

## Appendix C - Highest Measurement Plots

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/5

**01\_WLAN 2.4 GHz\_802.11b\_Ch6\_Side 1\_0 mm\_ANT Main**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1.002

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.757$  S/m;  $\epsilon_r = 38.825$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.28, 7.28, 7.28) @ 2437 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, 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) = 0.402 W/kg

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=5$  mm,  $dy=5$  mm,  $dz=5$  mm

Reference Value = 14.38 V/m; Power Drift = -0.02 dB

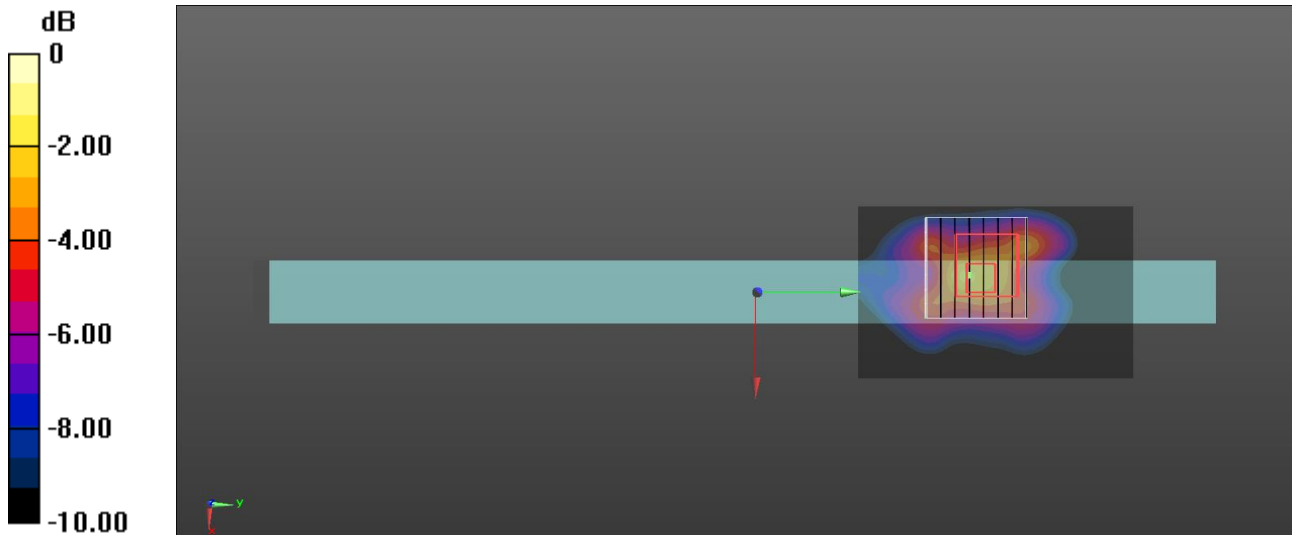
Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.239 W/kg; SAR(10 g) = 0.115 W/kg**

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 44.2%

Maximum value of SAR (measured) = 0.609 W/kg



0 dB = 0.609 W/kg = -2.15 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/5

**02\_WLAN 2.4 GHz\_802.11b\_Ch6\_Side 1\_0 mm\_ANT Aux**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz; Duty Cycle: 1:1.002

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.757$  S/m;  $\epsilon_r = 38.825$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3977; ConvF(7.28, 7.28, 7.28) @ 2437 MHz; Calibrated: 2021/7/26
- Sensor-Surface: 1.4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2021/7/30
- 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) = 0.408 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$  mm,  $dy=5$  mm,  $dz=5$  mm

Reference Value = 15.19 V/m; Power Drift = -0.11 dB

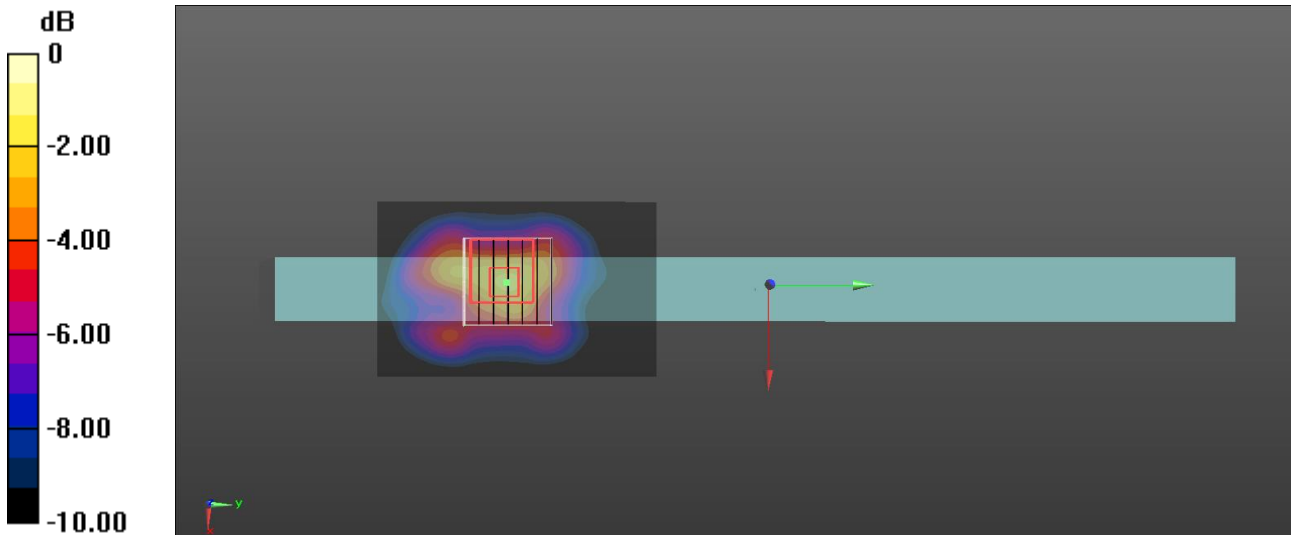
Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.258 W/kg; SAR(10 g) = 0.125 W/kg**

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 34.8%

Maximum value of SAR (measured) = 0.612 W/kg



0 dB = 0.612 W/kg = -2.13 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/5

**03\_Bluetooth\_GFSK\_Ch39\_Side 1\_0 mm\_ANT Aux**

**DUT: B3402FBA**

Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2441 MHz; Duty Cycle: 1:1.313

Medium parameters used (interpolated):  $f = 2441$  MHz;  $\sigma = 1.761$  S/m;  $\epsilon_r = 38.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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; 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) = 0.120 W/kg

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 8.852 V/m; Power Drift = -0.02 dB

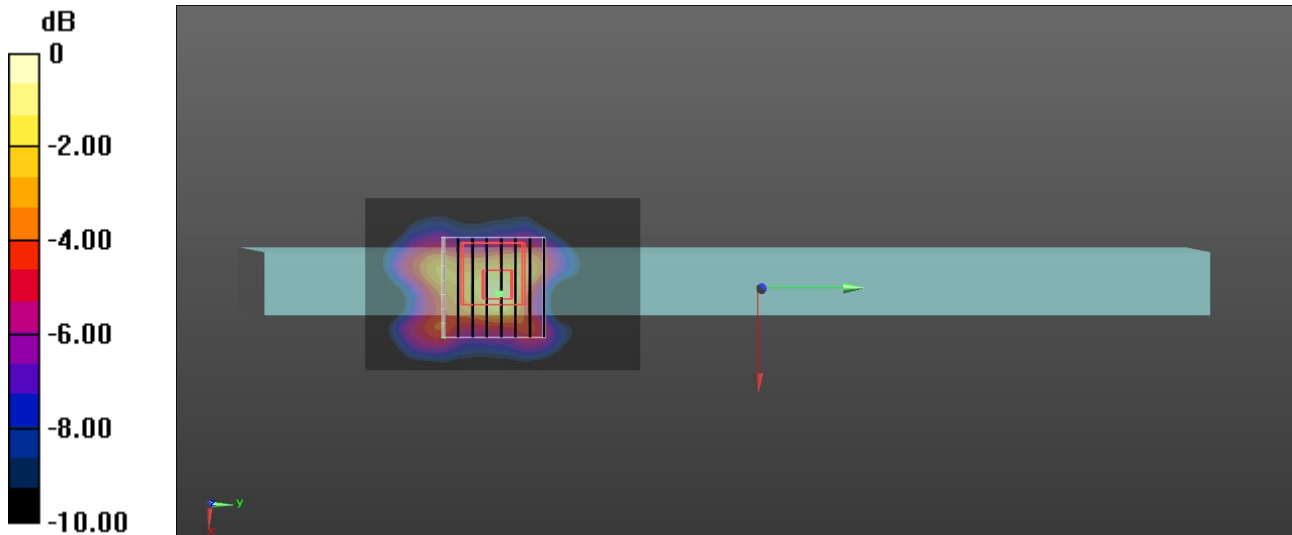
Peak SAR (extrapolated) = 0.234 W/kg

**SAR(1 g) = 0.053 W/kg; SAR(10 g) = 0.024 W/kg**

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 35.3%

Maximum value of SAR (measured) = 0.138 W/kg



0 dB = 0.138 W/kg = -8.60 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/24

**04\_WLAN 5 GHz\_802.11ac VHT80\_Ch58\_Side 1\_0 mm\_ANT Main**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5290 MHz;Duty Cycle: 1:1.053

Medium parameters used:  $f = 5290$  MHz;  $\sigma = 4.734$  S/m;  $\epsilon_r = 36.559$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 002 AA; Serial: 1133
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.466 W/kg

**Zoom Scan (11x10x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 8.069 V/m; Power Drift = 0.14 dB

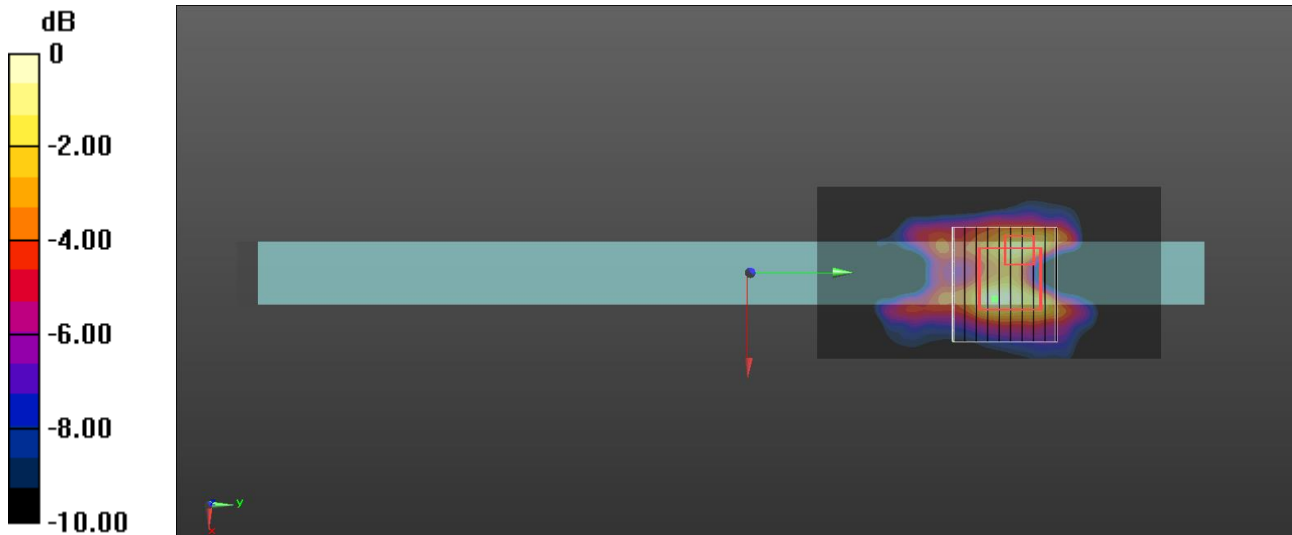
Peak SAR (extrapolated) = 0.801 W/kg

**SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.065 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.1 mm

Ratio of SAR at M2 to SAR at M1 = 65.2%

Maximum value of SAR (measured) = 0.481 W/kg



0 dB = 0.481 W/kg = -3.18 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/24

**05\_WLAN 5 GHz\_802.11ac VHT80\_Ch58\_Side 1\_0 mm\_ANT Aux**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5290 MHz;Duty Cycle: 1:1.053

Medium parameters used:  $f = 5290$  MHz;  $\sigma = 4.734$  S/m;  $\epsilon_r = 36.559$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 002 AA; Serial: 1133
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.394 W/kg

**Zoom Scan (9x9x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 7.879 V/m; Power Drift = -0.07 dB

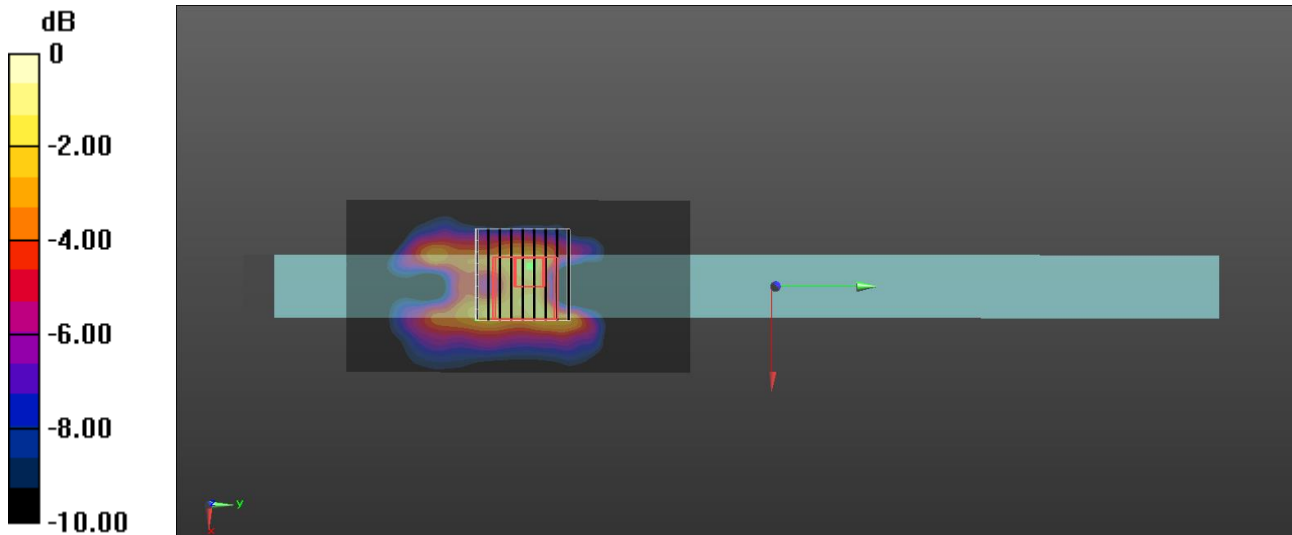
Peak SAR (extrapolated) = 0.867 W/kg

**SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.059 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 63.5%

Maximum value of SAR (measured) = 0.512 W/kg



0 dB = 0.512 W/kg = -2.91 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/24

**06\_WLAN 5 GHz\_802.11ac VHT80\_Ch106\_Side 1\_0 mm\_ANT Main**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.053

Medium parameters used:  $f = 5530$  MHz;  $\sigma = 4.995$  S/m;  $\epsilon_r = 36.264$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 002 AA; Serial: 1133
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.421 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 7.570 V/m; Power Drift = -0.07 dB

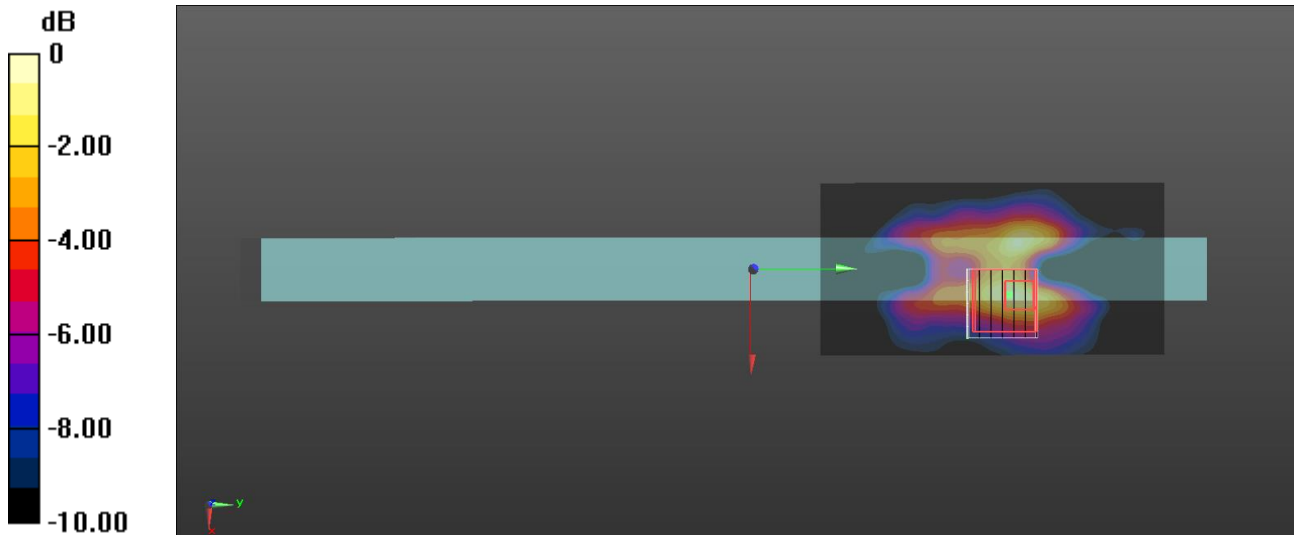
Peak SAR (extrapolated) = 0.709 W/kg

**SAR(1 g) = 0.179 W/kg; SAR(10 g) = 0.056 W/kg**

Smallest distance from peaks to all points 3 dB below = 6.1 mm

Ratio of SAR at M2 to SAR at M1 = 65.5%

Maximum value of SAR (measured) = 0.467 W/kg



0 dB = 0.467 W/kg = -3.31 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/24

**07\_WLAN 5 GHz\_802.11ac VHT80\_Ch106\_Side 1\_0 mm\_ANT Aux**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.053

Medium parameters used:  $f = 5530$  MHz;  $\sigma = 4.995$  S/m;  $\epsilon_r = 36.264$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (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 002 AA; Serial: 1133
- Measurement SW: DASYS2, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.447 W/kg

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 6.054 V/m; Power Drift = 0.05 dB

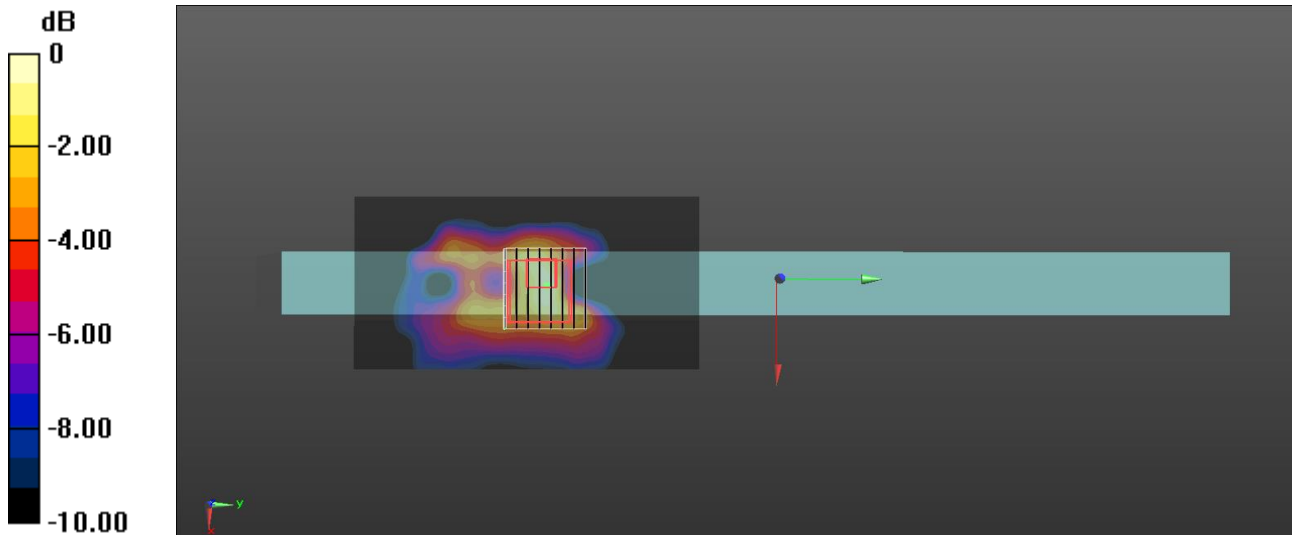
Peak SAR (extrapolated) = 0.844 W/kg

**SAR(1 g) = 0.181 W/kg; SAR(10 g) = 0.058 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.1 mm

Ratio of SAR at M2 to SAR at M1 = 61.7%

Maximum value of SAR (measured) = 0.454 W/kg



0 dB = 0.454 W/kg = -3.43 dBW/kg



Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/25

**08\_WLAN 5 GHz\_802.11ac VHT80\_Ch155\_Side 1\_0 mm\_ANT Main**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.053

Medium parameters used:  $f = 5775$  MHz;  $\sigma = 5.119$  S/m;  $\epsilon_r = 34.956$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 002 AA; Serial: 1133
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.519 W/kg

**Zoom Scan (10x9x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 4.479 V/m; Power Drift = -0.15 dB

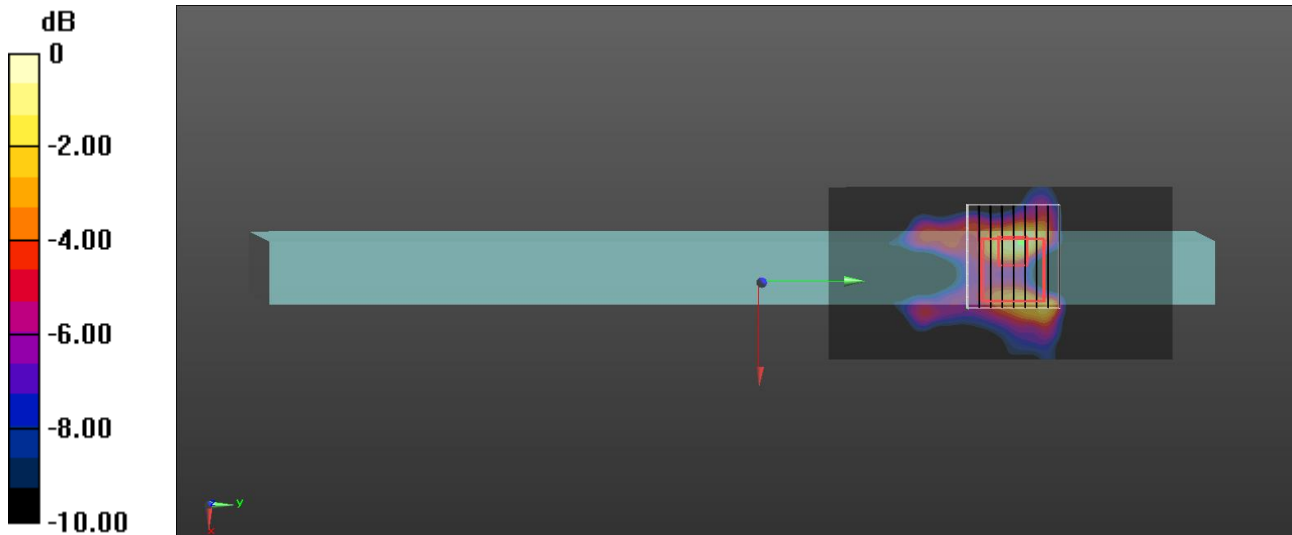
Peak SAR (extrapolated) = 0.883 W/kg

**SAR(1 g) = 0.181 W/kg; SAR(10 g) = 0.052 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.7 mm

Ratio of SAR at M2 to SAR at M1 = 60.1%

Maximum value of SAR (measured) = 0.544 W/kg



0 dB = 0.544 W/kg = -2.64 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/25

**09\_WLAN 5 GHz\_802.11ac VHT80\_Ch155\_Side 1\_0 mm\_ANT Aux**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.053

Medium parameters used:  $f = 5775$  MHz;  $\sigma = 5.119$  S/m;  $\epsilon_r = 34.956$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (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 002 AA; Serial: 1133
- Measurement SW: DASYS2, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (61x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.496 W/kg

**Zoom Scan (11x11x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 6.970 V/m; Power Drift = -0.05 dB

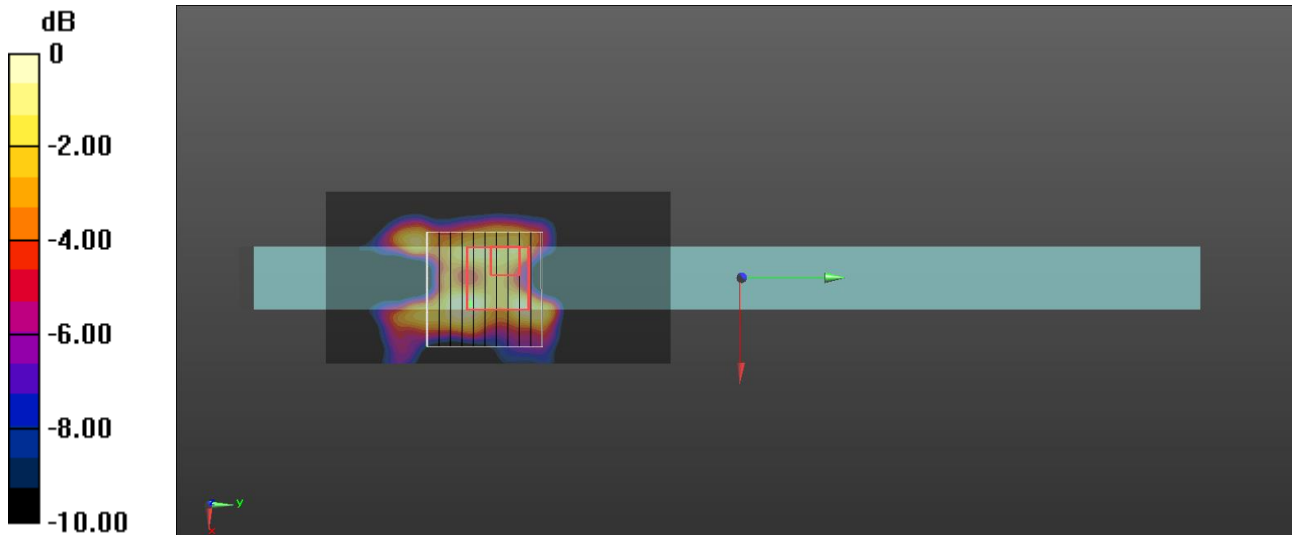
Peak SAR (extrapolated) = 0.788 W/kg

**SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.053 W/kg**

Smallest distance from peaks to all points 3 dB below = 5 mm

Ratio of SAR at M2 to SAR at M1 = 57.1%

Maximum value of SAR (measured) = 0.480 W/kg



0 dB = 0.480 W/kg = -3.19 dBW/kg