Appendix B. Highest Measurement Data

Test Laboratory: DEKRA Date: 2023/08/31

4_WLAN2.4GHz_802.11b-1M_CH1_Bottom_0mm_ANT Aux_INPAQ

DUT: Notebook Computer; Type: 14Z90S

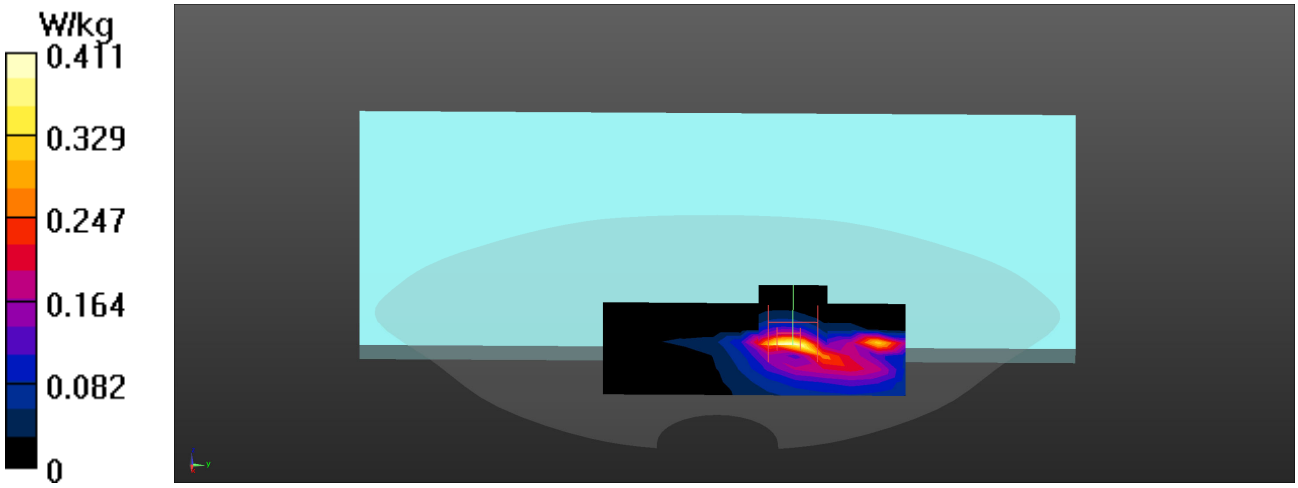
Communication System: UID 0, WLAN 2.4G; Frequency: 2412 MHz
Communication System PAR: 0dB
Medium parameters used: f = 2412 MHz; σ = 1.73 S/m; ε_r = 39.45; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.85, 8.9, 7.36) @ 2412 MHz; Calibrated: 2023/02/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2023/02/22
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 2030
- Measurement SW: V52.10.4.1535

Configuration/Flat/Area Scan (8x12x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.411 W/kg

Configuration/Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.19 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.559 W/kg
SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.095 W/kg
Smallest distance from peaks to all points 3 dB below = 6 mm
Ratio of SAR at M2 to SAR at M1 = 45.7%
Maximum value of SAR (measured) = 0.429 W/kg



Test Laboratory: DEKRA Date: 2023/08/31

31_Bluetooth_BT-1M_CH39_Bottom_0mm_ANT Aux_PULSE

DUT: Notebook Computer; Type: 14Z90S

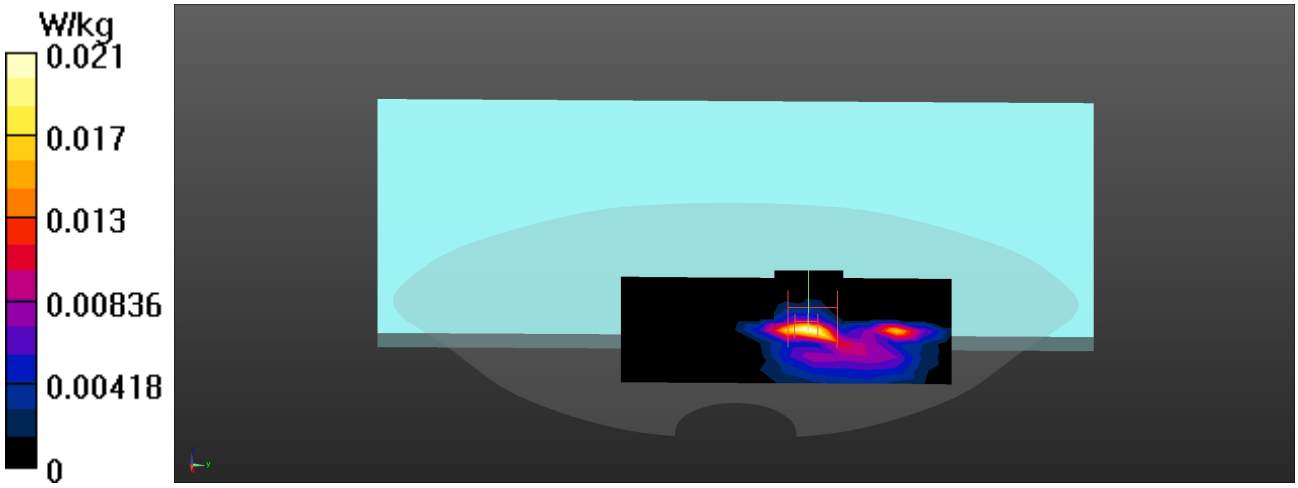
Communication System: UID 0, BT 1M&3M&BLE; Frequency: 2441 MHz
Communication System PAR: 0dB
Medium parameters used: f = 2441 MHz; σ = 1.76 S/m; ε_r = 39.34; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.85, 8.9, 7.36) @ 2441 MHz; Calibrated: 2023/02/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2023/02/22
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 2030
- Measurement SW: V52.10.4.1535

Configuration/Flat/Area Scan (9x13x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0209 W/kg

Configuration/Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.671 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.0460 W/kg
SAR(1 g) = 0.0058 W/kg; SAR(10 g) = 0.00107 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)
Ratio of SAR at M2 to SAR at M1 = 45.6%
Maximum value of SAR (measured) = 0.0228 W/kg



Test Laboratory: DEKRA Date: 2023/09/01

16_WLAN5GHz_802.11n40-HT0_CH54_Bottom_0mm_ANT Main_INPAQ

DUT: Notebook Computer; Type: 14Z90S

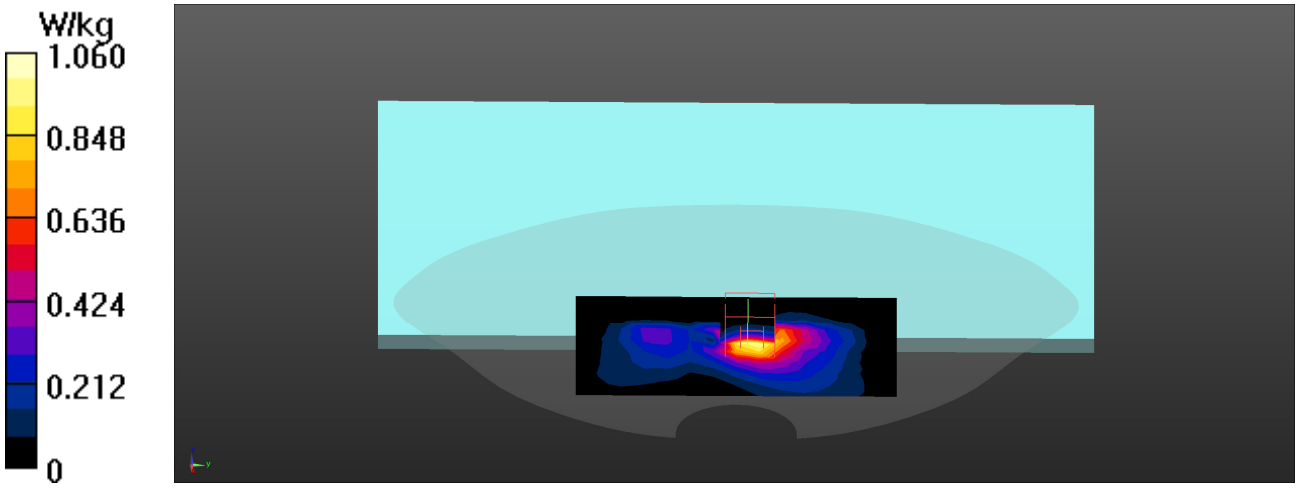
Communication System: UID 0, WLAN 5G; Frequency: 5270 MHz
Communication System PAR: 0dB
Medium parameters used: f = 5270 MHz; σ = 4.80 S/m; ε_r = 36.55; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.67, 6.32, 5.35) @ 5270 MHz; Calibrated: 2023/02/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2023/02/22
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 2030
- Measurement SW: V52.10.4.1535

Configuration/Flat/Area Scan (10x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.06 W/kg

Configuration/Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 9.308 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.83 W/kg
SAR(1 g) = 0.522 W/kg; SAR(10 g) = 0.199 W/kg
Smallest distance from peaks to all points 3 dB below = 9.4 mm
Ratio of SAR at M2 to SAR at M1 = 65.4%
Maximum value of SAR (measured) = 1.16 W/kg



Test Laboratory: DEKRA Date: 2023/09/01

21_WLAN5GHz_802.11ac80-VHT0_CH138_Bottom_0mm_ANT Aux_INPAQ

DUT: Notebook Computer; Type: 14Z90S

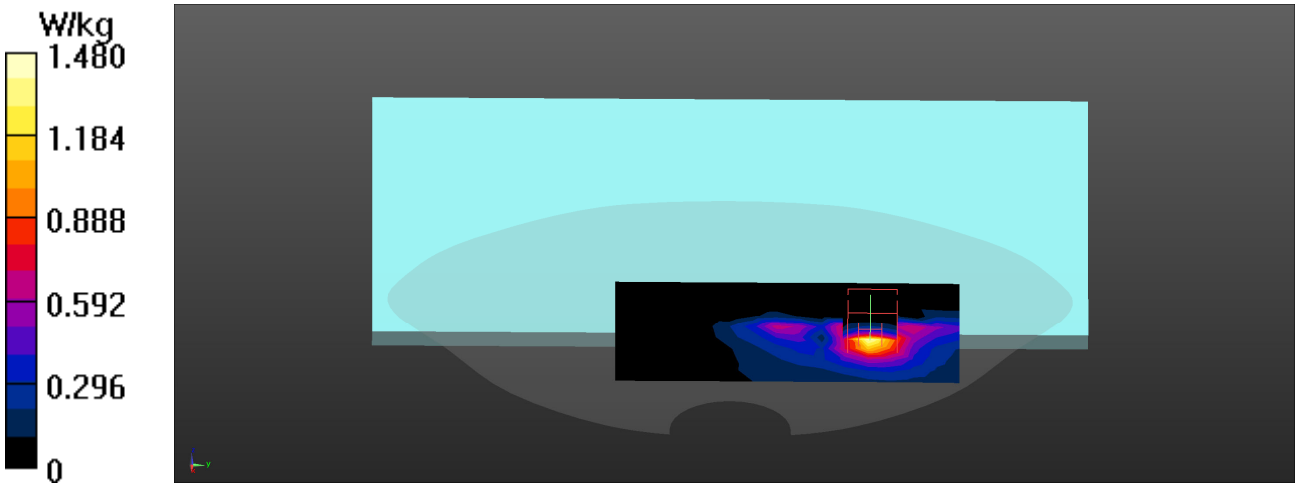
Communication System: UID 0, WLAN 5G; Frequency: 5690 MHz
Communication System PAR: 0dB
Medium parameters used: f = 5690 MHz; σ = 5.36 S/m; ε_r = 35.39; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(4.85, 5.34, 4.58) @ 5690 MHz; Calibrated: 2023/02/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2023/02/22
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 2030
- Measurement SW: V52.10.4.1535

Configuration/Flat/Area Scan (10x16x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.48 W/kg

Configuration/Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 17.90 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.38 W/kg
SAR(1 g) = 0.673 W/kg; SAR(10 g) = 0.249 W/kg
Smallest distance from peaks to all points 3 dB below = 8.8 mm
Ratio of SAR at M2 to SAR at M1 = 65.3%
Maximum value of SAR (measured) = 1.52 W/kg



Test Laboratory: DEKRA Date: 2023/09/01

22_WLAN5GHz_802.11ac80-VHT0_CH155_Bottom_0mm_ANT Aux_INPAQ

DUT: Notebook Computer; Type: 14Z90S

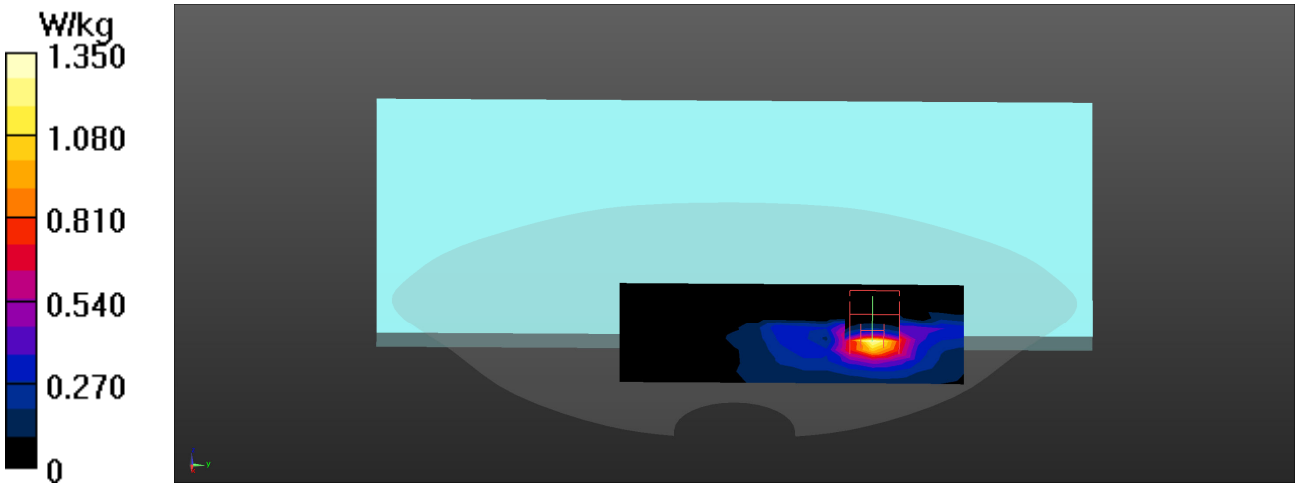
Communication System: UID 0, WLAN 5G; Frequency: 5775 MHz
Communication System PAR: 0dB
Medium parameters used: f = 5775 MHz; σ = 5.47 S/m; ε_r = 35.15; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(4.84, 5.4, 4.63) @ 5775 MHz; Calibrated: 2023/02/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2023/02/22
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 2030
- Measurement SW: V52.10.4.1535

Configuration/Flat/Area Scan (10x16x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.35 W/kg

Configuration/Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 17.64 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.23 W/kg
SAR(1 g) = 0.603 W/kg; SAR(10 g) = 0.220 W/kg
Smallest distance from peaks to all points 3 dB below = 9.7 mm
Ratio of SAR at M2 to SAR at M1 = 63.9%
Maximum value of SAR (measured) = 1.39 W/kg



Test Laboratory: DEKRA Date: 2023-09-05

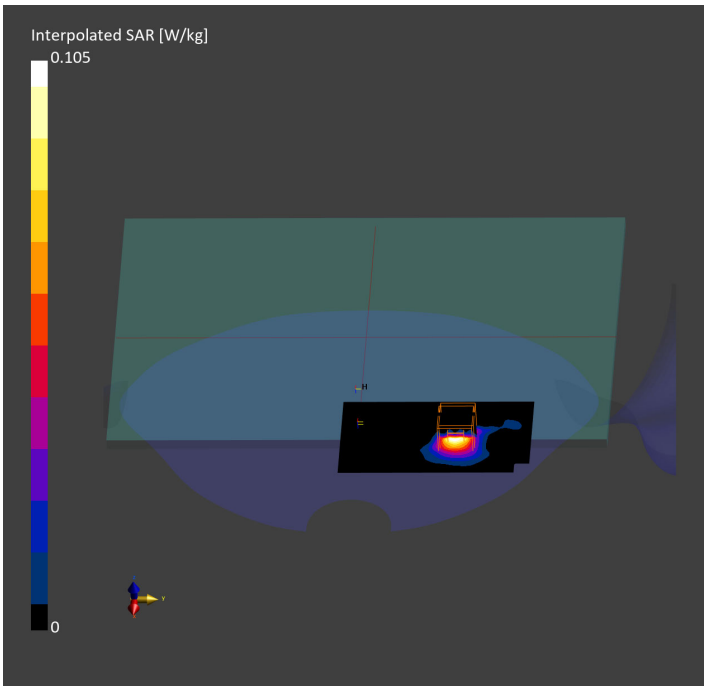
79_WLAN6GHz_802.11ax160-HE0_CH15_Bottom_0mm_ANT Aux_INPAQ

Communication System: UID 10755-AAC, WLAN; Frequency: 6025.000 MHz
Medium parameters used: f = 6025.000 MHz; Conductivity = 5.62 S/m; Permittivity = 34.90
Phantom section: Flat
DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.18, 5.95, 5.0); Calibrated: 2023-02-22
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn1651; Calibrated: 2023-02-22
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: V16.2.4.2524

Area Scan (68.0 mm x 119.0 mm): Measurement grid: 8.5 mm x 8.5 mm
SAR(1 g) = 0.077 W/kg; SAR(10 g) = 0.026 W/kg

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement grid: 3.4 mm x 3.4 mm x 1.4 mm
Power Drift = -0.19 dB
SAR(1 g) = 0.085 W/kg; SAR(10 g) = 0.030 W/kg
psAPD (4.0cm2, sq) = 0.684 W/m2
Smallest distance from peaks to all points 3 dB below = 8.9
Ratio of SAR at M2 to SAR at M1 = 62.8



Test Laboratory: DEKRA Date: 2023-09-05

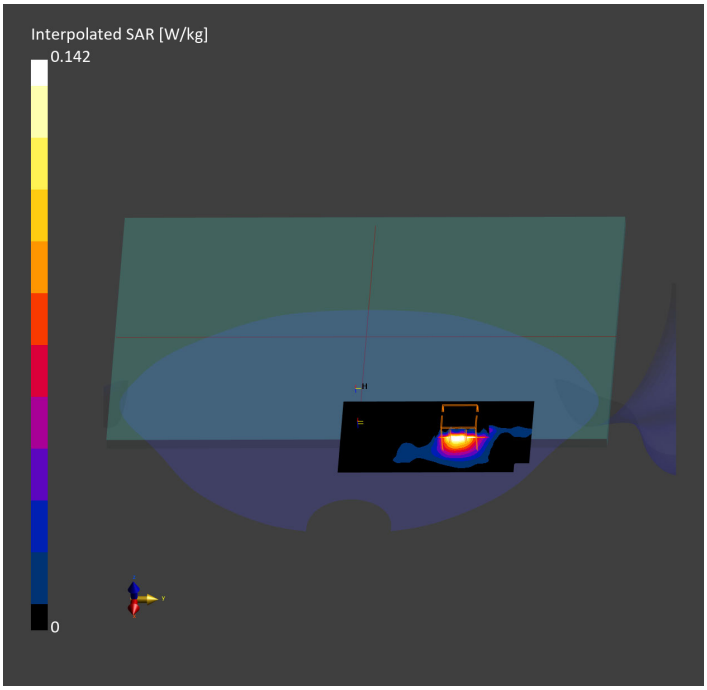
80_WLAN6GHz_802.11ax160-HE0_CH47_Bottom_0mm_ANT Aux_INPAQ

Communication System: UID 10755-AAC, WLAN; Frequency: 6185.000 MHz
Medium parameters used: f = 6185.000 MHz; Conductivity = 5.72 S/m; Permittivity = 35.20
Phantom section: Flat
DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.18, 5.95, 5.0); Calibrated: 2023-02-22
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn1651; Calibrated: 2023-02-22
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: V16.2.4.2524

Area Scan (68.0 mm x 119.0 mm): Measurement grid: 8.5 mm x 8.5 mm
SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.035 W/kg

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement grid: 3.4 mm x 3.4 mm x 1.4 mm
Power Drift = -0.12 dB
SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.038 W/kg
psAPD (4.0cm2, sq) = 0.866 W/m2
Smallest distance from peaks to all points 3 dB below = 8.2
Ratio of SAR at M2 to SAR at M1 = 59.8



Test Laboratory: DEKRA Date: 2023-09-04

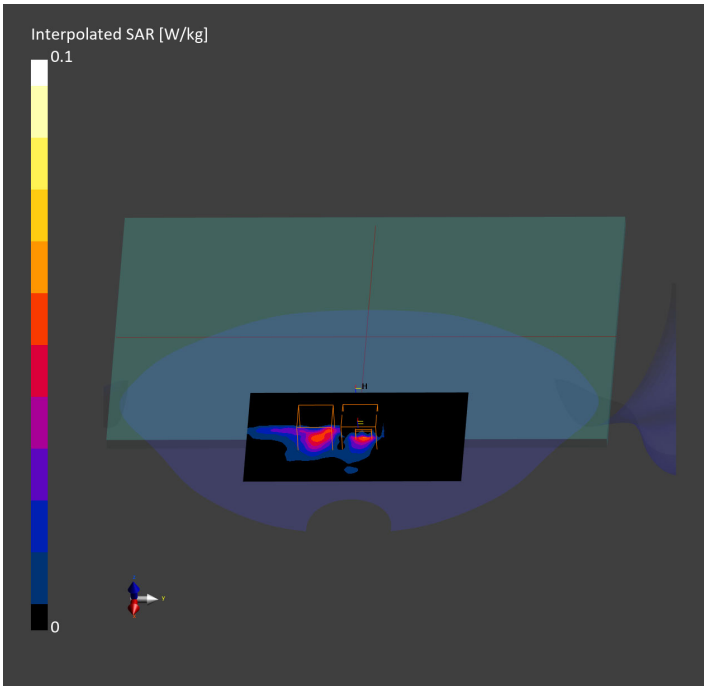
56_WLAN6GHz_802.11ax160-HE0_CH111_Bottom_0mm_ANT Main_PULSE

Communication System: UID 10755-AAC, WLAN; Frequency: 6505.000 MHz
Medium parameters used: f = 6505.000 MHz; Conductivity = 5.97 S/m; Permittivity = 34.18
Phantom section: Flat
DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.18, 5.95, 5.0); Calibrated: 2023-02-22
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn1651; Calibrated: 2023-02-22
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: V16.2.4.2524

Area Scan (85.0 mm x 136.0 mm): Measurement grid: 8.5 mm x 8.5 mm
SAR(1 g) = 0.047 W/kg; SAR(10 g) = 0.014 W/kg

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement grid: 3.4 mm x 3.4 mm x 1.4 mm
Power Drift = -0.15 dB
SAR(1 g) = 0.054 W/kg; SAR(10 g) = 0.015 W/kg
psAPD (4.0cm2, sq) = 0.353 W/m2
Smallest distance from peaks to all points 3 dB below = 5.7
Ratio of SAR at M2 to SAR at M1 = 59.1



Test Laboratory: DEKRA Date: 2023-09-04

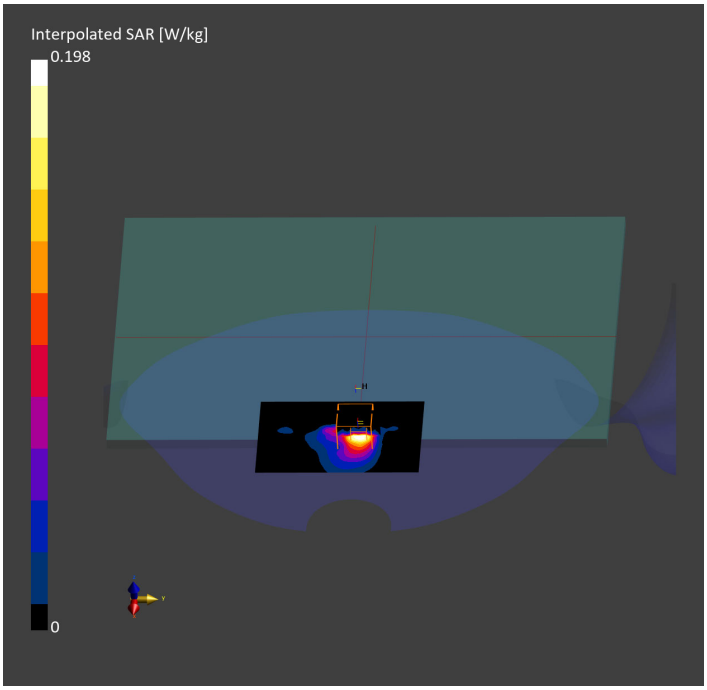
58_WLAN6GHz_802.11ax160-HE0_CH175_Bottom_0mm_ANT Main_PULSE

Communication System: UID 10755-AAC, WLAN; Frequency: 6825.000 MHz
Medium parameters used: f = 6825.000 MHz; Conductivity = 6.35 S/m; Permittivity = 33.60
Phantom section: Flat
DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.18, 5.95, 5.0); Calibrated: 2023-02-22
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn1651; Calibrated: 2023-02-22
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: V16.2.4.2524

Area Scan (68.0 mm x 102.0 mm): Measurement grid: 8.5 mm x 8.5 mm
SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.053 W/kg

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement grid: 3.4 mm x 3.4 mm x 1.4 mm
Power Drift = -0.16 dB
SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.051 W/kg
psAPD (4.0cm2, sq) = 1.15 W/m2
Smallest distance from peaks to all points 3 dB below = 6.5
Ratio of SAR at M2 to SAR at M1 = 55.5



Test Laboratory: DEKRA Date: 2023-09-04

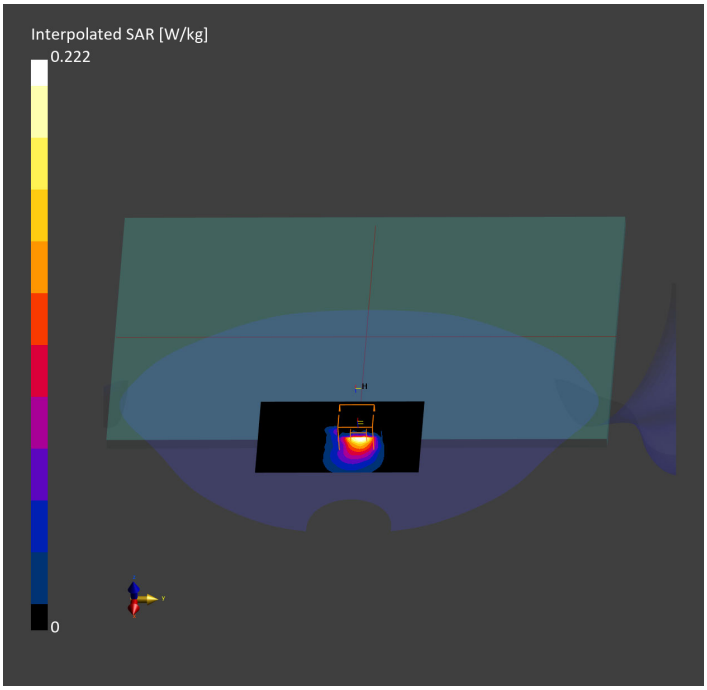
59_WLAN6GHz_802.11ax160-HE0_CH207_Bottom_0mm_ANT Main_PULSE

Communication System: UID 10755-AAC, WLAN; Frequency: 6985.000 MHz
Medium parameters used: f = 6985.000 MHz; Conductivity = 6.54 S/m; Permittivity = 33.38
Phantom section: Flat
DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.18, 5.95, 5.0); Calibrated: 2023-02-22
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn1651; Calibrated: 2023-02-22
- Phantom: Twin-SAM V8.0 (30deg probe tilt)
- Measurement SW: V16.2.4.2524

Area Scan (68.0 mm x 102.0 mm): Measurement grid: 8.5 mm x 8.5 mm
SAR(1 g) = 0.183 W/kg; SAR(10 g) = 0.059 W/kg

Zoom Scan (22.0 mm x 22.0 mm x 22.0 mm): Measurement grid: 3.4 mm x 3.4 mm x 1.4 mm
Power Drift = -0.14 dB
SAR(1 g) = 0.192 W/kg; SAR(10 g) = 0.061 W/kg
psAPD (4.0cm2, sq) = 1.39 W/m2
Smallest distance from peaks to all points 3 dB below = 6.7
Ratio of SAR at M2 to SAR at M1 = 54.1



87_WLAN6GHz_802.11ax160-HE0_CH175_Bottom_0mm_ANT Main_PULSE

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
14Z90S	312.0 x 213.0 x 7.0		Laptop

Exposure Conditions

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

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 1068	Air---	EUmmWV4 - SN9546_F1-55GHz, 2023-04-18	DAE4 Sn1651, 2023-02-22

Scan Setup

	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.05 x 0.05
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2023-09-07
Avg. Area [cm^2]	4.00
psPDn+ [W/m^2]	1.83
psPDtot+ [W/m^2]	1.90
psPDmod+ [W/m^2]	1.95
E_{max} [V/m]	31.6
Power Drift [dB]	0.13