



CERTIFICATE 2518.05

## DECLARATION OF COMPLIANCE SAR ASSESSMENT PCII Report Part 2 of 2

**Motorola Solutions Inc.**  
**EME Test Laboratory**

Motorola Solutions Malaysia Sdn Bhd  
Plot 2A, Medan Bayan Lepas,

Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.

**Date of Report:** 1/20/2022  
**Report Revision:** B

**Responsible Engineer:** Ch'ng Jian Sheng (EME Engineer)  
**Report Author:** Ch'ng Jian Sheng (EME Engineer)  
**Date/s Tested:** 11/23/2021 – 12/02/2021, 12/08/2021-12/14/2021, 12/20/2021-12/21/2021  
**Manufacturer:** Motorola Solutions Inc.  
**DUT Description:** Handheld Portable – APX 8000H ST U/V/7\_800 M3.5 BLK  
APX 8000H XE U/V/7\_800 M1.5 GRN GRIVORY  
**Test TX mode(s):** CW (PTT), Bluetooth, and WLAN 802.11b/g/n  
**Max. Power output:** Refer to Table 4  
**Nominal Power:** Refer to Table 4  
**Tx Frequency Bands:** LMR 136-174 MHz, 380-520 MHz, 762-806 MHz, 806-870 MHz; Bluetooth (BT/BT LE) 2402-2480 MHz; WLAN 2400-2483.5 MHz  
**Signaling type:** FM (LMR), FHSS (Bluetooth), 802.11b/g/n (WLAN)  
**Model(s) Tested:** H91TGD9PW9AN (Tanapa# PNUW1036C / KNUW1036C / ENUW1036C)  
H91TGD9PW4AN (Tanapa# PNUW1046C / KNUW1046C / ENUW1046C)  
**Model(s) Certified:** Refer to Table 1  
**Serial Number(s):** 673TXV0169, 579TXV0112  
**Classification:** Occupational/Controlled  
**Applicant Name:** Motorola Solutions Inc.  
**Applicant Address:** 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322  
**FCC ID:** AZ489FT7111; 150.8-173.4 MHz, 406.125-512 MHz, 769-775 MHz, 799-824 MHz, 851-869 MHz, 2412-2462 MHz  
**IC:** 109U-89FT7111; This report contains results that are immaterial for ISSED equipment approval, which are clearly identified.  
**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.

**Saw Sun Hock (Approved Signatory)**  
**Approval Date:** 1/20/2022

## **Appendix D**

### **System Verification Check Scans**

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/9/2021 9:45:10 AM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-SYSP-150B-211209-07#  
 Dipole Model#: CLA150  
 Phantom#: ELI4 1103  
 Tissue Temp: 22.0 (C)  
 Serial#: 4010  
 Test Freq: 150.0000 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.17 dB  
 Adjusted SAR (1W): 3.98 mW/g (1g)

## Comments:

Communication System Band: CLA150, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.77$  S/m;  $\epsilon_r = 59.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 150 MHz, ConvF(13.77, 13.77, 13.77) @ 150 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**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 = 80.66 V/m; Power Drift = 0.01 dB

**Fast SAR: SAR(1 g) = 4.41 W/kg; SAR(10 g) = 3.13 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 5.11 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 = 80.66 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 6.27 W/kg

**SAR(1 g) = 3.98 W/kg; SAR(10 g) = 2.61 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 15.7 mm

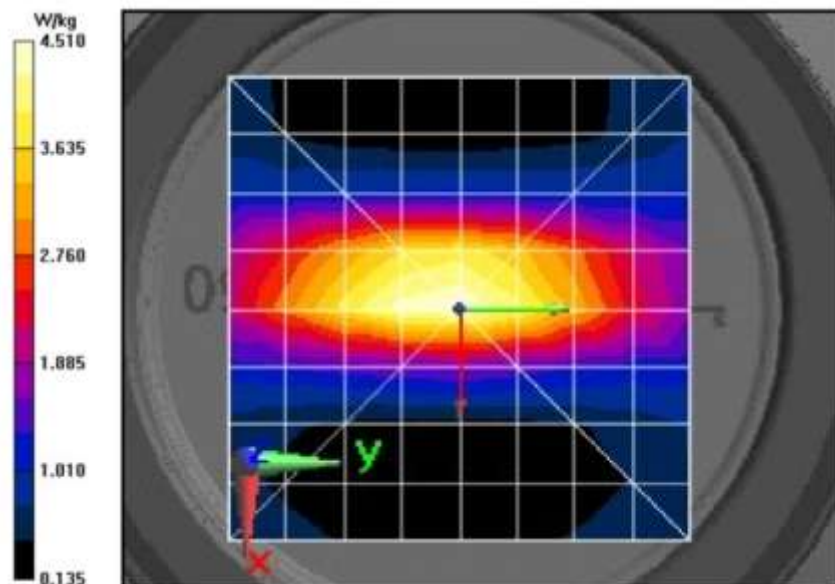
Ratio of SAR at M2 to SAR at M1 = 63.7%

Maximum value of SAR (measured) = 5.05 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) = 5.04 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/24/2021 9:21:01 AM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-SYSP-150H-211124-08  
 Dipole Model# CLA150  
 Phantom#: ELI5 1147  
 Tissue Temp: 23.4 (C)  
 Serial#: 4005  
 Test Freq: 150.0000(MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.17 dB  
 Adjusted SAR (1W): 3.70 mW/g (1g)

## Comments:

Communication System Band: CLA150, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.77$  S/m;  $\epsilon_r = 49.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 150 MHz, ConvF(14.08, 14.08, 14.08) @ 150 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (81x81x1):**

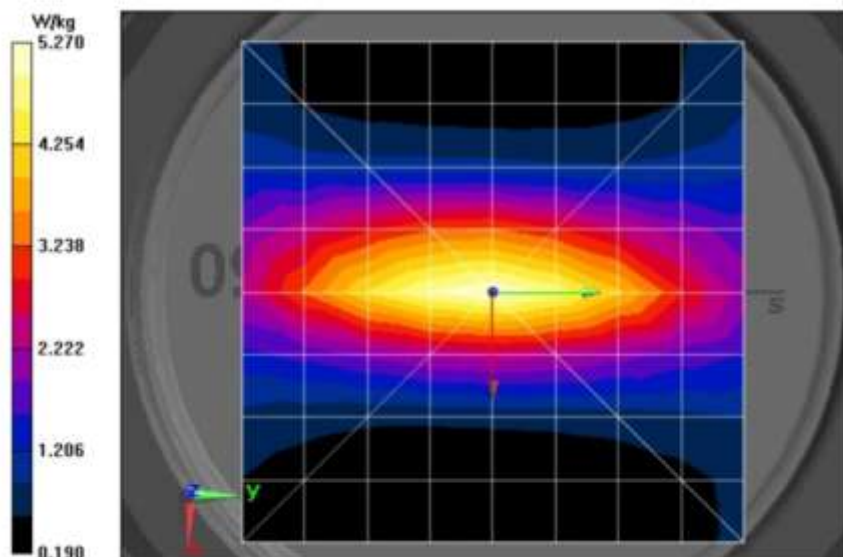
Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
 Reference Value = 83.28 V/m; Power Drift = 0.03 dB  
**Fast SAR: SAR(1 g) = 4.34 W/kg; SAR(10 g) = 3.09 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 5.39 W/kg

**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 = 83.28 V/m; Power Drift = 0.03 dB  
 Peak SAR (extrapolated) = 6.57 W/kg  
**SAR(1 g) = 3.7 W/kg; SAR(10 g) = 2.42 W/kg** (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below = 16.5 mm  
 Ratio of SAR at M2 to SAR at M1 = 58.8%  
 Maximum value of SAR (measured) = 5.37 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) = 5.36 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/21/2021 2:30:24 PM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-SYSP-150H-211221-10  
 Dipole Model#: CLA150  
 Phantom#: EL15 1147  
 Tissue Temp: 22.4 (C)  
 Serial#: 4010  
 Test Freq: 150.0000 (MHz)  
 Start Power: 1000 (mW)  
 Rotation (1D): 0.160 dB  
 Adjusted SAR (1W): 3.70 mW/g (1g)

**Comments:**

Communication System Band: CLA150, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 150$  MHz;  $\sigma = 0.77$  S/m;  $\epsilon_r = 49.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 150 MHz, ConvF(14.08, 14.08, 14.08) @ 150 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

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

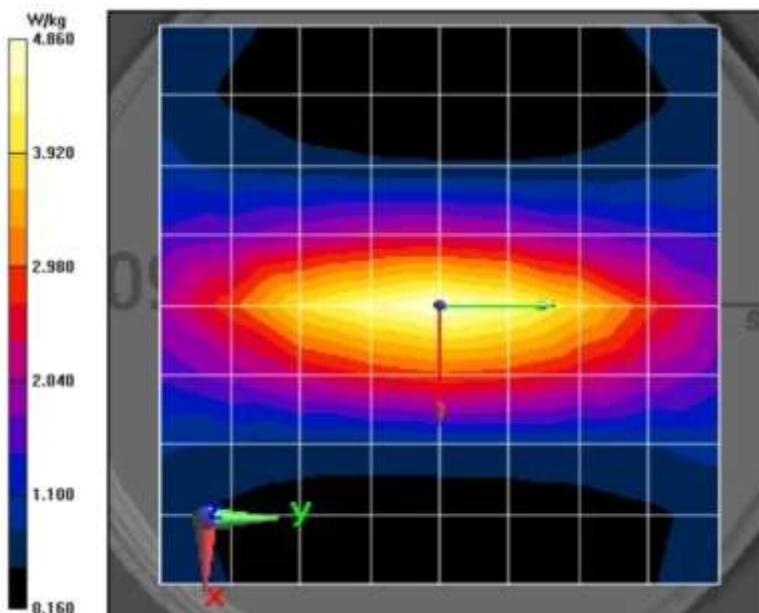
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 80.23 V/m; Power Drift = -0.10 dB  
**Fast SAR: SAR(1 g) = 4.12 W/kg; SAR(10 g) = 2.95 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 4.90 W/kg

**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 = 80.23 V/m; Power Drift = -0.10 dB  
 Peak SAR (extrapolated) = 6.07 W/kg  
**SAR(1 g) = 3.7 W/kg; SAR(10 g) = 2.42 W/kg** (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below = 18.3 mm  
 Ratio of SAR at M2 to SAR at M1 = 63.4%  
 Maximum value of SAR (measured) = 4.88 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) = 4.90 W/kg





**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 11/30/2021 5:54:18 PM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-SYSP-450B-211130-13  
 Dipole Model#: D450V3  
 Phantom#: ELI4 1022  
 Tissue Temp: 20.4 (C)  
 Serial#: 1077  
 Test Freq: 450 (MHz)  
 Start Power: 250(mW)  
 Rotation (1D): 0.130 dB  
 Adjusted SAR (1W): 4.72 mW/g (1g)

**Comments:**

Communication System Band: Dipole 450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.92$  S/m;  $\epsilon_r = 55.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(12.07, 12.07, 12.07) @ 450 MHz  
 Electronics: DAF3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):**

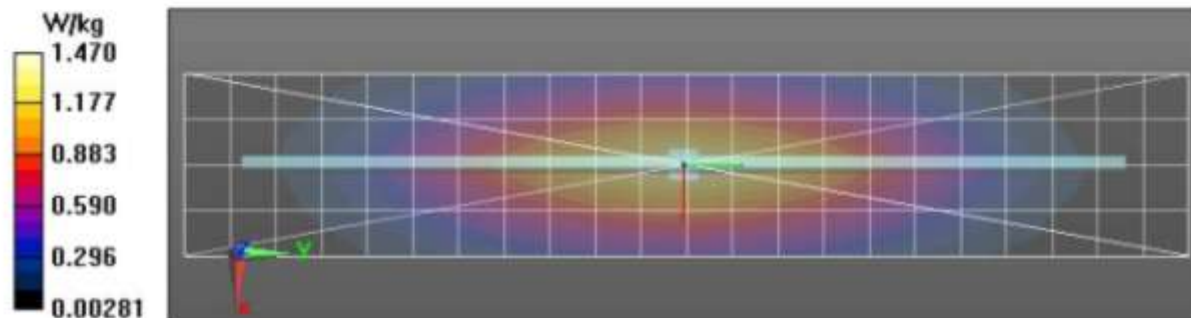
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 40.30 V/m; Power Drift = -0.02 dB  
**Fast SAR: SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.849 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.47 W/kg

**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 = 40.30 V/m; Power Drift = -0.02 dB  
 Peak SAR (extrapolated) = 1.76 W/kg  
**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.797 W/kg** (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
 Ratio of SAR at M2 to SAR at M1 = 66.6%  
 Maximum value of SAR (measured) = 1.48 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) = 1.48 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/26/2021 2:31:27 AM

Robot#: DASY5-PG-3 | Run#: BAD(DAN)-SYSP-450B-211126-03  
 Dipole Model#: D450V3  
 Phantom#: ELI4 1022  
 Tissue Temp: 21.3(C)  
 Serial#: 1077  
 Test Freq: 450.0000(MHz)  
 Start Power: 250(mW)  
 Rotation (1D): 0.16dB  
 Adjusted SAR (1W): 4.84mW/g (1g)

**Comments:**

Communication System Band: Dipole 450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.93$  S/m;  $\epsilon_r = 55.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(12.07, 12.07, 12.07) @ 450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x221x1):**

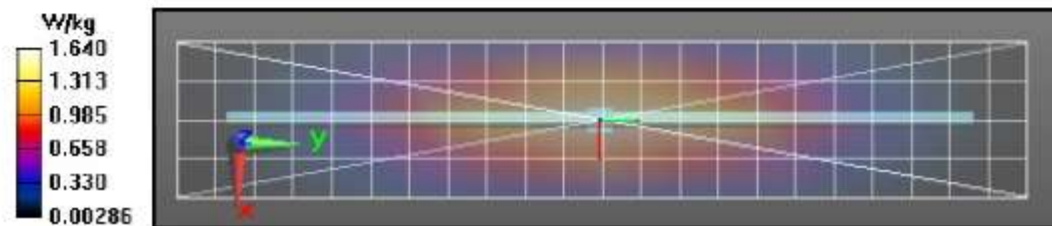
Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
 Reference Value = 42.71 V/m; Power Drift = -0.07 dB  
 Fast SAR: SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.900 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.64 W/kg

**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 = 42.71 V/m; Power Drift = -0.07 dB  
 Peak SAR (extrapolated) = 1.90 W/kg  
 SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.810 W/kg (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
 Ratio of SAR at M2 to SAR at M1 = 63.5%  
 Maximum value of SAR (measured) = 1.63 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) = 1.64 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/29/2021 12:21:54 PM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-SYSP-450B-211129-01  
 Dipole Model# D450V3  
 Phantom#: ELI4 1022  
 Tissue Temp: 22.0 (C)  
 Serial#: 1077  
 Test Freq: 450.0000(MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.140 dB  
 Adjusted SAR (1W): 4.80 mW/g (1g)

## Comments:

Communication System Band: Dipole 450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.93$  S/m;  $\epsilon_r = 54.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(12.07, 12.07, 12.07) @ 450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x221x1):**

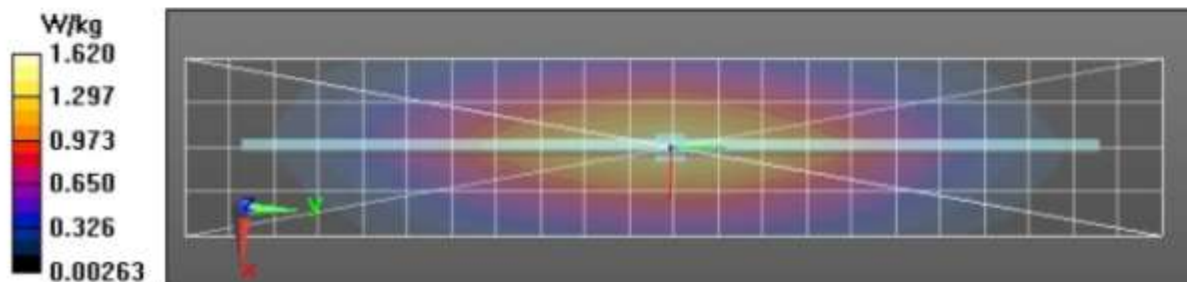
Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
 Reference Value = 42.43 V/m; Power Drift = -0.01 dB  
**Fast SAR: SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.888 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.62 W/kg

**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 = 42.43 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 1.89 W/kg  
**SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.811 W/kg** (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
 Ratio of SAR at M2 to SAR at M1 = 64%  
 Maximum value of SAR (measured) = 1.62 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) = 1.63 W/kg





**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/14/2021 1:37:34 PM

Robot#: DASY5-PG-3 | Run#: BAD(DAN)-SYSP-450B-211214-13  
 Dipole Model#: D450V3  
 Phantom#: ELI4 1040  
 Tissue Temp: 21.8 (C)  
 Serial#: 1077  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.14dB  
 Adjusted SAR (1W): 4.60mW/g (1g)

## Comments:

Communication System Band: Dipole 450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.97$  S/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(12.07, 12.07, 12.07) @ 450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 39.80 V/m; Power Drift = -0.03 dB

**Fast SAR: SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.832 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.50 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 = 39.80 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.80 W/kg

**SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.778 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

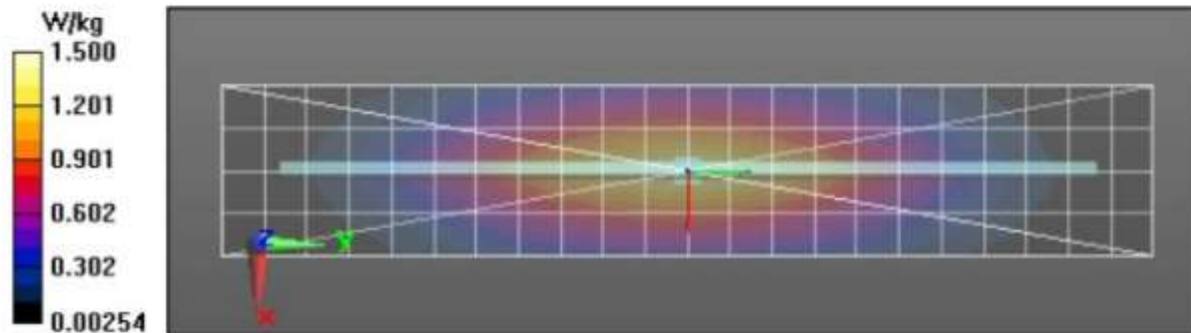
Ratio of SAR at M2 to SAR at M1 = 66.2%

Maximum value of SAR (measured) = 1.50 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) = 1.50 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/22/2021 11:49:39 PM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-SYSP-450H-211122-10  
 Dipole Model#: D450V3  
 Phantom#: EL14 1108  
 Tissue Temp: 22.3 (C)  
 Serial#: 1077  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.11 dB  
 Adjusted SAR (1W): 4.88 mW/g (1g)

**Comments:**

Communication System Band: Dipole 450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.9$  S/m;  $\epsilon_r = 43.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(11.86, 11.86, 11.86) @ 450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x221x1):**

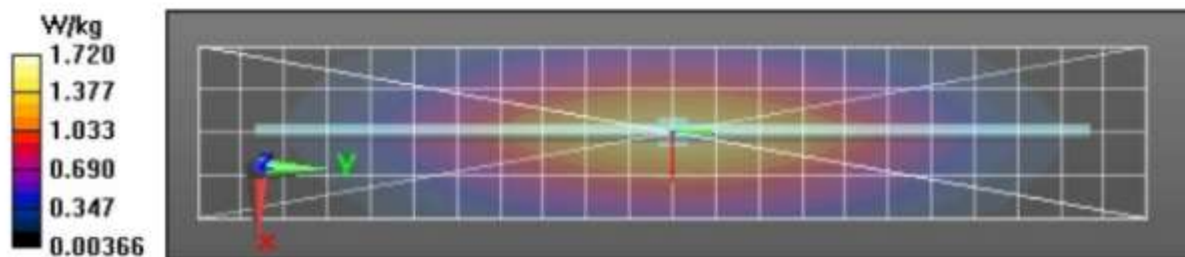
Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
 Reference Value = 44.95 V/m; Power Drift = -0.08 dB  
**Fast SAR: SAR(1 g) = 1.33 W/kg; SAR(10 g) = 0.918 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.72 W/kg

**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 = 44.95 V/m; Power Drift = -0.08 dB  
 Peak SAR (extrapolated) = 1.96 W/kg  
**SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.815 W/kg** (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
 Ratio of SAR at M2 to SAR at M1 = 63.8%  
 Maximum value of SAR (measured) = 1.70 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) = 1.72 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/25/2021 4:19:43 PM

Robot#: DASY5-xx-x | Run#: AR-SYSP-450H-211125-10  
 Dipole Model#: D450V3  
 Phantom#: ELI4 1108  
 Tissue Temp: 22.6 (C)  
 Serial#: 1077  
 Test Freq: 450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.14 dB  
 Adjusted SAR (1W): 4.48 mW/g (1g)

## Comments:

Communication System Band: Dipole 450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.84$  S/m;  $\epsilon_r = 41.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(11.86, 11.86, 11.86) @ 450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x221x1):**

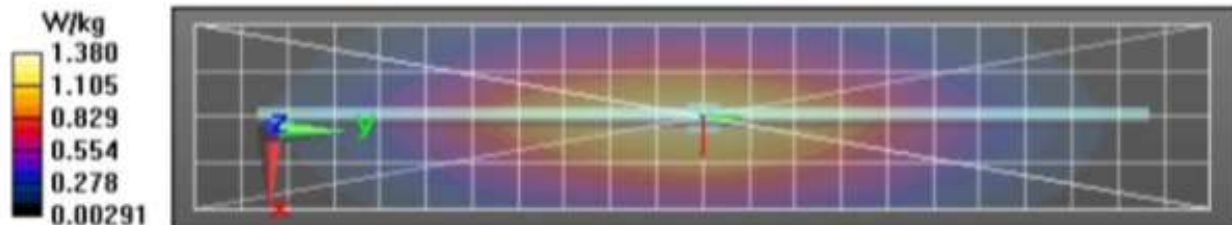
Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Reference Value = 41.09 V/m; Power Drift = 0.03 dB  
**Fast SAR: SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.809 W/kg** (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 1.40 W/kg

**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 = 41.09 V/m; Power Drift = 0.03 dB  
 Peak SAR (extrapolated) = 1.65 W/kg  
**SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.752 W/kg** (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
 Ratio of SAR at M2 to SAR at M1 = 66.5%  
 Maximum value of SAR (measured) = 1.39 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) = 1.39 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/23/2021 3:45:38 AM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-SYSP-835B-211123-04  
 Dipole Model#: D835V2  
 Phantom#: ELI4 1090  
 Tissue Temp: 21.5 (C)  
 Serial#: 4d029  
 Test Freq: 835.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.094 dB  
 Adjusted SAR (1W): 10.36 mW/g (1g)

**Comments:**

Communication System Band: Dipole 835, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 835$  MHz;  $\sigma = 1.01$  S/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 835 MHz, ConvF(10.3, 10.3, 10.3) @ 835 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x131x1):**

Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Reference Value = 61.99 V/m; Power Drift = -0.08 dB

**Fast SAR: SAR(1 g) = 2.63 W/kg; SAR(10 g) = 1.73 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.49 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 = 61.99 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.99 W/kg

**SAR(1 g) = 2.59 W/kg; SAR(10 g) = 1.71 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 16.5 mm

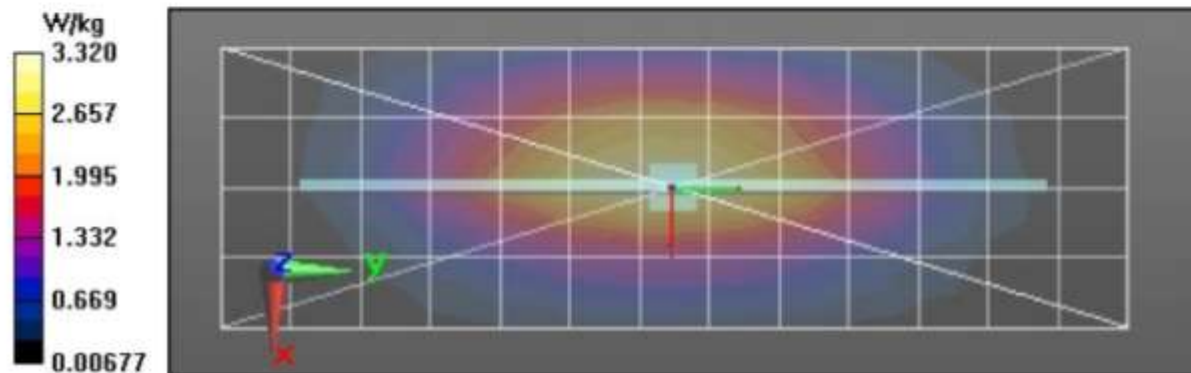
Ratio of SAR at M2 to SAR at M1 = 66.8%

Maximum value of SAR (measured) = 3.54 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) = 3.54 W/kg





**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/2/2021 6:45:19 AM

Robot#: DASY5-PG-3 | Run#: BAD(DAN)-SYSP-835B-211202-06  
 Dipole Model#: D835V2  
 Phantom#: ELI4 1090  
 Tissue Temp: 20.5 (C)  
 Serial#: 4D029  
 Test Freq: 835.0000(MHz)  
 Start Power: 250(mW)  
 Rotation (1D): 0.098 dB  
 Adjusted SAR (1W): 10.00 mW/g (1g)

**Comments:**

Communication System Band: Dipole 835, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 835$  MHz;  $\sigma = 1.01$  S/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 835 MHz, ConvF(10.3, 10.3, 10.3) @ 835 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x121x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 57.71 V/m; Power Drift = -0.00 dB

**Fast SAR: SAR(1 g) = 2.49 W/kg; SAR(10 g) = 1.65 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.17 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 = 57.71 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 3.80 W/kg

**SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.65 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 16.2 mm

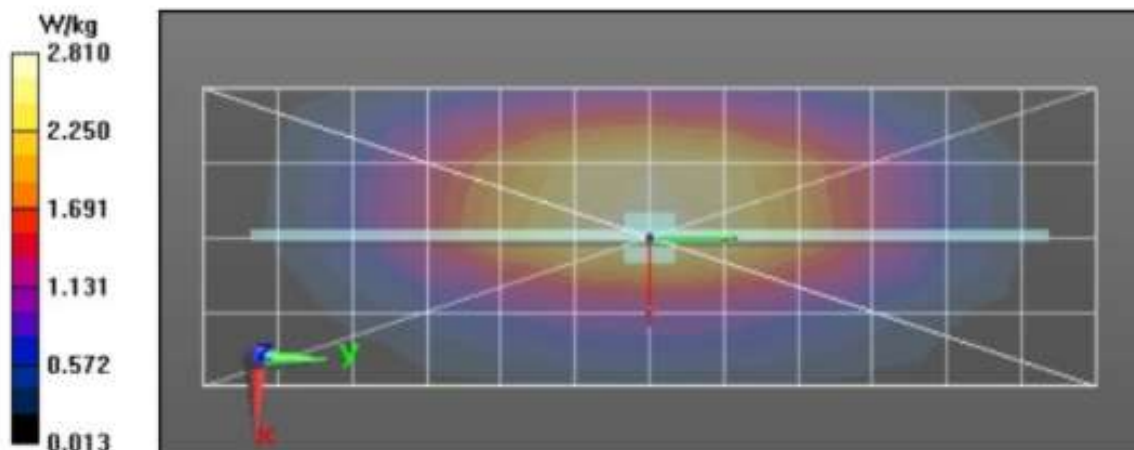
Ratio of SAR at M2 to SAR at M1 = 67.7%

Maximum value of SAR (measured) = 3.25 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) = 3.25 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/20/2021 4:05:55 PM

Robot#: DASY5-PG-3 | Run#: BL(IRA)-SYSP-835B-211220-04  
Dipole Model#: D835V2  
Phantom#: ELI4 1090  
Tissue Temp: 21.6 C)  
Serial#: 4D029  
Test Freq: 835.0000(MHz)  
Start Power: 250(mW)  
Rotation (1D): 0.069 dB  
Adjusted SAR (1W): 9.84 mW/g (1g)

**Comments:**

Communication System Band: Dipole 835, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 835$  MHz;  $\sigma = 1.02$  S/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 835 MHz, ConvF(10.3, 10.3, 10.3) @ 835 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x121x1):**

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 57.43 V/m; Power Drift = -0.03 dB

**Fast SAR: SAR(1 g) = 2.49 W/kg; SAR(10 g) = 1.64 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.20 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 = 57.43 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.77 W/kg

**SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.63 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 17.6 mm

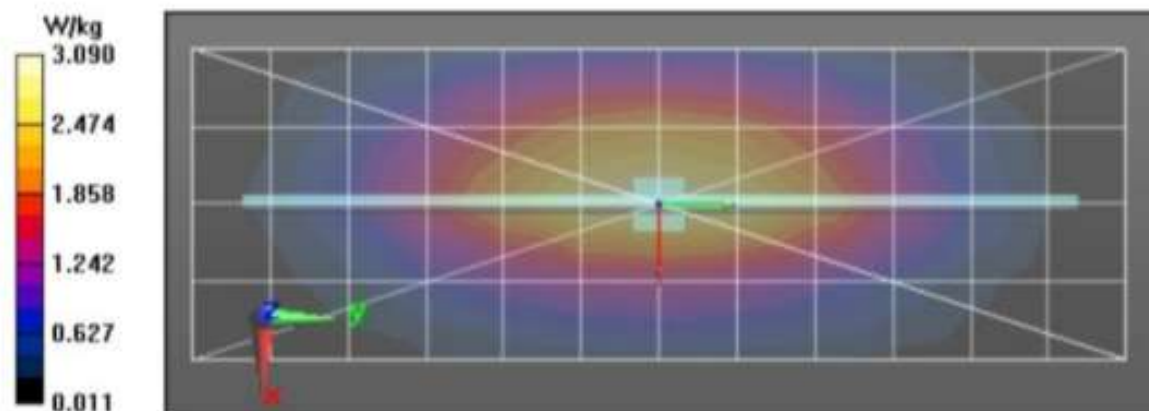
Ratio of SAR at M2 to SAR at M1 = 67.5%

Maximum value of SAR (measured) = 3.22 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) = 3.22 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/23/2021 7:34:11 PM

Robot#: DASY5-PG-3 | Run#: AR-SYSP-835H-211123-19  
Dipole Model# D835V2  
Phantom#: ELI4 1011  
Tissue Temp: 22.6 (C)  
Serial#: 4d029  
Test Freq: 835.0000 (MHz)  
Start Power: 250 (mW)  
Rotation (1D): 0.081 dB  
Adjusted SAR (1W): 9.16 mW/g (1g)

## Comments:

Communication System Band: Dipole 835, Communication System UID: 0, Duty Cycle: 1:1,  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.93$  S/m;  $\epsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 835 MHz, ConvF(10.5, 10.5, 10.5) @ 835 MHz  
Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/System Performance Check/Dipole Area Scan 2 (41x121x1):**

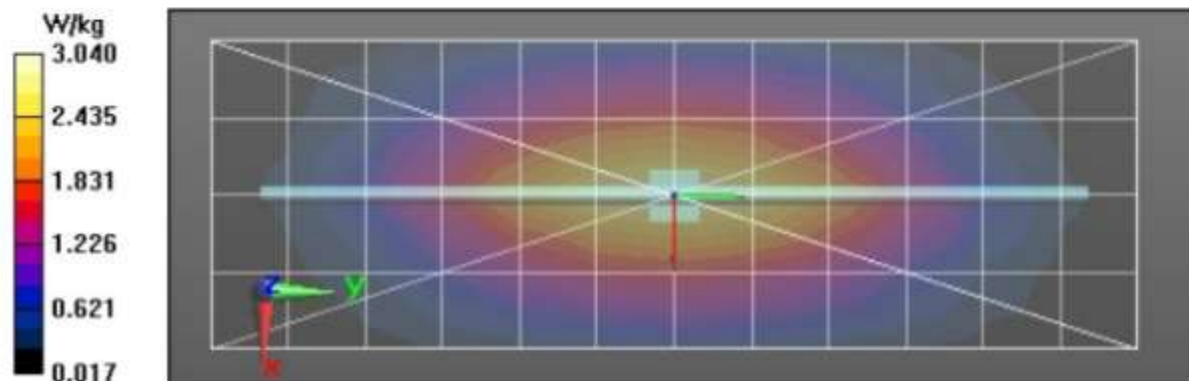
Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
Reference Value = 59.97 V/m; Power Drift = 0.02 dB  
**Fast SAR: SAR(1 g) = 2.3 W/kg; SAR(10 g) = 1.51 W/kg** (SAR corrected for target medium)  
Maximum value of SAR (interpolated) = 3.04 W/kg

**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 = 59.97 V/m; Power Drift = 0.02 dB  
Peak SAR (extrapolated) = 3.42 W/kg  
**SAR(1 g) = 2.29 W/kg; SAR(10 g) = 1.5 W/kg** (SAR corrected for target medium)  
Smallest distance from peaks to all points 3 dB below = 20.2 mm  
Ratio of SAR at M2 to SAR at M1 = 67.6%  
Maximum value of SAR (measured) = 3.08 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) = 3.07 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 12/8/2021 11:48:17 AM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-SYSP-835H-211208-08  
Dipole Model# D835V2  
Phantom#: ELI4 1011  
Tissue Temp: 19.7 (C)  
Serial#: 4d029  
Test Freq: 835.0000 (MHz)  
Start Power: 250 (mW)  
Rotation (1D): 0.086 dB  
Adjusted SAR (1W): 9.84 mW/g (1g)

**Comments:**

Communication System Band: Dipole 835, Communication System UID: 0, Duty Cycle: 1:1,  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 42.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 835 MHz, ConvF(10.5, 10.5, 10.5) @ 835 MHz  
Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (41x131x1):**

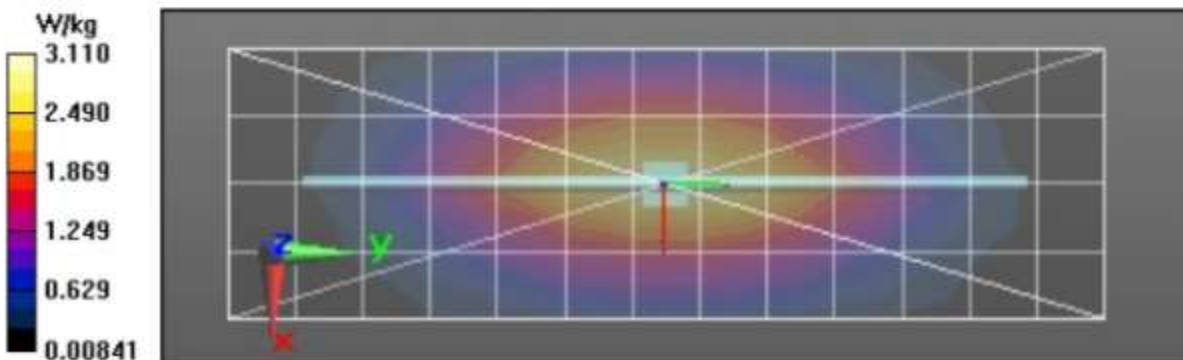
Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm  
Reference Value = 59.59 V/m; Power Drift = -0.05 dB  
**Fast SAR: SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.64 W/kg** (SAR corrected for target medium)  
Maximum value of SAR (interpolated) = 3.17 W/kg

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

Measurement grid:  $dx=7.5$ mm,  $dy=7.5$ mm,  $dz=5$ mm  
Reference Value = 59.59 V/m; Power Drift = -0.05 dB  
Peak SAR (extrapolated) = 3.72 W/kg  
**SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.6 W/kg** (SAR corrected for target medium)  
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
Ratio of SAR at M2 to SAR at M1 = 66.8%  
Maximum value of SAR (measured) = 3.18 W/kg

**Below 2 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement**

grid:  $dx=20$ mm,  $dy=20$ mm,  $dz=10$ mm  
Maximum value of SAR (measured) = 3.19 W/kg





**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/10/2021 11:34:44 PM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-SYSP-2450B-211210-14  
 Dipole Model#: D2450V2  
 Phantom#: ELI4 1028  
 Tissue Temp: 19.0(C)  
 Serial#: 782  
 Test Freq: 2450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.120 dB  
 Adjusted SAR (1W): 54.00 mW/g (1g)

**Comments:**

Communication System Band: Dipole 2450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.04$  S/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 2450 MHz, ConvF(7.82, 7.82, 7.82) @ 2450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x101x1): Interpolated**

grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 105.5 V/m; Power Drift = -0.19 dB

**Fast SAR: SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.63 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 22.4 W/kg

**2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement**

grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 105.5 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 29.4 W/kg

**SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.12 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 9.2 mm

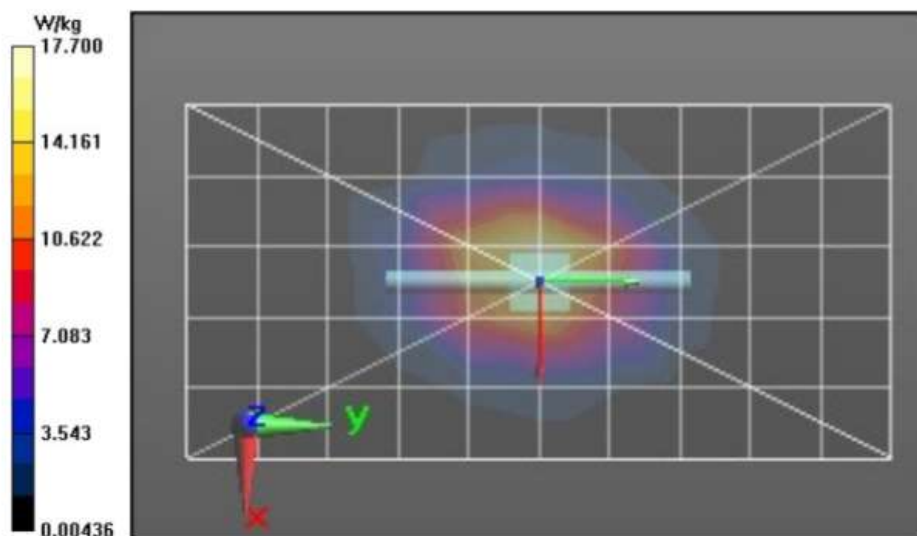
Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 21.3 W/kg

**2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:**

dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 21.5 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/11/2021 11:18:52 AM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-SYSP-2450H-211211-09  
 Dipole Model#: D2450V2  
 Phantom#: ELI4 1022  
 Tissue Temp: 19.1 (C)  
 Serial#: 782  
 Test Freq: 2450.0000 (MHz)  
 Start Power: 250 (mW)  
 Rotation (1D): 0.12 dB  
 Adjusted SAR (1W): 51.20 mW/g (1g)

**Comments:**

Communication System Band: Dipole 2450, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.89$  S/m;  $\epsilon_r = 35.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 2450 MHz, ConvF(7.83, 7.83, 7.83) @ 2450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**2-3 GHz-Rev.2/System Performance Check/Dipole Area Scan 2 (51x101x1): Interpolated**

grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 106.5 V/m; Power Drift = -0.07 dB

**Fast SAR: SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.34 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 21.2 W/kg

**2-3 GHz-Rev.2/System Performance Check/0-Degree Cube (7x7x7)/Cube 0: Measurement**

grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 106.5 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 28.3 W/kg

**SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.91 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 9.8 mm

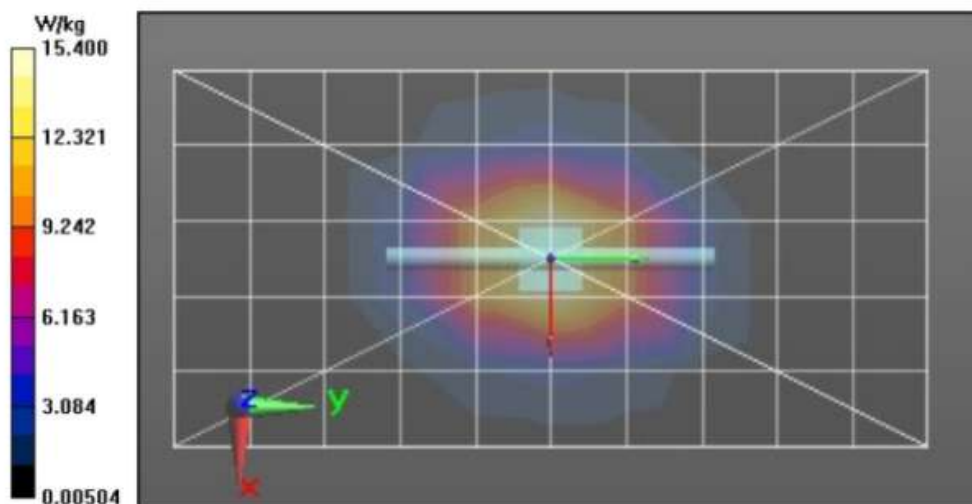
Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 20.7 W/kg

**2-3 GHz-Rev.2/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid:**

dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 20.7 W/kg



## **Appendix E DUT Scans**

## Assessments for VHF band - Table 19

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/9/2021 1:52:59 PM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-AB-211209-10#  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1103  
 Tissue Temp: 21.3 (C)  
 Serial#: 579TXV0112  
 Antenna: KT000026A01  
 Test Freq: 150.8000 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: HLN6875A  
 Audio Acc: BT(None)  
 Start Power: 6.45 (W)

## Comments:

Communication System Band: APX8000 HXE VHF, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 151 \text{ MHz}$ ;  $\sigma = 0.77 \text{ S/m}$ ;  $\epsilon_r = 59.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 150.8 MHz, ConvF(13.77, 13.77, 13.77) @ 150.8 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (81x281x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Reference Value = 45.22 V/m; Power Drift = -0.62 dB

**Fast SAR: SAR(1 g) = 2.79 W/kg; SAR(10 g) = 1.74 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.76 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 = 45.22 V/m; Power Drift = -0.70 dB

Peak SAR (extrapolated) = 7.85 W/kg

**SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.13 W/kg** (SAR corrected for target medium)

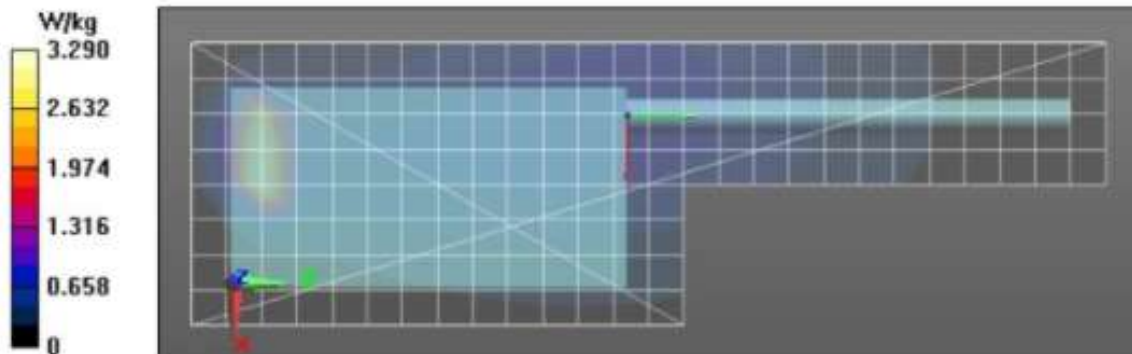
Smallest distance from peaks to all points 3 dB below = 7.5 mm

Ratio of SAR at M2 to SAR at M1 = 32.2%

Maximum value of SAR (measured) = 4.00 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) = 4.95 W/kg





**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/24/2021 12:08:15 PM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-FACE-211124-11  
 Model#: H91TGD9PW9AN(PNUW1036C)  
 Phantom#: ELI5 1147  
 Tissue Temp: 22.7 (C)  
 Serial#: 673TXV0169  
 Antenna: KT000026A01  
 Test Freq: 150.8000 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: None, Radio @ Back  
 Audio Acc: None  
 Start Power: 6.60 (W)

**Comments:**

Communication System Band: APX8000 VHF, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 151$  MHz;  $\sigma = 0.77$  S/m;  $\epsilon_r = 49.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 150.8 MHz, ConvF(14.08, 14.08, 14.08) @ 150.8 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/Face Scan/1-Area Scan (81x261x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 42.46 V/m; Power Drift = -0.29 dB

**Fast SAR: SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.889 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.36 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 = 42.46 V/m; Power Drift = -0.27 dB

Peak SAR (extrapolated) = 1.55 W/kg

**SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.824 W/kg** (SAR corrected for target medium)

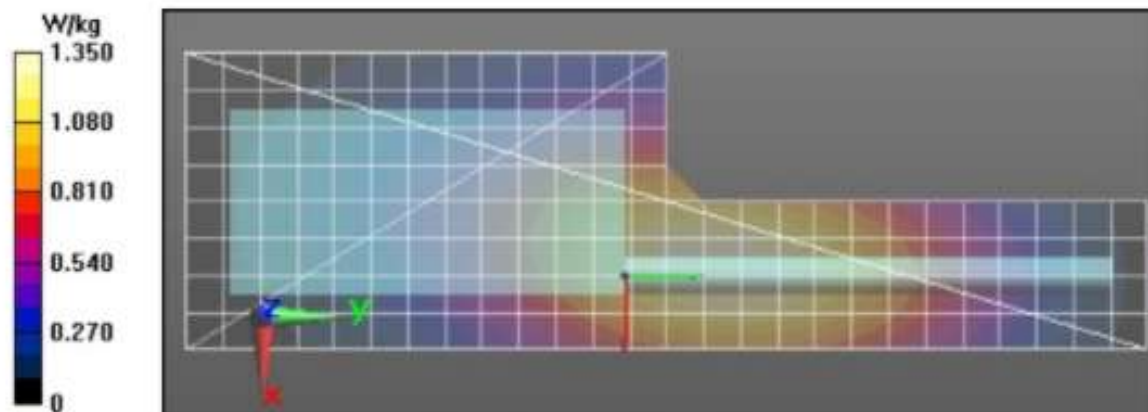
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 69.9%

Maximum value of SAR (measured) = 1.34 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) = 1.35 W/kg



## Assessment for UHF R1 band – Table 21

**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/1/2021 9:55:26 AM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-AB-211201-10#  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1022  
 Tissue Temp: 20.5 (C)  
 Serial#: 579TXV0112  
 Antenna: KT000026A01  
 Test Freq: 470.0000(MHz)  
 Battery: PMNN4547A  
 Carry Acc: PMLN7955A w/ RLN6486A w/ RLN6488A  
 Audio Acc: BT(None)  
 Start Power: 5.53 (W)

## Comments:

Communication System Band: APX8000 UHF, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 470$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 55.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 470 MHz, ConvF(12.07, 12.07, 12.07) @ 470 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 97.46 V/m; Power Drift = -0.49 dB

**Fast SAR: SAR(1 g) = 12 W/kg; SAR(10 g) = 8.75 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 14.3 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 = 97.46 V/m; Power Drift = -0.53 dB

Peak SAR (extrapolated) = 15.4 W/kg

**SAR(1 g) = 11.8 W/kg; SAR(10 g) = 8.89 W/kg** (SAR corrected for target medium)

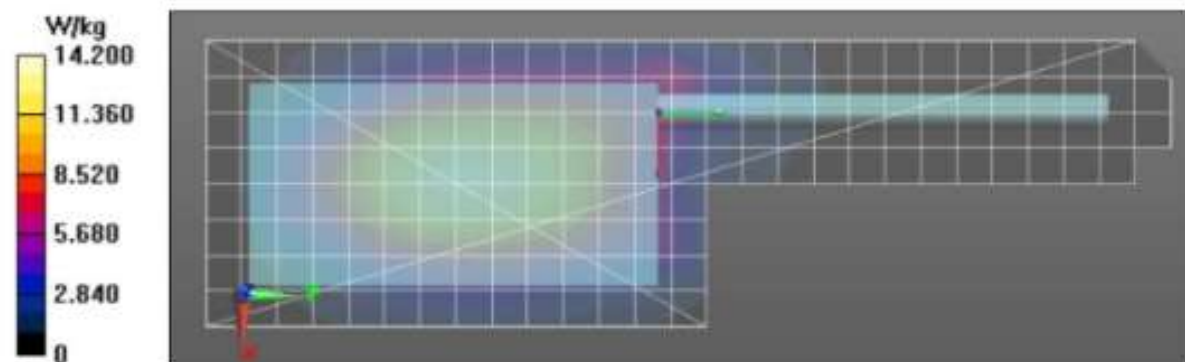
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 76.2%

Maximum value of SAR (measured) = 13.8 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) = 13.7 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/23/2021 2:33:26 AM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-FACE-211123-03#  
 Model#: H91TGD9PW9AN(PNUW1036C)  
 Phantom#: ELI4 1108  
 Tissue Temp: 21.9 (C)  
 Serial#: 673TXV0169  
 Antenna: PMAE4065A  
 Test Freq: 406.1250 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: None; Radio @ front  
 Audio Acc: None  
 Start Power: 5.70 (W)

## Comments:

Communication System Band: APX8000 UHF, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 406$  MHz;  $\sigma = 0.86$  S/m;  $\epsilon_r = 44.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 406.125 MHz, ConvF(11.86, 11.86, 11.86) @ 406.125 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/Face Scan/1-Area Scan (81x231x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 93.17 V/m; Power Drift = -0.34 dB

**Fast SAR: SAR(1 g) = 6.39 W/kg; SAR(10 g) = 4.71 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.73 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 = 93.17 V/m; Power Drift = -0.37 dB

Peak SAR (extrapolated) = 8.39 W/kg

**SAR(1 g) = 6.18 W/kg; SAR(10 g) = 4.67 W/kg** (SAR corrected for target medium)

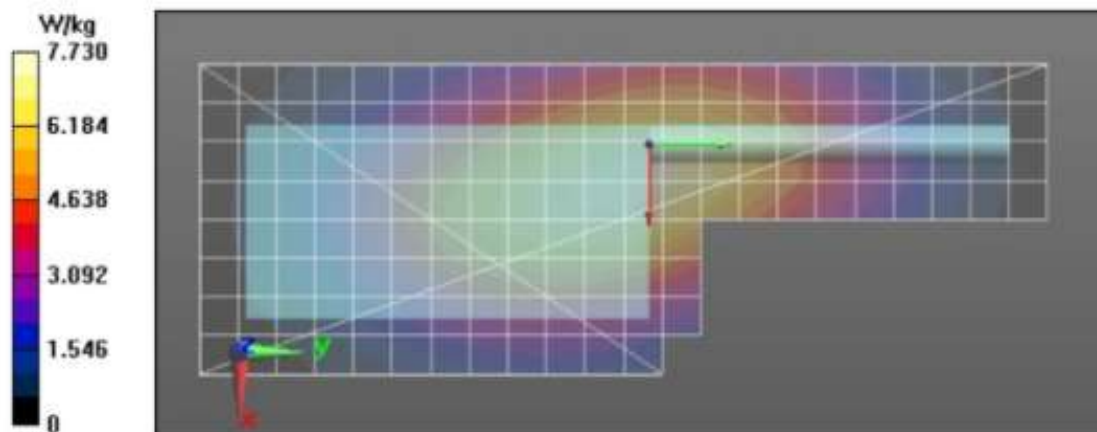
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 72.9%

Maximum value of SAR (measured) = 7.56 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) = 7.42 W/kg



## Assessment for UHF R2 band – Table 21

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 11/27/2021 12:24:59 AM

Robot#: DASY5-PG-3 | Run#: MA(DAN)-AB-211127-01#  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1022  
 Tissue Temp: 23.0(C)  
 Serial#: 579TXV0112  
 Antenna: PMAT4001A  
 Test Freq: 465.5000(MHz)  
 Battery: PMNN4547A  
 Carry Acc: PMLN7955A w/ RLN6486A w/ RLN6488A  
 Audio Acc: BT(None)  
 Start Power: 5.52 (W)

## Comments:

Communication System Band: APX8000 HXE UHF, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 466$  MHz,  $\sigma = 0.94$  S/m,  $\epsilon_r = 55.7$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 465.5 MHz, ConvF(12.07, 12.07, 12.07) @ 465.5 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 98.76 V/m; Power Drift = -0.72 dB

**Fast SAR: SAR(1 g) = 11.5 W/kg; SAR(10 g) = 8.39 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 14.2 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 = 98.76 V/m; Power Drift = -0.77 dB

Peak SAR (extrapolated) = 15.2 W/kg

**SAR(1 g) = 10.9 W/kg; SAR(10 g) = 8.03 W/kg** (SAR corrected for target medium)

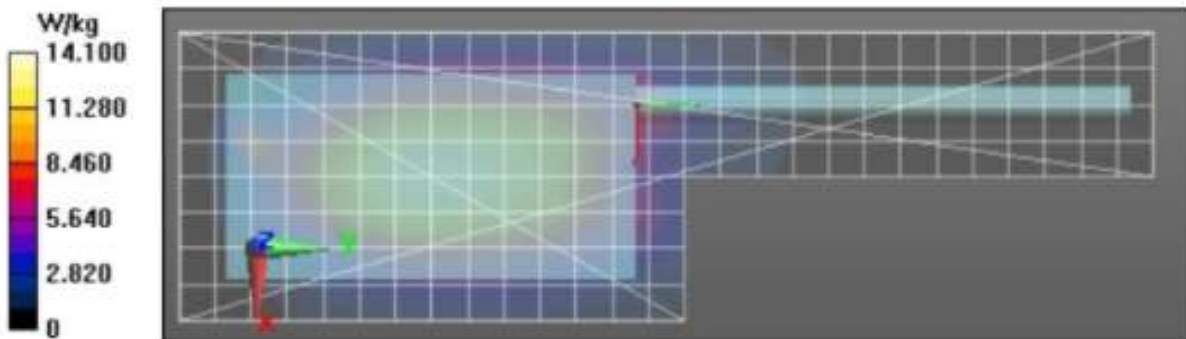
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 71.5%

Maximum value of SAR (measured) = 13.6 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) = 13.5 W/kg





**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/25/2021 5:21:05 PM

Robot#: DASY5-PG-3 | Run#: AR-FACE-211125-11  
 Model#: H91TGD9PW9AN(PNUW1036C)  
 Phantom#: ELI4 1108  
 Tissue Temp: 22.4 (C)  
 Serial#: 673TXV0169  
 Antenna: KT000026A01  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8930A  
 Carry Acc: None, Radio @ Front  
 Audio Acc: None  
 Start Power: 5.54 (W)

## Comments:

Communication System Band: APX8000 UHF, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.84$  S/m;  $\epsilon_r = 41.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(11.86, 11.86, 11.86) @ 450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Face Scan/1-Area Scan (81x261x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 93.16 V/m; Power Drift = -0.26 dB

**Fast SAR: SAR(1 g) = 6.76 W/kg; SAR(10 g) = 4.97 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.85 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 = 93.16 V/m; Power Drift = -0.27 dB

Peak SAR (extrapolated) = 8.56 W/kg

**SAR(1 g) = 6.73 W/kg; SAR(10 g) = 5.12 W/kg** (SAR corrected for target medium)

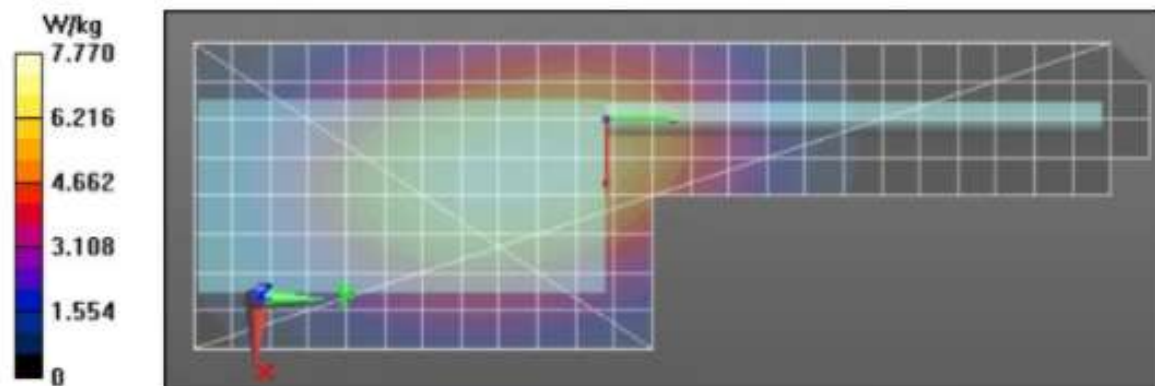
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 76.8%

Maximum value of SAR (measured) = 7.69 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) = 7.66 W/kg



## Assessments for 7/800MHz Band - Table 23

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/20/2021 5:12:09 PM

Robot#: DASY5-PG-3 | Run# BL(IRA)-AB-211220-05  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1090  
 Tissue Temp: 21.6 (C)  
 Serial#: 579TXV0112  
 Antenna: NAR6595A  
 Test Freq: 860.5000(MHz)  
 Battery: NNTN8930A  
 Carry Acc: PMLN7955A w/ RLN6486A w/ RLN6488A  
 Audio Acc: NMN6274BL  
 Start Power: 3.56 (W)

## Comments:

Communication System Band: APX8000 7/900, Communication System UID: 0, Duty Cycle: 1:1.

Medium parameters used:  $f = 861$  MHz;  $\sigma = 1.05$  S/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 860.5 MHz, ConvF(10.1, 10.1, 10.1) @ 860.5 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (81x201x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 81.53 V/m; Power Drift = -0.51 dB

**Fast SAR: SAR(1 g) = 9.5 W/kg; SAR(10 g) = 5.75 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 12.5 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 = 81.53 V/m; Power Drift = -0.52 dB

Peak SAR (extrapolated) = 15.2 W/kg

**SAR(1 g) = 9.37 W/kg; SAR(10 g) = 5.64 W/kg** (SAR corrected for target medium)

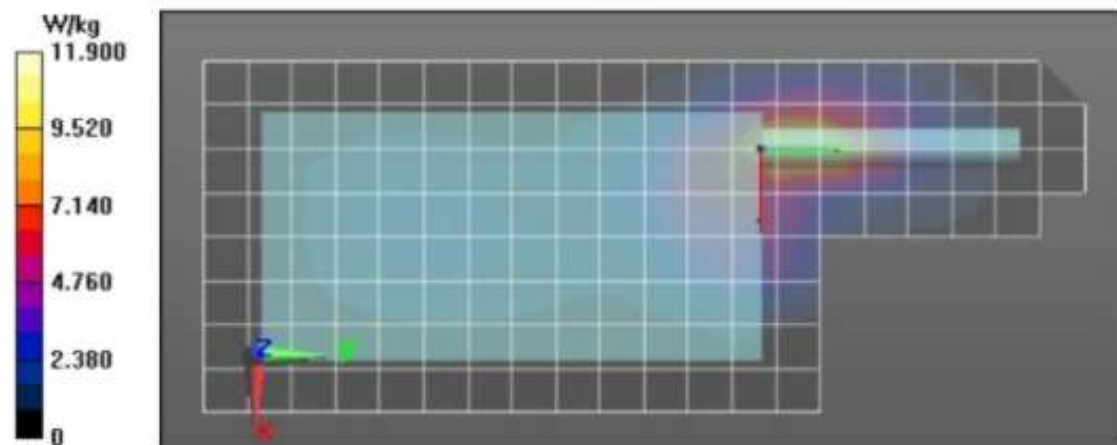
Smallest distance from peaks to all points 3 dB below = 12 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 12.6 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



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/8/2021 3:13:06 PM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-FACE-211208-10  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1011  
 Tissue Temp: 20.2 (C)  
 Serial#: 579TXV0112  
 Antenna: PMAF4040A  
 Test Freq: 808.5000 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: None, Radio @Back  
 Audio Acc: None  
 Start Power: 3.60 (W)

**Comments:**

Communication System Band: APX8000 HX 7/800, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 809$  MHz;  $\sigma = 0.91$  S/m;  $\epsilon_r = 42.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 808.5 MHz, ConvF(10.83, 10.83, 10.83) @ 808.5 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Face Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 83.93 V/m; Power Drift = -0.26 dB

Fast SAR: SAR(1 g) = 4.95 W/kg; SAR(10 g) = 3.47 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 6.01 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 = 83.93 V/m; Power Drift = -0.27 dB

Peak SAR (extrapolated) = 6.44 W/kg

SAR(1 g) = 4.91 W/kg; SAR(10 g) = 3.59 W/kg (SAR corrected for target medium)

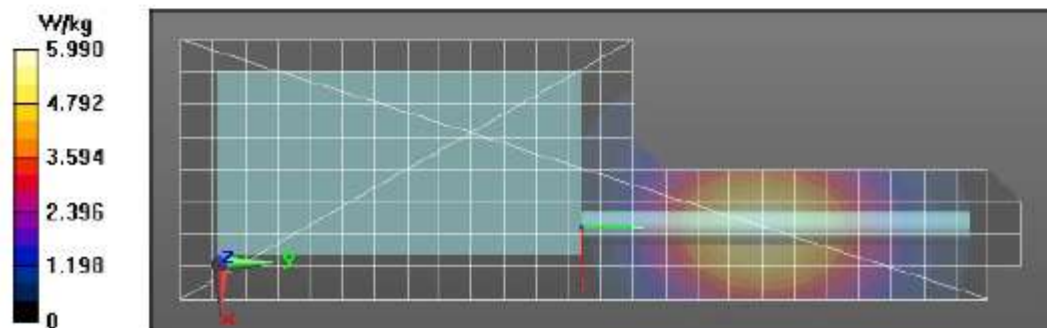
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 75.2%

Maximum value of SAR (measured) = 5.78 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) = 5.79 W/kg



## Assessments for ISED, Canada (VHF) - Table 24

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/9/2021 2:33:57 PM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-AB-211209-11#  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1103  
 Tissue Temp: 21.3 (C)  
 Serial#: 579TXV0112  
 Antenna: KT000026A01  
 Test Freq: 139.7000 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: HLN6875A  
 Audio Acc: BT(None)  
 Start Power: 6.44 (W)

## Comments:

Communication System Band: APX8000 HXE VHF, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 140$  MHz;  $\sigma = 0.76$  S/m;  $\epsilon_r = 59.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 139.7 MHz, ConvF(13.77, 13.77, 13.77) @ 139.7 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (81x281x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 74.65 V/m; Power Drift = -0.47 dB

**Fast SAR: SAR(1 g) = 7.84 W/kg; SAR(10 g) = 5.39 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.61 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 = 74.65 V/m; Power Drift = -0.53 dB

Peak SAR (extrapolated) = 25.9 W/kg

**SAR(1 g) = 8.59 W/kg; SAR(10 g) = 3.87 W/kg** (SAR corrected for target medium)

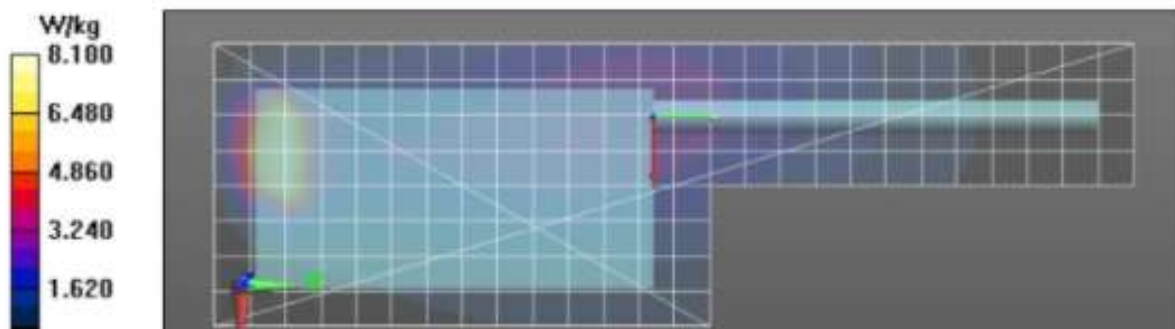
Smallest distance from peaks to all points 3 dB below = 7.5 mm

Ratio of SAR at M2 to SAR at M1 = 34.1%

Maximum value of SAR (measured) = 14.9 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) = 16.7 W/kg





**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 11/24/2021 2:06:23 PM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-FACE-211124-12  
 Model#: H91TGD9PW9AN(PNUW1036C)  
 Phantom#: ELI5 1147  
 Tissue Temp: 22.7 (C)  
 Serial#: 673TXV0169  
 Antenna: PMAT4001A  
 Test Freq: 143.4000 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: None, Radio @ Back  
 Audio Acc: None  
 Start Power: 6.60 (W)

## Comments:

Communication System Band: APX8000 VHF, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 143$  MHz;  $\sigma = 0.76$  S/m;  $\epsilon_r = 50.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 143.4 MHz, ConvF(14.08, 14.08, 14.08) @ 143.4 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/Face Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 66.61 V/m; Power Drift = -0.38 dB

**Fast SAR: SAR(1 g) = 2.83 W/kg; SAR(10 g) = 2.19 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 3.34 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 = 66.61 V/m; Power Drift = -0.49 dB

Peak SAR (extrapolated) = 3.63 W/kg

**SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.94 W/kg** (SAR corrected for target medium)

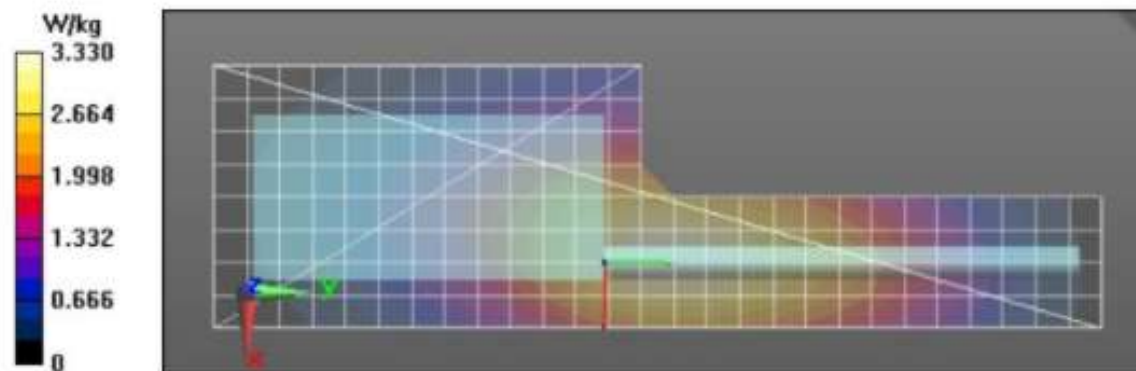
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 70.3%

Maximum value of SAR (measured) = 3.16 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) = 3.12 W/kg



## Assessments for ISED, Canada (UHF) - Table 24

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 11/27/2021 12:24:59 AM

Robot#: DASY5-PG-3 | Run#: MA(DAN)-AB-211127-01#  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1022  
 Tissue Temp: 23.0(C)  
 Serial#: 579TXV0112  
 Antenna: PMAT4001A  
 Test Freq: 465.5000(MHz)  
 Battery: PMNN4547A  
 Carry Acc: PMLN7955A w/ RLN6486A w/ RLN6488A  
 Audio Acc: BT(None)  
 Start Power: 5.52 (W)

## Comments:

Communication System Band: APX8000 HXE UHF, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 466$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 55.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 465.5 MHz, ConvF(12.07, 12.07, 12.07) @ 465.5 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 98.76 V/m; Power Drift = -0.72 dB

**Fast SAR: SAR(1 g) = 11.5 W/kg; SAR(10 g) = 8.39 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 14.2 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 = 98.76 V/m; Power Drift = -0.77 dB

Peak SAR (extrapolated) = 15.2 W/kg

**SAR(1 g) = 10.9 W/kg; SAR(10 g) = 8.03 W/kg** (SAR corrected for target medium)

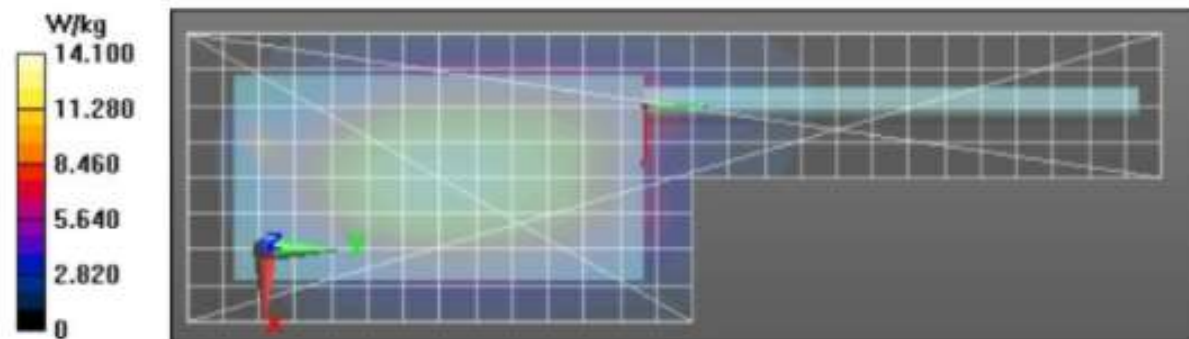
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 71.5%

Maximum value of SAR (measured) = 13.6 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) = 13.5 W/kg



**Motorola Solutions, Inc. EME Laboratory**  
Date/Time: 12/2/2021 4:46:12 AM

Robot#: DASY5-PG-3 | Run#: BAD(DAN)-FACE-211202-04  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1108  
 Tissue Temp: 20.8 (C)  
 Serial#: 579TXV0112  
 Antenna: KT000026A01  
 Test Freq: 450.0000 (MHz)  
 Battery: NNTN8930A  
 Carry Acc: None, Radio @ Front  
 Audio Acc: None  
 Start Power: 5.52 (W)

Comments:

Communication System Band: APX8000 HXE UHF2, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 450$  MHz;  $\sigma = 0.91$  S/m;  $\epsilon_r = 43.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 450 MHz, ConvF(11.86, 11.86, 11.86) @ 450 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Face Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 89.62 V/m; Power Drift = -0.44 dB

**Fast SAR: SAR(1 g) = 6.4 W/kg; SAR(10 g) = 4.72 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 7.57 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 = 89.62 V/m; Power Drift = -0.50 dB

Peak SAR (extrapolated) = 7.99 W/kg

**SAR(1 g) = 6.26 W/kg; SAR(10 g) = 4.82 W/kg** (SAR corrected for target medium)

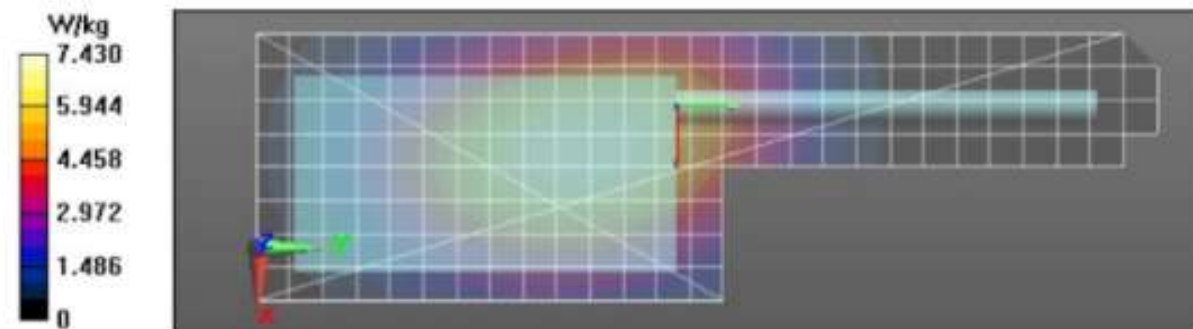
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 77.7%

Maximum value of SAR (measured) = 7.24 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) = 7.21 W/kg



## Assessments for ISED, Canada (7/800 MHz) - Table 24

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/20/2021 5:12:09 PM

Robot#: DASY5-PG-3 | Run# BL(IRA)-AB-211220-05  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1090  
 Tissue Temp: 21.6 (C)  
 Serial#: 579TXV0112  
 Antenna: NAR6595A  
 Test Freq: 860.5000(MHz)  
 Battery: NNTN8930A  
 Carry Acc: PMLN7955A w/ RLN6486A w/ RLN6488A  
 Audio Acc: NMN6274BL  
 Start Power: 3.56 (W)

## Comments:

Communication System Band: APX8000 7/900, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 861$  MHz;  $\sigma = 1.05$  S/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 860.5 MHz, ConvF(10.1, 10.1, 10.1) @ 860.5 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (81x201x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 81.53 V/m; Power Drift = -0.51 dB

**Fast SAR: SAR(1 g) = 9.5 W/kg; SAR(10 g) = 5.75 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 12.5 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 = 81.53 V/m; Power Drift = -0.52 dB

Peak SAR (extrapolated) = 15.2 W/kg

**SAR(1 g) = 9.37 W/kg; SAR(10 g) = 5.64 W/kg** (SAR corrected for target medium)

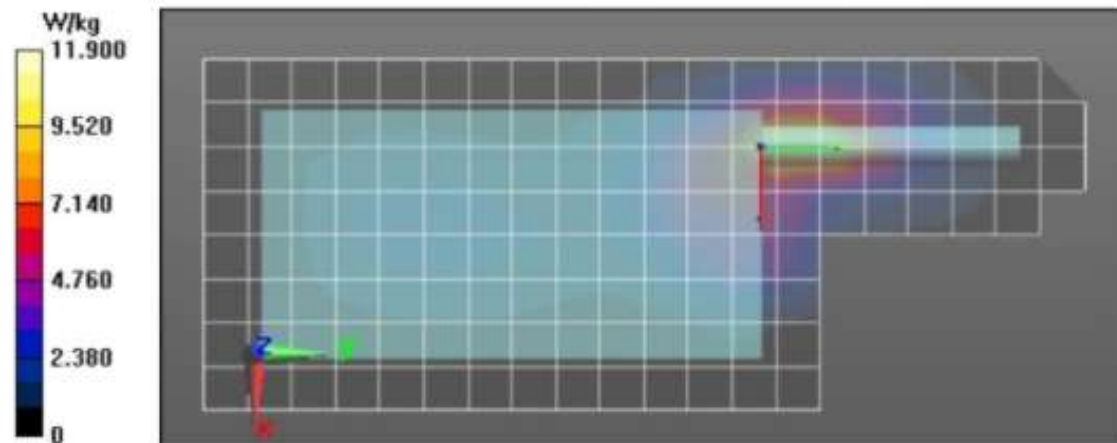
Smallest distance from peaks to all points 3 dB below = 12 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 12.6 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





**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/8/2021 3:13:06 PM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-FACE-211208-10  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1011  
 Tissue Temp: 20.2 (C)  
 Serial#: 579TXV0112  
 Antenna: PMAF4040A  
 Test Freq: 808.5000 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: None, Radio @Back  
 Audio Acc: None  
 Start Power: 3.60 (W)

**Comments:**

Communication System Band: APX8000 HX 7/800, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 809$  MHz;  $\sigma = 0.91$  S/m;  $\epsilon_r = 42.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 808.5 MHz, ConvF(10.83, 10.83, 10.83) @ 808.5 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Face Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

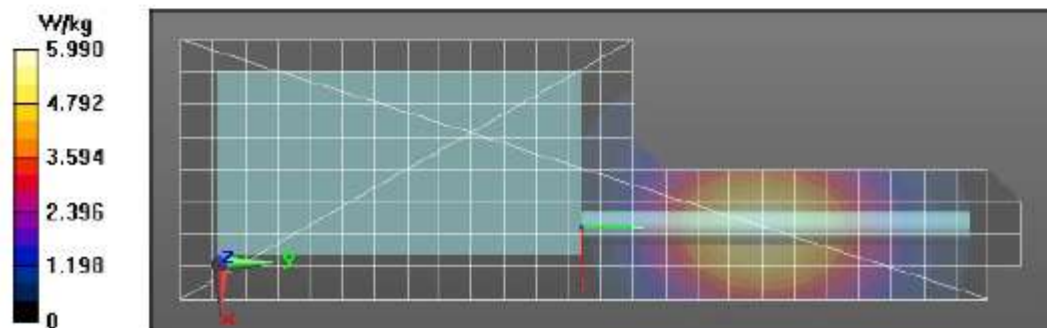
Reference Value = 83.93 V/m; Power Drift = -0.26 dB  
 Fast SAR: SAR(1 g) = 4.95 W/kg; SAR(10 g) = 3.47 W/kg (SAR corrected for target medium)  
 Maximum value of SAR (interpolated) = 6.01 W/kg

**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 = 83.93 V/m; Power Drift = -0.27 dB  
 Peak SAR (extrapolated) = 6.44 W/kg  
 SAR(1 g) = 4.91 W/kg; SAR(10 g) = 3.59 W/kg (SAR corrected for target medium)  
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid  
 Ratio of SAR at M2 to SAR at M1 = 75.2%  
 Maximum value of SAR (measured) = 5.78 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) = 5.79 W/kg



## Assessments for ISED, Canada (Each Antenna) - Table 24

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 11/30/2021 11:32:51 PM

Robot#: DASY5-PG-3 | Run#: MA(DAN)-AB-211130-16  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1022  
 Tissue Temp: 20.6(C)  
 Serial#: 579TXV0112  
 Antenna: KT000026A01  
 Test Freq: 465.5000(MHz)  
 Battery: PMNN4547A  
 Carry Acc: PMLN7955A w/ RLN6486A w/ RLN6488A  
 Audio Acc: BT(None)  
 Start Power: 5.62(W)

## Comments:

Communication System Band: APX8000 UHF, Communication System UID: 0, Duty Cycle: 1:1,

Medium parameters used:  $f = 466$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 465.5 MHz, ConvF(12.07, 12.07, 12.07) @ 465.5 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**Below 2 GHz-Rev.2/Ab Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 99.47 V/m; Power Drift = -0.50 dB

**Fast SAR: SAR(1 g) = 13 W/kg; SAR(10 g) = 9.46 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 15.4 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 = 99.47 V/m; Power Drift = -0.53 dB

Peak SAR (extrapolated) = 16.5 W/kg

**SAR(1 g) = 12.7 W/kg; SAR(10 g) = 9.55 W/kg** (SAR corrected for target medium)

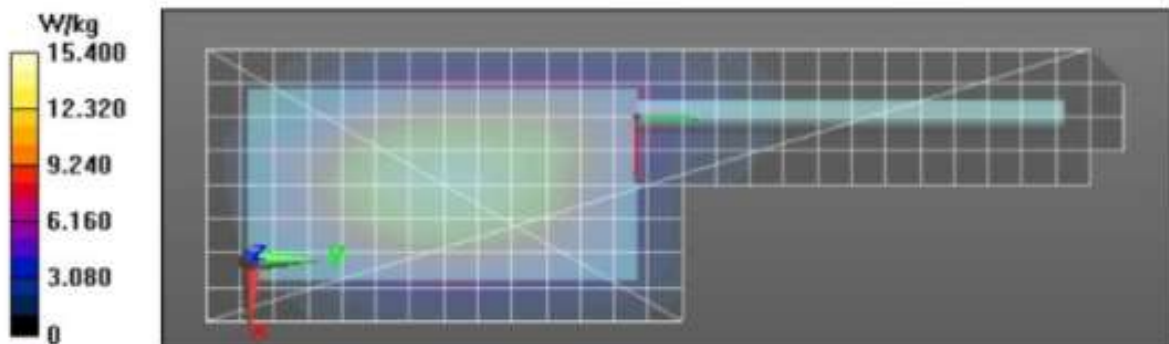
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 76.4%

Maximum value of SAR (measured) = 14.8 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) = 14.8 W/kg



## Assessments for FCC and ISED, Canada WLAN - Table 26

## Motorola Solutions, Inc. EME Laboratory

Date/Time: 12/11/2021 3:10:34 AM

Robot#: DASY5-PG-3 | Run#: AR(IRA)-AB-211211-03#  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1028  
 Tissue Temp: 19.0 (C)  
 Serial#: 579TXV0112  
 Antenna: 84009370002 WiFi Ant  
 Test Freq: 2412.0000 (MHz)  
 Battery: PMNN4547A  
 Carry Acc: HLN6875A  
 Audio Acc: None  
 Start Power: 0.0228 (W)

## Comments:

Communication System Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz), Communication System UID: 10415 - AAA, Duty Cycle: 1:1.4243,

Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.99$  S/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 2412 MHz, ConvF(7.82, 7.82, 7.82) @ 2412 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**2-3 GHz-Rev.2/Ab Scan/1-Area Scan (101x261x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 2.609 V/m; Power Drift = -0.17 dB

**Fast SAR: SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.00818 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.0217 W/kg

**2-3 GHz-Rev.2/Ab Scan/3-Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm,

dz=5mm

Reference Value = 2.609 V/m; Power Drift = -0.31 dB

Peak SAR (extrapolated) = 0.0250 W/kg

**SAR(1 g) = 0.014 W/kg; SAR(10 g) = 0.00785 W/kg** (SAR corrected for target medium)

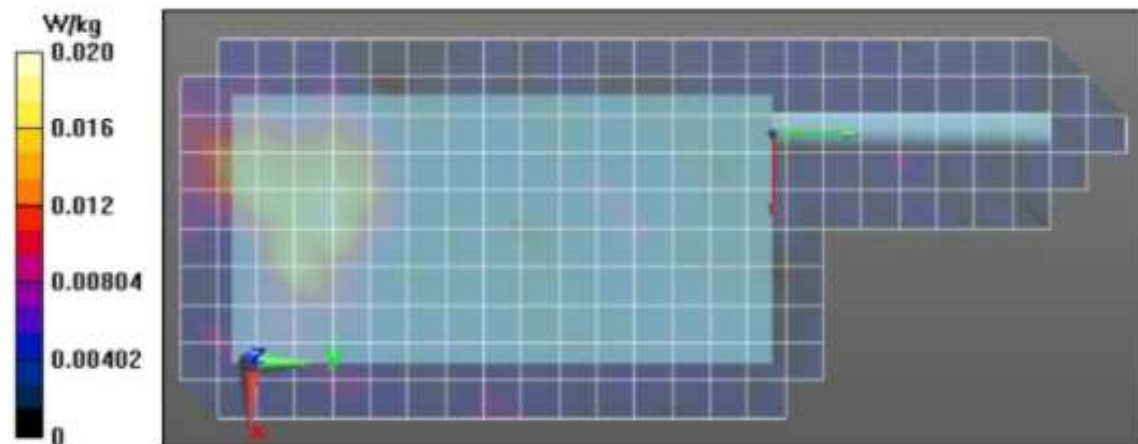
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 55.9%

Maximum value of SAR (measured) = 0.0188 W/kg

**2-3 GHz-Rev.2/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 0.0172 W/kg



**Motorola Solutions, Inc. EME Laboratory**

Date/Time: 12/11/2021 1:51:55 PM

Robot#: DASY5-PG-3 | Run#: MA(BAD)-FACE-211211-10  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1022  
 Tissue Temp: 19.2 (C)  
 Serial#: 579TXV0112  
 Antenna: 84009370002 WiFi Ant  
 Test Freq: 2412.0000 (MHz)  
 Battery: PMNN4485A  
 Carry Acc: 2.5cm @ Back  
 Audio Acc: None  
 Start Power: 0.0228 (W)

**Comments:**

Communication System Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz), Communication System UID: 10415 - AAA, Duty Cycle: 1:1.4243,

Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.85$  S/m;  $\epsilon_r = 35.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 2412 MHz, ConvF(7.83, 7.83, 7.83) @ 2412 MHz

Electronics: DAE3 Sn374, Calibrated: 4/8/2021

**2-3 GHz-Rev.2/Face Scan/1-Area Scan (101x261x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Reference Value = 8.528 V/m; Power Drift = -0.07 dB

**Fast SAR: SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.064 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 0.155 W/kg

**2-3 GHz-Rev.2/Face Scan/3-Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.528 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.196 W/kg

**SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.065 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 22.6 mm

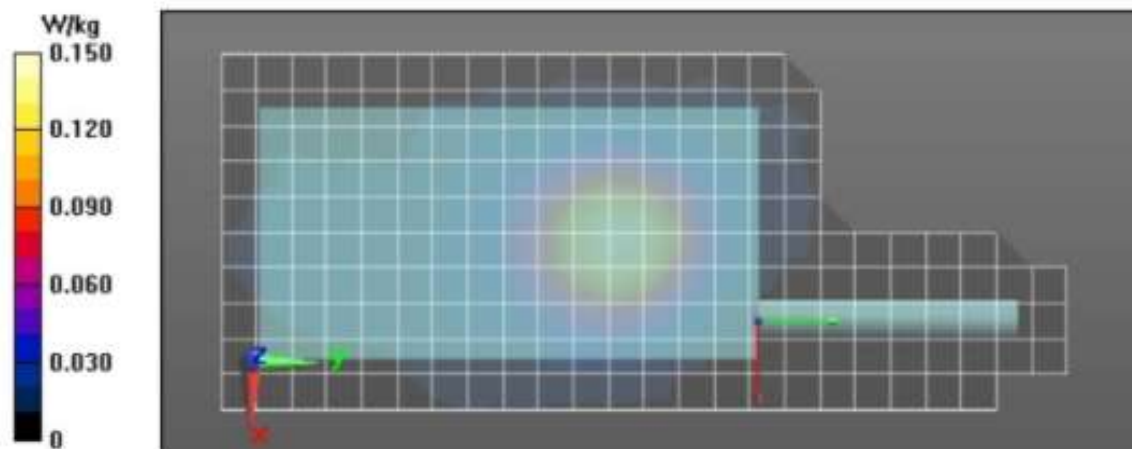
Ratio of SAR at M2 to SAR at M1 = 55.6%

Maximum value of SAR (measured) = 0.154 W/kg

**2-3 GHz-Rev.2/Face Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm

dx=10mm

Maximum value of SAR (measured) = 0.153 W/kg





## **APPENDIX F**

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

## Shortened Scan Table 27

### Motorola Solutions, Inc. EME Laboratory

Date/Time: 11/30/2021 2:24:20 AM

Robot#: DASY5-PG-3 | Run#: AM(DAN)-AB-211130-03#  
 Model#: H91TGD9PW4AN (PNUW1046C)  
 Phantom#: ELI4 1022  
 Tissue Temp: 21.4(C)  
 Serial#: 579TXV0112  
 Antenna: KT000026A01  
 Test Freq: 465.5000(MHz)  
 Battery: PMNN4547A  
 Carry Acc: PMLN7955A w/ RLN6486A w/ RLN6488A  
 Audio Acc: BT(None)  
 Start Power: 5.56(W)

#### Comments:

Communication System Band: APX8000 HXE UHF, Communication System UID: 0, Duty Cycle: 1:1,  
 Medium parameters used:  $f = 466$  MHz;  $\sigma = 0.95$  S/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Probe: EX3DV4 - SN7533, Calibrated: 4/19/2021, Frequency: 465.5 MHz, ConvF(12.07, 12.07, 12.07) @ 465.5 MHz  
 Electronics: DAE3 Sn374, Calibrated: 4/8/2021

#### **Below 2 GHz-Rev.3/Ab Scan/1-Area Scan (81x271x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 103.7 V/m; Power Drift = -0.54 dB

**Fast SAR: SAR(1 g) = 13.3 W/kg; SAR(10 g) = 9.68 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 16.3 W/kg

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

Reference Value = 103.7 V/m; Power Drift = -0.57 dB

**Fast SAR: SAR(1 g) = 13 W/kg; SAR(10 g) = 9.61 W/kg** (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 15.8 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 = 135.8 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 18.4 W/kg

**SAR(1 g) = 13.4 W/kg; SAR(10 g) = 10.1 W/kg** (SAR corrected for target medium)

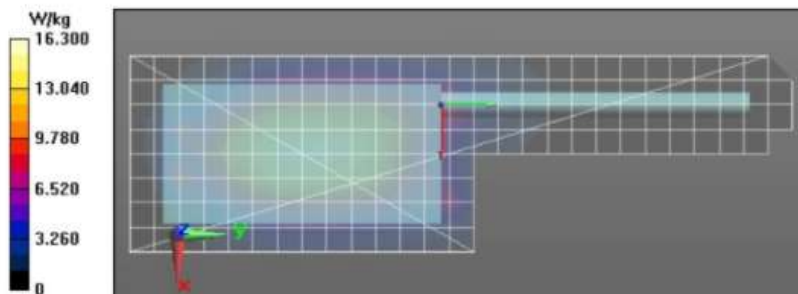
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 72.9%

Maximum value of SAR (measured) = 16.6 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) = 15.6 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)     | 27               | 8                | 7.13          |
| Full scan (area & zoom) | 24               | 31               | 7.28          |

## **APPENDIX G**

### **DUT Test Position Photos**

## 1.0 Highest SAR Test Position

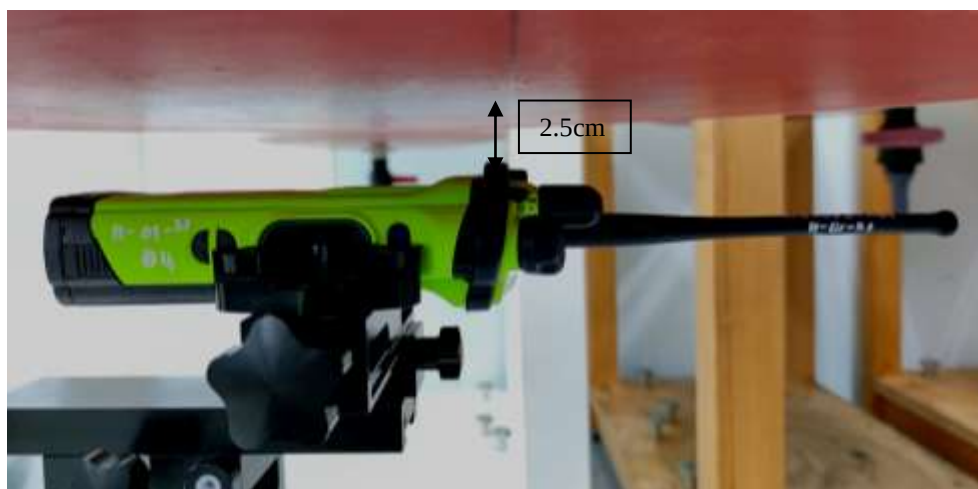
### 1.1 Body

DUT with antenna KT000026A01 with offered battery PMNN4547A and bodyworn accessories PMLN7955A w/ RLN6486A w/ RLN6488A against the phantom without an audio accessory attached.



### 1.2 Face

Front of DUT with antenna KT000026A01 and battery NNTN8930A separated 2.5cm from the phantom without an audio accessory attached.





## **APPENDIX H**

### **DUT, Body worn and audio accessories Photos**

Please refer to original filing report