

Appendix C - SAR Highest Measurement Plots

Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/22

01_WLAN2.4GHz_802.11b_CH 1_Bottom Face_0 mm_Ant Main

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

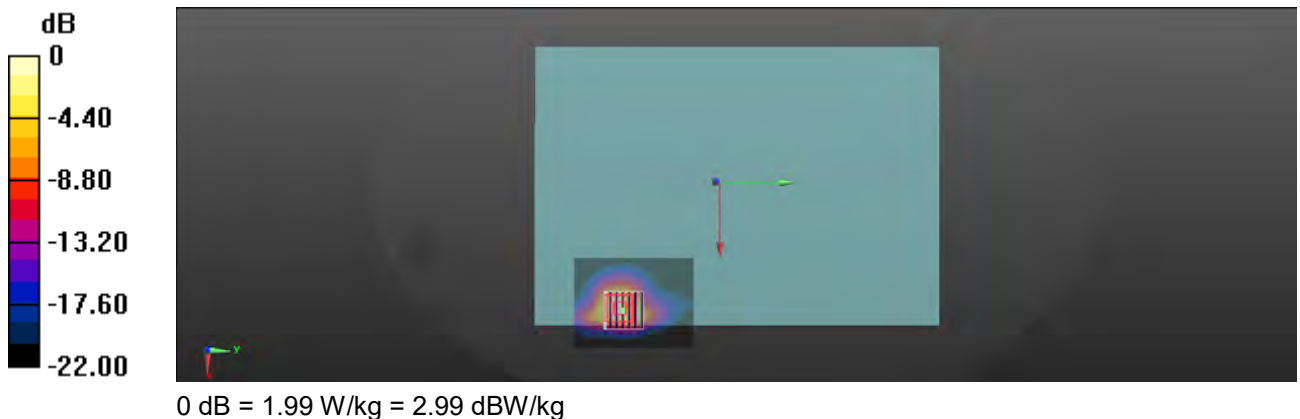
Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz; Duty Cycle: 1:1.005
Medium parameters used: $f = 2412$ MHz; $\sigma = 1.747$ S/m; $\epsilon_r = 39.796$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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(8.1, 8.1, 8.1) @ 2412 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
Maximum value of SAR (interpolated) = 2.15 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 24.17 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 2.60 W/kg
SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.486 W/kg
Smallest distance from peaks to all points 3 dB below = 7.6 mm
Ratio of SAR at M2 to SAR at M1 = 45.4%
Maximum value of SAR (measured) = 1.99 W/kg



Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/22

02_WLAN2.4GHz_802.11b_CH 11_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 802.11b (0); Frequency: 2462 MHz; Duty Cycle: 1:1.01
Medium parameters used: $f = 2462$ MHz; $\sigma = 1.801$ S/m; $\epsilon_r = 39.633$; $\rho = 1000$ kg/m³
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(8.1, 8.1, 8.1) @ 2462 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- Measurement SW: DASYS2, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x81x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
Maximum value of SAR (interpolated) = 1.80 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 28.38 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 2.30 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.426 W/kg
Smallest distance from peaks to all points 3 dB below = 8.1 mm
Ratio of SAR at M2 to SAR at M1 = 45.9%
Maximum value of SAR (measured) = 1.76 W/kg



Test Laboratory: A Test Lab Techno Corp.
Date: 2021/10/22

100_Bluetooth_CH 39_Bottom Face_0mm_Ant Aux

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

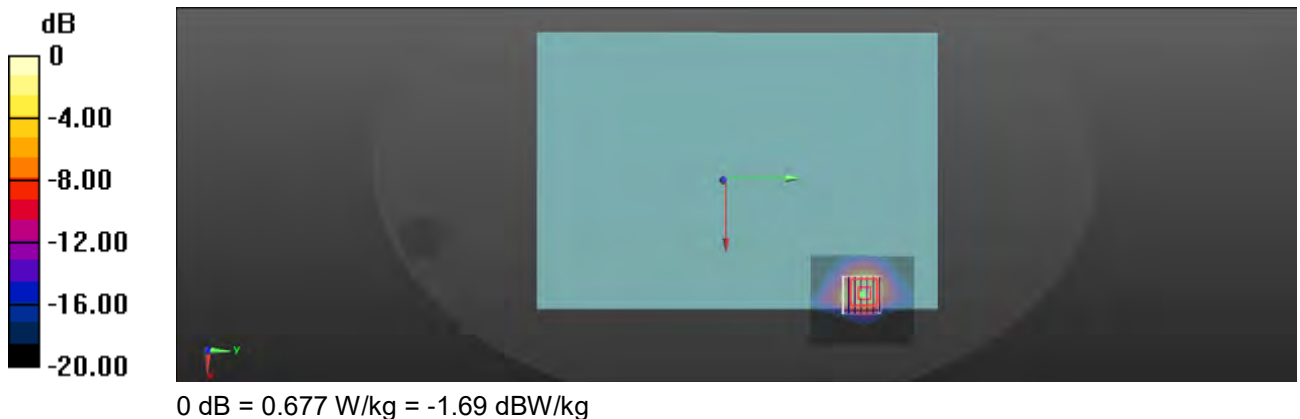
Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2441 MHz; Duty Cycle: 1:1.259
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.778$ S/m; $\epsilon_r = 39.697$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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(8.1, 8.1, 8.1) @ 2441 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- 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) = 0.932 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 19.06 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.897 W/kg
SAR(1 g) = 0.394 W/kg; SAR(10 g) = 0.165 W/kg
Smallest distance from peaks to all points 3 dB below = 7.1 mm
Ratio of SAR at M2 to SAR at M1 = 45%
Maximum value of SAR (measured) = 0.677 W/kg



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

03_WLAN5GHz_802.11ac VHT80_CH 58_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: 5290 MHz;Duty Cycle: 1:1.088

Medium parameters used: $f = 5290$ MHz; $\sigma = 4.682$ S/m; $\epsilon_r = 36.279$; $\rho = 1000$ kg/m³

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(5.75, 5.75, 5.75) @ 5290 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- 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) = 1.78 W/kg

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

Reference Value = 7.976 V/m; Power Drift = -0.08 dB

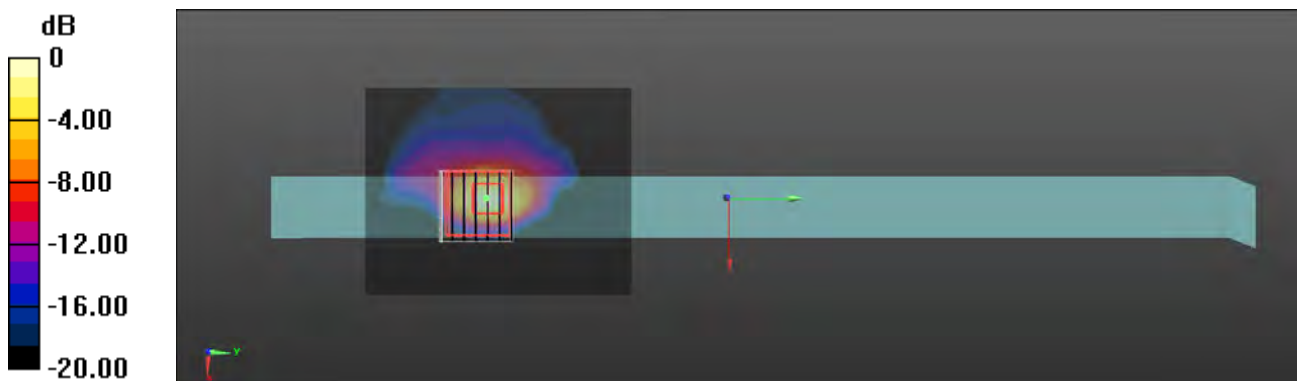
Peak SAR (extrapolated) = 3.22 W/kg

SAR(1 g) = 0.709 W/kg; SAR(10 g) = 0.167 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 64.8%

Maximum value of SAR (measured) = 1.92 W/kg



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

04_WLAN5GHz_802.11ac VHT80_CH 58_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: 5290 MHz;Duty Cycle: 1:1.088

Medium parameters used: $f = 5290$ MHz; $\sigma = 4.682$ S/m; $\epsilon_r = 36.279$; $\rho = 1000$ kg/m³

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(5.75, 5.75, 5.75) @ 5290 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- 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) = 1.04 W/kg

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

Reference Value = 7.899 V/m; Power Drift = -0.11 dB

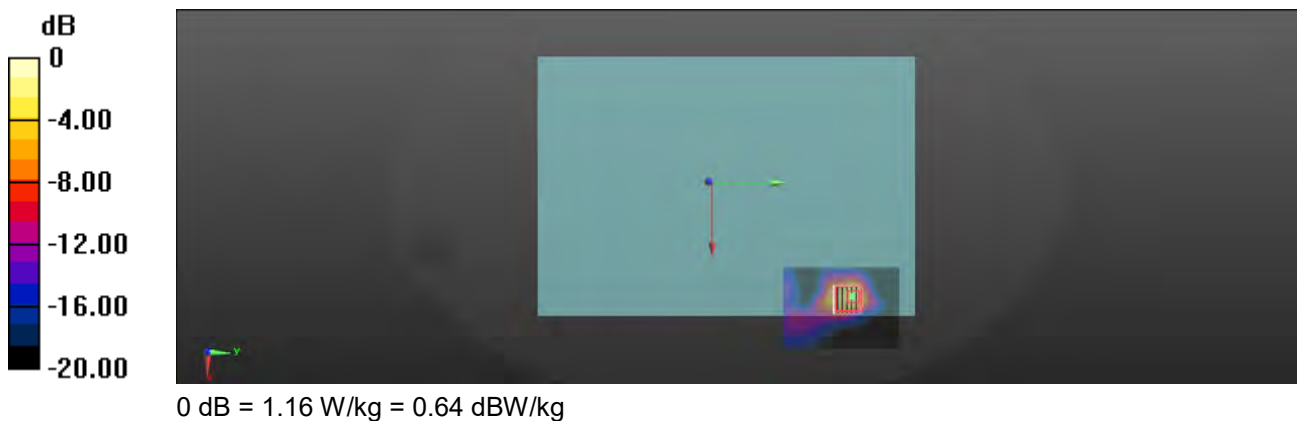
Peak SAR (extrapolated) = 2.06 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.126 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 62%

Maximum value of SAR (measured) = 1.16 W/kg



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

05_WLAN5GHz_802.11ac VHT80_CH 138_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: 5690 MHz;Duty Cycle: 1:1.088

Medium parameters used: $f = 5690$ MHz; $\sigma = 5.118$ S/m; $\epsilon_r = 36.056$; $\rho = 1000$ kg/m³

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(5.23, 5.23, 5.23) @ 5690 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- 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) = 3.05 W/kg

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

Reference Value = 18.04 V/m; Power Drift = -0.03 dB

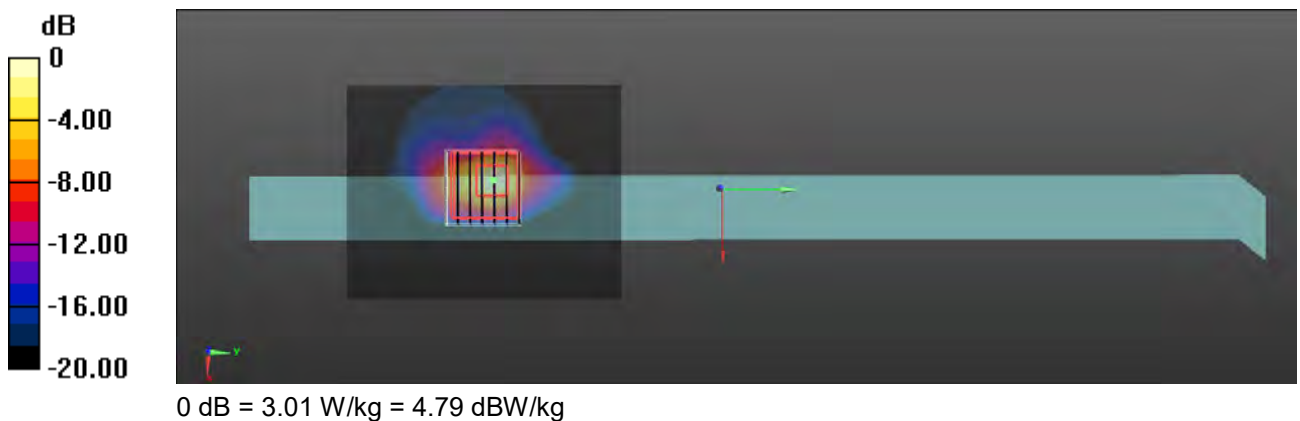
Peak SAR (extrapolated) = 5.74 W/kg

SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.234 W/kg

Smallest distance from peaks to all points 3 dB below = 4.7 mm

Ratio of SAR at M2 to SAR at M1 = 61.4%

Maximum value of SAR (measured) = 3.01 W/kg



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

06_WLAN5GHz_802.11ac VHT80_CH 106_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: 5530 MHz;Duty Cycle: 1:1.088

Medium parameters used: $f = 5530$ MHz; $\sigma = 4.871$ S/m; $\epsilon_r = 36.689$; $\rho = 1000$ kg/m³

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) @ 5530 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- 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) = 1.50 W/kg

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

Reference Value = 9.526 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 3.22 W/kg

SAR(1 g) = 0.646 W/kg; SAR(10 g) = 0.169 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 60.2%

Maximum value of SAR (measured) = 1.68 W/kg



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

17_WLAN5GHz_802.11ac VHT80_CH 155_Bottom of laptop_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: 1:1.088

Medium parameters used: $f = 5775$ MHz; $\sigma = 5.218$ S/m; $\epsilon_r = 35.597$; $\rho = 1000$ kg/m³

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(5.23, 5.23, 5.23) @ 5775 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- 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) = 3.35 W/kg

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

Reference Value = 23.66 V/m; Power Drift = 0.15 dB

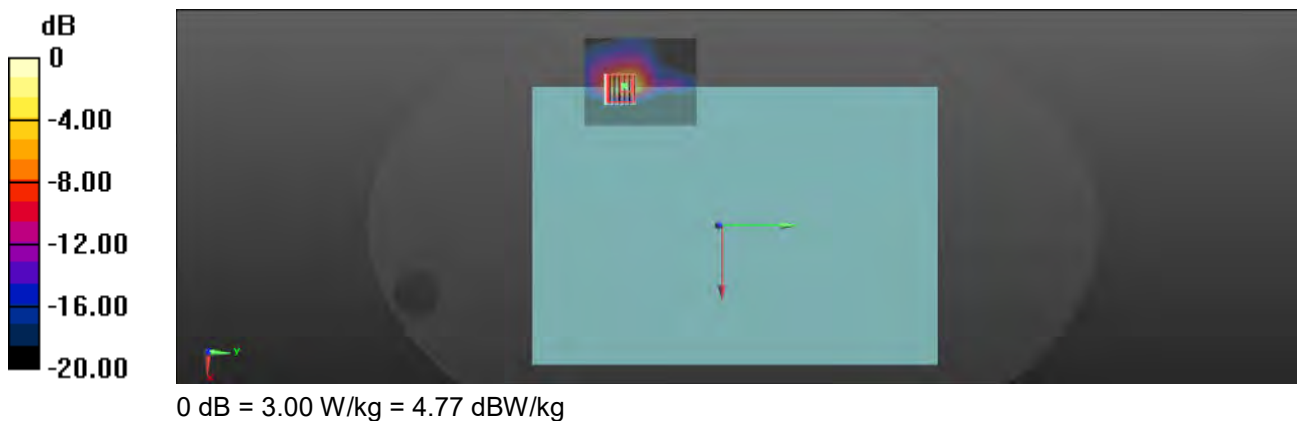
Peak SAR (extrapolated) = 6.91 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.245 W/kg

Smallest distance from peaks to all points 3 dB below = 4 mm

Ratio of SAR at M2 to SAR at M1 = 55.2%

Maximum value of SAR (measured) = 3.00 W/kg



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

08_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: 1:1.088

Medium parameters used: $f = 5775$ MHz; $\sigma = 5.218$ S/m; $\epsilon_r = 35.597$; $\rho = 1000$ kg/m³

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(5.23, 5.23, 5.23) @ 5775 MHz; Calibrated: 2021/4/15
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2020/12/16
- Phantom: ELI V5.0; Type: QD OVA 002 AA; Serial: 1133
- 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) = 2.16 W/kg

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

Reference Value = 13.77 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 4.75 W/kg

SAR(1 g) = 0.828 W/kg; SAR(10 g) = 0.214 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 56.3%

Maximum value of SAR (measured) = 2.22 W/kg

