

Test Laboratory: BTL Inc. (Dongguan)

Date: 2026/3/6

System Check_H2450_0306

DUT: Dipole 2450 MHz D2450V2;SN:919;

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.834$ S/m; $\epsilon_r = 38.048$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.8 °C; Liquid Temperature : 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN7544; ConvF(7.63,7.63,7.63) @2450 MHz; Calibrated: 2025/6/19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn420; Calibrated: 2025/4/8
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD000P40CB; Serial: TP:1469
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Area Scan (8x9x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 6.30 W/kg

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

Reference Value = 70.31 V/m; Power Drift = -0.02 dB

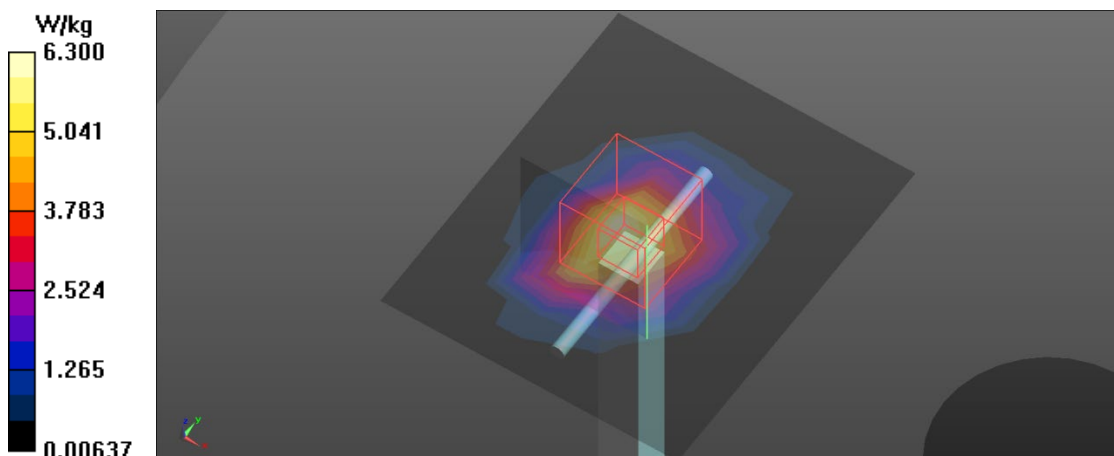
Peak SAR (extrapolated) = 11.1 W/kg

SAR(1 g) = 5.28 W/kg; SAR(10 g) = 2.41 W/kg

Smallest distance from peaks to all points 3 dB below = 9.3 mm

Ratio of SAR at M2 to SAR at M1 = 48.2%

Maximum value of SAR (measured) = 8.80 W/kg



Test Laboratory: BTL Inc. (Dongguan)

Date: 2026/4/15

System Check_H2450_0415

DUT: Dipole 2450 MHz D2450V2;SN:919;

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.846 \text{ S/m}$; $\epsilon_r = 38.801$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.2 \text{ }^\circ\text{C}$; Liquid Temperature : $22.9 \text{ }^\circ\text{C}$

DASY Configuration:

- Probe: EX3DV4-SN7544;ConvF(7.63, 7.63, 7.63) @ 2450 MHz; Calibrated: 2025/6/19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1717; Calibrated: 2025/6/19
- Phantom: SAM Mid v5.0; Type: QD000P40CD; Serial: S/N:1896
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

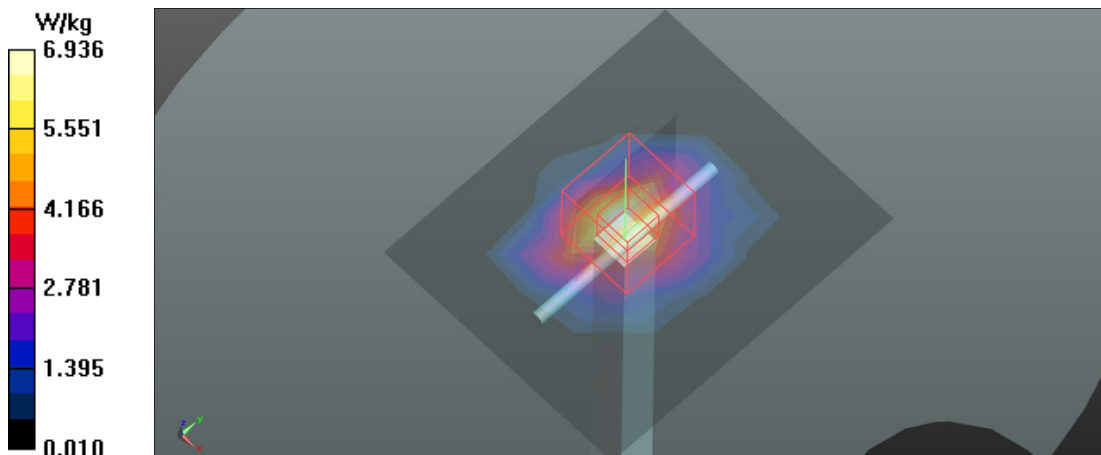
Area Scan (8x9x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$
Maximum value of SAR (measured) = 6.94 W/kg
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 69.35 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 10.8 W/kg
SAR(1 g) = 5.18 W/kg ; SAR(10 g) = 2.38 W/kg

Smallest distance from peaks to all points 3 dB below = 9.3 mm

Ratio of SAR at M2 to SAR at M1 = 48.9%

Maximum value of SAR (measured) = 8.55 W/kg


Measurement Report for System Check (2450.000MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	SN	DUT Type
Device,	50.0 x 10.0 x 8.0	919	D2450V2

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, Head Simulating Liquid	5.00		CW, 0-	2450.000, 0	7.29	1.80	37.9

Hardware Setup

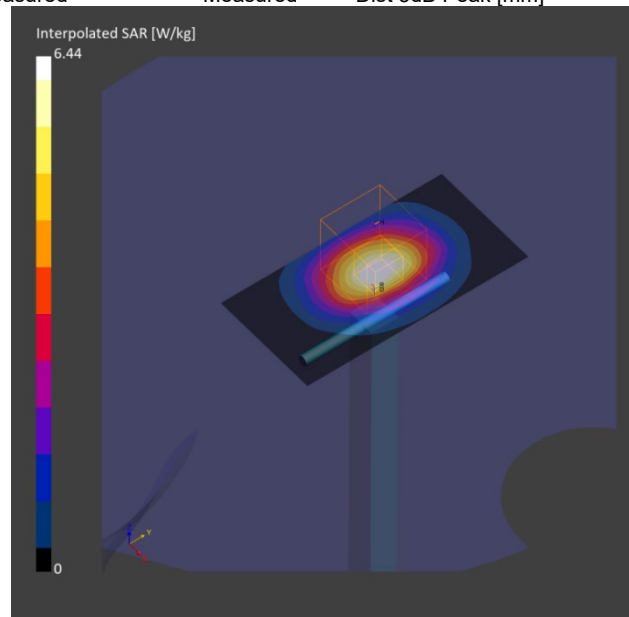
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2081	2300-2700MHz	EX3DV4 - SN7693, 2025-11-26	DAE4 Sn1390, 2025-11-19

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-04-19	2026-04-19
psSAR1g [W/kg]	5.05	5.07
psSAR10g [W/kg]	2.44	2.41
Power Drift [dB]	0.01	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		82.9
Dist 3dB Peak [mm]		9.9



Measurement Report for System Check (5250.000MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	SN	DUT Type
Device,	50.0 x 10.0 x 8.0	1160	D5GHzV2

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, Head Simulating Liquid	5.00		CW, 0-	5250.000, 0	5.71	4.71	35.9

Hardware Setup

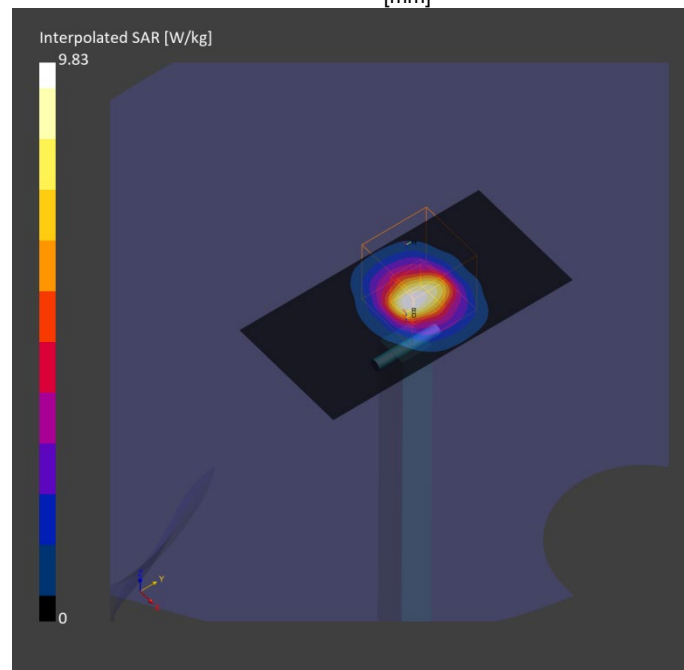
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2081	H4500-6500MHz	EX3DV4 - SN7693, 2025-11-26	DAE4 Sn1390, 2025-11-19

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-04-20	2026-04-20
psSAR1g [W/kg]	6.84	7.71
psSAR10g [W/kg]	2.08	2.24
Power Drift [dB]	0.00	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.5
Dist 3dB Peak [mm]		7.4



Measurement Report for System Check (5600.000MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	SN	DUT Type
Device,	50.0 x 10.0 x 8.0	1160	D5GHzV2

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, Head Simulating Liquid	5.00		CW, 0-	5600.000, 0	5.33	5.11	35.1

Hardware Setup

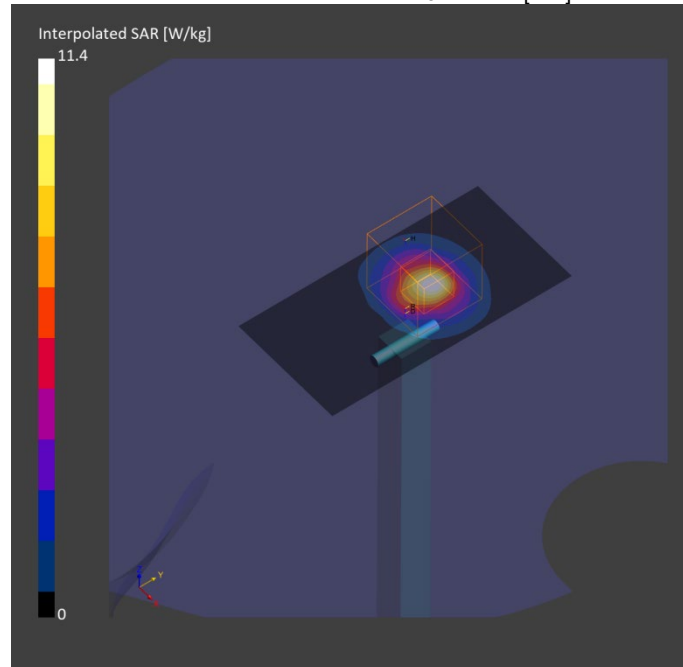
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2081	H4500-6500MHz	EX3DV4 - SN7693, 2025-11-26	DAE4 Sn1390, 2025-11-19

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-04-20	2026-04-20
psSAR1g [W/kg]	7.32	8.14
psSAR10g [W/kg]	2.13	2.31
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.9
Dist 3dB Peak [mm]		7.2



Measurement Report for System Check (5750.000MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	SN	DUT Type
Device,	50.0 x 10.0 x 8.0	1160	D5GHzV2

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, Head Simulating Liquid	5.00		CW, 0-	5750.000, 0	5.25	5.29	34.8

Hardware Setup

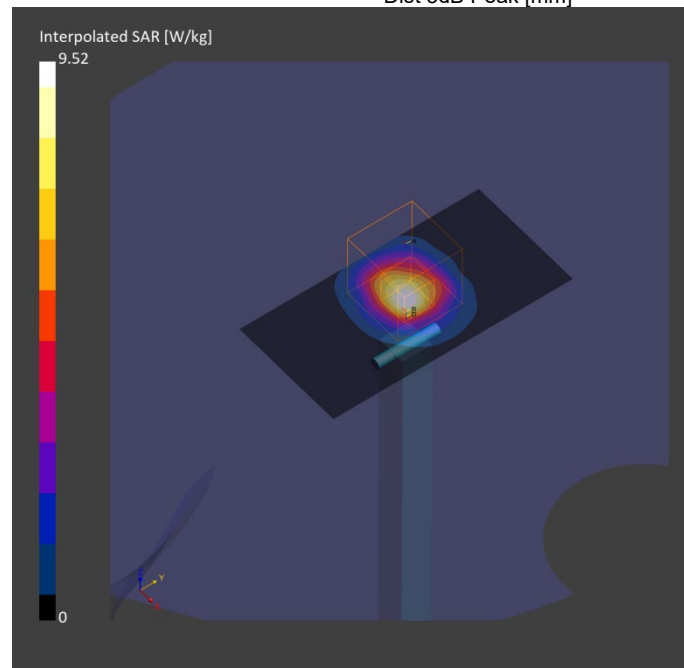
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2081	H4500-6500MHz	EX3DV4 - SN7693, 2025-11-26	DAE4 Sn1390, 2025-11-19

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-04-20	2026-04-20
psSAR1g [W/kg]	6.54	7.61
psSAR10g [W/kg]	2.04	2.20
Power Drift [dB]	-0.01	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.1
Dist 3dB Peak [mm]		7.4



Measurement Report for System Check (6500.000MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	SN	DUT Type
Device,	50.0 x 10.0 x 8.0	1052	D6500V2

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, Head Simulating Liquid	5.00		CW, 0-	6500.000, 0	5.51	5.98	35.0

Hardware Setup

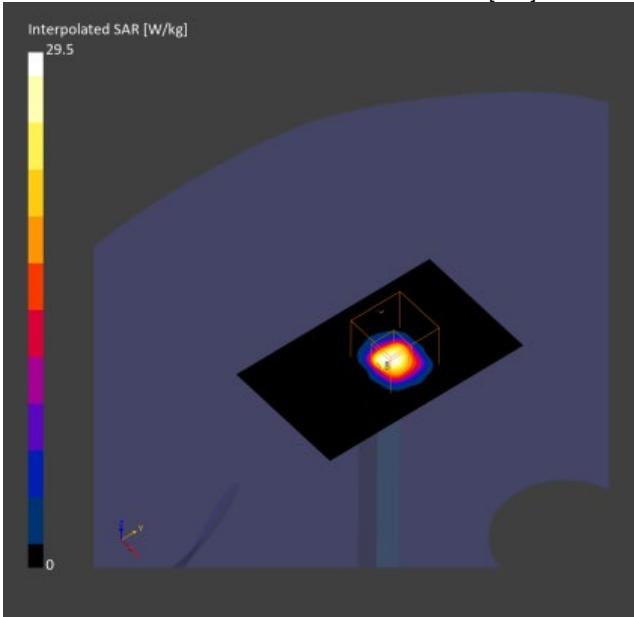
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2081	6000-7200	EX3DV4 - SN7693, 2025-11-26	DAE4 Sn1717, 2025-06-19

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
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-03-14	2026-03-14
psSAR1g [W/kg]	21.5	28.4
psSAR10g [W/kg]	5.11	5.53
Power Drift [dB]	-0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.7
Dist 3dB Peak [mm]		5.2



Measurement Report for System Check (6500.000MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	SN	DUT Type
Device,	50.0 x 10.0 x 8.0	1052	D6.5GHzV2

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, Head Simulating Liquid	5.00		CW, 0-	6500.000, 0	5.51	6.04	34.4

Hardware Setup

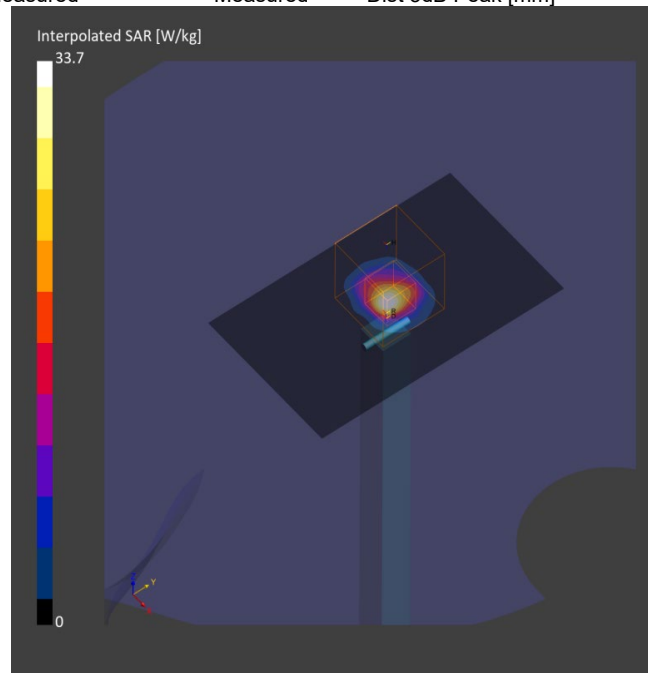
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2081	6000-7200MHz	EX3DV4 - SN7693, 2025-11-26	DAE4 Sn1390, 2025-11-19

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
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2026-04-17	2026-04-17
psSAR1g [W/kg]	21.5	28.2
psSAR10g [W/kg]	4.85	5.50
Power Drift [dB]	0.02	-0.16
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.2
Dist 3dB Peak [mm]		5.0



Measurement Report for System Check (10000.0MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	SN	DUT Type
, Device	100.0 x 100.0 x 172.0	1041	Verification Source

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	FRONT, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- xxxx	---Air	EUmmWV4 - SN9561_F1-55GHz, 2025-06-18	DAE4 Sn1717, 2025-06-19

Scan Setup

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

Measurement Results

	5G Scan
Date	2026-03-09
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	53.2
psPDtot+ [W/m ²]	53.4
psPDmod+ [W/m ²]	53.7
E _{max} [V/m]	147
Power Drift [dB]	-0.01

