



Appendix B. System Performance Check

Tissue Calibration Result :

6.1.3

Frequency (MHz)	Liquid Temp	Measured Values (W/kg)		Target Values (W/kg)		Deviation[%]		Limit	Measured. Date
		σ	ϵ_r (e')	σ	ϵ_r (e')	1g	10g	%	
2450	23.1	1.865	41.059	1.8	39.2	3.61%	4.74%	±5%	2022/7/7

Result of System Performance Check :

6.1.7

Frequency (MHz)	Dipole S/N	Measured SAR Values (W/kg)		Target SAR Values (W/kg)		Deviation[%]		Limit	Measured. Date
		1g	10g	1g	10g	1g	10g	%	
2450	914	13.6	6.34	13	5.92	4.62%	7.09%	±10%	2022/7/7



System Check_Head_2450MHz

Date: 2022/7/7

DUT: Dipole D2450V2 - SN:914

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

Medium parameters used : $f = 2450$ MHz; $\sigma = 1.865$ S/m; $\epsilon_r = 41.059$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(7.52, 7.52, 7.52) @ 2450 MHz; Calibrated: 2021/12/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn528; Calibrated: 2022/5/19
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CD; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

2450MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 23.1 W/kg

2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 111.0 V/m; Power Drift = 0.11 dB

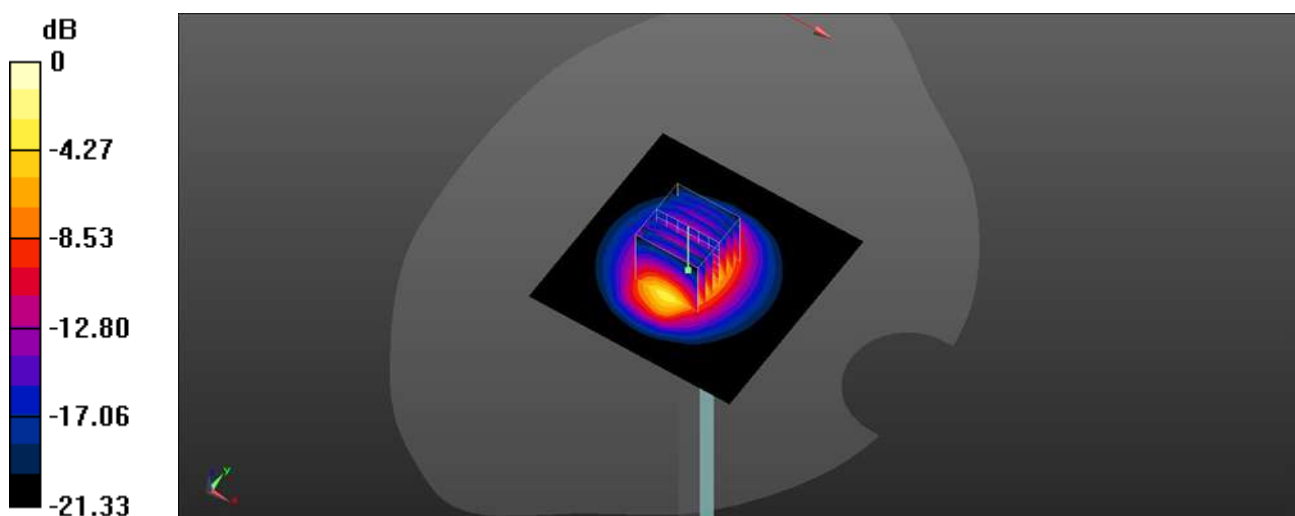
Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.34 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

Ratio of SAR at M2 to SAR at M1 = 49.6%

Maximum value of SAR (measured) = 22.7 W/kg



0 dB = 22.7 W/kg = 13.56 dBW/kg



Appendix C. Measured Conducted Power

Modulation Type	Channel	Power Output (dBm)		e.i.r.p. Power	
		Average	Tune-up	Average	Tune-up
PI/4 DQPSK	1	4.26	4.5	9.74	10
	20	3.78	4	9.26	9.5
	38	2.98	3.5	8.46	9



Appendix D. SAR Measurement Data

Headset:

FCC

Plot.No	Band	Mode	Channel	Frequency (MHz)	Test Position	Gap (mm)	Antenna	Avg Power (dBm)	Tune-up (dBm)	SAR 1g (W/Kg)	Reported SAR 1 g (W/Kg)
Headset_052-017											
	SRD	PI/4 DQPSK	1	2403.35	Left Cheek	0	Ant 1	4.26	4.5	0.00744	0.01
#1	SRD	PI/4 DQPSK	20	2441.35	Left Cheek	0	Ant 1	3.78	4	0.00809	0.01
	SRD	PI/4 DQPSK	38	2477.35	Left Cheek	0	Ant 1	2.98	3.5	0.00787	0.01
	SRD	PI/4 DQPSK	20	2441.35	Left Cheek	0	Ant 2	3.78	4	0.00806	0.01



SRD PI4 DQPSK CH20_Left Cheek_Ant 1

Communication System:SRD ; Frequency: 2441.35 MHz;Duty Cycle: 1:1

Medium parameters used : $f = 2441.35$ MHz; $\sigma = 1.859$ S/m; $\epsilon_r = 41.06$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7375; ConvF(7.52, 7.52, 7.52) @ 2441.35 MHz; Calibrated: 2021/12/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn528; Calibrated: 2022/5/19
- Phantom: Twin-SAM V5.0 (30deg probe tilt); Type: QD 000 P40 CD; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x91x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0120 W/kg

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

Reference Value = 2.259 V/m; Power Drift = -0.13 dB

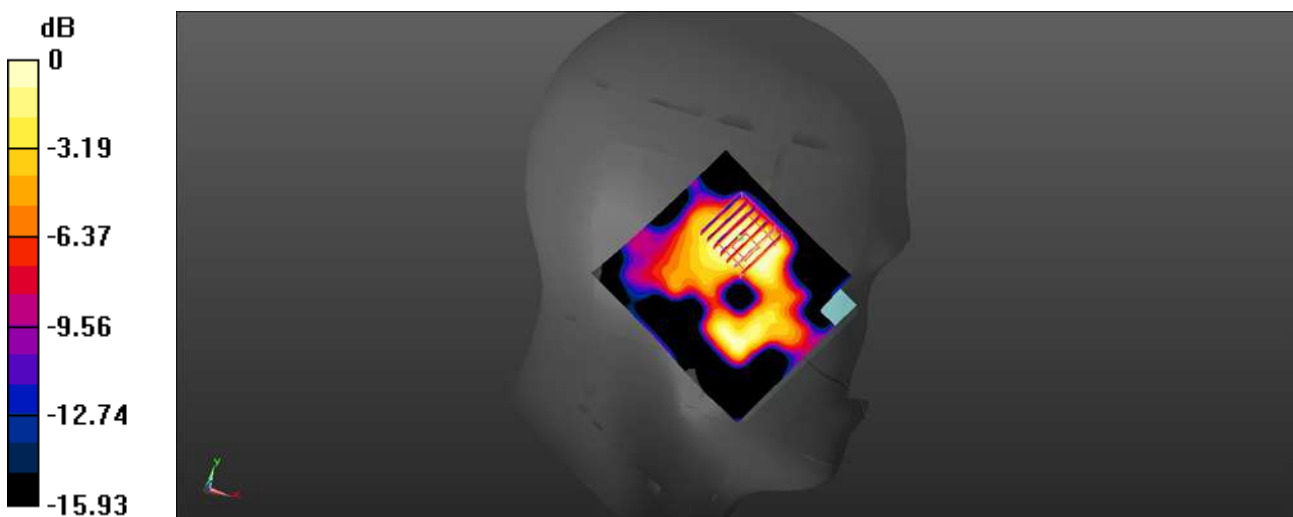
Peak SAR (extrapolated) = 0.0290 W/kg

SAR(1 g) = 0.00809 W/kg; SAR(10 g) = 0.0048 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)

Ratio of SAR at M2 to SAR at M1 = 52.3%

Maximum value of SAR (measured) = 0.0115 W/kg



0 dB = 0.0115 W/kg = -19.39 dBW/kg