
Appendix A. System Check Data

Test Laboratory: DEKRA

Date: 2025/01/13

System Performance Check_2450MHz-Head**DUT: D2450V2; Type: D2450V2**

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

Communication System PAR: 0 dB

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.79$ S/m; $\epsilon_r = 40.03$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (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: DASYS2, Version 52.10 (4);

Configuration/2450MHz-Head/Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 20.2 W/kg**Configuration/2450MHz-Head/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 119.4 V/m; Power Drift = 0.06 dB

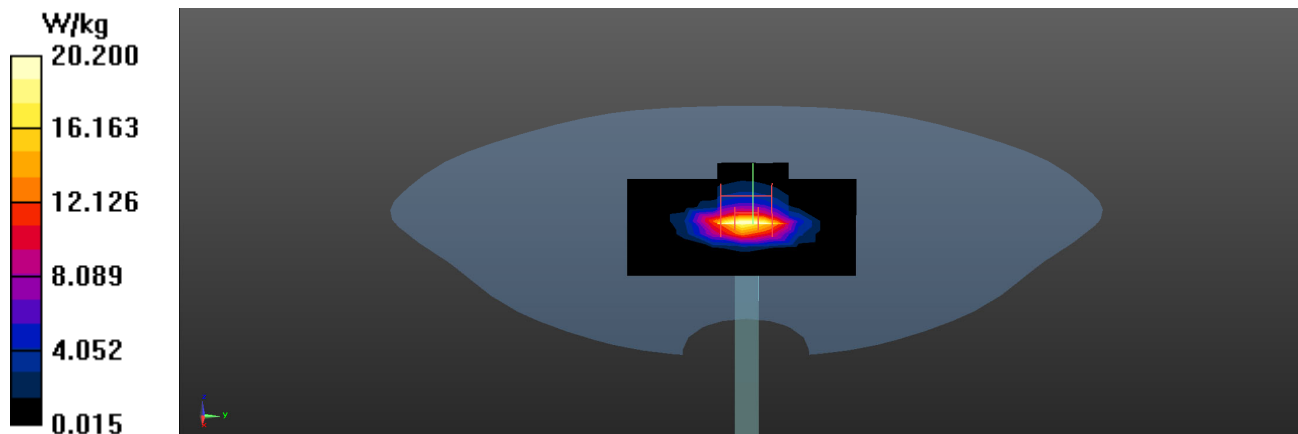
Peak SAR (extrapolated) = 23.3 W/kg

SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.61 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 48.8%

Maximum value of SAR (measured) = 23.5 W/kg



Test Laboratory: DEKRA

Date: 2025/01/14

System Performance Check_5250MHz-Head**DUT: D5GHzV2; Type: D5GHzV2**

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

Communication System PAR: 0 dB

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.66$ S/m; $\epsilon_r = 36.57$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (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 (4);

Configuration/5250MHz-Head/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 12.2 W/kg**Configuration/5250MHz-Head/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 75.35 V/m; Power Drift = 0.03 dB

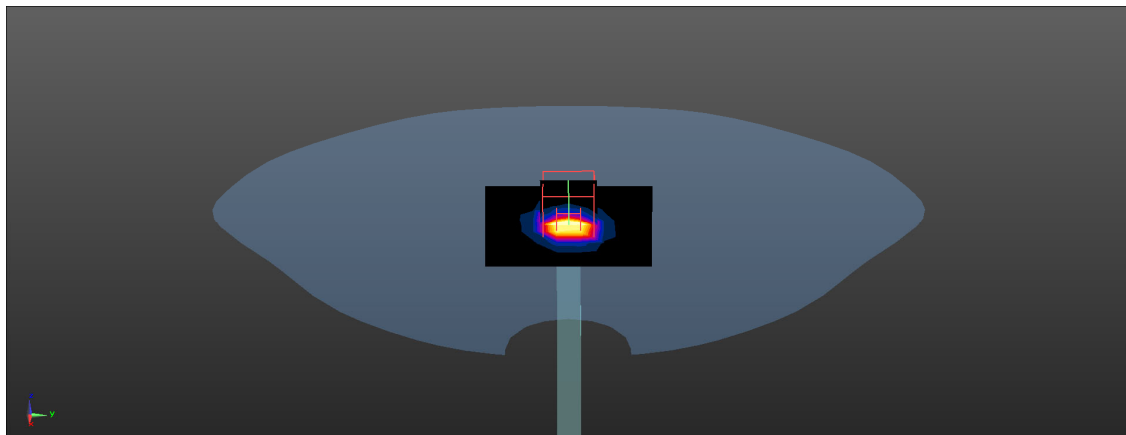
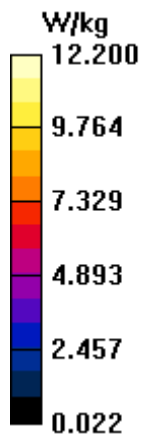
Peak SAR (extrapolated) = 26.6 W/kg

SAR(1 g) = 8.45 W/kg; SAR(10 g) = 2.39 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 64.6%

Maximum value of SAR (measured) = 21.7 W/kg



Test Laboratory: DEKRA

Date: 2025/01/14

System Performance Check_5600MHz-Head**DUT: D5GHzV2; Type: D5GHzV2**

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

Communication System PAR: 0 dB

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.13$ S/m; $\epsilon_r = 35.61$; $\rho = 1000$ 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 (4);

Configuration/5600MHz-Head/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 16.1 W/kg**Configuration/5600MHz-Head/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 69.90 V/m; Power Drift = 0.07 dB

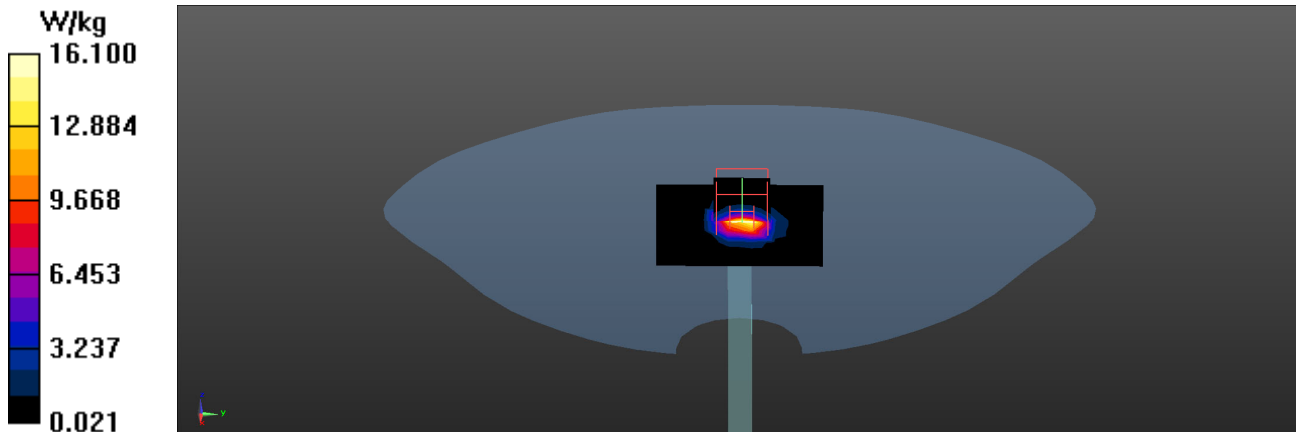
Peak SAR (extrapolated) = 30.1 W/kg

SAR(1 g) = 8.36 W/kg; SAR(10 g) = 2.34 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 61.9%

Maximum value of SAR (measured) = 21.9 W/kg



Test Laboratory: DEKRA

Date: 2025/01/14

System Performance Check_5800MHz-Head

DUT: D5GHzV2; Type: D5GHzV2

Communication System: UID 0, CW; Frequency: 5800 MHz
 Communication System PAR: 0 dB
 Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.39 \text{ S/m}$; $\epsilon_r = 35.06$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section
 Measurement Standard: DASY5 (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: DASY52, Version 52.10 (4);

Configuration/5800MHz-Head/Area Scan (8x8x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (measured) = 13.3 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 = 72.69 V/m; Power Drift = -0.01 dB

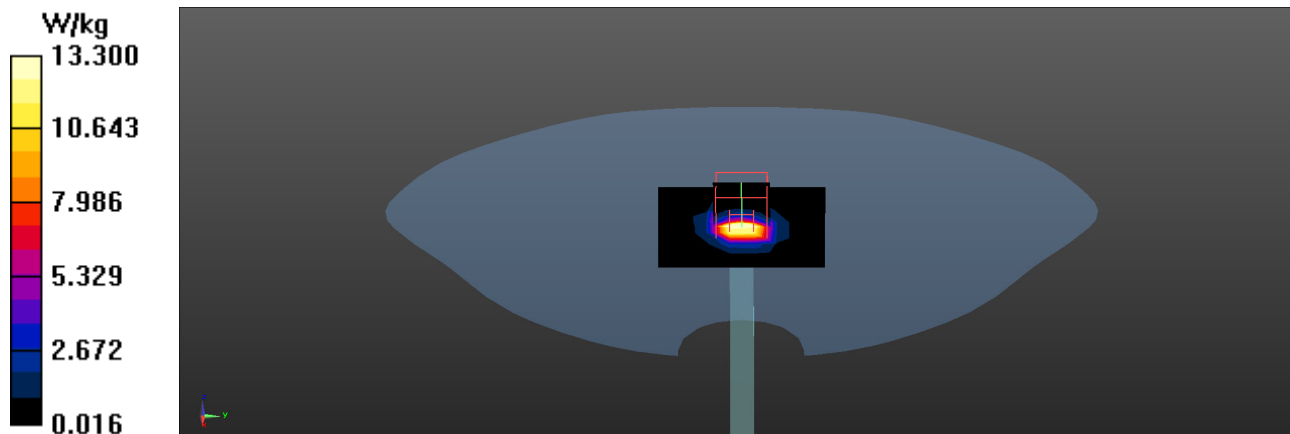
Peak SAR (extrapolated) = 32.0 W/kg

SAR(1 g) = 8.59 W/kg; SAR(10 g) = 2.4 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 59%

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



Test Laboratory: DEKRA

Date: 2024-01-15

System Performance Check_6500MHz-Head

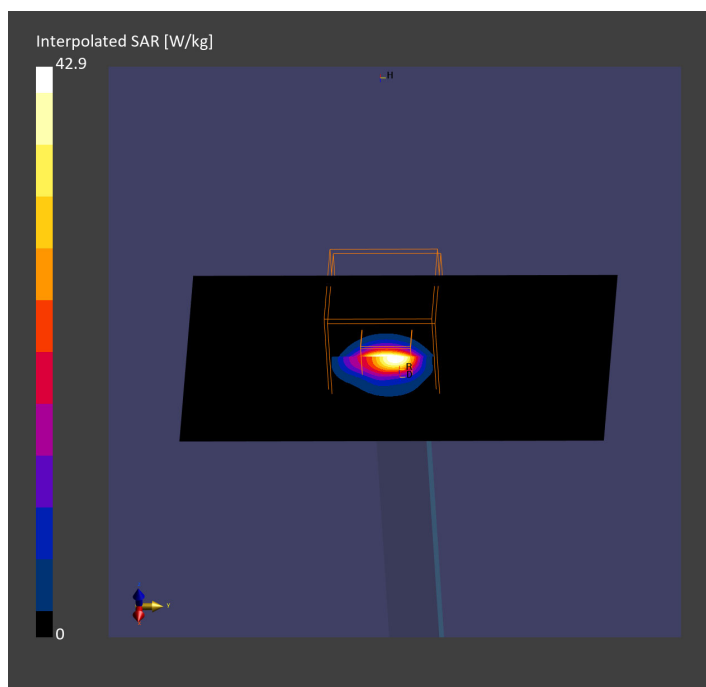
Communication System: UID 0--, CW; Frequency: 6500.000 MHz
Medium parameters used: $f = 6500.000$ MHz; Conductivity = 6.25 S/m; Permittivity = 34.7
Phantom section: Flat

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) = 23.6 W/kg; SAR (10 g) = 4.81 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 = -0.03 dB
SAR(1 g) = 28.0 W/kg; SAR(10 g) = 5.34 W/kg
psAPD (4.0cm², sq) = 129 W/m²
Smallest distance from peaks to all points 3 dB below = 4.9
Ratio of SAR at M2 to SAR at M1 = 50.0



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	2025-01-16
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	186
psPDtot+ [W/m ²]	187
psPDmod+ [W/m ²]	192
E _{max} [V/m]	306
Power Drift [dB]	-0.02

