Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2019/1/29

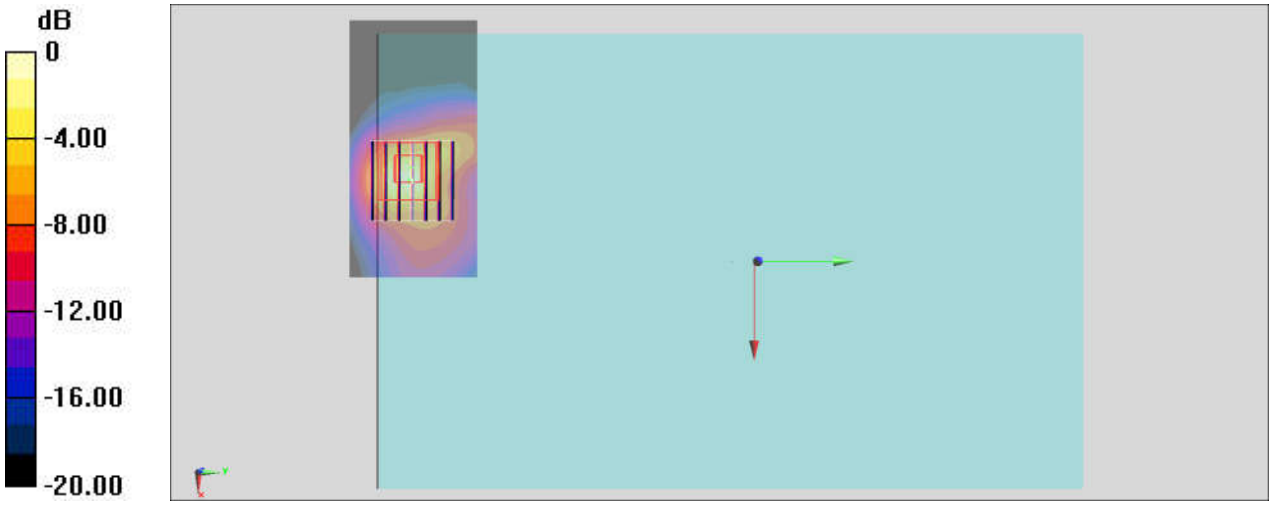
#01_WLAN2.4GHz_802.11b 1Mbps_Bottom Face_0mm_Ch6;Ant 2

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1.008
Medium: MSL_2450_190129 Medium parameters used: f = 2437 MHz; σ = 1.982 S/m; ε_r = 53.156; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7515; ConvF(7.53, 7.53, 7.53) ; Calibrated: 2018/10/3
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn918; Calibrated: 2018/6/20
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1041
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (81x41x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.33 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.58 W/kg
SAR(1 g) = 0.648 W/kg; SAR(10 g) = 0.244 W/kg
Maximum value of SAR (measured) = 1.23 W/kg



0 dB = 1.23 W/kg = 0.90 dBW/kg

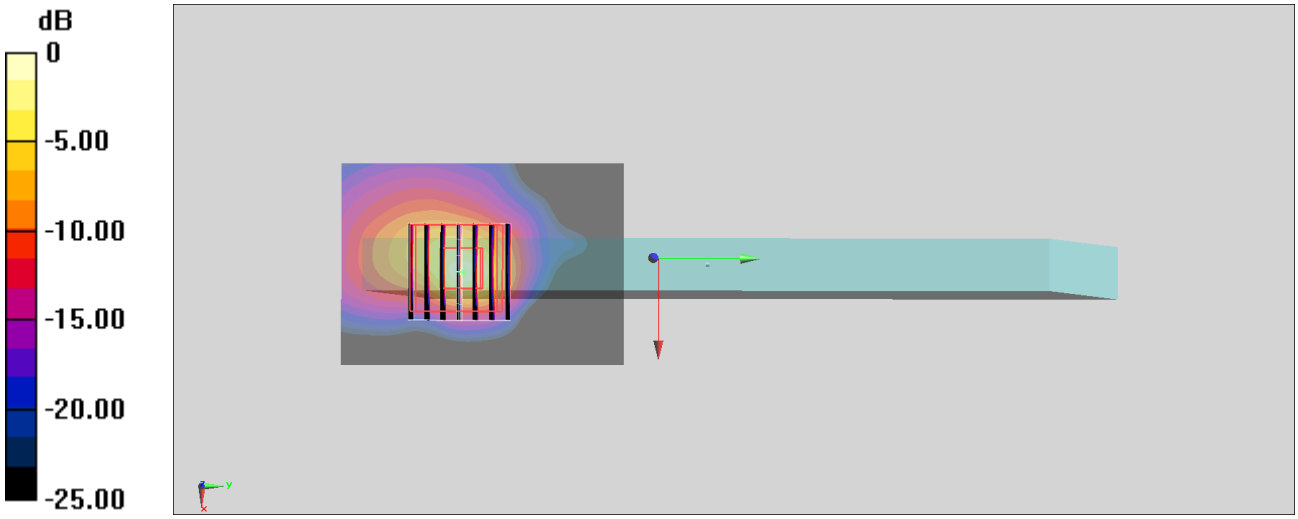
#02_WLAN5GHz_802.11ac-VHT80 MCS0_Edge 2_0mm_Ch42;Ant 1

Communication System: 802.11ac ; Frequency: 5210 MHz;Duty Cycle: 1:1.071
Medium: MSL_5G_190131 Medium parameters used : f = 5210 MHz; σ = 5.382 S/m; ε_r = 49.103; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7306;ConvF(4.8, 4.8, 4.8) ;Calibrated: 2018/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2018/9/19
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (51x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 3.13 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 14.63 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 5.81 W/kg
SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.306 W/kg
Maximum value of SAR (measured) = 3.63 W/kg



0 dB = 3.63 W/kg = 5.60 dBW/kg

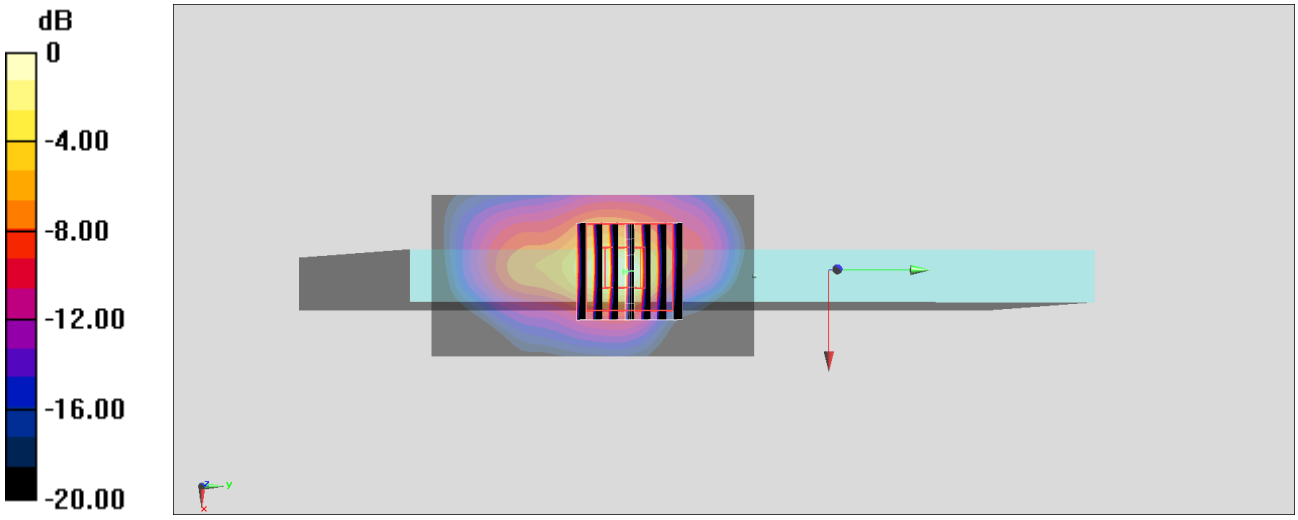
#03_WLAN5GHz_802.11a 6Mbps_Edge 4_0mm_Ch60;Ant 2

Communication System: 802.11a ; Frequency: 5300 MHz;Duty Cycle: 1:1.027
Medium: MSL_5G_190131 Medium parameters used : f = 5300 MHz; σ = 5.483 S/m; ε_r = 48.993; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7306;ConvF(4.8, 4.8, 4.8) ;Calibrated: 2018/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2018/9/19
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (41x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 3.54 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 15.85 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 5.43 W/kg
SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.348 W/kg
Maximum value of SAR (measured) = 3.41 W/kg



0 dB = 3.41 W/kg = 5.33 dBW/kg

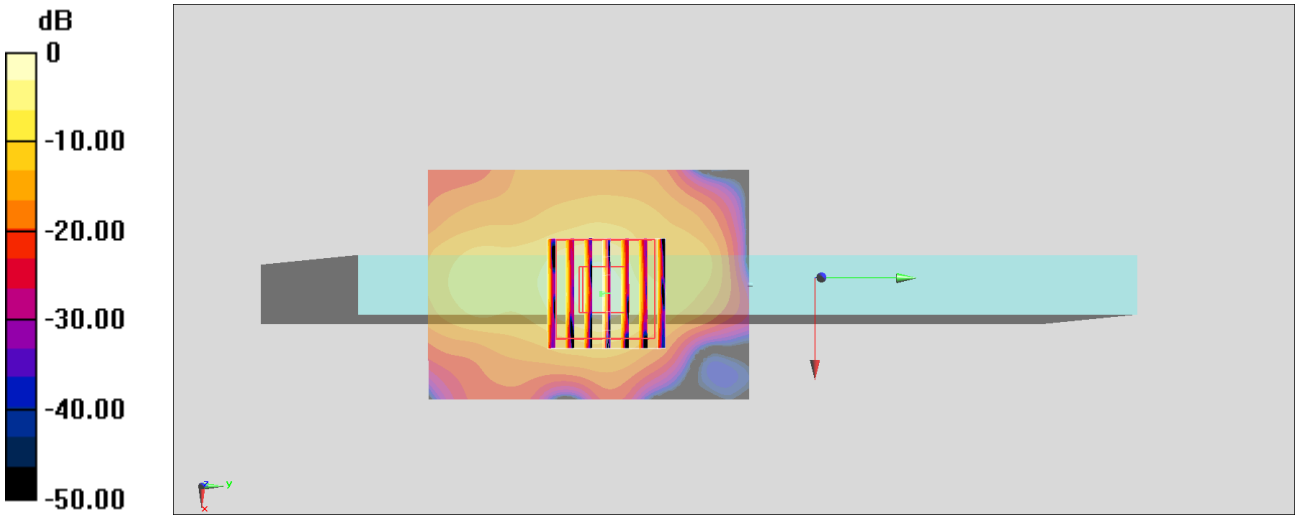
#04_WLAN5GHz_802.11ac-VHT80 MCS0_Edge 4_0mm_Ch106;Ant 2

Communication System: 802.11ac; Frequency: 5530 MHz;Duty Cycle: 1:1.079
Medium: MSL_5G_190131 Medium parameters used : f = 5530 MHz; σ = 5.736 S/m; ε_r = 48.677; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7306;ConvF(4.03, 4.03, 4.03) ;Calibrated: 2018/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2018/9/19
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (51x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 3.31 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 16.65 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 11.4 W/kg
SAR(1 g) = 1.26 W/kg; SAR(10 g) = 0.330 W/kg
Maximum value of SAR (measured) = 3.65 W/kg



0 dB = 3.65 W/kg = 5.62 dBW/kg

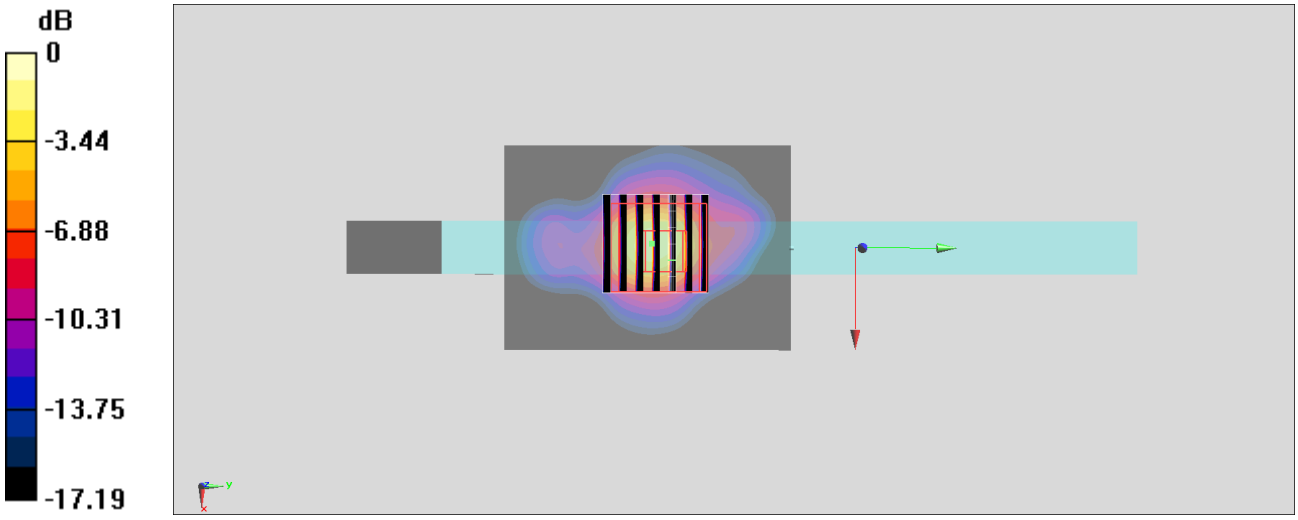
#05_WLAN5GHz_802.11n-HT40 MCS0_Edge 4_0mm_Ch159;Ant 2

Communication System: 802.11n; Frequency: 5795 MHz;Duty Cycle: 1:1.044
Medium: MSL_5G_190131 Medium parameters used: f = 5795 MHz; σ = 6.021 S/m; ε_r = 48.306; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7306;ConvF(4.37, 4.37, 4.37) ;Calibrated: 2018/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2018/9/19
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (51x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.64 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 23.23 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 6.58 W/kg
SAR(1 g) = 1.3 W/kg; SAR(10 g) = 0.335 W/kg
Maximum value of SAR (measured) = 3.43 W/kg



0 dB = 3.43 W/kg = 5.35 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2019/1/29

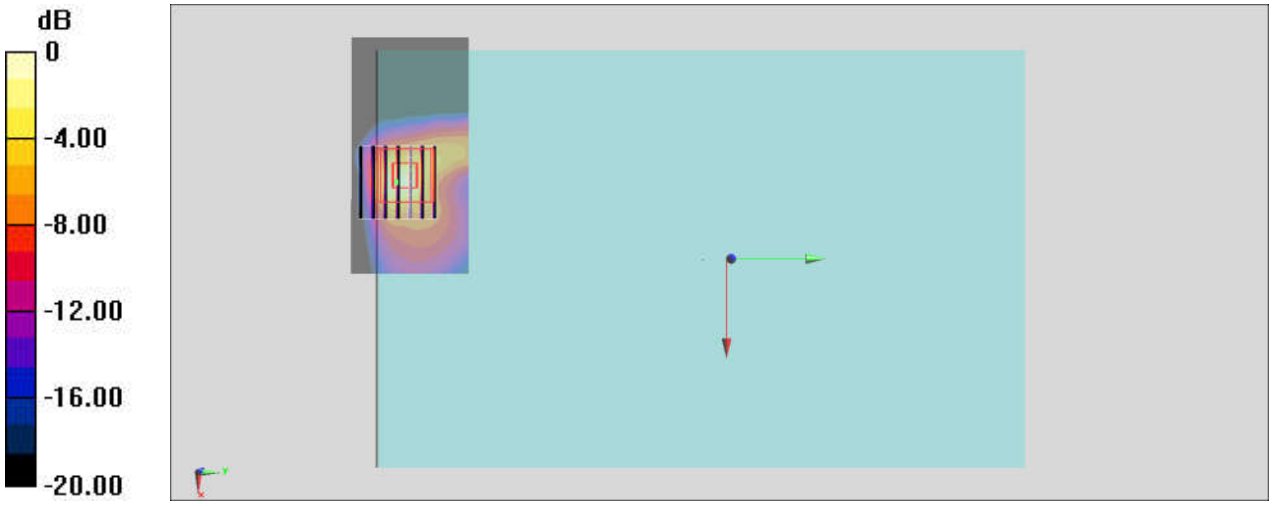
#06_Bluetooth_1Mbps_Bottom Face_0mm_Ch39;Ant 2

Communication System: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.302
Medium: MSL_2450_190129 Medium parameters used: f = 2441 MHz; σ = 1.987 S/m; ε_r = 53.138; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：22.6 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7515; ConvF(7.53, 7.53, 7.53) ; Calibrated: 2018/10/3
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn918; Calibrated: 2018/6/20
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1041
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (81x41x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.282 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.040 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.442 W/kg
SAR(1 g) = 0.180 W/kg; SAR(10 g) = 0.062 W/kg
Maximum value of SAR (measured) = 0.335 W/kg



0 dB = 0.335 W/kg = -4.75 dBW/kg