



### Appendix A. System Check Plots

Table of contents
<b>SystemPerformanceCheck-D835-ES-Head</b>
<b>SystemPerformanceCheck-D835-ES-Body</b>
<b>SystemPerformanceCheck-D1900-ES-Head</b>
<b>SystemPerformanceCheck-D1900-ES-Body</b>
<b>SystemPerformanceCheck-D2450-ES-Head</b>
<b>SystemPerformanceCheck-D2450-ES-Body</b>
<b>SystemPerformanceCheck-D2600-ES-Head</b>
<b>SystemPerformanceCheck-D2600-ES-Body</b>
<b>SystemPerformanceCheck-D5250-EX-Head</b>
<b>SystemPerformanceCheck-D5600-EX-Body</b>

Test Laboratory: HUAWEI SAR/HAC Lab

### System Performance Check-D835-ES-Head

**DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d059**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.9 \text{ S/m}$ ;  $\epsilon_r = 41.654$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(6.68, 6.68, 6.68); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM1; Type: SAM; Serial: TP-1475
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=15mm, Pin=250mW/Area Scan (6x13x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.84 W/kg

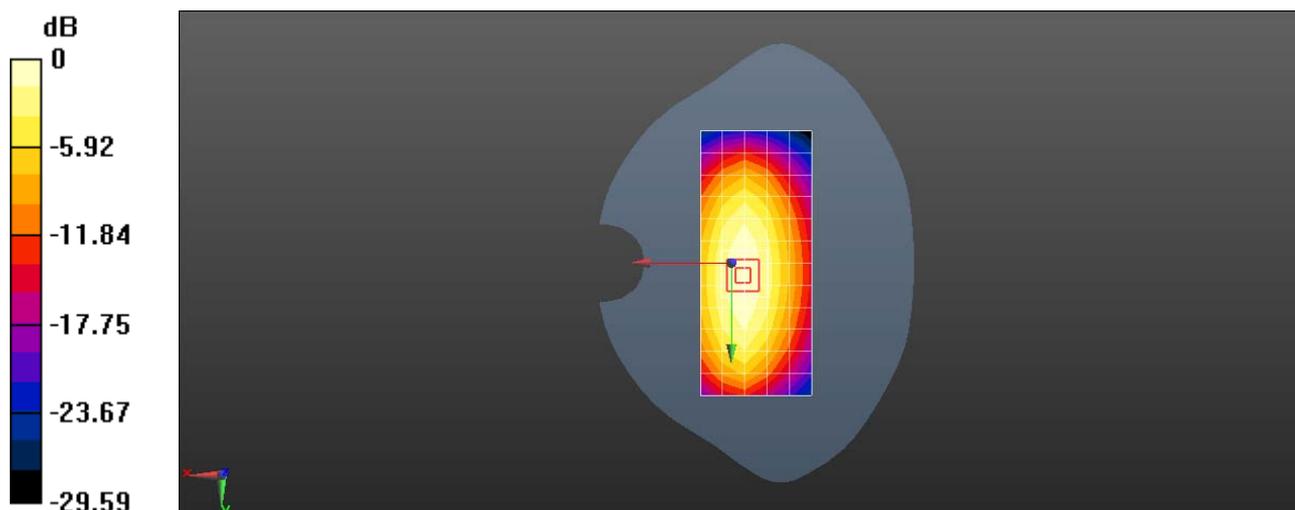
**Configuration/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 52.28 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 3.63 W/kg

**SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.59 W/kg**

Maximum value of SAR (measured) = 2.87 W/kg



0 dB = 2.84 W/kg = 4.53 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## SystemPerformanceCheck-D835-ES-Body

**DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d059**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.981$  S/m;  $\epsilon_r = 55.596$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(6.33, 6.33, 6.33); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM2; Type: SAM; Serial: TP:1474
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=15mm, Pin=250mW/Area Scan (6x13x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 2.53 W/kg

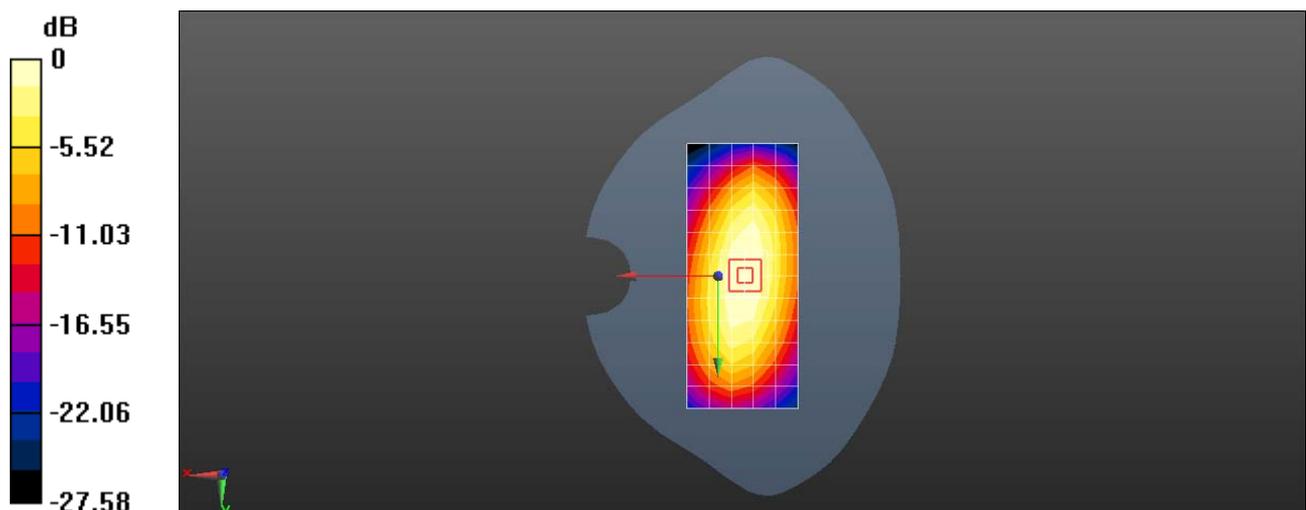
**Configuration/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 55.73 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.59 W/kg

**SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.62 W/kg**

Maximum value of SAR (measured) = 2.87 W/kg



0 dB = 2.53 W/kg = 4.03 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## SystemPerformanceCheck-D1900-ES-Head

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d091**

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.422$  S/m;  $\epsilon_r = 39.309$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(5.33, 5.33, 5.33); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM1; Type: SAM; Serial: TP-1475
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=10mm pin=250mW/Area Scan (6x10x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 11.7 W/kg

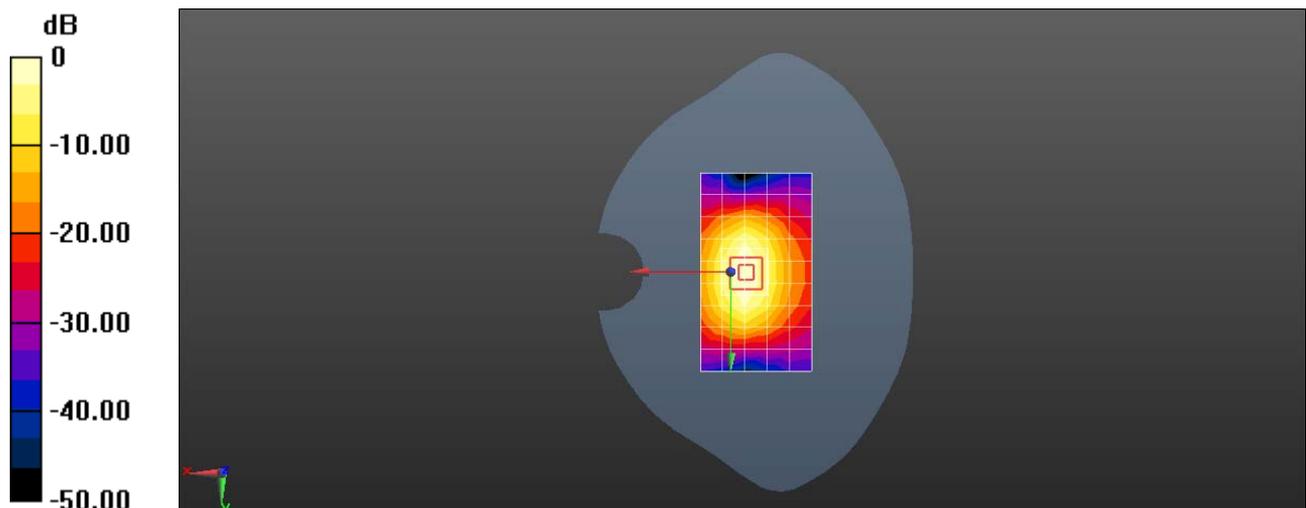
**Configuration/d=10mm pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 79.20 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 17.6 W/kg

**SAR(1 g) = 9.79 W/kg; SAR(10 g) = 5.09 W/kg**

Maximum value of SAR (measured) = 12.5 W/kg



0 dB = 11.7 W/kg = 10.68 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

### SystemPerformanceCheck-D1900-ES-Body

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d091**

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.572$  S/m;  $\epsilon_r = 52.663$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(4.99, 4.99, 4.99); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM2; Type: SAM; Serial: TP:1474
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=10mm pin=250mW/Area Scan (6x10x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 10.4 W/kg

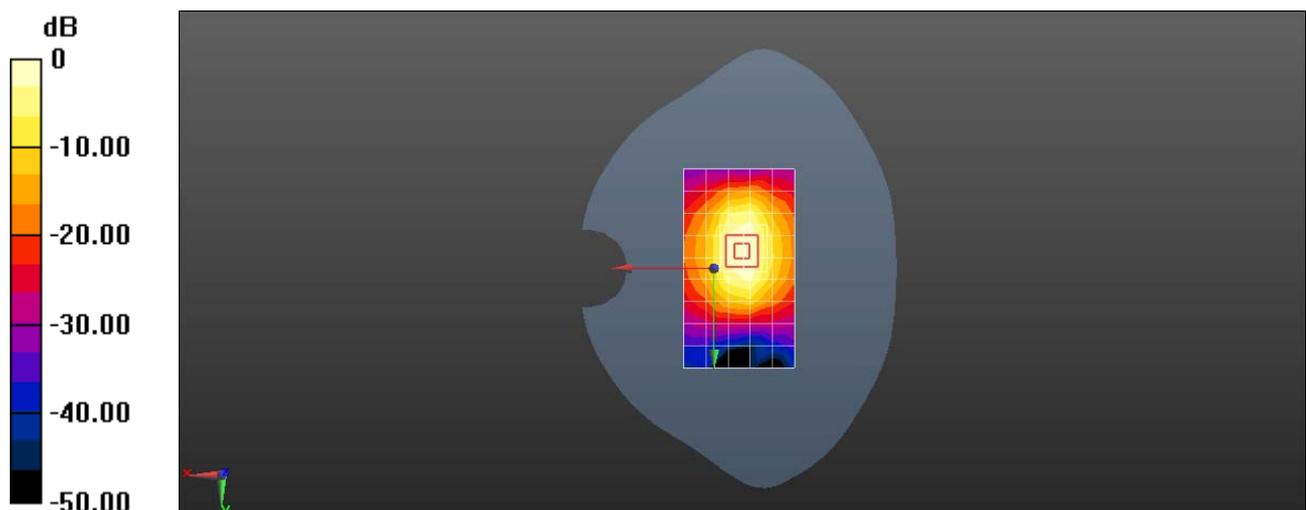
**Configuration/d=10mm pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 77.29 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 18.2 W/kg

**SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.36 W/kg**

Maximum value of SAR (measured) = 13.0 W/kg



0 dB = 10.4 W/kg = 10.17 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## SystemPerformanceCheck-D2450-ES-Head

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:860**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.83$  S/m;  $\epsilon_r = 40.445$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(4.73, 4.73, 4.73); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM1; Type: SAM; Serial: TP-1475
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=10mm, Pin=250mW/Area Scan (6x11x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 18.5 W/kg

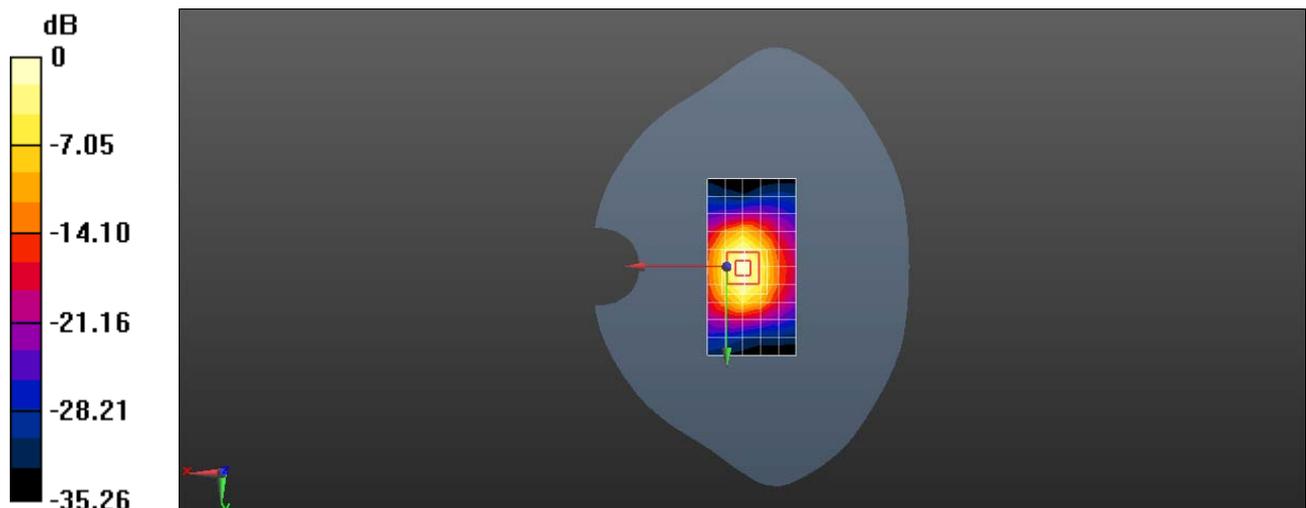
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 90.27 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 29.2 W/kg

**SAR(1 g) = 14 W/kg; SAR(10 g) = 6.43 W/kg**

Maximum value of SAR (measured) = 18.2 W/kg



0 dB = 18.5 W/kg = 12.67 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

### SystemPerformanceCheck-D2450-ES-Body

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:860**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.005$  S/m;  $\epsilon_r = 52.637$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(4.57, 4.57, 4.57); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM2; Type: SAM; Serial: TP:1474
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=10mm, Pin=250mW/Area Scan (6x11x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 13.2 W/kg

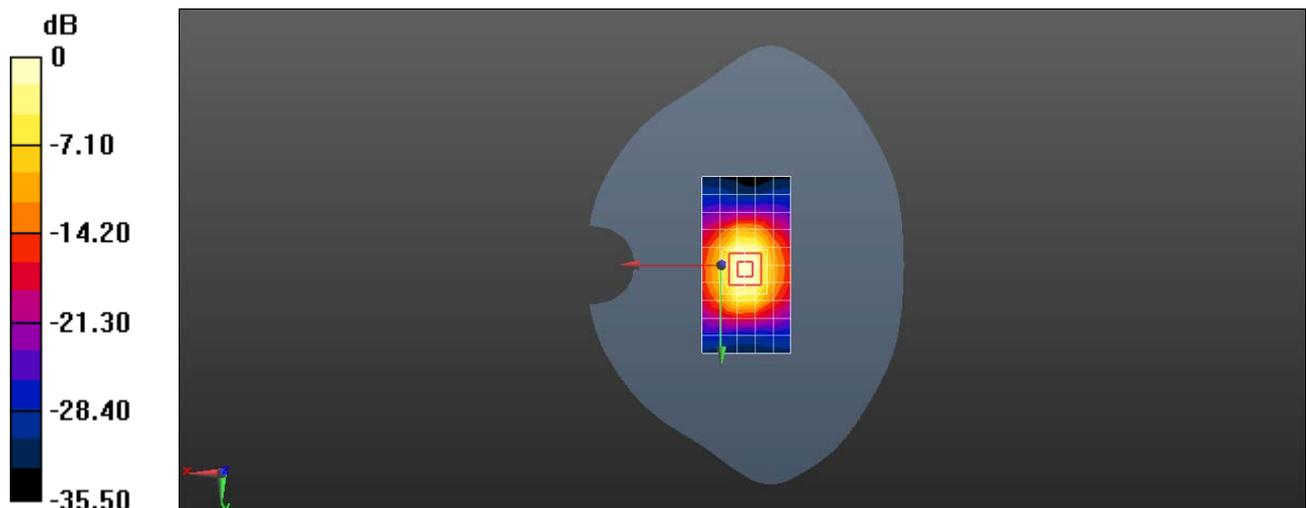
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 92.63 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 26.4 W/kg

**SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.87 W/kg**

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



0 dB = 13.2 W/kg = 11.21 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## SystemPerformanceCheck-D2600-ES-Head

**DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1021**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.985$  S/m;  $\epsilon_r = 38.436$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(4.69, 4.69, 4.69); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM1; Type: SAM; Serial: TP-1475
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=10mm, Pin=250mW/Area Scan (8x11x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 19.2 W/kg

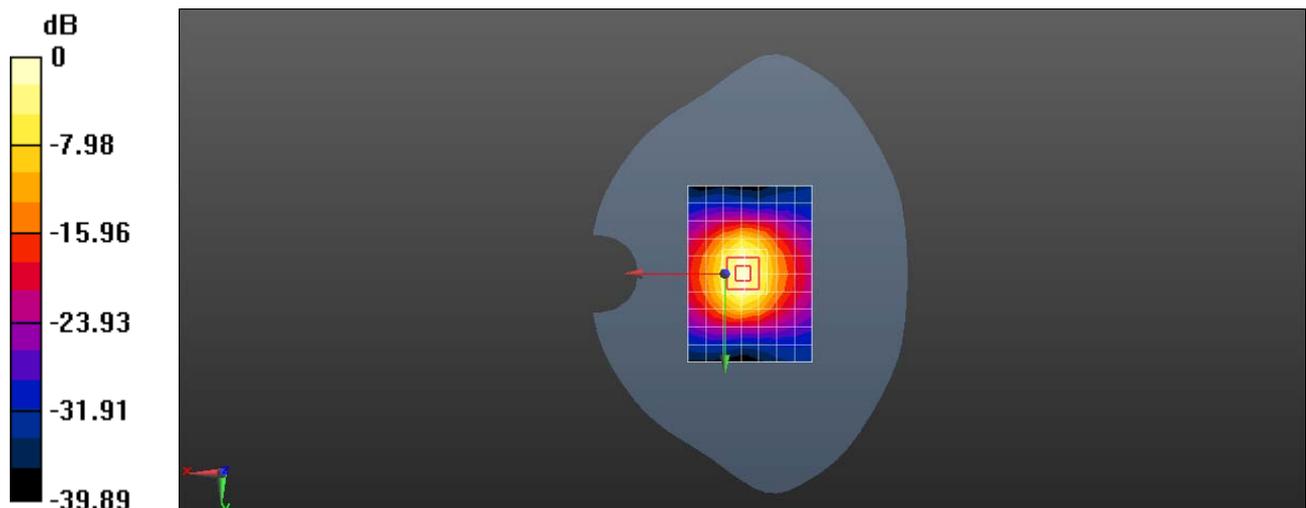
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 86.78 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 31.3 W/kg

**SAR(1 g) = 14.7 W/kg; SAR(10 g) = 6.62 W/kg**

Maximum value of SAR (measured) = 19.4 W/kg



0 dB = 19.2 W/kg = 12.83 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## SystemPerformanceCheck-D2600-ES-Body

**DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1021**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.197$  S/m;  $\epsilon_r = 52.151$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- ε Probe: ES3DV3 - SN3168; ConvF(4.31, 4.31, 4.31); Calibrated: 2016-9-27;
- ε Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM2; Type: SAM; Serial: TP:1474
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**Configuration/d=10mm, Pin=250mW/Area Scan (8x11x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 13.9 W/kg

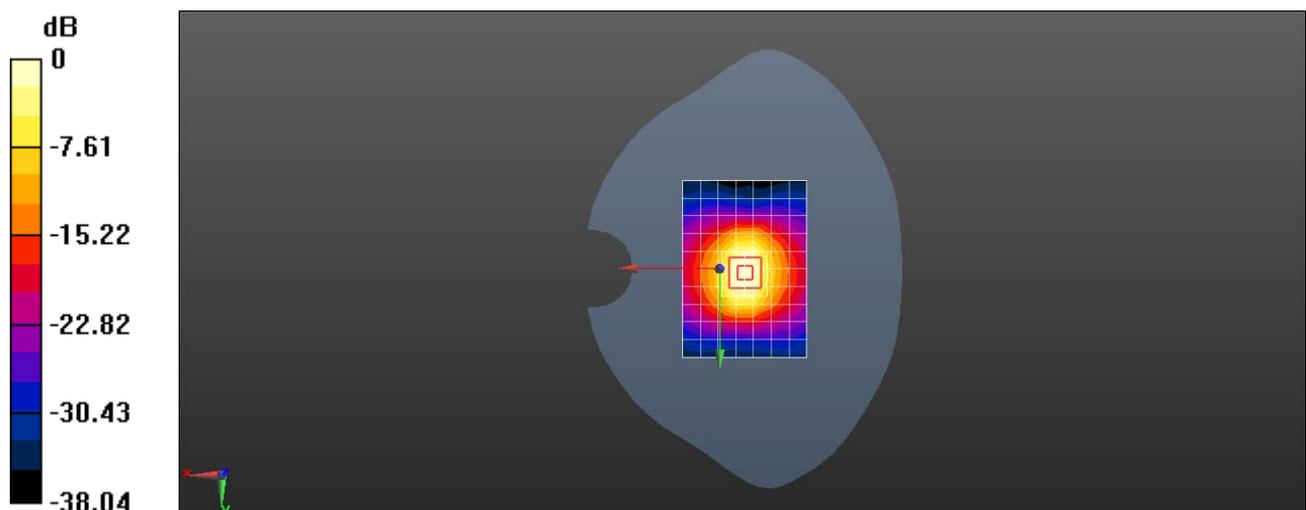
**Configuration/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 88.31 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 31.9 W/kg

**SAR(1 g) = 14.7 W/kg; SAR(10 g) = 6.52 W/kg**

Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 13.9 W/kg = 11.43 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## System Performance Check-D5250-EX-Head

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1155**

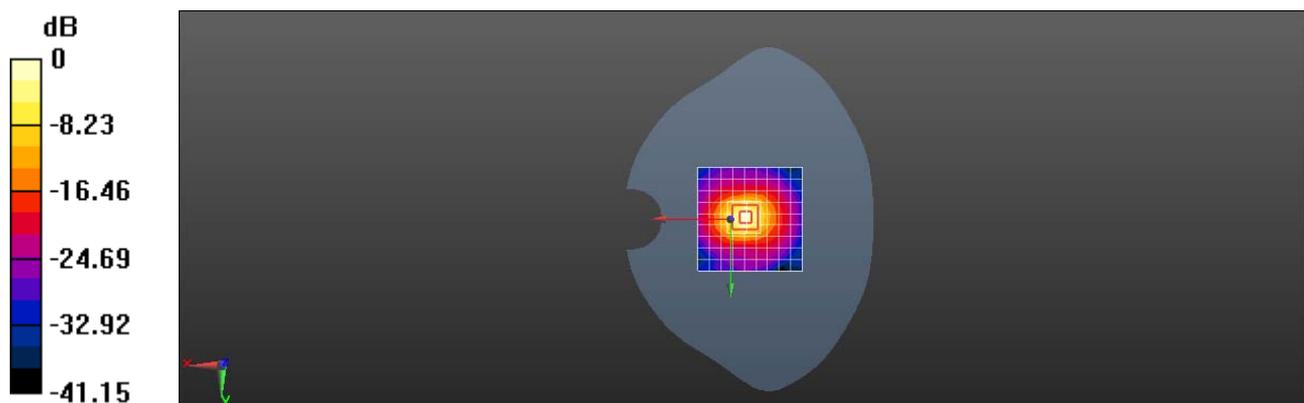
Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.709$  S/m;  $\epsilon_r = 35.329$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3736; ConvF(4.57, 4.57, 4.57); Calibrated: 2016-4-26;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM1; Type: SAM; Serial: TP-1475
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (measured) = 17.6 W/kg

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
 Reference Value = 60.70 V/m; Power Drift = -0.05 dB  
 Peak SAR (extrapolated) = 32.8 W/kg  
**SAR(1 g) = 7.92 W/kg; SAR(10 g) = 2.23 W/kg**  
 Maximum value of SAR (measured) = 18.8 W/kg



0 dB = 17.6 W/kg = 12.46 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## System Performance Check-D5250-EX-Body

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1155**

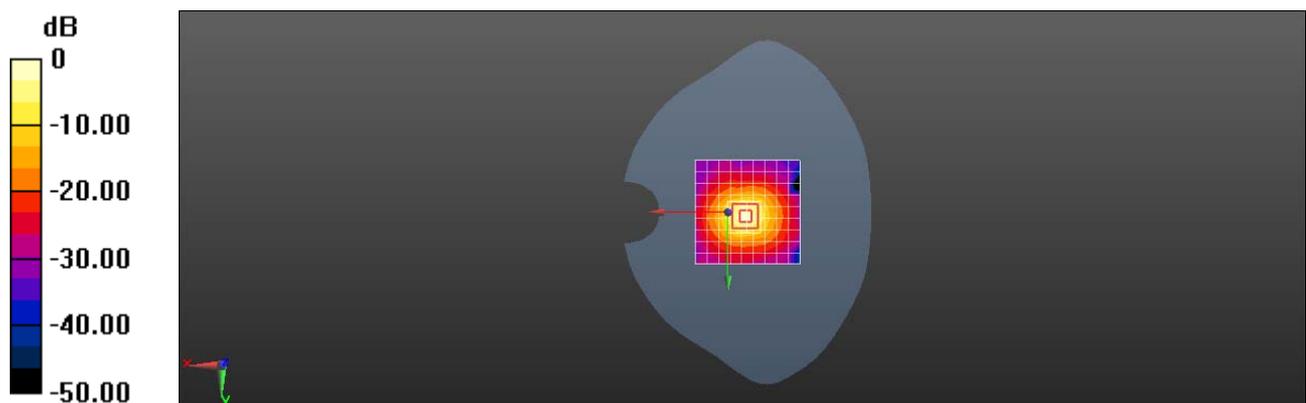
Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5250$  MHz;  $\sigma = 5.415$  S/m;  $\epsilon_r = 49.674$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3736; ConvF(3.92, 3.92, 3.92); Calibrated: 2016-4-26;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM2; Type: SAM; Serial: TP:1474
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 15.5 W/kg

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 59.41 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 28.3 W/kg  
**SAR(1 g) = 7.29 W/kg; SAR(10 g) = 2.01 W/kg**  
Maximum value of SAR (measured) = 17.5 W/kg



0 dB = 15.5 W/kg = 11.90 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## SystemPerformanceCheck-D5600-EX-Head

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1155**

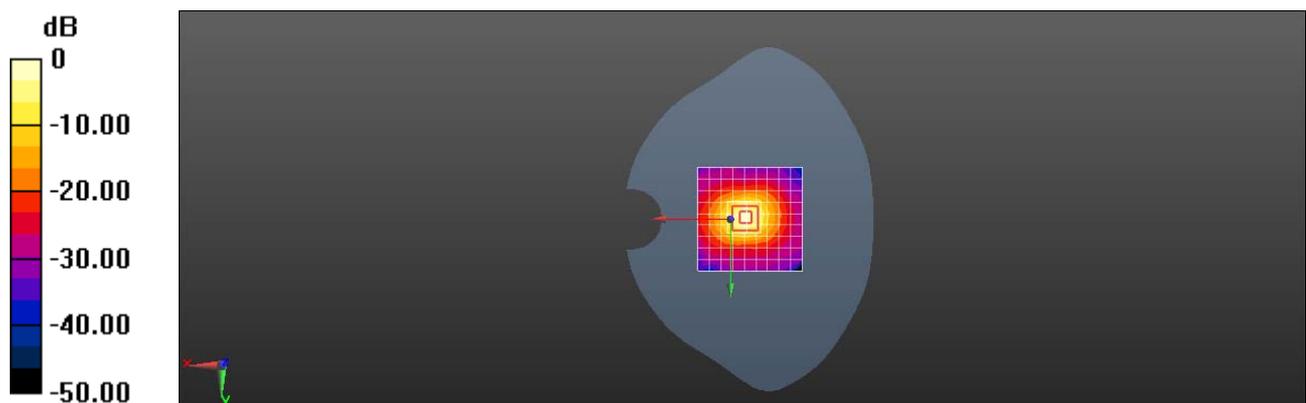
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.152$  S/m;  $\epsilon_r = 34.667$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3736; ConvF(4.29, 4.29, 4.29); Calibrated: 2016-4-26;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM1; Type: SAM; Serial: TP-1475
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 19.7 W/kg

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 62.88 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 38.0 W/kg  
**SAR(1 g) = 8.72 W/kg; SAR(10 g) = 2.45 W/kg**  
Maximum value of SAR (measured) = 21.1 W/kg



0 dB = 19.7 W/kg = 12.94 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

## System Performance Check-D5600-EX-Body

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1155**

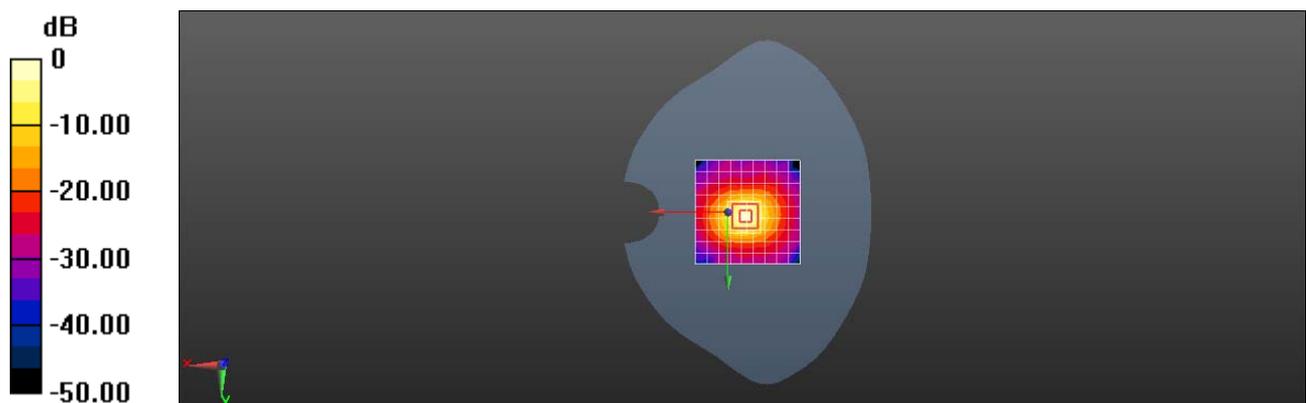
Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.81$  S/m;  $\epsilon_r = 49.246$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3736; ConvF(3.48, 3.48, 3.48); Calibrated: 2016-4-26;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2016-4-20
- ε Phantom: SAM2; Type: SAM; Serial: TP:1474
- ε DASY52 52.8.8(1258); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 16.6 W/kg

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 61.19 V/m; Power Drift = -0.16 dB  
Peak SAR (extrapolated) = 29.8 W/kg  
**SAR(1 g) = 7.52 W/kg; SAR(10 g) = 2.05 W/kg**  
Maximum value of SAR (measured) = 18.7 W/kg



0 dB = 16.6 W/kg = 12.20 dBW/kg