

Appendix A

System Validation Plots

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1. D2450V2-SN: 904 Validation Plot

Date: 05.02.2024

Test Laboratory: Guangdong Dongdian Testing Service Co., Ltd.

2450

DUT: Dipole 2450 MHz D2450V2; Serial: D2450V2 - SN:904

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.763$ S/m; $\epsilon_r = 38.038$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(8, 8, 8); Calibrated: 21.04.2023;
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1366; Calibrated: 10.04.2023
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP-1197
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/tilt/Area Scan (6x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 14.0 W/kg

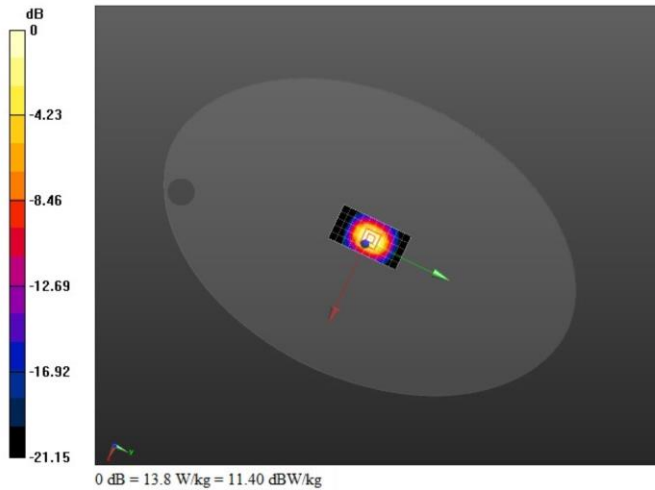
Configuration/tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.51 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 25.1 W/kg

SAR(1 g) = 12.1 W/kg; SAR(10 g) = 5.66 W/kg

Maximum value of SAR (measured) = 13.8 W/kg



2. D5GHzV2-SN: 1148 Validation Plot

Date: 18.02.2024

Test Laboratory: Guangdong Dongdian Testing Service Co., Ltd.

5200

DUT: Dipole D5GHzV2; Serial: D5GHzV2 - SN:1148

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5200 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.49$ S/m; $\epsilon_r = 36.971$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(5.81, 5.81, 5.81); Calibrated: 21.04.2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 10.04.2023
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1197
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/5200/Area Scan (5x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 15.6 W/kg

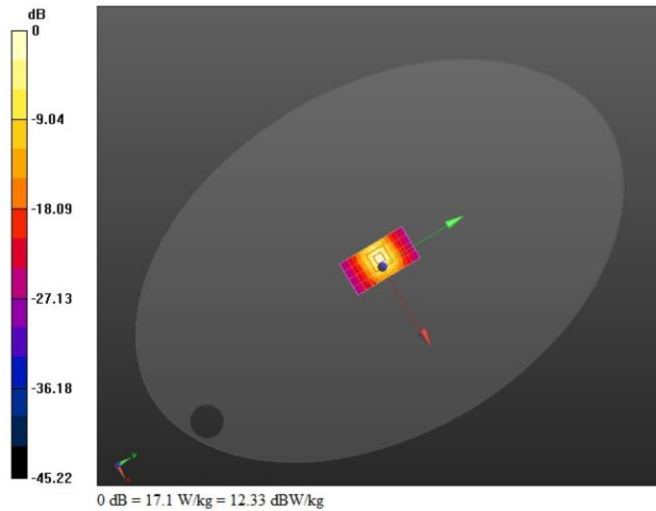
Configuration/5200/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=1.4$ mm

Reference Value = 64.05 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 26.8 W/kg

SAR(1 g) = 6.9 W/kg; SAR(10 g) = 2 W/kg

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



Date: 18.02.2024

Test Laboratory: Guangdong Dongdian Testing Service Co., Ltd.

5300**DUT: Dipole D5GHzV2; Serial: D5GHzV2 - SN:1148**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5300 MHz; Communication System PAR: 0 dB; PMF: 1

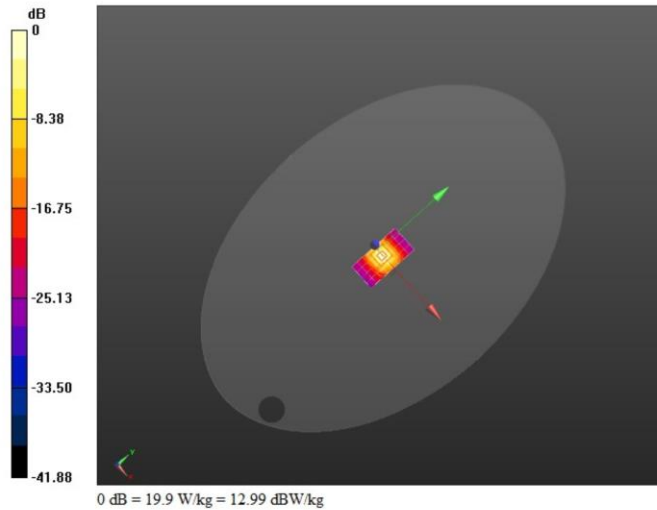
Medium parameters used: $f = 5300$ MHz; $\sigma = 4.628$ S/m; $\epsilon_r = 36.705$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(5.55, 5.55, 5.55); Calibrated: 21.04.2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 10.04.2023
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1197
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/5300/Area Scan (5x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 17.1 W/kg**Configuration/5300/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=1.4$ mm
Reference Value = 65.91 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 31.4 W/kg
SAR(1 g) = 7.94 W/kg; SAR(10 g) = 2.29 W/kg
Maximum value of SAR (measured) = 19.9 W/kg

Date: 18.02.2024

Test Laboratory: Guangdong Dongdian Testing Service Co., Ltd.

5500**DUT: Dipole D5GHzV2; Serial: D5GHzV2 - SN:1148**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5500 MHz; Communication System PAR: 0 dB; PMF: 1

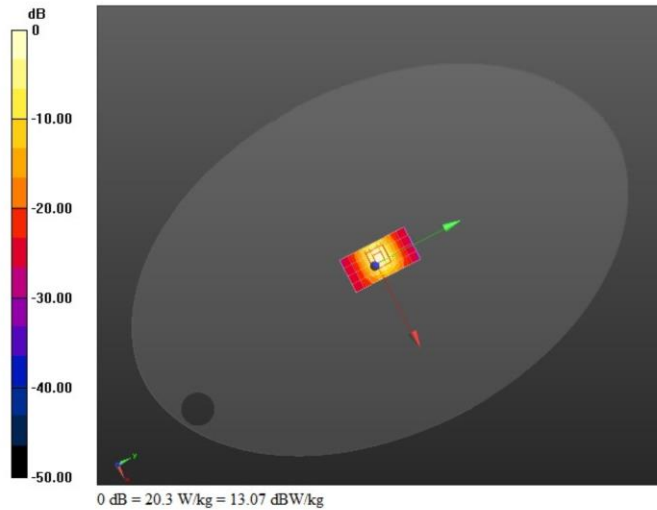
Medium parameters used: $f = 5500$ MHz; $\sigma = 4.822$ S/m; $\epsilon_r = 35.948$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(5.2, 5.2, 5.2); Calibrated: 21.04.2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 10.04.2023
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1197
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/5500/Area Scan (5x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 17.8 W/kg**Configuration/5500/Zoom Scan (7x7)/Cube 0:** Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=1.4$ mm
Reference Value = 66.38 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 32.5 W/kg
SAR(1 g) = 7.94 W/kg; SAR(10 g) = 2.27 W/kg
Maximum value of SAR (measured) = 20.3 W/kg

Date: 18.02.2024

Test Laboratory: Guangdong Dongdian Testing Service Co., Ltd.

5600**DUT: Dipole D5GHzV2; Serial: D5GHzV2 - SN:1148**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5600 MHz; Communication System PAR: 0 dB; PMF: 1

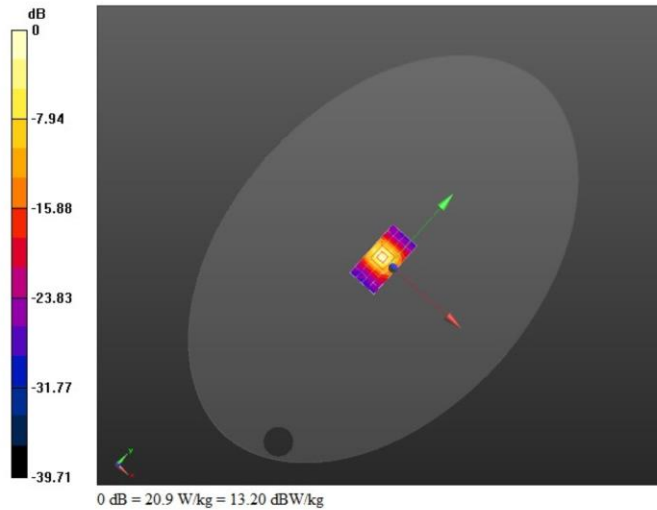
Medium parameters used: $f = 5600$ MHz; $\sigma = 4.92$ S/m; $\epsilon_r = 35.746$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(5.05, 5.05, 5.05); Calibrated: 21.04.2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 10.04.2023
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1197
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/5600/Area Scan (5x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 17.7 W/kg**Configuration/5600/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=1.4$ mm
Reference Value = 65.71 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 33.5 W/kg
SAR(1 g) = 8.18 W/kg; SAR(10 g) = 2.35 W/kg
Maximum value of SAR (measured) = 20.9 W/kg

Date: 18.02.2024

Test Laboratory: Guangdong Dongdian Testing Service Co., Ltd.

5800**DUT: Dipole D5GHzV2; Serial: D5GHzV2 - SN:1148**

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5800 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.121$ S/m; $\epsilon_r = 35.309$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(5.06, 5.06, 5.06); Calibrated: 21.04.2023;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 10.04.2023
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1197
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/5800/Area Scan (5x9x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 16.4 W/kg

Configuration/5800/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=1.4$ mm

Reference Value = 61.39 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 33.3 W/kg

SAR(1 g) = 7.39 W/kg; SAR(10 g) = 2.11 W/kg

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

