



**Appendix A. System Check Plots**

<b>Table of contents</b>
SystemPerformanceCheck-D835-EX-Head
SystemPerformanceCheck- D835-EX-Body
SystemPerformanceCheck-D1800- EX-Head
SystemPerformanceCheck-D1800-EX- Body
SystemPerformanceCheck-D1900- EX-Head
SystemPerformanceCheck-D1900-EX- Body
SystemPerformanceCheck-D2450-EX-Head
SystemPerformanceCheck-D2450-EX-Body

Test Laboratory: HUAWEI SAR Lab

**SystemPerformanceCheck-D835-EX-Head****DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d126**

Communication System: CW; Frequency: 835 MHz

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.916$  mho/m;  $\epsilon_r = 41.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(9.46, 9.46, 9.46); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = -9.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM 2; Type: SAM; Serial: TP-1474
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=15mm,pin=250mW/Area Scan (6x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 2.62 mW/g

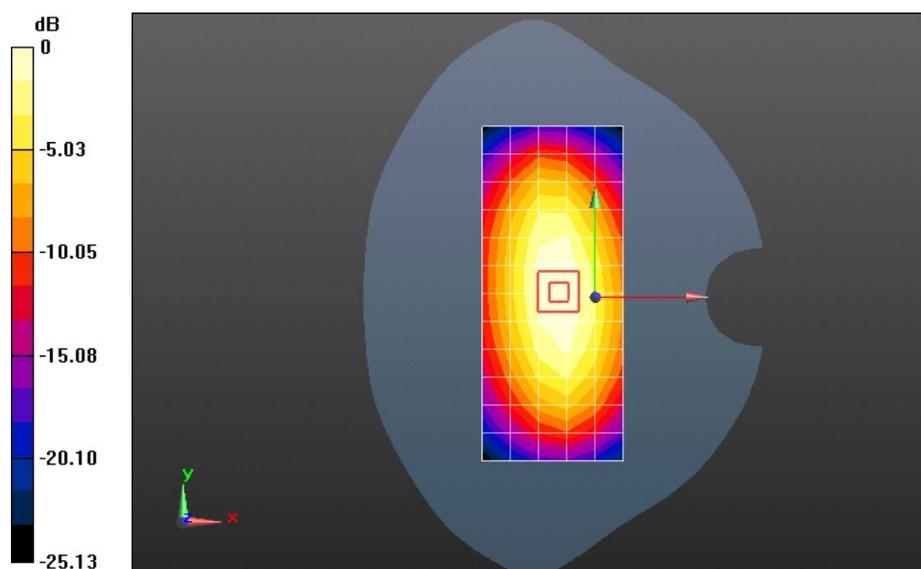
**Configuration/d=15mm,pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 54.589 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.727 mW/g

**SAR(1 g) = 2.5 mW/g; SAR(10 g) = 1.63 mW/g**

Maximum value of SAR (measured) = 2.70 mW/g



0 dB = 2.62 mW/g = 8.35 dB mW/g

Test Laboratory: HUAWEI SAR Lab

**SystemPerformanceCheck-D835-EX-Body****DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d126**

Communication System: CW; Frequency: 835 MHz

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.971$  mho/m;  $\epsilon_r = 52.834$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(9.64, 9.64, 9.64); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = -9.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM 2; Type: SAM; Serial: TP-1474
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=15mm,pin=250mW/Area Scan (6x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 2.61 mW/g

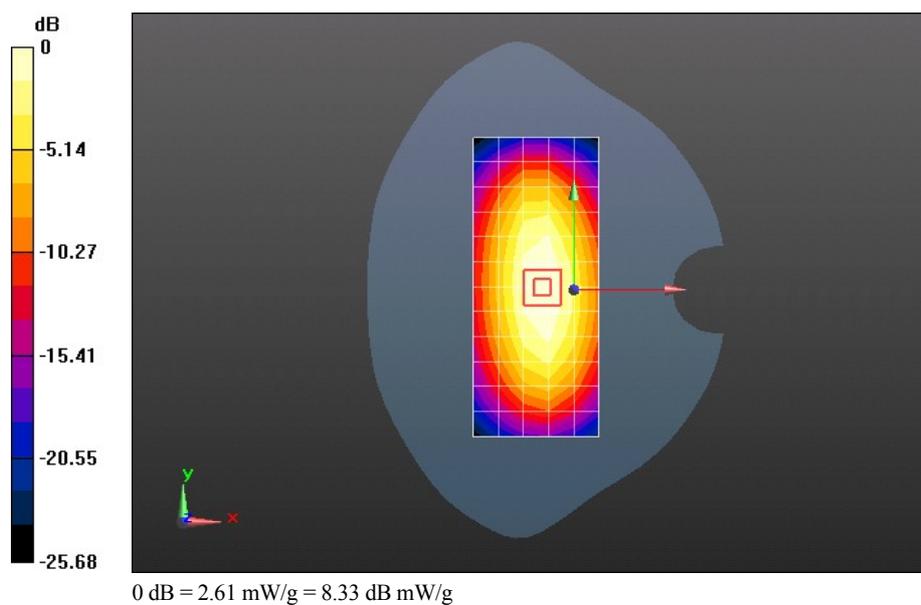
**Configuration/d=15mm,pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 52.993 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.700 mW/g

**SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.64 mW/g**

Maximum value of SAR (measured) = 2.72 mW/g



Test Laboratory: HUAWEI SAR Lab

**SystemPerformanceCheck-D1800-EX-Head****DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d184**

Communication System: CW; Frequency: 1800 MHz

Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.438$  mho/m;  $\epsilon_r = 40.456$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(8.64, 8.64, 8.64); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM 2; Type: SAM; Serial: TP-1474
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=10mm, Pin=250mW/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.73 mW/g

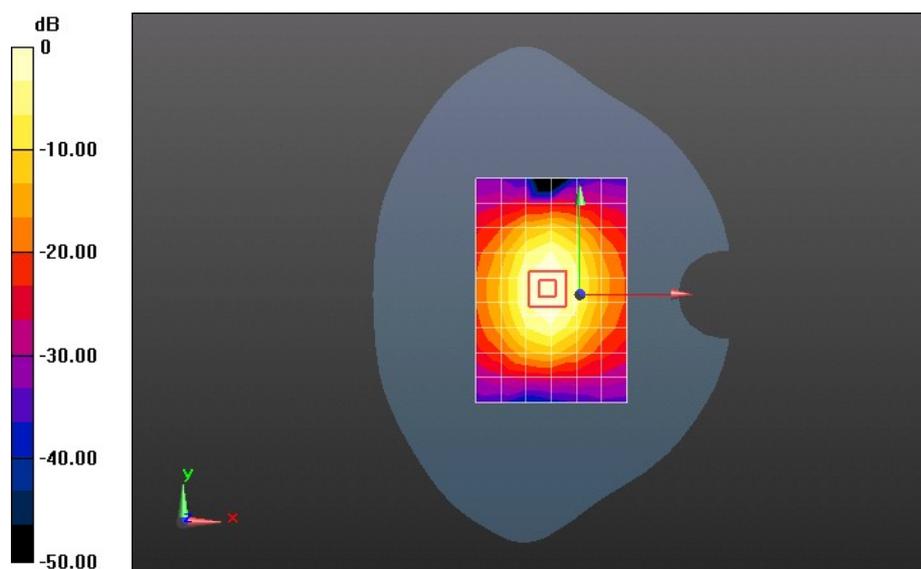
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.163 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 18.941 mW/g

**SAR(1 g) = 9.97 mW/g; SAR(10 g) = 5.16 mW/g**

Maximum value of SAR (measured) = 11.2 mW/g



0 dB = 9.73 mW/g = 19.76 dB mW/g

Test Laboratory: HUAWEI SAR Lab

## SystemPerformanceCheck-D1800-EX-Body

**DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d184**

Communication System: CW; Frequency: 1800 MHz

Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.541$  mho/m;  $\epsilon_r = 52.781$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(8.39, 8.39, 8.39); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM 2; Type: SAM; Serial: TP-1474
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=10mm, Pin=250mW/Area Scan (7x10x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 9.95 mW/g

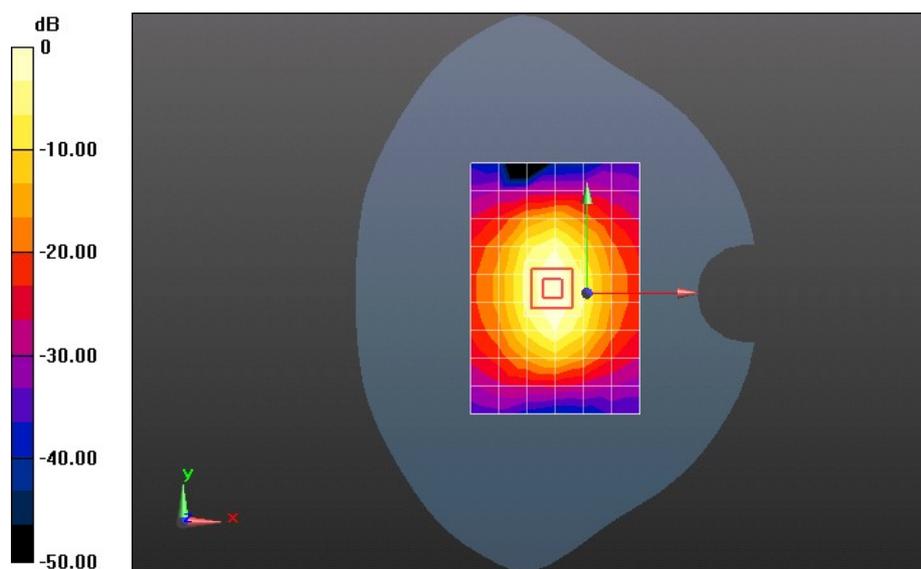
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 83.267 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 18.946 mW/g

**SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.25 mW/g**

Maximum value of SAR (measured) = 11.5 mW/g



0 dB = 9.95 mW/g = 19.96 dB mW/g

Test Laboratory: HUAWEI SAR Lab

**SystemPerformanceCheck-D1900-EX-Head****DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d143**

Communication System: CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.409$  mho/m;  $\epsilon_r = 39.334$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(8.33, 8.33, 8.33); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=10mm, Pin=250mW/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 8.80 mW/g

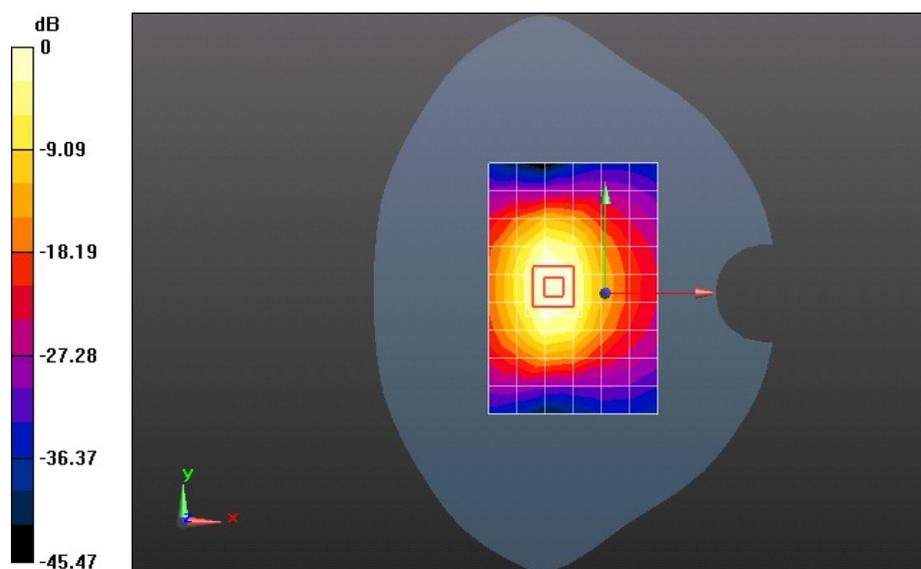
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 62.180 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 17.853 mW/g

**SAR(1 g) = 9.25 mW/g; SAR(10 g) = 4.71 mW/g**

Maximum value of SAR (measured) = 10.4 mW/g



0 dB = 8.80 mW/g = 18.89 dB mW/g

Test Laboratory: HUAWEI SAR Lab

### SystemPerformanceCheck-D1900-EX-Body

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d143**

Communication System: CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.577$  mho/m;  $\epsilon_r = 51.54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(7.89, 7.89, 7.89); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=10mm, Pin=250mW/Area Scan (7x10x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 11.1 mW/g

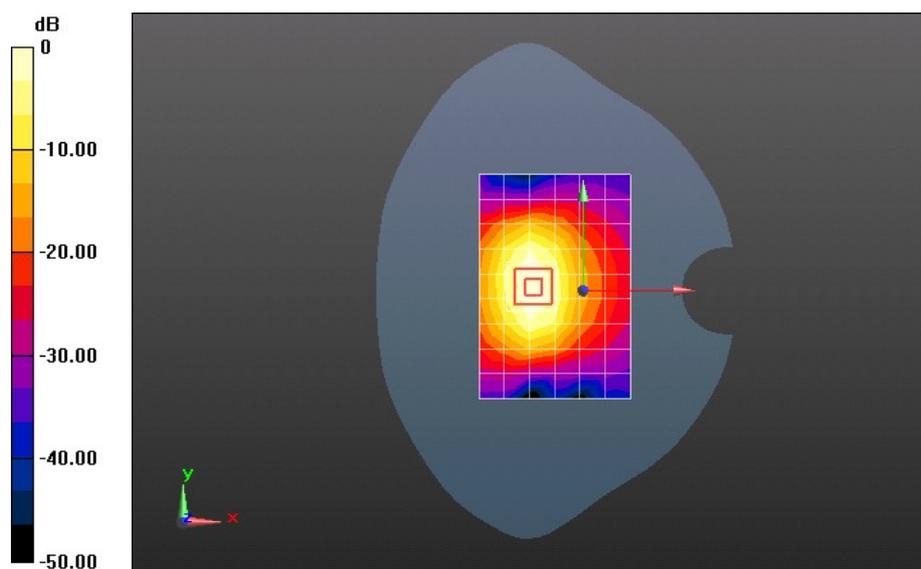
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 54.303 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 20.894 mW/g

**SAR(1 g) = 10.9 mW/g; SAR(10 g) = 5.5 mW/g**

Maximum value of SAR (measured) = 12.3 mW/g



0 dB = 11.1 mW/g = 20.90 dB mW/g

Test Laboratory: HUAWEI SAR Lab

### SystemPerformanceCheck-D2450-EX-Head

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:860**

Communication System: CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.832$  mho/m;  $\epsilon_r = 38.385$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(7.48, 7.48, 7.48); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM 2; Type: SAM; Serial: TP-1474
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 12.8 mW/g

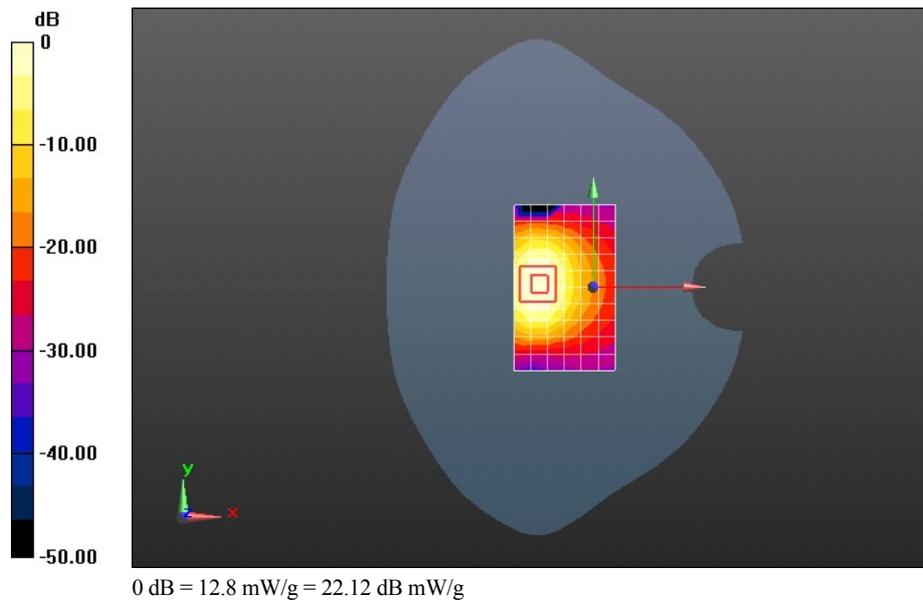
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 41.591 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 29.815 mW/g

**SAR(1 g) = 13.1 mW/g; SAR(10 g) = 5.87 mW/g**

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



Test Laboratory: HUAWEI SAR Lab

**SystemPerformanceCheck-D2450-EX-Body****DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:860**

Communication System: CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.009$  mho/m;  $\epsilon_r = 52.182$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3661; ConvF(7.5, 7.5, 7.5); Calibrated: 1/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn679; Calibrated: 12/23/2011
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

**Configuration/d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 13.8 mW/g

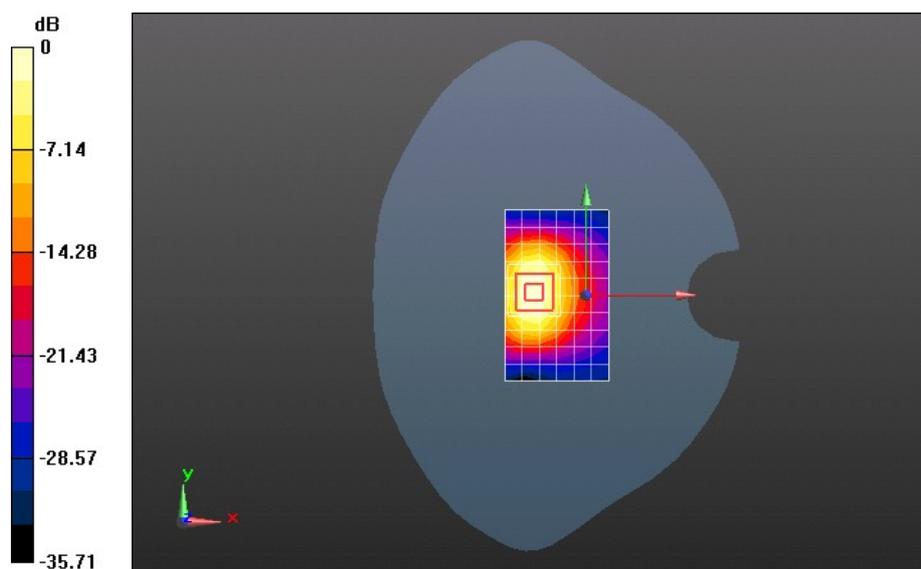
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.201 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 32.016 mW/g

**SAR(1 g) = 13.8 mW/g; SAR(10 g) = 6.17 mW/g**

Maximum value of SAR (measured) = 15.1 mW/g



0 dB = 13.8 mW/g = 22.82 dB mW/g