avg. = 4.91 mW/g.**

**Zoom scan max calculated SAR using SAR drift (see part 1 table 18): 1-g Avg. = 6.94 mW/g; 10-g Avg. = 4.99 mW/g.**

### Body - Highest SAR Configuration Result Table 18

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 2/26/2013 11:45:23 AM

Robot#: DASY5-FL-3 | Run#: ErC-Ab-130226-12  
 Model#: H59SDD9PW4N  
 Phantom#: OVAL1011  
 Tissue Temp: 20.2 (C)  
 Serial#: 536TPB0097  
 Antenna: FAF5260A  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN7008A  
 Audio Acc: None - BT Pod  
 Start Power: 5.42 (W)

Comments: Full scan

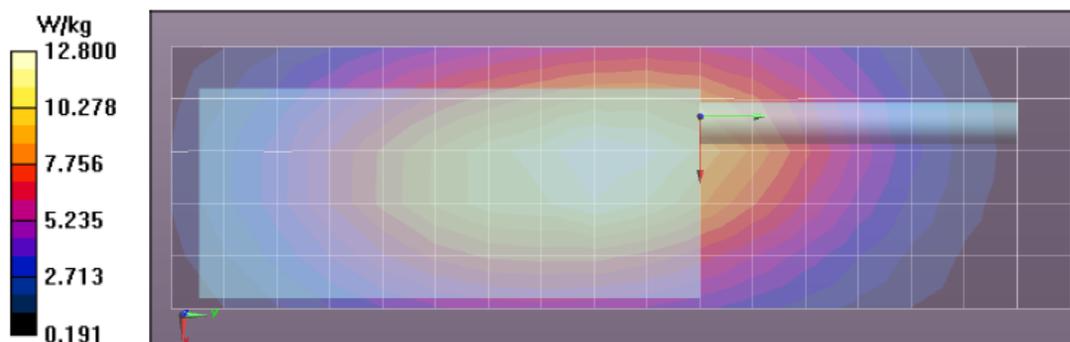
Duty Cycle: 1:1, Medium parameters used:  $f = 450 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 57.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x171x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 106.6 V/m; Power Drift = -0.26 dB  
 Fast SAR: SAR(1 g) = 12.8 mW/g; SAR(10 g) = 9.31 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 13.1 W/kg

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (6x18x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (measured) = 12.8 W/kg

**Below 3 GHz-Rev.5/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 = 106.6 V/m; Power Drift = -0.35 dB  
 Peak SAR (extrapolated) = 17.043 mW/g  
 SAR(1 g) = 12.4 mW/g; SAR(10 g) = 8.91 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 12.7 W/kg

**Below 3 GHz-Rev.5/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) = 12.6 W/kg



**APPENDIX F**  
**Assessment of FCC Part 90 (450-512 MHz band)**

**Assessments at the body with body worn PMLN4651A  
Table 14**

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 2/19/2013 9:37:44 PM

Robot#: DASY5-FL-3 | Run#: CM-Ab-130219-03  
 Model#: H59SDD9PW4N  
 Phantom#: OVAL1011  
 Tissue Temp: 20.8 (C)  
 Serial#: 536TPB0026  
 Antenna: FAF5260A  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN4651A  
 Audio Acc: HMN4104B  
 Start Power: 5.32 (W)

Comments: Full scan

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 56.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

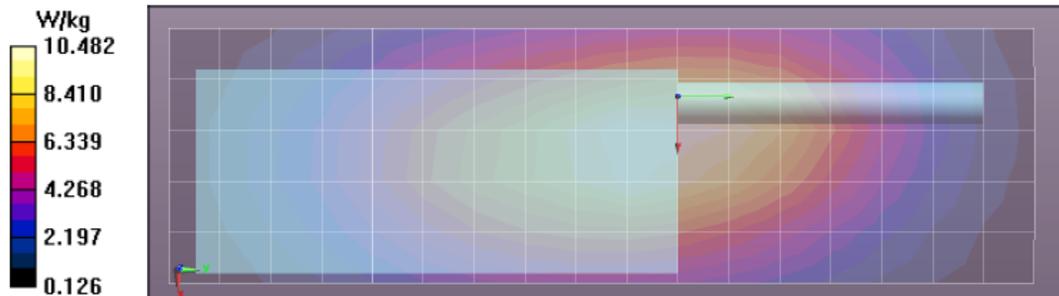
Reference Value = 102.4 V/m; Power Drift = -0.34 dB  
 Fast SAR: SAR(1 g) = 10.6 mW/g; SAR(10 g) = 7.69 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 10.8 W/kg

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

dy=7.5mm, dz=5mm  
 Reference Value = 102.4 V/m; Power Drift = -0.47 dB  
 Peak SAR (extrapolated) = 13.799 mW/g  
 SAR(1 g) = 10.1 mW/g; SAR(10 g) = 7.26 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 10.3 W/kg

**Below 3 GHz-Rev.5/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm,

dz=10mm  
 Maximum value of SAR (measured) = 10.2 W/kg



**Assessments at the body with body worn PMLN7008A  
Table 15**

**Motorola Solutions, Inc. EME Laboratory  
Date/Time: 2/20/2013 8:25:26 AM**

Robot#: DASY5-FL-3 | Run#: ErC-Ab-130220-05  
 Model#: H59SDD9PW4N  
 Phantom#: OVAL1011  
 Tissue Temp: 20.1 (C)  
 Serial#: 536TPB0026  
 Antenna: FAF5260A  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN7008A  
 Audio Acc: HMN4104B  
 Start Power: 5.42 (W)

Comments: Full scan

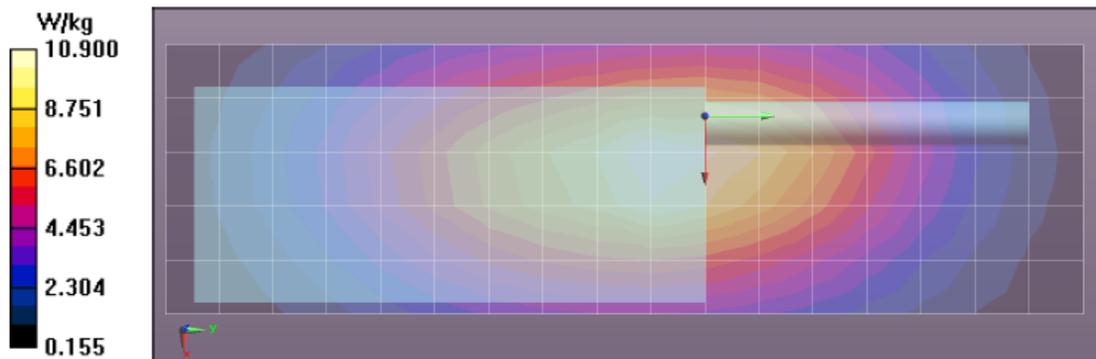
Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 56.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 102.5 V/m; Power Drift = -0.41 dB  
 Fast SAR: SAR(1 g) = 10.9 mW/g; SAR(10 g) = 7.88 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 11.2 W/kg

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (6x18x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 10.9 W/kg

**Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 102.5 V/m; Power Drift = -0.55 dB  
 Peak SAR (extrapolated) = 14.401 mW/g  
 SAR(1 g) = 10.4 mW/g; SAR(10 g) = 7.43 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 10.7 W/kg

**Below 3 GHz-Rev.5/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 10.6 W/kg



**Assessments at the body with body worn PMLN6327A  
Table 16**

**Motorola Solutions, Inc. EME Laboratory  
Date/Time: 2/20/2013 1:33:18 PM**

Robot#: DASY5-FL-3 | Run#: ErC-Ab-130220-13  
 Model#: H59SDD9PW4N  
 Phantom#: OVAL1011  
 Tissue Temp: 20.0 (C)  
 Serial#: 536TPB0026  
 Antenna: FAF5260A  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8305A  
 Carry Acc: PMLN6327A  
 Audio Acc: HMN4104B  
 Start Power: 5.41 (W)

Comments: Full scan

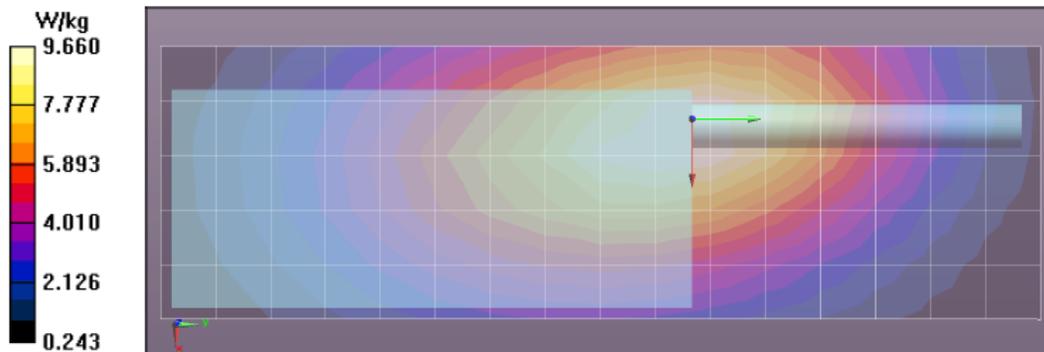
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 56.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x161x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 107.9 V/m; Power Drift = -0.44 dB  
 Fast SAR: SAR(1 g) = 9.79 mW/g; SAR(10 g) = 7.18 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 9.95 W/kg

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (6x17x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 9.66 W/kg

**Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 107.9 V/m; Power Drift = -0.62 dB  
 Peak SAR (extrapolated) = 12.325 mW/g  
 SAR(1 g) = 9.34 mW/g; SAR(10 g) = 6.85 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 9.49 W/kg

**Below 3 GHz-Rev.5/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 9.31 W/kg



**Assessment at the body with other audio accessories**  
**Table 17**

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 2/22/2013 6:24:33 AM

Robot#: DASY5-FL-3 | Run#: ErC-Ab-130222-03  
 Model#: H59SDD9PW4N  
 Phantom#: OVAL1011  
 Tissue Temp: 20.6 (C)  
 Serial#: 536TPB0026  
 Antenna: FAF5260A  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN7008A  
 Audio Acc: PMMN4040A  
 Start Power: 5.43 (W)

Comments: Full scan

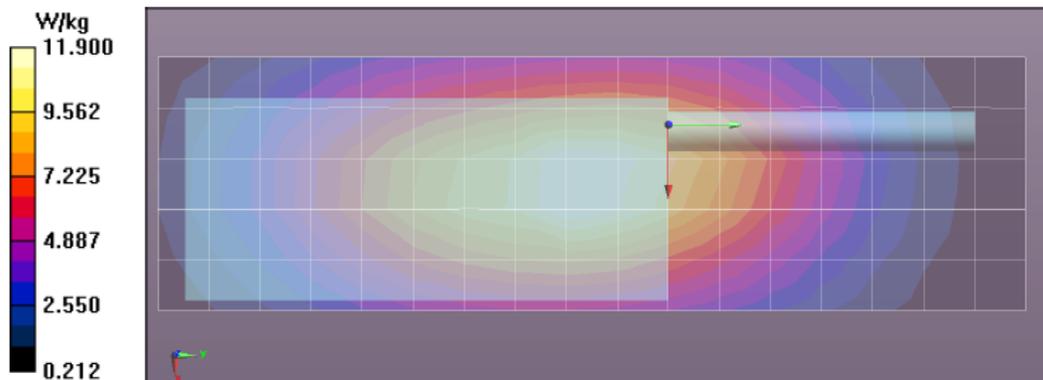
Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.94$  mho/m;  $\epsilon_r = 56.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 97.757 V/m; Power Drift = -0.35 dB  
 Fast SAR: SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.6 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 12.5 W/kg

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (6x18x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 11.9 W/kg

**Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 97.757 V/m; Power Drift = -0.49 dB  
 Peak SAR (extrapolated) = 16.262 mW/g  
 SAR(1 g) = 11.4 mW/g; SAR(10 g) = 8.11 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 12.1 W/kg

**Below 3 GHz-Rev.5/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm



### Assessment of wireless BT configuration Table 18

#### Motorola Solutions, Inc. EME Laboratory

Date/Time: 2/26/2013 11:45:23 AM

Robot#: DASY5-FL-3 | Run#: ErC-Ab-130226-12  
 Model#: H59SDD9PW4N  
 Phantom#: OVAL1011  
 Tissue Temp: 20.2 (C)  
 Serial#: 536TPB0097  
 Antenna: FAF5260A  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN7008A  
 Audio Acc: None - BT Pod  
 Start Power: 5.42 (W)

Comments: Full scan

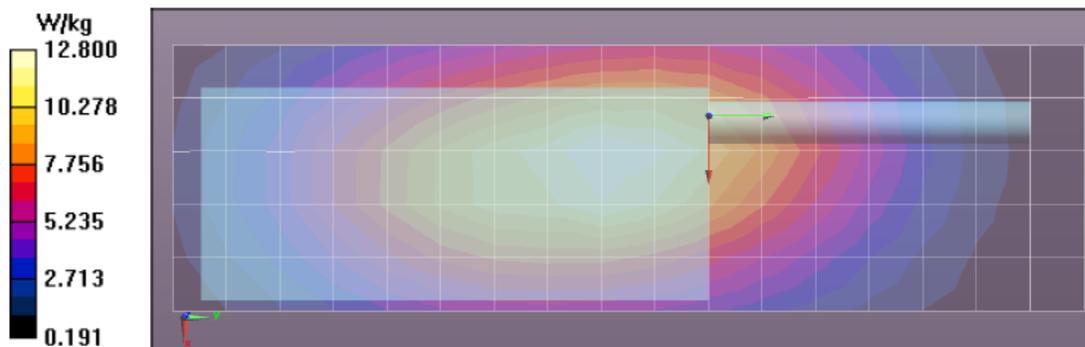
Duty Cycle: 1:1, Medium parameters used:  $f = 450 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 57.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x171x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 106.6 V/m; Power Drift = -0.26 dB  
 Fast SAR: SAR(1 g) = 12.8 mW/g; SAR(10 g) = 9.31 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 13.1 W/kg

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (6x18x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (measured) = 12.8 W/kg

**Below 3 GHz-Rev.5/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 = 106.6 V/m; Power Drift = -0.35 dB  
 Peak SAR (extrapolated) = 17.043 mW/g  
 SAR(1 g) = 12.4 mW/g; SAR(10 g) = 8.91 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 12.7 W/kg

**Below 3 GHz-Rev.5/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) = 12.6 W/kg



**APPENDIX G**  
**Assessment of Outside Part 90 (512-520MHz)**

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 2/26/2013 12:55:17 PM

Robot#: DASY5-FL-3 | Run#: ErC-Ab-130226-13  
 Model#: H59SDD9PW4N  
 Phantom#: OVAL1011  
 Tissue Temp: 20.2 (C)  
 Serial#: 536TPB0026  
 Antenna: FAF5260A  
 Test Freq: 516.0000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN7008A  
 Audio Acc: None - BT Pod  
 Start Power: 5.46 (W)

Comments: Full scan

Duty Cycle: 1:1, Medium parameters used:  $f = 516$  MHz;  $\sigma = 0.96$  mho/m;  $\epsilon_r = 56$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , ConvF(6.97, 6.97, 6.97); Calibrated: 4/25/2012  
 Electronics: DAE4 Sn729, Calibrated: 4/20/2012

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x171x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 72.176 V/m; Power Drift = -0.03 dB  
 Fast SAR: SAR(1 g) = 5.41 mW/g; SAR(10 g) = 3.93 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 5.75 W/kg

**Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (6x18x1):** Measurement grid: dx=15mm, dy=15mm

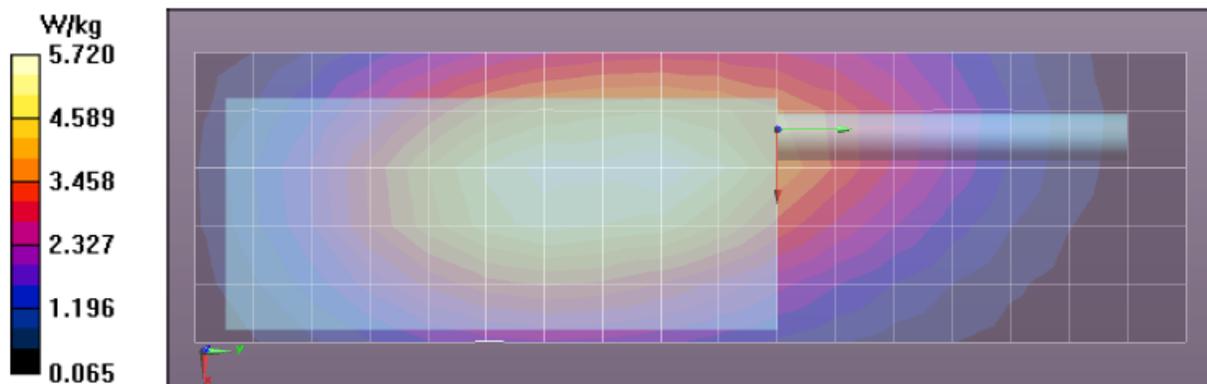
Maximum value of SAR (measured) = 5.72 W/kg

**Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x7x7)/Cube 0:** Measurement grid: dx=7.5mm,

dy=7.5mm, dz=5mm  
 Reference Value = 72.176 V/m; Power Drift = -0.07 dB  
 Peak SAR (extrapolated) = 7.660 mW/g  
 SAR(1 g) = 5.36 mW/g; SAR(10 g) = 3.9 mW/g (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 5.68 W/kg

**Below 3 GHz-Rev.5/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm,

dz=10mm  
 Maximum value of SAR (measured) = 5.66 W/kg

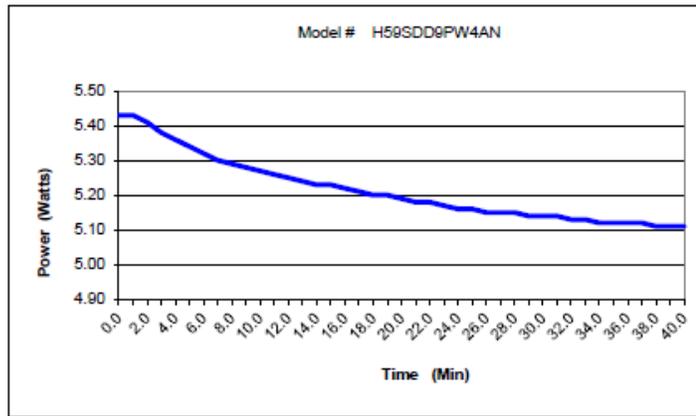


## APPENDIX H DUT Supplementary Data (Power slump)

Model # H59SDD9PW4AN  
Serial # 536TPB0097

<b>Battery</b>	NNTN8128B	<b>Transmit Mode</b>	CW
<b>Frequency</b>	450 MHz	<b>Audio Accessory</b>	None
<b>Date</b>	5/8/2013		

<b>TX TIME (Minutes)</b>	<b>Measured Power (Watts)</b>
0.0	5.43
1.0	5.43
2.0	5.41
3.0	5.38
4.0	5.36
5.0	5.34
6.0	5.32
7.0	5.30
8.0	5.29
9.0	5.28
10.0	5.27
11.0	5.26
12.0	5.25
13.0	5.24
14.0	5.23
15.0	5.23
16.0	5.22
17.0	5.21
18.0	5.20
19.0	5.20
20.0	5.19
21.0	5.18
22.0	5.18
23.0	5.17
24.0	5.16
25.0	5.16
26.0	5.15
27.0	5.15
28.0	5.15
29.0	5.14
30.0	5.14
31.0	5.14
32.0	5.13
33.0	5.13
34.0	5.12



**APPENDIX I**  
**DUT Test Position Photos**

**Photos available in Exhibit 7B**

**APPENDIX J**  
**DUT, Body worn and audio accessories photos**

**Photos available in Exhibit 7B**