

 MOTOROLA SOLUTIONS	  <p>MS ISO/IEC 17025 TESTING SAMM No. 0826</p>	  <p>CERTIFICATE 2518.05</p>
---	---	--

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

<p style="text-align: center;">Motorola Solutions Inc. EME Test Laboratory Motorola Solutions Malaysia Sdn Bhd Plot 2A, Medan Bayan Lepas, Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.</p>	<p>Date of Report: 12/19/2019 Report Revision: B</p>
---	--

Responsible Engineer:	Ch'ng Jian Sheng (EME Engineer)
Report Author:	Ch'ng Jian Sheng (EME Engineer)
Date/s Tested:	08/21/2019 – 09/19/2019
Manufacturer:	Motorola Solutions Inc.
Applicant Name:	Motorola Solutions Inc.
DUT Description:	Handheld Portable – 403-527 MHz 4W NKP CFS WiFi
Test TX mode(s):	CW (PTT), Bluetooth, WLAN 802.11 b/g/n
Max. Power output:	4.8W (LMR 403-527 MHz band), 10mW (BT, BT LE), 70.8mW (WLAN 802.11 b), 20mW (WLAN 802.11g), 12.6mW (WLAN 802.11n)
Nominal Power:	4.0W (LMR 403-527 MHz band), 8.9mW (BT, BT LE) , 55.0mW (WLAN 802.11 b), 14.8mW (WLAN 802.11g), 10mW (WLAN 802.11n)
Tx Frequency Bands:	LMR 403-527 MHz; Bluetooth 2.402-2.480 GHz; WLAN 802.11 b/g/n 2.412-2.462 GHz
Signaling type:	FM (LMR), FHSS (Bluetooth), 802.11 b/g/n (WLAN)
Model(s) Tested:	AAH02RDC9VA1AN (PMUE3838C) / PMUE3838CAANKA
Model(s) Certified:	AAH02RDC9VA1AN (PMUE3838C) / PMUE3838CAANKA, AAH02RDH9VA1AN (PMUE3836C) / PMUE3836CABNKA, AAH02RDH9VA7AN-AMA (PMUE3836C) / PMUE3836CABNNA
Serial Number(s):	446TVPB948, 446TVPB952
Classification:	Occupational/Controlled
FCC ID:	AZ489FT7125; LMR 406.125-512 MHz, Bluetooth 2.402-2.480 GHz, WLAN 802.11 b/g/n 2.412-2.462 GHz
IC:	109U-89FT7125; LMR 406.1-430 MHz, 450-470 MHz, Bluetooth 2.402-2.480 GHz, WLAN 802.11 b/g/n 2.412-2.462 GHz
ISED Test Site registration:	24843
FCC Test Firm Registration Number:	823256

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 FCC 47 CFR § 2.1093 and RSS-102 (Issue 5).

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 4.0 of this report (no deviation from standard methods). 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.

 Tiong Nguk Ing Deputy Technical Manager (Approved Signatory) Approval Date: 12/19/2019	
--	--

Appendix D

System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/21/2019 12:48:57 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190821-01
Dipole Model# D450V3
Phantom#: EL15 1150
Tissue Temp: 21.1 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.14 dB
Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.92 \text{ S/m}$; $\epsilon_r = 56.3$; $\rho = 1000 \text{ kg/m}^3$
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

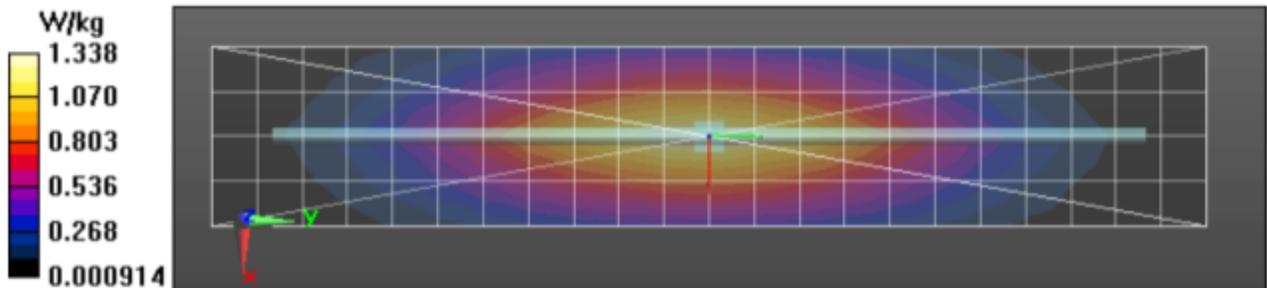
Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Reference Value = 38.84 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.774 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.34 W/kg

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

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 38.84 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.59 W/kg
SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.735 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.34 W/kg

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

grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$
Maximum value of SAR (measured) = 1.34 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/22/2019 1:09:17 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190822-01
Dipole Model# D450V3
Phantom#: ELI5 1150
Tissue Temp: 21.3 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.14 dB
Adjusted SAR (1W): 4.44 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

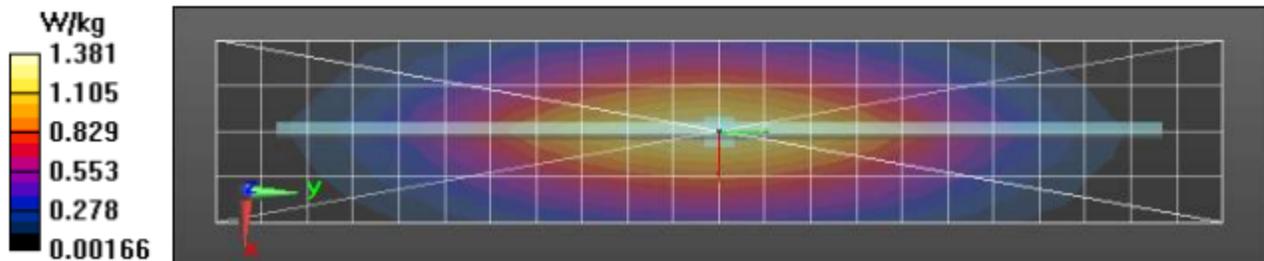
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 38.93 V/m; Power Drift = 0.04 dB
Fast SAR: SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.790 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.38 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.93 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.64 W/kg
SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.755 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.39 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.39 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 8/23/2019 1:32:29 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190823-02
 Dipole Model# D450V3
 Phantom#: ELI5 1150
 Tissue Temp: 21.2 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (ID): 0.14 dB
 Adjusted SAR (1W): 4.52 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.1$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

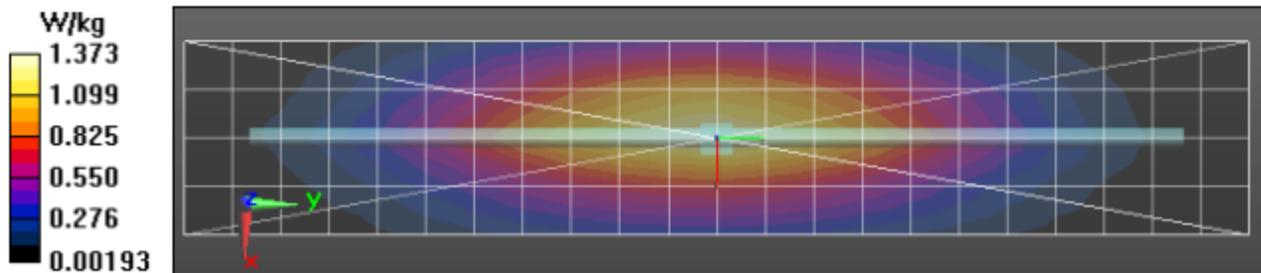
Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 39.24 V/m; Power Drift = 0.02 dB
Fast SAR: SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.800 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.40 W/kg

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

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 39.24 V/m; Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.761 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.42 W/kg

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

grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$
 Maximum value of SAR (measured) = 1.42 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/25/2019 1:19:14 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190825-01
 Dipole Model#: D450V3
 Phantom#: ELI5 1150
 Tissue Temp: 21.4 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.17 dB
 Adjusted SAR (1W): 4.36 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 56.2$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

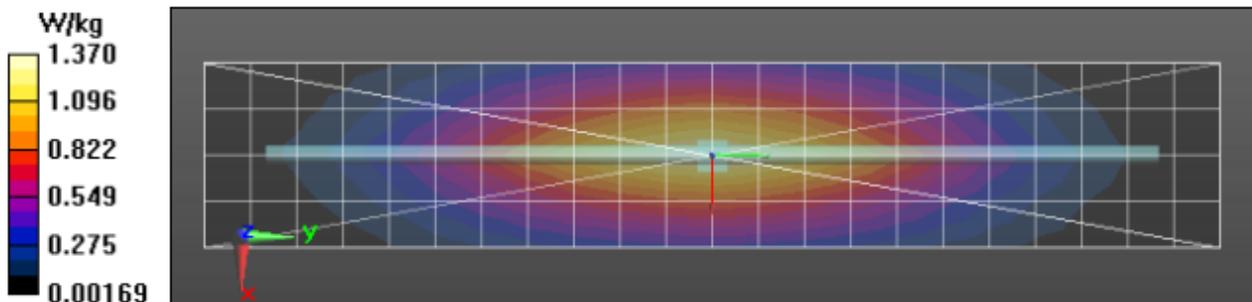
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 38.74 V/m; Power Drift = -0.02 dB
Fast SAR: SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.781 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.37 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 38.74 V/m; Power Drift = -0.02 dB
 Peak SAR (extrapolated) = 1.62 W/kg
SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.739 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.37 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.38 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 8/26/2019 3:54:30 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190826-03
 Dipole Model# D450V3
 Phantom#: ELI5 1150
 Tissue Temp: 20.8 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.15 dB
 Adjusted SAR (1W): 4.28 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.92 \text{ S/m}$; $\epsilon_r = 56$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

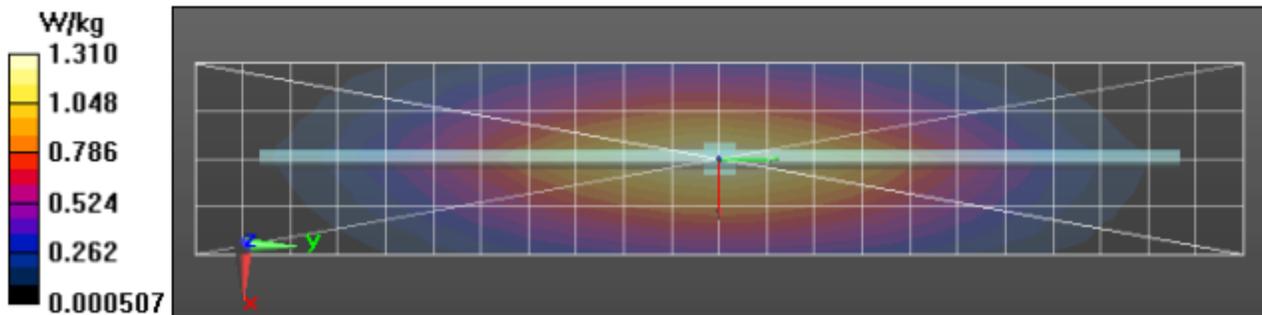
Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 38.77 V/m; Power Drift = -0.14 dB
Fast SAR: SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.776 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.34 W/kg

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

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 38.77 V/m; Power Drift = -0.14 dB
 Peak SAR (extrapolated) = 1.56 W/kg
SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.724 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.32 W/kg

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

grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$
 Maximum value of SAR (measured) = 1.31 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/27/2019 3:54:30 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190827-02
Dipole Model# D450V3
Phantom#: ELI5 1150
Tissue Temp: 20.2 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.18 dB
Adjusted SAR (1W): 4.52 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

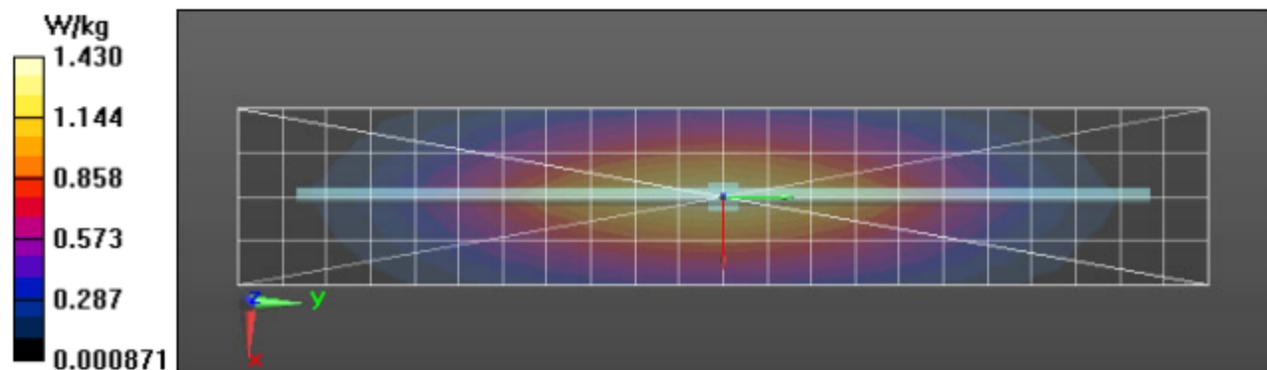
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 39.47 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.811 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.43 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.47 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.769 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.43 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.43 W/kg



Motorola Solutions, Inc. EME Laboratory
Date/Time: 8/28/2019 4:09:04 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190828-01
 Dipole Model#: D450V3
 Phantom#: EL15 1150
 Tissue Temp: 20.8 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.14 dB
 Adjusted SAR (1W): 4.56 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 55.3$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

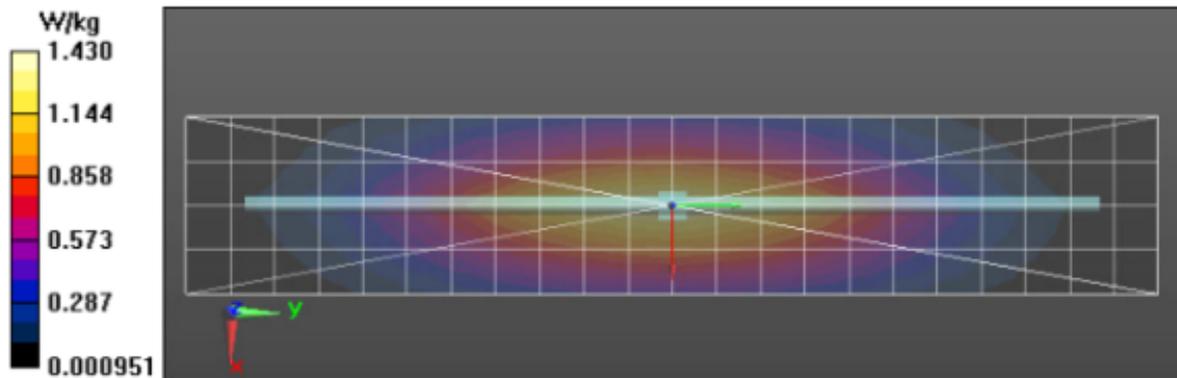
Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
 Reference Value = 39.73 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.812 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.43 W/kg

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

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
 Reference Value = 39.73 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.772 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.43 W/kg

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

grid: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm
 Maximum value of SAR (measured) = 1.43 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 8/29/2019 4:00:10 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190829-05
 Dipole Model#: D450V3
 Phantom#: EL15 1150
 Tissue Temp: 20.5 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.15 dB
 Adjusted SAR (1W): 4.12 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 55.7$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

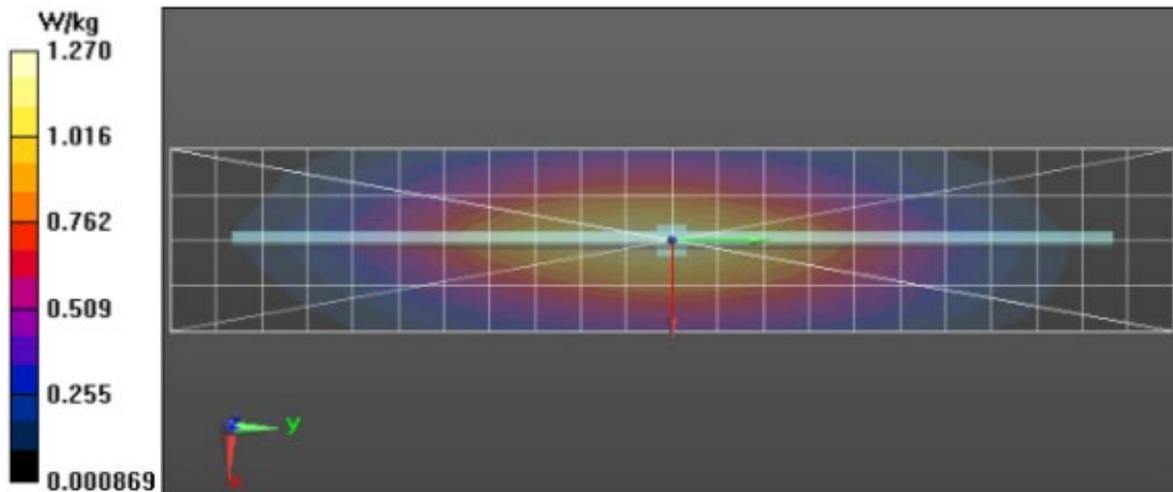
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 37.88 V/m; Power Drift = -0.07 dB
Fast SAR: SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.741 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.29 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 37.88 V/m; Power Drift = -0.07 dB
 Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.702 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.27 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.27 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/30/2019 5:12:08 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190830-06
Dipole Model#: D450V3
Phantom#: ELI5 1150
Tissue Temp: 20.3 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.14 dB
Adjusted SAR (1W): 4.64 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

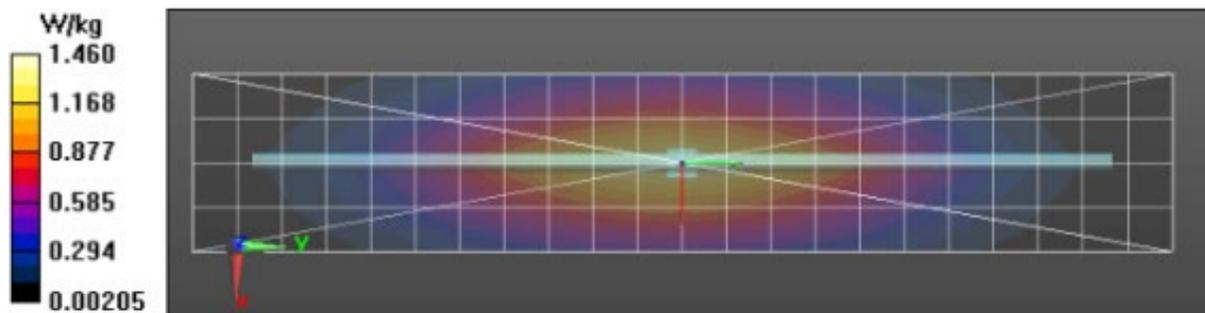
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 39.91 V/m; Power Drift = 0.02 dB
Fast SAR: SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.822 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.45 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.91 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.71 W/kg
SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.796 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.46 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.46 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 9/1/2019 12:49:29 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190901-01
 Dipole Model# D450V3
 Phantom#: ELI5 1150
 Tissue Temp: 21.9 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.14 dB
 Adjusted SAR (1W): 4.48 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

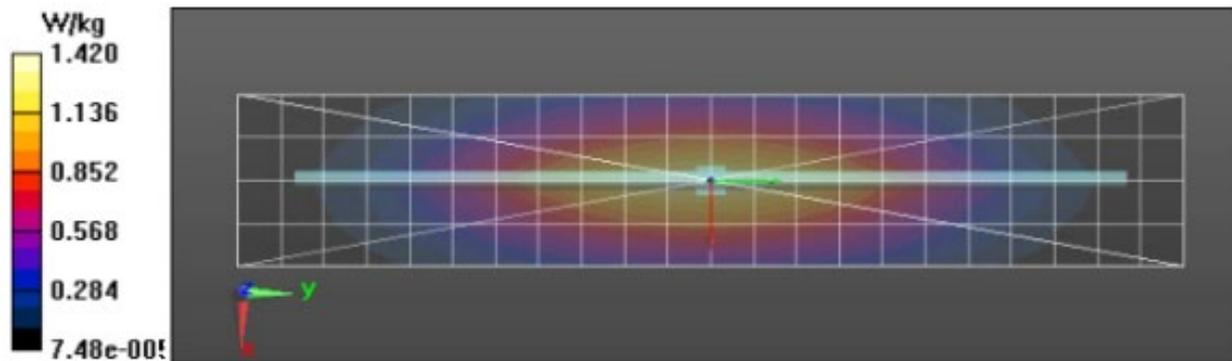
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 39.38 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.804 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.42 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 39.38 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.765 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.43 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.42 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/2/2019 1:11:53 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190902-01
Dipole Model#: D450V3
Phantom#: ELI5 1150
Tissue Temp: 20.6 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.16 dB
Adjusted SAR (1W): 4.64 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 55$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

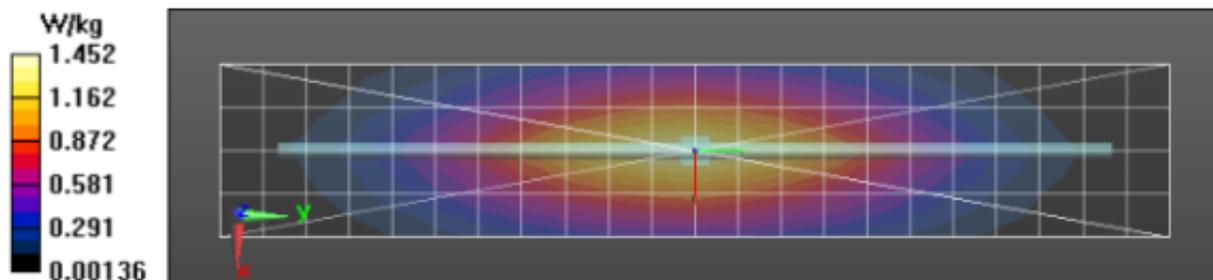
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 39.64 V/m; Power Drift = 0.10 dB
Fast SAR: SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.826 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.45 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.64 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.792 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.47 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.48 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 9/3/2019 1:31:09 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190903-01
 Dipole Model#: D450V3
 Phantom#: EL15 1150
 Tissue Temp: 21.2 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.14 dB
 Adjusted SAR (1W): 4.52 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.91 \text{ S/m}$; $\epsilon_r = 54.7$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

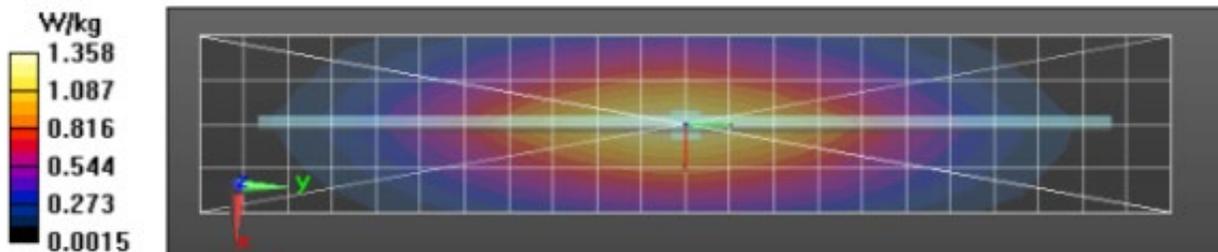
Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 38.80 V/m; Power Drift = 0.20 dB
Fast SAR: SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.791 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.36 W/kg

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

Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 38.80 V/m; Power Drift = 0.20 dB
 Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.771 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.40 W/kg

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

grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$
 Maximum value of SAR (measured) = 1.41 W/kg



Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/3/2019 4:43:12 PM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450H-190903-14
Dipole Model# D450V3
Phantom#: ELI4 1103
Tissue Temp: 21.1 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.15 dB
Adjusted SAR (1W): 4.60 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 43.7$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(10.75, 10.75, 10.75) @ 450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

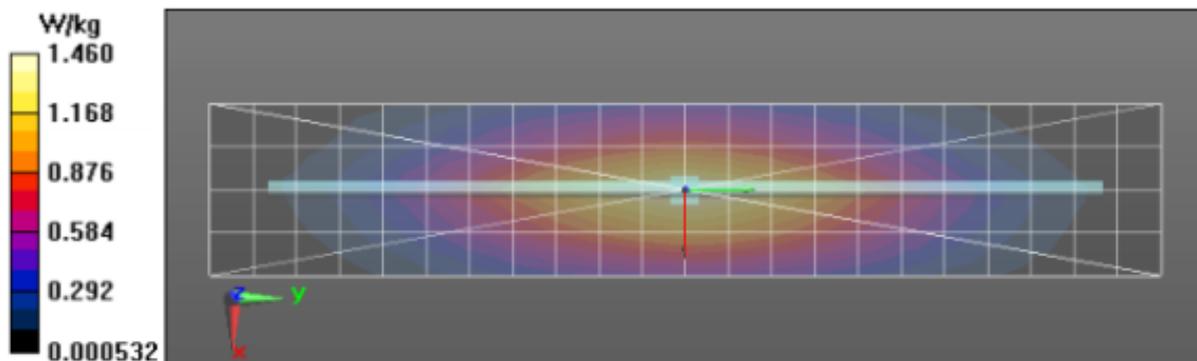
Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Reference Value = 41.74 V/m; Power Drift = -0.17 dB
Fast SAR: SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.843 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.48 W/kg

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

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 41.74 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.775 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.47 W/kg

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

grid: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm
Maximum value of SAR (measured) = 1.46 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 9/4/2019 6:42:57 PM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450H-190904-14
 Dipole Model# D450V3
 Phantom#: ELI4 1103
 Tissue Temp: 21.3 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.14 dB
 Adjusted SAR (1W): 4.56 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.84$ S/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(10.75, 10.75, 10.75) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

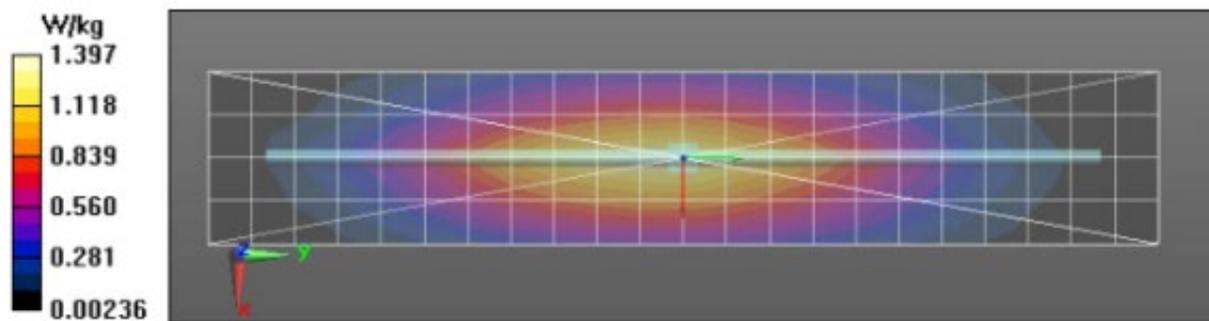
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 41.41 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.820 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.41 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 41.41 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.765 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.41 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.41 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 9/5/2019 8:17:10 PM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190905-17
 Dipole Model# D450V3
 Phantom#: ELI5 1150
 Tissue Temp: 20.7 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.15 dB
 Adjusted SAR (1W): 4.24 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

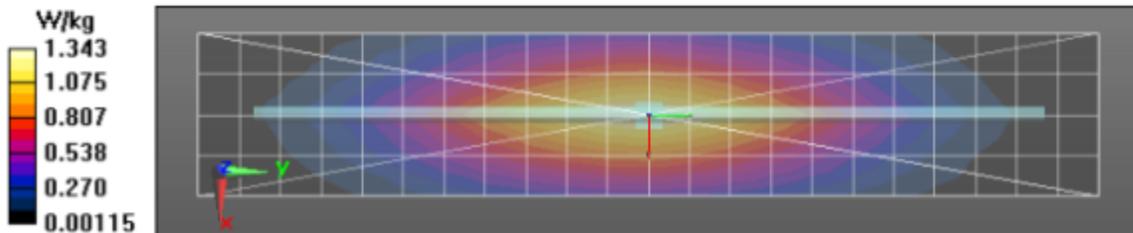
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 38.21 V/m; Power Drift = -0.08 dB
Fast SAR: SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.755 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.35 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 38.21 V/m; Power Drift = -0.08 dB
 Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.722 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.36 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.36 W/kg



Motorola Solutions, Inc. EME Laboratory
 Date/Time: 9/5/2019 2:20:57 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450H-190905-03
 Dipole Model# D450V3
 Phantom#: ELI4 1103
 Tissue Temp: 21.0 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.15 dB
 Adjusted SAR (1W): 4.56 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.87$ S/m; $\epsilon_r = 43.8$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(10.75, 10.75, 10.75) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

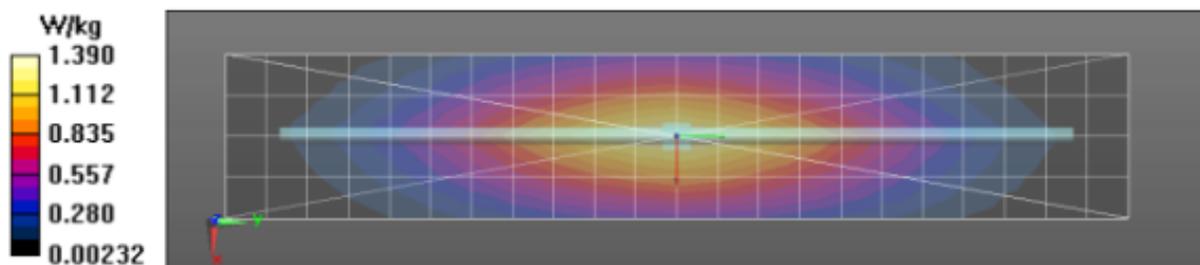
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 39.67 V/m; Power Drift = -0.52 dB
Fast SAR: SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.800 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.39 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 39.67 V/m; Power Drift = -0.52 dB
 Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.780 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.42 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.59 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/10/2019 3:00:31 PM

Robot#: DASY5-PG-3 | Run#: LOH(NZ)-SYSP-2450B-190910-07
 Dipole Model# D2450V2
 Phantom#: EL14 1108
 Tissue Temp: 21.3 (C)
 Serial#: 781
 Test Freq: 2450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.150 dB
 Adjusted SAR (1W): 51.60 mW/g (1g)

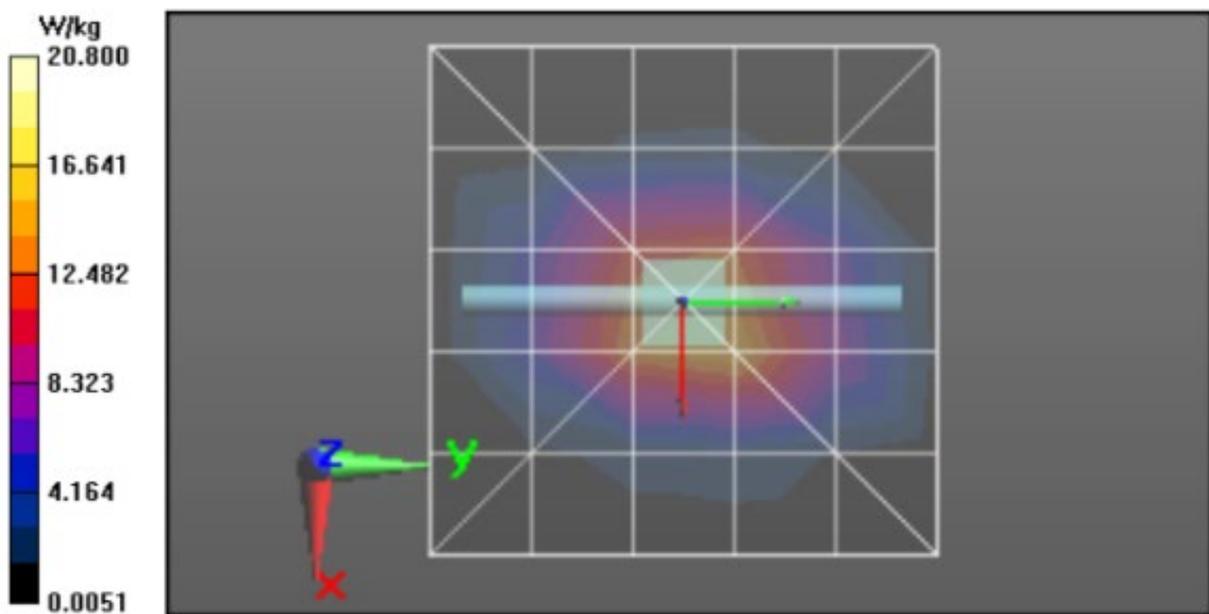
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2450 MHz, ConvF(7.48, 7.48, 7.48) @ 2450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x51x1): Interpolated grid:
 dx=1.200 mm, dy=1.200 mm
 Reference Value = 103.2 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.18 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 22.4 W/kg

2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 103.2 V/m; Power Drift = -0.03 dB
 Peak SAR (extrapolated) = 27.9 W/kg
SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.96 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 20.7 W/kg

2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 20.8 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/11/2019 2:21:45 PM

Robot#: DASY5-PG-3 | Run#: LOH(NZ)-SYSP-2450B-190911-08
Dipole Model# D2450V2
Phantom#: EL14 1108
Tissue Temp: 20.8 (C)
Serial#: 781
Test Freq: 2450 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.14 dB
Adjusted SAR (1W): 50.4 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 47.6$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2450 MHz, ConvF(7.48, 7.48, 7.48) @ 2450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x51x1): Interpolated grid:

dx=1.200 mm, dy=1.200 mm

Reference Value = 101.7 V/m; Power Drift = -0.11 dB

Fast SAR: SAR(1 g) = 13.2 W/kg; SAR(10 g) = 5.95 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 21.8 W/kg

2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 101.7 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 27.1 W/kg

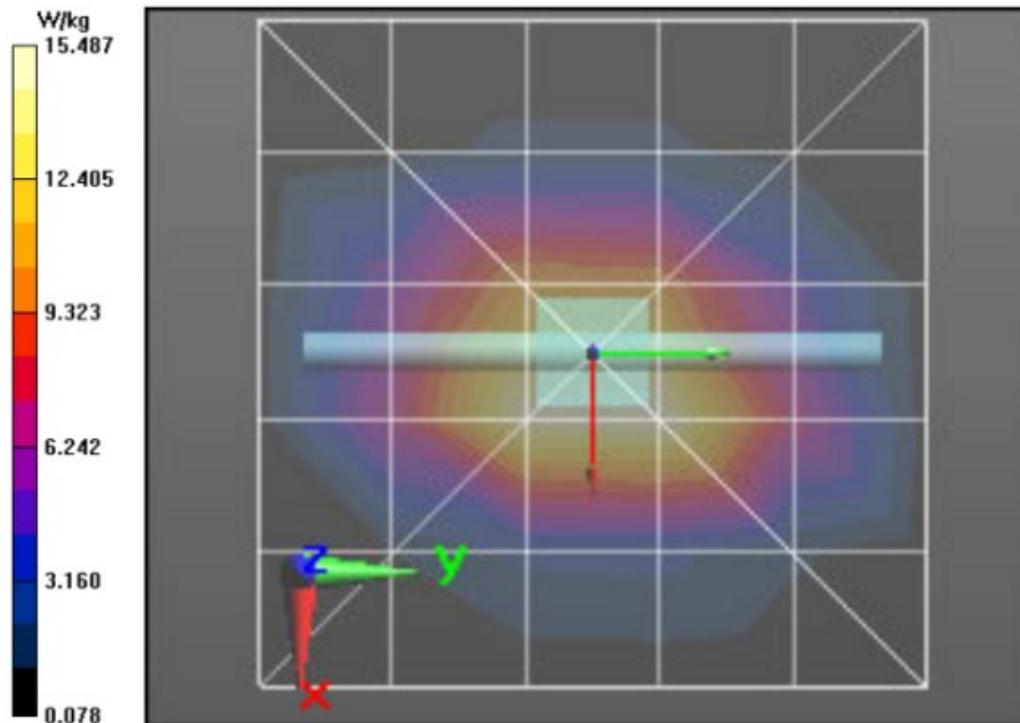
SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.84 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 20.2 W/kg

2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:

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

Maximum value of SAR (measured) = 20.2 W/kg



Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/12/2019 2:38:44 PM

Robot#: DASYS-PG-3 | Run#: LOH(NZ)-SYSP-2450B-190912-07
Dipole Model#: D2450V2
Phantom#: EL14 1108
Tissue Temp: 20.6 (C)
Serial#: 781
Test Freq: 2450 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.14 dB
Adjusted SAR (1W): 50.40 mW/g (1g)

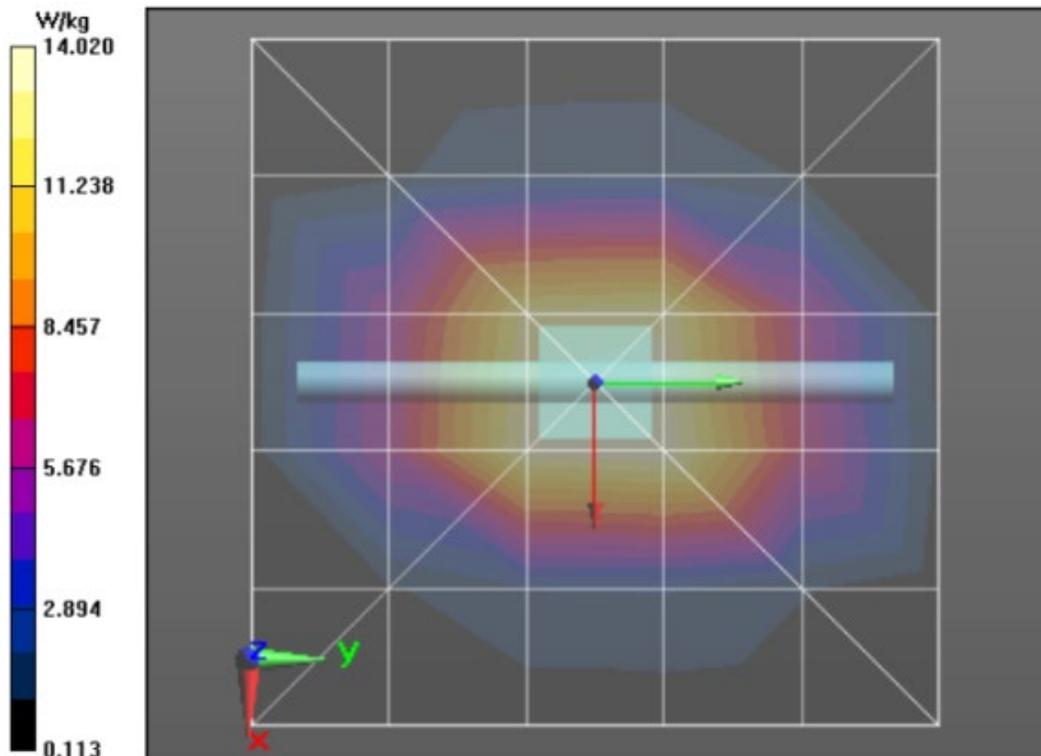
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 2.05$ S/m; $\epsilon_r = 47.9$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2450 MHz, ConvF(7.48, 7.48, 7.48) @ 2450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x51x1): Interpolated grid:
dx=1.200 mm, dy=1.200 mm
Reference Value = 101.8 V/m; Power Drift = -0.11 dB
Fast SAR: SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.06 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 22.5 W/kg

2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=5mm
Reference Value = 101.8 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 27.1 W/kg
SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.87 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 20.3 W/kg

2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:
dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 20.3 W/kg



Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/13/2019 3:15:25 PM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-2450H-190913-06
Dipole Model# D2450V2
Phantom#: ELI4 1028
Tissue Temp: 21.8 (C)
Serial#: 781
Test Freq: 2450 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.15 dB
Adjusted SAR (1W): 49.60 mW/g (1g)

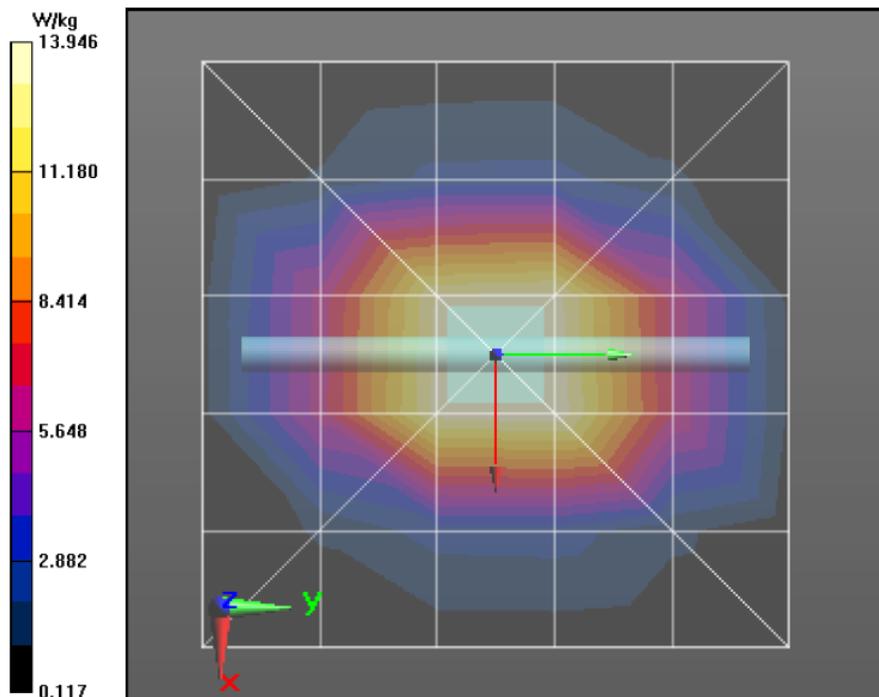
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 1.85$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2450 MHz, ConvF(7.38, 7.38, 7.38) @ 2450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x51x1): Interpolated grid:
dx=1.200 mm, dy=1.200 mm
Reference Value = 106.3 V/m; Power Drift = -0.11 dB
Fast SAR: SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.2 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 21.9 W/kg

2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 106.3 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 27.3 W/kg
SAR(1 g) = 12.4 W/kg; SAR(10 g) = 5.73 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 20.0 W/kg

2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 20.1 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/15/2019 2:28:55 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-2450H-190915-01
 Dipole Model# D2450V2
 Phantom#: EL14 1028
 Tissue Temp: 21.8 (C)
 Serial#: 781
 Test Freq: 2450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.13 dB
 Adjusted SAR (1W): 50.80 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 1.89$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2450 MHz, ConvF(7.38, 7.38, 7.38) @ 2450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x51x1): Interpolated grid:

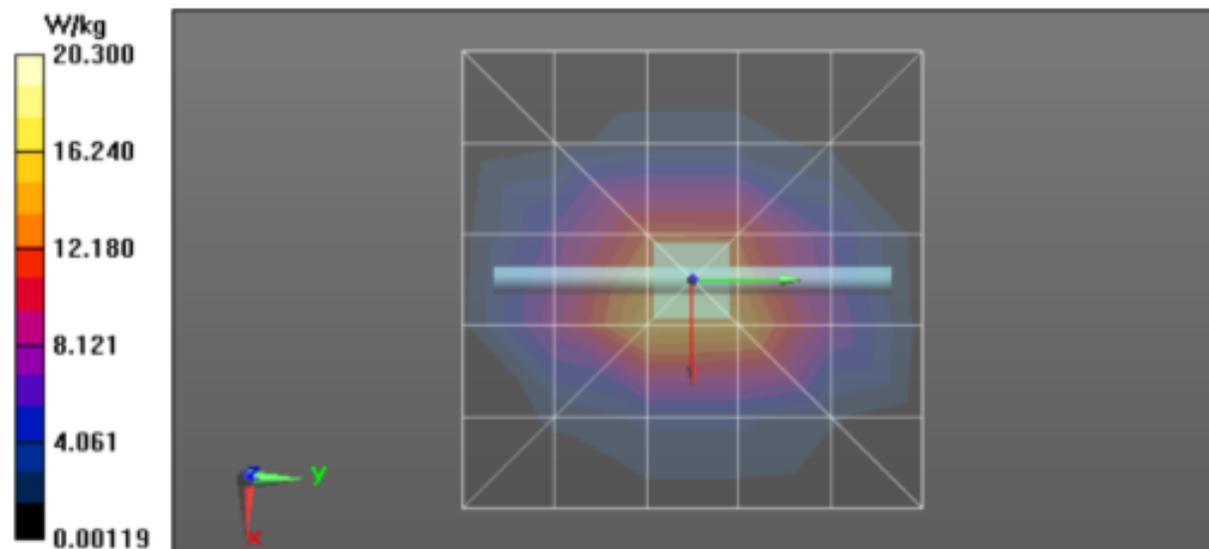
$dx=1.200$ mm, $dy=1.200$ mm
 Reference Value = 106.7 V/m; Power Drift = -0.15 dB
Fast SAR: SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.37 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 22.5 W/kg

2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement

grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
 Reference Value = 106.7 V/m; Power Drift = -0.15 dB
 Peak SAR (extrapolated) = 27.8 W/kg
SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.91 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 20.4 W/kg

2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:

$dx=20$ mm, $dy=20$ mm, $dz=10$ mm
 Maximum value of SAR (measured) = 20.3 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/17/2019 10:50:14 AM

Robot#: DASY5-PG-3 | Run#: ZZ(NZ)-SYSP-450B-190917-01
 Dipole Model# D450V3
 Phantom#: ELI4 1040
 Tissue Temp: 20.4 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.13 dB
 Adjusted SAR (1W): 4.40 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):

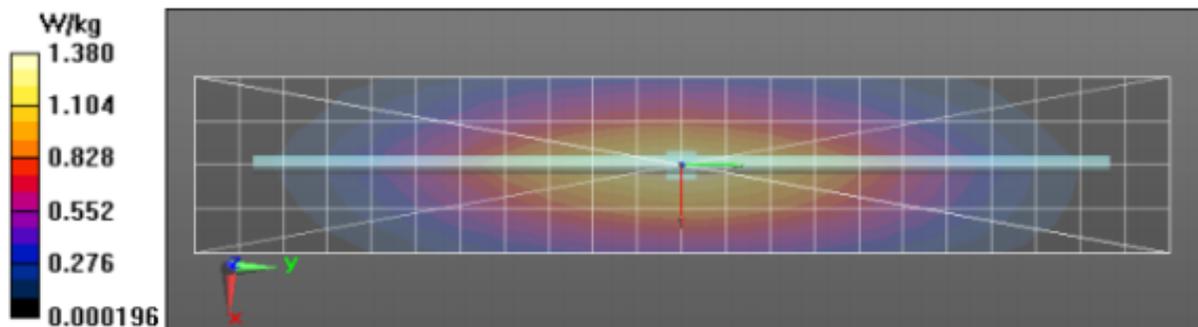
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 39.24 V/m; Power Drift = -0.08 dB
Fast SAR: SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.789 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.38 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 39.24 V/m; Power Drift = -0.08 dB
 Peak SAR (extrapolated) = 1.64 W/kg
SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.743 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.39 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.38 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/19/2019 8:05:27 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-2450B-190919-07
 Dipole Model# D2450V2
 Phantom#: ELI4 1108
 Tissue Temp: 21.4 (C)
 Serial#: 781
 Test Freq: 2450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.16 dB
 Adjusted SAR (1W): 48.80 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 1.91$ S/m; $\epsilon_r = 48.8$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2450 MHz, ConvF(7.48, 7.48, 7.48) @ 2450 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x51x1): Interpolated grid:

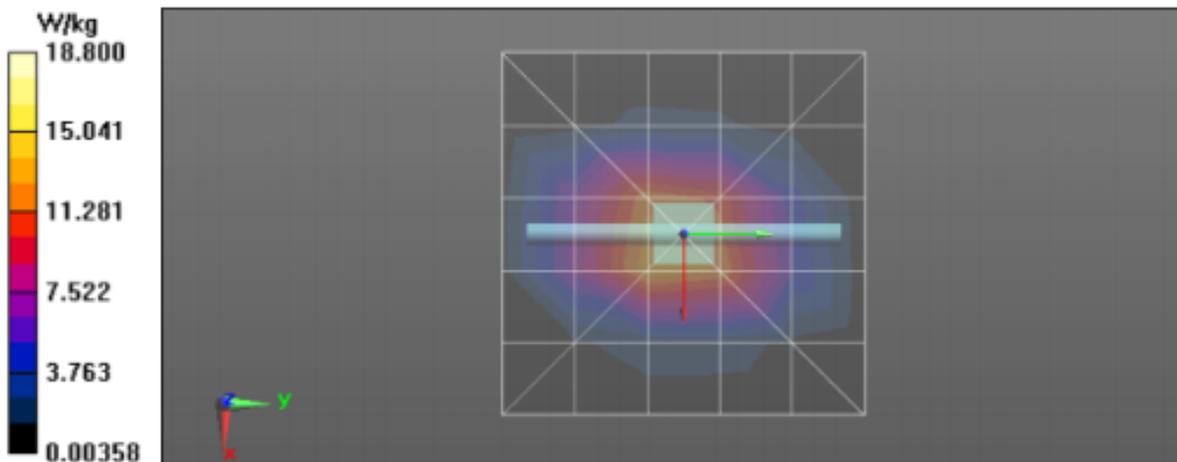
$dx=1.200$ mm, $dy=1.200$ mm
 Reference Value = 101.7 V/m; Power Drift = -0.16 dB
Fast SAR: SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.77 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 20.5 W/kg

2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement

grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
 Reference Value = 101.7 V/m; Power Drift = -0.16 dB
 Peak SAR (extrapolated) = 25.2 W/kg
SAR(1 g) = 12.2 W/kg; SAR(10 g) = 5.57 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 18.8 W/kg

2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:

$dx=20$ mm, $dy=20$ mm, $dz=10$ mm
 Maximum value of SAR (measured) = 18.8 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/19/2019 12:33:11 PM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-2450H-190919-11
Dipole Model#: D2450V2
Phantom#: EL14 1028
Tissue Temp: 21.2(C)
Serial#: 781
Test Freq: 2450 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.15 dB
Adjusted SAR (1W): 50.40 mW/g (1g)

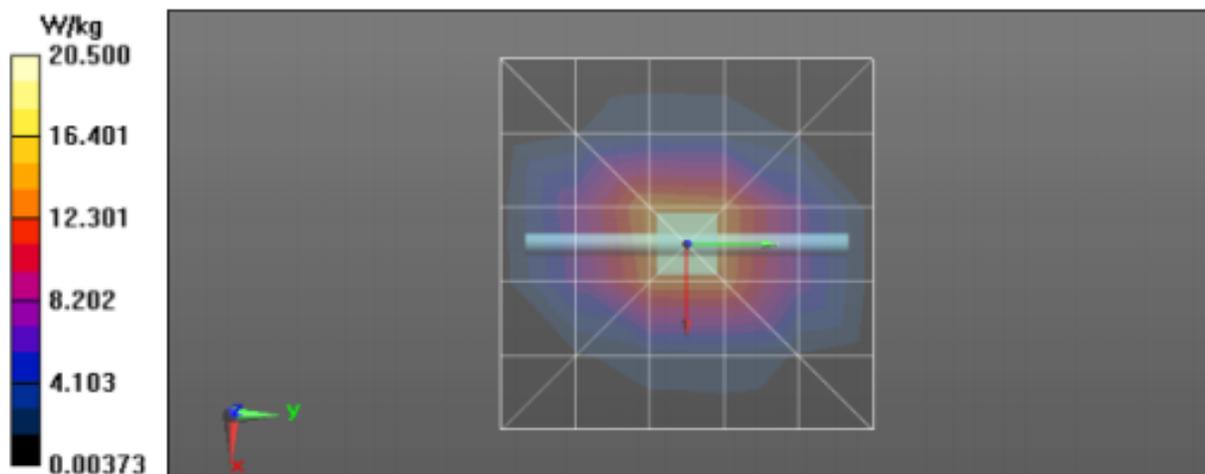
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 1.89$ S/m; $\epsilon_r = 36$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2450 MHz, ConvF(7.38, 7.38, 7.38) @ 2450 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x51x1): Interpolated grid:
dx=1.200 mm, dy=1.200 mm
Reference Value = 106.6 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.34 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 22.5 W/kg

2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 106.6 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 28.2 W/kg
SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.83 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 20.5 W/kg

2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 20.5 W/kg



Appendix E DUT Scans

Assessment at the Body - Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/22/2019 4:56:44 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190822-05
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 21.1 (C)
 Serial#: 446TVPB952
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: PMLN5866A w/o belt loop w/ NTN5243A
 Audio Acc: PMLN5727A
 Start Power: 4.78 (W)

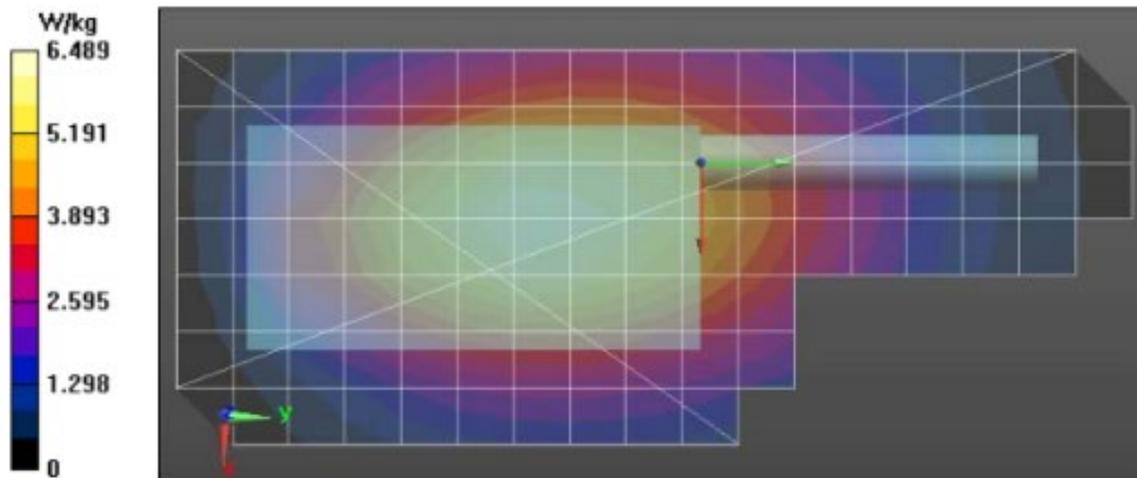
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 55.3$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 82.26 V/m; Power Drift = -0.48 dB
Fast SAR: SAR(1 g) = 5.5 W/kg; SAR(10 g) = 4.01 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 6.54 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 82.26 V/m; Power Drift = -0.58 dB
 Peak SAR (extrapolated) = 6.97 W/kg
SAR(1 g) = 5.38 W/kg; SAR(10 g) = 4.08 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 6.27 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 6.19 W/kg



Assessment at the Body - Table 19

Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/23/2019 12:33:21 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190823-01#
 Model#: PMUE3838C
 Phantom#: EL15 1150
 Tissue Temp: 21.3 (C)
 Serial#: 446TVPB952
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: PMLN5870A w/ NTN5243A
 Audio Acc: PMLN5727A
 Start Power: 4.75 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 55.3$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

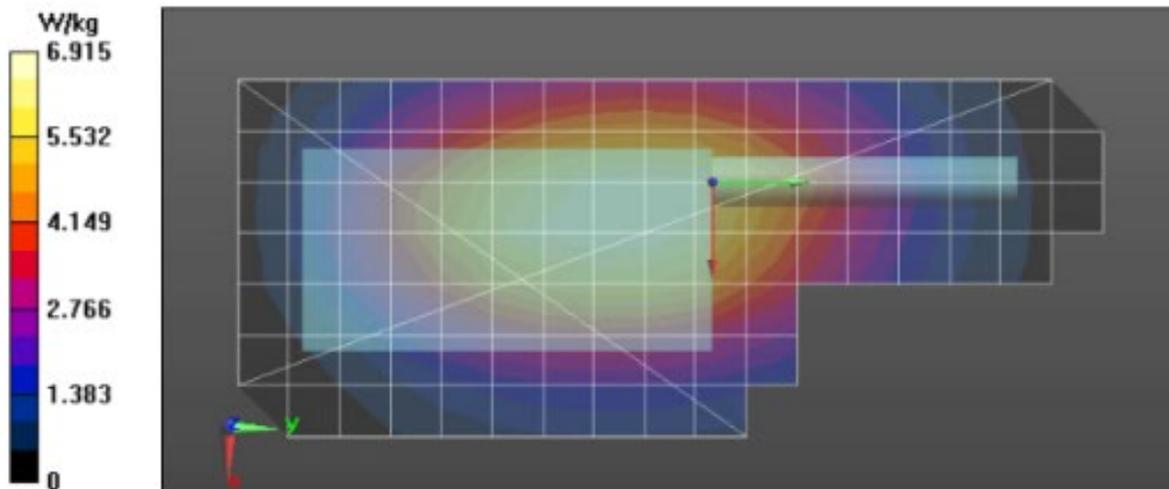
Reference Value = 87.93 V/m; Power Drift = -0.47 dB
Fast SAR: SAR(1 g) = 5.98 W/kg; SAR(10 g) = 4.36 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 7.09 W/kg

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

Reference Value = 87.93 V/m; Power Drift = -0.59 dB
 Peak SAR (extrapolated) = 7.58 W/kg
SAR(1 g) = 5.81 W/kg; SAR(10 g) = 4.41 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 6.77 W/kg

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

Maximum value of SAR (measured) = 6.73 W/kg



Assessment at the Body – Table 20

Motorola Solutions, Inc. EME Laboratory Date/Time: 8/24/2019 12:12:26 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190824-01#
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 21.1 (C)
 Serial#: 446TVPB952
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: PMLN5864A w/ NTN5243A
 Audio Acc: PMLN5727A
 Start Power: 4.80 (W)

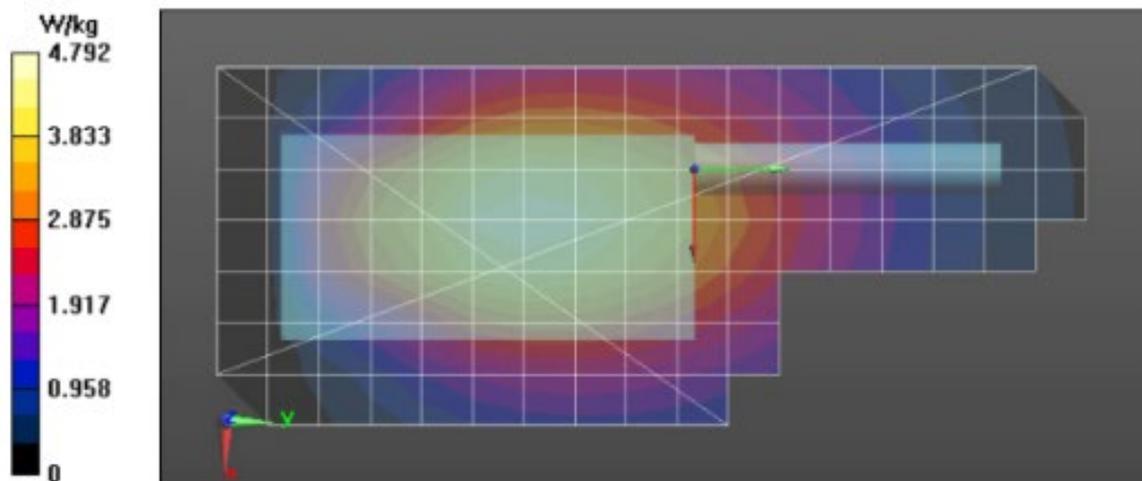
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 55.8$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 SnI483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 70.28 V/m; Power Drift = -0.59 dB
Fast SAR: SAR(1 g) = 4.04 W/kg; SAR(10 g) = 2.94 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 4.80 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 70.28 V/m; Power Drift = -0.69 dB
 Peak SAR (extrapolated) = 5.04 W/kg
SAR(1 g) = 3.88 W/kg; SAR(10 g) = 2.95 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 4.52 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 4.47 W/kg



Assessment at the Body - Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/25/2019 11:07:19 PM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190825-17
Model#: PMUE3838C
Phantom#: ELI5 1150
Tissue Temp: 20.9 (C)
Serial#: 446TVPB952
Antenna: PMAE4071A
Test Freq: 470.0000 (MHz)
Battery: PMNN4417BR
Carry Acc: PMLN4651A
Audio Acc: PMLN5727A
Start Power: 4.79 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 55.9$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 86.70 V/m; Power Drift = -0.58 dB

Fast SAR: SAR(1 g) = 6.45 W/kg; SAR(10 g) = 4.58 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.81 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm,

dy=7.5mm, dz=5mm

Reference Value = 86.70 V/m; Power Drift = -0.75 dB

Peak SAR (extrapolated) = 8.47 W/kg

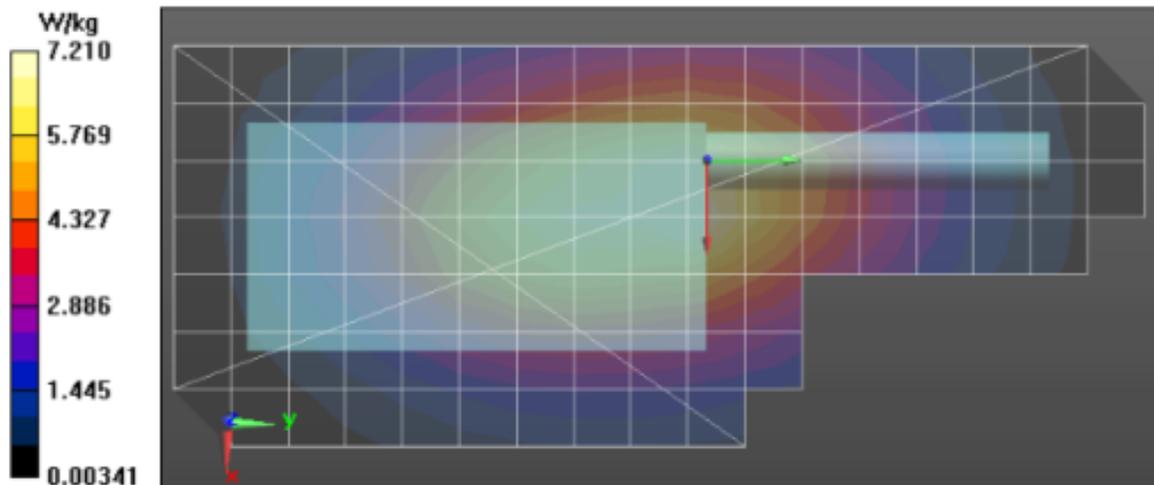
SAR(1 g) = 6.09 W/kg; SAR(10 g) = 4.43 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 7.41 W/kg

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

dz=10mm

Maximum value of SAR (measured) = 7.21 W/kg



Assessment at the Body - Table 22

Motorola Solutions, Inc. EME Laboratory Date/Time: 8/26/2019 10:00:15 PM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190826-18
Model#: PMUE3838C
Phantom#: ELI5 1150
Tissue Temp: 20.5 (C)
Serial#: 446TVPB952
Antenna: PMAE4071A
Test Freq: 470.0000 (MHz)
Battery: PMNN4417BR
Carry Acc: PMLN7008A
Audio Acc: PMLN5727A
Start Power: 4.80 (W)

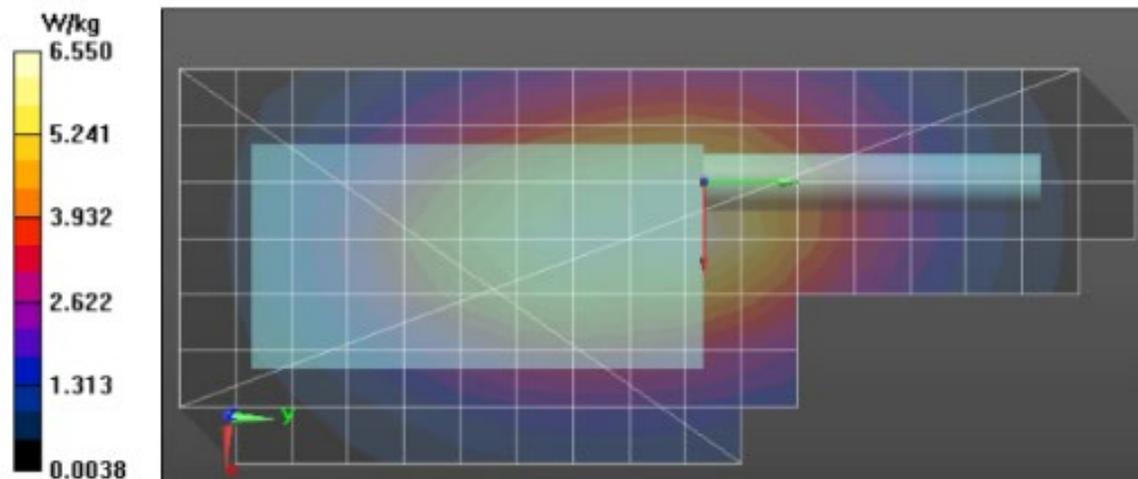
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 55.7$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 83.87 V/m; Power Drift = -0.56 dB
Fast SAR: SAR(1 g) = 5.79 W/kg; SAR(10 g) = 4.14 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 6.96 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 83.87 V/m; Power Drift = -0.72 dB
Peak SAR (extrapolated) = 7.64 W/kg
SAR(1 g) = 5.52 W/kg; SAR(10 g) = 4.06 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.60 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 6.55 W/kg



Assessment at the Body - Table 23

Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/27/2019 10:51:18 PM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190827-15
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 20.4 (C)
 Serial#: 446TVPB952
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4488A
 Carry Acc: PMLN7296A
 Audio Acc: PMLN5727A
 Start Power: 4.80 (W)

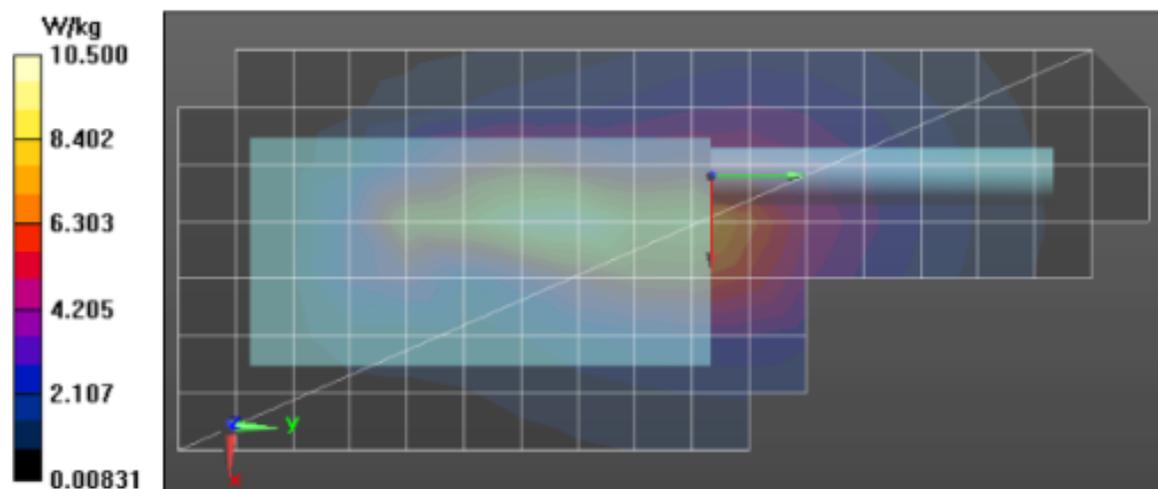
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 55.3$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 83.02 V/m; Power Drift = -0.73 dB
Fast SAR: SAR(1 g) = 8.58 W/kg; SAR(10 g) = 5.55 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 10.8 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 83.02 V/m; Power Drift = -0.89 dB
 Peak SAR (extrapolated) = 13.0 W/kg
SAR(1 g) = 8.01 W/kg; SAR(10 g) = 5.17 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 10.5 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 10.5 W/kg



Assessment at the Body - Table 24

Motorola Solutions, Inc. EME Laboratory Date/Time: 8/29/2019 12:26:13 AM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190829-01#
Model#: PMUE3838C
Phantom#: ELI5 1150
Tissue Temp: 20.3 (C)
Serial#: 446TVPB948
Antenna: PMAE4071A
Test Freq: 470.0000 (MHz)
Battery: PMNN4417BR
Carry Acc: HLN6602A
Audio Acc: PMLN5727A
Start Power: 4.80 (W)

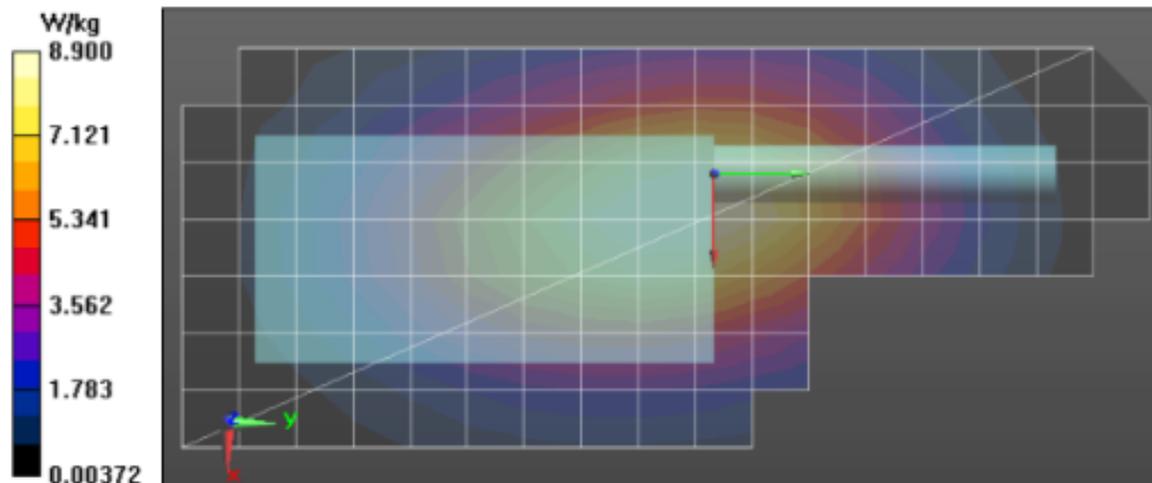
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 55$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 99.46 V/m; Power Drift = -0.51 dB
Fast SAR: SAR(1 g) = 7.97 W/kg; SAR(10 g) = 5.76 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 9.49 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 99.46 V/m; Power Drift = -0.64 dB
Peak SAR (extrapolated) = 10.2 W/kg
SAR(1 g) = 7.64 W/kg; SAR(10 g) = 5.65 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 9.04 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 8.90 W/kg



Assessment at the Body - Table 25

Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/30/2019 1:23:14 AM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190830-02#
Model#: PMUE3838C
Phantom#: EL15 1150
Tissue Temp: 20.2 (C)
Serial#: 446TVPB948
Antenna: PMAE4071A
Test Freq: 470.0000 (MHz)
Battery: PMNN4417BR
Carry Acc: RLN4570A
Audio Acc: PMLN5727A
Start Power: 4.80 (W)

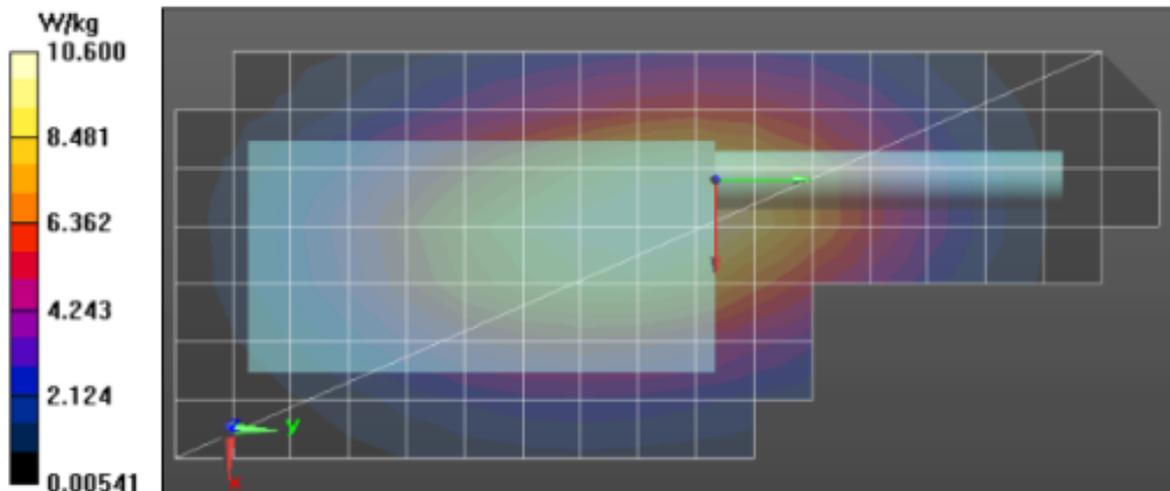
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 55.4$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 105.8 V/m; Power Drift = -0.50 dB
Fast SAR: SAR(1 g) = 9.4 W/kg; SAR(10 g) = 6.8 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 11.2 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 105.8 V/m; Power Drift = -0.62 dB
Peak SAR (extrapolated) = 12.2 W/kg
SAR(1 g) = 9.04 W/kg; SAR(10 g) = 6.64 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.8 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 10.6 W/kg



Assessment at the Body - Table 26

Motorola Solutions, Inc. EME Laboratory Date/Time: 8/30/2019 10:58:19 PM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190830-22
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 20.3 (C)
 Serial#: 446TVPB948
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: RLN4815A
 Audio Acc: PMLN5727A
 Start Power: 4.78 (W)

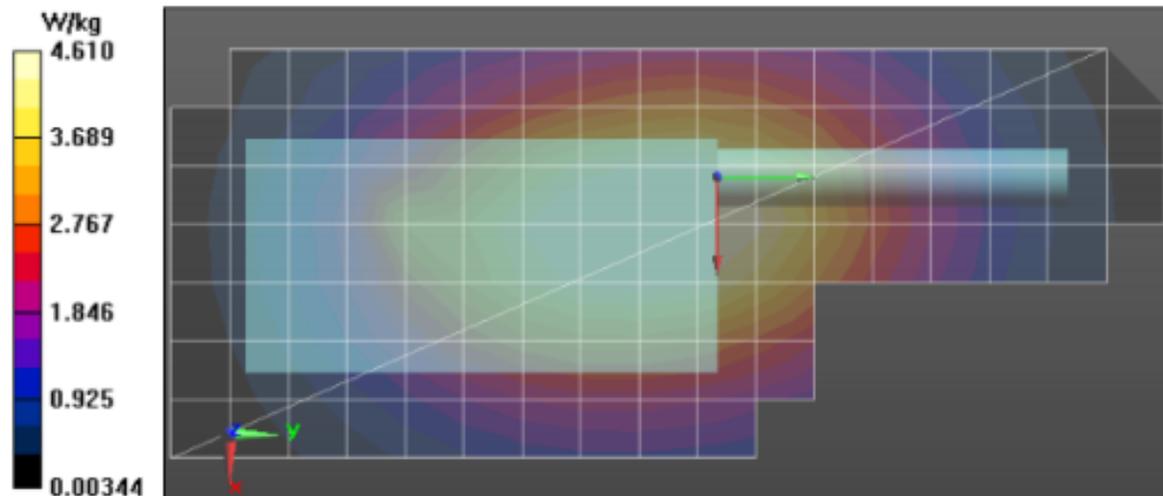
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 72.23 V/m; Power Drift = -0.56 dB
Fast SAR: SAR(1 g) = 4.24 W/kg; SAR(10 g) = 3.1 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 5.03 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x6x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 72.23 V/m; Power Drift = -0.72 dB
 Peak SAR (extrapolated) = 5.26 W/kg
SAR(1 g) = 4.09 W/kg; SAR(10 g) = 3.13 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 4.73 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$
 Maximum value of SAR (measured) = 4.61 W/kg



Assessment at the Body - Table 27

Motorola Solutions, Inc. EME Laboratory
 Date/Time: 9/1/2019 9:50:47 AM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190901-12
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 21.0 (C)
 Serial#: 446TVPB948
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: PMLN5870A w/ RLN6487A w/ RLN6488A
 Audio Acc: PMLN5727A
 Start Power: 4.80 (W)

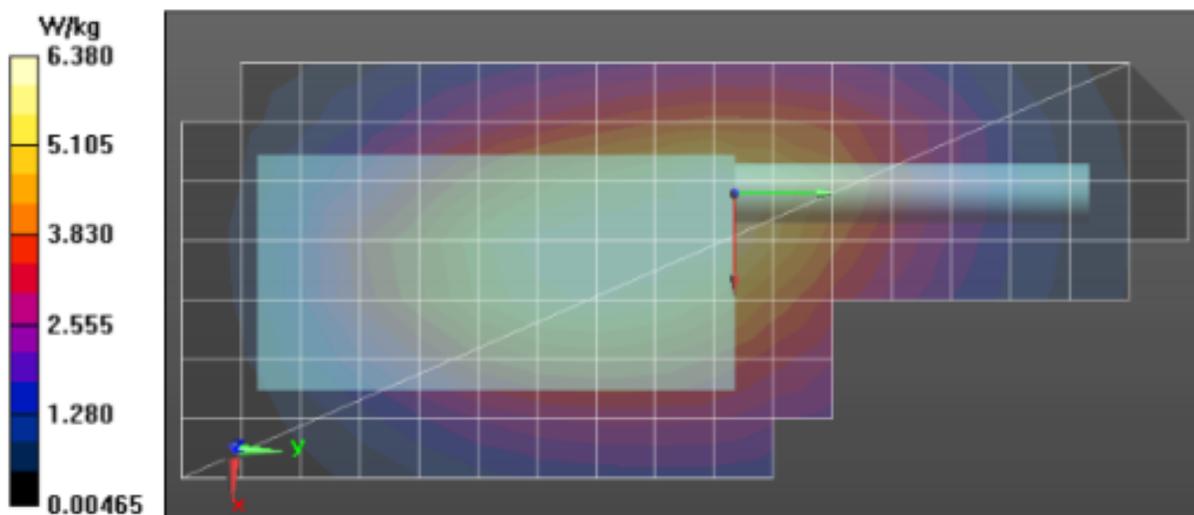
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 87.07 V/m; Power Drift = -0.44 dB
Fast SAR: SAR(1 g) = 5.55 W/kg; SAR(10 g) = 4.05 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 6.66 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 87.07 V/m; Power Drift = -0.55 dB
 Peak SAR (extrapolated) = 7.50 W/kg
SAR(1 g) = 5.38 W/kg; SAR(10 g) = 4.06 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 6.43 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 6.38 W/kg



Assessment at the Body - Table 28

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/2/2019 1:55:38 AM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190902-12
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 20.5 (C)
 Serial#: 446TVPB948
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: RLN4570A
 Audio Acc: PMMN4076AL
 Start Power: 4.75 (W)

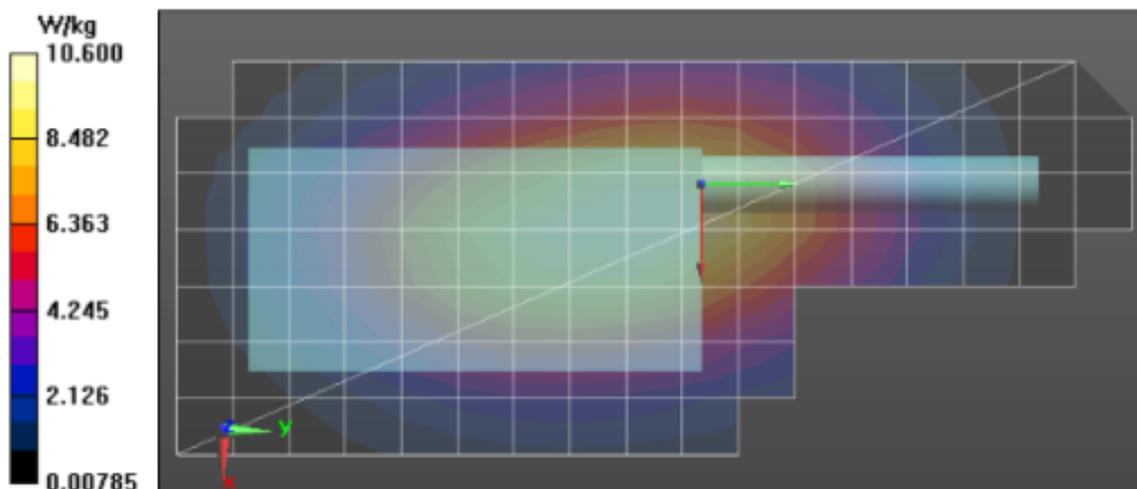
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 104.2 V/m; Power Drift = -0.58 dB
Fast SAR: SAR(1 g) = 9.35 W/kg; SAR(10 g) = 6.76 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 11.1 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 104.2 V/m; Power Drift = -0.70 dB
 Peak SAR (extrapolated) = 12.1 W/kg
SAR(1 g) = 8.93 W/kg; SAR(10 g) = 6.54 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 10.6 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 10.6 W/kg



Assessment of wireless BT config - Table 29

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/2/2019 2:39:04 PM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190902-13
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 20.4 (C)
 Serial#: 446TVPB948
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: RLN4570A
 Audio Acc: None
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

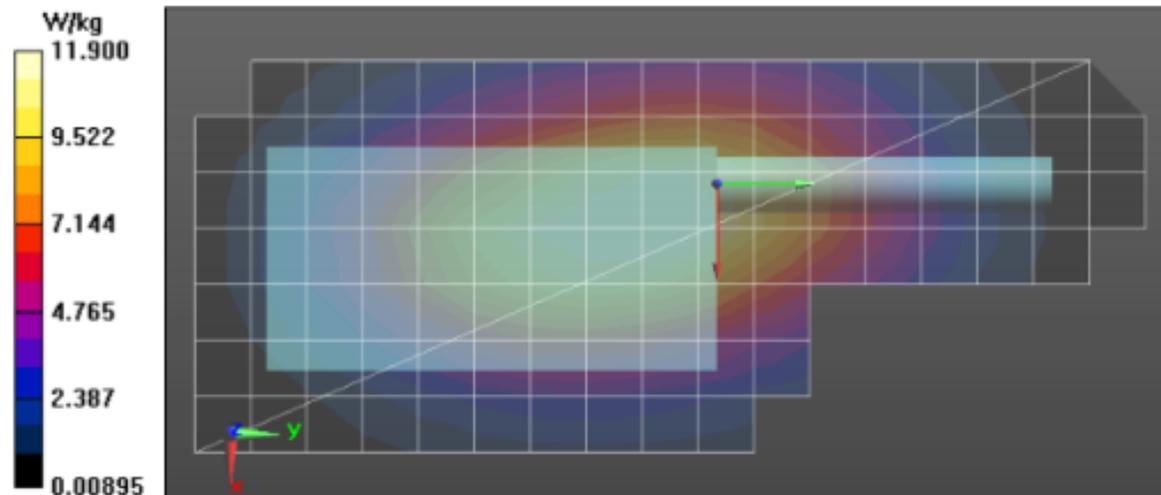
Reference Value = 112.1 V/m; Power Drift = -0.53 dB
Fast SAR: SAR(1 g) = 10.6 W/kg; SAR(10 g) = 7.67 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 12.6 W/kg

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

Reference Value = 112.1 V/m; Power Drift = -0.64 dB
 Peak SAR (extrapolated) = 13.6 W/kg
SAR(1 g) = 10.2 W/kg; SAR(10 g) = 7.53 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 12.0 W/kg

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

Maximum value of SAR (measured) = 11.9 W/kg



Assessment at the Body - Table 31

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/10/2019 10:57:23 PM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190910-12
 Model#: PMUE3838C
 Phantom#: ELI4 1108
 Tissue Temp: 20.7 (C)
 Serial#: 446TVPB948
 Antenna: 85012026001 WiFi Ant
 Test Freq: 2412.0000 (MHz)
 Battery: PMNN4491B
 Carry Acc: PMLN4651A
 Audio Acc: None
 Start Power: 0.057 (W)

Comments:

Communication System Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz), Communication System UID: 10415 - AAA, Duty Cycle: 1:1.42561,

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.98 \text{ S/m}$; $\epsilon_r = 47.6$; $\rho = 1000 \text{ kg/m}^3$

Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2412 MHz, ConvF(7.48, 7.48, 7.48) @ 2412 MHz

Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/Ab Scan/1-Area Scan (81x201x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Reference Value = 4.924 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 0.060 W/kg; SAR(10 g) = 0.033 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.0839 W/kg

2-3 GHz-Rev.2/Ab Scan/3-Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.924 V/m; Power Drift = -0.19 dB

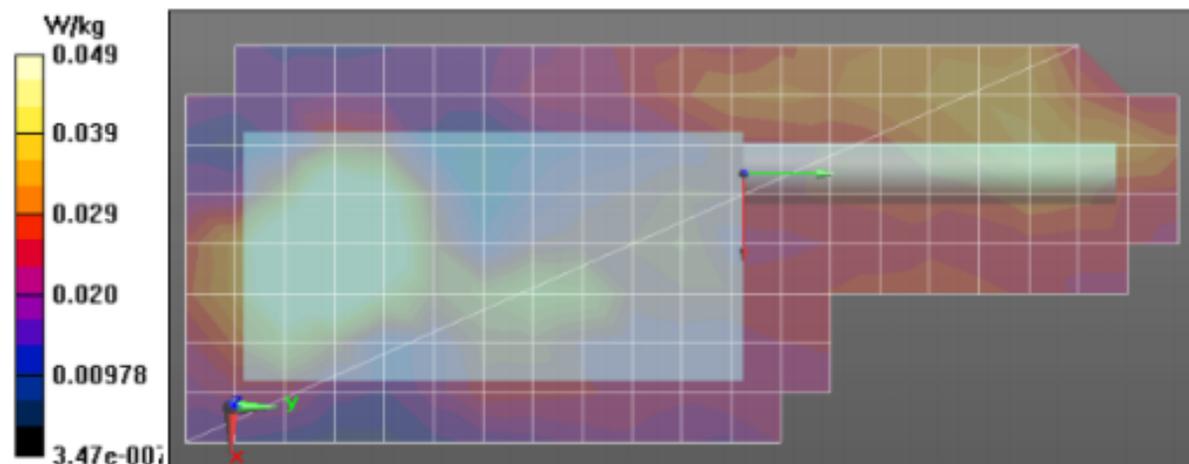
Peak SAR (extrapolated) = 0.123 W/kg

SAR(1 g) = 0.064 W/kg; SAR(10 g) = 0.037 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.0826 W/kg

2-3 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$

Maximum value of SAR (measured) = 0.0489 W/kg



Assessment at the Face - Table 33

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/4/2019 12:45:00 AM

Robot#: DASY5-PG-3 | Run#: LOH-FACE-190904-01#
 Model#: PMUE3838C
 Phantom#: ELI4 1103
 Tissue Temp: 21.0 (C)
 Serial#: 446TVPB948
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4406BR
 Carry Acc: @ front
 Audio Acc: N/A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.89 \text{ S/m}$; $\epsilon_r = 43.3$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(10.75, 10.75, 10.75) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (61x151x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

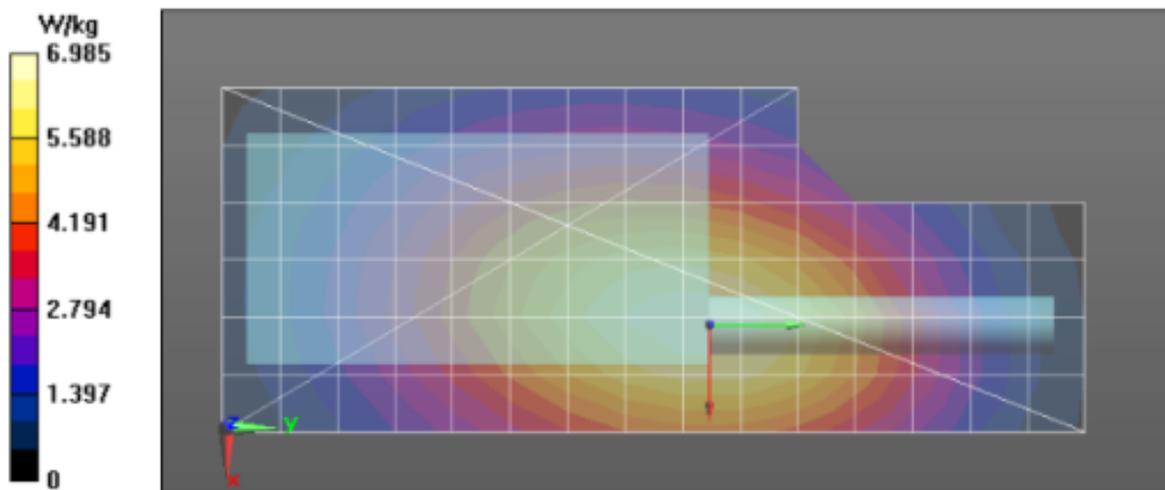
Reference Value = 95.79 V/m; Power Drift = -0.75 dB
Fast SAR: SAR(1 g) = 5.91 W/kg; SAR(10 g) = 4.31 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 7.01 W/kg

Below 2 GHz-Rev.2/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 95.79 V/m; Power Drift = -0.76 dB
 Peak SAR (extrapolated) = 8.13 W/kg
SAR(1 g) = 6.09 W/kg; SAR(10 g) = 4.51 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 7.20 W/kg

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

Maximum value of SAR (measured) = 7.10 W/kg



Assessment at the Face - Table 35

Motorola Solutions, Inc. EME Laboratory

Date/Time: 9/13/2019 10:28:35 PM

Robot#: DASY5-PG-3 | Run#: ZZ-FACE-190913-12
Model#: PMUE3838C
Phantom#: ELI4 1028
Tissue Temp: 20.4 (C)
Serial#: 446TVPB948
Antenna: 85012026001 WiFi Ant
Test Freq: 2412.0000 (MHz)
Battery: PMNN4418BR
Carry Acc: None
Audio Acc: None
Start Power: 0.057 (W)

Comments:

Communication System Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz), Communication System UID: 10415 - AAA, Duty Cycle: 1:1.42561,

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.81$ S/m; $\epsilon_r = 35.6$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 2412 MHz, ConvF(7.38, 7.38, 7.38) @ 2412 MHz

Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

2-3 GHz-Rev.2/Face Scan/1-Area Scan (81x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 7.465 V/m; Power Drift = 0.38 dB

Fast SAR: SAR(1 g) = 0.075 W/kg; SAR(10 g) = 0.043 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.105 W/kg

2-3 GHz-Rev.2/Face Scan/3-Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.465 V/m; Power Drift = -0.18 dB

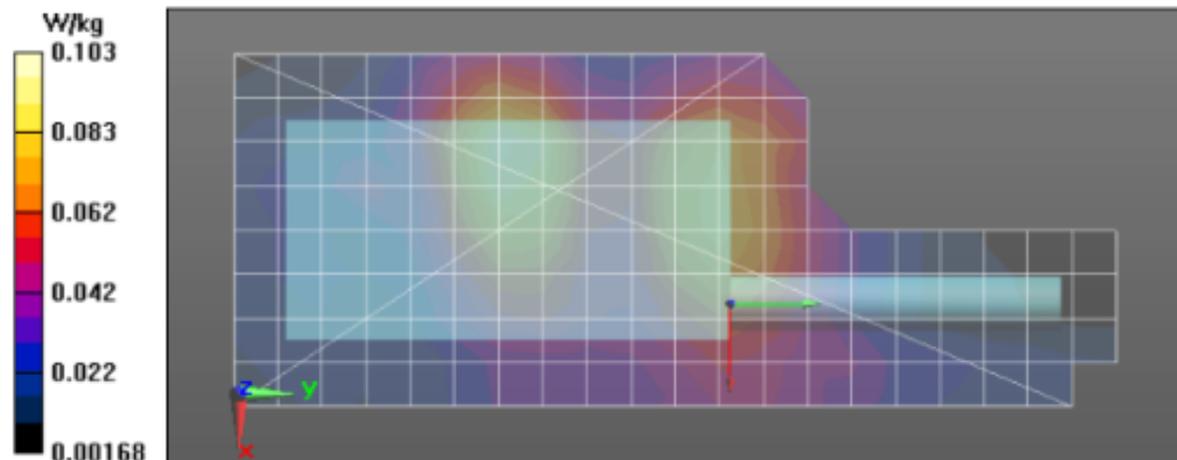
Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.051 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.111 W/kg

2-3 GHz-Rev.2/Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 0.103 W/kg



Assessments for Outside FCC - Table 37

Motorola Solutions, Inc. EME Laboratory Date/Time: 9/3/2019 2:55:46 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190903-03
Model#: PMUE3838C
Phantom#: ELI5 1150
Tissue Temp: 21.0 (C)
Serial#: 446TVPB948
Antenna: PMAE4071A
Test Freq: 527.0000 (MHz)
Battery: PMNN4417BR
Carry Acc: RLN4570A
Audio Acc: None
Start Power: 4.80 (W)

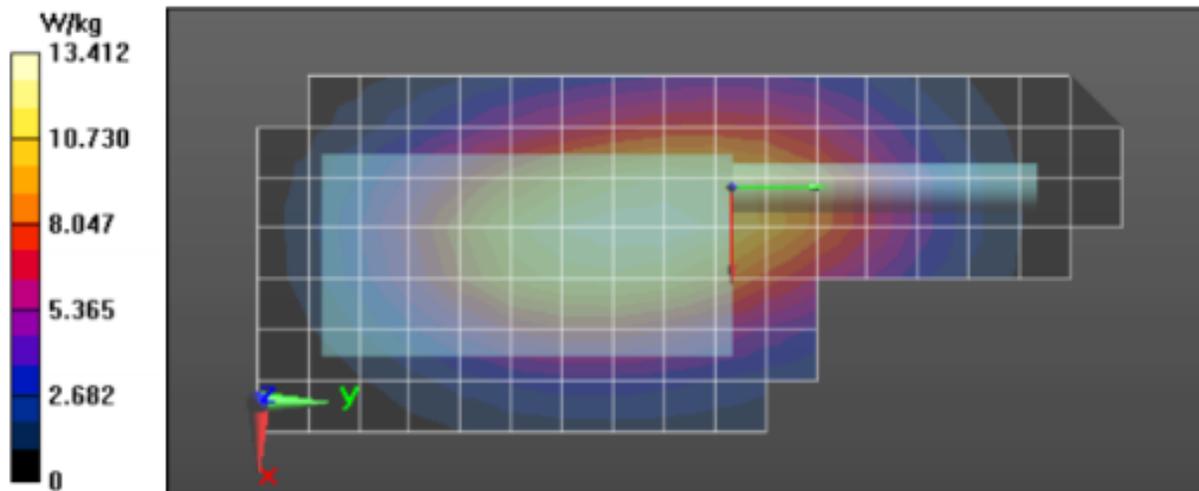
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 527 \text{ MHz}$; $\sigma = 0.98 \text{ S/m}$; $\epsilon_r = 53.6$; $\rho = 1000 \text{ kg/m}^3$
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 527 MHz, ConvF(11.17, 11.17, 11.17) @ 527 MHz
Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Reference Value = 116.8 V/m; Power Drift = -0.64 dB
Fast SAR: SAR(1 g) = 11.3 W/kg; SAR(10 g) = 8.18 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 13.5 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 116.8 V/m; Power Drift = -0.80 dB
Peak SAR (extrapolated) = 14.5 W/kg
SAR(1 g) = 10.9 W/kg; SAR(10 g) = 8.03 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 12.8 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$
Maximum value of SAR (measured) = 12.5 W/kg



APPENDIX F
Shortened Scan of Highest SAR configuration

Shortened Scan Table 38

Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/2/2019 7:03:46 PM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190902-14
 Model#: PMUE3838C
 Phantom#: ELI5 1150
 Tissue Temp: 20.8 (C)
 Serial#: 446TVPB948
 Antenna: PMAE4071A
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4417BR
 Carry Acc: RLN4570A
 Audio Acc: None
 Start Power: 4.80 (W)

Comments: Shorten Scan

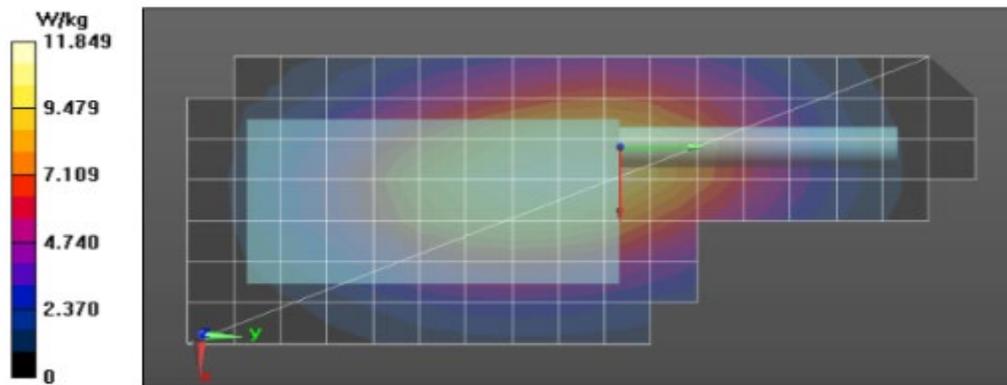
Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 470 MHz, ConvF(11.17, 11.17, 11.17) @ 470 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 110.0 V/m; Power Drift = -0.48 dB
Fast SAR: SAR(1 g) = 10 W/kg; SAR(10 g) = 7.28 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 11.9 W/kg

Below 2 GHz-Rev.2/Ab Scan/2-Volume Scan 2D (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm
 Reference Value = 110.0 V/m; Power Drift = -0.54 dB
Fast SAR: SAR(1 g) = 9.81 W/kg; SAR(10 g) = 7.2 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 11.6 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 11.4 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 118.0 V/m; Power Drift = -0.58 dB
 Peak SAR (extrapolated) = 13.4 W/kg
SAR(1 g) = 10 W/kg; SAR(10 g) = 7.48 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 11.8 W/kg



Shortened scan reflects highest SAR producing configuration and is compared to the full scan

Scan Description	Referenced Table	Test Time (min.)	SAR 1g (W/kg)
Shorten scan (zoom)	38	8	5.71
Full scan (area & zoom)	29	23	5.91

APPENDIX G
DUT Test Position Photos

Photos available in Exhibit 7B

APPENDIX H
DUT, Body worn and audio accessories Photos

Photos available in Exhibit 7B