Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/12

System Check_Head_5600MHz_20170312

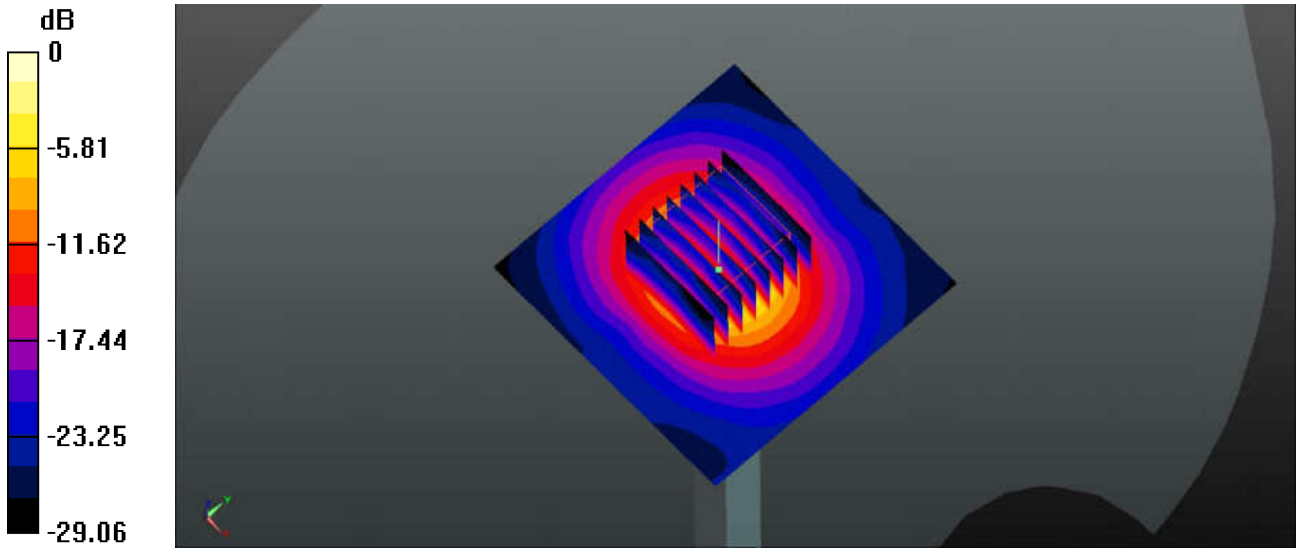
DUT:D5GHzV2 -SN:1128

Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium: HSL_5G_2017/03/12 Medium parameters used: f = 5600 MHz; σ = 4.901 S/m; ε_r = 34.464; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.84, 4.84, 4.84); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Pin=100mw/Area Scan (71x71x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 19.6 W/kg

Pin=100mw/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 46.34 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 32.9 W/kg
SAR(1 g) = 8.75 W/kg; SAR(10 g) = 2.23 W/kg
Maximum value of SAR (measured) = 19.9 W/kg



0 dB = 19.9 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/12

System Check_Head_5750MHz_20170312

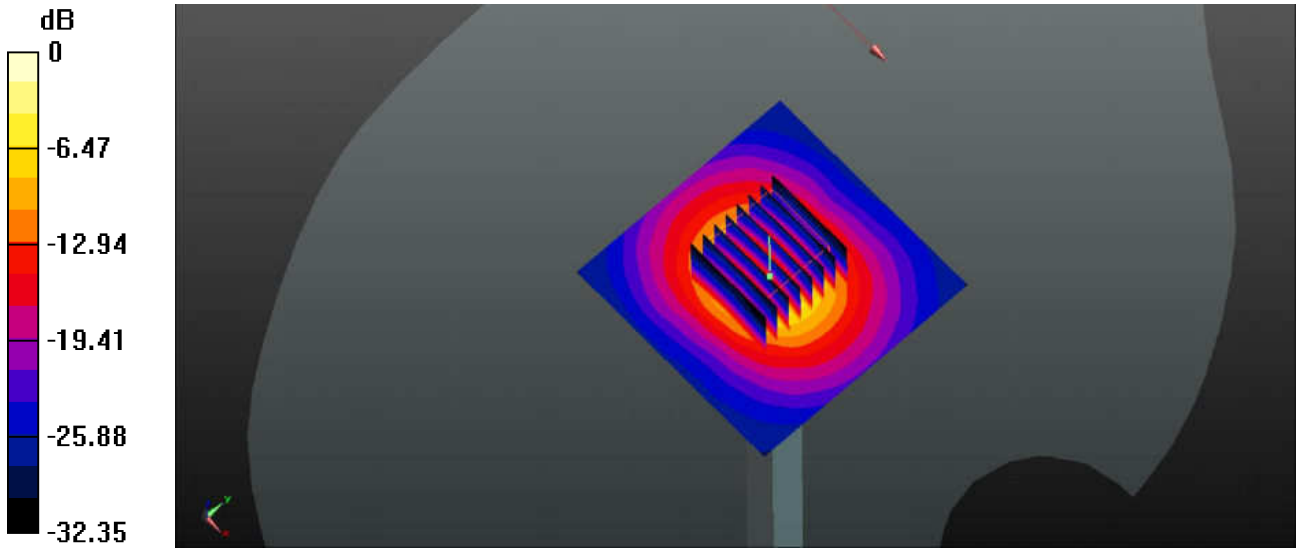
DUT:D5GHzV2 -SN:1128

Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_2017/03/12 Medium parameters used: f = 5750 MHz; σ = 5.092 S/m; ε_r = 34.268; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.78, 4.78, 4.78); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Pin=100mw/Area Scan (71x71x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.7 W/kg

Pin=100mw/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 40.58 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 33.8 W/kg
SAR(1 g) = 7.46 W/kg; SAR(10 g) = 2.14 W/kg
Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

System Check_Body_750MHz_20170304

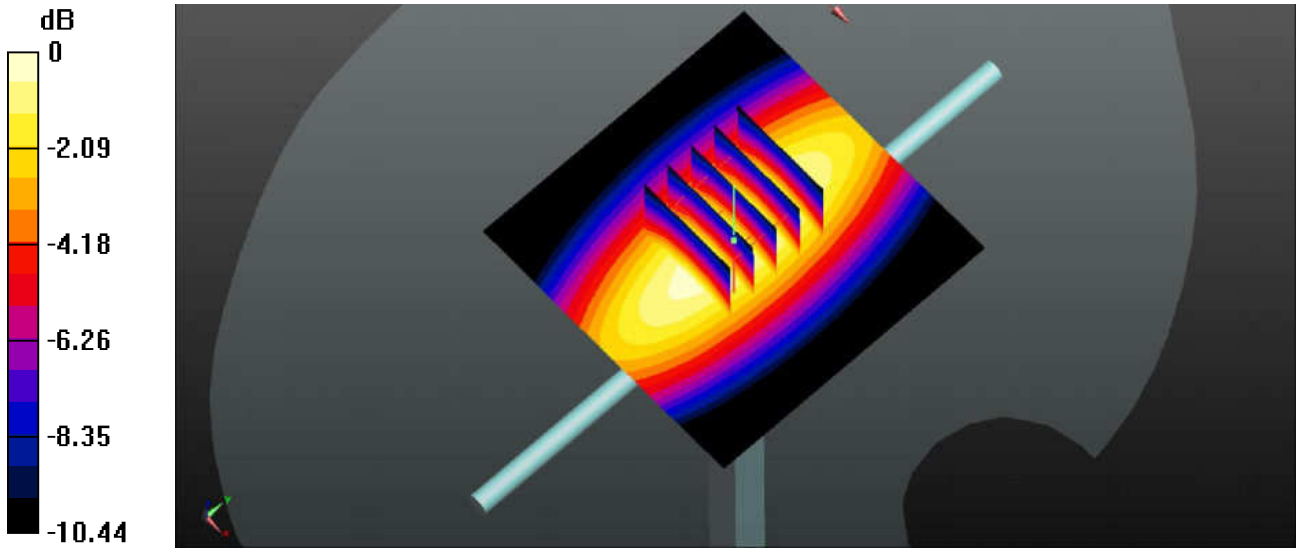
DUT: D750V3-SN:1078

Communication System: UID 0, CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium: MSL_750_2017/03/04 Medium parameters used: f = 750 MHz; σ = 0.959 S/m; ε_r = 54.176; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.68, 10.68, 10.68); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.09 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.20 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.50 W/kg
SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.5 W/kg
Maximum value of SAR (measured) = 3.07 W/kg



0 dB = 3.07 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

System Check_Body_835MHz_20170304

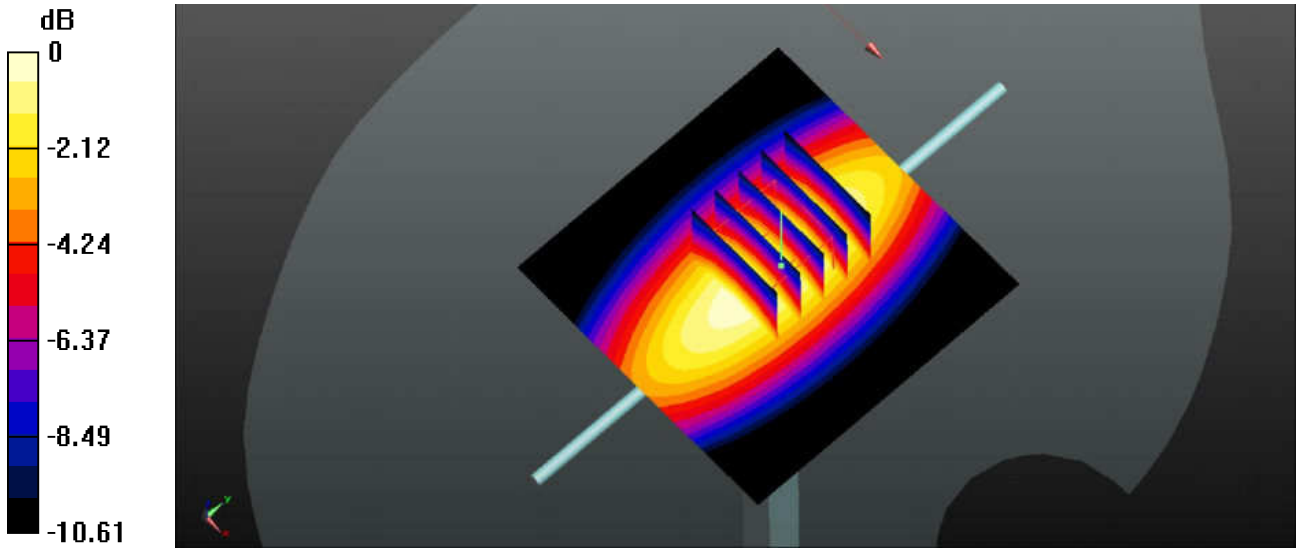
DUT: D835V2-SN:4d120

Communication System: UID 0, CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 835 MHz; σ = 1.008 S/m; ε_r = 57.593; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.69 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 53.79 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 4.18 W/kg
SAR(1 g) = 2.54 W/kg; SAR(10 g) = 1.8 W/kg
Maximum value of SAR (measured) = 3.68 W/kg



0 dB = 3.68 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/6

System Check_Body_1750MHz_20170306

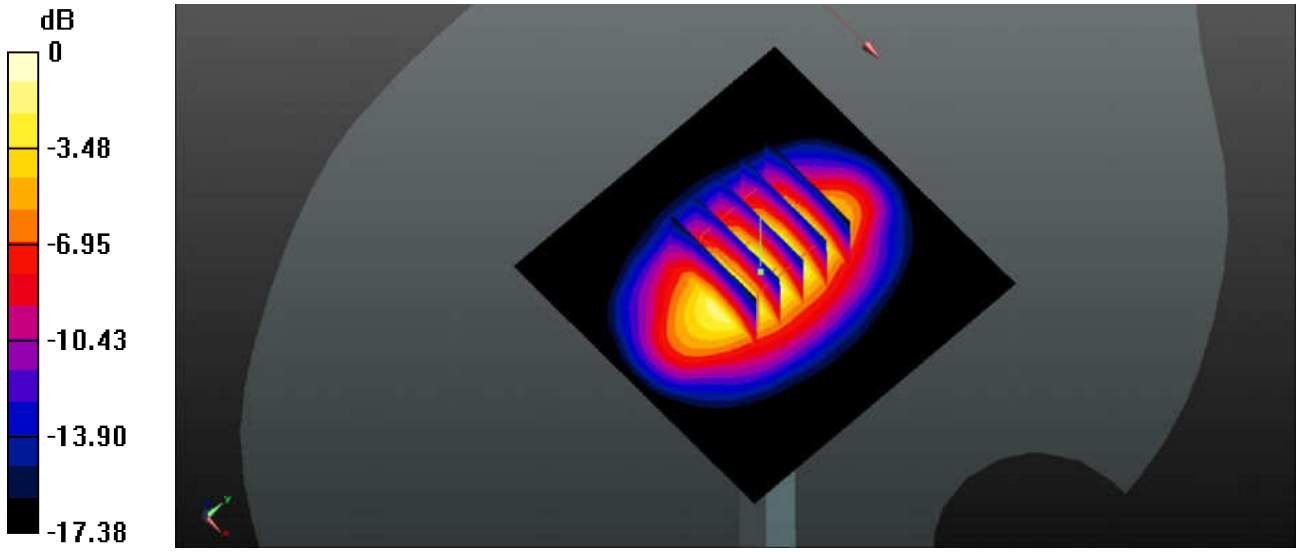
DUT:D1750V2-SN:1023

Communication System: UID 0, CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: MSL_1750_2017/03/06 Medium parameters used: f = 1750 MHz; σ = 1.538 S/m; ε_r = 52.734; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.46, 8.46, 8.46); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 14.6 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 94.09 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 17.8 W/kg
SAR(1 g) = 9.52 W/kg; SAR(10 g) = 4.99 W/kg
Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.7 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

System Check_Body_1900MHz_20170305

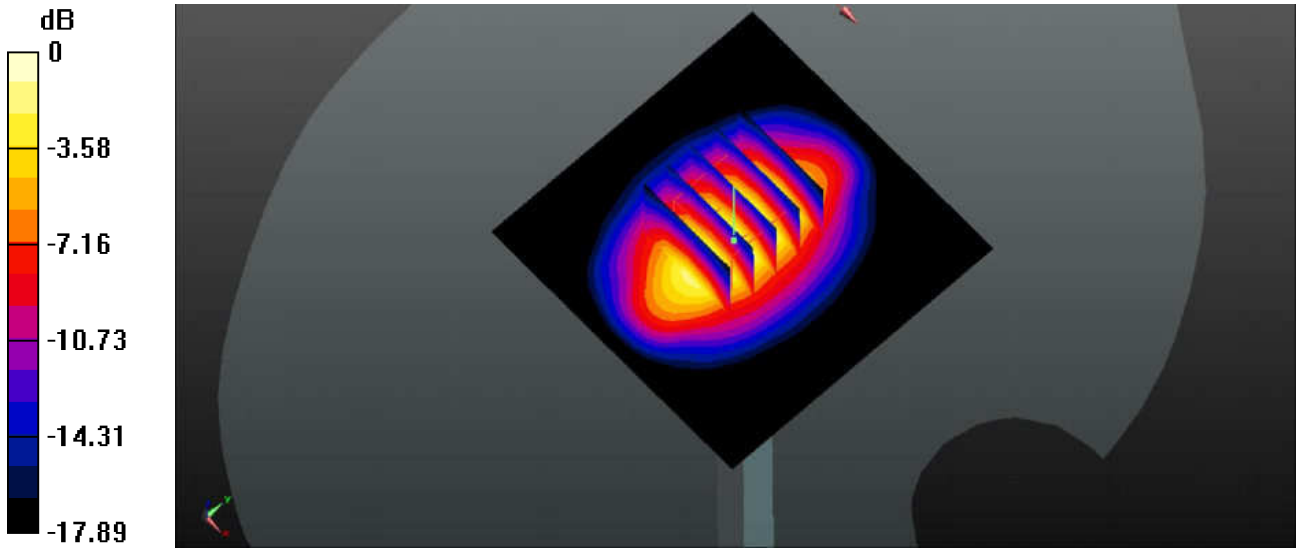
DUT:D1900V2-SN:5d018

Communication System: UID 0, CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1900 MHz; σ = 1.528 S/m; ε_r = 53.974; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 15.0 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 84.08 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 17.9 W/kg
SAR(1 g) = 9.83 W/kg; SAR(10 g) = 5.09 W/kg
Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

System Check_Body_2450MHz_20170305

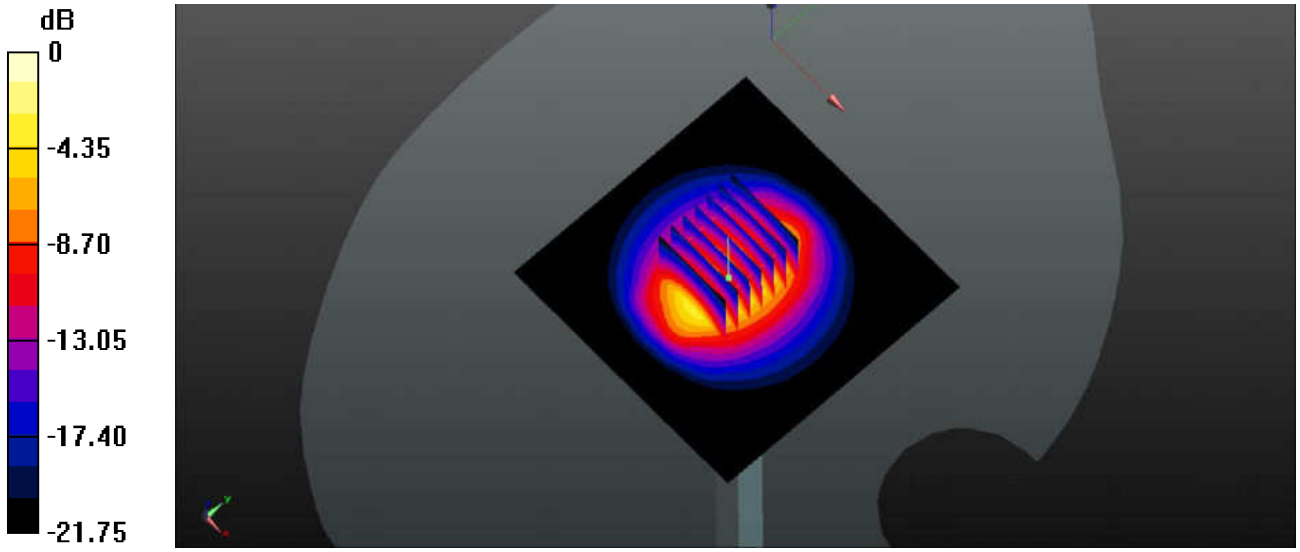
DUT:D2450V2 -SN:869

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: MSL_2450_2017/03/05 Medium parameters used: f = 2450 MHz; σ = 1.984 S/m; ε_r = 51.165; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.89, 7.89, 7.89); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 19.8 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 81.31 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 25.2 W/kg
SAR(1 g) = 12.00 W/kg; SAR(10 g) = 5.55 W/kg
Maximum value of SAR (measured) = 20.3 W/kg



0 dB = 20.3 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

System Check_Body_2600MHz_20170305

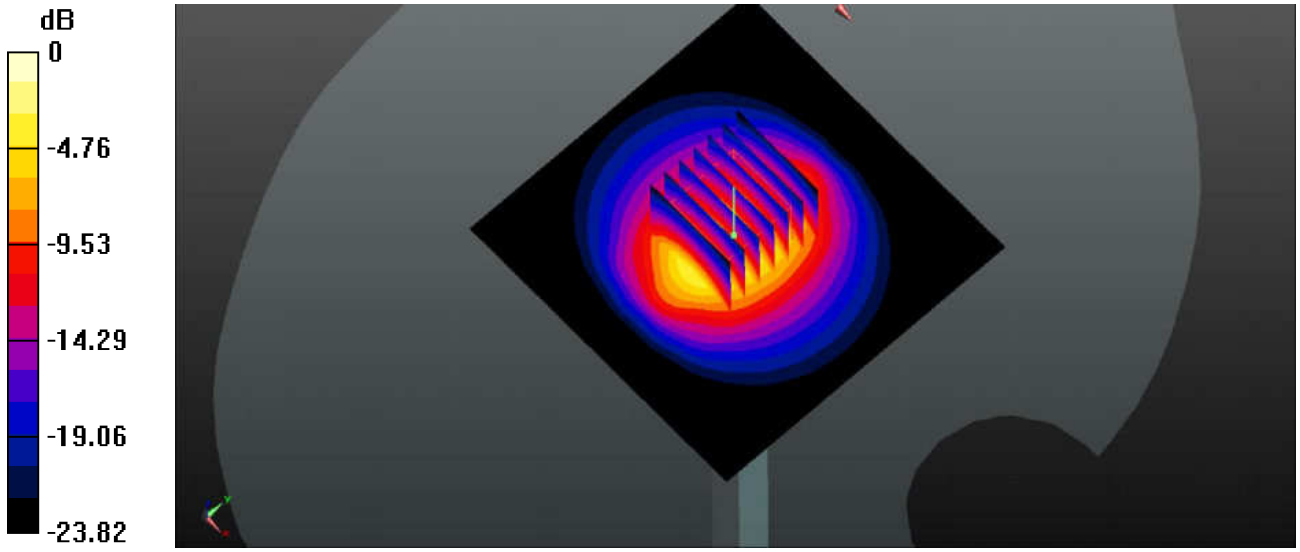
DUT:D2600V2 -SN:1112

Communication System: UID 0, CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: MSL_2600_2017/03/05 Medium parameters used: f = 2600 MHz; σ = 2.149 S/m; ε_r = 50.97; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.67, 7.67, 7.67); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 24.2 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 86.42 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 30.2 W/kg
SAR(1 g) = 13.90 W/kg; SAR(10 g) = 6.1 W/kg
Maximum value of SAR (measured) = 24.1 W/kg



0 dB = 24.1 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

System Check_Body_5250MHz_20170311

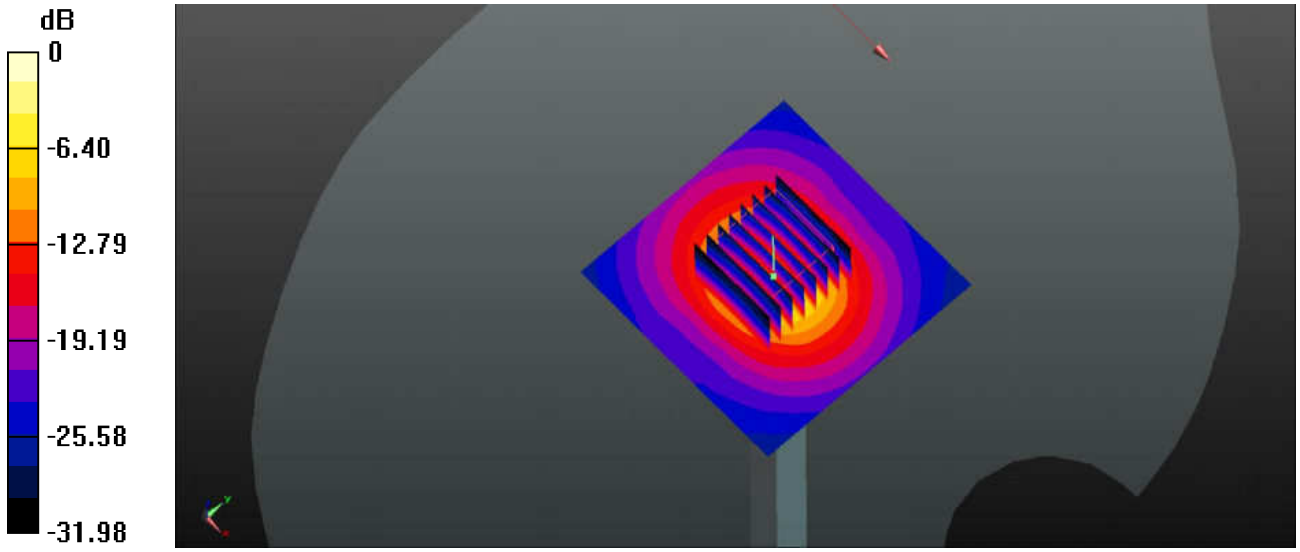
DUT:D5GHzV2 -SN:1128

Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5250 MHz; σ = 5.437 S/m; ε_r = 48.733; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.84, 4.84, 4.84); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=100mw/Area Scan (71x71x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.1 W/kg

Pin=100mw/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 40.56 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 33.0 W/kg
SAR(1 g) = 7.59 W/kg; SAR(10 g) = 2.14 W/kg
Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

System Check_Body_5600MHz_20170311

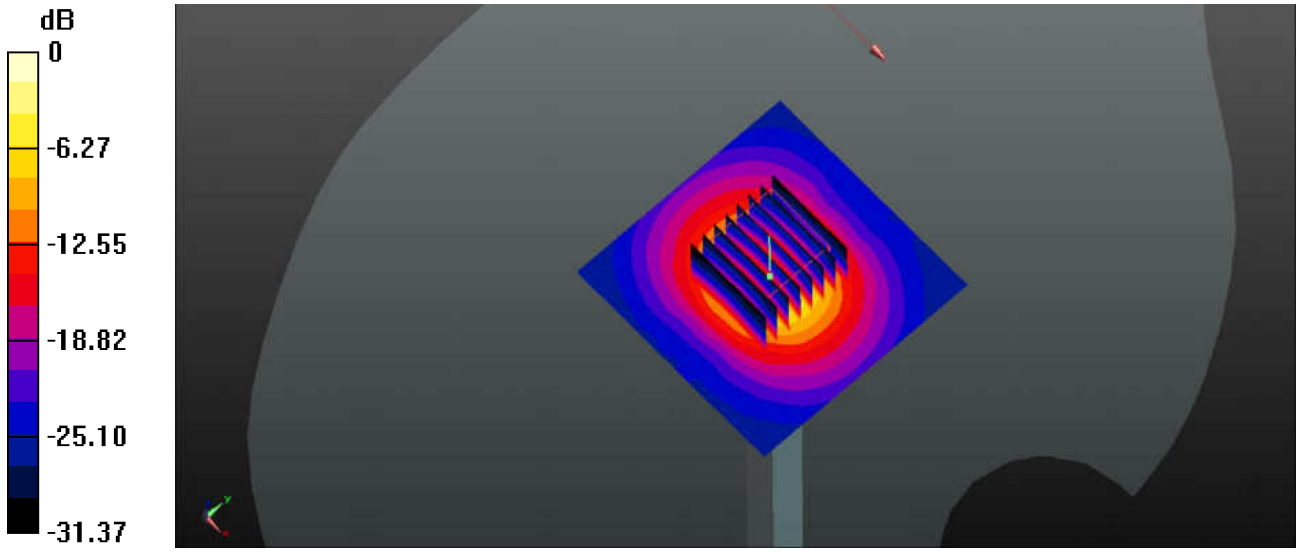
DUT:D5GHzV2 -SN:1128

Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5600 MHz; σ = 5.904 S/m; ε_r = 48.135; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4, 4, 4); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=100mw/Area Scan (71x71x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 20.8 W/kg

Pin=100mw/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 41.49 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 34.9 W/kg
SAR(1 g) = 8.32 W/kg; SAR(10 g) = 2.34 W/kg
Maximum value of SAR (measured) = 20.7 W/kg



0 dB = 20.7 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

System Check_Body_5750MHz_20170311

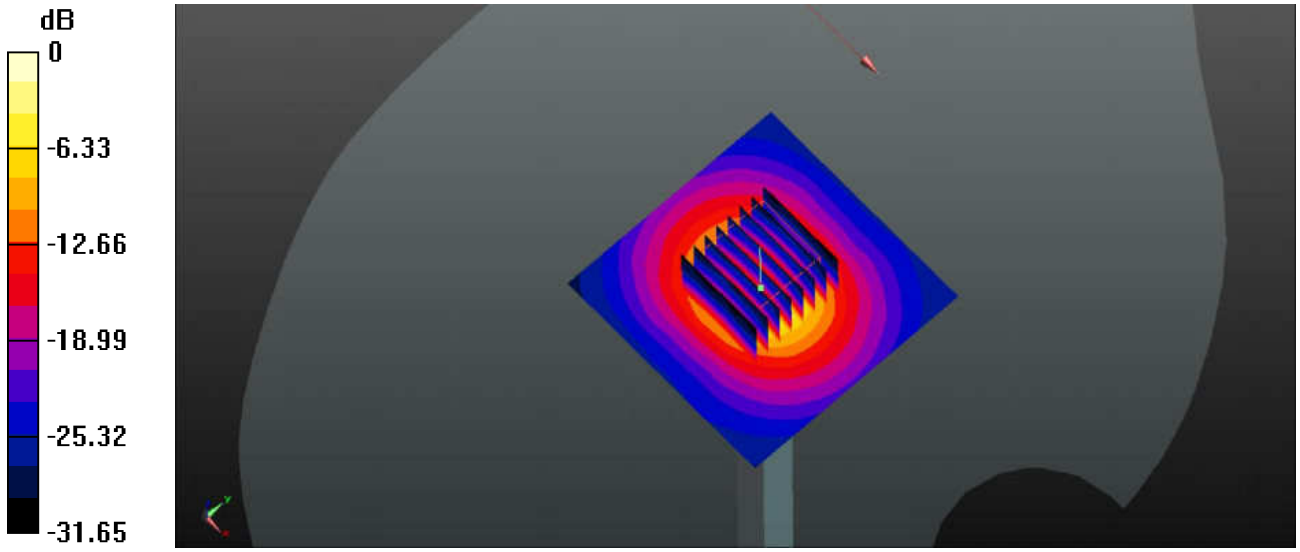
DUT:D5GHzV2 -SN:1128

Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5750 MHz; σ = 6.112 S/m; ε_r = 47.895; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.23, 4.23, 4.23); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Pin=100mw/Area Scan (71x71x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.8 W/kg

Pin=100mw/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 37.42 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 31.3 W/kg
SAR(1 g) = 7.20 W/kg; SAR(10 g) = 2.03 W/kg
Maximum value of SAR (measured) = 18.2 W/kg



0 dB = 18.2 W/kg

Appendix B. Plots of High SAR Measurement

The plots are shown as follows.

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/1

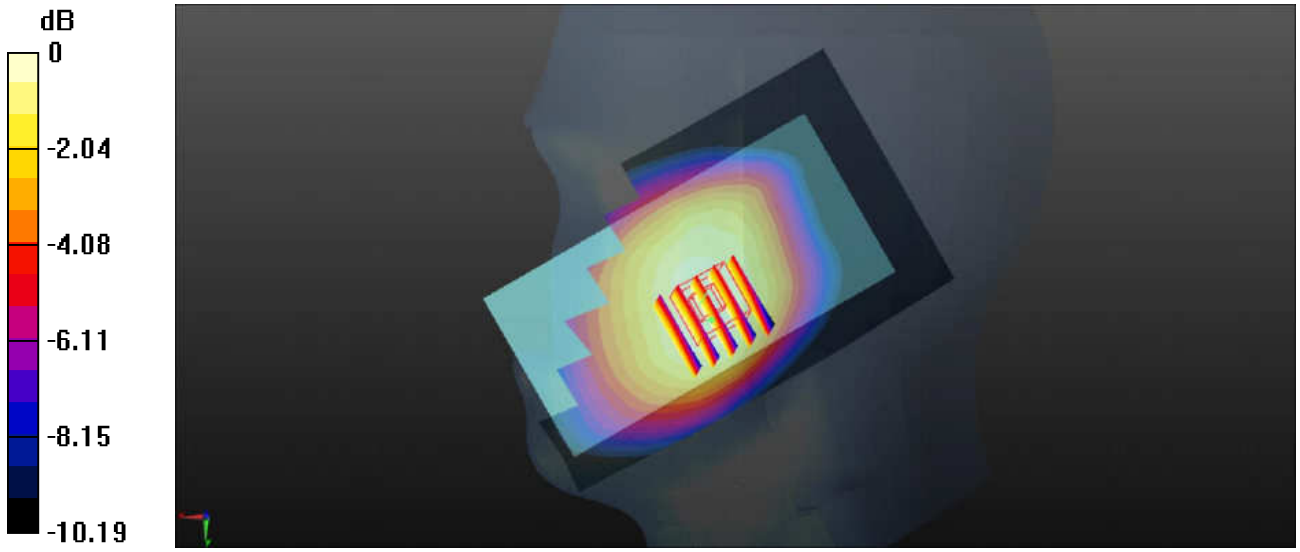
#01_GSM850_GPRS(4 Tx slots)_Right Cheek_0mm_Ch189

Communication System: UID 0, GPRS (GMSK 4 Tx slot) (0); Frequency: 836.4 MHz;Duty Cycle: 1:2.08
Medium: HSL_835_2017/03/01 Medium parameters used: f = 836.4 MHz; σ = 0.89 S/m; ε_r = 41.925; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.61, 10.61, 10.61); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch189/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.500 W/kg

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.629 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.526 W/kg
SAR(1 g) = 0.422 W/kg; SAR(10 g) = 0.328 W/kg
Maximum value of SAR (measured) = 0.489 W/kg



0 dB = 0.489 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/3

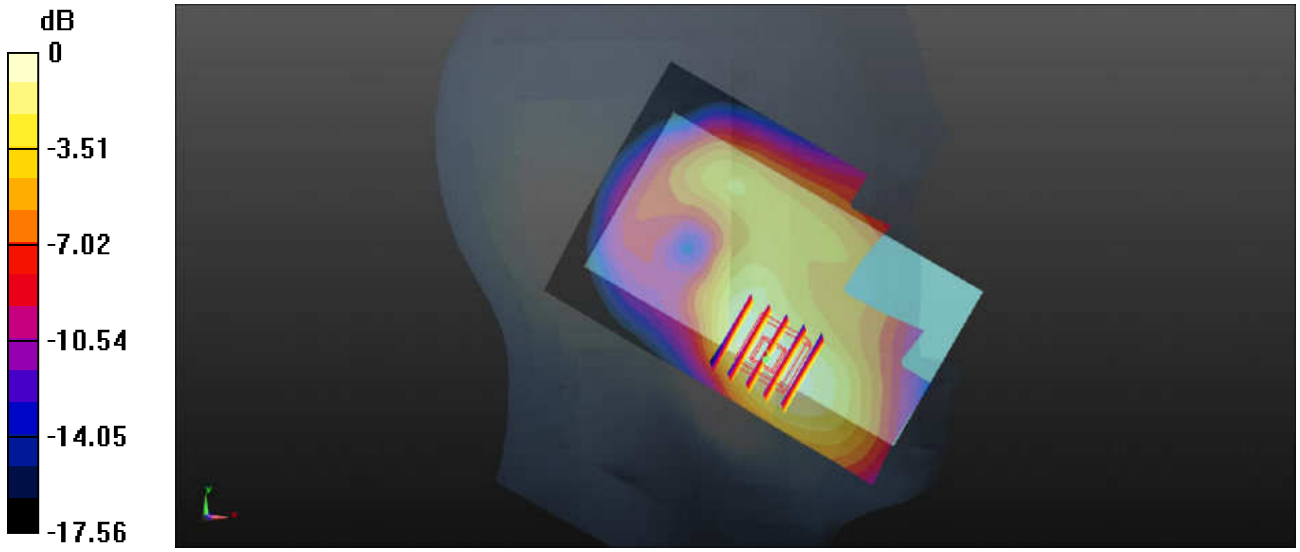
#02_GSM1900_GPRS(4 Tx slots)_Left Cheek_0mm_Ch810

Communication System: UID 0, GPRS (GMSK 4 Tx slot) (0); Frequency: 1909.8 MHz;Duty Cycle: 1:2.08
Medium: HSL_1900_2017/03/03 Medium parameters used: f = 1909.8 MHz; σ = 1.459 S/m; ε_r = 40.832; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.64, 8.64, 8.64); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.420 W/kg

Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.229 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.484 W/kg
SAR(1 g) = 0.299 W/kg; SAR(10 g) = 0.183 W/kg
Maximum value of SAR (measured) = 0.420 W/kg



0 dB = 0.420 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/1

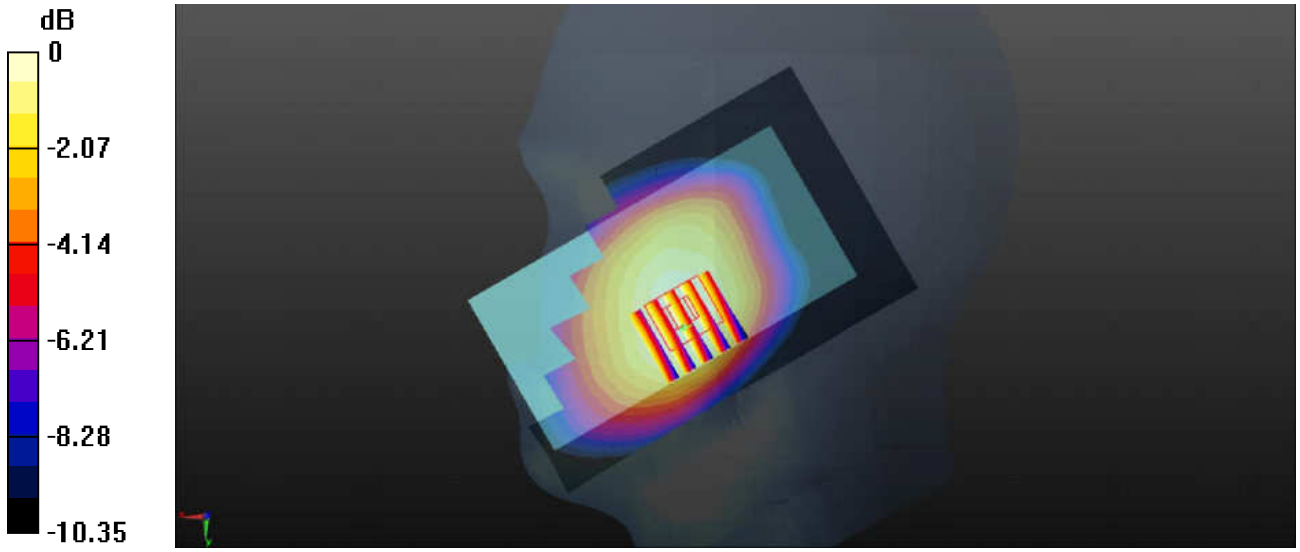
#03_WCDMA Band V_RMC 12.2Kbps_Right Cheek_0mm_Ch4132

Communication System: UID 0, WCDMA (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: HSL_835_2017/03/01 Medium parameters used: f = 826.4 MHz; σ = 0.88 S/m; ε_r = 42.047; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.61, 10.61, 10.61); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.579 W/kg

Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.773 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.600 W/kg
SAR(1 g) = 0.472 W/kg; SAR(10 g) = 0.363 W/kg
Maximum value of SAR (measured) = 0.554 W/kg



0 dB = 0.554 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/3

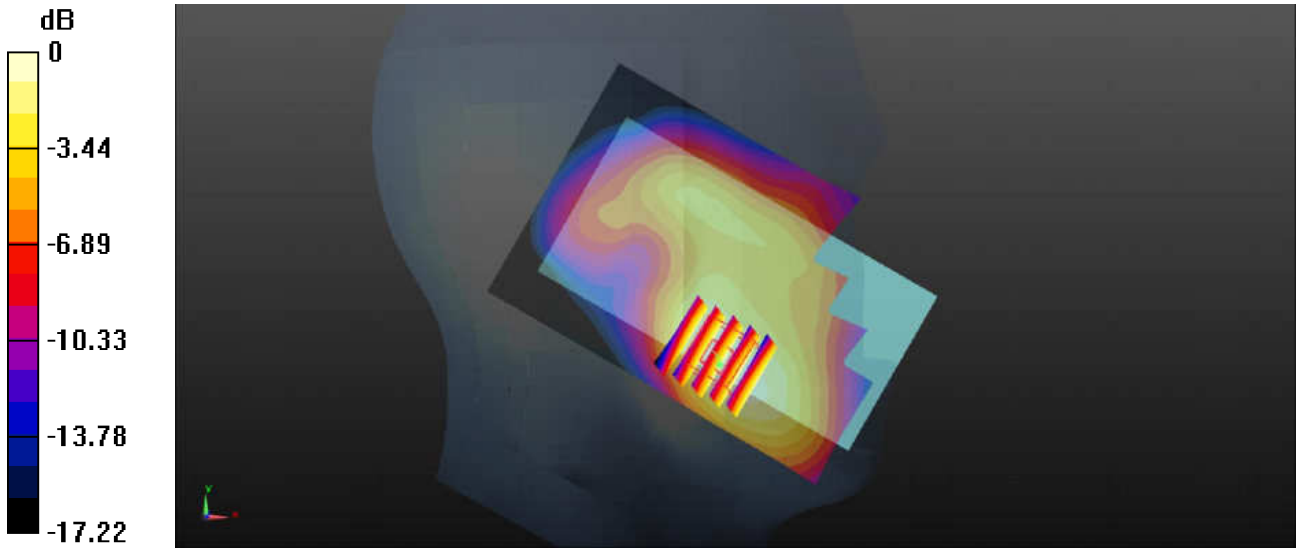
#04_WCDMA Band IV_RMC 12.2Kbps_Left Cheek_0mm_Ch1513

Communication System: UID 0, WCDMA (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: HSL_1750_2017/03/03 Medium parameters used: f = 1752.6 MHz; σ = 1.391 S/m; ε_r =40.956; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(9.03, 9.03, 9.03); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.20 W/kg

Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.21 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.870 W/kg; SAR(10 g) = 0.556 W/kg
Maximum value of SAR (measured) = 1.17 W/kg



0 dB = 1.17 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/3

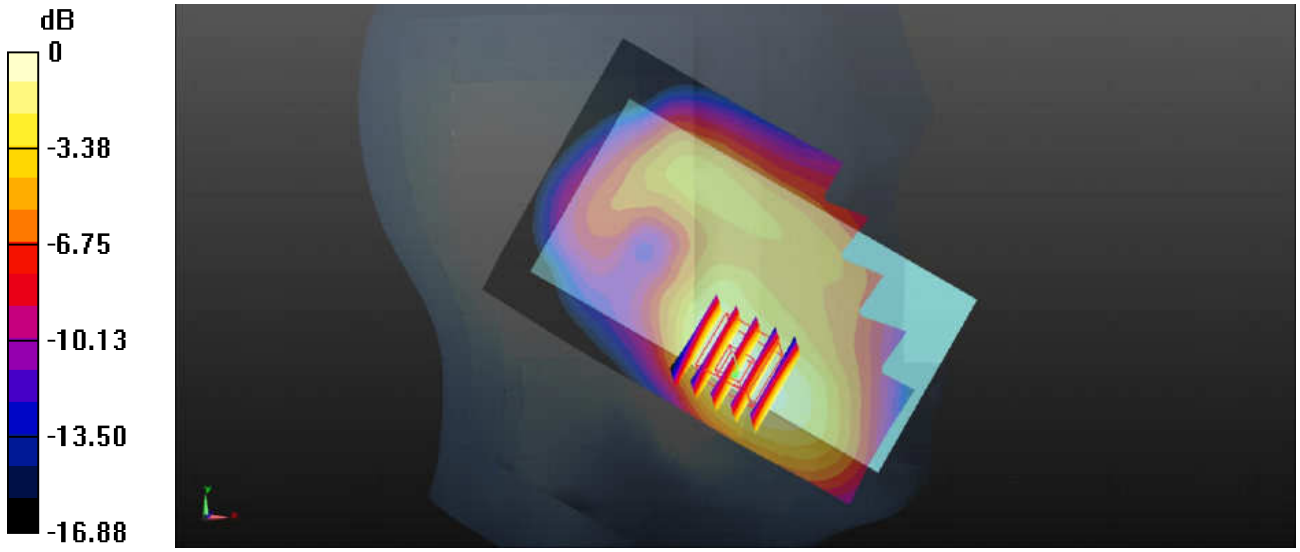
#05_WCDMA Band II_RMC 12.2Kbps_Left Cheek_0mm_Ch9262

Communication System: UID 0, WCDMA (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: HSL_1900_2017/03/03 Medium parameters used: f = 1852.4 MHz; σ = 1.394 S/m; ε_r = 41.059; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.64, 8.64, 8.64); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.23 W/kg

Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.56 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.899 W/kg; SAR(10 g) = 0.561 W/kg
Maximum value of SAR (measured) = 1.25 W/kg



0 dB = 1.25 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/1

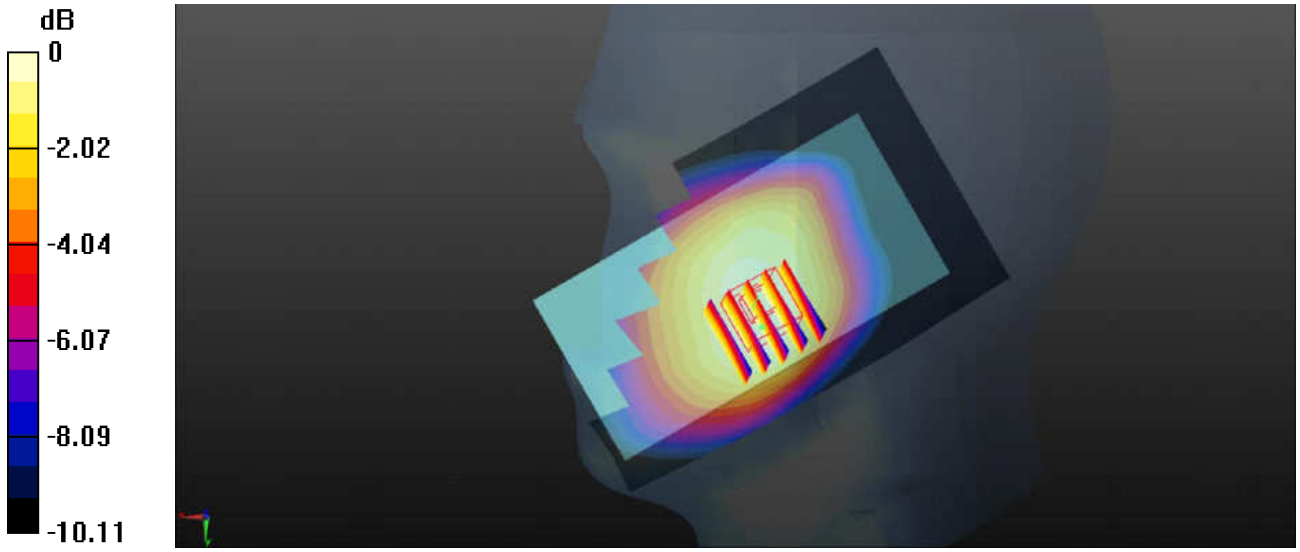
#06_CDMA2000 BC10_RC3 SO55_Right Cheek_0mm_Ch580

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz;Duty Cycle: 1:1
Medium: HSL_835_2017/03/01 Medium parameters used: f = 820.5 MHz; σ = 0.875 S/m; ε_r = 42.121; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.61, 10.61, 10.61); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch580/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.564 W/kg

Ch580/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.841 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.589 W/kg
SAR(1 g) = 0.478 W/kg; SAR(10 g) = 0.370 W/kg
Maximum value of SAR (measured) = 0.550 W/kg



0 dB = 0.550 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/1

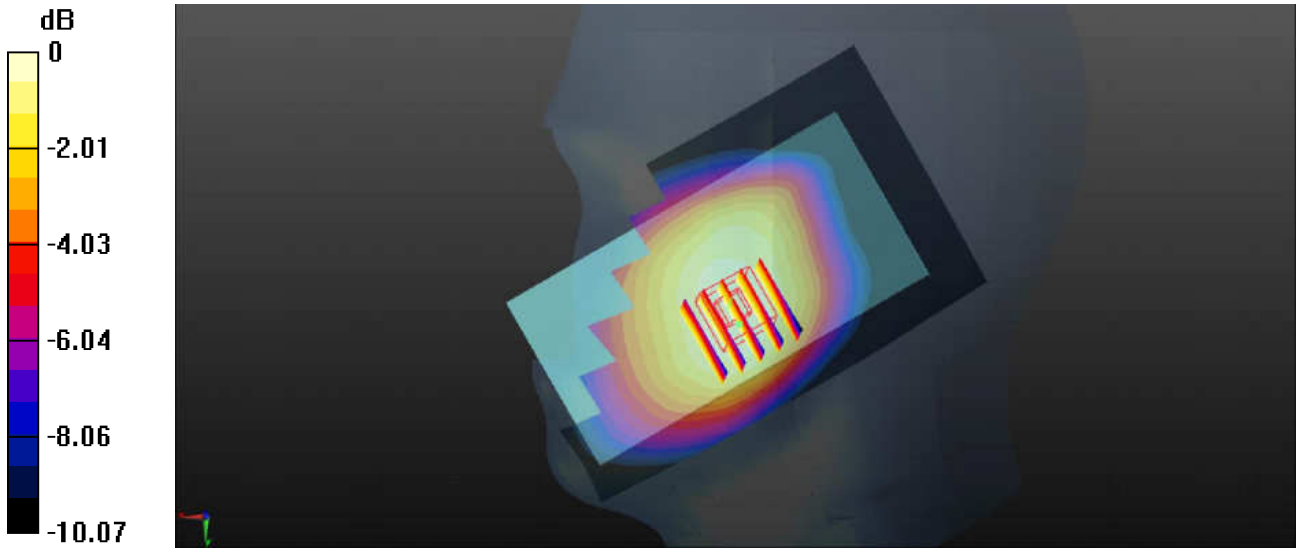
#07_CDMA2000 BC0_RC3 SO55_Right Cheek_0mm_Ch1013

Communication System: UID 0, CDMA2000 (0); Frequency: 824.7 MHz;Duty Cycle: 1:1
Medium: HSL_835_2017/03/01 Medium parameters used: f = 824.7 MHz; σ = 0.879 S/m; ε_r = 42.064;ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.61, 10.61, 10.61); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1013/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.593 W/kg

Ch1013/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.132 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.618 W/kg
SAR(1 g) = 0.501 W/kg; SAR(10 g) = 0.391 W/kg
Maximum value of SAR (measured) = 0.580 W/kg



0 dB = 0.580 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/3

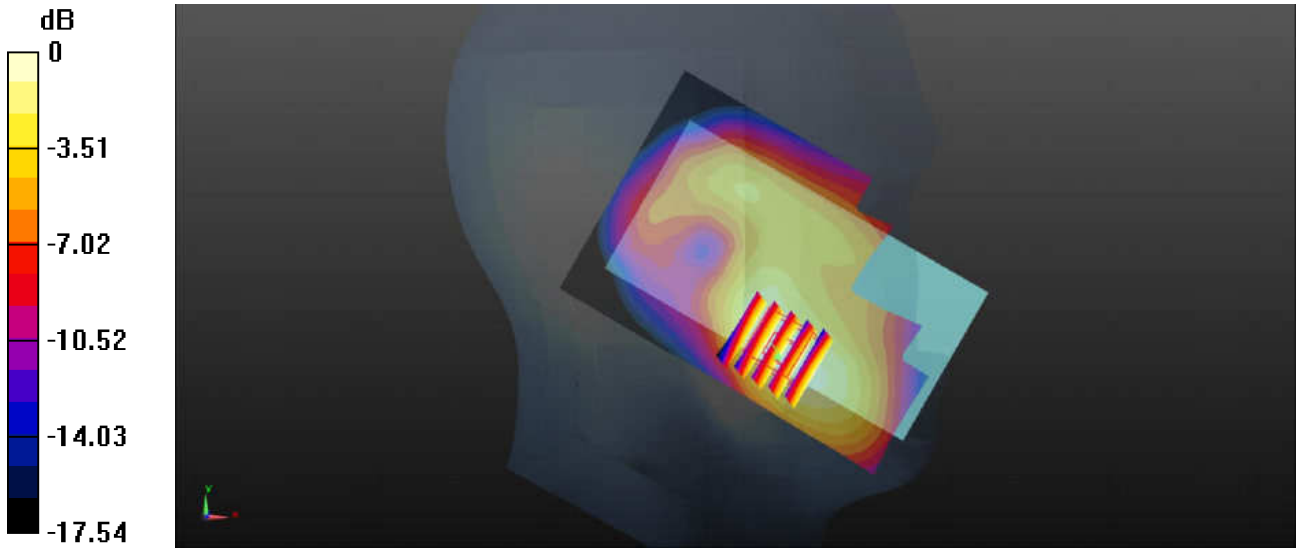
#08_CDMA2000 BC1_RC3 SO55_Left Cheek_0mm_Ch25

Communication System: UID 0, CDMA2000 (0); Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium: HSL_1900_2017/03/03 Medium parameters used: f = 1851.25 MHz; σ = 1.393 S/m; ε_r = 41.066; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.64, 8.64, 8.64); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch25/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.08 W/kg

Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.88 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 0.798 W/kg; SAR(10 g) = 0.500 W/kg
Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/2

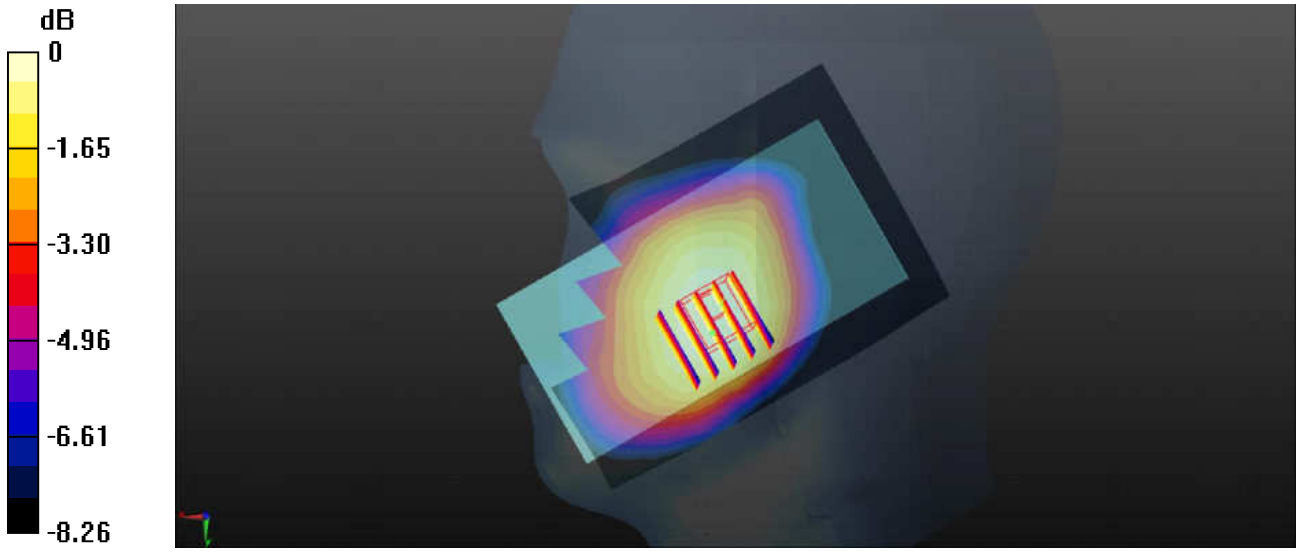
#09_LTE Band 12_10M_QPSK_1RB_25offset_Right Cheek_0mm_Ch23095

Communication System: UID 0, FDD-LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: HSL_750_2017/03/02 Medium parameters used: f = 707.5 MHz; σ = 0.851 S/m; ε_r = 42.537; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.92, 10.92, 10.92); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23095/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.294 W/kg

Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.374 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.305 W/kg
SAR(1 g) = 0.276 W/kg; SAR(10 g) = 0.227 W/kg
Maximum value of SAR (measured) = 0.292 W/kg



0 dB = 0.292 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/2

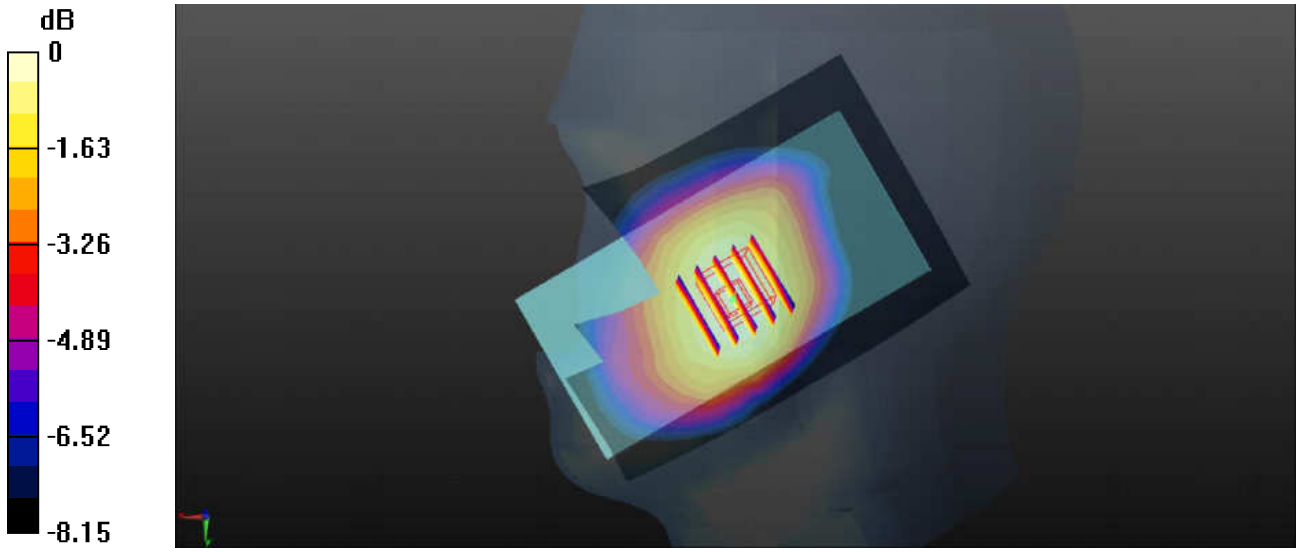
#10_LTE Band 13_10M_QPSK_1RB_25offset_Right Cheek_0mm_Ch23230

Communication System: UID 0, FDD-LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: HSL_750_2017/03/02 Medium parameters used: f = 782 MHz; σ = 0.918 S/m; ε_r = 41.565; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.92, 10.92, 10.92); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23230/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.344 W/kg

Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.548 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.374 W/kg
SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.246 W/kg
Maximum value of SAR (measured) = 0.357 W/kg



0 dB = 0.357 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/1

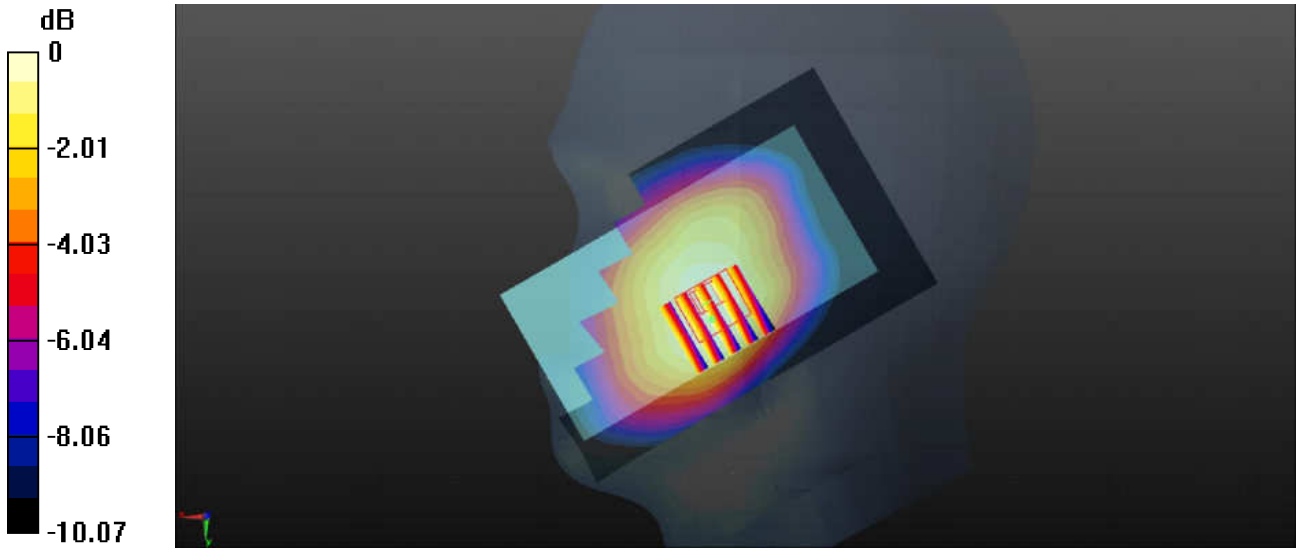
#11_LTE Band 26_15M_QPSK_1RB_37offset_Right Cheek_0mm_Ch26865

Communication System: UID 0, FDD-LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: HSL_835_2017/03/01 Medium parameters used: f = 831.5 MHz; σ = 0.885 S/m; ε_r = 41.984; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.61, 10.61, 10.61); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26865/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.395 W/kg

Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.683 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.415 W/kg
SAR(1 g) = 0.328 W/kg; SAR(10 g) = 0.249 W/kg
Maximum value of SAR (measured) = 0.383 W/kg



0 dB = 0.383 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/3

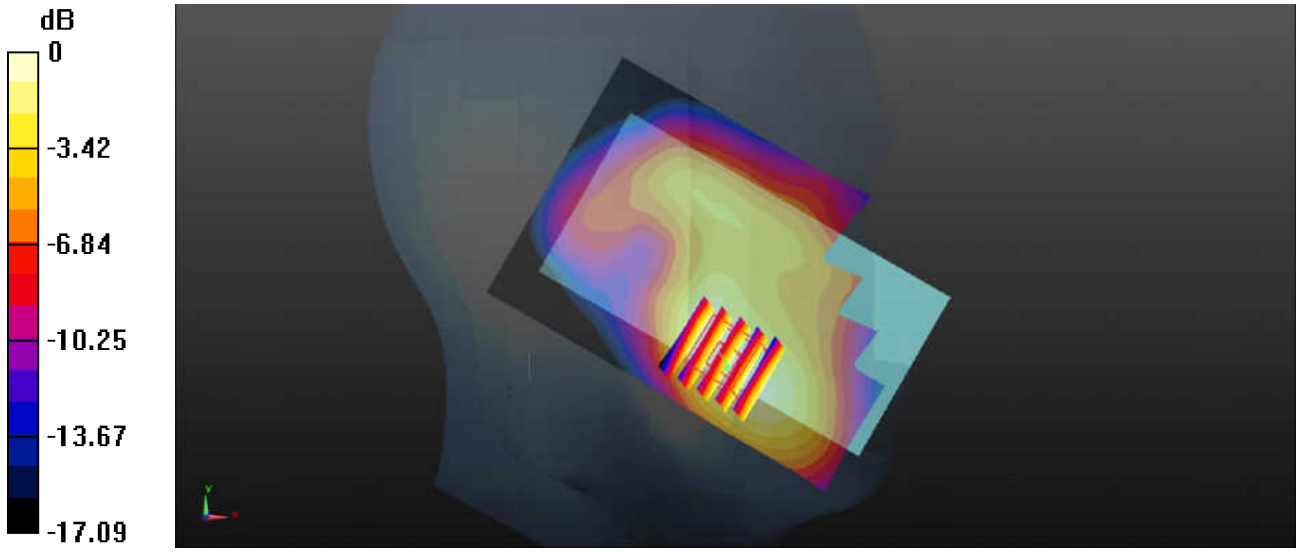
#12_LTE Band 66_20M_QPSK_1RB_49offset_Left Cheek_0mm_Ch132572

Communication System: UID 0, FDD-LTE (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium: HSL_1750_2017/03/03 Medium parameters used: f = 1770 MHz; σ = 1.41 S/m; ε_r = 40.89; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(9.03, 9.03, 9.03); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.07 W/kg

Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.47 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.788 W/kg; SAR(10 g) = 0.505 W/kg
Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/3

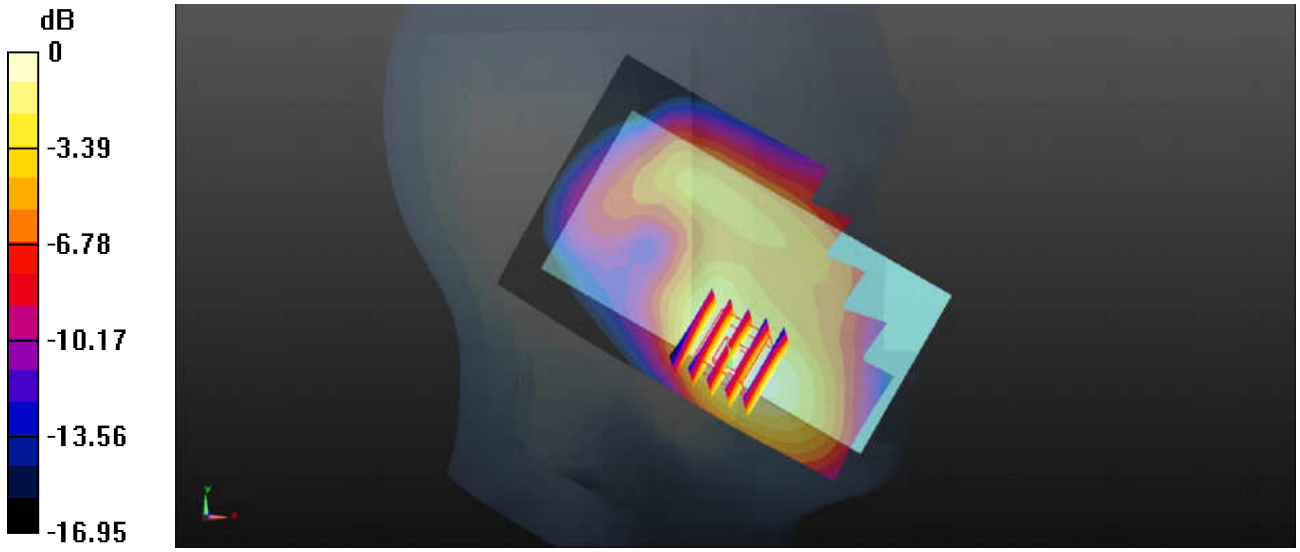
#13_LTE Band 25_20M_QPSK_1RB_0offset_Left Cheek_0mm_Ch26140

Communication System: UID 0, FDD-LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium: HSL_1900_2017/03/03 Medium parameters used: f = 1860 MHz; σ = 1.401 S/m; ε_r = 41.018; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.64, 8.64, 8.64); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26140/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.935 W/kg

Ch26140/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.682 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.685 W/kg; SAR(10 g) = 0.428 W/kg
Maximum value of SAR (measured) = 0.954 W/kg



0 dB = 0.954 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/2

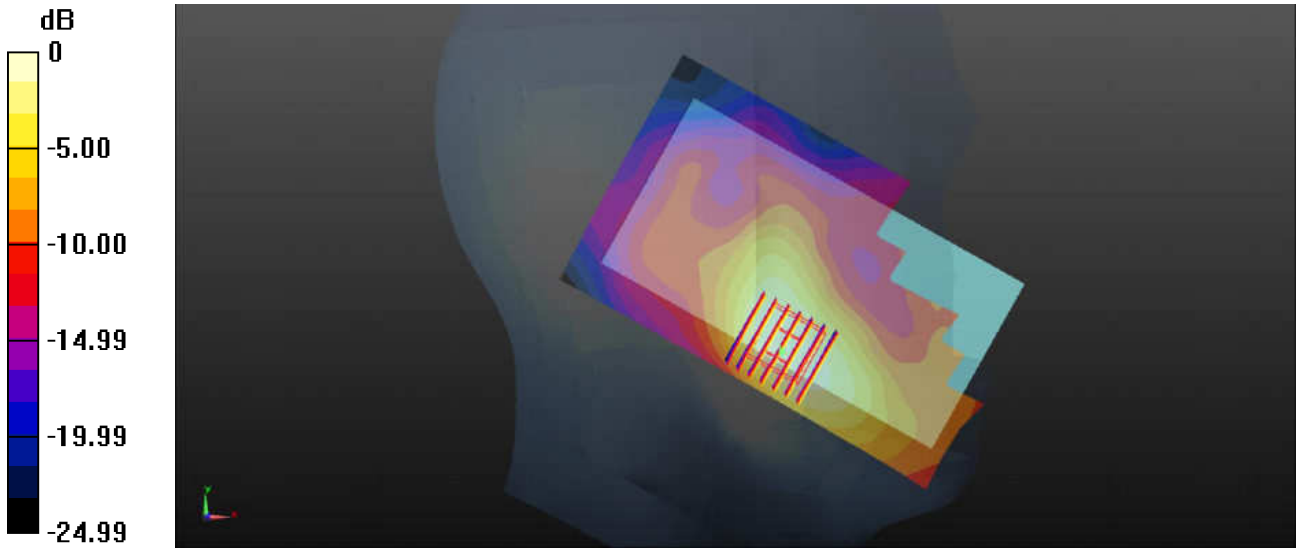
#14_LTE Band 7_20M_QPSK_1RB_49offset_Left Cheek_0mm_Ch21100

Communication System: UID 0, FDD-LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium: HSL_2600_2017/03/02 Medium parameters used: f = 2535 MHz; σ = 1.981 S/m; ε_r = 37.862; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.6, 7.6, 7.6); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21100/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 1.40 W/kg

Ch21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.265 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.66 W/kg
SAR(1 g) = 0.864 W/kg; SAR(10 g) = 0.451 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.35 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/2

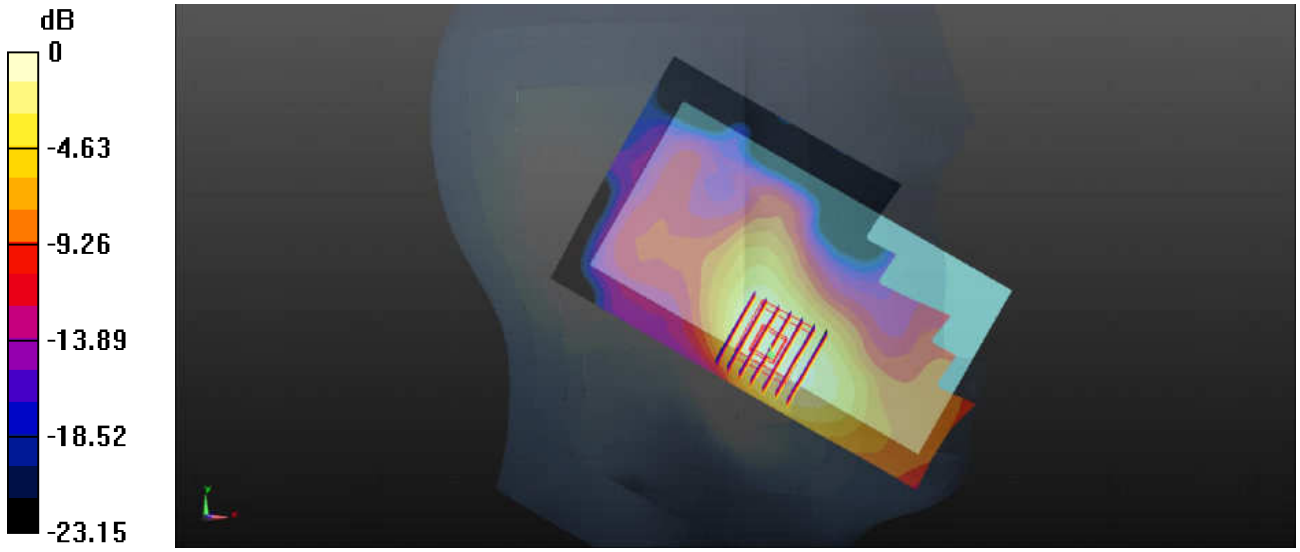
#15_LTE Band 41_20M_QPSK_1RB_49offset_Left Cheek_0mm_Ch41490

Communication System: UID 0, TDD-LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1.59
Medium: HSL_2600_2017/03/02 Medium parameters used: f = 2680 MHz; σ = 2.153 S/m; ε_r = 37.299; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.6, 7.6, 7.6); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch41490/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.451 W/kg

Ch41490/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.023 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.559 W/kg
SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.139 W/kg
Maximum value of SAR (measured) = 0.438 W/kg



0 dB = 0.438 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/2

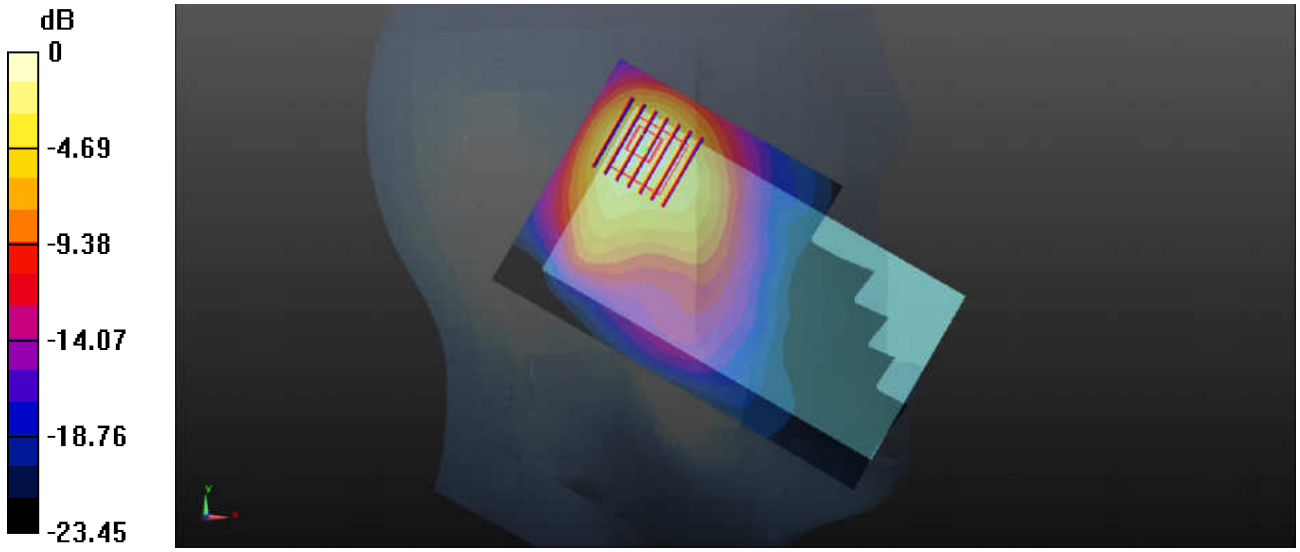
#16_WLAN2.4GHz_802.11b 1Mbps_Left Cheek_0mm_Ch11

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.025
Medium: HSL_2450_2017/03/02 Medium parameters used: f = 2462 MHz; σ = 1.893 S/m; ε_r = 38.164; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.3 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.81, 7.81, 7.81); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.870 W/kg

Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.97 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.518 W/kg; SAR(10 g) = 0.244 W/kg
Maximum value of SAR (measured) = 0.858 W/kg



0 dB = 0.858 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/12

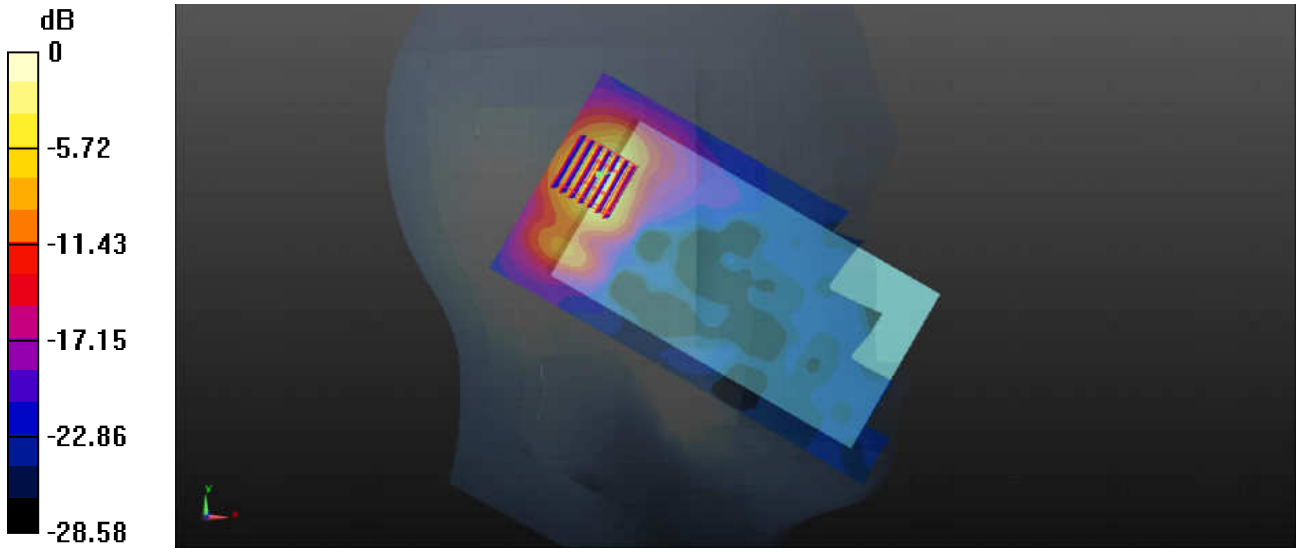
#17_WLAN5.3GHz_802.11a 6Mbps_Left Tilted_0mm_Ch60

Communication System: UID 0, 802.11a (0); Frequency: 5300 MHz;Duty Cycle: 1:1.146
Medium: HSL_5G_2017/03/12 Medium parameters used: f = 5300 MHz; σ = 4.612 S/m; ε_r = 34.898; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(5.32, 5.32, 5.32); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch60/Area Scan (91x171x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.61 W/kg

Ch60/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.988 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.72 W/kg
SAR(1 g) = 0.676 W/kg; SAR(10 g) = 0.212 W/kg
Maximum value of SAR (measured) = 1.64 W/kg



0 dB = 1.64 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/12

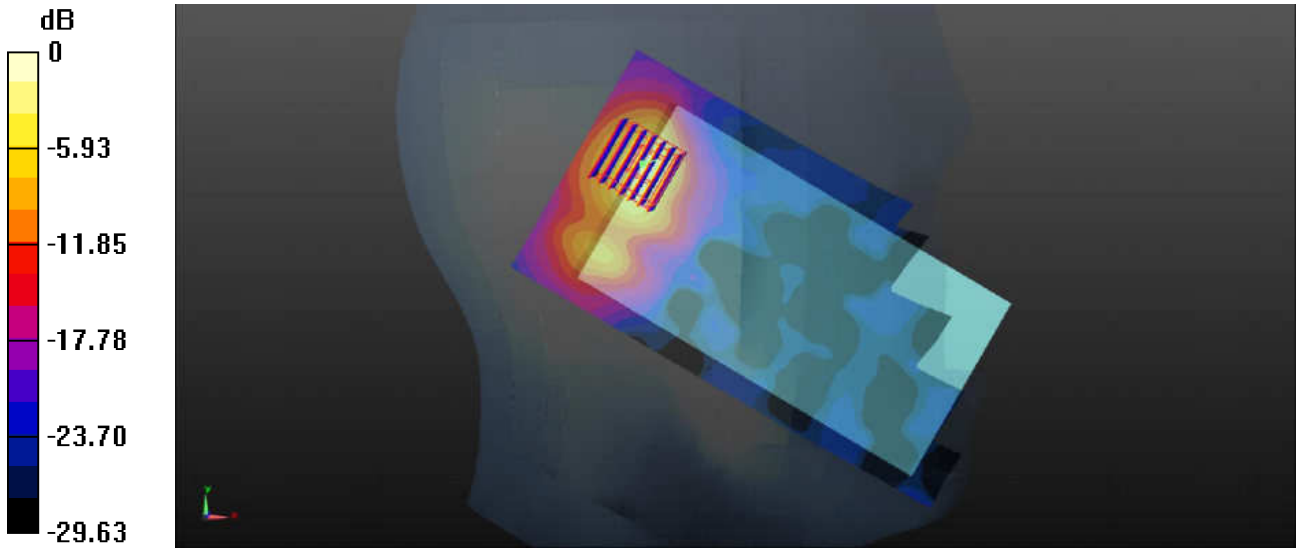
#18_WLAN5.5GHz_802.11a 6Mbps_Left Tilted_0mm_Ch144

Communication System: UID 0, 802.11a (0); Frequency: 5720 MHz;Duty Cycle: 1:1.146
Medium: HSL_5G_2017/03/12 Medium parameters used: f = 5720 MHz; σ = 5.039 S/m; ε_r = 34.251; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.84, 4.84, 4.84); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch144/Area Scan (91x171x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.46 W/kg

Ch144/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.919 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 2.93 W/kg
SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.188 W/kg
Maximum value of SAR (measured) = 1.69 W/kg



0 dB = 1.69 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/12

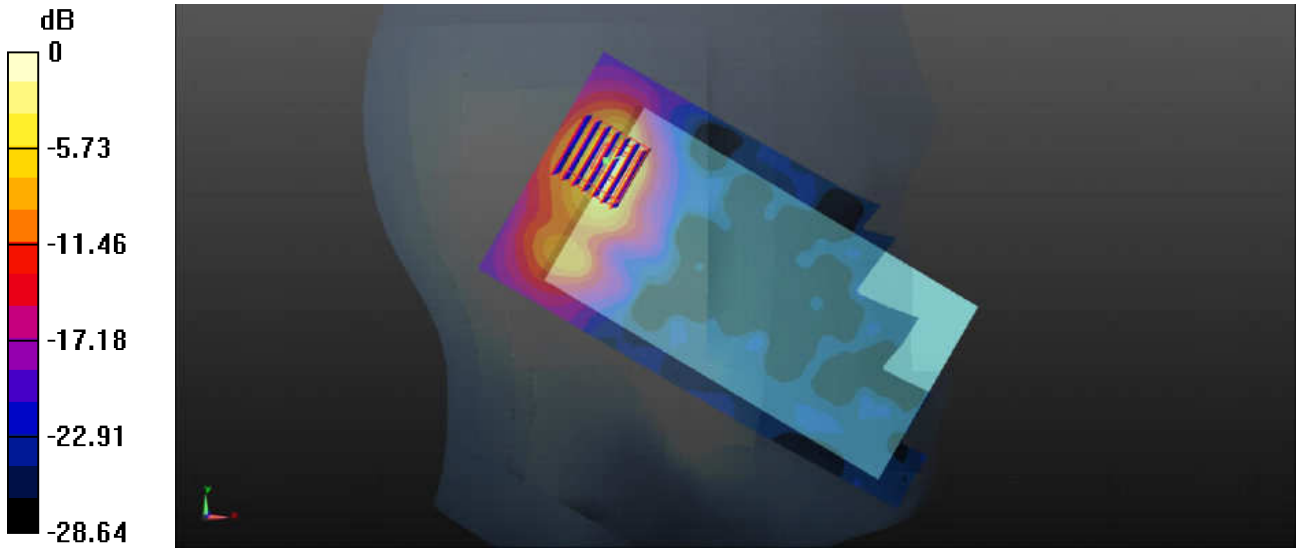
#19_WLAN5.8GHz_802.11a 6Mbps_Left Tilted_0mm_Ch165

Communication System: UID 0, 802.11a (0); Frequency: 5825 MHz;Duty Cycle: 1:1.146
Medium: HSL_5G_2017/03/12 Medium parameters used: f = 5825 MHz; σ = 5.147 S/m; ε_r = 34.095; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.78, 4.78, 4.78); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch165/Area Scan (91x171x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.54 W/kg

Ch165/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.417 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 2.92 W/kg
SAR(1 g) = 0.613 W/kg; SAR(10 g) = 0.172 W/kg
Maximum value of SAR (measured) = 1.62 W/kg



0 dB = 1.62 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

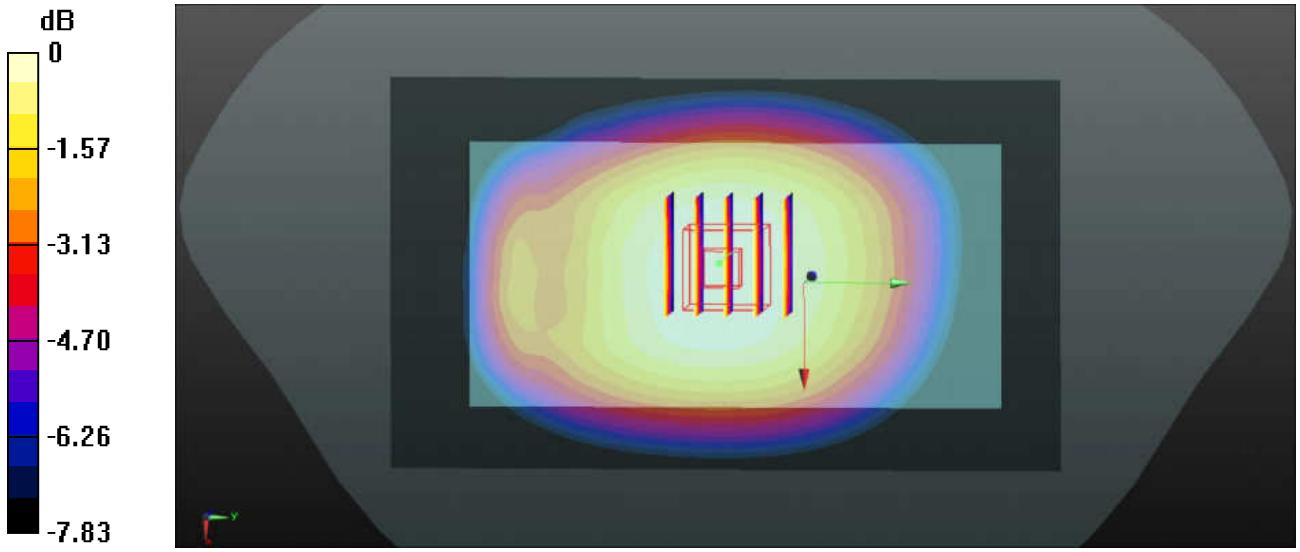
#20_GSM850_GPRS(4 Tx slots)_Back_10mm_Ch189

Communication System: UID 0, GPRS (GMSK 4 Tx slot) (0); Frequency: 836.4 MHz;Duty Cycle: 1:2.08
Medium: MSL_835_2017/03/04 Medium parameters used: f = 836.4 MHz; σ = 1.009 S/m; ε_r = 57.579; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch189/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.897 W/kg

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.01 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.969 W/kg
SAR(1 g) = 0.730 W/kg; SAR(10 g) = 0.561 W/kg
Maximum value of SAR (measured) = 0.884 W/kg



0 dB = 0.884 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

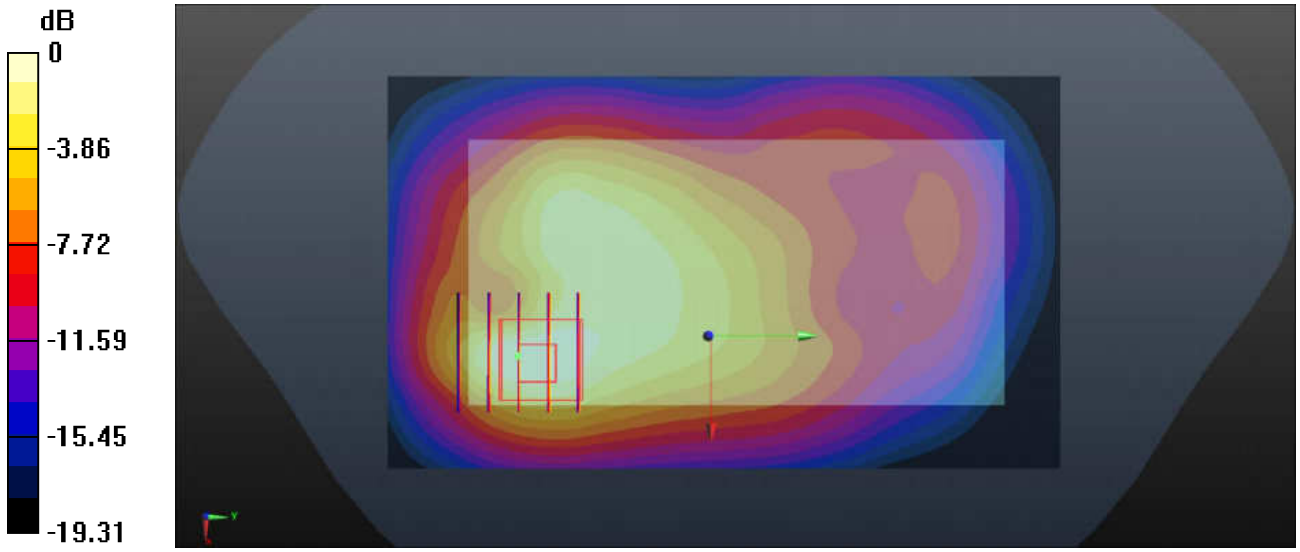
#21_GSM1900_GPRS(4 Tx slots)_Back_10mm_Ch810

Communication System: UID 0, GPRS (GMSK 4 Tx slot) (0); Frequency: 1909.8 MHz;Duty Cycle: 1:2.08
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1909.8 MHz; σ = 1.537 S/m; ε_r = 53.954; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.646 W/kg

Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.08 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.791 W/kg
SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.232 W/kg
Maximum value of SAR (measured) = 0.640 W/kg



0 dB = 0.640 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

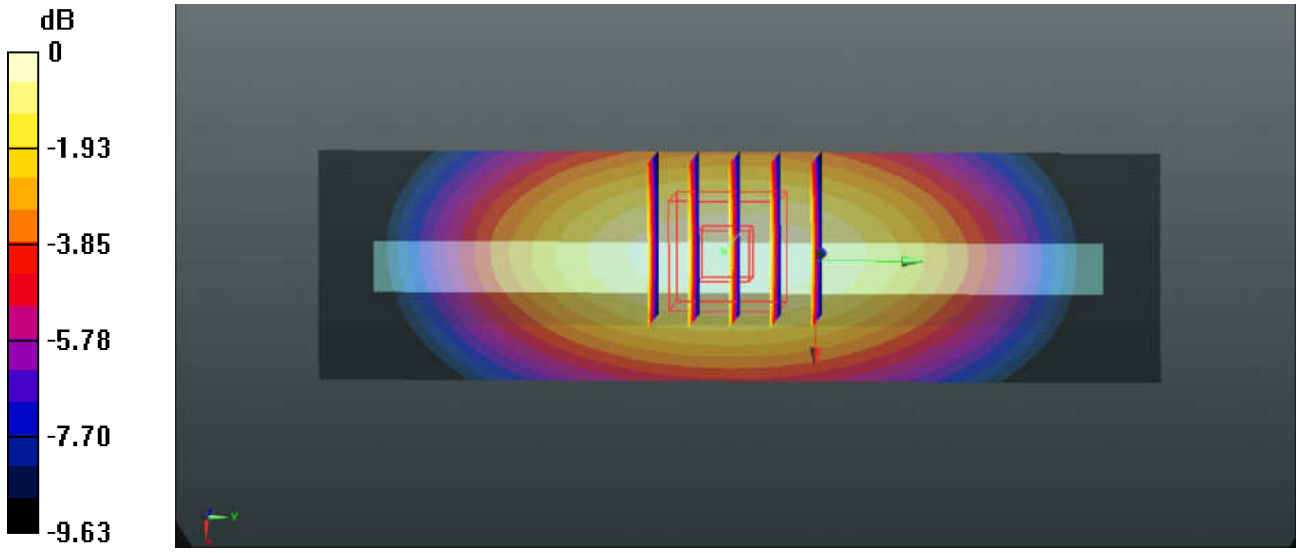
#22_WCDMA Band V_RMC 12.2Kbps_Right side_10mm_Ch4132

Communication System: UID 0, WCDMA (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 826.4 MHz; σ = 0.999 S/m; ε_r = 57.656; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4132/Area Scan (31x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.17 W/kg

Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.44 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.899 W/kg; SAR(10 g) = 0.616 W/kg
Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/6

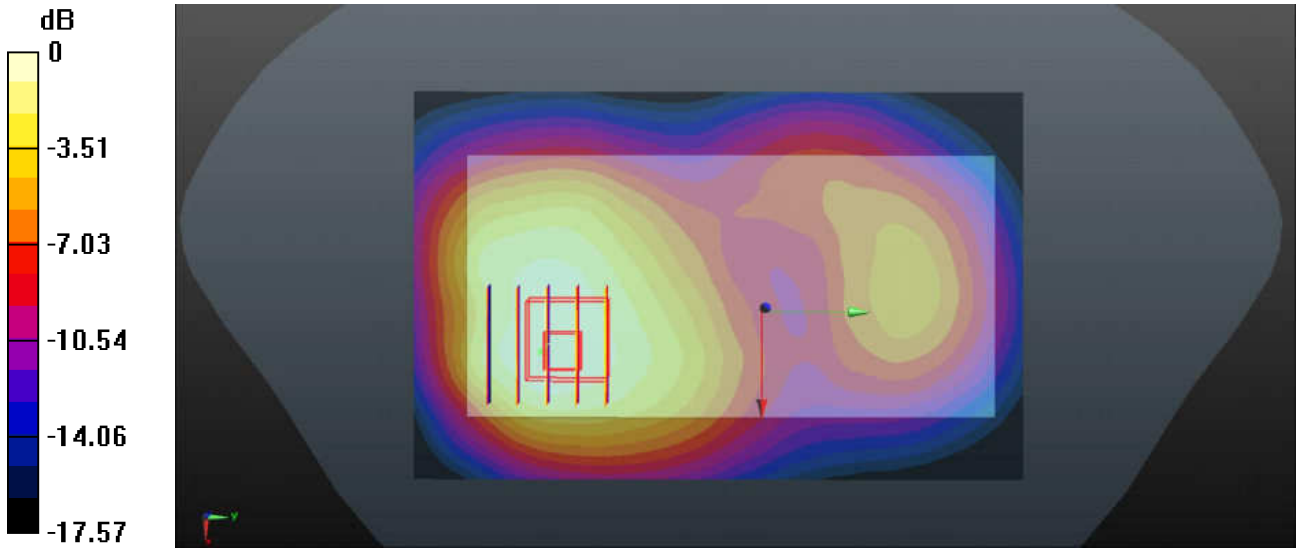
#23_WCDMA Band IV_RMC 12.2Kbps_Back_10mm_Ch1413

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium: MSL_1750_2017/03/06 Medium parameters used: f = 1732.6 MHz; σ = 1.521 S/m; ε_r =52.805; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.46, 8.46, 8.46); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1413/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.881 W/kg

Ch1413/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.407 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.954 W/kg
SAR(1 g) = 0.607 W/kg; SAR(10 g) = 0.379 W/kg
Maximum value of SAR (measured) = 0.821 W/kg



0 dB = 0.821 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

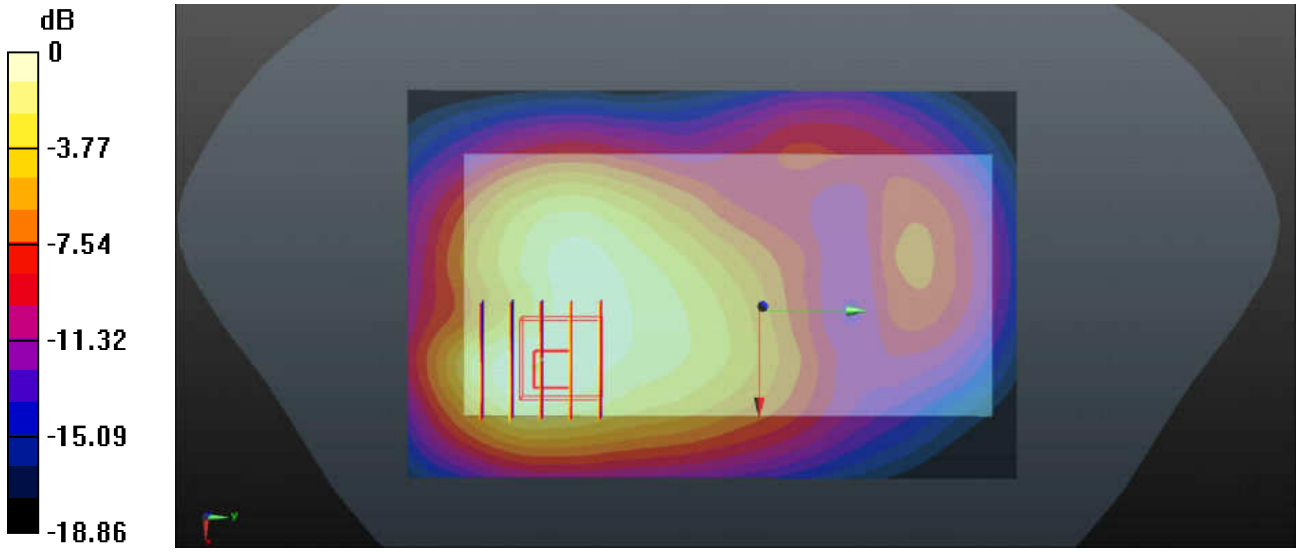
#24_WCDMA Band II_RMC 12.2Kbps_Back_10mm_Ch9262

Communication System: UID 0, WCDMA (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1852.4 MHz; σ = 1.472 S/m; ε_r = 54.075; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.751 W/kg

Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.55 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.864 W/kg
SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.306 W/kg
Maximum value of SAR (measured) = 0.714 W/kg



0 dB = 0.714 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

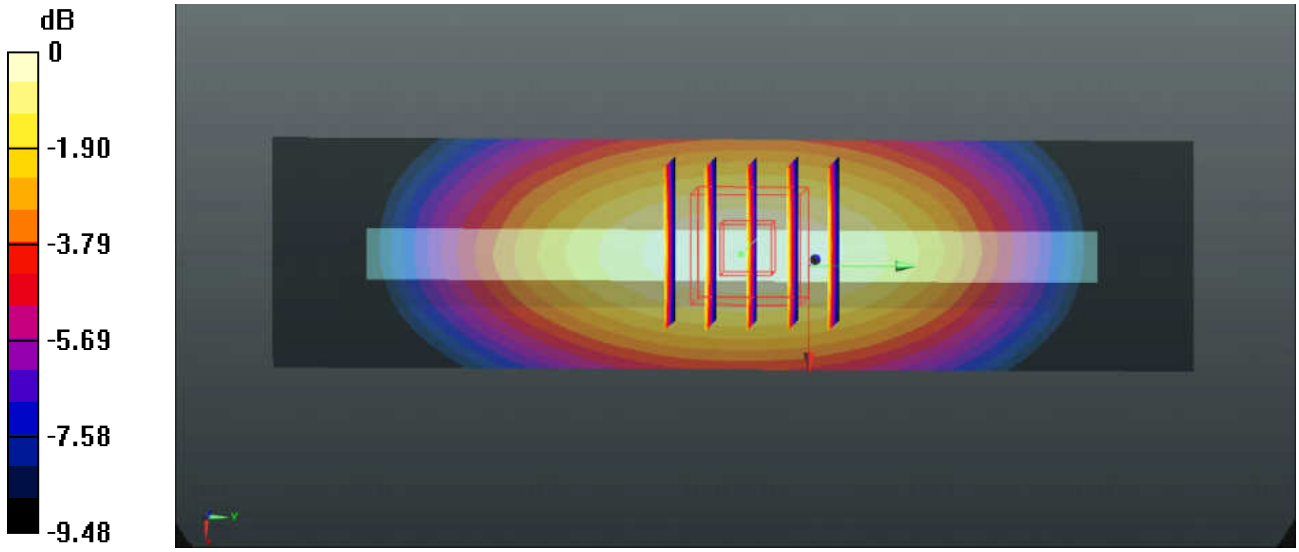
#25_CDMA2000 BC10_RTAP 153.6Kbps_Left side_10mm_Ch580

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 820.5 MHz; σ = 0.993 S/m; ε_r = 57.692; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch580/Area Scan (31x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.06 W/kg

Ch580/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.42 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.823 W/kg; SAR(10 g) = 0.567 W/kg
Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

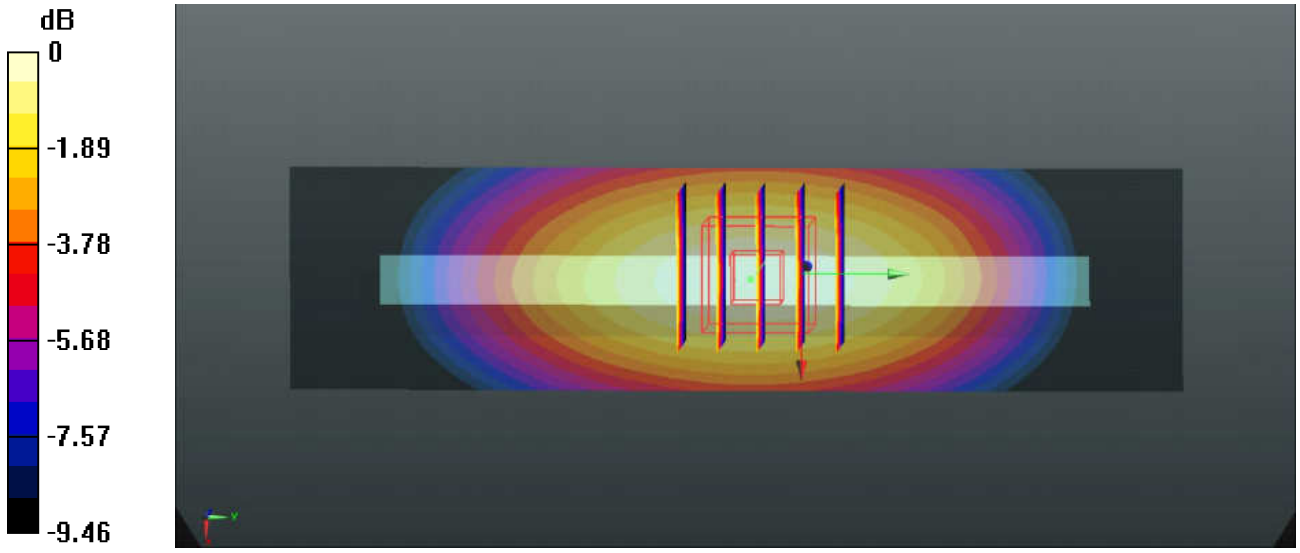
#26_CDMA2000 BC0_RTAP 153.6Kbps_Left side_10mm_Ch1013

Communication System: UID 0, CDMA2000 (0); Frequency: 824.7 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 824.7 MHz; σ = 0.997 S/m; ε_r = 57.665;ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1013/Area Scan (31x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.18 W/kg

Ch1013/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.89 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.890 W/kg; SAR(10 g) = 0.620 W/kg
Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

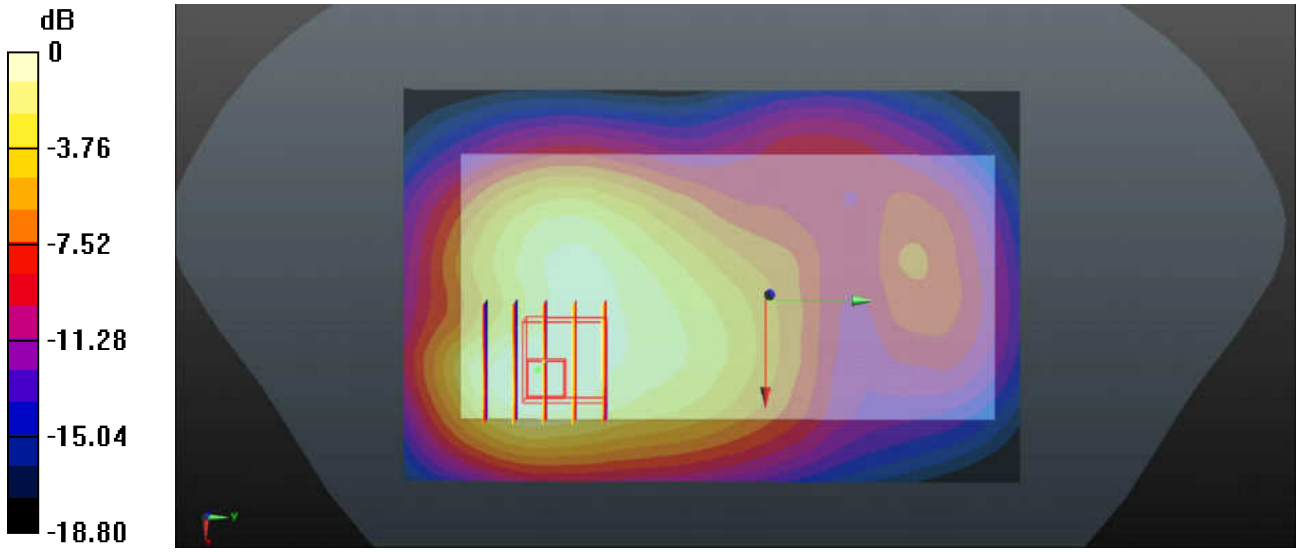
#27_CDMA2000 BC1_RTAP 153.6Kbps_Back_10mm_Ch25

Communication System: UID 0, CDMA2000 (0); Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1851.25 MHz; σ = 1.47 S/m; ε_r = 54.078; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch25/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.746 W/kg

Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.47 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.888 W/kg
SAR(1 g) = 0.521 W/kg; SAR(10 g) = 0.313 W/kg
Maximum value of SAR (measured) = 0.720 W/kg



0 dB = 0.720 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

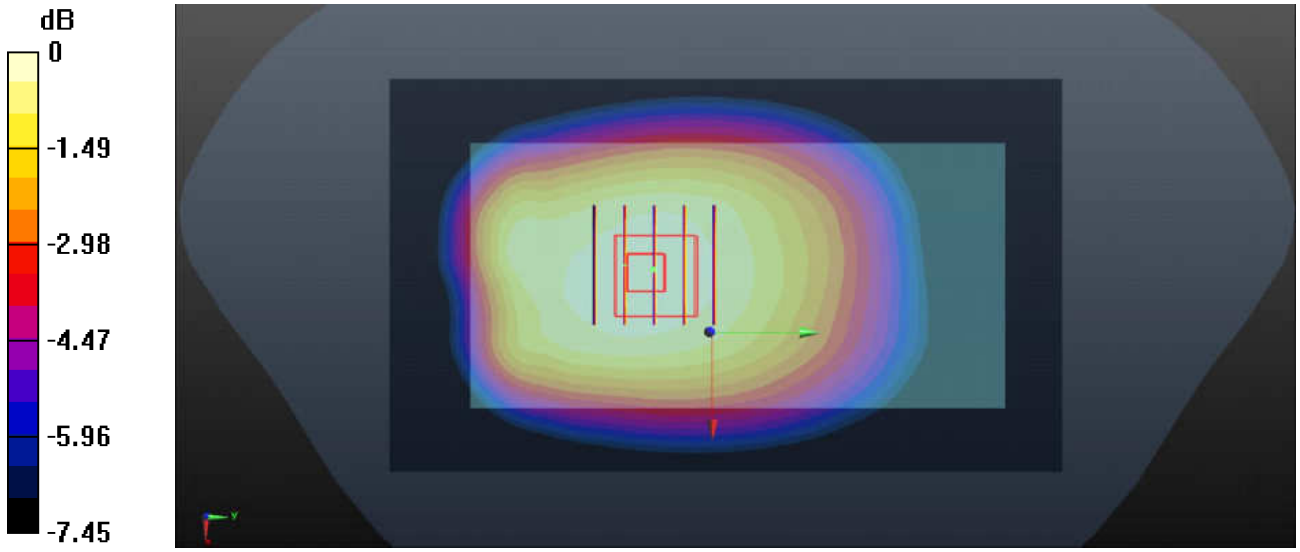
#28_LTE Band 12_10M_QPSK_1RB_25offset_Back_10mm_Ch23095

Communication System: UID 0, FDD-LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: MSL_750_2017/03/04 Medium parameters used: f = 707.5 MHz; σ = 0.928 S/m; ε_r = 54.634; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.68, 10.68, 10.68); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23095/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.641 W/kg

Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.84 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.702 W/kg
SAR(1 g) = 0.552 W/kg; SAR(10 g) = 0.432 W/kg
Maximum value of SAR (measured) = 0.649 W/kg



0 dB = 0.649 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

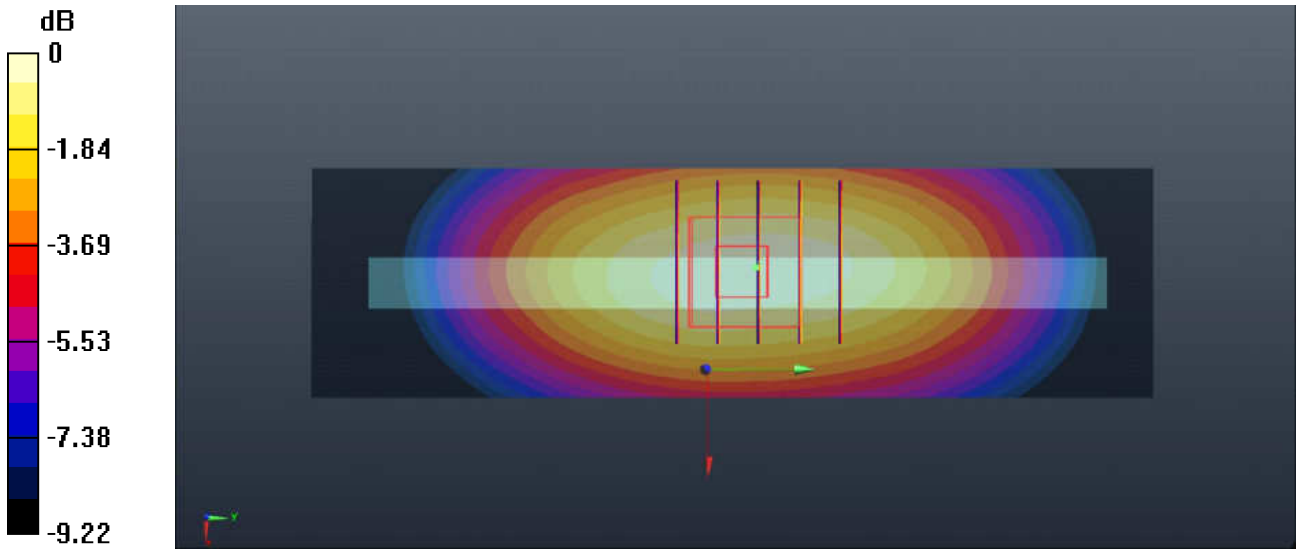
#29_LTE Band 13_10M_QPSK_1RB_25offset_Right side_10mm_Ch23230

Communication System: UID 0, FDD-LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: MSL_750_2017/03/04 Medium parameters used: f = 782 MHz; σ = 0.995 S/m; ε_r = 53.755; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.68, 10.68, 10.68); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23230/Area Scan (31x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.798 W/kg

Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.43 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.933 W/kg
SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.446 W/kg
Maximum value of SAR (measured) = 0.822 W/kg



0 dB = 0.822 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

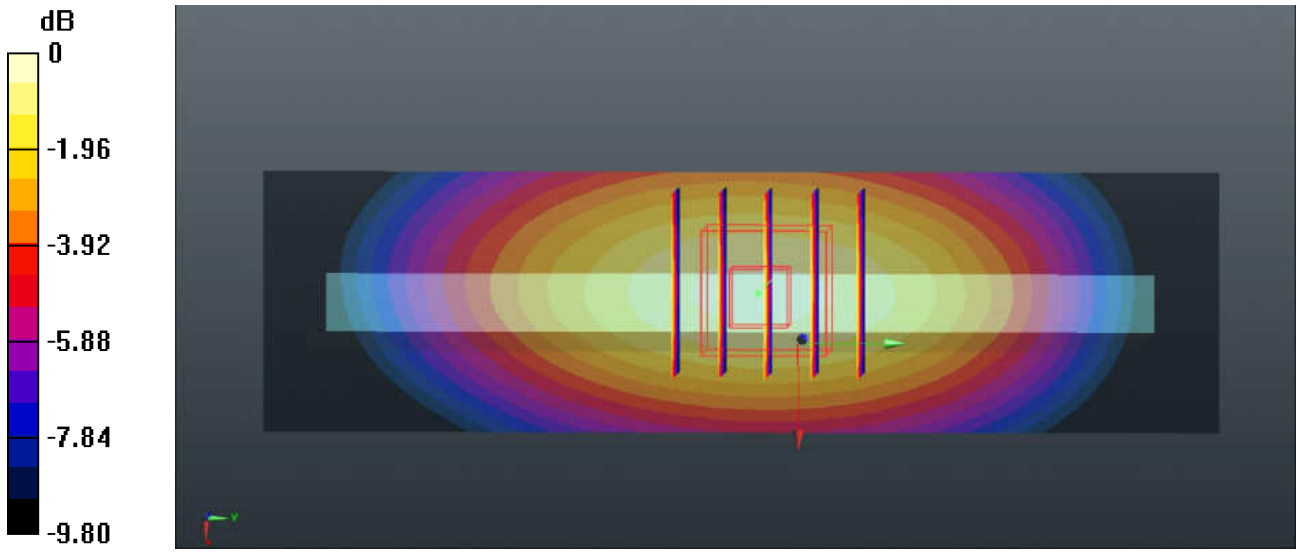
#30_LTE Band 26_15M_QPSK_1RB_37offset_Left side_10mm_Ch26865

Communication System: UID 0, FDD-LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 831.5 MHz; σ = 1.004 S/m; ε_r = 57.621; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26865/Area Scan (31x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.03 W/kg

Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.60 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.865 W/kg; SAR(10 g) = 0.589 W/kg
Maximum value of SAR (measured) = 1.14 W/kg



0 dB = 1.14 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/6

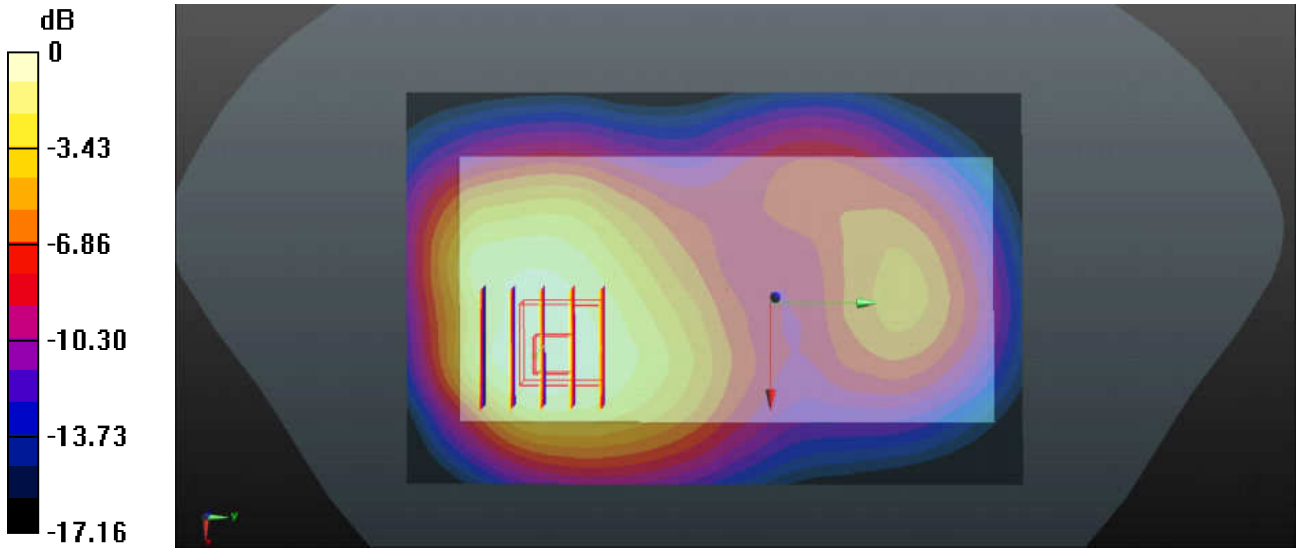
#31_LTE Band 66_20M_QPSK_1RB_49offset_Back_10mm_Ch132072

Communication System: UID 0, FDD-LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium: MSL_1750_2017/03/06 Medium parameters used: f = 1720 MHz; σ = 1.507 S/m; ε_r = 52.859; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.46, 8.46, 8.46); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132072/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.952 W/kg

Ch132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.895 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.660 W/kg; SAR(10 g) = 0.414 W/kg
Maximum value of SAR (measured) = 0.893 W/kg



0 dB = 0.893 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

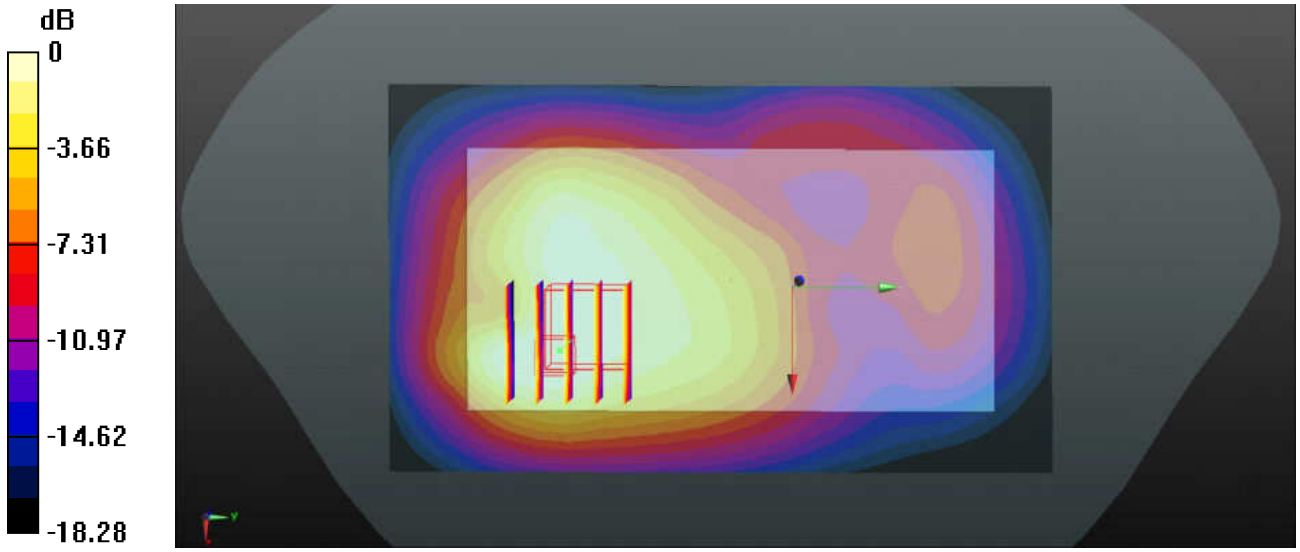
#32_LTE Band 25_20M_QPSK_1RB_0offset_Back_10mm_Ch26140

Communication System: UID 0, FDD-LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1860 MHz; σ = 1.481 S/m; ε_r = 54.05; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26140/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=5500 mm
Maximum value of SAR (interpolated) = 0.814 W/kg

Ch26140/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.00 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.916 W/kg
SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.322 W/kg
Maximum value of SAR (measured) = 0.737 W/kg



0 dB = 0.737 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

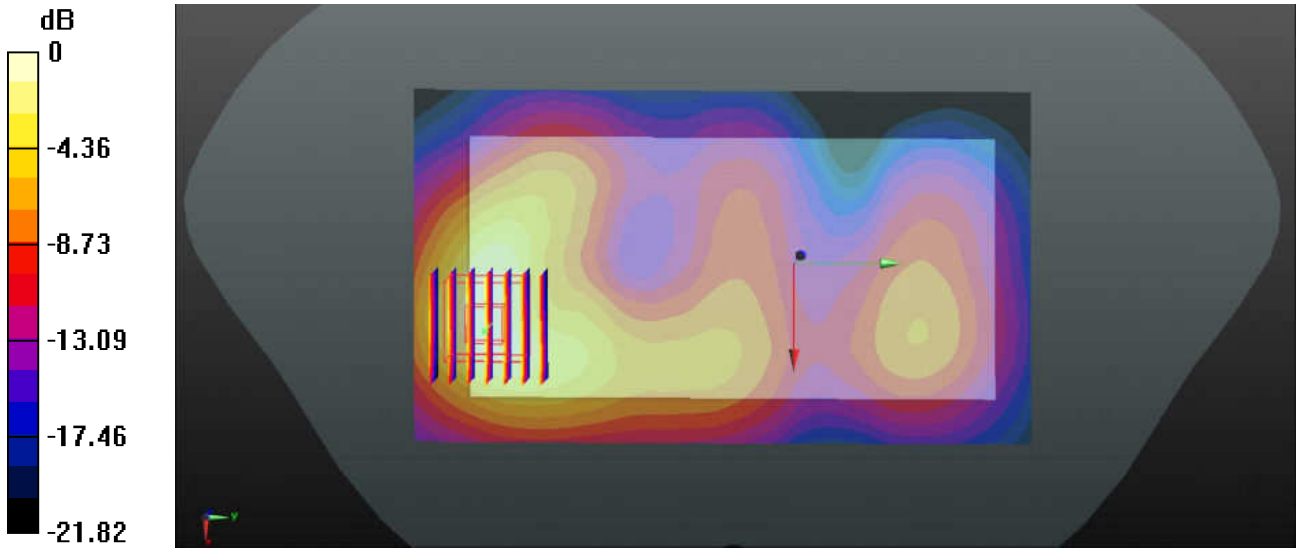
#33_LTE Band 7_20M_QPSK_1RB_49offset_Back_10mm_Ch21350

Communication System: UID 0, FDD-LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium: MSL_2600_2017/03/05 Medium parameters used: f = 2560 MHz; σ = 2.094 S/m; ε_r = 51.11; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.67, 7.67, 7.67); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 1.34 W/kg

Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.914 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.82 W/kg
SAR(1 g) = 0.901 W/kg; SAR(10 g) = 0.431 W/kg
Maximum value of SAR (measured) = 1.46 W/kg



0 dB = 1.46 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

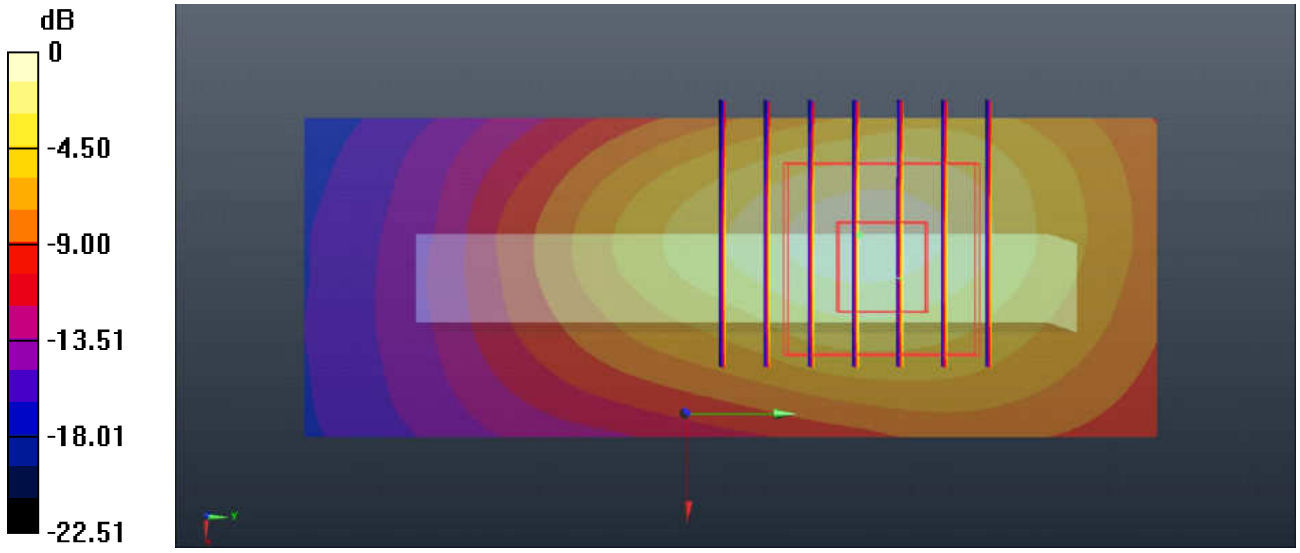
#34_LTE Band 41_20M_QPSK_1RB_49offset_Bottom side_10mm_Ch41055

Communication System: UID 0, TDD-LTE (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1.59
Medium: MSL_2600_2017/03/05 Medium parameters used: f = 2636.5 MHz; σ = 2.202 S/m; ε_r = 50.851; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.67, 7.67, 7.67); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch41055/Area Scan (31x81x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.970 W/kg

Ch41055/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.79 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.658 W/kg; SAR(10 g) = 0.298 W/kg
Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

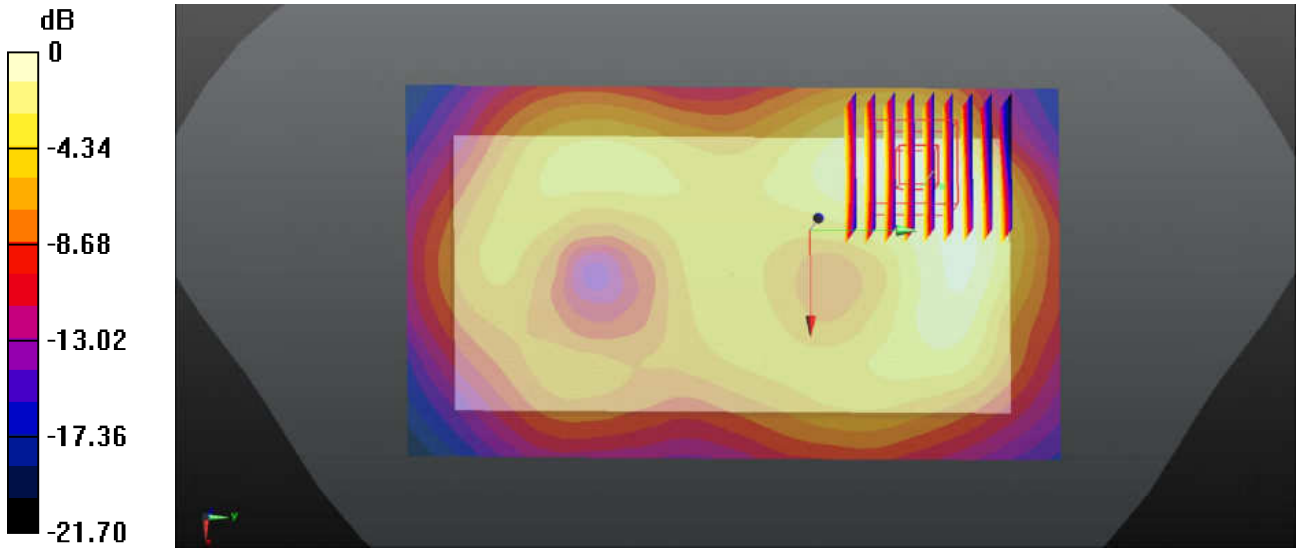
#35_WLAN2.4GHz_802.11b 1Mbps_Back_10mm_Ch11

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.025
Medium: MSL_2450_2017/03/05 Medium parameters used: f = 2462 MHz; σ = 2.002 S/m; ε_r = 51.118; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.89, 7.89, 7.89); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.280 W/kg

Ch11/Zoom Scan (8x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.617 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.354 W/kg
SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.087 W/kg
Maximum value of SAR (measured) = 0.266 W/kg



0 dB = 0.266 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

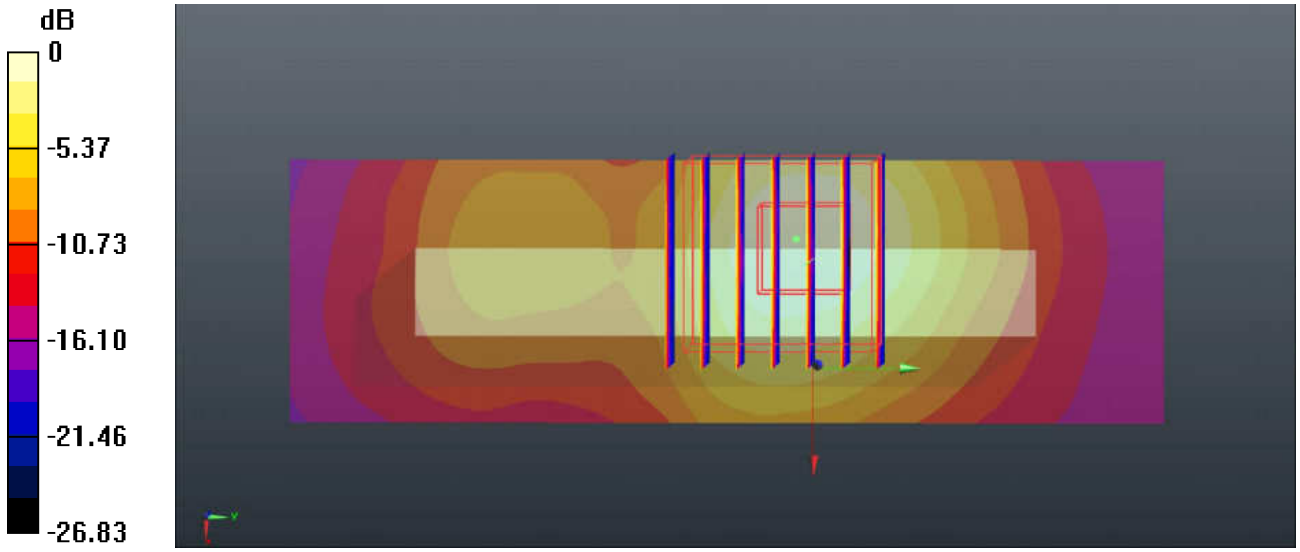
#36_WLAN5.2GHz_802.11a 6Mbps_Top side_10mm_Ch44

Communication System: UID 0, 802.11a (0); Frequency: 5220 MHz;Duty Cycle: 1:1.146
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5220 MHz; σ = 5.401 S/m; ε_r = 48.796; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.84, 4.84, 4.84); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch44/Area Scan (31x101x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.04 W/kg

Ch44/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.123 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 0.440 W/kg; SAR(10 g) = 0.152 W/kg
Maximum value of SAR (measured) = 0.995 W/kg



0 dB = 0.995 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

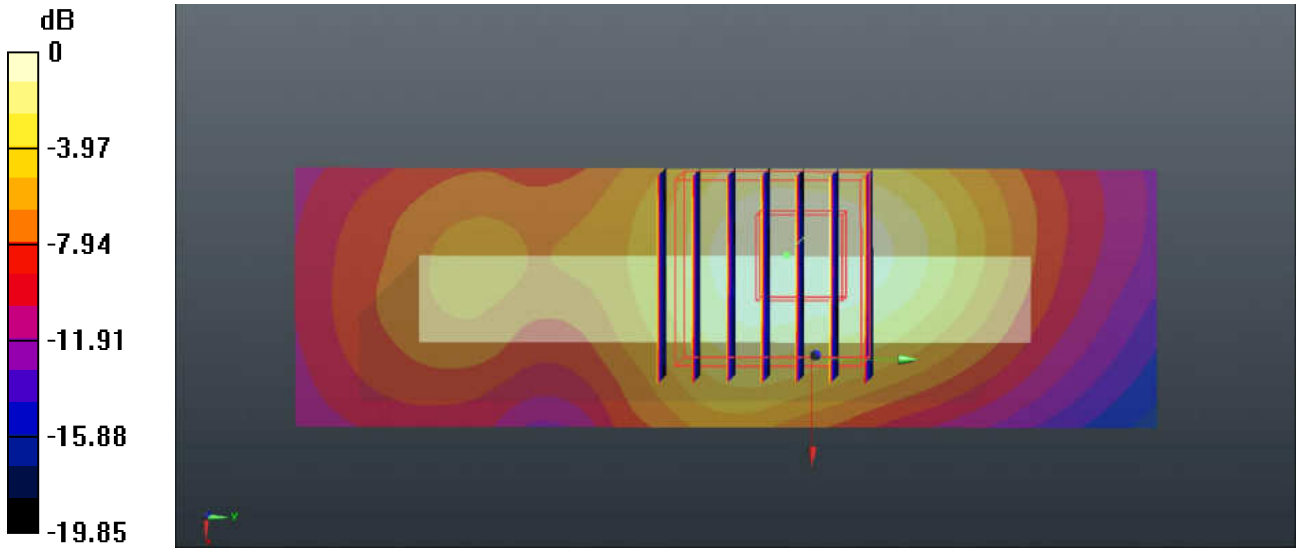
#37_WLAN5.8GHz_802.11a 6Mbps_Top side_10mm_Ch165

Communication System: UID 0, 802.11a (0); Frequency: 5825 MHz;Duty Cycle: 1:1.146
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5825 MHz; σ = 6.22 S/m; ε_r = 47.78; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.23, 4.23, 4.23); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch165/Area Scan (31x101x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.852 W/kg

Ch165/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.958 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.143 W/kg
Maximum value of SAR (measured) = 0.814 W/kg



0 dB = 0.814 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

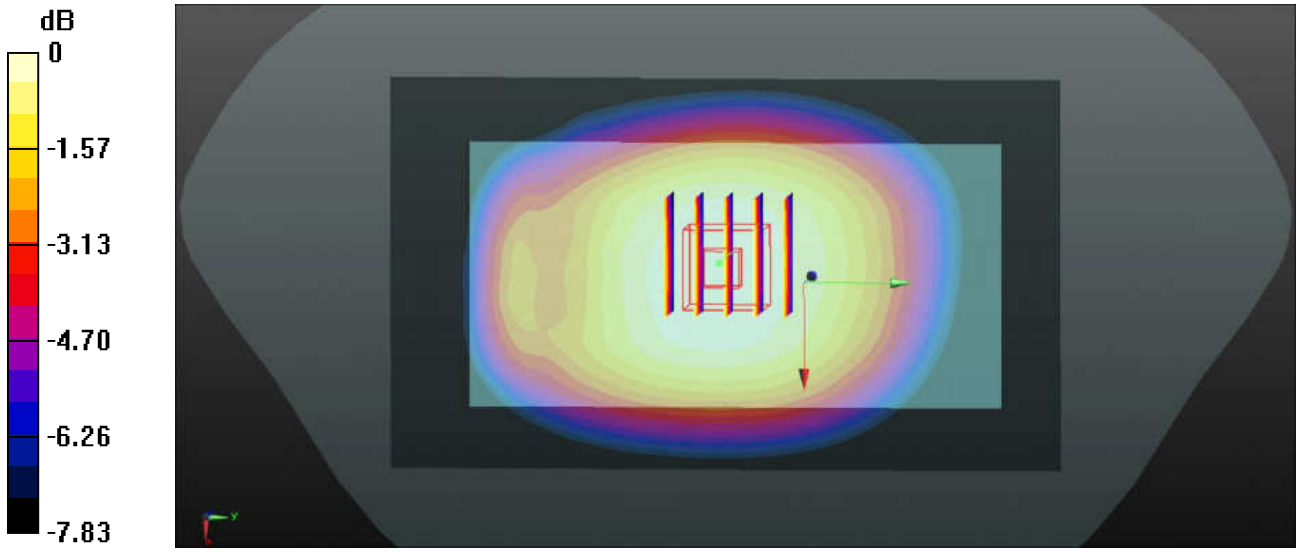
#38_GSM850_GPRS(4 Tx slots)_Back_10mm_Ch189

Communication System: UID 0, GPRS (GMSK 4 Tx slot) (0); Frequency: 836.4 MHz;Duty Cycle: 1:2.08
Medium: MSL_835_2017/03/04 Medium parameters used: f = 836.4 MHz; σ = 1.009 S/m; ε_r = 57.579; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch189/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.897 W/kg

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.01 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.969 W/kg
SAR(1 g) = 0.730 W/kg; SAR(10 g) = 0.561 W/kg
Maximum value of SAR (measured) = 0.884 W/kg



0 dB = 0.884 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

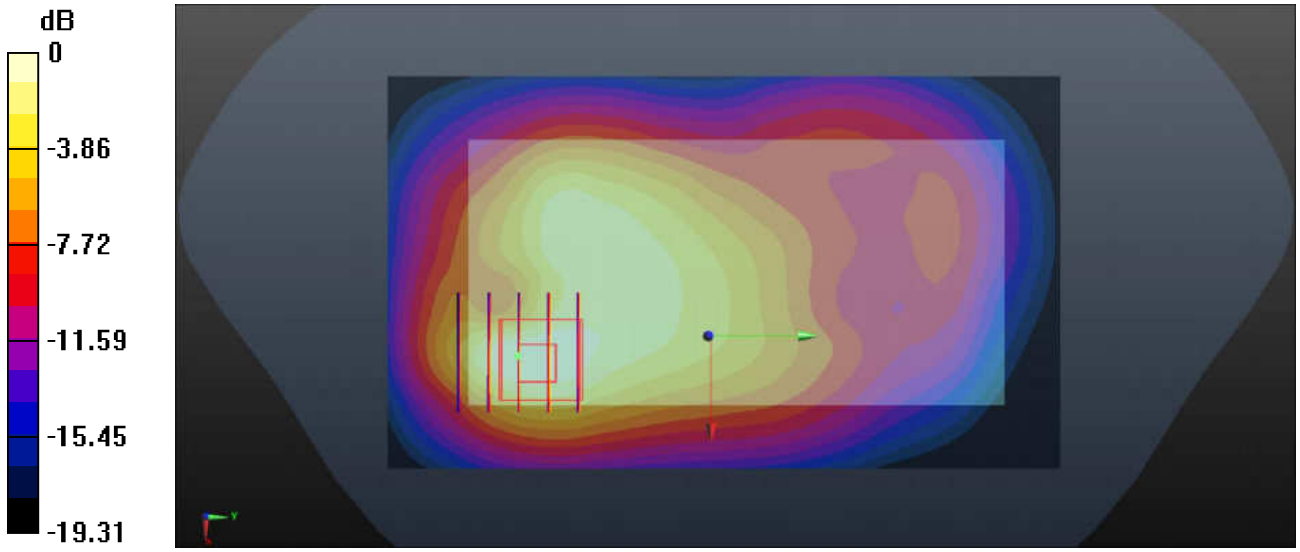
#39_GSM1900_GPRS(4 Tx slots)_Back_10mm_Ch810

Communication System: UID 0, GPRS (GMSK 4 Tx slot) (0); Frequency: 1909.8 MHz;Duty Cycle: 1:2.08
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1909.8 MHz; σ = 1.537 S/m; ε_r = 53.954; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch810/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.646 W/kg

Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.08 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.791 W/kg
SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.232 W/kg
Maximum value of SAR (measured) = 0.640 W/kg



0 dB = 0.640 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

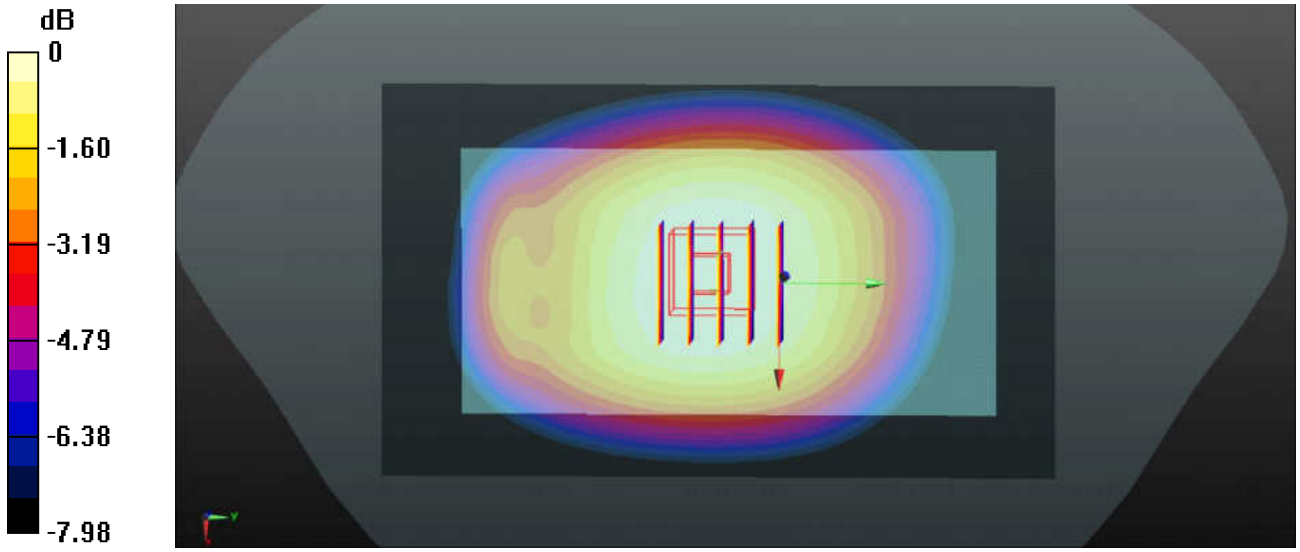
#40_WCDMA Band V_RMC 12.2Kbps_Back_10mm_Ch4182

Communication System: UID 0, WCDMA (0); Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 836.4 MHz; σ = 1.009 S/m; ε_r = 57.579; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4182/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.06 W/kg

Ch4182/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.43 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.867 W/kg; SAR(10 g) = 0.669 W/kg
Maximum value of SAR (measured) = 1.04 W/kg



0 dB = 1.04 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/6

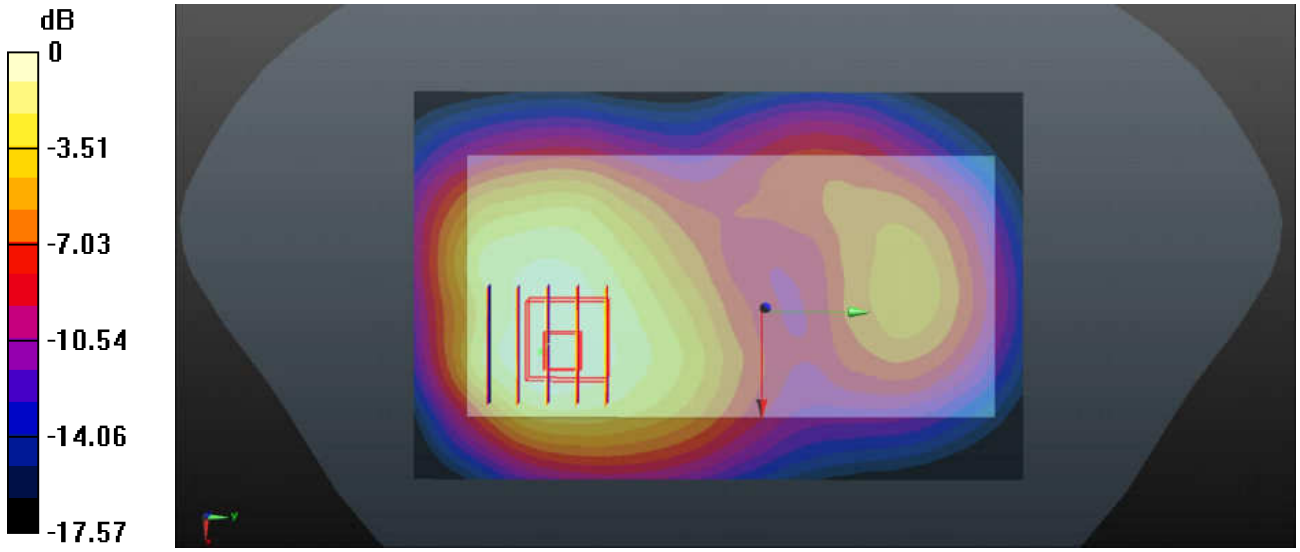
#41_WCDMA Band IV_RMC 12.2Kbps_Back_10mm_Ch1413

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium: MSL_1750_2017/03/06 Medium parameters used: f = 1732.6 MHz; σ = 1.521 S/m; ε_r =52.805; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.46, 8.46, 8.46); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1413/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.881 W/kg

Ch1413/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.407 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.954 W/kg
SAR(1 g) = 0.607 W/kg; SAR(10 g) = 0.379 W/kg
Maximum value of SAR (measured) = 0.821 W/kg



0 dB = 0.821 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

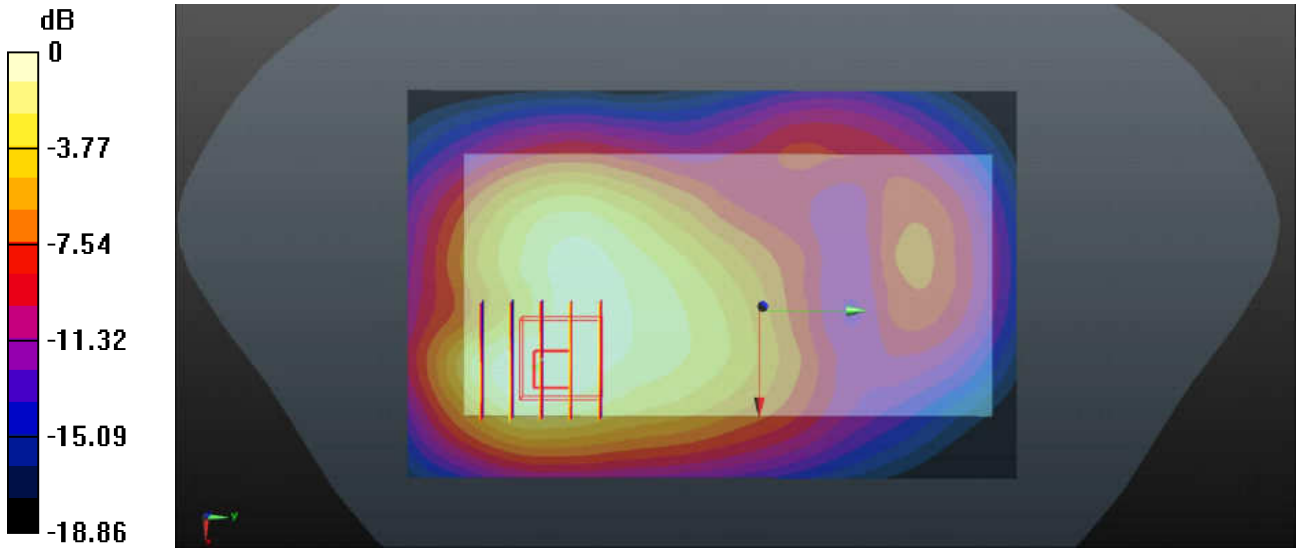
#42_WCDMA Band II_RMC 12.2Kbps_Back_10mm_Ch9262

Communication System: UID 0, WCDMA (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1852.4 MHz; σ = 1.472 S/m; ε_r = 54.075; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9262/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.751 W/kg

Ch9262/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.55 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.864 W/kg
SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.306 W/kg
Maximum value of SAR (measured) = 0.714 W/kg



0 dB = 0.714 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

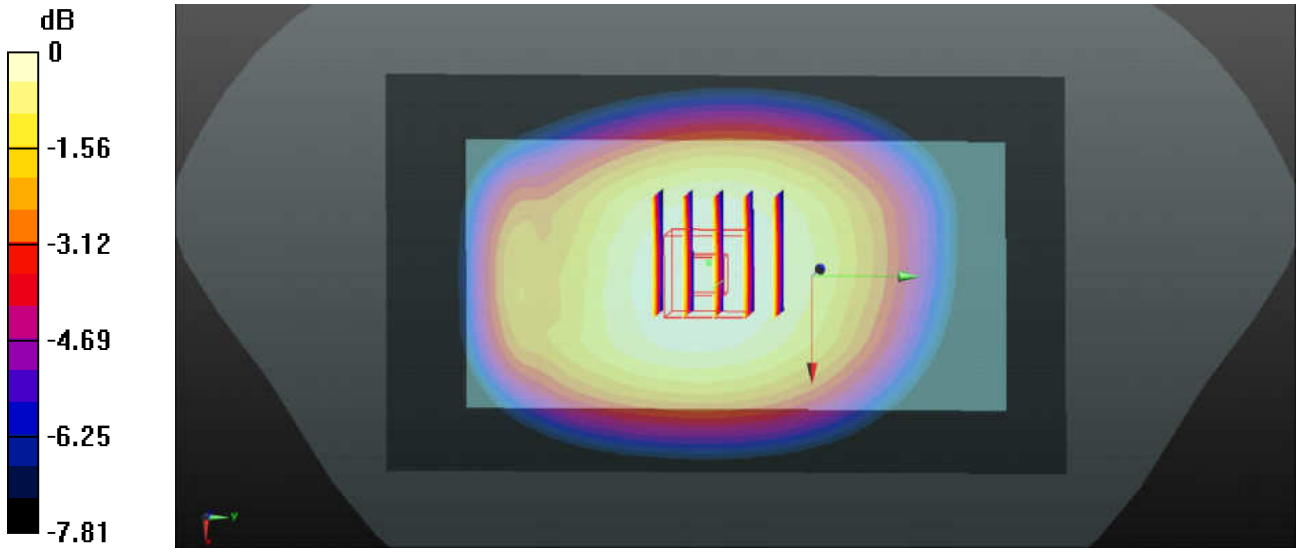
#43_CDMA2000 BC10_RC3 SO32 (F+SCH) _Back_10mm_Ch580

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 820.5 MHz; σ = 0.993 S/m; ε_r = 57.692; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch580/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.06 W/kg

Ch580/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.71 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.873 W/kg; SAR(10 g) = 0.674 W/kg
Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

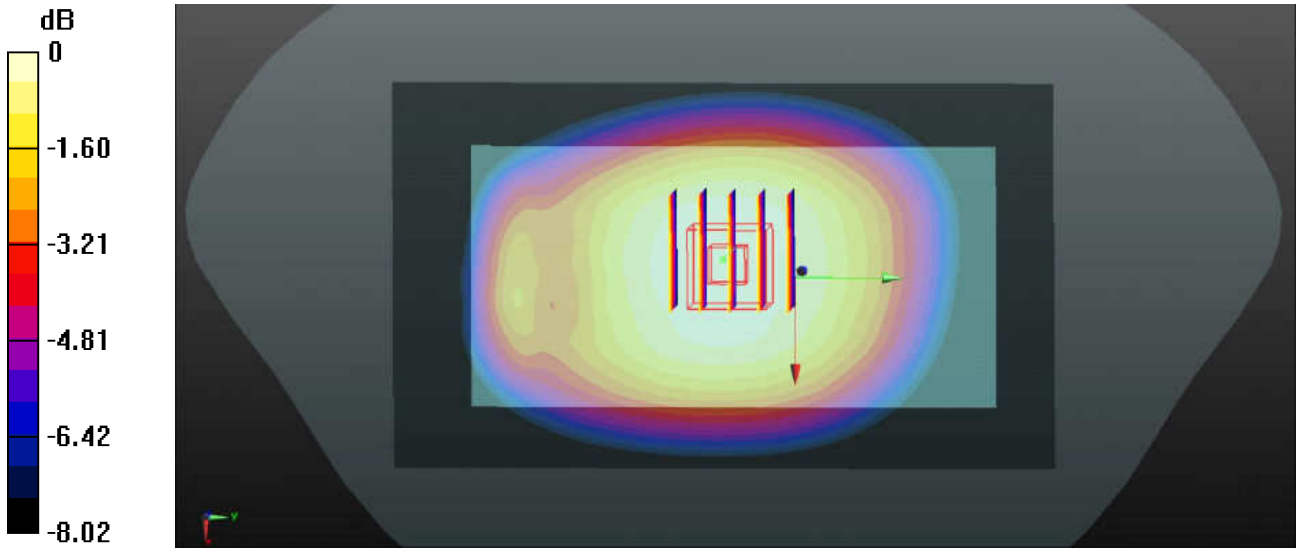
#44_CDMA2000 BC0_RC3 SO32 (F+SCH) _Back_10mm_Ch777

Communication System: UID 0, CDMA2000 (0); Frequency: 848.31 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 848.31 MHz; σ = 1.021 S/m; ε_r = 57.459; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch777/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.03 W/kg

Ch777/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.96 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.852 W/kg; SAR(10 g) = 0.654 W/kg
Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

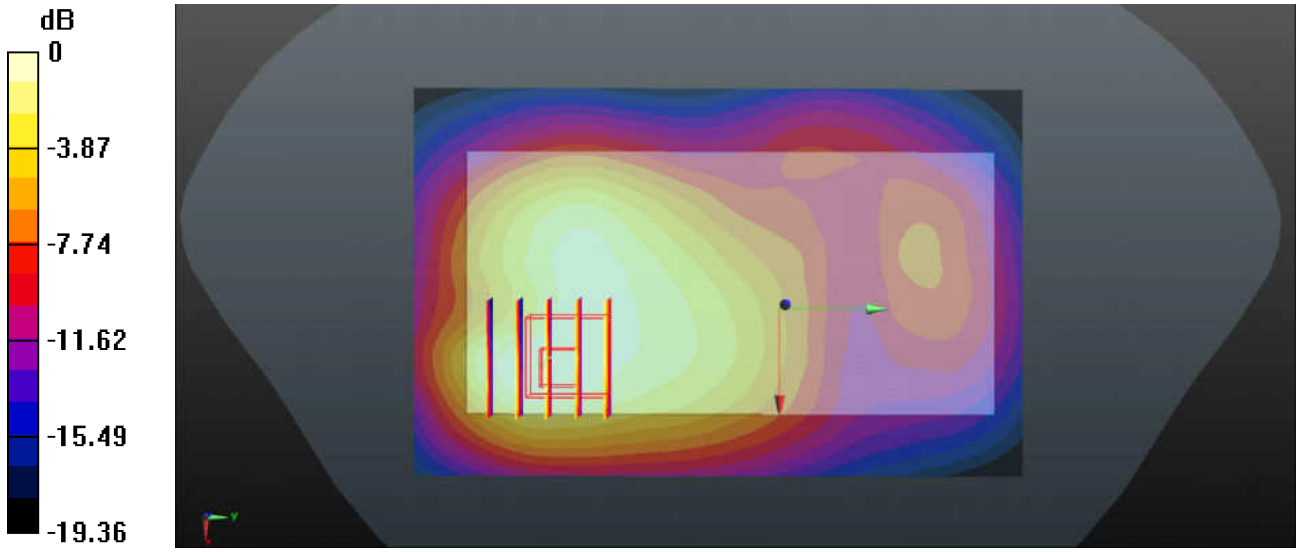
#45_CDMA2000 BC1_RC3 SO32 (F+SCH)_Back_10mm_Ch25

Communication System: UID 0, CDMA2000 (0); Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1851.25 MHz; σ = 1.47 S/m; ε_r = 54.078; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch25/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.753 W/kg

Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.64 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.862 W/kg
SAR(1 g) = 0.508 W/kg; SAR(10 g) = 0.304 W/kg
Maximum value of SAR (measured) = 0.710 W/kg



0 dB = 0.710 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

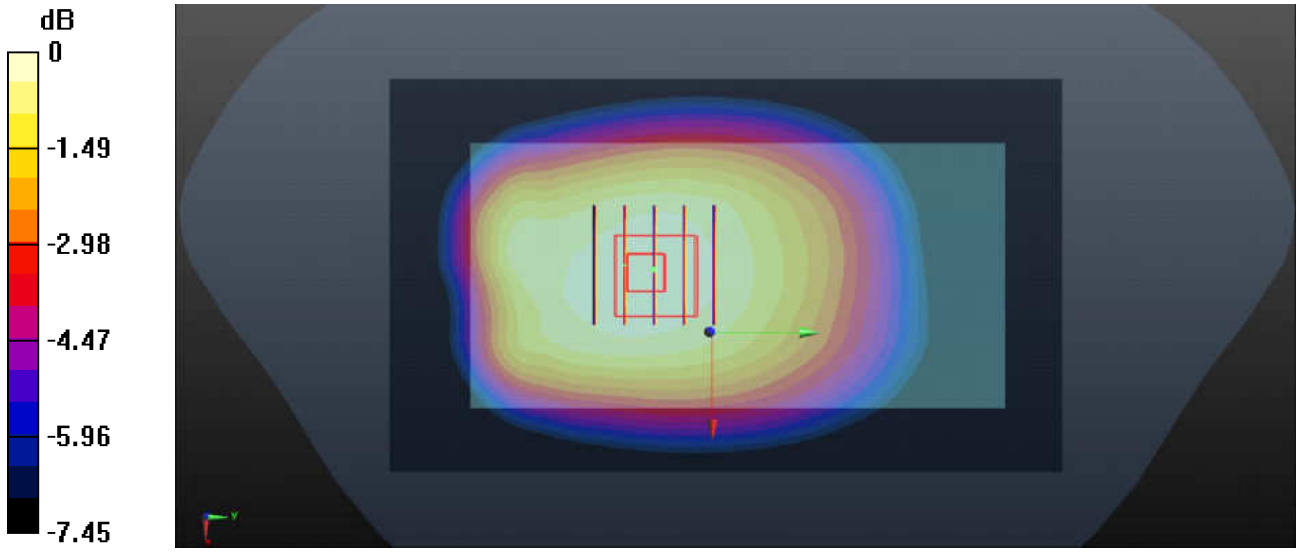
#46_LTE Band 12_10M_QPSK_1RB_25offset_Back_10mm_Ch23095

Communication System: UID 0, FDD-LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: MSL_750_2017/03/04 Medium parameters used: f = 707.5 MHz; σ = 0.928 S/m; ε_r = 54.634; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.68, 10.68, 10.68); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23095/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.641 W/kg

Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.84 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.702 W/kg
SAR(1 g) = 0.552 W/kg; SAR(10 g) = 0.432 W/kg
Maximum value of SAR (measured) = 0.649 W/kg



0 dB = 0.649 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

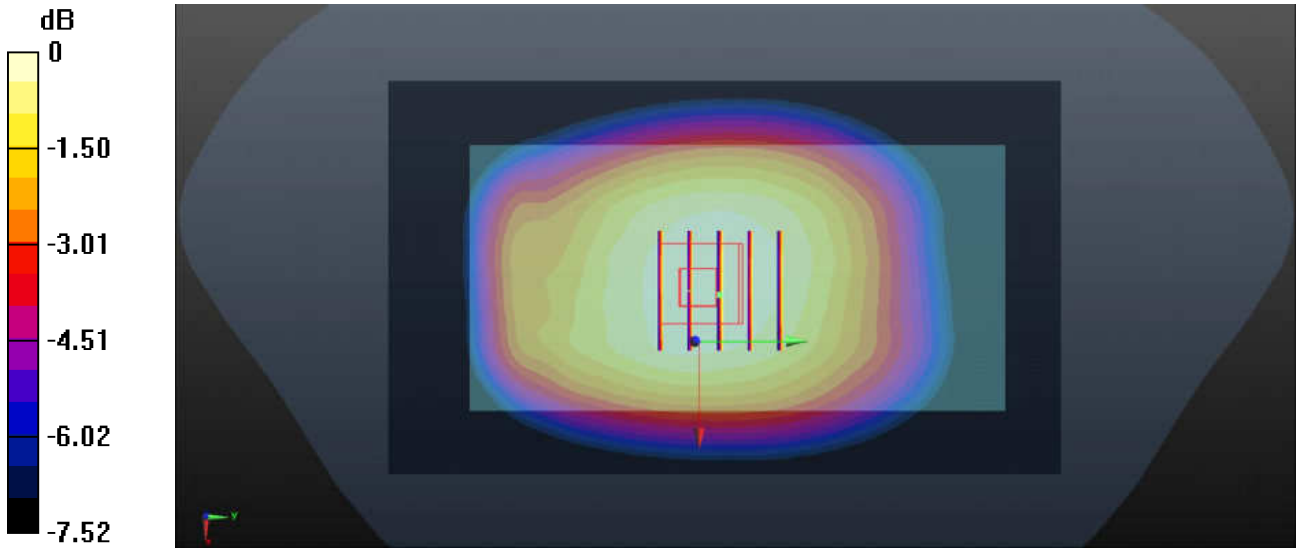
#47_LTE Band 13_10M_QPSK_1RB_25offset_Back_10mm_Ch23230

Communication System: UID 0, FDD-LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: MSL_750_2017/03/04 Medium parameters used: f = 782 MHz; σ = 0.995 S/m; ε_r = 53.755; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature ：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.68, 10.68, 10.68); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23230/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.789 W/kg

Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.11 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.854 W/kg
SAR(1 g) = 0.610 W/kg; SAR(10 g) = 0.439 W/kg
Maximum value of SAR (measured) = 0.790 W/kg



0 dB = 0.790 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/4

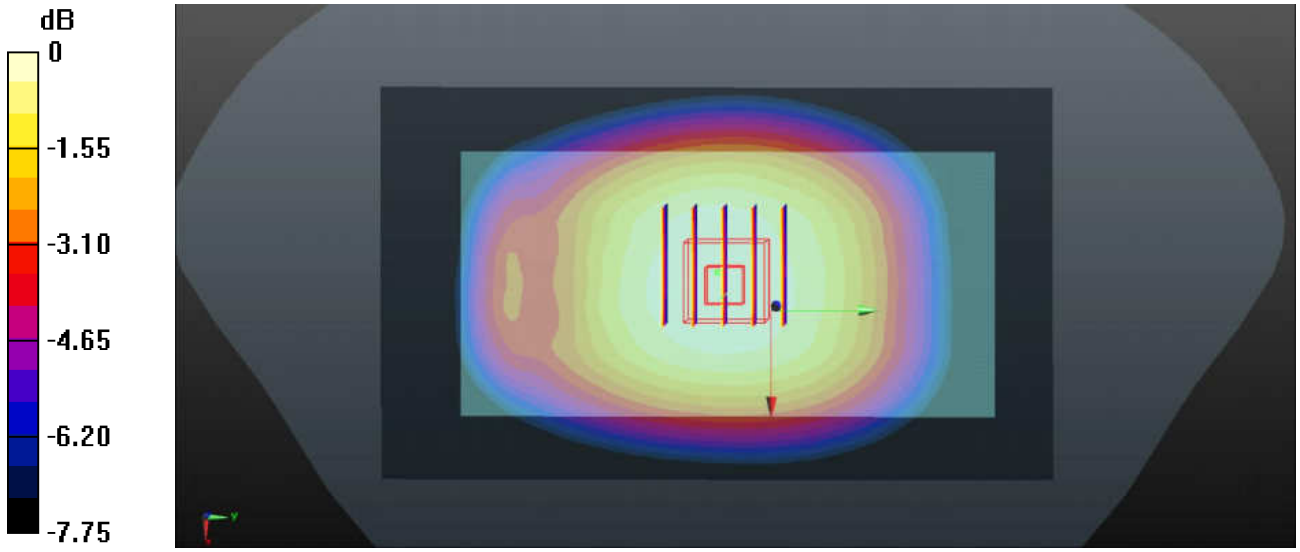
#48_LTE Band 26_15M_QPSK_1RB_37offset_Back_10mm_Ch26865

Communication System: UID 0, FDD-LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: MSL_835_2017/03/04 Medium parameters used: f = 831.5 MHz; σ = 1.004 S/m; ε_r = 57.621; ρ = 1000 kg/m^3
Ambient Temperature：23.8 ℃; Liquid Temperature ：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.48, 10.48, 10.48); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26865/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.00 W/kg

Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.83 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.839 W/kg; SAR(10 g) = 0.647 W/kg
Maximum value of SAR (measured) = 1.01 W/kg



0 dB = 1.01 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/6

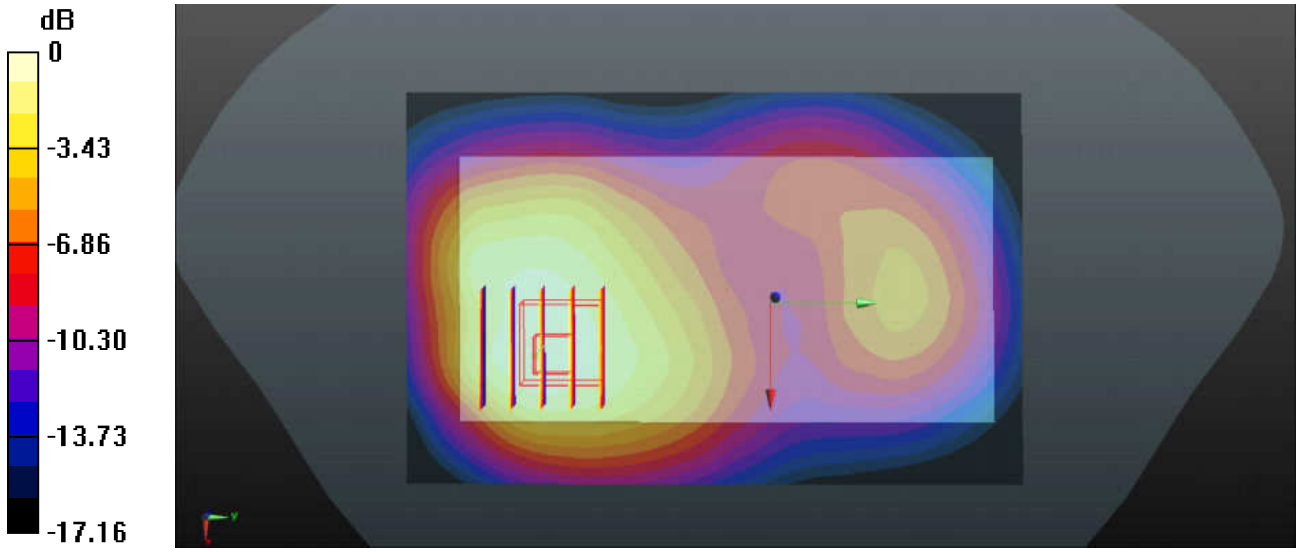
#49_LTE Band 66_20M_QPSK_1RB_49offset_Back_10mm_Ch132072

Communication System: UID 0, FDD-LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium: MSL_1750_2017/03/06 Medium parameters used: f = 1720 MHz; σ = 1.507 S/m; ε_r = 52.859; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.46, 8.46, 8.46); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132072/Area Scan (71x111x1): Interpolated grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.952 W/kg

Ch132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.895 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.660 W/kg; SAR(10 g) = 0.414 W/kg
Maximum value of SAR (measured) = 0.893 W/kg



0 dB = 0.893 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

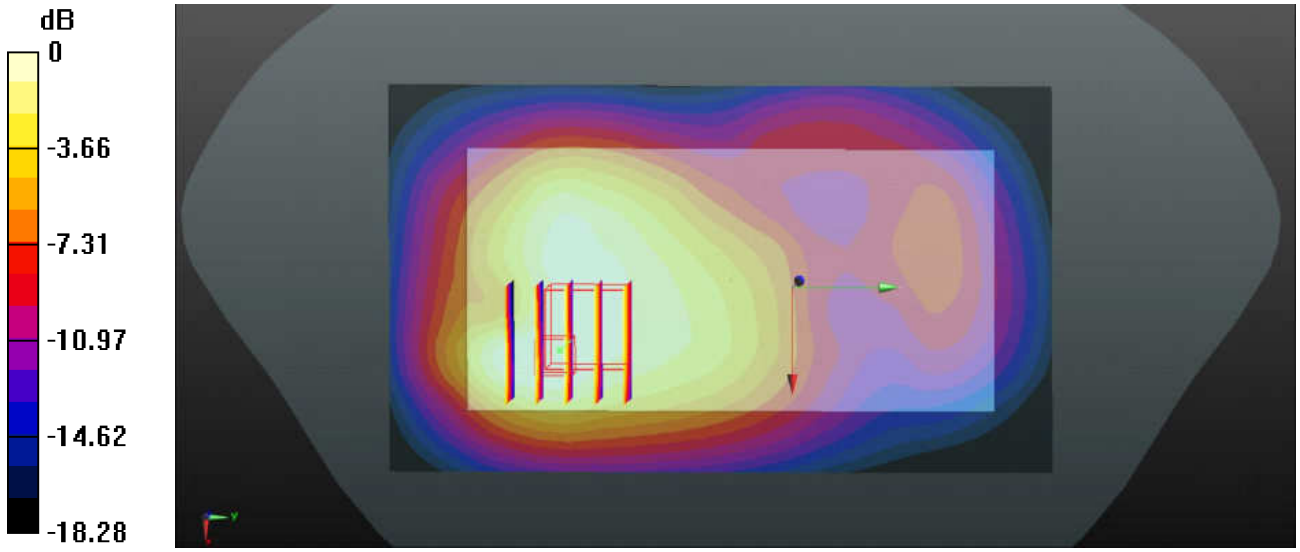
#50_LTE Band 25_20M_QPSK_1RB_0offset_Back_10mm_Ch26140

Communication System: UID 0, FDD-LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium: MSL_1900_2017/03/05 Medium parameters used: f = 1860 MHz; σ = 1.481 S/m; ε_r = 54.05; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature ：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(8.18, 8.18, 8.18); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1753
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26140/Area Scan (71x121x1): Interpolated grid: dx=15mm, dy=5500 mm
Maximum value of SAR (interpolated) = 0.814 W/kg

Ch26140/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.00 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.916 W/kg
SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.322 W/kg
Maximum value of SAR (measured) = 0.737 W/kg



0 dB = 0.737 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

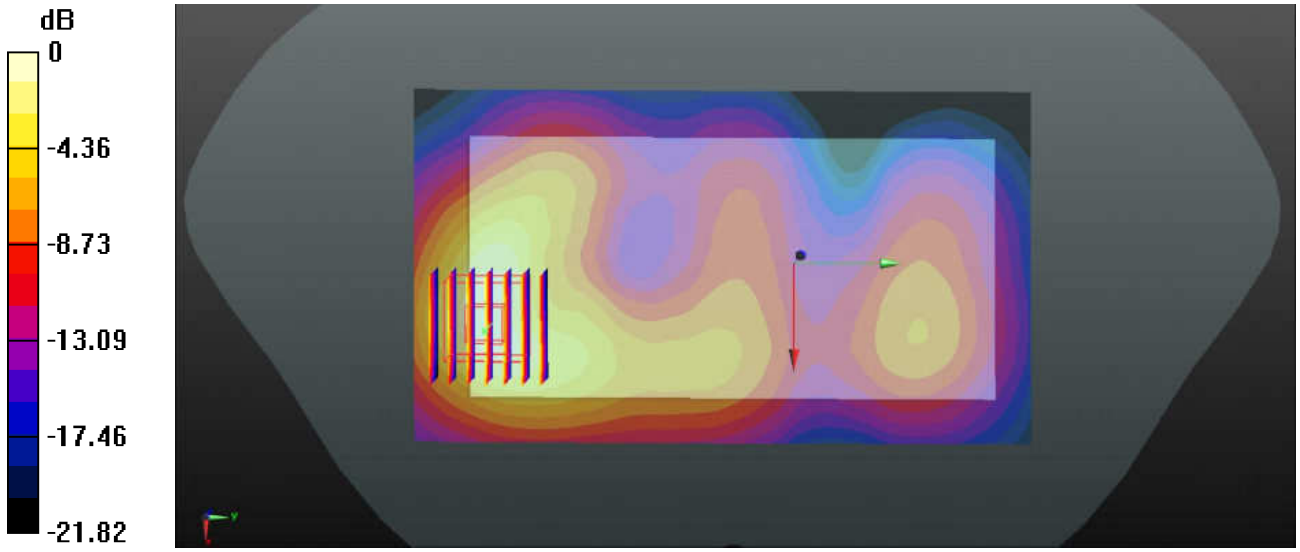
#51_LTE Band 7_20M_QPSK_1RB_49offset_Back_10mm_Ch21350

Communication System: UID 0, FDD-LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium: MSL_2600_2017/03/05 Medium parameters used: f = 2560 MHz; σ = 2.094 S/m; ε_r = 51.11; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.67, 7.67, 7.67); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch21350/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 1.34 W/kg

Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.914 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.82 W/kg
SAR(1 g) = 0.901 W/kg; SAR(10 g) = 0.431 W/kg
Maximum value of SAR (measured) = 1.46 W/kg



0 dB = 1.46 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

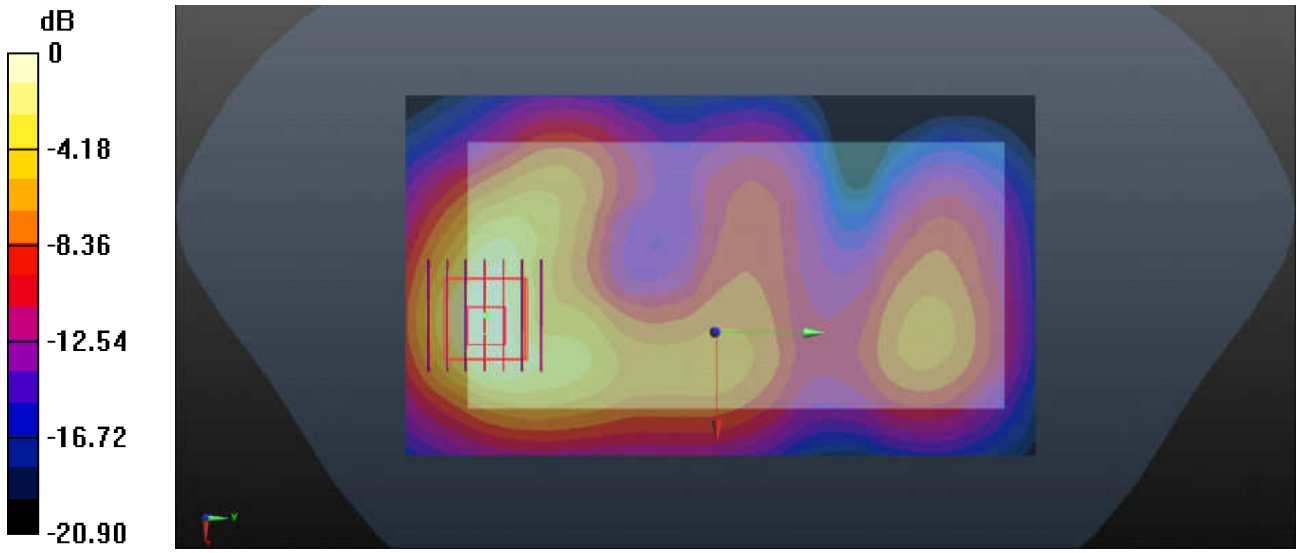
#52_LTE Band 41_20M_QPSK_1RB_49offset_Back_10mm_Ch40185

Communication System: UID 0, TDD-LTE (0); Frequency: 2549.5 MHz;Duty Cycle: 1:1.59
Medium: MSL_2600_2017/03/05 Medium parameters used: f = 2549.5 MHz; σ = 2.079 S/m; ε_r = 51.147; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.67, 7.67, 7.67); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch40185/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.989 W/kg

Ch40185/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.205 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.29 W/kg
SAR(1 g) = 0.651 W/kg; SAR(10 g) = 0.318 W/kg
Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/5

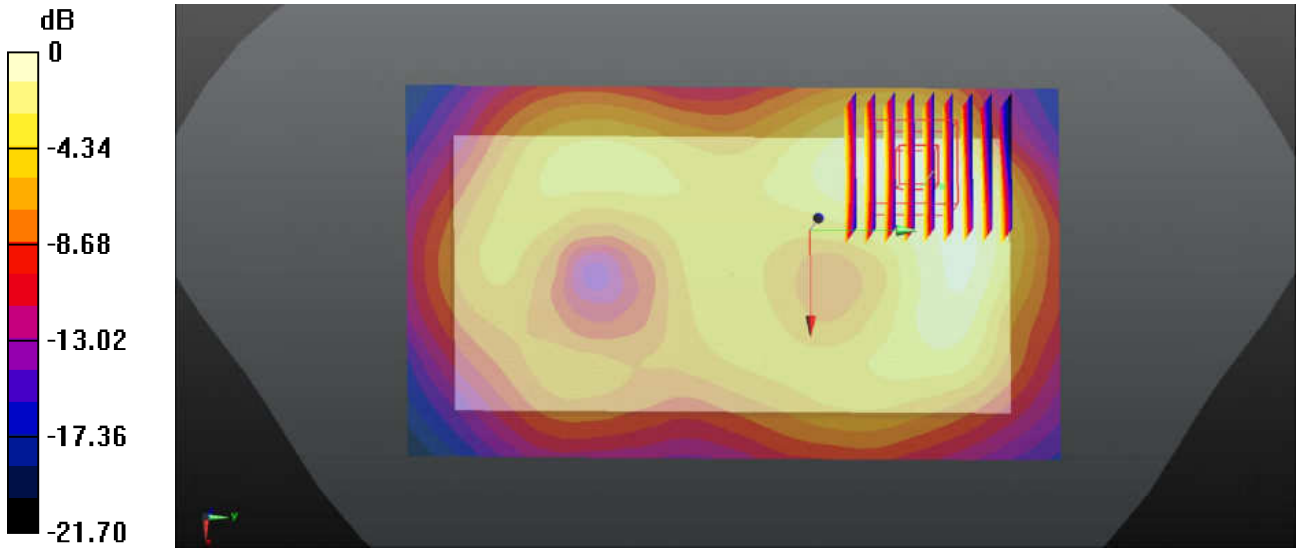
#53_WLAN2.4GHz_802.11b 1Mbps_Back_10mm_Ch11

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.025
Medium: MSL_2450_2017/03/05 Medium parameters used: f = 2462 MHz; σ = 2.002 S/m; ε_r = 51.118; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature ：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(7.89, 7.89, 7.89); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (81x141x1): Interpolated grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.280 W/kg

Ch11/Zoom Scan (8x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.617 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.354 W/kg
SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.087 W/kg
Maximum value of SAR (measured) = 0.266 W/kg



0 dB = 0.266 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

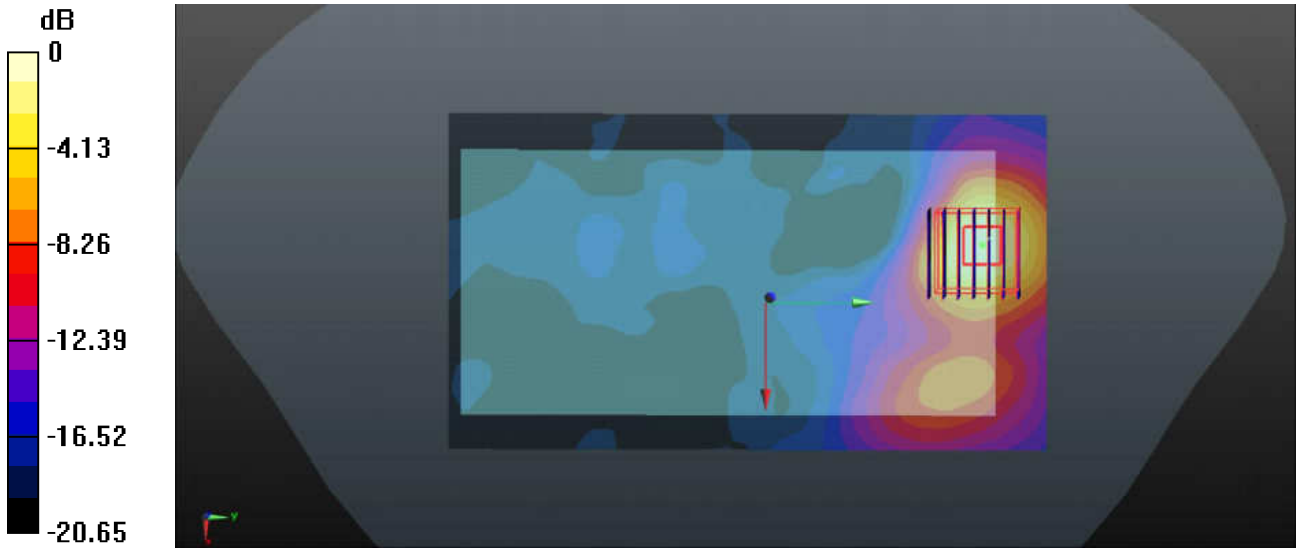
#54_WLAN5.3GHz_802.11a 6Mbps_Back_10mm_Ch52

Communication System: UID 0, 802.11a (0); Frequency: 5260 MHz;Duty Cycle: 1:1.146
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5260 MHz; σ = 5.452 S/m; ε_r = 48.714; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.84, 4.84, 4.84); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch52/Area Scan (91x161x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.802 W/kg

Ch52/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.438 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.110 W/kg
Maximum value of SAR (measured) = 0.730 W/kg



0 dB = 0.730 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

#55_WLAN5.5GHz_802.11a 6Mbps_Back_10mm_Ch144

Communication System: UID 0, 802.11a (0); Frequency: 5720 MHz;Duty Cycle: 1:1.146
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5720 MHz; σ = 5.941 S/m; ε_r = 46.644; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4, 4, 4); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch144/Area Scan (91x161x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.914 W/kg

Ch144/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.773 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.51 W/kg
SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.139 W/kg
Maximum value of SAR (measured) = 0.872 W/kg

0 dB = 0.872 W/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2017/3/11

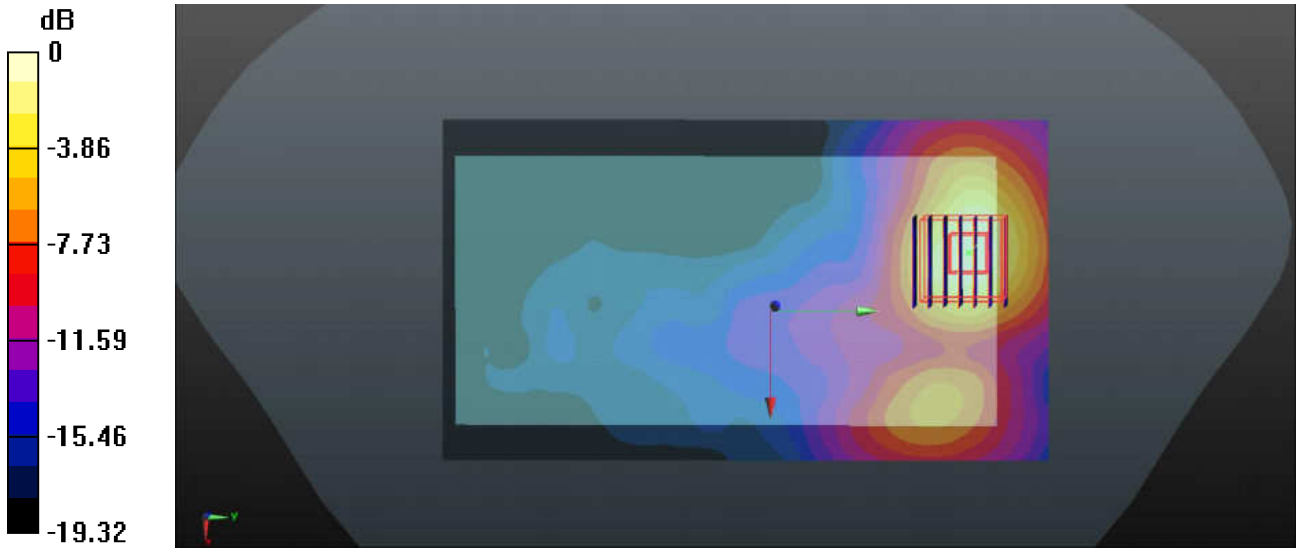
#56_WLAN5.8GHz_802.11a 6Mbps_Back_10mm_Ch165

Communication System: UID 0, 802.11a (0); Frequency: 5825 MHz;Duty Cycle: 1:1.146
Medium: MSL_5G_2017/03/11 Medium parameters used: f = 5825 MHz; σ = 6.22 S/m; ε_r = 47.78; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature ：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(4.23, 4.23, 4.23); Calibrated: 2016/11/28;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2016/9/5
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1754
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch165/Area Scan (91x161x1): Interpolated grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.822 W/kg

Ch165/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.592 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.126 W/kg
Maximum value of SAR (measured) = 0.782 W/kg



0 dB = 0.782 W/kg

Appendix C. DASY Calibration Certificate

The DASY calibration certificates are shown as follows.

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client **Auden**

Certificate No: D750V3-1078_Jun16

CALIBRATION CERTIFICATE

Object	D750V3 - SN:1078
Calibration procedure(s)	QA CAL-05.v9 Calibration procedure for dipole validation kits above 700 MHz
Calibration date:	June 22, 2016

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-16
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

	Name	Function	Signature
Calibrated by:	Leif Klysner	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: June 27, 2016

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.3 ± 6 %	0.90 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.07 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**8.18 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.36 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**5.39 W/kg ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	55.5	0.96 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.6 ± 6 %	0.98 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.20 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**8.63 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.44 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**5.67 W/kg ± 16.5 % (k=2)**

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.5 Ω - 0.7 jΩ
Return Loss	- 27.4 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	49.9 Ω - 2.9 jΩ
Return Loss	- 30.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.034 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	November 15, 2012

DASY5 Validation Report for Head TSL

Date: 22.06.2016

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1078

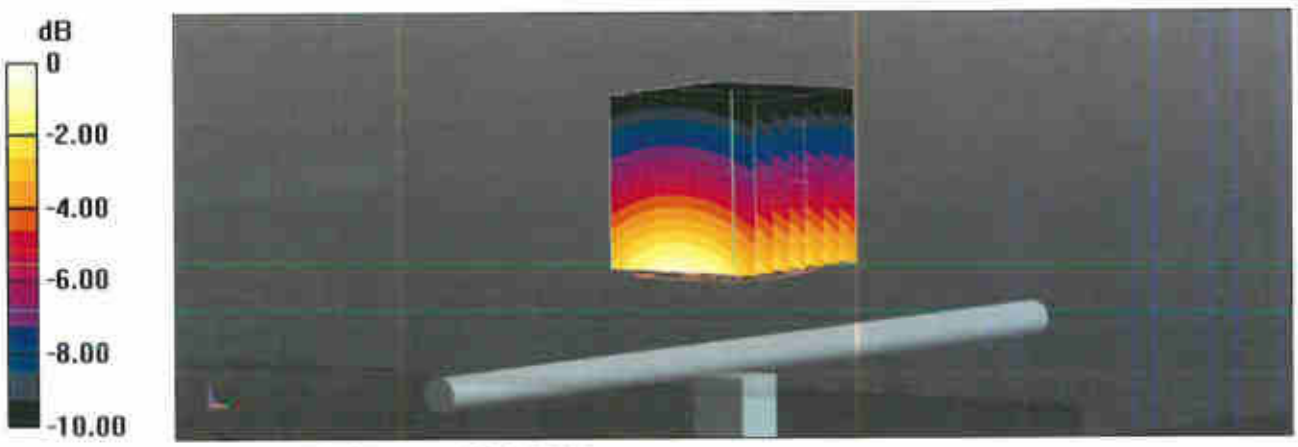
Communication System: UID 0 - CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; σ = 0.9 S/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(10.17, 10.17, 10.17); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

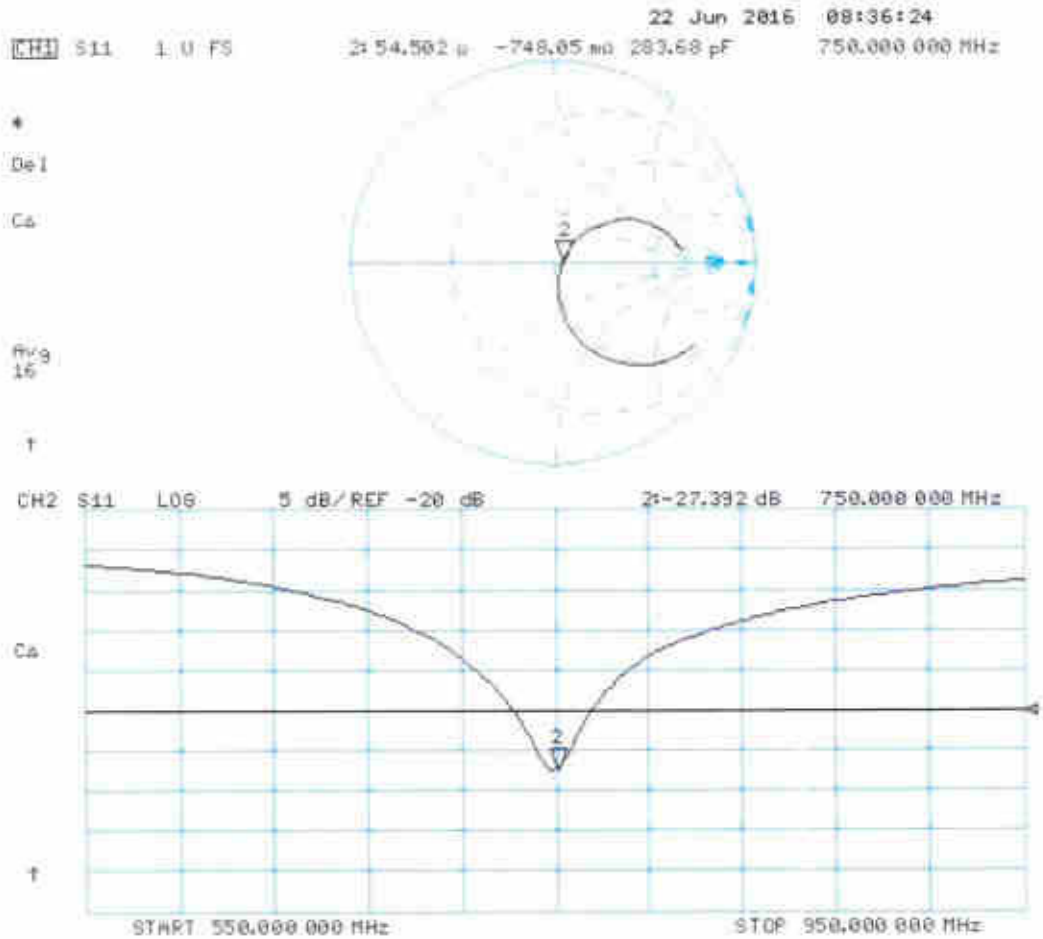
Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.85 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.07 W/kg
SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.36 W/kg
Maximum value of SAR (measured) = 2.73 W/kg



0 dB = 2.73 W/kg = 4.36 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 22.06.2016

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1078

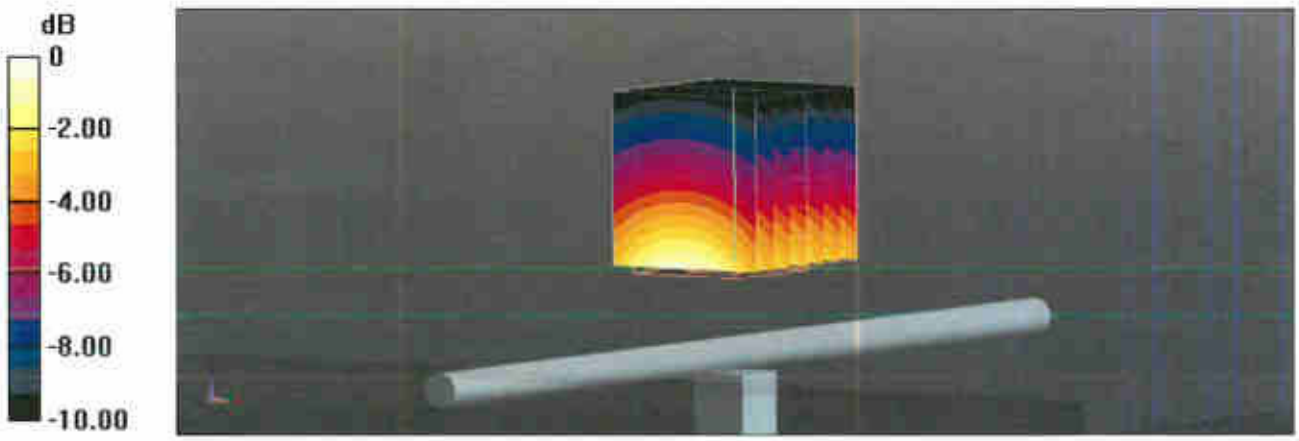
Communication System: UID 0 - CW; Frequency: 750 MHz
Medium parameters used: f = 750 MHz; σ = 0.98 S/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(9.99, 9.99, 9.99); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

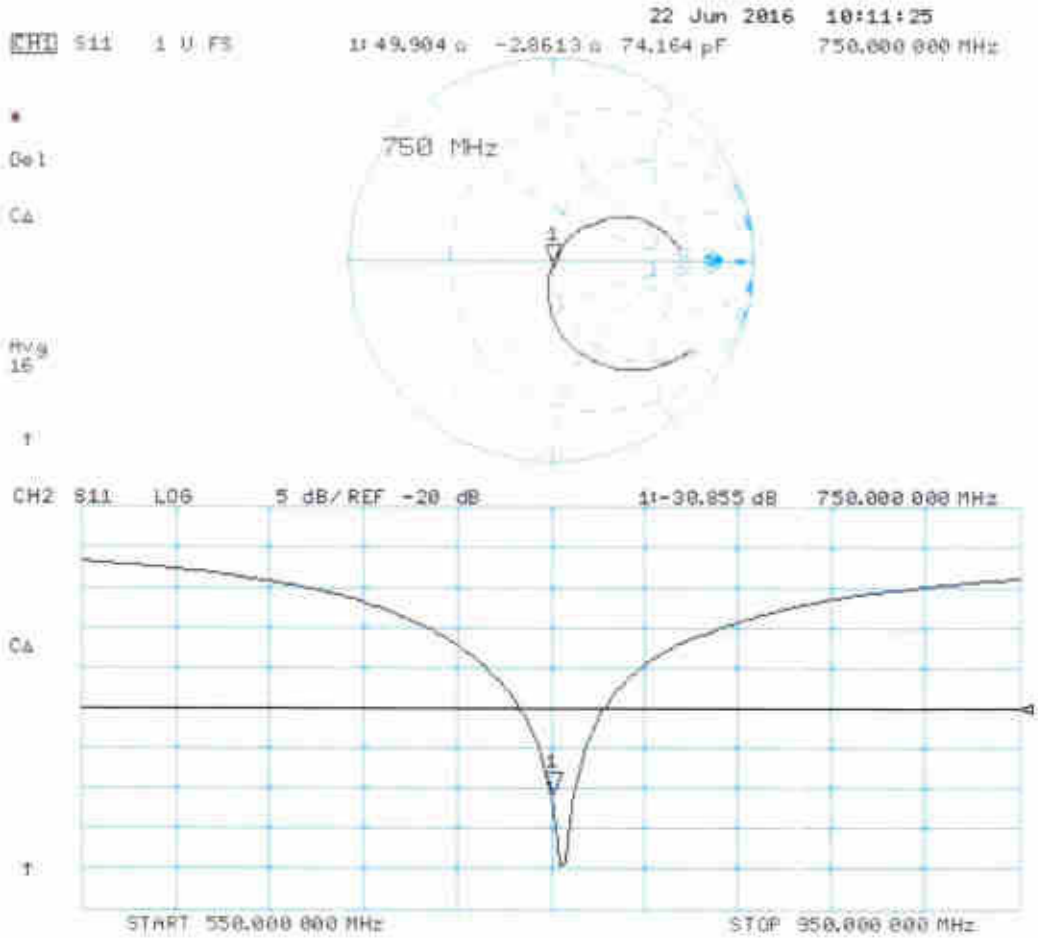
Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.86 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.26 W/kg
SAR(1 g) = 2.2 W/kg; SAR(10 g) = 1.44 W/kg
Maximum value of SAR (measured) = 2.91 W/kg



0 dB = 2.91 W/kg = 4.64 dBW/kg

Impedance Measurement Plot for Body TSL



Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

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Accreditation No.: SCS 0108

Client **Auden**

Certificate No: D835V2-4d120_Jun16

CALIBRATION CERTIFICATE

Object	D835V2 - SN:4d120
Calibration procedure(s)	QA CAL-05.v9 Calibration procedure for dipole validation kits above 700 MHz
Calibration date:	June 22, 2016

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-16
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: June 27, 2016

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