

Validation Report

No. VAL_0827_EF 2019-11

Kind of doc.:
QM Template

EUROFINS PRODUCT SERVICE GmbH

Storkower Str. 38c, 15526 Reichenwalde, Germany

1 Customer

Eurofins Product Service GmbH

2 Object

Equipment Number: EF00827
 Equipment Name: System validation dipole
 Equipment Type: D5GHzV2
 Serial Number: 1140
 Manufacturer: Schmid & Partner Engineering AG

3 State of Measurement

Validation: ☒
 Performance Control: ☒
 Other: ☐

4 Performance of Measurement

4.1 Generals

(e.g. object of validation such as specific setup, non-standard method or SW, specification of the requirements, test set-up configuration, risk analysis etc.)

Dipol verification

4.2 Validation procedure / measurement

(e.g. comparison of results achieved with other methods, interlaboratory comparison, systematic assessment of factors influencing the result, assessment of the uncertainty of the results based on scientific understanding of the theoretical principles of the method and practical experience; criteria/requirements for approval/rejection etc.)

According KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04 3.2.2 Dipole calibration

Limits for the verification: return loss <20% to the original measurement or >20 dB minimum return-loss
 Impedance <5 Ω to the original measurement.

4.3 Used reference equipment

Equipment name	Equipment type	Manufacturer	Equipment number	Cal. Date	Cal. Due Date
Vector Network Analyzer	ZNB40	Rohde & Schwarz Vertriebs GmbH	EF01065	2019-07-25	2020-07-25

- new acquired (incl. calibration) ☐
- new calibrated ☐
- check reference standard ☒

4.4 Environmental conditions

Temperature: 23 °C $\pm$ 2°C
 Relative Air Humidity: 50 rH $\pm$ 5%
 Air Pressure: 1020 hPa $\pm$ 5%

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5 Results

5.1 General:

(e.g. measurement results, user instructions such as handling, transport, storage, preparation; checks to be made before the work started; information about how to install (operations)-, to maintain-, to train and to use; safety measures etc.)

5200 MHz	Original measurement	Verification measurement	Margin
Impedance, transformend to feed point	50.3 Ω + 5.2 j Ω	48.31 Ω + 6.8 j Ω	-1.99 Ω + 1.6j Ω
Return Loss	-25.80 dB	-22.73 dB	3.07 dB
Tissue Validation ϵ_r	49.00	48.52	-0.98 %
Tissue Validation σ [S/m]	5.30	5.40	1.89 %
System validation	7.41 W/kg (1g)	7.4 W/kg (1g)	-0.14 %
Date:	10.09.2018	18.11.2019	

5500 MHz	Original measurement	Verification measurement	Margin
Impedance, transformend to feed point	54.0 Ω + 0.2 j Ω	51.68 Ω + 4.7 j Ω	-2.32 Ω + 4.5j Ω
Return Loss	-28.30 dB	-26.50 dB	1.80 dB
Tissue Validation ϵ_r	48.60	48.35	-0.51 %
Tissue Validation σ [S/m]	5.65	5.71	1.06 %
System validation	8.12 W/kg (1g)	8.00 W/kg (1g)	-1.48 %
Date:	10.09.2018	18.11.2019	

5800 MHz	Original measurement	Verification measurement	Margin
Impedance, transformend to feed point	59.4 Ω + 0.1 j Ω	57.73 Ω - 4.5 j Ω	-1.67 Ω - 4.6j Ω
Return Loss	-21.3 dB	-21.79 dB	-0.49 dB
Tissue Validation ϵ_r	48.2	47.93	-0.56 %
Tissue Validation σ [S/m]	6.00	6.13	2.17 %
System validation	7.71 W/kg (1g)	7.64 W/kg (1g)	-0.91 %
Date:	10.09.2018	18.11.2019	

5.2 Measurement uncertainty

The reported expanded uncertainty of measurement is stated as the standard uncertainty multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.
+/- 2.5 %

5.3 Results of Validation

Validated



Not validated



6 Operator

Pudell



Name

Signature

Place and Date of Verification:

Reichenwalde, 18.11.2019

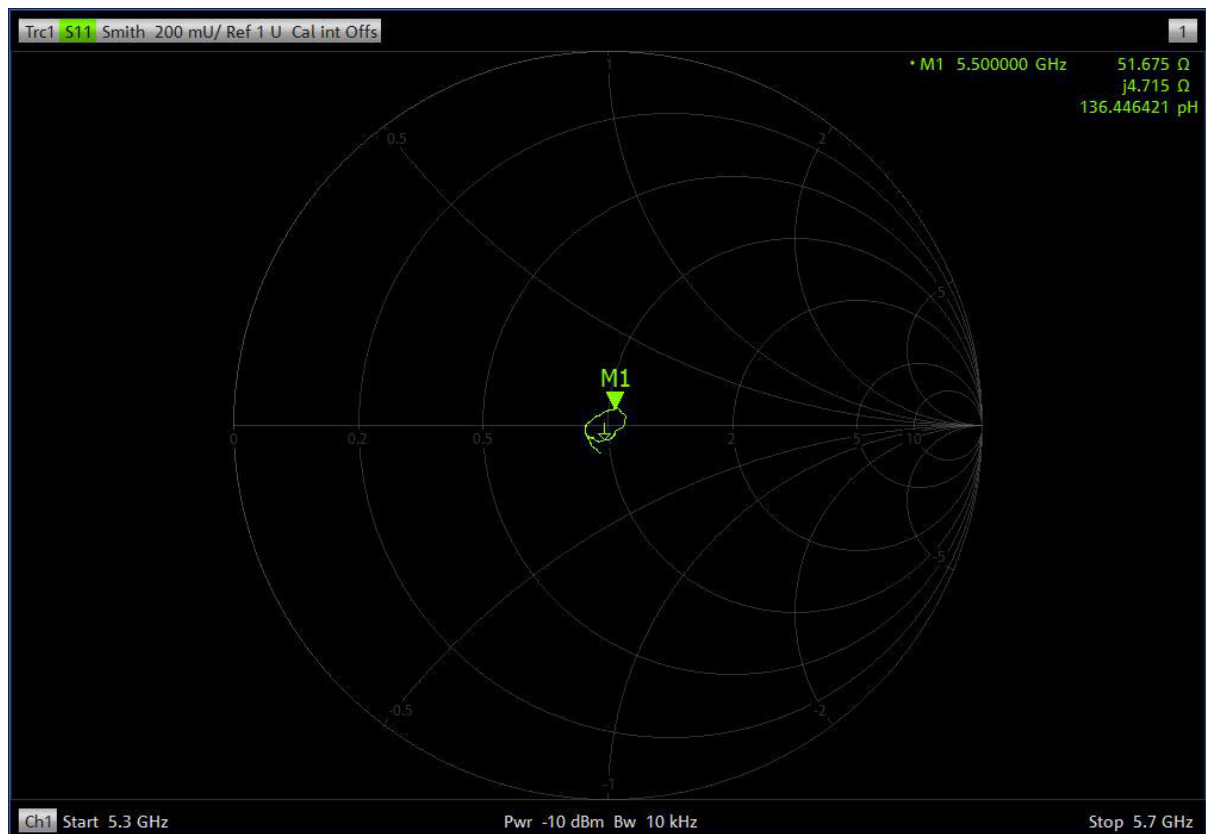
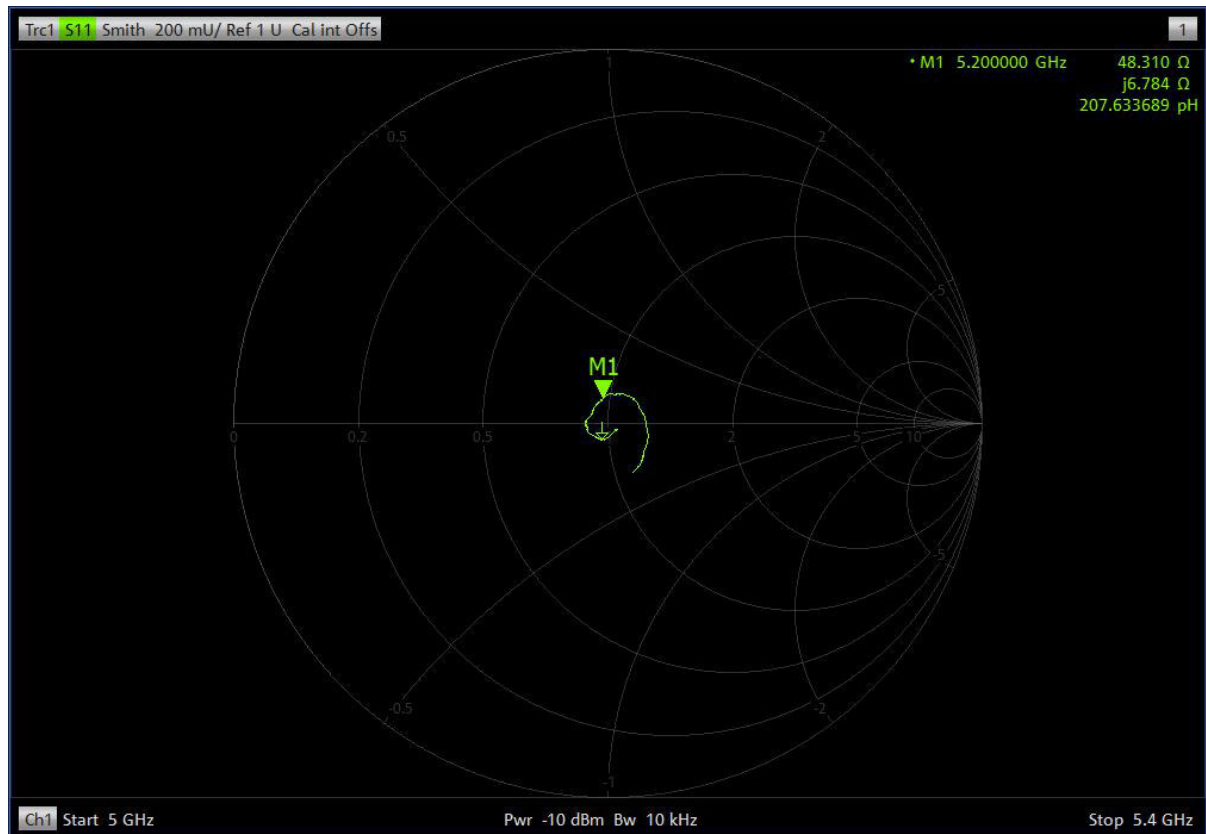
Attachment: Impedance, Return Loss, System validierung

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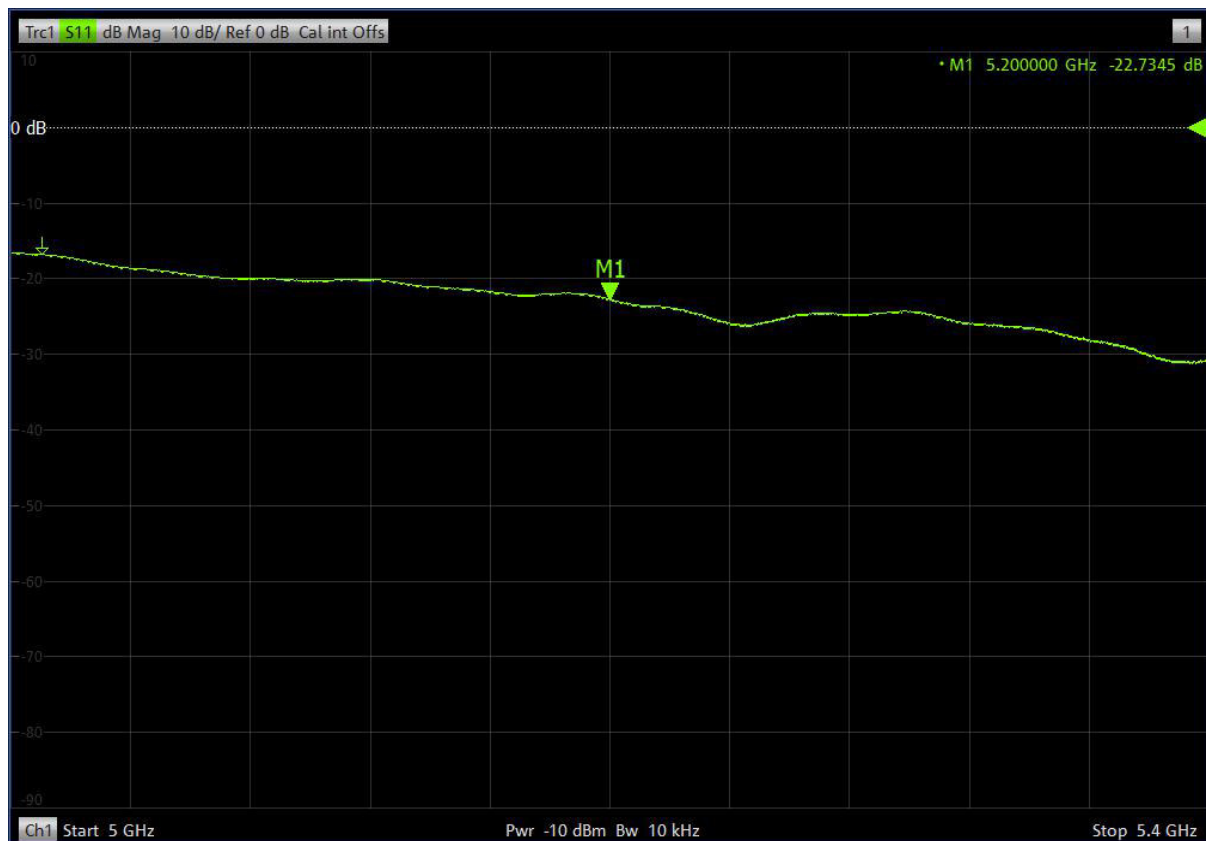
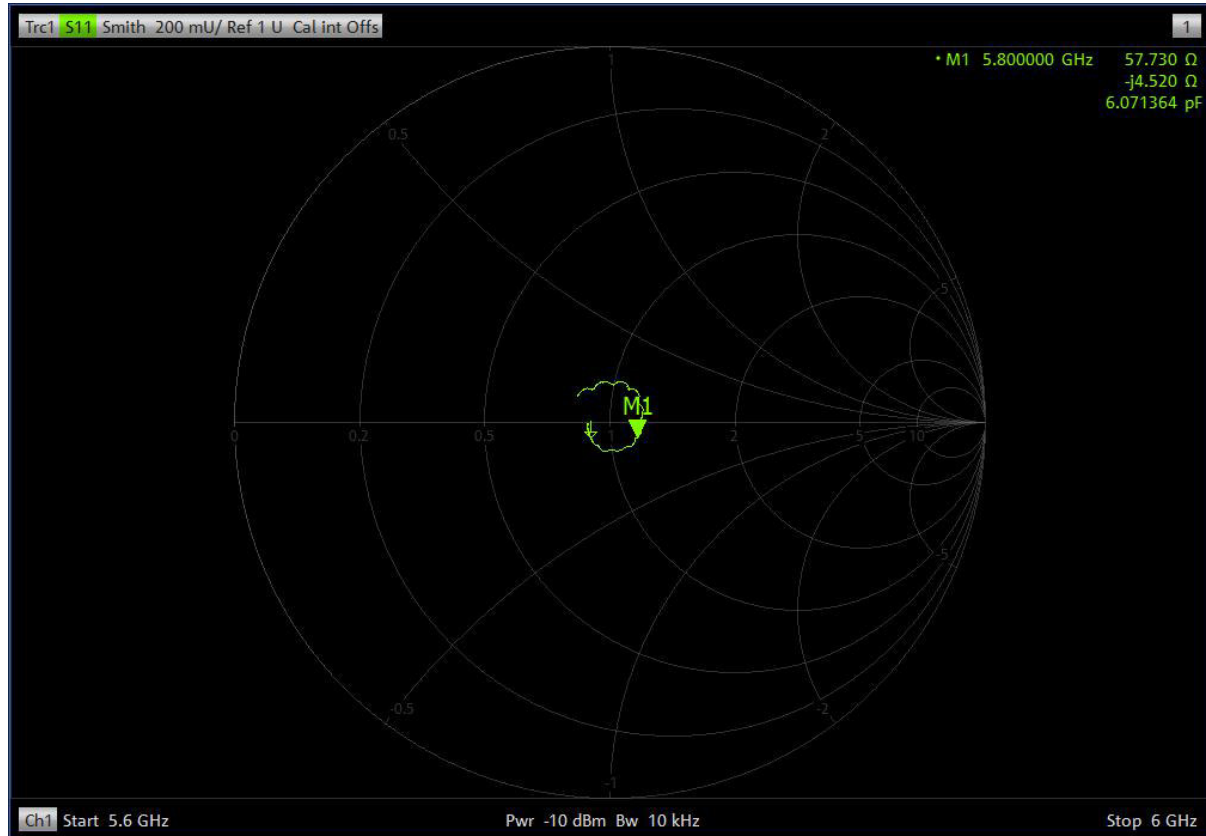


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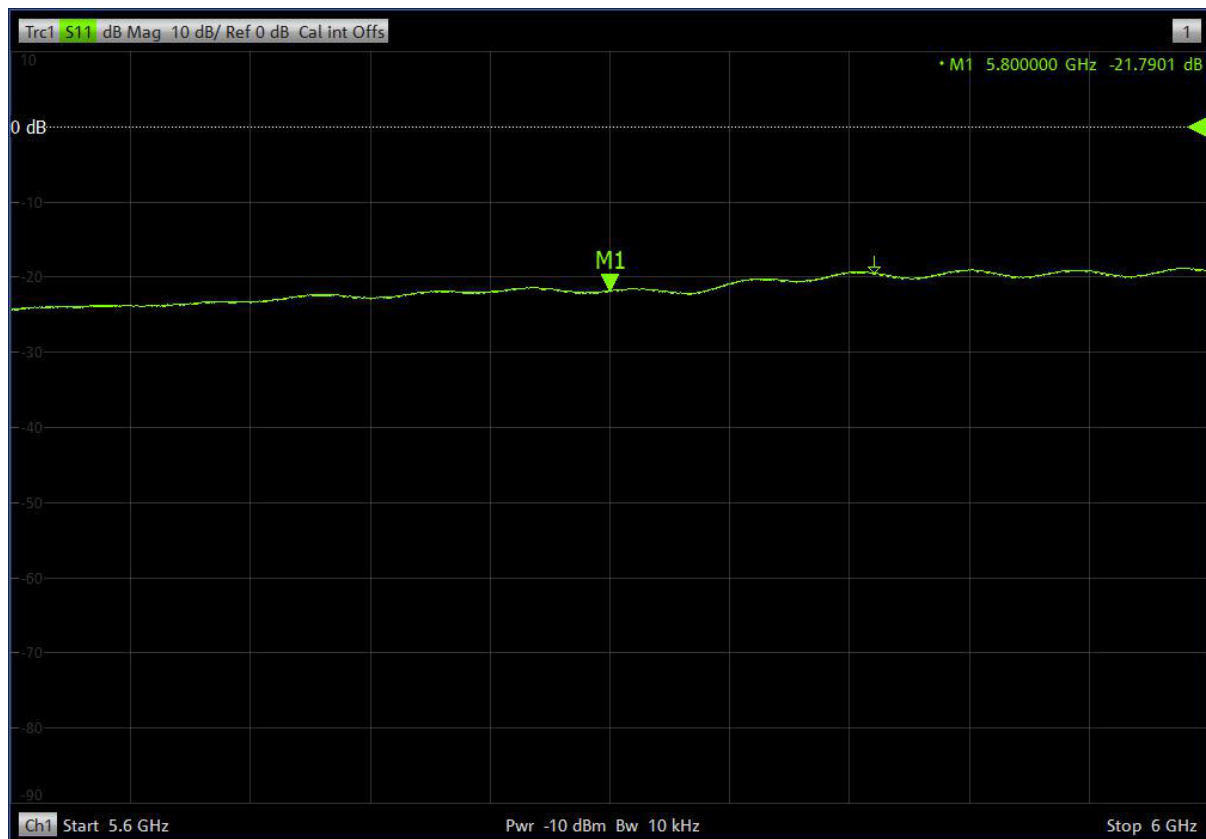


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EUROFINS PRODUCT SERVICE GmbH
Storkower Str. 38c, 15526 Reichenwalde, Germany

Date/Time: 18.11.2019 10:32:21

Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5200 (m)_100mW ELI4_18.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.398$ S/m; $\epsilon_r = 48.516$; $\rho = 1000$ kg/m³

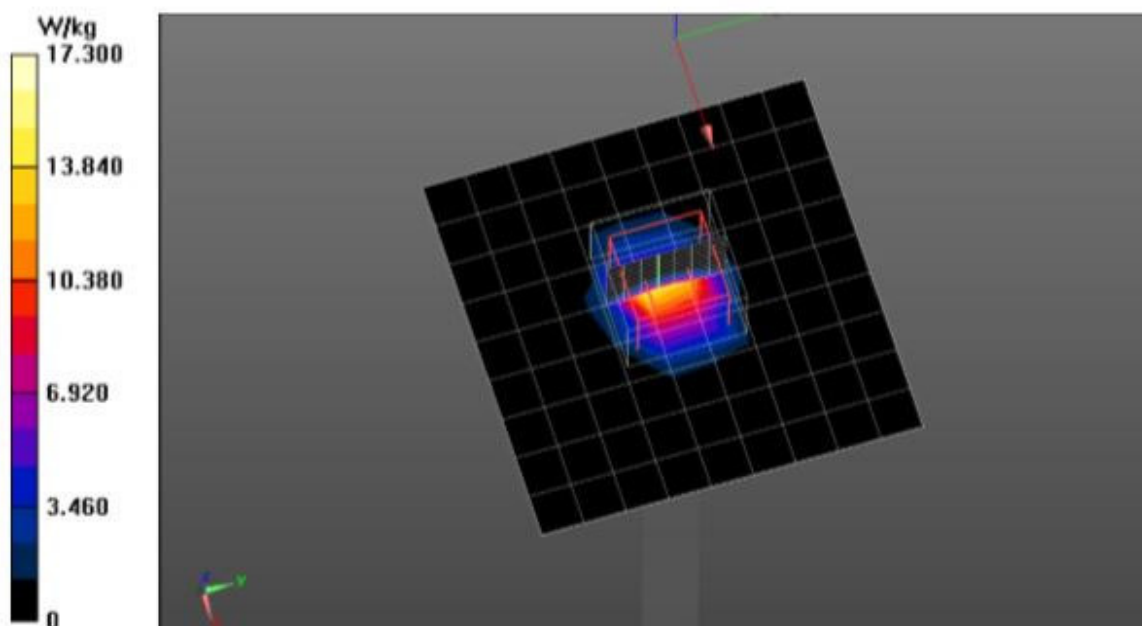
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5200 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW/Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 14.2 W/kg

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 63.87 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 30.2 W/kg
SAR(1 g) = 7.4 W/kg; SAR(10 g) = 2.08 W/kg
Maximum value of SAR (measured) = 17.3 W/kg



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EUROFINS PRODUCT SERVICE GmbH
Storkower Str. 38c, 15526 Reichenwalde, Germany

Date/Time: 18.11.2019 08:04:28

Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5500 (m)_100mW ELI4_18.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.714$ S/m; $\epsilon_r = 48.346$; $\rho = 1000$ kg/m³

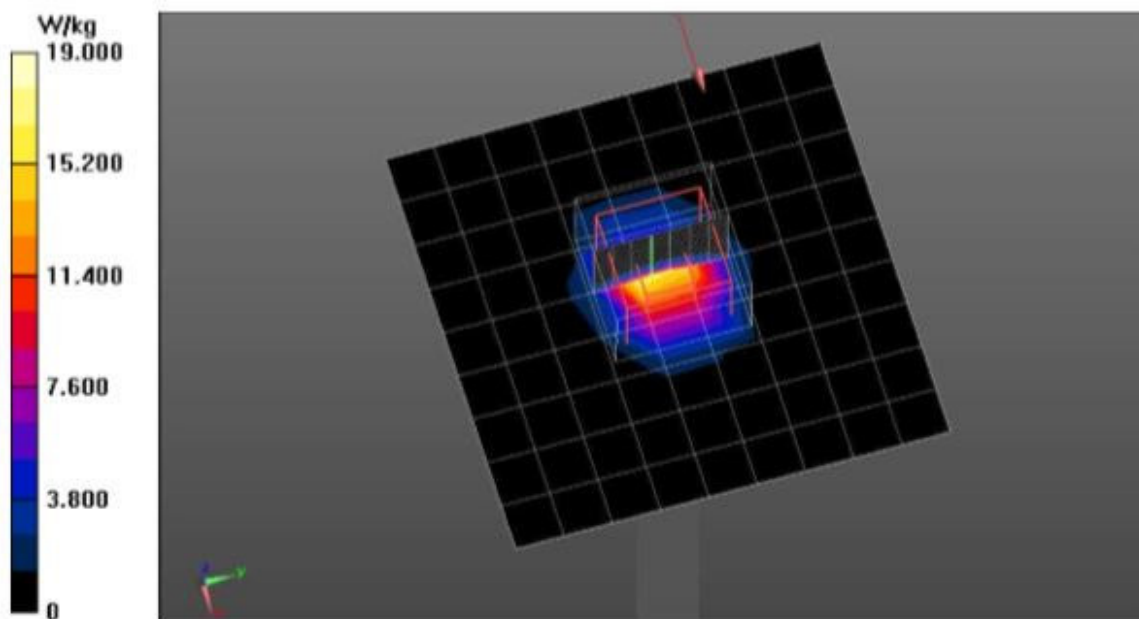
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5500 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW, f=5500 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 16.4 W/kg

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW, f=5500 MHz/Zoom Scan (4x4x2mm, uniform), dist=1.4mm
(8x8x13)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 66.71 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 35.3 W/kg
SAR(1 g) = 8 W/kg; SAR(10 g) = 2.24 W/kg
Maximum value of SAR (measured) = 19.0 W/kg



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Date/Time: 18.11.2019 11:59:22

Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5800 (m)_100mW ELI4_18.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 6.131 \text{ S/m}$; $\epsilon_r = 47.928$; $\rho = 1000 \text{ kg/m}^3$

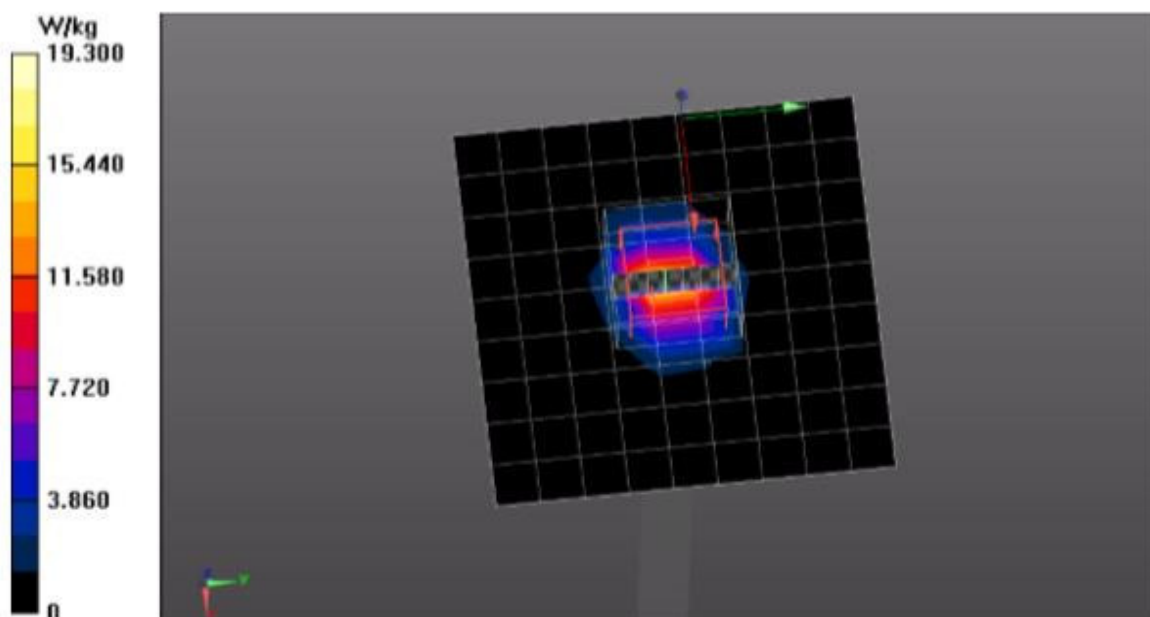
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.14, 4.14, 4.14) @ 5800 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW/Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 16.2 W/kg

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 62.80 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 36.4 W/kg
SAR(1 g) = 7.64 W/kg; SAR(10 g) = 2.13 W/kg
Maximum value of SAR (measured) = 19.3 W/kg



ANNEX B System Validation Reports

Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.2450 (m)_250mW ELI4_07.11.2019

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: SN: 722

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

Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 2.011$ S/m; $\epsilon_r = 52.492$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2450 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=2.0mm (EX-Probe)/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 16.2 W/kg

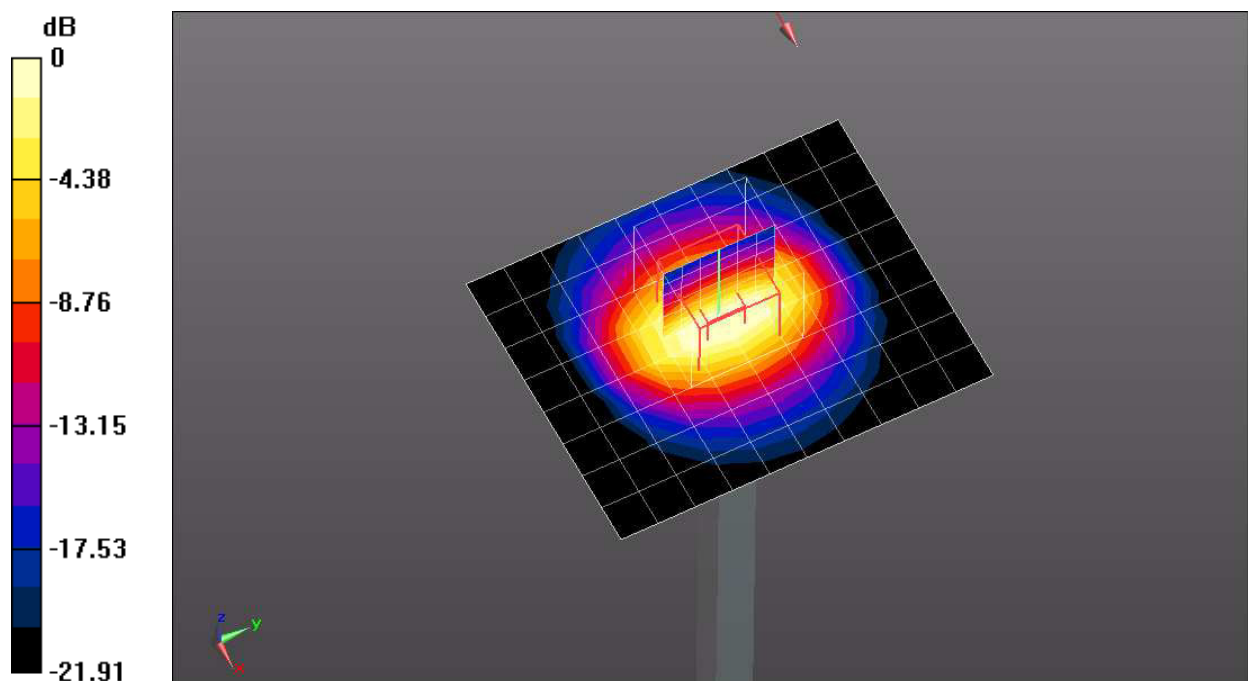
System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 78.85 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 26.6 W/kg

SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.87 W/kg

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



0 dB = 14.7 W/kg = 11.67 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.2450 (m)_250mW ELI4_12.11.2019

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 722

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

Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 2.014$ S/m; $\epsilon_r = 52.585$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2450 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=2.0mm (EX-Probe)/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 19.6 W/kg

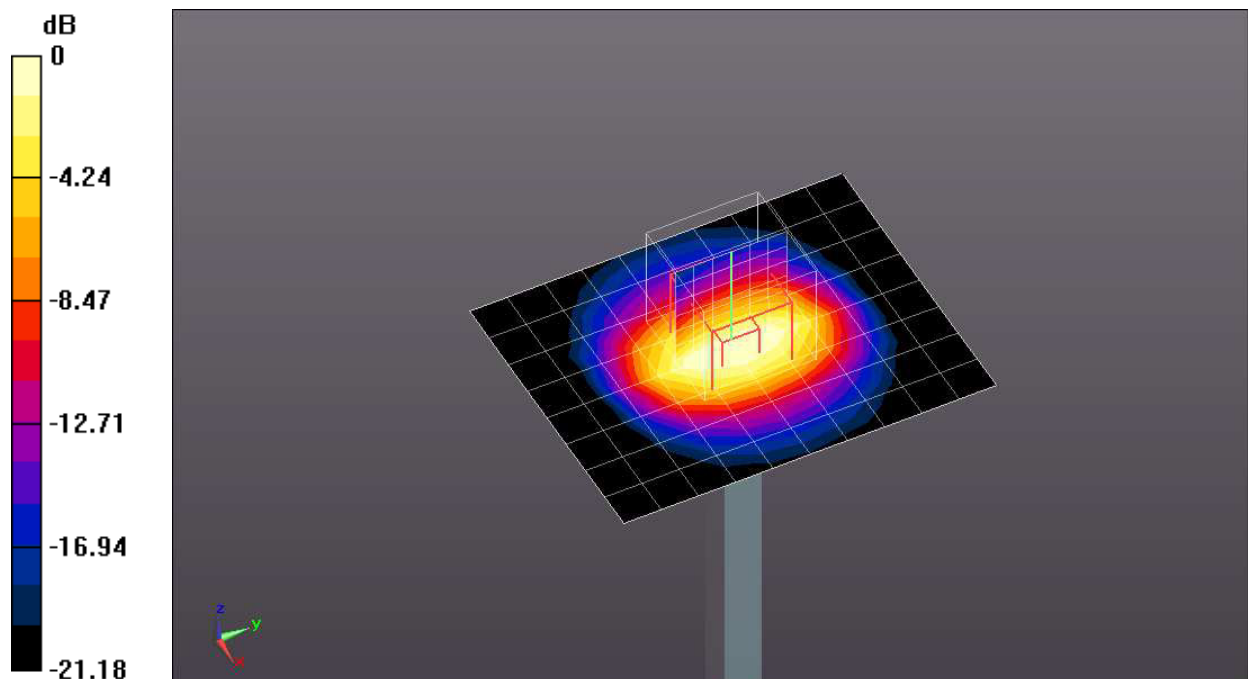
System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.27 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 26.1 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6 W/kg

Maximum value of SAR (measured) = 14.9 W/kg



0 dB = 14.9 W/kg = 11.73 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5200 (m)_100mW ELI4_20.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.447$ S/m; $\epsilon_r = 47.796$; $\rho = 1000$ kg/m³

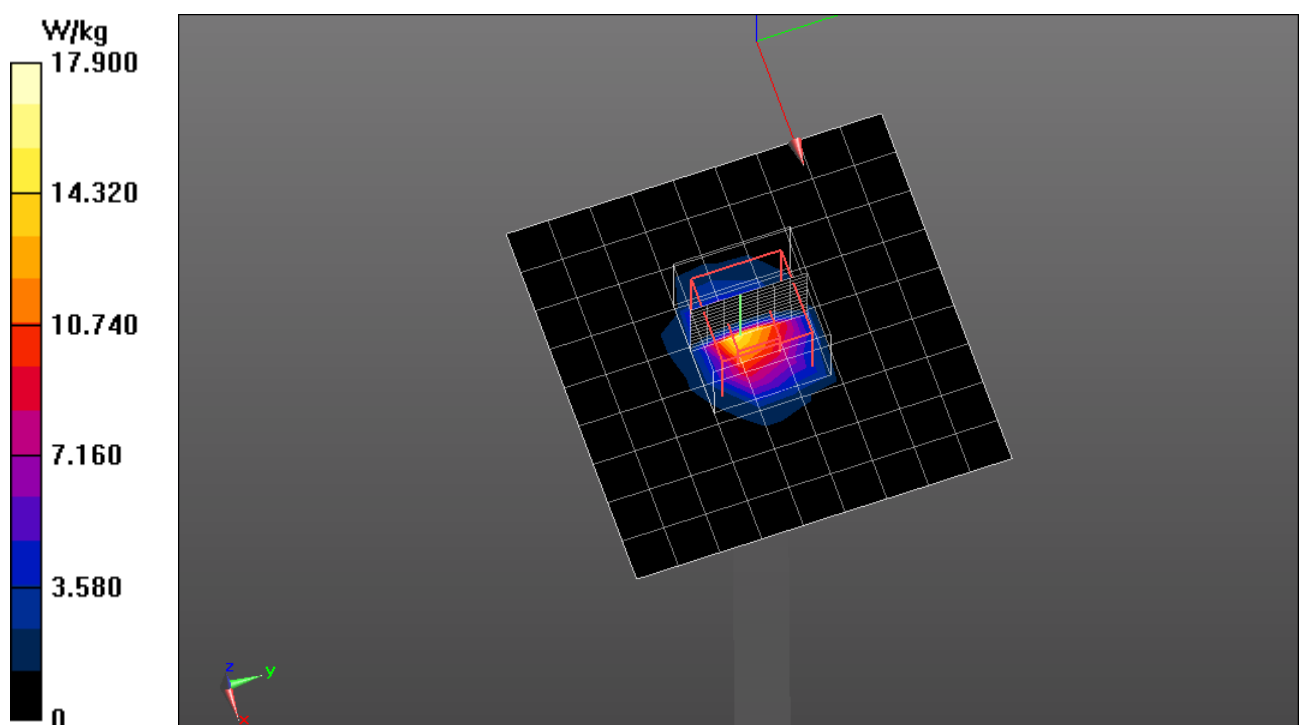
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5200 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW, f=5200 MHz/Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 16.0 W/kg

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW, f=5200 MHz/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 66.09 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 30.6 W/kg
SAR(1 g) = 7.58 W/kg; SAR(10 g) = 2.13 W/kg
Maximum value of SAR (measured) = 17.9 W/kg



Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5200 (m)_100mW ELI4_25.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.33$ S/m; $\epsilon_r = 47.575$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5200 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 12.0 W/kg

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0:**

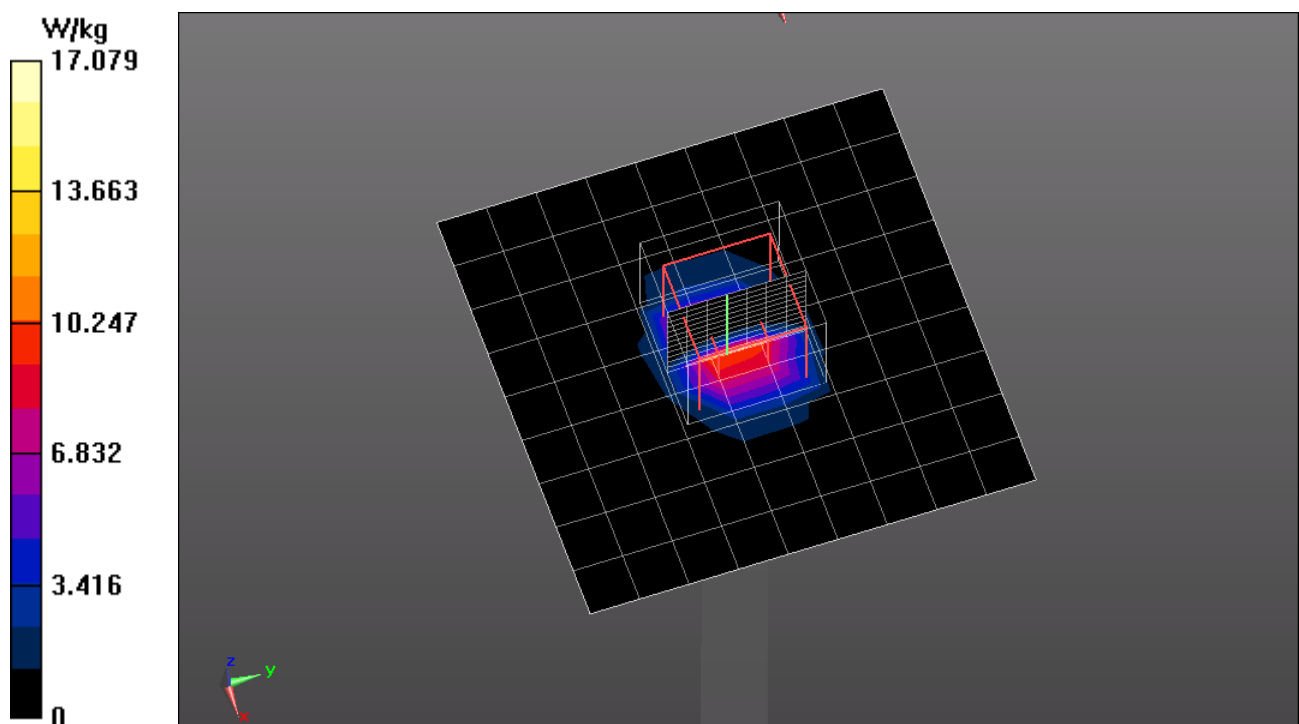
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 66.39 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 29.3 W/kg

SAR(1 g) = 7.29 W/kg; SAR(10 g) = 2.06 W/kg

Maximum value of SAR (measured) = 17.1 W/kg



Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5500 (m)_100mW ELI4_20.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.785$ S/m; $\epsilon_r = 47.556$; $\rho = 1000$ kg/m³

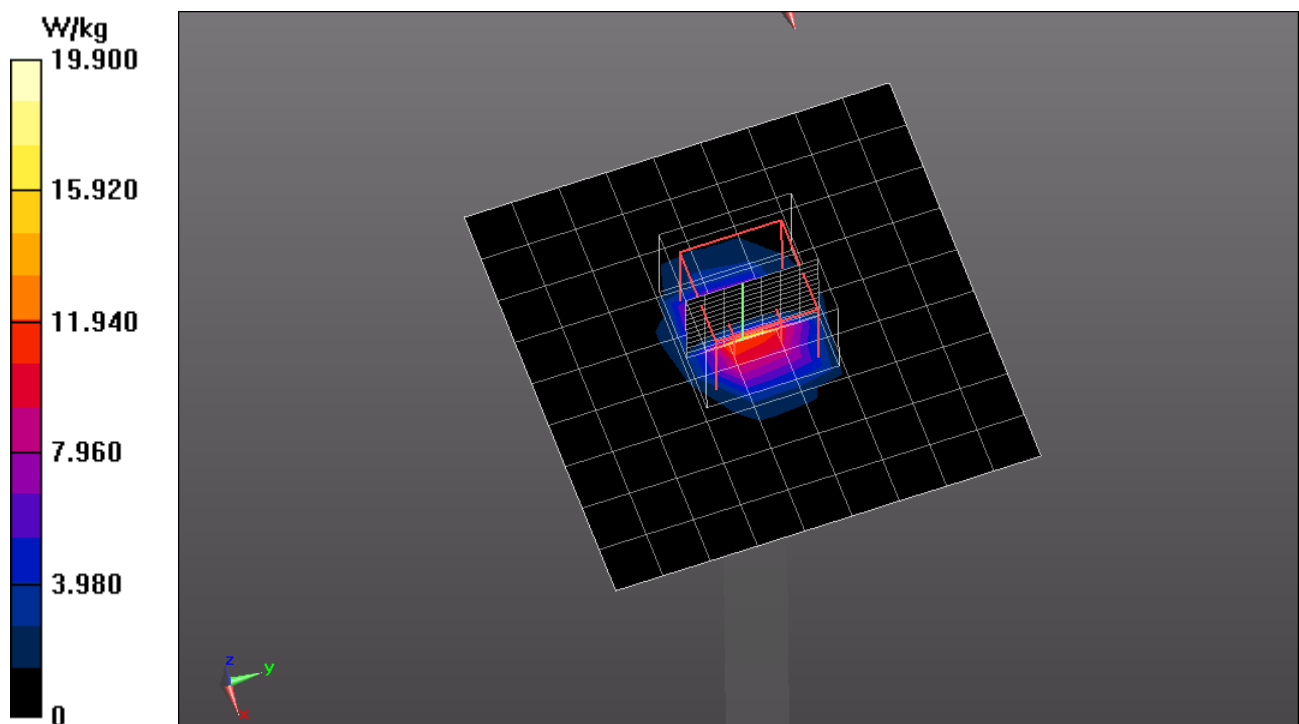
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5500 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW, f=5500 MHz/Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 14.5 W/kg

System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm, Pin=100mW, f=5500 MHz/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 66.89 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 35.6 W/kg
SAR(1 g) = 8.15 W/kg; SAR(10 g) = 2.3 W/kg
Maximum value of SAR (measured) = 19.9 W/kg



Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5500 (m)_100mW ELI4_25.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.747$ S/m; $\epsilon_r = 48.112$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5500 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 13.9 W/kg

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0:**

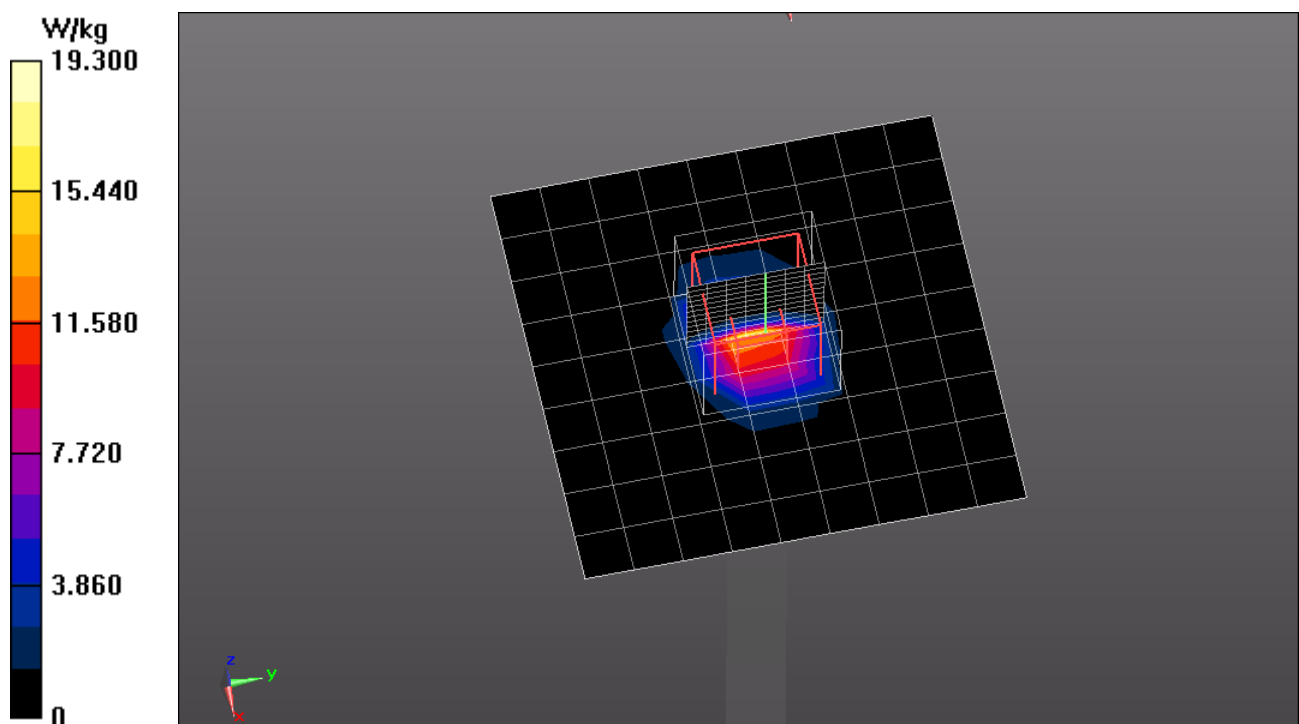
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 68.18 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 34.7 W/kg

SAR(1 g) = 8.07 W/kg; SAR(10 g) = 2.28 W/kg

Maximum value of SAR (measured) = 19.3 W/kg



Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5800 (m)_100mW ELI4_20.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.064$ S/m; $\epsilon_r = 47.107$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.14, 4.14, 4.14) @ 5800 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 15.7 W/kg

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0:**

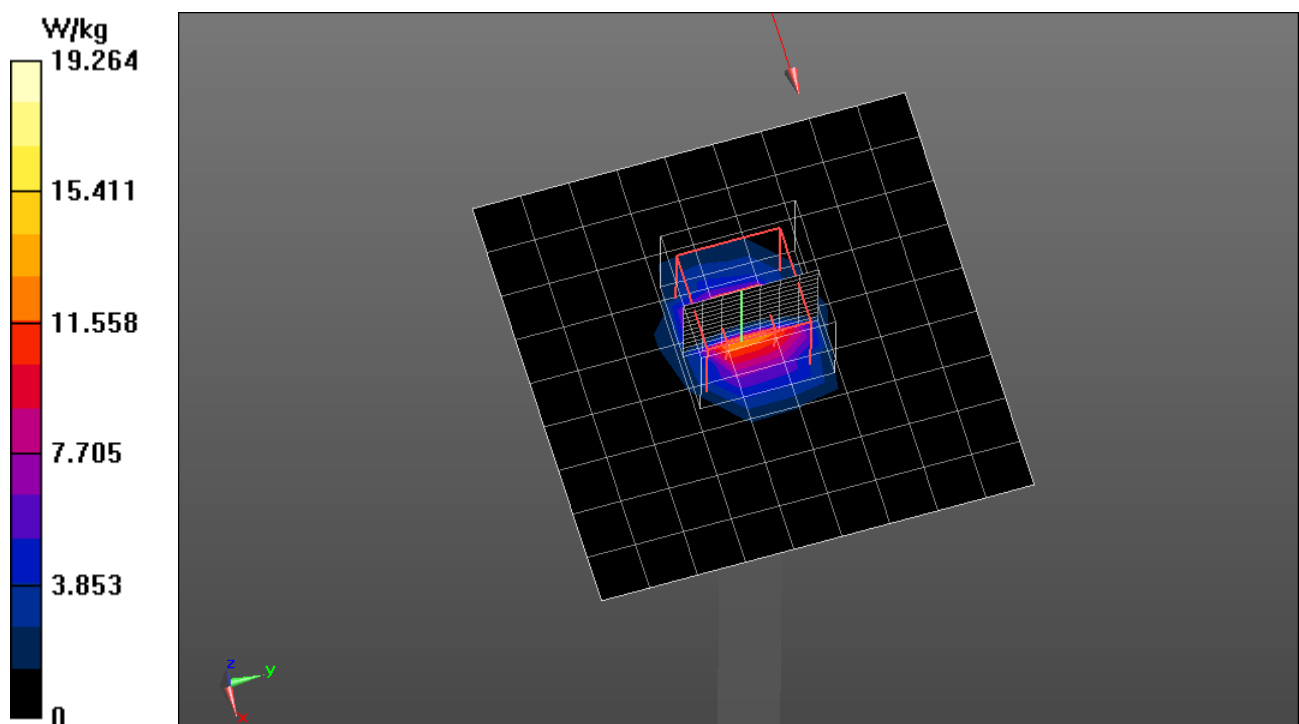
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 56.74 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 36.3 W/kg

SAR(1 g) = 7.78 W/kg; SAR(10 g) = 2.16 W/kg

Maximum value of SAR (measured) = 19.3 W/kg



Test Laboratory: Eurofins Product Service GmbH

Dipol Valid.5800 (m)_100mW ELI4_25.11.2019

DUT: Dipole D5GHzV2; Type: SA AAD 510 BB; Serial: 1140

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.096$ S/m; $\epsilon_r = 48.21$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.14, 4.14, 4.14) @ 5800 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 12.8 W/kg

**System Performance Check with D5GHzV2 Dipole (uniform grid)/d=10mm,
Pin=100mW/Zoom Scan (4x4x2mm, uniform), dist=1.4mm (8x8x13)/Cube 0:**

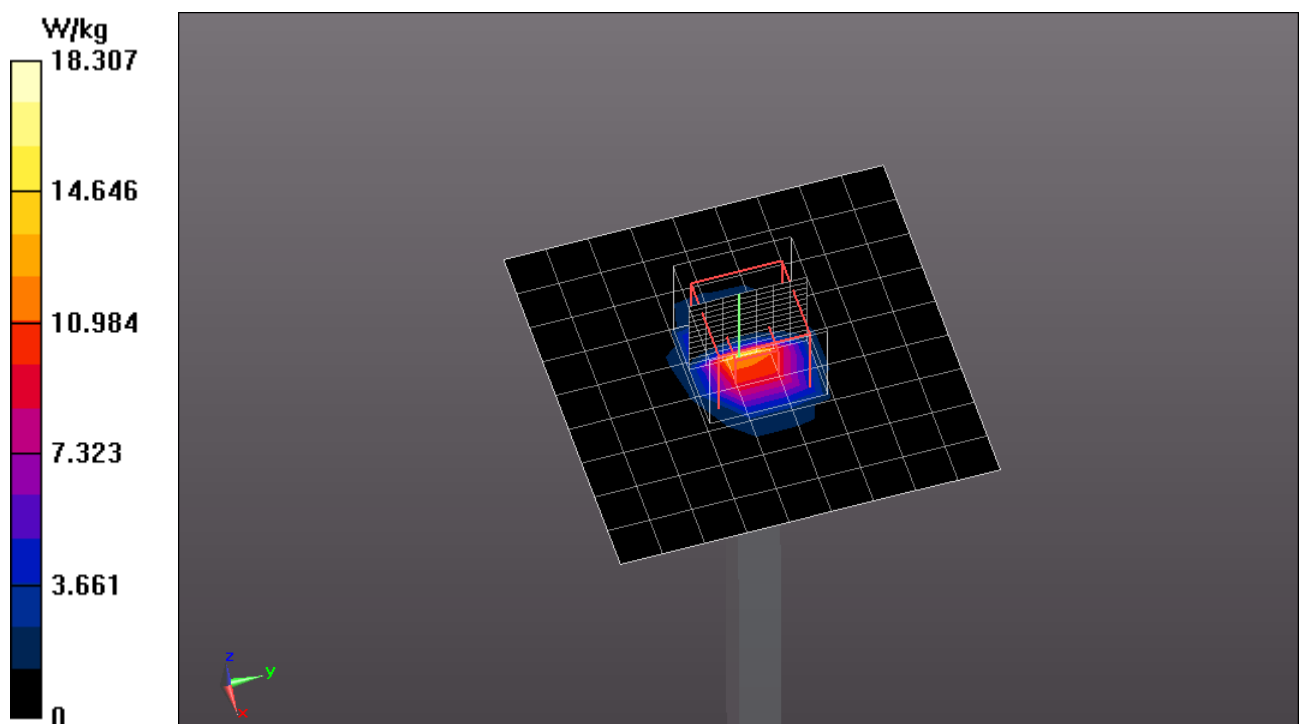
Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 64.89 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 34.5 W/kg

SAR(1 g) = 7.46 W/kg; SAR(10 g) = 2.11 W/kg

Maximum value of SAR (measured) = 18.3 W/kg



ANNEX C SAR Measurement Reports

Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 1_DSSS_1Mbps_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1Mbps) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.01

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.949$ S/m; $\epsilon_r = 52.648$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2412 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (11x29x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.731 W/kg

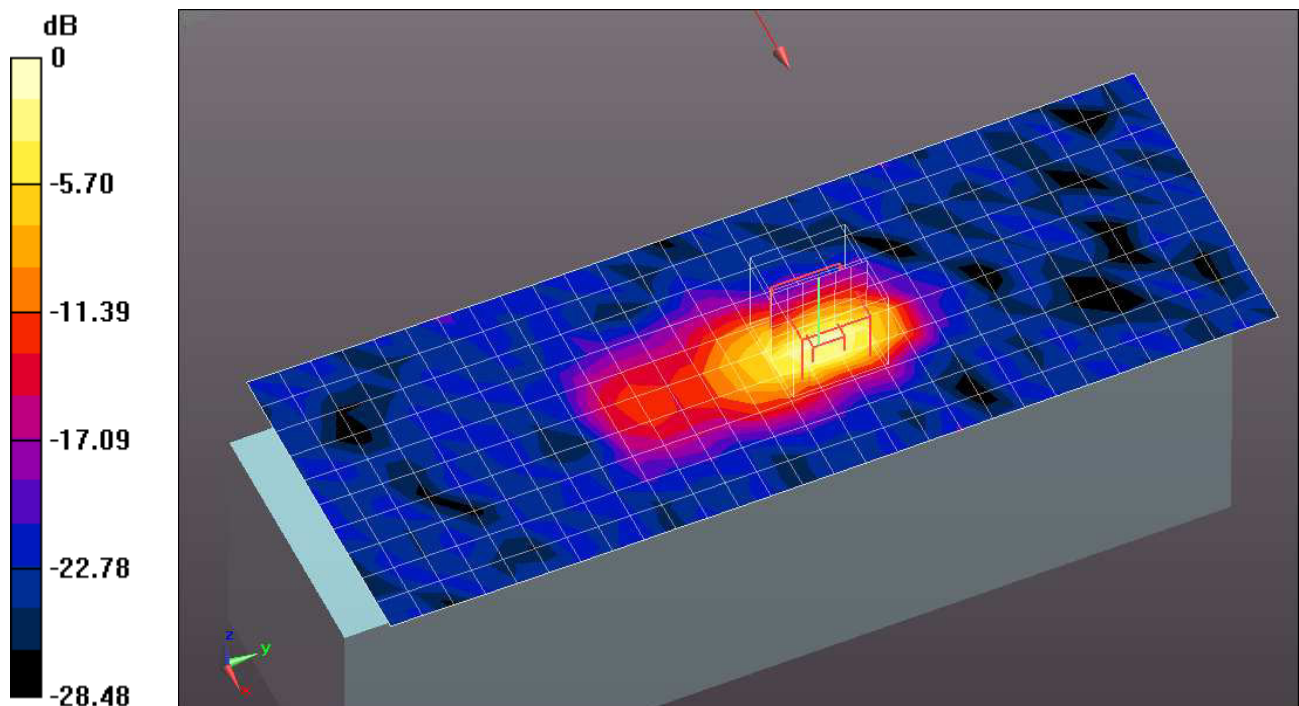
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.955 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 0.779 W/kg; SAR(10 g) = 0.297 W/kg

Maximum value of SAR (measured) = 0.970 W/kg



0 dB = 0.970 W/kg = -0.13 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 6_DSSS_1Mbps_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1Mbps) (0); Frequency: 2437 MHz; Duty Cycle: 1:1.01

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.994$ S/m; $\epsilon_r = 52.599$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2437 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.748 W/kg

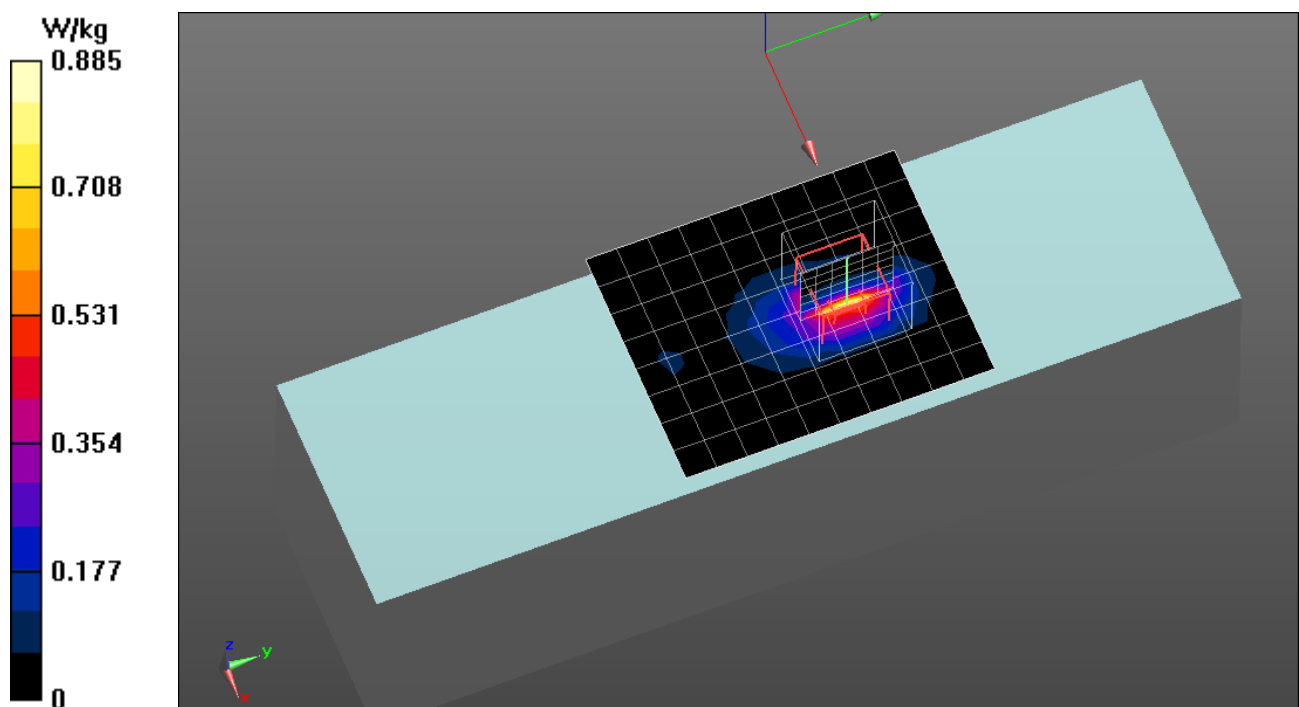
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.847 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 0.717 W/kg; SAR(10 g) = 0.271 W/kg

Maximum value of SAR (measured) = 0.885 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 11_DSSS_1Mbps_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1Mbps) (0); Frequency: 2462 MHz; Duty Cycle: 1:1.01

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.032$ S/m; $\epsilon_r = 52.559$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2462 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.710 W/kg

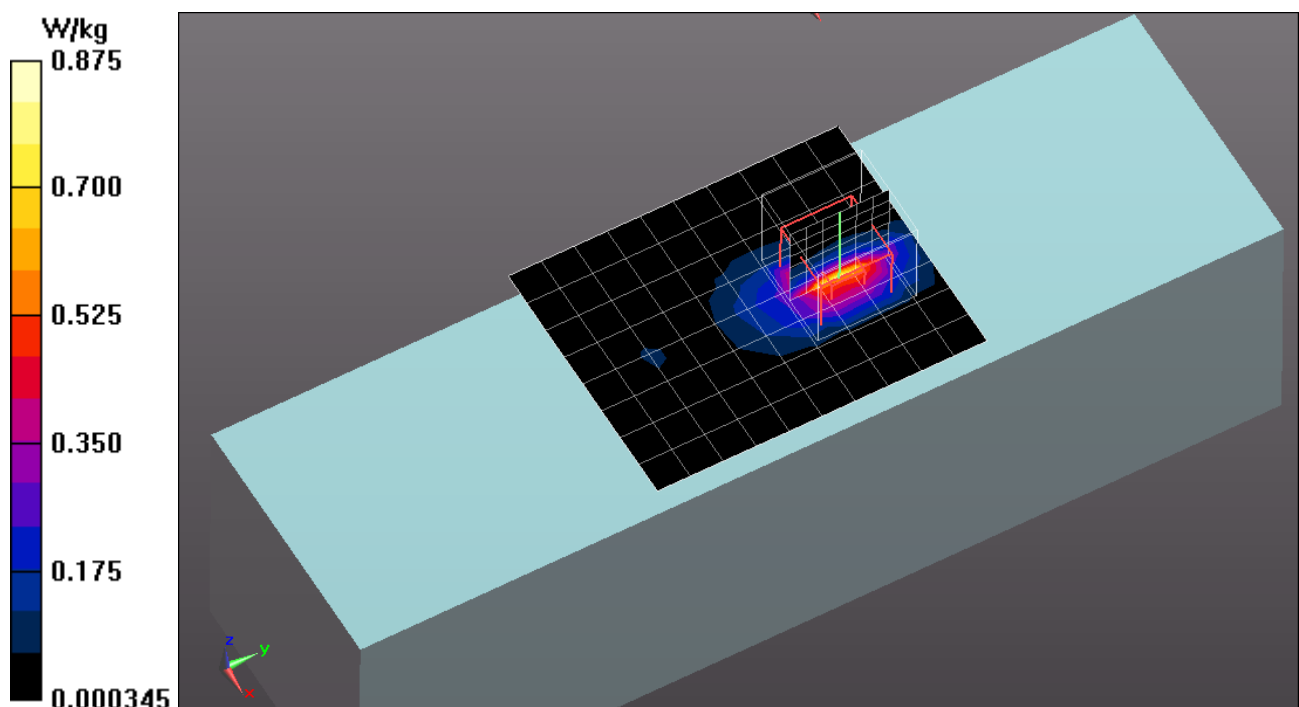
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.890 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 0.699 W/kg; SAR(10 g) = 0.258 W/kg

Maximum value of SAR (measured) = 0.875 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 1_OFDM_6Mbps_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11g WiFi 2.4 GHz (OFDM, 6Mbps) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.05

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.949$ S/m; $\epsilon_r = 52.648$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2412 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.713 W/kg

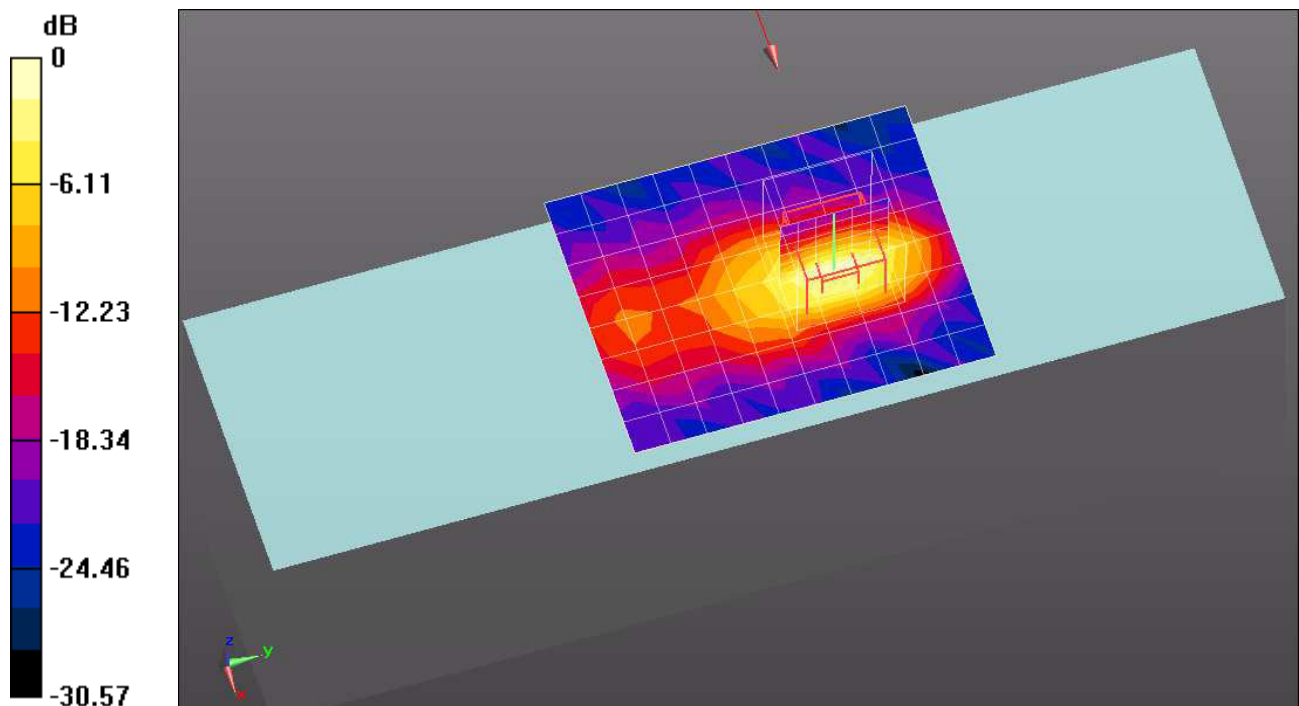
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.380 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.669 W/kg; SAR(10 g) = 0.250 W/kg

Maximum value of SAR (measured) = 0.832 W/kg



0 dB = 0.832 W/kg = -0.80 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 6_OFDM_6Mbps_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11g WiFi 2.4 GHz (OFDM, 6Mbps) (0); Frequency: 2437 MHz; Duty Cycle: 1:1.05

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.994$ S/m; $\epsilon_r = 52.599$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2437 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.651 W/kg

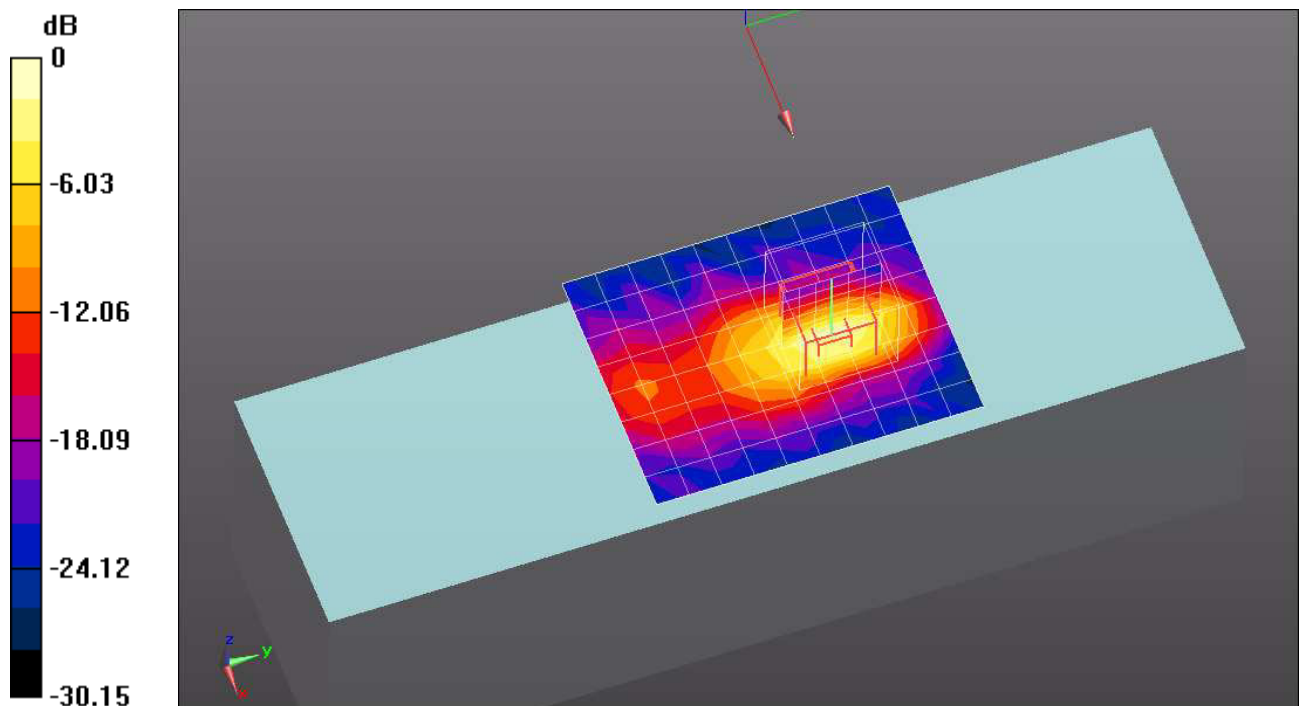
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.176 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.626 W/kg; SAR(10 g) = 0.230 W/kg

Maximum value of SAR (measured) = 0.784 W/kg



0 dB = 0.784 W/kg = -1.06 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 11_OFDM_6Mbps_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11g WiFi 2.4 GHz (OFDM, 6Mbps) (0); Frequency: 2462 MHz; Duty Cycle: 1:1.05

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.032$ S/m; $\epsilon_r = 52.559$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2462 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.628 W/kg

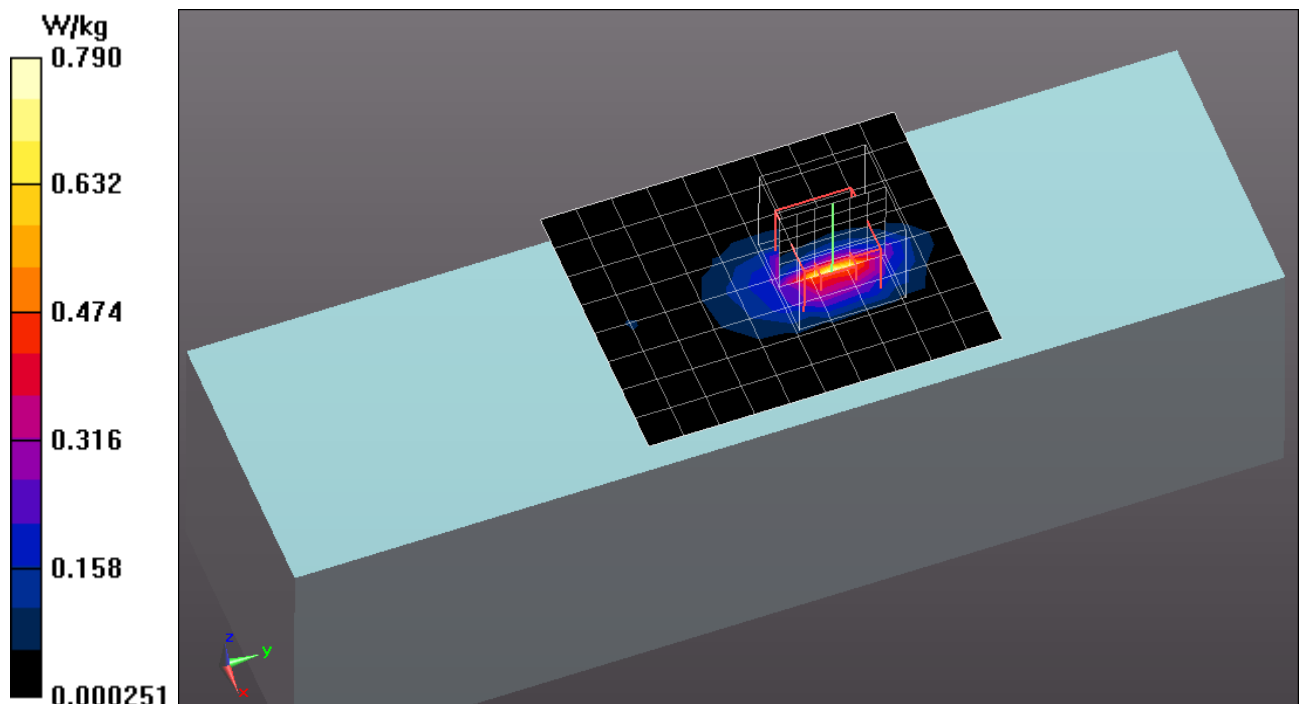
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.073 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.632 W/kg; SAR(10 g) = 0.228 W/kg

Maximum value of SAR (measured) = 0.790 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 1_OFDM_HT20-MCS0_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11n WiFi 2.4 GHz (BPSK, HT20, MCS0) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.05

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.949$ S/m; $\epsilon_r = 52.648$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2412 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.601 W/kg

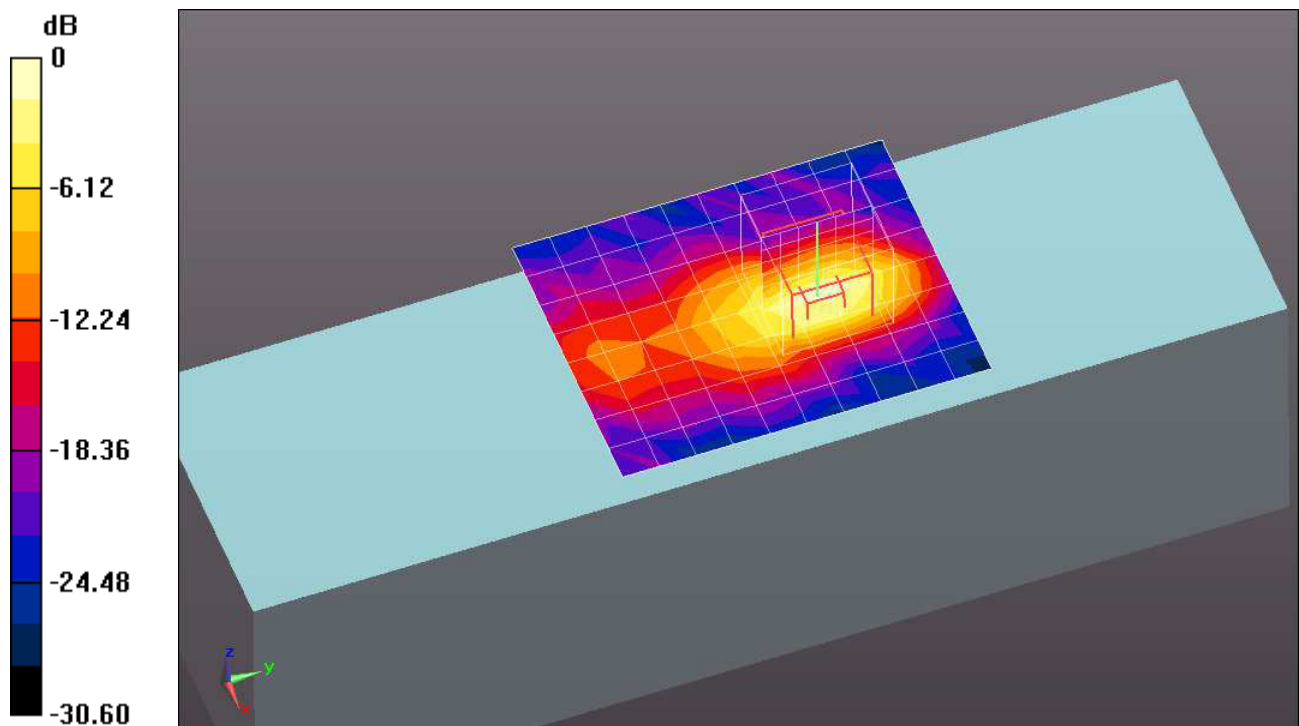
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.981 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.565 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.710 W/kg



0 dB = 0.710 W/kg = -1.49 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 6_OFDM_HT20-MCS0_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11n WiFi 2.4 GHz (BPSK, HT20, MCS0) (0); Frequency: 2437 MHz; Duty Cycle: 1:1.05

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.994$ S/m; $\epsilon_r = 52.599$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2437 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.553 W/kg

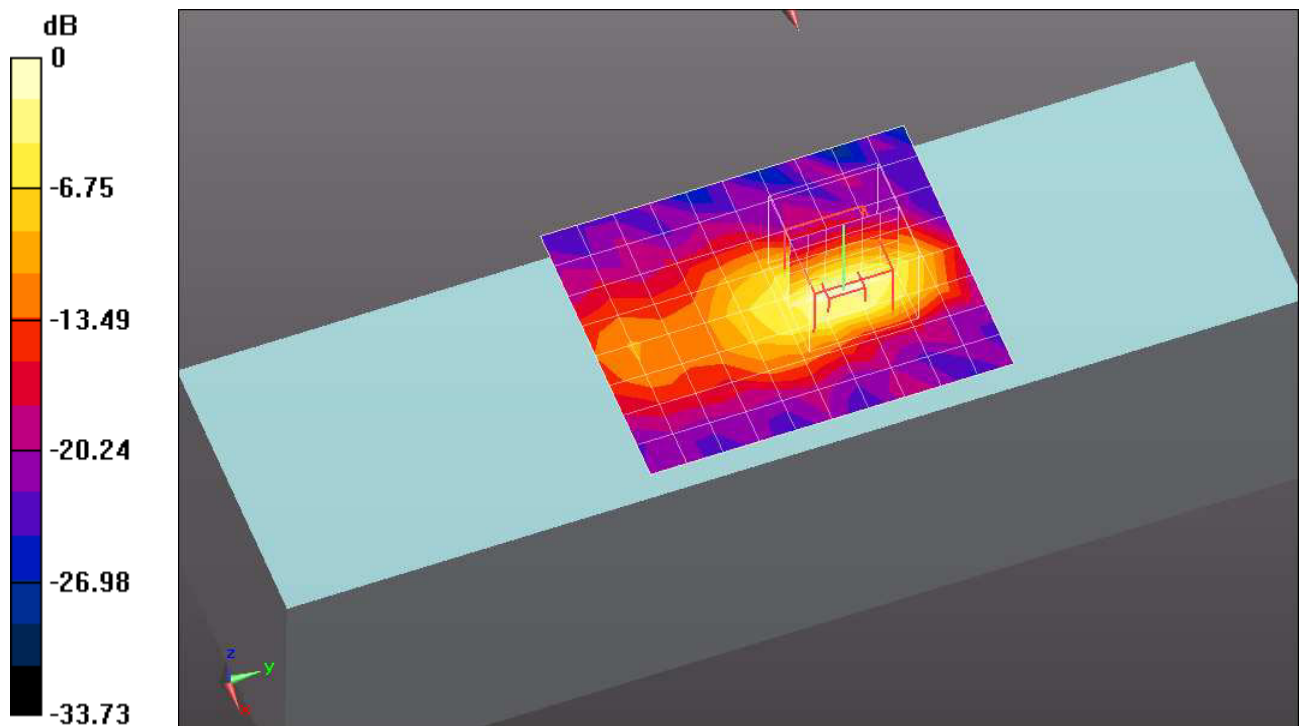
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.528 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.667 W/kg



0 dB = 0.667 W/kg = -1.76 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 11_OFDM_HT20-MCS0_ANT-0 Flat_Front_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11n WiFi 2.4 GHz (BPSK, HT20, MCS0) (0); Frequency: 2462 MHz; Duty Cycle: 1:1.05

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.032$ S/m; $\epsilon_r = 52.559$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2462 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.556 W/kg

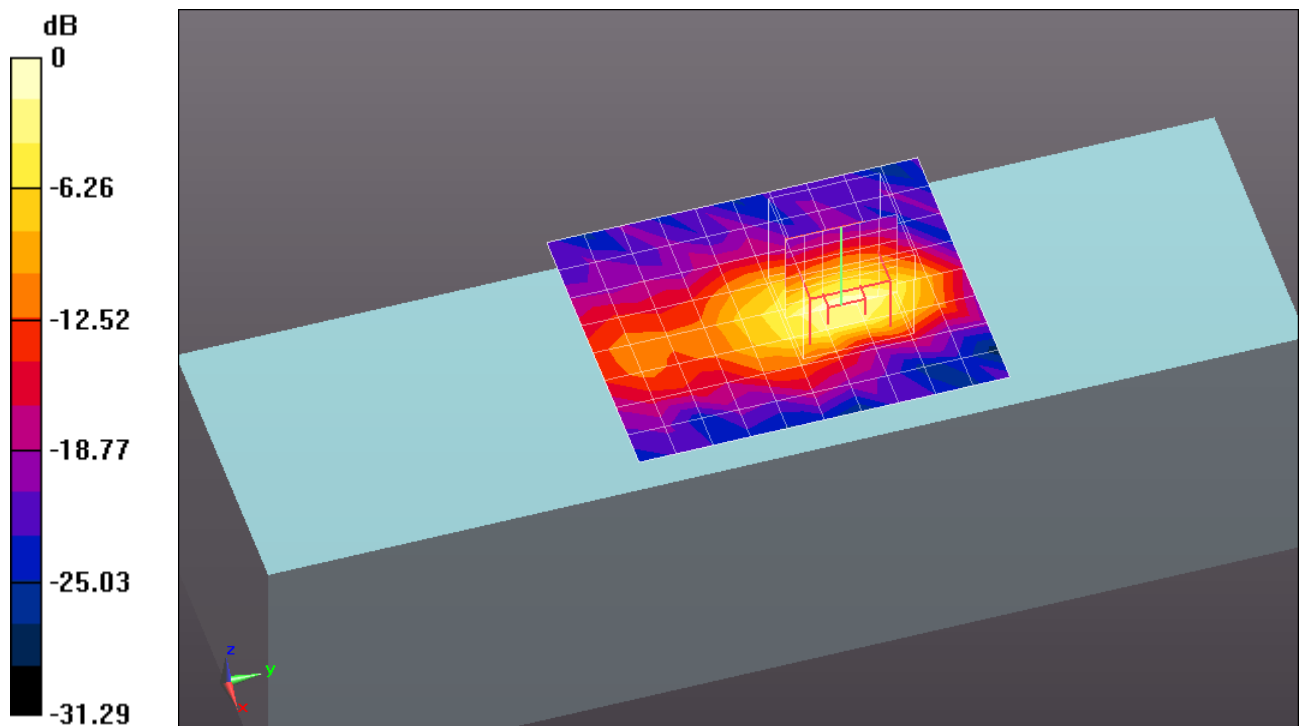
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.441 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.546 W/kg; SAR(10 g) = 0.204 W/kg

Maximum value of SAR (measured) = 0.683 W/kg



0 dB = 0.683 W/kg = -1.66 dBW/kg

Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 1_DSSS_1Mbps Flat_ANT1-45_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1Mbps) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.01

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.949$ S/m; $\epsilon_r = 52.648$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2412 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.707 W/kg

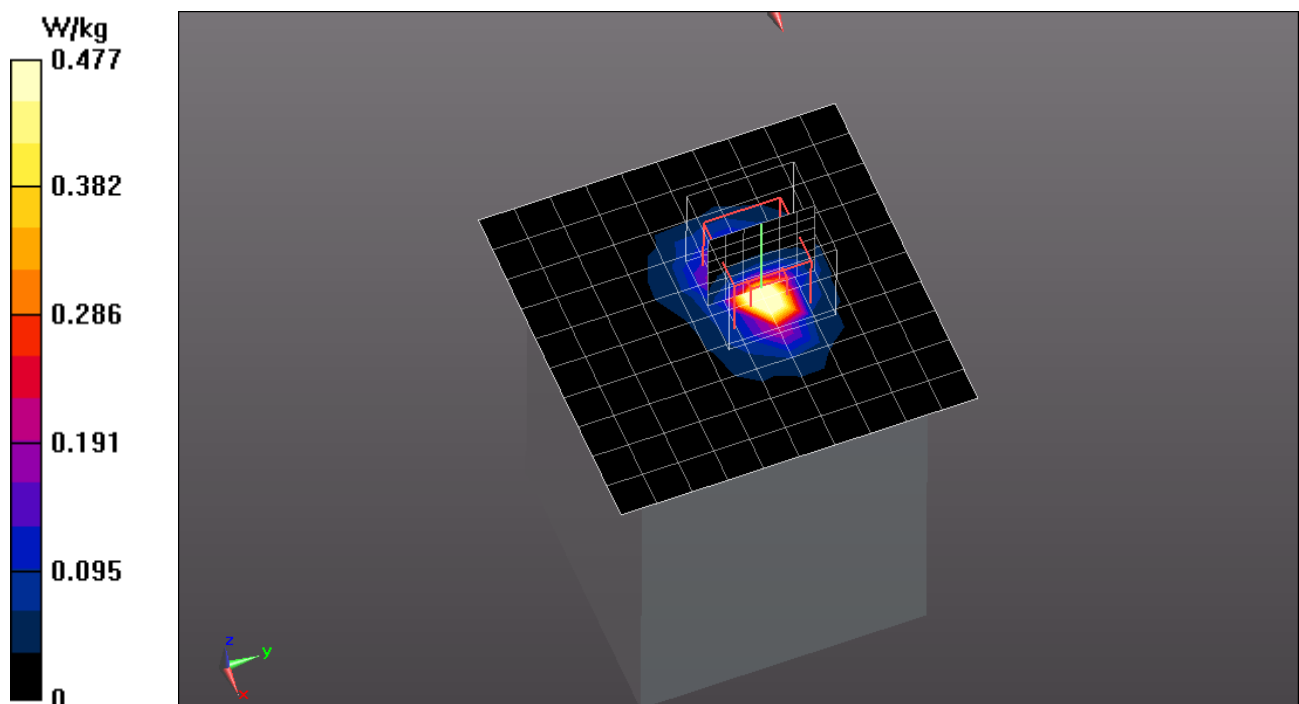
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.994 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.386 W/kg; SAR(10 g) = 0.142 W/kg

Maximum value of SAR (measured) = 0.477 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN_2.4G_CH 1_OFDM_6Mbps Flat_ANT1-45_0mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, IEEE 802.11g WiFi 2.4 GHz (OFDM, 6Mbps) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.05

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.949$ S/m; $\epsilon_r = 52.648$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(7.79, 7.79, 7.79) @ 2412 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.677 W/kg

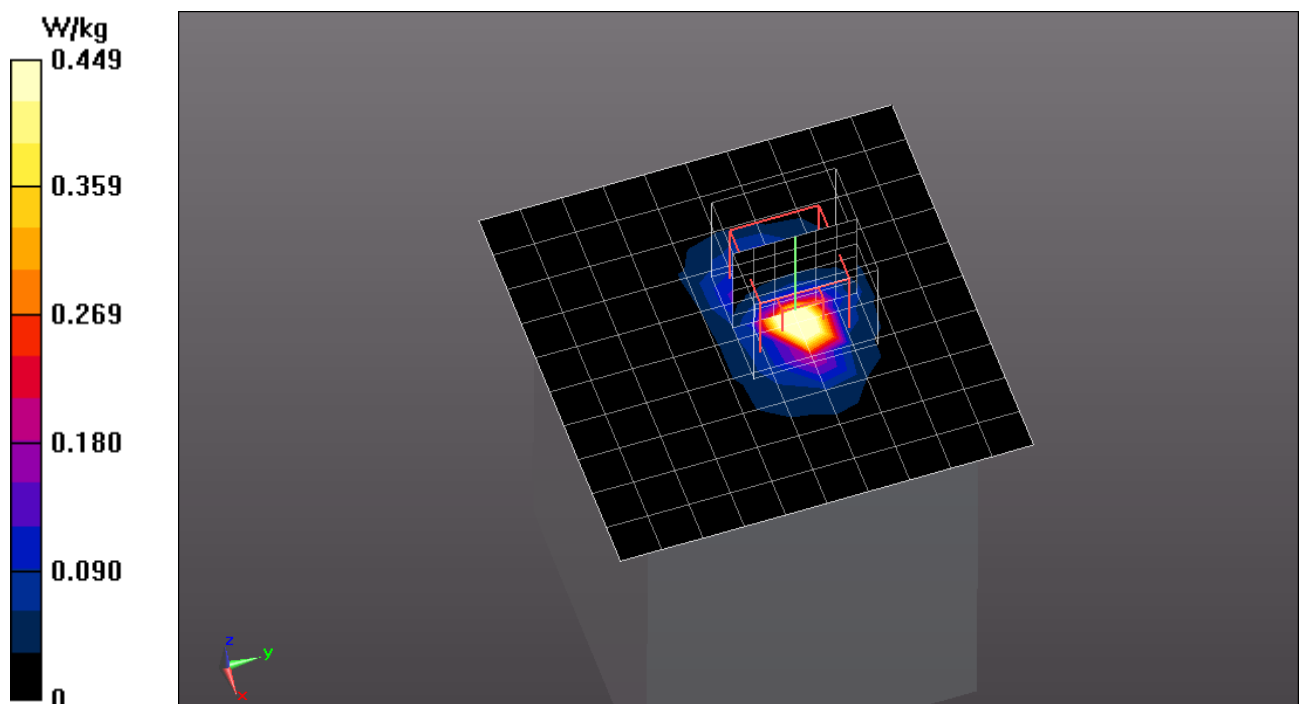
Configuration/BLK2GO/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.454 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.360 W/kg; SAR(10 g) = 0.128 W/kg

Maximum value of SAR (measured) = 0.449 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-52_BPSK_6Mbit ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.355$ S/m; $\epsilon_r = 47.83$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5260 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.35 W/kg

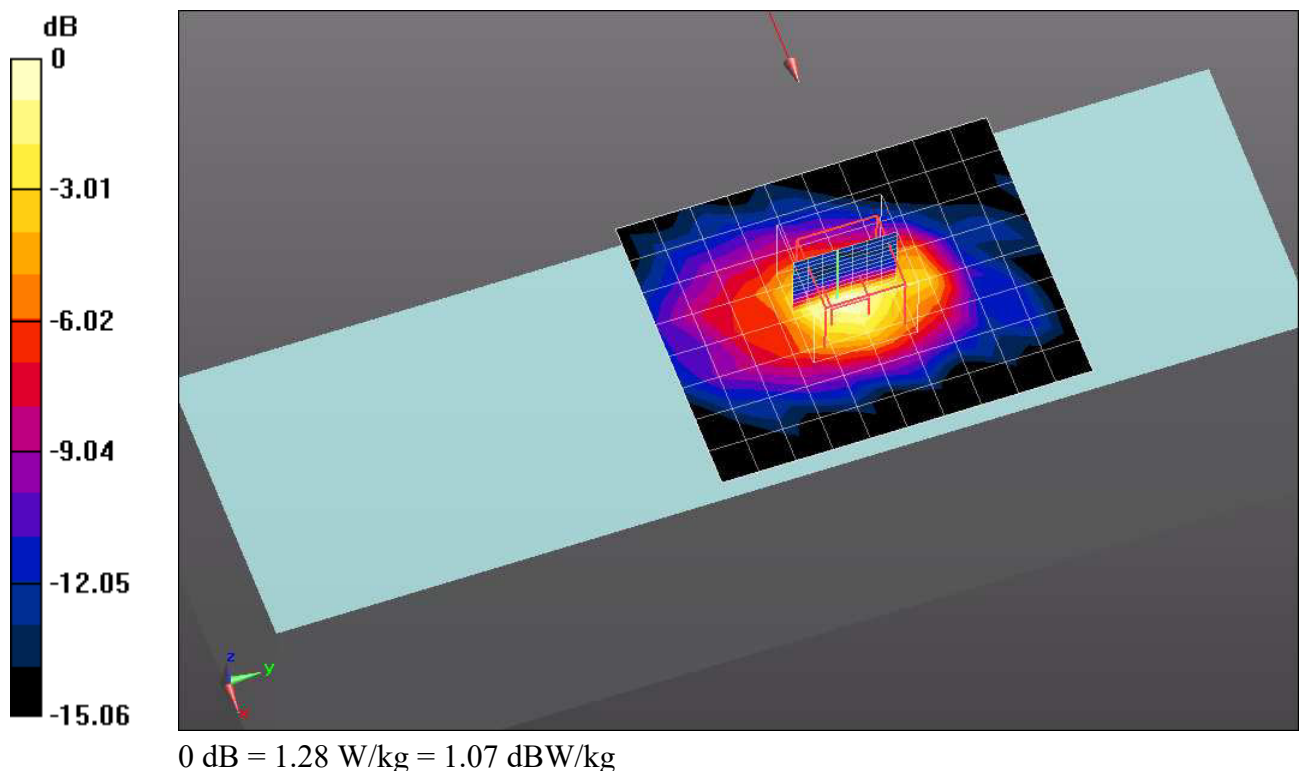
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.488 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.57 W/kg

SAR(1 g) = 0.710 W/kg; SAR(10 g) = 0.289 W/kg

Maximum value of SAR (measured) = 1.28 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-60_BPSK_6Mbit ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.462 \text{ S/m}$; $\epsilon_r = 48.337$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5300 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.15 W/kg

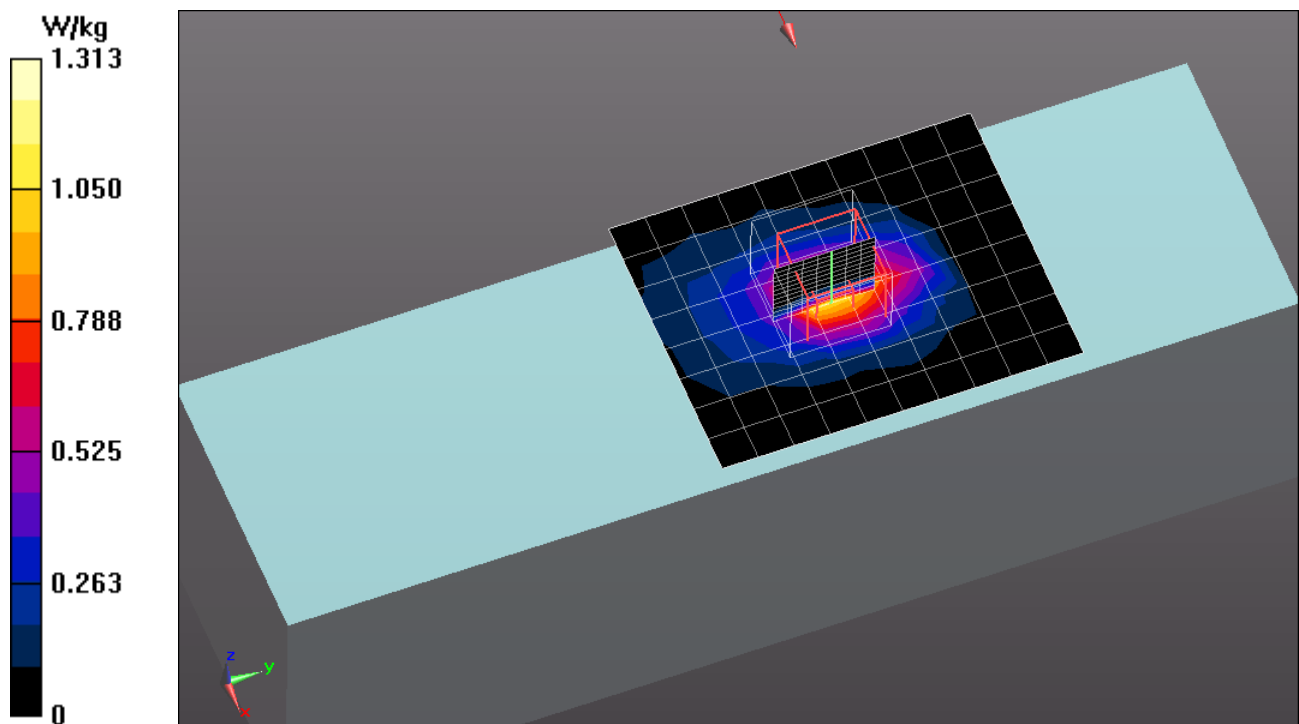
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 5.457 V/m ; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 2.85 W/kg

SAR(1 g) = 0.690 W/kg ; SAR(10 g) = 0.236 W/kg

Maximum value of SAR (measured) = 1.31 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-100_BPSK_6Mbit ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.785$ S/m; $\epsilon_r = 47.556$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5500 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.744 W/kg

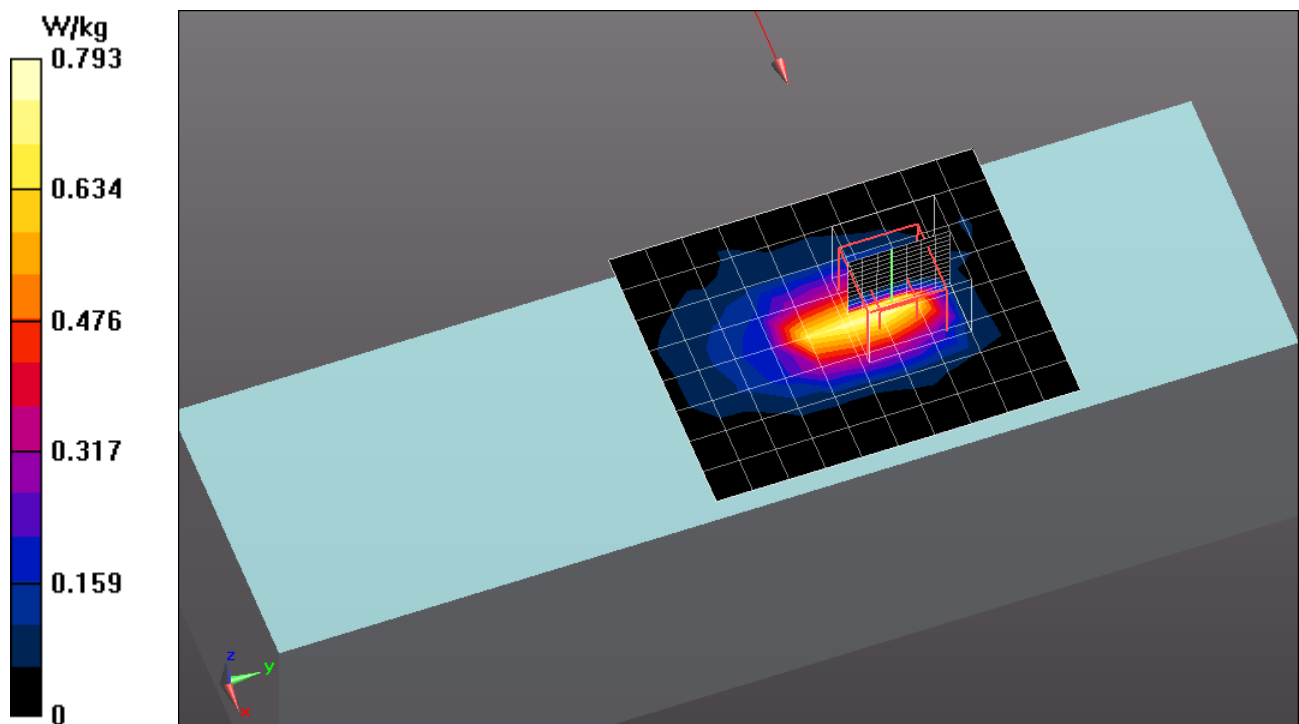
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.791 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 2.10 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.153 W/kg

Maximum value of SAR (measured) = 0.793 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-116_BPSK_6Mbit ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5580$ MHz; $\sigma = 5.858$ S/m; $\epsilon_r = 47.52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5580 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.891 W/kg

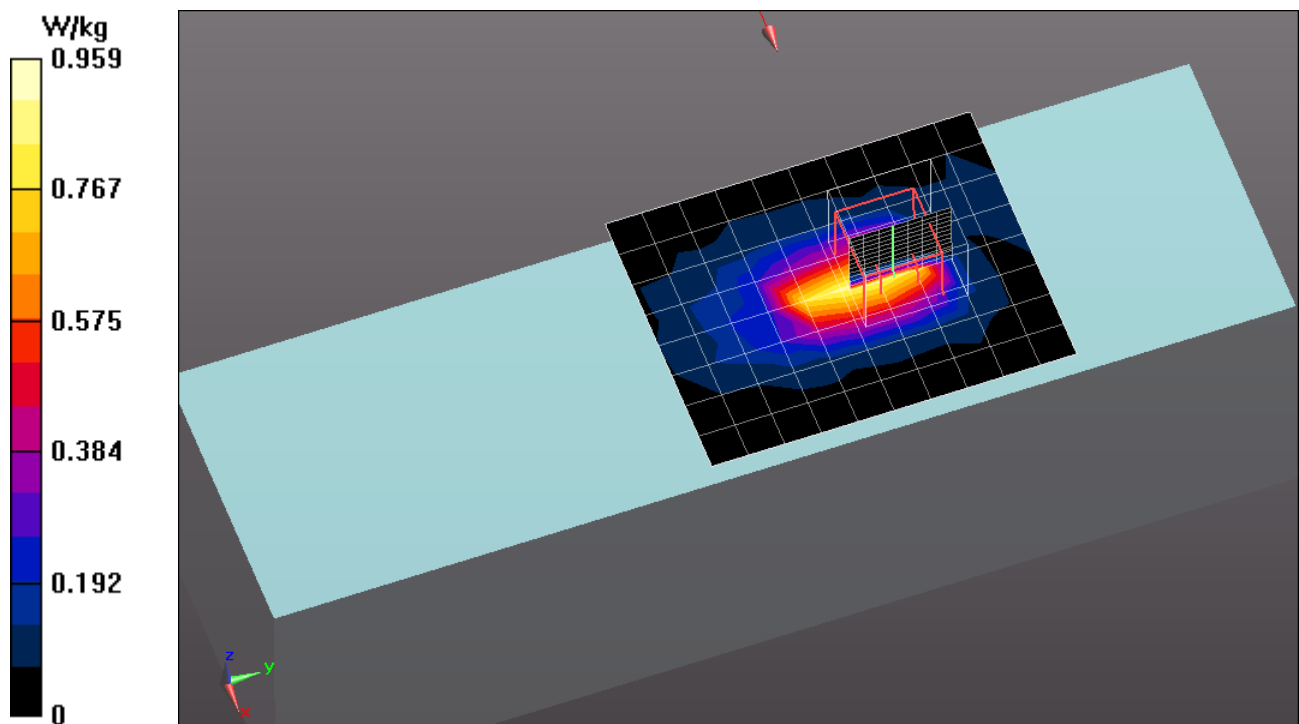
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.413 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.09 W/kg

SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.181 W/kg

Maximum value of SAR (measured) = 0.959 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-124_BPSK_6Mbit ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.893$ S/m; $\epsilon_r = 47.572$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5600 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.873 W/kg

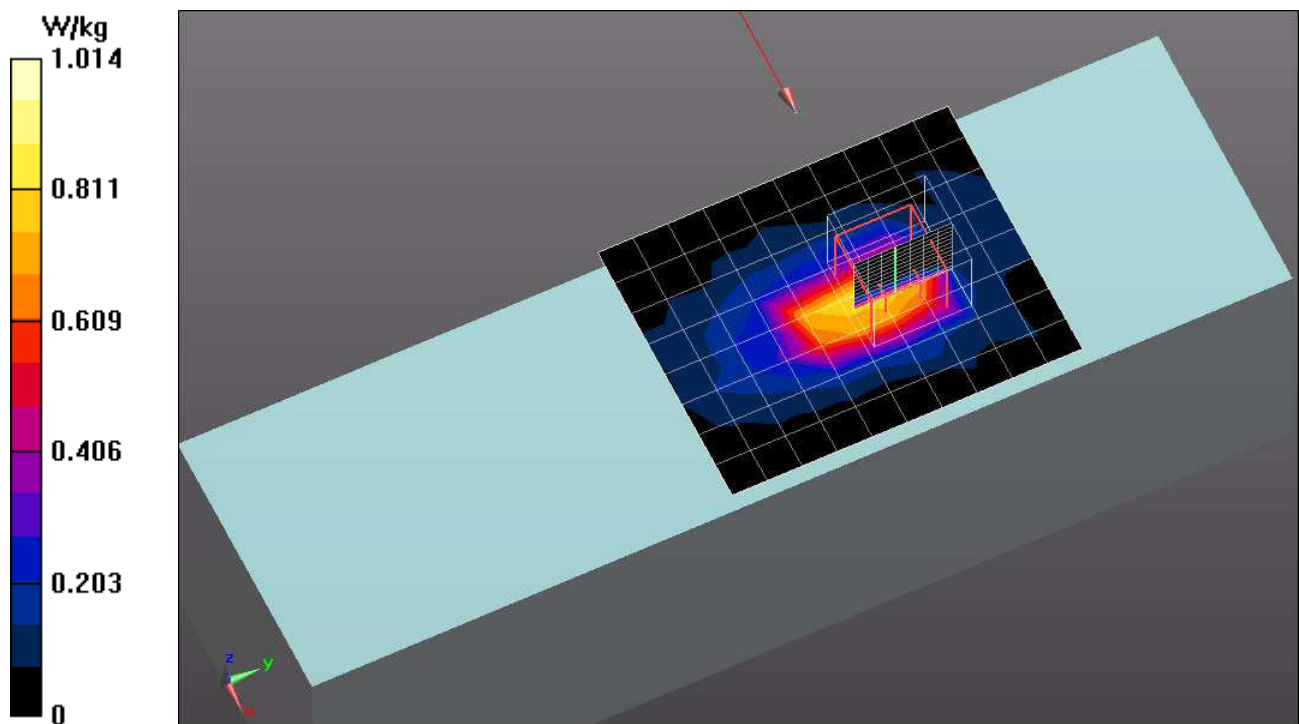
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.175 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.97 W/kg

SAR(1 g) = 0.522 W/kg; SAR(10 g) = 0.182 W/kg

Maximum value of SAR (measured) = 1.01 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-140_BPSK_6Mbit ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5700 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 6.025 \text{ S/m}$; $\epsilon_r = 47.276$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.14, 4.14, 4.14) @ 5700 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.976 W/kg

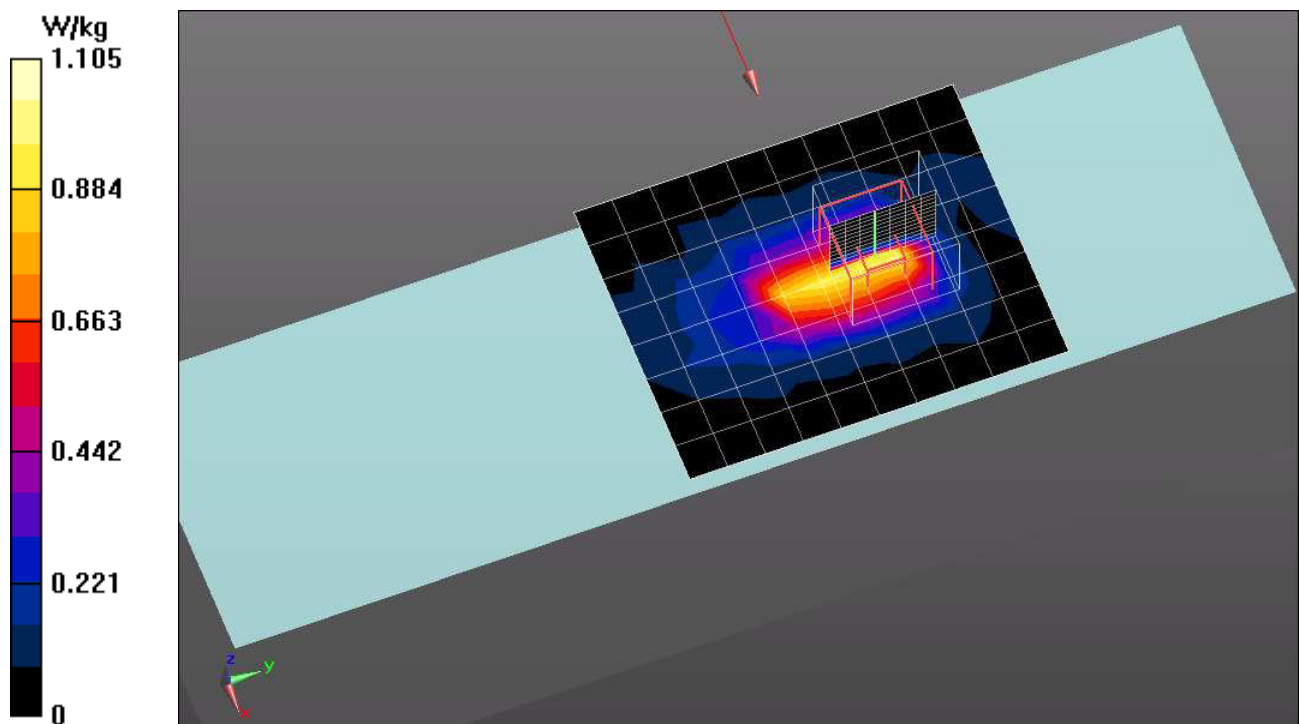
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.534 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.48 W/kg

SAR(1 g) = 0.569 W/kg ; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 1.11 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-52_BPSK_HT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.355$ S/m; $\epsilon_r = 47.83$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5260 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.931 W/kg

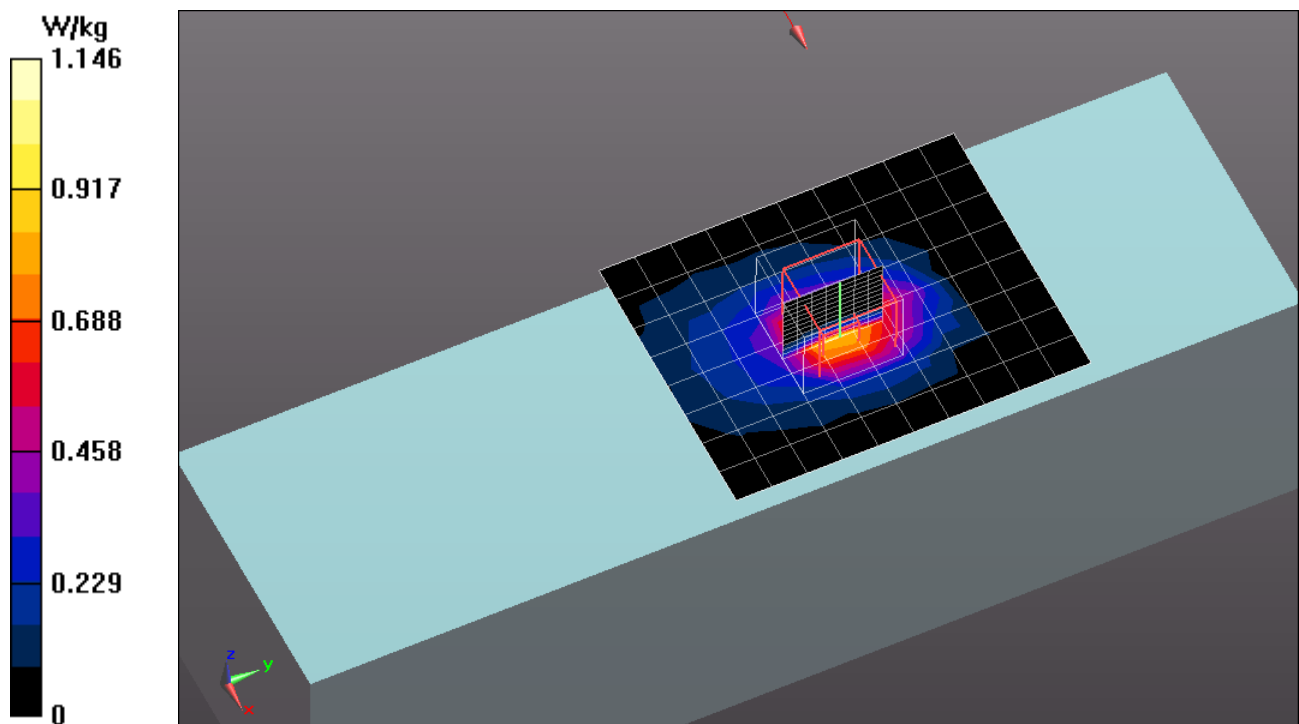
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.303 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 2.34 W/kg

SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.211 W/kg

Maximum value of SAR (measured) = 1.15 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-60_BPSK_HT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.462$ S/m; $\epsilon_r = 48.337$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5300 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.04 W/kg

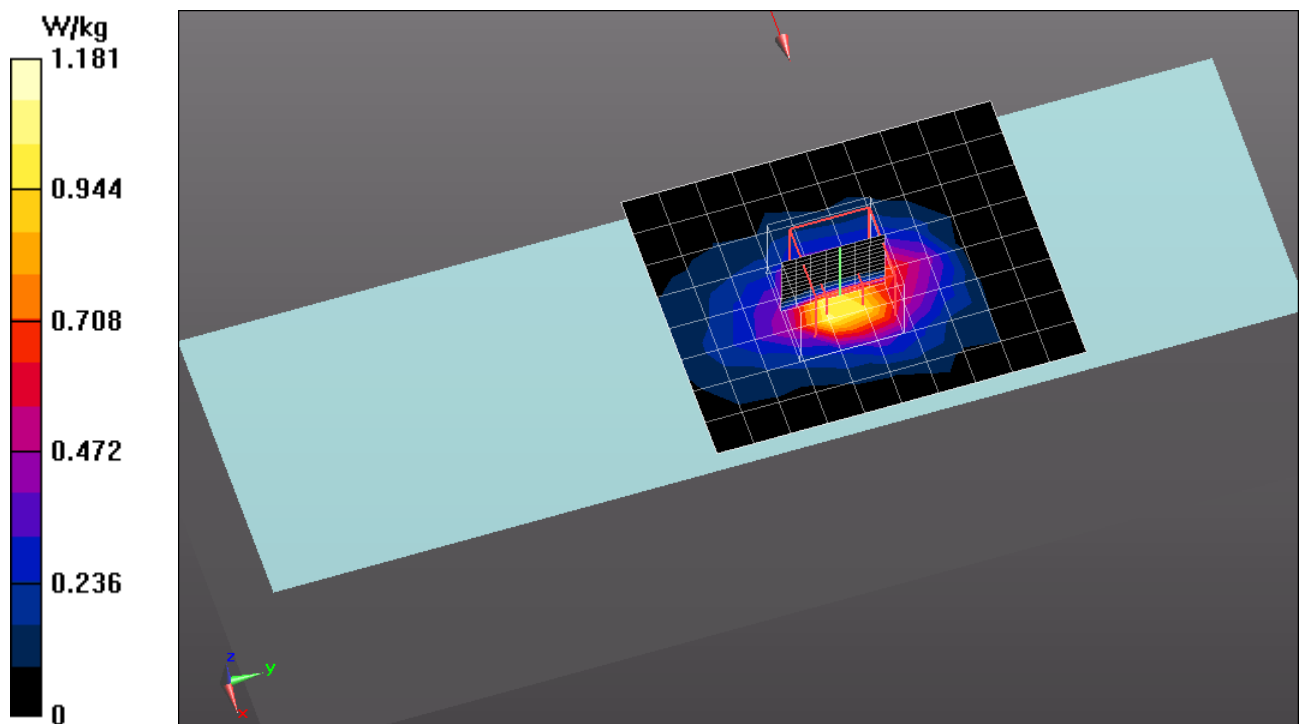
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.491 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 2.45 W/kg

SAR(1 g) = 0.617 W/kg; SAR(10 g) = 0.206 W/kg

Maximum value of SAR (measured) = 1.18 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-100_BPSK_HT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500 \text{ MHz}$; $\sigma = 5.785 \text{ S/m}$; $\epsilon_r = 47.556$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5500 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.650 W/kg

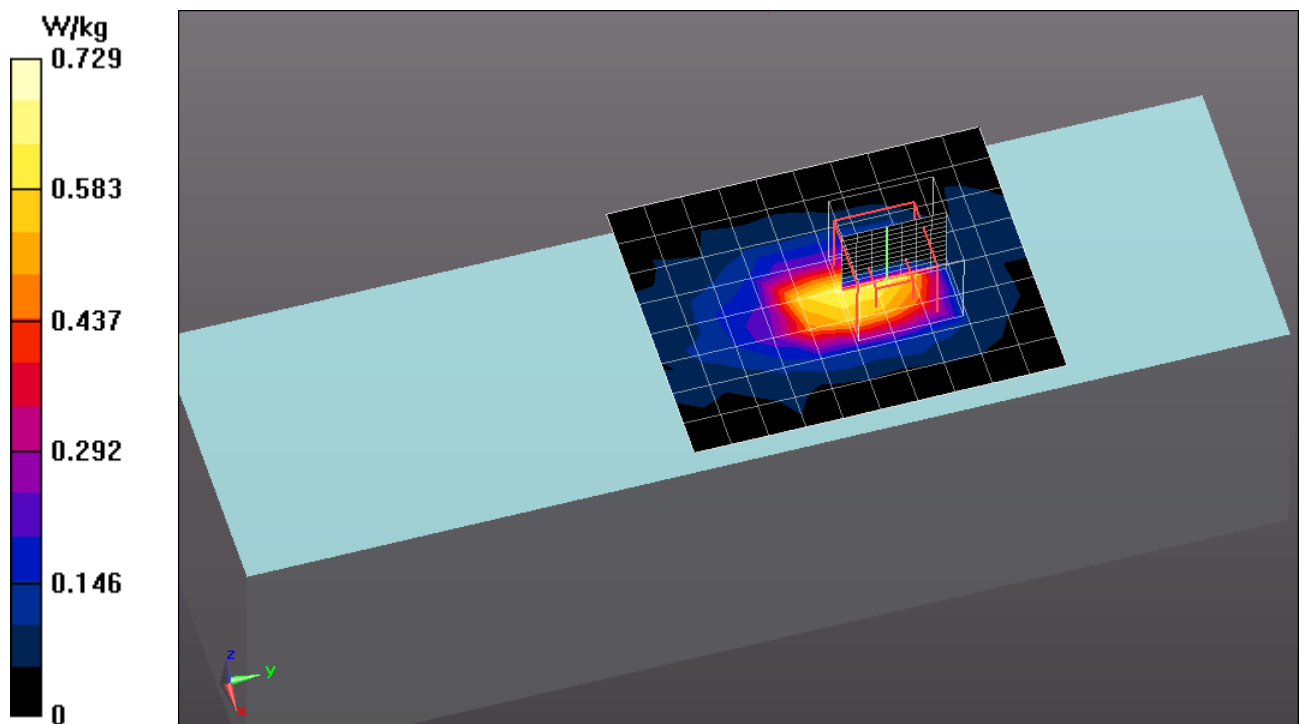
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 3.802 V/m ; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 0.389 W/kg ; SAR(10 g) = 0.142 W/kg

Maximum value of SAR (measured) = 0.729 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-116_BPSK_HT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5580$ MHz; $\sigma = 5.858$ S/m; $\epsilon_r = 47.52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5580 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.778 W/kg

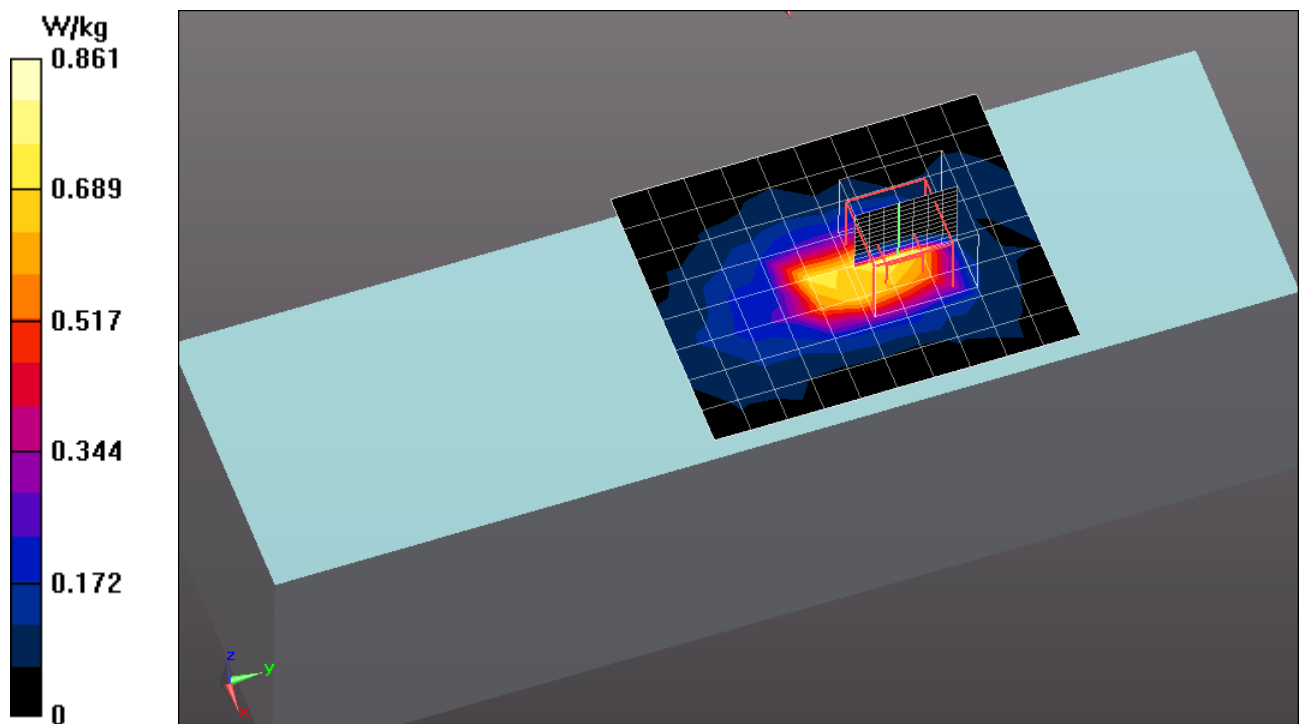
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.262 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.165 W/kg

Maximum value of SAR (measured) = 0.861 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-124_BPSK_HT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.893$ S/m; $\epsilon_r = 47.572$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5600 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.816 W/kg

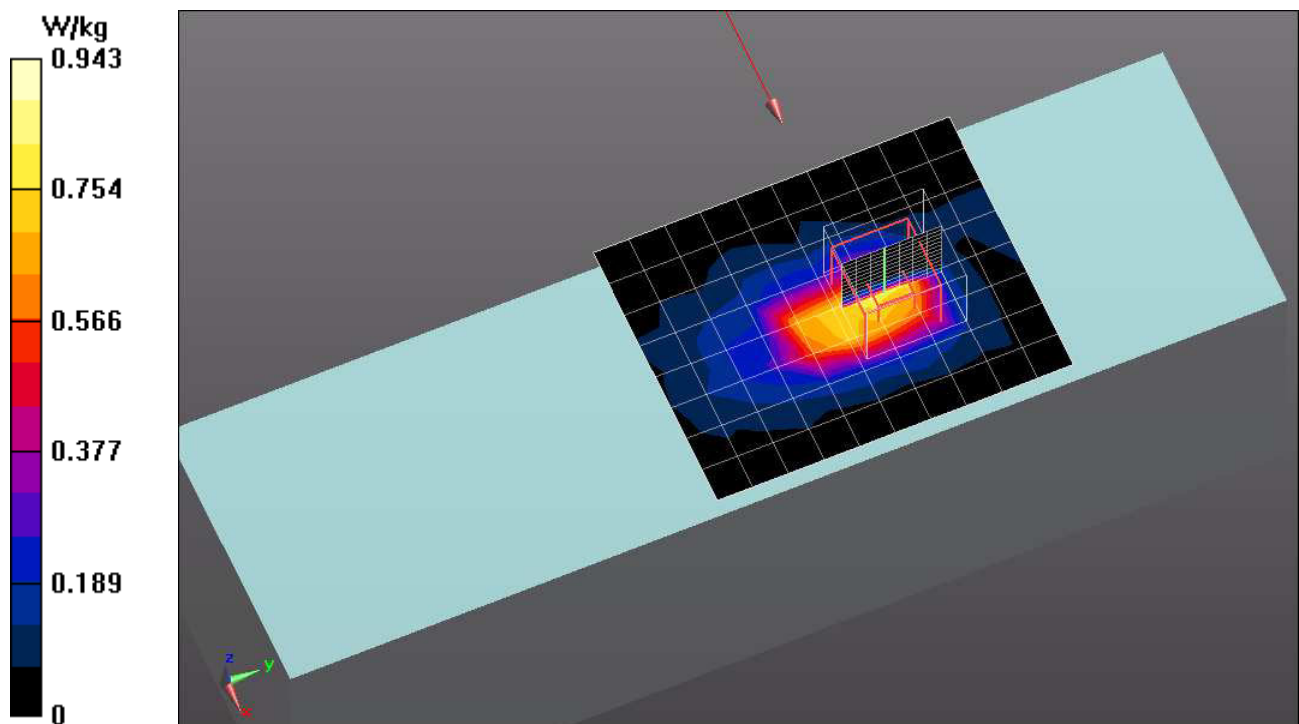
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.072 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 0.501 W/kg; SAR(10 g) = 0.179 W/kg

Maximum value of SAR (measured) = 0.943 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-140_BPSK_HT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5700 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 6.025 \text{ S/m}$; $\epsilon_r = 47.276$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.14, 4.14, 4.14) @ 5700 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.910 W/kg

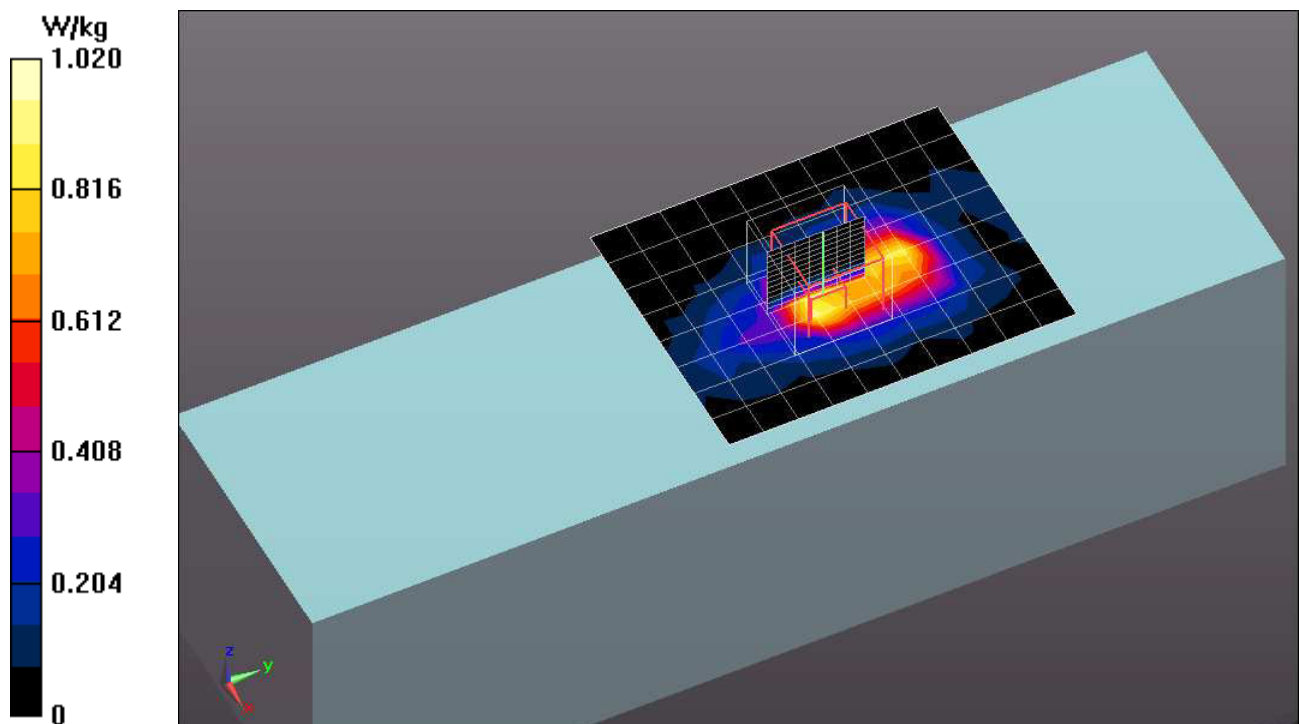
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.291 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 2.22 W/kg

SAR(1 g) = 0.543 W/kg ; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-52_BPSK_VHT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.385$ S/m; $\epsilon_r = 47.711$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5260 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.872 W/kg

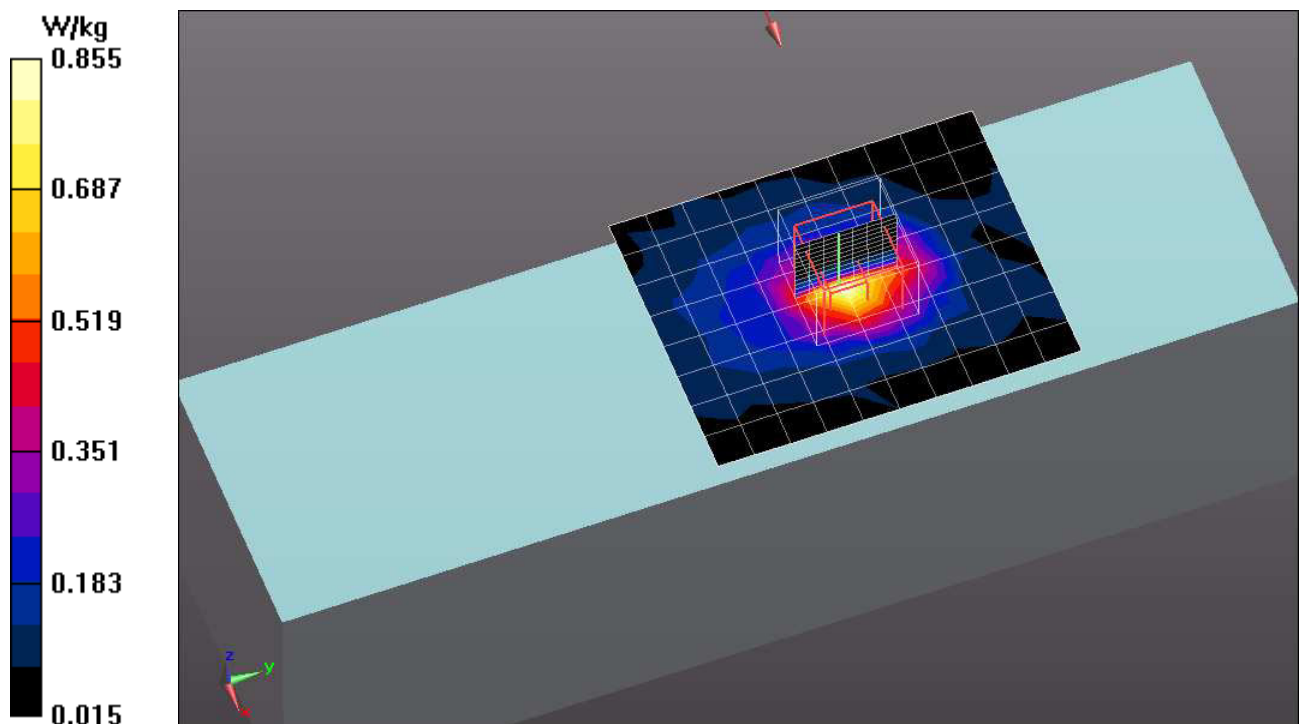
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.061 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.197 W/kg

Maximum value of SAR (measured) = 0.855 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-60_BPSK_VHT20_MCS5 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.533 \text{ S/m}$; $\epsilon_r = 48.285$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5300 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.892 W/kg

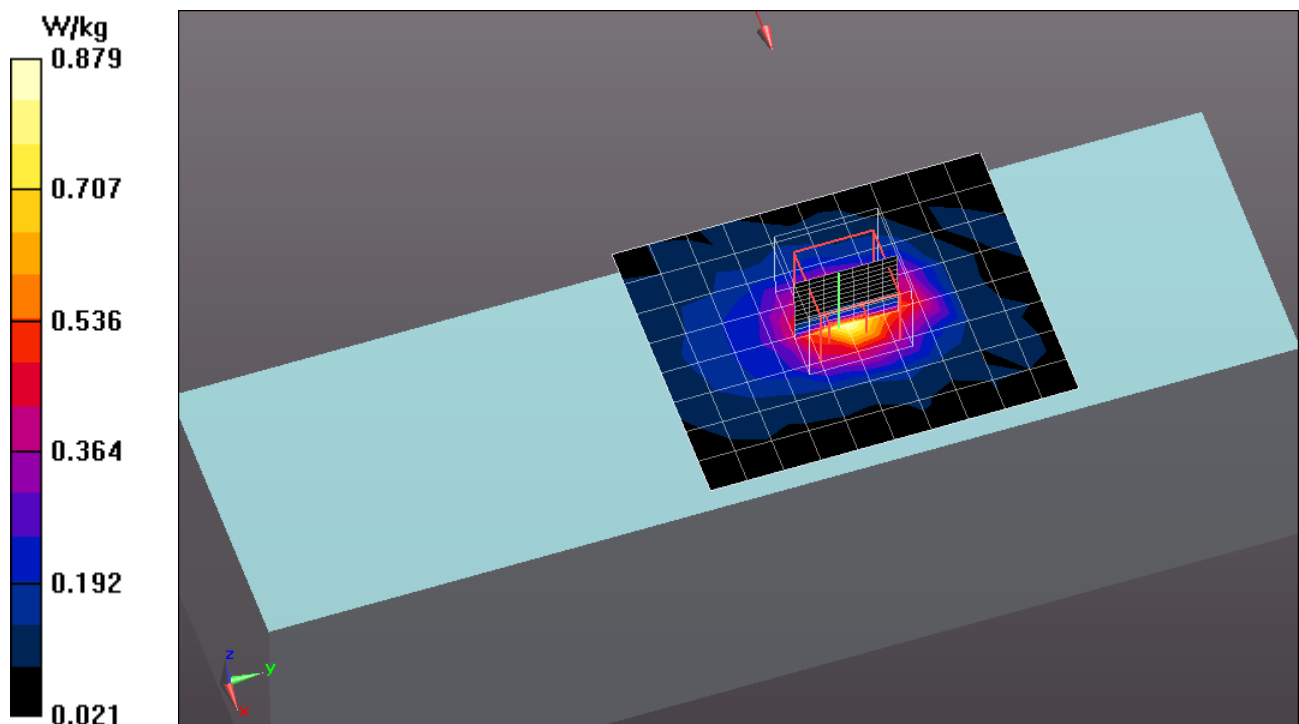
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 5.022 V/m ; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.88 W/kg

SAR(1 g) = 0.488 W/kg ; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.879 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-116_BPSK_VHT20_MCS0 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5580$ MHz; $\sigma = 5.858$ S/m; $\epsilon_r = 47.52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5580 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.793 W/kg

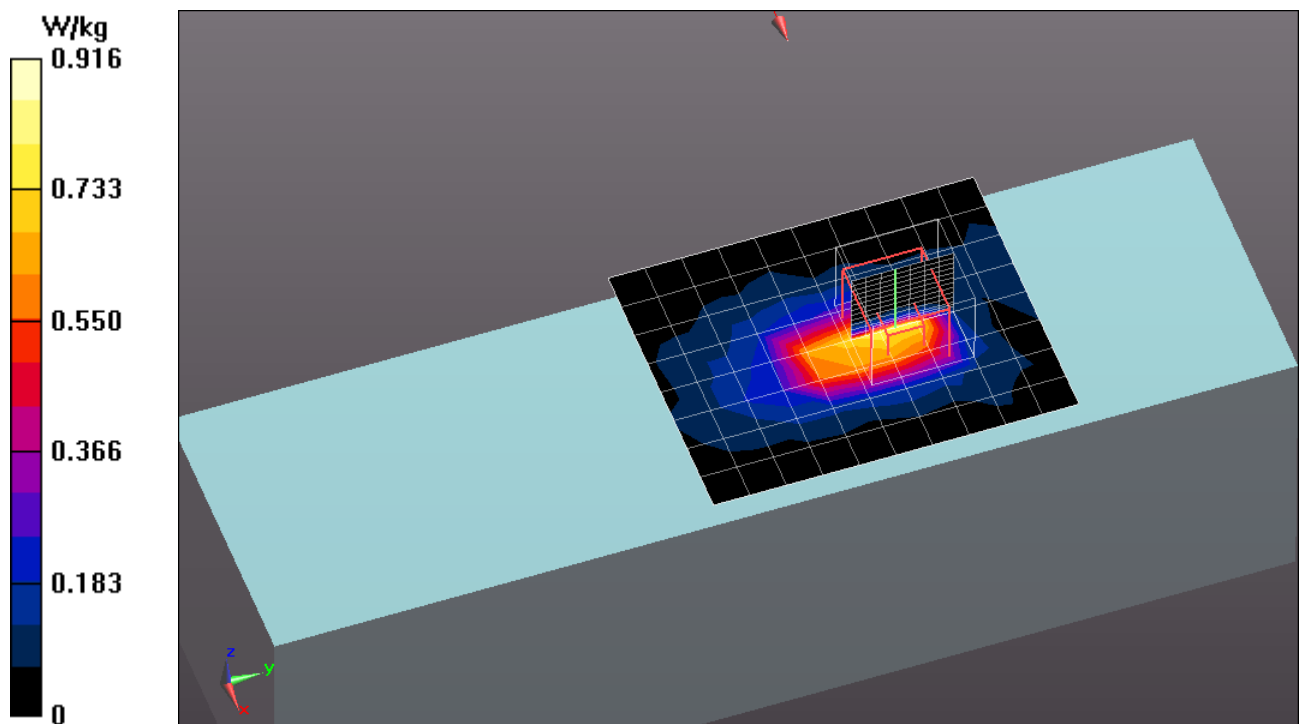
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.215 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.02 W/kg

SAR(1 g) = 0.481 W/kg; SAR(10 g) = 0.170 W/kg

Maximum value of SAR (measured) = 0.916 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-140_BPSK_VHT20_MCS5 ANT0_Flat_Front_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5700 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.964 \text{ S/m}$; $\epsilon_r = 47.352$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.14, 4.14, 4.14) @ 5700 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x11x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.735 W/kg

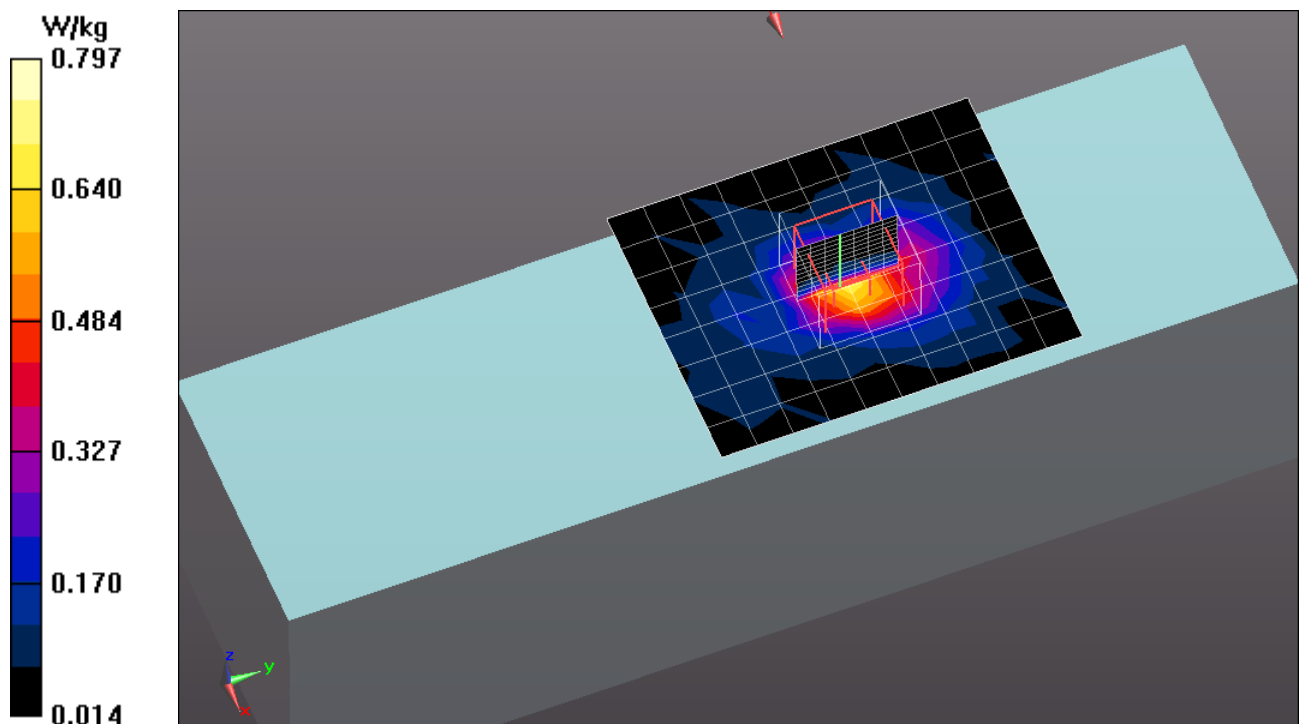
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 4.545 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 0.442 W/kg ; SAR(10 g) = 0.182 W/kg

Maximum value of SAR (measured) = 0.797 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-52_BPSK_6Mbit ANT1-45_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G EU; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.385$ S/m; $\epsilon_r = 47.711$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5260 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.317 W/kg

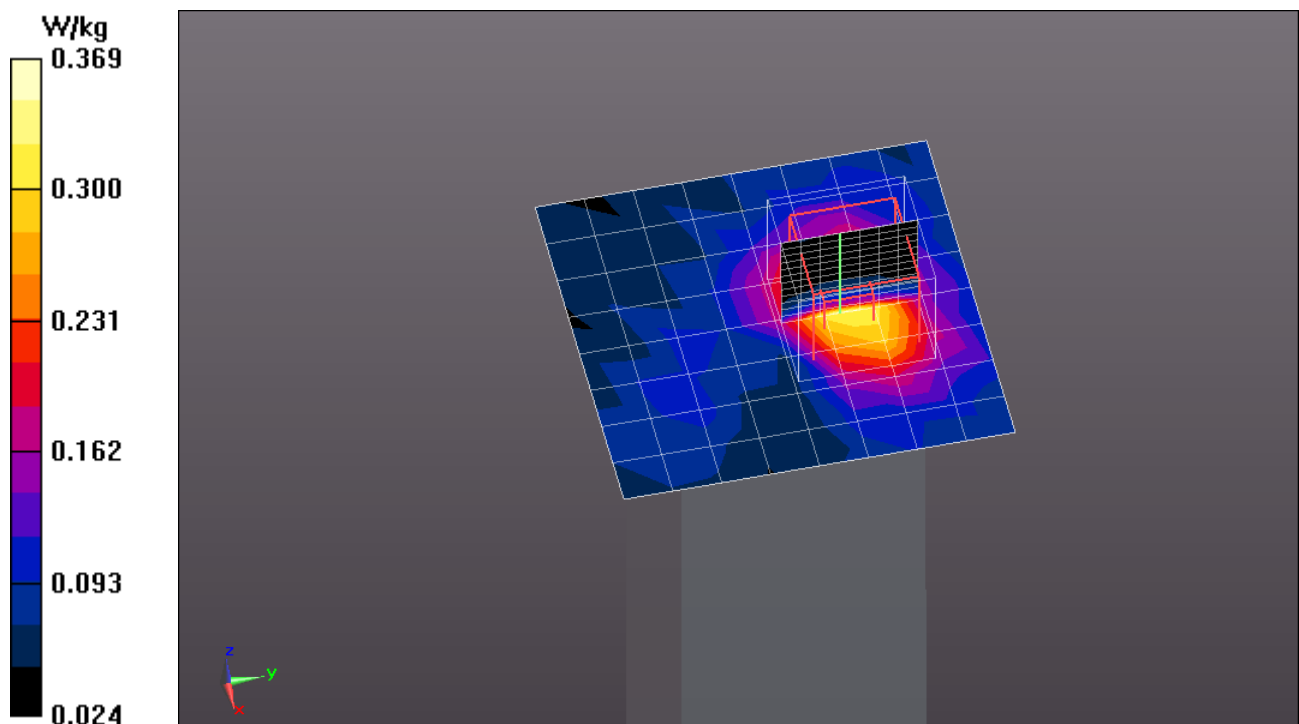
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.745 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.875 W/kg

SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.107 W/kg

Maximum value of SAR (measured) = 0.369 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2_CH-60_BPSK_6Mbit ANT1-45_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.533$ S/m; $\epsilon_r = 48.285$; $\rho = 1000$ kg/m³

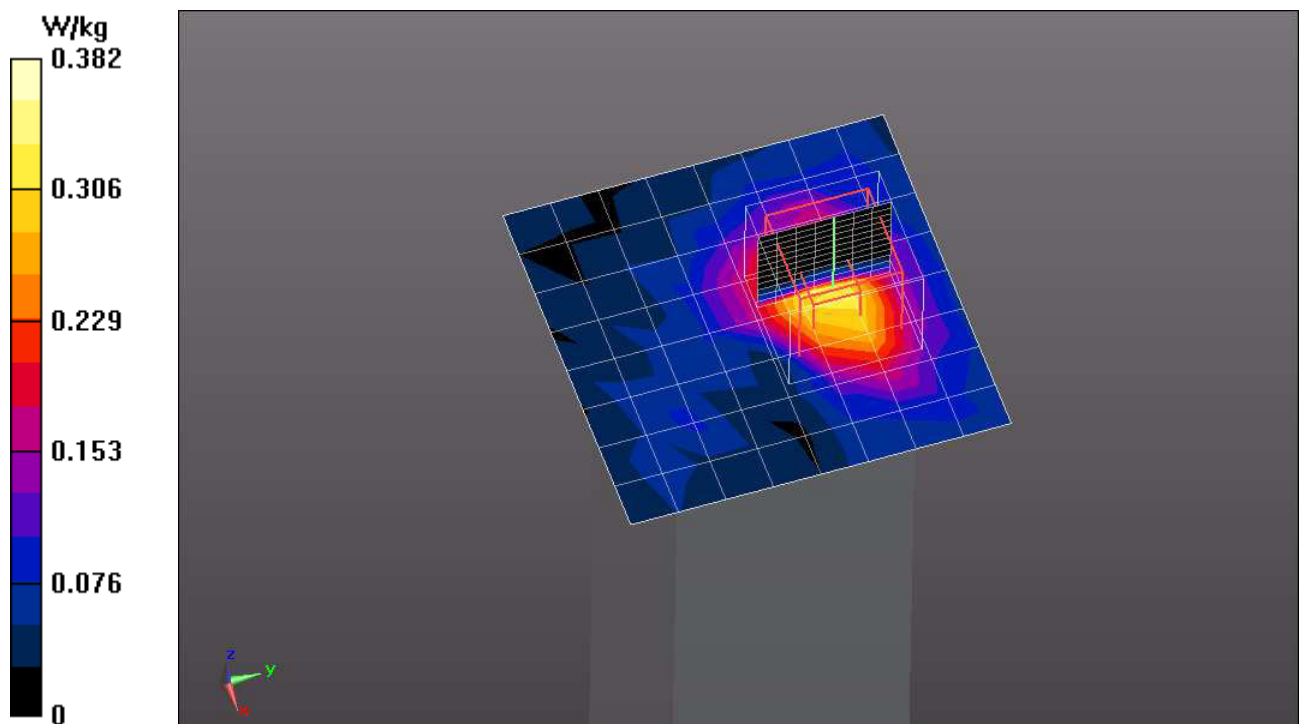
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.56, 4.56, 4.56) @ 5300 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.322 W/kg

Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.140 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.723 W/kg
SAR(1 g) = 0.199 W/kg; SAR(10 g) = 0.074 W/kg
Maximum value of SAR (measured) = 0.382 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-116_BPSK_6Mbit ANT1-45_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5580$ MHz; $\sigma = 5.823$ S/m; $\epsilon_r = 47.555$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.18, 4.18, 4.18) @ 5580 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.238 W/kg

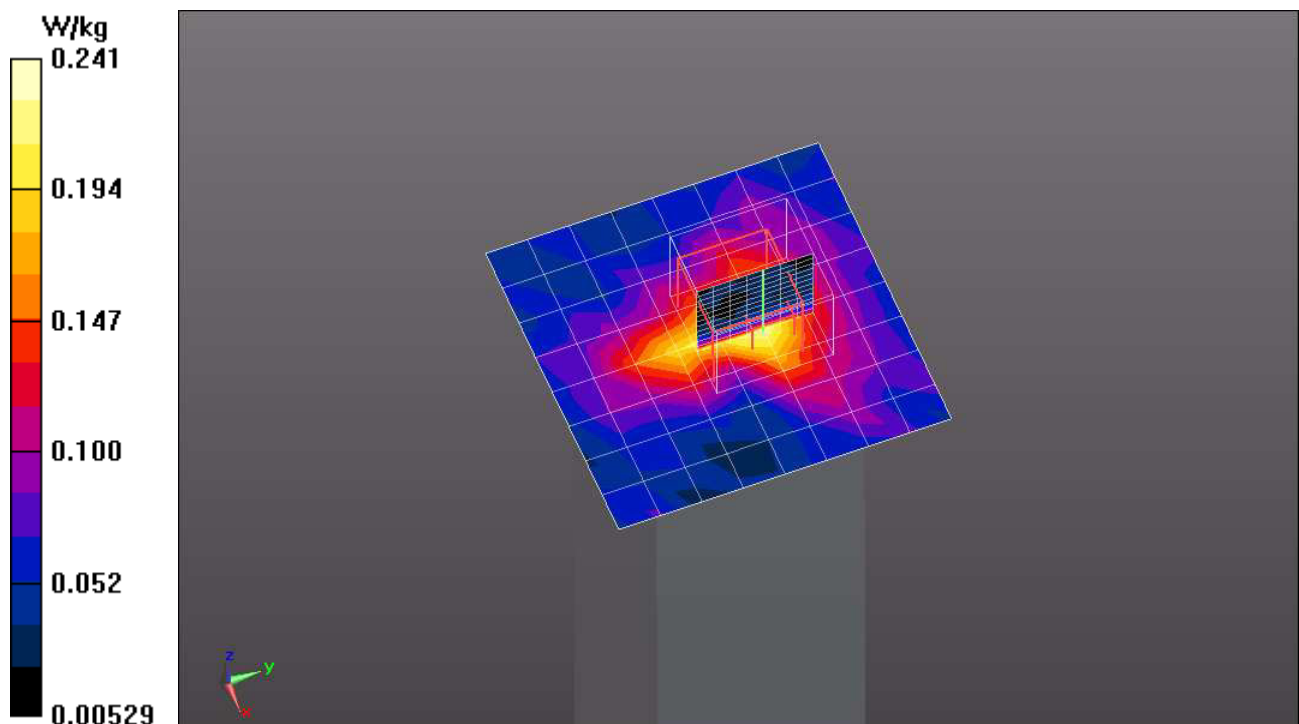
Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.733 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.667 W/kg

SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.241 W/kg



Test Laboratory: Eurofins Product Service GmbH

WLAN-5G-U-NII-2e_CH-140_BPSK_6Mbit ANT1-45_5mm

DUT: BLK2GO; Type: Imaging Laser Scanner; Serial: 3630030

Communication System: UID 0, WLAN 2.4G / 5G (0); Frequency: 5700 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.964 \text{ S/m}$; $\epsilon_r = 47.352$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3893; ConvF(4.14, 4.14, 4.14) @ 5700 MHz; Calibrated: 20.09.2019
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11.09.2019
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP: 1013
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Configuration/BLK2GO/Area Scan (9x9x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.170 W/kg

Configuration/BLK2GO/Zoom Scan (8x8x13)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 3.891 V/m ; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.469 W/kg

SAR(1 g) = 0.091 W/kg ; SAR(10 g) = 0.033 W/kg

Maximum value of SAR (measured) = 0.220 W/kg

