

 MOTOROLA SOLUTIONS	 ACCREDITED TESTING CERT # 2518.05
DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2	
Enterprise Mobility Solutions EME Test Laboratory Motorola Solutions Malaysia Sdn Bhd (455657-H) Customer Solution Center Plot 2, Bayan Lepas Technoplex Industrial Park, Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.	Date of Report: 01/30/13 Report Revision: O Report ID: SAR rpt_PMUE4174A_Rev.O 130130_SR11111
Responsible Engineer: Tan CheeChin (EME Section Manager) Report Author: Tan CheeChin (EME Section Manager) Date/s Tested: 12/28/12 – 01/29/13 Manufacturer/Location: Motorola, Penang Sector/Group/Div.: PCR Date submitted for test: 12/20/12 DUT Description: Full keypad with GPS & GOB 403 - 470MHz, 4W Test TX mode(s): CW (PTT) Max. Power output: 4.8 W Nominal Power: 4.0 W Tx Frequency Bands: 403-470 MHz Signaling type: FM Model(s) Tested: PMUE4174A Model(s) Certified: PMUE4174A Serial Number(s): 627TNX0276, 627TNX0279 Classification: Occupational/Controlled FCC ID: ABZ99FT4095; Rule Part 90 (406.1-470 MHz) IC: 109AB-99FT4095; (406.1-430 and 450-470 MHz) * 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. 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.	
 EMS EME Lab Senior Resource Manager, Laboratory Director Approval Date: 2/1/2013	Certification Date: 2/1/2013 Certification No.: L1130114

Appendix D

Test System Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/28/2012 7:28:29 AM

Robot#: DASY5-PG-2 | Run#: CcC-SYSP-450B-121228-01
 Dipole Model#: D450V3
 Phantom#: ELI5 1150
 Tissue Temp: 21.3 (C)
 Serial#: 1054
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.026 dB
 Adjusted SAR (1W): 4.44 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 56$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3196, , ConvF(6.99, 6.99, 6.99); Calibrated: 4/27/2012
 Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x19x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.20 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 = 35.548 V/m; Power Drift = 0.00 dB

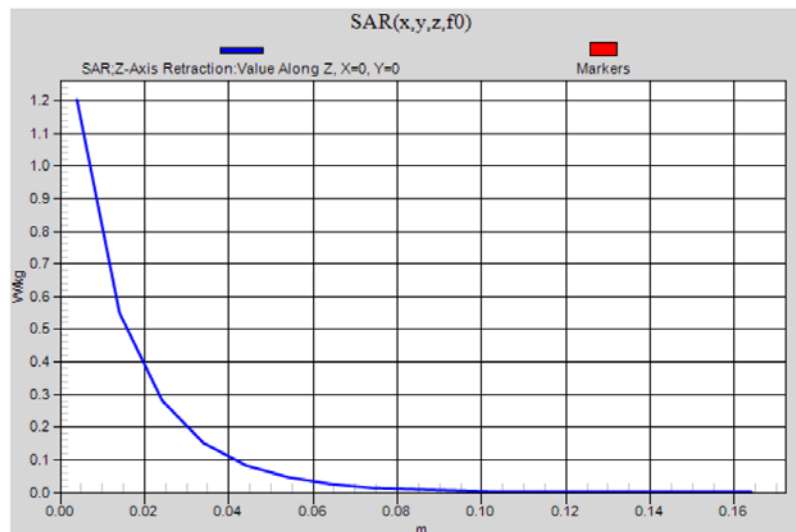
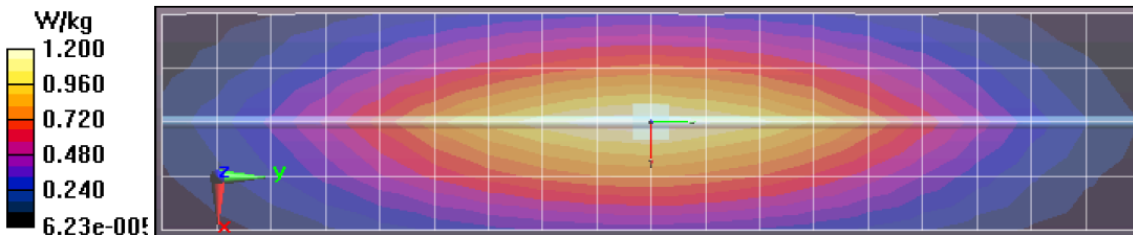
Peak SAR (extrapolated) = 1.760 mW/g

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.739 mW/g (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.21 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: 1/9/2013 8:12:24 AM

Robot#: DASY4-PG-1 | Run#: CcC-SYSP-450B-130109-01
 Dipole Model#: D450V3
 Phantom#: ELI4 1028
 Tissue Temp: 20.8 (C)
 Serial#: 1054
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.043 dB
 Adjusted SAR (1W): 4.56 mW/g (1g)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.140 mW/g (1g); 0.759 mW/g (10g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 56.1$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.8 V/m; Power Drift = -0.0082 dB

Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.759 mW/g

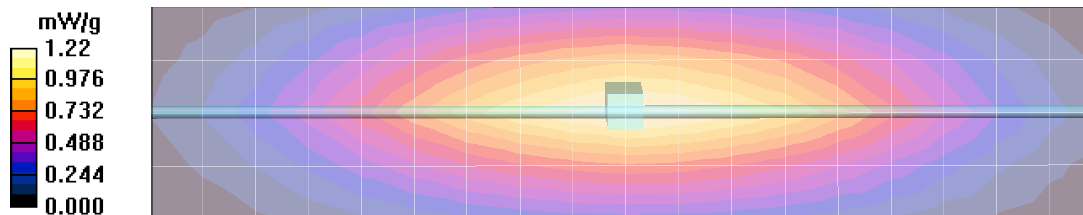
Maximum value of SAR (measured) = 1.23 mW/g

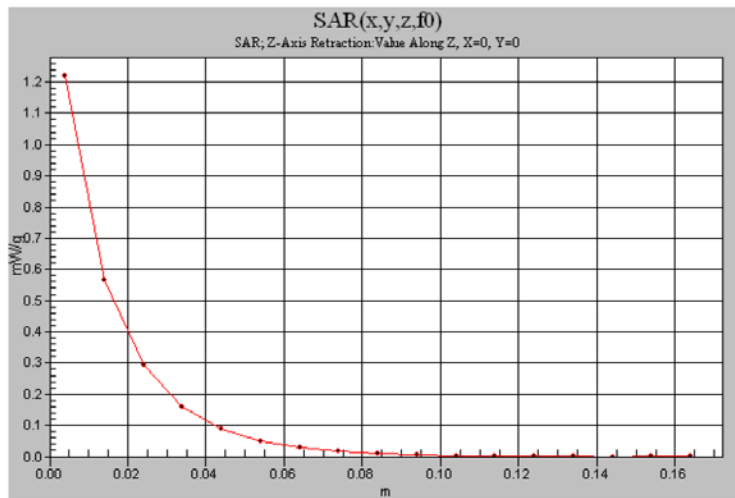
System Performance Check/Dipole Area Scan 2 (5x19x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.21 mW/g

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

Maximum value of SAR (measured) = 1.22 mW/g





Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/9/2013 6:50:08 PM

Robot#: DASY4-PG-1 | Run#: PS-SYSP-450H-130109-12
Dipole Model#: D450V3
Phantom#: ELI4 1037
Tissue Temp: 20.7 (C)
Serial#: 1054
Test Freq: 450 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.054 dB
Adjusted SAR (1W): 4.68 mW/g (1g)

Note:
Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.170 mW/g (1g); 0.780 mW/g (10g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.87$ mho/m; $\epsilon_r = 43.2$; $\rho = 1000$ kg/m³
Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.41, 6.41, 6.41)
Electronics: DAE3 Sn374, Calibrated: 4/24/2012

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.1 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 1.79 W/kg

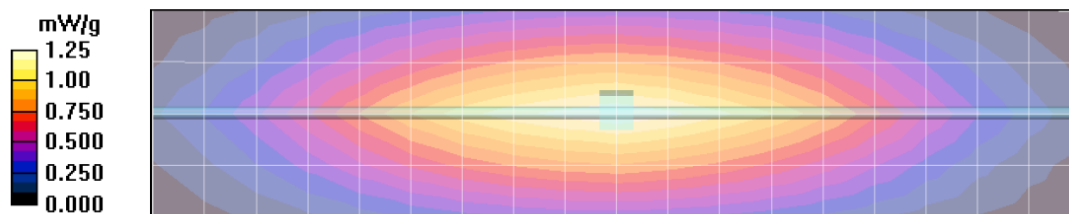
SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.780 mW/g

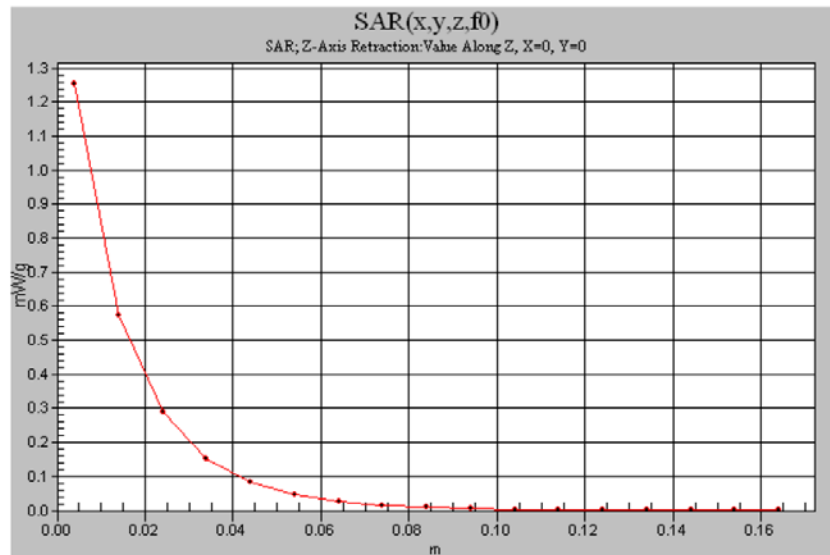
Maximum value of SAR (measured) = 1.26 mW/g

System Performance Check/Dipole Area Scan 2 (5x19x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.25 mW/g

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





Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/10/2013 7:09:31 AM

Robot#: DASY4-PG-1 | Run#: CcC-SYSP-450H-130110-01
 Dipole Model#: D450V3
 Phantom#: ELI4 1037
 Tissue Temp: 21.0 (C)
 Serial#: 1054
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.046 dB
 Adjusted SAR (1W): 4.76 mW/g (1g)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.190 mW/g (1g); 0.792 mW/g (10g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.87$ mho/m; $\epsilon_r = 43.4$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.41, 6.41, 6.41)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.4 V/m; Power Drift = 0.0101 dB

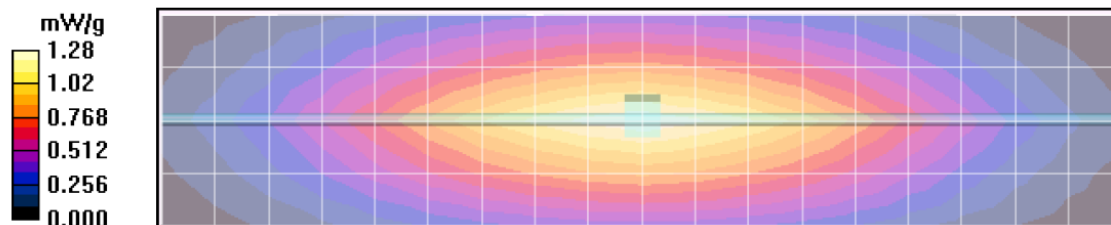
Peak SAR (extrapolated) = 1.81 W/kg

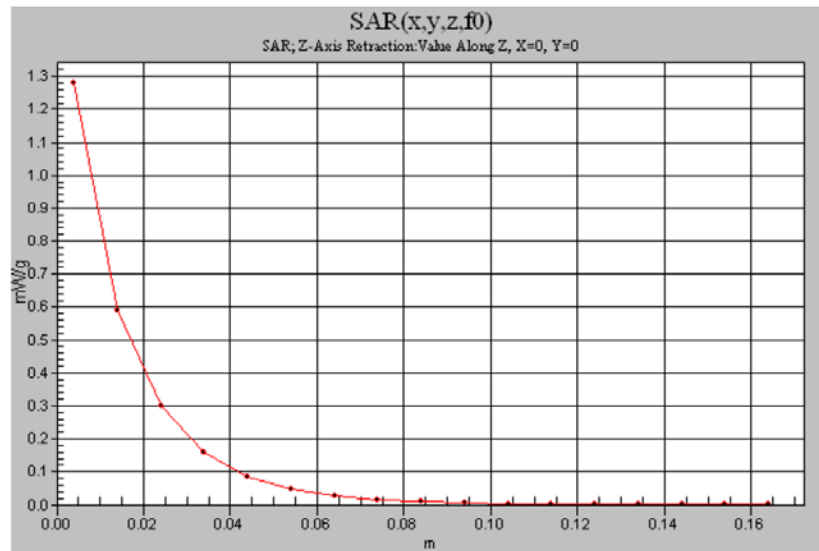
SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.792 mW/g

Maximum value of SAR (measured) = 1.28 mW/g

System Performance Check/Dipole Area Scan 2 (5x19x1): Measurement grid: dx=15mm, dy=15mm

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





Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/11/2013 8:36:57 AM

Robot#: DASY4-PG-1 | Run#: CcC-SYSP-450B-130111-01
 Dipole Model#: D450V3
 Phantom#: ELI4 1028
 Tissue Temp: 21.4 (C)
 Serial#: 1054
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.048 dB
 Adjusted SAR (1W): 4.50 mW/g (1g)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.126 mW/g (1g); 0.745 mW/g (10g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.4$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

System Performance Check/Dipole Area Scan 2 (5x19x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.18 mW/g

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

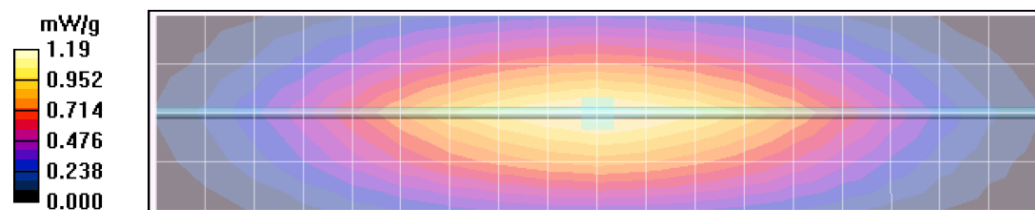
Reference Value = 35.6 V/m; Power Drift = -0.00302 dB

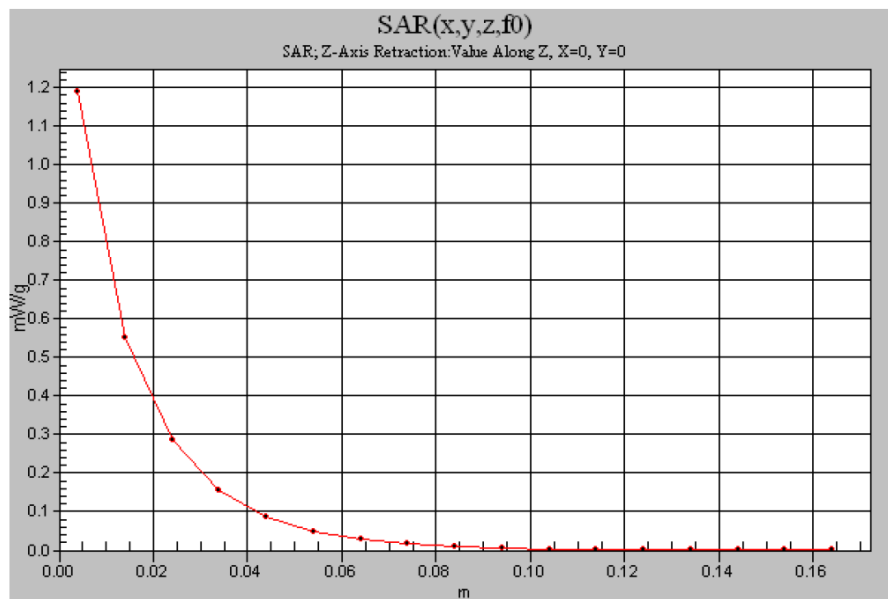
Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.743 mW/g

Maximum value of SAR (measured) = 1.19 mW/g

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





Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/21/2013 9:03:01 AM

Robot#: DASY5-PG-2 | Run#: CcC-SYSP-450H-130121-04
 Dipole Model# D450V3
 Phantom#: ELI4 1037
 Tissue Temp: 21.4 (C)
 Serial#: 1054
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.03 dB
 Adjusted SAR (1W): 4.68 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.87$ mho/m; $\epsilon_r = 43.6$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3196, , ConvF(6.64, 6.64, 6.64); Calibrated: 4/27/2012

Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x19x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.25 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 = 38.247 V/m; Power Drift = -0.03 dB

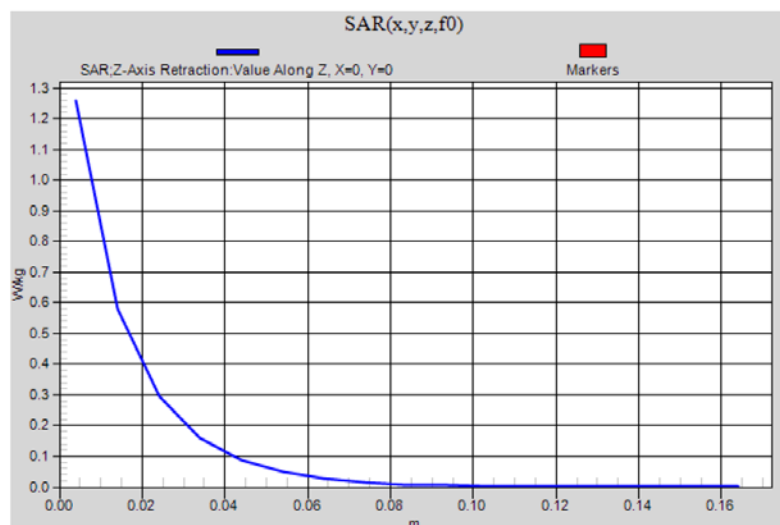
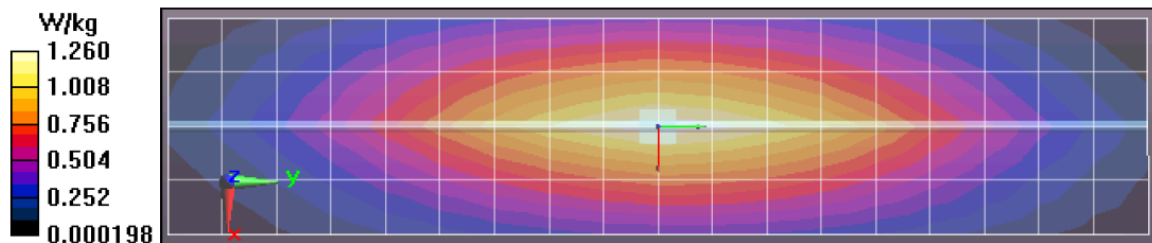
Peak SAR (extrapolated) = 1.795 mW/g

SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.780 mW/g (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.26 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: 1/21/2013 3:23:05 PM

Robot#: DASY5-PG-2 | Run#: PS-SYSP-450B-130121-12
 Dipole Model# D450V3
 Phantom#: ELI5 1147
 Tissue Temp: 21.6 (C)
 Serial#: 1054
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.027 dB
 Adjusted SAR (1W): 4.44 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.3$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3196, , ConvF(6.99, 6.99, 6.99); Calibrated: 4/27/2012
 Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x19x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.20 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

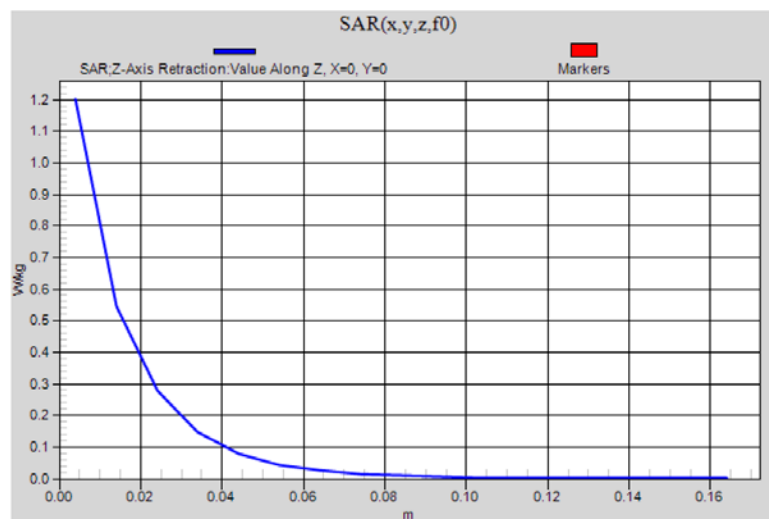
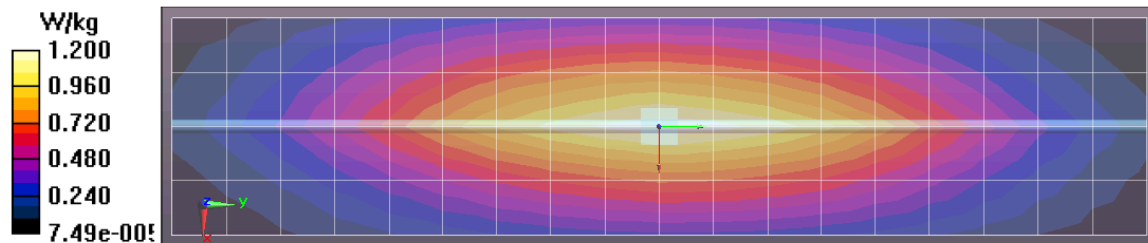
Reference Value = 35.542 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.763 mW/g

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.735 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: 1/22/2013 6:53:29 AM

Robot#: DASY5-PG-2 | Run#: CcC-SYSP-450B-130122-01
 Dipole Model#: D450V3
 Phantom#: ELI5 1147
 Tissue Temp: 20.7 (C)
 Serial#: 1054
 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; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3196, , ConvF(6.99, 6.99, 6.99); Calibrated: 4/27/2012

Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x19x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.21 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 = 35.842 V/m; Power Drift = 0.00 dB

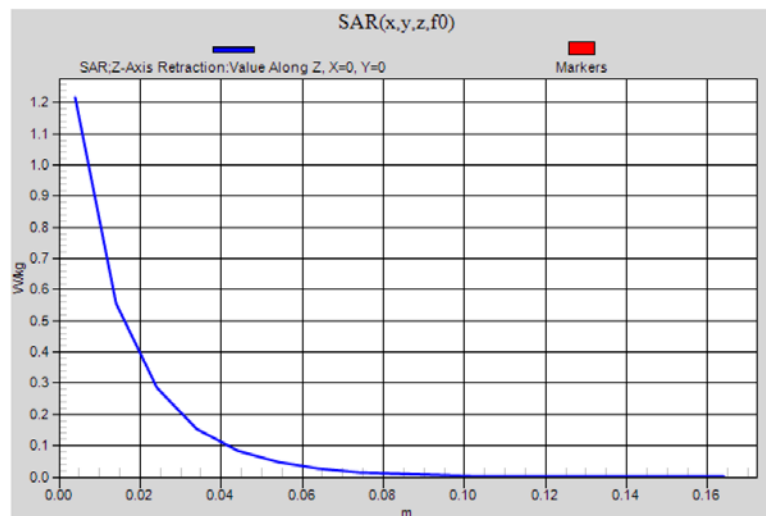
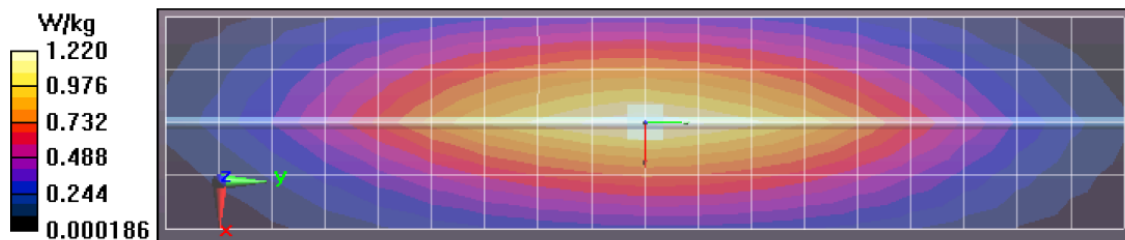
Peak SAR (extrapolated) = 1.770 mW/g

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

Maximum value of SAR (measured) = 1.22 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: 1/29/2013 2:41:55 PM

Robot#: DASY5-PG-2 | Run#: CcC-SYSP-450B-130129-01
 Dipole Model#: D450V3
 Phantom#: ELI5 1147
 Tissue Temp: 21.3 (C)
 Serial#: 1054
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.032 dB
 Adjusted SAR (1W): 4.48 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3196, , ConvF(6.99, 6.99, 6.99); Calibrated: 4/27/2012

Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (5x19x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.21 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 = 35.770 V/m; Power Drift = -0.01 dB

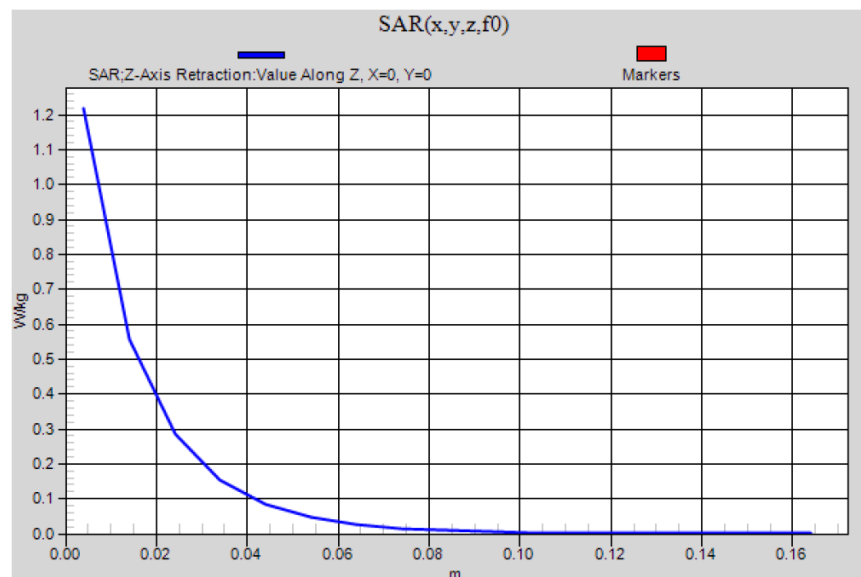
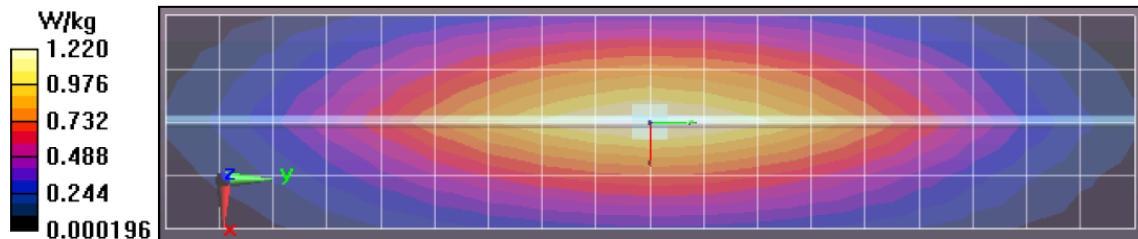
Peak SAR (extrapolated) = 1.775 mW/g

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.745 mW/g (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.22 W/kg

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

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



Appendix E
Worst Case for Band 406.1 – 470 MHz
DUT Scans (Shortened Scan and Highest SAR configurations)

Shortened Scan Result

Table 24

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/11/2013 2:21:22 PM

Robot#: DASY4-PG-1 | Run#: PS-AB-130111-07
 Model#: PMUE4174A
 Phantom#: ELI4 1028
 Tissue Temp: 21.0 (C)
 Serial#: 627TNX0279
 Antenna: PMAE4024B
 Test Freq: 443.300 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6086A
 Audio Acc: PMLN5275C
 Start Power: 4.60 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 8.651 mW/g (1g); 5.686 mW/g (10g)

Comments: Shorten Scan

Duty Cycle: 1:1, Medium parameters used: $f = 443$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.82, 6.82, 6.82)
 Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Ab Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 93.5 V/m; Power Drift = -0.421 dB

Motorola Fast SAR: SAR(1 g) = 8.19 mW/g; SAR(10 g) = 5.85 mW/g

Maximum value of SAR (interpolated) = 8.81 mW/g

Ab Scan/2-Volume 2D Scan (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 93.5 V/m; Power Drift = -0.458 dB

Peak SAR (extrapolated) = 9.28 W/kg

Motorola Fast SAR: SAR(1 g) = 8.4 mW/g; SAR(10 g) = 5.75 mW/g

Maximum value of SAR (interpolated) = 9.28 mW/g

Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 103.7 V/m; Power Drift = -0.269 dB

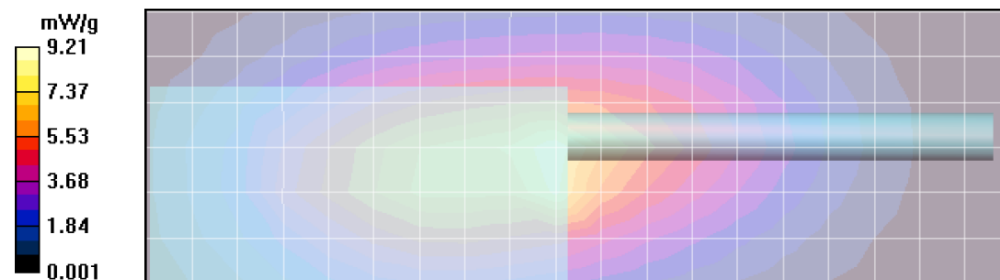
Peak SAR (extrapolated) = 14.4 W/kg

SAR(1 g) = 8.61 mW/g; SAR(10 g) = 5.67 mW/g

Maximum value of SAR (measured) = 9.60 mW/g

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

Maximum value of SAR (measured) = 9.21 mW/g



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

Representative full scan run time was 25 minutes.

“Shortened” scan max calculated SAR using SAR drift: 1-g Avg. = 4.80 mW/g; 10-g Avg. = 3.16 mW/g.

Zoom scan max calculated SAR using SAR drift (see part 1 section 13.5): 1-g Avg. = 4.75 mW/g; 10-g Avg. = 3.13 mW/g. (Run# CcC-AB-130111-06, Table 17)

Body - Highest SAR Configuration Result

Table 24

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/11/2013 2:21:22 PM

Robot#: DASY4-PG-1 | Run#: PS-AB-130111-07
 Model#: PMUE4174A
 Phantom#: ELI4 1028
 Tissue Temp: 21.0 (C)
 Serial#: 627TNX0279
 Antenna: PMAE4024B
 Test Freq: 443.300 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6086A
 Audio Acc: PMLN5275C
 Start Power: 4.60 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 8.651 mW/g (1g); 5.686 mW/g (10g)

Comments: Shorten Scan

Duty Cycle: 1:1, Medium parameters used: $f = 443$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.82, 6.82, 6.82)
 Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Ab Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 93.5 V/m; Power Drift = -0.421 dB

Motorola Fast SAR: SAR(1 g) = 8.19 mW/g; SAR(10 g) = 5.85 mW/g

Maximum value of SAR (interpolated) = 8.81 mW/g

Ab Scan/2-Volume 2D Scan (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 93.5 V/m; Power Drift = -0.458 dB

Peak SAR (extrapolated) = 9.28 W/kg

Motorola Fast SAR: SAR(1 g) = 8.4 mW/g; SAR(10 g) = 5.75 mW/g

Maximum value of SAR (interpolated) = 9.28 mW/g

Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 103.7 V/m; Power Drift = -0.269 dB

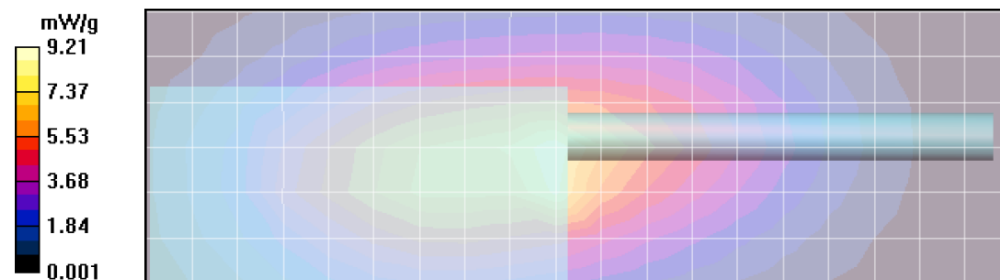
Peak SAR (extrapolated) = 14.4 W/kg

SAR(1 g) = 8.61 mW/g; SAR(10 g) = 5.67 mW/g

Maximum value of SAR (measured) = 9.60 mW/g

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

Maximum value of SAR (measured) = 9.21 mW/g



Face - Highest SAR Configuration Result Table 20

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/9/2013 7:31:36 PM

Robot#: DASY4-PG-1 | Run#: PS-FACE-130109-13
 Model#: PMUE4174A
 Phantom#: ELI4 1037
 Tissue Temp: 20.7 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4018B
 Test Freq: 433.000 (MHz)
 Battery: NNTN8386A
 Carry Acc: NONE
 Audio Acc: NONE
 Start Power: 4.79 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 5.926 mW/g (1g); 4.431 mW/g (10g)

Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: $f = 433$ MHz; $\sigma = 0.85$ mho/m; $\epsilon_r = 43.6$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.41, 6.41, 6.41)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Face Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 88.4 V/m; Power Drift = -0.322 dB

Motorola Fast SAR: SAR(1 g) = 6.15 mW/g; SAR(10 g) = 4.59 mW/g

Maximum value of SAR (interpolated) = 6.45 mW/g

Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 88.4 V/m; Power Drift = -0.377 dB

Peak SAR (extrapolated) = 6.24 W/kg

Motorola Fast SAR: SAR(1 g) = 5.97 mW/g; SAR(10 g) = 4.45 mW/g

Maximum value of SAR (interpolated) = 6.24 mW/g

Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 88.4 V/m; Power Drift = -0.463 dB

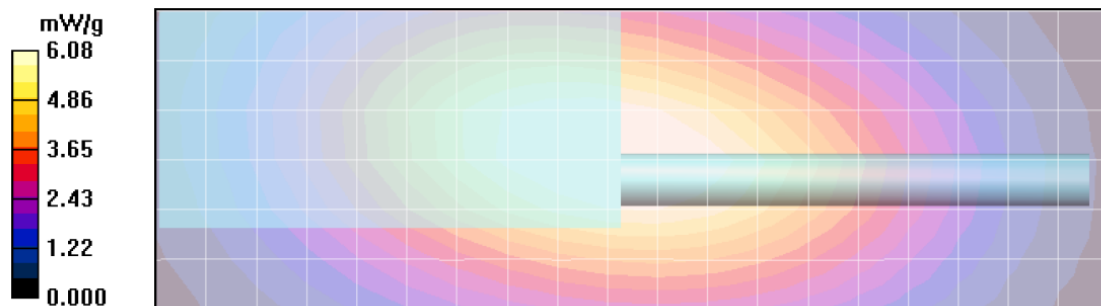
Peak SAR (extrapolated) = 7.73 W/kg

SAR(1 g) = 5.87 mW/g; SAR(10 g) = 4.41 mW/g

Maximum value of SAR (measured) = 6.16 mW/g

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

Maximum value of SAR (measured) = 6.08 mW/g



APPENDIX F
DUT Scans - FCC Part 90 (406.1 – 470 MHz) per KDB 643646

Assessments at the Body with Body worn PMLN6086A

Table 14

Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/28/2012 3:19:42 PM

Robot#: DASY5-PG-2 | Run#: Lee-AB-121228-06
 Model#: PMUE4174A
 Phantom#: ELI5 1150
 Tissue Temp: 21.6 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4024B
 Test Freq: 443.300 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6086A
 Audio Acc: PMMN4067B
 Start Power: 4.75 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 443 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 56.1$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3196, , ConvF(6.99, 6.99, 6.99); Calibrated: 4/27/2012
 Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x191x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 81.078 V/m ; Power Drift = -0.35 dB

Fast SAR: SAR(1 g) = 7.25 mW/g ; SAR(10 g) = 5.25 mW/g (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.75 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 = 81.078 V/m ; Power Drift = -0.40 dB

Peak SAR (extrapolated) = **Not Specified** mW/g

Fast SAR: SAR(1 g) = 7.72 mW/g ; SAR(10 g) = 5.29 mW/g (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 8.40 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 = 81.078 V/m ; Power Drift = -0.49 dB

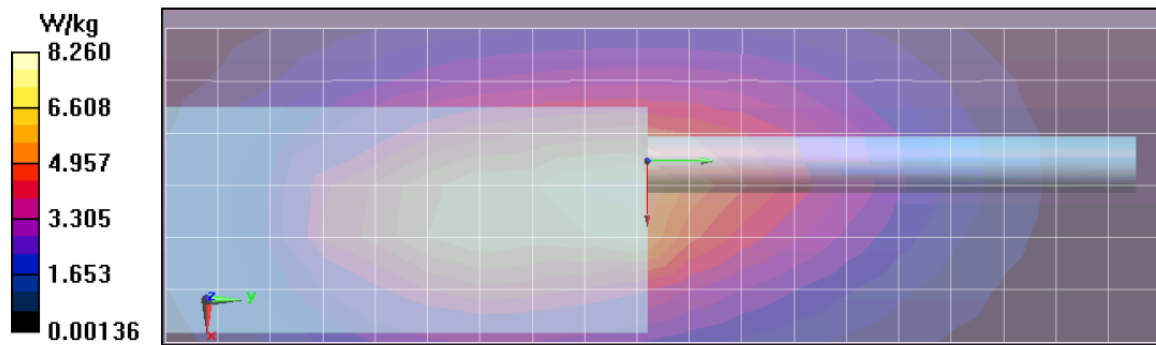
Peak SAR (extrapolated) = 12.490 mW/g

SAR(1 g) = 7.55 mW/g ; SAR(10 g) = 4.98 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: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$

Maximum value of SAR (measured) = 8.26 W/kg



Assessments at the Body with Body worn PMLN6097A

Table 15

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/9/2013 11:00:30 AM

Robot#: DASY4-PG-1 | Run#: Lee-AB-130109-03
 Model#: PMUE4174A
 Phantom#: ELI4 1028
 Tissue Temp: 20.0 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4024B
 Test Freq: 430.000 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6097A
 Audio Acc: PMMN4067B
 Start Power: 4.79 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 2.369 mW/g (1g); 1.804 mW/g (10g)

Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: $f = 430$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 56.3$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Ab Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 51.2 V/m; Power Drift = -0.264 dB

Motorola Fast SAR: SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.83 mW/g

Maximum value of SAR (interpolated) = 2.56 mW/g

Ab Scan/2-Volume 2D Scan (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 51.2 V/m; Power Drift = -0.295 dB

Peak SAR (extrapolated) = 2.48 W/kg

Motorola Fast SAR: SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.77 mW/g

Maximum value of SAR (interpolated) = 2.48 mW/g

Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 51.2 V/m; Power Drift = -0.353 dB

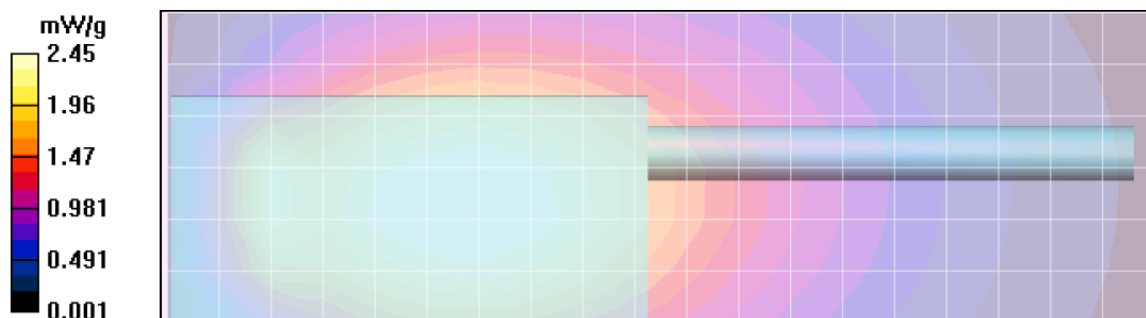
Peak SAR (extrapolated) = 3.11 W/kg

SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.8 mW/g

Maximum value of SAR (measured) = 2.46 mW/g

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

Maximum value of SAR (measured) = 2.45 mW/g



Assessments at the Body with Body worn PMLN6099A

Table 16

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/9/2013 1:50:20 PM

Robot#: DASY4-PG-1 | Run#: Lee-AB-130109-06
 Model#: PMUE4174A
 Phantom#: ELI4 1028
 Tissue Temp: 19.8 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4024B
 Test Freq: 430.000 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6099A
 Audio Acc: PMMN4067B
 Start Power: 4.80 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 2.489 mW/g (1g); 1.914 mW/g (10g)

Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: $f = 430$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 56.3$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Ab Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 53.6 V/m; Power Drift = -0.241 dB

Motorola Fast SAR: SAR(1 g) = 2.58 mW/g; SAR(10 g) = 1.93 mW/g

Maximum value of SAR (interpolated) = 2.70 mW/g

Ab Scan/2-Volume 2D Scan (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 53.6 V/m; Power Drift = -0.293 dB

Peak SAR (extrapolated) = 2.64 W/kg

Motorola Fast SAR: SAR(1 g) = 2.52 mW/g; SAR(10 g) = 1.88 mW/g

Maximum value of SAR (interpolated) = 2.64 mW/g

Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 53.6 V/m; Power Drift = -0.371 dB

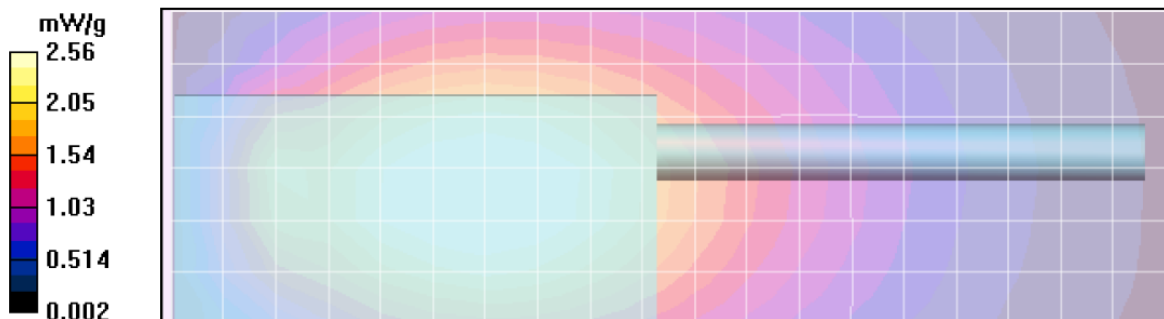
Peak SAR (extrapolated) = 3.28 W/kg

SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.91 mW/g

Maximum value of SAR (measured) = 2.59 mW/g

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

Maximum value of SAR (measured) = 2.56 mW/g



Assessments of other audio accessories at the body

Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/11/2013 1:40:56 PM

Robot#: DASY4-PG-1 | Run#: CcC-AB-130111-06
 Model#: PMUE4174A
 Phantom#: ELI4 1028
 Tissue Temp: 21.0 (C)
 Serial#: 627INX0279
 Antenna: PMAE4024B
 Test Freq: 443.300 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6086A
 Audio Acc: PMLN5275C
 Start Power: 4.61 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 8.330 mW/g (1g); 5.485 mW/g (10g)

Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: $f = 443$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Ab Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 91.9 V/m; Power Drift = -0.262 dB

Motorola Fast SAR: SAR(1 g) = 8.22 mW/g; SAR(10 g) = 5.86 mW/g

Maximum value of SAR (interpolated) = 8.84 mW/g

Ab Scan/2-Volume 2D Scan (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 91.9 V/m; Power Drift = -0.305 dB

Peak SAR (extrapolated) = 9.31 W/kg

Motorola Fast SAR: SAR(1 g) = 8.53 mW/g; SAR(10 g) = 5.8 mW/g

Maximum value of SAR (interpolated) = 9.31 mW/g

Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 91.9 V/m; Power Drift = -0.394 dB

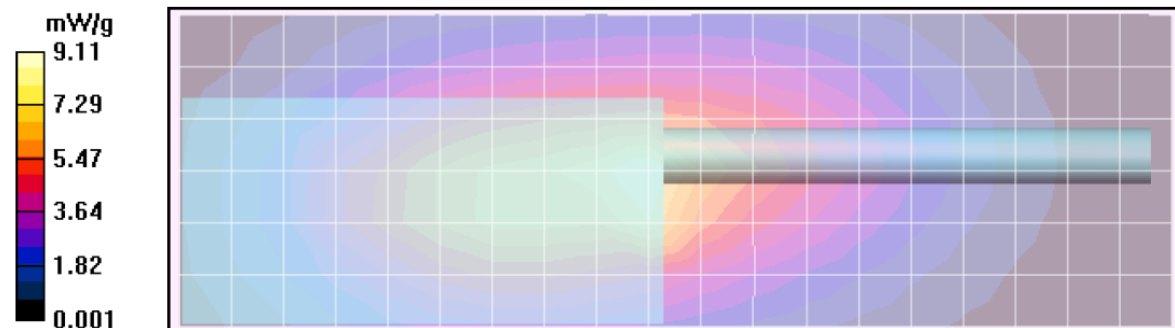
Peak SAR (extrapolated) = 13.7 W/kg

SAR(1 g) = 8.29 mW/g; SAR(10 g) = 5.47 mW/g

Maximum value of SAR (measured) = 9.13 mW/g

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

Maximum value of SAR (measured) = 9.11 mW/g



Assessments at the Face

Table 20

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/9/2013 7:31:36 PM

Robot#: DASY4-PG-1 | Run#: PS-FACE-130109-13
 Model#: PMUE4174A
 Phantom#: ELI4 1037
 Tissue Temp: 20.7 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4018B
 Test Freq: 433.000 (MHz)
 Battery: NNTN8386A
 Carry Acc: NONE
 Audio Acc: NONE
 Start Power: 4.79 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 5.926 mW/g (1g); 4.431 mW/g (10g)

Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: $f = 433$ MHz; $\sigma = 0.85$ mho/m; $\epsilon_r = 43.6$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.41, 6.41, 6.41)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Face Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 88.4 V/m; Power Drift = -0.322 dB

Motorola Fast SAR: SAR(1 g) = 6.15 mW/g; SAR(10 g) = 4.59 mW/g

Maximum value of SAR (interpolated) = 6.45 mW/g

Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 88.4 V/m; Power Drift = -0.377 dB

Peak SAR (extrapolated) = 6.24 W/kg

Motorola Fast SAR: SAR(1 g) = 5.97 mW/g; SAR(10 g) = 4.45 mW/g

Maximum value of SAR (interpolated) = 6.24 mW/g

Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 88.4 V/m; Power Drift = -0.463 dB

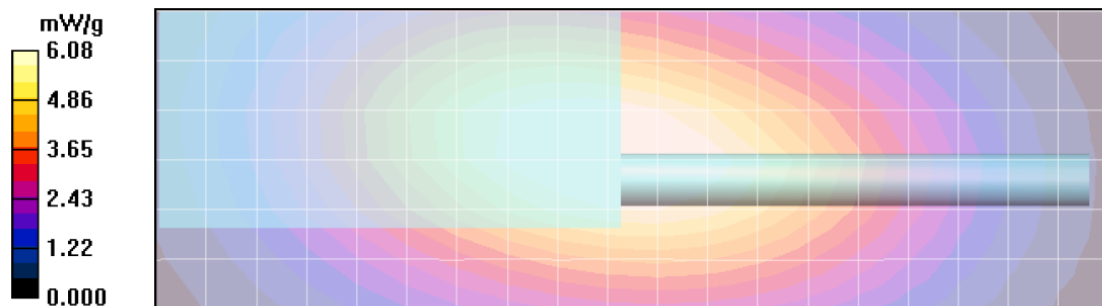
Peak SAR (extrapolated) = 7.73 W/kg

SAR(1 g) = 5.87 mW/g; SAR(10 g) = 4.41 mW/g

Maximum value of SAR (measured) = 6.16 mW/g

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

Maximum value of SAR (measured) = 6.08 mW/g



APPENDIX G

DUT Scans Outside Part 90 (403 – 470 MHz) & Industry Canada Frequency Range (406.1-430 MHz) and (450-470 MHz) within Part 90

**Data from 403-406 MHz enclosed for this Appendix is not applicable for FCC Part 90
Additional frequencies ran within the FCC band to satisfy Industry Canada frequencies are applicable for FCC
Part 90**

Assessments outside FCC Part 90 at the Body

Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/29/2013 3:28:25 PM

Robot#: DASY5-PG-2 | Run#: CcC-AB-130129-02
 Model#: PMUE4174A
 Phantom#: ELI5 1147
 Tissue Temp: 21.3 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4018B
 Test Freq: 403.000 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6086A
 Audio Acc: PMLN5275C
 Start Power: 4.40 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 403$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 55.3$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3196, , ConvF(6.99, 6.99, 6.99); Calibrated: 4/27/2012
 Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 78.061 V/m; Power Drift = -0.27 dB

Fast SAR: SAR(1 g) = 6.64 mW/g; SAR(10 g) = 4.69 mW/g (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.01 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 = 78.061 V/m; Power Drift = -0.32 dB

Peak SAR (extrapolated) = **Not Specified** mW/g

Fast SAR: SAR(1 g) = 6.58 mW/g; SAR(10 g) = 4.58 mW/g (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 6.92 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 = 78.061 V/m; Power Drift = -0.38 dB

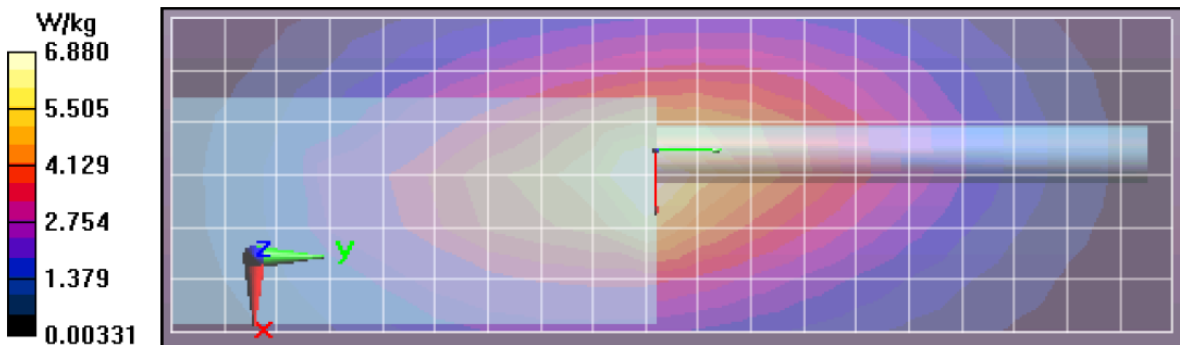
Peak SAR (extrapolated) = 9.612 mW/g

SAR(1 g) = 6.41 mW/g; SAR(10 g) = 4.38 mW/g (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.74 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) = 6.88 W/kg



Assessments outside FCC Part 90 at the Face

Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/10/2013 6:24:24 PM

Robot#: DASY4-PG-1 | Run#: PS-FACE-130110-04
 Model#: PMUE4174A
 Phantom#: ELI4 1037
 Tissue Temp: 21.2 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4018B
 Test Freq: 403.000 (MHz)
 Battery: NNTN8386A
 Carry Acc: NONE
 Audio Acc: NONE
 Start Power: 4.38 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 4.516 mW/g (1g); 3.396 mW/g (10g)

Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: $f = 403$ MHz; $\sigma = 0.83$ mho/m; $\epsilon_r = 44.5$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.41, 6.41, 6.41)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Face Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 74.8 V/m; Power Drift = -0.202 dB

Motorola Fast SAR: SAR(1 g) = 4.58 mW/g; SAR(10 g) = 3.42 mW/g

Maximum value of SAR (interpolated) = 4.81 mW/g

Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 74.8 V/m; Power Drift = -0.238 dB

Peak SAR (extrapolated) = 4.70 W/kg

Motorola Fast SAR: SAR(1 g) = 4.5 mW/g; SAR(10 g) = 3.35 mW/g

Maximum value of SAR (interpolated) = 4.70 mW/g

Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 74.8 V/m; Power Drift = -0.313 dB

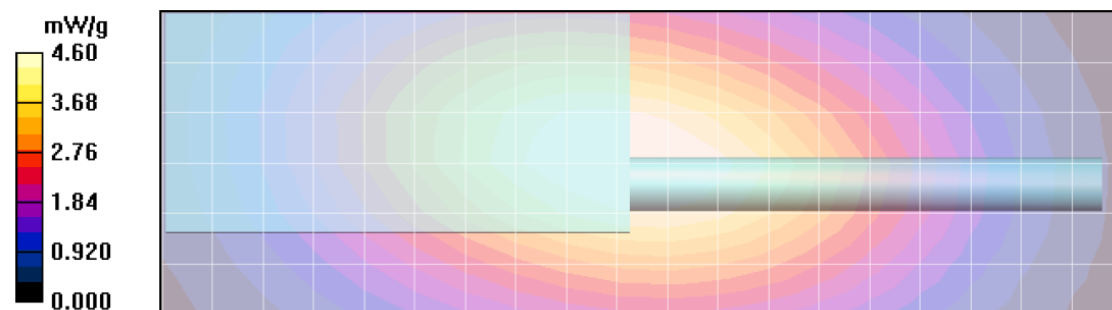
Peak SAR (extrapolated) = 5.79 W/kg

SAR(1 g) = 4.42 mW/g; SAR(10 g) = 3.33 mW/g

Maximum value of SAR (measured) = 4.63 mW/g

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

Maximum value of SAR (measured) = 4.60 mW/g



Assessment for Industry Canada frequency range - Body Table 22

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/21/2013 4:08:51 PM

Robot#: DASY5-PG-2 | Run#: PS-AB-130121-13
 Model#: PMUE4174A
 Phantom#: ELI5 1147
 Tissue Temp: 21.2 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4018B
 Test Freq: 406.125 (MHz)
 Battery: NNTN8386A
 Carry Acc: PMLN6086A
 Audio Acc: PMLN5275C
 Start Power: 4.57 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 406$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3196, , ConvF(6.99, 6.99, 6.99); Calibrated: 4/27/2012
 Electronics: DAE4 Sn688, Calibrated: 4/23/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 78.317 V/m; Power Drift = -0.30 dB

Fast SAR: SAR(1 g) = 7.15 mW/g; SAR(10 g) = 5.1 mW/g (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.51 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 = 78.317 V/m; Power Drift = -0.35 dB

Peak SAR (extrapolated) = **Not Specified** mW/g

Fast SAR: SAR(1 g) = 7.15 mW/g; SAR(10 g) = 4.99 mW/g (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.60 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 = 78.317 V/m; Power Drift = -0.44 dB

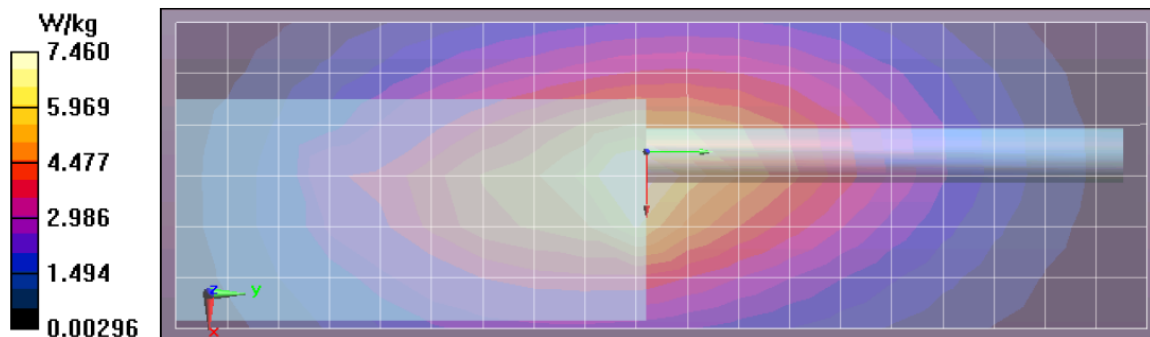
Peak SAR (extrapolated) = 10.572 mW/g

SAR(1 g) = 6.98 mW/g; SAR(10 g) = 4.74 mW/g (SAR corrected for target medium)

Maximum value of SAR (measured) = 7.29 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) = 7.46 W/kg



Assessment for Industry Canada frequency range - Face Table 23

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/9/2013 8:09:51 PM

Robot#: DASY4-PG-1 | Run#: PS-FACE-130109-14
 Model#: PMUE4174A
 Phantom#: ELI4 1037
 Tissue Temp: 20.9 (C)
 Serial#: 627TNX0276
 Antenna: PMAE4024B
 Test Freq: 430.000 (MHz)
 Battery: NNTN8386A
 Carry Acc: NONE
 Audio Acc: NONE
 Start Power: 4.79 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 5.956 mW/g (1g); 4.451 mW/g (10g)

Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: $f = 430$ MHz; $\sigma = 0.85$ mho/m; $\epsilon_r = 43.6$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3122, Calibrated: 4/26/2012, ConvF(6.41, 6.41, 6.41)

Electronics: DAE3 Sn374, Calibrated: 4/24/2012

Face Scan/1-Area Scan (61x191x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 87.7 V/m; Power Drift = -0.217 dB

Motorola Fast SAR: SAR(1 g) = 6.09 mW/g; SAR(10 g) = 4.55 mW/g

Maximum value of SAR (interpolated) = 6.38 mW/g

Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 87.7 V/m; Power Drift = -0.256 dB

Peak SAR (extrapolated) = 6.27 W/kg

Motorola Fast SAR: SAR(1 g) = 5.99 mW/g; SAR(10 g) = 4.46 mW/g

Maximum value of SAR (interpolated) = 6.27 mW/g

Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 87.7 V/m; Power Drift = -0.343 dB

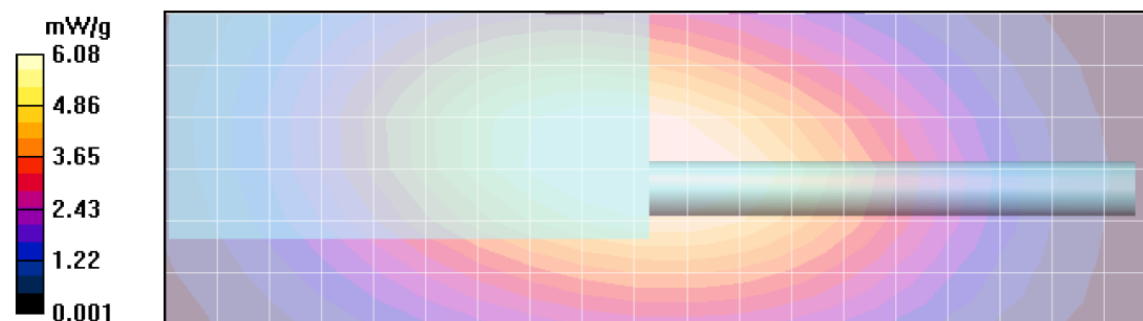
Peak SAR (extrapolated) = 7.79 W/kg

SAR(1 g) = 5.9 mW/g; SAR(10 g) = 4.43 mW/g

Maximum value of SAR (measured) = 6.19 mW/g

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

Maximum value of SAR (measured) = 6.08 mW/g



APPENDIX H

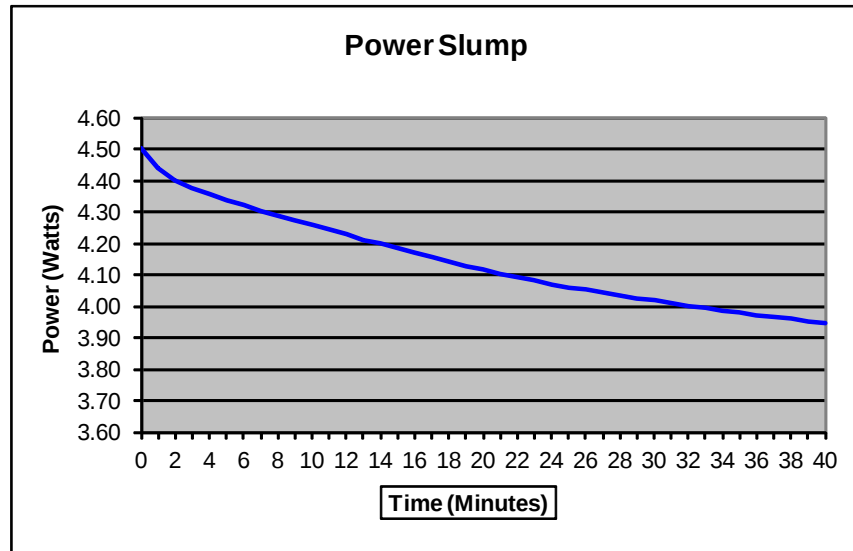
DUT Supplementary Data (Power slump)

Power Slump Model # : PMUE4174A
Serial # : 627TNX0279

Battery: NNTN8386A **Transmit Mode:** CW
Frequency: 443.3 MHz **Audio Accessory:** PMLN5275C
Date: 1/17/2013

Tx Time (Minutes)	Measure Power (Watts)
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0.0	4.50
1.0	4.44
2.0	4.40
3.0	4.38
4.0	4.36
5.0	4.34
6.0	4.32
7.0	4.30
8.0	4.29
9.0	4.27
10.0	4.26
11.0	4.24
12.0	4.23
13.0	4.21
14.0	4.20
15.0	4.19
16.0	4.17
17.0	4.16
18.0	4.14
19.0	4.13
20.0	4.12
21.0	4.10
22.0	4.09
23.0	4.08
24.0	4.07
25.0	4.06
26.0	4.05
27.0	4.04
28.0	4.03
29.0	4.02
30.0	4.02
31.0	4.01
32.0	4.00
33.0	3.99
34.0	3.99
35.0	3.98
36.0	3.97
37.0	3.97
38.0	3.96
39.0	3.95
40.0	3.95



APPENDIX I

DUT Test Position Photos

Photos available in Exhibit 7B

APPENDIX J
DUT, Body worn and Audio Accessory Photos

Photos available in Exhibit 7B