

## **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\_802.11n HT20\_Bottom\_0mm\_Ch6\_Ant 0+1\_INPQA

**DUT: BFLF-WTW-P21041126**

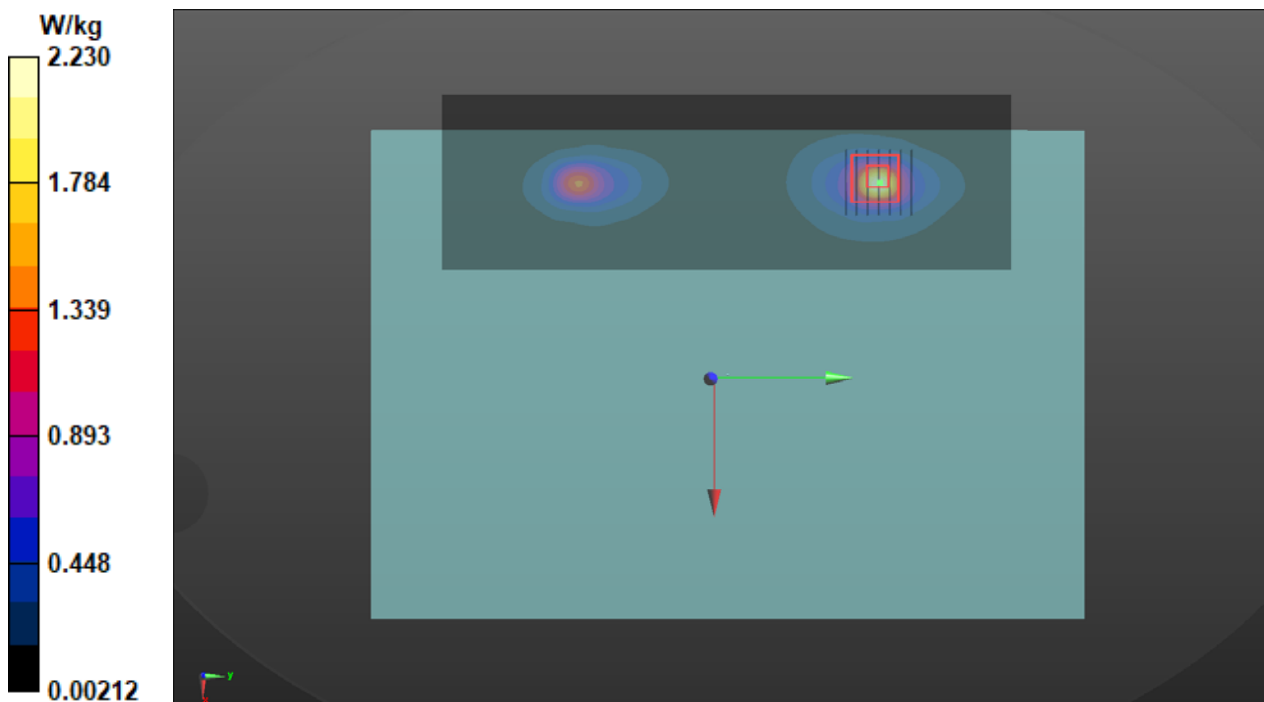
Communication System: UID 10591 - AAC, IEEE 802.11n (HT Mixed, 20MHz, MCS0);  
Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: H19T27N1\_0607 Medium parameters used (interpolated):  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.816 \text{ S/m}$ ;  
 $\epsilon_r = 38.991$ ;  $\rho = 1000 \text{ kg/m}^3$   
Ambient Temperature : 23.3 °C; Liquid Temperature : 23.1°C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2437 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn528; Calibrated: 2021/03/23
- Phantom: ELI V5.0 1204; Type: QD OVA 002 AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Area Scan (71x221x1):** Interpolated grid:  $dx=1.200 \text{ mm}$ ,  $dy=1.200 \text{ mm}$   
Maximum value of SAR (interpolated) = 2.23 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 36.36 V/m; Power Drift = 0.08 dB  
Peak SAR (extrapolated) = 3.02 W/kg  
**SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.438 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 = 39.2%  
Maximum value of SAR (measured) = 2.25 W/kg



## P02 WLAN5.3G\_802.11n HT40\_Bottom\_0mm\_Ch54\_Ant 0\_INPQA

**DUT: P21041126**

Communication System: UID 10599 - AAC, IEEE 802.11n (HT Mixed, 40MHz, MCS0);

Frequency: 5270 MHz; Duty Cycle: 1:1.02

Medium: H34T60N1\_0604 Medium parameters used:  $f = 5270$  MHz;  $\sigma = 4.888$  S/m;  $\epsilon_r = 36.551$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3887; ConvF(4.71, 4.71, 4.71) @ 5270 MHz; Calibrated: 2020/10/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: ELI Phantom\_1206; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Area Scan (101x341x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.12 W/kg

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

Reference Value = 14.07 V/m; Power Drift = 0.03 dB

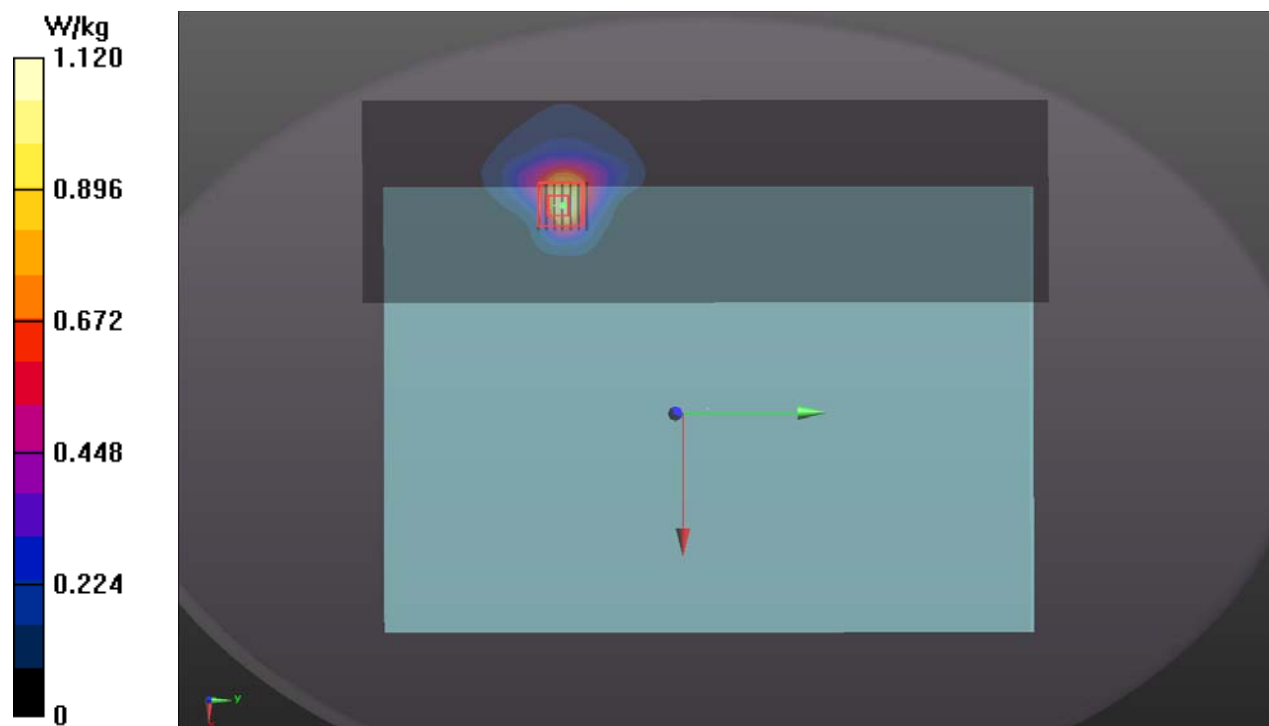
Peak SAR (extrapolated) = 4.45 W/kg

**SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.326 W/kg** (SAR corrected for target medium)

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

Ratio of SAR at M2 to SAR at M1 = 67.6%

Maximum value of SAR (measured) = 2.75 W/kg



### P03 WLAN5.6G\_802.11n HT40\_Bottom\_0mm\_Ch110\_Ant 0+1\_INPQA

**DUT: P21041126**

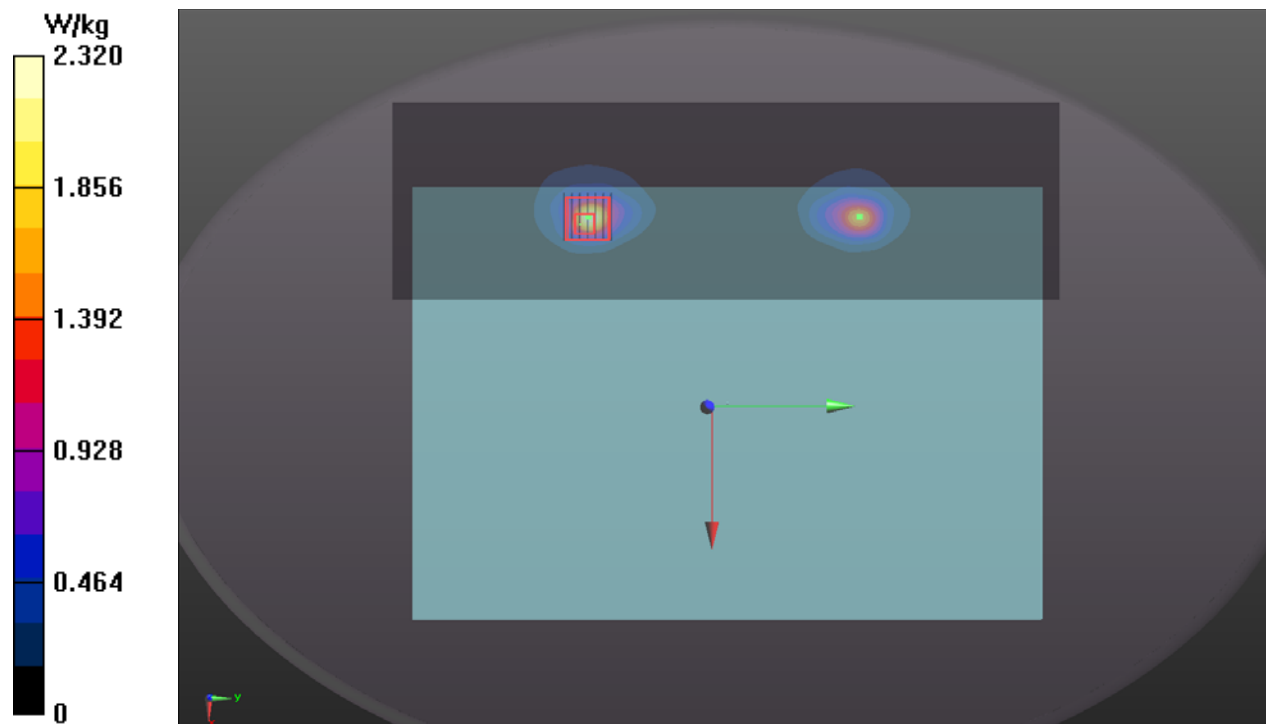
Communication System: UID 10599 - AAC, IEEE 802.11n (HT Mixed, 40MHz, MCS0);  
Frequency: 5550 MHz; Duty Cycle: 1:1.01  
Medium: H34T60N1\_0607 Medium parameters used:  $f = 5550$  MHz;  $\sigma = 4.913$  S/m;  $\epsilon_r = 35.304$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.3 °C ; Liquid Temperature : 23.1 °C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN3887; ConvF(4.24, 4.24, 4.24) @ 5550 MHz; Calibrated: 2020/10/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: ELI Phantom\_1206; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Area Scan (101x341x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 2.32 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 23.61 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 4.31 W/kg  
**SAR(1 g) = 0.991 W/kg; SAR(10 g) = 0.289 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 = 66.3%  
Maximum value of SAR (measured) = 2.55 W/kg



### P04 WLAN5.8G\_802.11n HT40\_Bottom\_0mm\_Ch151\_Ant 1\_INPQA

**DUT: P21041126**

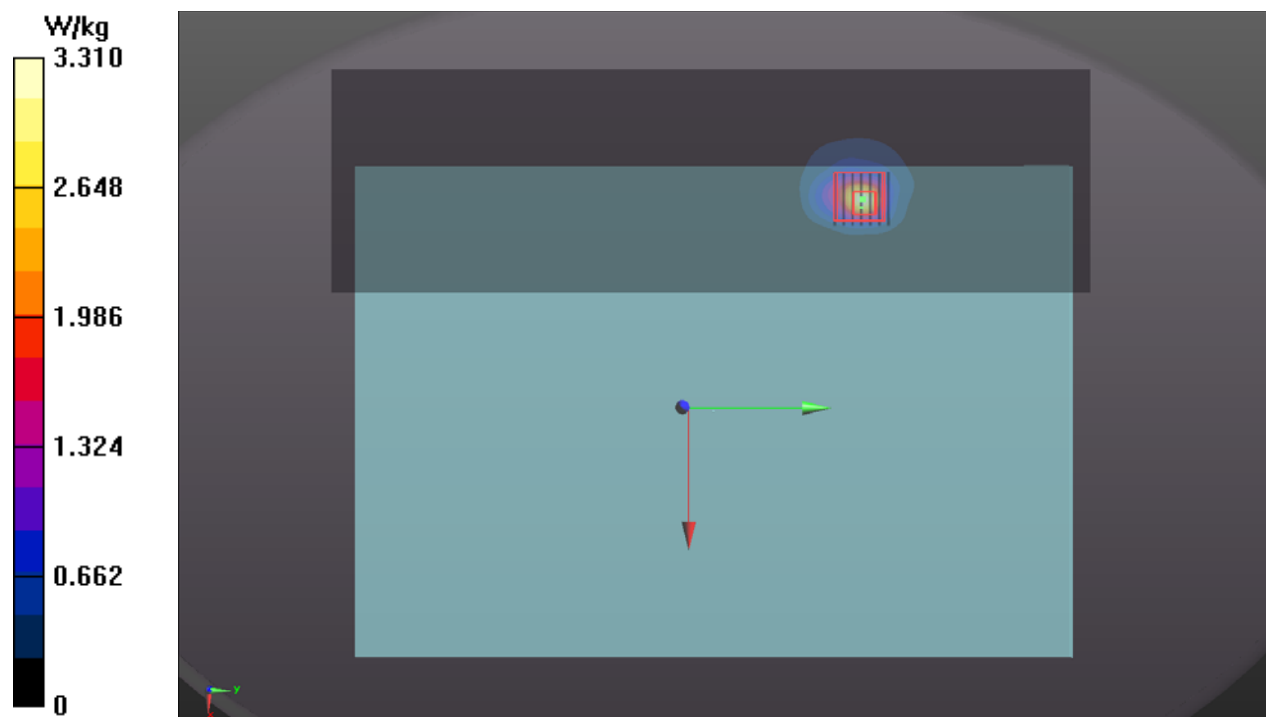
Communication System: UID 10599 - AAC, IEEE 802.11n (HT Mixed, 40MHz, MCS0);  
Frequency: 5755 MHz; Duty Cycle: 1:1.02  
Medium: H34T60N2\_0608 Medium parameters used:  $f = 5755$  MHz;  $\sigma = 5.386$  S/m;  $\epsilon_r = 35.925$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN3887; ConvF(4.36, 4.36, 4.36) @ 5755 MHz; Calibrated: 2020/10/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: ELI Phantom\_1206; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Area Scan (101x341x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 3.31 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 26.16 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 5.41 W/kg  
**SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.316 W/kg** (SAR corrected for target medium)  
Smallest distance from peaks to all points 3 dB below = 4.6 mm  
Ratio of SAR at M2 to SAR at M1 = 59.7%  
Maximum value of SAR (measured) = 2.88 W/kg



### P05 BT\_BR\_EDR\_Bottom\_0mm\_Ch0\_Ant 1\_INPQA

**DUT: BFLF-WTW-P21041126**

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2402 MHz; Duty Cycle: 1:1.31

Medium: H19T27N1\_0618 Medium parameters used (interpolated):  $f = 2402$  MHz;  $\sigma = 1.821$  S/m;  $\epsilon_r = 38.91$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(7.77, 7.77, 7.77) @ 2402 MHz; Calibrated: 2021/03/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2021/01/19
- Phantom: ELI Phantom\_1043\_P1aP2a; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Area Scan (71x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.162 W/kg

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

Reference Value = 9.513 V/m; Power Drift = 0.19 dB

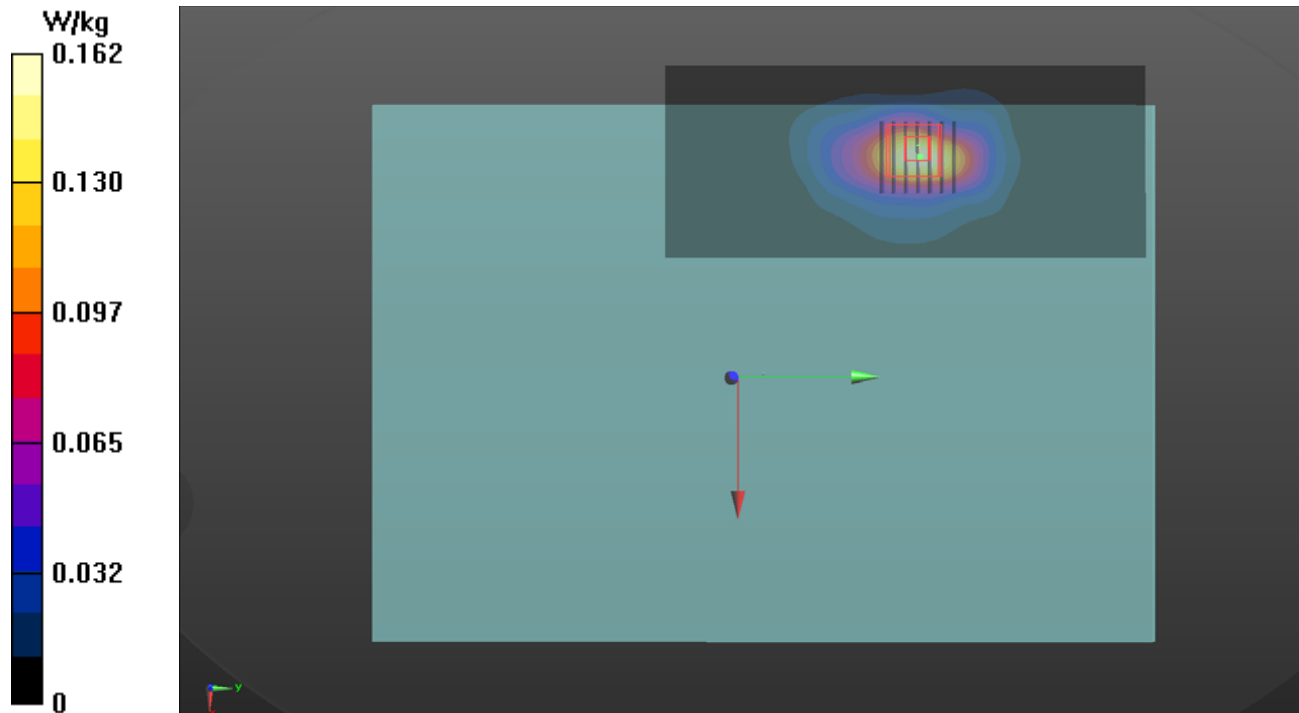
Peak SAR (extrapolated) = 0.419 W/kg

**SAR(1 g) = 0.160 W/kg; SAR(10 g) = 0.061 W/kg** (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.8 mm

Ratio of SAR at M2 to SAR at M1 = 44.3%

Maximum value of SAR (measured) = 0.304 W/kg



**P06 UNII\_5\_802.11ax HE160\_Bottom\_Ch79\_Ant 0\_INPQA**

**Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BFLF-WTW-P21041126	325.0 x 223.0 x 20.0		Laptop

**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, HSL	Bottom, 0.00	U-NII-5	WLAN, 10743-AAB	6345.0	5.65	5.92	34.8

**Hardware Setup**

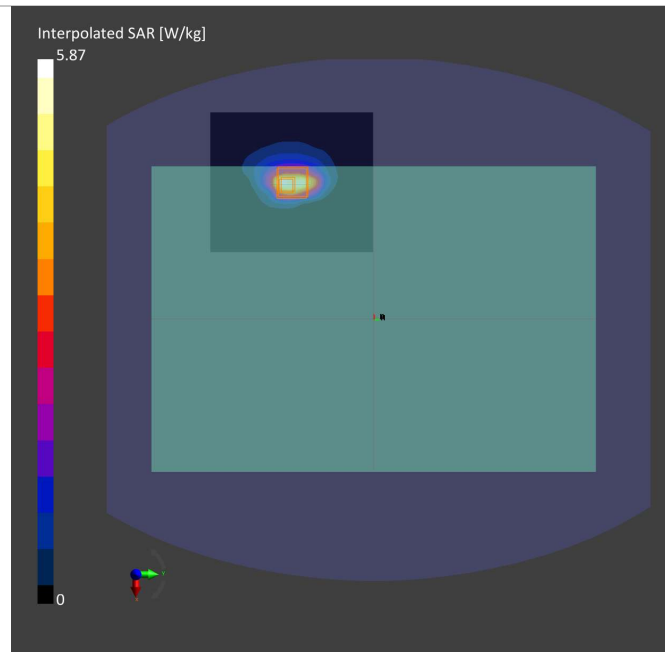
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2118	HBBL-600-10000 , 2021-Jun-09	EX3DV4 - SN7555, 2020-09-28	DAE4 Sn1589, 2020-09-15

**Scan Setup**

	Area Scan	Zoom Scan
Grid Extents [mm]	102.0 x 119.0	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	2021-06-09	2021-06-09
psSAR1g [W/Kg]	0.973	1.12
psSAR10g [W/Kg]	0.346	0.363
Power Drift [dB]	-0.09	-0.12
M2/M1 [%]		52.5
Dist 3dB Peak [mm]		4.6



## Test Lab: Bureau Veritas ADT SAR/HAC/PD Testing Lab

Power Density Plot No.:

P06 UNII-5 802.11ax HE160\_Bottom\_0mm\_Ch15\_Ant 0\_INPQA

### Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BFLF-WTW-P21041126	325.0 x 222.0 x 20.0		Laptop

### Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	Rear Face 2.00	U-NII-5	WLAN 10743	6025.0	1.0

### Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 1029	Air---	EUmmWV4 - SN9454_F1-78GHz, 2020-09-24	DAE4 Sn1590, 2020-09-15

### Scan Setup

	5G Scan
Grid Extents [mm]	40.0 x40.0
Grid Steps [lambda]	0.25 x0.25
Sensor Surface [mm]	2.0

### Measurement Results

	5G Scan
Date	2021-06-11
Avg. Area [cm <sup>2</sup> ]	4.00
pStotavg[W/m <sup>2</sup> ]	3.65
pSnavg [W/m <sup>2</sup> ]	3.37
E <sub>peak</sub> [V/m]	44.1
Power Drift [dB]	-0.18

