



## **DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2of 2**

**EME Test Laboratory** 8000 West Sunrise Blvd

8000 West Sunrise Blvd Fort Lauderdale, FL. 33322.

**Date of Report:** 1/21/2011

Report Revision: O

Report ID: SAR rpt\_H98QDD9PW5AN

(MNUE1005A/MNUE1006A) Rev.O 110121

SR8653/8903/8425

**Responsible Engineer:** Kim Uong (Principal Staff Eng.) **Report Author:** Kim Uong (Principal Staff Eng.)

**Date/s Tested:** 7/27/10 - 9/20/10, 10/5/10 - 10/7/10, 10/8/10 - 1/13/11

Manufacturer/Location: Motorola, Reynosa/Schaumburg

Sector/Group/Div.: G&PS

**Date submitted for test:** 7/23/10, 8/6/2010

**DUT Description:** APX6000 UHF R1 380 – 470 MHz, 3-5.7W, 6.25kHz/12.5kHz/25kHz, Basic Top

Display Model. Capable of digital and analog FM transmission. Also capable of TDMA

transmission and Bluetooth equipped

**Test TX mode(s):** CW (PTT) for UHF; CW (76.1% duty cycle for Bluetooth)

Max. Power output:5.7 W for UHF; 10 mW for BluetoothNominal Power:5.0 W for UHF; 10 mW for BluetoothTx Frequency Bands:380 - 470 MHz; 2402 - 2480 MHz

**Signaling type:** FM and TDMA (UHF); FHSS (Bluetooth)

Model(s) Tested: H98QDD9PW5AN (MNUE1005A/MNUE1006A)

**Model(s) Certified:** H98QDD9PW5AN (MNUE1006A)

**Serial Number(s):** NUE1006A0052, NUE1006A0043, CAI1006KW2

Classification: Occupational/Controlled

FCC ID: AZ489FT4892 FCC Rule Part(s): 90 (406.1 - 470 MHz) IC: 109U-89FT4892

IC standard(s): RSS 102 issue 4; Safety Code 6

\* Refer to section 15 of part 1 for highest SAR summary results.

The test results clearly demonstrate compliance with FCC Occupational/Controlled RF Exposure limits of 8 W/kg averaged over 1 gram per the requirements of 47 CFR 2.1093(d). The 10 grams result is not applicable to FCC filing.

The test results clearly demonstrate compliance with ICNIRP (1998) Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz), Health Physics 74, 494-522 RF Exposure limits of 10 W/kg averaged over 10grams of contiguous tissue.

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 3.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola 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.

Signature on file – Deanna Zakharia

Deanna Zakharia EME Lab Senior Resource Manager, Laboratory Director

**Approval Date:** 1/21/2011

**Certification Date:** 

Certification No.:

# APPENDIX D Test System Verification Scans

The SAR result indicated on the Manufacture's Calibrated certificates for dipoles D450V2 S/N 1001 and D450V2 S/N 1002 were not used due to the following:

- -- The IEEE 1528-2003 and the FCC OET-65 Supplement C, System Verification section indicated that "The measured 1-g SAR should be within 10% of the expected target values specified for the specific phantom and RF source used in the system verification measurement."
- -- SPEAG calibration certificate indicates that the allowed tolerance for this dipole is higher than +/-10% (e.g. 5.05 +/-18.1% at k=2 for the D450V2 S/N 1001, and 5.03 +/-18.1% at k=2 for the D450V2 S/N 1002).
- -- The allowed tolerance for the probes is also higher than  $\pm$ 10% (e.g. 13.3% at k=2 at 450 MHz for the probe being used to assess this product).

Due to probe, dipole and system tolerances noted above, the lab averages dipole results across multiple probes to establish a set of averaged targets for each dipole using the following procedure:

• The System Validation was conducted per IEEE1528-2003 and IEC62209-2 Edition 1.0 2010-03 standards using the simulated head tissue and multiple probes that are available and applicable for the dipole under test to verify the System Validation. Results for this dipole are within the measurement system uncertainty of the reference SAR values indicated within IEC62209-2 Edition 1.0 2010-03 when using flat phantom with 2mm thickness is used. These results then are averaged and used as the target for the daily system performance check when the simulated head tissue is used.

• The dipole targets for the body are set immediately following the same process noted above. Since there is no standard referencing the SAR values for the System Validation using the simulated body tissue, the compliant System Validation results using the simulated head tissue are used to justify the use of the System Validation results using the simulated body tissue due to the same setup except for the simulated tissue type.

The targets set in this report were conducted following the above process.

Note that the targets set for the tested dipole, when using the simulated head tissue, meets the requirement for the system validation per IEEE1528-2003, IEC62209-2 Edition 1.0 2010-03 standards, and the difference between this result and the result from the manufacture's dipole calibration certificate is up to 8.9% for 450 dipole which is well within the measurement uncertainty of the measurement system at k=2.

To assess the isotropic characteristics of the measurement probe, a probe rotation was performed using the "Rotation (1D)" function in the DASY software with a measured isotropy tolerance of +/-0.5dB.

# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 7/27/2010 1:38:04 PM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450H-100727-01

Phantom# / Tissue Temp.: OVAL1011 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.58 mW/g (1g) Target SAR (1W): Adjusted SAR (1W): 4.44 mW/g (1g) Percent from Target (+/-): 3.1 % (1g) Rotation (1D): 0.031 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.11 mW/g (1g); 0.730 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.87 \text{ mho/m}$ ;  $\epsilon_r = 42.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.1 V/m; Power Drift = 0.00537 dB

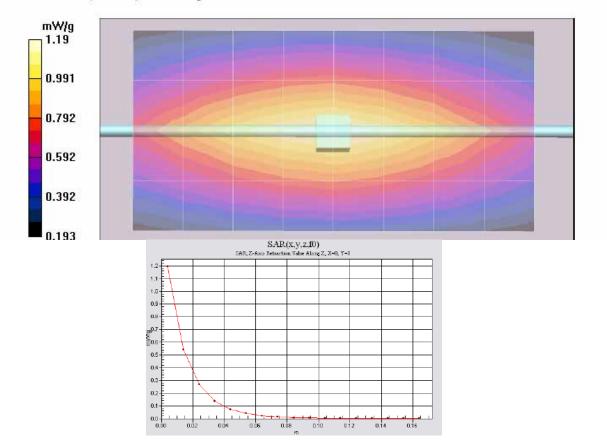
Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.730 mW/gMaximum value of SAR (measured) = 1.19 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.20 mW/g



Date/Time: 7/28/2010 6:21:25 AM

Robot# / Run#: DASY4-FL-2 / ErC-SYSP-450H-100728-01

Phantom# / Tissue Temp.: OVAL1011 / 20.5 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.58 mW/g (1g)
Adjusted SAR (1W): 4.48 mW/g (1g)
Percent from Target (+/-): 2.2 % (1g)
Rotation (1D): 0.039 dB

## Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.12 mW/g (1g); 0.736 mW/g (10g)

## Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

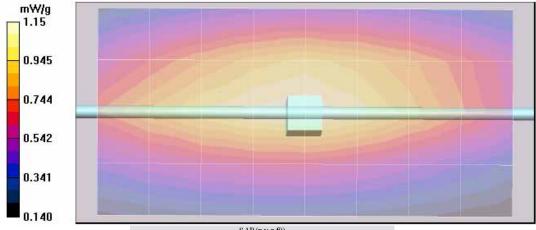
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.6 V/m; Power Drift = -0.00645 dB Peak SAR (extrapolated) = 1.70 W/kg SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.734 mW/g

Maximum value of SAR (measured) = 1.20 mW/g

# System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.15 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 7/29/2010 11:33:57 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450H-100729-01

Phantom# / Tissue Temp.: OVAL1011 / 20.4 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.58 mW/g (1g) 4.56 mW/g (1g) Adjusted SAR (1W): Percent from Target (+/-): 0.4 % (1g) 0.036 dB Rotation (1D):

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.14 mW/g (1g); 0.746 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.87 \text{ mho/m}$ ;  $\epsilon_r = 42.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

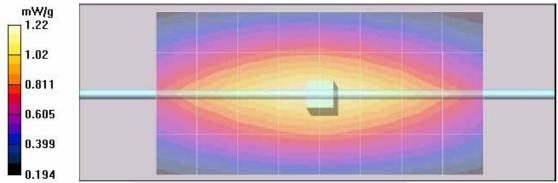
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

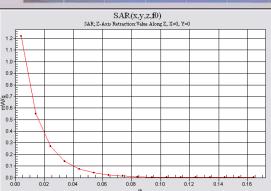
Reference Value = 37.7 V/m; Power Drift = -0.0156 dB

Peak SAR (extrapolated) = 1.74 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.746 mW/gMaximum value of SAR (measured) = 1.22 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm





## Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 7/30/2010 1:23:48 AM

Robot# / Run#: DASY4-FL-2 / MeC-SYSP-450H-100730-01

Phantom# / Tissue Temp.: OVAL1011 / 20.6 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.58 mW/g (1g) Adjusted SAR (1W): 4.60 mW/g (1g) Percent from Target (+/-): 0.4 % (1g) 0.034 dB Rotation (1D):

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.15 mW/g (1g); 0.754 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

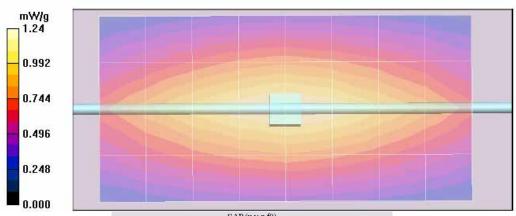
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

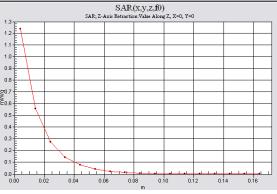
Reference Value = 37.6 V/m; Power Drift = -0.0273 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.754 mW/gMaximum value of SAR (measured) = 1.23 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.24 mW/g





## Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 7/31/2010 10:21:41 AM

Robot# / Run#: DASY4-FL-2 / MeC-SYSP-450H-100731-01

Phantom# / Tissue Temp.: OVAL1011 / 20.7 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.58 mW/g (1g) 4.60 mW/g (1g) Target SAR (1W): Adjusted SAR (1W): Percent from Target (+/-): 0.4 % (1g) Rotation (1D): 0.036 dB

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.15 mW/g (1g); 0.757 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 42.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

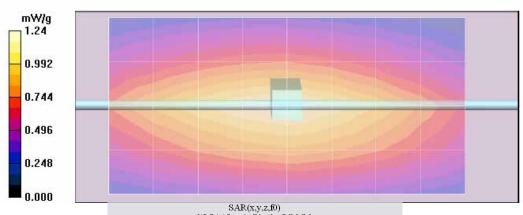
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

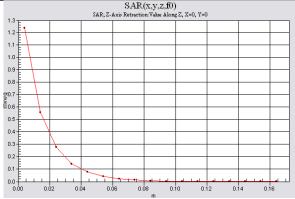
Reference Value = 37.4 V/m; Power Drift = 0.0339 dB

Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.757 mW/gMaximum value of SAR (measured) = 1.23 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/1/2010 11:27:14 AM

Robot# / Run#: DASY4-FL-2 / MeC-SYSP-450B-100801-01

Phantom# / Tissue Temp.: OVAL1018 / 21.3 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.40 mW/g (1g) 4.12 mW/g (1g) Adjusted SAR (1W): Percent from Target (+/-): 6.4 % (1g)Rotation (1D): 0.056 dB

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.03 mW/g (1g); 0.685 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 56.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

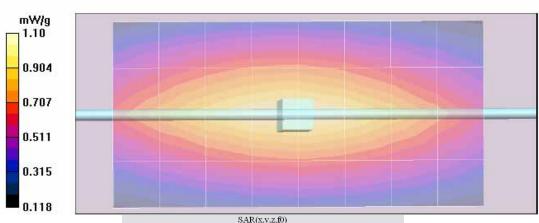
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

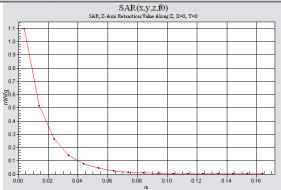
Reference Value = 34.7 V/m; Power Drift = -0.0124 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.683 mW/gMaximum value of SAR (measured) = 1.10 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





## Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/2/2010 5:47:09 AM

Robot# / Run#: DASY4-FL-2 / ErC-SYSP-450B-100802-01

Phantom# / Tissue Temp.: OVAL1018 / 21.2 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.40 mW/g (1g)Target SAR (1W): Adjusted SAR (1W): 4.12 mW/g (1g) Percent from Target (+/-): 6.4 % (1g) 0.034 dB Rotation (1D):

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.03 mW/g (1g); 0.687 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 56.3$ ;  $\rho = 1000 \text{ kg/m}^3$ 

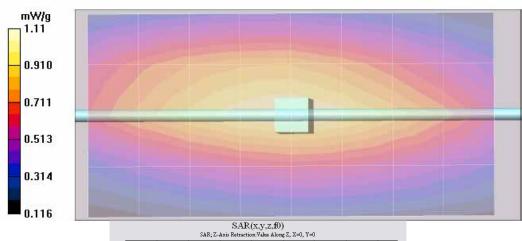
# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

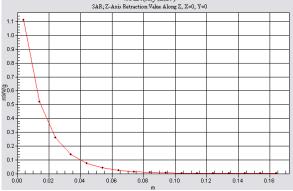
Reference Value = 34.5 V/m; Power Drift = 0.0121 dB Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.687 mW/g

Maximum value of SAR (measured) = 1.11 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/3/2010 6:01:55 AM

Robot# / Run#: DASY4-FL-2 / ErC-SYSP-450B-100803-01

Phantom# / Tissue Temp.: OVAL1018 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.40 mW/g (1g)
Adjusted SAR (1W): 4.24 mW/g (1g)
Percent from Target (+/-): 3.6 % (1g)
Rotation (1D): 0.056 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.06 mW/g (1g); 0.706 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 56.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

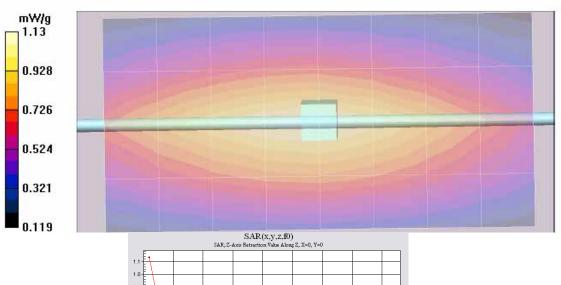
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.3 V/m; Power Drift = 0.00741 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.704 mW/gMaximum value of SAR (measured) = 1.13 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



SAR, Z-Aris Retraction. Value Along Z, X=0, Y=0

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# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/4/2010 6:33:04 AM

Robot# / Run#: DASY4-FL-2 / ErC-SYSP-450B-100804-01

Phantom# / Tissue Temp.: OVAL1018 / 21.1 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.40 mW/g (1g)
Adjusted SAR (1W): 4.16 mW/g (1g)
Percent from Target (+/-): 5.5 % (1g)
Rotation (1D): 0.041 dB

## Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.04 mW/g (1g); 0.687 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 56.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

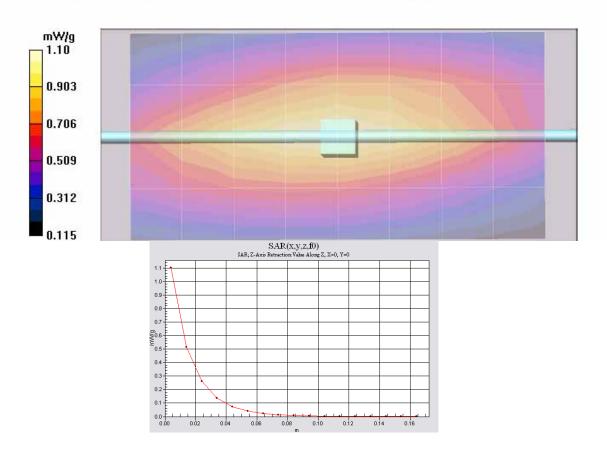
Reference Value = 34.7 V/m; Power Drift = -0.00185 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.685 mW/g

Maximum value of SAR (measured) = 1.10 mW/g

# System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/5/2010 6:42:02 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-100805-01

Phantom# / Tissue Temp.: OVAL1018 / 20.7 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.40 mW/g (1g)
Adjusted SAR (1W): 4.12 mW/g (1g)
Percent from Target (+/-): 6.4 % (1g)
Rotation (1D): 0.039 dB

### Note

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.03 mW/g (1g); 0.682 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

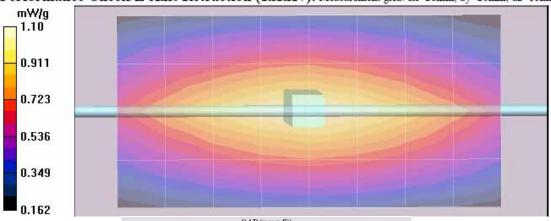
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

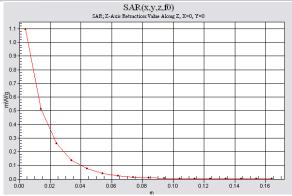
Reference Value = 34.7 V/m; Power Drift = -0.00831 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.680 mW/gMaximum value of SAR (measured) = 1.10 mW/g

# System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/6/2010 6:55:27 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-100806-01

Phantom# / Tissue Temp.: OVAL1018 / 20.6 (C) Dipole Model# / Serial#: D450V2 / 1002 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.40 mW/g (1g)
Adjusted SAR (1W): 4.12 mW/g (1g)
Percent from Target (+/-): 6.4 % (1g)
Rotation (1D): 0.033 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.03 mW/g (1g); 0.682 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 55.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

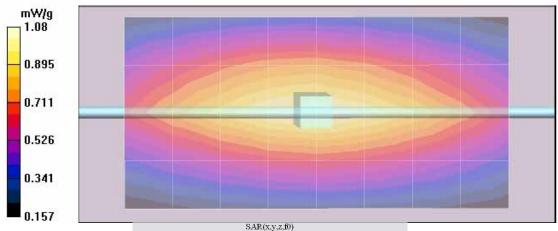
Reference Value = 34.7 V/m; Power Drift = 0.00979 dB

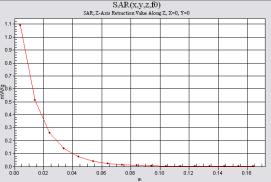
Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.678 mW/g

Maximum value of SAR (measured) = 1.09 mW/g

# System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 9/2/2010 4:57:23 PM

Robot# / Run#: DASY4-FL-2 / MeC-SYSP-450H-100902-01

Phantom# / Tissue Temp.: OVAL1011 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.72 mW/g (1g)
Adjusted SAR (1W): 4.80 mW/g (1g)
Percent from Target (+/-): 1.7 % (1g)
Rotation (1D): 0.036 dB

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.20 mW/g (1g); 0.789 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

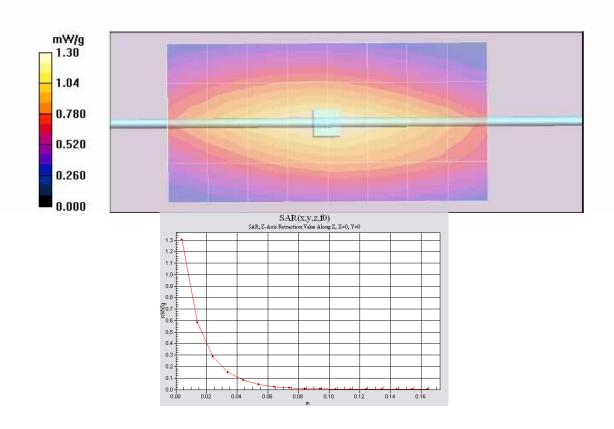
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.1 V/m; Power Drift = 0.0491 dB

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.789 mW/gMaximum value of SAR (measured) = 1.29 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 9/16/2010 6:13:56 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-100916-01

Phantom# / Tissue Temp.: OVAL1018 / 21.8 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.24 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)
Rotation (1D): 0.04 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.06 mW/g (1g); 0.708 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.94 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$ 

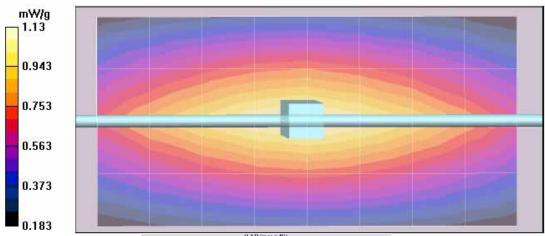
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

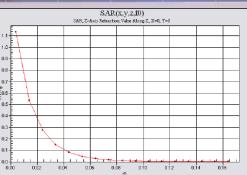
Reference Value = 35.0 V/m; Power Drift = 0.00791 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.708 mW/gMaximum value of SAR (measured) = 1.13 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 9/20/2010 8:27:26 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-100920-01

Phantom# / Tissue Temp.: OVAL1018 / 20.7 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.36 mW/g (1g)
Percent from Target (+/-): 0.9 % (1g)
Rotation (1D): 0.039 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.09 mW/g (1g); 0.730 mW/g (10g)

## Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz,  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

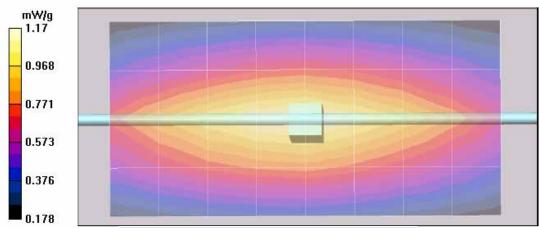
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

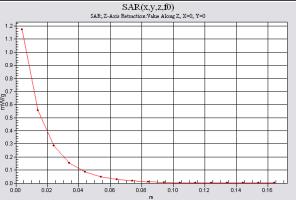
Reference Value = 35.3 V/m; Power Drift = 0.0215 dB

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.730 mW/gMaximum value of SAR (measured) = 1.17 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/5/2010 1:20:03 PM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-101005-01

Phantom# / Tissue Temp.: OVAL1011 / 20.4 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.24 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)
Rotation (1D): 0.034 dB

## Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.06 mW/g (1g); 0.713 mW/g (10g)

## Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.94 \text{ mho/m}$ ;  $\epsilon_r = 56.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

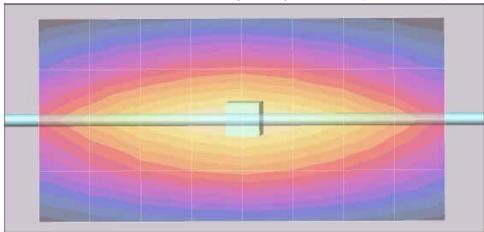
Reference Value = 35.1 V/m; Power Drift = 0.0033 dB

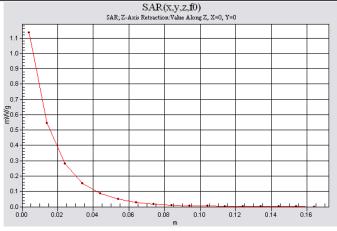
Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.713 mW/gMaximum value of SAR (measured) = 1.14 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.13 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/6/2010 6:46:24 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-101006-01

Phantom# / Tissue Temp.: OVAL1011 / 21.1 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)  $4.28 \ mW/g \ (1g)$ Adjusted SAR (1W): Percent from Target (+/-): 0.9 % (1g) 0.039 dB Rotation (1D):

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.07 mW/g (1g); 0.713 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

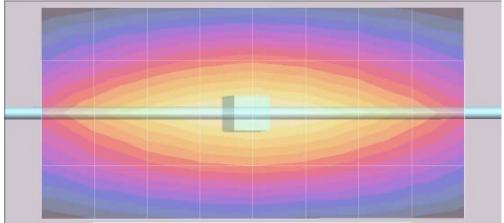
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

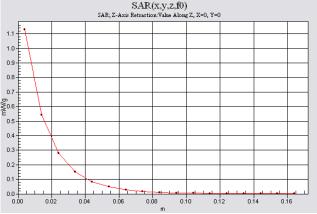
Reference Value = 35.3 V/m; Power Drift = 0.0069 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.711 mW/gMaximum value of SAR (measured) = 1.13 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/7/2010 6:32:44 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-101007-01

Phantom# / Tissue Temp.: OVAL1011 / 21.4 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g) 4.20 mW/g (1g) Adjusted SAR (1W): (1g) Percent from Target (+/-): 2.8 % Rotation (1D): 0.038 dB

## Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.05 mW/g (1g); 0.702 mW/g (10g)

## Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

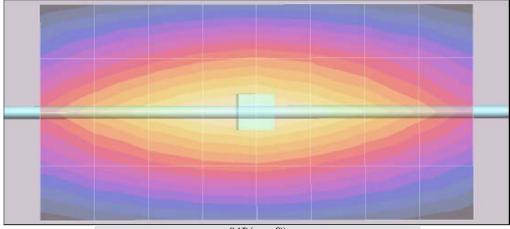
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

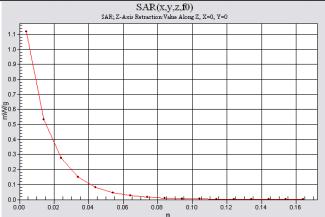
Reference Value = 35.1 V/m; Power Drift = -0.00352 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.700 mW/gMaximum value of SAR (measured) = 1.12 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/14/2010 6:35:59 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-101014-01

Phantom# / Tissue Temp.: OVAL1011 / 21.6 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.16 mW/g (1g)
Percent from Target (+/-): 3.7 % (1g)
Rotation (1D): 0.06 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.04 mW/g (1g); 0.694 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.94 \text{ mho/m}$ ;  $\epsilon_r = 55.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

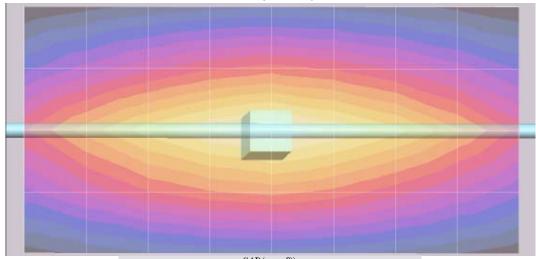
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.0 V/m; Power Drift = -0.0739 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.694 mW/gMaximum value of SAR (measured) = 1.12 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/15/2010 6:48:47 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-101015-01

Phantom# / Tissue Temp.: OVAL1011 / 21.7 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.20 mW/g (1g)
Percent from Target (+/-): 2.8 % (1g)
Rotation (1D): 0.038 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.05 mW/g (1g); 0.707 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 55.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

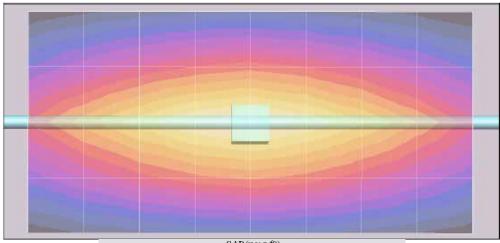
System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

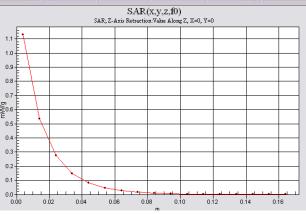
Reference Value = 34.7 V/m; Power Drift = 0.00194 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1~g) = 1.05~mW/g; SAR(10~g) = 0.707~mW/g Maximum value of SAR (measured) = 1.13 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm





Date/Time: 10/19/2010 8:00:33 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-101019-01

Phantom# / Tissue Temp.: OVAL1011 / 21.3 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.28 mW/g (1g)
Percent from Target (+/-): 0.9 % (1g)
Rotation (1D): 0.033 dB

# Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.07 mW/g (1g); 0.717 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 56.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.2 V/m; Power Drift = 0.00943 dB

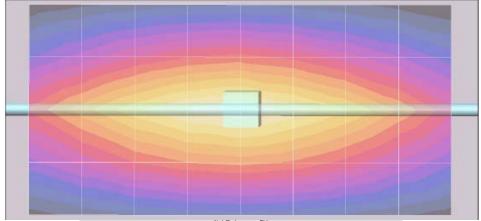
Peak SAR (extrapolated) = 1.54 W/kg

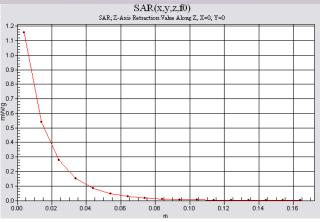
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.717 mW/gMaximum value of SAR (measured) = 1.15 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.16 mW/g





Date/Time: 11/23/2010 1:06:16 PM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101123-06

Phantom# / Tissue Temp.: OVAL1011 / 20.7 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g) 4.24~mW/g~(1g)Adjusted SAR (1W): Percent from Target (+/-): 1.90 % (1g) Rotation (1D): 0.062 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.06 mW/g (1g); 0.703 mW/g (10g)

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 55.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.4 V/m; Power Drift = -0.0489 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.697 mW/gMaximum value of SAR (measured) = 1.12 mW/g

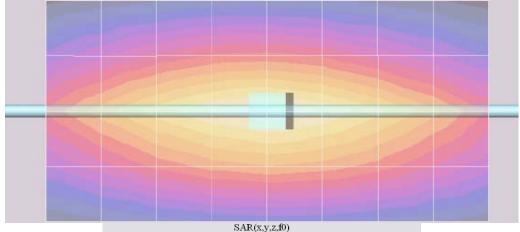
# System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

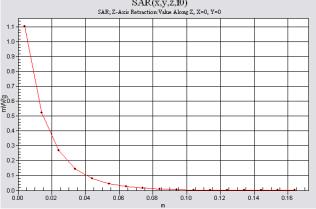
Reference Value = 35.4 V/m; Power Drift = -0.0489 dB

Motorola Fast SAR: SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.746 mW/g

Maximum value of SAR (interpolated) = 1.12 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.10 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 11/24/2010 4:59:01 PM

Robot# / Run#: DASY4-FL-2 / CM-SYSP-450B-101124-01

Phantom# / Tissue Temp.: OVAL1011 / 21.7 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g) 4.24~mW/g~(1g)Adjusted SAR (1W): Percent from Target (+/-): 1.9 % (1g) 0.062 dB Rotation (1D):

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.06 mW/g (1g); 0.709 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 56.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.0 V/m; Power Drift = 0.0267 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.709 mW/gMaximum value of SAR (measured) = 1.14 mW/g

# System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

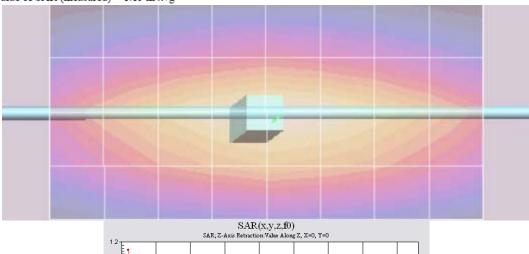
Reference Value = 35.0 V/m; Power Drift = 0.0267 dB

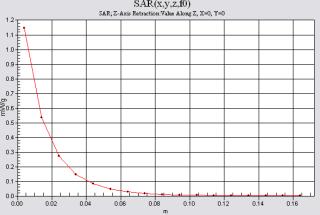
Motorola Fast SAR: SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.759 mW/g

Maximum value of SAR (interpolated) = 1.13 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.15 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 11/27/2010 4:47:35 AM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101127-01

Phantom# / Tissue Temp.: OVAL1011 / 20.7 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.32 mW/g (1g)
Percent from Target (+/-): 0.00 % (1g)
Rotation (1D): 0.054 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.08 mW/g (1g); 0.722 mW/g (10g)

## Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.97 \text{ mho/m}$ ;  $\epsilon_r = 56.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mi

Reference Value = 35.1 V/m; Power Drift = -0.0175 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.722 mW/gMaximum value of SAR (measured) = 1.17 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

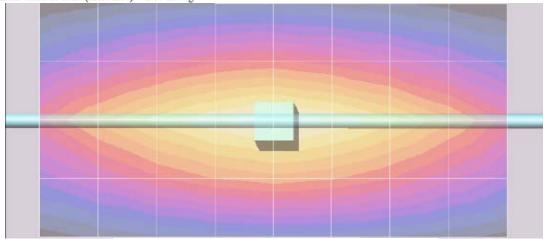
Reference Value = 35.1 V/m; Power Drift = -0.0175 dB

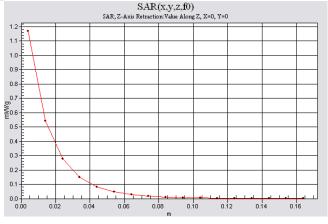
Motorola Fast SAR: SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.780 mW/g

Maximum value of SAR (interpolated) = 1.17 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.17 mW/g





Date/Time: 12/7/2010 9:46:04 AM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101207-01

Phantom# / Tissue Temp.: OVAL1011 / 23.0 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.32 mW/g (1g)Target SAR (1W): 4.20 mW/g (1g)Adjusted SAR (1W): Percent from Target (+/-): 2.80 % (1g) Rotation (1D): 0.036 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.05 mW/g (1g); 0.699 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.94 \text{ mho/m}$ ;  $\epsilon_r = 53.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 34.9 V/m; Power Drift = -0.0182 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.699 mW/gMaximum value of SAR (measured) = 1.13 mW/g

# System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

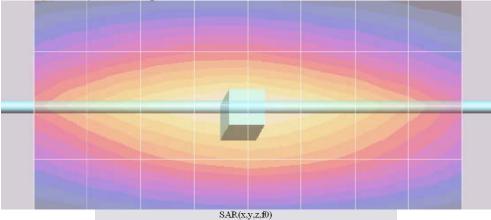
Reference Value = 34.9 V/m; Power Drift = -0.0182 dB

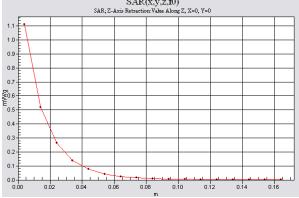
Motorola Fast SAR: SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.752 mW/g

Maximum value of SAR (interpolated) = 1.13 mW/

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.11 mW/g





Date/Time: 12/8/2010 9:15:31 AM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101208-01

Phantom# / Tissue Temp.: OVAL1011 / 20.0 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.32 mW/g (1g) Target SAR (1W): Adjusted SAR (1W): 4.32 mW/g (1g) Percent from Target (+/-): 0.00 % (1g) Rotation (1D): 0.043 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.08 mW/g (1g); 0.728 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.97 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 34.9 V/m; Power Drift = -0.00781 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.728 mW/g

Maximum value of SAR (measured) = 1.15 mW/g

# System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

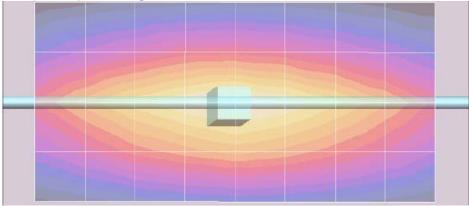
Reference Value = 34.9 V/m; Power Drift = -0.00781 dB

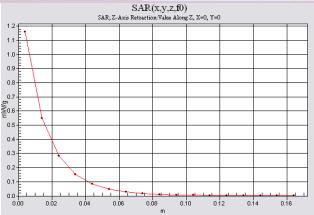
Motorola Fast SAR: SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.776 mW/g

Maximum value of SAR (interpolated) = 1.17 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.16 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/9/2010 10:32:58 AM

Robot# / Run#: DASY4-FL-2 / ErC-SYSP-450B-101209-01

Phantom# / Tissue Temp.: OVAL1011 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.16 mW/g (1g)
Percent from Target (+/-): 3.70 % (1g)
Rotation (1D): 0.091 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.04 mW/g (1g); 0.694 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 54.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

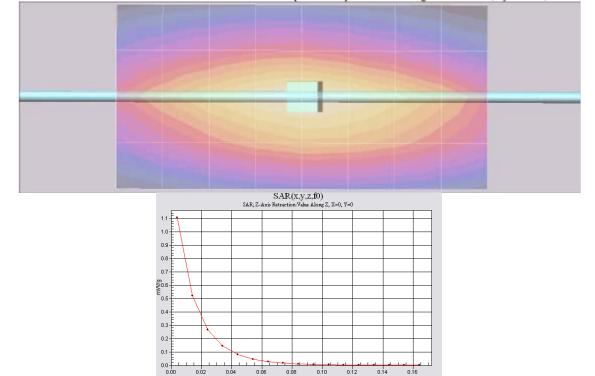
Reference Value = 35.0 V/m; Power Drift = -0.00501 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.690 mW/gMaximum value of SAR (measured) = 1.11 mW/g

# System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.09 mW/g



Date/Time: 12/10/2010 7:08:39 AM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101210-01

Phantom# / Tissue Temp.: OVAL1011 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g) Adjusted SAR (1W):  $4.04~m\mathrm{W/g}~(1\mathrm{g})$ Percent from Target (+/-): 6.50 % Rotation (1D): 0.036 dB

## Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.01 mW/g (1g); 0.672 mW/g (10g)

## Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 55.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 34.5 V/m; Power Drift = 0.00391 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 1.000 mW/g; SAR(10 g) = 0.668 mW/gMaximum value of SAR (measured) = 1.08 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

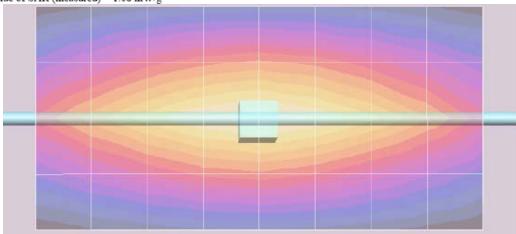
Reference Value = 34.5 V/m; Power Drift = 0.00391 dB

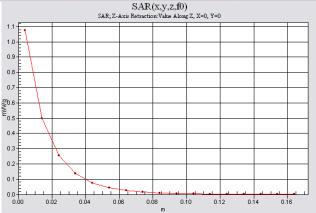
Motorola Fast SAR: SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.722 mW/g

Maximum value of SAR (interpolated) = 1.08 mW

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.08 mW/g





Date/Time: 12/11/2010 5:11:37 AM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101211-01

Phantom# / Tissue Temp.: OVAL1011 / 21.7 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g) Adjusted SAR (1W): 4.04 mW/g (1g) Percent from Target (+/-): 6.50 % 0.059 dB Rotation (1D):

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.01 mW/g (1g); 0.671 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 34.5 V/m; Power Drift = -0.0509 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 1 mW/g; SAR(10 g) = 0.667 mW/g

Maximum value of SAR (measured) = 1.08 mW/g

# System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

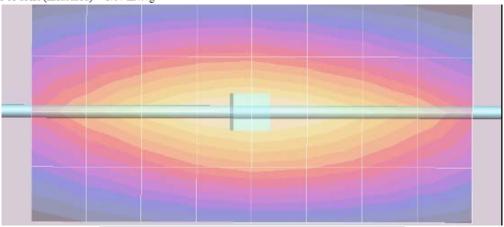
Reference Value = 34.5 V/m; Power Drift = -0.0509 dB

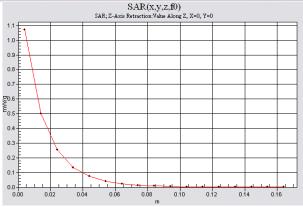
Motorola Fast SAR: SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.724 mW/g

Maximum value of SAR (interpolated) = 1.08 mW/g

# System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.07 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/12/2010 4:48:55 AM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101212-01

Phantom# / Tissue Temp.: OVAL1011 / 21.8 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.32 mW/g (1g) Target SAR (1W): Adjusted SAR (1W): 4.04 mW/g (1g) Percent from Target (+/-): 6.50 % (1g) Rotation (1D): 0.039 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.01 mW/g (1g); 0.670 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 54.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 34.6 V/m; Power Drift = 0.00489 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 1 mW/g; SAR(10 g) = 0.666 mW/g

Maximum value of SAR (measured) = 1.08 mW/g

# System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 34.6 V/m; Power Drift = 0.00489 dB

Motorola Fast SAR: SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.722 mW/g

0.0 -

0.04

0.06

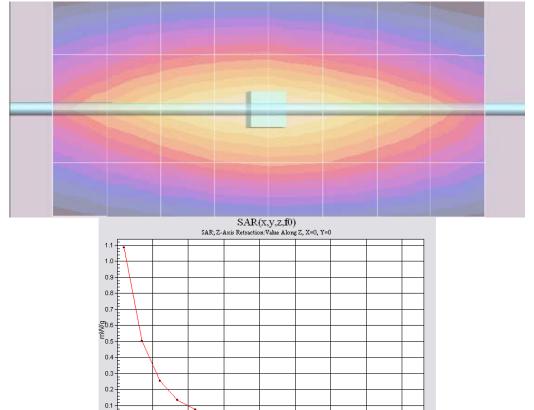
0.08

0.10

0.12

# Maximum value of SAR (interpolated) = 1.08 mW/g System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.09 mW/g



0.16

# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/13/2010 5:59:51 AM

Robot# / Run#: DASY4-FL-2 / HvH-SYSP-450B-101213-01

Phantom# / Tissue Temp.: OVAL1011 / 21.1 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.16 mW/g (1g)
Percent from Target (+/-): 3.70 % (1g)
Rotation (1D): 0.055 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.04 mW/g (1g); 0.682 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 54.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.1 V/m; Power Drift = -0.0544 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.676 mW/g

Maximum value of SAR (measured) = 1.10 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

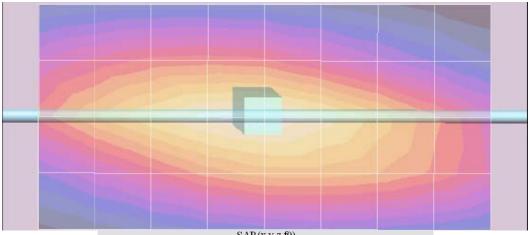
Reference Value = 35.1 V/m; Power Drift = -0.0544 dB

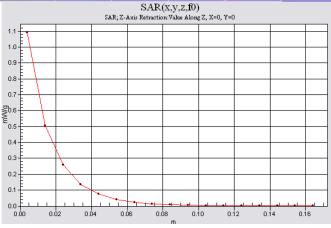
Motorola Fast SAR: SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.728 mW/g

Maximum value of SAR (interpolated) = 1.09 mW/s

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.09 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/16/2010 2:02:51 AM

Robot# / Run#: DASY4-FL-2 / CM-SYSP-450B-101216-01

Phantom# / Tissue Temp.: OVAL1011 / 20.0 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g) Adjusted SAR (1W): 4.12 mW/g (1g) Percent from Target (+/-): 4.6 % (1g) Rotation (1D): 0.038 dB

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.03 mW/g (1g); 0.686 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.3$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 34.7 V/m; Power Drift = -0.00709 dB

Peak SAR (extrapolated) = 1.48 W/kg

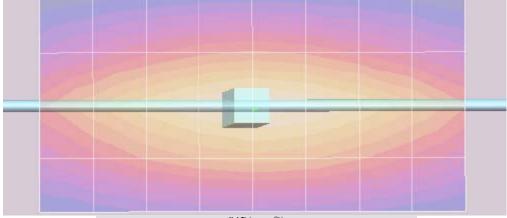
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.684 mW/gMaximum value of SAR (measured) = 1.10 mW/g

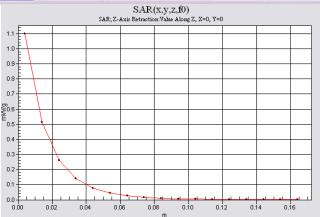
# System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 34.7 V/m; Power Drift = -0.00709 dB

Motorola Fast SAR: SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.737 mW/g

Maximum value of SAR (interpolated) = 1.10 mW/g





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/17/2010 12:49:09 AM

Robot# / Run#: DASY4-FL-2 / CM-SYSP-450H-101217-01

Phantom# / Tissue Temp.: OVAL1011 / 20.3 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.72 mW/g (1g) 4.52 mW/g (1g) Adjusted SAR (1W): Percent from Target (+/-): 4.2 % (1g) Rotation (1D): 0.049 dB

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.13 mW/g (1g); 0.744 mW/g (10g)

## Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.6 V/m; Power Drift = 0.00515 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.742 mW/g Maximum value of SAR (measured) = 1.21 mW/g

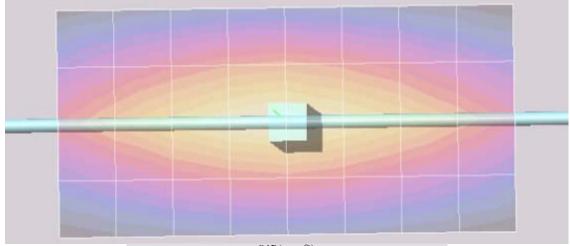
## System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

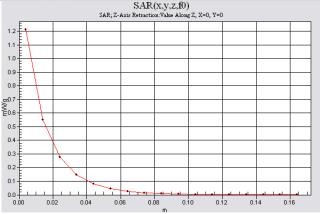
Reference Value = 37.6 V/m; Power Drift = 0.00515 dB

Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.807 mW/g

Maximum value of SAR (interpolated) = 1.21 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





# Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/18/2010 12:17:21 AM

Robot# / Run#: DASY4-FL-2 / CM-SYSP-450H-101218-01

Phantom# / Tissue Temp.: OVAL1011 / 20.3 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.72 mW/g (1g) Target SAR (1W): Adjusted SAR (1W): 4.44 mW/g (1g) Percent from Target (+/-): 5.9 % (1g) 0.041 dB Rotation (1D):

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.11 mW/g (1g); 0.728 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.87 \text{ mho/m}$ ;  $\epsilon_r = 42.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.2 V/m; Power Drift = 0.0499 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.728 mW/gMaximum value of SAR (measured) = 1.19 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

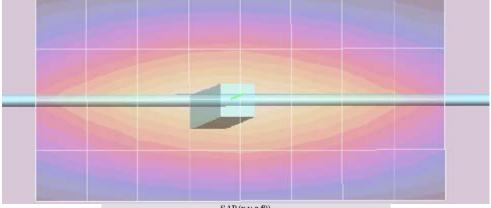
Reference Value = 37.2 V/m; Power Drift = 0.0499 dB

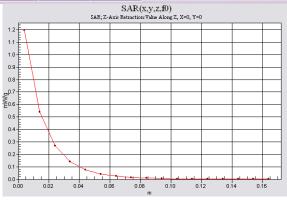
Motorola Fast SAR: SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.792 mW/g

Maximum value of SAR (interpolated) = 1.18 mW/s

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.20 mW/g





Date/Time: 12/19/2010 12:25:30 AM

Robot# / Run#: DASY4-FL-2 / CM-SYSP-450H-101219-01

Phantom# / Tissue Temp.: OVAL1011 / 20.1 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.72 mW/g (1g) Target SAR (1W): 4.44~mW/g~(1g)Adjusted SAR (1W): Percent from Target (+/-): 5.9 % (1g) 0.044 dB Rotation (1D):

### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.11 mW/g (1g); 0.730 mW/g (10g)

### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

# System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.5 V/m; Power Drift = 0.00646 dB

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.728 mW/gMaximum value of SAR (measured) = 1.18 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

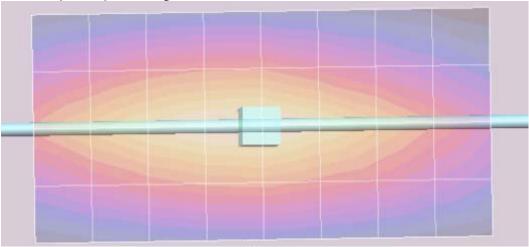
Reference Value = 37.5 V/m; Power Drift = 0.00646 dB

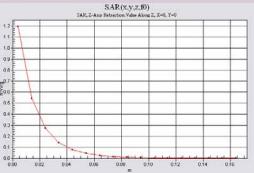
Motorola Fast SAR: SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.793 mW/g

Maximum value of SAR (interpolated) = 1.18 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.20 mW/g





#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/20/2010 5:54:22 AM

Robot# / Run#: DASY4-FL-2 / ErC-SYSP-450H-101220-01

Phantom# / Tissue Temp.: OVAL1011 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.72 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 3.4 % (1g)
Rotation (1D): 0.049 dB

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.14 mW/g (1g); 0.75 mW/g (10g)

#### Comments:

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

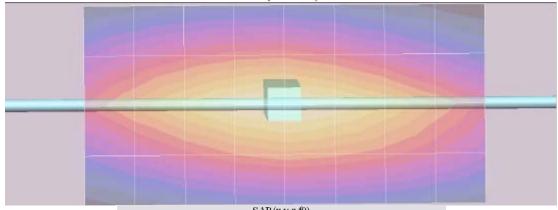
Reference Value = 37.5 V/m; Power Drift = -0.018 dB

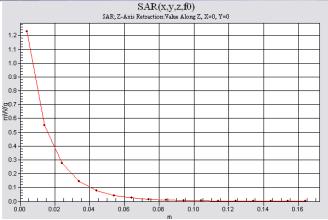
Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.750 mW/gMaximum value of SAR (measured) = 1.23 mW/g

#### System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm

#### System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 1/5/2011 5:49:40 PM

Robot# / Run#: DASY4-FL-2 / MeC-SYSP-450H-110105-01

Phantom# / Tissue Temp.: OVAL1016 / 20.8 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

4.72 mW/g (1g) Target SAR (1W): Adjusted SAR (1W): 4.84 mW/g (1g) Percent from Target (+/-): 2.5 % (1g) Rotation (1D): 0.11 dB

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.21 mW/g (1g); 0.808 mW/g (10g)

#### Comments:

Probe: ES3DV3 - SN3185, Calibrated: 11/25/2010, ConvF(6.13, 6.13, 6.13)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 44.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.0 V/m; Power Drift = -0.00138 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.799 mW/gMaximum value of SAR (measured) = 1.28 mW/g

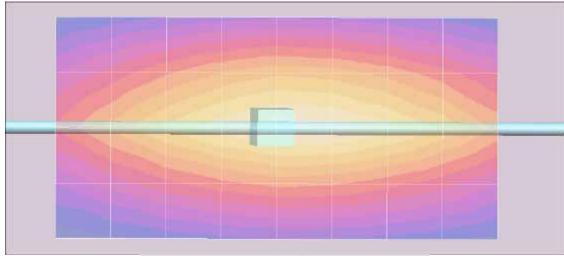
#### System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

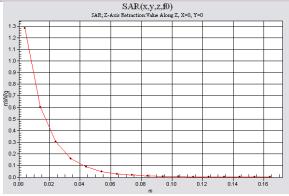
Reference Value = 38.0 V/m; Power Drift = -0.00138 dB

Motorola Fast SAR: SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.855 mW/g

Maximum value of SAR (interpolated) = 1.27 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm





#### Motorola Enterprise Mobility Solutions EME Laboratory

Date/Time: 1/7/2011 8:21:44 PM

Robot# / Run#: DASY4-FL-2 / MeC-SYSP-450H-100107-01

Phantom# / Tissue Temp.: OVAL1016 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.72 mW/g (1g) Adjusted SAR (1W): 4.60 mW/g (1g) Percent from Target (+/-): 2.5 % 0.11 dB Rotation (1D):

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.15 mW/g (1g); 0.768 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3185, Calibrated: 11/25/2010, ConvF(6.13, 6.13, 6.13)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.87 \text{ mho/m}$ ;  $\epsilon_r = 43.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 37.8 V/m; Power Drift = 0.0209 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.767 mW/gMaximum value of SAR (measured) = 1.23 mW/g

System Performance Check/Dipole Area Scan 2 (41x81x1): Measurement grid: dx=15mm, dy=15mm

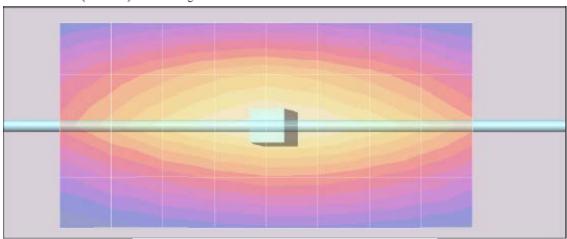
Reference Value = 37.8 V/m; Power Drift = 0.0209 dB

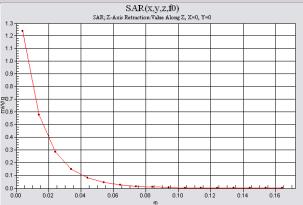
Motorola Fast SAR: SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.829 mW/g

Maximum value of SAR (interpolated) = 1.24 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.24 mW/g





### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 1/12/2011 10:50:47 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450B-110112-01

Phantom# / Tissue Temp.: OVAL1090 / 20.0 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.32 mW/g (1g)
Adjusted SAR (1W): 4.40 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)
Rotation (1D): 0.11 dB

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.10 mW/g (1g); 0.727 mW/g (10g)

#### Comments:

Probe: ES3DV3 - SN3185, Calibrated: 11/25/2010, ConvF(6.51, 6.51, 6.51)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.3$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 35.2 V/m; Power Drift = 0.0527 dB

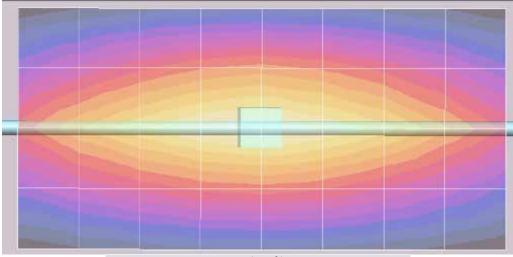
Peak SAR (extrapolated) = 1.67 W/kg

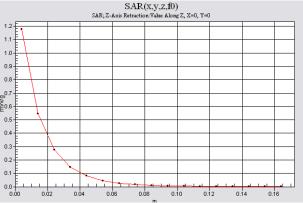
SAR(1~g) = 1.09~mW/g; SAR(10~g) = 0.725~mW/g Maximum value of SAR (measured) = 1.16 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.18 mW/g





#### Motorola Enterprise Mobility Solutions EME Laboratory

Date/Time: 1/13/2011 7:02:33 AM

Robot# / Run#: DASY4-FL-2 / JsT-SYSP-450H-110113-01

Phantom# / Tissue Temp.: OVAL1016 / 20.9 (C) Dipole Model# / Serial#: D450V2 / 1001 TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.72 mW/g (1g)
Adjusted SAR (1W): 4.68 mW/g (1g)
Percent from Target (+/-): 0.8 % (1g)
Rotation (1D): 0.15 dB

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 1.17 mW/g (1g); 0.779 mW/g (10g)

#### Comments:

Probe: ES3DV3 - SN3185, Calibrated: 11/25/2010, ConvF(6.13, 6.13, 6.13)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 43.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

System Performance Check/0-Degree Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 38.1 V/m; Power Drift = 0.00388 dB

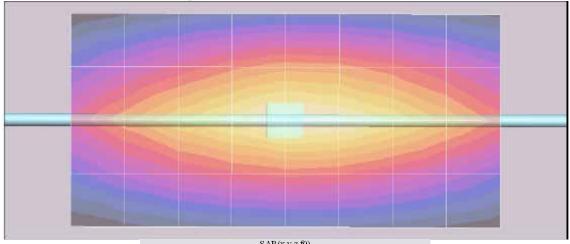
Peak SAR (extrapolated) = 1.76 W/kg

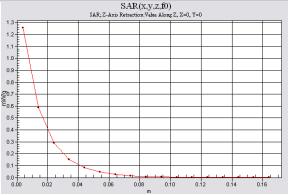
SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.778 mW/gMaximum value of SAR (measured) = 1.25 mW/g

System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement grid: dx=15mm, dy=15mm

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.26 mW/g





#### **DIPOLE SAR TARGET - HEAD**

i&PS	Mixture Type: Ambient Temp.(°C):	IEEE	Head
)	Ambient Temp (°C):		
	ranount remp.( c).	2	.2
			2.3200
-		-	
7	Distance (mm):	1	5
ole	Power to Dipole:	250	mW
12		-	
zed to 1.0 W):		Difference	from Target
		0.00%	(1g-SAR)
4.58		Passe	es K=2
	6 7 ole 02 zed to 1.0 W):	Distance (mm):  Power to Dipole:  zed to 1.0 W):	Distance (mm):  Power to Dipole:  250  Difference:  0.00%

Percent Difference From Target (MUST be within k=2 Uncertainty):

Probe SN #s	1g-SAR (Cube)	Diff from Ave	Robot
3007	4.60	0.4%	R1
3163	4.56	-0.4%	R1
Average	4.5800	New Measured SAR	Value

(normalized to 1.0 W)

Test performed by: Ed Church Initial:

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DIPOLE SA	AR TARG	ET - BODY
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Date:	10/28/09	Frequency (MHz):	450
Lab Location:	FL08-G&PS	Mixture Type:	Body
DAE Serial #:	850	Ambient Temp.(°C):	22
Tissue Characteristics			
Permitivity:	58.4	Phantom Type/SN:	OVAL1016
Conductivity: Tissue Temp.(°C):	0.97 20.1	Distance (mm):	15
D 6	D) I		
Reference Source:	Dipole	Power to Dipole:	250 mW
Reference SN:	1002		
New Target:	Value: <b>4.40</b> mW	/g(1g avg.),	
Average Measured SAR V			
Probe 1-G			
	Diff from Ave	Robot	
Probe 1-G	Diff from Ave		

(normalized to 1.0 W)

Average

**Ed Church** Initial: Test performed by:

New Measured SAR Value

#### **DIPOLE SAR TARGET - HEAD**

Date:	06/09/10	Frequency (MHz):	450
Lab Location:	FL08	Mixture Type:	IEEE Head
DAE Serial #:	729	Ambient Temp.(°C):	22
Tissue Characteristics			
Permitivity:	42.6	Phantom Type/SN:	OVAL1021
Conductivity:	0.90	Distance (mm):	15
Tissue Temp.(°C):	20.5		
Reference Source:	Dipole	Power to Dipole:	250 mW
Reference SN:	1001		A
Target 1g-SAR Value (m)	W/g, normalized to 1.0 W):		Difference from Target
4.	58		3.06% (1g-SAR)
New Target:			
Average 1g-SAR Value (m	W/g): 4.72		Passes K=2

Percent Difference From Target (MUST be within k=2 Uncertainty):

Probe SN #s	1g-SAR (Cube)	Diff from Ave	Robot
3147	4.60	-2.5%	R2
3007	4.84	2.5%	R2
3163	4.72	0.0%	R2
Average	4.7200	New Measured SAR	Value

(normalized to 1.0 W)

Test performed by:	Ed Church	Initial:	E,C

	DIPOL	E SAR	TARGET	- BODY
--	-------	-------	--------	--------

		06/09/10	Frequency (MHz):	450
Lab Location:	11.	FL08	Mixture Type:	Body
DAE Serial #:	-	729	Ambient Temp.(°C):	21.8
Tissue Characte	eristics			
Permitivity:		54.8	Phantom Type/SN:	OVAL1018
Conductivity:		0.91	Distance (mm):	15
Tissue Temp.(°	C):	20.9		
Reference Sour	ce:	Dipole	Power to Dipole:	250 mW
Reference SN:		1001		
New Target:	red SAR Value:	4.32 mw	/g(1g avg.),	
Average Measu				
economical and common and and a contract of the contract of th	1-G		1	
Average Measu Probe SN #s	1-G Cube	Diff from Ave	Robot	
Probe		Diff from Ave	Robot R2	
Probe SN #s	Cube	TARREST STATE OF THE STATE OF T		

(normalized to 1.0 W)

Test performed by: Ed Church Initial: E1

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### Appendix E FCC Part 90 (406.1 – 470 MHz) DUT Scans (Shortened Scan and Highest SAR configurations)

## Shortened Scan Result (Section 13.13, Table 36)

## Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 9/2/2010 9:43:03 PM

Robot# / Run#: DASY4-FL-2 / MeC-Face-100902-06 Phantom# / Tissue Temp.: OVAL1011 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0043

Antenna / TX Freq.: FAF5259A / 406.1250 (MHz)

Battery: PMMN4403A

Carry Acc. / Cable Acc.: None / None

Start Power: 5.64 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 10.90 mW/g (1g); 8.04 mW/g (10g)

Comments: Shorten Scan; Front DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

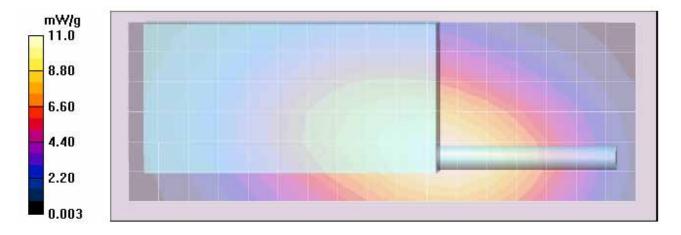
Reference Value = 118.0 V/m; Power Drift = -0.417 dB

Peak SAR (extrapolated) = 14.6 W/kg

SAR(1 g) = 10.9 mW/g; SAR(10 g) = 8.04 mW/gMaximum value of SAR (measured) = 11.5 mW/g

Shortened scan reflect highest SAR producing configuration; approximate run time 8 minutes. Representative full scan run time was 22 minutes

"Shortened" scan max calculated SAR using SAR drift: 1-g Avg. = 6.06 mW/g; 10-g Avg. = 4.47 mW/g Full scan max calculated SAR using SAR drift (see part 1 section 13.3): 1-g Avg. = 6.16 mW/g; 10-g Avg. = 4.60mW/g



#### **Body - Highest SAR Configuration Result for Body-worn** (Section 13.8, Table 30)

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 1/13/2011 3:00:54 PM

Robot# / Run#: DASY4-FL-2 / JsT-Ab-110113-08 Phantom# / Tissue Temp.: OVAL1090 / 20.3 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2 Antenna / TX Freq.: FAF5259A Grp2 (10/28/10) / 406.1250 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: NTN9179A / None

Start Power: 5.85 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 11.67 mW/g (1g); 4.76 mW/g (10g)

Comments: Full Scan

Probe: ES3DV3 - SN3185, Calibrated: 11/25/2010, ConvF(6.51, 6.51, 6.51)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 55.3$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 80.3 V/m; Power Drift = -0.639 dB

Motorola Fast SAR: SAR(1 g) = 11.6 mW/g; SAR(10 g) = 6.23 mW/g

Maximum value of SAR (interpolated) = 15.8 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 80.3 V/m; Power Drift = -0.613 dB

Peak SAR (extrapolated) = 14.4 W/kg

Motorola Fast SAR: SAR(1 g) = 11.3 mW/g; SAR(10 g) = 5.81 mW/g

Maximum value of SAR (interpolated) = 14.4 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

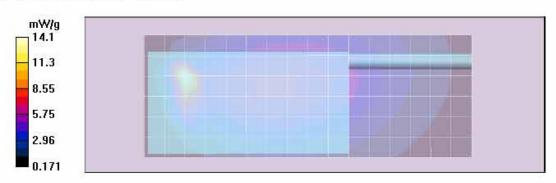
Reference Value = 80.3 V/m; Power Drift = -0.771 dB

Peak SAR (extrapolated) = 40.4 W/kg

SAR(1 g) = 11.4 mW/g; SAR(10 g) = 4.7 mW/gMaximum value of SAR (measured) = 11.7 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 14.9 mW/g



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#### **Highest SAR Configuration Result for PSM** (Section 13.10, Table 32)

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 9/16/2010 1:44:11 PM

Robot# / Run#: DASY4-FL-2 / JsT-Ab-100916-09 Phantom# / Tissue Temp.: OVAL1018 / 20.8 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1005A) / NUE1006A0052

Antenna / TX Freq.: FAF5259A / 438.1250 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: 4205823V01 PSM Belt Clip / PMMN4059A

Start Power: 5.50 (W)

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 13.46 mW/g (1g); 8.38 mW/g (10g)

Comments: Full Scan; Tested with PMAE4065A Antenna on Radio;

"PSM" Power Output = 5.13 Watts

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 438 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 54.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (61x131x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 120.4 V/m; Power Drift = -0.274 dB

Motorola Fast SAR: SAR(1 g) = 12.7 mW/g; SAR(10 g) = 9.18 mW/g

Maximum value of SAR (interpolated) = 14.0 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 120.4 V/m; Power Drift = -0.343 dB

Peak SAR (extrapolated) = 15.5 W/kg

Motorola Fast SAR: SAR(1 g) = 13.8 mW/g; SAR(10 g) = 9.12 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (interpolated) = 15.5 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 120.4 V/m; Power Drift = -0.481 dB

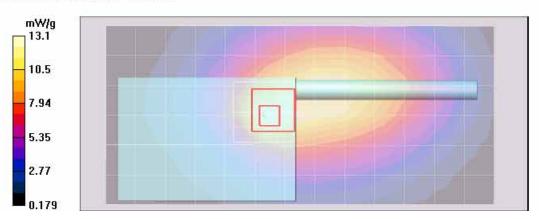
Peak SAR (extrapolated) = 24.4 W/kg

SAR(1 g) = 13.4 mW/g; SAR(10 g) = 8.36 mW/g
Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 14.8 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 13.1 mW/g



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#### **Face - Highest SAR Configuration Result** (Section 13.2, Table 16)

#### Motorola Enterprise Mobility Solutions EME Laboratory

Date/Time: 8/6/2010 6:25:25 PM

Robot# / Run#: DASY4-FL-2 / MeC-Face-100806-11 Phantom# / Tissue Temp.: OVAL1019 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0043

Antenna / TX Freq.: FAF5259A / 406.1250 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / None

Start Power: 5.66 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 10.18 mW/g (1g); 7.59 mW/g (10g)

Comments: Full Scan; Front DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 45.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 110.2 V/m; Power Drift = -0.525 dB

Motorola Fast SAR: SAR(1 g) = 11.2 mW/g; SAR(10 g) = 8.37 mW/g

Maximum value of SAR (interpolated) = 11.8 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 110.2 V/m; Power Drift = -0.623 dB

Peak SAR (extrapolated) = 10.8 W/kg

Motorola Fast SAR: SAR(1 g) = 10.3 mW/g; SAR(10 g) = 7.69 mW/g

Maximum value of SAR (interpolated) = 10.8 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

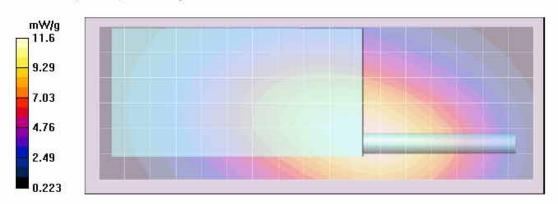
Reference Value = 110.2 V/m; Power Drift = -0.801 dB

Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 9.98 mW/g; SAR(10 g) = 7.47 mW/gMaximum value of SAR (measured) = 10.4 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 10.3 mW/g



### Appendix F DUT Scans - FCC Part 90 (406.1-470 MHz)

# Section 1.0 (Table 13) Assessments at the Face with antenna PMAE4065A using batteries NNTN7038A, PMNN4403A and NNTN7034A

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 7/29/2010 11:52:37 PM

Robot# / Run#: DASY4-FL-2 / MeC-Face-100729-09 Phantom# / Tissue Temp.: OVAL1011 / 20.7 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052

Antenna / TX Freq.: PMAE4065A / 422.1250 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / None

Start Power: 5.62 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 7.19 mW/g (1g); 5.31 mW/g (10g)

Comments: Full Scan; Front DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.84 \text{ mho/m}$ ;  $\epsilon_r = 43.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 89.1 V/m; Power Drift = -0.214 dB

Motorola Fast SAR: SAR(1 g) = 7.32 mW/g; SAR(10 g) = 5.46 mW/g

Maximum value of SAR (interpolated) = 7.67 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 89.1 V/m; Power Drift = -0.235 dB

Peak SAR (extrapolated) = 7.46 W/kg

Motorola Fast SAR: SAR(1 g) = 7.15 mW/g; SAR(10 g) = 5.33 mW/g

Maximum value of SAR (interpolated) = 7.46 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

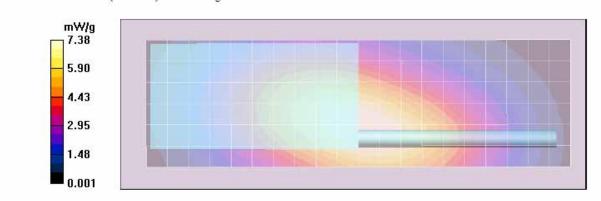
Reference Value = 89.1 V/m; Power Drift = -0.257 dB

Peak SAR (extrapolated) = 9.48 W/kg

SAR(1 g) = 7.09 mW/g; SAR(10 g) = 5.27 mW/g Maximum value of SAR (measured) = 7.44 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 7.38 mW/g



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# Section 2.0 (Table 14) Assessments at the Face with antenna PMAE4065A – Other Frequency channels

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/19/2010 2:34:41 PM

Robot# / Run#: DASY4-FL-2 / JsT-Face-101019-08 Phantom# / Tissue Temp.: OVAL1016 / 20.6 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 406.1250 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / None

Start Power: 5.75 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 8.96 mW/g (1g); 6.64 mW/g (10g)

Comments: Full Scan; DUT Front Facing Phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 44.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 108.3 V/m; Power Drift = -0.392 dB

Motorola Fast SAR: SAR(1 g) = 9.77 mW/g; SAR(10 g) = 7.29 mW/g

Maximum value of SAR (interpolated) = 10.3 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 108.3 V/m; Power Drift = -0.470 dB

Peak SAR (extrapolated) = 9.67 W/kg

Motorola Fast SAR: SAR(1 g) = 9.22 mW/g; SAR(10 g) = 6.86 mW/g

Maximum value of SAR (interpolated) = 9.67 mW/g

#### Face Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

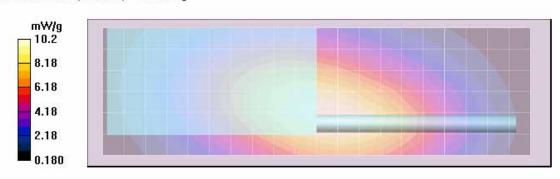
Reference Value = 108.3 V/m; Power Drift = -0.704 dB

Peak SAR (extrapolated) = 11.9 W/kg

SAR(1 g) = 8.86 mW/g; SAR(10 g) = 6.59 mW/gMaximum value of SAR (measured) = 9.28 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 8.98 mW/g



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# Section 3.0 (table 15) Assessments at the Face with antenna FAF5259A using batteries NNTN7038A, PMNN4403A and NNTN7034A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 7/28/2010 5:27:39 PM

Robot# / Run#: DASY4-FL-2 / MeC-Face-100728-03 Phantom# / Tissue Temp.: OVAL1011 / 20.7 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052

Antenna / TX Freq.: FAF5259A / 422.1250 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / None

Start Power: 5.62 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 7.49 mW/g (1g); 5.51 mW/g (10g)

Comments: Full Scan; Front DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.84 \text{ mho/m}$ ;  $\epsilon_r = 42.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 93.9 V/m; Power Drift = -0.247 dB

Motorola Fast SAR: SAR(1 g) = 7.74 mW/g; SAR(10 g) = 5.77 mW/g

Maximum value of SAR (interpolated) = 8.11 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 93.9 V/m; Power Drift = -0.279 dB

Peak SAR (extrapolated) = 7.86 W/kg

Motorola Fast SAR: SAR(1 g) = 7.5 mW/g; SAR(10 g) = 5.59 mW/g

Maximum value of SAR (interpolated) = 7.86 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

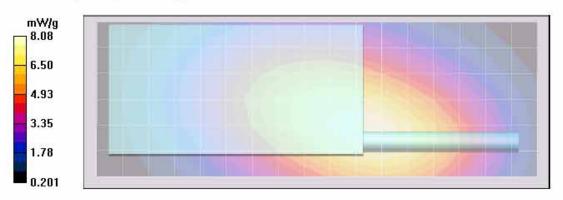
Reference Value = 93.9 V/m; Power Drift = -0.336 dB

Peak SAR (extrapolated) = 9.93 W/kg

SAR(1 g) = 7.39 mW/g; SAR(10 g) = 5.47 mW/g Maximum value of SAR (measured) = 7.77 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 7.73 mW/g



# Section 4.0 (Table 16) Assessments at the Face with antenna FAF5259A – Other Frequency channels

(Same scan as indicated in Appendix E: Face - Highest SAR Configuration Result)

#### **Section 5.0 (Table 17)**

## Assessment at the Face with PSM PMMN4059A and antenna PMAE4065A using batteries NNTN7038A, PMNN4403A and NNTN7034A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/7/2010 6:20:39 PM

Robot# / Run#: DASY4-FL-2 / CM-Face-101007-14 Phantom# / Tissue Temp.: OVAL1016 / 21.0 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1005A) / NUE1006A0052

Antenna / TX Freq.: PMAE4065A / 453.9875 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / PMMN4059A

Start Power: 5.52 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 5.13 mW/g (1g); 3.74 mW/g (10g)

Comments: Full Scan; Tested with Antenna FAF5259A on Radio;

"PSM" Power Output = 5.15 Watts

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 43.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 77.3 V/m; Power Drift = -0.0455 dB

Motorola Fast SAR: SAR(1 g) = 5.23 mW/g; SAR(10 g) = 3.87 mW/g

Maximum value of SAR (interpolated) = 5.50 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 77.3 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 5.46 W/kg

Motorola Fast SAR: SAR(1 g) = 5.21 mW/g; SAR(10 g) = 3.85 mW/g

Maximum value of SAR (interpolated) = 5.46 mW/g

#### Face Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

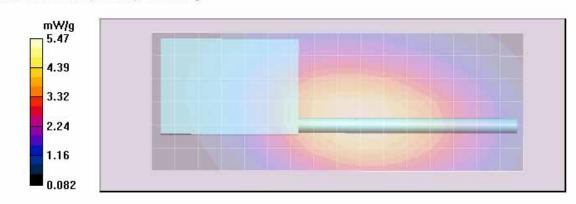
Reference Value = 77.3 V/m; Power Drift = -0.156 dB

Peak SAR (extrapolated) = 6.94 W/kg

SAR(1 g) = 5.12 mW/g; SAR(10 g) = 3.74 mW/g Maximum value of SAR (measured) = 5.39 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 5.38 mW/g



# Section 6.0 (Table 18) Assessment at the Face with PSM PMMN4059A and antenna PMAE4065A – Other Frequency channels

## Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/7/2010 10:11:49 PM

Robot# / Run#: DASY4-FL-2 / CM-Face-101007-18 Phantom# / Tissue Temp.: OVAL1016 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1005A) / NUE1006A0052

Antenna / TX Freq.: PMAE4065A / 469.9875 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / PMMN4059A

Start Power: 5.50 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 5.67 mW/g (1g); 4.12 mW/g (10g)

Comments: Full Scan; Tested with Antenna FAF5259A on Radio;

"PSM" Power Output = 5.15 Watts

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.91$  mho/m;  $\epsilon_r = 43.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Face Scan/1-Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 82.0 V/m; Power Drift = -0.180 dB

Motorola Fast SAR: SAR(1 g) = 5.97 mW/g; SAR(10 g) = 4.42 mW/g

Maximum value of SAR (interpolated) = 6.28 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 82.0 V/m; Power Drift = -0.231 dB

Peak SAR (extrapolated) = 6.07 W/kg

Motorola Fast SAR: SAR(1 g) = 5.79 mW/g; SAR(10 g) = 4.28 mW/g

Maximum value of SAR (interpolated) = 6.07 mW/g

#### Face Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 82.0 V/m; Power Drift = -0.331 dB

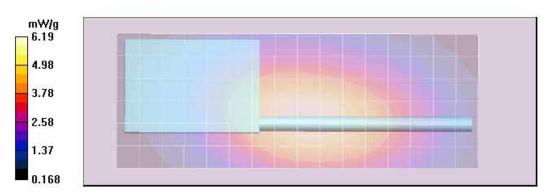
Peak SAR (extrapolated) = 7.67 W/kg

SAR(1 g) = 5.66 mW/g; SAR(10 g) = 4.12 mW/g

Maximum value of SAR (measured) = 5.95 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 5.93 mW/g



#### **Section 7.0 (Table 19)** Assessment at the Face with PSM PMMN4059A and antenna FAF5259A using batteries NNTN7038A, PMNN4403A and NNTN7034A

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/18/2010 10:50:41 PM

Robot# / Run#: DASY4-FL-2 / CM-Face-101218-26 Phantom# / Tissue Temp.: OVAL1020 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: FAF5259A / 453.9875 (MHz)

Battery: NNTN7034A

Carry Acc. / Cable Acc.: None / PMMN4059A

Start Power: 5.74 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 6.96 mW/g (1g); 5.03 mW/g (10g)

Comments: Full Scan. PMAE4065A on radio. PSM power output = 5.44 W.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.87 \text{ mho/m}$ ;  $\epsilon_r = 42.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 94.2 V/m; Power Drift = -0.102 dB

Motorola Fast SAR: SAR(1 g) = 7.24 mW/g; SAR(10 g) = 5.33 mW/g

Maximum value of SAR (interpolated) = 7.61 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 94.2 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 7.45 W/kg

Motorola Fast SAR: SAR(1 g) = 7.11 mW/g; SAR(10 g) = 5.23 mW/g

Maximum value of SAR (interpolated) = 7.45 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

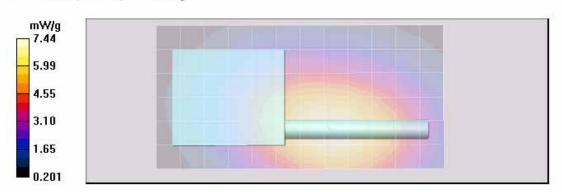
Reference Value = 94.2 V/m; Power Drift = -0.213 dB

Peak SAR (extrapolated) = 9.46 W/kg

SAR(1 g) = 6.96 mW/g; SAR(10 g) = 5.03 mW/gMaximum value of SAR (measured) = 7.35 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 7.28 mW/g



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#### Section 8.0 (Table 20) Assessment at the Face with PSM PMMN4059A and antenna FAF5259A – **Other Frequency channels**

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/19/2010 11:07:56 AM

Robot# / Run#: DASY4-FL-2 / MeC-Face-101219-04

Phantom# / Tissue Temp.: OVAL1020 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: FAF5259A / 469.9875 (MHz)

Battery: NNTN7034A

Carry Acc. / Cable Acc.: None / PMMN4059A

Start Power: 5.70 (W)

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 5.60 mW/g (1g); 4.03 mW/g (10g)

Comments: Full Scan. PMAE4065A on radio. PSM power output = 5.39 W.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 85.3 V/m; Power Drift = -0.147 dB

Motorola Fast SAR: SAR(1 g) = 5.8 mW/g; SAR(10 g) = 4.28 mW/g

Maximum value of SAR (interpolated) = 6.09 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 85.3 V/m; Power Drift = -0.194 dB

Peak SAR (extrapolated) = 5.96 W/kg

Motorola Fast SAR: SAR(1 g) = 5.67 mW/g; SAR(10 g) = 4.18 mW/g

Maximum value of SAR (interpolated) = 5.96 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

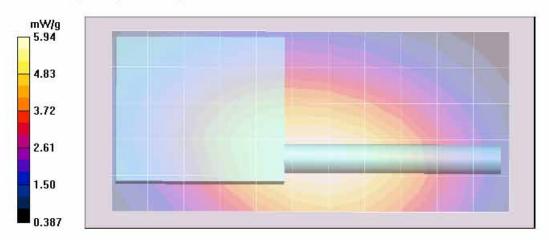
Reference Value = 85.3 V/m; Power Drift = -0.256 dB

Peak SAR (extrapolated) = 7.59 W/kg

SAR(1 g) = 5.57 mW/g; SAR(10 g) = 4.02 mW/g Maximum value of SAR (measured) = 5.88 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 5.83 mW/g



#### Section 9.0 (Table 21)

#### Assessment at the Face with PSM PMMN4061A and antenna PMAE4065A using batteries NNTN7038A, PMNN4403A and NNTN7034A

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/19/2010 12:30:33 PM

Robot# / Run#: DASY4-FL-2 / MeC-Face-101219-07 Phantom# / Tissue Temp.: OVAL1020 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 453.9875 (MHz)

Battery: NNTN7034A

Carry Acc. / Cable Acc.: None / PMMN4061A

Start Power: 5.65 (W)

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 4.45 mW/g (1g); 3.24 mW/g (10g)

Comments: Full Scan. FAF5259A on radio. PSM power output = 5.40 W.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (51x151x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 65.8 V/m; Power Drift = -0.158 dB

Motorola Fast SAR: SAR(1 g) = 4.59 mW/g; SAR(10 g) = 3.4 mW/g

Maximum value of SAR (interpolated) = 4.82 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 65.8 V/m; Power Drift = -0.173 dB

Peak SAR (extrapolated) = 4.72 W/kg

Motorola Fast SAR: SAR(1 g) = 4.5 mW/g; SAR(10 g) = 3.32 mW/g

Maximum value of SAR (interpolated) = 4.72 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

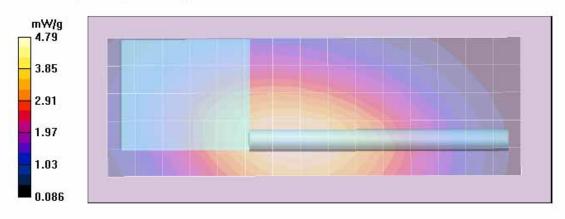
Reference Value = 65.8 V/m; Power Drift = -0.215 dB

Peak SAR (extrapolated) = 5.98 W/kg

SAR(1 g) = 4.43 mW/g; SAR(10 g) = 3.23 mW/g Maximum value of SAR (measured) = 4.66 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 4.65 mW/g



## **Section 10.0 (Table 22)**

#### Assessment at the Face with PSM PMMN4061A and antenna PMAE4065A – **Other Frequency channels**

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/19/2010 5:27:56 PM

Robot# / Run#: DASY4-FL-2 / CM-Face-101219-17 Phantom# / Tissue Temp.: OVAL1020 / 21.0 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 469.9875 (MHz)

Battery: NNTN7034A

Carry Acc. / Cable Acc.: None / PMMN4061A

Start Power: 5.71 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR. values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 4.10 mW/g (1g); 2.98 mW/g (10g)

Comments: Full Scan. FAF5259A on radio. PSM power output = 5.36 W.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (51x151x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 62.9 V/m; Power Drift = -0.156 dB

Motorola Fast SAR: SAR(1 g) = 4.2 mW/g; SAR(10 g) = 3.11 mW/g

Maximum value of SAR (interpolated) = 4.41 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 62.9 V/m; Power Drift = -0.154 dB

Peak SAR (extrapolated) = 4.29 W/kg

Motorola Fast SAR: SAR(1 g) = 4.1 mW/g; SAR(10 g) = 3.03 mW/g

Maximum value of SAR (interpolated) = 4.29 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

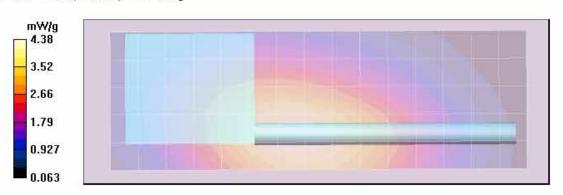
Reference Value = 62.9 V/m; Power Drift = -0.230 dB

Peak SAR (extrapolated) = 5.54 W/kg

SAR(1 g) = 4.08 mW/g; SAR(10 g) = 2.97 mW/gMaximum value of SAR (measured) = 4.30 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 4.31 mW/g



## Section 11.0 (Table 23) Assessment at the Face with PSM PMMN4061A and antenna FAF5259A

## Assessment at the Face with PSM PMMN4061A and antenna FAF5259A using batteries NNTN7038A, PMNN4403A and NNTN7034A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/20/2010 8:00:59 AM

Robot# / Run#: DASY4-FL-2 / ErC-Face-101220-03 Phantom# / Tissue Temp.: OVAL1020 / 20.9 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: FAF5259A / 453.9875 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / PMMN4061A

Start Power: 5.80 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 5.71 mW/g (1g); 4.1 mW/g (10g)

Comments: Full Scan. FAF5259A on PSM. PSM power output = 4.74 W.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.89$  mho/m;  $\epsilon_r = 42.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Face Scan/1-Area Scan (6x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 6.14 mW/g

Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 70.4 V/m; Power Drift = -0.195 dB

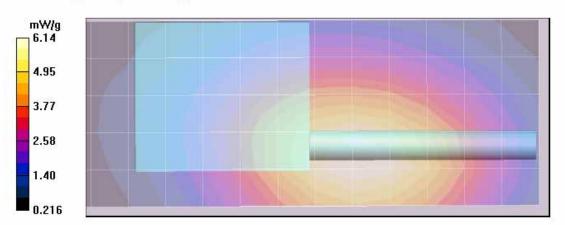
Peak SAR (extrapolated) = 7.86 W/kg

SAR(1 g) = 5.71 mW/g; SAR(10 g) = 4.1 mW/g

Maximum value of SAR (measured) = 6.05 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 6.06 mW/g



# Section 12.0 (Table 24) Assessment at the Face with PSM PMMN4061A and antenna FAF5259A – Other Frequency channels

## Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/20/2010 2:33:09 PM

Robot# / Run#: DASY4-FL-2 / ErC-Face-101220-09 Phantom# / Tissue Temp.: OVAL1020 / 20.5 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: FAF5259A /469.9875 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / PMMN4061A

Start Power: 5.77 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 3.59 mW/g (1g); 2.6 mW/g (10g)

Comments: Full Scan. FAF5259A on PSM. PSM power output = 4.54 W.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

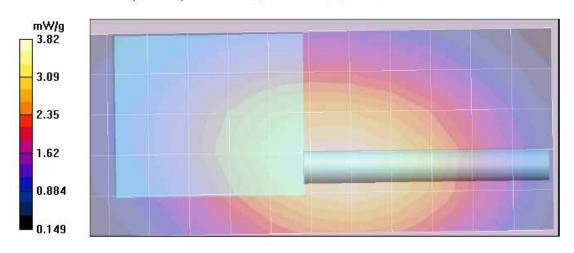
#### Face Scan/1-Area Scan (6x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.82 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 58.1 V/m; Power Drift = -0.130 dB Peak SAR (extrapolated) = 4.89 W/kg SAR(1 g) = 3.59 mW/g; SAR(10 g) = 2.6 mW/g Maximum value of SAR (measured) = 3.77 mW/g

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



#### **Section 13.0 (Table 25)**

#### Assessment at the Body with antenna PMAE4065A and Audio cable RMN5058A using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/4/2010 8:17:35 PM

Robot# / Run#: DASY4-FL-2 / MeC-Ab-100804-12 Phantom# / Tissue Temp.: OVAL1018 / 21.0 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052

Antenna / TX Freq.: PMAE4065A / 422.1250 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: NTN9179A / RMN5058A

Start Power: 5.68 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 5.95 mW/g (1g); 2.36 mW/g (10g)

Comments: Full Scan; Back of DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 56.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 50.3 V/m; Power Drift = -0.0968 dB

Motorola Fast SAR: SAR(1 g) = 4.53 mW/g; SAR(10 g) = 2.64 mW/g

Maximum value of SAR (interpolated) = 5.42 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 50.3 V/m; Power Drift = -0.165 dB

Peak SAR (extrapolated) = 8.03 W/kg

Motorola Fast SAR: SAR(1 g) = 5.76 mW/g; SAR(10 g) = 2.84 mW/g

Maximum value of SAR (interpolated) = 8.03 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

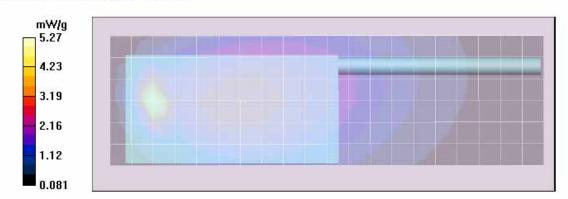
Reference Value = 50.3 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 21.6 W/kg

SAR(1 g) = 5.84 mW/g; SAR(10 g) = 2.34 mW/g Maximum value of SAR (measured) = 6.30 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 7.15 mW/g



#### **Section 14.0 (Table 26)**

#### Assessment at the Body with antenna PMAE4065A and Audio cable RMN5058A -**Other Frequency channels**

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/5/2010 3:56:03 PM

Robot# / Run#: DASY4-FL-2 / MeC-Ab-100805-10 Phantom# / Tissue Temp.: OVAL1018 / 20.3 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052

Antenna / TX Freq.: PMAE4065A / 406.1250 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: NTN9179A Belt Loop w/ D-Clip / RMN5058A

Start Power: 5.74 (W)

Note: Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 7.92 mW/g (1g); 3.18 mW/g (10g)

Comments: Full Scan; Back of DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 56.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Ab Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 57.5 V/m; Power Drift = -0.118 dB

Motorola Fast SAR: SAR(1 g) = 6.98 mW/g; SAR(10 g) = 3.76 mW/g

Maximum value of SAR (interpolated) = 8.98 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 57.5 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 10.9 W/kg

Motorola Fast SAR: SAR(1 g) = 7.88 mW/g; SAR(10 g) = 3.89 mW/g

Maximum value of SAR (interpolated) = 10.9 mW/g

#### Ab Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

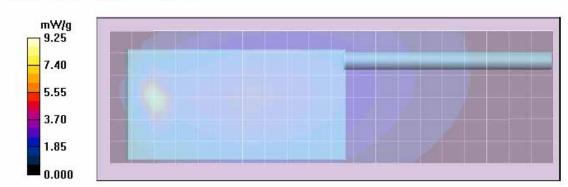
Reference Value = 57.5 V/m; Power Drift = -0.282 dB

Peak SAR (extrapolated) = 28.2 W/kg

SAR(1 g) = 7.78 mW/g; SAR(10 g) = 3.15 mW/gMaximum value of SAR (measured) = 8.16 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 9.25 mW/g



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#### **Section 15.0 (Table 27)**

## Assessment at the Body with antenna PMAE4065A w/o audio cable attached using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/14/2010 12:51:50 PM

Robot# / Run#: DASY4-FL-2 / JsT-Ab-101014-08 Phantom# / Tissue Temp.: OVAL1011 / 21.3 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 406.1250 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: HLN6875A / None

Start Power: 5.73 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 9.16 mW/g (1g); 3.82 mW/g (10g)

Comments: Full Scan; Inside Pair of Battery Contacts Closest to Robot Touching Phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 56.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 76.4 V/m; Power Drift = -0.262 dB

Motorola Fast SAR: SAR(1 g) = 8.41 mW/g; SAR(10 g) = 5 mW/g

Maximum value of SAR (interpolated) = 10.5 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 76.4 V/m; Power Drift = -0.287 dB

Peak SAR (extrapolated) = 11.9 W/kg

Motorola Fast SAR: SAR(1 g) = 8.78 mW/g; SAR(10 g) = 4.6 mW/g

Maximum value of SAR (interpolated) = 11.9 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

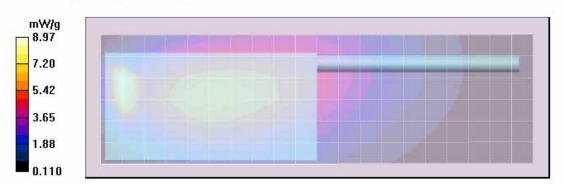
Reference Value = 76.4 V/m; Power Drift = -0.295 dB

Peak SAR (extrapolated) = 33.9 W/kg

SAR(1 g) = 9.04 mW/g; SAR(10 g) = 3.79 mW/g Maximum value of SAR (measured) = 10.2 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 10.8 mW/g



#### **Section 16.0 (Table 28)**

# Assessment at the Body with antenna FAF5259A and Audio cable RMN5058A using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/2/2010 5:29:37 PM

Robot# / Run#: DASY4-FL-2 / MeC-Ab-100802-17

Phantom# / Tissue Temp.: OVAL1018 / 21.5 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052

Antenna / TX Freq.: FAF5259A / 422.1250 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: NTN9179A / RMN5058A

Start Power: 5.66 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 5.46 mW/g (1g); 2.53 mW/g (10g)

Comments: Full Scan; Back of DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.92$  mho/m;  $\epsilon_r = 56.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Ab Scan/1-Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 51.0 V/m; Power Drift = -0.173 dB

Motorola Fast SAR: SAR(1 g) = 3.84 mW/g; SAR(10 g) = 2.61 mW/g

Maximum value of SAR (interpolated) = 4.23 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 51.0 V/m; Power Drift = -0.198 dB

Peak SAR (extrapolated) = 6.98 W/kg

Motorola Fast SAR: SAR(1 g) = 5.28 mW/g; SAR(10 g) = 2.99 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (interpolated) = 6.98 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 51.0 V/m; Power Drift = -0.236 dB

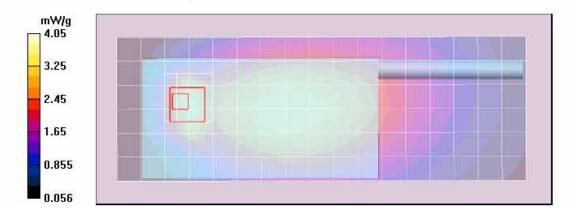
Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 5.42 mW/g; SAR(10 g) = 2.52 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 6.37 mW/g

## Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 6.60 mW/g



#### **Section 17.0 (Table 29)**

## Assessment at the Body with antenna FAF5259A and Audio cable RMN5058A – Other Frequency channels

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 9/20/2010 9:30:35 AM

Robot# / Run#: DASY4-FL-2 / JsT-Ab-100920-02 Phantom# / Tissue Temp.: OVAL1018 / 20.9 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0043

Antenna / TX Freq.: FAF5259A / 406.1250 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: NTN9179A Belt Loop w/ D-Clip / RMN5058A

Start Power: 5.47 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 10.13 mW/g (1g); 3.97 mW/g (10g)

Comments: Full Scan; Rolled DUT so Extreme Inside and Middle Plastic Peaks between

Battery Contacts Closest to Robot Touching Phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 422 MHz;  $\sigma = 0.93$  mho/m;  $\epsilon_r = 55.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Ab Scan/1-Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 65.2 V/m; Power Drift = -0.384 dB

Motorola Fast SAR: SAR(1 g) = 6.71 mW/g; SAR(10 g) = 4.17 mW/g

Maximum value of SAR (interpolated) = 8.94 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 65.2 V/m; Power Drift = -0.446 dB

Peak SAR (extrapolated) = 13.5 W/kg

Motorola Fast SAR: SAR(1 g) = 9.95 mW/g; SAR(10 g) = 5 mW/g

Maximum value of SAR (interpolated) = 13.5 mW/g

#### Ab Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 65.2 V/m; Power Drift = -0.619 dB

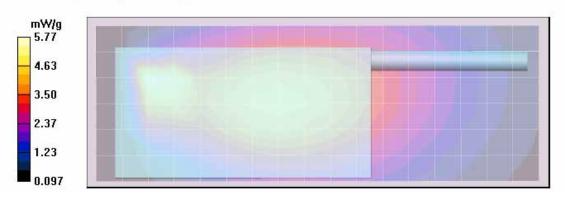
Peak SAR (extrapolated) = 37.2 W/kg

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 3.96 mW/g

Maximum value of SAR (measured) = 12.8 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 12.7 mW/g



#### **Section 18.0 (Table 30)**

# Assessment at the Body with antenna FAF5259A w/o Audio cable attached, using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

(Same scan as indicated in Appendix E: Highest Body - Highest SAR Configuration Result for Body-worn)

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## Section 19 (Table 31) Assessment at the Body with PSM PMMN4059A and antenna PMAE4065A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/11/2010 7:53:27 AM

Robot# / Run#: DASY4-FL-2 / HvH-Ab-101211-06 Phantom# / Tissue Temp.: OVAL1011 / 21.2 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 453.9875 (MHz)

Battery: NNTN7034A

Carry Acc. / Cable Acc.: 4205823V01 PSM belt clip / PMMN4059A

Start Power: 5.71 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 11.66 mW/g (1g); 7.67 mW/g (10g)

Comments: Full Scan. FAF5259A on radio, PSM power = 5.45 watts.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\varepsilon_r = 54.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (51x151x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 113.6 V/m; Power Drift = -0.173 dB

Motorola Fast SAR: SAR(1 g) = 11.7 mW/g; SAR(10 g) = 8.34 mW/g

Maximum value of SAR (interpolated) = 12.7 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 113.6 V/m; Power Drift = -0.200 dB

Peak SAR (extrapolated) = 13.2 W/kg

Motorola Fast SAR: SAR(1 g) = 12 mW/g; SAR(10 g) = 8.17 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (interpolated) = 13.2 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 113.6 V/m; Power Drift = -0.297 dB

Peak SAR (extrapolated) = 19.9 W/kg

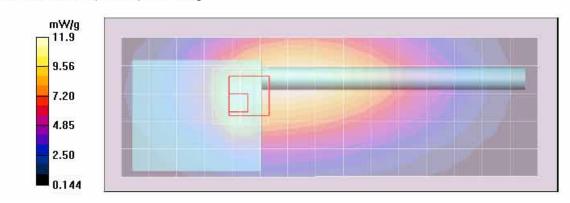
SAR(1 g) = 11.6 mW/g; SAR(10 g) = 7.65 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 12.3 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 12.9 mW/g



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## Section 20.0 (Table 32) Assessments at the Body with PSM PMMN4059A and antenna FAF5259A

(Same scan as indicated in Appendix E: Highest SAR Configuration Result for PSM)

#### **Section 21.0 (Table 33)**

## Assessment at the Body with PSM PMMN4061A and antenna PMAE4065A, using batteries NNTN7038A, PMNN4403A and NNTN7034A, and PSM belt clip 4205823V01

## Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/12/2010 7:04:09 AM

Robot# / Run#: DASY4-FL-2 / HvH-Ab-101212-06 Phantom# / Tissue Temp.: OVAL1011 / 21.4 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 453.9875 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: 4205823V01 PSM belt clip / PMMN4061A

Start Power: 5.68 (W)

#### Note

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 10.66 mW/g (1g); 6.87 mW/g (10g)

Comments: Full Scan. FAF5259A on radio, PSM power = 4.73 watts.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 454 MHz;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 54.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (51x151x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 105.3 V/m; Power Drift = -0.0642 dB

Motorola Fast SAR: SAR(1 g) = 10.2 mW/g; SAR(10 g) = 7.36 mW/g

Maximum value of SAR (interpolated) = 11.3 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 105.3 V/m; Power Drift = -0.0756 dB

Peak SAR (extrapolated) = 11.7 W/kg

Motorola Fast SAR: SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.28 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (interpolated) = 11.7 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 105.3 V/m; Power Drift = -0.107 dB

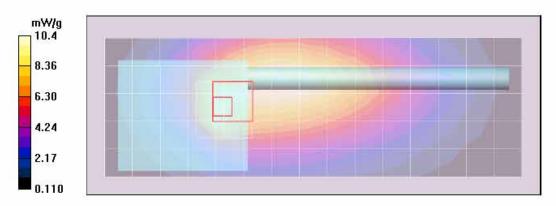
Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 10.6 mW/g; SAR(10 g) = 6.85 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 11.7 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



### Section 22.0 (Table 34) Assessment at the Body with PMMN4061A and antenna PMAE4065A – Other Frequency channels

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/12/2010 9:56:35 AM

Robot# / Run#: DASY4-FL-2 / HvH-Ab-101212-12 Phantom# / Tissue Temp.: OVAL1011 / 21.0 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 438.1250 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: 4205823V01 PSM belt clip / PMMN4061A

Start Power: 5.69 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 10.66 mW/g (1g); 6.77 mW/g (10g)

Comments: Full Scan. FAF5259A on radio, PSM power = 5.00 watts.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 438 MHz;  $\sigma = 0.91$  mho/m;  $\varepsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Ab Scan/1-Area Scan (51x151x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 105.2 V/m; Power Drift = -0.0975 dB

Motorola Fast SAR: SAR(1 g) = 10.2 mW/g; SAR(10 g) = 7.21 mW/g

Maximum value of SAR (interpolated) = 11.1 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 105.2 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 11.7 W/kg

Motorola Fast SAR: SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.18 mW/g

Maximum value of SAR (interpolated) = 11.7 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 105.2 V/m; Power Drift = -0.158 dB

Peak SAR (extrapolated) = 18.9 W/kg

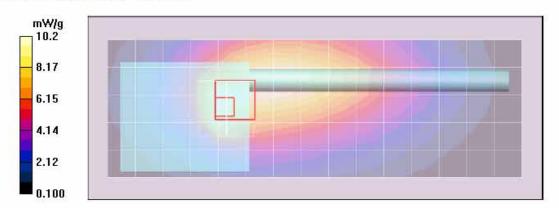
SAR(1 g) = 10.5 mW/g; SAR(10 g) = 6.71 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 11.6 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 11.8 mW/g



#### **Section 23.0 (Table 35)**

### Assessment at the Body with PSM PMMN4061A and antenna FAF5259A, using batteries NNTN7038A, PMNN4403A and NNTN7034A, and PSM belt clip 4205823V01

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 12/13/2010 6:42:52 AM

Robot# / Run#: DASY4-FL-2 / HvH-Ab-101213-02 Phantom# / Tissue Temp.: OVAL1011 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: FAF5259A / 438.1250 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: 4205823V01 PSM belt clip / PMMN4061A

Start Power: 5.68 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 14.38 mW/g (1g); 8.83 mW/g (10g)

Comments: Full Scan. PMAE4065A on radio, PSM power = 4.98 watts. Reduced area grid with step size = 10mm. No Volume 2D.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 438 MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Ab Scan/1-Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 113.3 V/m; Power Drift = -0.138 dB

Motorola Fast SAR: SAR(1 g) = 14.4 mW/g; SAR(10 g) = 9.56 mW/g

Maximum value of SAR (interpolated) = 16.6 mW/g

#### Ab Scan/2-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 113.3 V/m; Power Drift = -0.236 dB

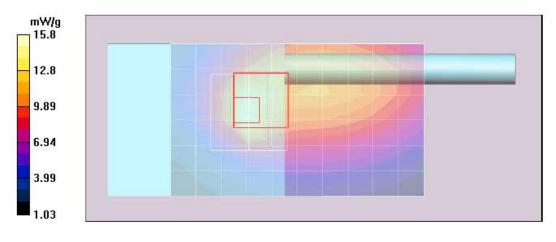
Peak SAR (extrapolated) = 26.5 W/kg

SAR(1 g) = 14.1 mW/g; SAR(10 g) = 8.73 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

#### Ab Scan/3-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 15.9 mW/g



### APPENDIX G DUT Scans (380-470 MHz)

Data enclosed for this appendix is not applicable for FCC part 90

### Section 1.0 (Table 13)

### Assessments at the Face with antenna PMAE4065A using batteries NNTN7038A, PMNN4403A and NNTN7034A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/19/2010 3:31:09 PM

Robot# / Run#: DASY4-FL-2 / JsT-Face-101019-09 Phantom# / Tissue Temp.: OVAL1016 / 20.9 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 395.0000 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / None

Start Power: 5.76 (W)

#### Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 8.20 mW/g (1g); 6.07 mW/g (10g)

Comments: Full Scan; DUT Front Facing Phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 395 MHz;  $\sigma = 0.84$  mho/m;  $\epsilon_r = 45.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Face Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 103.8 V/m; Power Drift = -0.325 dB

Motorola Fast SAR: SAR(1 g) = 8.9 mW/g; SAR(10 g) = 6.64 mW/g

Maximum value of SAR (interpolated) = 9.34 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 103.8 V/m; Power Drift = -0.431 dB

Peak SAR (extrapolated) = 8.76 W/kg

Motorola Fast SAR: SAR(1 g) = 8.37 mW/g; SAR(10 g) = 6.24 mW/g

Maximum value of SAR (interpolated) = 8.76 mW/g

#### Face Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

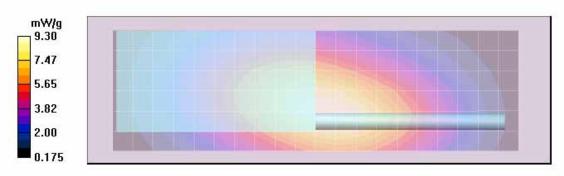
Reference Value = 103.8 V/m; Power Drift = -0.714 dB

Peak SAR (extrapolated) = 10.7 W/kg

SAR(1 g) = 8.03 mW/g; SAR(10 g) = 5.99 mW/gMaximum value of SAR (measured) = 8.42 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 8.08 mW/g



# Section 2.0 (Table 14) Assessments at the Face with antenna FAF5259A – Other Frequency channels (Same scan as indicated in Appendix F – Section 2.0)

### Section 3.0 (Table 15) Assessment at the Face with antenna FAF5259A using batteries NNTN7038A, PMNN4403A and NNTN7034A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 7/28/2010 4:37:55 PM

Robot# / Run#: DASY4-FL-2 / MeC-Face-100728-02 Phantom# / Tissue Temp.: OVAL1011 / 20.7 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052

Antenna / TX Freq.: FAF5259A / 395.0000 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: None / None

Start Power: 5.68 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 7.84 mW/g (1g); 5.76 mW/g (10g)

Comments: Full Scan; Front DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.43, 6.43, 6.43)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 395 MHz;  $\sigma = 0.83 \text{ mho/m}$ ;  $\epsilon_r = 43.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Face Scan/1-Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 101.7 V/m; Power Drift = -0.503 dB

Motorola Fast SAR: SAR(1 g) = 8.56 mW/g; SAR(10 g) = 6.4 mW/g

Maximum value of SAR (interpolated) = 8.98 mW/g

#### Face Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 101.7 V/m; Power Drift = -0.600 dB

Peak SAR (extrapolated) = 8.38 W/kg

Motorola Fast SAR: SAR(1 g) = 8 mW/g; SAR(10 g) = 5.95 mW/g

Maximum value of SAR (interpolated) = 8.38 mW/g

#### Face Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

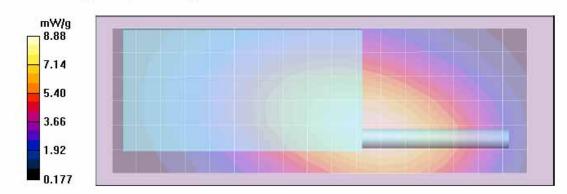
Reference Value = 101.7 V/m; Power Drift = -0.768 dB

Peak SAR (extrapolated) = 10.3 W/kg

SAR(1 g) = 7.71 mW/g; SAR(10 g) = 5.71 mW/g Maximum value of SAR (measured) = 8.09 mW/g

#### Face Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 7.93 mW/g



# Section 4.0 (Table 16) Assessments at the Face with antenna FAF5259A – Other Frequency channels

(Same scan as indicated in Appendix E: Face - Highest SAR Configuration Result)

# Section 5.0 (Table 17) Assessment at the Face with PSM PMMN4059A and antenna PMAE4065A using batteries NNTN7038A, PMNN4403A and NNTN7034A

(Same scan as indicated in Appendix F – Section 5.0)

# Section 6.0 (Table 18) Assessment at the Face with PSM PMMN4059A and antenna PMAE4065A – Other Frequency channels

(Same scan as indicated in Appendix F – Section 6.0)

# Section 7.0 (Table 19) Assessment at the Face with PSM PMMN4059A and antenna FAF5259A using batteries NNTN7038A, PMNN4403A and NNTN7034A

(Same scan as indicated in Appendix F – Section 7.0)

# Section 8.0 (Table 20) Assessment at the Face with PSM PMMN4059A and antenna FAF5259A – Other Frequency channels

(Same scan as indicated in Appendix F – Section 8.0)

# Section 9.0 (Table 21) Assessment at the Face with PSM PMMN4061A and antenna PMAE4065A using batteries NNTN7038A, PMNN4403A and NNTN7034A

(Same scan as indicated in Appendix F – Section 9.0)

# Section 10.0 (Table 22) Assessment at the Face with PSM PMMN4061A and antenna PMAE4065A – Other Frequency channels

(Same scan as indicated in Appendix F – Section 10.0)

# Section 11.0 (Table 23) Assessment at the Face with PSM PMMN4061A and antenna FAF5259A using batteries NNTN7038A, PMNN4403A and NNTN7034A

(Same scan as indicated in Appendix F – Section 11.0)

# Section 12.0 (Table 24) Assessment at the Face with PSM PMMN4061A and antenna FAF5259A – Other Frequency channels

(Same scan as indicated in Appendix F – Section 12.0)

#### **Section 13.0 (Table 25)**

### Assessment at the Body with antenna PMAE4065A and Audio cable RMN5058A using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/4/2010 7:41:03 PM

Robot# / Run#: DASY4-FL-2 / MeC-Ab-100804-11 Phantom# / Tissue Temp.: OVAL1018 / 21.1 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052 Antenna / TX Freq.: PMAE4065A / 395.0000 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: NTN9179A / RMN5058A

Start Power: 5.66 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 7.78 mW/g (1g); 3.25 mW/g (10g)

Comments: Full Scan; Back of DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 395 MHz;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 57.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 59.1 V/m; Power Drift = -0.0742 dB

Motorola Fast SAR: SAR(1 g) = 5.37 mW/g; SAR(10 g) = 3.34 mW/g

Maximum value of SAR (interpolated) = 6.50 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 59.1 V/m; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 9.90 W/kg

Motorola Fast SAR: SAR(1 g) = 7.33 mW/g; SAR(10 g) = 3.86 mW/g

Maximum value of SAR (interpolated) = 9.90 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 59.1 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 27.4 W/kg

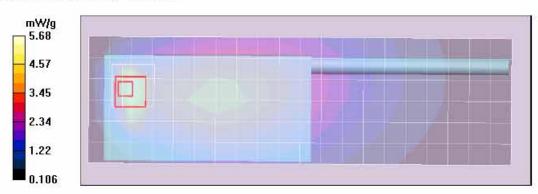
SAR(1 g) = 7.61 mW/g; SAR(10 g) = 3.21 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 8.70 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 9.45 mW/g



### Section 14.0 (Table 26) Assessment at the Body with antenna PMAE4065A and Audio cable RMN5058A — Other Frequency channels

(Same scan as indicated in Appendix F – Section 14.0)

#### **Section 15.0 (Table 27)**

### Assessment at the Body with antenna PMAE4065A w/o audio cable attached using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/14/2010 9:48:49 AM

Robot# / Run#: DASY4-FL-2 / JsT-Ab-101014-03 Phantom# / Tissue Temp.: OVAL1011 / 21.2 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1006A) / CAI1006KW2

Antenna / TX Freq.: PMAE4065A / 395.0000 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: HLN6875A / None

Start Power: 5.76 (W)

Note:

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 10.92 mW/g (1g); 4.44 mW/g (10g)

Comments: Full Scan; Inside Pair of Battery Contacts Closest to Robot Touching Phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 9/24/2010

Duty Cycle: 1:1, Medium parameters used: f = 395 MHz;  $\sigma = 0.89$  mho/m;  $\epsilon_r = 56.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

#### Ab Scan/1-Area Scan (61x201x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 78.4 V/m; Power Drift = -0.230 dB

Motorola Fast SAR: SAR(1 g) = 9.26 mW/g; SAR(10 g) = 5.55 mW/g

Maximum value of SAR (interpolated) = 11.2 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 78.4 V/m; Power Drift = -0.283 dB

Peak SAR (extrapolated) = 15.0 W/kg

Motorola Fast SAR: SAR(1 g) = 10.8 mW/g; SAR(10 g) = 5.42 mW/g

Maximum value of SAR (interpolated) = 15.0 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

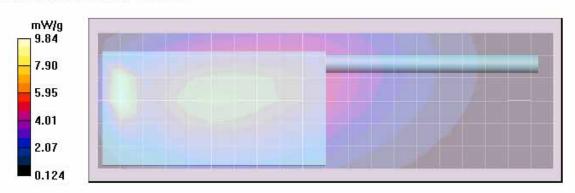
Reference Value = 78.4 V/m; Power Drift = -0.357 dB

Peak SAR (extrapolated) = 40.8 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 4.39 mW/gMaximum value of SAR (measured) = 10.5 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 12.4 mW/g



#### **Section 16.0 (Table 28)**

#### Assessment at the Body with antenna FAF5259A and Audio cable RMN5058A using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

#### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 8/2/2010 12:32:44 PM

Robot# / Run#: DASY4-FL-2 / MeC-Ab-100802-10 Phantom# / Tissue Temp.: OVAL1018 / 21.5 (C)

DUT Model# / Serial#: H98QDD9PW5AN / NUE1006A0052

Antenna / TX Freq.: FAF5259A / 395.0000 (MHz)

Battery: NNTN7038A

Carry Acc. / Cable Acc.: HLN6875A / RMN5058A

Start Power: 5.67 (W)

Note: Prior to recording the reported SAR values below, the measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported: 8.49 mW/g (1g); 4.04 mW/g (10g)

Comments: Full Scan; Back of DUT facing phantom.

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE4 Sn729, Calibrated: 3/10/2010

Duty Cycle: 1:1, Medium parameters used: f = 395 MHz;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 57.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (71x171x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 75.6 V/m; Power Drift = -0.465 dB

Motorola Fast SAR: SAR(1 g) = 7.56 mW/g; SAR(10 g) = 5.63 mW/g

Maximum value of SAR (interpolated) = 8.15 mW/g

Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 75.6 V/m; Power Drift = -0.574 dB

Peak SAR (extrapolated) = 10.8 W/kg

Motorola Fast SAR: SAR(1 g) = 8.48 mW/g; SAR(10 g) = 4.85 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (interpolated) = 10.8 mW/g

#### Ab Scan/3-Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 75.6 V/m; Power Drift = -0.736 dB

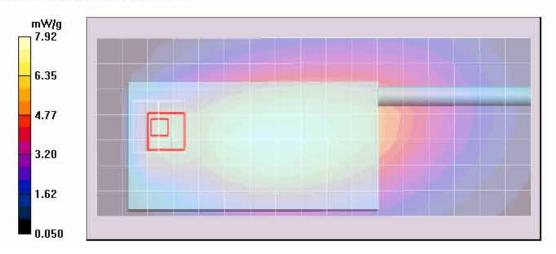
Peak SAR (extrapolated) = 24.8 W/kg

SAR(1 g) = 8.37 mW/g; SAR(10 g) = 4.01 mW/g
Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 10.3 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 10.1 mW/g



# Section 17.0 (Table 29) Assessment at the Body with antenna FAF5259A and Audio cable RMN5058A — Other Frequency channels

(Same scan as indicated in Appendix F – Section 17.0)

#### **Section 18.0 (Table 30)**

Assessment at the Body with antenna FAF5259A w/o Audio cable attached, using batteries NNTN7038A, PMNN4403A and NNTN7034A, body worn accessories HLN6875A and NTN9179A

(Same scan as indicated in Appendix E: Highest Body - Highest SAR Configuration Result for Body-worn)

### Section 19 (Table 31) Assessment at the Body with PSM PMMN4059A and antenna PMAE4065A

### Motorola Enterprise Mobility Solutions EME Laboratory Date/Time: 10/6/2010 6:04:06 PM

Robot# / Run#: DASY4-FL-2 / CM-Ab-101006-12 Phantom# / Tissue Temp.: OVAL1011 / 21.2 (C)

DUT Model# / Serial#: H98QDD9PW5AN (MNUE1005A) / NUE1006A0052

Antenna / TX Freq.: PMAE4065A / 380.0125 (MHz)

Battery: PMNN4403A

Carry Acc. / Cable Acc.: 4205823V01 (PSM Belt Clip) / PMMN4059A

Start Power: 5.58 (W)

#### Note

Prior to recording the Reported SAR values below, the Measured SAR values were corrected for tissue frequencies from 136 MHz to 3 GHz.

Reported SAR: 10.08 mW/g (1g); 5.50 mW/g (10g)

Comments: Full Scan; Tested with Antenna FAF5259A on Radio; "PSM" Power Output = 4.51 Watts

Probe: ES3DV3 - SN3147, Calibrated: 2/18/2010, ConvF(6.82, 6.82, 6.82)

Electronics: DAE3 Sn374, Calibrated: 4/15/2010

Duty Cycle: 1:1, Medium parameters used: f = 395 MHz;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_c = 56.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### Ab Scan/1-Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 97.1 V/m; Power Drift = -0.424 dB

Motorola Fast SAR: SAR(1 g) = 9.72 mW/g; SAR(10 g) = 6.25 mW/g

Maximum value of SAR (interpolated) = 11.4 mW/g

#### Ab Scan/2-Volume Scan 2D (41x41x1): Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm

Reference Value = 97.1 V/m; Power Drift = -0.513 dB

Peak SAR (extrapolated) = 12.1 W/kg

Motorola Fast SAR: SAR(1 g) = 10.3 mW/g; SAR(10 g) = 6.33 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (interpolated) = 12.1 mW/g

#### Ab Scan/3-Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 97.1 V/m; Power Drift = -0.839 dB

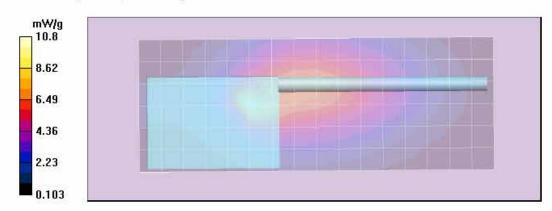
Peak SAR (extrapolated) = 22.2 W/kg

SAR(1 g) = 9.88 mW/g; SAR(10 g) = 5.44 mW/g

Maximum value of SAR (measured) = 11.3 mW/g

#### Ab Scan/4-Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 11.2 mW/g



### Section 20.0 (Table 32) Assessments at the Body with PSM PMMN4059A and antenna FAF5259A

(Same scan as indicated in Appendix E: Highest SAR Configuration Result for PSM)

# Section 21.0 (Table 33) Assessment at the Body with PSM PMMN4061A and antenna PMAE4065A, using batteries NNTN7038A, PMNN4403A and NNTN7034A, and PSM belt clip 4205823V01

(Same scan as indicated in Appendix F – Section 21.0)

# Section 22.0 (Table 34) Assessment at the Body with PMMN4061A and antenna PMAE4065A – Other Frequency channels

(Same scan as indicated in Appendix F – Section 22.0)

# Section 23.0 (Table 35) Assessment at the Body with PSM PMMN4061A and antenna FAF5259A, using batteries NNTN7038A, PMNN4403A and NNTN7034A, and PSM belt clip 4205823V01

(Same scan as indicated in Appendix F – Section 23.0)

### APPENDIX H DUT Supplementary Data (Power slump)

#### Model # H98QDD9PW5AN (MNUE1006A) Serial # CAI1006KW2

 Battery
 # PMNN4403A
 Transference

 Frequency
 406.125 MHz
 Audio

 Date
 1/120/11

Transmit Mode CW
Audio Accessory None

TX TIME (Minutes)	Measured Power (Watts)
0.0	5.96
1.0	5.97
2.0	5.96
3.0	5.95
4.0	5.94
5.0	5.93
6.0	5.92
7.0	5.91
8.0	5.91
9.0	5.90
10.0	5.89
11.0	5.88
12.0	5.88
13.0	5.87
14.0	5.86
15.0	5.85
16.0	5.84

5.83

5.82 5.82

5.81 5.80

5.79

5.78

5.77

5.77

5.76

5.75

5.74

5.74

5.73

5.73

5.72

5.71

5.71

5.70

5.69

5.68

5.67

5.67

5.66

17.0

18.0

19.0 20.0

21.0 22.0

23.0

24.0

25.0

26.0

27.0

28.0

29.0

30.0

31.0

32.0

33.0

34.0

35.0

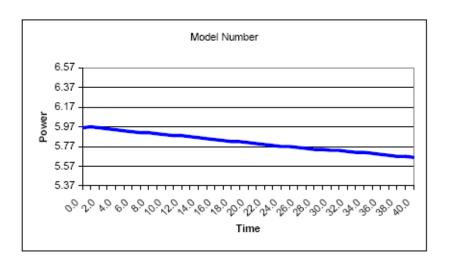
36.0

37.0

38.0

39.0

40.0



### Appendix I DUT Test Position Photos

Photos available in Exhibit 7B

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### Appendix J DUT and Body worn Accessory Photos

Photos available in Exhibit 7B