
Appendix A. System Check Data

Test Laboratory: DEKRA

Date: 2025/01/24

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; $\sigma = 1.83$ S/m; $\epsilon_r = 40.27$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.22, 8.22, 8.22) @ 2450 MHz; Calibrated: 2024/02/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2024/02/15
- Phantom: ELI V8.0; Type: QD OVA 004 AA; Serial: 2139
- Measurement SW: DASY52, Version 52.10 (4);

Configuration/2450MHz_Head/Area Scan (10x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 19.9 W/kg

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

Reference Value = 102.6 V/m; Power Drift = 0.08 dB

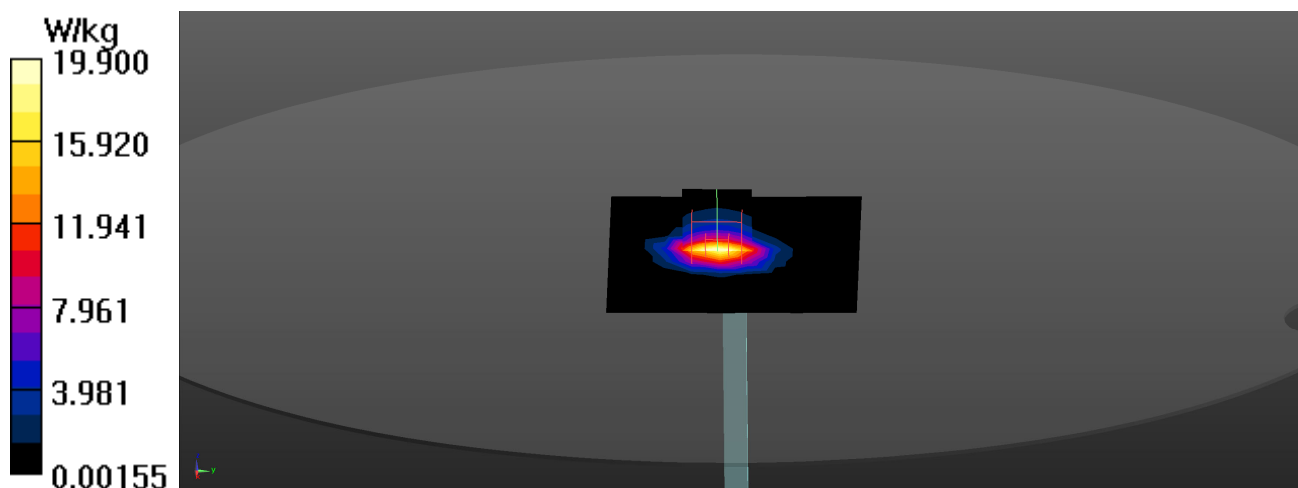
Peak SAR (extrapolated) = 26.1 W/kg

SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.16 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 49.3%

Maximum value of SAR (measured) = 21.8 W/kg



Test Laboratory: DEKRA

Date: 2025/01/25

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; $\sigma = 4.74$ S/m; $\epsilon_r = 36.19$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.79, 5.79, 5.79) @ 5250 MHz; Calibrated: 2024/02/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2024/02/15
- Phantom: ELI V8.0; Type: QD OVA 004 AA; Serial: 2139
- Measurement SW: DASY52, Version 52.10 (4);

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

Maximum value of SAR (measured) = 19.0 W/kg

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

Reference Value = 56.10 V/m; Power Drift = 0.18 dB

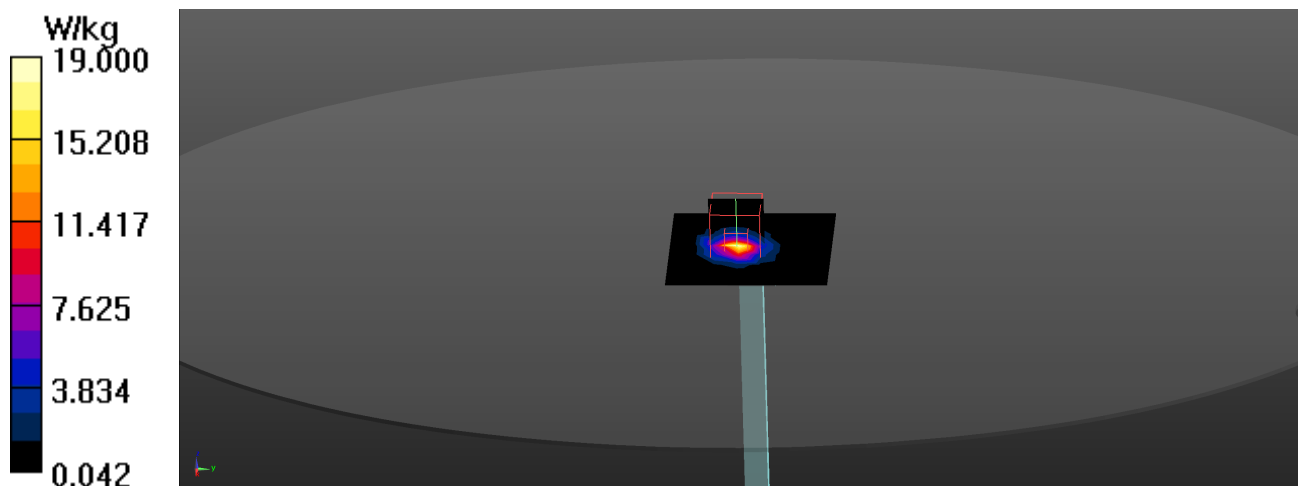
Peak SAR (extrapolated) = 27.5 W/kg

SAR(1 g) = 8.03 W/kg; SAR(10 g) = 2.29 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 66.1%

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



Test Laboratory: DEKRA

Date: 2025/01/25

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; $\sigma = 5.22$ S/m; $\epsilon_r = 35.22$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.03, 5.03, 5.03) @ 5600 MHz; Calibrated: 2024/02/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2024/02/15
- Phantom: ELI V8.0; Type: QD OVA 004 AA; Serial: 2139
- Measurement SW: DASY52, Version 52.10 (4);

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

Maximum value of SAR (measured) = 21.6 W/kg

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

Reference Value = 54.47 V/m; Power Drift = 0.14 dB

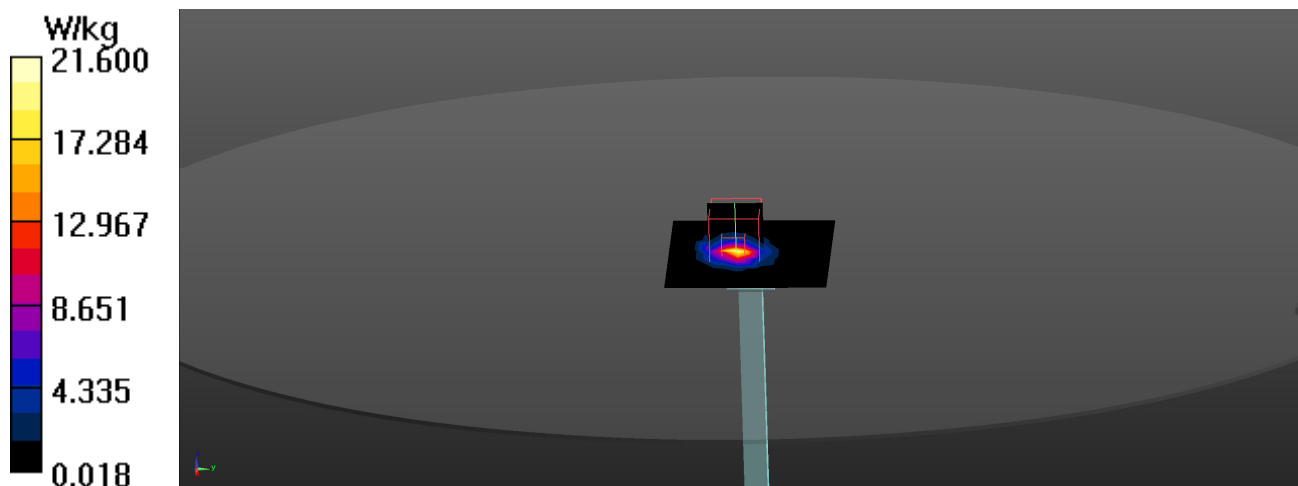
Peak SAR (extrapolated) = 35.6 W/kg

SAR(1 g) = 8.55 W/kg; SAR(10 g) = 2.44 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) = 22.3 W/kg



Test Laboratory: DEKRA

Date: 2025/01/25

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: $f = 5800$ MHz; $\sigma = 5.48$ S/m; $\epsilon_r = 34.67$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.14, 5.14, 5.14) @ 5800 MHz; Calibrated: 2024/02/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1651; Calibrated: 2024/02/15
- Phantom: ELI V8.0; Type: QD OVA 004 AA; Serial: 2139
- Measurement SW: DASY52, Version 52.10 (4);

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

Maximum value of SAR (measured) = 17.4 W/kg

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

Reference Value = 53.78 V/m; Power Drift = -0.16 dB

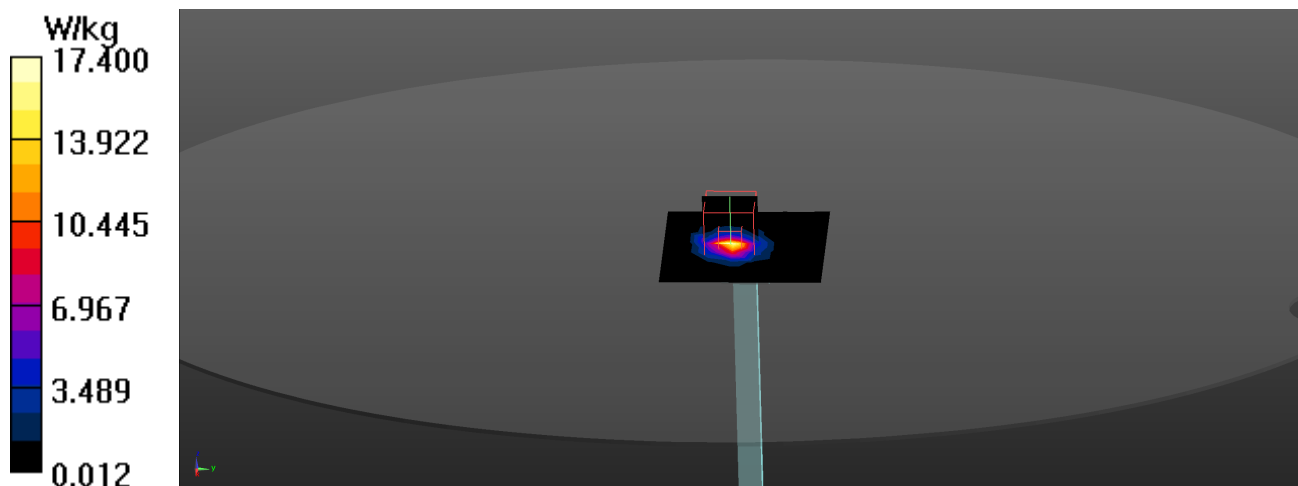
Peak SAR (extrapolated) = 32.0 W/kg

SAR(1 g) = 7.65 W/kg; SAR(10 g) = 2.19 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 62%

Maximum value of SAR (measured) = 19.1 W/kg



Test Laboratory: DEKRA

Date: 2025-01-26

System Performance Check_6500MHz-Head

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

Medium parameters used: $f = 6500.000$ MHz; Conductivity = 6.02 S/m; Permittivity = 34.5

Phantom section: Flat

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(5.7, 5.7, 5.7); Calibrated: 2024-02-21
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn1651; Calibrated: 2024-02-15
- Phantom: ELI V8.0 (20deg probe tilt)
- Measurement SW: V16.2.4.2524

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

SAR (1 g) = 22.1 W/kg; SAR (10 g) = 4.96 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

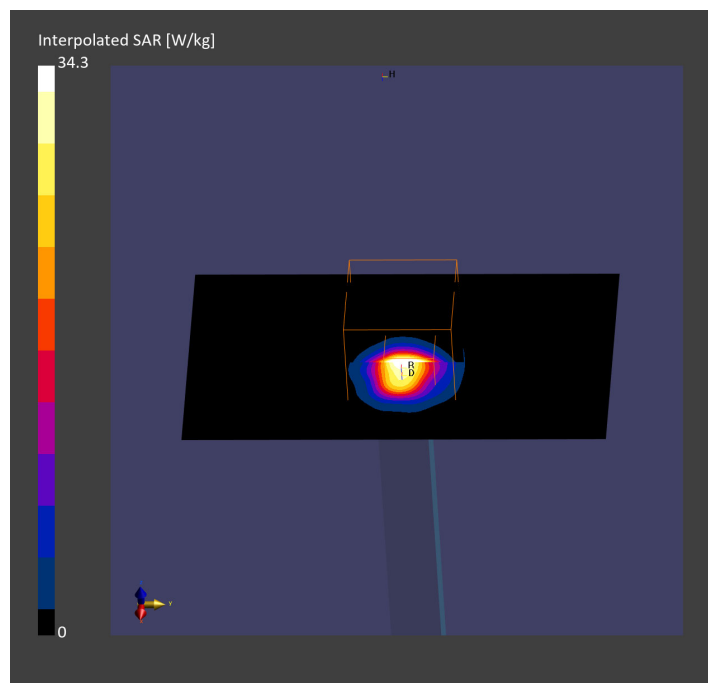
Power Drift = 0.02 dB

SAR(1 g) = 29.7 W/kg; SAR(10 g) = 5.44 W/kg

psAPD (4.0cm², sq) = 139 W/m²

Smallest distance from peaks to all points 3 dB below = 5.0

Ratio of SAR at M2 to SAR at M1 = 53.6



Test Laboratory: DEKRA

Date: 2025-02-18

System Performance Check_6500MHz-Head

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

Medium parameters used: $f = 6500.000$ MHz; Conductivity = 6.08 S/m; Permittivity = 34.6

Phantom section: Flat

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(5.51, 5.51, 5.62); Calibrated: 2024-02-21
- Sensor-Surface: 1.4 mm
- Electronics: DAE4 Sn916; Calibrated: 2024-02-15
- 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) = 21.2 W/kg; SAR (10 g) = 4.64 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

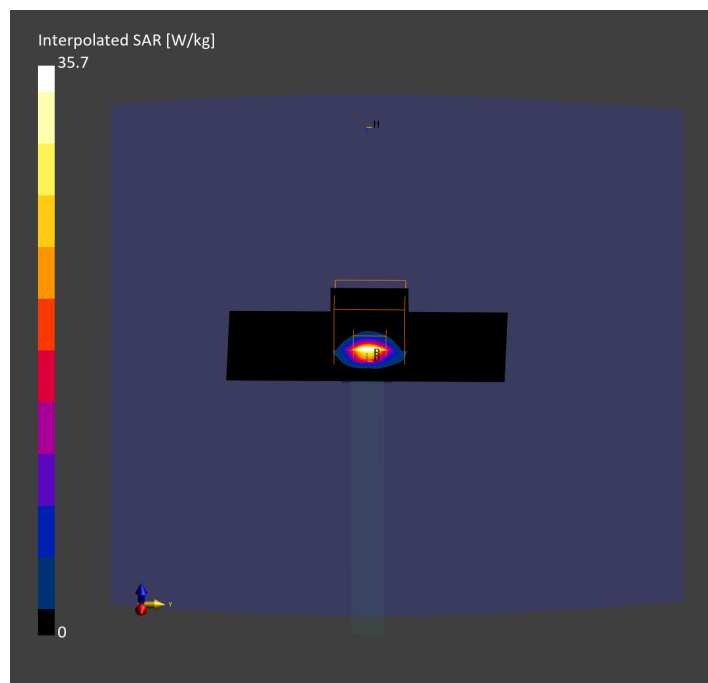
Power Drift = 0.03 dB

SAR(1 g) = 28.8 W/kg; SAR(10 g) = 5.32 W/kg

psAPD (4.0cm², sq) = 130 W/m²

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

Ratio of SAR at M2 to SAR at M1 = 52.6



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

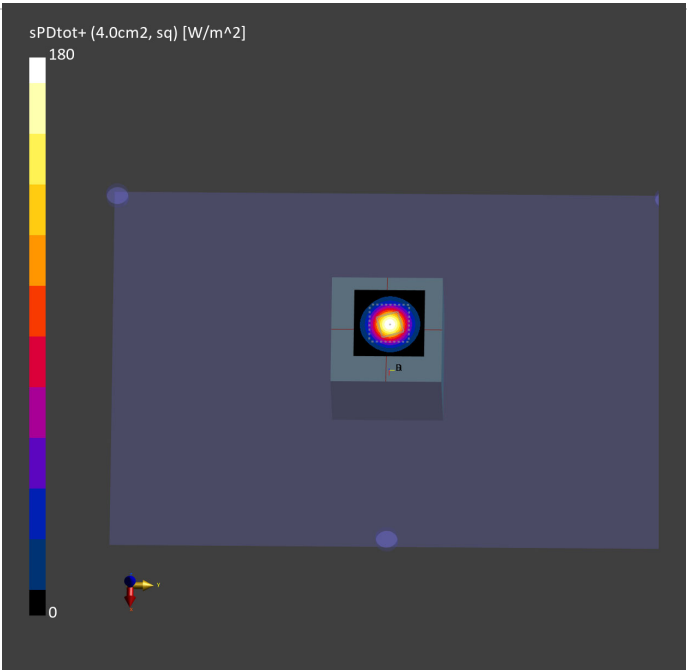
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 1068	Air	EUmmWV4 - SN9546_F1-55GHz, 2024-04-18	DAE4 Sn1651, 2024-02-15

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	2025-01-27
Avg. Area [cm²]	4.00
psPDn+ [W/m²]	179
psPDtot+ [W/m²]	180
psPDmod+ [W/m²]	184
E _{max} [V/m]	300
Power Drift [dB]	0.05



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 Sn916, 2024-12-04

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	2025-02-18
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	179
psPDtot+ [W/m ²]	180
psPDmod+ [W/m ²]	184
E _{max} [V/m]	299
Power Drift [dB]	0.02

