

**MOTOROLA SOLUTIONS**

TESTING CERT # 2518.01

DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

Motorola Solutions Inc.
EME Test Laboratory
 8000 West Sunrise Blvd
 Fort Lauderdale, FL. 33322

Date of Report: 08/04/2014
Report Revision: A

Responsible Engineer: Deanna Zakharia (Plantation Lab Director EME Test Lab)
Report Author: Mac Elliott (Principal Staff Engineer)
Date/s Tested: 5/13/2014 - 5/17/2014; 5/19/2014; 6/19/2014 – 6/20/2014; 6/24/2014
Manufacturer/Location: Motorola, Penang
Sector/Group/Div.: AESS – Astro Engineering Subscriber Solutions
Date submitted for test: 4/25/2014
DUT Description: Handheld Portable – 450-520MHz, 5W rated power, 6.25 kHz/12.5 kHz/25 kHz, Capable of digital and analog FM transmission. Also capable of TDMA transmission.
Test TX mode(s): CW (PTT)
Max. Power output: 5.6W
Nominal Power: 5.0W
Tx Frequency Bands: 450-520 MHz
Signaling type: FM, TDMA
Model(s) Tested: H84SDD9PW5AN
Model(s) Certified: H84SDD9PW5AN; H84SDH9PW7AN
Serial Number(s): 837TQH0035 & 837TQH0024
Classification: Occupational/Controlled
FCC ID: AZ489FT4920; Part 90 UHF (450 – 512 MHz)
 This report contains results that are immaterial for FCC 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.

Deanna Zakharia
EMS EME Lab Senior Resource Manager,
Laboratory Director
Approval Date: 8/6/2014

Certification Date: 8/6/2014

Certification No.: L1140802P &
 L1140803P

Appendix D

System Verification Check Scans

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/14/2014 9:33:13 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450B-140514-01
 Dipole Model#: D450V3
 Phantom#: OVAL1016
 Tissue Temp: 21.6 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.032 dB
 Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 57.3$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (41x81x1):

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

Reference Value = 35.03 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.760 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.15 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm

Reference Value = 35.03 V/m; Power Drift = 0.01 dB

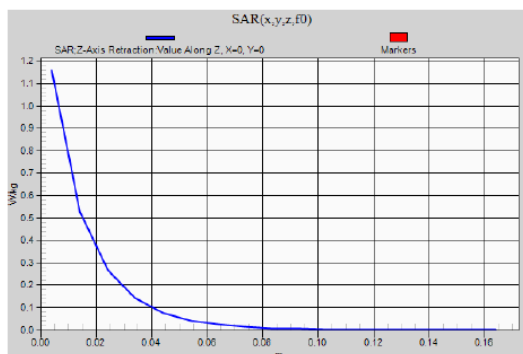
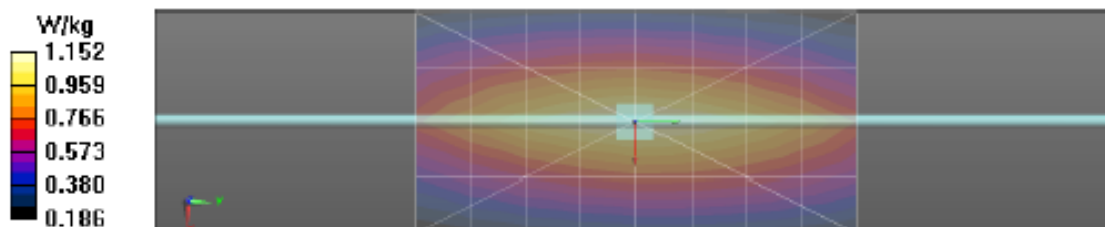
Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.714 W/kg (SAR corrected for target medium)

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

grid: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm

Maximum value of SAR (measured) = 1.16 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/15/2014 8:47:18 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450B-140515-01
 Dipole Model#: D450V3
 Phantom#: OVAL1016
 Tissue Temp: 21.6 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.035 dB
 Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.92$ S/m; $\epsilon_r = 56.9$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (4lx8lx1):

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

Reference Value = 34.97 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.758 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.13 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 34.97 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.63 W/kg

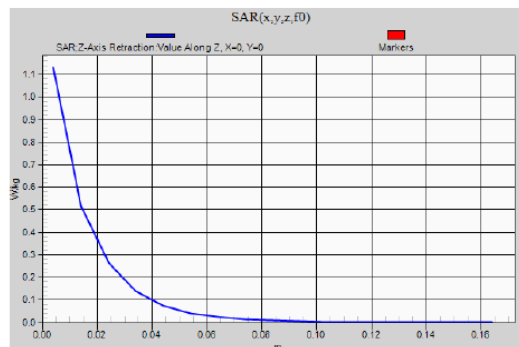
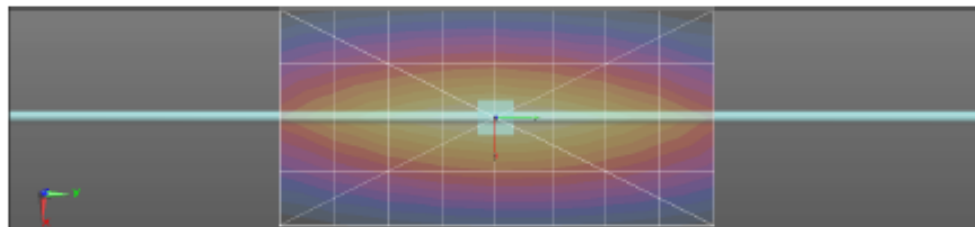
SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.711 W/kg (SAR corrected for target medium)

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

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

Maximum value of SAR (measured) = 1.13 W/kg

W/kg
 1.133
 0.944
 0.755
 0.566
 0.378
 0.189



Motorola Solutions, Inc. EME Laboratory
Date/Time: 5/16/2014 8:44:08 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450B-140516-01
 Dipole Model#: D450V3
 Phantom#: OVAL1016
 Tissue Temp: 22.2 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.036 dB
 Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.92$ S/m; $\epsilon_r = 56.9$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (41x81x1):

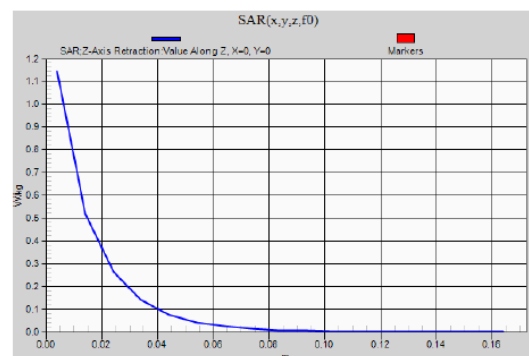
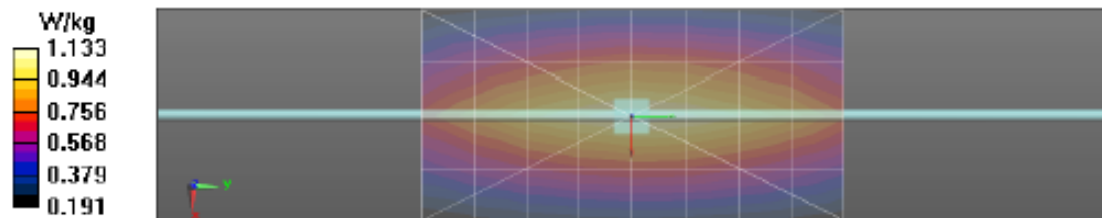
Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Reference Value = 35.24 V/m; Power Drift = 0.01 dB
 Fast SAR: SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.758 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.13 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 35.24 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 1.64 W/kg
 SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.711 W/kg (SAR corrected for target medium)
 Maximum value of SAR (measured) = 1.14 W/kg

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

grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 1.14 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/17/2014 4:36:46 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450B-140517-01
Dipole Model#: D450V3
Phantom#: OVAL1016
Tissue Temp: 22.1 (C)
Serial#: 1075
Test Freq: 450 (MHz)
Start Power: 250 (mW)
Rotation (1D): 0.034 dB
Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.92$ S/m; $\epsilon_r = 56.7$; $\rho = 1000$ kg/m³
Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (41x81x1):

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

Reference Value = 35.18 V/m; Power Drift = 0.00 dB

Fast SAR: SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.763 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.14 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.18 V/m; Power Drift = 0.00 dB

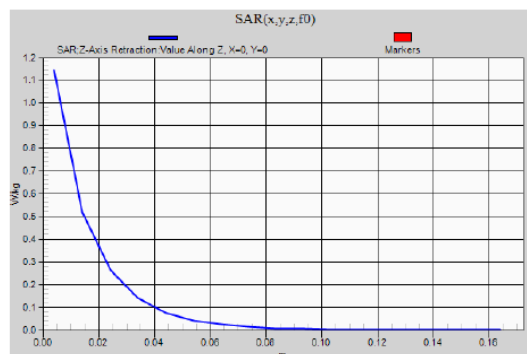
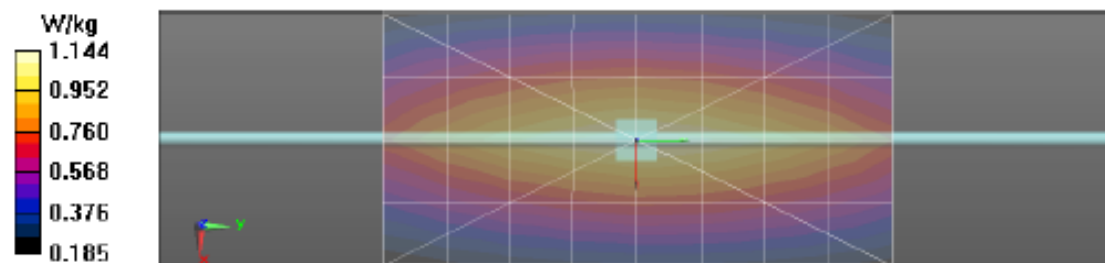
Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.714 W/kg (SAR corrected for target medium)

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

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

Maximum value of SAR (measured) = 1.142 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/19/2014 2:46:48 PM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450H-140619-01
 Dipole Model#: D450V3
 Phantom#: OVAL1108
 Tissue Temp: 21.4 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.034 dB
 Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.84$ S/m; $\epsilon_r = 43.2$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(6.85, 6.85, 6.85); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (41x81x1):

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

Reference Value = 37.37 V/m; Power Drift = 0.00 dB

Fast SAR: SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.764 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.13 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.37 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.54 W/kg

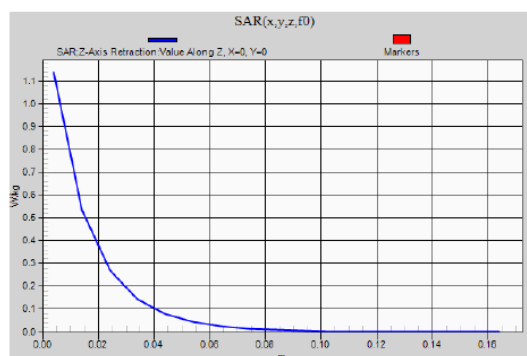
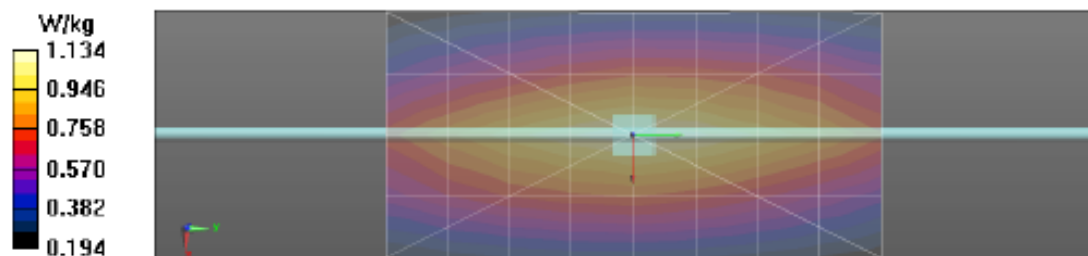
SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.726 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.14 W/kg

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

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

Maximum value of SAR (measured) = 1.137 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/20/2014 8:47:38 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450H-140620-01
 Dipole Model#: D450V3
 Phantom#: OVAL1108
 Tissue Temp: 22.2 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.038 dB
 Adjusted SAR (1W): 4.32 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.84$ S/m; $\epsilon_r = 42$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(6.85, 6.85, 6.85); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (41x81x1):

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

Reference Value = 37.36 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.760 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.13 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.36 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.54 W/kg

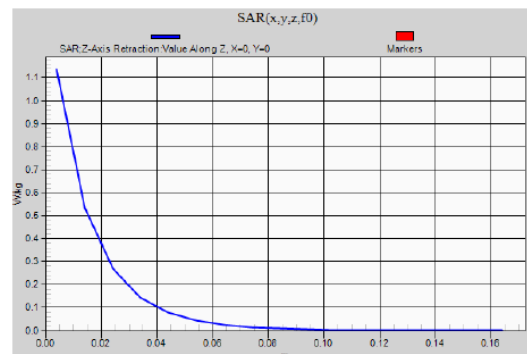
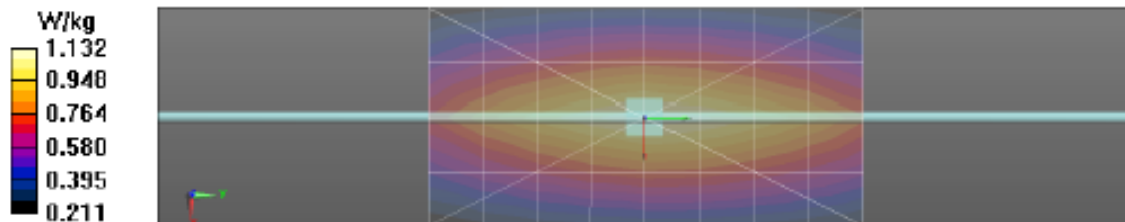
SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.720 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.14 W/kg

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

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

Maximum value of SAR (measured) = 1.13 W/kg



Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/24/2014 11:50:49 AM

Robot#: DASY5-FL-3 | Run#: HvH-SYSP-450H-140624-01
 Dipole Model#: D450V3
 Phantom#: OVAL1108
 Tissue Temp: 22.2 (C)
 Serial#: 1075
 Test Freq: 450 (MHz)
 Start Power: 250 (mW)
 Rotation (1D): 0.038 dB
 Adjusted SAR (1W): 4.36 mW/g (1g)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.86$ S/m; $\epsilon_r = 43.1$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(6.85, 6.85, 6.85); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/System Performance Check/Dipole Area Scan 2 (41x81x1):

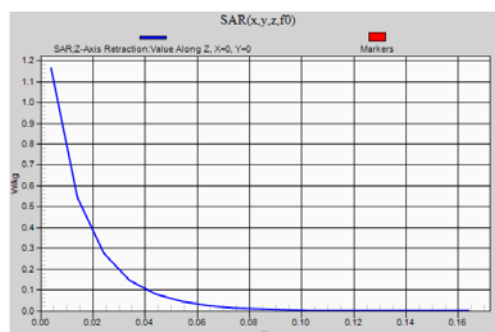
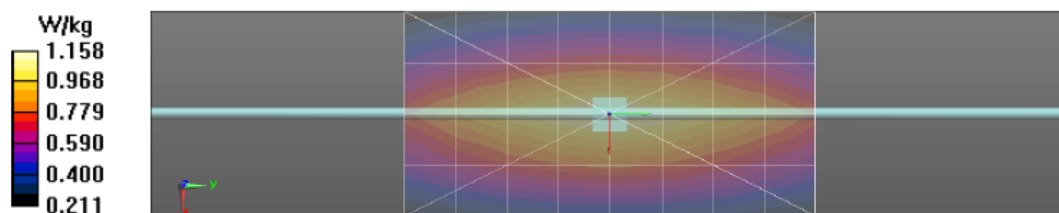
Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
 Reference Value = 37.18 V/m; Power Drift = 0.00 dB
 Fast SAR: SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.768 W/kg (SAR corrected for target medium)
 Maximum value of SAR (interpolated) = 1.16 W/kg

Below 2 GHz-Rev.1/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: $dx=7.5$ mm, $dy=7.5$ mm, $dz=5$ mm
 Reference Value = 37.18 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 1.58 W/kg
 SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.727 W/kg (SAR corrected for target medium)

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

grid: $dx=20$ mm, $dy=20$ mm, $dz=10$ mm
 Maximum value of SAR (measured) = 1.164 W/kg



Appendix E

DUT Scans

Assessments at the Body - Table 17

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/14/2014 11:43:40 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-140514-04
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1016
 Tissue Temp: 21.3 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 450.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: PMLN7008A
 Audio Acc: PMLN6130A
 Start Power: 5.18 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 57.3$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 89.61 V/m; Power Drift = -0.22 dB

Fast SAR: SAR(1 g) = 8.64 W/kg; SAR(10 g) = 6.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.17 W/kg

Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 89.61 V/m; Power Drift = -0.36 dB

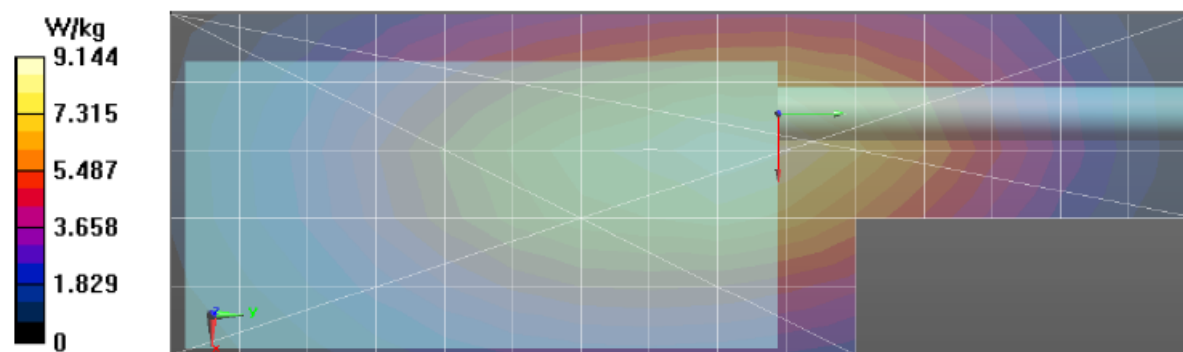
Peak SAR (extrapolated) = 12.3 W/kg

SAR(1 g) = 8.42 W/kg; SAR(10 g) = 5.9 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 8.91 W/kg

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

Maximum value of SAR (measured) = 8.87 W/kg



Assessments at the Body - Table 18

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/14/2014 4:19:19 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-140514-10
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1016
 Tissue Temp: 21.7 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 450.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: PMLN4651A
 Audio Acc: PMLN6130A
 Start Power: 5.14 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.94$ S/m; $\epsilon_r = 57.3$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 90.19 V/m; Power Drift = -0.21 dB

Fast SAR: SAR(1 g) = 8.73 W/kg; SAR(10 g) = 6.22 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.27 W/kg

Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm,

dy=7.5mm, dz=5mm

Reference Value = 90.19 V/m; Power Drift = -0.34 dB

Peak SAR (extrapolated) = 12.1 W/kg

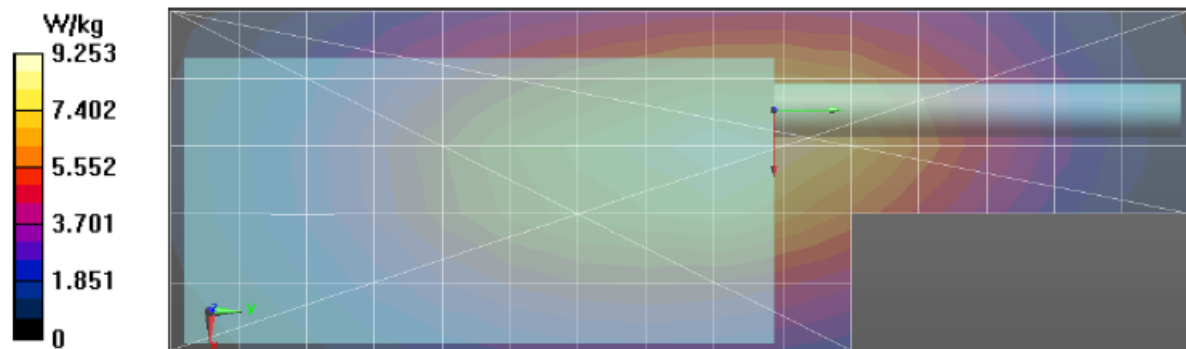
SAR(1 g) = 8.39 W/kg; SAR(10 g) = 5.91 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 8.91 W/kg

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

dz=10mm

Maximum value of SAR (measured) = 8.78 W/kg



Assessment at the Body – Table 19

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/15/2014 11:42:04 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-140515-06
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1016
 Tissue Temp: 21.8 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 481.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: PMLN6085A
 Audio Acc: PMLN6130A
 Start Power: 5.33 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 481 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 56.5$; $\rho = 1000 \text{ kg/m}^3$
 Probe: ES3DV3 - SN3301, , Frequency: 481 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Reference Value = 37.17 V/m; Power Drift = 0.16 dB

Fast SAR: SAR(1 g) = 1.59 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 1.67 W/kg

Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 37.17 V/m; Power Drift = 0.11 dB

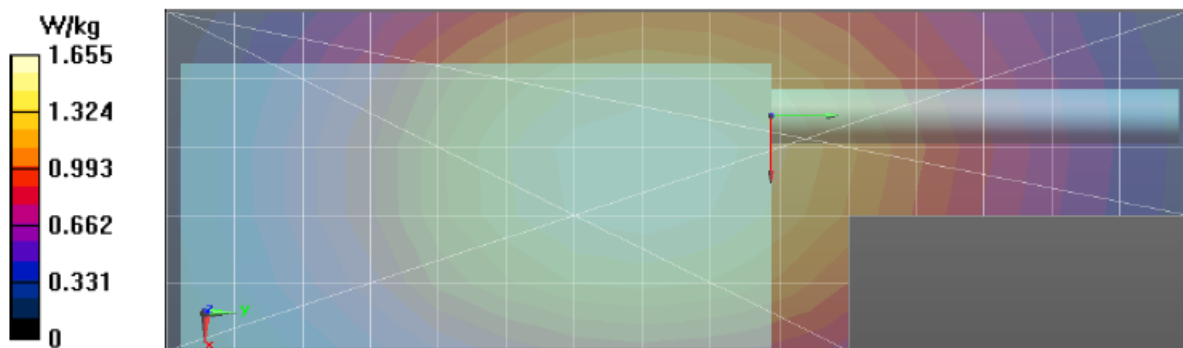
Peak SAR (extrapolated) = 2.06 W/kg

SAR(1 g) = 1.55 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.62 W/kg

Below 2 GHz-Rev.1/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) = 1.617 W/kg



Assessments at the Body - Table 20

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/15/2014 2:03:37 PM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-140515-09
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1016
 Tissue Temp: 21.6 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 481.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: PMLN6085A w/NNTN5243A w/no loop
 Audio Acc: PMLN6130A
 Start Power: 5.32 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 481$ MHz; $\sigma = 0.95$ S/m; $\epsilon_r = 56.5$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 481 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x181x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 67.84 V/m; Power Drift = 0.10 dB

Fast SAR: SAR(1 g) = 5.71 W/kg; SAR(10 g) = 4.15 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 6.04 W/kg

Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 67.84 V/m; Power Drift = 0.03 dB

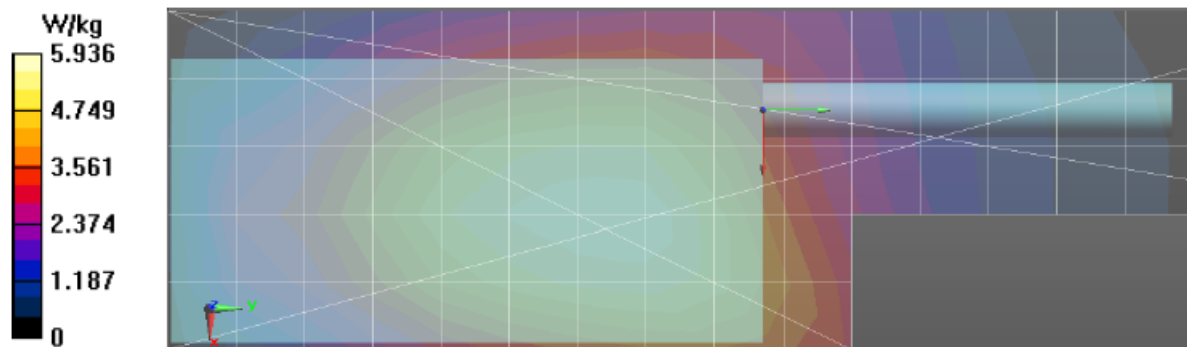
Peak SAR (extrapolated) = 7.80 W/kg

SAR(1 g) = 5.56 W/kg; SAR(10 g) = 4.04 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.82 W/kg

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

Maximum value of SAR (measured) = 5.84 W/kg



Assessments at the Body - Table 21

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/16/2014 9:12:28 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-140516-02
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1016
 Tissue Temp: 22.1 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 450.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: PMLN7008A
 Audio Acc: PMMN4040A
 Start Power: 5.14 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.92$ S/m; $\epsilon_r = 56.9$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 91.37 V/m; Power Drift = -0.20 dB

Fast SAR: SAR(1 g) = 8.85 W/kg; SAR(10 g) = 6.33 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 9.22 W/kg

Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 91.37 V/m; Power Drift = -0.32 dB

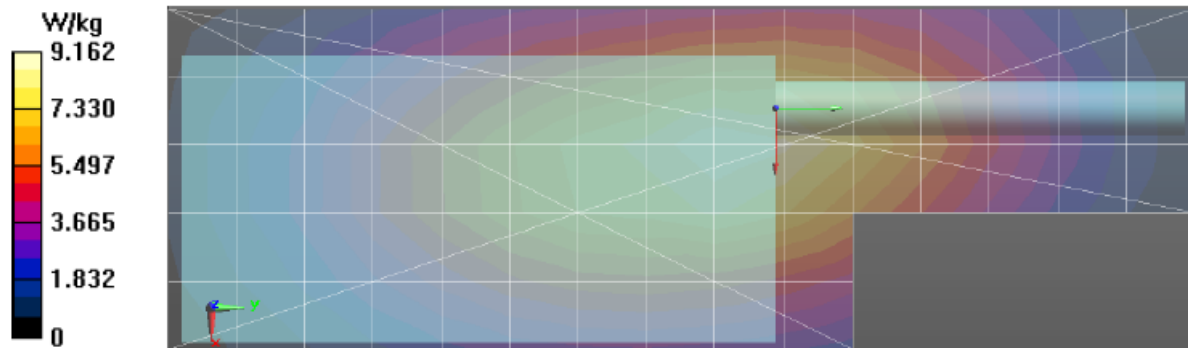
Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 8.82 W/kg; SAR(10 g) = 6.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.15 W/kg

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

Maximum value of SAR (measured) = 9.11 W/kg



Assessments at the Face - Table 24

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/24/2014 12:53:16 PM

Robot#: DASY5-FL-3 | Run#: HvH-Face-140624-02
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1108
 Tissue Temp: 22.2 (C)
 Serial#: 837TQH0035
 Antenna: FAF5260A
 Test Freq: 465.5000 (MHz)
 Battery: NNTN8128B
 Carry Acc: None
 Audio Acc: None
 Start Power: 5.22 (W)

Comments: @ front

Duty Cycle: 1:1, Medium parameters used: $f = 466$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 42.8$; $\rho = 1000$ kg/m³

Probe: ES3DV3 - SN3301, , Frequency: 465.5 MHz, ConvF(6.85, 6.85, 6.85); Calibrated: 8/27/2013

Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Face Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 84.12 V/m; Power Drift = -0.09 dB

Fast SAR: SAR(1 g) = 6.34 W/kg; SAR(10 g) = 4.65 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 6.66 W/kg

Below 2 GHz-Rev.1/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 84.12 V/m; Power Drift = -0.19 dB

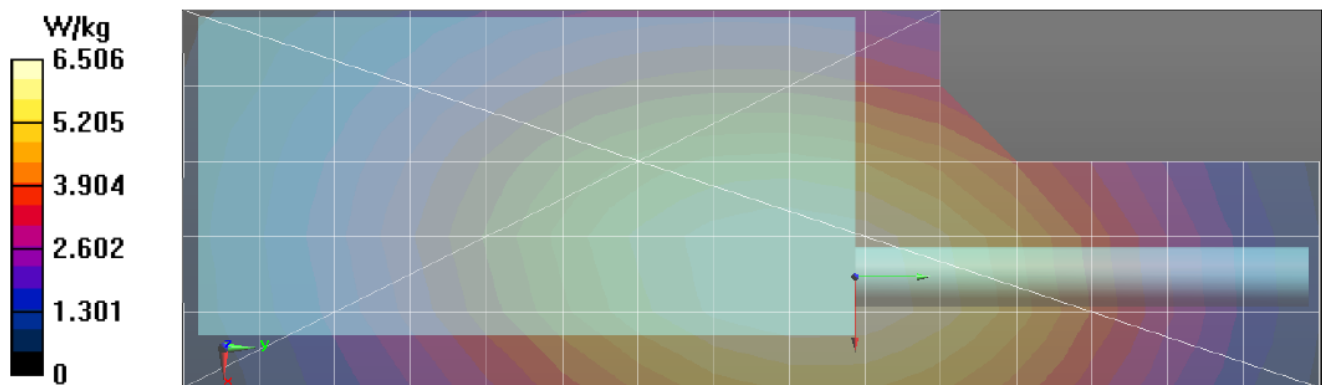
Peak SAR (extrapolated) = 7.78 W/kg

SAR(1 g) = 6.1 W/kg; SAR(10 g) = 4.6 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.41 W/kg

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

Maximum value of SAR (measured) = 6.35 W/kg



APPENDIX F
Shortened Scan of Highest SAR configuration

Shortened Scan – Table 26

Motorola Solutions, Inc. EME Laboratory

Date/Time: 5/17/2014 11:00:29 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-140517-13
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1016
 Tissue Temp: 21.2 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 450.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: PMLN7008A
 Audio Acc: PMMN4040A
 Start Power: 5.10 (W)

Comments: Shortened Scan.

Duty Cycle: 1:1, Medium parameters used: $f = 450$ MHz; $\sigma = 0.92$ S/m; $\epsilon_r = 56.7$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 450 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 88.71 V/m; Power Drift = -0.20 dB

Fast SAR: SAR(1 g) = 8.51 W/kg; SAR(10 g) = 6.1 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 8.88 W/kg

Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 101.3 V/m; Power Drift = -0.15 dB

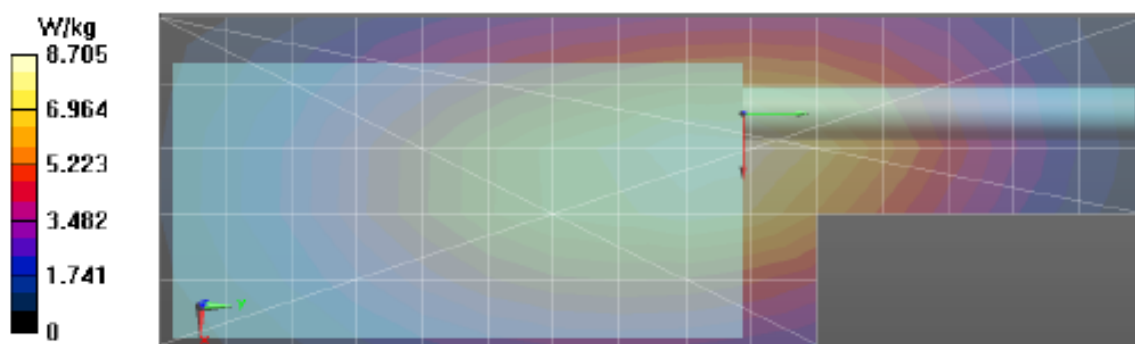
Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 8.81 W/kg; SAR(10 g) = 6.15 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.28 W/kg

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

Maximum value of SAR (measured) = 9.10 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)	26	7	5.01	3.50
Full scan (area & zoom)	21	29	5.17	3.61

APPENDIX G

DUT Power slump

Model # H84SDD9PW5AN
Serial # 837TQH0024

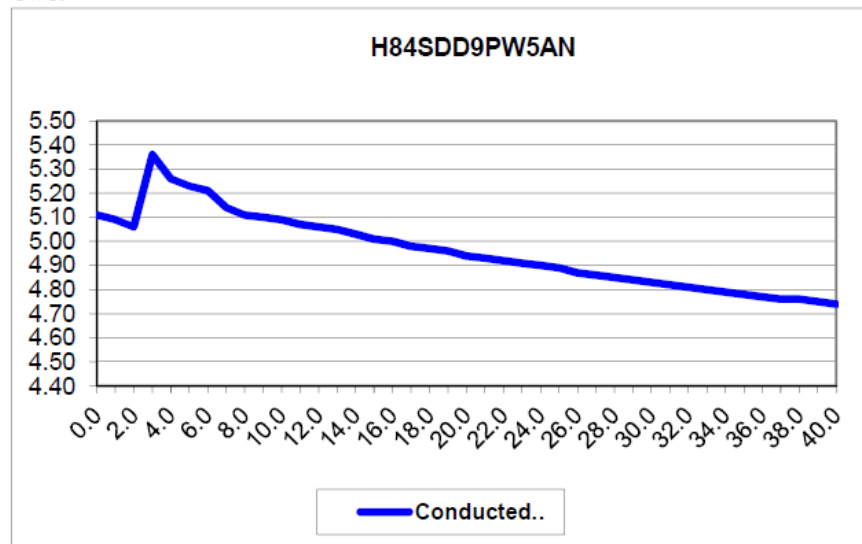
Battery NNTN8128B
Frequency 450
Date 5/19/2014

Transmit Mode CW
Audio Accessory PMMN4040A

TX TIME **Measured Power**
 (minutes) Watts

TX TIME (minutes)	Measured Power Watts
0.0	5.11
1.0	5.09
2.0	5.06
3.0	5.36
4.0	5.26
5.0	5.23
6.0	5.21
7.0	5.14
8.0	5.11
9.0	5.10
10.0	5.09
11.0	5.07
12.0	5.06
13.0	5.05
14.0	5.03
15.0	5.01
16.0	5.00
17.0	4.98
18.0	4.97
19.0	4.96
20.0	4.94
21.0	4.93
22.0	4.92
23.0	4.91
24.0	4.90
25.0	4.89
26.0	4.87
27.0	4.86
28.0	4.85
29.0	4.84
30.0	4.83
31.0	4.82
32.0	4.81
33.0	4.80
34.0	4.79
35.0	4.78
36.0	4.77
37.0	4.76
38.0	4.76
39.0	4.75
40.0	4.74

Conducted Power



APPENDIX H

Assessments Outside FCC Part 90

Assessment at Body – Table 22
Motorola Solutions, Inc. EME Laboratory
 Date/Time: 5/17/2014 8:43:15 AM

Robot#: DASY5-FL-3 | Run#: HvH-Ab-140517-10
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1016
 Tissue Temp: 21.5 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 520.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: PMLN7008A
 Audio Acc: PMMN4040A
 Start Power: 4.96 (W)

Comments:

Duty Cycle: 1:1, Medium parameters used: $f = 520$ MHz; $\sigma = 0.97$ S/m; $\epsilon_r = 55.8$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, . Frequency: 520 MHz, ConvF(7.11, 7.11, 7.11); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Ab Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 76.16 V/m; Power Drift = -0.34 dB

Fast SAR: SAR(1 g) = 6.45 W/kg; SAR(10 g) = 4.6 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 6.87 W/kg

Below 2 GHz-Rev.1/Ab Scan/3-Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 76.16 V/m; Power Drift = -0.56 dB

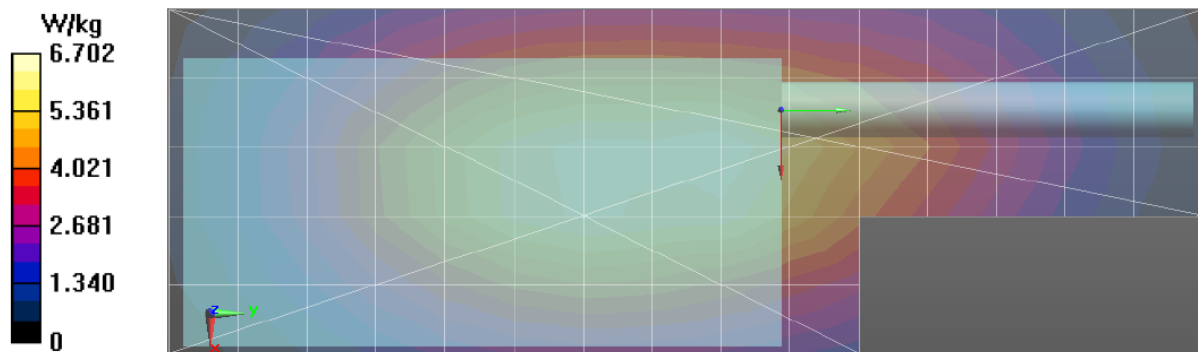
Peak SAR (extrapolated) = 9.12 W/kg

SAR(1 g) = 6.12 W/kg; SAR(10 g) = 4.32 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.50 W/kg

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

Maximum value of SAR (measured) = 6.27 W/kg



Assessment at Face – Table 25

Motorola Solutions, Inc. EME Laboratory

Date/Time: 6/24/2014 2:45:05 PM

Robot#: DASY5-FL-3 | Run#: HvH-Face-140624-05
 Model#: H84SDD9PW5AN
 Phantom#: OVAL1108
 Tissue Temp: 22.3 (C)
 Serial#: 837TQH0024
 Antenna: FAF5260A
 Test Freq: 516.0000 (MHz)
 Battery: NNTN8128B
 Carry Acc: None
 Audio Acc: None
 Start Power: 5.00 (W)

Comments: @ front

Duty Cycle: 1:1, Medium parameters used: $f = 516$ MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 41.6$; $\rho = 1000$ kg/m³
 Probe: ES3DV3 - SN3301, , Frequency: 516 MHz, ConvF(6.85, 6.85, 6.85); Calibrated: 8/27/2013
 Electronics: DAE3 Sn363, Calibrated: 1/13/2014

Below 2 GHz-Rev.1/Face Scan/1-Area Scan (51x151x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 71.40 V/m; Power Drift = -0.61 dB

Fast SAR: SAR(1 g) = 4.59 W/kg; SAR(10 g) = 3.35 W/kg (SAR corrected for target medium)

Maximum value of SAR (interpolated) = 4.82 W/kg

Below 2 GHz-Rev.1/Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 71.40 V/m; Power Drift = -0.75 dB

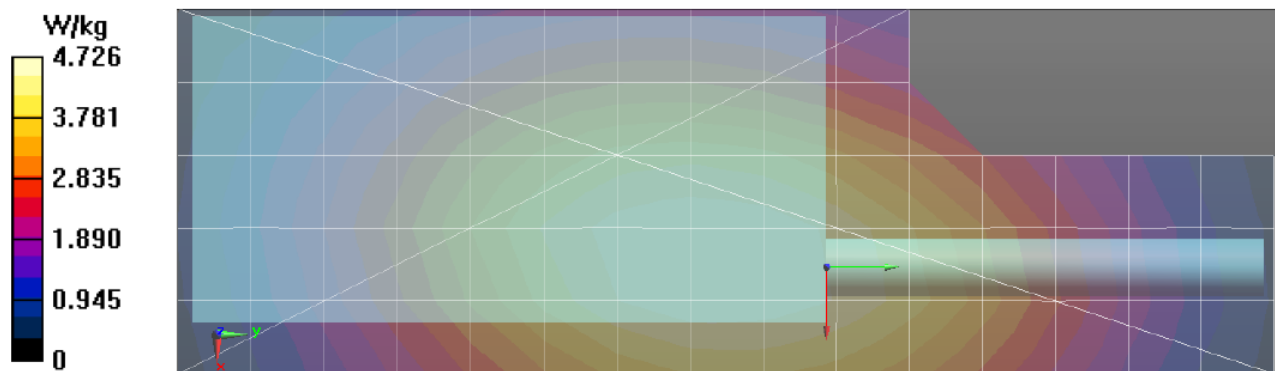
Peak SAR (extrapolated) = 5.45 W/kg

SAR(1 g) = 4.25 W/kg; SAR(10 g) = 3.18 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.47 W/kg

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

Maximum value of SAR (measured) = 4.40 W/kg



APPENDIX I

DUT Test Position Photos

Photos available in Exhibit 7B

APPENDIX J
DUT, Body worn and audio accessories Photos

Photos available in Exhibit 7B