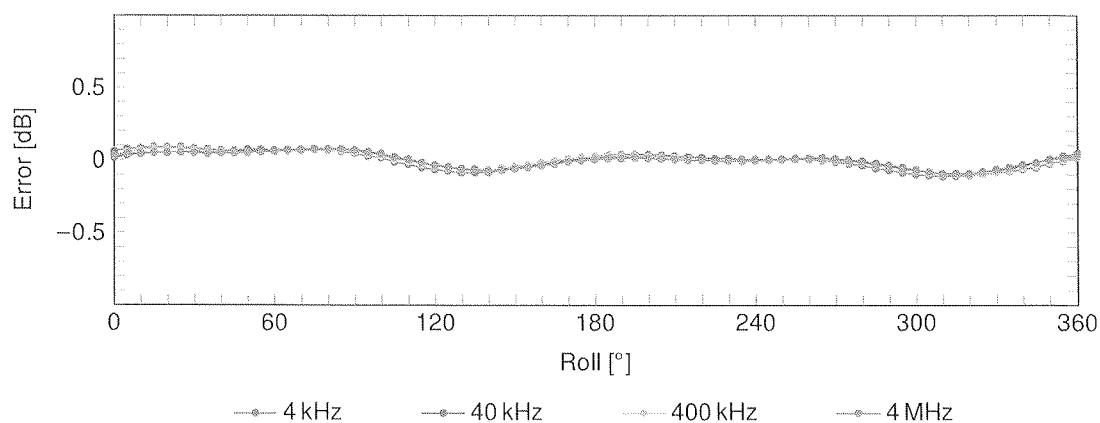
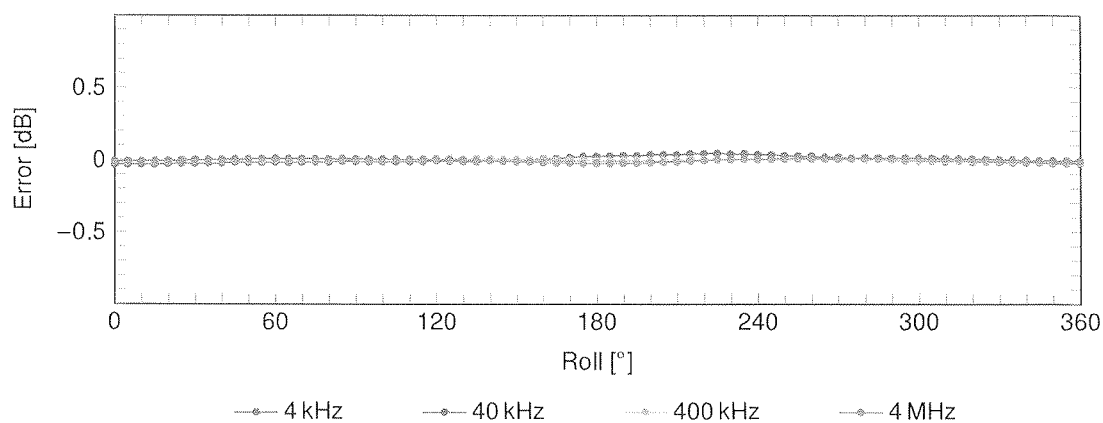


E-Field Receiving Pattern (ϕ), $\vartheta = 0^\circ$



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



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



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

Accreditation No.: **SCS 0108**

Client **B.V. ADT**
Taoyuan City

Certificate No. **V-Coil350/85-1020_Jun25**

CALIBRATION CERTIFICATE

Object **V-Coil350/85V2 - SN: 1020**

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

Calibration date: **June 18, 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 $(22 \pm 3)^{\circ}\text{C}$ 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	22-Aug-24 (MAGPy-8H3D-3090_Aug24)	Aug-25

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

Calibrated by: **Name** **Krešimir Franjić** **Function** **Laboratory Technician**

Approved by: **Sven Kühn** **Technical Manager**

Signature

Issued: June 18, 2025

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



Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

WPT wireless power transfer
V&V verification & validation

Calibration is Performed According to the Following Standards:

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

Additional Documentation:

- a) cDASY6/DASY8 Module WPT Manual

Methods Applied and Interpretation of Parameters:

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

Calibrated Quantity

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

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

Measurement Conditions

Software version	cDASY6 Module WPT	2.8.0.5184
	Notebook GUI	2.8.2.2
	Sim4Life	8.0.1
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	207	1.13
2	189	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	2.37	3.38	3.41	3.42	6.57	4.88
2	2.22	3.17	3.21	3.22	5.87	4.42

Voltage measurement

Total voltage (V)	Voltages at harmonics (dBc)
0.409	Highest harmonic: -47.4 2 nd highest harmonic: -48.2

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:
1020

Scenario:
Source Calibration

Tool info

DASY software version:
cDASY6 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000230, 2024/08/23

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: -48.07 mm, y: -119.84 mm, z: 36.60 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:
2025/06/18 12:54:49

Measurement results

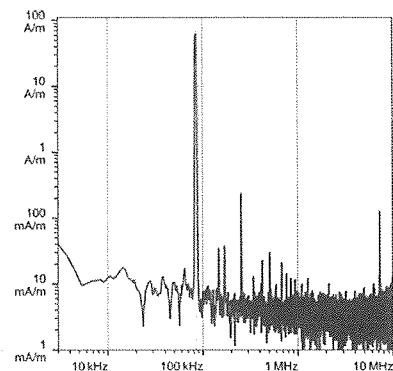
Maximum H-field [RMS]:
MAGNITUDE: 135.81 A/m
x: 118.69 A/m, y: 30.77 A/m, z: 58.40 A/m

Maximum H-field location relative to DUT:
x: 157.67 mm, y: 25.67 mm, z: 8.50 mm

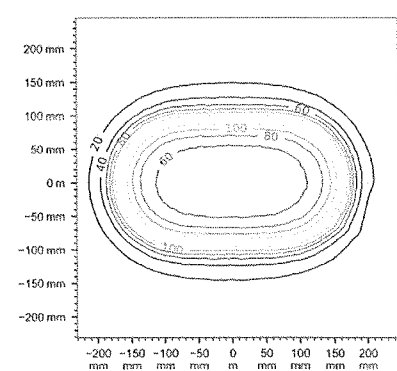
Distance to -20.0 dB boundary:
62.66 mm

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, $\sigma = 0.750\text{ S/m}$, tissue density = $1,000\text{ kg/m}^3$)

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	207	3.38	3.41	3.42	2.37	6.57	4.88	182	1%	89%	38%
2.00	189	3.17	3.21	3.22	2.23	5.87	4.42	184	1%	89%	38%

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} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pJ_{ind} [A/m ²]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{ind} [V/m]	psSAR [mW/kg]
0.00	207	3.38	4.88	207	2.37	4.88	207	3.42	4.88	207	N/A	6.57	207	3.41	6.57
2.00	189	3.17	4.42	189	2.23	4.42	189	3.22	4.42	189	N/A	5.87	189	3.21	5.87

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	N/A	NS	TH	NS	TH	NS	TH	N/A	N/A	TH	NS	TH	NS	TH
0.00	19.9	N/A	-10.6	N/A	32.3	22.9	N/A	2.09	N/A	-14.3	N/A	7.24	N/A	N/A	7.24	N/A	-10.5	N/A
2.00	19.1	N/A	-11.2	N/A	31.5	22.4	N/A	1.28	N/A	-14.9	N/A	6.44	N/A	N/A	6.44	N/A	-11.1	N/A

Document generated at 2025/06/18 13:07:18, simulation performed at 2025/06/18 13:00:10 using Sim4Life version 8.0.1.15737

Appendix D. System Verification

The measuring results for system check are shown as below.

DASY8 Module WPT Measurement Report

Device under test

Info:
V-Coi350/85

Serial number:
1020

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 2.8.0.5184

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000225, 2025/08/06

Software version:
2.8.8, backend: 2.2.36

Scan info

Center location:
x: 3.95 mm, y: 40.58 mm, z: 36.76 mm

Dimensions:
x: 609.0 mm, y: 608.0 mm, z: 36.6 mm

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

Completed on:
2025/12/01

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 116.03 A/m
x: 25.83 A/m, y: 89.93 A/m, z: 68.62 A/m

Maximum H-field location relative to DUT:
x: -25.67 mm, y: 143.00 mm, z: 8.50 mm

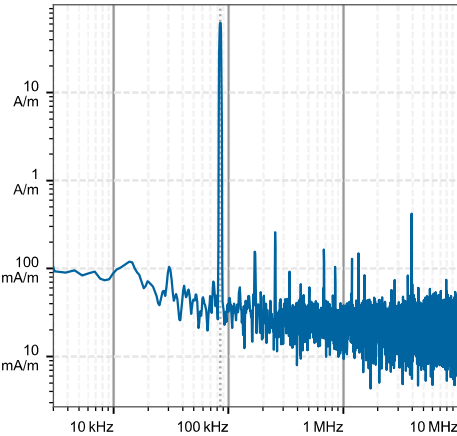
Maximum E-field [RMS]:
MAGNITUDE: 216.40 V/m
x: 5.83 V/m, y: 2.68 V/m, z: 216.30 V/m

Maximum E-field location relative to DUT:
x: 88.00 mm, y: 146.67 mm, z: 0.00 m

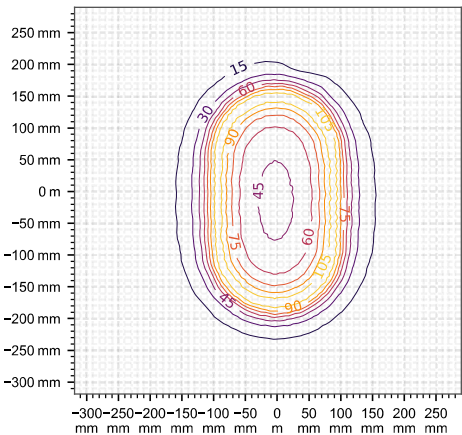
Distance to -20.0 dB boundary:
69.57 mm

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, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

Distance [mm]	Peak incident fields [RMS]		Peak E _{ind} [V/m, RMS]			Peak J _{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
	H _{inc} [A/m]	E _{inc} [V/m]	Cube avg.	Local	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius [mm]	Sign	Vector potential	Boundary effect
0.00	184	216	2.99	3.02	3.03	2.11	5.24	3.93	184	3%	73%	20%
2.00	167	199	2.82	2.85	2.86	1.99	4.71	3.57	187	3%	73%	21%

Compliance evaluation (Field values at the peak frequency) (f=85.00 kHz, total field evaluation, coverage evaluation)

Distance [mm]	ICNIRP 2010/2020				ICNIRP 1998				IEEE 2019				FCC				HC Code 6			
	RL [RMS]		BR [RMS]		RL [RMS]		BR [RMS]		ERL [RMS]		DRL [RMS]		MPE [RMS]		BR [RMS]		RL [RMS]		BR [RMS]	
	PH _{inc}	PE _{inc}	PE _{ind}	psSAR	PH _{inc}	PE _{inc}	PJ _{ind}	psSAR	PH _{inc}	PE _{inc}	PE _{ind}	psSAR	PH _{inc}	PE _{inc}	PE _{ind}	psSAR	PH _{inc}	PE _{inc}	PE _{ind}	psSAR
0.00	184	216	22.6	3.93	184	216	2.11	3.93	184	216	11.8	3.93	184	216	N/A	5.24	184	216	32.3	5.24
2.00	167	199	21.5	3.57	167	199	2.00	3.57	167	199	11.2	3.57	167	199	N/A	4.71	167	199	30.6	4.71

Coverage factors: w_{E_{ind}, cube avg.} = [7.56, 7.60], w_{E_{ind}, local} = [10.68, 10.74], w_{E_{ind}, line avg.} = [3.88, 3.90]

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

Distance [mm]	ICNIRP 2010/2020				ICNIRP 1998				IEEE 2019				FCC				HC Code 6			
	RL		BR		RL		BR		ERL		DRL		MPE		BR		RL		BR	
	PH _{inc}	PE _{inc}	PE _{ind}	psSAR	PH _{inc}	PE _{inc}	PJ _{ind}	psSAR	PH _{inc}	PE _{inc}	PE _{ind}	psSAR	PH _{inc}	PE _{inc}	PE _{ind}	psSAR	PH _{inc}	PE _{inc}	PE _{ind}	psSAR
0.00	8.78	N/A	6.93	N/A	1.97	N/A	36.9	6.61	12.5	N/A	1.13	N/A	0.94	N/A	0.66	N/A	2.05	4.79	N/A	N/A
2.00	7.95	N/A	6.38	N/A	1.87	N/A	33.4	6.09	11.8	N/A	1.02	N/A	0.86	N/A	0.63	N/A	1.85	4.42	N/A	N/A

Coverage factors: w_{E_{ind}, cube avg.} = [7.56, 7.60], w_{E_{ind}, local} = [10.68, 10.74], w_{E_{ind}, line avg.} = [3.88, 3.90]