



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

The plots are shown as follows.

## System Check\_Body\_2450MHz\_130306

### DUT: D2450V2-SN:736

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_130306 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.969$  mho/m;  $\epsilon_r = 52.278$ ;  $\rho$

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

Ambient Temperature : 22.4 °C ; Liquid Temperature : 21.4 °C

#### DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.17, 4.17, 4.17); 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=12mm, dy=12mm  
 Maximum value of SAR (interpolated) = 19.2 mW/g

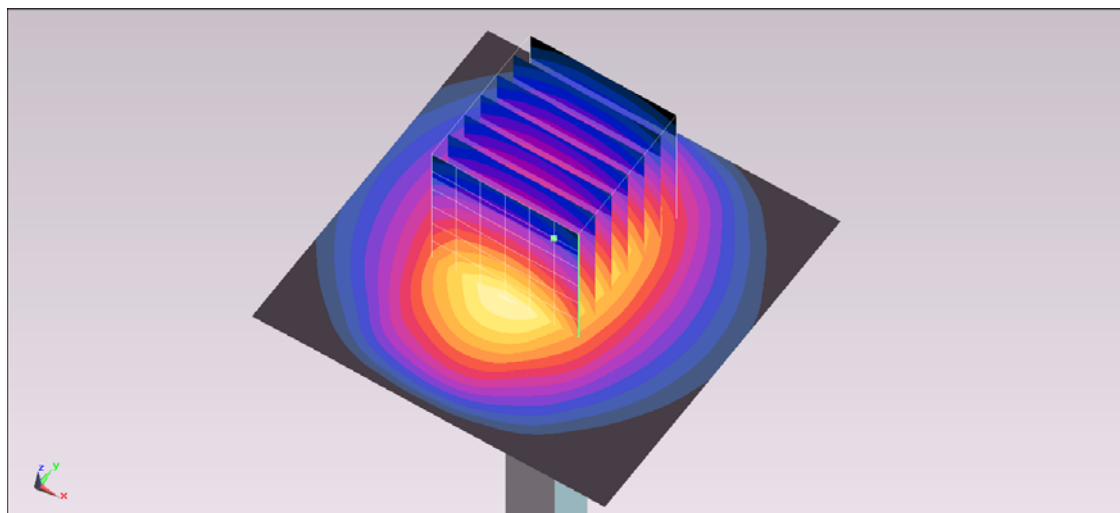
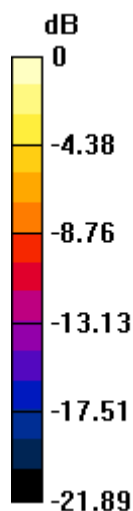
**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.954 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 28.570 mW/g

**SAR(1 g) = 13.6 mW/g; SAR(10 g) = 6.36 mW/g**

Maximum value of SAR (measured) = 17.8 mW/g



0 dB = 17.8 mW/g = 25.01 dB mW/g

### System Check\_Body\_5200MHz\_130306

#### DUT: D5GHzV2-SN:1006

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: MSL\_5G\_130306 Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.131$  mho/m;  $\epsilon_r = 47.488$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.2°C; Liquid Temperature : 21.2°C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(4.2, 4.2, 4.2); Calibrated: 2012/6/21;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2012/6/12
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1029
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 18.7 mW/g

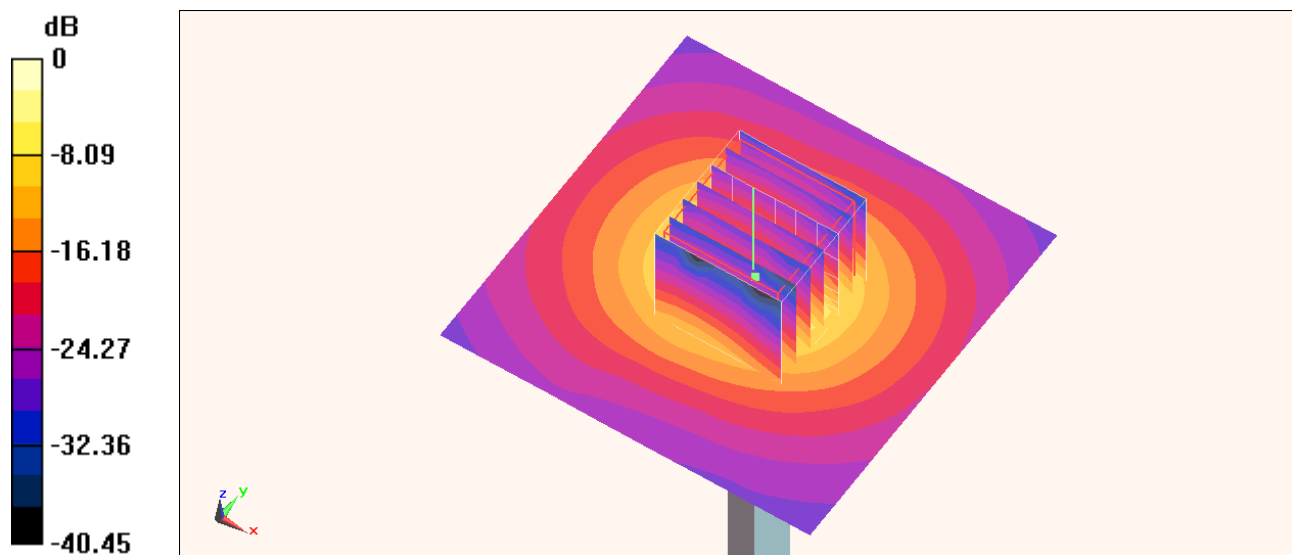
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 48.732 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 27.727 mW/g

**SAR(1 g) = 7.53 mW/g; SAR(10 g) = 2.13 mW/g**

Maximum value of SAR (measured) = 17.8 mW/g



0 dB = 17.8 mW/g = 25.01 dB mW/g

## System Check\_Body\_5300MHz\_130306

### DUT: D5GHzV2-SN:1006

Communication System: CW; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: MSL\_5G\_130306 Medium parameters used:  $f = 5300$  MHz;  $\sigma = 5.264$  mho/m;  $\epsilon_r = 47.249$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.2°C; Liquid Temperature : 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(4.01, 4.01, 4.01); Calibrated: 2012/6/21;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2012/6/12
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1029
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 17.9 mW/g

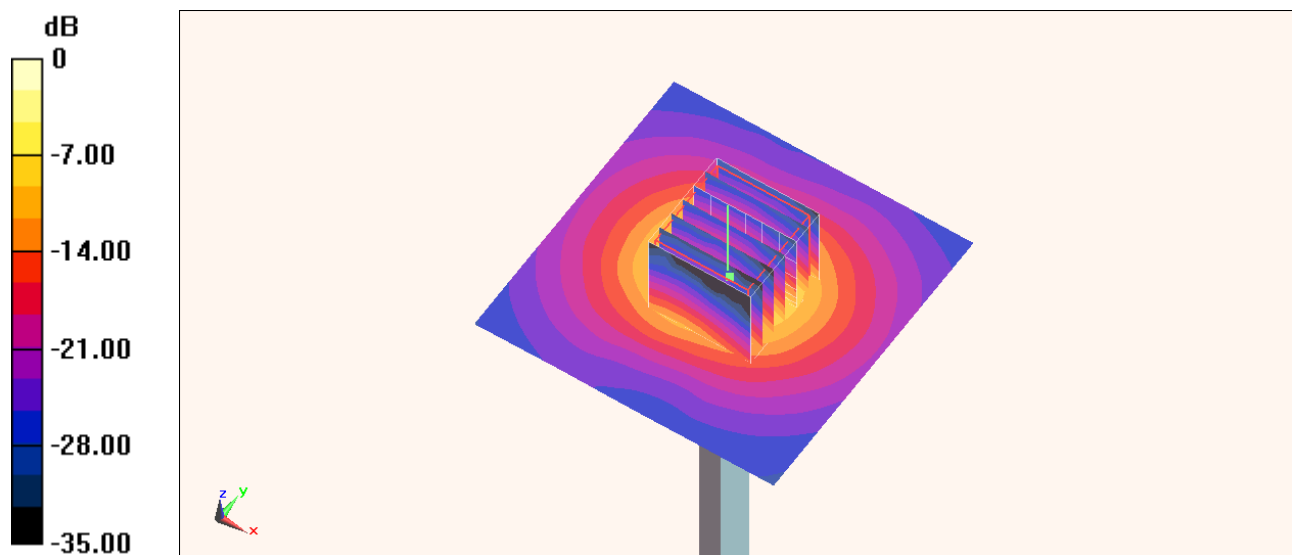
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.807 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 27.709 mW/g

**SAR(1 g) = 7.3 mW/g; SAR(10 g) = 2.04 mW/g**

Maximum value of SAR (measured) = 17.3 mW/g



0 dB = 17.3 mW/g = 24.76 dB mW/g

## System Check\_Body\_5300MHz\_130308

### DUT: D5GHzV2-SN:1006

Communication System: CW; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: MSL\_5G\_130308 Medium parameters used:  $f = 5300$  MHz;  $\sigma = 5.405$  mho/m;  $\epsilon_r = 47.298$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(4.01, 4.01, 4.01); Calibrated: 2012/6/21;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2012/6/12
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1029
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 19.0 mW/g

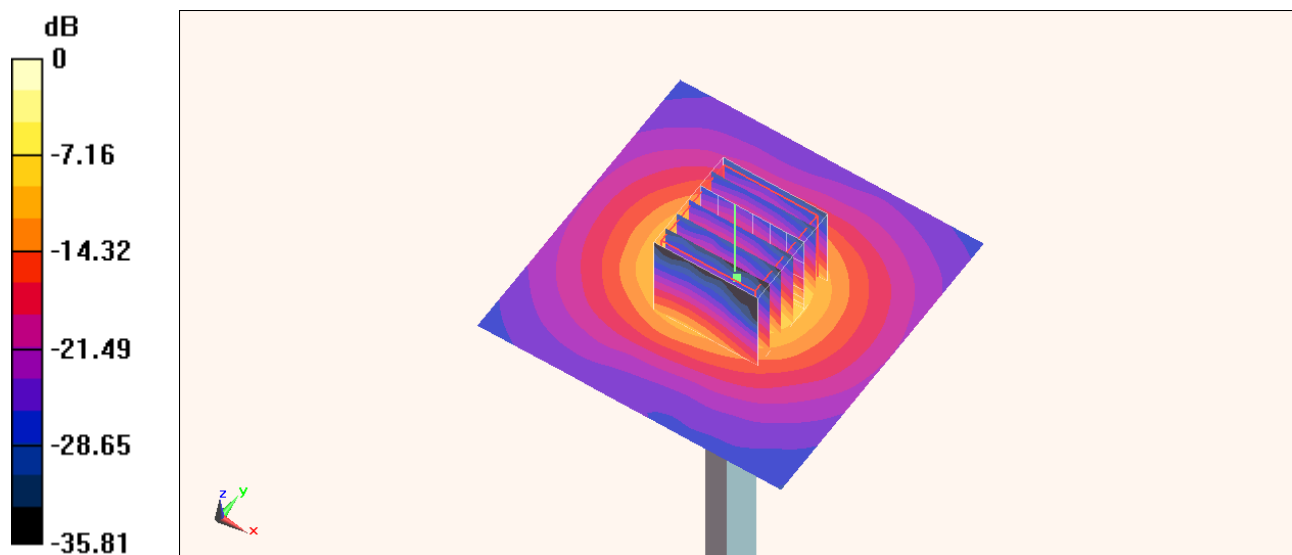
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 47.900 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 29.093 mW/g

**SAR(1 g) = 7.72 mW/g; SAR(10 g) = 2.16 mW/g**

Maximum value of SAR (measured) = 18.2 mW/g



0 dB = 18.2 mW/g = 25.20 dB mW/g

## System Check\_Body\_5600MHz\_130306

### DUT: D5GHzV2-SN:1006

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL\_5G\_130306 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.642$  mho/m;  $\epsilon_r = 46.786$ ;  $\rho =$

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

Ambient Temperature : 22.2°C; Liquid Temperature : 21.2°C

DASY5 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(3.72, 3.72, 3.72); Calibrated: 2012/6/21;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2012/6/12
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1029
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (interpolated) = 19.5 mW/g

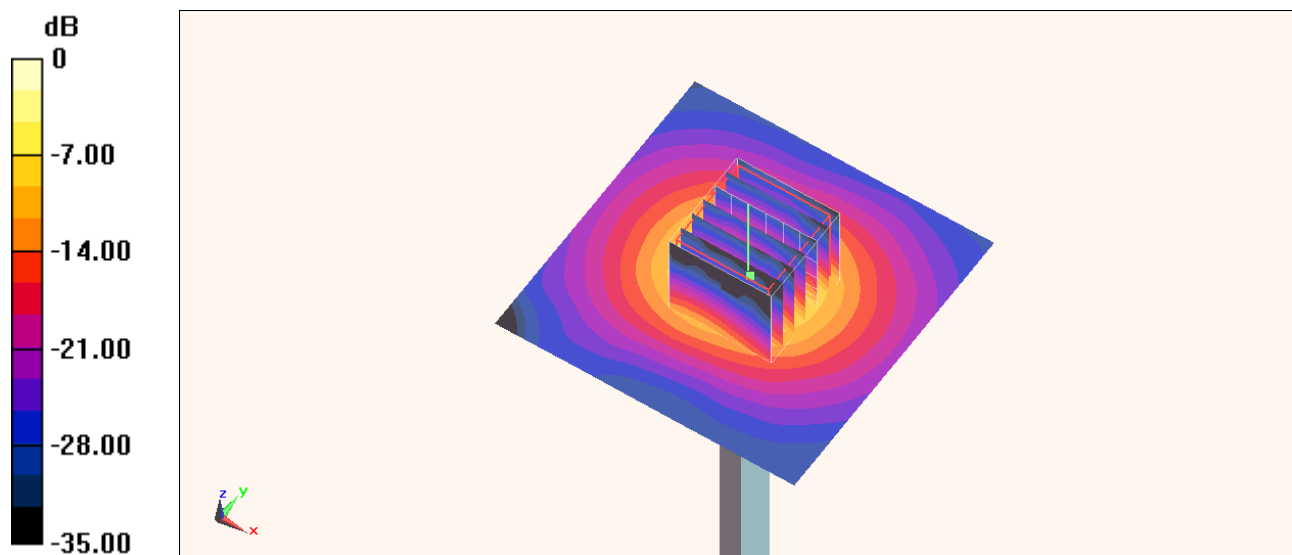
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 47.270 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 33.242 mW/g

**SAR(1 g) = 7.99 mW/g; SAR(10 g) = 2.22 mW/g**

Maximum value of SAR (measured) = 19.3 mW/g



0 dB = 19.3 mW/g = 25.71 dB mW/g

## System Check\_Body\_5600MHz\_130308

### DUT: D5GHzV2-SN:1006

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL\_5G\_130308 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.8$  mho/m;  $\epsilon_r = 46.785$ ;  $\rho =$

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

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(3.72, 3.72, 3.72); Calibrated: 2012/6/21;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2012/6/12
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1029
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (interpolated) = 19.3 mW/g

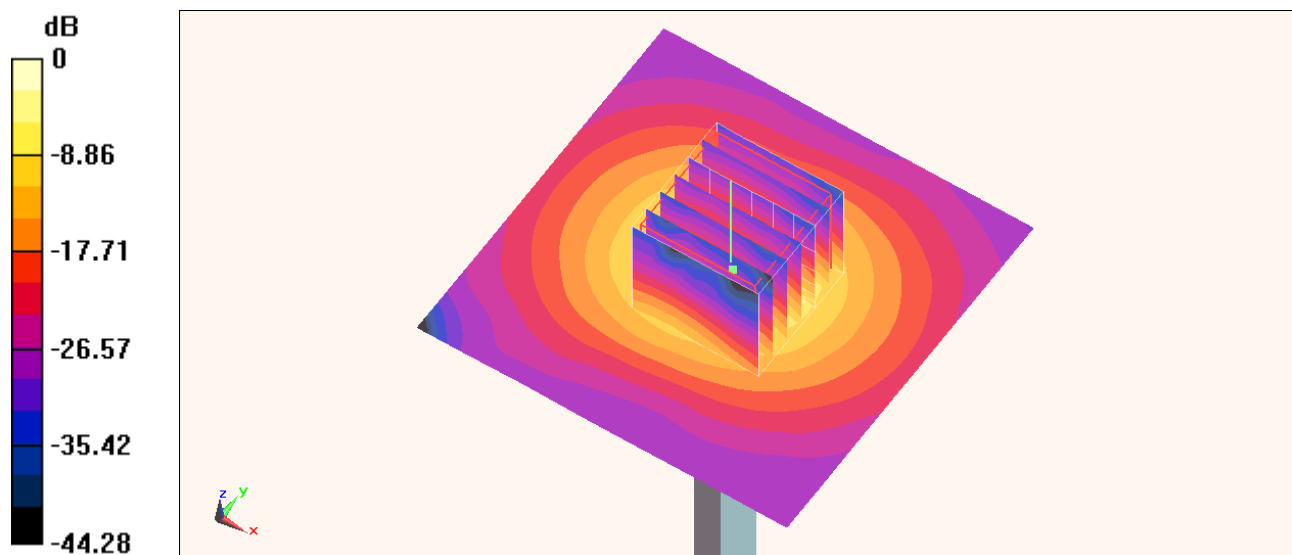
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.025 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 33.567 mW/g

**SAR(1 g) = 7.92 mW/g; SAR(10 g) = 2.18 mW/g**

Maximum value of SAR (measured) = 19.6 mW/g



0 dB = 19.6 mW/g = 25.85 dB mW/g

## System Check\_Body\_5800MHz\_130308

### DUT: D5GHzV2-SN:1006

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: MSL\_5G\_130308 Medium parameters used:  $f = 5800 \text{ MHz}$ ;  $\sigma = 6.153 \text{ mho/m}$ ;  $\epsilon_r = 46.472$ ;  $\rho =$

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

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(3.89, 3.89, 3.89); Calibrated: 2012/6/21;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2012/6/12
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1029
- Measurement SW: DASY52, Version 52.8 (3); SEMCAD X Version 14.6.5 (6469)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$   
 Maximum value of SAR (interpolated) =  $18.7 \text{ mW/g}$

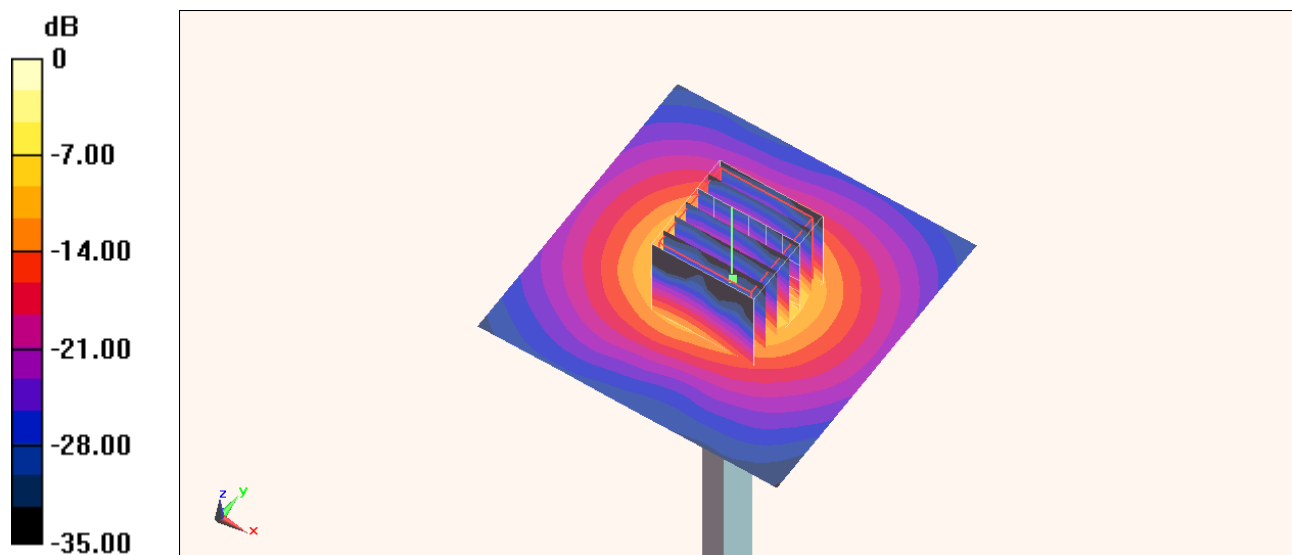
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  
 $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$

Reference Value =  $45.301 \text{ V/m}$ ; Power Drift =  $0.03 \text{ dB}$

Peak SAR (extrapolated) =  $31.576 \text{ mW/g}$

**SAR(1 g) =  $7.67 \text{ mW/g}$ ; SAR(10 g) =  $2.11 \text{ mW/g}$**

Maximum value of SAR (measured) =  $19.1 \text{ mW/g}$



0 dB =  $19.1 \text{ mW/g} = 25.62 \text{ dB mW/g}$