

# Appendix A

## System Validation Plots

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1. D2450V2-SN: 904 Validation Plot

Date: 10.11.2025

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

2450

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

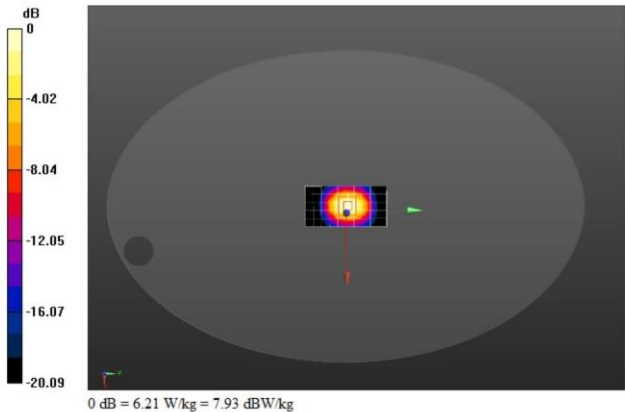
Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.818$  S/m;  $\epsilon_r = 39.247$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(7.9, 7.9, 7.9) @ 2450 MHz; Calibrated: 28.05.2025
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1366; Calibrated: 28.05.2025
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1197
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/tilt/Area Scan (6x11x1): Measurement grid:  $dx=10$ mm,  $dy=10$ mm  
Maximum value of SAR (measured) = 5.98 W/kg

Configuration/tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm  
Reference Value = 56.35 V/m; Power Drift = 0.13 dB  
Peak SAR (extrapolated) = 10.8 W/kg  
SAR(1 g) = 5.46 W/kg; SAR(10 g) = 2.63 W/kg  
Smallest distance from peaks to all points 3 dB below = 10.2 mm  
Ratio of SAR at M2 to SAR at M1 = 52.3%  
Maximum value of SAR (measured) = 6.21 W/kg



2. D5GHz-SN: 1148 Validation Plot

Date: 12.11.2025

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

5200

DUT: Dipole D5GHzV2; Type: 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;  $\epsilon_r = 36.961$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ComF(5.63, 5.63, 5.63) @ 5200 MHz; Calibrated: 28.05.2025
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 28.05.2025
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP-1197
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/5200/Area Scan (6x11x1): Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 7.86 W/kg

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

Reference Value = 38.69 V/m; Power Drift = 0.12 dB

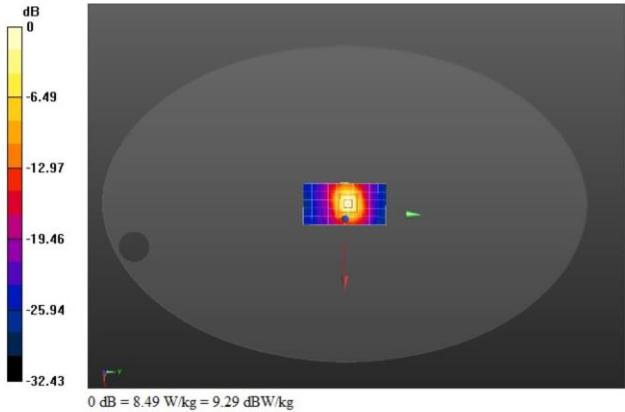
Peak SAR (extrapolated) = 25.9 W/kg

SAR(1 g) = 7.35 W/kg; SAR(10 g) = 2.2 W/kg

Smallest distance from peaks to all points 3 dB below = 7.8 mm

Ratio of SAR at M2 to SAR at M1 = 68.9%

Maximum value of SAR (measured) = 8.49 W/kg



Date: 12.11.2025

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

5300

DUT: Dipole D5GHzV2; Type: 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:  $f = 5300 \text{ MHz}$ ;  $\sigma = 4.628 \text{ S/m}$ ;  $\epsilon_r = 36.725$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ComF(5.43, 5.43, 5.43) @ 5300 MHz; Calibrated: 28.05.2025
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 28.05.2025
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP-1197
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/5300/Area Scan (6x11x1): Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (measured) = 8.60 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 = 40.14 V/m; Power Drift = 0.14 dB

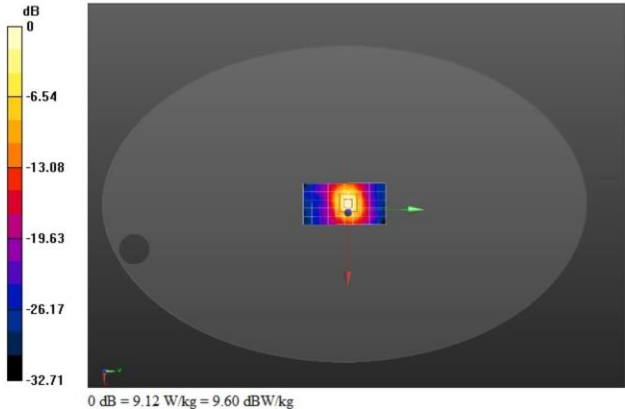
Peak SAR (extrapolated) = 29.1 W/kg

SAR(1 g) = 7.92 W/kg; SAR(10 g) = 2.32 W/kg

Smallest distance from peaks to all points 3 dB below = 7.8 mm

Ratio of SAR at M2 to SAR at M1 = 67.8%

Maximum value of SAR (measured) = 9.12 W/kg



Date: 12.11.2025

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

5500

DUT: Dipole D5GHzV2; Type: 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:  $f = 5500 \text{ MHz}$ ;  $\sigma = 4.825 \text{ S/m}$ ;  $\epsilon_r = 35.942$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ComF(5.04, 5.04, 5.04) @ 5500 MHz; Calibrated: 28.05.2025
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 28.05.2025
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP-1197
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/5500/Area Scan (6x11x1): Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (measured) = 8.55 W/kg

Configuration/5500/Zoom Scan (7x7x8)/Cube 0: Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=1.4\text{mm}$

Reference Value = 38.92 V/m; Power Drift = 0.09 dB

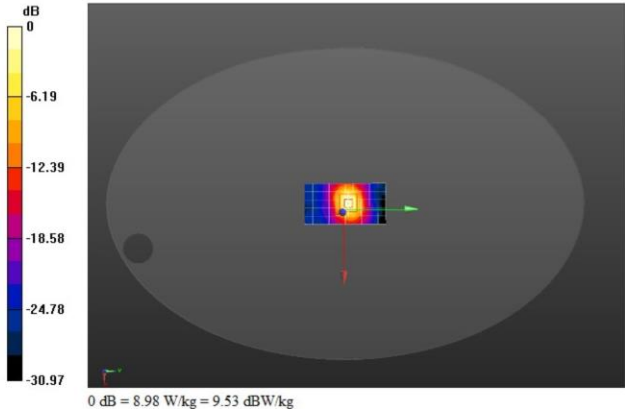
Peak SAR (extrapolated) = 31.4 W/kg

SAR(1 g) = 7.96 W/kg; SAR(10 g) = 2.32 W/kg

Smallest distance from peaks to all points 3 dB below = 7.8 mm

Ratio of SAR at M2 to SAR at M1 = 66.4%

Maximum value of SAR (measured) = 8.98 W/kg



Date: 12.11.2025

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

5600

DUT: Dipole D5GHzV2; Type: 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;  $\epsilon_r = 35.766$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ComF(4.93, 4.93, 4.93) @ 5600 MHz; Calibrated: 28.05.2025
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1366; Calibrated: 28.05.2025
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP-1197
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/5600/Area Scan (6x11x1): Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 8.07 W/kg

Configuration/5600/Zoom Scan (7x7x8)/Cube 0: Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=1.4$ mm

Reference Value = 37.46 V/m; Power Drift = 0.04 dB

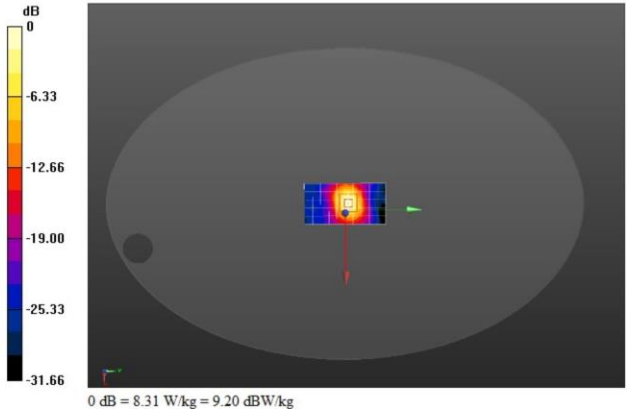
Peak SAR (extrapolated) = 28.9 W/kg

SAR(1 g) = 7.41 W/kg; SAR(10 g) = 2.16 W/kg

Smallest distance from peaks to all points 3 dB below = 7.8 mm

Ratio of SAR at M2 to SAR at M1 = 66.4%

Maximum value of SAR (measured) = 8.31 W/kg



Date: 12.11.2025

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

5800

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

Communication System: UID 0, CW (0); Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5600 MHz, Frequency: 5800 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 5600$  MHz,  $\sigma = 4.92$  S/m,  $\epsilon_r = 35.766$ ,  $\rho = 1000$  kg/m<sup>3</sup>, Medium parameters used:  $f = 5800$  MHz,  $\sigma = 5.121$  S/m,  $\epsilon_r = 35.319$ ,  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3906; ConvF(4.93, 4.93, 4.93) @ 5600 MHz, ConvF(5.03, 5.03, 5.03) @ 5800 MHz; Calibrated: 28.05.2025
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 1.0, 25.0, 31.0$
- Electronics: DAE4 Sn1366; Calibrated: 28.05.2025
- Phantom: ELI v5 0; Type: QDOVA002AA; Serial: TP:1197
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Configuration/5600/Area Scan (6x11x1): Measurement grid:  $dx=10$ mm,  $dy=10$ mm  
Maximum value of SAR (measured) = 8.07 W/kg

Configuration/5600/Zoom Scan (7x7x8)/Cube 0: Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=1.4$ mm  
Reference Value = 37.46 V/m; Power Drift = 0.04 dB  
Peak SAR (extrapolated) = 28.9 W/kg  
SAR(1 g) = 7.41 W/kg; SAR(10 g) = 2.16 W/kg  
Smallest distance from peaks to all points 3 dB below = 7.8 mm  
Ratio of SAR at M2 to SAR at M1 = 66.4%  
Maximum value of SAR (measured) = 8.31 W/kg

Configuration/5800/Area Scan (6x11x1): Measurement grid:  $dx=10$ mm,  $dy=10$ mm  
Maximum value of SAR (measured) = 8.25 W/kg

Configuration/5800/Zoom Scan (7x7x8)/Cube 0: Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=1.4$ mm  
Reference Value = 36.66 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 32.5 W/kg  
SAR(1 g) = 7.71 W/kg; SAR(10 g) = 2.24 W/kg  
Smallest distance from peaks to all points 3 dB below = 8 mm  
Ratio of SAR at M2 to SAR at M1 = 64.7%  
Maximum value of SAR (measured) = 8.35 W/kg

