

Annex A: System verification
Tested Model : XMC30
Report Number: WSCT-ANAB-R&E251200097A

cDASY6 Module WPT Measurement Report

Device under test

Info:
3KHz sys check

Serial number:
1028

Scenario:
not set

Tool info

DASY software version:
cDASY6 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000270, 2024/11/01

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: -150.00 µm, y: 48.06 mm, z: 46.16 mm

Dimensions:
x: 653.0 mm, y: 653.0 mm, z: 36.6 mm

Resolution:
x: 7.33 mm, y: 7.33 mm, z: 7.33 mm

Completed on:
2025/01/22 16:57:29

Measurement results

Maximum H-field [RMS]:

MAGNITUDE: 114.31 A/m

x: 57.72 A/m, y: 89.82 A/m, z: 40.84 A/m

Maximum H-field location relative to DUT:

x: 121.00 mm, y: -172.33 mm, z: 8.50 mm

Maximum E-field [RMS]:

MAGNITUDE: 127.58 V/m

x: 1.34 V/m, y: 4.65 V/m, z: 127.49 V/m

Maximum E-field location relative to DUT:

x: 51.33 mm, y: 220.00 mm, z: 0.00 m

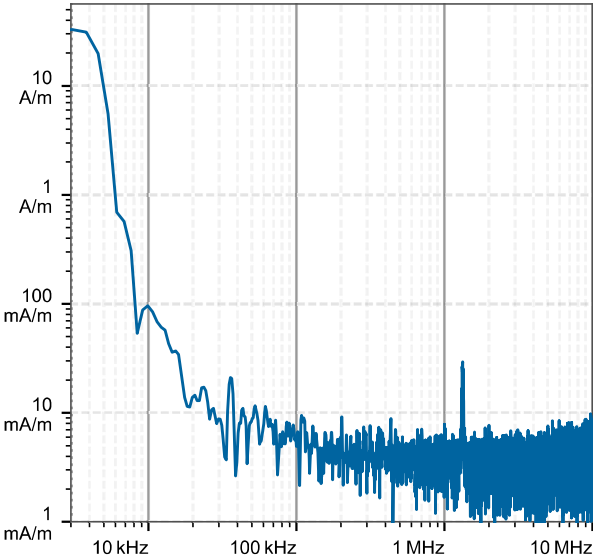
Distance to -20.0 dB boundary:

78.98 mm

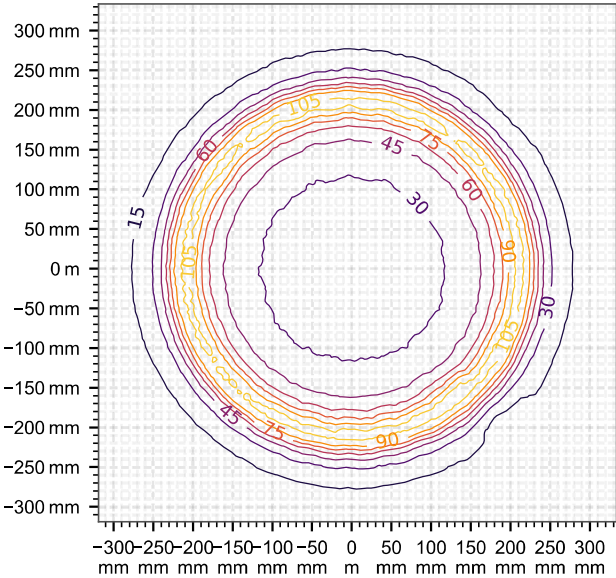
Offset relative to DUT:

x: 0.00 m, y: 0.00 m, z: 1.00 mm

H-field magnitude [RMS] at center location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 3.02 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

	Peak incident fields <i>[RMS]</i>		Peak E_{ind} <i>[V/m, RMS]</i>			Peak J_{ind} <i>[A/m², RMS]</i>	psSAR <i>[mW/kg]</i>		H-field extent	Warnings		
Distance [mm]	H_{inc} [A/m]	E_{inc} [V/m]	Cube avg.	Local	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius [mm]	Sign	Vector potential	Boundary effect
0.00	167	128	0.126	0.127	0.127	0.0901	9.77e-3	7.71e-3	273	0%	35%	34%
2.00	153	114	0.120	0.121	0.121	0.0860	8.95e-3	7.14e-3	276	0%	35%	35%

Compliance evaluation (Field values at the peak frequency) (f=3.02 kHz, total field evaluation, coverage evaluation)

Distance [mm]	ICNIRP 2010/2020				ICNIRP 1998				IEEE 2019				FCC				HC Code 6			
	RL [RMS]		BR [RMS]		RL [RMS]		BR [RMS]		ERL [RMS]		DRL [RMS]		MPE [RMS]		BR [RMS]		RL [RMS]		BR [RMS]	
	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pJ _{ind} [A/m ²]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]
0.00	167	128	1.12	7.71e-3	167	128	0.0902	7.71e-3	167	128	0.566	7.71e-3	167	128	N/A	9.77e-3	167	128	1.59	9.77e-3
2.00	153	114	1.07	7.14e-3	153	114	0.0861	7.14e-3	153	114	0.543	7.14e-3	153	114	N/A	8.95e-3	153	114	1.53	8.95e-3

Coverage factors: w_{E_{ind}, cube avg.} = [8.90, 8.95], w_{E_{ind}, local} = [12.57, 12.64], w_{E_{ind}, line avg.} = [4.46, 4.48]

Compliance evaluation (Exposure ratios) (with multi-frequency enhancement, total field evaluation, coverage evaluation)

Distance [mm]	ICNIRP 2010/2020						ICNIRP 1998				IEEE 2019						FCC				HC Code 6					
	RL				BR		RL		BR		ERL				DRL		MPE		BR		RL				BR	
	pH _{inc}		pE _{inc}		pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pJ _{ind}	psSAR	pH _{inc}		pE _{inc}		pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pE _{ind}	psSAR	pH _{inc}		pE _{inc}		pE _{ind}	psSAR
	NS	TH	NS	TH							NS	TH	N/A	N/A							NS	TH	NS	TH		
	0.00	7.95	N/A	133.0	N/A	2.77	N/A	33.4	127.0	16.1	N/A	0.92	N/A	18.0	N/A	0.82	N/A	1.86	55.0	N/A	N/A	1.86	N/A	133.0	N/A	3.93
2.00	7.3	N/A	119.0	N/A	2.66	N/A	30.7	114.0	15.3	N/A	0.85	N/A	16.1	N/A	0.79	N/A	1.7	49.2	N/A	N/A	1.7	N/A	119.0	N/A	3.77	N/A

Coverage factors: $w_{E_{ind}, cube\ avg.} = [8.90, 8.95]$, $w_{E_{ind}, local} = [12.57, 12.64]$, $w_{E_{ind}, line\ avg.} = [4.46, 4.48]$

cDASY6 Module WPT Measurement Report

Device under test

Info:
85KHz SYS CHECK

Serial number:
1035

Scenario:
not set

Tool info

DASY software version:
cDASY6 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000270, 2024/11/01

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 2.76 mm, y: -34.43 mm, z: 46.64 mm

Dimensions:
x: 432.0 mm, y: 520.0 mm, z: 36.7 mm

Resolution:
x: 7.33 mm, y: 7.33 mm, z: 7.33 mm

Completed on:
2025/01/18 22:38:43

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 134.26 A/m
x: 40.95 A/m, y: 108.61 A/m, z: 67.47 A/m

Maximum H-field location relative to DUT:
x: -33.00 mm, y: 150.33 mm, z: 8.50 mm

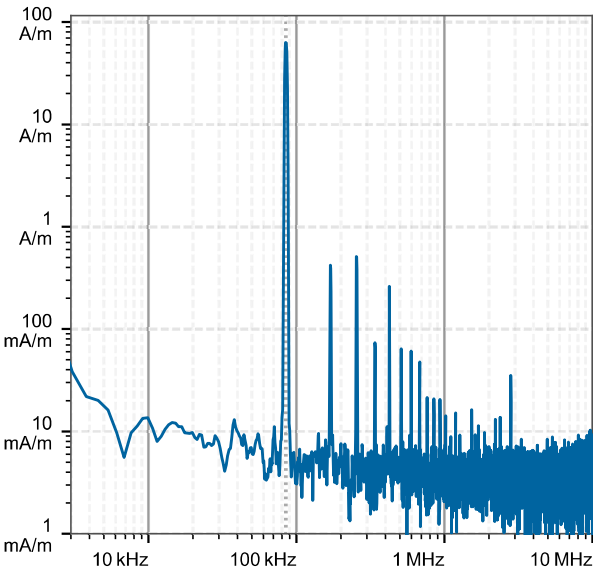
Maximum E-field [RMS]:
MAGNITUDE: 171.84 V/m
x: 13.67 V/m, y: 6.16 V/m, z: 171.19 V/m

Maximum E-field location relative to DUT:
x: 44.00 mm, y: -168.67 mm, z: 0.00 m

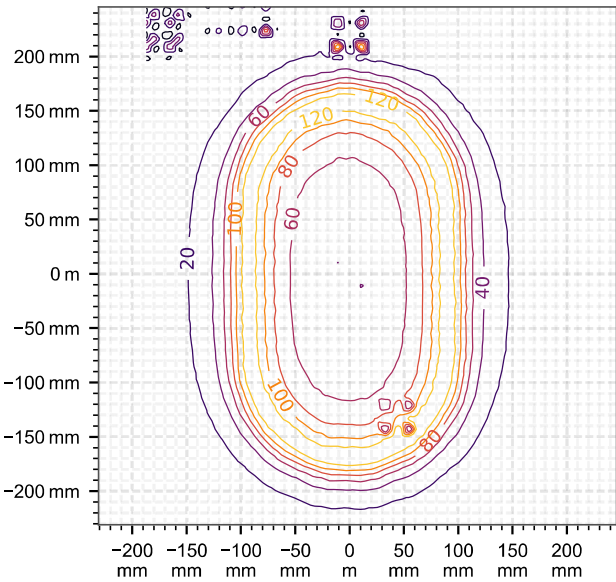
Distance to -20.0 dB boundary:
65.59 mm

Offset relative to DUT:
x: 0.00 m, y: 0.00 m, z: 1.00 mm

H-field magnitude [RMS] at center location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 84.97 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

	Peak incident fields <i>[RMS]</i>		Peak E_{ind} <i>[V/m, RMS]</i>			Peak J_{ind} <i>[A/m², RMS]</i>	psSAR <i>[mW/kg]</i>		H-field extent	Warnings		
Distance [mm]	H_{inc} [A/m]	E_{inc} [V/m]	Cube avg.	Local	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius [mm]	Sign	Vector potential	Boundary effect
0.00	227	172	3.38	3.41	3.42	2.37	6.63	4.92	181	2%	97%	38%
2.00	200	155	3.18	3.20	3.21	2.24	5.93	4.46	184	2%	97%	41%

Compliance evaluation (Field values at the peak frequency) (f=84.97 kHz, total field evaluation, coverage evaluation)

Distance	ICNIRP 2010/2020				ICNIRP 1998				IEEE 2019				FCC				HC Code 6			
	RL [RMS]		BR [RMS]		RL [RMS]		BR [RMS]		ERL [RMS]		DRL [RMS]		MPE [RMS]		BR [RMS]		RL [RMS]		BR [RMS]	
[mm]	pH _{inc}	pE _{inc}	pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pJ _{ind}	psSAR	pH _{inc}	pE _{inc}	pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pE _{ind}	psSAR
0.00	227	172	25.4	4.92	227	172	2.38	4.92	227	172	13.2	4.92	227	172	N/A	6.63	227	172	36.2	6.63
2.00	200	155	24.0	4.46	200	155	2.24	4.46	200	155	12.5	4.46	200	155	N/A	5.93	200	155	34.2	5.93

Coverage factors: w_{E_{ind}, cube avg.} = [7.52, 7.56], w_{E_{ind}, local} = [10.62, 10.68], w_{E_{ind}, line avg.} = [3.87, 3.88]

Compliance evaluation (Exposure ratios) (with multi-frequency enhancement, total field evaluation, coverage evaluation, ratios in dB)

Distance [mm]	ICNIRP 2010/2020						ICNIRP 1998				IEEE 2019						FCC				HC Code 6					
	RL				BR		RL		BR		ERL				DRL		MPE		BR		RL				BR	
	pH _{inc}		pE _{inc}		pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pJ _{ind}	psSAR	pH _{inc}		pE _{inc}		pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pE _{ind}	psSAR	pH _{inc}		pE _{inc}		pE _{ind}	psSAR
	NS	TH	NS	TH	NS	TH	N/A	N/A	NS	TH	NS	TH	NS	TH	NS	TH	N/A	N/A	N/A	TH	NS	TH	NS	TH	NS	TH
0.00	20.7	N/A	20.2	N/A	6.91	N/A	33.1	18.6	23.0	N/A	2.88	N/A	2.79	N/A	-2.56	N/A	8.04	12.3	N/A	N/A	8.04	N/A	20.2	N/A	9.99	N/A
2.00	19.6	N/A	19.3	N/A	6.42	N/A	32.1	17.7	22.5	N/A	1.79	N/A	1.9	N/A	-3.07	N/A	6.95	11.4	N/A	N/A	6.95	N/A	19.3	N/A	9.5	N/A

Coverage factors: $w_{E_{ind, cube\ avg.}} = [7.52, 7.56]$, $w_{E_{ind, local}} = [10.62, 10.68]$, $w_{E_{ind, line\ avg.}} = [3.87, 3.88]$

cDASY6 Module WPT Measurement Report

Device under test

Info:
400KHz SYS CHECK

Serial number:
1034

Scenario:
not set

Tool info

DASY software version:
cDASY6 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000270, 2024/11/01

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 2.76 mm, y: -34.43 mm, z: 46.64 mm

Dimensions:
x: 168.6 mm, y: 168.2 mm, z: 36.7 mm

Resolution:
x: 7.33 mm, y: 7.33 mm, z: 7.33 mm

Completed on:
2025/01/18 14:52:13

Measurement results

Maximum H-field [RMS]:

MAGNITUDE: 134.12 A/m

X: 10.62 A/m, Y: 24.77 A/m, Z: 131.38 A/m

Maximum H-field location relative to DUT:

X: -3.67 mm, Y: -3.67 mm, Z: 8.50 mm

Maximum E-field [RMS]:

MAGNITUDE: 60.48 V/m

X: 25.32 V/m, Y: 11.69 V/m, Z: 53.66 V/m

Maximum E-field location relative to DUT:

X: 7.33 mm, Y: -29.33 mm, Z: 0.00 mm

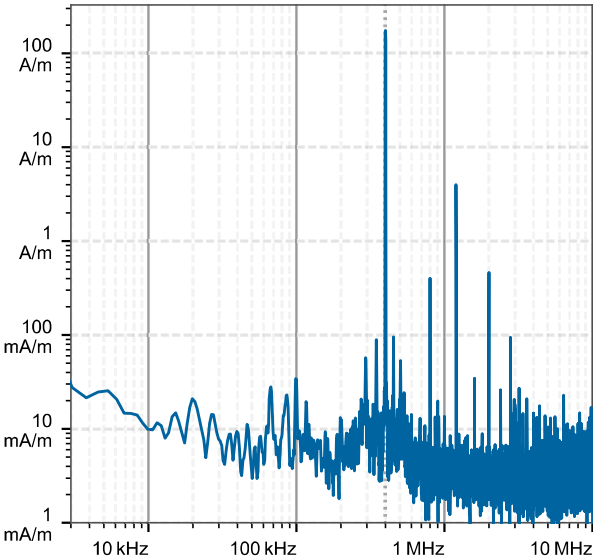
Distance to -20.0 dB boundary:

39.49 mm

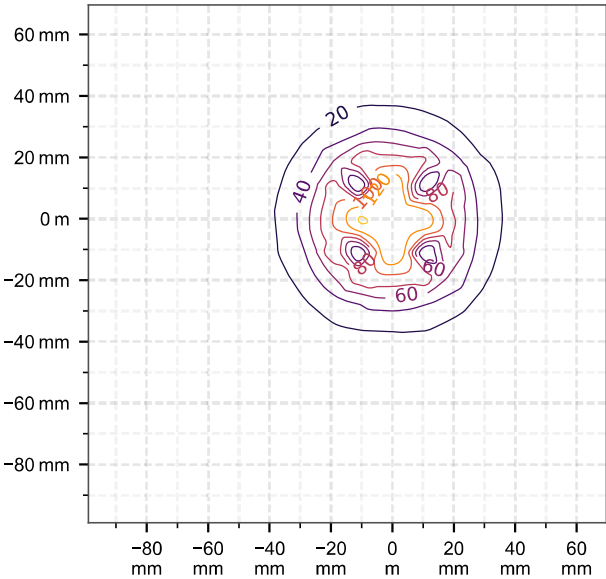
Offset relative to DUT:

X: 0.00 m, Y: 0.00 m, Z: 1.00 mm

H-field magnitude [RMS] at center location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 400.00 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

	Peak incident fields <i>[RMS]</i>		Peak E_{ind} [V/m, <i>RMS</i>]			Peak J_{ind} [A/m ² , <i>RMS</i>]	psSAR [mW/kg]		H-field extent	Warnings		
Distance [mm]	H _{inc} [A/m]	E _{inc} [V/m]	Cube avg.	Local	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius [mm]	Sign	Vector potential	Boundary effect
0.00	264	60.5	4.23	4.37	4.37	2.58	6.39	3.26	39.3	6%	31%	24%
2.00	232	55.7	3.54	3.66	3.66	2.18	4.66	2.44	39.6	6%	31%	23%

Compliance evaluation (Field values at the peak frequency) (f=400.00 kHz, total field evaluation, coverage evaluation)

Distance [mm]	ICNIRP 2010/2020				ICNIRP 1998				IEEE 2019				FCC				HC Code 6			
	RL [RMS]		BR [RMS]		RL [RMS]		BR [RMS]		ERL [RMS]		DRL [RMS]		MPE [RMS]		BR [RMS]		RL [RMS]		BR [RMS]	
	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pJ _{ind} [A/m ²]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]	pH _{inc} [A/m]	pE _{inc} [V/m]	pE _{ind} [V/m]	psSAR [mW/kg]
0.00	264	60.5	22.8	3.26	264	60.5	2.59	3.26	264	60.5	12.9	3.26	264	60.5	N/A	6.39	264	60.5	33.3	6.39
2.00	232	55.7	19.1	2.44	232	55.7	2.18	2.44	232	55.7	10.8	2.44	232	55.7	N/A	4.66	232	55.7	27.9	4.66

Coverage factors: w_{E_{ind}, cube avg.} = [5.39, 5.39], w_{E_{ind}, local} = [7.61, 7.62], w_{E_{ind}, line avg.} = [2.95, 2.95]

Compliance evaluation (Exposure ratios) (with multi-frequency enhancement, total field evaluation, coverage evaluation, ratios in dB)

Distance [mm]	ICNIRP 2010/2020						ICNIRP 1998				IEEE 2019						FCC				HC Code 6					
	RL				BR		RL		BR		ERL				DRL		MPE		BR		RL				BR	
	pH _{inc}		pE _{inc}		pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pJ _{ind}	psSAR	pH _{inc}		pE _{inc}		pE _{ind}	psSAR	pH _{inc}	pE _{inc}	pE _{ind}	psSAR	pH _{inc}		pE _{inc}		pE _{ind}	psSAR
	NS	TH	NS	TH							NS	TH	N/A	N/A							NS	TH	NS	TH		
	NS	TH	NS	TH	NS	TH	N/A	N/A	NS	TH	NS	TH	NS	TH	NS	TH	N/A	N/A	N/A	TH	NS	TH	NS	TH	NS	TH
0.00	22.0	26.7	42.9	23.0	-7.0	-27.9	43.2	47.4	13.0	-27.9	4.2	9.26	25.5	32.7	-15.4	-27.9	44.2	40.5	N/A	-24.0	9.35	43.2	42.9	N/A	-3.87	-24.0
2.00	20.9	25.6	42.2	22.3	-8.5	-29.1	42.1	46.7	11.7	-29.1	3.08	8.15	24.8	32.0	-16.9	-29.1	43.1	39.8	N/A	-25.3	8.24	42.1	42.2	N/A	-5.38	-25.3

Coverage factors: $w_{E_{ind, cube\ avg.}} = [5.39, 5.39]$, $w_{E_{ind, local}} = [7.61, 7.62]$, $w_{E_{ind, line\ avg.}} = [2.95, 2.95]$