MOTOROLA SOLUTIONS

TESTING CERT # 2518.05

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

Motorola Solutions Inc
EME Test Laboratory
Motorola Solutions Malaysia Sdn Bhd (Innoplex) (455657-H)
Plot 2A, Medan Bayan Lepas,
Mukim 12 SWD, 11900 Bayan Lepas Penang, Malaysia.

Date of Report: 02/29/2016
Report Revision: B

Responsible Engineer:	Veeramani (Sr. EME Engineer)
Report Author:	Veeramani (Sr. EME Engineer)
Date/s Tested:	01/29/2016- 02/01/2016
Manufacturer:	Motorola Solutions Inc.
DUT Description:	T200 GMRS/FRS Consumer Radio 462-467MHz
Test TX mode(s):	CW (PTT)
Max. Power output:	0.7W (GMRS/FRS)
Nominal Power:	0.5W (GMRS/FRS)
Tx Frequency Bands:	FRS 462.5625 – 462.7125 MHz FRS 467.5625 – 467.7125 MHz GMRS 462.5500 – 462.7250 MHz
Signaling type:	FM
Model(s) Tested:	T200 (PMUE5040A)
Model(s) Certified:	T200 (PMUE5040A)
Serial Number(s):	1651NP0010
Classification:	General Population/Uncontrolled
FCC ID:	AZ489FT4928; FRS 467.5625 - 467.7125 MHz, FRS 462.5625 – 462.7125 MHz, GMRS 462.5500 – 462.7250 MHz This report contains results that are immaterial for FCC equipment approval, which are clearly identified.
IC:	109U-89FT4928**;** This report contains results that are immaterial for IC equipment approval, which are clearly identified.

The test results clearly demonstrate compliance with FCC General Population/Uncontrolled RF Exposure limits of 1.6 W/kg averaged over 1 gram per the requirements of OET Bulletin 65. The 10 grams result is not applicable to FCC filing. The test results clearly demonstrate compliance with ICNIRP (1998) Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz), Health Physics 74, 494-522 RF Exposure limits of 2 W/kg averaged over 10grams of contiguous tissue.

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: 2/29/2016

Tiong Nguk Ing

Digitally signed by Tiong Nguk Ing
DN: cn=Tiong Nguk Ing, o=Motorola Solutions, ou=Regulatory Compliance Lab, email=n.i.tiong@motorolasolutions.com, c=MY
Date: 2016.02.29 06:20:48 +08'00'

Certification Date: 2/24/2016

Certification No.: L1160208

APPENDIX D
System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/29/2016 10:19:14 AM

Robot#: DASY5-PG-3 | Run#:	TLC-SYSP-450B-160129-04
Dipole Model#	D450V3
Phantom#:	ELI4 1037
Tissue Temp:	21.3 (C)
Serial#:	1053
Test Freq:	450.000 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.024 dB
Adjusted SAR (1W):	4.68 mW/g (1g)

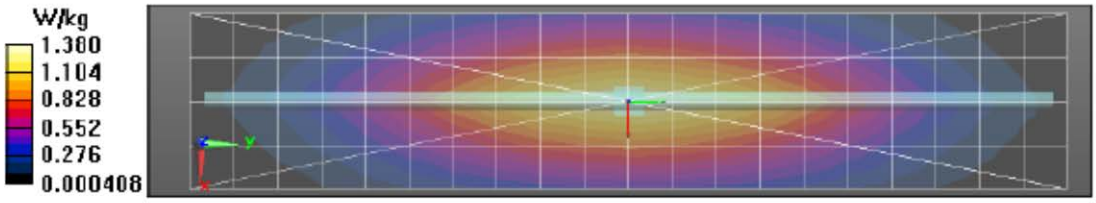
Comments:

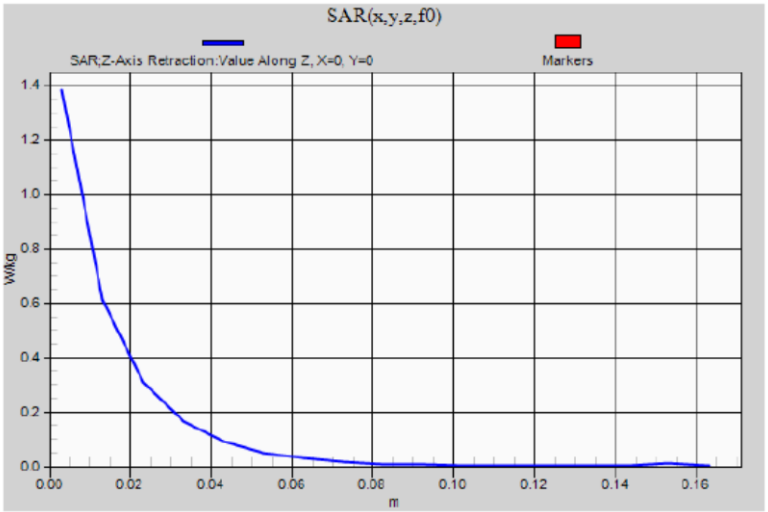
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.93 S/m; ε_r = 54.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 450 MHz, ConvF(7.06, 7.06, 7.06); Calibrated: 11/17/2015
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

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 = 38.59 V/m; Power Drift = -0.04 dB
Fast SAR: SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.833 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.37 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 = 38.59 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.88 W/kg
SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.772 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
Maximum value of SAR (measured) = 1.38 W/kg





Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/1/2016 7:21:33 AM

Robot#: DASY5-PG-3 | Run#:	ZR-SYSP-450B-160201-01
Dipole Model#	D450V3
Phantom#:	ELI4 1037
Tissue Temp:	21.9 (C)
Serial#:	1053
Test Freq:	450.000 (MHz)
Start Power:	250.000 (mW)
Rotation (1D):	0.028 dB
Adjusted SAR (1W):	4.64 mW/g (1g)

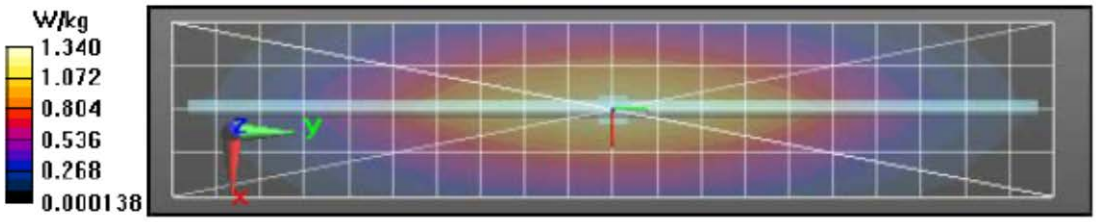
Comments:

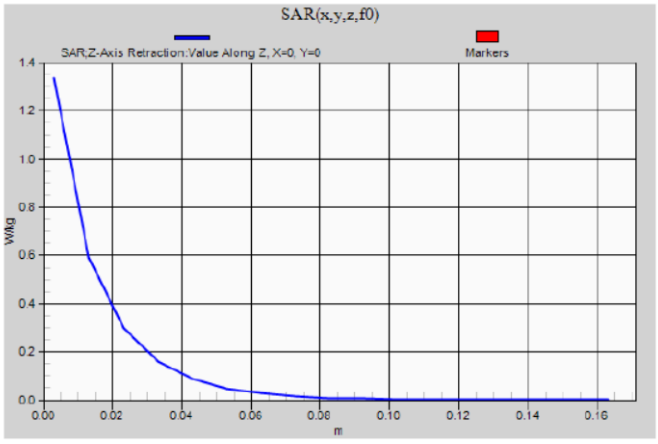
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.91 S/m; ε_r = 55; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 450 MHz, ConvF(7.06, 7.06, 7.06); Calibrated: 11/17/2015
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

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 = 39.04 V/m; Power Drift = -0.16 dB
Fast SAR: SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.841 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.36 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 = 39.04 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.83 W/kg
SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.763 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.33 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) = 1.34 W/kg





Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/1/2016 2:53:04 PM

Robot#: DASY5-PG-3 | Run#:	AZ-SYSP-450H-160201-07
Dipole Model#	D450V3
Phantom#:	ELI4 1028
Tissue Temp:	20.6 (C)
Serial#:	1053
Test Freq:	450.000 (MHz)
Start Power:	250 (mW)
Rotation (1D):	0.038 dB
Adjusted SAR (1W):	4.64 mW/g (1g)

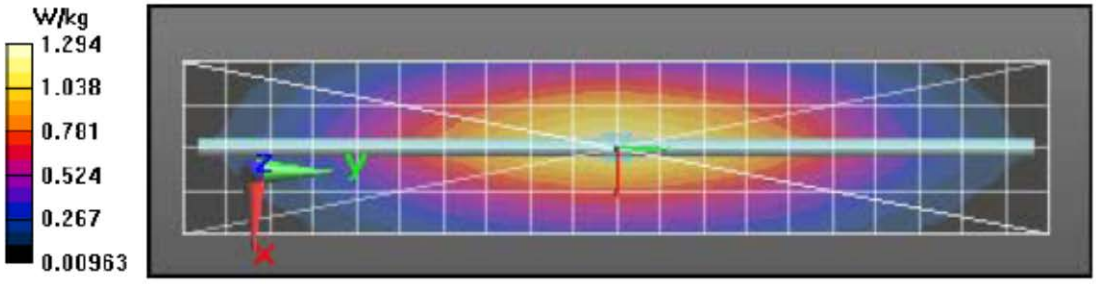
Comments:

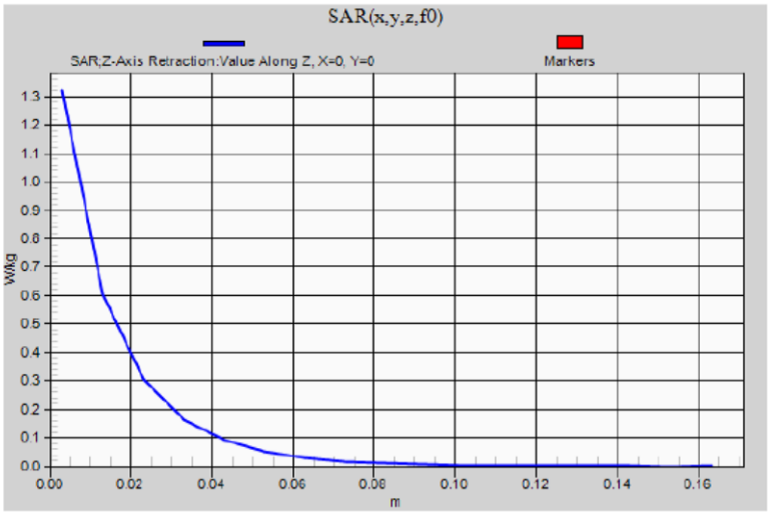
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; σ = 0.85 S/m; ε_r = 44.6; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 450 MHz, ConvF(6.83, 6.83, 6.83); Calibrated: 11/17/2015
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

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 = 40.10 V/m; Power Drift = -0.01 dB
Fast SAR: SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.815 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.31 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 = 40.10 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.770 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.32 W/kg

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 for FRS band
Table 18

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/29/2016 7:54:05 PM

Robot#: DASY5-PG-3 | Run#:	AZ-AB-160129-17
Model#:	PMUE5040A
Phantom#:	ELI4 1037
Tissue Temp:	20.1 (C)
Serial#:	1651NP0010
Antenna:	Fixed
Test Freq:	467.6375 (MHz)
Battery:	3xAA Alkaline
Carry Acc:	1564028V01
Audio Acc:	GU7140 w/56320B
Start Power:	0.623 (W)

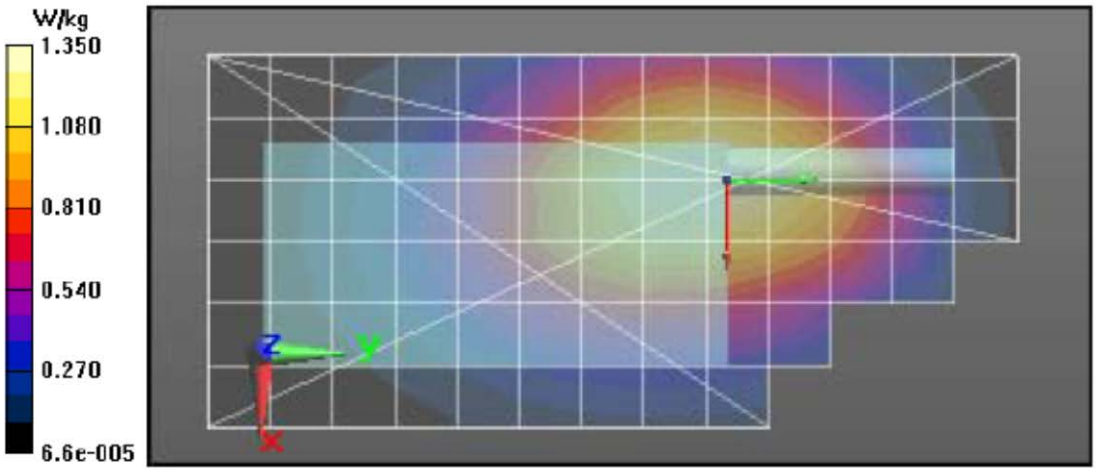
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 468 MHz; σ = 0.95 S/m; ε_r = 54; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 467.637 MHz, ConvF(7.06, 7.06, 7.06); Calibrated: 11/17/2015
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.27 V/m; Power Drift = -0.37 dB
Fast SAR: SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.911 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.43 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 = 40.27 V/m; Power Drift = -0.52 dB
Peak SAR (extrapolated) = 1.78 W/kg
SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.855 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.38 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) = 1.35 W/kg



Assessments at the Body for GRMS/FRS band
Table 20

Motorola Solutions, Inc. EME Laboratory
Date/Time: 1/29/2016 3:19:00 PM

Robot#: DASY5-PG-3 | Run#:	AZ-AB-160129-08
Model#:	PMUE5040A
Phantom#:	ELI4 1037
Tissue Temp:	20.3 (C)
Serial#:	1651NP0010
Antenna:	Fixed
Test Freq:	462.6375 (MHz)
Battery:	PMNN4477A
Carry Acc:	1564028V01
Audio Acc:	GU6970A
Start Power:	0.535 (W)

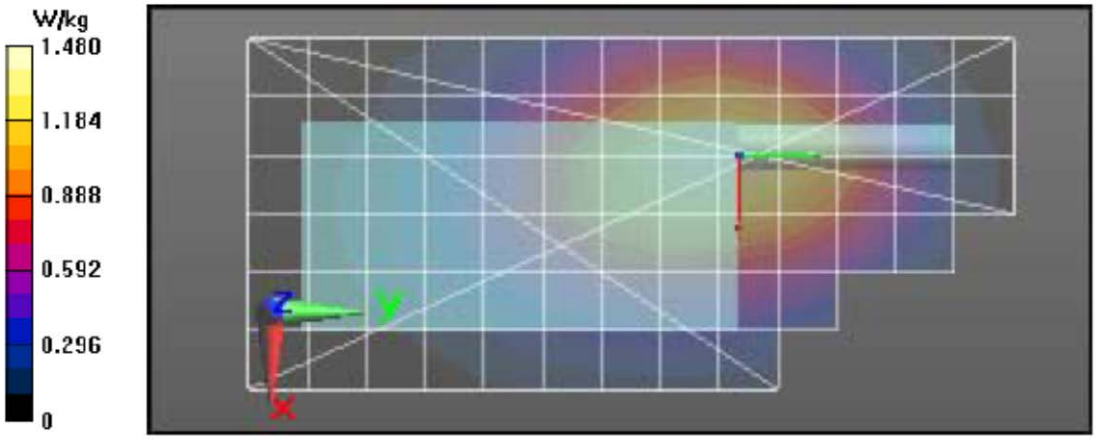
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 463 MHz; σ = 0.95 S/m; ε_r = 54.1; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 462.637 MHz, ConvF(7.06, 7.06, 7.06); Calibrated: 11/17/2015
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.22 V/m; Power Drift = -0.17 dB
Fast SAR: SAR(1 g) = 1.32 W/kg; SAR(10 g) = 0.944 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.49 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 = 40.22 V/m; Power Drift = -0.26 dB
Peak SAR (extrapolated) = 1.87 W/kg
SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.895 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.44 W/kg

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



Assessments at the Face for FRS band
Table 22

Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/1/2016 5:40:02 PM

Robot#: DASY5-PG-3 | Run#: TLC-FACE-160201-11
Model#: PMUE5040A
Phantom#: ELI4 1028
Tissue Temp: 19.4 (C)
Serial#: 1651NP0010
Antenna: Fixed
Test Freq: 467.6375 (MHz)
Battery: PMNN4477A
Carry Acc: None
Audio Acc: None
Start Power: 0.535 (W)

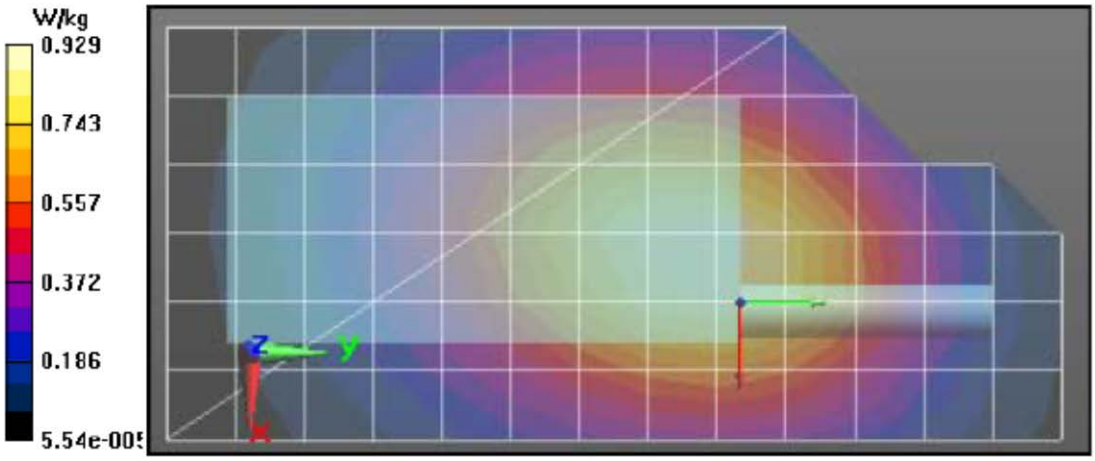
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 468 MHz; σ = 0.86 S/m; ε_r = 44.3; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 467.637 MHz, ConvF(6.83, 6.83, 6.83); Calibrated: 11/17/2015
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 32.97 V/m; Power Drift = -0.08 dB
Fast SAR: SAR(1 g) = 0.857 W/kg; SAR(10 g) = 0.617 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.947 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 = 32.97 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 1.14 W/kg
SAR(1 g) = 0.839 W/kg; SAR(10 g) = 0.606 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.932 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) = 0.929 W/kg



Assessments at the Face for GRMS/FRS band
Table 24

Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/1/2016 4:22:26 PM

Robot#: DASY5-PG-3 | Run#: AZ-FACE-160201-09
Model#: PMUE5040A
Phantom#: ELI4 1028
Tissue Temp: 20.3(C)
Serial#: 1651NP0010
Antenna: Fixed
Test Freq: 462.6375 (MHz)
Battery: PMNN4477A
Carry Acc: None
Audio Acc: None
Start Power: 0.535 (W)

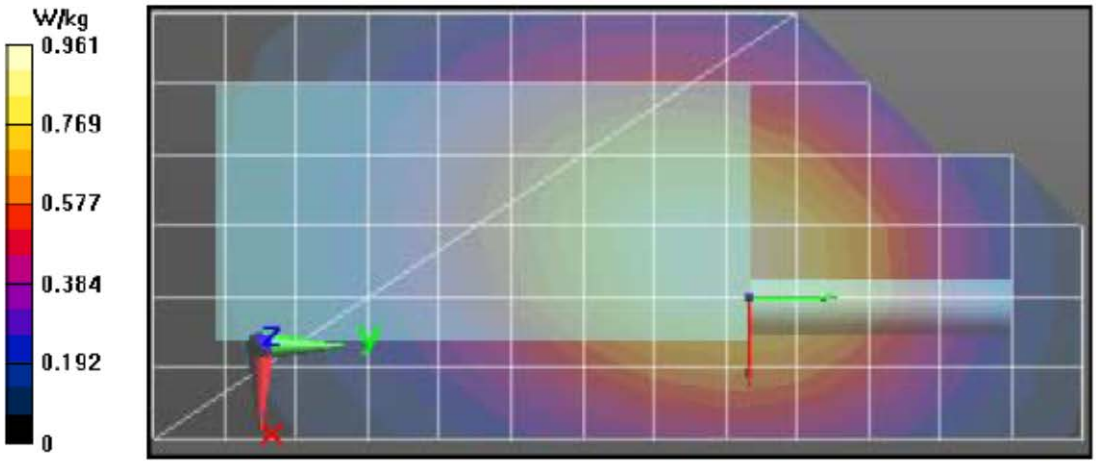
Comments:

Duty Cycle: 1:1, Medium parameters used: f = 463 MHz; σ = 0.86 S/m; ε_r = 44.4; ρ = 1000 kg/m^3
Probe: ES3DV3 - SN3196, , Frequency: 462.637 MHz, ConvF(6.83, 6.83, 6.83); Calibrated: 11/17/2015
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

Below 2 GHz-Rev.2/Face Scan/1-Area Scan (81x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 33.90 V/m; Power Drift = -0.09 dB
Fast SAR: SAR(1 g) = 0.894 W/kg; SAR(10 g) = 0.645 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 0.987 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 = 33.90 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.876 W/kg; SAR(10 g) = 0.633 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 0.973 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) = 0.968 W/kg



APPENDIX F
Shortened Scan of Highest SAR configuration

Motorola Solutions, Inc. EME Laboratory
Date/Time: 2/1/2016 1:33:53 PM

Robot#: DASY5-PG-3 | Run#: AZ-AB-160201-06

Model#:	PMUE5040A
Phantom#:	ELI4 1037
Tissue Temp:	20.6 (C)
Serial#:	1651NP0010
Antenna:	Fixed
Test Freq:	462.6375 (MHz)
Battery:	PMNN4477A
Carry Acc:	1564028V01
Audio Acc:	GU6970A
Start Power:	0.535 (W)

Comments: Shorten Scan

Duty Cycle: 1:1, Medium parameters used: f = 463 MHz; σ = 0.92 S/m; ε_r = 54.8; ρ = 1000 kg/m^3

Probe: ES3DV3 - SN3196, , Frequency: 462.637 MHz, ConvF(7.06, 7.06, 7.06); Calibrated: 11/17/2015

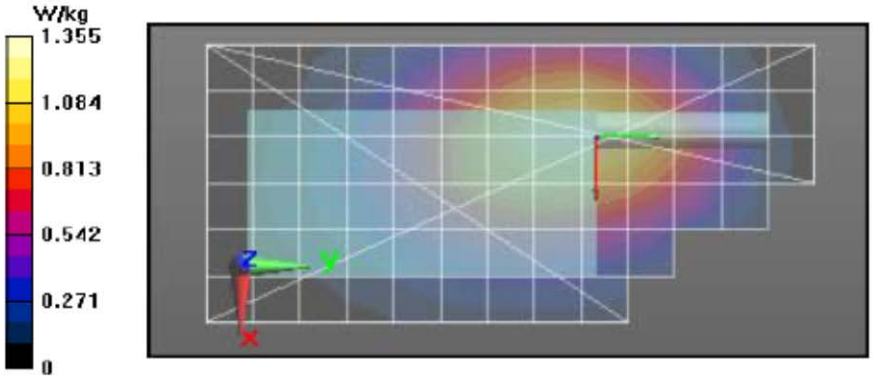
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 39.69 V/m; Power Drift = -0.27 dB
Fast SAR: SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.873 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.36 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 = 39.69 V/m; Power Drift = -0.30 dB
Fast SAR: SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.884 W/kg (SAR corrected for target medium)
Maximum value of SAR (interpolated) = 1.34 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 = 39.14 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.77 W/kg
SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.854 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 1.36 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) = 1.32 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)	SAR 10g (W/kg)
Shorten scan (zoom)	25	7	0.82	0.58
Full scan (area & zoom)	20	22	0.88	0.62

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