

Appendix 1

SAR distribution comparisons for System Accuracy Verifications

System Accuracy Verification Measurements for Head SAR Measurements

Date/Time: 6/29/2012 7:43:12 AM

Test Laboratory: Motorola Mobility - Jun-29-2012 835 MHz Head**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4D129; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 4d129; Input Power = 200 mW

Sim.Temp@meas = 20.0°C; Sim.Temp@SPC = 20.0°C; Room Temp @ SPC = 20.6°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *HEAD Tissue*

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 41.4$; $\rho = 1000 \text{ kg/m}^3$ **DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(6.18, 6.18, 6.18); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#_4 Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0;
Serial: TP-1132; Phantom section: Flat Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, SAM - System Performance Check Template, Dipole Area Scan (5x15x1):

Measurement grid: dx=10mm, dy=15mm; Maximum value of SAR (measured) = 2.19 mW/g

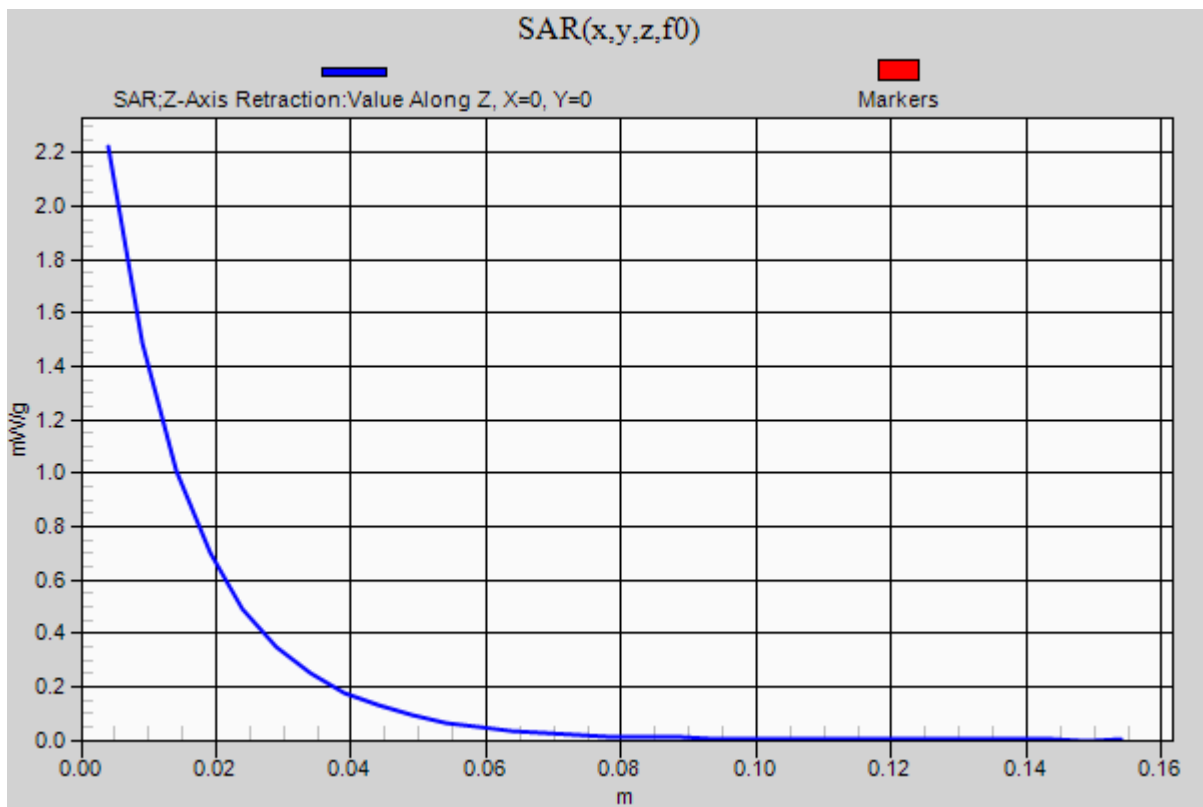
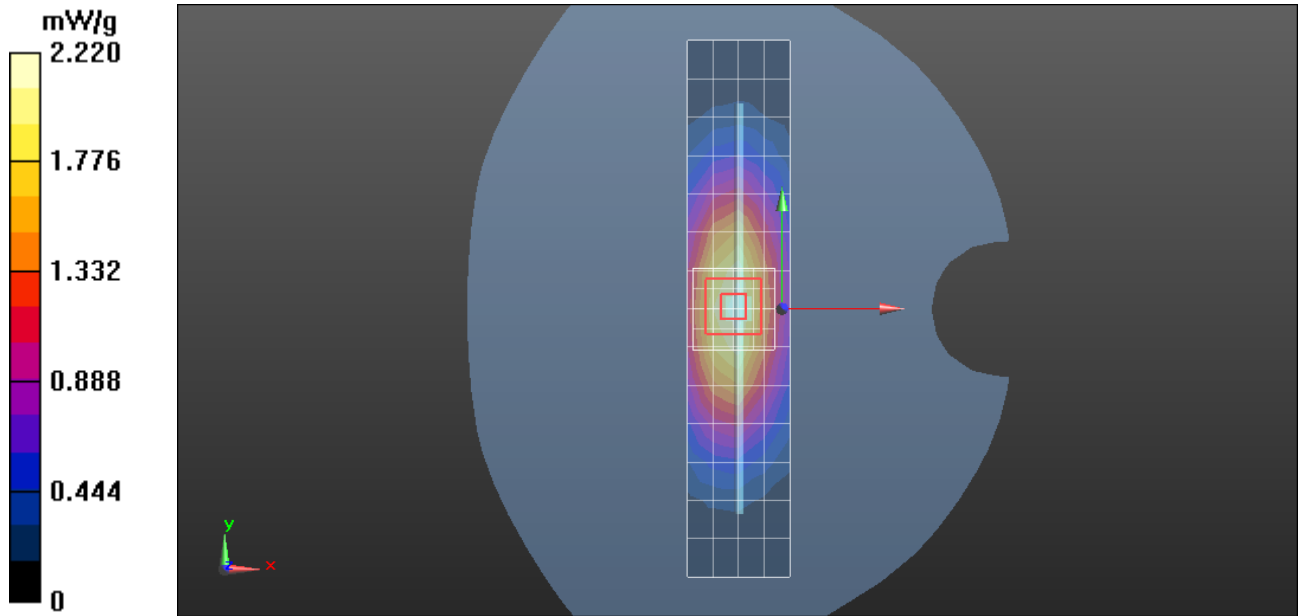
DASY5, SAM - System Performance Check Template, 0-Degree, 5x5x7 Cube (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 49.000 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 3.048 mW/g

SAR(1 g) = 2.05 mW/g; SAR(10 g) = 1.34 mW/g; Maximum value of SAR (measured) = 2.22 mW/g**DASY5, SAM - System Performance Check Template, Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm



Date/Time: 6/30/2012 7:26:46 AM

Test Laboratory: Motorola Mobility - Jun-30-2012 835 Mhz Head**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4D128; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 4D128; Input Power = 200 mW

Sim.Temp@meas = 19.2°C; Sim.Temp@SPC = 19.2°C; Room Temp @ SPC = 21.0°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *HEAD Tissue*

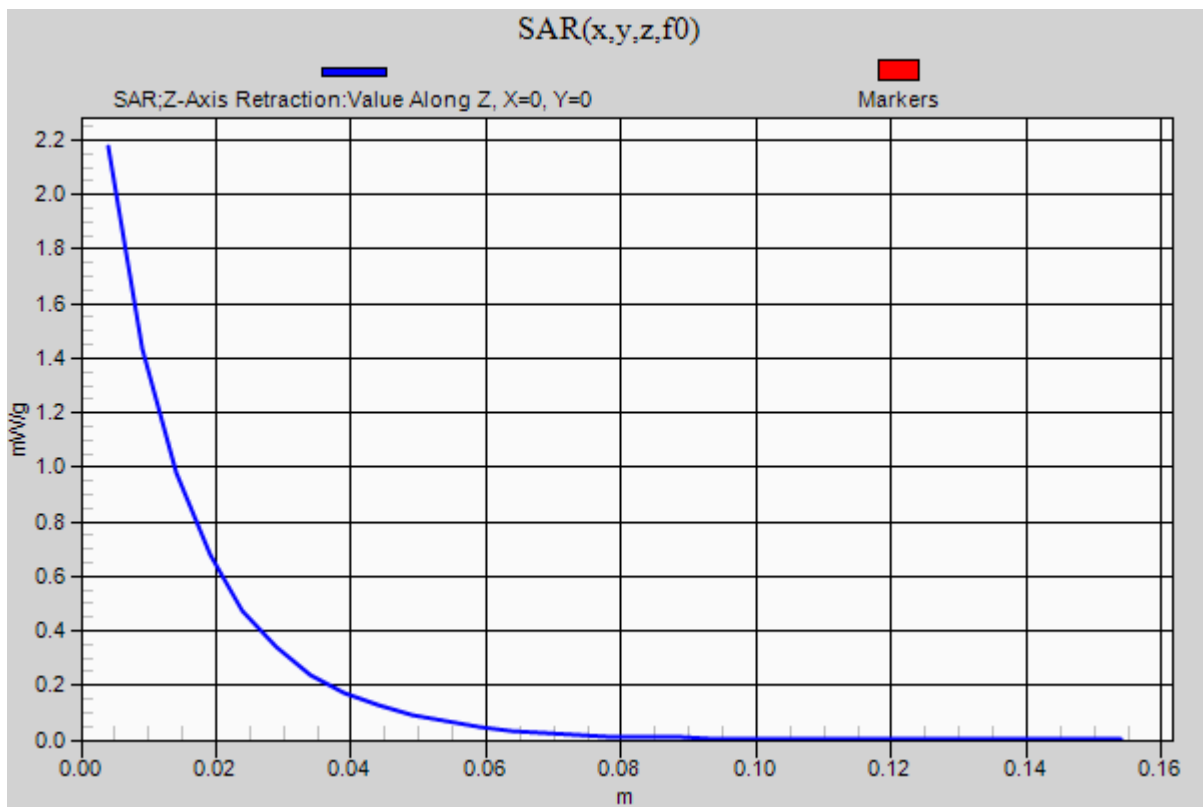
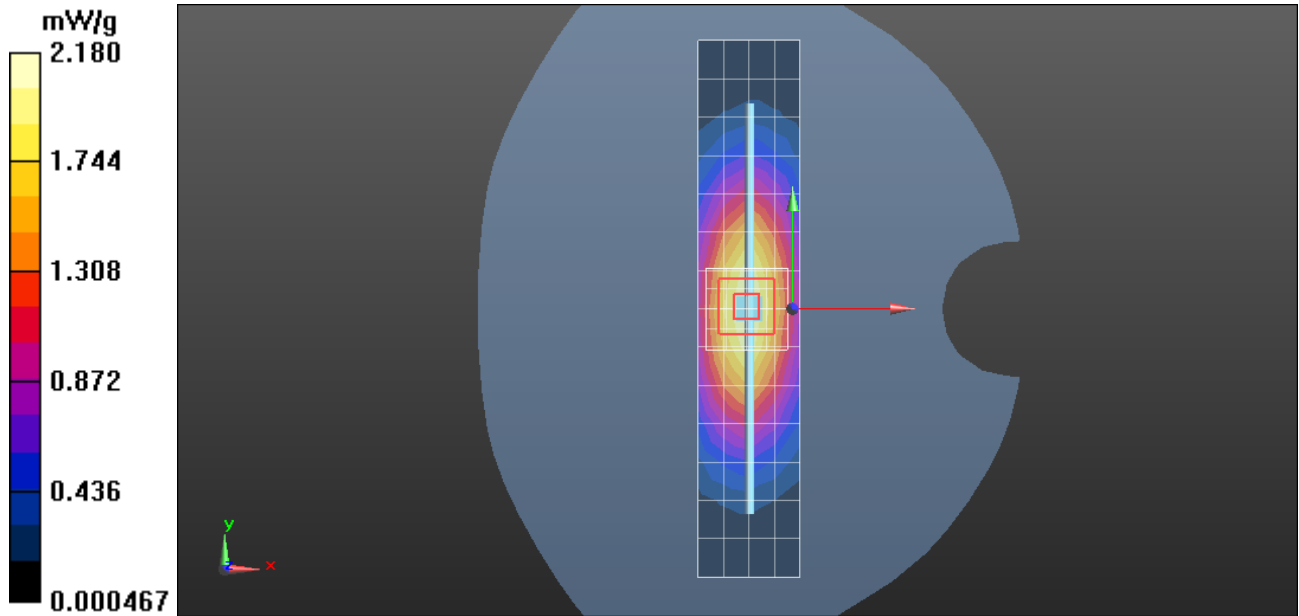
Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 42.1$; $\rho = 1000 \text{ kg/m}^3$ **DASY4 Configuration:**

- Probe: ES3DV3 - SN3124; ConvF(6.08, 6.08, 6.08); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#1 - Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0;
Serial: TP-1156; Phantom section: Flat Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, SAM - System Performance Check Template, Dipole Area Scan (5x15x1):Measurement grid: $dx=10\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 2.17 mW/g**DASY5, SAM - System Performance Check Template, 0-Degree, 5x5x7 Cube (5x5x7)/Cube 0:**Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 48.393 V/m; Power Drift = 0.03 dB; Peak SAR (extrapolated) = 3.057 mW/g

SAR(1 g) = 2.01 mW/g; SAR(10 g) = 1.31 mW/g; Maximum value of SAR (measured) = 2.18 mW/g**DASY5, SAM - System Performance Check Template, Z-Axis Retraction (1x1x31):**Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=5\text{mm}$



Date/Time: 6/29/2012 7:06:55 AM

Test Laboratory: Motorola Mobility - Jun-29-2012 1800 MHz Head**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 2D191; FCC ID: IHDT56NS1**

Procedure Notes: 1800 MHz System Performance Check; Dipole Sn# 2D191; Input Power = 200 mW

Sim.Temp@meas = 19.2°C; Sim.Temp@SPC = 19.2°C; Room Temp @ SPC = 21.0°C

Communication System: _CW - Dipole; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: Validation *HEAD Tissue*

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(5.33, 5.33, 5.33); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Left Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

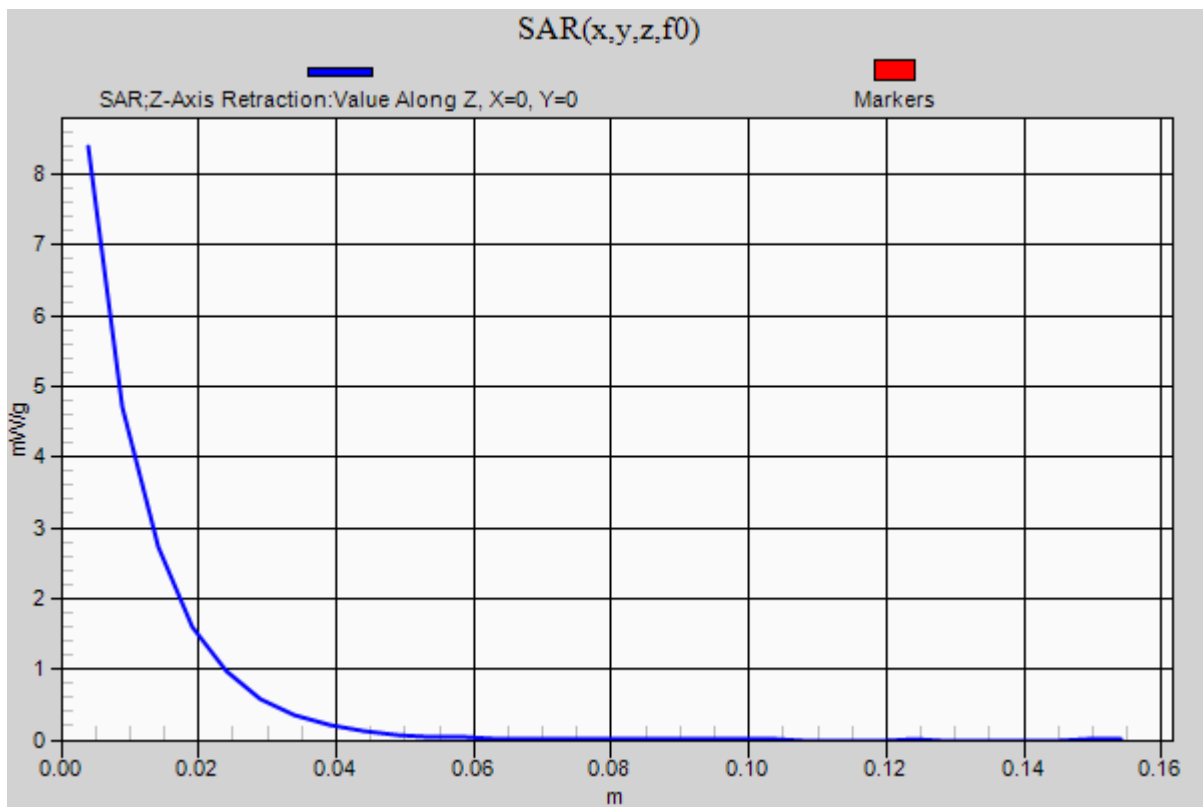
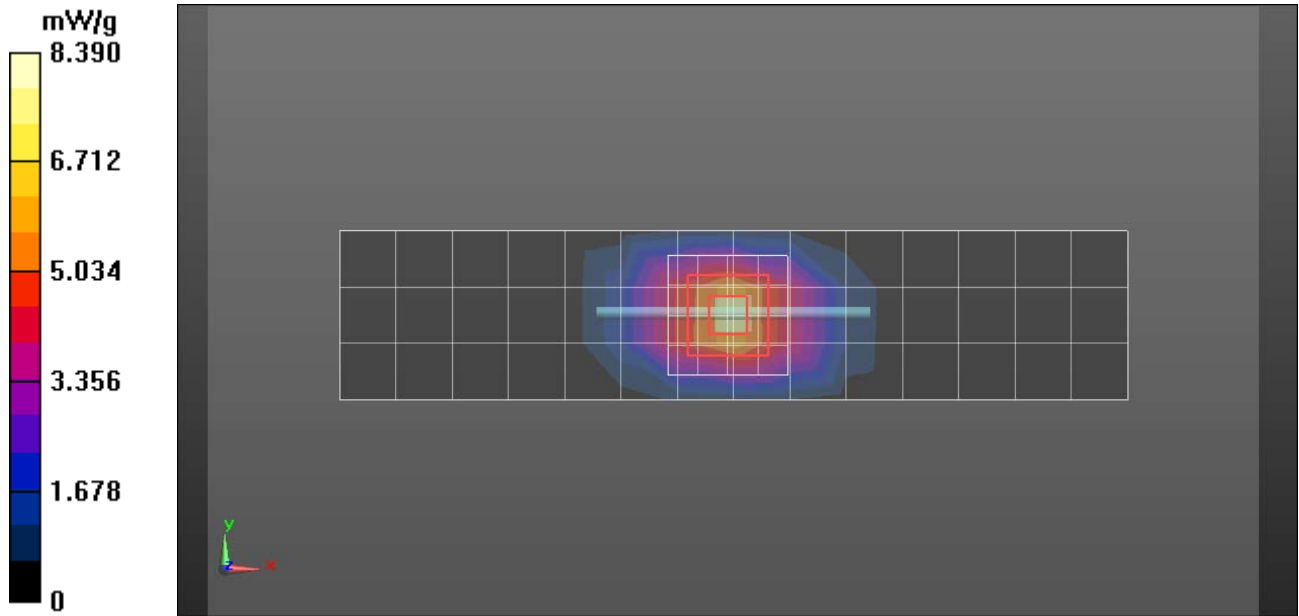
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 6.05 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.243 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 13.532 mW/g

SAR(1 g) = 7.48 mW/g; SAR(10 g) = 3.95 mW/g; Maximum value of SAR (measured) = 8.42 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 8.39 mW/g



Date/Time: 7/2/2012 7:04:11 AM

Test Laboratory: Motorola Mobility - Jul-02-2012 1800 MHz Head**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 2d191; FCC ID: IHDT56NS1**

Procedure Notes: 1800 MHz System Performance Check; Dipole Sn# 2d191; Input Power = 200 mW

Sim.Temp@meas = 19.0°C; Sim.Temp@SPC = 19.0°C; Room Temp @ SPC = 20.7°C

Communication System: _CW - Dipole; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: Validation *HEAD Tissue*

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(5.33, 5.33, 5.33); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Left Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

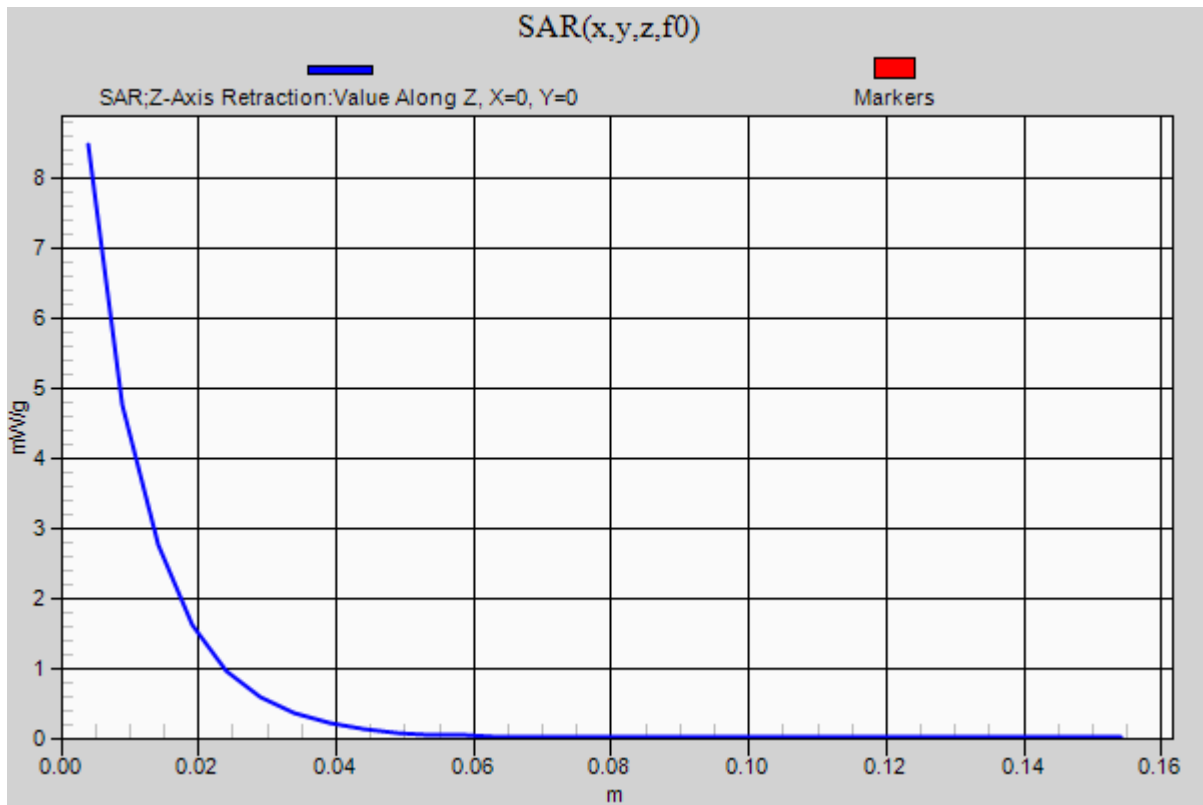
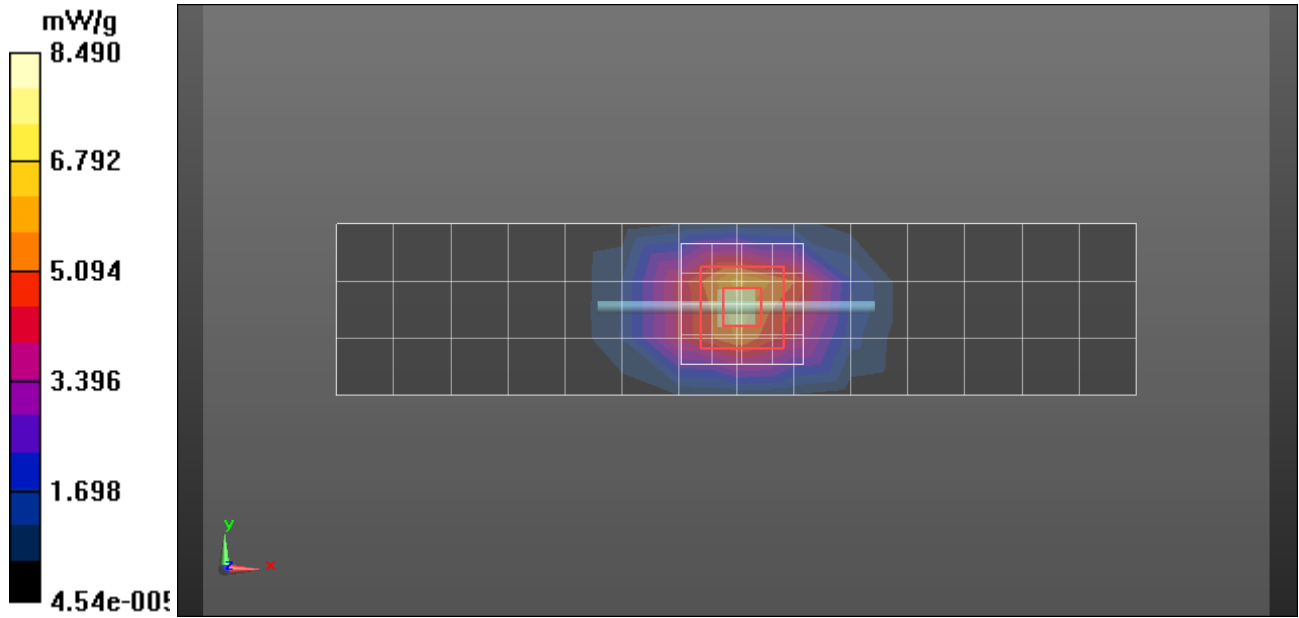
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 6.46 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.387 V/m; Power Drift = -0.04 dB; Peak SAR (extrapolated) = 13.593 mW/g

SAR(1 g) = 7.53 mW/g; SAR(10 g) = 3.97 mW/g; Maximum value of SAR (measured) = 8.43 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 8.49 mW/g



Date/Time: 7/21/2012 6:23:22 AM

Test Laboratory: Motorola Mobility - Jul-21-2012 2450 MHz Head**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 863; FCC IHDT56NS1**

Procedure Notes: 2450 MHz System Performance Check; Dipole Sn# 863; Input Power = 200 mW

Sim.Temp@meas = 19.8°C; Sim.Temp@SPC = 19.6°C; Room Temp @ SPC = 21.4°C

Communication System: _CW - Dipole; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Validation *HEAD Tissue*

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3728; ConvF(6.86, 6.86, 6.86); Calibrated: 4/24/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn440; Calibrated: 5/23/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Left Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

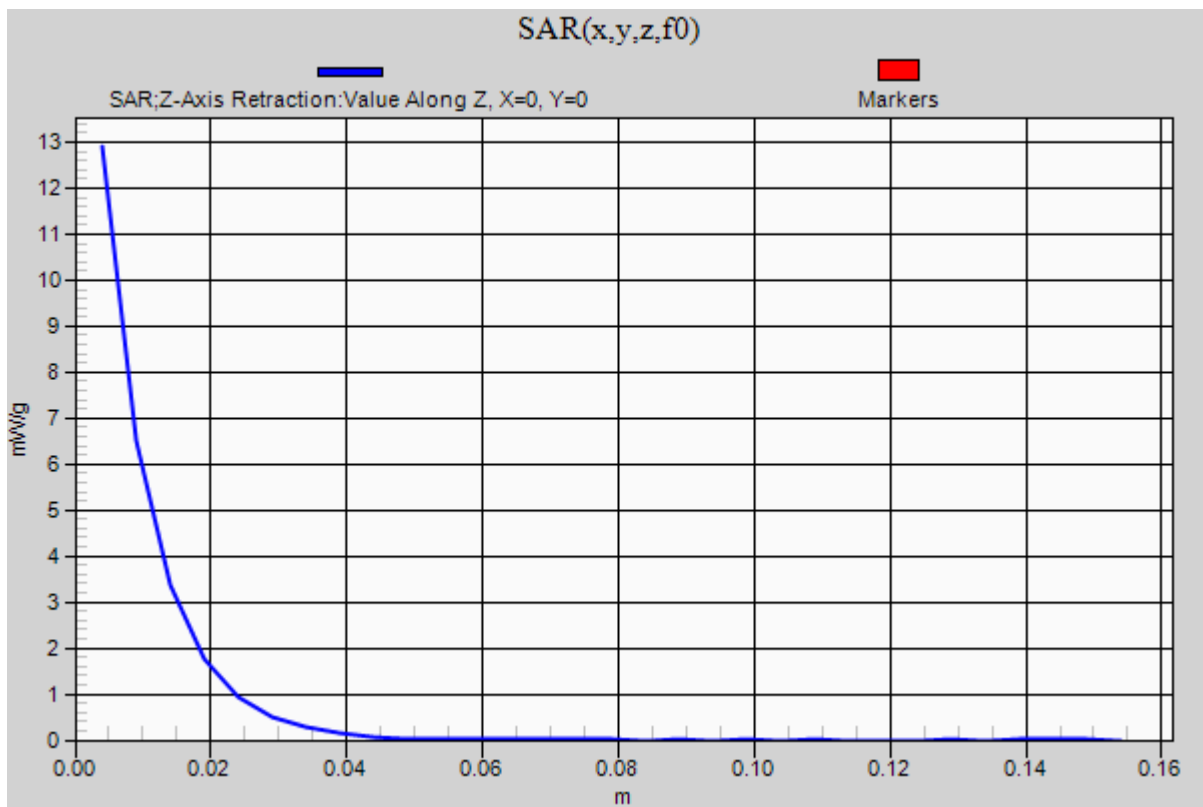
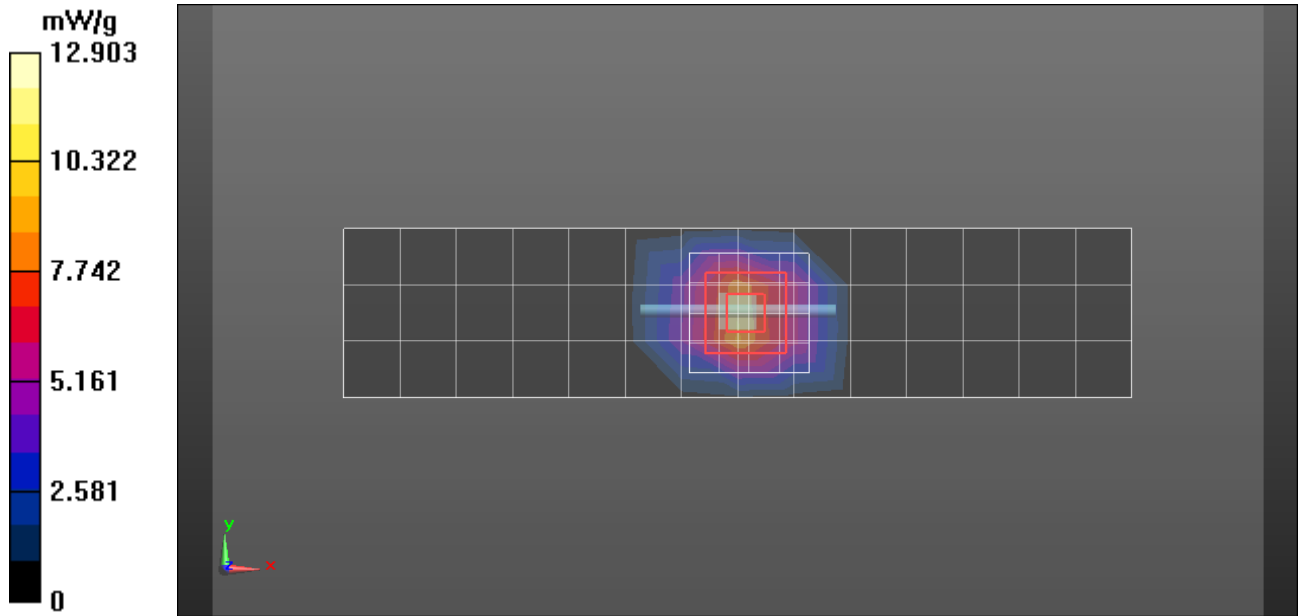
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 8.81 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 84.090 V/m; Power Drift = -0.07 dB; Peak SAR (extrapolated) = 23.788 mW/g

SAR(1 g) = 11.5 mW/g; SAR(10 g) = 5.37 mW/g; Maximum value of SAR (measured) = 13.1 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 12.9 mW/g



Date/Time: 7/11/2012 1:33:32 PM

Test Laboratory: Motorola Mobility - Jul-11-2012 5200 MHz Head**DUT: Dipole 5-6GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN 1088; FCC ID: IHDT56NS1**

Procedure Notes: 5200 MHz System Performance Check; Dipole Sn# 1088; Input Power = 100 mW

Sim.Temp@meas = 20.0°C; Sim.Temp@SPC = 20.0°C; Room Temp @ SPC = 20.6°C

Communication System: _CW - Dipole; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: Validation *HEAD Tissue* SPEAG

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.56$ mho/m; $\epsilon_r = 34.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

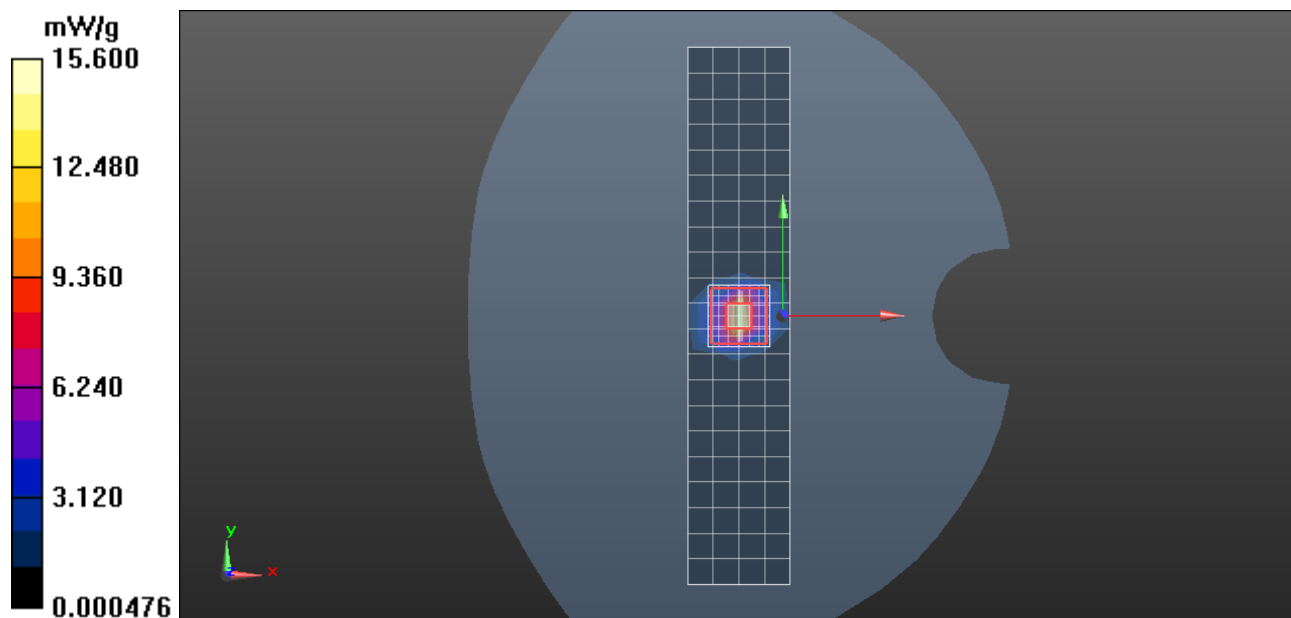
- Probe: EX3DV4 - SN3728; ConvF(4.74, 4.74, 4.74); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#3 5 GHz HEAD SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1106; Phantom section: Flat Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, SAM System Performance Check Template - Dipole Area Scan (5x22x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 11.9 mW/g

DASY5, SAM System Performance Check Template - 0-Degree, 7x7x12 Cube (7x7x6)/Cube**0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 62.999 V/m; Power Drift = -0.00 dB; Peak SAR (extrapolated) = 28.945 mW/g

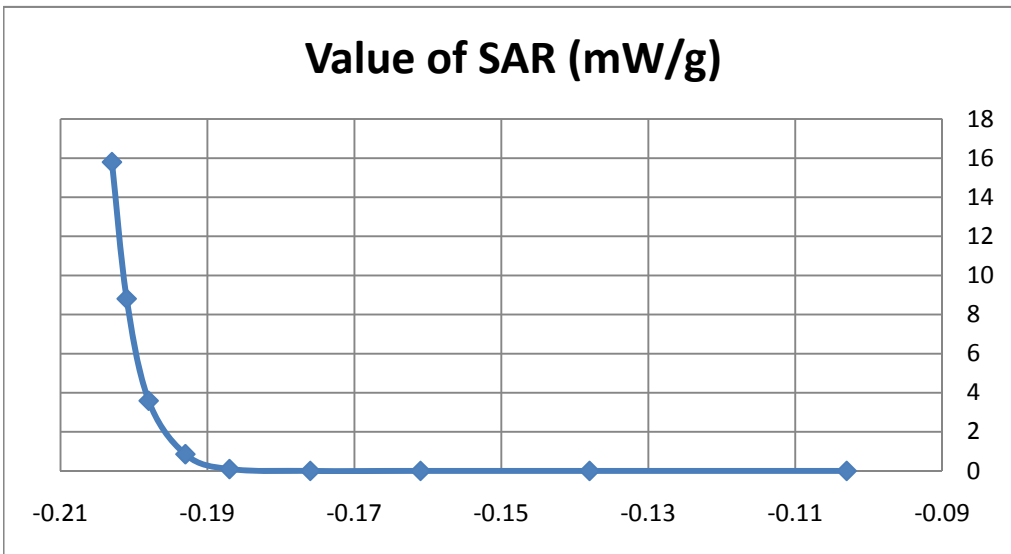
SAR(1 g) = 7.5 mW/g; SAR(10 g) = 2.15 mW/g; Maximum value of SAR (measured) = 15.6 mW/g

Jul-11-2012 5200 MHz Head - Z-Axis Retraction

SAR(x,y,z,f0) in mW/g

Grid: 1x1x9x1

Value of SAR mW/g	X m	Y m	Z m
15.8	-0.017	0	-0.203
8.81	-0.017	0	-0.201
3.59	-0.017	0	-0.198
0.857	-0.017	0	-0.193
0.0962	-0.017	0	-0.187
0.00263	-0.017	0	-0.176
0.00166	-0.017	0	-0.161
0.000992	-0.017	0	-0.138
0.000177	-0.017	0	-0.103



Date/Time: 7/11/2012 10:20:05 PM

Test Laboratory: Motorola Mobility - Jul-11-2012 5800 MHz Head**DUT: Dipole 5-6GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1088; FCC ID: IHDT56NS1**

Procedure Notes: 5800 MHz System Performance Check; Dipole Sn# 1088; Input Power = 100 mW

Sim.Temp@meas = 20.0°C; Sim.Temp@SPC = 20.1°C; Room Temp @ SPC = 21.3°C

Communication System: _CW - Dipole; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: Validation *HEAD Tissue*

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.17$ mho/m; $\epsilon_r = 33.9$; $\rho = 1000$ kg/m³

DASY4 Configuration:

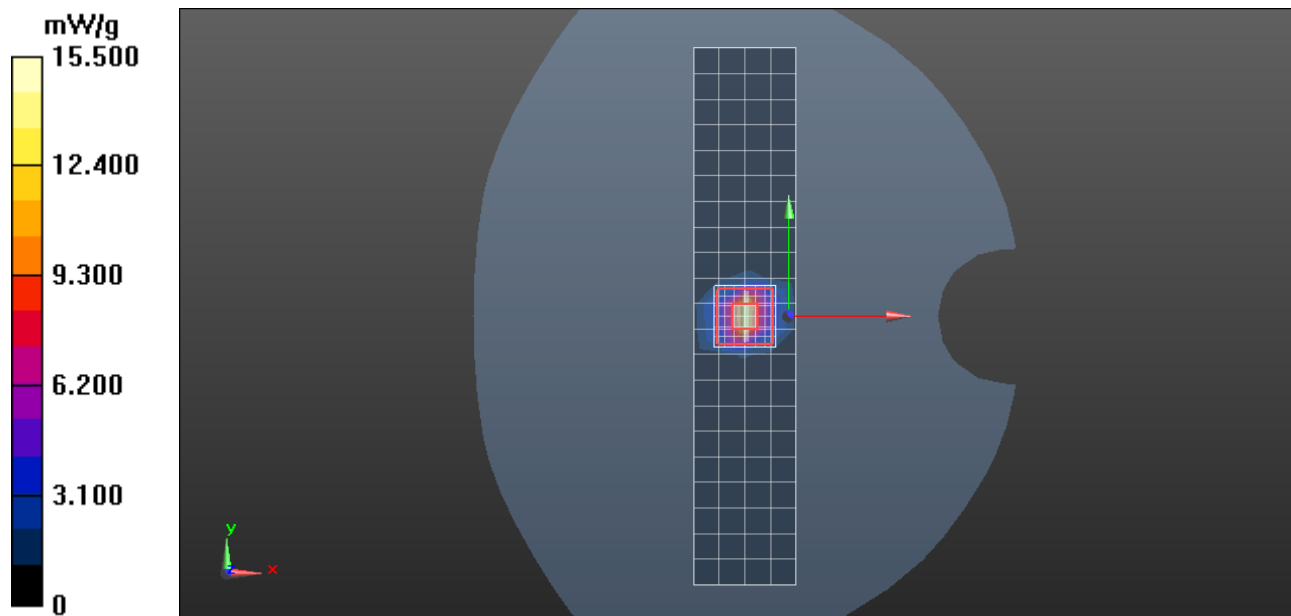
- Probe: EX3DV4 - SN3728; ConvF(4.23, 4.23, 4.23); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#3 5 GHz HEAD SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1106; Phantom section: Flat Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, SAM System Performance Check Template - Dipole Area Scan (5x22x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 11.8 mW/g

DASY5, SAM System Performance Check Template - 0-Degree, 7x7x12 Cube (7x7x6)/Cube**0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 59.157 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 30.748 mW/g

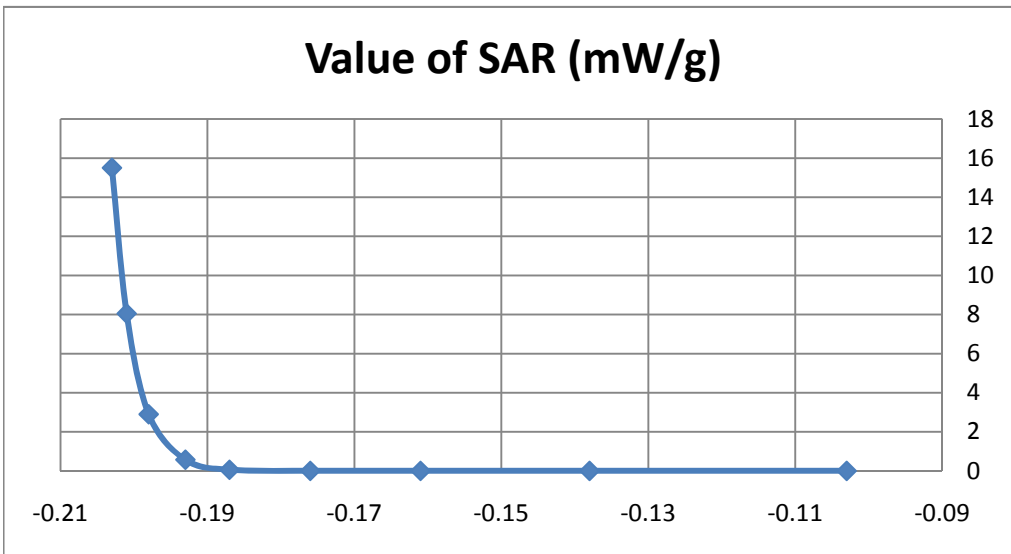
SAR(1 g) = 7.22 mW/g; SAR(10 g) = 2.04 mW/g; Maximum value of SAR (measured) = 15.5 mW/g

Jul-11-2012 5800 MHz Head - Z-Axis Retraction

SAR(x,y,z,f0) in mW/g

Grid: 1x1x9x1

Value of SAR mW/g	X m	Y m	Z m
15.5	-0.0162	0	-0.203
8.05	-0.0162	0	-0.201
2.9	-0.0162	0	-0.198
0.576	-0.0162	0	-0.193
0.0598	-0.0162	0	-0.187
0.00698	-0.0162	0	-0.176
0.00583	-0.0162	0	-0.161
0.00351	-0.0162	0	-0.138
0.00336	-0.0162	0	-0.103



System Accuracy Verification Measurements for Body SAR Measurements

Date/Time: 6/27/2012 6:23:12 PM

Test Laboratory: Motorola Mobility - Jun-27-2012 835 MHz Body**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 436TR; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 436TR; Input Power = 200 mW

Sim.Temp@meas = 20.0°C; Sim.Temp@SPC = 19.8°C; Room Temp @ SPC = 20.5°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

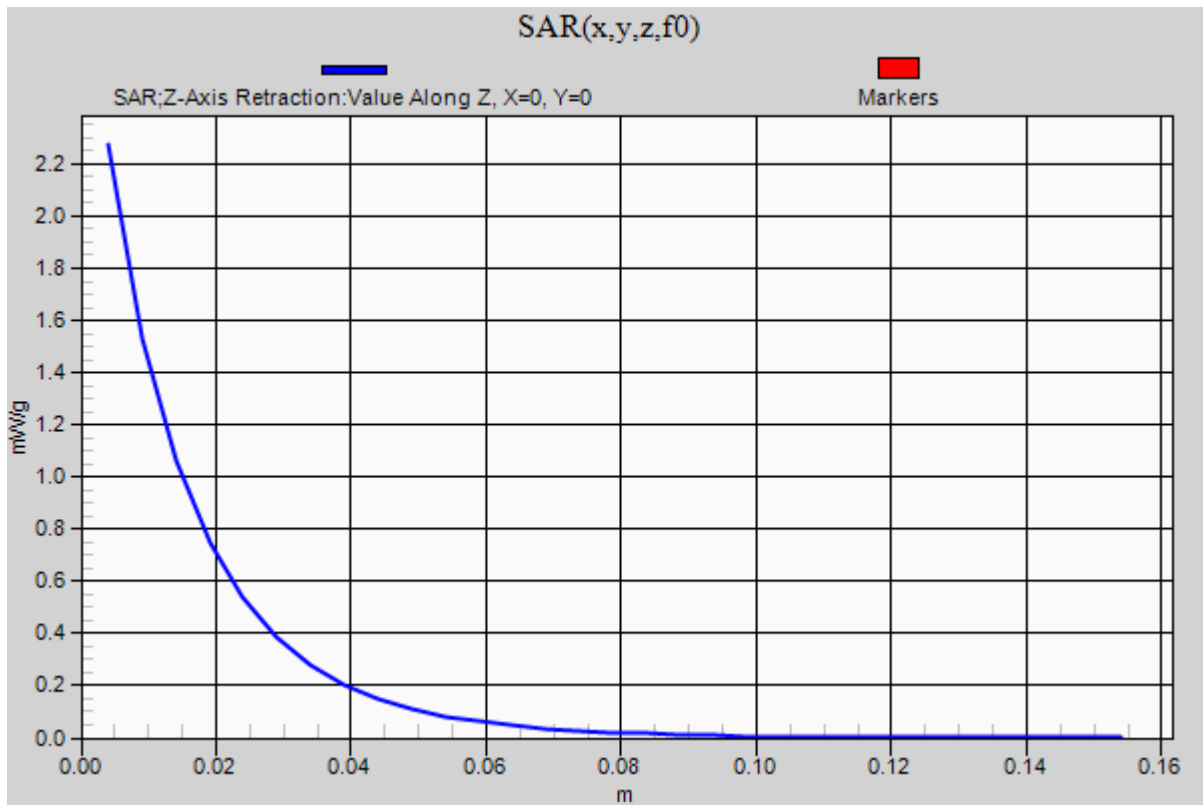
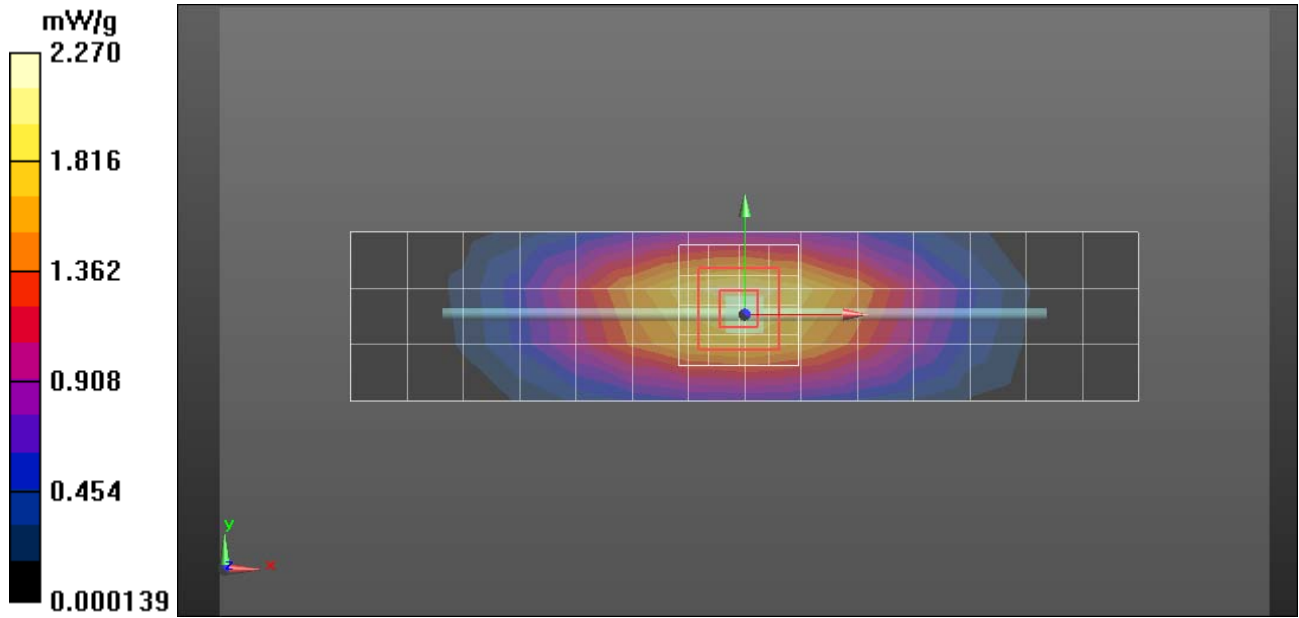
Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$ **DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(6.28, 6.28, 6.28); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 2.07 mW/g**DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube****(5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 48.253 V/m; Power Drift = -0.03 dB; Peak SAR (extrapolated) = 3.148 mW/g

SAR(1 g) = 2.1 mW/g; SAR(10 g) = 1.38 mW/g; Maximum value of SAR (measured) = 2.26 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=5\text{mm}$; Maximum value of SAR (measured) = 2.27 mW/g



Date/Time: 6/29/2012 9:08:39 AM

Test Laboratory: Motorola Mobility - Jun-29-2012 835 MHz Body**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 436TR; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 436TR; Input Power = 200 mW

Sim.Temp@meas = 20.0°C; Sim.Temp@SPC = 20.6°C; Room Temp @ SPC = 21.2°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 1.01 \text{ mho/m}$; $\epsilon_r = 53.5$; $\rho = 1000 \text{ kg/m}^3$

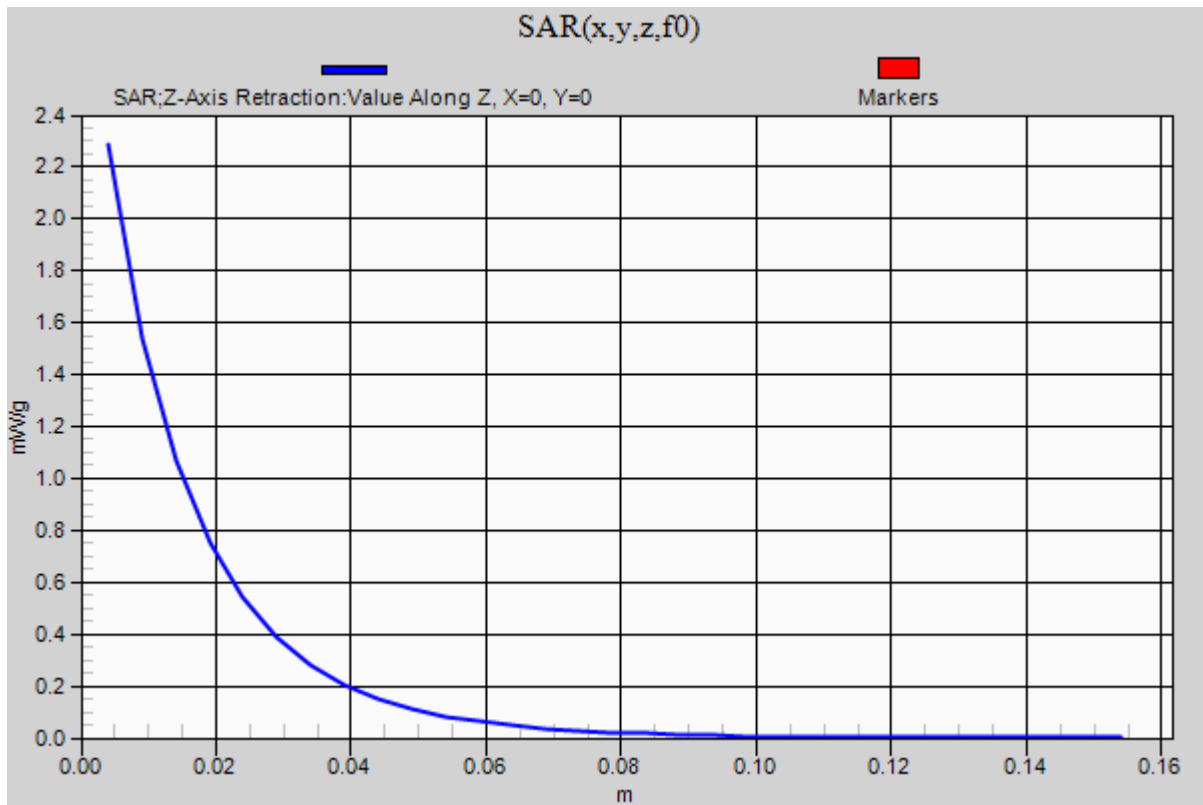
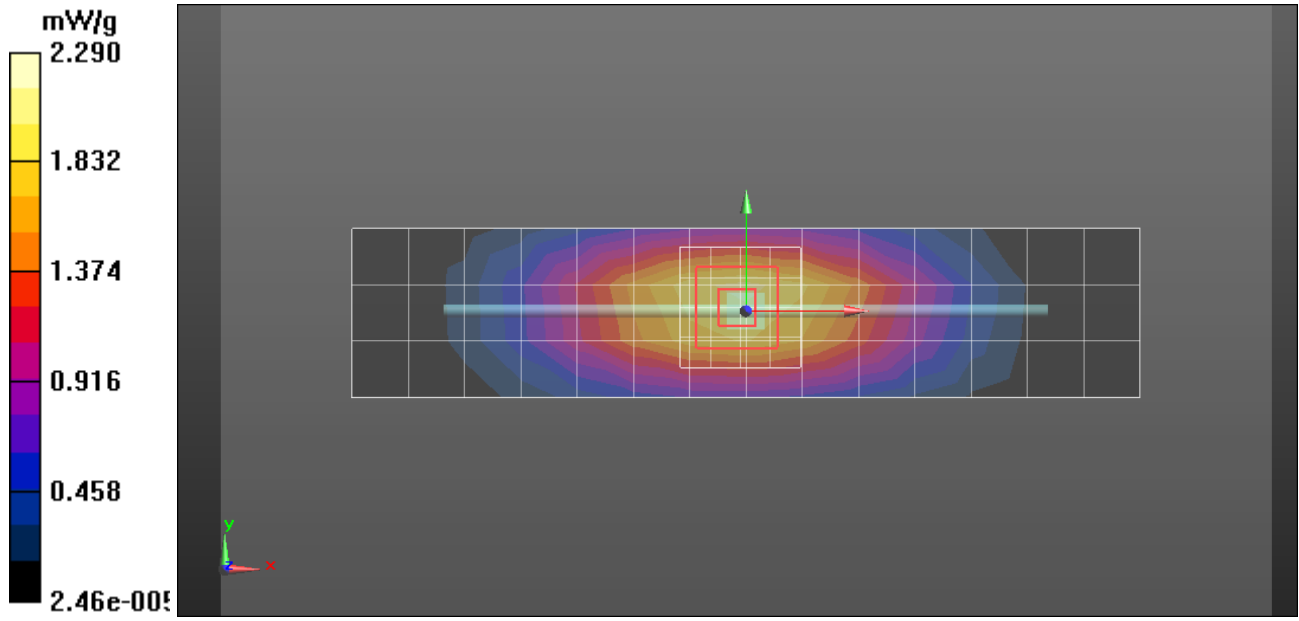
DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(6.28, 6.28, 6.28); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 2.05 mW/g**DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube****(5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 48.166 V/m; Power Drift = -0.06 dB; Peak SAR (extrapolated) = 3.162 mW/g

SAR(1 g) = 2.12 mW/g; SAR(10 g) = 1.38 mW/g; Maximum value of SAR (measured) = 2.29 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=5\text{mm}$;



Date/Time: 6/30/2012 6:56:18 AM

Test Laboratory: Motorola Mobility - Jun-30-2012 835 MHz Body**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4D128; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 4D128; Input Power = 200 mW

Sim.Temp@meas = 19.2°C; Sim.Temp@SPC = 19.2°C; Room Temp @ SPC = 21.0°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$

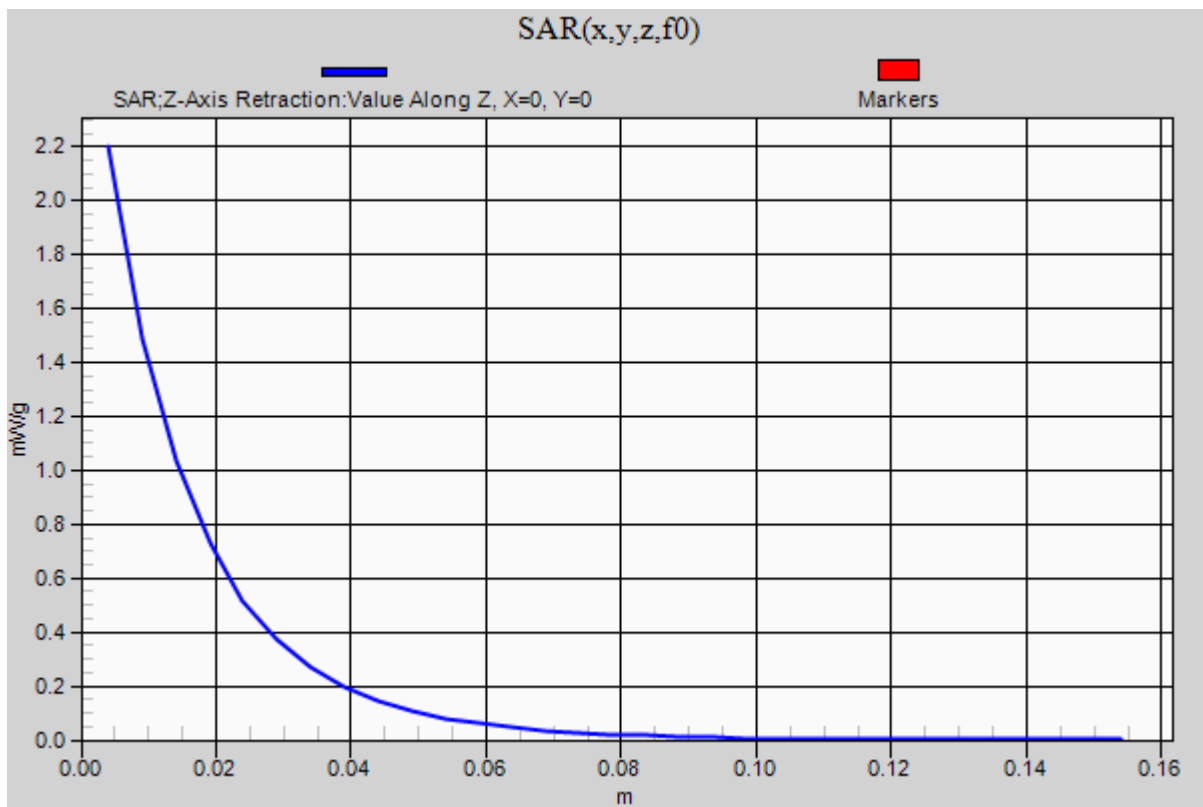
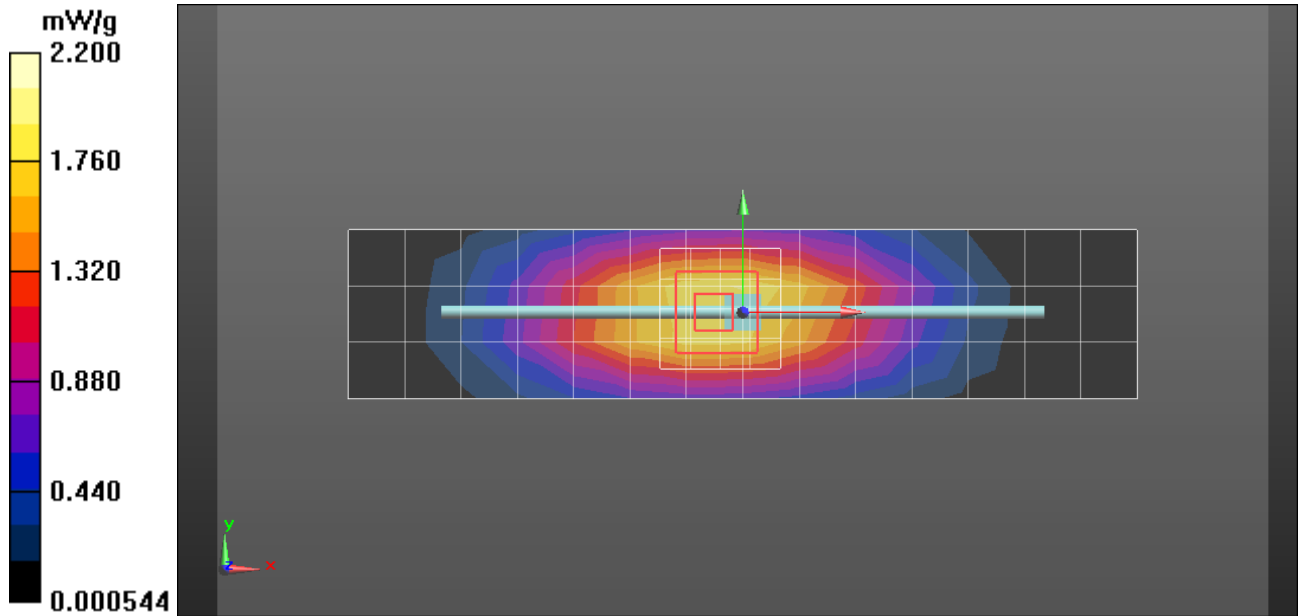
DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.04, 6.04, 6.04); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 1.92 mW/g**DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube****(5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 47.346 V/m; Power Drift = -0.02 dB; Peak SAR (extrapolated) = 3.034 mW/g

SAR(1 g) = 2.04 mW/g; SAR(10 g) = 1.34 mW/g; Maximum value of SAR (measured) = 2.20 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=5\text{mm}$



Date/Time: 7/6/2012 6:06:39 PM

Test Laboratory: Motorola Mobility - Jul-06-2012 835 MHz Body**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4D128; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 4D128; Input Power = 200 mW

Sim.Temp@meas = 19.1°C; Sim.Temp@SPC = 19.1°C; Room Temp @ SPC = 21.2°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 835$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3124; ConvF(6.04, 6.04, 6.04); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

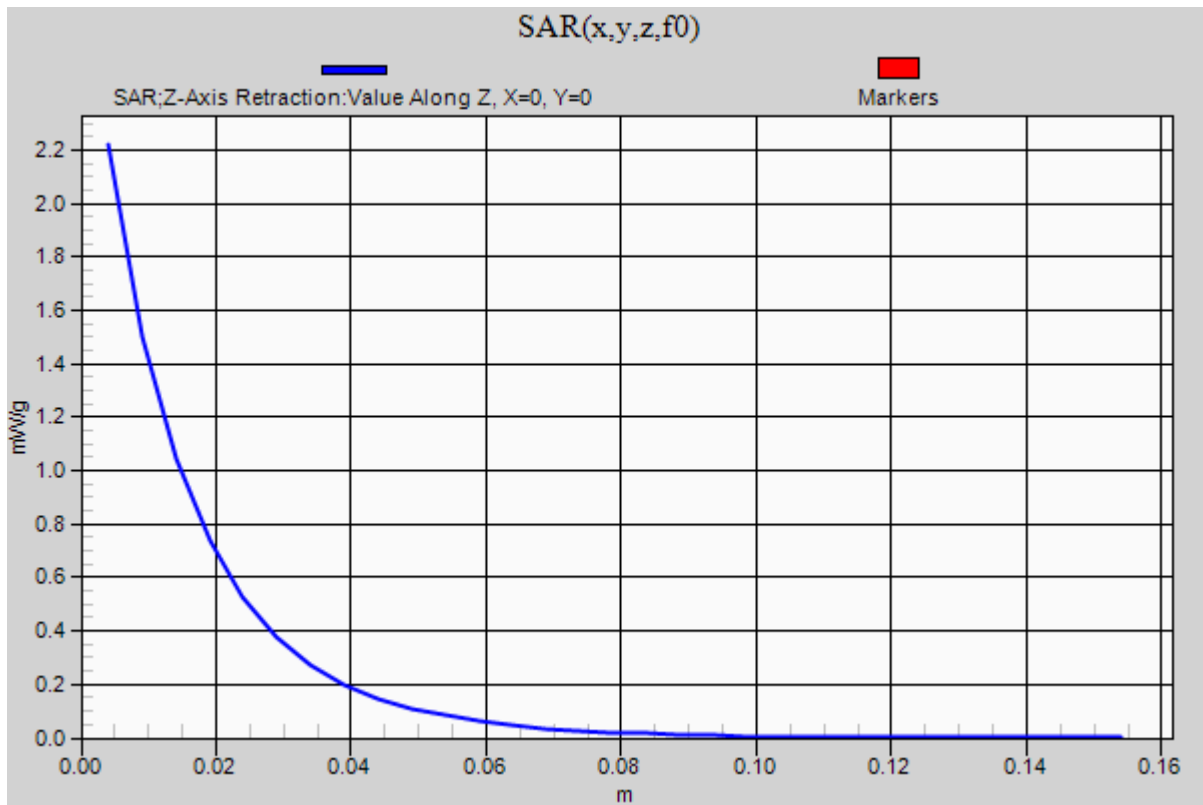
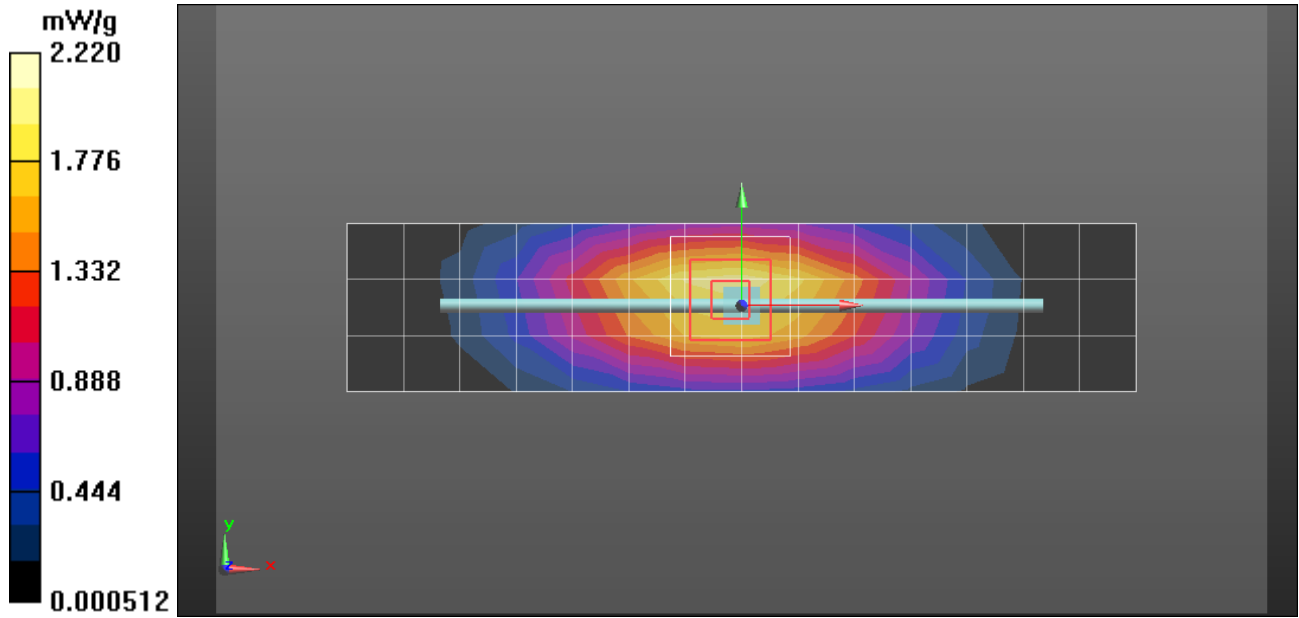
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 2.03 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.455 V/m; Power Drift = 0.01 dB; Peak SAR (extrapolated) = 3.051 mW/g

SAR(1 g) = 2.05 mW/g; SAR(10 g) = 1.34 mW/g; Maximum value of SAR (measured) = 2.21 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.22 mW/g



Date/Time: 6/29/2012 12:06:01 AM

Test Laboratory: Motorola Mobility - Jun-29-2012 1800 MHz Body**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 2D191; FCC ID: IHDT56NS1**

Procedure Notes: 1800 MHz System Performance Check; Dipole Sn# 2D191; Input Power = 200 mW

Sim.Temp@meas = 19.5°C; Sim.Temp@SPC = 20.3°C; Room Temp @ SPC = 21.1°C

Communication System: _CW - Dipole; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(5.28, 5.28, 5.28); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

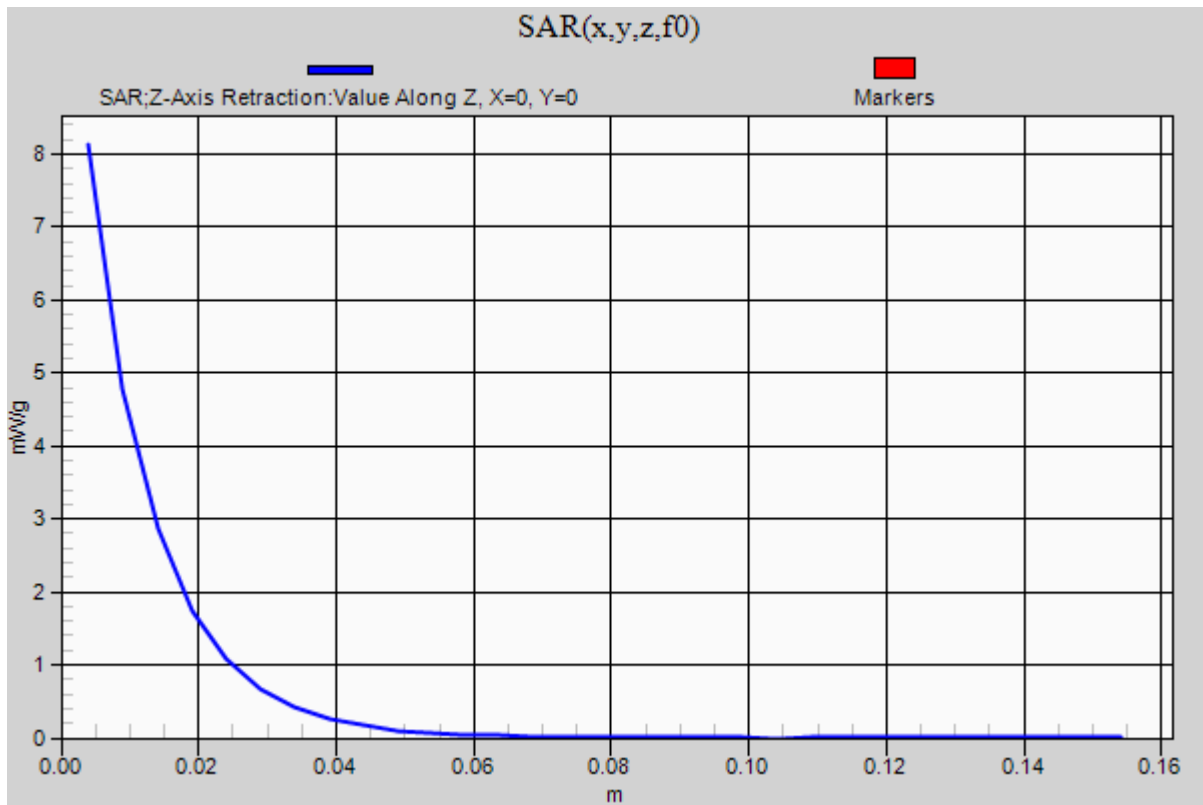
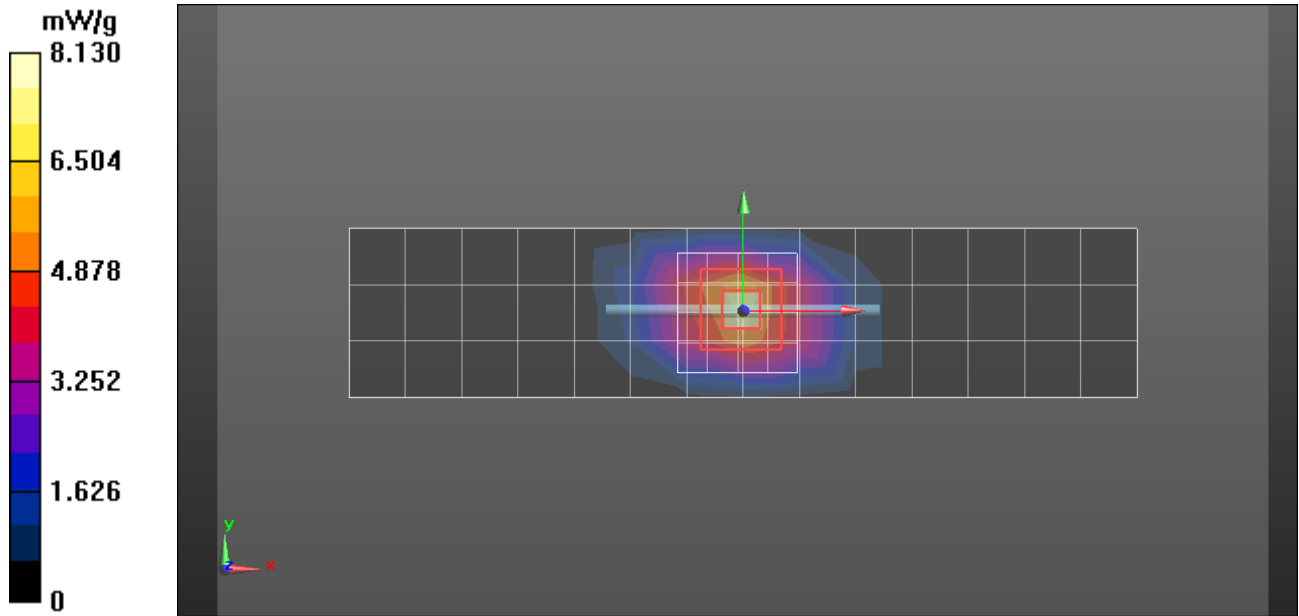
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 5.89 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 75.718 V/m; Power Drift = 0.01 dB; Peak SAR (extrapolated) = 12.513 mW/g

SAR(1 g) = 7.19 mW/g; SAR(10 g) = 3.84 mW/g; Maximum value of SAR (measured) = 8.11 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 8.13 mW/g



Date/Time: 7/6/2012 11:32:10 AM

Test Laboratory: Motorola Mobility - Jul-06-2012 1800 MHz Body**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 259TR; FCC ID: IHDT56NS1**

Procedure Notes: 1800 MHz System Performance Check; Dipole Sn# 259TR; Input Power = 200 mW

Sim.Temp@meas = 19.1°C; Sim.Temp@SPC = 19.0°C; Room Temp @ SPC = 21.4°C

Communication System: _CW - Dipole; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(4.69, 4.69, 4.69); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

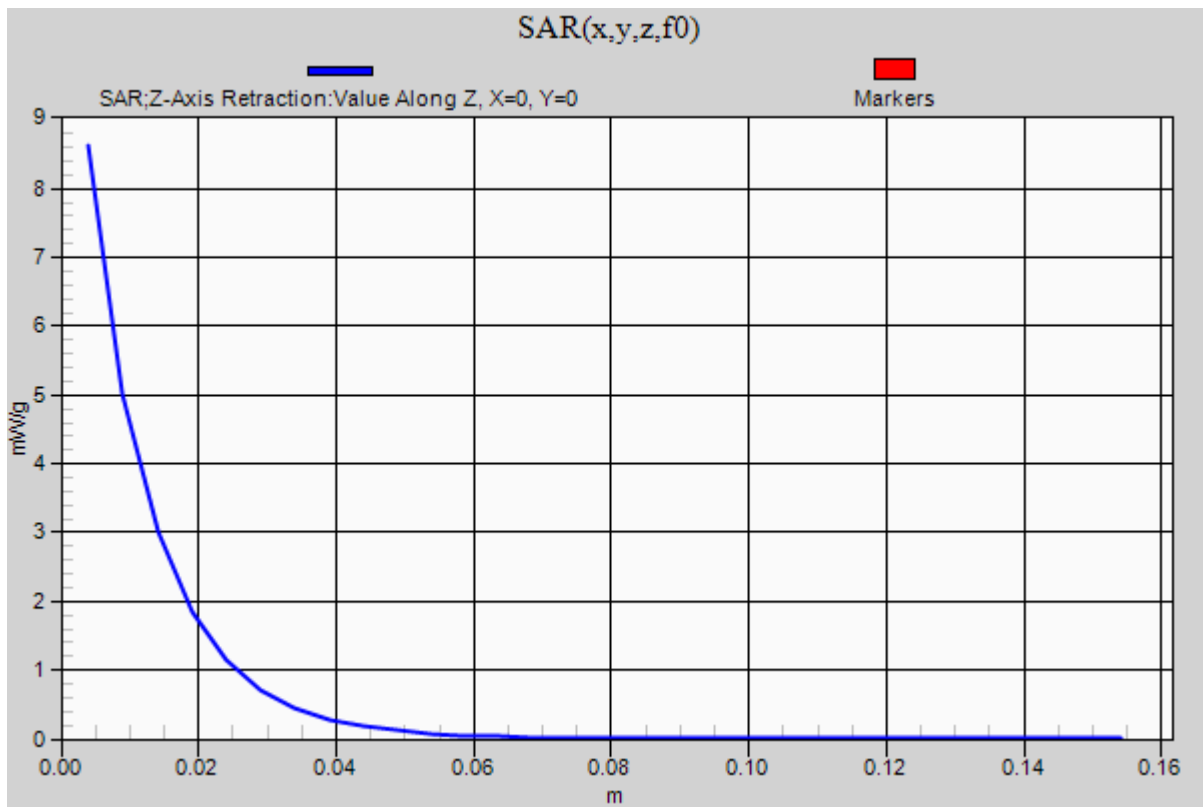
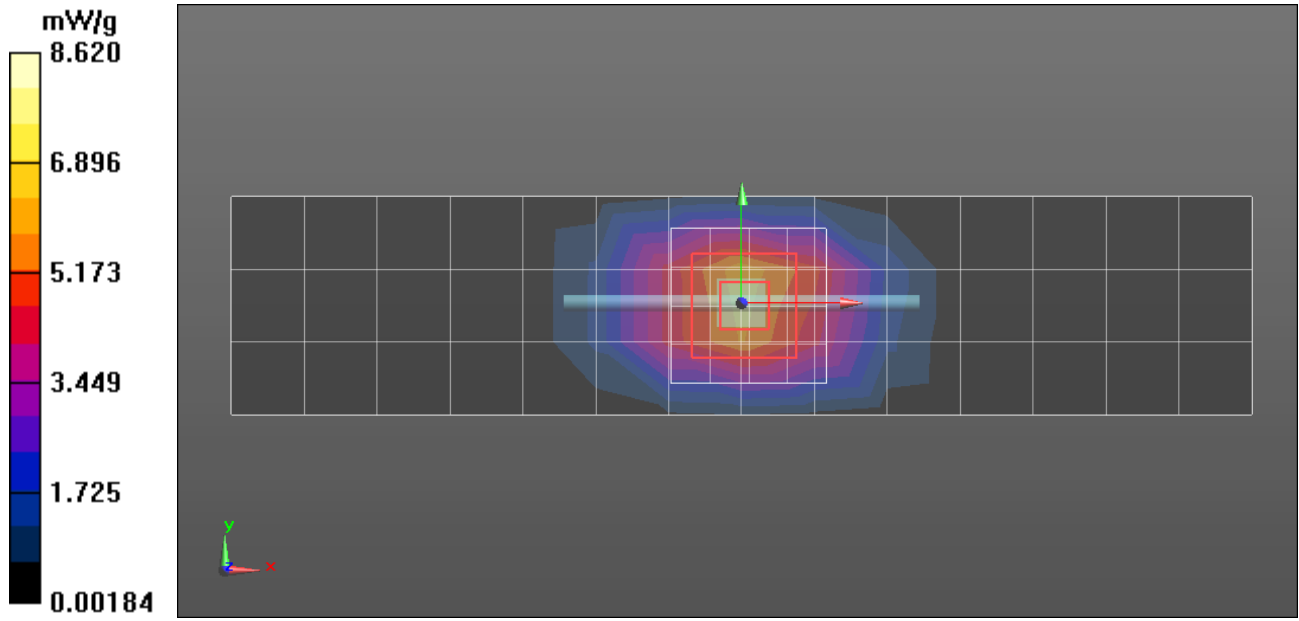
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 6.20 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 77.645 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 13.629 mW/g

SAR(1 g) = 7.67 mW/g; SAR(10 g) = 4.11 mW/g; Maximum value of SAR (measured) = 8.60 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 8.62 mW/g



Date/Time: 7/11/2012 7:55:31 AM

Test Laboratory: Motorola Mobility - Jul-11-2012 2450 MHz Body**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 877; FCC ID: IHDT56NS1**

Procedure Notes: 2450 MHz System Performance Check; Dipole Sn# 877; Input Power = 200 mW

Sim.Temp@meas = 19.7°C; Sim.Temp@SPC = 19.4°C; Room Temp @ SPC = 20.6°C

Communication System: _CW - Dipole; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(4.56, 4.56, 4.56); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

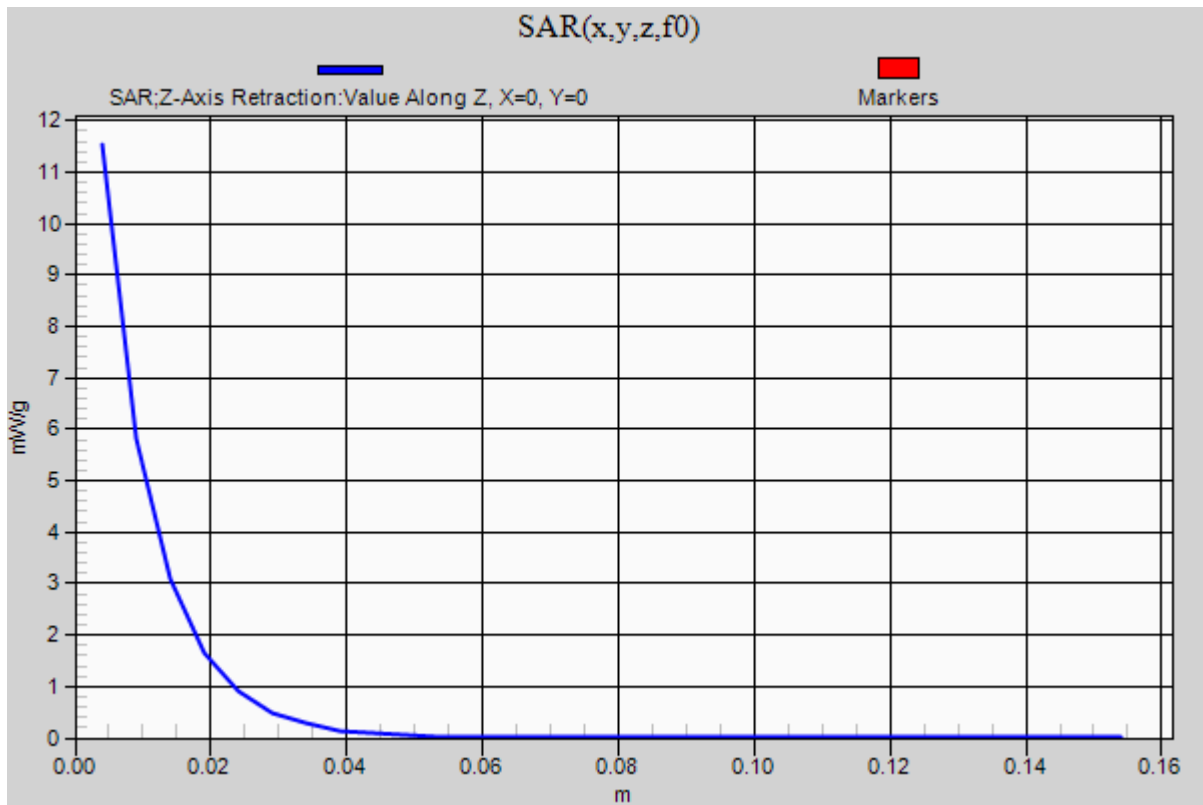
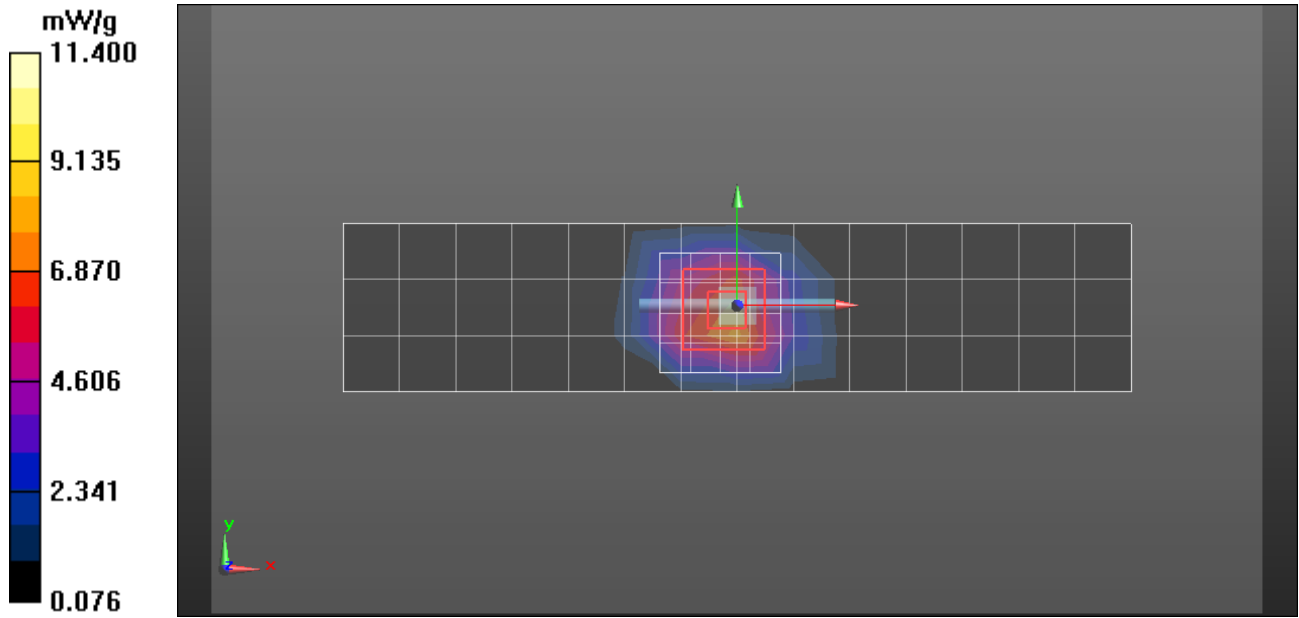
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 7.98 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 74.621 V/m; Power Drift = 0.02 dB; Peak SAR (extrapolated) = 21.425 mW/g

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 4.7 mW/g; Maximum value of SAR (measured) = 11.4 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 11.5 mW/g



Date/Time: 7/13/2012 4:36:14 PM

Test Laboratory: Motorola Mobility - Jul-13-2012 2450 MHz Body**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 877; FCC ID: IHDT56NS1**

Procedure Notes: 2450 MHz System Performance Check; Dipole Sn# 877; Input Power = 200 mW

Sim.Temp@meas = 19.6°C; Sim.Temp@SPC = 19.2°C; Room Temp @ SPC = 20.1°C

Communication System: _CW - Dipole; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 2450$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(4.56, 4.56, 4.56); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

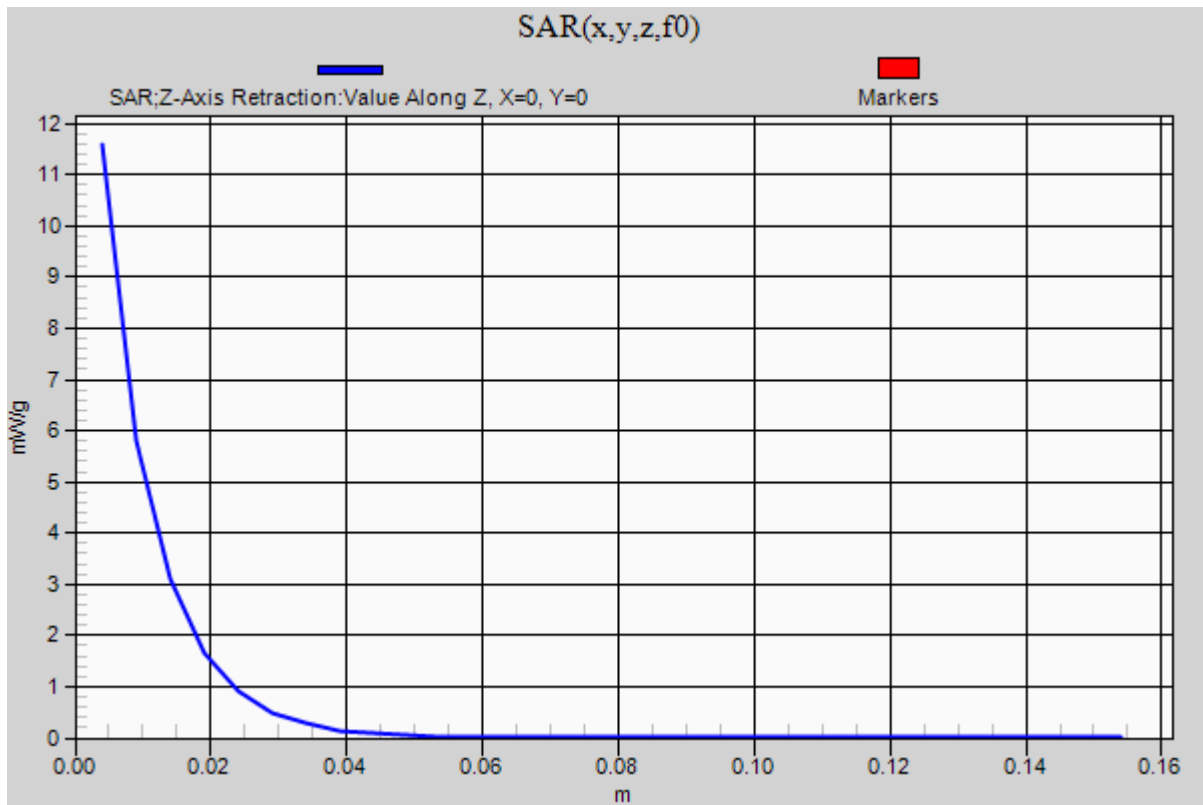
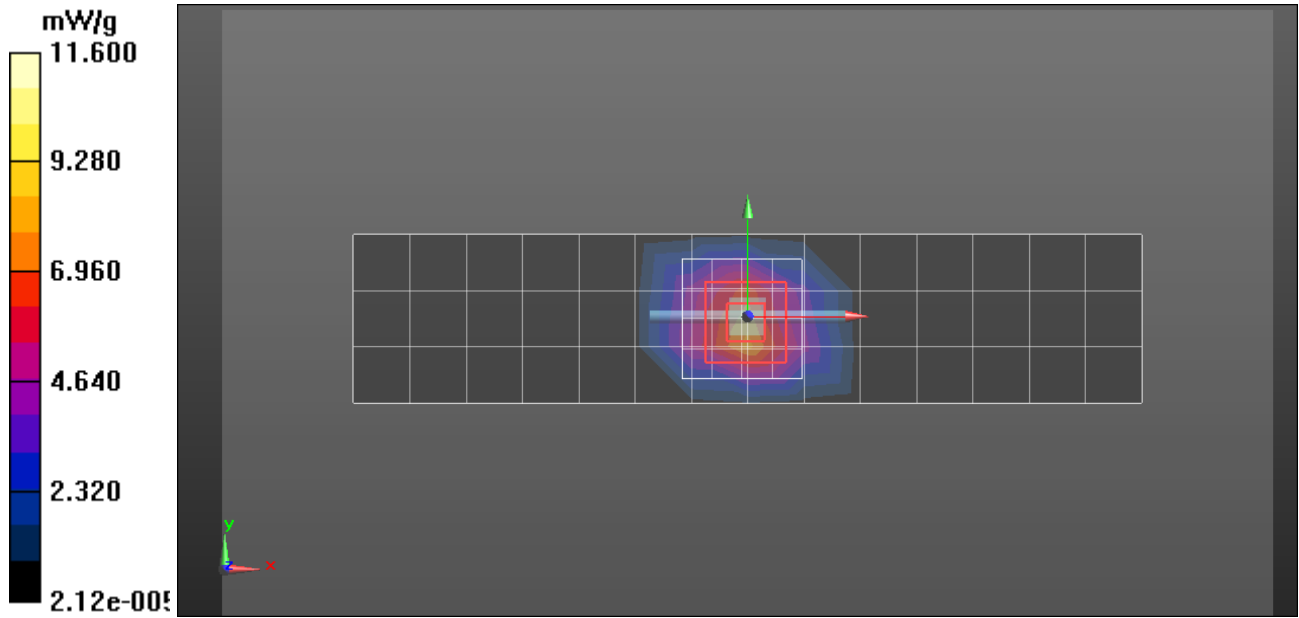
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 8.11 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 76.236 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 21.694 mW/g

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 4.73 mW/g; Maximum value of SAR (measured) = 11.6 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm



Date/Time: 7/10/2012 7:09:28 PM

Test Laboratory: Motorola Mobility - Jul-10-2012 5200 MHz Body**DUT: Dipole 5-6GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1088; FCC ID: IHDT56NS1**

Procedure Notes: 5200 MHz System Performance Check; Dipole Sn# 1088; Input Power = 100 mW

Sim.Temp@meas = 20.0°C; Sim.Temp@SPC = 20.1°C; Room Temp @ SPC = 20.3°C

Communication System: _CW - Dipole; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.27$ mho/m; $\epsilon_r = 45.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

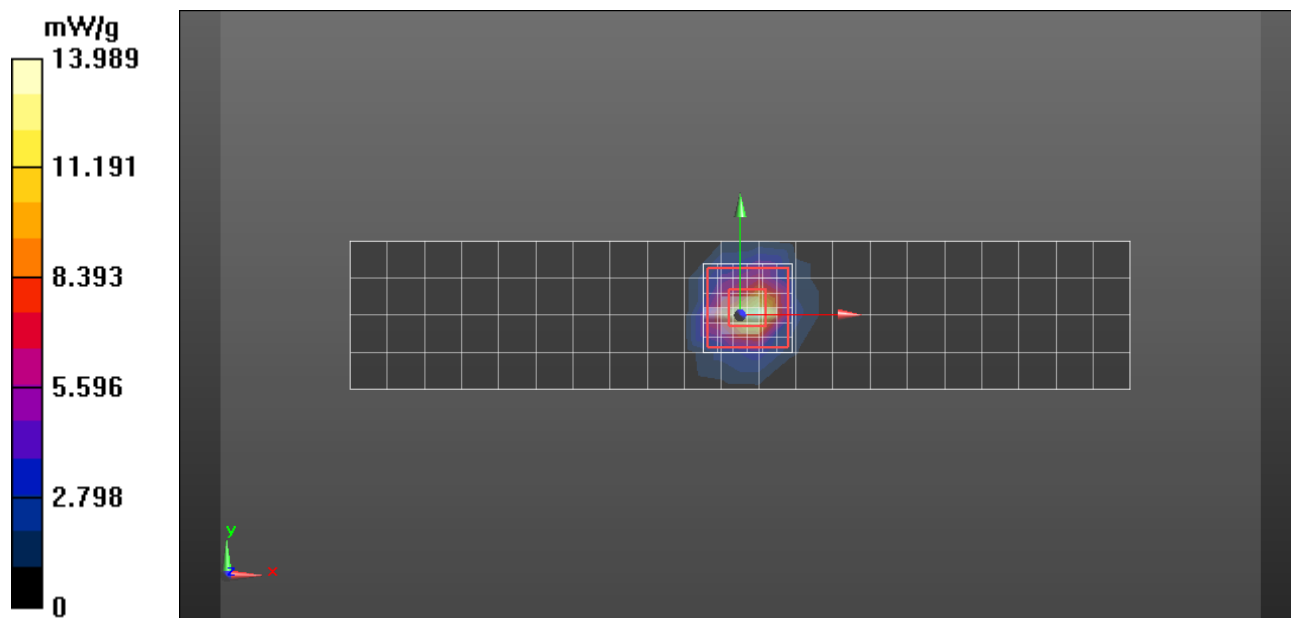
- Probe: EX3DV4 - SN3728; ConvF(4.22, 4.22, 4.22); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template, Dipole Area Scan (22x5x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 14.0 mW/g

DASY5, Triple Flat System Performance Check Template, 0-Degree, 7x7x12 Cube**(7x7x6)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 58.078 V/m; Power Drift = -0.14 dB; Peak SAR (extrapolated) = 27.894 mW/g

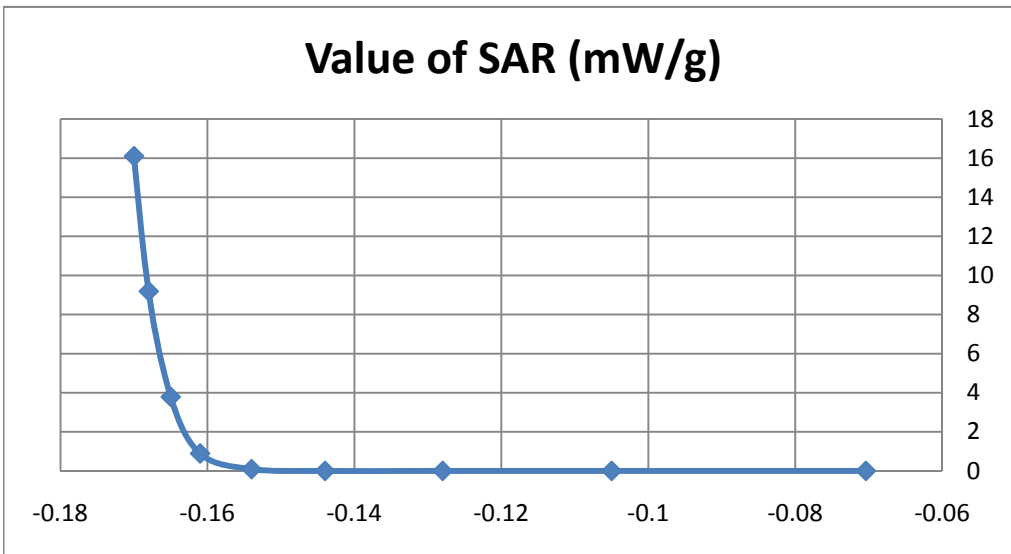
SAR(1 g) = 7.56 mW/g; SAR(10 g) = 2.14 mW/g; Maximum value of SAR (measured) = 15.9 mW/g

Jul-10-2012 5200 MHz Body - Z-Axis Retraction

SAR(x,y,z,f0) in mW/g

Grid: 1x1x9x1

Value of SAR mW/g	X m	Y m	Z m
16.1	0.002	0.002	-0.17
9.19	0.002	0.002	-0.168
3.79	0.002	0.002	-0.165
0.897	0.002	0.002	-0.161
0.0967	0.002	0.002	-0.154
0.00366	0.002	0.002	-0.144
0.00745	0.002	0.002	-0.128
0.00643	0.002	0.002	-0.105
0.00492	0.002	0.002	-0.0704



Date/Time: 7/12/2012 12:24:31 PM

Test Laboratory: Motorola Mobility - Jul-12-2012 5800 MHz Body**DUT: Dipole 5-6GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1088; FCC ID: IHDT56NS1**

Procedure Notes: 5800 MHz System Performance Check; Dipole Sn# 1088; Input Power = 100 mW

Sim.Temp@meas = 19.5°C; Sim.Temp@SPC = 19.5°C; Room Temp @ SPC = 20.0°C

Communication System: _CW - Dipole; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.03$ mho/m; $\epsilon_r = 44.5$; $\rho = 1000$ kg/m³

DASY4 Configuration:

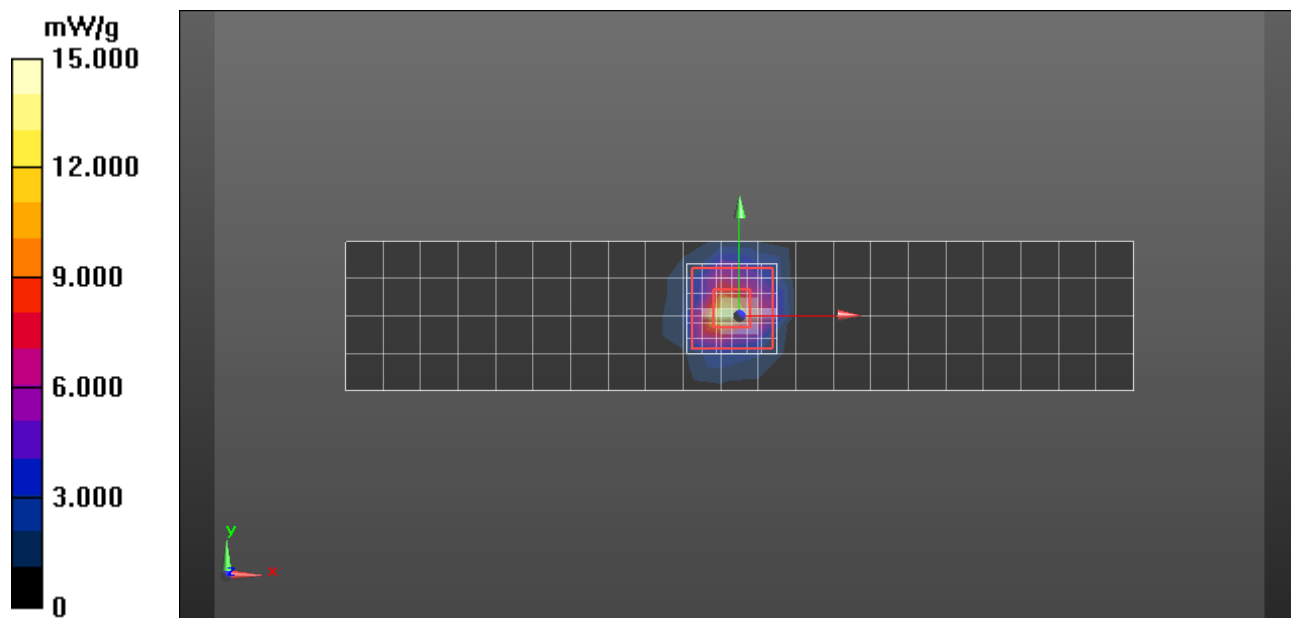
- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template, Dipole Area Scan (22x5x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 12.5 mW/g

DASY5, Triple Flat System Performance Check Template, 0-Degree, 7x7x12 Cube**(7x7x6)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 52.762 V/m; Power Drift = -0.01 dB; Peak SAR (extrapolated) = 27.659 mW/g

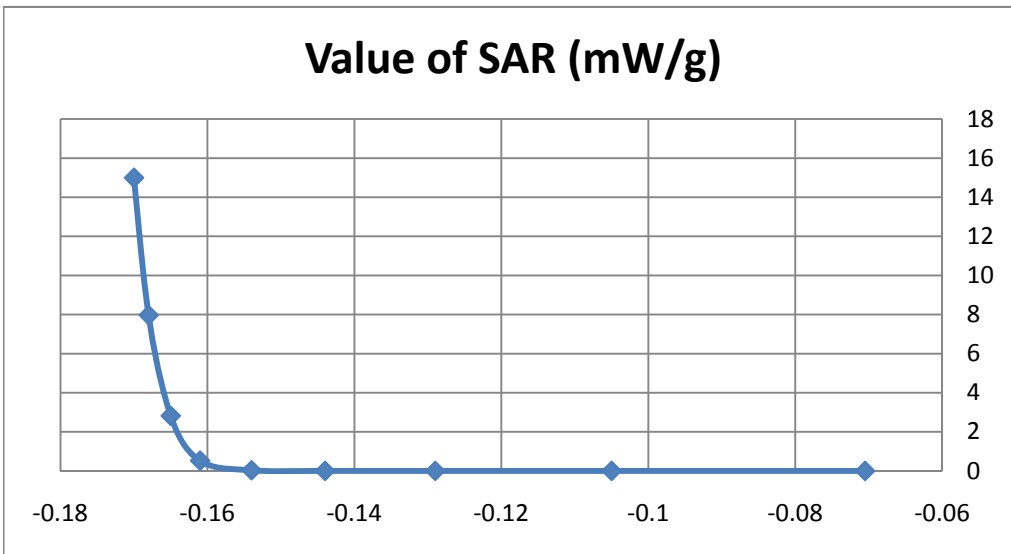
SAR(1 g) = 6.91 mW/g; SAR(10 g) = 1.94 mW/g; Maximum value of SAR (measured) = 15.0 mW/g

Jul-12-2012 5800 MHz Body - Z-Axis Retraction

SAR(x,y,z,f0) in mW/g

Grid: 1x1x9x1

Value of SAR mW/g	X m	Y m	Z m
15	-0.002	0.002	-0.17
7.97	-0.002	0.002	-0.168
2.82	-0.002	0.002	-0.165
0.526	-0.002	0.002	-0.161
0.0325	-0.002	0.002	-0.154
0.00292	-0.002	0.002	-0.144
0	-0.002	0.002	-0.129
0	-0.002	0.002	-0.105
9.48E-05	-0.002	0.002	-0.0705



Date/Time: 7/13/2012 3:36:25 PM

Test Laboratory: Motorola Mobility - Jul-13-2012 5800 MHz Body**DUT: Dipole 5-6GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN 1088; FCC ID: IHDT56NS1**

Procedure Notes: 5800 MHz System Performance Check; Dipole Sn# 1088; Input Power = 100 mW

Sim.Temp@meas = 19.2°C; Sim.Temp@SPC = 19.0°C; Room Temp @ SPC = 20.6°C

Communication System: _CW - Dipole; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.22$ mho/m; $\epsilon_r = 44.7$; $\rho = 1000$ kg/m³

DASY4 Configuration:

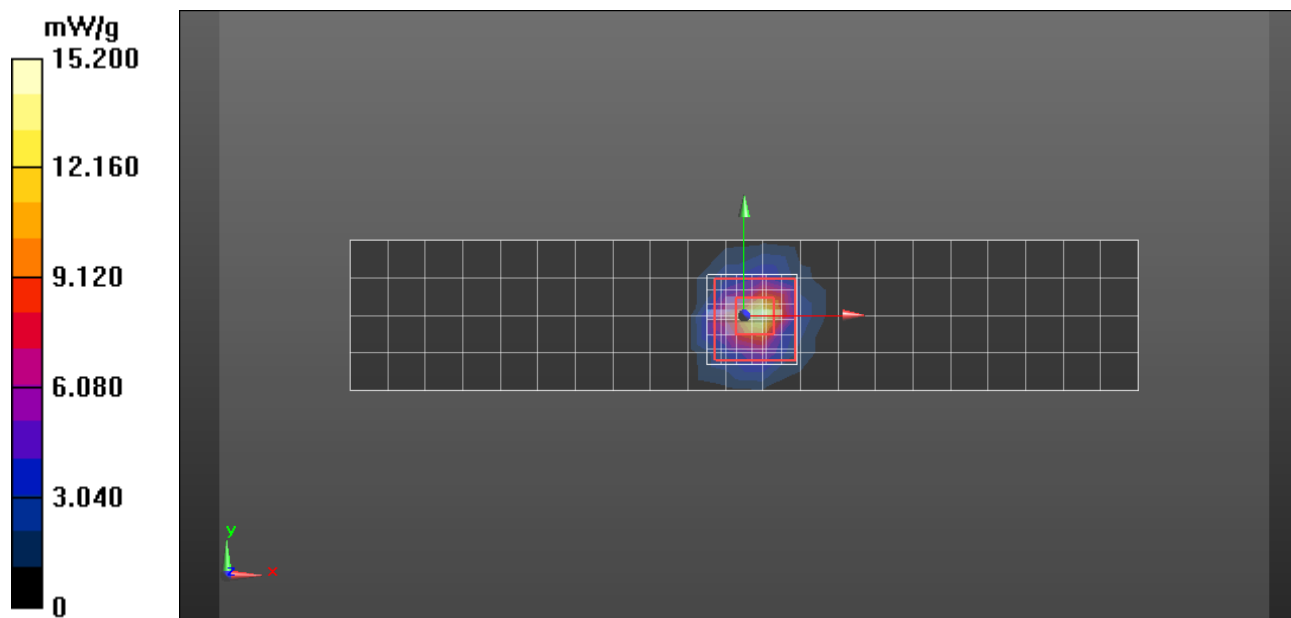
- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template, Dipole Area Scan (22x5x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 14.5 mW/g

DASY5, Triple Flat System Performance Check Template, 0-Degree, 7x7x12 Cube**(7x7x6)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 53.520 V/m; Power Drift = -0.09 dB; Peak SAR (extrapolated) = 28.213 mW/g

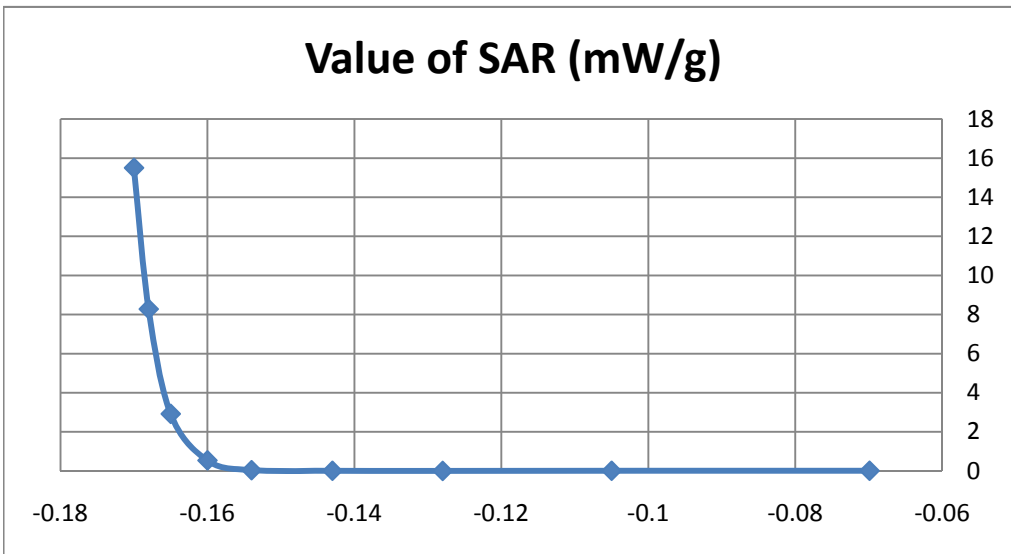
SAR(1 g) = 7.12 mW/g; SAR(10 g) = 2.01 mW/g; Maximum value of SAR (measured) = 15.2 mW/g

Jul-13-2012 5800 MHz Body - Z-Axis Retraction

SAR(x,y,z,f0) in mW/g

Grid: 1x1x9x1

Value of SAR mW/g	X m	Y m	Z m
15.5	0.0028	-0.0002	-0.17
8.28	0.0028	-0.0002	-0.168
2.92	0.0028	-0.0002	-0.165
0.54	0.0028	-0.0002	-0.16
0.0407	0.0028	-0.0002	-0.154
0.00832	0.0028	-0.0002	-0.143
0.00201	0.0028	-0.0002	-0.128
0.00834	0.0028	-0.0002	-0.105
0.0127	0.0028	-0.0002	-0.0699



Appendix 2

SAR distribution plots for Head Adjacent Test Results

Date/Time: 6/30/2012 1:07:19 AM

Test Laboratory: Motorola Mobility - LTE Band 13 Cheek**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): CHEEK

Device Mode: QPSK, 1 RB @ High Edge of Channel

Communication System: _LTE Band 13; Frequency: 782 MHz; Channel Number: 23230; Duty Cycle: 1:1

Medium: Low Freq Head

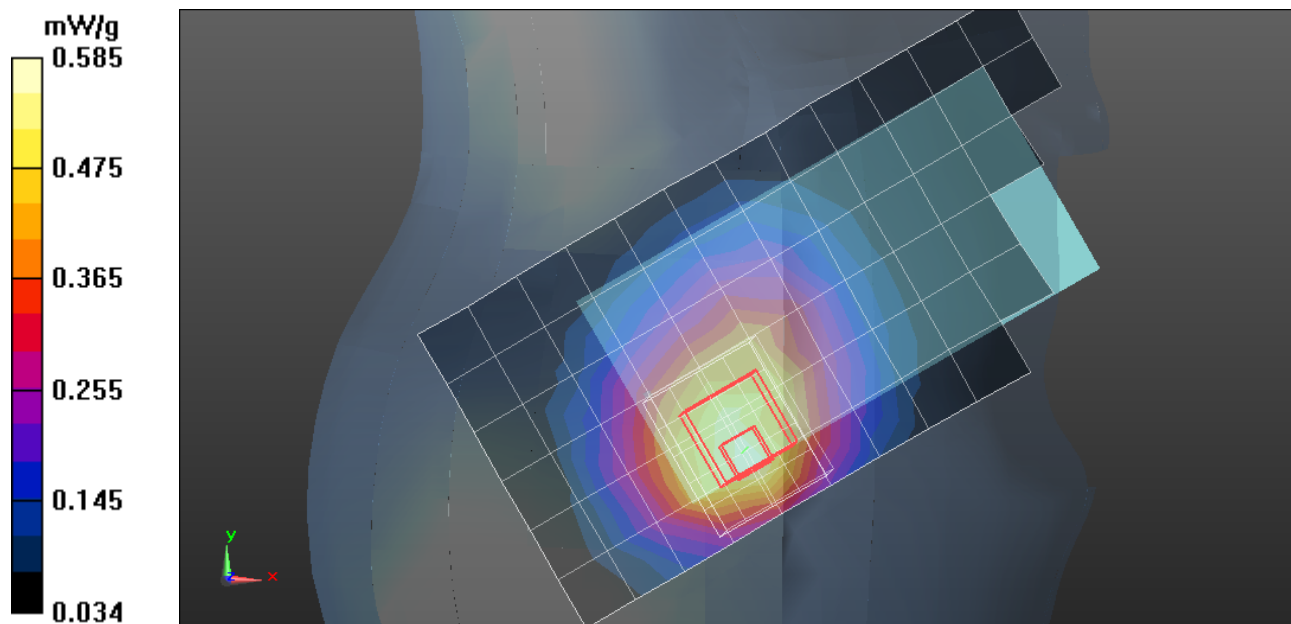
Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.26, 6.26, 6.26); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#1 - Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1156; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, SAM - RIGHT head template - Area Scan - Normal (15mm) (7x17x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 0.586 mW/g**DASY5, SAM - RIGHT head template - 5x5x7 Zoom Scan ($\leq 3\text{GHz}$) (6x5x7)/Cube 0:**Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.373 V/m; Power Drift = -0.01 dB; Peak SAR (extrapolated) = 0.833 mW/g

SAR(1 g) = 0.544 mW/g; SAR(10 g) = 0.375 mW/g; Maximum value of SAR (measured) = 0.585 mW/g

Date/Time: 6/29/2012 8:11:47 PM

Test Laboratory: Motorola Mobility - CDMA 800 Cheek**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): CHEEK

Communication System: _CDMA; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1

Medium: Low Freq Head

Medium parameters used: $f = 835$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 41.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(6.18, 6.18, 6.18); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#_4 Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1132; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

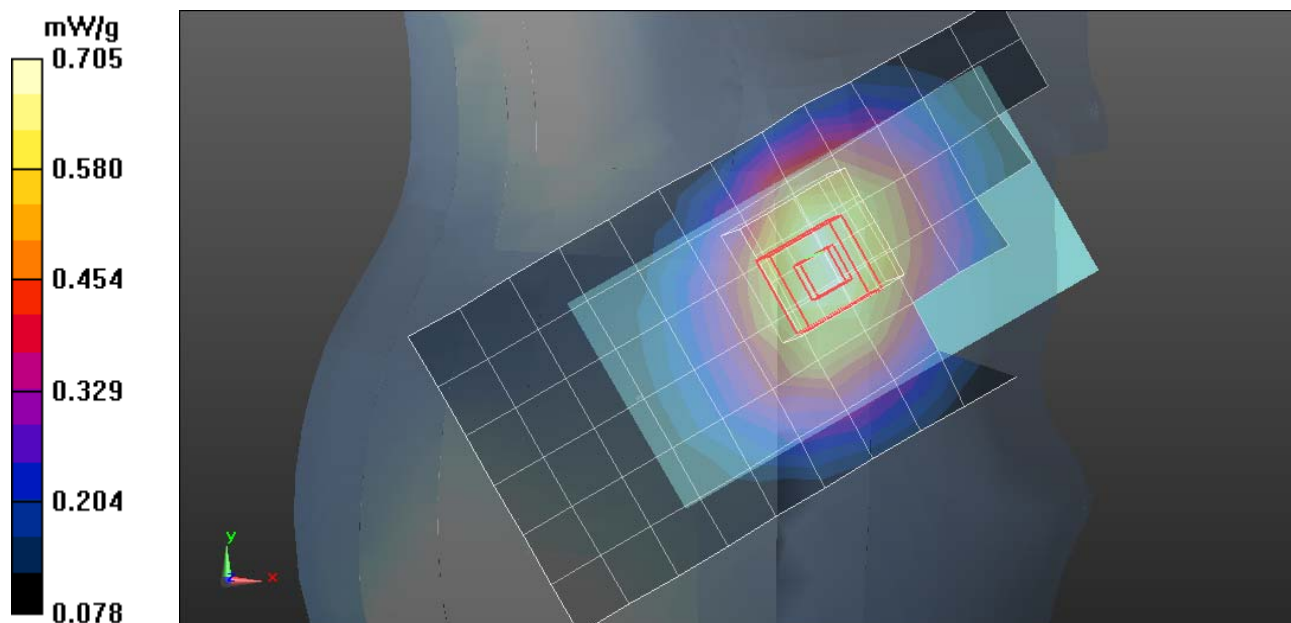
DASY5, SAM - RIGHT head template - Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.686 mW/g

DASY5, SAM - RIGHT head template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.977 V/m; Power Drift = -0.11 dB; Peak SAR (extrapolated) = 0.837 mW/g

SAR(1 g) = 0.673 mW/g; SAR(10 g) = 0.508 mW/g; Maximum value of SAR (measured) = 0.705 mW/g

Date/Time: 7/2/2012 1:08:38 PM

Test Laboratory: Motorola Mobility - CDMA 1900 Cheek**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All Up Bits; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): Cheek

Communication System: _CDMA; Frequency: 1908.75 MHz; Channel Number: 1175; Duty Cycle: 1:1

Medium: Regular Glycol Head 1750/1880

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.47$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(5.33, 5.33, 5.33); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4 Glycol SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1162; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

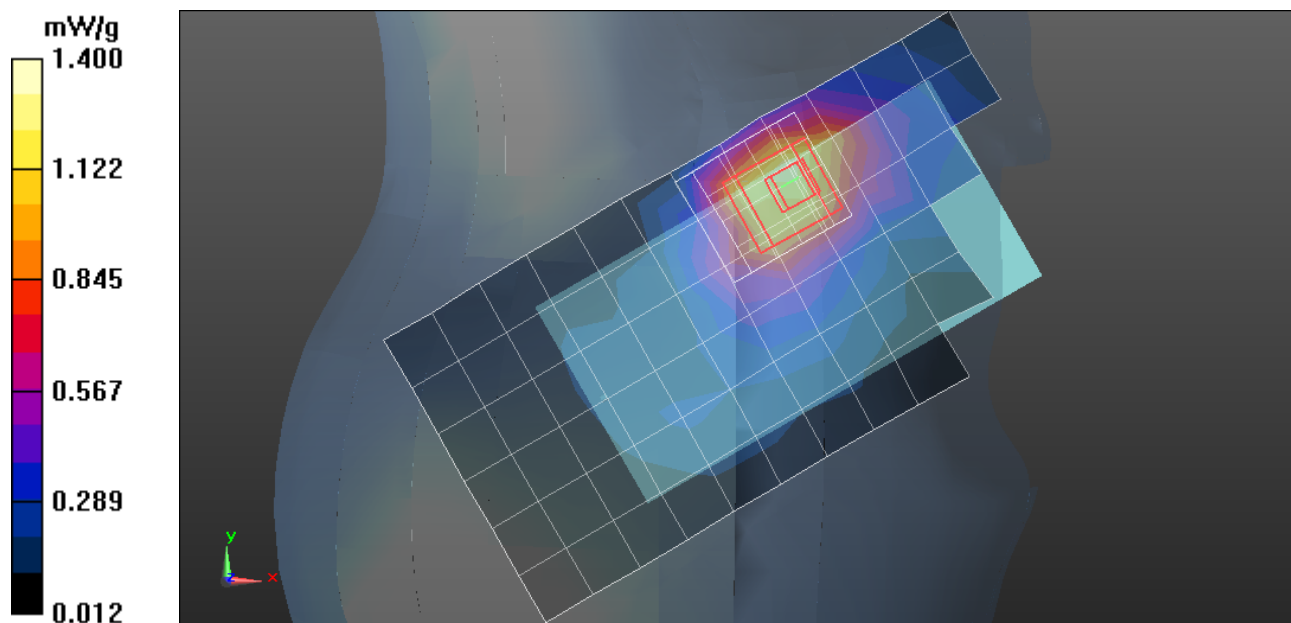
DASY5, SAM - RIGHT head template - Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 1.31 mW/g

DASY5, SAM - RIGHT head template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.011 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 2.146 mW/g

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.765 mW/g; Maximum value of SAR (measured) = 1.40 mW/g

Date/Time: 7/21/2012 7:59:30 AM

Test Laboratory: Motorola Mobility - Wi-Fi 2.4 GHz Cheek**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION: CHEEK

Device Mode: 802.11b mode, 5.5 Mbps data rate

Communication System: _Wi-Fi 2450MHz; Frequency: 2412 MHz; Channel Number: 1; Duty Cycle: 1:1

Medium: 2450 TRITON Head

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(6.86, 6.86, 6.86); Calibrated: 4/24/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn440; Calibrated: 5/23/2012
- Phantom: R#3 5G/2450 WiFi SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1153; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

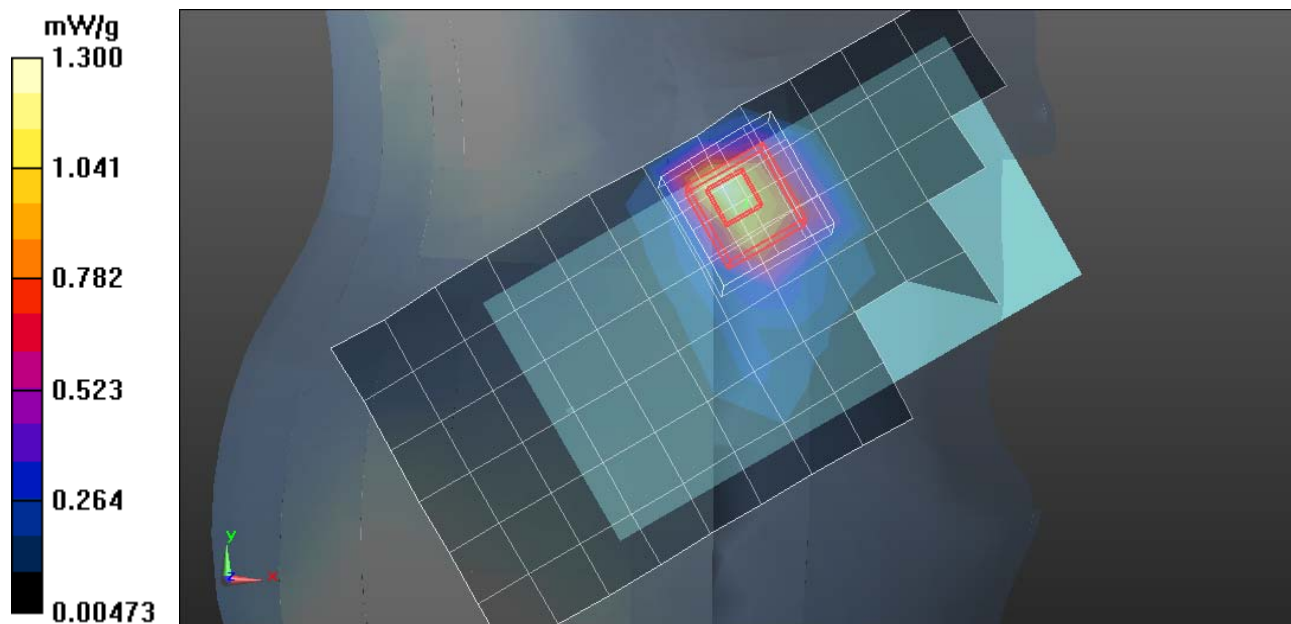
DASY5, SAM - RIGHT head template - Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 1.27 mW/g

DASY5, SAM - RIGHT head template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.940 V/m; Power Drift = -0.07 dB; Peak SAR (extrapolated) = 3.070 mW/g

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.573 mW/g; Maximum value of SAR (measured) = 1.30 mW/g

Date/Time: 7/11/2012 7:05:30 PM

Test Laboratory: Motorola Mobility - Wi-Fi 5.2 GHz Cheek**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): CHEEK

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5180 MHz; Channel Number: 36; Duty Cycle: 1:1

Medium: 5.2 - 5.6 GHz HEAD

Medium parameters used: $f = 5210$ MHz; $\sigma = 4.57$ mho/m; $\epsilon_r = 34.8$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(4.74, 4.74, 4.74); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#3 5 GHz HEAD SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1106; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

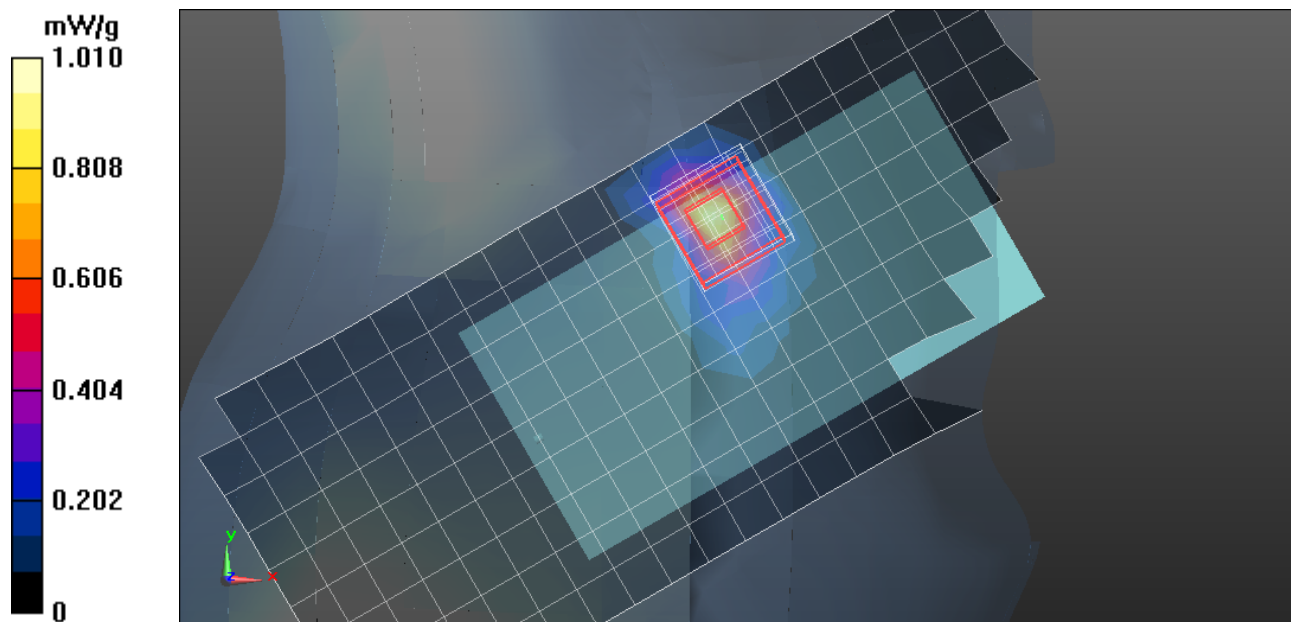
DASY5, Right Head SAM Template - Area Scan - Normal (10mm) (10x25x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.884 mW/g

DASY5, Right Head SAM Template - 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 8.162 V/m; Power Drift = -0.29 dB; Peak SAR (extrapolated) = 1.874 mW/g

SAR(1 g) = 0.497 mW/g; SAR(10 g) = 0.157 mW/g; Maximum value of SAR (measured) = 1.01 mW/g

Date/Time: 7/12/2012 12:09:23 AM

Test Laboratory: Motorola Mobility - Wi-Fi 5.8 GHz Cheek**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): CHEEK

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5825 MHz; Channel Number: 165; Duty Cycle: 1:1

Medium: 5.785 GHz HEAD

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.15$ mho/m; $\epsilon_r = 33.9$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(4.23, 4.23, 4.23); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#3 5 GHz HEAD SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1106; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

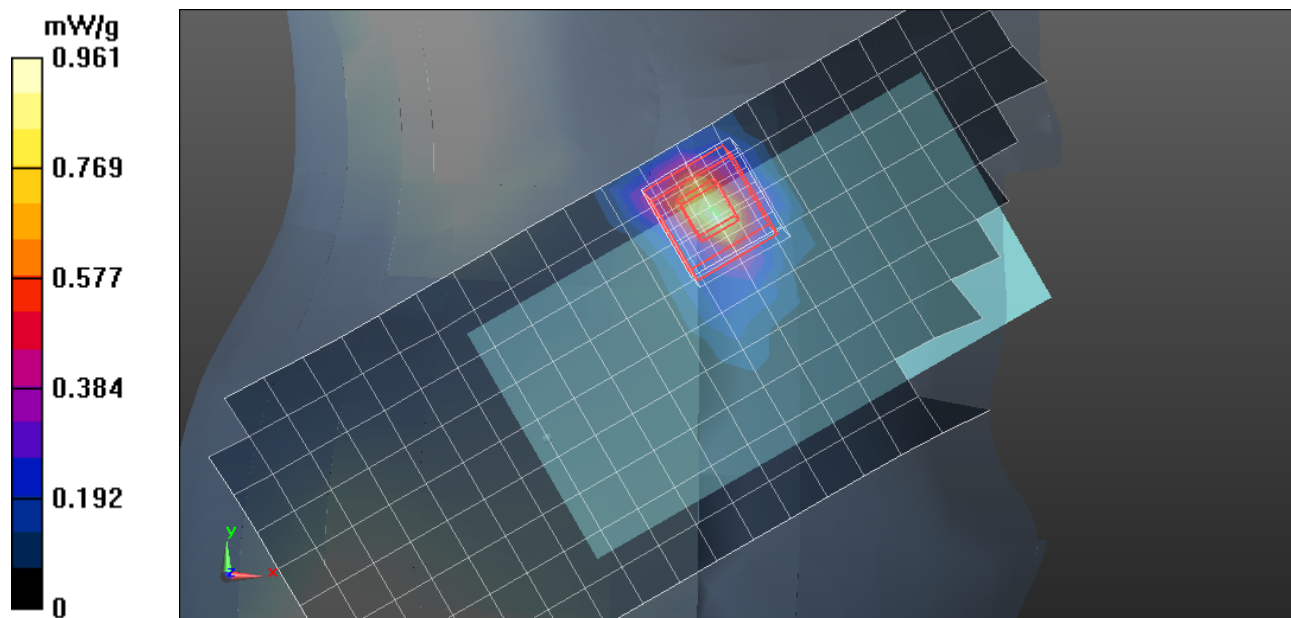
DASY5, Right Head SAM Template - Area Scan - Normal (10mm) (10x25x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.937 mW/g

DASY5, Right Head SAM Template - 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.649 V/m; Power Drift = 0.03 dB; Peak SAR (extrapolated) = 1.938 mW/g

SAR(1 g) = 0.470 mW/g; SAR(10 g) = 0.153 mW/g; Maximum value of SAR (measured) = 0.961 mW/g

Date/Time: 6/30/2012 1:50:36 AM

Test Laboratory: Motorola Mobility - LTE Band 13 Tilt**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): ROTATED

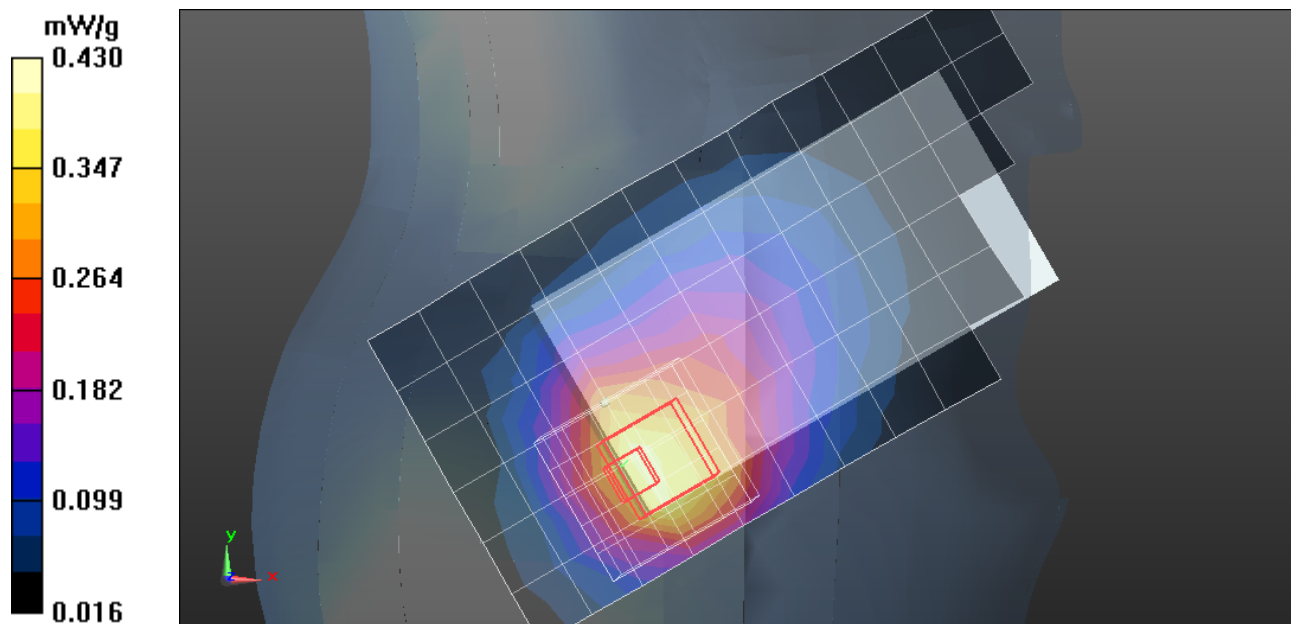
Device Mode: QPSK, 1 RB @ Low Edge of Channel

Communication System: _LTE Band 13; Frequency: 782 MHz; Channel Number: 23230; Duty Cycle: 1:1

Medium: Low Freq Head

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$ **DASY4 Configuration:**

- Probe: ES3DV3 - SN3124; ConvF(6.26, 6.26, 6.26); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#1 - Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1156; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, SAM - RIGHT head template - Area Scan - Normal (15mm) (7x17x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 0.394 mW/g **DASY5, SAM - RIGHT head template - 5x5x7 Zoom Scan ($\leq 3\text{GHz}$) (6x6x7)/Cube 0:**Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 19.623 V/m ; Power Drift = -0.05 dB ; Peak SAR (extrapolated) = 0.669 mW/g **SAR(1 g) = 0.391 mW/g ; SAR(10 g) = 0.260 mW/g ; Maximum value of SAR (measured) = 0.430 mW/g** 

Date/Time: 6/29/2012 10:25:32 PM

Test Laboratory: Motorola Mobility - CDMA 800 Tilt**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): TILTED

Communication System: _CDMA; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1

Medium: Low Freq Head

Medium parameters used: $f = 835$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 41.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(6.18, 6.18, 6.18); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#_ 4 Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1132; Phantom section: Left Section
- SEMCAD X Version 14.6.5 (6469)

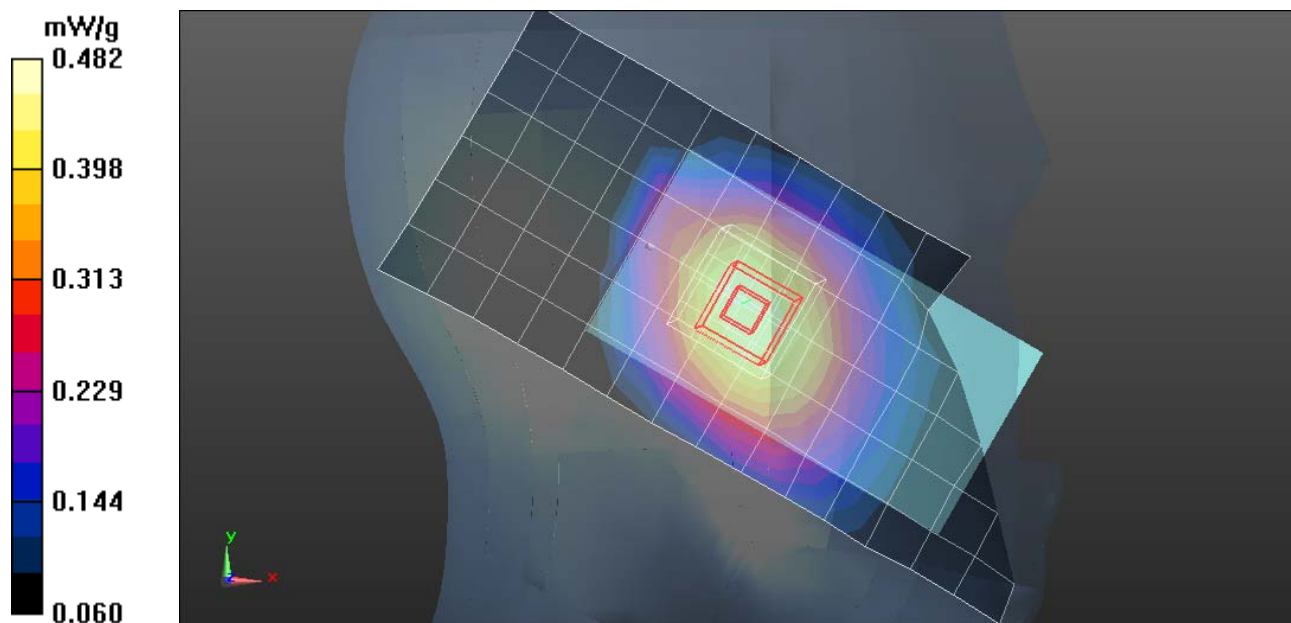
DASY5, SAM - Left Head Template, Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.460 mW/g

DASY5, SAM - Left Head Template, 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.260 V/m; Power Drift = 0.02 dB; Peak SAR (extrapolated) = 0.565 mW/g

SAR(1 g) = 0.456 mW/g; SAR(10 g) = 0.346 mW/g; Maximum value of SAR (measured) = 0.482 mW/g

Date/Time: 6/30/2012 1:03:36 AM

Test Laboratory: Motorola Mobility - CDMA 1900 Tilt**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): TILTED

Communication System: _CDMA; Frequency: 1880 MHz; Channel Number: 600; Duty Cycle: 1:1

Medium: Regular Glycol Head 1750/1880

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(5.33, 5.33, 5.33); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4 Glycol SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1162; Phantom section: Left Section
- SEMCAD X Version 14.6.5 (6469)

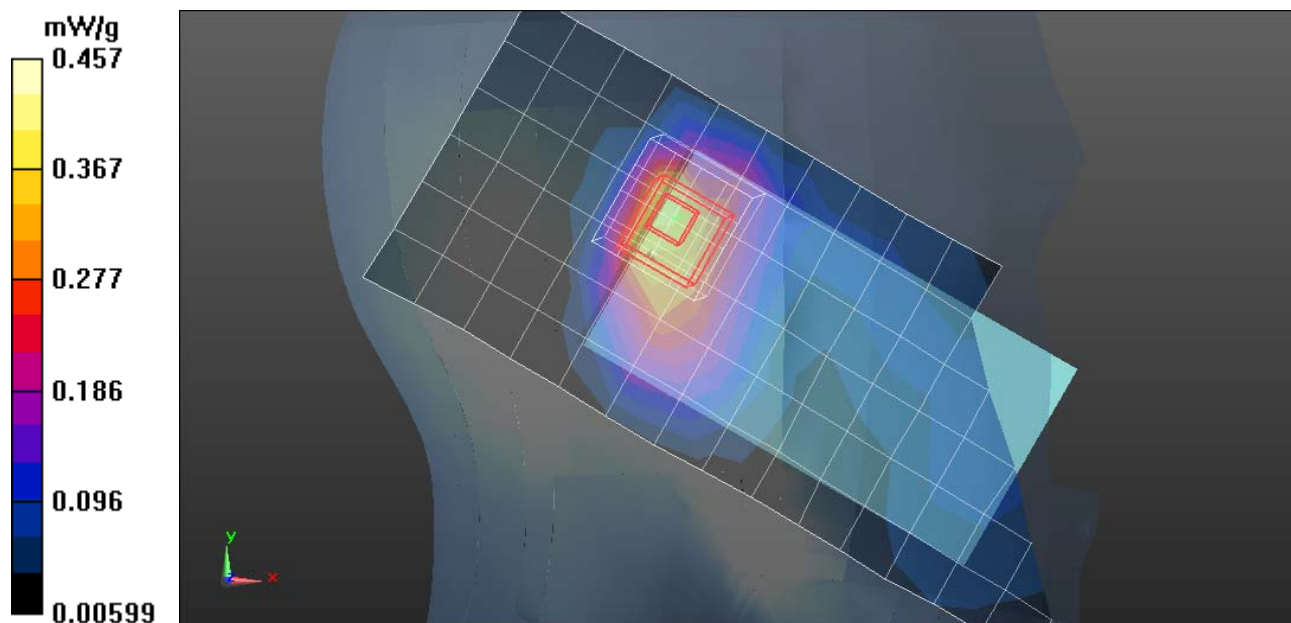
DASY5, SAM - Left Head Template, Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.402 mW/g

DASY5, SAM - Left Head Template, 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.988 V/m; Power Drift = 0.04 dB; Peak SAR (extrapolated) = 0.682 mW/g

SAR(1 g) = 0.407 mW/g; SAR(10 g) = 0.234 mW/g; Maximum value of SAR (measured) = 0.457 mW/g

Date/Time: 7/21/2012 8:42:07 AM

Test Laboratory: Motorola Mobility - Wi-Fi 2.4 GHz Tilt**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal ; DEVICE POSITION: TILTED

Device Mode: 802.11b mode, 5.5 Mbps data rate

Communication System: _Wi-Fi 2450MHz; Frequency: 2412 MHz; Channel Number: 1; Duty Cycle: 1:1

Medium: 2450 TRITON Head

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(6.86, 6.86, 6.86); Calibrated: 4/24/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn440; Calibrated: 5/23/2012
- Phantom: R#3 5G/2450 WiFi SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1153; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

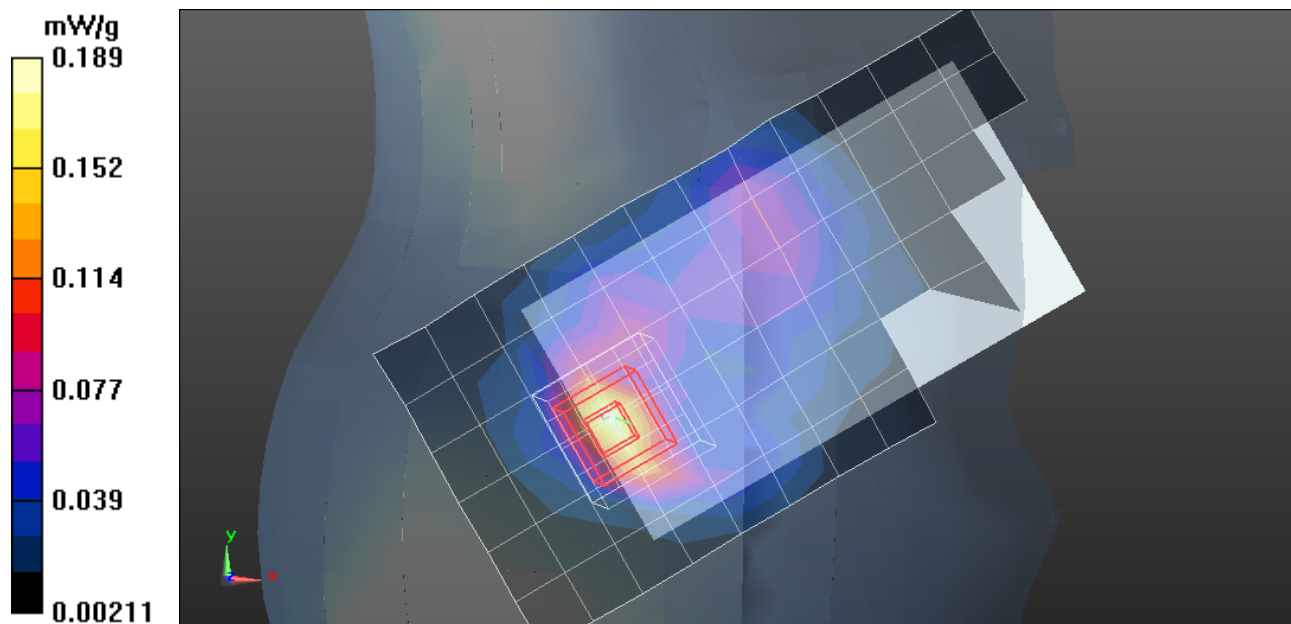
DASY5, SAM - RIGHT head template - Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.188 mW/g

DASY5, SAM - RIGHT head template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.381 V/m; Power Drift = 0.05 dB; Peak SAR (extrapolated) = 0.336 mW/g

SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.082 mW/g; Maximum value of SAR (measured) = 0.189 mW/g

Date/Time: 7/11/2012 7:45:34 PM

Test Laboratory: Motorola Mobility - Wi-Fi 5.2 GHz Tilt**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): TILT

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5180 MHz; Channel Number: 36; Duty Cycle: 1:1

Medium: 5.2 - 5.6 GHz HEAD

Medium parameters used: $f = 5210$ MHz; $\sigma = 4.57$ mho/m; $\epsilon_r = 34.8$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(4.74, 4.74, 4.74); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#3 5 GHz HEAD SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1106; Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

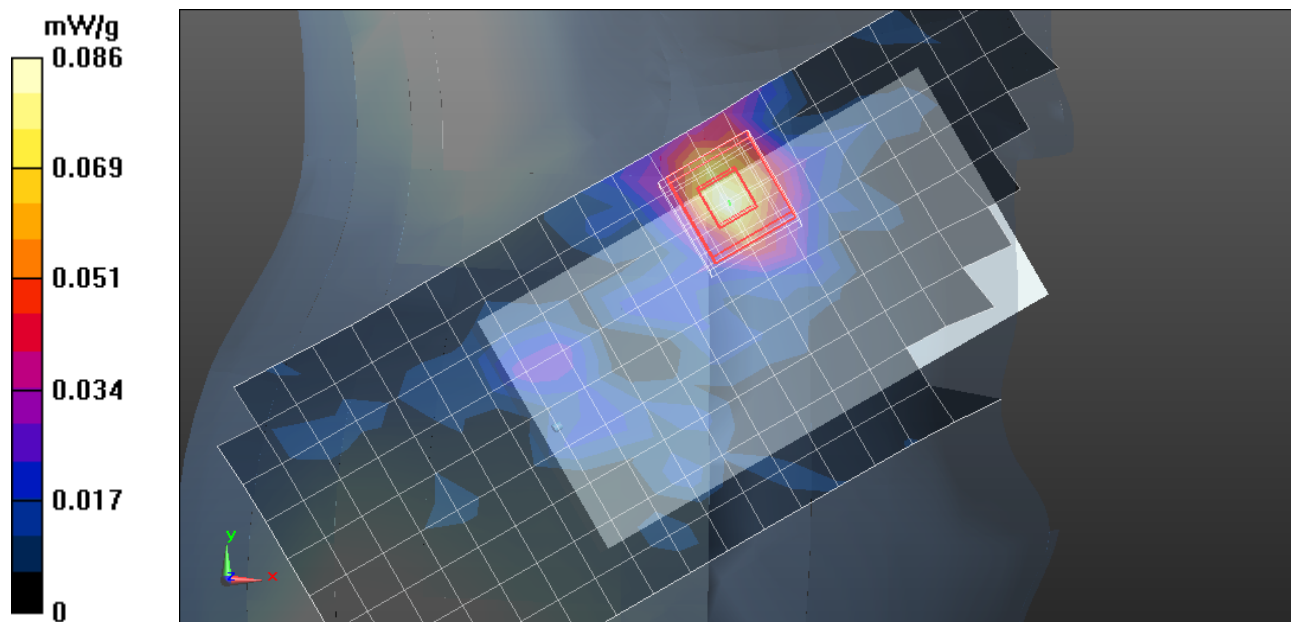
DASY5, Right Head SAM Template - Area Scan - Normal (10mm) (10x25x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.0867 mW/g

DASY5, Right Head SAM Template - 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.754 V/m; Power Drift = -0.15 dB; Peak SAR (extrapolated) = 0.160 mW/g

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.016 mW/g; Maximum value of SAR (measured) = 0.0857 mW/g

Date/Time: 7/11/2012 11:32:42 PM

Test Laboratory: Motorola Mobility - Wi-Fi 5.8 GHz Tilt**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Accessory Model #: N/A

Battery Model #: Internal; DEVICE POSITION (cheek or rotated): TILT

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5825 MHz; Channel Number: 165; Duty Cycle: 1:1

Medium: 5.785 GHz HEAD

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.15$ mho/m; $\epsilon_r = 33.9$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(4.23, 4.23, 4.23); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#3 5 GHz HEAD SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1106; Phantom section: Left Section
- SEMCAD X Version 14.6.5 (6469)

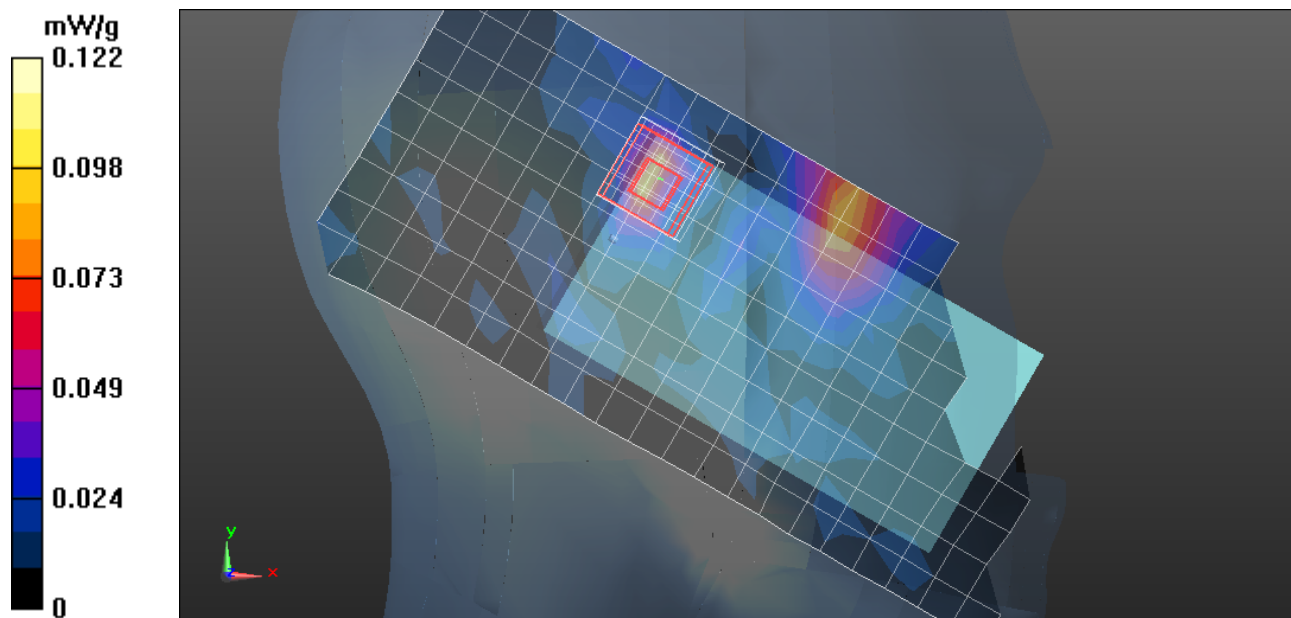
DASY5, Left Head SAM Template - Area Scan - Normal (10mm) (10x25x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.0910 mW/g

DASY5, Left Head SAM Template - 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.350 V/m; Power Drift = -0.48 dB; Peak SAR (extrapolated) = 0.211 mW/g

SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.013 mW/g; Maximum value of SAR (measured) = 0.122 mW/g

Appendix 3

SAR distribution plots for Body Worn Test Results

Date/Time: 6/30/2012 12:08:36 PM

Test Laboratory: Motorola Mobility - LTE Band 13 Body-Worn**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Body-Worn, Back of Phone 25 mm from Phantom

Device Mode: QPSK, 1 RB @ Low Edge of Channel

Communication System: _LTE Band 13; Frequency: 782 MHz; Channel Number: 23230; Duty Cycle: 1:1

Medium: Low Freq Body

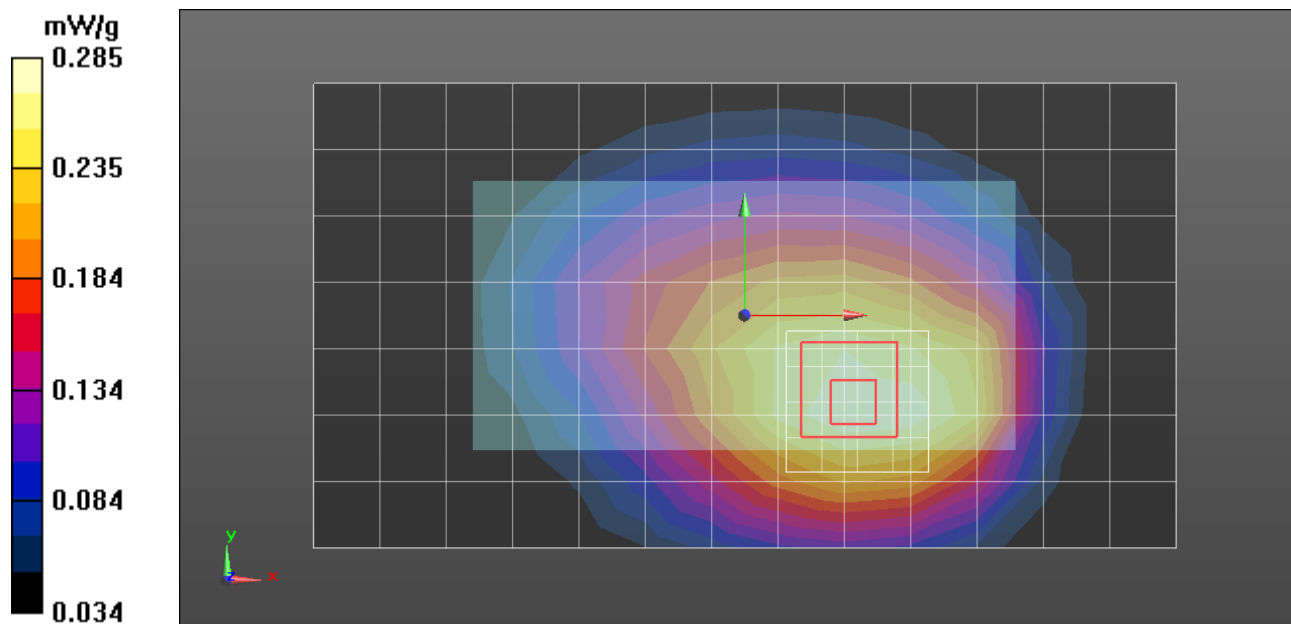
Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.09, 6.09, 6.09); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 0.286 mW/g**DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan ($\leq 3\text{GHz}$) (5x5x7)/Cube 0:**Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.585 V/m; Power Drift = 0.07 dB; Peak SAR (extrapolated) = 0.365 mW/g

SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.203 mW/g; Maximum value of SAR (measured) = 0.285 mW/g

Date/Time: 6/29/2012 4:59:47 PM

Test Laboratory: Motorola Mobility - CDMA 800 Body-Worn**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Battery Model #: Internal

Device Position: Body Worn, Front of Phone 25mm from Phantom

Communication System: _CDMA; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1

Medium: Low Freq Body

Medium parameters used: $f = 835$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(6.28, 6.28, 6.28); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

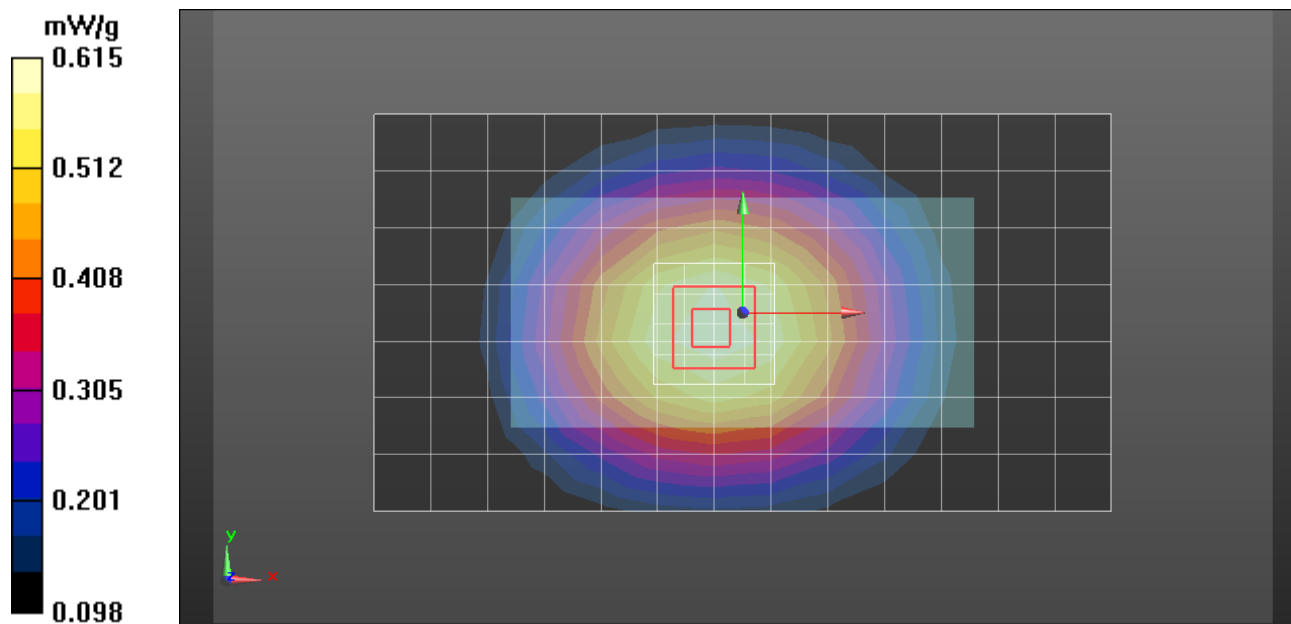
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.607 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.974 V/m; Power Drift = -0.17 dB; Peak SAR (extrapolated) = 0.762 mW/g

SAR(1 g) = 0.584 mW/g; SAR(10 g) = 0.438 mW/g; Maximum value of SAR (measured) = 0.615 mW/g

Date/Time: 6/29/2012 9:31:55 PM

Test Laboratory: Motorola Mobility - CDMA 1900 Body-Worn**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Battery Model #: Internal

Device Position: Body Worn, Back of Phone 25mm from Phantom

Communication System: _CDMA; Frequency: 1880 MHz; Channel Number: 600; Duty Cycle: 1:1

Medium: Regular Glycol Body 1750/1880

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.59$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(5.28, 5.28, 5.28); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

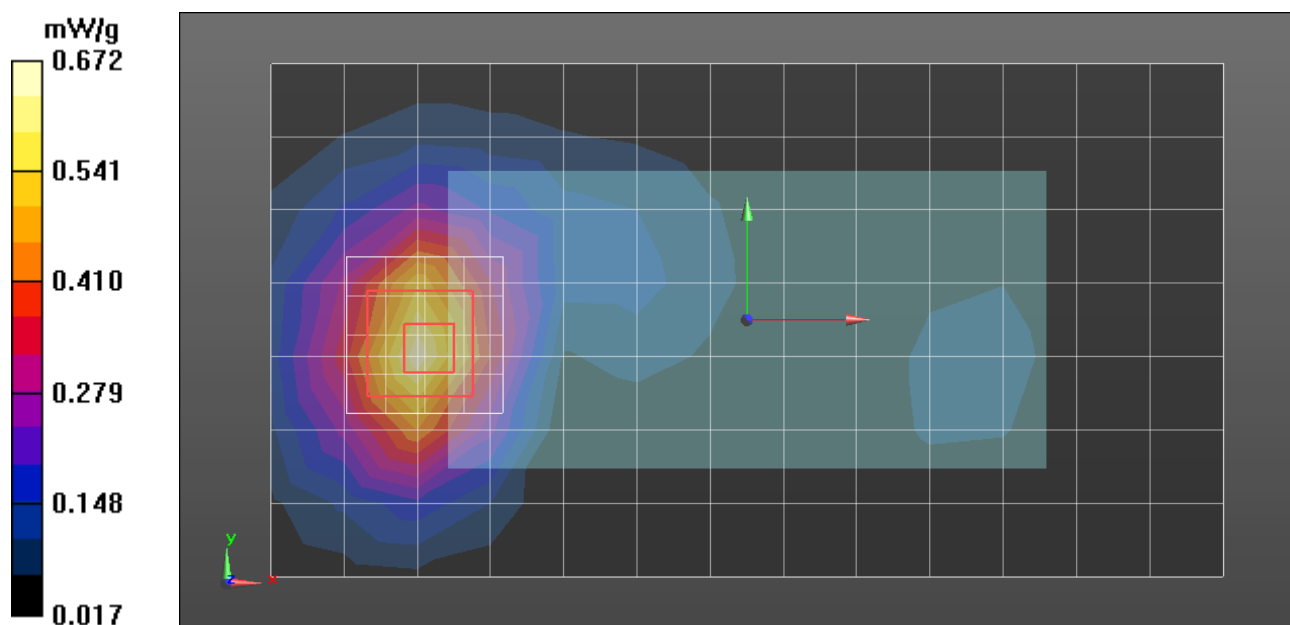
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.668 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.371 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 0.987 mW/g

SAR(1 g) = 0.625 mW/g; SAR(10 g) = 0.375 mW/g; Maximum value of SAR (measured) = 0.672 mW/g

Date/Time: 7/11/2012 10:29:15 AM

Test Laboratory: Motorola Mobility - Wi-Fi 2.4 GHz Body-Worn**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Body-Worn, Back of Phone 25 mm from Phantom

Device Mode: 802.11b mode, 1 Mbps data rate

Communication System: _Wi-Fi 2450MHz; Frequency: 2437 MHz; Channel Number: 6; Duty Cycle: 1:1

Medium: 2450 Triton Body

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(4.56, 4.56, 4.56); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

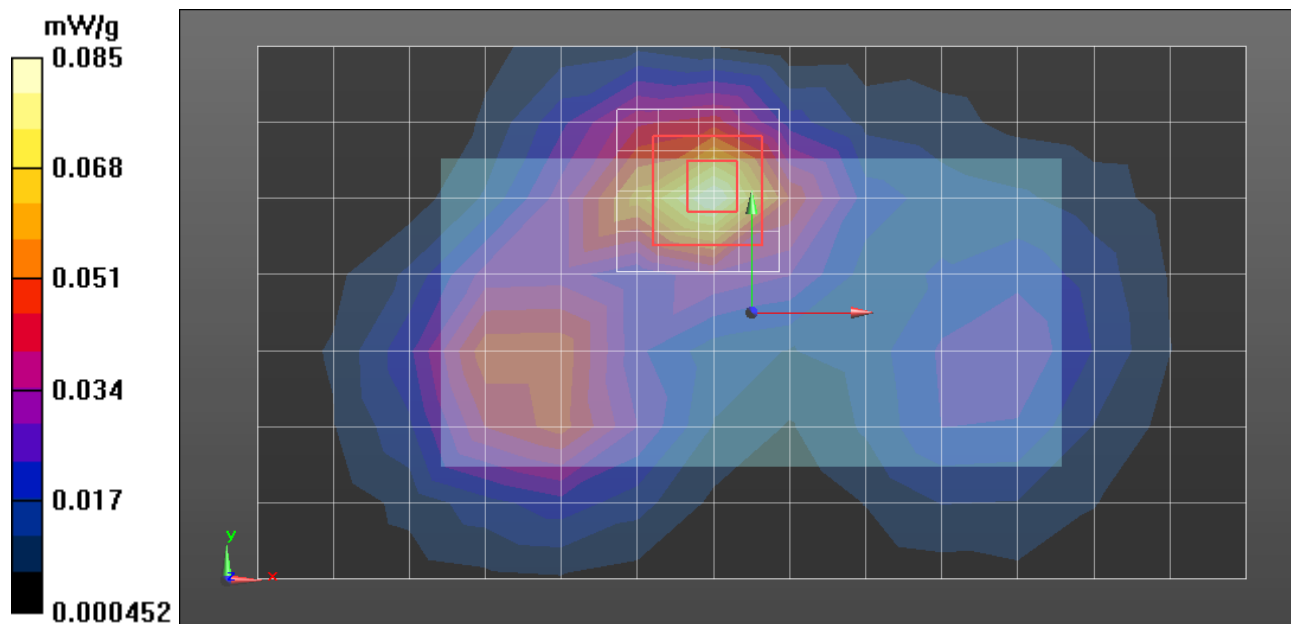
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.0870 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.900 V/m; Power Drift = 0.07 dB; Peak SAR (extrapolated) = 0.157 mW/g

SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.040 mW/g; Maximum value of SAR (measured) = 0.0850 mW/g

Date/Time: 7/11/2012 9:51:41 AM

Test Laboratory: Motorola Mobility - Wi-Fi 5.2 GHz Body-Worn**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Body-Worn, Back of Phone 25 mm from Phantom

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5180 MHz; Channel Number: 36; Duty Cycle: 1:1

Medium: 5.2 - 5.6 GHz BODY TRITON

Medium parameters used: $f = 5210$ MHz; $\sigma = 5.29$ mho/m; $\epsilon_r = 45.5$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(4.22, 4.22, 4.22); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

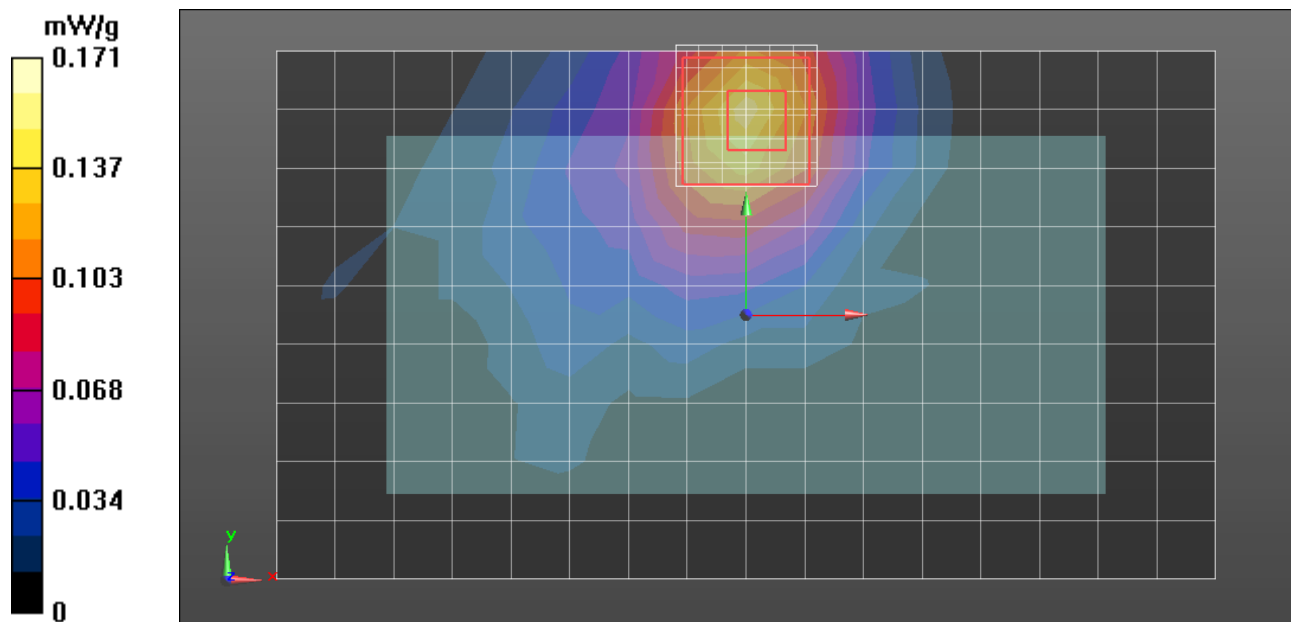
DASY5, TRIPLE Flat Phone Template, Area Scan - Normal Body (10mm) (17x10x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.157 mW/g

DASY5, TRIPLE Flat Phone Template, 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.798 V/m; Power Drift = -0.14 dB; Peak SAR (extrapolated) = 0.258 mW/g

SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.033 mW/g; Maximum value of SAR (measured) = 0.171 mW/g

Date/Time: 7/12/2012 2:58:11 PM

Test Laboratory: Motorola Mobility - Wi-Fi 5.8 GHz Body-Worn**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Body Worn, Back of Phone 25 mm from Phantom

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5825 MHz; Channel Number: 165; Duty Cycle: 1:1

Medium: 5.785 GHz BODY

Medium parameters used: $f = 5785$ MHz; $\sigma = 6$ mho/m; $\epsilon_r = 44.6$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

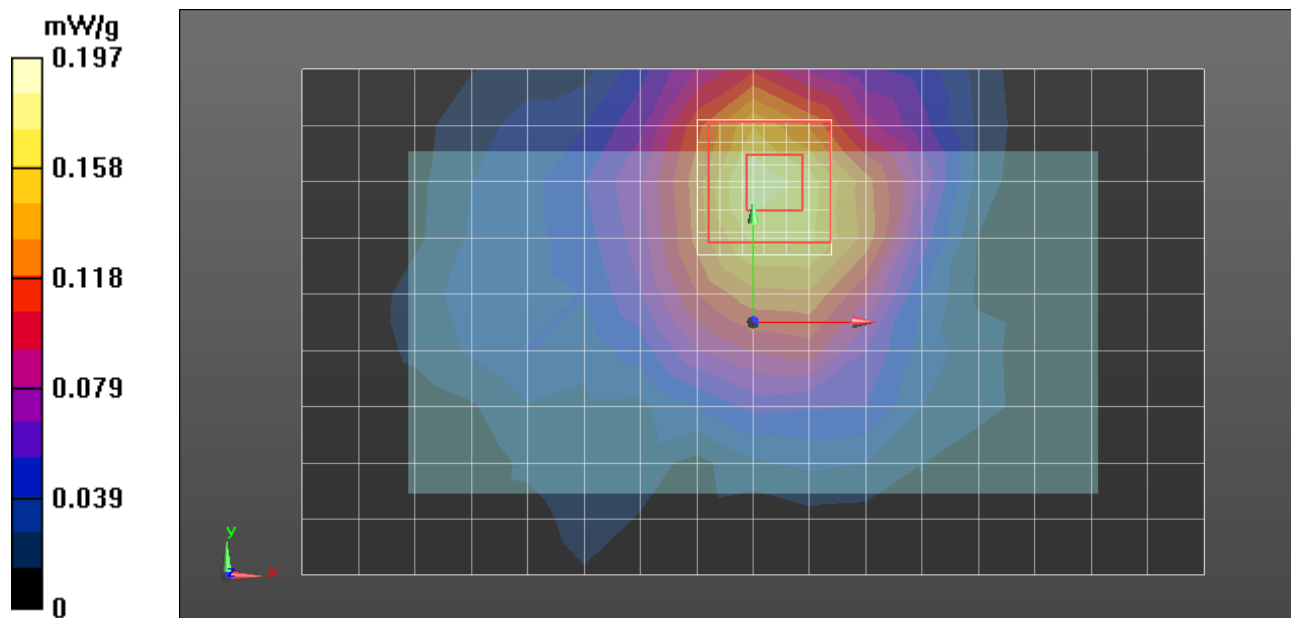
DASY5, TRIPLE Flat Phone Template, Area Scan - Normal Body (10mm) (17x10x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.184 mW/g

DASY5, TRIPLE Flat Phone Template, 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.700 V/m; Power Drift = -0.10 dB; Peak SAR (extrapolated) = 0.336 mW/g

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.038 mW/g; Maximum value of SAR (measured) = 0.197 mW/g

Appendix 4

SAR distribution plots for Mobile Hotspot Test Results

Date/Time: 7/7/2012 3:09:12 AM

Test Laboratory: Motorola Mobility - LTE Band 13 Mobile Hotspot**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-Adjacent), Back of Phone 10mm from Phantom

Device Mode: QPSK, 50% RB Allocation

Communication System: _LTE Band 13; Frequency: 782 MHz; Channel Number: 23230; Duty Cycle: 1:1

Medium: Low Freq Body

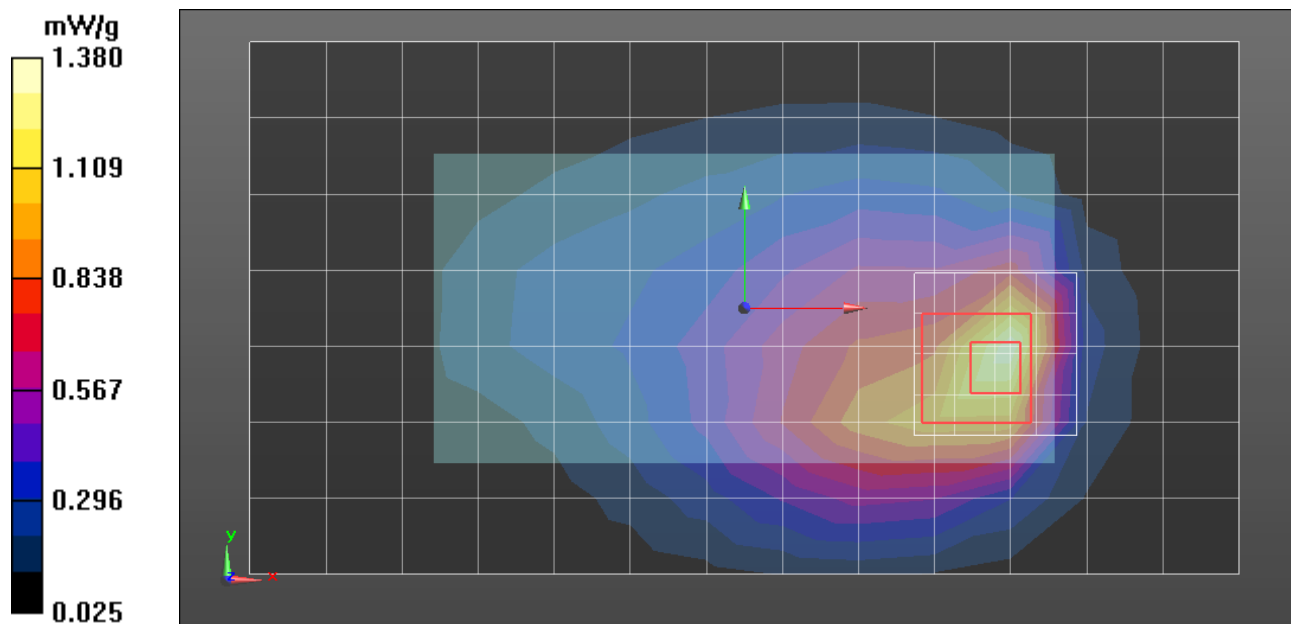
Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 54.5$; $\rho = 1000 \text{ kg/m}^3$

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.09, 6.09, 6.09); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 1.38 mW/g**DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan ($\leq 3\text{GHz}$) (5x5x7)/Cube 0:**Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.044 V/m; Power Drift = -0.24 dB; Peak SAR (extrapolated) = 2.298 mW/g

SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.709 mW/g;

Date/Time: 6/27/2012 10:50:52 PM

Test Laboratory: Motorola Mobility - CDMA 800 Mobile Hotspot**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-Adjacent), Front of Phone 10mm from Phantom

Communication System: _CDMA; Frequency: 848.31 MHz; Channel Number: 777; Duty Cycle: 1:1

Medium: Low Freq Body

Medium parameters used: $f = 835$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(6.28, 6.28, 6.28); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

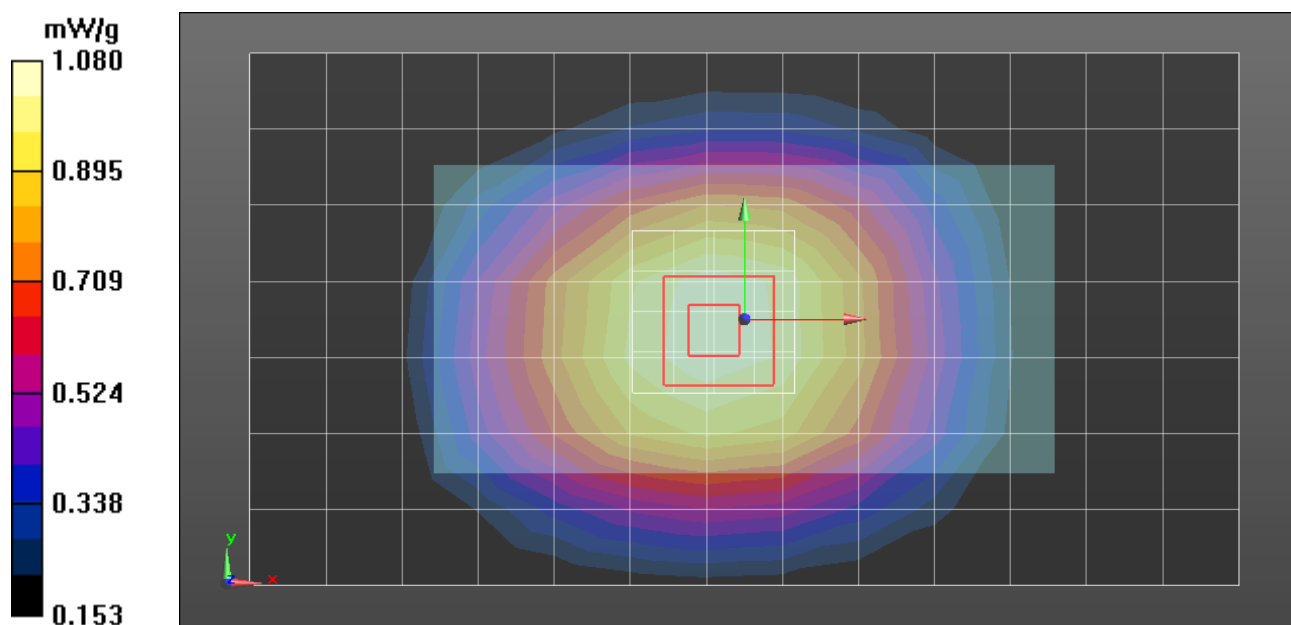
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 1.07 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.888 V/m; Power Drift = 0.03 dB; Peak SAR (extrapolated) = 1.306 mW/g

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.796 mW/g; Maximum value of SAR (measured) = 1.08 mW/g

Date/Time: 7/6/2012 3:51:15 PM

Test Laboratory: Motorola Mobility - CDMA 1900 Mobile Hotspot**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-Adjacent), Bottom Edge of Phone 10 mm from Phantom

Communication System: _CDMA; Frequency: 1908.75 MHz; Channel Number: 1175; Duty Cycle: 1:1

Medium: Regular Glycol Body 1750/1880

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(4.69, 4.69, 4.69); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

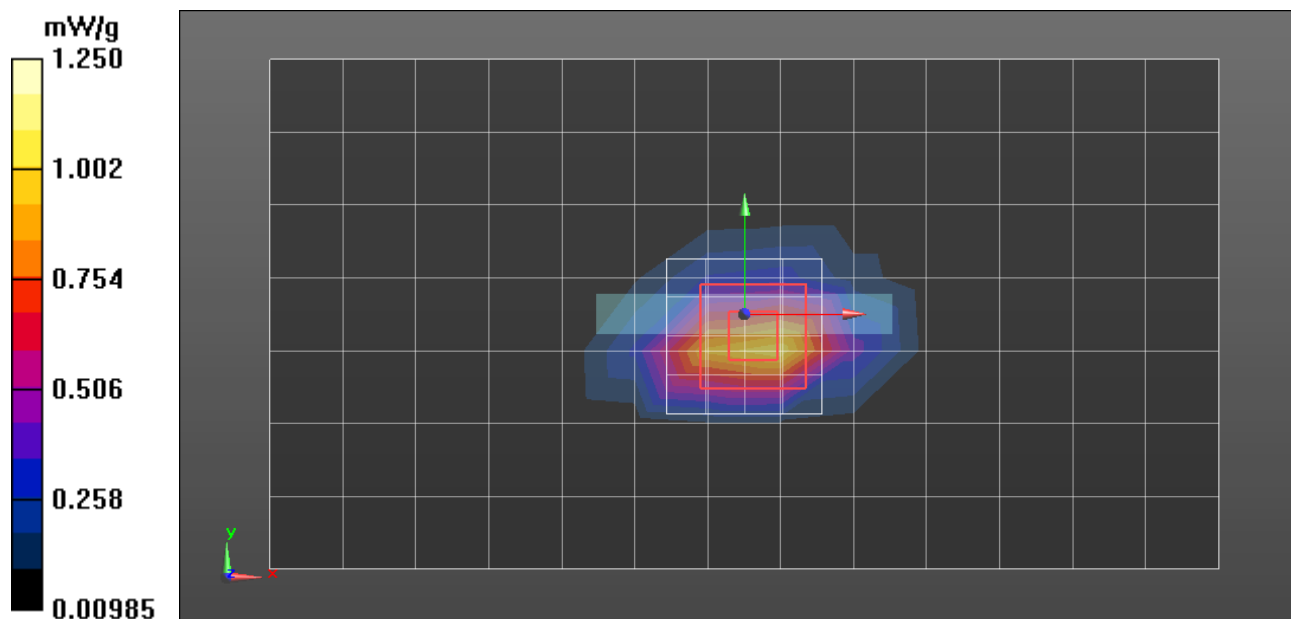
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 1.08 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.362 V/m; Power Drift = 0.11 dB; Peak SAR (extrapolated) = 2.112 mW/g

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.526 mW/g; Maximum value of SAR (measured) = 1.25 mW/g

Date/Time: 7/13/2012 8:53:18 PM

Test Laboratory: Motorola Mobility - Wi-Fi 2.4 GHz Mobile Hotspot**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-adjacent), Back of Phone 10 mm from Phantom

Device Mode: 802.11b mode, 1 Mbps data rate

Communication System: _Wi-Fi 2450MHz; Frequency: 2412 MHz; Channel Number: 1; Duty Cycle: 1:1

Medium: 2450 Triton Body

Medium parameters used: $f = 2450$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(4.56, 4.56, 4.56); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

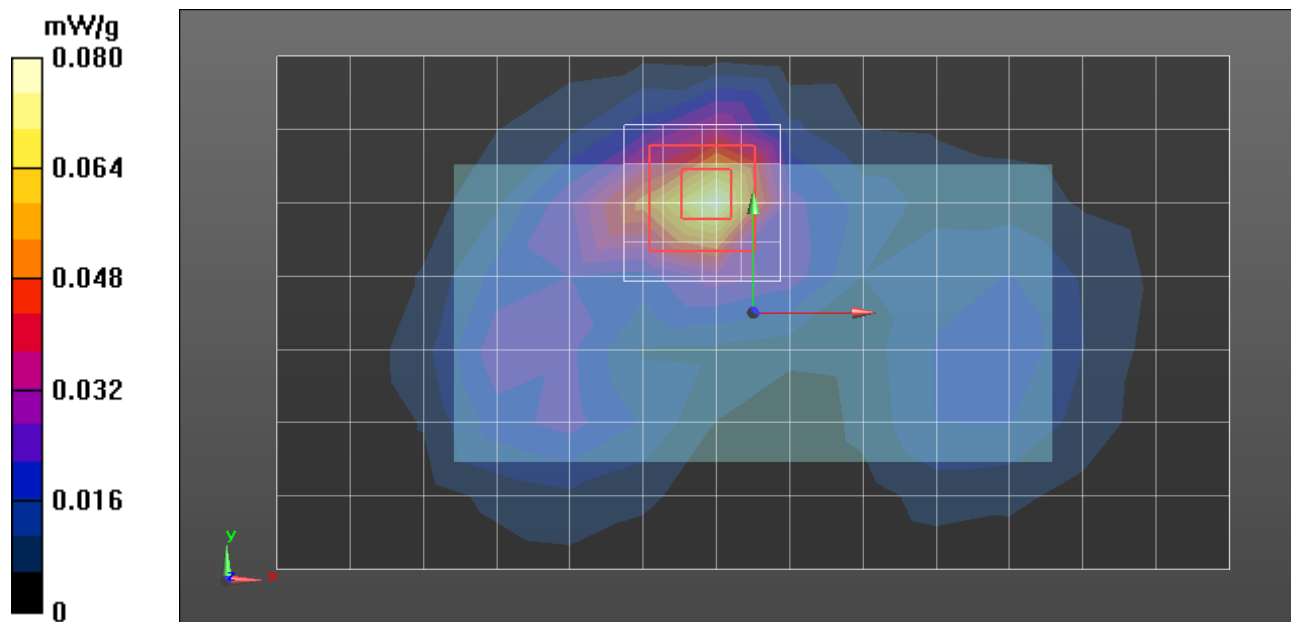
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.0793 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.487 V/m; Power Drift = -0.08 dB; Peak SAR (extrapolated) = 0.153 mW/g

SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.035 mW/g; Maximum value of SAR (measured) = 0.0796 mW/g

Date/Time: 7/14/2012 1:50:07 PM

Test Laboratory: Motorola Mobility - Wi-Fi 5.8 GHz Mobile Hotspot**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-Adjacent), Back of Phone 10 mm from Phantom

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5825 MHz; Channel Number: 165; Duty Cycle: 1:1

Medium: 5.785 GHz BODY

Medium parameters used: $f = 5785$ MHz; $\sigma = 6.2$ mho/m; $\epsilon_r = 44.7$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

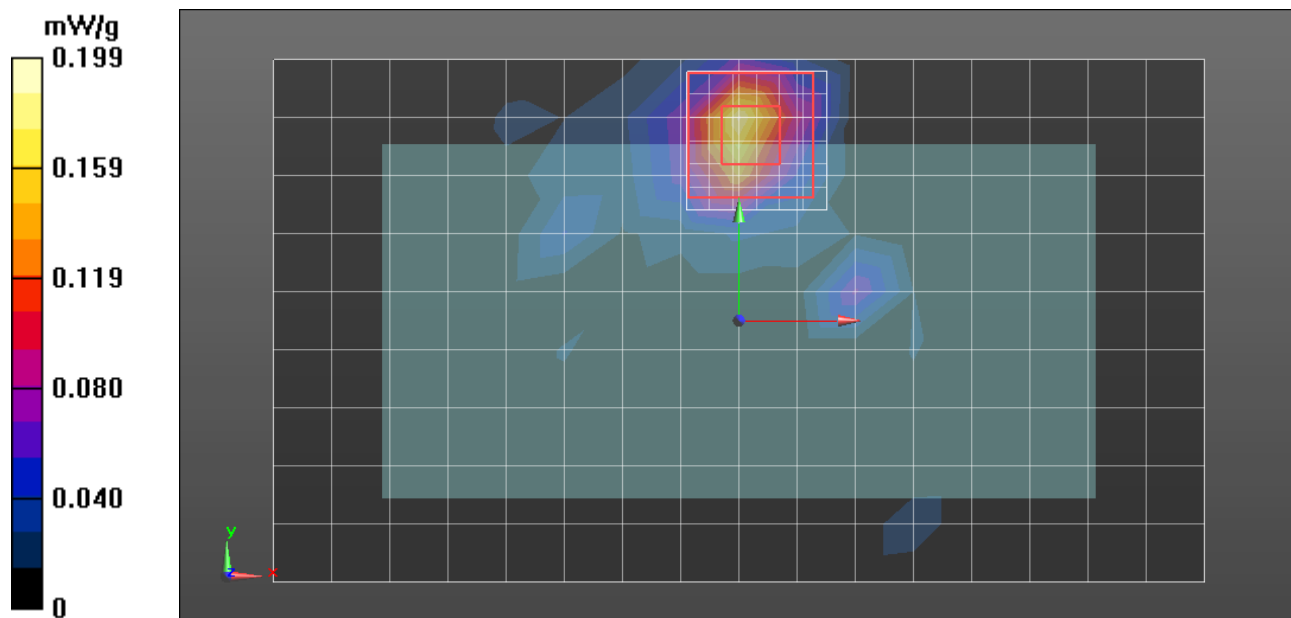
DASY5, TRIPLE Flat Phone Template, Area Scan - Normal Body (10mm) (17x10x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.190 mW/g

DASY5, TRIPLE Flat Phone Template, 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.488 V/m; Power Drift = -0.09 dB; Peak SAR (extrapolated) = 0.337 mW/g

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.027 mW/g; Maximum value of SAR (measured) = 0.199 mW/g

Appendix 5

Measurement Uncertainty Budget

Uncertainty Budget for Device Under Test, for 735 MHz to 3 GHz

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	$e = f(d,k)$	<i>f</i>	<i>g</i>	$h = c \times f / e$	$i = c \times g / e$	<i>k</i>
Uncertainty Component	Description IEEE1528(2003) / IEC62209-1(2005)	Tol. (± %)	Prob Dist	Div.	<i>c_i</i> (1 g)	<i>c_i</i> (10 g)	1 g <i>u_i</i> (±%)	10 g <i>u_i</i> (±%)	<i>v_i</i>
Measurement System									
Probe Calibration [ES3DV3]	E.2.1 / 7.2.1	6.0	N	1.00	1	1	6.0	6.0	∞
Axial Isotropy	E.2.2 / 7.2.1.2	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Hemispherical Isotropy	E.2.2 / 7.2.1.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Boundary Effect	E.2.3 / 7.2.1.5	1.0	R	1.73	1	1	0.6	0.6	∞
Linearity	E.2.4 / 7.2.1.3	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5 / 7.2.1.4	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6 / 7.2.1.6	0.3	N	1.00	1	1	0.3	0.3	∞
Response Time	E.2.7 / 7.2.1.7	1.1	R	1.73	1	1	0.6	0.6	∞
Integration Time	E.2.8 / 7.2.1.8	1.1	R	1.73	1	1	0.6	0.6	∞
RF Ambient Conditions - Noise	E.6.1 / 7.2.3.6	3.0	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1 / 7.2.3.6	3.0	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mech. Tolerance	E.6.2 / 7.2.2.1	0.4	R	1.73	1	1	0.2	0.2	∞
Probe Positioning w.r.t Phantom	E.6.3 / 7.2.2.3	1.4	R	1.73	1	1	0.8	0.8	∞
Max. SAR Evaluation (ext., int., avg.)	E.5 / 7.2.4	3.4	R	1.73	1	1	2.0	2.0	∞
Test sample Related									
Test Sample Positioning	E.4.2 / 7.2.2.4	3.4	N	1.00	1	1	3.4	3.4	79
Device Holder Uncertainty	E.4.1 / 7.2.2.4.2	4.5	N	1.00	1	1	4.5	4.5	11
SAR drift	6.6.2 / 7.2.3.5	0.0	R	1.73	1	1	0.0	0.0	∞
Phantom and Tissue Parameters									
Phantom Uncertainty	E.3.1 / 7.2.2.2	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity (target)	E.3.2 / 7.2.3.3	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Conductivity (measurement)	E.3.3 / 7.2.3.3	2.5	N	1.00	0.64	0.43	1.6	1.1	6
Liquid Permittivity (target)	E.3.2 / 7.2.3.4	5.0	R	1.73	0.6	0.49	1.7	1.4	∞
Liquid Permittivity (measurement)	E.3.2 / 7.2.3.4	2.3	N	1.00	0.6	0.49	1.4	1.1	6
Combined Standard Uncertainty			RSS				11	11	372
Expanded Uncertainty (95% CONFIDENCE LEVEL)			<i>k</i> =2				22	22	

Uncertainty Budget for Device Under Test for 3 to 6 GHz

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	$e = f(d,k)$	<i>f</i>	<i>g</i>	$h = c \times f / e$	$i = c \times g / e$	<i>k</i>
Uncertainty Component	Description IEC62209-2(2010)	Tol. (± %)	Prob Dist	Div.	<i>c_i</i> (1 g)	<i>c_i</i> (10 g)	1 g <i>u_i</i> (±%)	10 g <i>u_i</i> (±%)	<i>v_i</i>
Measurement System									
Probe Calibration [EX3DV4]	7.2.2.1	6.6	N	1.00	1	1	6.6	6.6	∞
Axial Isotropy	7.2.2.2	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Hemispherical Isotropy	7.2.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Boundary Effect	7.2.2.6	2.0	R	1.73	1	1	1.2	1.2	∞
Linearity	7.2.2.5	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	7.2.2	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	7.2.2.7	0.3	N	1.00	1	1	0.3	0.3	∞
Response Time	7.2.2.8	1.1	R	1.73	1	1	0.6	0.6	∞
Integration Time	7.2.2.9	1.1	R	1.73	1	1	0.6	0.6	∞
RF Ambient Conditions - Noise	7.2.4.5	3.0	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	7.2.4.5	3.0	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mech. Tolerance	7.2.3.1	1.0	R	1.73	1	1	0.6	0.6	∞
Probe Positioning w.r.t Phantom	7.2.3.3	4.0	R	1.73	1	1	2.3	2.3	∞
Max. SAR Evaluation (ext., int., avg.)	7.2.5.3	4.0	R	1.73	1	1	2.3	2.3	∞
Test sample Related									
Test Sample Positioning	7.2.3.4	3.4	N	1.00	1	1	3.4	3.4	79
Device Holder Uncertainty	7.2.3.4	4.5	N	1.00	1	1	4.5	4.5	11
SAR drift	7.2.2.10	0.0	R	1.73	1	1	0.0	0.0	∞
Phantom and Tissue Parameters									
Phantom Uncertainty	7.2.3.2	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity (target)		5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Conductivity (measurement)	7.2.4.3	3.4	N	1.00	0.64	0.43	2.2	1.5	6
Liquid Permittivity (target)		10.0	R	1.73	0.6	0.49	3.5	2.8	∞
Liquid Permittivity (measurement)	7.2.4.3	2.6	N	1.00	0.6	0.49	1.6	1.3	6
Combined Standard Uncertainty									
			RSS				12	12	508
Expanded Uncertainty (95% CONFIDENCE LEVEL)									
			<i>k</i> =2				24	24	