

Appendix A. Measured Test Result

Test Result are shown as below.

DASY8 Module WPT Measurement Report

Device under test

Info:
P25040437

Serial number:
P01_Front Face_with Smart Pen_0mm

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2024/06/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 14.75 mm, y: 93.44 mm, z: 102.16 mm

Dimensions:
x: 520.0 mm, y: 521.0 mm, z: 36.0 mm

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

Completed on:
2025/05/13

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 768.90 mA/m
x: 554.92 mA/m, y: 508.08 mA/m, z: 158.48 mA/m

Maximum H-field location relative to DUT:
x: 25.67 mm, y: 11.00 mm, z: 8.50 mm

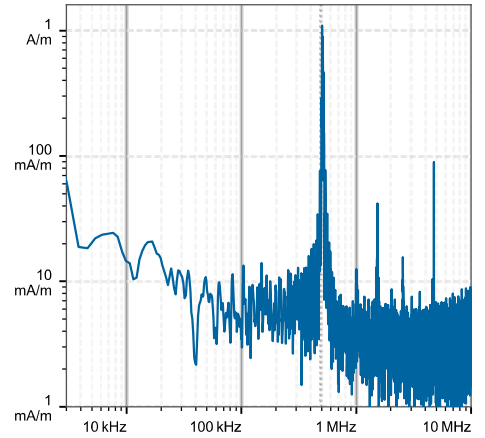
Maximum E-field [RMS]:
MAGNITUDE: 1.27 V/m
x: 223.93 mV/m, y: 99.77 mV/m, z: 1.25 V/m

Maximum E-field location relative to DUT:
x: 0.00 m, y: 14.67 mm, z: 0.00 m

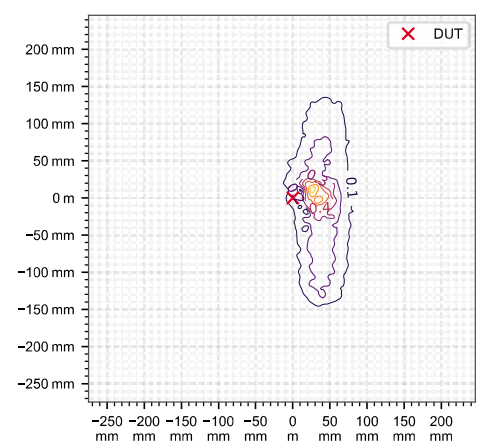
Distance to -20.0 dB boundary:
30.24 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 510.63 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	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	1.58	1.27	0.0443	0.0457	0.0456	0.0271	6.92e-4	3.1e-4	76.6	48%	40%	12%

Compliance evaluation (Field values at the peak frequency) (f=510.63 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]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]
0.00	1.58	1.27	0.264	3.1e-4	1.58	1.27	0.0273	3.1e-4	1.58	1.27	0.146	3.1e-4	1.58	1.27	N/A	6.92e-4	1.58	1.27	0.384	6.92e-4

Coverage factors: $w_{E_{ind, cube avg.}} = [5.95]$, $w_{E_{ind, local}} = [8.40]$, $w_{E_{ind, line avg.}} = [3.19]$

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 [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	ERL [RMS]	DRL [RMS]	MPE [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]
0.00	0.08	0.16	0.02	<0.01	<0.01	<0.01	1.1	0.01	0.03	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	10.97	<0.01	N/A	<0.01

Coverage factors: $w_{E_{ind, cube avg.}} = [5.95]$, $w_{E_{ind, local}} = [8.40]$, $w_{E_{ind, line avg.}} = [3.19]$

DASY8 Module WPT Measurement Report

Device under test

Info:
P25040437

Serial number:
P02_Rear Face_with Smart Pen_0mm

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2024/06/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: -35.60 mm, y: 84.41 mm, z: 59.70 mm

Dimensions:
x: 521.0 mm, y: 521.0 mm, z: 36.8 mm

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

Completed on:
2025/05/13

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 347.35 mA/m
x: 35.21 mA/m, y: 273.77 mA/m, z: 210.87 mA/m

Maximum H-field location relative to DUT:
x: 11.00 mm, y: -40.33 mm, z: 8.50 mm

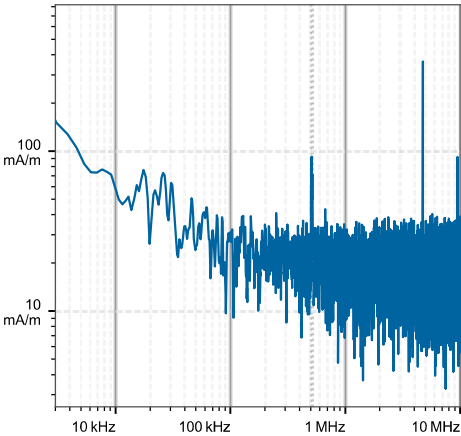
Maximum E-field [RMS]:
MAGNITUDE: 1.16 V/m
x: 65.50 mV/m, y: 53.36 mV/m, z: 1.16 V/m

Maximum E-field location relative to DUT:
x: 7.33 mm, y: -29.33 mm, z: 0.00 mm

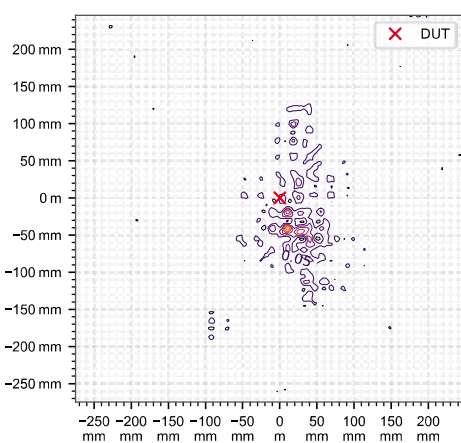
Distance to -20.0 dB boundary:
7.33 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 510.54 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	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	0.411	1.16	8.56e-3	8.83e-3	8.86e-3	5.12e-3	2.36e-5	1.02e-5	91.9	86%	124%	25%

Compliance evaluation (Field values at the peak frequency) (f=510.54 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]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]
0.00	0.411	1.16	0.0530	1.03e-5	0.411	1.16	5.24e-3	1.03e-5	0.411	1.16	0.0293	1.03e-5	0.411	1.16	N/A	2.37e-5	0.411	1.16	0.0772	2.37e-5

Coverage factors: $w_{E_{ind, cube avg.}} = [6.18]$, $w_{E_{ind, local}} = [8.73]$, $w_{E_{ind, line avg.}} = [3.29]$

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	RL	BR	RL	BR	RL	BR	RL	BR	RL	BR
0.00	0.02	0.04	0.01	<0.01	<0.01	<0.01	0.29	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.25	<0.01	N/A	<0.01	<0.01	<0.01

Coverage factors: $w_{E_{ind, cube avg.}} = [6.18]$, $w_{E_{ind, local}} = [8.73]$, $w_{E_{ind, line avg.}} = [3.29]$

DASY8 Module WPT Measurement Report

Device under test

Info:
P25040437

Serial number:
P03_Left Side_with Smart Pen_0mm

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2024/06/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 22.67 mm, y: 21.52 mm, z: 98.63 mm

Dimensions:
x: 432.0 mm, y: 432.0 mm, z: 37.0 mm

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

Completed on:
2025/05/13

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 731.52 mA/m
x: 4.61 mA/m, y: 577.09 mA/m, z: 449.53 mA/m

Maximum H-field location relative to DUT:
x: 25.67 mm, y: 18.33 mm, z: 8.50 mm

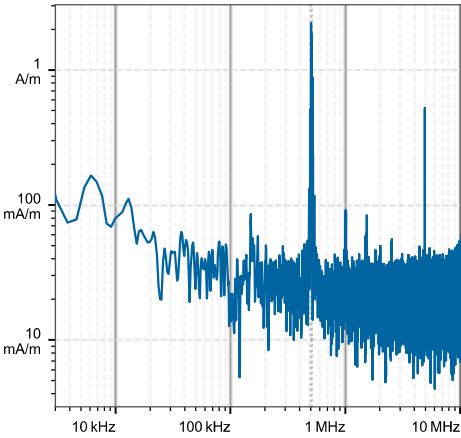
Maximum E-field [RMS]:
MAGNITUDE: 4.39 V/m
x: 93.22 mV/m, y: 45.61 mV/m, z: 4.39 V/m

Maximum E-field location relative to DUT:
x: 14.67 mm, y: 51.33 mm, z: 0.00 mm

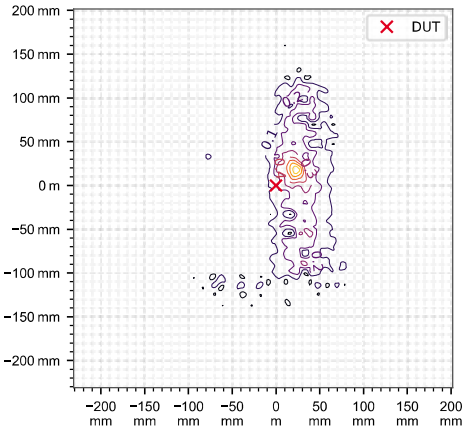
Distance to -20.0 dB boundary:
32.80 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 510.22 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	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	1.58	4.39	0.0296	0.0305	0.0306	0.0177	2.8e-4	1.10e-4	66.9	46%	47%	15%

Compliance evaluation (Field values at the peak frequency) (f=510.22 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}	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	1.58	4.39	0.172	1.10e-4	1.58	4.39	0.0182	1.10e-4	1.58	4.39	0.0963	1.10e-4	1.58	4.39	N/A	2.8e-4	1.58	4.39	0.251	2.8e-4

Coverage factors: w_{E_{ind}, cube avg.} = [5.80], w_{E_{ind}, local} = [8.20], w_{E_{ind}, line avg.} = [3.13]

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
0.00	0.08	0.16	0.05	<0.01	0.11	0.05	0.02	<0.01	0.02	0.02	<0.01	<0.01	0.97	<0.01	N/A	<0.01	0.02	1.11	0.05	0.04

Coverage factors: w_{E_{ind}, cube avg.} = [5.80], w_{E_{ind}, local} = [8.20], w_{E_{ind}, line avg.} = [3.13]

DASY8 Module WPT Measurement Report

Device under test

Info:
P25040437

Serial number:
P04_Right Side_with Smart Pen_0mm

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2024/06/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 22.73 mm, y: 21.47 mm, z: 98.59 mm

Dimensions:
x: 432.0 mm, y: 433.0 mm, z: 37.0 mm

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

Completed on:
2025/05/13

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 1.07 A/m
x: 258.21 mA/m, y: 973.86 mA/m, z: 349.33 mA/m

Maximum H-field location relative to DUT:
x: 11.00 mm, y: 18.33 mm, z: 8.50 mm

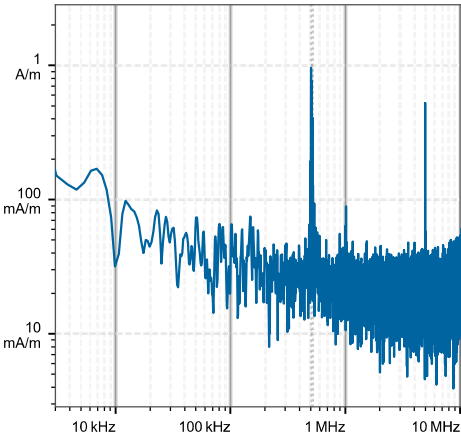
Maximum E-field [RMS]:
MAGNITUDE: 2.58 V/m
x: 51.13 mV/m, y: 20.53 mV/m, z: 2.58 V/m

Maximum E-field location relative to DUT:
x: 7.33 mm, y: 51.33 mm, z: 0.00 mm

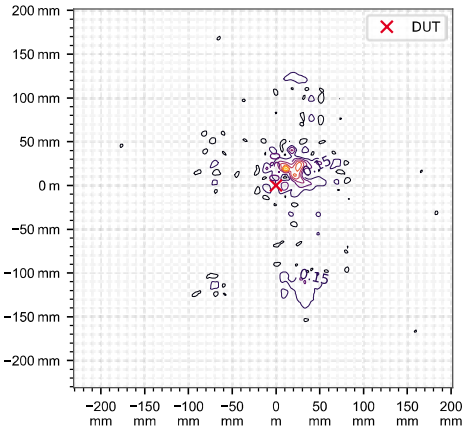
Distance to -20.0 dB boundary:
7.33 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 510.75 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	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	1.39	2.58	0.0117	0.0122	0.0122	6.62e-3	4.21e-5	1.77e-5	47.0	78%	349%	71%

Compliance evaluation (Field values at the peak frequency) (f=510.75 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]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]
0.00	1.39	2.58	0.0647	1.78e-5	1.39	2.58	6.90e-3	1.78e-5	1.39	2.58	0.037	1.78e-5	1.39	2.58	N/A	4.22e-5	1.39	2.58	0.0954	4.22e-5

Coverage factors: w_{E_{ind}, cube avg.} = [5.51], w_{E_{ind}, local} = [7.78], w_{E_{ind}, line avg.} = [3.00]

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	RL	BR	RL	BR	RL	BR	RL	BR	RL	BR
0.00	0.07	0.14	0.03	<0.01	0.97	0.03	<0.01	0.02	0.01	0.01	0.01	0.01	0.85	<0.01	N/A	<0.01	0.02	0.97	0.03	<0.01

Coverage factors: w_{E_{ind}, cube avg.} = [5.51], w_{E_{ind}, local} = [7.78], w_{E_{ind}, line avg.} = [3.00]

DASY8 Module WPT Measurement Report

Device under test

Info:
P25040437

Serial number:
P05_Top Side_with Smart Pen_0mm

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2024/06/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 22.56 mm, y: 21.58 mm, z: 98.81 mm

Dimensions:
x: 520.0 mm, y: 520.0 mm, z: 37.0 mm

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

Completed on:
2025/05/13

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 461.73 mA/m
x: 74.51 mA/m, y: 399.77 mA/m, z: 218.69 mA/m

Maximum H-field location relative to DUT:
x: 40.33 mm, y: 18.33 mm, z: 8.50 mm

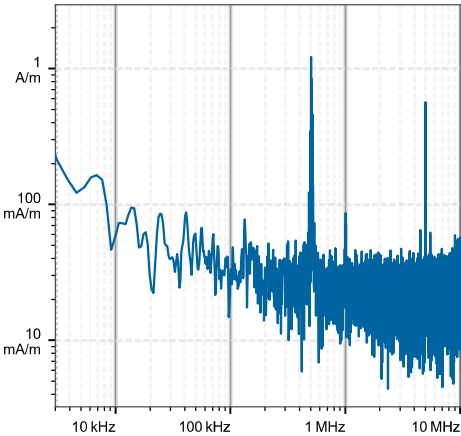
Maximum E-field [RMS]:
MAGNITUDE: 3.25 V/m
x: 57.85 mV/m, y: 54.09 mV/m, z: 3.25 V/m

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

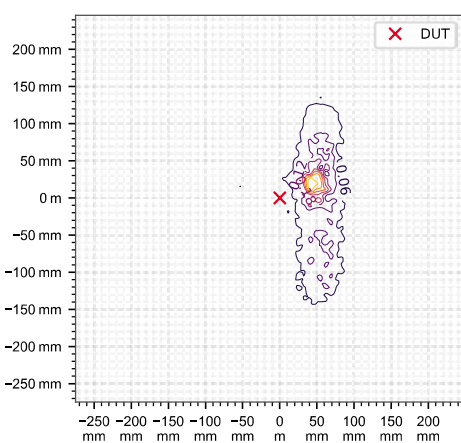
Distance to -20.0 dB boundary:
30.24 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 504.98 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	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	0.868	3.25	0.0133	0.0144	0.0142	6.73e-3	5.29e-5	2.48e-5	71.8	84%	131%	51%

Compliance evaluation (Field values at the peak frequency) (f=504.98 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]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]
0.00	0.868	3.25	0.0788	2.5e-5	0.868	3.25	7.08e-3	2.5e-5	0.868	3.25	0.0453	2.5e-5	0.868	3.25	N/A	5.30e-5	0.868	3.25	0.12	5.30e-5

Coverage factors: w_{E_{ind}, cube avg.} = [5.88], w_{E_{ind}, local} = [8.30], w_{E_{ind}, line avg.} = [3.16]

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 [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	ERL [RMS]	DRL [RMS]	MPE [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]
0.00	0.04	0.09	0.04	<0.01	<0.01	<0.01	0.60	0.04	<0.01	<0.01	<0.01	0.10	0.01	<0.01	<0.01	0.53	<0.01	N/A	<0.01	<0.01

Coverage factors: w_{E_{ind}, cube avg.} = [5.88], w_{E_{ind}, local} = [8.30], w_{E_{ind}, line avg.} = [3.16]

DASY8 Module WPT Measurement Report

Device under test

Info:
P25040437

Serial number:
P06_Bottom Side_with Smart Pen_0mm

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2024/06/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 22.52 mm, y: 21.62 mm, z: 99.03 mm

Dimensions:
x: 520.0 mm, y: 520.0 mm, z: 36.0 mm

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

Completed on:
2025/05/13

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 625.61 mA/m
x: 382.66 mA/m, y: 476.25 mA/m, z: 134.68 mA/m

Maximum H-field location relative to DUT:
x: 47.67 mm, y: 18.33 mm, z: 8.50 mm

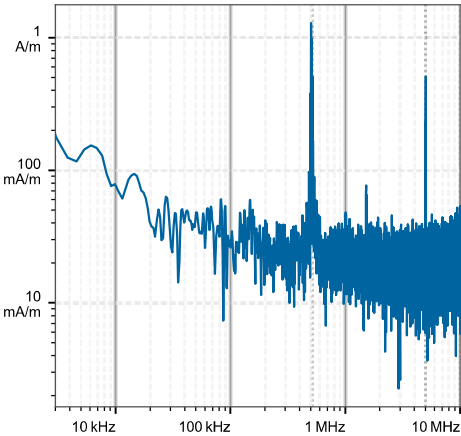
Maximum E-field [RMS]:
MAGNITUDE: 616.52 mV/m
x: 95.29 mV/m, y: 38.49 mV/m, z: 607.90 mV/m

Maximum E-field location relative to DUT:
x: 14.67 mm, y: 58.67 mm, z: 0.00 mm

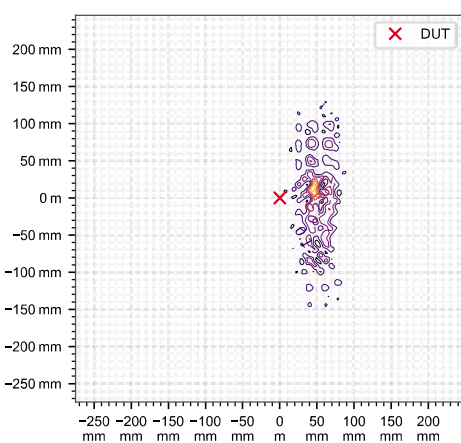
Distance to -20.0 dB boundary:
14.67 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency (f = 509.39 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	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	1.08	0.617	0.0224	0.0233	0.0229	0.0135	1.74e-4	6.86e-5	64.1	66%	71%	15%

Compliance evaluation (Field values at the peak frequency) (f=509.39 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]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]	RL [RMS]	BR [RMS]
0.00	1.08	0.617	0.129	6.86e-5	1.08	0.617	0.0136	6.86e-5	1.08	0.617	0.0715	6.86e-5	1.08	0.617	N/A	1.74e-4	1.08	0.617	0.189	1.74e-4

Coverage factors: $w_{E_{ind, cube avg.}} = [5.76]$, $w_{E_{ind, local}} = [8.14]$, $w_{E_{ind, line avg.}} = [3.11]$

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	RL	BR	RL	BR	RL	BR	RL	BR	RL	BR
0.00	0.05	0.11	<0.01	<0.01	<0.01	<0.01	0.75	<0.01	0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.66	<0.01	N/A	<0.01

Coverage factors: $w_{E_{ind, cube avg.}} = [5.76]$, $w_{E_{ind, local}} = [8.14]$, $w_{E_{ind, line avg.}} = [3.11]$

Appendix C. Calibration Certificate for Probe and Dipole

The SPEAG calibration certificates are shown as follows.



Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client

B.V. ADT
Taoyuan City

Certificate No.

MAGPy-8H3D-3078

CALIBRATION CERTIFICATE

Object

MAGPy-8H3D+E3DV2 SN:3078
MAGPy-DASV2 SN:3070

Calibration procedure(s)

QA CAL-46.v1
Calibration Procedure for MAGPy-8H3D+E3D
Near-field Electric and Magnetic Field Sensor System

Calibration date

June 06, 2024

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ}\text{C}$ and humidity $< 70\%$.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Oscilloscope	SN: 112135	25-Sep-23 (No. 17A1162175)	Sep-24
Reference 20 dB Attenuator	SN: CC2552 (20x)	26-Mar-24 (No. 217-04046)	Mar-25
Type-N mismatch	SN: 310982 / 06327	26-Mar-24 (No. 217-04047)	Mar-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Network Analyzer E5061B	SN: MY49810822	In house check: Nov-23	In house check: Nov-24
TEM Cell	SN: S6029i	In house check: Nov-23	In house check: Nov-24
Plate Capacitor	SN: 6028i	In house check: Nov-23	In house check: Nov-24
Resonator (160kHz)	SN: 6030i	In house check: Nov-23	In house check: Nov-24

	Name	Function	Signature
Calibrated by	Aidonia Georgiadou	Laboratory Engineer	
Approved by	Sven Kühn	Technical Manager	

Issued: June 06, 2024

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



Accredited by the Swiss Accreditation Service (SAS)
**The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates**

Accreditation No.: SCS 0108

Glossary

MAGPy-8H3D-E3D Magnetic Amplitude and Gradient Probe – Eight H-field Sensors, Single E-field sensor
MAGPy-DAS Magnetic Amplitude and Gradient Data Acquisition System

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1309-2013, "IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", November 2013

Methods Applied and Interpretation of Parameters

- Calibration has been performed after the adjustment of the device.
- *Linearity*: Calibration of the linearity of the field reading over the specified dynamic range at 161.75 kHz. Influence of offset voltage is included in this measurement.
- *Frequency response*: Calibration of the field reading over the specified frequency range from 3.0 kHz to 10.0 MHz.
- Receiving Pattern: Assessed for H-field polarizations ϑ , and $\phi = 0^\circ \dots 360^\circ$; $\vartheta = 90^\circ$, and $\phi = 0^\circ \dots 360^\circ$; for the XYZ sensors (in TEM-Cell at 4 kHz, 40 kHz, 400 kHz and 4 MHz).
- Receiving Pattern: Assessed for E-field polarizations ϑ , and $\phi = 0^\circ \dots 360^\circ$; $\vartheta = 90^\circ$, and $\phi = 0^\circ \dots 360^\circ$; for the XYZ sensor (in parallel plate capacitor at 4 kHz, 40 kHz, 400 kHz and 4 MHz).

Calibration Uncertainty

The calibration uncertainty is 0.7 dB for the H-field readings and 1.06 dB for the E-field readings. The calibration uncertainty is specified over the frequency range from 3.0 kHz to 10.0 MHz and a dynamic range from 0.1 A/m to 3200 A/m and from 0.08 V/m to 2000 V/m respectively.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

Unit Type	MAGPy-8H3D+E3DV2 (SP MGY 303 AA)	3078
	MAGPy-DASV2 (SE UMS 303 AC)	3070
	MAGPy FPGA Board	WP000225
Adjustment Date	Last MAGPy Adjustment	June 06, 2024
Firmware SW Version	MAGPy Firmware	Ver. 1.00
Backend SW Version	MAGPy Backend	Ver. 1.0.2
Calibration SW Version	MAGACAP	Ver. 1.0

Dynamic Range

Dynamic Range, H-field, Channel 0

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.370	0.360	0.350	0.380	0.390	0.370	0.23	0.70	0.48	±1.00
0.510	0.490	0.480	0.500	0.510	0.500	-0.17	0.35	0.35	±1.00
0.700	0.670	0.660	0.680	0.660	0.660	-0.25	-0.13	0.00	±1.00
0.910	0.880	0.860	0.890	0.880	0.860	-0.19	0.00	0.00	±1.00
1.23	1.19	1.17	1.23	1.20	1.16	0.00	0.07	-0.07	±1.00
1.69	1.63	1.60	1.70	1.62	1.61	0.05	-0.05	0.05	±1.00
2.25	2.17	2.13	2.26	2.18	2.14	0.04	0.04	0.04	±0.20
3.01	2.90	2.85	3.00	2.90	2.85	-0.03	0.00	0.00	±0.20
4.08	3.95	3.87	4.09	3.96	3.88	0.02	0.02	0.02	±0.20
5.52	5.34	5.23	5.53	5.35	5.24	0.02	0.02	0.02	±0.20
7.43	7.18	7.04	7.43	7.20	7.05	0.00	0.02	0.01	±0.20
9.92	9.59	9.41	9.93	9.61	9.41	0.01	0.02	0.00	±0.20
13.4	13.0	12.7	13.4	13.0	12.7	0.00	0.00	0.00	±0.20
18.1	17.5	17.1	18.0	17.5	17.1	-0.05	0.00	0.00	±0.20
24.4	23.6	23.1	24.4	23.7	23.2	0.00	0.04	0.04	±0.20
32.5	31.5	30.9	32.7	31.7	31.1	0.05	0.05	0.06	±0.20
44.0	42.6	41.7	44.1	42.9	41.9	0.02	0.06	0.04	±0.20
59.4	57.8	56.5	59.8	58.1	56.8	0.06	0.04	0.05	±0.20
81.9	79.4	77.7	81.5	79.1	77.5	-0.04	-0.03	-0.02	±0.20
107	104	102	107	104	101	0.00	0.00	-0.09	±0.20
147	143	140	147	142	139	0.00	-0.06	-0.06	±0.20
205	199	194	204	198	194	-0.04	-0.04	0.00	±0.20
284	275	269	285	271	270	0.03	-0.13	0.03	±0.20
421	408	399	413	403	392	-0.17	-0.11	-0.15	±0.20
582	565	553	576	562	547	-0.09	-0.05	-0.09	±0.20
872	847	827	873	851	828	0.01	0.04	0.01	±0.20
1330	1290	1260	1340	1310	1270	0.07	0.13	0.07	±0.30
1810	1760	1720	1860	1810	1760	0.24	0.24	0.20	±0.30
2980	2890	2820	3090	3010	2930	0.31	0.35	0.33	±0.40
3640	3520	3440	3790	3690	3590	0.35	0.41	0.37	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0A/m
- ±0.2dB for applied H-fields ≥ 2.0A/m and < 1000A/m
- ±0.3dB for applied H-fields ≥ 1000A/m and < 2000A/m
- ±0.4dB for applied H-fields ≥ 2000A/m and < 3000A/m
- ±0.5dB for applied H-fields ≥ 3000A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, H-field, Channel 1

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.380	0.360	0.360	0.400	0.390	0.380	0.45	0.70	0.47	±1.00
0.510	0.490	0.490	0.530	0.530	0.510	0.33	0.68	0.35	±1.00
0.710	0.680	0.670	0.700	0.690	0.700	-0.12	0.13	0.38	±1.00
0.920	0.880	0.880	0.920	0.880	0.890	0.00	0.00	0.10	±1.00
1.25	1.20	1.19	1.24	1.19	1.18	-0.07	-0.07	-0.07	±1.00
1.71	1.64	1.63	1.70	1.65	1.63	-0.05	0.05	0.00	±1.00
2.28	2.19	2.18	2.28	2.20	2.19	0.00	0.04	0.04	±0.20
3.05	2.93	2.91	3.04	2.96	2.90	-0.03	0.09	-0.03	±0.20
4.13	3.98	3.95	4.15	4.02	3.96	0.04	0.09	0.02	±0.20
5.59	5.38	5.35	5.61	5.41	5.35	0.03	0.05	0.00	±0.20
7.52	7.24	7.20	7.53	7.27	7.20	0.01	0.04	0.00	±0.20
10.0	9.67	9.61	10.1	9.70	9.60	0.09	0.03	-0.01	±0.20
13.6	13.1	13.0	13.6	13.1	13.0	0.00	0.00	0.00	±0.20
18.3	17.6	17.5	18.3	17.7	17.6	0.00	0.05	0.05	±0.20
24.7	23.8	23.6	24.7	23.9	23.7	0.00	0.04	0.04	±0.20
32.9	31.8	31.6	33.1	32.0	31.7	0.05	0.05	0.03	±0.20
44.5	43.0	42.6	44.7	43.2	42.8	0.04	0.04	0.04	±0.20
60.2	58.2	57.7	60.6	58.5	58.0	0.06	0.04	0.05	±0.20
82.9	80.0	79.4	82.5	79.8	79.1	-0.04	-0.02	-0.03	±0.20
109	105	104	108	104	104	-0.08	-0.08	0.00	±0.20
149	144	143	149	144	142	0.00	0.00	-0.06	±0.20
207	200	198	206	200	198	-0.04	0.00	0.00	±0.20
287	278	275	288	273	276	0.03	-0.16	0.03	±0.20
426	412	408	418	407	401	-0.16	-0.11	-0.15	±0.20
590	570	565	582	566	558	-0.12	-0.06	-0.11	±0.20
883	854	845	883	858	845	0.00	0.04	0.00	±0.20
1340	1300	1280	1360	1320	1300	0.13	0.13	0.13	±0.30
1840	1770	1750	1880	1830	1800	0.19	0.29	0.24	±0.30
3010	2910	2880	3120	3030	2990	0.31	0.35	0.33	±0.50
3680	3550	3520	3830	3720	3670	0.35	0.41	0.36	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0A/m
- ±0.2dB for applied H-fields ≥ 2.0A/m and < 1000A/m
- ±0.3dB for applied H-fields ≥ 1000A/m and < 2000A/m
- ±0.4dB for applied H-fields ≥ 2000A/m and < 3000A/m
- ±0.5dB for applied H-fields ≥ 3000A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, H-field, Channel 2

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.370	0.360	0.360	0.390	0.390	0.390	0.46	0.70	0.70	±1.00
0.500	0.490	0.500	0.530	0.510	0.520	0.51	0.35	0.34	±1.00
0.690	0.680	0.680	0.710	0.680	0.690	0.25	0.00	0.13	±1.00
0.900	0.890	0.890	0.900	0.890	0.880	0.00	0.00	-0.10	±1.00
1.22	1.20	1.20	1.21	1.21	1.19	-0.07	0.07	-0.07	±1.00
1.67	1.65	1.65	1.67	1.64	1.65	0.00	-0.05	0.00	±1.00
2.23	2.19	2.19	2.26	2.21	2.20	0.12	0.08	0.04	±0.20
2.98	2.93	2.94	2.99	2.95	2.95	0.03	0.06	0.03	±0.20
4.05	3.99	3.99	4.06	4.02	3.99	0.02	0.07	0.00	±0.20
5.47	5.39	5.39	5.49	5.41	5.39	0.03	0.03	0.00	±0.20
7.37	7.26	7.26	7.40	7.27	7.25	0.04	0.01	-0.01	±0.20
9.83	9.69	9.69	9.91	9.72	9.70	0.07	0.03	0.01	±0.20
13.3	13.1	13.1	13.4	13.2	13.1	0.07	0.07	0.00	±0.20
17.9	17.7	17.6	18.0	17.7	17.6	0.05	0.00	0.00	±0.20
24.2	23.9	23.8	24.2	23.9	23.8	0.00	0.00	0.00	±0.20
32.2	31.9	31.8	32.4	32.1	32.0	0.05	0.05	0.05	±0.20
43.6	43.1	42.9	43.8	43.3	43.1	0.04	0.04	0.04	±0.20
58.9	58.3	58.1	59.3	58.7	58.5	0.06	0.06	0.06	±0.20
81.2	80.2	80.1	80.8	79.9	79.8	-0.04	-0.03	-0.03	±0.20
106	105	105	106	105	104	0.00	0.00	-0.08	±0.20
146	144	144	146	144	144	0.00	0.00	0.00	±0.20
203	201	200	202	200	199	-0.04	-0.04	-0.04	±0.20
281	278	277	282	274	279	0.03	-0.13	0.06	±0.20
417	413	411	410	407	404	-0.15	-0.13	-0.15	±0.20
577	571	569	570	568	563	-0.11	-0.05	-0.09	±0.20
865	856	852	864	860	852	-0.01	0.04	0.00	±0.20
1310	1300	1290	1330	1320	1310	0.13	0.13	0.13	±0.30
1800	1780	1770	1840	1830	1810	0.19	0.24	0.19	±0.30
2950	2920	2900	3060	3040	3010	0.32	0.35	0.32	±0.40
3600	3560	3550	3750	3720	3700	0.35	0.38	0.36	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0 A/m
- ±0.2dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
- ±0.3dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
- ±0.4dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
- ±0.5dB for applied H-fields ≥ 3000 A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, H-field, Channel 3

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.370	0.360	0.360	0.400	0.390	0.380	0.68	0.70	0.47	±1.00
0.500	0.490	0.490	0.520	0.520	0.520	0.34	0.52	0.52	±1.00
0.690	0.680	0.670	0.680	0.690	0.690	-0.13	0.13	0.26	±1.00
0.900	0.880	0.880	0.900	0.880	0.870	0.00	0.00	-0.10	±1.00
1.22	1.20	1.19	1.22	1.20	1.19	0.00	0.00	0.00	±1.00
1.67	1.64	1.63	1.68	1.65	1.63	0.05	0.05	0.00	±1.00
2.23	2.19	2.17	2.23	2.18	2.17	0.00	-0.04	0.00	±0.20
2.98	2.93	2.90	2.97	2.93	2.90	-0.03	0.00	0.00	±0.20
4.04	3.98	3.94	4.03	3.98	3.93	-0.02	0.00	-0.02	±0.20
5.46	5.39	5.33	5.44	5.39	5.33	-0.03	0.00	0.00	±0.20
7.35	7.25	7.17	7.33	7.25	7.19	-0.02	0.00	0.02	±0.20
9.81	9.68	9.58	9.82	9.67	9.64	0.01	-0.01	0.05	±0.20
13.3	13.1	12.9	13.3	13.1	13.0	0.00	0.00	0.07	±0.20
17.9	17.6	17.4	17.9	17.6	17.5	0.00	0.00	0.05	±0.20
24.1	23.8	23.5	24.1	23.9	23.6	0.00	0.04	0.04	±0.20
32.2	31.8	31.4	32.4	32.0	31.6	0.05	0.05	0.06	±0.20
43.5	43.0	42.4	43.7	43.2	42.6	0.04	0.04	0.04	±0.20
58.8	58.3	57.5	59.2	58.6	57.8	0.06	0.04	0.05	±0.20
81.0	80.1	79.1	80.7	79.8	78.8	-0.03	-0.03	-0.03	±0.20
106	105	104	106	105	103	0.00	0.00	-0.08	±0.20
146	144	142	145	144	142	-0.06	0.00	0.00	±0.20
203	201	198	202	200	197	-0.04	-0.04	-0.04	±0.20
281	278	274	282	273	275	0.03	-0.16	0.03	±0.20
416	412	406	409	407	399	-0.15	-0.11	-0.15	±0.20
576	570	562	569	566	556	-0.11	-0.06	-0.09	±0.20
863	854	842	863	858	842	0.00	0.04	0.00	±0.20
1310	1300	1280	1330	1320	1300	0.13	0.13	0.13	±0.30
1790	1770	1750	1840	1820	1790	0.24	0.24	0.20	±0.30
2950	2910	2870	3050	3020	2980	0.29	0.32	0.33	±0.40
3600	3550	3500	3750	3680	3650	0.35	0.31	0.36	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0 A/m
- ±0.2dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
- ±0.3dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
- ±0.4dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
- ±0.5dB for applied H-fields ≥ 3000 A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, H-field, Channel 4

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.370	0.370	0.370	0.390	0.380	0.380	0.46	0.23	0.23	±1.00
0.500	0.500	0.500	0.520	0.490	0.510	0.34	-0.18	0.17	±1.00
0.680	0.690	0.680	0.700	0.680	0.690	0.25	-0.13	0.13	±1.00
0.890	0.900	0.890	0.890	0.900	0.900	0.00	0.00	0.10	±1.00
1.21	1.22	1.20	1.22	1.24	1.22	0.07	0.14	0.14	±1.00
1.65	1.67	1.65	1.69	1.69	1.67	0.21	0.10	0.10	±1.00
2.20	2.23	2.20	2.22	2.24	2.22	0.08	0.04	0.08	±0.20
2.95	2.98	2.94	2.98	3.00	2.96	0.09	0.06	0.06	±0.20
4.00	4.05	3.99	4.04	4.06	4.01	0.09	0.02	0.04	±0.20
5.41	5.48	5.40	5.44	5.50	5.41	0.05	0.03	0.02	±0.20
7.28	7.38	7.27	7.30	7.39	7.27	0.02	0.01	0.00	±0.20
9.72	9.85	9.71	9.75	9.87	9.71	0.03	0.02	0.00	±0.20
13.1	13.3	13.1	13.2	13.4	13.1	0.07	0.07	0.00	±0.20
17.7	18.0	17.7	17.7	18.0	17.7	0.00	0.00	0.00	±0.20
23.9	24.3	23.9	23.9	24.3	23.9	0.00	0.00	0.00	±0.20
31.9	32.4	31.9	32.0	32.6	32.0	0.03	0.05	0.03	±0.20
43.1	43.8	43.0	43.3	44.0	43.2	0.04	0.04	0.04	±0.20
58.2	59.3	58.2	58.7	59.7	58.5	0.07	0.06	0.04	±0.20
80.3	81.6	80.2	79.9	81.3	79.9	-0.04	-0.03	-0.03	±0.20
105	107	105	105	106	105	0.00	-0.08	0.00	±0.20
145	147	144	144	146	144	-0.06	-0.06	0.00	±0.20
201	204	200	200	204	200	-0.04	0.00	0.00	±0.20
278	283	278	279	278	279	0.03	-0.15	0.03	±0.20
412	420	412	405	414	405	-0.15	-0.12	-0.15	±0.20
571	581	570	564	577	564	-0.11	-0.06	-0.09	±0.20
855	870	853	855	874	854	0.00	0.04	0.01	±0.20
1300	1320	1300	1320	1350	1320	0.13	0.20	0.13	±0.30
1780	1810	1770	1820	1860	1820	0.19	0.24	0.24	±0.30
2920	2970	2910	3030	3090	3020	0.32	0.34	0.32	±0.40
3560	3620	3550	3710	3790	3700	0.36	0.40	0.36	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0A/m
- ±0.2dB for applied H-fields ≥ 2.0A/m and < 1000A/m
- ±0.3dB for applied H-fields ≥ 1000A/m and < 2000A/m
- ±0.4dB for applied H-fields ≥ 2000A/m and < 3000A/m
- ±0.5dB for applied H-fields ≥ 3000A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, H-field, Channel 5

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.370	0.370	0.370	0.380	0.390	0.390	0.23	0.46	0.46	±1.00
0.510	0.510	0.510	0.490	0.530	0.530	-0.35	0.33	0.33	±1.00
0.690	0.700	0.700	0.690	0.690	0.710	0.00	-0.12	0.12	±1.00
0.900	0.910	0.910	0.910	0.900	0.910	0.10	-0.10	0.00	±1.00
1.23	1.23	1.23	1.24	1.23	1.23	0.07	0.00	0.00	±1.00
1.68	1.69	1.69	1.70	1.71	1.70	0.10	0.10	0.05	±1.00
2.24	2.25	2.25	2.25	2.25	2.25	0.04	0.00	0.00	±0.20
3.00	3.01	3.01	3.01	3.01	3.00	0.03	0.00	-0.03	±0.20
4.07	4.08	4.08	4.08	4.10	4.09	0.02	0.04	0.02	±0.20
5.50	5.53	5.52	5.52	5.55	5.53	0.03	0.03	0.02	±0.20
7.40	7.44	7.43	7.41	7.46	7.44	0.01	0.02	0.01	±0.20
9.88	9.93	9.93	9.90	9.96	9.94	0.02	0.03	0.01	±0.20
13.3	13.4	13.4	13.4	13.5	13.4	0.07	0.06	0.00	±0.20
18.0	18.1	18.1	18.0	18.1	18.1	0.00	0.00	0.00	±0.20
24.3	24.5	24.4	24.3	24.5	24.4	0.00	0.00	0.00	±0.20
32.4	32.6	32.6	32.6	32.8	32.7	0.05	0.05	0.03	±0.20
43.8	44.1	44.0	44.0	44.3	44.2	0.04	0.04	0.04	±0.20
59.2	59.8	59.6	59.6	60.1	59.9	0.06	0.04	0.04	±0.20
81.6	82.2	82.0	81.2	82.0	81.7	-0.04	-0.02	-0.03	±0.20
107	108	107	106	107	107	-0.08	-0.08	0.00	±0.20
147	148	148	146	148	147	-0.06	0.00	-0.06	±0.20
204	206	205	203	205	204	-0.04	-0.04	-0.04	±0.20
283	285	284	284	280	285	0.03	-0.15	0.03	±0.20
419	423	421	412	418	414	-0.15	-0.10	-0.15	±0.20
580	585	583	573	582	577	-0.11	-0.04	-0.09	±0.20
869	877	873	869	882	873	0.00	0.05	0.00	±0.20
1320	1330	1330	1340	1360	1350	0.13	0.19	0.13	±0.30
1810	1820	1810	1850	1880	1860	0.19	0.28	0.24	±0.30
2970	2990	2970	3080	3120	3090	0.32	0.37	0.34	±0.40
3620	3650	3630	3780	3820	3790	0.38	0.40	0.37	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0 A/m
- ±0.2dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
- ±0.3dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
- ±0.4dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
- ±0.5dB for applied H-fields ≥ 3000 A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, H-field, Channel 6

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.380	0.370	0.370	0.390	0.390	0.380	0.23	0.46	0.23	±1.00
0.510	0.500	0.500	0.520	0.520	0.510	0.17	0.34	0.17	±1.00
0.700	0.690	0.690	0.690	0.700	0.680	-0.12	0.12	-0.13	±1.00
0.920	0.900	0.900	0.920	0.910	0.890	0.00	0.10	-0.10	±1.00
1.24	1.22	1.22	1.26	1.25	1.21	0.14	0.21	-0.07	±1.00
1.70	1.68	1.67	1.71	1.70	1.67	0.05	0.10	0.00	±1.00
2.27	2.24	2.23	2.29	2.27	2.23	0.08	0.12	0.00	±0.20
3.04	2.99	2.98	3.05	3.02	2.98	0.03	0.09	0.00	±0.20
4.12	4.06	4.05	4.13	4.08	4.04	0.02	0.04	-0.02	±0.20
5.57	5.50	5.47	5.59	5.52	5.47	0.03	0.03	0.00	±0.20
7.50	7.40	7.37	7.55	7.41	7.36	0.06	0.01	-0.01	±0.20
10.0	9.88	9.84	10.1	9.90	9.84	0.09	0.02	0.00	±0.20
13.5	13.3	13.3	13.6	13.4	13.3	0.06	0.07	0.00	±0.20
18.2	18.0	17.9	18.3	18.0	17.9	0.05	0.00	0.00	±0.20
24.6	24.3	24.2	24.6	24.4	24.2	0.00	0.04	0.00	±0.20
32.8	32.5	32.3	33.0	32.6	32.5	0.05	0.03	0.05	±0.20
44.4	43.9	43.6	44.6	44.1	43.8	0.04	0.04	0.04	±0.20
60.0	59.5	59.0	60.4	59.8	59.4	0.06	0.04	0.06	±0.20
82.7	81.8	81.3	82.3	81.5	81.0	-0.04	-0.03	-0.03	±0.20
108	107	106	108	107	106	0.00	0.00	0.00	±0.20
149	147	146	148	147	146	-0.06	0.00	0.00	±0.20
207	205	203	206	204	202	-0.04	-0.04	-0.04	±0.20
286	284	282	288	279	283	0.06	-0.15	0.03	±0.20
425	421	417	417	415	410	-0.17	-0.12	-0.15	±0.20
588	582	578	581	579	571	-0.10	-0.04	-0.11	±0.20
880	872	865	880	876	865	0.00	0.04	0.00	±0.20
1340	1330	1310	1360	1350	1330	0.13	0.13	0.13	±0.30
1830	1810	1800	1870	1860	1840	0.19	0.24	0.19	±0.30
3010	2970	2950	3120	3100	3060	0.31	0.37	0.32	±0.50
3670	3630	3600	3820	3790	3750	0.35	0.37	0.35	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0 A/m
- ±0.2dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
- ±0.3dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
- ±0.4dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
- ±0.5dB for applied H-fields ≥ 3000 A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, H-field, Channel 7

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.380	0.370	0.360	0.400	0.390	0.370	0.45	0.46	0.24	±1.00
0.510	0.500	0.480	0.540	0.530	0.500	0.50	0.51	0.35	±1.00
0.700	0.690	0.660	0.720	0.700	0.680	0.24	0.12	0.26	±1.00
0.910	0.900	0.870	0.920	0.910	0.870	0.09	0.10	0.00	±1.00
1.23	1.22	1.17	1.25	1.22	1.18	0.14	0.00	0.07	±1.00
1.69	1.68	1.61	1.71	1.69	1.62	0.10	0.05	0.05	±1.00
2.26	2.23	2.14	2.27	2.25	2.17	0.04	0.08	0.12	±0.20
3.02	2.99	2.86	3.04	3.00	2.88	0.06	0.03	0.06	±0.20
4.10	4.06	3.89	4.10	4.07	3.89	0.00	0.02	0.00	±0.20
5.54	5.50	5.26	5.55	5.52	5.26	0.02	0.03	0.00	±0.20
7.46	7.39	7.08	7.45	7.43	7.07	-0.01	0.05	-0.01	±0.20
9.95	9.88	9.46	9.96	9.91	9.45	0.01	0.03	-0.01	±0.20
13.4	13.3	12.8	13.4	13.4	12.8	0.00	0.07	0.00	±0.20
18.1	18.0	17.2	18.1	18.1	17.2	0.00	0.05	0.00	±0.20
24.5	24.3	23.2	24.5	24.4	23.3	0.00	0.04	0.04	±0.20
32.6	32.5	31.0	32.8	32.6	31.2	0.05	0.03	0.06	±0.20
44.1	43.9	41.9	44.3	44.1	42.1	0.04	0.04	0.04	±0.20
59.6	59.4	56.7	60.0	59.8	57.1	0.06	0.06	0.06	±0.20
82.2	81.7	78.1	81.8	81.5	77.8	-0.04	-0.02	-0.03	±0.20
108	107	102	107	107	102	-0.08	0.00	0.00	±0.20
148	147	141	147	147	140	-0.06	0.00	-0.06	±0.20
205	205	195	205	204	195	0.00	-0.04	0.00	±0.20
285	284	271	286	279	272	0.03	-0.15	0.03	±0.20
422	420	401	415	415	394	-0.15	-0.10	-0.15	±0.20
584	582	555	577	578	549	-0.10	-0.06	-0.09	±0.20
875	872	831	875	876	831	0.00	0.04	0.00	±0.20
1330	1320	1260	1350	1350	1280	0.13	0.20	0.14	±0.30
1820	1810	1730	1860	1860	1770	0.19	0.24	0.20	±0.30
2990	2970	2830	3100	3090	2940	0.31	0.34	0.33	±0.40
3650	3620	3460	3800	3790	3600	0.35	0.40	0.34	±0.50

SPEAG H-field linearity tolerance criteria¹:

- ±1.0dB for applied H-fields < 2.0 A/m
- ±0.2dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
- ±0.3dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
- ±0.4dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
- ±0.5dB for applied H-fields ≥ 3000 A/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Dynamic Range, E-field, Channel 0

E-field/(V/m) Applied			E-field/(V/m) Reading			Difference/(dB)			Tolerance/(dB)		
x	y	z	x	y	z	x	y	z	x	y	z
0.320	0.200	0.080	0.320	0.200	0.090	0.00	0.00	1.02	±5.00	±5.00	±5.00
0.430	0.270	0.110	0.440	0.280	0.150	0.20	0.32	2.69	±5.00	±5.00	±5.00
0.590	0.370	0.150	0.610	0.370	0.160	0.29	0.00	0.56	±5.00	±5.00	±5.00
0.770	0.480	0.190	0.780	0.490	0.220	0.11	0.18	1.27	±5.00	±5.00	±5.00
1.04	0.650	0.260	1.05	0.650	0.250	0.08	0.00	-0.34	±5.00	±5.00	±5.00
1.43	0.900	0.360	1.44	0.910	0.380	0.06	0.10	0.47	±5.00	±5.00	±5.00
1.91	1.20	0.480	1.93	1.20	0.480	0.09	0.00	0.00	±5.00	±5.00	±5.00
2.55	1.60	0.640	2.56	1.60	0.640	0.03	0.00	0.00	±1.00	±5.00	±5.00
3.46	2.18	0.870	3.49	2.16	0.880	0.07	-0.08	0.10	±1.00	±1.00	±5.00
4.68	2.94	1.17	4.71	2.93	1.16	0.06	-0.03	-0.07	±1.00	±1.00	±5.00
6.30	3.96	1.58	6.34	3.96	1.55	0.05	0.00	-0.17	±1.00	±1.00	±5.00
8.42	5.29	2.11	8.44	5.25	2.05	0.02	-0.07	-0.25	±1.00	±1.00	±1.00
11.4	7.15	2.85	11.4	7.10	2.80	0.00	-0.06	-0.15	±1.00	±1.00	±1.00
15.3	9.64	3.84	15.4	9.60	3.78	0.06	-0.04	-0.14	±1.00	±1.00	±1.00
20.7	13.0	5.19	20.8	12.9	5.08	0.04	-0.07	-0.19	±1.00	±1.00	±1.00
27.7	17.4	6.92	27.9	17.4	6.84	0.06	0.00	-0.10	±1.00	±1.00	±1.00
37.4	23.5	9.35	37.7	23.5	9.24	0.07	0.00	-0.10	±1.00	±1.00	±1.00
50.7	31.8	12.7	51.1	31.8	12.6	0.07	0.00	-0.07	±1.00	±1.00	±1.00
69.7	43.8	17.4	69.6	43.4	17.0	-0.01	-0.08	-0.20	±1.00	±1.00	±1.00
91.3	57.4	22.8	91.2	56.8	22.4	-0.01	-0.09	-0.15	±1.00	±1.00	±1.00
125	78.8	31.4	125	78.1	30.8	0.00	-0.08	-0.17	±1.00	±1.00	±1.00
174	110	43.6	174	109	42.8	0.00	-0.08	-0.16	±1.00	±1.00	±1.00
242	152	60.4	244	152	59.8	0.07	0.00	-0.09	±1.00	±1.00	±1.00
358	225	89.5	347	216	89.0	-0.27	-0.35	-0.05	±1.00	±1.00	±1.00
496	312	124	484	301	124	-0.21	-0.31	0.00	±1.00	±1.00	±1.00
743	467	186	735	457	188	-0.09	-0.19	0.09	±1.00	±1.00	±1.00
1130	710	282	1130	704	290	0.00	-0.07	0.24	±1.00	±1.00	±1.00
1540	970	386	1570	973	401	0.17	0.03	0.33	±1.00	±1.00	±1.00
2530	1590	633	2610	1620	637	0.27	0.16	0.05	±1.00	±1.00	±1.00
3090	1940	773	3200	1980	782	0.30	0.18	0.10	±1.00	±1.00	±1.00

SPEAG E-field linearity tolerance criteria¹:

±5.0dB for applied E-field < 2 V/m

±1.0dB for applied E-field ≥ 2 V/m

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response

Frequency Response, H-field, Channel 0

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.47	1.46	1.47	0.00	-0.06	0.00	±0.3
3200	1.47	1.47	1.47	1.47	1.45	1.48	0.00	-0.12	0.06	±0.3
4000	1.46	1.46	1.46	1.46	1.46	1.46	0.00	0.00	0.00	±0.3
5200	1.45	1.45	1.45	1.45	1.44	1.45	0.00	-0.06	0.00	±0.3
6600	1.44	1.44	1.43	1.44	1.43	1.43	0.00	-0.06	0.00	±0.3
8200	1.43	1.42	1.42	1.42	1.43	1.43	-0.06	0.06	0.06	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.42	0.00	0.00	0.00	±0.3
10600	4.26	4.19	4.19	4.30	4.22	4.18	0.08	0.06	-0.02	±0.3
13400	4.26	4.21	4.21	4.26	4.21	4.22	0.00	0.00	0.02	±0.3
17000	4.26	4.21	4.21	4.27	4.22	4.21	0.02	0.02	0.00	±0.3
21400	4.29	4.24	4.23	4.29	4.25	4.23	0.00	0.02	0.00	±0.3
27200	4.29	4.24	4.23	4.30	4.24	4.23	0.02	0.00	0.00	±0.3
34400	4.29	4.25	4.24	4.29	4.25	4.25	0.00	0.00	0.02	±0.3
40000	4.27	4.24	4.24	4.29	4.25	4.25	0.04	0.02	0.02	±0.3
43600	4.27	4.24	4.23	4.29	4.23	4.24	0.04	-0.02	0.02	±0.3
55400	4.26	4.23	4.22	4.27	4.23	4.23	0.02	0.00	0.02	±0.3
70000	4.25	4.22	4.21	4.26	4.22	4.22	0.02	0.00	0.02	±0.3
88800	4.23	4.20	4.20	4.24	4.21	4.20	0.02	0.02	0.00	±0.3
112400	4.22	4.19	4.19	4.23	4.20	4.20	0.02	0.02	0.02	±0.3
142400	4.20	4.17	4.17	4.21	4.18	4.17	0.02	0.02	0.00	±0.3
161750	4.18	4.16	4.15	4.19	4.16	4.15	0.02	0.00	0.00	±0.3
180400	4.17	4.15	4.14	4.18	4.15	4.15	0.02	0.00	0.02	±0.3
228400	4.14	4.11	4.11	4.15	4.12	4.11	0.02	0.02	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.08	4.08	0.02	0.00	0.00	±0.3
366400	4.06	4.04	4.04	4.07	4.04	4.04	0.02	0.00	0.00	±0.3
400000	4.04	4.02	4.02	4.05	4.03	4.02	0.02	0.02	0.00	±0.3
464000	4.01	3.99	3.99	4.02	4.00	3.99	0.02	0.02	0.00	±0.3
587800	3.97	3.95	3.95	3.97	3.95	3.95	0.00	0.00	0.00	±0.3
744200	3.92	3.90	3.90	3.92	3.91	3.90	0.00	0.02	0.00	±0.3
942600	3.90	3.89	3.89	3.91	3.89	3.89	0.02	0.00	0.00	±0.3
1193600	3.88	3.87	3.87	3.89	3.87	3.87	0.02	0.00	0.00	±0.3
1511600	3.87	3.86	3.86	3.88	3.87	3.86	0.02	0.02	0.00	±0.3
1914400	3.85	3.84	3.84	3.86	3.84	3.84	0.02	0.00	0.00	±0.3
2424400	3.84	3.83	3.83	3.84	3.81	3.83	0.00	-0.05	0.00	±0.3
3070200	3.81	3.79	3.79	3.81	3.80	3.79	0.00	0.02	0.00	±0.3
3888000	3.76	3.74	3.74	3.77	3.71	3.74	0.02	-0.07	0.00	±0.3
4000000	3.75	3.73	3.73	3.76	3.72	3.73	0.02	-0.02	0.00	±0.3
4923800	3.68	3.67	3.67	3.69	3.67	3.67	0.02	0.00	0.00	±0.3
6235400	3.58	3.57	3.57	3.58	3.57	3.57	0.00	0.00	0.00	±0.3
7896400	3.43	3.42	3.42	3.44	3.41	3.42	0.03	-0.03	0.00	±0.3
10000000	3.29	3.28	3.28	3.31	3.29	3.23	0.05	0.03	-0.13	±0.3

SPEAG H-field frequency response tolerance criteria¹:
±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, H-field, Channel 1

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.46	1.47	1.47	-0.06	0.00	0.00	±0.3
3200	1.47	1.47	1.47	1.46	1.45	1.48	-0.06	-0.12	0.06	±0.3
4000	1.46	1.46	1.46	1.47	1.47	1.46	0.06	0.06	0.00	±0.3
5200	1.45	1.45	1.45	1.47	1.45	1.45	0.12	0.00	0.00	±0.3
6600	1.44	1.44	1.43	1.43	1.43	1.43	-0.06	-0.06	0.00	±0.3
8200	1.43	1.42	1.42	1.42	1.43	1.43	-0.06	0.06	0.06	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.42	0.00	0.00	0.00	±0.3
10600	4.26	4.19	4.19	4.27	4.22	4.20	0.02	0.06	0.02	±0.3
13400	4.26	4.21	4.21	4.26	4.22	4.20	0.00	0.02	-0.02	±0.3
17000	4.26	4.21	4.21	4.27	4.22	4.21	0.02	0.02	0.00	±0.3
21400	4.29	4.24	4.23	4.29	4.23	4.24	0.00	-0.02	0.02	±0.3
27200	4.29	4.24	4.23	4.30	4.26	4.23	0.02	0.04	0.00	±0.3
34400	4.29	4.25	4.24	4.30	4.26	4.25	0.02	0.02	0.02	±0.3
40000	4.27	4.24	4.24	4.29	4.25	4.25	0.04	0.02	0.02	±0.3
43600	4.27	4.24	4.23	4.27	4.24	4.23	0.00	0.00	0.00	±0.3
55400	4.26	4.23	4.22	4.27	4.24	4.22	0.02	0.02	0.00	±0.3
70000	4.25	4.22	4.21	4.27	4.23	4.22	0.04	0.02	0.02	±0.3
88800	4.23	4.20	4.20	4.25	4.21	4.20	0.04	0.02	0.00	±0.3
112400	4.22	4.19	4.19	4.24	4.20	4.19	0.04	0.02	0.00	±0.3
142400	4.20	4.17	4.17	4.22	4.18	4.18	0.04	0.02	0.02	±0.3
161750	4.18	4.16	4.15	4.20	4.16	4.16	0.04	0.00	0.02	±0.3
180400	4.17	4.15	4.14	4.18	4.15	4.14	0.02	0.00	0.00	±0.3
228400	4.14	4.11	4.11	4.15	4.12	4.11	0.02	0.02	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.08	4.07	0.02	0.00	-0.02	±0.3
366400	4.06	4.04	4.04	4.07	4.04	4.04	0.02	0.00	0.00	±0.3
400000	4.04	4.02	4.02	4.05	4.02	4.02	0.02	0.00	0.00	±0.3
464000	4.01	3.99	3.99	4.02	3.99	3.99	0.02	0.00	0.00	±0.3
587800	3.97	3.95	3.95	3.98	3.95	3.94	0.02	0.00	-0.02	±0.3
744200	3.92	3.90	3.90	3.92	3.90	3.90	0.00	0.00	0.00	±0.3
942600	3.90	3.89	3.89	3.91	3.89	3.89	0.02	0.00	0.00	±0.3
1193600	3.88	3.87	3.87	3.89	3.87	3.87	0.02	0.00	0.00	±0.3
1511600	3.87	3.86	3.86	3.88	3.86	3.86	0.02	0.00	0.00	±0.3
1914400	3.85	3.84	3.84	3.87	3.85	3.84	0.05	0.02	0.00	±0.3
2424400	3.84	3.83	3.83	3.85	3.83	3.83	0.02	0.00	0.00	±0.3
3070200	3.81	3.79	3.79	3.82	3.79	3.78	0.02	0.00	-0.02	±0.3
3888000	3.76	3.74	3.74	3.76	3.74	3.74	0.00	0.00	0.00	±0.3
4000000	3.75	3.73	3.73	3.76	3.72	3.73	0.02	-0.02	0.00	±0.3
4923800	3.68	3.67	3.67	3.70	3.67	3.66	0.05	0.00	-0.02	±0.3
6235400	3.58	3.57	3.57	3.58	3.57	3.59	0.00	0.00	0.05	±0.3
7896400	3.43	3.42	3.42	3.44	3.42	3.41	0.03	0.00	-0.03	±0.3
10000000	3.29	3.28	3.28	3.31	3.27	3.26	0.05	-0.03	-0.05	±0.3

SPEAG H-field frequency response tolerance criteria¹:
±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, H-field, Channel 2

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.47	1.48	1.47	0.00	0.06	0.00	±0.3
3200	1.47	1.47	1.47	1.47	1.45	1.48	0.00	-0.12	0.06	±0.3
4000	1.46	1.46	1.46	1.46	1.46	1.46	0.00	0.00	0.00	±0.3
5200	1.45	1.45	1.45	1.46	1.45	1.45	0.06	0.00	0.00	±0.3
6600	1.44	1.44	1.43	1.44	1.44	1.43	0.00	0.00	0.00	±0.3
8200	1.43	1.42	1.42	1.42	1.43	1.43	-0.06	0.06	0.06	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.42	0.00	0.00	0.00	±0.3
10600	4.26	4.19	4.19	4.29	4.17	4.18	0.06	-0.04	-0.02	±0.3
13400	4.26	4.21	4.21	4.27	4.21	4.19	0.02	0.00	-0.04	±0.3
17000	4.26	4.21	4.21	4.27	4.22	4.21	0.02	0.02	0.00	±0.3
21400	4.29	4.24	4.23	4.26	4.24	4.23	-0.06	0.00	0.00	±0.3
27200	4.29	4.24	4.23	4.29	4.24	4.24	0.00	0.00	0.02	±0.3
34400	4.29	4.25	4.24	4.29	4.25	4.25	0.00	0.00	0.02	±0.3
40000	4.27	4.24	4.24	4.29	4.25	4.25	0.04	0.02	0.02	±0.3
43600	4.27	4.24	4.23	4.28	4.24	4.24	0.02	0.00	0.02	±0.3
55400	4.26	4.23	4.22	4.26	4.23	4.23	0.00	0.00	0.02	±0.3
70000	4.25	4.22	4.21	4.25	4.22	4.21	0.00	0.00	0.00	±0.3
88800	4.23	4.20	4.20	4.24	4.21	4.20	0.02	0.02	0.00	±0.3
112400	4.22	4.19	4.19	4.22	4.20	4.19	0.00	0.02	0.00	±0.3
142400	4.20	4.17	4.17	4.20	4.18	4.18	0.00	0.02	0.02	±0.3
161750	4.18	4.16	4.15	4.18	4.16	4.15	0.00	0.00	0.00	±0.3
180400	4.17	4.15	4.14	4.18	4.15	4.15	0.02	0.00	0.02	±0.3
228400	4.14	4.11	4.11	4.14	4.12	4.11	0.00	0.02	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.08	4.08	0.02	0.00	0.00	±0.3
366400	4.06	4.04	4.04	4.06	4.04	4.04	0.00	0.00	0.00	±0.3
400000	4.04	4.02	4.02	4.04	4.03	4.02	0.00	0.02	0.00	±0.3
464000	4.01	3.99	3.99	4.02	4.00	3.99	0.02	0.02	0.00	±0.3
587800	3.97	3.95	3.95	3.97	3.95	3.95	0.00	0.00	0.00	±0.3
744200	3.92	3.90	3.90	3.92	3.91	3.90	0.00	0.02	0.00	±0.3
942600	3.90	3.89	3.89	3.91	3.90	3.89	0.02	0.02	0.00	±0.3
1193600	3.88	3.87	3.87	3.88	3.87	3.87	0.00	0.00	0.00	±0.3
1511600	3.87	3.86	3.86	3.88	3.87	3.86	0.02	0.02	0.00	±0.3
1914400	3.85	3.84	3.84	3.86	3.84	3.84	0.02	0.00	0.00	±0.3
2424400	3.84	3.83	3.83	3.84	3.82	3.83	0.00	-0.02	0.00	±0.3
3070200	3.81	3.79	3.79	3.81	3.80	3.78	0.00	0.02	-0.02	±0.3
3888000	3.76	3.74	3.74	3.76	3.73	3.74	0.00	-0.02	0.00	±0.3
4000000	3.75	3.73	3.73	3.76	3.73	3.73	0.02	0.00	0.00	±0.3
4923800	3.68	3.67	3.67	3.69	3.67	3.66	0.02	0.00	-0.02	±0.3
6235400	3.58	3.57	3.57	3.58	3.57	3.58	0.00	0.00	0.02	±0.3
7896400	3.43	3.42	3.42	3.43	3.41	3.42	0.00	-0.03	0.00	±0.3
10000000	3.29	3.28	3.28	3.27	3.28	3.24	-0.05	0.00	-0.11	±0.3

SPEAG H-field frequency response tolerance criteria¹:
±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, H-field, Channel 3

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.47	1.48	1.47	0.00	0.06	0.00	±0.3
3200	1.47	1.47	1.47	1.46	1.45	1.48	-0.06	-0.12	0.06	±0.3
4000	1.46	1.46	1.46	1.46	1.46	1.46	0.00	0.00	0.00	±0.3
5200	1.45	1.45	1.45	1.46	1.45	1.46	0.06	0.00	0.06	±0.3
6600	1.44	1.44	1.43	1.44	1.43	1.43	0.00	-0.06	0.00	±0.3
8200	1.43	1.42	1.42	1.41	1.43	1.43	-0.12	0.06	0.06	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.42	0.00	0.00	0.00	±0.3
10600	4.26	4.19	4.19	4.25	4.21	4.19	-0.02	0.04	0.00	±0.3
13400	4.26	4.21	4.21	4.26	4.22	4.21	0.00	0.02	0.00	±0.3
17000	4.26	4.21	4.21	4.25	4.21	4.20	-0.02	0.00	-0.02	±0.3
21400	4.29	4.24	4.23	4.29	4.24	4.25	0.00	0.00	0.04	±0.3
27200	4.29	4.24	4.23	4.31	4.24	4.23	0.04	0.00	0.00	±0.3
34400	4.29	4.25	4.24	4.30	4.25	4.25	0.02	0.00	0.02	±0.3
40000	4.27	4.24	4.24	4.30	4.25	4.25	0.06	0.02	0.02	±0.3
43600	4.27	4.24	4.23	4.27	4.24	4.25	0.00	0.00	0.04	±0.3
55400	4.26	4.23	4.22	4.27	4.23	4.23	0.02	0.00	0.02	±0.3
70000	4.25	4.22	4.21	4.25	4.22	4.22	0.00	0.00	0.02	±0.3
88800	4.23	4.20	4.20	4.25	4.22	4.20	0.04	0.04	0.00	±0.3
112400	4.22	4.19	4.19	4.23	4.21	4.19	0.02	0.04	0.00	±0.3
142400	4.20	4.17	4.17	4.21	4.18	4.18	0.02	0.02	0.02	±0.3
161750	4.18	4.16	4.15	4.19	4.17	4.16	0.02	0.02	0.02	±0.3
180400	4.17	4.15	4.14	4.18	4.15	4.15	0.02	0.00	0.02	±0.3
228400	4.14	4.11	4.11	4.14	4.12	4.11	0.00	0.02	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.08	4.08	0.02	0.00	0.00	±0.3
366400	4.06	4.04	4.04	4.06	4.05	4.04	0.00	0.02	0.00	±0.3
400000	4.04	4.02	4.02	4.06	4.02	4.02	0.04	0.00	0.00	±0.3
464000	4.01	3.99	3.99	4.02	3.99	3.99	0.02	0.00	0.00	±0.3
587800	3.97	3.95	3.95	3.97	3.96	3.95	0.00	0.02	0.00	±0.3
744200	3.92	3.90	3.90	3.92	3.91	3.90	0.00	0.02	0.00	±0.3
942600	3.90	3.89	3.89	3.90	3.90	3.89	0.00	0.02	0.00	±0.3
1193600	3.88	3.87	3.87	3.88	3.87	3.87	0.00	0.00	0.00	±0.3
1511600	3.87	3.86	3.86	3.88	3.85	3.86	0.02	-0.02	0.00	±0.3
1914400	3.85	3.84	3.84	3.86	3.85	3.84	0.02	0.02	0.00	±0.3
2424400	3.84	3.83	3.83	3.85	3.84	3.82	0.02	0.02	-0.02	±0.3
3070200	3.81	3.79	3.79	3.81	3.79	3.78	0.00	0.00	-0.02	±0.3
3888000	3.76	3.74	3.74	3.76	3.75	3.74	0.00	0.02	0.00	±0.3
4000000	3.75	3.73	3.73	3.76	3.73	3.73	0.02	0.00	0.00	±0.3
4923800	3.68	3.67	3.67	3.69	3.67	3.65	0.02	0.00	-0.05	±0.3
6235400	3.58	3.57	3.57	3.58	3.56	3.57	0.00	-0.02	0.00	±0.3
7896400	3.43	3.42	3.42	3.43	3.42	3.42	0.00	0.00	0.00	±0.3
10000000	3.29	3.28	3.28	3.32	3.27	3.23	0.08	-0.03	-0.13	±0.3

SPEAG H-field frequency response tolerance criteria¹:
±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, H-field, Channel 4

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.47	1.48	1.46	0.00	0.06	-0.06	±0.3
3200	1.47	1.47	1.47	1.47	1.45	1.48	0.00	-0.12	0.06	±0.3
4000	1.46	1.46	1.46	1.47	1.46	1.47	0.06	0.00	0.06	±0.3
5200	1.45	1.45	1.45	1.46	1.45	1.45	0.06	0.00	0.00	±0.3
6600	1.44	1.44	1.43	1.44	1.44	1.43	0.00	0.00	0.00	±0.3
8200	1.43	1.42	1.42	1.42	1.42	1.43	-0.06	0.00	0.06	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.43	0.00	0.00	0.06	±0.3
10600	4.26	4.19	4.19	4.28	4.20	4.22	0.04	0.02	0.06	±0.3
13400	4.26	4.21	4.21	4.25	4.23	4.21	-0.02	0.04	0.00	±0.3
17000	4.26	4.21	4.21	4.26	4.22	4.22	0.00	0.02	0.02	±0.3
21400	4.29	4.24	4.23	4.27	4.24	4.24	-0.04	0.00	0.02	±0.3
27200	4.29	4.24	4.23	4.29	4.23	4.24	0.00	-0.02	0.02	±0.3
34400	4.29	4.25	4.24	4.29	4.26	4.25	0.00	0.02	0.02	±0.3
40000	4.27	4.24	4.24	4.29	4.24	4.25	0.04	0.00	0.02	±0.3
43600	4.27	4.24	4.23	4.29	4.23	4.24	0.04	-0.02	0.02	±0.3
55400	4.26	4.23	4.22	4.27	4.22	4.22	0.02	-0.02	0.00	±0.3
70000	4.25	4.22	4.21	4.25	4.23	4.22	0.00	0.02	0.02	±0.3
88800	4.23	4.20	4.20	4.24	4.21	4.21	0.02	0.02	0.02	±0.3
112400	4.22	4.19	4.19	4.22	4.20	4.19	0.00	0.02	0.00	±0.3
142400	4.20	4.17	4.17	4.21	4.18	4.18	0.02	0.02	0.02	±0.3
161750	4.18	4.16	4.15	4.19	4.17	4.15	0.02	0.02	0.00	±0.3
180400	4.17	4.15	4.14	4.18	4.15	4.15	0.02	0.00	0.02	±0.3
228400	4.14	4.11	4.11	4.15	4.12	4.11	0.02	0.02	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.08	4.08	0.02	0.00	0.00	±0.3
366400	4.06	4.04	4.04	4.06	4.05	4.04	0.00	0.02	0.00	±0.3
400000	4.04	4.02	4.02	4.04	4.02	4.02	0.00	0.00	0.00	±0.3
464000	4.01	3.99	3.99	4.02	3.99	3.99	0.02	0.00	0.00	±0.3
587800	3.97	3.95	3.95	3.97	3.96	3.95	0.00	0.02	0.00	±0.3
744200	3.92	3.90	3.90	3.92	3.90	3.90	0.00	0.00	0.00	±0.3
942600	3.90	3.89	3.89	3.91	3.89	3.89	0.02	0.00	0.00	±0.3
1193600	3.88	3.87	3.87	3.89	3.87	3.87	0.02	0.00	0.00	±0.3
1511600	3.87	3.86	3.86	3.88	3.86	3.86	0.02	0.00	0.00	±0.3
1914400	3.85	3.84	3.84	3.87	3.84	3.84	0.05	0.00	0.00	±0.3
2424400	3.84	3.83	3.83	3.85	3.82	3.83	0.02	-0.02	0.00	±0.3
3070200	3.81	3.79	3.79	3.81	3.79	3.78	0.00	0.00	-0.02	±0.3
3888000	3.76	3.74	3.74	3.76	3.73	3.74	0.00	-0.02	0.00	±0.3
4000000	3.75	3.73	3.73	3.75	3.72	3.73	0.00	-0.02	0.00	±0.3
4923800	3.68	3.67	3.67	3.70	3.67	3.66	0.05	0.00	-0.02	±0.3
6235400	3.58	3.57	3.57	3.58	3.57	3.60	0.00	0.00	0.07	±0.3
7896400	3.43	3.42	3.42	3.44	3.42	3.42	0.03	0.00	0.00	±0.3
10000000	3.29	3.28	3.28	3.30	3.23	3.29	0.03	-0.13	0.03	±0.3

SPEAG H-field frequency response tolerance criteria¹:
±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, H-field, Channel 5

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.47	1.47	1.47	0.00	0.00	0.00	±0.3
3200	1.47	1.47	1.47	1.47	1.46	1.48	0.00	-0.06	0.06	±0.3
4000	1.46	1.46	1.46	1.46	1.46	1.45	0.00	0.00	-0.06	±0.3
5200	1.45	1.45	1.45	1.46	1.44	1.44	0.06	-0.06	-0.06	±0.3
6600	1.44	1.44	1.43	1.44	1.44	1.43	0.00	0.00	0.00	±0.3
8200	1.43	1.42	1.42	1.41	1.43	1.43	-0.12	0.06	0.06	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.42	0.00	0.00	0.00	±0.3
10600	4.26	4.19	4.19	4.29	4.20	4.19	0.06	0.02	0.00	±0.3
13400	4.26	4.21	4.21	4.28	4.21	4.21	0.04	0.00	0.00	±0.3
17000	4.26	4.21	4.21	4.28	4.23	4.20	0.04	0.04	-0.02	±0.3
21400	4.29	4.24	4.23	4.29	4.24	4.23	0.00	0.00	0.00	±0.3
27200	4.29	4.24	4.23	4.29	4.24	4.23	0.00	0.00	0.00	±0.3
34400	4.29	4.25	4.24	4.30	4.25	4.24	0.02	0.00	0.00	±0.3
40000	4.27	4.24	4.24	4.29	4.25	4.24	0.04	0.02	0.00	±0.3
43600	4.27	4.24	4.23	4.27	4.23	4.23	0.00	-0.02	0.00	±0.3
55400	4.26	4.23	4.22	4.27	4.22	4.23	0.02	-0.02	0.02	±0.3
70000	4.25	4.22	4.21	4.27	4.22	4.22	0.04	0.00	0.02	±0.3
88800	4.23	4.20	4.20	4.24	4.21	4.20	0.02	0.02	0.00	±0.3
112400	4.22	4.19	4.19	4.23	4.19	4.19	0.02	0.00	0.00	±0.3
142400	4.20	4.17	4.17	4.21	4.18	4.17	0.02	0.02	0.00	±0.3
161750	4.18	4.16	4.15	4.19	4.16	4.15	0.02	0.00	0.00	±0.3
180400	4.17	4.15	4.14	4.18	4.14	4.14	0.02	-0.02	0.00	±0.3
228400	4.14	4.11	4.11	4.15	4.12	4.11	0.02	0.02	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.08	4.08	0.02	0.00	0.00	±0.3
366400	4.06	4.04	4.04	4.07	4.04	4.04	0.02	0.00	0.00	±0.3
400000	4.04	4.02	4.02	4.04	4.01	4.02	0.00	-0.02	0.00	±0.3
464000	4.01	3.99	3.99	4.02	3.99	3.99	0.02	0.00	0.00	±0.3
587800	3.97	3.95	3.95	3.98	3.95	3.95	0.02	0.00	0.00	±0.3
744200	3.92	3.90	3.90	3.92	3.90	3.90	0.00	0.00	0.00	±0.3
942600	3.90	3.89	3.89	3.91	3.89	3.89	0.02	0.00	0.00	±0.3
1193600	3.88	3.87	3.87	3.88	3.87	3.86	0.00	0.00	-0.02	±0.3
1511600	3.87	3.86	3.86	3.87	3.86	3.86	0.00	0.00	0.00	±0.3
1914400	3.85	3.84	3.84	3.88	3.84	3.84	0.07	0.00	0.00	±0.3
2424400	3.84	3.83	3.83	3.86	3.83	3.82	0.05	0.00	-0.02	±0.3
3070200	3.81	3.79	3.79	3.82	3.80	3.78	0.02	0.02	-0.02	±0.3
3888000	3.76	3.74	3.74	3.76	3.74	3.74	0.00	0.00	0.00	±0.3
4000000	3.75	3.73	3.73	3.75	3.74	3.73	0.00	0.02	0.00	±0.3
4923800	3.68	3.67	3.67	3.70	3.66	3.66	0.05	-0.02	-0.02	±0.3
6235400	3.58	3.57	3.57	3.58	3.56	3.60	0.00	-0.02	0.07	±0.3
7896400	3.43	3.42	3.42	3.44	3.42	3.41	0.03	0.00	-0.03	±0.3
10000000	3.29	3.28	3.28	3.30	3.26	3.29	0.03	-0.05	0.03	±0.3

SPEAG H-field frequency response tolerance criteria¹:
±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, H-field, Channel 6

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.44	1.47	1.45	-0.18	0.00	-0.12	±0.3
3200	1.47	1.47	1.47	1.47	1.45	1.47	0.00	-0.12	0.00	±0.3
4000	1.46	1.46	1.46	1.46	1.47	1.47	0.00	0.06	0.06	±0.3
5200	1.45	1.45	1.45	1.46	1.45	1.45	0.06	0.00	0.00	±0.3
6600	1.44	1.44	1.43	1.44	1.43	1.43	0.00	-0.06	0.00	±0.3
8200	1.43	1.42	1.42	1.43	1.43	1.43	0.00	0.06	0.06	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.42	0.00	0.00	0.00	±0.3
10600	4.26	4.19	4.19	4.30	4.18	4.20	0.08	-0.02	0.02	±0.3
13400	4.26	4.21	4.21	4.28	4.21	4.21	0.04	0.00	0.00	±0.3
17000	4.26	4.21	4.21	4.27	4.21	4.21	0.02	0.00	0.00	±0.3
21400	4.29	4.24	4.23	4.29	4.24	4.25	0.00	0.00	0.04	±0.3
27200	4.29	4.24	4.23	4.30	4.24	4.24	0.02	0.00	0.02	±0.3
34400	4.29	4.25	4.24	4.30	4.25	4.24	0.02	0.00	0.00	±0.3
40000	4.27	4.24	4.24	4.29	4.24	4.24	0.04	0.00	0.00	±0.3
43600	4.27	4.24	4.23	4.29	4.25	4.22	0.04	0.02	-0.02	±0.3
55400	4.26	4.23	4.22	4.27	4.23	4.22	0.02	0.00	0.00	±0.3
70000	4.25	4.22	4.21	4.27	4.22	4.21	0.04	0.00	0.00	±0.3
88800	4.23	4.20	4.20	4.25	4.20	4.21	0.04	0.00	0.02	±0.3
112400	4.22	4.19	4.19	4.23	4.20	4.20	0.02	0.02	0.02	±0.3
142400	4.20	4.17	4.17	4.22	4.17	4.18	0.04	0.00	0.02	±0.3
161750	4.18	4.16	4.15	4.20	4.16	4.15	0.04	0.00	0.00	±0.3
180400	4.17	4.15	4.14	4.18	4.16	4.14	0.02	0.02	0.00	±0.3
228400	4.14	4.11	4.11	4.14	4.11	4.11	0.00	0.00	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.07	4.07	0.02	-0.02	-0.02	±0.3
366400	4.06	4.04	4.04	4.07	4.04	4.04	0.02	0.00	0.00	±0.3
400000	4.04	4.02	4.02	4.04	4.02	4.01	0.00	0.00	-0.02	±0.3
464000	4.01	3.99	3.99	4.02	3.99	4.00	0.02	0.00	0.02	±0.3
587800	3.97	3.95	3.95	3.97	3.95	3.95	0.00	0.00	0.00	±0.3
744200	3.92	3.90	3.90	3.92	3.90	3.90	0.00	0.00	0.00	±0.3
942600	3.90	3.89	3.89	3.91	3.89	3.89	0.02	0.00	0.00	±0.3
1193600	3.88	3.87	3.87	3.88	3.87	3.86	0.00	0.00	-0.02	±0.3
1511600	3.87	3.86	3.86	3.87	3.87	3.86	0.00	0.02	0.00	±0.3
1914400	3.85	3.84	3.84	3.88	3.85	3.84	0.07	0.02	0.00	±0.3
2424400	3.84	3.83	3.83	3.86	3.84	3.82	0.05	0.02	-0.02	±0.3
3070200	3.81	3.79	3.79	3.81	3.80	3.77	0.00	0.02	-0.05	±0.3
3888000	3.76	3.74	3.74	3.75	3.75	3.74	-0.02	0.02	0.00	±0.3
4000000	3.75	3.73	3.73	3.76	3.75	3.73	0.02	0.05	0.00	±0.3
4923800	3.68	3.67	3.67	3.71	3.67	3.66	0.07	0.00	-0.02	±0.3
6235400	3.58	3.57	3.57	3.57	3.55	3.60	-0.02	-0.05	0.07	±0.3
7896400	3.43	3.42	3.42	3.43	3.42	3.42	0.00	0.00	0.00	±0.3
10000000	3.29	3.28	3.28	3.24	3.28	3.26	-0.13	0.00	-0.05	±0.3

SPEAG H-field frequency response tolerance criteria¹:

±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, H-field, Channel 7

f/(Hz)	H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	1.47	1.47	1.47	1.47	1.48	1.46	0.00	0.06	-0.06	±0.3
3200	1.47	1.47	1.47	1.47	1.46	1.48	0.00	-0.06	0.06	±0.3
4000	1.46	1.46	1.46	1.46	1.46	1.46	0.00	0.00	0.00	±0.3
5200	1.45	1.45	1.45	1.46	1.45	1.45	0.06	0.00	0.00	±0.3
6600	1.44	1.44	1.43	1.44	1.43	1.43	0.00	-0.06	0.00	±0.3
8200	1.43	1.42	1.42	1.42	1.42	1.44	-0.06	0.00	0.12	±0.3
9000	1.42	1.42	1.42	1.42	1.42	1.42	0.00	0.00	0.00	±0.3
10600	4.26	4.19	4.19	4.25	4.19	4.17	-0.02	0.00	-0.04	±0.3
13400	4.26	4.21	4.21	4.27	4.24	4.20	0.02	0.06	-0.02	±0.3
17000	4.26	4.21	4.21	4.25	4.21	4.22	-0.02	0.00	0.02	±0.3
21400	4.29	4.24	4.23	4.29	4.25	4.23	0.00	0.02	0.00	±0.3
27200	4.29	4.24	4.23	4.30	4.24	4.24	0.02	0.00	0.02	±0.3
34400	4.29	4.25	4.24	4.30	4.25	4.25	0.02	0.00	0.02	±0.3
40000	4.27	4.24	4.24	4.29	4.25	4.25	0.04	0.02	0.02	±0.3
43600	4.27	4.24	4.23	4.28	4.24	4.24	0.02	0.00	0.02	±0.3
55400	4.26	4.23	4.22	4.27	4.24	4.22	0.02	0.02	0.00	±0.3
70000	4.25	4.22	4.21	4.25	4.23	4.22	0.00	0.02	0.02	±0.3
88800	4.23	4.20	4.20	4.24	4.21	4.20	0.02	0.02	0.00	±0.3
112400	4.22	4.19	4.19	4.23	4.19	4.19	0.02	0.00	0.00	±0.3
142400	4.20	4.17	4.17	4.20	4.18	4.17	0.00	0.02	0.00	±0.3
161750	4.18	4.16	4.15	4.19	4.16	4.15	0.02	0.00	0.00	±0.3
180400	4.17	4.15	4.14	4.18	4.14	4.14	0.02	-0.02	0.00	±0.3
228400	4.14	4.11	4.11	4.14	4.11	4.11	0.00	0.00	0.00	±0.3
289400	4.10	4.08	4.08	4.11	4.08	4.08	0.02	0.00	0.00	±0.3
366400	4.06	4.04	4.04	4.07	4.04	4.03	0.02	0.00	-0.02	±0.3
400000	4.04	4.02	4.02	4.04	4.01	4.02	0.00	-0.02	0.00	±0.3
464000	4.01	3.99	3.99	4.02	3.98	3.99	0.02	-0.02	0.00	±0.3
587800	3.97	3.95	3.95	3.97	3.95	3.94	0.00	0.00	-0.02	±0.3
744200	3.92	3.90	3.90	3.93	3.91	3.89	0.02	0.02	-0.02	±0.3
942600	3.90	3.89	3.89	3.91	3.89	3.88	0.02	0.00	-0.02	±0.3
1193600	3.88	3.87	3.87	3.88	3.87	3.86	0.00	0.00	-0.02	±0.3
1511600	3.87	3.86	3.86	3.87	3.87	3.85	0.00	0.02	-0.02	±0.3
1914400	3.85	3.84	3.84	3.87	3.85	3.83	0.05	0.02	-0.02	±0.3
2424400	3.84	3.83	3.83	3.85	3.83	3.82	0.02	0.00	-0.02	±0.3
3070200	3.81	3.79	3.79	3.81	3.79	3.75	0.00	0.00	-0.09	±0.3
3888000	3.76	3.74	3.74	3.76	3.74	3.74	0.00	0.00	0.00	±0.3
4000000	3.75	3.73	3.73	3.77	3.74	3.73	0.05	0.02	0.00	±0.3
4923800	3.68	3.67	3.67	3.70	3.67	3.65	0.05	0.00	-0.05	±0.3
6235400	3.58	3.57	3.57	3.57	3.57	3.61	-0.02	0.00	0.10	±0.3
7896400	3.43	3.42	3.42	3.44	3.42	3.41	0.03	0.00	-0.03	±0.3
10000000	3.29	3.28	3.28	3.25	3.26	3.31	-0.11	-0.05	0.08	±0.3

SPEAG H-field frequency response tolerance criteria¹:
±0.3dB for applied H-fields at calibration points from 3kHz to 10MHz

¹ Calibration uncertainty not taken into account (shared risk 50%).

Frequency Response, E-field, Channel 0

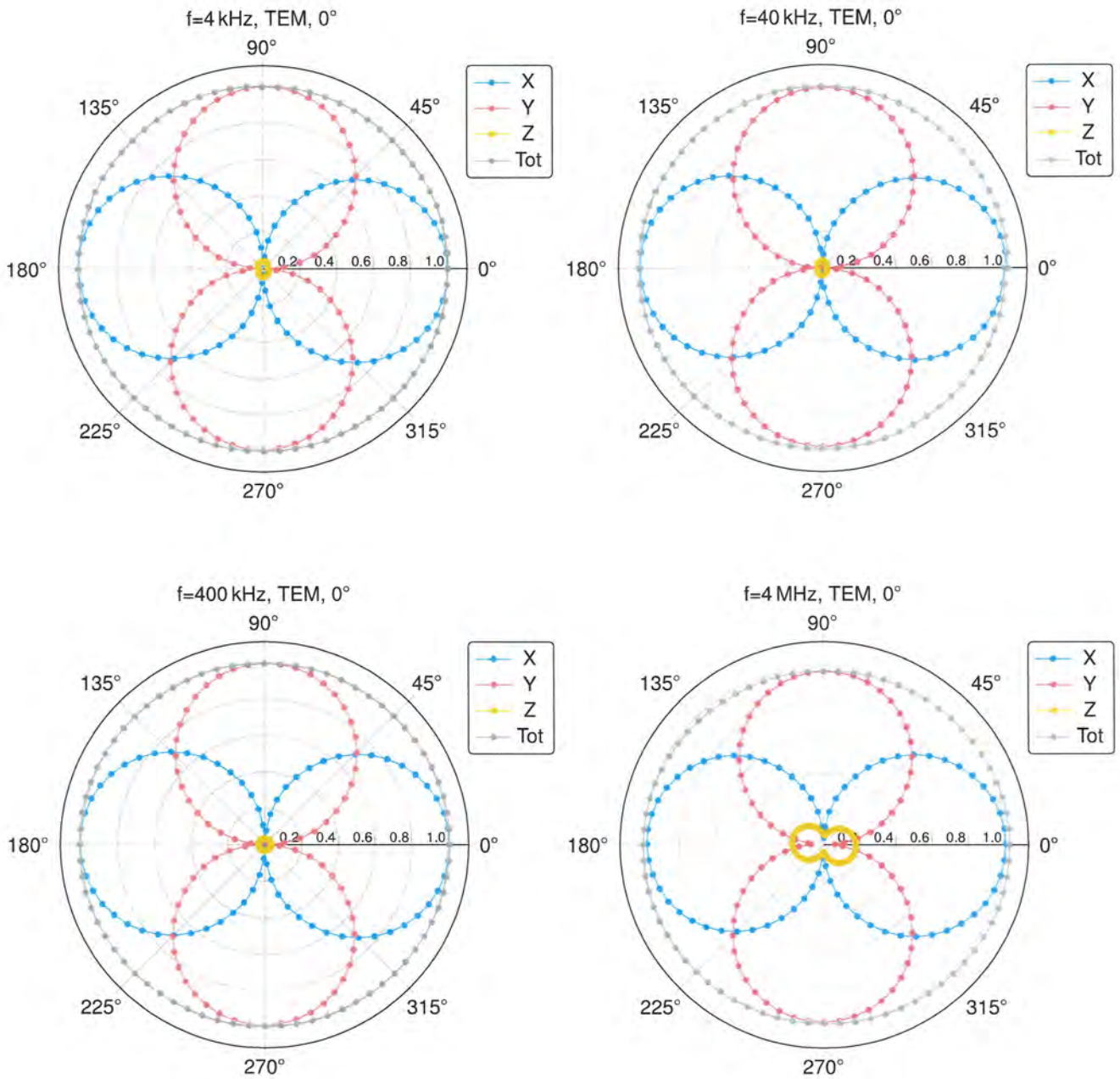
f/(Hz)	E-field/(V/m) Applied			E-field/(V/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	169	169	172	169	169	172	0.00	0.00	0.00	±0.3
3200	167	167	162	168	167	164	0.05	0.00	0.11	±0.3
4000	175	175	170	175	175	170	0.00	0.00	0.00	±0.3
5200	165	165	163	165	166	162	0.00	0.05	-0.05	±0.3
6600	163	163	160	163	163	161	0.00	0.00	0.05	±0.3
8200	162	162	159	161	162	158	-0.05	0.00	-0.05	±0.3
9000	163	163	164	163	163	163	0.00	0.00	-0.05	±0.3
10600	166	166	159	166	166	159	0.00	0.00	0.00	±0.3
13400	163	163	162	163	164	162	0.00	0.05	0.00	±0.3
17000	161	161	163	161	161	163	0.00	0.00	0.00	±0.3
21400	157	157	158	157	157	158	0.00	0.00	0.00	±0.3
27200	158	158	157	158	158	157	0.00	0.00	0.00	±0.3
34400	162	162	159	162	162	159	0.00	0.00	0.00	±0.3
40000	161	161	161	161	161	161	0.00	0.00	0.00	±0.3
43600	162	162	160	162	162	160	0.00	0.00	0.00	±0.3
55400	161	161	159	161	161	159	0.00	0.00	0.00	±0.3
70000	162	162	160	162	162	159	0.00	0.00	-0.05	±0.3
88800	161	161	160	161	161	160	0.00	0.00	0.00	±0.3
112400	161	161	160	161	161	160	0.00	0.00	0.00	±0.3
142400	162	162	160	162	162	160	0.00	0.00	0.00	±0.3
161750	163	163	162	163	163	162	0.00	0.00	0.00	±0.3
180400	164	164	162	164	164	162	0.00	0.00	0.00	±0.3
228400	165	165	163	165	165	163	0.00	0.00	0.00	±0.3
289400	166	166	164	165	166	164	-0.05	0.00	0.00	±0.3
366400	166	166	165	166	166	164	0.00	0.00	-0.05	±0.3
400000	167	167	165	167	167	165	0.00	0.00	0.00	±0.3
464000	168	168	166	168	168	166	0.00	0.00	0.00	±0.3
587800	169	169	167	169	169	167	0.00	0.00	0.00	±0.3
744200	169	169	167	169	169	167	0.00	0.00	0.00	±0.3
942600	170	170	168	170	170	168	0.00	0.00	0.00	±0.3
1193600	171	171	169	171	171	169	0.00	0.00	0.00	±0.3
1511600	170	170	169	170	170	168	0.00	0.00	-0.05	±0.3
1914400	170	170	168	170	170	168	0.00	0.00	0.00	±0.3
2424400	170	170	168	170	170	168	0.00	0.00	0.00	±0.3
3070200	171	171	169	170	170	169	-0.05	-0.05	0.00	±0.3
3888000	171	171	169	171	171	169	0.00	0.00	0.00	±0.3
4000000	171	171	169	171	171	169	0.00	0.00	0.00	±0.3
4923800	172	172	170	172	172	170	0.00	0.00	0.00	±0.3
6235400	174	174	172	174	174	172	0.00	0.00	0.00	±0.3
7896400	180	180	179	180	180	178	0.00	0.00	-0.05	±0.3
10000000	201	201	199	200	201	199	-0.04	0.00	0.00	±0.3

SPEAG E-field frequency response tolerance criteria¹:
±0.3dB for applied E-fields at calibration points from 3kHz to 10MHz

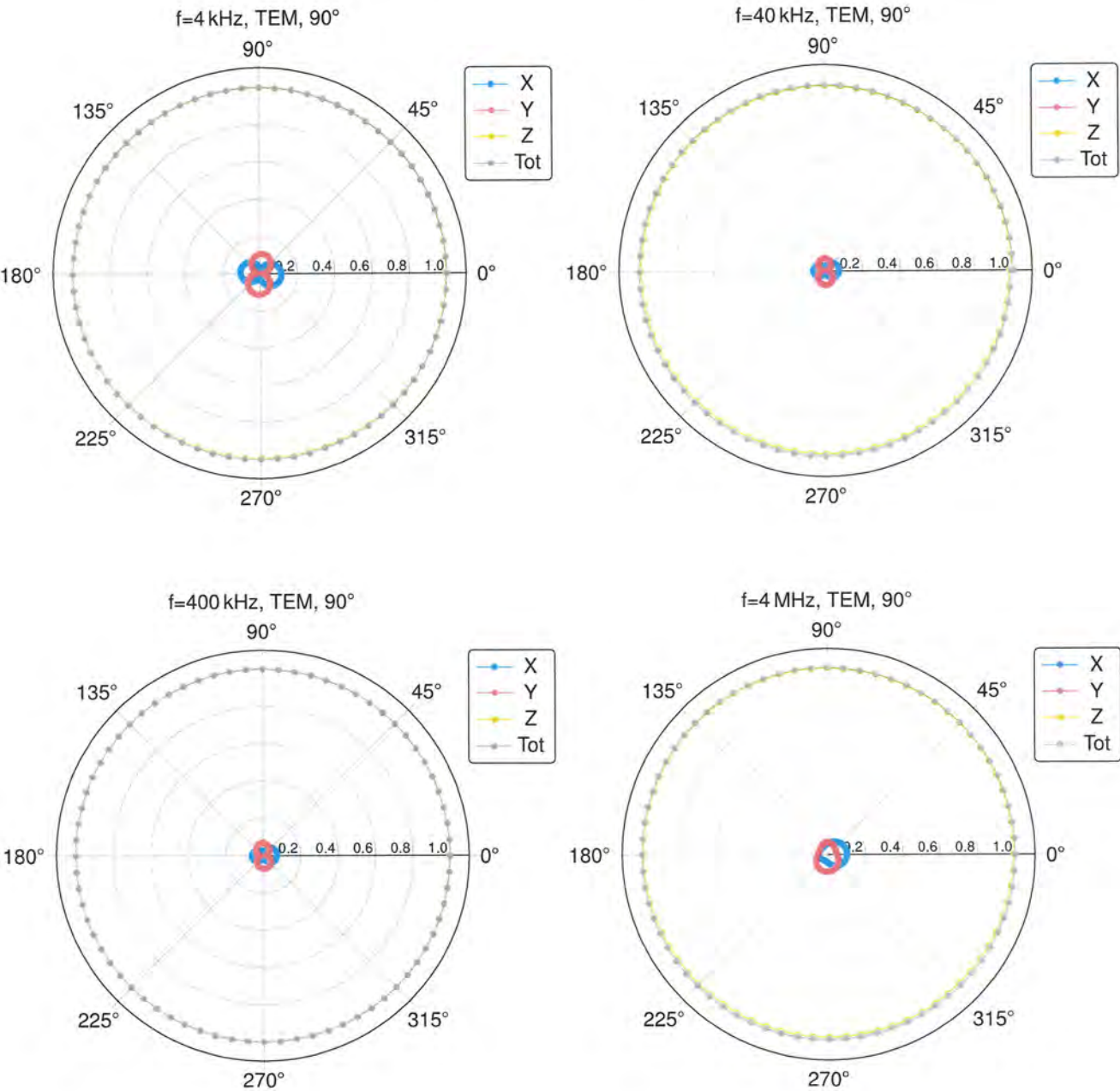
¹ Calibration uncertainty not taken into account (shared risk 50%).

Isotropy H-Field

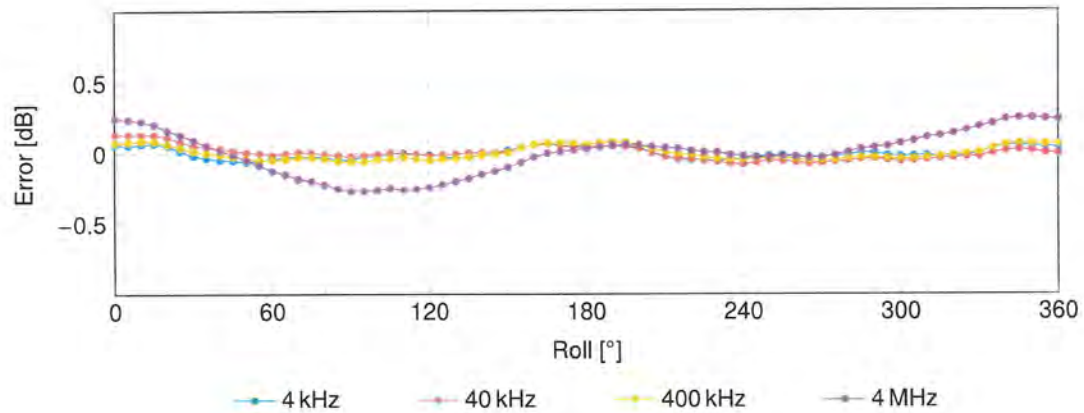
H-Field Receiving Pattern (ϕ), $\vartheta = 0^\circ$



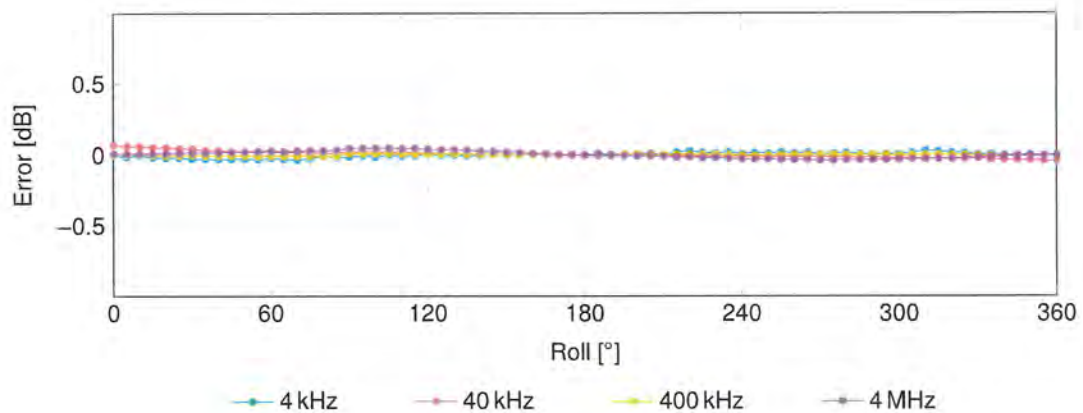
H-Field Receiving Pattern (ϕ), $\vartheta = 90^\circ$



H-Field Receiving Pattern (ϕ), $\vartheta = 0^\circ$



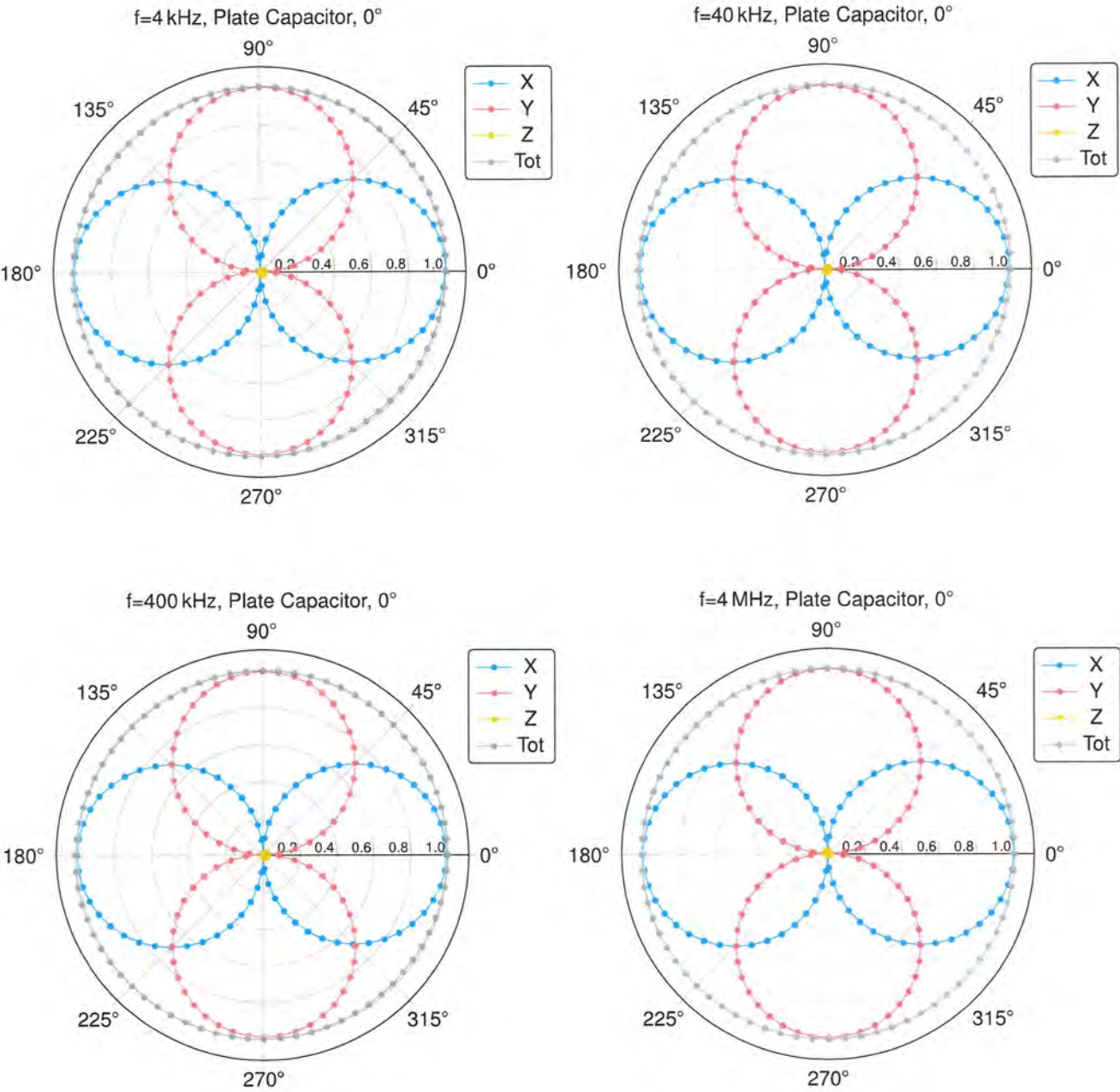
H-Field Receiving Pattern (ϕ), $\vartheta = 90^\circ$



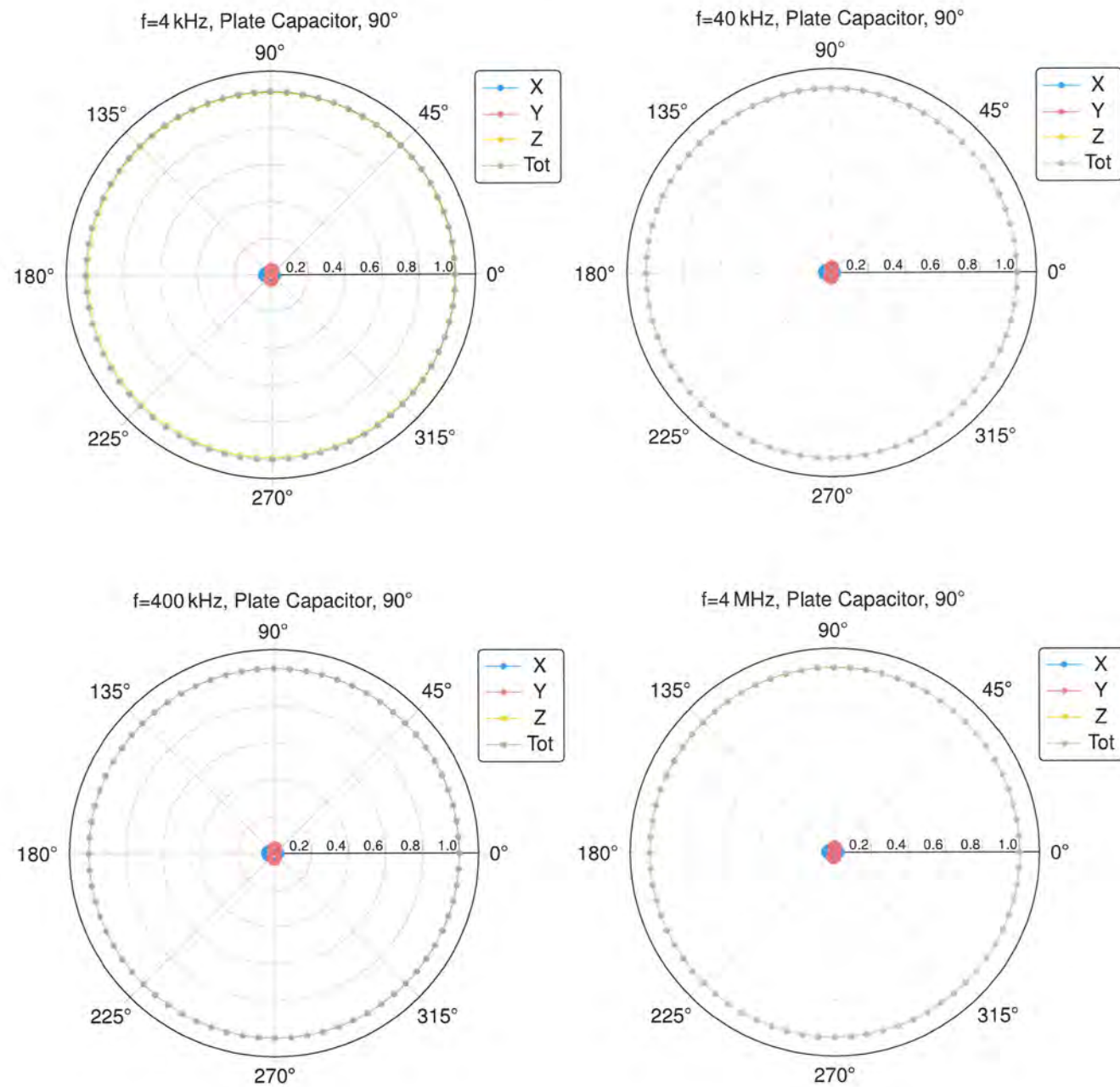
SPEAG axial deviation from the ideal response tolerance for H-field: ± 0.6 dB

Isotropy E-Field

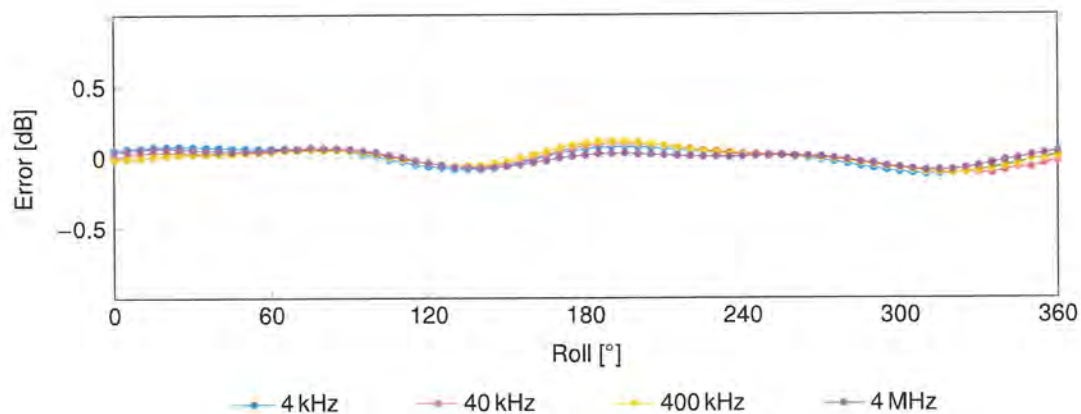
E-Field Receiving Pattern (ϕ), $\vartheta = 0^\circ$



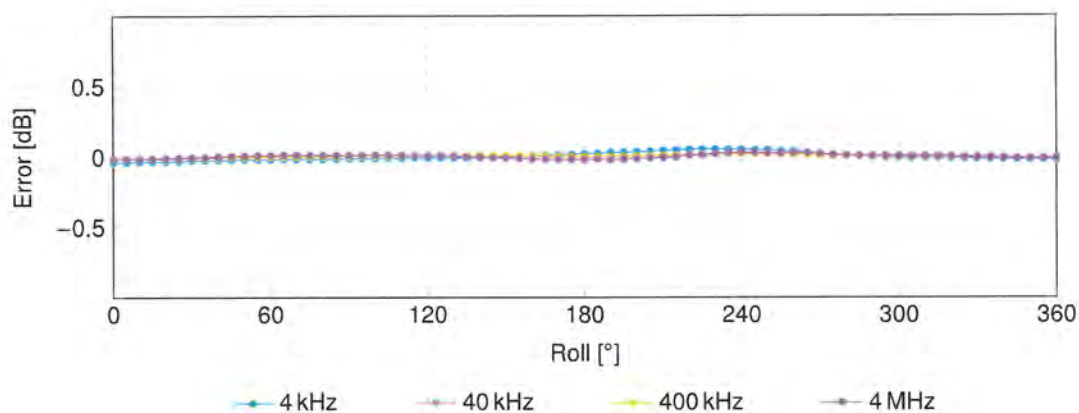
E-Field Receiving Pattern (ϕ), $\vartheta = 90^\circ$



E-Field Receiving Pattern (ϕ), $\vartheta = 0^\circ$



E-Field Receiving Pattern (ϕ), $\vartheta = 90^\circ$



SPEAG axial deviation from the ideal response tolerance for E-field: ± 0.8 dB

Client
B.V. ADT
Taoyuan

Certificate No: V-Coil50/400V2-
1015 May24

CALIBRATION CERTIFICATE

Object V-Coil50/400V2 - SN: 1015

Calibration procedure(s) QA CAL-47.v13
Calibration Procedure for WPT Verification & Validation Sources

Calibration date: May 27, 2024

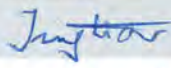
This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 75%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
MAGPy-8H3D+E3D/DAS	SN: 3089/3079	17-Nov-23 (MAGPy-8H3D+E3D-3089)	Nov-24

Secondary Standards	ID #	Check Date (in house)	Scheduled Check

	Name	Function	Signature
Calibrated by:	Jingtian Xi	Project Leader	
Approved by:	Sven Kühn	Technical Manager	

Issued: June 11, 2024

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Glossary:

WPT	wireless power transfer
V&V	verification & validation

Calibration is Performed According to the Following Standards:

- Internal procedure QA CAL-47 Calibration procedure for WPT verification & validation sources from 3 kHz to 10 MHz
- IEC/IEEE 63164, "Assessment methods of the human exposure to electric and magnetic fields from wireless power transfer systems – Models, instrumentation, measurement and computational methods and procedures (Frequency range 3 kHz to 30 MHz)", draft standard, 2023

Additional Documentation:

- a) cDASY6/DASY8 Module WPT Manual

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* The V&V source is switched on for at least 30 minutes.
- *Source Positioning:* The V&V source is placed in the center of the UniPV1 phantom such that the source surface is parallel to phantom surface. The probe location used for DUT teaching is the top center of the coil (marked on the source casing). The probe distance is verified using mechanical gauges placed on the source surface.
- *H-field distribution:* H-field is measured in the volume above the V&V source in a rectilinear grid with a uniform grid step of 7.33 mm.

Calibrated Quantity

- Spatial peak of H-field (RMS value) at d mm from the DUT surface (extrapolated from measurements)

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.
--

Measurement Conditions

Software version	cDASY6 Module WPT	2.4.0.4346
	Notebook GUI	2.4.0.2
	Sim4Life	7.2.4
Scan setup	Grid dimensions	x: 125 mm, y: 125 mm, z: 36.7 mm
	Grid resolutions	dx, dy, dz: 7.33 mm
Nominal frequency	400 kHz	

Calibrated Quantities

Distance (relative to source surface) (mm)	Peak H-field (A/m)	Uncertainty (k=2) (dB)
0	264	1.13
2	232	1.13

Appendix (Additional assessments outside the scope of SCS 0108)

Peak values of induced fields¹

Distance (relative to source surface) (mm)	Induced peak current density, 1cm ² area avg. (A/m ²)	Induced peak E-field (V/m)			peak spatial SAR (mW/kg)	
		2mm cube avg.	Local	5mm line avg.	1g avg.	10g avg.
0	2.67	4.18	4.28	4.29	7.06	3.55
2	2.28	3.61	3.72	3.72	5.19	2.65

Voltage measurement

Total voltage (V)	Voltages at harmonics (dBc)
0.408	Highest harmonic: -33.3 2 nd highest harmonic: -39.3

¹ determined for a virtual half-space phantom with tissue properties $\epsilon_r = 55$, $\sigma = 0.75$ S/m, $\rho = 1000$ kg/m³

Measurement report

cDASY6 Module WPT Measurement Report

Device under test

Info:
V-Coil50/400

Serial number:
1015

Scenario:
source calibration

Tool info

DASY software version:
cDASY6 Module WPT 2.4.0.4346

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000231, 2024/01/10

Software version:
2.0.49, backend: 2.2.3

Scan info

Center location:
x: -186.17 mm, y: -319.37 mm, z: 36.38 mm

Dimensions:
x: 125.0 mm, y: 125.0 mm, z: 36.7 mm

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

Completed on:
2024/05/27 15:03:26

Measurement results

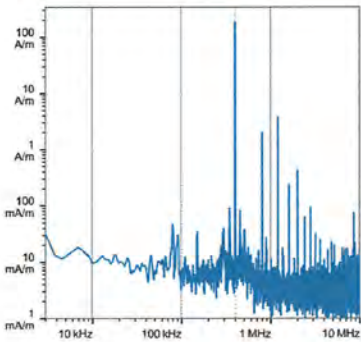
Maximum H-field [RMS]:
MAGNITUDE: 132.28 A/m
x: 19.16 A/m, y: 10.09 A/m, z: 130.49 A/m

Maximum H-field location relative to DUT:
x: 3.67 mm, y: 3.67 mm, z: 8.50 mm

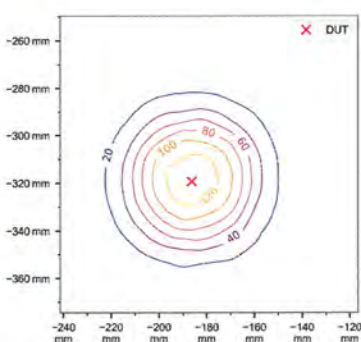
Distance to -20.0 dB boundary:
39.49 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields, and induced quantities in the anatomical model (f = 400.00 kHz, $\sigma = 0.750$ S/m, tissue density = 1.000 kg/m³)

Distance [mm]	Peak incident fields [RMS]	Peak E_{ind} [V/m, RMS]			Peak J_{ind} [A/m ² , RMS]	psSAR [mW/kg]		H-field extent	Errors		
	H_{inc} [A/m]	Cube avg.	Local	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius [mm]	Sign	Vector potential	Boundary effect
0.0	264.0	4.18	4.28	4.29	2.67	7.06	3.55	39.2	1%	10%	25%
2.0	232.0	3.61	3.72	3.72	2.28	5.19	2.65	39.4	1%	10%	28%

Standard compliance evaluation, Absolute

Distance [mm]	ICNIRP 2010/2020			ICNIRP 1998			IEEE 2019			FCC			HC Code 6		
	pH_{inc} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pJ_{ind} [A/m ²]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]
0.0	264.0	4.18	3.55	264.0	2.67	3.55	264.0	4.29	3.55	264.0	N/A	7.06	264.0	4.28	7.06
2.0	232.0	3.61	2.65	232.0	2.28	2.65	232.0	3.72	2.65	232.0	N/A	5.19	232.0	3.72	5.19

Standard compliance evaluation, Relative

Distance [mm]	ICNIRP 2010/2020 [dB]			ICNIRP 1998 [dB]			IEEE 2019 [dB]			FCC [dB]			HC Code 6 [dB]		
	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pJ_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR
0.0	26.7	-22.2	-27.5	43.2	10.5	-27.5	9.3	-25.8	-27.5	N/A	N/A	-23.6	43.2	-22.0	-23.6
2.0	25.5	-23.5	-28.8	42.1	9.1	-28.8	8.1	-27.0	-28.8	N/A	N/A	-24.9	42.1	-23.2	-24.9

Document generated at 2024/05/27 15:16:56, simulation performed at 2024/05/27 15:11:58 using Sim4Life version 7.2.4.14019

Appendix D. System Verification

The measuring results for system check are shown as below.

DASY8 Module WPT Measurement Report

Device under test

Info:
V-Coil50/400

Serial number:
1015

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2024/06/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 36.73 mm, y: 21.92 mm, z: 35.89 mm

Dimensions:
x: 168.3 mm, y: 168.7 mm, z: 36.7 mm

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

Completed on:
2025/05/13

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 126.31 A/m
x: 19.39 A/m, y: 20.31 A/m, z: 123.15 A/m

Maximum H-field location relative to DUT:
x: -3.67 mm, y: -3.67 mm, z: 8.50 mm

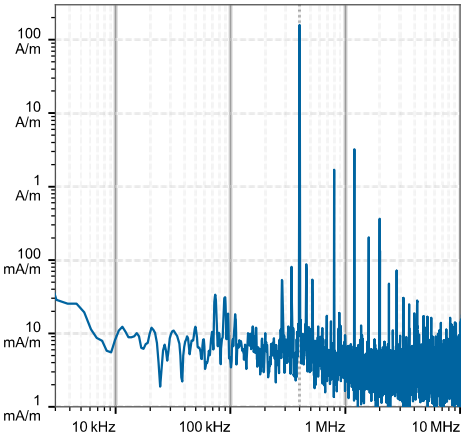
Maximum E-field [RMS]:
MAGNITUDE: 45.89 V/m
x: 22.97 V/m, y: 11.53 V/m, z: 38.03 V/m

Maximum E-field location relative to DUT:
x: 7.33 mm, y: -29.33 mm, z: 0.00 mm

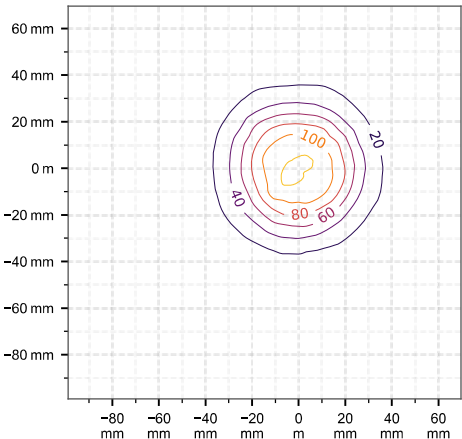
Distance to -20.0 dB boundary:
39.49 mm

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)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	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	254	45.9	4.00	4.10	4.11	2.53	6.26	3.11	39.2	1%	11%	18%
2.00	222	42.8	3.42	3.51	3.52	2.14	4.55	2.32	39.5	1%	11%	20%

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/m²]	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	254	45.9	21.6	3.11	254	45.9	2.54	3.11	254	45.9	12.1	3.11	254	45.9	N/A	6.26	254	45.9	31.2	6.26
2.00	222	42.8	18.4	2.32	222	42.8	2.15	2.32	222	42.8	10.4	2.32	222	42.8	N/A	4.55	222	42.8	26.7	4.55

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)

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
0.00	12.1	20.8	85.9	32.2	0.41	<0.01	139.0	193.0	3.92	<0.01	11.56	2.8	11.6	98.6	0.15	<0.01	156.0	97.4	N/A	<0.01
2.00	10.6	18.1	80.1	30.0	0.36	<0.01	122.0	180.0	3.38	<0.01	11.36	2.44	10.8	91.9	0.13	<0.01	136.0	90.8	N/A	<0.01

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]