



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

The plots are shown as follows.

## System Check\_Body\_2450MHz\_130304

**DUT: D2450V2-SN:736**

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

Medium: MSL\_2450\_130304 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.963$  mho/m;  $\epsilon_r = 52.895$ ;  $\rho$

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

Ambient Temperature : 22.4 °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) = 18.0 mW/g

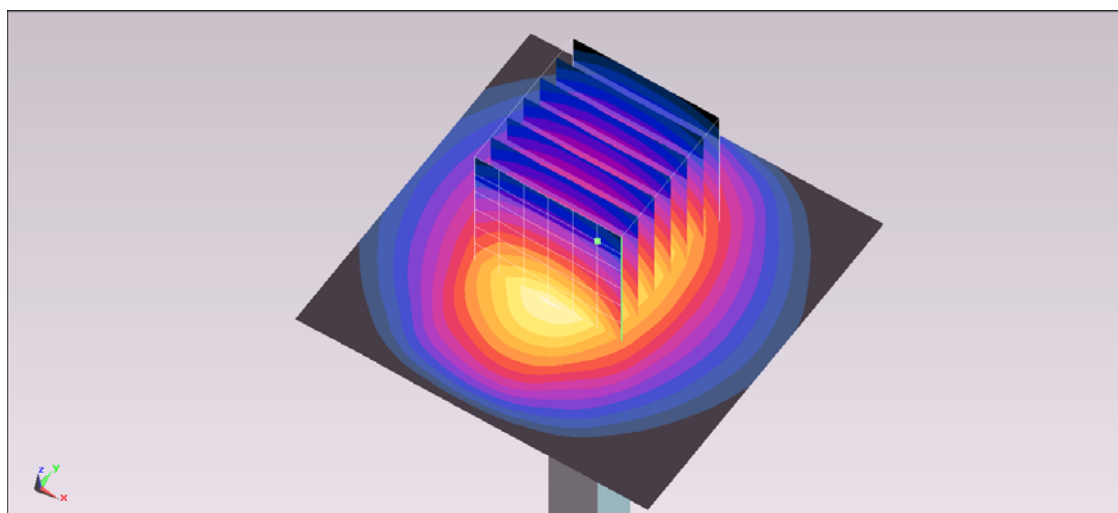
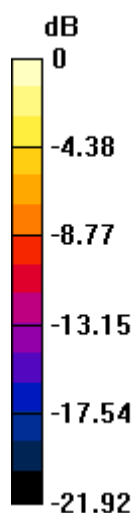
**Configuration/Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

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\_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

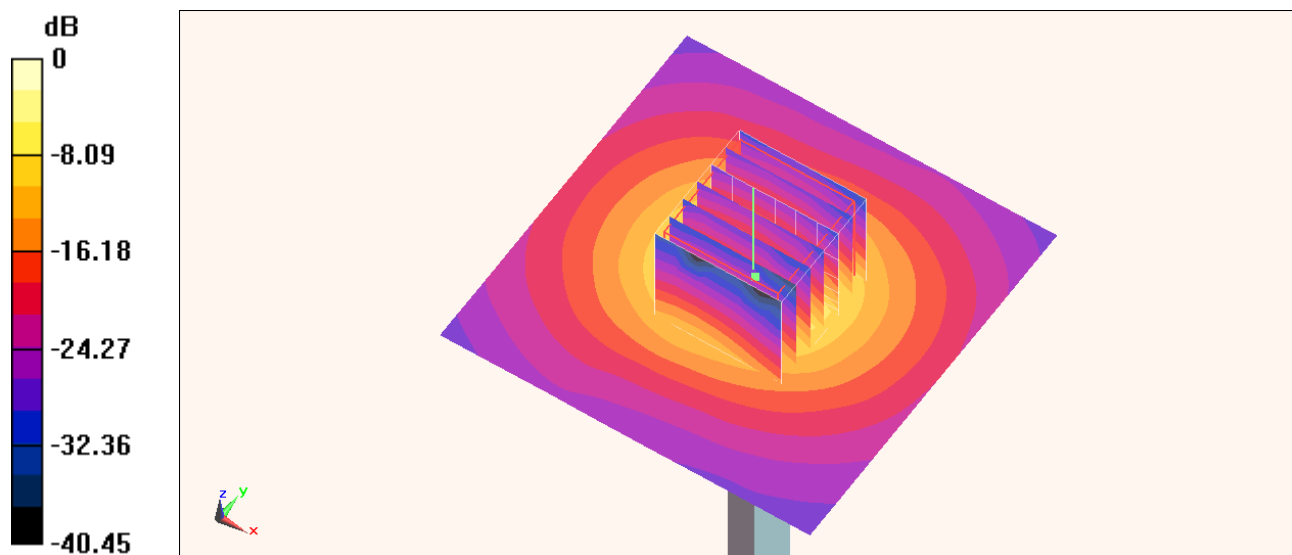
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

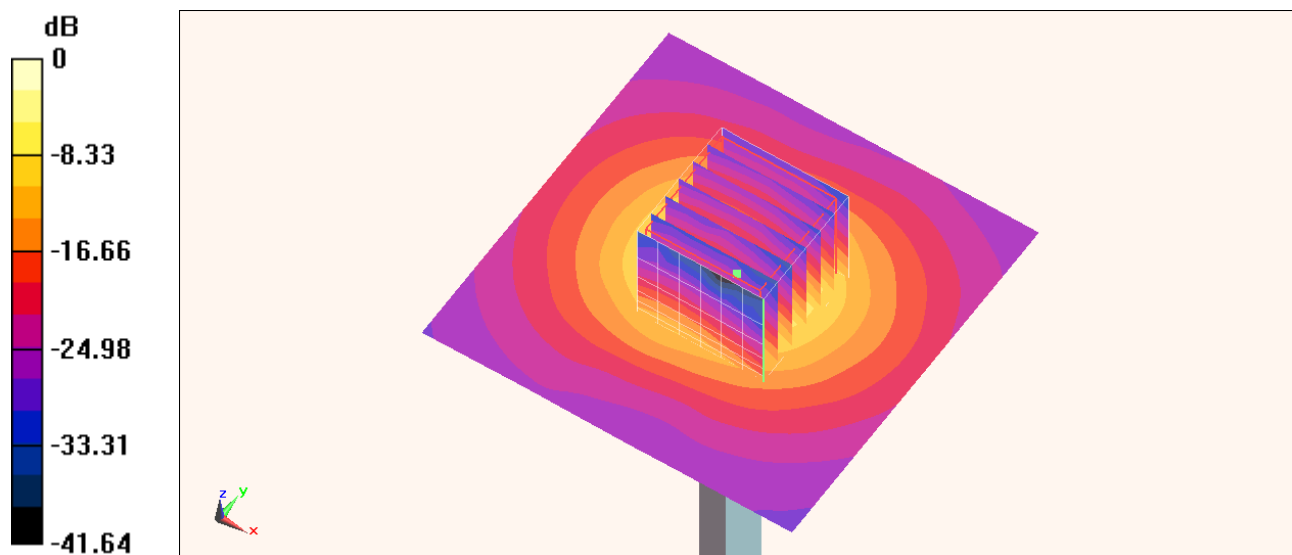
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.807 V/m; Power Drift = -0.00 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\_5600MHz\_130307

### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130307 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.821$  mho/m;  $\epsilon_r = 46.733$ ;  $\rho =$

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

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3661; ConvF(4.13, 4.13, 4.13); Calibrated: 2013/1/15;
- Sensor-Surface: 1.4mm (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=100mW/Area Scan (71x71x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 20.5 mW/g

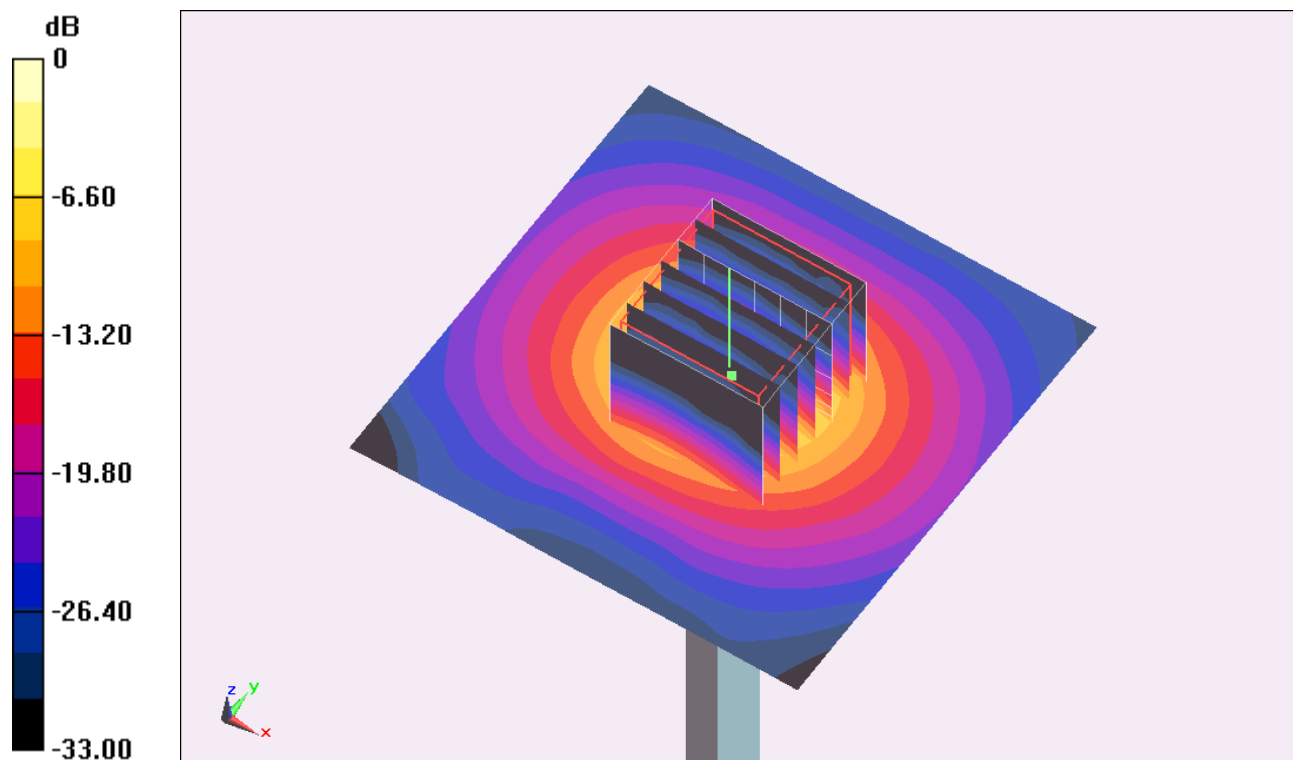
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 44.019 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 42.556 mW/g

**SAR(1 g) = 7.68 mW/g; SAR(10 g) = 2.06 mW/g**

Maximum value of SAR (measured) = 20.0 mW/g



0 dB = 20.0 mW/g = 26.02 dB mW/g

## System Check\_Body\_5600MHz\_130312

### DUT: D5GHzV2-SN:1006

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

Medium: MSL\_5G\_130312 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.642$  S/m;  $\epsilon_r = 46.786$ ;  $\rho =$

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

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

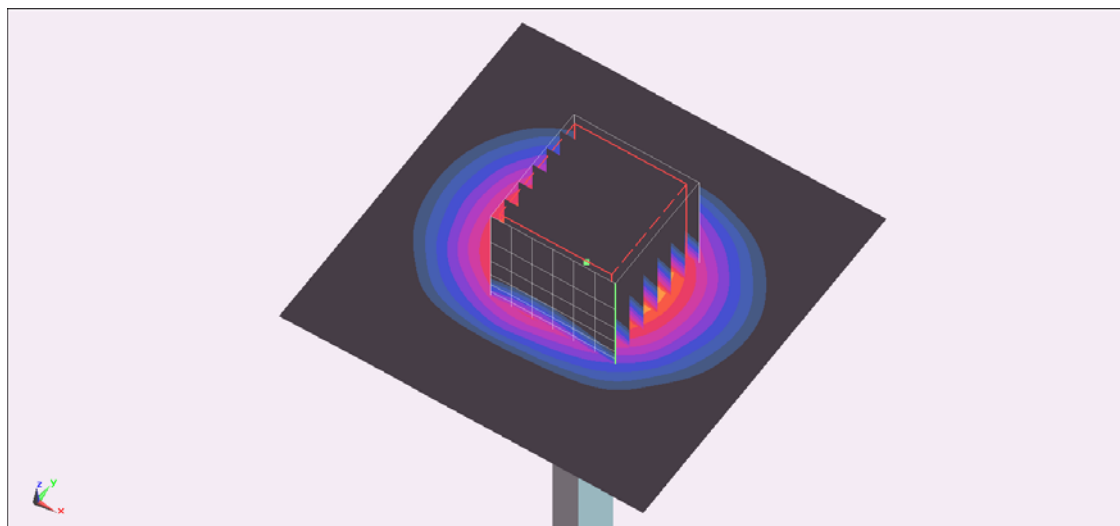
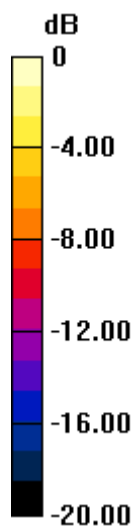
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

Peak SAR (extrapolated) = 42.8 W/kg

**SAR(1 g) = 7.58 W/kg; SAR(10 g) = 2.04 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\_130307

**DUT: D5GHzV2-SN:1006**

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

Medium: MSL\_5G\_130307 Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.179$  mho/m;  $\epsilon_r = 46.434$ ;  $\rho =$

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

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3661; ConvF(3.97, 3.97, 3.97); Calibrated: 2013/1/15;
- Sensor-Surface: 1.4mm (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=100mW/Area Scan (71x71x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 17.8 mW/g

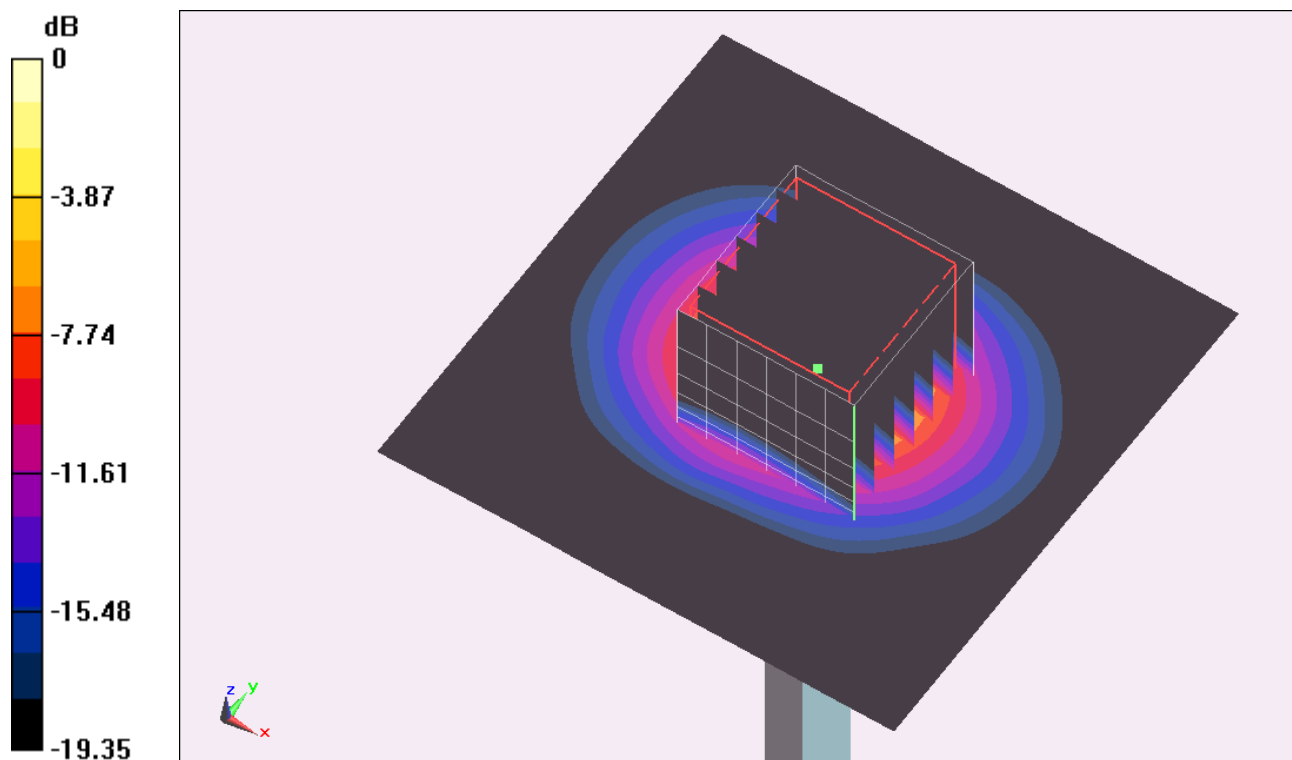
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 41.192 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 35.850 mW/g

**SAR(1 g) = 6.82 mW/g; SAR(10 g) = 1.83 mW/g**

Maximum value of SAR (measured) = 17.2 mW/g



## System Check\_Body\_5800MHz\_130312

**DUT: D5GHzV2-SN:1006**

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

Medium: MSL\_5G\_130312 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 : 22.5°C; Liquid Temperature : 21.5°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=10mm, dy=10mm  
 Maximum value of SAR (interpolated) = 18.7 mW/g

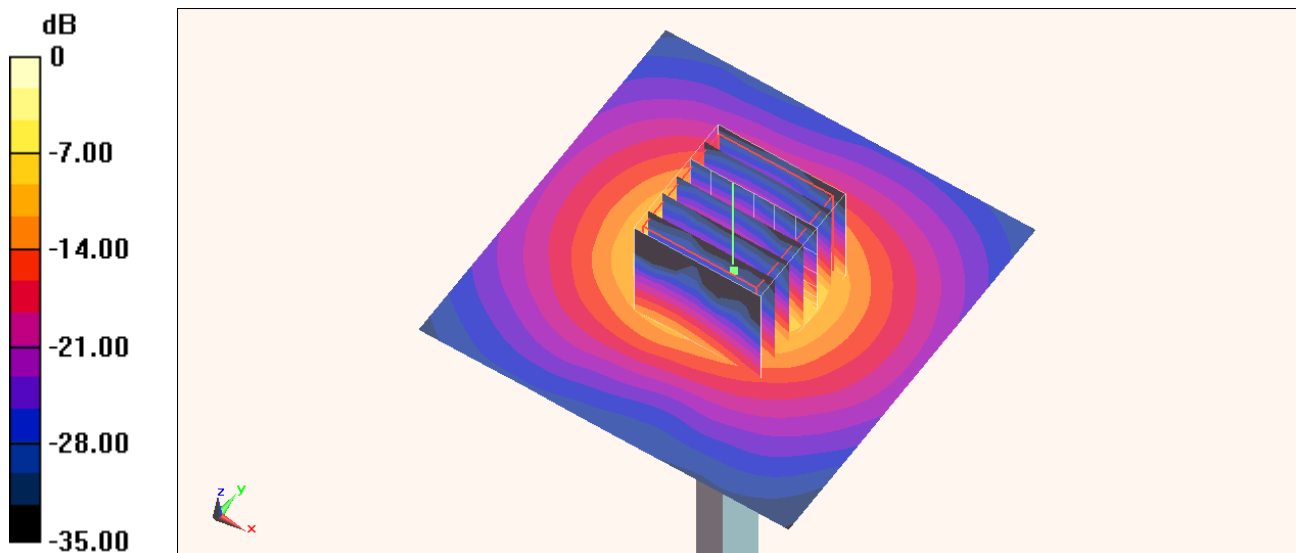
**Configuration/Pin=100mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 45.301 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 31.576 mW/g

**SAR(1 g) = 7.67 mW/g; SAR(10 g) = 2.11 mW/g**

Maximum value of SAR (measured) = 19.1 mW/g



0 dB = 19.1 mW/g = 25.62 dB mW/g