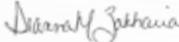


 <b>MOTOROLA SOLUTIONS</b>	 <p>ACCREDITED TESTING CERT # 2518.01</p>
<b>DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2</b>	
<p style="text-align: center;"> <b>Motorola Solutions, Inc</b>  <b>EME Test Laboratory</b>                  8000 West Sunrise Blvd                  Fort Lauderdale, FL. 33322             </p>	<p> <b>Date of Report:</b> 12/11/2014  <b>Report Revision:</b> A             </p>
<p> <b>Responsible Engineer:</b> Deanna Zakharia ( EME Lab Senior Resource Manager, Laboratory Director)  <b>Report Author:</b> Jessica Zada (EME Engineer)  <b>Date/s Tested:</b> 10/03/2014, 10/06/2014  <b>Manufacturer/Location:</b> Motorola Solutions, Inc, Penang  <b>Sector/Group/Div.:</b> EMS  <b>Date submitted for test:</b> 09/19/14  <b>DUT Description:</b> RDV5100+ VHF BRUS 10 CH Non-Display, 5 Watts, Removable Antenna, Black Li-Ion  <b>Test TX mode(s):</b> TDMA (PTT)  <b>Max. Power output:</b> 5.0 W  <b>Nominal Power:</b> 4.8 W  <b>Tx Frequency Bands:</b> 146-174 MHz  <b>Signaling type:</b> TDMA  <b>Model(s) Tested:</b> PMUD3351A  <b>Model(s) Certified:</b> PMUD3351A  <b>Serial Number(s):</b> 4 &amp; 3  <b>Classification:</b> Occupational/Controlled  <b>FCC ID:</b> AZ489FT3834; (150.8-173.4 MHz)             </p> <p>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 47 CFR 2.1093(d). 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.</p>	
<p>                 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.             </p>	
<p style="text-align: center;">   <b>Deanna Zakharia</b>                  EMS EME Lab Senior Resource Manager,                  Laboratory Director  <b>Approval Date:</b> 12/12/2014             </p>	<p> <b>Certification Date:</b> 10/23/2014  <b>Certification No.:</b> L1141012P             </p>

## **Appendix D**

### **System Verification Check Scans**

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 10/6/2014 12:53:20 PM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-150B-141006-06  
 Dipole Model#: CLA-150  
 Phantom#: OVAL1090  
 Tissue Temp: 21.1 (C)  
 Serial#: 4005  
 Test Freq: 150 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.078 dB  
 Adjusted SAR (1W): 4.05 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.8$  S/m;  $\epsilon_r = 60$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3291, Frequency: 150 MHz, ConvF(7.28, 7.28, 7.28); Calibrated: 7/21/2014  
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

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

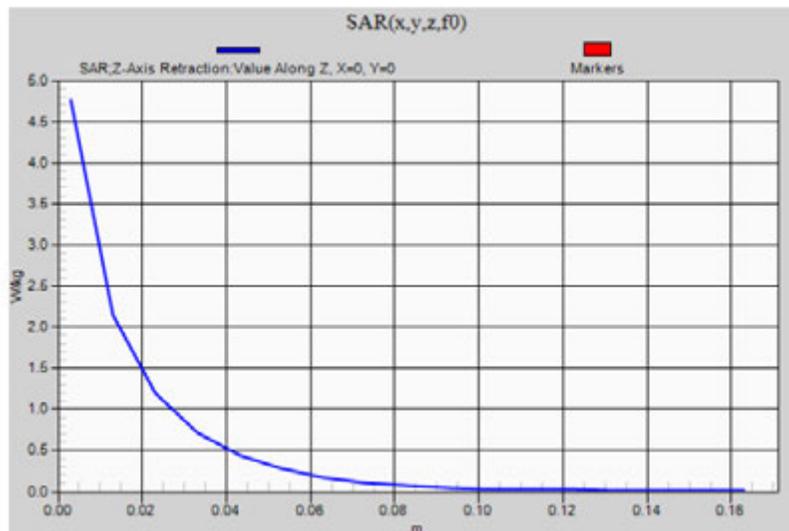
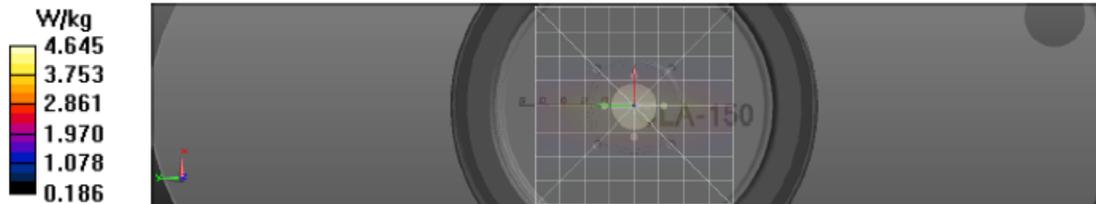
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 77.37 V/m; Power Drift = -0.00 dB  
 Fast SAR: SAR(1 g) = 4.24 W/kg; SAR(10 g) = 3.04 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 4.77 W/kg

**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 = 77.37 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 6.89 W/kg  
 SAR(1 g) = 4.05 W/kg; SAR(10 g) = 2.65 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 4.80 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) = 4.76 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 10/6/2014 8:34:12 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-150H-141006-01  
 Dipole Model#: CLA-150  
 Phantom#: OVAL1016  
 Tissue Temp: 21.3 (C)  
 Serial#: 4005  
 Test Freq: 150 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.077 dB  
 Adjusted SAR (1W): 3.65 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.73$  S/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3291, Frequency: 150 MHz, ConvF(7.68, 7.68, 7.68); Calibrated: 7/21/2014  
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

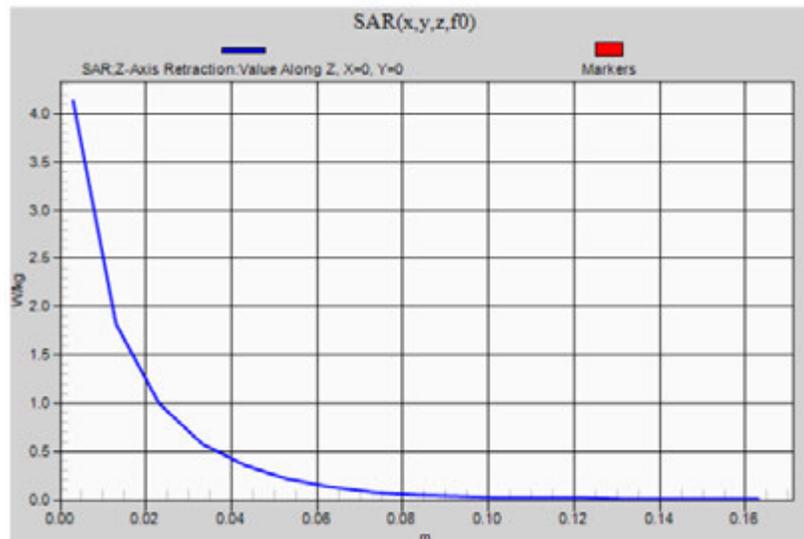
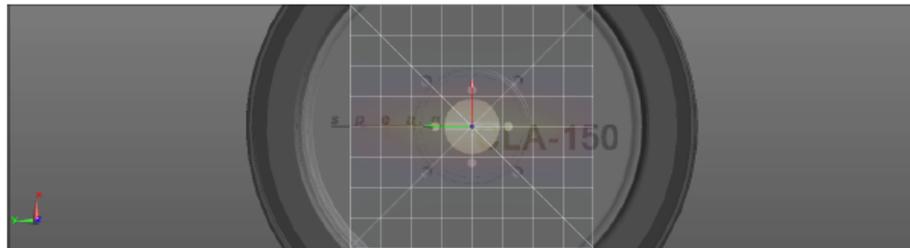
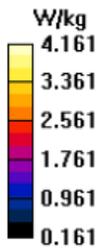
**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (81x81x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 75.57 V/m; Power Drift = -0.02 dB  
 Fast SAR: SAR(1 g) = 3.86 W/kg; SAR(10 g) = 2.75 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 4.16 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 = 75.57 V/m; Power Drift = -0.02 dB  
 Peak SAR (extrapolated) = 6.02 W/kg  
 SAR(1 g) = 3.65 W/kg; SAR(10 g) = 2.36 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) = 4.13 W/kg



## **Appendix E**

### **DUT Scans**

### Assessments at the Body with Body-worn RLN6307A Table 17

Motorola Solutions, Inc. EME Laboratory  
Date/Time: 10/6/2014 1:41:56 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-141006-07  
Model#: PMUD3351A  
Phantom#: OVAL1090  
Tissue Temp: 21.0 (C)  
Serial#: 003  
Antenna: RAN4041A  
Test Freq: 154.5475 (MHz)  
Battery: RLN6308B (60012000001)  
Carry Acc: RLN6307A (4280383X62)  
Audio Acc: HKLN4604A  
Start Power: 4.98 (W)

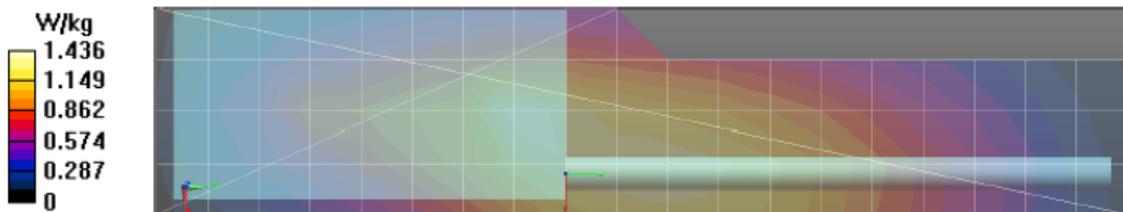
Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 155$  MHz;  $\sigma = 0.8$  S/m;  $\epsilon_r = 59.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Probe: ES3DV3 - SN3291, , Frequency: 154.548 MHz, ConvF(7.28, 7.28, 7.28); Calibrated: 7/21/2014  
Electronics: DAE3 Sn363, Calibrated: 1/13/2014

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (41x191x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Reference Value = 37.98 V/m; Power Drift = -0.26 dB  
Fast SAR: SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.962 W/kg (SAR corrected for target medium)  
Maximum value of SAR (interpolated) = 1.48 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 = 37.98 V/m; Power Drift = -0.44 dB  
Peak SAR (extrapolated) = 2.12 W/kg  
SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.877 W/kg (SAR corrected for target medium)

**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) = 1.42 W/kg



**Assessment at the Body with other audio accessories**

Assessment per “KDB 643646 D01 Body SAR Test Consideration for Audio Accessories without Built-in Antenna; Sec 1, A. when overall < 4.0 W/kg, SAR tested for that audio accessory is not necessary.” This was applicable to all remaining accessories.

**Assessments at the Face  
Table 20**

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 10/6/2014 9:16:52 AM

Robot#: DASY5-FL-3 | Run#: HvH-Face-141006-02  
 Model#: PMUD3351A  
 Phantom#: OVAL1016  
 Tissue Temp: 21.3 (C)  
 Serial#: 004  
 Antenna: RAN4041A  
 Test Freq: 154.5475 (MHz)  
 Battery: RLN6308B (60012000001)  
 Carry Acc: @ front  
 Audio Acc: N/A  
 Start Power: 5.00 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used:  $f = 155$  MHz;  $\sigma = 0.74$  S/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: ES3DV3 - SN3291, Frequency: 154.548 MHz, ConvF(7.68, 7.68, 7.68); Calibrated: 7/21/2014  
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

**Below 2 GHz-Rev.2/Face Scan/1-Area Scan (41x191x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

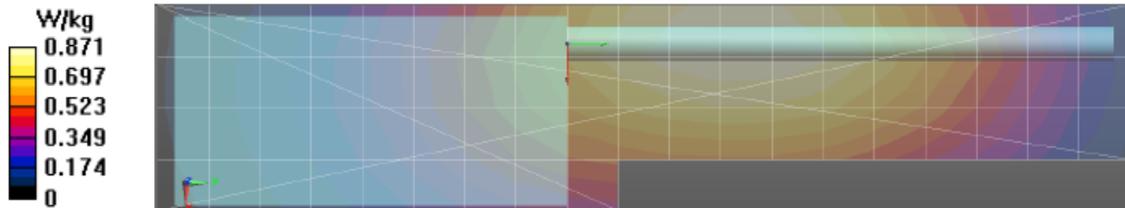
Reference Value = 35.16 V/m; Power Drift = -0.28 dB  
 Fast SAR: SAR(1 g) = 0.822 W/kg; SAR(10 g) = 0.633 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 0.881 W/kg

**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 = 35.16 V/m; Power Drift = -0.39 dB  
 Peak SAR (extrapolated) = 1.10 W/kg  
 SAR(1 g) = 0.798 W/kg; SAR(10 g) = 0.605 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 0.869 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) = 0.859 W/kg



**Appendix F**  
**Shortened Scan of Highest SAR configuration**

## Shortened Scan Table 21

**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 10/6/2014 2:21:37 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-141006-08  
 Model#: PMUD3351A  
 Phantom#: OVAL1090  
 Tissue Temp: 21.0 (C)  
 Serial#: 003  
 Antenna: RAN4041A  
 Test Freq: 154.5475 (MHz)  
 Battery: RLN6308B (60012000001)  
 Carry Acc: RLN6307A (4280383X62)  
 Audio Acc: HKLN4604A  
 Start Power: 4.98 (W)

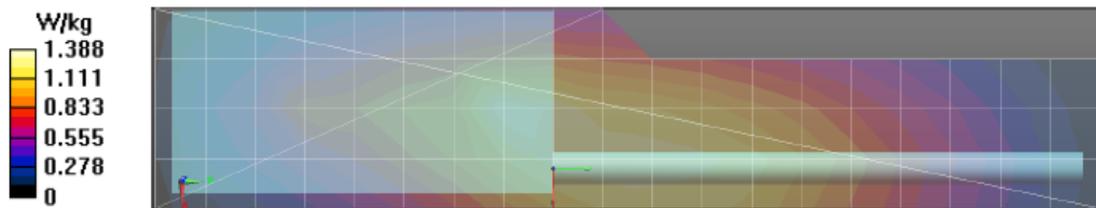
Comments: Shortened scan.

Duty Cycle: 1:1, Medium parameters used:  $f = 155 \text{ MHz}$ ;  $\sigma = 0.8 \text{ S/m}$ ;  $\epsilon_r = 59.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Probe: ES3DV3 - SN3291, , Frequency: 154.548 MHz, ConvF(7.28, 7.28, 7.28); Calibrated: 7/21/2014  
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (41x19x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Reference Value = 37.51 V/m; Power Drift = -0.28 dB  
**Fast SAR: SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.921 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.42 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 = 46.18 V/m; Power Drift = -0.20 dB  
 Peak SAR (extrapolated) = 2.45 W/kg  
**SAR(1 g) = 1.4 W/kg; SAR(10 g) = 0.986 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (measured) = 1.67 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) = 1.62 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)	21	10	0.74	0.52
Full scan (area & zoom)	17	20	0.68	0.49

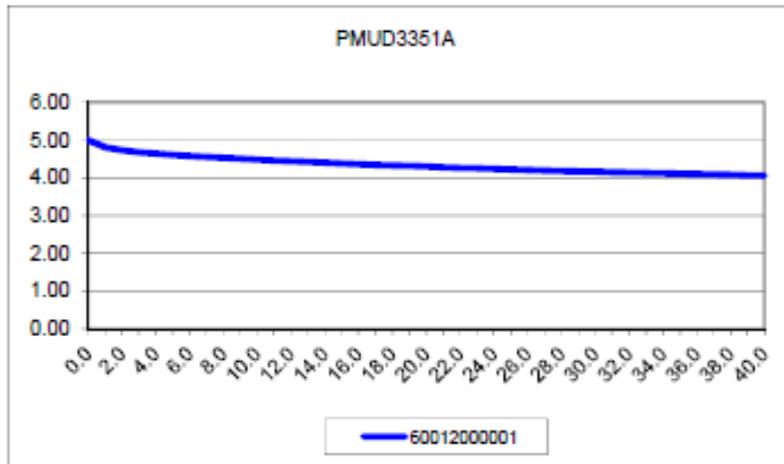
## Appendix G DUT Power slump

Model # PMUD3351A  
Serial # 001

<b>Battery</b>	60012000001	<b>Transmit Mode</b>	CW
<b>Frequency</b>	154.5475	<b>Audio Accessory</b>	HKLN4604A
<b>Date</b>	10/6/2014		

<b>TX TIME</b> (minutes)	<b>Measured Power</b> Watts
-----------------------------	--------------------------------

TX TIME (minutes)	Measured Power (Watts)
0.0	5.00
1.0	4.81
2.0	4.73
3.0	4.68
4.0	4.64
5.0	4.61
6.0	4.58
7.0	4.55
8.0	4.53
9.0	4.51
10.0	4.48
11.0	4.46
12.0	4.44
13.0	4.42
14.0	4.40
15.0	4.38
16.0	4.36
17.0	4.34
18.0	4.33
19.0	4.32
20.0	4.30
21.0	4.28
22.0	4.26
23.0	4.25
24.0	4.24
25.0	4.22
26.0	4.21
27.0	4.19
28.0	4.18
29.0	4.17
30.0	4.16
31.0	4.15
32.0	4.14
33.0	4.13
34.0	4.12
35.0	4.11
36.0	4.10
37.0	4.09
38.0	4.08
39.0	4.07
40.0	4.06



## **Appendix H DUT Test Position Photos**

**Photos available in Exhibit 7B**

**Appendix I**  
**DUT, Body worn and audio accessories Photos**

Photos available in Exhibit 7B