Appendix A. SAR Plots of System Verification

The plots for system verification are shown as follows.

S01 System Check_H2450_210720

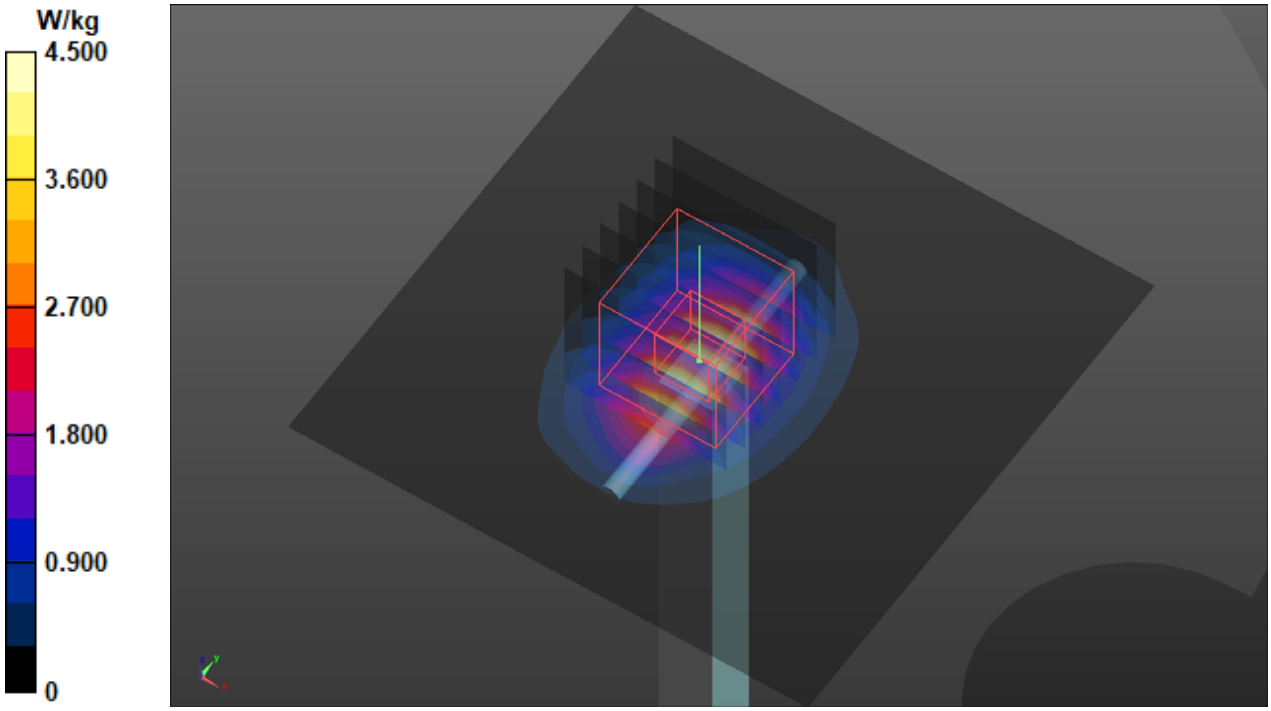
DUT: Dipole 2450 MHz; Type: D2450V2; SN: 835

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0720 Medium parameters used (interpolated): f = 2450 MHz; σ = 1.862 S/m; ε_r = 39.176; ρ = 1000 kg/m^3
Ambient Temperature：23.7 ℃; Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7554; ConvF(7.41, 7.41, 7.41) @ 2450 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn915; Calibrated: 2021/06/02
- Phantom: SAM Phantom_1982; Type: QD 000 P41 Ax;
- 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) = 4.50 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.73 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 5.58 W/kg
SAR(1 g) = 2.67 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.53 W/kg



S02 System Check_H2450_210721

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 835

Communication System: UID 0, CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: H19T27N1_0721 Medium parameters used (interpolated): f = 2450 MHz; σ = 1.882 S/m; ε_r = 38.359; ρ = 1000 kg/m^3
Ambient Temperature：23.6 ℃; Liquid Temperature：23.2 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7555; ConvF(7.59, 7.59, 7.59) @ 2450 MHz; Calibrated: 2020/09/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1589; Calibrated: 2020/09/15
- Phantom: Twin-SAM V8.0_1988; Type: QD 000 P41 AA;
- 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) = 5.50 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.80 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 6.82 W/kg
SAR(1 g) = 2.69 W/kg; SAR(10 g) = 1.24 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.55 W/kg