

## Appendix C - Highest Measurement Plots

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/5

**01\_WLAN 2.4 GHz\_802.11b\_Ch11\_Side 1\_0 mm\_ANT Main**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHz; Duty Cycle: 1:1.001

Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.783$  S/m;  $\epsilon_r = 38.755$ ;  $\rho = 1000$  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 - SN7647; ConvF(8.13, 8.13, 8.13) @ 2462 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4 mm (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 (51x81x1):** Interpolated grid:  $dx=1.200$  mm,  $dy=1.200$  mm

Maximum value of SAR (interpolated) = 0.342 W/kg

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

Reference Value = 14.19 V/m; Power Drift = -0.16 dB

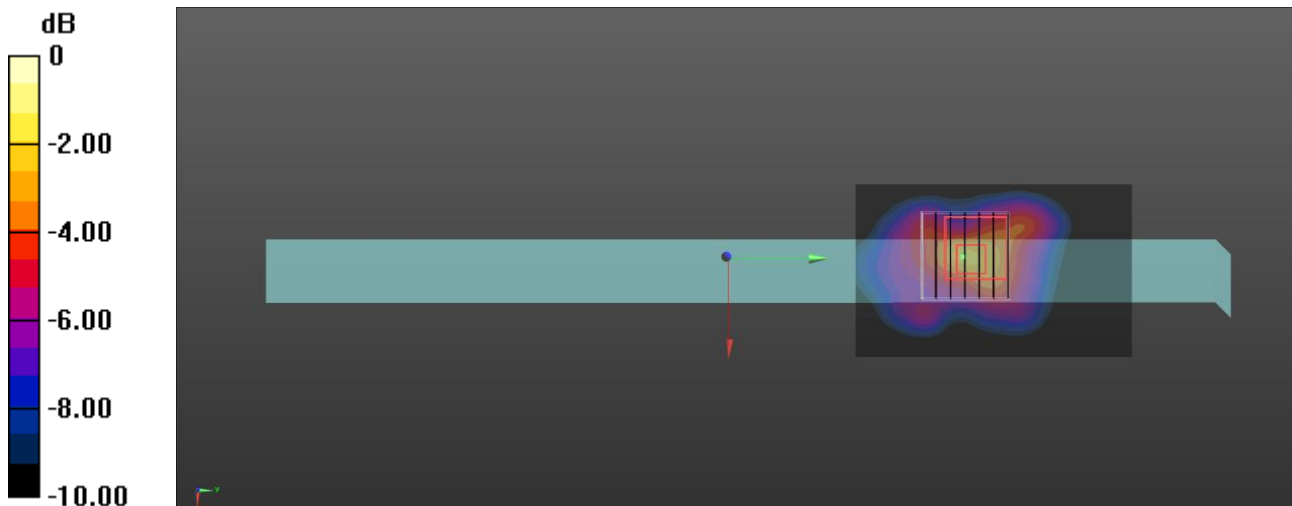
Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.331 W/kg; SAR(10 g) = 0.156 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.1 mm

Ratio of SAR at M2 to SAR at M1 = 35.2%

Maximum value of SAR (measured) = 0.582 W/kg



0 dB = 0.582 W/kg = -2.35 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/5

**02\_WLAN 2.4 GHz\_802.11b\_Ch1\_Side 1\_0 mm\_ANT Aux**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz; Duty Cycle: 1:1.001

Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.73$  S/m;  $\epsilon_r = 38.914$ ;  $\rho = 1000$  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 - SN7647; ConvF(8.13, 8.13, 8.13) @ 2412 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4 mm (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 (51x81x1):** Interpolated grid:  $dx=1.200$  mm,  $dy=1.200$  mm

Maximum value of SAR (interpolated) = 0.398 W/kg

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

Reference Value = 16.67 V/m; Power Drift = -0.10 dB

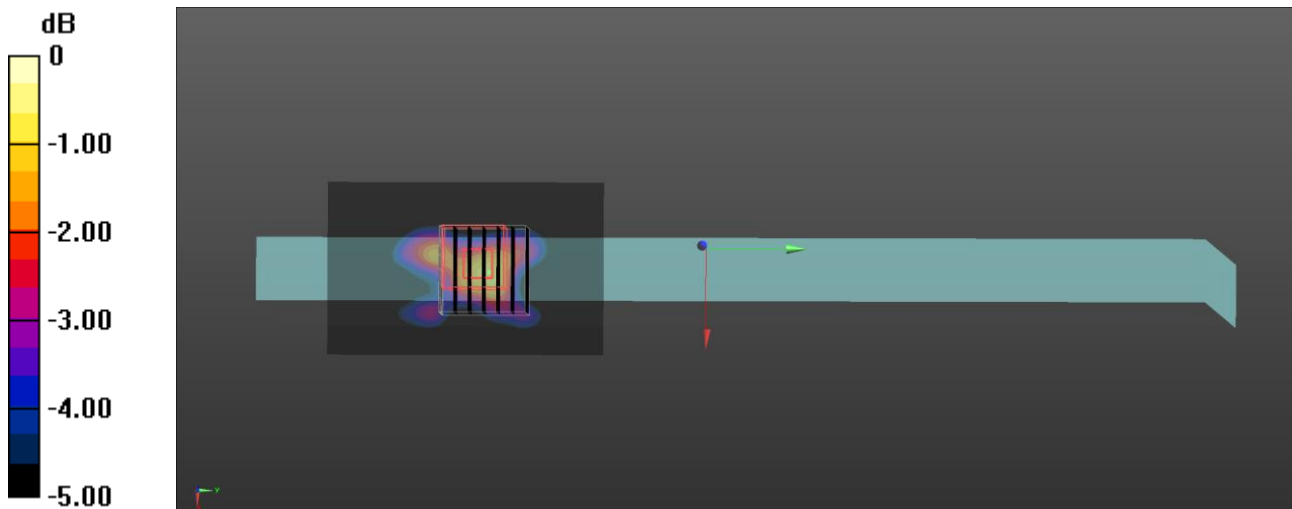
Peak SAR (extrapolated) = 0.780 W/kg

**SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.149 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.1 mm

Ratio of SAR at M2 to SAR at M1 = 43.1%

Maximum value of SAR (measured) = 0.472 W/kg



0 dB = 0.472 W/kg = -3.26 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: 1:1.318

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: 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 - SN7647; ConvF(8.13, 8.13, 8.13) @ 2441 MHz; Calibrated: 2022/4/27
- Sensor-Surface: 1.4 mm (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 (51x81x1):** Interpolated grid:  $dx=1.200$  mm,  $dy=1.200$  mm

Maximum value of SAR (interpolated) = 0.0731 W/kg

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

Reference Value = 7.664 V/m; Power Drift = -0.01 dB

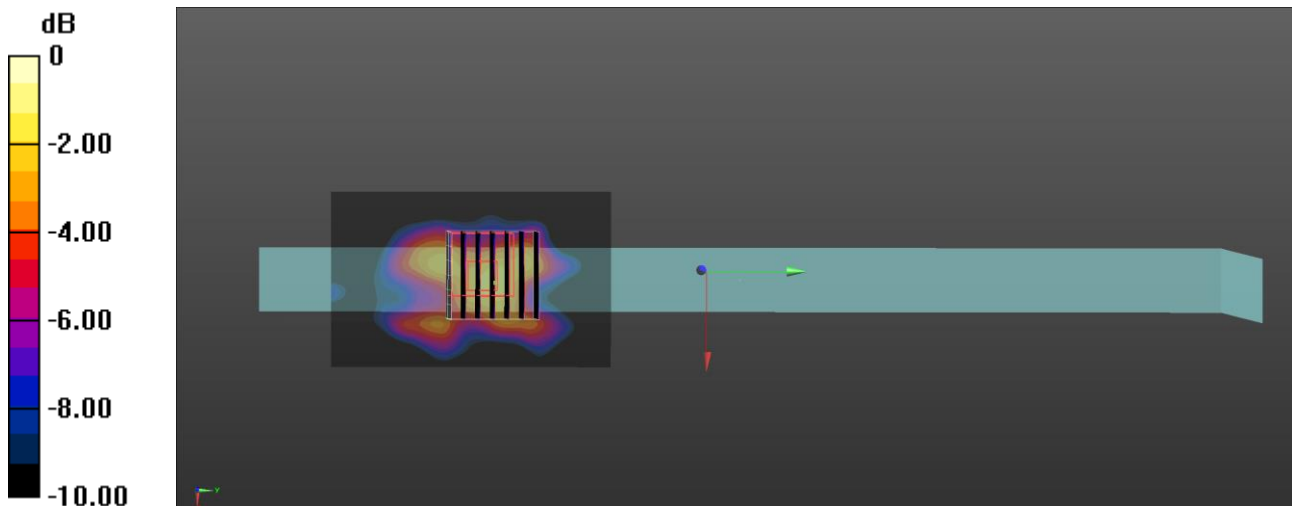
Peak SAR (extrapolated) = 0.172 W/kg

**SAR(1 g) = 0.043 W/kg; SAR(10 g) = 0.019 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.1 mm

Ratio of SAR at M2 to SAR at M1 = 30.3%

Maximum value of SAR (measured) = 0.104 W/kg



0 dB = 0.104 W/kg = -9.83 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/22

**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: 1:1.028

Medium parameters used:  $f = 5290$  MHz;  $\sigma = 4.701$  S/m;  $\epsilon_r = 36.189$ ;  $\rho = 1000$  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(5.74, 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: DASYS2, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

**Area Scan (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.397 W/kg

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

Reference Value = 5.745 V/m; Power Drift = -0.05 dB

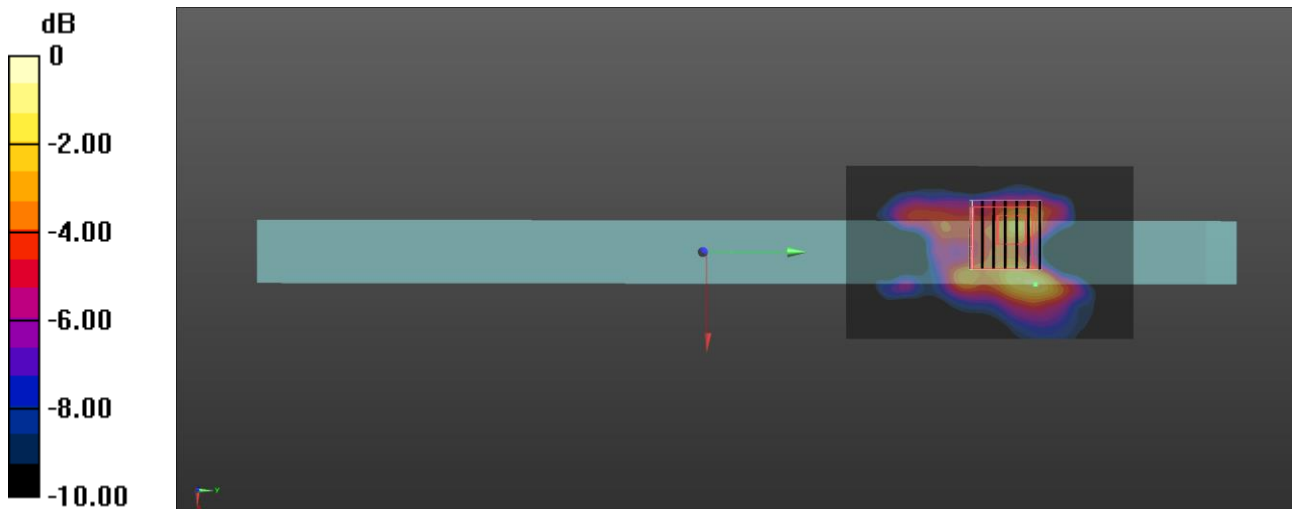
Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.049 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 65.4%

Maximum value of SAR (measured) = 0.518 W/kg



0 dB = 0.518 W/kg = -2.86 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/22

**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: 1:1.028

Medium parameters used:  $f = 5290$  MHz;  $\sigma = 4.701$  S/m;  $\epsilon_r = 36.189$ ;  $\rho = 1000$  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 (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.451 W/kg

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

Reference Value = 6.490 V/m; Power Drift = 0.15 dB

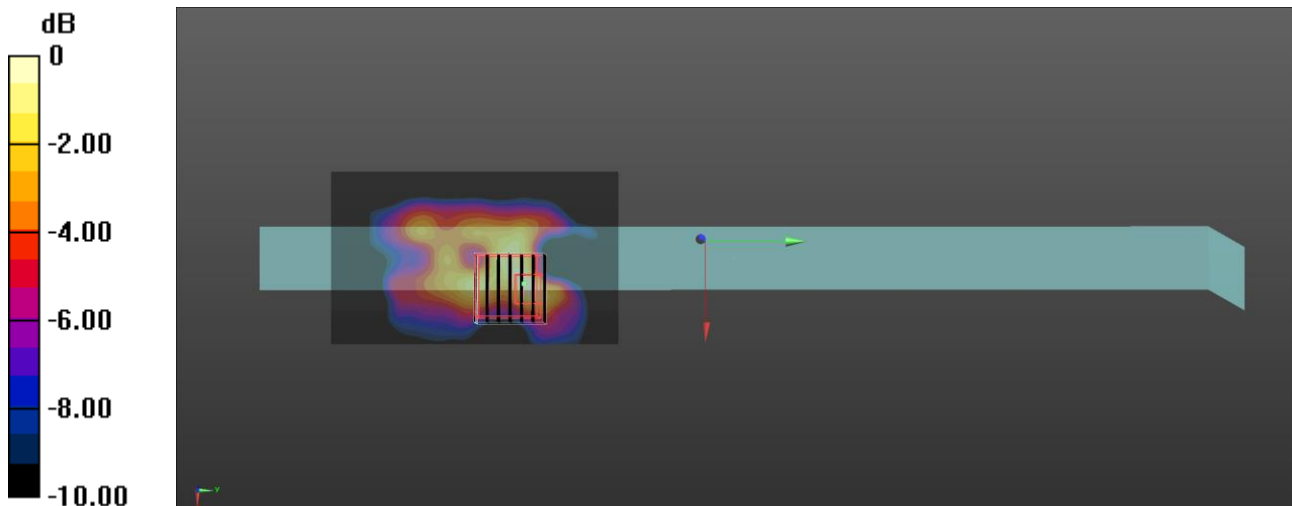
Peak SAR (extrapolated) = 0.726 W/kg

**SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.042 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.2 mm

Ratio of SAR at M2 to SAR at M1 = 58.4%

Maximum value of SAR (measured) = 0.453 W/kg



0 dB = 0.453 W/kg = -3.44 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/23

**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: 1:1.028

Medium parameters used:  $f = 5530$  MHz;  $\sigma = 4.973$  S/m;  $\epsilon_r = 35.975$ ;  $\rho = 1000$  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 (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.556 W/kg

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

Reference Value = 5.968 V/m; Power Drift = -0.02 dB

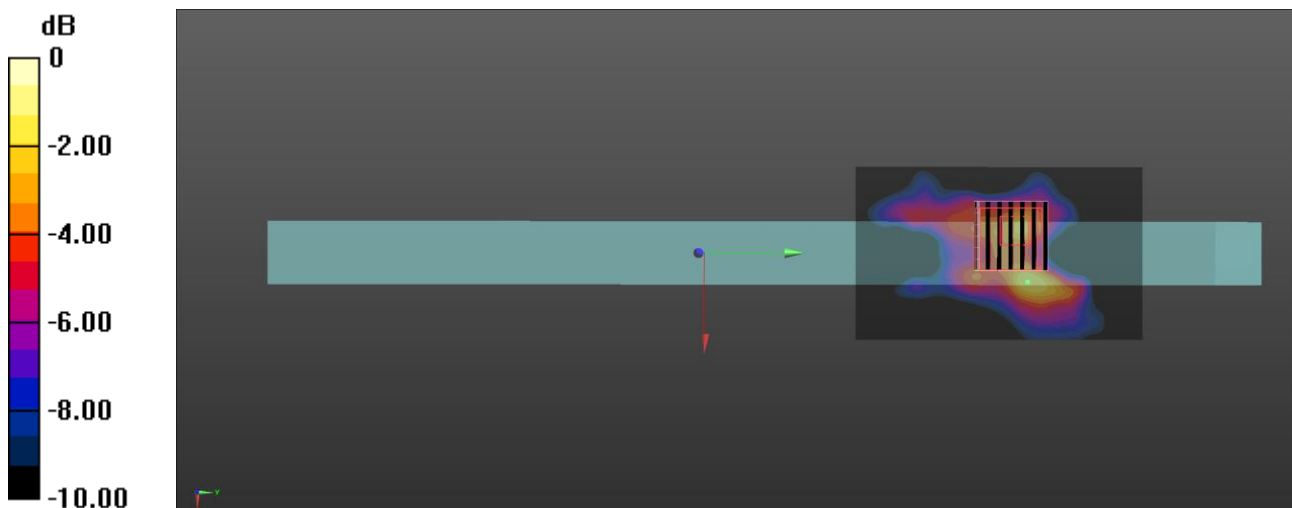
Peak SAR (extrapolated) = 3.09 W/kg

**SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.073 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.8 mm

Ratio of SAR at M2 to SAR at M1 = 62.6%

Maximum value of SAR (measured) = 0.747 W/kg



0 dB = 0.747 W/kg = -1.27 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/23

**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: 1:1.028

Medium parameters used:  $f = 5530$  MHz;  $\sigma = 4.973$  S/m;  $\epsilon_r = 35.975$ ;  $\rho = 1000$  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 (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.505 W/kg

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

Reference Value = 6.227 V/m; Power Drift = 0.19 dB

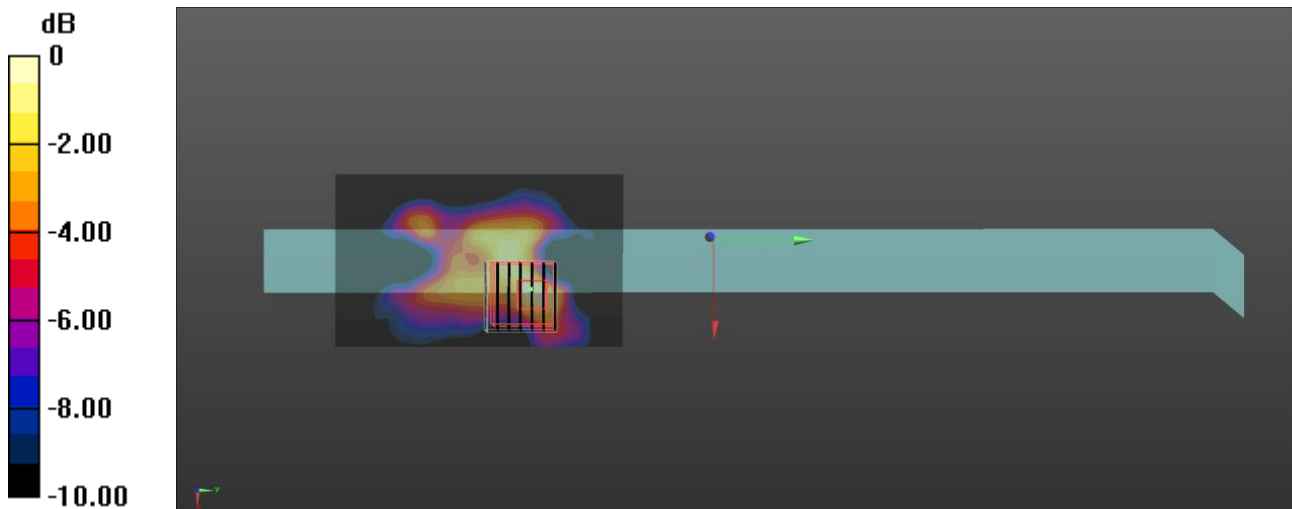
Peak SAR (extrapolated) = 0.790 W/kg

**SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.041 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.2 mm

Ratio of SAR at M2 to SAR at M1 = 57.7%

Maximum value of SAR (measured) = 0.474 W/kg



0 dB = 0.474 W/kg = -3.24 dBW/kg



Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/22

**08\_WLAN 5 GHz\_802.11n HT40\_Ch159\_Side 1\_0 mm\_ANT Main**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11n(5GHz)HT40 (0); Frequency: 5795 MHz;Duty Cycle: 1:1.017

Medium parameters used:  $f = 5795$  MHz;  $\sigma = 5.228$  S/m;  $\epsilon_r = 35.299$ ;  $\rho = 1000$  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) @ 5795 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 (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.468 W/kg

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

Reference Value = 5.610 V/m; Power Drift = -0.05 dB

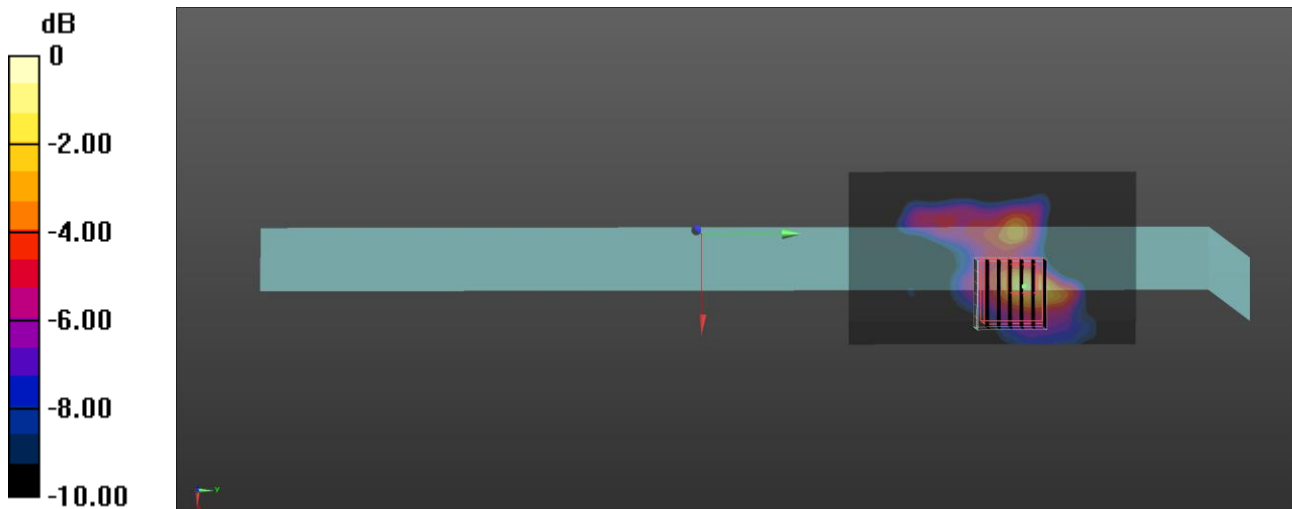
Peak SAR (extrapolated) = 0.984 W/kg

**SAR(1 g) = 0.220 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 = 58.6%

Maximum value of SAR (measured) = 0.604 W/kg



0 dB = 0.604 W/kg = -2.19 dBW/kg

Test Laboratory: A Test Lab Techno Corp.

Date: 2022/5/22

**09\_WLAN 5 GHz\_802.11n HT40\_Ch159\_Side 1\_0 mm\_ANT Aux**

**DUT: B3402FBA**

Communication System: UID 0, IEEE 802.11n(5GHz)HT40 (0); Frequency: 5795 MHz;Duty Cycle: 1:1.017

Medium parameters used:  $f = 5795$  MHz;  $\sigma = 5.228$  S/m;  $\epsilon_r = 35.299$ ;  $\rho = 1000$  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) @ 5795 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 (61x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.533 W/kg

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

Reference Value = 7.010 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.804 W/kg

**SAR(1 g) = 0.164 W/kg; SAR(10 g) = 0.042 W/kg**

Smallest distance from peaks to all points 3 dB below = 4.2 mm

Ratio of SAR at M2 to SAR at M1 = 58.5%

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

