

Plot 1: 802.11b, 2412MHz, Main Antenna, Secondary Landscape

Date/Time: 1/27/2011 2:27:46 PM, Date/Time: 1/27/2011 2:39:42 PM

DUT: Broadcom 43224HMS; Type: Laptop/Tablet; Serial: ABC041002Z

Communication System: IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps); Frequency: 2436 MHz

Medium parameters used (interpolated): $f = 2436$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24);
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0;

Flat-Section MSL Landscape/Flat Section 0mm b mode Main Antenna Ch1/Area Scan (6x21x1):Measurement grid: $dx=12$ mm, $dy=12$ mmInfo: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.965 mW/g

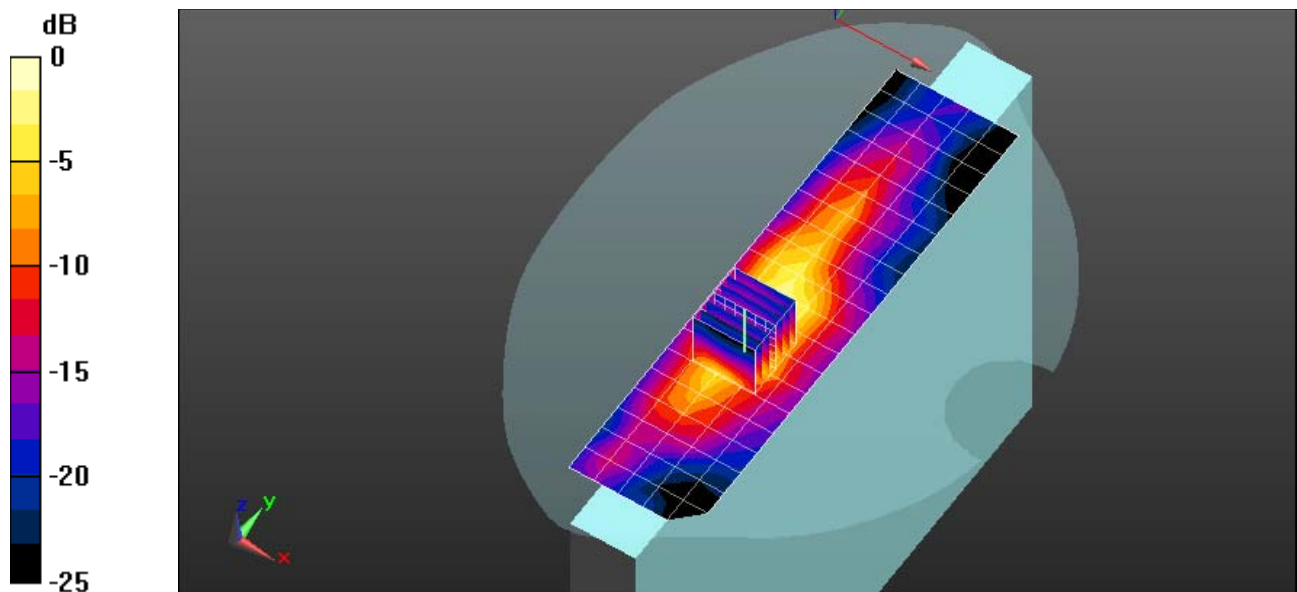
Flat-Section MSL Landscape/Flat Section 0mm b mode Main Antenna Ch1/Zoom Scan (7x7x7)/Cube0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 15 V/m; Power Drift = 0.204 dB

Peak SAR (extrapolated) = 2.41 W/kg

SAR(1 g) = 0.991 mW/g; SAR(10 g) = 0.422 mW/gInfo: [Interpolated medium parameters used for SAR evaluation.](#)

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



Plot 2: 802.11b, 2437MHz, Main Antenna, Secondary Landscape

Date/Time: 1/26/2011 4:51:30 PM, Date/Time: 1/26/2011 5:03:26 PM

DUT: Broadcom 43224HMS; Type: Laptop/Tablet; Serial: ABC041002Z

Communication System: IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps); Frequency: 2436 MHz

Medium parameters used (interpolated): $f = 2436$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24);
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0;

Flat-Section MSL Landscape/Flat Section 0mm b mode Main Antenna/Area Scan (6x21x1):

Measurement grid: dx=12mm, dy=12mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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

Flat-Section MSL Landscape/Flat Section 0mm b mode Main Antenna/Zoom Scan (7x7x7)/Cube 0:

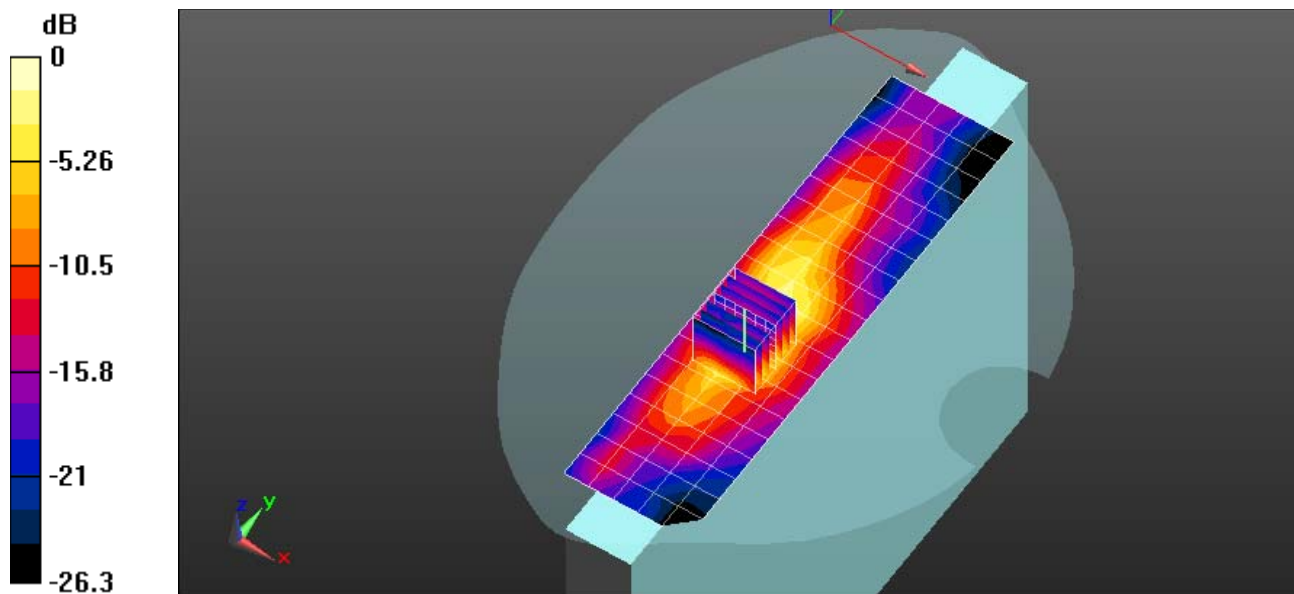
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.8 V/m; Power Drift = 0.195 dB

Peak SAR (extrapolated) = 2.9 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.516 mW/g[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.38 mW/g



0 dB = 1.38mW/g

Plot 3: 802.11b, 2462MHz, Main Antenna, Secondary Landscape

Date/Time: 1/27/2011 2:56:57 PM, Date/Time: 1/27/2011 3:08:53 PM

DUT: Broadcom 43224HMS; Type: Laptop/Tablet; Serial: ABC041002Z

Communication System: IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps); Frequency: 2436 MHz

Medium parameters used (interpolated): $f = 2436$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24);
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0;

Flat-Section MSL Landscape/Flat Section 0mm b mode Main Antenna Ch11/Area Scan (6x21x1):Measurement grid: $dx=12$ mm, $dy=12$ mmInfo: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.01 mW/g

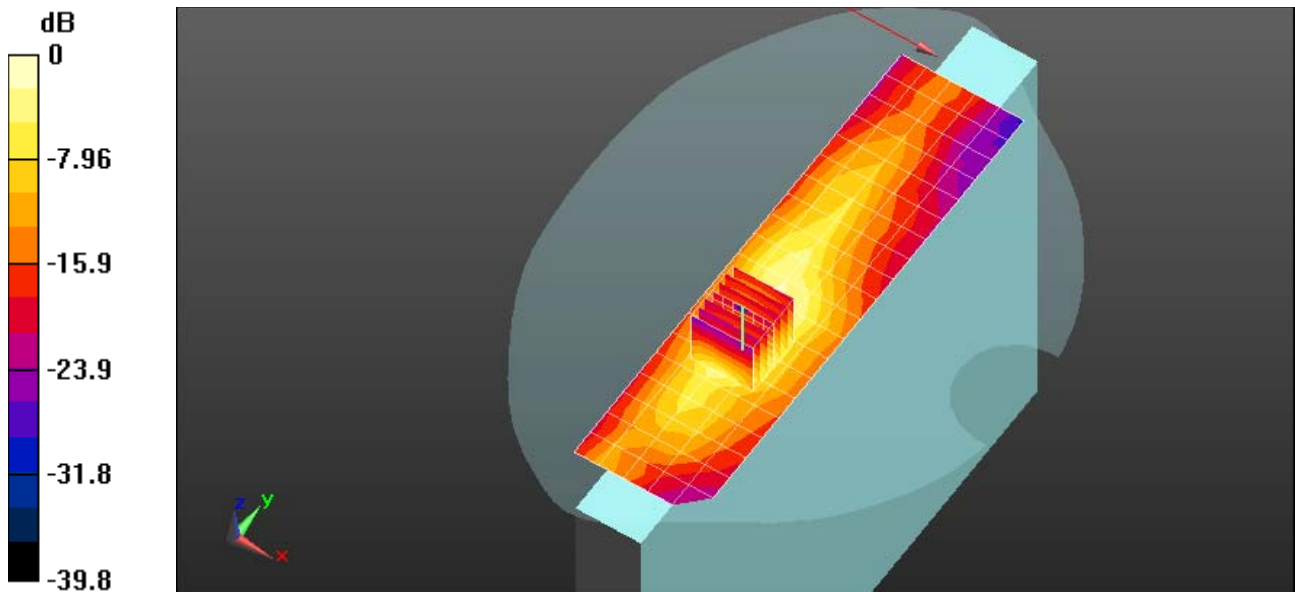
Flat-Section MSL Landscape/Flat Section 0mm b mode Main Antenna Ch11/Zoom Scan(7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 12.4 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 2.72 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.476 mW/gInfo: [Interpolated medium parameters used for SAR evaluation.](#)

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



Plot 4: 802.11g, 2437MHz, Auxiliary Antenna, Secondary Landscape

Date/Time: 1/27/2011 3:25:42 PM, Date/Time: 1/27/2011 3:38:52 PM

DUT: Broadcom 43224HMS; Type: Laptop/Tablet; Serial: ABC041002Z

Communication System: IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps); Frequency: 2436 MHz

Medium parameters used (interpolated): $f = 2436$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24);
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0;

Flat-Section MSL Landscape/Flat Section 0mm g mode Aux Antenna/Area**Scan (6x26x1):** Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.644 mW/g

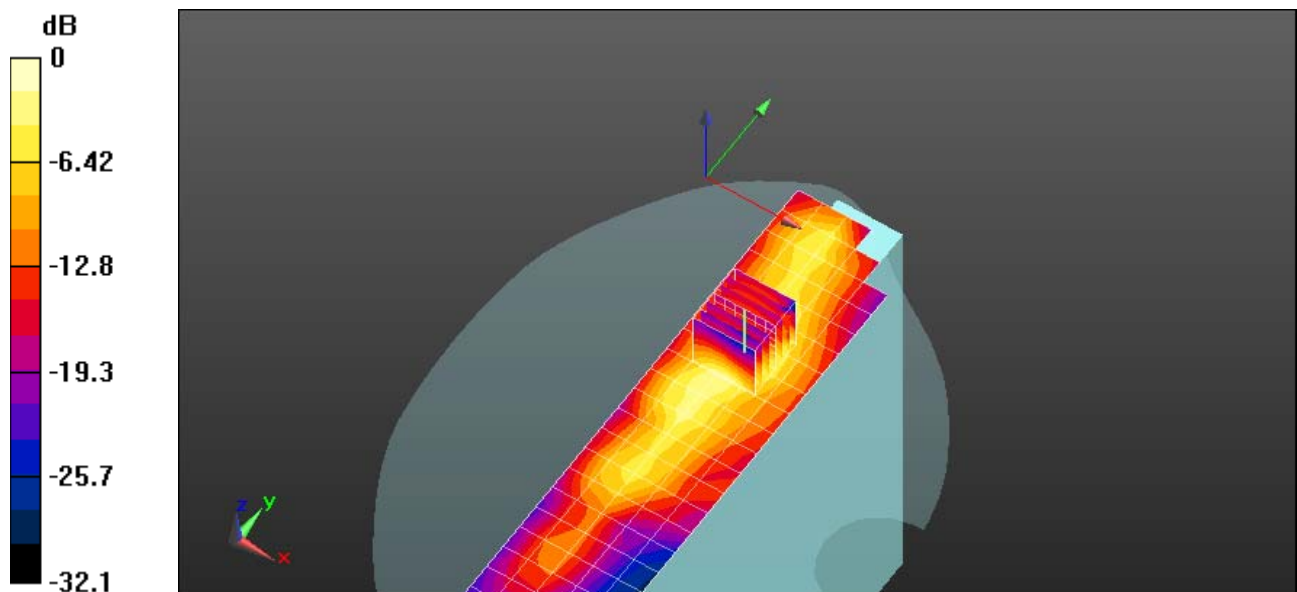
Flat-Section MSL Landscape/Flat Section 0mm g mode Aux**Antenna/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.99 V/m; Power Drift = 0.081 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.617 mW/g; SAR(10 g) = 0.288 mW/g[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.694 mW/g



0 dB = 0.694mW/g

Plot 5: 802.11b, 2437MHz, Main Antenna, Screen Outside Face

Date/Time: 1/27/2011 4:27:50 PM, Date/Time: 1/27/2011 4:40:59 PM

DUT: Broadcom 43224HMS; Type: Laptop/Tablet; Serial: ABC041002Z

Communication System: IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps); Frequency: 2436 MHz

Medium parameters used (interpolated): $f = 2436$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24);
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0;

Flat-Section MSL Bystander/Flat Section 25mm Top/Front Lid b mode**Main Ant/Area Scan (6x26x1):** Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.173 mW/g

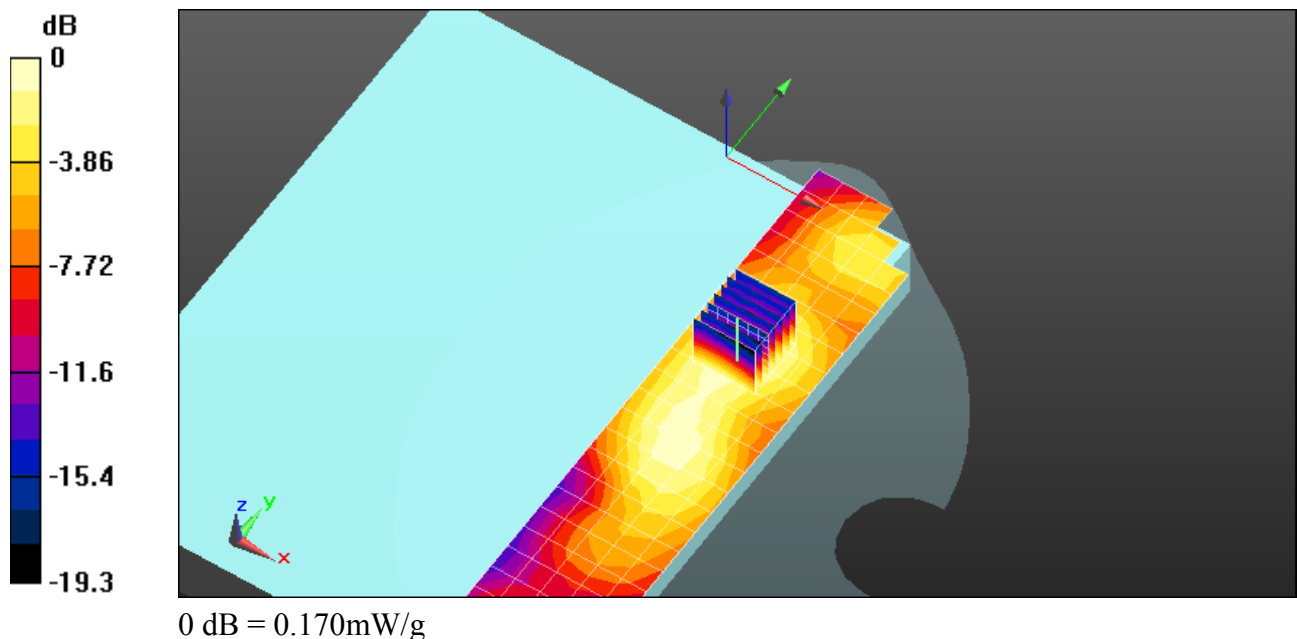
Flat-Section MSL Bystander/Flat Section 25mm Top/Front Lid b mode**Main Ant/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.13 V/m; Power Drift = 0.132 dB

Peak SAR (extrapolated) = 0.311 W/kg

SAR(1 g) = 0.159 mW/g; SAR(10 g) = 0.089 mW/g[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.170 mW/g



Plot 6: 802.11g, 2437MHz, Auxiliary Antenna, Screen Outside Face

Date/Time: 1/27/2011 3:56:17 PM, Date/Time: 1/27/2011 4:09:30 PM

DUT: Broadcom 43224HMS; Type: Laptop/Tablet; Serial: ABC041002Z

Communication System: IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps); Frequency: 2436 MHz

Medium parameters used (interpolated): $f = 2436$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24);
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0;

Flat-Section MSL Bystander/Flat Section 25mm Top/FRont Lid g mode**Aux Ant/Area Scan (6x26x1):** Measurement grid: dx=12mm, dy=12mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.129 mW/g

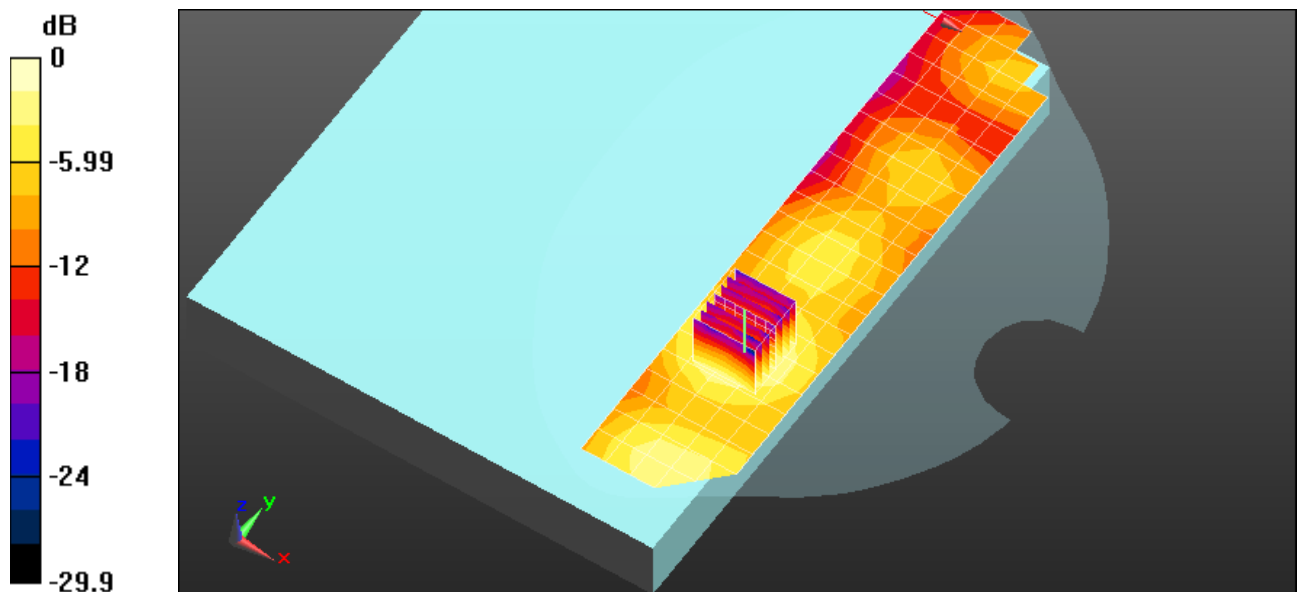
Flat-Section MSL Bystander/Flat Section 25mm Top/FRont Lid g mode**Aux Ant/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.28 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.268 W/kg

SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.073 mW/g[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.149 mW/g



0 dB = 0.149mW/g

Plot 7: 2450MHz Dipole Verification – 2011/01/26

Date/Time: 1/26/2011 10:30:05 AM

Test Laboratory: Cetecom Inc.

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:859

Communication System: CW; Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 50.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24); Calibrated: 10/13/2010
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0; Postprocessing SW: SEMCAD X, V14.2 Build 2Version 14.2.2 (1685) (Deployment Build)

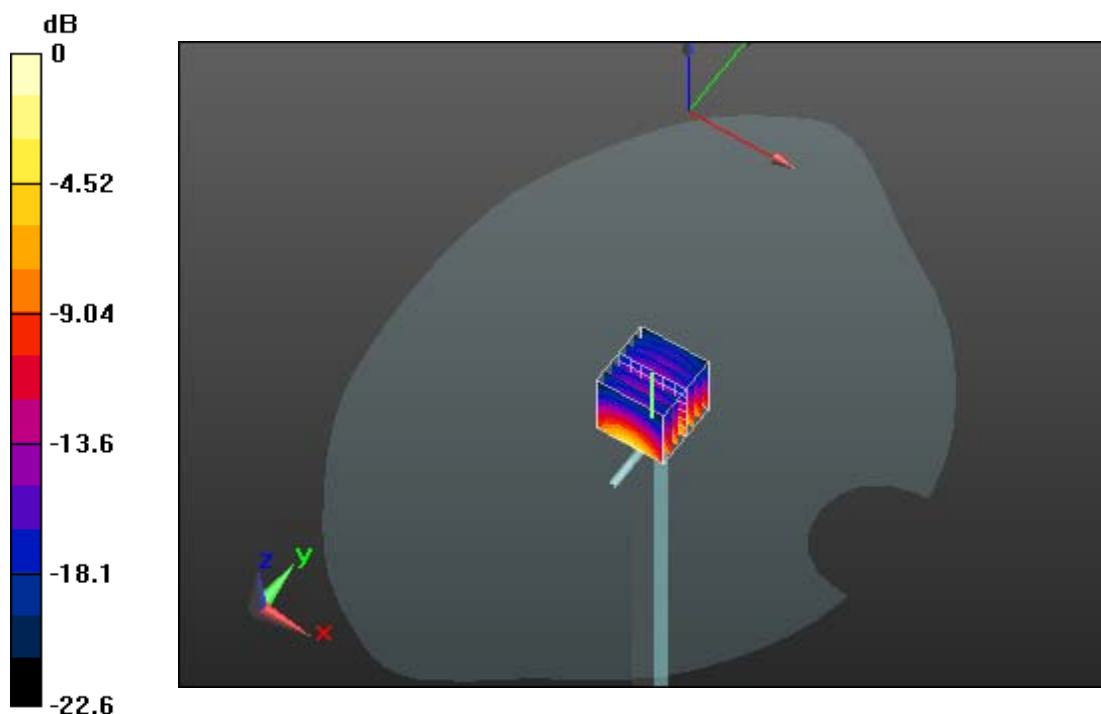
System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 190.6 V/m; Power Drift = -0.034 dB

Peak SAR (extrapolated) = 115.8 W/kg

SAR(1 g) = 53.4 mW/g; SAR(10 g) = 23.8 mW/g

Maximum value of SAR (measured) = 71.4 mW/g



0 dB = 71.4mW/g

Plot 8: 2450MHz Dipole Verification – 2011/01/27

Date/Time: 1/27/2011 1:52:20 PM, Date/Time: 1/27/2011 1:57:18 PM

DUT: Dipole 2450 MHz D2450V2; Serial: D2450V2 - SN:859

Communication System: CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 50.7$; $\rho = 1000$ kg/m³

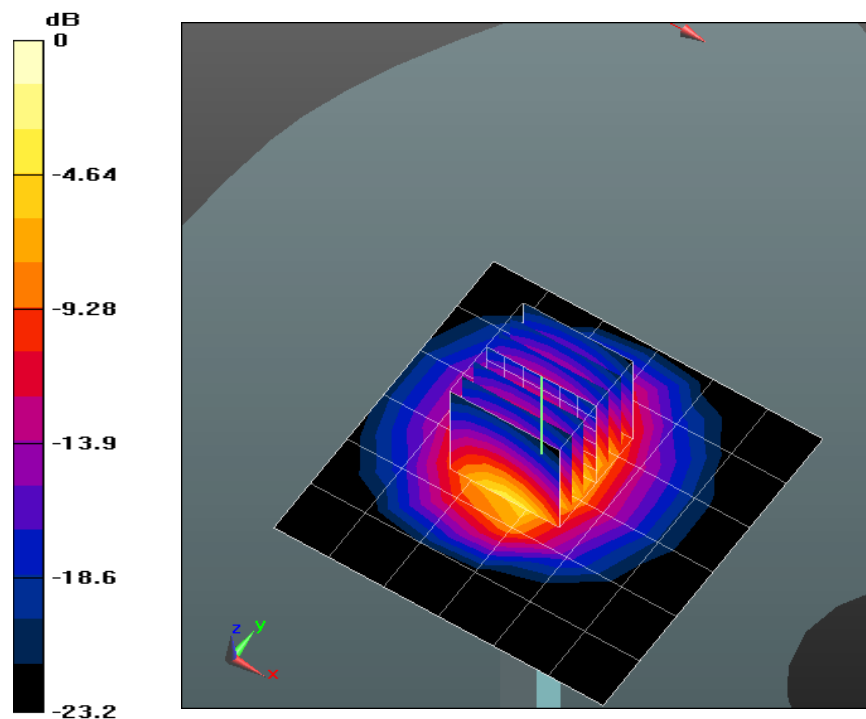
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3244; ConvF(4.24, 4.24, 4.24);
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1233; Calibrated: 10/13/2010
- Phantom: SAM; Type: QD 000 P40 CC; Serial: 1592
- Measurement SW: DASY52, V52.2 Build 0;

System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe)/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 47 mW/g

System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 182.3 V/m; Power Drift = -0.050 dB
Peak SAR (extrapolated) = 114.2 W/kg
SAR(1 g) = 53.1 mW/g; SAR(10 g) = 23.8 mW/g
Maximum value of SAR (measured) = 69.5 mW/g



0 dB = 69.5mW/g