MOTOROLA SOLUTIONS

MS ISO/IEC 17025 TESTING SAMM No. 0826

ACCREDITED CERTIFICATE 2518.05

DECLARATION OF COMPLIANCE SAR ASSESSMENT 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: 04/20/2020
Report Revision: B

Responsible Engineer:	Ch'ng Jian Sheng
Report Author:	Ch'ng Jian Sheng
Date/s Tested:	01/07/2020 - 01/13/2020, 01/15/2020, 01/21/2020
Manufacturer:	Motorola Solutions Inc.
DUT Description:	Handheld Portable – CP100d 136-174M 5W FKP
Test TX mode(s):	CW (PTT)
Max. Power output:	6.0 W
Nominal Power:	5.0 W
Tx Frequency Bands:	136-174MHz
Signaling type:	FM, TDMA
Model(s) Tested:	AAH87JDF9JA2AN (PMUD3484A)
Model(s) Certified:	AAH87JDF9JA2AN (PMUD3484A), AAH87JDC9JA2AN (PMUD3486A), AAH87JDH9JA2AN (PMUD3485A)
Serial Number(s):	278TVZ3129
Classification:	Occupational/Controlled
Applicant Name:	Motorola Solutions Inc.
Applicant Address:	8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
FCC ID:	AZ489FT3847; 150.8-173.4MHz This report contains results that are immaterial for FCC equipment approval, which are clearly identified.
IC:	109U-89FT3847; 138-174MHz This report contains results that are immaterial for ISED equipment approval, which are clearly identified.
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
Digitally signed by Tiong Nguk Ing
Date: 2020.04.20 18:05:35 +08'00'

Tiong Nguk Ing
Deputy Technical Manager (Approved Signatory)
Approval Date: 4/20/2020

Appendix D
System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/7/2020 10:13:08 AM

Robot#: DASY5-PG-4 | Run#: AM(MA)-SYSP-150H-200107-01
Dipole Model# CLA150
Phantom#: ELI4 1108
Tissue Temp: 22.2 (C)
Serial#: 4005
Test Freq: 150.0000 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.049 dB
Adjusted SAR (1W): 3.61 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.75 S/m; ε_r = 50.5; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 150 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

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

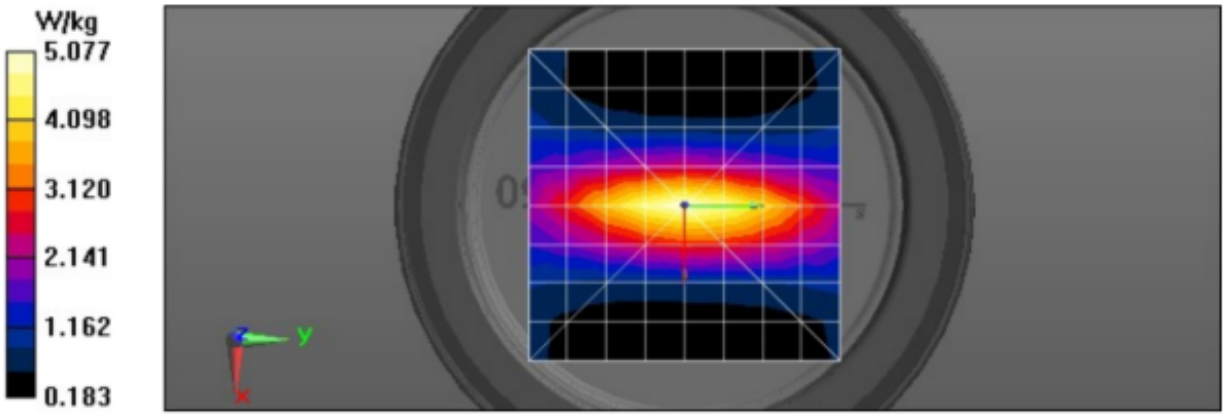
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 82.39 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 4.24 W/kg; SAR(10 g) = 3.01 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.14 W/kg

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 = 82.39 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.24 W/kg
SAR(1 g) = 3.61 W/kg; SAR(10 g) = 2.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.10 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) = 5.13 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/8/2020 9:31:23 AM

Robot#: DASY5-PG-4 | Run#: AM(MA)-SYSP-150H-200108-10
Dipole Model# CLA150
Phantom#: ELI4 1108
Tissue Temp: 21.9 (C)
Serial#: 4005
Test Freq: 150.0000 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.057 dB
Adjusted SAR (1W): 3.93 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.72 S/m; ε_r = 49.9; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 150 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

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

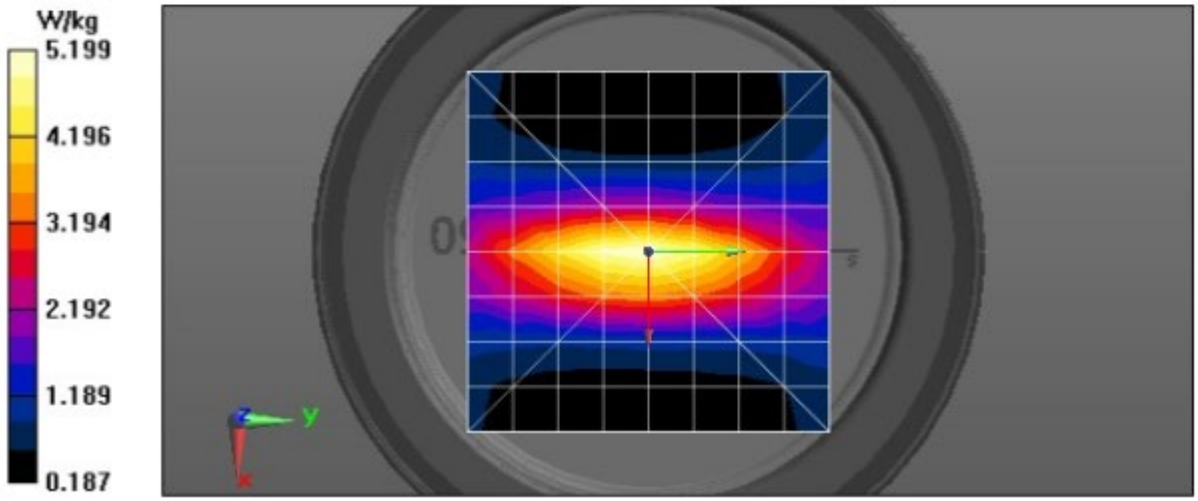
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 86.90 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 4.6 W/kg; SAR(10 g) = 3.27 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.41 W/kg

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 = 86.90 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 6.65 W/kg
SAR(1 g) = 3.93 W/kg; SAR(10 g) = 2.58 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.42 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) = 5.46 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/9/2020 2:14:06 PM

Robot#: DASY5-PG-4 | Run#: AM(MA)-SYSP-150H-200109-5
Dipole Model# CLA150
Phantom#: ELI4 1108
Tissue Temp: 22.0 (C)
Serial#: 4005
Test Freq: 150.0000 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.051 dB
Adjusted SAR (1W): 3.82 mW/g (1g)

Comments: |

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.76 S/m; ε_r = 50.6; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 150 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

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

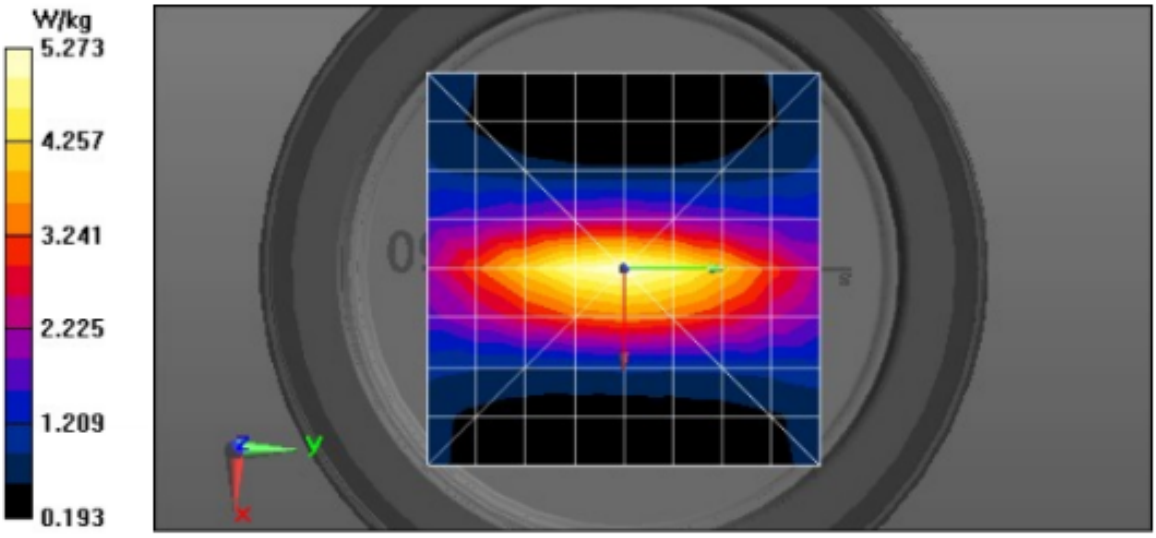
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 85.00 V/m; Power Drift = 0.03 dB
Fast SAR: SAR(1 g) = 4.45 W/kg; SAR(10 g) = 3.17 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.44 W/kg

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 = 85.00 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 6.77 W/kg
SAR(1 g) = 3.82 W/kg; SAR(10 g) = 2.48 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.50 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) = 5.53 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/10/2020 4:12:38 PM

Robot#: DASY5-PG-4 | Run#: AM(MA)-SYSP-150H-200110-07
Dipole Model# CLA150
Phantom#: ELI4 1108
Tissue Temp: 21.6 (C)
Serial#: 4005
Test Freq: 150.0000 (MHz)
Start Power: 1000 (mW)
Rotation (1D): 0.064 dB
Adjusted SAR (1W): 3.82 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.73 S/m; ε_r = 50.5; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 150 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

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

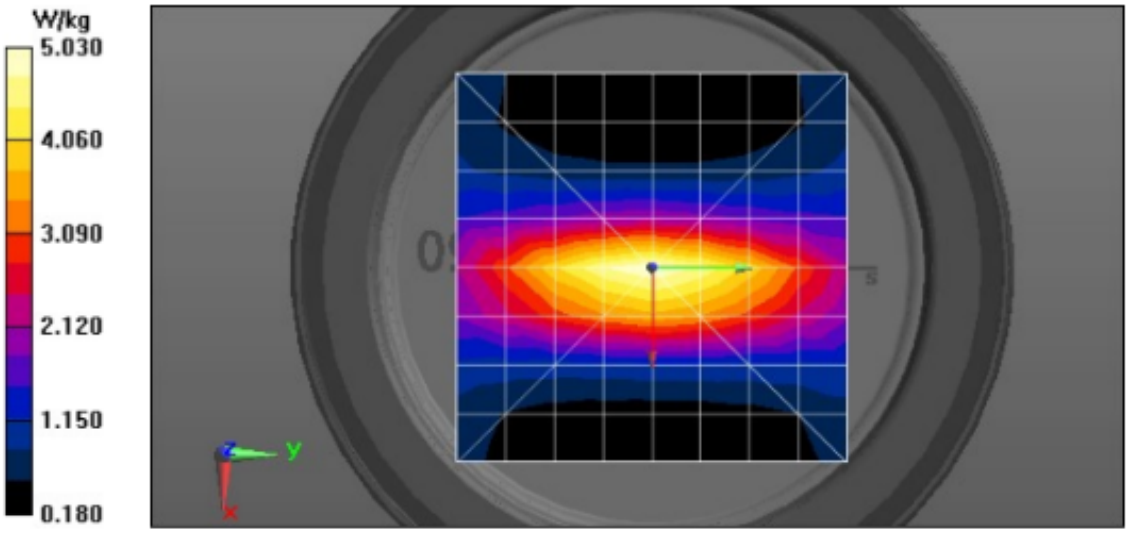
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 85.23 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 4.46 W/kg; SAR(10 g) = 3.17 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.29 W/kg

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 = 85.23 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 6.50 W/kg
SAR(1 g) = 3.82 W/kg; SAR(10 g) = 2.51 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.29 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) = 5.35 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/12/2020 2:32:45 AM

Robot#: DASY5-PG-4 | Run#:	AN-SYSP-150H-200112-01
Dipole Model#	CLA150
Phantom#:	ELI4 1108
Tissue Temp:	22.1 (C)
Serial#:	4005
Test Freq:	150.0000 (MHz)
Start Power:	1000 (mW)
Rotation (1D):	0.065 dB
Adjusted SAR (1W):	4.05 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.8 S/m; ε_r = 51.6; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 150 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

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

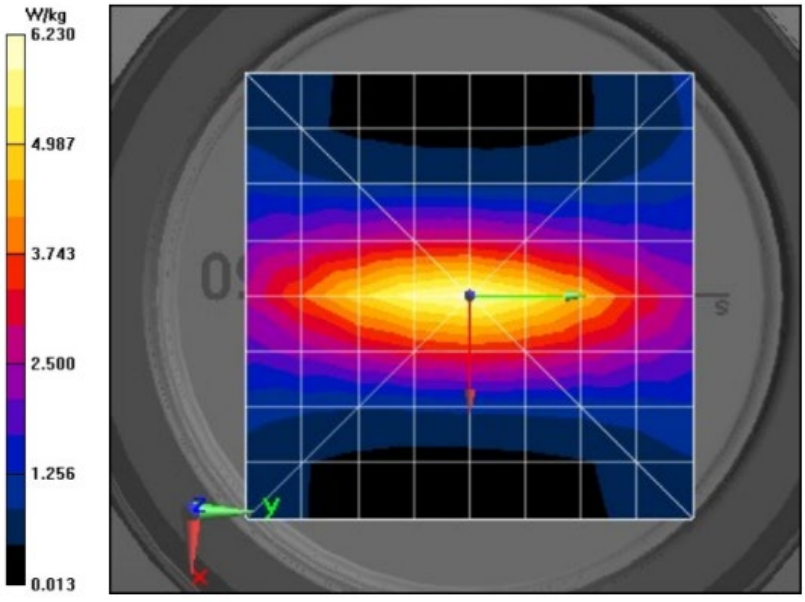
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 89.14 V/m; Power Drift = -0.17 dB
Fast SAR: SAR(1 g) = 4.78 W/kg; SAR(10 g) = 3.4 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 6.07 W/kg

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 = 89.14 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 7.42 W/kg
SAR(1 g) = 4.05 W/kg; SAR(10 g) = 2.66 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.05 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) = 6.23 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/13/2020 5:28:27 AM

Robot#: DASY5-PG-4 | Run#:	AN-SYSP-150H-200113-01
Dipole Model#:	CLA150
Phantom#:	ELI4 1108
Tissue Temp:	22.4 (C)
Serial#:	4005
Test Freq:	150.0000 (MHz)
Start Power:	1000 (mW)
Rotation (1D):	0.066 dB
Adjusted SAR (1W):	3.69 mW/g (lg)

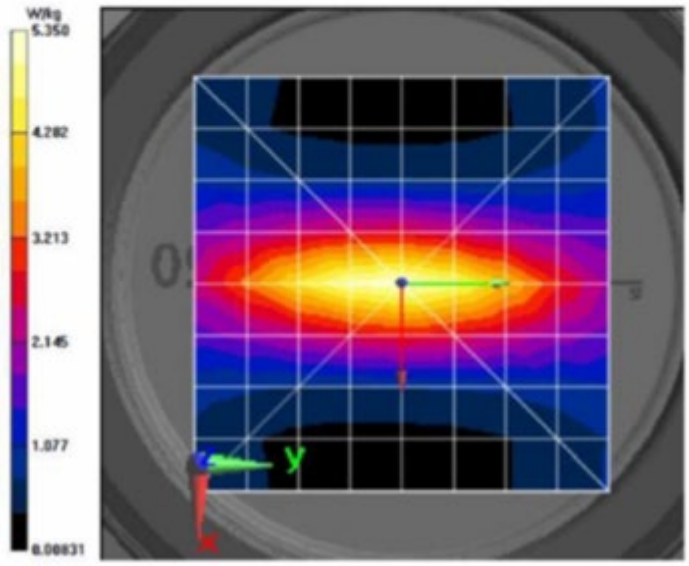
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.78 S/m; ε_r = 54.6; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 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 = 83.19 V/m; Power Drift = 0.04 dB
Fast SAR: SAR(1 g) = 4.36 W/kg; SAR(10 g) = 3.1 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.38 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 = 83.19 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 6.52 W/kg
SAR(1 g) = 3.69 W/kg; SAR(10 g) = 2.4 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.33 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) = 5.35 W/kg



Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/15/2020 6:22:57 AM

Robot#: DASY5-PG-4 | Run#:	AN-SYSP-150H-200115-07
Dipole Model#:	CLA150
Phantom#:	EL14 1108
Tissue Temp:	22.4 (C)
Serial#:	4005
Test Freq:	150.0000 (MHz)
Start Power:	1000 (mW)
Rotation (1D):	0.15 dB
Adjusted SAR (1W):	4.08 mW/g (lg)

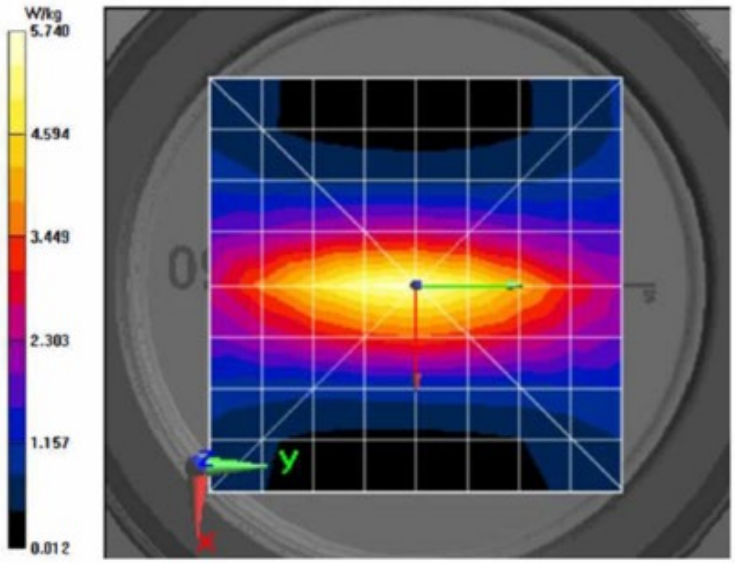
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.74 S/m; ε_r = 50.3; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 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 = 87.81 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 4.77 W/kg; SAR(10 g) = 3.39 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.75 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 = 87.81 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 6.99 W/kg
SAR(1 g) = 4.08 W/kg; SAR(10 g) = 2.68 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.71 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) = 5.74 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/21/2020 8:34:54 AM

Robot#: DASY5-PG-4 | Run#:	ZZ(MA)-SYSP-150H-200121-01
Dipole Model#	CLA150
Phantom#:	ELI4 1108
Tissue Temp:	20.6 (C)
Serial#:	4005
Test Freq:	150.0000 (MHz)
Start Power:	1000 (mW)
Rotation (1D):	0.14 dB
Adjusted SAR (1W):	3.76 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.8 S/m; ε_r = 50.6; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 150 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

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

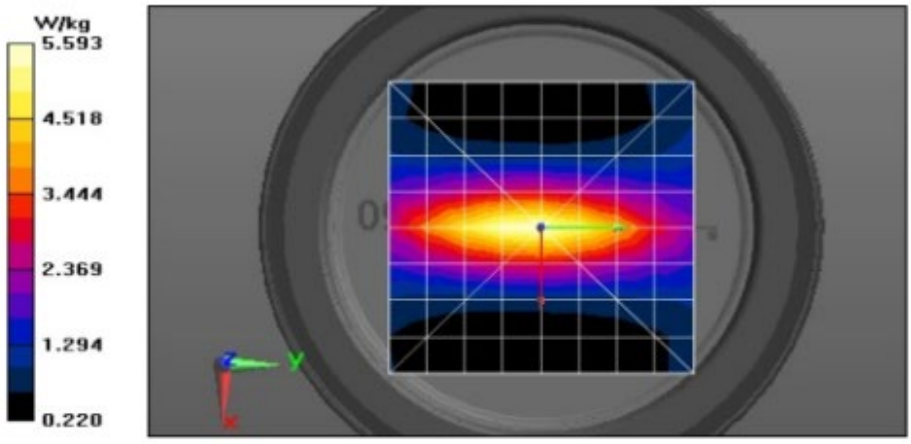
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 83.79 V/m; Power Drift = -0.03 dB
Fast SAR: SAR(1 g) = 4.45 W/kg; SAR(10 g) = 3.15 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.69 W/kg

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 = 83.79 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.93 W/kg
SAR(1 g) = 3.76 W/kg; SAR(10 g) = 2.45 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.66 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) = 5.66 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/31/2020 7:52:12 PM

Robot#: DASY5-PG-4 | Run#:	AM(MA)-SYSP-150H-200131-01
Dipole Model#	CLA150
Phantom#:	ELI4 1108
Tissue Temp:	21.1 (C)
Serial#:	4005
Test Freq:	150.0000 (MHz)
Start Power:	1000 (mW)
Rotation (1D):	0.110 dB
Adjusted SAR (1W):	3.75 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 150 MHz; σ = 0.78 S/m; ε_r = 50; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150 MHz, ConvF(12.15, 12.15, 12.15) @ 150 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

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

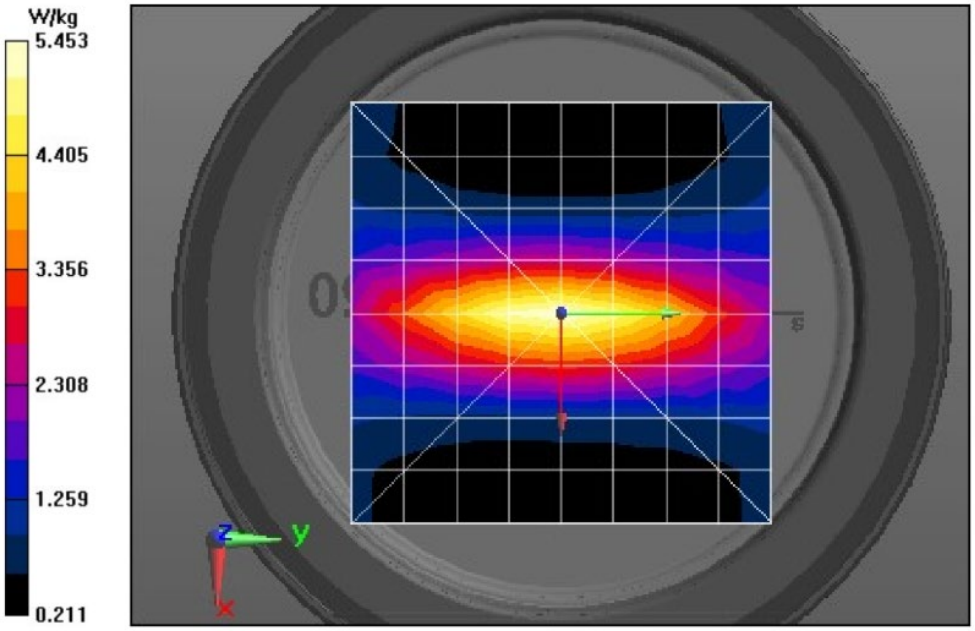
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 83.81 V/m; Power Drift = 0.01 dB
Fast SAR: SAR(1 g) = 4.42 W/kg; SAR(10 g) = 3.14 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 5.55 W/kg

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

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 83.81 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 6.75 W/kg
SAR(1 g) = 3.75 W/kg; SAR(10 g) = 2.45 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.50 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) = 5.52 W/kg



Appendix E
DUT Scans

Assessments at the Body - Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/7/2020 8:46:56 PM

Robot#: DASY5-PG-4 | Run#: AN-AB-200107-03
Model#: AAH87JDF9JA2AN (PMUD3484A)
Phantom#: ELI4 1108
Tissue Temp: 22.0 (C)
Serial#: 278TVZ3129
Antenna: HAD9743A
Test Freq: 162.0000 (MHz)
Battery: PMMN4476A
Carry Acc: HLN6602A
Audio Acc: PMMN4092A
Start Power: 5.79 (W)

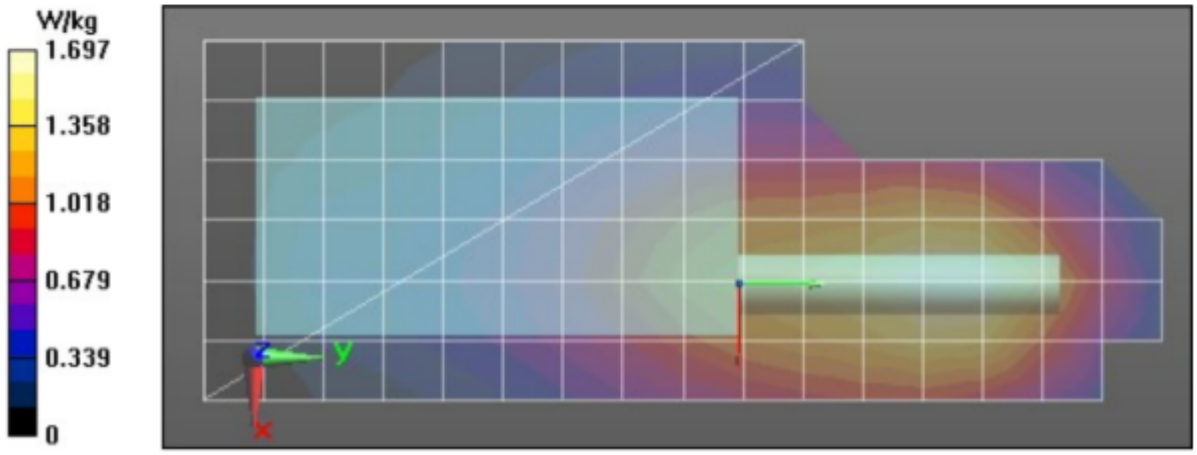
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 162 MHz; σ = 0.75 S/m; ε_r = 50; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 162 MHz, ConvF(12.15, 12.15, 12.15) @ 162 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 44.72 V/m; Power Drift = -0.19 dB
Fast SAR: SAR(1 g) = 1.46 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.75 W/kg

Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (5x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 44.72 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 2.30 W/kg
SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.826 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.73 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) = 1.72 W/kg



Assessments at the Body - Table 18

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/8/2020 3:31:24 AM

Robot#: DASY5-PG-4 | Run#: AN-AB-200108-05#
Model#: AAH87JDF9JA2AN (PMUD3484A)
Phantom#: ELI4 1108
Tissue Temp: 22.1 (C)
Serial#: 278TVZ3129
Antenna: NAD6502AR
Test Freq: 150.8000 (MHz)
Battery: PMNN4476A
Carry Acc: HLN9844A
Audio Acc: PMMN4092A
Start Power: 5.85 (W)

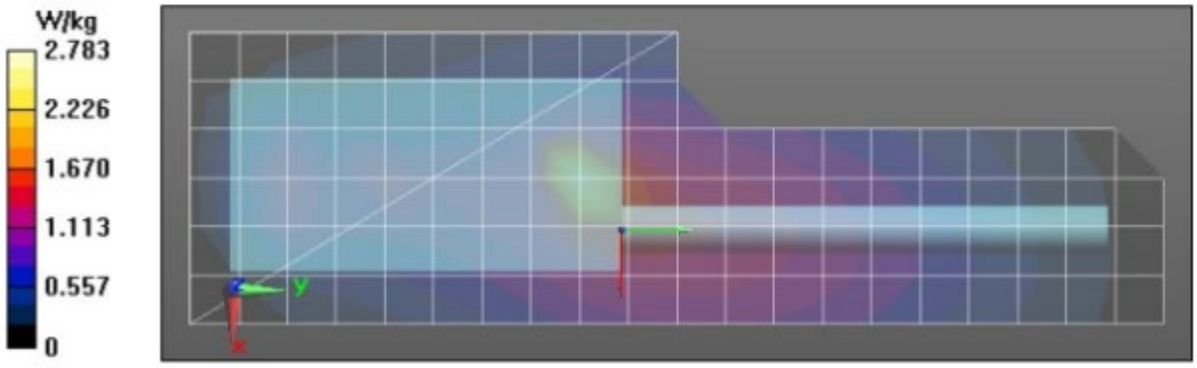
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.75 S/m; ε_r = 50.5; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150.8 MHz, ConvF(12.15, 12.15, 12.15) @ 150.8 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 41.35 V/m; Power Drift = -0.28 dB
Fast SAR: SAR(1 g) = 2.1 W/kg; SAR(10 g) = 1.31 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 2.81 W/kg

Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 41.35 V/m; Power Drift = -0.29 dB
Peak SAR (extrapolated) = 3.63 W/kg
SAR(1 g) = 1.54 W/kg; SAR(10 g) = 0.959 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.61 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) = 2.61 W/kg



Assessments at the Body - Table 19

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/8/2020 11:22:32 PM

Robot#: DASY5-PG-4 | Run#:	AN-AB-200108-22
Model#:	AAH87JDF9JA2AN (PMUD3484A)
Phantom#:	ELI4 1108
Tissue Temp:	21.8 (C)
Serial#:	278TVZ3129
Antenna:	HAD9743A
Test Freq:	162.0000 (MHz)
Battery:	PMNN4476A
Carry Acc:	RLN4570A
Audio Acc:	PMMN4092A
Start Power:	5.75 (W)

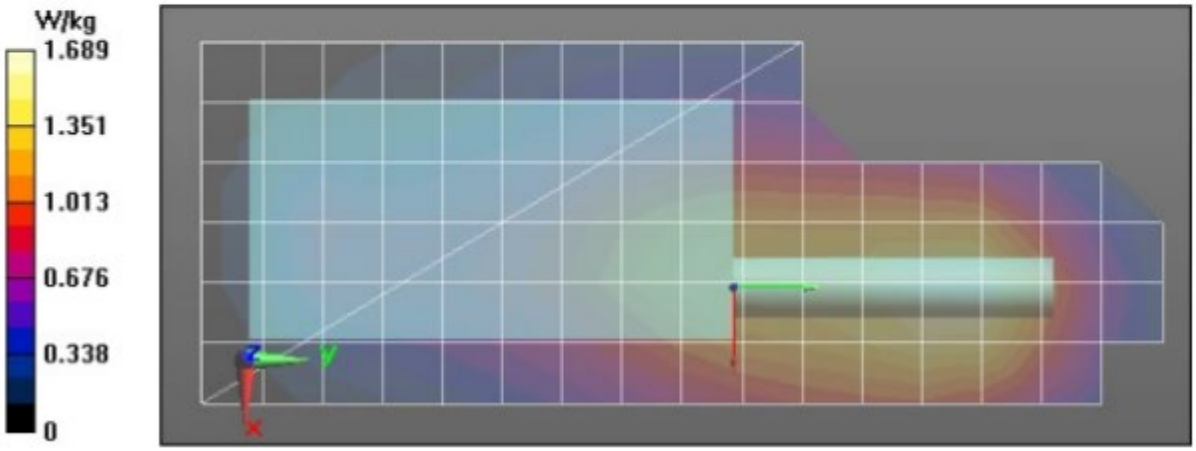
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 162 MHz; σ = 0.73 S/m; ε_r = 49.3; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 162 MHz, ConvF(12.15, 12.15, 12.15) @ 162 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 44.92 V/m; Power Drift = -0.11 dB
Fast SAR: SAR(1 g) = 1.47 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.75 W/kg

Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (6x9x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 44.92 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 2.33 W/kg
SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.836 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.75 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) = 1.76 W/kg



Assessment at the Body – Table 20

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/8/2020 11:22:32 PM

Robot#: DASY5-PG-4 | Run#: AN-AB-200108-22
Model#: AAH87JDF9JA2AN (PMUD3484A)
Phantom#: ELI4 1108
Tissue Temp: 21.8 (C)
Serial#: 278TVZ3129
Antenna: HAD9743A
Test Freq: 162.0000 (MHz)
Battery: PMNN4476A
Carry Acc: RLN4570A
Audio Acc: PMMN4092A
Start Power: 5.75 (W)

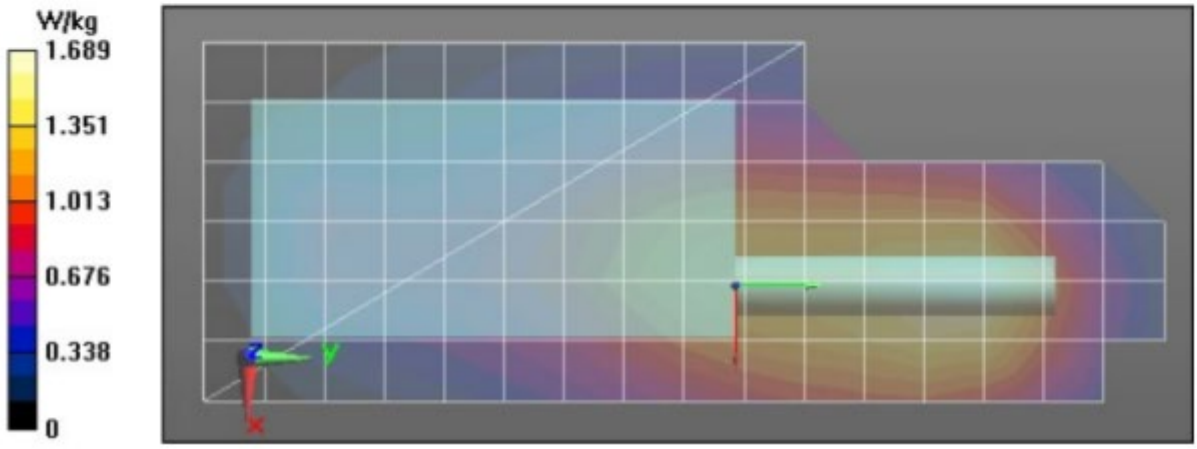
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 162 MHz; σ = 0.73 S/m; ε_r = 49.3; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 162 MHz, ConvF(12.15, 12.15, 12.15) @ 162 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 44.92 V/m; Power Drift = -0.11 dB
Fast SAR: SAR(1 g) = 1.47 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.75 W/kg

Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (6x9x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 44.92 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 2.33 W/kg
SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.836 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.75 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) = 1.76 W/kg



Assessments at the Body - Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/31/2020 11:56:31 PM

Robot#: DASY5-PG-4 | Run#: AM(MA)-AB-200131-03
Model#: AAH87JDF9JA2AN (PMUD3484A)
Phantom#: ELI4 1108
Tissue Temp: 20.8 (C)
Serial#: 278TVZ3129
Antenna: NAD6502AR
Test Freq: 150.8000 (MHz)
Battery: PMNN4476A
Carry Acc: RLN4815A
Audio Acc: PMMN4092A
Start Power: 5.60 (W)

Comments:

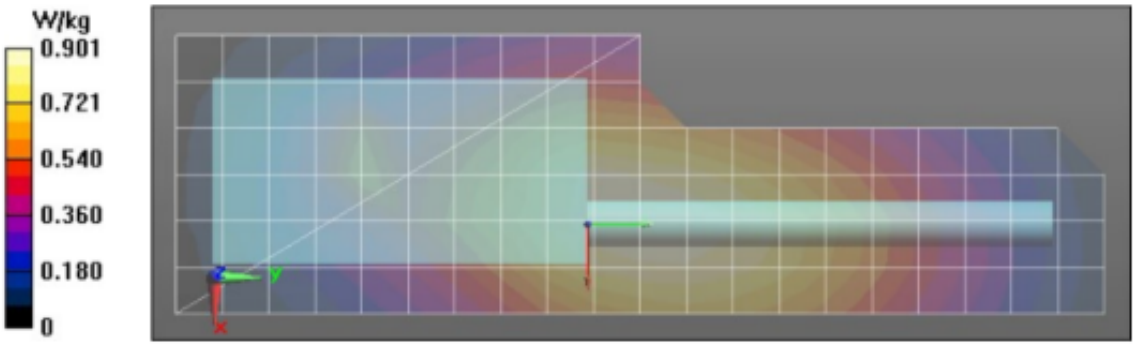
Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.78 S/m; ε_r = 50; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150.8 MHz, ConvF(12.15, 12.15, 12.15) @ 150.8 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 34.42 V/m; Power Drift = -0.28 dB
Fast SAR: SAR(1 g) = 0.770 W/kg; SAR(10 g) = 0.595 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.911 W/kg

Below 2 GHz-Rev.3/Ab Scan/2-Volume Scan 2D (5x5x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm
Reference Value = 34.42 V/m; Power Drift = -0.30 dB
Maximum value of SAR (measured) = 0.884 W/kg

Below 2 GHz-Rev.3/Ab Scan/3-Zoom Scan (14x14x8)/Cube 0: Measurement grid: dx=2.6mm, dy=2.6mm, dz=1.4mm
Reference Value = 35.16 V/m; Power Drift = -0.62 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.735 W/kg; SAR(10 g) = 0.565 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.933 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) = 0.873 W/kg



Assessments at the Face - Table 23

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/10/2020 8:55:11 AM

Robot#: DASY5-PG-4 | Run#: AM(MA)-FACE-200110-04#
Model#: AAH87JDF9JA2AN (PMUD3484A)
Phantom#: ELI4 1108
Tissue Temp: 22.0 (C)
Serial#: 278TVZ3129
Antenna: HAD9742A
Test Freq: 150.8000 (MHz)
Battery: PMNN4080AR
Carry Acc: @ front
Audio Acc: N/A
Start Power: 5.69 (W)

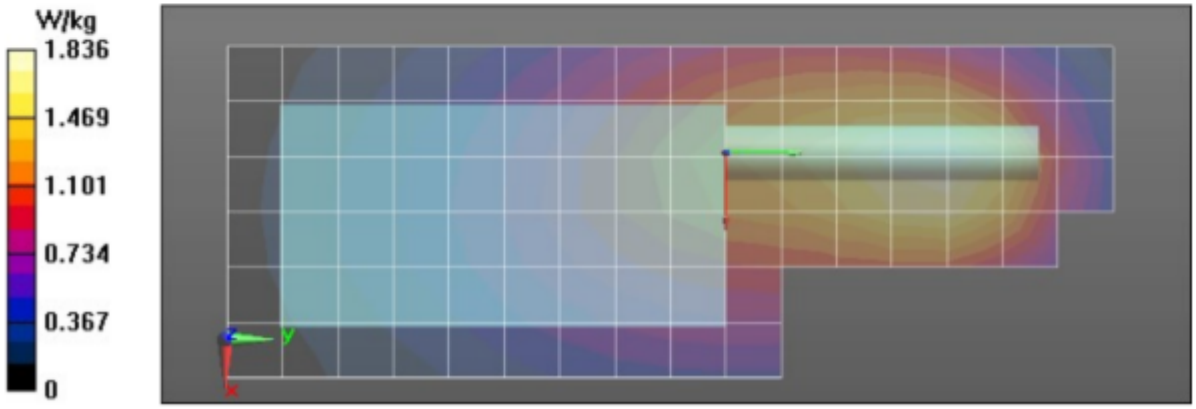
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.76 S/m; ε_r = 50.5; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150.8 MHz, ConvF(12.15, 12.15, 12.15) @ 150.8 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Face Scan/1-Area Scan (71x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 48.17 V/m; Power Drift = -0.67 dB
Fast SAR: SAR(1 g) = 1.57 W/kg; SAR(10 g) = 1.19 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.87 W/kg

Below 2 GHz-Rev.3/Face Scan/3-Zoom Scan (6x10x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 48.17 V/m; Power Drift = -0.88 dB
Peak SAR (extrapolated) = 2.43 W/kg
SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.885 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.85 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) = 1.73 W/kg



Assessments for ISED Canada - Table 24

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/12/2020 4:44:15 AM

Robot#: DASY5-PG-4 | Run#: AN-FACE-200112-04
Model#: AAH87JDF9JA2AN (PMUD3484A)
Phantom#: ELI4 1108
Tissue Temp: 22.3 (C)
Serial#: 278TVZ3129
Antenna: PMAD4042A
Test Freq: 138.0000 (MHz)
Battery: PMNN4080AR
Carry Acc: @ front
Audio Acc: N/A
Start Power: 5.68 (W)

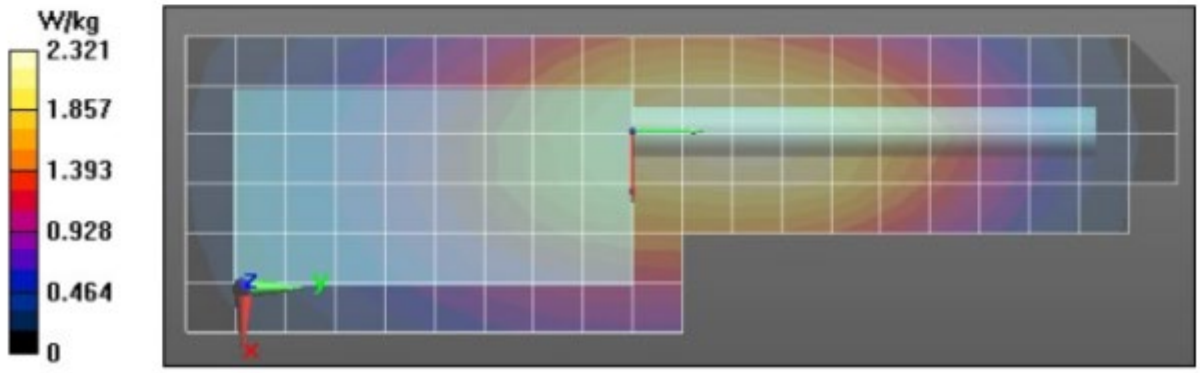
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 138 MHz; σ = 0.79 S/m; ε_r = 52.2; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 138 MHz, ConvF(12.15, 12.15, 12.15) @ 138 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Face Scan/1-Area Scan (71x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 55.44 V/m; Power Drift = -0.39 dB
Fast SAR: SAR(1 g) = 1.97 W/kg; SAR(10 g) = 1.52 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 2.32 W/kg

Below 2 GHz-Rev.3/Face Scan/3-Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 55.44 V/m; Power Drift = -0.48 dB
Peak SAR (extrapolated) = 2.67 W/kg
SAR(1 g) = 1.73 W/kg; SAR(10 g) = 1.31 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.23 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) = 2.19 W/kg



APPENDIX F
Shortened Scan of Highest SAR configuration

Shortened Scan - Table 26

Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/15/2020 10:48:23 AM

Robot#: DASY5-PG-4 | Run#: AN-AB-200115-11
Model#: AAH87JDF9JA2AN (PMUD3484A)
Phantom#: ELI4 1108
Tissue Temp: 22.2 (C)
Serial#: 278TVZ3129
Antenna: NAD6502AR
Test Freq: 150.8000 (MHz)
Battery: PMNN4476A
Carry Acc: HLN9844A
Audio Acc: PMMN4092A
Start Power: 5.64 (W)

Comments: Shorten Scan

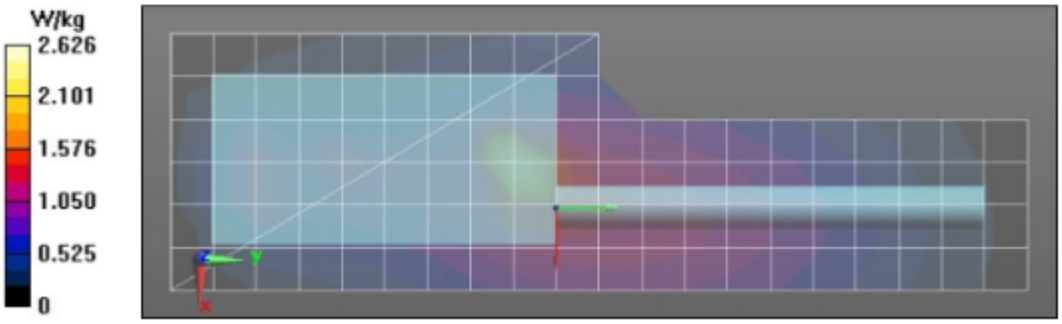
Duty Cycle: 1:1, Medium parameters used: f = 151 MHz; σ = 0.74 S/m; ε_r = 50.3; ρ = 1000 kg/m^3
Probe: EX3DV4 - SN7511, Calibrated: 10/24/2019, Frequency: 150.8 MHz, ConvF(12.15, 12.15, 12.15) @ 150.8 MHz
Electronics: DAE4 Sn729, Calibrated: 10/16/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x211x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.88 V/m; Power Drift = -0.21 dB
Fast SAR: SAR(1 g) = 2 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 2.67 W/kg

Below 2 GHz-Rev.3/Ab Scan/2-Volume Scan 2D (41x41x1): Interpolated grid: dx=0.7500 mm, dy=0.7500 mm, dz=1.000 mm
Reference Value = 40.88 V/m; Power Drift = -0.22 dB
Fast SAR: SAR(1 g) = 2.01 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 2.63 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 = 60.48 V/m; Power Drift = -0.27 dB
Peak SAR (extrapolated) = 3.85 W/kg
SAR(1 g) = 1.62 W/kg; SAR(10 g) = 1 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.70 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) = 2.50 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)	26	8	0.92
Full scan (area & zoom)	18	35	0.84

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