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)
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Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.

Date of Report: 03/29/2018
Report Revision: A

Responsible Engineer:	Saw Sun Hock (EME Engineer)
Report Author:	Saw Sun Hock (EME Engineer)
Date/s Tested:	1/25/2018-1/26/2018; 1/29/2018
Manufacturer:	Vertex Standard LMR, Inc.
DUT Description:	Handheld Portable – BC250D-G6-4, 403-470MHz, 4W, No Keypad
Test TX mode(s):	CW (PTT)
Max. Power output:	5.5W
Nominal Power:	4.6W
Tx Frequency Bands:	LMR 403-470MHz
Signaling type:	FM, 4FSK
Model(s) Tested:	BC250D-G6-4
Model(s) Certified:	BC250D-G6-4
Serial Number(s):	3W8C011010, 3W8C011007
Classification:	Occupational/Controlled
FCC ID:	AZ489FT4949; LMR 403-470MHz 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. 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

Tiong Nguk Ing
Deputy Technical Manager
Approval Date: 3/29/2018

Tiong Nguk Ing Digitally signed by Tiong Nguk Ing Date: 2018.03.29 15:12:11 +08'00'

Appendix D
System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/24/2018 2:14:05 PM

Robot#: DASY5-PG-4 | Run#:	AM-SYSP-450B-180124-08
Dipole Model#	D450V2
Phantom#:	ELI4 1040
Tissue Temp:	20.3 (C)
Serial#:	1054
Test Freq:	450(MHz)
Start Power:	250 (mW)
Rotation (1D):	0.032 dB
Adjusted SAR (1W):	5.00 mW/g (1g)

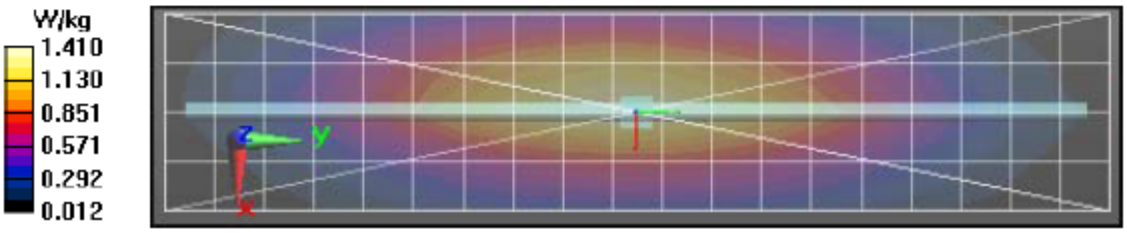
Comments:

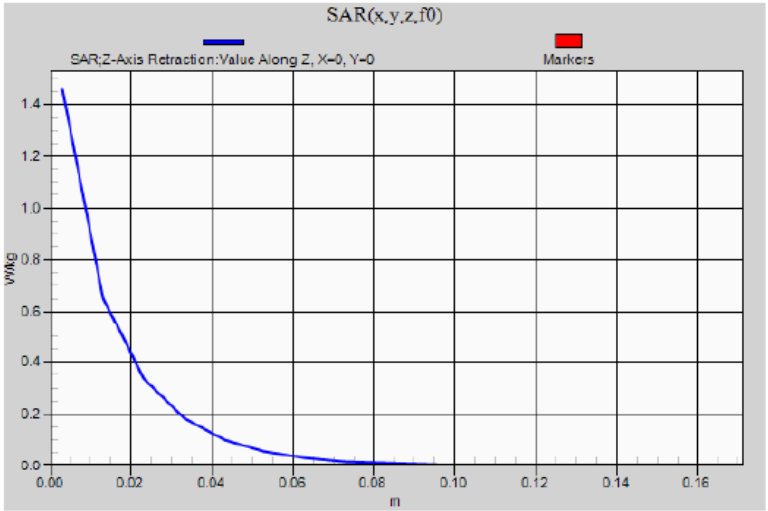
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.93 S/m; ε_r = 54.5; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 450 MHz, ConvF(7, 7, 7); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x191x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.03 V/m; Power Drift = 0.00 dB
Fast SAR: SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.882 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.45 W/kg

Below 2 GHz-Rev.2/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 40.03 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.821 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.46 W/kg

Below 2 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/29/2018 10:16:32 AM

Robot#: DASY5-PG-4 | Run:	FIE-SYSP-450B-180129-01
Dipole Model#	D450V3
Phantom#:	ELI4 1040
Tissue Temp:	20.9 (C)
Serial#:	1054
Test Freq:	450.0000 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.028 dB
Adjusted SAR (1W):	5.00 mW/g (1g)

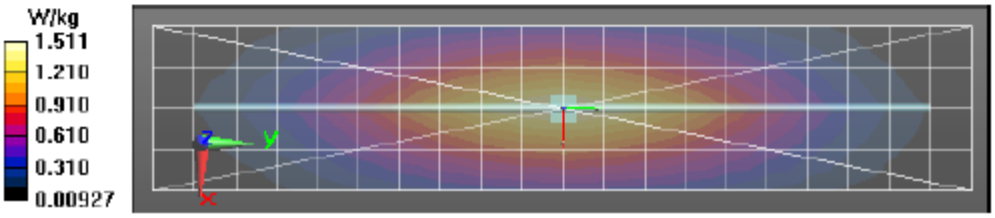
Comments:

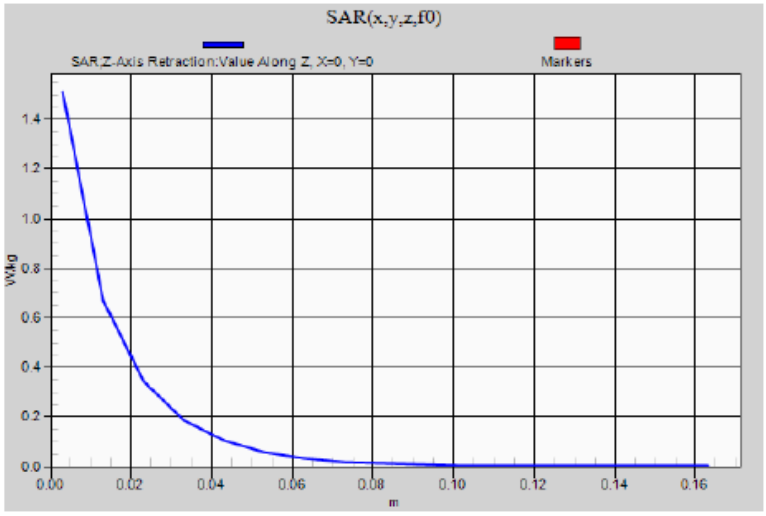
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.96 S/m; ε_r = 54.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 450 MHz, ConvF(7, 7, 7); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x201x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.01 V/m; Power Drift = -0.02 dB
Fast SAR: SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.898 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.51 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 = 40.01 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.07 W/kg
SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.831 W/kg (SAR corrected for target medium)

Below 2 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/25/2018 11:26:35 PM

Robot#: DASY5-PG-4 | Run#:	AZ(FAZ)-SYSP-450H-180125-09
Dipole Model#	D450V3
Phantom#:	ELI4 1050
Tissue Temp:	20.1 (C)
Serial#:	1054
Test Freq:	450.000 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.037 dB
Adjusted SAR (1W):	4.88 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.9 S/m; ε_r = 43.3; ρ = 1000 kg/m^3

Probe: ES3DV3 - SN3196, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

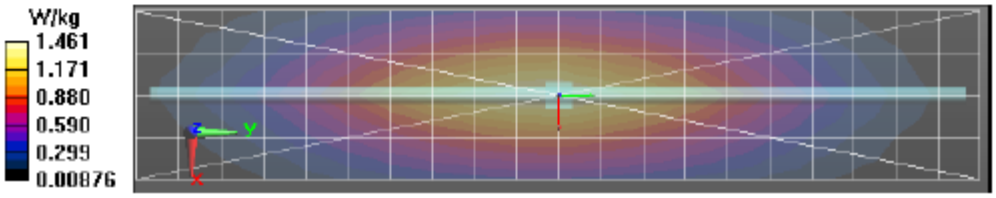
Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x201x1):

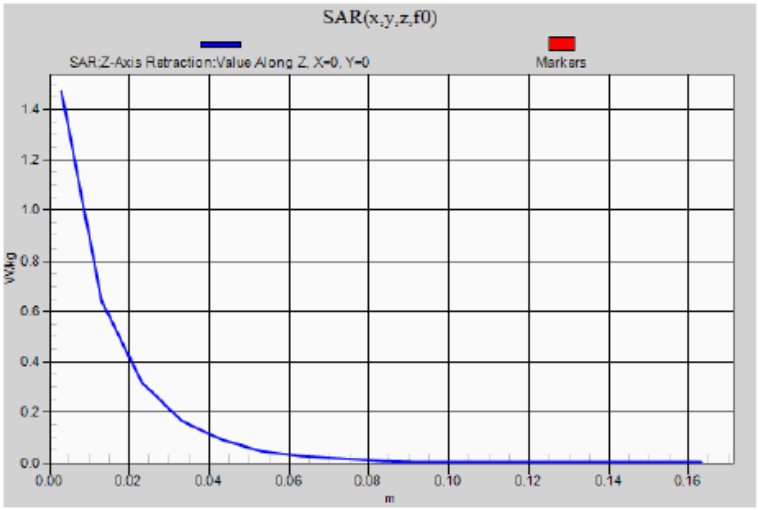
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 41.00 V/m; Power Drift = -0.00 dB
Fast SAR: SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.872 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.47 W/kg

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 = 41.00 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.803 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





Motorola Solutions, Inc. EME Laboratory

Date/Time: 1/29/2018 7:59:24 PM

Robot#: DASY5-PG-4 | Run#:	ZR(FAZ)-SYSP-450H-180129-07
Dipole Model#	D450V3
Phantom#:	ELI4 1050
Tissue Temp:	21.4 (C)
Serial#:	1054
Test Freq:	450.000 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.04 dB
Adjusted SAR (1W):	4.76 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.89 S/m; ε_r = 43.2; ρ = 1000 kg/m^3

Probe: ES3DV3 - SN3196, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

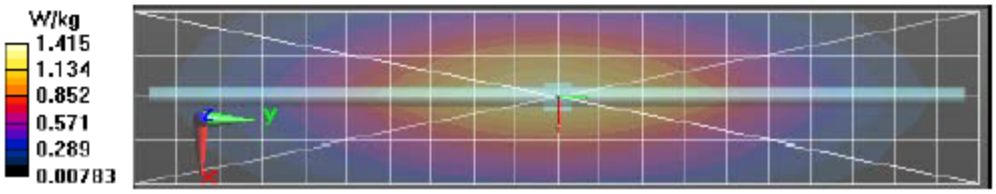
Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x201x1):

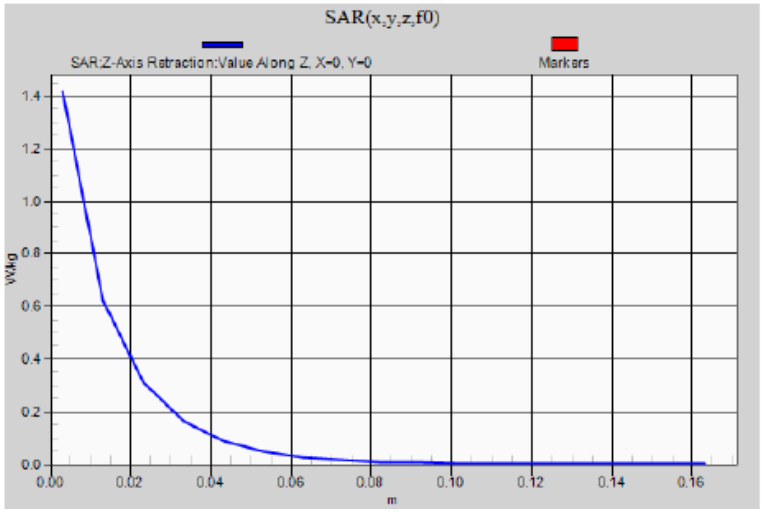
Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.82 V/m; Power Drift = -0.07 dB
Fast SAR: SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.852 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.43 W/kg

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 = 40.82 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.93 W/kg
SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.782 W/kg (SAR corrected for target medium)

Below 2 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





Appendix E
DUT Scans

Assessments at the Body - Table 18

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/25/2018 12:27:15 AM

Robot#: DASY5-PG-4 | Run#:	AZ(FAZ)-AB-180125-01#
Model#:	BC250D-G6-4
Phantom#:	ELI4 1040
Tissue Temp:	20.2 (C)
Serial#:	3W8C011010
Antenna:	AAM32X001
Test Freq:	422.1000 (MHz)
Battery:	FNB-V143LI (AAM29X001)
Carry Acc:	AAM34X001
Audio Acc:	MH-Z101B
Start Power:	5.48 (W)

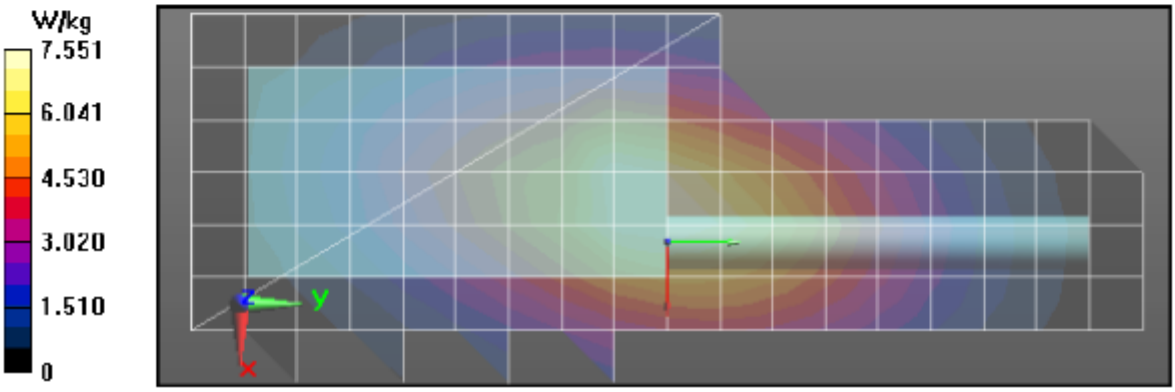
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz; σ = 0.91 S/m; ε_r = 55; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 422.1 MHz, ConvF(7, 7, 7); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 90.52 V/m; Power Drift = -0.23 dB
Fast SAR: SAR(1 g) = 7.15 W/kg; SAR(10 g) = 5.15 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 7.99 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 = 90.52 V/m; Power Drift = -0.34 dB
Peak SAR (extrapolated) = 10.0 W/kg
SAR(1 g) = 6.88 W/kg; SAR(10 g) = 4.93 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.71 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) = 7.59 W/kg



Assessments at the Face - Table 19

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/26/2018 12:31:36 AM

Robot#: DASY5-PG-4 | Run#: AZ(FAZ)-FACE-180126-01#
Model#: BC250D-G6-4
Phantom#: ELI4 1050
Tissue Temp: 20.1 (C)
Serial#: 3W8C011010
Antenna: AAM32X001
Test Freq: 422.1000 (MHz)
Battery: FNB-V143LI (AAM29X001)
Carry Acc: @ front
Audio Acc: N/A
Start Power: 5.50 (W)

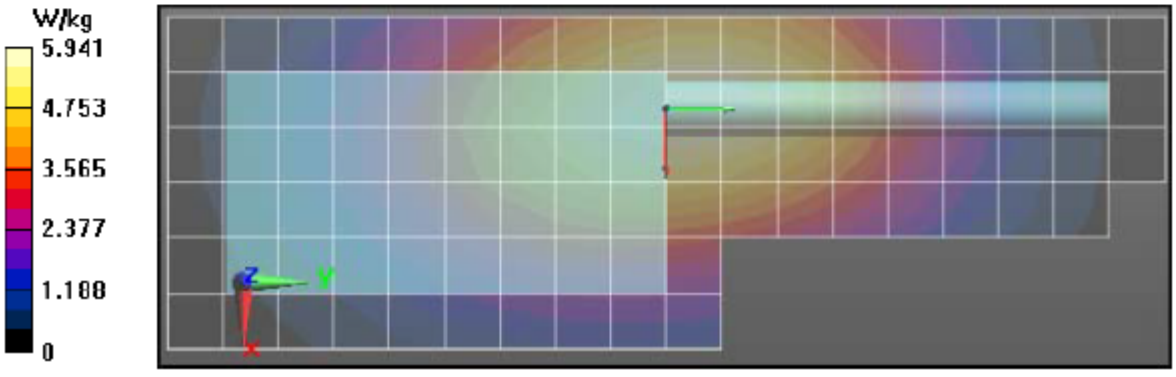
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz; σ = 0.88 S/m; ε_r = 44; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 422.1 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (71x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 85.77 V/m; Power Drift = -0.23 dB
Fast SAR: SAR(1 g) = 5.43 W/kg; SAR(10 g) = 3.99 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 6.05 W/kg

Below 2 GHz-Rev.2/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 85.77 V/m; Power Drift = -0.32 dB
Peak SAR (extrapolated) = 7.33 W/kg
SAR(1 g) = 5.26 W/kg; SAR(10 g) = 3.87 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.89 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) = 5.86 W/kg



Assessments at Outside Part 90 for Body - Table 20

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/29/2018 1:53:47 PM

Robot#: DASY5-PG-4 | Run#:	FIE-AB-180129-03
Model#:	BC250D-G6-4
Phantom#:	ELI4 1040
Tissue Temp:	21.0 (C)
Serial#:	3W8C011010
Antenna:	AAM32X001
Test Freq:	403.0000 (MHz)
Battery:	FNB-V143LI (AAM29X001)
Carry Acc:	AAM34X001
Audio Acc:	MH-Z101B
Start Power:	5.38 (W)

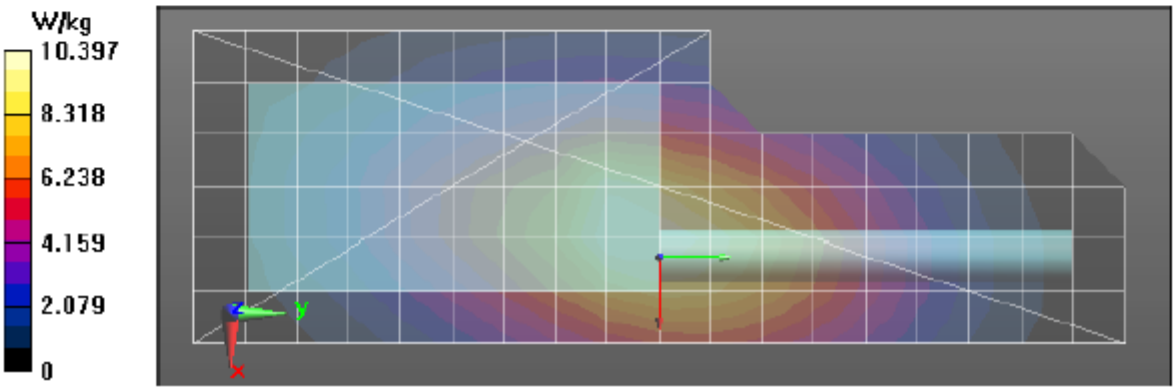
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 403 MHz; σ = 0.92 S/m; ε_r = 55.2; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 403 MHz, ConvF(7, 7, 7); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 107.9 V/m; Power Drift = -0.30 dB
Fast SAR: SAR(1 g) = 9.57 W/kg; SAR(10 g) = 6.92 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 10.8 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 107.9 V/m; Power Drift = -0.39 dB
Peak SAR (extrapolated) = 13.5 W/kg
SAR(1 g) = 9.13 W/kg; SAR(10 g) = 6.54 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.3 W/kg

Below 2 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 10.2 W/kg



Assessments at Outside Part 90 for Face - Table 20

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/29/2018 8:42:34 PM

Robot#: DASY5-PG-4 | Run#:	ZR(FAZ)-FACE-180129-08
Model#:	BC250D-G6-4
Phantom#:	ELI4 1050
Tissue Temp:	20.8 (C)
Serial#:	3W8C011010
Antenna:	AAM32X001
Test Freq:	403.0000 (MHz)
Battery:	FNB-V143LI (AAM29X001)
Carry Acc:	@ front
Audio Acc:	N/A
Start Power:	5.38 (W)

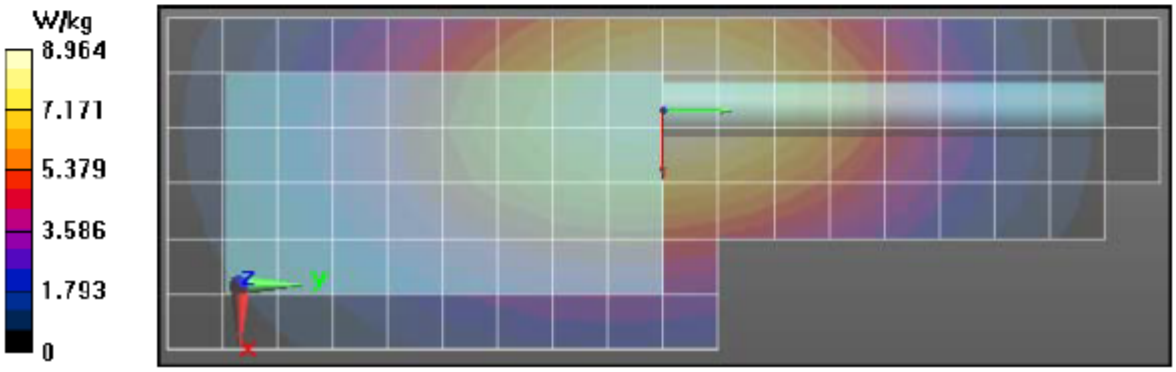
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 403 MHz; σ = 0.85 S/m; ε_r = 44.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 403 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (71x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 108.9 V/m; Power Drift = -0.37 dB
Fast SAR: SAR(1 g) = 8.42 W/kg; SAR(10 g) = 6.18 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 9.22 W/kg

Below 2 GHz-Rev.2/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 108.9 V/m; Power Drift = -0.48 dB
Peak SAR (extrapolated) = 11.2 W/kg
SAR(1 g) = 8.14 W/kg; SAR(10 g) = 6 W/kg (SAR corrected for target medium)

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) = 8.81 W/kg



APPENDIX F
Shortened Scan of Highest SAR configuration

Shortened Scan
Table 21

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/29/2018 3:56:33 PM

Robot#: DASY5-PG-2 | Run#: FIE-AB-180129-05
Model#: BC250D-G6-4
Phantom#: ELI4 1040
Tissue Temp: 20.6 (C)
Serial#: 3W8C011010
Antenna: AAM32X001
Test Freq: 442.1000 (MHz)
Battery: FNB-V143LI (AAM29X001)
Carry Acc: AAM34X001
Audio Acc: MH-Z101B
Start Power: 5.49 (W)

Comments:

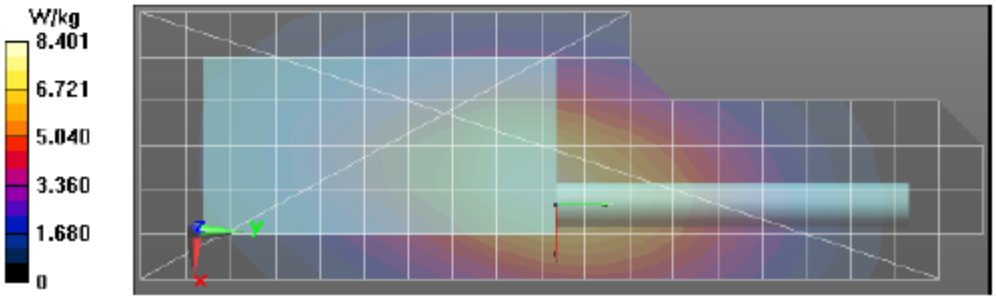
Duty Cycle: 1:1, Medium parameters used: f = 422 MHz; σ = 0.94 S/m; ε_r = 54.9; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 422.1 MHz, ConvF(7, 7, 7); Calibrated: 5/17/2017
Electronics: DAE4 Sn684, Calibrated: 5/12/2017

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x191x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 94.27 V/m; Power Drift = -0.38 dB
Fast SAR: SAR(1 g) = 7.61 W/kg; SAR(10 g) = 5.51 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 8.53 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 = 94.27 V/m; Power Drift = -0.41 dB
Fast SAR: SAR(1 g) = 7.4 W/kg; SAR(10 g) = 5.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 8.28 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) = 8.09 W/kg

Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 99.05 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 11.6 W/kg
SAR(1 g) = 7.81 W/kg; SAR(10 g) = 5.58 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.83 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)	21	8	4.09
Full scan (area & zoom)	18	25	3.73

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