## Appendix B. Highest Measurement Data

Test Laboratory: DEKRA Date: 2024/11/01

**617_WLAN2.4GHz_802.11ax20-HE0_CH6_Right-side_10mm_ANT Main**

**DUT: Rugged Controller; Type: 140000**

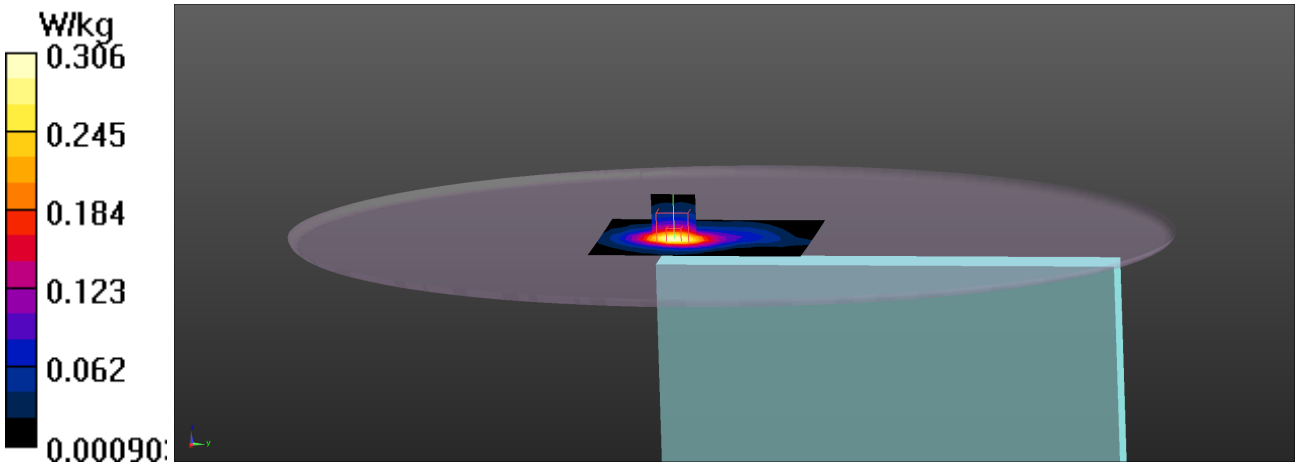
Communication System: UID 0, WLAN 2.4G; Frequency: 2437 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2437 MHz; $\sigma$ = 1.77 S/m; $\varepsilon_r$ = 39.67; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(7.15, 7.15, 7.15) @ 2437 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (10x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.306 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.87 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.374 W/kg
**SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.123 W/kg**
Smallest distance from peaks to all points 3 dB below = 17.5 mm
Ratio of SAR at M2 to SAR at M1 = 56.3%
Maximum value of SAR (measured) = 0.315 W/kg



Test Laboratory: DEKRA Date: 2024/11/01

**614_Bluetooth_BT-1M_CH78_Top_10mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

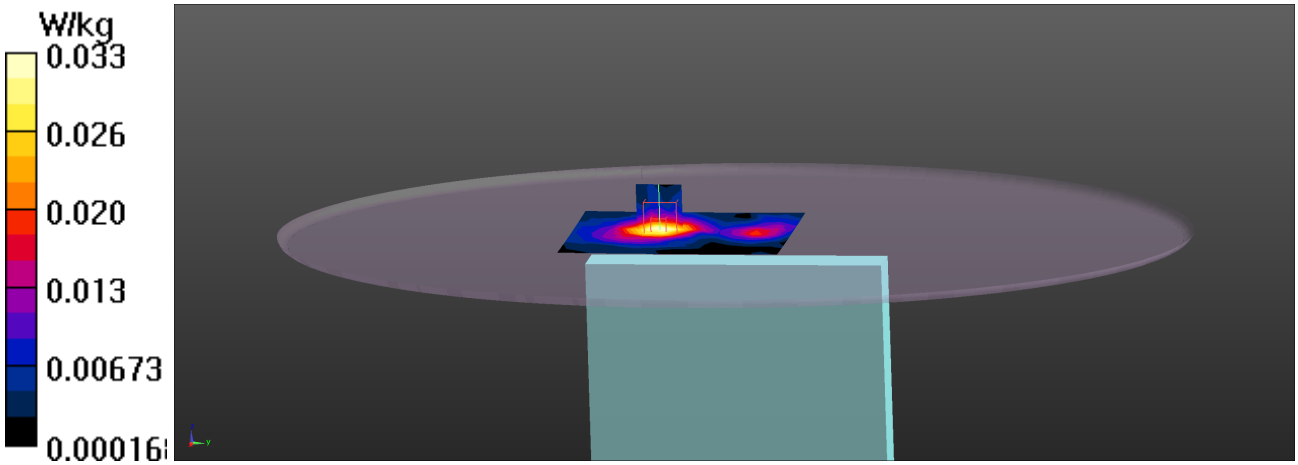
Communication System: UID 0, BT 1M&3M&BLE; Frequency: 2480 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2480 MHz; $\sigma$ = 1.82 S/m; $\varepsilon_r$ = 39.51; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(7.15, 7.15, 7.15) @ 2480 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (11x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0330 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.553 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.0430 W/kg
**SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.014 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)
Ratio of SAR at M2 to SAR at M1 = 55.3%
Maximum value of SAR (measured) = 0.0366 W/kg



Test Laboratory: DEKRA Date: 2024/11/02

**606_WLAN5GHz_802.11ac80-VHT0_CH58_Top_10mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

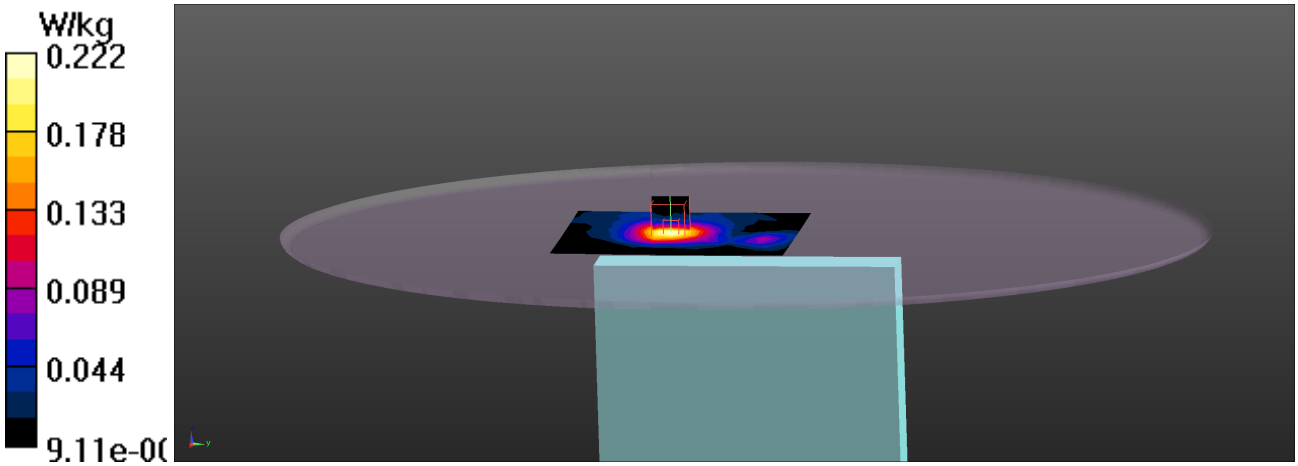
Communication System: UID 0, WLAN 5G; Frequency: 5290 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 5290 MHz; $\sigma$ = 4.73 S/m; $\varepsilon_r$ = 35.71; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(4.71, 4.71, 4.71) @ 5290 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (13x16x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.222 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.906 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.359 W/kg
**SAR(1 g) = 0.120 W/kg; SAR(10 g) = 0.057 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 12 mm)
Ratio of SAR at M2 to SAR at M1 = 70.5%
Maximum value of SAR (measured) = 0.237 W/kg



Test Laboratory: DEKRA Date: 2024/11/02

**607_WLAN5GHz_802.11ac80-VHT0_CH106_Top_10mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

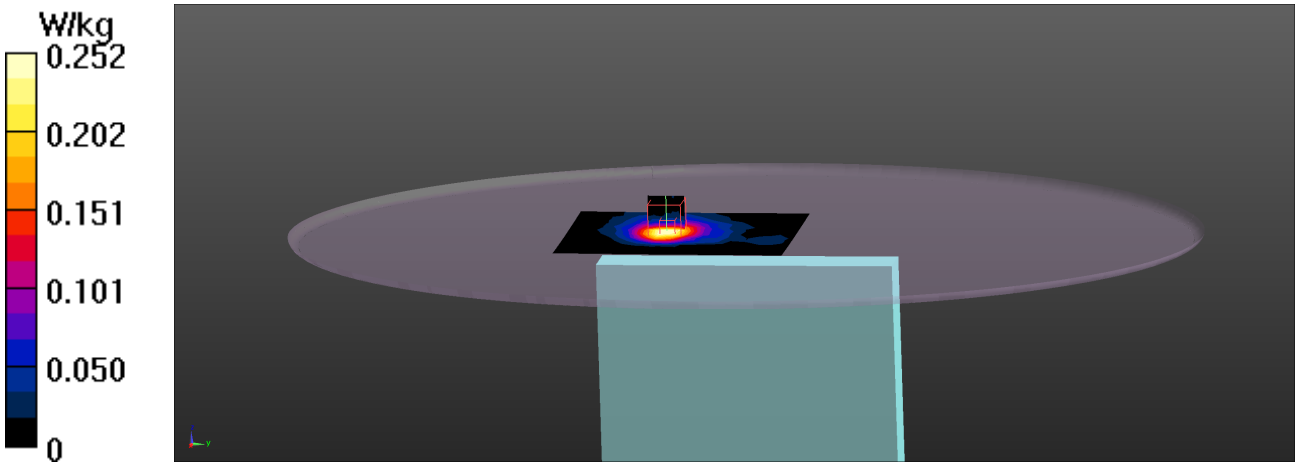
Communication System: UID 0, WLAN 5G; Frequency: 5530 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 5530 MHz; $\sigma$ = 5.06 S/m; $\varepsilon_r$ = 35.05; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(4.41, 4.41, 4.41) @ 5530 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (13x16x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.252 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 8.052 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.422 W/kg
**SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.062 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 12 mm)
Ratio of SAR at M2 to SAR at M1 = 65.8%
Maximum value of SAR (measured) = 0.273 W/kg



Test Laboratory: DEKRA Date: 2024/11/02

**608_WLAN5GHz_802.11ac80-VHT0_CH155_Top_10mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

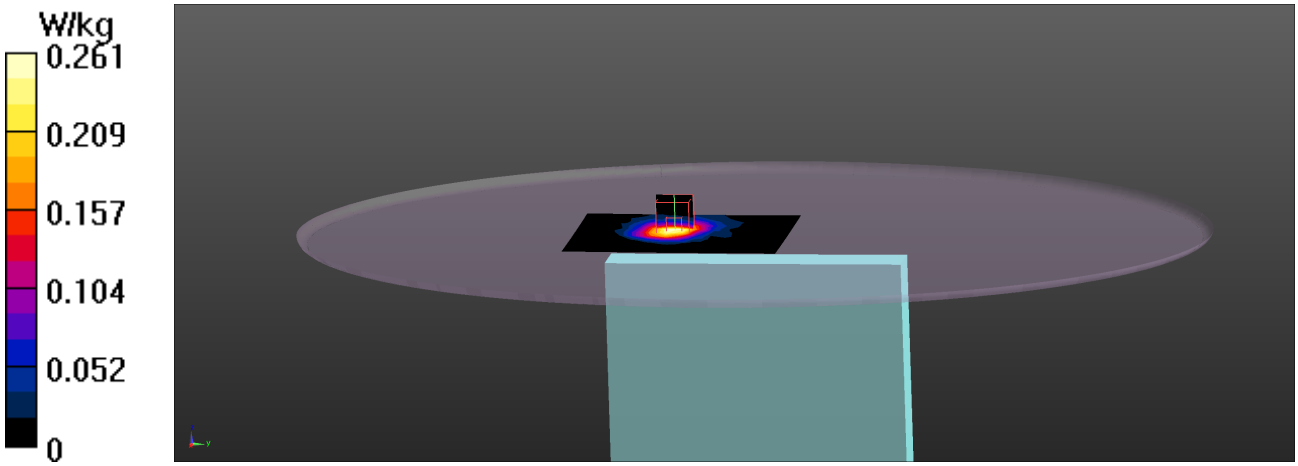
Communication System: UID 0, WLAN 5G; Frequency: 5775 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 5775 MHz; $\sigma$ = 5.38 S/m; $\varepsilon_r$ = 34.38; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(4.6, 4.6, 4.6) @ 5775 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (12x15x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.261 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.866 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.457 W/kg
**SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.059 W/kg**
Smallest distance from peaks to all points 3 dB below = 15.4 mm
Ratio of SAR at M2 to SAR at M1 = 63.9%
Maximum value of SAR (measured) = 0.275 W/kg



Test Laboratory: DEKRA Date: 2024/10/07

**226_WCDMA B2_RMC_CH9400_Back_30mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

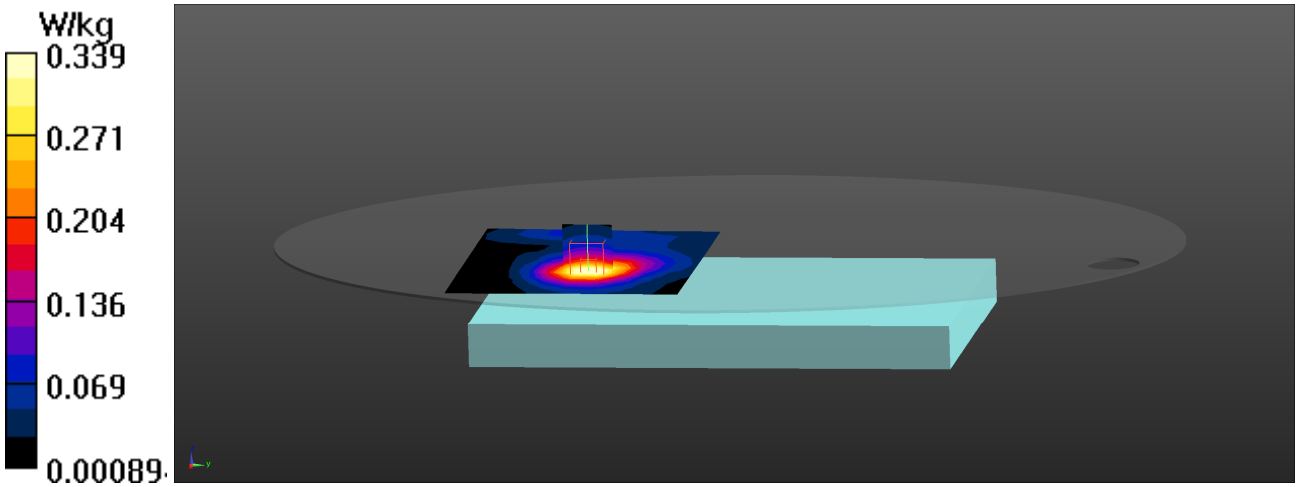
Communication System: UID 0, WCDMA_Band-2; Frequency: 1880 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.40 S/m; $\varepsilon_r$ = 41.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1880 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/Flat/Area Scan (13x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.339 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.70 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.429 W/kg
**SAR(1 g) = 0.267 W/kg; SAR(10 g) = 0.169 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 61.9%
Maximum value of SAR (measured) = 0.368 W/kg



Test Laboratory: DEKRA Date: 2024/10/28

**222_WCDMA B4_RMC_CH1413_Back_30mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

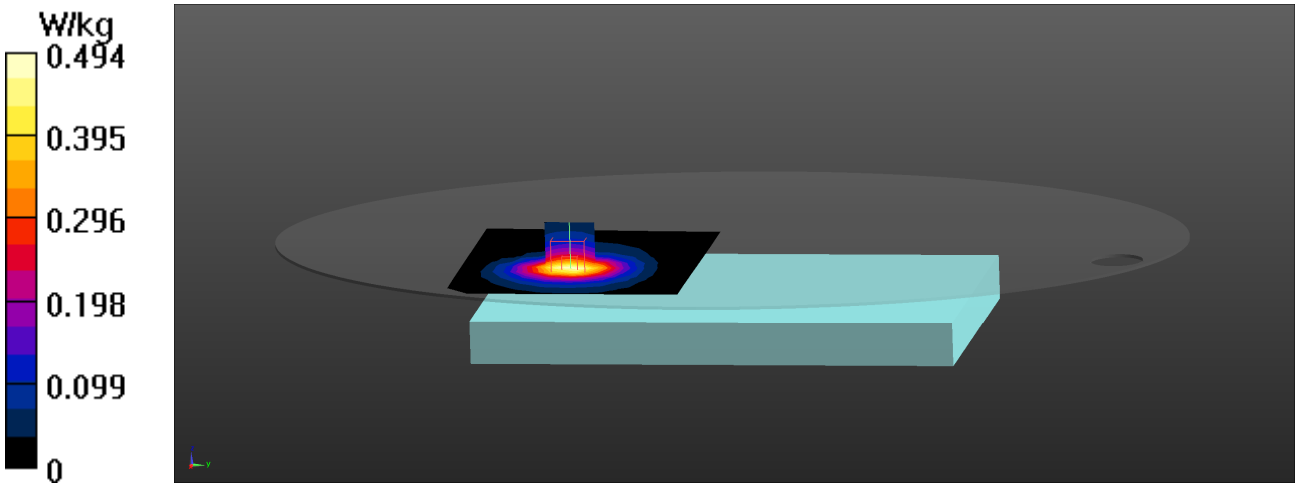
Communication System: UID 0, WCDMA_Band 4; Frequency: 1732.6 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1732.6 MHz; $\sigma$ = 1.37 S/m; $\varepsilon_r$ = 39.88; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1732.6 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/Flat/Area Scan (13x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.494 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.05 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.580 W/kg
**SAR(1 g) = 0.376 W/kg; SAR(10 g) = 0.242 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 64.2%
Maximum value of SAR (measured) = 0.509 W/kg



Test Laboratory: DEKRA Date: 2024/10/05

**220_WCDMA B5_RMC_CH4183_Right-side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

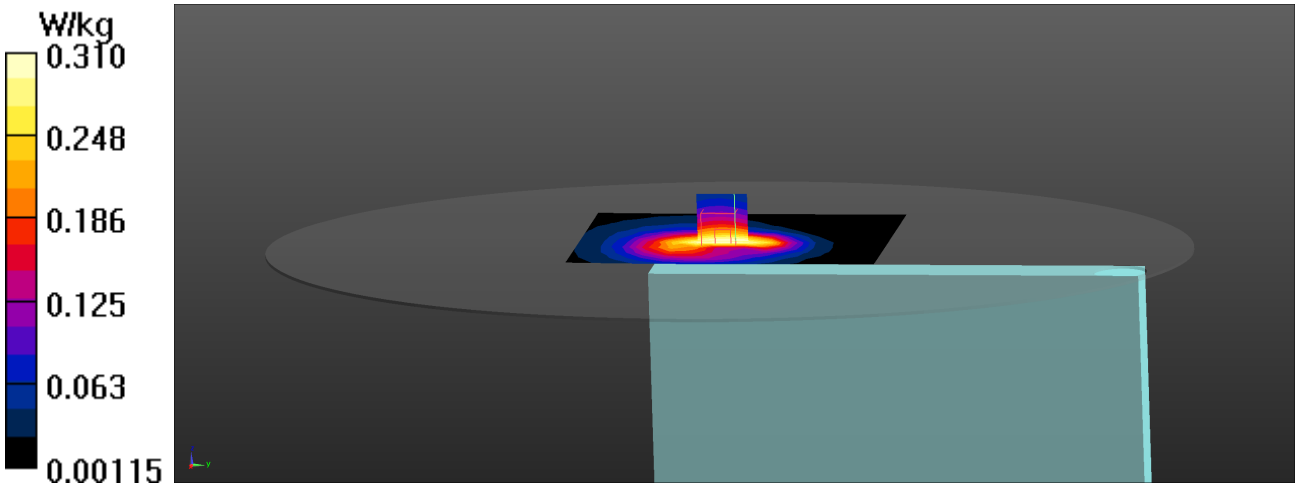
Communication System: UID 0, WCDMA_Band-5; Frequency: 836.6 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 836.6 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.6 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.310 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.839 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.351 W/kg
**SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.172 W/kg**
Smallest distance from peaks to all points 3 dB below = 16 mm
Ratio of SAR at M2 to SAR at M1 = 70.7%
Maximum value of SAR (measured) = 0.316 W/kg



Test Laboratory: DEKRA Date: 2024/10/08

**88_LTE_Band2_QPSK_20M_18900_1RB-0offset_Back_30mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

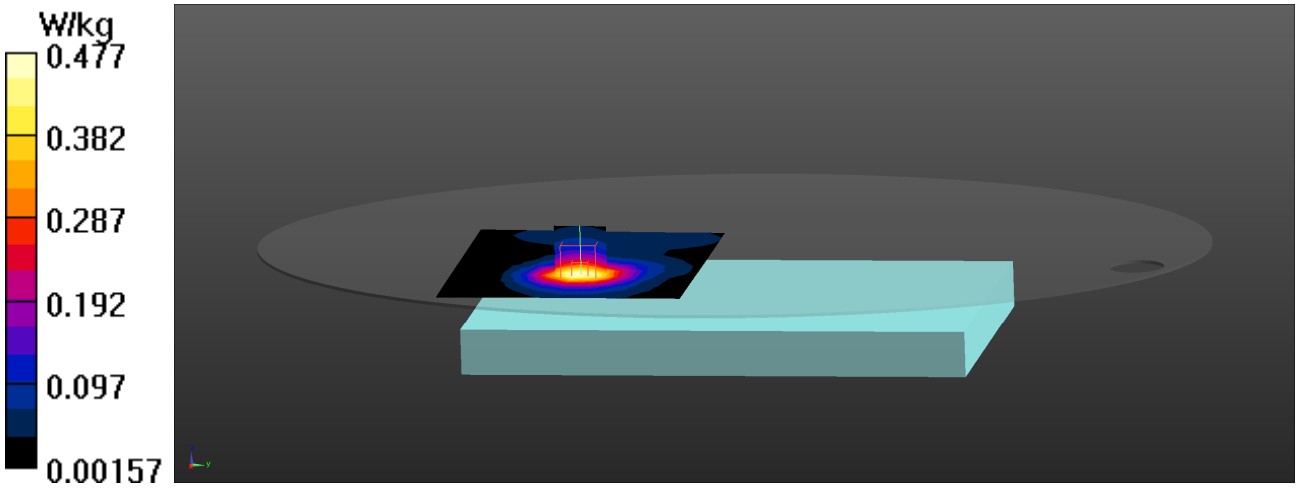
Communication System: UID 0, LTE Band2; Frequency: 1880 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.38 S/m; $\varepsilon_r$ = 41.35; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1880 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/Flat/Area Scan (13x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.477 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.39 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.585 W/kg
**SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.228 W/kg**
Smallest distance from peaks to all points 3 dB below = 22.6 mm
Ratio of SAR at M2 to SAR at M1 = 61.6%
Maximum value of SAR (measured) = 0.506 W/kg



Test Laboratory: DEKRA Date: 2024/10/28

**97_LTE_Band4_QPSK_20M_20175_1RB-0offset_Back_30mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

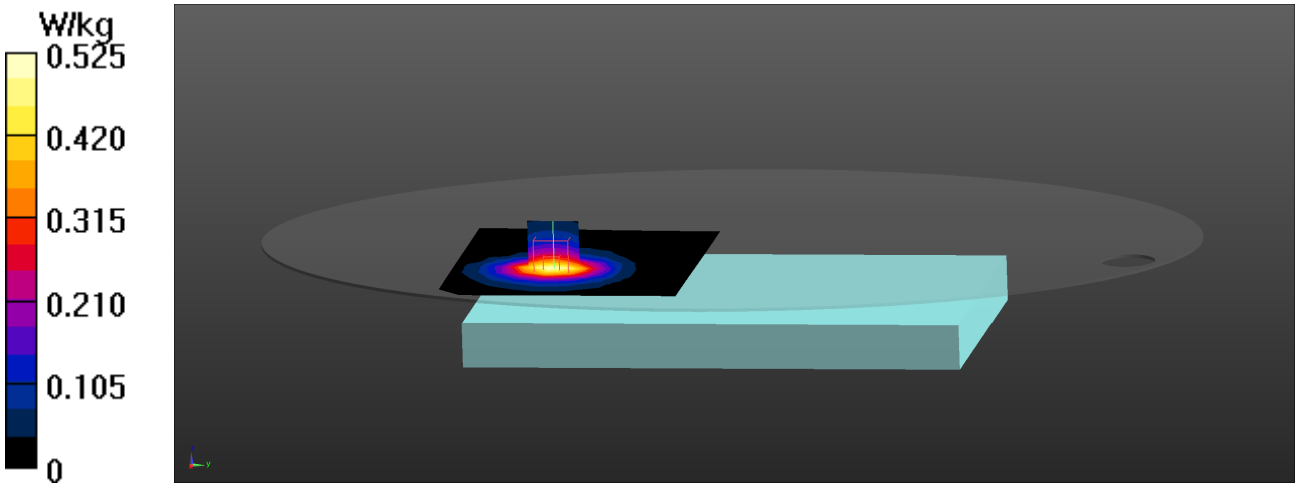
Communication System: UID 0, LTE Band4; Frequency: 1732.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1732.5 MHz; $\sigma$ = 1.37 S/m; $\varepsilon_r$ = 39.87; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1732.5 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/Flat/Area Scan (13x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.525 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.45 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.596 W/kg
**SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.249 W/kg**
Smallest distance from peaks to all points 3 dB below = 22.6 mm
Ratio of SAR at M2 to SAR at M1 = 65.1%
Maximum value of SAR (measured) = 0.525 W/kg



Test Laboratory: DEKRA Date: 2024/10/05

**4_LTE_Band5_QPSK_10M_20525_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

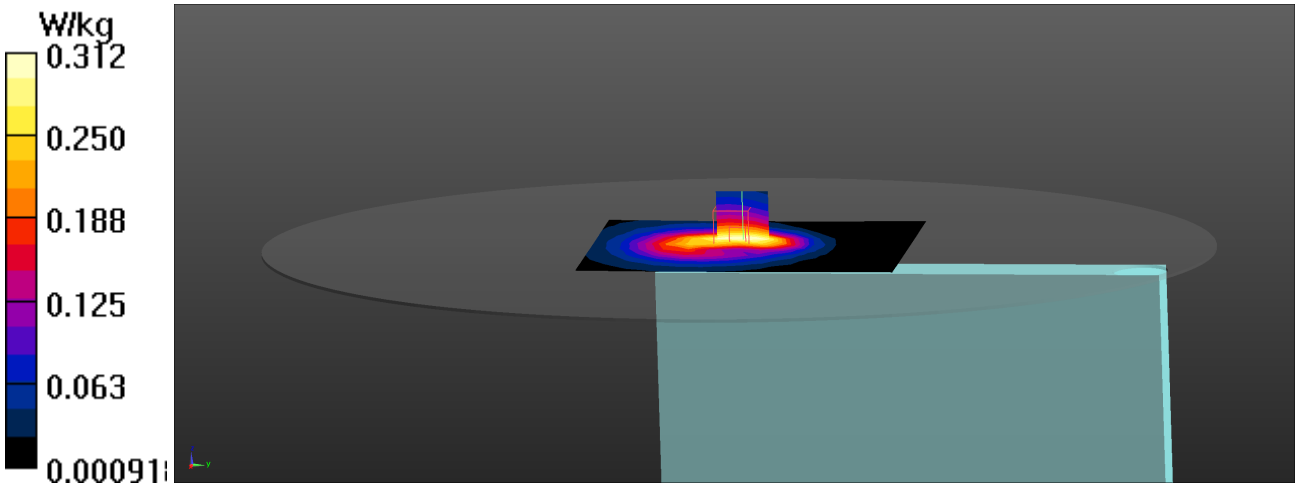
Communication System: UID 0, LTE Band5; Frequency: 836.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 836.5 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.312 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.96 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.365 W/kg
**SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.174 W/kg**
Smallest distance from peaks to all points 3 dB below = 16 mm
Ratio of SAR at M2 to SAR at M1 = 70.7%
Maximum value of SAR (measured) = 0.326 W/kg



Test Laboratory: DEKRA Date: 2024/10/18

**679_LTE_Band7_QPSK_20M_21100_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

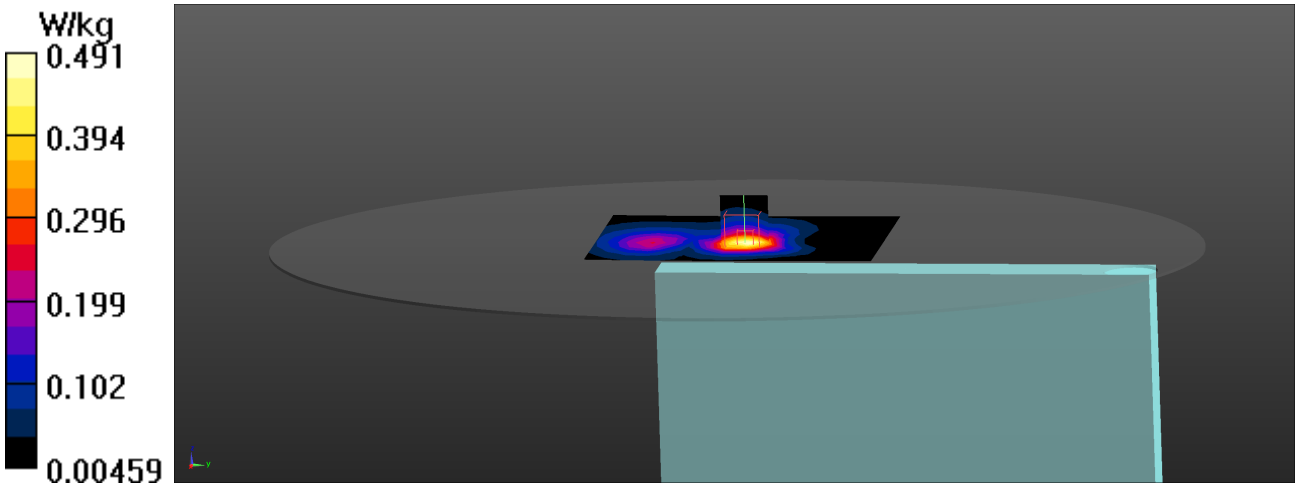
Communication System: UID 0, LTE Band7; Frequency: 2535 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2535 MHz; $\sigma$ = 1.91 S/m; $\varepsilon_r$ = 39.73; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2535 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/Flat/Area Scan (11x16x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.491 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.92 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.607 W/kg
**SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.188 W/kg**
Smallest distance from peaks to all points 3 dB below = 18.4 mm
Ratio of SAR at M2 to SAR at M1 = 54.7%
Maximum value of SAR (measured) = 0.495 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**5_LTE_Band12_QPSK_10M_23095_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

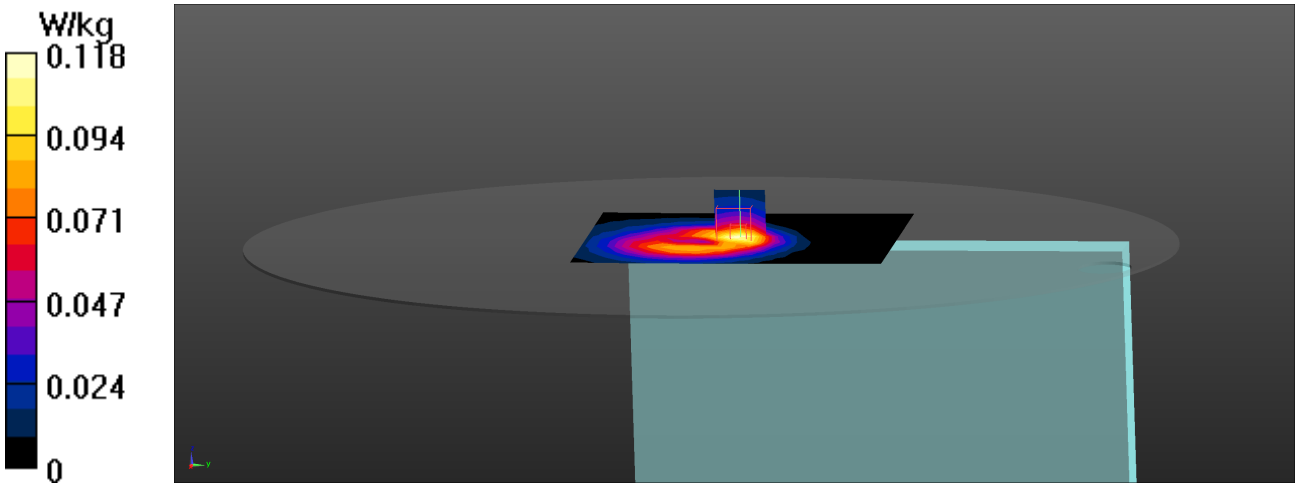
Communication System: UID 0, LTE Band12; Frequency: 707.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 707.5 MHz; $\sigma$ = 0.88 S/m; $\varepsilon_r$ = 42.20; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 707.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.118 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.18 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.138 W/kg
**SAR(1 g) = 0.087 W/kg; SAR(10 g) = 0.056 W/kg**
Smallest distance from peaks to all points 3 dB below = 16.5 mm
Ratio of SAR at M2 to SAR at M1 = 63.3%
Maximum value of SAR (measured) = 0.119 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**6_LTE_Band13_QPSK_10M_23230_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

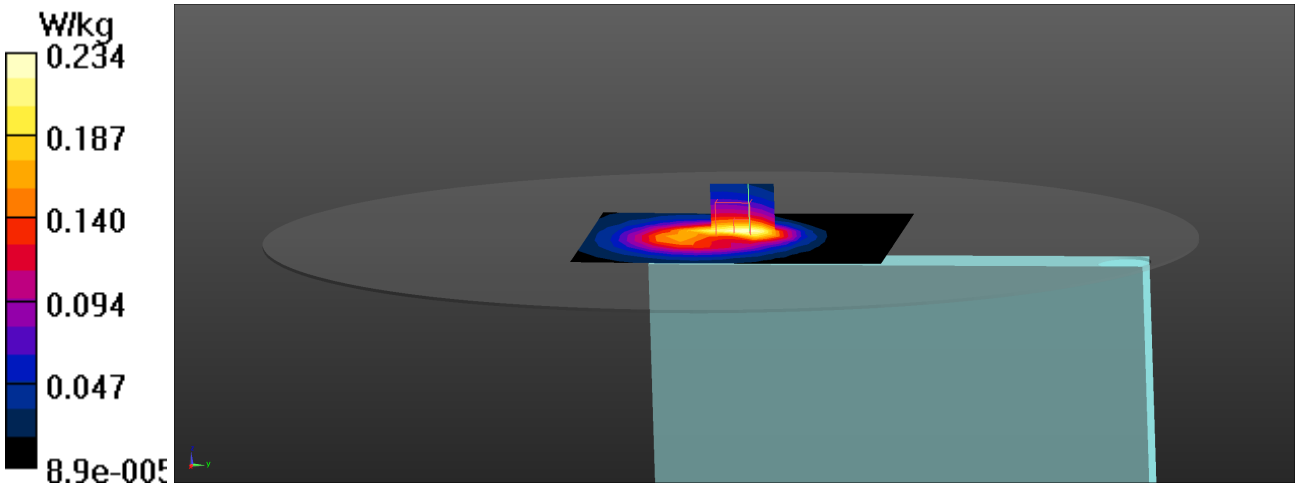
Communication System: UID 0, LTE Band13; Frequency: 782 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 782 MHz; $\sigma$ = 0.93 S/m; $\varepsilon_r$ = 41.72; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 782 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.234 W/kg

**Configuration/Flat/Zoom Scan (5x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.28 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.269 W/kg
**SAR(1 g) = 0.180 W/kg; SAR(10 g) = 0.122 W/kg**
Smallest distance from peaks to all points 3 dB below = 16.5 mm
Ratio of SAR at M2 to SAR at M1 = 67.9%
Maximum value of SAR (measured) = 0.237 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**132_LTE_Band14_QPSK_10M_23330_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

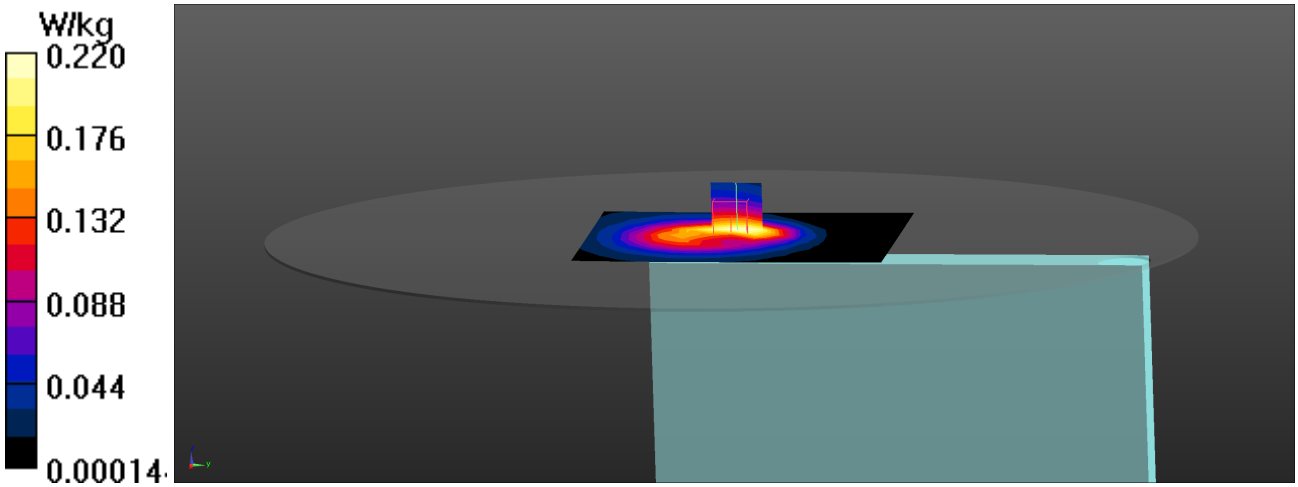
Communication System: UID 0, LTE Band14; Frequency: 793 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 793 MHz; $\sigma$ = 0.94 S/m; $\varepsilon_r$ = 41.65; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 793 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.220 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.25 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.253 W/kg
**SAR(1 g) = 0.171 W/kg; SAR(10 g) = 0.116 W/kg**
Smallest distance from peaks to all points 3 dB below = 16.3 mm
Ratio of SAR at M2 to SAR at M1 = 69.3%
Maximum value of SAR (measured) = 0.223 W/kg



Test Laboratory: DEKRA Date: 2024/10/08

**168_LTE_Band25_QPSK_20M_26365_1RB-0offset_Back_30mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

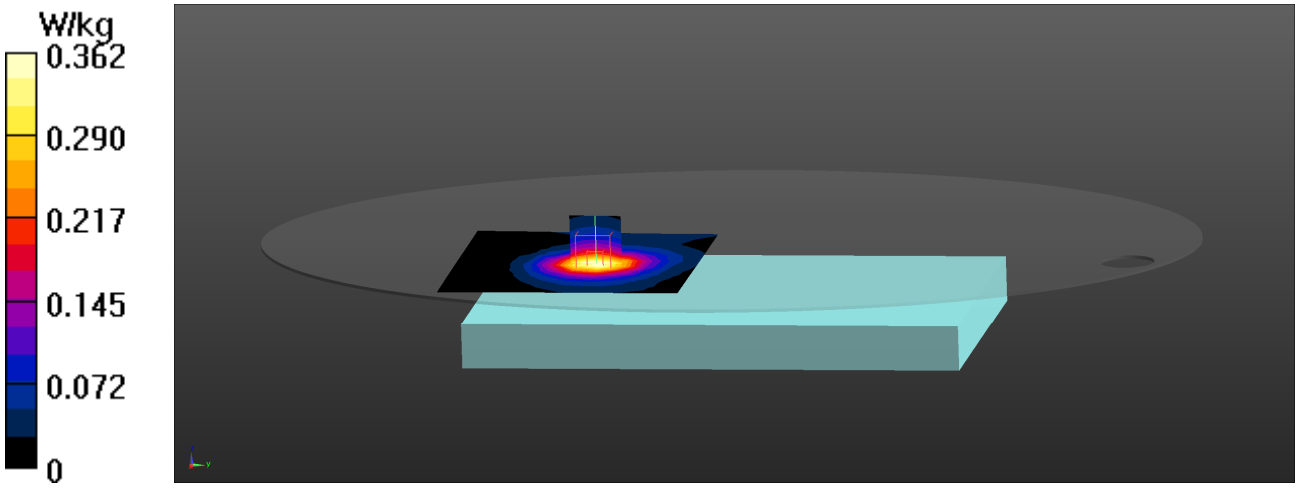
Communication System: UID 0, LTE Band25; Frequency: 1882.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1882.5 MHz; $\sigma$ = 1.38 S/m; $\varepsilon_r$ = 41.29; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1882.5 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/Flat/Area Scan (12x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.362 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.73 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.445 W/kg
**SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.172 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 60.7%
Maximum value of SAR (measured) = 0.382 W/kg



Test Laboratory: DEKRA Date: 2024/10/05

**153_LTE_Band26_QPSK_15M_26865_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

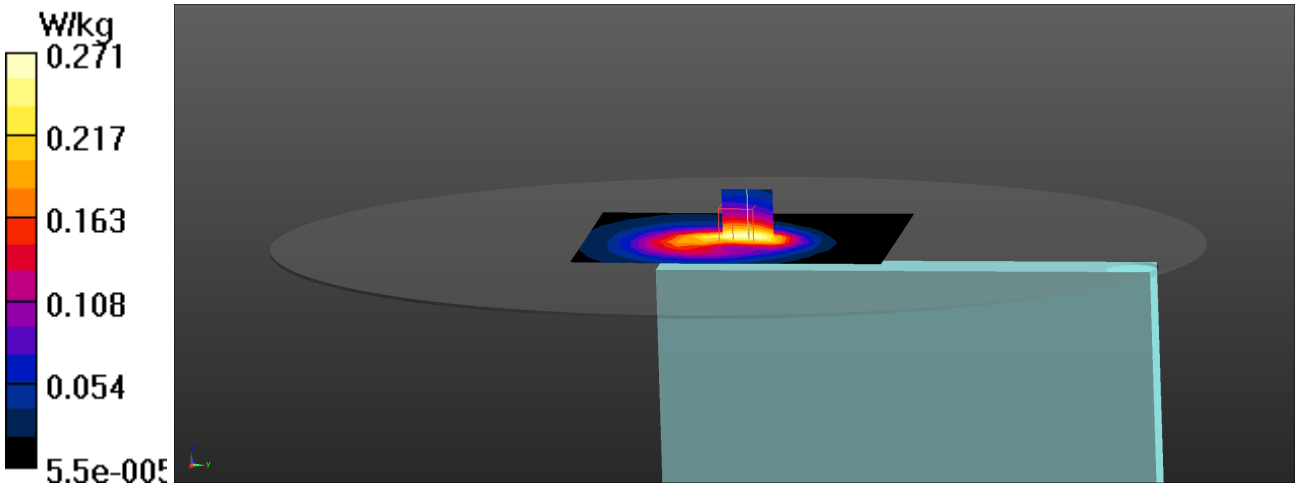
Communication System: UID 0, LTE Band26; Frequency: 831.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 831.5 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.32; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 831.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.271 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.44 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.314 W/kg
**SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.150 W/kg**
Smallest distance from peaks to all points 3 dB below = 17.6 mm
Ratio of SAR at M2 to SAR at M1 = 69.9%
Maximum value of SAR (measured) = 0.279 W/kg



Test Laboratory: DEKRA Date: 2024/10/29

**687_LTE_Band41_QPSK_20M_40620_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

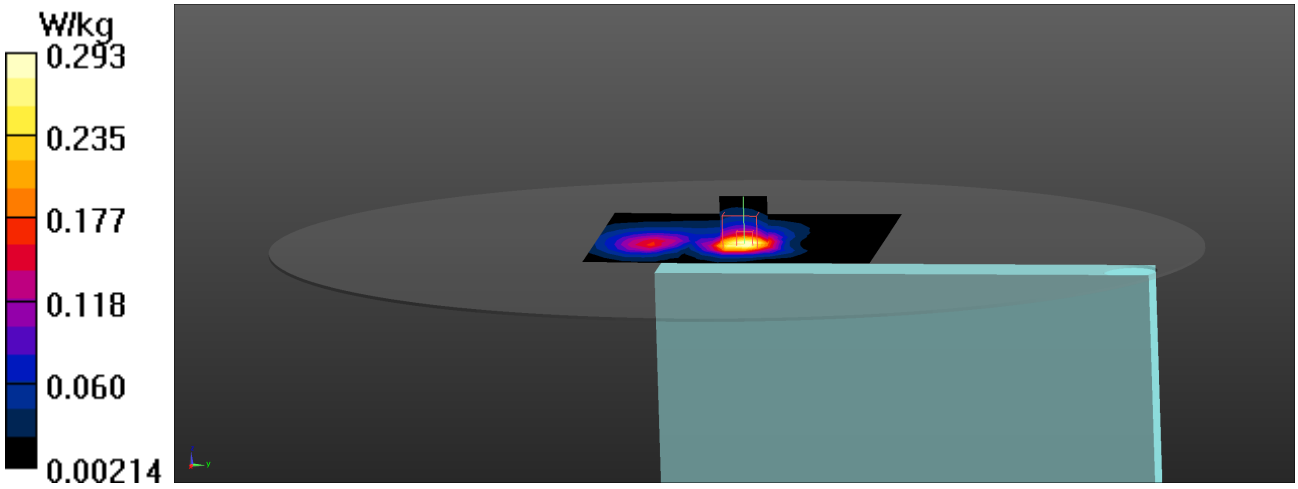
Communication System: UID 0, LTE-TDD Band41; Frequency: 2593 MHz
Communication System PAR: 2.014 dB
Medium parameters used: f = 2593 MHz; $\sigma$ = 1.87 S/m; $\varepsilon_r$ = 38.83; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2593 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/Flat/Area Scan (12x16x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.293 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.64 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.383 W/kg
**SAR(1 g) = 0.207 W/kg; SAR(10 g) = 0.116 W/kg**
Smallest distance from peaks to all points 3 dB below = 17 mm
Ratio of SAR at M2 to SAR at M1 = 53.5%
Maximum value of SAR (measured) = 0.313 W/kg



Test Laboratory: DEKRA Date: 2024/10/20

**215_LTE_Band42_QPSK_20M_42590_1RB-0offset_Back_30mm_ANT 3_HPUE**

**DUT: Rugged Controller; Type: 140000**

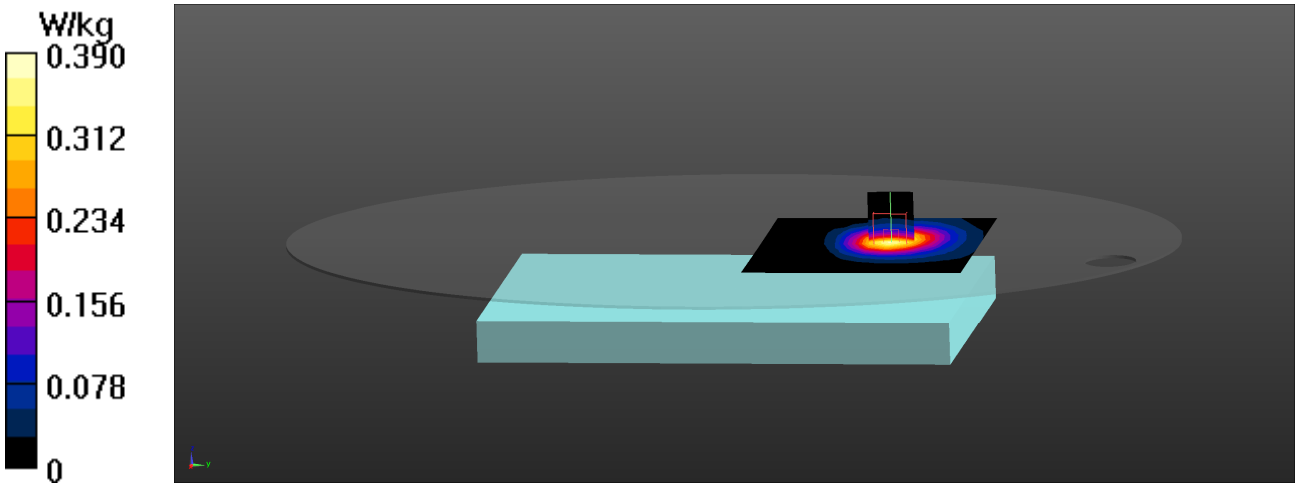
Communication System: UID 0, LTE-TDD Band42; Frequency: 3500 MHz
Communication System PAR: 2.331 dB
Medium parameters used: f = 3500 MHz; $\sigma$ = 3.01 S/m; $\varepsilon_r$ = 37.91; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.66, 7.66, 7.66) @ 3500 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/Flat/Area Scan (14x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.390 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 11.70 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.519 W/kg
**SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.124 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)
Ratio of SAR at M2 to SAR at M1 = 76.7%
Maximum value of SAR (measured) = 0.391 W/kg



Test Laboratory: DEKRA Date: 2024/10/23

**710_LTE_Band48_QPSK_20M_55990_1RB-0offset_Back_30mm_ANT 3**

**DUT: Rugged Controller; Type: 140000**

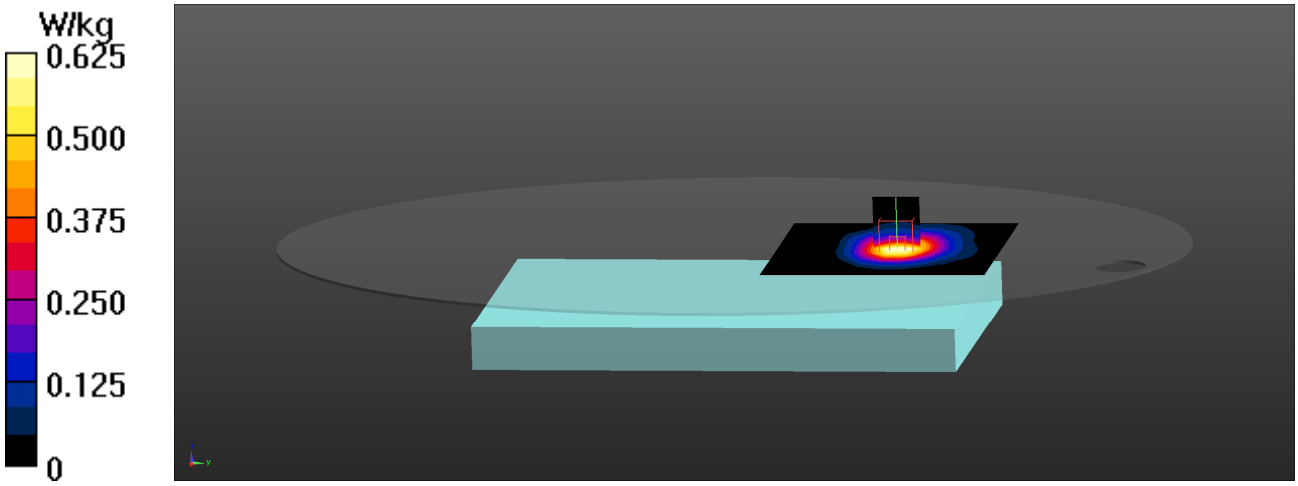
Communication System: UID 0, LTE-TDD Band48; Frequency: 3625 MHz
Communication System PAR: 2.014 dB
Medium parameters used: f = 3625 MHz; $\sigma$ = 3.12 S/m; $\varepsilon_r$ = 38.32; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.25, 7.25, 7.25) @ 3625 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/Flat/Area Scan (13x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.625 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 15.08 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.854 W/kg
**SAR(1 g) = 0.404 W/kg; SAR(10 g) = 0.212 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)
Ratio of SAR at M2 to SAR at M1 = 78.9%
Maximum value of SAR (measured) = 0.659 W/kg



Test Laboratory: DEKRA Date: 2024/10/15

**162_LTE_Band66_QPSK_20M_132322_1RB-0offset_Back_30mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

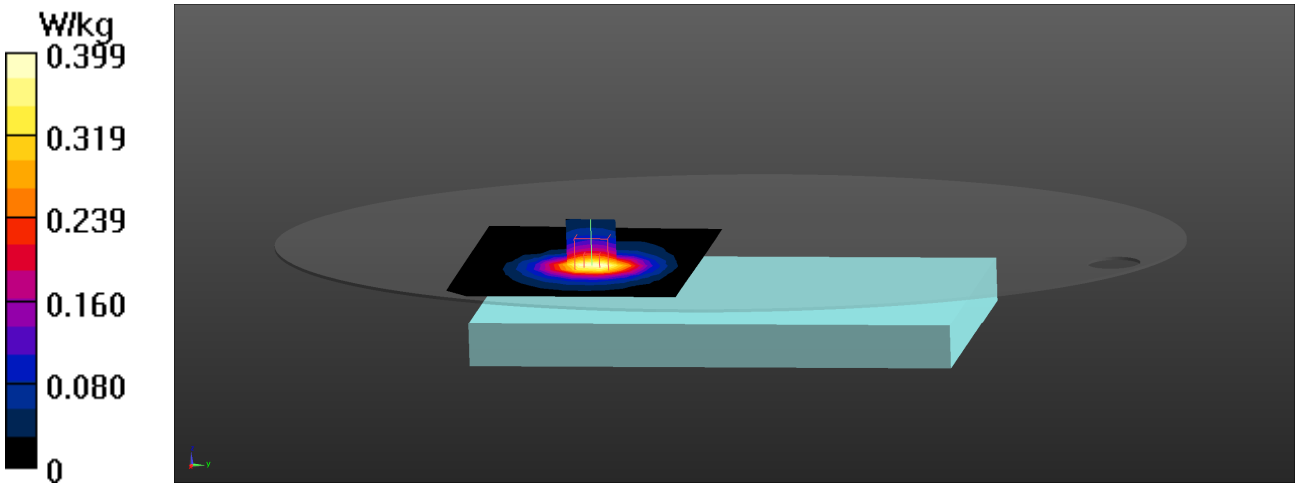
Communication System: UID 0, LTE Band66; Frequency: 1745 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1745 MHz; $\sigma$ = 1.41 S/m; $\varepsilon_r$ = 41.14; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1745 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/Flat/Area Scan (14x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.399 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.393 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.471 W/kg
**SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.198 W/kg**
Smallest distance from peaks to all points 3 dB below = 24.9 mm
Ratio of SAR at M2 to SAR at M1 = 65.4%
Maximum value of SAR (measured) = 0.413 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**131_LTE_Band71_QPSK_20M_133322_1RB-0offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

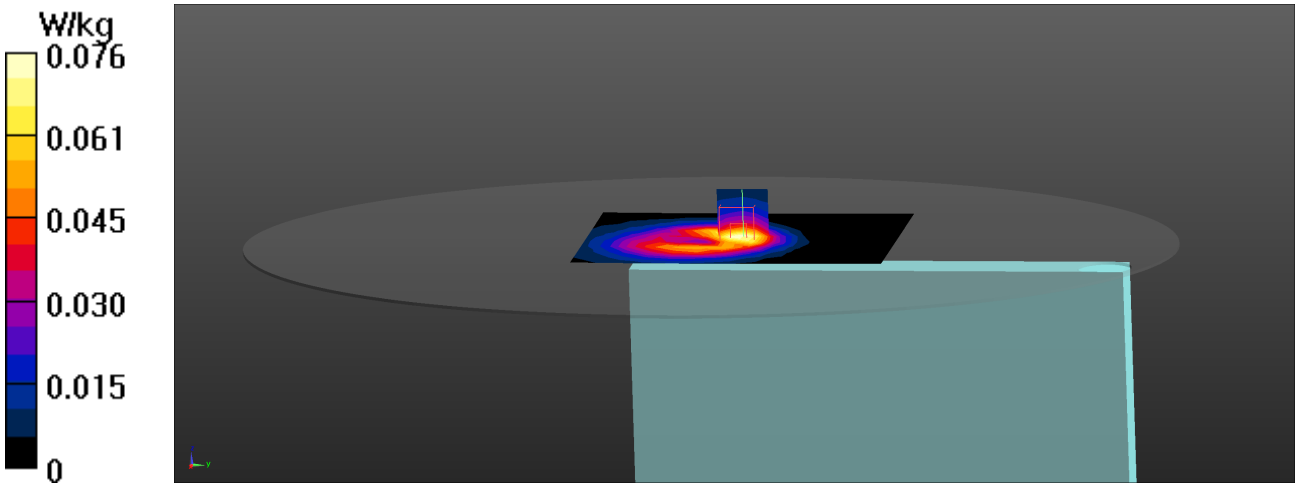
Communication System: UID 0, LTE B71; Frequency: 683 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 683 MHz; $\sigma$ = 0.87 S/m; $\varepsilon_r$ = 42.37; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 683 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0758 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.005 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.0920 W/kg
**SAR(1 g) = 0.057 W/kg; SAR(10 g) = 0.036 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 62.3%
Maximum value of SAR (measured) = 0.0787 W/kg



Test Laboratory: DEKRA Date: 2024/10/06

**8_NRn5_DFT-S-QPSK_20M_CH167300_1RB_1offset_Right side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

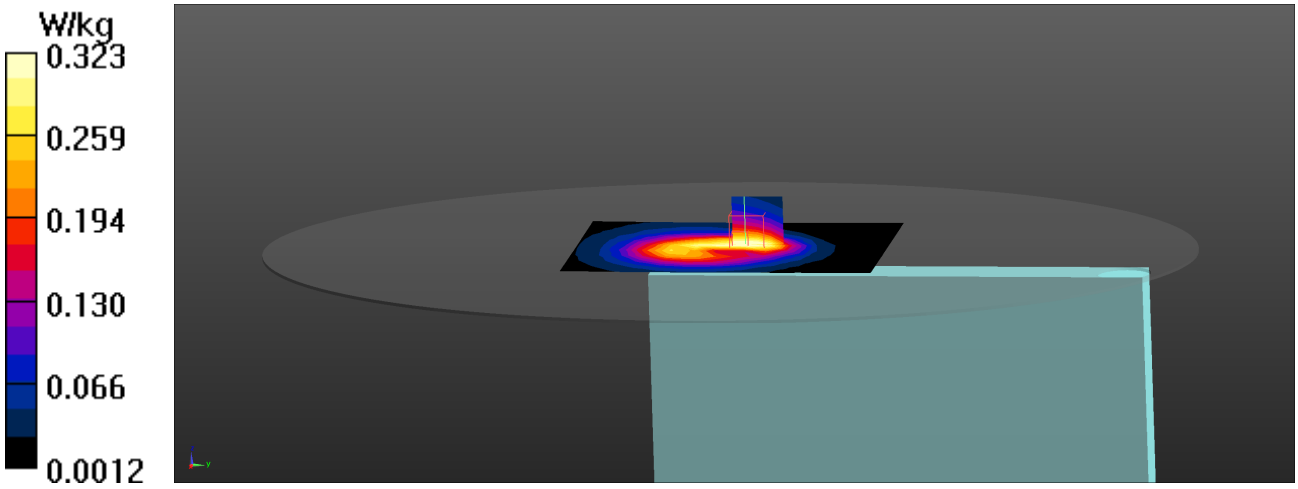
Communication System: UID 0, 5G n5; Frequency: 836.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 836.5 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.34; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.323 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.156 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.381 W/kg
**SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.176 W/kg**
Smallest distance from peaks to all points 3 dB below = 16.7 mm
Ratio of SAR at M2 to SAR at M1 = 70.2%
Maximum value of SAR (measured) = 0.341 W/kg



Test Laboratory: DEKRA Date: 2024/10/09

**441_NRn7_DFT-S-QPSK_40M_CH507000_1RB_1offset_Right side_10mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

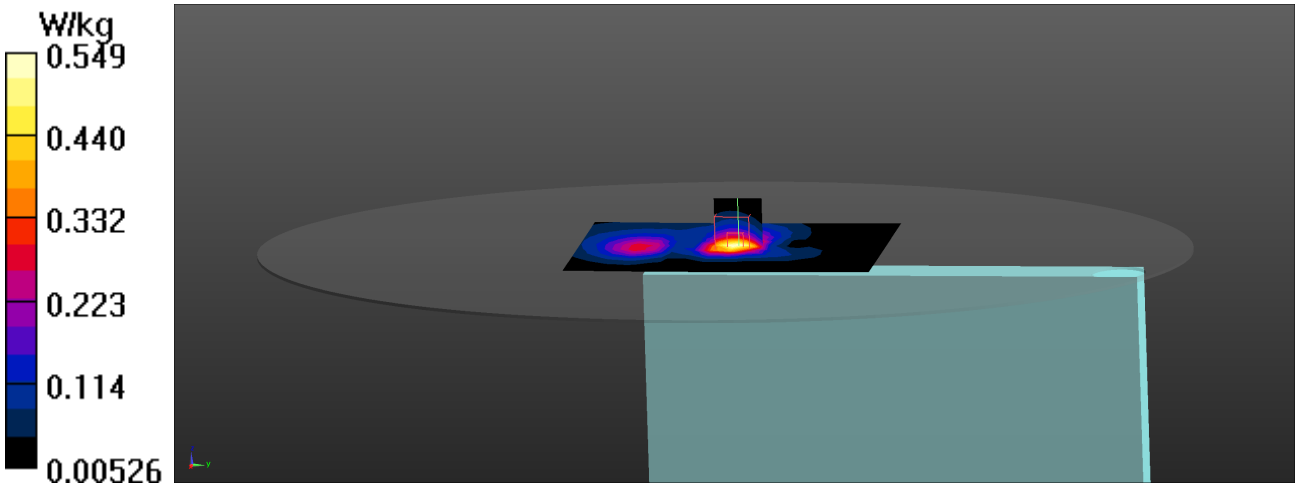
Communication System: UID 0, 5G n7; Frequency: 2535 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2535 MHz; $\sigma$ = 1.87 S/m; $\varepsilon_r$ = 40.65; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2535 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/Flat/Area Scan (12x17x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.549 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.05 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.697 W/kg
**SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.206 W/kg**
Smallest distance from peaks to all points 3 dB below = 14 mm
Ratio of SAR at M2 to SAR at M1 = 52.7%
Maximum value of SAR (measured) = 0.567 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**10_NRn12_DFT-S-QPSK_15M_CH141500_1RB_1offset_Right side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

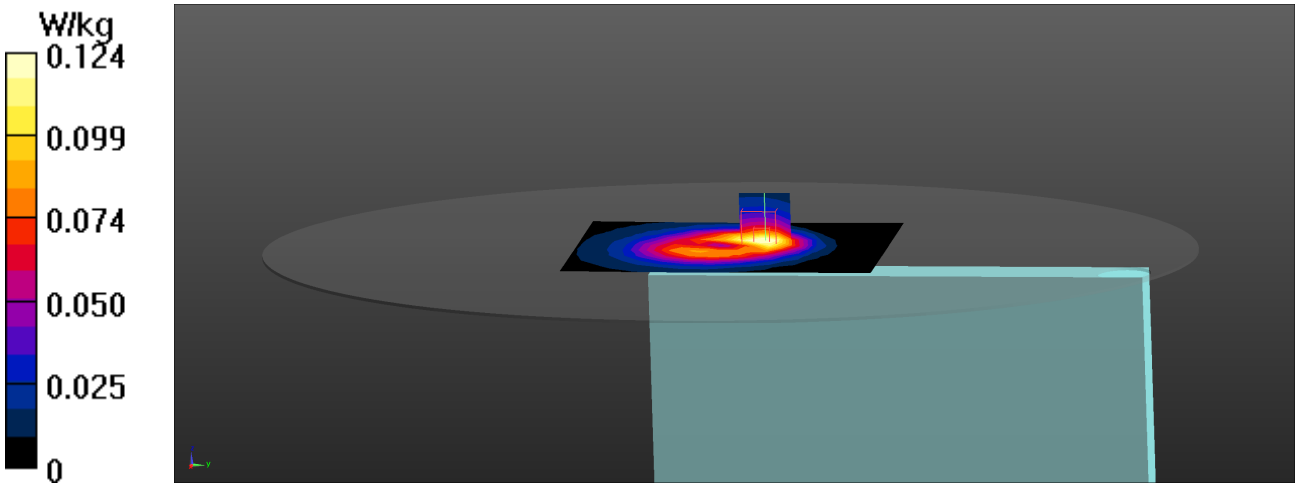
Communication System: UID 0, 5G n12; Frequency: 707.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 707.5 MHz; $\sigma$ = 0.87 S/m; $\varepsilon_r$ = 41.76; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 707.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.124 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.84 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.152 W/kg
**SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.062 W/kg**
Smallest distance from peaks to all points 3 dB below = 17.9 mm
Ratio of SAR at M2 to SAR at M1 = 62.5%
Maximum value of SAR (measured) = 0.131 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**11_NRn13_DFT-S-QPSK_10M_CH156400_1RB_1offset_Right side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

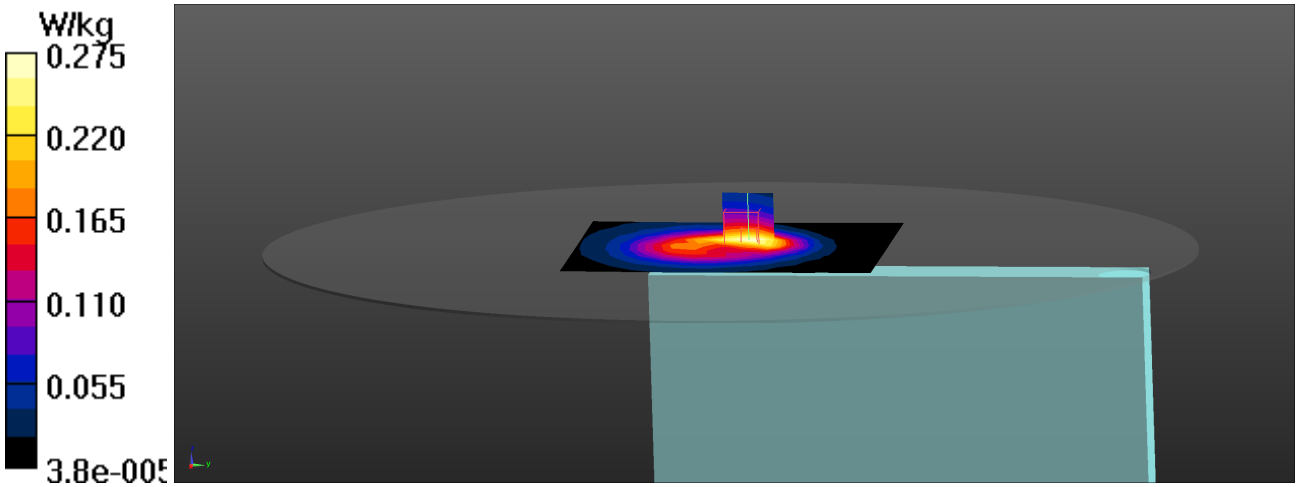
Communication System: UID 0, 5G n13; Frequency: 782 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 782 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 40.31; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 782 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.275 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.81 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.319 W/kg
**SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.143 W/kg**
Smallest distance from peaks to all points 3 dB below = 17.9 mm
Ratio of SAR at M2 to SAR at M1 = 67.7%
Maximum value of SAR (measured) = 0.281 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**12_NRn14_DFT-S-QPSK_10M_CH158600_1RB_1offset_Right side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

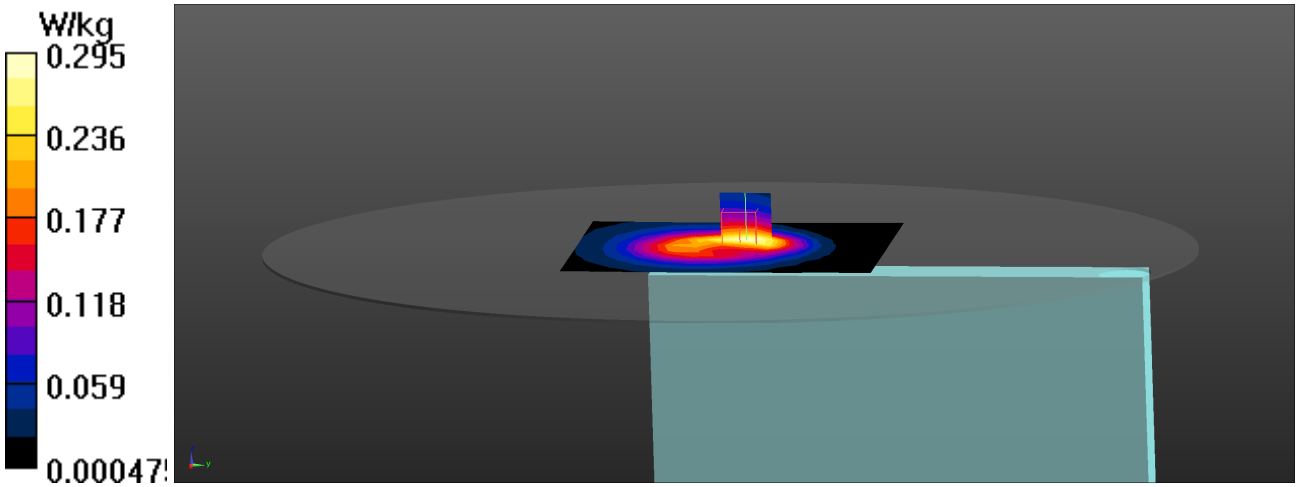
Communication System: UID 0, 5G n14; Frequency: 793 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 793 MHz; $\sigma$ = 0.93 S/m; $\varepsilon_r$ = 40.10; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 793 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.295 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.88 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.340 W/kg
**SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.155 W/kg**
Smallest distance from peaks to all points 3 dB below = 17.2 mm
Ratio of SAR at M2 to SAR at M1 = 68.8%
Maximum value of SAR (measured) = 0.297 W/kg



Test Laboratory: DEKRA Date: 2024/10/07

**71_NRn25_DFT-S-QPSK_40M_CH376500_1RB_1offset_Back_30mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

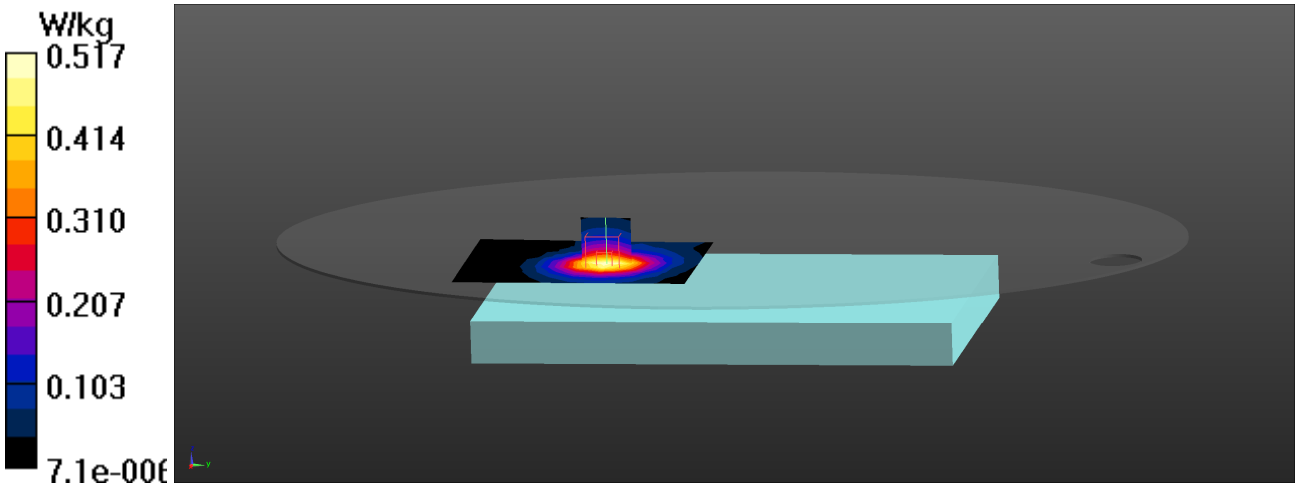
Communication System: UID 0, 5G n25; Frequency: 1882.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1882.5 MHz; $\sigma$ = 1.40 S/m; $\varepsilon_r$ = 41.18; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1882.5 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/Flat/Area Scan (9x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.517 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.86 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.603 W/kg
**SAR(1 g) = 0.387 W/kg; SAR(10 g) = 0.246 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 64.1%
Maximum value of SAR (measured) = 0.523 W/kg



Test Laboratory: DEKRA Date: 2024/10/06

**9_NRn26_DFT-S-QPSK_20M_CH167300_1RB_1offset_Right side_10mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

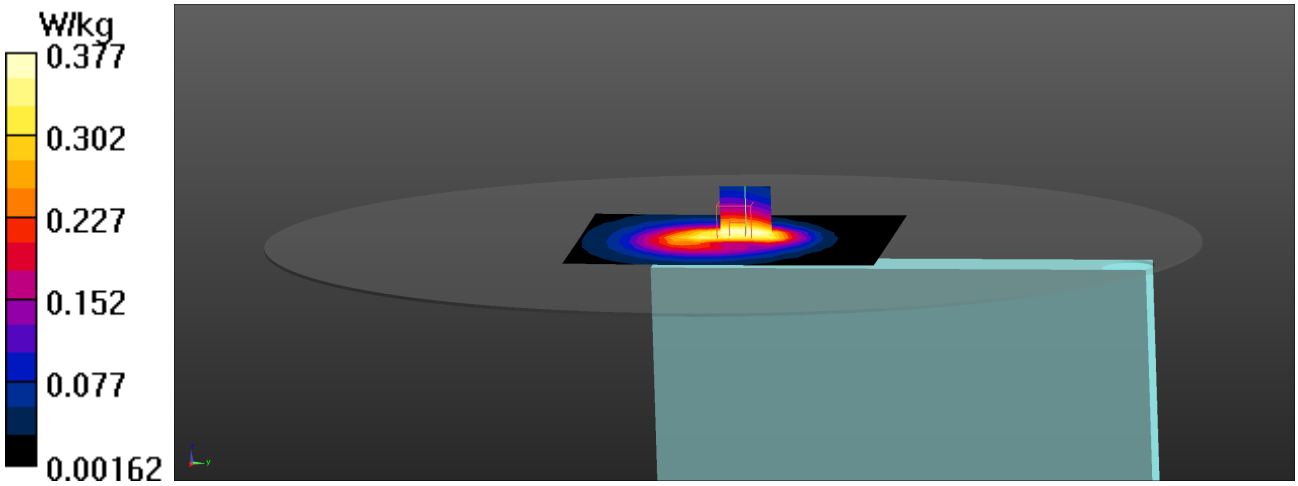
Communication System: UID 0, 5G n26; Frequency: 831.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 831.5 MHz; $\sigma$ = 0.91 S/m; $\varepsilon_r$ = 42.51; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.377 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.85 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.467 W/kg
**SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.224 W/kg**
Smallest distance from peaks to all points 3 dB below = 17.6 mm
Ratio of SAR at M2 to SAR at M1 = 69.9%
Maximum value of SAR (measured) = 0.417 W/kg



Test Laboratory: DEKRA Date: 2024/10/17

**514_NRn30_DFT-S-QPSK_10M_462000_1RB-26offset_Right-side_10mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

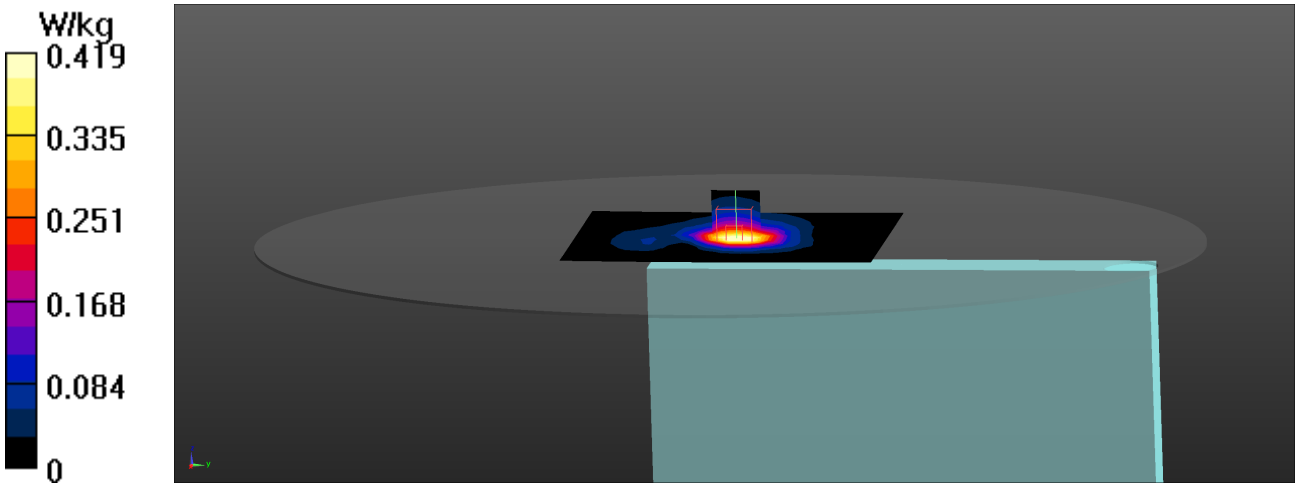
Communication System: UID 0, 5G n30; Frequency: 2310 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2310 MHz; $\sigma$ = 1.65 S/m; $\varepsilon_r$ = 42.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.29, 8.29, 8.29) @ 2310 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/Flat/Area Scan (12x17x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.419 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.81 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.527 W/kg
**SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.182 W/kg**
Smallest distance from peaks to all points 3 dB below = 16.3 mm
Ratio of SAR at M2 to SAR at M1 = 57.9%
Maximum value of SAR (measured) = 0.446 W/kg



Test Laboratory: DEKRA Date: 2024/10/26

**451_NRn41_DFT-S-QPSK_100M_CH518598_1RB_1offset_Back_15mm_ANT 2_HPUE**

**DUT: Rugged Controller ; Type: 140000**

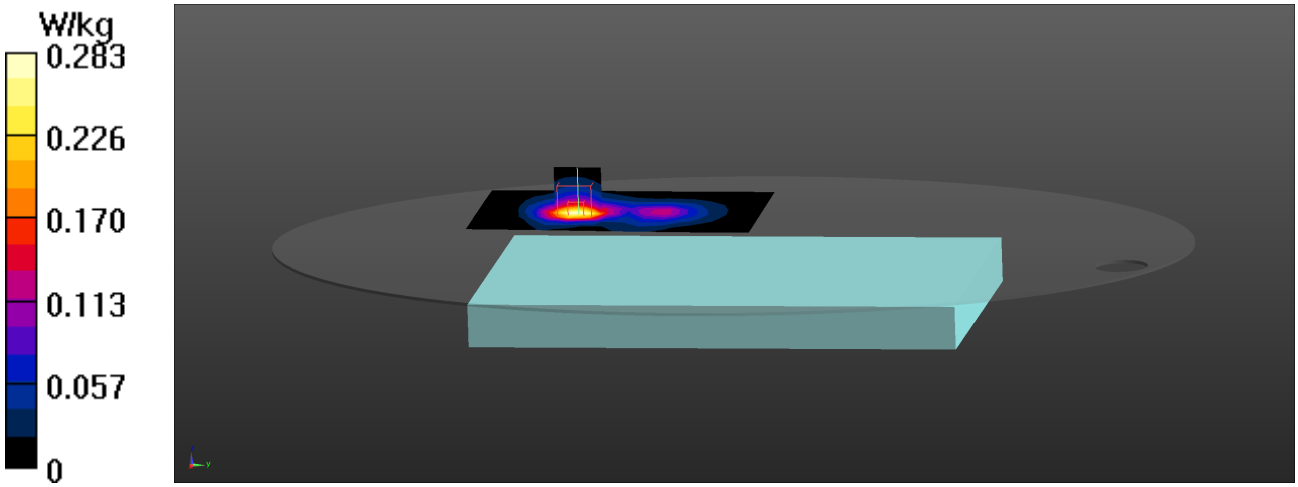
Communication System: UID 0, 5G n41; Frequency: 2592.99 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2592.99 MHz; $\sigma$ = 1.94 S/m; $\varepsilon_r$ = 39.53; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2592.99 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/Flat/Area Scan (10x16x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.283 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.94 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.364 W/kg
**SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.109 W/kg**
Smallest distance from peaks to all points 3 dB below = 15.1 mm
Ratio of SAR at M2 to SAR at M1 = 55.2%
Maximum value of SAR (measured) = 0.304 W/kg



Test Laboratory: DEKRA Date: 2024/10/22

**94_NRn48_DFT-S-QPSK_40M_CH641666_1RB_1offset_Back_30mm_ANT 3**

**DUT: Rugged Controller; Type: 140000**

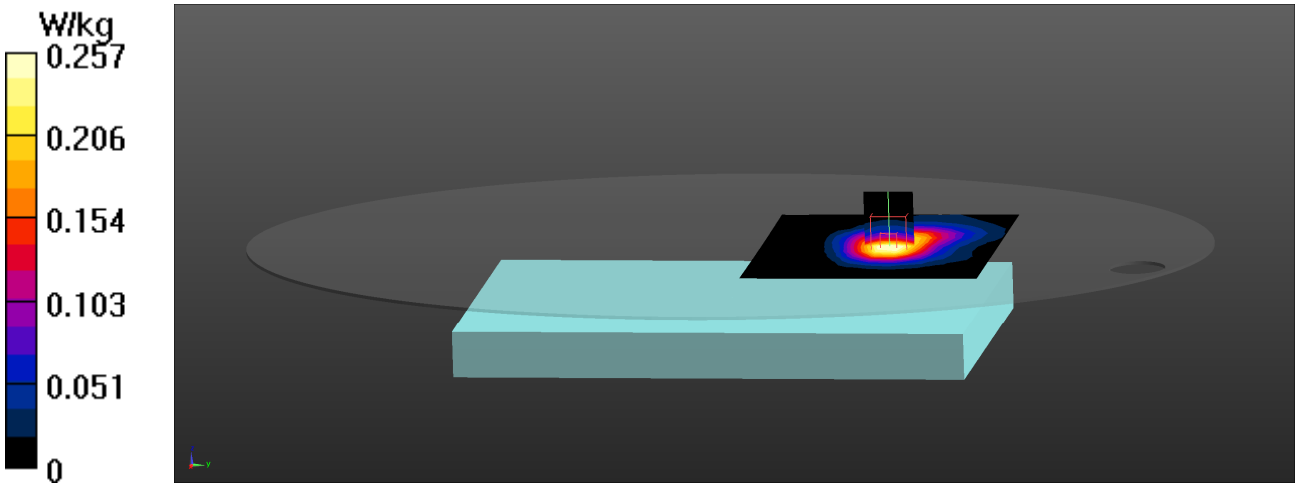
Communication System: UID 0, 5G n48; Frequency: 3624.99 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 3624.99 MHz; $\sigma$ = 3.15 S/m; $\varepsilon_r$ = 38.22; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.25, 7.25, 7.25) @ 3624.99 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/Flat/Area Scan (15x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.257 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 10.17 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.357 W/kg
**SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.086 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)
Ratio of SAR at M2 to SAR at M1 = 77.6%
Maximum value of SAR (measured) = 0.273 W/kg



Test Laboratory: DEKRA Date: 2024/10/15

**77_NRn66_DFT-S-QPSK_40M_349000_1RB-1offset_Back_30mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

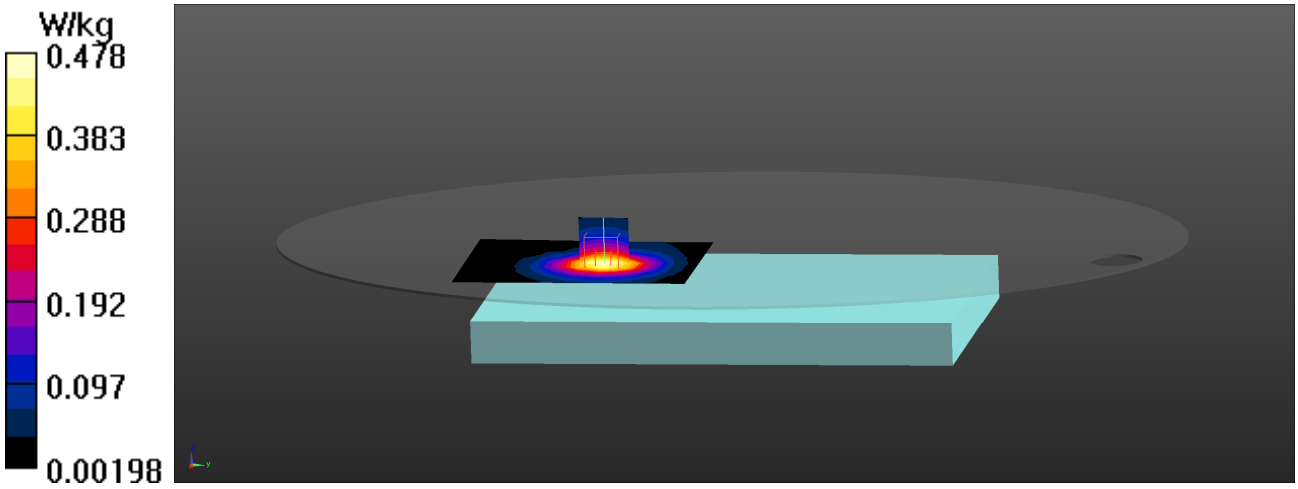
Communication System: UID 0, 5G n66; Frequency: 1745 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1745 MHz; $\sigma$ = 1.41 S/m; $\varepsilon_r$ = 41.14; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1745 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/Flat/Area Scan (9x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.478 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.83 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.567 W/kg
**SAR(1 g) = 0.369 W/kg; SAR(10 g) = 0.237 W/kg**
Smallest distance from peaks to all points 3 dB below = 23.8 mm
Ratio of SAR at M2 to SAR at M1 = 64.7%
Maximum value of SAR (measured) = 0.497 W/kg



Test Laboratory: DEKRA Date: 2024/10/28

**75_NRn70_DFT-S-QPSK_15M_340500_1RB-1offset_Back_30mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

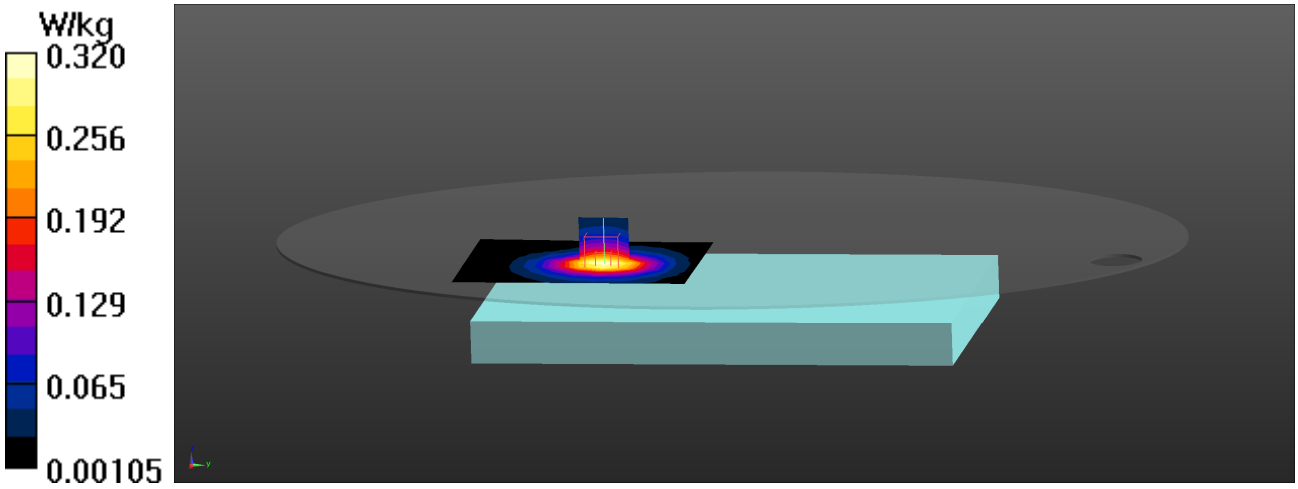
Communication System: UID 0, 5G n70; Frequency: 1702.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1702.5 MHz; $\sigma$ = 1.35 S/m; $\varepsilon_r$ = 40.28; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1702.5 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/Flat/Area Scan (9x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.320 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.32 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.378 W/kg
**SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.158 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 64.8%
Maximum value of SAR (measured) = 0.332 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**1140_NRn71_DFT-S-QPSK_20M_CH136100_1RB_1offset_Back_30mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

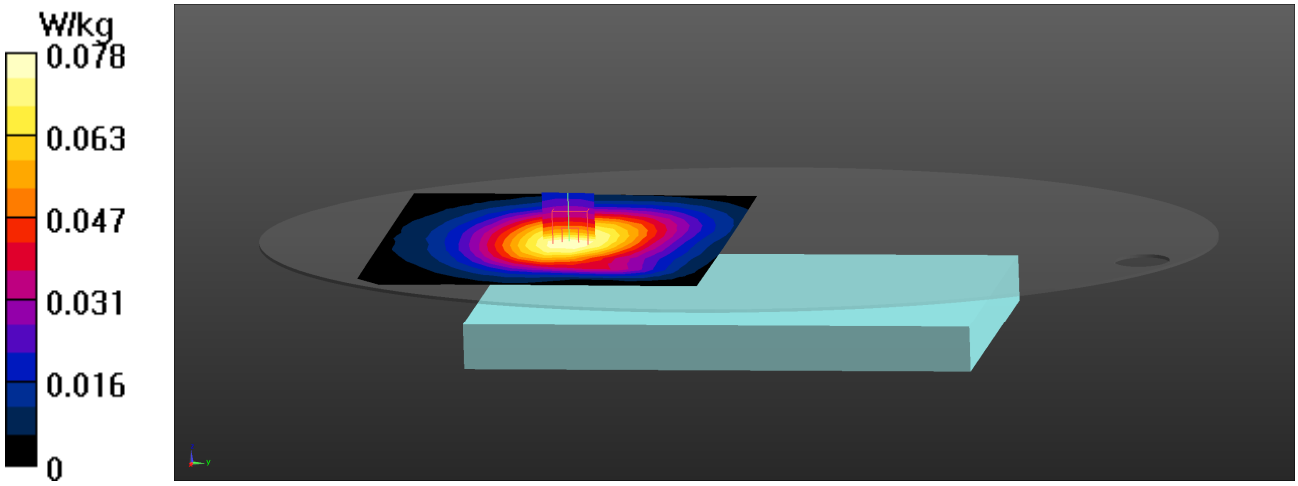
Communication System: UID 0, 5G n71; Frequency: 680.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 680.5 MHz; $\sigma$ = 0.85 S/m; $\varepsilon_r$ = 42.28; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 680.5 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/Flat/Area Scan (17x15x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.0783 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.951 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.0850 W/kg
**SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.050 W/kg**
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 75%
Maximum value of SAR (measured) = 0.0784 W/kg



Test Laboratory: DEKRA Date: 2024/10/30

**90_NRn77_DFT-S-QPSK_100M_CH656000_1RB_1offset_Back_30mm_ANT 3_HUPE**

**DUT: Rugged Controller ; Type: 140000**

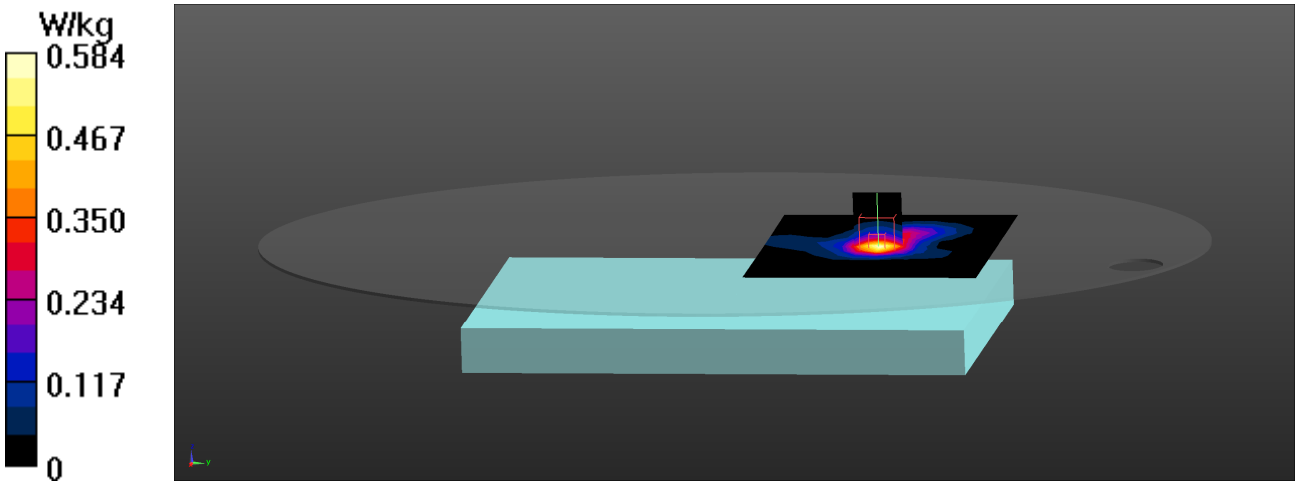
Communication System: UID 0, 5G n77; Frequency: 3840 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 3840 MHz; $\sigma$ = 3.16 S/m; $\varepsilon_r$ = 38.08; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.21, 7.21, 7.21) @ 3840 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/Flat/Area Scan (15x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.584 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 14.77 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.717 W/kg
**SAR(1 g) = 0.350 W/kg; SAR(10 g) = 0.170 W/kg**
Smallest distance from peaks to all points 3 dB below = 15 mm
Ratio of SAR at M2 to SAR at M1 = 80.7%
Maximum value of SAR (measured) = 0.577 W/kg



Test Laboratory: DEKRA Date: 2024/10/19

**464_NRn78_DFT-S-QPSK_100M_CH650000_1RB_1offset_Back_30mm_ANT 3_HPUE**

**DUT: Rugged Controller ; Type: 140000**

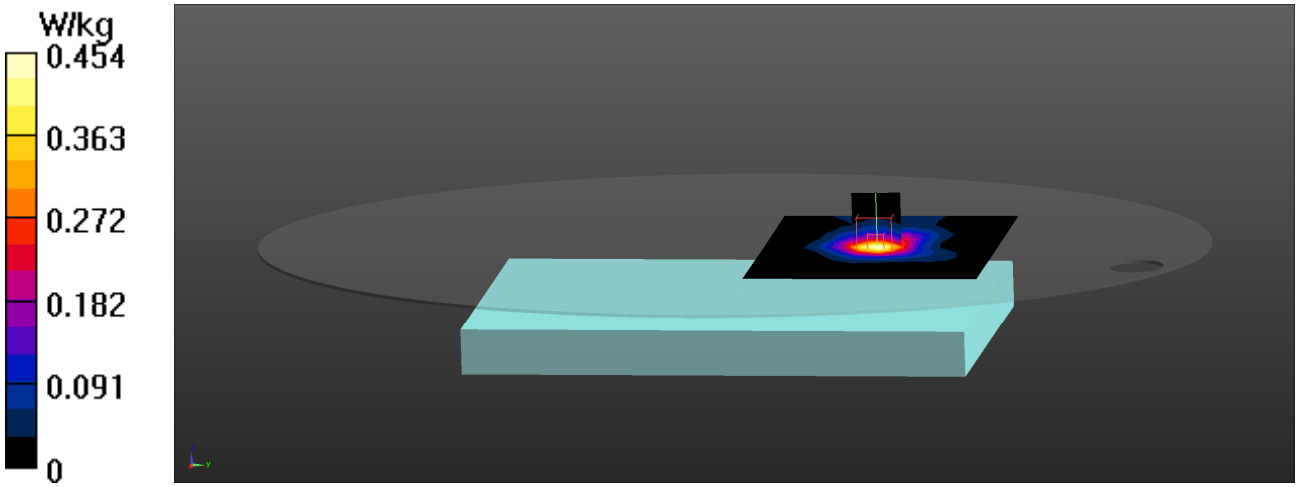
Communication System: UID 0, 5G n78; Frequency: 3750 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 3750 MHz; $\sigma$ = 3.31 S/m; $\varepsilon_r$ = 37.29; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.25, 7.25, 7.25) @ 3750 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/Flat/Area Scan (15x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.454 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 13.72 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.583 W/kg
**SAR(1 g) = 0.281 W/kg; SAR(10 g) = 0.142 W/kg**
Smallest distance from peaks to all points 3 dB below = 16.1 mm
Ratio of SAR at M2 to SAR at M1 = 79.9%
Maximum value of SAR (measured) = 0.460 W/kg



Test Laboratory: DEKRA Date: 2024/11/01

**621_WLAN2.4GHz_802.11b-1M_CH11_Back_0mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

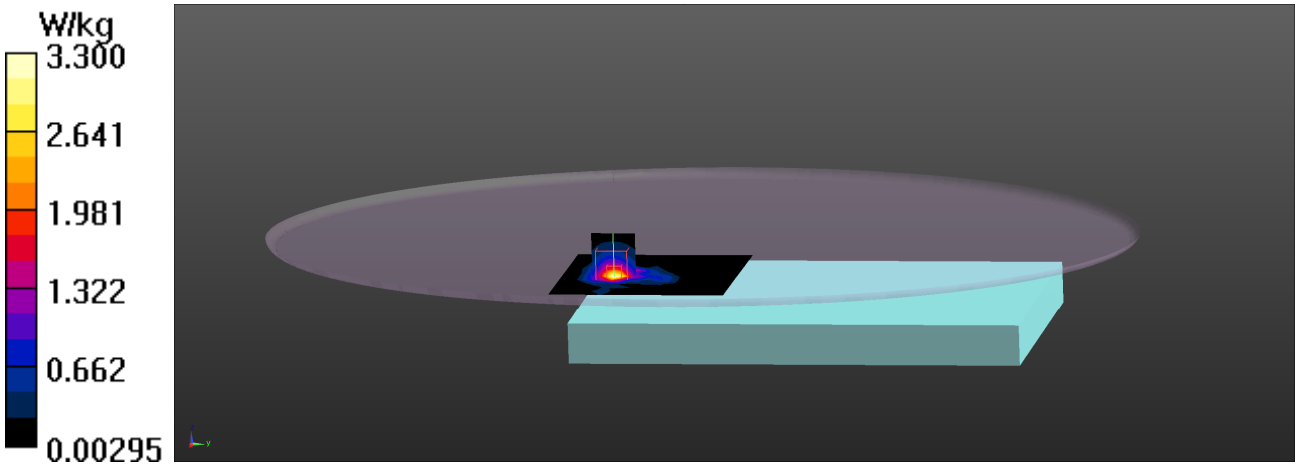
Communication System: UID 0, WLAN 2.4G; Frequency: 2462 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2462 MHz; $\sigma$ = 1.81 S/m; $\varepsilon_r$ = 39.58; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(7.15, 7.15, 7.15) @ 2462 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (12x11x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.30 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.40 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 3.92 W/kg
**SAR(1 g) = 2.19 W/kg; SAR(10 g) = 1.06 W/kg**
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 59.2%
Maximum value of SAR (measured) = 3.33 W/kg



Test Laboratory: DEKRA Date: 2024/11/01

**623_Bluetooth_BT-1M_CH78_Back_0mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

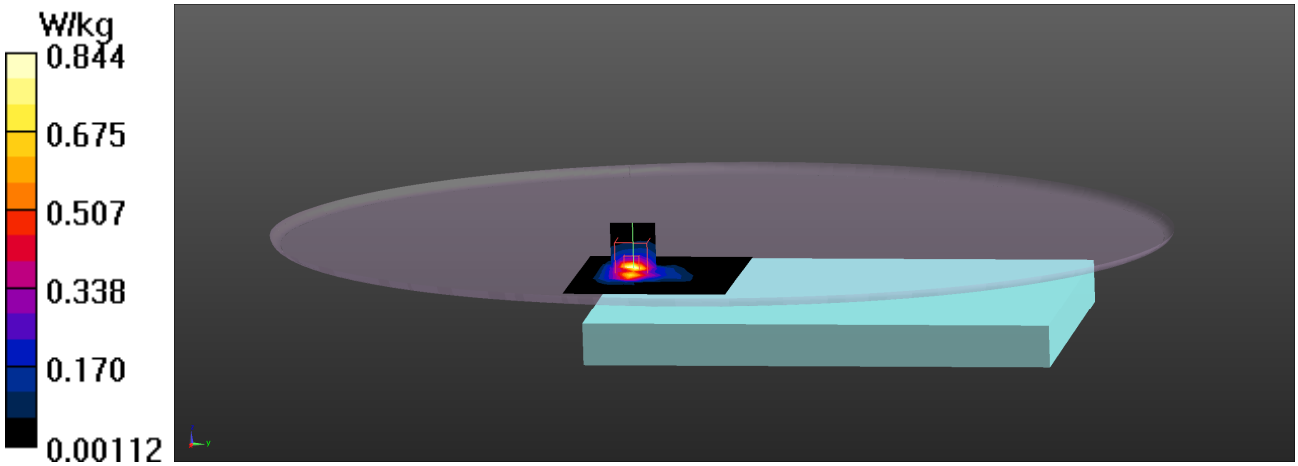
Communication System: UID 0, BT 1M&3M&BLE; Frequency: 2480 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2480 MHz; $\sigma$ = 1.82 S/m; $\varepsilon_r$ = 39.51; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(7.15, 7.15, 7.15) @ 2480 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (11x10x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.844 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.52 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.35 W/kg
**SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.223 W/kg**
Smallest distance from peaks to all points 3 dB below = 7.3 mm
Ratio of SAR at M2 to SAR at M1 = 40%
Maximum value of SAR (measured) = 0.910 W/kg



Test Laboratory: DEKRA Date: 2024/11/02

**624_WLAN5GHz_802.11ac80-VHT0_CH58_Back_0mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

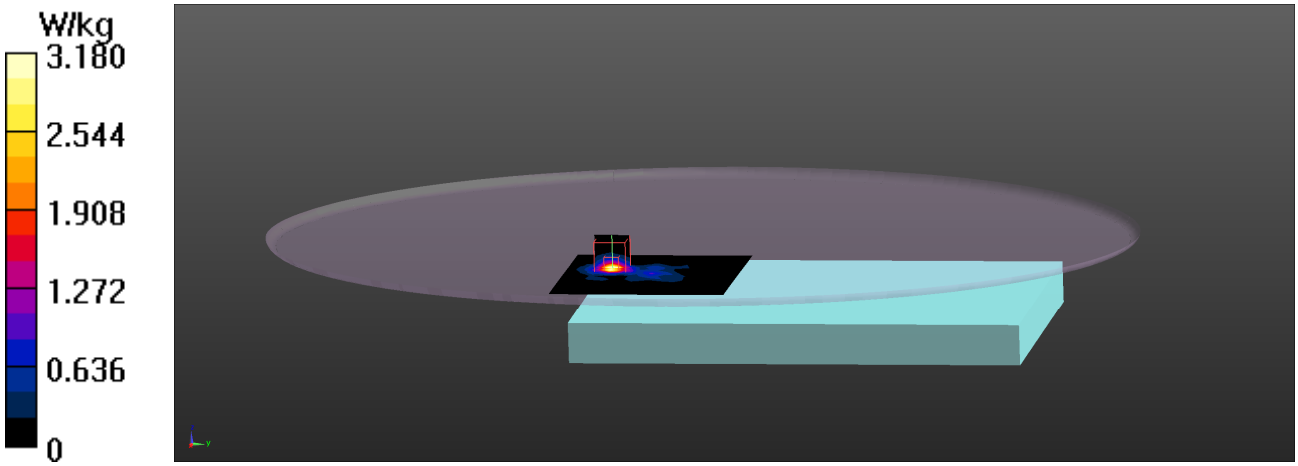
Communication System: UID 0, WLAN 5G; Frequency: 5290 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 5290 MHz; $\sigma$ = 4.73 S/m; $\varepsilon_r$ = 35.71; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(4.71, 4.71, 4.71) @ 5290 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (14x13x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 3.18 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 32.78 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 6.48 W/kg
**SAR(1 g) = 1.66 W/kg; SAR(10 g) = 0.513 W/kg**
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 66%
Maximum value of SAR (measured) = 4.09 W/kg



Test Laboratory: DEKRA Date: 2024/11/02

**625_WLAN5GHz_802.11ac80-VHT0_CH106_Back_0mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

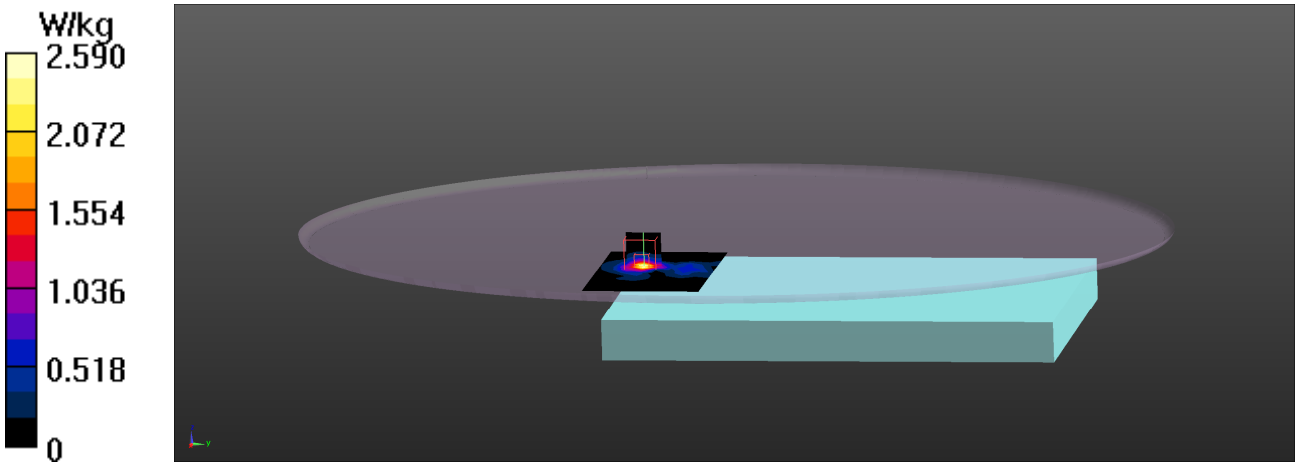
Communication System: UID 0, WLAN 5G; Frequency: 5530 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 5530 MHz; $\sigma$ = 5.06 S/m; $\varepsilon_r$ = 35.05; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(4.41, 4.41, 4.41) @ 5530 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (14x9x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.59 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 25.96 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 4.57 W/kg
**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.387 W/kg**
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 64.8%
Maximum value of SAR (measured) = 2.84 W/kg



Test Laboratory: DEKRA Date: 2024/11/02

**644_WLAN5GHz_802.11ac80-VHT0_CH155_Back_0mm_ANT Aux**

**DUT: Rugged Controller; Type: 140000**

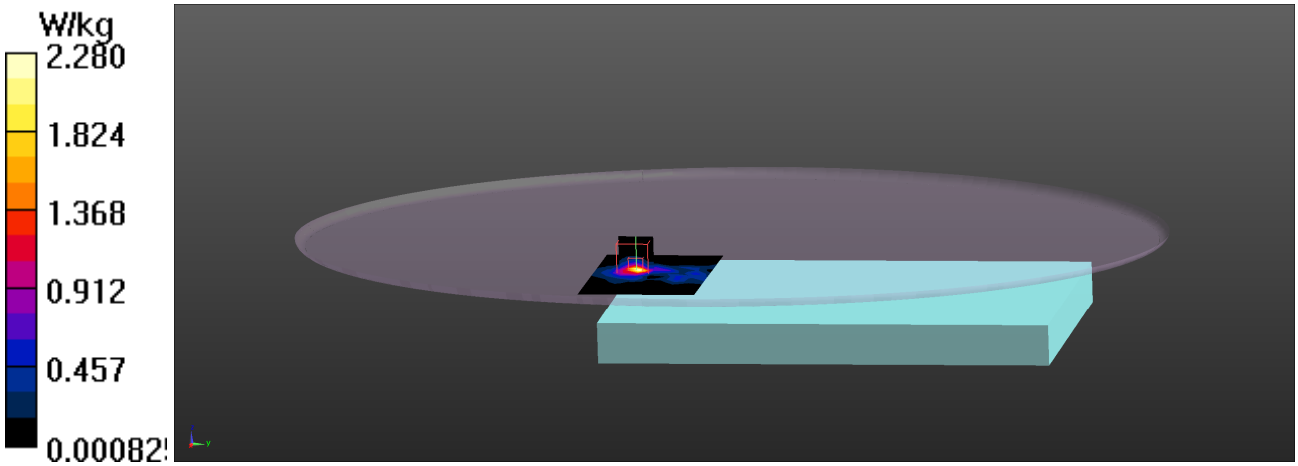
Communication System: UID 0, WLAN 5G; Frequency: 5775 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 5775 MHz; $\sigma$ = 5.38 S/m; $\varepsilon_r$ = 34.38; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3698; ConvF(4.6, 4.6, 4.6) @ 5775 MHz; Calibrated: 2023/11/21
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 2023/11/22
- Phantom: ELI 5.0; Type: QDOVA002AA; Serial: 1199
- Measurement SW: DASY52, Version 52.10 (4);

**Configuration/Flat/Area Scan (14x9x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.28 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 23.89 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 4.39 W/kg
**SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.335 W/kg**
Smallest distance from peaks to all points 3 dB below = 5.1 mm
Ratio of SAR at M2 to SAR at M1 = 64.4%
Maximum value of SAR (measured) = 2.50 W/kg



Test Laboratory: DEKRA Date: 2024/10/07

**234_WCDMA B2_RMC_CH9400_Back_0mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

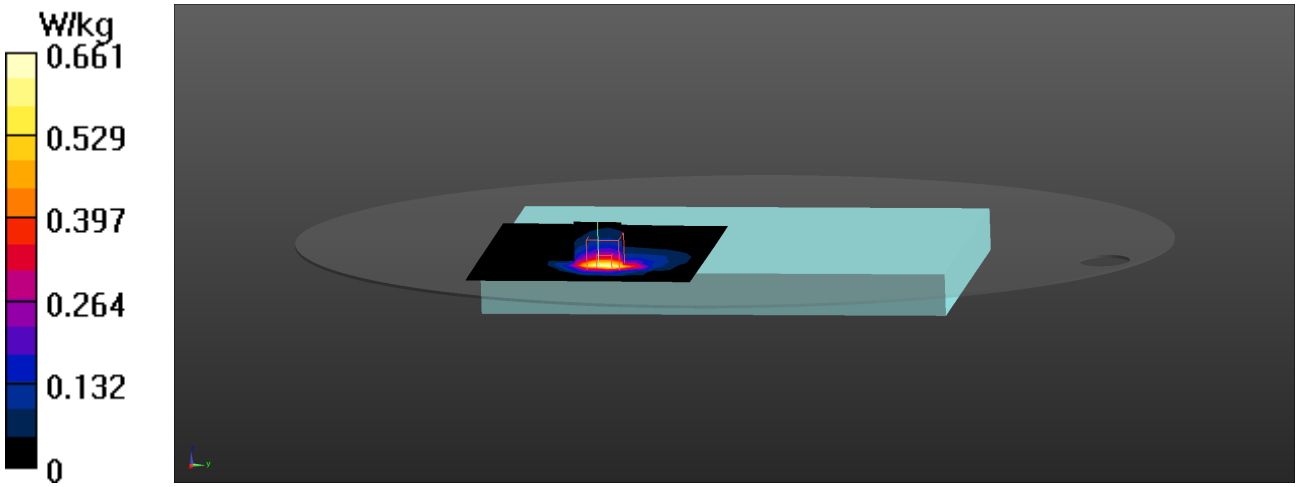
Communication System: UID 0, WCDMA_Band-2; Frequency: 1880 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.40 S/m; $\varepsilon_r$ = 41.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1880 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/Flat/Area Scan (12x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.661 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.38 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.826 W/kg
**SAR(1 g) = 0.447 W/kg; SAR(10 g) = 0.239 W/kg**
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 53.6%
Maximum value of SAR (measured) = 0.678 W/kg



Test Laboratory: DEKRA Date: 2024/10/28

**767_WCDMA B4_RMC_CH1413_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

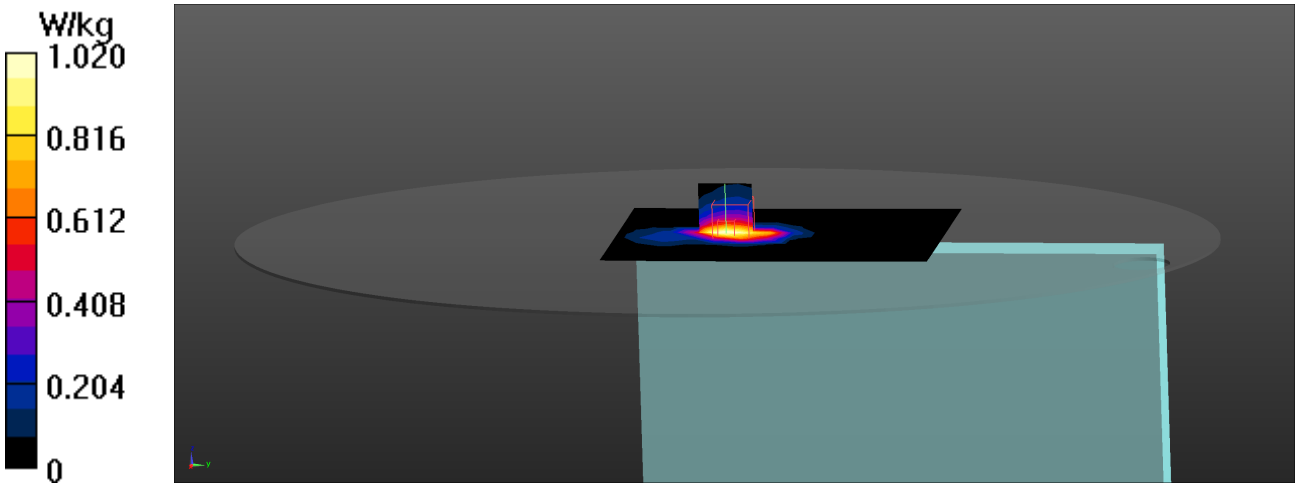
Communication System: UID 0, WCDMA_Band 4; Frequency: 1732.6 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1732.6 MHz; $\sigma$ = 1.37 S/m; $\varepsilon_r$ = 39.88; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1732.6 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.02 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.80 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.29 W/kg
**SAR(1 g) = 0.747 W/kg; SAR(10 g) = 0.431 W/kg**
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 58.2%
Maximum value of SAR (measured) = 1.10 W/kg



Test Laboratory: DEKRA Date: 2024/10/05

**238_WCDMA B5_RMC_CH4183_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

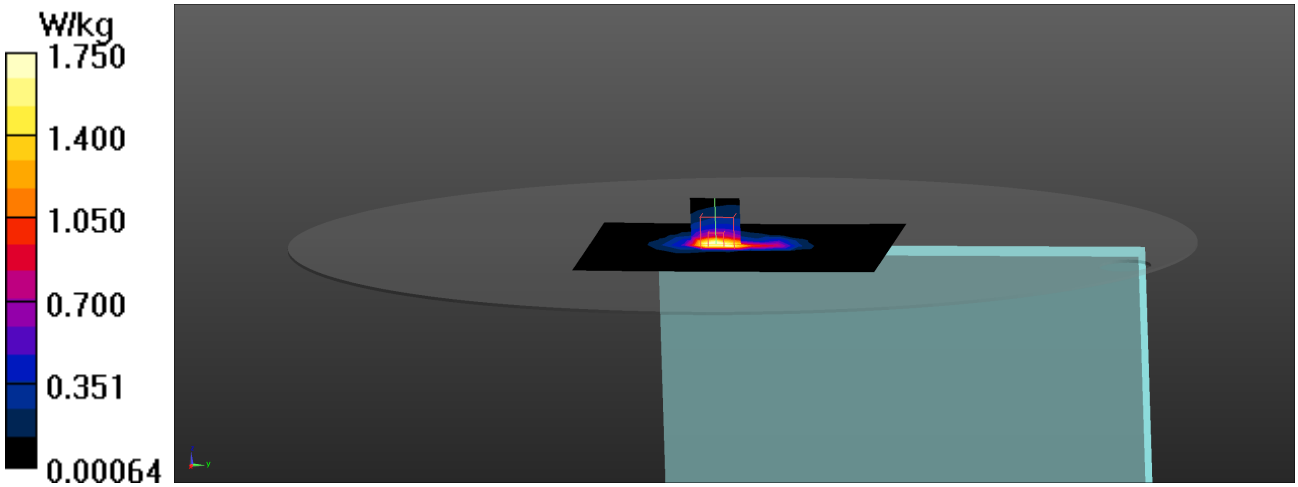
Communication System: UID 0, WCDMA_Band-5; Frequency: 836.6 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 836.6 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.6 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.75 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.547 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 2.71 W/kg
**SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.549 W/kg**
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 42.8%
Maximum value of SAR (measured) = 2.04 W/kg



Test Laboratory: DEKRA Date: 2024/10/08

**182_LTE_Band2_QPSK_20M_18900_1RB-0offset_Back_0mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

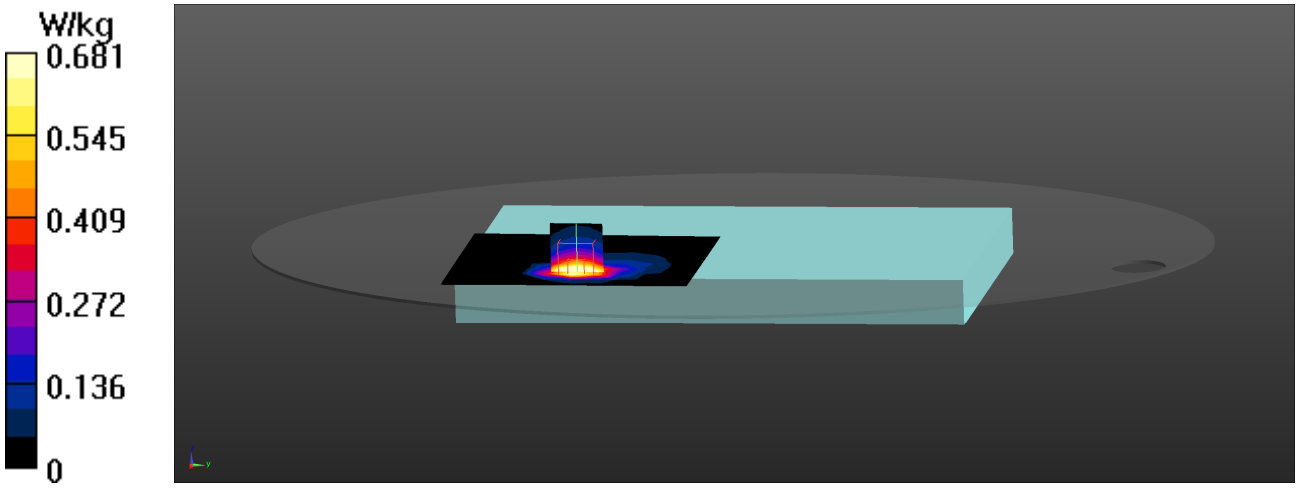
Communication System: UID 0, LTE Band2; Frequency: 1880 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.38 S/m; $\varepsilon_r$ = 41.35; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1880 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/Flat/Area Scan (10x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.681 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.53 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.10 W/kg
**SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.316 W/kg**
Smallest distance from peaks to all points 3 dB below = 10.1 mm
Ratio of SAR at M2 to SAR at M1 = 55.7%
Maximum value of SAR (measured) = 0.936 W/kg



Test Laboratory: DEKRA Date: 2024/10/28

**516_LTE_Band4_QPSK_20M_20175_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

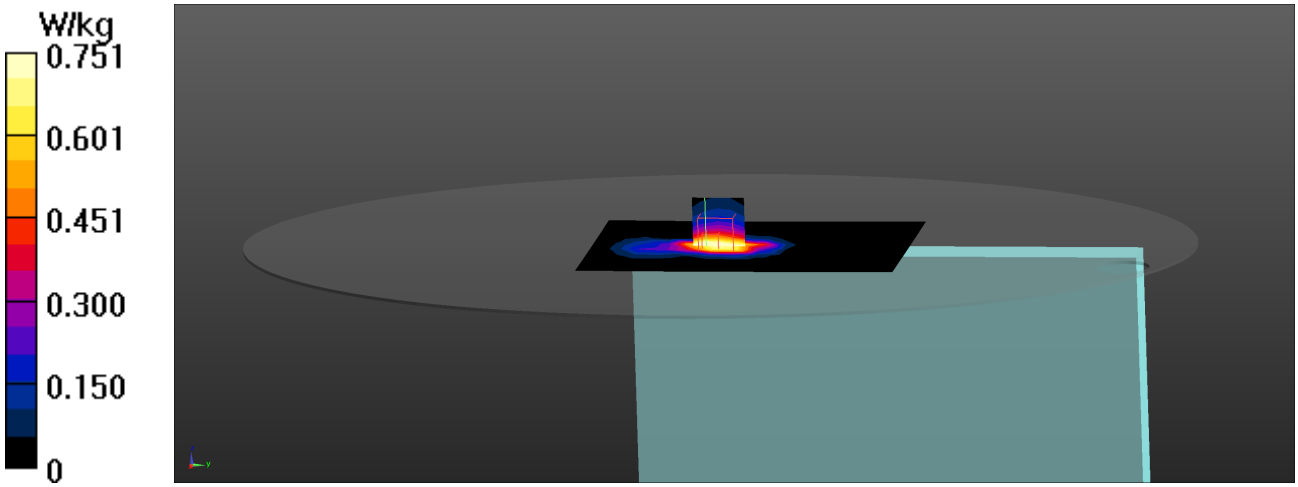
Communication System: UID 0, LTE Band4; Frequency: 1732.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1732.5 MHz; $\sigma$ = 1.37 S/m; $\varepsilon_r$ = 39.87; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1732.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.751 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.8830 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.14 W/kg
**SAR(1 g) = 0.627 W/kg; SAR(10 g) = 0.358 W/kg**
Smallest distance from peaks to all points 3 dB below = 10.7 mm
Ratio of SAR at M2 to SAR at M1 = 54.9%
Maximum value of SAR (measured) = 0.943 W/kg



Test Laboratory: DEKRA Date: 2024/10/05

**127_LTE_Band5_QPSK_10M_20525_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

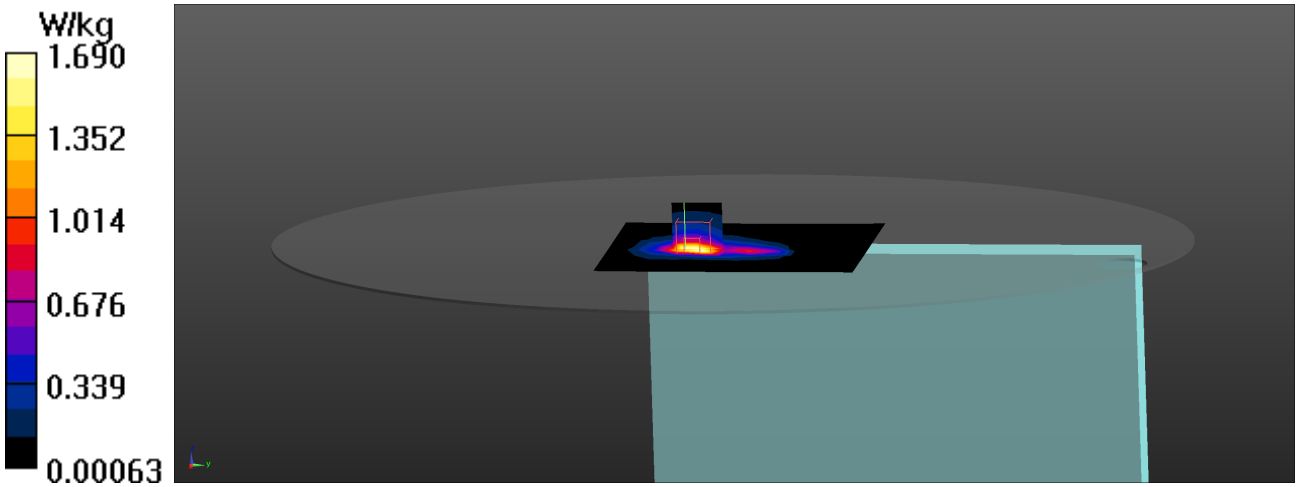
Communication System: UID 0, LTE Band5; Frequency: 836.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 836.5 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.5 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/Flat/Area Scan (10x12x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.69 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.35 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.56 W/kg
**SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.568 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.7 mm
Ratio of SAR at M2 to SAR at M1 = 43.6%
Maximum value of SAR (measured) = 1.84 W/kg



Test Laboratory: DEKRA Date: 2024/10/18

**519_LTE_Band7_QPSK_20M_21100_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

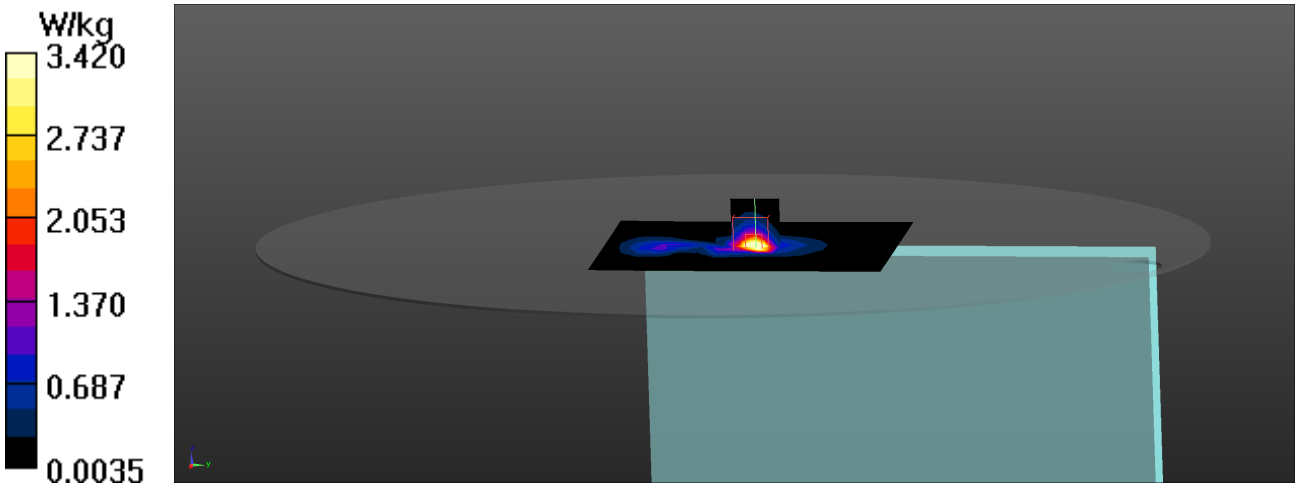
Communication System: UID 0, LTE Band7; Frequency: 2535 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2535 MHz; $\sigma$ = 1.91 S/m; $\varepsilon_r$ = 39.73; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2535 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/Flat/Area Scan (12x16x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.42 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.11 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 6.46 W/kg
**SAR(1 g) = 2.89 W/kg; SAR(10 g) = 1.16 W/kg**
Smallest distance from peaks to all points 3 dB below = 6.7 mm
Ratio of SAR at M2 to SAR at M1 = 48%
Maximum value of SAR (measured) = 5.09 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**124_LTE_Band12_QPSK_10M_23095_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

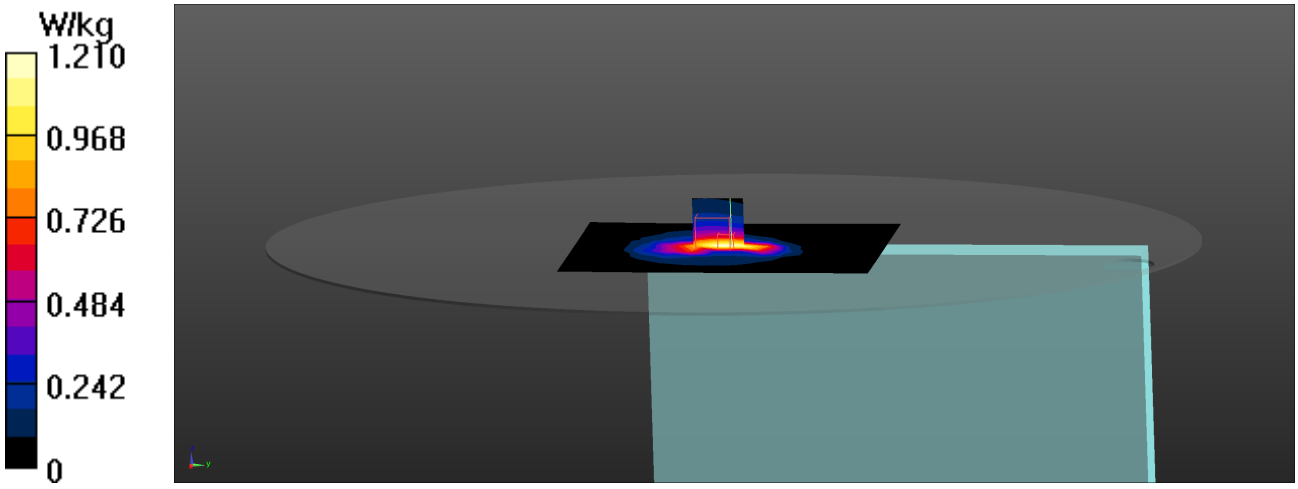
Communication System: UID 0, LTE Band12; Frequency: 707.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 707.5 MHz; $\sigma$ = 0.88 S/m; $\varepsilon_r$ = 42.20; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 707.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.21 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 38.97 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.76 W/kg
**SAR(1 g) = 0.807 W/kg; SAR(10 g) = 0.449 W/kg**
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 52.8%
Maximum value of SAR (measured) = 1.21 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**125_LTE_Band13_QPSK_10M_23230_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

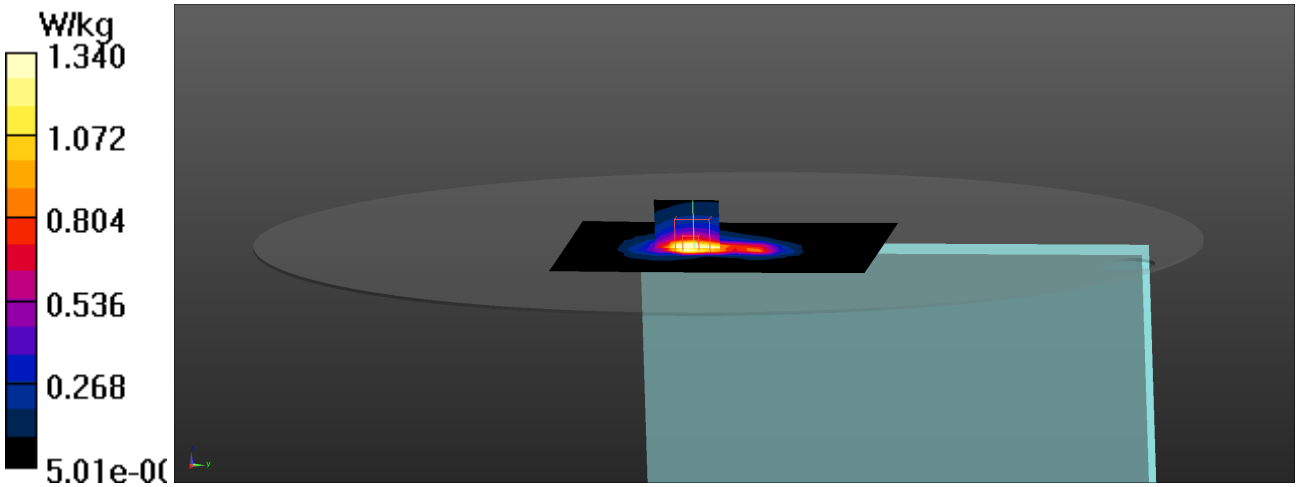
Communication System: UID 0, LTE Band13; Frequency: 782 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 782 MHz; $\sigma$ = 0.93 S/m; $\varepsilon_r$ = 41.72; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 782 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.34 W/kg

**Configuration/Flat/Zoom Scan (5x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.330 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 2.37 W/kg
**SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.556 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 44.6%
Maximum value of SAR (measured) = 1.82 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**126_LTE_Band14_QPSK_10M_23330_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

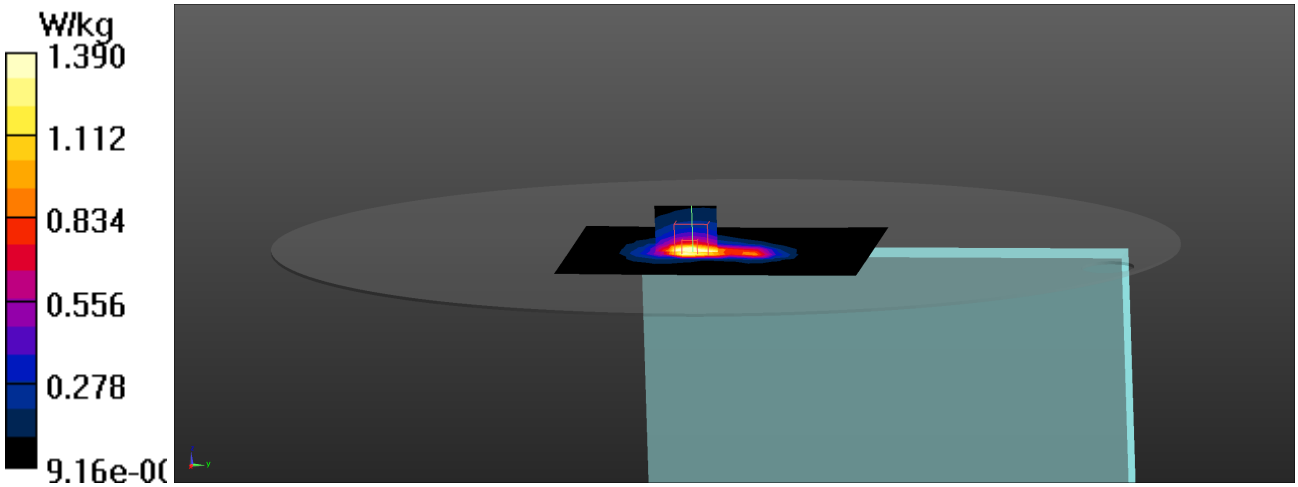
Communication System: UID 0, LTE Band14; Frequency: 793 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 793 MHz; $\sigma$ = 0.94 S/m; $\varepsilon_r$ = 41.65; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 793 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.39 W/kg

**Configuration/Flat/Zoom Scan (5x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 46.75 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 2.42 W/kg
**SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.569 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 44.8%
Maximum value of SAR (measured) = 1.85 W/kg



Test Laboratory: DEKRA Date: 2024/10/08

**183_LTE_Band25_QPSK_20M_26365_1RB-0offset_Back_0mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

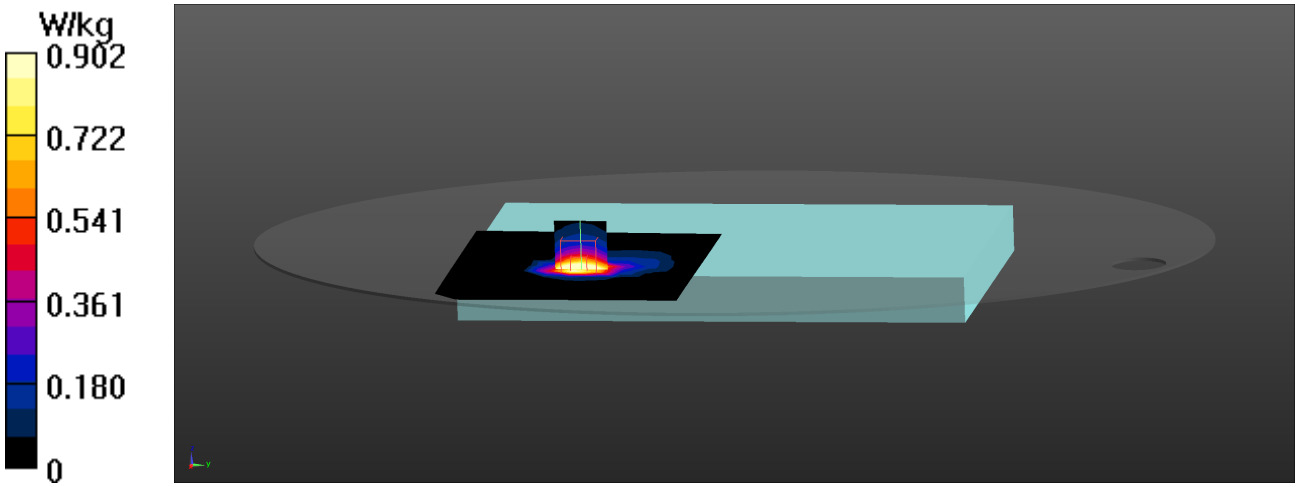
Communication System: UID 0, LTE Band25; Frequency: 1882.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1882.5 MHz; $\sigma$ = 1.38 S/m; $\varepsilon_r$ = 41.29; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1882.5 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/Flat/Area Scan (13x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.902 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.18 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.52 W/kg
**SAR(1 g) = 0.821 W/kg; SAR(10 g) = 0.426 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 55.1%
Maximum value of SAR (measured) = 1.28 W/kg



Test Laboratory: DEKRA Date: 2024/10/05

**128_LTE_Band26_QPSK_15M_26865_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

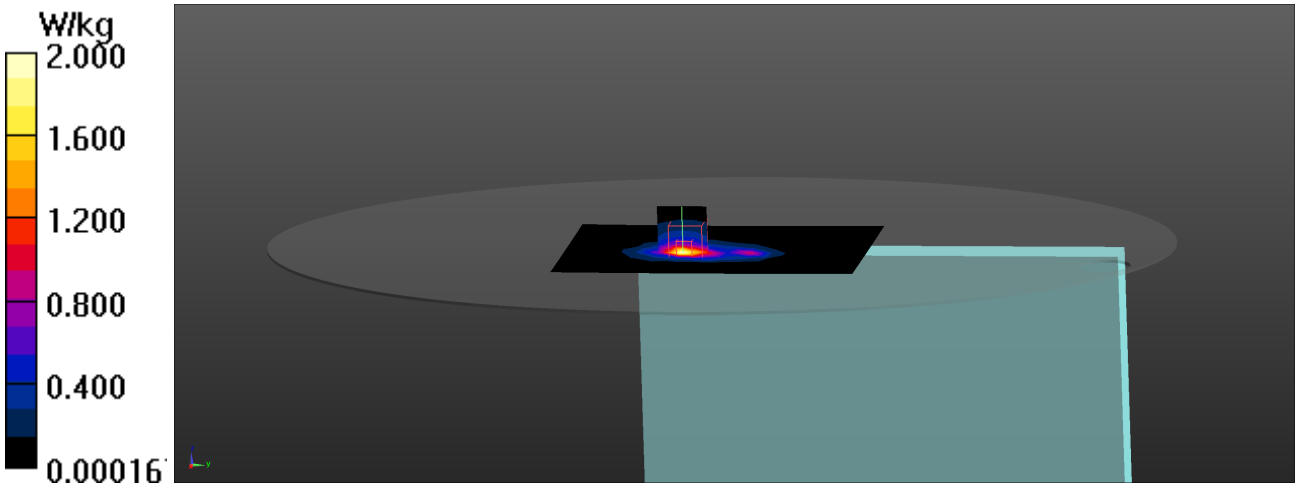
Communication System: UID 0, LTE Band26; Frequency: 831.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 831.5 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.32; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 831.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.00 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 48.86 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 2.73 W/kg
**SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.526 W/kg**
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 38.6%
Maximum value of SAR (measured) = 2.01 W/kg



Test Laboratory: DEKRA Date: 2024/10/29

**522_LTE_Band41_QPSK_20M_40620_1RB-0offset_Back_0mm_ANT 0_HPUE**

**DUT: Rugged Controller; Type: 140000**

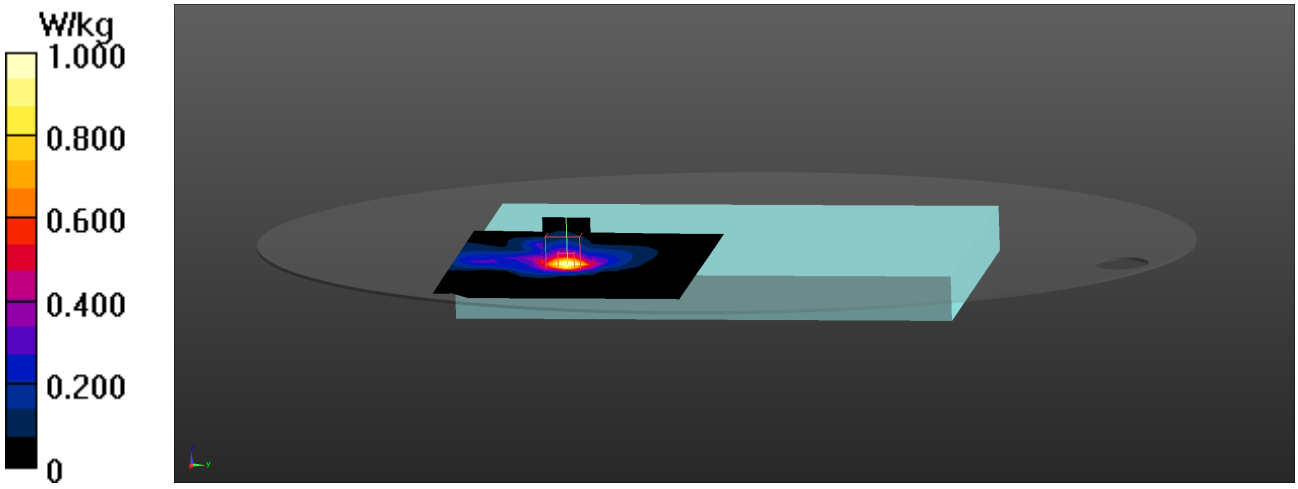
Communication System: UID 0, LTE-TDD Band41; Frequency: 2593 MHz
Communication System PAR: 2.331 dB
Medium parameters used: f = 2593 MHz; $\sigma$ = 1.87 S/m; $\varepsilon_r$ = 38.83; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2593 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/Flat/Area Scan (16x14x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.00 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.83 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.40 W/kg
**SAR(1 g) = 0.686 W/kg; SAR(10 g) = 0.337 W/kg**
Smallest distance from peaks to all points 3 dB below = 12.6 mm
Ratio of SAR at M2 to SAR at M1 = 49%
Maximum value of SAR (measured) = 1.13 W/kg



Test Laboratory: DEKRA Date: 2024/10/20

**701_LTE_Band42_QPSK_20M_42590_1RB-0offset_Back_0mm_ANT 3_HPUE**

**DUT: Rugged Controller; Type: 140000**

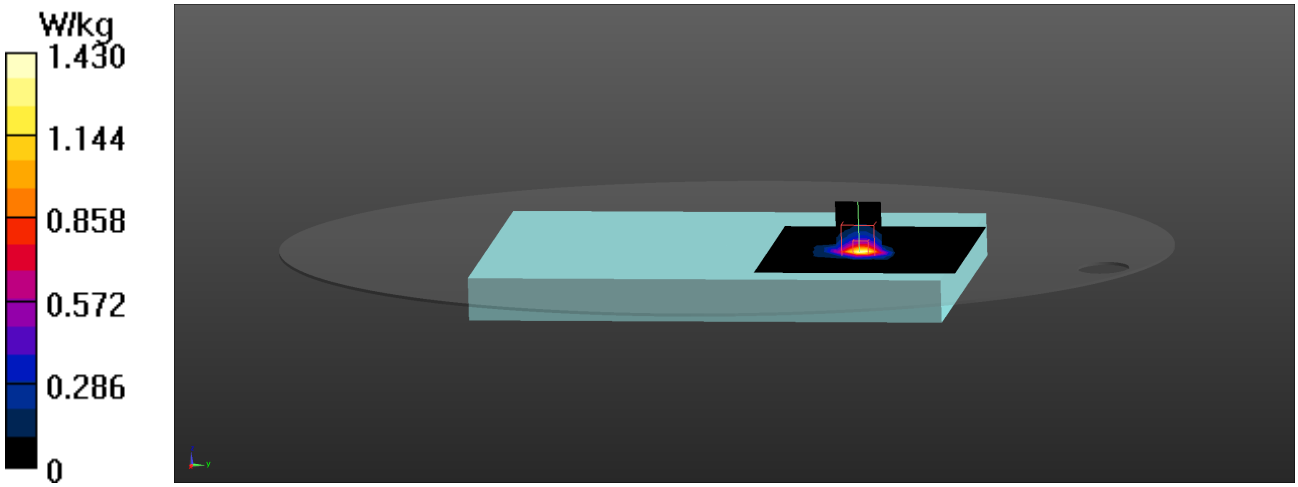
Communication System: UID 0, FCC LTE-TDD Band42; Frequency: 3500 MHz
Communication System PAR: 2.331 dB
Medium parameters used: f = 3500 MHz; $\sigma$ = 3.01 S/m; $\varepsilon_r$ = 37.91; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.66, 7.66, 7.66) @ 3500 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/Flat/Area Scan (12x12x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.43 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 24.06 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.73 W/kg
**SAR(1 g) = 0.854 W/kg; SAR(10 g) = 0.355 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 83.8%
Maximum value of SAR (measured) = 1.39 W/kg



Test Laboratory: DEKRA Date: 2024/10/23

**206_LTE_Band48_QPSK_20M_55990_1RB-0offset_Back_0mm_ANT 3**

**DUT: Rugged Controller; Type: 140000**

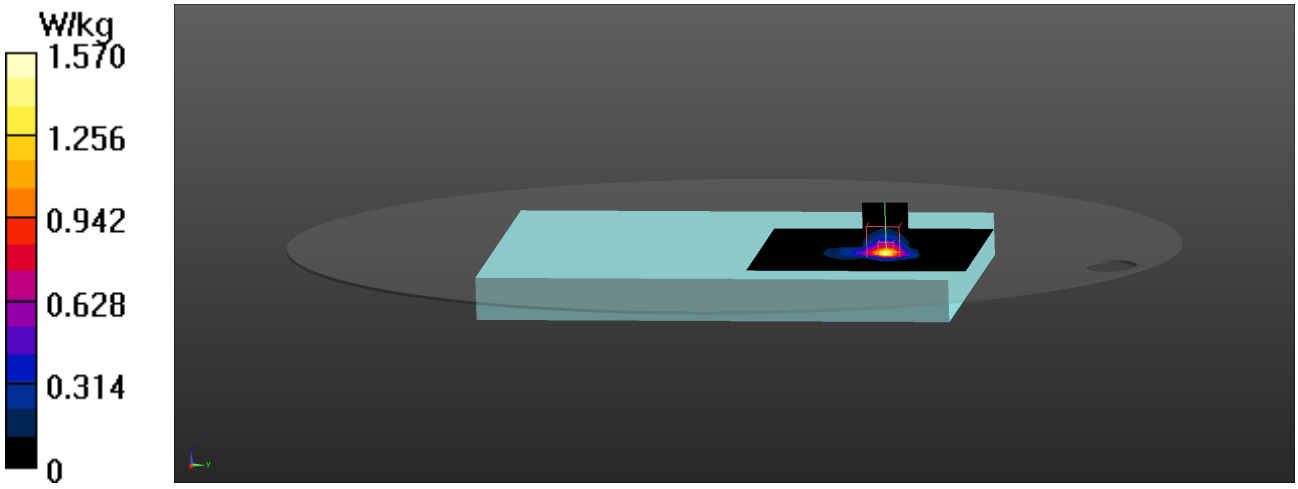
Communication System: UID 0, LTE-TDD Band48; Frequency: 3625 MHz
Communication System PAR: 2.014 dB
Medium parameters used: f = 3625 MHz; $\sigma$ = 3.12 S/m; $\varepsilon_r$ = 38.32; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.25, 7.25, 7.25) @ 3625 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/Flat/Area Scan (11x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.57 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 24.59 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 2.00 W/kg
**SAR(1 g) = 0.911 W/kg; SAR(10 g) = 0.354 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.5 mm
Ratio of SAR at M2 to SAR at M1 = 80.5%
Maximum value of SAR (measured) = 1.55 W/kg



Test Laboratory: DEKRA Date: 2024/10/15

**688_LTE_Band66_QPSK_20M_132322_1RB-0offset_Back_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

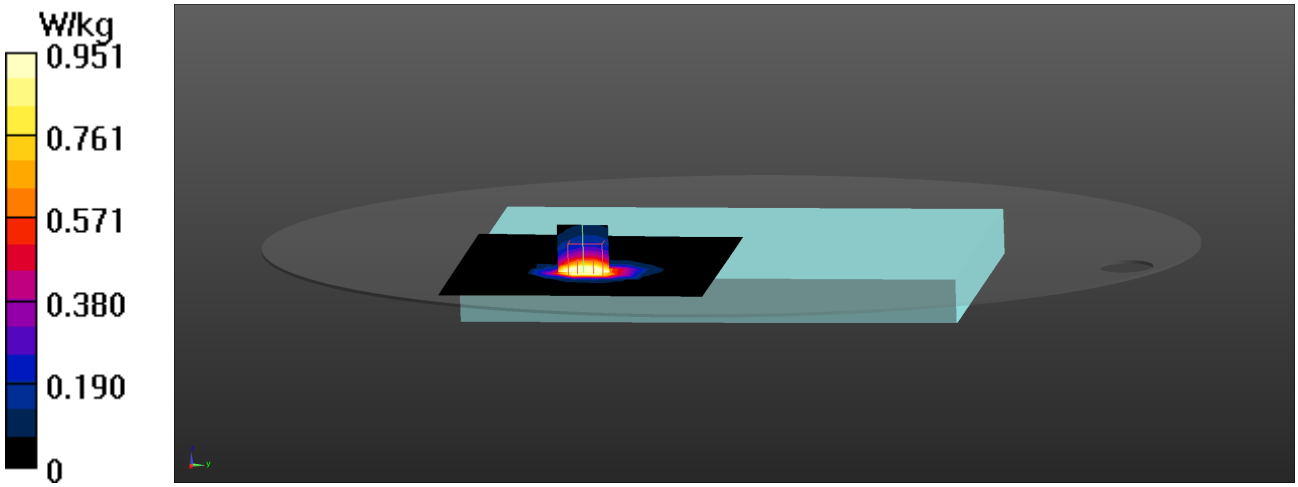
Communication System: UID 0, LTE Band66; Frequency: 1745 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1745 MHz; $\sigma$ = 1.41 S/m; $\varepsilon_r$ = 41.14; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1745 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/Flat/Area Scan (12x12x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.951 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 32.92 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.61 W/kg
**SAR(1 g) = 0.902 W/kg; SAR(10 g) = 0.484 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.7 mm
Ratio of SAR at M2 to SAR at M1 = 56.7%
Maximum value of SAR (measured) = 1.34 W/kg



Test Laboratory: DEKRA Date: 2024/10/01

**123_LTE_Band71_QPSK_20M_133322_1RB-0offset_Right-side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

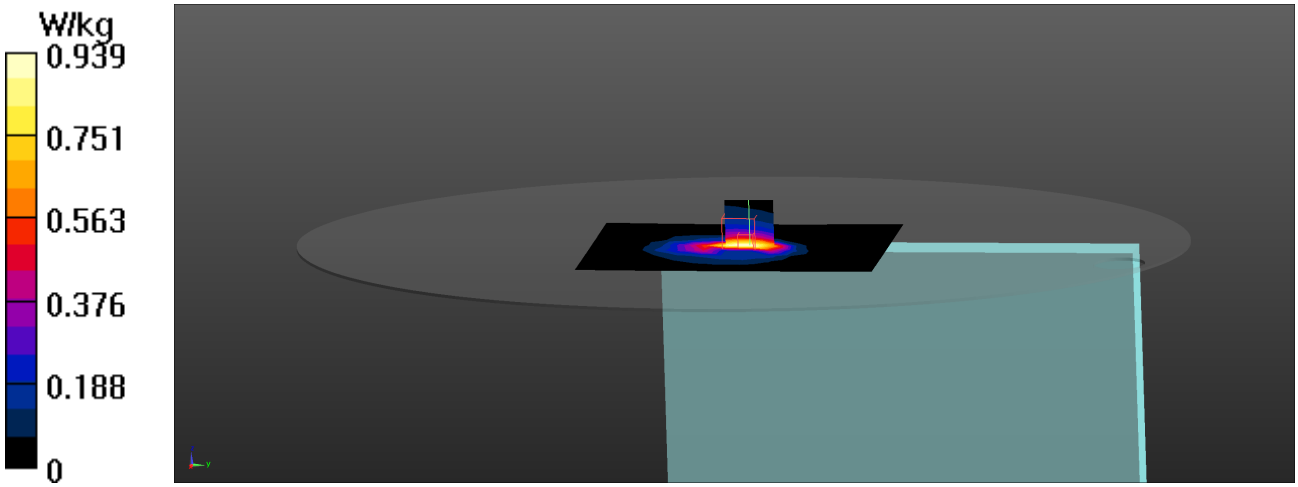
Communication System: UID 0, LTE B71; Frequency: 683 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 683 MHz; $\sigma$ = 0.87 S/m; $\varepsilon_r$ = 42.37; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 683 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.939 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.967 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.42 W/kg
**SAR(1 g) = 0.610 W/kg; SAR(10 g) = 0.308 W/kg**
Smallest distance from peaks to all points 3 dB below = 8.2 mm
Ratio of SAR at M2 to SAR at M1 = 50.7%
Maximum value of SAR (measured) = 0.956 W/kg



Test Laboratory: DEKRA Date: 2024/10/06

**116_NRn5_DFT-S-QPSK_20M_CH167300_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

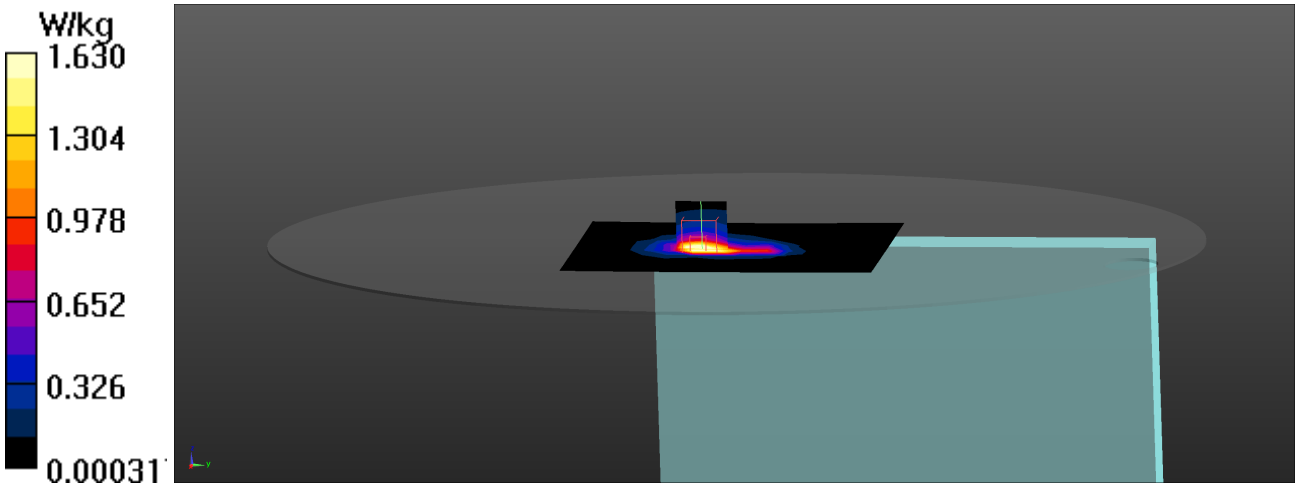
Communication System: UID 0, 5G n5; Frequency: 836.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 836.5 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 42.34; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.63 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.36 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 2.85 W/kg
**SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.589 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.3 mm
Ratio of SAR at M2 to SAR at M1 = 42.6%
Maximum value of SAR (measured) = 2.09 W/kg



Test Laboratory: DEKRA Date: 2024/10/09

**120_NRn7_DFT-S-QPSK_40M_CH507000_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

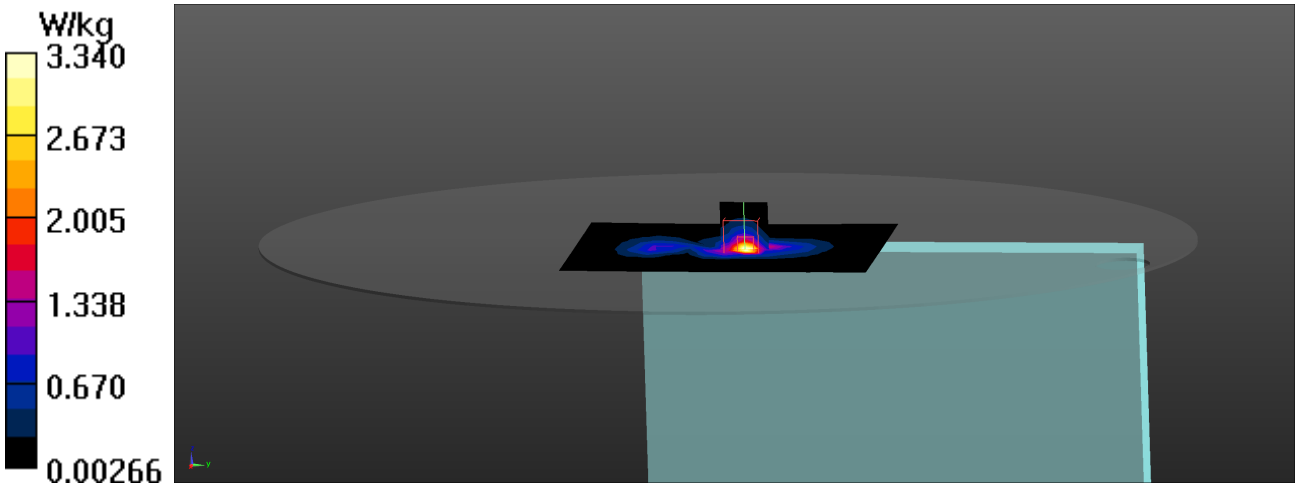
Communication System: UID 0, 5G n7; Frequency: 2535 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2535 MHz; $\sigma$ = 1.87 S/m; $\varepsilon_r$ = 40.65; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2535 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/Flat/Area Scan (12x17x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 3.34 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 45.45 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 4.79 W/kg
**SAR(1 g) = 2.14 W/kg; SAR(10 g) = 0.904 W/kg**
Smallest distance from peaks to all points 3 dB below = 7.8 mm
Ratio of SAR at M2 to SAR at M1 = 49.9%
Maximum value of SAR (measured) = 3.72 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**113_NRn12_DFT-S-QPSK_15M_CH141500_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

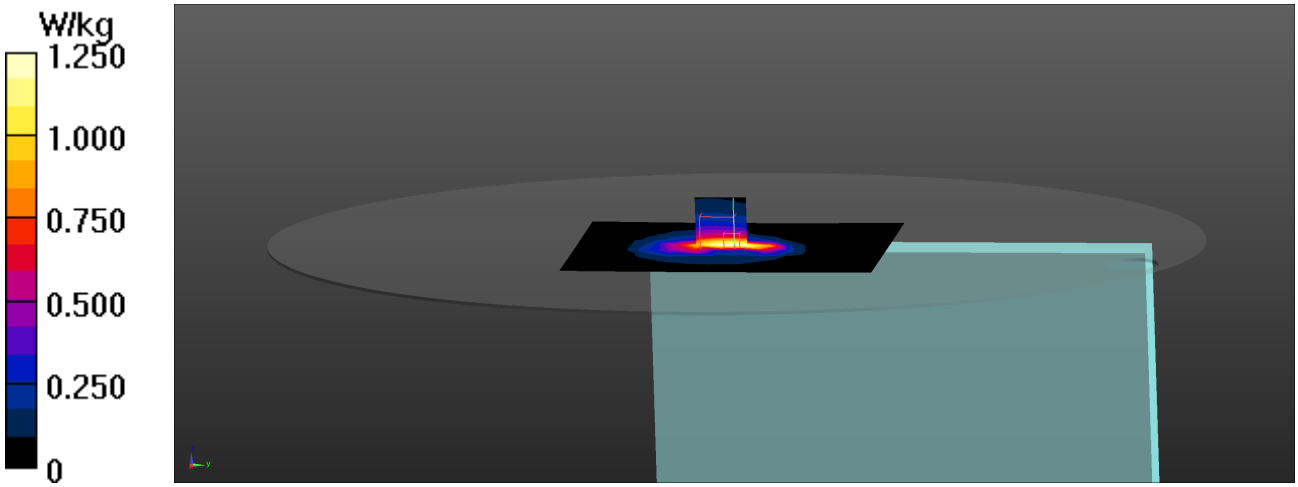
Communication System: UID 0, 5G n12; Frequency: 707.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 707.5 MHz; $\sigma$ = 0.87 S/m; $\varepsilon_r$ = 41.76; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 707.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.25 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 39.86 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.75 W/kg
**SAR(1 g) = 0.809 W/kg; SAR(10 g) = 0.449 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 50.6%
Maximum value of SAR (measured) = 1.28 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**114_NRn13_DFT-S-QPSK_10M_CH156400_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

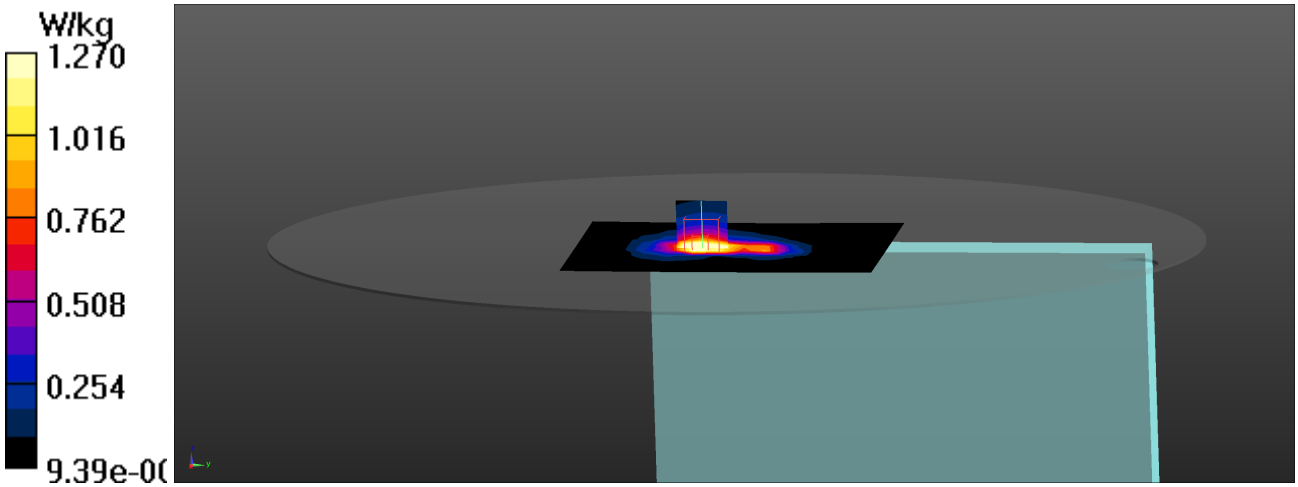
Communication System: UID 0, 5G n13; Frequency: 782 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 782 MHz; $\sigma$ = 0.92 S/m; $\varepsilon_r$ = 40.31; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 782 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.27 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.96 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 2.73 W/kg
**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.614 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 44%
Maximum value of SAR (measured) = 2.06 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**115_NRn14_DFT-S-QPSK_10M_CH158600_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

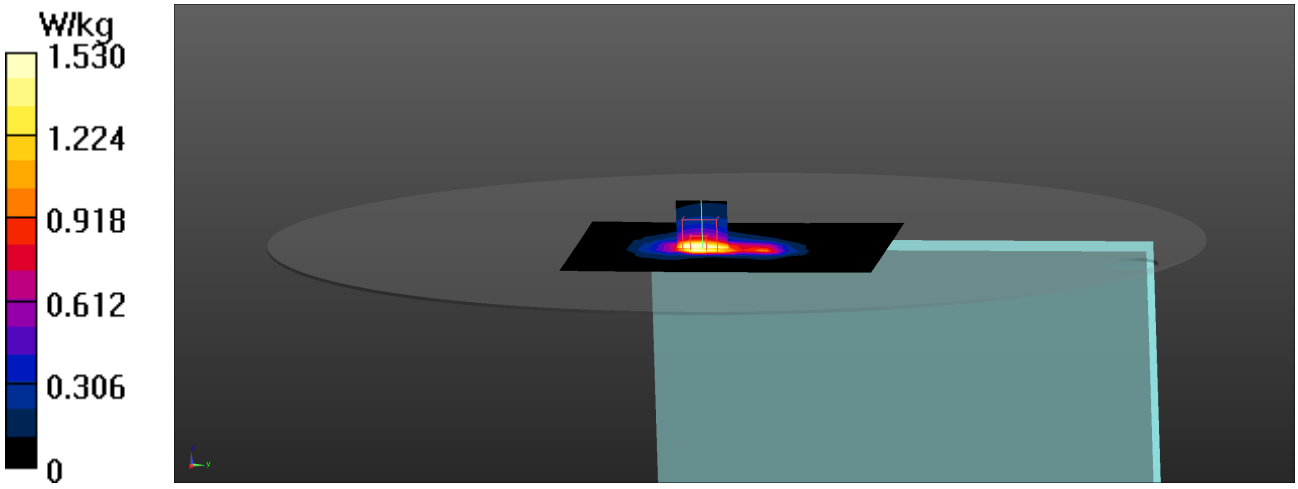
Communication System: UID 0, 5G n14; Frequency: 793 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 793 MHz; $\sigma$ = 0.93 S/m; $\varepsilon_r$ = 40.10; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 793 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.53 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 49.08 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 2.69 W/kg
**SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.622 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.3 mm
Ratio of SAR at M2 to SAR at M1 = 44.9%
Maximum value of SAR (measured) = 2.02 W/kg



Test Laboratory: DEKRA Date: 2024/10/07

**502_NRn25_DFT-S-QPSK_40M_CH376500_1RB_1offset_Back_0mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

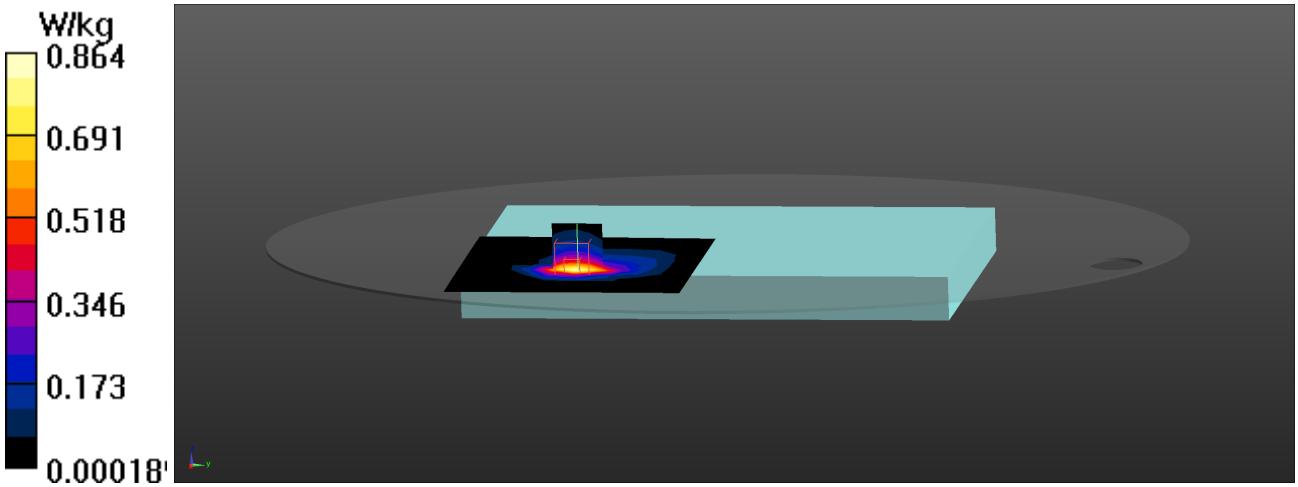
Communication System: UID 0, 5G n25; Frequency: 1882.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1882.5 MHz; $\sigma$ = 1.40 S/m; $\varepsilon_r$ = 41.18; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.46, 8.46, 8.46) @ 1882.5 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/Flat/Area Scan (11x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.864 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 25.49 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.03 W/kg
**SAR(1 g) = 0.581 W/kg; SAR(10 g) = 0.312 W/kg**
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 56.7%
Maximum value of SAR (measured) = 0.849 W/kg



Test Laboratory: DEKRA Date: 2024/10/06

**117_NRn26_DFT-S-QPSK_20M_CH167300_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

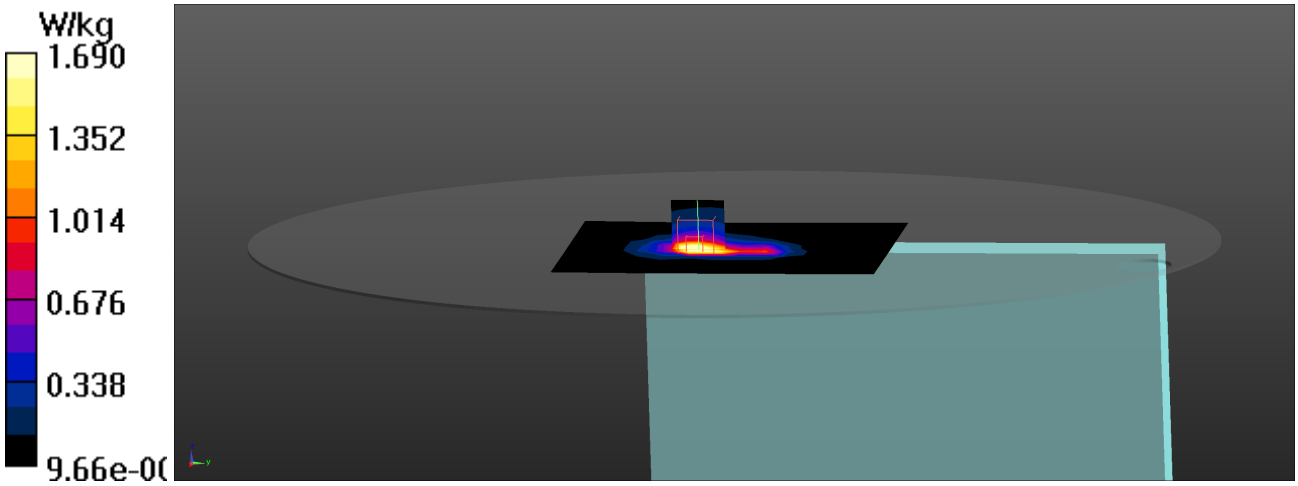
Communication System: UID 0, 5G n26; Frequency: 831.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 831.5 MHz; $\sigma$ = 0.91 S/m; $\varepsilon_r$ = 42.51; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.27, 10.27, 10.27) @ 836.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.69 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 51.35 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.02 W/kg
**SAR(1 g) = 1.26 W/kg; SAR(10 g) = 0.623 W/kg**
Smallest distance from peaks to all points 3 dB below = 10.1 mm
Ratio of SAR at M2 to SAR at M1 = 42.4%
Maximum value of SAR (measured) = 2.22 W/kg



Test Laboratory: DEKRA Date: 2024/10/17

**511_NRn30_DFT-S-QPSK_10M_CH462000_1RB_26offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller; Type: 140000**

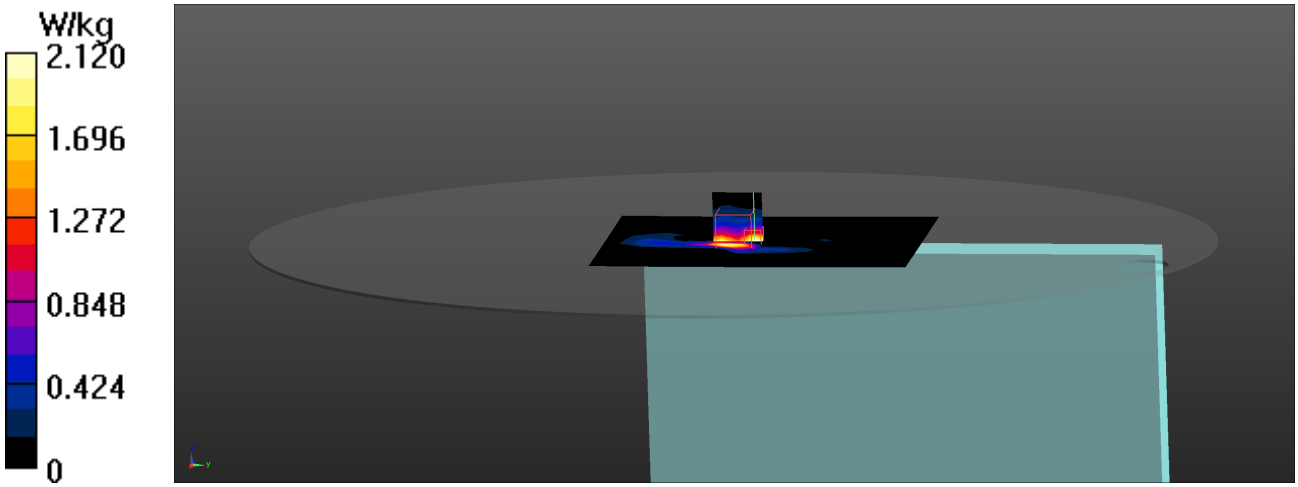
Communication System: UID 0, 5G n30; Frequency: 2310 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2310 MHz; $\sigma$ = 1.65 S/m; $\varepsilon_r$ = 42.21; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.29, 8.29, 8.29) @ 2310 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/Flat/Area Scan (12x17x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.12 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.79 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 3.25 W/kg
**SAR(1 g) = 1.43 W/kg; SAR(10 g) = 0.719 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.8 mm
Ratio of SAR at M2 to SAR at M1 = 47.4%
Maximum value of SAR (measured) = 2.44 W/kg



Test Laboratory: DEKRA Date: 2024/10/26

**449_NRn41_DFT-S-QPSK_100M_CH518598_1RB_1offset_Left side_0mm_ANT 2_HPUE**

**DUT: Rugged Controller; Type: 140000**

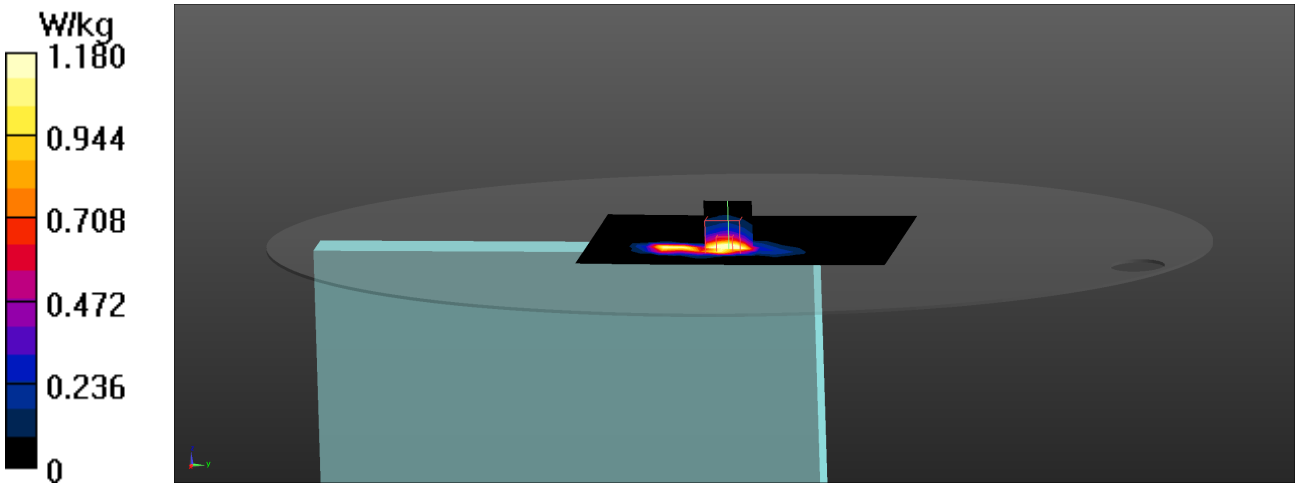
Communication System: UID 0, 5G n41; Frequency: 2592.99 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 2592.99 MHz; $\sigma$ = 1.94 S/m; $\varepsilon_r$ = 39.53; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.97, 7.97, 7.97) @ 2592.99 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/Flat/Area Scan (12x17x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 1.18 W/kg

**Configuration/Flat/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.56 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.00 W/kg
**SAR(1 g) = 0.922 W/kg; SAR(10 g) = 0.411 W/kg**
Smallest distance from peaks to all points 3 dB below = 7.6 mm
Ratio of SAR at M2 to SAR at M1 = 46.8%
Maximum value of SAR (measured) = 1.60 W/kg



Test Laboratory: DEKRA Date: 2024/10/22

**947_NRn48_DFT-S-QPSK_40M_CH641666_1RB_1offset_Back_0mm_ANT 1**

**DUT: Rugged Controller; Type: 140000**

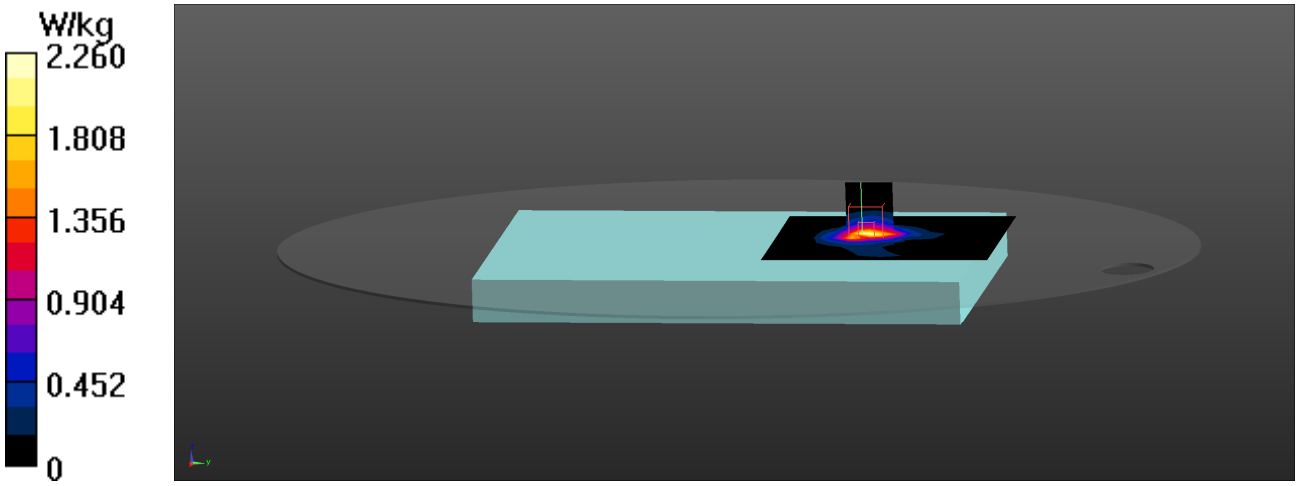
Communication System: UID 0, 5G n48; Frequency: 3624.99 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 3624.99 MHz; $\sigma$ = 3.15 S/m; $\varepsilon_r$ = 38.22; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.25, 7.25, 7.25) @ 3624.99 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/Flat/Area Scan (11x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.26 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 28.55 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 3.09 W/kg
**SAR(1 g) = 1.33 W/kg; SAR(10 g) = 0.590 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.5 mm
Ratio of SAR at M2 to SAR at M1 = 77.1%
Maximum value of SAR (measured) = 2.32 W/kg



Test Laboratory: DEKRA Date: 2024/10/15

**498_NRn66_DFT-S-QPSK_40M_CH349000_1RB_1offset_Back_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

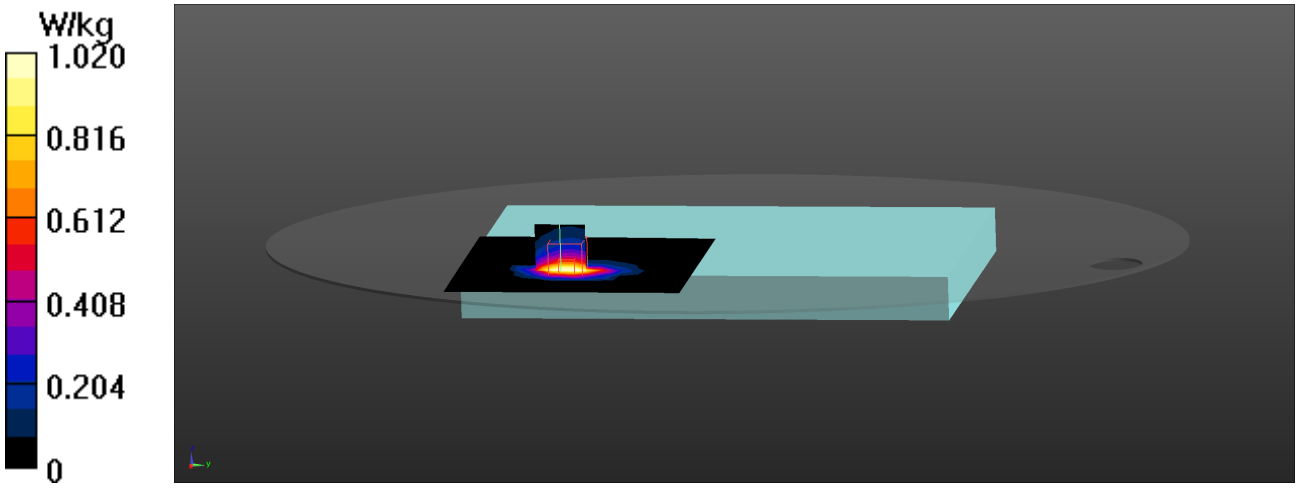
Communication System: UID 0, 5G n66; Frequency: 1745 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1745 MHz; $\sigma$ = 1.41 S/m; $\varepsilon_r$ = 41.14; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1745 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/Flat/Area Scan (11x11x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.02 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.62 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.38 W/kg
**SAR(1 g) = 0.789 W/kg; SAR(10 g) = 0.429 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.7 mm
Ratio of SAR at M2 to SAR at M1 = 56.6%
Maximum value of SAR (measured) = 1.16 W/kg



Test Laboratory: DEKRA Date: 2024/10/28

**510_NRn70_DFT-S-QPSK_15M_CH340500_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

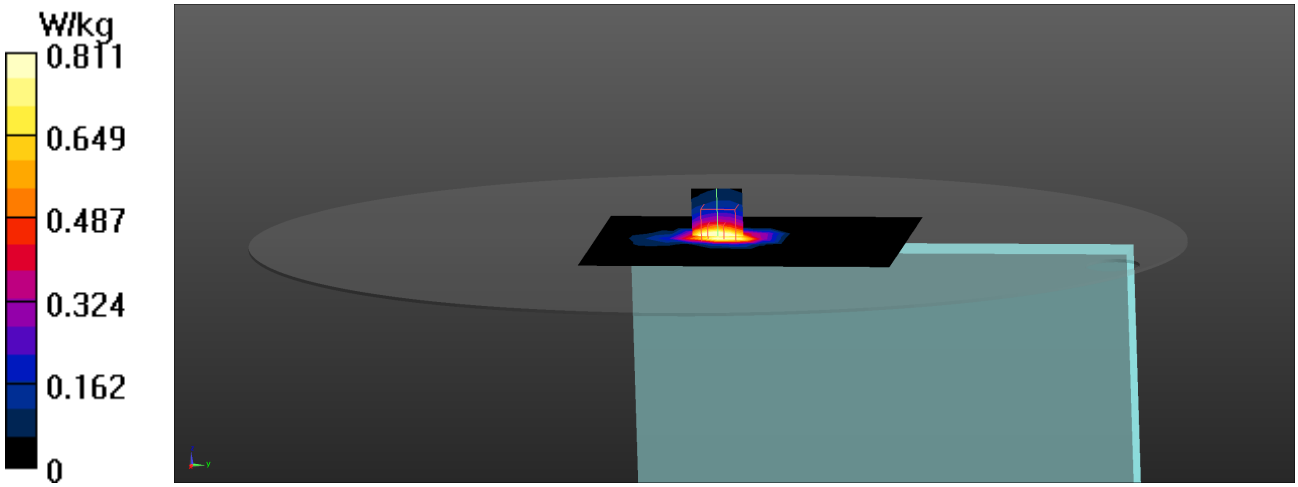
Communication System: UID 0, 5G n70; Frequency: 1702.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 1702.5 MHz; $\sigma$ = 1.35 S/m; $\varepsilon_r$ = 40.28; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(8.71, 8.71, 8.71) @ 1702.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.811 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.67 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.21 W/kg
**SAR(1 g) = 0.681 W/kg; SAR(10 g) = 0.378 W/kg**
Smallest distance from peaks to all points 3 dB below = 9.6 mm
Ratio of SAR at M2 to SAR at M1 = 57.2%
Maximum value of SAR (measured) = 0.999 W/kg



Test Laboratory: DEKRA Date: 2024/10/04

**112_NRn71_DFT-S-QPSK_20M_CH136100_1RB_1offset_Right side_0mm_ANT 0**

**DUT: Rugged Controller ; Type: 140000**

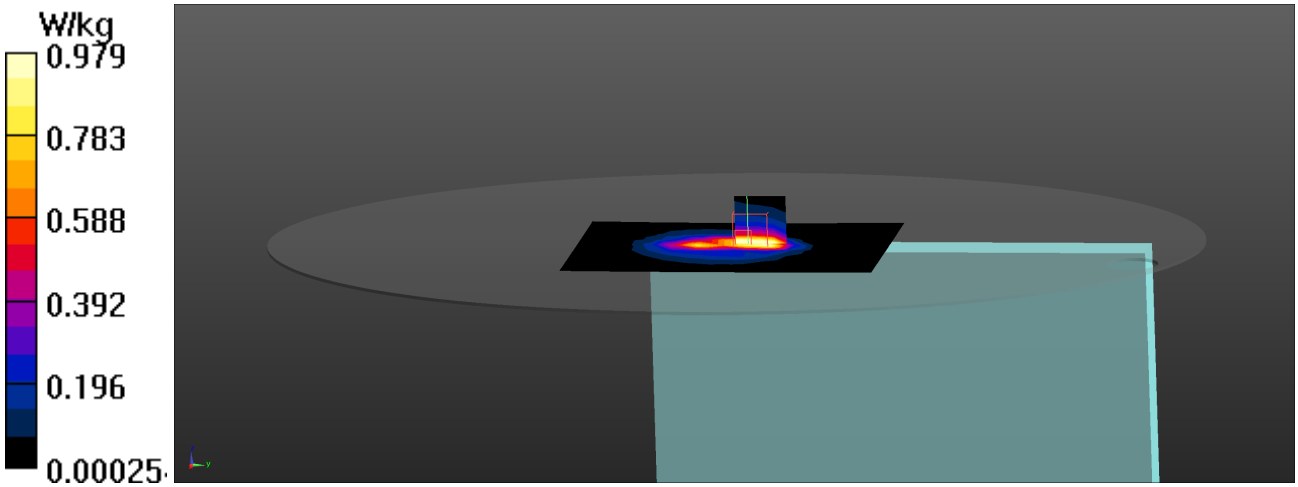
Communication System: UID 0, 5G n71; Frequency: 680.5 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 680.5 MHz; $\sigma$ = 0.85 S/m; $\varepsilon_r$ = 42.28; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(10.5, 10.5, 10.5) @ 680.5 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/Flat/Area Scan (10x14x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.979 W/kg

**Configuration/Flat/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 36.52 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.75 W/kg
**SAR(1 g) = 0.747 W/kg; SAR(10 g) = 0.373 W/kg**
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 42.3%
Maximum value of SAR (measured) = 1.27 W/kg



Test Laboratory: DEKRA Date: 2024/10/24

**922_NRn77_DFT-S-QPSK_100M_CH656000_1RB_1offset_Back_0mm_ANT 1_HPUE**

**DUT: Rugged Controller ; Type: 140000**

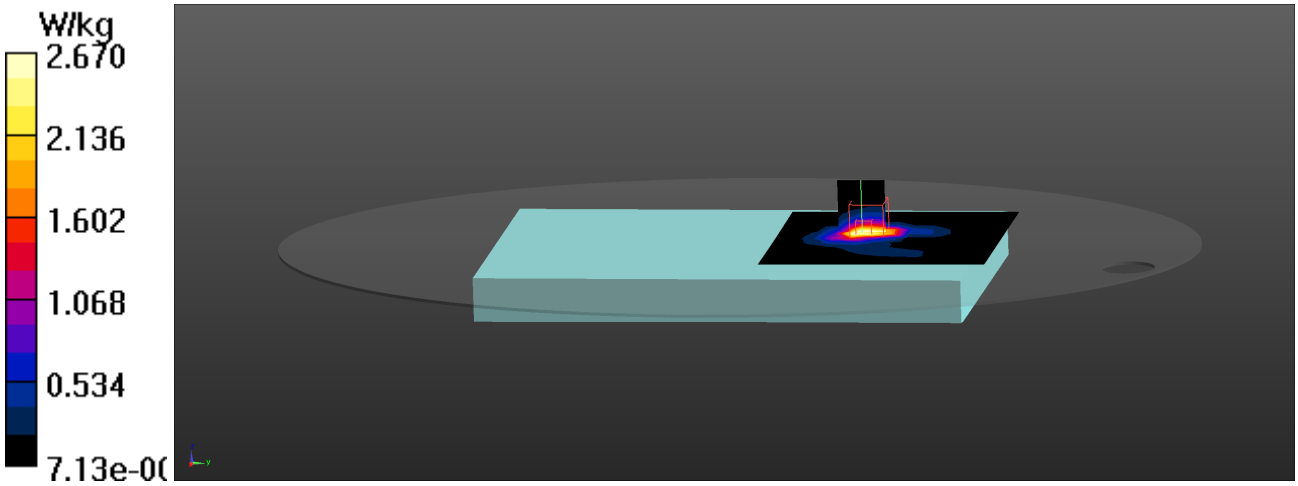
Communication System: UID 0, 5G n77; Frequency: 3840 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 3840 MHz; $\sigma$ = 3.22 S/m; $\varepsilon_r$ = 38.11; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.21, 7.21, 7.21) @ 3840 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/Flat/Area Scan (13x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.67 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 33.67 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 3.87 W/kg
**SAR(1 g) = 1.76 W/kg; SAR(10 g) = 0.805 W/kg**
Smallest distance from peaks to all points 3 dB below = 11 mm
Ratio of SAR at M2 to SAR at M1 = 79.1%
Maximum value of SAR (measured) = 3.06 W/kg



Test Laboratory: DEKRA Date: 2024/11/01

**924_NRn78_DFT-S-QPSK_100M_CH650000_1RB_1offset_Back_0mm_ANT 1_HPUE**

**DUT: Rugged Controller ; Type: 140000**

Communication System: UID 0, 5G n78; Frequency: 3750 MHz
Communication System PAR: 0 dB
Medium parameters used: f = 3750 MHz; $\sigma$ = 3.24 S/m; $\varepsilon_r$ = 37.81; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN7631; ConvF(7.25, 7.25, 7.25) @ 3750 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/Flat/Area Scan (13x13x1):** Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 2.65 W/kg

**Configuration/Flat/Zoom Scan (7x7x8)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=1.4mm
Reference Value = 31.37 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 3.98 W/kg
**SAR(1 g) = 1.77 W/kg; SAR(10 g) = 0.788 W/kg**
Smallest distance from peaks to all points 3 dB below = 11 mm
Ratio of SAR at M2 to SAR at M1 = 79%
Maximum value of SAR (measured) = 3.10 W/kg