
Appendix A. System Check Data

Test Laboratory: DEKRA

Date: 2025/01/06

System Performance Check_2450MHz-Head**DUT: Dipole 2450 MHz; Type: D2450V2**

Communication System: UID 0, CW; Frequency: 2450 MHz

Communication System PAR: 0 dB

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.76$ S/m; $\epsilon_r = 39.13$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3979; ConvF(6.39, 8.11, 6.76) @ 2450 MHz; Calibrated: 2024/11/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1425; Calibrated: 2024/11/18
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/2450MHz-Head/Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 21.1 W/kg

Configuration/2450MHz-Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 119.3 V/m; Power Drift = 0.09 dB

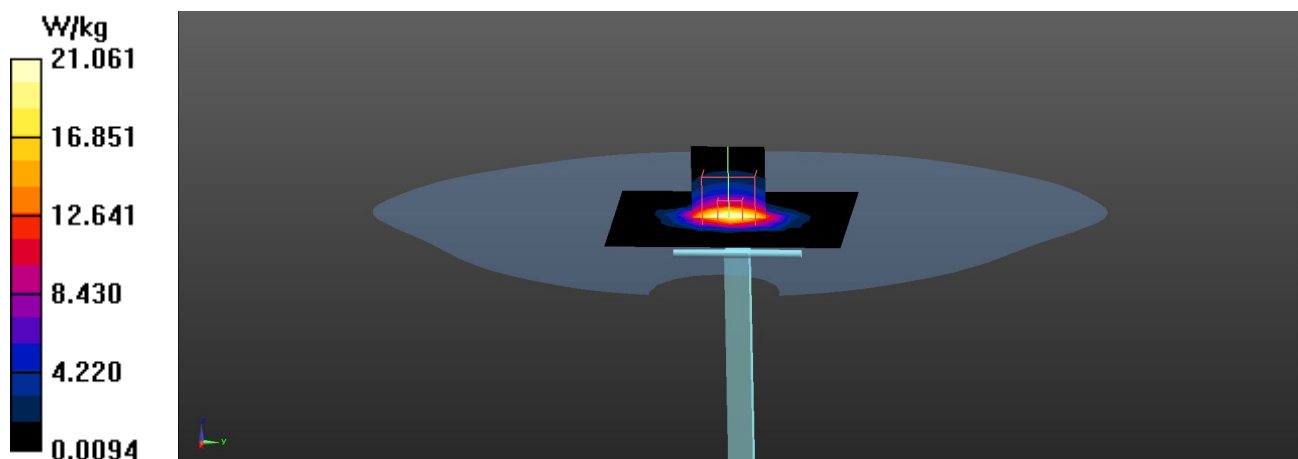
Peak SAR (extrapolated) = 29.1 W/kg

SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.44 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 24.0 W/kg



Test Laboratory: DEKRA

Date: 2025/01/06

System Performance Check_5250MHz-Head**DUT: Dipole 5GHz; Type: D5GHzV2**

Communication System: UID 0, CW; Frequency: 5250 MHz

Communication System PAR: 0 dB

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.76$ S/m; $\epsilon_r = 36.31$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3979; ConvF(4.53, 5.75, 4.8) @ 5250 MHz; Calibrated: 2024/11/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1425; Calibrated: 2024/11/18
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.10 (0);

Configuration/5250MHz-Head/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 13.0 W/kg

Configuration/5250MHz-Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 73.00 V/m; Power Drift = -0.02 dB

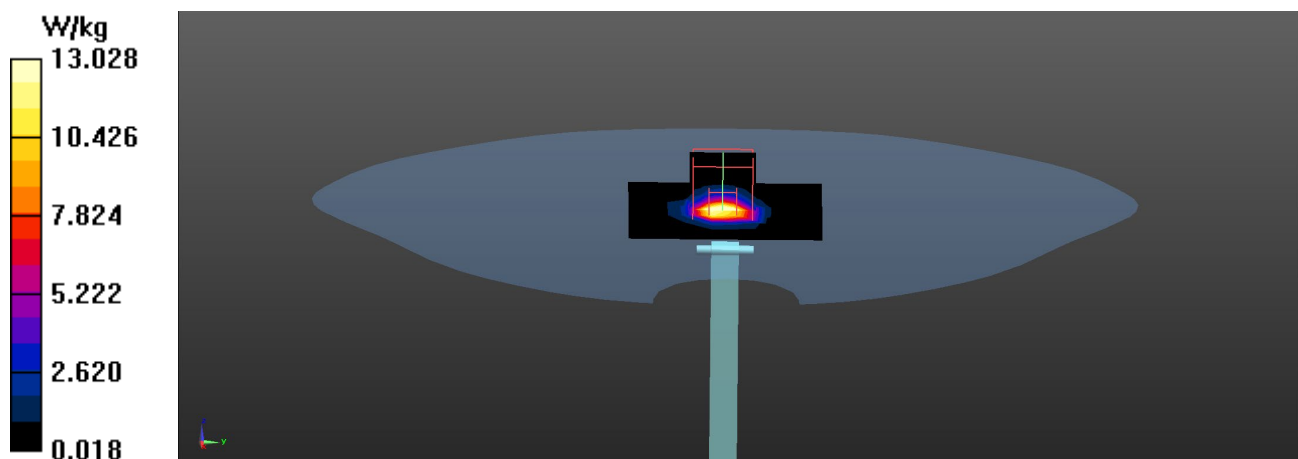
Peak SAR (extrapolated) = 28.2 W/kg

SAR(1 g) = 8.04 W/kg; SAR(10 g) = 2.28 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.9%

Maximum value of SAR (measured) = 20.4 W/kg



Test Laboratory: DEKRA

Date: 2025/01/06

System Performance Check_5600MHz-Head**DUT: Dipole 5GHz; Type: D5GHzV2**

Communication System: UID 0, CW; Frequency: 5600 MHz

Communication System PAR: 0 dB

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 35.34$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3979; ConvF(4.33, 5.49, 4.58) @ 5600 MHz; Calibrated: 2024/11/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1425; Calibrated: 2024/11/18
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.10 (0);

Configuration/5600MHz-Head/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 14.7 W/kg

Configuration/5600MHz-Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 74.58 V/m; Power Drift = 0.09 dB

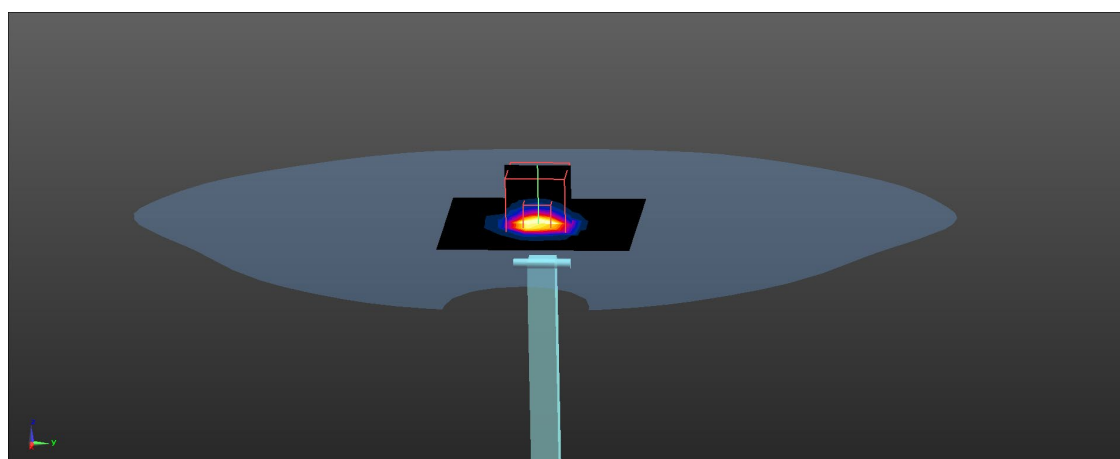
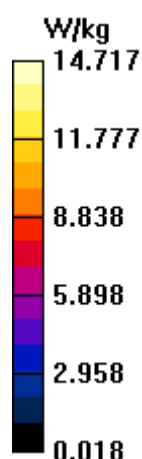
Peak SAR (extrapolated) = 35.1 W/kg

SAR(1 g) = 9.04 W/kg; SAR(10 g) = 2.53 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 61.6%

Maximum value of SAR (measured) = 23.8 W/kg



Test Laboratory: DEKRA

Date: 2025/01/06

System Performance Check_5800MHz-Head**DUT: Dipole 5GHz; Type: D5GHzV2**

Communication System: UID 0, CW; Frequency: 5800 MHz

Communication System PAR: 0 dB

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.48 \text{ S/m}$; $\epsilon_r = 34.79$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3979; ConvF(4.23, 5.36, 4.47) @ 5800 MHz; Calibrated: 2024/11/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1425; Calibrated: 2024/11/18
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.10 (0);

Configuration/5800MHz-Head/Area Scan (8x8x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 13.4 W/kg

Configuration/5800MHz-Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 72.43 V/m; Power Drift = -0.04 dB

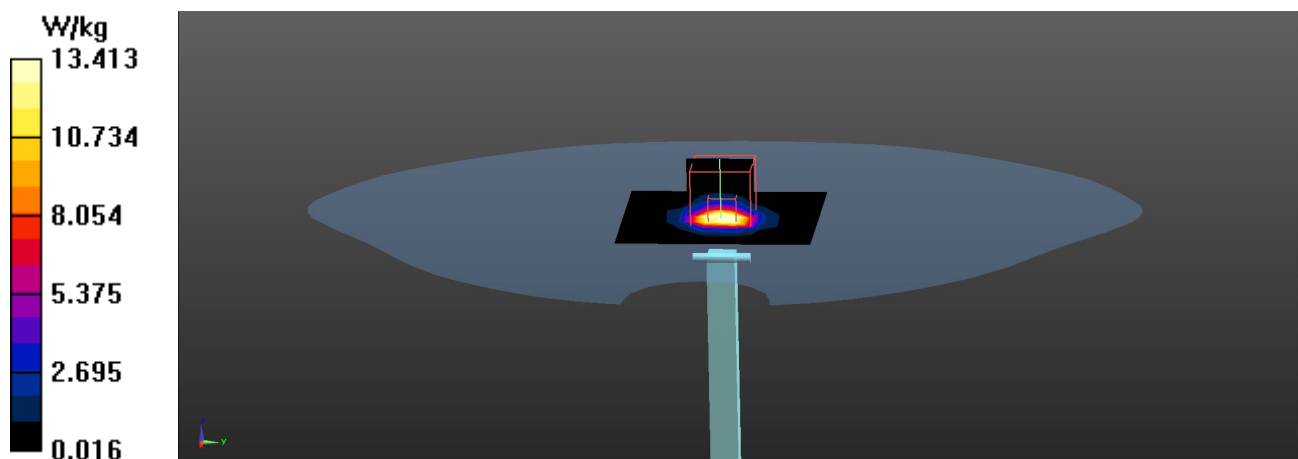
Peak SAR (extrapolated) = 34.5 W/kg

SAR(1 g) = 8.64 W/kg; SAR(10 g) = 2.45 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

Ratio of SAR at M2 to SAR at M1 = 58.9%

Maximum value of SAR (measured) = 23.2 W/kg



Test Laboratory: DEKRA

Date: 2025-01-07

System Performance Check_6500MHz-Head

Communication System: UID 0--, CW; Frequency: 6500.000 MHz

Medium parameters used: $f = 6500.000$ MHz; Conductivity = 6.15 S/m; Permittivity = 34.9

Phantom section: Flat

DASY Configuration:

- Probe: EX3DV4 - SN7784; ConvF(4.71, 4.83, 4.78); Calibrated: 2024-04-22
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn1791; Calibrated: 2024-04-22
- Phantom: ELI V8.0 (20deg probe tilt)
- Measurement SW: V16.4.0.5005

Area Scan (51.0 mm x 85.0 mm): Measurement grid: 8.5 mm x 8.5 mm

SAR (1 g) = 24.9 W/kg; SAR (10 g) = 5.04 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

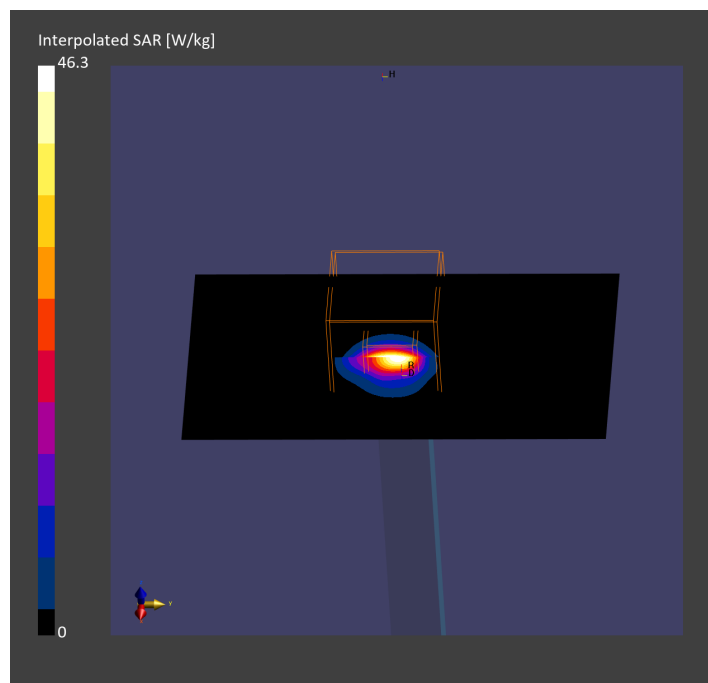
Power Drift = 0.09 dB

SAR(1 g) = 30.3 W/kg; SAR(10 g) = 5.79 W/kg

psAPD (4.0cm², sq) = 140 W/m²

Smallest distance from peaks to all points 3 dB below = 4.9

Ratio of SAR at M2 to SAR at M1 = 50.6



System Performance Check_10GHz

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
5G Verification Source 10 GHz	100.0 x 100.0 x 100.0		

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- 1068	Air	EUmmWV4 - SN9546_F1-55GHz, 2024-04-18	DAE4 Sn1651, 2024-02-15

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	N/A

Measurement Results

	5G Scan
Date	2025-01-08
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	194
psPDtot+ [W/m²]	195
psPDmod+ [W/m²]	199
E _{max} [V/m]	311
Power Drift [dB]	-0.01

