

	 	 
---	---	---

DECLARATION OF COMPLIANCE SAR ASSESSMENT PCII Report Part 2 of 2


<p>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: 04/05/2020 Report Revision: C</p>
---	---

Responsible Engineer:	Ch'ng Jian Sheng & Lee Kin Kting
Report Author:	Lee Kin Kting
Date/s Tested:	10/01/2019-10/02/2019,11/08/2019,11/19/2019,11/26/2019-12/27/2019, 26/12/2019, 01/10/2020-01/11/2020,01/16/2020
Manufacturer:	Motorola Solutions Inc.
DUT Description:	Handheld Portable – 450-520MHz, 5W rated power, 6.25kHz/12.5kHz/25kHz, Capable of digital and analog FM transmission. Also capable of TDMA transmission
Test TX mode(s):	CW (PTT)
Max. Power output:	5.6W
Nominal Power:	5.0W
Tx Frequency Bands:	450-520MHz
Signaling type:	FM, TDMA
Model(s) Tested:	H84SDD9PW5AN (MUE4401), H84SDH9PW7AN (MUE4400)
Model(s) Certified:	H84SDD9PW5AN (MUE4401), H84SDH9PW7AN (MUE4400), H84SDF9W6AN (MUE4432)
Serial Number(s):	837CQT0032, 837CQT0036
Classification:	Occupational/Controlled
FCC ID:	AZ489FT4920; LMR 450-512MHz
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: 4/5/2020	
--	--

Appendix D

System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 10/1/2019 9:09:16 PM

Robot#: DASY5-PG-4 | Run#: CK-SYSP-450H-191001-17
Dipole Model# D450V3
Phantom#: ELI4 1103
Tissue Temp: 21.1 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.063 dB
Adjusted SAR (1W): 4.28 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 43.1$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7485, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.95, 11.95, 11.95) @ 450 MHz
Electronics: DAE4 Sn688, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x211x1):

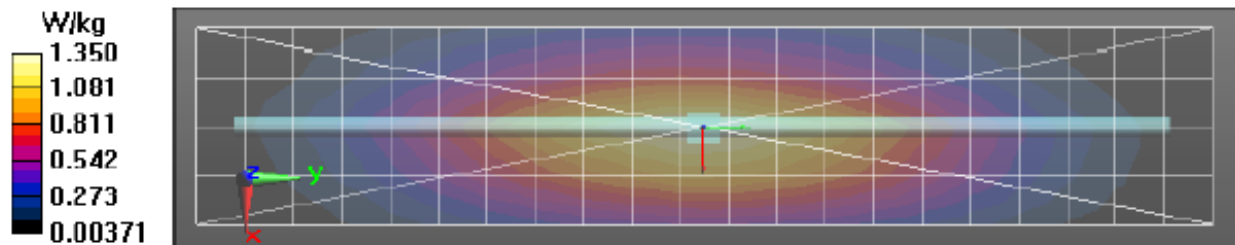
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.02 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.781 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.38 W/kg

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 = 40.02 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.717 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.38 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: 11/8/2019 4:32:59 PM

Robot#: DASY5-PG-4 | Run#: CK-SYSP-450H-191108-07
 Dipole Model# D450V3
 Phantom#: ELI4 1103
 Tissue Temp: 21.1 (C)
 Serial#: 1053
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.069 dB
 Adjusted SAR (1W): 4.64 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 43.7$; $\rho = 1000$ kg/m³
 Probe: EX3DV4 - SN7485, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(11.95, 11.95, 11.95) @ 450 MHz
 Electronics: DAE4 Sn688, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x211x1):

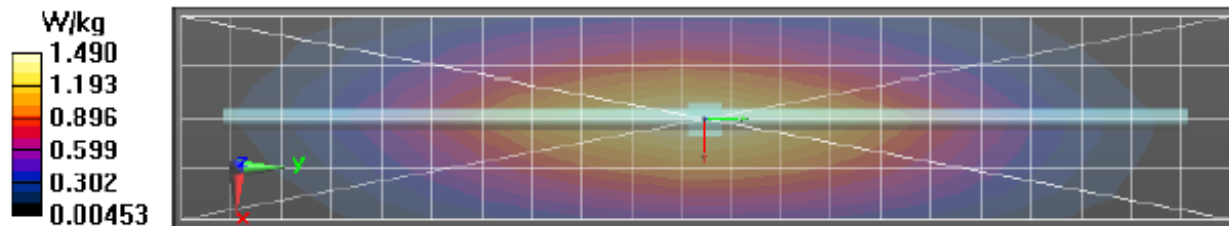
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 41.61 V/m; Power Drift = -0.01 dB
 Fast SAR: SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.846 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.50 W/kg

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 = 41.61 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 1.80 W/kg
 SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.780 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) = 1.50 W/kg



Motorola Solutions, Inc. EME Laboratory
Date/Time: 12/25/2019 1:17:27 PM

Robot#: DASY5-PG-1 | Run#: AM-SYSP-450H-191225-11
Dipole Model# D450V3
Phantom#: ELI4 1103
Tissue Temp: 21.4 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.12 dB
Adjusted SAR (1W): 4.72 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.84$ S/m; $\epsilon_r = 43$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 450 MHz, ConvF(11.84, 11.84, 11.84) @ 450 MHz
Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x221x1):

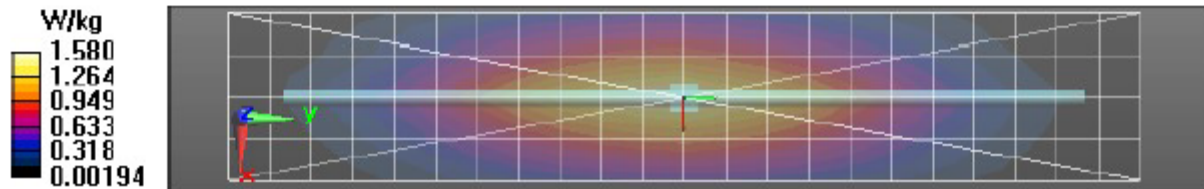
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 44.19 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.886 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.59 W/kg

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 = 44.19 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.787 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.58 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) = 1.57 W/kg



Motorola Solutions, Inc. EME Laboratory
Date/Time: 9/30/2019 8:37:27 PM

Robot#: DASY5-PG-4 | Run#: CK-SYSP-450B-190930-12
Dipole Model# D450V3
Phantom#: ELI4 1040
Tissue Temp: 22.4 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.076 dB
Adjusted SAR (1W): 4.16 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7485, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(12.52, 12.52, 12.52) @ 450 MHz
Electronics: DAE4 Sn688, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x211x1):

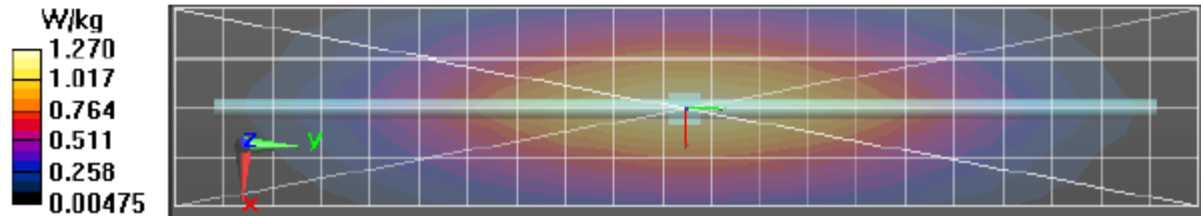
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 37.96 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.751 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.28 W/kg

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 = 37.96 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 1.52 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.710 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) = 1.28 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 11/7/2019 6:01:43 PM

Robot#: DASY5-PG-4 | Run#: CK-SYSP-450B-191107-11
Dipole Model# D450V3
Phantom#: ELI4 1040
Tissue Temp: 20.1 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.067 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 - SN7485, Calibrated: 1/23/2019, Frequency: 450 MHz, ConvF(12.52, 12.52, 12.52) @ 450 MHz
Electronics: DAE4 Sn688, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x211x1):

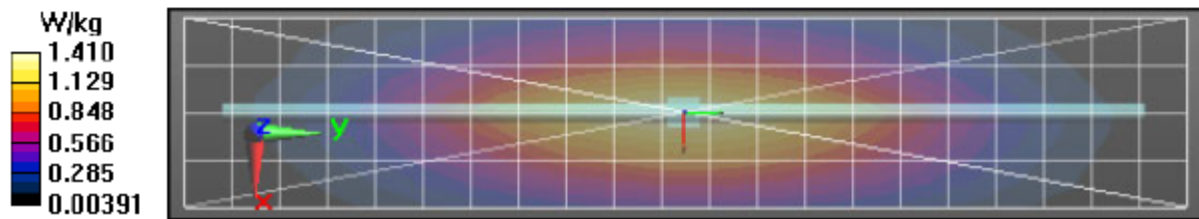
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 39.40 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.815 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.43 W/kg

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 = 39.40 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.762 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: 12/26/2019 3:57:30 PM

Robot#: DASY5-PG-1 | Run#: AM-SYSP-450B-191226-13
Dipole Model# D450V3
Phantom#: ELI4 1040
Tissue Temp: 20.7 (C)
Serial#: 1054
Test Freq: 450.000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.11 dB
Adjusted SAR (1W): 4.84 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 55.2$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 450 MHz, ConvF(12.06, 12.06, 12.06) @ 450 MHz
Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x201x1):

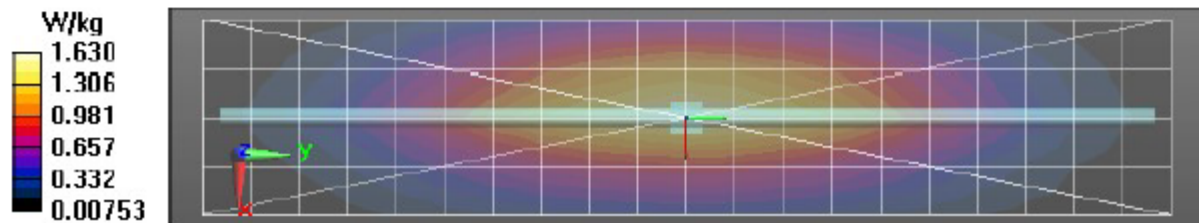
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 42.74 V/m; Power Drift = -0.02 dB
Fast SAR: SAR(1 g) = 1.33 W/kg; SAR(10 g) = 0.916 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.66 W/kg

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 = 42.74 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.98 W/kg
SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.806 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.67 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) = 1.67 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/10/2020 8:29:19 PM

Robot#: DASY5-PG-3 | Run#: IZ(NZ)-SYSP-450B-200110-10
Dipole Model# D450V3
Phantom#: ELI5 1150
Tissue Temp: 22.4 (C)
Serial#: 1053
Test Freq: 450 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.044 dB
Adjusted SAR (1W): 4.80 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 55.7$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7486, Calibrated: 10/24/2019, Frequency: 450 MHz, ConvF(11.73, 11.73, 11.73) @ 450 MHz
Electronics: DAE4 Sn850, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x241x1):

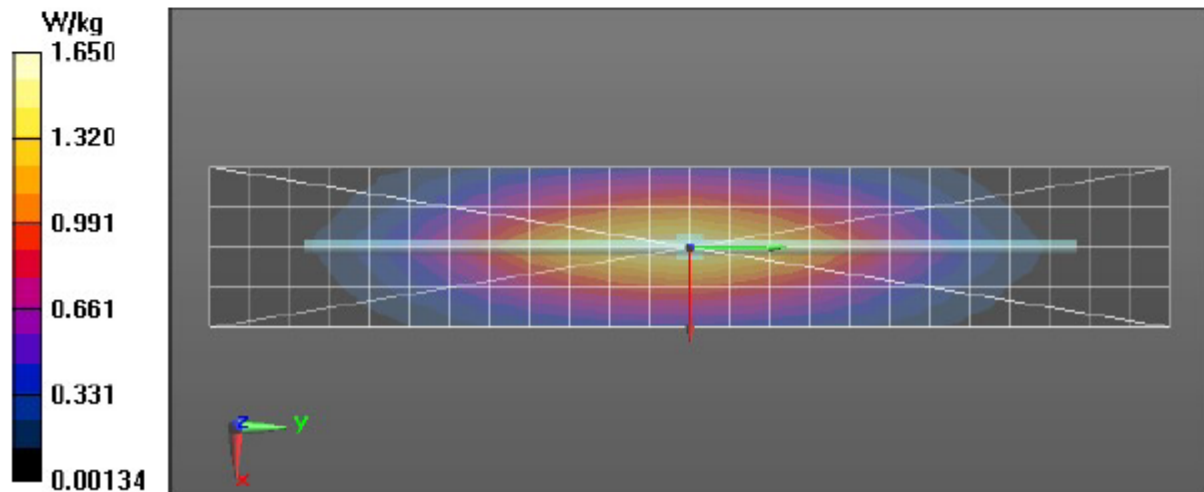
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 42.31 V/m; Power Drift = -0.10 dB
Fast SAR: SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.902 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.65 W/kg

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 = 42.31 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.94 W/kg
SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.803 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.66 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) = 1.65 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/16/2020 8:44:35 AM

Robot#: DASY5-PG-1 | Run#: IZ-SYSP-450B-200116-08
Dipole Model# D450V3
Phantom#: ELI5 1150
Tissue Temp: 21.1 (C)
Serial#: 1053
Test Freq: 450.0000 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.089 dB
Adjusted SAR (1W): 4.84 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f= 450 MHz; sigma = 0.89 S/m; epsilon_r = 55; rho = 1000 kg/m^3
Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 450 MHz, ConvF(12.06, 12.06, 12.06) @ 450 MHz
Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x221x1):

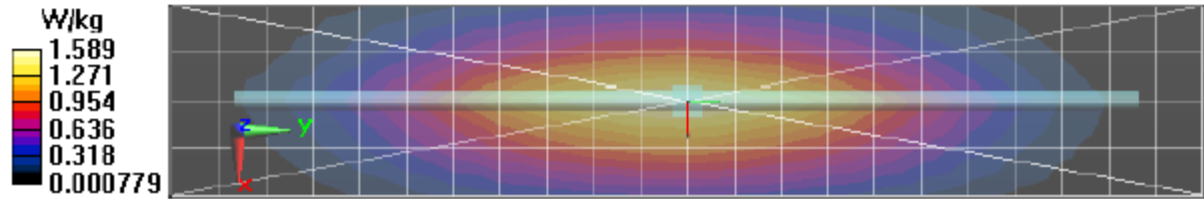
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 42.98 V/m; Power Drift = 0.02 dB
Fast SAR: SAR(1 g) = 1.32 W/kg; SAR(10 g) = 0.906 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.60 W/kg

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 = 42.98 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.92 W/kg
SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.805 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.62 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) = 1.61 W/kg



Appendix E

DUT Scans

Battery Assessment for FCC Body Configuration - Table 16

Motorola Solutions, Inc. EME Laboratory
 Date/Time: 12/27/2019 6:28:12 AM

Robot#: DASY5-PG-1 | Run#: IZ-AB-191227-05#
 Model#: H84SDH9PW7AN
 Phantom#: ELI4 1040
 Tissue Temp: 20.7 (C)
 Serial#: 837CQT0036
 Antenna: FAF5260A
 Test Freq: 450.0000 (MHz)
 Battery: PMNN4491C
 Carry Acc: PMLN7008A
 Audio Acc: RMN5137B
 Start Power: 5.11 (W)

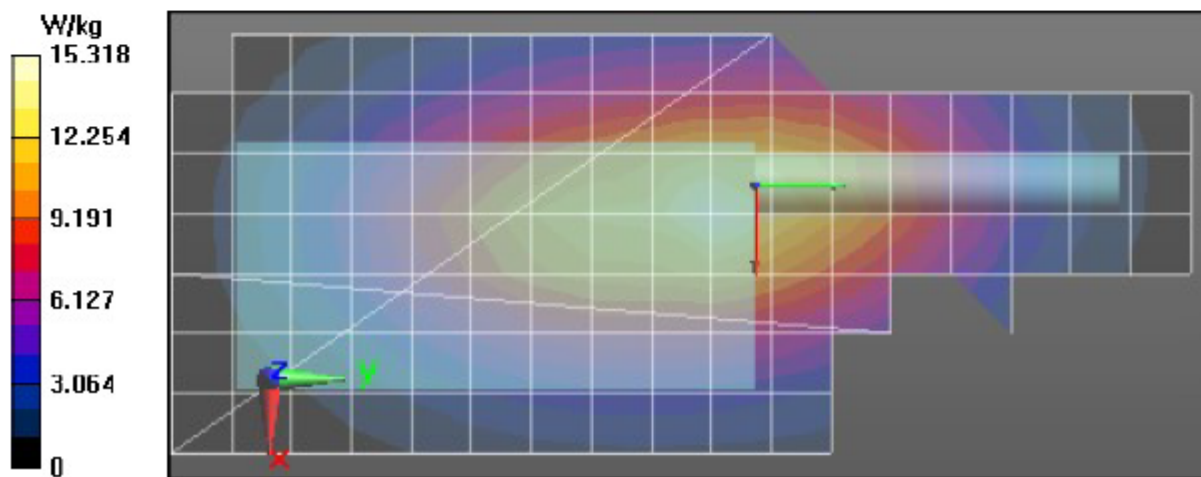
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.93 \text{ S/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$
 Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 450 MHz, ConvF(12.06, 12.06, 12.06) @ 450 MHz
 Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x181x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
 Reference Value = 127.3 V/m; Power Drift = -0.30 dB
 Fast SAR: SAR(1 g) = 12.3 W/kg; SAR(10 g) = 8.62 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 15.3 W/kg

Below 2 GHz-Rev.3/Ab 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 = 127.3 V/m; Power Drift = -0.33 dB
 Peak SAR (extrapolated) = 17.4 W/kg
 SAR(1 g) = 11.1 W/kg; SAR(10 g) = 7.9 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 14.9 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) = 14.8 W/kg



Battery Assessment for FCC Face Configuration - Table 16

Motorola Solutions, Inc. EME Laboratory
Date/Time: 10/2/2019 2:22:23 AM

Robot#: DASY5-PG-4 | Run#: CK-FACE-191002-02#
Model#: H84SDD9PW5AN
Phantom#: ELI4 1103
Tissue Temp: 21.1 (C)
Serial#: 837CQT0032
Antenna: FAF5260A
Test Freq: 465.5000 (MHz)
Battery: PMNN4448B
Carry Acc: None
Audio Acc: None
Start Power: 5.17 (W)

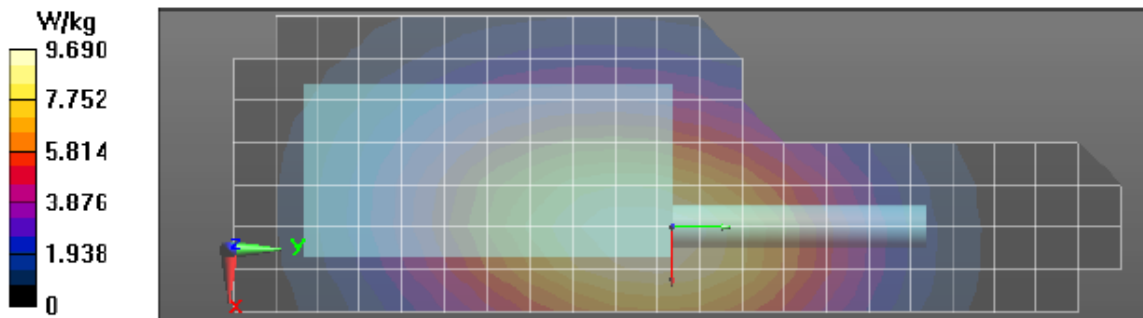
Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 466 \text{ MHz}$; $\sigma = 0.91 \text{ S/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$
Probe: EX3DV4 - SN7485, Calibrated: 1/23/2019, Frequency: 465.5 MHz, ConvF(11.95, 11.95, 11.95) @ 465.5 MHz
Electronics: DAE4 Sn688, Calibrated: 1/10/2019

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (81x251x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Reference Value = 107.3 V/m; Power Drift = -0.47 dB
Fast SAR: SAR(1 g) = 8.25 W/kg; SAR(10 g) = 6.05 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 9.78 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 = 107.3 V/m; Power Drift = -0.56 dB
Peak SAR (extrapolated) = 10.3 W/kg
SAR(1 g) = 7.8 W/kg; SAR(10 g) = 5.87 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 9.14 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) = 9.01 W/kg



APPENDIX F
Shortened Scan of Highest SAR configuration

Shortened Scan Assessment - Table 17

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/16/2020 11:08:51 AM

Robot#: DASY5-PG-1 | Run#: IZ-AB-200116-09
Model#: H84SDH9PW7AN
Phantom#: ELIS 1150
Tissue Temp: 21.1 (C)
Serial#: 837CQT0036
Antenna: FAF5260A
Test Freq: 450.0000 (MHz)
Battery: PMNN4491C
Carry Acc: PMLN7008A
Audio Acc: RMN5137B
Start Power: 5.41 (W)

Comments:

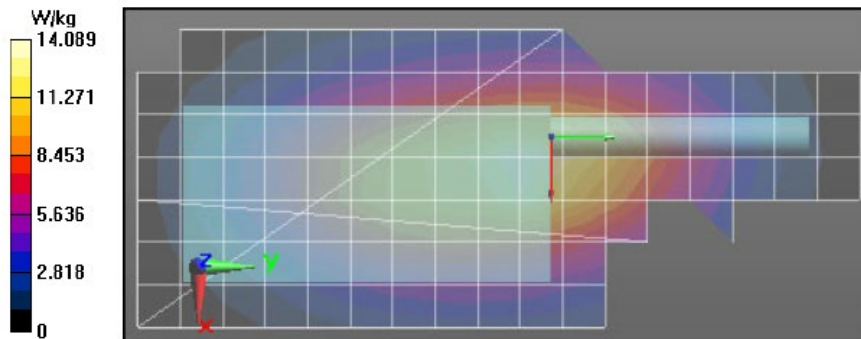
Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 55$; $\rho = 1000$ kg/m³
Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 450 MHz, ConvF(12.06, 12.06, 12.06) @ 450 MHz
Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 120.4 V/m; Power Drift = -0.38 dB
Fast SAR: SAR(1 g) = 12 W/kg; SAR(10 g) = 8.48 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 14.4 W/kg

Below 2 GHz-Rev.3/Ab Scan/2-Volume 2D Scan (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm
Reference Value = 120.4 V/m; Power Drift = -0.45 dB
Fast SAR: SAR(1 g) = 11.9 W/kg; SAR(10 g) = 8.44 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 14.2 W/kg

Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 131.5 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 17.3 W/kg
SAR(1 g) = 11.6 W/kg; SAR(10 g) = 8.21 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 14.9 W/kg

Below 2 GHz-Rev.3/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 14.1 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)	17	8	6.16
Full scan (area & zoom)	16	25	6.56

APPENDIX G
DUT Test Position Photos

1.0 Highest SAR Test Position per body location

1.1 Body

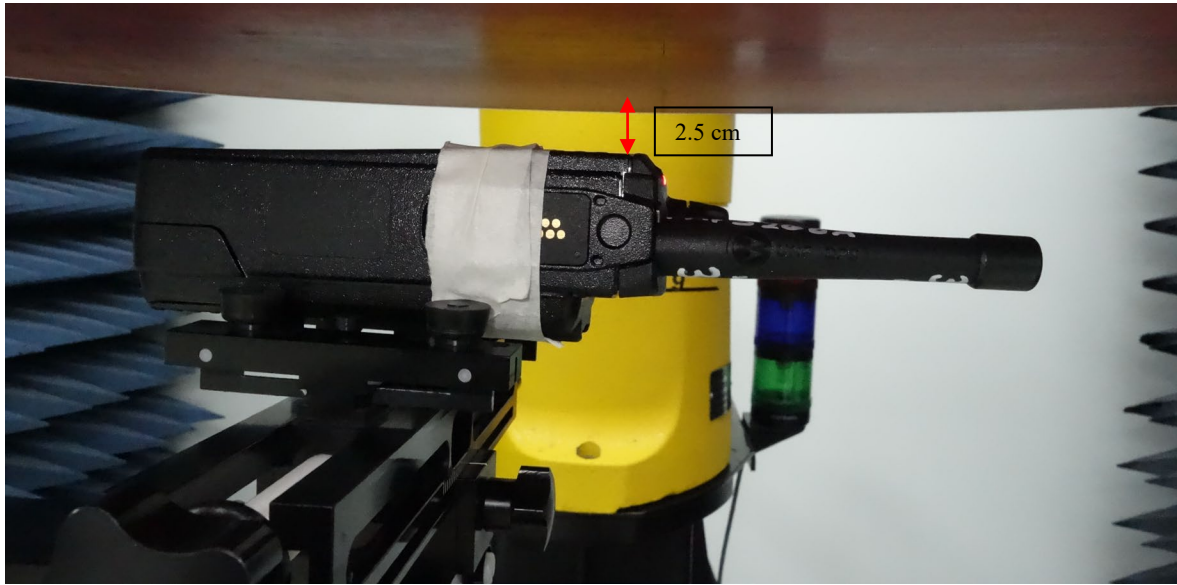
DUT with antenna FAF5260A, new offered battery PMNN4491C and body worn PMLN7008A positioned against the phantom with audio accessory RMN5137B attached. Same position used with other offered batteries.



Antenna kit #	Batteries	Separation Distances (mm)		
		@ bottom surface of DUT	@ base of antenna	@ tip of antenna
FAF5260A	PMNN4448B	7	35	43
	PMNN4424B	7	35	43
	NNTN8128C	7	28	38
	PMNN4491C	7	28	38

1.2 Face

Front of DUT with antenna FAF5260A and new offered battery PMNN4448B separated 2.5cm from the phantom without an audio accessory attached. Same position used with other offered batteries.



Antenna kit #	Batteries	Separation Distances (mm)		
		@ bottom surface of DUT	@ base of antenna	@ tip of antenna
FAF5260A	PMNN4448B	29	41	44
	PMNN4424B			
	NNTN8128C			
	PMNN4491C			

APPENDIX H Battery Photo



Front view



side view



Back view

New offered battery PMNN448B



Front view



side view



Back view

New offered battery PMNN4424B



Front view



side view



Back view

New offered battery NNTN8128C



Front view



side view



Back view

New offered battery PMNN4491C

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