

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

The plots for system verification are shown as follows.

## S01 System Check\_H1900\_210731

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

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: H16T20N1\_0731 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.459$  S/m;  $\epsilon_r = 38.97$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7555; ConvF(8.42, 8.42, 8.42) @ 1900 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 (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.30 W/kg

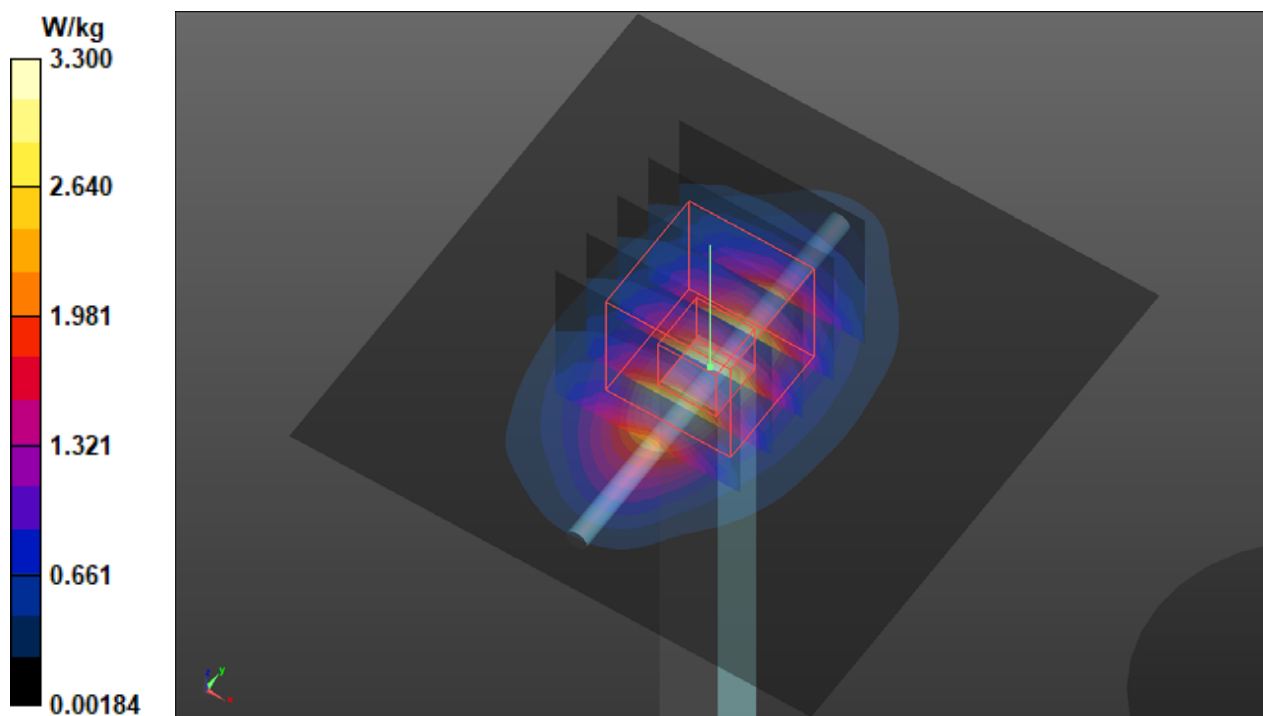
**Pin=50mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 49.62 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 4.05 W/kg

**SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.16 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.43 W/kg



## S02 System Check\_H835\_210731

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

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: H07T10N1\_0731 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.906$  S/m;  $\epsilon_r = 40.795$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7555; ConvF(9.69, 9.69, 9.69) @ 835 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 (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 0.695 W/kg

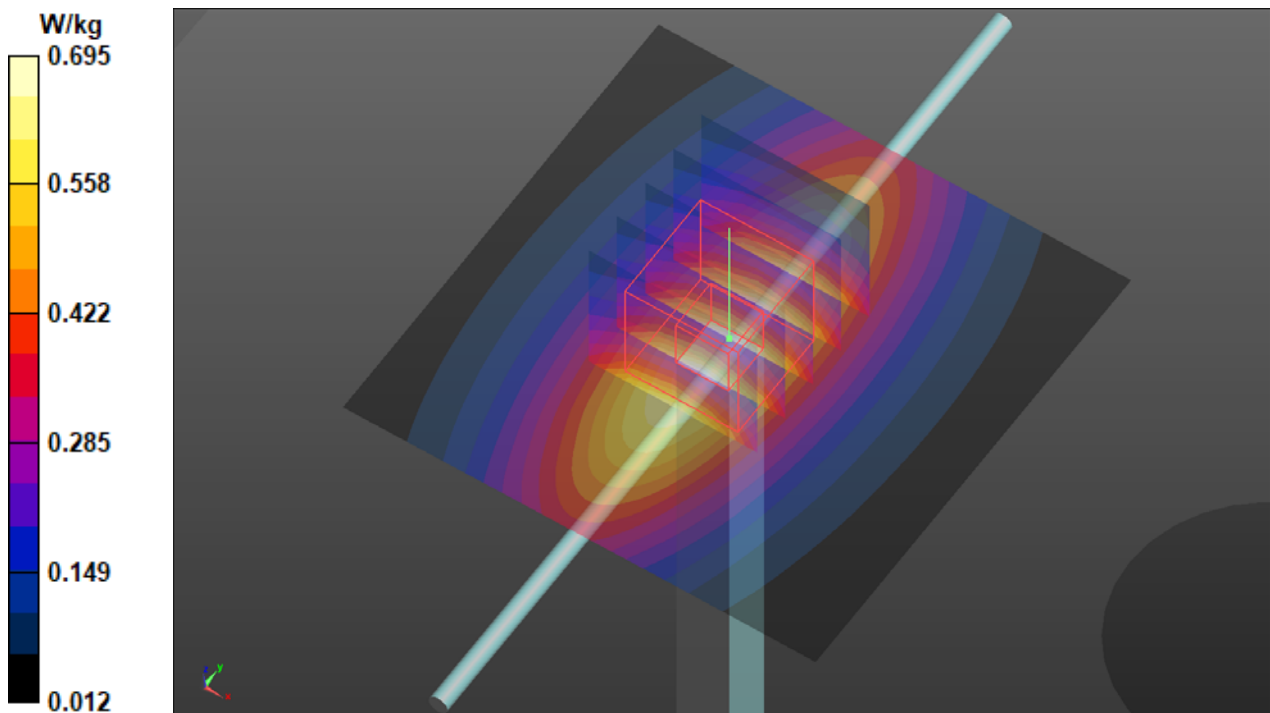
**Pin=50mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.99 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.798 W/kg

**SAR(1 g) = 0.522 W/kg; SAR(10 g) = 0.363 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.713 W/kg



### S03 System Check\_H835\_210716

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

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: H07T10N1\_0716 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.917 \text{ S/m}$ ;  $\epsilon_r = 40.678$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.4 °C; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7555; ConvF(9.69, 9.69, 9.69) @ 835 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 (61x61x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
 Maximum value of SAR (interpolated) = 0.671 W/kg

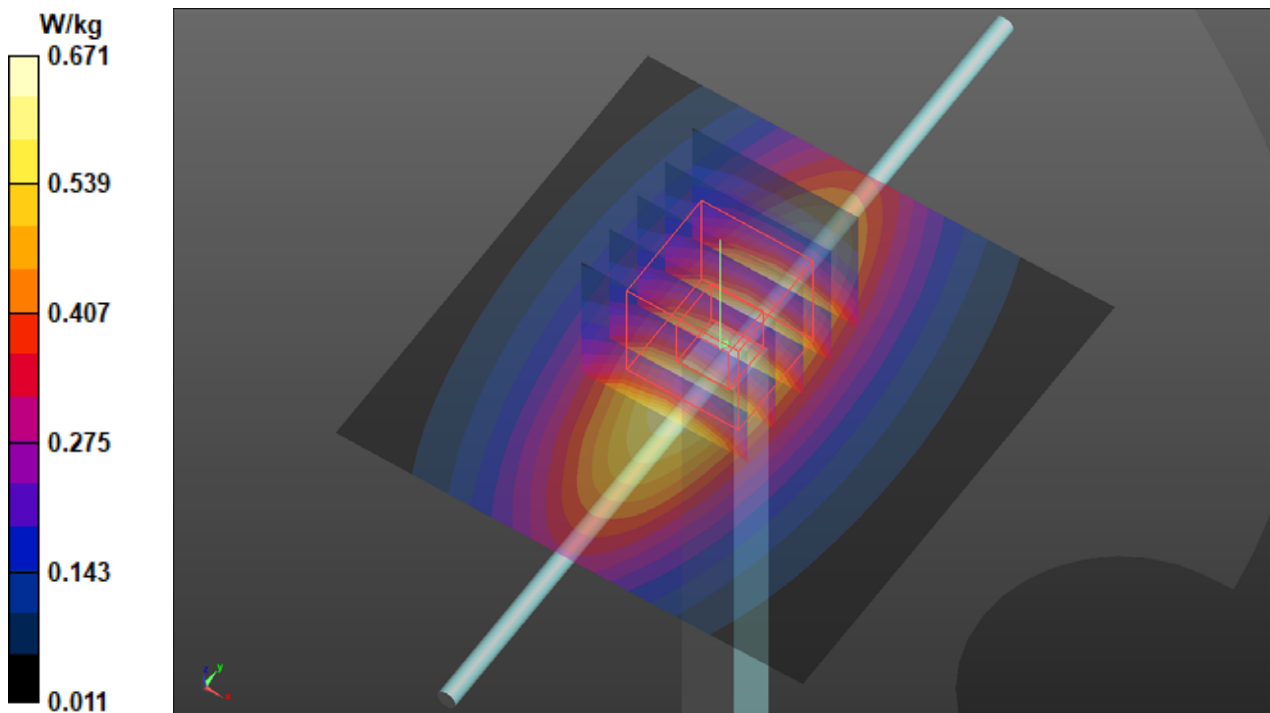
**Pin=50mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 28.30 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.781 W/kg

**SAR(1 g) = 0.501 W/kg; SAR(10 g) = 0.325 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.684 W/kg



## S04 System Check\_H750\_210716

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

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: H06T09N1\_0716 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.885$  S/m;  $\epsilon_r = 43.435$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7555; ConvF(10, 10, 10) @ 750 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 (61x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 0.583 W/kg

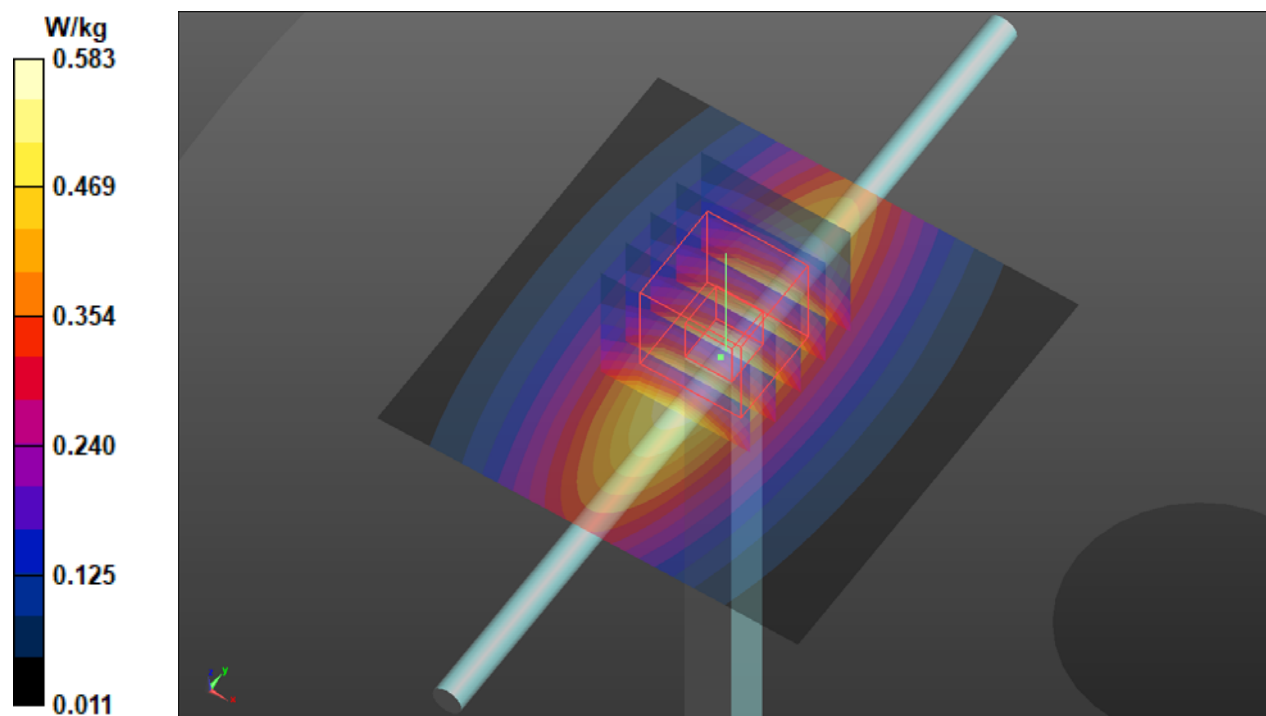
**Pin=50mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.49 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.661 W/kg

**SAR(1 g) = 0.435 W/kg; SAR(10 g) = 0.283 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.583 W/kg



## S05 System Check\_H2450\_210805

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

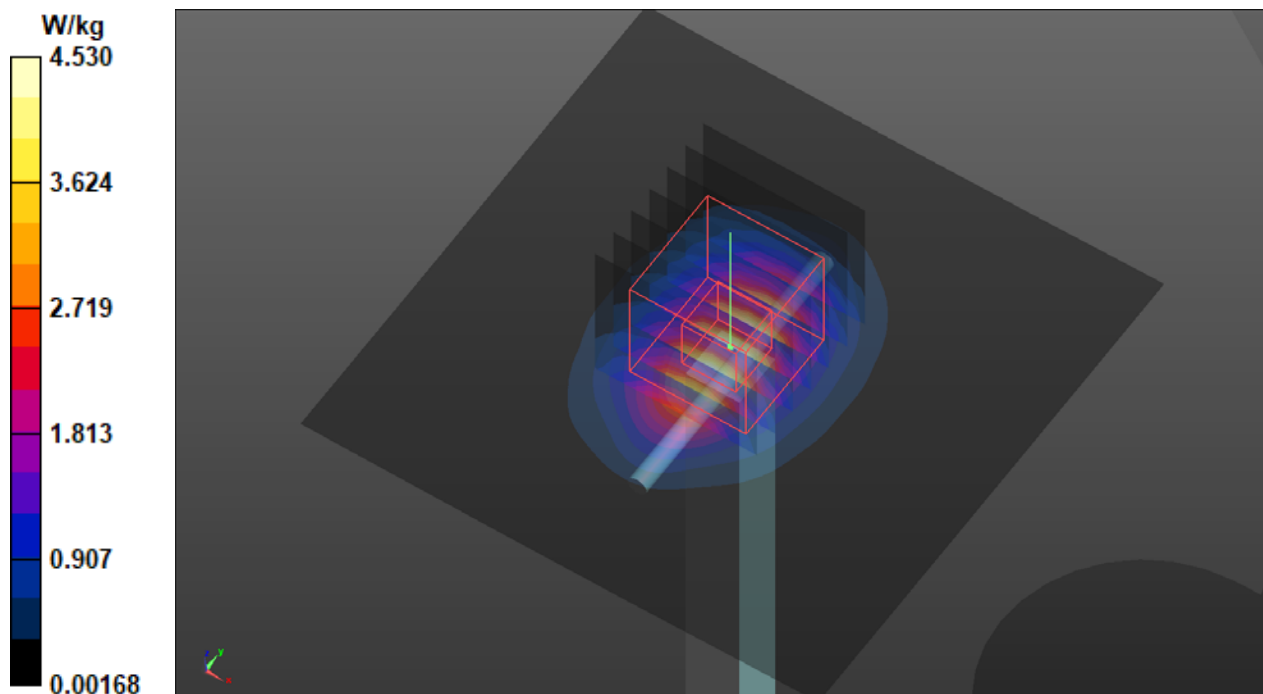
Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium: H19T27N1\_0805 Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.867$  S/m;  
 $\epsilon_r = 37.958$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2450 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: SAM Phantom\_1987; 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) = 4.53 W/kg

**Pin=50mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 51.26 V/m; Power Drift = 0.08 dB  
Peak SAR (extrapolated) = 5.68 W/kg  
**SAR(1 g) = 2.68 W/kg; SAR(10 g) = 1.27 W/kg** (SAR corrected for target medium)  
Maximum value of SAR (measured) = 4.60 W/kg



## S06 System Check\_H2450\_210805

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

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: H19T27N1\_0805 Medium parameters used (interpolated):  $f = 2450$  MHz;  $\sigma = 1.867$  S/m;  $\epsilon_r = 37.958$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.61, 7.61, 7.61) @ 2450 MHz; Calibrated: 2021/04/26
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2021/04/15
- Phantom: SAM Phantom\_1987; 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) = 4.53 W/kg

**Pin=50mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.26 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 5.68 W/kg

**SAR(1 g) = 2.68 W/kg; SAR(10 g) = 1.27 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.60 W/kg

