



## **Appendix A. Plots of System Performance Check**

**System Check\_B2450\_151019****DUT: Dipole 2450MHz D2450V2\_ SN: 929**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: B2450\_151019 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.005$  S/m;  $\epsilon_r = 51.281$ ;  $\rho = 1000$  kg/m<sup>3</sup>

**Ambient Temperature** : 23.3 °C; **Liquid Temperature** : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3976; ConvF(7.26, 7.26, 7.26); Calibrated: 2015/2/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 2015/2/20
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 20.2 W/kg

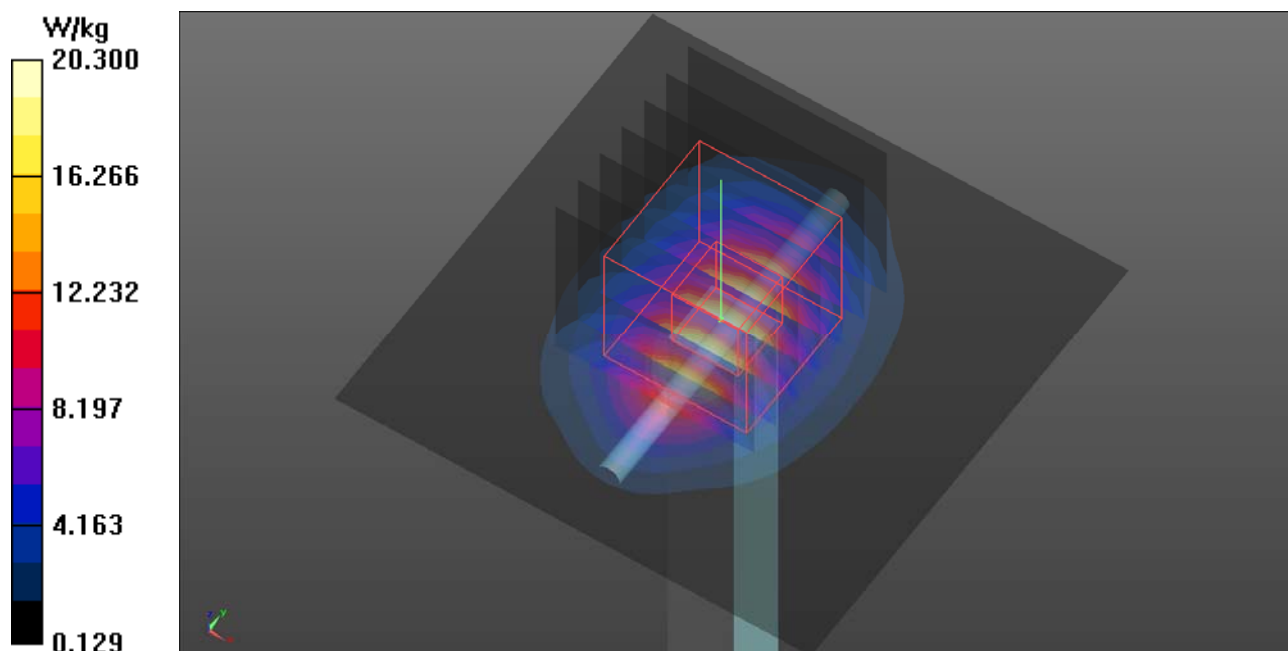
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 99.80 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 27.8 W/kg

**SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.1 W/kg**

Maximum value of SAR (measured) = 20.3 W/kg



**System Check\_B2450\_151110****DUT: Dipole 2450MHz D2450V2\_ SN: 929**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: B2450\_151110 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.015$  S/m;  $\epsilon_r = 51.289$ ;  $\rho = 1000$  kg/m<sup>3</sup>

**Ambient Temperature : 23.3 °C; Liquid Temperature : 22.3 °C**

DASY5 Configuration:

- Probe: EX3DV4 - SN3976; ConvF(7.26, 7.26, 7.26); Calibrated: 2015/2/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 2015/2/20
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

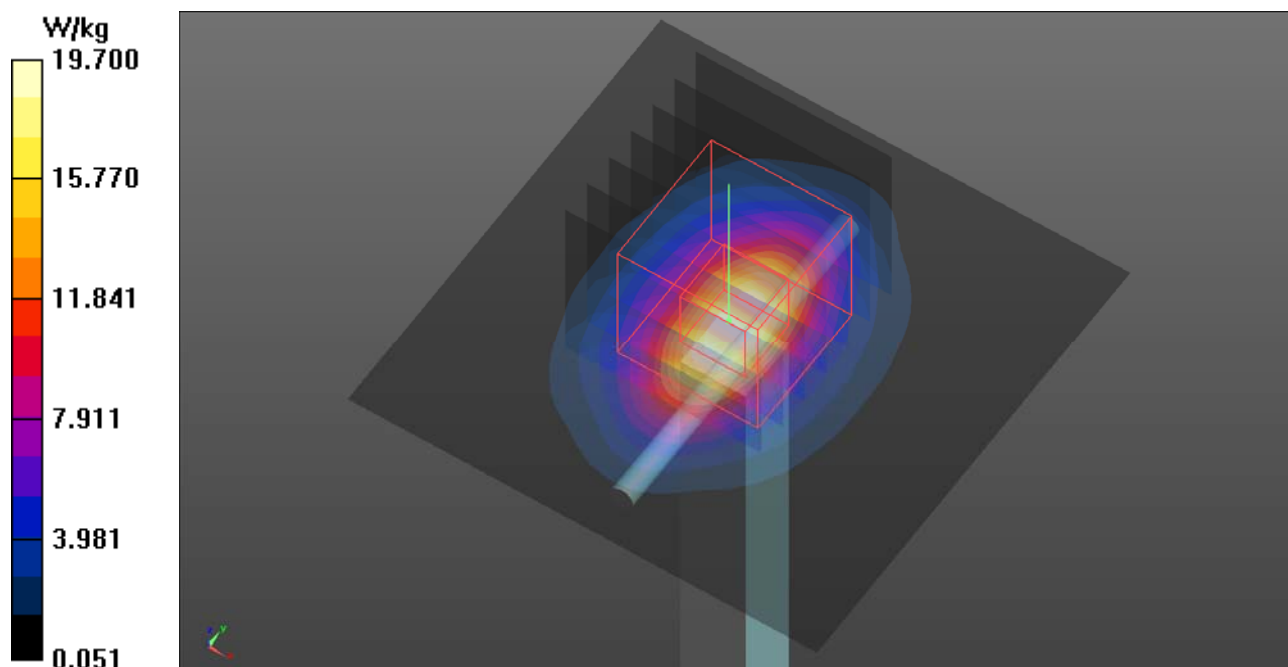
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.82 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 27.3 W/kg

**SAR(1 g) = 13 W/kg; SAR(10 g) = 5.98 W/kg**

Maximum value of SAR (measured) = 19.9 W/kg



**System Check\_B5200\_151022****DUT: Dipole D5GHzV2\_ SN: 1171**

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: B5G\_151022 Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.38$  S/m;  $\epsilon_r = 48.152$ ;  $\rho = 1000$  kg/m<sup>3</sup>

**Ambient Temperature : 23.2 °C; Liquid Temperature : 22.5 °C**

DASY5 Configuration:

- Probe: EX3DV4 - SN3976; ConvF(4.52, 4.52, 4.52); Calibrated: 2015/2/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 2015/2/20
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=100mW/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 13.4 W/kg

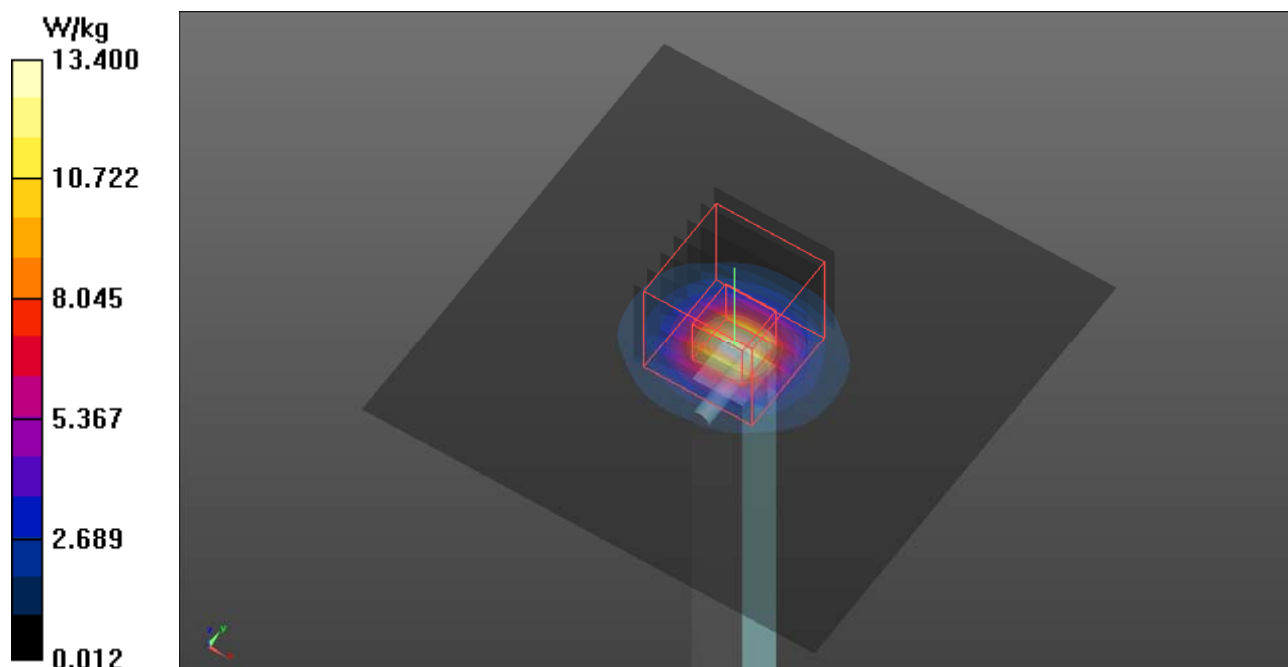
**Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 57.06 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 30.6 W/kg

**SAR(1 g) = 7.08 W/kg; SAR(10 g) = 2.02 W/kg**

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



**System Check\_B5300\_151022****DUT: Dipole D5GHzV2\_ SN: 1171**

Communication System: CW; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: B5G\_151022 Medium parameters used:  $f = 5300$  MHz;  $\sigma = 5.511$  S/m;  $\epsilon_r = 47.96$ ;  $\rho = 1000$  kg/m<sup>3</sup>

**Ambient Temperature : 23.2 °C; Liquid Temperature : 22.5 °C**

DASY5 Configuration:

- Probe: EX3DV4 - SN3976; ConvF(4.52, 4.52, 4.52); Calibrated: 2015/2/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 2015/2/20
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=100mW/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 14.6 W/kg

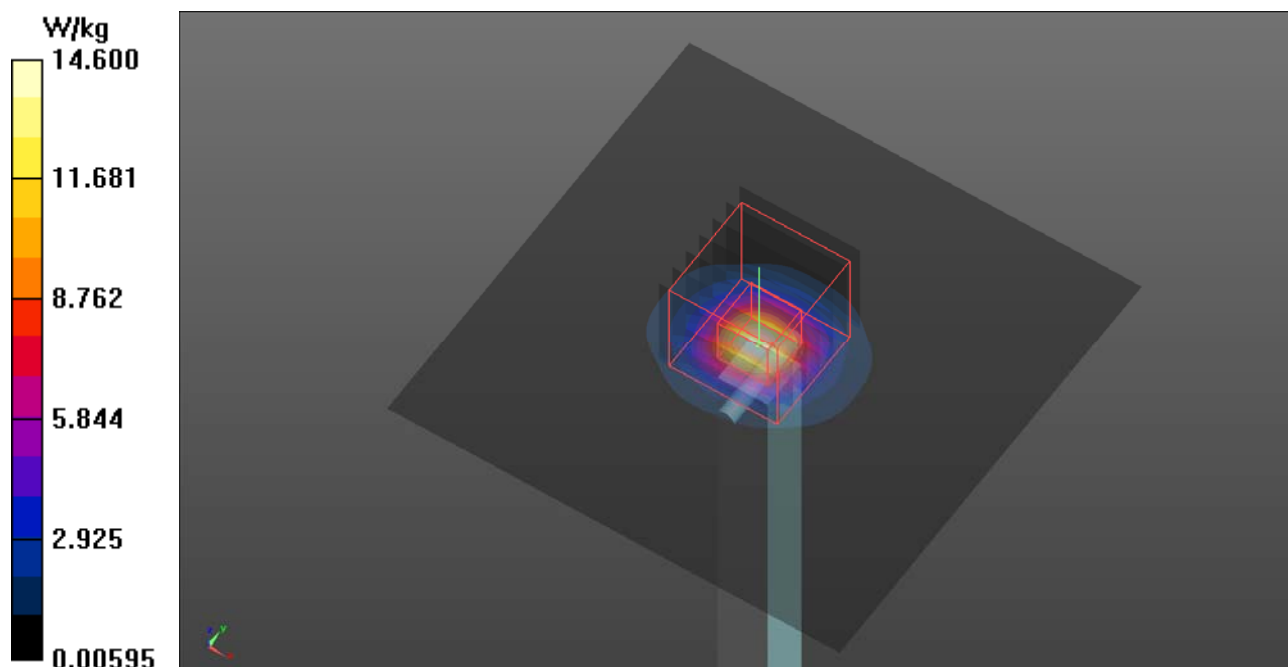
**Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 57.48 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 33.2 W/kg

**SAR(1 g) = 7.52 W/kg; SAR(10 g) = 2.11 W/kg**

Maximum value of SAR (measured) = 15.9 W/kg



**System Check\_B5600\_151022****DUT: Dipole D5GHzV2\_ SN: 1171**

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: B5G\_151022 Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.901$  S/m;  $\epsilon_r = 47.419$ ;  $\rho = 1000$  kg/m<sup>3</sup>

**Ambient Temperature : 23.2 °C; Liquid Temperature : 22.5 °C**

DASY5 Configuration:

- Probe: EX3DV4 - SN3976; ConvF(3.9, 3.9, 3.9); Calibrated: 2015/2/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 2015/2/20
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=100mW/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 16.0 W/kg

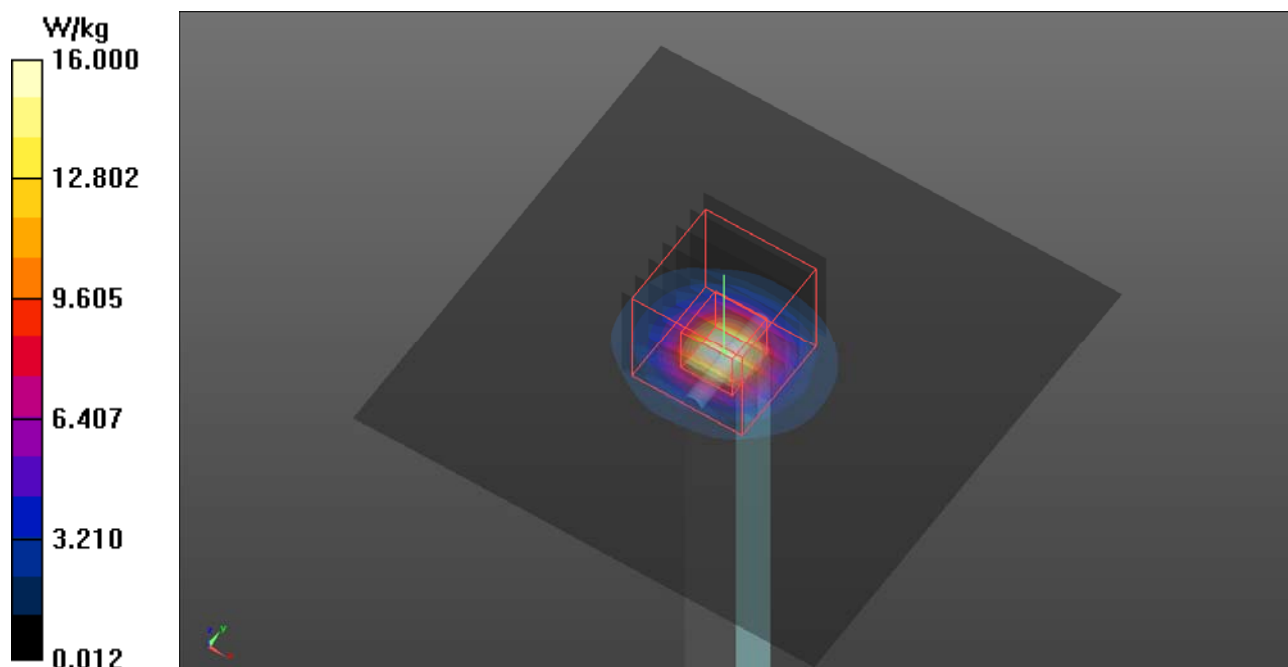
**Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 57.20 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 34.8 W/kg

**SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.23 W/kg**

Maximum value of SAR (measured) = 17.0 W/kg



**System Check\_B5800\_151022****DUT: Dipole D5GHzV2 \_SN: 1171**

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: B5G\_151022 Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.21$  S/m;  $\epsilon_r = 47.159$ ;  $\rho = 1000$  kg/m<sup>3</sup>

**Ambient Temperature : 23.2 °C; Liquid Temperature : 22.5 °C**

DASY5 Configuration:

- Probe: EX3DV4 - SN3976; ConvF(4.23, 4.23, 4.23); Calibrated: 2015/2/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1424; Calibrated: 2015/2/20
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1238
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=100mW/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 14.5 W/kg

**Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 52.95 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 35.0 W/kg

**SAR(1 g) = 7.69 W/kg; SAR(10 g) = 2.15 W/kg**

Maximum value of SAR (measured) = 16.6 W/kg

