

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

<p>Motorola Solutions Inc. EME Test Laboratory 8000 West Sunrise Blvd Fort Lauderdale, FL. 33322</p>	<p>Date of Report: 12/17/2012 Report Revision: C Report ID: SR10604 APX3000 7/800 Rev C 121217</p>
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<p>Responsible Engineer: Michael Sailsman(Senior Staff EME Engineer) Report Author: Michael Sailsman (Senior Staff EME Engineer) Date/s Tested: 7/25/2012-12/14/2012 Manufacturer/Location: Motorola, Penang Sector/Group/Div.: AESS – Astro Engineering Subscriber Solutions Date submitted for test: 7/11/2012 DUT Description: 764-775 MHz and 794-805 MHz at 2.5 W, 806 -824 MHz and 851-870 MHz at 3 W, 6.25kHz/12.5kHz/25kHz, Capable of digital and analog FM transmission. Also capable of TDMA transmission. This radio is Bluetooth equipped. Test TX mode(s): CW (PTT); CW (Bluetooth) Max. Power output: 2.99 W (764MHz – 805 MHz); 3.6 W (806-870 MHz); 10 mW (Bluetooth) Nominal Power: 2.5 W (764MHz – 805 MHz); 3.0 W (806-870 MHz); 10 mW (Bluetooth) Tx Frequency Bands: 764-775 MHz , 794-805 MHz ; 806 -824 MHz; 851-870 MHz ; 2.402-2.480 GHz (Bluetooth) Signaling type: FM, TDMA, FHSS (Bluetooth) Model(s) Tested: H59UCD9PW4AN (MUF1611) Model(s) Certified: H59UCD9PW4AN (MUF1611) Serial Number(s): 536TNM0184 Classification: Occupational/Controlled FCC ID: AZ489FT5860; Rule Part 90 (764-869MHz); Rule Part 15 (2402 – 2480 MHz) Results outside FCC bands are not applicable for FCC compliance demonstration. IC: 109U-89FT5860</p>	
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* 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.

<p><i>Deanna M Zakharia</i> Deanna Zakharia EMS EME Lab Senior Resource Manager, Laboratory Director Approval Date: 12/18/2012</p>	<p>Certification Date: 9/27/2012 Certification No.: L1120901P</p>
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APPENDIX D
System Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/25/2012 5:34:53 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP 835B-120725-01
 Dipole Model# D835V2
 Phantom#: OVAL1016
 Tissue Temp: 20.7 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.023 dB

Comments:

Duty Cycle: 1:1, Medium parameters used; f = 835 MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

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

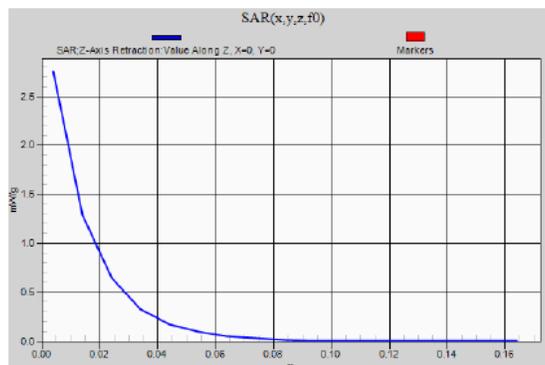
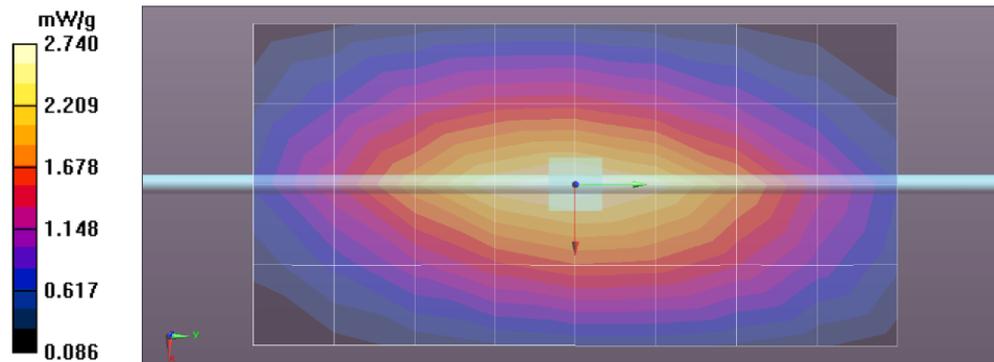
grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.74 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 52.747 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 3.712 mW/g
SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.62 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.77 mW/g

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.75 mW/g



Motorola Solutions, Inc. EME Laboratory
Date/Time: 7/26/2012 7:19:48 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP 835B-120726-01
 Dipole Model# D835V2
 Phantom#: OVAL1016
 Tissue Temp: 20.5 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.029 dB

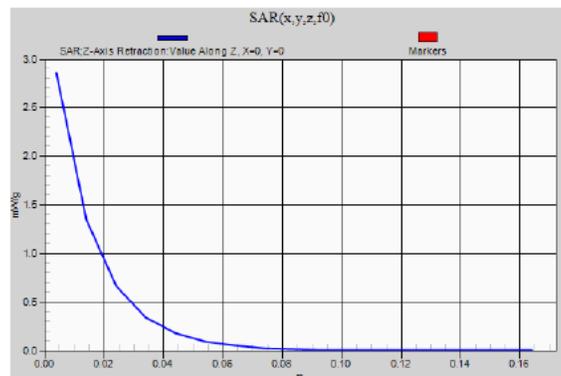
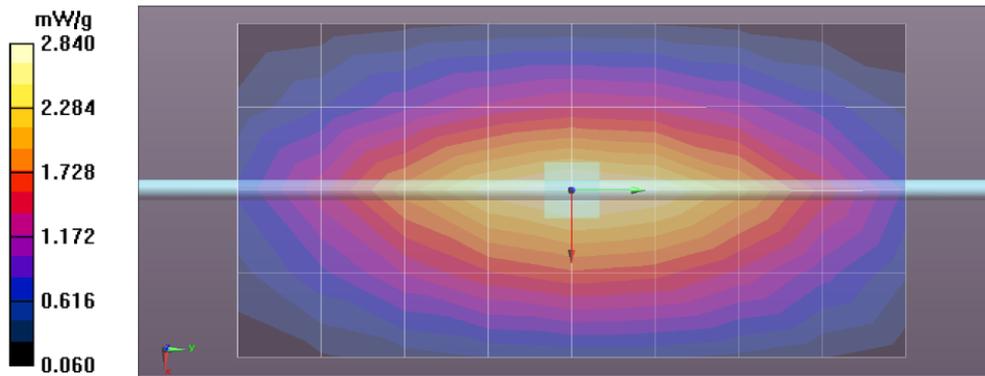
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement
 grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.84 mW/g

Below 3 GHz-Rev.4/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:
 Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 54.623 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 3.841 mW/g
SAR(1 g) = 2.59 mW/g; SAR(10 g) = 1.7 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.86 mW/g

Below 3 GHz-Rev.4/System Performance Check/Z-Axis Retraction (1x1x17): Measurement
 grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.85 mW/g



Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/17/2012 4:17:12 PM

Robot#: DASY5-FL-3 | Run#: CM-SYSP-835B-120817-01
 Dipole Model#: D835V2
 Phantom#: OVAL1021
 Tissue Temp: 21.5 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Target SAR (1W): 9.84 mW/g (1g)
 Adjusted SAR (1W): 9.20 mW/g (1g)
 Percent from Target (+/-): 6.5 % (1g)
 Rotation (1D): 0.024 dB

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (41x81x1):

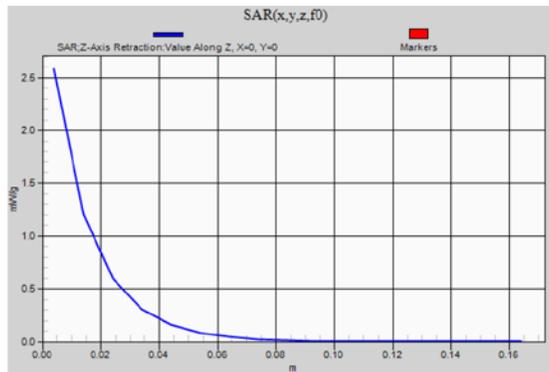
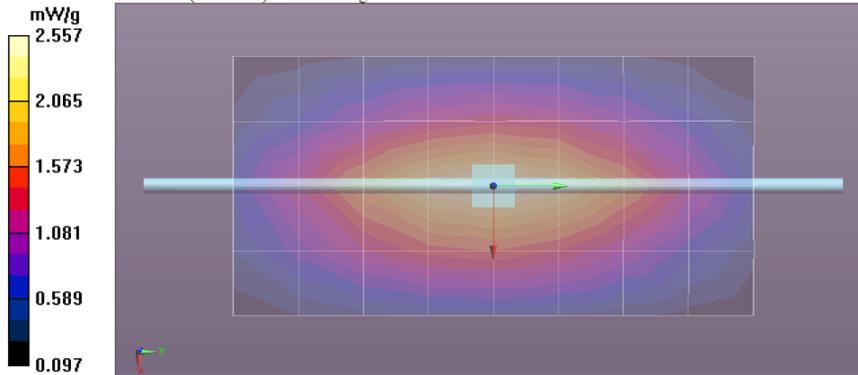
Measurement grid: dx=15mm, dy=15mm
 Reference Value = 51.051 V/m; Power Drift = 0.01 dB
Fast SAR: SAR(1 g) = 2.31 mW/g; SAR(10 g) = 1.57 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 2.56 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 51.051 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 3.458 mW/g
SAR(1 g) = 2.3 mW/g; SAR(10 g) = 1.52 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.57 mW/g

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.58 mW/g



Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/21/2012 5:46:15 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP-835B-120821-01
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 21.1 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.022 dB

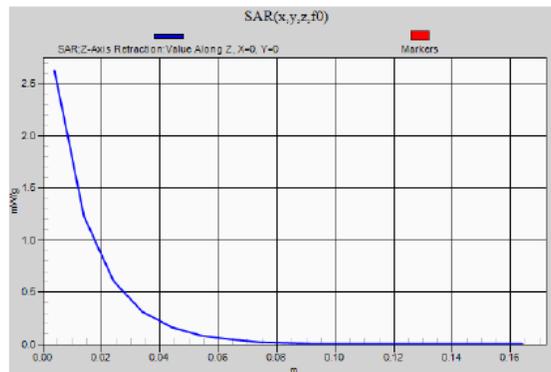
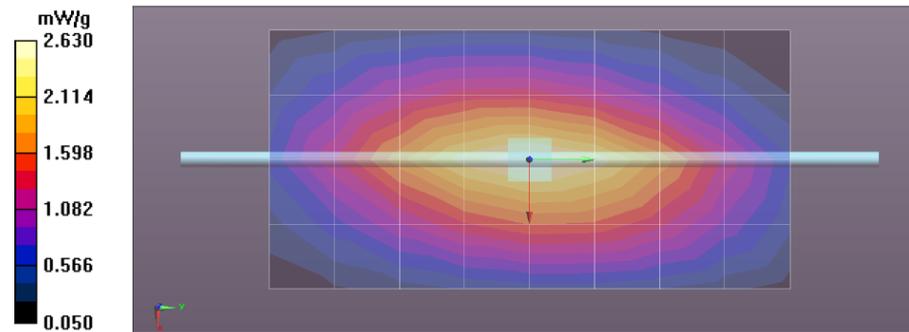
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement
 grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.63 mW/g

Below 3 GHz-Rev.4/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:
 Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 52.078 V/m; Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 3.559 mW/g
SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.56 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.65 mW/g

Below 3 GHz-Rev.4/System Performance Check/Z-Axis Retraction (1x1x17): Measurement
 grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.62 mW/g



Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/22/2012 5:36:00 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP-835B-120822-01
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 21.0 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.028 dB

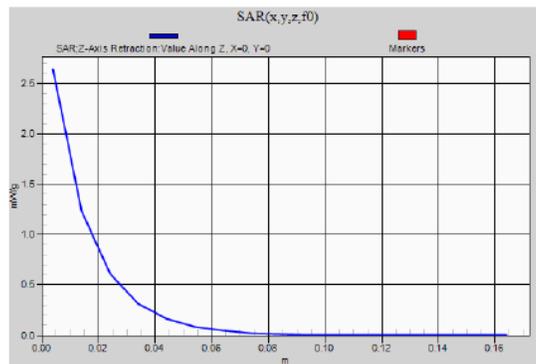
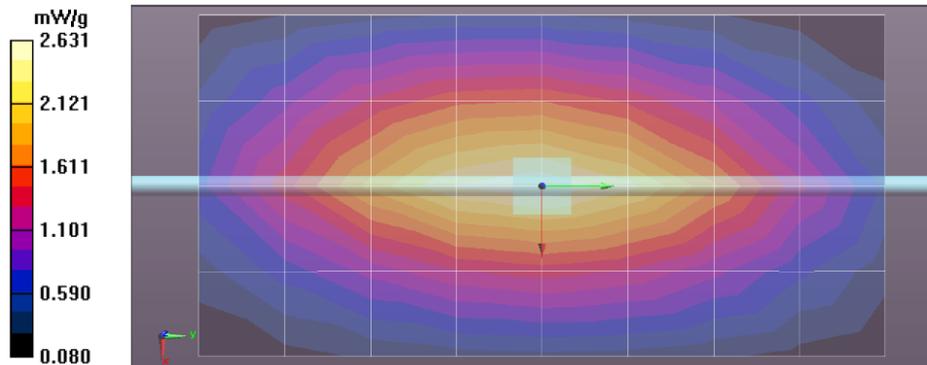
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement
 grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.63 mW/g

Below 3 GHz-Rev.4/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:
 Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 51.879 V/m; Power Drift = -0.00 dB
 Peak SAR (extrapolated) = 3.546 mW/g
 SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.55 mW/g (SAR corrected for target medium)

Below 3 GHz-Rev.4/System Performance Check/Z-Axis Retraction (1x1x17): Measurement
 grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.64 mW/g



Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/23/2012 6:09:49 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP-835B-120823-01
 Dipole Model#: D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.8 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.03 dB

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

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

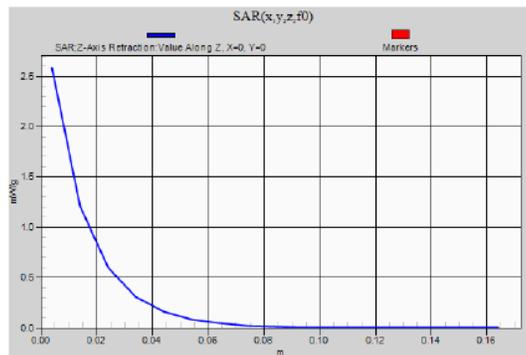
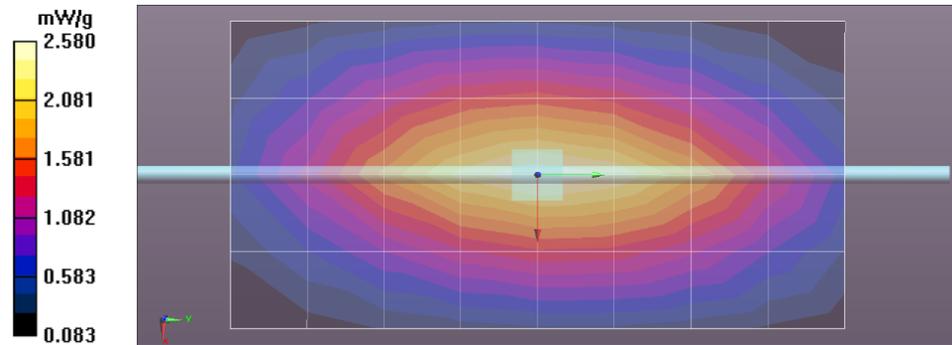
grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.58 mW/g

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 52.145 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 3.468 mW/g
 SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.53 mW/g (SAR corrected for target medium)

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

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



Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/24/2012 6:09:18 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP-835B-120824-01
 Dipole Model#: D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.8 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.021 dB

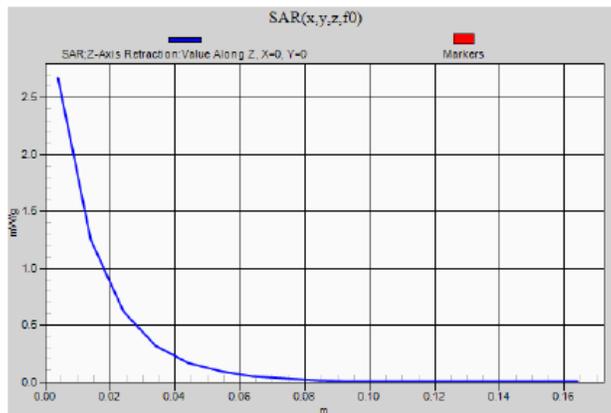
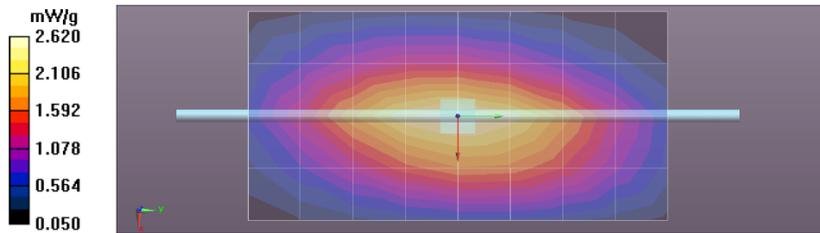
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_c = 54.4$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, . ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Su363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement
 grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.62 mW/g

Below 3 GHz-Rev.4/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:
 Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 51.972 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 3.579 mW/g
SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.57 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.66 mW/g

Below 3 GHz-Rev.4/System Performance Check/Z-Axis Retraction (1x1x17): Measurement
 grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.67 mW/g



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/14/2012 5:48:24 AM

Robot#: DASY5-FL-3 | Run#: ErC-SYSP-835B-120914-01
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.9 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.04 dB

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

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

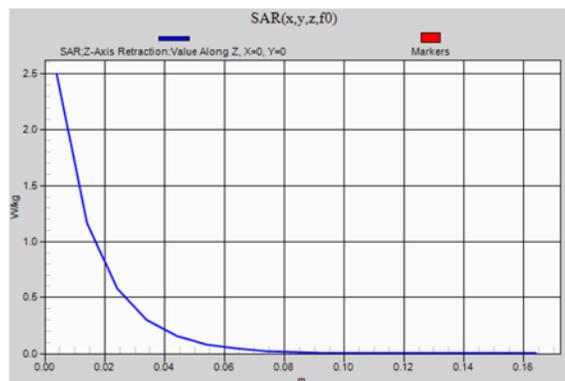
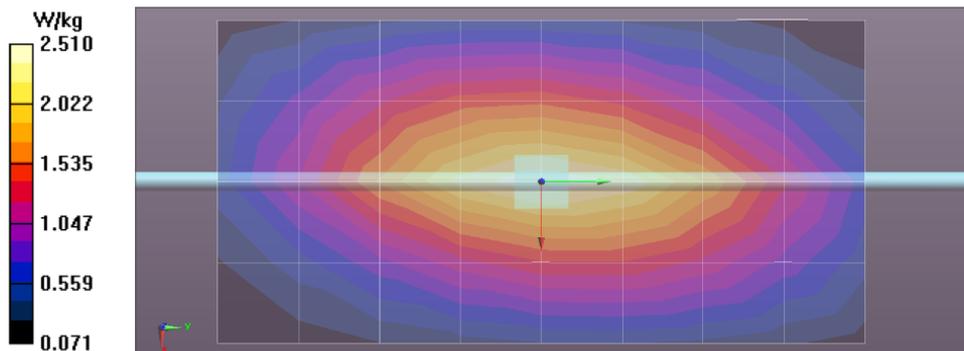
grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.51 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 51.640 V/m; Power Drift = -0.00 dB
 Peak SAR (extrapolated) = 3.368 mW/g
SAR(1 g) = 2.3 mW/g; SAR(10 g) = 1.51 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.50 W/kg

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

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



Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/17/2012 4:45:36 PM

Robot#: DASY5-FL-3 | Run#: CM-SYSP-835B-120917-01
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.6 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.022 dB

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 53$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (41x81x1):

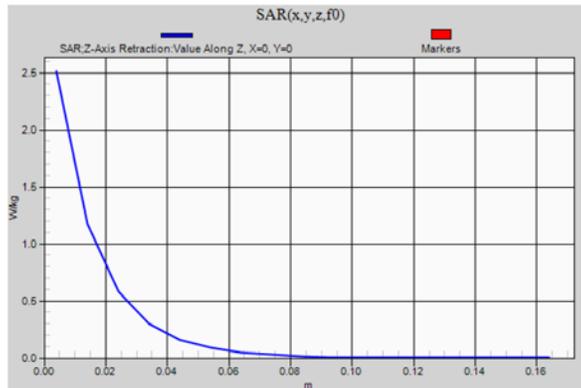
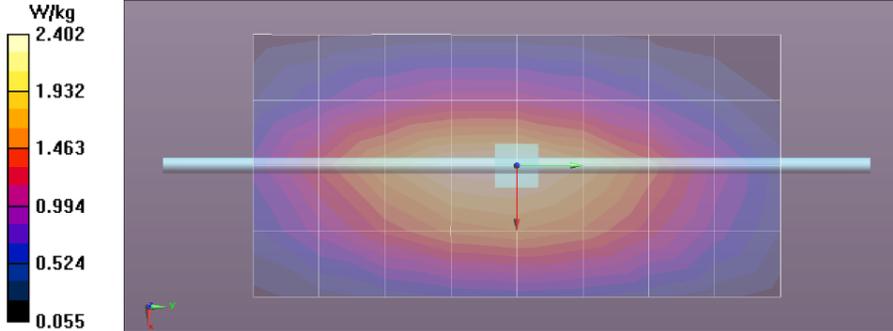
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 52.241 V/m; Power Drift = 0.01 dB
Fast SAR: SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.58 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 2.50 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 52.241 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 3.373 mW/g
SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.53 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.52 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.51 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/18/2012 10:07:43 AM

Robot#: DASY5-FL-3 | Run#: JsT-SYSP-835B-120918-04
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.7 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.021 dB

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 53.1$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

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

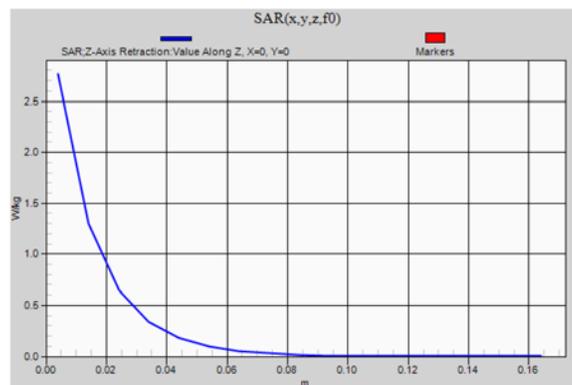
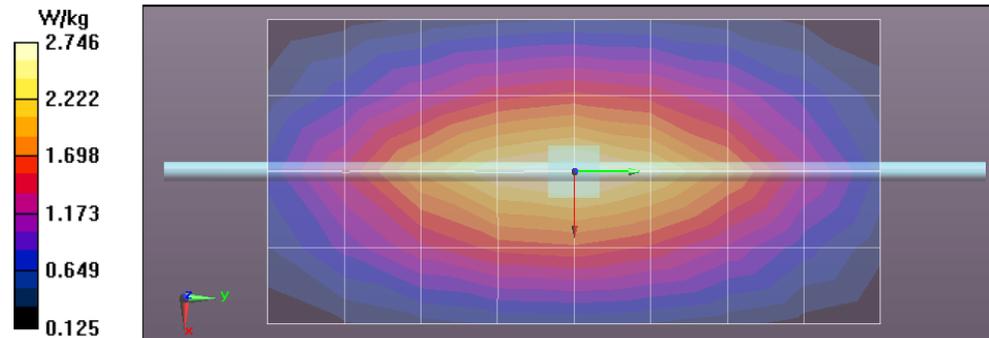
grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 2.75 W/kg

Below 3 GHz-Rev.4/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 = 54.901 V/m; Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 3.663 mW/g
 SAR(1 g) = 2.58 mW/g; SAR(10 g) = 1.7 mW/g (SAR corrected for target medium)

Below 3 GHz-Rev.4/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) = 2.76 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/19/2012 9:05:35 AM

Robot#: DASY5-FL-3 | Run#: JsT-SYSP-835B-120919-06
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.7 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)

Rotation (1D): 0.084 dB

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 52.9$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

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

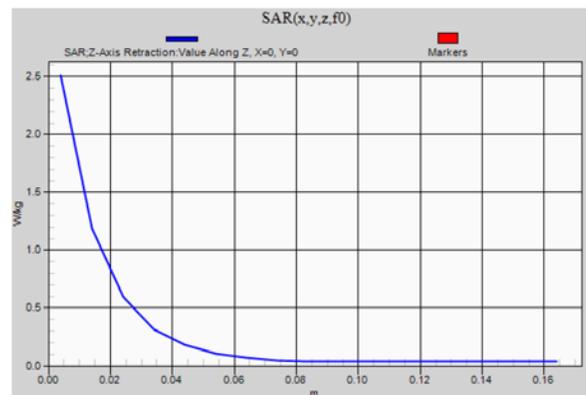
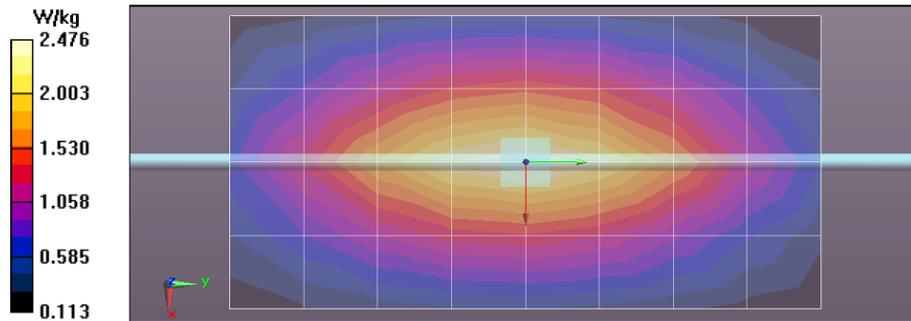
grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.48 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 50.824 V/m; Power Drift = 0.14 dB
 Peak SAR (extrapolated) = 3.343 mW/g
SAR(1 g) = 2.28 mW/g; SAR(10 g) = 1.5 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.49 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.51 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/10/2012 3:01:54 PM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-835B-121210-01
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.0 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.016 dB
 Adjusted SAR (1W): 9.44 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (41x81x1):

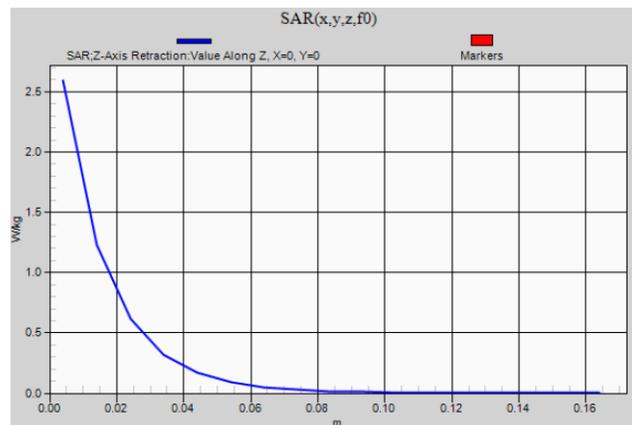
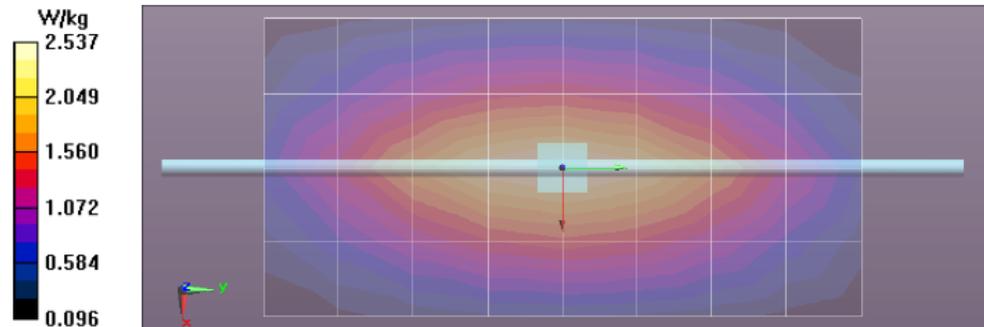
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 51.733 V/m; Power Drift = 0.11 dB
 Fast SAR: SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.59 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 2.54 W/kg

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 = 51.733 V/m; Power Drift = 0.11 dB
 Peak SAR (extrapolated) = 3.431 mW/g
 SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.56 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.57 W/kg

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) = 2.59 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/11/2012 2:31:14 PM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-835B-121211-04
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 20.8 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.031 dB
 Adjusted SAR (1W): 9.16 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 1$ mho/m; $\epsilon_c = 54.7$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (41x81x1):

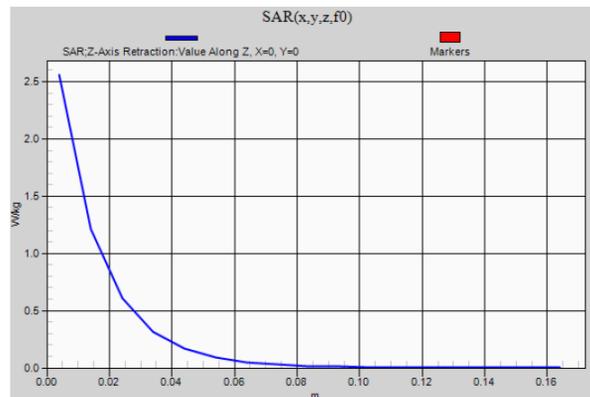
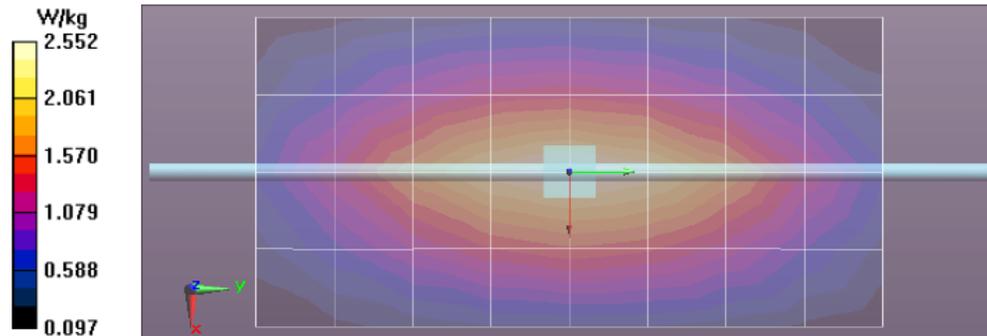
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 51.233 V/m; Power Drift = 0.00 dB
Fast SAR: SAR(1 g) = 2.32 mW/g; SAR(10 g) = 1.57 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 2.55 W/kg

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 = 51.233 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 3.395 mW/g
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.52 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.54 W/kg

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) = 2.56 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/13/2012 8:40:16 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-835B-121213-01
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 21.0 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.021 dB
 Adjusted SAR (1W): 9.20 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (41x81x1):

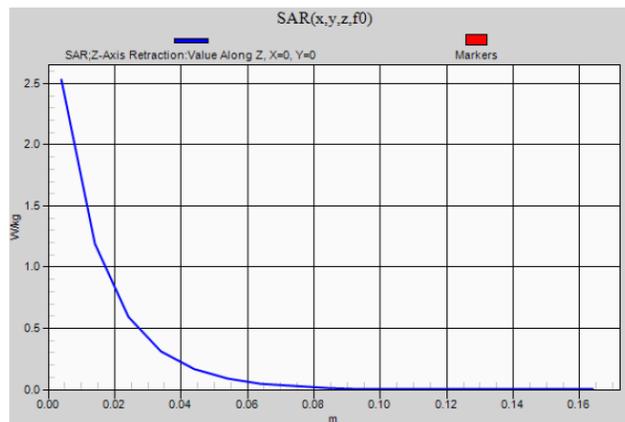
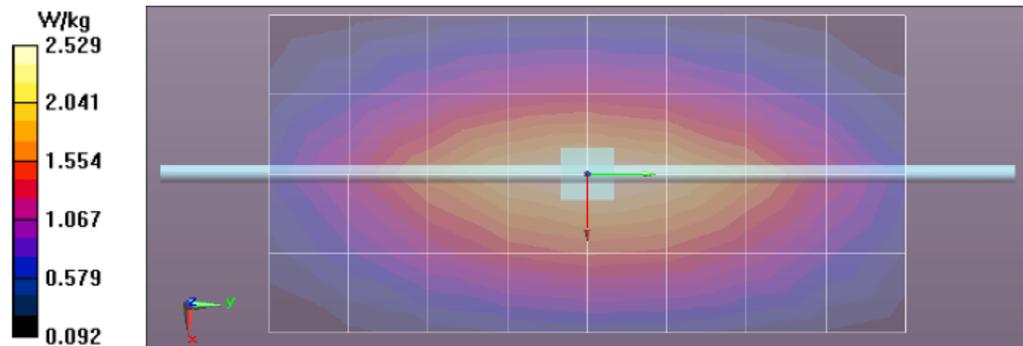
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 51.438 V/m; Power Drift = 0.01 dB
 Fast SAR: SAR(1 g) = 2.33 mW/g; SAR(10 g) = 1.57 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 2.54 W/kg

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 = 51.438 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 3.400 mW/g
 SAR(1 g) = 2.3 mW/g; SAR(10 g) = 1.52 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.54 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: 12/14/2012 9:31:26 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-835B-121214-01
 Dipole Model# D835V2
 Phantom#: OVAL1021
 Tissue Temp: 21.0 (C)
 Serial#: 435
 Test Freq: 835 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.025 dB
 Adjusted SAR (1W): 9.44 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 835$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_1 = 54.6$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (41x81x1):

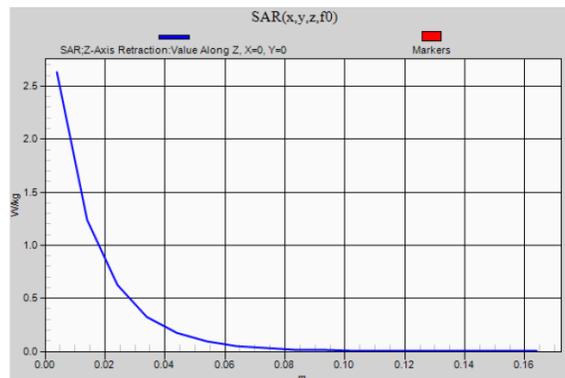
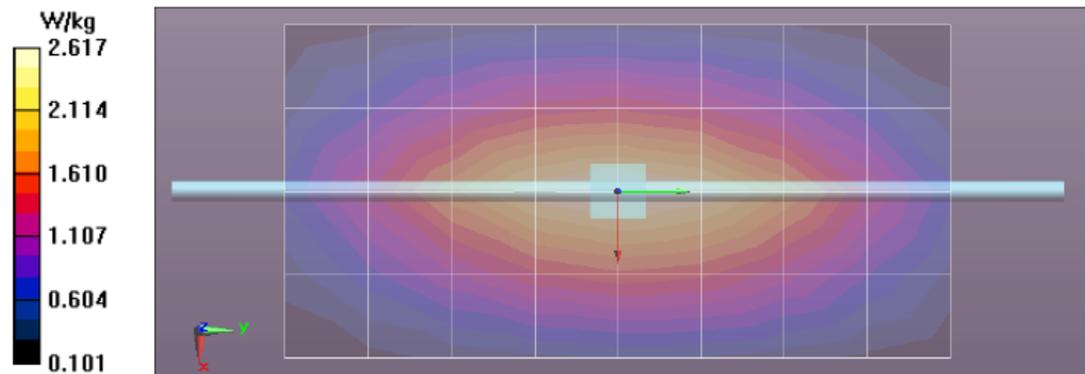
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 51.752 V/m; Power Drift = 0.03 dB
Fast SAR: SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.61 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 2.62 W/kg

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 = 51.752 V/m; Power Drift = 0.03 dB
 Peak SAR (extrapolated) = 3.537 mW/g
SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.56 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 2.64 W/kg

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) = 2.63 W/kg



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

Note: all scans are tested with back side (battery side) of the device against the phantom

**Shortened Scan Result
Table 26**

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/14/2012 7:59:31 PM

Robot#: DASY5-FL-3 | Run#: CM-Ab-120914-15
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.9 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 869.0000 (MHz)
 Battery: NNTN8129A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.71 (W)

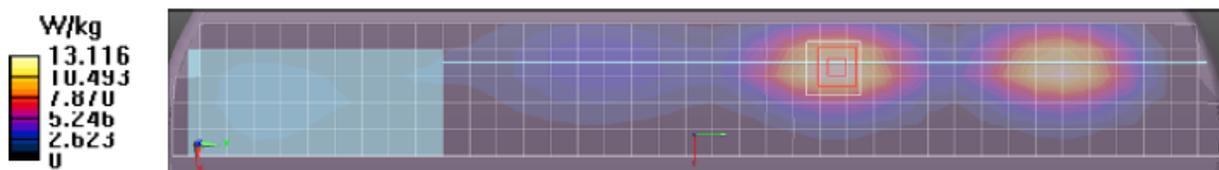
Comments: Shortened scan

Duty Cycle: 1:1, Medium parameters used: $f = 869 \text{ MHz}$; $\sigma = 1.02 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x391x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 110.2 V/m; Power Drift = -0.17 dB
 Fast SAR: SAR(1 g) = 13.5 mW/g; SAR(10 g) = 9.01 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 14.5 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 = 126.2 V/m; Power Drift = -0.10 dB
 Peak SAR (extrapolated) = 21.254 mW/g
 SAR(1 g) = 14.4 mW/g; SAR(10 g) = 9.26 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 15.5 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) = 14.4 W/kg



Device back surface (battery) against phantom

Shortened scan reflect highest SAR producing configuration; approximate run time is 5 minutes.

Representative full scan run time was 32 minutes.

“Shortened” scan max calculated SAR using SAR drift: 1-g Avg. = 7.37 mW/g; 10-g Avg. = 4.74 mW/g.

Zoom scan max calculated SAR using SAR drift (see part 1 table 34): 1-g Avg. = 7.61 mW/g; 10-g Avg. = 4.89 mW/g.

**Body - Highest SAR Configuration Result
Table 24**

**Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/14/2012 8:58:39 AM**

Robot#: DASY5-FL-3 | Run#: ErC-Ab-120914-04
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 21.0 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 869.0000 (MHz)
 Battery: NNTN8129A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.72 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 869 \text{ MHz}$; $\sigma = 1.02 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x391x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

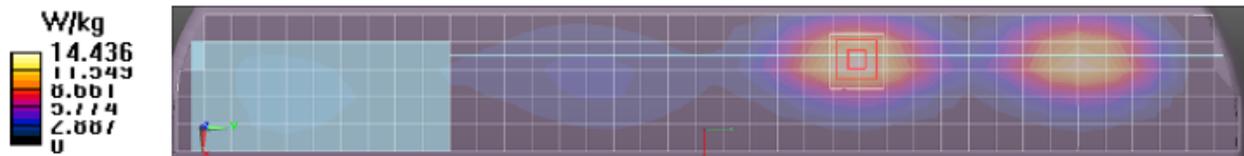
Reference Value = 115.7 V/m; Power Drift = -0.28 dB
 Fast SAR: SAR(1 g) = 14.4 mW/g; SAR(10 g) = 9.59 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 15.5 W/kg

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 = 115.7 V/m; Power Drift = -0.33 dB
 Peak SAR (extrapolated) = 20.775 mW/g
 SAR(1 g) = 14.1 mW/g; SAR(10 g) = 9.06 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 15.3 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) = 15.2 W/kg



Device back surface (battery) against phantom

APPENDIX F
DUT Scans - FCC Part 90 (764-775, 794-824 & 851-869 MHz bands)

764-775 MHz Band

**Assessment at the body with no body worn attached
Table 19**

Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/25/2012 5:20:35 PM

Robot#: DASY5-FL-3 | Run#: CM-Ab-120725-11
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1016
 Tissue Temp: 20.0 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 775.0000 (MHz)
 Battery: NNTN8305A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.03 (W)

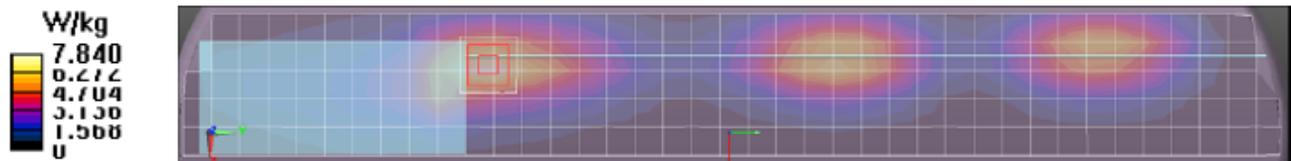
Comments: Bluetooth Pod NTN5274B

Duty Cycle: 1:1, Medium parameters used: $f = 775$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.16, 6.16, 6.16); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x391x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 57.381 V/m; Power Drift = -0.03 dB
 Fast SAR: SAR(1 g) = 7.45 mW/g; SAR(10 g) = 5.04 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 8.01 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 = 57.381 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 11.291 mW/g
 SAR(1 g) = 7.51 mW/g; SAR(10 g) = 4.83 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 8.16 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) = 8.17 W/kg



Device back surface (battery) against phantom

**Secondary peak assessment (2dB from maximum peak)
Table 19**

Motorola Solutions, Inc. EME Laboratory
Date/Time: 12/11/2012 10:00:04 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-121211-02
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.9 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 775.0000 (MHz)
 Battery: NNTN8305A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.05 (W)

Comments: Bluetooth Pod NTN5274B
 Area scan: Maxima - Secondary within 2db.
 Zoom scan: Maxima - Number of cubes to measure = 2.

Duty Cycle: 1:1, Medium parameters used: $f = 775 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_1 = 53.5$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3163, , ConvF(6.16, 6.16, 6.16); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

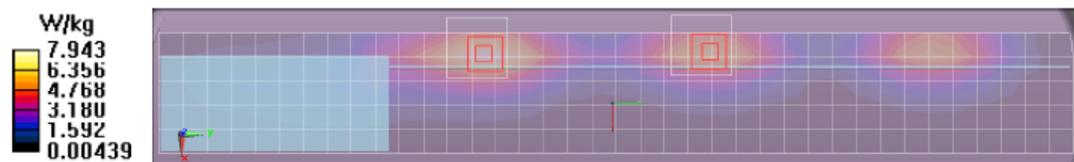
Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x381x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 84.647 V/m; Power Drift = -0.01 dB
 Fast SAR: SAR(1 g) = 7.57 mW/g; SAR(10 g) = 5.12 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 8.15 W/kg

Below 3 GHz-Rev.5/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 = 84.647 V/m; Power Drift = -0.10 dB
 Peak SAR (extrapolated) = **Not Specified** mW/g
 Fast SAR: SAR(1 g) = 7.63 mW/g; SAR(10 g) = 5.13 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 8.03 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 = 84.647 V/m; Power Drift = -0.10 dB
 Peak SAR (extrapolated) = 10.679 mW/g
 SAR(1 g) = 7.44 mW/g; SAR(10 g) = 4.97 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 8.01 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x6x7)/Cube 1: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 84.647 V/m; Power Drift = -0.10 dB
 Peak SAR (extrapolated) = 8.967 mW/g
 SAR(1 g) = 6.3 mW/g; SAR(10 g) = 4.23 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 6.81 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) = 7.90 W/kg



Device back surface (battery) against phantom

794-824 MHz band

Assessment at the body with no body worn attached

Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/26/2012 9:44:56 AM

Robot#: DASY5-FL-3 | Run#: ErC-Ab-120726-04
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1016
 Tissue Temp: 20.4 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 823.9875 (MHz)
 Battery: NNTN8305A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.67 (W)

Comments: Reduced Area Scan

Duty Cycle: 1:1, Medium parameters used: $f = 824 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (31x291x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 108.1 V/m; Power Drift = -0.43 dB
 Fast SAR: SAR(1 g) = 11.5 mW/g; SAR(10 g) = 7.78 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 12.3 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 = 108.1 V/m; Power Drift = -0.64 dB
 Peak SAR (extrapolated) = 15.611 mW/g
 SAR(1 g) = 10.8 mW/g; SAR(10 g) = 7.05 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 11.7 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) = 11.4 W/kg



Device back surface (battery) against phantom

**Secondary peak assessment (2dB from maximum peak)
Table 21**

Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/11/2012 2:59:14 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-121211-05
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.7 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 823.9875 (MHz)
 Battery: NNTN8305A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.64 (W)

Comments: Reduced Area Scan. Bluetooth Pod NTN5274B
 Area scan: Maxima - Secondary within 2db.
 Zoom scan: Maxima - Number of cubes to measure = 2.

Duty Cycle: 1:1, Medium parameters used: f = 824 MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

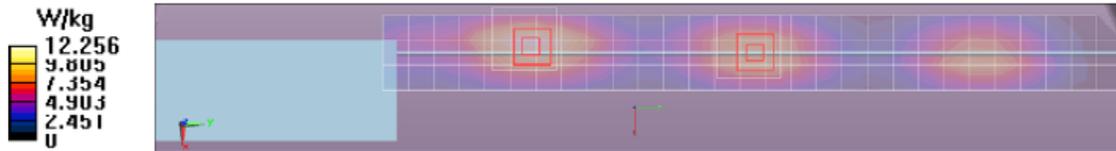
Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (31x291x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 103.8 V/m; Power Drift = -0.30 dB
 Fast SAR: SAR(1 g) = 11.9 mW/g; SAR(10 g) = 8 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 12.8 W/kg

Below 3 GHz-Rev.5/Ab Scan/2-Volume 2D Scan (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm
 Reference Value = 103.8 V/m; Power Drift = -0.78 dB
 Peak SAR (extrapolated) = **Not Specified** mW/g
 Fast SAR: SAR(1 g) = 11.7 mW/g; SAR(10 g) = 7.78 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 12.4 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 103.8 V/m; Power Drift = -0.78 dB
 Peak SAR (extrapolated) = 16.277 mW/g
 SAR(1 g) = 11.2 mW/g; SAR(10 g) = 7.37 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 12.1 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x6x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 103.8 V/m; Power Drift = -0.78 dB
 Peak SAR (extrapolated) = 14.045 mW/g
 SAR(1 g) = 9.7 mW/g; SAR(10 g) = 6.4 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 10.5 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) = 11.0 W/kg



Device back surface (battery) against phantom

**Assessment of other audio accessories
Table 22**

**Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/22/2012 2:23:55 PM**

Robot#: DASY5-FL-3 | Run#: ErC-Ab-120822-08
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.7 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 823.9875 (MHz)
 Battery: NNTN8305A
 Carry Acc: None (DUT Flush Against Phantom)
 Audio Acc: BDN6667A w/BDN6783A
 Start Power: 3.72 (W)

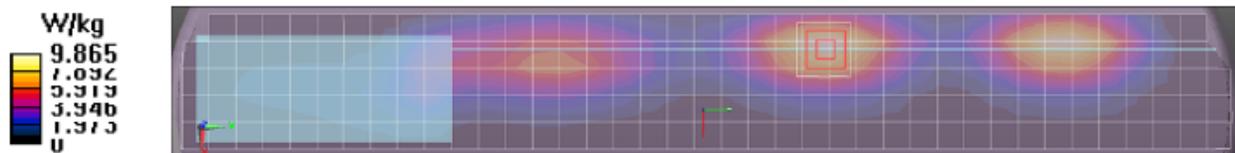
Comments: Short Scan

Duty Cycle: 1:1, Medium parameters used: $f = 824 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x391x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 92.753 V/m; Power Drift = -0.85 dB
Fast SAR: SAR(1 g) = 9.62 mW/g; SAR(10 g) = 6.49 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 10.3 W/kg

Below 3 GHz-Rev.5/Ab Scan/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$,
 $dy=7.5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 111.4 V/m; Power Drift = -0.30 dB
 Peak SAR (extrapolated) = 16.430 mW/g
SAR(1 g) = 11.3 mW/g; SAR(10 g) = 7.41 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 12.3 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) = 10.9 W/kg



Device back surface (battery) against phantom

**Secondary peak assessment (2dB from maximum peak)
Table 22**

Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/11/2012 3:43:22 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-121211-06
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.7 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 823.9875 (MHz)
 Battery: NNTN8305A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: BDN6667A with BDN6783A
 Start Power: 3.67 (W)

Comments: Reduced Area Scan.
 Area scan: Maxima - Secondary within 2db.
 Zoom scan: Maxima - Number of cubes to measure = 2.

Duty Cycle: 1:1, Medium parameters used: f = 824 MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (31x291x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 103.7 V/m; Power Drift = -0.27 dB
 Fast SAR: SAR(1 g) = 11.5 mW/g; SAR(10 g) = 7.74 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 12.4 W/kg

Below 3 GHz-Rev.5/Ab Scan/2-Volume 2D Scan (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm

Reference Value = 103.7 V/m; Power Drift = -0.69 dB
 Peak SAR (extrapolated) = **Not Specified** mW/g
 Fast SAR: SAR(1 g) = 11.3 mW/g; SAR(10 g) = 7.56 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 12.0 W/kg

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

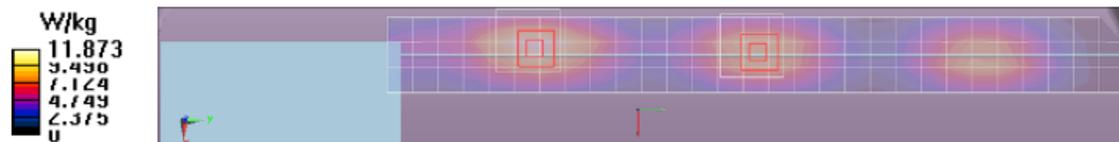
Reference Value = 103.7 V/m; Power Drift = -0.69 dB
 Peak SAR (extrapolated) = 15.862 mW/g
 SAR(1 g) = 10.9 mW/g; SAR(10 g) = 7.17 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 11.7 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x6x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 103.7 V/m; Power Drift = -0.69 dB
 Peak SAR (extrapolated) = 13.659 mW/g
 SAR(1 g) = 9.4 mW/g; SAR(10 g) = 6.2 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 10.2 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) = 10.9 W/kg



Device back surface (battery) against phantom

851-869 MHz band

Assessments at the body with no body worn attached

Table 24

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/14/2012 8:58:39 AM

Robot#: DASY5-FL-3 | Run#: ErC-Ab-120914-04
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 21.0 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 869.0000 (MHz)
 Battery: NNTN8129A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.72 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 869 MHz; $\sigma = 1.02$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x391x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

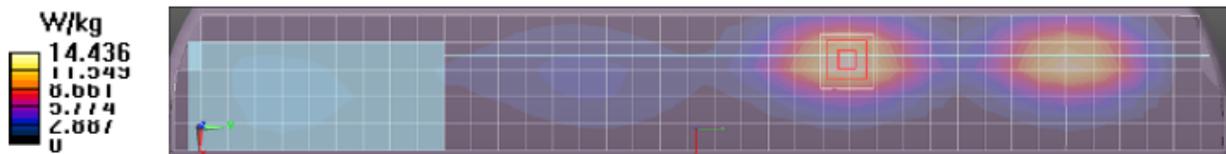
Reference Value = 115.7 V/m; Power Drift = -0.28 dB
 Fast SAR: SAR(1 g) = 14.4 mW/g; SAR(10 g) = 9.59 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 15.5 W/kg

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 = 115.7 V/m; Power Drift = -0.33 dB
 Peak SAR (extrapolated) = 20.775 mW/g
 SAR(1 g) = 14.1 mW/g; SAR(10 g) = 9.06 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 15.3 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) = 15.2 W/kg



Device back surface (battery) against phantom

**Secondary peak assessment (2dB from maximum peak)
Table 24**

Motorola Solutions, Inc. EME Laboratory
Date/Time: 12/13/2012 12:56:08 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-121213-04
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.8 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 869.0000 (MHz)
 Battery: NNTN8129A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: NTN2574B
 Start Power: 3.69 (W)

Comments: Mounted antenna with ONE SPACER ONLY! Bluetooth Pod NTN5274B.
 Area scan: Maxima - Secondary within 2db.
 Zoom scan: Maxima - Number of cubes to measure = 2.

Duty Cycle: 1:1, Medium parameters used: $f = 869$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_1 = 53.4$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x381x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 116.0 V/m; Power Drift = -0.23 dB
Fast SAR: SAR(1 g) = 13.1 mW/g; SAR(10 g) = 8.78 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 14.0 W/kg

Below 3 GHz-Rev.5/Ab Scan/2-Volume 2D Scan (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm

Reference Value = 116.0 V/m; Power Drift = -0.30 dB
 Peak SAR (extrapolated) = **Not Specified** mW/g
Fast SAR: SAR(1 g) = 13.4 mW/g; SAR(10 g) = 8.82 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 14.2 W/kg

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

Reference Value = 116.0 V/m; Power Drift = -0.30 dB
 Peak SAR (extrapolated) = 19.114 mW/g
SAR(1 g) = 13 mW/g; SAR(10 g) = 8.46 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 14.1 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x6x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 116.0 V/m; Power Drift = -0.30 dB
 Peak SAR (extrapolated) = 17.751 mW/g
SAR(1 g) = 12.2 mW/g; SAR(10 g) = 8 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 13.2 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) = 13.9 W/kg



Device back surface (battery) against phantom

Assessment of other audio accessories at the body

Table 25

Motorola Solutions, Inc. EME Laboratory
 Date/Time: 9/19/2012 7:38:00 PM

Robot#: DASY5-FL-3 | Run#: CM-Ab-120919-18
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.8 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 869.0000 (MHz)
 Battery: NNTN8129A
 Carry Acc: None (DUT Flush Against Phantom)
 Audio Acc: BDN6668A w/RLN4922A & BDN6783A
 Start Power: 3.74 (W)

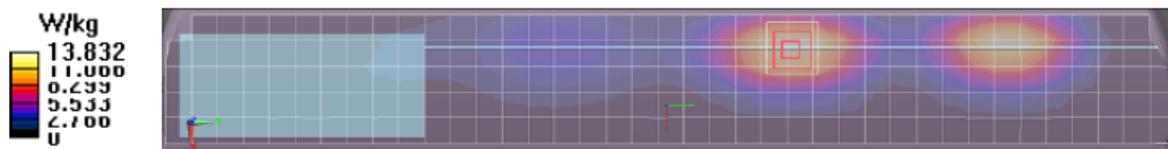
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 869 MHz; $\sigma = 1.03$ mho/m; $\epsilon_1 = 52.4$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x391x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 97.236 V/m; Power Drift = -0.17 dB
 Fast SAR: SAR(1 g) = 13.9 mW/g; SAR(10 g) = 9.36 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 15.0 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 = 97.236 V/m; Power Drift = -0.20 dB
 Peak SAR (extrapolated) = 20.357 mW/g
 SAR(1 g) = 13.8 mW/g; SAR(10 g) = 8.94 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 14.9 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) = 15.0 W/kg



Device back surface (battery) against phantom

**Secondary peak assessment (2dB from maximum peak)
Table 25**

Motorola Solutions, Inc. EME Laboratory
Date/Time: 12/14/2012 10:18:38 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-121214-02
 Model#: H59UCD9PW4AN (MUF1611)
 Phantom#: OVAL1021
 Tissue Temp: 20.9 (C)
 Serial#: 536TNM0184
 Antenna: PMAF4006A
 Test Freq: 869.0000 (MHz)
 Battery: NNTN8129A
 Carry Acc: None (DUT flush against phantom)
 Audio Acc: BDN6668A with RLN4922A and BDN6783A
 Start Power: 3.66 (W)

Comments: Mounted antenna with ONE SPACER ONLY!
 Area scan: Maxima - Secondary within 2db.
 Zoom scan: Maxima - Number of cubes to measure = 2.

Duty Cycle: 1:1, Medium parameters used: f = 869 MHz; $\sigma = 1.04$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3163, , ConvF(6.02, 6.02, 6.02); Calibrated: 4/25/2012
 Electronics: DAE3 Sn363, Calibrated: 1/20/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x381x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 117.3 V/m; Power Drift = -0.11 dB
 Fast SAR: SAR(1 g) = 13.9 mW/g; SAR(10 g) = 9.26 mW/g (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 14.9 W/kg

Below 3 GHz-Rev.5/Ab Scan/2-Volume 2D Scan (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm

Reference Value = 117.3 V/m; Power Drift = -0.27 dB
 Peak SAR (extrapolated) = **Not Specified** mW/g
 Fast SAR: SAR(1 g) = 14 mW/g; SAR(10 g) = 9.22 mW/g (SAR corrected for target medium)

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

Reference Value = 117.3 V/m; Power Drift = -0.27 dB
 Peak SAR (extrapolated) = 19.948 mW/g
 SAR(1 g) = 13.6 mW/g; SAR(10 g) = 8.82 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 14.8 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x6x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 117.3 V/m; Power Drift = -0.27 dB
 Peak SAR (extrapolated) = 18.666 mW/g
 SAR(1 g) = 12.9 mW/g; SAR(10 g) = 8.44 mW/g (SAR corrected for target medium)
 Maximum value of SAR (measured) = 13.9 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) = 14.5 W/kg



Device back surface (battery) against phantom

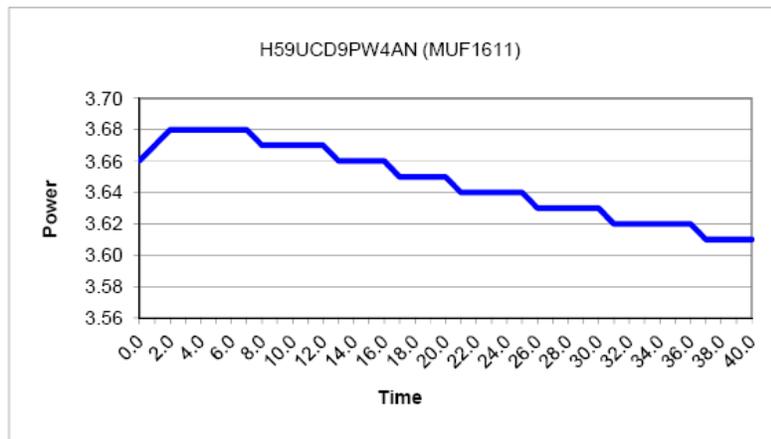
APPENDIX G DUT Supplementary Data (Power slump)

**Model # H59UCD9PW4AN (MUF1611)
Serial # 536TNM0184**

Battery#	NNTN8129A	Transmit Mode	CW
Frequency	869.0000 MHz	Audio Accessory	NTN2574B
Date	9/20/2012		

TX TIME (Minutes)	Measured Power (Watts)
----------------------	---------------------------

0.0	3.66
1.0	3.67
2.0	3.68
3.0	3.68
4.0	3.68
5.0	3.68
6.0	3.68
7.0	3.68
8.0	3.67
9.0	3.67
10.0	3.67
11.0	3.67
12.0	3.67
13.0	3.66
14.0	3.66
15.0	3.66
16.0	3.66
17.0	3.65
18.0	3.65
19.0	3.65
20.0	3.65
21.0	3.64
22.0	3.64
23.0	3.64
24.0	3.64
25.0	3.64
26.0	3.63
27.0	3.63
28.0	3.63
29.0	3.63
30.0	3.63
31.0	3.62
32.0	3.62
33.0	3.62
34.0	3.62
35.0	3.62
36.0	3.62
37.0	3.61
38.0	3.61
39.0	3.61
40.0	3.61



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