



## ***Appendix A. Plots of System Performance Check***

The plots are shown as follows.

## System Check\_Body\_835MHz\_130206

### DUT: D835V2-SN:499

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL\_850\_130206 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 52.69$ ;  $\rho =$

$1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(6.08, 6.08, 6.08); Calibrated: 2012/5/29;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2012/4/23
- Phantom: ELI v5.0 Left; Type: QDOVA002AA; Serial: TP:1131
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 2.62 mW/g

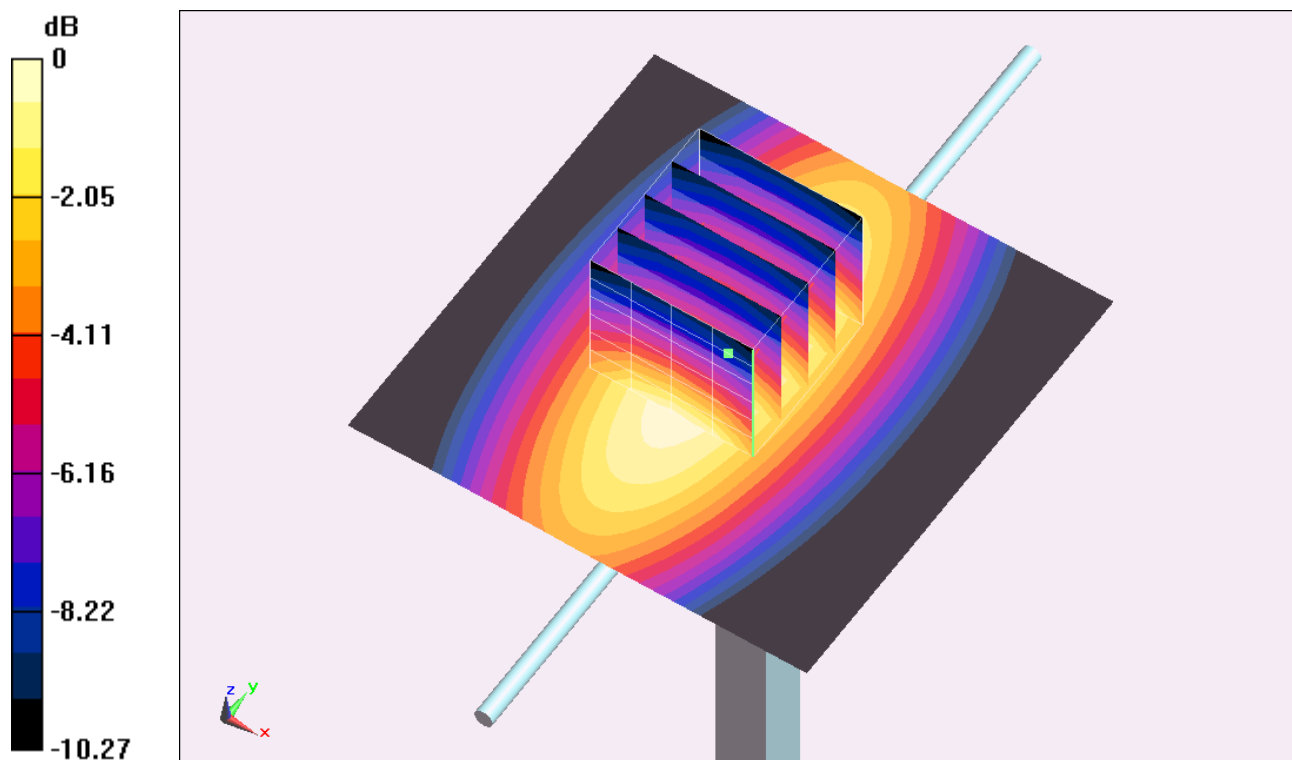
**Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.202 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.464 mW/g

**SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.61 mW/g**

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



0 dB = 2.62 mW/g = 8.37 dB mW/g

## System Check\_Body\_835MHz\_130209

**DUT: D835V2-SN:499**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL\_850\_130209 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.963 \text{ mho/m}$ ;  $\epsilon_r = 54.544$ ;  $\rho =$

$1000 \text{ kg/m}^3$

Ambient Temperature :  $22.4 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $21.4 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(6.08, 6.08, 6.08); Calibrated: 2012/5/29;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2012/4/23
- Phantom: ELI v5.0 Left; Type: QDOVA002AA; Serial: TP:1131
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $2.71 \text{ mW/g}$

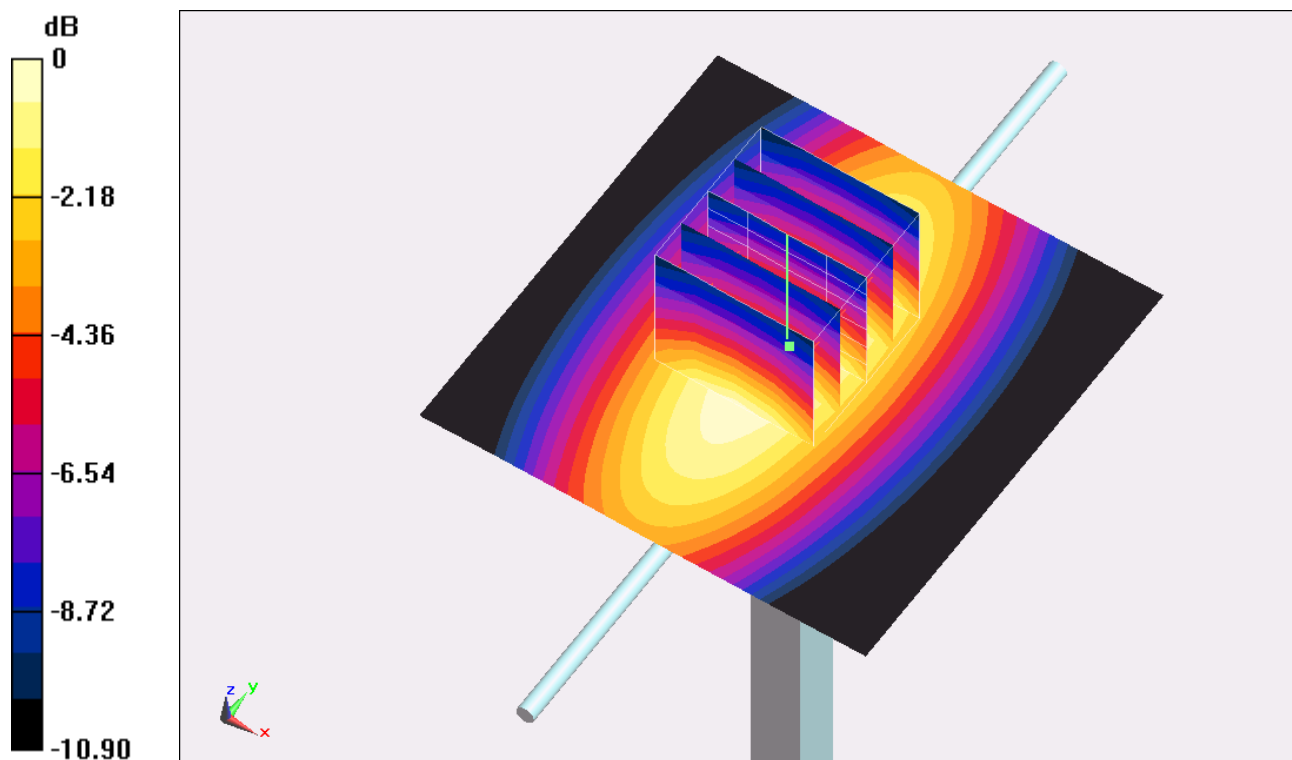
**Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  
 $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $55.138 \text{ V/m}$ ; Power Drift =  $0.00 \text{ dB}$

Peak SAR (extrapolated) =  $3.546 \text{ mW/g}$

**SAR(1 g) =  $2.5 \text{ mW/g}$ ; SAR(10 g) =  $1.66 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.70 \text{ mW/g}$



0 dB =  $2.70 \text{ mW/g} = 8.63 \text{ dB mW/g}$

## System Check\_Body\_835MHz\_130213

**DUT: D835V2-SN:499**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL\_850\_130213 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.953 \text{ mho/m}$ ;  $\epsilon_r = 52.72$ ;  $\rho =$

$1000 \text{ kg/m}^3$

Ambient Temperature :  $22.7 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $21.7 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(6.08, 6.08, 6.08); Calibrated: 2012/5/29;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2012/4/23
- Phantom: ELI v5.0 Left; Type: QDOVA002AA; Serial: TP:1131
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $2.76 \text{ mW/g}$

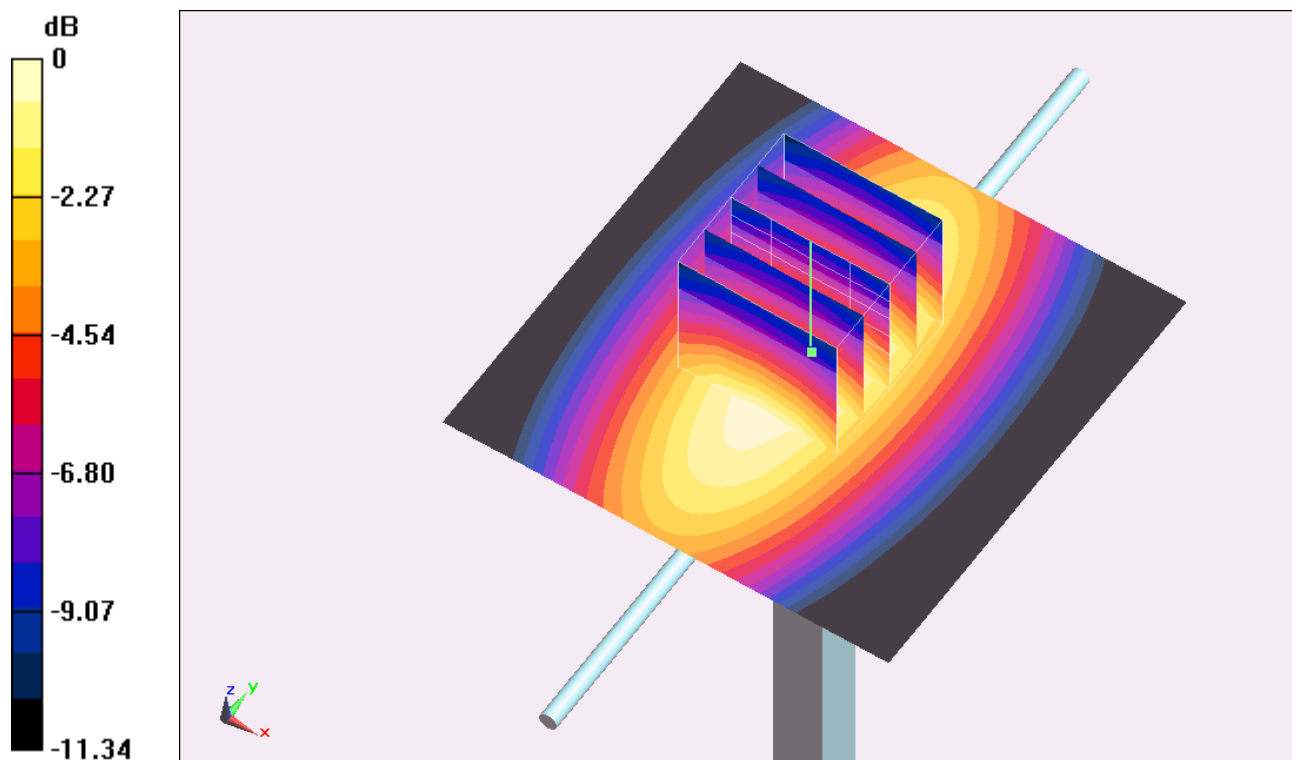
**Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  
 $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $55.460 \text{ V/m}$ ; Power Drift =  $0.04 \text{ dB}$

Peak SAR (extrapolated) =  $3.633 \text{ mW/g}$

**SAR(1 g) =  $2.55 \text{ mW/g}$ ; SAR(10 g) =  $1.69 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.75 \text{ mW/g}$



0 dB =  $2.75 \text{ mW/g} = 8.79 \text{ dB mW/g}$

## System Check\_Body\_1750MHz\_130220

### DUT: D1750V2-SN:1068

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: MSL\_1750\_130220 Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.479$  mho/m;  $\epsilon_r = 52.368$ ;  $\rho$

$= 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.6 °C ; Liquid Temperature : 21.6 °C

#### DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.98, 4.98, 4.98); Calibrated: 2012/9/28;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2012/8/27
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

**Configuration/Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 10.4 mW/g

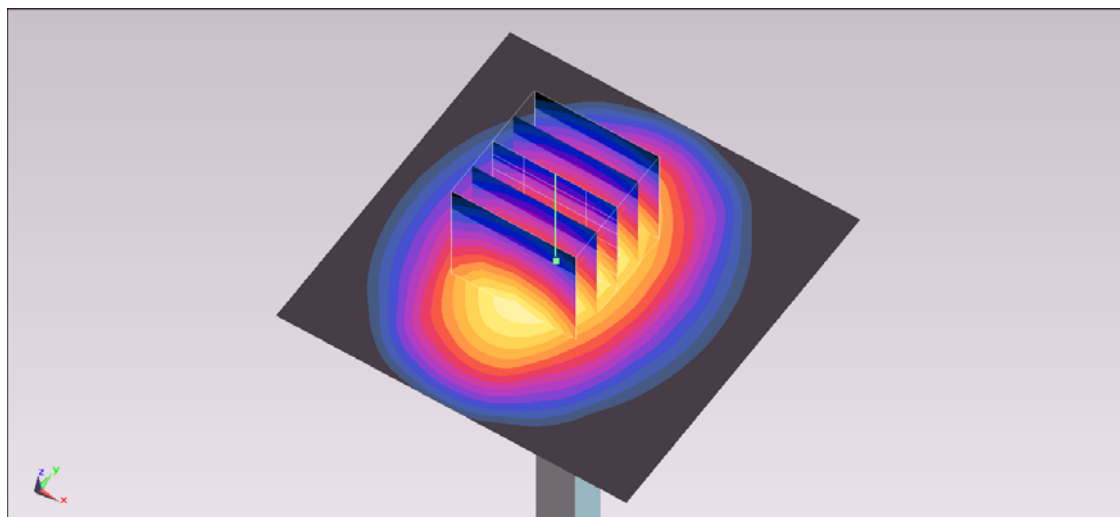
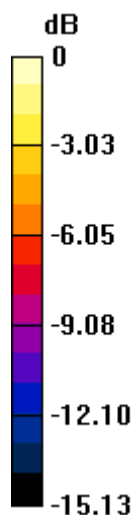
**Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 81.122 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 13.144 mW/g

**SAR(1 g) = 8.59 mW/g; SAR(10 g) = 5 mW/g**

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



0 dB = 10.3 mW/g = 20.26 dB mW/g

## System Check\_Body\_1900MHz\_130206

**DUT: D1900V2-SN:5d041**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_130206 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.503 \text{ mho/m}$ ;  $\epsilon_r = 53.023$ ;  $\rho$

$= 1000 \text{ kg/m}^3$

Ambient Temperature :  $22.6 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/5/29;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2012/4/23
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1127
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $11.0 \text{ mW/g}$

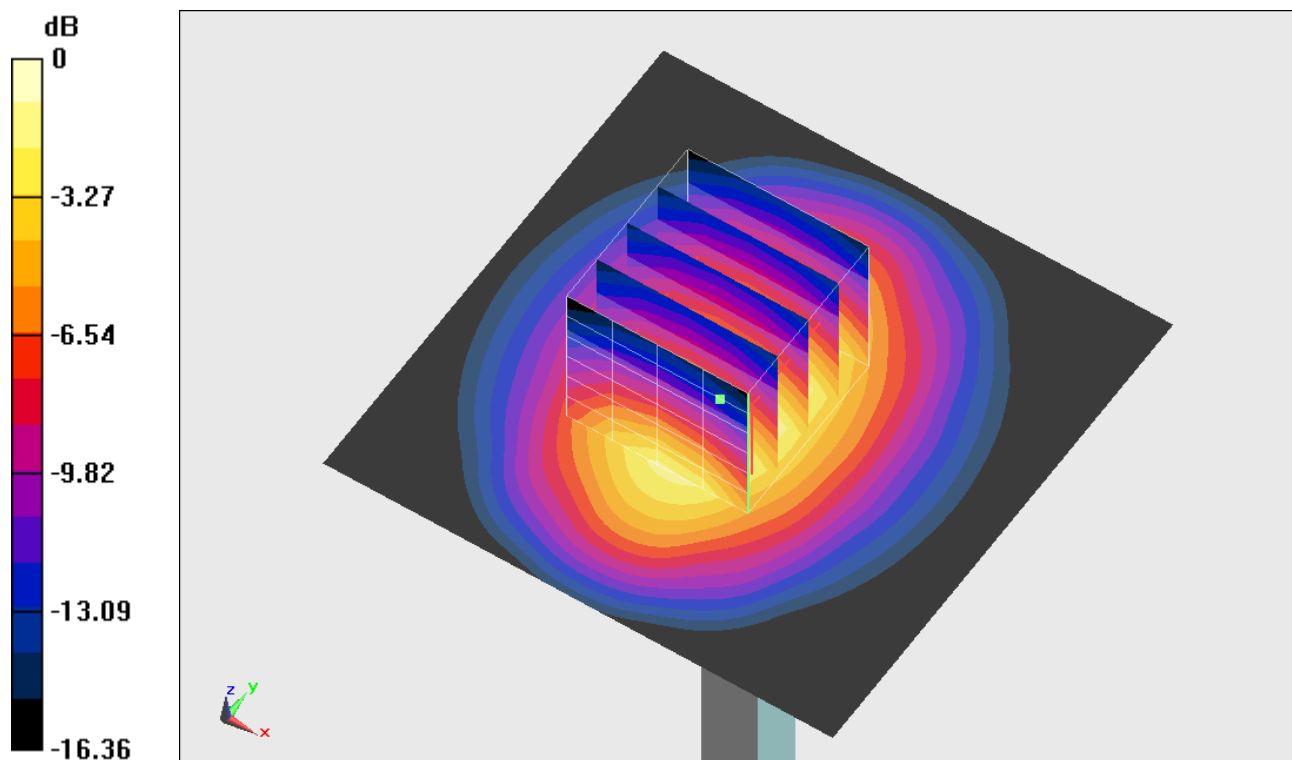
**Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  
 $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $91.543 \text{ V/m}$ ; Power Drift =  $0.02 \text{ dB}$

Peak SAR (extrapolated) =  $14.631 \text{ mW/g}$

**SAR(1 g) =  $9.73 \text{ mW/g}$ ; SAR(10 g) =  $5.58 \text{ mW/g}$**

Maximum value of SAR (measured) =  $10.7 \text{ mW/g}$



0 dB =  $10.7 \text{ mW/g} = 20.59 \text{ dB mW/g}$

## System Check\_Body\_1900MHz\_130208

**DUT: D1900V2-SN:5d041**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_130208 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.545$  mho/m;  $\epsilon_r = 53.277$ ;  $\rho$

$= 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/5/29;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn495; Calibrated: 2012/4/23
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1127
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 11.3 mW/g

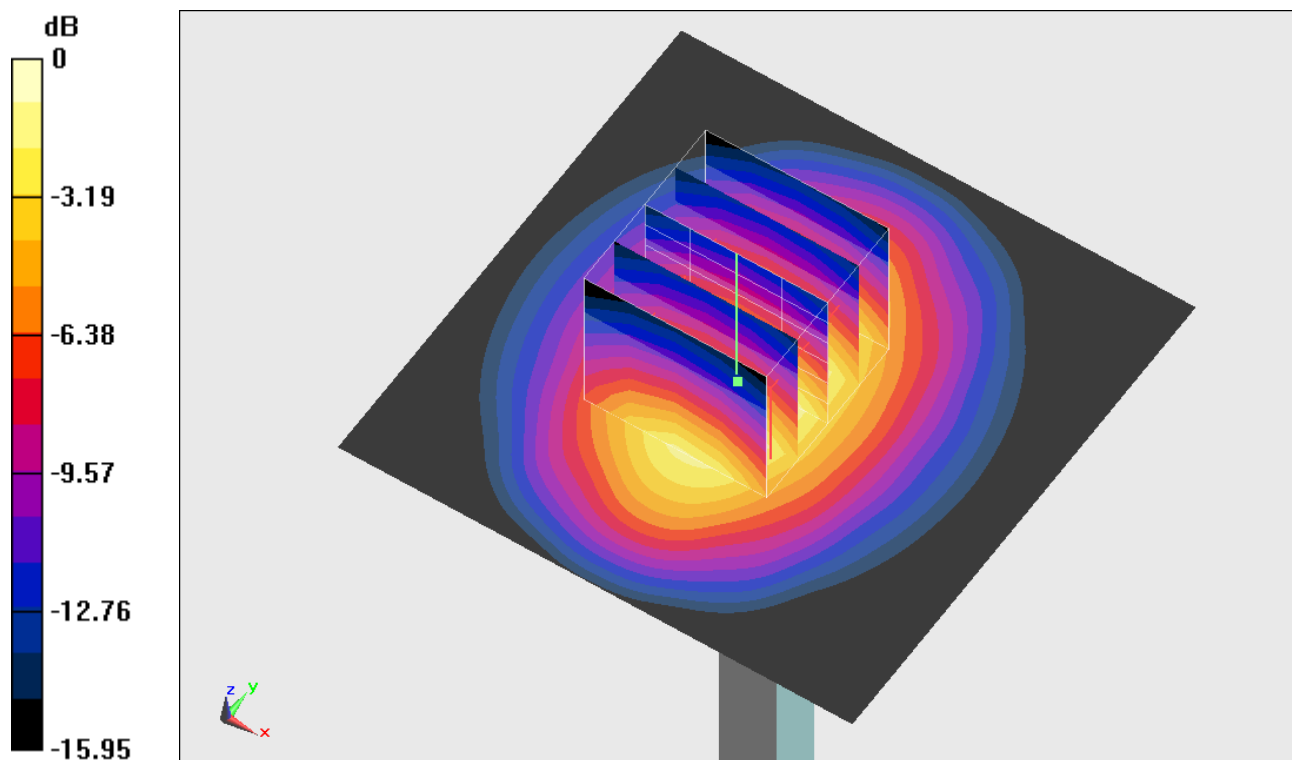
**Configuration/Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 91.543 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 15.041 mW/g

**SAR(1 g) = 10 mW/g; SAR(10 g) = 5.74 mW/g**

Maximum value of SAR (measured) = 11.0 mW/g



0 dB = 11.0 mW/g = 20.83 dB mW/g