

Annex A. Plots of SAR and Power Density System Verification

The plots for system verification are shown as follows.

S01 System Check_H2450_210916

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

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

Medium: H19T27N1_0916 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.857$ S/m; $\epsilon_r = 38.122$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.2 °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) = 4.51 W/kg

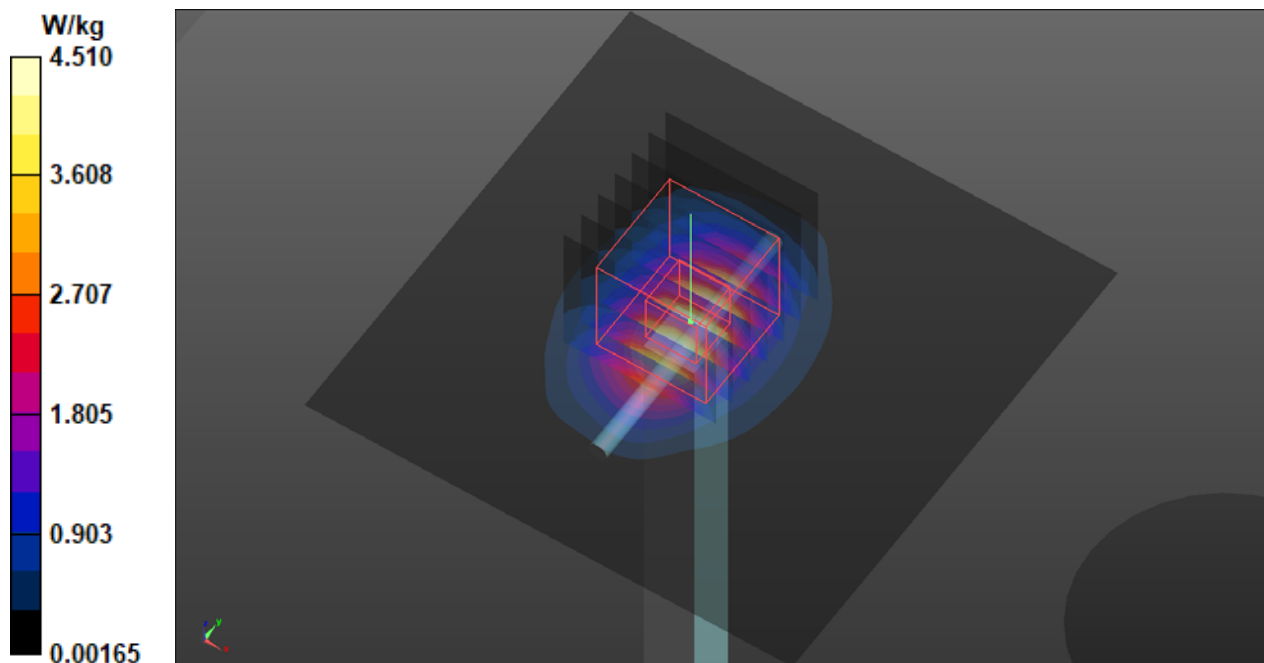
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.58 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 5.85 W/kg

SAR(1 g) = 2.76 W/kg; SAR(10 g) = 1.32 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.71 W/kg



S02 System Check_H5250_210916

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

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

Medium: H34T60N1_0916 Medium parameters used (interpolated): $f = 5250$ MHz; $\sigma = 4.912$ S/m; $\epsilon_r = 35.831$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(5.5, 5.5, 5.5) @ 5250 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 (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 10.7 W/kg

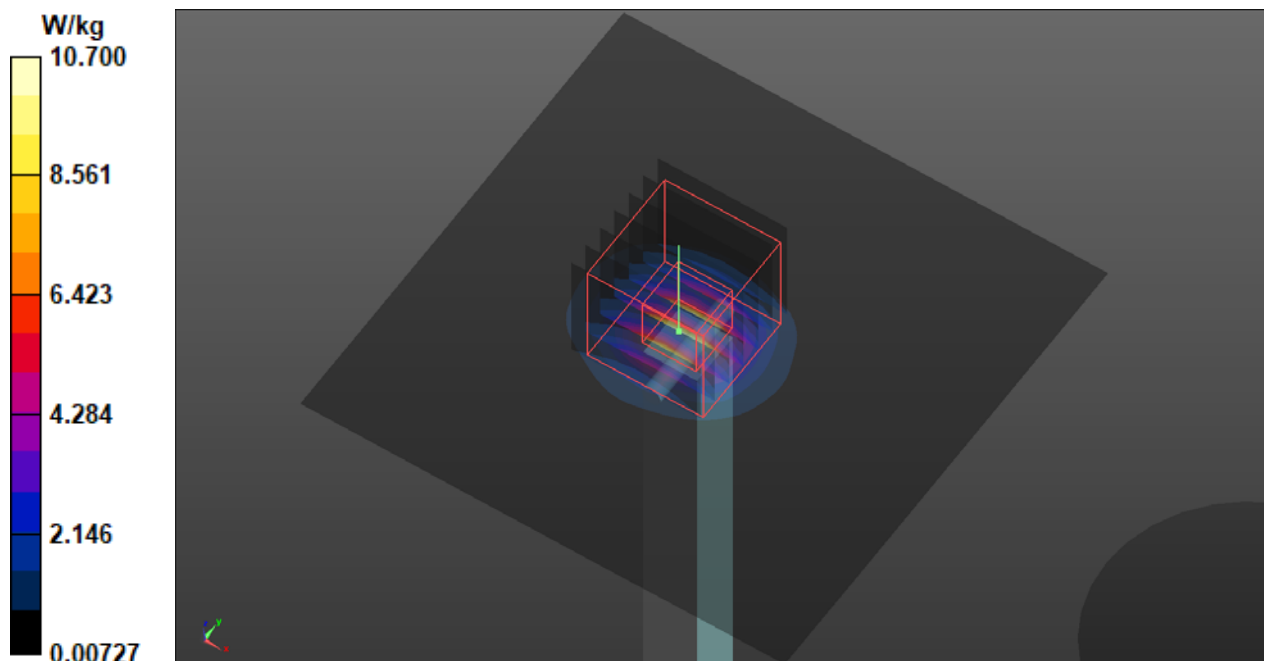
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 48.05 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 4.32 W/kg; SAR(10 g) = 1.21 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 11.0 W/kg



S03 System Check_H5600_210916

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

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0916 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.26$ S/m; $\epsilon_r = 35.277$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.8, 4.8, 4.8) @ 5600 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 (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 11.5 W/kg

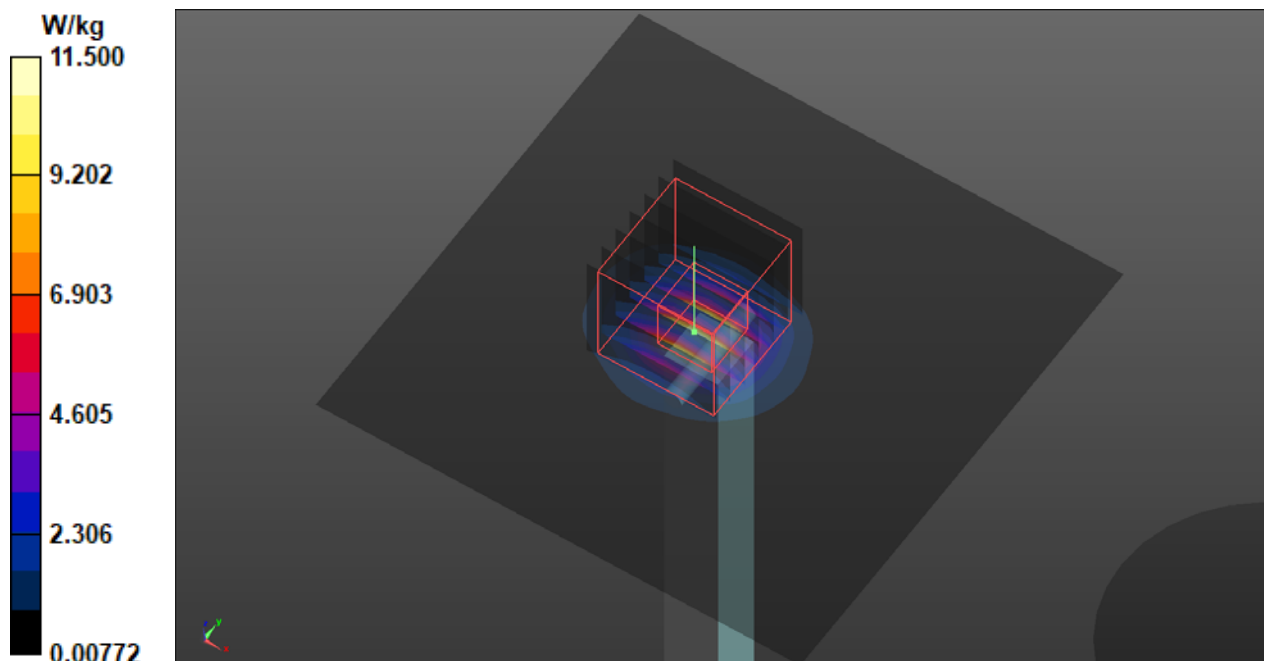
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 48.38 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 4.46 W/kg; SAR(10 g) = 1.24 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 11.7 W/kg



S04 System Check_H5750_210916**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0916 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.428$ S/m; $\epsilon_r = 34.929$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.95, 4.95, 4.95) @ 5750 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 (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 10.2 W/kg

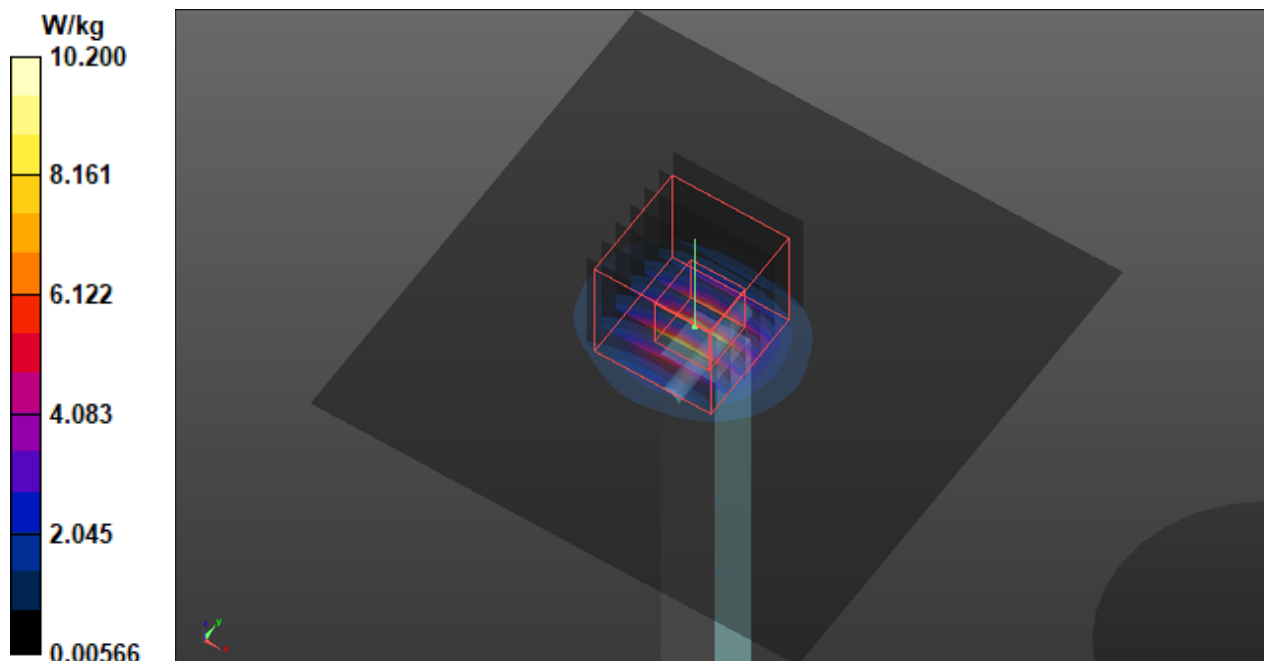
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 44.90 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 17.5 W/kg

SAR(1 g) = 4.12 W/kg; SAR(10 g) = 1.18 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.5 W/kg



S05 System Check_H2450_210621**DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737**

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

Medium: H19T27N1_0621 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.867$ S/m; $\epsilon_r = 37.958$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.87, 7.87, 7.87) @ 2450 MHz; Calibrated: 2021/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2021/03/24
- Phantom: ELI Phantom_1245; 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) = 4.07 W/kg

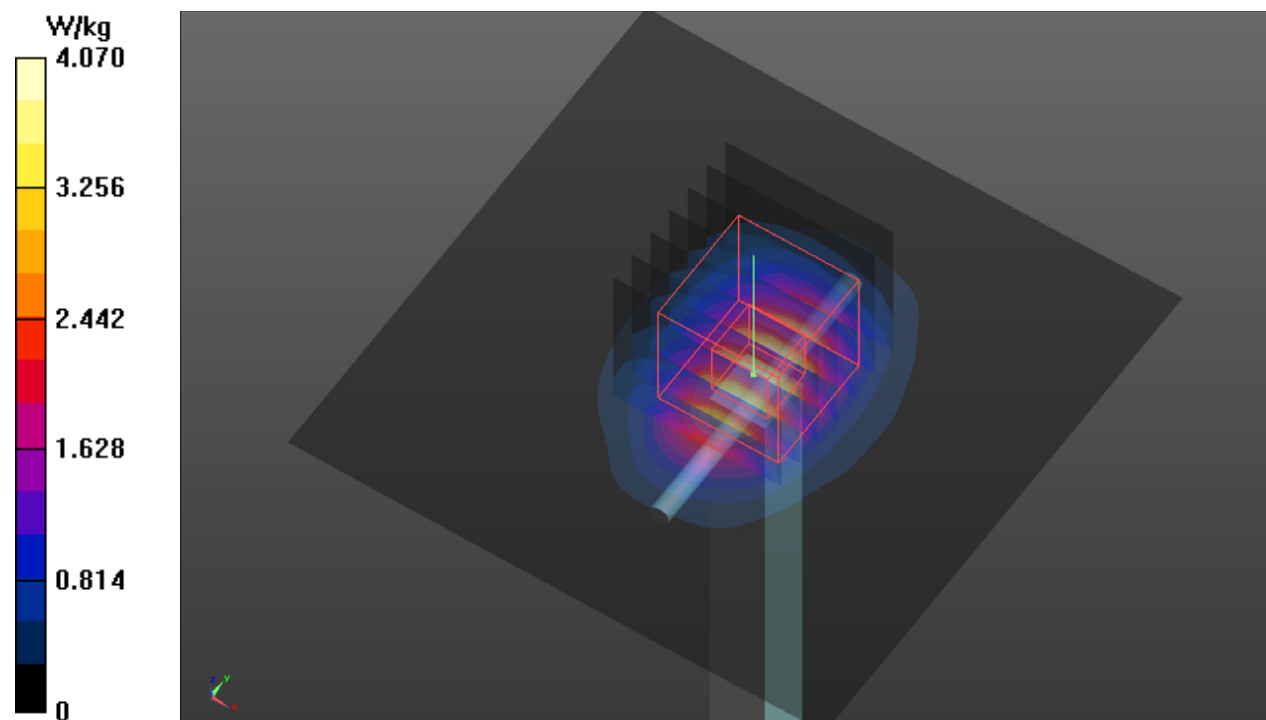
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.69 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 5.14 W/kg

SAR(1 g) = 2.48 W/kg; SAR(10 g) = 1.20 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.17 W/kg



Measurement Report for Device

S06S System Check_H6.5GHz_210807

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Speag 6.5GHz System Valisation Kit	50.0 x 10.0 x 8.0		6.5GHzV2 Valisation Kit

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat,	,		UID 0	6500.0,	5.65	6.21	33.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - 2105	H50T72N1 , 2021-Aug-07	EX3DV4 - SN7554, 2020-09-28	DAE4 Sn915, 2021-06-02

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2021-08-07	2021-08-07
psSAR1g [W/Kg]	24.7	31.2
psSAR10g [W/Kg]	5.20	5.74
Power Drift [dB]	0.02	0.00
M2/M1 [%]		51.8
Dist 3dB Peak [mm]		4.8

