

## 20140728\_SystemPerformanceCheck-D2450V2 SN 706

Frequency: 2450 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.99$  S/m;  $\epsilon_r = 52.084$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Averaged Fast SAR: Polynomial fit
- Electronics: DAE3 Sn500; Calibrated: 5/15/2014
- Probe: EX3DV4 - SN3749; ConvF(6.49, 6.49, 6.49); Calibrated: 1/29/2014;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1117

**Body/Pin=100 mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 59.358 V/m; Power Drift = -0.15 dB

**Fast SAR: SAR(1 g) = 4.76 W/kg; SAR(10 g) = 1.99 W/kg**

Maximum value of SAR (interpolated) = 6.98 W/kg

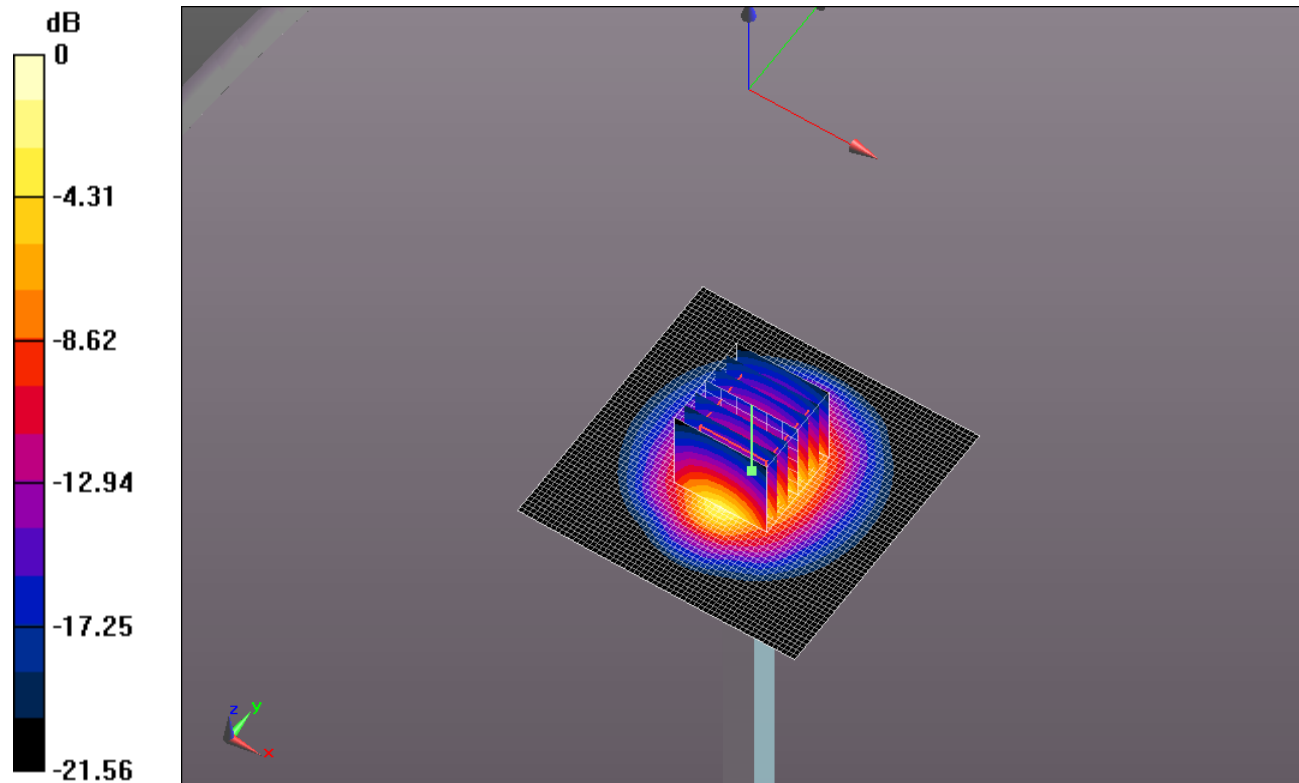
**Body/Pin=100 mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 59.358 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 9.95 W/kg

**SAR(1 g) = 4.75 W/kg; SAR(10 g) = 2.19 W/kg**

Maximum value of SAR (measured) = 6.74 W/kg

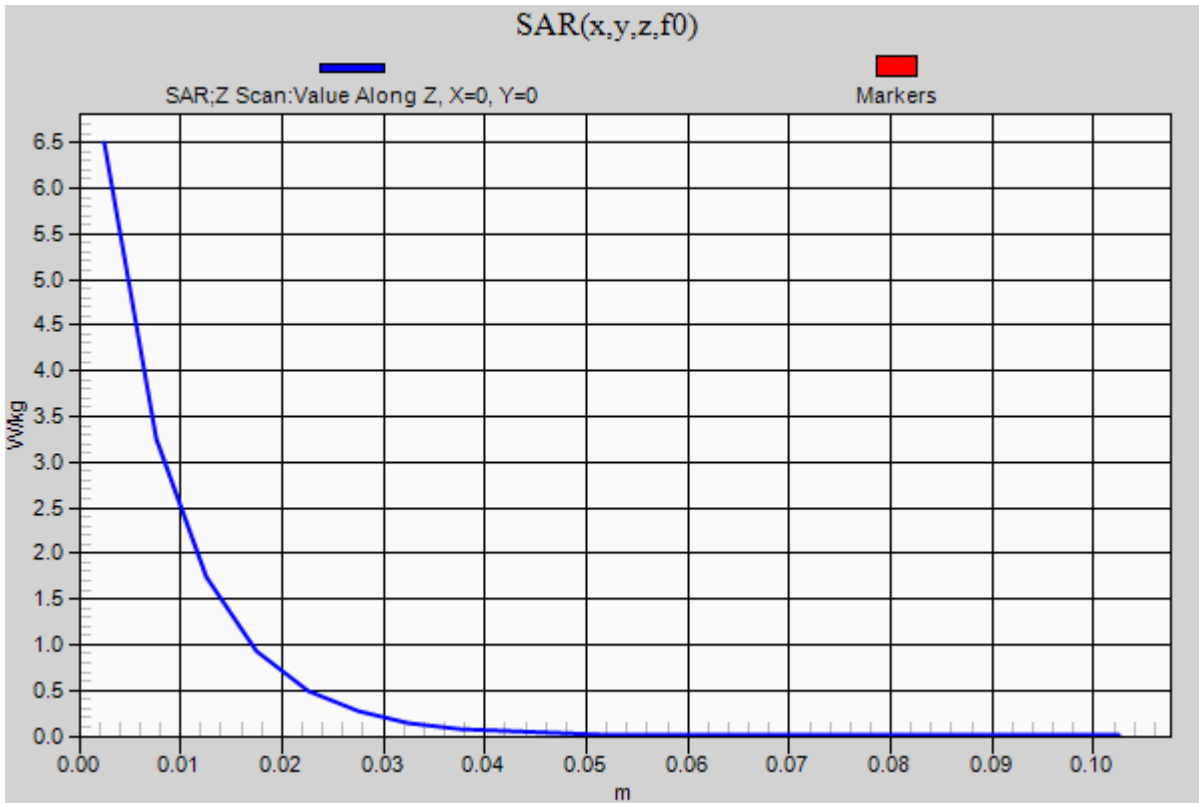


0 dB = 6.74 W/kg = 8.29 dBW/kg

### 20140728\_SystemPerformanceCheck-D2450V2 SN 706

Frequency: 2450 MHz; Duty Cycle: 1:1

**Body/Pin=100 mW/Z Scan (1x1x21):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 6.50 W/kg



## 20140723\_SystemPerformanceCheck-D5GHzV2 SN 1003

Frequency: 5200 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.11$  S/m;  $\epsilon_r = 47.042$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Averaged Fast SAR: Polynomial fit
- Electronics: DAE4 Sn1433; Calibrated: 4/14/2014
- Probe: EX3DV4 - SN3989; ConvF(4.77, 4.77, 4.77); Calibrated: 4/15/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI B v5.0; Type: QDOVA001BB; Serial: 1121

**Body/5.2 GHz, Pin=100mW/Area Scan (61x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 50.755 V/m; Power Drift = 0.06 dB

**Fast SAR: SAR(1 g) = 6.42 W/kg; SAR(10 g) = 1.79 W/kg**

Maximum value of SAR (interpolated) = 16.8 W/kg

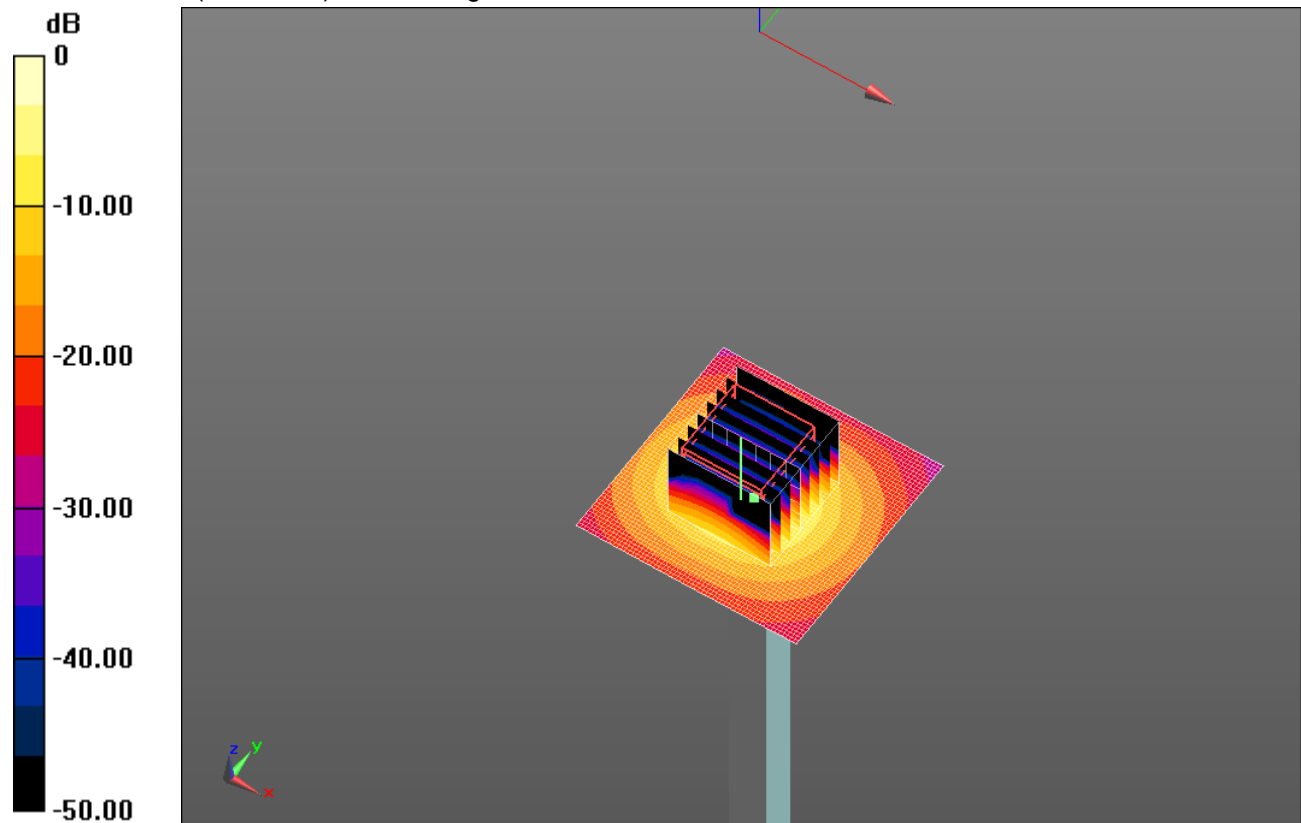
**Body/5.2 GHz, Pin=100mW/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 50.755 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 27.6 W/kg

**SAR(1 g) = 6.87 W/kg; SAR(10 g) = 1.94 W/kg**

Maximum value of SAR (measured) = 16.2 W/kg

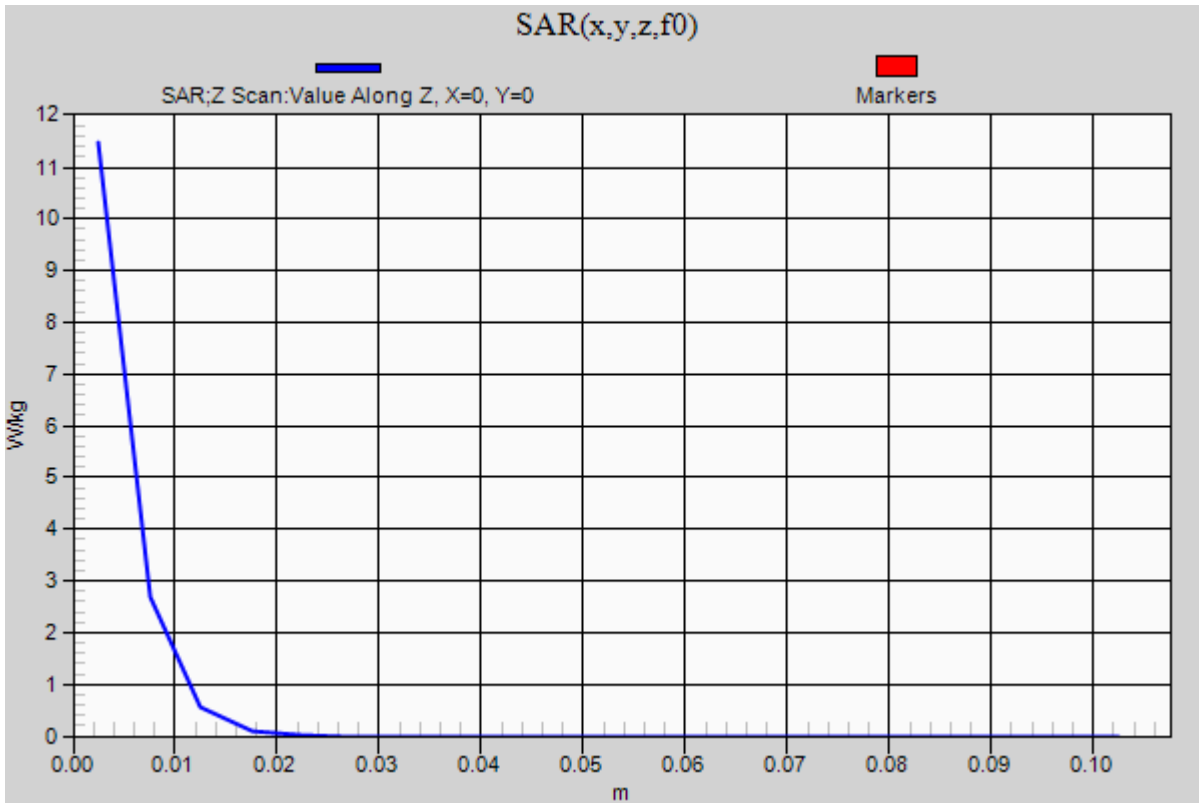


0 dB = 16.2 W/kg = 12.10 dBW/kg

### 20140723\_SystemPerformanceCheck-D5GHzV2 SN 1003

Frequency: 5200 MHz; Duty Cycle: 1:1

**Body/5.2 GHz, Pin=100mW/Z Scan (1x1x21):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 11.5 W/kg



## 20140730\_SystemPerformanceCheck-D5GHzV2 SN 1168

Frequency: 5600 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.953$  S/m;  $\epsilon_r = 47.479$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Averaged Fast SAR: Polynomial fit
- Electronics: DAE4 Sn1357; Calibrated: 2/17/2014
- Probe: EX3DV4 - SN3901; ConvF(3.74, 3.74, 3.74); Calibrated: 2/25/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 A; Type: QD OVA 002 AA; Serial: 1180

**Body/5.6 GHz, Pin=100mW 2/Area Scan (61x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 54.140 V/m; Power Drift = -0.00 dB

**Fast SAR: SAR(1 g) = 8.02 W/kg; SAR(10 g) = 2.19 W/kg**

Maximum value of SAR (interpolated) = 22.0 W/kg

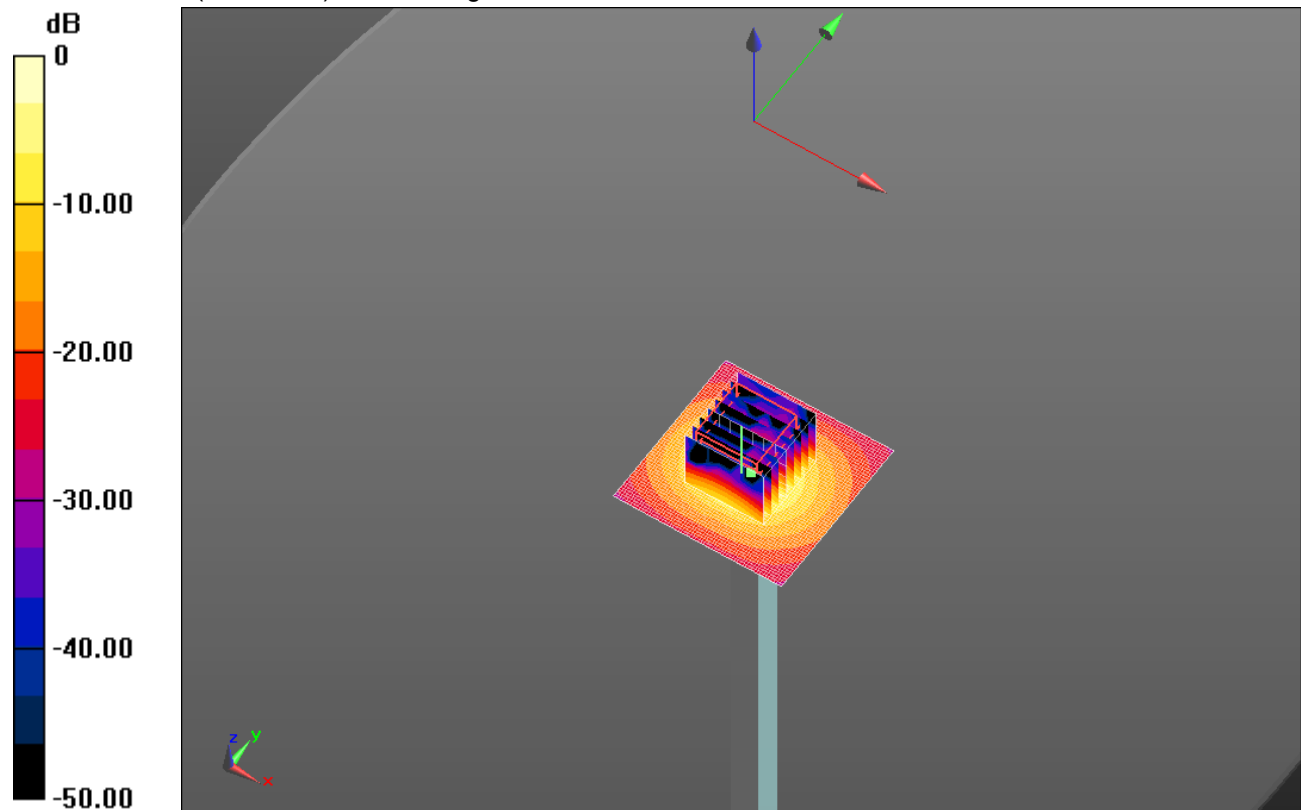
**Body/5.6 GHz, Pin=100mW 2/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 54.140 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 35.9 W/kg

**SAR(1 g) = 8.47 W/kg; SAR(10 g) = 2.37 W/kg**

Maximum value of SAR (measured) = 20.7 W/kg

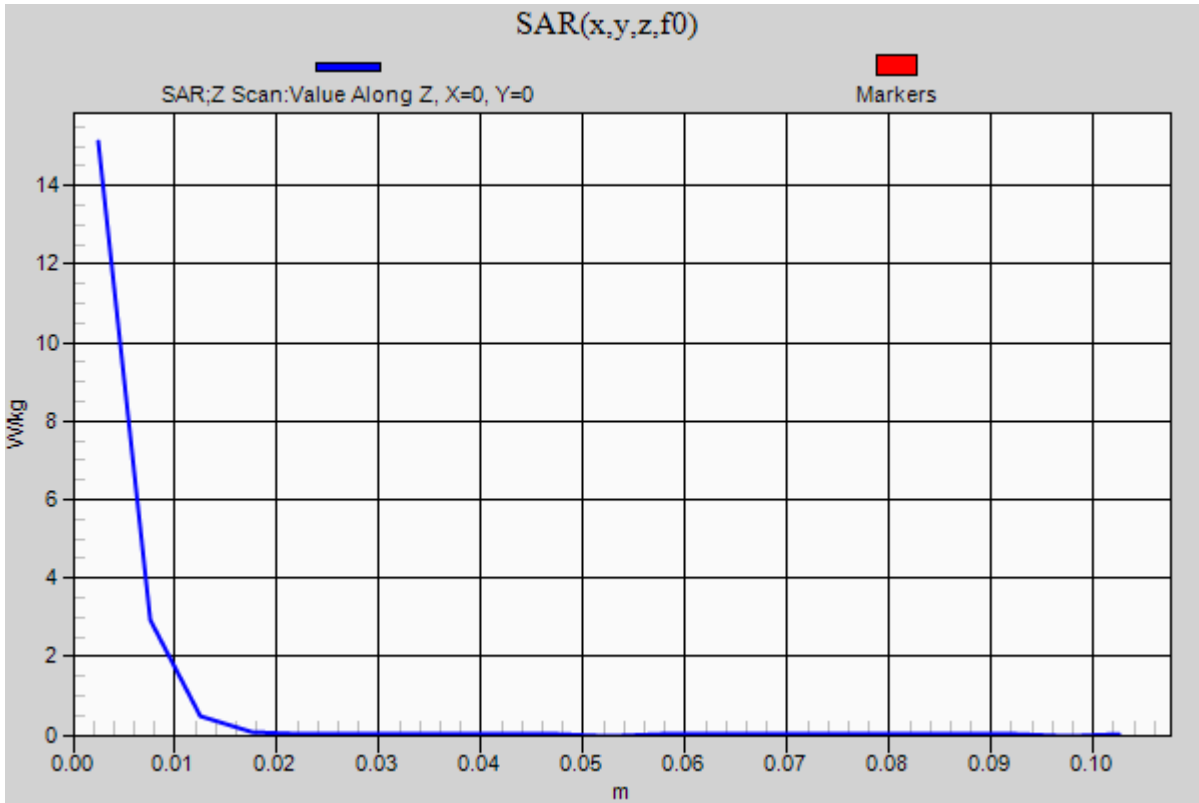


0 dB = 20.7 W/kg = 13.16 dBW/kg

### 20140730\_SystemPerformanceCheck-D5GHzV2 SN 1168

Frequency: 5600 MHz; Duty Cycle: 1:1

**Body/5.6 GHz, Pin=100mW 2/Z Scan (1x1x21):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 15.1 W/kg



### 20140723 SystemPerformanceCheck-D5GHzV2 SN 1003

Frequency: 5800 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 5800 \text{ MHz}$ ;  $\sigma = 5.937 \text{ S/m}$ ;  $\epsilon_r = 46.469$ ;  $\rho = 1000 \text{ kg/m}^3$   
 DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Averaged Fast SAR: Polynomial fit
- Electronics: DAE4 Sn1239; Calibrated: 4/15/2014
- Probe: EX3DV4 - SN3885; ConvF(3.86, 3.86, 3.86); Calibrated: 9/18/2013;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118

#### Body/5.8 GHz, Pin=100mW/Area Scan (61x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 46.169 V/m; Power Drift = -0.11 dB

**Fast SAR: SAR(1 g) = 6.81 W/kg; SAR(10 g) = 1.84 W/kg**

Maximum value of SAR (interpolated) = 18.6 W/kg

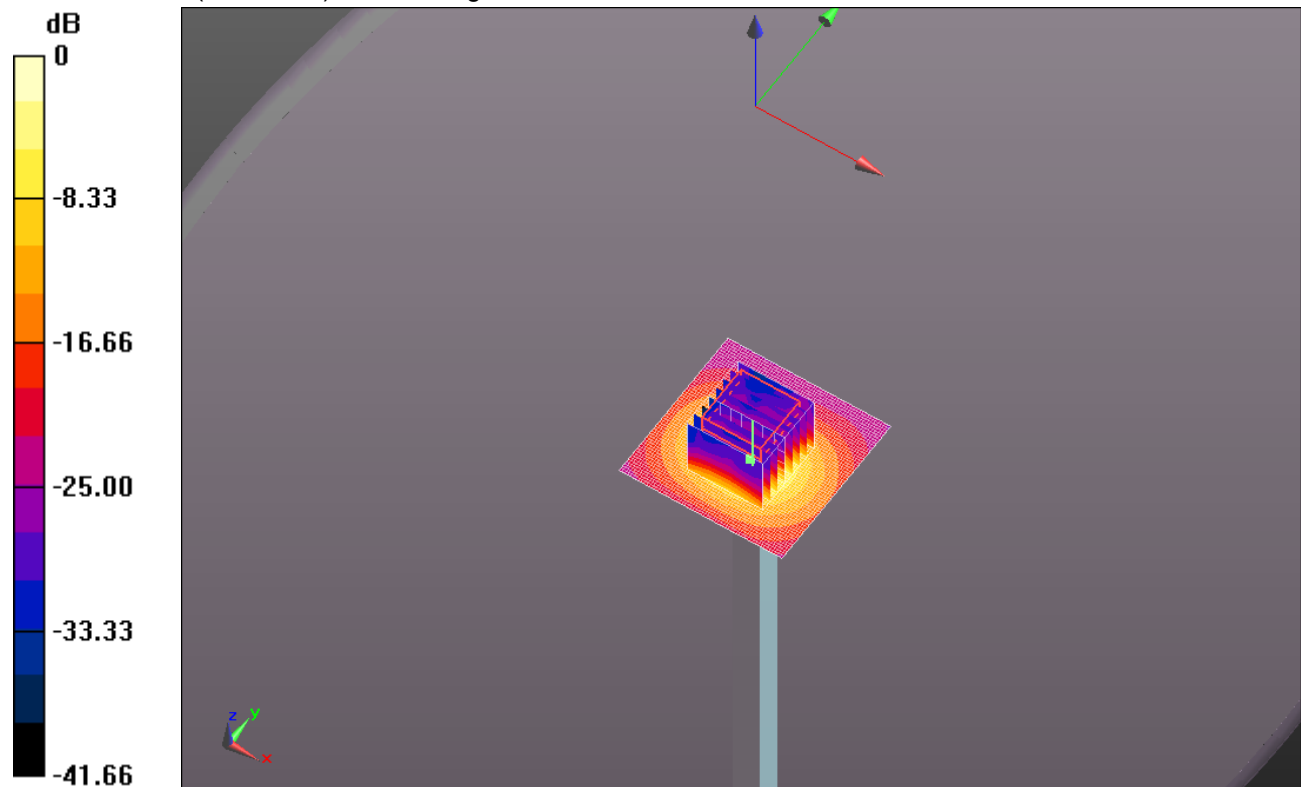
#### Body/5.8 GHz, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.169 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 29.7 W/kg

**SAR(1 g) = 7.17 W/kg; SAR(10 g) = 2.03 W/kg**

Maximum value of SAR (measured) = 17.1 W/kg

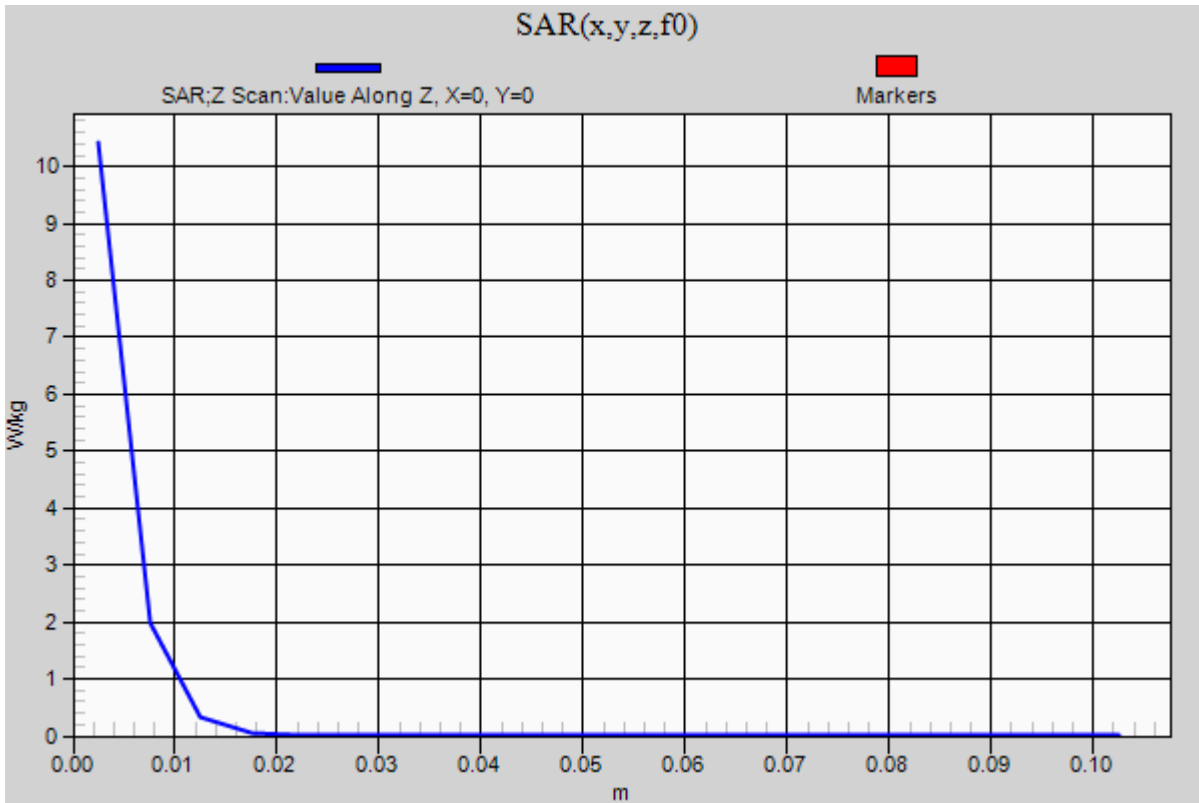


0 dB = 17.1 W/kg = 12.33 dBW/kg

### 20140723 SystemPerformanceCheck-D5GHzV2 SN 1003

Frequency: 5800 MHz; Duty Cycle: 1:1

**Body/5.8 GHz, Pin=100mW/Z Scan (1x1x21):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 10.4 W/kg





## Wi-Fi 2.4GHz Wi-Fi 2

Frequency: 2437 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used (interpolated):  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.854 \text{ S/m}$ ;  $\epsilon_r = 51.595$ ;  $\rho = 1000 \text{ kg/m}^3$   
 DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE3 Sn500; Calibrated: 5/15/2014
- Probe: EX3DV4 - SN3749; ConvF(6.49, 6.49, 6.49); Calibrated: 1/29/2014;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1117

### Edge 3/802.11b\_Ch 6/Area Scan (8x16x1): Measurement grid: dx=12mm, dy=12mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.09 W/kg

### Edge 3/802.11b\_Ch 6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

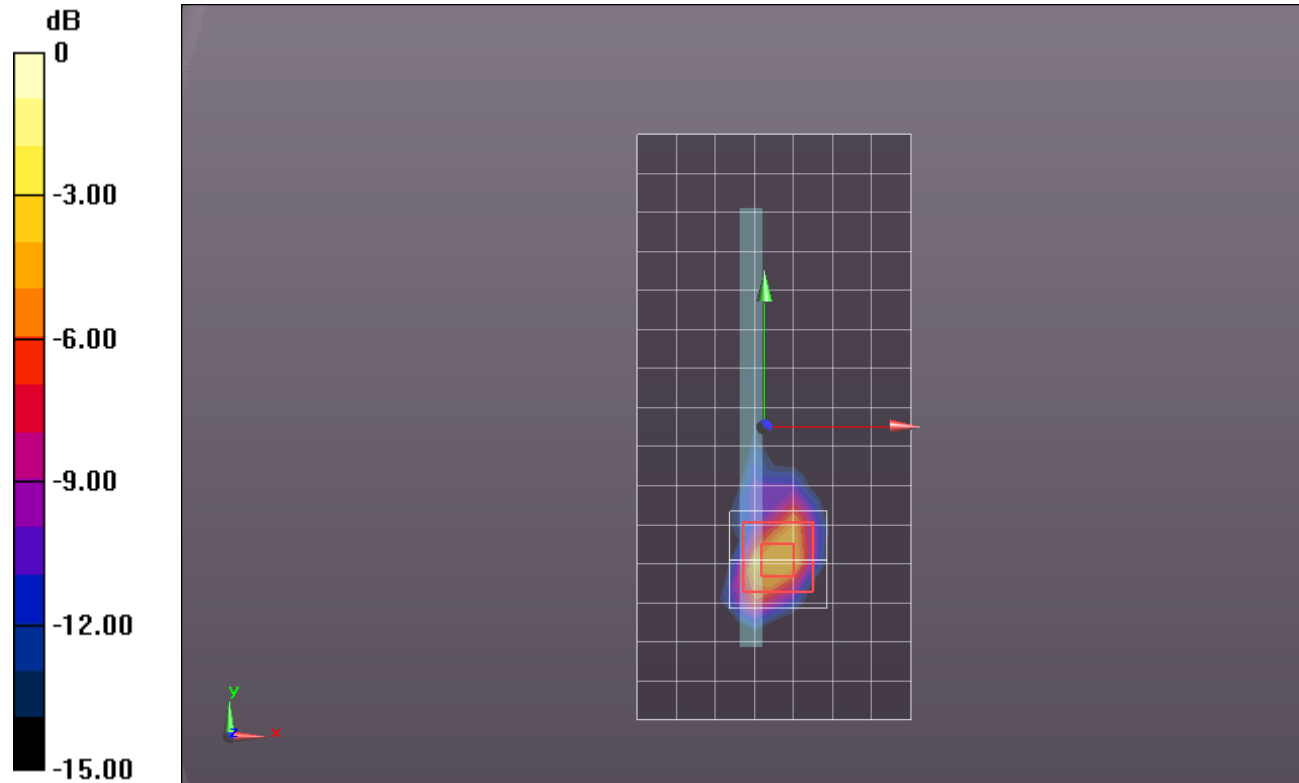
Reference Value = 33.931 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 4.01 W/kg

**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.373 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.16 W/kg



0 dB = 2.16 W/kg = 3.34 dBW/kg

## WiFi 5GHz MIMO

Frequency: 5240 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 5240$  MHz;  $\sigma = 5.262$  S/m;  $\epsilon_r = 50.604$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1433; Calibrated: 4/14/2014
- Probe: EX3DV4 - SN3989; ConvF(4.77, 4.77, 4.77); Calibrated: 4/15/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: ELI B v5.0; Type: QDOVA001BB; Serial: 1121

**Edge 3/802.11a\_Ch 48/Area Scan (10x19x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.32 W/kg

**Edge 3/802.11a\_Ch 48/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 16.595 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 3.77 W/kg

**SAR(1 g) = 0.891 W/kg; SAR(10 g) = 0.264 W/kg**

Maximum value of SAR (measured) = 1.81 W/kg

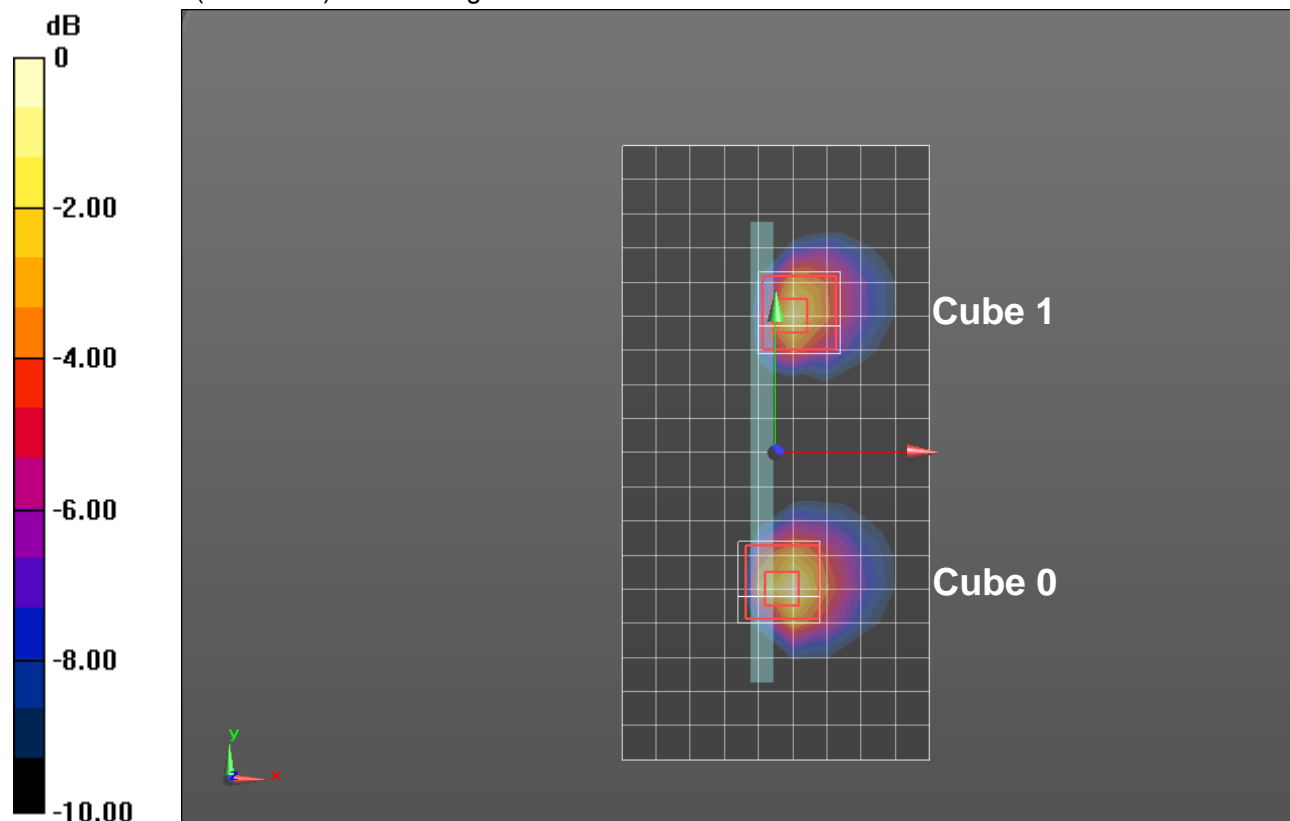
**Edge 3/802.11a\_Ch 48/Zoom Scan (7x7x12)/Cube 1:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 16.595 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 2.61 W/kg

**SAR(1 g) = 0.676 W/kg; SAR(10 g) = 0.226 W/kg**

Maximum value of SAR (measured) = 1.33 W/kg



0 dB = 1.33 W/kg = 1.24 dBW/kg

## WiFi 5GHz MIMO

Frequency: 5260 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 5260 \text{ MHz}$ ;  $\sigma = 5.286 \text{ S/m}$ ;  $\epsilon_r = 50.519$ ;  $\rho = 1000 \text{ kg/m}^3$

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1433; Calibrated: 4/14/2014
- Probe: EX3DV4 - SN3989; ConvF(4.58, 4.58, 4.58); Calibrated: 4/15/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: ELI B v5.0; Type: QDOVA001BB; Serial: 1121

**Edge 3/802.11a\_Ch 52/Area Scan (10x19x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.57 W/kg

**Edge 3/802.11a\_Ch 52/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 17.113 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.90 W/kg

**SAR(1 g) = 0.878 W/kg; SAR(10 g) = 0.262 W/kg**

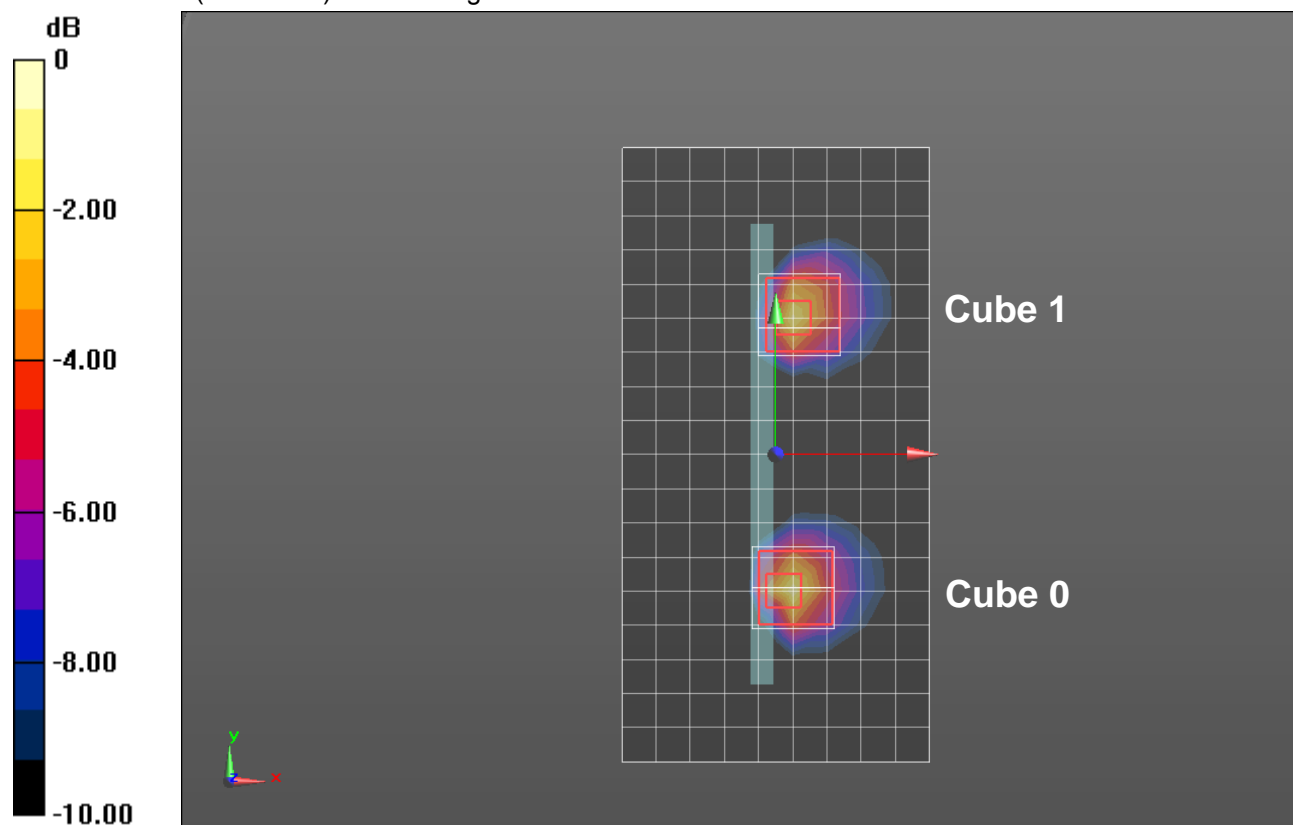
**Edge 3/802.11a\_Ch 52/Zoom Scan (7x7x12)/Cube 1:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 17.113 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.94 W/kg

**SAR(1 g) = 0.760 W/kg; SAR(10 g) = 0.251 W/kg**

Maximum value of SAR (measured) = 1.85 W/kg



0 dB = 1.85 W/kg = 2.67 dBW/kg

## WiFi 5GHz MIMO

Frequency: 5580 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 5580 \text{ MHz}$ ;  $\sigma = 5.938 \text{ S/m}$ ;  $\epsilon_r = 47.517$ ;  $\rho = 1000 \text{ kg/m}^3$

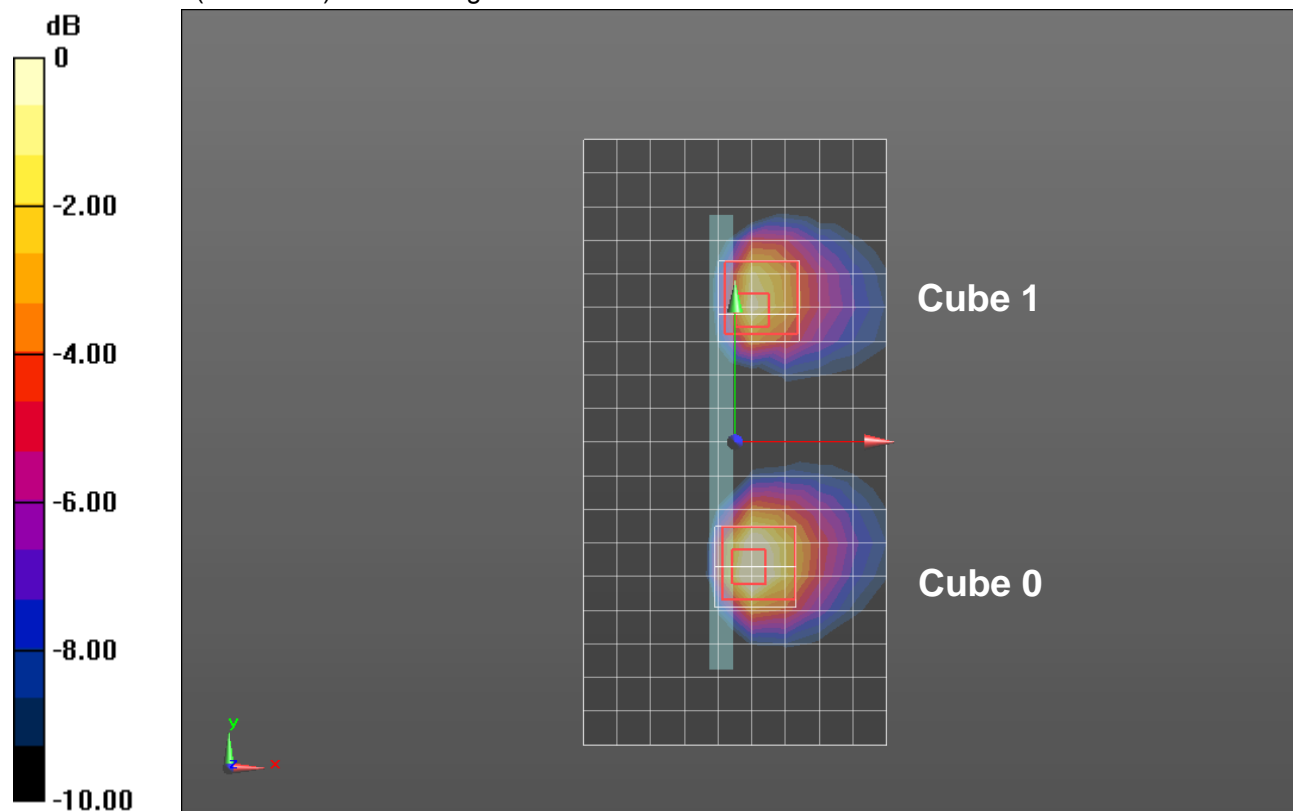
DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1357; Calibrated: 2/17/2014
- Probe: EX3DV4 - SN3901; ConvF(3.74, 3.74, 3.74); Calibrated: 2/25/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 A; Type: QD OVA 002 AA; Serial: 1180

**Edge 3/802.11a\_Ch 116/Area Scan (10x19x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (measured) = 1.84 W/kg

**Edge 3/802.11a\_Ch 116/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 18.229 V/m; Power Drift = 0.05 dB  
 Peak SAR (extrapolated) = 4.54 W/kg  
**SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.327 W/kg**  
 Maximum value of SAR (measured) = 2.14 W/kg

**Edge 3/802.11a\_Ch 116/Zoom Scan (7x7x12)/Cube 1:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 18.229 V/m; Power Drift = 0.05 dB  
 Peak SAR (extrapolated) = 2.50 W/kg  
**SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.208 W/kg**  
 Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

## WiFi 5GHz MIMO

Frequency: 5825 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used:  $f = 5825 \text{ MHz}$ ;  $\sigma = 6.118 \text{ S/m}$ ;  $\epsilon_r = 48.707$ ;  $\rho = 1000 \text{ kg/m}^3$

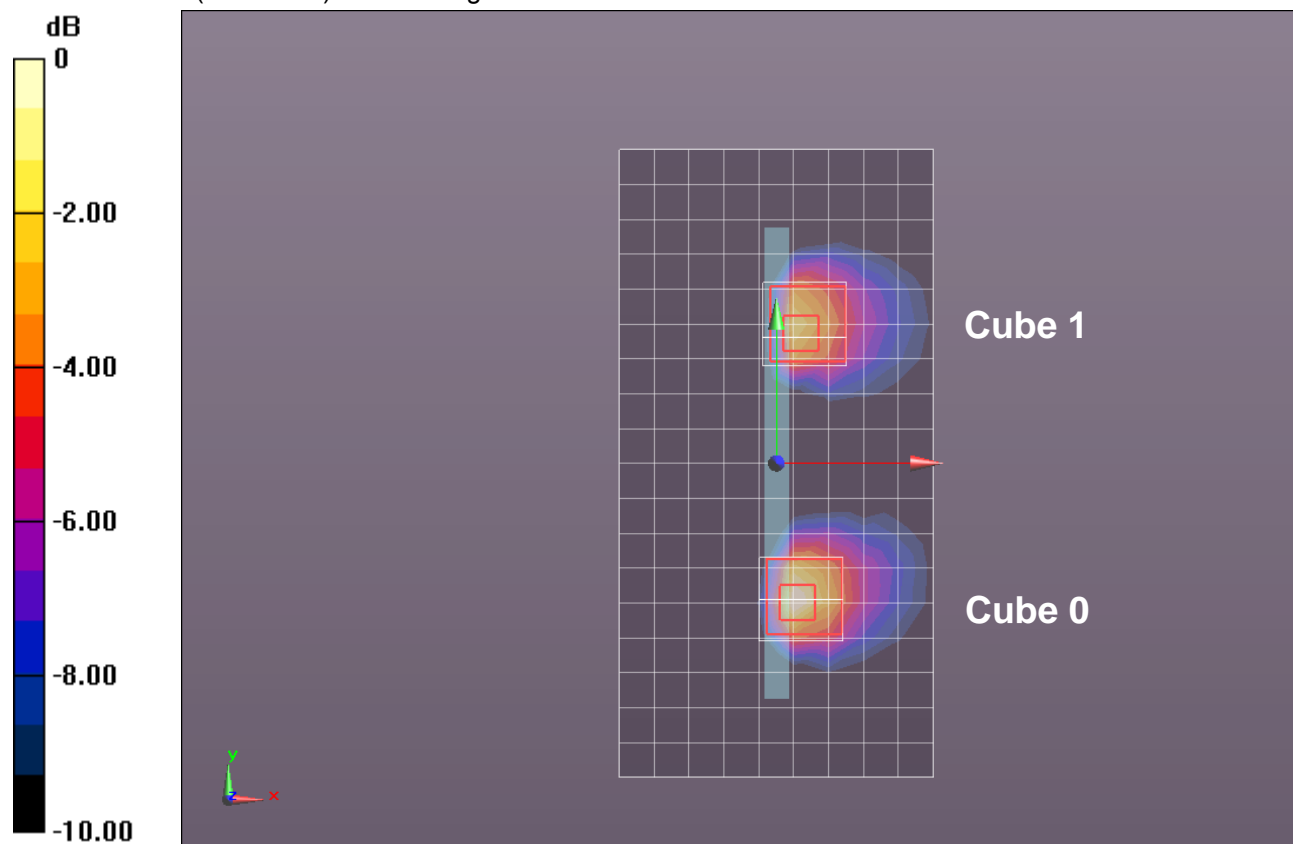
DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1239; Calibrated: 4/15/2014
- Probe: EX3DV4 - SN3885; ConvF(3.86, 3.86, 3.86); Calibrated: 9/18/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118

**Edge 3/802.11a\_Ch 165/Area Scan (10x19x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (measured) = 1.89 W/kg

**Edge 3/802.11a\_Ch 165/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 19.583 V/m; Power Drift = 0.10 dB  
 Peak SAR (extrapolated) = 5.05 W/kg  
**SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.356 W/kg**  
 Maximum value of SAR (measured) = 2.20 W/kg

**Edge 3/802.11a\_Ch 165/Zoom Scan 2 (7x7x12)/Cube 1:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 19.583 V/m; Power Drift = 0.10 dB  
 Peak SAR (extrapolated) = 3.65 W/kg  
**SAR(1 g) = 0.851 W/kg; SAR(10 g) = 0.286 W/kg**  
 Maximum value of SAR (measured) = 1.71 W/kg



0 dB = 1.71 W/kg = 2.33 dBW/kg

## Bluetooth

Frequency: 2441 MHz; Duty Cycle: 1:1.3; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 2.018$  S/m;  $\epsilon_r = 50.712$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan Setting: Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE3 Sn500; Calibrated: 5/15/2014
- Probe: EX3DV4 - SN3749; ConvF(6.49, 6.49, 6.49); Calibrated: 1/29/2014;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1117

**Edge 3/802.15\_GFSK\_Ch 39/Area Scan (8x16x1):** Measurement grid: dx=12mm, dy=12mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.314 W/kg

**Edge 3/802.15\_GFSK\_Ch 39/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

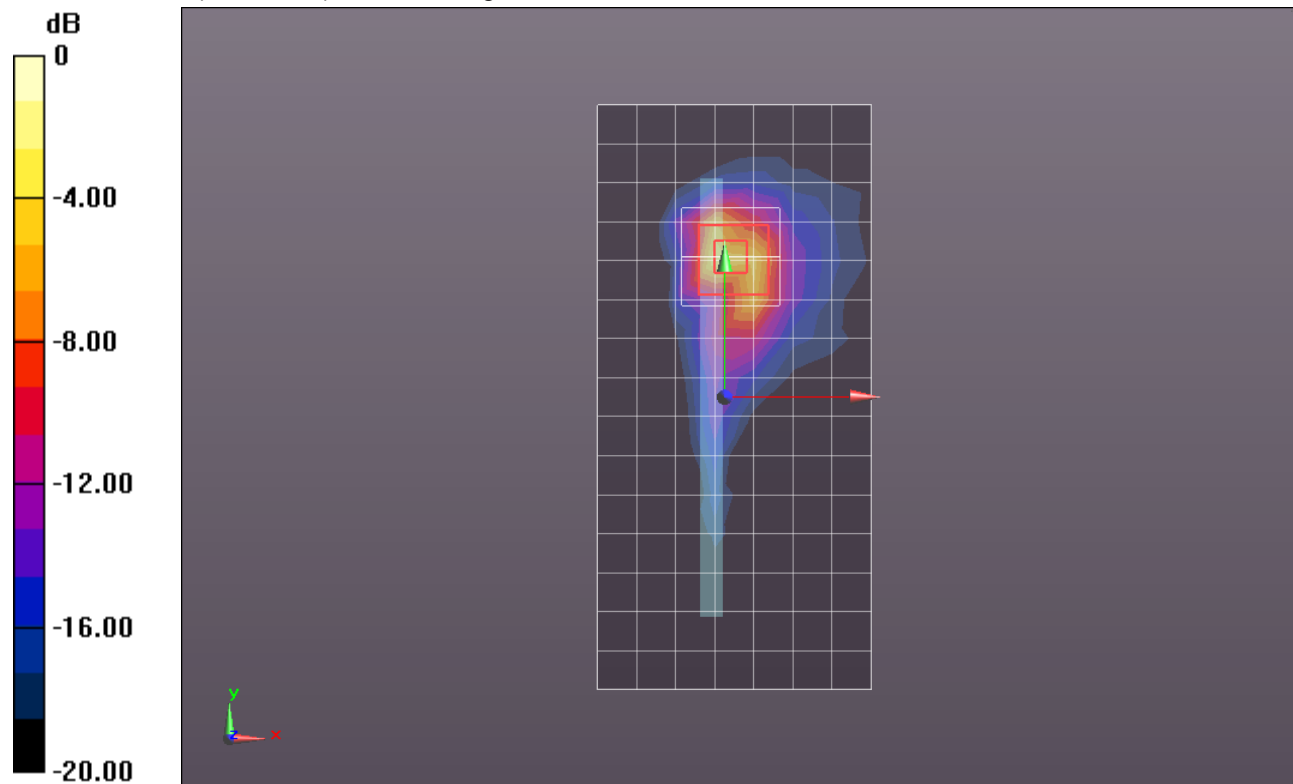
Reference Value = 16.695 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.101 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.559 W/kg



0 dB = 0.559 W/kg = -2.53 dBW/kg