

Appendix C - Highest Measurement Plots

Date: 2023/12/16

4_WLAN 2.4 GHz_802.11b_Bottom of laptop_0mm_Ch1_ANT 0

DUT: MT7922A12L

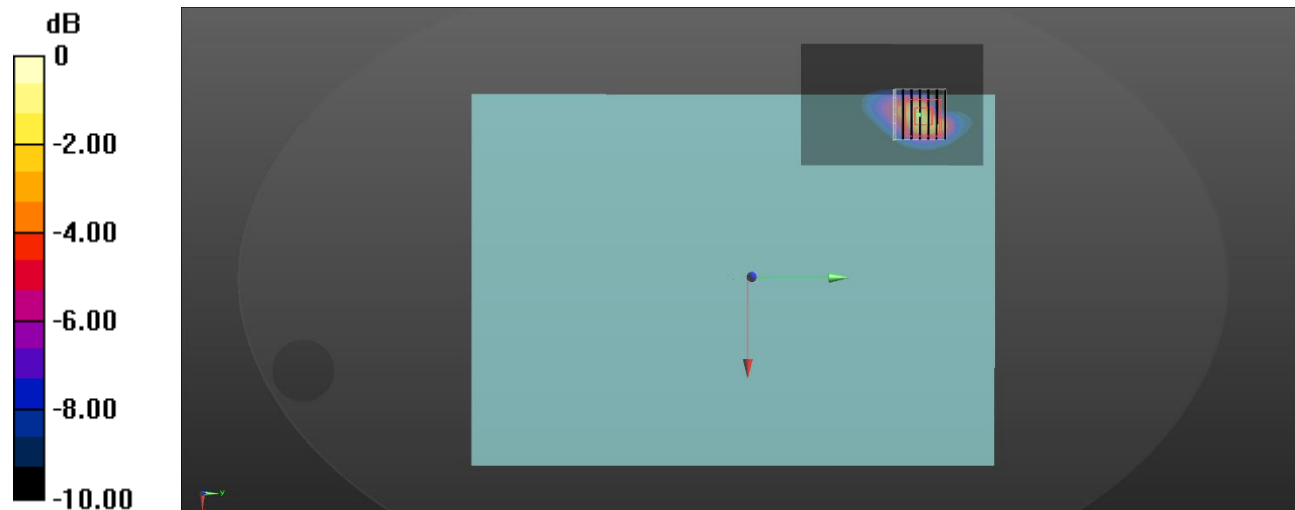
Communication System: UID 0, IEEE 802.11b (0); Frequency: 2412 MHz; Duty Cycle: 1:1.001
 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.785$ S/m; $\epsilon_r = 38.757$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASYS5

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 - SN3847; ConvF(7.33, 7.5, 7.2) @ 2412 MHz; Calibrated: 2023/3/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2023/3/22
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
 Maximum value of SAR (interpolated) = 1.57 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
 Reference Value = 31.41 V/m; Power Drift = -0.02 dB
 Peak SAR (extrapolated) = 2.83 W/kg
SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.450 W/kg
 Smallest distance from peaks to all points 3 dB below = 5.7 mm
 Ratio of SAR at M2 to SAR at M1 = 42.3%
 Maximum value of SAR (measured) = 2.12 W/kg



0 dB = 2.12 W/kg = 3.26 dBW/kg

Date: 2023/12/16

10_Bluetooth_GFSK_Bottom of laptop_0mm_Ch39_ANT 1

DUT: MT7922A12L

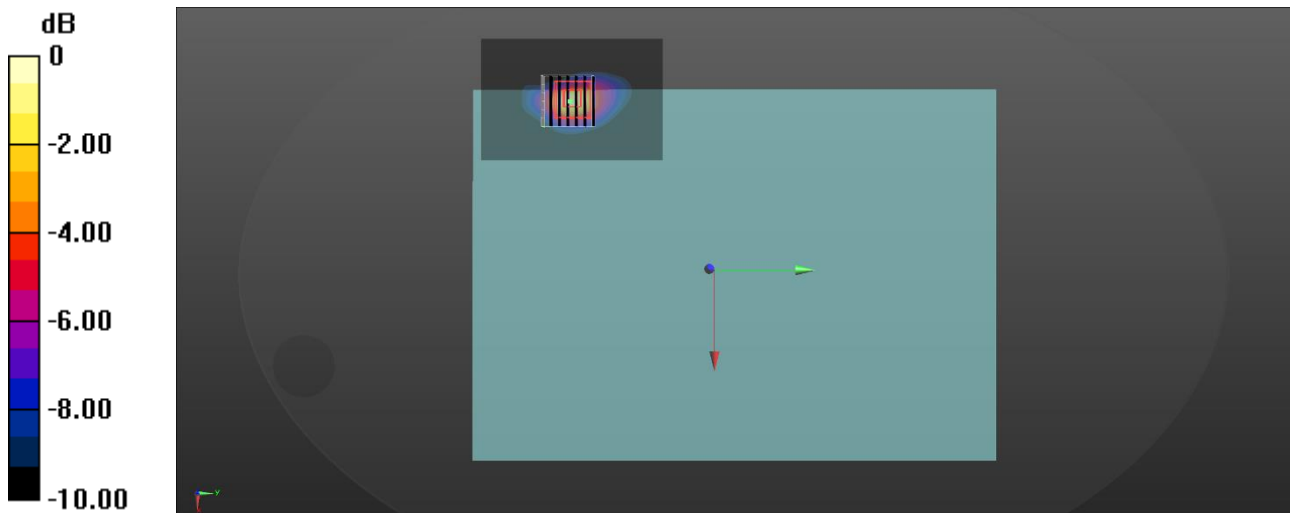
Communication System: UID 0, Bluetooth 3.0 (0); Frequency: 2441 MHz; Duty Cycle: 1:1.304
 Medium parameters used: $f = 2441$ MHz; $\sigma = 1.808$ S/m; $\epsilon_r = 38.706$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASYS5

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 - SN3847; ConvF(7.33, 7.5, 7.2) @ 2441 MHz; Calibrated: 2023/3/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2023/3/22
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (61x91x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
 Maximum value of SAR (interpolated) = 0.387 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
 Reference Value = 14.83 V/m; Power Drift = 0.03 dB
 Peak SAR (extrapolated) = 0.560 W/kg
SAR(1 g) = 0.205 W/kg; SAR(10 g) = 0.085 W/kg
 Smallest distance from peaks to all points 3 dB below = 6.2 mm
 Ratio of SAR at M2 to SAR at M1 = 35.8%
 Maximum value of SAR (measured) = 0.421 W/kg



0 dB = 0.421 W/kg = -3.76 dBW/kg

Date: 2023/12/15

13_WLAN 5 GHz_802.11ac_VHT80_Bottom of laptop_0mm_Ch58_ANT 0

DUT: MT7922A12L

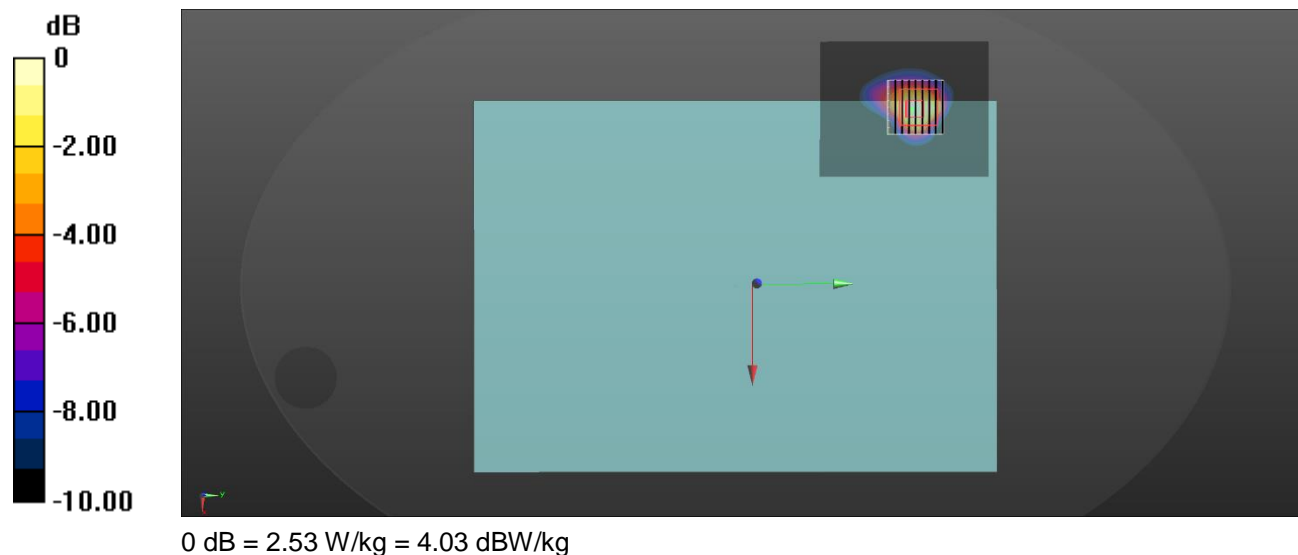
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5290 MHz;Duty Cycle: 1:1.071
Medium parameters used: $f = 5290$ MHz; $\sigma = 4.548$ S/m; $\epsilon_r = 34.462$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS

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 - SN3847; ConvF(5.24, 5.27, 5.14) @ 5290 MHz; Calibrated: 2023/3/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2023/3/22
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.65 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 25.67 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 4.05 W/kg
SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.411 W/kg
Smallest distance from peaks to all points 3 dB below = 7.9 mm
Ratio of SAR at M2 to SAR at M1 = 65.7%
Maximum value of SAR (measured) = 2.53 W/kg



Date: 2023/12/15

17_WLAN 5 GHz_802.11ac VHT80_Bottom of laptop_0mm_Ch106_ANT 0

DUT: MT7922A12L

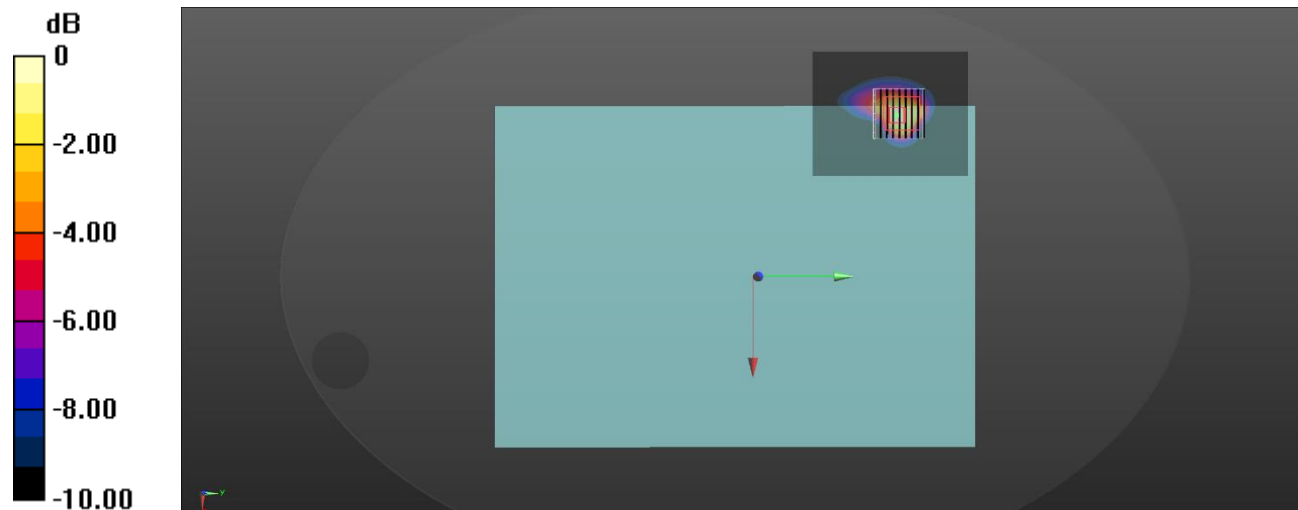
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT80 (0); Frequency: 5530 MHz;Duty Cycle: 1:1.071
Medium parameters used: $f = 5530$ MHz; $\sigma = 4.76$ S/m; $\epsilon_r = 34.301$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS

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 - SN3847; ConvF(4.5, 4.5, 4.41) @ 5530 MHz; Calibrated: 2023/3/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2023/3/22
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.62 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 24.67 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 4.12 W/kg
SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.396 W/kg
Smallest distance from peaks to all points 3 dB below = 6.2 mm
Ratio of SAR at M2 to SAR at M1 = 65%
Maximum value of SAR (measured) = 2.47 W/kg



Date: 2023/12/15

27_WLAN 5 GHz_802.11ac_VHT160_Bottom of laptop_0mm_Ch163_ANT 0

DUT: MT7922A12L

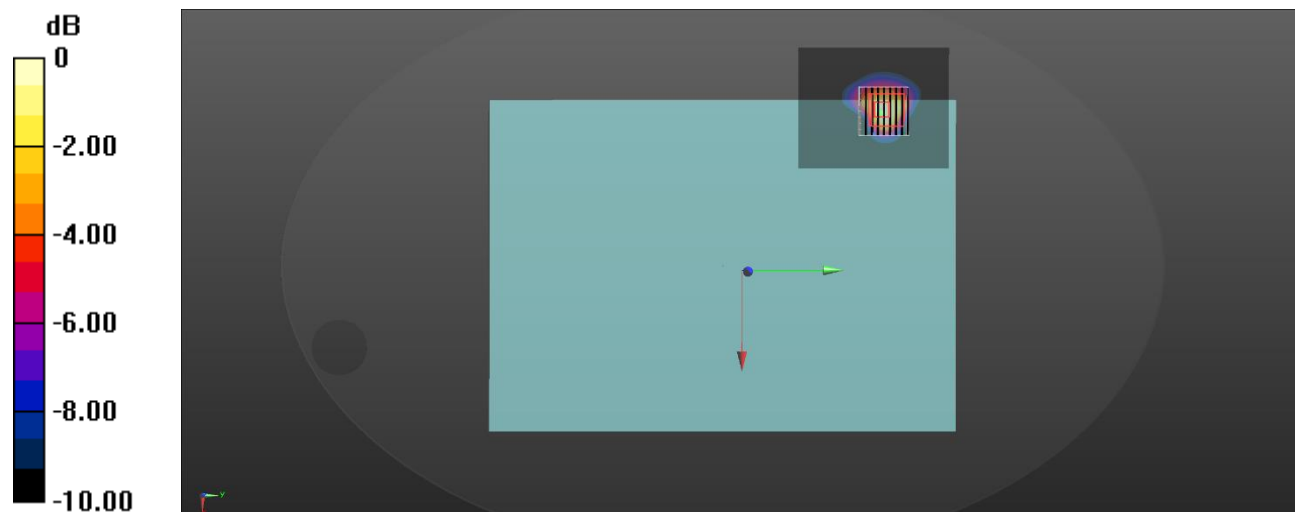
Communication System: UID 0, IEEE 802.11ac(5GHz)VHT160 (0); Frequency: 5815 MHz;Duty Cycle: 1:1.121
Medium parameters used: $f = 5815 \text{ MHz}$; $\sigma = 4.994 \text{ S/m}$; $\epsilon_r = 33.722$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section
Measurement Standard: DASYS

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 - SN3847; ConvF(4.62, 4.66, 4.53) @ 5815 MHz; Calibrated: 2023/3/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 2023/3/22
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$
Maximum value of SAR (interpolated) = 2.32 W/kg

Zoom Scan (9x9x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
Reference Value = 23.35 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.99 W/kg
SAR(1 g) = 0.964 W/kg; SAR(10 g) = 0.348 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 61.9%
Maximum value of SAR (measured) = 2.24 W/kg



0 dB = 2.24 W/kg = 3.50 dBW/kg

Test Date : 2023-12-14 | Ambient Temp : 23.2 °C | Tissue Temp : 22.1 °C

Test Mode

31_WLAN 6 GHz_80211ax HE160_Bottom of laptop_0mm_Ch111_ANT 0

Device Under Test Properties

Manufacturer or Brand	Model No. or Code Name	Sample No. or IMEI	DUT Type
MediaTek	MT7922A12L	RBNTCX00117346B	Notebooks

Exposure Conditions

Phantom Section	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	U-NII-6	WLAN, 10554 - AAE	6505.000, 111	5.6	6.10	32.2

Hardware Setup

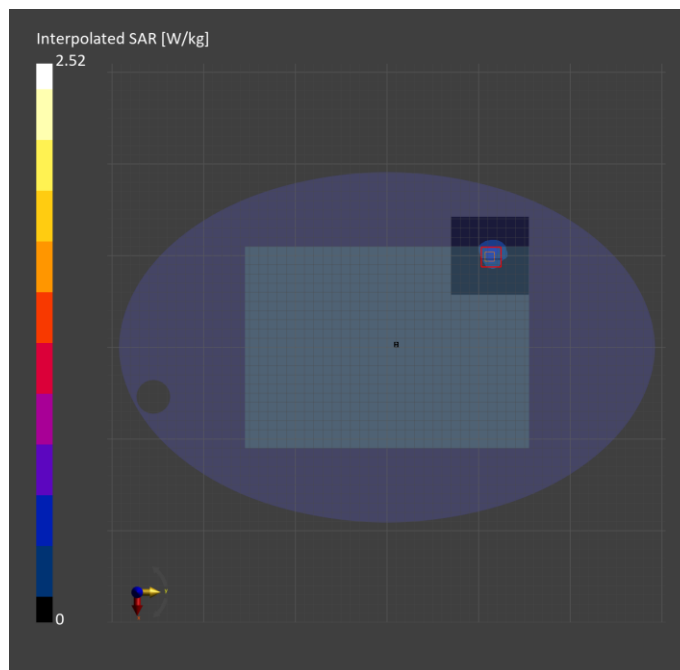
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	H51T71N2	EX3DV4 - SN3847 / 2023-03-23	DAE4 Sn541 / 2023-03-22

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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR-1g [W/kg]	0.438	0.496
psSAR-10g [W/kg]	0.161	0.178
psAPD (1.0 cm ² , sq) [W/m ²]		4.96
psAPD (4.0 cm ² , sq) [W/m ²]		4.10
Power Drift [dB]		-0.04
TSL Correction	Positive only	Positive only
M2 / M1 [%]		48.7
Dist 3dB Peak [mm]		5.9



Test Date : 2023-12-18 | Ambient Temp : 22.8 °C

Test Mode

131_WLAN 6 GHz_802.11ax HE160_Bottom of laptop_2mm_Ch111_ANT 0

Device Under Test Properties

Manufacturer or Brand	Model No. or Code Name	Sample No. or IMEI	DUT Type
MediaTek	MT7922A12L	RBNTCX00117346B	Notebooks

Exposure Conditions

Phantom Section	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	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	EUmmWV4 - SN9639_F1-55GHz 2023-08-18	DAE4 Sn541 2023-03-22

Scan Setup

	5G Scan
Grid Extents [mm]	92.0 x 92.0
Grid Steps [mm]	0.0542 x 0.0542
Sensor Surface [mm]	2.0

Measurement Results

	5G Scan
Avg. Area [cm ²]	4.00
psPD n+ [W/m ²]	3.05
psPD tot+ [W/m ²]	7.23
psPD mod+ [W/m ²]	8.96
E max [V/m]	74.3
Power Drift [dB]	-0.02

