



## **Appendix A. SAR Plots of System Verification**

The plots for system verification with largest deviation for each SAR system combination are shown as follows.

## System Check\_B750\_150722

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B06T09N1\_0722 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.96 \text{ S/m}$ ;  $\epsilon_r = 55.09$ ;  $\rho = 1000 \text{ kg/m}^3$

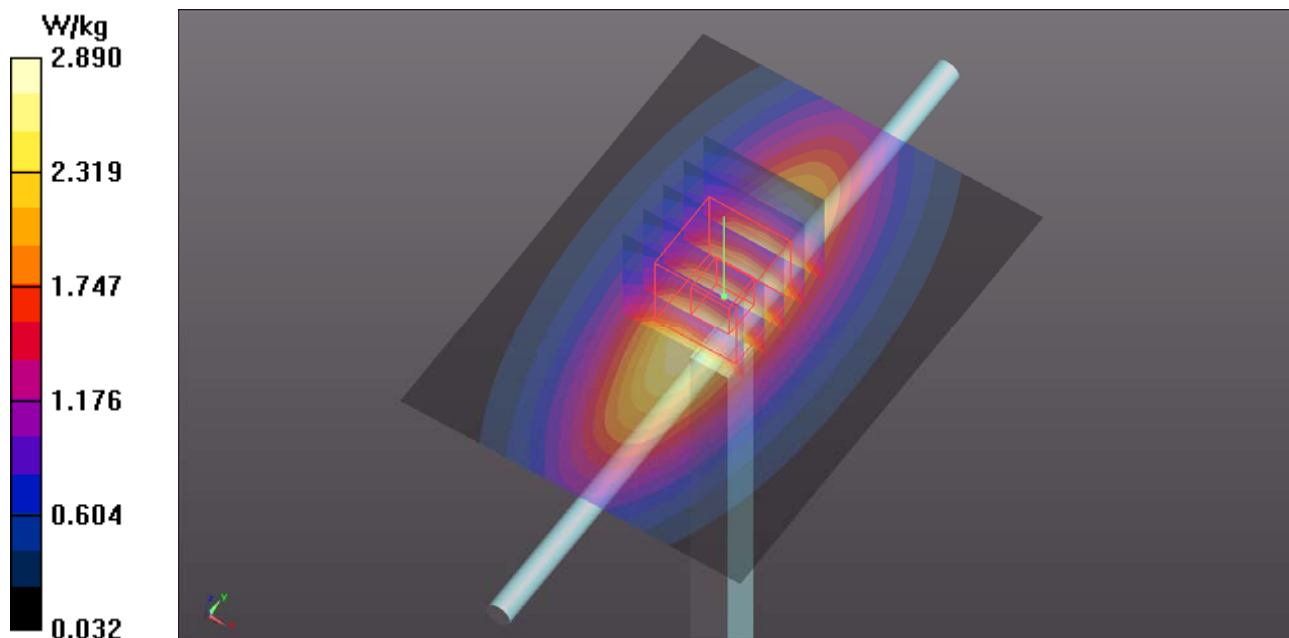
Ambient Temperature :  $24.1 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $23.7 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(9.29, 9.29, 9.29); Calibrated: 2015/03/31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2014/08/26
- Phantom: ELI Phantom\_1245; Type: QDOVA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x81x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Maximum value of SAR (interpolated) =  $2.89 \text{ W/kg}$

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value =  $55.61 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$   
Peak SAR (extrapolated) =  $3.34 \text{ W/kg}$   
**SAR(1 g) =  $2.3 \text{ W/kg}$ ; SAR(10 g) =  $1.54 \text{ W/kg}$**   
Maximum value of SAR (measured) =  $2.87 \text{ W/kg}$



## System Check\_B835\_150722

**DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: B07T10N2\_0722 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.994 \text{ S/m}$ ;  $\epsilon_r = 56.078$ ;  $\rho = 1000 \text{ kg/m}^3$

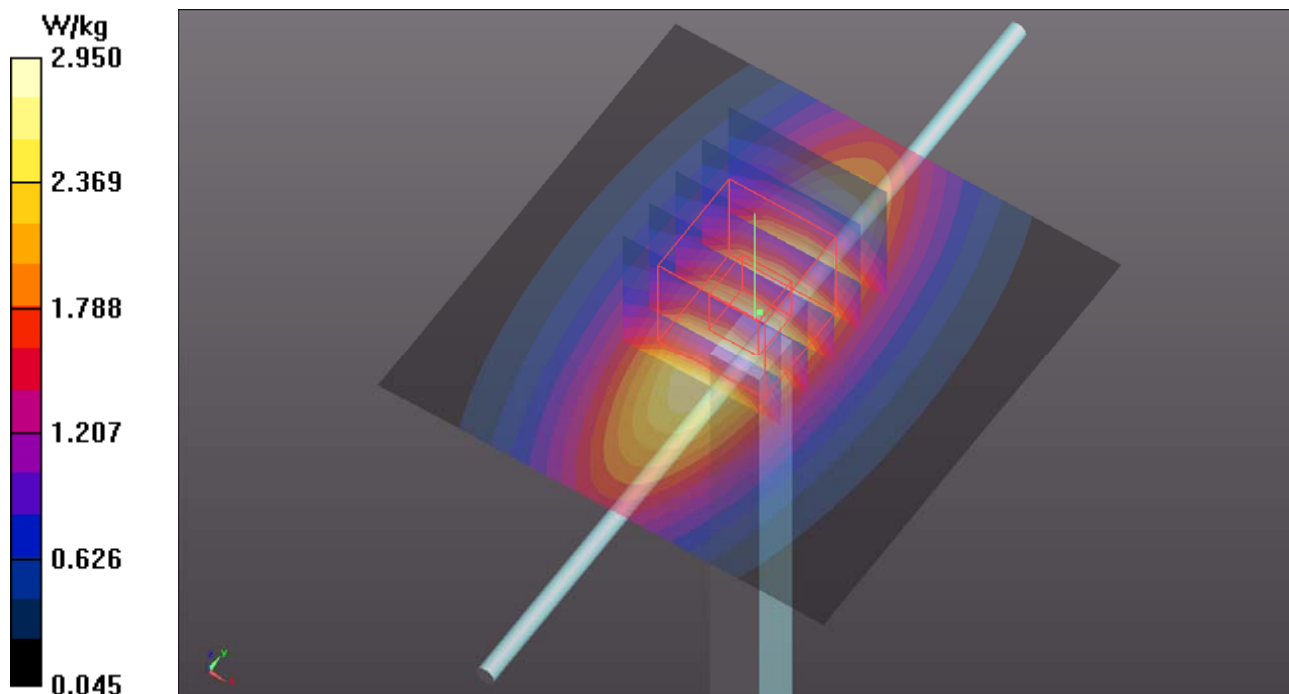
Ambient Temperature :  $23.8 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $23.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(9.27, 9.27, 9.27); Calibrated: 2015/03/31;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2014/08/26
- Phantom: ELI Phantom\_1206; Type: QDOVA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Maximum value of SAR (interpolated) =  $2.95 \text{ W/kg}$

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value =  $52.00 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$   
Peak SAR (extrapolated) =  $3.49 \text{ W/kg}$   
**SAR(1 g) =  $2.31 \text{ W/kg}$ ; SAR(10 g) =  $1.52 \text{ W/kg}$**   
Maximum value of SAR (measured) =  $2.93 \text{ W/kg}$



## System Check\_B1750\_150812

**DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055**

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: B16T20N1\_0812 Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.445$  S/m;  $\epsilon_r = 51.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

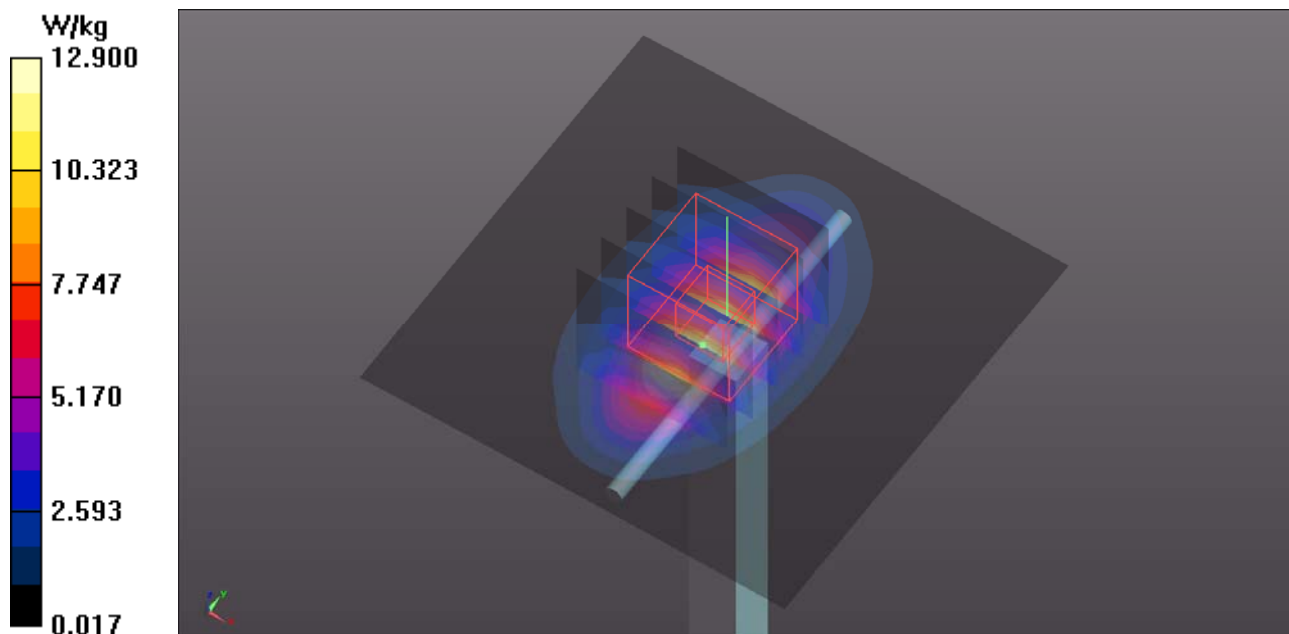
Ambient Temperature : 23.7 °C ; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.04, 8.04, 8.04); Calibrated: 2015/03/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2015/03/20
- Phantom: ELI Phantom\_1245; Type: QDOVA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 12.9 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 94.45 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 15.3 W/kg  
**SAR(1 g) = 8.84 W/kg; SAR(10 g) = 4.75 W/kg**  
Maximum value of SAR (measured) = 12.2 W/kg



### System Check\_B1900\_150813

**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: B16T20N1\_0813 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.576$  S/m;  $\epsilon_r = 51.396$ ;  $\rho = 1000$  kg/m<sup>3</sup>

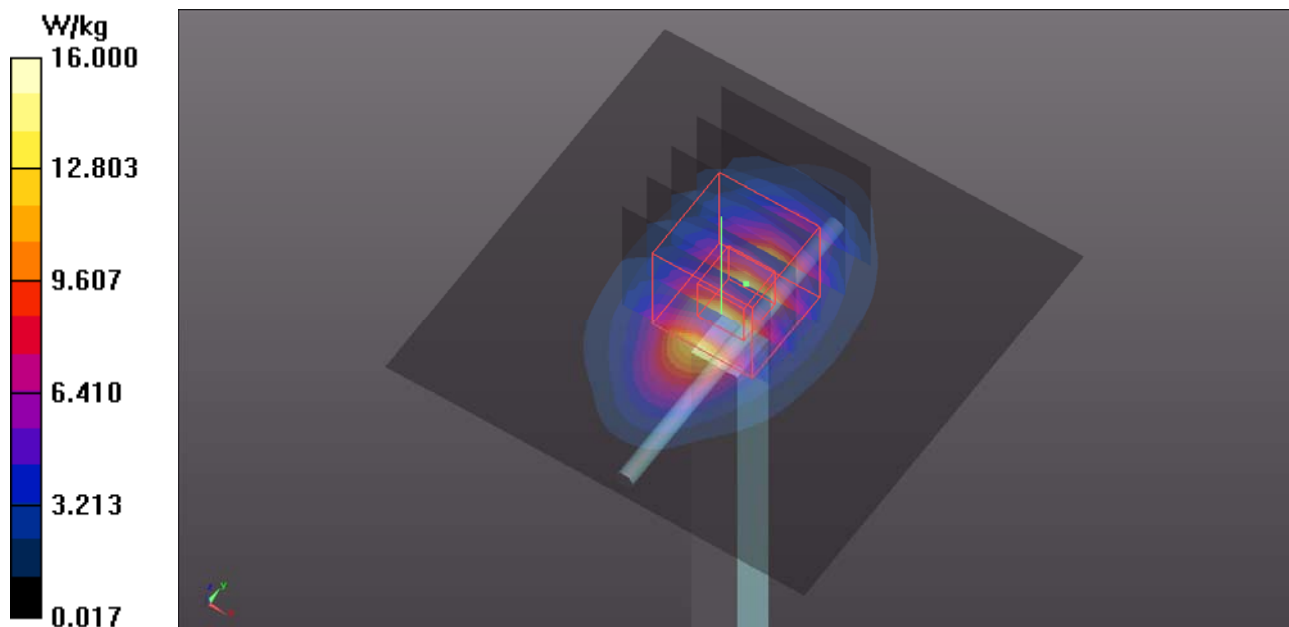
Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.85, 7.85, 7.85); Calibrated: 2015/03/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2015/03/20
- Phantom: ELI Phantom\_1206; Type: QDOVA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 16.0 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 99.09 V/m; Power Drift = 0.04 dB  
Peak SAR (extrapolated) = 19.2 W/kg  
**SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.51 W/kg**  
Maximum value of SAR (measured) = 15.0 W/kg



### System Check\_B2450\_150813

**DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737**

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

Medium: B19T27N1\_0813 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.018$  S/m;  $\epsilon_r = 50.978$ ;  $\rho = 1000$  kg/m<sup>3</sup>

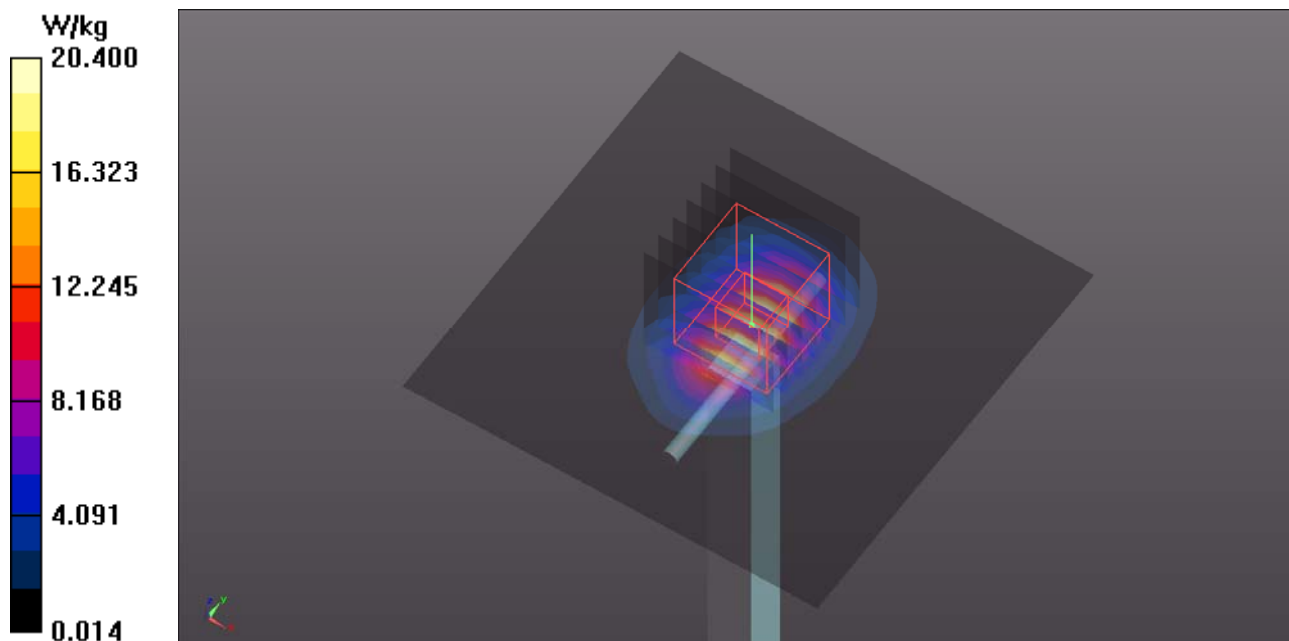
Ambient Temperature : 23.5 °C ; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.12, 7.12, 7.12); Calibrated: 2015/03/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2015/03/20
- Phantom: ELI Phantom\_1245; Type: QDOVA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (81x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 20.4 W/kg

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 101.1 V/m; Power Drift = -0.04 dB  
Peak SAR (extrapolated) = 28.1 W/kg  
**SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.03 W/kg**  
Maximum value of SAR (measured) = 20.5 W/kg



## System Check\_B2600\_150812

**DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020**

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: B19T27N2\_0812 Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.157$  S/m;  $\epsilon_r = 50.91$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.9 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(6.77, 6.77, 6.77); Calibrated: 2015/03/26;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2015/03/20
- Phantom: ELI Phantom\_1206; Type: QDOVA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (81x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 21.5 W/kg

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

Reference Value = 98.54 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 29.4 W/kg

**SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6 W/kg**

Maximum value of SAR (measured) = 21.1 W/kg

