

APPENDIX B: VERIFICATION PLOTS

cDASY6 Module WPT Measurement Report

Device under test

Model / Manufacturer:
SPEAG V-COIL50/400

Serial number:
1012

Dimensions:
125mm x 250mm x 35mm

Measurement scenario:
400 kHz verification

Hardware setup

DASY version:
cDASY6 Module WPT, 1.2.0.8

Notebook version:
1.2.5

Probe model / serial number:
Single Probe with reference / WP000100

Scan setup

Type:
Dynamic

Resolution:
X: 7.00 mm, Y: 7.00 mm, Z: 7.00 mm

Dimensions:
X: 126.00 mm, Y: 119.00 mm, Z: 56.00 mm

Completed on:
2023/02/13 20:28:10

Measurement results

Maximum H-field:
170.01 A/m (rms)

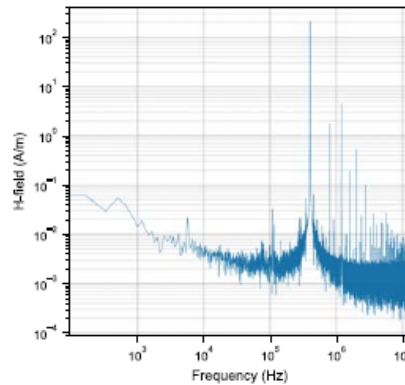
Location of maximum relative to DUT:
X: 0.00 m, Y: 0.00 m, Z: 7.00 mm

Maximum H-field (x, y, z):
140.51 A/m, 144.02 A/m, 240.00 A/m

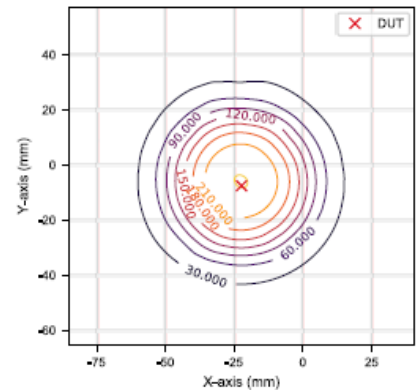
Peak frequency:
400.00 kHz (median)

Distance to -20.0 dB boundary:
39.60 mm

H-field magnitude at maximum



H-field magnitude at lowest plane



Induced quantities in the anatomical model (f = 400.00 kHz, $\sigma = 0.355$ S/m, reconstruction error = 7.9%)

Spacing (mm)	Peak Hinc (A/m, rms)	Peak Eind (V/m, rms)		Peak Jind (A/m ² , rms)		psSAR (mW/kg)		
		Cube avg.	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius (mm)	
2.00	265	4.91	5.02	1.45	4.14	1.99	38.4	

Standard compliance evaluation

Spacing (mm)	ICNIRP 2020 (dB)			ICNIRP 1998 (dB)			IEEE 2019 (dB)			FCC 2020 (dB)			HC Code 6 (dB)		
	Peak Hinc (RL)	Peak Eind (BR)	psSAR (BR)	Peak Hinc (RL)	Peak Jind (BR)	psSAR (BR)	Peak Hinc (RL)	Peak Eind (BR)	psSAR (BR)	Peak Hinc (RL)	Peak Eind (BR)	psSAR (BR)	Peak Hinc (RL)	Peak Eind (BR)	psSAR (BR)
2.00	27.2	-20.7	-30.0	43.7	5.24	-30.0	9.75	-24.3	-30.0	44.4	-20.7	-25.8	43.7	-20.7	-25.8

Standard compliance evaluation (coverage factor-adjusted) (Coefficients: $w_{Ez} = 3.0$, $w_{Ej} = 2.0$, $w_j = 1.0$, $w_{SAR1g} = 1.0$, $w_{SAR10g} = 1.0$)

Spacing (mm)	ICNIRP 2020 (dB)			ICNIRP 1998 (dB)			IEEE 2019 (dB)			FCC 2020 (dB)			HC Code 6 (dB)		
	Peak Eind (BR)	psSAR (BR)	Peak Jind (BR)	Peak Jind (BR)	psSAR (BR)	Peak Eind (BR)	psSAR (BR)	Peak Eind (BR)	psSAR (BR)	Peak Eind (BR)	psSAR (BR)	Peak Eind (BR)	psSAR (BR)		
2.00	-13.5	-31.1	2.96	2.96	-31.1	-20.6	-31.1	-13.5	-27.0	-13.5	-27.0	-13.5	-27.0		

ELEMENT

DUT: Dipole 5800.0 MHz; Type: D5GHzV2 - SN1057

Communication System: UID: 0, CW; Frequency: 5800.0 MHz
Medium: 5200-5800 Body; Medium parameters used:
f = 5800.0 MHz; cond = 5.90 S/m; perm = 47.5; density = 1000 kg/m³
Phantom Section: Flat; Space: 10 mm

Test Date: 12/27/2022; Ambient Temp: 22.0⁰C; Tissue Temp: 22.0⁰C

Probe: EX3DV4 - SN7659; ConvF:(4.67,4.67,4.67); Calibrated: 2022-04-20
Sensor-Surface: 1.4mm (VMS + 6p)
Electronics: DAE4 Sn1407; Calibrated: 2022-04-13
Phantom: Twin-SAM V5.0; Serial: 1873
Measurement SW: DASY Module SAR V16.2.0.1425

5800 MHz System Verification at 17 dBm (50 mW)

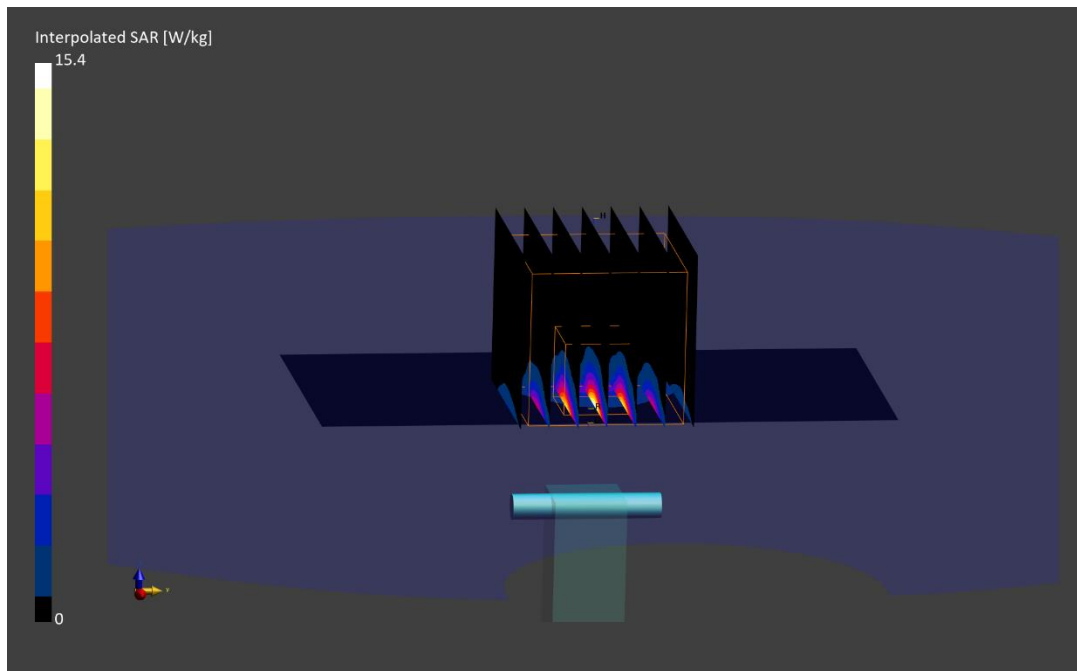
Area Scan (40.0 x 80.0): Measurement grid: dx=10.0 mm, dy=10.0 mm

Zoom Scan (22.0 x 22.0 x 22.0): Measurement grid: dx=4.0 mm, dy=4.0 mm, dz=1.4 mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.4 W/kg

SAR(1 g) = 3.63 W/kg

Deviation (1 g) = -2.94%



ELEMENT

10 GHz System Verification

Date: 12/12/2022

DUT	Serial Number
10 GHz Verification Source	1004

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	FRONT	10.00	Validation band	10000.0

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9407_F1-55GHz, 2022-10-17	DAE4ip Sn1638, 2022-10-13

Software Setup

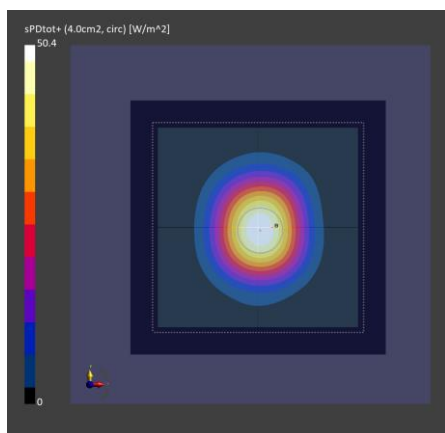
Software	Software Version
cDasy6 Module mmWave	3.0.0.841

Scans Setup

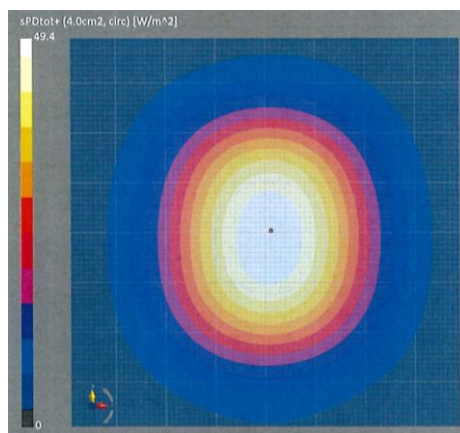
Scan Type	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10.0

Measurement Results

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS_{tot} avg [W/m²]	50.4
pS_n avg [W/m²]	50.3
E_{peak} [V/m]	145
Deviation [dB]	0.09



10GHz System Verification



Calibration Certificate