



CERTIFICATE 2518.05

DECLARATION OF COMPLIANCE SAR ASSESSMENT PCII Report Part 2 of 2

Motorola Solutions Inc.**EME Test Laboratory**

Motorola Solutions Malaysia Sdn Bhd

Plot 2A, Medan Bayan Lepas,

Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia

Date of Report: 4/20/2020**Report Revision:** A

Responsible Engineer: Kin Kting Lee (EME Engineer)
Report Author: Puteri Alifah Ilyana Binti Nor Rahim (EME Engineer)
Date/s Tested: 1/14/2020, 4/5/2020-4/6/2020, 4/9/2020, 4/20/2020
Manufacturer: Motorola Solutions Inc.
DUT Description: Handheld Portable – 136-174 5W GOB GNSS BT WLAN
Test TX mode(s): CW (PTT), Bluetooth, and WLAN 802.11b/g/n
Max. Power output: 6.0 W (VHF band), 10.0 mW (Bluetooth), 22.4 mW (802.11b), 8.3 mW (802.11g), 12.6 mW (802.11n)
Nominal Power: 5.0 W (VHF band), 8.9 mW (Bluetooth), 16.6 mW (802.11b), 6.6 mW (802.11g), 10.0 mW (802.11n)
Tx Frequency Bands: LMR 136-174 MHz; Bluetooth 2.402-2.480 GHz; WLAN 2.412-2.462 GHz
Signaling type: FM, FHSS (Bluetooth), 802.11b/g/n (WLAN)
Model(s) Tested: AAH56JDN9RA1AN (PMUD2904B)
Model(s) Certified: AAH56JDR9RA1AN (PMUD2906B), AAH56JDN9RA1AN (PMUD2904B), AAH56JDC9RA1AN, AAH56JDC9WA1AN, AAH56JDN9WA1AN, AAH56JDS9RA1AN
Serial Number(s): 807TRTT144, 807TRTT145
Classification: Occupational/Controlled
Applicant Name: Motorola Solutions Inc.
Applicant Address: 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
FCC ID: AZ489FT7066; LMR 150.8-173.4 MHz, Bluetooth 2.402-2.480 GHz, WLAN 2.412-2.462 GHz
This report contains results that are immaterial for FCC equipment approval, which are clearly identified.
IC: 109U-89FT7066
This report contains results that are immaterial for ISSED equipment approval, which are clearly identified.
ISSED 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: 4/22/2020**

Appendix D

System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory
Date/Time: 4/5/2020 3:21:19 AM

Robot#: DASY5-PG-1 | Run#: ZZ-SYSP-150B-200405-04
Dipole Model#: CLA150
Phantom#: ELI4 1016
Tissue Temp: 20.1 (C)
Serial#: 4016
Test Freq: 150.0000 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.16 dB
Adjusted SAR (1W): 4.31 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 150$ MHz; $\sigma = 0.78$ S/m; $\epsilon_r = 59$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 150 MHz, ConvF(13.5, 13.5, 13.5) @ 150 MHz
Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (81x81x1):

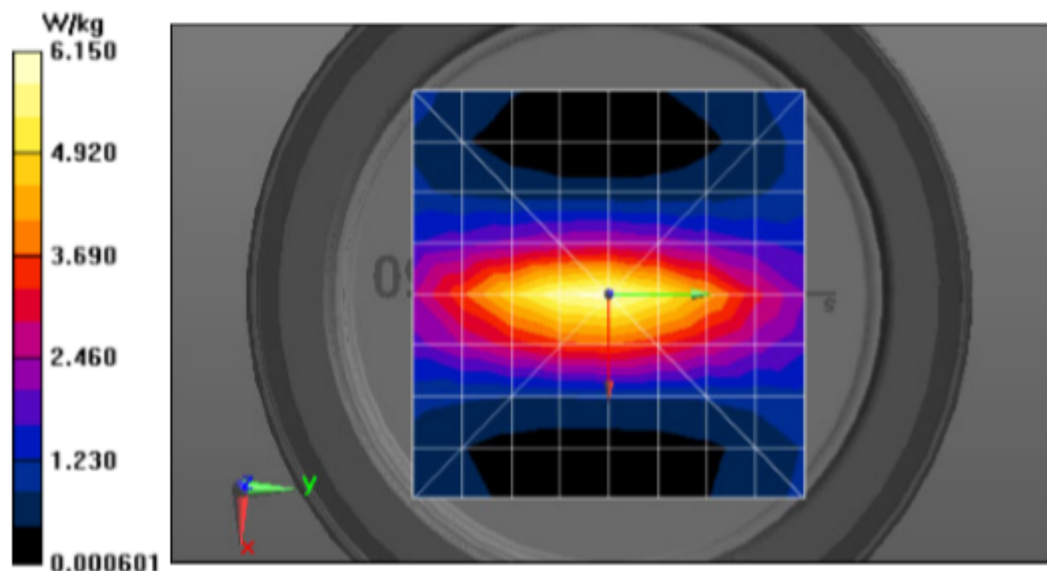
Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Reference Value = 88.94 V/m; Power Drift = -0.07 dB
Fast SAR: SAR(1 g) = 5.18 W/kg; SAR(10 g) = 3.66 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 6.27 W/kg

Below 2 GHz-Rev.3/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 88.94 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 7.64 W/kg
SAR(1 g) = 4.31 W/kg; SAR(10 g) = 2.77 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.19 W/kg

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

grid: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm
Maximum value of SAR (measured) = 6.15 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/8/2020 11:17:45 AM

Robot#: DASY5-PG-4 | Run#: NZ-SYSP-150B-200408-06
 Dipole Model#: CLA150
 Phantom#: ELI4 1016
 Tissue Temp: 21.1 (C)
 Serial#: 4016
 Test Freq: 150.0000 (MHz)
 Start Power: 1000 (mW)
 Rotation (1D): 0.20 dB
 Adjusted SAR (1W): 4.17 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 150$ MHz; $\sigma = 0.81$ S/m; $\epsilon_r = 59.6$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(11.72, 11.72, 11.72) @ 150 MHz

Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (81x81x1):

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

Reference Value = 85.52 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 4.95 W/kg; SAR(10 g) = 3.52 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 6.06 W/kg

Below 2 GHz-Rev.3/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 85.52 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 7.32 W/kg

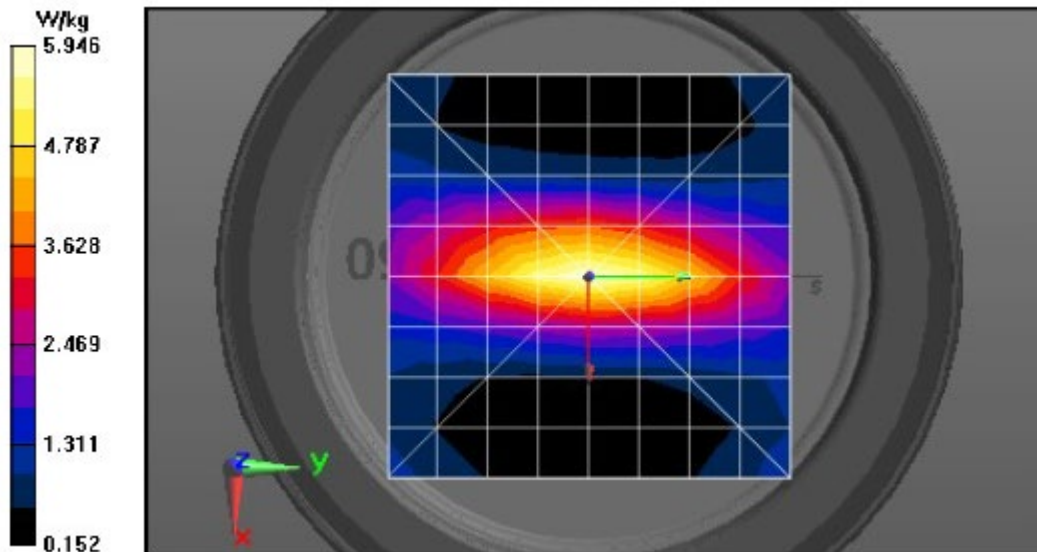
SAR(1 g) = 4.17 W/kg; SAR(10 g) = 2.71 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.99 W/kg

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

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

Maximum value of SAR (measured) = 5.98 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/20/2020 1:10:34 AM

Robot#: DASY5-PG-3 | Run#: AM-SYSP-2450B-200420-03#
 Dipole Model# D2450V2
 Phantom#: ELI4 1103
 Tissue Temp: 22.1 (C)
 Serial#: 782
 Test Freq: 2450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.1 dB
 Adjusted SAR (1W): 52.40 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ S/m; $\epsilon_r = 47.7$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7486, Calibrated: 10/24/2019, Frequency: 2450 MHz, ConvF(7.67, 7.67, 7.67) @ 2450 MHz

Electronics: DAE4 Sn850, Calibrated: 10/16/2019

2-3 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (51x101x1): Interpolated

grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 111.2 V/m; Power Drift = -0.15 dB

Fast SAR: SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.31 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 24.0 W/kg

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

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

Reference Value = 111.2 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 29.0 W/kg

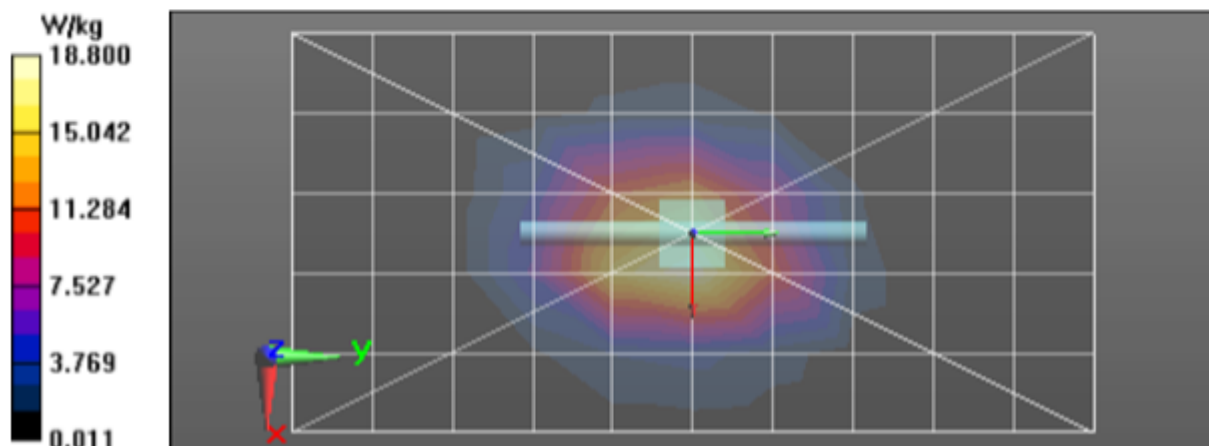
SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.02 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 23.2 W/kg

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

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

Maximum value of SAR (measured) = 23.3 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/13/2020 10:46:50 PM

Robot#: DASY5-PG-1 | Run#: ZZ-SYSP-150H-200113-09
Dipole Model# CLA150
Phantom#: ELI4 1109
Tissue Temp: 22.7 (C)
Serial#: 4005
Test Freq: 150.0000 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.18 dB
Adjusted SAR (1W): 4.14 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 150$ MHz; $\sigma = 0.78$ S/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 150 MHz, ConvF(13.81, 13.81, 13.81) @ 150 MHz
Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (81x81x1):

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

Reference Value = 87.56 V/m; Power Drift = -0.08 dB

Fast SAR: SAR(1 g) = 4.94 W/kg; SAR(10 g) = 3.49 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 5.99 W/kg

Below 2 GHz-Rev.3/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 87.56 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 7.46 W/kg

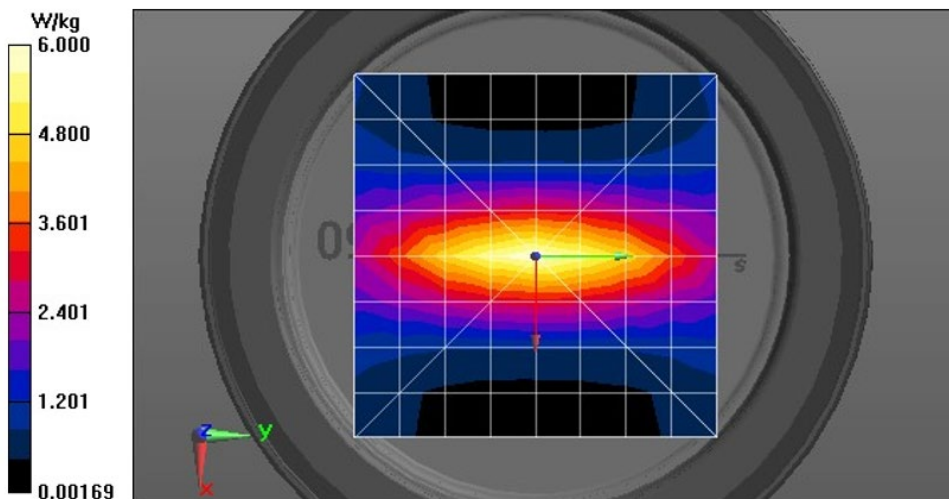
SAR(1 g) = 4.14 W/kg; SAR(10 g) = 2.69 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.01 W/kg

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

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

Maximum value of SAR (measured) = 6.00 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/6/2020 12:45:57 AM

Robot#: DASY5-PG-1 | Run#: ZZ-SYSP-150H-200406-01
Dipole Model#: CLA150
Phantom#: ELI4 1109
Tissue Temp: 20.9 (C)
Serial#: 4016
Test Freq: 150.0000 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.17 dB
Adjusted SAR (1W): 3.70 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 150$ MHz; $\sigma = 0.74$ S/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 150 MHz, ConvF(13.81, 13.81, 13.81) @ 150 MHz
Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (81x81x1):

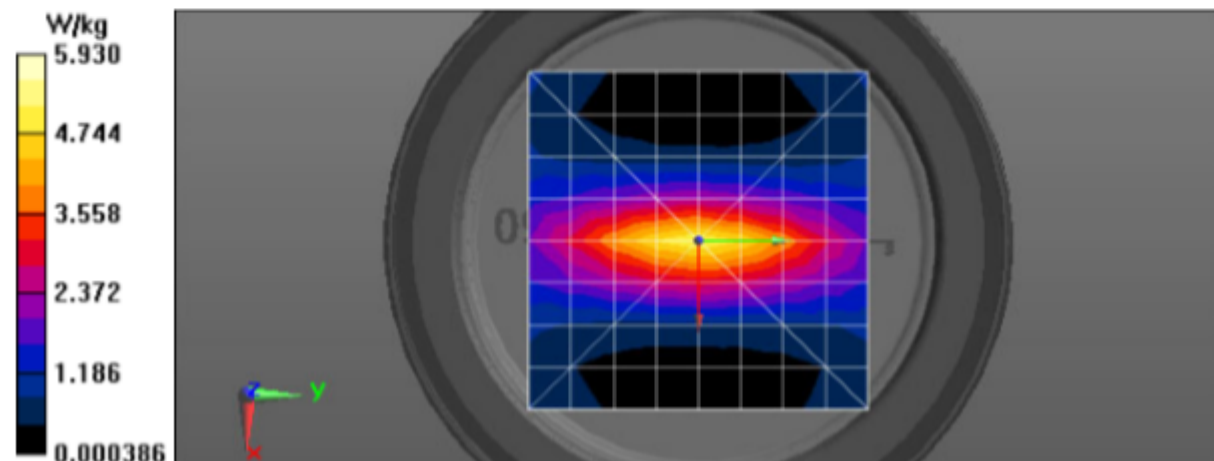
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 89.16 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 4.44 W/kg; SAR(10 g) = 3.13 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.27 W/kg

Below 2 GHz-Rev.3/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 89.16 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.54 W/kg
SAR(1 g) = 3.7 W/kg; SAR(10 g) = 2.37 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.27 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 5.93 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/20/2020 10:01:32 AM

Robot#: DASY5-PG-3 | Run#: FAZ-SYSP-2450H-200420-09
 Dipole Model#: D2450V2
 Phantom#: ELI4 1108
 Tissue Temp: 21.7 (C)
 Serial#: 782
 Test Freq: 2450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.062 dB
 Adjusted SAR (1W): 54.80 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ S/m; $\epsilon_r = 35.6$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7486, Calibrated: 10/24/2019, Frequency: 2450 MHz, ConvF(7.59, 7.59, 7.59) @ 2450 MHz

Electronics: DAE4 Sn850, Calibrated: 10/16/2019

2-3 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (51x101x1): Interpolated

grid: $dx=1.200$ mm, $dy=1.200$ mm

Reference Value = 118.3 V/m; Power Drift = -0.11 dB

Fast SAR: SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.87 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 24.8 W/kg

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

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

Reference Value = 118.3 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 30.0 W/kg

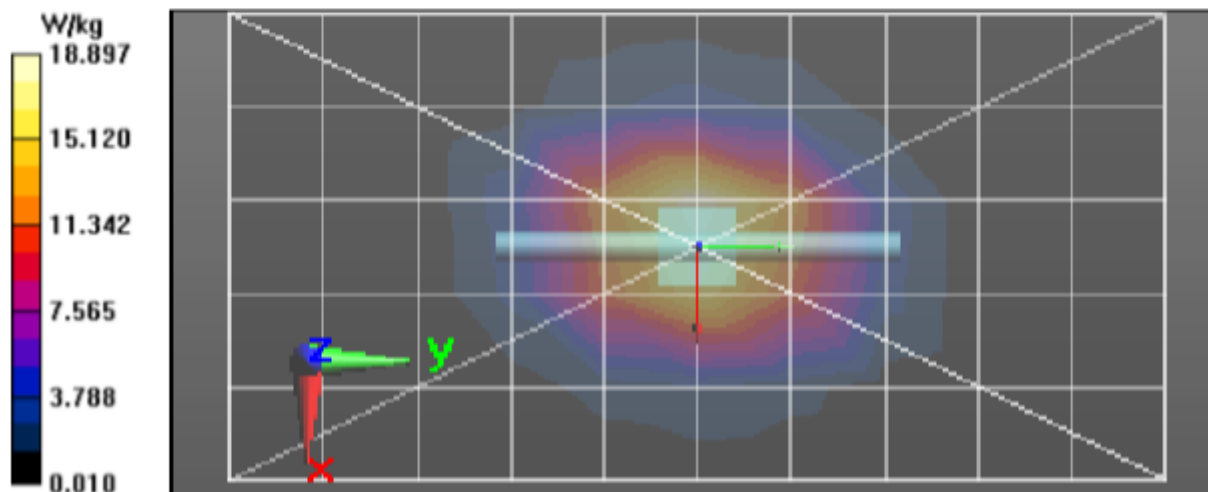
SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.39 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 24.1 W/kg

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

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

Maximum value of SAR (measured) = 24.1 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 2/18/2020 12:11:54 PM

Robot#: DASY5-PG-2 | Run#: NZ-SYSP-150H-200218-09
Dipole Model#: CLA150
Phantom#: ELI4 1108
Tissue Temp: 20.1 (C)
Serial#: 4016
Test Freq: 150 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.19 dB
Adjusted SAR (1W): 3.98 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 150$ MHz; $\sigma = 0.77$ S/m; $\epsilon_r = 49.9$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7534, Calibrated: 7/25/2019, Frequency: 150 MHz, ConvF(13.79, 13.79, 13.79) @ 150 MHz
Electronics: DAE3 Sn374, Calibrated: 7/17/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (81x81x1):

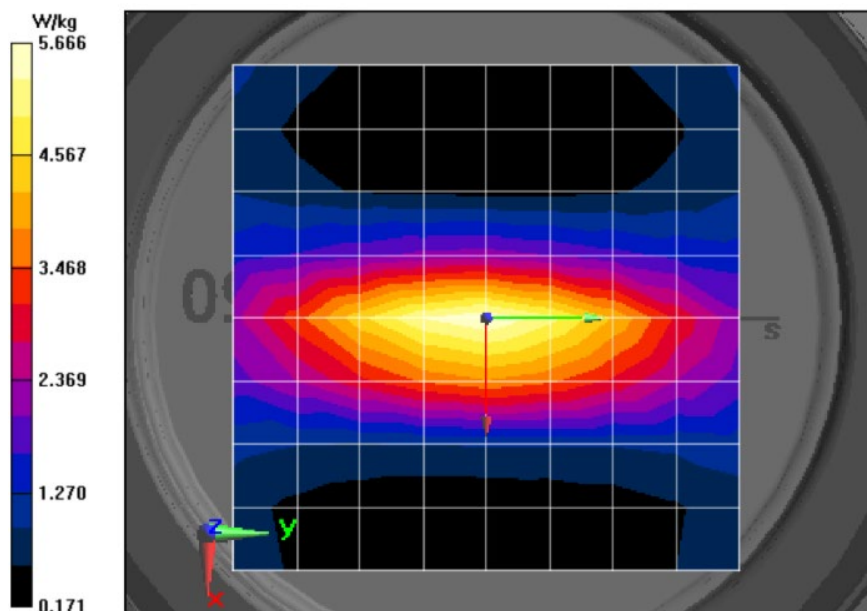
Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Reference Value = 87.39 V/m; Power Drift = -0.02 dB
Fast SAR: SAR(1 g) = 4.81 W/kg; SAR(10 g) = 3.4 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.93 W/kg

Below 2 GHz-Rev.3/System Performance Check/0-Degree Cube (5x6x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
Reference Value = 87.39 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 7.32 W/kg
SAR(1 g) = 3.98 W/kg; SAR(10 g) = 2.55 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.90 W/kg

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

grid: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm
Maximum value of SAR (measured) = 5.96 W/kg



Appendix E

DUT Scans

Assessment for LMR FCC Body Configuration - Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/9/2020 8:00:38 AM

Robot#: DASY5-PG-4 | Run#: NZ-AB-200409-04#
 Model#: PMUD2904B
 Phantom#: ELI4 1016
 Tissue Temp: 20.8 (C)
 Serial#: 807TRTT145
 Antenna: PMAD4120A
 Test Freq: 150.8000 (MHz)
 Battery: PMMN4491C
 Carry Acc: RLN4570A
 Audio Acc: PMMN4024A
 Start Power: 5.95 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 151 \text{ MHz}$; $\sigma = 0.81 \text{ S/m}$; $\epsilon_r = 59.6$; $\rho = 1000 \text{ kg/m}^3$

Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150.8 MHz, ConvF(11.72, 11.72, 11.72) @ 150.8 MHz

Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (81x201x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 53.67 V/m; Power Drift = -0.56 dB

Fast SAR: SAR(1 g) = 2.29 W/kg; SAR(10 g) = 1.65 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.78 W/kg

Below 2 GHz-Rev.3/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 = 53.67 V/m; Power Drift = -0.59 dB

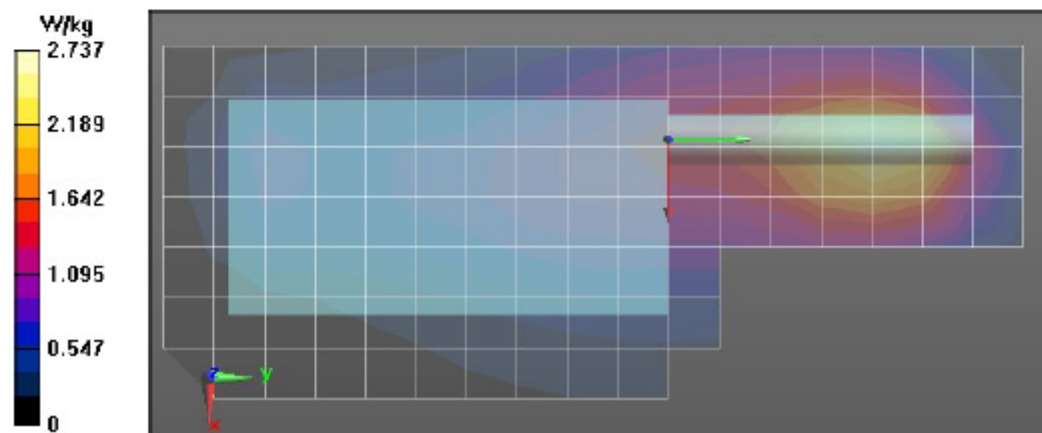
Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 1.72 W/kg; SAR(10 g) = 1.1 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.73 W/kg

Below 2 GHz-Rev.3/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) = 2.73 W/kg



Assessment for LMR FCC/ ISED Face Configuration - Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/14/2020 2:16:47 AM

Robot#: DASY5-PG-1 | Run#: ZZ-FACE-200114-04#
 Model#: PMUD2904B
 Phantom#: ELI4 1109
 Tissue Temp: 22.5 (C)
 Serial#: 807TRTT144
 Antenna: PMAD4118A
 Test Freq: 166.500 (MHz)
 Battery: PMNN4491C
 Carry Acc: NONE
 Audio Acc: NONE
 Start Power: 5.86 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 167$ MHz; $\sigma = 0.79$ S/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 166.5 MHz, ConvF(13.81, 13.81, 13.81) @ 166.5 MHz
 Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/Face Scan/1-Area Scan (81x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 63.35 V/m; Power Drift = -0.38 dB

Fast SAR: SAR(1 g) = 2.79 W/kg; SAR(10 g) = 2.14 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.31 W/kg

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

Reference Value = 63.35 V/m; Power Drift = -0.45 dB

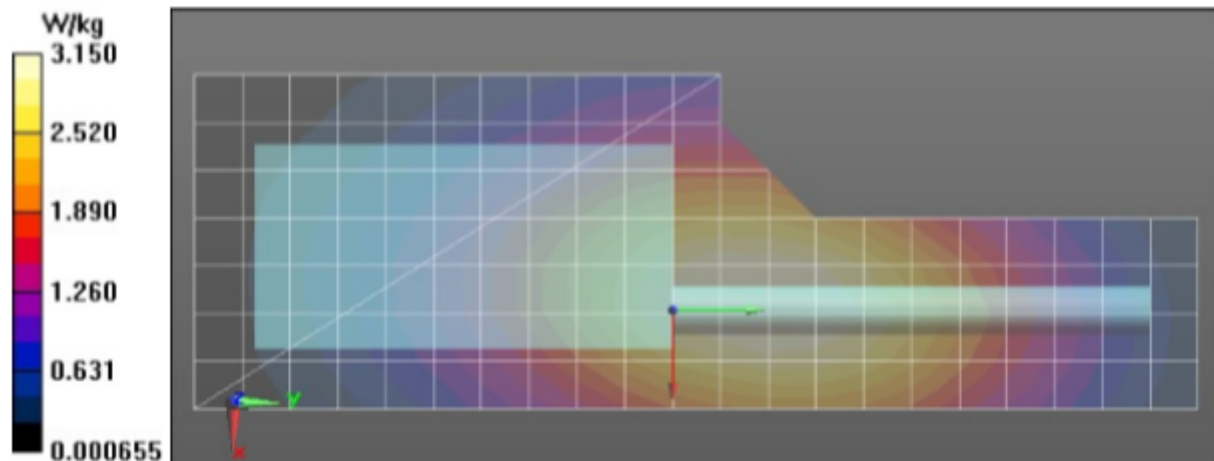
Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.9 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.23 W/kg

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

Maximum value of SAR (measured) = 3.15 W/kg



Assessment for WiFi 2.4 GHz FCC / ISED Body Configuration - Table 17 and 18**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 4/20/2020 3:00:50 AM

Robot#: DASY5-PG-3 | Run#: AM-AB-200420-05#
 Model#: PMUD2904B
 Phantom#: ELI4 1103
 Tissue Temp: 22.0 (C)
 Serial#: 871TRTT145
 Antenna: 0104039J80 WiFi Ant
 Test Freq: 2412.0000 (MHz)
 Battery: PMNN4491C
 Carry Acc: HLN6602A
 Audio Acc: None
 Start Power: 0.018 (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; $\sigma = 1.99$ S/m; $\epsilon_r = 47.8$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7486, Calibrated: 10/24/2019, Frequency: 2412 MHz, ConvF(7.67, 7.67) @ 2412 MHz

Electronics: DAE4 Sn850, Calibrated: 10/16/2019

2-3 GHz-Rev.3/Ab Scan/1-Area Scan (101x251x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 2.175 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 0.00651 W/kg; SAR(10 g) = 0.00368 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.0116 W/kg

2-3 GHz-Rev.3/Ab Scan/3-Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.175 V/m; Power Drift = -0.01 dB

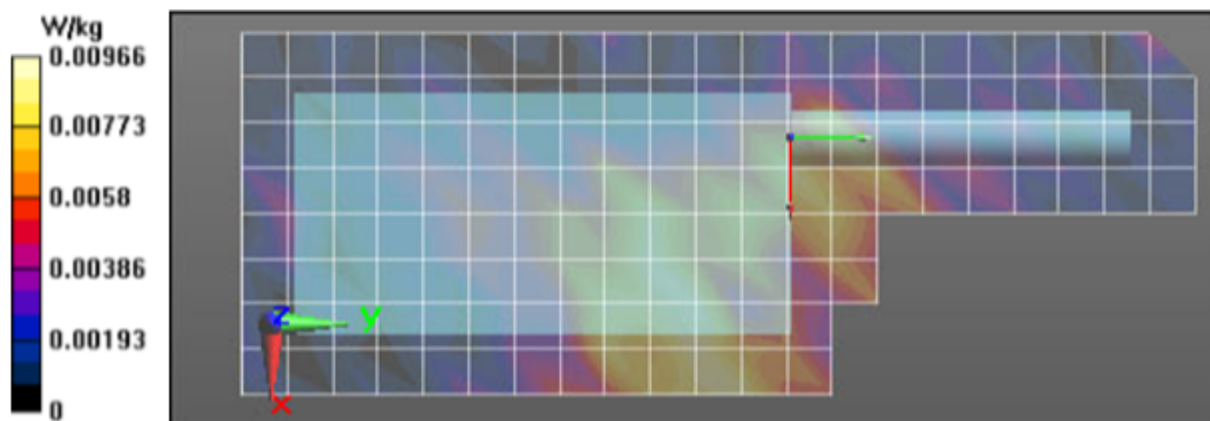
Peak SAR (extrapolated) = 0.0210 W/kg

SAR(1 g) = 0.0058 W/kg; SAR(10 g) = 0.00321 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.0148 W/kg

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

Maximum value of SAR (measured) = 0.00839 W/kg



Assessment for WiFi 2.4GHz FCC / ISED Face Configuration - Table 17 and 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/20/2020 11:19:14 AM

Robot#: DASY5-PG-3 | Run#: FAZ-FACE-200420-10
 Model#: PMUD2904B
 Phantom#: ELI4 1108
 Tissue Temp: 21.7 (C)
 Serial#: 871TRTT145
 Antenna: 0104039J80 WiFi Ant
 Test Freq: 2412.0000 (MHz)
 Battery: PMNN4491C
 Carry Acc: None
 Audio Acc: None
 Start Power: 0.018 (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; $\sigma = 1.83$ S/m; $\epsilon_r = 35.8$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7486, Calibrated: 10/24/2019, Frequency: 2412 MHz, ConvF(7.59, 7.59, 7.59) @ 2412 MHz

Electronics: DAE4 Sn850, Calibrated: 10/16/2019

2-3 GHz-Rev.3/Face Scan/1-Area Scan (91x231x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 3.586 V/m; Power Drift = -0.01 dB

Fast SAR: SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.010 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.0261 W/kg

2-3 GHz-Rev.3/Face Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.586 V/m; Power Drift = -0.08 dB

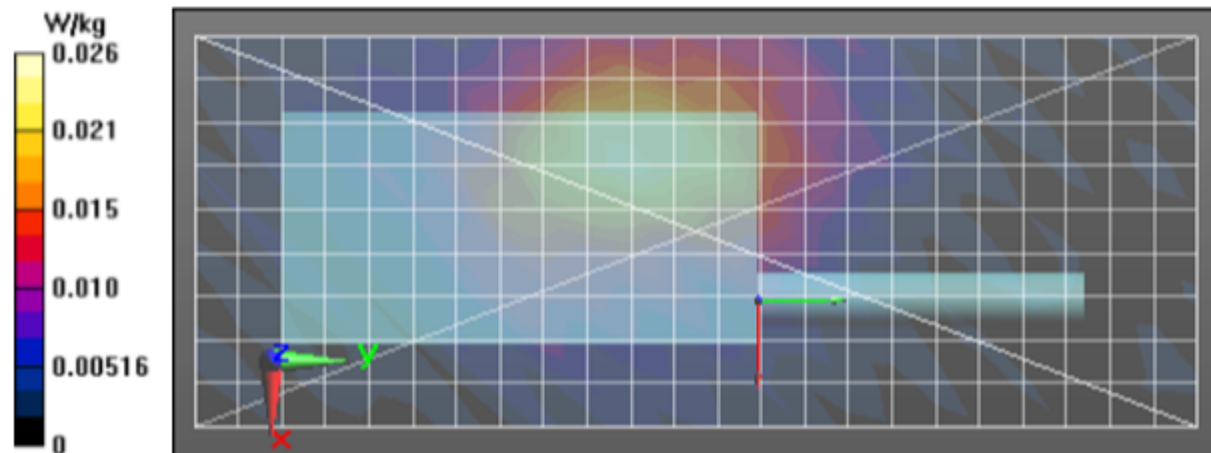
Peak SAR (extrapolated) = 0.0330 W/kg

SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.01 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.0262 W/kg

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

Maximum value of SAR (measured) = 0.0248 W/kg



Assessment for LMR ISED Body Configuration - Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/5/2020 9:49:16 PM

Robot#: DASY5-PG-1 | Run#: ZZ-AB-200405-14
 Model#: PMUD2904B
 Phantom#: ELI4 1016
 Tissue Temp: 20.3 (C)
 Serial#: 807TRTT145
 Antenna: PMAD4120A
 Test Freq: 146.0000 (MHz)
 Battery: PMNN4491C
 Carry Acc: RLN4570A
 Audio Acc: PMMN4024A
 Start Power: 5.70 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 146 \text{ MHz}$; $\sigma = 0.78 \text{ S/m}$; $\epsilon_r = 59.1$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 146 MHz, ConvF(13.5, 13.5, 13.5) @ 146 MHz
 Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (81x201x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 63.65 V/m; Power Drift = -0.89 dB

Fast SAR: SAR(1 g) = 3.12 W/kg; SAR(10 g) = 2.24 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.77 W/kg

Below 2 GHz-Rev.3/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 = 63.65 V/m; Power Drift = -0.99 dB

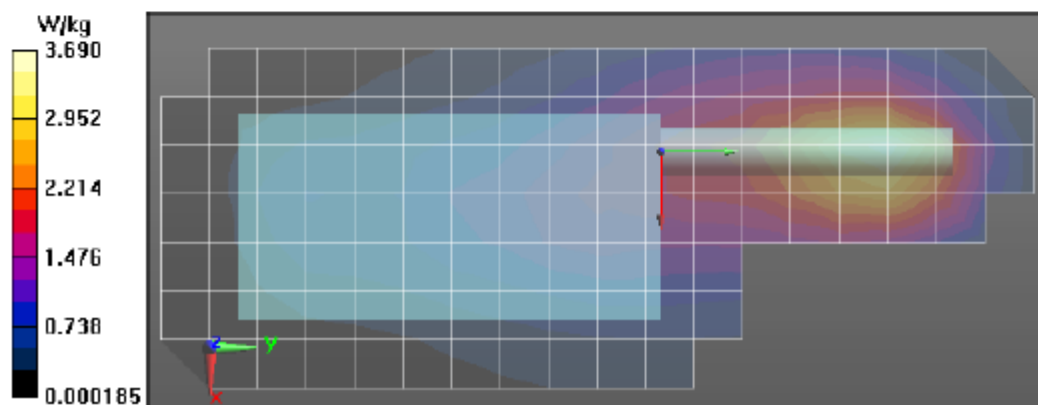
Peak SAR (extrapolated) = 5.44 W/kg

SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.41 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.62 W/kg

Below 2 GHz-Rev.3/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) = 3.69 W/kg



APPENDIX F

Shortened Scan of Highest SAR configuration

Shortened Scan Assessment - Table 19

Motorola Solutions, Inc. EME Laboratory

Date/Time: 2/18/2020 3:23:09 PM

Robot#: DASY5-PG-2 | Run#: NZ-FACE-200218-12
 Model#: PMUD2904B
 Phantom#: ELI4 1108
 Tissue Temp: 20.2 (C)
 Serial#: 807TRTT144
 Antenna: PMAD4118A
 Test Freq: 166.5000 (MHz)
 Battery: PMNN4491C
 Carry Acc: NONE
 Audio Acc: NONE
 Start Power: 5.90 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 167$ MHz; $\sigma = 0.78$ S/m; $\epsilon_r = 49.1$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7534, Calibrated: 7/25/2019, Frequency: 166.5 MHz, ConvF(13.79, 13.79, 13.79) @ 166.5 MHz

Electronics: DAE3 Sn374, Calibrated: 7/17/2019

Below 2 GHz-Rev.3/Face Scan/1-Area Scan (81x241x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 62.96 V/m; Power Drift = -0.20 dB

Fast SAR: SAR(1 g) = 2.66 W/kg; SAR(10 g) = 2.05 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.16 W/kg

Below 2 GHz-Rev.3/Face Scan/2-Volume Scan 2D (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm

Reference Value = 62.96 V/m; Power Drift = -0.20 dB

Fast SAR: SAR(1 g) = 2.57 W/kg; SAR(10 g) = 1.95 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.08 W/kg

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

Reference Value = 64.82 V/m; Power Drift = -0.17 dB

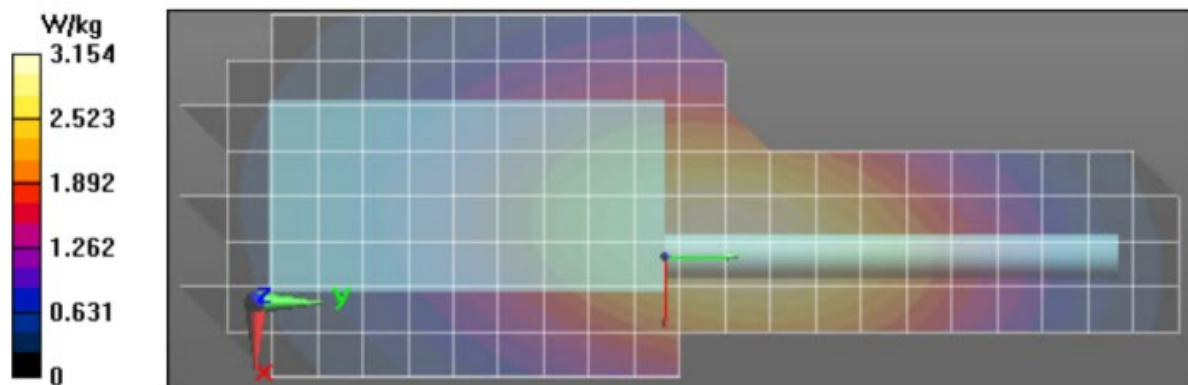
Peak SAR (extrapolated) = 3.75 W/kg

SAR(1 g) = 2.49 W/kg; SAR(10 g) = 1.89 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.22 W/kg

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

Maximum value of SAR (measured) = 3.04 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)	19	8	1.32
Full scan (area & zoom)	17	23	1.47

APPENDIX G

DUT Test Position Photos

1.0 Highest SAR Test Position per body location

1.1 Body

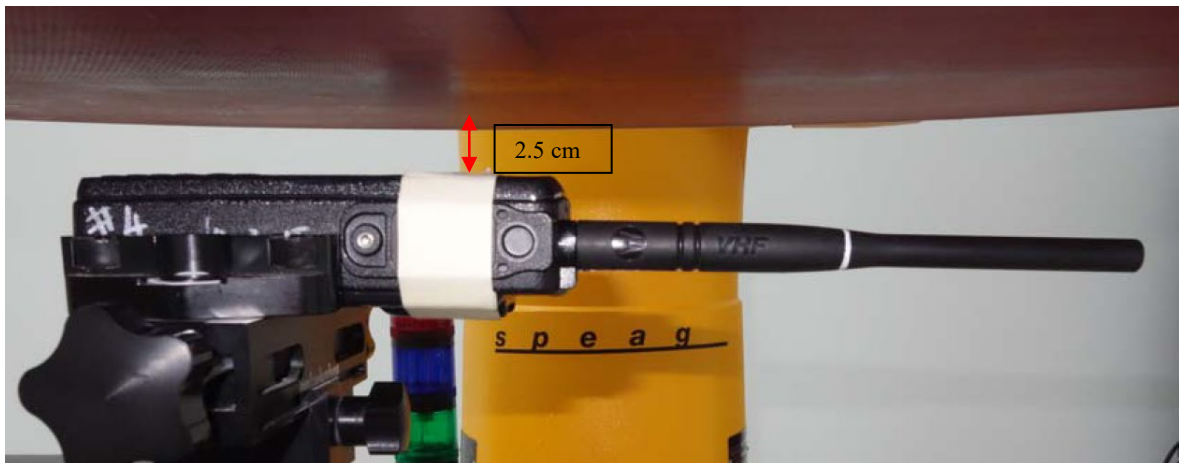
DUT with antenna PMAD4120A, new offered battery PMNN4491C and chest pack RLN4570A positioned against the phantom with PMMN4024A RSM audio accessory attached.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of DUT	@ base of antenna	@ tip of antenna
PMAD4120A	0	18	18

1.2 Face

Front of DUT with antenna PMAD4118A and new offered battery PMNN4491C separated 2.5cm from the phantom without an audio accessory attached.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of DUT	@ base of antenna	@ tip of antenna
PMAD4118A	27	38	43

APPENDIX H

Battery Photo



New offered battery PMNN4491C (Front, side and Back)

For photos of other previously approved accessories please refer to previous filing report.