Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 11/6/2019

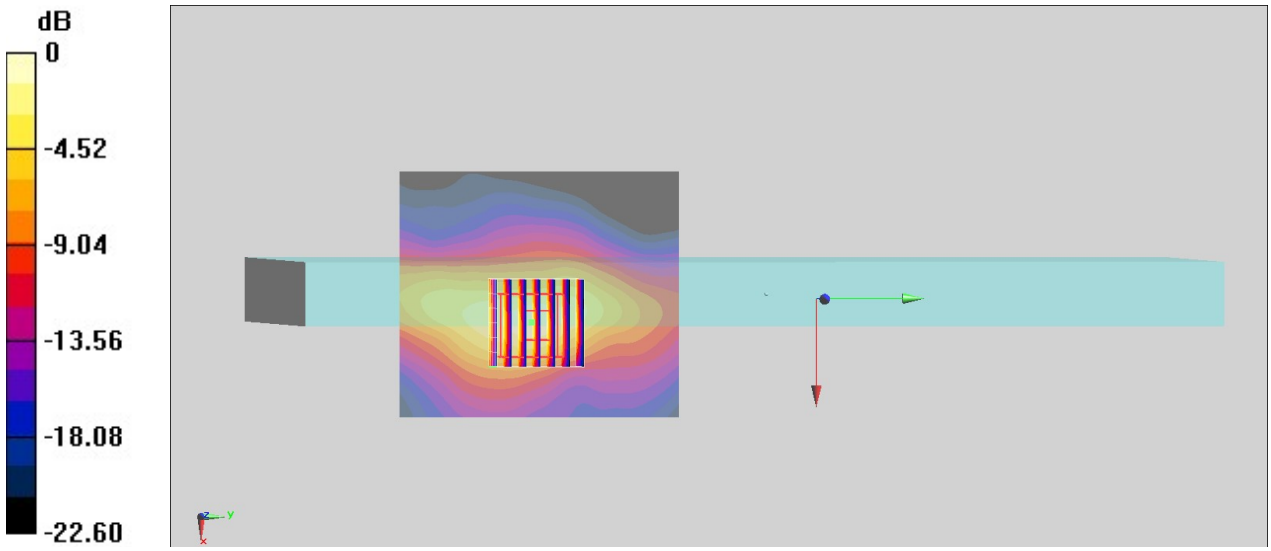
#01_WLAN2.4GHz_802.11b 1Mbps_Edge 3_0mm_Ch6

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1.014
Medium: HSL_2450_191106 Medium parameters used : f = 2437 MHz; σ = 1.855 S/m; ε_r = 39.323; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3976; ConvF(7.7, 7.7, 7.7) @ 2437 MHz; Calibrated: 1/29/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 1/24/2019
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1025
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.14 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.282 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.66 W/kg
SAR(1 g) = 0.717 W/kg; SAR(10 g) = 0.320 W/kg
Maximum value of SAR (measured) = 1.27 W/kg



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

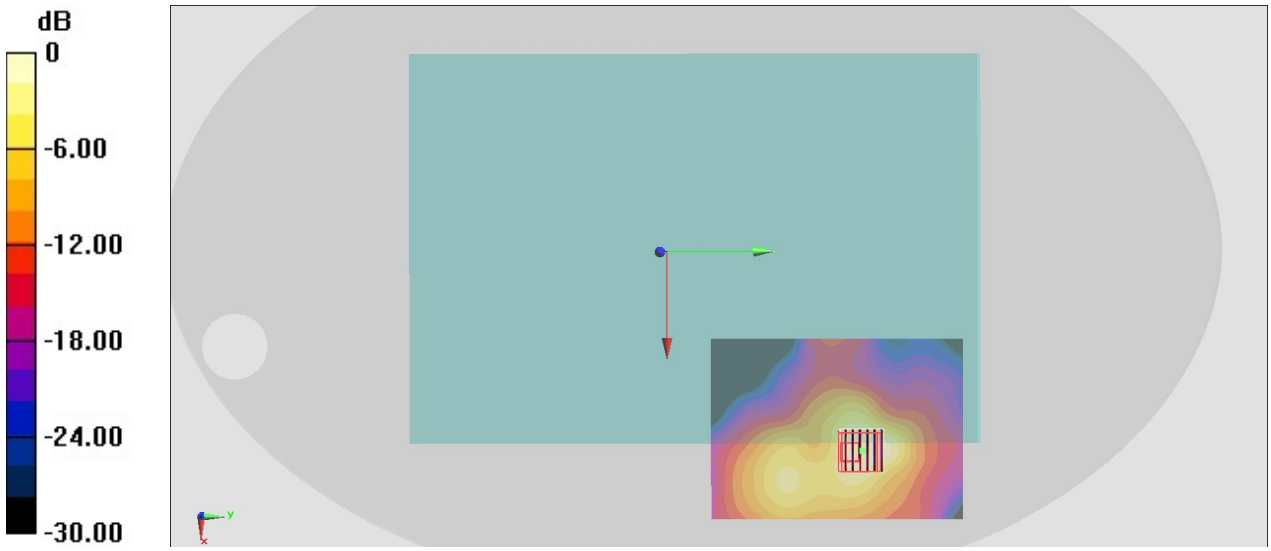
#02_WLAN5GHz_802.11a 6Mbps_Bottom of Laptop_0mm_Ch56

Communication System: 802.11a ; Frequency: 5280 MHz;Duty Cycle: 1:1.019
Medium: HSL_5G_191107 Medium parameters used: f = 5280 MHz; σ = 4.697 S/m; ε_r = 36.563; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3976; ConvF(5.43, 5.43, 5.43) @ 5280 MHz; Calibrated: 1/29/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 1/24/2019
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1025
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (101x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.39 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 3.63 W/kg
SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.343 W/kg
Maximum value of SAR (measured) = 2.30 W/kg



0 dB = 2.30 W/kg = 3.62 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 11/7/2019

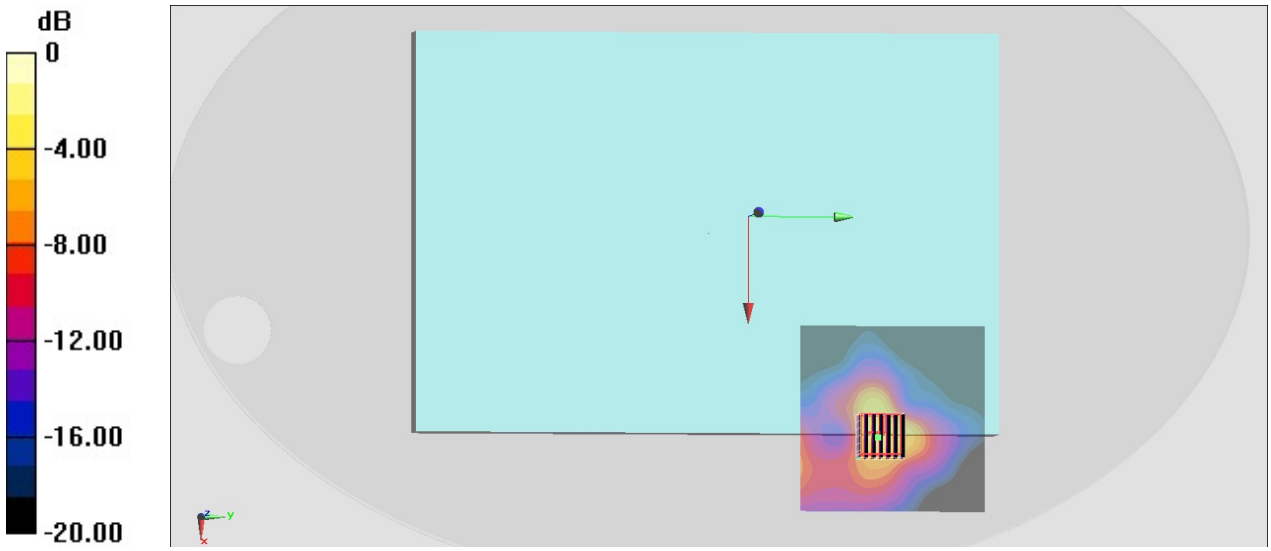
#03_WLAN5GHz_802.11ac-VHT80 MCS0_Bottom of Laptop_0mm_Ch122

Communication System: 802.11ac ; Frequency: 5610 MHz;Duty Cycle: 1:1.098
Medium: HSL_5G_191107 Medium parameters used : f = 5610 MHz; σ = 5.028 S/m; ε_r = 36.116; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3976; ConvF(4.86, 4.86, 4.86) @ 5610 MHz; Calibrated: 1/29/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 1/24/2019
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1025
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.81 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 4.90 W/kg
SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.300 W/kg
Maximum value of SAR (measured) = 2.69 W/kg



0 dB = 2.69 W/kg = 4.30 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 11/7/2019

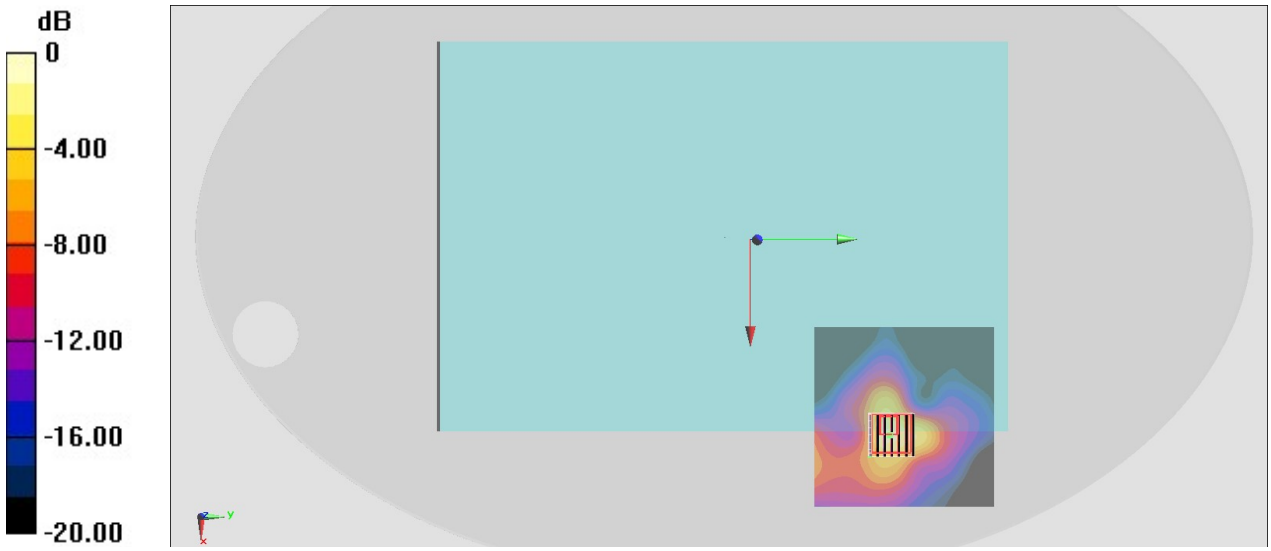
#04_WLAN5GHz_802.11ac-VHT80 MCS0_Bottom of Laptop_0mm_Ch155

Communication System: 802.11ac ; Frequency: 5775 MHz;Duty Cycle: 1:1.098
Medium: HSL_5G_191107 Medium parameters used: f = 5775 MHz; σ = 5.215 S/m; ε_r = 35.917; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3976; ConvF(4.95, 4.95, 4.95) @ 5775 MHz; Calibrated: 1/29/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 1/24/2019
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1025
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.79 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 3.97 W/kg
SAR(1 g) = 0.837 W/kg; SAR(10 g) = 0.279 W/kg
Maximum value of SAR (measured) = 2.18 W/kg



0 dB = 2.18 W/kg = 3.38 dBW/kg

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 11/8/2019

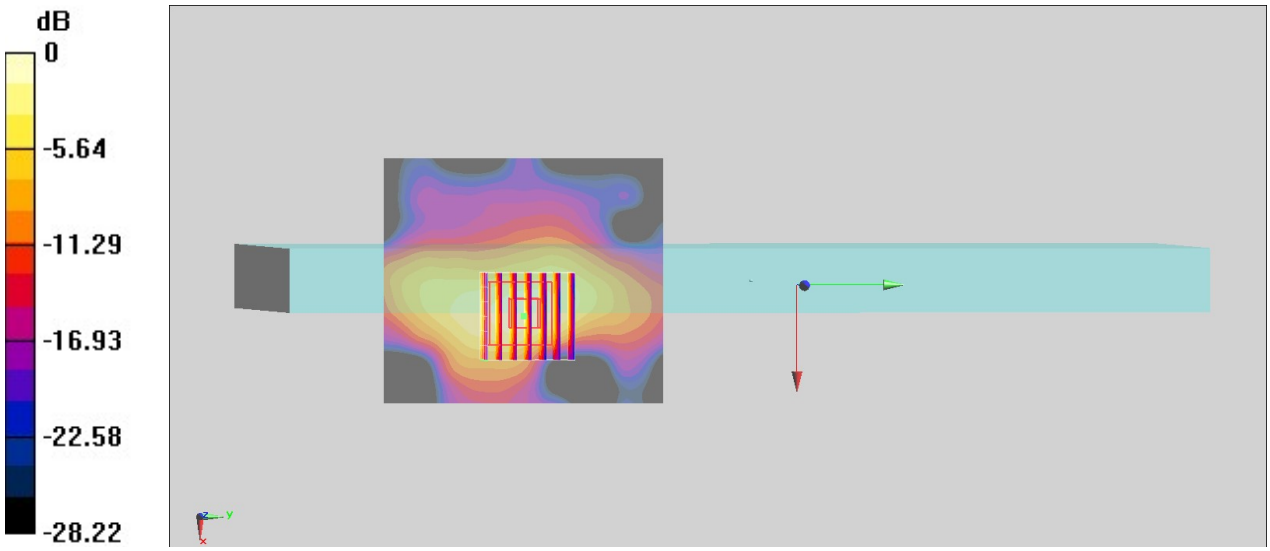
#05_Bluetooth_1Mbps_Edge 3_0mm_Ch0

Communication System: Bluetooth ; Frequency: 2402 MHz;Duty Cycle: 1:1.301
Medium: HSL_2450_191108 Medium parameters used : f = 2402 MHz; σ = 1.721 S/m; ε_r = 40.727; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3976; ConvF(7.7, 7.7, 7.7) @ 2402 MHz; Calibrated: 1/29/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 1/24/2019
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1025
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.11 (7439)

Area Scan (71x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.119 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.8620 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.164 W/kg
SAR(1 g) = 0.071 W/kg; SAR(10 g) = 0.031 W/kg
Maximum value of SAR (measured) = 0.124 W/kg



0 dB = 0.124 W/kg = -9.07 dBW/kg