



## Appendix B. SAR Measurement Plots

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Test Laboratory: HUAWEI SAR/HAC Lab

**501HW LTE Band XXV 20M QPSK 1RB#99 26140CH Front Side 10mm**

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1860 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.482$  S/m;  $\epsilon_r = 53.511$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3744; ConvF(7.17, 7.17, 7.17); Calibrated: 2014-7-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (7x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 1.14 W/kg

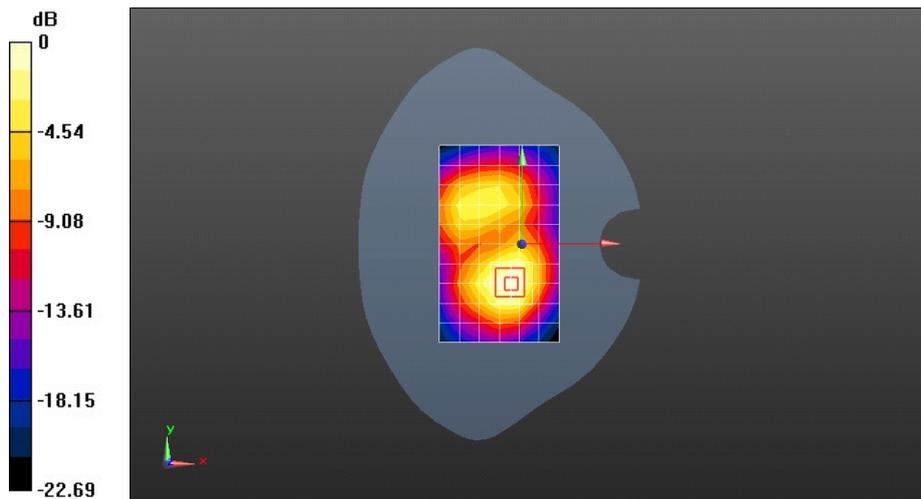
**Configuration/Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 10.73 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.645 W/kg**

Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.14 W/kg = 0.57 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

### 501HW LTE Band XXVI 15M QPSK 1RB#74 26775CH Front Side 10mm-repeated

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, LTE-FDD (SC-FDMA, 15MHz, QPSK/16-QAM) (0); Frequency: 822.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 822.5$  MHz;  $\sigma = 0.953$  S/m;  $\epsilon_r = 55.267$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3744; ConvF(9.06, 9.06, 9.06); Calibrated: 2014-7-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (8x11x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

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

Maximum value of SAR (measured) = 1.15 W/kg

**Configuration/Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

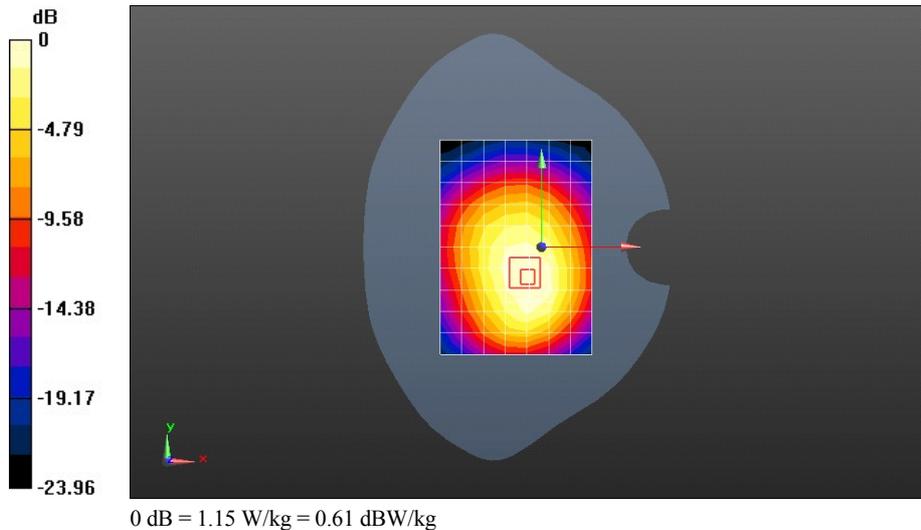
Reference Value = 29.86 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.46 W/kg

**SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.731 W/kg**

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

Maximum value of SAR (measured) = 1.18 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

### 501HW LTE Band XLI 20M QPSK 1RB#50 41490CH Bottom Side 10mm

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, LTE-TDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 2680 MHz; Duty Cycle: 1:2.3094  
Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.274$  S/m;  $\epsilon_r = 52.196$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3744; ConvF(6.54, 6.54, 6.54); Calibrated: 2014-7-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (8x13x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 0.360 W/kg

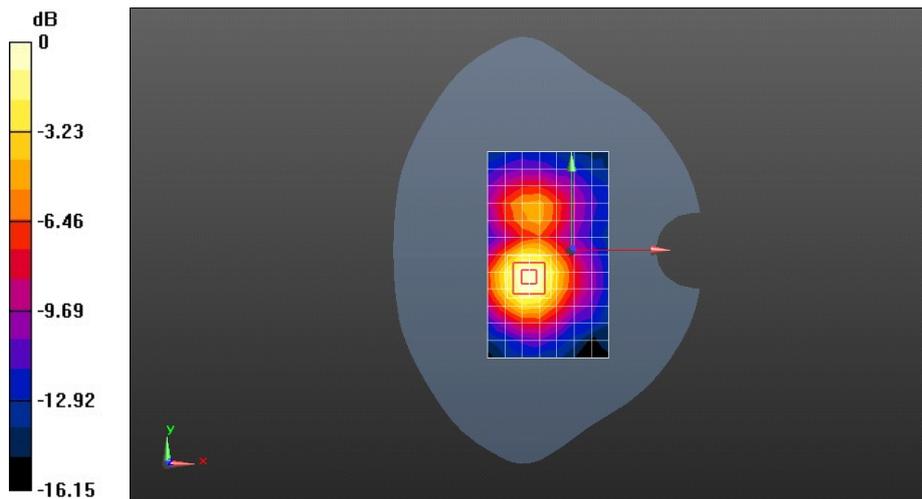
**Configuration/Body/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 6.322 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.612 W/kg

**SAR(1 g) = 0.315 W/kg; SAR(10 g) = 0.163 W/kg**

Maximum value of SAR (measured) = 0.397 W/kg



0 dB = 0.360 W/kg = -4.44 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

### 501HW WiFi 2.4G 11b 6CH Bottom side 10mm-Ap $\nu$ 3

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.913$  S/m;  $\epsilon_r = 52.881$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3744; ConvF(6.69, 6.69, 6.69); Calibrated: 2014-7-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (8x13x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 0.208 W/kg

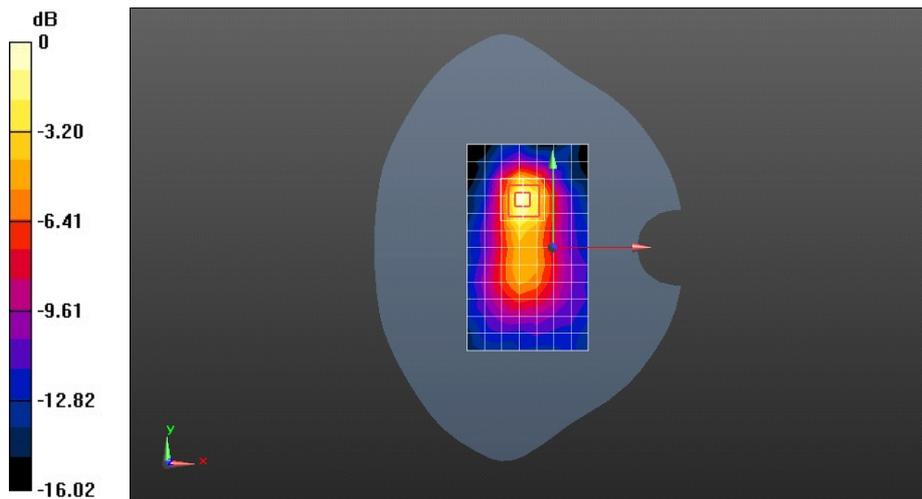
**Configuration/Body/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 5.910 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.341 W/kg

**SAR(1 g) = 0.171 W/kg; SAR(10 g) = 0.081 W/kg**

Maximum value of SAR (measured) = 0.226 W/kg



0 dB = 0.208 W/kg = -6.82 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

### 501HW WiFi 2.4G 11b 6CH Top Side 10mm-Apv4

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.913$  S/m;  $\epsilon_r = 52.881$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3744; ConvF(6.69, 6.69, 6.69); Calibrated: 2014-7-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (8x13x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 0.350 W/kg

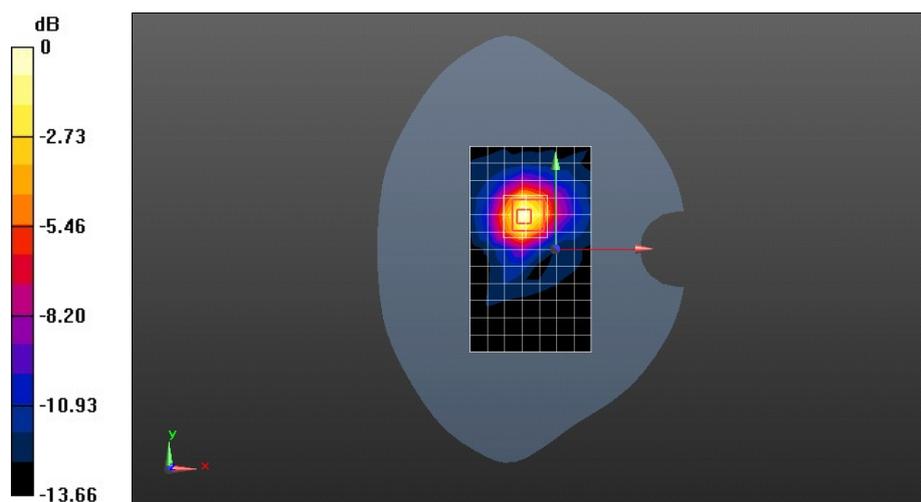
**Configuration/Body/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 4.111 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.580 W/kg

**SAR(1 g) = 0.278 W/kg; SAR(10 g) = 0.140 W/kg**

Maximum value of SAR (measured) = 0.381 W/kg



0 dB = 0.350 W/kg = -4.56 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

### 501HW WiFi 2.4G 11n 6CH Top side 10mm-MIMO

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.913$  S/m;  $\epsilon_r = 52.881$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3744; ConvF(6.69, 6.69, 6.69); Calibrated: 2014-7-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (9x13x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 0.125 W/kg

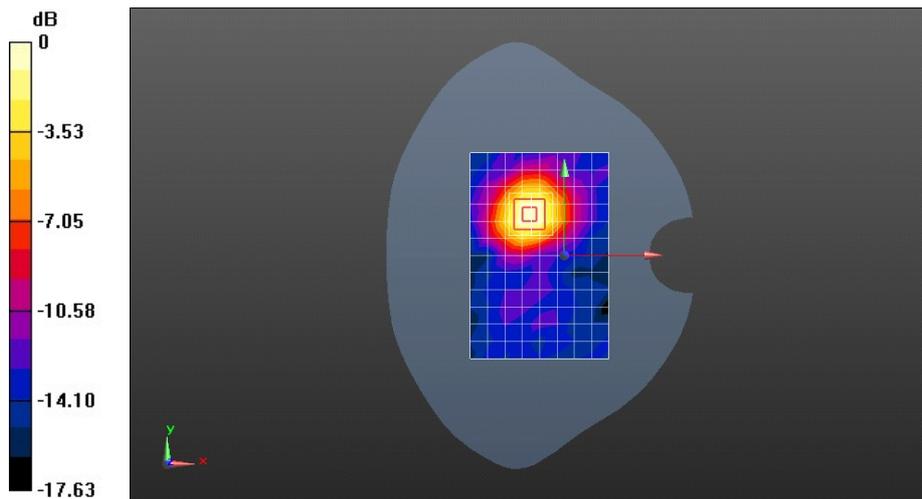
**Configuration/Body/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 1.960 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.218 W/kg

**SAR(1 g) = 0.115 W/kg; SAR(10 g) = 0.058 W/kg**

Maximum value of SAR (measured) = 0.145 W/kg



0 dB = 0.125 W/kg = -9.03 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

### 501HW WiFi 5G 11a 56CH Bottom Side 10mm-Apv1

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 5280 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5280$  MHz;  $\sigma = 5.564$  S/m;  $\epsilon_r = 47.085$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3736; ConvF(4.08, 4.08, 4.08); Calibrated: 2015-4-30;
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (9x13x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 0.0897 W/kg

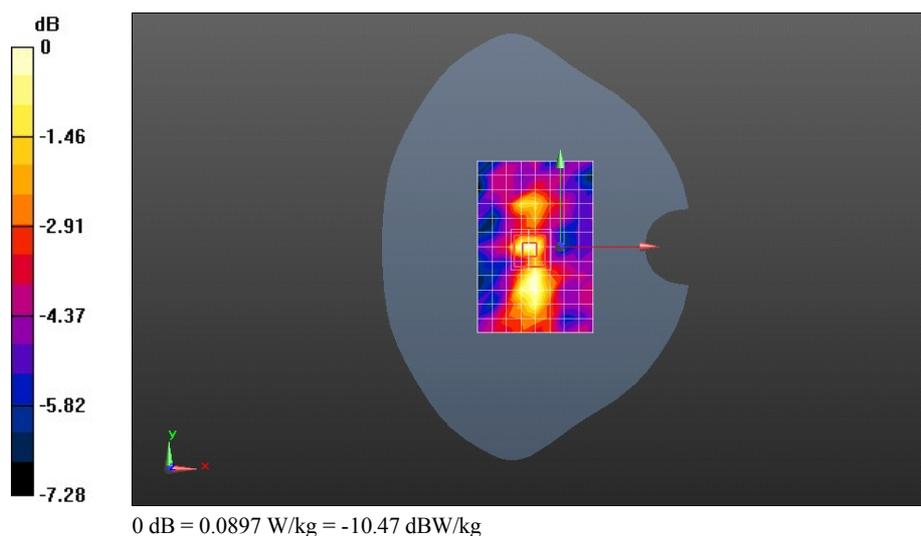
**Configuration/Body/Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 4.298 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.358 W/kg

**SAR(1 g) = 0.055 W/kg; SAR(10 g) = 0.015 W/kg**

Maximum value of SAR (measured) = 0.152 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

## 501HW WiFi 5G 11a 60CH Top Side 10mm-Ant 2

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5300$  MHz;  $\sigma = 5.335$  S/m;  $\epsilon_r = 47.414$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3736; ConvF(4.08, 4.08, 4.08); Calibrated: 2015-4-30;
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 47.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (9x14x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 0.228 W/kg

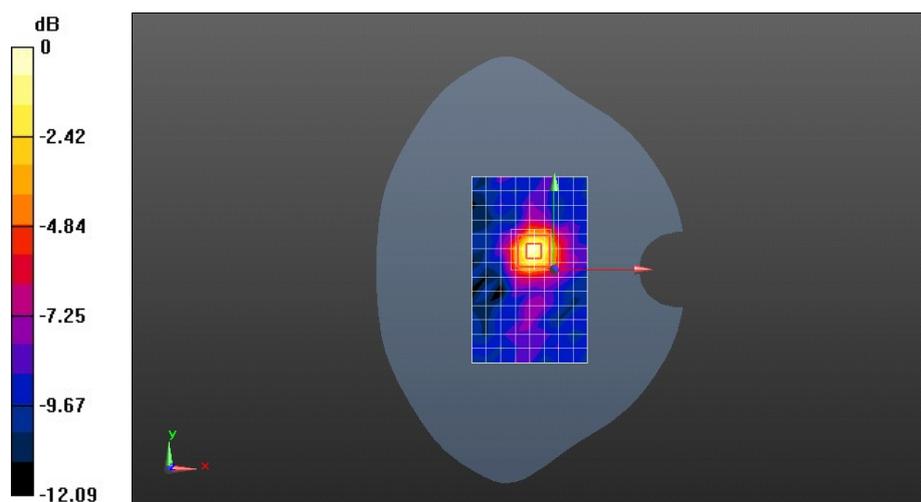
**Configuration/Body/Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 4.528 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.575 W/kg

**SAR(1 g) = 0.171 W/kg; SAR(10 g) = 0.060 W/kg**

Maximum value of SAR (measured) = 0.375 W/kg



0 dB = 0.228 W/kg = -6.42 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## 501HW WiFi 5G 11n 64CH Top Side 10mm-MIMO

**DUT: 501HW; Type: Mobile WiFi; Serial: SAR1**

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 5320 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5320$  MHz;  $\sigma = 5.394$  S/m;  $\epsilon_r = 47.095$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3736; ConvF(4.08, 4.08, 4.08); Calibrated: 2015-4-30;
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Body/Area Scan (9x12x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 0.299 W/kg

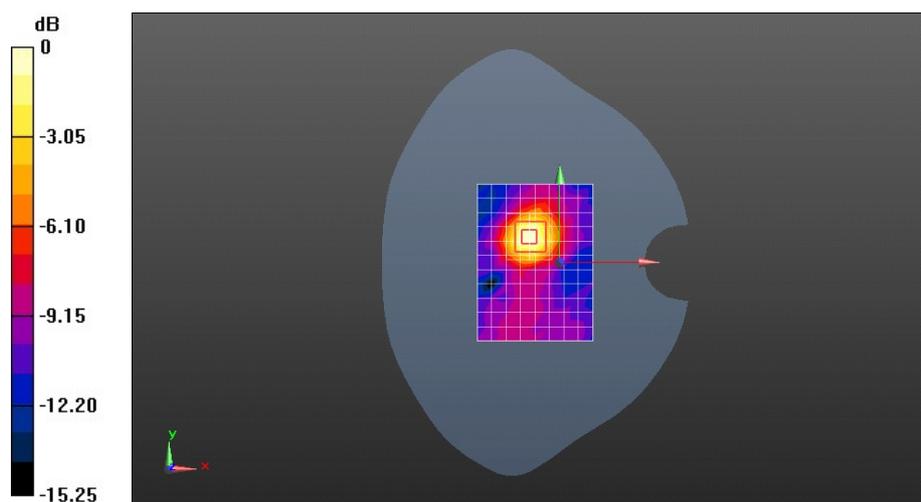
**Configuration/Body/Zoom Scan (9x9x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 3.876 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.900 W/kg

**SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.089 W/kg**

Maximum value of SAR (measured) = 0.601 W/kg



0 dB = 0.299 W/kg = -5.24 dBW/kg