

**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:** 10/15/2014  
**Report Revision:** A

**Responsible Engineer:** Deanna Zakharia ( EME Lab Senior Resource Manager, Laboratory Director)  
**Report Author:** Jessica Zada (EME Engineer)  
**Date/s Tested:** 08/28/14-08/30/14  
**Manufacturer/Location:** Motorola Solutions, Inc, Penang  
**Sector/Group/Div.:** EMS  
**Date submitted for test:** 08/25/14  
**DUT Description:** Handheld Portable 136-174MHz, 5W rated power, 6.25kHz/12.5kHz/25kHz, Capable of digital and analog FM transmission. Also capable of TDMA transmission.  
**Test TX mode(s):** CW (PTT)  
**Max. Power output:** 5.9 W  
**Nominal Power:** 5.0 W  
**Tx Frequency Bands:** 136-174 MHz  
**Signaling type:** TDMA  
**Model(s) Tested:** H84KDD9PW5AN (MUD3305)  
**Model(s) Certified:** H84KDD9PW5AN (MUD3305) & H84KDH9PW7AN (MUD3277)  
**Serial Number(s):** 873TQR0184  
**Classification:** Occupational/Controlled  
**FCC ID:** AZ489FT3834; Rule Part 90 (150.8-173.4 MHz); Rule Part 80 ( 154-161.625MHz, 161.775-162.0375MHz)  
**IC :** 109U-89FT3834; (138-144 MHz, 148-149.9 MHz and 150.05-174 MHz)

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. 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 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.

**Deanna Zakharia**  
**EMS EME Lab Senior Resource Manager,**  
**Laboratory Director**  
**Approval Date:** 10/15/2014

**Certification Date:** 9/30/2014  
**Certification No.:** L1140917P & L1140918P

## **Appendix D**

### **System Verification Check Scans**

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 8/28/2014 9:15:38 AM

Robot#: DASY5-FL-2 | Run#: HvH-SYSP-150B-140828-01  
 Dipole Model#: CLA-150  
 Phantom#: OVAL1090  
 Tissue Temp: 22.6 (C)  
 Serial#: 4005  
 Test Freq: 150 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.073 dB  
 Adjusted SAR (1W): 3.99 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.83$  S/m;  $\epsilon_r = 60$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , Frequency: 150 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

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

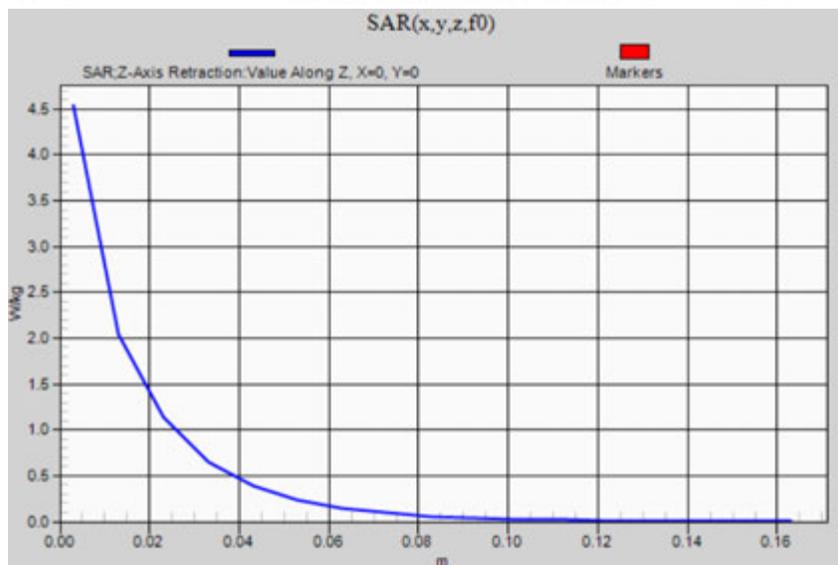
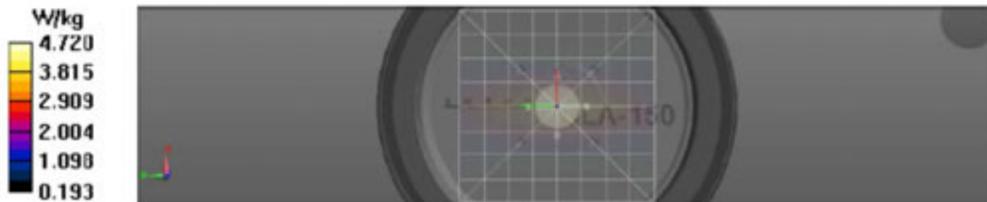
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 70.78 V/m; Power Drift = -0.11 dB  
 Fast SAR: SAR(1 g) = 4.09 W/kg; SAR(10 g) = 2.94 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 4.72 W/kg

**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 = 70.78 V/m; Power Drift = -0.11 dB  
 Peak SAR (extrapolated) = 7.06 W/kg  
 SAR(1 g) = 3.99 W/kg; SAR(10 g) = 2.58 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 4.95 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 4.54 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 8/29/2014 9:06:45 AM

Robot#: DASY5-FL-2 | Run#: HvH-SYSP-150B-140829-01  
 Dipole Model#: CLA-150  
 Phantom#: OVAL1090  
 Tissue Temp: 22.8 (C)  
 Serial#: 4005  
 Test Freq: 150 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (ID): 0.05 dB  
 Adjusted SAR (1W): 3.83 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.81$  S/m;  $\epsilon_r = 59.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , Frequency: 150 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

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

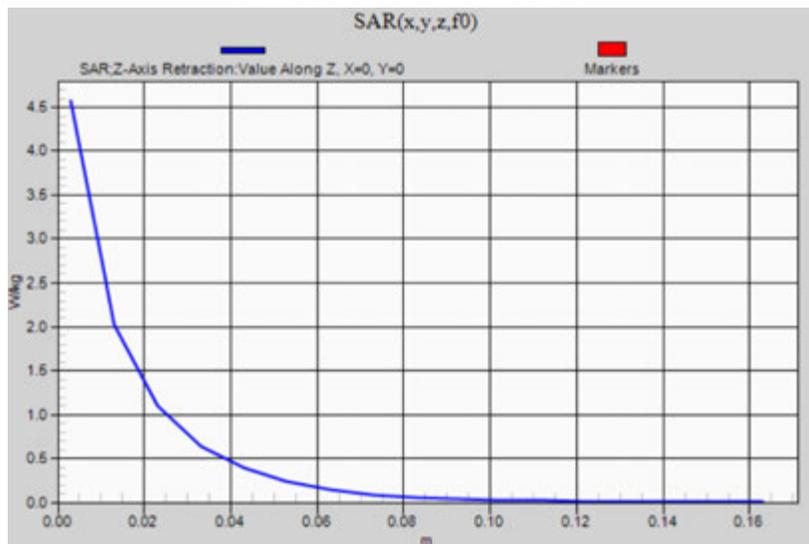
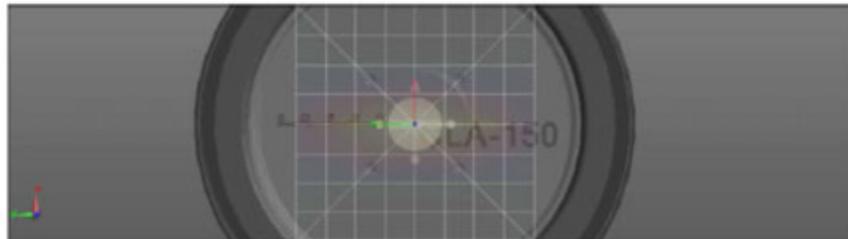
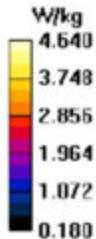
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 70.76 V/m; Power Drift = -0.06 dB  
 Fast SAR: SAR(1 g) = 4.12 W/kg; SAR(10 g) = 2.95 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 4.67 W/kg

**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 = 70.76 V/m; Power Drift = -0.06 dB  
 Peak SAR (extrapolated) = 6.57 W/kg  
 SAR(1 g) = 3.83 W/kg; SAR(10 g) = 2.5 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 4.57 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 4.573 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 8/30/2014 9:45:16 AM

Robot#: DASY5-FL-2 | Run#: HvH-SYSP-150B-140830-09  
 Dipole Model#: CLA-150  
 Phantom#: OVAL1090  
 Tissue Temp: 22.8 (C)  
 Serial#: 4005  
 Test Freq: 150 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.038 dB  
 Adjusted SAR (1W): 3.86 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.82$  S/m;  $\epsilon_r = 60.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , Frequency: 150 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

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

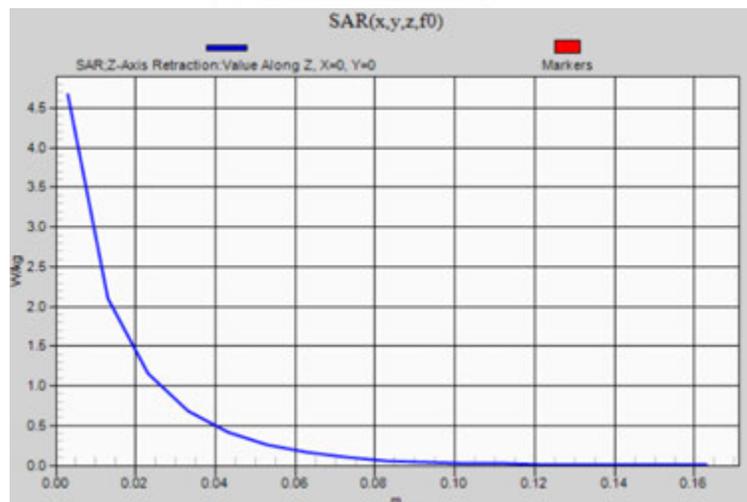
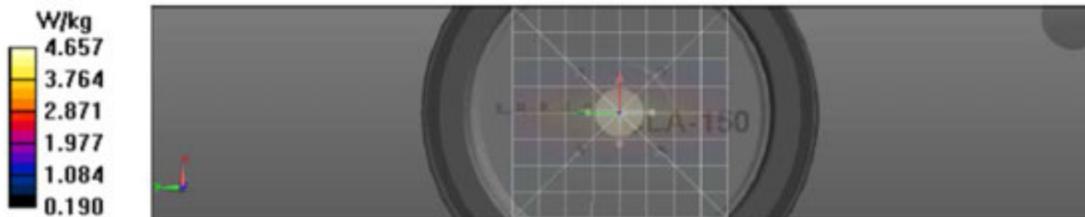
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 70.69 V/m; Power Drift = -0.00 dB  
 Fast SAR: SAR(1 g) = 4.1 W/kg; SAR(10 g) = 2.96 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 4.68 W/kg

**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 = 70.69 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 6.63 W/kg  
 SAR(1 g) = 3.86 W/kg; SAR(10 g) = 2.54 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 4.62 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 4.67 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 8/30/2014 4:46:01 AM

Robot#: DASY5-FL-2 | Run#: HvH-SYSP-150H-140830-01  
 Dipole Model#: CLA-150  
 Phantom#: OVAL1016  
 Tissue Temp: 23.1 (C)  
 Serial#: 4005  
 Test Freq: 150 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.047 dB  
 Adjusted SAR (1W): 3.80 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 150 \text{ MHz}$ ;  $\sigma = 0.76 \text{ S/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 150 MHz, ConvF(7.15, 7.15, 7.15); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

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

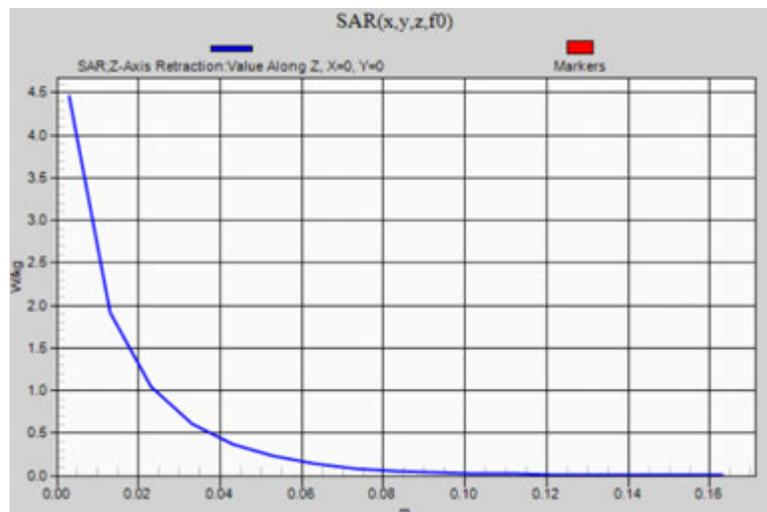
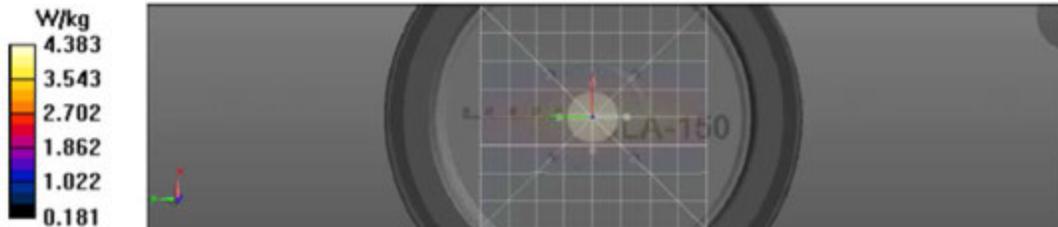
Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 71.57 V/m; Power Drift = -0.01 dB  
 Fast SAR: SAR(1 g) = 4.01 W/kg; SAR(10 g) = 2.86 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 4.46 W/kg

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

Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 71.57 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 6.59 W/kg  
 SAR(1 g) = 3.8 W/kg; SAR(10 g) = 2.44 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 4.47 W/kg

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

grid:  $dx=20\text{mm}$ ,  $dy=20\text{mm}$ ,  $dz=10\text{mm}$   
 Maximum value of SAR (measured) = 4.46 W/kg



## **Appendix E**

### **DUT Scans**

**Assessments at the Body with Body-worn PMLN7008A  
Table 17**

**Motorola Solutions, Inc. EME Laboratory  
Date/Time: 8/28/2014 3:24:55 PM**

Robot#: DASY5-FL-2 | Run#: HvH-Ab-140828-10  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1090  
 Tissue Temp: 22.7 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 150.8000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN7008A  
 Audio Acc: PMLN6130A  
 Start Power: 5.90 (W)

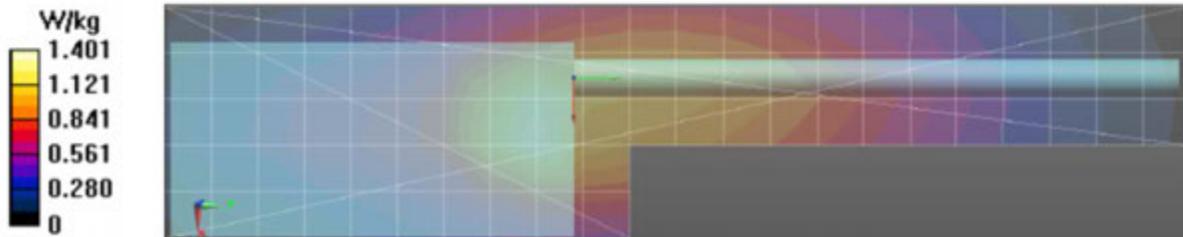
Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 151 \text{ MHz}$ ;  $\sigma = 0.83 \text{ S/m}$ ;  $\epsilon_r = 60$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 150.8 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x221x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 37.79 V/m; Power Drift = -0.60 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) = 1.46 W/kg

**Below 2 GHz-Rev.1/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 = 37.79 V/m; Power Drift = -0.70 dB  
 Peak SAR (extrapolated) = 2.67 W/kg  
 SAR(1 g) = 1.38 W/kg; SAR(10 g) = 0.871 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.45 W/kg

**Below 2 GHz-Rev.1/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) = 1.48 W/kg



**Assessments at the Body with Body-worn PMLN4651A**  
**Table 18**

**Motorola Solutions, Inc. EME Laboratory**  
 Date/Time: 8/29/2014 9:46:32 AM

Robot#: DASY5-FL-2 | Run#: HvH-Ab-140829-02  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1090  
 Tissue Temp: 22.7 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 150.8000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN4651A  
 Audio Acc: PMLN6130A  
 Start Power: 5.82 (W)

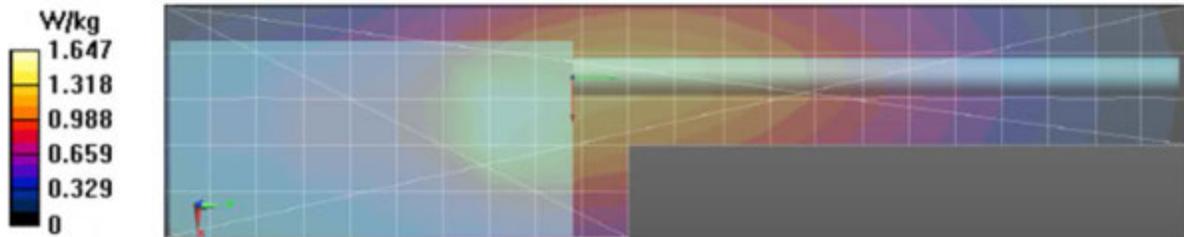
Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 151 \text{ MHz}$ ;  $\sigma = 0.81 \text{ S/m}$ ;  $\epsilon_r = 59.9$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 150.8 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x221x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 41.30 V/m; Power Drift = -0.34 dB  
 Fast SAR: SAR(1 g) = 1.66 W/kg; SAR(10 g) = 1.22 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.81 W/kg

**Below 2 GHz-Rev.1/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 = 41.30 V/m; Power Drift = -0.47 dB  
 Peak SAR (extrapolated) = 3.58 W/kg  
 SAR(1 g) = 1.81 W/kg; SAR(10 g) = 1.13 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.98 W/kg

**Below 2 GHz-Rev.1/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) = 1.94 W/kg



**Assessments at the Body with Body-worn PMLN6085A**  
**Table 19**

**Motorola Solutions, Inc. EME Laboratory**  
 Date/Time: 8/29/2014 11:29:05 AM

Robot#: DASY5-FL-2 | Run#: HvH-Ab-140829-05  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1090  
 Tissue Temp: 22.7 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 150.8000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN6085A  
 Audio Acc: PMLN6130A  
 Start Power: 5.90 (W)

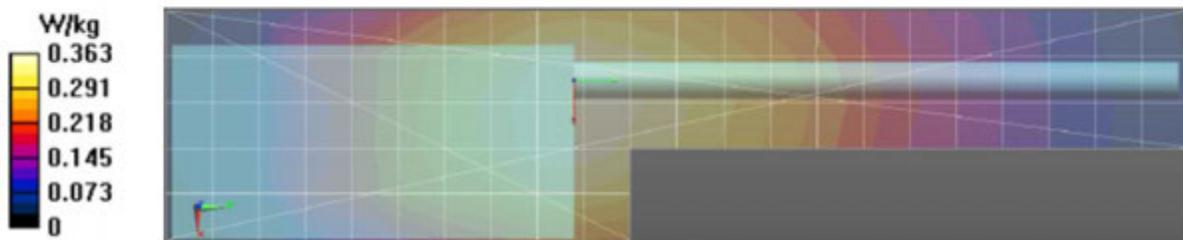
Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 151 \text{ MHz}$ ;  $\sigma = 0.81 \text{ S/m}$ ;  $\epsilon_r = 59.9$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 150.8 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x221x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 20.94 V/m; Power Drift = -0.56 dB  
 Fast SAR: SAR(1 g) = 0.352 W/kg; SAR(10 g) = 0.273 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 0.367 W/kg

**Below 2 GHz-Rev.1/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 = 20.94 V/m; Power Drift = -0.67 dB  
 Peak SAR (extrapolated) = 0.447 W/kg  
 SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.265 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 0.353 W/kg

**Below 2 GHz-Rev.1/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) = 0.348 W/kg



**Assessments at the Body with Body-worn PMLN6085A with NNTN5243A without loop**  
**Table 20**

**Motorola Solutions, Inc. EME Laboratory**  
 Date/Time: 8/29/2014 1:24:54 PM

Robot#: DASY5-FL-2 | Run#: HvH-Ab-140829-08  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1090  
 Tissue Temp: 22.6 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 150.8000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN6085A w/NNTN5243A w/no loop  
 Audio Acc: PMLN6130A  
 Start Power: 5.90 (W)

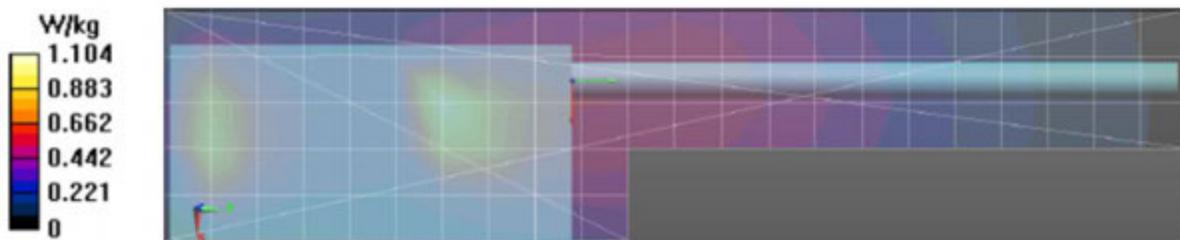
Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 151 \text{ MHz}$ ;  $\sigma = 0.81 \text{ S/m}$ ;  $\epsilon_r = 59.9$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 150.8 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x221x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 25.72 V/m; Power Drift = -0.33 dB  
 Fast SAR: SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.672 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.23 W/kg

**Below 2 GHz-Rev.1/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 = 25.72 V/m; Power Drift = -0.47 dB  
 Peak SAR (extrapolated) = 5.64 W/kg  
 SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.599 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.44 W/kg

**Below 2 GHz-Rev.1/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) = 1.56 W/kg



**Assessment at the Body with other audio accessories**

Assessment per “KDB 643646 D01 Body SAR Test Consideration for Audio Accessories without Built-in Antenna; Sec 1, A. when overall < 4.0 W/kg, SAR tested for that audio accessory is not necessary.” This was applicable to all remaining accessories.

**Assessments at the Face**  
**Table 23**

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 8/30/2014 5:40:52 AM

Robot#: DASY5-FL-2 | Run#: HvH-Face-140830-02  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1016  
 Tissue Temp: 23.0 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 150.8000 (MHz)  
 Battery: PMNN4448AR  
 Carry Acc: None @ front  
 Audio Acc: N/A  
 Start Power: 5.84 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 151 \text{ MHz}$ ;  $\sigma = 0.76 \text{ S/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 150.8 MHz, ConvF(7.15, 7.15, 7.15); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Face Scan/1-Area Scan (51x221x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

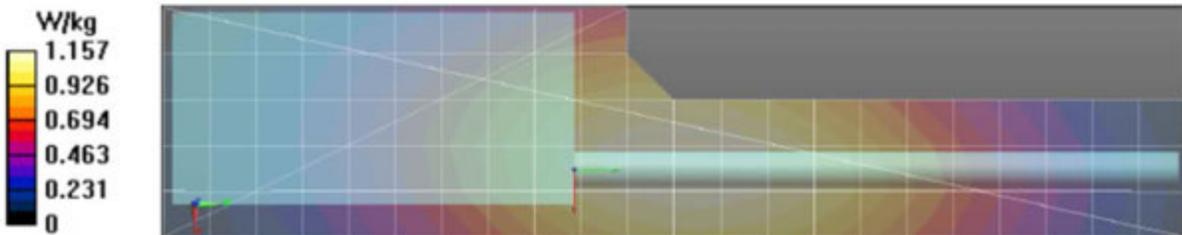
Reference Value = 40.07 V/m; Power Drift = -0.24 dB  
 Fast SAR: SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.875 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.17 W/kg

**Below 2 GHz-Rev.1/Face Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 40.07 V/m; Power Drift = -0.33 dB  
 Peak SAR (extrapolated) = 1.45 W/kg  
 SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.852 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.14 W/kg

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

Maximum value of SAR (measured) = 1.13 W/kg



Assessment outside FCC Part 90 at the Body  
 Table 21

Motorola Solutions, Inc. EME Laboratory  
 Date/Time: 8/29/2014 4:09:26 PM

Robot#: DASY5-FL-2 | Run#: HvH-Ab-140829-12  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1090  
 Tissue Temp: 22.6 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 144.4000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN4651A  
 Audio Acc: PMLN6130A  
 Start Power: 5.84 (W)

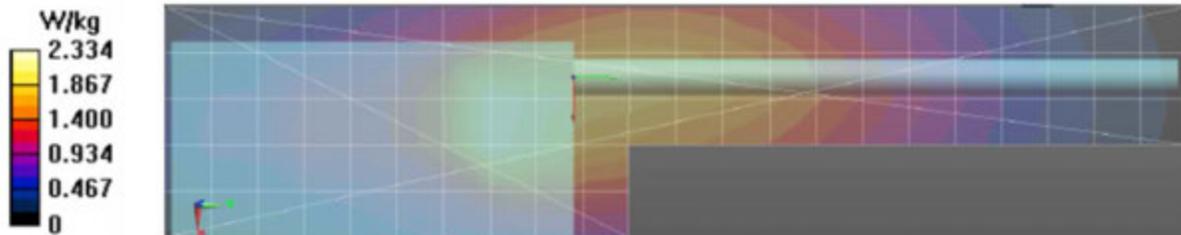
Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 144 \text{ MHz}$ ;  $\sigma = 0.81 \text{ S/m}$ ;  $\epsilon_r = 60.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 144.4 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x221x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 49.44 V/m; Power Drift = -0.29 dB  
 Fast SAR: SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.72 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 2.56 W/kg

**Below 2 GHz-Rev.1/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 = 49.44 V/m; Power Drift = -0.43 dB  
 Peak SAR (extrapolated) = 4.97 W/kg  
 SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.57 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 2.77 W/kg

**Below 2 GHz-Rev.1/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) = 2.64 W/kg



**Assessment outside FCC Part 90 at the Face  
Table 24**

**Motorola Solutions, Inc. EME Laboratory  
Date/Time: 8/30/2014 7:57:06 AM**

Robot#: DASY5-FL-2 | Run#: HvH-Face-140830-06  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1016  
 Tissue Temp: 22.9 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 144.4000 (MHz)  
 Battery: PMNN4448AR  
 Carry Acc: None @ front  
 Audio Acc: N/A  
 Start Power: 5.77 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 144 \text{ MHz}$ ;  $\sigma = 0.75 \text{ S/m}$ ;  $\epsilon_r = 54.3$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3163, , Frequency: 144.4 MHz, ConvF(7.15, 7.15, 7.15); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Face Scan/1-Area Scan (51x221x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

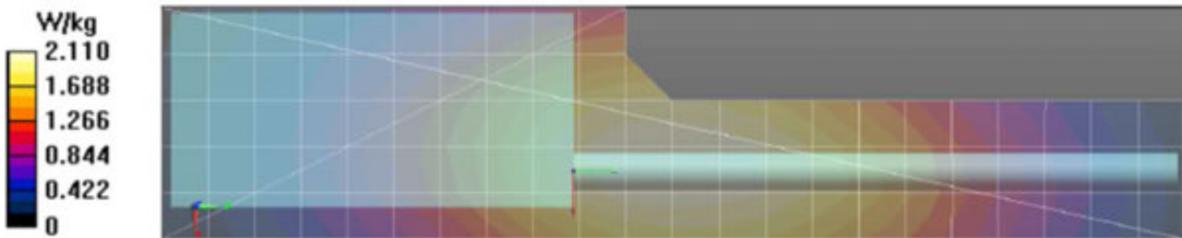
Reference Value = 52.29 V/m; Power Drift = 0.26 dB  
 Fast SAR: SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.61 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 2.14 W/kg

**Below 2 GHz-Rev.1/Face Scan/3-Zoom Scan (5x6x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 52.29 V/m; Power Drift = 0.29 dB  
 Peak SAR (extrapolated) = 2.80 W/kg  
 SAR(1 g) = 2.14 W/kg; SAR(10 g) = 1.67 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 2.20 W/kg

**Below 2 GHz-Rev.1/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) = 2.17 W/kg



**Appendix F**  
**Shortened Scan of Highest SAR configuration**

## Shortened Scan Table 25

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 8/30/2014 11:35:17 AM

Robot#: DASY5-FL-2 | Run#: HvH-Ab-140830-12  
 Model#: H84KDD9PW5AN (MUD3305)  
 Phantom#: OVAL1090  
 Tissue Temp: 23.0 (C)  
 Serial#: 837TQR0184  
 Antenna: NAR6593A  
 Test Freq: 144.4000 (MHz)  
 Battery: NNTN8128B  
 Carry Acc: PMLN4651A  
 Audio Acc: PMLN6130A  
 Start Power: 5.90 (W)

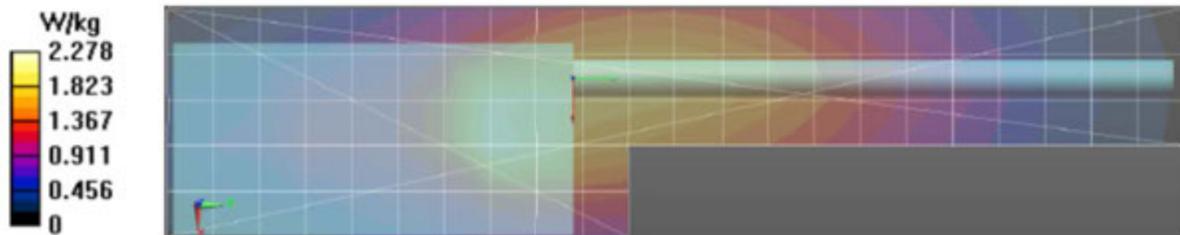
Comments: Shorten scan.

Duty Cycle: 1:1, Medium parameters used: f = 144 MHz;  $\sigma = 0.82$  S/m;  $\epsilon_r = 60.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3163, , Frequency: 144.4 MHz, ConvF(6.87, 6.87, 6.87); Calibrated: 5/15/2014  
 Electronics: DAE4 Sn1231, Calibrated: 2/12/2014

**Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x221x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 48.59 V/m; Power Drift = -0.26 dB  
 Fast SAR: SAR(1 g) = 2.28 W/kg; SAR(10 g) = 1.67 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 2.49 W/kg

**Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm  
 Reference Value = 60.43 V/m; Power Drift = -0.25 dB  
 Peak SAR (extrapolated) = 5.27 W/kg  
 SAR(1 g) = 2.68 W/kg; SAR(10 g) = 1.67 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 2.89 W/kg

**Below 2 GHz-Rev.1/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm  
 Maximum value of SAR (measured) = 2.83 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)	25	10	1.42	0.88
Full scan (area & zoom)	21	24	1.41	0.88

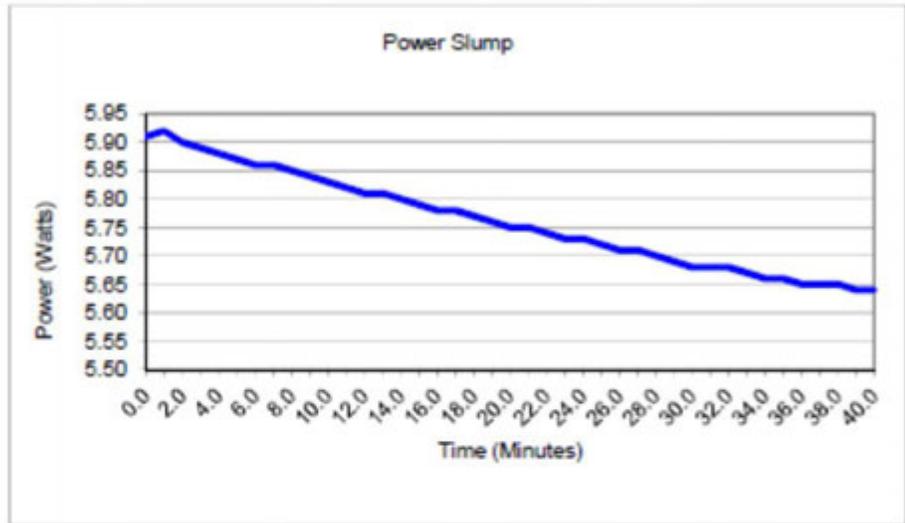
## Appendix G DUT Power slump

**Model # H84KDD9PW5AN (IC model MUD3305)**  
**Serial # 837TQR0184**

<b>Battery</b> NNTN8128BR	<b>Transmit Mode</b> CW
<b>Frequency</b> 144.4 MHz	<b>Audio Accessory</b> PMLN6130A
<b>Date</b> 9/19/2014	

**TX TIME**      **Measured Power**  
**(minutes)**      **Watts**

NNTN8128BR	
0.0	5.91
1.0	5.92
2.0	5.90
3.0	5.89
4.0	5.88
5.0	5.87
6.0	5.86
7.0	5.86
8.0	5.85
9.0	5.84
10.0	5.83
11.0	5.82
12.0	5.81
13.0	5.81
14.0	5.80
15.0	5.79
16.0	5.78
17.0	5.78
18.0	5.77
19.0	5.76
20.0	5.75
21.0	5.75
22.0	5.74
23.0	5.73
24.0	5.73
25.0	5.72
26.0	5.71
27.0	5.71
28.0	5.70
29.0	5.69
30.0	5.68
31.0	5.68
32.0	5.68
33.0	5.67
34.0	5.66
35.0	5.66
36.0	5.65
37.0	5.65
38.0	5.65
39.0	5.64
40.0	5.64



## **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