



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

The plots are shown as follows.

## System Check\_Body\_2450MHz\_130301

### DUT: D2450V2-SN:736

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

Medium: MSL\_2450\_130301 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.963$  mho/m;  $\epsilon_r = 52.895$ ;  $\rho$

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

Ambient Temperature : 22.6 °C ; Liquid Temperature : 21.6 °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) = 18.0 mW/g

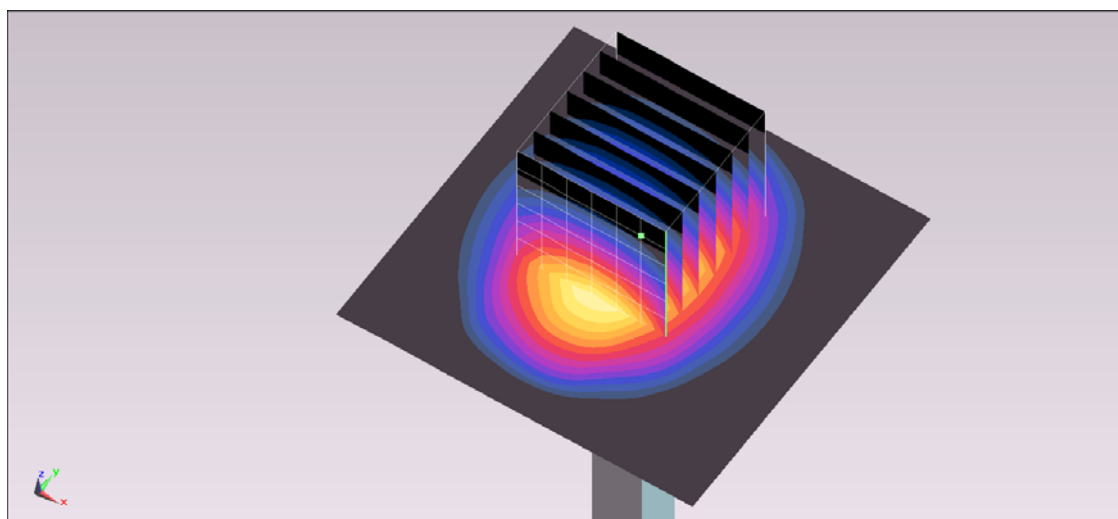
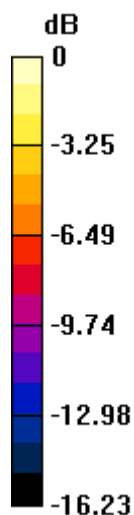
**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.762 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 27.265 mW/g

**SAR(1 g) = 12.9 mW/g; SAR(10 g) = 6.04 mW/g**

Maximum value of SAR (measured) = 16.8 mW/g



0 dB = 16.8 mW/g = 24.51 dB mW/g

## System Check\_Body\_5200MHz\_130304

### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130304 Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.268$  S/m;  $\epsilon_r = 47.552$ ;  $\rho =$

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

Ambient Temperature : 22.3 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(4.29, 4.29, 4.29); Calibrated: 2012/9/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1173
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=10 mm, dy=10 mm  
 Maximum value of SAR (interpolated) = 19.2 W/kg

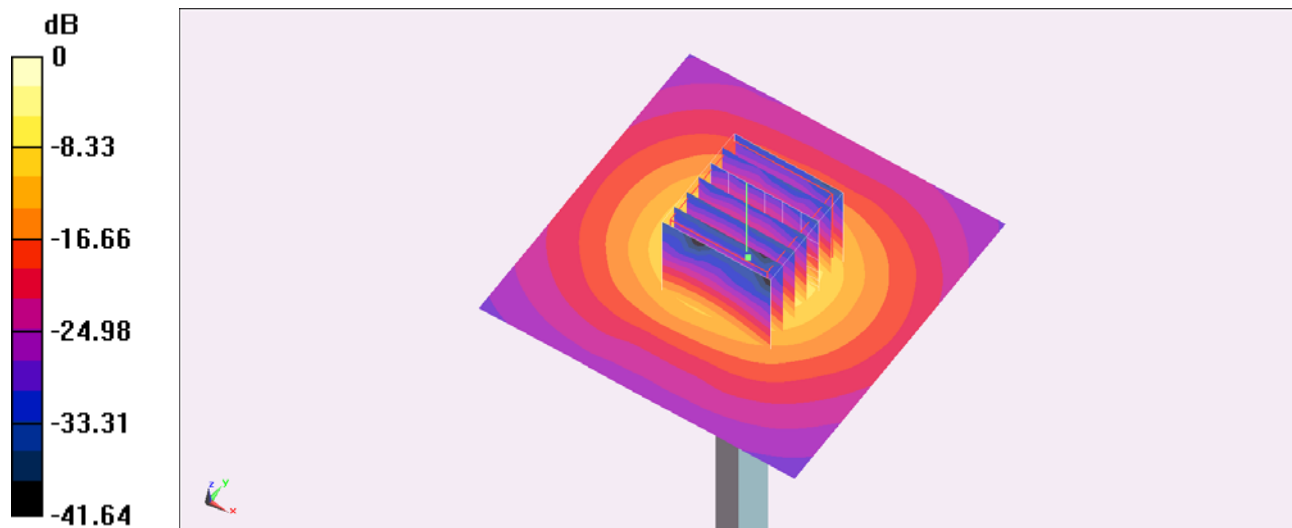
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 45.737 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 35.6 W/kg

**SAR(1 g) = 7.32 W/kg; SAR(10 g) = 2 W/kg**

Maximum value of SAR (measured) = 18.3 W/kg



0 dB = 18.3 W/kg = 12.62 dBW/kg

### System Check\_Body\_5300MHz\_130304

#### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130304 Medium parameters used:  $f = 5300$  MHz;  $\sigma = 5.405$  S/m;  $\epsilon_r = 47.298$ ;  $\rho =$

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

Ambient Temperature : 22.3 °C ; Liquid Temperature : 21.3 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(4.29, 4.29, 4.29); Calibrated: 2012/9/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1173
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 21.1 W/kg

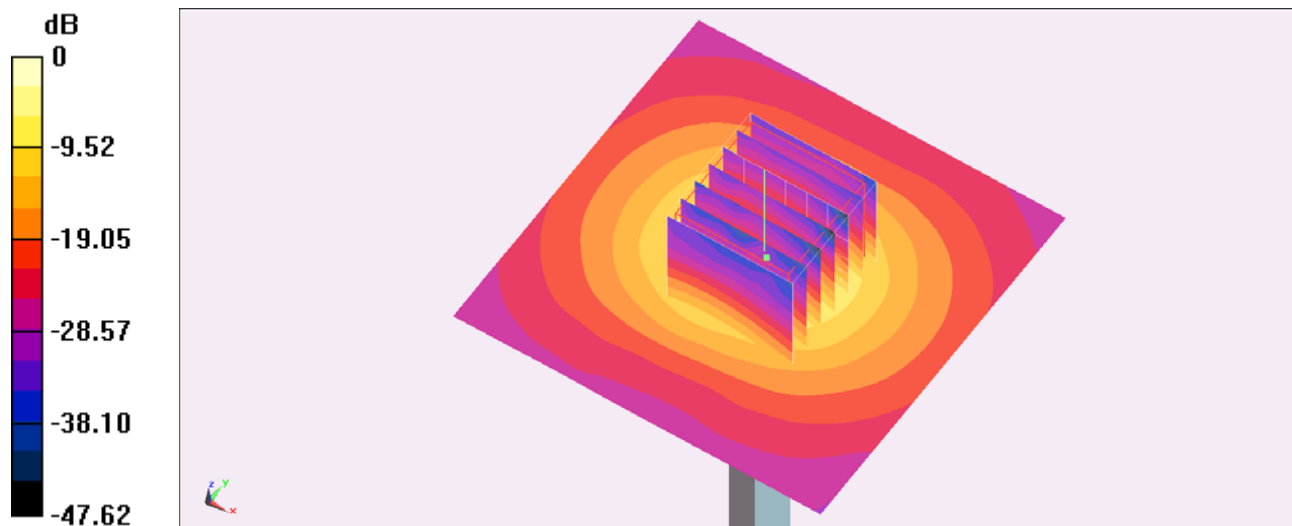
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.642 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 39.2 W/kg

**SAR(1 g) = 7.85 W/kg; SAR(10 g) = 2.13 W/kg**

Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.5 W/kg = 12.90 dBW/kg

## System Check\_Body\_5300MHz\_130305

### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130305 Medium parameters used:  $f = 5300 \text{ MHz}$ ;  $\sigma = 5.27 \text{ S/m}$ ;  $\epsilon_r = 47.255$ ;  $\rho =$

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

Ambient Temperature :  $22.3 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $21.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(4.29, 4.29, 4.29); Calibrated: 2012/9/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1173
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) =  $20.6 \text{ W/kg}$

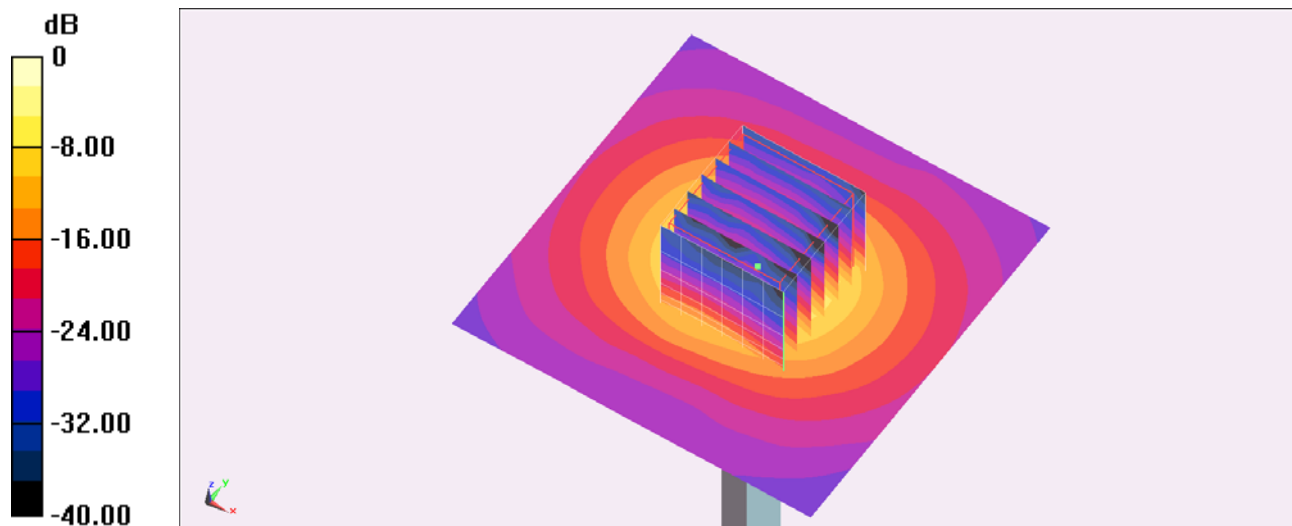
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$

Reference Value =  $46.642 \text{ V/m}$ ; Power Drift =  $0.03 \text{ dB}$

Peak SAR (extrapolated) =  $38.2 \text{ W/kg}$

**SAR(1 g) =  $7.65 \text{ W/kg}$ ; SAR(10 g) =  $2.07 \text{ W/kg}$**

Maximum value of SAR (measured) =  $19.0 \text{ W/kg}$



0 dB =  $19.0 \text{ W/kg} = 12.79 \text{ dBW/kg}$

### System Check\_Body\_5300MHz\_130307

#### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130307 Medium parameters used:  $f = 5300 \text{ MHz}$ ;  $\sigma = 5.422 \text{ mho/m}$ ;  $\epsilon_r = 47.242$ ;  $\rho =$

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

Ambient Temperature :  $22.3^\circ\text{C}$ ; Liquid Temperature :  $21.3^\circ\text{C}$

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:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$   
Maximum value of SAR (interpolated) =  $19.0 \text{ mW/g}$

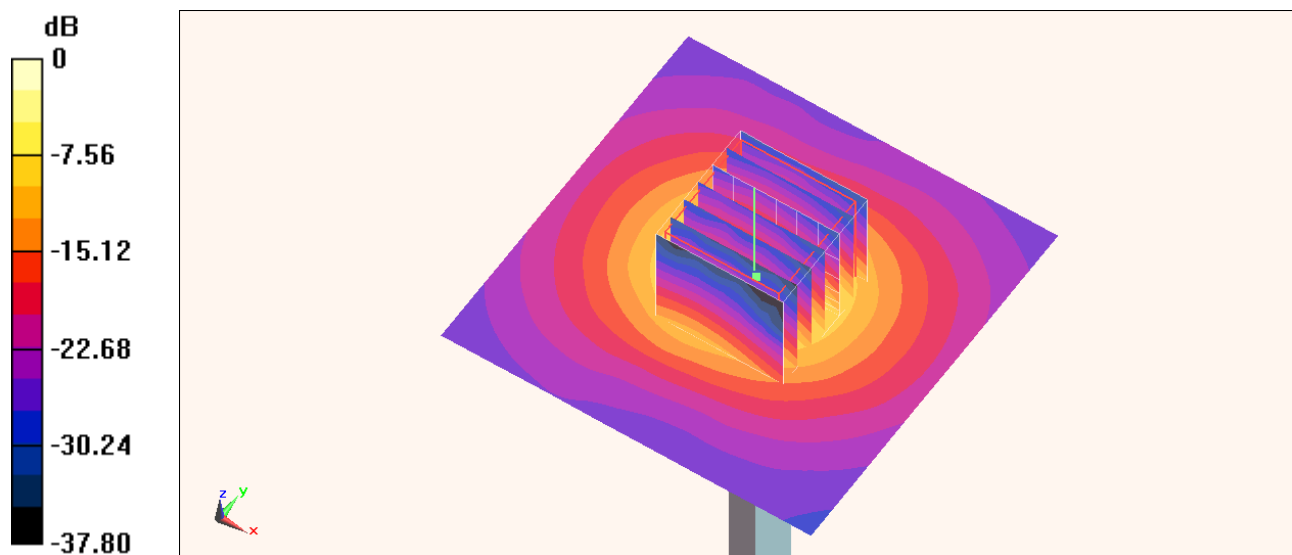
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  
 $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$

Reference Value =  $47.900 \text{ V/m}$ ; Power Drift =  $-0.01 \text{ dB}$

Peak SAR (extrapolated) =  $29.186 \text{ mW/g}$

**SAR(1 g) =  $7.74 \text{ mW/g}$ ; SAR(10 g) =  $2.17 \text{ mW/g}$**

Maximum value of SAR (measured) =  $18.2 \text{ mW/g}$



0 dB =  $18.2 \text{ mW/g} = 25.20 \text{ dB mW/g}$

## System Check\_Body\_5600MHz\_130305

### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130305 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.653$  S/m;  $\epsilon_r = 46.801$ ;  $\rho =$

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

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(3.75, 3.75, 3.75); Calibrated: 2012/9/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1173
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.2 W/kg

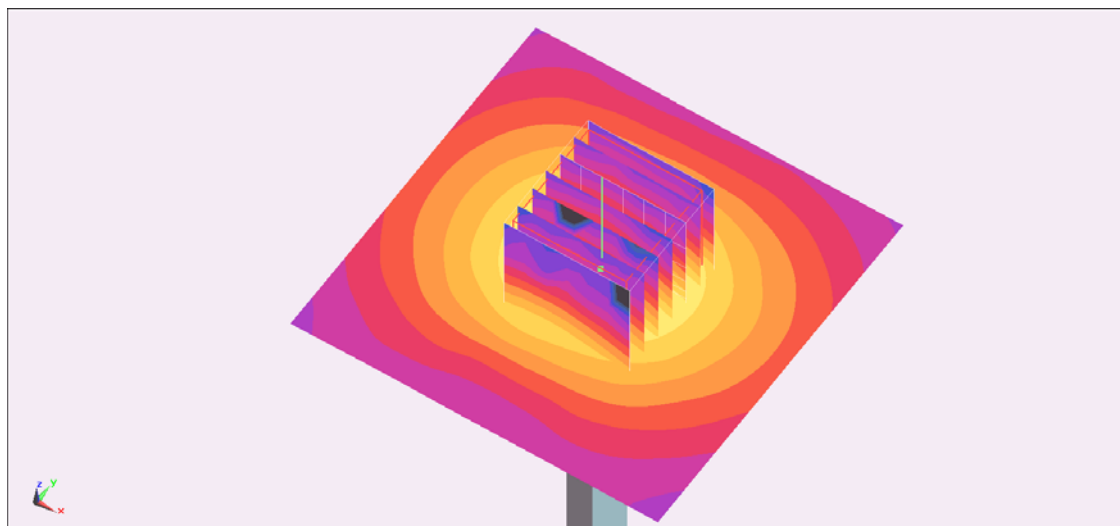
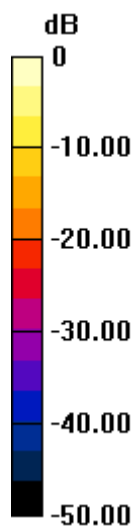
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 43.714 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 42.9 W/kg

**SAR(1 g) = 7.6 W/kg; SAR(10 g) = 2.05 W/kg**

Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.5 W/kg = 12.90 dBW/kg

## System Check\_Body\_5800MHz\_130306

### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130306 Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.127$  S/m;  $\epsilon_r = 46.464$ ;  $\rho =$

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

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(4.06, 4.06, 4.06); Calibrated: 2012/9/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2013/1/28
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1173
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

**Configuration/Pin=100mW/Area Scan (71x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 18.7 W/kg

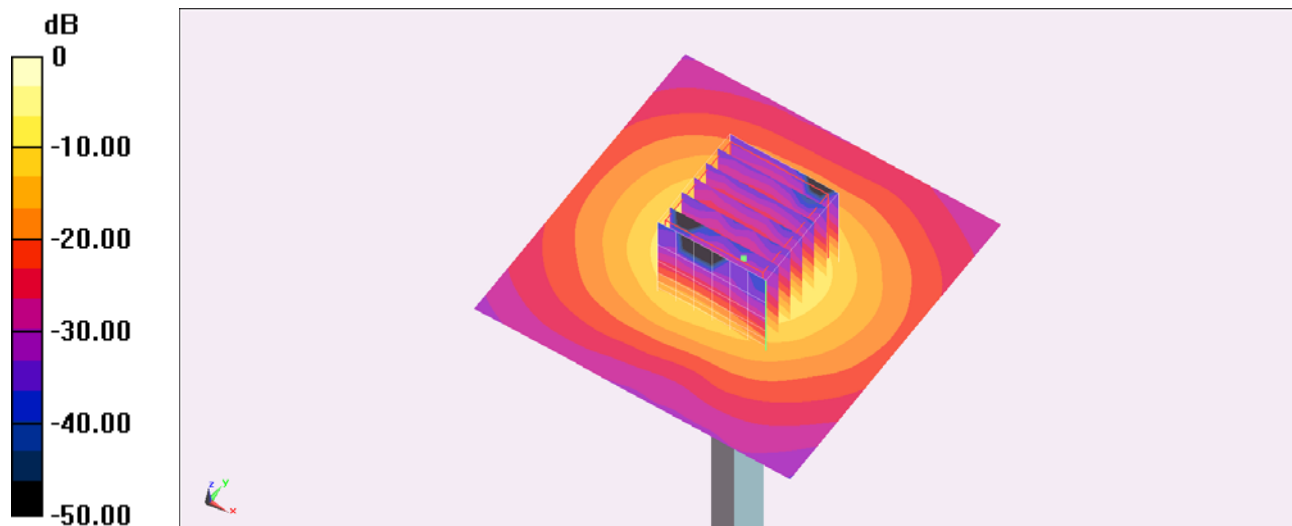
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 41.112 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 39.7 W/kg

**SAR(1 g) = 7.09 W/kg; SAR(10 g) = 1.9 W/kg**

Maximum value of SAR (measured) = 18.1 W/kg



0 dB = 18.1 W/kg = 12.58 dBW/kg