

## Appendix C - SAR Highest Measurement Plots



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 01\_WLAN 2.4 GHz\_802.11b\_Ch6\_Side 1\_0 mm\_ANT Main DUT: B3000

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1.006 Medium parameters used (interpolated): f = 2437 MHz;  $\sigma$  = 1.783 S/m;  $\epsilon_r$  = 39.615;  $\rho$  = 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) @ 2437 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 (51x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 1.12 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 14.83 V/m; Power Drift = 0.13 dB Peak SAR (extrapolated) = 1.58 W/kg SAR(1 g) = 0.619 W/kg; SAR(10 g) = 0.238 W/kg Smallest distance from peaks to all points 3 dB below = 6.7 mm Ratio of SAR at M2 to SAR at M1 = 41.2% Maximum value of SAR (measured) = 1.19 W/kg



0 dB = 1.19 W/kg = 0.76 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 02\_WLAN 2.4 GHz\_802.11b\_Ch1\_Side 1\_0 mm\_ANT Aux DUT: B3000

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz;Duty Cycle: 1:1.006 Medium parameters used: f = 2412 MHz;  $\sigma$  = 1.754 S/m;  $\epsilon_r$  = 39.69;  $\rho$  = 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) @ 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 (51x91x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 1.36 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 30.81 V/m; Power Drift = -0.03 dB Peak SAR (extrapolated) = 2.17 W/kg SAR(1 g) = 0.830 W/kg; SAR(10 g) = 0.327 W/kg Smallest distance from peaks to all points 3 dB below = 6 mm Ratio of SAR at M2 to SAR at M1 = 40.1% Maximum value of SAR (measured) = 1.64 W/kg



0 dB = 1.64 W/kg = 2.15 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 03\_Bluetooth\_GFSK\_Ch0\_Side 1\_0 mm\_ANT Main DUT: B3000

Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2402 MHz;Duty Cycle: 1:1.308 Medium parameters used: f = 2402 MHz;  $\sigma$  = 1.742 S/m;  $\epsilon_r$  = 39.731;  $\rho$  = 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) @ 2402 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 (61x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.419 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 16.11 V/m; Power Drift = 0.00 dB Peak SAR (extrapolated) = 0.556 W/kg SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.082 W/kg Smallest distance from peaks to all points 3 dB below = 6 mm Ratio of SAR at M2 to SAR at M1 = 40.4% Maximum value of SAR (measured) = 0.417 W/kg



<sup>0</sup> dB = 0.417 W/kg = -3.80 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 04\_WLAN 5 GHz\_802.11a\_Ch60\_Side 1\_0 mm\_ANT Main DUT: B3000

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5300 MHz;Duty Cycle: 1:1.020 Medium parameters used: f = 5300 MHz;  $\sigma$  = 4.711 S/m;  $\epsilon_r$  = 36.705;  $\rho$  = 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(5.04, 5.04, 5.04) @ 5300 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 (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.344 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 3.306 V/m; Power Drift = 0.09 dB Peak SAR (extrapolated) = 0.709 W/kg SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.029 W/kg Smallest distance from peaks to all points 3 dB below = 5 mm Ratio of SAR at M2 to SAR at M1 = 63.5% Maximum value of SAR (measured) = 0.373 W/kg



<sup>0</sup> dB = 0.373 W/kg = -4.28 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2021/1/5 05\_WLAN 5 GHz\_802.11a\_Ch60\_Side 1\_0 mm\_ANT Aux DUT: B3000

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5300 MHz;Duty Cycle: 1:1.025 Medium parameters used: f = 5300 MHz;  $\sigma$  = 4.711 S/m;  $\epsilon_r$  = 36.705;  $\rho$  = 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(5.04, 5.04, 5.04) @ 5300 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 (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 2.58 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 11.24 V/m; Power Drift = 0.12 dB Peak SAR (extrapolated) = 4.48 W/kg SAR(1 g) = 0.973 W/kg; SAR(10 g) = 0.239 W/kg Smallest distance from peaks to all points 3 dB below = 4.9 mm Ratio of SAR at M2 to SAR at M1 = 64.3% Maximum value of SAR (measured) = 2.77 W/kg



<sup>0</sup> dB = 2.77 W/kg = 4.42 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 06\_WLAN 5 GHz\_802.11a\_Ch132\_Side 1\_0 mm\_ANT Main DUT: B3000

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5660 MHz;Duty Cycle: 1:1.02 Medium parameters used: f = 5660 MHz;  $\sigma$  = 5.13 S/m;  $\epsilon_r$  = 35.929;  $\rho$  = 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(4.61, 4.61, 4.61) @ 5660 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 (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 1.67 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 4.816 V/m; Power Drift = 0.04 dB Peak SAR (extrapolated) = 3.48 W/kg SAR(1 g) = 0.592 W/kg; SAR(10 g) = 0.163 W/kg Smallest distance from peaks to all points 3 dB below = 4.8 mm Ratio of SAR at M2 to SAR at M1 = 61.6% Maximum value of SAR (measured) = 1.87 W/kg



0 dB = 1.87 W/kg = 2.72 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 07\_WLAN 5 GHz\_802.11a\_Ch132\_Side 1\_0 mm\_ANT Aux DUT: B3000

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5660 MHz;Duty Cycle: 1:1.025 Medium parameters used: f = 5660 MHz;  $\sigma$  = 5.13 S/m;  $\epsilon_r$  = 35.929;  $\rho$  = 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(4.61, 4.61, 4.61) @ 5660 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 (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 3.56 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 9.496 V/m; Power Drift = 0.12 dB Peak SAR (extrapolated) = 5.90 W/kg SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.251 W/kg Smallest distance from peaks to all points 3 dB below = 4.8 mm Ratio of SAR at M2 to SAR at M1 = 61.1% Maximum value of SAR (measured) = 3.13 W/kg



<sup>0</sup> dB = 3.13 W/kg = 4.96 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 08\_WLAN 5 GHz\_802.11a\_Ch165\_Side 1\_0 mm\_ANT Main DUT: B3000

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5825 MHz;Duty Cycle: 1:1.020 Medium parameters used: f = 5825 MHz;  $\sigma$  = 5.214 S/m;  $\epsilon_r$  = 35.675;  $\rho$  = 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(4.64, 4.64, 4.64) @ 5825 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 (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 2.03 W/kg

Zoom Scan (9x10x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 8.497 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 3.90 W/kg **SAR(1 g) = 0.665 W/kg; SAR(10 g) = 0.161 W/kg** Smallest distance from peaks to all points 3 dB below = 4.8 mm Ratio of SAR at M2 to SAR at M1 = 58.8% Maximum value of SAR (measured) = 2.11 W/kg



<sup>0</sup> dB = 2.11 W/kg = 3.24 dBW/kg



Test Laboratory: A Test Lab Techno Corp. Date: 2022/1/5 09\_WLAN 5 GHz\_802.11a\_Ch157\_Side 1\_0 mm\_ANT Aux DUT: B3000

Communication System: UID 0, IEEE 802.11a (0); Frequency: 5785 MHz;Duty Cycle: 1:1.025 Medium parameters used: f = 5785 MHz;  $\sigma$  = 5.212 S/m;  $\epsilon_r$  = 35.744;  $\rho$  = 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(4.64, 4.64, 4.64) @ 5785 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 (81x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 2.87 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 7.084 V/m; Power Drift = 0.14 dB Peak SAR (extrapolated) = 5.86 W/kg SAR(1 g) = 0.938 W/kg; SAR(10 g) = 0.211 W/kg Smallest distance from peaks to all points 3 dB below = 4.8 mm Ratio of SAR at M2 to SAR at M1 = 59.9% Maximum value of SAR (measured) = 3.23 W/kg



<sup>0</sup> dB = 3.23 W/kg = 5.09 dBW/kg