Appendix C - SAR Highest Measurement Plots

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/11/3

52_WLAN2.4GHz_802.11b_CH 11_Bottom Face_0mm_Ant Main

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

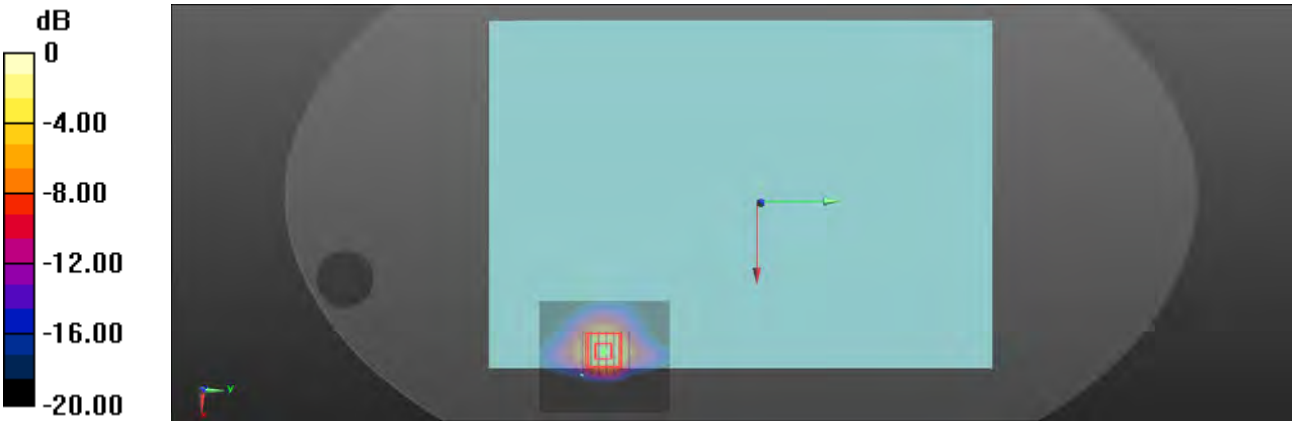
Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1.009
Medium parameters used: f = 2462 MHz; σ = 1.811 S/m; ε_r = 39.752; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(7.28, 7.28, 7.28) @ 2462 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 2.04 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.14 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.24 W/kg
SAR(1 g) = 0.913 W/kg; SAR(10 g) = 0.379 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 44.1%
Maximum value of SAR (measured) = 1.73 W/kg



0 dB = 1.73 W/kg = 2.38 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/11/3

54_WLAN2.4GHz_802.11b_CH 1_Bottom Face_0mm_Ant Aux

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

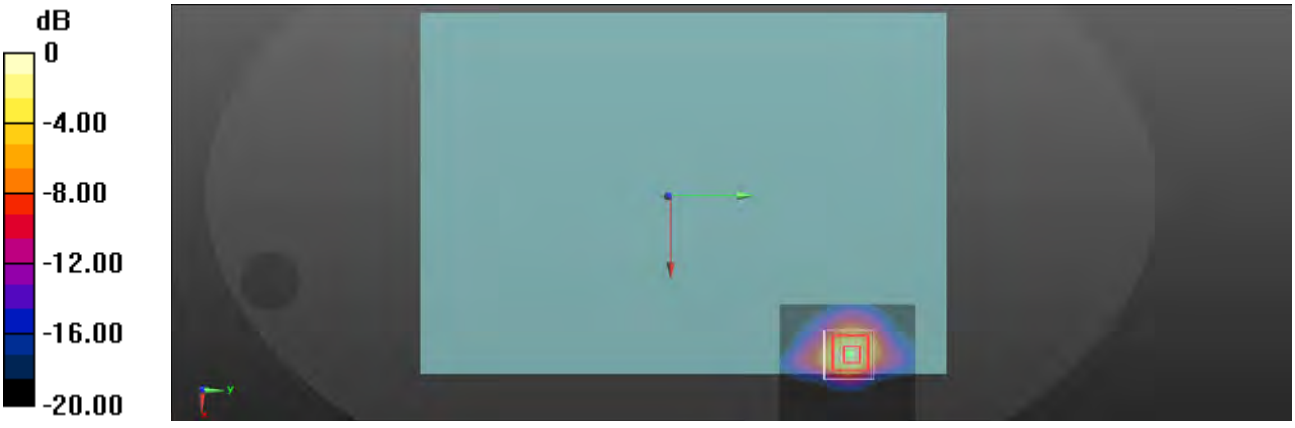
Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.009
Medium parameters used: f = 2412 MHz; σ = 1.752 S/m; ε_r = 39.891; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(7.28, 7.28, 7.28) @ 2412 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 2.14 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.93 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 0.991 W/kg; SAR(10 g) = 0.411 W/kg
Smallest distance from peaks to all points 3 dB below = 7.8 mm
Ratio of SAR at M2 to SAR at M1 = 44.8%
Maximum value of SAR (measured) = 1.73 W/kg



0 dB = 1.73 W/kg = 2.38 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/18

89_Bluetooth_CH 39_Bottom Face_0mm_Ant Aux

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

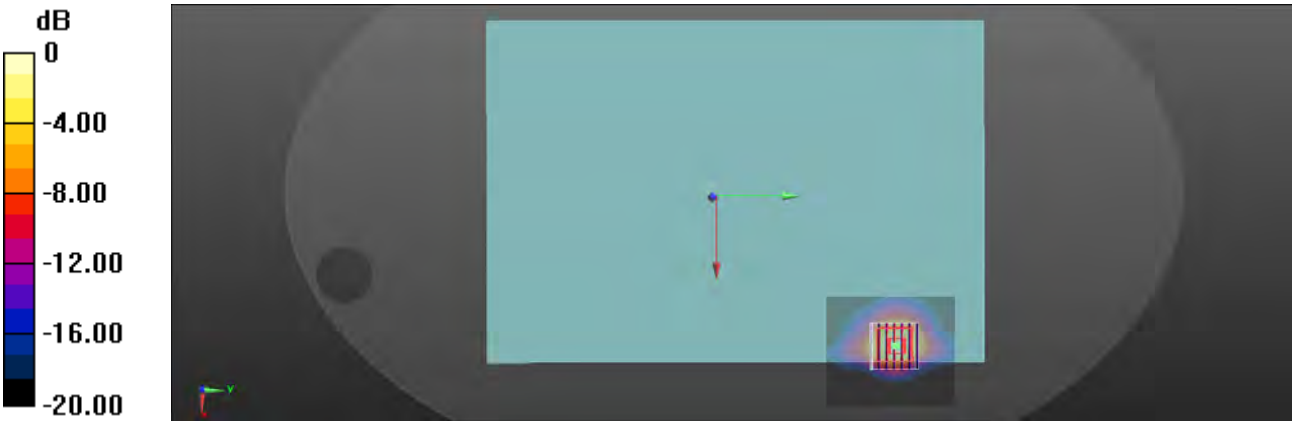
Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2441 MHz;Duty Cycle: 1:1.307
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.806 S/m; ε_r = 39.617; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(7.28, 7.28, 7.28) @ 2441 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.04 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.15 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.521 W/kg; SAR(10 g) = 0.214 W/kg
Smallest distance from peaks to all points 3 dB below = 8.1 mm
Ratio of SAR at M2 to SAR at M1 = 45.7%
Maximum value of SAR (measured) = 0.918 W/kg



0 dB = 0.918 W/kg = -0.37 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/19

01_WLAN5GHz_802.11ac VHT160_CH 50_Side 1_0 mm_Ant Main

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

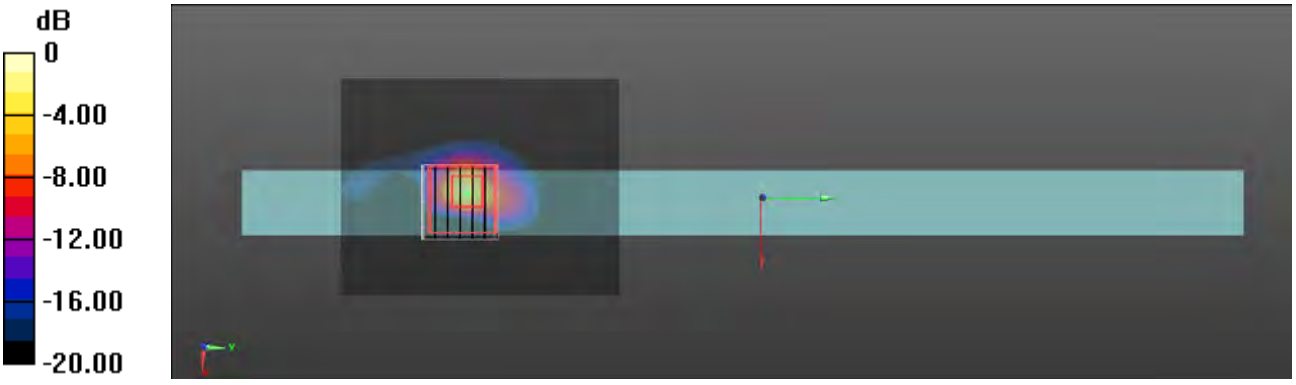
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT160 (0); Frequency: 5250 MHz;Duty Cycle: 1:1.04
Medium parameters used: f = 5250 MHz; σ = 4.737 S/m; ε_r = 36.626; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(5.04, 5.04, 5.04) @ 5250 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.08 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 14.28 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 5.57 W/kg
SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.219 W/kg
Smallest distance from peaks to all points 3 dB below = 4.8 mm
Ratio of SAR at M2 to SAR at M1 = 63.8%
Maximum value of SAR (measured) = 3.32 W/kg



0 dB = 3.32 W/kg = 5.21 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/19

02_WLAN5GHz_802.11ac VHT160_CH 50_Bottom Face_0 mm_Ant Aux

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

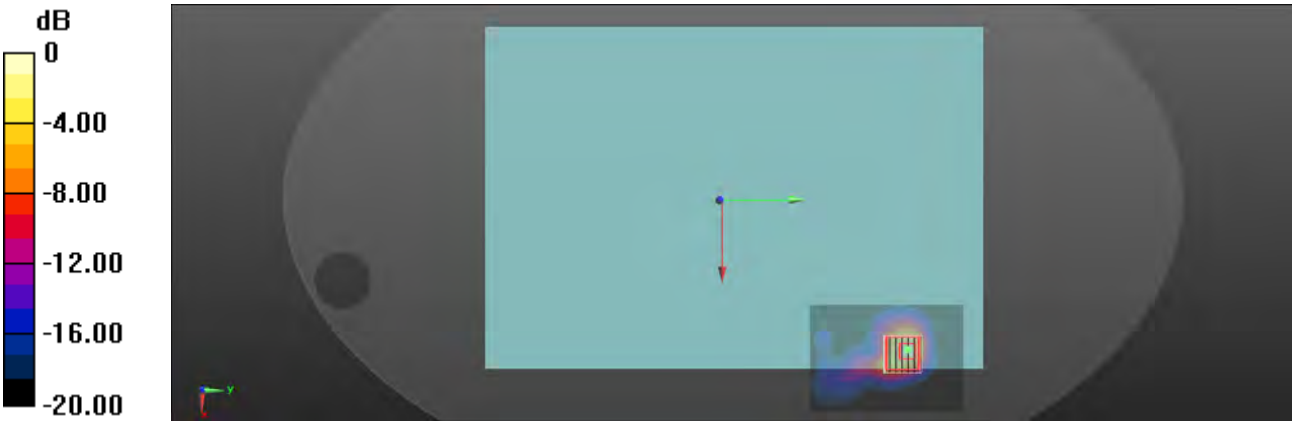
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT160 (0); Frequency: 5250 MHz;Duty Cycle: 1:1.04
Medium parameters used: f = 5250 MHz; σ = 4.737 S/m; ε_r = 36.626; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(5.04, 5.04, 5.04) @ 5250 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.33 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 22.70 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 4.35 W/kg
SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.261 W/kg
Smallest distance from peaks to all points 3 dB below = 6.4 mm
Ratio of SAR at M2 to SAR at M1 = 61.1%
Maximum value of SAR (measured) = 2.34 W/kg



0 dB = 2.34 W/kg = 3.69 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/20

03_WLAN5GHz_802.11ac VHT80_CH 106_Side 1_0 mm_Ant Main

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

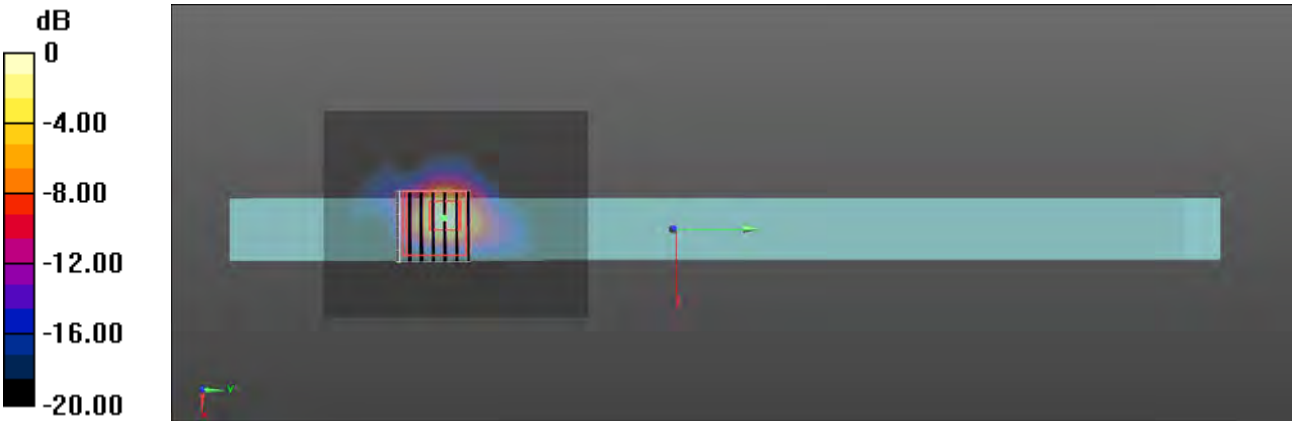
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.041
Medium parameters used: f = 5530 MHz; σ = 4.948 S/m; ε_r = 35.057; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(4.61, 4.61, 4.61) @ 5530 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 3.71 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 19.95 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 6.46 W/kg
SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.215 W/kg
Smallest distance from peaks to all points 3 dB below = 4.7 mm
Ratio of SAR at M2 to SAR at M1 = 61.2%
Maximum value of SAR (measured) = 3.47 W/kg



0 dB = 3.47 W/kg = 5.40 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/20

04_WLAN5GHz_802.11ac VHT80_CH 138_Bottom Face_0 mm_Ant Aux

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

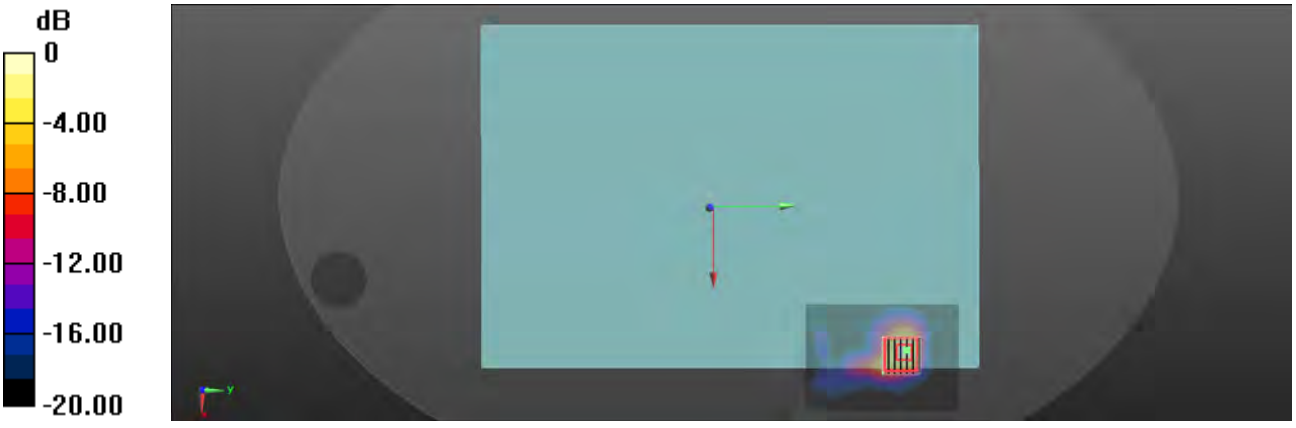
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5690 MHz;Duty Cycle: 1:1.041
Medium parameters used: f = 5690 MHz; σ = 5.116 S/m; ε_r = 34.734; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(4.64, 4.64, 4.64) @ 5690 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.56 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 16.67 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 4.67 W/kg
SAR(1 g) = 0.924 W/kg; SAR(10 g) = 0.246 W/kg
Smallest distance from peaks to all points 3 dB below = 6.1 mm
Ratio of SAR at M2 to SAR at M1 = 57.7%
Maximum value of SAR (measured) = 2.31 W/kg



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

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/21

05_WLAN5GHz_802.11ac VHT80_CH 155_Side 1_0 mm_Ant Main

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

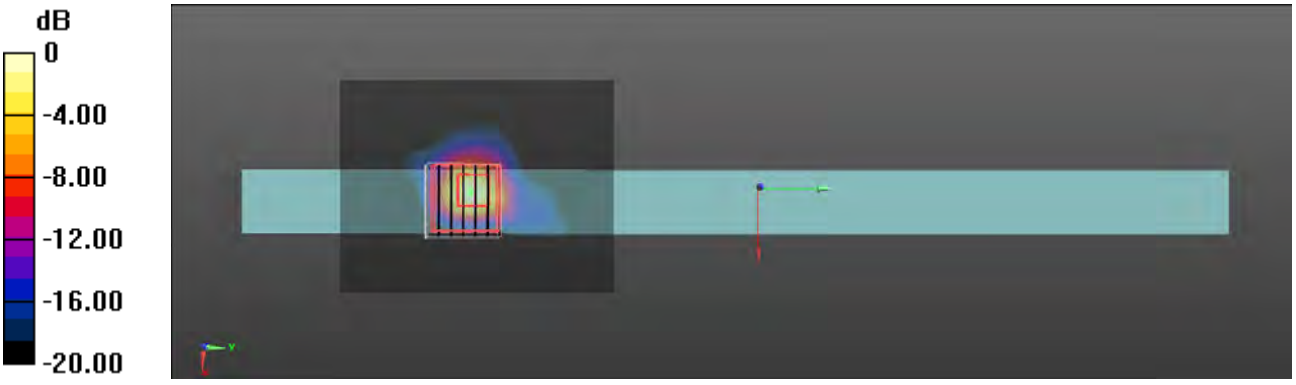
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.04
Medium parameters used: f = 5775 MHz; σ = 5.267 S/m; ε_r = 35.611; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(4.64, 4.64, 4.64) @ 5775 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.94 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 13.27 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 6.32 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.195 W/kg
Smallest distance from peaks to all points 3 dB below = 4 mm
Ratio of SAR at M2 to SAR at M1 = 59.3%
Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.17 W/kg = 5.01 dBW/kg

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/21

06_WLAN5GHz_802.11ac VHT80_CH 155_Bottom Face_0 mm_Ant Aux

DUT: B5402CE , B5402CEA, B5402FE, B5408FE, B5402FEA, B5408FEA, B5408CE, B5408CEA, B5402CEAW, B5402FEAW, B5400FE, B5400CE, B5400FEA, B5400CEA

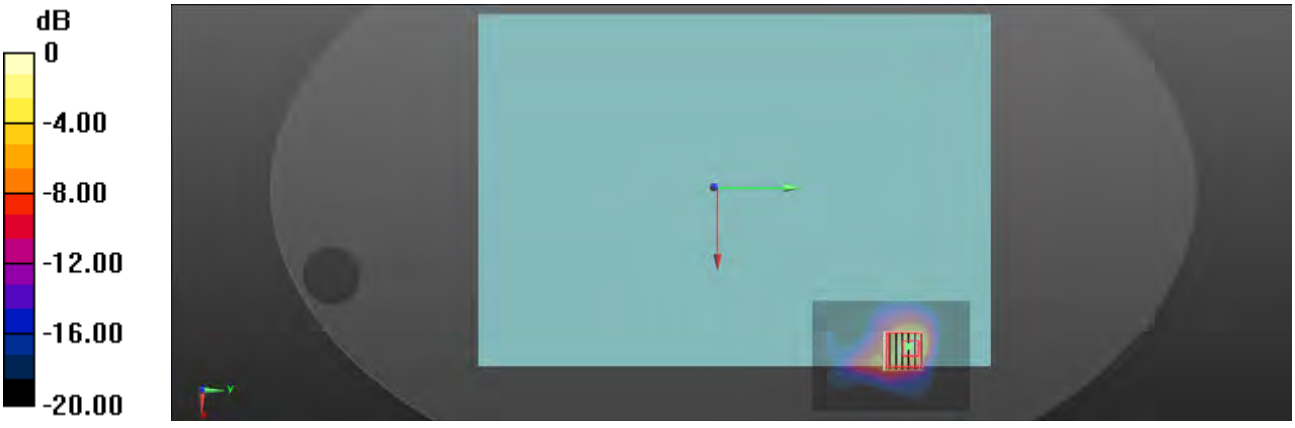
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.041
Medium parameters used: f = 5775 MHz; σ = 5.267 S/m; ε_r = 35.611; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN3977; ConvF(4.64, 4.64, 4.64) @ 5775 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI V4.0; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.62 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 19.02 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 5.85 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.278 W/kg
Smallest distance from peaks to all points 3 dB below = 5.6 mm
Ratio of SAR at M2 to SAR at M1 = 56.6%
Maximum value of SAR (measured) = 2.79 W/kg



0 dB = 2.79 W/kg = 4.46 dBW/kg