

**MOTOROLA SOLUTIONS**

MS ISO/IEC 17025
TESTING
SAMM No.0826

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

Motorola Solutions Inc.**EME Test Laboratory**

Motorola Solutions Malaysia Sdn Bhd (Innoplex)
 Plot 2A, Medan Bayan Lepas,
 Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.

Date of Report: 06/07/2019**Report Revision:** A

Responsible Engineer: Ch'ng Jian Sheng (EME Engineer)
Report Author: Ch'ng Jian Sheng (EME Engineer)
Date/s Tested: 05/16/2019 - 05/17/2019, 05/20/2019 - 05/22/2019
Manufacturer: Motorola Solutions Inc.
DUT Description: Handheld Portable – DEP 250 403-480M 4W NKP
Test TX mode(s): CW (PTT)
Max. Power output: 4.8W
Nominal Power: 4.0W
Tx Frequency Bands: LMR 403-480 MHz
Signaling type: FM
Model(s) Tested: PMUE4526B
Model(s) Certified: LAH87YDC9JA2AN (PMUE4526B)
Serial Number(s): 278TUH0164
Classification: Occupational/Controlled
FCC ID: AZ489FT4953; LMR 403-480MHz
 This report contains results that are immaterial for FCC equipment approval, which are clearly identified.

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.

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: 6/24/2019

Appendix D

System Verification Check Scans

System verifications for Body

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/16/2019 12:52:14 PM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190516-01
 Dipole Model#: D450V3
 Phantom#: ELI4 1040
 Tissue Temp: 20.7 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.130 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; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.17, 11.17, 11.17) @ 450 MHz
 Electronics: DAF4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x231x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 40.41 V/m; Power Drift = -0.06 dB

Fast SAR: SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.839 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.47 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 = 40.41 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.75 W/kg

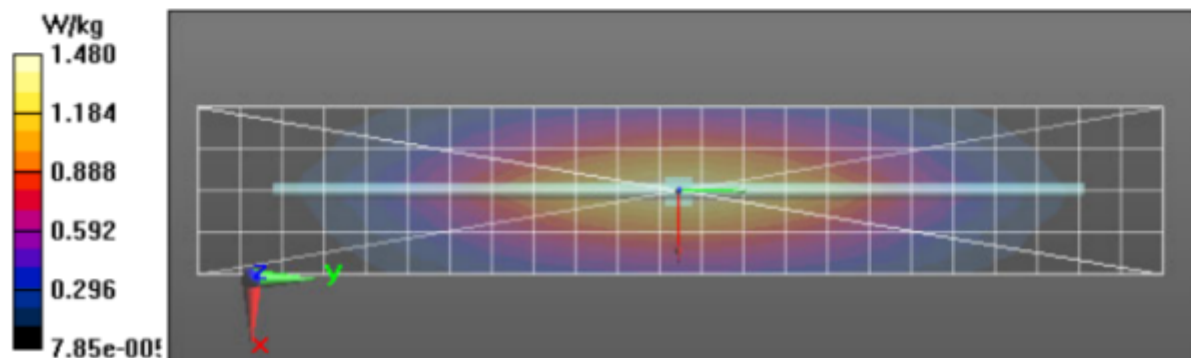
SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.787 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.48 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: 5/17/2019 11:30:16 AM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450B-190517-14
Dipole Model# D450V3
Phantom#: ELI4 1040
Tissue Temp: 20.1 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.018 dB
Adjusted SAR (1W): 4.84 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 55.8$; $\rho = 1000$ 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 (41x231x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 40.64 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.867 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.54 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 = 40.64 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.84 W/kg

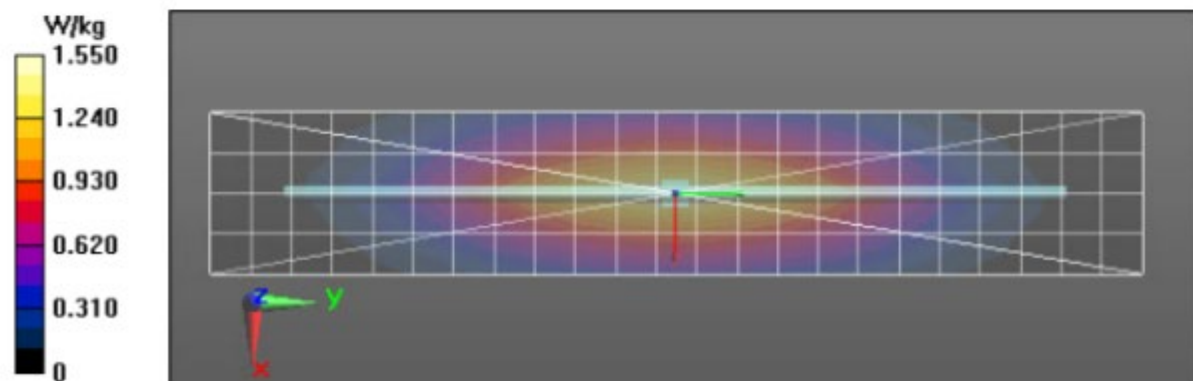
SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.822 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.55 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) = 1.55 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/20/2019 2:02:07 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190520-01
Dipole Model#: D450V3
Phantom#: EL14 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): 4.64 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 54.9$; $\rho = 1000$ 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 (41x231x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 40.24 V/m; Power Drift = -0.00 dB

Fast SAR: SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.834 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.46 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 = 40.24 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.74 W/kg

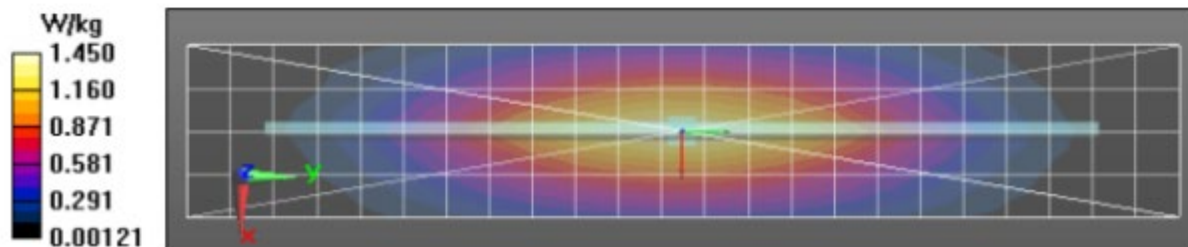
SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.785 W/kg (SAR corrected for target medium)

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) = 1.47 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/21/2019 5:38:51 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190521-01
Dipole Model# D450V3
Phantom#: ELI4 1040
Tissue Temp: 20.3 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.13 dB
Adjusted SAR (1W): 4.68 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 55.4$; $\rho = 1000$ 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 (41x231x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 40.33 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.840 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.46 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 = 40.33 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.74 W/kg

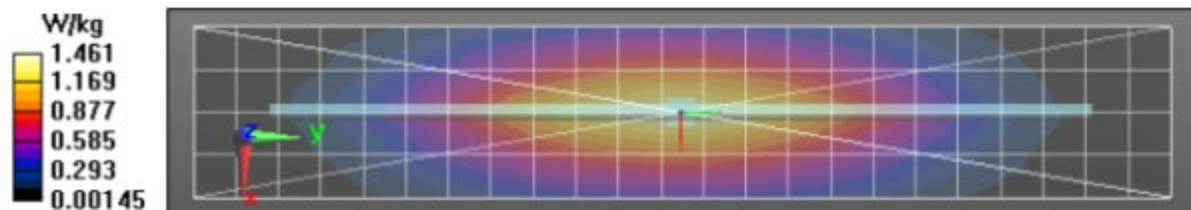
SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.792 W/kg (SAR corrected for target medium)

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) = 1.47 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/22/2019 6:30:47 AM

Robot#: DASY5-PG-3 | Run#: LOH-SYSP-450B-190522-04
Dipole Model#: D450V3
Phantom#: ELI4 1040
Tissue Temp: 20.4 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.029 dB
Adjusted SAR (1W): 4.72 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.95$ 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 (41x231x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 40.41 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.846 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.49 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 = 40.41 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.79 W/kg

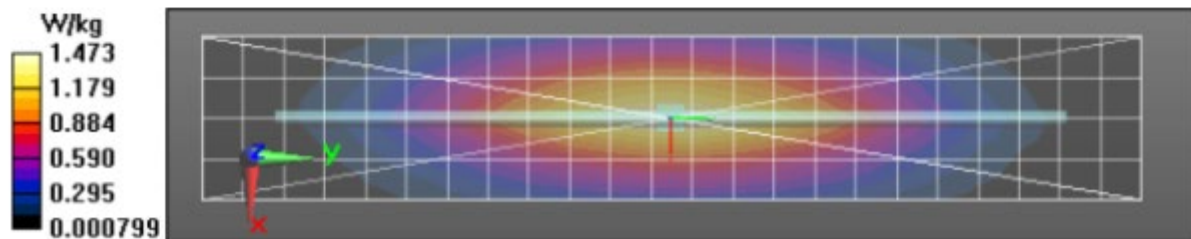
SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.791 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.51 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) = 1.51 W/kg



System verification for Head

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/21/2019 6:43:43 PM

Robot#: DASY5-PG-3 | Run#: ZZ-SYSP-450H-190521-09
 Dipole Model# D450V3
 Phantom#: ELI4 1103
 Tissue Temp: 20.9 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.041 dB
 Adjusted SAR (1W): 4.84 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 (41x231x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 42.49 V/m; Power Drift = -0.05 dB

Fast SAR: SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.870 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.52 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 = 42.49 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.83 W/kg

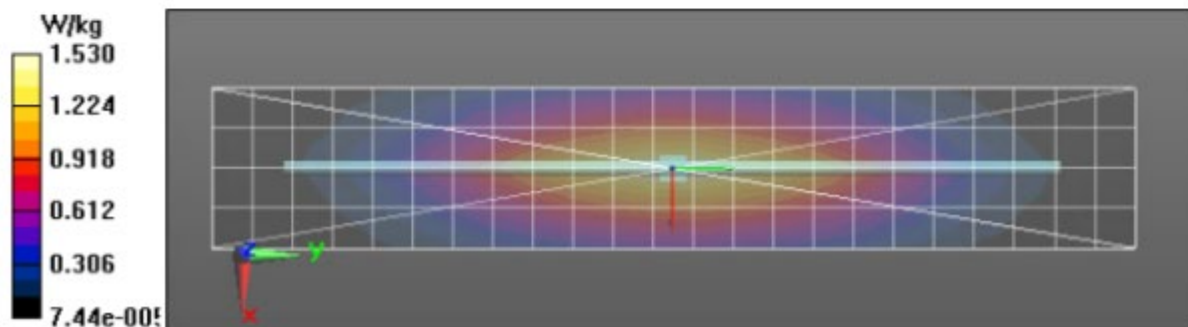
SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.807 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.53 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) = 1.53 W/kg



Appendix E

DUT Scans

Assessment at the Body with Body worn HLN6602A - Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/16/2019 4:41:01 PM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190516-07
 Model#: PMUE4526B
 Phantom#: ELI4 1040
 Tissue Temp: 21.0 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 480.0000 (MHz)
 Battery: PMNN4476A
 Carry Acc: HLN6602A
 Audio Acc: PMMN4092A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 480$ MHz; $\sigma = 0.97$ S/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 480 MHz, ConvF(11.17, 11.17, 11.17) @ 480 MHz

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

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x201x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Reference Value = 102.9 V/m; Power Drift = -0.42 dB

Fast SAR: SAR(1 g) = 7.93 W/kg; SAR(10 g) = 5.72 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.46 W/kg

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

Reference Value = 102.9 V/m; Power Drift = -0.49 dB

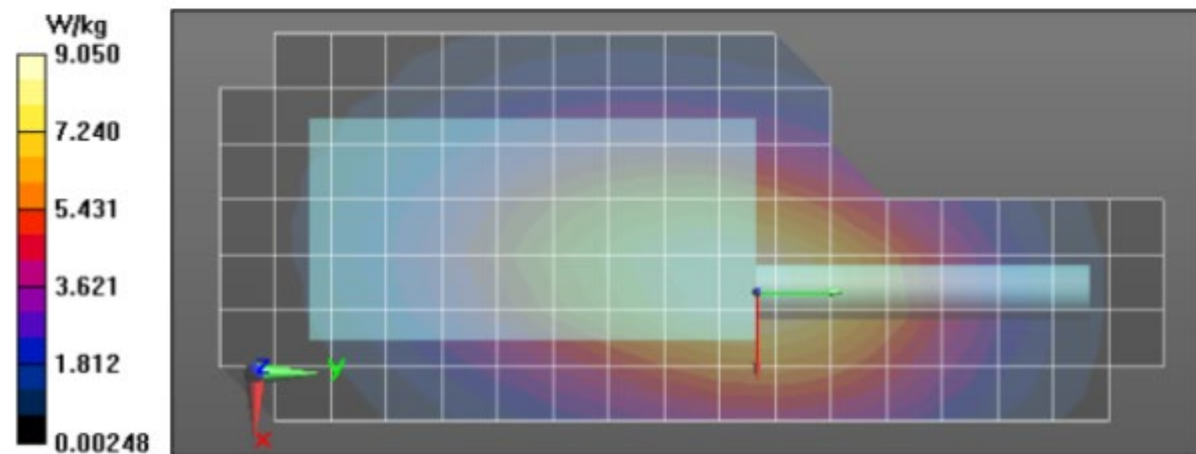
Peak SAR (extrapolated) = 10.4 W/kg

SAR(1 g) = 7.59 W/kg; SAR(10 g) = 5.53 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.12 W/kg

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

Maximum value of SAR (measured) = 9.05 W/kg



Assessment at the Body with Body worn HLN9844A - Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/17/2019 2:24:45 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190517-04#
 Model#: PMUE4526B
 Phantom#: ELI4 1040
 Tissue Temp: 20.7 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 465.0000 (MHz)
 Battery: PMNN4092A
 Carry Acc: HLN9844A
 Audio Acc: PMMN4092A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 465$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 465 MHz, ConvF(11.17, 11.17, 11.17) @ 465 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 91.45 V/m; Power Drift = -0.33 dB

Fast SAR: SAR(1 g) = 6.3 W/kg; SAR(10 g) = 4.49 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.59 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 = 91.45 V/m; Power Drift = -0.38 dB

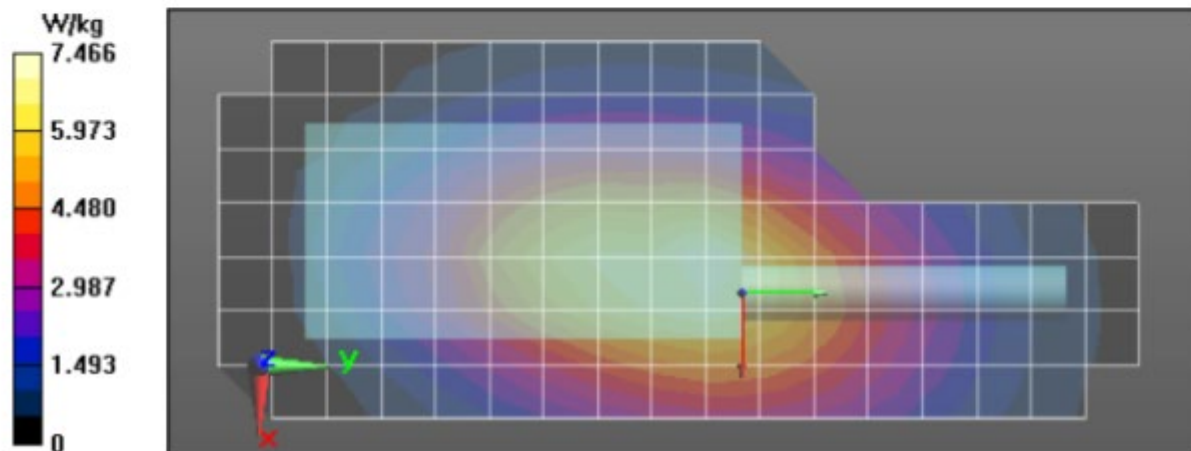
Peak SAR (extrapolated) = 8.42 W/kg

SAR(1 g) = 6.1 W/kg; SAR(10 g) = 4.45 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 7.33 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) = 7.39 W/kg



Assessment at the Body with Body worn PMLN7075A with NTN5243A – Table 19

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/17/2019 8:42:08 AM

Robot#: DASY5-PG-3 | Run#: ZZ-AB-190517-11#
 Model#: PMUE4526B
 Phantom#: ELI4 1040
 Tissue Temp: 20.4 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 465.0000 (MHz)
 Battery: PMNN4092A
 Carry Acc: PMLN7075A w/ NTN5243A
 Audio Acc: PMMN4092A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 465$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 465 MHz, ConvF(11.17, 11.17, 11.17) @ 465 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 87.35 V/m; Power Drift = -0.31 dB

Fast SAR: SAR(1 g) = 5.79 W/kg; SAR(10 g) = 4.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 6.93 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 = 87.35 V/m; Power Drift = -0.39 dB

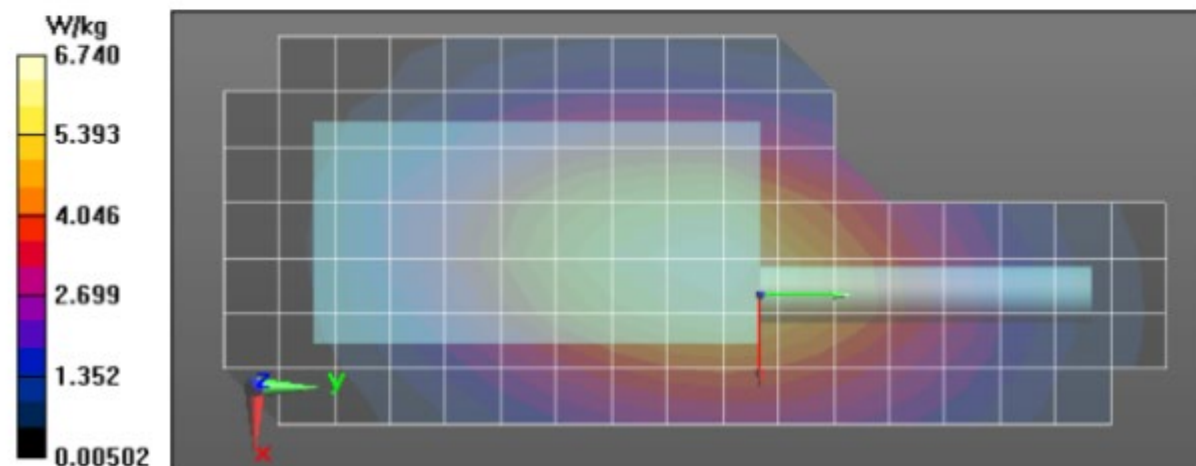
Peak SAR (extrapolated) = 7.80 W/kg

SAR(1 g) = 5.64 W/kg; SAR(10 g) = 4.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.71 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) = 6.74 W/kg



Assessment at the Body with Body worn RLN4570A - Table 20

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/17/2019 9:07:02 PM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190517-25
 Model#: PMUE4526B
 Phantom#: ELI4 1040
 Tissue Temp: 20.3 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 465.0000 (MHz)
 Battery: PMNN4092A
 Carry Acc: RLN4570A
 Audio Acc: PMMN4092A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 465$ MHz; $\sigma = 0.97$ S/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 465 MHz, ConvF(11.17, 11.17, 11.17) @ 465 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 103.1 V/m; Power Drift = -0.40 dB

Fast SAR: SAR(1 g) = 8.14 W/kg; SAR(10 g) = 5.86 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.71 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 = 103.1 V/m; Power Drift = -0.47 dB

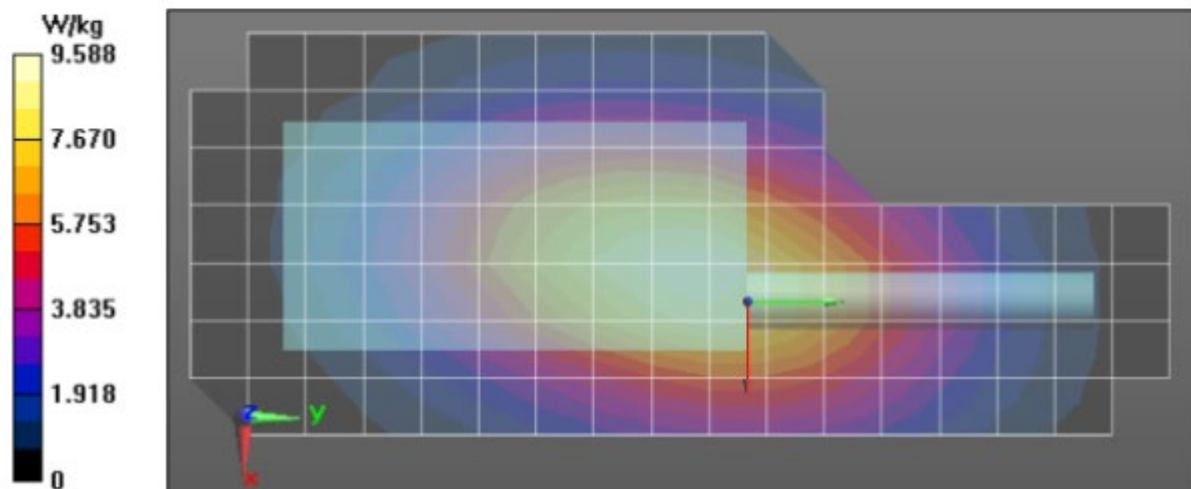
Peak SAR (extrapolated) = 10.6 W/kg

SAR(1 g) = 7.83 W/kg; SAR(10 g) = 5.74 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.35 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) = 9.28 W/kg



Assessment at the Body with Body worn RLN4815A - Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/20/2019 9:02:28 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190520-09
 Model#: PMUE4526B
 Phantom#: ELI4 1040
 Tissue Temp: 20.3 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 465.0000 (MHz)
 Battery: PMNN4092A
 Carry Acc: RLN4815A
 Audio Acc: PMMN4092A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 465$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 465 MHz, ConvF(11.17, 11.17, 11.17) @ 465 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 73.15 V/m; Power Drift = -0.43 dB

Fast SAR: SAR(1 g) = 3.93 W/kg; SAR(10 g) = 2.87 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 4.66 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 = 73.15 V/m; Power Drift = -0.52 dB

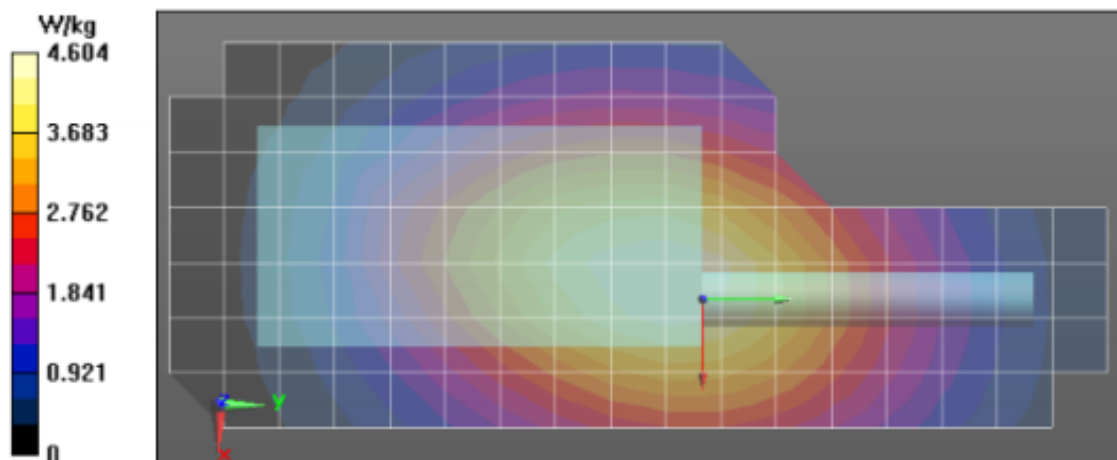
Peak SAR (extrapolated) = 5.00 W/kg

SAR(1 g) = 3.85 W/kg; SAR(10 g) = 2.93 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.47 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) = 4.45 W/kg



Assessment at the Body with other audio accessories - Table 22

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/20/2019 11:53:01 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190520-13
 Model#: PMUE4526B
 Phantom#: ELI4 1040
 Tissue Temp: 20.6 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 465.0000 (MHz)
 Battery: PMNN4092A
 Carry Acc: RLN4570A
 Audio Acc: PMLN6541A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 465$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 465 MHz, ConvF(11.17, 11.17, 11.17) @ 465 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 103.2 V/m; Power Drift = -0.42 dB

Fast SAR: SAR(1 g) = 7.82 W/kg; SAR(10 g) = 5.65 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.32 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 = 103.2 V/m; Power Drift = -0.53 dB

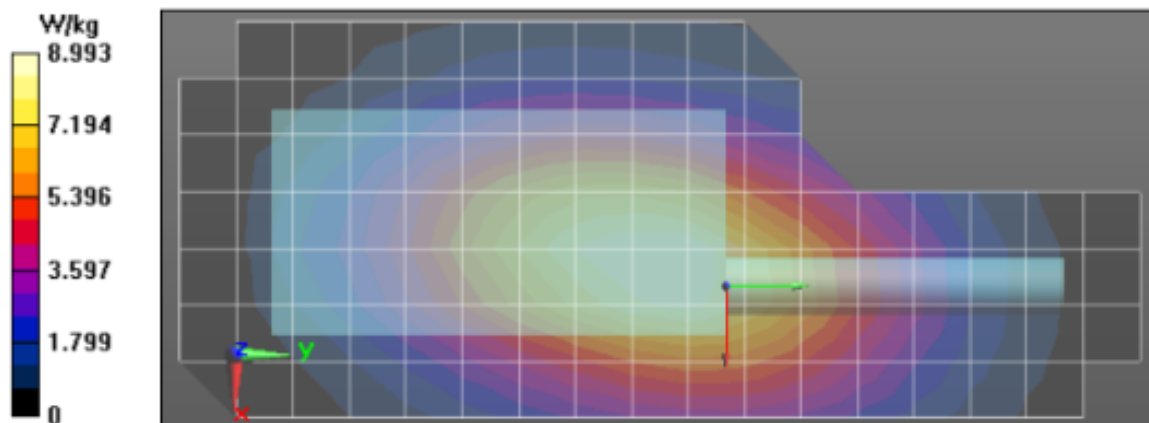
Peak SAR (extrapolated) = 10.2 W/kg

SAR(1 g) = 7.54 W/kg; SAR(10 g) = 5.55 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.02 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) = 8.95 W/kg



Assessment at the Face with DUT @ front - Table 24

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/22/2019 12:30:34 AM

Robot#: DASY5-PG-3 | Run#: ZZ-FACE-190522-01#
 Model#: PMUE4526B
 Phantom#: ELI4 1103
 Tissue Temp: 20.4 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 465.0000 (MHz)
 Battery: PMNN4476A
 Carry Acc: @ front
 Audio Acc: N/A
 Start Power: 4.80 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 465$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 43.5$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 465 MHz, ConvF(10.75, 10.75, 10.75) @ 465 MHz

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

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (71x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 100.5 V/m; Power Drift = -0.47 dB

Fast SAR: SAR(1 g) = 7.22 W/kg; SAR(10 g) = 5.25 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 8.58 W/kg

Below 2 GHz-Rev.2/Face Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 100.5 V/m; Power Drift = -0.59 dB

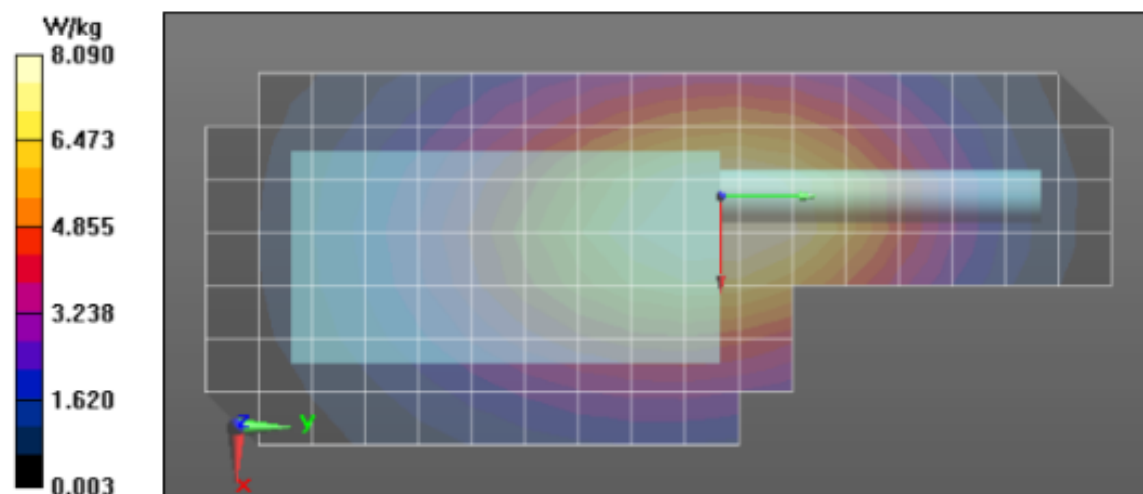
Peak SAR (extrapolated) = 9.25 W/kg

SAR(1 g) = 6.85 W/kg; SAR(10 g) = 5.06 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 8.14 W/kg

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

Maximum value of SAR (measured) = 8.09 W/kg



Assessment for Outside FCC Part 90 – Table 26

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/21/2019 4:10:15 PM

Robot#: DASY5-PG-3 | Run#: ZR(LWS)-AB-190521-08
Model#: PMUE4526B
Phantom#: ELI4 1040
Tissue Temp: 20.3 (C)
Serial#: 278TUH0164
Antenna: PMAE4016A
Test Freq: 403.0000 (MHz)
Battery: PMNN4092A
Carry Acc: RLN4570A
Audio Acc: PMMN4092A
Start Power: 4.75 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 403$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 56.2$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 403 MHz, ConvF(11.17, 11.17, 11.17) @ 403 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 = 106.9 V/m; Power Drift = -0.25 dB

Fast SAR: SAR(1 g) = 8.47 W/kg; SAR(10 g) = 6.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.74 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 = 106.9 V/m; Power Drift = -0.30 dB

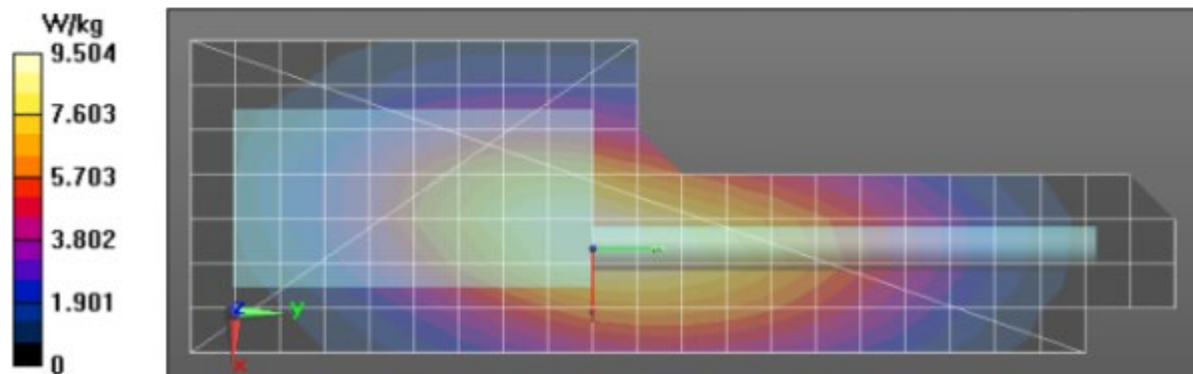
Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 8.34 W/kg; SAR(10 g) = 6.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.55 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) = 9.54 W/kg



APPENDIX F

Shortened Scan of Highest SAR configuration

Shortened Scan Table 25

Motorola Solutions, Inc. EME Laboratory Date/Time: 5/22/2019 7:48:47 AM

Robot#: DASY5-PG-3 | Run#: LOH-AB-190522-05
 Model#: PMUE4526B
 Phantom#: ELI4 1040
 Tissue Temp: 20.4 (C)
 Serial#: 278TUH0164
 Antenna: PMAE4006A
 Test Freq: 465.0000 (MHz)
 Battery: PMNN4092A
 Carry Acc: RLN4570A
 Audio Acc: PMMN4092A
 Start Power: 4.80 (W)

Comments: Shorten Scan

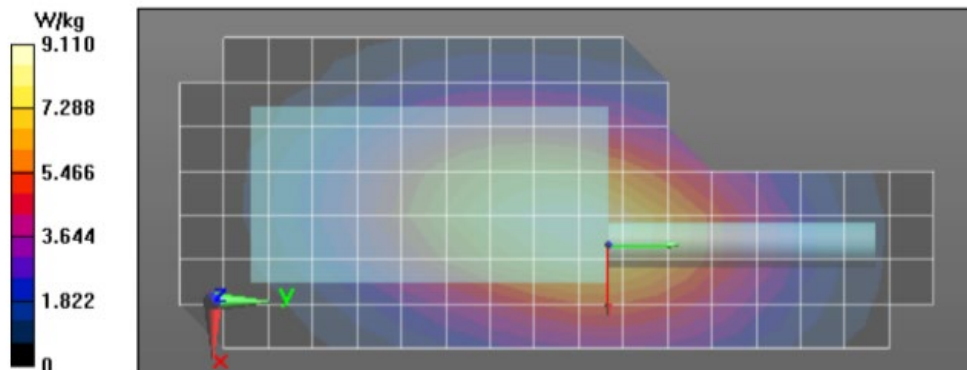
Duty Cycle: 1:1, Medium parameters used: $f = 465$ MHz; $\sigma = 0.96$ S/m; $\epsilon_r = 55$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7364, Calibrated: 1/23/2019, Frequency: 465 MHz, ConvF(11.17, 11.17, 11.17) @ 465 MHz
 Electronics: DAE4 Sn1483, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x231x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 101.2 V/m; Power Drift = -0.41 dB
Fast SAR: SAR(1 g) = 7.73 W/kg; SAR(10 g) = 5.58 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 9.22 W/kg

Below 2 GHz-Rev.2/Ab Scan/2-Volume 2D Scan (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm
 Reference Value = 101.2 V/m; Power Drift = -0.44 dB
Fast SAR: SAR(1 g) = 7.6 W/kg; SAR(10 g) = 5.55 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 8.94 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) = 8.89 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 = 103.6 V/m; Power Drift = -0.24 dB
 Peak SAR (extrapolated) = 11.0 W/kg
SAR(1 g) = 8.15 W/kg; SAR(10 g) = 5.95 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 9.70 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)	25	8	4.31
Full scan (area & zoom)	20	28	4.36

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