MOTOROLA SOLUTIONS

ACCREDITED
TESTING CERT # 2518.01

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

Motorola Solutions Inc.
EME Test Laboratory
8000 West Sunrise Blvd
Fort Lauderdale, FL. 33322

Date of Report: 10/10/2012
Report Revision: O
Report ID: SR10822 SRX2200 UHFR1 ULP Rev O 121010

Responsible Engineer:	Stephen C. Whalen (Principal Staff EME Test Engineer)
Report Author:	Stephen C. Whalen (Principal Staff EME Test Engineer)
Date/s Tested:	09/05/2012-09/13/2012 & 9/25/2012
Manufacturer/Location:	Motorola, Reynosa/Schaumburg
Sector/Group/Div.:	AESS – Astro Engineering Subscriber Solutions
Date submitted for test:	7/30/2012
DUT Description:	380 - 470MHz 10-100 mW 6.25kHz/12.5kHz/25kHz , Dual Display full keypad Model. 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:	120 mW; 10 mW (Bluetooth)
Nominal Power:	100 mW; 10 mW (Bluetooth)
Tx Frequency Bands:	380 - 470 MHz; 2.402-2.480 GHz (Bluetooth)
Signaling type:	FM, TDMA, FHSS (Bluetooth)
Model(s) Tested:	H99QAH9PW7AN (NUE1155)
Model(s) Certified:	H99QAH9PW7AN (NUE1155)
Serial Number(s):	CAI1216CCH
Classification:	Occupational/Controlled
FCC ID:	AZ489FT4908; Rule Part 90 (406.1-470 MHz); Rule part 15 (2402 – 2480 MHz) Results outside FCC bands are not applicable for FCC compliance demonstration.
IC:	109U-89FT4908

* 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.

Deanna Zakharia

Deanna Zakharia
EMS EME Lab Senior Resource Manager,
Laboratory Director

Approval Date: 10/11/2012

Certification Date: 10/16/2012

Certification No.: L1121001P

APPENDIX D
System Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/5/2012 1:14:18 PM

Robot#: DASY5-FL-2 | Run#:	JsT-SYSP-450B-120905-02
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	20.9 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.56 mW/g (1g)

Rotation (1D): 0.043 dB

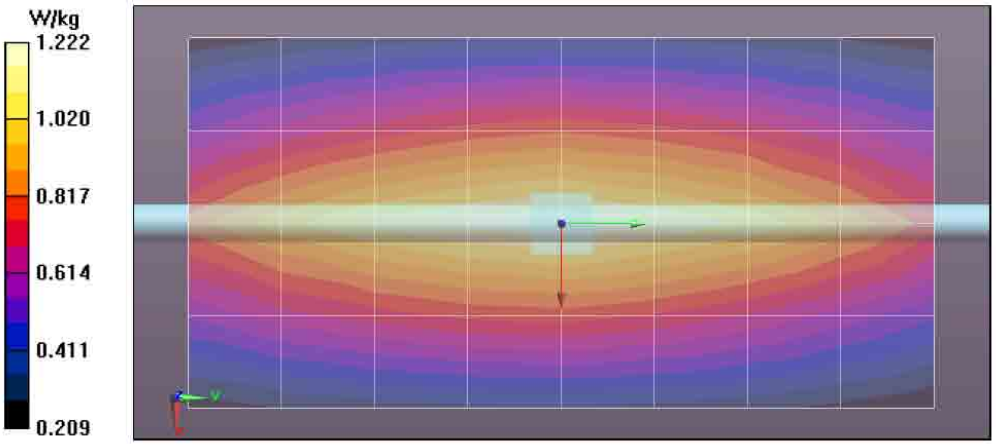
Comments:

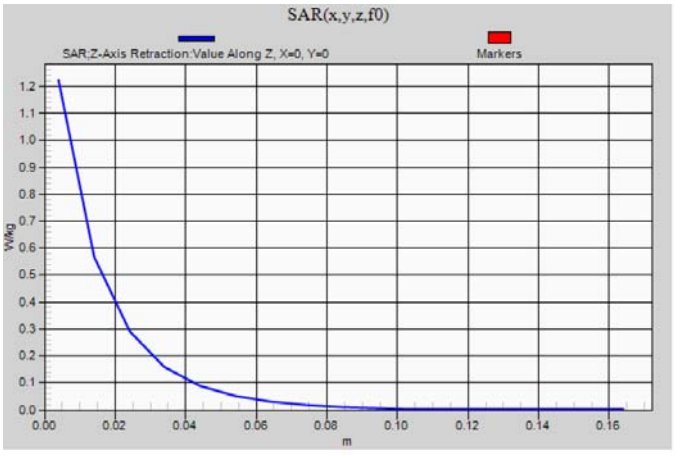
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.95 mho/m; ε_r = 57.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.22 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 = 35.824 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.774 mW/g
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.757 mW/g (SAR corrected for target medium)

Below 3 GHz-Rev.4/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/5/2012 7:59:23 PM

Robot#: DASY5-FL-2 | Run#:	CM-SYSP-450H-120905-08
Dipole Model#	D450V3
Phantom#:	OVAL1108
Tissue Temp:	21.1 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)
Adjusted SAR (1W):	4.84 mW/g (1g)
Rotation (1D):	0.051 dB

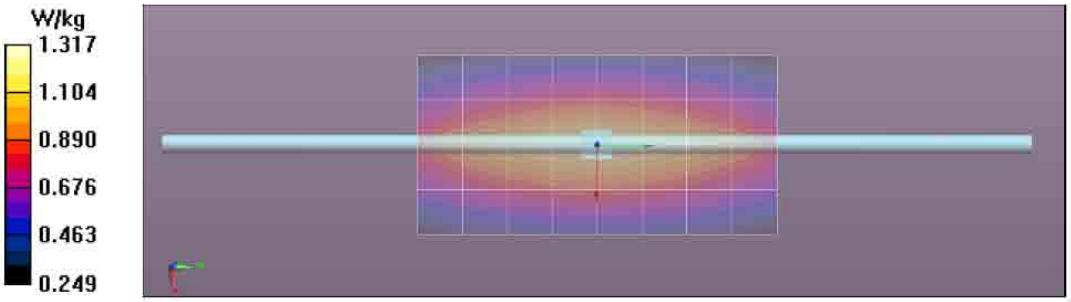
Comments:

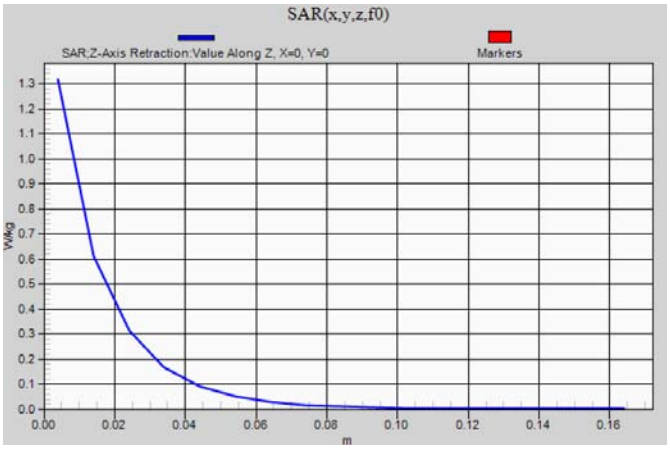
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.89 mho/m; ε_r = 43.8; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.5, 6.5, 6.5); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

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 = 38.558 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.869 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.32 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 = 38.558 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.868 mW/g
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.807 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: 9/6/2012 9:57:16 PM

Robot#: DASY5-FL-2 | Run#:	CM-SYSP-450B-120906-21
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	20.9 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.60 mW/g (1g)

Rotation (1D): 0.039 dB

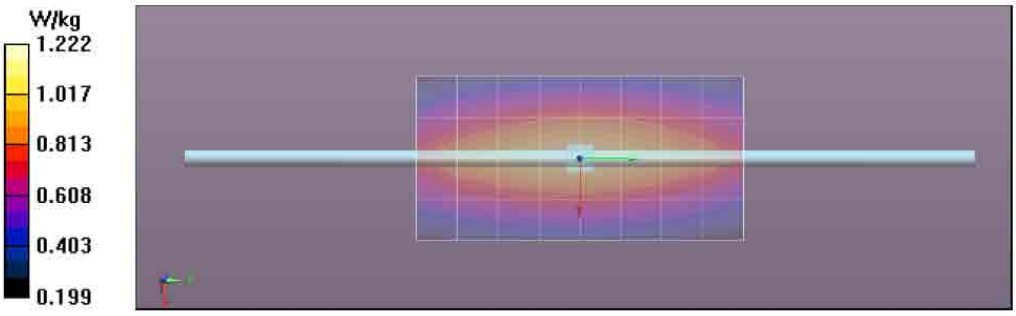
Comments:

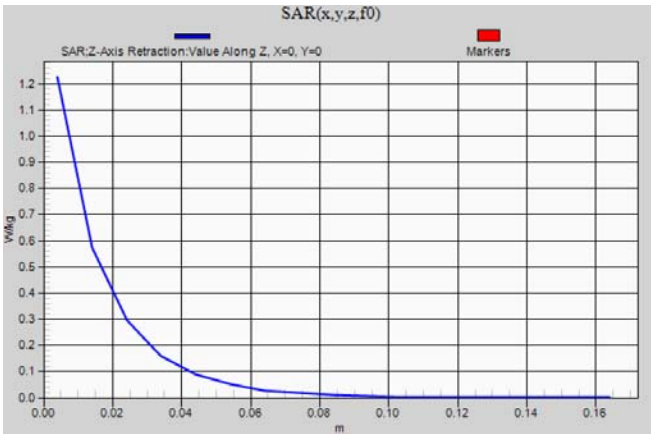
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.94 mho/m; ε_r = 57.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

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 = 35.986 V/m; Power Drift = 0.01 dB
Fast SAR: SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.819 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.22 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 = 35.986 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.765 mW/g
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.763 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) = 1.23 W/kg





Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/6/2012 6:16:50 AM

Robot#: DASY5-FL-2 | Run#:	JsT-SYSP-450H-120906-01
Dipole Model#	D450V3
Phantom#:	OVAL1108
Tissue Temp:	21.0 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.84 mW/g (1g)

Rotation (1D): 0.049 dB

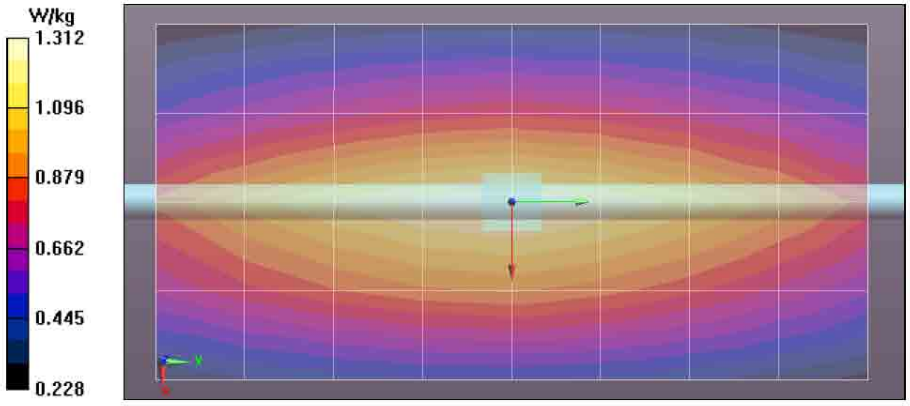
Comments:

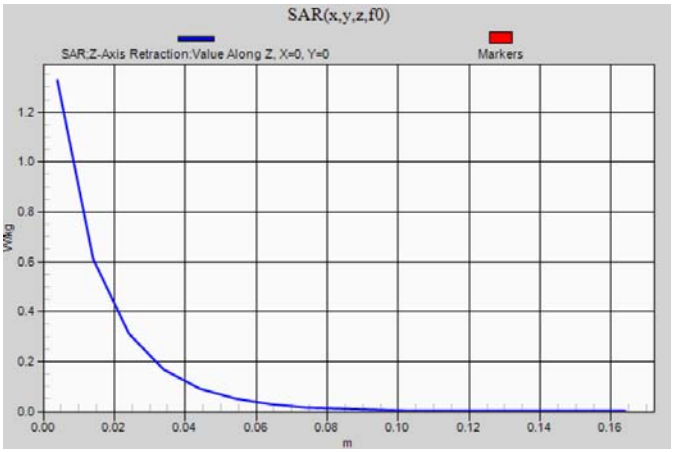
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.9 mho/m; ε_r = 44.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.5, 6.5, 6.5); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.31 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 = 38.573 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.890 mW/g
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.808 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.33 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: 9/7/2012 5:57:03 AM

Robot#: DASY5-FL-2 | Run#:	ErC-SYSP-450B-120907-01
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	21.0 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.52 mW/g (1g)

Rotation (1D): 0.097 dB

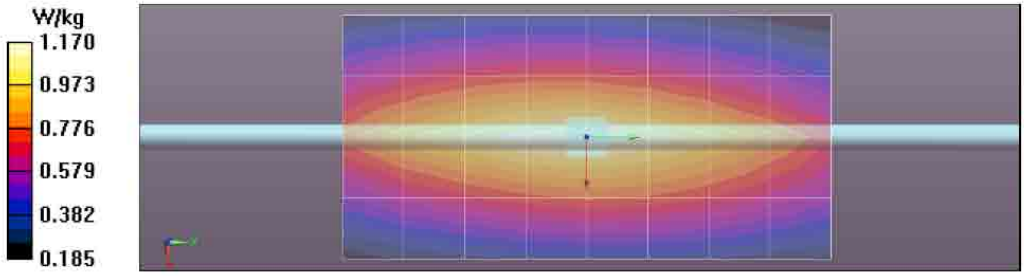
Comments:

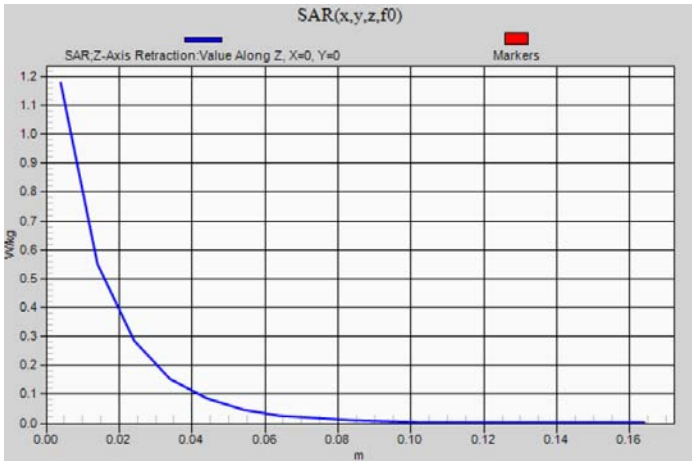
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.91 mho/m; ε_r = 56.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.17 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 = 35.912 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.699 mW/g
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.750 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.18 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: 9/10/2012 6:50:42 AM

Robot#: DASY5-FL-2 | Run#:	JsT-SYSP-450B-120910-01
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	21.8 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.56 mW/g (1g)

Rotation (1D): 0.039 dB

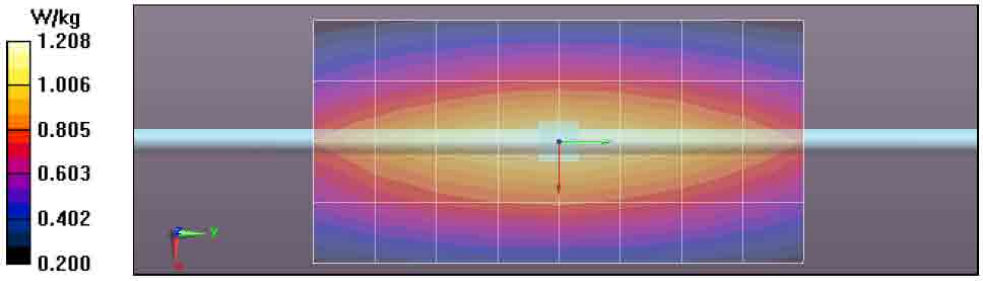
Comments:

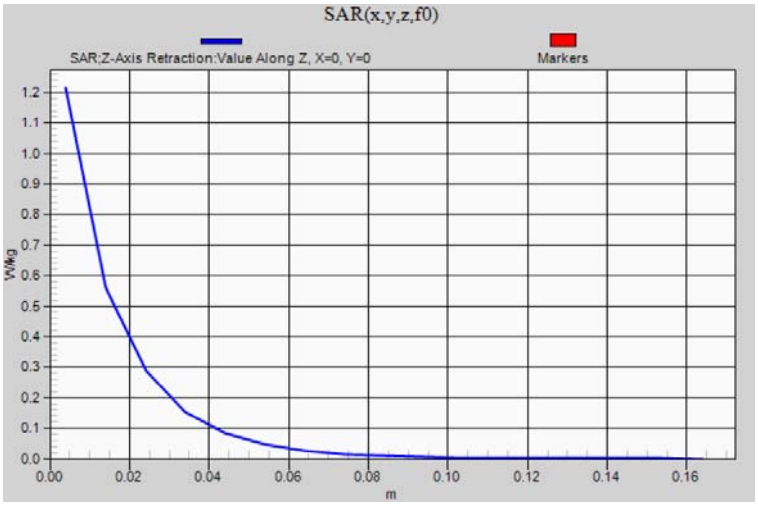
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.94 mho/m; ε_r = 56.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.21 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 = 35.803 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.760 mW/g
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.755 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: 9/11/2012 5:59:03 AM

Robot#: DASY5-FL-2 | Run#:	JsT-SYSP-450B-120911-01
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	21.8 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.56 mW/g (1g)

Rotation (1D): 0.044 dB

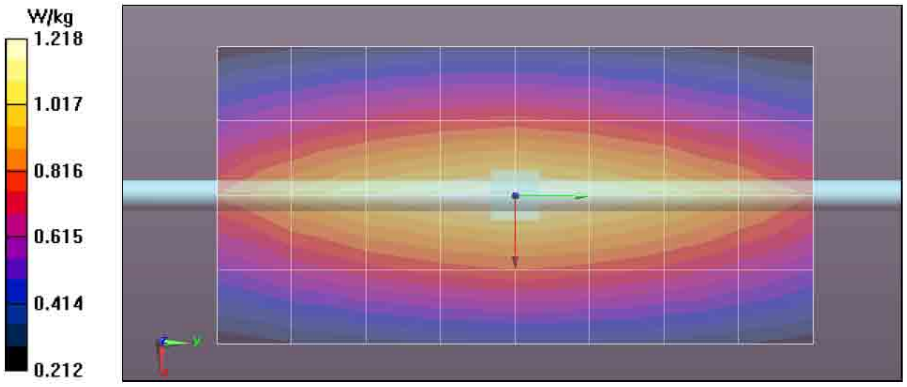
Comments:

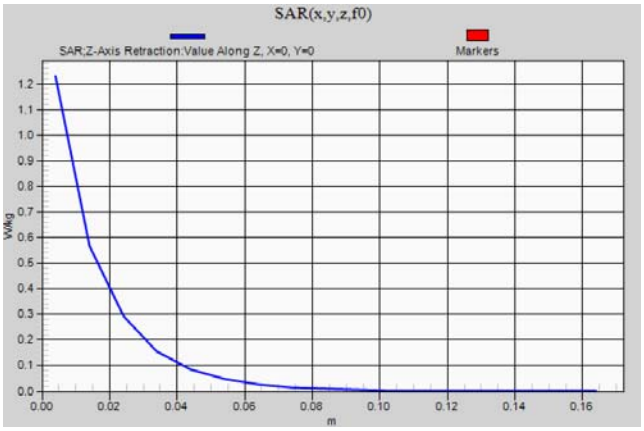
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.95 mho/m; ε_r = 57.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.22 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 = 35.859 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.763 mW/g
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.756 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) = 1.23 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/12/2012 5:36:47 AM

Robot#: DASY5-FL-2 | Run#:	JsT-SYSP-450B-120912-01
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	21.6 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.52 mW/g (1g)

Rotation (1D): 0.051 dB

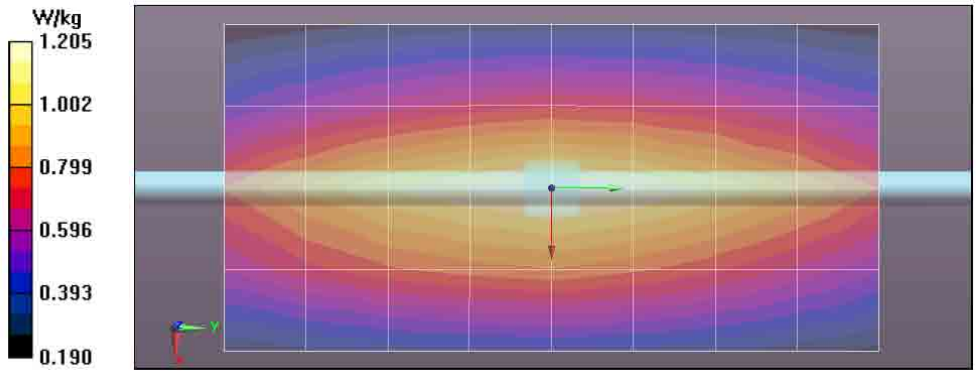
Comments:

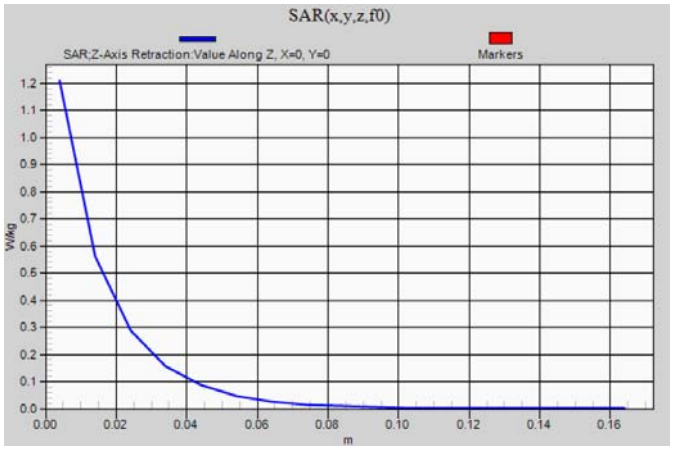
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.94 mho/m; ε_r = 56.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.21 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 = 35.820 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.749 mW/g
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.754 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: 9/13/2012 6:01:10 AM

Robot#: DASY5-FL-2 | Run#:	JsT-SYSP-450B-120913-01
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	21.6 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)
Adjusted SAR (1W):	4.52 mW/g (1g)
Rotation (1D):	0.047 dB

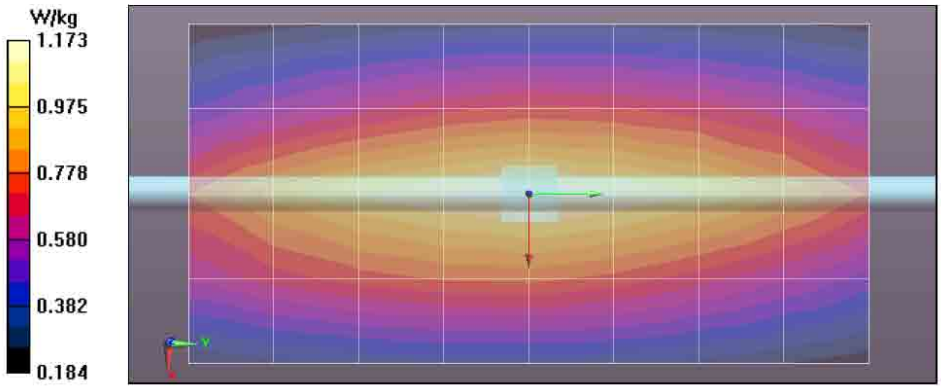
Comments:

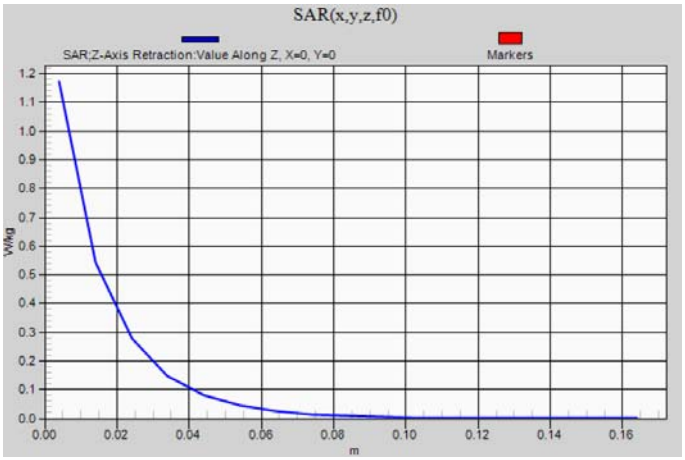
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.91 mho/m; ε_r = 57.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.17 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 = 35.809 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.698 mW/g
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.747 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: 9/25/2012 7:03:36 AM

Robot#: DASY5-FL-2 | Run#:	JsT-SYSP-450B-120925-01
Dipole Model#	D450V3
Phantom#:	OVAL1011
Tissue Temp:	21.1 (C)
Serial#:	1077
Test Freq:	450 (MHz)
Start Power:	250 (mW)

Adjusted SAR (1W): 4.60 mW/g (1g)

Rotation (1D): 0.043 dB

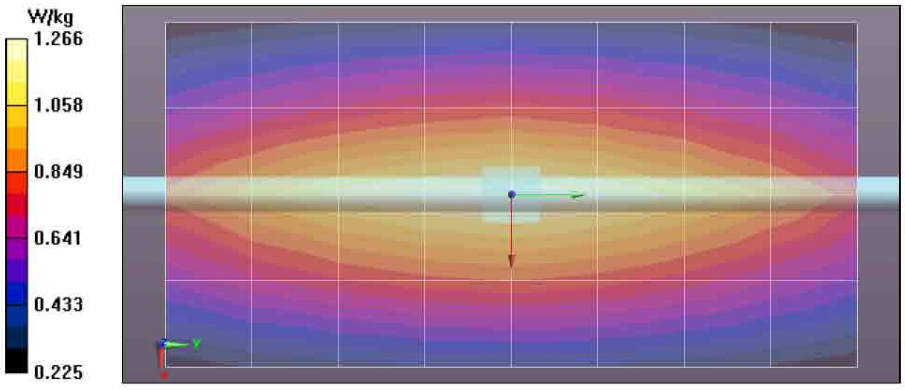
Comments:

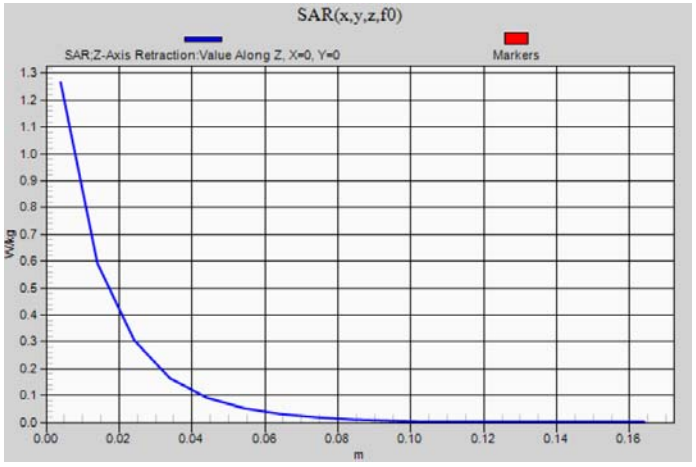
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.98 mho/m; ε_r = 57; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.4/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.27 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 = 35.911 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.822 mW/g
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.770 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.26 W/kg

Below 3 GHz-Rev.4/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





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

Shortened Scan Result
Table 35

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/13/2012 4:08:11 PM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120913-15
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.0 (C)
Serial#: CAI1216CCH
Antenna: FAF5259A
Test Freq: 406.1250 (MHz)
Battery: PMNN4403A
Carry Acc: NNTN8269A
Audio Acc: RMN5058A
Start Power: 0.117 (W)

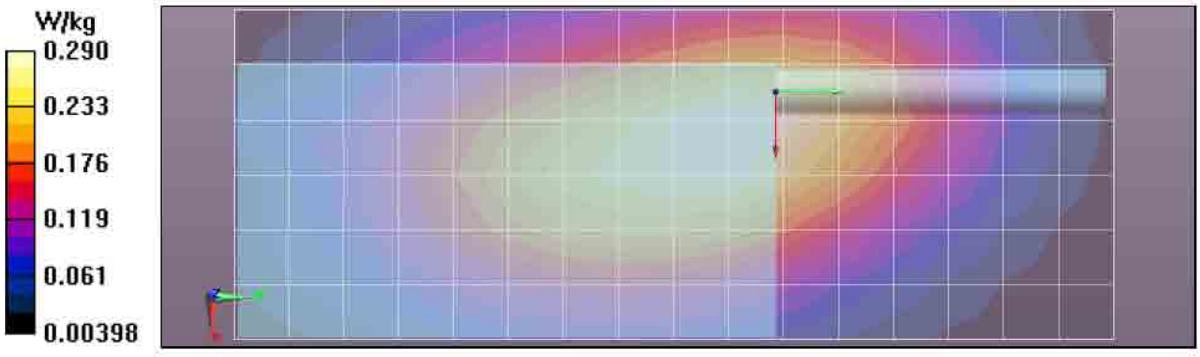
Comments: Shortened Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.9 mho/m; ε_r = 58.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 16.722 V/m; Power Drift = -0.07 dB
Fast SAR: SAR(1 g) = 0.293 mW/g; SAR(10 g) = 0.216 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.297 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 = 18.316 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.396 mW/g
SAR(1 g) = 0.299 mW/g; SAR(10 g) = 0.219 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.302 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) = 0.301 W/kg



Shortened scan reflect highest SAR producing configuration; approximate run time is 7 minutes.
Representative full scan run time was 27 minutes.
"Shortened" scan max calculated SAR using SAR drift: 1-g Avg. = 0.15 mW/g; 10-g Avg. = 0.11 mW/g.
Zoom scan max calculated SAR using SAR drift (see part 1 table 14): 1-g Avg. = 0.17 mW/g; 10-g Avg. = 0.12 mW/g.

Body - Highest SAR Configuration Result
Table 14
Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/6/2012 11:23:45 PM

Robot#: DASY5-FL-2 | Run#:	CM-Ab-120906-23
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	20.9 (C)
Serial#:	CAI1216CCH
Antenna:	FAF5259A
Test Freq:	406.1250 (MHz)
Battery:	PMNN4403A
Carry Acc:	NNTN8269A
Audio Acc:	RMN5058A
Start Power:	0.114 (W)

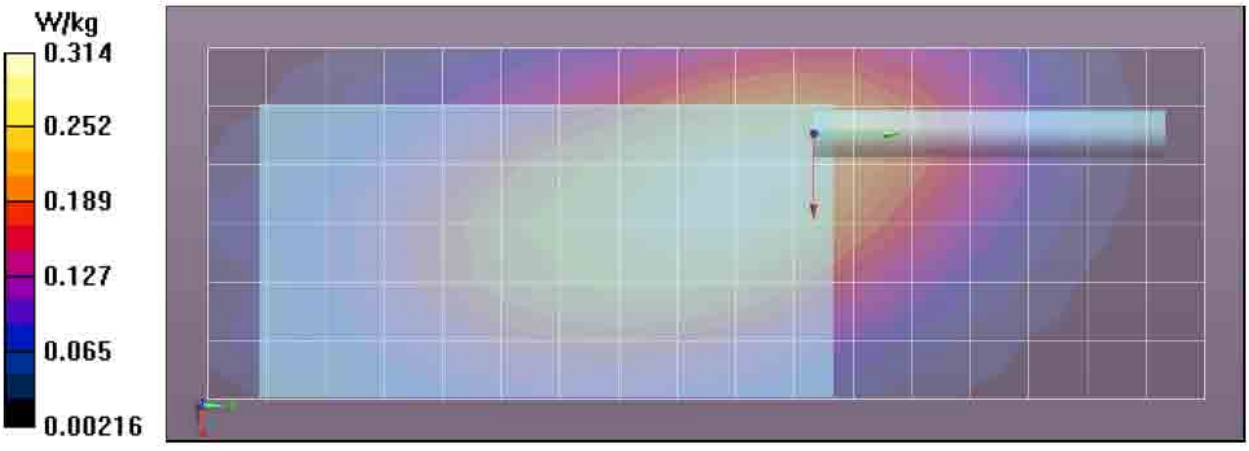
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.91 mho/m; ε_r = 58; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x171x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 17.903 V/m; Power Drift = -0.08 dB
Fast SAR: SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.232 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.322 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 = 17.903 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.419 mW/g
SAR(1 g) = 0.313 mW/g; SAR(10 g) = 0.229 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.319 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) = 0.318 W/kg



Face - Highest SAR Configuration Result
Table 32
Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/6/2012 9:48:02 AM

Robot#: DASY5-FL-2 | Run#:	JsT-Face-120906-06
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1108
Tissue Temp:	21.2 (C)
Serial#:	CAI1216CCH
Antenna:	PMAE4065A
Test Freq:	406.1250 (MHz)
Battery:	PMNN4403A
Carry Acc:	None
Audio Acc:	None
Start Power:	0.116 (W)

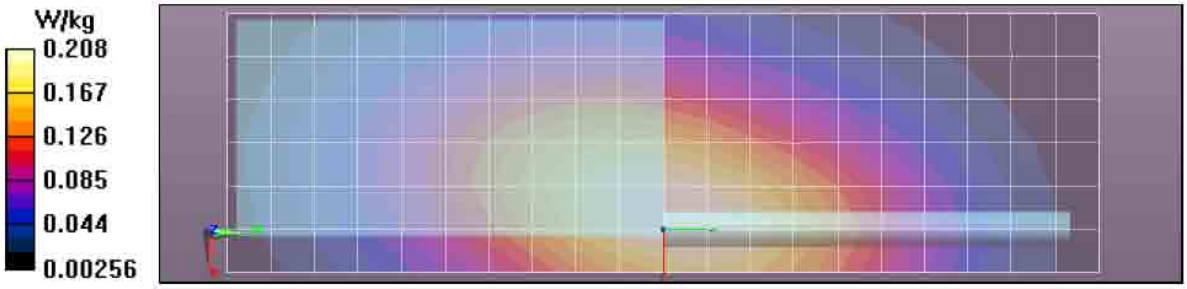
Comments: Full Scan; Front (Non-Display Side) of Radio @ 2.5 cm.

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.85 mho/m; ε_r = 45.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.5, 6.5, 6.5); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Face Scan/1-Area Scan (61x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.637 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.154 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.212 W/kg

Below 3 GHz-Rev.5/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.637 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.267 mW/g
SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.155 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.212 W/kg

Below 3 GHz-Rev.5/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.208 W/kg



APPENDIX F
DUT Scans - FCC Part 90 (460.1-470.0 MHz band)

Assessment at the Body with Body worn NNTN8269A
Table 14

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/6/2012 11:23:45 PM

Robot#: DASY5-FL-2 | Run#:	CM-Ab-120906-23
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	20.9 (C)
Serial#:	CAI1216CCH
Antenna:	FAF5259A
Test Freq:	406.1250 (MHz)
Battery:	PMNN4403A
Carry Acc:	NNTN8269A
Audio Acc:	RMN5058A
Start Power:	0.114 (W)

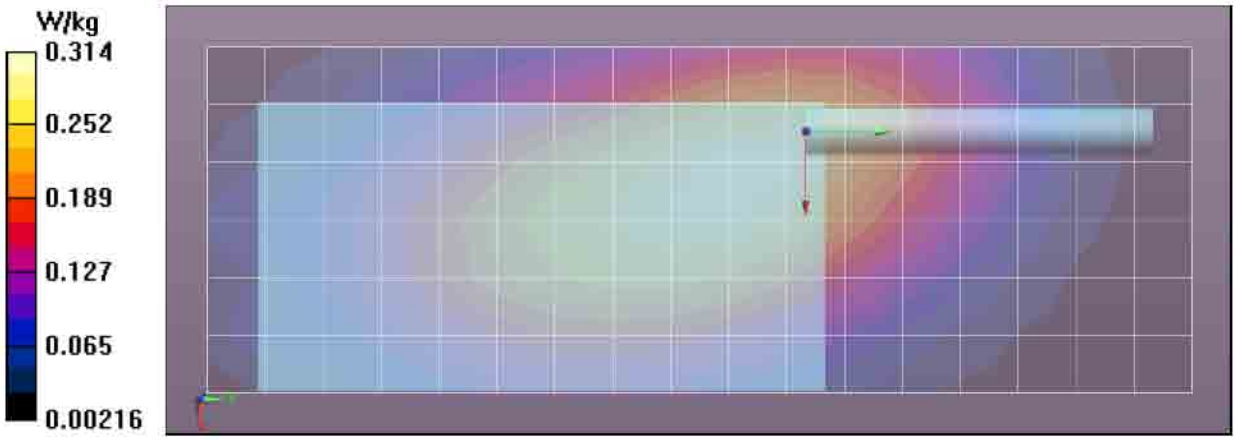
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.91 mho/m; ε_r = 58; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x171x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 17.903 V/m; Power Drift = -0.08 dB
Fast SAR: SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.232 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.322 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 = 17.903 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.419 mW/g
SAR(1 g) = 0.313 mW/g; SAR(10 g) = 0.229 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.319 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) = 0.318 W/kg



Assessment at the Body with Body worn NTN9179A with PMLN5709A holster
Table 15

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/7/2012 12:21:51 PM

Robot#: DASY5-FL-2 | Run#:	ErC-Ab-120907-10
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	20.9 (C)
Serial#:	CAI1216CCH
Antenna:	FAF5259A
Test Freq:	406.1250 (MHz)
Battery:	NNTN7037A
Carry Acc:	NTN9179A w/PMLN5709A
Audio Acc:	RMN5058A
Start Power:	0.117 (W)

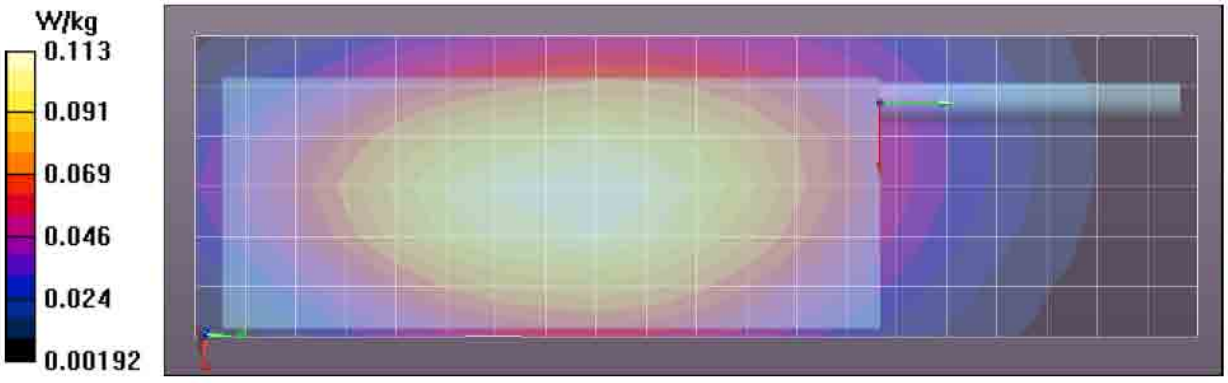
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.9 mho/m; ε_r = 57.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (7x21x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.113 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 = 9.458 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.142 mW/g
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.084 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.112 W/kg

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



Assessment at the body with Body worn PMLN5658A
Table 16

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/10/2012 9:14:02 AM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120910-04
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.5 (C)
Serial#: CAI1216CCH
Antenna: FAF5259A
Test Freq: 406.1250 (MHz)
Battery: NNTN8182A
Carry Acc: PMLN5658A
Audio Acc: RMN5058A
Start Power: 0.116 (W)

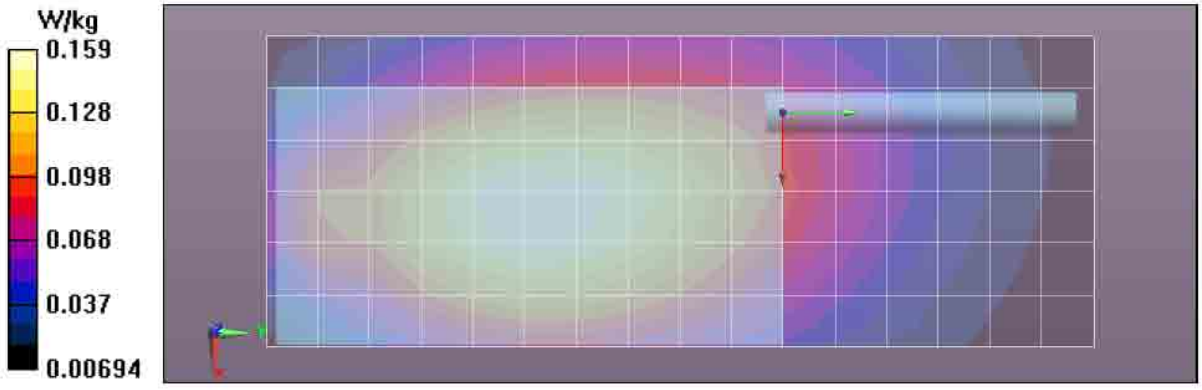
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.93 mho/m; ε_r = 57.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.985 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.156 mW/g; SAR(10 g) = 0.116 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.162 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 = 10.985 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.203 mW/g
SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.116 mW/g (SAR corrected for target medium)

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) = 0.160 W/kg



Assessment at the Body with Body worn PMLN5657A
Table 17

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/10/2012 12:28:54 PM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120910-09
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.2 (C)
Serial#: CAI1216CCH
Antenna: FAF5259A
Test Freq: 406.1250 (MHz)
Battery: NNTN8182A
Carry Acc: PMLN5657A
Audio Acc: RMN5058A
Start Power: 0.116 (W)

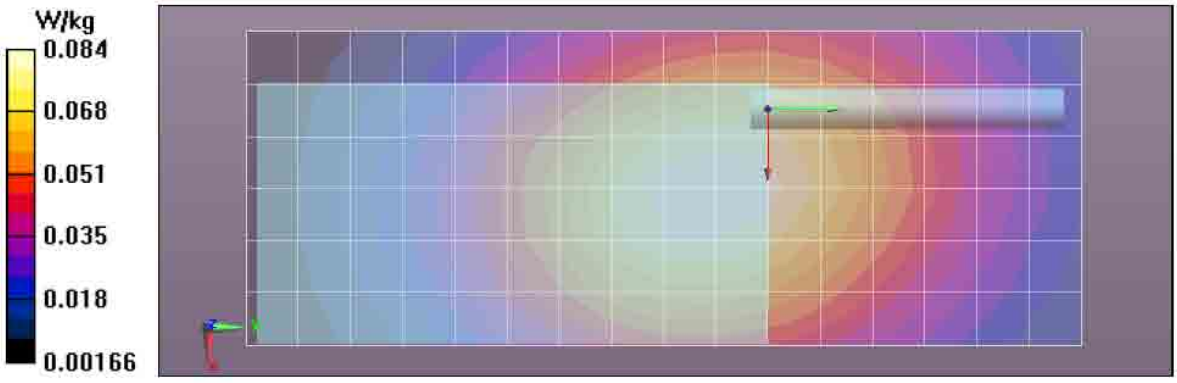
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.93 mho/m; ε_r = 57.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 8.986 V/m; Power Drift = -0.36 dB
Fast SAR: SAR(1 g) = 0.081 mW/g; SAR(10 g) = 0.061 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.0843 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 = 8.986 V/m; Power Drift = -0.45 dB
Peak SAR (extrapolated) = 0.102 mW/g
SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.060 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.0813 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) = 0.0807 W/kg



Assessment at the Body with Body worn PMLN5658A with NTN5243A carry strap
Table 18

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/10/2012 3:38:56 PM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120910-14
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.0 (C)
Serial#: CAI1216CCH
Antenna: FAF5259A
Test Freq: 406.1250 (MHz)
Battery: NNTN8182A
Carry Acc: NTN5243A w/ PMLN5658A
Audio Acc: RMN5058A
Start Power: 0.117 (W)

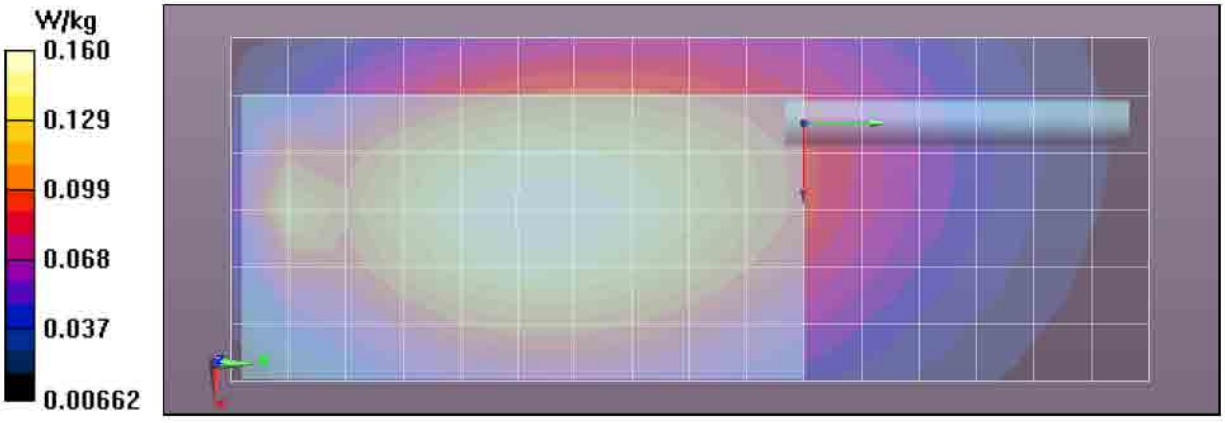
Comments: Full Scan; Back of DUT Towards Phantom.

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.93 mho/m; ε_r = 57.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.489 V/m; Power Drift = -0.05 dB
Fast SAR: SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.116 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.161 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 = 11.489 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.202 mW/g
SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.117 mW/g (SAR corrected for target medium)

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) = 0.159 W/kg



Assessment at the Body with Body worn PMLN5657A (no belt loop) with NTN5243A carry strap Table 19

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/11/2012 7:56:32 AM

Robot#: DASY5-FL-2 | Run#:	JsT-Ab-120911-04
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	21.5 (C)
Serial#:	CAI1216CCH
Antenna:	FAF5259A
Test Freq:	406.1250 (MHz)
Battery:	NNTN7038A
Carry Acc:	NTN5243A w/ PMLN5657A (W/out Belt Loop)
Audio Acc:	RMN5058A
Start Power:	0.116 (W)

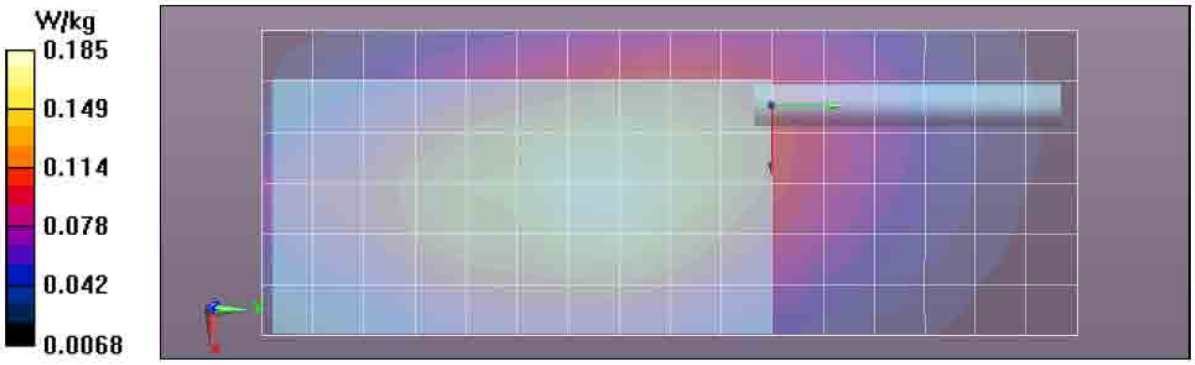
Comments: Full Scan; Back of DUT Towards Phantom.

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.92 mho/m; ε_r = 58.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.837 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.133 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.190 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 = 11.837 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.279 mW/g
SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.132 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.192 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) = 0.194 W/kg



Assessment at the Body with Body worn PMLN5660A
Table 20

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/11/2012 9:46:50 AM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120911-07
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.4 (C)
Serial#: CAI1216CCH
Antenna: PMAE4065A
Test Freq: 406.1250 (MHz)
Battery: NNTN7034A
Carry Acc: PMLN5660A
Audio Acc: RMN5058A
Start Power: 0.116 (W)

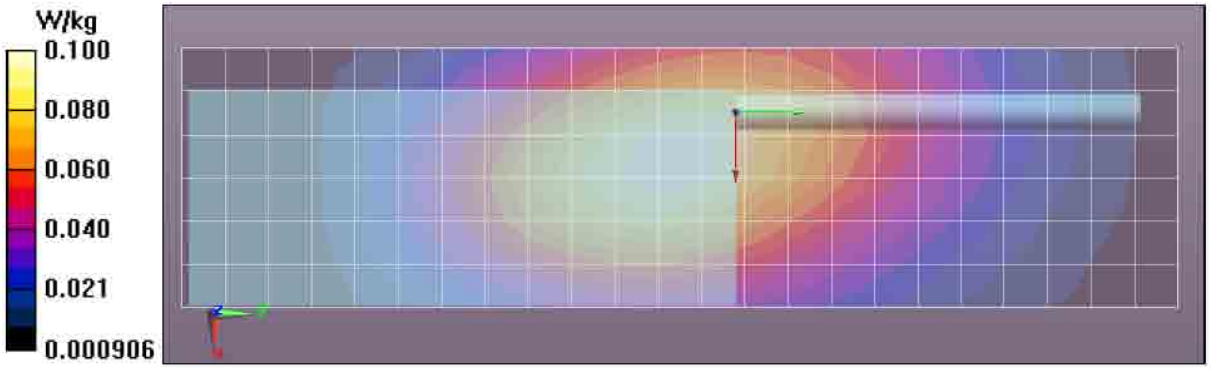
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.92 mho/m; ε_r = 58.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 9.770 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.073 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.101 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 = 9.770 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.128 mW/g
SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.073 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.100 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) = 0.0997 W/kg



Assessment at the Body with Body worn PMLN5659A
Table 21

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/11/2012 1:52:26 PM

Robot#: DASY5-FL-2 | Run#:	JsT-Ab-120911-11
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	21.2 (C)
Serial#:	CAI1216CCH
Antenna:	FAF5259A
Test Freq:	406.1250 (MHz)
Battery:	NNTN7034A
Carry Acc:	PMLN5659A
Audio Acc:	RMN5058A
Start Power:	0.116 (W)

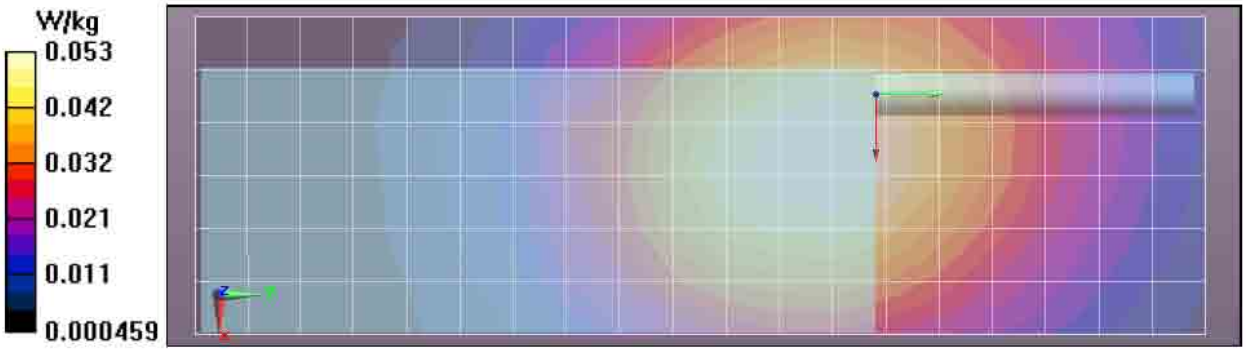
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.92 mho/m; ε_r = 58.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 7.451 V/m; Power Drift = -0.30 dB
Fast SAR: SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.039 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.0537 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 = 7.451 V/m; Power Drift = -0.42 dB
Peak SAR (extrapolated) = 0.067 mW/g
SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.040 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.0530 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) = 0.0524 W/kg



Assessment at the Body with Body worn PMLN5660A with NTN5243A carry strap
Table 22

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/11/2012 3:05:50 PM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120911-13
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.1 (C)
Serial#: CAI1216CCH
Antenna: PMAE4065A
Test Freq: 406.1250 (MHz)
Battery: NNTN7034A
Carry Acc: NTN5243A w/ PMLN5660A
Audio Acc: RMN5058A
Start Power: 0.117 (W)

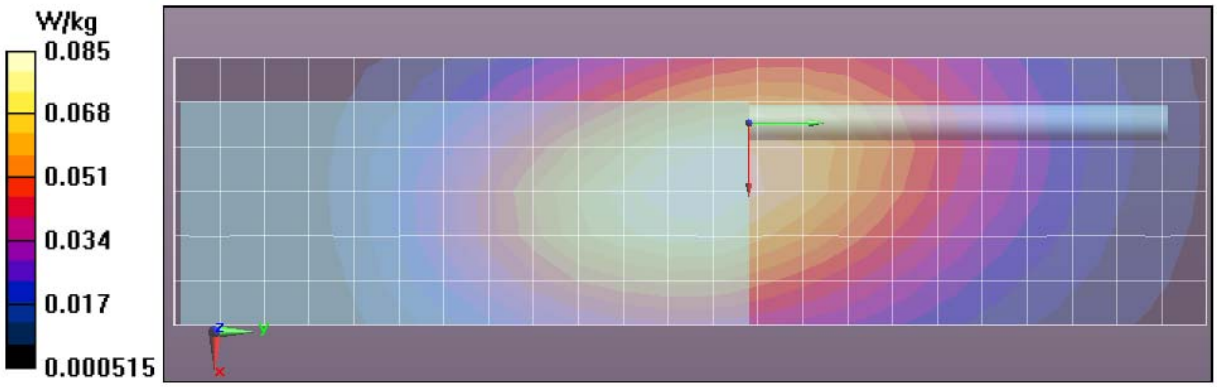
Comments: Full Scan; Back of DUT Towards Phantom.

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.92 mho/m; ε_r = 58.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 8.931 V/m; Power Drift = -0.07 dB
Fast SAR: SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.062 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.0852 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 = 8.931 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.109 mW/g
SAR(1 g) = 0.084 mW/g; SAR(10 g) = 0.063 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.0853 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) = 0.0855 W/kg



Assessment at the Body with Body worn PMLN5659A (no belt loop) with NTN5243A carry strap Table 23

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/12/2012 7:01:24 AM

Robot#: DASY5-FL-2 | Run#:	JsT-Ab-120912-03
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	21.5 (C)
Serial#:	CAI1216CCH
Antenna:	PMAE4065A
Test Freq:	406.1250 (MHz)
Battery:	NNTN7034A
Carry Acc:	NTN5243A w/ PMLN5659A (W/out Belt Loop)
Audio Acc:	RMN5058A
Start Power:	0.116 (W)

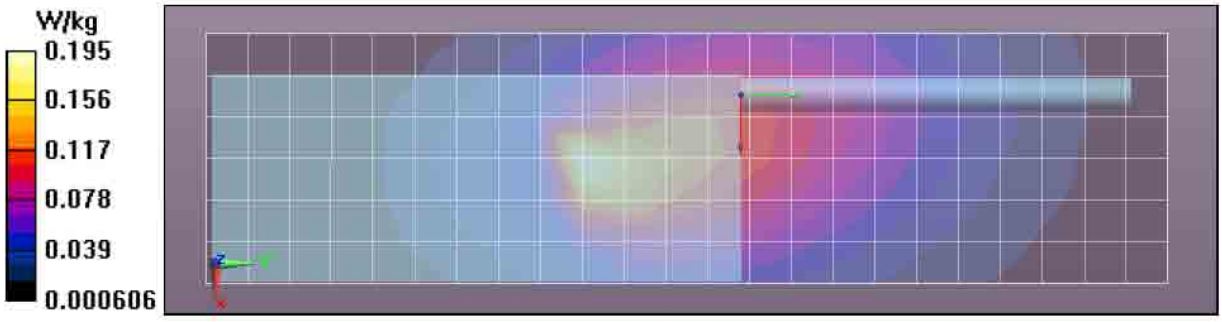
Comments: Full Scan; Back of DUT Towards Phantom.

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.91 mho/m; ε_r = 57.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.791 V/m; Power Drift = -0.05 dB
Fast SAR: SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.125 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.217 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 = 10.791 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.607 mW/g
SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.113 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.194 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) = 0.227 W/kg



Assessment at the Body with Body worn HLN6875A with PMLN5709A holster
Table 24

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/12/2012 12:51:44 PM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120912-13
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.1 (C)
Serial#: CAI1216CCH
Antenna: FAF5259A
Test Freq: 406.1250 (MHz)
Battery: NNTN8182A
Carry Acc: HLN6875A w/ PMLN5709A
Audio Acc: RMN5058A
Start Power: 0.115 (W)

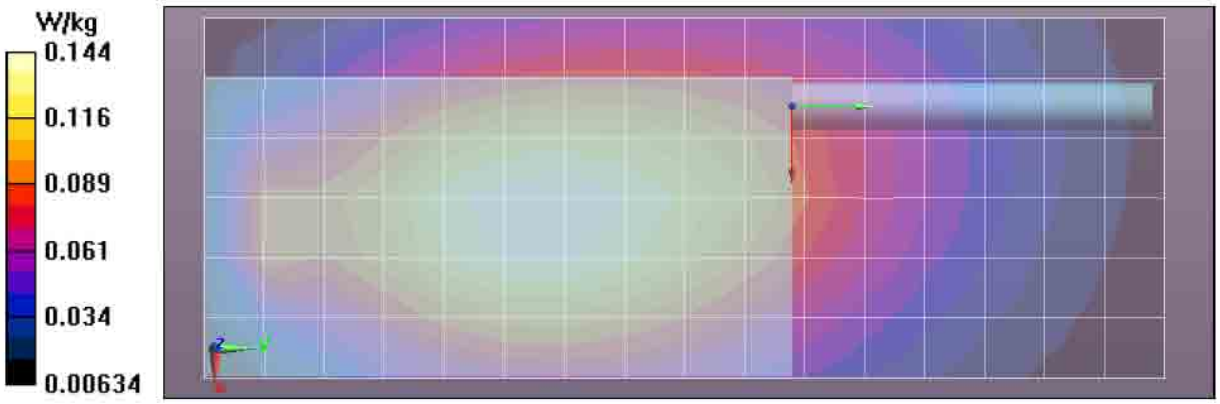
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.91 mho/m; ε_r = 57.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 10.654 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.106 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.146 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 = 10.654 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.186 mW/g
SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.107 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.146 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) = 0.145 W/kg



Assessment at the Body with Body worn NTN8266B with PMLN5709A holster
Table 25

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/13/2012 8:35:22 AM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120913-06
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.4 (C)
Serial#: CAI1216CCH
Antenna: FAF5259A
Test Freq: 406.1250 (MHz)
Battery: NNTN8182A
Carry Acc: NTN8266B w/ PMLN5709A
Audio Acc: RMN5058A
Start Power: 0.116 (W)

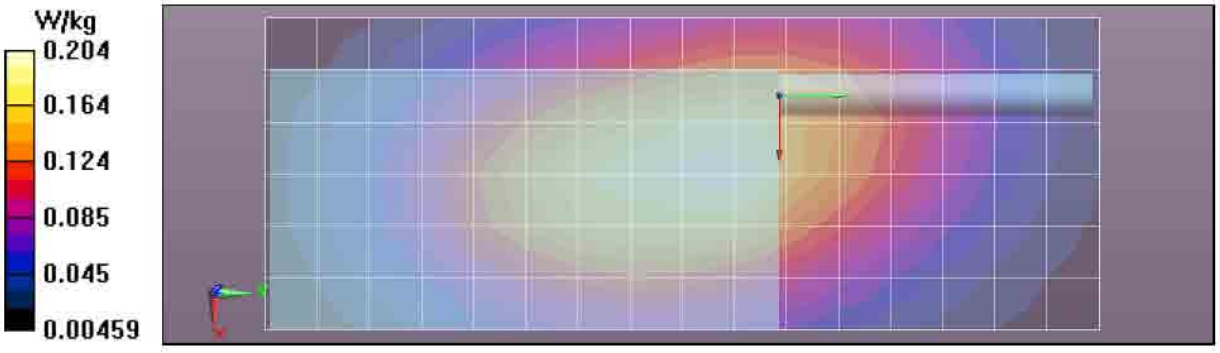
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.9 mho/m; ε_r = 58.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.462 V/m; Power Drift = -0.32 dB
Fast SAR: SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.149 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.207 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 = 13.462 V/m; Power Drift = -0.44 dB
Peak SAR (extrapolated) = 0.265 mW/g
SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.144 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.201 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) = 0.199 W/kg



Assessment at the Body with other audio accessories

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

Assessment of wireless BT configuration
Table 26

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/13/2012 10:05:20 AM

Robot#: DASY5-FL-2 | Run#:	JsT-Ab-120913-08
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	21.3 (C)
Serial#:	CAI1216CCH
Antenna:	FAF5259A
Test Freq:	406.1250 (MHz)
Battery:	PMNN4403A
Carry Acc:	NNTN8269A
Audio Acc:	None
Start Power:	0.116 (W)

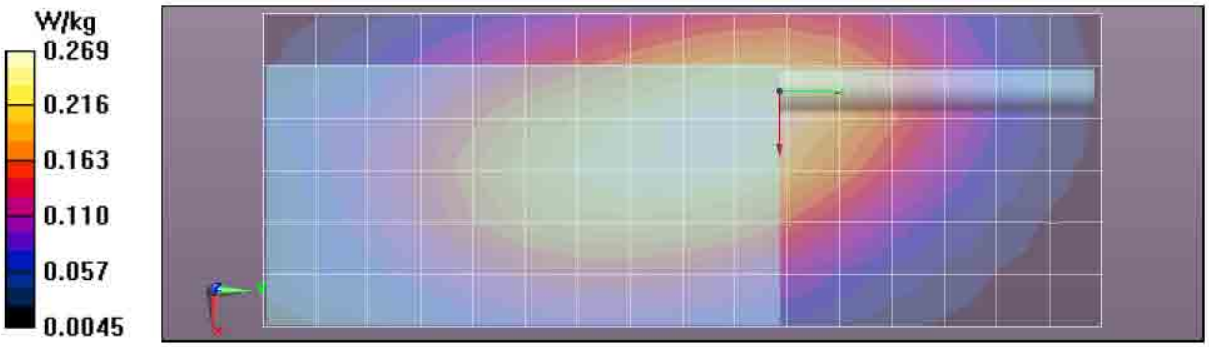
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.9 mho/m; ε_r = 58.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 16.236 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 0.270 mW/g; SAR(10 g) = 0.199 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.272 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 = 16.236 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.350 mW/g
SAR(1 g) = 0.269 mW/g; SAR(10 g) = 0.200 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.271 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) = 0.269 W/kg



Assessment at the Shoulder with PSM's PMMN4059B, PMMN4060B & PMMN4061B
Table 29

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/5/2012 5:01:28 PM

Robot#: DASY5-FL-2 | Run#: CM-Ab-120905-05
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 20.7 (C)
Serial#: CAI1216CCH
Antenna: PMAE4065A
Test Freq: 406.1250 (MHz)
Battery: NNTN7034A
Carry Acc: 4205823V08 Rev. L
Audio Acc: PMMN4059B
Start Power: 0.115 (W)

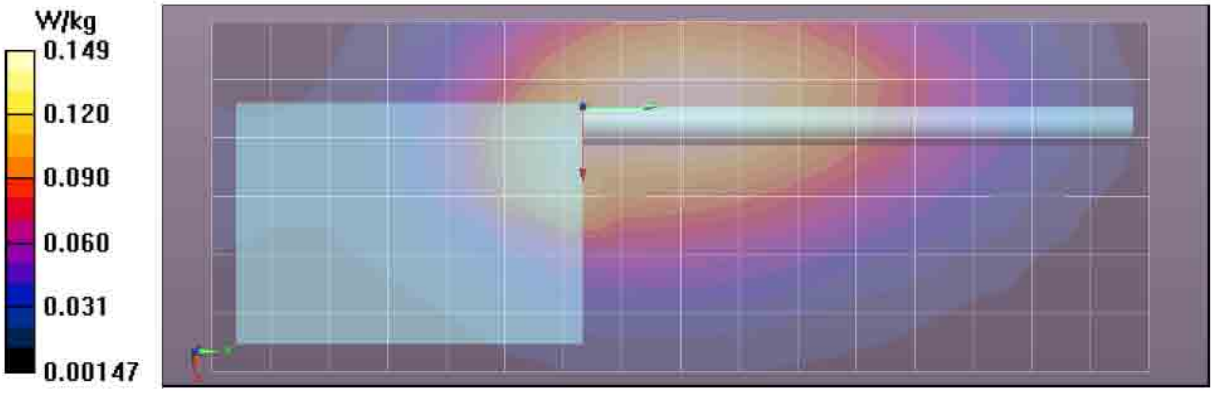
Comments: Full Scan: PSM power output = 0.093 W; FAF5259A on radio

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.91 mho/m; ε_r = 57.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.584 V/m; Power Drift = 0.00 dB
Fast SAR: SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.111 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.155 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 = 12.584 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.208 mW/g
SAR(1 g) = 0.153 mW/g; SAR(10 g) = 0.109 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.156 W/kg

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



Assessment at the Face with Front Side of DUT
Table 32

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/6/2012 9:48:02 AM

Robot#: DASY5-FL-2 | Run#:	JsT-Face-120906-06
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1108
Tissue Temp:	21.2 (C)
Serial#:	CAI1216CCH
Antenna:	PMAE4065A
Test Freq:	406.1250 (MHz)
Battery:	PMNN4403A
Carry Acc:	None
Audio Acc:	None
Start Power:	0.116 (W)

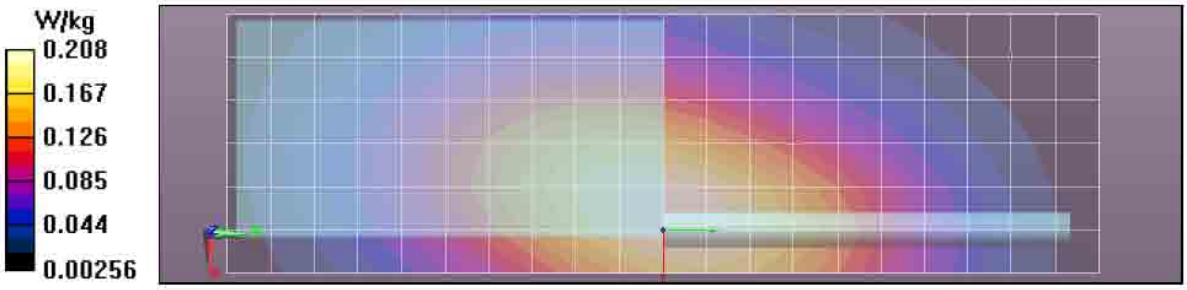
Comments: Full Scan; Front (Non-Display Side) of Radio @ 2.5 cm.

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.85 mho/m; ε_r = 45.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.5, 6.5, 6.5); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Face Scan/1-Area Scan (61x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.637 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.154 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.212 W/kg

Below 3 GHz-Rev.5/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.637 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.267 mW/g
SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.155 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.212 W/kg

Below 3 GHz-Rev.5/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.208 W/kg



Assessment at the Face with Back Side of DUT
Table 33

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/6/2012 2:27:07 PM

Robot#: DASY5-FL-2 | Run#:	JsT-Face-120906-13
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1108
Tissue Temp:	21.2 (C)
Serial#:	CAI1216CCH
Antenna:	PMAE4065A
Test Freq:	406.1250 (MHz)
Battery:	NNTN8182A
Carry Acc:	None
Audio Acc:	None
Start Power:	0.115 (W)

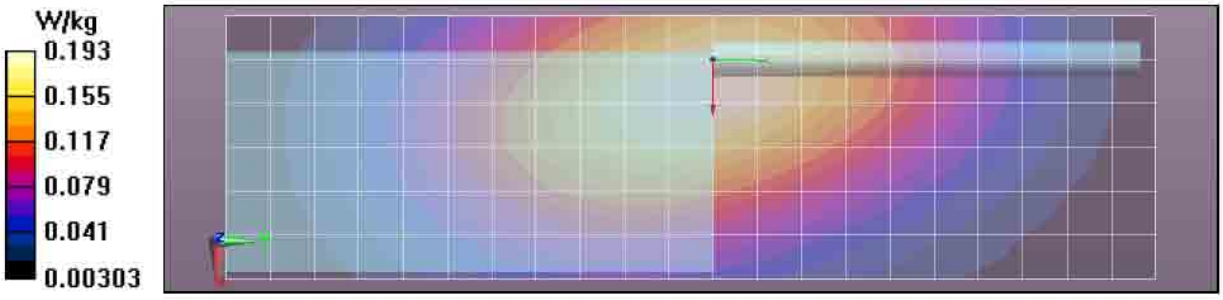
Comments: Full Scan; Back (Display Side) of Radio @ 2.5 cm.

Duty Cycle: 1:1, Medium parameters used: f = 406 MHz; σ = 0.85 mho/m; ε_r = 45.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.5, 6.5, 6.5); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Face Scan/1-Area Scan (61x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 14.778 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.142 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.195 W/kg

Below 3 GHz-Rev.5/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.778 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.242 mW/g
SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.143 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.194 W/kg

Below 3 GHz-Rev.5/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.193 W/kg



APPENDIX G
DUT Scans - Outside FCC Part 90

Assessment outside FCC Part 90 at the body
Table 27

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/13/2012 2:13:40 PM

Robot#: DASY5-FL-2 | Run#: JsT-Ab-120913-12
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1011
Tissue Temp: 21.0 (C)
Serial#: CAI1216CCH
Antenna: PMAE4065A
Test Freq: 393.0000 (MHz)
Battery: PMNN4403A
Carry Acc: NNTN8269A
Audio Acc: RMN5058A
Start Power: 0.116 (W)

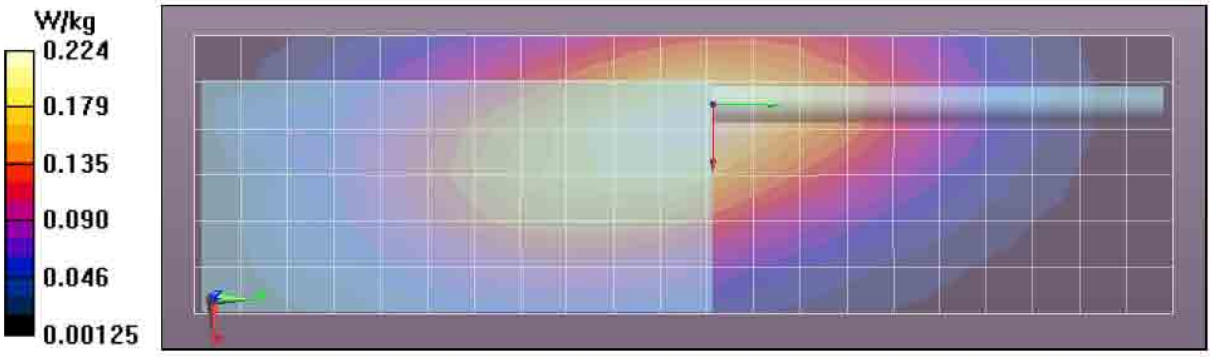
Comments: Full Scan

Duty Cycle: 1:1, Medium parameters used: f = 393 MHz; σ = 0.89 mho/m; ε_r = 58.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.558 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.166 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.226 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 = 15.558 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.298 mW/g
SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.166 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.227 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) = 0.226 W/kg



Assessment outside FCC Part 90 at the Shoulder
Table 30

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/25/2012 6:33:54 PM

Robot#: DASY5-FL-2 | Run#:	CM-Ab-120925-14
Model#:	H99QAH9PW7AN (NUE1155)
Phantom#:	OVAL1011
Tissue Temp:	20.9 (C)
Serial#:	CAI1216CCH
Antenna:	PMAE4065A
Test Freq:	393.0000 (MHz)
Battery:	NNTN7034A
Carry Acc:	4205823V08 Rev. L
Audio Acc:	PMMN4059B
Start Power:	0.114 (W)

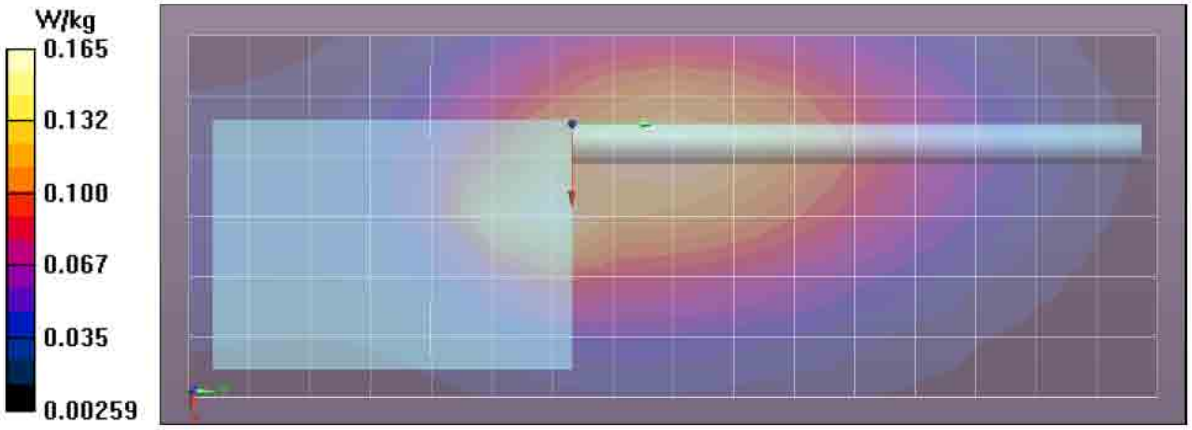
Comments: Full Scan; PSM power output = 0.092 W; FAF5259A on radio

Duty Cycle: 1:1, Medium parameters used: f = 393 MHz; σ = 0.9 mho/m; ε_r = 56.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.92, 6.92, 6.92); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (61x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.187 V/m; Power Drift = -0.04 dB
Fast SAR: SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.112 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.169 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 = 12.187 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.371 mW/g
SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.109 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.196 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) = 0.155 W/kg



Assessment outside FCC Part 90 at the Face
Table 34

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/6/2012 6:12:10 PM

Robot#: DASY5-FL-2 | Run#: CM-Face-120906-18
Model#: H99QAH9PW7AN (NUE1155)
Phantom#: OVAL1108
Tissue Temp: 21.1 (C)
Serial#: CAI1216CCH
Antenna: PMAE4065A
Test Freq: 393.0000 (MHz)
Battery: PMNN4403A
Carry Acc: None
Audio Acc: None
Start Power: 0.115 (W)

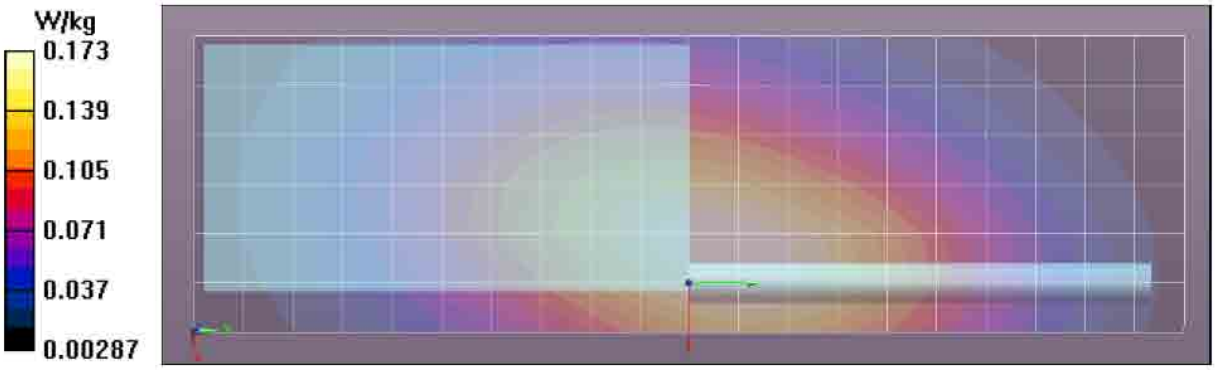
Comments: Full Scan; Front (Non-Display Side) of Radio @ 2.5 cm.

Duty Cycle: 1:1, Medium parameters used: f = 393 MHz; σ = 0.83 mho/m; ε_r = 45.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(6.5, 6.5, 6.5); Calibrated: 1/25/2012
Electronics: DAE3 Sn401, Calibrated: 3/9/2012

Below 3 GHz-Rev.5/Face Scan/1-Area Scan (61x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.982 V/m; Power Drift = -0.28 dB
Fast SAR: SAR(1 g) = 0.177 mW/g; SAR(10 g) = 0.131 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.177 W/kg

Below 3 GHz-Rev.5/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.982 V/m; Power Drift = -0.37 dB
Peak SAR (extrapolated) = 0.208 mW/g
SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.123 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.165 W/kg

Below 3 GHz-Rev.5/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.163 W/kg

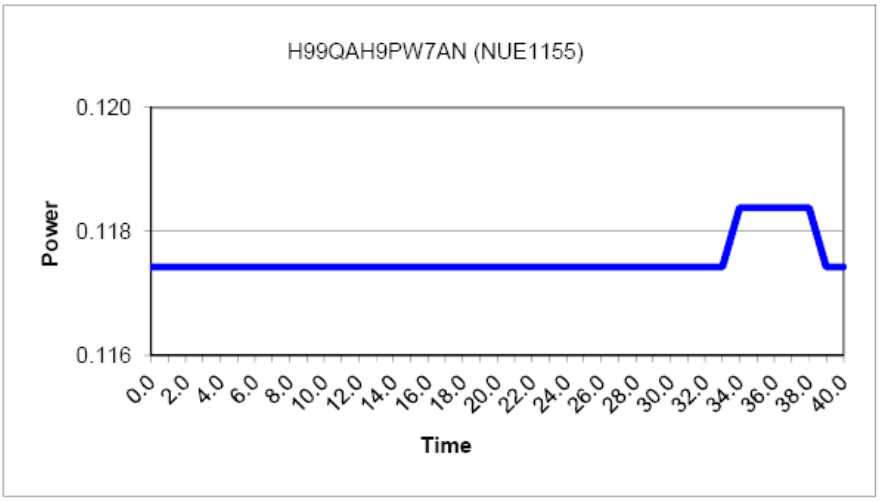


APPENDIX H
DUT Supplementary Data (Power slump)

Model # H99QAH9PW7AN (NUE1155)
Serial # CAI1216CCH

Battery#	PMNN4403A	**Transmit Mode**	CW
Frequency	406.1250 MHz	**Audio Accessory**	RMN5058A
Date	9/27/2012		

TX TIME (Minutes)	**Meaured Power (Watts)**
0.0	0.117
1.0	0.117
2.0	0.117
3.0	0.117
4.0	0.117
5.0	0.117
6.0	0.117
7.0	0.117
8.0	0.117
9.0	0.117
10.0	0.117
11.0	0.117
12.0	0.117
13.0	0.117
14.0	0.117
15.0	0.117
16.0	0.117
17.0	0.117
18.0	0.117
19.0	0.117
20.0	0.117
21.0	0.117
22.0	0.117
23.0	0.117
24.0	0.117
25.0	0.117
26.0	0.117
27.0	0.117
28.0	0.117
29.0	0.117
30.0	0.117
31.0	0.117
32.0	0.117
33.0	0.117
34.0	0.118
35.0	0.118
36.0	0.118
37.0	0.118
38.0	0.118
39.0	0.117
40.0	0.117



APPENDIX I
DUT Test Position Photos

Photos available in Exhibit 7B

APPENDIX J
DUT, Body worn and audio accessories Photos

Photos available in Exhibit 7B