Annex A301 – Calibration data

No. 1-0702-25-01-11_TR1-A301-R01

June 16, 2026

Description	Detailed WPT System calibration data

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authorized by

Marco Scigliano

Testing Manager
Regulatory Services Radio

1. MAGPy 8H3D+E3D V2 SN:3079 / DAS V2 SN:1023

Calibration Laboratory of
Schmid & Partner
Engineering AG
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Accreditation No.: **SCS 0108**

Client	**Cetecom Advanced** Saarbrücken, Germany	Certificate No.	MAGPy-8H3D-3079_Nov25

CALIBRATION CERTIFICATE

Object	MAGPy-8H3D+E3DV2 SN:3079 MAGPy-DASV2 SN:1023
Calibration procedure(s)	QA CAL-46.v3 Calibration Procedure for MAGPy–8H3D+E3D Near-field Electric and Magnetic Field Sensor System
Calibration date	November 11, 2025

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 < 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-26
Reference 20 dB Attenuator	SN: CC2552 (20x)	26-Mar-25 (No. 217-04284)	Mar-26
Type-N mismatch	SN: L1119	26-Mar-25 (No. 217-04292)	Mar-26

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Network Analyzer E5061B	SN: MY49810922	In house check: Nov-24	In house check: Nov-25
TEM Cell	SN: S6029i	In house check: Nov-24	In house check: Nov-25
Plate Capacitor	SN: 6028i	In house check: Nov-24	In house check: Nov-25
Resonator (160kHz)	SN: 6030i	In house check: Nov-24	In house check: Nov-25

	Name	Function	Signature
Calibrated by	Krešimir Franjić	Laboratory Technician	
Approved by	Sven Kühn	Technical Manager	i.A.

Issued: November 11, 2025

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

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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 $\phi = 0° ... 360°$; $\theta = 90°$, and $\phi = 0° ... 360°$; 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 $\phi = 0° ... 360°$; $\theta = 90°$, and $\phi = 0° ... 360°$; 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)	3079
	MAGPy-DASV2 (SE UMS 303 AE)	1023
	MAGPy FPGA Board	WP000009
Adjustment Date	Last MAGPy Adjustment	November 11, 2025
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)			
x	y	z	x	y	z	x	y	z	Tolerance (dB)
0.410	0.380	0.380	0.410	0.400	0.400	0.00	0.45	0.45	±1.00
0.550	0.520	0.520	0.540	0.540	0.540	−0.16	0.33	0.33	±1.00
0.760	0.720	0.710	0.750	0.740	0.720	−0.12	0.24	0.12	±1.00
0.990	0.930	0.920	0.990	0.960	0.930	0.00	0.28	0.09	±1.00
1.33	1.26	1.25	1.36	1.29	1.25	0.19	0.20	0.00	±1.00
1.83	1.73	1.71	1.84	1.74	1.73	0.05	0.05	0.10	±1.00
2.44	2.30	2.28	2.44	2.31	2.28	0.00	0.04	0.00	±0.20
3.26	3.09	3.05	3.27	3.09	3.07	0.03	0.00	0.06	±0.20
4.42	4.19	4.14	4.42	4.23	4.16	0.00	0.08	0.04	±0.20
5.97	5.67	5.60	6.00	5.69	5.64	0.04	0.03	0.06	±0.20
8.05	7.64	7.54	8.07	7.66	7.56	0.02	0.02	0.02	±0.20
10.7	10.2	10.1	10.8	10.2	10.1	0.08	0.00	0.00	±0.20
14.5	13.8	13.6	14.5	13.8	13.6	0.00	0.00	0.00	±0.20
19.5	18.6	18.3	19.6	18.6	18.4	0.04	0.00	0.05	±0.20
26.3	25.1	24.7	26.4	25.2	24.7	0.03	0.03	0.00	±0.20
35.1	33.6	32.9	35.4	33.8	33.1	0.07	0.05	0.05	±0.20
47.5	45.4	44.5	47.7	45.6	44.8	0.04	0.04	0.06	±0.20
64.2	61.6	60.2	64.7	61.9	60.6	0.07	0.04	0.05	±0.20
88.3	84.6	82.8	87.9	84.3	82.4	−0.04	−0.03	−0.04	±0.20
115	111	108	115	110	108	0.00	−0.08	0.00	±0.20
159	152	149	158	152	148	−0.05	0.00	−0.06	±0.20
220	211	206	219	211	205	−0.04	0.00	−0.04	±0.20
304	293	285	298	288	280	−0.17	−0.15	−0.15	±0.20
447	432	419	442	426	414	−0.10	−0.12	−0.10	±0.20
616	595	577	612	592	574	−0.06	−0.04	−0.05	±0.20
917	886	860	921	891	865	0.04	0.05	0.05	±0.20
1380	1340	1300	1410	1360	1320	0.19	0.13	0.13	±0.30
1880	1820	1770	1940	1880	1820	0.27	0.28	0.24	±0.30
3060	2950	2870	3180	3070	2990	0.33	0.35	0.36	±0.50
3640	3500	3420	3810	3670	3580	0.40	0.41	0.40	±0.50

SPEAG H-field linearity tolerance criteria[1]:
- ±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	
0.410	0.390	0.390	0.410	0.400	0.430	0.00	0.22	0.85	±1.00
0.560	0.530	0.530	0.550	0.540	0.570	−0.16	0.16	0.63	±1.00
0.770	0.730	0.730	0.770	0.720	0.760	0.00	−0.12	0.35	±1.00
1.00	0.950	0.950	1.01	0.950	0.960	0.09	0.00	0.09	±1.00
1.35	1.29	1.28	1.36	1.30	1.31	0.06	0.07	0.20	±1.00
1.86	1.77	1.76	1.86	1.79	1.79	0.00	0.10	0.15	±1.00
2.47	2.36	2.35	2.48	2.38	2.37	0.04	0.07	0.07	±0.20
3.31	3.16	3.14	3.31	3.17	3.17	0.00	0.03	0.08	±0.20
4.49	4.29	4.26	4.50	4.31	4.28	0.02	0.04	0.04	±0.20
6.06	5.81	5.76	6.09	5.84	5.79	0.04	0.04	0.05	±0.20
8.16	7.82	7.75	8.16	7.86	7.76	0.00	0.04	0.01	±0.20
10.9	10.4	10.3	10.9	10.5	10.3	0.00	0.08	0.00	±0.20
14.7	14.1	14.0	14.7	14.2	14.0	0.00	0.06	0.00	±0.20
19.8	19.0	18.8	19.8	19.1	18.8	0.00	0.05	0.00	±0.20
26.7	25.7	25.4	26.8	25.8	25.4	0.03	0.03	0.00	±0.20
35.7	34.4	33.9	35.9	34.5	34.1	0.05	0.03	0.05	±0.20
48.2	46.5	45.7	48.4	46.7	46.0	0.04	0.04	0.06	±0.20
65.2	63.1	61.9	65.6	63.4	62.3	0.05	0.04	0.06	±0.20
89.5	86.6	85.1	89.2	86.3	84.7	−0.03	−0.03	−0.04	±0.20
117	113	111	117	113	111	0.00	0.00	0.00	±0.20
161	156	153	160	156	152	−0.05	0.00	−0.06	±0.20
223	216	211	222	216	211	−0.04	0.00	0.00	±0.20
308	300	293	302	294	288	−0.17	−0.18	−0.15	±0.20
454	442	431	448	437	426	−0.12	−0.10	−0.10	±0.20
624	609	594	621	606	590	−0.04	−0.04	−0.06	±0.20
930	906	884	935	913	889	0.05	0.05	0.05	±0.20
1400	1370	1340	1430	1400	1360	0.18	0.19	0.13	±0.30
1910	1870	1820	1970	1920	1870	0.27	0.23	0.24	±0.30
3100	3020	2950	3230	3150	3070	0.36	0.37	0.35	±0.50
3690	3590	3510	3870	3760	3680	0.41	0.40	0.41	±0.50

SPEAG H-field linearity tolerance criteria[1]:
±1.0 dB for applied H-fields < 2.0 A/m
±0.2 dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
±0.3 dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
±0.4 dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
±0.5 dB 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	
0.410	0.390	0.390	0.430	0.410	0.430	0.41	0.43	0.85	±1.00
0.550	0.530	0.540	0.550	0.550	0.580	0.00	0.32	0.62	±1.00
0.760	0.730	0.740	0.760	0.750	0.750	0.00	0.23	0.12	±1.00
0.980	0.950	0.960	1.00	0.980	0.970	0.18	0.27	0.09	±1.00
1.33	1.29	1.30	1.37	1.29	1.32	0.26	0.00	0.13	±1.00
1.83	1.76	1.78	1.84	1.75	1.81	0.05	−0.05	0.15	±1.00
2.43	2.35	2.37	2.45	2.36	2.40	0.07	0.04	0.11	±0.20
3.26	3.15	3.17	3.27	3.16	3.19	0.03	0.03	0.05	±0.20
4.42	4.27	4.30	4.42	4.27	4.32	0.00	0.00	0.04	±0.20
5.97	5.78	5.82	5.96	5.79	5.83	0.01	0.02	0.01	±0.20
8.04	7.79	7.83	8.04	7.79	7.84	0.00	0.00	0.01	±0.20
10.7	10.4	10.4	10.7	10.4	10.4	0.00	0.00	0.00	±0.20
14.5	14.1	14.1	14.5	14.1	14.1	0.00	0.00	0.00	±0.20
19.5	19.0	19.0	19.6	19.0	19.1	0.04	0.00	0.05	±0.20
26.3	25.6	25.6	26.4	25.7	25.7	0.03	0.03	0.03	±0.20
35.1	34.2	34.2	35.3	34.4	34.4	0.05	0.05	0.05	±0.20
47.5	46.3	46.2	47.6	46.5	46.5	0.02	0.04	0.06	±0.20
64.2	62.8	62.6	64.6	63.1	62.9	0.05	0.04	0.04	±0.20
88.2	86.3	86.0	87.8	86.0	85.6	−0.04	−0.03	−0.04	±0.20
115	113	112	115	113	112	0.00	0.00	0.00	±0.20
158	155	154	158	155	154	0.00	0.00	0.00	±0.20
219	216	214	219	215	213	0.00	−0.04	−0.04	±0.20
303	299	296	298	293	291	−0.14	−0.18	−0.15	±0.20
447	440	436	441	435	430	−0.12	−0.10	−0.12	±0.20
615	607	600	612	604	596	−0.04	−0.04	−0.06	±0.20
916	904	894	921	909	898	0.05	0.05	0.04	±0.20
1380	1370	1350	1410	1390	1370	0.19	0.13	0.13	±0.30
1880	1860	1840	1940	1910	1890	0.27	0.23	0.23	±0.30
3050	3010	2980	3180	3130	3110	0.36	0.34	0.37	±0.50
3630	3570	3550	3810	3740	3710	0.42	0.40	0.38	±0.50

SPEAG H-field linearity tolerance criteria[1]:
- ±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	
0.400	0.390	0.390	0.430	0.410	0.380	0.63	0.43	−0.23	±1.00
0.550	0.530	0.530	0.560	0.560	0.520	0.16	0.48	−0.17	±1.00
0.750	0.730	0.730	0.740	0.740	0.720	−0.12	0.12	−0.12	±1.00
0.980	0.940	0.950	0.970	0.940	0.960	−0.09	0.00	0.09	±1.00
1.32	1.28	1.28	1.33	1.28	1.28	0.07	0.00	0.00	±1.00
1.81	1.75	1.76	1.81	1.77	1.75	0.00	0.10	−0.05	±1.00
2.41	2.34	2.34	2.44	2.34	2.35	0.11	0.00	0.04	±0.20
3.23	3.13	3.13	3.24	3.14	3.15	0.03	0.03	0.06	±0.20
4.38	4.25	4.25	4.39	4.26	4.27	0.02	0.02	0.04	±0.20
5.91	5.75	5.75	5.95	5.76	5.78	0.06	0.02	0.05	±0.20
7.96	7.75	7.74	7.98	7.76	7.75	0.02	0.01	0.01	±0.20
10.6	10.3	10.3	10.6	10.4	10.3	0.00	0.08	0.00	±0.20
14.3	14.0	13.9	14.4	14.0	13.9	0.06	0.00	0.00	±0.20
19.3	18.9	18.8	19.3	18.9	18.8	0.00	0.00	0.00	±0.20
26.1	25.5	25.3	26.1	25.5	25.4	0.00	0.00	0.03	±0.20
34.8	34.0	33.8	35.0	34.2	34.0	0.05	0.05	0.05	±0.20
47.0	46.1	45.7	47.2	46.3	45.9	0.04	0.04	0.04	±0.20
63.6	62.5	61.8	64.0	62.8	62.2	0.05	0.04	0.06	±0.20
87.4	85.8	85.0	87.0	85.5	84.6	−0.04	−0.03	−0.04	±0.20
114	112	111	114	112	111	0.00	0.00	0.00	±0.20
157	154	153	156	154	152	−0.06	0.00	−0.06	±0.20
217	214	211	217	214	211	0.00	0.00	0.00	±0.20
301	297	292	295	292	287	−0.17	−0.15	−0.15	±0.20
443	438	430	437	432	425	−0.12	−0.12	−0.10	±0.20
609	603	593	606	600	590	−0.04	−0.04	−0.04	±0.20
908	899	883	913	903	888	0.05	0.04	0.05	±0.20
1370	1360	1330	1400	1380	1360	0.19	0.13	0.19	±0.30
1870	1850	1810	1920	1900	1870	0.23	0.23	0.28	±0.30
3030	2990	2950	3150	3090	3070	0.34	0.29	0.35	±0.50
3600	3550	3510	3770	3680	3670	0.40	0.31	0.39	±0.50

SPEAG H-field linearity tolerance criteria[1]:
- ±1.0 dB for applied H-fields < 2.0 A/m
- ±0.2 dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
- ±0.3 dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
- ±0.4 dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
- ±0.5 dB 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	
0.400	0.390	0.390	0.420	0.420	0.410	0.42	0.64	0.43	±1.00
0.550	0.540	0.540	0.560	0.550	0.550	0.16	0.16	0.16	±1.00
0.750	0.740	0.740	0.740	0.730	0.750	−0.12	−0.12	0.12	±1.00
0.980	0.960	0.960	0.970	0.960	0.960	−0.09	0.00	0.00	±1.00
1.32	1.30	1.30	1.33	1.31	1.30	0.07	0.07	0.00	±1.00
1.81	1.78	1.78	1.81	1.79	1.78	0.00	0.05	0.00	±1.00
2.42	2.37	2.37	2.42	2.39	2.38	0.00	0.07	0.04	±0.20
3.23	3.17	3.17	3.22	3.19	3.17	−0.03	0.05	0.00	±0.20
4.38	4.31	4.30	4.39	4.33	4.31	0.02	0.04	0.02	±0.20
5.92	5.83	5.81	5.95	5.85	5.83	0.04	0.03	0.03	±0.20
7.98	7.85	7.82	7.99	7.86	7.83	0.01	0.01	0.01	±0.20
10.6	10.5	10.4	10.7	10.5	10.4	0.08	0.00	0.00	±0.20
14.4	14.2	14.1	14.4	14.2	14.1	0.00	0.00	0.00	±0.20
19.4	19.1	19.0	19.4	19.2	19.0	0.00	0.05	0.00	±0.20
26.1	25.8	25.6	26.2	25.9	25.7	0.03	0.03	0.03	±0.20
34.9	34.5	34.2	35.1	34.7	34.4	0.05	0.05	0.05	±0.20
47.1	46.7	46.2	47.3	46.9	46.4	0.04	0.04	0.04	±0.20
63.7	63.3	62.5	64.1	63.6	62.9	0.05	0.04	0.06	±0.20
87.5	87.0	85.9	87.1	86.6	85.6	−0.04	−0.04	−0.03	±0.20
114	114	112	114	113	112	0.00	−0.08	0.00	±0.20
157	157	154	157	156	154	0.00	−0.06	0.00	±0.20
218	217	213	217	217	213	−0.04	0.00	0.00	±0.20
301	301	295	296	296	290	−0.15	−0.15	−0.15	±0.20
443	444	435	437	438	430	−0.12	−0.12	−0.10	±0.20
610	611	599	606	607	596	−0.06	−0.06	−0.04	±0.20
909	911	893	913	915	898	0.04	0.04	0.05	±0.20
1370	1380	1350	1400	1400	1370	0.19	0.12	0.13	±0.30
1870	1870	1830	1920	1930	1890	0.23	0.27	0.28	±0.30
3030	3030	2980	3160	3160	3100	0.36	0.36	0.34	±0.50
3610	3600	3550	3780	3770	3710	0.40	0.40	0.38	±0.50

SPEAG H-field linearity tolerance criteria[1]:
- ±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 5

H-field (A/m) Applied			H-field (A/m) Reading			Difference (dB)			Tolerance (dB)
x	y	z	x	y	z	x	y	z	
0.410	0.400	0.410	0.410	0.430	0.420	0.00	0.83	0.21	±1.00
0.550	0.550	0.550	0.550	0.570	0.570	0.00	0.31	0.31	±1.00
0.760	0.750	0.760	0.750	0.750	0.760	−0.12	0.00	0.00	±1.00
0.980	0.980	0.990	0.990	0.970	0.990	0.09	−0.09	0.00	±1.00
1.33	1.32	1.34	1.34	1.34	1.36	0.07	0.13	0.13	±1.00
1.83	1.81	1.84	1.83	1.81	1.85	0.00	0.00	0.05	±1.00
2.43	2.41	2.44	2.44	2.43	2.47	0.04	0.07	0.11	±0.20
3.26	3.23	3.27	3.26	3.24	3.29	0.00	0.03	0.05	±0.20
4.42	4.39	4.44	4.43	4.40	4.45	0.02	0.02	0.02	±0.20
5.97	5.94	6.00	5.99	5.95	6.04	0.03	0.01	0.06	±0.20
8.04	8.00	8.07	8.05	8.04	8.12	0.01	0.04	0.05	±0.20
10.7	10.7	10.8	10.7	10.8	10.8	0.00	0.08	0.00	±0.20
14.5	14.4	14.6	14.5	14.5	14.6	0.00	0.06	0.00	±0.20
19.5	19.5	19.6	19.5	19.5	19.6	0.00	0.00	0.00	±0.20
26.3	26.3	26.4	26.4	26.4	26.5	0.03	0.03	0.03	±0.20
35.1	35.1	35.3	35.4	35.4	35.5	0.07	0.07	0.05	±0.20
47.5	47.5	47.7	47.6	47.8	47.9	0.02	0.05	0.04	±0.20
64.2	64.5	64.5	64.6	64.8	64.9	0.05	0.04	0.05	±0.20
88.2	88.6	88.7	87.8	88.2	88.3	−0.04	−0.04	−0.04	±0.20
115	116	116	115	116	115	0.00	0.00	−0.08	±0.20
158	159	159	158	159	159	0.00	0.00	0.00	±0.20
220	221	220	219	221	220	−0.04	0.00	0.00	±0.20
303	307	305	298	301	300	−0.14	−0.17	−0.14	±0.20
447	452	449	441	446	444	−0.12	−0.12	−0.10	±0.20
615	623	619	611	619	616	−0.06	−0.06	−0.04	±0.20
916	928	922	921	933	927	0.05	0.05	0.05	±0.20
1380	1400	1390	1410	1430	1420	0.19	0.18	0.19	±0.30
1880	1910	1890	1940	1960	1950	0.27	0.22	0.27	±0.30
3050	3090	3070	3180	3220	3210	0.36	0.36	0.39	±0.50
3630	3670	3660	3810	3840	3830	0.42	0.39	0.39	±0.50

SPEAG H-field linearity tolerance criteria[1]:
±1.0 dB for applied H-fields < 2.0 A/m
±0.2 dB for applied H-fields ≥ 2.0 A/m and < 1000 A/m
±0.3 dB for applied H-fields ≥ 1000 A/m and < 2000 A/m
±0.4 dB for applied H-fields ≥ 2000 A/m and < 3000 A/m
±0.5 dB 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	
0.410	0.400	0.400	0.420	0.400	0.420	0.21	0.00	0.42	±1.00
0.560	0.540	0.550	0.580	0.550	0.550	0.30	0.16	0.00	±1.00
0.770	0.740	0.750	0.780	0.760	0.770	0.11	0.23	0.23	±1.00
1.01	0.970	0.980	1.01	0.990	0.990	0.00	0.18	0.09	±1.00
1.36	1.31	1.33	1.37	1.35	1.34	0.06	0.26	0.07	±1.00
1.87	1.80	1.82	1.87	1.84	1.84	0.00	0.19	0.09	±1.00
2.49	2.39	2.42	2.50	2.42	2.46	0.03	0.11	0.14	±0.20
3.33	3.21	3.24	3.33	3.21	3.27	0.00	0.00	0.08	±0.20
4.52	4.35	4.40	4.52	4.35	4.43	0.00	0.00	0.06	±0.20
6.10	5.89	5.95	6.12	5.90	5.99	0.03	0.01	0.06	±0.20
8.22	7.93	8.01	8.22	7.93	8.04	0.00	0.00	0.03	±0.20
11.0	10.6	10.7	11.0	10.6	10.7	0.00	0.00	0.00	±0.20
14.8	14.3	14.4	14.8	14.3	14.5	0.00	0.00	0.06	±0.20
19.9	19.3	19.4	20.0	19.3	19.5	0.04	0.00	0.04	±0.20
26.9	26.1	26.2	26.9	26.1	26.3	0.00	0.00	0.03	±0.20
35.9	34.9	35.0	36.1	35.1	35.2	0.05	0.05	0.05	±0.20
48.5	47.2	47.2	48.7	47.4	47.6	0.04	0.04	0.07	±0.20
65.6	64.0	64.0	66.1	64.3	64.3	0.07	0.04	0.04	±0.20
90.2	87.9	87.9	89.8	87.5	87.5	−0.04	−0.04	−0.04	±0.20
118	115	115	118	115	114	0.00	0.00	−0.08	±0.20
162	158	158	161	158	157	−0.05	0.00	−0.06	±0.20
224	220	219	224	219	218	0.00	−0.04	−0.04	±0.20
310	304	302	305	299	297	−0.14	−0.14	−0.15	±0.20
457	448	445	451	442	440	−0.11	−0.12	−0.10	±0.20
629	618	614	625	614	610	−0.06	−0.06	−0.06	±0.20
937	921	914	941	926	919	0.04	0.05	0.05	±0.20
1410	1390	1380	1440	1420	1410	0.18	0.19	0.19	±0.30
1930	1890	1880	1980	1950	1940	0.22	0.27	0.27	±0.30
3120	3070	3050	3250	3190	3180	0.35	0.33	0.36	±0.50
3720	3640	3630	3890	3810	3800	0.39	0.40	0.40	±0.50

SPEAG H-field linearity tolerance criteria[1]:
- ±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 7

H-field (A/m) Applied			H-field (A/m) Reading			Difference (dB)			Tolerance (dB)
x	y	z	x	y	z	x	y	z	
0.410	0.390	0.390	0.420	0.420	0.370	0.21	0.64	−0.46	±1.00
0.560	0.540	0.530	0.540	0.550	0.520	−0.32	0.16	−0.17	±1.00
0.760	0.730	0.720	0.760	0.740	0.720	0.00	0.12	0.00	±1.00
1.00	0.960	0.940	1.00	0.960	0.950	0.00	0.00	0.09	±1.00
1.35	1.29	1.27	1.34	1.29	1.28	−0.06	0.00	0.07	±1.00
1.85	1.78	1.74	1.84	1.79	1.76	−0.05	0.05	0.10	±1.00
2.46	2.37	2.32	2.47	2.39	2.35	0.04	0.07	0.11	±0.20
3.29	3.17	3.11	3.29	3.20	3.13	0.00	0.08	0.06	±0.20
4.47	4.30	4.22	4.46	4.33	4.24	−0.02	0.06	0.04	±0.20
6.03	5.82	5.70	6.06	5.86	5.74	0.04	0.06	0.06	±0.20
8.12	7.84	7.68	8.13	7.88	7.70	0.01	0.04	0.02	±0.20
10.8	10.5	10.2	10.8	10.5	10.2	0.00	0.00	0.00	±0.20
14.6	14.2	13.8	14.6	14.2	13.9	0.00	0.00	0.06	±0.20
19.7	19.1	18.6	19.7	19.1	18.7	0.00	0.00	0.05	±0.20
26.6	25.8	25.1	26.6	25.8	25.2	0.00	0.00	0.03	±0.20
35.5	34.5	33.6	35.7	34.6	33.7	0.05	0.03	0.03	±0.20
48.0	46.6	45.3	48.1	46.9	45.6	0.02	0.06	0.06	±0.20
64.9	63.3	61.3	65.3	63.6	61.7	0.05	0.04	0.06	±0.20
89.1	86.9	84.3	88.7	86.6	84.0	−0.04	−0.03	−0.03	±0.20
117	114	110	116	113	110	−0.07	−0.08	0.00	±0.20
160	156	151	159	156	151	−0.05	0.00	0.00	±0.20
222	217	210	221	217	209	−0.04	0.00	−0.04	±0.20
307	301	290	301	295	285	−0.17	−0.17	−0.15	±0.20
452	443	427	446	438	422	−0.12	−0.10	−0.10	±0.20
622	611	588	618	608	585	−0.06	−0.04	−0.04	±0.20
926	910	876	930	915	881	0.04	0.05	0.05	±0.20
1400	1380	1320	1430	1400	1350	0.18	0.12	0.20	±0.30
1900	1870	1800	1960	1930	1860	0.27	0.27	0.28	±0.30
3090	3030	2920	3220	3150	3050	0.36	0.34	0.38	±0.50
3670	3600	3480	3850	3770	3640	0.42	0.40	0.39	±0.50

SPEAG H-field linearity tolerance criteria[1]:
- ±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, 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
0.370	0.220	0.090	0.380	0.210	0.100	0.23	−0.40	0.92	±5.00	±5.00	±5.00
0.500	0.300	0.130	0.520	0.280	0.090	0.34	−0.60	−3.19	±5.00	±5.00	±5.00
0.680	0.410	0.170	0.680	0.410	0.170	0.00	0.00	0.00	±5.00	±5.00	±5.00
0.890	0.530	0.230	0.900	0.520	0.240	0.10	−0.17	0.37	±5.00	±5.00	±5.00
1.21	0.720	0.310	1.22	0.720	0.310	0.07	0.00	0.00	±5.00	±5.00	±5.00
1.65	0.980	0.420	1.68	0.990	0.400	0.16	0.09	−0.42	±5.00	±5.00	±5.00
2.20	1.31	0.560	2.22	1.31	0.520	0.08	0.00	−0.64	±1.00	±5.00	±5.00
2.95	1.75	0.750	2.97	1.74	0.730	0.06	−0.05	−0.23	±1.00	±5.00	±5.00
4.01	2.38	1.01	4.04	2.36	0.980	0.06	−0.07	−0.26	±1.00	±1.00	±5.00
5.42	3.22	1.37	5.46	3.20	1.35	0.06	−0.05	−0.13	±1.00	±1.00	±5.00
7.31	4.34	1.84	7.36	4.31	1.80	0.06	−0.06	−0.19	±1.00	±1.00	±5.00
9.75	5.79	2.45	9.81	5.75	2.39	0.05	−0.06	−0.22	±1.00	±1.00	±1.00
13.2	7.83	3.31	13.3	7.79	3.23	0.07	−0.04	−0.21	±1.00	±1.00	±1.00
17.8	10.6	4.46	17.9	10.5	4.37	0.05	−0.08	−0.18	±1.00	±1.00	±1.00
24.0	14.2	6.02	24.1	14.2	5.89	0.04	0.00	−0.19	±1.00	±1.00	±1.00
32.1	19.1	8.04	32.4	19.1	7.89	0.09	0.00	−0.16	±1.00	±1.00	±1.00
43.5	25.8	10.9	43.7	25.7	10.7	0.04	−0.03	−0.16	±1.00	±1.00	±1.00
58.9	35.0	14.7	59.3	34.9	14.5	0.06	−0.02	−0.12	±1.00	±1.00	±1.00
81.0	48.0	20.2	80.8	47.5	19.7	−0.02	−0.09	−0.22	±1.00	±1.00	±1.00
106	62.9	26.4	106	62.3	25.8	0.00	−0.08	−0.20	±1.00	±1.00	±1.00
146	86.5	36.2	146	85.7	35.4	0.00	−0.08	−0.19	±1.00	±1.00	±1.00
202	120	50.2	202	119	49.2	0.00	−0.07	−0.17	±1.00	±1.00	±1.00
280	166	69.4	283	166	68.6	0.09	0.00	−0.10	±1.00	±1.00	±1.00
413	245	102	398	235	102	−0.32	−0.36	0.00	±1.00	±1.00	±1.00
569	338	141	552	326	141	−0.26	−0.31	0.00	±1.00	±1.00	±1.00
848	503	210	832	491	212	−0.17	−0.21	0.08	±1.00	±1.00	±1.00
1280	760	317	1270	752	325	−0.07	−0.09	0.22	±1.00	±1.00	±1.00
1740	1030	431	1750	1040	448	0.05	0.08	0.34	±1.00	±1.00	±1.00
2820	1680	699	2880	1700	702	0.18	0.10	0.04	±1.00	±1.00	±1.00
3350	1990	832	3440	2030	841	0.23	0.17	0.09	±1.00	±1.00	±1.00

SPEAG E-field linearity tolerance criteria[1]:
±5.0 dB for applied E-field < 2 V/m
±1.0 dB 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

	H-field (A/m) Applied			H-field (A/m) Reading			Difference (dB)			
f (Hz)	x	y	z	x	y	z	x	y	z	Tolerance (dB)
3000	3.29	3.28	3.29	3.29	3.29	3.29	0.00	0.03	0.00	±0.3
3200	3.30	3.29	3.29	3.31	3.29	3.30	0.03	0.00	0.03	±0.3
4000	3.29	3.29	3.29	3.29	3.29	3.29	0.00	0.00	0.00	±0.3
5200	3.27	3.26	3.26	3.26	3.26	3.25	−0.03	0.00	−0.03	±0.3
6600	3.23	3.22	3.23	3.23	3.23	3.24	0.00	0.03	0.03	±0.3
8200	3.19	3.19	3.19	3.21	3.19	3.20	0.05	0.00	0.03	±0.3
9000	3.17	3.17	3.17	3.17	3.17	3.17	0.00	0.00	0.00	±0.3
10600	4.40	4.31	4.30	4.40	4.32	4.29	0.00	0.02	−0.02	±0.3
13400	4.43	4.34	4.33	4.41	4.37	4.33	−0.04	0.06	0.00	±0.3
17000	4.43	4.38	4.37	4.44	4.38	4.38	0.02	0.00	0.02	±0.3
21400	4.45	4.38	4.38	4.46	4.39	4.38	0.00	0.02	0.00	±0.3
27200	4.45	4.40	4.39	4.47	4.41	4.38	0.04	0.02	−0.02	±0.3
34400	4.45	4.42	4.41	4.46	4.43	4.41	0.02	0.02	0.00	±0.3
40000	4.45	4.42	4.40	4.45	4.42	4.40	0.00	0.00	0.00	±0.3
43600	4.45	4.42	4.40	4.46	4.41	4.41	0.02	−0.02	0.02	±0.3
55400	4.43	4.37	4.39	4.43	4.40	4.38	0.00	0.06	−0.02	±0.3
70000	4.42	4.39	4.38	4.41	4.40	4.38	−0.02	0.02	0.00	±0.3
88800	4.41	4.38	4.37	4.42	4.38	4.37	0.02	0.00	0.00	±0.3
112400	4.39	4.37	4.35	4.39	4.37	4.36	0.00	0.00	0.02	±0.3
142400	4.37	4.35	4.33	4.38	4.35	4.34	0.02	0.00	0.02	±0.3
161750	4.36	4.33	4.32	4.36	4.33	4.32	0.00	0.00	0.00	±0.3
180400	4.34	4.32	4.31	4.34	4.32	4.31	0.00	0.00	0.00	±0.3
228400	4.31	4.28	4.27	4.32	4.28	4.28	0.02	0.00	0.02	±0.3
289400	4.27	4.25	4.23	4.27	4.25	4.24	0.00	0.00	0.02	±0.3
366400	4.22	4.20	4.18	4.22	4.20	4.19	0.00	0.00	0.02	±0.3
400000	4.20	4.18	4.17	4.21	4.18	4.17	0.02	0.00	0.00	±0.3
464000	4.18	4.16	4.15	4.18	4.16	4.15	0.00	0.00	0.00	±0.3
587800	4.12	4.10	4.09	4.12	4.10	4.09	0.00	0.00	0.00	±0.3
744200	4.07	4.06	4.04	4.07	4.05	4.05	0.00	−0.02	0.02	±0.3
942600	4.05	4.04	4.03	4.05	4.04	4.03	0.00	0.00	0.00	±0.3
1193600	4.02	4.01	4.00	4.02	4.01	4.00	0.00	0.00	0.00	±0.3
1511600	4.01	4.00	3.99	4.01	4.00	3.99	0.00	0.00	0.00	±0.3
1914400	3.99	3.98	3.97	4.00	3.98	3.97	0.02	0.00	0.00	±0.3
2424400	3.97	3.96	3.95	3.98	3.96	3.94	0.02	0.00	−0.02	±0.3
3070200	3.93	3.93	3.92	3.95	3.93	3.92	0.04	0.00	0.00	±0.3
3888000	3.88	3.87	3.86	3.88	3.88	3.86	0.00	0.02	0.00	±0.3
4000000	3.86	3.86	3.85	3.87	3.85	3.85	0.02	−0.02	0.00	±0.3
4923800	3.79	3.78	3.78	3.80	3.79	3.78	0.02	0.02	0.00	±0.3
6235400	3.67	3.67	3.67	3.68	3.66	3.66	0.02	−0.02	−0.02	±0.3
7896400	3.54	3.53	3.53	3.54	3.54	3.53	0.00	0.02	0.00	±0.3
10000000	3.38	3.38	3.38	3.37	3.39	3.38	−0.03	0.03	0.00	±0.3

SPEAG H-field frequency response tolerance criteria[1]:
±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	3.29	3.28	3.29	3.29	3.29	3.29	0.00	0.03	0.00	±0.3
3200	3.30	3.29	3.29	3.32	3.29	3.29	0.05	0.00	0.00	±0.3
4000	3.29	3.29	3.29	3.29	3.29	3.30	0.00	0.00	0.03	±0.3
5200	3.27	3.26	3.26	3.26	3.26	3.25	-0.03	0.00	-0.03	±0.3
6600	3.23	3.22	3.23	3.23	3.23	3.24	0.00	0.03	0.03	±0.3
8200	3.19	3.19	3.19	3.21	3.19	3.20	0.05	0.00	0.03	±0.3
9000	3.17	3.17	3.17	3.17	3.17	3.17	0.00	0.00	0.00	±0.3
10600	4.40	4.31	4.30	4.40	4.33	4.32	0.00	0.04	0.04	±0.3
13400	4.43	4.34	4.33	4.43	4.37	4.32	0.00	0.06	-0.02	±0.3
17000	4.43	4.38	4.37	4.44	4.38	4.37	0.02	0.00	0.00	±0.3
21400	4.46	4.38	4.38	4.47	4.38	4.39	0.02	0.00	0.02	±0.3
27200	4.45	4.40	4.39	4.46	4.41	4.39	0.02	0.02	0.00	±0.3
34400	4.45	4.42	4.41	4.47	4.43	4.42	0.04	0.02	0.02	±0.3
40000	4.45	4.42	4.40	4.45	4.42	4.40	0.00	0.00	0.00	±0.3
43600	4.45	4.42	4.40	4.44	4.42	4.42	-0.02	0.00	0.04	±0.3
55400	4.43	4.37	4.39	4.44	4.41	4.38	0.02	0.08	-0.02	±0.3
70000	4.42	4.39	4.38	4.42	4.39	4.38	0.00	0.00	0.00	±0.3
88800	4.41	4.38	4.37	4.42	4.38	4.37	0.02	0.00	0.00	±0.3
112400	4.39	4.37	4.35	4.40	4.37	4.36	0.02	0.00	0.02	±0.3
142400	4.37	4.35	4.33	4.38	4.36	4.34	0.02	0.02	0.02	±0.3
161750	4.36	4.33	4.32	4.36	4.34	4.32	0.00	0.02	0.00	±0.3
180400	4.34	4.32	4.31	4.34	4.32	4.31	0.00	0.00	0.00	±0.3
228400	4.31	4.28	4.27	4.32	4.29	4.28	0.02	0.02	0.02	±0.3
289400	4.27	4.25	4.23	4.28	4.25	4.24	0.02	0.00	0.02	±0.3
366400	4.22	4.20	4.18	4.23	4.21	4.19	0.02	0.02	0.02	±0.3
400000	4.20	4.18	4.17	4.21	4.18	4.17	0.02	0.00	0.00	±0.3
464000	4.18	4.16	4.15	4.18	4.17	4.15	0.00	0.02	0.00	±0.3
587800	4.12	4.10	4.09	4.12	4.11	4.09	0.00	0.02	0.00	±0.3
744200	4.07	4.06	4.04	4.08	4.06	4.05	0.02	0.00	0.02	±0.3
942600	4.05	4.04	4.03	4.06	4.04	4.04	0.02	0.00	0.02	±0.3
1193600	4.02	4.01	4.00	4.03	4.01	4.00	0.02	0.00	0.00	±0.3
1511600	4.01	4.00	3.99	4.01	4.00	3.99	0.00	0.00	0.00	±0.3
1914400	3.99	3.98	3.97	4.00	3.98	3.97	0.02	0.00	0.00	±0.3
2424400	3.97	3.96	3.95	3.98	3.96	3.94	0.02	0.00	-0.02	±0.3
3070200	3.93	3.93	3.92	3.94	3.93	3.92	0.02	0.00	0.00	±0.3
3888000	3.88	3.87	3.86	3.89	3.87	3.86	0.02	0.00	0.00	±0.3
4000000	3.86	3.86	3.85	3.88	3.85	3.85	0.04	-0.02	0.00	±0.3
4923800	3.79	3.78	3.78	3.80	3.79	3.77	0.02	0.02	-0.02	±0.3
6235400	3.67	3.67	3.67	3.69	3.67	3.66	0.05	0.00	-0.02	±0.3
7896400	3.54	3.53	3.53	3.55	3.54	3.53	0.02	0.02	0.00	±0.3
10000000	3.38	3.38	3.38	3.40	3.37	3.37	0.05	-0.03	-0.03	±0.3

SPEAG H-field frequency response tolerance criteria[1]:
±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	3.29	3.28	3.29	3.29	3.29	3.29	0.00	0.03	0.00	±0.3
3200	3.30	3.29	3.29	3.32	3.29	3.30	0.05	0.00	0.03	±0.3
4000	3.29	3.29	3.29	3.29	3.29	3.29	0.00	0.00	0.00	±0.3
5200	3.27	3.26	3.26	3.26	3.27	3.25	−0.03	0.03	−0.03	±0.3
6600	3.23	3.22	3.23	3.23	3.23	3.24	0.00	0.03	0.03	±0.3
8200	3.19	3.19	3.19	3.21	3.19	3.20	0.05	0.00	0.03	±0.3
9000	3.17	3.17	3.17	3.17	3.17	3.17	0.00	0.00	0.00	±0.3
10600	4.40	4.31	4.30	4.39	4.31	4.30	−0.02	0.00	0.00	±0.3
13400	4.43	4.34	4.33	4.42	4.36	4.34	−0.02	0.04	0.02	±0.3
17000	4.43	4.38	4.37	4.43	4.38	4.38	0.00	0.00	0.02	±0.3
21400	4.46	4.38	4.38	4.43	4.39	4.38	−0.06	0.02	0.00	±0.3
27200	4.45	4.40	4.39	4.46	4.42	4.39	0.02	0.04	0.00	±0.3
34400	4.45	4.42	4.41	4.47	4.43	4.41	0.04	0.02	0.00	±0.3
40000	4.45	4.42	4.40	4.45	4.42	4.40	0.00	0.00	0.00	±0.3
43600	4.45	4.42	4.40	4.45	4.42	4.40	0.00	0.00	0.00	±0.3
55400	4.43	4.37	4.39	4.43	4.40	4.38	0.00	0.06	−0.02	±0.3
70000	4.42	4.39	4.38	4.42	4.39	4.39	0.00	0.00	0.02	±0.3
88800	4.41	4.38	4.37	4.41	4.38	4.37	0.00	0.00	0.00	±0.3
112400	4.39	4.37	4.35	4.39	4.37	4.36	0.00	0.00	0.02	±0.3
142400	4.37	4.35	4.33	4.37	4.35	4.34	0.00	0.00	0.02	±0.3
161750	4.36	4.33	4.32	4.36	4.33	4.33	0.00	0.00	0.02	±0.3
180400	4.34	4.32	4.31	4.34	4.32	4.31	0.00	0.00	0.00	±0.3
228400	4.31	4.28	4.27	4.32	4.29	4.28	0.02	0.02	0.02	±0.3
289400	4.27	4.25	4.23	4.28	4.25	4.24	0.02	0.00	0.02	±0.3
366400	4.22	4.20	4.18	4.23	4.20	4.19	0.02	0.00	0.02	±0.3
400000	4.20	4.18	4.17	4.21	4.18	4.17	0.02	0.00	0.00	±0.3
464000	4.18	4.16	4.15	4.18	4.16	4.15	0.00	0.00	0.00	±0.3
587800	4.12	4.10	4.09	4.12	4.10	4.10	0.00	0.00	0.02	±0.3
744200	4.07	4.06	4.04	4.07	4.05	4.05	0.00	−0.02	0.02	±0.3
942600	4.05	4.04	4.03	4.06	4.04	4.03	0.02	0.00	0.00	±0.3
1193600	4.02	4.01	4.00	4.02	4.01	4.00	0.00	0.00	0.00	±0.3
1511600	4.01	4.00	3.99	4.02	4.00	4.00	0.02	0.00	0.02	±0.3
1914400	3.99	3.98	3.97	4.00	3.98	3.98	0.02	0.00	0.02	±0.3
2424400	3.97	3.96	3.95	3.98	3.96	3.94	0.02	0.00	−0.02	±0.3
3070200	3.93	3.93	3.92	3.95	3.92	3.92	0.04	−0.02	0.00	±0.3
3888000	3.88	3.87	3.86	3.88	3.87	3.86	0.00	0.00	0.00	±0.3
4000000	3.86	3.86	3.85	3.87	3.86	3.85	0.02	0.00	0.00	+0.3
4923800	3.79	3.78	3.78	3.80	3.79	3.78	0.02	0.02	0.00	+0.3
6235400	3.67	3.67	3.67	3.68	3.67	3.67	0.02	0.00	0.00	±0.3
7896400	3.54	3.53	3.53	3.55	3.53	3.53	0.02	0.00	0.00	+0.3
10000000	3.38	3.38	3.38	3.39	3.36	3.37	0.03	−0.05	−0.03	+0.3

SPEAG H-field frequency response tolerance criteria[1]:
±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	3.29	3.28	3.29	3.29	3.29	3.29	0.00	0.03	0.00	±0.3
3200	3.30	3.29	3.29	3.32	3.29	3.30	0.05	0.00	0.03	±0.3
4000	3.29	3.29	3.29	3.29	3.29	3.30	0.00	0.00	0.03	±0.3
5200	3.27	3.26	3.26	3.26	3.26	3.24	−0.03	0.00	−0.05	±0.3
6600	3.23	3.22	3.23	3.24	3.23	3.24	0.03	0.03	0.03	±0.3
8200	3.19	3.19	3.19	3.21	3.19	3.20	0.05	0.00	0.03	±0.3
9000	3.17	3.17	3.17	3.17	3.17	3.18	0.00	0.00	0.03	±0.3
10600	4.40	4.31	4.30	4.39	4.34	4.28	−0.02	0.06	−0.04	±0.3
13400	4.43	4.34	4.33	4.43	4.35	4.35	0.00	0.02	0.04	±0.3
17000	4.43	4.38	4.37	4.44	4.39	4.37	0.02	0.02	0.00	±0.3
21400	4.46	4.38	4.38	4.45	4.39	4.39	−0.02	0.02	0.02	±0.3
27200	4.45	4.40	4.39	4.47	4.41	4.40	0.04	0.02	0.02	±0.3
34400	4.45	4.42	4.41	4.47	4.42	4.42	0.04	0.00	0.02	±0.3
40000	4.45	4.42	4.40	4.46	4.42	4.42	0.02	0.00	0.04	±0.3
43600	4.45	4.42	4.40	4.46	4.42	4.41	0.02	0.00	0.02	±0.3
55400	4.43	4.37	4.39	4.44	4.40	4.39	0.02	0.06	0.00	±0.3
70000	4.42	4.39	4.38	4.43	4.41	4.40	0.02	0.04	0.04	±0.3
88800	4.41	4.38	4.37	4.41	4.38	4.38	0.00	0.00	0.02	±0.3
112400	4.39	4.37	4.35	4.40	4.37	4.37	0.02	0.00	0.04	±0.3
142400	4.37	4.35	4.33	4.38	4.36	4.35	0.02	0.02	0.04	±0.3
161750	4.36	4.33	4.32	4.36	4.33	4.33	0.00	0.00	0.02	±0.3
180400	4.34	4.32	4.31	4.34	4.31	4.32	0.00	−0.02	0.02	±0.3
228400	4.31	4.28	4.27	4.31	4.29	4.28	0.00	0.02	0.02	±0.3
289400	4.27	4.25	4.23	4.28	4.25	4.24	0.02	0.00	0.02	±0.3
366400	4.22	4.20	4.18	4.23	4.21	4.20	0.02	0.02	0.04	±0.3
400000	4.20	4.18	4.17	4.20	4.19	4.18	0.00	0.02	0.02	±0.3
464000	4.18	4.16	4.15	4.18	4.16	4.16	0.00	0.00	0.02	±0.3
587800	4.12	4.10	4.09	4.12	4.10	4.10	0.00	0.00	0.02	±0.3
744200	4.07	4.06	4.04	4.08	4.06	4.06	0.02	0.00	0.04	±0.3
942600	4.05	4.04	4.03	4.06	4.04	4.04	0.02	0.00	0.02	±0.3
1193600	4.02	4.01	4.00	4.03	4.01	4.01	0.02	0.00	0.02	±0.3
1511600	4.01	4.00	3.99	4.02	4.00	4.00	0.02	0.00	0.02	±0.3
1914400	3.99	3.98	3.97	4.00	3.98	3.98	0.02	0.00	0.02	±0.3
2424400	3.97	3.96	3.95	3.98	3.96	3.95	0.02	0.00	0.00	±0.3
3070200	3.93	3.93	3.92	3.94	3.93	3.93	0.02	0.00	0.02	±0.3
3888000	3.88	3.87	3.86	3.89	3.87	3.87	0.02	0.00	0.02	±0.3
4000000	3.86	3.86	3.85	3.88	3.86	3.86	0.04	0.00	0.02	±0.3
4923800	3.79	3.78	3.78	3.80	3.79	3.78	0.02	0.02	0.00	±0.3
6235400	3.67	3.67	3.67	3.68	3.67	3.67	0.02	0.00	0.00	±0.3
7896400	3.54	3.53	3.53	3.55	3.54	3.54	0.02	0.02	0.02	±0.3
10000000	3.38	3.38	3.38	3.38	3.37	3.37	0.00	−0.03	−0.03	±0.3

SPEAG H-field frequency response tolerance criteria[1]:
±0.3 dB for applied H-fields at calibration points from 3 kHz to 10 MHz

[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	3.29	3.28	3.29	3.29	3.29	3.29	0.00	0.03	0.00	±0.3
3200	3.30	3.29	3.29	3.32	3.28	3.30	0.05	−0.03	0.03	±0.3
4000	3.29	3.29	3.29	3.29	3.29	3.29	0.00	0.00	0.00	±0.3
5200	3.27	3.26	3.26	3.25	3.26	3.23	−0.05	0.00	−0.08	±0.3
6600	3.23	3.22	3.23	3.24	3.24	3.27	0.03	0.05	0.11	±0.3
8200	3.19	3.19	3.19	3.21	3.19	3.19	0.05	0.00	0.00	±0.3
9000	3.17	3.17	3.17	3.17	3.18	3.17	0.00	0.03	0.00	±0.3
10600	4.40	4.31	4.30	4.41	4.33	4.29	0.02	0.04	−0.02	±0.3
13400	4.43	4.34	4.33	4.44	4.36	4.35	0.02	0.04	0.04	±0.3
17000	4.43	4.38	4.37	4.44	4.38	4.37	0.02	0.00	0.00	±0.3
21400	4.46	4.38	4.38	4.46	4.39	4.38	0.00	0.02	0.00	±0.3
27200	4.45	4.40	4.39	4.46	4.39	4.39	0.02	−0.02	0.00	±0.3
34400	4.45	4.42	4.41	4.46	4.43	4.41	0.02	0.02	0.00	±0.3
40000	4.45	4.42	4.40	4.45	4.42	4.41	0.00	0.00	0.02	±0.3
43600	4.45	4.42	4.40	4.46	4.41	4.41	0.02	−0.02	0.02	±0.3
55400	4.43	4.37	4.39	4.44	4.40	4.38	0.02	0.06	−0.02	±0.3
70000	4.42	4.39	4.38	4.42	4.40	4.39	0.00	0.02	0.02	±0.3
88800	4.41	4.38	4.37	4.41	4.38	4.37	0.00	0.00	0.00	±0.3
112400	4.39	4.37	4.35	4.40	4.37	4.36	0.02	0.00	0.02	±0.3
142400	4.37	4.35	4.33	4.39	4.36	4.34	0.04	0.02	0.02	±0.3
161750	4.36	4.33	4.32	4.36	4.33	4.32	0.00	0.00	0.00	±0.3
180400	4.34	4.32	4.31	4.34	4.32	4.31	0.00	0.00	0.00	±0.3
228400	4.31	4.28	4.27	4.31	4.28	4.28	0.00	0.00	0.02	±0.3
289400	4.27	4.25	4.23	4.28	4.24	4.24	0.02	−0.02	0.02	±0.3
366400	4.22	4.20	4.18	4.23	4.20	4.19	0.02	0.00	0.02	±0.3
400000	4.20	4.18	4.17	4.21	4.18	4.17	0.02	0.00	0.00	±0.3
464000	4.18	4.16	4.15	4.18	4.16	4.15	0.00	0.00	0.00	±0.3
587800	4.12	4.10	4.09	4.12	4.10	4.09	0.00	0.00	0.00	±0.3
744200	4.07	4.06	4.04	4.08	4.06	4.05	0.02	0.00	0.02	±0.3
942600	4.05	4.04	4.03	4.06	4.04	4.03	0.02	0.00	0.00	±0.3
1193600	4.02	4.01	4.00	4.03	4.01	4.00	0.02	0.00	0.00	±0.3
1511600	4.01	4.00	3.99	4.01	4.00	3.99	0.00	0.00	0.00	±0.3
1914400	3.99	3.98	3.97	4.00	3.98	3.97	0.02	0.00	0.00	±0.3
2424400	3.97	3.96	3.95	3.98	3.97	3.95	0.02	0.02	0.00	±0.3
3070200	3.93	3.93	3.92	3.94	3.92	3.91	0.02	−0.02	−0.02	±0.3
3888000	3.88	3.87	3.86	3.89	3.87	3.86	0.02	0.00	0.00	±0.3
4000000	3.86	3.86	3.85	3.87	3.86	3.85	0.02	0.00	0.00	±0.3
4923800	3.79	3.78	3.78	3.79	3.79	3.78	0.00	0.02	0.00	±0.3
6235400	3.67	3.67	3.67	3.68	3.68	3.66	0.02	0.02	−0.02	±0.3
7896400	3.54	3.53	3.53	3.55	3.54	3.53	0.02	0.02	0.00	±0.3
10000000	3.38	3.38	3.38	3.39	3.37	3.36	0.03	−0.03	−0.05	±0.3

SPEAG H-field frequency response tolerance criteria[1]:
±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	3.29	3.28	3.29	3.29	3.29	3.29	0.00	0.03	0.00	±0.3
3200	3.30	3.29	3.29	3.31	3.29	3.29	0.03	0.00	0.00	±0.3
4000	3.29	3.29	3.29	3.29	3.29	3.29	0.00	0.00	0.00	±0.3
5200	3.27	3.26	3.26	3.26	3.26	3.24	−0.03	0.00	−0.05	±0.3
6600	3.23	3.22	3.23	3.23	3.23	3.24	0.00	0.03	0.03	±0.3
8200	3.19	3.19	3.19	3.21	3.19	3.20	0.05	0.00	0.03	±0.3
9000	3.17	3.17	3.17	3.17	3.17	3.17	0.00	0.00	0.00	±0.3
10600	4.40	4.31	4.30	4.38	4.34	4.31	−0.04	0.06	0.02	±0.3
13400	4.43	4.34	4.33	4.42	4.37	4.35	−0.02	0.06	0.04	±0.3
17000	4.43	4.38	4.37	4.43	4.38	4.37	0.00	0.00	0.00	±0.3
21400	4.46	4.38	4.38	4.48	4.39	4.38	0.04	0.02	0.00	±0.3
27200	4.45	4.40	4.39	4.45	4.41	4.39	0.00	0.02	0.00	±0.3
34400	4.45	4.42	4.41	4.47	4.43	4.41	0.04	0.02	0.00	±0.3
40000	4.45	4.42	4.40	4.45	4.42	4.39	0.00	0.00	−0.02	±0.3
43600	4.45	4.42	4.40	4.44	4.41	4.40	−0.02	−0.02	0.00	±0.3
55400	4.43	4.37	4.39	4.43	4.40	4.39	0.00	0.06	0.00	±0.3
70000	4.42	4.39	4.38	4.43	4.40	4.38	0.02	0.02	0.00	±0.3
88800	4.41	4.38	4.37	4.41	4.38	4.37	0.00	0.00	0.00	±0.3
112400	4.39	4.37	4.35	4.39	4.37	4.36	0.00	0.00	0.02	±0.3
142400	4.37	4.35	4.33	4.38	4.35	4.34	0.02	0.00	0.02	±0.3
161750	4.35	4.33	4.32	4.36	4.33	4.32	0.00	0.00	0.00	±0.3
180400	4.34	4.32	4.31	4.34	4.32	4.31	0.00	0.00	0.00	±0.3
228400	4.31	4.28	4.27	4.31	4.29	4.28	0.00	0.02	0.02	±0.3
289400	4.27	4.25	4.23	4.27	4.25	4.24	0.00	0.00	0.02	±0.3
366400	4.22	4.20	4.18	4.22	4.20	4.19	0.00	0.00	0.02	±0.3
400000	4.20	4.18	4.17	4.21	4.18	4.18	0.02	0.00	0.02	±0.3
464000	4.18	4.16	4.15	4.18	4.17	4.16	0.00	0.02	0.02	±0.3
587800	4.12	4.10	4.09	4.12	4.10	4.09	0.00	0.00	0.00	±0.3
744200	4.07	4.06	4.04	4.08	4.06	4.05	0.02	0.00	0.02	±0.3
942600	4.05	4.04	4.03	4.06	4.04	4.04	0.02	0.00	0.02	±0.3
1193600	4.02	4.01	4.00	4.03	4.01	4.00	0.02	0.00	0.00	±0.3
1511600	4.01	4.00	3.99	4.01	4.00	3.99	0.00	0.00	0.00	±0.3
1914400	3.99	3.98	3.97	4.01	3.98	3.97	0.04	0.00	0.00	±0.3
2424400	3.97	3.96	3.95	3.96	3.97	3.95	0.02	0.02	0.00	±0.3
3070200	3.93	3.93	3.92	3.95	3.92	3.92	0.04	−0.02	0.00	±0.3
3888000	3.88	3.87	3.86	3.89	3.87	3.87	0.02	0.00	0.02	±0.3
4000000	3.86	3.86	3.85	3.88	3.86	3.85	0.04	0.00	0.00	±0.3
4923800	3.79	3.78	3.78	3.80	3.78	3.78	0.02	0.00	0.00	±0.3
6235400	3.67	3.67	3.67	3.68	3.67	3.66	0.02	0.00	−0.02	±0.3
7896400	3.54	3.53	3.53	3.55	3.54	3.53	0.02	0.02	0.00	±0.3
10000000	3.38	3.38	3.38	3.40	3.37	3.37	0.05	−0.03	−0.03	±0.3

SPEAG H-field frequency response tolerance criteria[1]:
±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	3.29	3.28	3.29	3.30	3.28	3.29	0.03	0.00	0.00	±0.3
3200	3.30	3.29	3.29	3.32	3.29	3.30	0.05	0.00	0.03	±0.3
4000	3.29	3.29	3.29	3.29	3.29	3.30	0.00	0.00	0.03	±0.3
5200	3.27	3.26	3.26	3.26	3.26	3.24	−0.03	0.00	−0.05	±0.3
6600	3.23	3.22	3.23	3.23	3.23	3.26	0.00	0.03	0.08	±0.3
8200	3.19	3.19	3.19	3.21	3.19	3.20	0.05	0.00	0.03	±0.3
9000	3.17	3.17	3.17	3.17	3.17	3.17	0.00	0.00	0.00	±0.3
10600	4.40	4.31	4.30	4.41	4.32	4.28	0.02	0.02	−0.04	±0.3
13400	4.43	4.34	4.33	4.44	4.36	4.34	0.02	0.04	0.02	±0.3
17000	4.43	4.38	4.37	4.45	4.38	4.38	0.04	0.00	0.02	±0.3
21400	4.46	4.38	4.38	4.49	4.40	4.38	0.06	0.04	0.00	±0.3
27200	4.45	4.40	4.39	4.47	4.40	4.40	0.04	0.00	0.02	±0.3
34400	4.45	4.42	4.41	4.46	4.42	4.41	0.02	0.00	0.00	±0.3
40000	4.45	4.42	4.40	4.45	4.41	4.40	0.00	−0.02	0.00	±0.3
43600	4.45	4.42	4.40	4.44	4.43	4.41	−0.02	0.02	0.02	±0.3
55400	4.43	4.37	4.39	4.44	4.40	4.39	0.02	0.06	0.00	±0.3
70000	4.42	4.39	4.38	4.43	4.39	4.38	0.02	0.00	0.00	±0.3
88800	4.41	4.38	4.37	4.42	4.37	4.37	0.02	−0.02	0.00	±0.3
112400	4.39	4.37	4.35	4.40	4.37	4.36	0.02	0.00	0.02	±0.3
142400	4.37	4.35	4.33	4.38	4.35	4.35	0.02	0.00	0.04	±0.3
161750	4.36	4.33	4.32	4.37	4.33	4.33	0.02	0.00	0.02	±0.3
180400	4.34	4.32	4.31	4.35	4.32	4.31	0.02	0.00	0.00	±0.3
228400	4.31	4.28	4.27	4.32	4.28	4.28	0.02	0.00	0.02	±0.3
289400	4.27	4.25	4.23	4.28	4.25	4.24	0.02	0.00	0.02	±0.3
366400	4.22	4.20	4.18	4.23	4.20	4.19	0.02	0.00	0.02	±0.3
400000	4.20	4.18	4.17	4.21	4.18	4.17	0.02	0.00	0.00	±0.3
464000	4.18	4.16	4.15	4.19	4.16	4.16	0.02	0.00	0.02	±0.3
587800	4.12	4.10	4.09	4.13	4.10	4.10	0.02	0.00	0.02	±0.3
744200	4.07	4.06	4.04	4.08	4.05	4.05	0.02	−0.02	0.02	±0.3
942600	4.05	4.04	4.03	4.06	4.04	4.04	0.02	0.00	0.02	±0.3
1193600	4.02	4.01	4.00	4.03	4.01	4.00	0.02	0.00	0.00	±0.3
1511600	4.01	4.00	3.99	4.02	4.00	3.99	0.02	0.00	0.00	±0.3
1914400	3.99	3.98	3.97	4.01	3.98	3.98	0.04	0.00	0.02	±0.3
2424400	3.97	3.96	3.95	3.99	3.96	3.95	0.04	0.00	0.00	±0.3
3070200	3.93	3.93	3.92	3.95	3.92	3.92	0.04	−0.02	0.00	±0.3
3888000	3.88	3.87	3.86	3.89	3.86	3.87	0.02	−0.02	0.02	±0.3
4000000	3.86	3.86	3.85	3.88	3.86	3.85	0.04	0.00	0.00	±0.3
4923800	3.79	3.78	3.78	3.81	3.79	3.79	0.05	0.02	0.02	±0.3
6235400	3.67	3.67	3.67	3.69	3.67	3.67	0.05	0.00	0.00	±0.3
7896400	3.54	3.53	3.53	3.55	3.53	3.53	0.02	0.00	0.00	±0.3
10000000	3.38	3.38	3.38	3.40	3.37	3.39	0.05	−0.03	0.03	±0.3

SPEAG H-field frequency response tolerance criteria[1]:
±0.3 dB for applied H-fields at calibration points from 3 kHz to 10 MHz

[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	3.29	3.28	3.29	3.29	3.29	3.29	0.00	0.03	0.00	±0.3
3200	3.30	3.29	3.29	3.31	3.29	3.29	0.03	0.00	0.00	±0.3
4000	3.29	3.29	3.29	3.30	3.29	3.29	0.03	0.00	0.00	±0.3
5200	3.27	3.26	3.26	3.26	3.26	3.24	-0.03	0.00	-0.05	±0.3
6600	3.23	3.22	3.23	3.24	3.23	3.24	0.03	0.03	0.03	±0.3
8200	3.19	3.19	3.19	3.22	3.19	3.20	0.08	0.00	0.03	±0.3
9000	3.17	3.17	3.17	3.17	3.17	3.17	0.00	0.00	0.00	±0.3
10600	4.40	4.31	4.30	4.42	4.32	4.29	0.04	0.02	-0.02	±0.3
13400	4.43	4.34	4.33	4.43	4.36	4.33	0.00	0.04	0.00	±0.3
17000	4.43	4.38	4.37	4.45	4.40	4.37	0.04	0.04	0.00	±0.3
21400	4.46	4.38	4.38	4.47	4.41	4.38	0.02	0.06	0.00	±0.3
27200	4.45	4.40	4.39	4.47	4.41	4.39	0.04	0.02	0.00	±0.3
34400	4.45	4.42	4.41	4.47	4.43	4.41	0.04	0.02	0.00	±0.3
40000	4.45	4.42	4.40	4.45	4.42	4.41	0.00	0.00	0.02	±0.3
43600	4.45	4.42	4.40	4.44	4.42	4.41	-0.02	0.00	0.02	±0.3
55400	4.43	4.37	4.39	4.44	4.41	4.38	0.02	0.08	-0.02	±0.3
70000	4.42	4.39	4.38	4.43	4.41	4.39	0.02	0.04	0.02	±0.3
88800	4.41	4.38	4.37	4.42	4.39	4.38	0.02	0.02	0.02	±0.3
112400	4.39	4.37	4.35	4.41	4.37	4.36	0.04	0.00	0.02	±0.3
142400	4.37	4.35	4.33	4.38	4.36	4.34	0.02	0.02	0.02	±0.3
161750	4.36	4.33	4.32	4.37	4.34	4.33	0.02	0.02	0.02	±0.3
180400	4.34	4.32	4.31	4.34	4.33	4.32	0.00	0.02	0.02	±0.3
228400	4.31	4.28	4.27	4.33	4.29	4.28	0.04	0.02	0.02	±0.3
289400	4.27	4.25	4.23	4.28	4.25	4.24	0.02	0.00	0.02	±0.3
366400	4.22	4.20	4.18	4.23	4.21	4.19	0.02	0.02	0.02	±0.3
400000	4.20	4.18	4.17	4.21	4.19	4.17	0.02	0.02	0.00	±0.3
464000	4.18	4.16	4.15	4.20	4.16	4.16	0.04	0.00	0.02	±0.3
587800	4.12	4.10	4.09	4.13	4.11	4.10	0.02	0.02	0.02	±0.3
744200	4.07	4.06	4.04	4.08	4.05	4.05	0.02	-0.02	0.02	±0.3
942600	4.05	4.04	4.03	4.07	4.05	4.04	0.04	0.02	0.02	±0.3
1193600	4.02	4.01	4.00	4.03	4.01	4.00	0.02	0.00	0.00	±0.3
1511600	4.01	4.00	3.99	4.02	4.00	3.99	0.02	0.00	0.00	±0.3
1914400	3.99	3.98	3.97	4.01	3.98	3.97	0.04	0.00	0.00	±0.3
2424400	3.97	3.96	3.95	3.98	3.97	3.95	0.02	0.02	0.00	±0.3
3070200	3.93	3.93	3.92	3.95	3.93	3.92	0.04	0.00	0.00	±0.3
3888000	3.89	3.87	3.86	3.89	3.87	3.87	0.02	0.00	0.02	±0.3
4000000	3.86	3.86	3.85	3.88	3.86	3.85	0.04	0.00	0.00	±0.3
4923800	3.79	3.78	3.78	3.80	3.79	3.78	0.02	0.02	0.00	±0.3
6235400	3.67	3.67	3.67	3.68	3.67	3.67	0.02	0.00	0.00	±0.3
7896400	3.54	3.53	3.53	3.56	3.54	3.54	0.05	0.02	0.02	±0.3
10000000	3.38	3.38	3.38	3.39	3.38	3.39	0.03	0.00	0.03	±0.3

SPEAG H-field frequency response tolerance criteria[1]:
±0.3 dB for applied H-fields at calibration points from 3 kHz to 10 MHz

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

Frequency Response, E-field, Channel 0

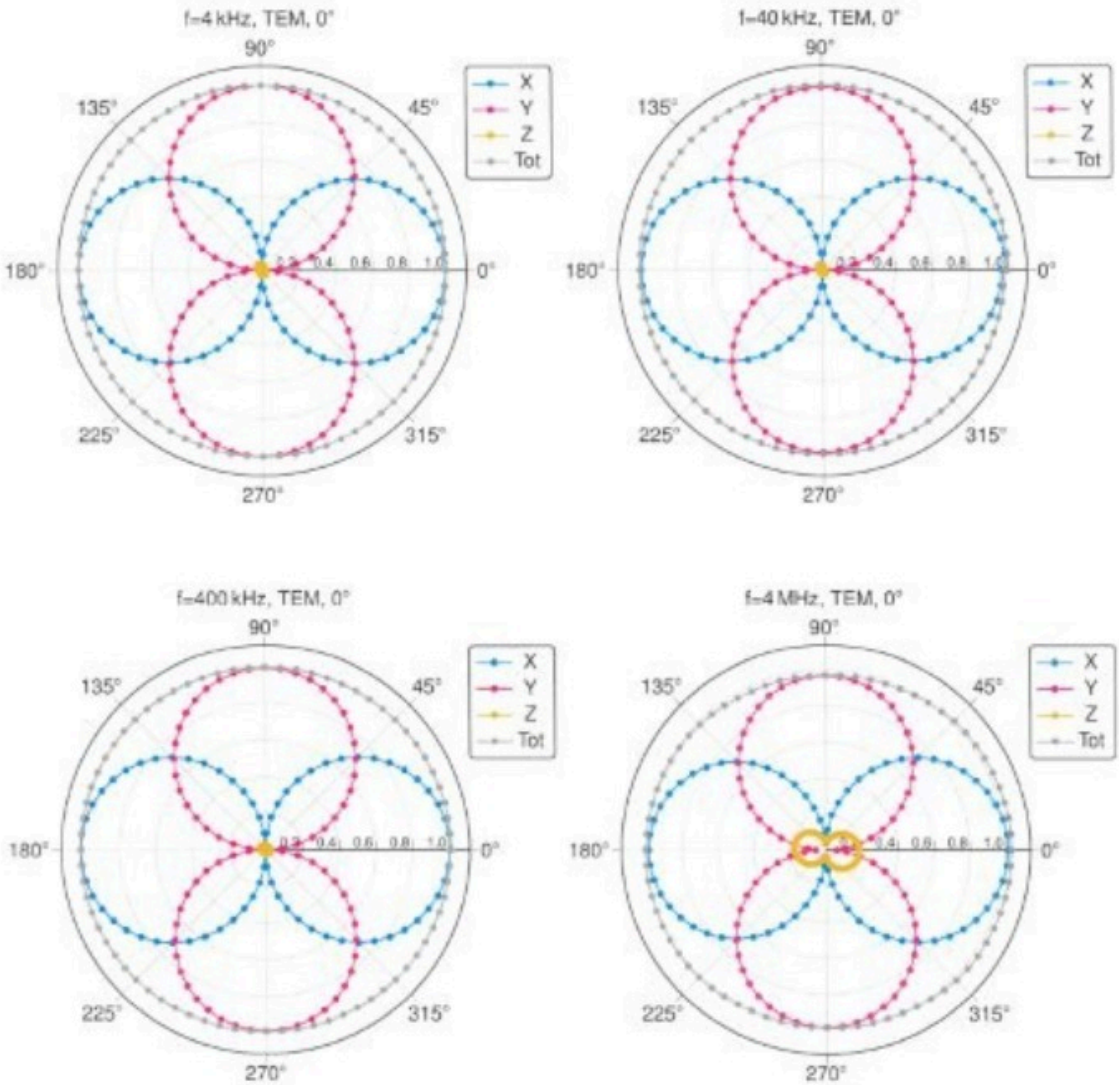
f (Hz)	E-field (V/m) Applied			E-field (V/m) Reading			Difference (dB)			Tolerance (dB)
	x	y	z	x	y	z	x	y	z	
3000	84.6	84.6	88.0	84.7	84.7	87.9	0.01	0.01	−0.01	±0.3
3200	86.2	86.2	80.3	86.2	86.7	80.4	0.00	0.05	0.01	±0.3
4000	83.9	83.9	88.0	84.0	84.0	88.0	0.01	0.01	0.00	±0.3
5200	81.8	81.8	85.0	81.7	82.5	84.8	−0.01	0.07	−0.02	±0.3
6600	81.9	81.9	82.1	82.0	81.9	82.3	0.01	0.00	0.02	±0.3
8200	78.0	78.0	82.1	78.2	78.3	82.2	0.02	0.03	0.01	±0.3
9000	83.4	83.4	83.5	83.5	83.5	83.5	0.01	0.01	0.00	±0.3
10600	82.6	82.6	81.7	82.7	82.9	81.9	0.01	0.03	0.02	±0.3
13400	85.7	85.7	79.6	85.9	85.8	79.7	0.02	0.01	0.01	±0.3
17000	84.9	84.9	78.2	84.9	85.0	78.2	0.00	0.01	0.00	±0.3
21400	83.1	83.1	82.6	83.2	83.3	82.6	0.01	0.02	0.00	±0.3
27200	83.9	83.9	80.4	84.0	84.1	80.4	0.01	0.02	0.00	±0.3
34400	82.5	82.5	79.4	82.5	82.6	79.5	0.00	0.01	0.01	±0.3
40000	83.2	83.2	82.1	83.2	83.2	82.2	0.00	0.00	0.01	±0.3
43600	82.5	82.5	81.3	82.5	82.5	81.3	0.00	0.00	0.00	±0.3
55400	82.3	82.3	81.3	82.4	82.3	81.3	0.01	0.00	0.00	±0.3
70000	83.1	83.1	81.4	83.1	83.2	81.4	0.00	0.01	0.00	±0.3
88800	82.2	82.2	82.1	82.3	82.2	82.1	0.01	0.00	0.00	±0.3
112400	82.6	82.6	81.7	82.7	82.7	81.7	0.01	0.01	0.00	±0.3
142400	82.6	82.6	82.1	82.7	82.7	82.1	0.01	0.01	0.00	±0.3
161750	82.7	82.7	82.1	82.7	82.7	82.1	0.00	0.00	0.00	±0.3
180400	83.0	83.0	82.1	83.0	83.1	82.1	0.00	0.01	0.00	±0.3
228400	83.1	83.1	82.2	83.1	83.2	82.2	0.00	0.01	0.00	±0.3
289400	83.3	83.3	82.6	83.4	83.4	82.7	0.01	0.01	0.01	±0.3
366400	83.5	83.5	82.7	83.5	83.5	82.7	0.00	0.00	0.00	±0.3
400000	83.8	83.8	82.7	83.8	83.8	82.8	0.00	0.00	0.01	±0.3
464000	84.0	84.0	83.0	84.1	84.1	83.0	0.01	0.01	0.00	±0.3
587800	84.0	84.0	83.0	84.1	84.1	83.0	0.01	0.01	0.00	±0.3
744200	84.1	84.1	83.0	84.1	84.1	83.0	0.00	0.00	0.00	±0.3
942600	84.1	84.1	83.1	84.1	84.1	83.2	0.00	0.00	0.01	±0.3
1193600	83.8	83.8	82.7	83.9	83.9	82.7	0.01	0.01	0.00	±0.3
1511600	83.3	83.3	82.3	83.4	83.4	82.3	0.01	0.01	0.00	±0.3
1914400	82.9	82.9	82.0	83.0	83.0	82.0	0.01	0.01	0.00	±0.3
2424400	82.6	82.6	81.8	82.6	82.6	81.8	0.00	0.00	0.00	±0.3
3070200	82.5	82.5	81.5	82.5	82.5	81.5	0.00	0.00	0.00	±0.3
3888000	82.6	82.6	81.8	82.7	82.7	81.8	0.01	0.01	0.00	±0.3
4000000	82.4	82.4	81.7	82.5	82.5	81.7	0.01	0.01	0.00	±0.3
4923800	83.0	83.0	82.5	83.1	83.1	82.5	0.01	0.01	0.00	±0.3
6235400	85.7	85.7	85.0	85.7	85.7	85.0	0.00	0.00	0.00	±0.3
7896400	88.5	88.5	88.0	88.5	88.5	88.0	0.00	0.00	0.00	±0.3
10000000	96.8	96.8	96.2	96.8	96.8	96.2	0.00	0.00	0.00	±0.3

SPEAG E-field frequency response tolerance criteria[1]:
±0.3dB for applied E-fields at calibration points from 3kHz to 10MHz

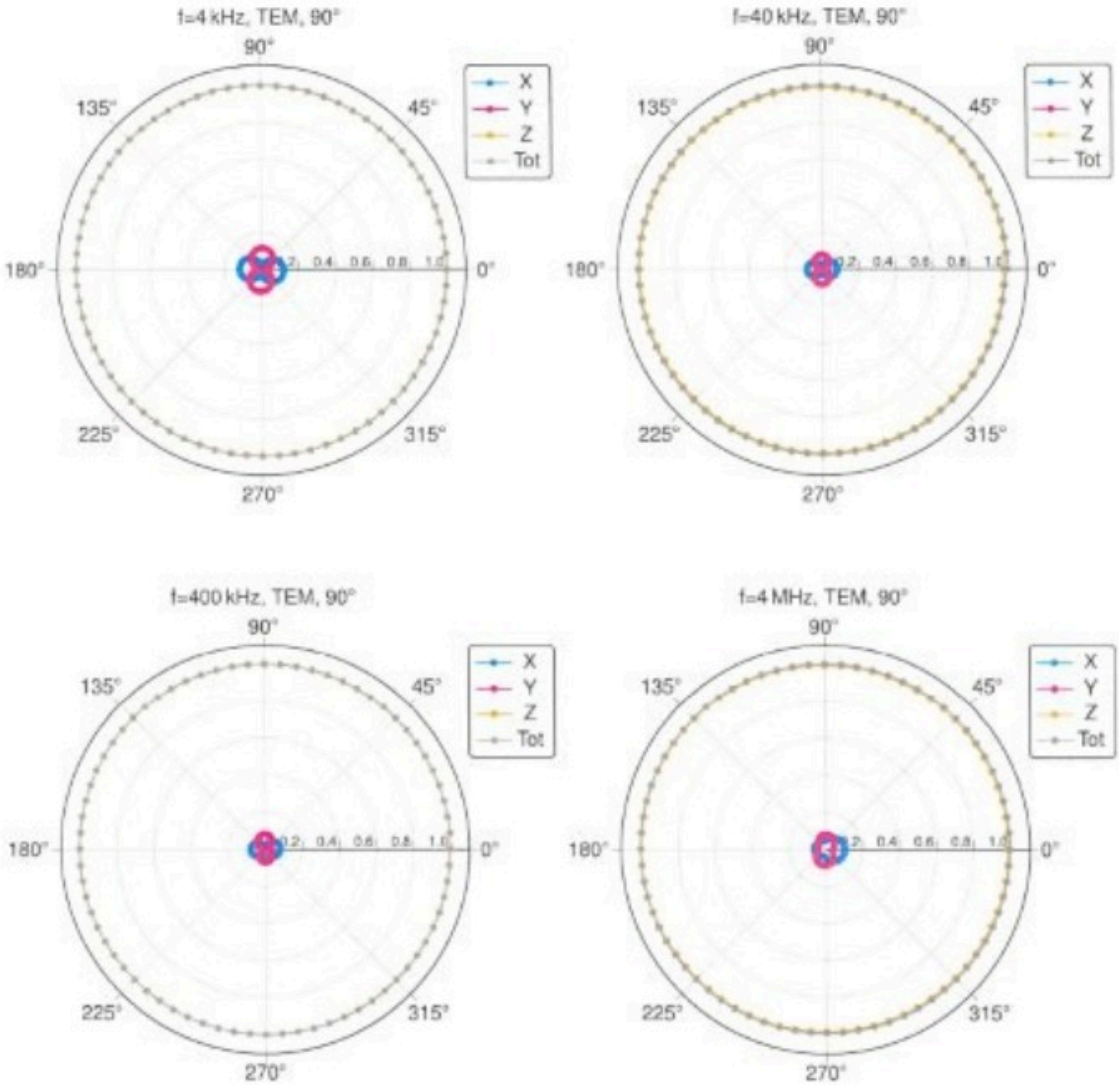
[1]Calibration uncertainty not taken into account (shared risk 50%).

Isotropy H-Field

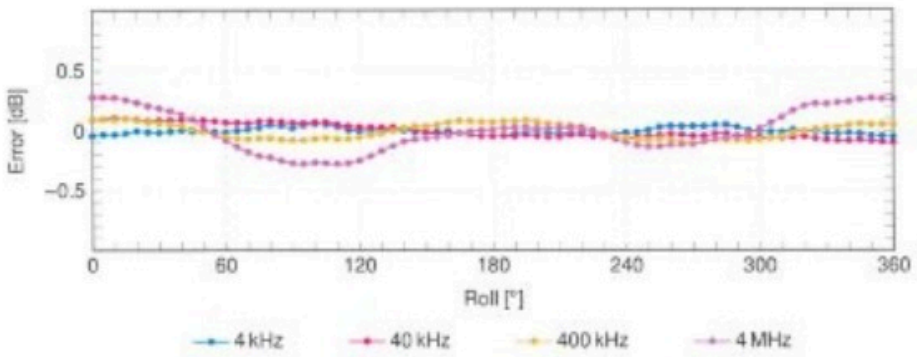
H-Field Receiving Pattern (ϕ), $\theta = 0°$



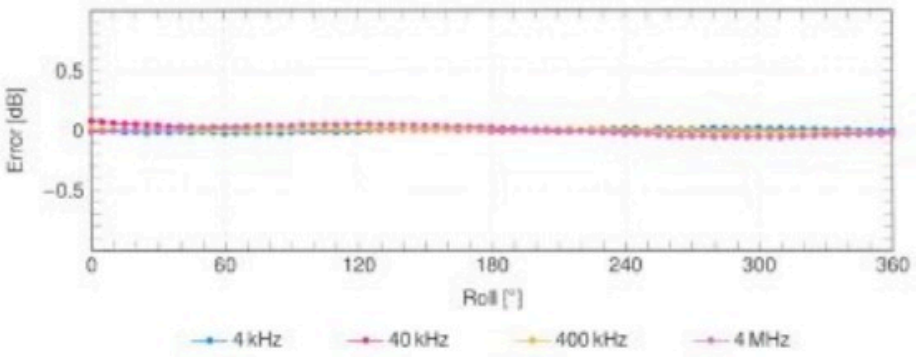
H-Field Receiving Pattern (ϕ), $\theta = 90°$



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



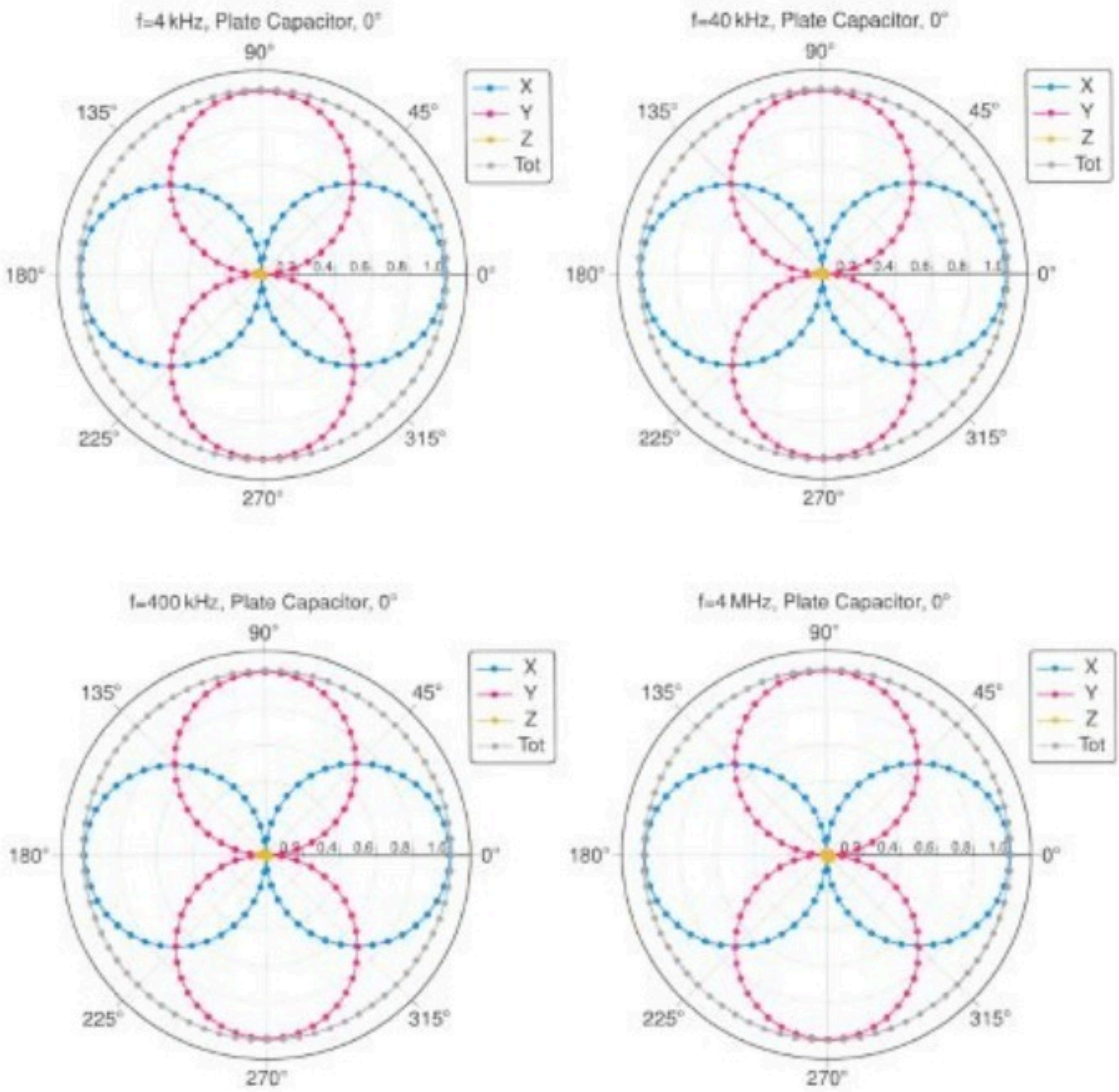
H-Field Receiving Pattern (ϕ), $\theta = 90°$



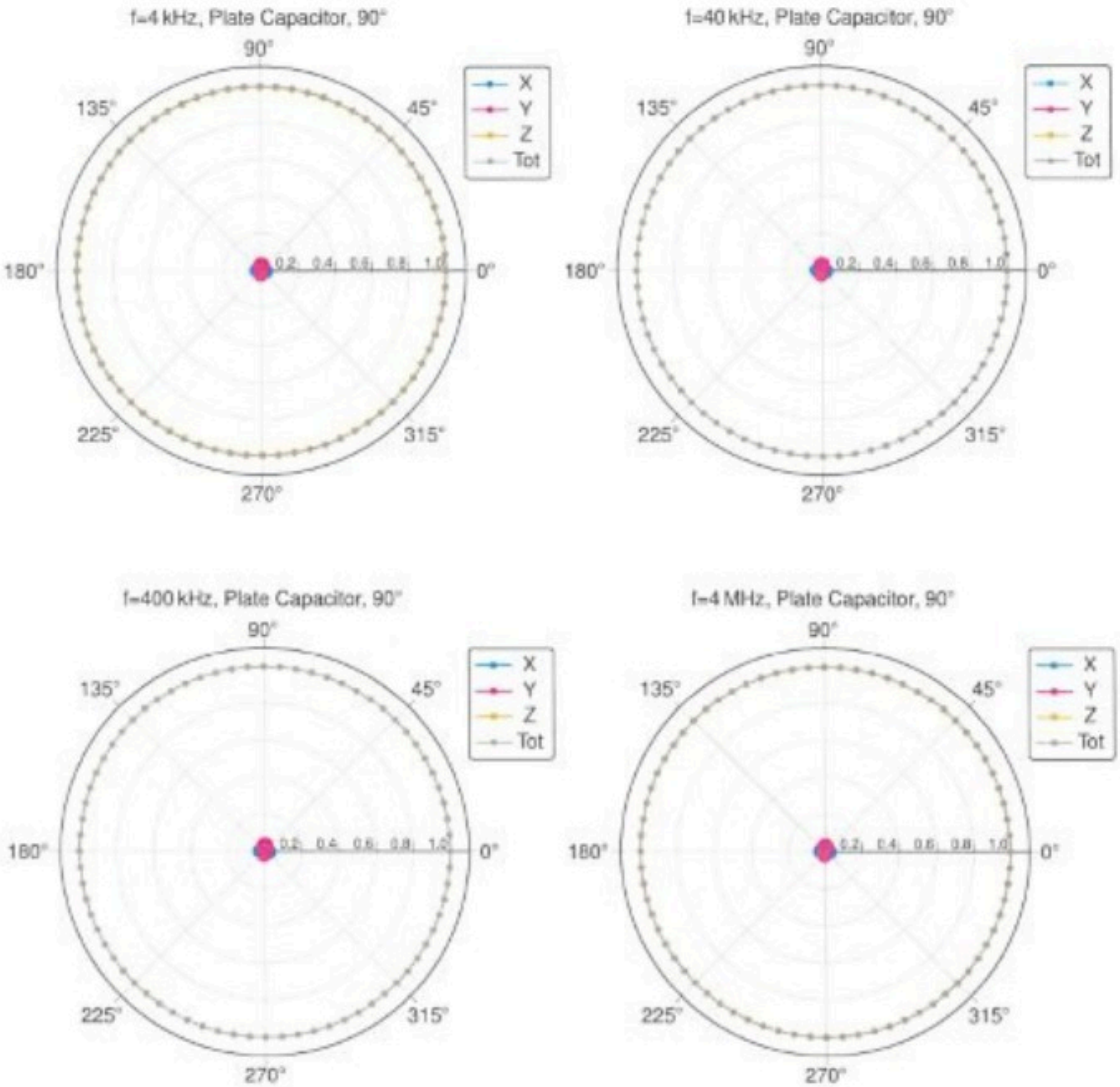
SPEAG axial deviation from the ideal response tolerance for H-field: ±0.6dB

Isotropy E-Field

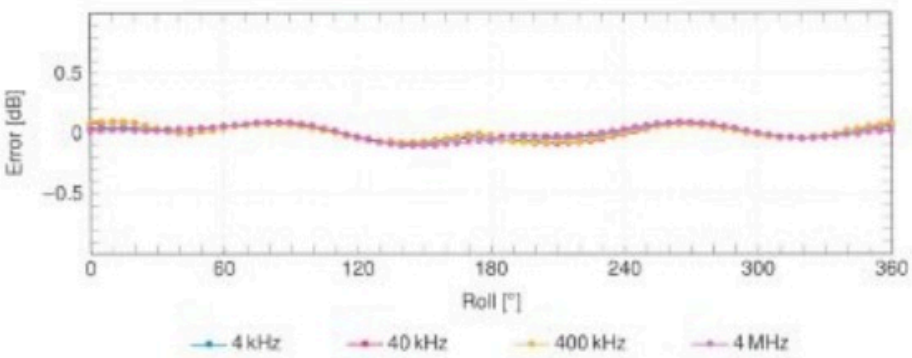
E-Field Receiving Pattern (ϕ), $\theta = 0°$



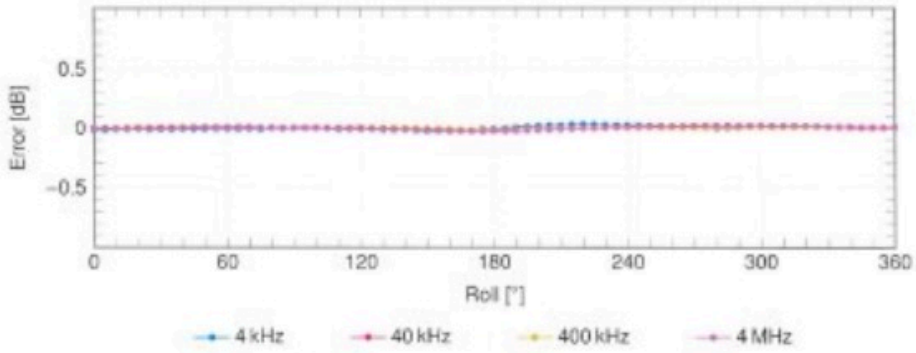
E-Field Receiving Pattern (ϕ), $\vartheta = 90°$



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



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



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

2. V-COIL50\400V2 SN:1021

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

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
Swiss Calibration Service

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: **Cetecom Advanced**
Saarbrücken, Germany

Certificate No.: **V-Coil50/400-1021_Nov25**

CALIBRATION CERTIFICATE

Object	V-Coil50/400V2 - SN: 1021
Calibration procedure(s)	QA CAL-47.v14 Calibration Procedure for WPT Verification & Validation Sources
Calibration date	November 11, 2025

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

	Name	Function	Signature
Calibrated by:	Krešimir Franjić	Laboratory Technician	
Approved by:	Sven Kühn	Technical Manager	i.A.

Issued: November 11, 2025

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

Certificate No: V-Coil50/400-1021_Nov25 Page 1 of 6

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

Accredited by the Swiss Accreditation Service (SAS)
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S C S Schweizerischer Kalibrierdienst
Service suisse d'étalonnage
Servizio svizzero di taratura
Swiss Calibration Service

Accreditation No.: **SCS 0108**

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	3.0.0.6328
	Notebook GUI	3.0.2.6
	Sim4Life	9.0.0
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	277	1.13
2	243	1.13

Measurement Conditions

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0	277	1.13
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Appendix (Additional assessments outside the scope of SCS 0108)

Peak values of induced fields[1]

Distance (relative to source surface) (mm)	Induced peak current density, 1cm² area avg. (A/m²)	Induced peak E-field (V/m)			peak spatial SAR (mW/kg)	
		2mm cube avg.	Local	5mm line avg.	1g avg.	10g avg.
0	2.77	4.38	4.50	4.50	7.48	3.69
2	2.34	3.76	3.87	3.88	6.41	2.72

Voltage measurement

Total voltage (V)	Voltages at harmonics (dBc)
0.414	Highest harmonic: -21.7 2nd highest harmonic: -31.9

[1] determined for a virtual half-space phantom with tissue properties ε_r = 55, σ = 0.75 S/m, ρ=1000 kg/m³ and a 2 mm thick phantom shell

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Measurement report

cDASY6 Module WPT Measurement Report

Device under test

Info:
V-Coil50/400

Serial number:
1021

Scenario:
Source Calibration

Test info

DASY software version:
cDASY6 Module WPT 3.0.0.0328

Probe model, serial no. and configuration date:
MRDPy-EHDO-E30v2, WP600038, 2025/11/10

Software version:
3.0.22, backend: 3.0.22

Scan info

Center location:
x:-149.47 mm, y: -262.67 mm, z: 37.01 mm

Dimensions:
x:124.0 mm, y: 125.0 mm, z: 36.7 mm

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

Completed on:
2025/11/11 11:42:04

Measurement results

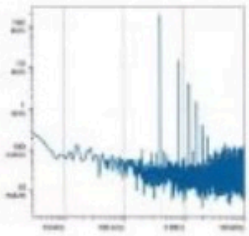
Maximum H-field (peak)?
[illegible]: 158.99 A/m
x: 25.03 A/m, y: 14.02 A/m, z: 133.56 A/m

Maximum H-field location relative to DUT:
x: -3.63 mm, y: 3.70 mm, z: 8.50 mm

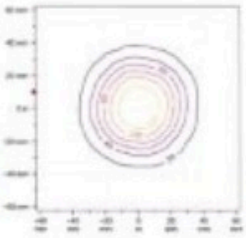
Distance to -20.0 dB boundary:
36.67 mm

Offset relative to DUT:
x: 38.70 mm, y: 38.70 mm, z: 1.00 mm

H-field magnitude [mm] at center location



H-field magnitude [mm] at lowest plane



Incident fields and induced fields in the homogeneous phantom at the peak frequency ([illegible])

Distance [mm]	Peak incident fields [mm] H_{inc} [A/m]	Peak E_{inc} [V/m, mm] Cube avg	Local	Line avg	Peak J_{ind} [A/m², mm] Surface avg	psSAR [mW/kg] 1g avg	10g avg	Induced extent -20 dB radius [mm]	Sign	Vector potential	Warnings Boundary effect
0.00	277	4.38	4.50	4.50	2.77	7.48	3.89	38.9	2%	8%	10%
1.00	243	3.78	3.87	3.98	2.34	5.41	2.72	39.1	2%	8%	21%

Compliance evaluation (Field values at the peak frequency) ([illegible])

Distance [mm]	ICNIRP 2010/2020 RL [mm] H_{inc} [A/m]	ICNIRP 2010/2020 BR [mm] H_{ind} [V/m]	ICNIRP 2010/2020 BR [mm] psSAR [mW/kg]	ICNIRP 1998 RL [mm] H_{inc} [A/m]	ICNIRP 1998 BR [mm] J_{ind} [A/m²]	ICNIRP 1998 BR [mm] psSAR [mW/kg]	IEEE 2019 DTL [mm] H_{inc} [A/m]	IEEE 2019 DRL [mm] H_{ind} [V/m]	IEEE 2019 DRL [mm] psSAR [mW/kg]	FCC MPE [mm] H_{inc} [A/m]	FCC BR [mm] H_{ind} [V/m]	FCC BR [mm] psSAR [mW/kg]	HC Code 6 RL [mm] H_{inc} [A/m]	HC Code 6 BR [mm] H_{ind} [V/m]	HC Code 6 BR [mm] psSAR [mW/kg]
0.00	277	4.38	3.89	277	2.77	3.89	277	4.50	3.89	277	N/A	7.48	277	4.50	7.48
1.00	243	3.78	2.72	243	2.34	2.72	243	3.98	2.72	243	N/A	5.41	243	3.87	5.41

Compliance evaluation (Exposure ratios) ([illegible])

Distance [mm]	ICNIRP 2010/2020 RL H_{inc} NB	RL H_{inc} TH	BR H_{ind} NB	BR H_{ind} TH	BR psSAR NB	BR psSAR TH	ICNIRP 1998 RL H_{inc} NB	RL H_{inc} TH	BR J_{ind} NB	BR J_{ind} TH	BR psSAR NB	BR psSAR TH	IEEE 2019 DTL H_{inc} NB	DTL H_{inc} TH	DRL H_{ind} NB	DRL H_{ind} TH	DRL psSAR NB	DRL psSAR TH	FCC MPE H_{inc} N/A	BR H_{ind} N/A	BR psSAR TH	HC Code 6 RL H_{inc} NB	RL H_{inc} TH	BR H_{ind} NB	BR psSAR TH
0.00	22.4	27.1	-21.8	-27.3	43.6	10.9	-27.3	4.6	9.67	-25.4	-27.3	44.8	N/A	-23.3	9.76	43.6	-21.8	-23.3							
1.00	21.9	26.0	-25.1	-28.7	42.5	9.34	-28.7	5.48	8.55	-26.7	-28.7	43.5	N/A	-24.7	8.64	42.5	-22.6	-24.7							

Document generated at 2025/11/11 11:44:26; simulation performed at 2025/11/11 11:42:43 using SimNIBs version 5.0.0.18020

1/1

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3. Document History

Release	Applied changes	Release date
R01	initial release	June 16, 2026

End of document