

Calibration Laboratory ofSchmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client

Sporton

Taoyuan City

Certificate No.

MAGPy-8H3D-3059_May26

CALIBRATION CERTIFICATE

Object

MAGPy-8H3D+E3DV2 SN:3059
MAGPy-DASV2 SN:3064

Calibration procedure(s)

QA CAL-46.v4
Calibration Procedure for MAGPy
Near-field Electric and Magnetic Field Sensor System

Calibration date

May 27, 2026

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	15-Aug-25 (No. 4030A315010970)	Aug-27
Reference 20 dB Attenuator	SN: MY61372120	26-Mar-26 (No. 2026-005591)	Mar-27
Type-N mismatch	SN: L1119	26-Mar-26 (No. 2026-005592)	Mar-27

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Network Analyzer E5061B	SN: MY49810822	In house check: Mar-26	In house check: Mar-29
TEM Cell	SN: S6029i	In house check: Nov-25	In house check: Nov-26
Plate Capacitor	SN: 6028i	In house check: Nov-25	In house check: Nov-26
Resonator (160kHz)	SN: 6030i	In house check: Nov-25	In house check: Nov-26

	Name	Function	Signature
Calibrated by	Krešimir Franjić	Laboratory Technician	
Approved by	Sven Kühn	Technical Manager	
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			Issued: May 27, 2026

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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 $\phi = 0^\circ \dots 360^\circ$; $\theta = 90^\circ$, 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 $\phi = 0^\circ \dots 360^\circ$; $\theta = 90^\circ$, 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)	3059
	MAGPy-DASV2 (SE UMS 303 AE)	3064
	MAGPy FPGA Board	WP000211
Adjustment Date	Last MAGPy Adjustment	May 27, 2026
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	
0.390	0.370	0.360	0.410	0.390	0.360	0.43	0.46	0.00	±1.00
0.530	0.510	0.490	0.550	0.530	0.490	0.32	0.33	0.00	±1.00
0.730	0.700	0.670	0.730	0.720	0.670	0.00	0.24	0.00	±1.00
0.950	0.910	0.870	0.950	0.910	0.880	0.00	0.00	0.10	±1.00
1.28	1.23	1.17	1.28	1.23	1.19	0.00	0.00	0.15	±1.00
1.75	1.69	1.61	1.76	1.70	1.64	0.05	0.05	0.16	±1.00
2.33	2.25	2.14	2.34	2.25	2.18	0.04	0.00	0.16	±0.20
3.13	3.01	2.87	3.12	3.02	2.90	-0.03	0.03	0.09	±0.20
4.24	4.09	3.89	4.25	4.10	3.93	0.02	0.02	0.09	±0.20
5.73	5.54	5.26	5.74	5.55	5.30	0.02	0.02	0.07	±0.20
7.71	7.46	7.08	7.72	7.46	7.10	0.01	0.00	0.02	±0.20
10.3	9.97	9.45	10.3	9.97	9.45	0.00	0.00	0.00	±0.20
13.9	13.5	12.8	13.9	13.5	12.8	0.00	0.00	0.00	±0.20
18.7	18.2	17.2	18.7	18.2	17.2	0.00	0.00	0.00	±0.20
25.3	24.5	23.2	25.3	24.6	23.3	0.00	0.04	0.04	±0.20
33.7	32.8	31.0	33.9	32.9	31.2	0.05	0.03	0.06	±0.20
45.5	44.2	41.9	45.8	44.5	42.1	0.06	0.06	0.04	±0.20
61.6	59.9	56.8	62.0	60.2	57.1	0.06	0.04	0.05	±0.20
84.8	82.5	78.2	84.4	82.2	77.9	-0.04	-0.03	-0.03	±0.20
111	108	102	110	108	102	-0.08	0.00	0.00	±0.20
152	149	141	152	148	140	0.00	-0.06	-0.06	±0.20
211	206	195	211	206	195	0.00	0.00	0.00	±0.20
293	286	271	294	280	273	0.03	-0.18	0.06	±0.20
433	424	402	426	417	397	-0.14	-0.14	-0.11	±0.20
600	586	556	594	581	553	-0.09	-0.07	-0.05	±0.20
900	877	834	899	880	838	-0.01	0.03	0.04	±0.20
1370	1330	1270	1390	1350	1290	0.13	0.13	0.14	±0.30
1870	1820	1730	1920	1870	1780	0.23	0.24	0.25	±0.30
3040	2960	2820	3150	3070	2930	0.31	0.32	0.33	±0.50
3600	3490	3330	3740	3650	3480	0.33	0.39	0.38	±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 1

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.390	0.380	0.370	0.410	0.390	0.390	0.43	0.23	0.46	±1.00
0.530	0.510	0.500	0.560	0.530	0.520	0.48	0.33	0.34	±1.00
0.730	0.700	0.690	0.740	0.730	0.690	0.12	0.36	0.00	±1.00
0.950	0.910	0.900	0.970	0.930	0.900	0.18	0.19	0.00	±1.00
1.29	1.24	1.22	1.32	1.24	1.22	0.20	0.00	0.00	±1.00
1.77	1.70	1.67	1.79	1.70	1.69	0.10	0.00	0.10	±1.00
2.35	2.26	2.23	2.38	2.28	2.25	0.11	0.08	0.08	±0.20
3.15	3.04	2.98	3.17	3.04	3.00	0.05	0.00	0.06	±0.20
4.28	4.12	4.05	4.29	4.15	4.08	0.02	0.06	0.06	±0.20
5.78	5.58	5.47	5.80	5.61	5.51	0.03	0.05	0.06	±0.20
7.77	7.51	7.37	7.78	7.53	7.39	0.01	0.02	0.02	±0.20
10.4	10.0	9.83	10.4	10.0	9.88	0.00	0.00	0.04	±0.20
14.0	13.6	13.3	14.0	13.6	13.3	0.00	0.00	0.00	±0.20
18.9	18.3	17.9	18.9	18.3	17.9	0.00	0.00	0.00	±0.20
25.4	24.7	24.2	25.5	24.7	24.2	0.03	0.00	0.00	±0.20
34.0	33.0	32.3	34.1	33.1	32.4	0.03	0.03	0.03	±0.20
45.9	44.5	43.6	46.1	44.7	43.9	0.04	0.04	0.06	±0.20
62.1	60.4	59.1	62.5	60.7	59.4	0.06	0.04	0.04	±0.20
85.4	83.1	81.3	85.0	82.8	81.0	-0.04	-0.03	-0.03	±0.20
112	109	106	111	108	106	-0.08	-0.08	0.00	±0.20
153	150	146	153	149	146	0.00	-0.06	0.00	±0.20
213	208	203	212	207	203	-0.04	-0.04	0.00	±0.20
295	288	282	297	282	284	0.06	-0.18	0.06	±0.20
437	426	418	430	420	413	-0.14	-0.12	-0.10	±0.20
604	590	579	598	585	575	-0.09	-0.07	-0.06	±0.20
907	883	868	906	886	871	-0.01	0.03	0.03	±0.20
1380	1340	1320	1400	1370	1340	0.12	0.19	0.13	±0.30
1880	1830	1800	1930	1890	1850	0.23	0.28	0.24	±0.30
3070	2980	2930	3170	3090	3050	0.28	0.31	0.35	±0.50
3630	3520	3470	3770	3670	3620	0.33	0.36	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 2

H-field/(A/m) Applied			H-field/(A/m) Reading			Difference/(dB)			Tolerance/(dB)
x	y	z	x	y	z	x	y	z	
0.390	0.380	0.380	0.410	0.390	0.390	0.43	0.23	0.23	±1.00
0.530	0.510	0.510	0.530	0.530	0.530	0.00	0.33	0.33	±1.00
0.730	0.700	0.700	0.720	0.730	0.720	-0.12	0.36	0.24	±1.00
0.950	0.920	0.910	0.950	0.940	0.910	0.00	0.19	0.00	±1.00
1.28	1.24	1.23	1.29	1.26	1.23	0.07	0.14	0.00	±1.00
1.76	1.71	1.69	1.76	1.71	1.69	0.00	0.00	0.00	±1.00
2.34	2.27	2.25	2.34	2.28	2.27	0.00	0.04	0.08	±0.20
3.13	3.04	3.02	3.13	3.05	3.02	0.00	0.03	0.00	±0.20
4.25	4.14	4.10	4.26	4.13	4.10	0.02	-0.02	0.00	±0.20
5.74	5.60	5.53	5.76	5.61	5.55	0.03	0.02	0.03	±0.20
7.73	7.54	7.45	7.74	7.54	7.44	0.01	0.00	-0.01	±0.20
10.3	10.1	9.94	10.3	10.1	9.93	0.00	0.00	-0.01	±0.20
13.9	13.6	13.4	13.9	13.6	13.4	0.00	0.00	0.00	±0.20
18.8	18.4	18.1	18.8	18.3	18.1	0.00	-0.05	0.00	±0.20
25.3	24.8	24.4	25.4	24.8	24.5	0.03	0.00	0.04	±0.20
33.8	33.1	32.6	34.0	33.2	32.8	0.05	0.03	0.05	±0.20
45.6	44.7	44.1	45.9	44.9	44.3	0.06	0.04	0.04	±0.20
61.8	60.5	59.8	62.1	60.9	60.0	0.04	0.06	0.03	±0.20
85.0	83.3	82.2	84.5	83.0	82.0	-0.05	-0.03	-0.02	±0.20
111	109	108	111	109	107	0.00	0.00	-0.08	±0.20
152	150	148	152	149	148	0.00	-0.06	0.00	±0.20
212	208	206	211	208	205	-0.04	0.00	-0.04	±0.20
293	289	285	295	283	287	0.06	-0.18	0.06	±0.20
434	428	423	427	422	418	-0.14	-0.12	-0.10	±0.20
601	591	585	595	587	582	-0.09	-0.06	-0.04	±0.20
901	886	877	901	889	882	0.00	0.03	0.05	±0.20
1370	1350	1330	1390	1370	1360	0.13	0.13	0.19	±0.30
1870	1840	1820	1920	1890	1880	0.23	0.23	0.28	±0.30
3050	2990	2960	3160	3100	3080	0.31	0.31	0.35	±0.50
3610	3530	3510	3750	3680	3660	0.33	0.36	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

¹Calibration 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	
0.380	0.380	0.370	0.400	0.400	0.380	0.45	0.45	0.23	±1.00
0.520	0.510	0.500	0.530	0.530	0.510	0.17	0.33	0.17	±1.00
0.720	0.700	0.680	0.710	0.700	0.700	-0.12	0.00	0.25	±1.00
0.930	0.920	0.890	0.940	0.920	0.900	0.09	0.00	0.10	±1.00
1.26	1.24	1.20	1.30	1.27	1.22	0.27	0.21	0.14	±1.00
1.73	1.71	1.65	1.75	1.71	1.67	0.10	0.00	0.10	±1.00
2.31	2.27	2.19	2.34	2.29	2.23	0.11	0.08	0.16	±0.20
3.09	3.05	2.94	3.11	3.05	2.98	0.06	0.00	0.12	±0.20
4.19	4.14	3.99	4.20	4.13	4.01	0.02	-0.02	0.04	±0.20
5.66	5.60	5.39	5.66	5.59	5.43	0.00	-0.02	0.06	±0.20
7.62	7.54	7.25	7.61	7.56	7.30	-0.01	0.02	0.06	±0.20
10.2	10.1	9.68	10.2	10.1	9.74	0.00	0.00	0.05	±0.20
13.7	13.6	13.1	13.7	13.7	13.1	0.00	0.06	0.00	±0.20
18.5	18.4	17.6	18.5	18.4	17.7	0.00	0.00	0.05	±0.20
24.9	24.8	23.8	25.0	24.8	23.8	0.03	0.00	0.00	±0.20
33.3	33.1	31.8	33.5	33.3	31.9	0.05	0.05	0.03	±0.20
45.0	44.7	42.9	45.2	44.9	43.1	0.04	0.04	0.04	±0.20
60.9	60.6	58.2	61.2	60.9	58.4	0.04	0.04	0.03	±0.20
83.8	83.4	80.0	83.4	83.0	79.8	-0.04	-0.04	-0.02	±0.20
109	109	105	109	109	104	0.00	0.00	-0.08	±0.20
150	150	144	150	150	144	0.00	0.00	0.00	±0.20
209	208	200	208	208	200	-0.04	0.00	0.00	±0.20
289	289	278	291	284	279	0.06	-0.15	0.03	±0.20
428	428	411	421	422	407	-0.14	-0.12	-0.08	±0.20
592	592	570	587	587	567	-0.07	-0.07	-0.05	±0.20
889	886	854	889	889	859	0.00	0.03	0.05	±0.20
1350	1350	1300	1370	1370	1320	0.13	0.13	0.13	±0.30
1850	1840	1780	1890	1890	1830	0.19	0.23	0.24	±0.30
3010	2990	2880	3110	3080	3000	0.28	0.26	0.35	±0.50
3560	3530	3410	3700	3640	3570	0.34	0.27	0.40	±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	
0.380	0.380	0.370	0.400	0.400	0.380	0.45	0.45	0.23	±1.00
0.520	0.520	0.510	0.540	0.530	0.520	0.33	0.17	0.17	±1.00
0.710	0.710	0.700	0.720	0.720	0.700	0.12	0.12	0.00	±1.00
0.930	0.920	0.910	0.920	0.920	0.910	-0.09	0.00	0.00	±1.00
1.26	1.25	1.23	1.25	1.25	1.25	-0.07	0.00	0.14	±1.00
1.72	1.72	1.69	1.73	1.73	1.71	0.05	0.05	0.10	±1.00
2.29	2.28	2.25	2.32	2.29	2.27	0.11	0.04	0.08	±0.20
3.07	3.06	3.01	3.09	3.06	3.03	0.06	0.00	0.06	±0.20
4.17	4.16	4.08	4.17	4.16	4.11	0.00	0.00	0.06	±0.20
5.63	5.63	5.52	5.63	5.63	5.56	0.00	0.00	0.06	±0.20
7.58	7.58	7.43	7.57	7.58	7.45	-0.01	0.00	0.02	±0.20
10.1	10.1	9.91	10.1	10.1	9.94	0.00	0.00	0.03	±0.20
13.7	13.7	13.4	13.6	13.7	13.4	-0.06	0.00	0.00	±0.20
18.4	18.4	18.1	18.4	18.4	18.1	0.00	0.00	0.00	±0.20
24.8	24.9	24.4	24.9	24.9	24.4	0.03	0.00	0.00	±0.20
33.1	33.3	32.5	33.3	33.4	32.7	0.05	0.03	0.05	±0.20
44.7	44.9	44.0	45.0	45.1	44.2	0.06	0.04	0.04	±0.20
60.6	60.9	59.6	60.9	61.2	59.9	0.04	0.04	0.04	±0.20
83.3	83.8	82.0	82.9	83.5	81.7	-0.04	-0.03	-0.03	±0.20
109	110	107	108	109	107	-0.08	-0.08	0.00	±0.20
150	151	148	149	150	147	-0.06	-0.06	-0.06	±0.20
207	209	205	207	209	205	0.00	0.00	0.00	±0.20
288	290	284	289	285	286	0.03	-0.15	0.06	±0.20
426	430	421	419	424	417	-0.14	-0.12	-0.08	±0.20
589	595	584	583	591	581	-0.09	-0.06	-0.04	±0.20
884	891	875	884	895	880	0.00	0.04	0.05	±0.20
1340	1350	1330	1360	1380	1350	0.13	0.19	0.13	±0.30
1840	1850	1820	1880	1900	1870	0.19	0.23	0.24	±0.30
2990	3000	2960	3100	3130	3080	0.31	0.37	0.35	±0.50
3540	3550	3500	3680	3710	3660	0.34	0.38	0.39	±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

¹Calibration 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	
0.380	0.380	0.390	0.400	0.390	0.400	0.45	0.23	0.22	±1.00
0.520	0.520	0.530	0.530	0.540	0.540	0.17	0.33	0.16	±1.00
0.720	0.710	0.720	0.710	0.720	0.740	-0.12	0.12	0.24	±1.00
0.940	0.930	0.940	0.940	0.930	0.960	0.00	0.00	0.18	±1.00
1.27	1.26	1.28	1.29	1.26	1.31	0.14	0.00	0.20	±1.00
1.74	1.72	1.75	1.76	1.74	1.78	0.10	0.10	0.15	±1.00
2.31	2.30	2.33	2.34	2.34	2.37	0.11	0.15	0.15	±0.20
3.09	3.08	3.12	3.11	3.11	3.15	0.06	0.08	0.08	±0.20
4.20	4.18	4.23	4.23	4.22	4.26	0.06	0.08	0.06	±0.20
5.67	5.66	5.72	5.71	5.70	5.75	0.06	0.06	0.05	±0.20
7.64	7.62	7.70	7.66	7.66	7.70	0.02	0.05	0.00	±0.20
10.2	10.2	10.3	10.2	10.2	10.3	0.00	0.00	0.00	±0.20
13.8	13.7	13.9	13.8	13.8	13.9	0.00	0.06	0.00	±0.20
18.5	18.6	18.7	18.6	18.6	18.8	0.05	0.00	0.05	±0.20
25.0	25.0	25.2	25.1	25.1	25.3	0.03	0.03	0.03	±0.20
33.3	33.4	33.7	33.5	33.6	33.9	0.05	0.05	0.05	±0.20
45.1	45.2	45.5	45.3	45.4	45.8	0.04	0.04	0.06	±0.20
61.0	61.2	61.8	61.3	61.5	62.1	0.04	0.04	0.04	±0.20
83.9	84.2	85.0	83.5	83.9	84.7	-0.04	-0.03	-0.03	±0.20
110	110	111	109	110	111	-0.08	0.00	0.00	±0.20
151	152	153	150	151	153	-0.06	-0.06	0.00	±0.20
209	210	212	209	210	212	0.00	0.00	0.00	±0.20
290	292	295	291	286	296	0.03	-0.18	0.03	±0.20
429	432	437	422	426	431	-0.14	-0.12	-0.12	±0.20
594	598	605	588	593	601	-0.09	-0.07	-0.06	±0.20
891	895	907	890	896	911	-0.01	0.03	0.04	±0.20
1350	1360	1380	1370	1380	1400	0.13	0.13	0.12	±0.30
1850	1860	1880	1900	1910	1940	0.23	0.23	0.27	±0.30
3010	3020	3060	3120	3130	3180	0.31	0.31	0.33	±0.50
3560	3570	3620	3710	3720	3780	0.36	0.36	0.38	±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 < 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	
0.390	0.380	0.380	0.400	0.400	0.390	0.22	0.45	0.23	±1.00
0.530	0.520	0.510	0.540	0.550	0.520	0.16	0.49	0.17	±1.00
0.730	0.720	0.710	0.740	0.750	0.700	0.12	0.35	-0.12	±1.00
0.950	0.930	0.920	0.960	0.960	0.910	0.09	0.28	-0.09	±1.00
1.28	1.27	1.24	1.30	1.28	1.23	0.13	0.07	-0.07	±1.00
1.76	1.74	1.71	1.78	1.74	1.69	0.10	0.00	-0.10	±1.00
2.34	2.31	2.27	2.34	2.33	2.26	0.00	0.07	-0.04	±0.20
3.14	3.10	3.04	3.12	3.12	3.02	-0.06	0.06	-0.06	±0.20
4.26	4.21	4.13	4.26	4.22	4.11	0.00	0.02	-0.04	±0.20
5.75	5.70	5.57	5.77	5.71	5.57	0.03	0.02	0.00	±0.20
7.74	7.67	7.50	7.75	7.68	7.48	0.01	0.01	-0.02	±0.20
10.3	10.2	10.0	10.4	10.3	10.0	0.08	0.08	0.00	±0.20
13.9	13.8	13.5	14.0	13.9	13.5	0.06	0.06	0.00	±0.20
18.8	18.7	18.2	18.8	18.7	18.2	0.00	0.00	0.00	±0.20
25.3	25.2	24.6	25.4	25.2	24.6	0.03	0.00	0.00	±0.20
33.8	33.7	32.9	34.0	33.8	33.0	0.05	0.03	0.03	±0.20
45.7	45.5	44.4	45.9	45.7	44.6	0.04	0.04	0.04	±0.20
61.8	61.6	60.2	62.2	61.9	60.5	0.06	0.04	0.04	±0.20
85.1	84.8	82.8	84.7	84.5	82.6	-0.04	-0.03	-0.02	±0.20
111	111	108	111	111	108	0.00	0.00	0.00	±0.20
153	153	149	152	152	149	-0.06	-0.06	0.00	±0.20
212	212	207	211	211	207	-0.04	-0.04	0.00	±0.20
293	294	287	295	288	289	0.06	-0.18	0.06	±0.20
435	436	426	427	429	421	-0.16	-0.14	-0.10	±0.20
602	602	590	596	598	587	-0.09	-0.06	-0.04	±0.20
903	902	884	903	905	889	0.00	0.03	0.05	±0.20
1370	1370	1340	1390	1390	1370	0.13	0.13	0.19	±0.30
1880	1870	1840	1920	1930	1890	0.18	0.27	0.23	±0.30
3050	3040	2990	3160	3160	3110	0.31	0.34	0.34	±0.50
3610	3590	3530	3760	3750	3700	0.35	0.38	0.41	±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

¹Calibration 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	
0.390	0.380	0.370	0.410	0.400	0.380	0.43	0.45	0.23	±1.00
0.530	0.510	0.500	0.560	0.540	0.500	0.48	0.50	0.00	±1.00
0.720	0.700	0.680	0.750	0.710	0.680	0.35	0.12	0.00	±1.00
0.940	0.920	0.890	0.950	0.930	0.890	0.09	0.09	0.00	±1.00
1.28	1.24	1.20	1.27	1.26	1.22	-0.07	0.14	0.14	±1.00
1.75	1.70	1.65	1.75	1.72	1.66	0.00	0.10	0.05	±1.00
2.33	2.27	2.20	2.35	2.30	2.22	0.07	0.11	0.08	±0.20
3.12	3.04	2.95	3.11	3.05	2.95	-0.03	0.03	0.00	±0.20
4.23	4.12	4.00	4.23	4.15	4.02	0.00	0.06	0.04	±0.20
5.72	5.58	5.40	5.72	5.62	5.43	0.00	0.06	0.05	±0.20
7.70	7.51	7.27	7.69	7.54	7.29	-0.01	0.03	0.02	±0.20
10.3	10.0	9.70	10.3	10.1	9.76	0.00	0.09	0.05	±0.20
13.9	13.6	13.1	13.9	13.6	13.2	0.00	0.00	0.07	±0.20
18.7	18.3	17.7	18.8	18.3	17.7	0.05	0.00	0.00	±0.20
25.2	24.7	23.9	25.3	24.7	23.9	0.03	0.00	0.00	±0.20
33.6	33.0	31.8	33.8	33.2	32.0	0.05	0.05	0.05	±0.20
45.4	44.6	43.0	45.7	44.8	43.3	0.06	0.04	0.06	±0.20
61.5	60.4	58.4	61.9	60.7	58.6	0.06	0.04	0.03	±0.20
84.6	83.1	80.3	84.2	82.8	80.0	-0.04	-0.03	-0.03	±0.20
110	109	105	110	108	105	0.00	-0.08	0.00	±0.20
152	150	145	151	149	144	-0.06	-0.06	-0.06	±0.20
211	208	201	210	207	200	-0.04	-0.04	-0.04	±0.20
292	288	278	294	283	280	0.06	-0.15	0.06	±0.20
433	427	412	425	420	407	-0.16	-0.14	-0.11	±0.20
598	590	571	593	585	567	-0.07	-0.07	-0.06	±0.20
898	883	856	898	886	860	0.00	0.03	0.04	±0.20
1360	1340	1300	1380	1360	1320	0.13	0.13	0.13	±0.30
1870	1830	1780	1910	1880	1830	0.18	0.23	0.24	±0.30
3040	2980	2890	3150	3090	3000	0.31	0.31	0.32	±0.50
3590	3520	3420	3740	3670	3570	0.36	0.36	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 < 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

¹Calibration 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
0.350	0.220	0.100	0.360	0.230	0.130	0.24	0.39	2.28	±5.00	±5.00	±5.00
0.480	0.300	0.140	0.490	0.310	0.150	0.18	0.28	0.60	±5.00	±5.00	±5.00
0.650	0.410	0.190	0.670	0.420	0.210	0.26	0.21	0.87	±5.00	±5.00	±5.00
0.850	0.540	0.240	0.870	0.540	0.250	0.20	0.00	0.35	±5.00	±5.00	±5.00
1.15	0.730	0.330	1.17	0.720	0.330	0.15	-0.12	0.00	±5.00	±5.00	±5.00
1.59	1.00	0.450	1.60	1.01	0.460	0.05	0.09	0.19	±5.00	±5.00	±5.00
2.11	1.33	0.600	2.13	1.34	0.570	0.08	0.07	-0.45	±1.00	±5.00	±5.00
2.83	1.79	0.800	2.87	1.78	0.820	0.12	-0.05	0.21	±1.00	±5.00	±5.00
3.84	2.43	1.09	3.88	2.41	1.04	0.09	-0.07	-0.41	±1.00	±1.00	±5.00
5.20	3.29	1.47	5.26	3.30	1.45	0.10	0.03	-0.12	±1.00	±1.00	±5.00
7.00	4.43	1.98	7.05	4.42	1.92	0.06	-0.02	-0.27	±1.00	±1.00	±5.00
9.35	5.91	2.64	9.43	5.91	2.57	0.07	0.00	-0.23	±1.00	±1.00	±1.00
12.6	7.99	3.56	12.7	7.99	3.52	0.07	0.00	-0.10	±1.00	±1.00	±1.00
17.1	10.8	4.80	17.2	10.8	4.69	0.05	0.00	-0.20	±1.00	±1.00	±1.00
23.0	14.5	6.47	23.1	14.5	6.33	0.04	0.00	-0.19	±1.00	±1.00	±1.00
30.7	19.4	8.63	31.0	19.4	8.50	0.08	0.00	-0.13	±1.00	±1.00	±1.00
41.5	26.2	11.7	41.9	26.3	11.5	0.08	0.03	-0.15	±1.00	±1.00	±1.00
56.2	35.6	15.8	56.8	35.6	15.6	0.09	0.00	-0.11	±1.00	±1.00	±1.00
77.4	49.0	21.7	77.5	48.6	21.2	0.01	-0.07	-0.20	±1.00	±1.00	±1.00
101	64.0	28.4	101	63.6	27.8	0.00	-0.05	-0.19	±1.00	±1.00	±1.00
139	88.1	39.0	139	87.5	38.2	0.00	-0.06	-0.18	±1.00	±1.00	±1.00
193	122	54.1	194	122	53.1	0.04	0.00	-0.16	±1.00	±1.00	±1.00
268	170	75.0	271	170	74.2	0.10	0.00	-0.09	±1.00	±1.00	±1.00
398	251	111	381	241	110	-0.38	-0.35	-0.08	±1.00	±1.00	±1.00
550	347	154	530	335	154	-0.32	-0.31	0.00	±1.00	±1.00	±1.00
823	520	231	802	508	233	-0.22	-0.20	0.07	±1.00	±1.00	±1.00
1250	790	350	1240	782	359	-0.07	-0.09	0.22	±1.00	±1.00	±1.00
1710	1080	479	1710	1080	472	0.00	0.00	-0.13	±1.00	±1.00	±1.00
2770	1750	779	2800	1770	778	0.09	0.10	-0.01	±1.00	±1.00	±1.00
3280	2070	922	3330	2110	926	0.13	0.17	0.04	±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	3.23	3.24	3.24	3.24	3.25	3.23	0.03	0.03	-0.03	±0.3
3200	3.25	3.26	3.25	3.25	3.23	3.23	0.00	-0.08	-0.05	±0.3
4000	3.25	3.26	3.25	3.27	3.27	3.26	0.05	0.03	0.03	±0.3
5200	3.23	3.24	3.23	3.24	3.25	3.21	0.03	0.03	-0.05	±0.3
6600	3.20	3.21	3.20	3.22	3.20	3.19	0.05	-0.03	-0.03	±0.3
8200	3.17	3.17	3.17	3.17	3.16	3.16	0.00	-0.03	-0.03	±0.3
9000	3.15	3.15	3.15	3.15	3.15	3.15	0.00	0.00	0.00	±0.3
10600	4.37	4.31	4.29	4.34	4.31	4.32	-0.06	0.00	0.06	±0.3
13400	4.37	4.33	4.31	4.38	4.34	4.32	0.02	0.02	0.02	±0.3
17000	4.38	4.33	4.31	4.40	4.33	4.32	0.04	0.00	0.02	±0.3
21400	4.41	4.36	4.34	4.42	4.35	4.34	0.02	-0.02	0.00	±0.3
27200	4.40	4.35	4.33	4.41	4.35	4.34	0.02	0.00	0.02	±0.3
34400	4.41	4.37	4.35	4.41	4.37	4.35	0.00	0.00	0.00	±0.3
40000	4.40	4.36	4.34	4.40	4.37	4.35	0.00	0.02	0.02	±0.3
43600	4.39	4.36	4.34	4.40	4.36	4.35	0.02	0.00	0.02	±0.3
55400	4.38	4.35	4.33	4.38	4.35	4.34	0.00	0.00	0.02	±0.3
70000	4.37	4.33	4.32	4.37	4.34	4.32	0.00	0.02	0.00	±0.3
88800	4.35	4.32	4.30	4.36	4.32	4.31	0.02	0.00	0.02	±0.3
112400	4.34	4.30	4.29	4.34	4.31	4.30	0.00	0.02	0.02	±0.3
142400	4.32	4.29	4.27	4.32	4.29	4.27	0.00	0.00	0.00	±0.3
161750	4.31	4.28	4.26	4.30	4.28	4.26	-0.02	0.00	0.00	±0.3
180400	4.29	4.26	4.25	4.29	4.27	4.25	0.00	0.02	0.00	±0.3
228400	4.26	4.23	4.21	4.26	4.23	4.22	0.00	0.00	0.02	±0.3
289400	4.21	4.19	4.17	4.21	4.19	4.17	0.00	0.00	0.00	±0.3
366400	4.17	4.15	4.13	4.17	4.15	4.13	0.00	0.00	0.00	±0.3
400000	4.15	4.13	4.11	4.16	4.13	4.12	0.02	0.00	0.02	±0.3
464000	4.12	4.10	4.09	4.13	4.11	4.09	0.02	0.02	0.00	±0.3
587800	4.07	4.05	4.04	4.08	4.05	4.04	0.02	0.00	0.00	±0.3
744200	4.03	4.01	4.00	4.03	4.01	4.00	0.00	0.00	0.00	±0.3
942600	4.00	3.99	3.98	4.01	3.99	3.98	0.02	0.00	0.00	±0.3
1193600	3.98	3.96	3.95	3.99	3.97	3.96	0.02	0.02	0.02	±0.3
1511600	3.98	3.96	3.94	3.99	3.96	3.95	0.02	0.00	0.02	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.93	0.00	0.02	0.00	±0.3
2424400	3.94	3.92	3.90	3.95	3.93	3.91	0.02	0.02	0.02	±0.3
3070200	3.90	3.88	3.86	3.90	3.89	3.87	0.00	0.02	0.02	±0.3
3888000	3.84	3.82	3.81	3.85	3.82	3.80	0.02	0.00	-0.02	±0.3
4000000	3.83	3.81	3.80	3.85	3.81	3.80	0.05	0.00	0.00	±0.3
4923800	3.76	3.74	3.72	3.77	3.74	3.73	0.02	0.00	0.02	±0.3
6235400	3.65	3.63	3.62	3.66	3.64	3.62	0.02	0.02	0.00	±0.3
7896400	3.52	3.50	3.48	3.51	3.50	3.48	-0.02	0.00	0.00	±0.3
10000000	3.37	3.35	3.33	3.40	3.36	3.36	0.08	0.03	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, 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	3.23	3.24	3.24	3.24	3.25	3.24	0.03	0.03	0.00	±0.3
3200	3.25	3.26	3.25	3.24	3.23	3.23	-0.03	-0.08	-0.05	±0.3
4000	3.25	3.26	3.25	3.26	3.27	3.26	0.03	0.03	0.03	±0.3
5200	3.23	3.24	3.23	3.23	3.25	3.22	0.00	0.03	-0.03	±0.3
6600	3.20	3.21	3.20	3.21	3.20	3.20	0.03	-0.03	0.00	±0.3
8200	3.17	3.17	3.17	3.17	3.15	3.17	0.00	-0.05	0.00	±0.3
9000	3.15	3.15	3.15	3.15	3.15	3.15	0.00	0.00	0.00	±0.3
10600	4.37	4.31	4.29	4.36	4.31	4.28	-0.02	0.00	-0.02	±0.3
13400	4.37	4.33	4.31	4.38	4.32	4.32	0.02	-0.02	0.02	±0.3
17000	4.38	4.33	4.31	4.39	4.32	4.31	0.02	-0.02	0.00	±0.3
21400	4.41	4.36	4.34	4.40	4.36	4.34	-0.02	0.00	0.00	±0.3
27200	4.40	4.35	4.33	4.40	4.36	4.33	0.00	0.02	0.00	±0.3
34400	4.41	4.37	4.35	4.41	4.37	4.35	0.00	0.00	0.00	±0.3
40000	4.40	4.36	4.34	4.39	4.36	4.34	-0.02	0.00	0.00	±0.3
43600	4.39	4.36	4.34	4.39	4.37	4.33	0.00	0.02	-0.02	±0.3
55400	4.38	4.35	4.33	4.38	4.35	4.34	0.00	0.00	0.02	±0.3
70000	4.37	4.33	4.32	4.36	4.33	4.31	-0.02	0.00	-0.02	±0.3
88800	4.35	4.32	4.30	4.36	4.33	4.30	0.02	0.02	0.00	±0.3
112400	4.34	4.30	4.29	4.33	4.31	4.30	-0.02	0.02	0.02	±0.3
142400	4.32	4.29	4.27	4.32	4.29	4.28	0.00	0.00	0.02	±0.3
161750	4.31	4.28	4.26	4.31	4.28	4.26	0.00	0.00	0.00	±0.3
180400	4.29	4.26	4.25	4.29	4.27	4.25	0.00	0.02	0.00	±0.3
228400	4.26	4.23	4.21	4.26	4.23	4.22	0.00	0.00	0.02	±0.3
289400	4.21	4.19	4.17	4.21	4.19	4.18	0.00	0.00	0.02	±0.3
366400	4.17	4.15	4.13	4.17	4.15	4.13	0.00	0.00	0.00	±0.3
400000	4.15	4.13	4.11	4.16	4.13	4.11	0.02	0.00	0.00	±0.3
464000	4.12	4.10	4.09	4.13	4.11	4.09	0.02	0.02	0.00	±0.3
587800	4.07	4.05	4.04	4.08	4.05	4.04	0.02	0.00	0.00	±0.3
744200	4.03	4.01	4.00	4.03	4.02	4.00	0.00	0.02	0.00	±0.3
942600	4.00	3.99	3.98	4.01	3.98	3.96	0.02	-0.02	-0.04	±0.3
1193600	3.98	3.96	3.95	3.98	3.97	3.94	0.00	0.02	-0.02	±0.3
1511600	3.98	3.96	3.94	3.98	3.97	3.95	0.00	0.02	0.02	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.95	0.00	0.02	0.04	±0.3
2424400	3.94	3.92	3.90	3.94	3.92	3.92	0.00	0.00	0.04	±0.3
3070200	3.90	3.88	3.86	3.90	3.88	3.88	0.00	0.00	0.04	±0.3
3888000	3.84	3.82	3.81	3.84	3.83	3.81	0.00	0.02	0.00	±0.3
4000000	3.83	3.81	3.80	3.83	3.82	3.80	0.00	0.02	0.00	±0.3
4923800	3.76	3.74	3.72	3.76	3.74	3.73	0.00	0.00	0.02	±0.3
6235400	3.65	3.63	3.62	3.66	3.64	3.64	0.02	0.02	0.05	±0.3
7896400	3.52	3.50	3.48	3.52	3.51	3.49	0.00	0.02	0.02	±0.3
10000000	3.37	3.35	3.33	3.36	3.37	3.37	-0.03	0.05	0.10	±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	3.23	3.24	3.24	3.24	3.25	3.24	0.03	0.03	0.00	±0.3
3200	3.25	3.26	3.25	3.25	3.23	3.23	0.00	-0.08	-0.05	±0.3
4000	3.25	3.26	3.25	3.26	3.27	3.26	0.03	0.03	0.03	±0.3
5200	3.23	3.24	3.23	3.24	3.24	3.22	0.03	0.00	-0.03	±0.3
6600	3.20	3.21	3.20	3.21	3.20	3.20	0.03	-0.03	0.00	±0.3
8200	3.17	3.17	3.17	3.17	3.16	3.16	0.00	-0.03	-0.03	±0.3
9000	3.15	3.15	3.15	3.14	3.15	3.15	-0.03	0.00	0.00	±0.3
10600	4.37	4.31	4.29	4.36	4.32	4.31	-0.02	0.02	0.04	±0.3
13400	4.37	4.33	4.31	4.37	4.33	4.32	0.00	0.00	0.02	±0.3
17000	4.38	4.33	4.31	4.38	4.34	4.31	0.00	0.02	0.00	±0.3
21400	4.41	4.36	4.34	4.42	4.36	4.35	0.02	0.00	0.02	±0.3
27200	4.40	4.35	4.33	4.41	4.35	4.35	0.02	0.00	0.04	±0.3
34400	4.41	4.37	4.35	4.41	4.37	4.36	0.00	0.00	0.02	±0.3
40000	4.40	4.36	4.34	4.39	4.36	4.35	-0.02	0.00	0.02	±0.3
43600	4.39	4.36	4.34	4.40	4.36	4.35	0.02	0.00	0.02	±0.3
55400	4.38	4.35	4.33	4.39	4.35	4.34	0.02	0.00	0.02	±0.3
70000	4.37	4.33	4.32	4.38	4.33	4.32	0.02	0.00	0.00	±0.3
88800	4.35	4.32	4.30	4.36	4.32	4.31	0.02	0.00	0.02	±0.3
112400	4.34	4.30	4.29	4.35	4.31	4.30	0.02	0.02	0.02	±0.3
142400	4.32	4.29	4.27	4.32	4.29	4.27	0.00	0.00	0.00	±0.3
161750	4.31	4.28	4.26	4.31	4.28	4.26	0.00	0.00	0.00	±0.3
180400	4.29	4.26	4.25	4.29	4.27	4.25	0.00	0.02	0.00	±0.3
228400	4.26	4.23	4.21	4.26	4.23	4.22	0.00	0.00	0.02	±0.3
289400	4.21	4.19	4.17	4.22	4.19	4.17	0.02	0.00	0.00	±0.3
366400	4.17	4.15	4.13	4.18	4.15	4.14	0.02	0.00	0.02	±0.3
400000	4.15	4.13	4.11	4.16	4.13	4.12	0.02	0.00	0.02	±0.3
464000	4.12	4.10	4.09	4.12	4.10	4.09	0.00	0.00	0.00	±0.3
587800	4.07	4.05	4.04	4.08	4.05	4.05	0.02	0.00	0.02	±0.3
744200	4.03	4.01	4.00	4.04	4.01	4.01	0.02	0.00	0.02	±0.3
942600	4.00	3.99	3.98	4.01	3.99	3.98	0.02	0.00	0.00	±0.3
1193600	3.98	3.96	3.95	3.99	3.97	3.95	0.02	0.02	0.00	±0.3
1511600	3.98	3.96	3.94	3.98	3.96	3.95	0.00	0.00	0.02	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.94	0.00	0.02	0.02	±0.3
2424400	3.94	3.92	3.90	3.94	3.92	3.91	0.00	0.00	0.02	±0.3
3070200	3.90	3.88	3.86	3.91	3.89	3.86	0.02	0.02	0.00	±0.3
3888000	3.84	3.82	3.81	3.84	3.82	3.82	0.00	0.00	0.02	±0.3
4000000	3.83	3.81	3.80	3.83	3.81	3.79	0.00	0.00	-0.02	±0.3
4923800	3.76	3.74	3.72	3.76	3.74	3.73	0.00	0.00	0.02	±0.3
6235400	3.65	3.63	3.62	3.65	3.64	3.62	0.00	0.02	0.00	±0.3
7896400	3.52	3.50	3.48	3.52	3.50	3.50	0.00	0.00	0.05	±0.3
10000000	3.37	3.35	3.33	3.35	3.36	3.33	-0.05	0.03	0.00	±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	3.23	3.24	3.24	3.24	3.25	3.24	0.03	0.03	0.00	±0.3
3200	3.25	3.26	3.25	3.24	3.23	3.22	-0.03	-0.08	-0.08	±0.3
4000	3.25	3.26	3.25	3.26	3.27	3.26	0.03	0.03	0.03	±0.3
5200	3.23	3.24	3.23	3.23	3.25	3.21	0.00	0.03	-0.05	±0.3
6600	3.20	3.21	3.20	3.21	3.20	3.20	0.03	-0.03	0.00	±0.3
8200	3.17	3.17	3.17	3.16	3.15	3.16	-0.03	-0.05	-0.03	±0.3
9000	3.15	3.15	3.15	3.15	3.15	3.15	0.00	0.00	0.00	±0.3
10600	4.37	4.31	4.29	4.36	4.29	4.29	-0.02	-0.04	0.00	±0.3
13400	4.37	4.33	4.31	4.38	4.34	4.32	0.02	0.02	0.02	±0.3
17000	4.38	4.33	4.31	4.38	4.34	4.32	0.00	0.02	0.02	±0.3
21400	4.41	4.36	4.34	4.40	4.37	4.33	-0.02	0.02	-0.02	±0.3
27200	4.40	4.35	4.33	4.40	4.35	4.34	0.00	0.00	0.02	±0.3
34400	4.41	4.37	4.35	4.41	4.38	4.35	0.00	0.02	0.00	±0.3
40000	4.40	4.36	4.34	4.40	4.37	4.34	0.00	0.02	0.00	±0.3
43600	4.39	4.36	4.34	4.40	4.36	4.34	0.02	0.00	0.00	±0.3
55400	4.38	4.35	4.33	4.38	4.35	4.34	0.00	0.00	0.02	±0.3
70000	4.37	4.33	4.32	4.37	4.34	4.33	0.00	0.02	0.02	±0.3
88800	4.35	4.32	4.30	4.35	4.33	4.31	0.00	0.02	0.02	±0.3
112400	4.34	4.30	4.29	4.33	4.32	4.30	-0.02	0.04	0.02	±0.3
142400	4.32	4.29	4.27	4.32	4.29	4.27	0.00	0.00	0.00	±0.3
161750	4.31	4.28	4.26	4.31	4.29	4.27	0.00	0.02	0.02	±0.3
180400	4.29	4.26	4.25	4.29	4.27	4.25	0.00	0.02	0.00	±0.3
228400	4.26	4.23	4.21	4.26	4.24	4.22	0.00	0.02	0.02	±0.3
289400	4.21	4.19	4.17	4.21	4.20	4.17	0.00	0.02	0.00	±0.3
366400	4.17	4.15	4.13	4.18	4.15	4.13	0.02	0.00	0.00	±0.3
400000	4.15	4.13	4.11	4.16	4.13	4.11	0.02	0.00	0.00	±0.3
464000	4.12	4.10	4.09	4.12	4.11	4.09	0.00	0.02	0.00	±0.3
587800	4.07	4.05	4.04	4.08	4.05	4.04	0.02	0.00	0.00	±0.3
744200	4.03	4.01	4.00	4.03	4.02	4.00	0.00	0.02	0.00	±0.3
942600	4.00	3.99	3.98	4.01	4.00	3.98	0.02	0.02	0.00	±0.3
1193600	3.98	3.96	3.95	3.98	3.97	3.95	0.00	0.02	0.00	±0.3
1511600	3.98	3.96	3.94	3.99	3.97	3.95	0.02	0.02	0.02	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.94	0.00	0.02	0.02	±0.3
2424400	3.94	3.92	3.90	3.94	3.93	3.91	0.00	0.02	0.02	±0.3
3070200	3.90	3.88	3.86	3.90	3.88	3.85	0.00	0.00	-0.02	±0.3
3888000	3.84	3.82	3.81	3.85	3.84	3.83	0.02	0.05	0.05	±0.3
4000000	3.83	3.81	3.80	3.84	3.82	3.79	0.02	0.02	-0.02	±0.3
4923800	3.76	3.74	3.72	3.76	3.73	3.73	0.00	-0.02	0.02	±0.3
6235400	3.65	3.63	3.62	3.66	3.64	3.63	0.02	0.02	0.02	±0.3
7896400	3.52	3.50	3.48	3.53	3.48	3.50	0.02	-0.05	0.05	±0.3
10000000	3.37	3.35	3.33	3.35	3.33	3.38	-0.05	-0.05	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	3.23	3.24	3.24	3.24	3.25	3.24	0.03	0.03	0.00	±0.3
3200	3.25	3.26	3.25	3.24	3.23	3.21	-0.03	-0.08	-0.11	±0.3
4000	3.25	3.26	3.25	3.26	3.27	3.26	0.03	0.03	0.03	±0.3
5200	3.23	3.24	3.23	3.24	3.25	3.21	0.03	0.03	-0.05	±0.3
6600	3.20	3.21	3.20	3.22	3.20	3.20	0.05	-0.03	0.00	±0.3
8200	3.17	3.17	3.17	3.16	3.16	3.16	-0.03	-0.03	-0.03	±0.3
9000	3.15	3.15	3.15	3.15	3.15	3.15	0.00	0.00	0.00	±0.3
10600	4.37	4.31	4.29	4.35	4.30	4.31	-0.04	-0.02	0.04	±0.3
13400	4.37	4.33	4.31	4.37	4.32	4.32	0.00	-0.02	0.02	±0.3
17000	4.38	4.33	4.31	4.39	4.33	4.32	0.02	0.00	0.02	±0.3
21400	4.41	4.36	4.34	4.42	4.35	4.34	0.02	-0.02	0.00	±0.3
27200	4.40	4.35	4.33	4.40	4.34	4.34	0.00	-0.02	0.02	±0.3
34400	4.41	4.37	4.35	4.41	4.38	4.36	0.00	0.02	0.02	±0.3
40000	4.40	4.36	4.34	4.39	4.37	4.34	-0.02	0.02	0.00	±0.3
43600	4.39	4.36	4.34	4.40	4.36	4.34	0.02	0.00	0.00	±0.3
55400	4.38	4.35	4.33	4.38	4.36	4.34	0.00	0.02	0.02	±0.3
70000	4.37	4.33	4.32	4.37	4.34	4.31	0.00	0.02	-0.02	±0.3
88800	4.35	4.32	4.30	4.35	4.32	4.30	0.00	0.00	0.00	±0.3
112400	4.34	4.30	4.29	4.34	4.31	4.29	0.00	0.02	0.00	±0.3
142400	4.32	4.29	4.27	4.32	4.29	4.28	0.00	0.00	0.02	±0.3
161750	4.31	4.28	4.26	4.30	4.28	4.26	-0.02	0.00	0.00	±0.3
180400	4.29	4.26	4.25	4.29	4.27	4.25	0.00	0.02	0.00	±0.3
228400	4.26	4.23	4.21	4.26	4.23	4.22	0.00	0.00	0.02	±0.3
289400	4.21	4.19	4.17	4.21	4.19	4.17	0.00	0.00	0.00	±0.3
366400	4.17	4.15	4.13	4.18	4.15	4.14	0.02	0.00	0.02	±0.3
400000	4.15	4.13	4.11	4.15	4.13	4.11	0.00	0.00	0.00	±0.3
464000	4.12	4.10	4.09	4.12	4.11	4.09	0.00	0.02	0.00	±0.3
587800	4.07	4.05	4.04	4.07	4.06	4.04	0.00	0.02	0.00	±0.3
744200	4.03	4.01	4.00	4.03	4.01	4.00	0.00	0.00	0.00	±0.3
942600	4.00	3.99	3.98	4.00	3.99	3.98	0.00	0.00	0.00	±0.3
1193600	3.98	3.96	3.95	3.98	3.97	3.94	0.00	0.02	-0.02	±0.3
1511600	3.98	3.96	3.94	3.98	3.96	3.96	0.00	0.00	0.04	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.95	0.00	0.02	0.04	±0.3
2424400	3.94	3.92	3.90	3.94	3.92	3.92	0.00	0.00	0.04	±0.3
3070200	3.90	3.88	3.86	3.91	3.89	3.86	0.02	0.02	0.00	±0.3
3888000	3.84	3.82	3.81	3.85	3.82	3.83	0.02	0.00	0.05	±0.3
4000000	3.83	3.81	3.80	3.82	3.81	3.79	-0.02	0.00	-0.02	±0.3
4923800	3.76	3.74	3.72	3.75	3.74	3.72	-0.02	0.00	0.00	±0.3
6235400	3.65	3.63	3.62	3.66	3.64	3.63	0.02	0.02	0.02	±0.3
7896400	3.52	3.50	3.48	3.51	3.50	3.50	-0.02	0.00	0.05	±0.3
10000000	3.37	3.35	3.33	3.32	3.36	3.35	-0.13	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 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	3.23	3.24	3.24	3.23	3.25	3.24	0.00	0.03	0.00	±0.3
3200	3.25	3.26	3.25	3.25	3.23	3.23	0.00	-0.08	-0.05	±0.3
4000	3.25	3.26	3.25	3.26	3.26	3.26	0.03	0.00	0.03	±0.3
5200	3.23	3.24	3.23	3.24	3.25	3.21	0.03	0.03	-0.05	±0.3
6600	3.20	3.21	3.20	3.21	3.20	3.19	0.03	-0.03	-0.03	±0.3
8200	3.17	3.17	3.17	3.17	3.16	3.16	0.00	-0.03	-0.03	±0.3
9000	3.15	3.15	3.15	3.15	3.16	3.15	0.00	0.03	0.00	±0.3
10600	4.37	4.31	4.29	4.37	4.28	4.30	0.00	-0.06	0.02	±0.3
13400	4.37	4.33	4.31	4.37	4.32	4.32	0.00	-0.02	0.02	±0.3
17000	4.38	4.33	4.31	4.37	4.34	4.32	-0.02	0.02	0.02	±0.3
21400	4.41	4.36	4.34	4.40	4.36	4.35	-0.02	0.00	0.02	±0.3
27200	4.40	4.35	4.33	4.40	4.34	4.33	0.00	-0.02	0.00	±0.3
34400	4.41	4.37	4.35	4.41	4.37	4.36	0.00	0.00	0.02	±0.3
40000	4.40	4.36	4.34	4.39	4.36	4.34	-0.02	0.00	0.00	±0.3
43600	4.39	4.36	4.34	4.39	4.34	4.34	0.00	-0.04	0.00	±0.3
55400	4.38	4.35	4.33	4.38	4.35	4.34	0.00	0.00	0.02	±0.3
70000	4.37	4.33	4.32	4.36	4.33	4.32	-0.02	0.00	0.00	±0.3
88800	4.35	4.32	4.30	4.36	4.32	4.31	0.02	0.00	0.02	±0.3
112400	4.34	4.30	4.29	4.34	4.31	4.30	0.00	0.02	0.02	±0.3
142400	4.32	4.29	4.27	4.32	4.28	4.27	0.00	-0.02	0.00	±0.3
161750	4.31	4.28	4.26	4.30	4.28	4.27	-0.02	0.00	0.02	±0.3
180400	4.29	4.26	4.25	4.29	4.27	4.25	0.00	0.02	0.00	±0.3
228400	4.26	4.23	4.21	4.26	4.23	4.22	0.00	0.00	0.02	±0.3
289400	4.21	4.19	4.17	4.21	4.19	4.17	0.00	0.00	0.00	±0.3
366400	4.17	4.15	4.13	4.17	4.15	4.13	0.00	0.00	0.00	±0.3
400000	4.15	4.13	4.11	4.15	4.13	4.11	0.00	0.00	0.00	±0.3
464000	4.12	4.10	4.09	4.12	4.11	4.09	0.00	0.02	0.00	±0.3
587800	4.07	4.05	4.04	4.07	4.05	4.04	0.00	0.00	0.00	±0.3
744200	4.03	4.01	4.00	4.04	4.01	4.00	0.02	0.00	0.00	±0.3
942600	4.00	3.99	3.98	4.01	3.99	3.98	0.02	0.00	0.00	±0.3
1193600	3.98	3.96	3.95	3.97	3.97	3.95	-0.02	0.02	0.00	±0.3
1511600	3.98	3.96	3.94	3.97	3.96	3.96	-0.02	0.00	0.04	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.94	0.00	0.02	0.02	±0.3
2424400	3.94	3.92	3.90	3.93	3.92	3.91	-0.02	0.00	0.02	±0.3
3070200	3.90	3.88	3.86	3.91	3.88	3.87	0.02	0.00	0.02	±0.3
3888000	3.84	3.82	3.81	3.84	3.83	3.82	0.00	0.02	0.02	±0.3
4000000	3.83	3.81	3.80	3.83	3.81	3.79	0.00	0.00	-0.02	±0.3
4923800	3.76	3.74	3.72	3.75	3.74	3.73	-0.02	0.00	0.02	±0.3
6235400	3.65	3.63	3.62	3.65	3.64	3.64	0.00	0.02	0.05	±0.3
7896400	3.52	3.50	3.48	3.52	3.50	3.50	0.00	0.00	0.05	±0.3
10000000	3.37	3.35	3.33	3.31	3.35	3.37	-0.16	0.00	0.10	±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	3.23	3.24	3.24	3.24	3.25	3.24	0.03	0.03	0.00	±0.3
3200	3.25	3.26	3.25	3.25	3.23	3.23	0.00	-0.08	-0.05	±0.3
4000	3.25	3.26	3.25	3.25	3.27	3.25	0.00	0.03	0.00	±0.3
5200	3.23	3.24	3.23	3.24	3.25	3.21	0.03	0.03	-0.05	±0.3
6600	3.20	3.21	3.20	3.21	3.21	3.20	0.03	0.00	0.00	±0.3
8200	3.17	3.17	3.17	3.16	3.16	3.16	-0.03	-0.03	-0.03	±0.3
9000	3.15	3.15	3.15	3.15	3.15	3.15	0.00	0.00	0.00	±0.3
10600	4.37	4.31	4.29	4.36	4.29	4.30	-0.02	-0.04	0.02	±0.3
13400	4.37	4.33	4.31	4.37	4.32	4.33	0.00	-0.02	0.04	±0.3
17000	4.38	4.33	4.31	4.38	4.34	4.31	0.00	0.02	0.00	±0.3
21400	4.41	4.36	4.34	4.41	4.36	4.35	0.00	0.00	0.02	±0.3
27200	4.40	4.35	4.33	4.40	4.35	4.35	0.00	0.00	0.04	±0.3
34400	4.41	4.37	4.35	4.41	4.37	4.36	0.00	0.00	0.02	±0.3
40000	4.40	4.36	4.34	4.39	4.36	4.35	-0.02	0.00	0.02	±0.3
43600	4.39	4.36	4.34	4.39	4.36	4.35	0.00	0.00	0.02	±0.3
55400	4.38	4.35	4.33	4.38	4.35	4.34	0.00	0.00	0.02	±0.3
70000	4.37	4.33	4.32	4.36	4.34	4.32	-0.02	0.02	0.00	±0.3
88800	4.35	4.32	4.30	4.35	4.33	4.31	0.00	0.02	0.02	±0.3
112400	4.34	4.30	4.29	4.34	4.31	4.30	0.00	0.02	0.02	±0.3
142400	4.32	4.29	4.27	4.32	4.29	4.27	0.00	0.00	0.00	±0.3
161750	4.31	4.28	4.26	4.30	4.28	4.26	-0.02	0.00	0.00	±0.3
180400	4.29	4.26	4.25	4.29	4.27	4.25	0.00	0.02	0.00	±0.3
228400	4.26	4.23	4.21	4.26	4.23	4.22	0.00	0.00	0.02	±0.3
289400	4.21	4.19	4.17	4.21	4.19	4.17	0.00	0.00	0.00	±0.3
366400	4.17	4.15	4.13	4.17	4.15	4.14	0.00	0.00	0.02	±0.3
400000	4.15	4.13	4.11	4.15	4.13	4.12	0.00	0.00	0.02	±0.3
464000	4.12	4.10	4.09	4.12	4.11	4.09	0.00	0.02	0.00	±0.3
587800	4.07	4.05	4.04	4.08	4.06	4.04	0.02	0.02	0.00	±0.3
744200	4.03	4.01	4.00	4.03	4.01	4.00	0.00	0.00	0.00	±0.3
942600	4.00	3.99	3.98	4.01	3.99	3.98	0.02	0.00	0.00	±0.3
1193600	3.98	3.96	3.95	3.97	3.96	3.95	-0.02	0.00	0.00	±0.3
1511600	3.98	3.96	3.94	3.97	3.96	3.95	-0.02	0.00	0.02	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.94	0.00	0.02	0.02	±0.3
2424400	3.94	3.92	3.90	3.93	3.92	3.91	-0.02	0.00	0.02	±0.3
3070200	3.90	3.88	3.86	3.91	3.89	3.87	0.02	0.02	0.02	±0.3
3888000	3.84	3.82	3.81	3.83	3.83	3.81	-0.02	0.02	0.00	±0.3
4000000	3.83	3.81	3.80	3.81	3.81	3.79	-0.05	0.00	-0.02	±0.3
4923800	3.76	3.74	3.72	3.75	3.73	3.72	-0.02	-0.02	0.00	±0.3
6235400	3.65	3.63	3.62	3.65	3.63	3.63	0.00	0.00	0.02	±0.3
7896400	3.52	3.50	3.48	3.52	3.50	3.50	0.00	0.00	0.05	±0.3
10000000	3.37	3.35	3.33	3.26	3.35	3.38	-0.29	0.00	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 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	3.23	3.24	3.24	3.23	3.25	3.24	0.00	0.03	0.00	±0.3
3200	3.25	3.26	3.25	3.25	3.23	3.23	0.00	-0.08	-0.05	±0.3
4000	3.25	3.26	3.25	3.25	3.27	3.27	0.00	0.03	0.05	±0.3
5200	3.23	3.24	3.23	3.24	3.25	3.21	0.03	0.03	-0.05	±0.3
6600	3.20	3.21	3.20	3.21	3.20	3.20	0.03	-0.03	0.00	±0.3
8200	3.17	3.17	3.17	3.16	3.16	3.16	-0.03	-0.03	-0.03	±0.3
9000	3.15	3.15	3.15	3.15	3.15	3.15	0.00	0.00	0.00	±0.3
10600	4.37	4.31	4.29	4.36	4.30	4.31	-0.02	-0.02	0.04	±0.3
13400	4.37	4.33	4.31	4.38	4.33	4.32	0.02	0.00	0.02	±0.3
17000	4.38	4.33	4.31	4.39	4.34	4.32	0.02	0.02	0.02	±0.3
21400	4.41	4.36	4.34	4.41	4.37	4.33	0.00	0.02	-0.02	±0.3
27200	4.40	4.35	4.33	4.40	4.35	4.34	0.00	0.00	0.02	±0.3
34400	4.41	4.37	4.35	4.41	4.37	4.36	0.00	0.00	0.02	±0.3
40000	4.40	4.36	4.34	4.39	4.37	4.36	-0.02	0.02	0.04	±0.3
43600	4.39	4.36	4.34	4.39	4.36	4.34	0.00	0.00	0.00	±0.3
55400	4.38	4.35	4.33	4.39	4.36	4.34	0.02	0.02	0.02	±0.3
70000	4.37	4.33	4.32	4.37	4.34	4.32	0.00	0.02	0.00	±0.3
88800	4.35	4.32	4.30	4.35	4.33	4.31	0.00	0.02	0.02	±0.3
112400	4.34	4.30	4.29	4.33	4.32	4.30	-0.02	0.04	0.02	±0.3
142400	4.32	4.29	4.27	4.32	4.30	4.28	0.00	0.02	0.02	±0.3
161750	4.31	4.28	4.26	4.30	4.28	4.26	-0.02	0.00	0.00	±0.3
180400	4.29	4.26	4.25	4.29	4.28	4.25	0.00	0.04	0.00	±0.3
228400	4.26	4.23	4.21	4.25	4.24	4.22	-0.02	0.02	0.02	±0.3
289400	4.21	4.19	4.17	4.21	4.20	4.17	0.00	0.02	0.00	±0.3
366400	4.17	4.15	4.13	4.17	4.16	4.14	0.00	0.02	0.02	±0.3
400000	4.15	4.13	4.11	4.16	4.14	4.11	0.02	0.02	0.00	±0.3
464000	4.12	4.10	4.09	4.12	4.11	4.09	0.00	0.02	0.00	±0.3
587800	4.07	4.05	4.04	4.08	4.07	4.04	0.02	0.04	0.00	±0.3
744200	4.03	4.01	4.00	4.03	4.03	4.00	0.00	0.04	0.00	±0.3
942600	4.00	3.99	3.98	4.01	4.00	3.98	0.02	0.02	0.00	±0.3
1193600	3.98	3.96	3.95	3.98	3.97	3.95	0.00	0.02	0.00	±0.3
1511600	3.98	3.96	3.94	3.98	3.97	3.96	0.00	0.02	0.04	±0.3
1914400	3.97	3.94	3.93	3.97	3.95	3.95	0.00	0.02	0.04	±0.3
2424400	3.94	3.92	3.90	3.93	3.92	3.91	-0.02	0.00	0.02	±0.3
3070200	3.90	3.88	3.86	3.91	3.89	3.87	0.02	0.02	0.02	±0.3
3888000	3.84	3.82	3.81	3.84	3.82	3.83	0.00	0.00	0.05	±0.3
4000000	3.83	3.81	3.80	3.82	3.81	3.80	-0.02	0.00	0.00	±0.3
4923800	3.76	3.74	3.72	3.75	3.74	3.73	-0.02	0.00	0.02	±0.3
6235400	3.65	3.63	3.62	3.65	3.64	3.64	0.00	0.02	0.05	±0.3
7896400	3.52	3.50	3.48	3.53	3.51	3.50	0.02	0.02	0.05	±0.3
10000000	3.37	3.35	3.33	3.36	3.35	3.36	-0.03	0.00	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

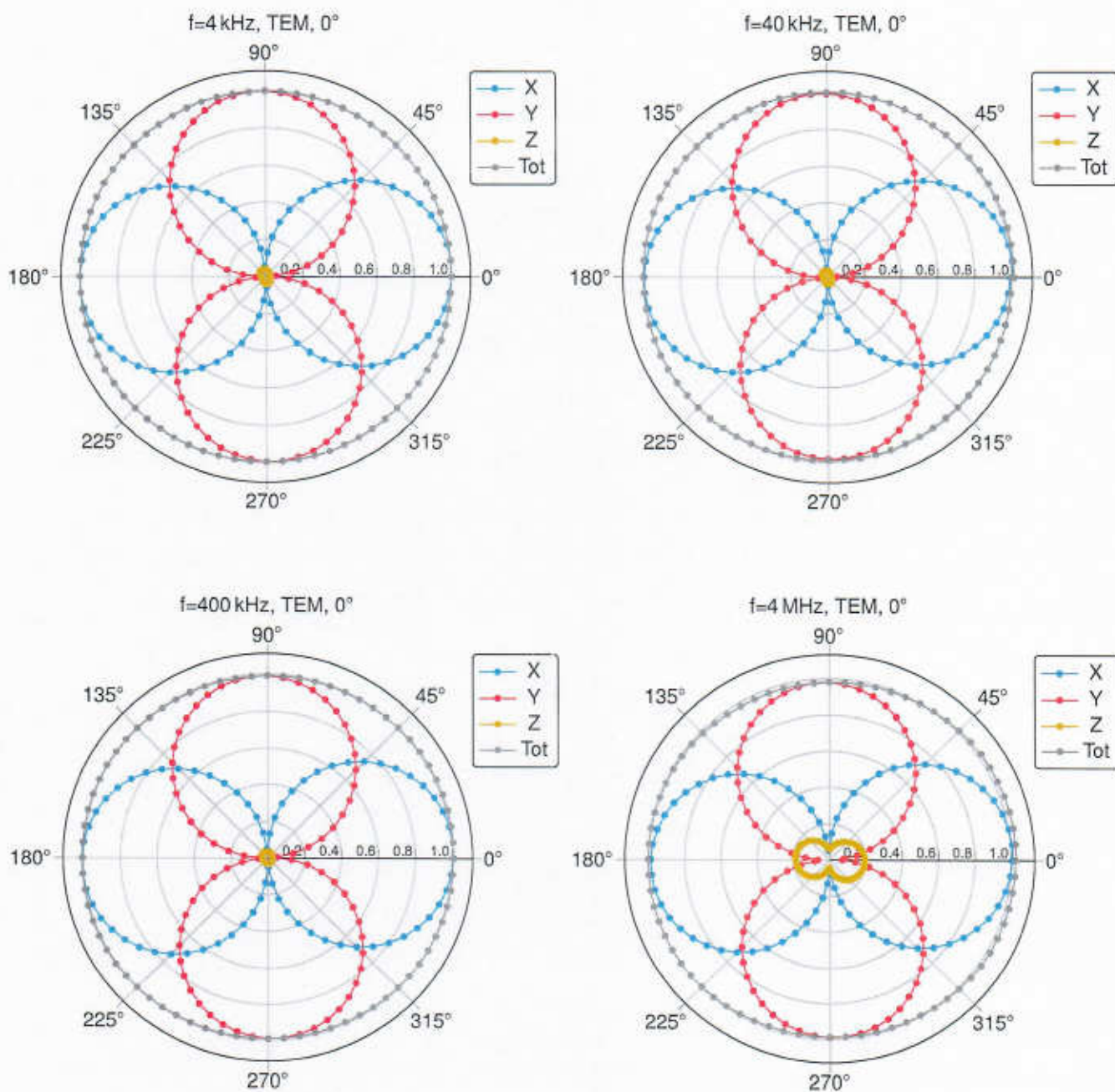
f/(Hz)	E-field/(V/m) Applied			E-field/(V/m) Reading			Difference/(dB)			Tolerance/(dB)
	x	y	z	x	y	z	x	y	z	
3000	83.5	83.5	82.0	83.6	83.5	82.0	0.01	0.00	0.00	±0.3
3200	83.5	83.5	82.0	83.8	83.3	80.8	0.03	-0.02	-0.13	±0.3
4000	83.5	83.5	82.0	83.7	83.5	82.0	0.02	0.00	0.00	±0.3
5200	83.5	83.5	82.0	84.3	84.0	82.0	0.08	0.05	0.00	±0.3
6600	83.5	83.5	82.0	84.1	83.6	82.2	0.06	0.01	0.02	±0.3
8200	83.5	83.5	82.0	83.7	83.4	81.7	0.02	-0.01	-0.03	±0.3
9000	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
10600	83.5	83.5	82.0	83.8	83.3	82.1	0.03	-0.02	0.01	±0.3
13400	83.5	83.5	82.0	83.7	83.3	82.2	0.02	-0.02	0.02	±0.3
17000	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
21400	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
27200	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
34400	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
40000	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
43600	83.5	83.5	82.0	83.7	83.5	82.0	0.02	0.00	0.00	±0.3
55400	83.5	83.5	82.0	83.7	83.5	82.0	0.02	0.00	0.00	±0.3
70000	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
88800	83.5	83.5	82.0	83.8	83.5	82.0	0.03	0.00	0.00	±0.3
112400	83.5	83.5	82.0	83.7	83.5	82.0	0.02	0.00	0.00	±0.3
142400	83.5	83.5	82.0	83.7	83.5	82.0	0.02	0.00	0.00	±0.3
161750	83.5	83.5	82.0	83.7	83.5	82.1	0.02	0.00	0.01	±0.3
180400	83.5	83.5	82.0	83.7	83.5	82.0	0.02	0.00	0.00	±0.3
228400	83.5	83.5	82.0	83.6	83.5	82.0	0.01	0.00	0.00	±0.3
289400	83.5	83.5	82.0	83.6	83.5	82.0	0.01	0.00	0.00	±0.3
366400	83.5	83.5	82.0	83.6	83.5	82.0	0.01	0.00	0.00	±0.3
400000	83.5	83.5	82.0	83.5	83.5	82.0	0.00	0.00	0.00	±0.3
464000	83.5	83.5	82.0	83.5	83.5	82.0	0.00	0.00	0.00	±0.3
587800	83.5	83.5	82.0	83.4	83.5	82.0	-0.01	0.00	0.00	±0.3
744200	83.5	83.5	82.0	83.4	83.5	82.0	-0.01	0.00	0.00	±0.3
942600	83.5	83.5	82.0	83.4	83.5	82.0	-0.01	0.00	0.00	±0.3
1193600	83.5	83.5	82.0	83.4	83.5	82.0	-0.01	0.00	0.00	±0.3
1511600	83.5	83.5	82.0	83.5	83.5	82.0	0.00	0.00	0.00	±0.3
1914400	83.5	83.5	82.0	83.5	83.5	82.0	0.00	0.00	0.00	±0.3
2424400	82.8	82.8	81.2	82.8	82.8	81.3	0.00	0.00	0.01	±0.3
3070200	82.5	82.5	81.0	82.6	82.6	81.1	0.01	0.01	0.01	±0.3
3888000	82.6	82.6	81.1	82.7	82.7	81.1	0.01	0.01	0.00	±0.3
4000000	82.7	82.7	81.2	82.9	82.8	81.2	0.02	0.01	0.00	±0.3
4923800	83.1	83.1	81.6	83.2	83.1	81.6	0.01	0.00	0.00	±0.3
6235400	84.6	84.6	83.1	84.6	84.6	83.1	0.00	0.00	0.00	±0.3
7896400	88.3	88.3	86.8	88.3	88.3	86.9	0.00	0.00	0.01	±0.3
10000000	96.1	96.1	94.4	96.1	96.1	94.5	0.00	0.00	0.01	±0.3

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

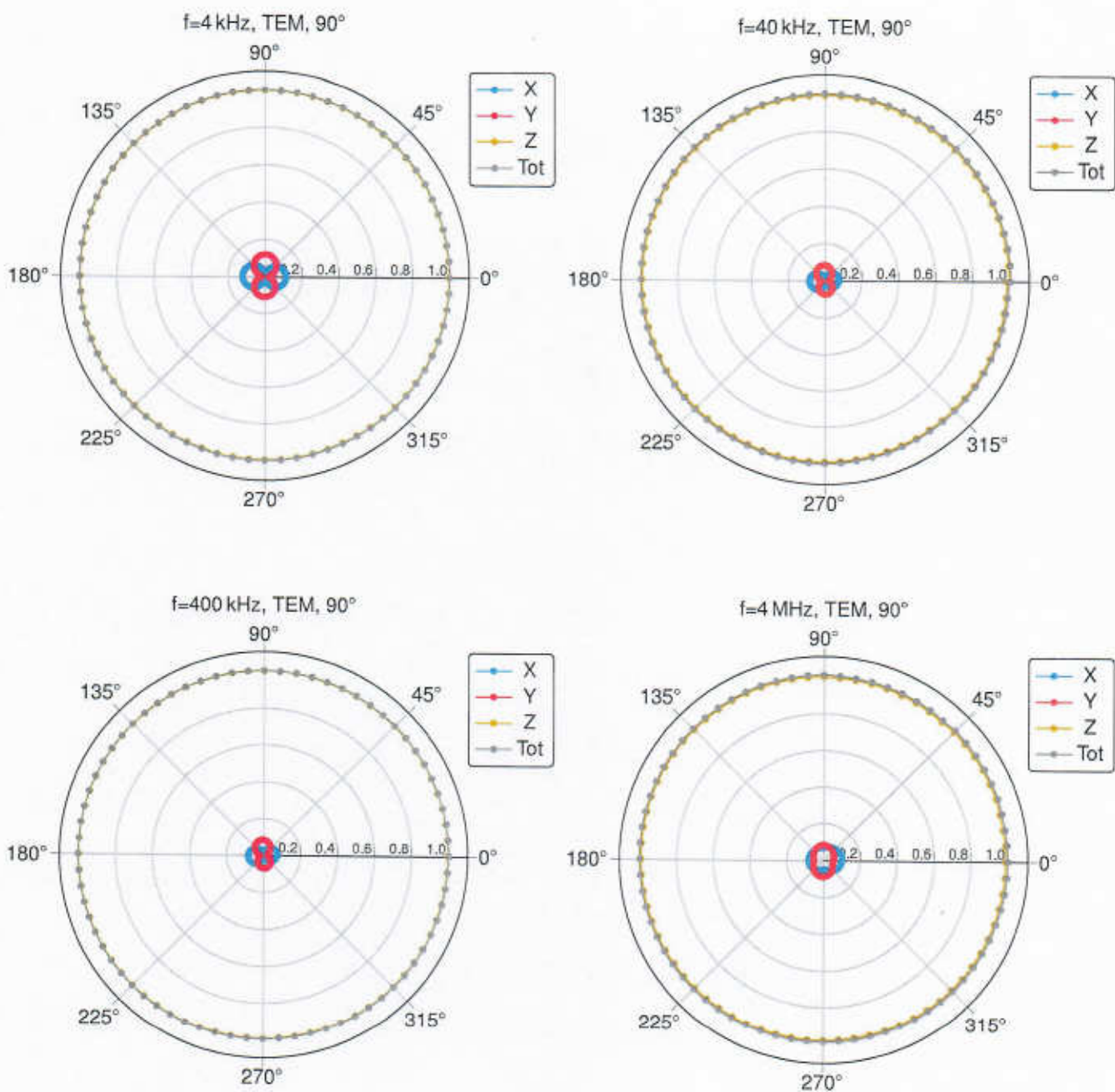
¹ Calibration uncertainty not taken into account (shared risk 50%).

Isotropy H-Field

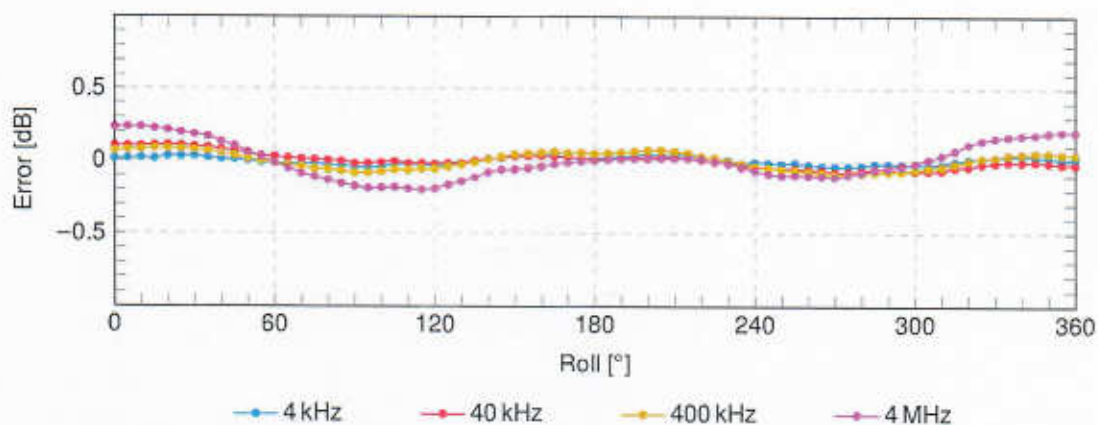
H-Field Receiving Pattern (ϕ), $\theta = 0^\circ$



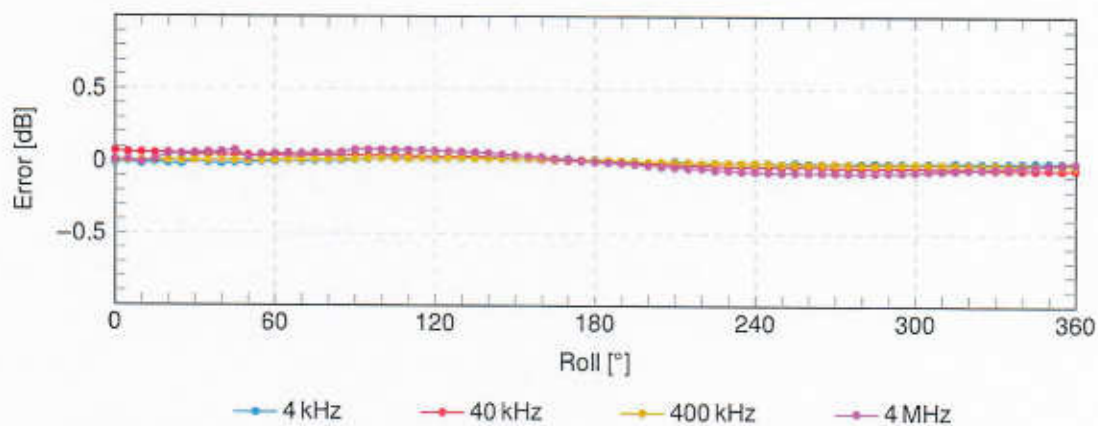
H-Field Receiving Pattern (ϕ), $\theta = 90^\circ$



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



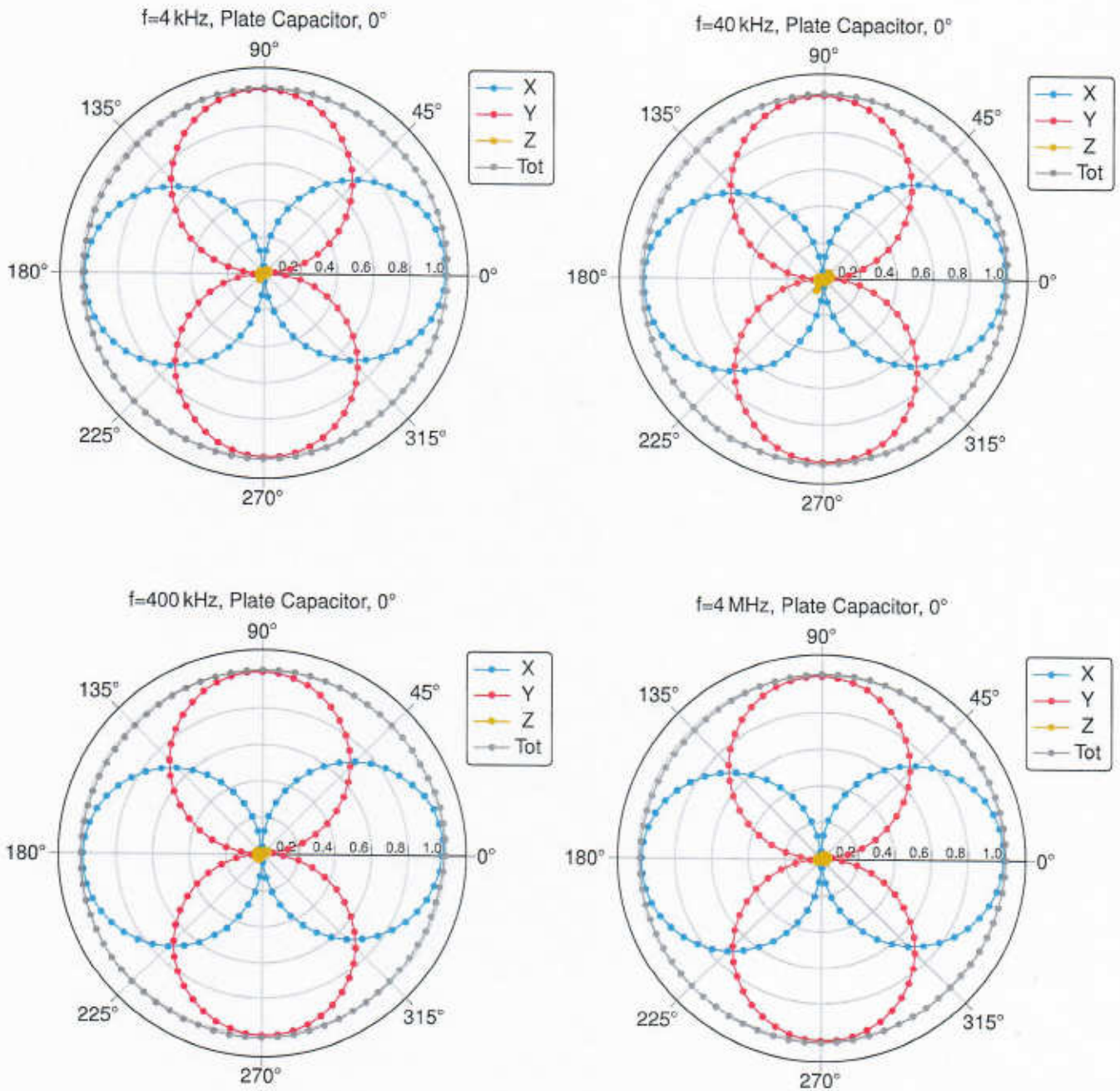
H-Field Receiving Pattern (ϕ), $\theta = 90^\circ$



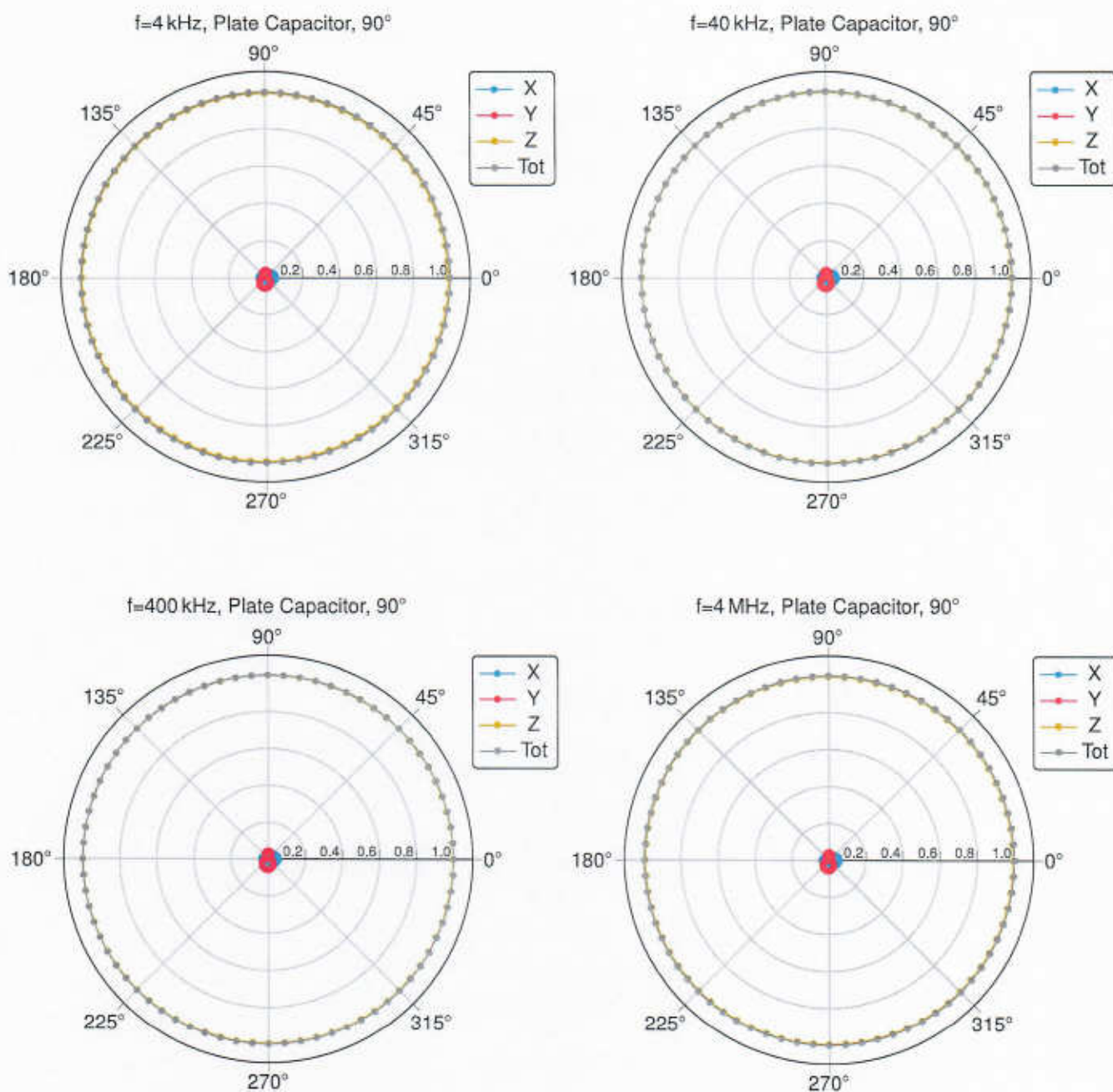
SPEAG axial deviation from the ideal response tolerance for H-field: ± 0.6 dB

Isotropy E-Field

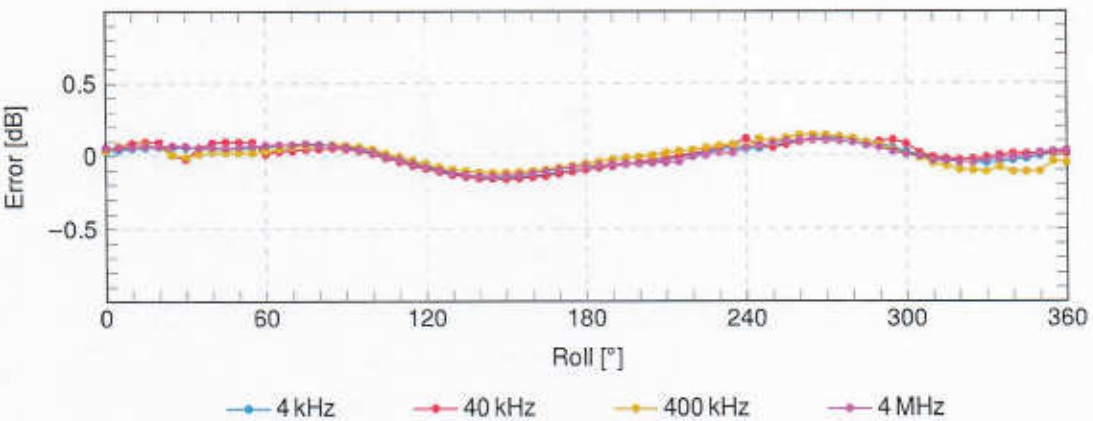
E-Field Receiving Pattern (ϕ), $\theta = 0^\circ$



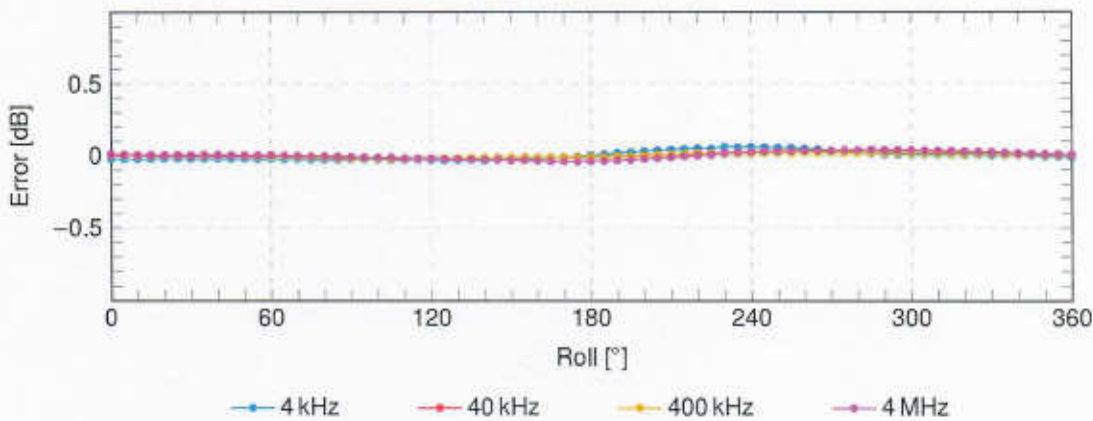
E-Field Receiving Pattern (ϕ), $\theta = 90^\circ$



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

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



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Accreditation No.: **SCS 0108**

Client **Sporton**
Taoyuan City

Certificate No. **V-Coil350/85-1023_Jun26**

CALIBRATION CERTIFICATE

Object **V-Coil350/85V2 - SN: 1023**

Calibration procedure(s) **QA CAL-47.v15
Calibration Procedure for WPT Verification & Validation Sources**

Calibration date: **June 30, 2026**

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: 3090/3078	10-Nov-25 (MAGPy-8H3D-3090_Nov25)	Nov-26

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
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	Name	Function	Signature
Calibrated by:	Krešimir Franjić	Laboratory Technician	

Approved by:	Sven Kühn	Technical Manager	
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Issued: June 30, 2026

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

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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 63184, "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 of 3 kHz to 30 MHz)", February 2025

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	3.4.0.6944
	Notebook GUI	3.4.0.0
	Sim4Life	9.0.0
Scan setup	Grid dimensions	x: 477 mm, y: 389 mm, z: 36.7 mm
	Grid resolutions	dx, dy, dz: 7.33 mm
Nominal frequency	85 kHz	

Calibrated Quantities

Distance (relative to source surface) (mm)	Peak H-field (A/m)	Uncertainty (k=2) (dB)
0	203	1.13
2	185	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	2.34	3.34	3.37	3.38	6.41	4.76
2	2.21	3.14	3.17	3.18	5.73	4.31

Voltage measurement

Total voltage (V)	Voltages at harmonics (dBc)
0.412	Highest harmonic: -53.6 2 nd highest harmonic: -54.3

¹ determined for a virtual half-space phantom with tissue properties $\epsilon_r = 55$, $\sigma = 0.75$ S/m, $\rho = 1000$ kg/m³ and a 2 mm thick phantom shell

Measurement report

cDASY6 Module WPT Measurement Report

Device under test

Info:
V-Coil350/85

Serial number:
1023

Scenario:
Source Calibration

Tool info

DASY software version:
cDASY6 Module WPT 3.4.0.6944

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000230, 2025/11/10

Software version:
3.4.0, backend: 3.2.21

Hardware version:
FPGA: 100, FW: N/A

Scan info

Center location:
x: -48.08 mm, y: -119.87 mm, z: 36.55 mm

Dimensions:
x: 477.0 mm, y: 388.8 mm, z: 36.7 mm

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

Completed on:
2026/06/30 15:08:56

Measurement results
Maximum H-field [RMS]:

MAGNITUDE: 132.29 A/m

x: 29.18 A/m, y: 115.86 A/m, z: 56.79 A/m

Maximum H-field location relative to DUT:

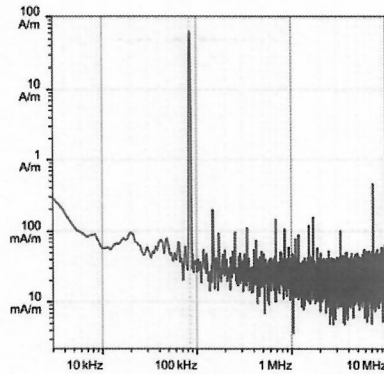
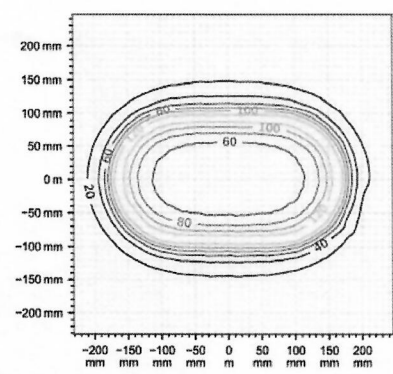
x: -91.67 mm, y: -84.33 mm, z: 8.50 mm

Distance to -20.0 dB boundary:

67.61 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 ($f = 85.00$ 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	Warnings		
	H_{inc} [A/m]	Cube avg.	Local	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius [mm]	Sign	Vector potential	Boundary effect
0.00	203	3.34	3.37	3.38	2.34	6.41	4.76	182	1%	84%	35%
2.00	185	3.14	3.17	3.18	2.21	5.73	4.31	184	1%	84%	37%

Compliance evaluation (Field values at the peak frequency) ($f = 85.00$ kHz)

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_{ind}	psSAR	pH_{inc}	pJ_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR
	[A/m]	[V/m]	[mW/kg]	[A/m]	[A/m ²]	[mW/kg]	[A/m]	[V/m]	[mW/kg]	[A/m]	[V/m]	[mW/kg]	[A/m]	[V/m]	[mW/kg]
0.00	203	3.34	4.76	203	2.34	4.76	203	3.38	4.76	203	N/A	6.41	203	3.37	6.41
2.00	185	3.14	4.31	185	2.21	4.31	185	3.18	4.31	185	N/A	5.73	185	3.17	5.73

Compliance evaluation (Exposure ratios) (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_{ind}	psSAR	pH_{inc}	pJ_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR
	NS	TH	NS	TH	NS	TH	NS	TH	NS	TH	NS	TH	NS	TH	NS
0.00	19.7	N/A	-10.7	N/A	32.2	22.8	N/A	1.91	N/A	-14.4	N/A	7.06	N/A	-10.6	N/A
2.00	18.9	N/A	-11.3	N/A	31.4	22.3	N/A	1.11	N/A	-15.0	N/A	6.27	N/A	-11.2	N/A

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