

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

The plots for system verification are shown as follows.

## S01 System Check\_H2450\_210601

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

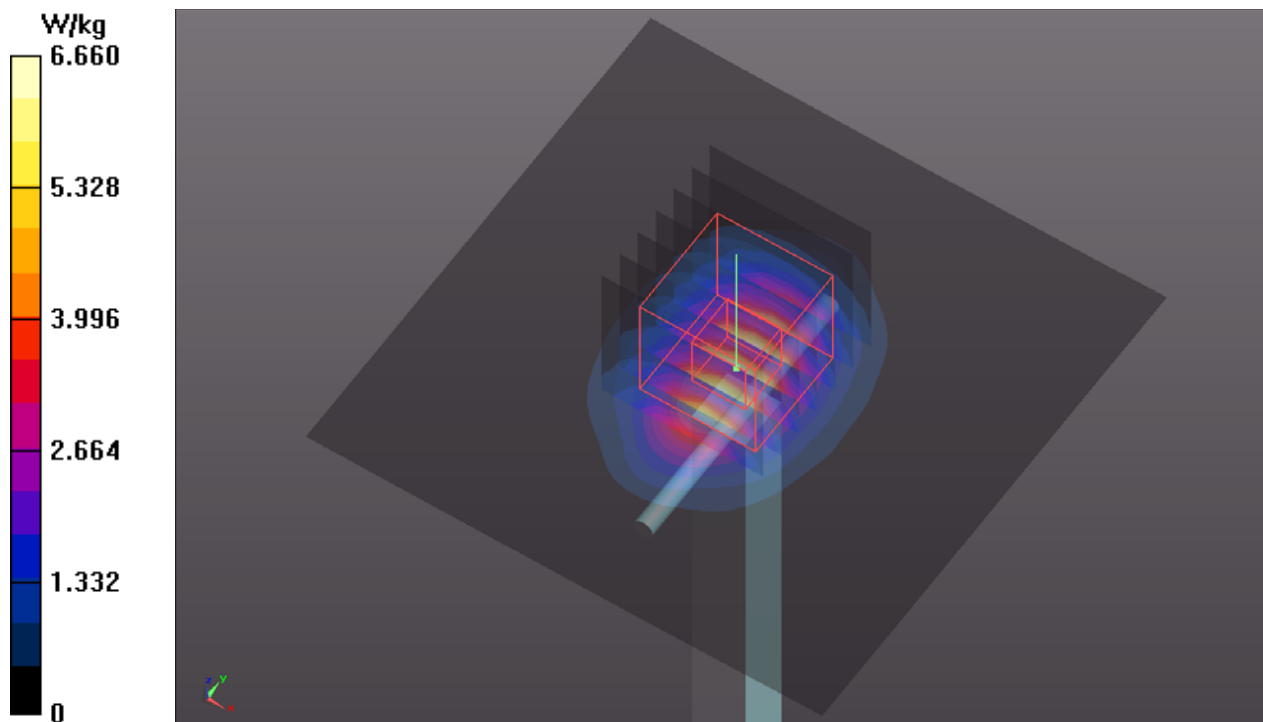
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium: H19T27N1\_0601 Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.857$  S/m;  
 $\epsilon_r = 38.837$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3887; ConvF(7.33, 7.33, 7.33) @ 2450 MHz; Calibrated: 2020/10/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: ELI Phantom\_1206; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Pin=50mW/Area Scan (81x81x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 6.66 W/kg

**Pin=50mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 62.18 V/m; Power Drift = -0.05 dB  
Peak SAR (extrapolated) = 8.33 W/kg  
**SAR(1 g) = 2.82 W/kg; SAR(10 g) = 1.14 W/kg** (SAR corrected for target medium)  
Maximum value of SAR (measured) = 6.71 W/kg



## S02 System Check\_H5250\_210602

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1\_0602 Medium parameters used (interpolated):  $f = 5250$  MHz;  $\sigma = 4.76$  S/m;  $\epsilon_r = 35.003$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3887; ConvF(4.71, 4.71, 4.71) @ 5250 MHz; Calibrated: 2020/10/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: ELI Phantom\_1206; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Pin=50mW/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 11.1 W/kg

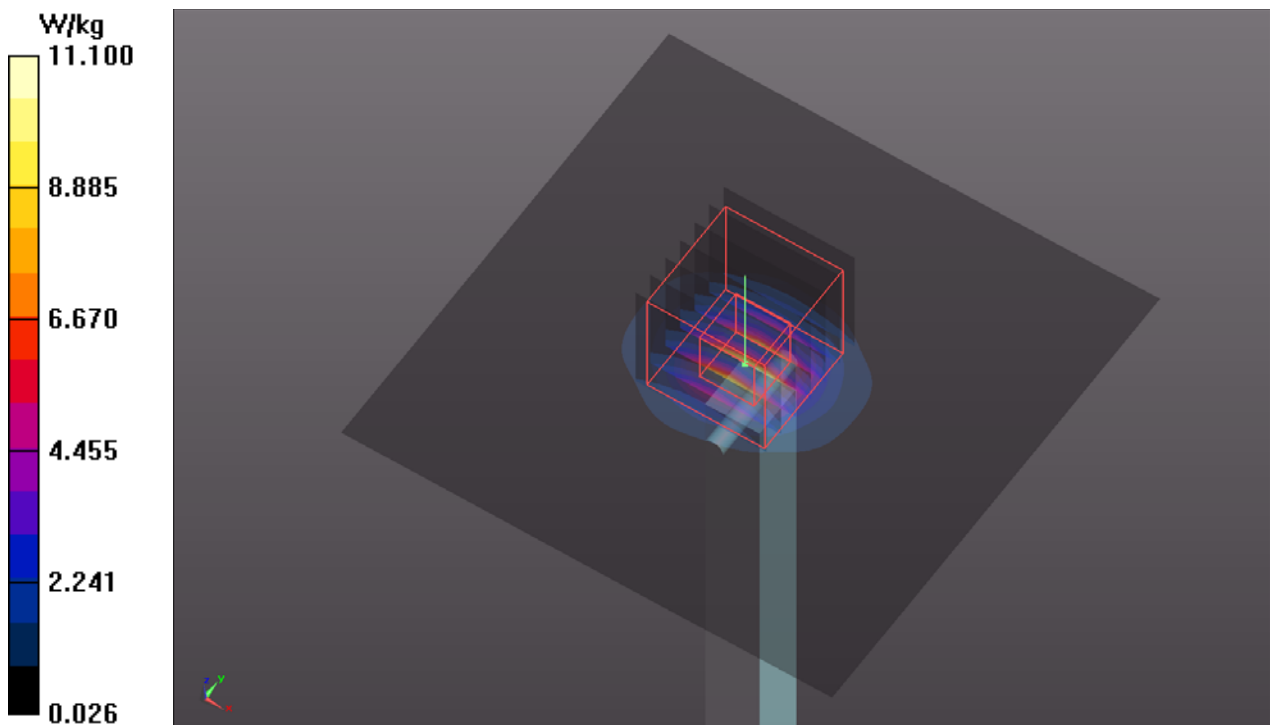
**Pin=50mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 54.51 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 17.7 W/kg

**SAR(1 g) = 4.23 W/kg; SAR(10 g) = 1.29 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 11.4 W/kg



### S03 System Check\_H5750\_210602

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1  
Medium: H34T60N1\_0602 Medium parameters used:  $f = 5750$  MHz;  $\sigma = 5.275$  S/m;  $\epsilon_r = 34.361$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3887; ConvF(4.36, 4.36, 4.36) @ 5750 MHz; Calibrated: 2020/10/22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2021/04/14
- Phantom: ELI Phantom\_1206; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Pin=50mW/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 16.3 W/kg

**Pin=50mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm  
Reference Value = 57.95 V/m; Power Drift = -0.16 dB  
Peak SAR (extrapolated) = 29.8 W/kg  
**SAR(1 g) = 4.27 W/kg; SAR(10 g) = 1.28 W/kg** (SAR corrected for target medium)  
Maximum value of SAR (measured) = 17.2 W/kg

