

# Calibration certificate – additional Annex

## Werkskalibrierschein – zusätzlicher Anhang



XXXXX
2023xxx

### Sigmatest calibration results: unit conversion MS/m → %IACS

Kalibrierergebnisse Sigmatest: Einheiten Umrechnung MS/m → %IACS

### Measurement results

#### Messergebnisse

reference value [MS/m]	reading 960kHz [MS/m]	U(k=2) 960kHz [MS/m]	reading 960kHz [%IACS]	U(k=2) 960kHz [%IACS]	reading 480kHz [MS/m]	U(k=2) 480kHz [MS/m]	reading 480kHz [%IACS]	U(k=2) 480kHz [%IACS]	reading 240kHz [MS/m]	U(k=2) 240kHz [MS/m]	reading 240kHz [%IACS]	U(k=2) 240kHz [%IACS]
62,89	62,897	0,331	108,443	0,571	62,788	0,337	108,255	0,581	62,796	0,333	108,269	0,574
59,24	59,135	0,334	101,956	0,575	59,203	0,299	102,074	0,515	59,251	0,297	102,157	0,511
41,44	41,199	0,254	71,032	0,439	41,385	0,193	71,354	0,333	41,430	0,181	71,431	0,312
36,19	36,034	0,185	62,128	0,318	36,128	0,151	62,290	0,260	36,184	0,149	62,386	0,257
29,77	29,677	0,167	51,168	0,288	29,747	0,137	51,288	0,235	29,769	0,136	51,326	0,234
27,14	27,054	0,155	46,645	0,268	27,124	0,114	46,766	0,196	27,141	0,113	46,795	0,195
22,55	22,454	0,114	38,713	0,196	22,533	0,087	38,850	0,151	22,553	0,088	38,885	0,152
17,46	17,394	0,079	29,989	0,136	17,453	0,074	30,092	0,128	17,466	0,076	30,114	0,131
14,62	14,594	0,047	25,163	0,081	14,631	0,050	25,226	0,086	14,637	0,051	25,237	0,088
9,312	9,310	0,023	16,051	0,039	9,328	0,022	16,082	0,038	9,331	0,022	16,087	0,038
4,407	4,403	0,012	7,592	0,020	4,406	0,010	7,596	0,018	4,408	0,010	7,601	0,018
2,090	2,085	0,004	3,594	0,006	2,089	0,004	3,602	0,006	2,090	0,004	3,603	0,007
0,627	0,629	0,346	1,084	0,597	0,629	0,215	1,084	0,371	0,629	0,207	1,085	0,357

reference value [MS/m]	reading 120kHz [MS/m]	U(k=2) 120kHz [MS/m]	reading 120kHz [%IACS]	U(k=2) 120kHz [%IACS]	reading 60kHz [MS/m]	U(k=2) 60kHz [MS/m]	reading 60kHz [%IACS]	U(k=2) 60kHz [%IACS]
62,89	62,786	0,337	108,251	0,581	62,662	0,267	108,038	0,461
59,24	59,266	0,298	102,184	0,514	59,219	0,024	102,101	0,042
41,44	41,477	0,185	71,512	0,319	41,487	0,043	71,530	0,073
36,19	36,220	0,149	62,449	0,258	36,223	0,016	62,454	0,028
29,77	29,777	0,136	51,340	0,234	29,780	0,024	51,345	0,041
27,14	27,137	0,113	46,789	0,195	27,117	0,009	46,754	0,016
22,55	22,553	0,088	38,884	0,151	22,554	0,003	38,886	0,006
17,46	17,464	0,074	30,111	0,128	17,459	0,012	30,101	0,020
14,62	14,632	0,051	25,228	0,088	14,630	0,022	25,225	0,037
9,312	9,330	0,023	16,087	0,040	9,331	0,006	16,087	0,010
4,407	4,414	0,011	7,610	0,019	4,412	0,003	7,607	0,006
2,090	2,087	0,004	3,598	0,007	2,087	0,000	3,598	0,001
0,627	0,629	0,213	1,085	0,367	0,627	0,061	1,081	0,105

Lift-Off	59,2 MS/m f=480kHz				27,1 MS/m f=480kHz				0,63 MS/m f=480kHz			
h	reading	StDev	reading	StDev	reading	StDev	reading	StDev	reading	StDev	reading	StDev
[μm]	[MS/m]	[MS/m]	[%IACS]	[%IACS]	[MS/m]	[MS/m]	[%IACS]	[%IACS]	[MS/m]	[MS/m]	[%IACS]	[%IACS]
0	59,203	0,00015	102,074	0,00026	27,124	0,00053	46,766	0,00091	0,629	0,00006	1,084	0,00010
250	59,000	0,01776	101,724	0,03062	27,070	0,00562	46,673	0,00970	0,629	0,00012	1,085	0,00020
500	59,570	0,00814	102,707	0,01404	27,187	0,00217	46,875	0,00373	0,628	0,00006	1,083	0,00010