

**MOTOROLA SOLUTIONS**

CERTIFICATE 2518.05

**DECLARATION OF COMPLIANCE SAR ASSESSMENT PCII Part 2 of 2****Motorola Solutions Inc.****EME Test Laboratory**

Motorola Solutions Malaysia Sdn Bhd (Innoplex)  
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**Date of Report: 9/9/2016****Report Revision: B**

**Responsible Engineer:** Chang Chi Chern (EME Engineer)  
**Report Author:** Chang Chi Chern (EME Engineer)  
**Date/s Tested:** 07/05/2016; 8/24/2016  
**Manufacturer:** Vertex Standard LMR, Inc.  
**DUT Description:** Handheld Portable – EVX-261-G7-5 450-520 MHz 5W  
**Test TX mode(s):** CW (PTT)  
**Max. Power output:** 5.5 W  
**Nominal Power:** 5.0 W  
**Tx Frequency Bands:** LMR 450-520 MHz  
**Signaling type:** FM and TDMA  
**Model(s) Tested:** EVX-261-G7-5  
**Model(s) Certified:** EVX-261-G7-5  
**Serial Number(s):** 2B6G110029  
**Classification:** Occupational/Controlled  
**FCC ID:** AXI11374720; LMR 450-512 MHz  
 This report contains results that are immaterial for FCC equipment approval, which are clearly identified.  
**IC:** 10239A-11374720; This report contains results that are immaterial for IC equipment approval, which are clearly identified.

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 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 10 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 Nguk Ing**  
**Deputy Technical Manager**  
**Approval Date: 9/9/2016**

**Certification Date: 8/25/2016****Certification No.: 160805AD**

## **Appendix D**

### **System Verification Check Scans**

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 7/5/2016 6:50:39 AM

Robot#: DASY5-PG-3 | Run#: ZWS(ARF)-SYSP-450B-160705-11  
 Dipole Model#: D450V3  
 Phantom#: ELI5 1150  
 Tissue Temp: 20.8 (C)  
 Serial#: 1053  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.033 dB  
 Adjusted SAR (1W): 4.60 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.92$  S/m;  $\epsilon_r = 56.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 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 = 38.31 V/m; Power Drift = -0.04 dB

Fast SAR: SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.820 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.33 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 = 38.31 V/m; Power Drift = -0.04 dB

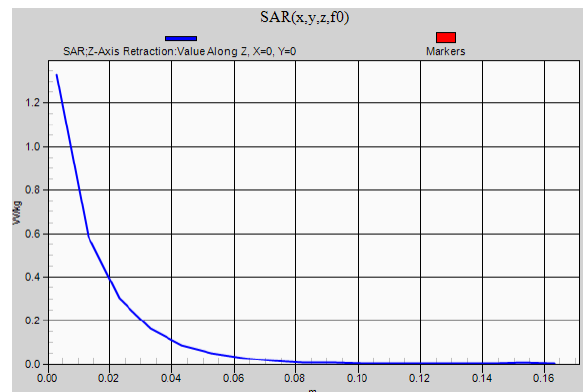
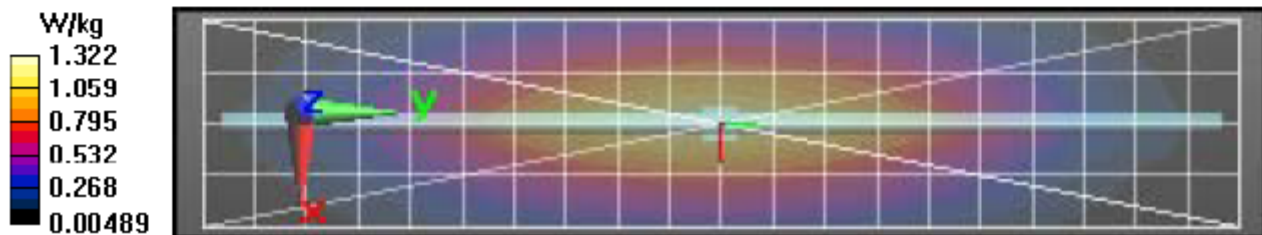
Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.758 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) = 1.33 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 8/24/2016 7:52:24 AM

Robot#: DASY5-PG-2 | Run#: ZR-SYSP-450B-160824-01  
 Dipole Model#: D450V3  
 Phantom#: OVAL 1019  
 Tissue Temp: 21.2 (C)  
 Serial#: 1053  
 Test Freq: 450.000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.063 dB  
 Adjusted SAR (1W): 4.40 mW/g (1g)

**Comments:**

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3096, , Frequency: 450 MHz, ConvF(6.82, 6.82, 6.82); Calibrated: 4/29/2016  
 Electronics: DAE4 Sn688, Calibrated: 4/21/2016

**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 = 37.72 V/m; Power Drift = -0.09 dB

Fast SAR: SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.790 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.30 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 = 37.72 V/m; Power Drift = -0.09 dB

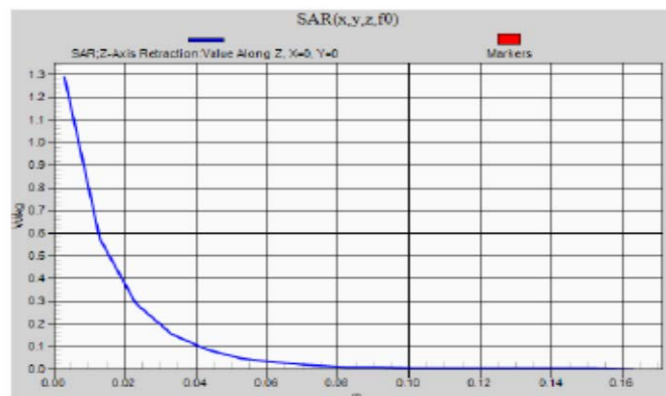
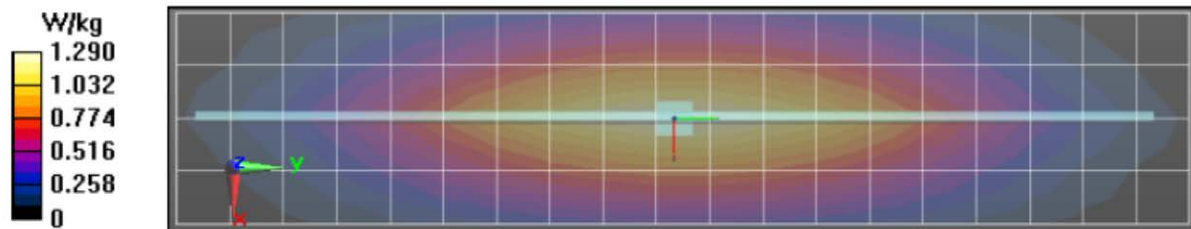
Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.725 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.30 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

Table 16

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 7/5/2016 1:34:42 PM

Robot#: DASY5-PG-3 | Run#: ZWS-AB-160705-18  
 Model#: EVX-261-G7-5  
 Phantom#: ELI5 1150  
 Tissue Temp: 20.2 (C)  
 Serial#: 2B6G110029  
 Antenna: ATU-6F  
 Test Freq: 501.0000 (MHz)  
 Battery: FNB-V133LI-UNI  
 Carry Acc: LCC-261  
 Audio Acc: MH-360S  
 Start Power: 5.49 (W)

## Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 501$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3196, , Frequency: 501 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 (71x211x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 124.5 V/m; Power Drift = -0.50 dB

Fast SAR: SAR(1 g) = 12.3 W/kg; SAR(10 g) = 8.73 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 13.8 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 = 124.5 V/m; Power Drift = -0.66 dB

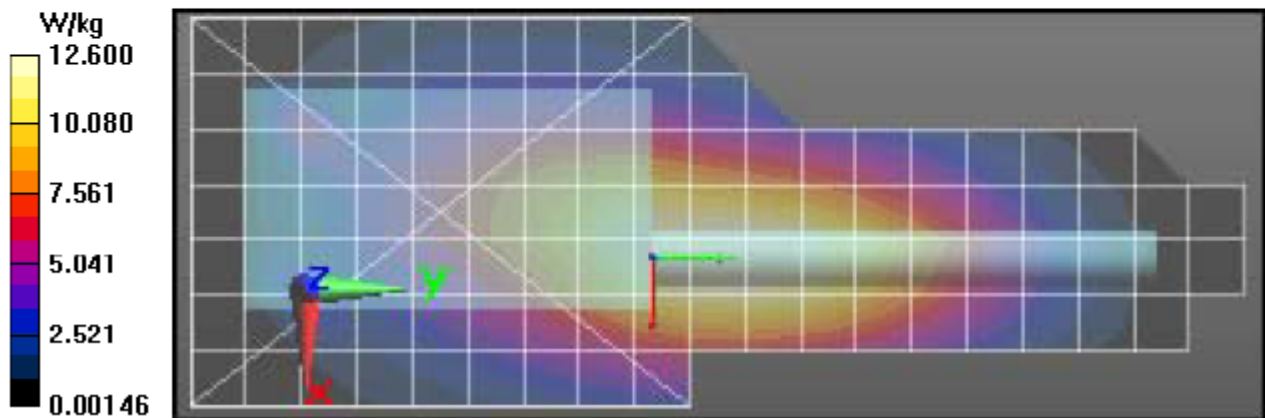
Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 11.2 W/kg; SAR(10 g) = 7.84 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 12.9 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) = 12.6 W/kg



## Assessments at the Body for Industry Canada

### Table 17

#### Motorola Solutions, Inc. EME Laboratory

Date/Time: 8/24/2016 10:45:52 AM

Robot#: DASY5-PG-2 | Run#: ZR-AB-160824-05  
 Model#: EVX-261-G7-5  
 Phantom#: OVAL 1019  
 Tissue Temp: 20.8 (C)  
 Serial#: 2B6G110031  
 Antenna: ATU-6C  
 Test Freq: 450.0000 (MHz)  
 Battery: FNB-V133LI-UNI  
 Carry Acc: LCC-261  
 Audio Acc: MH-360S  
 Start Power: 5.50 (W)

#### Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3096, , Frequency: 450 MHz, ConvF(6.82, 6.82, 6.82); Calibrated: 4/29/2016  
 Electronics: DAE4 Sn688, Calibrated: 4/21/2016

#### **Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x211x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 108.1 V/m; Power Drift = -0.43 dB

Fast SAR: SAR(1 g) = 9.3 W/kg; SAR(10 g) = 6.67 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 10.4 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 = 108.1 V/m; Power Drift = -0.57 dB

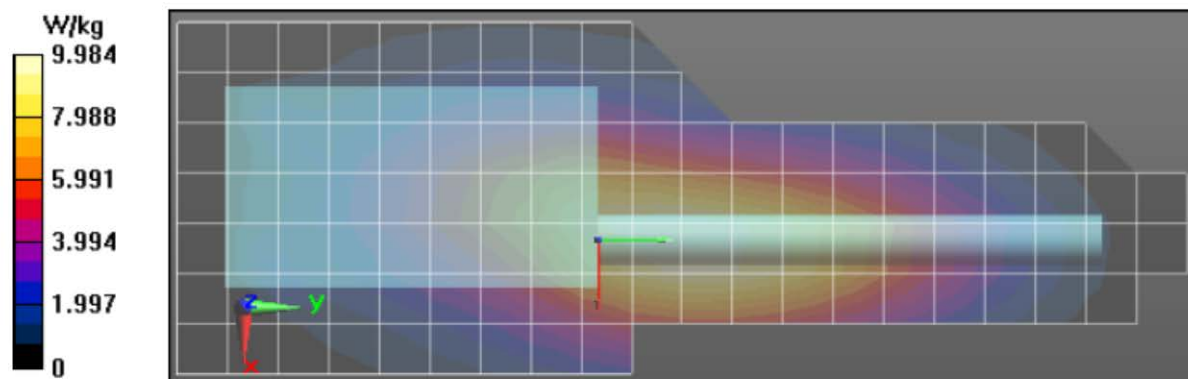
Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 8.53 W/kg; SAR(10 g) = 5.98 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.75 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) = 9.61 W/kg



## **APPENDIX F**

### **Shortened Scan of Highest SAR configuration**

## Shortened Scan Table 18

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 7/5/2016 3:54:46 PM

Robot#: DASY5-PG-3 | Run#: TLC-AB-160705-20  
Model#: EVX-261-G7-5  
Phantom#: ELI5 1150  
Tissue Temp: 20.0 (C)  
Serial#: 2B6G110029  
Antenna: ATU-6F  
Test Freq: 501.0000 (MHz)  
Battery: FNB-V133LI-UNI  
Carry Acc: LCC-261  
Audio Acc: MH-360S  
Start Power: 5.48 (W)

Comments: Shorten scan

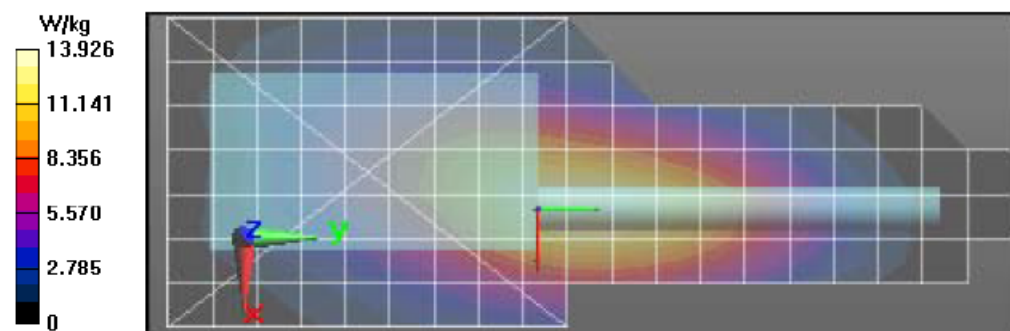
Duty Cycle: 1:1, Medium parameters used:  $f = 501 \text{ MHz}$ ;  $\sigma = 0.96 \text{ S/m}$ ;  $\epsilon_r = 56.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Probe: ES3DV3 - SN3196, , Frequency: 501 MHz, ConvF(7.06, 7.06, 7.06); Calibrated: 11/17/2015  
Electronics: DAE4 Sn1294, Calibrated: 1/6/2016

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (71x211x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Reference Value = 126.4 V/m; Power Drift = -0.51 dB  
Fast SAR: SAR(1 g) = 12.6 W/kg; SAR(10 g) = 8.99 W/kg (SAR corrected for target medium)  
Maximum value of SAR (interpolated) = 14.2 W/kg

**Below 2 GHz-Rev.2/Ab Scan/2-Volume 2D Scan (41x41x1):** Interpolated grid:  $dx=0.7500 \text{ mm}$ ,  
 $dy=0.7500 \text{ mm}$ ,  $dz=1.000 \text{ mm}$   
Reference Value = 126.4 V/m; Power Drift = -0.57 dB  
Fast SAR: SAR(1 g) = 12.1 W/kg; SAR(10 g) = 8.7 W/kg (SAR corrected for target medium)  
Maximum value of SAR (interpolated) = 13.5 W/kg

**Below 2 GHz-Rev.2/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=7.5 \text{ mm}$ ,  
 $dy=7.5 \text{ mm}$ ,  $dz=5 \text{ mm}$   
Reference Value = 127.8 V/m; Power Drift = -0.35 dB  
Peak SAR (extrapolated) = 19.2 W/kg  
SAR(1 g) = 12.8 W/kg; SAR(10 g) = 8.94 W/kg (SAR corrected for target medium)  
Maximum value of SAR (measured) = 14.7 W/kg

**Below 2 GHz-Rev.2/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) = 13.2 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)     | 18               | 8                | 6.96          | 4.86           |
| Full scan (area & zoom) | 17               | 30               | 6.53          | 4.57           |

## APPENDIX G

### DUT Test Position Photos

#### Body (Highest SAR configuration)

DUT with offered antenna ATU-6F, battery FNB-V133LI-UNI and new leather case, belt loop accessory LCC-261 against phantom with an audio accessory MH-360S.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| ATU-6F        | 15                          | 20               | 17              |

## APPENDIX H

### Body worn accessory



**LCC-261**  
**Front View**



**LCC-261**  
**Side View**



**LCC-261**  
**Back View**

**New offered leather case, belt loop LCC-261**

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