Appendix C - Highest Measurement Plots

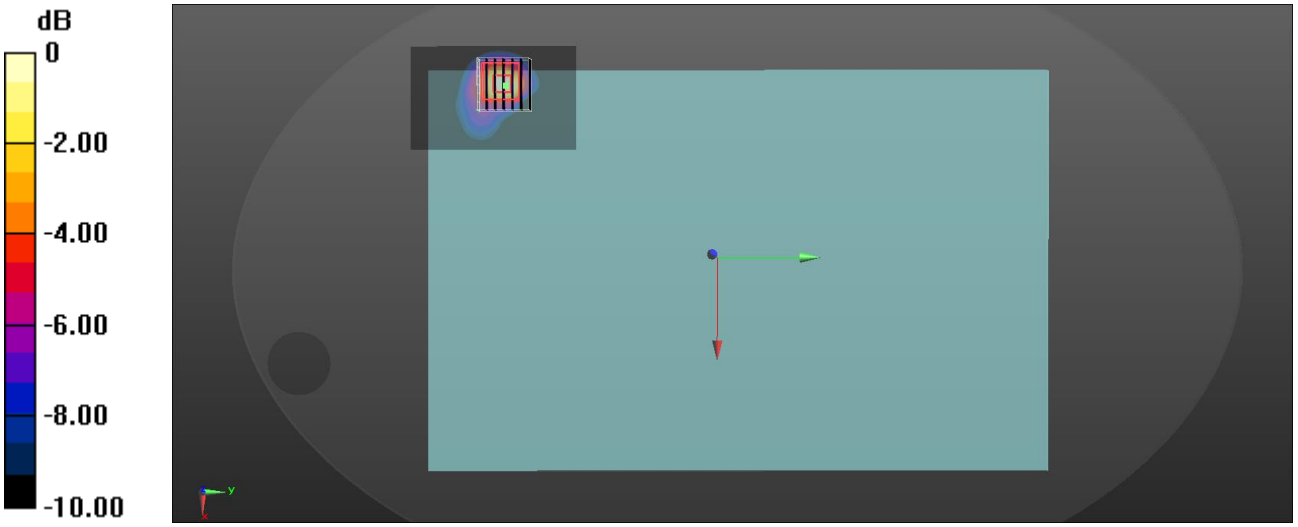
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/30
21_WLAN 2.4 GHz_802.11b_Ch11_Bottom of laptop_0 mm_ANT Main
DUT: M3502QA

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.009
Medium parameters used: f = 2462 MHz; σ = 1.802 S/m; ε_r = 39.082; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(8.13, 8.13, 8.13) @ 2462 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.797 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.15 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.926 W/kg
SAR(1 g) = 0.453 W/kg; SAR(10 g) = 0.201 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 50.6%
Maximum value of SAR (measured) = 0.742 W/kg



0 dB = 0.742 W/kg = -1.30 dBW/kg

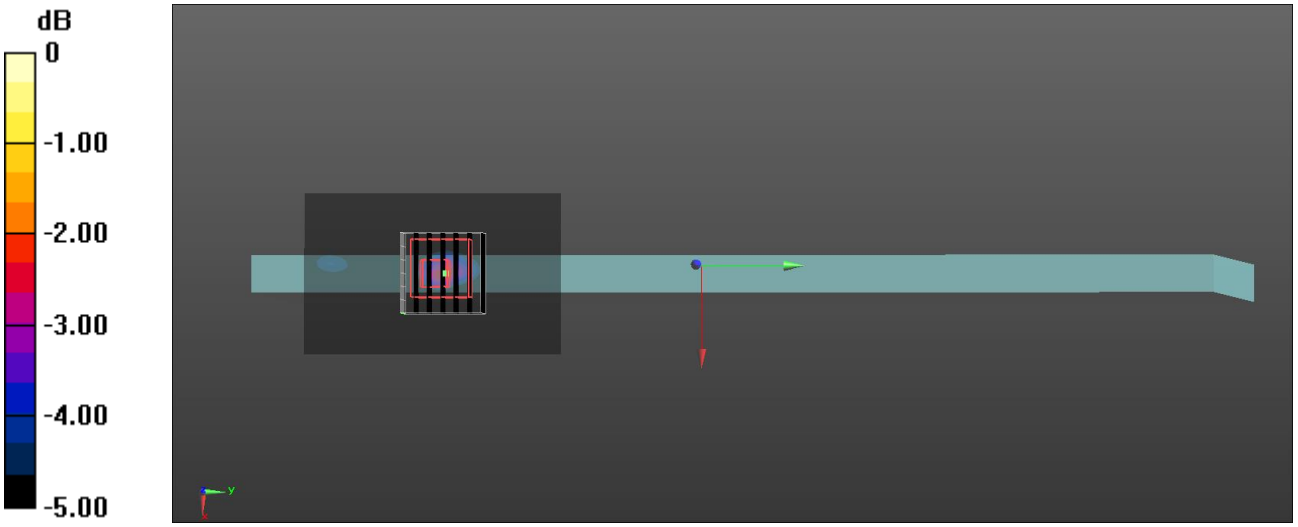
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/30
12_WLAN 2.4 GHz_802.11b_Ch11_NB-Edge_0 mm_ANT Aux
DUT: M3502QA

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.009
Medium parameters used: f = 2462 MHz; σ = 1.802 S/m; ε_r = 39.082; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(8.13, 8.13, 8.13) @ 2462 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.425 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.58 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.975 W/kg
SAR(1 g) = 0.320 W/kg; SAR(10 g) = 0.120 W/kg
Smallest distance from peaks to all points 3 dB below = 5.2 mm
Ratio of SAR at M2 to SAR at M1 = 35.2%
Maximum value of SAR (measured) = 0.722 W/kg



0 dB = 0.722 W/kg = -1.41 dBW/kg

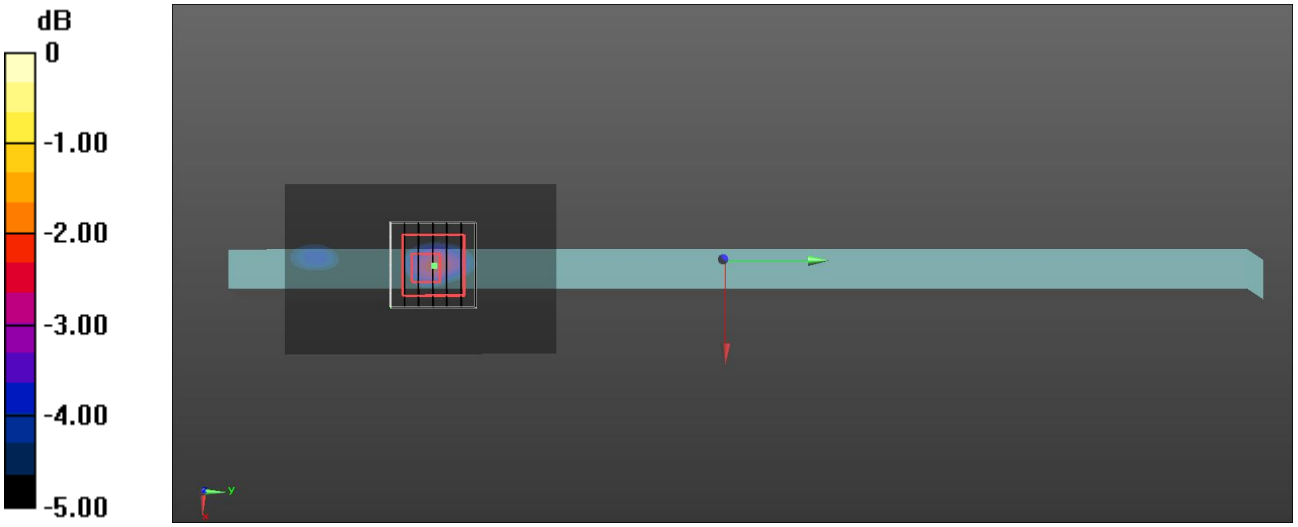
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/30
13_Bluetooth_GFSK_Ch39_NB-Edge_0 mm_ANT Aux
DUT: M3502QA

Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2441 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.78 S/m; ε_r = 39.163; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(8.13, 8.13, 8.13) @ 2441 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (51x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0776 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.928 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.180 W/kg
SAR(1 g) = 0.064 W/kg; SAR(10 g) = 0.026 W/kg
Smallest distance from peaks to all points 3 dB below = 5.1 mm
Ratio of SAR at M2 to SAR at M1 = 37.5%
Maximum value of SAR (measured) = 0.131 W/kg



0 dB = 0.131 W/kg = -8.83 dBW/kg

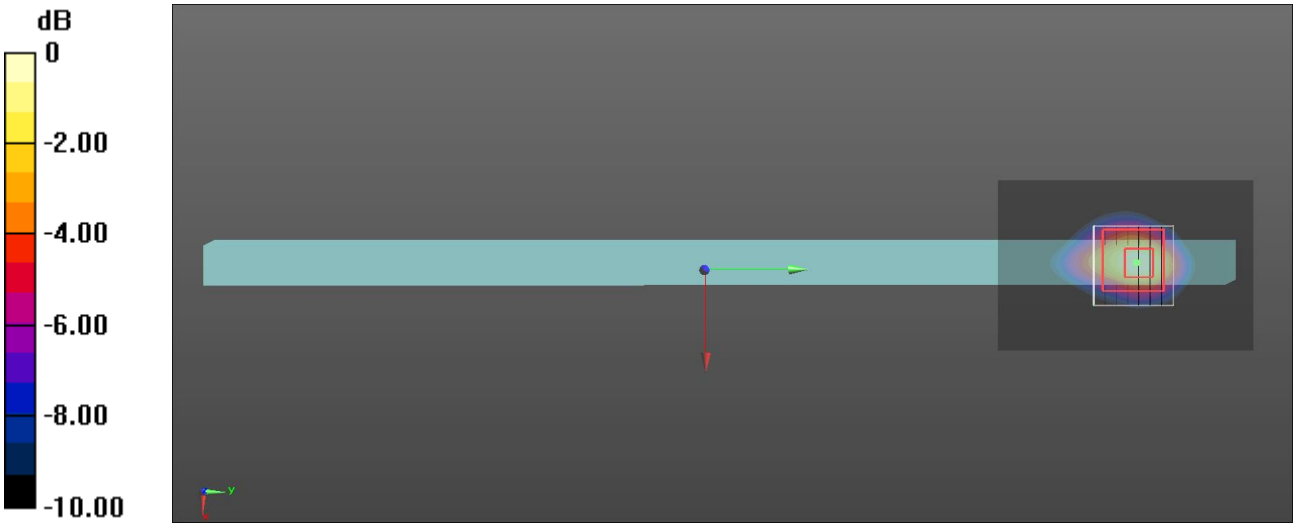
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/29
14_WLAN 5 GHz_802.11ac VHT80_Ch58_NB-Edge_0 mm_ANT Main
DUT: M3502QA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5290 MHz;Duty Cycle: 1:1.121
Medium parameters used: f = 5290 MHz; σ = 4.697 S/m; ε_r = 35.462; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.74, 5.74, 5.74) @ 5290 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.45 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 13.46 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 2.13 W/kg
SAR(1 g) = 0.633 W/kg; SAR(10 g) = 0.229 W/kg
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 68.5%
Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

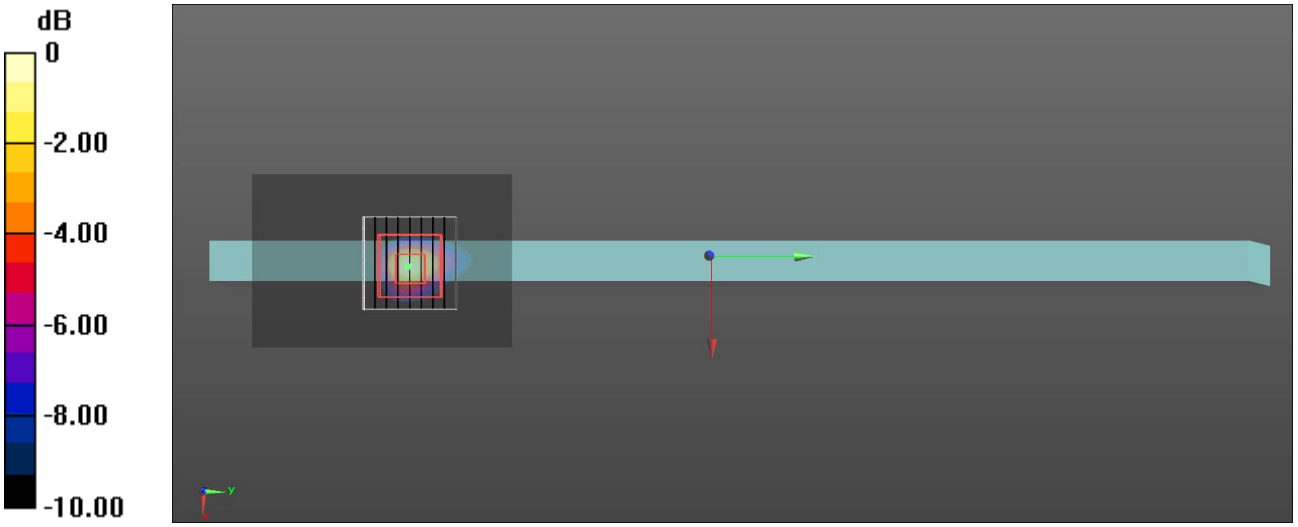
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/29
15_WLAN 5 GHz_802.11n HT40_Ch54_NB-Edge_0 mm_ANT Aux
DUT: M3502QA

Communication System: UID 0, IEEE 802.11n(5GHz)HT40 (0); Frequency: 5270 MHz;Duty Cycle: 1:1.062
Medium parameters used: f = 5270 MHz; σ = 4.679 S/m; ε_r = 35.489; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.74, 5.74, 5.74) @ 5270 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.16 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 14.61 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 4.09 W/kg
SAR(1 g) = 0.881 W/kg; SAR(10 g) = 0.217 W/kg
Smallest distance from peaks to all points 3 dB below = 5.4 mm
Ratio of SAR at M2 to SAR at M1 = 64.2%
Maximum value of SAR (measured) = 2.30 W/kg



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

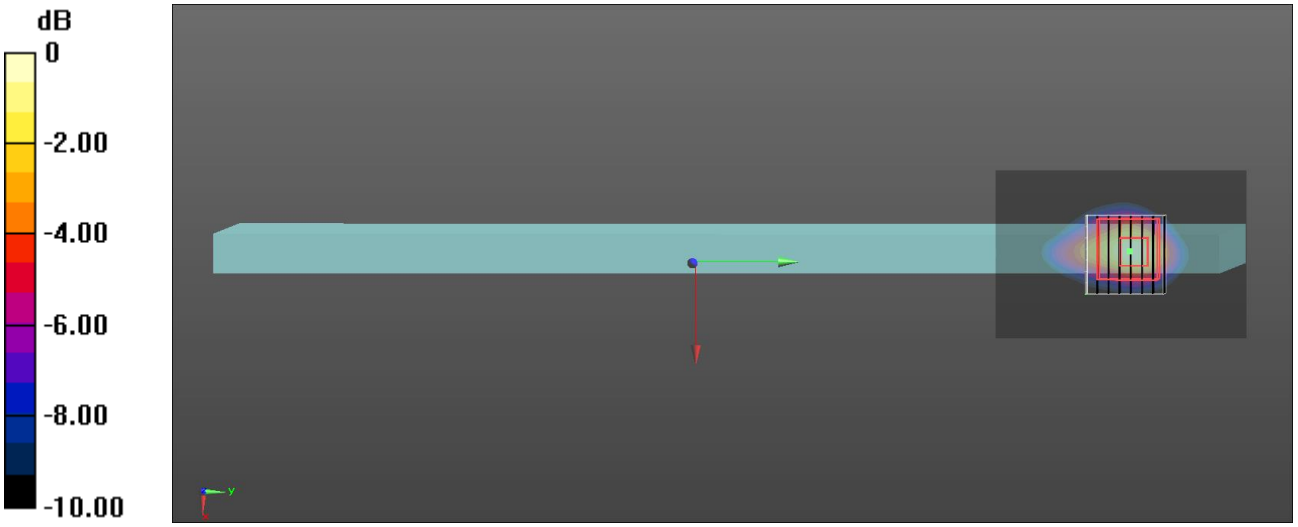
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/29
16_WLAN 5 GHz_802.11ac VHT80_Ch106_NB-Edge_0 mm_ANT Main
DUT: M3502QA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.121
Medium parameters used: f = 5530 MHz; σ = 4.932 S/m; ε_r = 34.998; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.19, 5.19, 5.19) @ 5530 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.85 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 14.66 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 2.82 W/kg
SAR(1 g) = 0.783 W/kg; SAR(10 g) = 0.276 W/kg
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 66.3%
Maximum value of SAR (measured) = 1.80 W/kg



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

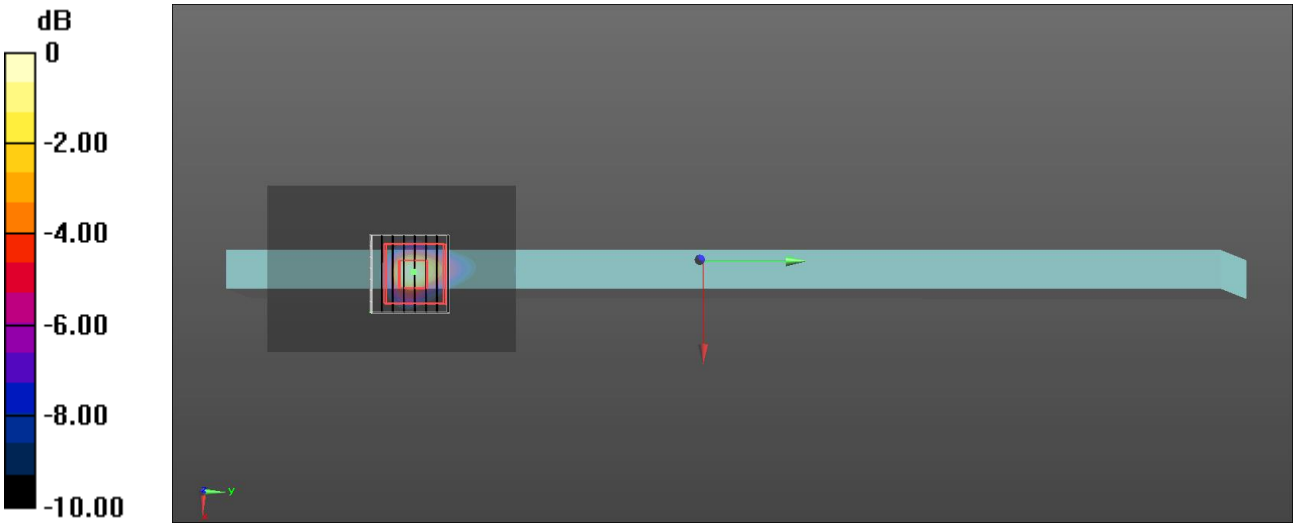
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/29
17_WLAN 5 GHz_802.11ac VHT80_Ch138_NB-Edge_0 mm_ANT Aux
DUT: M3502QA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5690 MHz;Duty Cycle: 1:1.121
Medium parameters used: f = 5690 MHz; σ = 5.1 S/m; ε_r = 34.675; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.25, 5.25, 5.25) @ 5690 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.46 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 15.57 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 4.70 W/kg
SAR(1 g) = 0.831 W/kg; SAR(10 g) = 0.202 W/kg
Smallest distance from peaks to all points 3 dB below = 5.6 mm
Ratio of SAR at M2 to SAR at M1 = 60.4%
Maximum value of SAR (measured) = 2.38 W/kg



0 dB = 2.38 W/kg = 3.77 dBW/kg

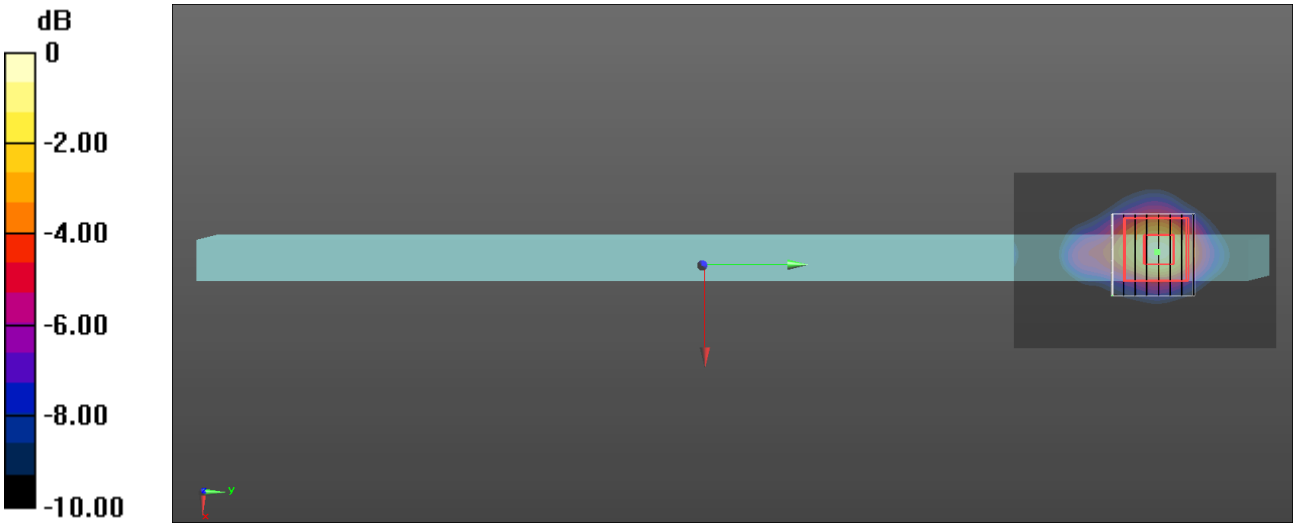
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/29
18_WLAN 5 GHz_802.11ac VHT80_Ch155_NB-Edge_0 mm_ANT Main
DUT: M3502QA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.121
Medium parameters used: f = 5775 MHz; σ = 5.177 S/m; ε_r = 34.508; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.25, 5.25, 5.25) @ 5775 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.94 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 21.40 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 3.40 W/kg
SAR(1 g) = 0.835 W/kg; SAR(10 g) = 0.283 W/kg
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 62.7%
Maximum value of SAR (measured) = 2.02 W/kg



0 dB = 2.02 W/kg = 3.05 dBW/kg

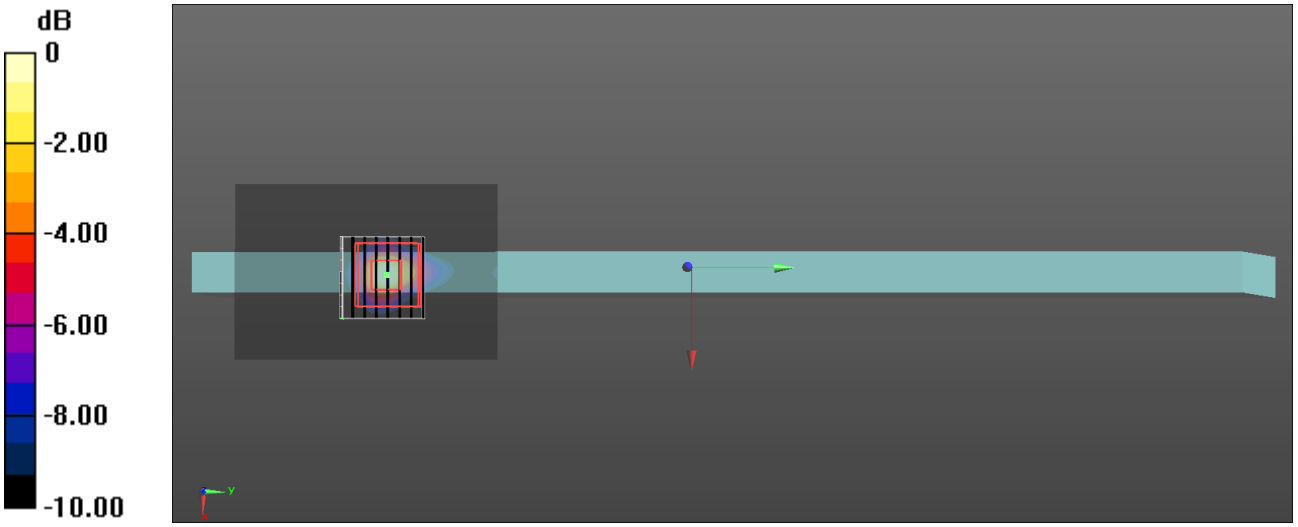
Test Laboratory: A Test Lab Techno Corp.
Date: 2022/8/29
19_WLAN 5 GHz_802.11ac VHT80_Ch155_NB-Edge_0 mm_ANT Aux
DUT: M3502QA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.121
Medium parameters used: f = 5775 MHz; σ = 5.177 S/m; ε_r = 34.508; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN7647; ConvF(5.25, 5.25, 5.25) @ 5775 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2021/12/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.35 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 10.02 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 4.34 W/kg
SAR(1 g) = 0.811 W/kg; SAR(10 g) = 0.206 W/kg
Smallest distance from peaks to all points 3 dB below = 5.6 mm
Ratio of SAR at M2 to SAR at M1 = 58.8%
Maximum value of SAR (measured) = 2.22 W/kg



0 dB = 2.22 W/kg = 3.46 dBW/kg