

Appendix A

System Validation Plots

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1. D2450V2-SN: 904 Validation Plot

Date: 13.03.2024

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

2450

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

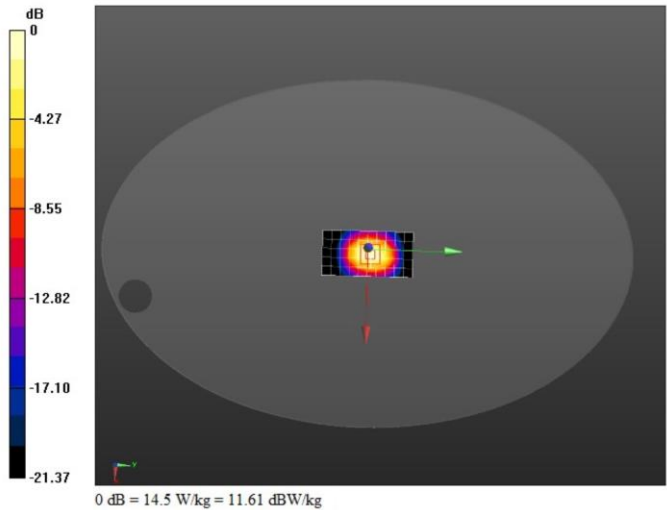
Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1
Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.815 \text{ S/m}$; $\epsilon_r = 40.796$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section
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: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 13.7 W/kg

Configuration/tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 84.25 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 26.3 W/kg
SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.93 W/kg
Maximum value of SAR (measured) = 14.5 W/kg



2. D5GHzV2-SN: 1148 Validation Plot

Date: 18.03.2024

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: $f = 5300\text{ MHz}$; $\sigma = 4.628\text{ S/m}$; $\epsilon_r = 36.705$; $\rho = 1000\text{ kg/m}^3$

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: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 18.4 W/kg

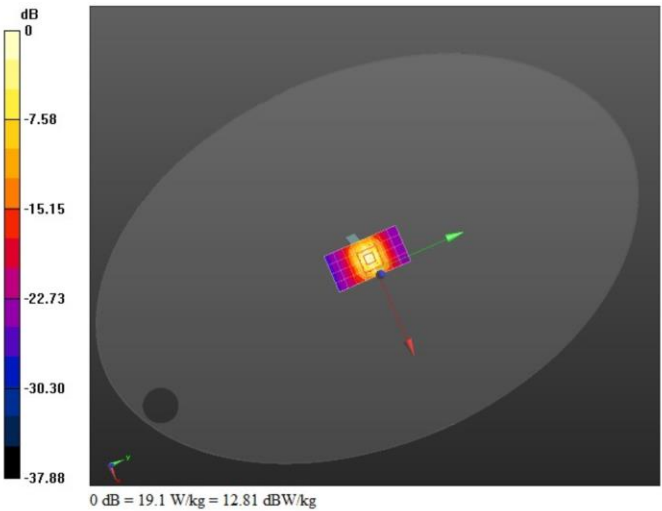
Configuration/5300/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 68.83 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 29.9 W/kg

SAR(1 g) = 7.63 W/kg; SAR(10 g) = 2.21 W/kg

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



Date: 18.03.2024

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: $f = 5500 \text{ MHz}$; $\sigma = 4.822 \text{ S/m}$; $\epsilon_r = 35.942$; $\rho = 1000 \text{ kg/m}^3$

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: $dx=10\text{mm}$, $dy=10\text{mm}$

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

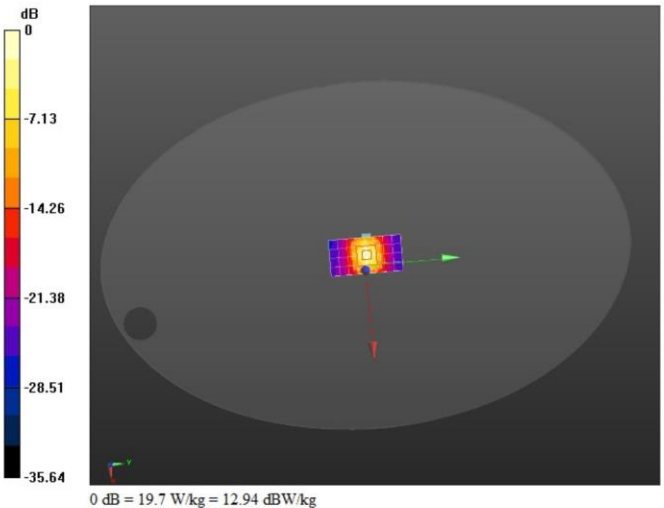
Configuration/5500/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 69.50 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 31.2 W/kg

SAR(1 g) = 7.75 W/kg; SAR(10 g) = 2.22 W/kg

Maximum value of SAR (measured) = 19.7 W/kg



Date: 18.03.2024

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: $f = 5600 \text{ MHz}$; $\sigma = 4.92 \text{ S/m}$; $\epsilon_r = 35.746$; $\rho = 1000 \text{ kg/m}^3$

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
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/5600/Area Scan (5x9x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 20.6 W/kg

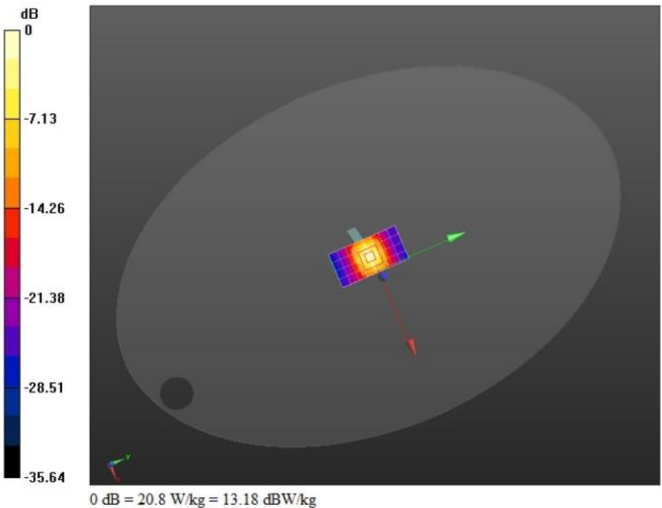
Configuration/5600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 70.73 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 32.8 W/kg

SAR(1 g) = 8.19 W/kg; SAR(10 g) = 2.36 W/kg

Maximum value of SAR (measured) = 20.8 W/kg



Date: 18.03.2024

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: $f = 5600 \text{ MHz}$; $\sigma = 4.92 \text{ S/m}$; $\epsilon_r = 35.746$; $\rho = 1000 \text{ kg/m}^3$

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
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/5600/Area Scan (5x9x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 20.6 W/kg

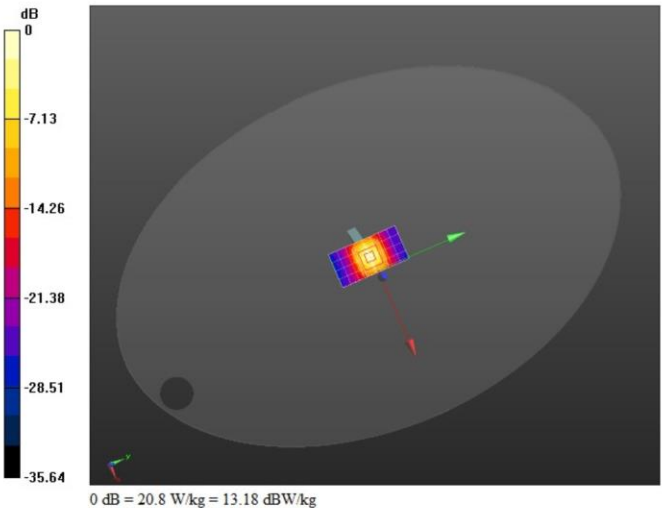
Configuration/5600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 70.73 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 32.8 W/kg

SAR(1 g) = 8.19 W/kg; SAR(10 g) = 2.36 W/kg

Maximum value of SAR (measured) = 20.8 W/kg



Date: 18.03.2024

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: $f = 5800 \text{ MHz}$; $\sigma = 5.121 \text{ S/m}$; $\epsilon_r = 35.309$; $\rho = 1000 \text{ kg/m}^3$

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: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 18.9 W/kg

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

Reference Value = 66.28 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 32.1 W/kg

SAR(1 g) = 7.25 W/kg; SAR(10 g) = 2.08 W/kg

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

