MOTOROLA SOLUTIONS

A2LA ACCREDITED
TESTING CERT # 2518.01

# DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 3

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

**Date of Report:** 3/22/2012
**Report Revision:** B
**Report ID:** SR9408 APX7000 U1/U2 BT Rev B 120322

| | |
|---|---|
| **Responsible Engineer:** | Deanna Zakharia ( Lab Senior Resource Manager /Laboratory Director ) |
| | Kim Uong (Principal Staff Engineer) |
| **Report Author:** | Kim Uong (Principal Staff Engineer) |
| **Date/s Tested:** | 5/28/2011-6/17/2011, 10/19/2011 – 12/15/2011 |
| **Manufacturer/Location:** | Motorola, Penang |
| **Sector/Group/Div.:** | G&PS |
| **Date submitted for test:** | 04/18/2011 |
| **DUT Description:** | 380-470MHz 1-5W, 470-520MHz 1-5W, 6.25kHz/12.5kHz/25kHz, Basic Top Display Model-1, W/GPS & with Bluetooth. Capable of digital and analog FM transmission. Also capable of TDMA transmission. |
| **Test TX mode(s):** | CW (PTT); CW (BlueTooth) |
| **Max. Power output:** | 5.7W (UHF R1) & 5.6W (UHF R2), 12 mW (Bluetooth) |
| **Nominal Power:** | 5.0W (UHF R1) & 5.0W (UHF R2), 12 mW (Bluetooth) |
| **Tx Frequency Bands:** | 380-406 MHz (UHF R1) & 406.1-470 MHz (UHF R1) & 470-520 MHz (UHF R2), 2.402-2.480 GHz (Bluetooth) |
| **Signaling type:** | FM, TDMA, FHSS (Bluetooth) |
| **Model(s) Tested:** | H97TGD9PW1AN (NUE3622) |
| **Model(s) Certified:** | H97TGD9PW1AN (NUE3622) |
| **Serial Number(s):** | Q0SOM063 and Q0SOM064 |
| **Classification:** | Occupational/Controlled |
| **FCC ID:** | AZ489FT4906; Rule part 90 (406.1 – 512 MHz); Rule part 15 (2402 – 2480 MHz) Results outside FCC bands are not applicable for FCC compliance demonstration. |

* 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 Solutions Inc EME Laboratory.**
**I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. This reporting format is consistent with the suggested guidelines of the TIA TSB-150 December 2004. The results and statements contained in this report pertain only to the device(s) evaluated.**

Deanna Zakharia

**Deanna Zakharia**
**EMS EME Lab Senior Resource Manager,**
**Laboratory Director**

**Approval Date:** 3/22/2012

**Certification Date**:

**Certification No.:**

# Appendix D
# Test System Verification Scans

The SAR result indicated on the Manufacture's Calibrated certificate for dipoles D450V3 S/N 1075 and 1077 are not used due to the following:

-- The IEEE1528-2003 and the FCC OET-65 Supplement C, System Verification section recommends
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 the dipole is higher than +/- 10% (e.g. +/-18.1% at k=2 for the 1g-SAR).

-- The allowed tolerances for the probes are also higher than +/- 10% (e.g. 13.3% to 13.4 %, 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 target set for the tested dipoles, 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 differences between this result and the result from the manufacture's dipole calibration certificates are 2.6% to 6.6% for the 450 MHz dipoles which are 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 Solutions, Inc. EME Laboratory

**Date/Time: 5/28/2011 5:20:45 AM, Date/Time: 5/28/2011 5:25:37 AM, Date/Time: 5/28/2011 5:40:50 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-110528-01
Phantom# / Tissue Temp.: OVAL1090 / 21.8 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.68 mW/g (1g)
Adjusted SAR (1W): 4.48 mW/g (1g)
Percent from Target (+/-): 4.3 % (1g)
Rotation (1D): 0.021 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); 0.737 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(7.28, 7.28, 7.28)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.91 mho/m; $\varepsilon_r$ = 56.6; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

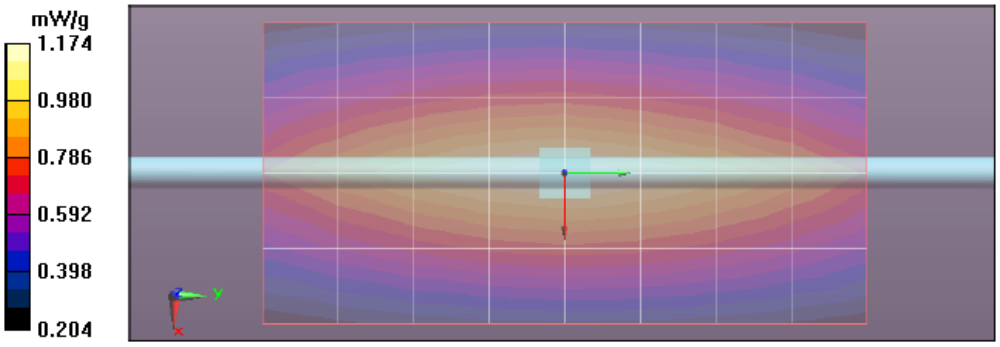
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.938 V/m; Power Drift = -0.0003 dB
**Motorola Fast SAR: SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.786 mW/g**
Maximum value of SAR (interpolated) = 1.174 mW/g

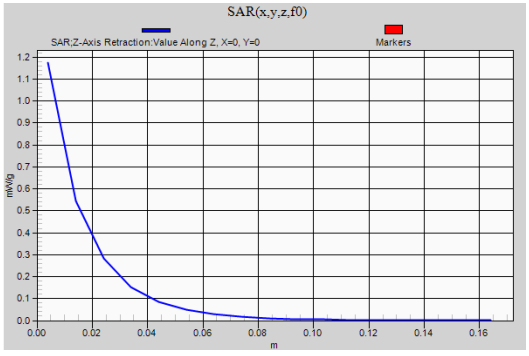
## Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.938 V/m; Power Drift = -0.0003 dB
Peak SAR (extrapolated) = 1.711 W/kg
**SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.730 mW/g**
Maximum value of SAR (measured) = 1.173 mW/g

## Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.174 mW/g



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 5/31/2011 9:53:26 AM, Date/Time: 5/31/2011 9:58:18 AM, Date/Time: 5/31/2011 10:13:34 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-110531-01
Phantom# / Tissue Temp.: OVAL1090 / 21.9 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.68 mW/g (1g)
Adjusted SAR (1W): 4.40 mW/g (1g)
Percent from Target (+/-): 6.0 % (1g)
Rotation (1D): 0.019 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); 0.731 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(7.28, 7.28, 7.28)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 56.4; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

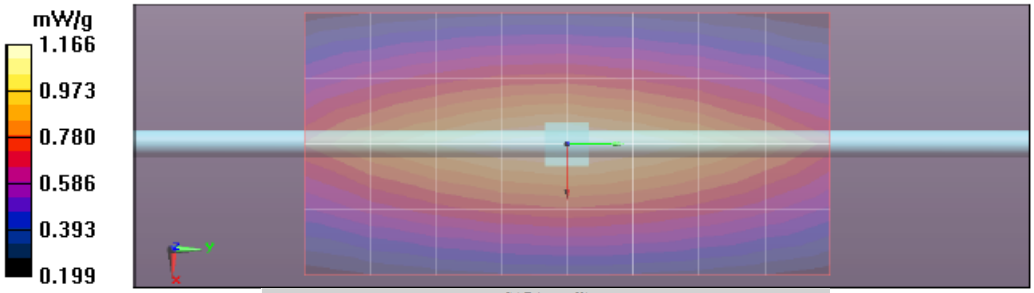
Measurement grid: dx=15mm, dy=15mm
Reference Value = 36.021 V/m; Power Drift = 0.00082 dB
**Motorola Fast SAR: SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.781 mW/g**
Maximum value of SAR (interpolated) = 1.167 mW/g

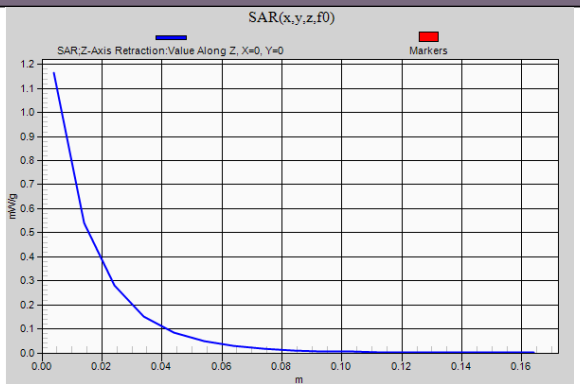
## Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 36.021 V/m; Power Drift = 0.00082 dB
Peak SAR (extrapolated) = 1.683 W/kg
**SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.722 mW/g**
Maximum value of SAR (measured) = 1.158 mW/g

## Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.165 mW/g



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 6/1/2011 7:27:03 AM, Date/Time: 6/1/2011 7:31:53 AM, Date/Time: 6/1/2011 7:47:04 AM**

Robot# / Run#: DASY5-FL-1 / JsT-SYSP-450H-110601-01
Phantom# / Tissue Temp.: OVAL1016 / 21.8 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

| | | |
|---|---|---|
| Target SAR (1W): | 5.04 mW/g | (1g) |
| Adjusted SAR (1W): | 4.76 mW/g | (1g) |
| Percent from Target (+/-): | 5.6 % | (1g) |
| Rotation (1D): | 0.016 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: 1.19 mW/g (1g); 0.784 mW/g (10g)

Comments:

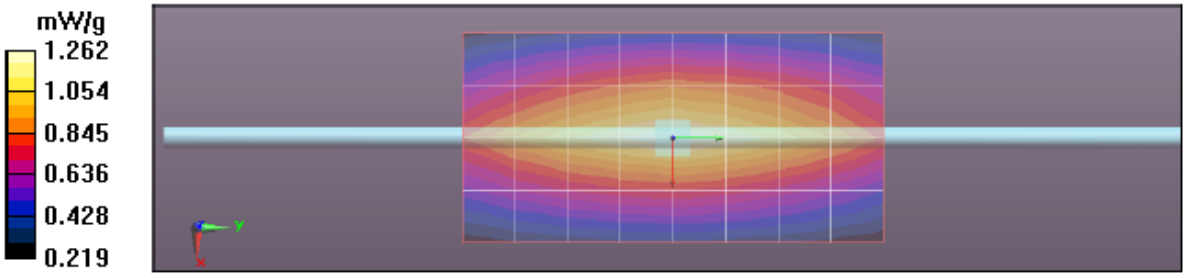
Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(6.7, 6.7, 6.7)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010

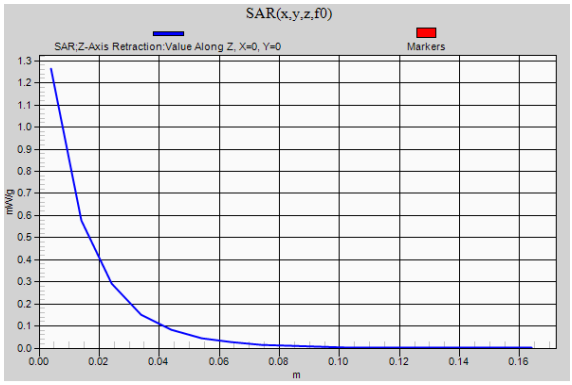
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.86 mho/m; $\varepsilon_r$ = 43.1; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.262 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 38.599 V/m; Power Drift = -0.0029 dB
Peak SAR (extrapolated) = 1.795 W/kg
**SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.782 mW/g**
Maximum value of SAR (measured) = 1.264 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.263 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 6/9/2011 5:35:37 AM, Date/Time: 6/9/2011 5:40:31 AM, Date/Time: 6/9/2011 5:55:48 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-110609-01
Phantom# / Tissue Temp.: OVAL1090 / 22.4 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.68 mW/g (1g)
Adjusted SAR (1W): 4.52 mW/g (1g)
Percent from Target (+/-): 3.4 % (1g)
Rotation (1D): 0.020 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); 0.750 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(7.28, 7.28, 7.28)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 56.5; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

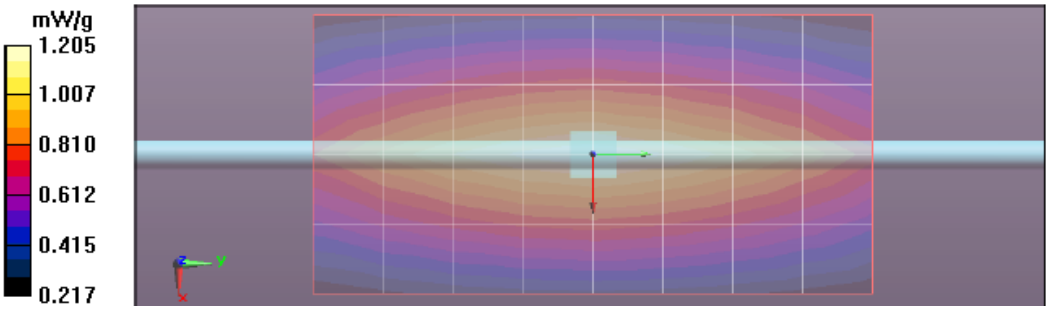
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.799 V/m; Power Drift = 0.0054 dB
**Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.807 mW/g**
Maximum value of SAR (interpolated) = 1.205 mW/g

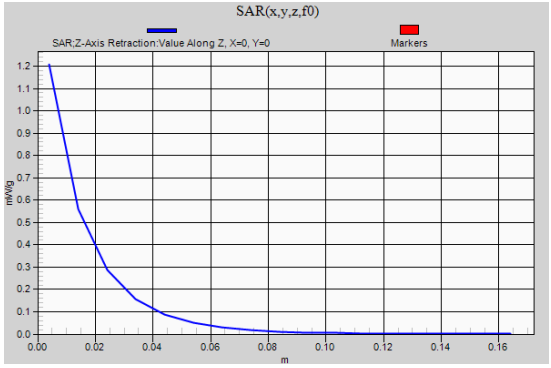
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.799 V/m; Power Drift = 0.0054 dB
Peak SAR (extrapolated) = 1.754 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.750 mW/g**

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.207 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 6/10/2011 6:05:51 AM, Date/Time: 6/10/2011 6:10:44 AM, Date/Time: 6/10/2011 6:25:59 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-110610-01
Phantom# / Tissue Temp.: OVAL1090 / 21.9 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.68 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 2.6 % (1g)
Rotation (1D): 0.026 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); 0.756 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(7.28, 7.28, 7.28)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 56.6; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

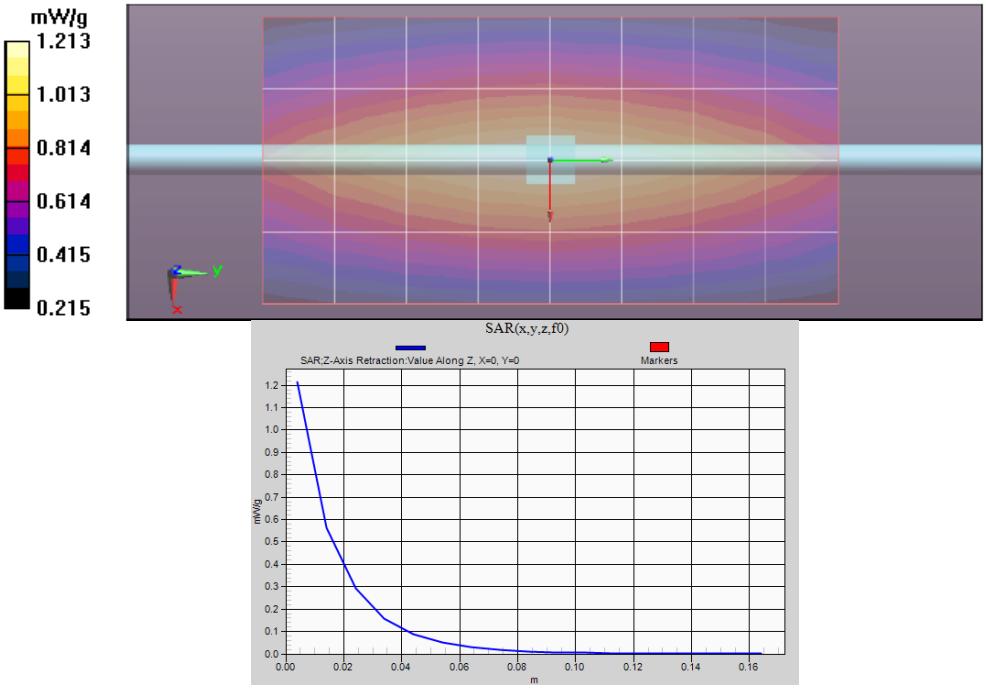
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.924 V/m; Power Drift = -0.0077 dB
**Motorola Fast SAR: SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.814 mW/g**
Maximum value of SAR (interpolated) = 1.213 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.924 V/m; Power Drift = -0.0077 dB
Peak SAR (extrapolated) = 1.761 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.756 mW/g**
Maximum value of SAR (measured) = 1.212 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.214 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 6/14/2011 12:17:41 AM, Date/Time: 6/14/2011 12:22:34 AM, Date/Time: 6/14/2011 12:37:49 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP-450B-110614-01
Phantom# / Tissue Temp.: OVAL1090 / 21.7 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.68 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 2.6 % (1g)
Rotation (1D): 0.02 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); 0.751 mW/g (10g)

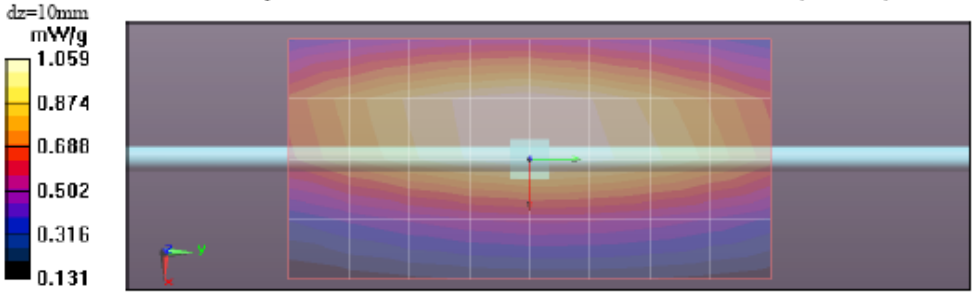
Comments:

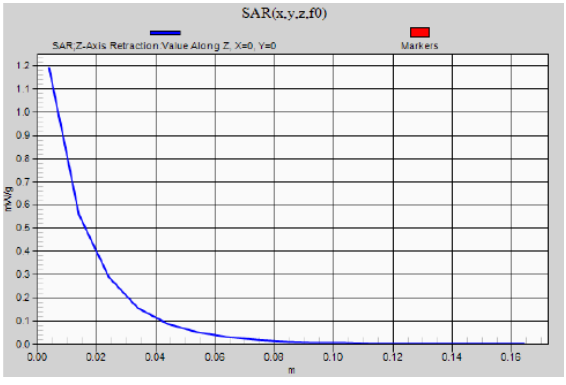
Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(7.28, 7.28, 7.28)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.91 mho/m; $\varepsilon_r$ = 56; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.059 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 36.220 V/m; Power Drift = -0.0057 dB
Peak SAR (extrapolated) = 1.725 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.744 mW/g**
Maximum value of SAR (measured) = 1.193 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 6/16/2011 12:26:07 AM, Date/Time: 6/16/2011 12:31:01 AM, Date/Time: 6/16/2011 12:46:16 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP-450B-110616-01
Phantom# / Tissue Temp.: OVAL1090 / 21.9 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.68 mW/g (1g)
Adjusted SAR (1W): 4.52 mW/g (1g)
Percent from Target (+/-): 3.4 % (1g)
Rotation (1D): 0.027 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); 0.752 mW/g (10g)

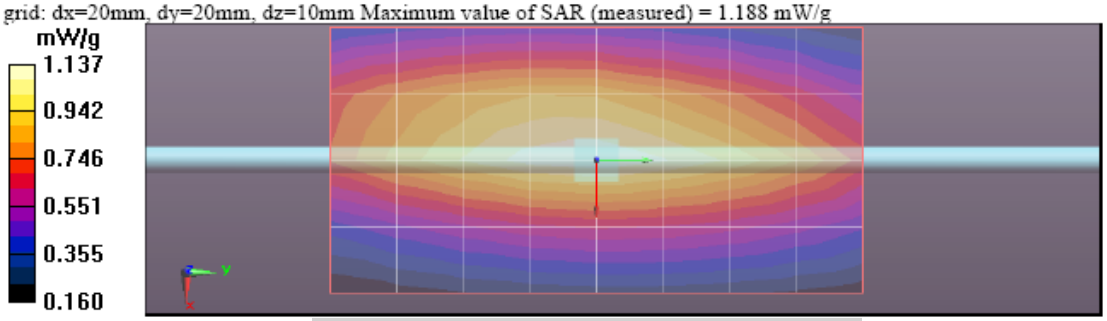
Comments:

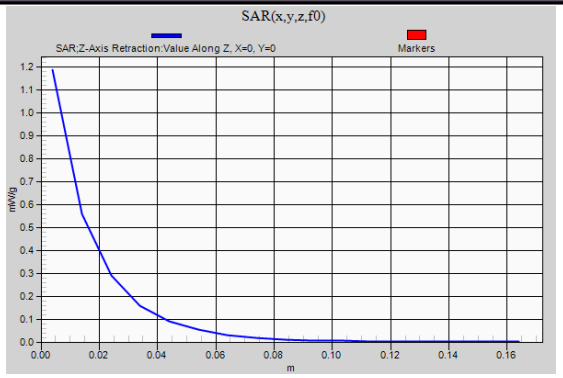
Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(7.28, 7.28, 7.28)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 55.6; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.137 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 36.390 V/m; Power Drift = -0.0083 dB
Peak SAR (extrapolated) = 1.715 W/kg
**SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.743 mW/g**
Maximum value of SAR (measured) = 1.186 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.188 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 6/17/2011 12:14:31 AM, Date/Time: 6/17/2011 12:19:26 AM, Date/Time: 6/17/2011 12:34:42 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP-450B-110617-01
Phantom# / Tissue Temp.: OVAL1090 / 21.9 (C)
Dipole Model# / Serial#: D450V3 / 1077
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.68 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 2.6 % (1g)
Rotation (1D): 0.015 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); 0.764 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3291, Calibrated: 9/3/2010, ConvF(7.28, 7.28, 7.28)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2010
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 57; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement

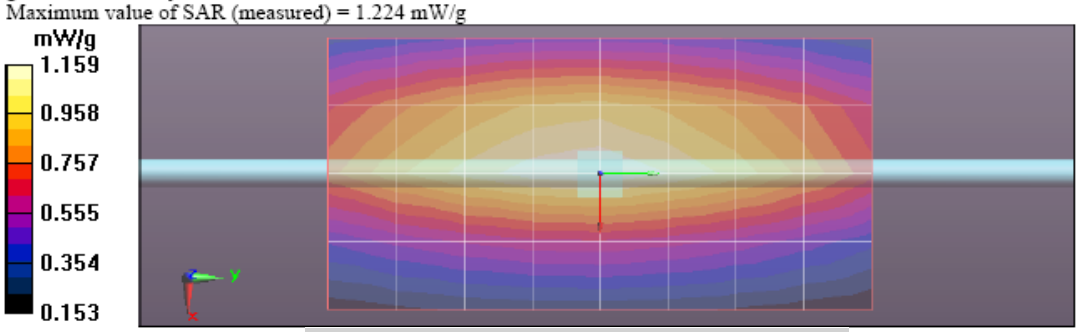
grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.159 mW/g

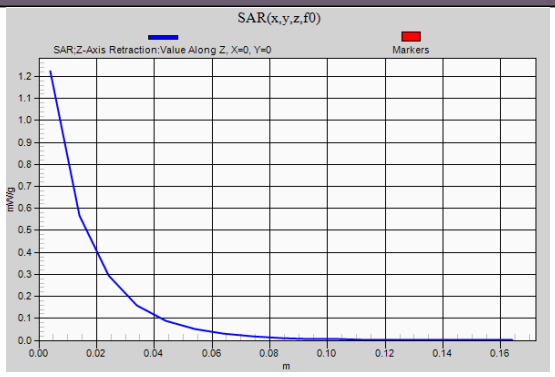
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 36.087 V/m; Power Drift = -0.0019 dB
Peak SAR (extrapolated) = 1.773 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.762 mW/g**
Maximum value of SAR (measured) = 1.223 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17): Measurement

grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.224 mW/g



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/19/2011 5:54:41 AM, Date/Time: 10/19/2011 5:59:42 AM, Date/Time: 10/19/2011 6:15:49 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP-450B-111019-01
Phantom# / Tissue Temp.: OVAL1090 / 22.1 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.60 mW/g (1g)
Percent from Target (+/-): 1.1 % (1g)
Rotation (1D): 0.019 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); 0.763 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.95 mho/m; $\varepsilon_r$ = 56.1; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement

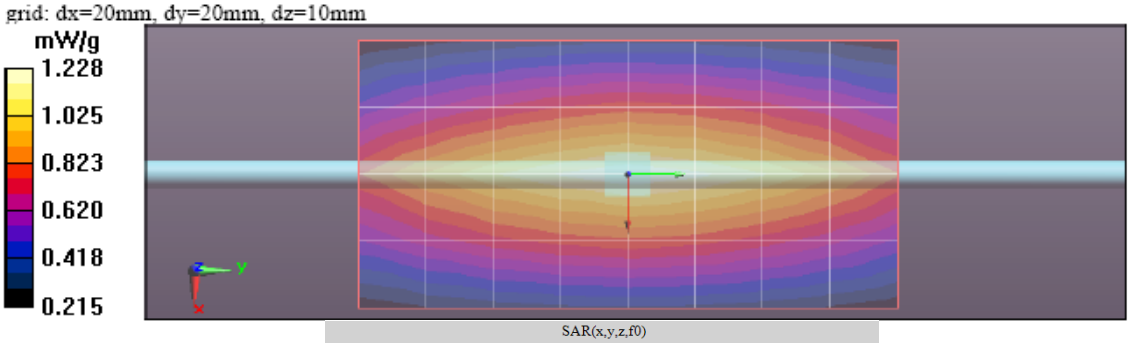
grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.228 mW/g

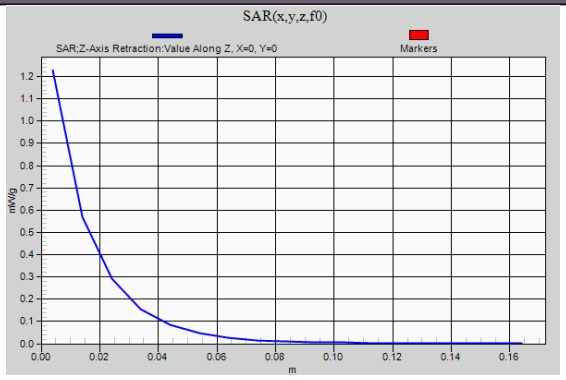
## Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.956 V/m; Power Drift = -0.00067 dB
Peak SAR (extrapolated) = 1.787 W/kg
**SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.763 mW/g**

## Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17): Measurement

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



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/20/2011 9:11:53 AM, Date/Time: 10/20/2011 9:16:54 AM, Date/Time: 10/20/2011 9:32:59 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450H-111020-01
Phantom# / Tissue Temp.: OVAL1022 / 21.9 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81 mW/g (1g)
Adjusted SAR (1W): 4.64 mW/g (1g)
Percent from Target (+/-): 3.5 % (1g)
Rotation (1D): 0.012 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: 1.16 mW/g (1g); 0.773 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(6.53, 6.53, 6.53)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.87 mho/m; $\varepsilon_r$ = 43.4; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

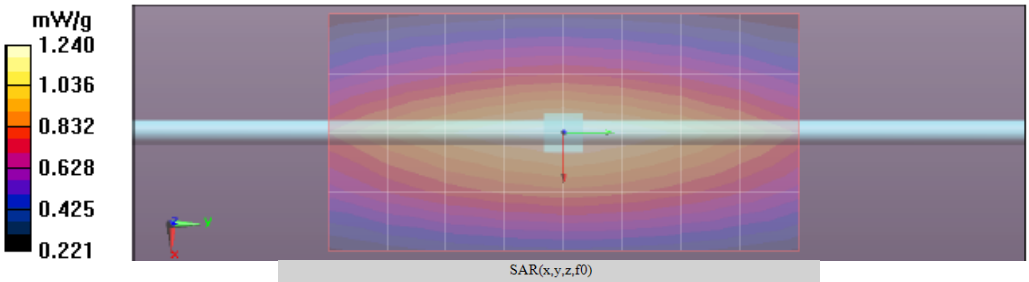
Measurement grid: dx=15mm, dy=15mm
Reference Value = 38.110 V/m; Power Drift = -0.0036 dB
**Motorola Fast SAR: SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.832 mW/g**
Maximum value of SAR (interpolated) = 1.246 mW/g

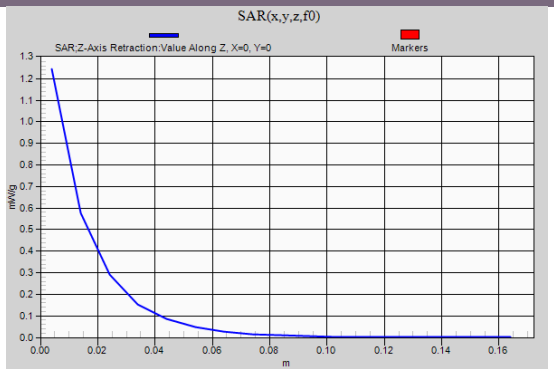
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 38.110 V/m; Power Drift = -0.0036 dB
Peak SAR (extrapolated) = 1.766 W/kg
**SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.773 mW/g**
Maximum value of SAR (measured) = 1.247 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.244 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/21/2011 8:43:14 AM, Date/Time: 10/21/2011 8:48:14 AM, Date/Time: 10/21/2011 9:04:19 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450H-111021-01
Phantom# / Tissue Temp.: OVAL1022 / 21.8 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81 mW/g (1g)
Adjusted SAR (1W): 4.92 mW/g (1g)
Percent from Target (+/-): 2.3 % (1g)
Rotation (1D): 0.020 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: 1.23 mW/g (1g); 0.814 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(6.53, 6.53, 6.53)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.91 mho/m; $\varepsilon_r$ = 44.7; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

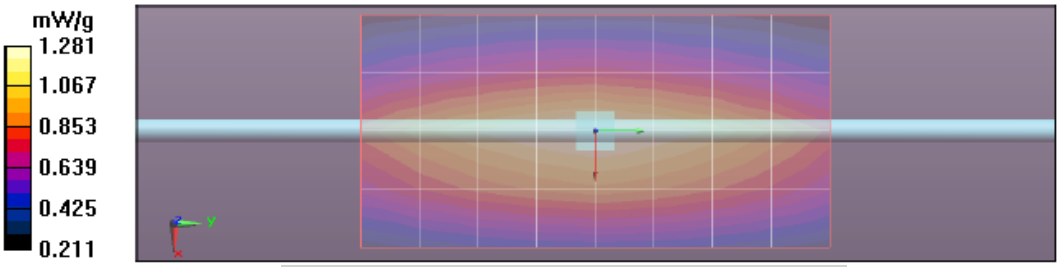
Measurement grid: dx=15mm, dy=15mm
Reference Value = 38.039 V/m; Power Drift = 0.011 dB
**Motorola Fast SAR: SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.867 mW/g**
Maximum value of SAR (interpolated) = 1.299 mW/g

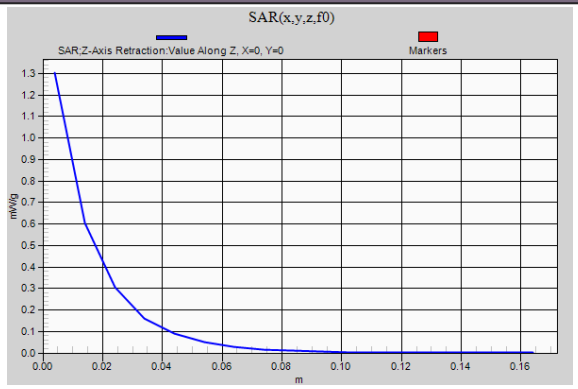
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 38.039 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 1.838 W/kg
**SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.806 mW/g**
Maximum value of SAR (measured) = 1.300 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.302 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/24/2011 7:21:23 AM, Date/Time: 10/24/2011 7:26:23 AM, Date/Time: 10/24/2011 7:42:27 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111024-01
Phantom# / Tissue Temp.: OVAL1090 / 22.0 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.52 mW/g (1g)
Percent from Target (+/-): 2.8 % (1g)
Rotation (1D): 0.012 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); 0.746 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.93 mho/m; $\varepsilon_r$ = 55.7; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

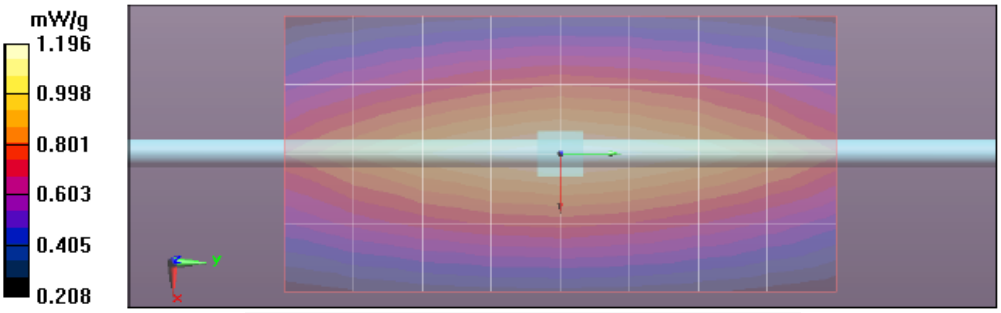
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.845 V/m; Power Drift = -0.0074 dB
**Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.803 mW/g**
Maximum value of SAR (interpolated) = 1.196 mW/g

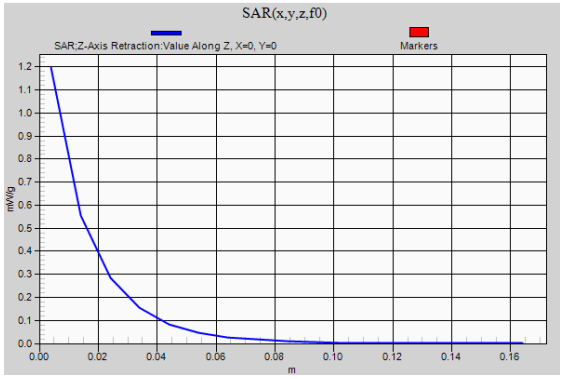
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.845 V/m; Power Drift = -0.0074 dB
Peak SAR (extrapolated) = 1.742 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.744 mW/g**
Maximum value of SAR (measured) = 1.195 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.196 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/25/2011 9:08:06 AM, Date/Time: 10/25/2011 9:13:06 AM, Date/Time: 10/25/2011 9:29:11 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111025-01
Phantom# / Tissue Temp.: OVAL1090 / 21.8 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)
Rotation (1D): 0.019 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); 0.758 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.95 mho/m; $\varepsilon_r$ = 56.5; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

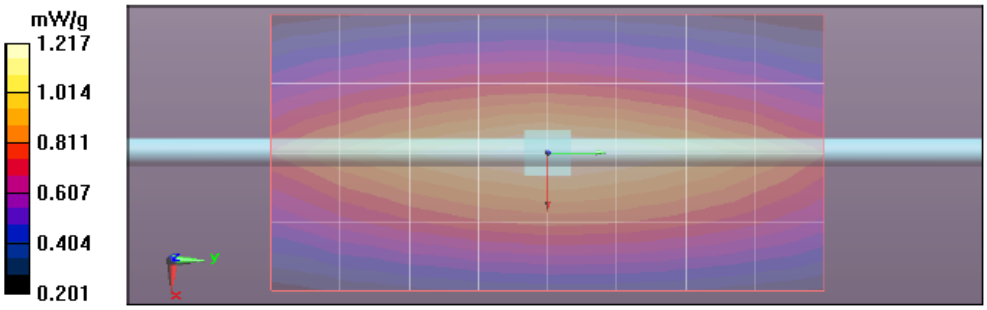
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.790 V/m; Power Drift = -0.0054 dB
**Motorola Fast SAR: SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.816 mW/g**
Maximum value of SAR (interpolated) = 1.220 mW/g

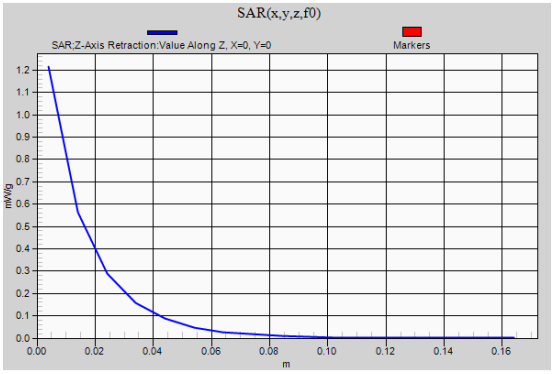
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.790 V/m; Power Drift = -0.0054 dB
Peak SAR (extrapolated) = 1.768 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.758 mW/g**
Maximum value of SAR (measured) = 1.214 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.215 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/26/2011 8:48:38 AM, Date/Time: 10/26/2011 8:53:37 AM, Date/Time: 10/26/2011 9:09:42 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111026-01
Phantom# / Tissue Temp.: OVAL1090 / 21.8 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)
Rotation (1D): 0.012 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); 0.757 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.95 mho/m; $\varepsilon_r$ = 56.3; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

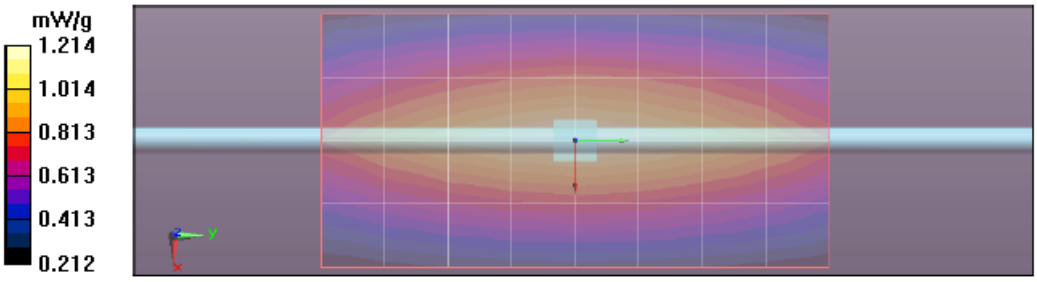
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.768 V/m; Power Drift = -0.0014 dB
**Motorola Fast SAR: SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.816 mW/g**
Maximum value of SAR (interpolated) = 1.216 mW/g

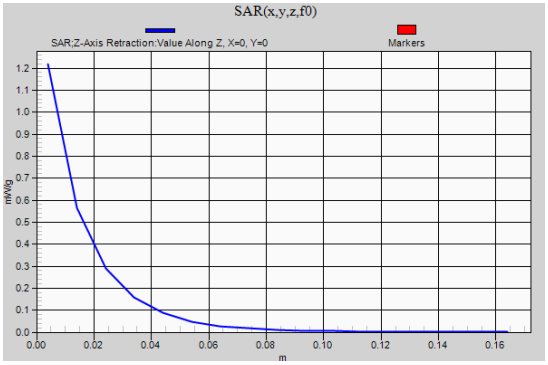
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.768 V/m; Power Drift = -0.0014 dB
Peak SAR (extrapolated) = 1.770 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.757 mW/g**
Maximum value of SAR (measured) = 1.217 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.217 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/27/2011 8:58:33 AM, Date/Time: 10/27/2011 9:03:34 AM, Date/Time: 10/27/2011 9:19:39 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111027-01
Phantom# / Tissue Temp.: OVAL1090 / 21.4 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

| | |
|---|---|
| Target SAR (1W): | 4.65 mW/g (1g) |
| Adjusted SAR (1W): | 4.44 mW/g (1g) |
| Percent from Target (+/-): | 4.5 % (1g) |
| Rotation (1D): | 0.0095 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); 0.741 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 56.1; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

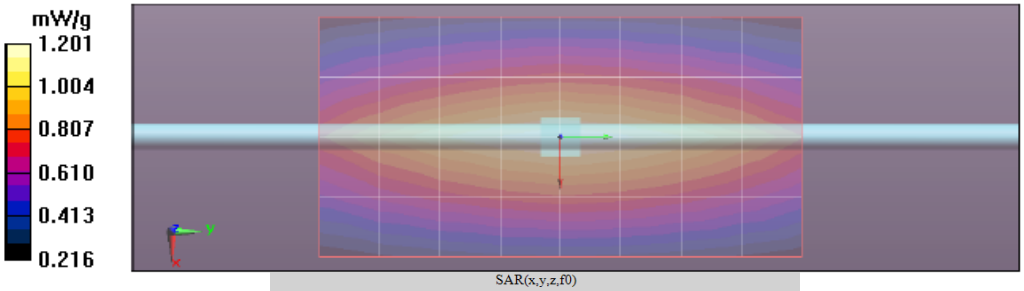
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.757 V/m; Power Drift = -0.062 dB
**Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.805 mW/g**
Maximum value of SAR (interpolated) = 1.201 mW/g

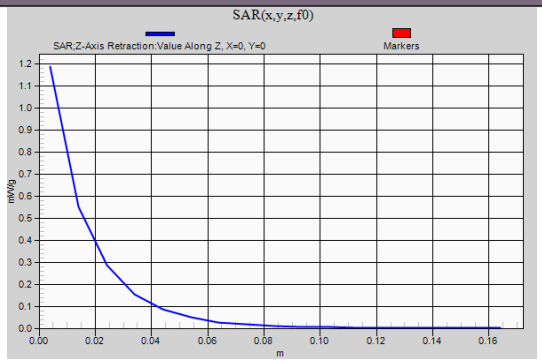
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.757 V/m; Power Drift = -0.062 dB
Peak SAR (extrapolated) = 1.731 W/kg
**SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.741 mW/g**
Maximum value of SAR (measured) = 1.191 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.185 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/28/2011 8:37:54 AM, Date/Time: 10/28/2011 8:42:54 AM, Date/Time: 10/28/2011 8:59:02 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111028-01
Phantom# / Tissue Temp.: OVAL1090 / 21.8 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.52 mW/g (1g)
Percent from Target (+/-): 2.8 % (1g)
Rotation (1D): 0.012 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); 0.754 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 56; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

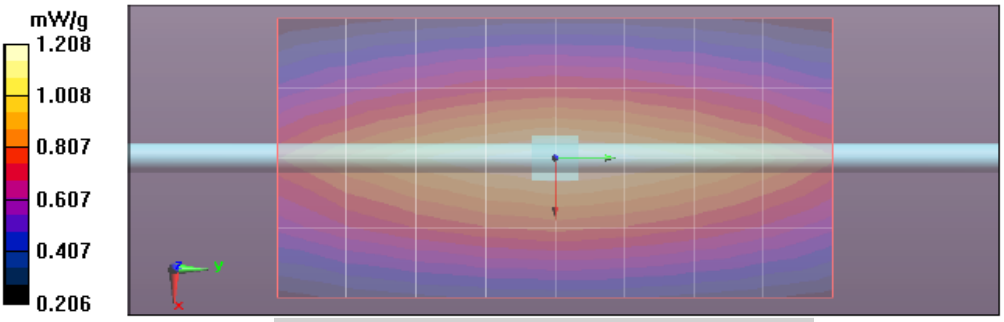
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.863 V/m; Power Drift = 0.002 dB
**Motorola Fast SAR: SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.812 mW/g**
Maximum value of SAR (interpolated) = 1.210 mW/g

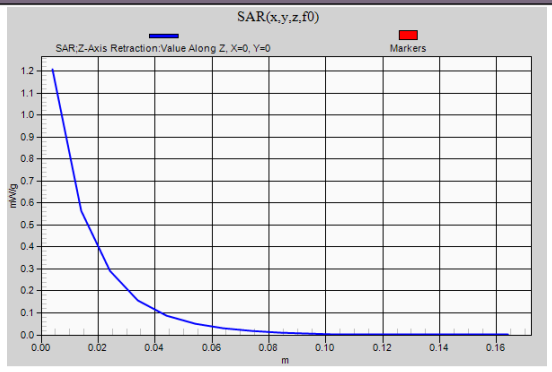
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.863 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 1.763 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.754 mW/g**
Maximum value of SAR (measured) = 1.214 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.208 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/31/2011 8:50:49 AM, Date/Time: 10/31/2011 8:55:50 AM, Date/Time: 10/31/2011 9:11:54 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111031-01
Phantom# / Tissue Temp.: OVAL1090 / 22.1 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.48 mW/g (1g)
Percent from Target (+/-): 3.7 % (1g)
Rotation (1D): 0.011 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); 0.746 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 55.7; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

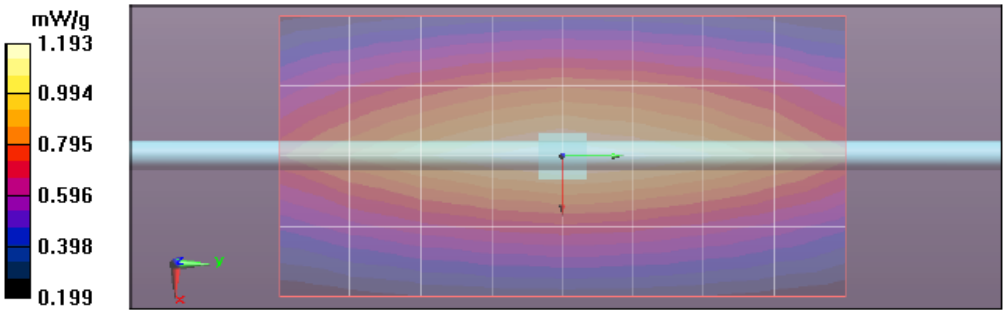
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.721 V/m; Power Drift = 0.0089 dB
**Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.804 mW/g**
Maximum value of SAR (interpolated) = 1.201 mW/g

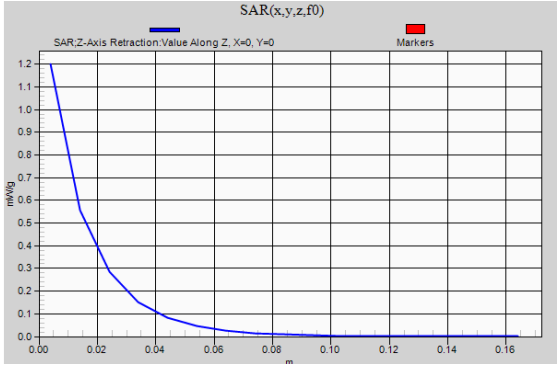
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.721 V/m; Power Drift = 0.0089 dB
Peak SAR (extrapolated) = 1.749 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.746 mW/g**
Maximum value of SAR (measured) = 1.200 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.200 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/1/2011 7:14:02 AM, Date/Time: 11/1/2011 7:19:02 AM, Date/Time: 11/1/2011 7:35:08 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111101-01
Phantom# / Tissue Temp.: OVAL1090 / 21.8 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.60 mW/g (1g)
Percent from Target (+/-): 1.1 % (1g)
Rotation (1D): 0.011 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); 0.767 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.95 mho/m; $\varepsilon_r$ = 56.5; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

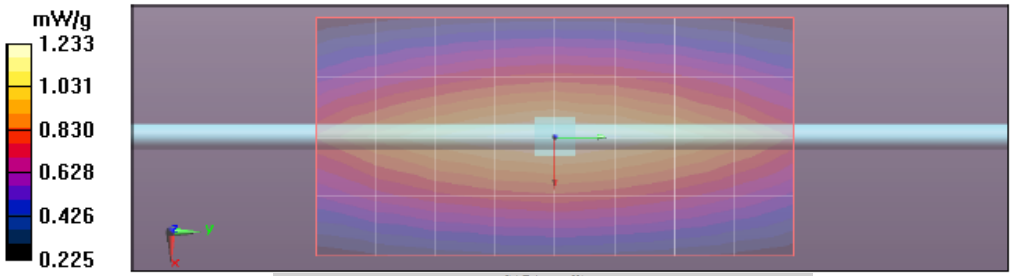
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.996 V/m; Power Drift = -0.0048 dB
**Motorola Fast SAR: SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.827 mW/g**
Maximum value of SAR (interpolated) = 1.233 mW/g

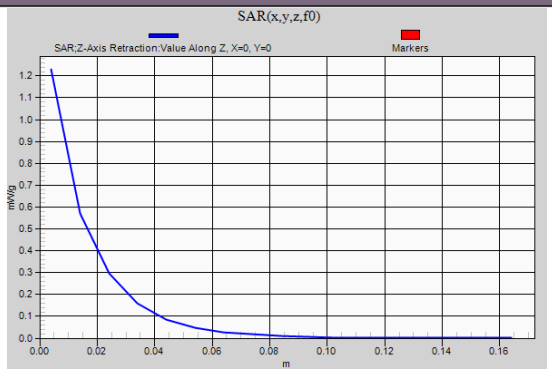
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.996 V/m; Power Drift = -0.0048 dB
Peak SAR (extrapolated) = 1.795 W/kg
**SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.767 mW/g**
Maximum value of SAR (measured) = 1.231 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.229 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/2/2011 6:23:56 AM, Date/Time: 11/2/2011 6:28:57 AM, Date/Time: 11/2/2011 6:45:04 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111102-01
Phantom# / Tissue Temp.: OVAL1090 / 21.5 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.48 mW/g (1g)
Percent from Target (+/-): 3.7 % (1g)
Rotation (1D): 0.011 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); 0.742 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 56.6; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

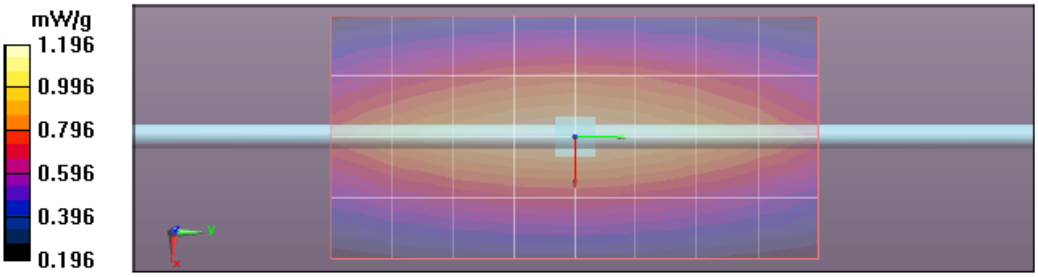
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.673 V/m; Power Drift = -0.0064 dB
**Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.802 mW/g**
Maximum value of SAR (interpolated) = 1.199 mW/g

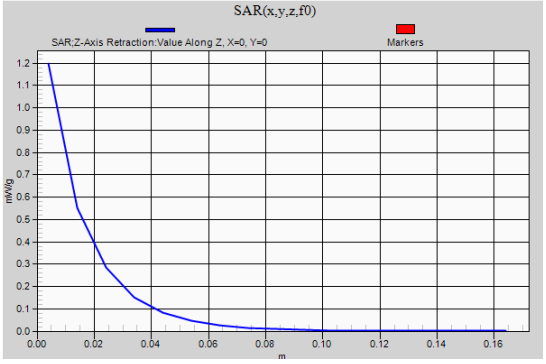
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.673 V/m; Power Drift = -0.0064 dB
Peak SAR (extrapolated) = 1.748 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.742 mW/g**
Maximum value of SAR (measured) = 1.199 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.197 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/5/2011 5:34:12 AM, Date/Time: 11/5/2011 5:39:11 AM, Date/Time: 11/5/2011 5:55:14 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111105-01
Phantom# / Tissue Temp.: OVAL1016 / 21.0 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.52 mW/g (1g)
Percent from Target (+/-): 2.8 % (1g)
Rotation (1D): 0.016 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); 0.748 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.95 mho/m; $\varepsilon_r$ = 56.5; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

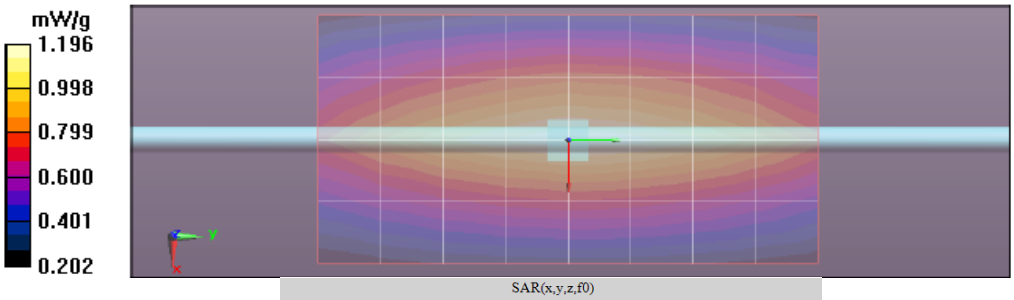
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.568 V/m; Power Drift = 0.0065 dB
**Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.805 mW/g**
Maximum value of SAR (interpolated) = 1.203 mW/g

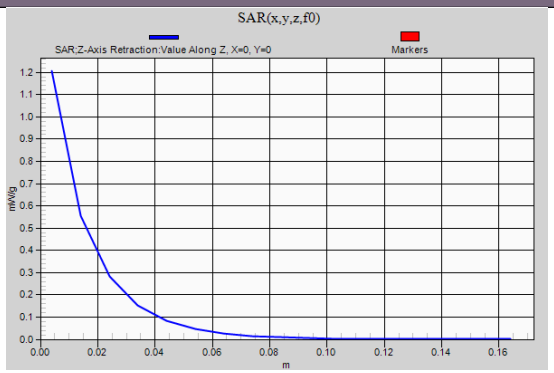
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.568 V/m; Power Drift = 0.0065 dB
Peak SAR (extrapolated) = 1.764 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.748 mW/g**
Maximum value of SAR (measured) = 1.206 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.196 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/7/2011 8:13:08 AM, Date/Time: 11/7/2011 7:28:17 AM, Date/Time: 11/7/2011 8:34:02 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111107-01
Phantom# / Tissue Temp.: OVAL1016 / 22.1 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

| | | |
|---|---|---|
| Target SAR (1W): | 4.65 mW/g (1g) | |
| Adjusted SAR (1W): | 4.56 mW/g (1g) | |
| Percent from Target (+/-): | 1.9 % | (1g) |
| Rotation (1D): | 0.014 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); 0.759 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.96 mho/m; $\varepsilon_r$ = 56.5; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

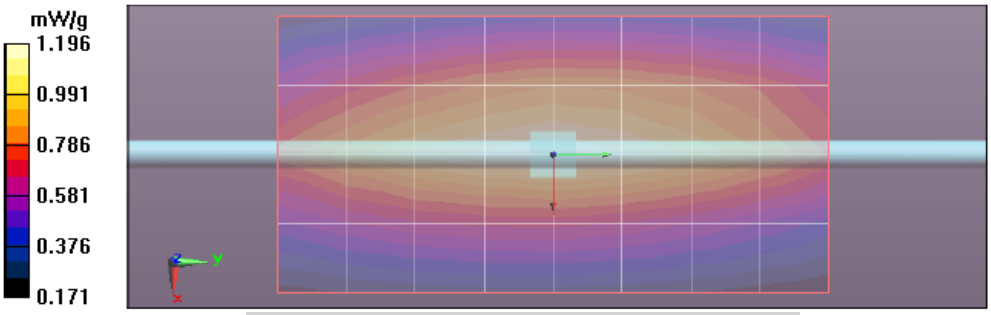
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.706 V/m; Power Drift = 0.0054 dB
**Motorola Fast SAR: SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.815 mW/g**
Maximum value of SAR (interpolated) = 1.220 mW/g

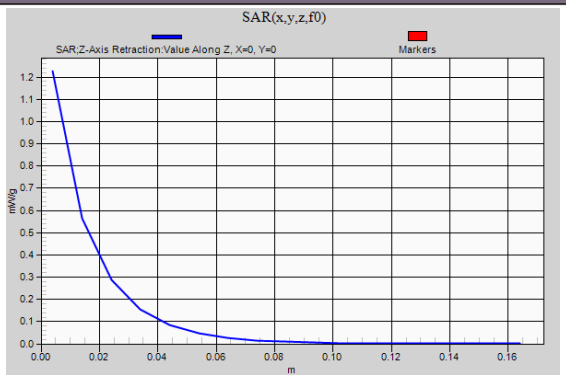
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.706 V/m; Power Drift = 0.0054 dB
Peak SAR (extrapolated) = 1.784 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.759 mW/g**
Maximum value of SAR (measured) = 1.222 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (measured) = 1.226 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/8/2011 8:00:58 AM, Date/Time: 11/8/2011 8:05:57 AM, Date/Time: 11/8/2011 8:22:00 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111108-01
Phantom# / Tissue Temp.: OVAL1016 / 21.4 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)
Rotation (1D): 0.009 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); 0.754 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.95 mho/m; $\varepsilon_r$ = 56.2; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

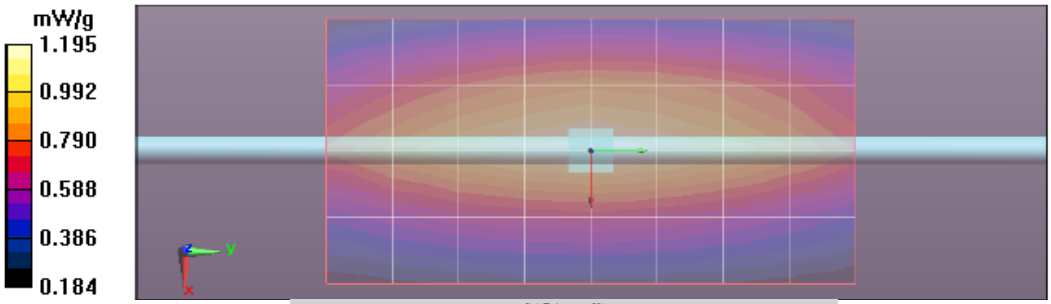
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.725 V/m; Power Drift = -0.002 dB
**Motorola Fast SAR: SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.811 mW/g**
Maximum value of SAR (interpolated) = 1.215 mW/g

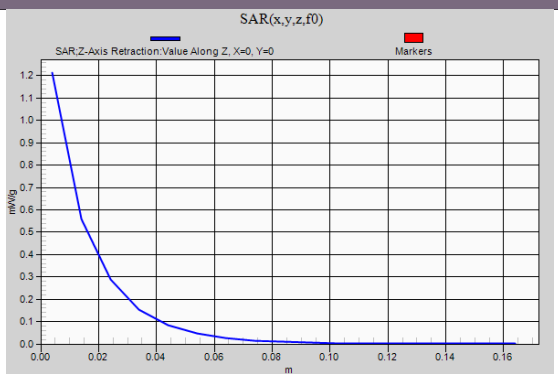
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.725 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 1.770 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.754 mW/g**
Maximum value of SAR (measured) = 1.214 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.213 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/9/2011 9:19:15 AM, Date/Time: 11/9/2011 9:24:14 AM, Date/Time: 11/9/2011 9:40:20 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450H-111109-01
Phantom# / Tissue Temp.: OVAL1108 / 20.4 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81 mW/g (1g)
Adjusted SAR (1W): 4.76 mW/g (1g)
Percent from Target (+/-): 1.0 % (1g)
Rotation (1D): 0.013 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: 1.19 mW/g (1g); 0.790 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(6.53, 6.53, 6.53)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.84 mho/m; $\varepsilon_r$ = 43.4; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

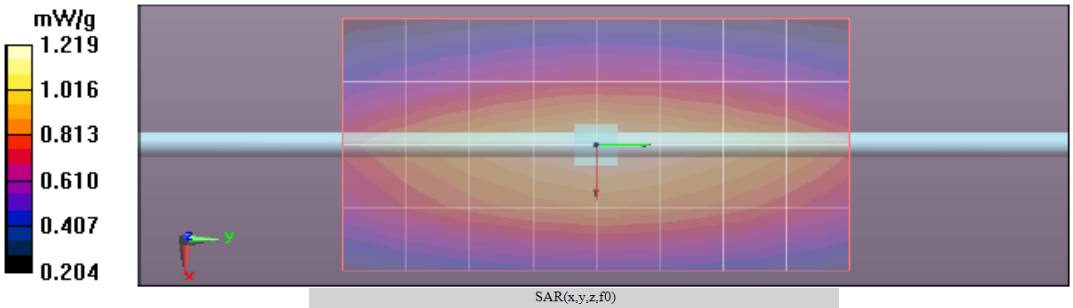
Measurement grid: dx=15mm, dy=15mm
Reference Value = 38.791 V/m; Power Drift = -0.016 dB
**Motorola Fast SAR: SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.831 mW/g**
Maximum value of SAR (interpolated) = 1.242 mW/g

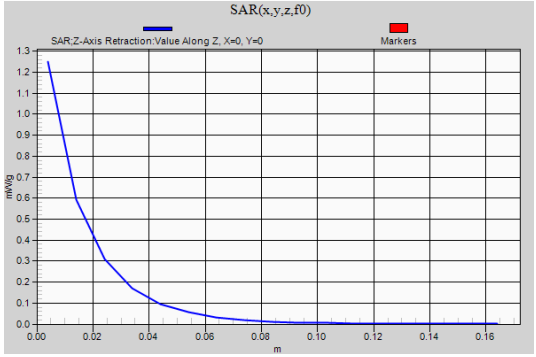
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 38.791 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.748 W/kg
**SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.784 mW/g**
Maximum value of SAR (measured) = 1.248 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.249 mW/g



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/10/2011 5:34:20 AM, Date/Time: 11/10/2011 5:39:19 AM, Date/Time: 11/10/2011 5:55:23 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP-450B-111110-01
Phantom# / Tissue Temp.: OVAL1016 / 21.5 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.48 mW/g (1g)
Percent from Target (+/-): 3.7 % (1g)
Rotation (1D): 0.035 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); 0.744 mW/g (10g)

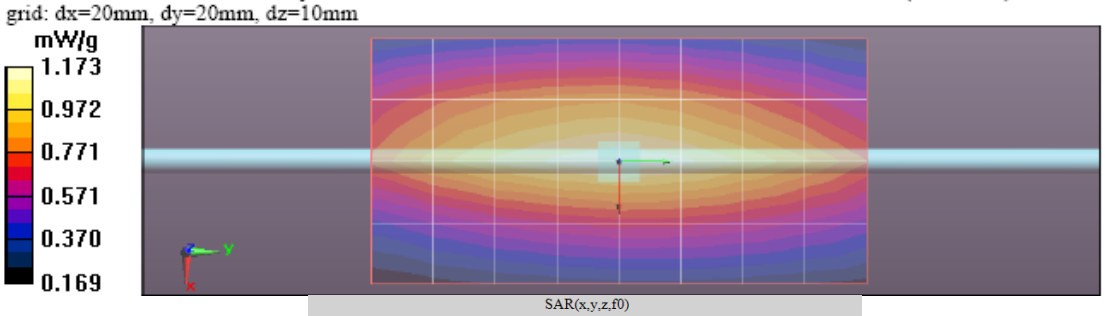
Comments:

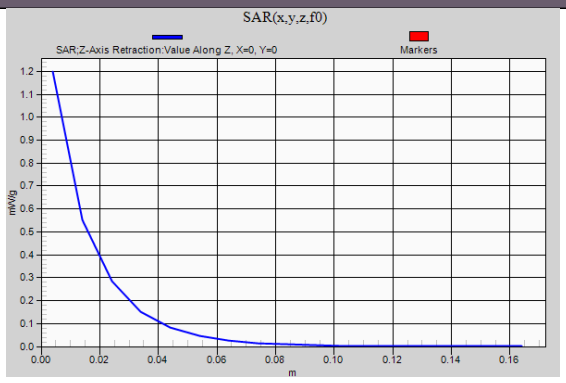
Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 55.9; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.173 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.695 V/m; Power Drift = 0.0071 dB
Peak SAR (extrapolated) = 1.748 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.744 mW/g**
Maximum value of SAR (measured) = 1.198 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/11/2011 5:55:01 AM, Date/Time: 11/11/2011 6:00:00 AM, Date/Time: 11/11/2011 6:16:05 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP-450B-111111-01
Phantom# / Tissue Temp.: OVAL1016 / 21.6 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.48 mW/g (1g)
Percent from Target (+/-): 3.7 % (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: 1.12 mW/g (1g); 0.739 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.93 mho/m; $\varepsilon_r$ = 55.8; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1): Measurement

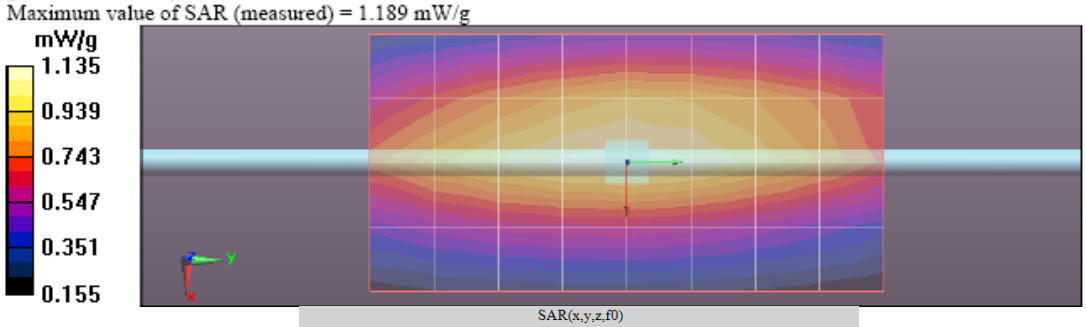
grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.135 mW/g

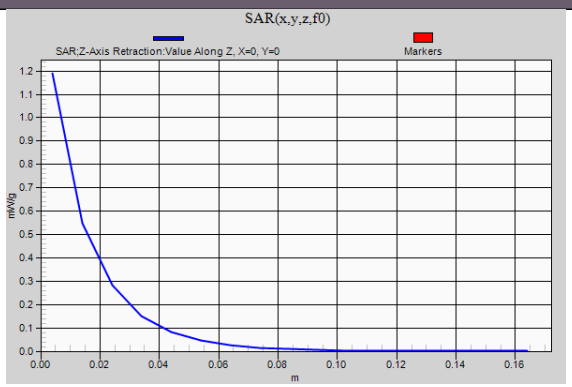
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.741 V/m; Power Drift = 0.0029 dB
Peak SAR (extrapolated) = 1.729 W/kg
**SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.737 mW/g**
Maximum value of SAR (measured) = 1.186 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17): Measurement

grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.189 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/14/2011 9:48:59 AM, Date/Time: 11/14/2011 9:53:54 AM, Date/Time: 11/14/2011 10:09:54 AM**

Robot# / Run#: DASY5-FL-1 / HvH-SYSP-450B-111114-04
Phantom# / Tissue Temp.: OVAL1016 / 20.4 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.48 mW/g (1g)
Percent from Target (+/-): 3.7 % (1g)
Rotation (1D): 0.012 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); 0.748 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 55.9; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (41x81x1):

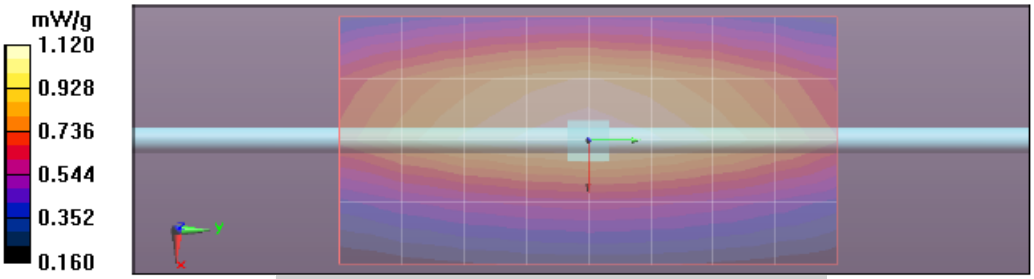
Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.771 V/m; Power Drift = -0.0087 dB
**Motorola Fast SAR: SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.797 mW/g**
Maximum value of SAR (interpolated) = 1.190 mW/g

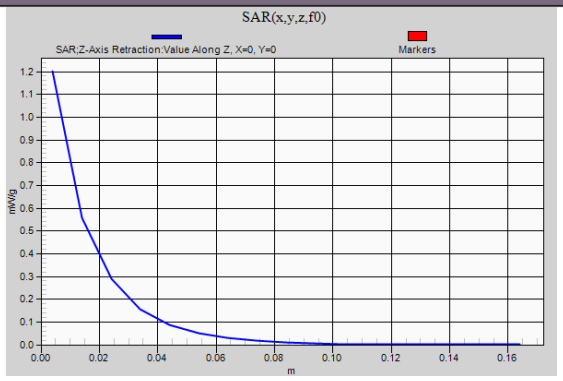
### Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.771 V/m; Power Drift = -0.0087 dB
Peak SAR (extrapolated) = 1.743 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.748 mW/g**
Maximum value of SAR (measured) = 1.201 mW/g

### Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.201 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/15/2011 5:56:24 AM, Date/Time: 11/15/2011 6:01:20 AM, Date/Time: 11/15/2011 6:17:22 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP-450B-111115-01
Phantom# / Tissue Temp.: OVAL1016 / 21.3 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.52 mW/g (1g)
Percent from Target (+/-): 2.8 % (1g)
Rotation (1D): 0.071 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); 0.750 mW/g (10g)

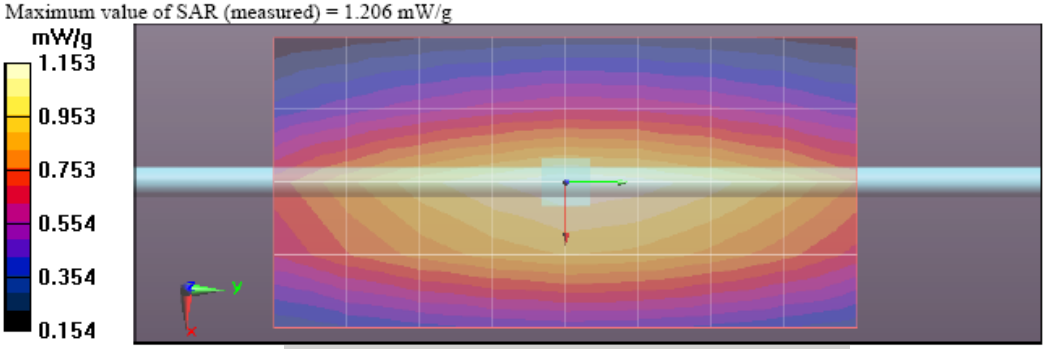
Comments:

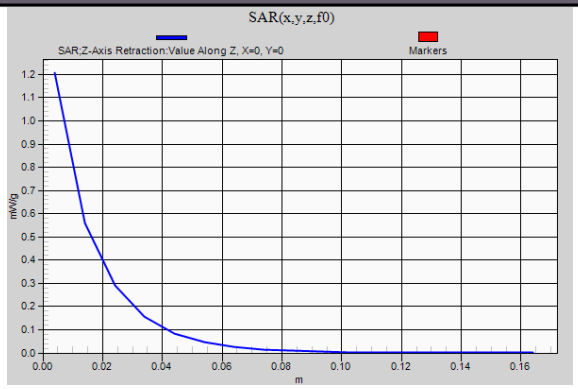
Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.94 mho/m; $\varepsilon_r$ = 55.9; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.153 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.833 V/m; Power Drift = 0.0026 dB
Peak SAR (extrapolated) = 1.761 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.750 mW/g**
Maximum value of SAR (measured) = 1.209 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.206 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/16/2011 6:05:15 AM, Date/Time: 11/16/2011 6:10:14 AM, Date/Time: 11/16/2011 6:26:19 AM**

Robot# / Run#: DASY5-FL-1 / ErC-SYSP 450H-111116-01
Phantom# / Tissue Temp.: OVAL1022 / 21.3 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81 mW/g (1g)
Adjusted SAR (1W): 4.80 mW/g (1g)
Percent from Target (+/-): 0.2 % (1g)
Rotation (1D): 0.032 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); 0.785 mW/g (10g)

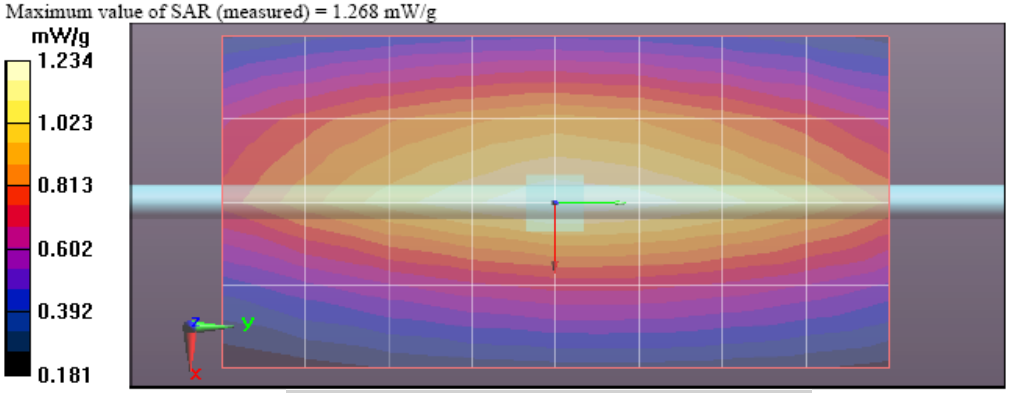
Comments:

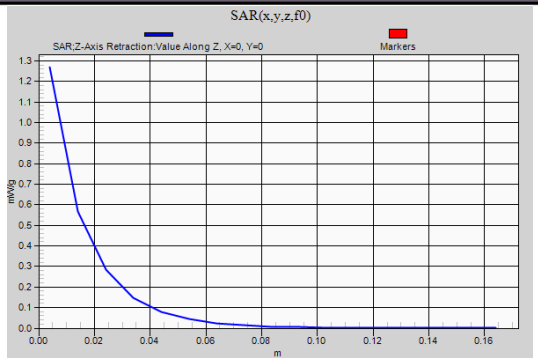
Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(6.53, 6.53, 6.53)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 44.1; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.3l/System Performance Check/Dipole Area Scan 2 (5x9x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.234 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/0-Degree Cube (7x7x7)/Cube 0:**
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 38.022 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 1.845 W/kg
**SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.781 mW/g**
Maximum value of SAR (measured) = 1.272 mW/g

**Below 3 GHz-Rev.3l/System Performance Check/Z-Axis Retraction (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.268 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/19/2011 10:30:51 AM, Date/Time: 10/19/2011 10:35:30 AM, Date/Time: 10/19/2011 10:43:06 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450H-111019-01
Phantom# / Tissue Temp.: OVAL1022 / 21.9 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81 mW/g (1g)
Adjusted SAR (1W): 4.84 mW/g (1g)
Percent from Target (+/-): 0.6 % (1g)
Rotation (1D): 0.059 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); 0.80 mW/g (10g)

Comments:
Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.49, 6.49, 6.49)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.89 mho/m; $\varepsilon_r$ = 44.2; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

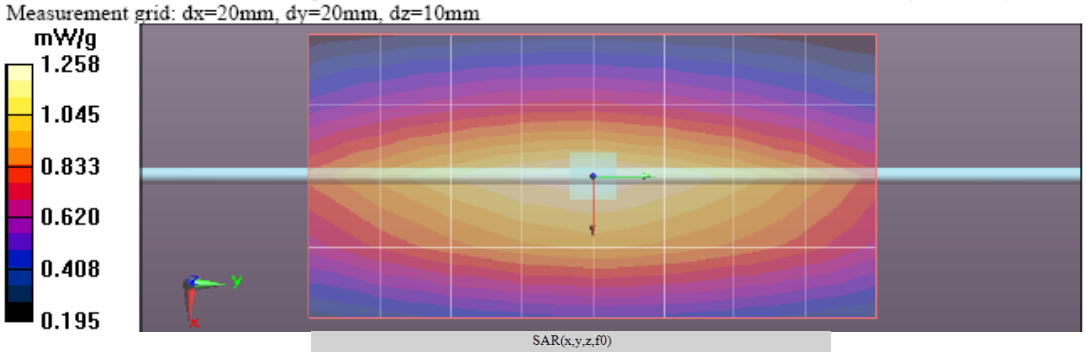
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.258 mW/g

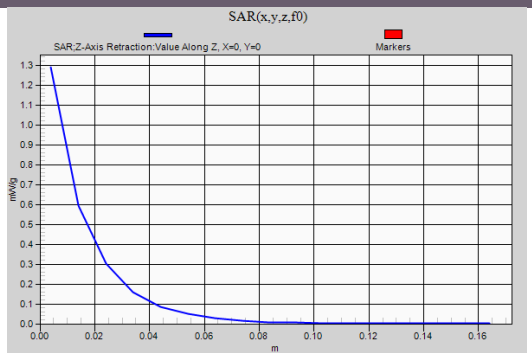
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.263 V/m; Power Drift = 0.0069 dB
Peak SAR (extrapolated) = 1.823 W/kg
**SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.800 mW/g**
Maximum value of SAR (measured) = 1.289 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

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



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/20/2011 5:44:27 AM, Date/Time: 10/20/2011 5:49:28 AM, Date/Time: 10/20/2011 5:59:40 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450H-111020-01
Phantom# / Tissue Temp.: OVAL1108 / 21.5 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81 mW/g (1g)
Adjusted SAR (1W): 4.72 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)
Rotation (1D): 0.047 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: 1.18 mW/g (1g); 0.776 mW/g (10g)

Comments:
Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.49, 6.49, 6.49)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.84 mho/m; $\varepsilon_r$ = 43.1; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

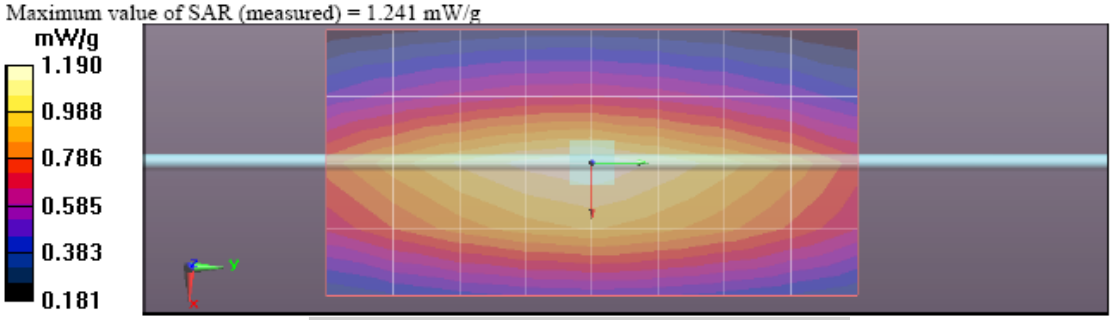
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.190 mW/g

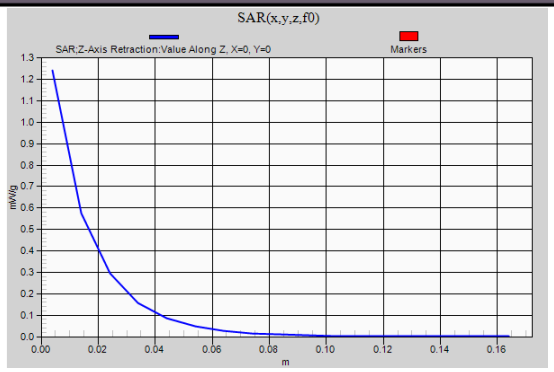
## Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.618 V/m; Power Drift = -0.0049 dB
Peak SAR (extrapolated) = 1.748 W/kg
**SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.770 mW/g**
Maximum value of SAR (measured) = 1.244 mW/g

## Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.241 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/21/2011 5:33:56 AM, Date/Time: 10/21/2011 5:38:58 AM, Date/Time: 10/21/2011 5:46:44 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450H-111021-01
Phantom# / Tissue Temp.: OVAL1108 / 21.2 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81 mW/g (1g)
Adjusted SAR (1W): 4.64 mW/g (1g)
Percent from Target (+/-): 3.5 % (1g)
Rotation (1D): 0.047 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: 1.16 mW/g (1g); 0.773 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.49, 6.49, 6.49)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.83 mho/m; $\varepsilon_r$ = 42.9; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

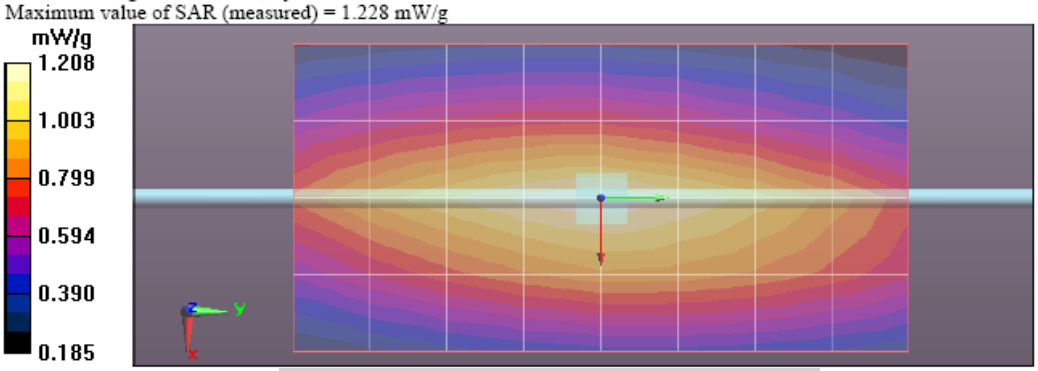
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.208 mW/g

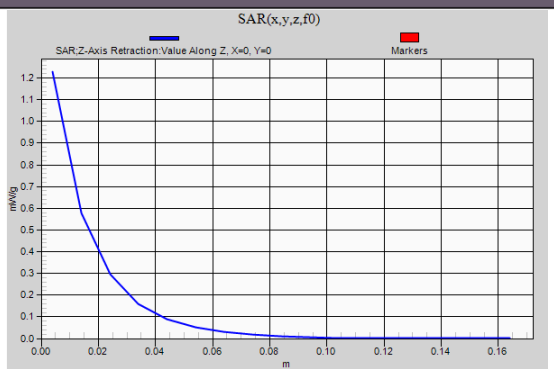
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.699 V/m; Power Drift = 0.0057 dB
Peak SAR (extrapolated) = 1.724 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.765 mW/g**
Maximum value of SAR (measured) = 1.229 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.228 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/25/2011 5:18:17 AM, Date/Time: 10/25/2011 5:23:01 AM, Date/Time: 10/25/2011 5:30:41 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111025-01
Phantom# / Tissue Temp.: OVAL1021 / 21.5 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.68 mW/g (1g)
Percent from Target (+/-): 0.6 % (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: 1.17 mW/g (1g); 0.779 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.93 mho/m; $\varepsilon_r$ = 56.2; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

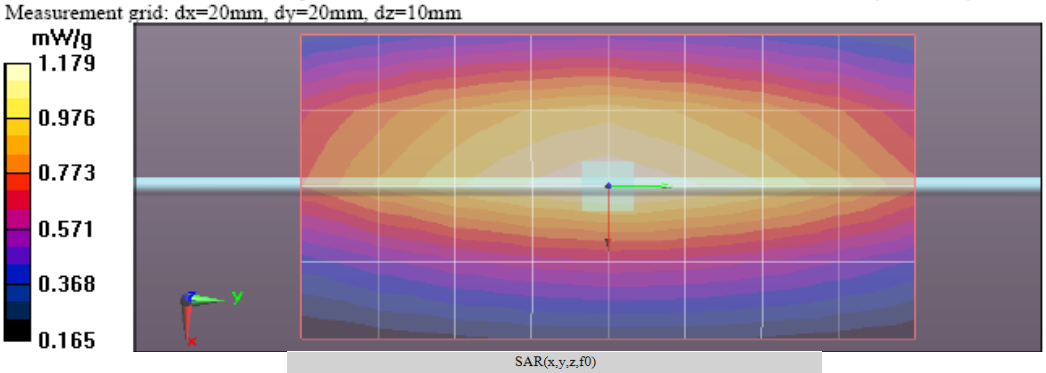
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.179 mW/g

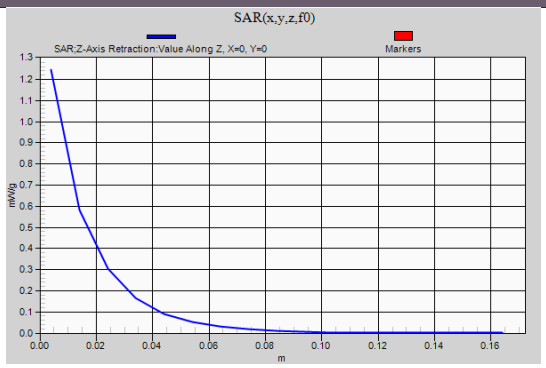
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.561 V/m; Power Drift = 0.00064 dB
Peak SAR (extrapolated) = 1.799 W/kg
**SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.777 mW/g**
Maximum value of SAR (measured) = 1.245 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

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



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/26/2011 5:33:44 AM, Date/Time: 10/26/2011 5:38:28 AM, Date/Time: 10/26/2011 5:46:06 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111026-01
Phantom# / Tissue Temp.: OVAL1021 / 21.1 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 1.9 % (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: 1.14 mW/g (1g); 0.756 mW/g (10g)

Comments:
Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $e_r$ = 55.3; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

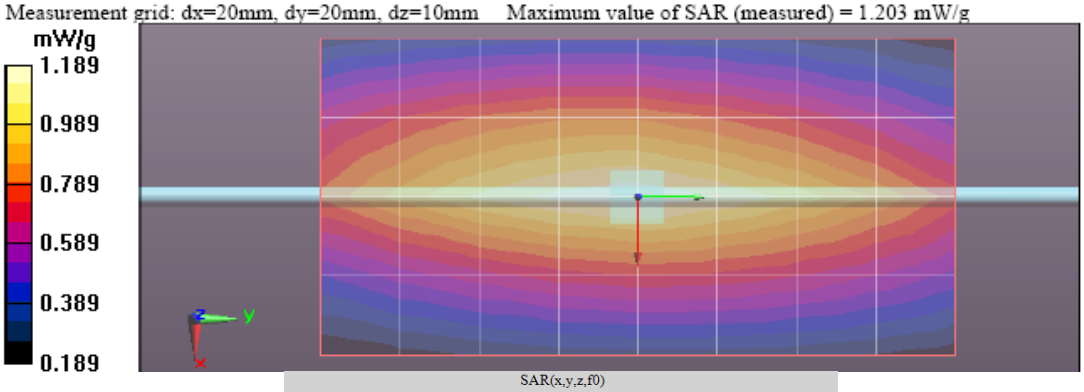
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.189 mW/g

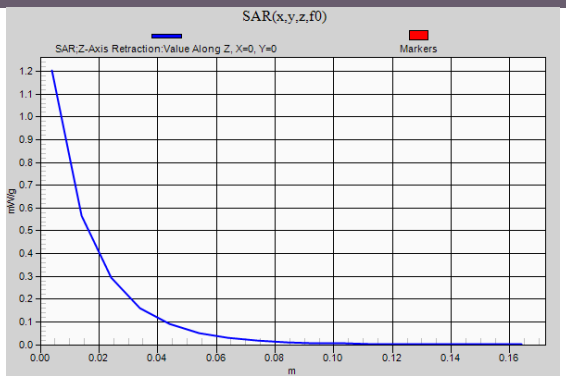
## Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.366 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.722 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.747 mW/g**
Maximum value of SAR (measured) = 1.200 mW/g

## Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.203 mW/g



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/27/2011 5:28:52 AM, Date/Time: 10/27/2011 5:33:33 AM, Date/Time: 10/27/2011 5:41:13 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111027-01
Phantom# / Tissue Temp.: OVAL1021 / 21.1 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.64 mW/g (1g)
Percent from Target (+/-): 0.2 % (1g)
Rotation (1D): 0.037 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: 1.16 mW/g (1g); 0.771 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 55.3; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

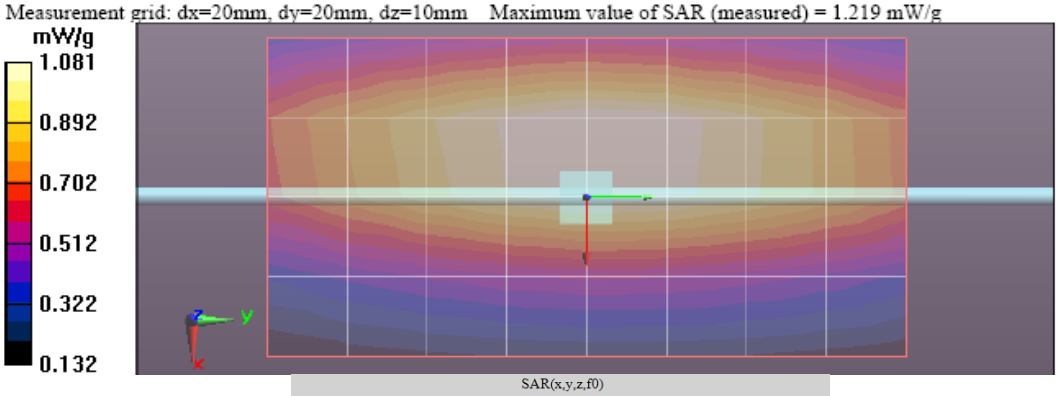
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.081 mW/g

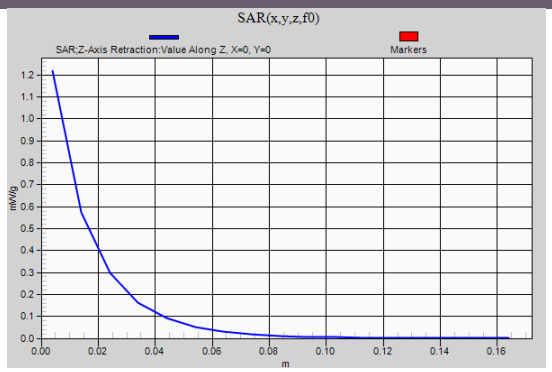
## Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.700 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.753 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.762 mW/g**
Maximum value of SAR (measured) = 1.221 mW/g

## Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.219 mW/g



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/28/2011 5:31:18 AM, Date/Time: 10/28/2011 5:36:03 AM, Date/Time: 10/28/2011 5:43:40 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111028-01
Phantom# / Tissue Temp.: OVAL1021 / 21.2 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.60 mW/g (1g)
Percent from Target (+/-): 1.1 % (1g)
Rotation (1D): 0.046 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); 0.770 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $e_r$ = 55; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

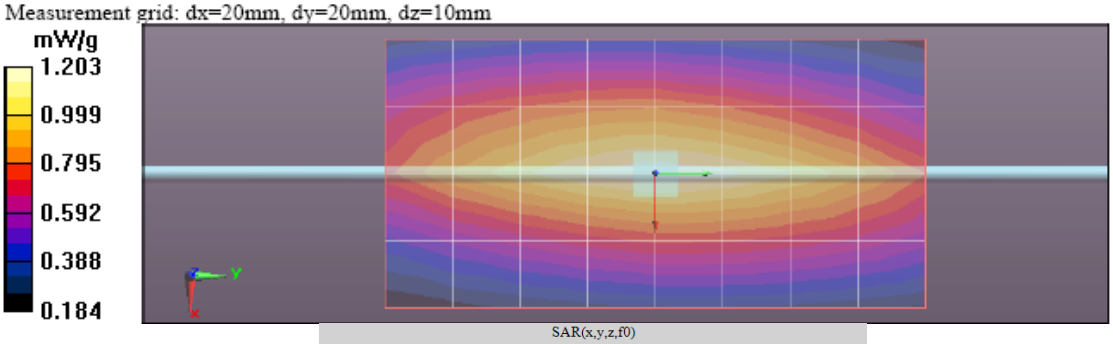
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.203 mW/g

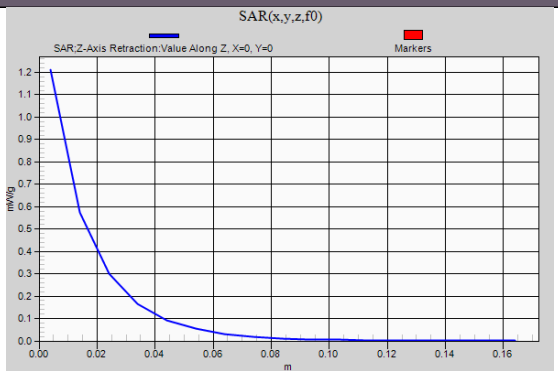
## Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.581 V/m; Power Drift = 0.0066 dB
Peak SAR (extrapolated) = 1.733 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.761 mW/g**
Maximum value of SAR (measured) = 1.211 mW/g

## Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

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



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/31/2011 4:14:48 PM, Date/Time: 10/31/2011 4:19:33 PM, Date/Time: 10/31/2011 4:27:10 PM**

Robot# / Run#: DASY5-FL-3 / CM-SYSP 450B-111031-01
Phantom# / Tissue Temp.: OVAL1021 / 21.7 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.60 mW/g (1g)
Percent from Target (+/-): 1.1 % (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: 1.15 mW/g (1g); 0.766 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.91 mho/m; $\varepsilon_r$ = 55.6; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (41x81x1):

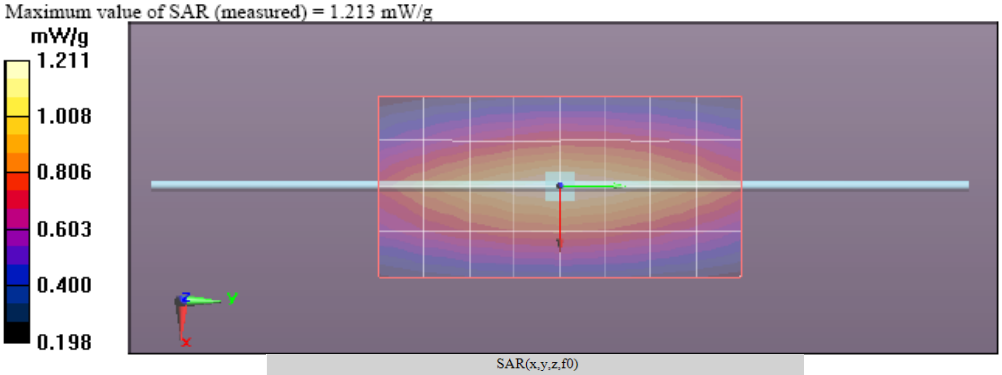
Measurement grid: dx=15mm, dy=15mm
Reference Value = 36.414 V/m; Power Drift = 0.0098 dB
**Motorola Fast SAR: SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.811 mW/g**
Maximum value of SAR (interpolated) = 1.211 mW/g

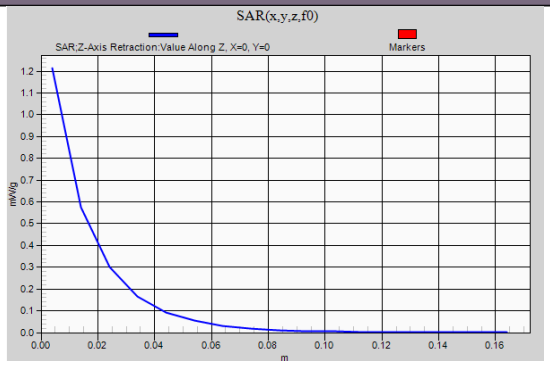
## Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.414 V/m; Power Drift = 0.0098 dB
Peak SAR (extrapolated) = 1.736 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.759 mW/g**
Maximum value of SAR (measured) = 1.214 mW/g

## Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.213 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/1/2011 5:51:38 AM, Date/Time: 11/1/2011 5:56:23 AM, Date/Time: 11/1/2011 6:04:00 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111101-01
Phantom# / Tissue Temp.: OVAL1021 / 21.0 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.64 mW/g (1g)
Percent from Target (+/-): 0.2 % (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: 1.16 mW/g (1g); 0.772 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 55.3; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

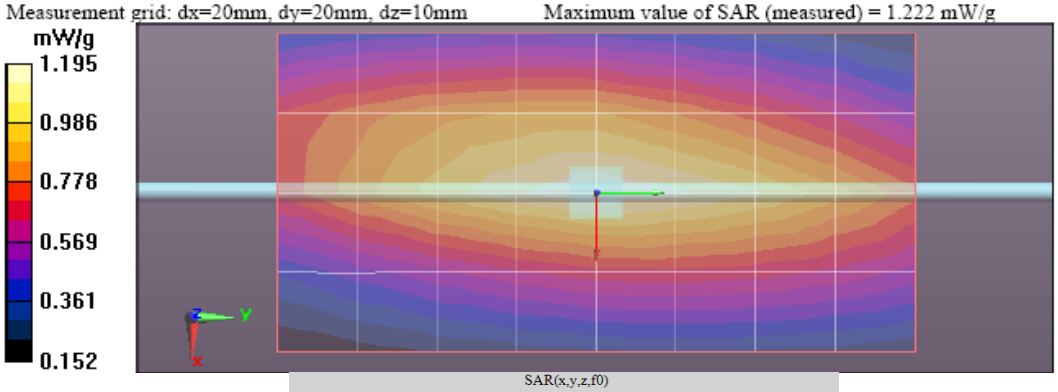
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.195 mW/g

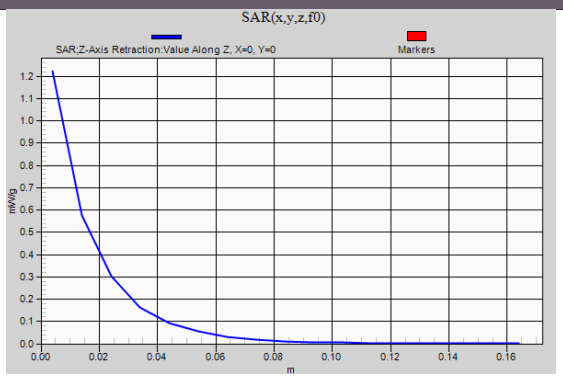
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.637 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.750 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.763 mW/g**
Maximum value of SAR (measured) = 1.224 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.222 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/2/2011 5:30:41 AM, Date/Time: 11/2/2011 5:35:25 AM, Date/Time: 11/2/2011 5:43:02 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111102-01
Phantom# / Tissue Temp.: OVAL1021 / 21.2 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.60 mW/g (1g)
Percent from Target (+/-): 1.1 % (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: 1.15 mW/g (1g); 0.785 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 55.7; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

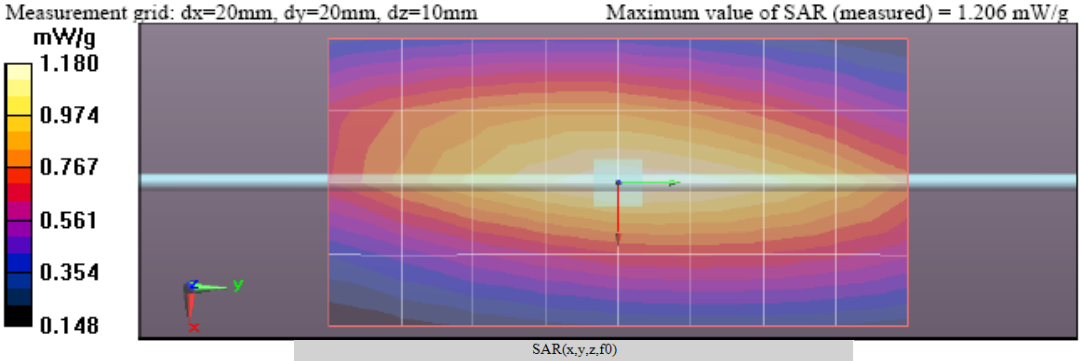
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.180 mW/g

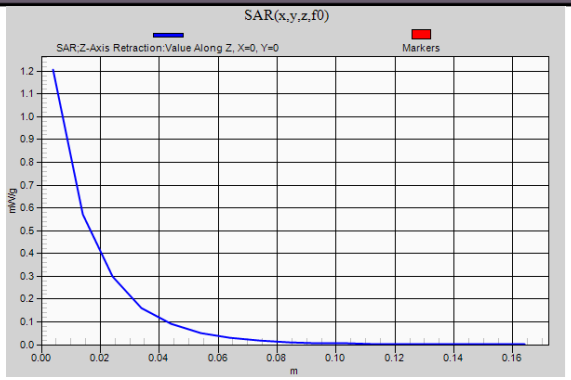
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.653 V/m; Power Drift = 0.0094 dB
Peak SAR (extrapolated) = 1.727 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.755 mW/g**
Maximum value of SAR (measured) = 1.201 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.206 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/3/2011 5:37:38 AM, Date/Time: 11/3/2011 5:42:23 AM, Date/Time: 11/3/2011 5:50:01 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111103-01
Phantom# / Tissue Temp.: OVAL1021 / 20.9 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.68 mW/g (1g)
Percent from Target (+/-): 0.6 % (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: 1.17 mW/g (1g); 0.783 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.93 mho/m; $\varepsilon_r$ = 57; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

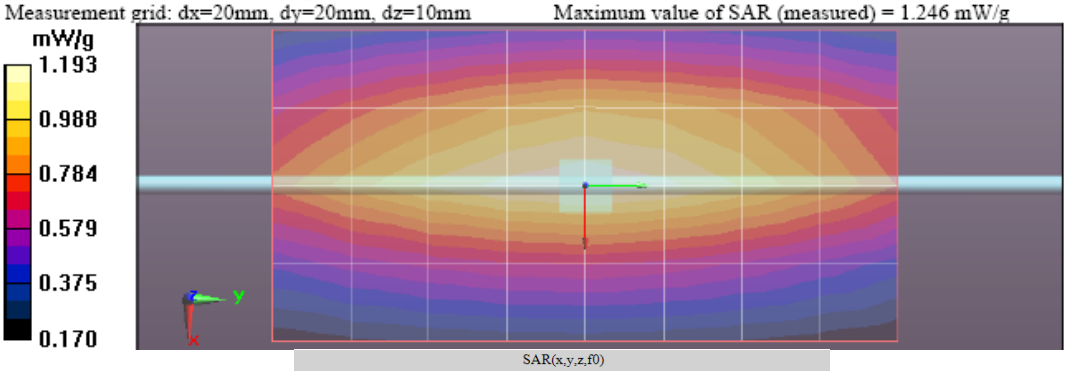
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.193 mW/g

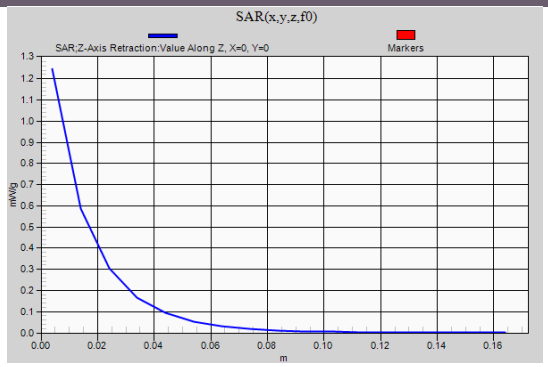
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.526 V/m; Power Drift = 0.0029 dB
Peak SAR (extrapolated) = 1.785 W/kg
**SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.779 mW/g**
Maximum value of SAR (measured) = 1.247 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.246 mW/g



# Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/4/2011 5:29:11 AM, Date/Time: 11/4/2011 5:33:54 AM, Date/Time: 11/4/2011 5:41:31 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111104-01
Phantom# / Tissue Temp.: OVAL1021 / 20.9 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.60 mW/g (1g)
Percent from Target (+/-): 1.1 % (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: 1.15 mW/g (1g); 0.766 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 55.8; $\rho$ = 1000 kg/m$^3$

## Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

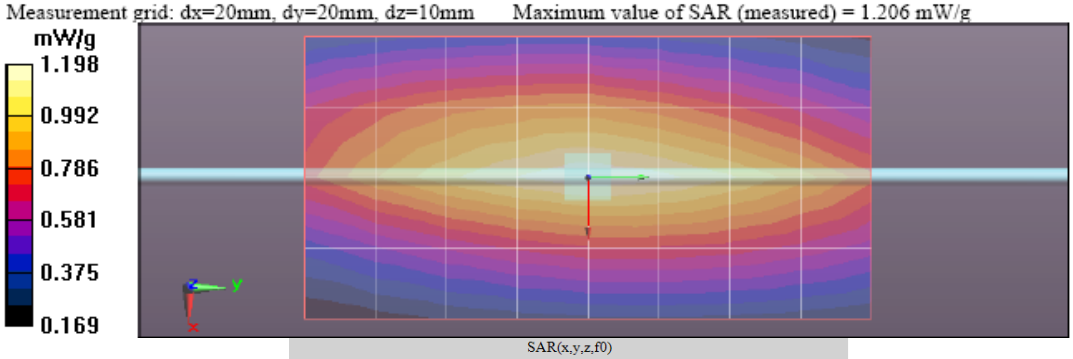
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.198 mW/g

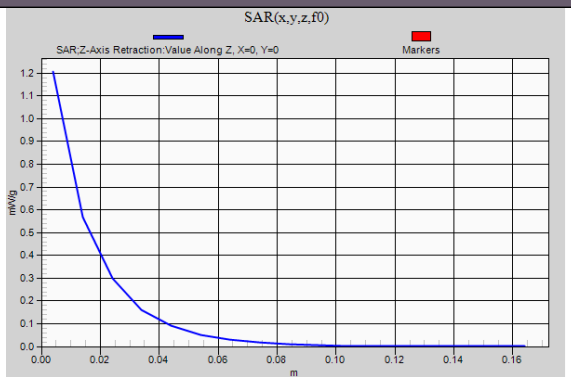
## Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.577 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.735 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.757 mW/g**
Maximum value of SAR (measured) = 1.208 mW/g

## Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.206 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/5/2011 12:44:05 AM, Date/Time: 11/5/2011 12:48:47 AM, Date/Time: 11/5/2011 12:56:23 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111105-01
Phantom# / Tissue Temp.: OVAL1021 / 20.4 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.60 mW/g (1g)
Percent from Target (+/-): 1.1 % (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: 1.15 mW/g (1g); 0.767 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 56.1; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

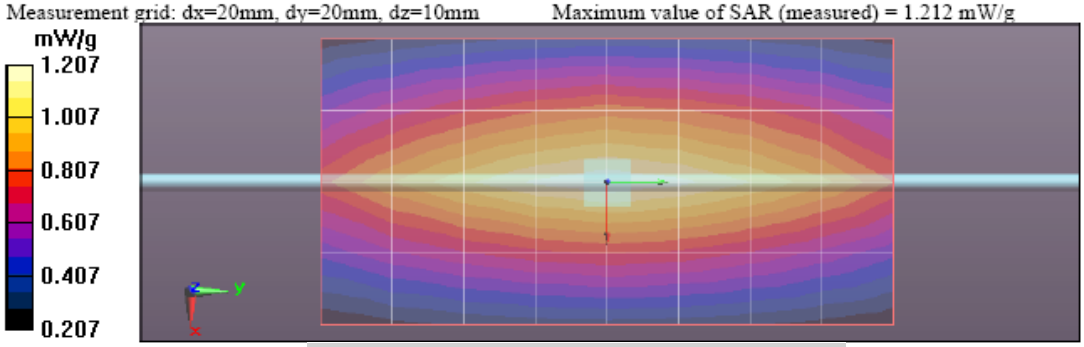
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.207 mW/g

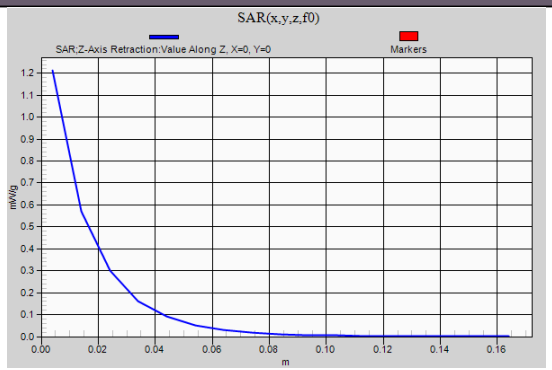
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.704 V/m; Power Drift = 0.0075 dB
Peak SAR (extrapolated) = 1.728 W/kg
**SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.758 mW/g**
Maximum value of SAR (measured) = 1.209 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.212 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/7/2011 9:21:22 AM, Date/Time: 11/7/2011 9:26:05 AM, Date/Time: 11/7/2011 9:33:38 AM**

Robot# / Run#: DASY5-FL-3 / JsT-SYSP-450B-111107-01
Phantom# / Tissue Temp.: OVAL1021 / 21.0 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

| | | |
|---|---|---|
| Target SAR (1W): | 4.65 mW/g | (1g) |
| Adjusted SAR (1W): | 4.64 mW/g | (1g) |
| Percent from Target (+/-): | 0.2 % | (1g) |
| Rotation (1D): | 0.037 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: 1.16 mW/g (1g); 0.769 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011

Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.91 mho/m; $\varepsilon_r$ = 55.8; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

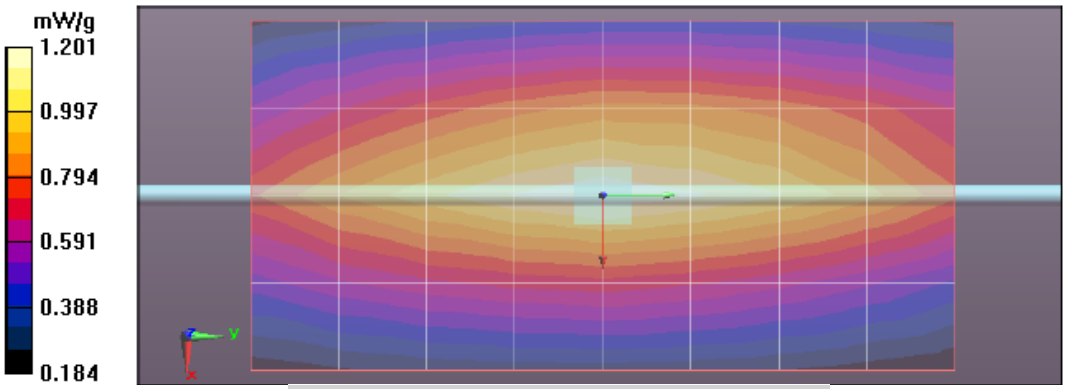
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.201 mW/g

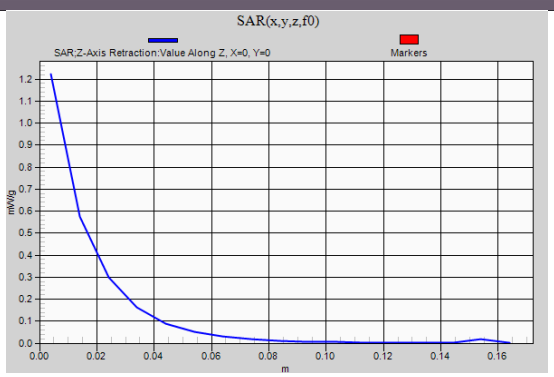
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.525 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 1.749 W/kg
**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.762 mW/g**
Maximum value of SAR (measured) = 1.216 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.222 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/8/2011 5:42:14 AM, Date/Time: 11/8/2011 5:46:57 AM, Date/Time: 11/8/2011 5:54:34 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111108-01
Phantom# / Tissue Temp.: OVAL1021 / 20.9 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 1.9 % (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: 1.14 mW/g (1g); 0.762 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 55.6; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

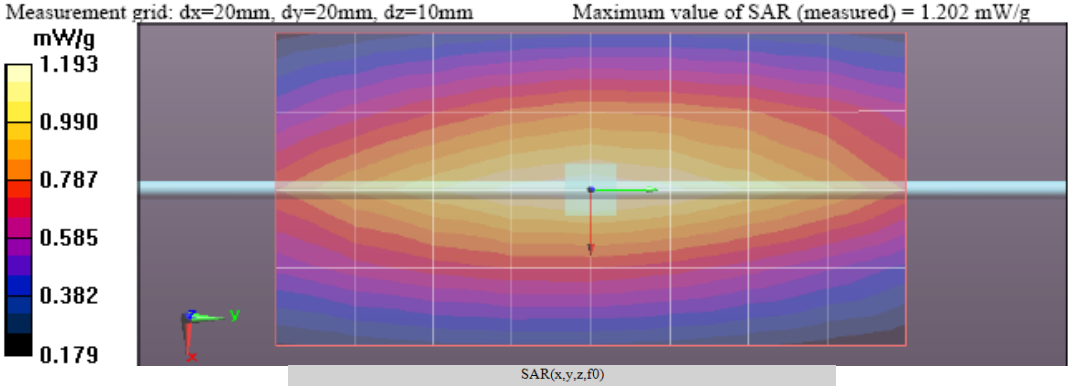
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.193 mW/g

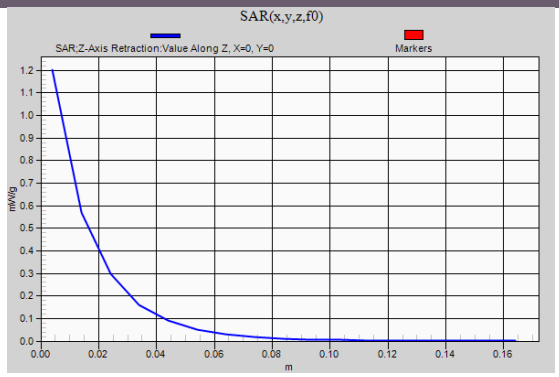
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.450 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.715 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.753 mW/g**
Maximum value of SAR (measured) = 1.198 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm Maximum value of SAR (measured) = 1.202 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/9/2011 5:42:47 AM, Date/Time: 11/9/2011 5:47:32 AM, Date/Time: 11/9/2011 5:55:12 AM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111109-01
Phantom# / Tissue Temp.: OVAL1021 / 21.1 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 1.9 % (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: 1.14 mW/g (1g); 0.760 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.9 mho/m; $\varepsilon_r$ = 55.9; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

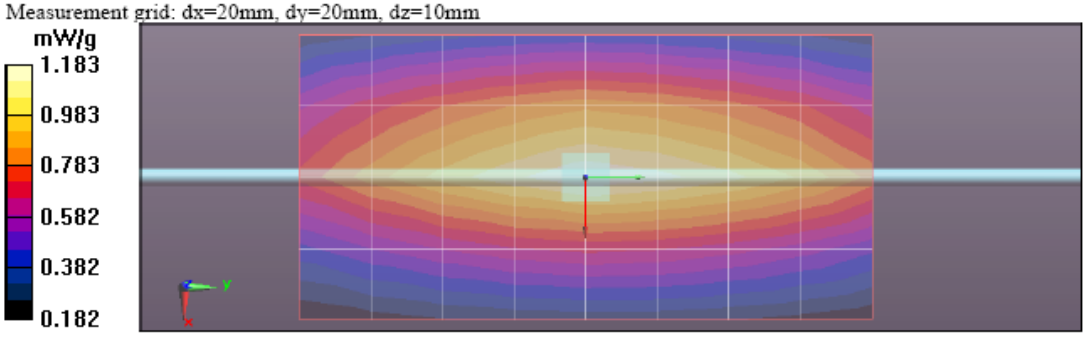
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.183 mW/g

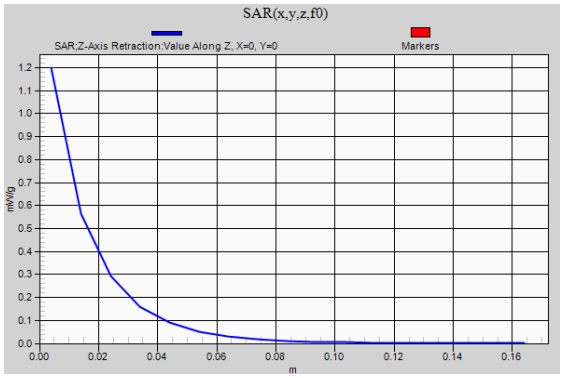
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.370 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.719 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.751 mW/g**
Maximum value of SAR (measured) = 1.199 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

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



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 12/13/2011 3:08:22 PM, Date/Time: 12/13/2011 3:13:00 PM, Date/Time: 12/13/2011 3:20:35 PM**

Robot# / Run#: DASY5-FL-3 / ErC-SYSP 450B-111213-01
Phantom# / Tissue Temp.: OVAL1090 / 20.4 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.65 mW/g (1g)
Adjusted SAR (1W): 4.68 mW/g (1g)
Percent from Target (+/-): 0.6 % (1g)
Rotation (1D): 0.16 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); 0.774 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3185, Calibrated: 11/17/2011, ConvF(6.67, 6.67, 6.67)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.93 mho/m; $\varepsilon_r$ = 55.3; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (5x9x1):

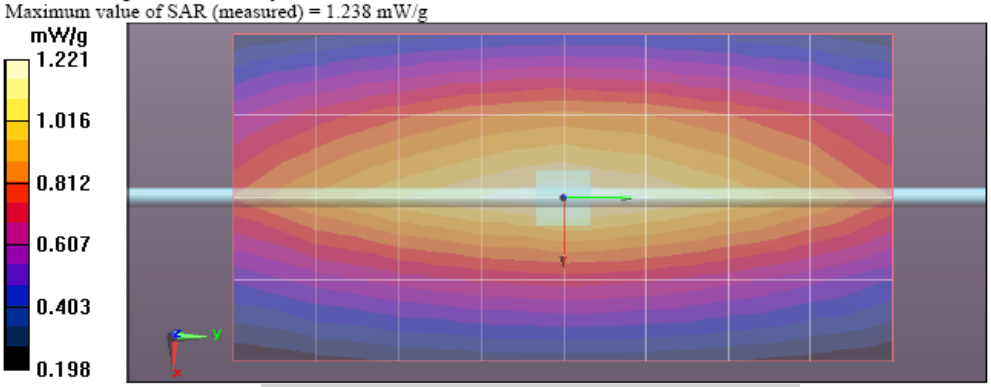
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.221 mW/g

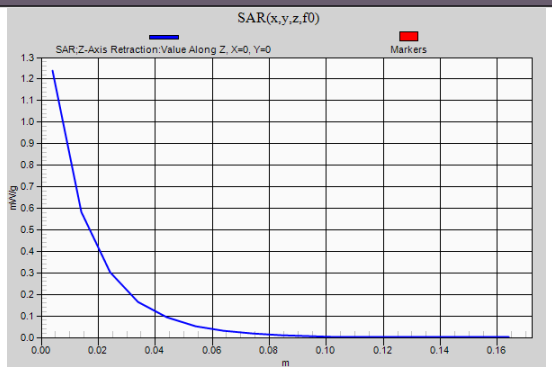
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.366 V/m; Power Drift = 0.0028 dB
Peak SAR (extrapolated) = 1.779 W/kg
**SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.772 mW/g**
Maximum value of SAR (measured) = 1.239 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.238 mW/g



## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 12/15/2011 10:39:09 AM, Date/Time: 12/15/2011 10:44:07 AM, Date/Time: 12/15/2011 10:51:53 AM**

Robot# / Run#: DASY5-FL-3 / HvH-SYSP-450H-111215-01
Phantom# / Tissue Temp.: OVAL1108 / 21.3 (C)
Dipole Model# / Serial#: D450V3 / 1075
TX Freq. / Start power: 450 (MHz) / 250 (mW)

Target SAR (1W): 4.81mW/g (1g)
Adjusted SAR (1W): 4.56 mW/g (1g)
Percent from Target (+/-): 5.2 % (1g)
Rotation (1D): 0.16 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); 0.76 mW/g (10g)

Comments:

Probe: ES3DV3 - SN3185, Calibrated: 11/17/2011, ConvF(6.22, 6.22, 6.22)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.84 mho/m; $\varepsilon_r$ = 43.7; $\rho$ = 1000 kg/m$^3$

### Below 3 GHz-Rev.3m/System Performance Check/Dipole Area Scan 2 (41x81x1):

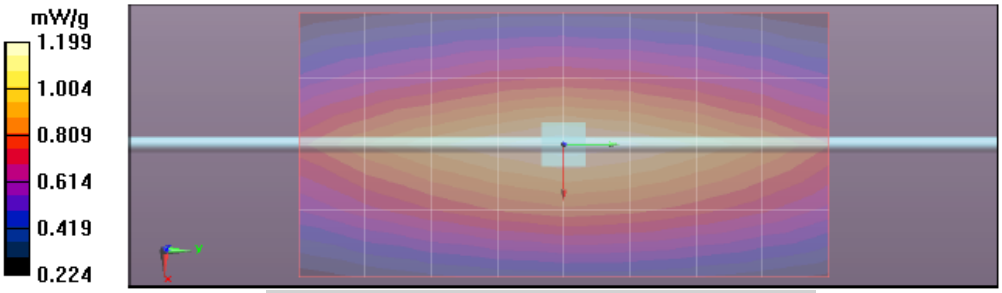
Measurement grid: dx=15mm, dy=15mm
Reference Value = 38.002 V/m; Power Drift = 0.011 dB
**Motorola Fast SAR: SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.808 mW/g**
Maximum value of SAR (interpolated) = 1.203 mW/g

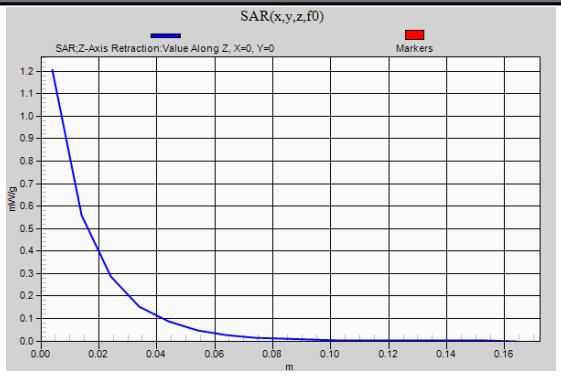
### Below 3 GHz-Rev.3m/System Performance Check/0-Degree Cube (5x5x7)/Cube 0:

Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.002 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 1.705 W/kg
**SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.750 mW/g**
Maximum value of SAR (measured) = 1.205 mW/g

### Below 3 GHz-Rev.3m/System Performance Check/Z-Axis Retraction (1x1x17):

Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 1.206 mW/g



## DIPOLE SAR TARGET - HEAD

| | | | |
|---|---|---|---|
| Date: | 09/12/11 | Frequency (MHz): | 450 |
| Lab Location: | FL08 | Mixture Type: | IEEE Head |
| DAE Serial #: | 401 | Ambient Temp.(°C): | 21.9 |
| Tissue Characteristics | | | |
| Permitivity: | 44.3 | Phantom Type/SN: | OVAL1108 |
| Conductivity: | 0.88 | Distance (mm): | 15 |
| Tissue Temp.(°C): | 21.8 | | |
| Reference Source: | Dipole | Power to Dipole: | 250 mW |
| Reference SN: | 1075 | | |

**Target 1g-SAR Value (mW/g, normalized to 1.0 W):**

| 4.58 |
|---|

**Difference from Target**

| 5.09% (1g-SAR) |
|---|

**New Target:**

| Average 1g-SAR Value (mW/g): | 4.81 |
|---|---|

**Passes K=2**

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

| Probe SN #s | 1g-SAR (Cube) | Diff from Ave | Robot |
|---|---|---|---|
| **3147** | 4.84 | *0.6%* | R1 |
| **3163** | 4.76 | *-1.1%* | R1 |
| **3185** | 4.84 | *0.6%* | R1 |
| Average | **4.8133** | New Measured SAR Value | |

(normalized to 1.0 W)

Test performed by: **J. Turco** Initial:

## DIPOLE SAR TARGET - BODY

| | | | |
|---|---|---|---|
| Date: | 09/12/11 | Frequency (MHz): | **450** |
| Lab Location: | FL08 | Mixture Type: | **Body** |
| DAE Serial #: | 401 | Ambient Temp.(°C): | 22.1 |

Tissue Characteristics

| | | | |
|---|---|---|---|
| Permitivity: | 56.1 | Phantom Type/SN: | OVAL1090 |
| Conductivity: | 0.95 | Distance (mm): | 15 |
| Tissue Temp.(°C): | 21.8 | | |

| | | | |
|---|---|---|---|
| Reference Source: | Dipole | Power to Dipole: | 250 mW |
| Reference SN: | **1075** | | |

**New Target:**

Average Measured SAR Value: **4.65** mW/g(1g avg.),

| Probe SN #s | 1-G Cube | Diff from Ave | Robot |
|---|---|---|---|
| **3147** | 4.72 | *1.4%* | R1 |
| **3163** | 4.56 | *-2.0%* | R1 |
| **3185** | 4.68 | *0.6%* | R1 |
| Average | | New Measured SAR Value | |

(normalized to 1.0 W)

Test performed by: **J. Turco** Initial:

## DIPOLE SAR TARGET - HEAD

| | | | |
|---|---|---|---|
| Date: | 03/01/11 | Frequency (MHz): | 450 |
| Lab Location: | FL08 | Mixture Type: | IEEE Head |
| DAE Serial #: | 850 | Ambient Temp.(°C): | 21.7 C |
| Tissue Characteristics | | | |
| Permitivity: | 44.3 | Phantom Type/SN: | OVAL1016 |
| Conductivity: | 0.91 | Distance (mm): | 2 |
| Tissue Temp.(°C): | 20.3 | | |
| Reference Source: | Dipole | Power to Dipole: | 250 mW |
| Reference SN: | 1077 | | |

**Target 1g-SAR Value (mW/g, normalized to 1.0 W):**

| 4.58 |
|---|

**Difference from Target**

| 10.04% (1g-SAR) |
|---|

**New Target:**

| Average 1g-SAR Value (mW/g): | 5.04 |
|---|---|

**Passes K=2**

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

| Probe SN #s | 1g-SAR (Cube) | Diff from Ave | Robot |
|---|---|---|---|
| **3147** | 5.00 | *-0.8%* | R3 |
| **3291** | 5.12 | *1.6%* | R3 |
| **3185** | 5.00 | *-0.8%* | R3 |
| Average | **5.0400** | New Measured SAR Value | |

(normalized to 1.0 W)

Test performed by: **C. Miller** Initial: 

## DIPOLE SAR TARGET - BODY

| | | | |
|---|---|---|---|
| Date: | 03/01/11 | Frequency (MHz): | 450 |
| Lab Location: | FL08 | Mixture Type: | Body |
| DAE Serial #: | 850 | Ambient Temp.(°C): | 21.6 |

Tissue Characteristics

| | | | |
|---|---|---|---|
| Permitivity: | 55.8 | Phantom Type/SN: | OVAL1090 |
| Conductivity: | 0.95 | Distance (mm): | 2 |
| Tissue Temp.(°C): | 21.3 | | |

| | | | |
|---|---|---|---|
| Reference Source: | Dipole | Power to Dipole: | 250 mW |
| Reference SN: | 1077 | | |

**New Target:**

Average Measured SAR Value: **4.68** mW/g(1g avg.),

| Probe SN #s | 1-G Cube | Diff from Ave | Robot |
|---|---|---|---|
| **3185** | 4.68 | *0.0%* | R3 |
| **3147** | 4.64 | *-0.9%* | R3 |
| **3006** | 4.72 | *0.9%* | R3 |
| Average | | New Measured SAR Value | |

(normalized to 1.0 W)

Test performed by: **C. Miller** Initial: CM

## DIPOLE SAR TARGET - HEAD

| | | | |
|---|---|---|---|
| Date: | 12/05/11 | Frequency (MHz): | 450 |
| Lab Location: | FL08 | Mixture Type: | IEEE Head |
| DAE Serial #: | 1231 | Ambient Temp.(°C): | 22.2 C |
| Tissue Characteristics | | | |
| Permitivity: | 44.4 | Phantom Type/SN: | OVAL1108 |
| Conductivity: | 0.91 | Distance (mm): | 2 |
| Tissue Temp.(°C): | 21.3 | | |
| Reference Source: | Dipole | Power to Dipole: | 250 mW |
| Reference SN: | 1077 | | |

**Target 1g-SAR Value (mW/g, normalized to 1.0 W):** **4.58**

**Difference from Target** 7.71% (1g-SAR)

**New Target:**

| Average 1g-SAR Value (mW/g): | 4.93 |
|---|---|

**Passes K=2**

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

| Probe SN #s | 1g-SAR (Cube) | Diff from Ave | Robot |
|---|---|---|---|
| **3163** | 4.96 | *0.5%* | R1 |
| **3185** | 4.92 | *-0.3%* | R1 |
| **3291** | 4.92 | *-0.3%* | R1 |
| Average | **4.9333** | New Measured SAR Value | |

(normalized to 1.0 W)

Test performed by: **Gene Von Holten** Initial: HvH

## DIPOLE SAR TARGET - BODY

| | | | |
|---|---|---|---|
| Date: | 12/05/11 | Frequency (MHz): | 450 |
| Lab Location: | FL08 | Mixture Type: | Body |
| DAE Serial #: | 1231 | Ambient Temp.(°C): | 22.2 |

Tissue Characteristics

| | | | |
|---|---|---|---|
| Permitivity: | 54.0 | Phantom Type/SN: | OVAL1090 |
| Conductivity: | 0.96 | Distance (mm): | 2 |
| Tissue Temp.(°C): | 21.1 | | |

| | | | |
|---|---|---|---|
| Reference Source: | Dipole | Power to Dipole: | 250 mW |
| Reference SN: | 1077 | | |

**New Target:**

Average Measured SAR Value: **4.53** mW/g(1g avg.),

| Probe SN #s | 1-G Cube | Diff from Ave | Robot |
|---|---|---|---|
| **3291** | 4.52 | *-0.3%* | R1 |
| **3185** | 4.52 | *-0.3%* | R1 |
| **3163** | 4.56 | *0.6%* | R1 |
| Average | | New Measured SAR Value | |

(normalized to 1.0 W)

Test performed by: **Gene Von Holten** Initial: HvH

# Appendix E
# DUT Scans (Shortened Scan and Highest SAR configurations)
# FCC Part 90
# (406.1 - 470MHz and 470-512MHz)

# Shortened Scan Result
# Table 80

## Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/16/2011 8:27:35 PM, Date/Time: 11/16/2011 8:42:37 PM, Date/Time: 11/16/2011 8:45:44 PM, Date/Time: 11/16/2011 8:59:15 PM**

Robot# / Run#: DASY5-FL-1 / CM-Ab-111116-13
Phantom# / Tissue Temp.: OVAL1016 / 21.0 (C)
DUT Model# / Serial#: H97TGD9PW1AN (MNUE3622A) / Q0SOM063
Antenna / TX Freq.: FAF5260A / 450.0000 (MHz)
Battery: NNTN8092A
Carry Acc. / Cable Acc.: PMLN5322B with NTN5243A / 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 SAR: 13.17 mW/g (1g); 9.77 mW/g (10g)

Comments: Shortened scan

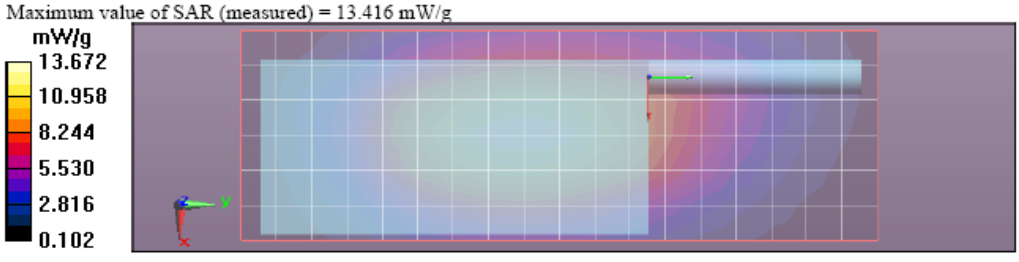
Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.93 mho/m; $\varepsilon_r$ = 56; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.4e/Ab Scan/1-Area Scan (61x181x1):** Measurement grid: dx=15mm, dy=15mm
Reference Value = 95.918 V/m; Power Drift = -0.18 dB
**Motorola Fast SAR: SAR(1 g) = 13 mW/g; SAR(10 g) = 9.67 mW/g**
Maximum value of SAR (interpolated) = 13.673 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/2-Volume 2D Scan (41x41x1):** Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm
Reference Value = 95.918 V/m; Power Drift = -0.22 dB
Peak SAR (extrapolated) = Not Specified W/kg
**Motorola Fast SAR: SAR(1 g) = 12.9 mW/g; SAR(10 g) = 9.53 mW/g**
Maximum value of SAR (interpolated) = 13.520 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 122.0 V/m; Power Drift = -0.071 dB
Peak SAR (extrapolated) = 17.771 W/kg
**SAR(1 g) = 13.1 mW/g; SAR(10 g) = 9.74 mW/g**
Maximum value of SAR (measured) = 13.777 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 13.416 mW/g




**Shortened scan reflect highest SAR producing configuration; approximate run time is 8 minutes. Representative full scan run time was 25 minutes.**
**"Shortened" scan max calculated SAR using SAR drift: 1-g Avg. = 6.74 mW/g; 10-g Avg. = 5.0 mW/g. Zoom scan max calculated SAR using SAR drift (see part 1 table 37): 1-g Avg. = 6.66 mW/g; 10-g Avg. = 4.94 mW/g.**

# Table 37
## Body - Highest SAR Configuration Result (406.1-470 MHz)
### Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/16/2011 7:47:28 PM, Date/Time: 11/16/2011 8:02:32 PM, Date/Time: 11/16/2011 8:05:35 PM, Date/Time: 11/16/2011 8:13:18 PM**

Robot# / Run#: DASY5-FL-1 / CM-Ab-111116-12
Phantom# / Tissue Temp.: OVAL1016 / 21.0 (C)
DUT Model# / Serial#: H97TGD9PW1AN (MNUE3622A) / Q0SOM063
Antenna / TX Freq.: FAF5260A / 450.0000 (MHz)
Battery: NNTN8092A
Carry Acc. / Cable Acc.: PMLN5322B with NTN5243A / None
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: 12.37 mW/g (1g); 9.18 mW/g (10g)

Comments: Zoom.

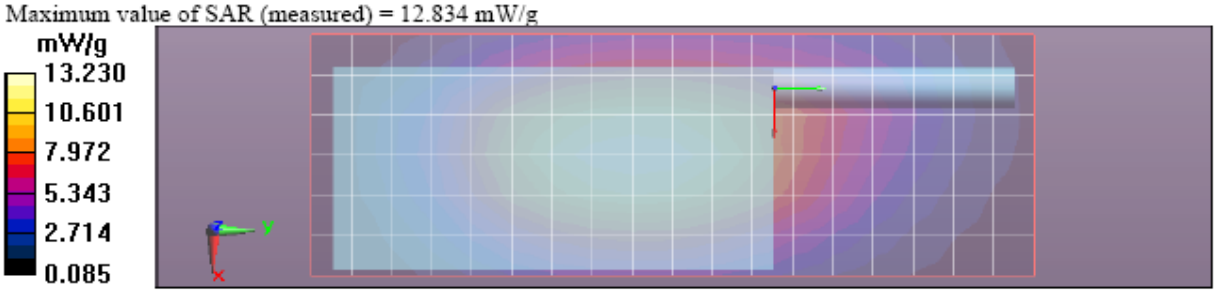
Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(7.01, 7.01, 7.01)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 450 MHz; $\sigma$ = 0.93 mho/m; $\varepsilon_r$ = 56; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.4e/Ab Scan/1-Area Scan (61x181x1):** Measurement grid: dx=15mm, dy=15mm
Reference Value = 93.983 V/m; Power Drift = -0.18 dB
**Motorola Fast SAR: SAR(1 g) = 12.6 mW/g; SAR(10 g) = 9.36 mW/g**
Maximum value of SAR (interpolated) = 13.233 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/2-Volume 2D Scan (41x41x1):** Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm
Reference Value = 93.983 V/m; Power Drift = -0.22 dB
Peak SAR (extrapolated) = Not Specified W/kg
**Motorola Fast SAR: SAR(1 g) = 12.5 mW/g; SAR(10 g) = 9.25 mW/g**
Maximum value of SAR (interpolated) = 13.106 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 93.983 V/m; Power Drift = -0.28 dB
Peak SAR (extrapolated) = 16.702 W/kg
**SAR(1 g) = 12.3 mW/g; SAR(10 g) = 9.15 mW/g**
Maximum value of SAR (measured) = 12.929 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 12.834 mW/g



# Table 44
## Face - Highest SAR Configuration Result (406.1-470 MHz)
### Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/16/2011 12:11:51 PM, Date/Time: 11/16/2011 12:32:00 PM, Date/Time: 11/16/2011 12:39:41 PM**

Robot# / Run#: DASY5-FL-1 / ErC-Face-111116-07
Phantom# / Tissue Temp.: OVAL1022 / 21.1 (C)
DUT Model# / Serial#: H97TGD9PW1AN (MNUE3622A) / Q0SOM063
Antenna / TX Freq.: FAF5260A / 470.0000 (MHz)
Battery: NNTN7034A
Carry Acc. / Cable Acc.: None / None
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: 6.13 mW/g (1g); 4.52 mW/g (10g)

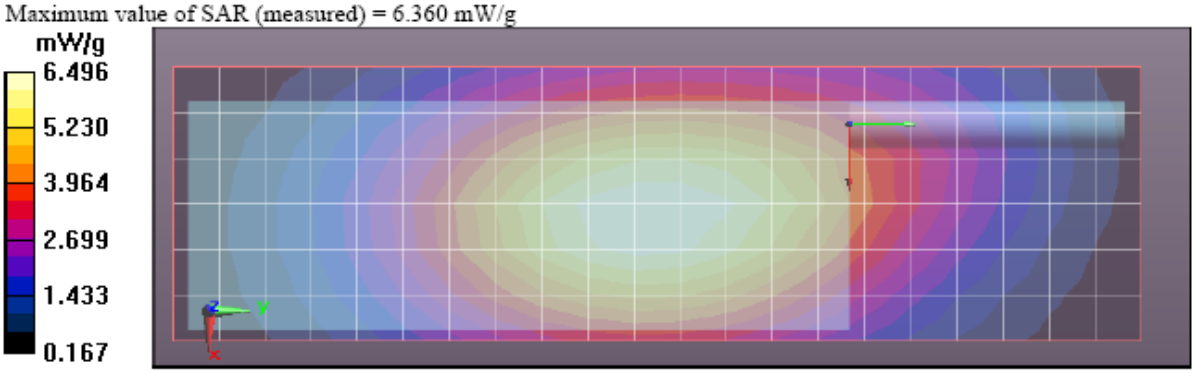
Comments: Zoom, Back toward phantom.

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(6.53, 6.53, 6.53)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 470 MHz; $\sigma$ = 0.91 mho/m; $\varepsilon_r$ = 43.5; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.4e/Face Scan/1-Area Scan (7x22x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 6.496 mW/g

**Below 3 GHz-Rev.4e/Face Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 66.940 V/m; Power Drift = -0.25 dB
Peak SAR (extrapolated) = 8.275 W/kg
**SAR(1 g) = 6.12 mW/g; SAR(10 g) = 4.52 mW/g**
Maximum value of SAR (measured) = 6.426 mW/g

**Below 3 GHz-Rev.4e/Face Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 6.360 mW/g



# Table 71
## Body - Highest SAR Configuration Result (470-512 MHz)

### Motorola Solutions, Inc. EME Laboratory

**Date/Time: 11/8/2011 1:37:40 PM, Date/Time: 11/8/2011 1:58:55 PM, Date/Time: 11/8/2011 2:08:49 PM**

Robot# / Run#: DASY5-FL-3 / ErC-Ab-111108-12
Phantom# / Tissue Temp.: OVAL1021 / 20.8 (C)
DUT Model# / Serial#: H97TGD9PW1AN (MNUE3622A) / Q0SOM063
Antenna / TX Freq.: FAF5260A / 498.0000 (MHz)
Battery: NNTN7036A
Carry Acc. / Cable Acc.: PMLN5330B w/NTN5243A / None
Start Power: 5.92 (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: 11.80 mW/g (1g); 6.19 mW/g (10g)

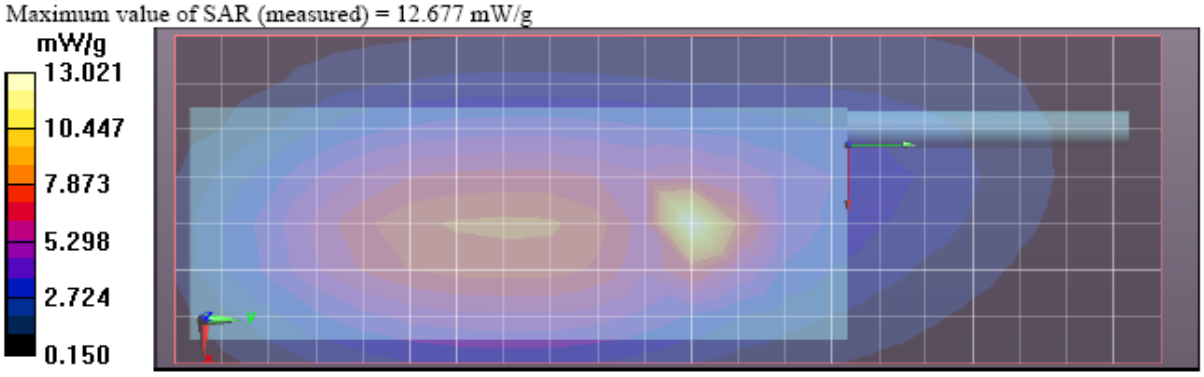
Comments: Back against phantom, tested without loop.

Probe: ES3DV3 - SN3147, Calibrated: 1/26/2011, ConvF(6.83, 6.83, 6.83)
Electronics: DAE3 Sn401, Calibrated: 5/6/2011
Duty Cycle: 1:1, Medium parameters used: f = 498 MHz; $\sigma$ = 0.95 mho/m; $\varepsilon_r$ = 55; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.4e/Ab Scan/1-Area Scan (8x22x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 13.021 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/3-Zoom Scan (6x7x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 73.402 V/m; Power Drift = -0.48 dB
Peak SAR (extrapolated) = 28.437 W/kg
**SAR(1 g) = 11.8 mW/g; SAR(10 g) = 6.19 mW/g**
Maximum value of SAR (measured) = 13.493 mW/g

**Below 3 GHz-Rev.4e/Ab Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 12.677 mW/g



# Table 78
## Face - Highest SAR Configuration Result (470-512 MHz)

### Motorola Solutions, Inc. EME Laboratory

**Date/Time: 10/20/2011 4:13:22 PM, Date/Time: 10/20/2011 4:32:52 PM, Date/Time: 10/20/2011 4:42:01 PM, Date/Time: 10/20/2011 4:49:43 PM**

Robot# / Run#: DASY5-FL-1 / HvH-Face-111020-09
Phantom# / Tissue Temp.: OVAL1022 / 21.7 (C)
DUT Model# / Serial#: H97TGD9PW1AN (MNUE3622A) / Q0SOM064
Antenna / TX Freq.: PMAE4065A / 470.0000 (MHz)
Battery: NNTN7034A
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 SAR: 3.64 mW/g (1g); 2.73 mW/g (10g)

Comments: Zoom, Back toward phantom. Shorten scan.

Probe: ES3DV3 - SN3163, Calibrated: 4/13/2011, ConvF(6.53, 6.53, 6.53)
Electronics: DAE4 Sn1231, Calibrated: 9/21/2011
Duty Cycle: 1:1, Medium parameters used: f = 470 MHz; $\sigma$ = 0.89 mho/m; $\varepsilon_r$ = 43; $\rho$ = 1000 kg/m$^3$

**Below 3 GHz-Rev.4e/Face Scan/1-Area Scan (61x241x1):** Measurement grid: dx=15mm, dy=15mm
Reference Value = 56.226 V/m; Power Drift = -0.36 dB
**Motorola Fast SAR: SAR(1 g) = 3.56 mW/g; SAR(10 g) = 2.65 mW/g**
Maximum value of SAR (interpolated) = 3.738 mW/g

**Below 3 GHz-Rev.4e/Face Scan/2-Volume Scan 2D (41x41x1):** Measurement grid: dx=7.5mm, dy=7.5mm, dz=1mm
Reference Value = 56.226 V/m; Power Drift = -0.40 dB
Peak SAR (extrapolated) = Not Specified W/kg
**Motorola Fast SAR: SAR(1 g) = 3.49 mW/g; SAR(10 g) = 2.59 mW/g**
Maximum value of SAR (interpolated) = 3.656 mW/g

**Below 3 GHz-Rev.4e/Face Scan/3-Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 56.638 V/m; Power Drift = -0.24 dB
Peak SAR (extrapolated) = 4.758 W/kg
**SAR(1 g) = 3.64 mW/g; SAR(10 g) = 2.73 mW/g**
Maximum value of SAR (measured) = 3.813 mW/g

**Below 3 GHz-Rev.4e/Face Scan/4-Z-Axis Scan (1x1x17):** Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 3.776 mW/g