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: **05/20/2013**
Report Revision: **A**
Report ID: **SR11195_PMUD3231A Rev A 130520**

Responsible Engineer:	Veeramani Veerapan (Sr.EME Engineer)
Report Author:	Veeramani Veerapan (Sr.EME Engineer)
Date/s Tested:	02/22/13-04/09/13
Manufacturer/Location:	Motorola, Penang
Sector/Group/Div.:	EMS
Date submitted for test:	02/01/13
DUT Description:	136-174 MHz, 5W, NKP
Test TX mode(s):	CW (PTT)
Max. Power output:	6.0 W
Nominal Power:	5.0 W
Tx Frequency Bands:	136 – 174 MHz
Signaling type:	FM
Model(s) Tested:	PMUD3231A
Model(s) Certified:	PMUD3231A
Serial Number(s):	752TPB0245, 752TPB0246
Classification:	Occupational/Controlled
FCC ID:	ABZ99FT3092; Rule Part 90 (150.8-173.4 MHz) Results outside FCC bands are not applicable for FCC compliance demonstration.
IC:	109AB-99FT3092; (138-144; 148-149.9 and 150.05-174 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. 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

Zakharia Deanna-EDC015

Digitally signed by Zakharia Deanna-EDC015
DN: cn=Zakharia Deanna-EDC015
Date: 2013.05.22 17:30:28 -04'00'

Deanna Zakharia
EMS EME Lab Senior Resource Manager, Laboratory Director
Approval Date: 5/22/2013

Certification Date: 5/22/2013

Certification No.: L1130523P

APPENDIX D
Test System Check Scans

Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/22/2013 9:30:02 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130222-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	20.8 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.05 dB
Adjusted SAR (1W):	2.74 mW/g (1g)

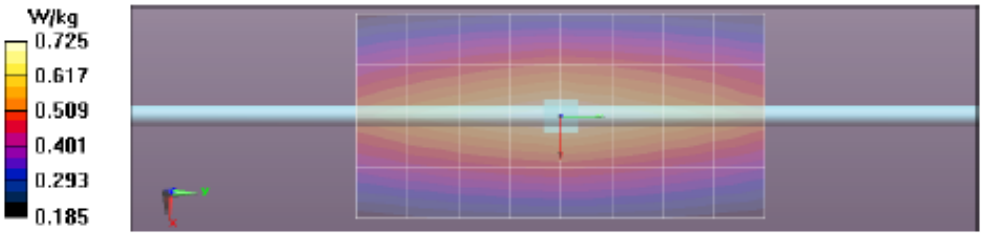
Comments:

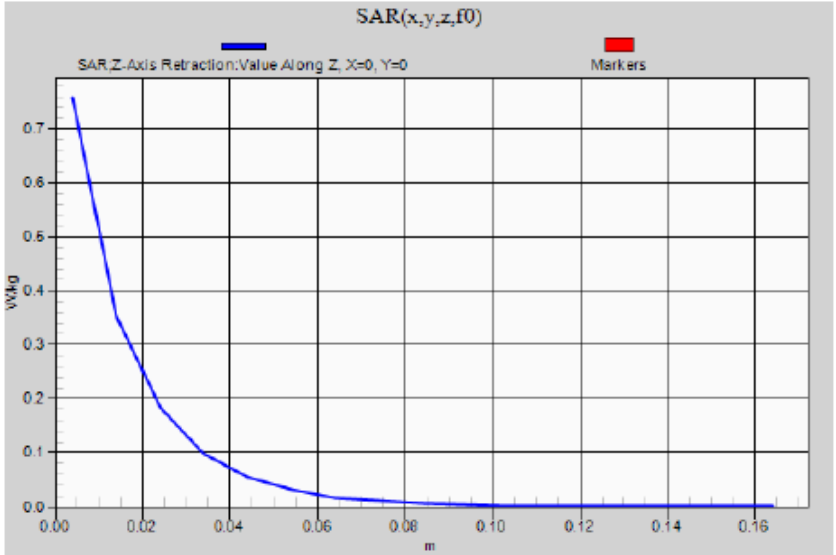
Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.9 mho/m; ε_r = 56.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (41x81x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.671 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 0.692 mW/g; SAR(10 g) = 0.502 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.725 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 = 28.671 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.989 mW/g
SAR(1 g) = 0.685 mW/g; SAR(10 g) = 0.469 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.724 W/kg

Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):
Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.725 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 2/26/2013 6:58:00 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130226-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	21.2 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.049 dB
Adjusted SAR (1W):	2.72 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.9 mho/m; ε_r = 55.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

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

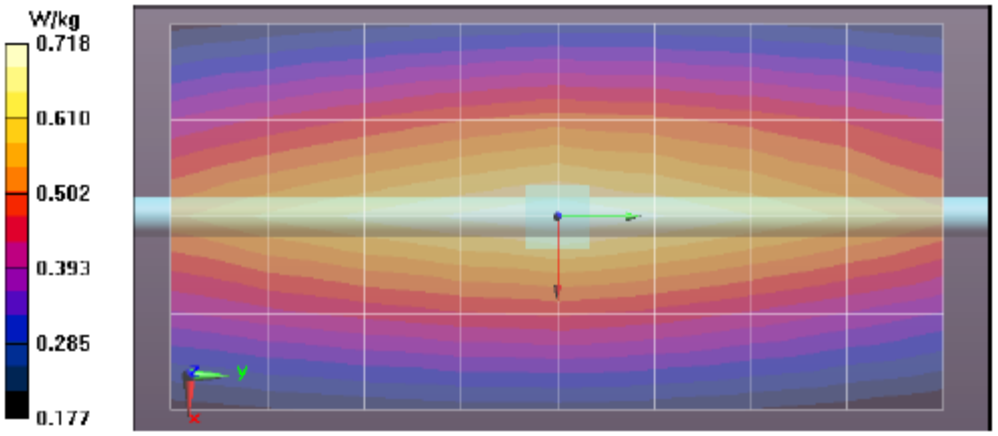
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.718 W/kg

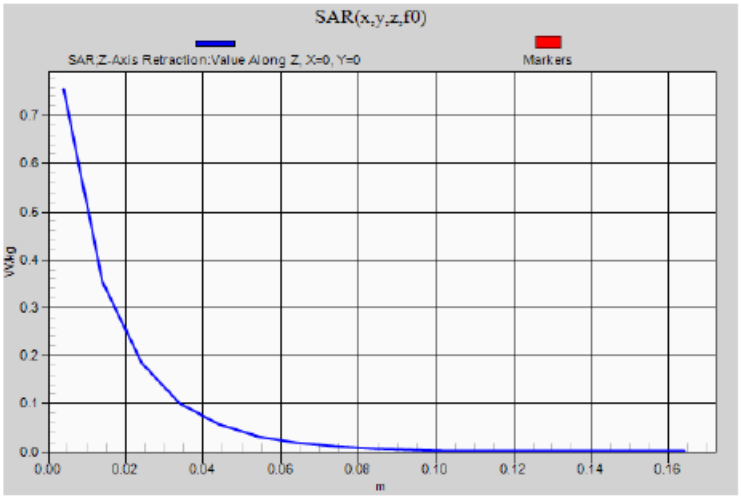
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.625 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.986 mW/g
SAR(1 g) = 0.679 mW/g; SAR(10 g) = 0.465 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.722 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.721 W/kg





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Date/Time: 2/27/2013 7:43:15 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130227-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	21.3 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.049 dB
Adjusted SAR (1W):	2.72 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.89 mho/m; ε_r = 57.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

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

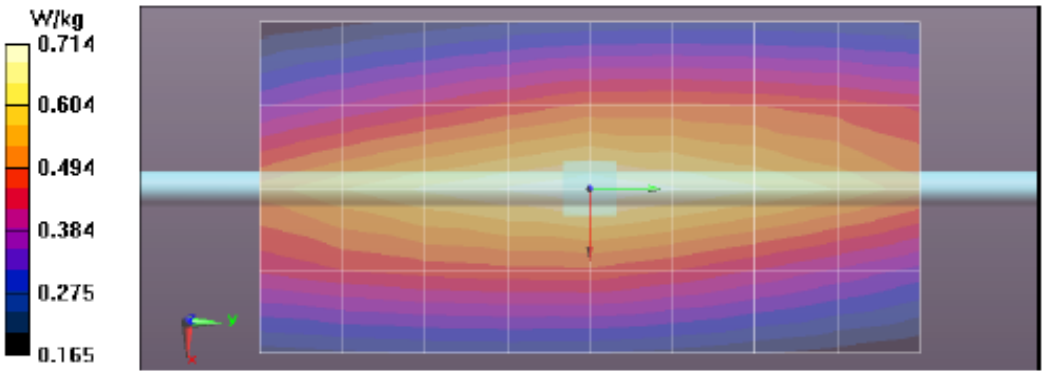
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.714 W/kg

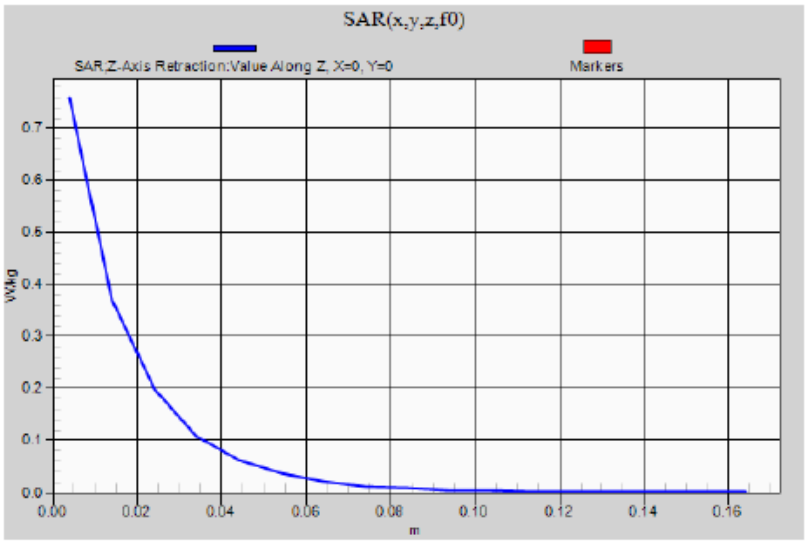
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.667 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.971 mW/g
SAR(1 g) = 0.681 mW/g; SAR(10 g) = 0.466 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.713 W/kg

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

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





Motorola Solutions, Inc. EME Laboratory

Date/Time: 2/28/2013 5:43:28 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130228-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	21.0 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.11 dB
Adjusted SAR (1W):	2.86 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.91 mho/m; ε_r = 57.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

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

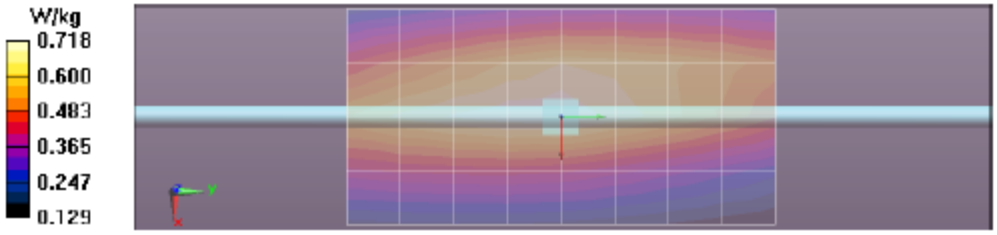
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.213 V/m; Power Drift = 0.01 dB
Fast SAR: SAR(1 g) = 0.715 mW/g; SAR(10 g) = 0.517 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.753 W/kg

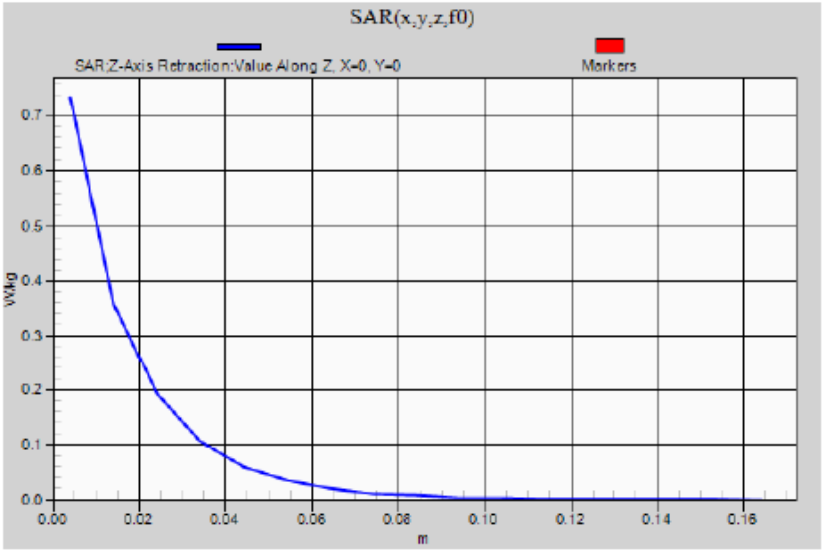
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 29.213 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.034 mW/g
SAR(1 g) = 0.714 mW/g; SAR(10 g) = 0.489 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.759 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.718 W/kg





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Date/Time: 3/1/2013 6:10:41 AM

Robot#: DASY5-FL-1 | Run#: HvH-SYSP-300B-130301-01
Dipole Model# D300V3
Phantom#: OVAL1018
Tissue Temp: 20.8 (C)
Serial#: 1015
Test Freq: 300 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.13 dB
Adjusted SAR (1W): 2.73 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.89 mho/m; ε_r = 56.2; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

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

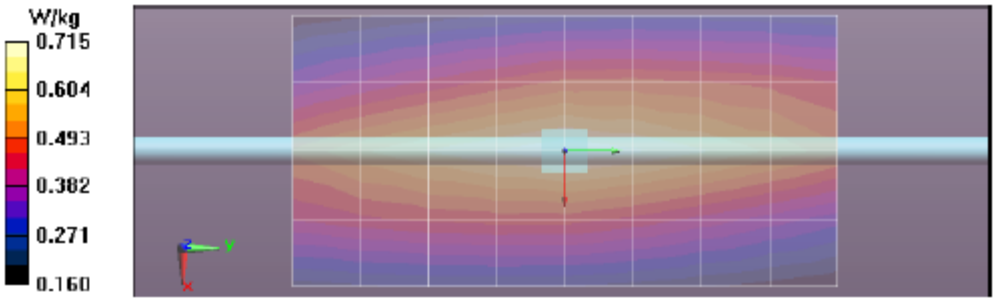
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.472 V/m; Power Drift = 0.06 dB
Fast SAR: SAR(1 g) = 0.687 mW/g; SAR(10 g) = 0.496 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.715 W/kg

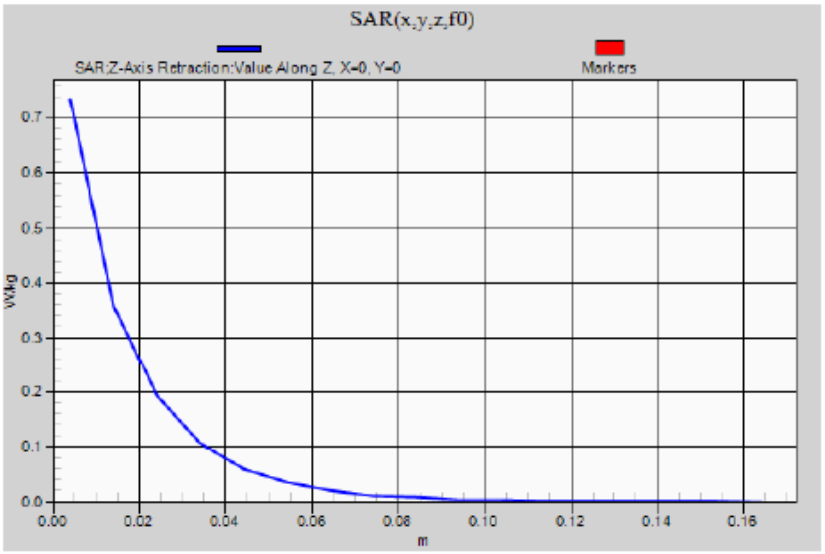
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.472 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.987 mW/g
SAR(1 g) = 0.682 mW/g; SAR(10 g) = 0.465 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.716 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.716 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/4/2013 7:11:25 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130304-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	22.0 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.052 dB
Adjusted SAR (1W):	2.76 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.95 mho/m; ε_r = 56.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

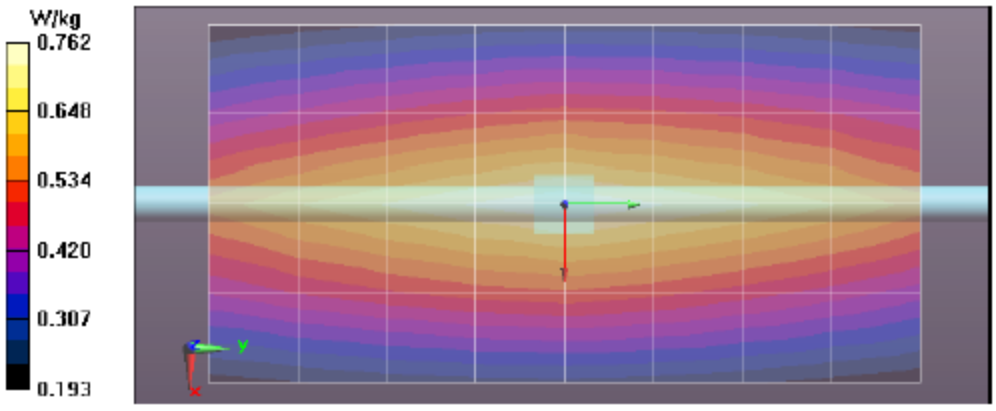
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.762 W/kg

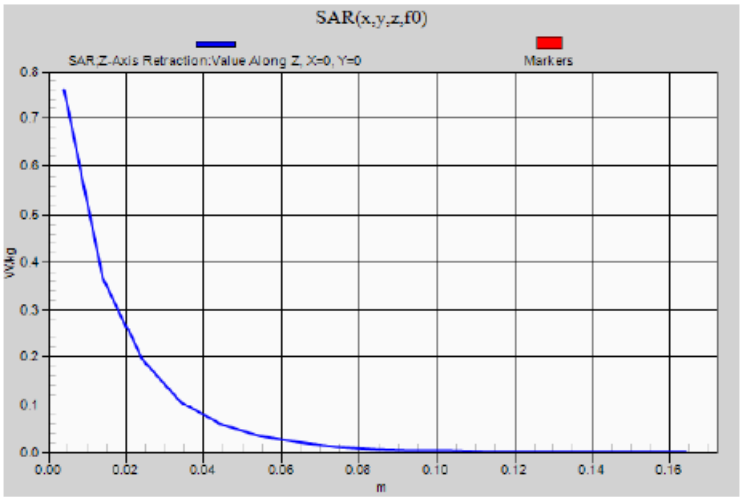
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.585 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.047 mW/g
SAR(1 g) = 0.689 mW/g; SAR(10 g) = 0.470 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





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Date/Time: 3/5/2013 6:29:06 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130305-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	20.2 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.053 dB
Adjusted SAR (1W):	2.70 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.89 mho/m; ε_r = 56.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

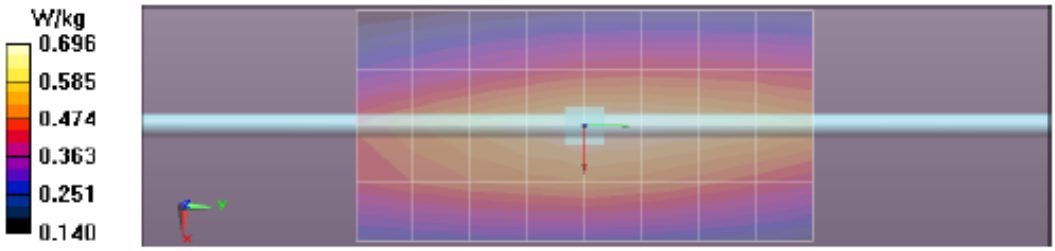
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.555 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 0.679 mW/g; SAR(10 g) = 0.491 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.707 W/kg

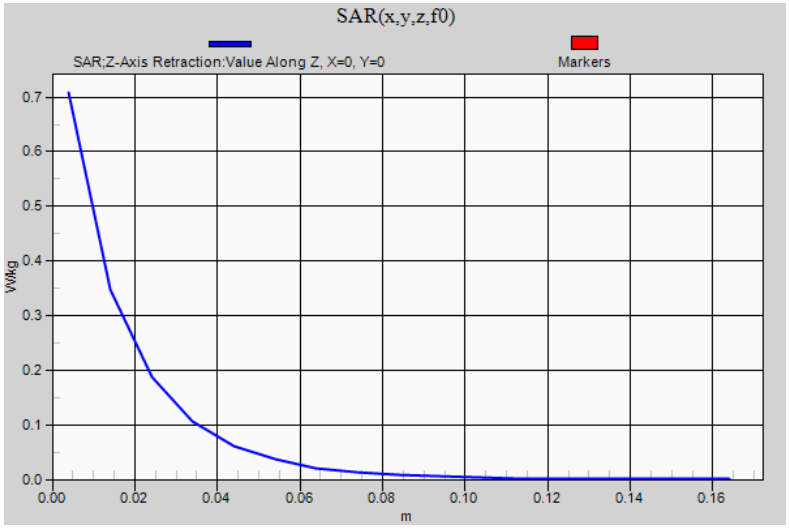
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.555 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.965 mW/g
SAR(1 g) = 0.674 mW/g; SAR(10 g) = 0.461 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.708 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.696 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/6/2013 6:01:21 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130306-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	20.6 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.049 dB
Adjusted SAR (1W):	2.70 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.91 mho/m; ε_r = 56.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

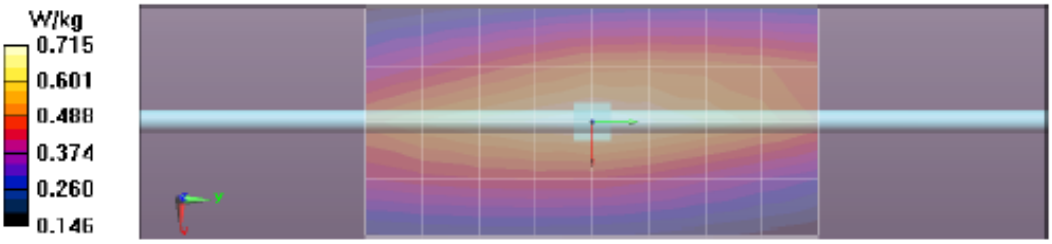
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.511 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 0.681 mW/g; SAR(10 g) = 0.493 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.721 W/kg

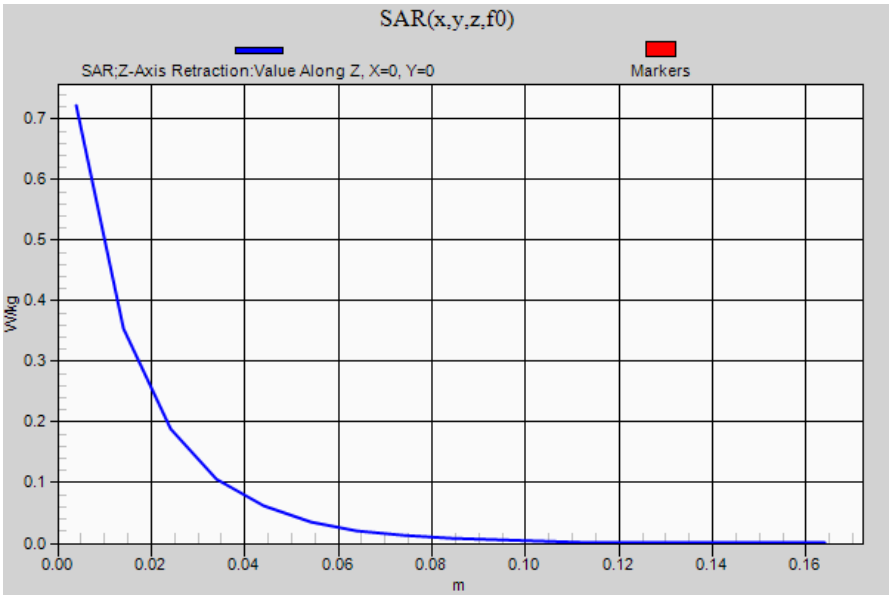
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.511 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.982 mW/g
SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.463 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.720 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.722 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/7/2013 6:52:13 AM

Robot#: DASY5-FL-1 | Run#:	JsT-SYSP-300B-130307-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	20.1 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.048 dB
Adjusted SAR (1W):	2.82 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.96 mho/m; ε_r = 56.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

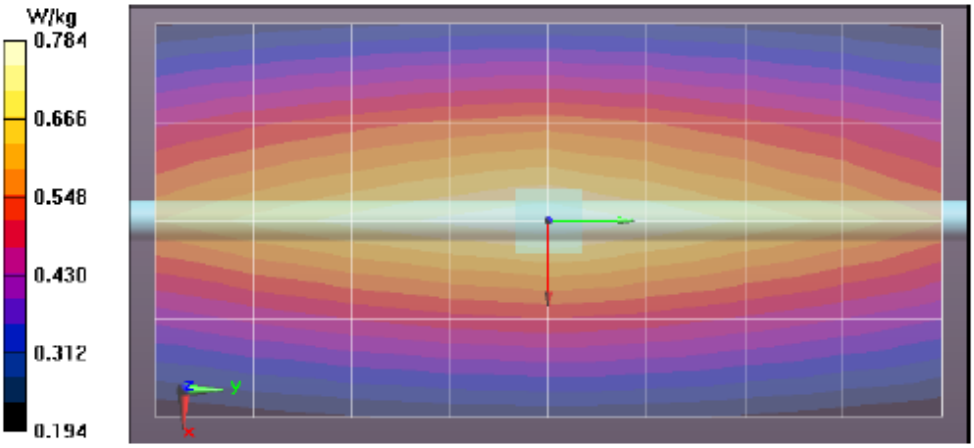
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.784 W/kg

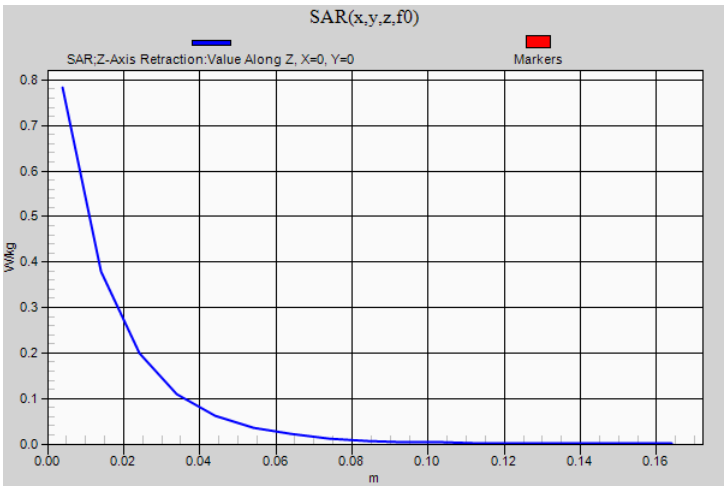
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.955 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.081 mW/g
SAR(1 g) = 0.705 mW/g; SAR(10 g) = 0.481 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.786 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.783 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/8/2013 5:39:37 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130308-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	20.4 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.057 dB
Adjusted SAR (1W):	2.82 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.93 mho/m; ε_r = 56; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

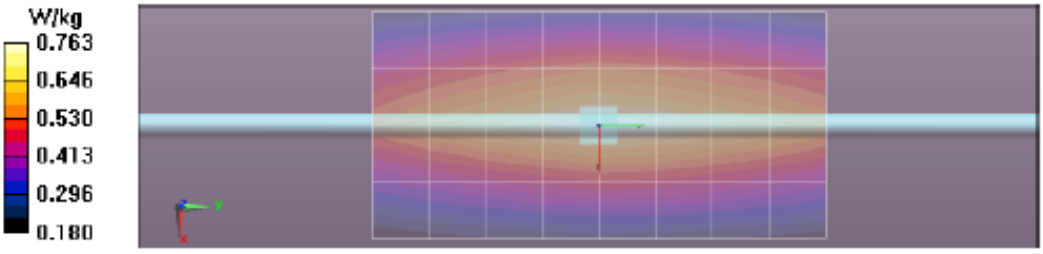
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.077 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 0.713 mW/g; SAR(10 g) = 0.517 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.768 W/kg

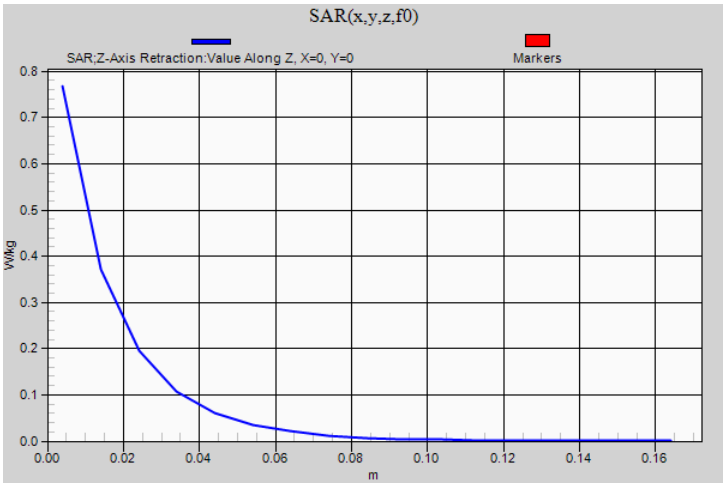
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 29.077 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.052 mW/g
SAR(1 g) = 0.704 mW/g; SAR(10 g) = 0.480 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.766 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.767 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/11/2013 10:56:02 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300H-130311-03
Dipole Model#	D300V3
Phantom#:	OVAL1109
Tissue Temp:	21.8 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.048 dB
Adjusted SAR (1W):	2.75 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.91 mho/m; ε_r = 44.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.25, 7.25, 7.25); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

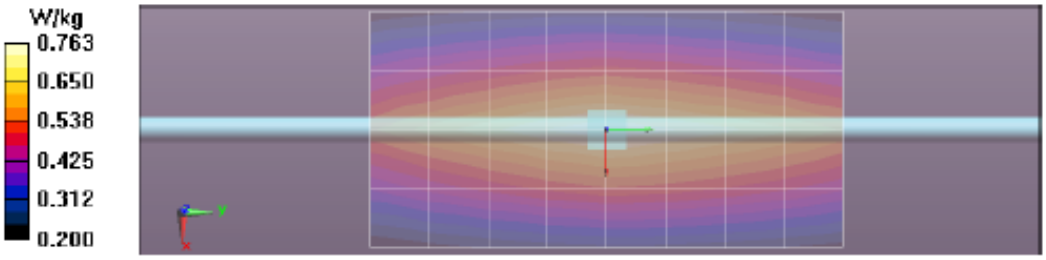
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.007 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 0.694 mW/g; SAR(10 g) = 0.505 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.763 W/kg

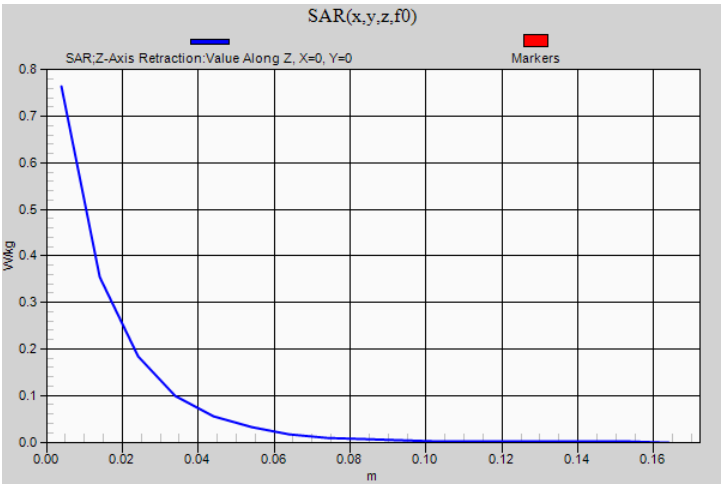
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 29.007 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.098 mW/g
SAR(1 g) = 0.688 mW/g; SAR(10 g) = 0.462 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.764 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.764 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/12/2013 9:29:03 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300H-130312-01
Dipole Model#	D300V3
Phantom#:	OVAL1109
Tissue Temp:	20.9 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.051 dB
Adjusted SAR (1W):	2.77 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.88 mho/m; ε_r = 45.2; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.25, 7.25, 7.25); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

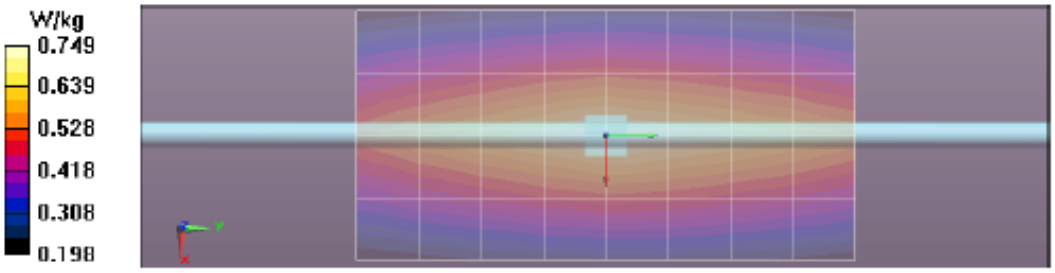
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.285 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 0.700 mW/g; SAR(10 g) = 0.508 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.749 W/kg

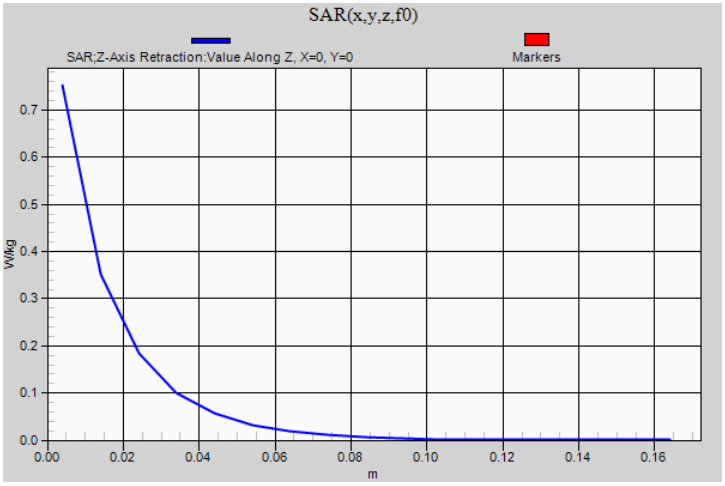
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 29.285 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.068 mW/g
SAR(1 g) = 0.693 mW/g; SAR(10 g) = 0.467 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.747 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.752 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/13/2013 12:22:14 AM

Robot#: DASY5-FL-1 | Run#:	CM-SYSP-300B-130313-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	20.7 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.049 dB
Adjusted SAR (1W):	2.71 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.89 mho/m; ε_r = 56.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

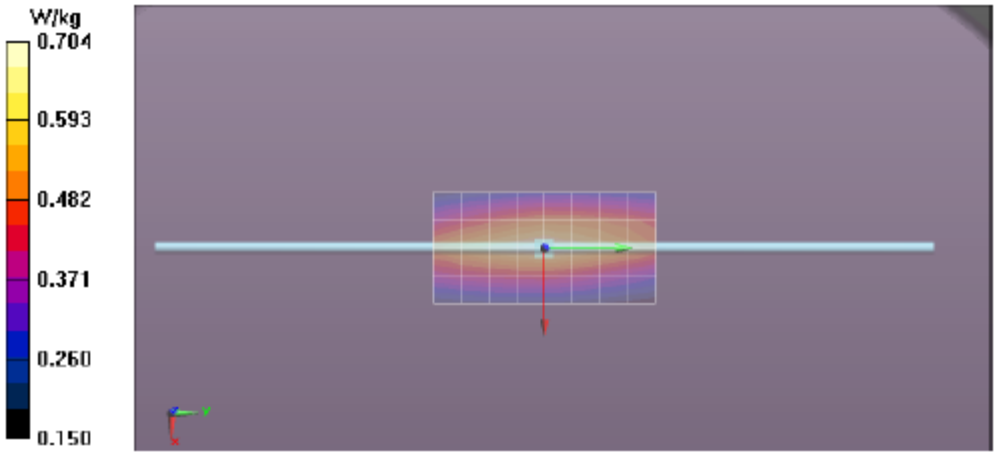
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.582 V/m; Power Drift = -0.02 dB
Fast SAR: SAR(1 g) = 0.684 mW/g; SAR(10 g) = 0.493 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.711 W/kg

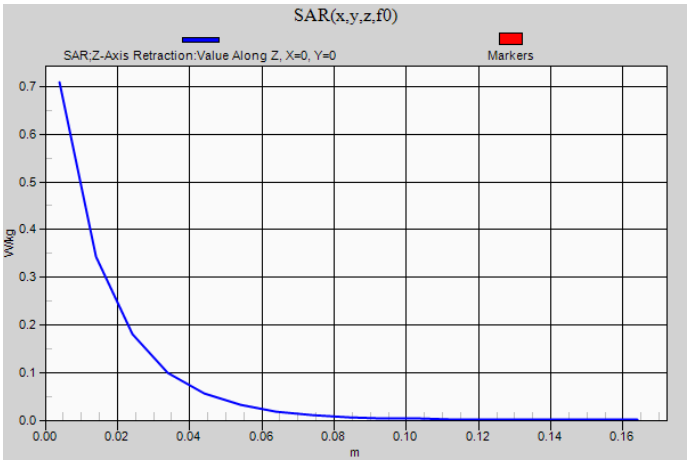
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.582 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.975 mW/g
SAR(1 g) = 0.677 mW/g; SAR(10 g) = 0.460 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.710 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.709 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/14/2013 9:17:36 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130314-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	20.1 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.046 dB
Adjusted SAR (1W):	2.68 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.92 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

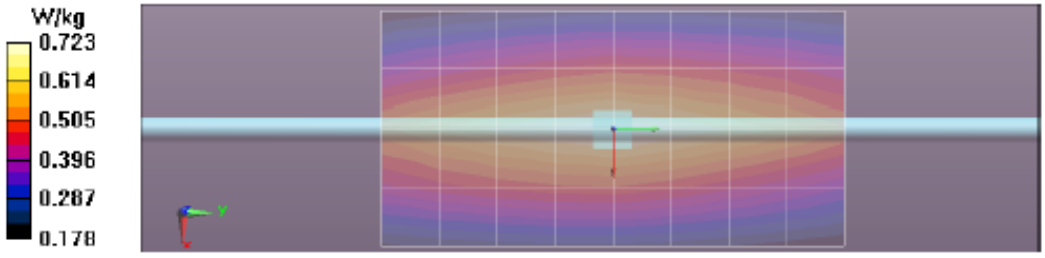
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.382 V/m; Power Drift = -0.02 dB
Fast SAR: SAR(1 g) = 0.677 mW/g; SAR(10 g) = 0.492 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.723 W/kg

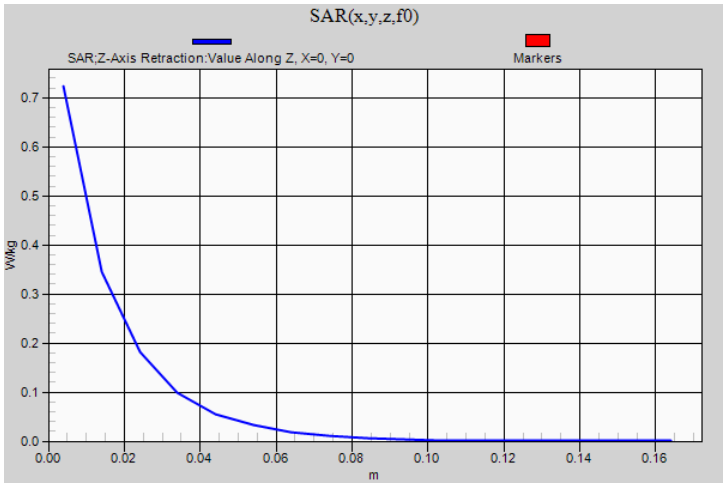
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.382 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.996 mW/g
SAR(1 g) = 0.669 mW/g; SAR(10 g) = 0.455 mW/g (SAR corrected for target medium)

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.723 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/18/2013 7:32:24 AM

Robot#: DASY5-FL-1 | Run#:	JsT-SYSP-300B-130318-01
Dipole Model#	D300V3
Phantom#:	OVAL1018
Tissue Temp:	21.2 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.049 dB
Adjusted SAR (1W):	2.70 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.96 mho/m; ε_r = 56.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

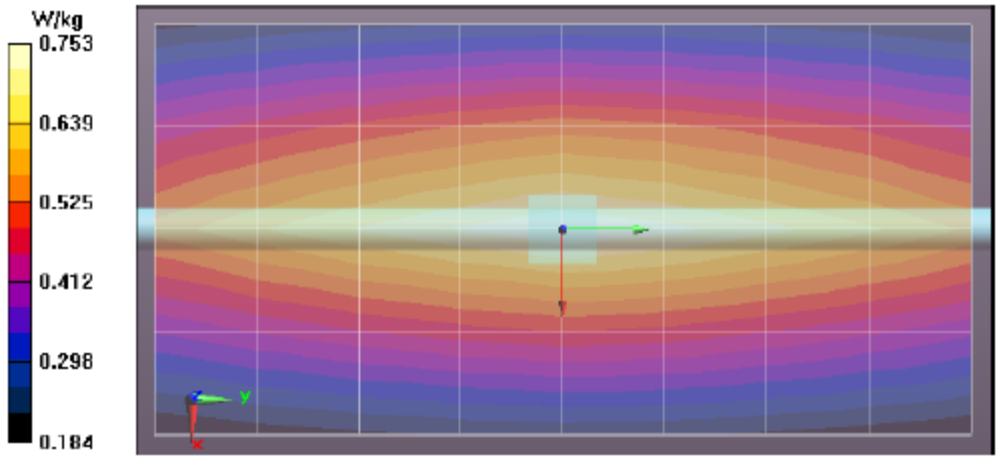
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.753 W/kg

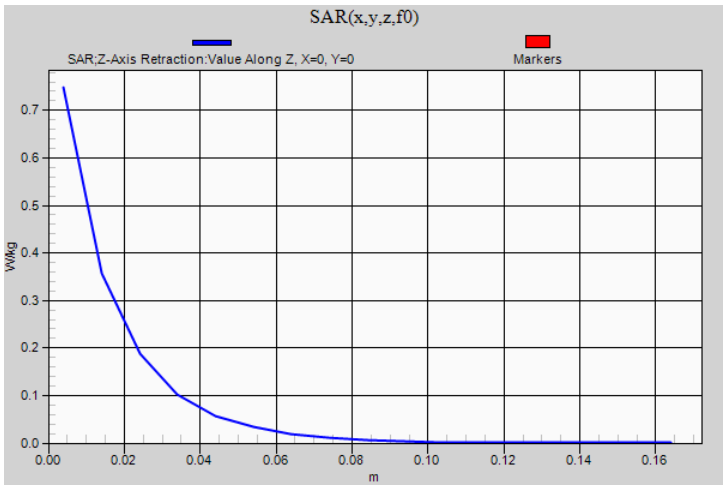
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.407 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.037 mW/g
SAR(1 g) = 0.675 mW/g; SAR(10 g) = 0.459 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.754 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.748 W/kg





Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/4/2013 9:48:02 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300H-130404-01
Dipole Model#	D300V3
Phantom#:	OVAL1109
Tissue Temp:	21.0 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.041 dB
Adjusted SAR (1W):	2.79 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.89 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.25, 7.25, 7.25); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

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

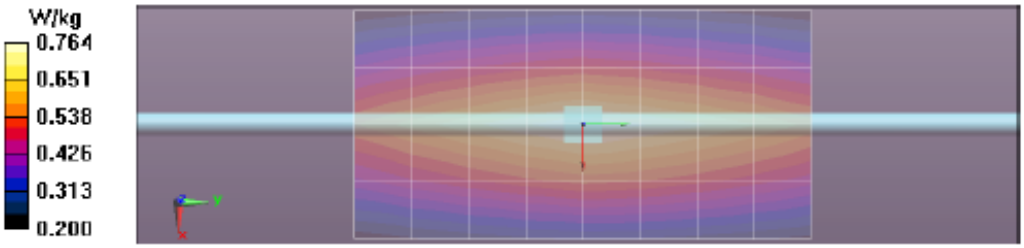
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.462 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 0.702 mW/g; SAR(10 g) = 0.511 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.765 W/kg

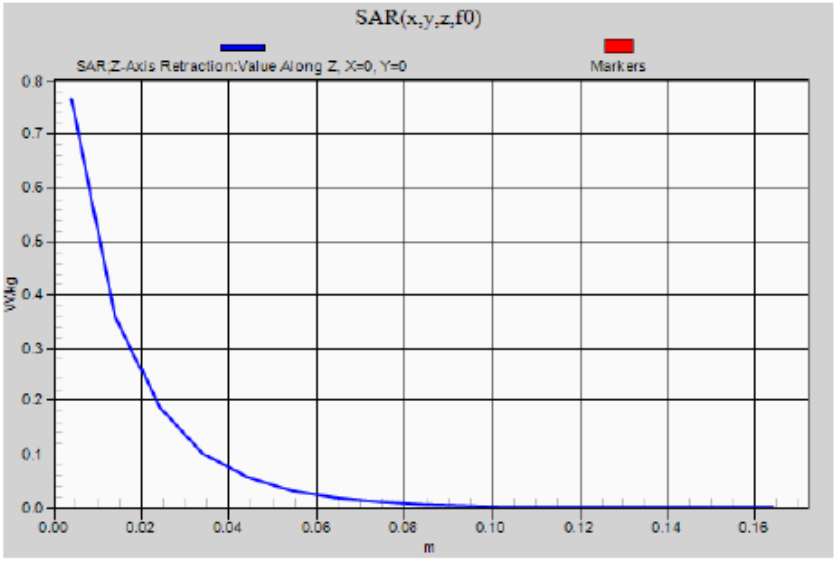
Below 3 GHz-Rev.4a/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 29.462 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.099 mW/g
SAR(1 g) = 0.697 mW/g; SAR(10 g) = 0.470 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.766 W/kg

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

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.767 W/kg





Motorola Solutions, Inc. EME Laboratory
Date/Time: 4/9/2013 6:16:07 AM

Robot#: DASY5-FL-1 | Run#:	HvH-SYSP-300B-130409-01
Dipole Model#	D300V3
Phantom#:	OVAL1090
Tissue Temp:	21.6 (C)
Serial#:	1015
Test Freq:	300 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.05 dB
Adjusted SAR (1W):	2.68 mW/g (1g)

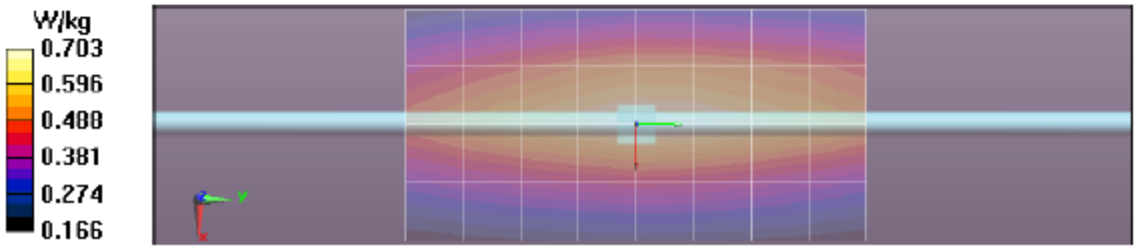
Comments:

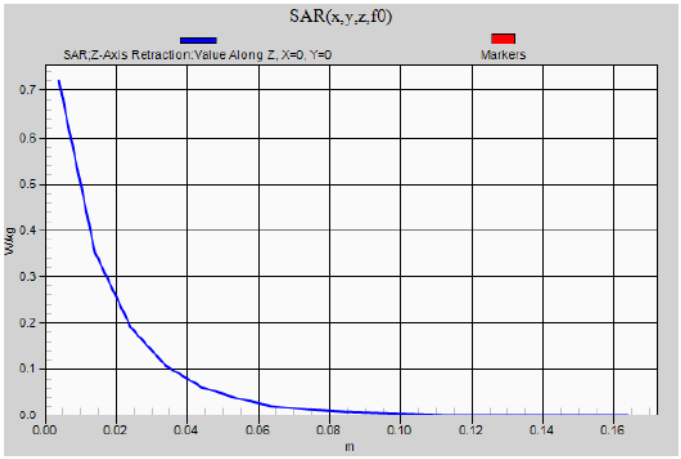
Duty Cycle: 1:1, Medium parameters used: f = 300 MHz; σ = 0.91 mho/m; ε_r = 56.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(7.12, 7.12, 7.12); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.4a/System Performance Check/Dipole Area Scan 2 (41x81x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.399 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 0.675 mW/g; SAR(10 g) = 0.489 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.715 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 = 28.399 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.980 mW/g
SAR(1 g) = 0.671 mW/g; SAR(10 g) = 0.460 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.716 W/kg

Below 3 GHz-Rev.4a/System Performance Check/Z-Axis Retraction (1x1x17):
Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 0.720 W/kg





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

Shortened Scan Result
Table 28

Motorola Solutions, Inc. EME Laboratory
Date/Time: 4/9/2013 11:34:17 AM

Robot#: DASY5-FL-1 | Run#:	HvH-Ab-130409-03
Model#:	PMUD3231A
Phantom#:	OVAL1090
Tissue Temp:	21.9 (C)
Serial#:	752TPB0246
Antenna:	HAD9742A
Test Freq:	150.8000 (MHz)
Battery:	NNTN4970A
Carry Acc:	HLN6602A
Audio Acc:	PMMN4013A
Start Power:	5.70 (W)

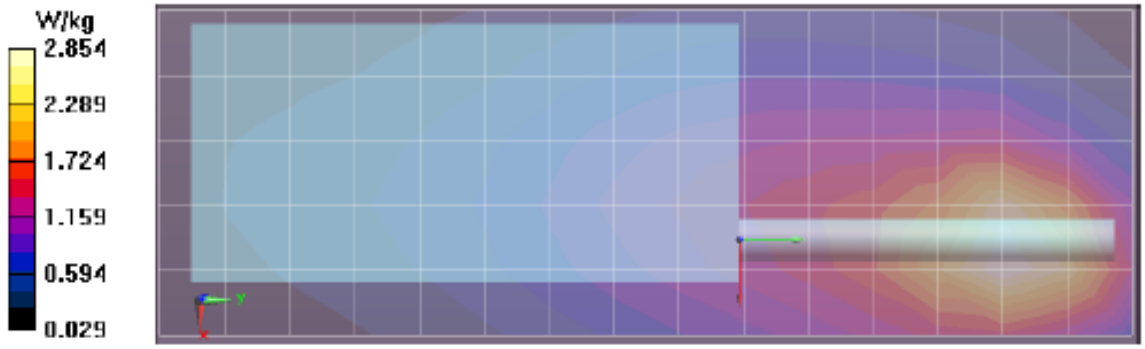
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.8 mho/m; ε_r = 60.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 45.519 V/m; Power Drift = -0.36 dB
Fast SAR: SAR(1 g) = 2.84 mW/g; SAR(10 g) = 2.02 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 3.06 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 = 60.589 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 5.300 mW/g
SAR(1 g) = 2.8 mW/g; SAR(10 g) = 1.69 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.96 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) = 2.92 W/kg



Shortened scan reflect highest SAR producing configuration; approximate run time is 12 minutes.
Representative full scan run time was 21 minutes.
"Shortened" scan max calculated SAR using SAR drift: 1-g Avg. = 1.53 mW/g; 10-g Avg. = 0.92 mW/g.
Zoom scan max calculated SAR using SAR drift (see part 1 table 19): 1-g Avg. = 1.22 mW/g; 10-g Avg. = 0.75 mW/g.

Body - Highest SAR Configuration Result
Table 19

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/5/2013 3:35:11 PM

Robot#: DASY5-FL-1 | Run#:	HvH-Ab-130305-09
Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	20.1 (C)
Serial#:	752TPB0246
Antenna:	HAD9742A
Test Freq:	150.8000 (MHz)
Battery:	NNTN4970A
Carry Acc:	HLN6602A
Audio Acc:	PMMN4013A
Start Power:	5.81 (W)

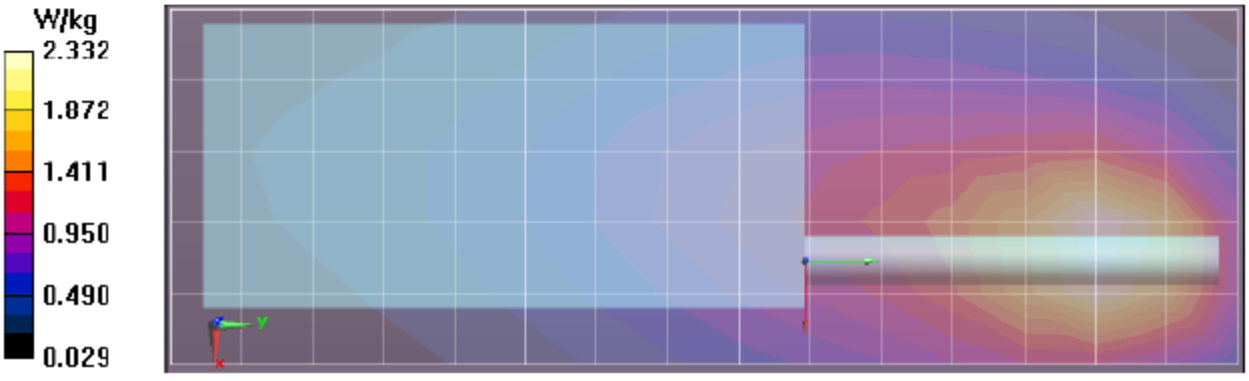
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.8 mho/m; ε_r = 62.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 41.669 V/m; Power Drift = -0.59 dB
Fast SAR: SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.68 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 2.50 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 = 55.076 V/m; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 4.155 mW/g
SAR(1 g) = 2.26 mW/g; SAR(10 g) = 1.39 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.39 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) = 2.31 W/kg



Face - Highest SAR Configuration Result
Table 26

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/11/2013 11:46:17 AM

Robot#: DASY5-FL-1 | Run#: HvH-Face-130311-04
Model#: PMUD3231A
Phantom#: OVAL1109
Tissue Temp: 21.7 (C)
Serial#: 752TPB0246
Antenna: PMAD4042A
Test Freq: 150.8000 (MHz)
Battery: PMNN4254AR
Carry Acc: None
Audio Acc: None
Start Power: 5.74 (W)

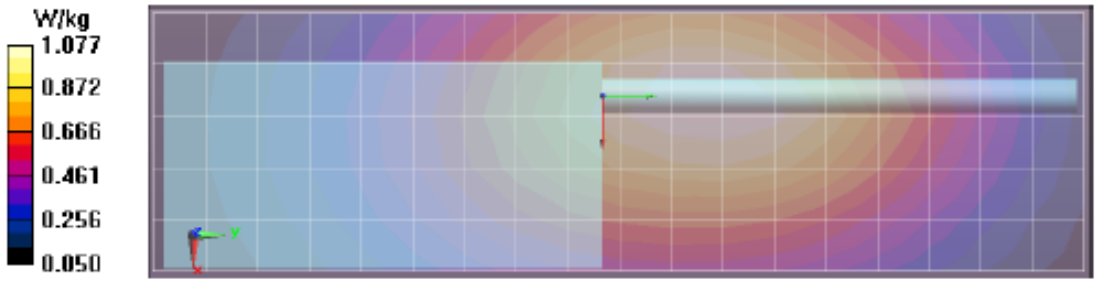
Comments: DUT front at 2.5cm.

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.78 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.35, 8.35, 8.35); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Face Scan/1-Area Scan (51x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 37.085 V/m; Power Drift = -0.26 dB
Fast SAR: SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.787 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.08 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 = 37.085 V/m; Power Drift = -0.40 dB
Peak SAR (extrapolated) = 1.371 mW/g
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.773 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.06 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) = 1.05 W/kg



APPENDIX F
DUT Scans - FCC Part 90 (150.8-173.4 MHz) per KDB 643646

Assessments at the Body with Body worn RLN5644A
Table 14

Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/22/2013 12:20:26 PM

Robot#: DASY5-FL-1 | Run#:	HvH-Ab-130222-04
Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	20.9 (C)
Serial#:	752TPB0245
Antenna:	PMAD4014A
Test Freq:	150.8000 (MHz)
Battery:	NNTN4970A
Carry Acc:	RLN5644A
Audio Acc:	PMMN4013A
Start Power:	6.00 (W)

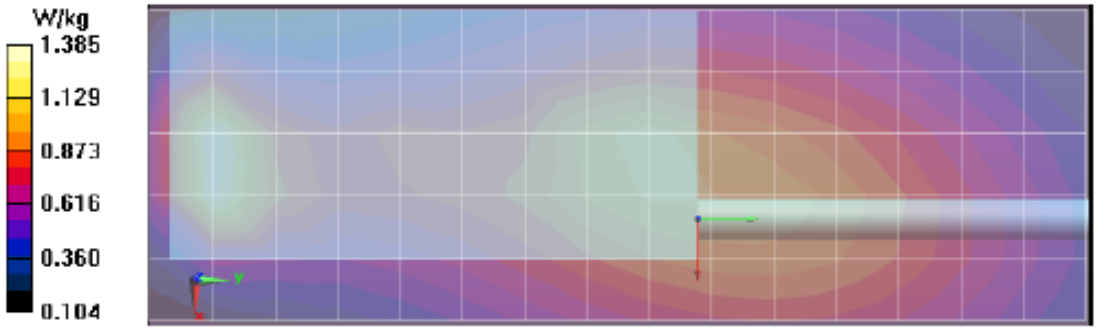
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.8 mho/m; ε_r = 60.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 37.961 V/m; Power Drift = -0.36 dB
Fast SAR: SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.916 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.52 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 = 37.961 V/m; Power Drift = -0.54 dB
Peak SAR (extrapolated) = 3.322 mW/g
SAR(1 g) = 1.38 mW/g; SAR(10 g) = 0.742 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.39 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) = 1.38 W/kg



Assessments at the Body with Body worn HLN8255B
Table 15

Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/27/2013 12:59:38 PM

Robot#: DASY5-FL-1 | Run#:	HvH-Ab-130227-06
Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	20.7 (C)
Serial#:	752TPB0245
Antenna:	PMAD4014A
Test Freq:	150.8000 (MHz)
Battery:	NNTN4851A
Carry Acc:	HLN8255B
Audio Acc:	PMMN4013A
Start Power:	5.99 (W)

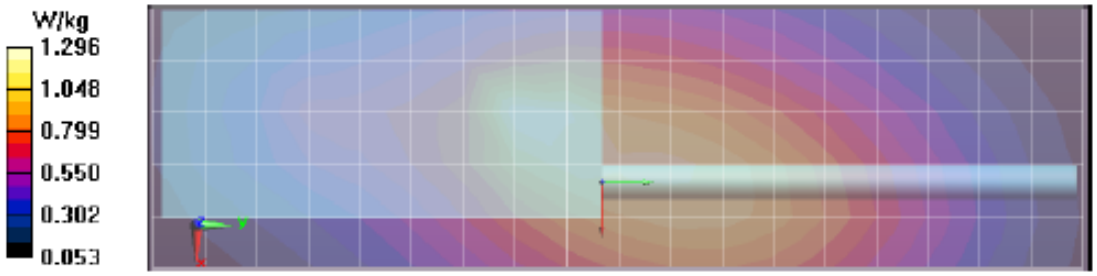
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.83 mho/m; ε_r = 60.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 37.205 V/m; Power Drift = -0.74 dB
Fast SAR: SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.908 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.36 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 = 37.205 V/m; Power Drift = -0.89 dB
Peak SAR (extrapolated) = 2.315 mW/g
SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.849 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.36 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) = 1.30 W/kg



Assessments at the body with Body worn RLN5383A
Table 16

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/1/2013 10:54:06 AM

Robot#: DASY5-FL-1 | Run#: HvH-Ab-130301-03
Model#: PMUD3231A
Phantom#: OVAL1018
Tissue Temp: 20.8 (C)
Serial#: 752TPB0246
Antenna: PMAD4014A
Test Freq: 150.8000 (MHz)
Battery: PMNN4253AR
Carry Acc: RLN5383A
Audio Acc: PMMN4013A
Start Power: 5.71 (W)

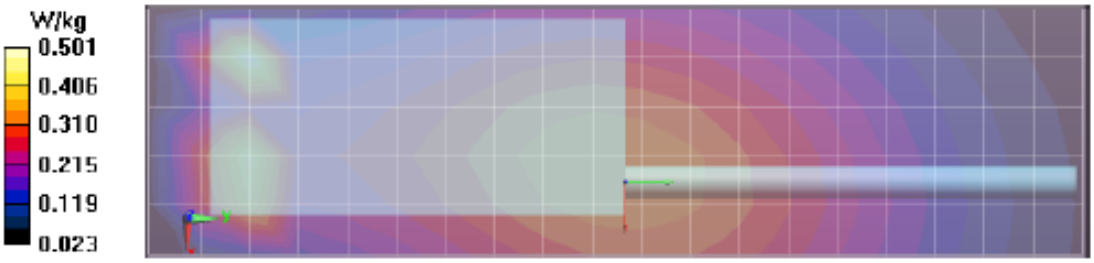
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.77 mho/m; ε_r = 60.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 38.107 V/m; Power Drift = -0.13 dB
Fast SAR: SAR(1 g) = 0.480 mW/g; SAR(10 g) = 0.318 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.531 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 = 43.913 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 6.617 mW/g
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.354 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.46 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) = 1.44 W/kg



Assessments at the body with Body worn RLN5385B
Table 17

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/1/2013 7:38:45 PM

Robot#: DASY5-FL-1 | Run#: CM-Ab-130301-14

Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	19.9 (C)
Serial#:	752TPB0246
Antenna:	PMAD4042A
Test Freq:	150.8000 (MHz)
Battery:	NNTN4497CR
Carry Acc:	RLN5385B
Audio Acc:	PMMN4013A
Start Power:	5.79 (W)

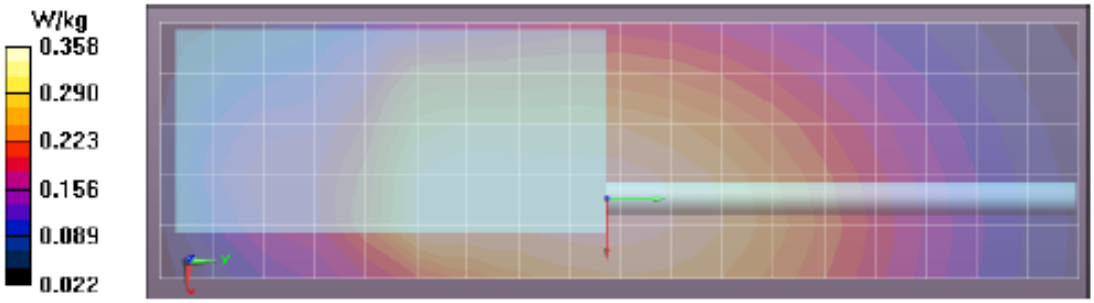
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.77 mho/m; ε_r = 60.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn1231, Calibrated: 3/5/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 22.068 V/m; Power Drift = -0.27 dB
Fast SAR: SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.270 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.366 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (6x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 21.132 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.496 mW/g
SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.259 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.345 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) = 0.323 W/kg



Assessments at the body with Body worn HLN9701B
Table 18

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/4/2013 10:47:44 PM

Robot#: DASY5-FL-1 | Run#: CM-Ab-130304-16

Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	20.4 (C)
Serial#:	752TPB0246
Antenna:	PMAD4042A
Test Freq:	150.8000 (MHz)
Battery:	PMNN4253AR
Carry Acc:	HLN9701B
Audio Acc:	PMMN4013A
Start Power:	5.82 (W)

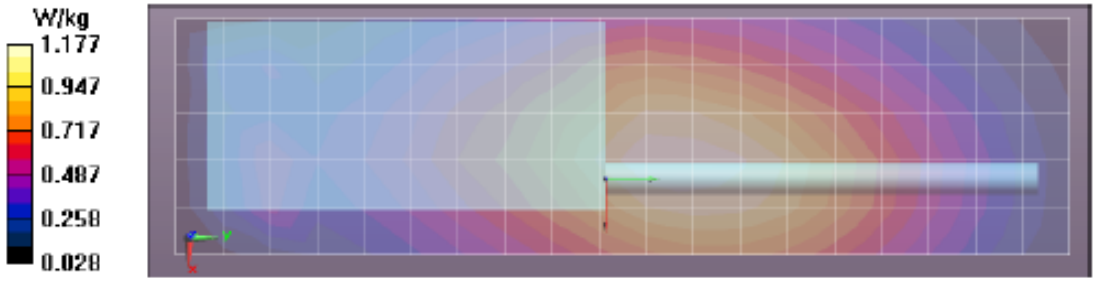
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.82 mho/m; ε_r = 60; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 38.308 V/m; Power Drift = -0.30 dB
Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.852 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.19 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 = 38.308 V/m; Power Drift = -0.52 dB
Peak SAR (extrapolated) = 1.500 mW/g
SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.825 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.13 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) = 1.09 W/kg



Assessments at the body with Body worn HLN6602A
Table 19

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/5/2013 3:35:11 PM

Robot#: DASY5-FL-1 | Run#:	HvH-Ab-130305-09
Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	20.1 (C)
Serial#:	752TPB0246
Antenna:	HAD9742A
Test Freq:	150.8000 (MHz)
Battery:	NNTN4970A
Carry Acc:	HLN6602A
Audio Acc:	PMMN4013A
Start Power:	5.81 (W)

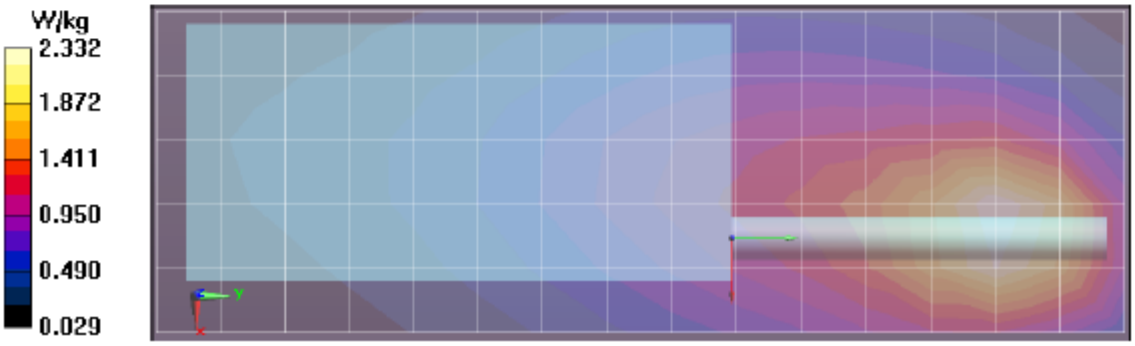
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.8 mho/m; ε_r = 62.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 41.669 V/m; Power Drift = -0.59 dB
Fast SAR: SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.68 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 2.50 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 = 55.076 V/m; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 4.155 mW/g
SAR(1 g) = 2.26 mW/g; SAR(10 g) = 1.39 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.39 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) = 2.31 W/kg



Assessments at the body with Body worn RLN4815A
Table 20

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/6/2013 9:25:55 AM

Robot#: DASY5-FL-1 | Run#:	HvH-Ab-130306-02
Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	20.8 (C)
Serial#:	752TPB0246
Antenna:	PMAD4042A
Test Freq:	150.8000 (MHz)
Battery:	NNTN4970A
Carry Acc:	RLN4815A
Audio Acc:	PMMN4013A
Start Power:	5.78 (W)

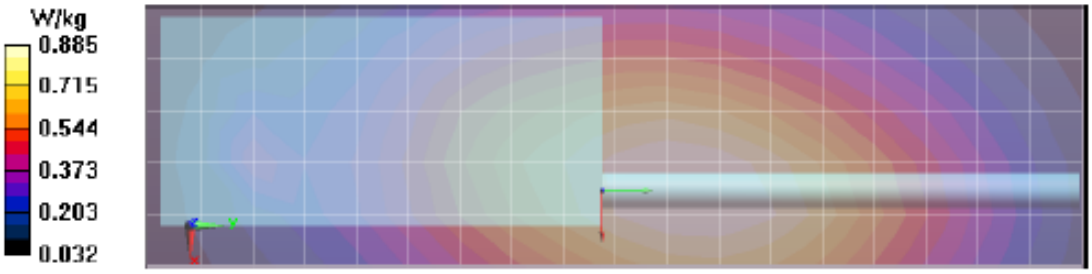
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.81 mho/m; ε_r = 60.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 32.817 V/m; Power Drift = -0.36 dB
Fast SAR: SAR(1 g) = 0.867 mW/g; SAR(10 g) = 0.659 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.907 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 = 32.817 V/m; Power Drift = -0.49 dB
Peak SAR (extrapolated) = 1.096 mW/g
SAR(1 g) = 0.823 mW/g; SAR(10 g) = 0.634 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.857 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) = 0.848 W/kg



Assessments of accessory RLN5383A with carry strap NTN5243A

Table 21

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/6/2013 10:45:45 PM

Robot#: DASY5-FL-1 | Run#: CM-Ab-130306-19

Model#:	PMUD3231A
Phantom#:	OVAL1018
Tissue Temp:	20.4 (C)
Serial#:	752TPB0246
Antenna:	NAD6502AR
Test Freq:	150.8000 (MHz)
Battery:	NNTN4970A
Carry Acc:	RLN5383A w/NTN5243A
Audio Acc:	PMMN4013A
Start Power:	5.72 (W)

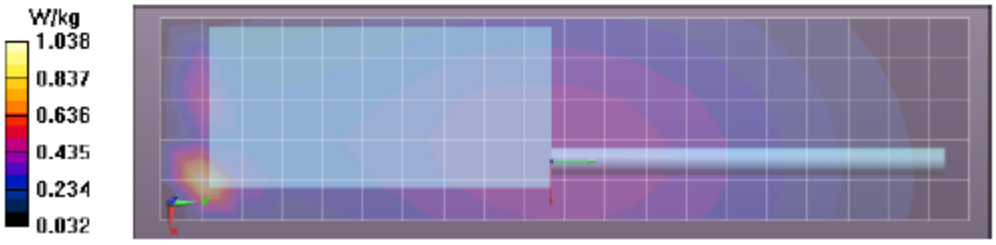
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.81 mho/m; ε_r = 60.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 42.630 V/m; Power Drift = -0.63 dB
Fast SAR: SAR(1 g) = 0.805 mW/g; SAR(10 g) = 0.398 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.22 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 = 42.630 V/m; Power Drift = -0.77 dB
Peak SAR (extrapolated) = 7.374 mW/g
SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.380 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.44 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) = 1.57 W/kg



Assessments of accessory RLN5385B with carry strap NTN5243A

Table 22

Motorola Solutions, Inc. EME Laboratory

Date/Time: 3/7/2013 5:07:02 PM

Robot#: DASY5-FL-1 | Run#: CM-Ab-130307-12
Model#: PMUD3231A
Phantom#: OVAL1018
Tissue Temp: 19.8 (C)
Serial#: 752TPB0246
Antenna: PMAD4042A
Test Freq: 150.8000 (MHz)
Battery: NNTN4970A
Carry Acc: RLN5385B w/o belt loop w/ NTN5243A
Audio Acc: PMMN4013A
Start Power: 5.73 (W)

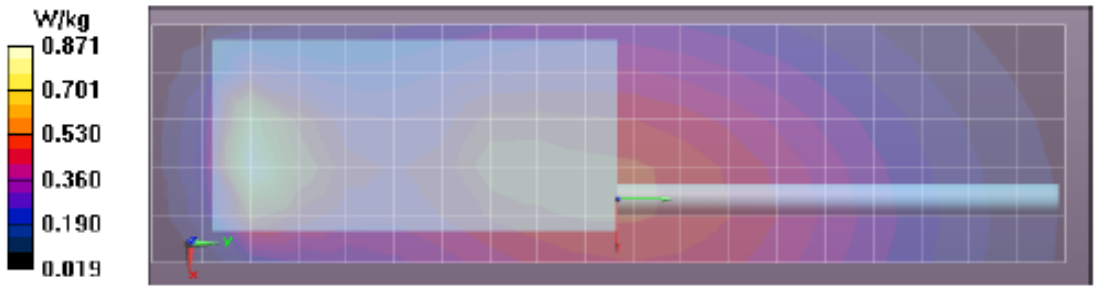
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.79 mho/m; ε_r = 63.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 26.316 V/m; Power Drift = -0.32 dB
Fast SAR: SAR(1 g) = 0.847 mW/g; SAR(10 g) = 0.556 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.955 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 = 26.316 V/m; Power Drift = -0.47 dB
Peak SAR (extrapolated) = 1.798 mW/g
SAR(1 g) = 0.805 mW/g; SAR(10 g) = 0.443 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.836 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) = 0.822 W/kg



Assessments of accessory HLN9701B with carry strap NTN5243A

Table 23

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/8/2013 10:57:42 PM

Robot#: DASY5-FL-1 | Run#: CM-Ab-130308-22
Model#: PMUD3231A
Phantom#: OVAL1018
Tissue Temp: 20.1 (C)
Serial#: 752TPB0246
Antenna: PMAD4042A
Test Freq: 150.8000 (MHz)
Battery: PMNN4072A
Carry Acc: HLN9701B w/ NTN5243A
Audio Acc: PMMN4013A
Start Power: 5.70 (W)

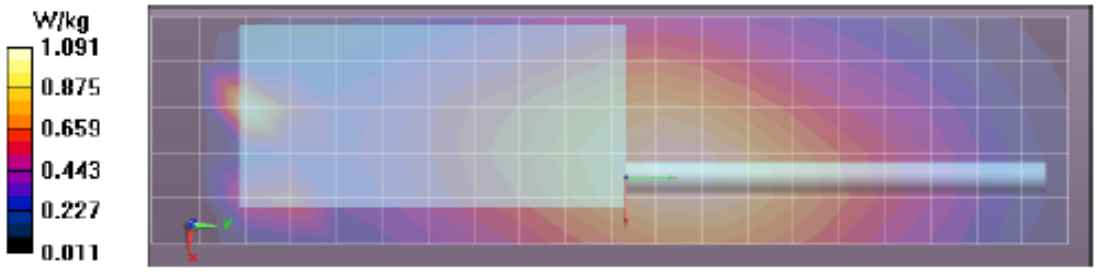
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.8 mho/m; ε_r = 60.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 37.963 V/m; Power Drift = -0.41 dB
Fast SAR: SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.784 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.25 W/kg

Below 3 GHz-Rev.5/Ab Scan/3-Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 37.963 V/m; Power Drift = -0.55 dB
Peak SAR (extrapolated) = 7.817 mW/g
SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.406 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.59 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) = 1.62 W/kg



Assessment at the Body with other audio accessories

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

Assessments at the Face
Table 26

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/11/2013 11:46:17 AM

Robot#: DASY5-FL-1 | Run#: HvH-Face-130311-04

Model#:	PMUD3231A
Phantom#:	OVAL1109
Tissue Temp:	21.7 (C)
Serial#:	752TPB0246
Antenna:	PMAD4042A
Test Freq:	150.8000 (MHz)
Battery:	PMNN4254AR
Carry Acc:	None
Audio Acc:	None
Start Power:	5.74 (W)

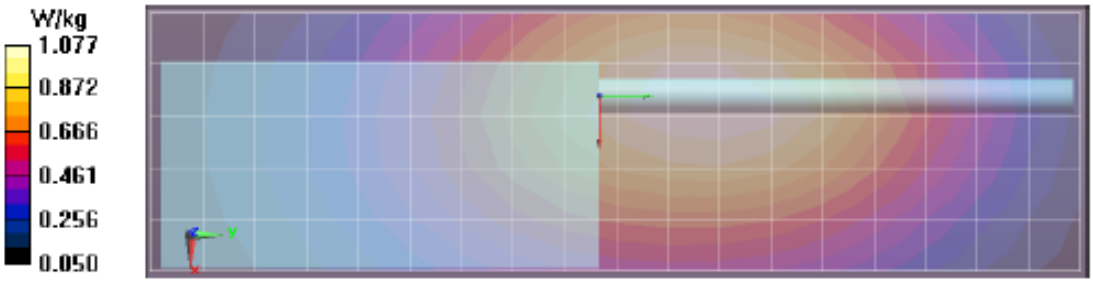
Comments: DUT front at 2.5cm.

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.78 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.35, 8.35, 8.35); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Face Scan/1-Area Scan (51x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 37.085 V/m; Power Drift = -0.26 dB
Fast SAR: SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.787 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.08 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 = 37.085 V/m; Power Drift = -0.40 dB
Peak SAR (extrapolated) = 1.371 mW/g
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.773 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.06 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) = 1.05 W/kg



APPENDIX G
DUT Scans - Outside FCC Part 90

Assessments outside FCC Part 90 at the Body
Table 24

Motorola Solutions, Inc. EME Laboratory
Date/Time: 4/9/2013 10:34:52 AM

Robot#: DASY5-FL-1 | Run#: HvH-Ab-130409-02
Model#: PMUD3231A
Phantom#: OVAL1090
Tissue Temp: 21.7 (C)
Serial#: 752TPB0246
Antenna: HAD9742A
Test Freq: 146.0000 (MHz)
Battery: NNTN4970A
Carry Acc: HLN6602A
Audio Acc: PMMN4013A
Start Power: 5.70 (W)

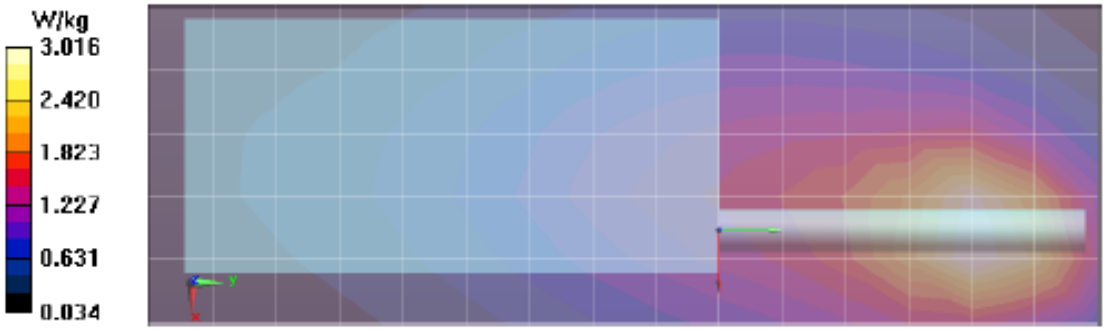
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 146 MHz; σ = 0.8 mho/m; ε_r = 60.7; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.06, 8.06, 8.06); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 46.071 V/m; Power Drift = -0.34 dB
Fast SAR: SAR(1 g) = 3.06 mW/g; SAR(10 g) = 2.18 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 3.29 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 = 62.978 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 5.590 mW/g
SAR(1 g) = 2.98 mW/g; SAR(10 g) = 1.81 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.14 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) = 3.13 W/kg



Assessments outside FCC Part 90 at the Face
Table 27

Motorola Solutions, Inc. EME Laboratory
Date/Time: 3/12/2013 11:47:46 AM

Robot#: DASY5-FL-1 | Run#: HvH-Face-130312-04

Model#:	PMUD3231A
Phantom#:	OVAL1109
Tissue Temp:	20.8 (C)
Serial#:	752TPB0246
Antenna:	PMAD4042A
Test Freq:	146.0000 (MHz)
Battery:	PMNN4254AR
Carry Acc:	None
Audio Acc:	None
Start Power:	5.73 (W)

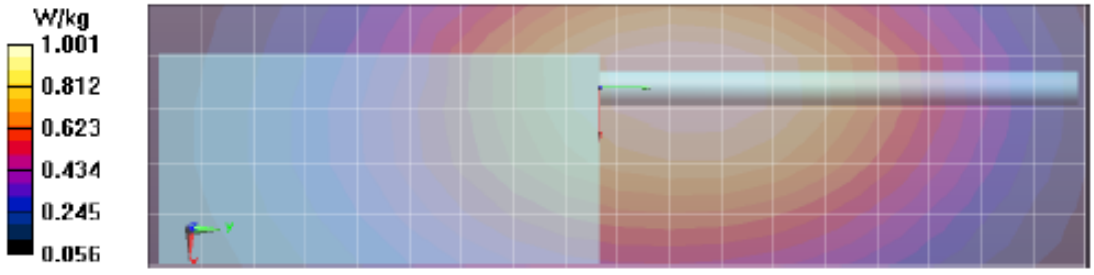
Comments: DUT front at 2.5cm.

Duty Cycle: 1:1, Medium parameters used: f = 146 MHz; σ = 0.74 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3147, , ConvF(8.35, 8.35, 8.35); Calibrated: 1/28/2013
Electronics: DAE4 Sn850, Calibrated: 7/18/2012

Below 3 GHz-Rev.5/Face Scan/1-Area Scan (51x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 36.467 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 1 mW/g; SAR(10 g) = 0.760 mW/g (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.02 W/kg

Below 3 GHz-Rev.5/Face Scan/3-Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.467 V/m; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 1.322 mW/g
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.782 mW/g (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.03 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) = 1.01 W/kg



APPENDIX H

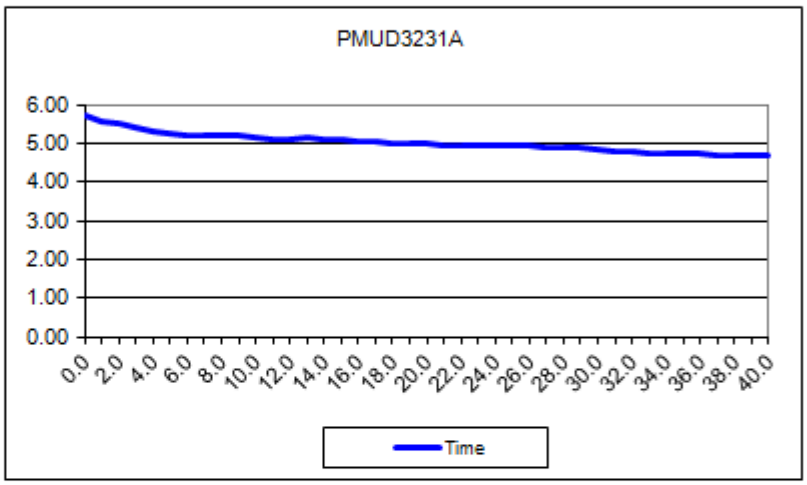
DUT Supplementary Data (Power slump)

PMUD3231A

752TPB0246

Battery	NNTN4970A	**Transmit Mode**	CW
Frequency	146.00MHz	**Audio Accessory**	PMMN4013A
Date	3/15/2013		

TX TIME (minutes)	**Meaured Power Watts**
	Time
0.0	5.70
1.0	5.54
2.0	5.49
3.0	5.41
4.0	5.32
5.0	5.28
6.0	5.20
7.0	5.22
8.0	5.20
9.0	5.19
10.0	5.15
11.0	5.12
12.0	5.11
13.0	5.14
14.0	5.12
15.0	5.10
16.0	5.06
17.0	5.04
18.0	5.02
19.0	4.98
20.0	4.98
21.0	4.95
22.0	4.94
23.0	4.93
24.0	4.94
25.0	4.93
26.0	4.92
27.0	4.89
28.0	4.88
29.0	4.89
30.0	4.85
31.0	4.80
32.0	4.78
33.0	4.76
34.0	4.75
35.0	4.74
36.0	4.73
37.0	4.69
38.0	4.68
39.0	4.70
40.0	4.68



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