# Appendix B. SAR Plots of SAR Measurement

The SAR plots for highest measured SAR in each exposure configuration, wireless mode and frequency band combination are shown as follows.

# P01 WLAN2.4G\_802.11b\_Rear Face\_0mm\_Ch1\_Ant 0+1

#### **DUT: BERD-WTW\_P21050107**

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps); Frequency: 2412 MHz;Duty Cycle: 1:1.01 Medium: H19T27N1\_0526 Medium parameters used: f = 2412 MHz;  $\sigma = 1.824$  S/m;  $\epsilon_r = 40.212$ ;  $\rho = 1000$  kg/m<sup>3</sup> Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 SN3971; ConvF(7.87, 7.87, 7.87) @ 2412 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: Twin SAM Phantom 1986; Type: QD 000 P40 CD;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 2.53 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 37.86 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 3.37 W/kg SAR(1 g) = 1.4 W/kg; SAR(10 g) = 0.598 W/kg (SAR corrected for target medium) Smallest distance from peaks to all points 3 dB below = 7.1 mm Ratio of SAR at M2 to SAR at M1 = 42.1% Maximum value of SAR (measured) = 2.60 W/kg



# P02 WLAN5.3G\_802.11a\_Rear Face\_0mm\_Ch52\_Ant 0+1

#### **DUT: BERD-WTW\_P21050107**

Communication System: UID 10062 - CAD, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps); Frequency: 5260 MHz;Duty Cycle: 1:1.01 Medium: H34T60N1\_0524 Medium parameters used: f = 5260 MHz;  $\sigma = 4.725$  S/m;  $\epsilon_r = 36.067$ ;  $\rho = 1000$  kg/m<sup>3</sup> Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.4 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3971; ConvF(5.2, 5.2, 5.2) @ 5260 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: Twin SAM Phantom 1986; Type: QD 000 P40 CD;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (111x201x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 4.01 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 30.44 V/m; Power Drift = -0.15 dB Peak SAR (extrapolated) = 24.6 W/kg **SAR(1 g) = 4.59 W/kg; SAR(10 g) = 1.09 W/kg (SAR corrected for target medium)** Smallest distance from peaks to all points 3 dB below = 5.4 mm Ratio of SAR at M2 to SAR at M1 = 66.8%Maximum value of SAR (measured) = 11.7 W/kg



### P03 WLAN5.6G\_802.11a\_Rear Face\_0mm\_Ch140\_Ant 0+1

#### **DUT: BERD-WTW\_P21050107**

Communication System: UID 10062 - CAD, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps); Frequency: 5700 MHz;Duty Cycle: 1:1.01 Medium: H34T60N1\_0525 Medium parameters used (interpolated): f = 5700 MHz;  $\sigma = 5.014$  S/m;  $\epsilon_r = 36.028$ ;  $\rho = 1000$  kg/m<sup>3</sup> Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3971; ConvF(4.95, 4.95, 4.95) @ 5700 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: Twin SAM Phantom 1986; Type: QD 000 P40 CD;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (111x201x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 2.74 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 22.82 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 13.3 W/kg SAR(1 g) = 2.55 W/kg; SAR(10 g) = 0.664 W/kg (SAR corrected for target medium) Smallest distance from peaks to all points 3 dB below = 6.1 mm Ratio of SAR at M2 to SAR at M1 = 60.1% Maximum value of SAR (measured) = 7.08 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mmReference Value = 22.82 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 8.13 W/kg **SAR(1 g) = 1.65 W/kg; SAR(10 g) = 0.440 W/kg** (SAR corrected for target medium) Smallest distance from peaks to all points 3 dB below = 5.4 mm Ratio of SAR at M2 to SAR at M1 = 60.4% Maximum value of SAR (measured) = 4.35 W/kg



# P04 WLAN5.8G\_802.11a\_Rear Face\_0mm\_Ch165\_Ant 0+1

#### **DUT: BERD-WTW\_P21050107**

Communication System: UID 10062 - CAD, IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps); Frequency: 5825 MHz;Duty Cycle: 1:1.01 Medium: H34T60N1\_0525 Medium parameters used (interpolated): f = 5825 MHz;  $\sigma = 5.134$  S/m;  $\epsilon_r = 35.867$ ;  $\rho = 1000$  kg/m<sup>3</sup> Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3971; ConvF(4.95, 4.95, 4.95) @ 5825 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: Twin SAM Phantom 1986; Type: QD 000 P40 CD;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (111x201x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 3.45 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 28.58 V/m; Power Drift = -0.08 dB Peak SAR (extrapolated) = 12.1 W/kg SAR(1 g) = 2.25 W/kg; SAR(10 g) = 0.566 W/kg (SAR corrected for target medium) Smallest distance from peaks to all points 3 dB below = 5.7 mm Ratio of SAR at M2 to SAR at M1 = 58.2% Maximum value of SAR (measured) = 6.12 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mmReference Value = 28.58 V/m; Power Drift = -0.08 dB Peak SAR (extrapolated) = 9.40 W/kg **SAR(1 g) = 1.92 W/kg; SAR(10 g) = 0.465 W/kg** (SAR corrected for target medium) Smallest distance from peaks to all points 3 dB below = 5.1 mm Ratio of SAR at M2 to SAR at M1 = 61.9% Maximum value of SAR (measured) = 5.19 W/kg



# P05 BT\_BDR\_Front Face\_0mm\_Ch39\_Ant 1

#### **DUT: BERD-WTW\_P21050107**

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2441 MHz;Duty Cycle: 1:1.29 Medium: H19T27N1\_0525 Medium parameters used (interpolated): f = 2441 MHz;  $\sigma = 1.858$  S/m;  $\epsilon_r = 39.014$ ;  $\rho = 1000$  kg/m<sup>3</sup> Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3971; ConvF(7.87, 7.87, 7.87) @ 2441 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: Twin SAM Phantom 1986; Type: QD 000 P40 CD;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (91x171x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.299 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 12.80 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 0.377 W/kg SAR(1 g) = 0.183 W/kg; SAR(10 g) = 0.092 W/kg (SAR corrected for target medium) Smallest distance from peaks to all points 3 dB below = 11.4 mm Ratio of SAR at M2 to SAR at M1 = 53.3% Maximum value of SAR (measured) = 0.296 W/kg

