

Appendix C - Highest Measurement Plots

Date: 2023/1/10

01_WLAN 2.4 GHz_802.11b_Ch11_Bottom of laptop_0 mm_ANT Main

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2462 MHz; Duty Cycle: 1:1.005

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.822$ S/m; $\epsilon_r = 39.455$; $\rho = 1000$ 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 - SN7756; ConvF(7.68, 7.68, 7.68) @ 2462 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x71x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.95 W/kg

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

Reference Value = 24.85 V/m; Power Drift = -0.10 dB

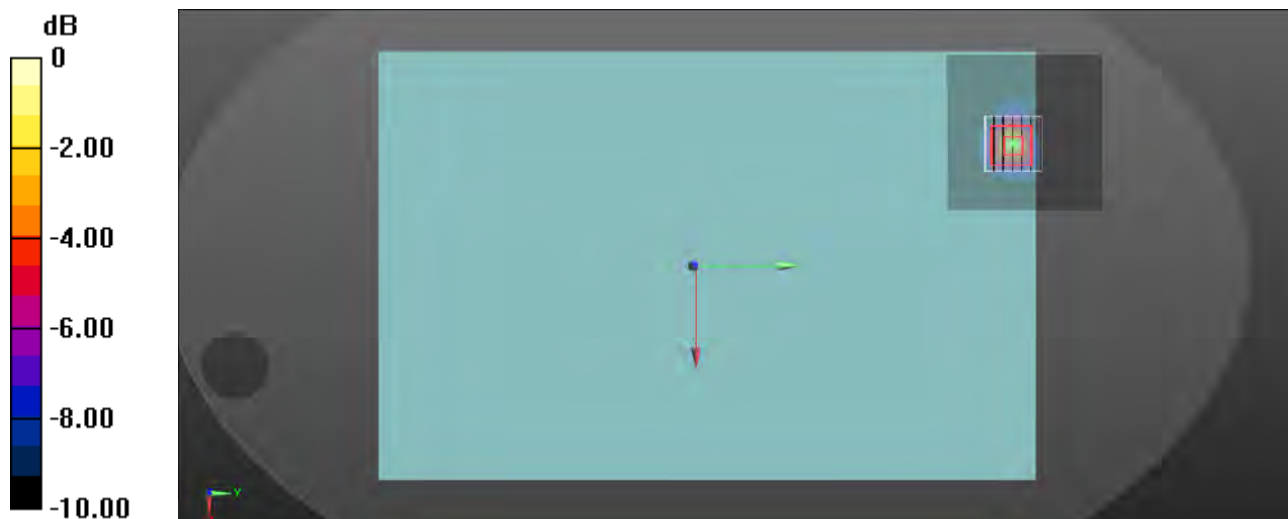
Peak SAR (extrapolated) = 2.57 W/kg

SAR(1 g) = 0.972 W/kg; SAR(10 g) = 0.357 W/kg

Smallest distance from peaks to all points 3 dB below = 6.3 mm

Ratio of SAR at M2 to SAR at M1 = 41.1%

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



0 dB = 1.94 W/kg = 2.88 dBW/kg

Date: 2023/1/10

02_WLAN 2.4 GHz_802.11b_Ch1_Bottom of laptop_0 mm_ANT Aux

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz; Duty Cycle: 1:1.005

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.765$ S/m; $\epsilon_r = 39.618$; $\rho = 1000$ 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 - SN7756; ConvF(7.68, 7.68, 7.68) @ 2412 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x71x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.849 W/kg

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

Reference Value = 19.75 V/m; Power Drift = -0.18 dB

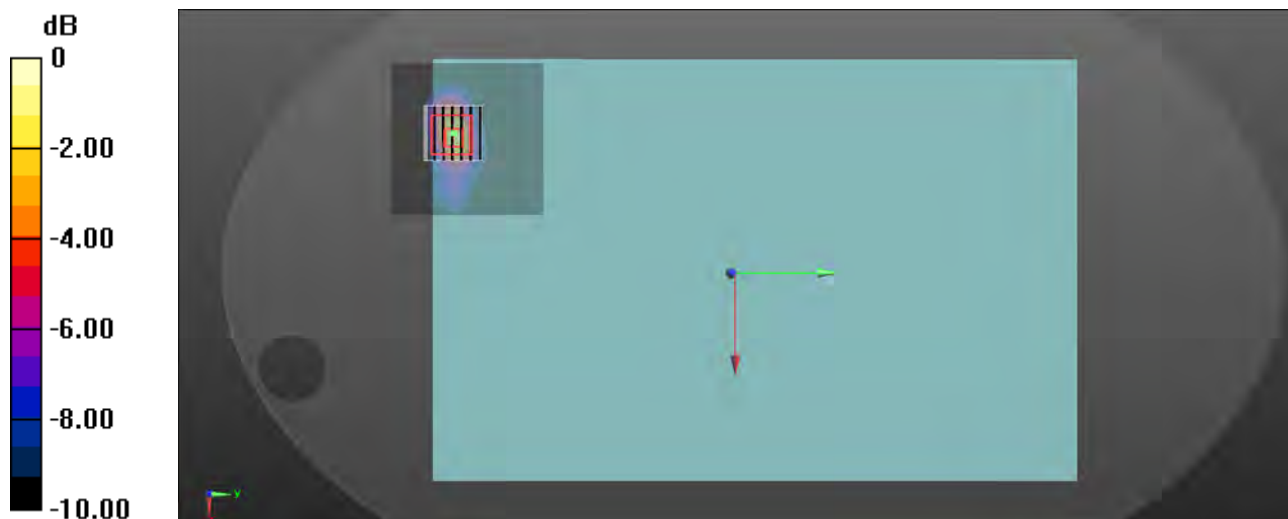
Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.634 W/kg; SAR(10 g) = 0.244 W/kg

Smallest distance from peaks to all points 3 dB below = 6.3 mm

Ratio of SAR at M2 to SAR at M1 = 41.5%

Maximum value of SAR (measured) = 1.19 W/kg



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

Date: 2023/1/17

14_WLAN 2.4 GHz_802.11n HT40_Ch6_Bottom of laptop_0mm_ANT MIMO

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11n(2.4GHz)HT40 (0); Frequency: 2437 MHz;Duty Cycle: 1:1.117
Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.806$ S/m; $\epsilon_r = 39.763$; $\rho = 1000$ 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 - SN7756; ConvF(7.68, 7.68, 7.68) @ 2437 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x351x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
Maximum value of SAR (interpolated) = 1.39 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 19.94 V/m; Power Drift = -0.10 dB

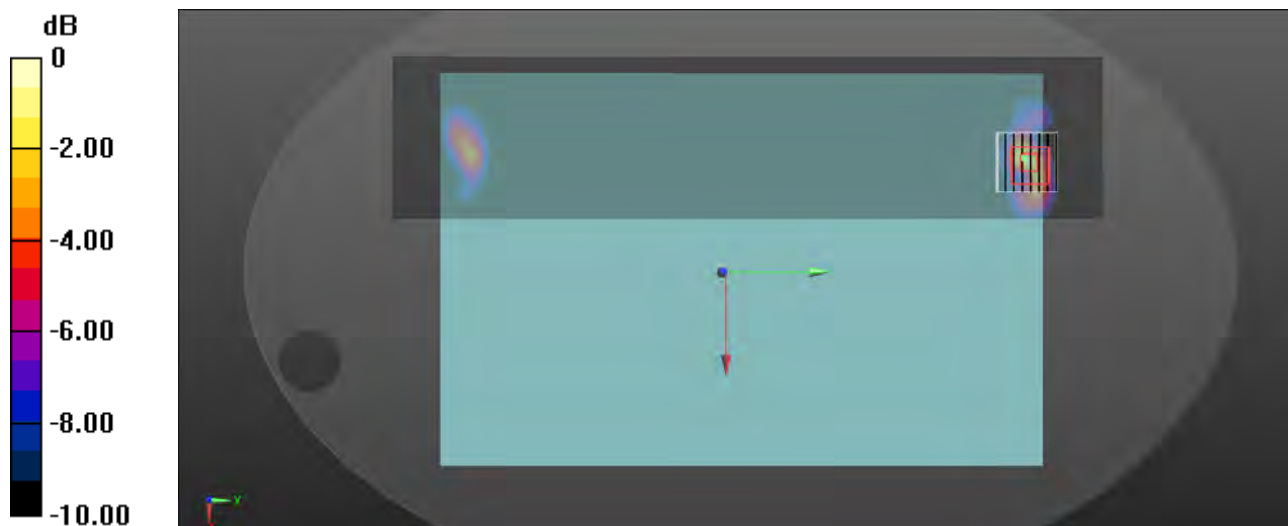
Peak SAR (extrapolated) = 2.15 W/kg

SAR(1 g) = 0.777 W/kg; SAR(10 g) = 0.286 W/kg

Smallest distance from peaks to all points 3 dB below = 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 36.9%

Maximum value of SAR (measured) = 1.49 W/kg



0 dB = 1.49 W/kg = 1.73 dBW/kg

Date: 2023/1/10

03_Bluetooth_GFSK_Ch39_Bottom of laptop_0 mm_ANT Aux

DUT: UM3504DA

Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2441 MHz; Duty Cycle: 1:1.293
Medium parameters used (interpolated): $f = 2441$ MHz; $\sigma = 1.797$ S/m; $\epsilon_r = 39.536$; $\rho = 1000$ 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 - SN7756; ConvF(7.68, 7.68, 7.68) @ 2441 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASYS2, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x71x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
Maximum value of SAR (interpolated) = 0.388 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
Reference Value = 13.60 V/m; Power Drift = -0.02 dB

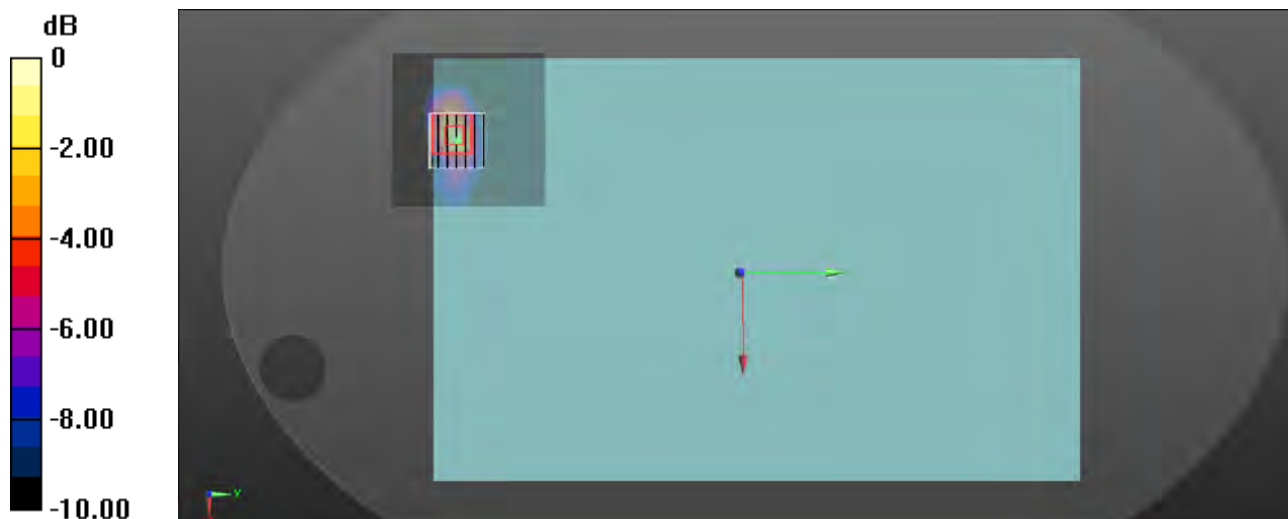
Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.078 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 38.9%

Maximum value of SAR (measured) = 0.395 W/kg



0 dB = 0.395 W/kg = -4.03 dBW/kg

Date: 2023/1/11

04_WLAN 5 GHz_802.11ac_VHT80_Ch58_Bottom of laptop_0 mm_ANT Main

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5290 MHz;Duty Cycle: 1:1.017
Medium parameters used: $f = 5290$ MHz; $\sigma = 4.678$ S/m; $\epsilon_r = 35.865$; $\rho = 1000$ 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 - SN7756; ConvF(5.21, 5.21, 5.21) @ 5290 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x81x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 1.62 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.5$ mm
Reference Value = 15.36 V/m; Power Drift = -0.15 dB

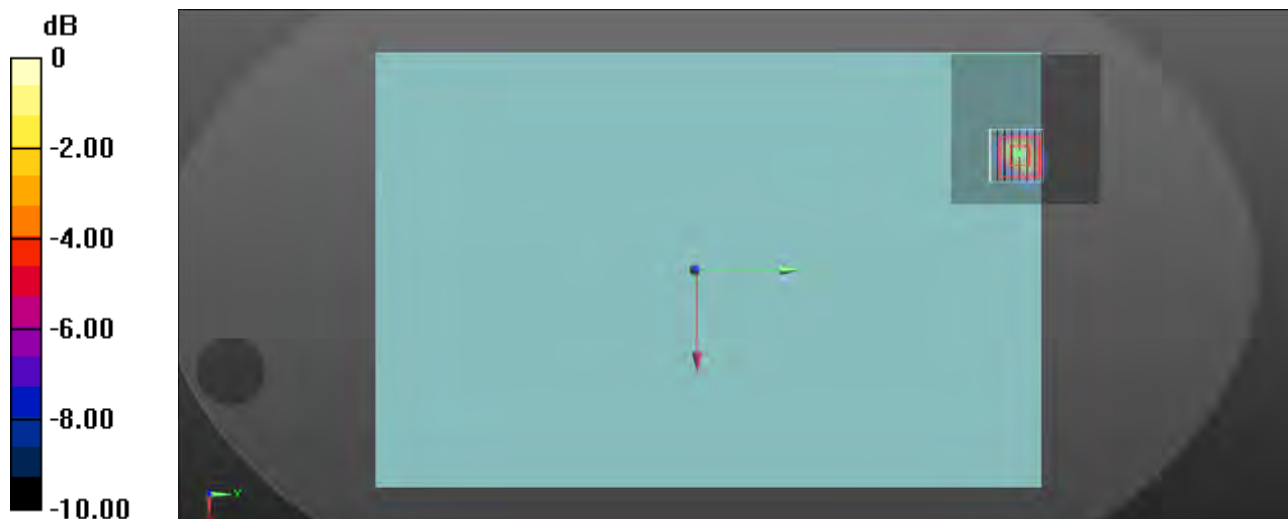
Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 0.758 W/kg; SAR(10 g) = 0.205 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 61.7%

Maximum value of SAR (measured) = 1.97 W/kg



0 dB = 1.97 W/kg = 2.94 dBW/kg

Date: 2023/1/11

05_WLAN 5 GHz_802.11ac VHT80_Ch58_Bottom of laptop_0 mm_ANT Aux

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5290 MHz;Duty Cycle: 1:1.017

Medium parameters used: $f = 5290$ MHz; $\sigma = 4.678$ S/m; $\epsilon_r = 35.865$; $\rho = 1000$ 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 - SN7756; ConvF(5.21, 5.21, 5.21) @ 5290 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.57 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 13.31 V/m; Power Drift = -0.19 dB

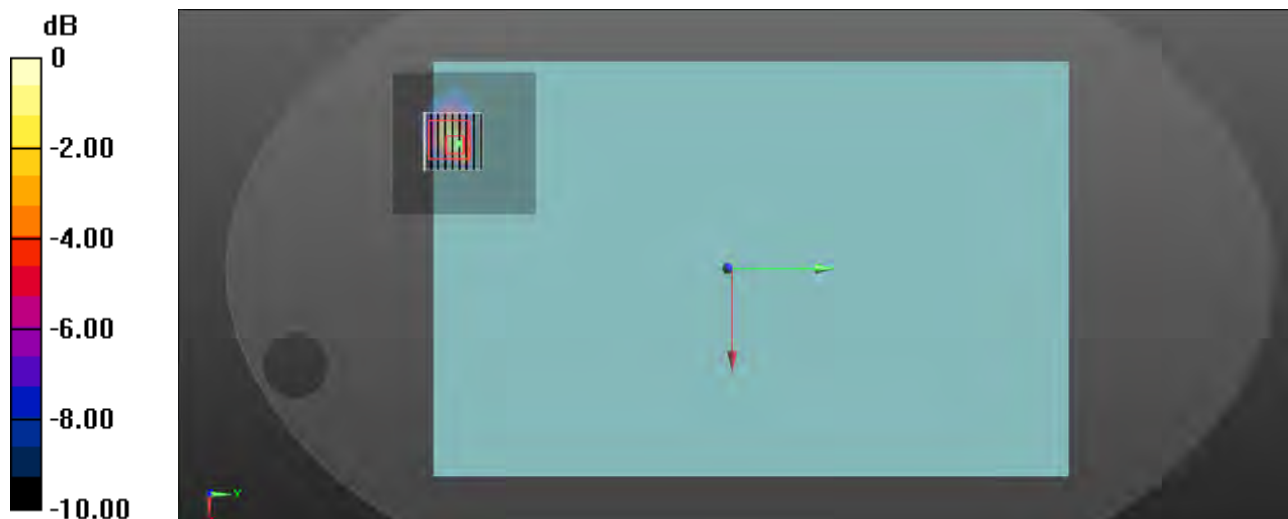
Peak SAR (extrapolated) = 3.27 W/kg

SAR(1 g) = 0.638 W/kg; SAR(10 g) = 0.205 W/kg

Smallest distance from peaks to all points 3 dB below = 4.6 mm

Ratio of SAR at M2 to SAR at M1 = 59.9%

Maximum value of SAR (measured) = 1.82 W/kg



0 dB = 1.82 W/kg = 2.60 dBW/kg

Date: 2023/1/16

11_WLAN 5 GHz_802.11ac_VHT80_Ch58_Bottom of laptop_0mm_ANT MIMO

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5290 MHz;Duty Cycle: 1:1.017
Medium parameters used: $f = 5290 \text{ MHz}$; $\sigma = 4.659 \text{ S/m}$; $\epsilon_r = 35.741$; $\rho = 1000 \text{ kg/m}^3$
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 - SN7756; ConvF(5.21, 5.21, 5.21) @ 5290 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x401x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$
Maximum value of SAR (interpolated) = 1.71 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.5\text{mm}$
Reference Value = 12.70 V/m; Power Drift = 0.15 dB

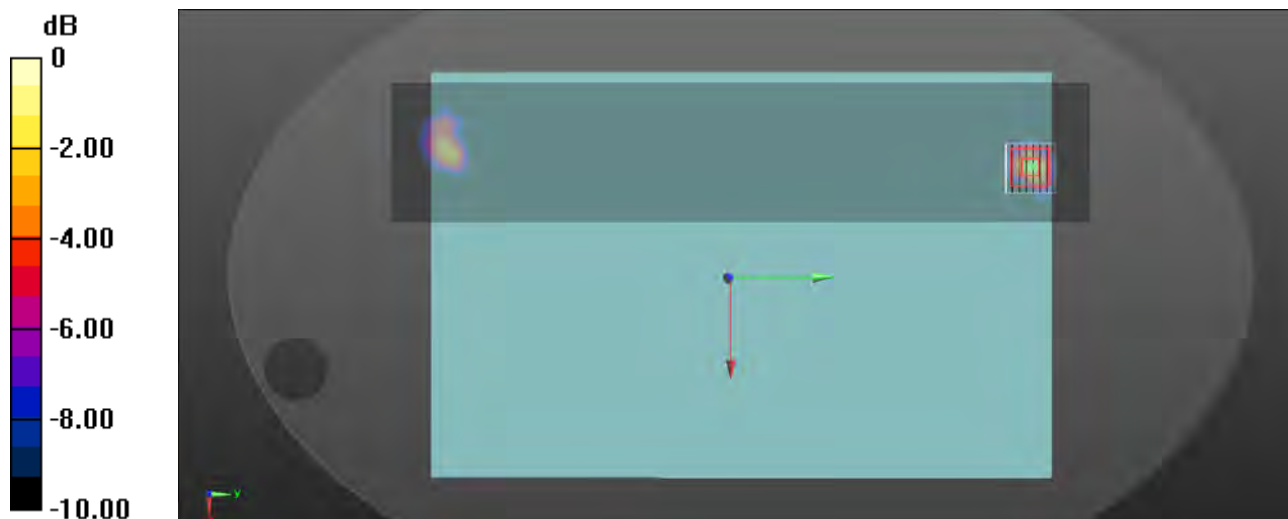
Peak SAR (extrapolated) = 3.55 W/kg

SAR(1 g) = 0.701 W/kg; SAR(10 g) = 0.189 W/kg

Smallest distance from peaks to all points 3 dB below = 5.4 mm

Ratio of SAR at M2 to SAR at M1 = 57.2%

Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 2.00 W/kg = 3.01 dBW/kg

Date: 2023/1/11

06_WLAN 5 GHz_802.11ac VHT80_Ch138_Bottom of laptop_0 mm_ANT Main

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5690 MHz;Duty Cycle: 1:1.017

Medium parameters used: $f = 5690$ MHz; $\sigma = 5.156$ S/m; $\epsilon_r = 34.958$; $\rho = 1000$ 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 - SN7756; ConvF(4.56, 4.56, 4.56) @ 5690 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x81x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm
Maximum value of SAR (interpolated) = 1.53 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.5$ mm

Reference Value = 10.69 V/m; Power Drift = -0.11 dB

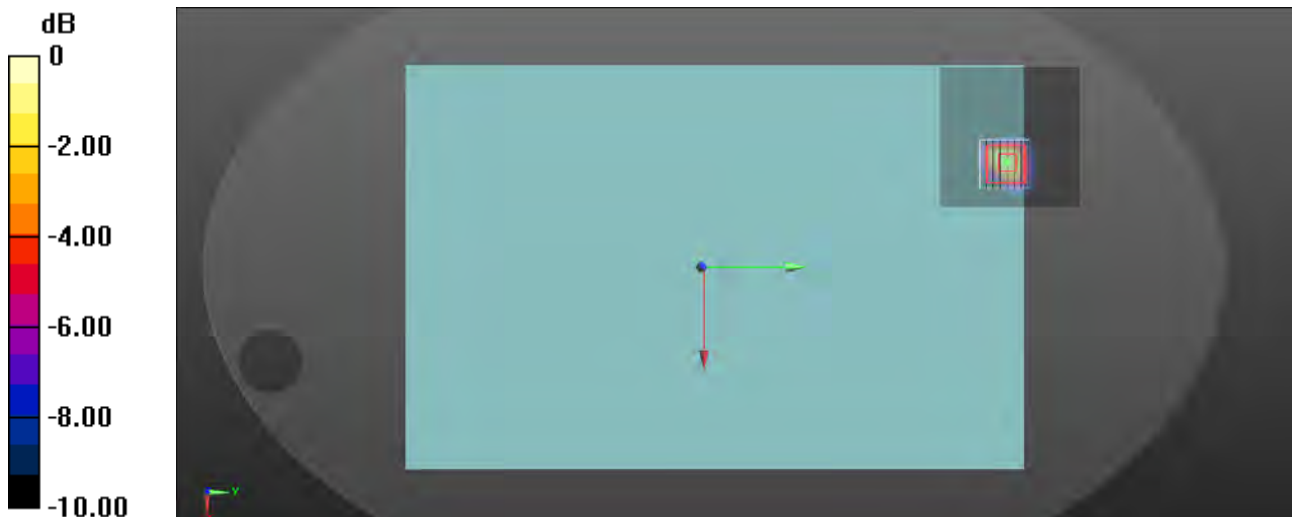
Peak SAR (extrapolated) = 3.18 W/kg

SAR(1 g) = 0.650 W/kg; SAR(10 g) = 0.187 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 58.1%

Maximum value of SAR (measured) = 1.75 W/kg



0 dB = 1.75 W/kg = 2.43 dBW/kg

Date: 2023/1/11

07_WLAN 5 GHz_802.11ac VHT80_Ch106_Bottom of laptop_0 mm_ANT Aux

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.017
Medium parameters used: $f = 5530 \text{ MHz}$; $\sigma = 4.911 \text{ S/m}$; $\epsilon_r = 35.569$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section
Measurement Standard: DASYS (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 - SN7756; ConvF(4.56, 4.56, 4.56) @ 5530 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$
Maximum value of SAR (interpolated) = 1.73 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
Reference Value = 13.07 V/m; Power Drift = -0.07 dB

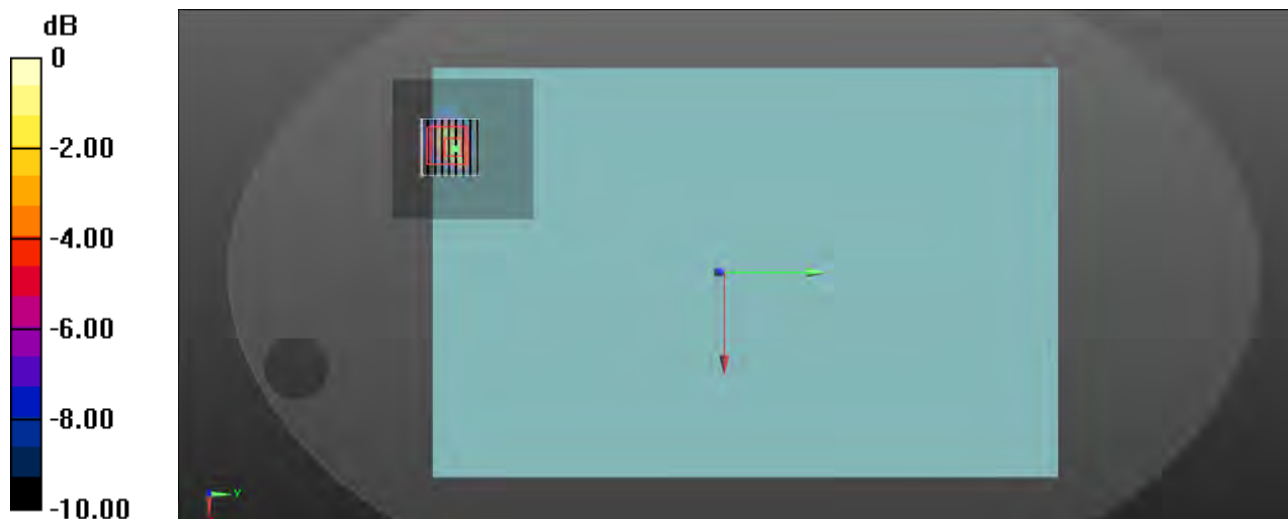
Peak SAR (extrapolated) = 3.43 W/kg

SAR(1 g) = 0.678 W/kg; SAR(10 g) = 0.220 W/kg

Smallest distance from peaks to all points 3 dB below = 4.6 mm

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

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



0 dB = 1.94 W/kg = 2.88 dBW/kg

Date: 2023/1/16

12_WLAN 5 GHz_802.11ac_VHT80_Ch138_Bottom of laptop_0mm_ANT MIMO

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5690 MHz;Duty Cycle: 1:1.017
Medium parameters used: $f = 5690$ MHz; $\sigma = 5.135$ S/m; $\epsilon_r = 34.834$; $\rho = 1000$ 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 - SN7756; ConvF(4.56, 4.56, 4.56) @ 5690 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x401x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.03 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.5mm
Reference Value = 16.88 V/m; Power Drift = -0.11 dB

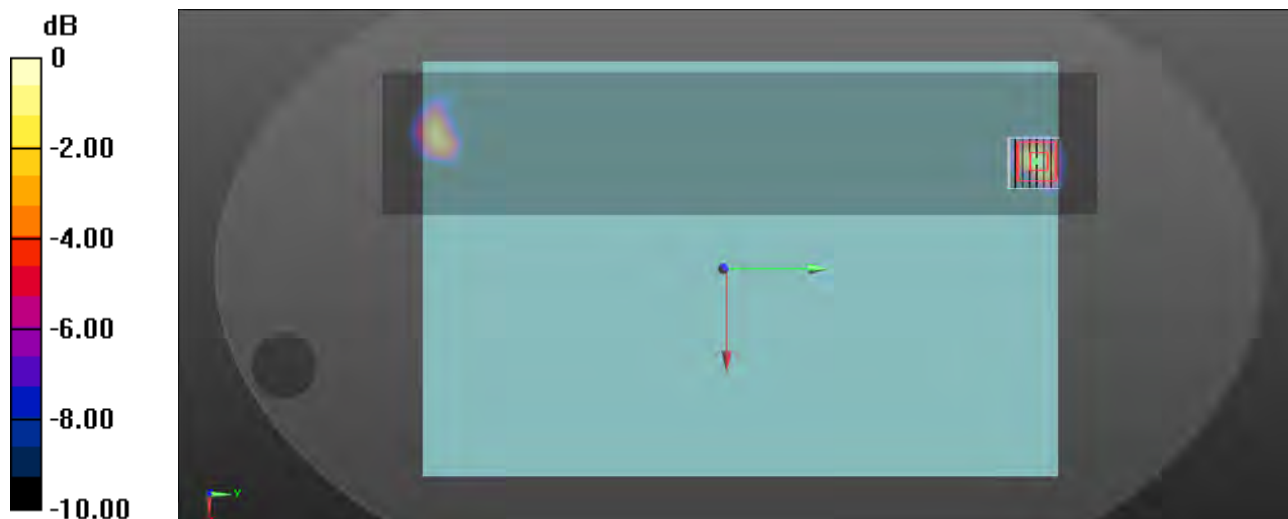
Peak SAR (extrapolated) = 8.99 W/kg

SAR(1 g) = 0.700 W/kg; SAR(10 g) = 0.201 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 54.7%

Maximum value of SAR (measured) = 2.08 W/kg



0 dB = 2.08 W/kg = 3.18 dBW/kg

Date: 2023/1/11

08_WLAN 5 GHz_802.11ac VHT80_Ch155_Bottom of laptop_0 mm_ANT Main

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.017

Medium parameters used: $f = 5775$ MHz; $\sigma = 5.189$ S/m; $\epsilon_r = 34.89$; $\rho = 1000$ 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 - SN7756; ConvF(4.6, 4.6, 4.6) @ 5775 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.71 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.5mm

Reference Value = 11.53 V/m; Power Drift = -0.16 dB

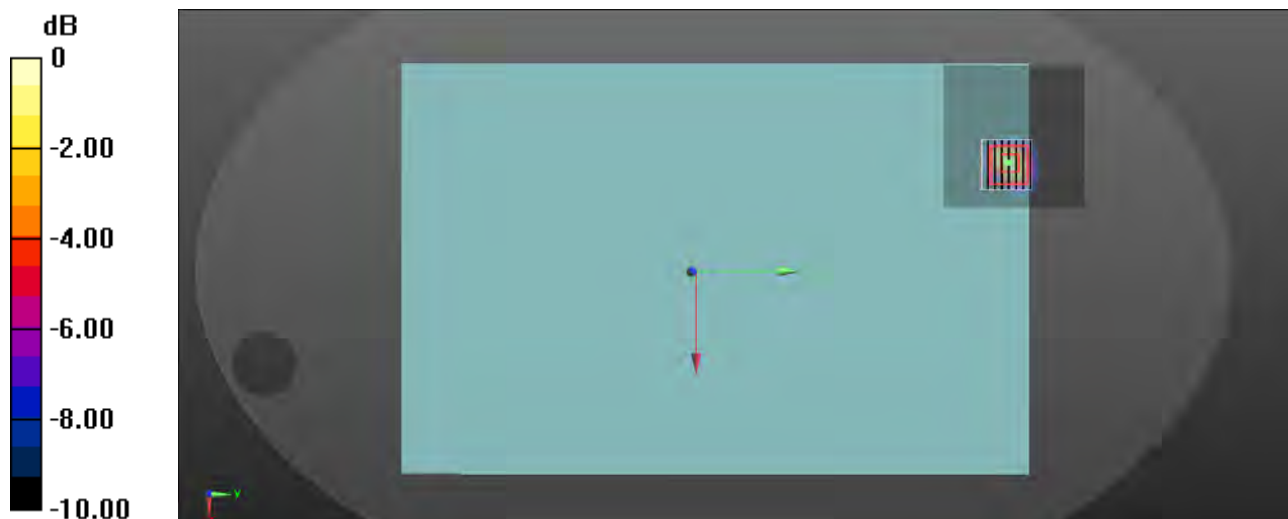
Peak SAR (extrapolated) = 3.75 W/kg

SAR(1 g) = 0.744 W/kg; SAR(10 g) = 0.217 W/kg

Smallest distance from peaks to all points 3 dB below = 5.4 mm

Ratio of SAR at M2 to SAR at M1 = 57.2%

Maximum value of SAR (measured) = 2.04 W/kg



0 dB = 2.04 W/kg = 3.10 dBW/kg

Date: 2023/1/11

09_WLAN 5 GHz_802.11ac VHT80_Ch155_Bottom of laptop_0 mm_ANT Aux

DUT: UM3504DA

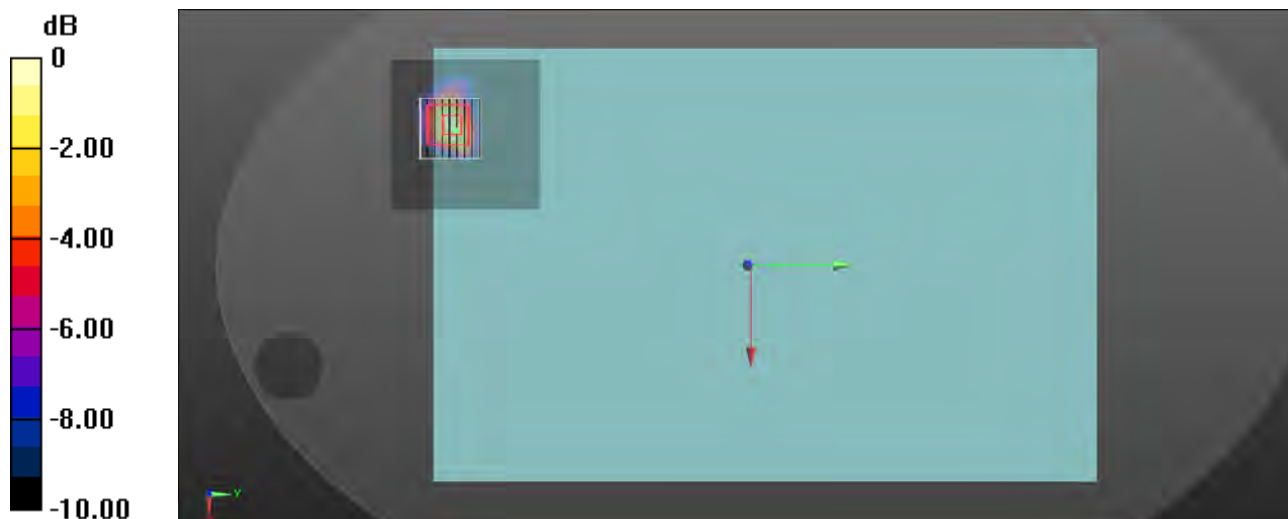
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.017
Medium parameters used: $f = 5775$ MHz; $\sigma = 5.189$ S/m; $\epsilon_r = 34.89$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

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 - SN7756; ConvF(4.6, 4.6, 4.6) @ 5775 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.39 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 15.94 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 2.71 W/kg
SAR(1 g) = 0.604 W/kg; SAR(10 g) = 0.197 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 60.2%
Maximum value of SAR (measured) = 1.47 W/kg



0 dB = 1.47 W/kg = 1.67 dBW/kg

Date: 2023/1/16

13_WLAN 5 GHz_802.11ac_VHT80_Ch155_Bottom of laptop_0mm_ANT MIMO

DUT: UM3504DA

Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5775 MHz;Duty Cycle: 1:1.017
Medium parameters used: $f = 5775$ MHz; $\sigma = 5.167$ S/m; $\epsilon_r = 34.766$; $\rho = 1000$ 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 - SN7756; ConvF(4.6, 4.6, 4.6) @ 5775 MHz; Calibrated: 2022/8/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2022/7/19
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x401x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.86 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.5mm
Reference Value = 15.06 V/m; Power Drift = -0.18 dB

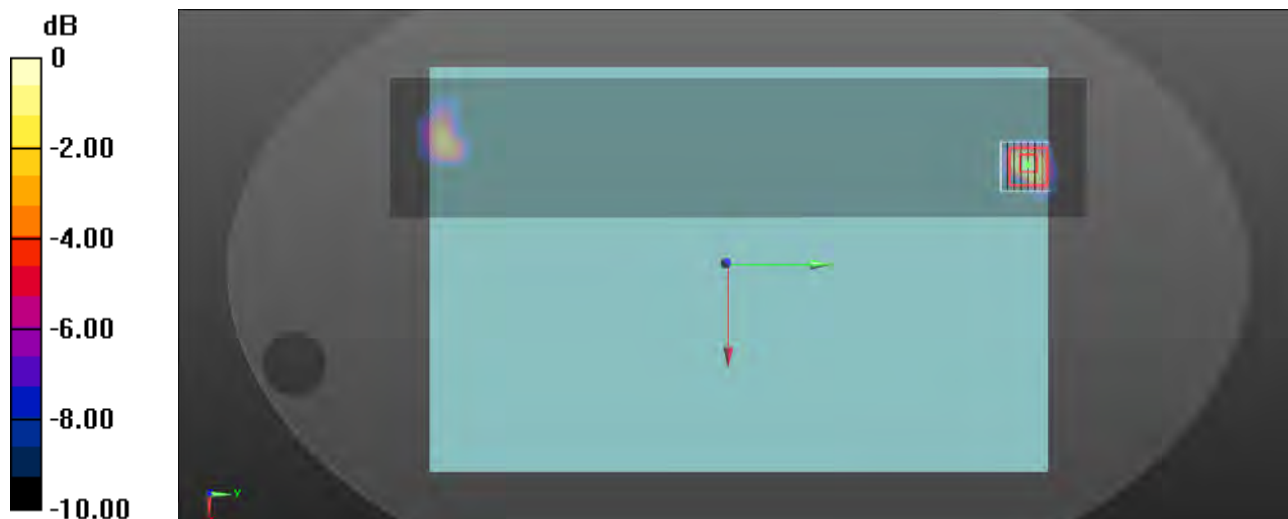
Peak SAR (extrapolated) = 3.73 W/kg

SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.196 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 53.1%

Maximum value of SAR (measured) = 1.89 W/kg



0 dB = 1.89 W/kg = 2.76 dBW/kg

102_WLAN 6 GHz_802.11ax HE160_Ch111_Bottom of laptop_0 mm_ANT Main

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-6	WLAN, 10755-AAC	6505.0, 111	5.5	6.08	33.5

Hardware Setup

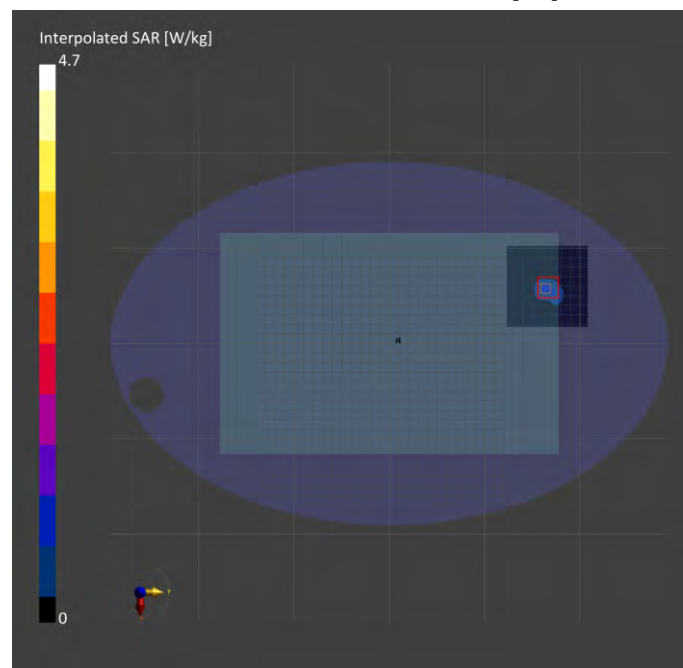
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.801	0.828
psSAR10g [W/Kg]	0.275	0.260
psPDab (1.0cm2, sq) [W/m2]		8.28
psPDab (4.0cm2, sq) [W/m2]		5.97
Power Drift [dB]	-0.03	-0.14
TSL Correction	Positive only	Positive only
M2/M1 [%]		45.9
Dist 3dB Peak [mm]		6.4



100_WLAN 6 GHz_802.11ax HE160_Ch15_Bottom of laptop_0mm_ANT Main

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-5	WLAN, 10755-AAC	6025.0, 15	5.5	5.53	34.2

Hardware Setup

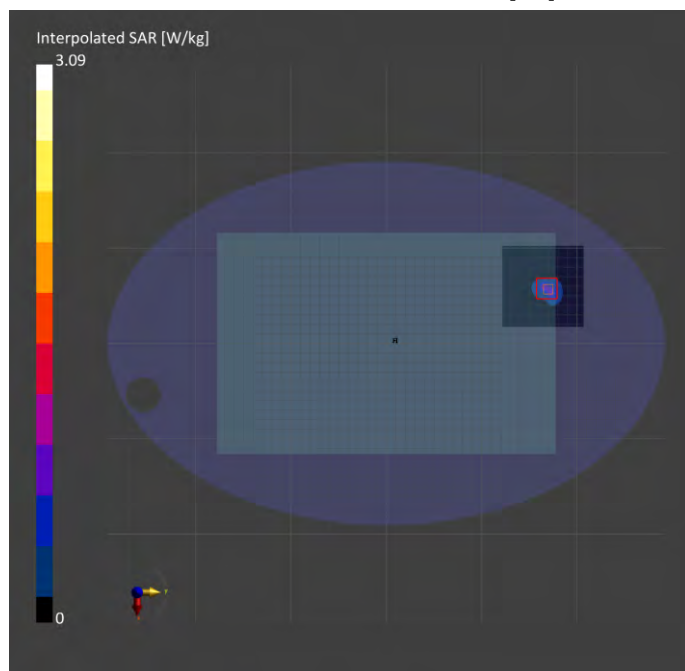
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.651	0.667
psSAR10g [W/Kg]	0.221	0.212
psPDab (1.0cm2, sq) [W/m2]		6.67
psPDab (4.0cm2, sq) [W/m2]		4.93
Power Drift [dB]	0.11	-0.19
TSL Correction	Positive only	Positive only
M2/M1 [%]		49.7
Dist 3dB Peak [mm]		6.2



101_WLAN 6 GHz_802.11ax HE160_Ch47_Bottom of laptop_0 mm_ANT Main

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	5.5	5.62	34.2

Hardware Setup

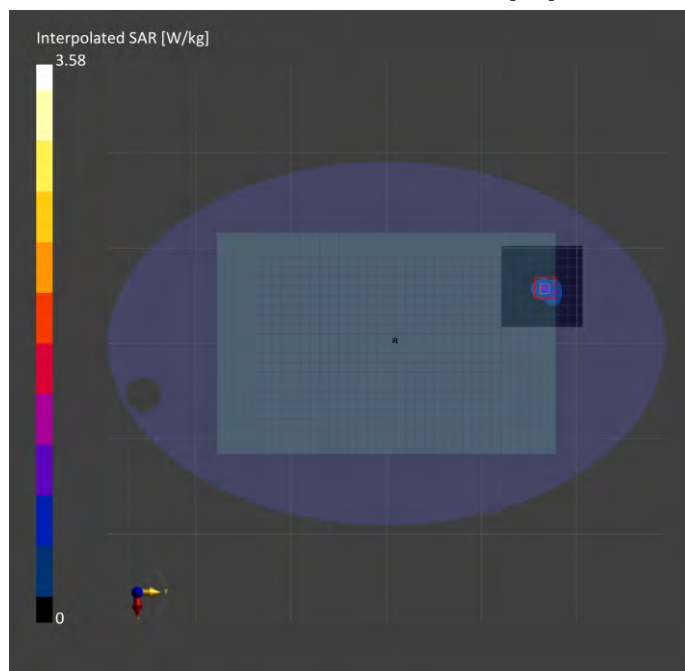
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.716	0.719
psSAR10g [W/Kg]	0.248	0.229
psPDab (1.0cm2, sq) [W/m2]		7.19
psPDab (4.0cm2, sq) [W/m2]		5.34
Power Drift [dB]	0.04	-0.13
TSL Correction	Positive only	Positive only
M2/M1 [%]		48.1
Dist 3dB Peak [mm]		6.9



103_WLAN 6 GHz_802.11ax HE160_Ch175_Bottom of laptop_0 mm_ANT Main

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-7	WLAN, 10755-AAC	6825.0, 175	5.5	6.45	33.0

Hardware Setup

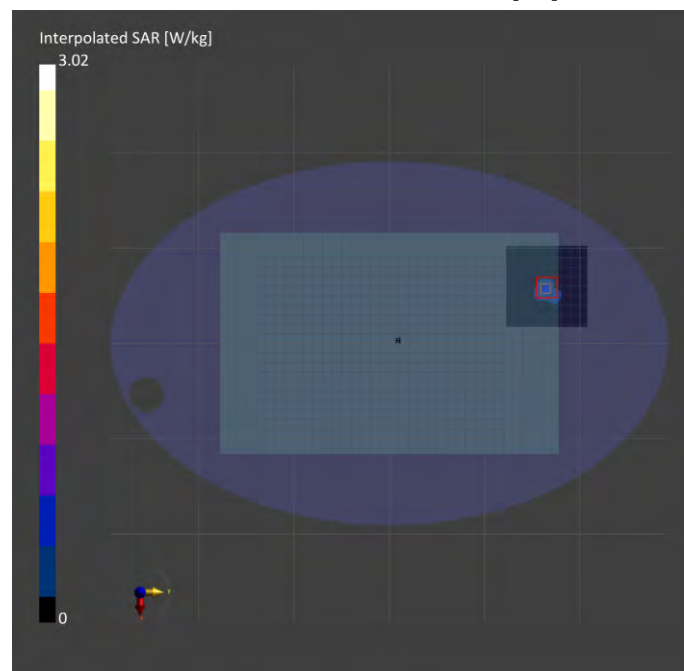
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.499	0.496
psSAR10g [W/Kg]	0.165	0.149
psPDab (1.0cm2, sq) [W/m2]		4.96
psPDab (4.0cm2, sq) [W/m2]		3.45
Power Drift [dB]	-0.08	-0.01
TSL Correction	Positive only	Positive only
M2/M1 [%]		44.5
Dist 3dB Peak [mm]		5.5



104_WLAN 6 GHz_802.11ax HE160_Ch207_Bottom of laptop_0 mm_ANT Main

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-8	WLAN, 10755-AAC	6985.0, 207	5.5	6.56	32.4

Hardware Setup

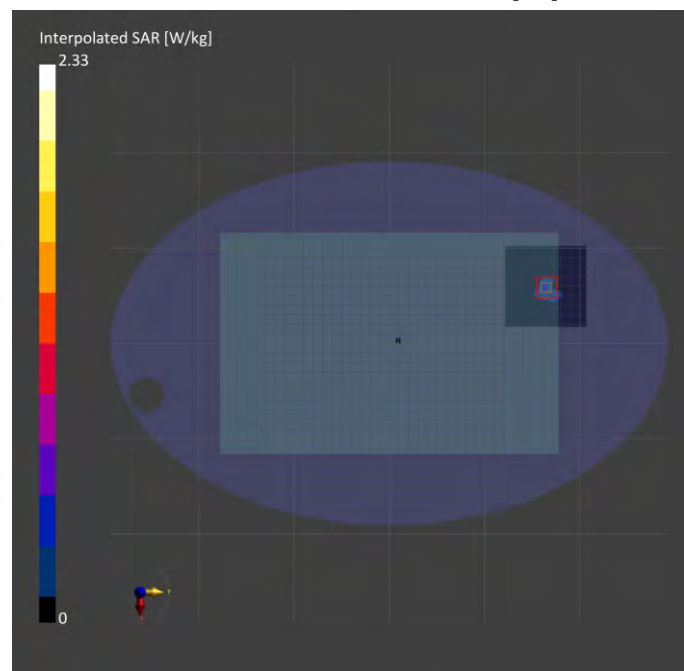
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.355	0.389
psSAR10g [W/Kg]	0.117	0.120
psPDab (1.0cm2, sq) [W/m2]		3.89
psPDab (4.0cm2, sq) [W/m2]		2.75
Power Drift [dB]	-0.05	-0.08
TSL Correction	Positive only	Positive only
M2/M1 [%]		45.0
Dist 3dB Peak [mm]		5.4



107_WLAN 6 GHz_802.11ax HE160_Ch47_Bottom of laptop_0 mm_ANT Aux

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	5.5	5.62	34.2

Hardware Setup

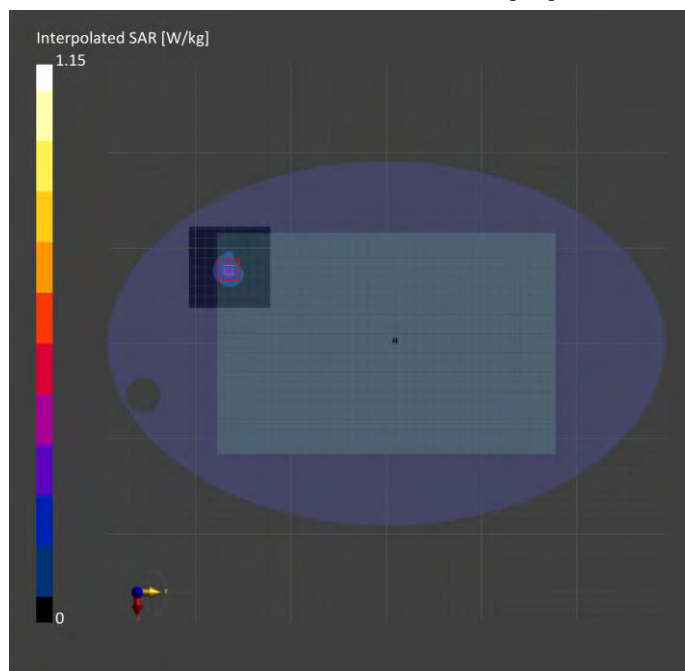
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G_230112	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.253	0.251
psSAR10g [W/Kg]	0.087	0.080
psPDab (1.0cm2, sq) [W/m2]		2.51
psPDab (4.0cm2, sq) [W/m2]		1.84
Power Drift [dB]	-0.01	0.10
TSL Correction	Positive only	Positive only
M2/M1 [%]		53.6
Dist 3dB Peak [mm]		8.2



106_WLAN 6 GHz_802.11ax HE160_Ch15_Bottom of laptop_0 mm_ANT Aux

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-5	WLAN, 10755-AAC	6025.0, 15	5.5	5.53	34.2

Hardware Setup

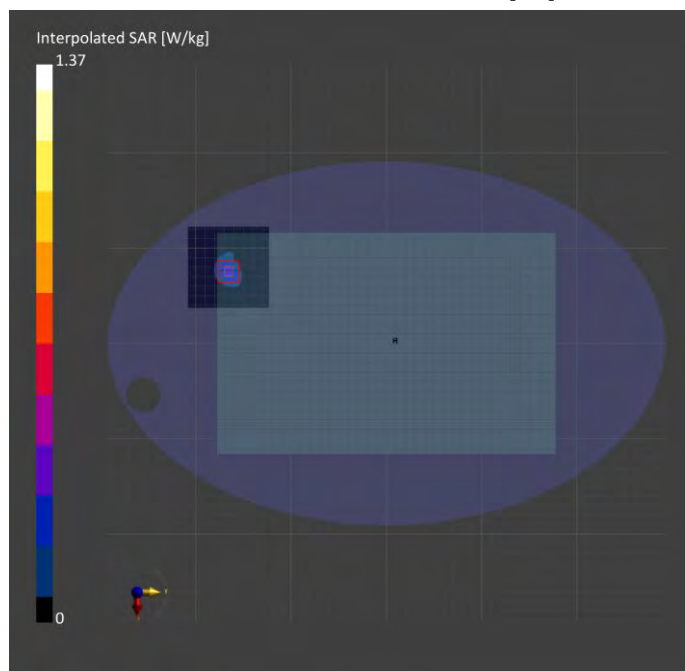
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.295	0.304
psSAR10g [W/Kg]	0.100	0.096
psPDab (1.0cm2, sq) [W/m2]		3.04
psPDab (4.0cm2, sq) [W/m2]		2.21
Power Drift [dB]	0.10	0.15
TSL Correction	Positive only	Positive only
M2/M1 [%]		54.2
Dist 3dB Peak [mm]		7.6



108_WLAN 6 GHz_802.11ax HE160_Ch111_Bottom of laptop_0 mm_ANT Aux

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-6	WLAN, 10755-AAC	6505.0, 111	5.5	6.08	33.5

Hardware Setup

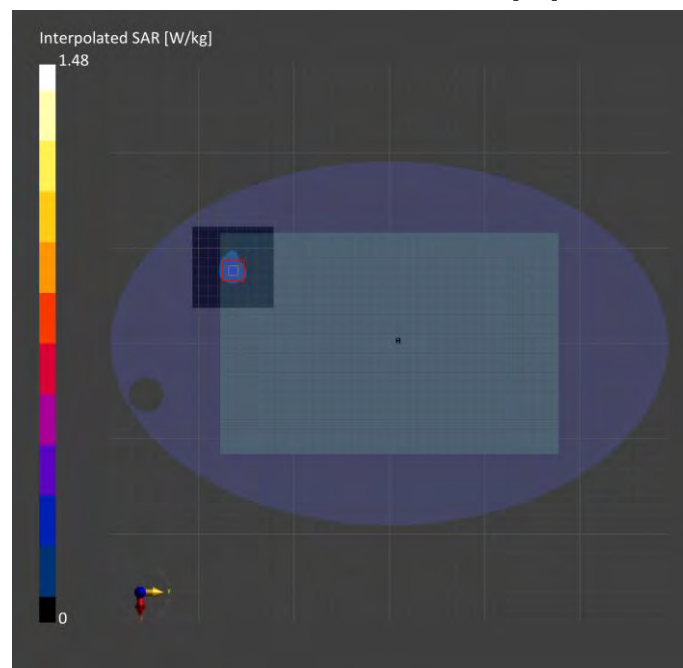
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.278	0.283
psSAR10g [W/Kg]	0.097	0.084
psPDab (1.0cm2, sq) [W/m2]		2.83
psPDab (4.0cm2, sq) [W/m2]		1.94
Power Drift [dB]	0.07	0.07
TSL Correction	Positive only	Positive only
M2/M1 [%]		48.2
Dist 3dB Peak [mm]		6.7



109_WLAN 6 GHz_802.11ax HE160_Ch143_Bottom of laptop_0 mm_ANT Aux

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-7	WLAN, 10755-AAC	6665.0, 143	5.5	6.27	33.0

Hardware Setup

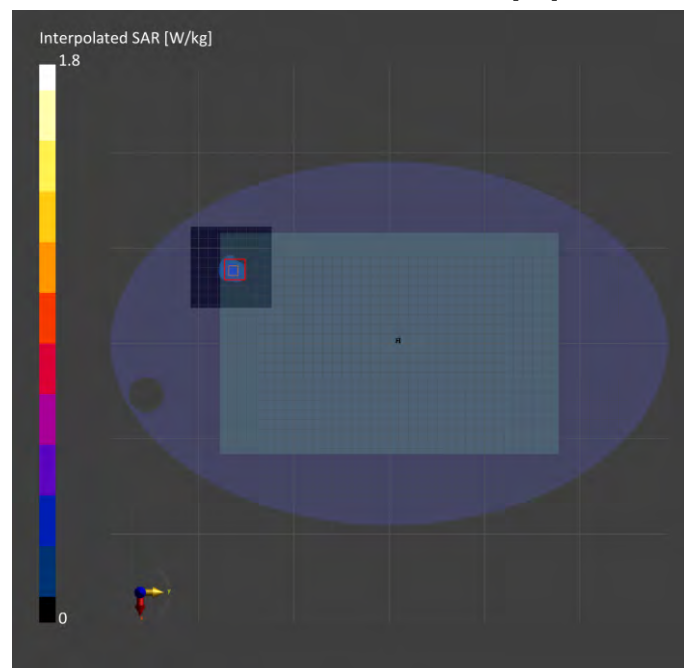
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.319	0.338
psSAR10g [W/Kg]	0.109	0.097
psPDab (1.0cm2, sq) [W/m2]		3.38
psPDab (4.0cm2, sq) [W/m2]		2.28
Power Drift [dB]	0.15	0.18
TSL Correction	Positive only	Positive only
M2/M1 [%]		48.6
Dist 3dB Peak [mm]		6.5



110_WLAN 6 GHz_802.11ax HE160_Ch207_Bottom of laptop_0 mm_ANT Aux

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-8	WLAN, 10755-AAC	6985.0, 207	5.5	6.56	32.4

Hardware Setup

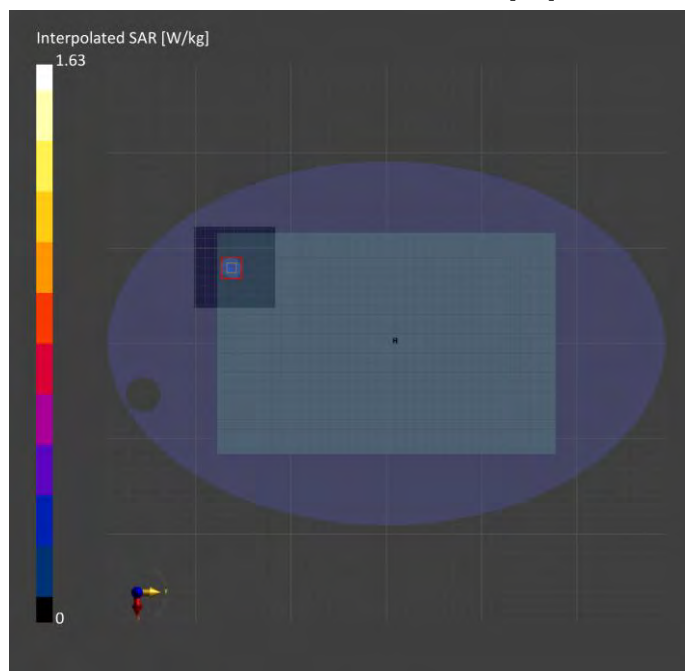
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.288	0.289
psSAR10g [W/Kg]	0.087	0.078
psPDab (1.0cm2, sq) [W/m2]		2.89
psPDab (4.0cm2, sq) [W/m2]		1.86
Power Drift [dB]	-0.01	0.04
TSL Correction	Positive only	Positive only
M2/M1 [%]		45.7
Dist 3dB Peak [mm]		6.3



119_WLAN 6 GHz_802.11ax HE160_Ch207_Bottom of laptop_0 mm_ANT MIMO

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-8	WLAN, 10755-AAC	6985.0, 207	5.5	6.56	32.4

Hardware Setup

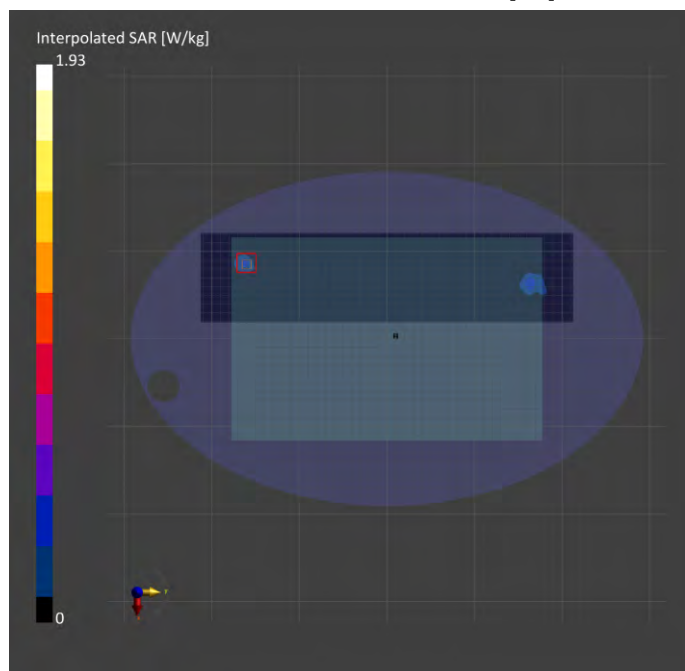
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	102.0 x 425.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.340	0.338
psSAR10g [W/Kg]	0.116	0.095
psPDab (1.0cm2, sq) [W/m2]		3.38
psPDab (4.0cm2, sq) [W/m2]		2.23
Power Drift [dB]	0.02	0.05
TSL Correction	Positive only	Positive only
M2/M1 [%]		44.8
Dist 3dB Peak [mm]		6.7



115_WLAN 6 GHz_802.11ax HE160_Ch15_Bottom of laptop_0 mm_ANT MIMO

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-5	WLAN, 10755-AAC	6025.0, 15	5.5	5.53	34.2

Hardware Setup

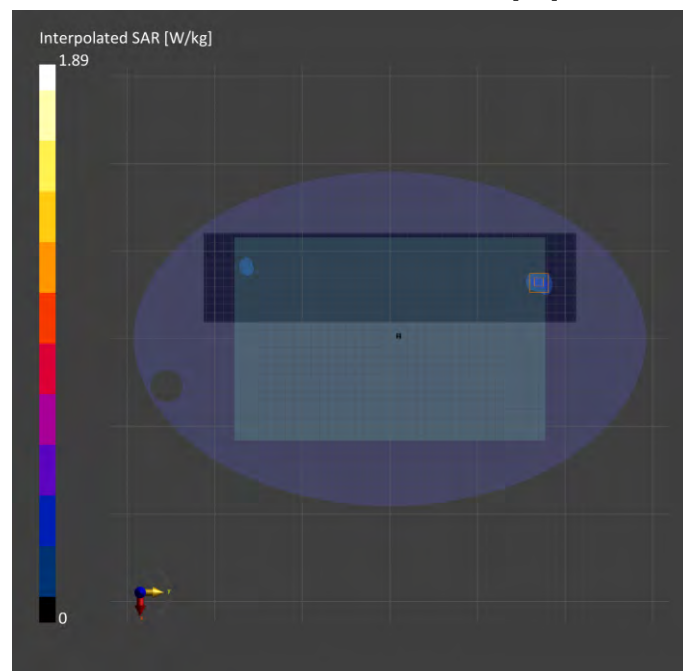
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	102.0 x 425.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.322	0.392
psSAR10g [W/Kg]	0.113	0.126
psPDab (1.0cm2, sq) [W/m2]		3.92
psPDab (4.0cm2, sq) [W/m2]		2.88
Power Drift [dB]	0.05	0.03
TSL Correction	Positive only	Positive only
M2/M1 [%]		48.6
Dist 3dB Peak [mm]		6.5



116_WLAN 6 GHz_802.11ax HE160_Ch47_Bottom of laptop_0 mm_ANT MIMO

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	5.5	5.62	34.2

Hardware Setup

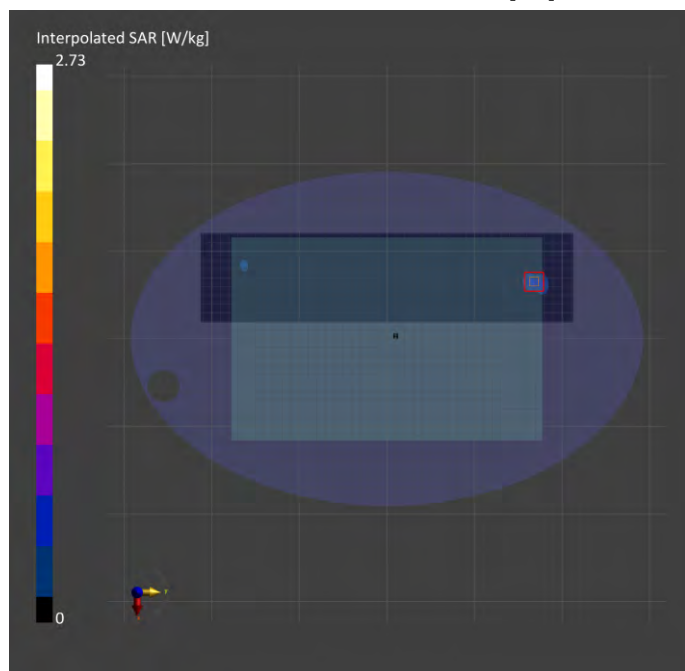
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	102.0 x 425.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.438	0.540
psSAR10g [W/Kg]	0.155	0.176
psPDab (1.0cm2, sq) [W/m2]		5.40
psPDab (4.0cm2, sq) [W/m2]		4.04
Power Drift [dB]	0.03	0.04
TSL Correction	Positive only	Positive only
M2/M1 [%]		47.3
Dist 3dB Peak [mm]		7.3



117_WLAN 6 GHz_802.11ax HE160_Ch111_Bottom of laptop_0 mm_ANT MIMO

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-6	WLAN, 10755-AAC	6505.0, 111	5.5	6.08	33.5

Hardware Setup

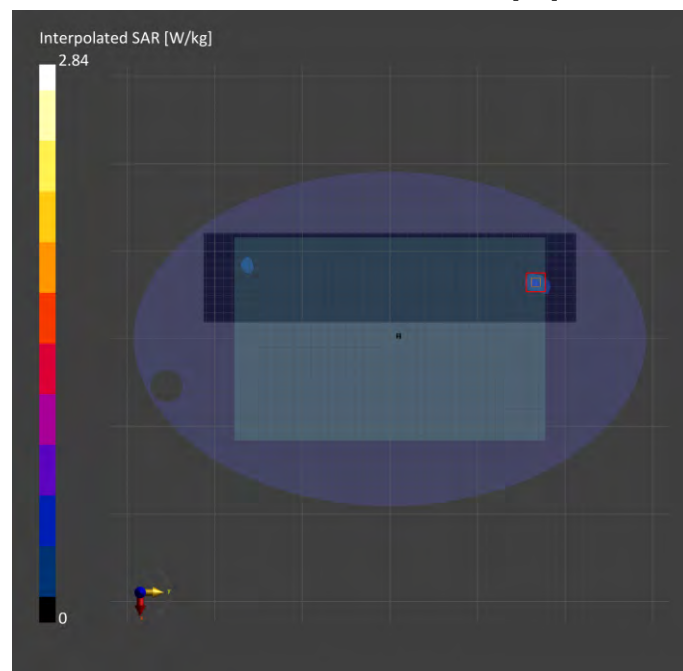
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	102.0 x 425.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.411	0.512
psSAR10g [W/Kg]	0.144	0.160
psPDab (1.0cm2, sq) [W/m2]		5.12
psPDab (4.0cm2, sq) [W/m2]		3.68
Power Drift [dB]	0.09	0.13
TSL Correction	Positive only	Positive only
M2/M1 [%]		45.7
Dist 3dB Peak [mm]		7.1



118_WLAN 6 GHz_802.11ax HE160_Ch175_Bottom of laptop_0 mm_ANT MIMO

Device under Test Properties

Model: UM3504DA

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 of laptop, 0.00	U-NII-7	WLAN, 10755-AAC	6825.0, 175	5.5	6.45	33.0

Hardware Setup

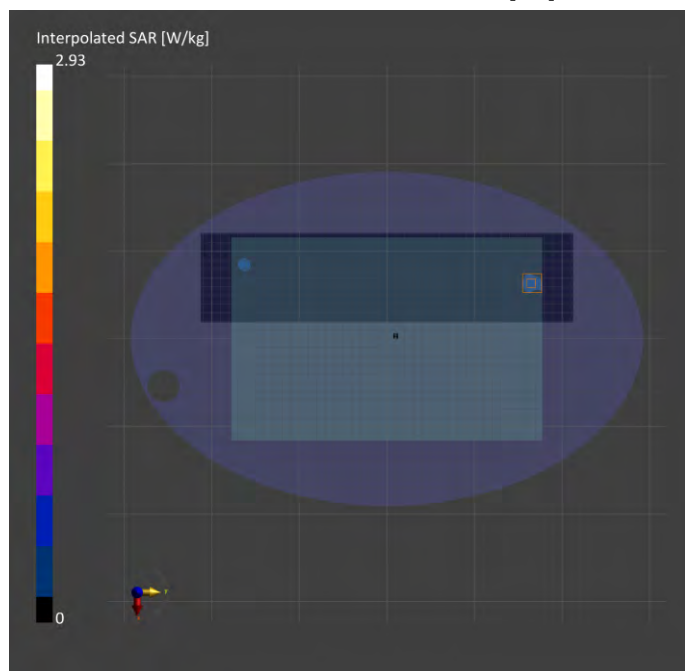
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HSL6G	EX3DV4 - SN3847, 2022-03-24	DAE4 Sn541, 2022-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	102.0 x 425.0	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	2023-01-12	2023-01-12
psSAR1g [W/Kg]	0.385	0.489
psSAR10g [W/Kg]	0.130	0.146
psPDab (1.0cm2, sq) [W/m2]		4.89
psPDab (4.0cm2, sq) [W/m2]		3.36
Power Drift [dB]	0.07	-0.10
TSL Correction	Positive only	Positive only
M2/M1 [%]		44.1
Dist 3dB Peak [mm]		6.1



120_WLAN 6 GHz_802.11ax HE160_Ch15_Bottom of laptop_2 mm_ANT Main

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-5	WLAN, 10755-AAC	6025.0, 15	1.0

Hardware Setup

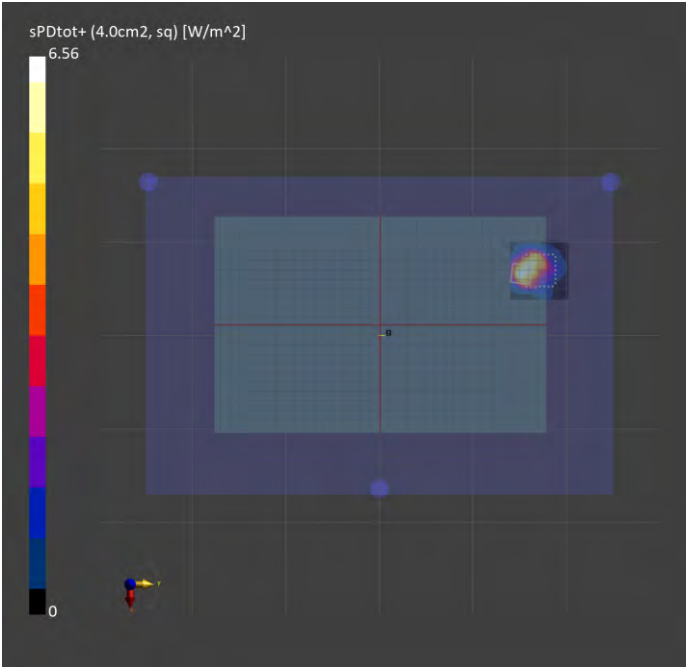
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	3.29
psPDtot+ [W/m²]	6.09
psPDmod+ [W/m²]	18.3
E _{max} [V/m]	90.7
H _{max} [A/m]	0.782
Power Drift [dB]	-0.02



121_WLAN 6 GHz_802.11ax HE160_Ch47_Bottom of laptop_2 mm_ANT Main

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	1.0

Hardware Setup

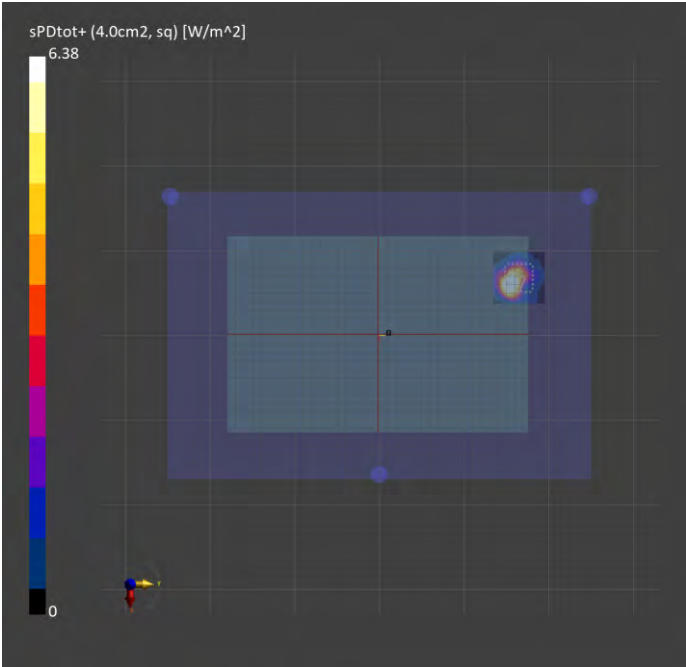
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	3.38
psPDtot+ [W/m²]	6.23
psPDmod+ [W/m²]	21.0
E _{max} [V/m]	99.2
H _{max} [A/m]	0.858
Power Drift [dB]	0.02



122_WLAN 6 GHz_802.11ax HE160_Ch111_Bottom of laptop_2 mm_ANT Main

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-6	WLAN, 10755-AAC	6505.0, 111	1.0

Hardware Setup

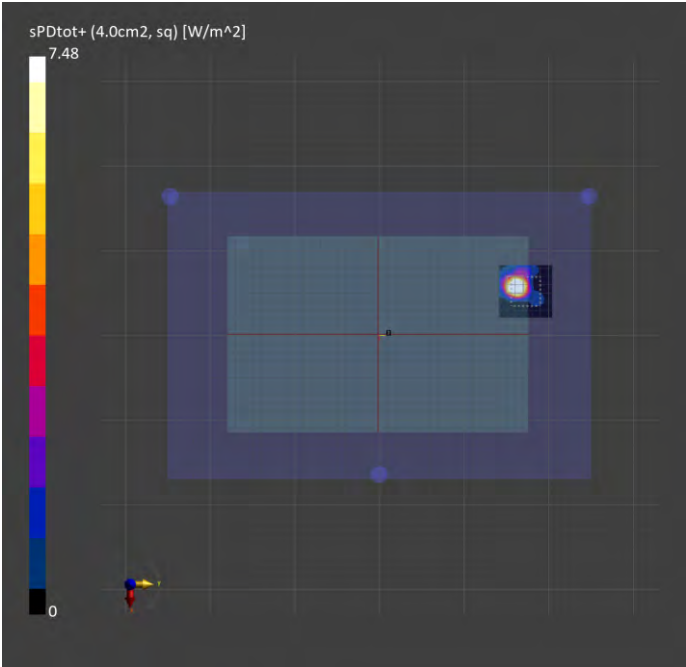
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	2.90
psPDtot+ [W/m²]	7.03
psPDmod+ [W/m²]	20.2
E _{max} [V/m]	89.8
H _{max} [A/m]	0.792
Power Drift [dB]	0.11



123_WLAN 6 GHz_802.11ax HE160_Ch175_Bottom of laptop_2 mm_ANT Main

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-7	WLAN, 10755-AAC	6825.0, 175	1.0

Hardware Setup

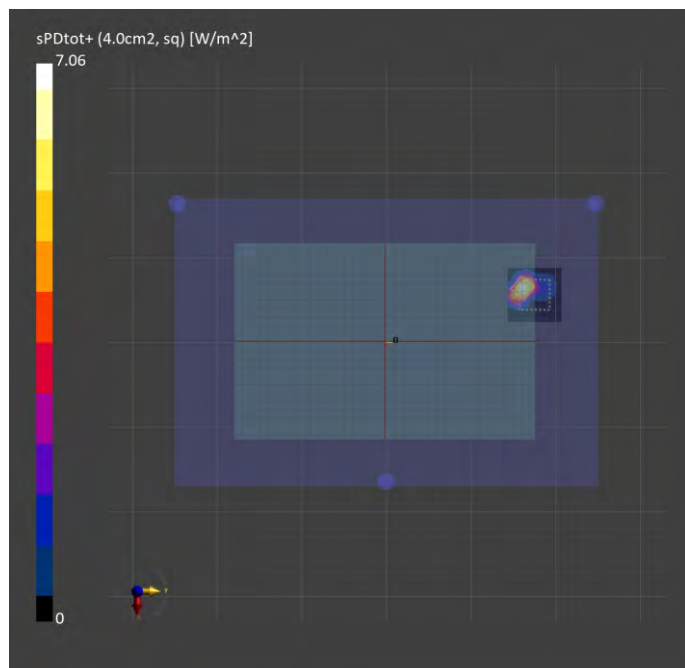
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.10
psPDtot+ [W/m ²]	6.99
psPDmod+ [W/m ²]	15.3
E _{max} [V/m]	94.8
H _{max} [A/m]	0.680
Power Drift [dB]	-0.01



124_WLAN 6 GHz_802.11ax HE160_Ch207_Bottom of laptop_2 mm_ANT Main

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-8	WLAN, 10755-AAC	6985.0, 207	1.0

Hardware Setup

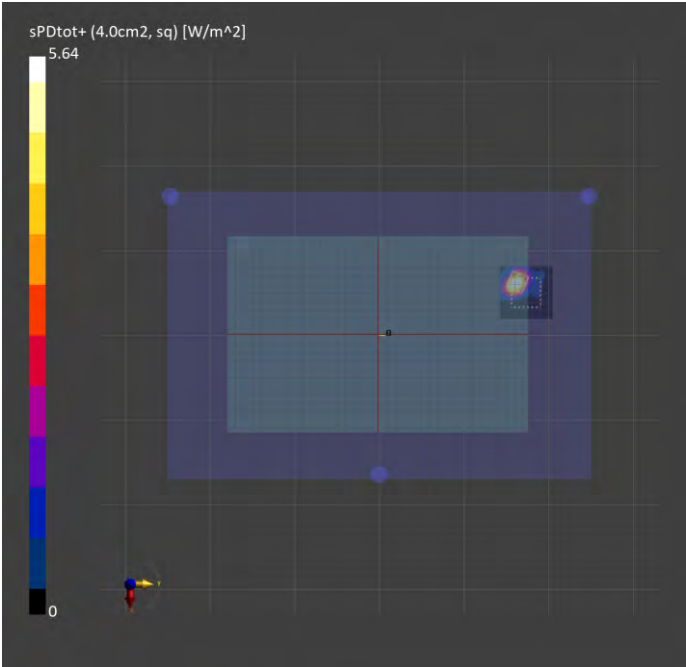
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	1.22
psPDtot+ [W/m²]	5.49
psPDmod+ [W/m²]	13.3
E _{max} [V/m]	80.1
H _{max} [A/m]	0.722
Power Drift [dB]	-0.09



125_WLAN 6 GHz_802.11ax HE160_Ch15_Bottom of laptop_2 mm_ANT Aux

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-5	WLAN, 10755-AAC	6025.0, 15	1.0

Hardware Setup

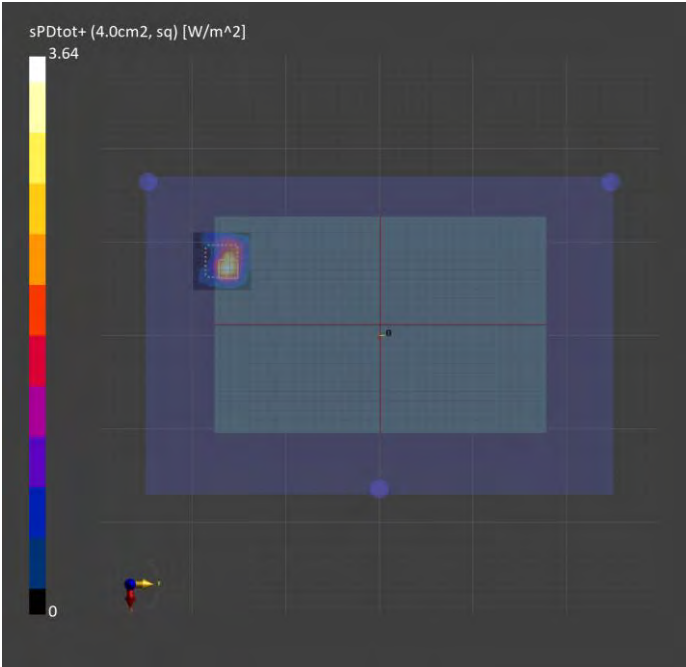
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	1.81
psPDtot+ [W/m²]	3.53
psPDmod+ [W/m²]	7.74
E _{max} [V/m]	65.6
H _{max} [A/m]	0.510
Power Drift [dB]	-0.04



126_WLAN 6 GHz_802.11ax HE160_Ch47_Bottom of laptop_2 mm_ANT Aux

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	1.0

Hardware Setup

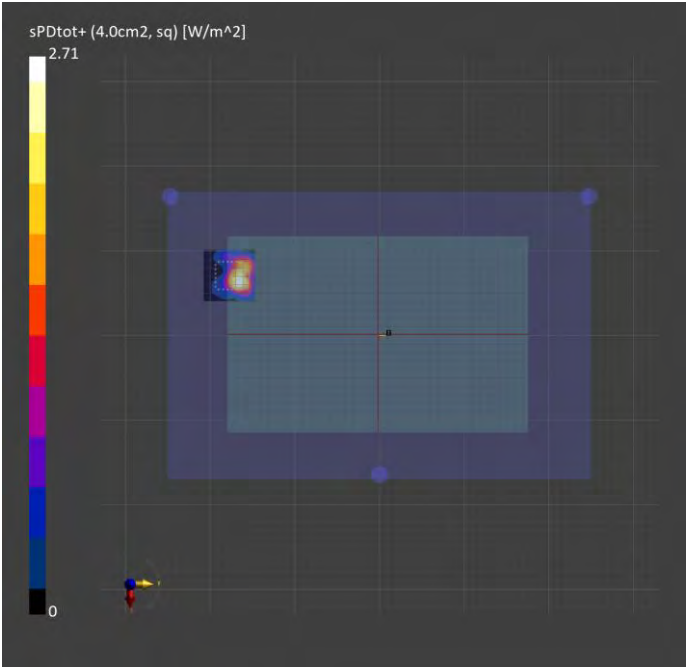
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	1.11
psPDtot+ [W/m²]	2.60
psPDmod+ [W/m²]	7.34
E _{max} [V/m]	70.7
H _{max} [A/m]	0.534
Power Drift [dB]	-0.06



127_WLAN 6 GHz_802.11ax HE160_Ch111_Bottom of laptop_2 mm_ANT Aux

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-6	WLAN, 10755-AAC	6505.0, 111	1.0

Hardware Setup

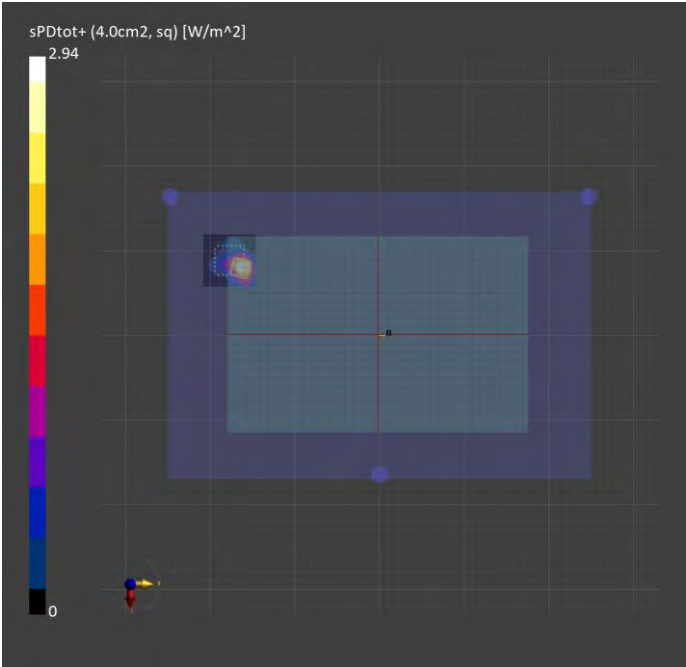
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	1.26
psPDtot+ [W/m²]	2.93
psPDmod+ [W/m²]	7.03
E _{max} [V/m]	70.0
H _{max} [A/m]	0.386
Power Drift [dB]	0.01



128_WLAN 6 GHz_802.11ax HE160_Ch143_Bottom of laptop_2 mm_ANT Aux

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-7	WLAN, 10755-AAC	6665.0, 143	1.0

Hardware Setup

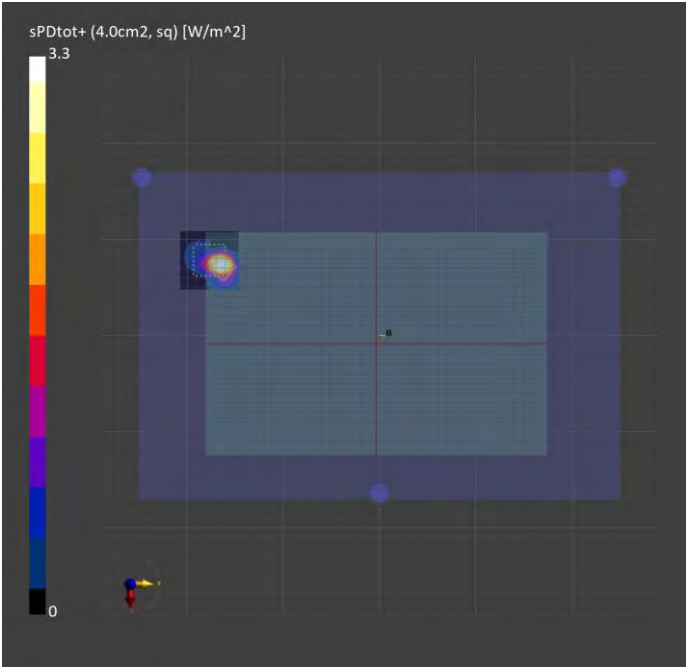
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	1.37
psPDtot+ [W/m²]	3.21
psPDmod+ [W/m²]	8.56
E _{max} [V/m]	66.3
H _{max} [A/m]	0.479
Power Drift [dB]	-0.18



129_WLAN 6 GHz_802.11ax HE160_Ch207_Bottom of laptop_2 mm_ANT Aux

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-8	WLAN, 10755-AAC	6985.0, 207	1.0

Hardware Setup

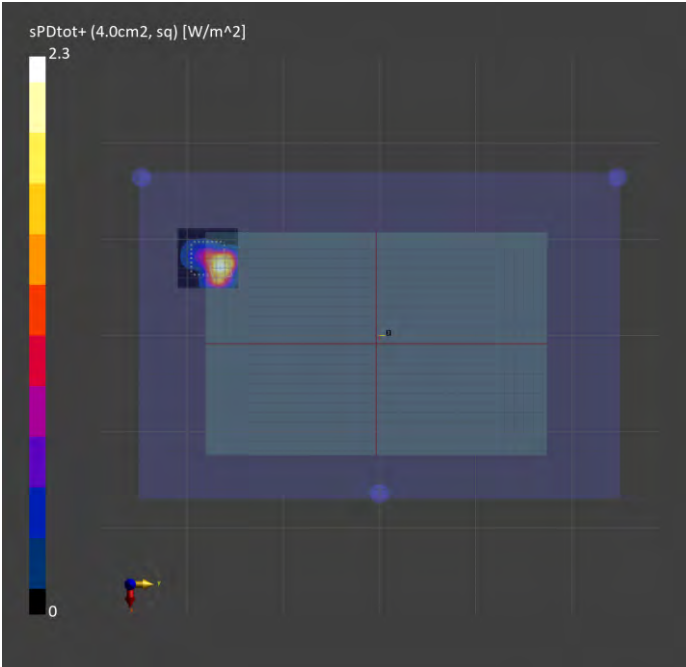
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-13
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	0.966
psPDtot+ [W/m²]	2.17
psPDmod+ [W/m²]	5.50
E _{max} [V/m]	60.3
H _{max} [A/m]	0.319
Power Drift [dB]	-0.12



131_WLAN 6 GHz_802.11ax HE160_Ch15_Bottom of laptop_2 mm_ANT MIMO

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-5	WLAN, 10755-AAC	6025.0, 15	1.0

Hardware Setup

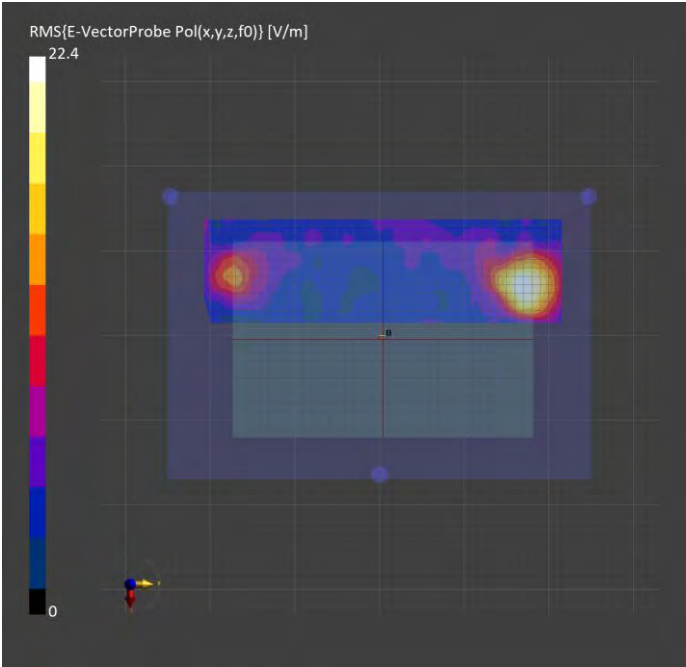
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-30
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	2.42
psPDtot+ [W/m²]	5.45
psPDmod+ [W/m²]	15.2
E _{max} [V/m]	86.6
H _{max} [A/m]	0.706
Power Drift [dB]	0.04



132_WLAN 6 GHz_802.11ax HE160_Ch47_Bottom of laptop_2 mm_ANT MIMO

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	1.0

Hardware Setup

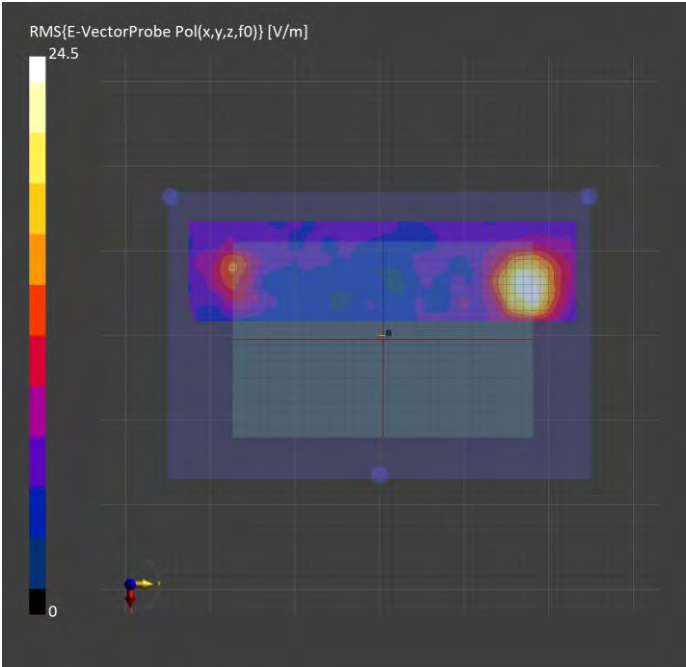
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-30
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	1.84
psPDtot+ [W/m²]	5.22
psPDmod+ [W/m²]	20.0
E _{max} [V/m]	94.1
H _{max} [A/m]	0.897
Power Drift [dB]	-0.04



133_WLAN 6 GHz_802.11ax HE160_Ch111_Bottom of laptop_2 mm_ANT MIMO

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-6	WLAN, 10755-AAC	6505.0, 111	1.0

Hardware Setup

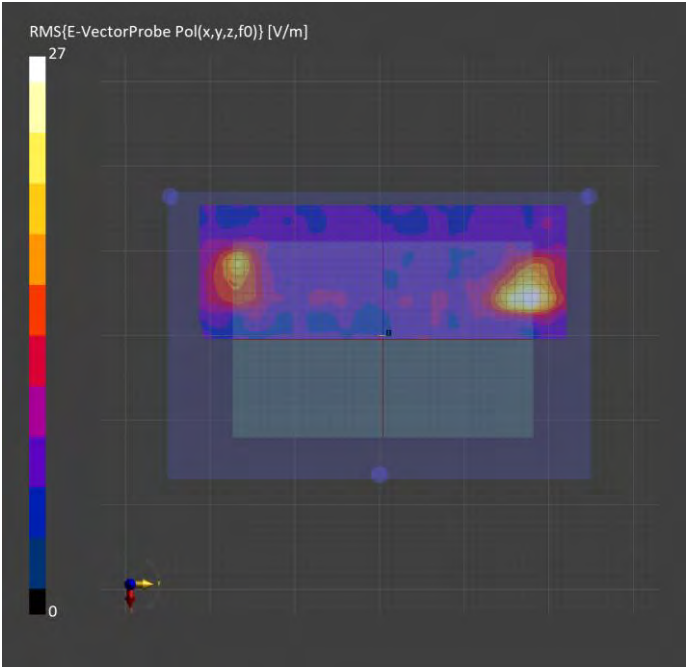
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-30
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	2.55
psPDtot+ [W/m²]	5.82
psPDmod+ [W/m²]	18.1
E _{max} [V/m]	92.8
H _{max} [A/m]	0.759
Power Drift [dB]	-0.02



134_WLAN 6 GHz_802.11ax HE160_Ch175_Bottom of laptop_2 mm_ANT MIMO

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-7	WLAN, 10755-AAC	6825.0, 175	1.0

Hardware Setup

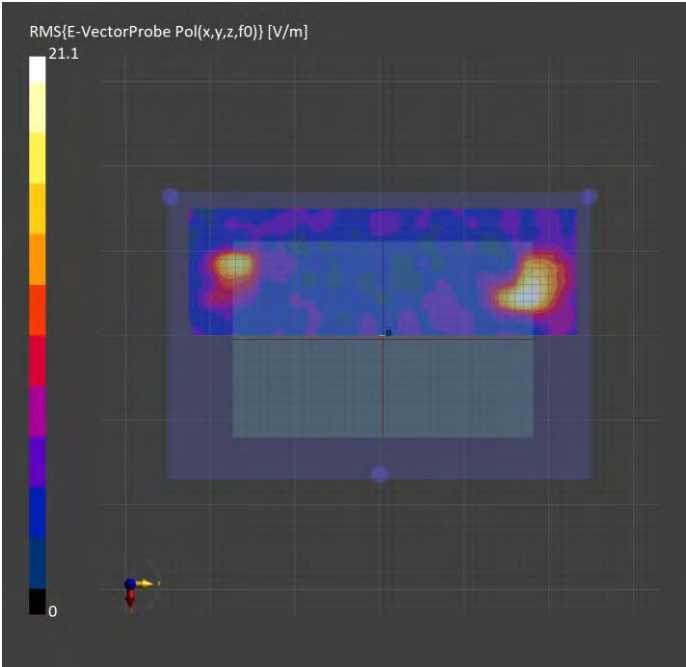
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-30
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	2.14
psPDtot+ [W/m²]	5.31
psPDmod+ [W/m²]	13.2
E _{max} [V/m]	90.6
H _{max} [A/m]	0.637
Power Drift [dB]	-0.02



135_WLAN 6 GHz_802.11ax HE160_Ch207_Bottom of laptop_2 mm_ANT MIMO

Device under Test Properties

Model:UM3504DA

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom of laptop, 2.00	U-NII-8	WLAN, 10755-AAC	6985.0, 207	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz, 2022-12-07	DAE4 Sn541, 2022-03-23

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-01-30
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	1.91
psPDtot+ [W/m²]	5.07
psPDmod+ [W/m²]	9.96
E _{max} [V/m]	70.0
H _{max} [A/m]	0.622
Power Drift [dB]	-0.04

