# Appendix B. Plots of High SAR Measurement

The plots are shown as follows.

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/9

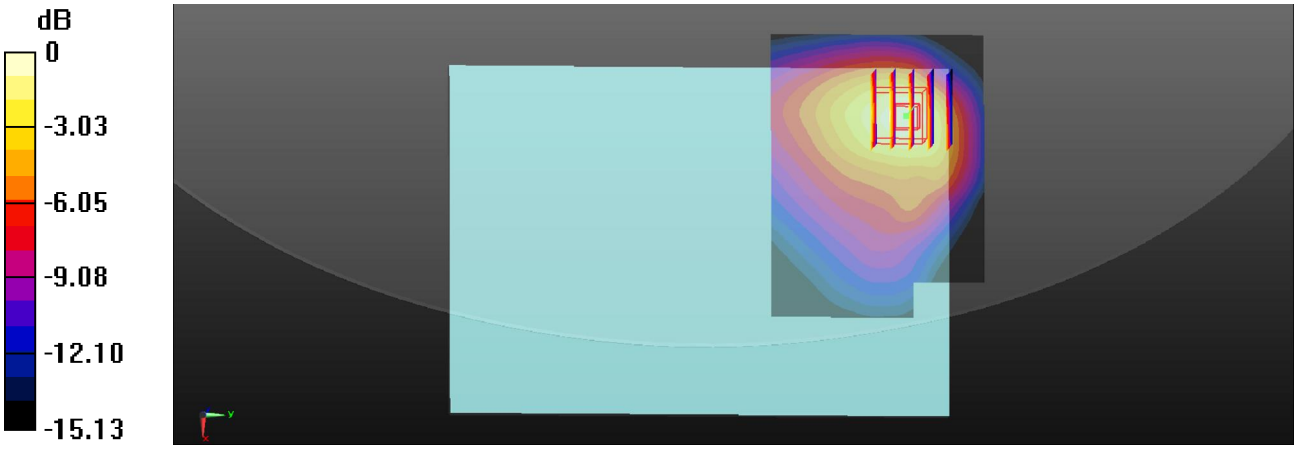
**#01 GSM850_GPRS (3 Tx slots)_Bottom Face_0cm_Ch128_sensor on**

Communication System: GPRS (GMSK 3 Tx slots); Frequency: 824.2 MHz;Duty Cycle: 1:2.77
Medium: MSL_835_140709 Medium parameters used: f = 824.2 MHz; $\sigma$ = 0.961 S/m; $\varepsilon_r$ = 56.093; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(10.02, 10.02, 10.02); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch128/Area Scan (81x61x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.64 W/kg

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.952 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.95 W/kg
**SAR(1 g) = 1.160 W/kg; SAR(10 g) = 0.704 W/kg**
Maximum value of SAR (measured) = 1.54 W/kg




0 dB = 1.54 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/8

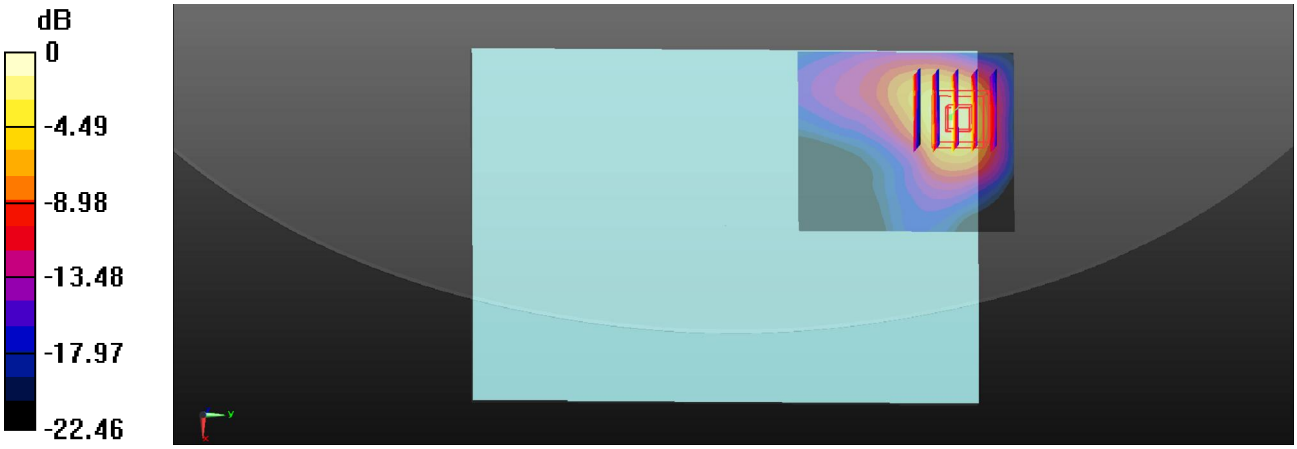
**#02 GSM1900_GPRS (3 Tx slots)_Bottom Face_0cm_Ch810_sensor on**

Communication System: GPRS (GMSK 3 Tx slots); Frequency: 1909.8 MHz;Duty Cycle: 1:2.77
Medium: MSL_1900_140708 Medium parameters used: f = 1909.8 MHz; $\sigma$ = 1.544 S/m; $\varepsilon_r$ = 54.546; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(7.83, 7.83, 7.83); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch810/Area Scan (51x61x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.24 W/kg

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.813 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 2.26 W/kg
**SAR(1 g) = 1.090 W/kg; SAR(10 g) = 0.465 W/kg**
Maximum value of SAR (measured) = 1.73 W/kg




0 dB = 1.73 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/9

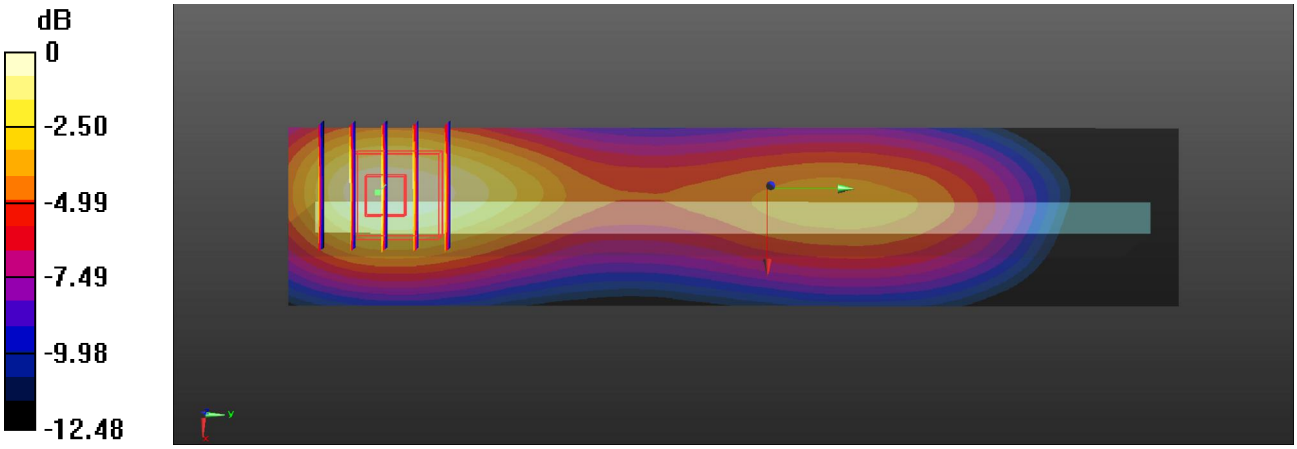
**#03 WCDMA Band V_RMC 12.2Kbps_Edge 1_0cm_Ch4233_sensor off**

Communication System: WCDMA ; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: MSL_835_140709 Medium parameters used: f = 846.6 MHz; $\sigma$ = 0.982 S/m; $\varepsilon_r$ = 55.892; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(10.02, 10.02, 10.02); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch4233/Area Scan (31x151x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.934 W/kg

**Ch4233/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.288 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.19 W/kg
**SAR(1 g) = 0.738 W/kg; SAR(10 g) = 0.453 W/kg**
Maximum value of SAR (measured) = 0.950 W/kg




0 dB = 0.950 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/8

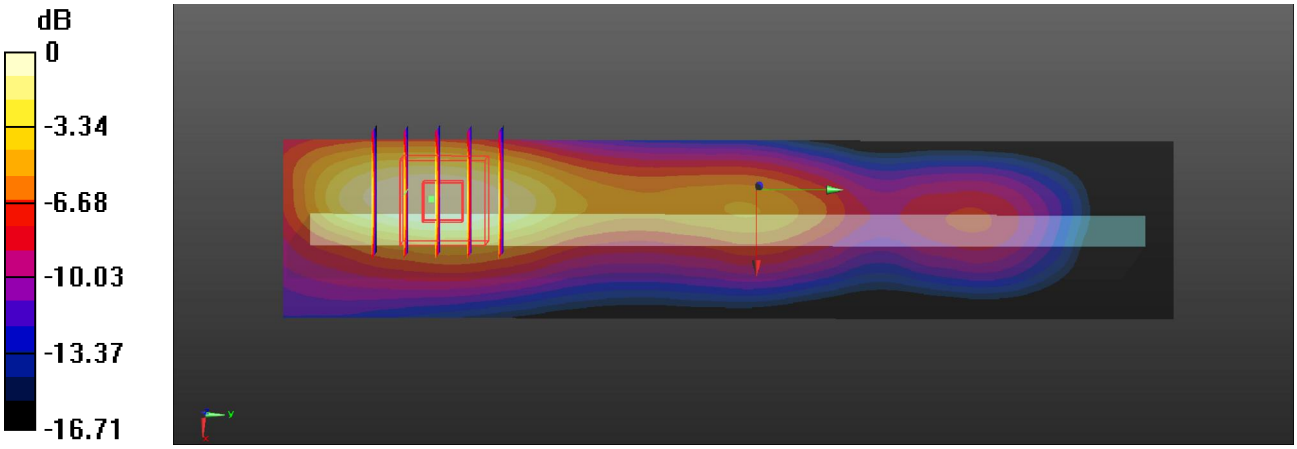
**#04 WCDMA Band IV_RMC 12.2k_Edge 1_0cm_Ch1513_sensor off**

Communication System: WCDMA ; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: MSL_1750_140708 Medium parameters used: f = 1752.6 MHz; $\sigma$ = 1.525 S/m; $\varepsilon_r$ = 54.433; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(8.11, 8.11, 8.11); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch1513/Area Scan (31x151x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.51 W/kg

**Ch1513/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.894 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.81 W/kg
**SAR(1 g) = 1.060 W/kg; SAR(10 g) = 0.587 W/kg**
Maximum value of SAR (measured) = 1.38 W/kg




0 dB = 1.38 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/8

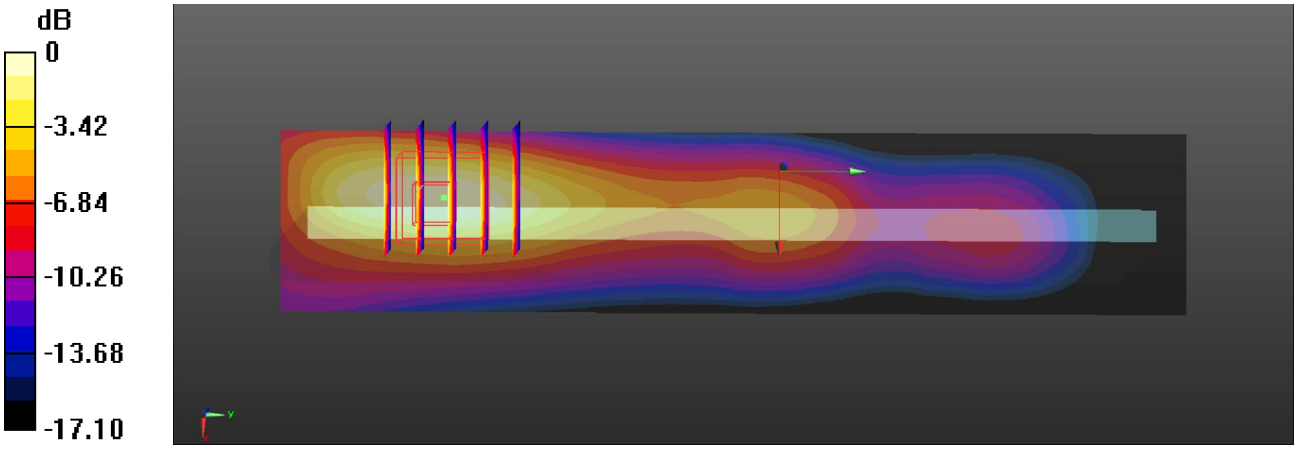
**#05 WCDMA Band II_RMC 12.2Kbps_Edge 1_0cm_Ch9400_sensor off**

Communication System: WCDMA ; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: MSL_1900_140708 Medium parameters used: f = 1880 MHz; $\sigma$ = 1.513 S/m; $\varepsilon_r$ = 54.594; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(7.83, 7.83, 7.83); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch9400/Area Scan (31x151x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.32 W/kg

**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.814 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.65 W/kg
**SAR(1 g) = 0.971 W/kg; SAR(10 g) = 0.531 W/kg**
Maximum value of SAR (measured) = 1.29 W/kg




0 dB = 1.29 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/9

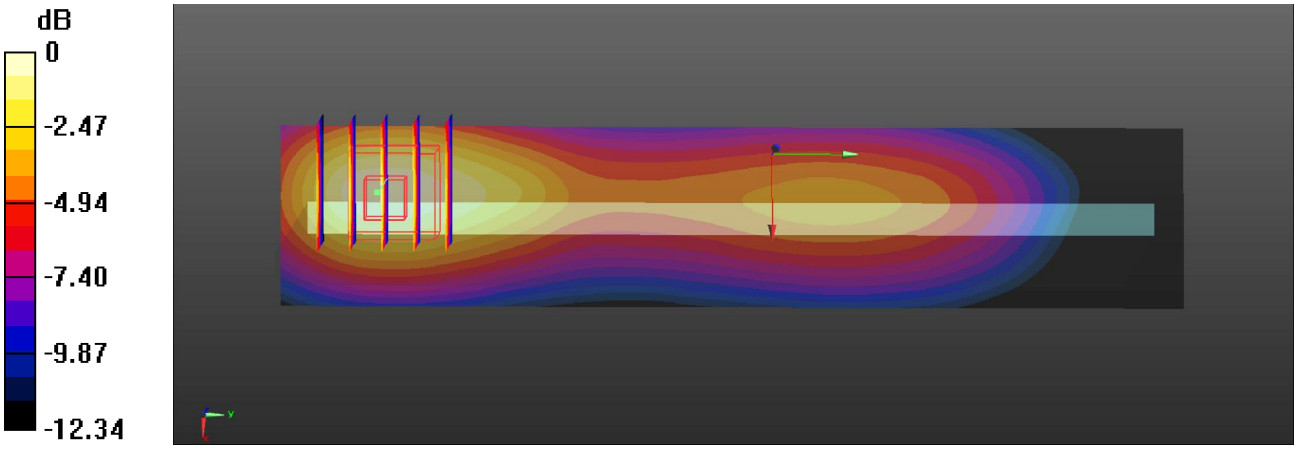
**#06 LTE Band 5_QPSK_10M(1,0)_Edge 1_0cm_Ch20525_sensor off**

Communication System: LTE; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium: MSL_835_140709 Medium parameters used: f = 836.5 MHz; $\sigma$ = 0.972 S/m; $\varepsilon_r$ = 55.99; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(10.02, 10.02, 10.02); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch20525/Area Scan (31x151x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.677 W/kg

**Ch20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.108 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.873 W/kg
**SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.331 W/kg**
Maximum value of SAR (measured) = 0.693 W/kg




0 dB = 0.693 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/8

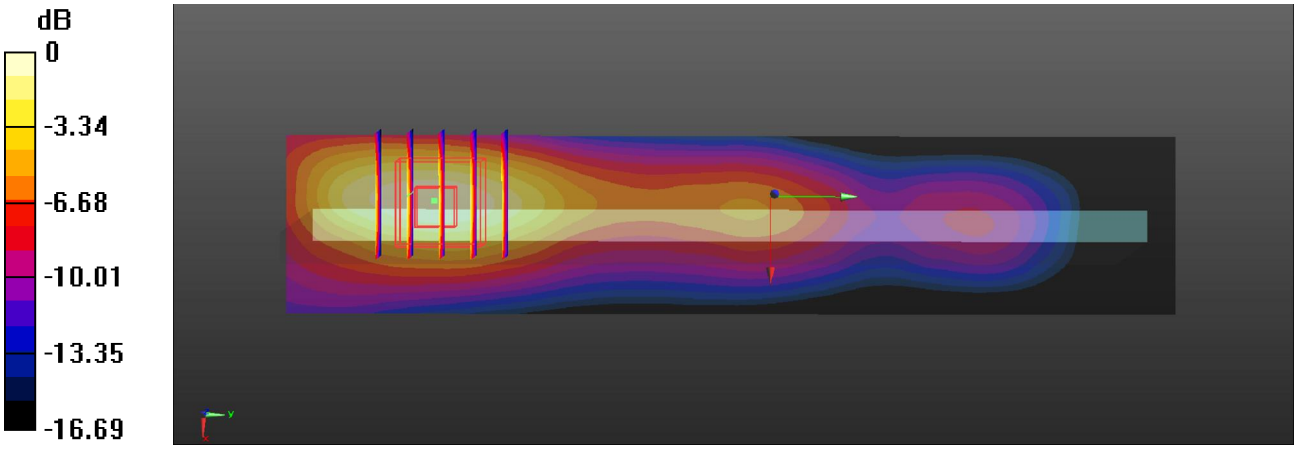
**#07 LTE Band 4_QPSK_20M(1,0)_Edge 1_0cm_Ch20300_sensor off**

Communication System: LTE; Frequency: 1745 MHz;Duty Cycle: 1:1
Medium: MSL_1750_140708 Medium parameters used: f = 1745 MHz; $\sigma$ = 1.516 S/m; $\varepsilon_r$ = 54.446; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(8.11, 8.11, 8.11); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch20300/Area Scan (31x151x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.988 W/kg

**Ch20300/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.754 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.32 W/kg
**SAR(1 g) = 0.752 W/kg; SAR(10 g) = 0.414 W/kg**
Maximum value of SAR (measured) = 0.978 W/kg




0 dB = 0.978 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/8

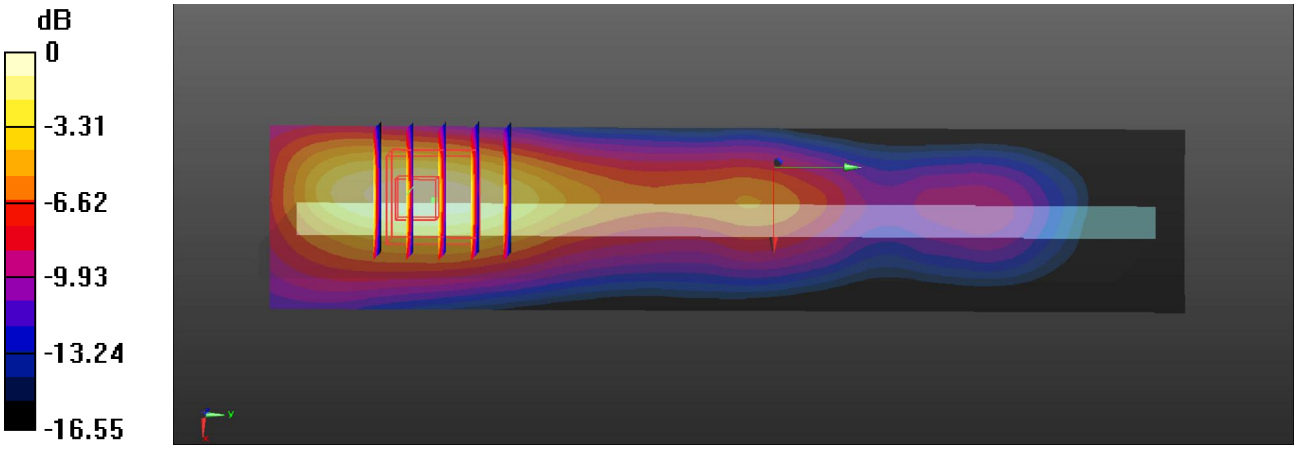
**#08 LTE Band 2_QPSK_20M(1,0)_Edge 1_0cm_Ch19100_sensor off**

Communication System: LTE; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: MSL_1900_140708 Medium parameters used: f = 1900 MHz; $\sigma$ = 1.535 S/m; $\varepsilon_r$ = 54.565; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(7.83, 7.83, 7.83); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch19100/Area Scan (31x151x1):** Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.39 W/kg

**Ch19100/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.556 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.81 W/kg
**SAR(1 g) = 1.030 W/kg; SAR(10 g) = 0.562 W/kg**
Maximum value of SAR (measured) = 1.44 W/kg




0 dB = 1.44 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014/7/8

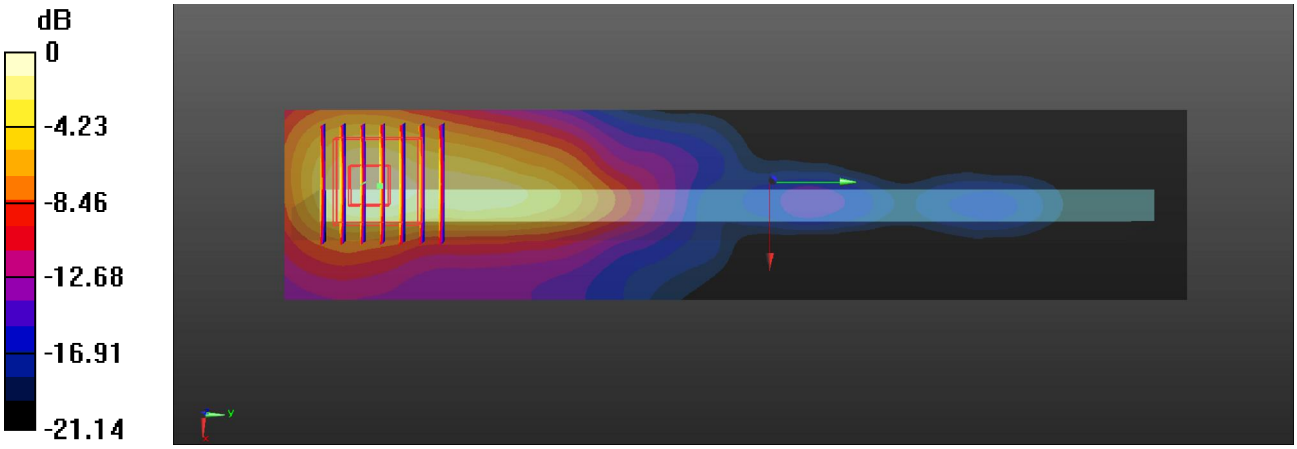
**#09 LTE Band 7_QPSK_20M(1,0)_Edge 1_0cm_Ch21350_sensor off**

Communication System: LTE; Frequency: 2560 MHz;Duty Cycle: 1:1
Medium: MSL_2600_140708 Medium parameters used: f = 2560 MHz; $\sigma$ = 2.114 S/m; $\varepsilon_r$ = 53.782; $\rho$ = 1000 kg/m$^3$
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3911; ConvF(7.09, 7.09, 7.09); Calibrated: 2014/4/22;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2014/4/30
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1201
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.6.8 (7028)

**Ch21350/Area Scan (41x191x1):** Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 1.12 W/kg

**Ch21350/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.169 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.71 W/kg
**SAR(1 g) = 0.787 W/kg; SAR(10 g) = 0.364 W/kg**
Maximum value of SAR (measured) = 1.21 W/kg




0 dB = 1.21 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2014.07.21

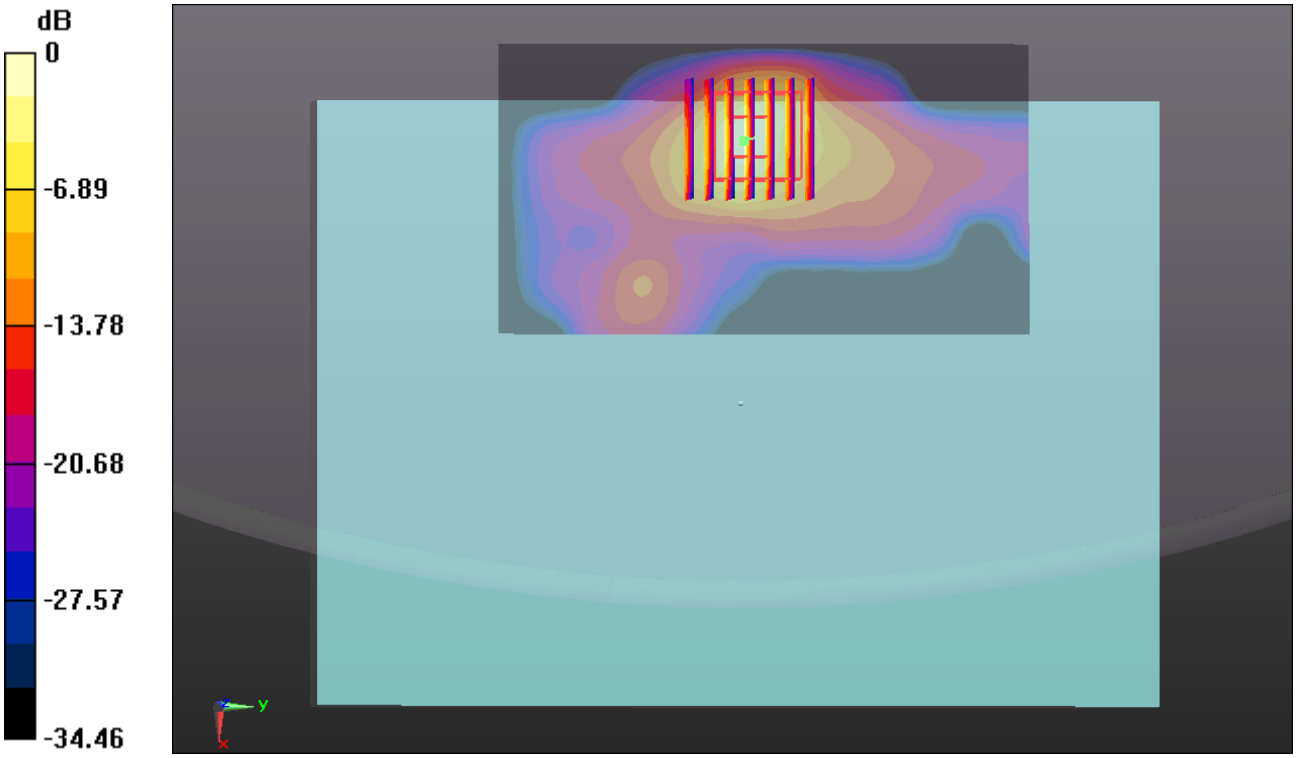
**#10_WLAN 2.4GHz_802.11b_1Mbps_Bottom Face 0cm_Ch6_Ant.1**

Communication System: WIFI (0); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450_140721 Medium parameters used: f = 2437 MHz; $\sigma$ = 1.924 mho/m; $\varepsilon_r$ = 51.008; $\rho$ = 1000 kg/$m^3$
Ambient Temperature：23.3 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(7.14, 7.14, 7.14); Calibrated: 2014.05.23
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2014.05.19
- Phantom: SAM3; Type: SAM; Serial: TP-1079
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.4.5 (3634)

**Ch6/Area Scan (61x111x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 1.457 mW/g

**Ch6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.767 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.324 W/kg
**SAR(1 g) = 0.730 mW/g; SAR(10 g) = 0.260 mW/g**
Maximum value of SAR (measured) = 1.453 mW/g




0 dB = 1.450mW/g

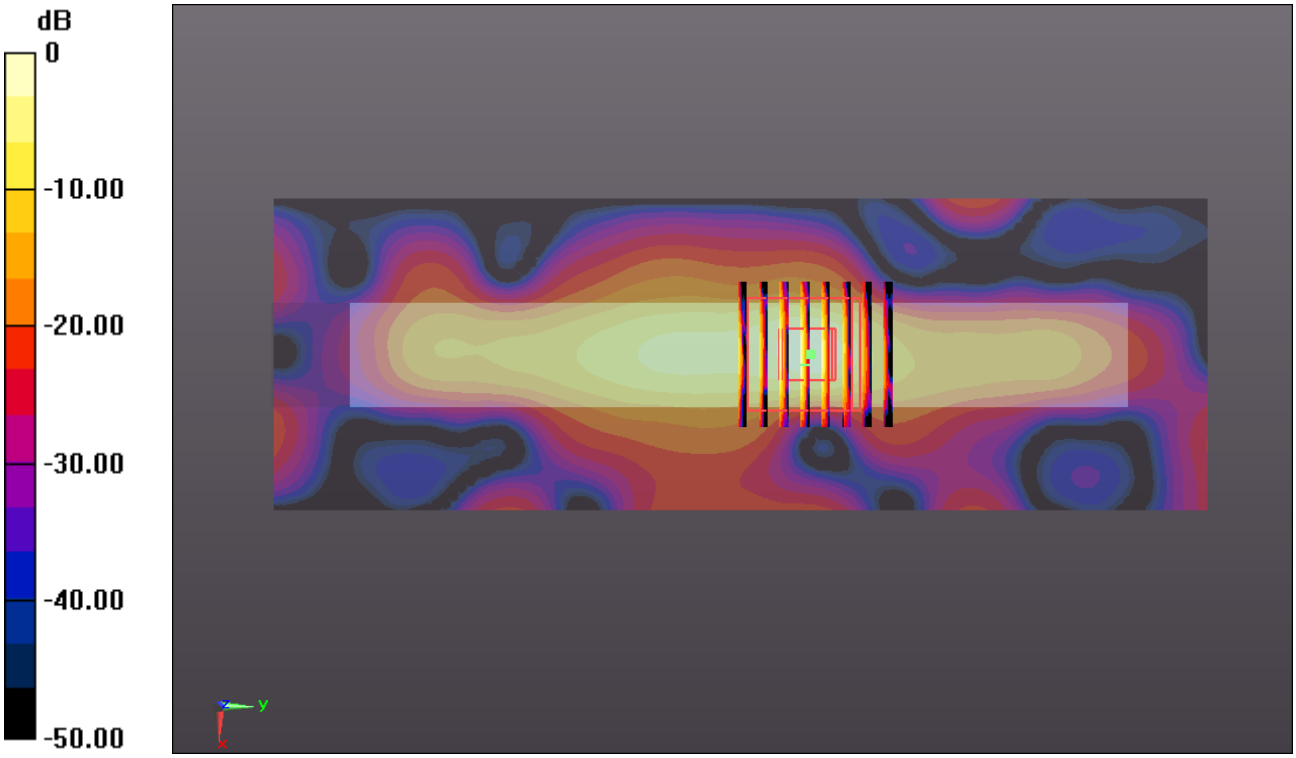
**#11_WLAN 5.2GHz_802.11a_6Mbps_Edge2 0cm_Ch36_Ant.0**

Communication System: WIFI (0); Frequency: 5180 MHz;Duty Cycle: 1:1.044
Medium: MSL_5000_140712 Medium parameters used: f = 5180 MHz; $\sigma$ = 5.104 mho/m; $\varepsilon_r$ = 47.493; $\rho$ = 1000 kg/$m^3$
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.54, 4.54, 4.54); Calibrated: 2014.05.23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2014.05.19
- Phantom: SAM3; Type: SAM; Serial: TP-1079
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.4.5 (3634)

**Ch36/Area Scan (61x181x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.947 mW/g

**Ch36/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 9.348 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 4.971 W/kg
**SAR(1 g) = 1.270 mW/g; SAR(10 g) = 0.279 mW/g**
Maximum value of SAR (measured) = 2.978 mW/g




0 dB = 2.980mW/g

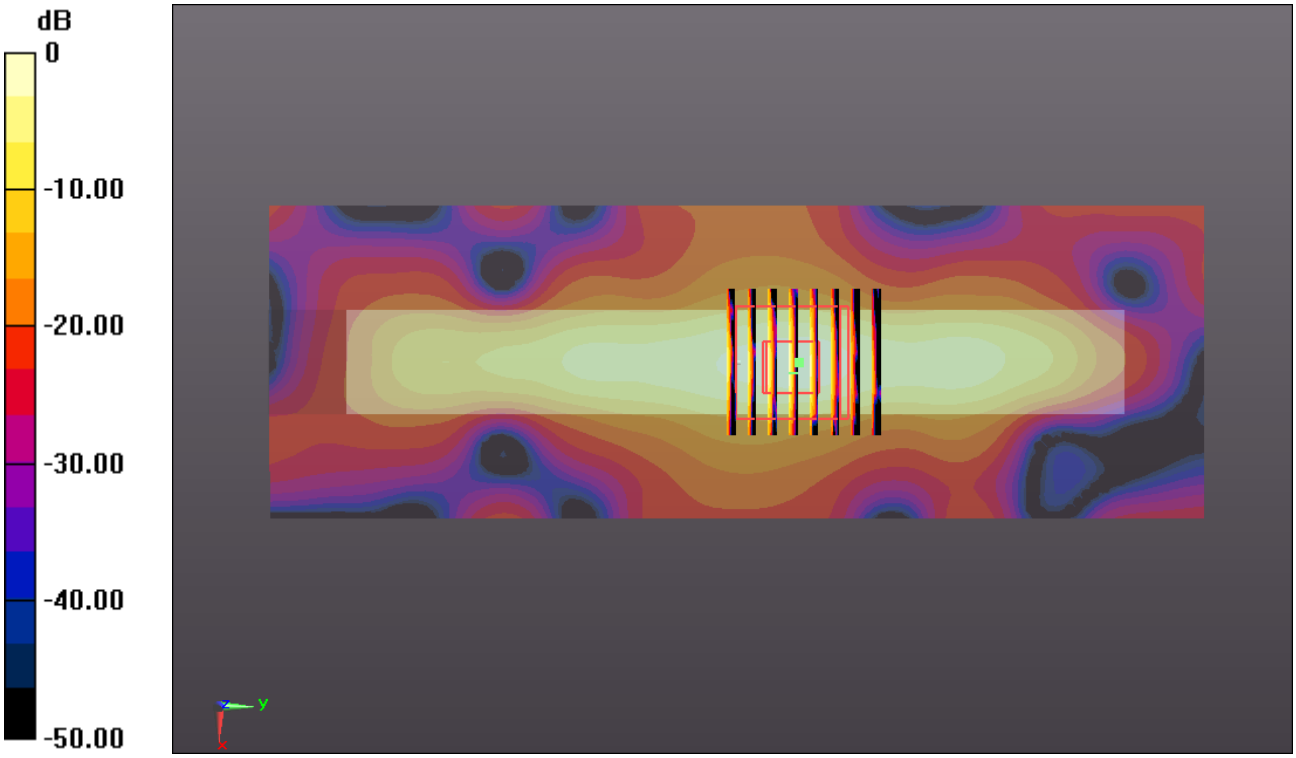
**#12_WLAN 5.8GHz_802.11a_6Mbps_Edge2 0cm_Ch165_Ant.0**

Communication System: WIFI (0); Frequency: 5825 MHz;Duty Cycle: 1:1.044
Medium: MSL_5000_140713 Medium parameters used: f = 5825 MHz; $\sigma$ = 6.054 mho/m; $\varepsilon_r$ = 46.462; $\rho$ = 1000 kg/$m^3$
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.21, 4.21, 4.21); Calibrated: 2014.05.23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2014.05.19
- Phantom: SAM3; Type: SAM; Serial: TP-1079
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.4.5 (3634)

**Ch165/Area Scan (91x221x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.600 mW/g

**Ch165/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 12.931 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 5.086 W/kg
**SAR(1 g) = 1.300 mW/g; SAR(10 g) = 0.332 mW/g**
Maximum value of SAR (measured) = 3.248 mW/g




0 dB = 3.250mW/g