



CERTIFICATE 2518.05

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

**Motorola Solutions Inc.
EME Test Laboratory**

Motorola Solutions Malaysia Sdn Bhd
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Date of Report: 06/18/2020

Report Revision: A

Responsible Engineer: Ch'ng Jian Sheng (EME Engineer)
Report Author: Lee Kin Kting (Senior Technician)
Date/s Tested: 04/27/2020
Manufacturer: Motorola Solutions Inc.
DUT Description: CLS1410 Black; 450-470 MHz at 1.0W
Test TX mode(s): CW (PTT)
Max. Power output: 1.3W
Nominal Power: 1.0W
Tx Frequency Bands: 450-470 MHz
Signaling type: FM
Model(s) Tested: CU1410BKV4BA (HCUE1081G)
Model(s) Certified: AP1810BKN8BB (RLA1002G), CU1110GYN1BA (HCUE1080G),
 CU1110GYN1BB (HCUE1080G), CU1410BKV4BB (HCUE1081G),
 CU1410BKV4BS (HCUE1142G), HCUE1082G,
 GS1810BKN8BB (RLA1001G), P24VPC03D2BA (HCUE1157G)
Serial Number(s): 134TWDB799, 134TWDB803
Classification: Occupational/Controlled
Applicant Name: Motorola Solutions Inc
Applicant Address: 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322.
FCC ID: AZ489FT4963
IC: 109U-89FT4963
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
Deputy Technical Manager (Approved Signatory)
Approval Date: 6/18/2020

Appendix D

System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/27/2020 12:27:05 AM

Robot#: DASY5-PG-1 | Run#: ZZ-SYSP-450H-200427-01#
 Dipole Model# D450V3
 Phantom#: ELI4 1022
 Tissue Temp: 21.5 (C)
 Serial#: 1054
 Test Freq: 450.0000 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.18 dB
 Adjusted SAR (1W): 4.76 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.8$; $\rho = 1000$ 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 (41x201x1):

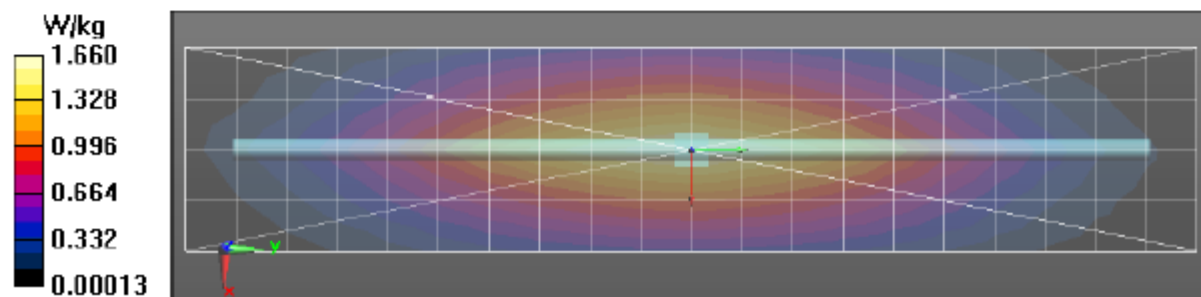
Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
 Reference Value = 44.31 V/m; Power Drift = -0.01 dB
 Fast SAR: SAR(1 g) = 1.3 W/kg; SAR(10 g) = 0.899 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.65 W/kg

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

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
 Reference Value = 44.31 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 1.94 W/kg
 SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.790 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: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm
 Maximum value of SAR (measured) = 1.66 W/kg



Appendix E

DUT Scans

Assessments at the Body for 450-470 MHz – Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/27/2020 11:49:39 AM

Robot#: DASY5-PG-1 | Run#: BL(AR)-AB-200427-08#
 Model#: CU1410BKV4BA (HCUE1081G)
 Phantom#: ELI4 1022
 Tissue Temp: 20.4 (C)
 Serial#: 134TWDB803
 Antenna: Fixed Antenna
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4497AR
 Carry Acc: HCLN4013C
 Audio Acc: HKLN4606A
 Start Power: 1.100 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 470 MHz, ConvF(11.84, 11.84, 11.84) @ 470 MHz

Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 23.45 V/m; Power Drift = -0.32 dB

Fast SAR: SAR(1 g) = 0.518 W/kg; SAR(10 g) = 0.370 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.642 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 = 23.45 V/m; Power Drift = -0.41 dB

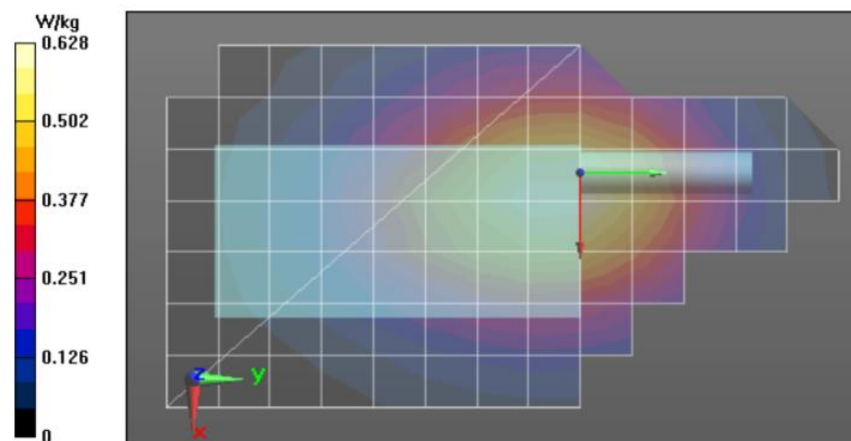
Peak SAR (extrapolated) = 0.744 W/kg

SAR(1 g) = 0.489 W/kg; SAR(10 g) = 0.342 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.646 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) = 0.649 W/kg



Assessments at the Face for 450-470 MHz – Table 20

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/27/2020 12:31:55 PM

Robot#: DASY5-PG-1 | Run#: BL(AR)-FACE-200427-09#
 Model#: CU1410BKV4BA (HCUE1081G)
 Phantom#: ELI4 1022
 Tissue Temp: 20.3 (C)
 Serial#: 134TWDB803
 Antenna: Fixed Antenna
 Test Freq: 470.0000 (MHz)
 Battery: PMNN4497AR
 Carry Acc: @ front
 Audio Acc: N/A
 Start Power: 1.100 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 470$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Probe: EX3DV4 - SN7533, Calibrated: 11/6/2019, Frequency: 470 MHz, ConvF(11.84, 11.84, 11.84) @ 470 MHz

Electronics: DAE4 Sn1488, Calibrated: 7/23/2019

Below 2 GHz-Rev.3/Face Scan/1-Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 33.13 V/m; Power Drift = -0.18 dB

Fast SAR: SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.765 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.31 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 = 33.13 V/m; Power Drift = -0.23 dB

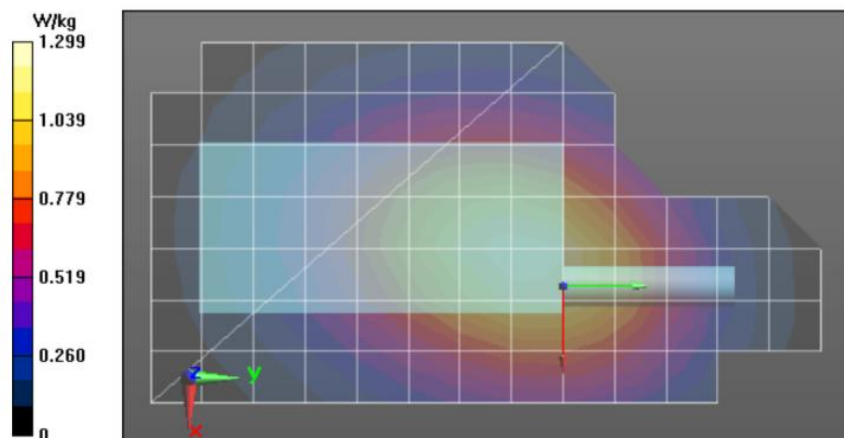
Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.987 W/kg; SAR(10 g) = 0.707 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.27 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) = 1.26 W/kg



Assessment for Industry Canada Body – Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/27/2020 2:22:17 PM

Robot#: DASY5-PG-1 | Run#: BL(AR)-AB-200427-10#
 Model#: CU1410BKV4BA (HCUE1081G)
 Phantom#: ELI4 1022
 Tissue Temp: 20.2 (C)
 Serial#: 134TWDB803
 Antenna: Fixed Antenna
 Test Freq: 450.0000 (MHz)
 Battery: PMNN4497AR
 Carry Acc: HCLN4013C
 Audio Acc: HKLN4606A
 Start Power: 1.090 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.8$; $\rho = 1000$ 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/Ab Scan/1-Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 32.18 V/m; Power Drift = -0.26 dB

Fast SAR: SAR(1 g) = 0.978 W/kg; SAR(10 g) = 0.699 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.21 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 = 32.18 V/m; Power Drift = -0.32 dB

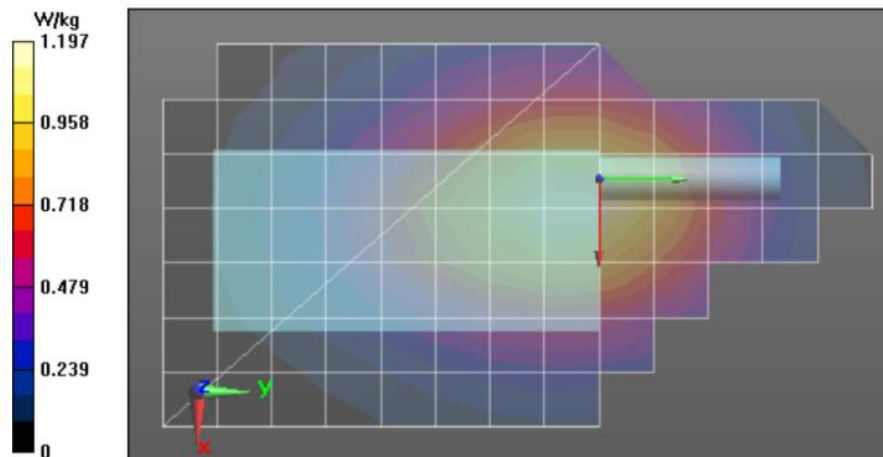
Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.937 W/kg; SAR(10 g) = 0.656 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.23 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) = 1.25 W/kg



Assessment for Industry Canada Face – Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/27/2020 7:43:34 PM

Robot#: DASY5-PG-1 | Run#: ZZ-FACE-200427-14#
 Model#: CU1410BKV4BA (HCUE1081G)
 Phantom#: ELI4 1022
 Tissue Temp: 20.1 (C)
 Serial#: 134TWDB799
 Antenna: Fixed Antenna
 Test Freq: 450.0000 (MHz)
 Battery: PMNN4497AR
 Carry Acc: @ front
 Audio Acc: N/A
 Start Power: 1.09 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.8$; $\rho = 1000$ 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/Face Scan/1-Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 51.54 V/m; Power Drift = -0.35 dB

Fast SAR: SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.7 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.90 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 = 51.54 V/m; Power Drift = -0.46 dB

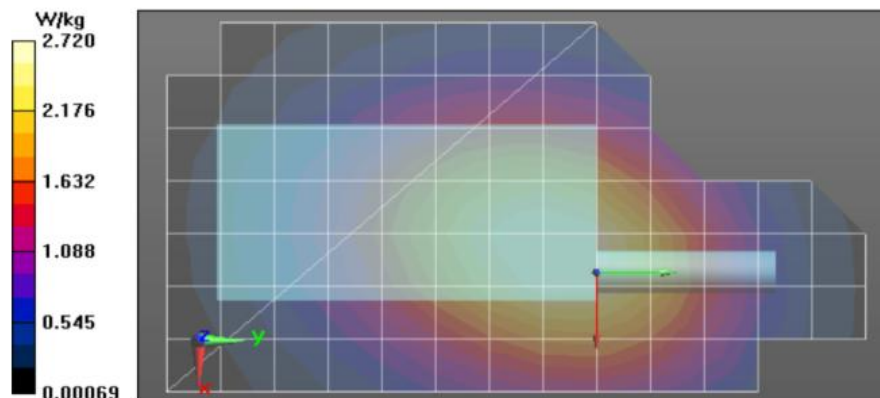
Peak SAR (extrapolated) = 3.13 W/kg

SAR(1 g) = 2.14 W/kg; SAR(10 g) = 1.55 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.75 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) = 2.72 W/kg



APPENDIX F

Shortened Scan of Highest SAR configuration

Shortened Scan - Table 22

Motorola Solutions, Inc. EME Laboratory

Date/Time: 4/27/2020 9:29:27 PM

Robot#: DASY5-PG-1 | Run#: ZZ-FACE-200427-17#
 Model#: CU1410BKV4BA (HCUE1081G)
 Phantom#: ELI4 1022
 Tissue Temp: 20.4 (C)
 Serial#: 134TWDB799
 Antenna: Fixed Antenna
 Test Freq: 450.0000 (MHz)
 Battery: PMNN4497AR
 Carry Acc: @ front
 Audio Acc: N/A
 Start Power: 1.09 (W)

Comments: Shorten Scan

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.8$; $\rho = 1000$ 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/Face Scan/1-Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 48.85 V/m; Power Drift = -0.25 dB

Fast SAR: SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.54 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.62 W/kg

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

Reference Value = 48.85 V/m; Power Drift = -0.28 dB

Fast SAR: SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.53 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 2.55 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 = 56.69 V/m; Power Drift = -0.20 dB

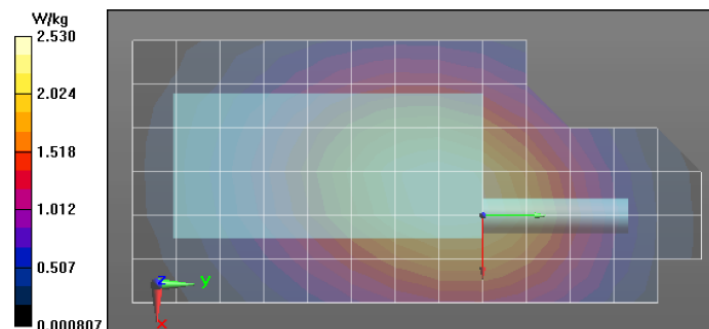
Peak SAR (extrapolated) = 3.02 W/kg

SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.5 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.65 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) = 2.53 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)	22	9	1.29
Full scan (area & zoom)	21	20	1.42

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