Appendix B – System Check Plots

Date: 2025/4/7

System Performance Check at 2450 MHz

DUT: D2450V2_SN712

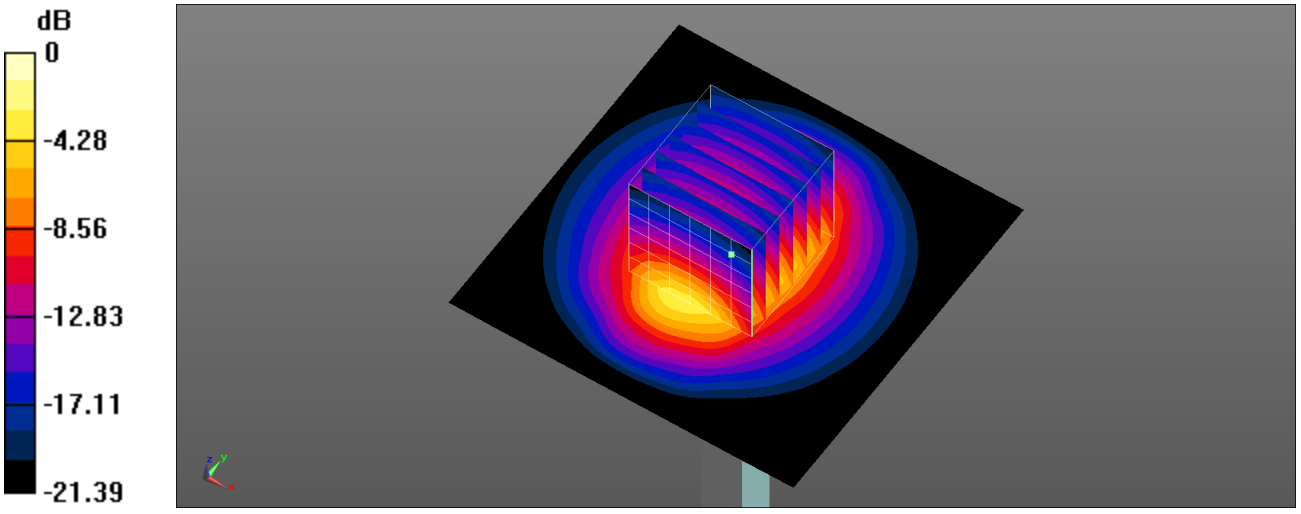
Communication System: UID 0, CW (0); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.776 S/m; ε_r = 41.293; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5

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(7.01, 6.75, 6.74) @ 2450 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 2450MHz/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 4.21 W/kg

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.88 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 5.04 W/kg
SAR(1 g) = 2.65 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 9 mm
Ratio of SAR at M2 to SAR at M1 = 52.1%
Maximum value of SAR (measured) = 4.21 W/kg



0 dB = 4.21 W/kg = 6.24 dBW/kg

Date: 2025/4/8

System Performance Check at 5250 MHz

DUT: D5GHzV2_SN1021

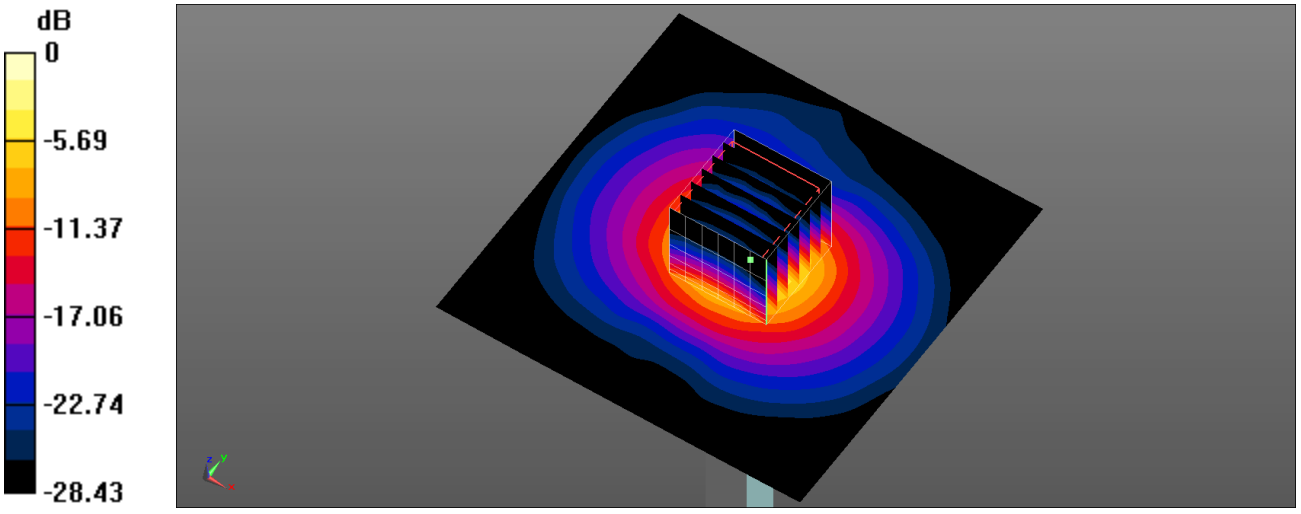
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.616 S/m; ε_r = 36.68; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5

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(5.47, 5.26, 5.25) @ 5250 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5250MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.59 W/kg

System Performance Check at 5250MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 48.97 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 17.3 W/kg
SAR(1 g) = 4.1 W/kg; SAR(10 g) = 1.18 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 63.3%
Maximum value of SAR (measured) = 10.4 W/kg



0 dB = 10.4 W/kg = 10.17 dBW/kg

Date: 2025/4/9

System Performance Check at 5600 MHz

DUT: D5GHzV2_SN1021

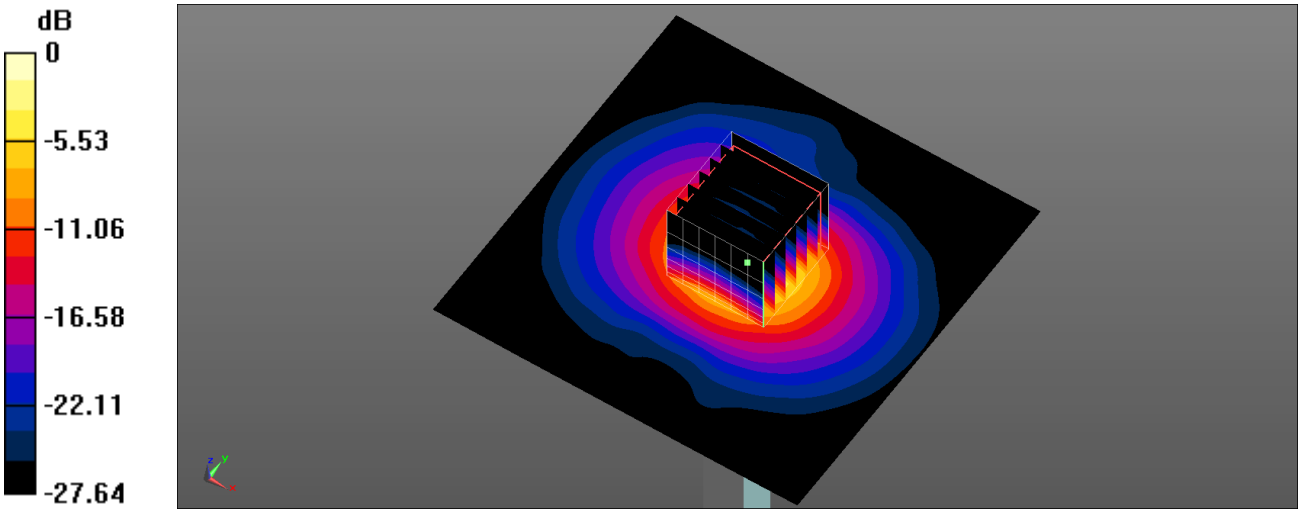
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 4.948 S/m; ε_r = 36.271; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5

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(5.19, 5, 4.99) @ 5600 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5600MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 10.4 W/kg

System Performance Check at 5600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 48.80 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 20.0 W/kg
SAR(1 g) = 4.26 W/kg; SAR(10 g) = 1.2 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) = 11.1 W/kg



0 dB = 11.1 W/kg = 10.45 dBW/kg

Date: 2025/4/10

System Performance Check at 5800 MHz

DUT: D5GHzV2_SN1021

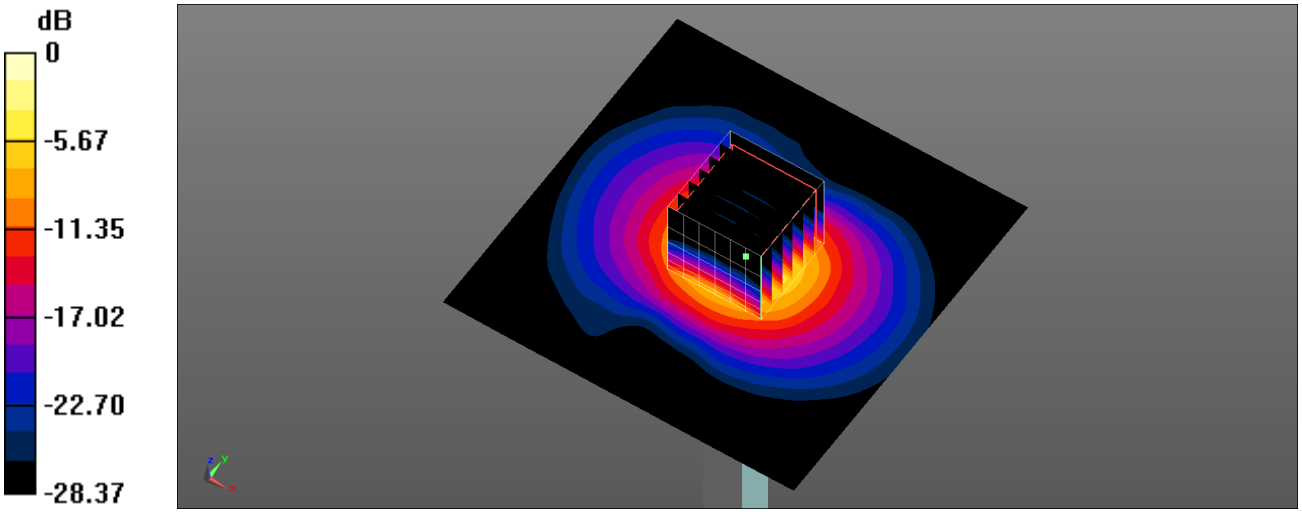
Communication System: UID 0, CW (0); Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.169 S/m; ε_r = 35.943; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5

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(5.03, 4.84, 4.83) @ 5800 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5800MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 10.2 W/kg

System Performance Check at 5800MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 46.95 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 19.9 W/kg
SAR(1 g) = 4.05 W/kg; SAR(10 g) = 1.16 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 58.6%
Maximum value of SAR (measured) = 10.7 W/kg



0 dB = 10.7 W/kg = 10.29 dBW/kg

Test Date : 2025-04-07 | Ambient Temp : 22.2 °C | Tissue Temp : 21.9 °C

System Performance Check

System Performance Check at 6500 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D6.5GHzV2	1016	20.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	6500.000	5.2	6.04	33.6

Hardware Setup

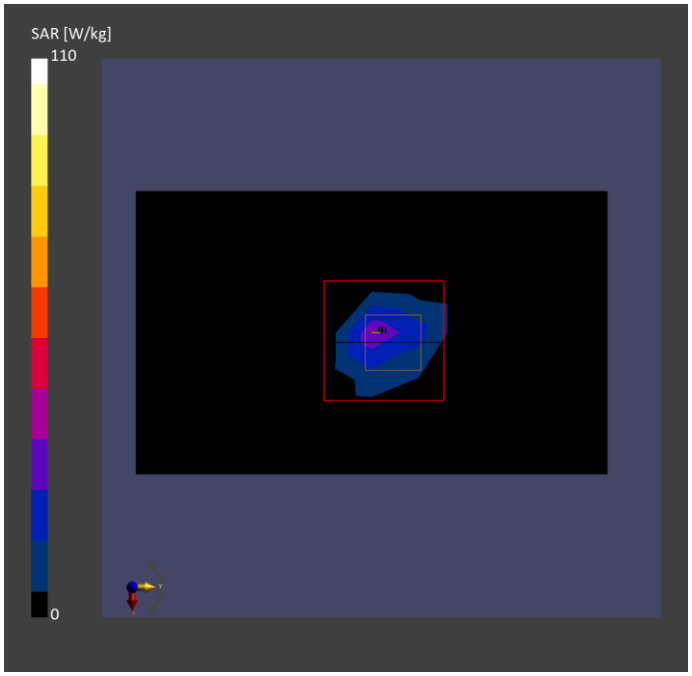
Phantom	Tissue Simulating Liquid	Probe | Calibration Date	DAE | Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HBBL-600-10000V6	EX3DV4 - SN7647 / 2024-04-24	DAE4 Sn1253 / 2024-04-22
Measurement Software Version		16.4.0.5005	

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 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]	22.7	**29.2**
psSAR-*8g* [W/kg]	6.01	**6.68**
psSAR-*10g* [W/kg]	4.99	**5.51**
psAPD (*1.0 cm²*, sq) [W/m²]		**292**
psAPD (*4.0 cm²*, sq) [W/m²]		**134**
Power Drift [dB]		0.05
TSL Correction	Positive only	Positive only



Test Date : 2025-04-11 | Ambient Temp : 22.3 °C

System Performance Check

System Performance Check at 10GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	5G Verification Soruce 10GHz	1060

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor
5G	CW	10000.0	1.0

Hardware Setup

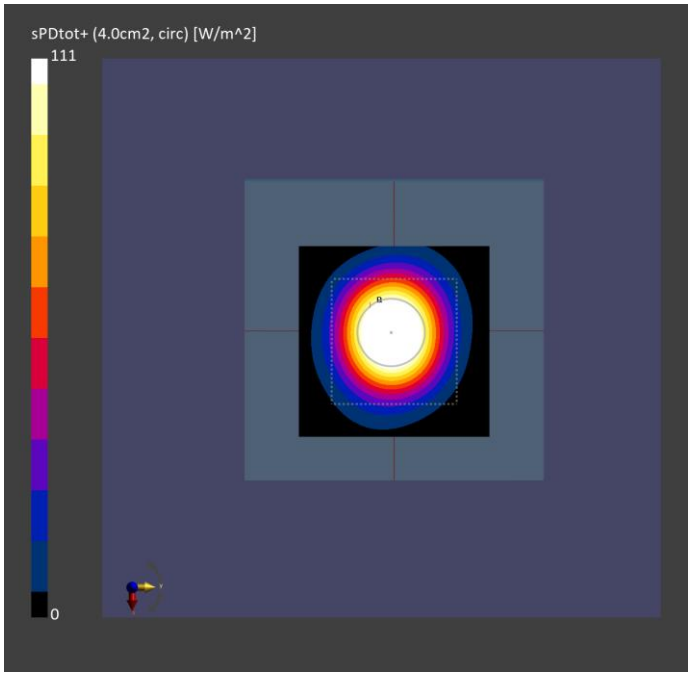
Phantom	Medium	Probe	Calibration Date	DAE	Calibration Date
mmWave - 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz	2024-11-15	DAE4 Sn541	2024-10-28
Measurement Software Version		3.2.2.2358			

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [mm]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Avg. Area [cm²]	4.00
psPD n+ [W/m²]	**51.4**
psPD tot+ [W/m²]	**52.1**
psPD mod+ [W/m²]	53.4
E max [V/m]	173
Power Drift [dB]	0.02



Test Date : 2025-04-14 | Ambient Temp : 22.1 °C

System Performance Check

System Performance Check at 10GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	5G Verification Soruce 10GHz	1060

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor
5G	CW	10000.0	1.0

Hardware Setup

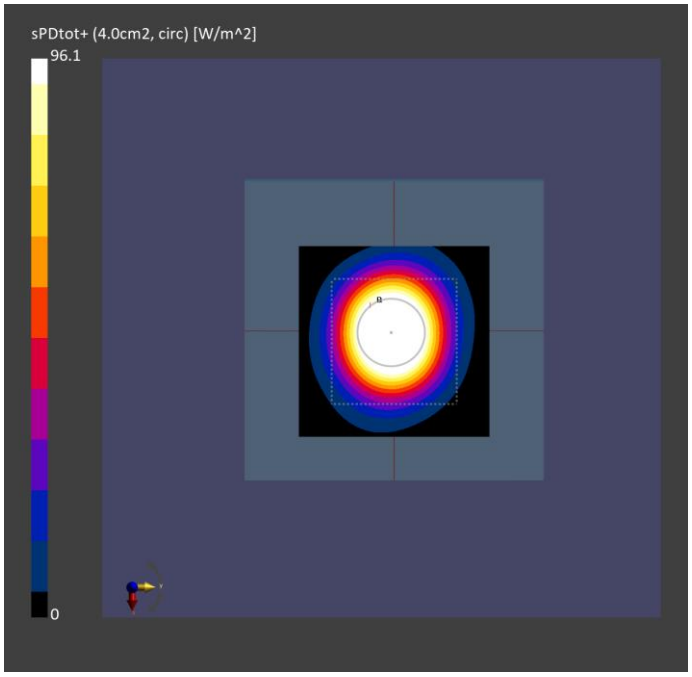
Phantom	Medium	Probe	Calibration Date	DAE	Calibration Date
mmWave - 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz	2024-11-15	DAE4 Sn541	2024-10-28
Measurement Software Version		3.2.2.2358			

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [mm]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Avg. Area [cm²]	4.00
psPD n+ [W/m²]	**52.3**
psPD tot+ [W/m²]	**53.8**
psPD mod+ [W/m²]	55.6
E max [V/m]	181
Power Drift [dB]	0.11



Test Date : 2025-04-15 | Ambient Temp : 22.5 °C

System Performance Check

System Performance Check at 10GHz

Verification Source Properties

Manufacturer	*Model No.*	*Serial No.*
SPEAG	5G Verification Soruce 10GHz	1060

Exposure Conditions

Phantom Section	*Group*	*Frequency [MHz]*	*Conversion Factor*
5G	CW	10000.0	1.0

Hardware Setup

Phantom	*Medium*	*Probe	Calibration Date*	*DAE	Calibration Date*
mmWave - 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz / 2024-11-15	DAE4 Sn541 / 2024-10-28
Measurement Software Version		3.2.2.2358	

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [mm]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Avg. Area [cm²]	4.00
psPD n+ [W/m²]	**54.3**
psPD tot+ [W/m²]	**55.2**
psPD mod+ [W/m²]	56.7
E max [V/m]	177
Power Drift [dB]	-0.08