

Annex B. Plots of SAR and Power Density Measurement

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

P01 WLAN2.4G_802.11b_Bottom Side _5mm_Ch1_Ant 0+1**DUT: BARR-WTW-P21060023**

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps);

Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0916 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.818$ S/m; $\epsilon_r = 38.262$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2412 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x201x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.989 W/kg

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

Reference Value = 25.19 V/m; Power Drift = -0.15 dB

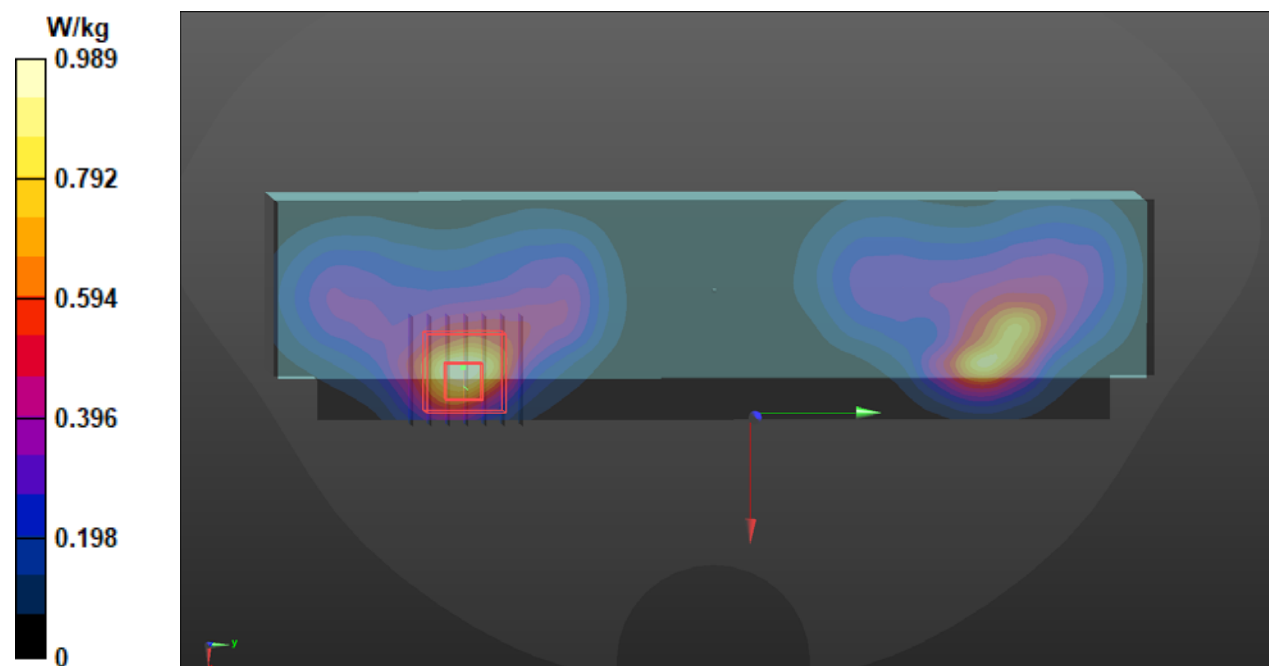
Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.655 W/kg; SAR(10 g) = 0.311 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

Ratio of SAR at M2 to SAR at M1 = 45%

Maximum value of SAR (measured) = 1.17 W/kg



P02 WLAN5.3G_802.11ac VHT160_Bottom Side_5mm_Ch50_Ant 0+1**DUT: BARR-WTW-P21060023**

Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0916 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.912$ S/m; $\epsilon_r = 35.831$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(5.5, 5.5, 5.5) @ 5250 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.63 W/kg

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

Reference Value = 20.08 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 2.74 W/kg

SAR(1 g) = 0.711 W/kg; SAR(10 g) = 0.254 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 64.5%

Maximum value of SAR (measured) = 1.65 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 20.08 V/m; Power Drift = -0.17 dB

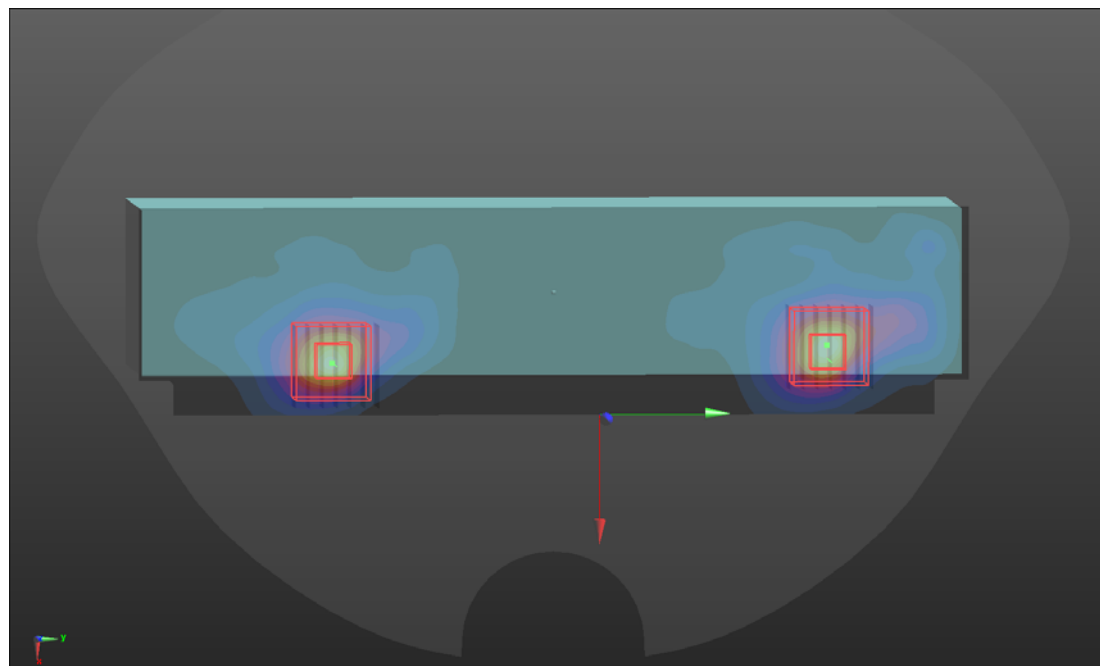
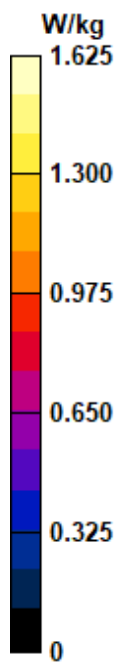
Peak SAR (extrapolated) = 2.59 W/kg

SAR(1 g) = 0.680 W/kg; SAR(10 g) = 0.243 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.5 mm

Ratio of SAR at M2 to SAR at M1 = 64.3%

Maximum value of SAR (measured) = 1.60 W/kg



P03 WLAN5.6G_802.11ac VHT160_Bottom Side _5mm_Ch114_Ant 1**DUT: BARR-WTW-P21060023**

Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5570 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0916 Medium parameters used (interpolated): $f = 5570$ MHz; $\sigma = 5.247$ S/m; $\epsilon_r = 35.316$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.8, 4.8, 4.8) @ 5570 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

Maximum value of SAR (interpolated) = 1.94 W/kg

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

Reference Value = 20.86 V/m; Power Drift = -0.06 dB

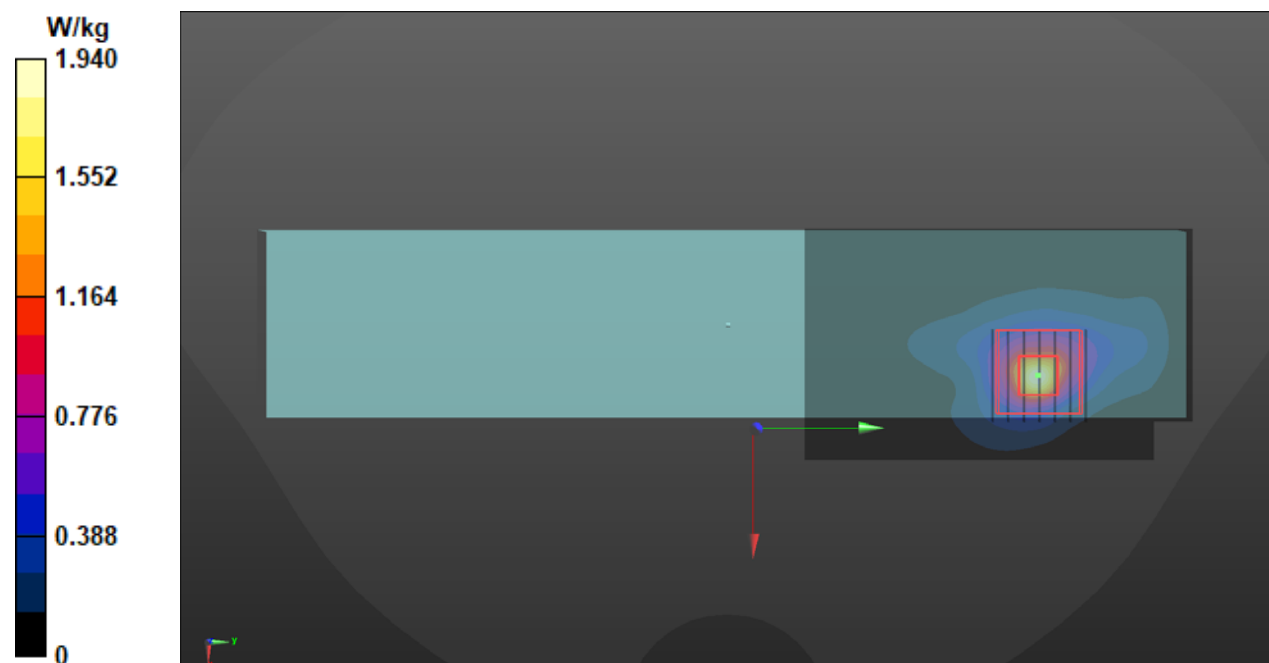
Peak SAR (extrapolated) = 3.30 W/kg

SAR(1 g) = 0.748 W/kg; SAR(10 g) = 0.237 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 61.8%

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



P04 WLAN5.8G_802.11ac VHT80_Bottom Side _5mm_Ch155_Ant 0+1**DUT: BARR-WTW-P21060023**

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0916 Medium parameters used: $f = 5775$ MHz; $\sigma = 5.466$ S/m; $\epsilon_r = 34.955$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.95, 4.95, 4.95) @ 5775 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: SAM Phantom_1987; Type: QD 000 P41 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 2.06 W/kg

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

Reference Value = 21.20 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 3.61 W/kg

SAR(1 g) = 0.773 W/kg; SAR(10 g) = 0.248 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 60%

Maximum value of SAR (measured) = 2.02 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 21.20 V/m; Power Drift = -0.07 dB

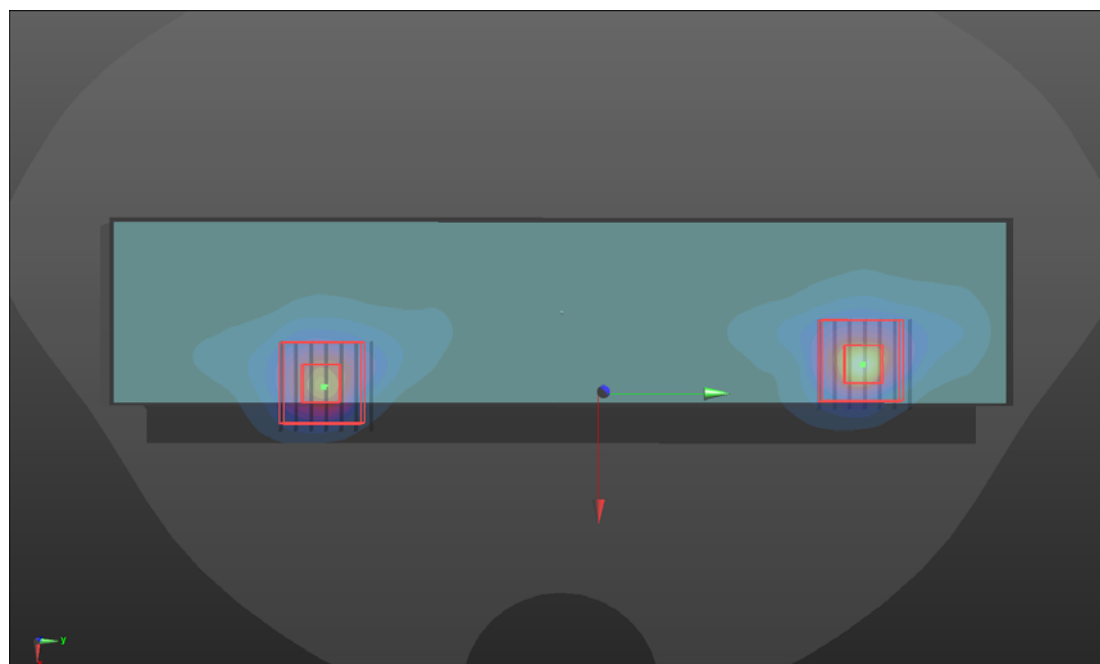
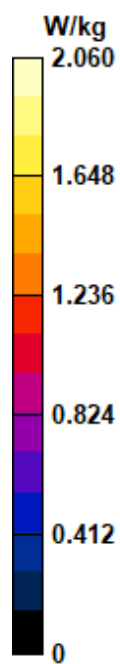
Peak SAR (extrapolated) = 2.87 W/kg

SAR(1 g) = 0.646 W/kg; SAR(10 g) = 0.213 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.9 mm

Ratio of SAR at M2 to SAR at M1 = 60.7%

Maximum value of SAR (measured) = 1.62 W/kg



P05 BT_BR_EDR_Bottom Side_5mm_Ch78_Ant 1**DUT: BARR-WTW-P21060023**

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2480 MHz; Duty Cycle: 1:1.3

Medium: H19T27N1_0621 Medium parameters used: $f = 2480$ MHz; $\sigma = 1.898$ S/m; $\epsilon_r = 37.889$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.87, 7.87, 7.87) @ 2480 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x111x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.488 W/kg

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

Reference Value = 15.70 V/m; Power Drift = -0.18 dB

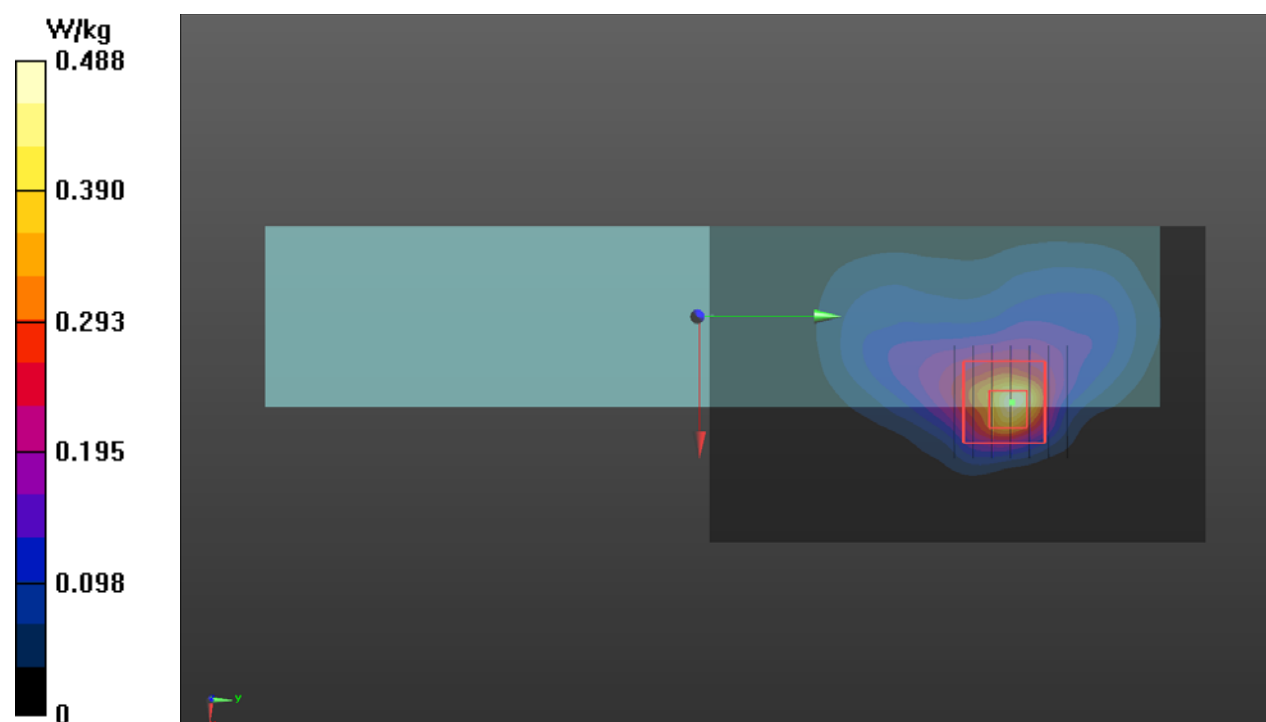
Peak SAR (extrapolated) = 0.684 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.129 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 40.8%

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



P06S UNII-8_802.11ax HE160_Bottom Side_5mm_Ch207_Ant 0+1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BARR-WTW-P21060023,	237.0 x 48.0 x 74.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat,	Bottom Side, 5.00	U-NII-8	WLAN, 10743-AAC	6985.0,	5.6	6.51	32.8

Hardware Setup

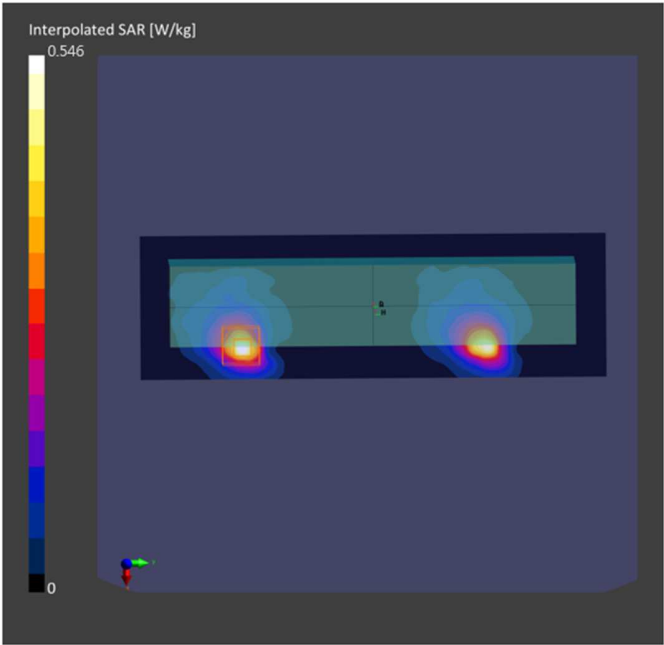
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2105	H50T72N1 , 2021-Aug-07	EX3DV4 - SN7554, 2020-09-28	DAE4 Sn915, 2021-06-02

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 272.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2021-08-07	2021-08-07
psSAR1g [W/Kg]	0.419	0.431
psSAR10g [W/Kg]	0.196	0.201
Power Drift [dB]	0.06	-0.09



Power Density Plot No.:

P06P UNII-8_802.11ax HE160_Bottom Side_5mm_Ch207_Ant0+1

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BEDW-WTW-P21060023	230.0 x 48.0 x 70.0		Module

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	Bottom Side 5.00	U-NII-8	WLAN 10755-AAC	6985 207	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 1030	Air---	EUmmWV3 - SN9361_F1-78GHz, 2020-09-24	DAE4 Sn915, 2021-06-02

Scan Setup

	5G Scan
Grid Extents [mm]	220.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.0

Measurement Results

	5G Scan
Date	2021-08-04
Avg. Area [cm²]	4.00
pStotavg[W/m²]	3.19
pSnavg [W/m²]	3.03
E_peak [V/m]	51.8
Power Drift [dB]	-0.11

