

## System Check\_Head\_1750MHz

### DUT: D1750V2-1112

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

Medium: HSL\_1750\_200120 Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.372$  S/m;  $\epsilon_r = 40.969$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.7 °C ; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3931; ConvF(8.66, 8.66, 8.66) @ 1750 MHz; Calibrated: 2019/9/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2019/5/21
- Phantom: SAM\_RIGHT; Type: QD000P40CB; Serial: 1446
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 14.9 W/kg

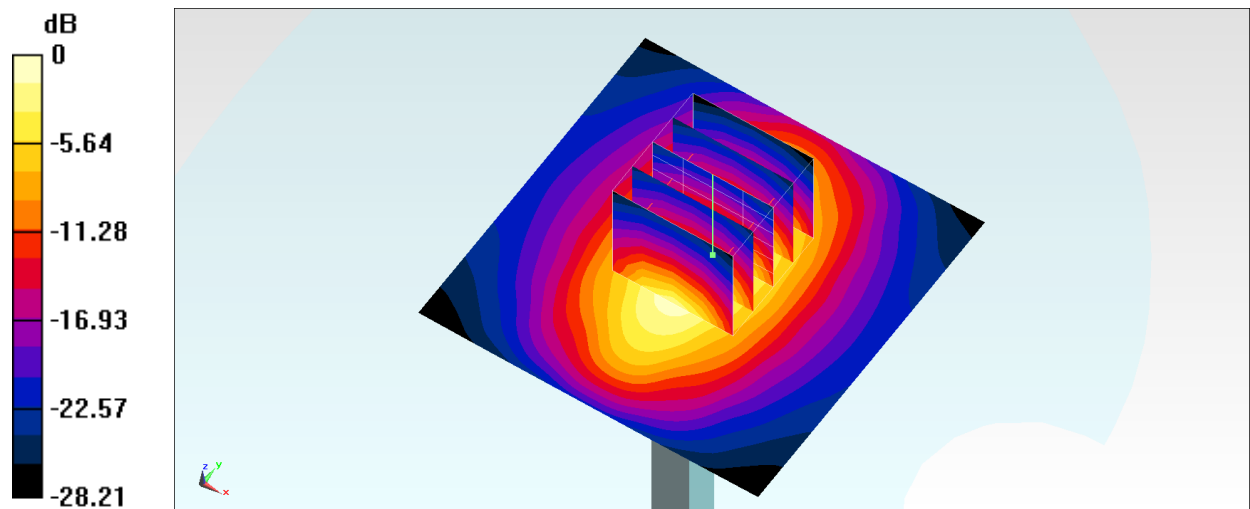
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 104.6 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 17.2 W/kg

**SAR(1 g) = 9.55 W/kg; SAR(10 g) = 5.09 W/kg**

Maximum value of SAR (measured) = 14.5 W/kg



0 dB = 14.9 W/kg = 11.73 dBW/kg

## System Check\_Head\_1750MHz

### DUT: D1750V2-1112

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

Medium: HSL\_1750\_200221 Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.369$  S/m;  $\epsilon_r = 40.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 22.5 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN3931; ConvF(8.66, 8.66, 8.66) @ 1750 MHz; Calibrated: 2019/9/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2019/5/21
- Phantom: SAM\_Right; Type: SAM; Serial: TP:1446
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 14.0 W/kg

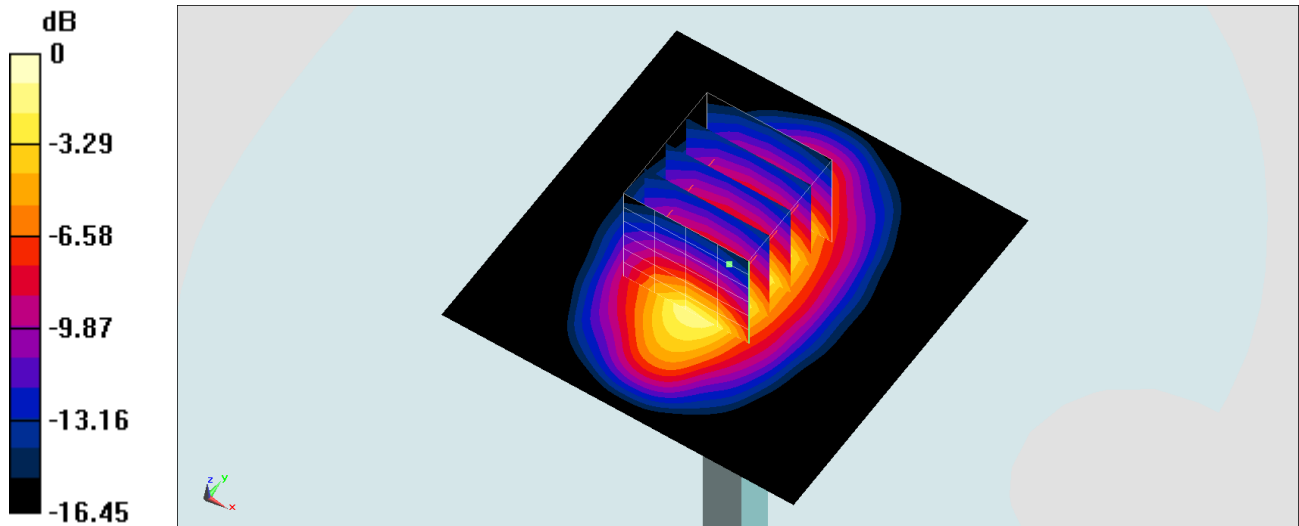
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 104.9 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 16.4 W/kg

**SAR(1 g) = 9.25 W/kg; SAR(10 g) = 5.02 W/kg**

Maximum value of SAR (measured) = 13.5 W/kg



0 dB = 14.0 W/kg = 11.46 dBW/kg

## System Check\_Head\_1900MHz

### DUT: D1900V2-5d041

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

Medium: HSL\_1900\_200120 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.453$  S/m;  $\epsilon_r = 41.053$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.7 °C ; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3931; ConvF(8.32, 8.32, 8.32) @ 1900 MHz; Calibrated: 2019/9/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2019/5/21
- Phantom: SAM\_RIGHT; Type: QD000P40CB; Serial: 1446
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

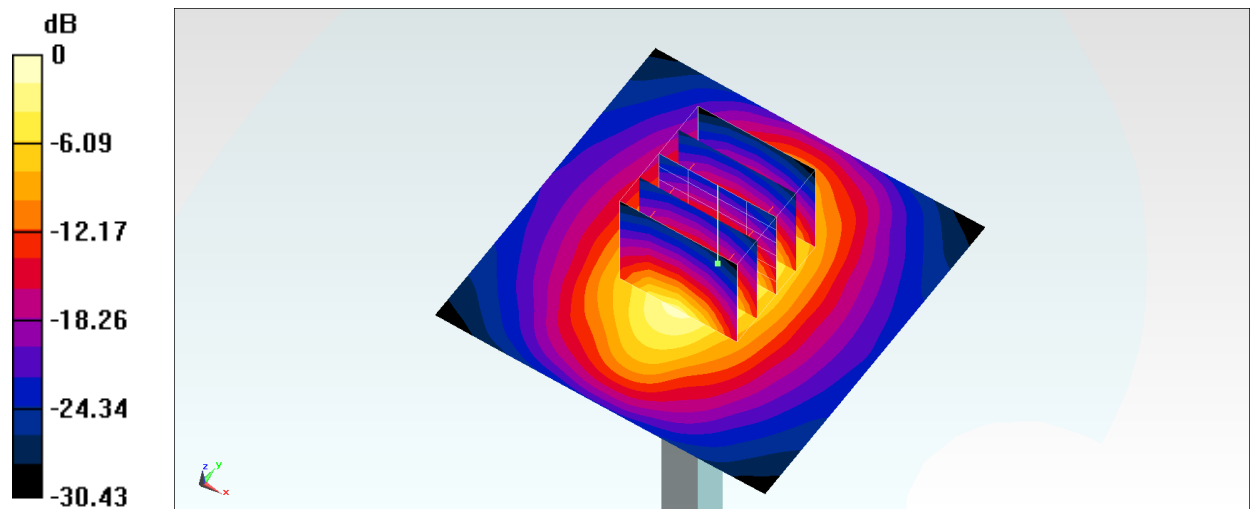
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 110.1 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 19.4 W/kg

**SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.56 W/kg**

Maximum value of SAR (measured) = 16.4 W/kg



0 dB = 16.8 W/kg = 12.25 dBW/kg

## System Check\_Head\_1900MHz

### DUT: D1900V2-5d041

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

Medium: HSL\_1900\_200221 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.415$  S/m;  $\epsilon_r = 39.184$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3931; ConvF(8.32, 8.32, 8.32) @ 1900 MHz; Calibrated: 2019/9/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2019/5/21
- Phantom: SAM\_Right; Type: SAM; Serial: TP:1446
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 16.0 W/kg

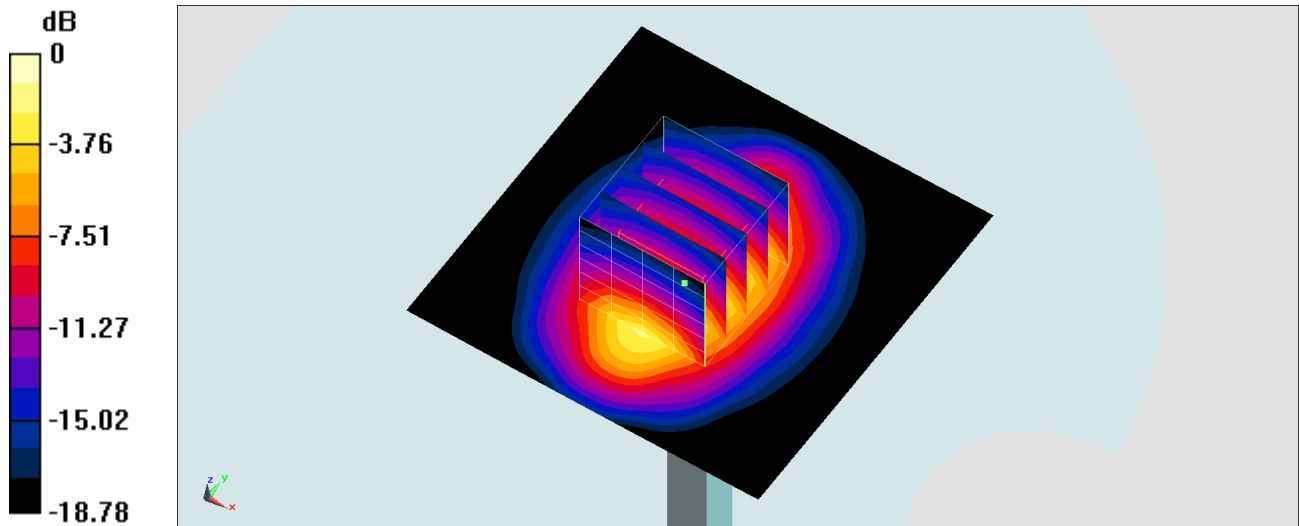
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 110.2 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 19.1 W/kg

**SAR(1 g) = 10 W/kg; SAR(10 g) = 5.17 W/kg**

Maximum value of SAR (measured) = 15.8 W/kg



0 dB = 15.8 W/kg = 11.99 dBW/kg

Test Laboratory: Sporton International Inc.

Device Under Test Properties

| Manufacturer | Dimensions [mm]       | IMEI | DUT Type                   |
|--------------|-----------------------|------|----------------------------|
|              | 100.0 x 100.0 x 100.0 |      | System Verification Source |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Frequency [MHz] | Conversion Factor |
|-----------------|------------------------------|-----------------|-------------------|
| 5G              | FRONT, 5.55                  | 30000.0         | 1.0               |

Hardware Setup

| Phantom       | Medium | Probe, Calibration Date               | DAE, Calibration Date  |
|---------------|--------|---------------------------------------|------------------------|
| mmWave – xxxx | Air –  | EUmmWV4 – SN9461_F1–78GHz, 2019–11–05 | DAE4 Sn376, 2019–12–06 |

Scans Setup

|                     |             |
|---------------------|-------------|
| Grid Extents [mm]   | 60.0 x 60.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 5.55        |

Measurement Results

|                                          |                   |
|------------------------------------------|-------------------|
| Date                                     | 2020–03–19, 14:37 |
| Avg. Area [cm <sup>2</sup> ]             | 4.00              |
| S <sub>avg inc</sub> [W/m <sup>2</sup> ] | 30.7              |
| S <sub>avg tot</sub> [W/m <sup>2</sup> ] | 31.2              |
| S <sub>peak</sub> [W/m <sup>2</sup> ]    | 44.7              |
| E <sub>peak</sub> [V/m]                  | 130               |
| H <sub>peak</sub> [A/m]                  | 0.348             |
| Power Drift [dB]                         | –0.10             |

Averaged [4.0 cm<sup>2</sup>] |Re{S}|(x,y,z,f0) [dB(31.2W/m<sup>2</sup>)]

