

Date/Time: 10/3/2015 4:15:31 PM

**Test Laboratory: Product Compliance\_Beijing****750MHz\_Head\_Validation****DUT: Dipole 750 MHz D750V3**

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz);  
Frequency: 750 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.855$  S/m;  $\epsilon_r = 41.252$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(6.59, 6.59, 6.59); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: Phantom 4-3; Type: QD000P40CC; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/750MHz\_Head\_Validation/Area Scan (61x201x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 2.37 W/kg

**Configuration/750MHz\_Head\_Validation/Zoom Scan (7x7x7)/Cube 0:**

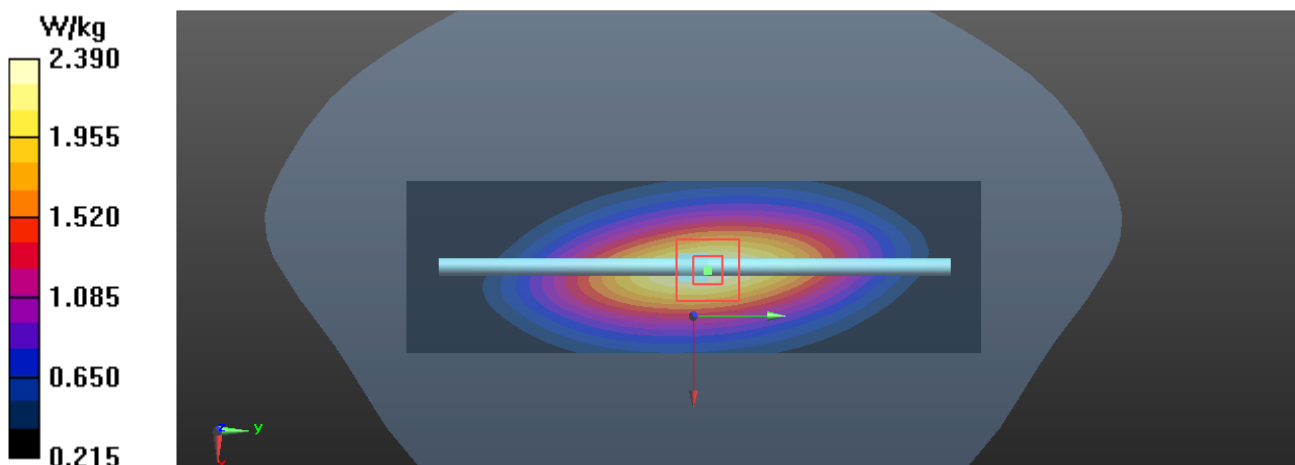
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 50.93 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.04 W/kg

**SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.33 W/kg**

Maximum value of SAR (measured) = 2.39 W/kg



Date/Time: 10/3/2015 10:32:45 AM

**Test Laboratory: Product Compliance\_Beijing****835MHz\_Head\_Validation****DUT: Dipole 835 MHz**

Communication System: UID 0, CW; Communication System Band: D835 (835.0MHz);  
 Frequency: 835 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.883 \text{ S/m}$ ;  $\epsilon_r = 40.469$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3169; ConvF(6.31, 6.31, 6.31); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn854; Calibrated: 12/15/2014
- Phantom: SAM with CRP v4.0\_1488; Type: QD000P40CC; Serial: TP:1488
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/835MHz Head\_Validation/Area Scan (61x181x1):**

Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 2.65 W/kg

**Configuration/835MHz Head\_Validation/Zoom Scan (7x7x7)/Cube 0:**

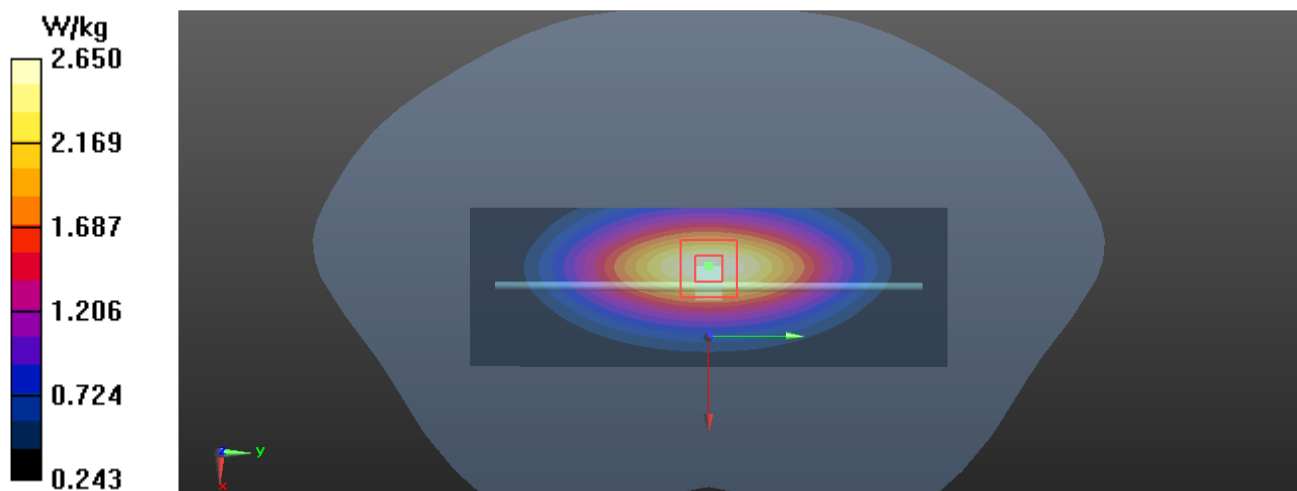
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 52.13 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 3.40 W/kg

**SAR(1 g) = 2.26 W/kg; SAR(10 g) = 1.48 W/kg**

Maximum value of SAR (measured) = 2.65 W/kg



Date/Time: 10/3/2015 11:13:25 AM

**Test Laboratory: Product Compliance\_Beijing****900MHz\_Head\_Validation****DUT: Dipole 900 MHz D900V2**

Communication System: UID 0, CW (0); Communication System Band: D900 (900.0 MHz);  
 Frequency: 900 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 0.956 \text{ S/m}$ ;  $\epsilon_r = 39.745$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3169; ConvF(6.22, 6.22, 6.22); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn854; Calibrated: 12/15/2014
- Phantom: SAM with CRP v4.0\_1488; Type: QD000P40CC; Serial: TP:1488
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**900MHz\_Head\_System validation/Validation/Area Scan (61x181x1):**

Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 2.99 W/kg

**900MHz\_Head\_System validation/Validation/Zoom Scan (7x7x7)/Cube 0:**

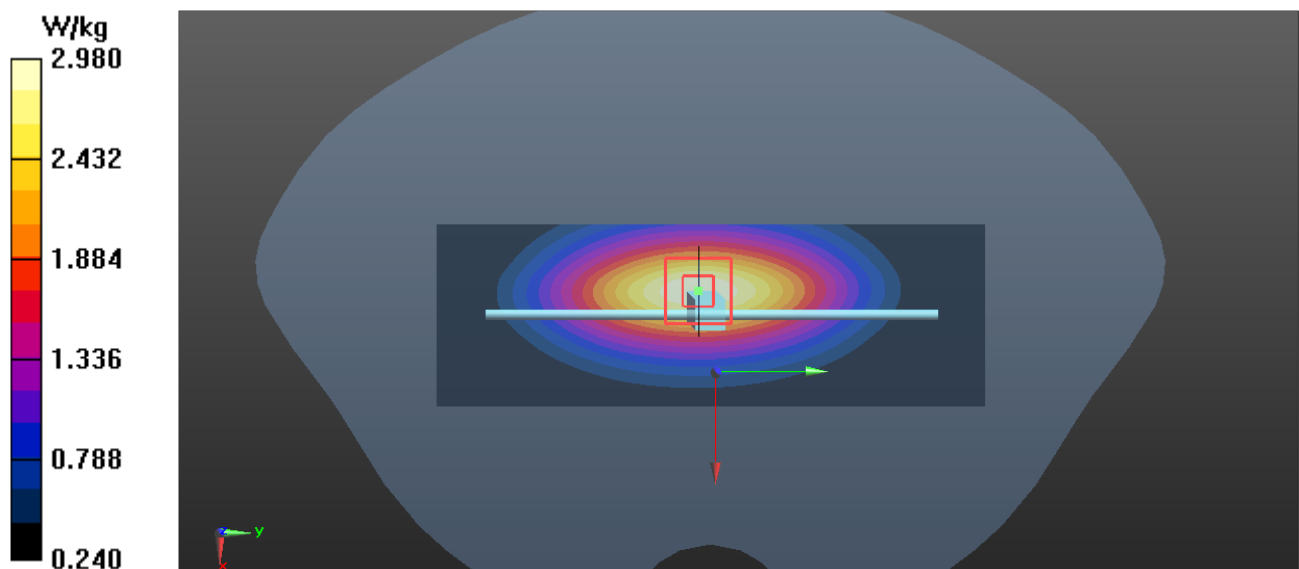
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 50.03 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 3.82 W/kg

**SAR(1 g) = 2.54 W/kg; SAR(10 g) = 1.64 W/kg**

Maximum value of SAR (measured) = 2.98 W/kg



Date/Time: 10/4/2015 5:06:03 PM

**Test Laboratory: Product Compliance\_Beijing****1800MHz\_Head\_Validation****DUT: D1800V2**

Communication System: UID 0, CW (0); Communication System Band: D1800 (1800.0 MHz);  
Frequency: 1800 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.357$  S/m;  $\epsilon_r = 38.264$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(5.21, 5.21, 5.21); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: Phantom 4-1; Type: QD000P40CC; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/1800MHz\_Head\_Validation/Area Scan (61x91x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

**Configuration/1800MHz\_Head\_Validation/Zoom Scan (7x7x7)/Cube 0:**

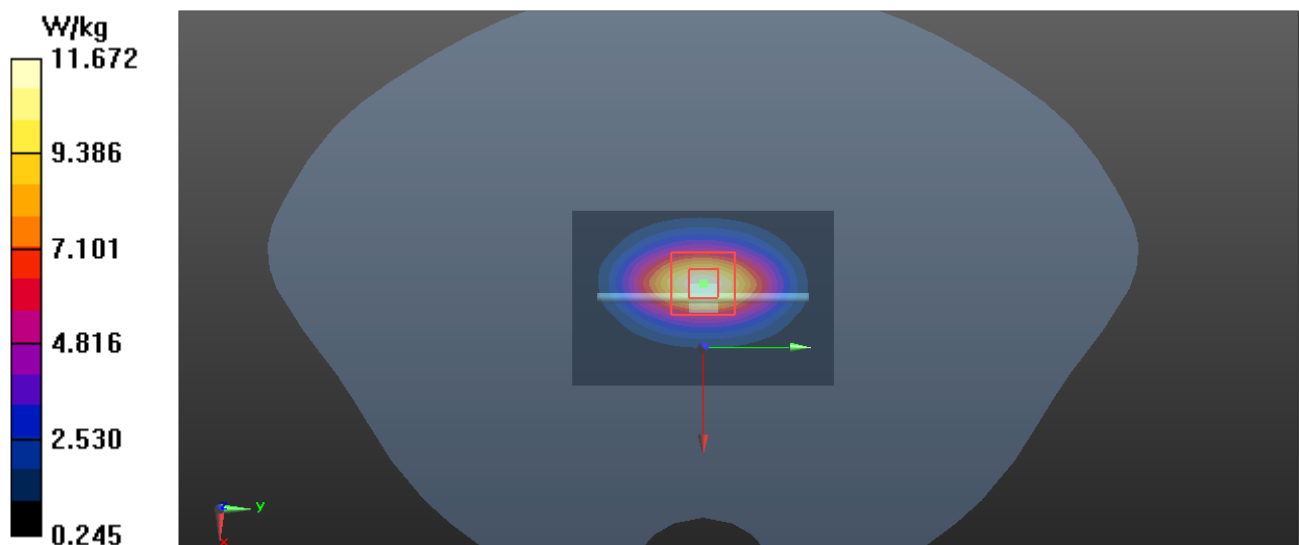
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 83.18 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 16.3 W/kg

**SAR(1 g) = 9.2 W/kg; SAR(10 g) = 4.87 W/kg**

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



Date/Time: 10/3/2015 1:01:55 PM

**Test Laboratory: Product Compliance\_Beijing****1900MHz\_Head\_Validation****DUT: Dipole 1900 MHz D1900V2**

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz);  
 Frequency: 1900 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.392$  S/m;  $\epsilon_r = 38.24$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3293; ConvF(5.06, 5.06, 5.06); Calibrated: 7/20/2015;
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1325; Calibrated: 2/12/2015
- Phantom: SAM with CRP v5.0 #1697; Type: QD000P40CD; Serial: TP1697
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Validation/Area Scan (61x101x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 11.2 W/kg

**Configuration/Validation/Zoom Scan (7x7x7)/Cube 0:**

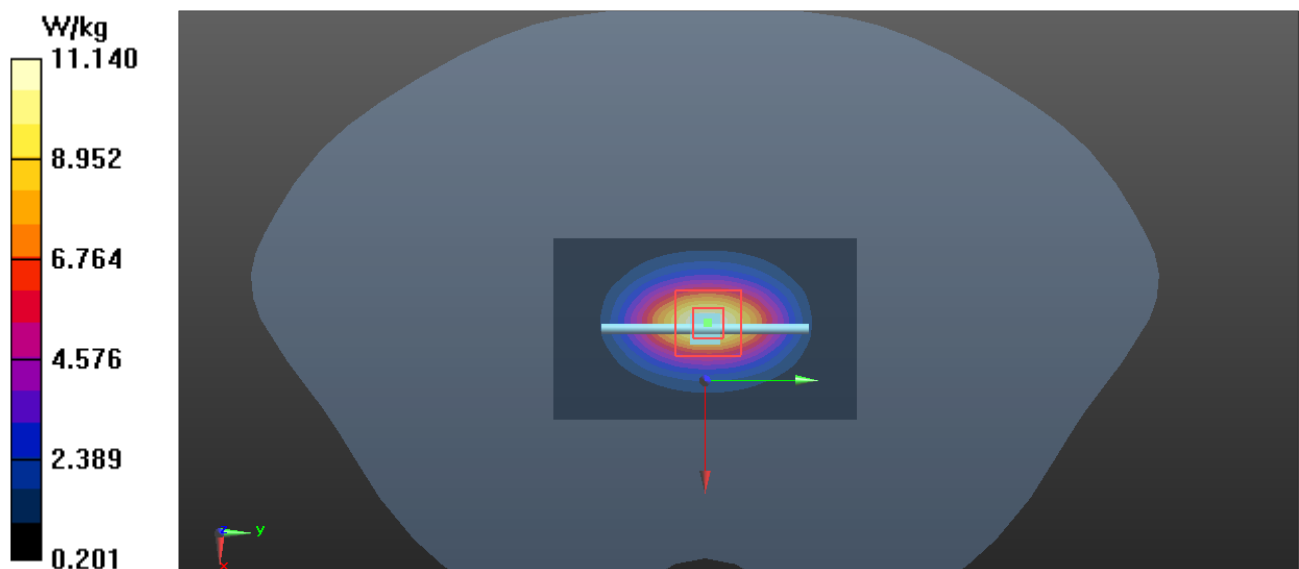
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 89.65 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 18.3 W/kg

**SAR(1 g) = 9.88 W/kg; SAR(10 g) = 5.13 W/kg**

Maximum value of SAR (measured) = 11.1 W/kg



Date/Time: 10/6/2015 3:01:48 AM

**Test Laboratory: Product Compliance\_Beijing****2450MHz\_Head\_Validation****DUT: Dipole 2450 MHz D2450V2**

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz);  
 Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.876$  S/m;  $\epsilon_r = 37.502$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3293; ConvF(4.42, 4.42, 4.42); Calibrated: 7/20/2015;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1325; Calibrated: 2/12/2015
- Phantom: SAM with CRP v5.0#1696; Type: QD000P40CD; Serial: TP:1696
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Validation/Area Scan (61x101x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 18.0 W/kg

**Configuration/Validation/Zoom Scan (7x7x7)/Cube 0:**

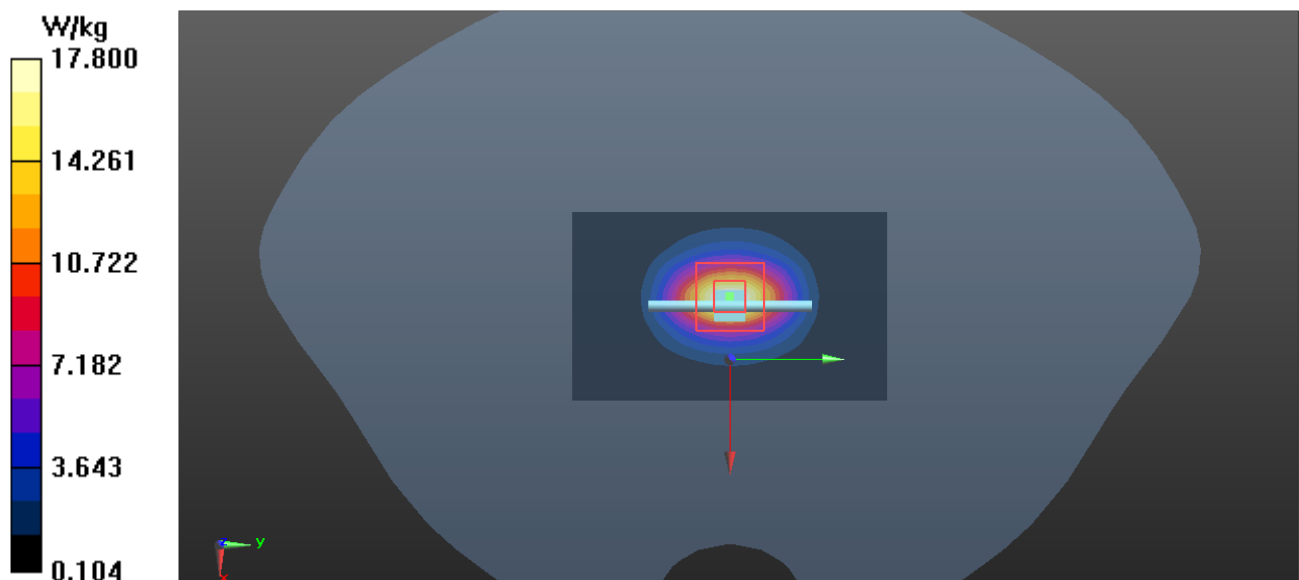
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 98.45 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 27.9 W/kg

**SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.2 W/kg**

Maximum value of SAR (measured) = 17.8 W/kg



Date/Time: 10/7/2015 4:14:31 AM

**Test Laboratory: Product Compliance\_Beijing****2450MHz\_Head\_Validation****DUT: Dipole 2450 MHz D2450V2**

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz);  
 Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.866$  S/m;  $\epsilon_r = 37.871$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(4.43, 4.43, 4.43); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: SAM Right ; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Validation/Area Scan (61x101x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 17.8 W/kg

**Configuration/Validation/Zoom Scan (7x7x7)/Cube 0:**

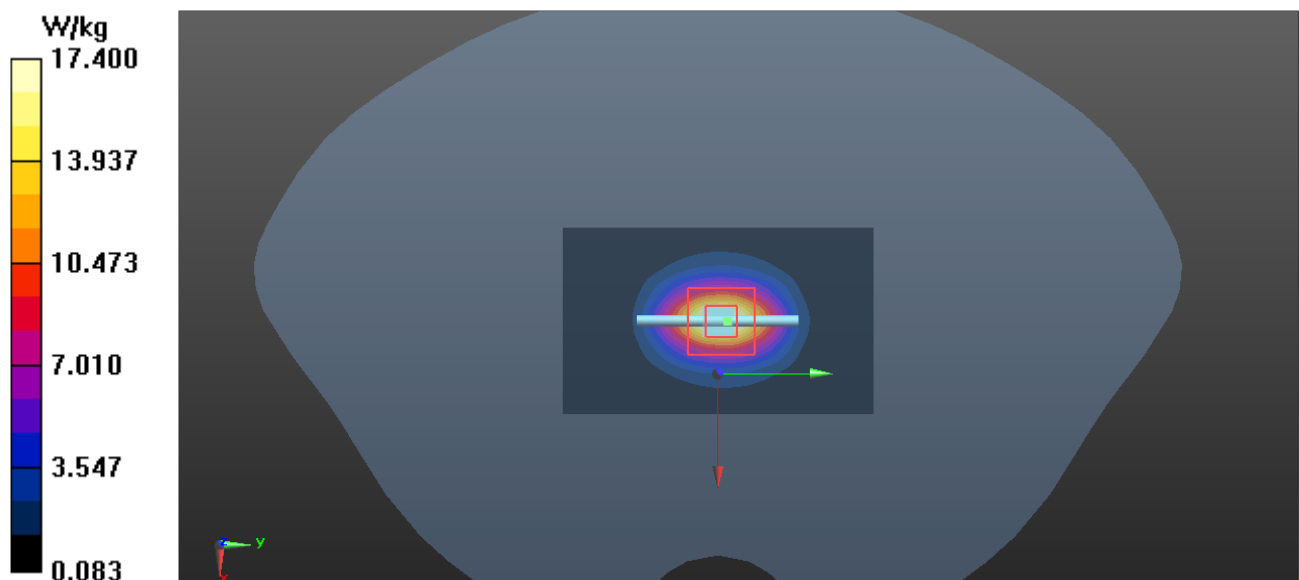
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 100.4 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 27.9 W/kg

**SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.04 W/kg**

Maximum value of SAR (measured) = 17.4 W/kg



Date/Time: 10/6/2015 10:11:51 AM

**Test Laboratory: Product Compliance\_Beijing****2600MHz\_Head\_Validation****DUT: Dipole 2600 MHz D2600V2**

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz);  
 Frequency: 2600 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.047$  S/m;  $\epsilon_r = 37.321$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3293; ConvF(4.33, 4.33, 4.33); Calibrated: 7/20/2015;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1325; Calibrated: 2/12/2015
- Phantom: SAM with CRP v5.0#1696; Type: QD000P40CD; Serial: TP:1696
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Validation/Area Scan (61x101x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 21.4 W/kg

**Configuration/Validation/Zoom Scan (7x7x7)/Cube 0:**

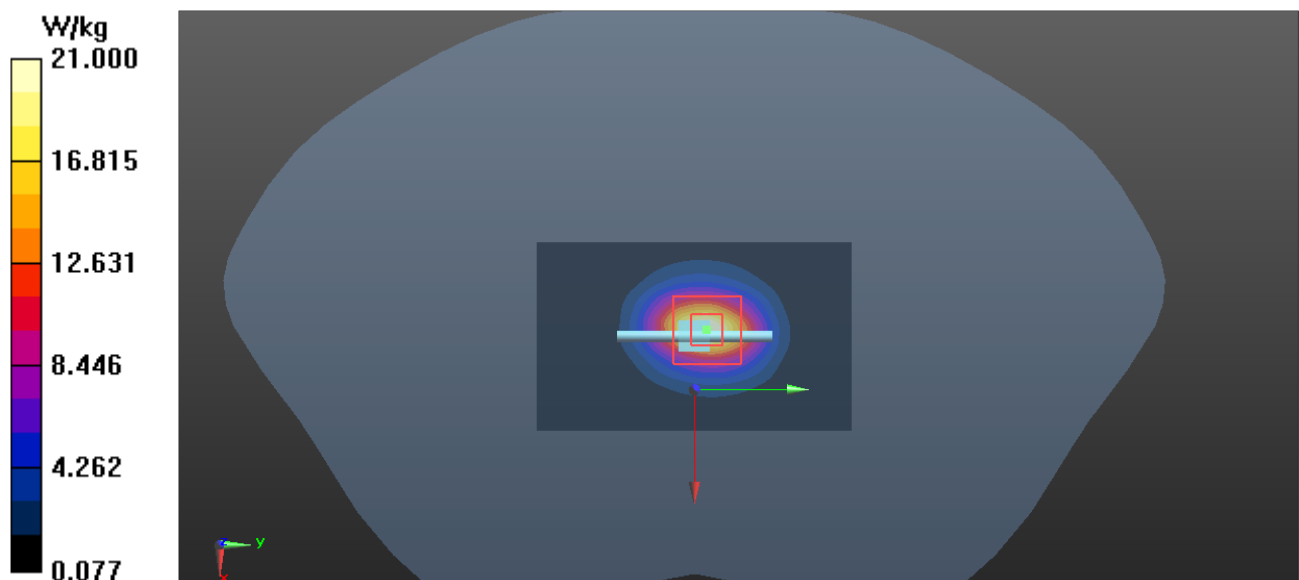
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 100.3 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 34.1 W/kg

**SAR(1 g) = 15.6 W/kg; SAR(10 g) = 6.87 W/kg**

Maximum value of SAR (measured) = 21.0 W/kg





Date/Time: 10/7/2015 4:54:27 AM

**Test Laboratory: Product Compliance\_Beijing****2600MHz\_Head\_Validation****DUT: Dipole 2600 MHz D2600V2**

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz);  
Frequency: 2600 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.044$  S/m;  $\epsilon_r = 37.287$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(4.21, 4.21, 4.21); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: SAM Right ; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Validation/Area Scan (61x101x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 20.6 W/kg

**Configuration/Validation/Zoom Scan (7x7x7)/Cube 0:**

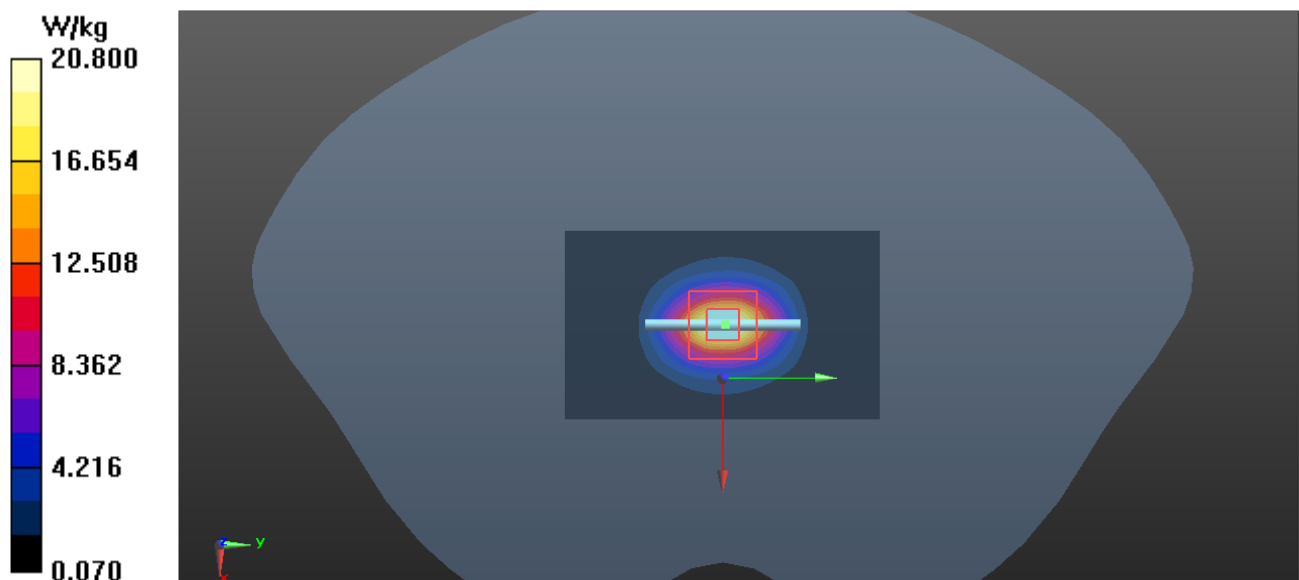
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 104.2 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 34.2 W/kg

**SAR(1 g) = 15.4 W/kg; SAR(10 g) = 6.78 W/kg**

Maximum value of SAR (measured) = 20.8 W/kg



Date/Time: 10/3/2015 7:52:23 PM

**Test Laboratory: Product Compliance\_Beijing****5.3GHz\_Head\_Validation****DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5300 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 5300$  MHz;  $\sigma = 4.753$  S/m;  $\epsilon_r = 35$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7306; ConvF(4.97, 4.97, 4.97); Calibrated: 7/21/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1437; Calibrated: 7/23/2015
- Phantom: SAM near door; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5300 MHz/Area Scan (61x61x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 18.3 W/kg

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5300 MHz/Zoom Scan (4x4x2mm, uniform) (8x8x13)/Cube 0:**

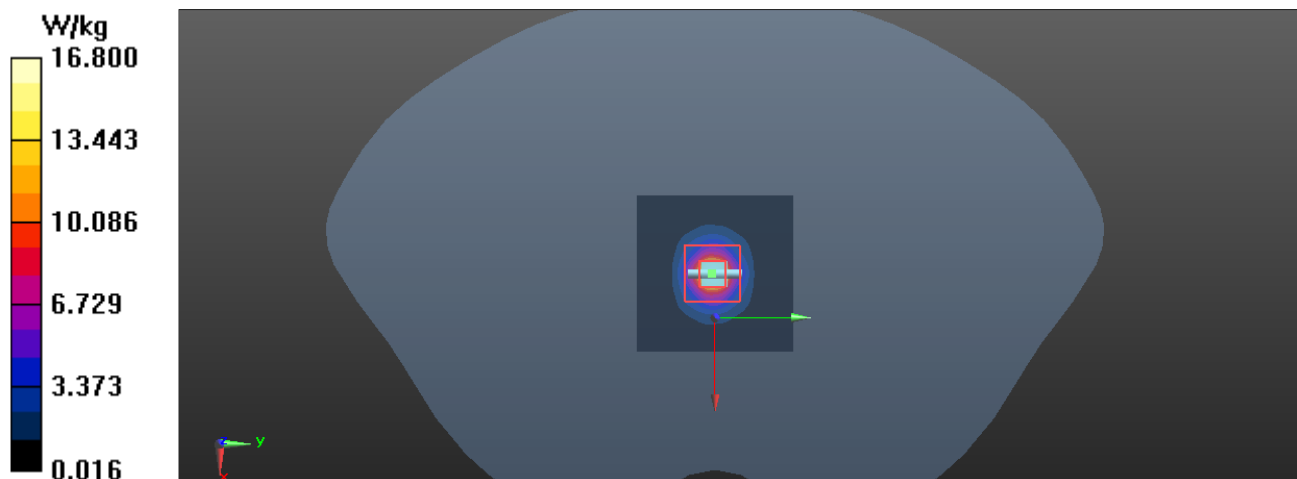
Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 74.50 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 36.0 W/kg

**SAR(1 g) = 8.73 W/kg; SAR(10 g) = 2.48 W/kg**

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



Date/Time: 10/3/2015 8:29:30 PM

**Test Laboratory: Product Compliance\_Beijing****5.6GHz\_Head\_Validation****DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5600 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.052$  S/m;  $\epsilon_r = 34.356$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7306; ConvF(4.64, 4.64, 4.64); Calibrated: 7/21/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1437; Calibrated: 7/23/2015
- Phantom: SAM near door; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (61x61x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (4x4x2mm, uniform) (8x8x13)/Cube 0:**

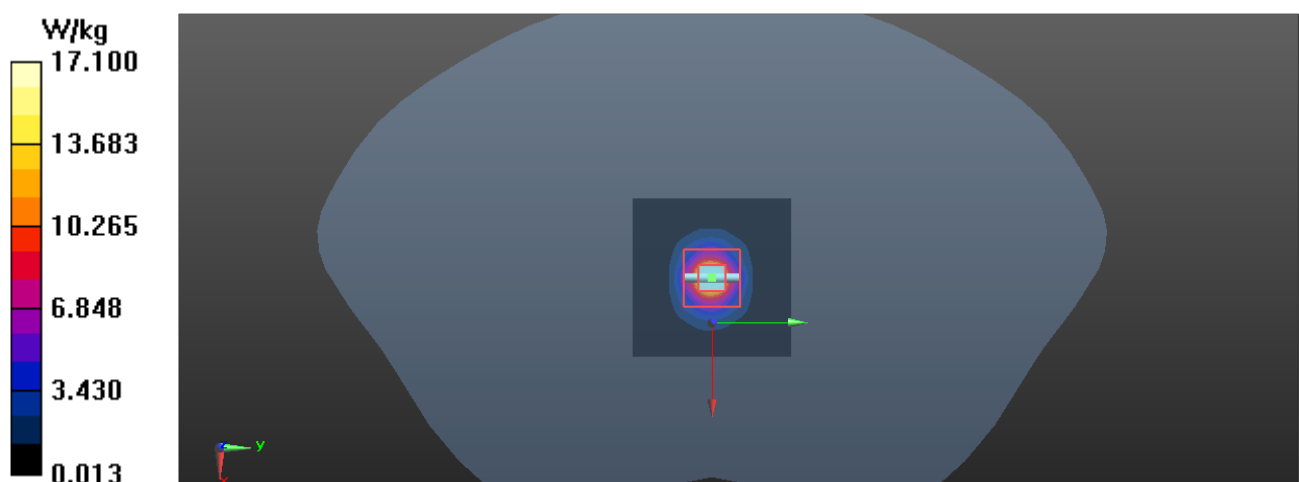
Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 73.81 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 38.0 W/kg

**SAR(1 g) = 8.87 W/kg; SAR(10 g) = 2.53 W/kg**

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



Date/Time: 10/3/2015 9:03:48 PM

**Test Laboratory: Product Compliance\_Beijing****5.8GHz\_Head\_Validation****DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5800 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.269$  S/m;  $\epsilon_r = 33.941$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7306; ConvF(4.56, 4.56, 4.56); Calibrated: 7/21/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1437; Calibrated: 7/23/2015
- Phantom: SAM near door; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5800 MHz/Area Scan (61x61x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5800 MHz/Zoom Scan (4x4x2mm, uniform) (8x8x13)/Cube 0:**

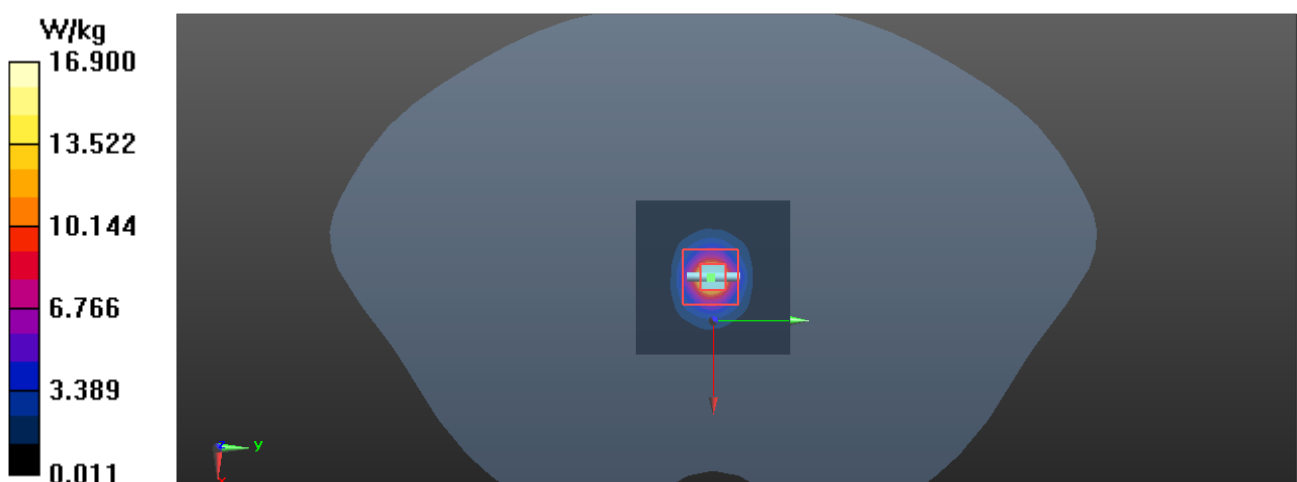
Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 71.83 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 38.6 W/kg

**SAR(1 g) = 8.52 W/kg; SAR(10 g) = 2.42 W/kg**

Maximum value of SAR (measured) = 16.9 W/kg



Date/Time: 10/3/2015 5:48:42 PM

**Test Laboratory: Product Compliance\_Beijing****750MHz\_Body\_Validation****DUT: Dipole 750 MHz D750V3**

Communication System: UID 0, CW (0); Communication System Band: D750 (750.0 MHz);  
 Frequency: 750 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.985$  S/m;  $\epsilon_r = 55.673$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(6.21, 6.21, 6.21); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: Phantom 4-2; Type: QD000P40CD; Serial: TP:1503
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/750MHz\_Body\_Validation/Area Scan (61x201x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 2.68 W/kg

**Configuration/750MHz\_Body\_Validation/Zoom Scan (7x7x7)/Cube 0:**

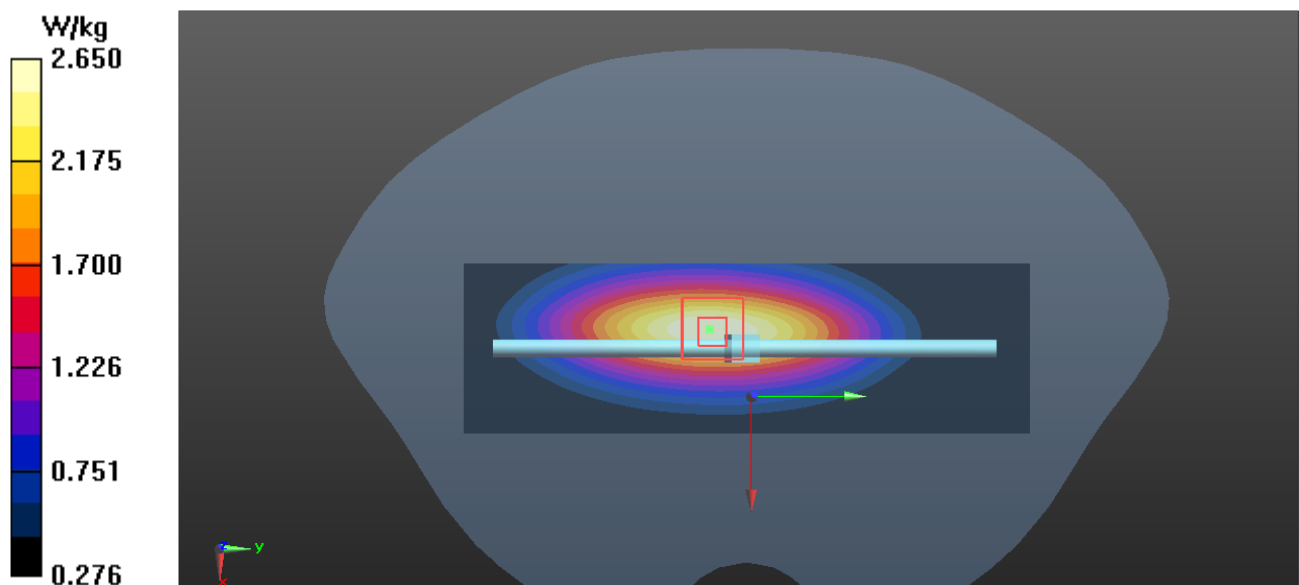
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 47.37 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.36 W/kg

**SAR(1 g) = 2.29 W/kg; SAR(10 g) = 1.52 W/kg**

Maximum value of SAR (measured) = 2.65 W/kg



Date/Time: 10/5/2015 1:55:53 PM

**Test Laboratory: Product Compliance\_Beijing****835MHz\_Body\_Validation****DUT: Dipole 835 MHz D835V2**

Communication System: UID 0, CW; Communication System Band: D835 (835.0MHz);  
Frequency: 835 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.971$  S/m;  $\epsilon_r = 53.415$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3169; ConvF(6.05, 6.05, 6.05); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn854; Calibrated: 12/15/2014
- Phantom: ELI v4.0\_1041; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/835MHz Body\_Validation/Area Scan (91x181x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

**Configuration/835MHz Body\_Validation/Zoom Scan (7x7x7)/Cube 0:**

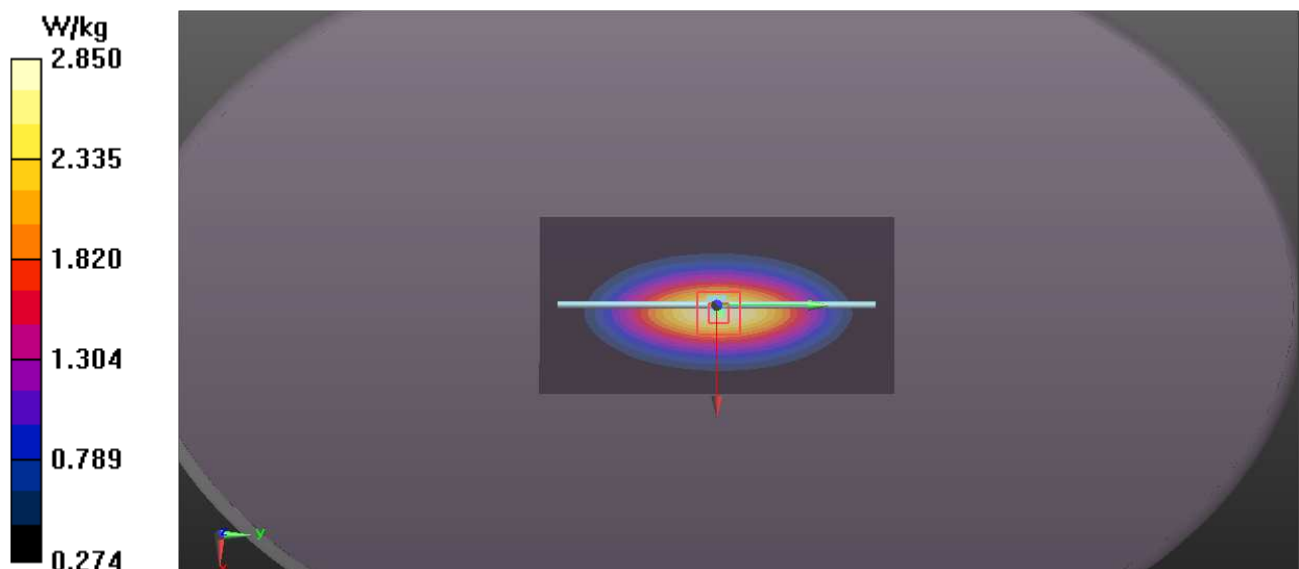
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 54.61 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.63 W/kg

**SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.6 W/kg**

Maximum value of SAR (measured) = 2.85 W/kg



Date/Time: 10/4/2015 12:45:51 AM

**Test Laboratory: Product Compliance\_Beijing****1800MHz\_Body\_Validation****DUT: Dipole 1800 MHz D1800V2**

Communication System: UID 0, CW (0); Communication System Band: D1800 (1800.0 MHz);  
 Frequency: 1800 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.519$  S/m;  $\epsilon_r = 51.596$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(5, 5, 5); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**1800MHz\_Body\_System validation/Validation/Area Scan (41x121x1):**

Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 12.0 W/kg

**1800MHz\_Body\_System validation/Validation/Zoom Scan (7x7x7)/Cube 0:**

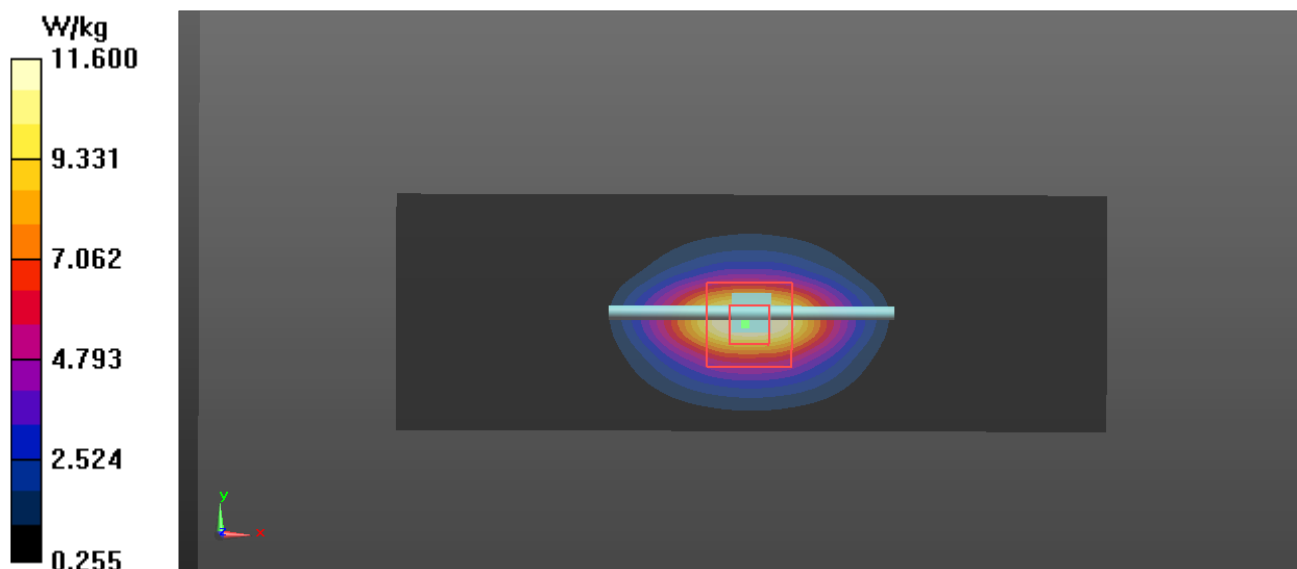
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 83.63 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 15.7 W/kg

**SAR(1 g) = 9.2 W/kg; SAR(10 g) = 4.9 W/kg**

Maximum value of SAR (measured) = 11.6 W/kg



Date/Time: 10/3/2015 3:26:43 PM

**Test Laboratory: Product Compliance\_Beijing****1900MHz\_Body\_Validation****DUT: Dipole 1900 MHz D1900V2**

Communication System: UID 0, CW; Communication System Band: D1900 (1900.0 MHz);  
 Frequency: 1900 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.498$  S/m;  $\epsilon_r = 50.876$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3293; ConvF(4.69, 4.69, 4.69); Calibrated: 7/20/2015;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1325; Calibrated: 2/12/2015
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**GSM1900\_Head\_System validation/Validation/Area Scan (41x121x1):**

Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 12.8 W/kg

**GSM1900\_Head\_System validation/Validation/Zoom Scan (7x7x7)/Cube 0:**

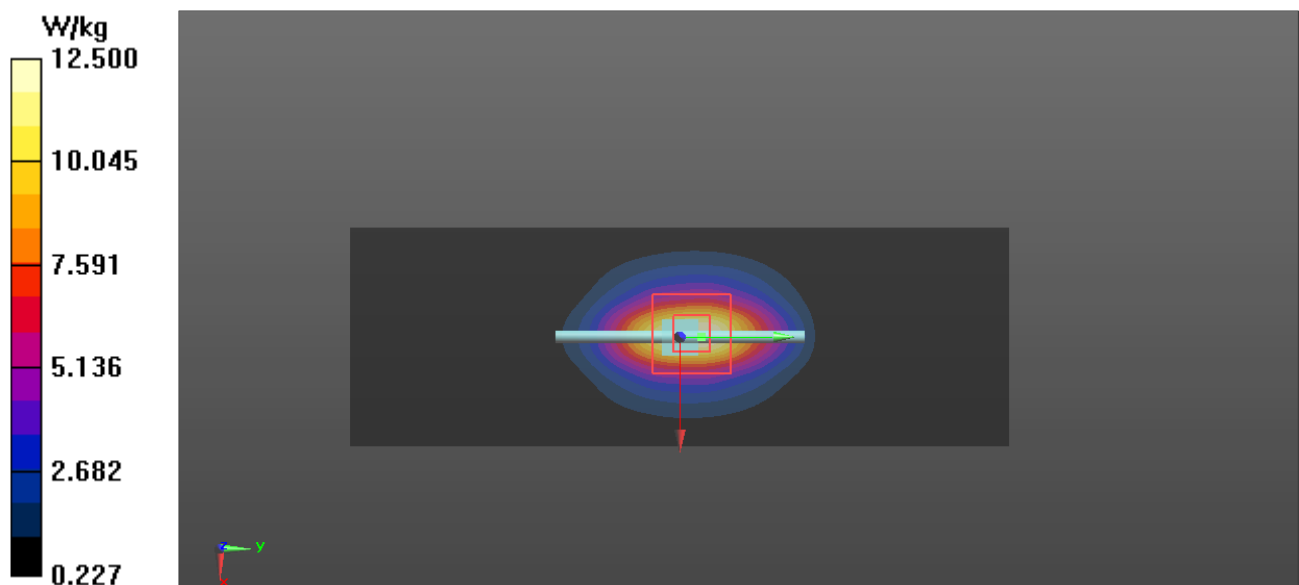
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 88.03 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 17.5 W/kg

**SAR(1 g) = 9.99 W/kg; SAR(10 g) = 5.26 W/kg**

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





Date/Time: 10/8/2015 4:46:44 PM

**Test Laboratory: Product Compliance\_Beijing****1900MHz\_Body\_Validation****DUT: Dipole 1900 MHz D1900V2**

Communication System: UID 0, CW; Communication System Band: D1900 (1900.0 MHz);  
 Frequency: 1900 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.471$  S/m;  $\epsilon_r = 51.035$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3293; ConvF(4.69, 4.69, 4.69); Calibrated: 7/20/2015;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1325; Calibrated: 2/12/2015
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**GSM1900\_Head\_System validation/Validation/Area Scan (41x121x1):**

Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 13.1 W/kg

**GSM1900\_Head\_System validation/Validation/Zoom Scan (7x7x7)/Cube 0:**

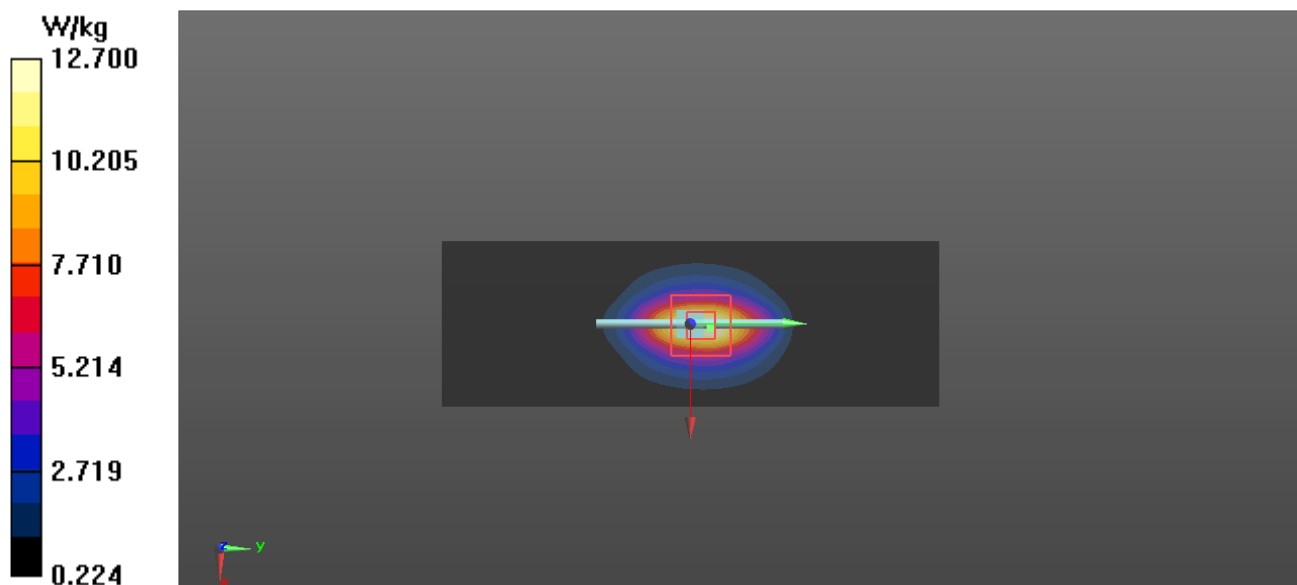
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 87.94 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 17.8 W/kg

**SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.3 W/kg**

Maximum value of SAR (measured) = 12.7 W/kg



Date/Time: 10/6/2015 2:31:33 PM

**Test Laboratory: Product Compliance\_Beijing****2450MHz\_Body\_Validation****DUT: Dipole 2450 MHz D2450V2**

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz);  
 Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.953$  S/m;  $\epsilon_r = 51.032$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Center Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(4.21, 4.21, 4.21); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Validation/Area Scan (61x101x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 18.0 W/kg

**Configuration/Validation/Zoom Scan (7x7x7)/Cube 0:**

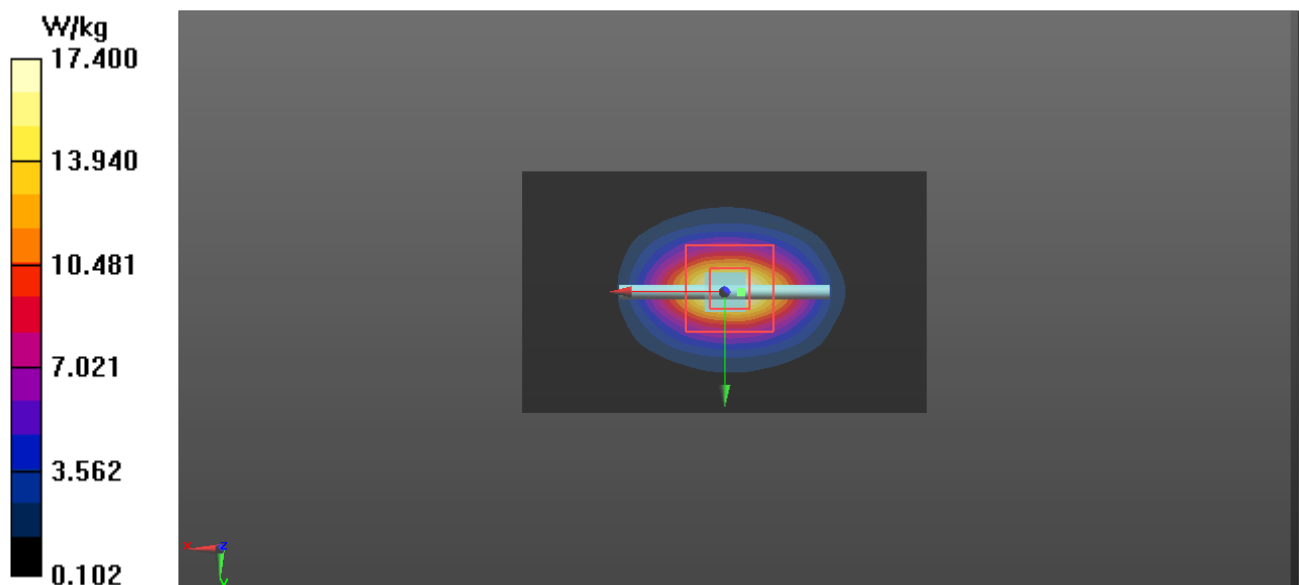
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 96.91 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 27.8 W/kg

**SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.22 W/kg**

Maximum value of SAR (measured) = 17.4 W/kg



Date/Time: 10/6/2015 3:05:53 PM

**Test Laboratory: Product Compliance\_Beijing****2600MHz\_Body\_Validation****DUT: Dipole 2600 MHz D2600V2**

Communication System: UID 0, CW (0); Communication System Band: D2600 (2600.0 MHz);  
 Frequency: 2600 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.16$  S/m;  $\epsilon_r = 50.51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Center Section

DASY Configuration:

- Probe: ES3DV3 - SN3170; ConvF(3.92, 3.92, 3.92); Calibrated: 12/16/2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1326; Calibrated: 12/11/2014
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**Configuration/Validation/Area Scan (61x101x1):**

Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 20.5 W/kg

**Configuration/Validation/Zoom Scan (7x7x7)/Cube 0:**

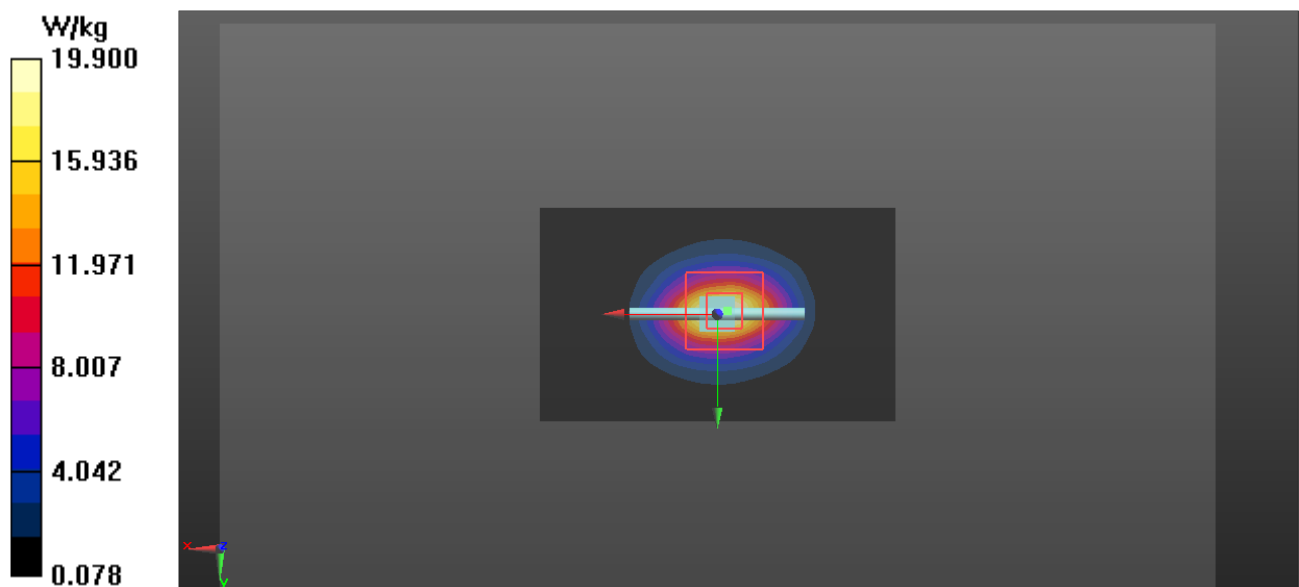
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 97.10 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 33.4 W/kg

**SAR(1 g) = 14.8 W/kg; SAR(10 g) = 6.5 W/kg**

Maximum value of SAR (measured) = 19.9 W/kg



Date/Time: 10/5/2015 7:08:25 PM

**Test Laboratory: Product Compliance\_Beijing****5.3GHz\_Body\_Validation****DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5300 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 5300$  MHz;  $\sigma = 5.453$  S/m;  $\epsilon_r = 46.924$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN7306; ConvF(4.49, 4.49, 4.49); Calibrated: 7/21/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1437; Calibrated: 7/23/2015
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5300 MHz/Area Scan (61x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 15.1 W/kg

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5300 MHz/Zoom Scan (4x4x2mm, uniform) (8x8x13)/Cube 0:**

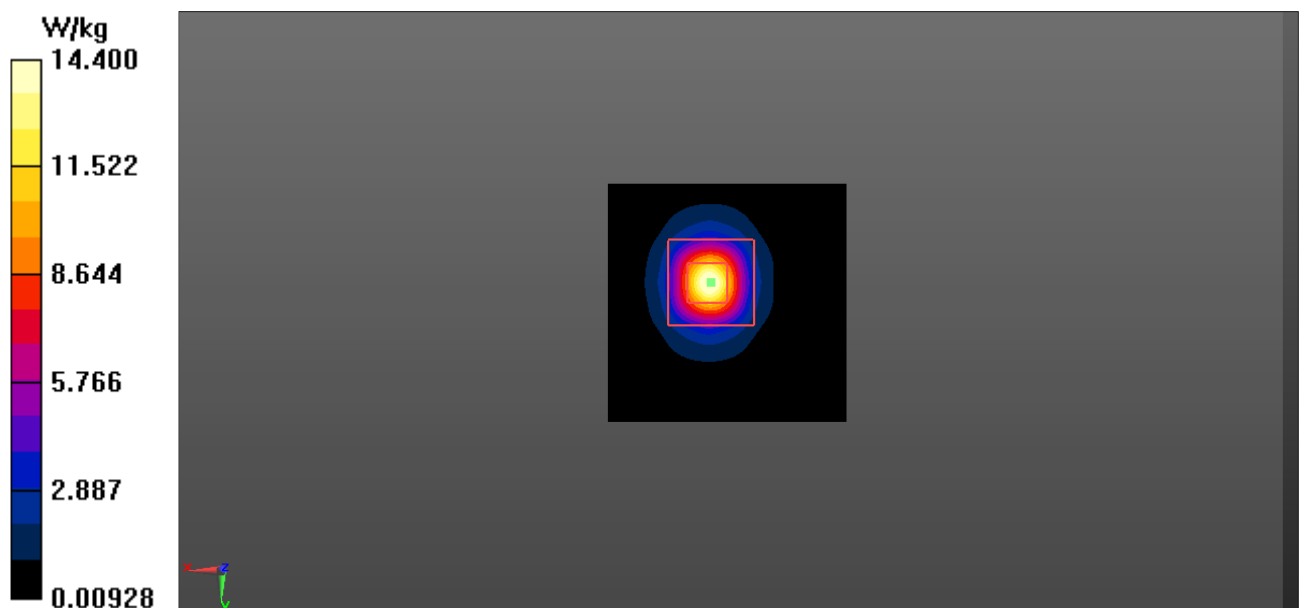
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 49.37 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 28.7 W/kg

**SAR(1 g) = 7.51 W/kg; SAR(10 g) = 2.17 W/kg**

Maximum value of SAR (measured) = 14.4 W/kg



Date/Time: 10/5/2015 7:45:11 PM

**Test Laboratory: Product Compliance\_Beijing****5.6GHz\_Body\_Validation****DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5600 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.866$  S/m;  $\epsilon_r = 46.337$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN7306; ConvF(3.9, 3.9, 3.9); Calibrated: 7/21/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1437; Calibrated: 7/23/2015
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (61x61x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm  
Maximum value of SAR (interpolated) = 17.3 W/kg

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (4x4x2mm, uniform) (8x8x13)/Cube 0:**

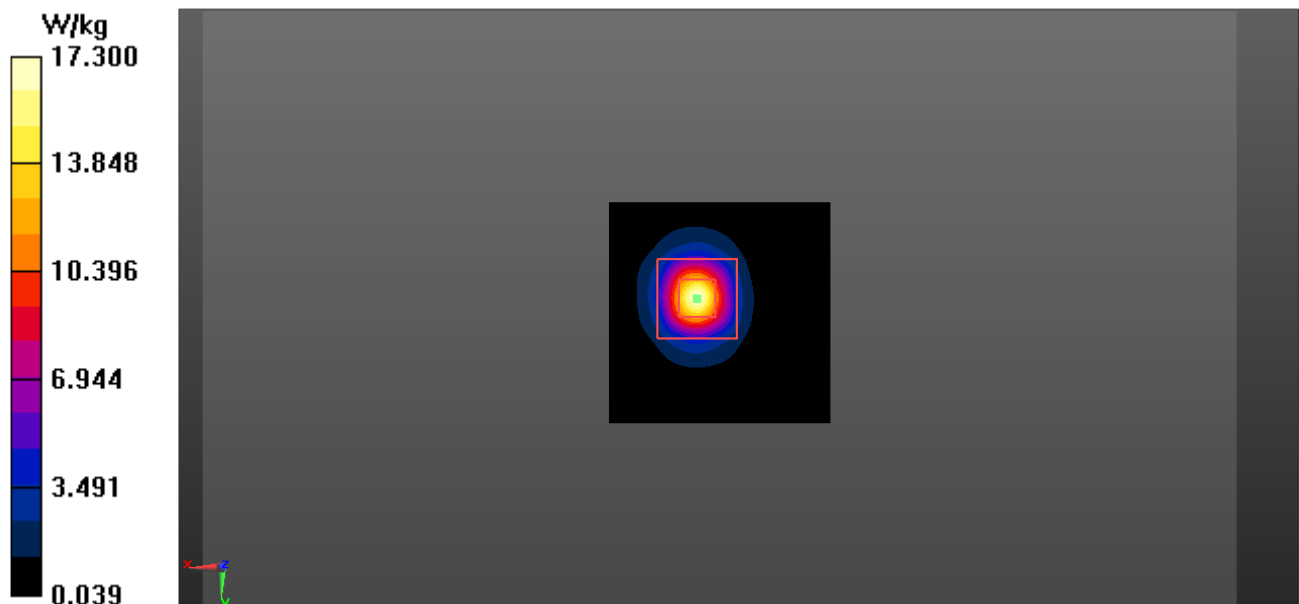
Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 48.75 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 34.4 W/kg

**SAR(1 g) = 8.52 W/kg; SAR(10 g) = 2.41 W/kg**

Maximum value of SAR (measured) = 16.5 W/kg



Date/Time: 10/5/2015 8:23:26 PM

**Test Laboratory: Product Compliance\_Beijing****5.8GHz\_Body\_Validation****DUT: Dipole D5GHzV2**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz);

Frequency: 5800 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.114$  S/m;  $\epsilon_r = 46.019$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN7306; ConvF(4.26, 4.26, 4.26); Calibrated: 7/21/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1437; Calibrated: 7/23/2015
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: xxxx
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5800 MHz/Area Scan (61x61x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm  
Maximum value of SAR (interpolated) = 15.2 W/kg

**System Performance Check with D5GHzV2 Dipole/d=10mm, Pin=100mW, f=5800 MHz/Zoom Scan (4x4x2mm, uniform) (8x8x13)/Cube 0:**

Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 48.07 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 30.5 W/kg

**SAR(1 g) = 7.27 W/kg; SAR(10 g) = 2.06 W/kg**

Maximum value of SAR (measured) = 14.6 W/kg

