Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.22

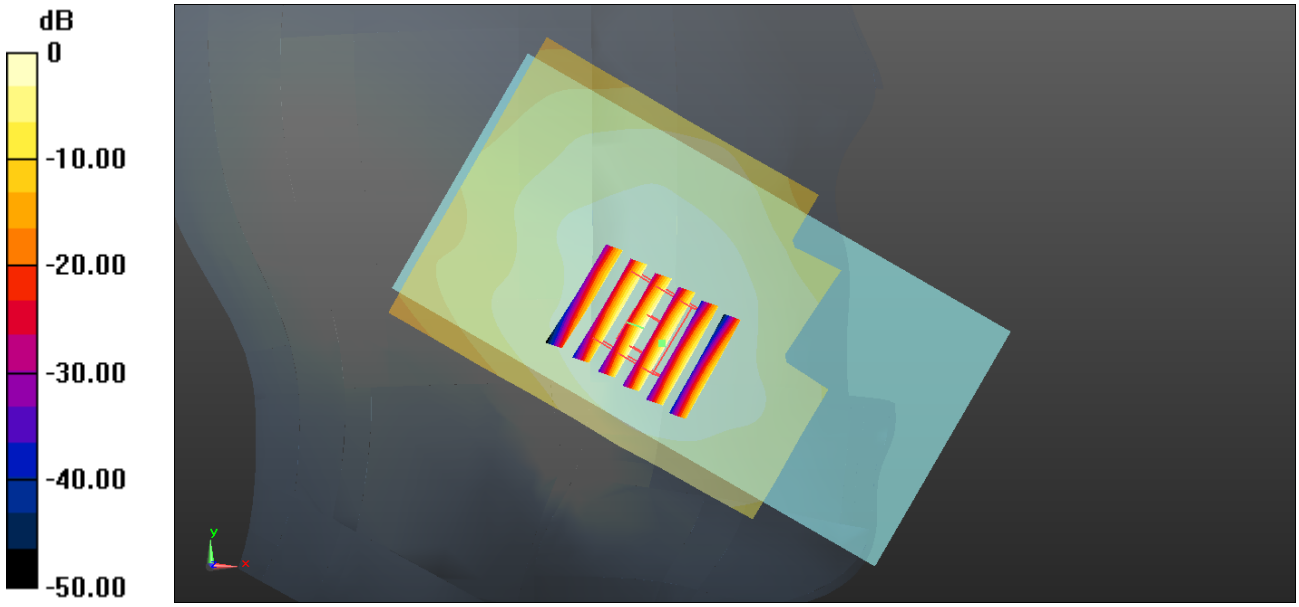
01_GSM850_GPRS 4 Tx slots_Left Cheek_0mm_Ch251

Communication System: UID 0, GPRS/EDGE (4 Tx slots) (0); Frequency: 848.8 MHz;Duty Cycle: 1:2.08
Medium: HSL_850 Medium parameters used: f = 848.8 MHz; σ = 0.938 S/m; ε_r = 42.3; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃； Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(6.13, 6.13, 6.13); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch251/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.272 W/kg

Ch251/Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.49 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.287 W/kg
SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.205 W/kg
Maximum value of SAR (measured) = 0.270 W/kg



0 dB = 0.272 W/kg = -5.65 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.30

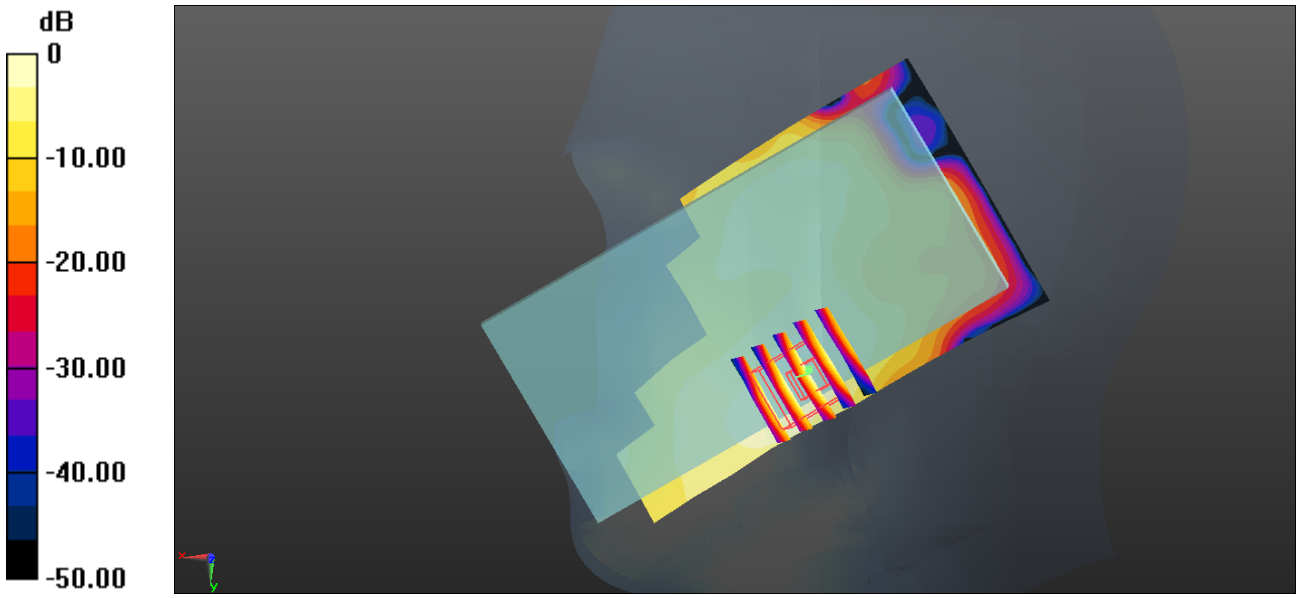
02_GSM1900_GPRS (4 Tx slots)_Right Cheek_5mm_Ch810

Communication System: UID 0, PCS (0); Frequency: 1909.8 MHz;Duty Cycle: 1:2.08
Medium: HSL_1900 Medium parameters used: f = 1909.8 MHz; σ = 1.465 S/m; ε_r = 39.101; ρ = 1000kg/m^3
Ambient Temperature：23.4 ℃； Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(5.07, 5.07, 5.07); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch810/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.116 W/kg

Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.312 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.113 W/kg
SAR(1 g) = 0.084 W/kg; SAR(10 g) = 0.052 W/kg
Maximum value of SAR (measured) = 0.104 W/kg



0 dB = 0.116 W/kg = -9.36 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.22

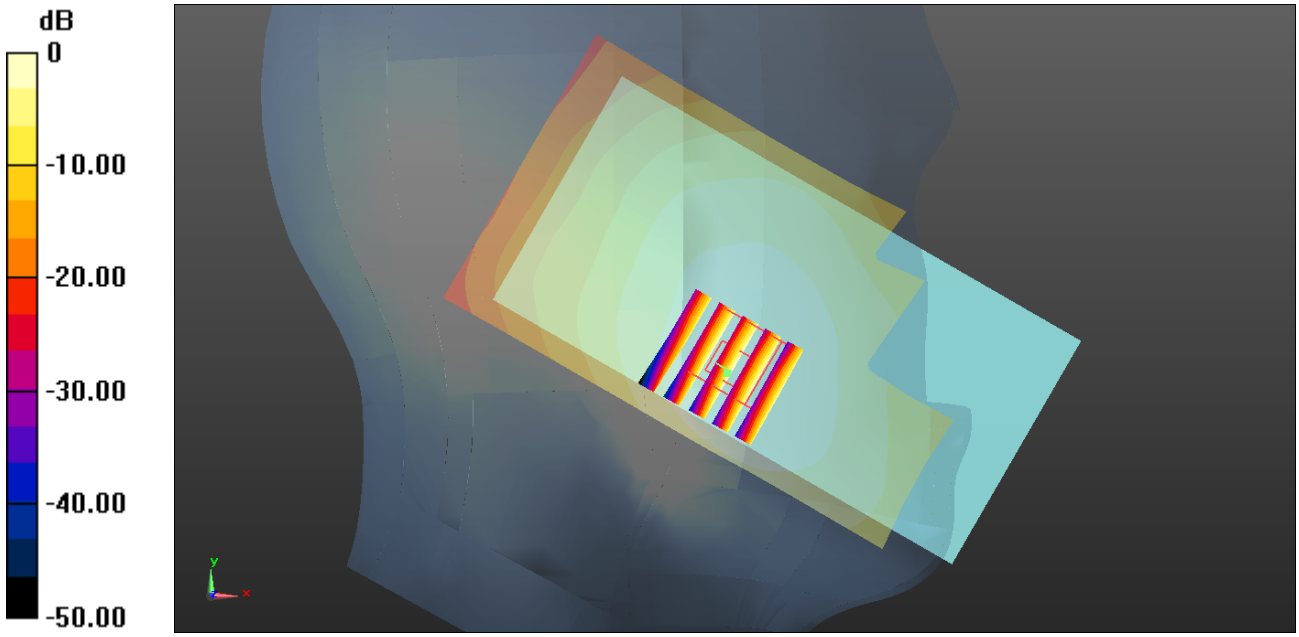
03_WCDMA V_RMC 12.2Kbps_Left Cheek_0mm_Ch4132

Communication System: UID 0, UMTS (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: HSL_850 Medium parameters used: f = 826.4 MHz; σ = 0.917 S/m; ε_r = 42.572; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(6.13, 6.13, 6.13); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch4132/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.355 W/kg

Ch4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.22 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.424 W/kg
SAR(1 g) = 0.315 W/kg; SAR(10 g) = 0.234 W/kg
Maximum value of SAR (measured) = 0.350 W/kg



0 dB = 0.355 W/kg = -4.50 dBW/kg

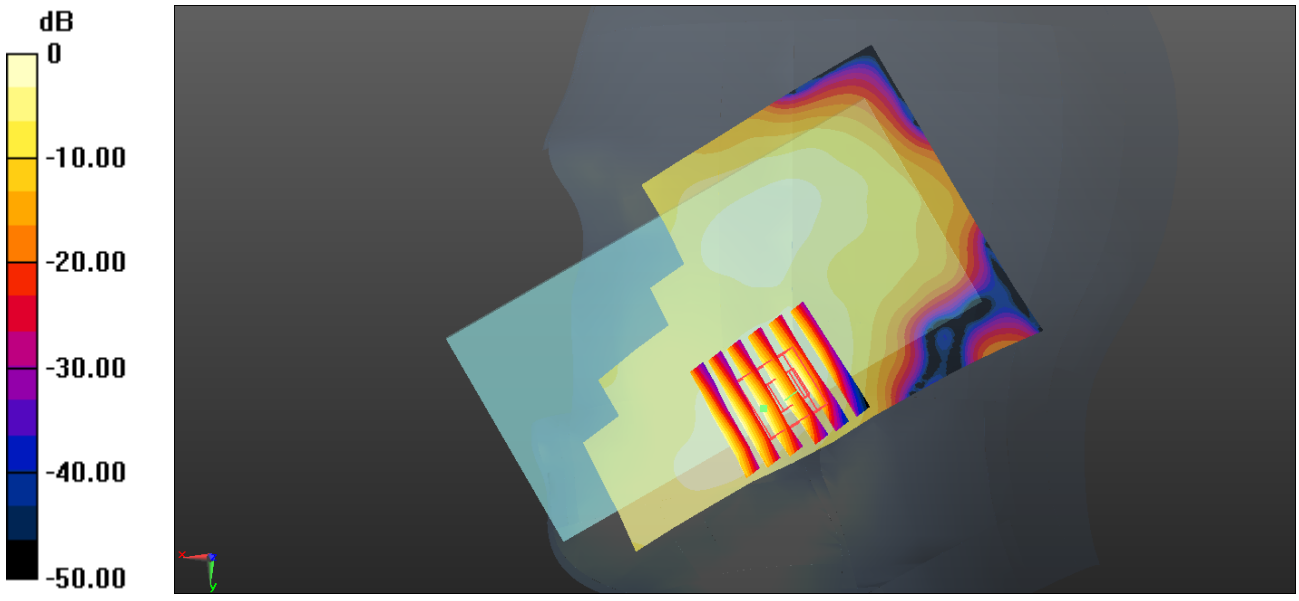
04_WCDMA IV_RMC 12.2Kbps_Right Cheek_0mm_Ch1413

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium: HSL_1750 Medium parameters used: f = 1732.6 MHz; σ = 1.385 S/m; ε_r = 41.53; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.3 ℃； Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(5.05, 5.05, 5.05); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch1413/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.142 W/kg

Ch1413/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.975 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.161 W/kg
SAR(1 g) = 0.121 W/kg; SAR(10 g) = 0.081 W/kg
Maximum value of SAR (measured) = 0.147 W/kg



0 dB = 0.142 W/kg = -8.48 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.30

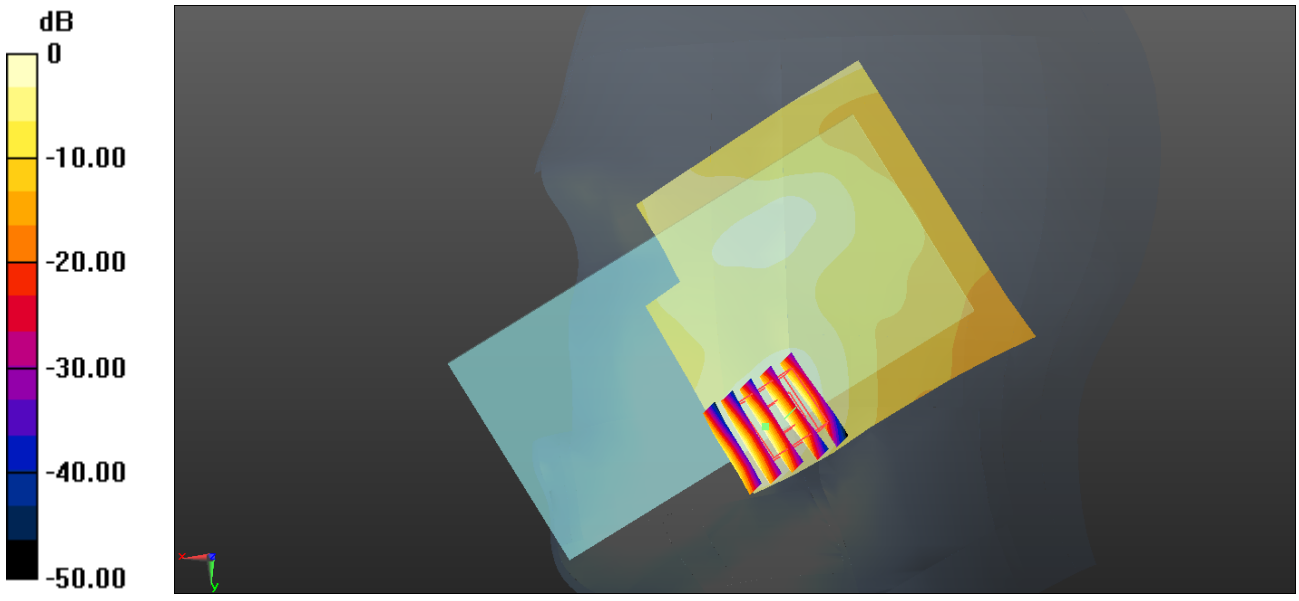
05_WCDMA II_RMC 12.2Kbps_Right Cheek_0mm_Ch9538

Communication System: UID 0, WCDMA (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: f = 1907.6 MHz; σ = 1.463 S/m; ε_r = 39.109; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.4 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(5.07, 5.07, 5.07); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch9538/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.130 W/kg

Ch9538/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.795 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.136 W/kg
SAR(1 g) = 0.103 W/kg; SAR(10 g) = 0.066 W/kg
Maximum value of SAR (measured) = 0.129 W/kg



0 dB = 0.130 W/kg = -8.86 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.22

06_CDMA2000 BC0_RC3 SO55_Left Cheek_0mm_Ch777

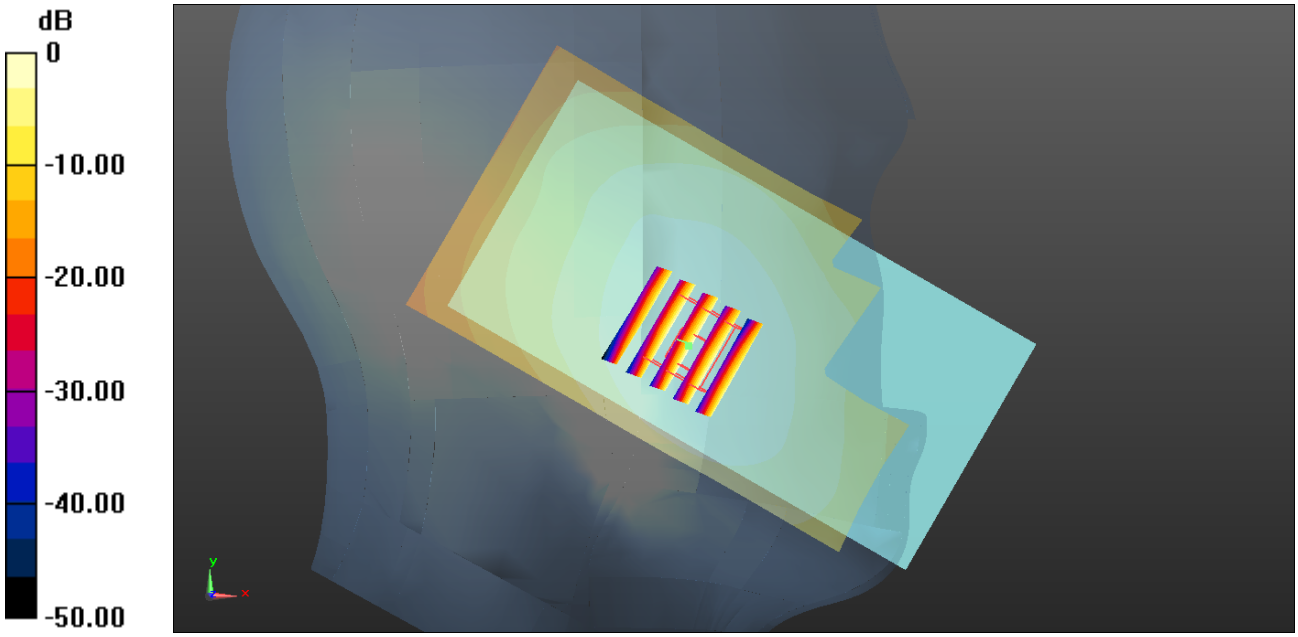
Communication System: UID 0, CDMA2000 (0); Frequency: 848.31 MHz;Duty Cycle: 1:1
Medium: HSL_850 Medium parameters used: f = 848.31 MHz; σ = 0.937 S/m; ε_r = 42.308; ρ = 1000 kg/m^3

Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(6.13, 6.13, 6.13); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch777/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.383 W/kg

Ch777/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.63 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.427 W/kg
SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.259 W/kg
Maximum value of SAR (measured) = 0.370 W/kg



0 dB = 0.383 W/kg = -4.17 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.30

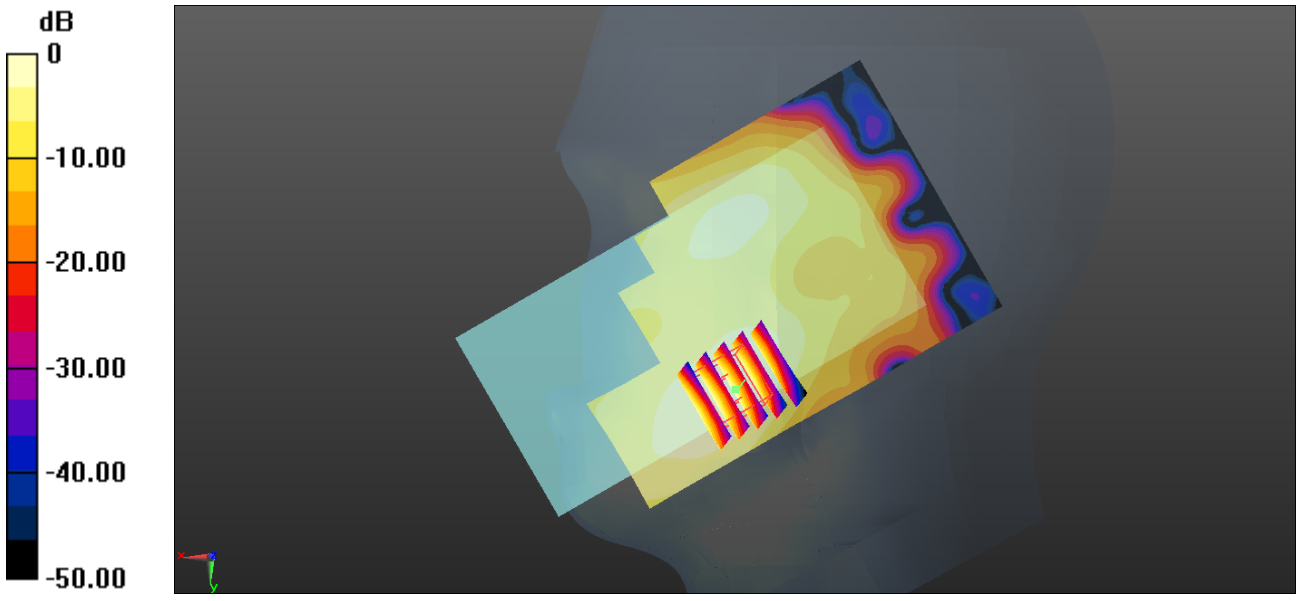
07_CDMA BC1_RC3 SO55_Right Cheek_0mm_Ch600

Communication System: UID 0, CDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.442 S/m; ε_r = 39.228; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃； Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(5.07, 5.07, 5.07); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch600/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.125 W/kg

Ch600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.615 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.138 W/kg
SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.064 W/kg
Maximum value of SAR (measured) = 0.126 W/kg



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

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.22

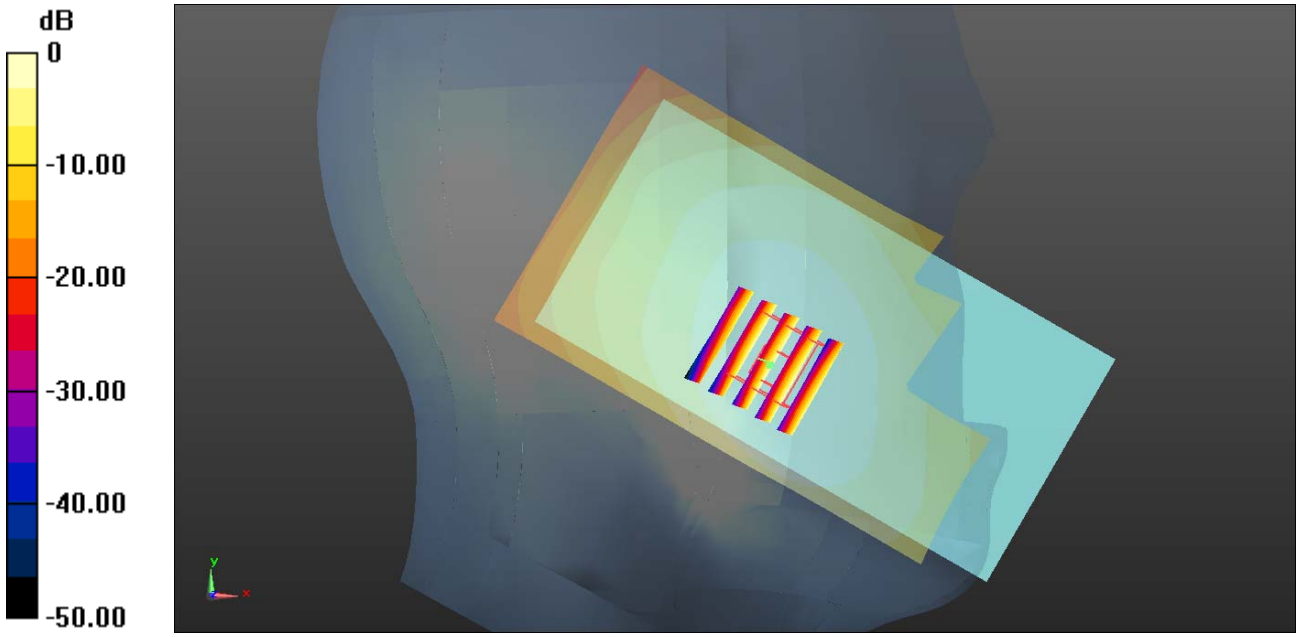
08_CDMA2000 BC10_RC3 SO55_Left Cheek_0mm_Ch580

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz;Duty Cycle: 1:1
Medium: HSL_850 Medium parameters used: f = 820.5 MHz; σ = 0.911 S/m; ε_r = 42.646; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(6.13, 6.13, 6.13); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch580/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.341 W/kg

Ch580/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.83 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.388 W/kg
SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.237 W/kg
Maximum value of SAR (measured) = 0.339 W/kg



0 dB = 0.341 W/kg = -4.67 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

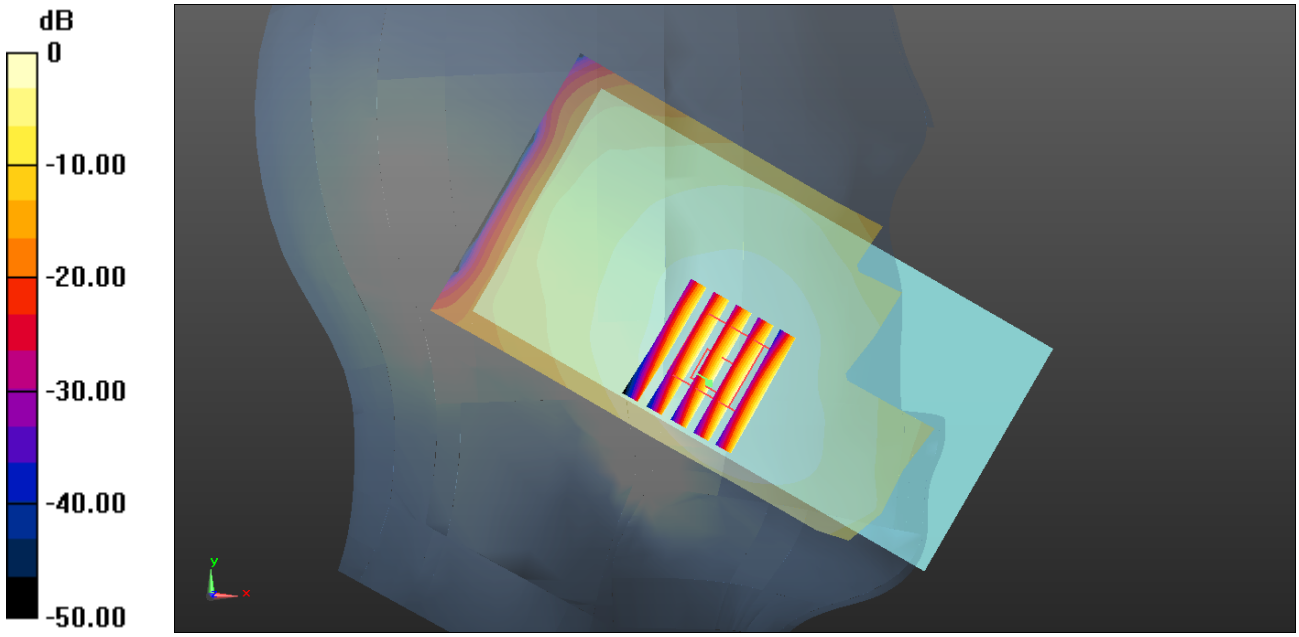
09_LTE Band 13_10M_QPSK_1RB_25Offset_Left Cheek_0mm_Ch23230

Communication System: UID 0, FDD_LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: HSL_750 Medium parameters used: f = 782 MHz; σ = 0.929 S/m; ε_r = 42.676; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(9.92, 9.92, 9.92); Calibrated: 2018.5.31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch23230/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.271 W/kg

Ch23230/Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.00 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.289 W/kg
SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.172 W/kg
Maximum value of SAR (measured) = 0.266 W/kg



0 dB = 0.271 W/kg = -5.67 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

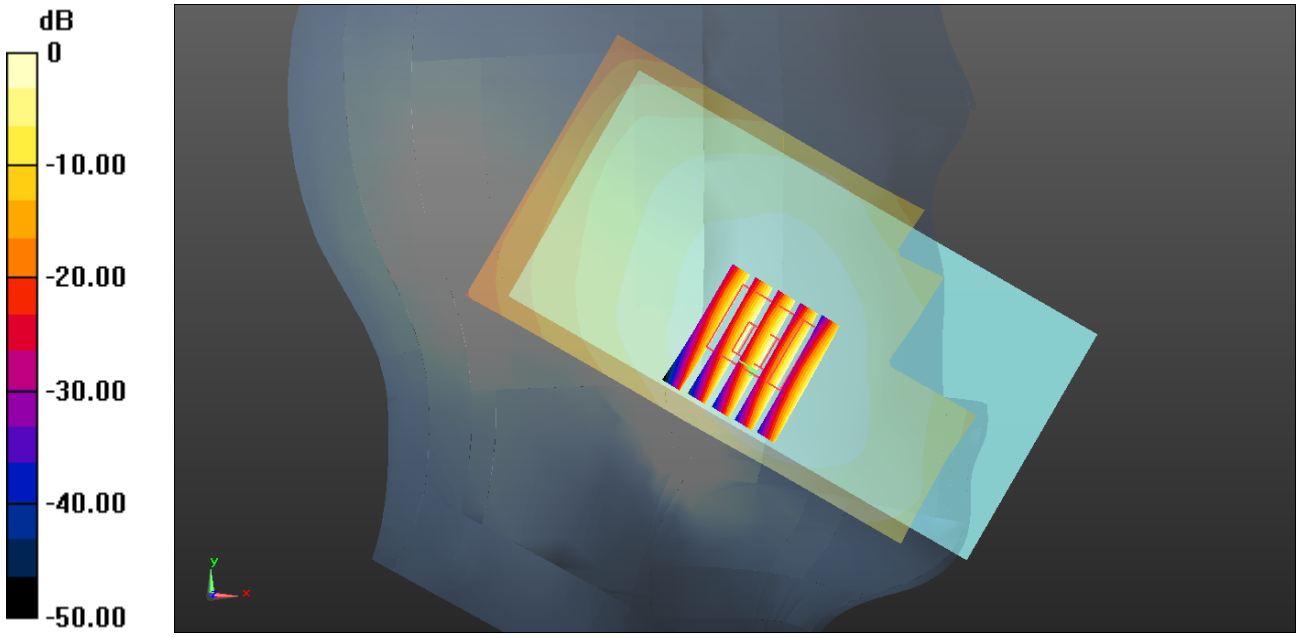
10_LTE Band 12_10M_QPSK_1RB_25Offset_Left Cheek_0mm_Ch23095

Communication System: UID 0, FDD_LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: HSL_750 Medium parameters used: f = 707.5 MHz; σ = 0.879 S/m; ε_r = 43.676; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(9.92, 9.92, 9.92); Calibrated: 2018.5.31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch23095/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.375 W/kg

Ch23095/Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.80 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.393 W/kg
SAR(1 g) = 0.314 W/kg; SAR(10 g) = 0.249 W/kg
Maximum value of SAR (measured) = 0.363 W/kg



0 dB = 0.375 W/kg = -4.26 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.22

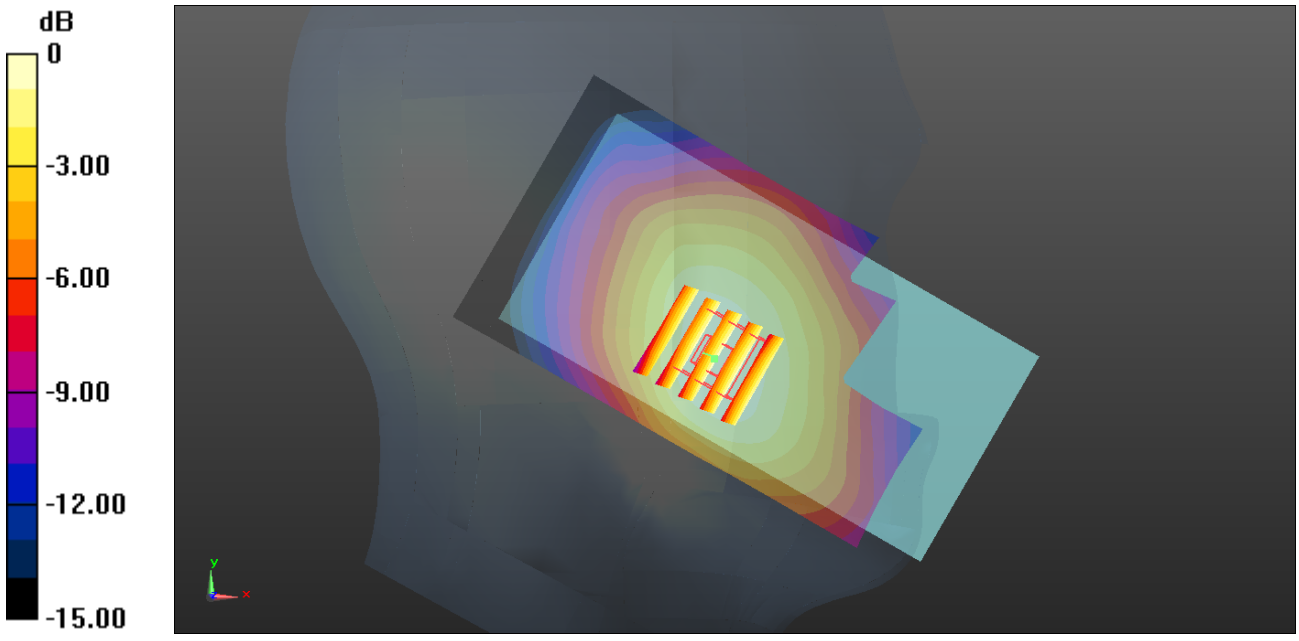
11_LTE Band 26_15M_QPSK_1RB_37Offset_Left Cheek_0mm_Ch26865

Communication System: UID 0, FDD_LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: HSL_850 Medium parameters used : f = 831.5 MHz; σ = 0.921 S/m; ε_r = 42.51; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(6.13, 6.13, 6.13); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch26865/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.324 W/kg

Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.06 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.358 W/kg
SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.219 W/kg
Maximum value of SAR (measured) = 0.310 W/kg



0 dB = 0.324 W/kg = -4.89 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.27

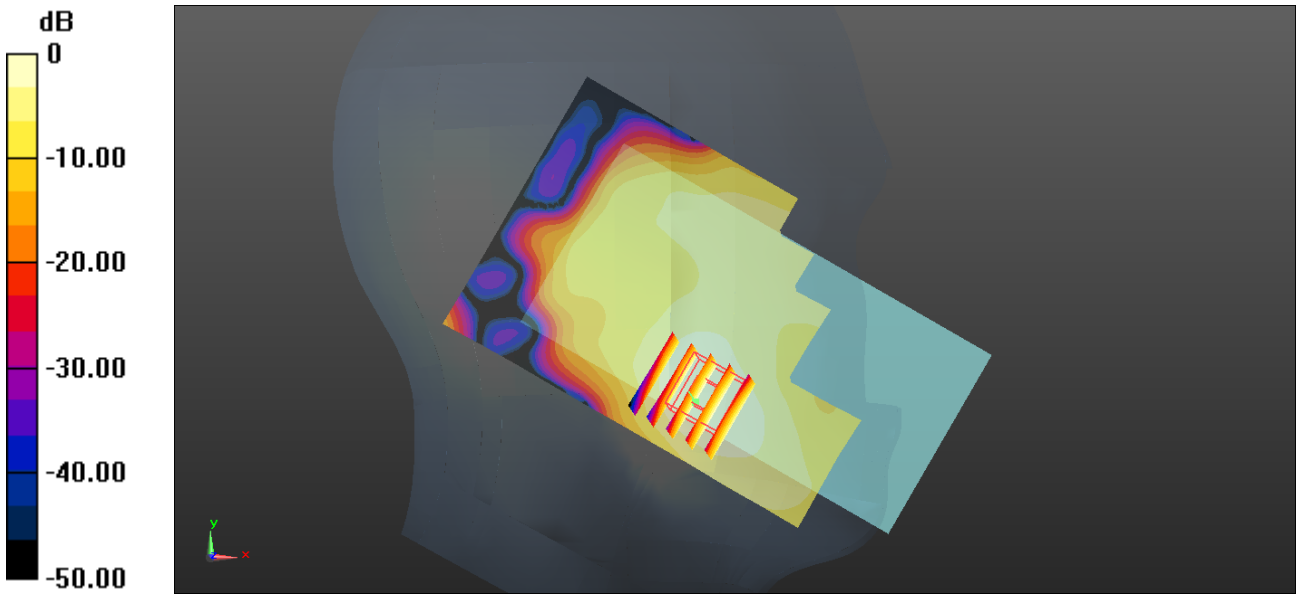
12_LTE Band 66_20M_QPSK_1RB_49Offset_Left Cheek_0mm_Ch132572

Communication System: UID 0, LTE-FDD (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium: HSL_1750 Medium parameters used: f = 1770 MHz; σ = 1.422 S/m; ε_r = 41.412; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(5.05, 5.05, 5.05); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch132572/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.110 W/kg

Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.557 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.140 W/kg
SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.067 W/kg
Maximum value of SAR (measured) = 0.122 W/kg



0 dB = 0.110 W/kg = -9.59 dBW/kg

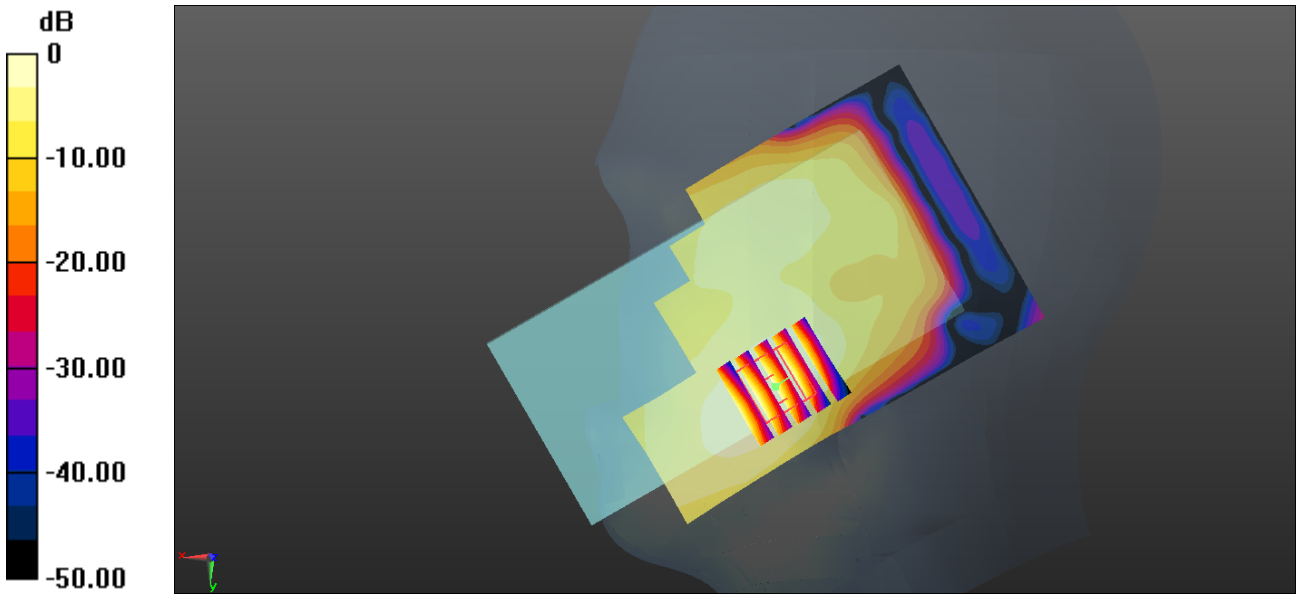
13_LTE Band 25_20M_QPSK_1RB_0Offset_Right Cheek_0mm_Ch26140

Communication System: UID 0, LTE-FDD (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: f = 1860 MHz; σ = 1.423 S/m; ε_r = 39.302; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃； Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(5.07, 5.07, 5.07); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch26140/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.133 W/kg

Ch26140/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.817 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.144 W/kg
SAR(1 g) = 0.103 W/kg; SAR(10 g) = 0.065 W/kg
Maximum value of SAR (measured) = 0.132 W/kg



0 dB = 0.133 W/kg = -8.76 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.28

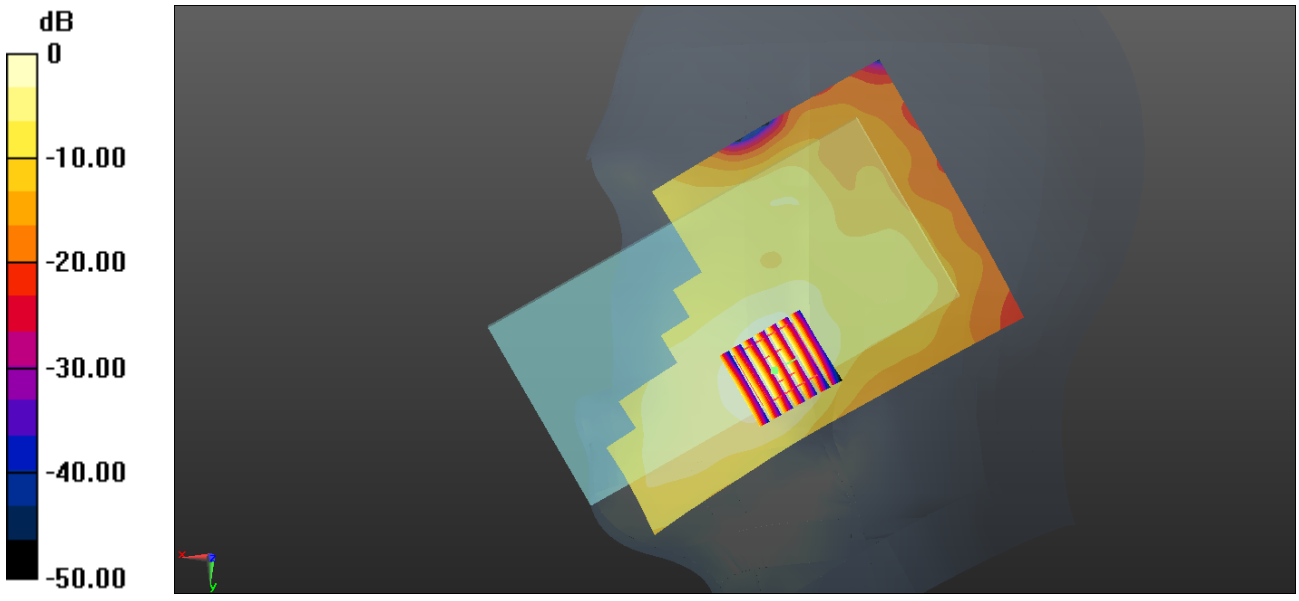
14_LTE Band 7_20M_QPSK_1RB_0Offset_Right Cheek_0mm_Ch20850

Communication System: UID 0, LTE-FDD (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium: HSL_2600 Medium parameters used: f = 2510 MHz; σ = 1.917 S/m; ε_r = 38.762; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.45, 4.45, 4.45); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch20850/Area Scan (91x141x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.611 W/kg

Ch20850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.073 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.632 W/kg
SAR(1 g) = 0.416 W/kg; SAR(10 g) = 0.249 W/kg
Maximum value of SAR (measured) = 0.561 W/kg



0 dB = 0.611 W/kg = -2.14 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.28

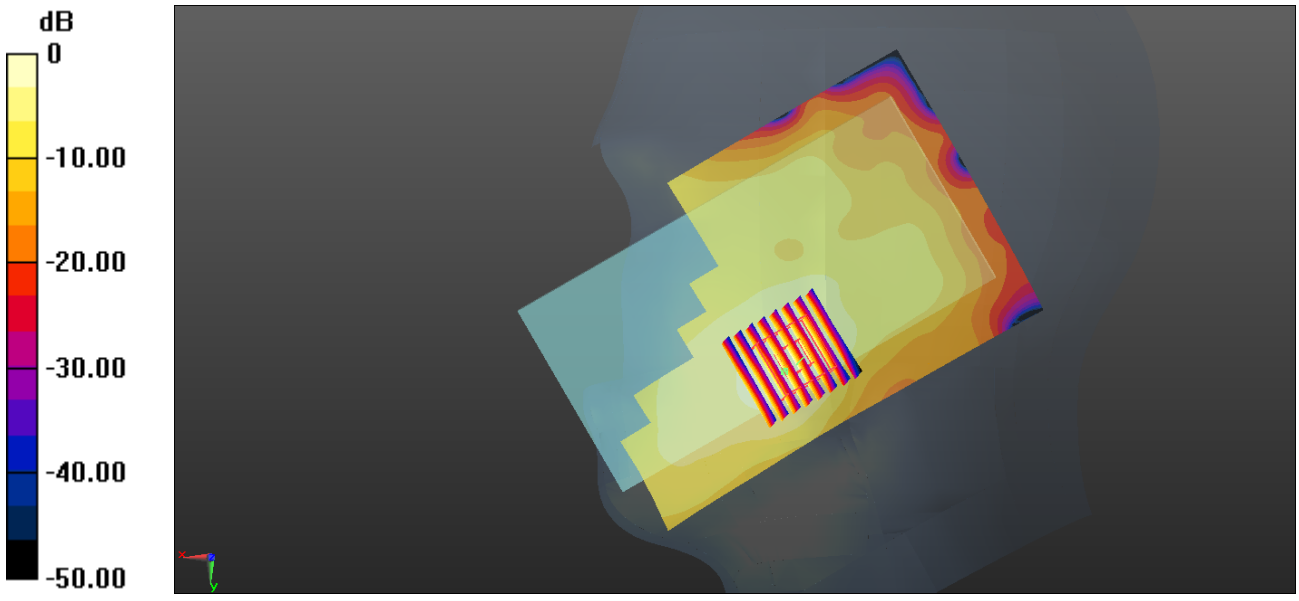
15_LTE Band 41_20M_QPSK_1RB_99Offset_Right Cheek_0mm_Ch39750

Communication System: UID 0, LTE-TDD (0); Frequency: 2506 MHz;Duty Cycle: 1:2.331
Medium: HSL_2600 Medium parameters used: f = 2506 MHz; σ = 1.913 S/m; ε_r = 38.776; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.45, 4.45, 4.45); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch39750/Area Scan (91x131x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.560 W/kg

Ch39750/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.24 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.606 W/kg
SAR(1 g) = 0.368 W/kg; SAR(10 g) = 0.213 W/kg
Maximum value of SAR (measured) = 0.539 W/kg



0 dB = 0.560 W/kg = -2.52 dBW/kg

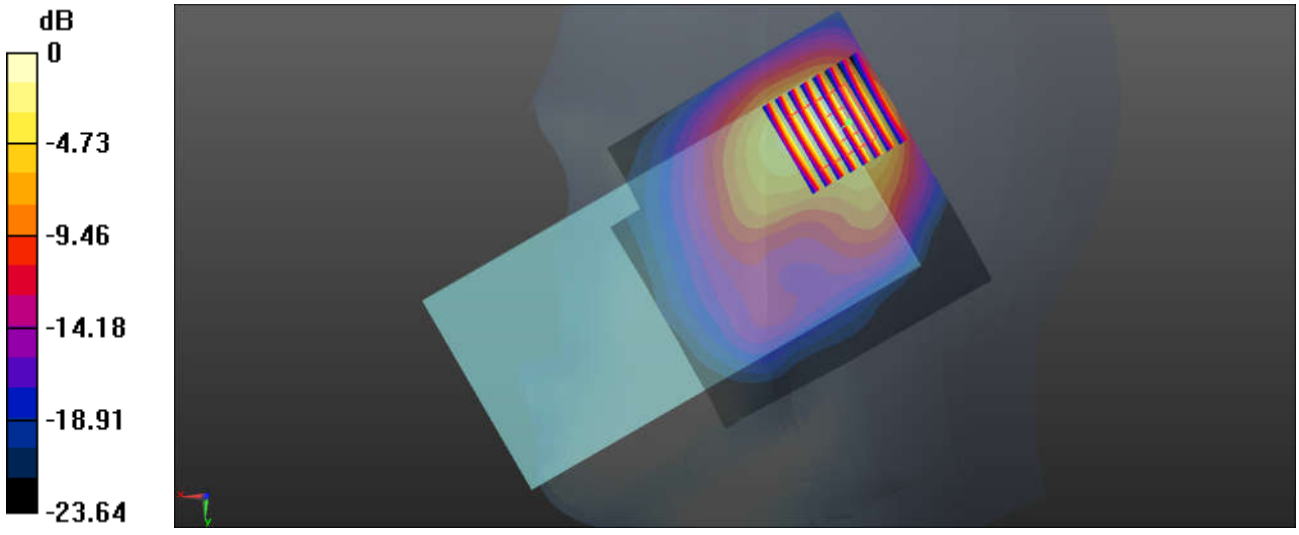
16_WLAN2.4GHz_802.11b 1Mbps_Right Cheek_0mm_ Reduction On _Ch11

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.025
Medium: HSL_2450 Medium parameters used: f = 2462 MHz; σ = 1.878 S/m; ε_r = 39.511; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3954; ConvF(7.49, 7.49, 7.49); Calibrated: 2018.1.31;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- Phantom: SAM2;Type: SAM ; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.32 W/kg

Ch11/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.62 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 0.967 W/kg; SAR(10 g) = 0.472 W/kg
Maximum value of SAR (measured) = 1.25 W/kg



0 dB = 1.25 W/kg = 0.97 dBW/kg

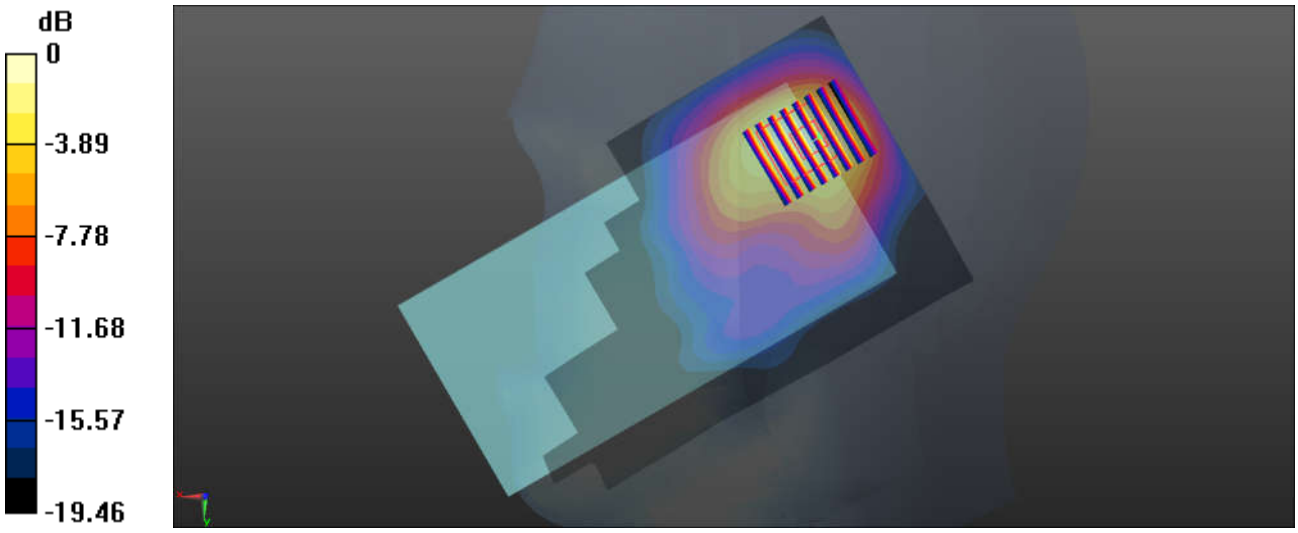
17_Bluetooth_DH5 1Mbps_Right Cheek_0mm_Off_Ch39

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.297
Medium: HSL_2450 Medium parameters used: f = 2441 MHz; σ = 1.836 S/m; ε_r = 39.07; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3954; ConvF(7.49, 7.49, 7.49); Calibrated: 2018.1.31;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- Phantom: SAM2;Type: SAM ; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (91x121x1): Interpolated grid: dx=1.200 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.156 W/kg

Ch39/Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.881 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.291 W/kg
SAR(1 g) = 0.131 W/kg; SAR(10 g) = 0.063 W/kg
Maximum value of SAR (measured) = 0.167 W/kg



0 dB = 0.167 W/kg = -7.77 dBW/kg

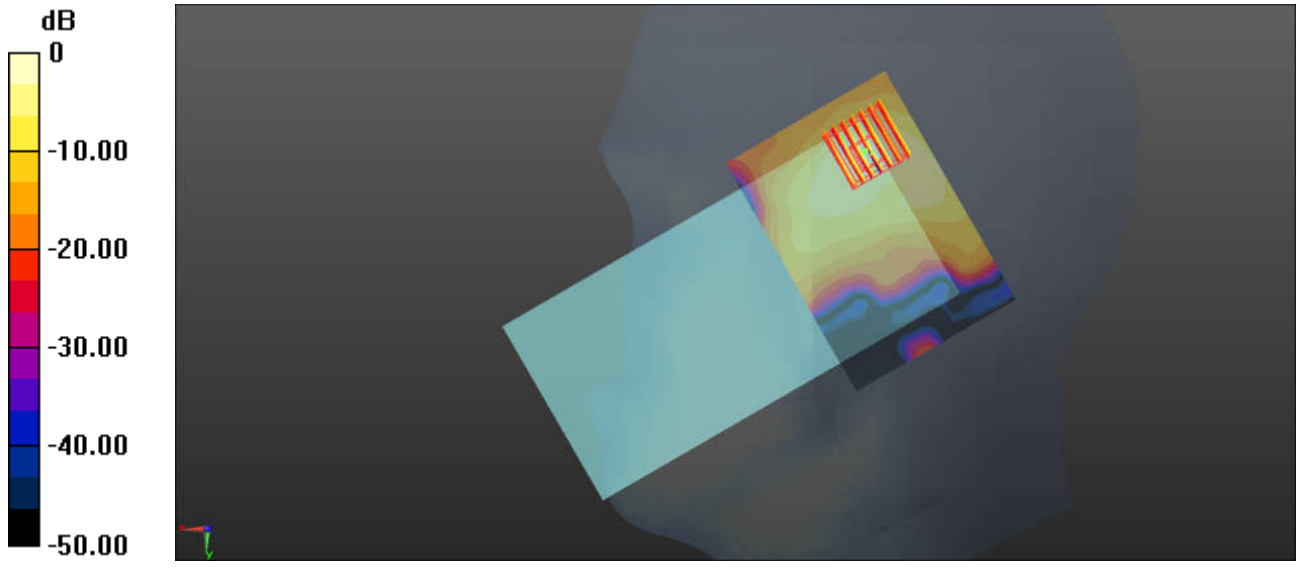
18_WLAN5GHz_802.11a 6Mbps_Right Cheek_0mm_On_Ch64

Communication System: UID 0, 802.11a (0); Frequency: 5320 MHz;Duty Cycle: 1:1.073
Medium: HSL_5000 Medium parameters used: f = 5320 MHz; σ = 4.783 S/m; ε_r = 36.527; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(5.2, 5.2, 5.2); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch64/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.82 W/kg

Ch64/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 21.68 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 2.97 W/kg
SAR(1 g) = 0.737 W/kg; SAR(10 g) = 0.208 W/kg
Maximum value of SAR (measured) = 1.85 W/kg



0 dB = 1.82 W/kg = 2.60 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.28

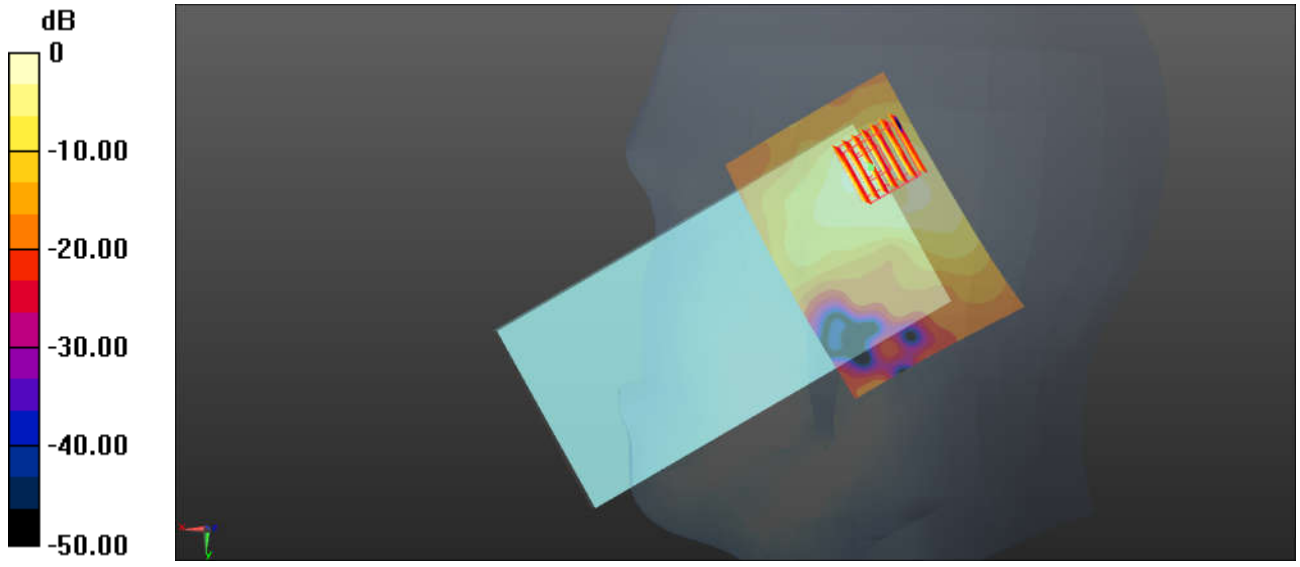
19_WLAN5GHz_802.11a 6Mbps_Right Cheek_0mm_off_Ch132

Communication System: UID 0, 802.11a (0); Frequency: 5660 MHz;Duty Cycle: 1:1.073
Medium: HSL_5000 Medium parameters used: f = 5660 MHz; σ = 5.142 S/m; ε_r = 36.021; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.94, 4.94, 4.94); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch132/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.89 W/kg

Ch132/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 22.39 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 3.62 W/kg
SAR(1 g) = 0.796 W/kg; SAR(10 g) = 0.229 W/kg
Maximum value of SAR (measured) = 1.99 W/kg



0 dB = 1.89 W/kg = 2.76 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.28

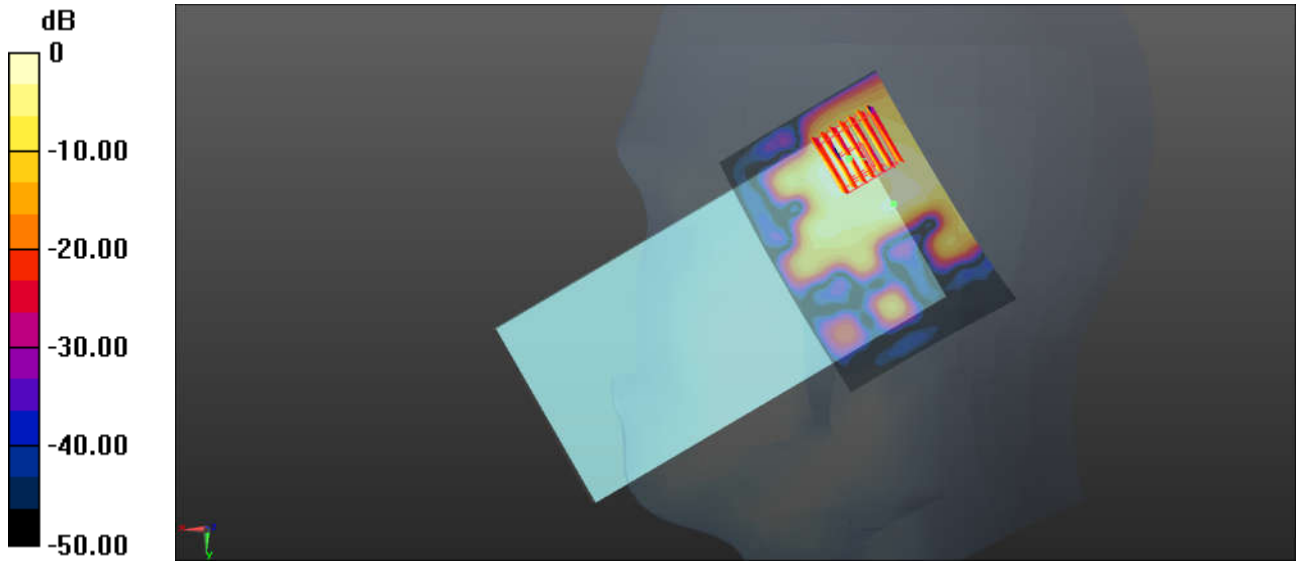
20_WLAN5GHz_802.11a 6Mbps_Right Cheek_0mm_off_Ch157

Communication System: UID 0, 802.11a (0); Frequency: 5785 MHz;Duty Cycle: 1:1.073
Medium: HSL_5000 Medium parameters used: f = 5785 MHz; σ = 5.269 S/m; ε_r =35.862; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃； Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(5.23, 5.23, 5.23); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch157/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.80 W/kg

Ch157/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 20.47 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.48 W/kg
SAR(1 g) = 0.754 W/kg; SAR(10 g) = 0.201 W/kg
Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 1.80 W/kg = 2.55 dBW/kg

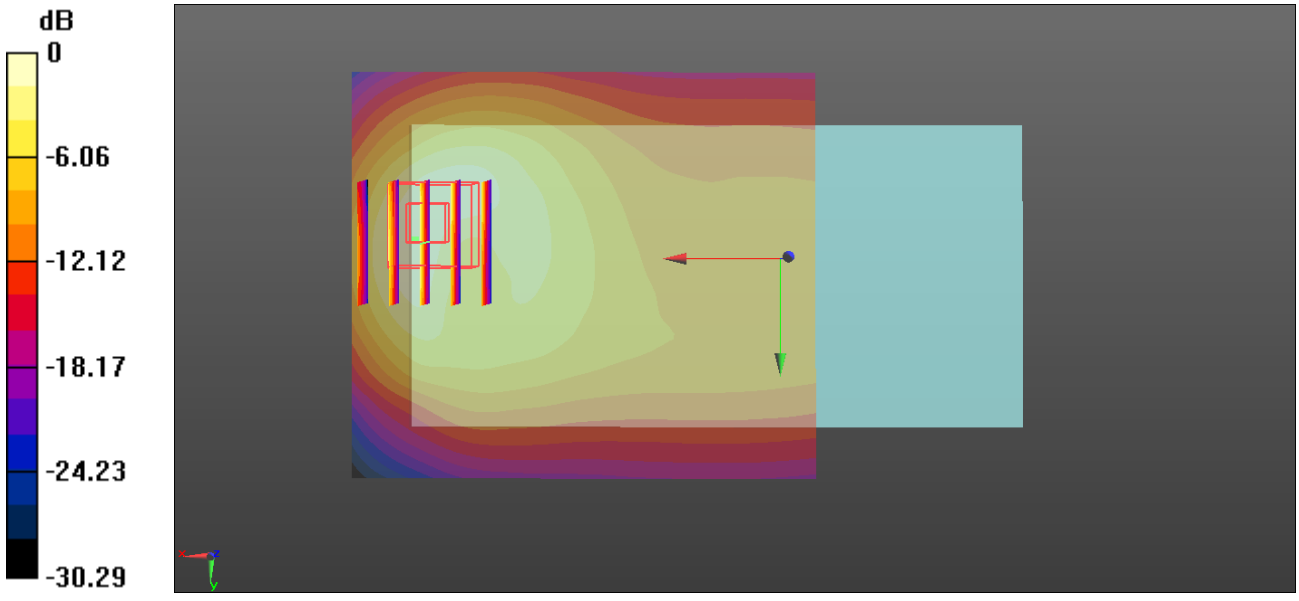
21_GSM850_GPRS (4Tx slots)_Back_5mm_Ch251

Communication System: UID 0, GPRS/EDGE (4 Tx slots) (0); Frequency: 848.8 MHz;Duty Cycle: 1:2.08
Medium: MSL_850 Medium parameters used: f = 848.8 MHz; σ = 0.999 S/m; ε_r = 56.465; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch251/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.65 W/kg

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.86 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 2.28 W/kg
SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.571 W/kg
Maximum value of SAR (measured) = 1.74 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

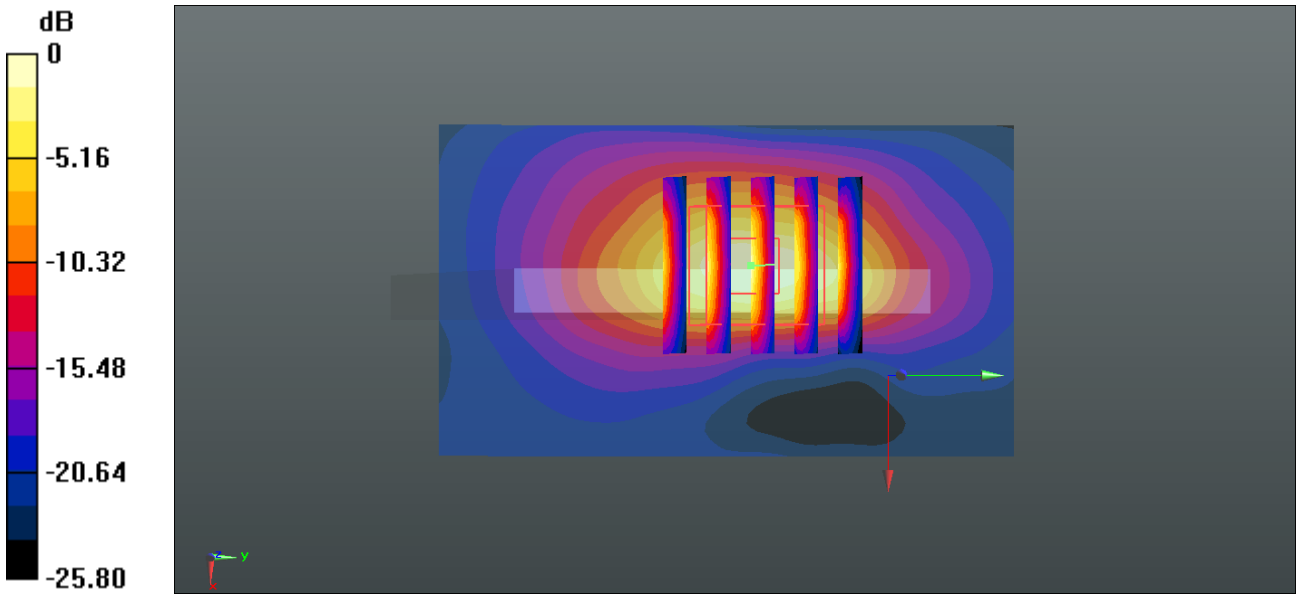
22_GSM1900_GPRS (4 Tx slots)_Bottom Side_5mm_Hotspot On_Ch512

Communication System: UID 0, PCS (0); Frequency: 1850.2 MHz;Duty Cycle: 1:2.08
Medium: MSL_1900 Medium parameters used: f = 1850.2 MHz; σ = 1.482 S/m; ε_r = 53.974; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch512/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.83 W/kg

Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.16 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 2.34 W/kg
SAR(1 g) = 1.22 W/kg; SAR(10 g) = 0.564 W/kg
Maximum value of SAR (measured) = 1.70 W/kg



0 dB = 1.83 W/kg = 2.62 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

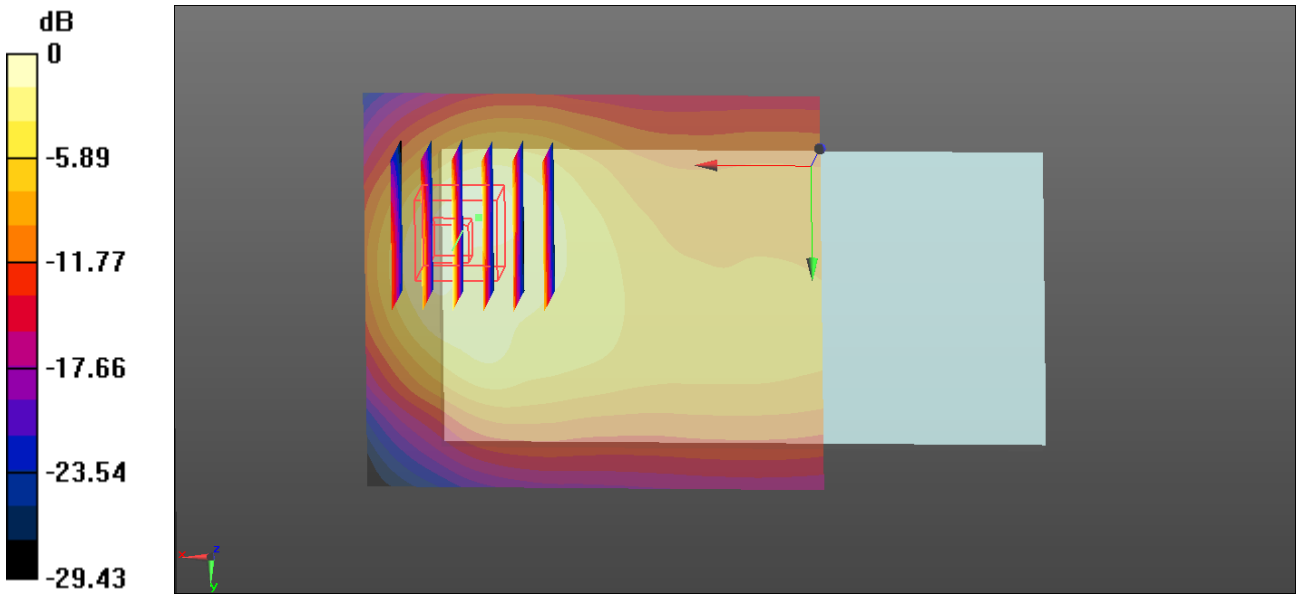
23_WCDMA V_RMC 12.2Kbps_Back_5mm_Ch4233

Communication System: UID 0, UMTS (0); Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 846.6 MHz; σ = 0.997 S/m; ε_r = 56.487; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch4233/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.50 W/kg

Ch4233/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.40 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 0.984 W/kg; SAR(10 g) = 0.521 W/kg
Maximum value of SAR (measured) = 1.63 W/kg



0 dB = 1.50 W/kg = 1.76 dBW/kg

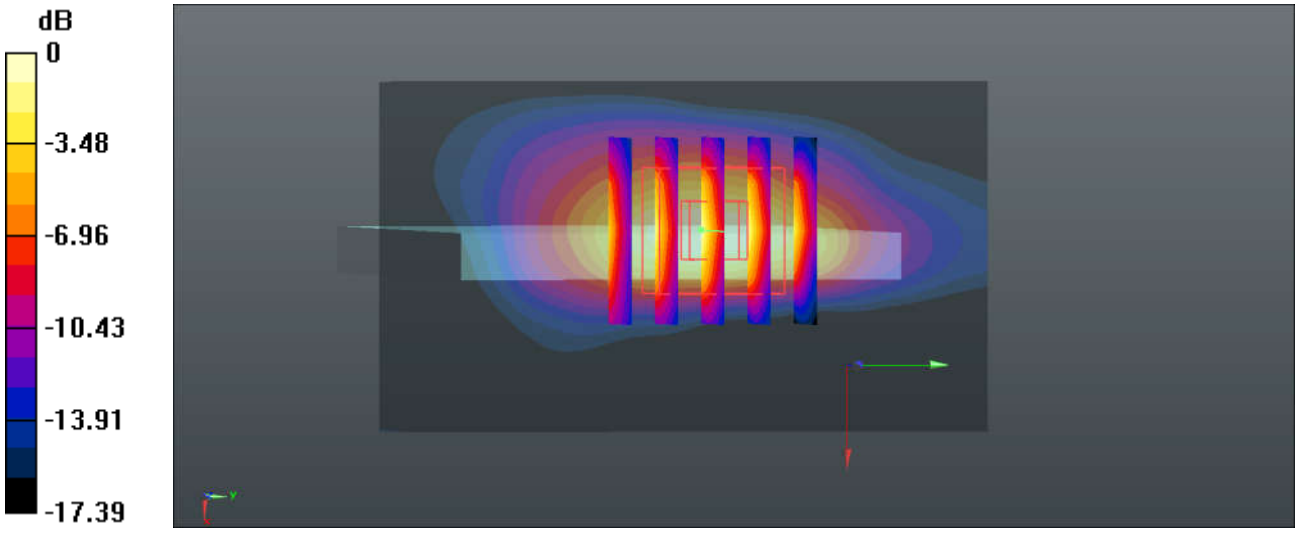
24_WCDMA IV_RMC 12.2Kbps_Bottom Side_5mm_Hotspot On_Ch1513

Communication System: UID 0, WCDMA (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: MSL_1750 Medium parameters used: f = 1752.6 MHz; σ = 1.494 S/m; ε_r = 54.093;
$\rho = 1000 kg/m^3$
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.82, 4.82, 4.82); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1513/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.37 W/kg

Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.48 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.859 W/kg; SAR(10 g) = 0.435 W/kg
Maximum value of SAR (measured) = 1.27 W/kg



0 dB = 1.27 W/kg = 1.04 dBW/kg

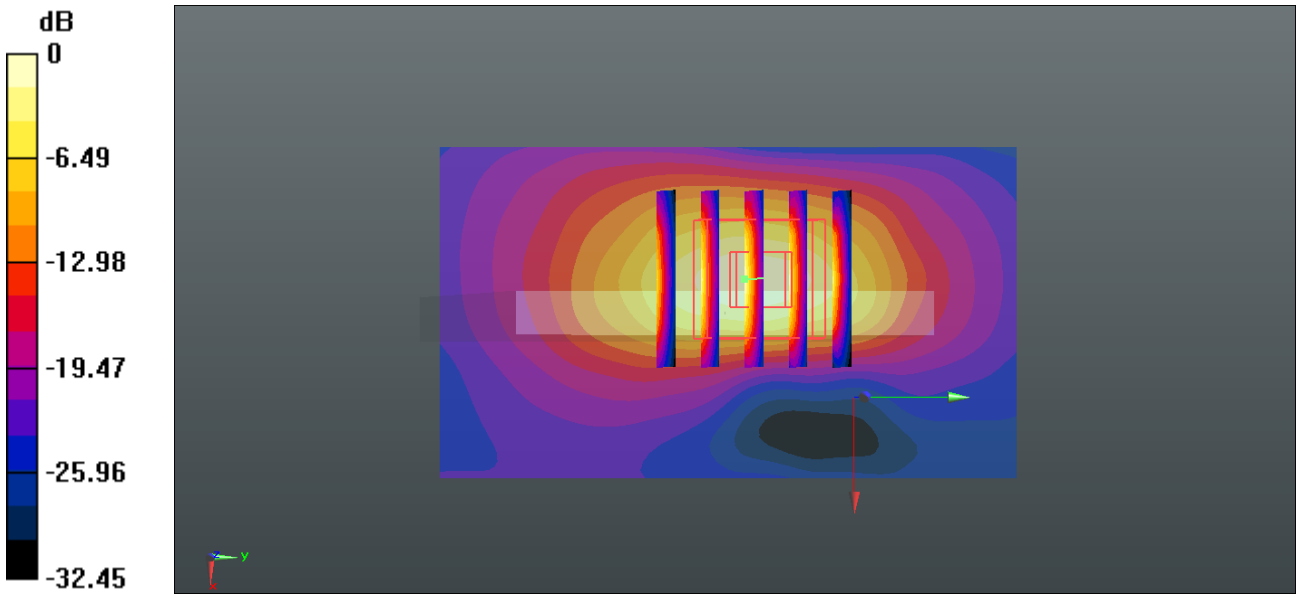
25_WCDMA II_RMC 12.2Kbps_Bottom Side_5mm_Hotspot On_Ch9400

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.514 S/m; ε_r = 53.87; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch9400/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.95 W/kg

Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.88 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 2.37 W/kg
SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.534 W/kg
Maximum value of SAR (measured) = 1.53 W/kg



0 dB = 1.95 W/kg = 2.90 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

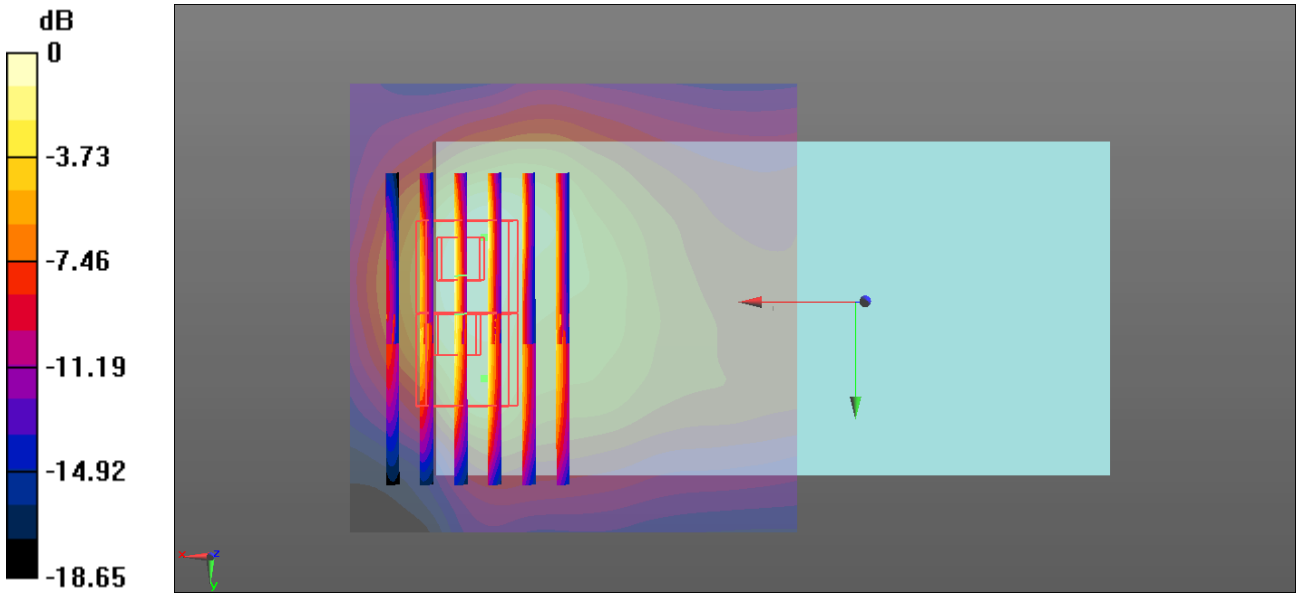
26_CDMA BC0_RTAP 153.6Kbps_Back_5mm_Ch777

Communication System: UID 0, CDMA2000 (0); Frequency: 848.31 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 848.31 MHz; σ = 0.998 S/m; ε_r = 56.473; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch777/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.64 W/kg

Ch777/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.06 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.693 W/kg
Maximum value of SAR (measured) = 1.66 W/kg



0 dB = 1.64 W/kg = 2.15 dBW/kg

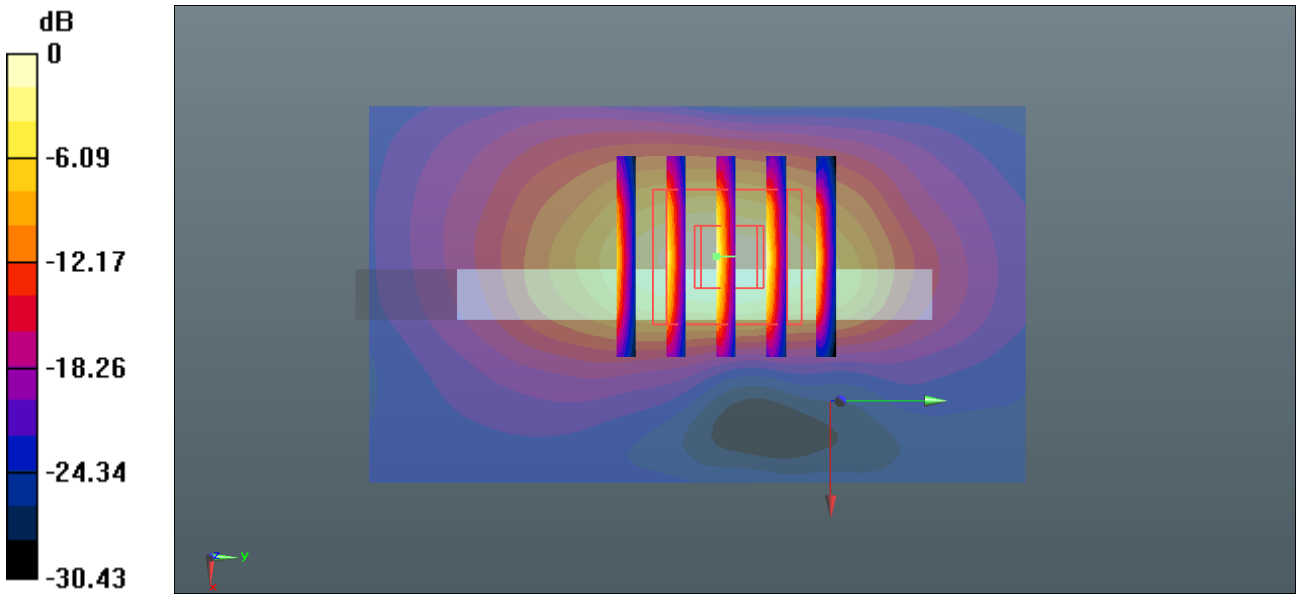
27_CDMA BC1_RTAP 153.6Kbps_Bottom Side_5mm_Hotspot On_Ch25

Communication System: UID 0, CDMA (0); Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1851.25 MHz; σ = 1.483 S/m; ε_r = 53.971; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch25/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.98 W/kg

Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.61 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 2.38 W/kg
SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.546 W/kg
Maximum value of SAR (measured) = 1.57 W/kg



0 dB = 1.98 W/kg = 2.97 dBW/kg

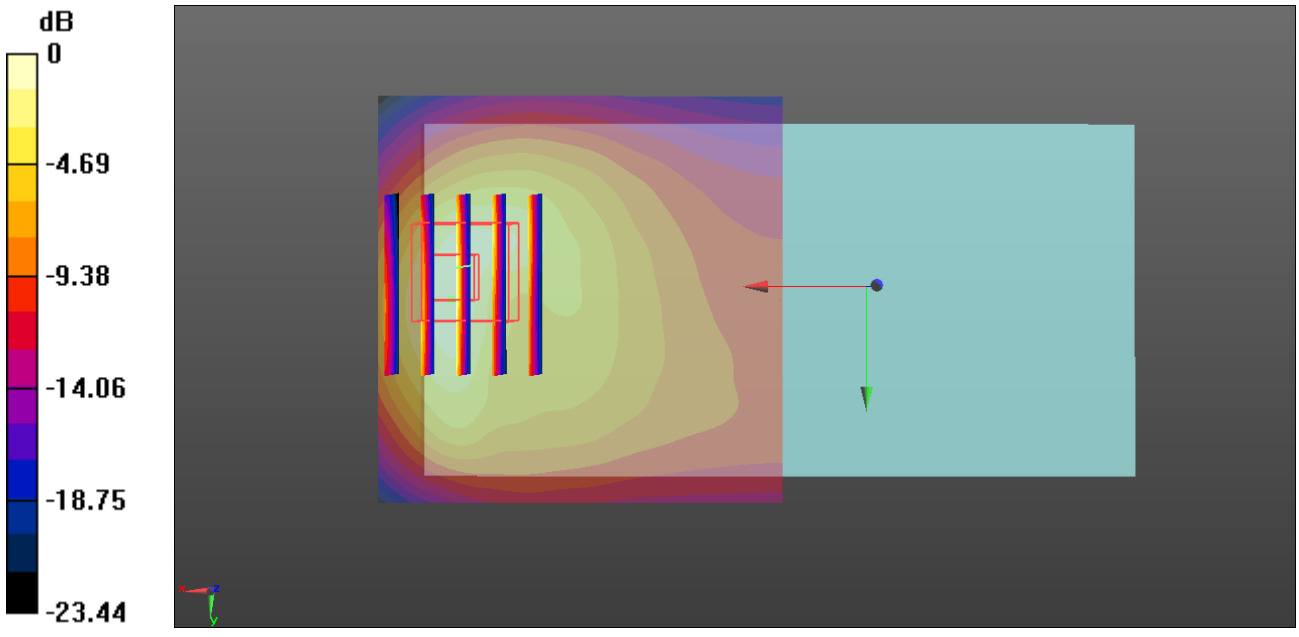
28_CDMA BC10_RTAP 153.6Kbps_Back_5mm_Ch580

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 820.5 MHz; σ = 0.97 S/m; ε_r = 56.725; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch580/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.82 W/kg

Ch580/Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.25 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.36 W/kg
SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.551 W/kg
Maximum value of SAR (measured) = 1.86 W/kg



0 dB = 1.82 W/kg = 2.60 dBW/kg

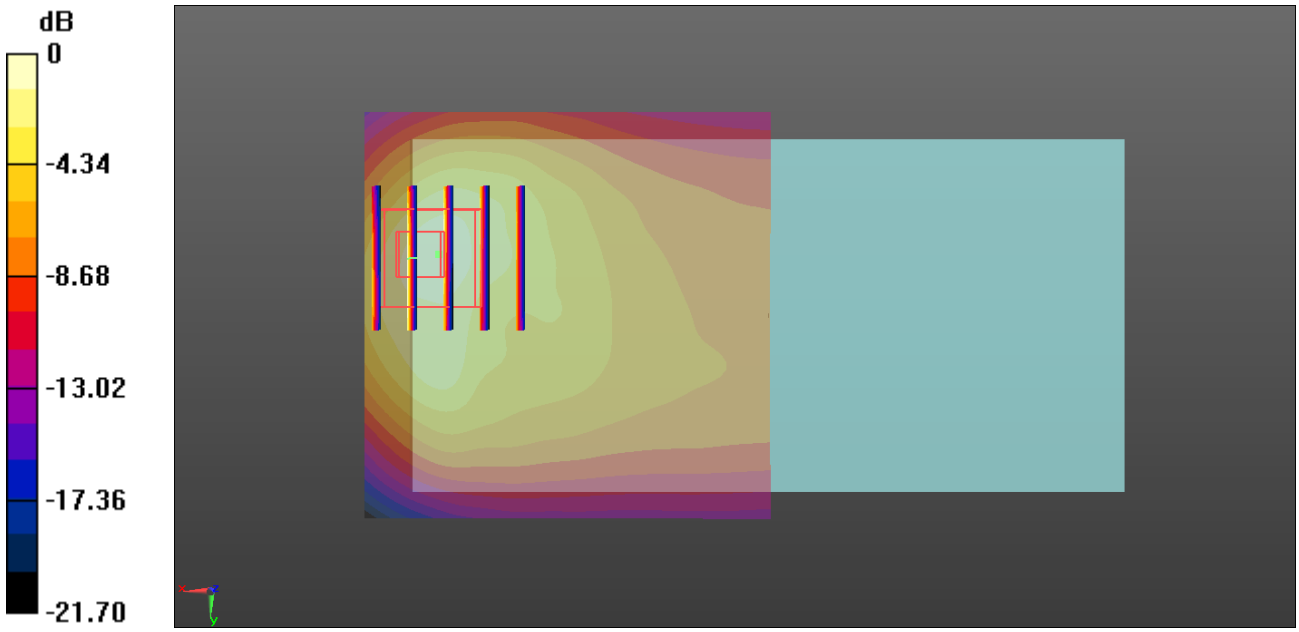
29_LTE Band 13_10M_QPSK_1RB_25Offset_Back_5mm_Ch23230

Communication System: UID 0, FDD_LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: MSL_750 Medium parameters used: f = 782 MHz; σ = 0.989 S/m; ε_r = 56.05; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(9.7, 9.7, 9.7); Calibrated: 2018.5.31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch23230/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.51 W/kg

Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 37.63 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.77 W/kg
SAR(1 g) = 0.844 W/kg; SAR(10 g) = 0.463 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

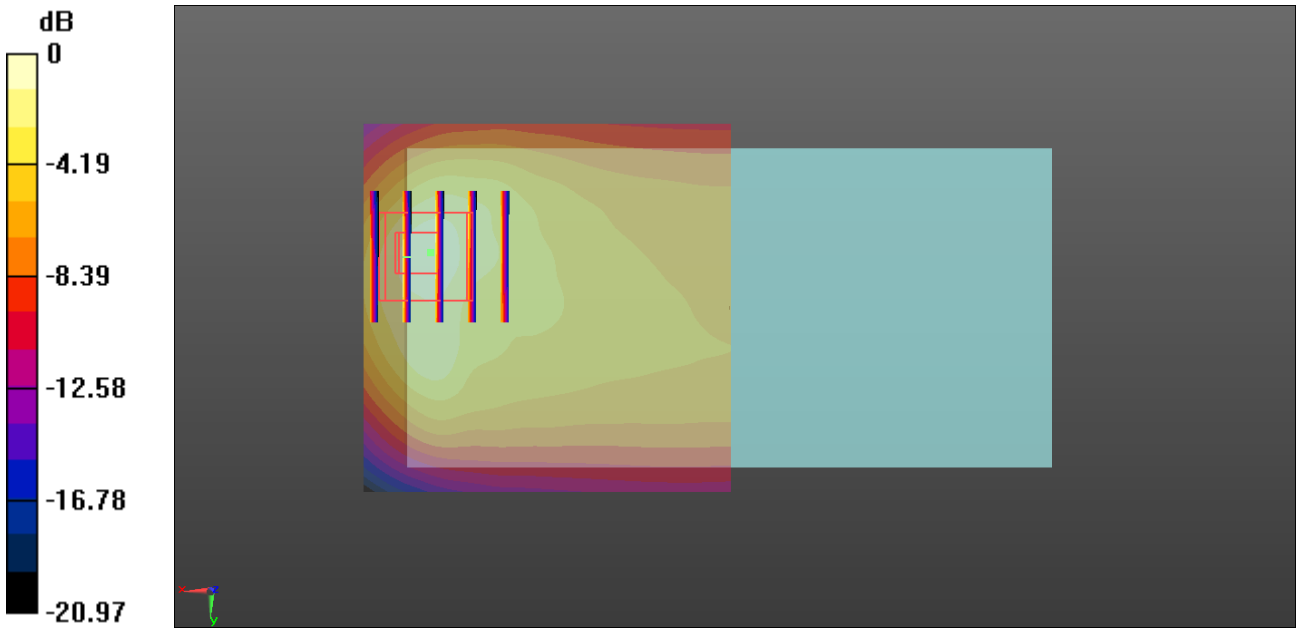
30_LTE Band 12_10M_QPSK_1RB_25Offset_Back_5mm_Ch23095

Communication System: UID 0, FDD_LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: MSL_750 Medium parameters used: f = 707.5 MHz; σ = 0.939 S/m; ε_r = 56.725; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(9.7, 9.7, 9.7); Calibrated: 2018.5.31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch23095/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.43 W/kg

Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 38.57 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 0.811 W/kg; SAR(10 g) = 0.449 W/kg
Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.43 W/kg = 1.55 dBW/kg

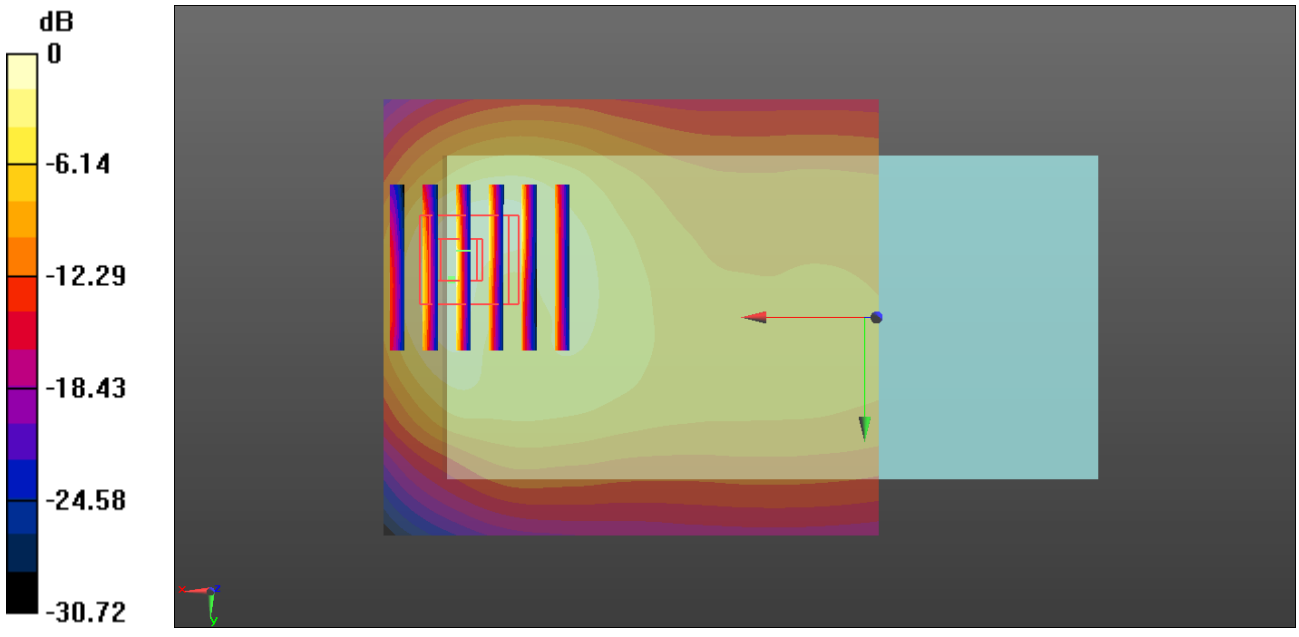
31_LTE Band 26_15M_QPSK_1RB_37Offset_Back_5mm_Ch26865

Communication System: UID 0, FDD_LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 831.5 MHz; σ = 0.981 S/m; ε_r = 56.624; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch26865/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.62 W/kg

Ch26865/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.96 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.07 W/kg
SAR(1 g) = 0.997 W/kg; SAR(10 g) = 0.534 W/kg
Maximum value of SAR (measured) = 1.62 W/kg



0 dB = 1.62 W/kg = 2.10 dBW/kg

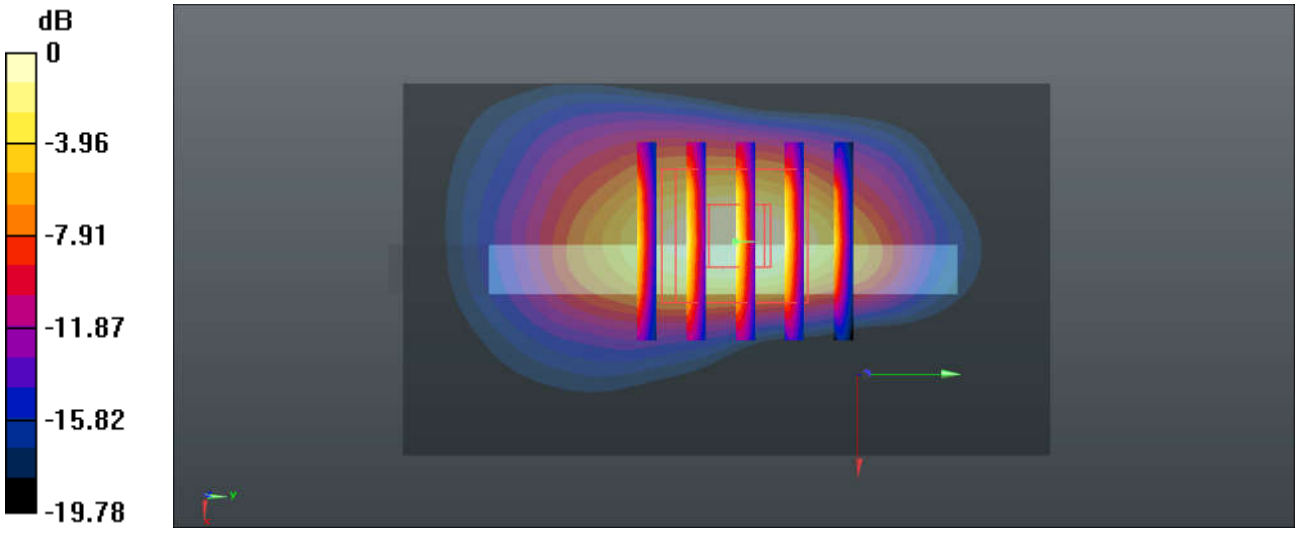
32_LTE Band 66_20M_QPSK_100RB_0Offset_Bottom Side_5mm_Hotspot On_Ch132572

Communication System: UID 0, LTE-FDD (0); Frequency: 1770 MHz;Duty Cycle: 1:1
Medium: MSL_1750 Medium parameters used: f = 1770 MHz; σ = 1.509 S/m; ε_r = 54.05; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.82, 4.82, 4.82); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132572/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.95 W/kg

Ch132572/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.90 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.39 W/kg
SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.574 W/kg
Maximum value of SAR (measured) = 1.63 W/kg



0 dB = 1.63 W/kg = 2.12 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

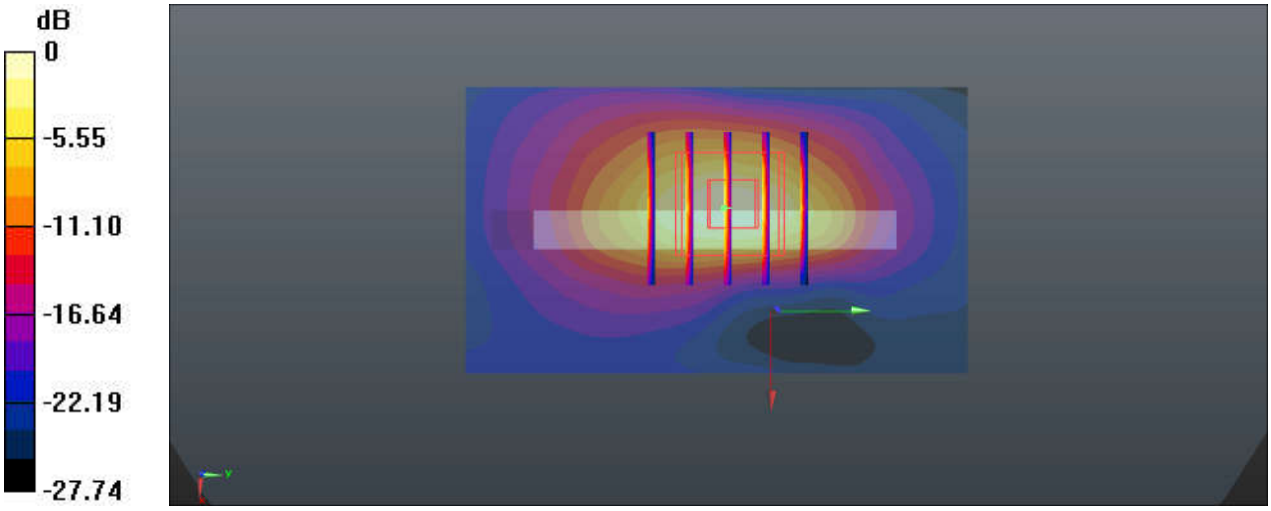
33_LTE Band 25_20M_QPSK_50RB_0Offset_Bottom Side_5mm_Hotspot On_Ch26590

Communication System: UID 0, LTE-FDD (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1905 MHz; σ = 1.542 S/m; ε_r = 53.796; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.11 (7439)

Ch26590/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.72 W/kg

Ch26590/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.63 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.20 W/kg
SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.494 W/kg
Maximum value of SAR (measured) = 1.43 W/kg



0 dB = 1.72 W/kg = 2.36 dBW/kg

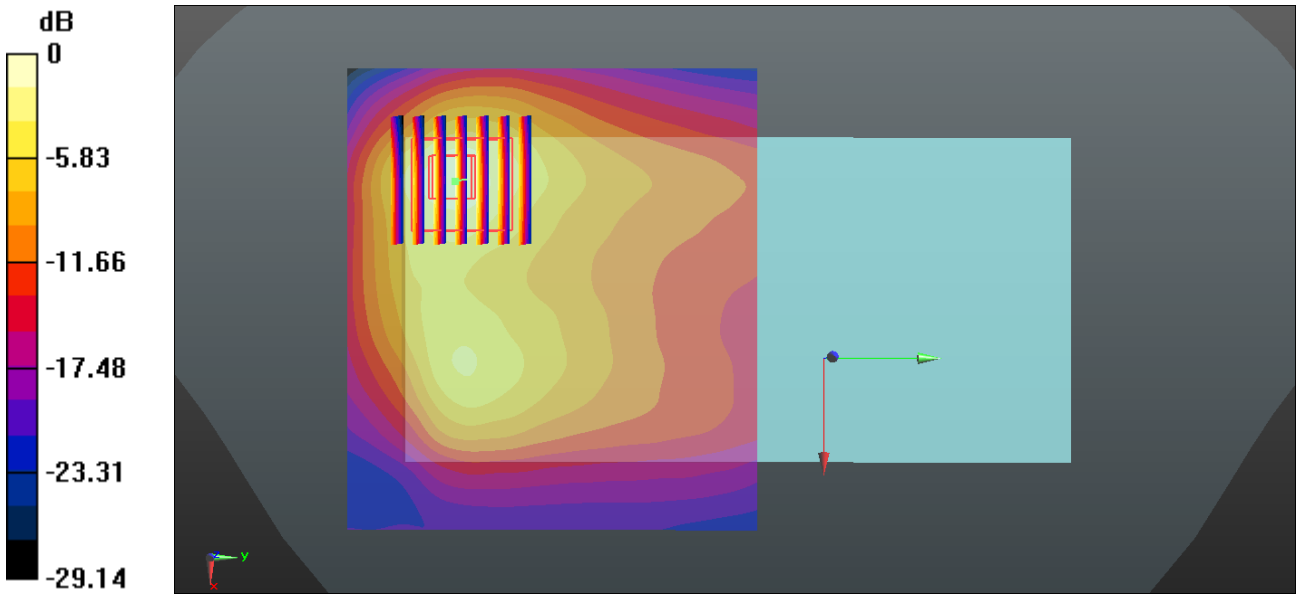
34_LTE Band 7_20M_QPSK_50RB_0Offset_Back_5mm_Sensor On_Ch21350

Communication System: UID 0, LTE-FDD (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium: MSL_2600 Medium parameters used: f = 2560 MHz; σ = 2.166 S/m; ε_r = 51.393; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.15, 4.15, 4.15); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch21350/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.65 W/kg

Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.17 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.66 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.496 W/kg
Maximum value of SAR (measured) = 1.50 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

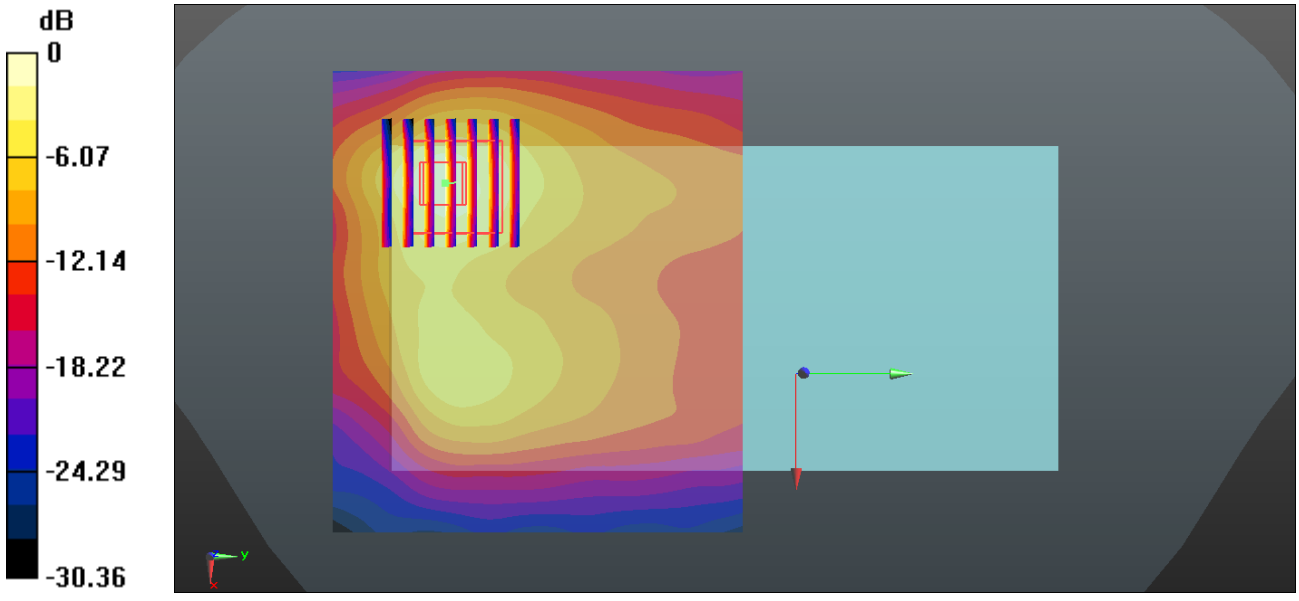
35_LTE Band 41_20M_QPSK_1RB_99Offset_Back_5mm_Psensor_Ch41055

Communication System: UID 0, LTE-TDD (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1.59
Medium: MSL_2600 Medium parameters used: f = 2636.5 MHz; σ = 2.273 S/m; ε_r = 51.095; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃； Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.15, 4.15, 4.15); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch41055/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 2.31 W/kg

Ch41055/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 30.98 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.58 W/kg
SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.633 W/kg
Maximum value of SAR (measured) = 2.03 W/kg



0 dB = 2.31 W/kg = 3.64 dBW/kg

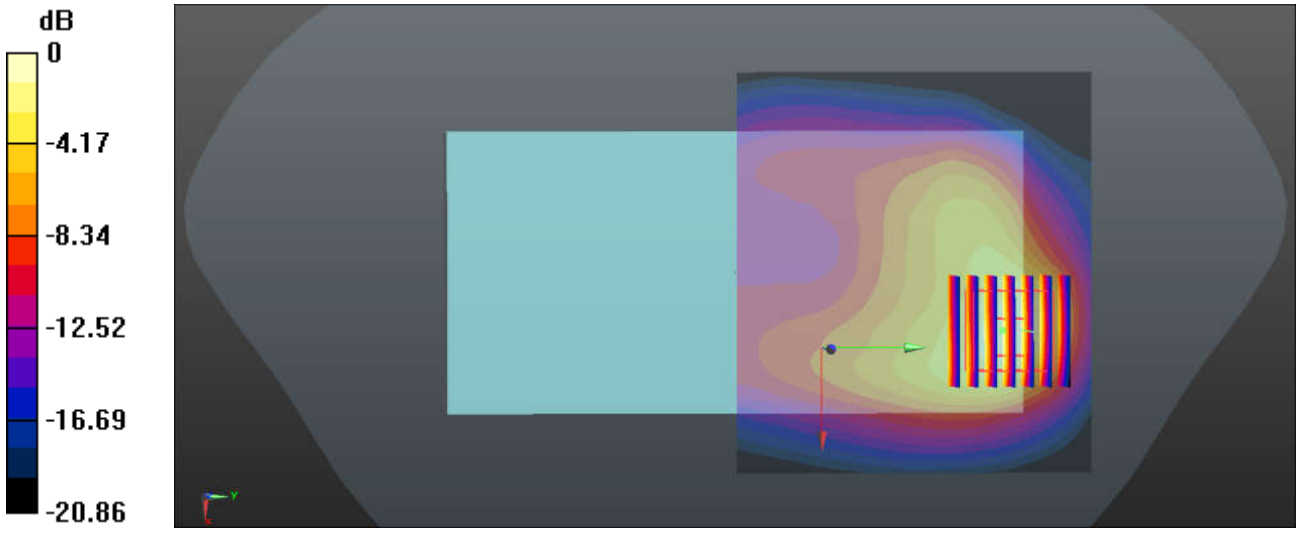
36_WLAN2.4GHz_802.11b 1Mbps_Back_5mm_Sensor On_Ch11

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.025
Medium: MSL_2450 Medium parameters used: f = 2462 MHz; σ = 2.027 S/m; ε_r = 51.75; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.41, 4.41, 4.41); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.57 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.66 W/kg
SAR(1 g) = 0.769 W/kg; SAR(10 g) = 0.357 W/kg
Maximum value of SAR (measured) = 0.979 W/kg



0 dB = 0.979 W/kg = -0.09 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.10

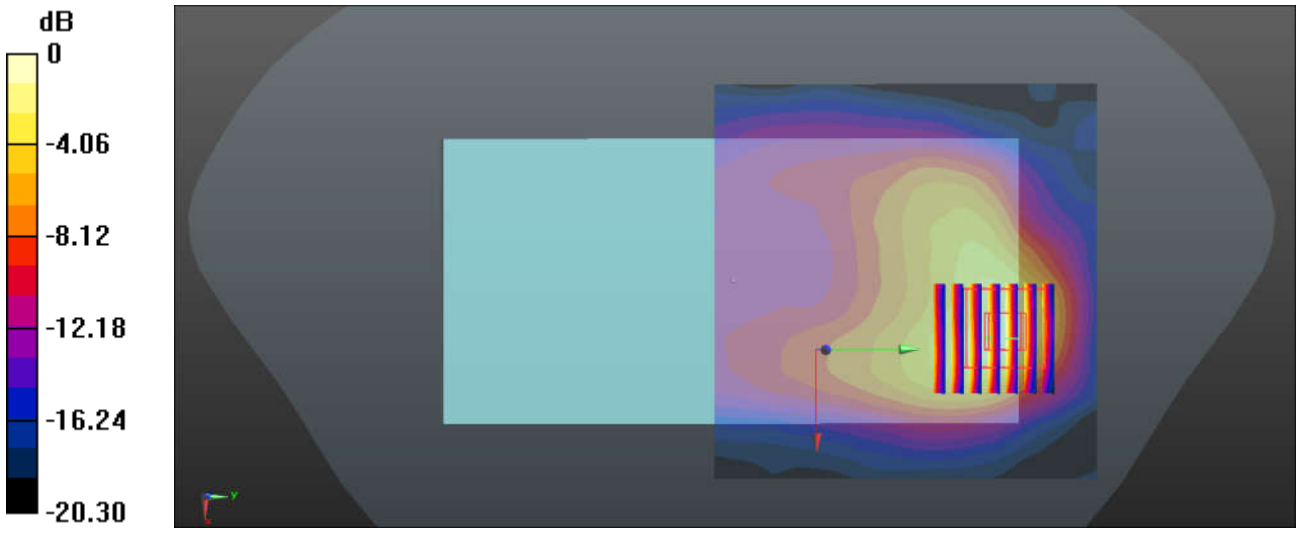
37_Bluetooth_DH5 1Mbps_Back_5mm_Off_Ch39

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.297
Medium: MSL_2450 Medium parameters used: f = 2441 MHz; σ = 1.996 S/m; ε_r = 51.837; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.41, 4.41, 4.41); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (91x71x1): Interpolated grid: dx=1.200 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.127 W/kg

Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.000 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.211 W/kg
SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.046 W/kg
Maximum value of SAR (measured) = 0.129 W/kg



0 dB = 0.129 W/kg = -8.89 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.13

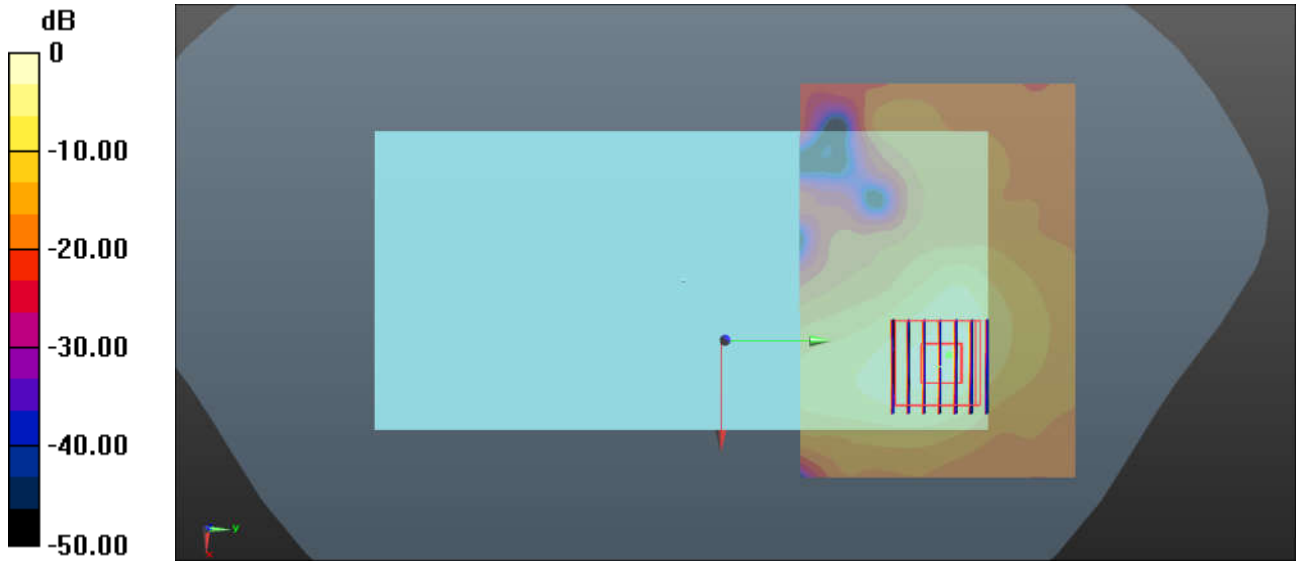
38_WLAN5GHz_802.11a 6Mbps_Back_5mm_On_Ch48

Communication System: UID 0, 802.11a (0); Frequency: 5240 MHz;Duty Cycle: 1:1.073
Medium: MSL_5000 Medium parameters used: f = 5240 MHz; σ = 5.537 S/m; ε_r = 47.03; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.4, 4.4, 4.4); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch48/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.24 W/kg

Ch48/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 23.77 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 4.32 W/kg
SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.256 W/kg
Maximum value of SAR (measured) = 2.42 W/kg



0 dB = 2.24 W/kg = 3.50 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.13

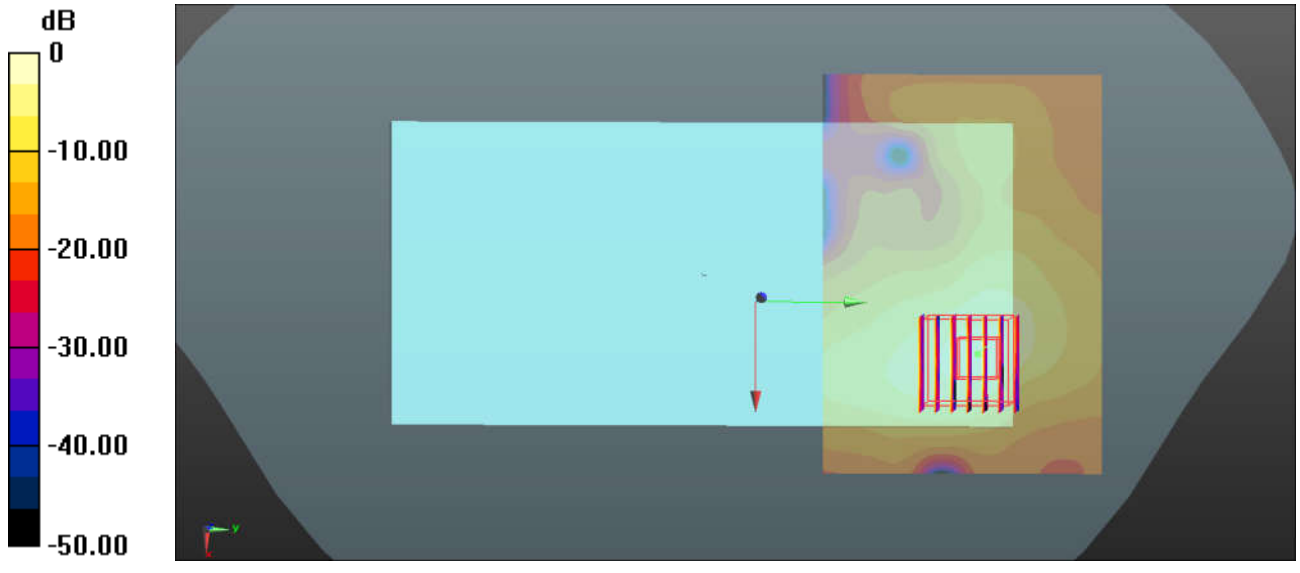
39_WLAN5GHz_802.11a 6Mbps_Back_5mm_On_Ch149

Communication System: UID 0, 802.11a (0); Frequency: 5745 MHz;Duty Cycle: 1:1.073
Medium: MSL_5000 Medium parameters used: f = 5745 MHz; σ = 6.147 S/m; ε_r = 47.129; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.31, 4.31, 4.31); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch149/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.17 W/kg

Ch149/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 21.21 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 4.05 W/kg
SAR(1 g) = 0.734 W/kg; SAR(10 g) = 0.210 W/kg
Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 2.17 W/kg = 3.36 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

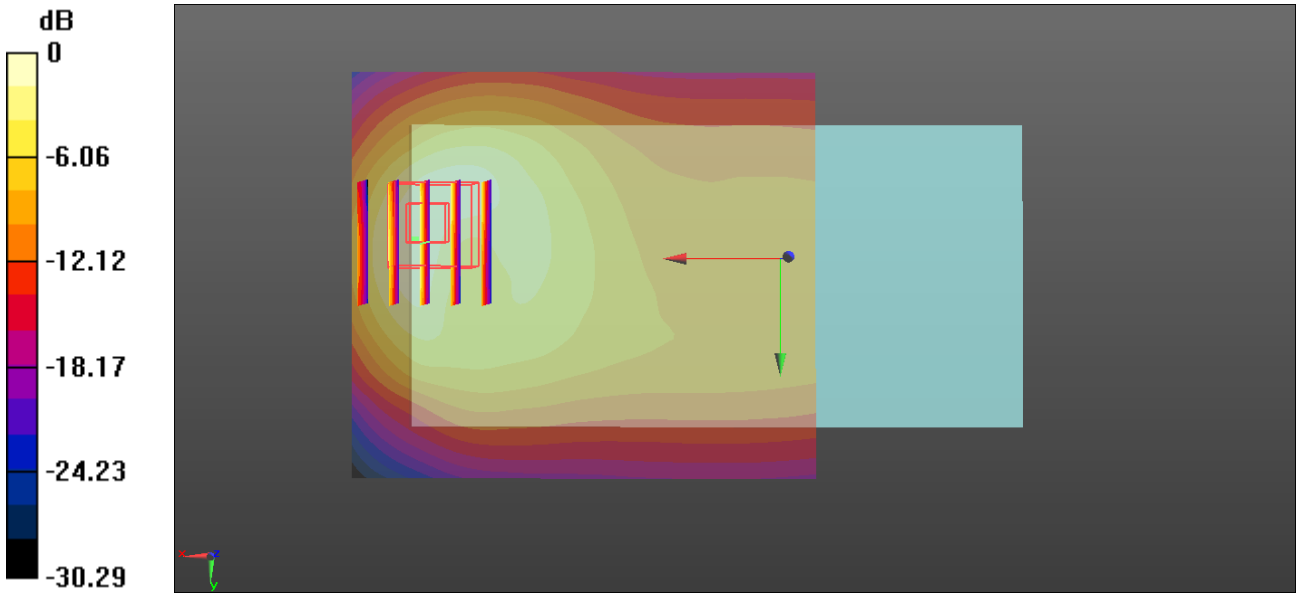
40_GSM850_GPRS (4Tx slots)_Back_5mm_Ch251

Communication System: UID 0, GPRS/EDGE (4 Tx slots) (0); Frequency: 848.8 MHz;Duty Cycle: 1:2.08
Medium: MSL_850 Medium parameters used: f = 848.8 MHz; σ = 0.999 S/m; ε_r = 56.465; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch251/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.65 W/kg

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.86 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 2.28 W/kg
SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.571 W/kg
Maximum value of SAR (measured) = 1.74 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

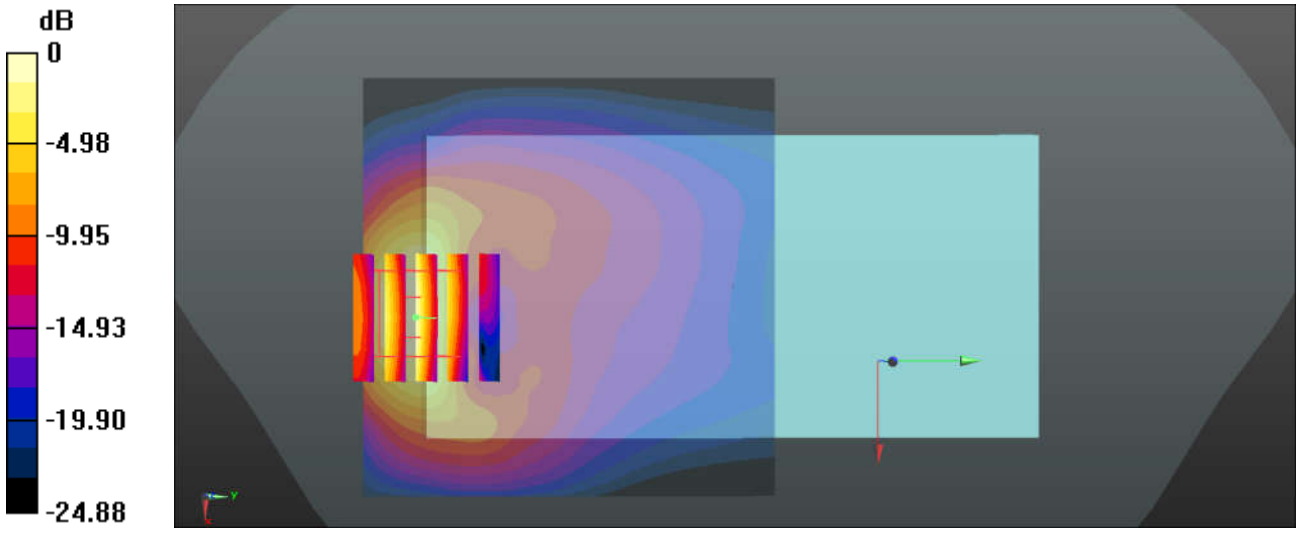
41_GSM1900_GPRS (4 Tx slots)_Back_5mm_Sensor On_Ch512

Communication System: UID 0, PCS (0); Frequency: 1850.2 MHz;Duty Cycle: 1:2.08
Medium: MSL_1900 Medium parameters used: f = 1850.2 MHz; σ = 1.482 S/m; ε_r = 53.974; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch512/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.68 W/kg

Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 34.86 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.40 W/kg
SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.626 W/kg
Maximum value of SAR (measured) = 1.70 W/kg



0 dB = 1.70 W/kg = 2.30 dBW/kg

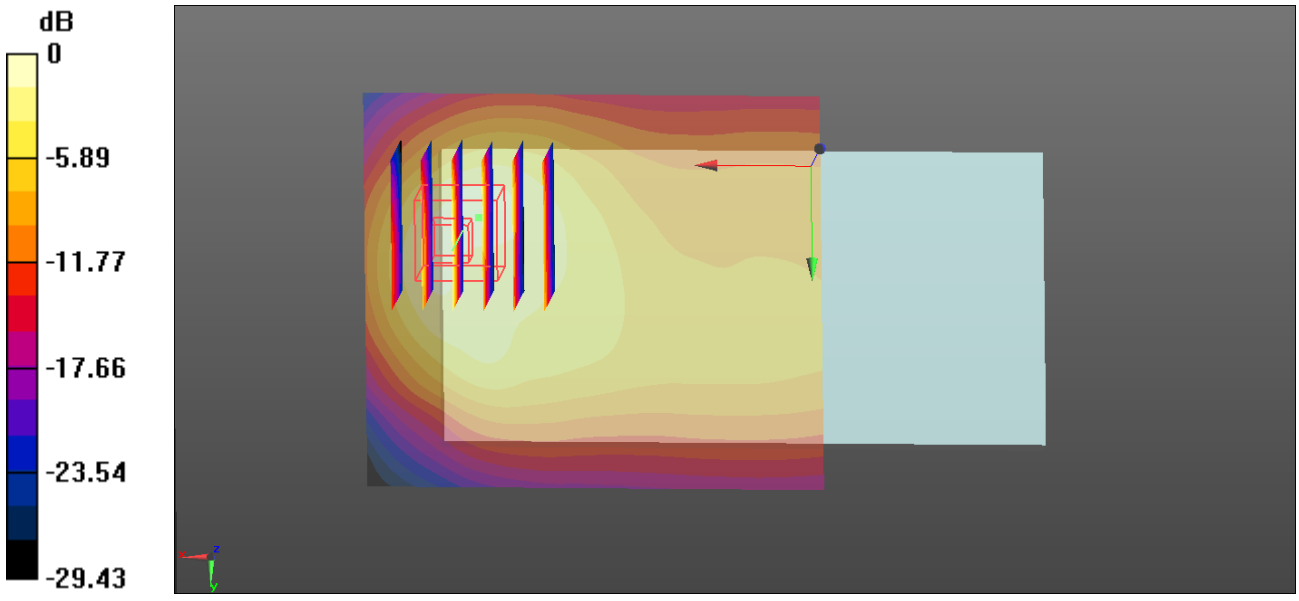
42_WCDMA V_RMC 12.2Kbps_Back_5mm_Ch4233

Communication System: UID 0, UMTS (0); Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 846.6 MHz; σ = 0.997 S/m; ε_r = 56.487; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch4233/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.50 W/kg

Ch4233/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.40 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 0.984 W/kg; SAR(10 g) = 0.521 W/kg
Maximum value of SAR (measured) = 1.63 W/kg



0 dB = 1.50 W/kg = 1.76 dBW/kg

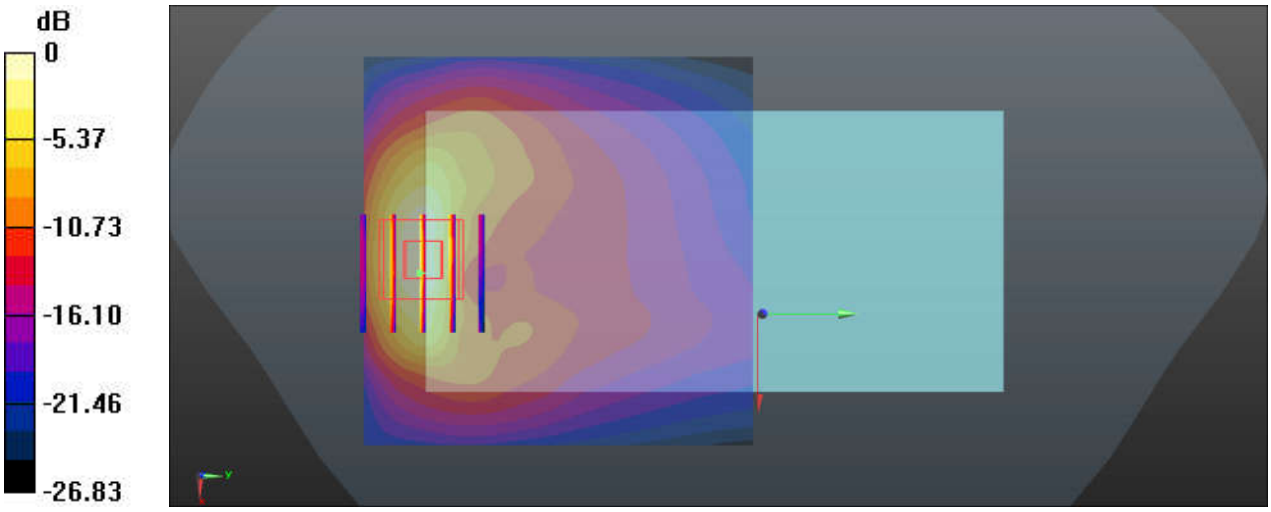
43_WCDMA IV_RMC 12.2Kbps_Back_5mm_Headset_Sensor On_Ch1312

Communication System: UID 0, WCDMA (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: MSL_1750 Medium parameters used: f = 1712.4 MHz; σ = 1.447 S/m; ε_r = 54.194; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.82, 4.82, 4.82); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.11 (7439)

Ch1312/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.55 W/kg

Ch1312/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.91 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 2.35 W/kg
SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.631 W/kg
Maximum value of SAR (measured) = 1.56 W/kg



0 dB = 1.55 W/kg = 1.90 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

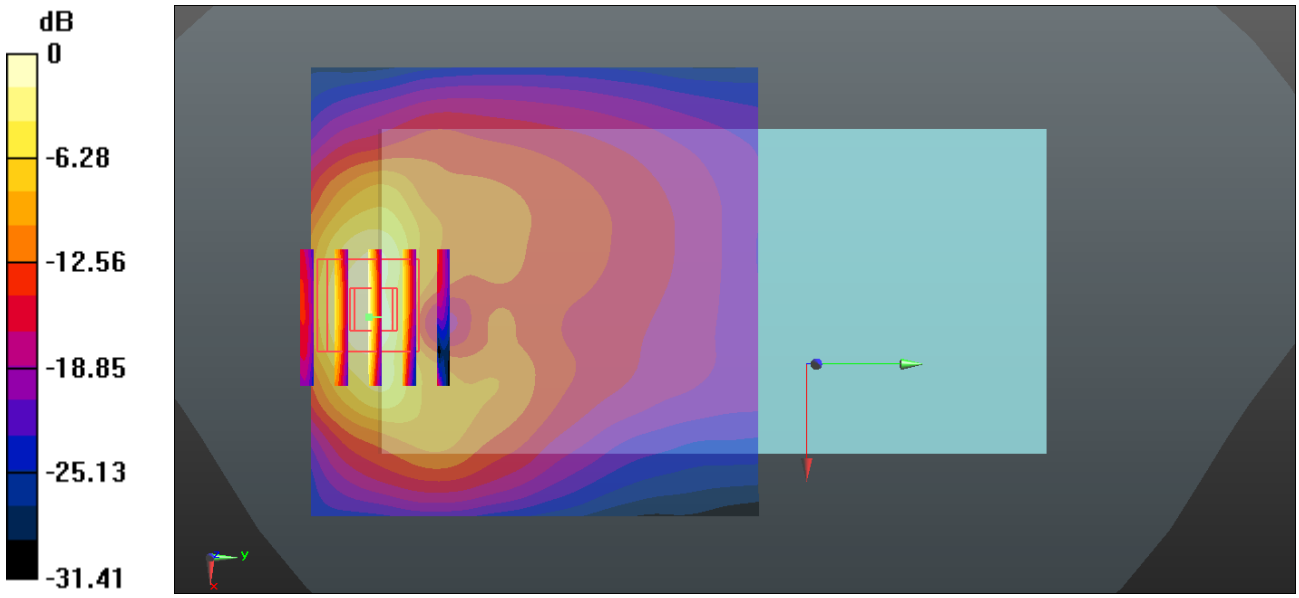
44_WCDMA II_RMC 12.2Kbps_Back_5mm_Sensor On_Ch9400

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.514 S/m; ε_r = 53.87; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch9400/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.52 W/kg

Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.65 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.26 W/kg
SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.541 W/kg
Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.52 W/kg = 1.82 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

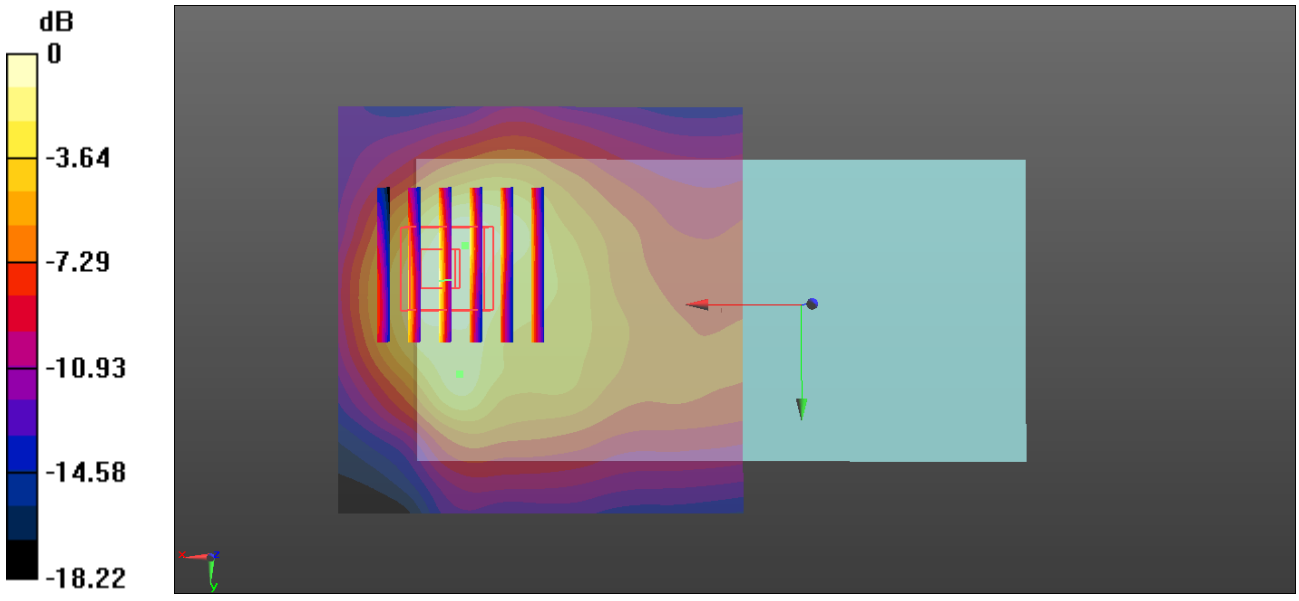
45_CDMA BC0_RC3 SO32 (F+SCH) _Back_5mm_Ch384

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 836.52 MHz; σ = 0.986 S/m; ε_r = 56.574; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch384/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.61 W/kg

Ch384/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 43.88 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 2.20 W/kg
SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.721 W/kg
Maximum value of SAR (measured) = 1.82 W/kg



0 dB = 1.61 W/kg = 2.07 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

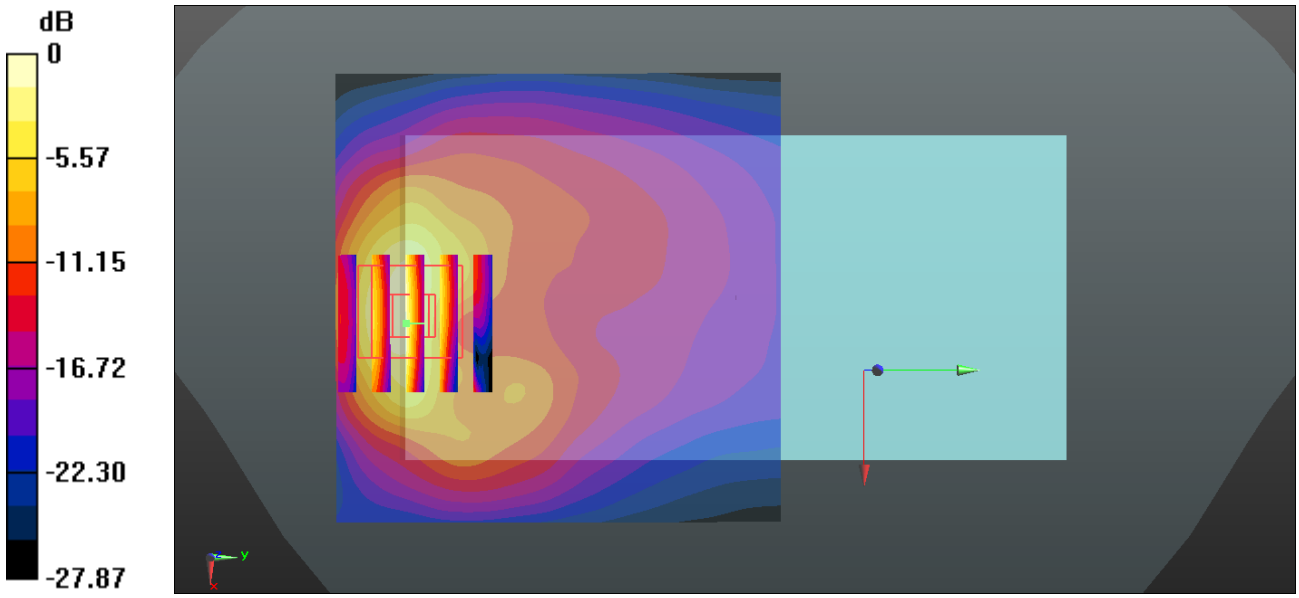
46_CDMA BC1_RC3 SO32 (F+SCH) _Back_5mm_Sensor On_Ch1175

Communication System: UID 0, CDMA (0); Frequency: 1908.75 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1908.75 MHz; σ = 1.547 S/m; ε_r = 53.782; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch1175/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.47 W/kg

Ch1175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.87 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.39 W/kg
SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.549 W/kg
Maximum value of SAR (measured) = 1.56 W/kg



0 dB = 1.47 W/kg = 1.67 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

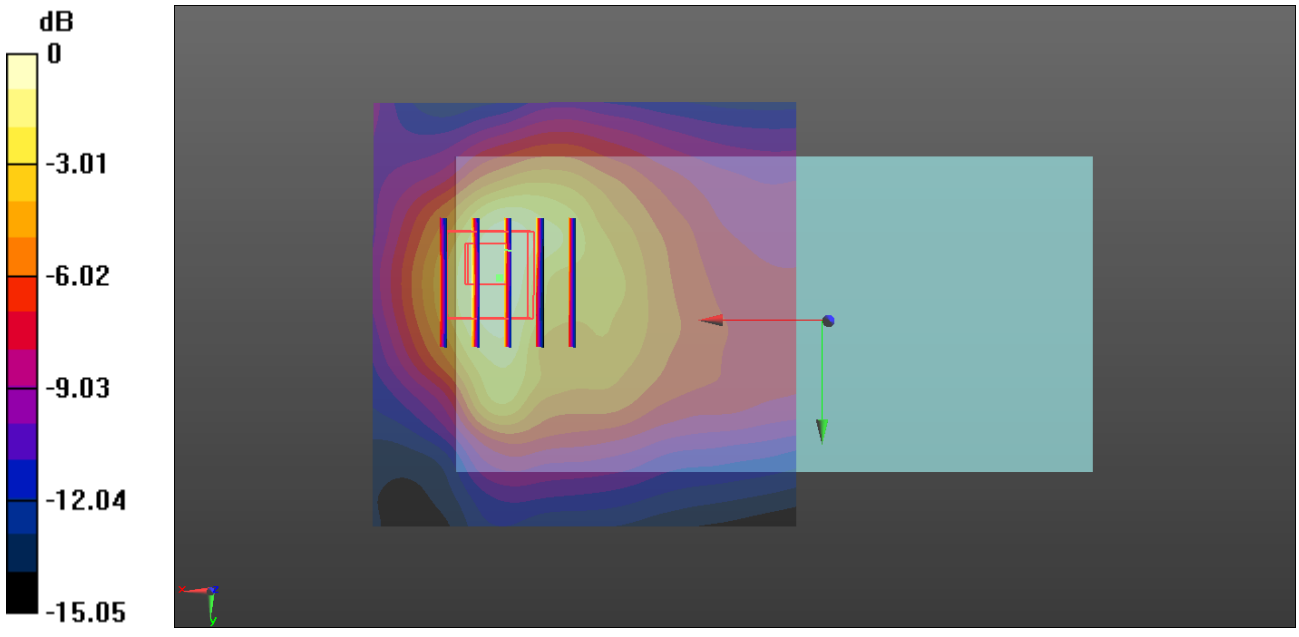
47_CDMA BC10_RC3 SO32 (F+SCH) _Back_5mm_Ch684

Communication System: UID 0, CDMA2000 (0); Frequency: 823.1 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 823.1 MHz; σ = 0.972 S/m; ε_r = 56.695; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch684/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.58 W/kg

Ch684/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 38.44 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.92 W/kg
SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.649 W/kg
Maximum value of SAR (measured) = 1.58 W/kg



0 dB = 1.58 W/kg = 1.99 dBW/kg

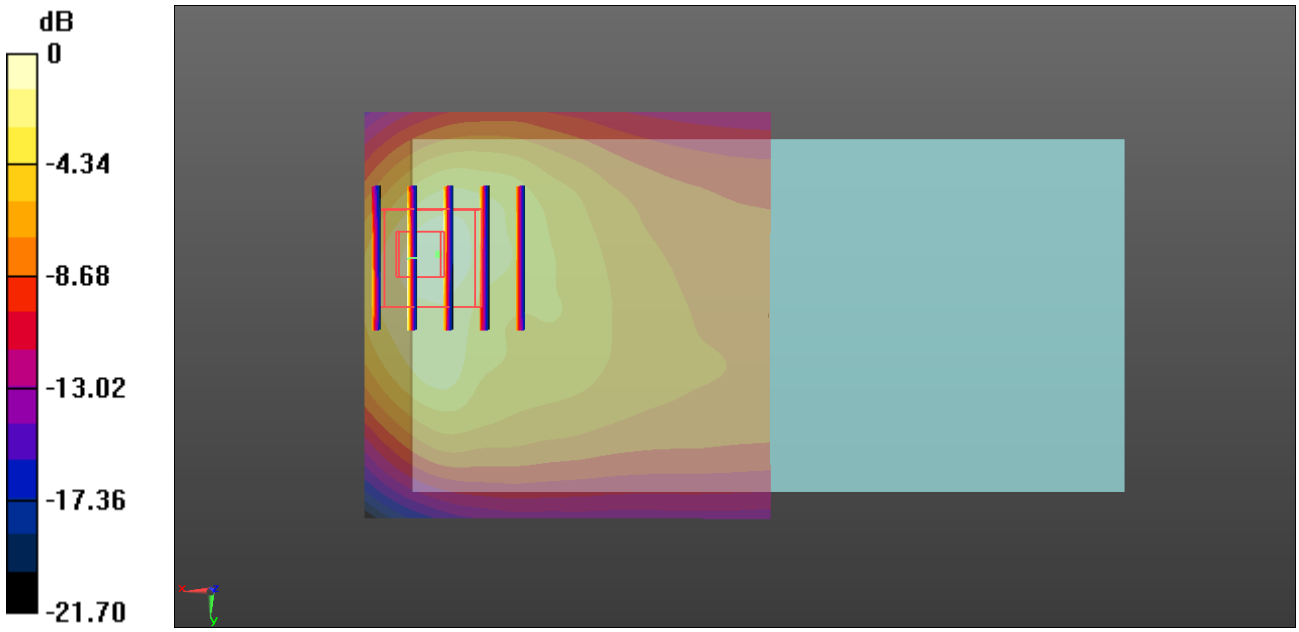
48_LTE Band 13_10M_QPSK_1RB_25Offset_Back_5mm_Ch23230

Communication System: UID 0, FDD_LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: MSL_750 Medium parameters used: f = 782 MHz; σ = 0.989 S/m; ε_r = 56.05; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(9.7, 9.7, 9.7); Calibrated: 2018.5.31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch23230/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.51 W/kg

Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 37.63 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.77 W/kg
SAR(1 g) = 0.844 W/kg; SAR(10 g) = 0.463 W/kg
Maximum value of SAR (measured) = 1.35 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

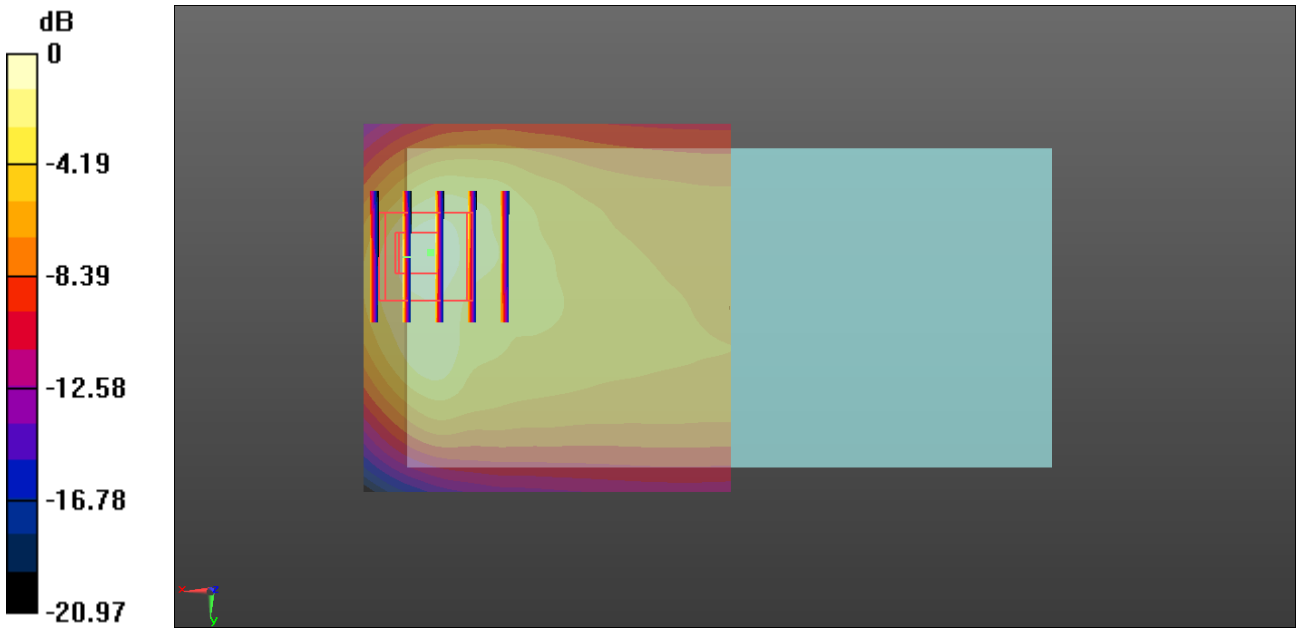
49_LTE Band 12_10M_QPSK_1RB_25Offset_Back_5mm_Ch23095

Communication System: UID 0, FDD_LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: MSL_750 Medium parameters used: f = 707.5 MHz; σ = 0.939 S/m; ε_r = 56.725; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(9.7, 9.7, 9.7); Calibrated: 2018.5.31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM1; Type: SAM; Serial: TP-1697
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch23095/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.43 W/kg

Ch23095/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 38.57 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 0.811 W/kg; SAR(10 g) = 0.449 W/kg
Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.43 W/kg = 1.55 dBW/kg

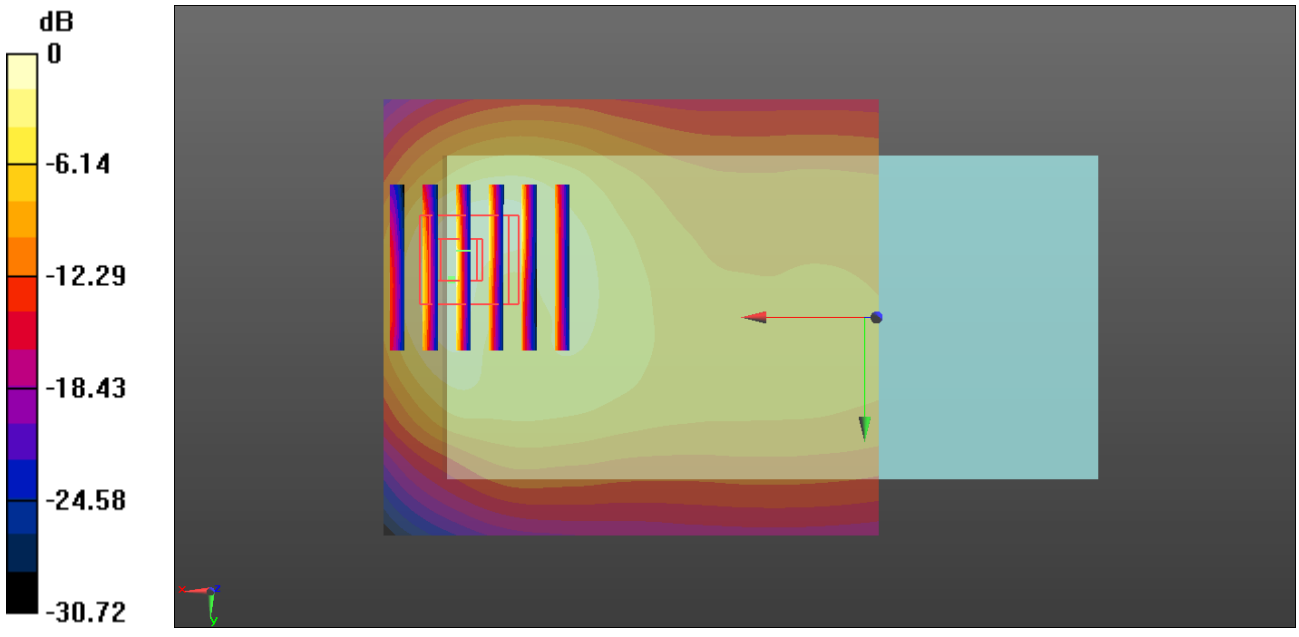
50_LTE Band 26_15M_QPSK_1RB_37Offset_Back_5mm_Ch26865

Communication System: UID 0, FDD_LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 831.5 MHz; σ = 0.981 S/m; ε_r = 56.624; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch26865/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.62 W/kg

Ch26865/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 42.96 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.07 W/kg
SAR(1 g) = 0.997 W/kg; SAR(10 g) = 0.534 W/kg
Maximum value of SAR (measured) = 1.62 W/kg



0 dB = 1.62 W/kg = 2.10 dBW/kg

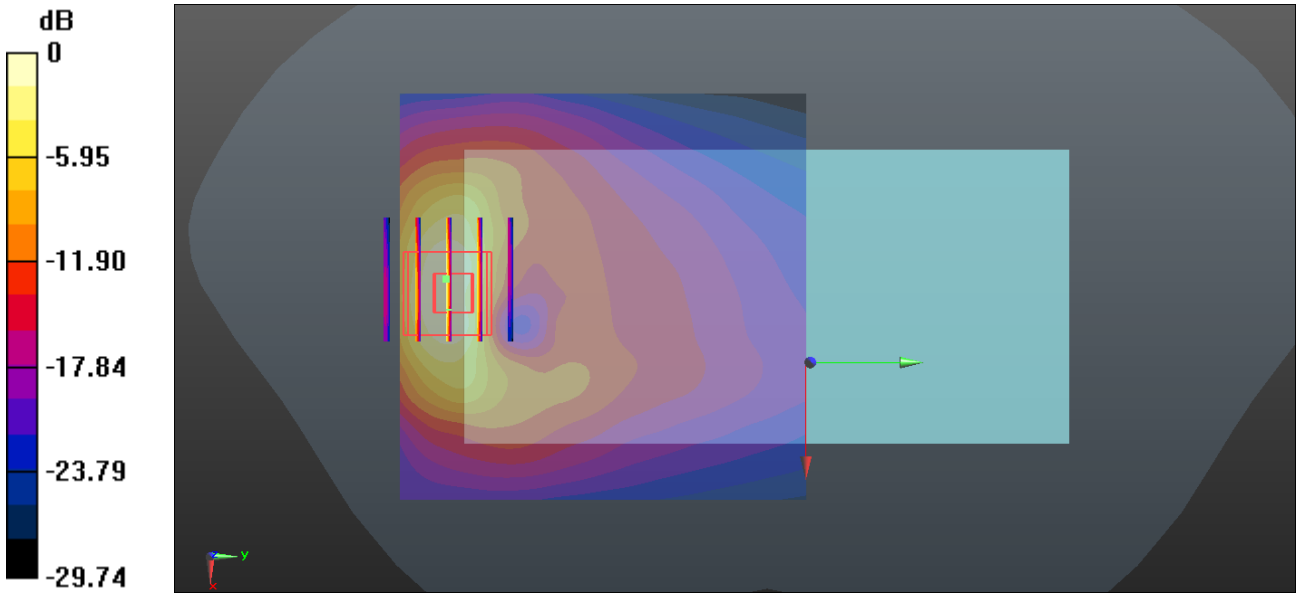
51_LTE Band 66_20M_QPSK_50RB_0Offset_Back_5mm_Headset_Sensor On_Ch132072

Communication System: UID 0, LTE-FDD (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium: MSL_1750 Medium parameters used: f = 1720 MHz; σ = 1.455 S/m; ε_r = 54.164; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.82, 4.82, 4.82); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch132072/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.48 W/kg

Ch132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.61 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.601 W/kg
Maximum value of SAR (measured) = 1.44 W/kg



0 dB = 1.48 W/kg = 1.70 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

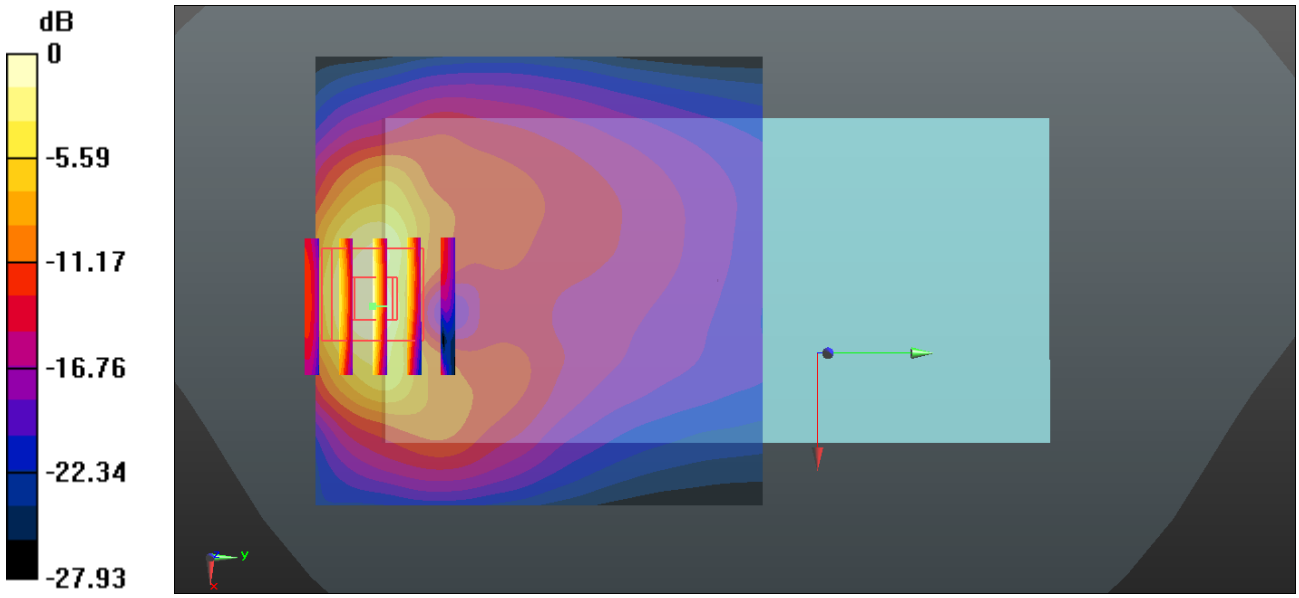
52_LTE Band 25_20M_QPSK_50RB_0Offset_Back_5mm_Sensor On_Ch26590

Communication System: UID 0, LTE-FDD (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1905 MHz; σ = 1.542 S/m; ε_r = 53.796; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch26590/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.51 W/kg

Ch26590/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.29 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.23 W/kg
SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.532 W/kg
Maximum value of SAR (measured) = 1.50 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

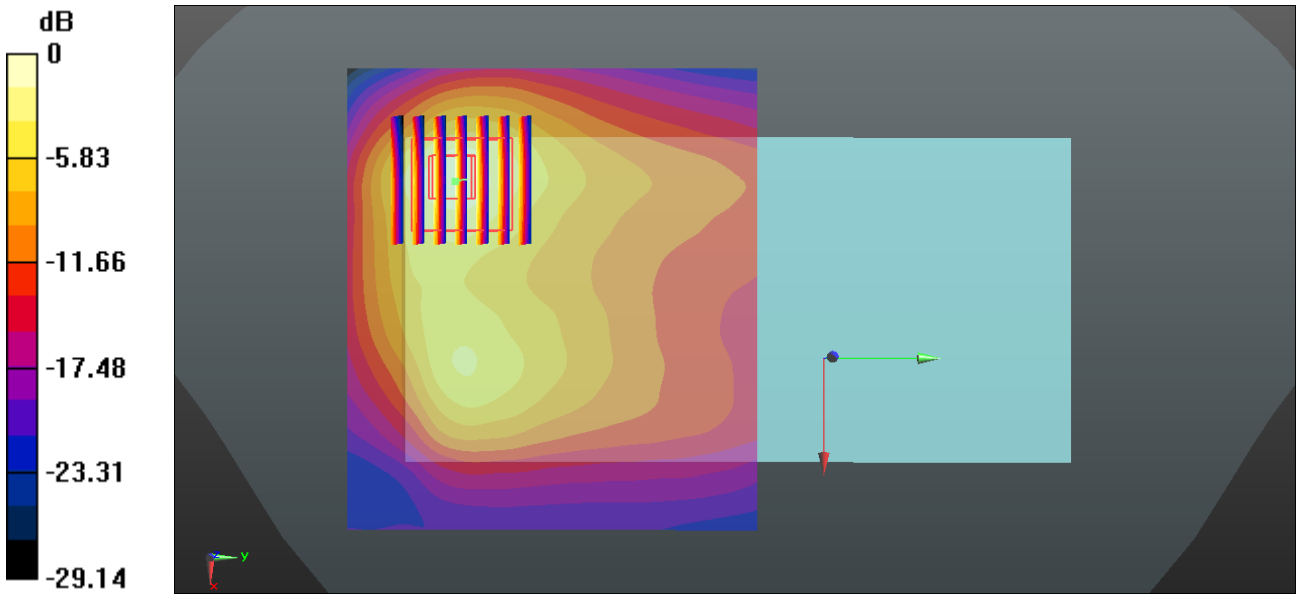
53_LTE Band 7_20M_QPSK_50RB_0Offset_Back_5mm_Sensor On_Ch21350

Communication System: UID 0, LTE-FDD (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium: MSL_2600 Medium parameters used: f = 2560 MHz; σ = 2.166 S/m; ε_r = 51.393; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.15, 4.15, 4.15); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch21350/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.65 W/kg

Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.17 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.66 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.496 W/kg
Maximum value of SAR (measured) = 1.50 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

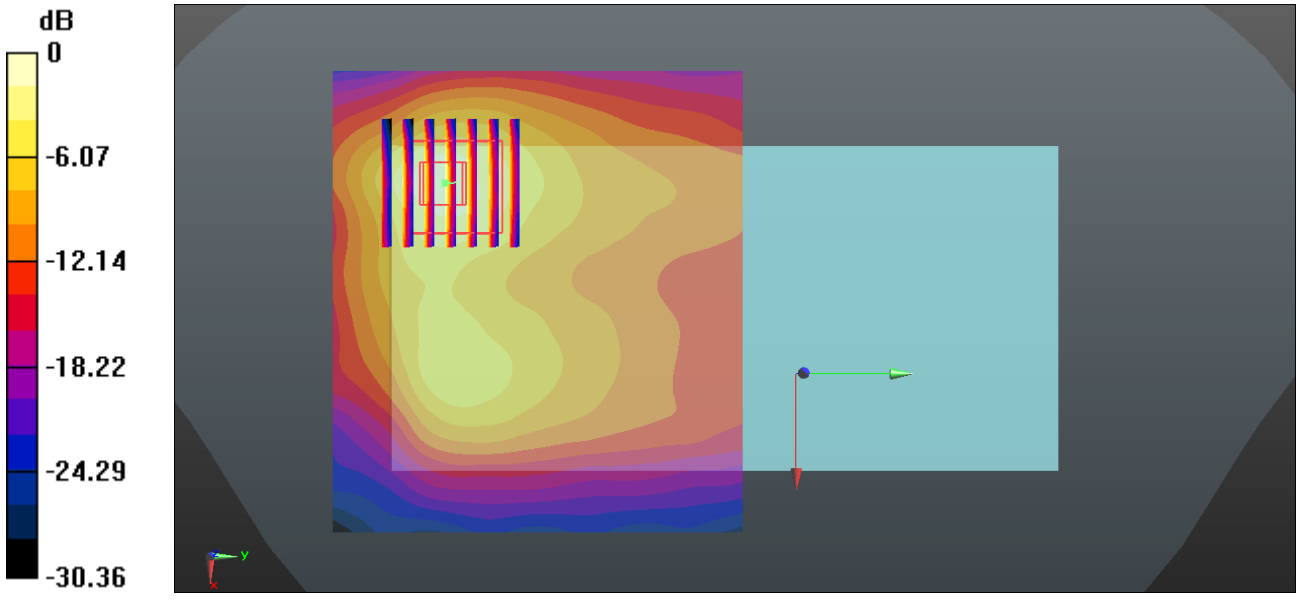
54_LTE Band 41_20M_QPSK_1RB_99Offset_Back_5mm_Psensor_Ch41055

Communication System: UID 0, LTE-TDD (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1.59
Medium: MSL_2600 Medium parameters used: f = 2636.5 MHz; σ = 2.273 S/m; ε_r = 51.095; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃； Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.15, 4.15, 4.15); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch41055/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 2.31 W/kg

Ch41055/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 30.98 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.58 W/kg
SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.633 W/kg
Maximum value of SAR (measured) = 2.03 W/kg



0 dB = 2.31 W/kg = 3.64 dBW/kg

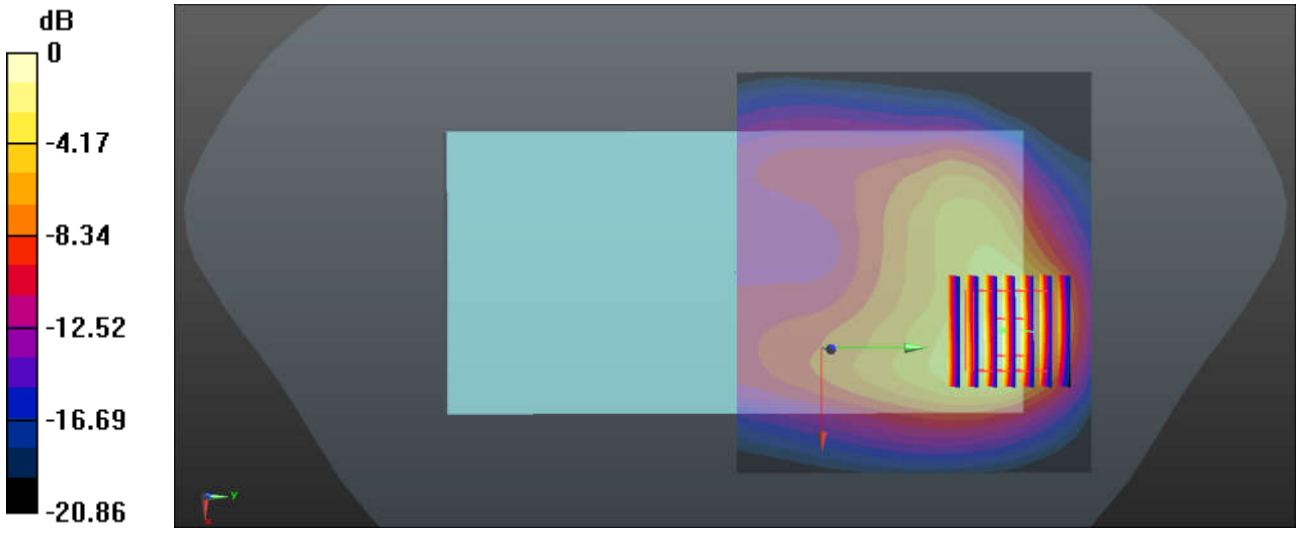
55_WLAN2.4GHz_802.11b 1Mbps_Back_5mm_Sensor On_Ch11

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.025
Medium: MSL_2450 Medium parameters used: f = 2462 MHz; σ = 2.027 S/m; ε_r = 51.75; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.41, 4.41, 4.41); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch11/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.57 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.66 W/kg
SAR(1 g) = 0.769 W/kg; SAR(10 g) = 0.357 W/kg
Maximum value of SAR (measured) = 0.979 W/kg



0 dB = 0.979 W/kg = -0.09 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.10

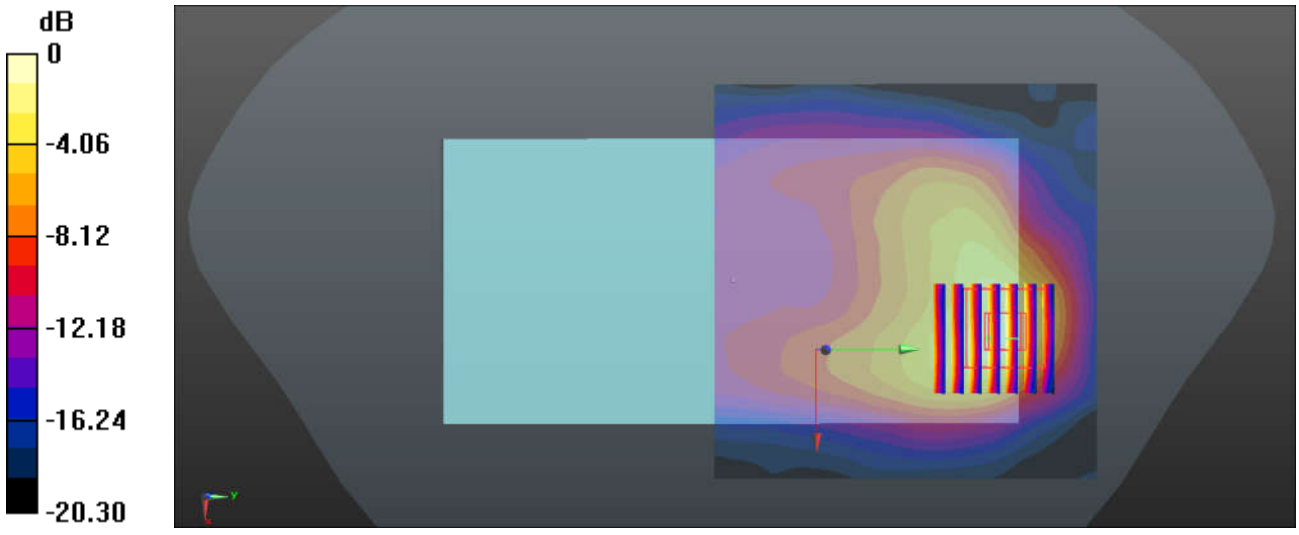
56_Bluetooth_DH5 1Mbps_Back_5mm_Off_Ch39

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz;Duty Cycle: 1:1.297
Medium: MSL_2450 Medium parameters used: f = 2441 MHz; σ = 1.996 S/m; ε_r = 51.837; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.41, 4.41, 4.41); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch39/Area Scan (91x71x1): Interpolated grid: dx=1.200 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.127 W/kg

Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.000 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.211 W/kg
SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.046 W/kg
Maximum value of SAR (measured) = 0.129 W/kg



0 dB = 0.129 W/kg = -8.89 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.13

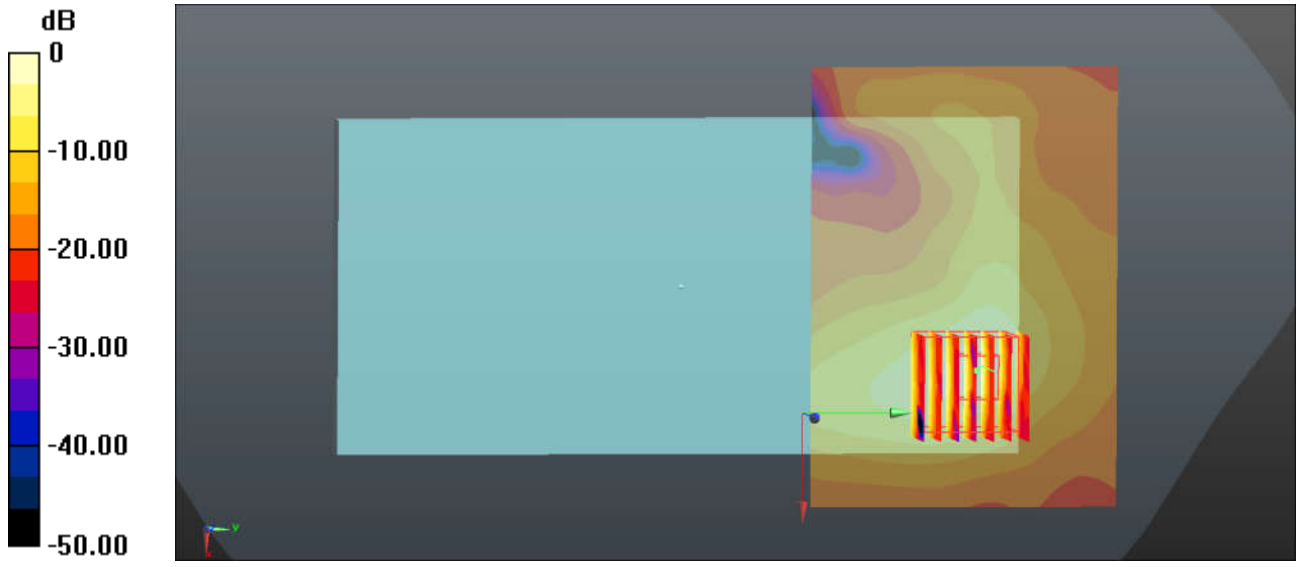
57_WLAN5GHz_802.11a 6Mbps_Back_5mm_On_Ch60

Communication System: UID 0, 802.11a (0); Frequency: 5300 MHz;Duty Cycle: 1:1.073
Medium: MSL_5000 Medium parameters used: f = 5300 MHz; σ = 5.567 S/m; ε_r =47.867; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃； Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.4, 4.4, 4.4); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch60/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.64 W/kg

Ch60/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 25.11 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 4.58 W/kg
SAR(1 g) = 0.963 W/kg; SAR(10 g) = 0.274 W/kg
Maximum value of SAR (measured) = 2.55 W/kg



0 dB = 2.64 W/kg = 4.22 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.13

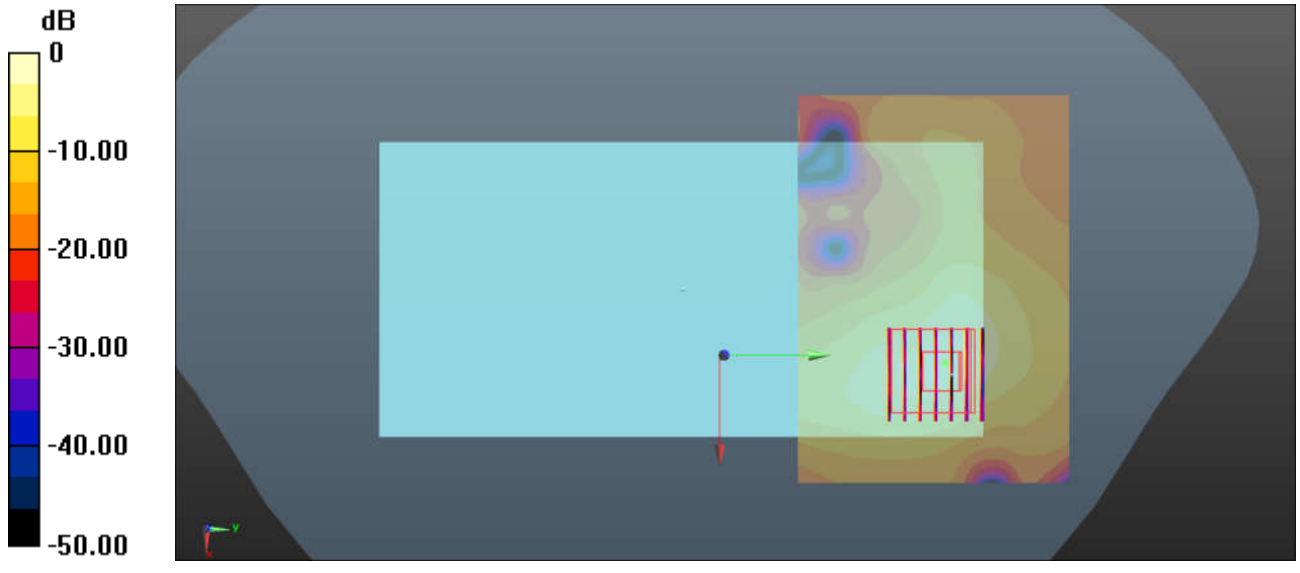
58_WLAN5GHz_802.11a 6Mbps_Back_5mm_On_Ch116

Communication System: UID 0, 802.11a (0); Frequency: 5580 MHz;Duty Cycle: 1:1.073
Medium: MSL_5000 Medium parameters used: f = 5580 MHz; σ = 5.879 S/m; ε_r = 46.568; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(3.98, 3.98, 3.98); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch116/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.29 W/kg

Ch116/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 22.19 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 4.36 W/kg
SAR(1 g) = 0.863 W/kg; SAR(10 g) = 0.254 W/kg
Maximum value of SAR (measured) = 2.28 W/kg



0 dB = 2.29 W/kg = 3.60 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.13

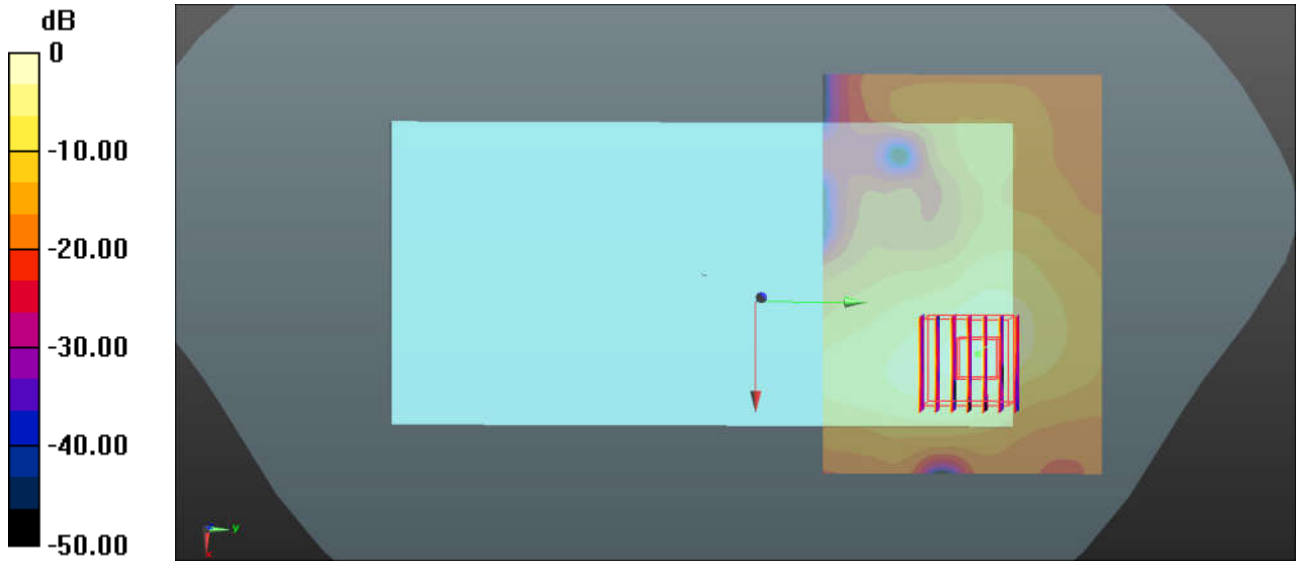
59_WLAN5GHz_802.11a 6Mbps_Back_5mm_On_Ch149

Communication System: UID 0, 802.11a (0); Frequency: 5745 MHz;Duty Cycle: 1:1.073
Medium: MSL_5000 Medium parameters used: f = 5745 MHz; σ = 6.147 S/m; ε_r = 47.129; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.31, 4.31, 4.31); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch149/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.17 W/kg

Ch149/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 21.21 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 4.05 W/kg
SAR(1 g) = 0.734 W/kg; SAR(10 g) = 0.210 W/kg
Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 2.17 W/kg = 3.36 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

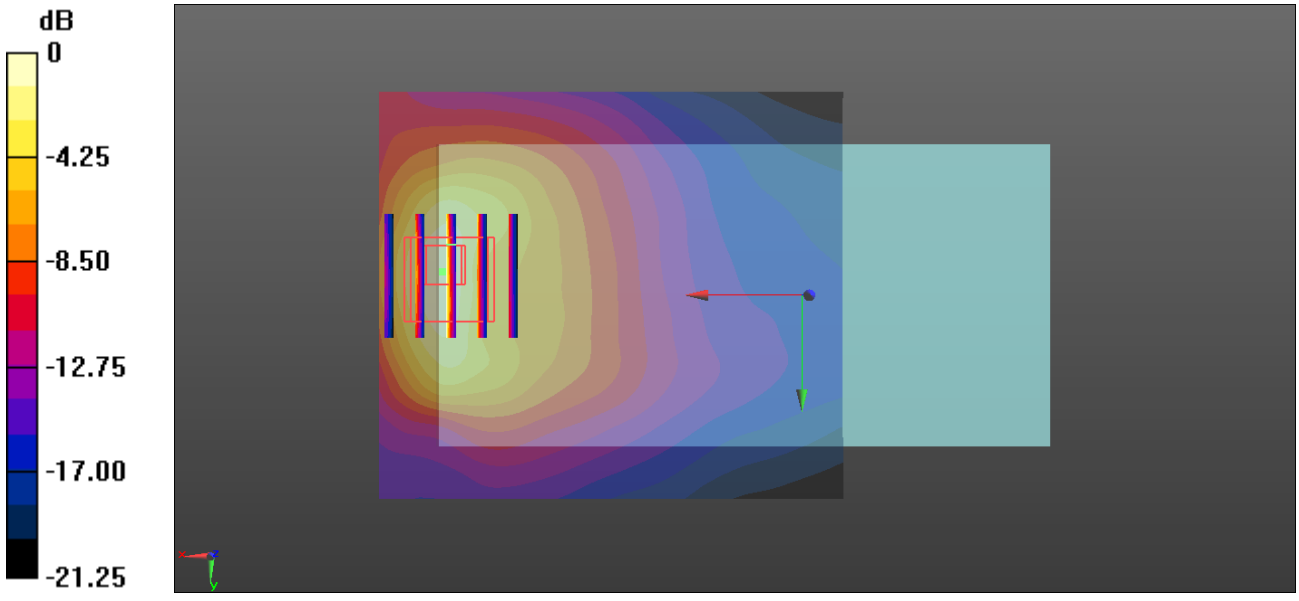
60_GSM850_GPRS (4Tx slots)_Back_0mm_Ch128

Communication System: UID 0, GPRS/EDGE (4 Tx slots) (0); Frequency: 824.2 MHz;Duty Cycle: 1:2.08
Medium: MSL_850 Medium parameters used: f = 824.2 MHz; σ = 0.999 S/m; ε_r = 56.465; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.5 ℃； Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch251/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.33 W/kg

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 60.83 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 4.56 W/kg
SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.15 W/kg
Maximum value of SAR (measured) = 3.77 W/kg



0 dB = 3.33 W/kg = 5.22 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

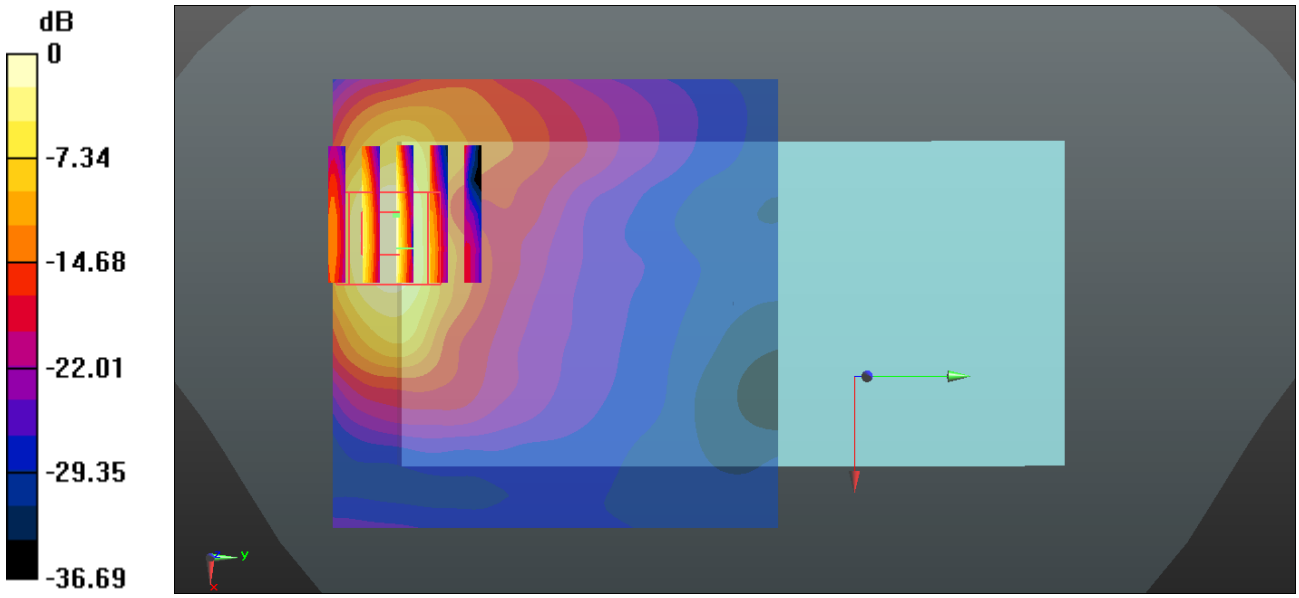
61_GSM1900_GPRS (4 Tx slots)_Front_0mm_Handheld On_Ch512

Communication System: UID 0, PCS (0); Frequency: 1850.2 MHz;Duty Cycle: 1:2.08
Medium: MSL_1900 Medium parameters used: f = 1850.2 MHz; σ = 1.482 S/m; ε_r = 53.974; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch512/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.86 W/kg

Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 75.52 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 12.3 W/kg
SAR(1 g) = 5.79 W/kg; SAR(10 g) = 2.42 W/kg
Maximum value of SAR (measured) = 8.00 W/kg



0 dB = 7.86 W/kg = 8.95 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

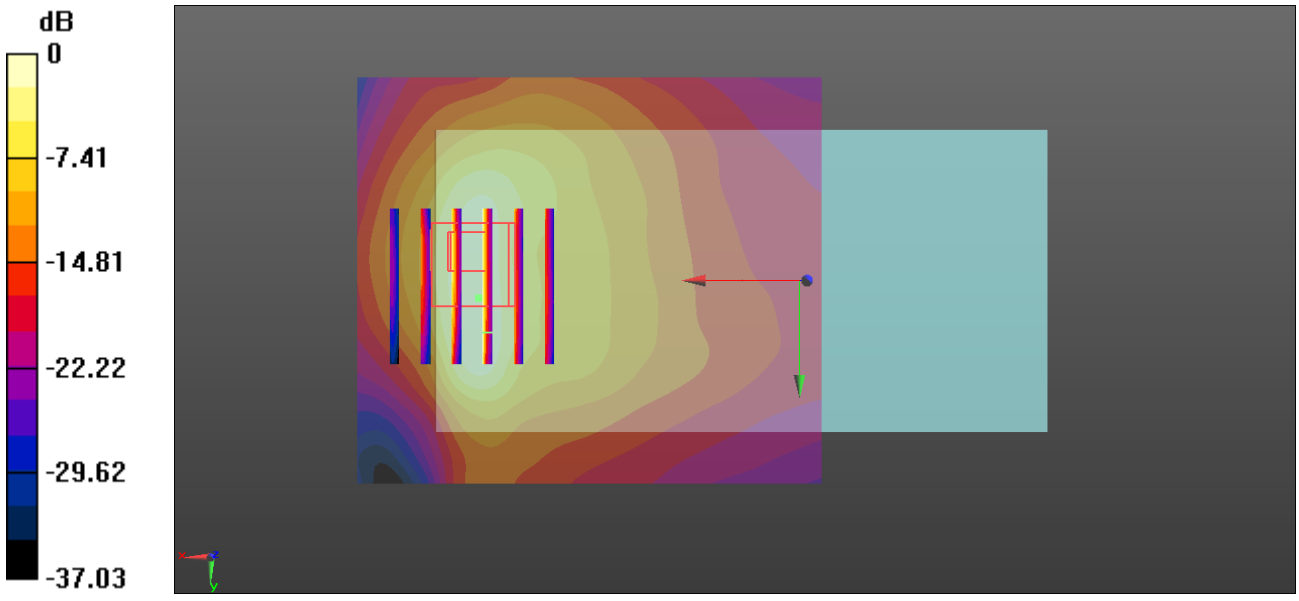
62_WCDMA V_RMC 12.2Kbps_Back_0mm_Ch4132

Communication System: UID 0, UMTS (0); Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 826.4 MHz; σ = 0.975 S/m; ε_r = 56.67; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch4132/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 5.84 W/kg

Ch4132/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 71.59 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 5.56 W/kg
SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.44 W/kg
Maximum value of SAR (measured) = 4.51 W/kg



0 dB = 5.84 W/kg = 7.66 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.28

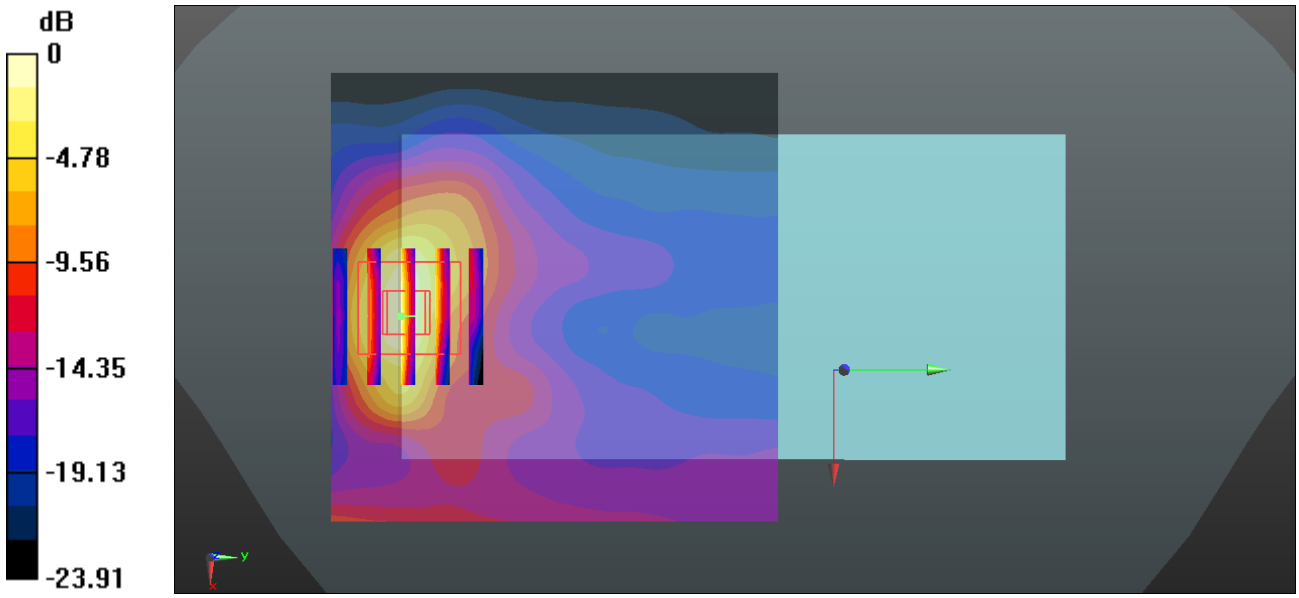
63_WCDMA IV_RMC 12.2Kbps_Back_0mm_Handheld On_Ch1513

Communication System: UID 0, WCDMA (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: MSL_1750 Medium parameters used: f = 1752.6 MHz; σ = 1.494 S/m; ε_r = 54.093; ρ = $1000_{kg/m^3}$
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.82, 4.82, 4.82); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch1513/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 9.02 W/kg

Ch1513/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 86.47 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 12.2 W/kg
SAR(1 g) = 6.35 W/kg; SAR(10 g) = 3.06 W/kg
Maximum value of SAR (measured) = 10.2 W/kg



0 dB = 9.02 W/kg = 9.55 dBW/kg

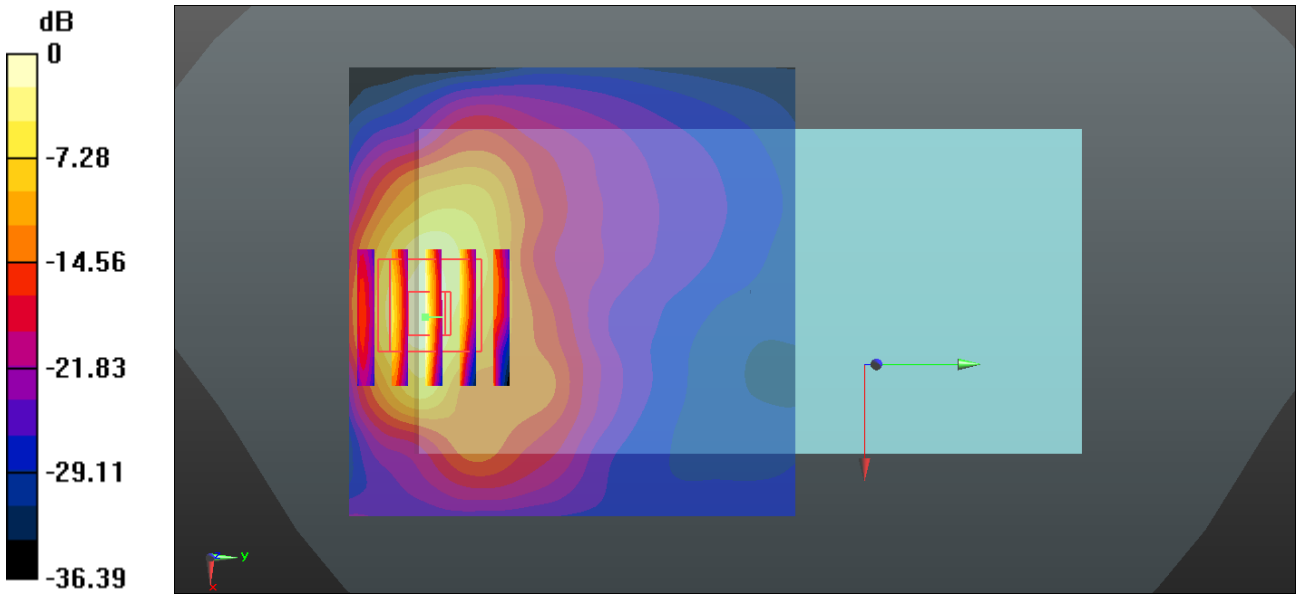
64_WCDMA II_RMC 12.2Kbps_Back_0mm_Handheld On_Ch9400

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.514 S/m; ε_r = 53.87; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch9400/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.03 W/kg

Ch9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 78.76 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 12.7 W/kg
SAR(1 g) = 5.98 W/kg; SAR(10 g) = 2.58 W/kg
Maximum value of SAR (measured) = 8.82 W/kg



0 dB = 8.03 W/kg = 9.05 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.20

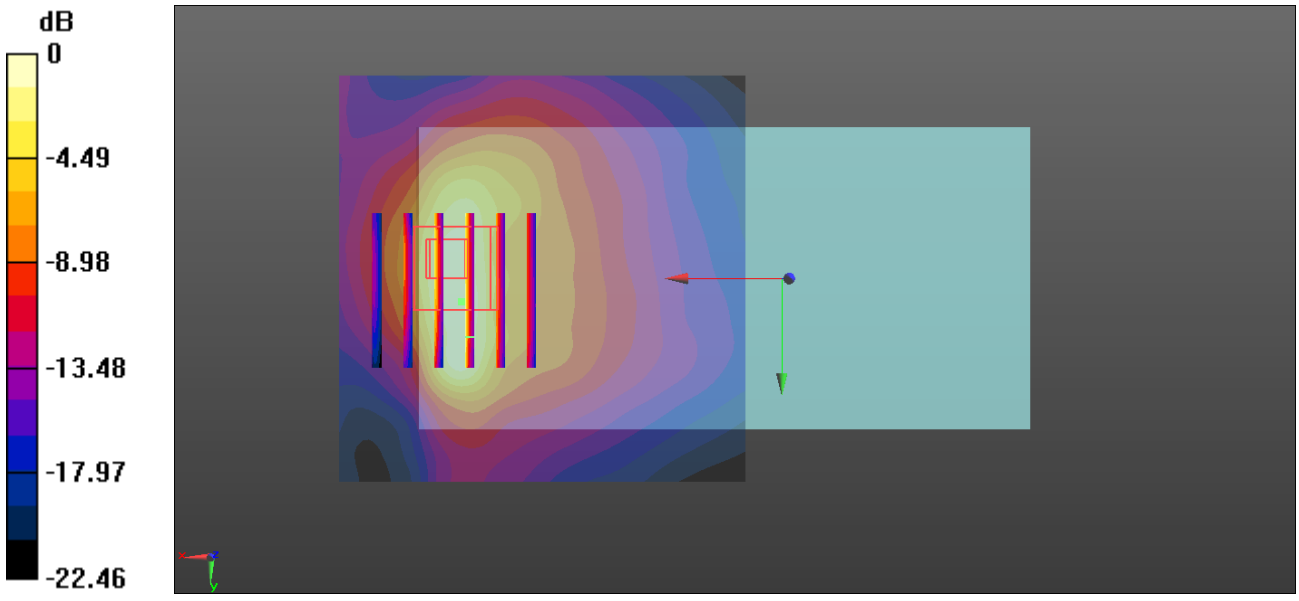
65_CDMA BC0_RTAP 153.6Kbps_Back_0mm_Ch777

Communication System: UID 0, CDMA2000 (0); Frequency: 848.31 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 848.31 MHz; σ = 0.998 S/m; ε_r = 56.473; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch777/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.13 W/kg

Ch777/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 76.41 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 6.54 W/kg
SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.38 W/kg
Maximum value of SAR (measured) = 5.26 W/kg



0 dB = 6.13 W/kg = 7.87 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.9.29

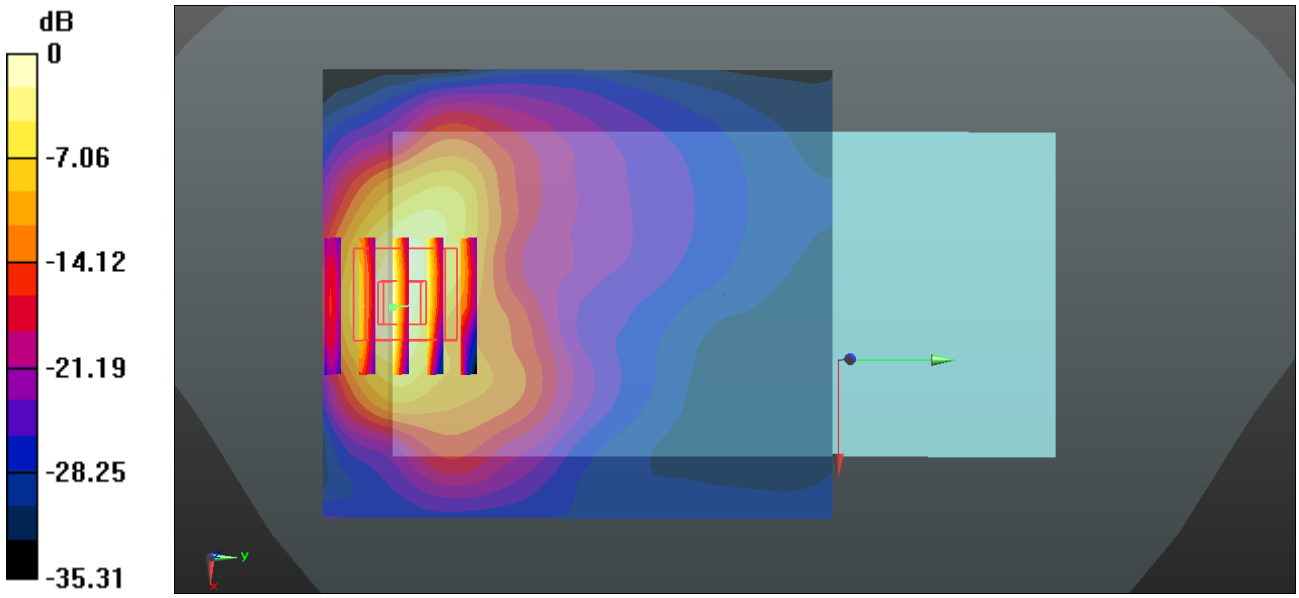
66_CDMA BC1_RTAP 153.6Kbps_Back_0mm_Handheld On_Ch25

Communication System: UID 0, CDMA (0); Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1851.25 MHz; σ = 1.483 S/m; ε_r = 53.971; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch25/Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.73 W/kg

Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 77.09 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 12.7 W/kg
SAR(1 g) = 6.05 W/kg; SAR(10 g) = 2.65 W/kg
Maximum value of SAR (measured) = 8.19 W/kg



0 dB = 7.73 W/kg = 8.88 dBW/kg

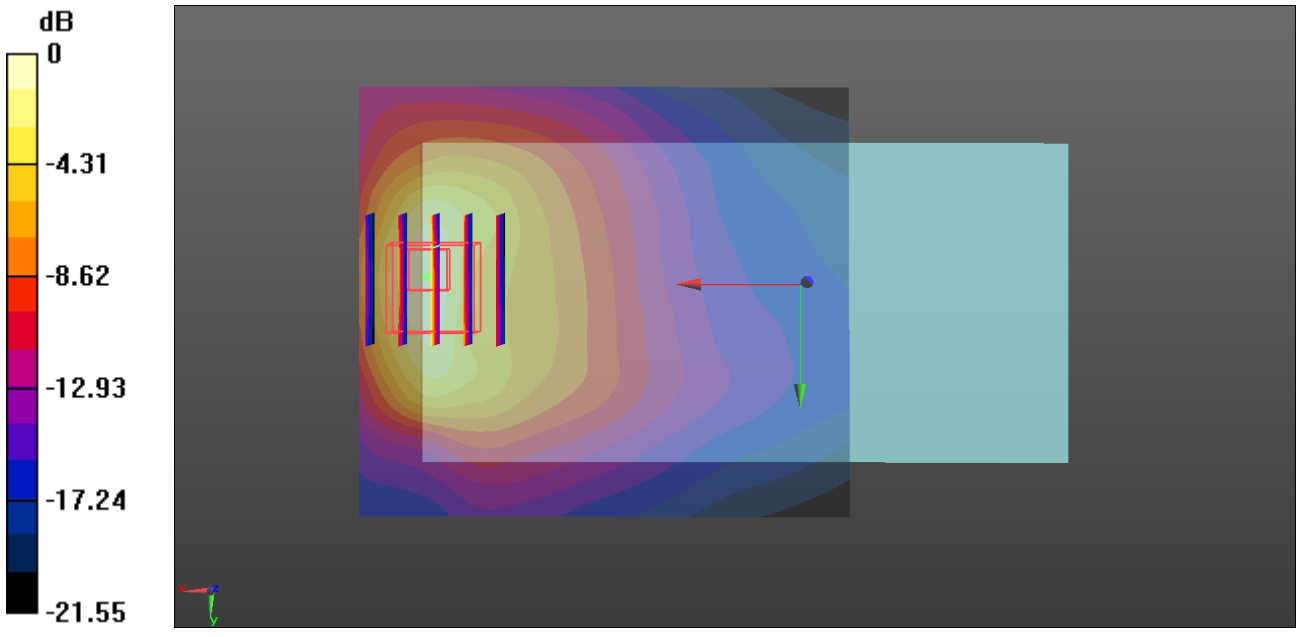
67_LTE Band 26_15M_QPSK_1RB_37Offset_Back_0mm_Ch26865

Communication System: UID 0, FDD_LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 831.5 MHz; σ = 0.981 S/m; ε_r = 56.624; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3935; ConvF(10.33, 10.33, 10.33); Calibrated: 2017.12.14;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.1.3
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch26865/Area Scan (81x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.98 W/kg

Ch26865/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 57.92 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 4.12 W/kg
SAR(1 g) = 1.87 W/kg; SAR(10 g) = 0.996 W/kg
Maximum value of SAR (measured) = 3.40 W/kg



0 dB = 2.98 W/kg = 4.74 dBW/kg

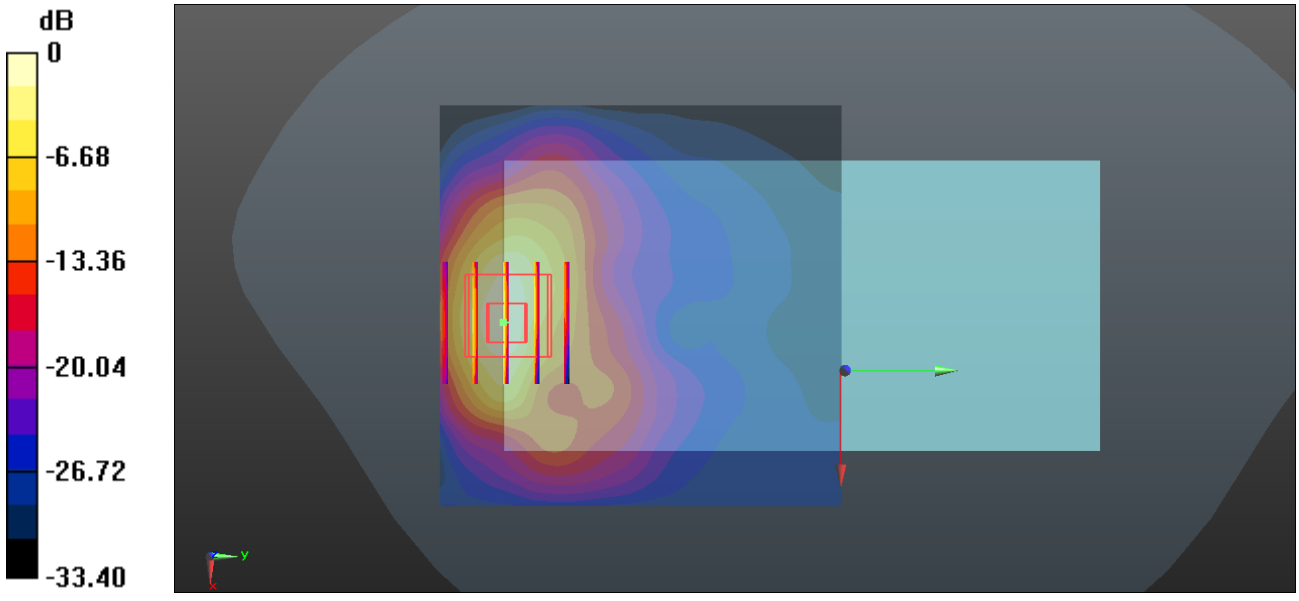
68_LTE Band 66_20M_QPSK_1RB_49Offset_Back_0mm_Handheld On_Ch132072

Communication System: UID 0, LTE-FDD (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium: MSL_1750 Medium parameters used: f = 1720 MHz; σ = 1.455 S/m; ε_r = 54.164; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.82, 4.82, 4.82); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch132072/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.48 W/kg

Ch132072/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 79.55 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 12.1 W/kg
SAR(1 g) = 6.24 W/kg; SAR(10 g) = 2.9 W/kg
Maximum value of SAR (measured) = 8.57 W/kg



0 dB = 8.48 W/kg = 9.28 dBW/kg

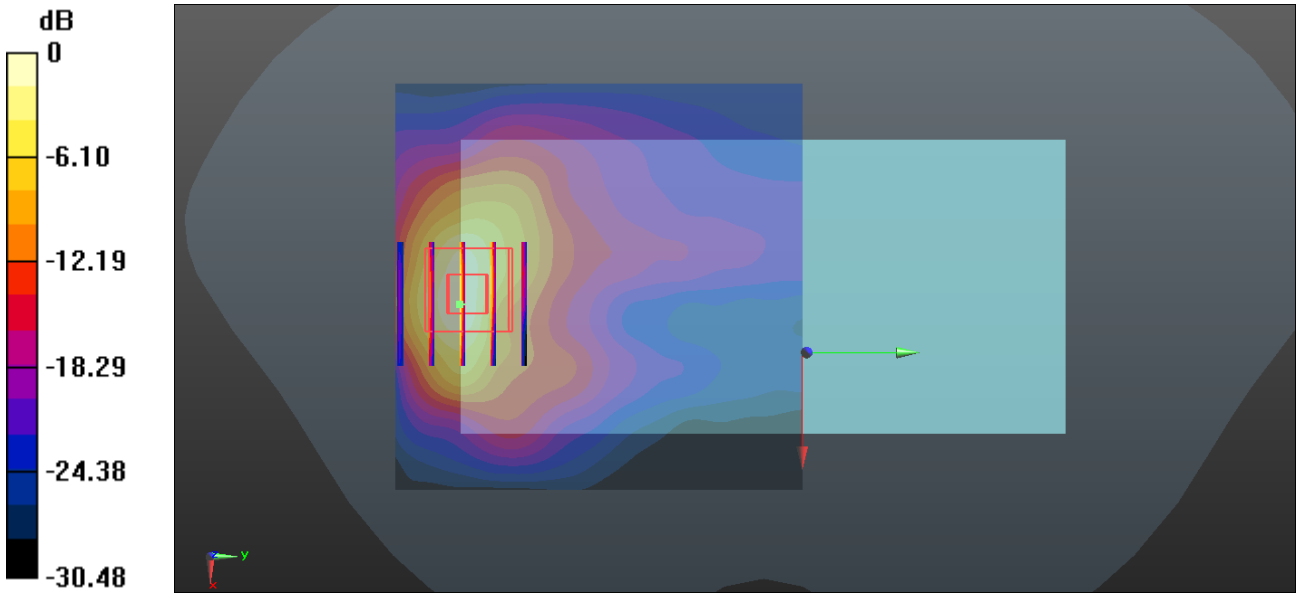
69_LTE Band 25_20M_QPSK_1RB_0Offset_Back_0mm_Handheld On_Ch26140

Communication System: UID 0, LTE-FDD (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1860 MHz; σ = 1.492 S/m; ε_r = 53.947; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.71, 4.71, 4.71); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch26140/Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.65 W/kg

Ch26140/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 84.78 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 11.8 W/kg
SAR(1 g) = 6.03 W/kg; SAR(10 g) = 2.82 W/kg
Maximum value of SAR (measured) = 9.76 W/kg



0 dB = 8.65 W/kg = 9.37 dBW/kg

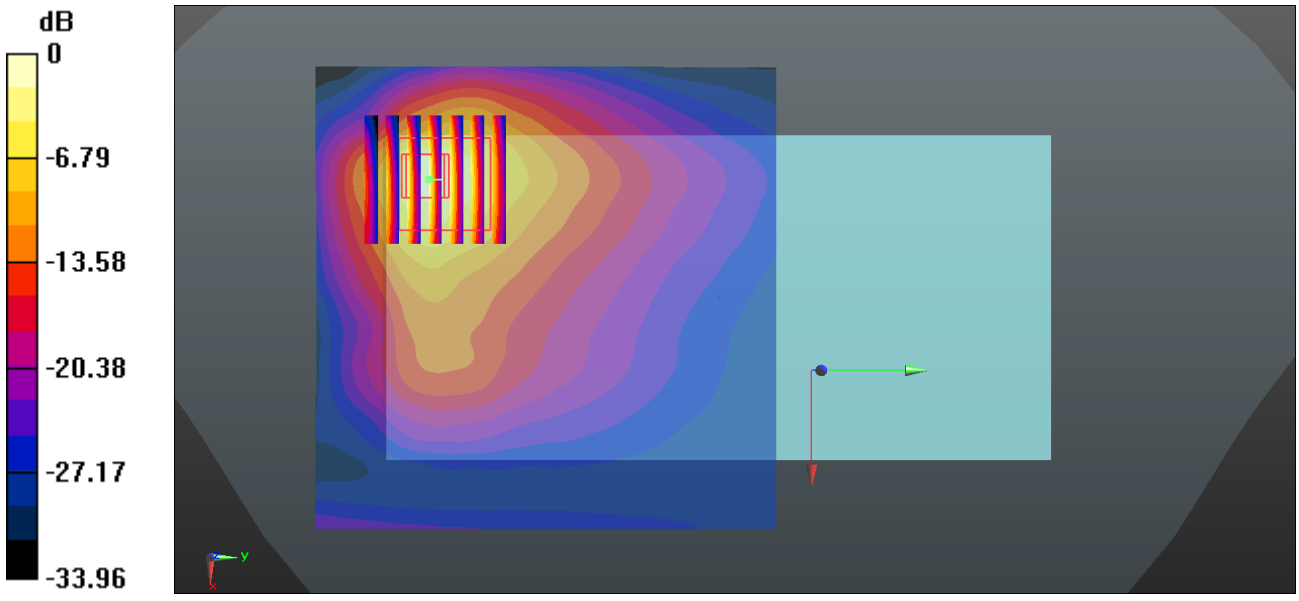
70_LTE Band 7_20M_QPSK_1RB_0Offset_Back_0mm_Handheld On_Ch21350

Communication System: UID 0, LTE-FDD (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium: MSL_2600 Medium parameters used: f = 2560 MHz; σ = 2.166 S/m; ε_r = 51.393; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.15, 4.15, 4.15); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch21350/Area Scan (91x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 12.7 W/kg

Ch21350/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 71.87 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 22.8 W/kg
SAR(1 g) = 7.56 W/kg; SAR(10 g) = 2.81 W/kg
Maximum value of SAR (measured) = 10.5 W/kg



0 dB = 12.7 W/kg = 11.04 dBW/kg

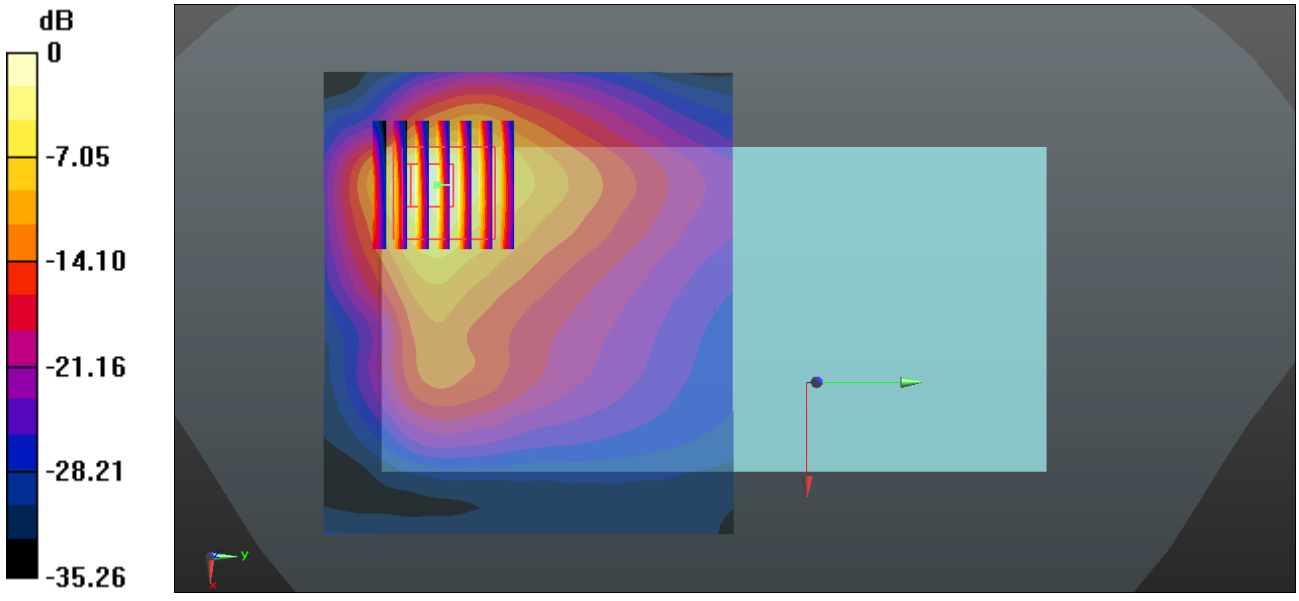
71_LTE Band 41_20M_QPSK_1RB_99Offset_Back_0mm_Handheld On_Ch41055

Communication System: UID 0, LTE-TDD (0); Frequency: 2636.5 MHz;Duty Cycle: 1:1.59
Medium: MSL_2600 Medium parameters used: f = 2636.5 MHz; σ = 2.273 S/m; ε_r = 51.095; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃； Liquid Temperature：22.8 ℃

DASY5 Configuration:
- Probe: ES3DV3 - SN3088; ConvF(4.15, 4.15, 4.15); Calibrated: 2018.7.19;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

Ch41055/Area Scan (91x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 13.1 W/kg

Ch41055/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 68.03 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 22.8 W/kg
SAR(1 g) = 7.05 W/kg; SAR(10 g) = 2.58 W/kg
Maximum value of SAR (measured) = 9.72 W/kg



0 dB = 13.1 W/kg = 11.17 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.13

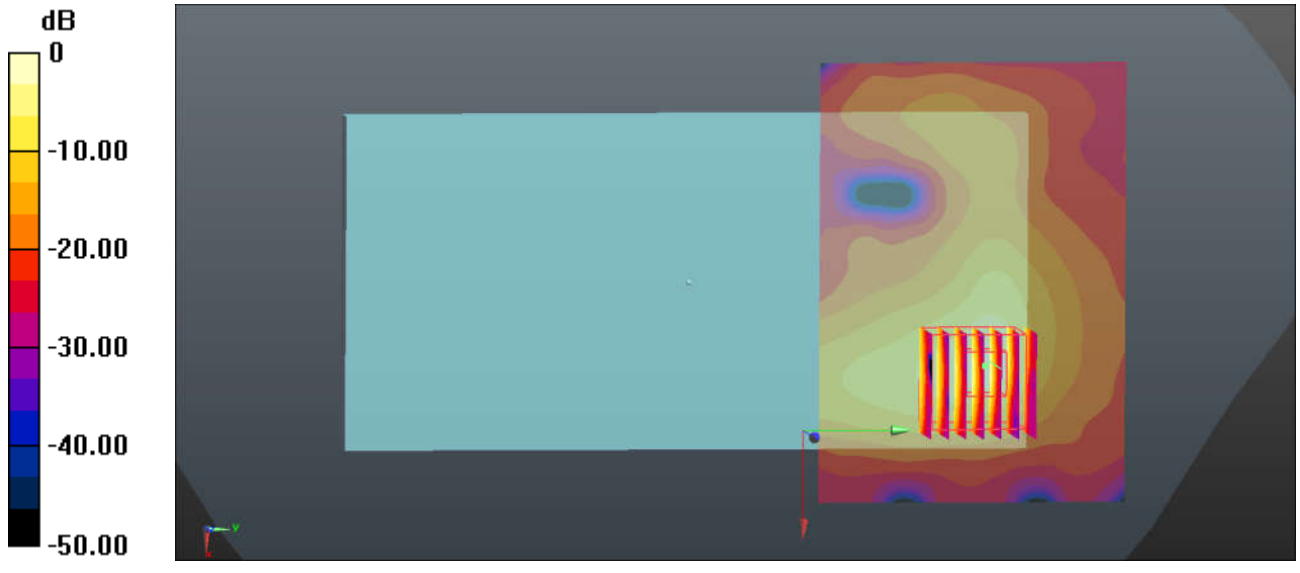
72_WLAN5GHz_802.11a 6Mbps_Back_0mm_on_Ch64

Communication System: UID 0, 802.11a (0); Frequency: 5320 MHz;Duty Cycle: 1:1.073
Medium: MSL_5000 Medium parameters used: f = 5320 MHz; σ = 5.642 S/m; ε_r = 46.894; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(4.4, 4.4, 4.4); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch64/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 7.92 W/kg

Ch64/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 43.75 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 15.2 W/kg
SAR(1 g) = 2.52 W/kg; SAR(10 g) = 0.613 W/kg
Maximum value of SAR (measured) = 7.86 W/kg



0 dB = 7.92 W/kg = 8.99 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2018.10.13

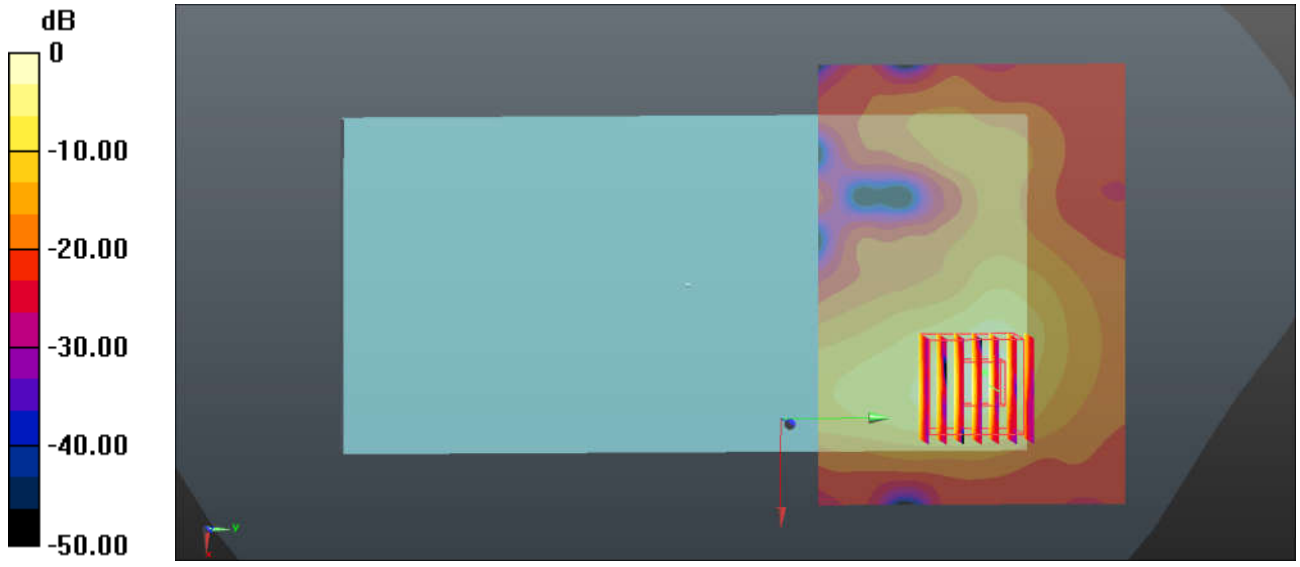
73_WLAN5GHz_802.11a 6Mbps_Back_0mm_on_Ch100

Communication System: UID 0, 802.11a (0); Frequency: 5500 MHz;Duty Cycle: 1:1.073
Medium: MSL_5000 Medium parameters used: f = 5500 MHz; σ = 5.921 S/m; ε_r = 46.416; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃; Liquid Temperature：22.7 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3857; ConvF(3.98, 3.98, 3.98); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Ch100/Area Scan (101x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 5.87 W/kg

Ch100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 34.07 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 11.6 W/kg
SAR(1 g) = 1.89 W/kg; SAR(10 g) = 0.475 W/kg
Maximum value of SAR (measured) = 5.95 W/kg



0 dB = 5.87 W/kg = 7.69 dBW/kg