EMF Evaluation Report

Date of Report:	23/02/2026	**Client's Contact person:**	Aydin Arrigo
Number of pages:	35	**Responsible Test engineer:**	Ilari Kinnunen
Testing laboratory:	**Verkotan Oy** Elektroniikkatie 17 90590 Oulu Finland	**Client:**	**Datamars SA** Via Industria 16 Lamone 6814 Switzerland
Tested device:	**OMNI MAX + Portable Reader**		
Related reports:	-		
Testing has been carried out in accordance with:	**680106 D01 RF Exposure Wireless Charging App v03** RF exposure considerations for low power consumer wireless power transfer applications **Persistent Inquiry Acceptance for DASY8/6 Module WPT (V1.2 August 2025) KDB 130303**		
Documentation:	The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory		
Test Results:	**The DUT complies with the requirements in respect of all parameters subject to the test.** The test results relate only to devices specified in this document		
Date and signatures:	23.02.2026		

Laboratory Manager

Miia Nurkkala

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1. SUMMARY OF EMF TEST REPORT

1.1 Test Details

Device Under Test (DUT):

Product:	OMNI MAX + Portable Reader
Manufacturer:	Datamars SA
Model:	OMNI MAX +
Serial Number:	S009
Hardware Version:	1V1
FCC ID:	NDX-OMNIMAX2
DUT Number:	3991
Battery Type used in testing:	Li-polymer battery
State of the Sample:	Production sample

Testing information:

Testing performed:	05.12.2025 – 29.12.2025
Notes:	-
Document ID:	FCC EMF Test Report_OMNI MAX +_ID7710_11022026.docx
Document history/changes:	Initial version
Measurement performed by:	Ilari Kinnunen
Temperature °C:	22±2 / Controlled
Humidity RH%:	30±20 / Controlled
Testing Laboratory:	Verkotan Oy
FCC Test Firm Designation number:	FI0005

1.2 Maximum Results

1.2.1 Maximum Multi-Frequency Ratio Results

The maximum psSAR values for Head/Body-worn configuration for transmitting systems are shown in a table below. The device conforms to the requirements of the standards when the maximum reported SAR value is less than or equal to the limit. The SAR limit specified in FCC 47 CFR part 2 (2.1093) for Head/Body SAR_{1g} is 1.6 W/kg.

Test	Frequency [kHz]	Assessment Method	Reference Period	Distance to DUT* [mm]	Measurement Direction	Measured Value	Limit	Result
psSAR1g [W/kg]	134.2	Frequency-domain	6 Minutes**	0*	Back	0.0033	1.6	PASS

*Simulated distance
**Measured psSAR1g value is not time-averaged over 6 minutes, overestimating the psSAR1g value

1.2.2 Maximum Multi-Frequency Ratio Results

Test	Frequency [kHz]	Assessment Method	Reference Period	Distance to DUT* [mm]	Measurement Direction	Ratio [dB]	Limit [dB]	Result
psSAR1g	134.2	Frequency-domain	6 Minutes**	0*	Back	-26.9	0	PASS

*Simulated distance
**Measured psSAR1g value is not time-averaged over 6 minutes, overestimating the psSAR1g value

1.2.3 Measurement Uncertainty

DASY8 Module WPT Peak Incident H-Field:

Expanded Uncertainty (k=2)	±16.6 %

DASY8 Module WPT Peak Incident E-Field:

Expanded Uncertainty (k=2)	±24.4 %

DASY8 Module WPT psSAR1g:

Expanded Uncertainty (k=2)	±25.6 %

2. DESCRIPTION OF THE DEVICE UNDER TEST (DUT)

The DUT is a Portable Reader for Animal Identification. It can read FDX-B (ISO), FDX-A/Fecava, Avid Encrypted, Trovan and HDX transponders. It can store up to 100.000 microchip codes and can transfer microchip codes during or after the reading session. It has a user-friendly icon-based interface with a 2.4" colour display. The battery is rechargeable.

Figure 1. Overview of the DUT

Device Category	Portable
Exposure Environment	Uncontrolled

2.1 Supported Frequency Bands and Operational Modes

TX Frequency bands	Modes of Operation	Transmitter Frequency Range
	RFID	134.2 kHz

2.2 Technical Information

From the customer, including tune-up tolerances;

Operating Frequency [kHz]	Antenna Type	Maximum Nominal Power [W]
134.2	Magnetic loop	<15W

3. TEST EQUIPMENT

DASY8 Module WPT is a unique solution for high-precision evaluations in the laboratory. Integrating the MAGPy system with the DASY robotics system and Sim4Life simulation platform ensures high precision.

DASY8 Module WPT manufactured by SPEAG was used to measure electric and magnetic fields. MAGPy-8H3D+E3D Version 2 probe (with the integrated data acquisition system MAGPy-DAS) was attached to MAGPy-ES emergency stop system and then mounted to the DASY8 Robot. MAGy-RAφV2 reference probe was connected to the MAGPy probe and used as a phase reference. The H-field distributions can be analyzed directly, and the values are compared to the reference level, or they are converted into Maxwell field and used as excitations for determining the basic restriction quantities for further dosimetric analysis with the Magneto Quasi-Static (MQS) solver.

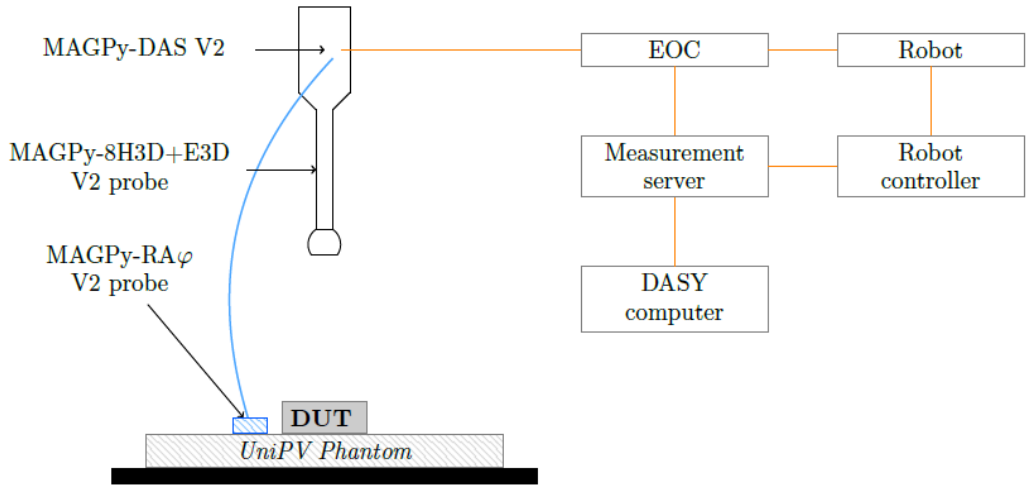


Figure 2. Schematic Laboratory Picture

3.1 Test Equipment List

Test Equipment	Model	Serial Number	Calibration Date	Interval [years]
DASY8 Software	DASY8 Module WPT V3.0.0.6328	-	NA	NA
Data Acquisition System	SPEAG MAGPy V2.0	3060	08.09.2025	1
E & H Field Probe	MAGPy-8H3D+E3D V2	3037	08.09.2025	1
WPT Verification & Validation Source	V-Coil350/85V2	1030	30.05.2024	3

3.1.1 MAGPy-8H3D+E3D V2 probe specifications

Probe design	
Probe head diameter	60 mm
H-field sub-probes	8 isotropic H-field sub-probes Concentric loops of 1 cm^2 arranged at the corners of a 22 mm cube[1]
E-field sub-probes	1 isotropic E-field sub-probe Orthogonal dipole/monopole (dipole length: 53 mm)
Temperature range	0–40 °C
Dimensions	110 mm×635 mm×35 mm (MAGPy-8H3D+E3D V2 & MAGPy-DAS V2)
H-field measurement specifications	
Frequency range	3 kHz–10 MHz
Dynamic range	0.1–3200 A/m (0.12 µT–4 mT)
E-field measurement specifications	
Frequency range	3 kHz–10 MHz
Dynamic range	0.08–2000 V/m

3.2 System Performance Check

Date	WPT Verification & Validation Source	Frequency [kHz]	Test	Measured Value	Target Value	Deviation [%]	Plot #
05.12.2025	V-Coil350-85	85	Peak Incident H-Field [A/m, RMS]	191	206	-7.28	1
			Peak Induced 1 Local E-field [V/m, RMS]	3.26	3.35	-2.69	
			psSAR1g [mW/kg]	6.15	6.38	-3.61	
18.12.2025	V-Coil350-85	85	Peak Incident H-Field [A/m, RMS]	188	206	-8.74	2
			Peak Induced 1 Local E-field [V/m, RMS]	3.23	3.35	-3.58	
			psSAR1g [mW/kg]	6.02	6.38	-5.64	
29.12.2025	V-Coil350-85	85	Peak Incident H-Field [A/m, RMS]	189	206	-8.25	3
			Peak Induced 1 Local E-field [V/m, RMS]	3.23	3.35	-3.58	
			psSAR1g [mW/kg]	6.02	6.38	-5.64	

4. TEST PROCEDURE

Testing was conducted in accordance to 680106 D01 Wireless Power Transfer v04 and Application Note " Persistent Inquiry Acceptance for DASY8/6 Module WPT (V1.2 August 2025)" issued by SPEAG.

Step-by-step measurement procedure is shown in Figure 3.

The testing was done inside a shielded room. Before the testing was started, the probe was positioned at 0 mm separation distance from the DUT surface. The test system always increases the separation distance by 1 mm when a measurement is started to avoid collisions, thus actual measurement distance was 1 mm. The distance is measured as the distance from the edge of the DUT to the edge of the measurement probe. After the measurement was completed, a simulation using Sim4Life was performed to evaluate both the Incident E- & H-Field and psSAR1g at 0 mm separation distance.

Control software for RFID was used to set the DUT to transmit at maximum power and 75% duty cycle.

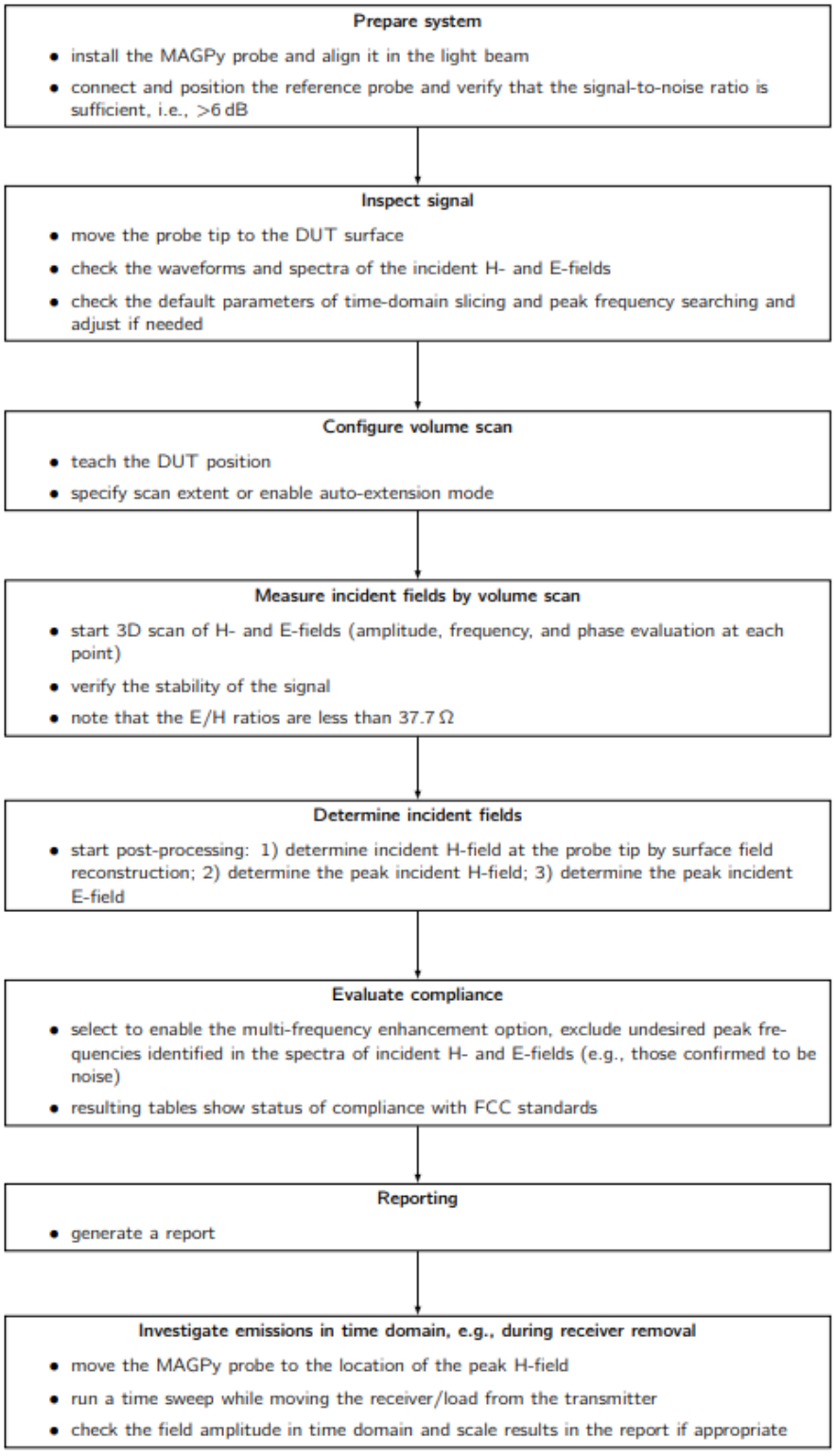


Figure 3 DASY8 Module WPT step-by-step measurement procedure

4.1 Test Positions

The DUT was placed on top of a UniPV1 phantom, free of metal objects.

psSAR1g was measured from six user accessible sides (front, back, left, right, top and bottom) of the DUT. Photos of the test setup are shown in Appendix A.

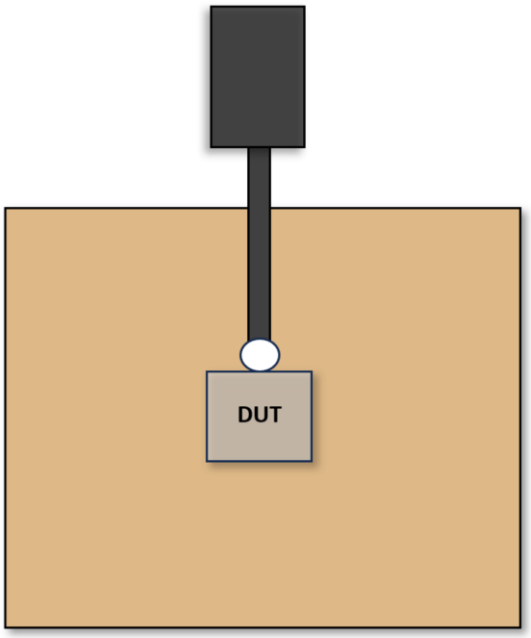


Figure 4 The top view of the test setup.

4.2 Scan Procedures

A volume scan was measured with scan dimensions (radius, height) configured to cover the whole transmitting area. Auto extend was enabled where the measurement system checks the decays at all four sides (at ±x and ±y), and extends the grid until the field decays at all four sides meet the 20 dB decay criteria. The lowest measurement plane of the volume scan was measured at 1.0mm distance from the separation distance, which equals to 0mm sensor offset plus 1.0mm probe-tip-to-DUT-surface to avoid collisions. The values in the latter combined with the scan resolution of 7.33mm provide the actual dimensions of the scanned volume.

The Sim4Life plug-in was used to simulate the Incident E- & H-Field and psSAR values at 0mm distance to the DUT. Distances are defined as the distances between the DUT and the surface of the probe tip. The measured incident E-field was also contributing to the compliance evaluation by enabling Total Field Evaluation. A magneto quasi-static (MQS) simulation is automatically setup to solve for a lossy half-space Phantom setup. The lossy halfspace has muscle tissue dielectric properties (σ = 0.75 S/m, ρ = 1000 kg/m3). The MQS solver performs an extrapolation of the H-field towards the source on the Z- side and a reconstruction of the vector potential A before the finite element solver is launched.

A multi-frequency evaluation was performed to account for simultaneous exposure to fields of different frequencies, whereby multiple frequency components extracted from the field spectra are applied to account for their additive effects. The frequency components used in multi-frequency evaluation originate from the spectrum of the dominant single-axis H and Efield sensors. Only components that are > −30 dB with respect to the primary/dominant component are factored in.

Coverage factors were applied to the results of the Sim4Life simulation with a homogeneous block phantom. These factors have been derived for various anatomical models and can return a conservative estimation of the maximum induced fields.

5. MEASUREMENT UNCERTAINTY

DASY8 Uncertainty Budget for Peak Incident H-field according to IEC/IEEE 63184						
Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.1
12	Surface field reconstruction	0.3	N	1	1	0.3
Combined uncertainty (k = 1)						0.67
Expanded uncertainty (k = 2)						**1.33 (16.6%)**

DASY8 Uncertainty Budget for Peak Incident E-field according to IEC/IEEE 63184						
Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.53	N	1	1	0.53
2	Probe anisotropy	0.8	R	√3	1	0.46
3	Probe dynamic linearity	1	R	√3	1	0.58
4	Probe frequency domain response	0.3	R	√3	1	0.17
5	Probe frequency linear interp. fit	0.15	R	√3	1	0.09
6	Parasitic H-field sensitivity	0.2	R	√3	1	0.12
7	Detection limit	0.15	R	√3	1	0.09
8	Readout electronics	0	N	1	1	0
9	Repeatability	0.1	N	1	1	0.1
Combined uncertainty (k = 1)						0.95
Expanded uncertainty (k = 2)						**1.89 (24.4%)**

System Check Uncertainty Budget for psSAR1g according to IEC/IEEE 63184						
Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.18	N	1	1	0.18
2	Probe anisotropy	0.40	R	√3	1	0.35
3	Probe dynamic linearity	0.20	R	√3	1	0.12
4	Probe frequency domain response	0.30	R	√3	1	0.17
5	Probe frequency linear interp. fit	0.15	R	√3	1	0.09
6	Spatial averaging	0.10	R	√3	1	0.06
7	Parasitic E-field sensitivity	0.10	R	√3	1	0.06
8	Detection limit	0.0	R	√3	1	0.0
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.10	N	1	1	0.10
12	Surface field reconstruction	0.20	N	1	1	0.20
Numerical simulations						
13	Grid resolution	0.02	R	√3	1	0.01
14	Tissue parameters	0	R	√3	1	0
15	Exposure position	0	R	√3	1	0
16	Source representation	0.09	N	1	1	0.09
17	Convergence and power budget	0	R	√3	1	0
18	Boundary conditions	0.10	R	√3	1	0.06
19	Phantom loading/backscattering	0.10	R	√3	1	0.06
Combined uncertainty (k = 1)						0.49
Expanded uncertainty (k = 2)						**0.99 (25.6%)**

6. TEST RESULTS

Test description	Findings
A frequency span from 3 kHz to 10 MHz was scanned to check for spurious.	Spurious emissions above -20 dBc were automatically identified and summed to the fields generated at the operational frequency. Frequency-domain plot is available in the Appendix A: Photos of the DUT.
Occupied Bandwidth check.	OBW was measured and found to be less than 8 kHz.
Six user accessible sides of the DUT were scanned.	Maximum emissions were found from the back of the DUT for psSAR1g. (Appendix A: Photos of the DUT).
psSAR1g measurements were performed with DASY8 Module WPT	Results in the table below.

6.1 psSAR Results

Measurement direction	Separation distance* [mm]	Measured psSAR1g [mW/kg]	Measured psSAR1g [W/kg]	psSAR1g Limit [W/kg]	Multi-Frequency Ratio [dB]	Multi-Frequency Limit [dB]	Plot #
Front	0	2.22	0.00222	1.6	-28.6	0	-
Back	0	3.3	0.0033	1.6	-26.9	0	4
Left	0	0.989	0.000989	1.6	-32.1	0	-
Right	0	1.26	0.00126	1.6	-31	0	-
Top	0	0.74	0.00074	1.6	-33.3	0	-
Bottom	0	0.785	0.000785	1.6	-33.1	0	-

*Simulated distance

APPENDIX A: PHOTOS OF THE DUT

Size of the DUT is: 266 x 148 x 27 mm

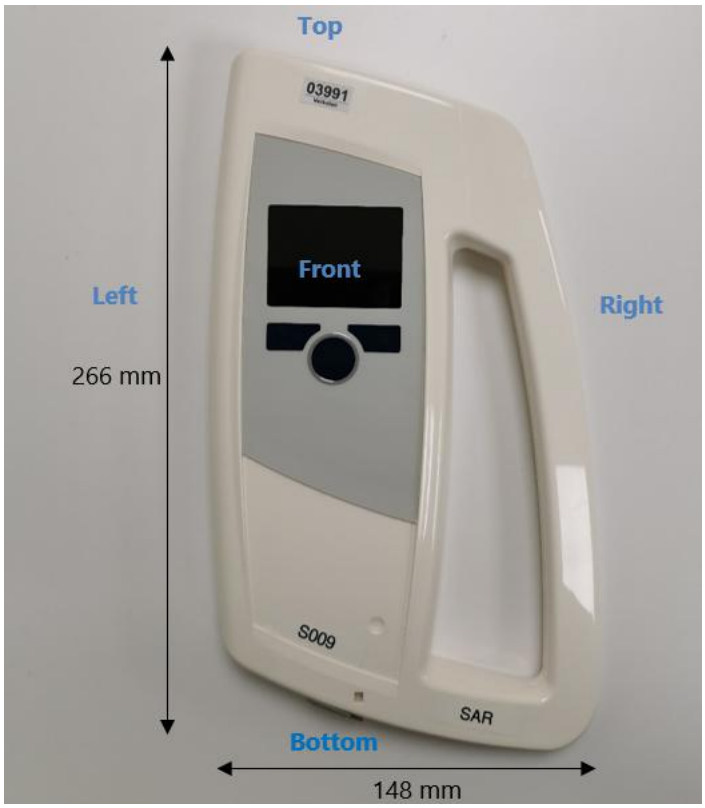


Figure 5 Overview of the DUT

Spurious emission frequency-domain plot from 3 kHz – 10 MHz.

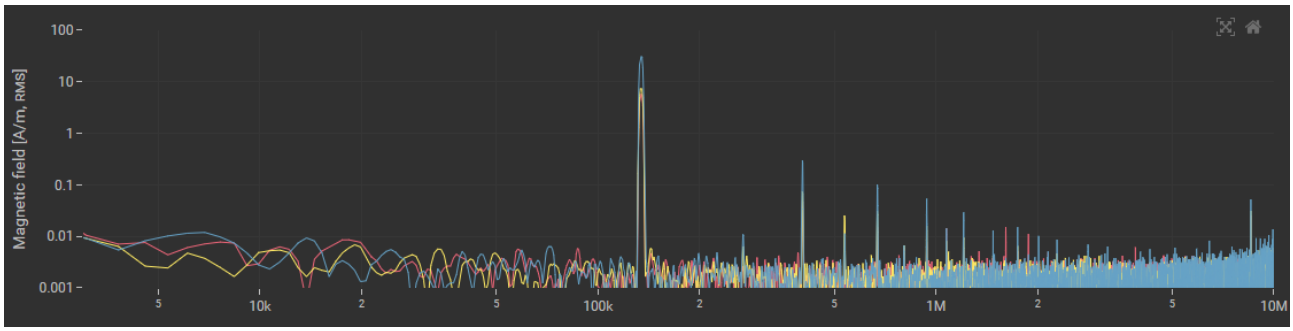


Figure 6. H-field frequency-domain plot from 3 kHz to 10 MHz

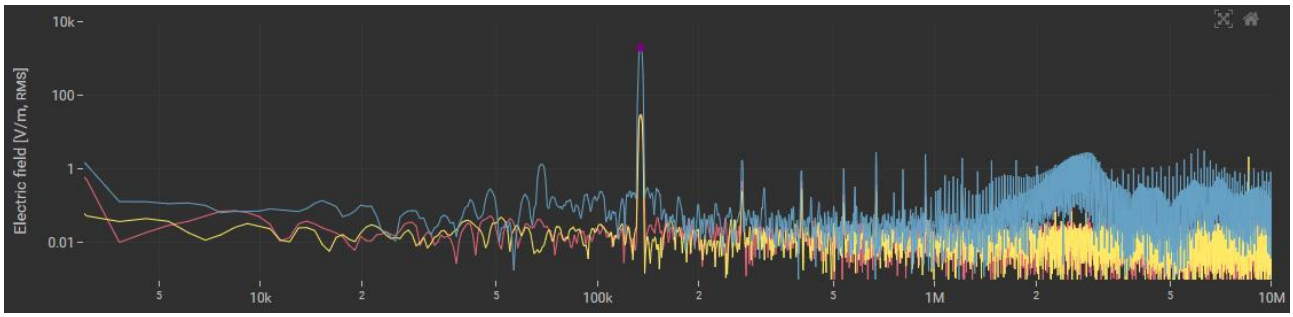


Figure 7. E-field frequency-domain plot from 3 kHz to 10 MHz

Figure 8. Front test position, 0mm separation distance

Figure 9. Back test position, 0mm separation distance

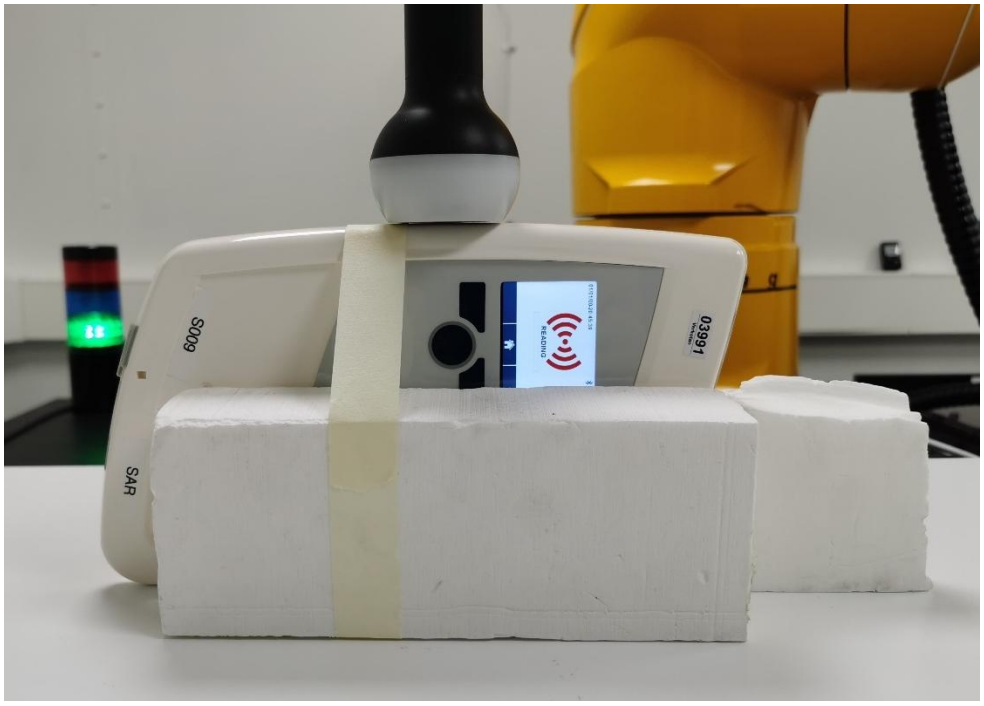


Figure 10. Left test position, 0mm separation distance

Figure 11. Right test position, 0mm separation distance

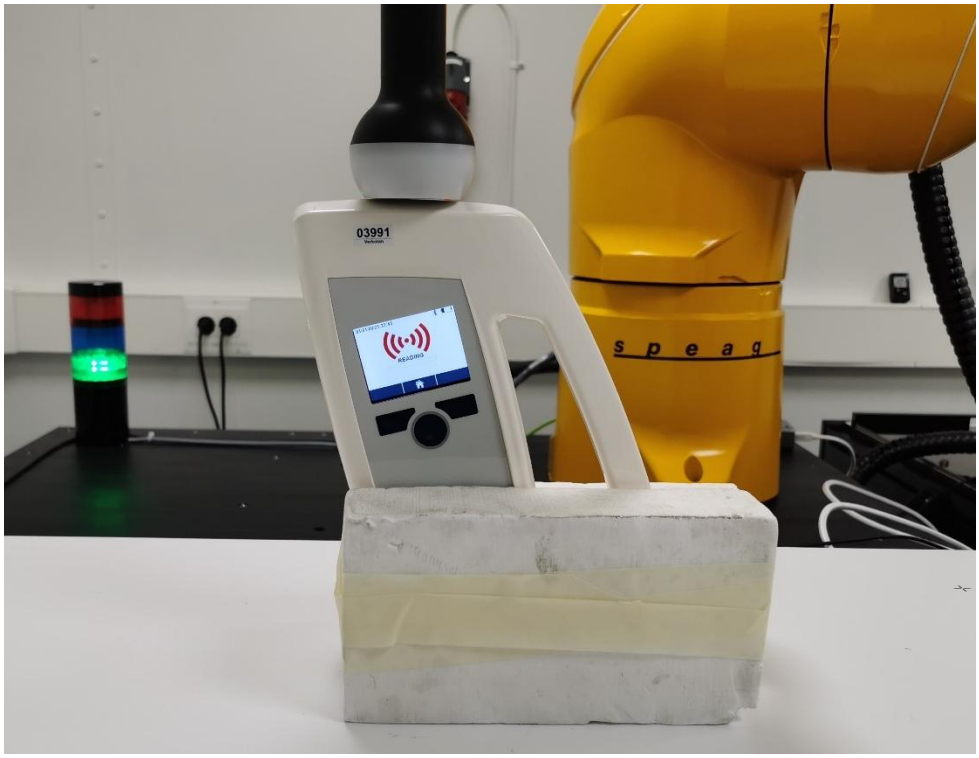


Figure 12. Top test position, 0mm separation distance

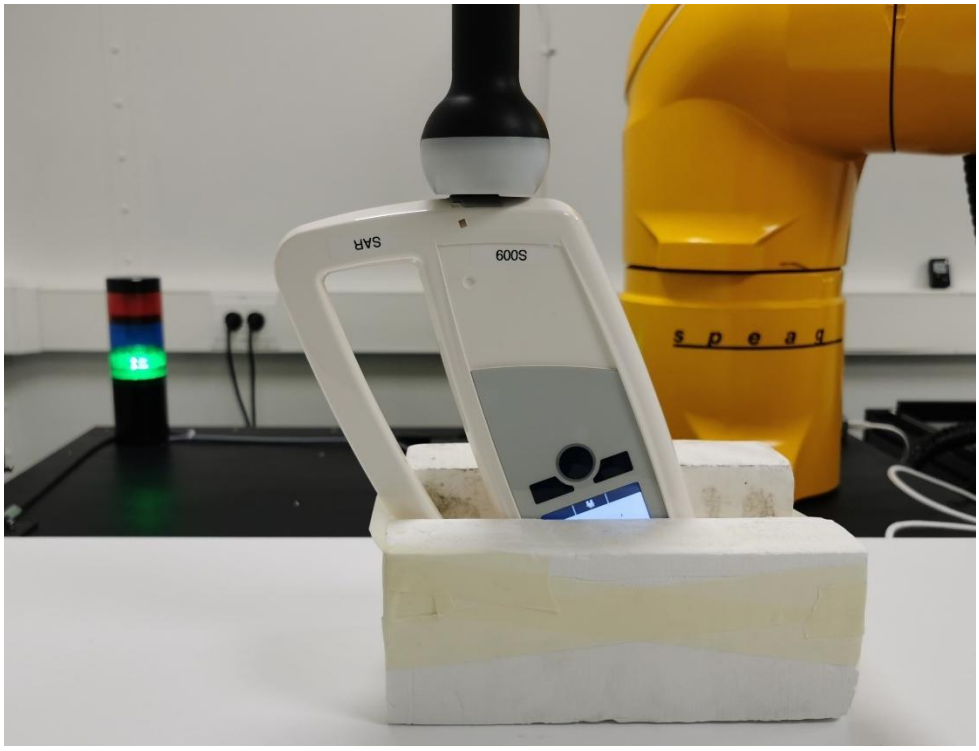


Figure 13. Bottom test position, 0mm separation distance

APPENDIX B: SYSTEM PERFORMANCE CHECK SCAN

Plot 1

DASY8 Module WPT Measurement Report

Device under test

Info: not set

Serial number: not set

Scenario: not set

Tool info

DASY software version: DASY8 Module WPT 3.0.0.6328

Probe model, serial no. and configuration date: MAGPy-8H3D+E3Dv2, WP000226, *2025/09/08*

Software version: 3.0.22, *backend: 3.0.22*

Scan info

Center location: x: 2.76 mm, y: -42.14 mm, z: 37.03 mm

Dimensions: x: 388.0 mm, y: 477.0 mm, z: 36.7 mm

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

Completed on: 2025/12/05 08:04:03

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 124.53 A/m
x: 101.60 A/m, y: 47.95 A/m, z: 53.74 A/m

Maximum H-field location relative to DUT:
x: 77.00 mm, y: 113.67 mm, z: 8.50 mm

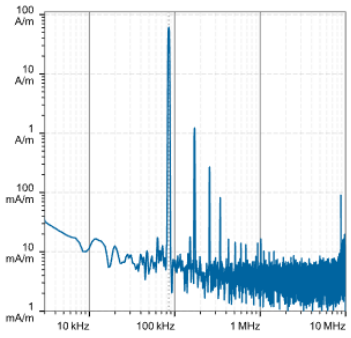
Maximum E-field [RMS]:
MAGNITUDE: 125.06 V/m
x: 6.90 V/m, y: 10.78 V/m, z: 124.40 V/m

Maximum E-field location relative to DUT:
x: 14.67 mm, y: -168.67 mm, z: 0.00 m

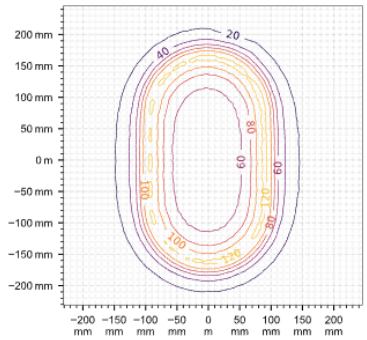
Distance to -20.0 dB boundary:
65.59 mm

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 homogeous 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] H_{inc} [A/m]	E_{inc} [V/m]	Peak E_{ind} [V/m, RMS] Cube avg.	Local	Line avg.	Peak J_{ind} [A/m², RMS] Surface avg.	psSAR [mW/kg] 1g avg.	10g avg.	H-field extent -20 dB radius [mm]	Warnings Sign	Vector potential	Boundary effect
0.00	191	125	3.24	3.26	3.27	2.29	6.15	4.60	183	2%	94%	37%

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

Distance [mm]	ICNIRP 2010/2020 RL [RMS] pH_{inc} [A/m]	pE_{inc} [V/m]	BR [RMS] pE_{ind} [V/m]	psSAR [mW/kg]	ICNIRP 1998 RL [RMS] pH_{inc} [A/m]	pE_{inc} [V/m]	BR [RMS] pJ_{ind} [A/m²]	psSAR [mW/kg]	IEEE 2019 ERL [RMS] pH_{inc} [A/m]	pE_{inc} [V/m]	DRL [RMS] pE_{ind} [V/m]	psSAR [mW/kg]	FCC MPE [RMS] pH_{inc} [A/m]	pE_{inc} [V/m]	BR [RMS] pE_{ind} [V/m]	psSAR [mW/kg]	HC Code 6 RL [RMS] pH_{inc} [A/m]	pE_{inc} [V/m]	BR [RMS] pE_{ind} [V/m]	psSAR [mW/kg]
0.00	191	125	24.4	4.60	191	125	2.29	4.60	191	125	12.7	4.60	191	125	N/A	6.15	191	125	34.8	6.15

Coverage factors: $w_{E_{ind,\ cube\ avg.}}$ = [7.55], $w_{E_{ind,\ local}}$ = [10.67], $w_{E_{ind,\ line\ avg.}}$ = [3.88]

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

Distance [mm]	ICNIRP 2010/2020 RL pH_{inc} NS	TH	pE_{inc} NS	TH	BR pE_{ind} NS	psSAR TH	ICNIRP 1998 RL pH_{inc} N/A	pE_{inc} N/A	BR pJ_{ind} NS	psSAR TH	IEEE 2019 ERL pH_{inc} NS	TH	pE_{inc} NS	TH	DRL pE_{ind} NS	psSAR TH	FCC MPE pH_{inc} N/A	pE_{inc} N/A	BR pE_{ind} N/A	psSAR TH	HC Code 6 RL pH_{inc} NS	TH	pE_{inc} NS	TH	BR pE_{ind} NS	psSAR TH
0.00	19.2	N/A	16.6	N/A	6.57	N/A	31.6	16.0	22.6	N/A	1.37	N/A	-0.79	N/A	-2.92	N/A	6.53	9.1	N/A	N/A	6.53	N/A	16.6	N/A	9.64	N/A

Coverage factors: $w_{E_{ind,\ cube\ avg.}}$ = [7.55], $w_{E_{ind,\ local}}$ = [10.67], $w_{E_{ind,\ line\ avg.}}$ = [3.88]

Document generated at 2025/12/30 08:11:18, simulation performed at 2025/12/05 08:41:47 using Sim4Life version 8.0.1.15737

DASY8 Module WPT Measurement Report

Device under test

Info:
System Check

Serial number:
not set

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 3.0.0.6328

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000226, *2025/09/08*

Software version:
3.0.22, *backend: 3.0.22*

Scan info

Center location:
x: -10.89 mm, y: -7.84 mm, z: 37.02 mm

Dimensions:
x: 389.0 mm, y: 477.0 mm, z: 36.7 mm

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

Completed on:
2025/12/18 11:26:56

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 122.79 A/m
x: 95.40 A/m, y: 45.33 A/m, z: 62.62 A/m

Maximum H-field location relative to DUT:
x: 77.00 mm, y: 113.67 mm, z: 8.50 mm

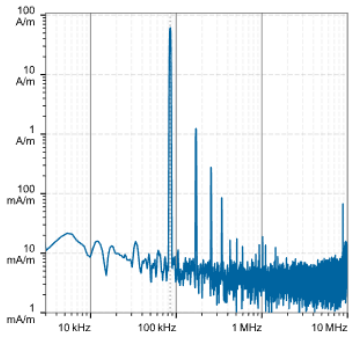
Maximum E-field [RMS]:
MAGNITUDE: 113.61 V/m
x: 12.42 V/m, y: 6.94 V/m, z: 112.72 V/m

Maximum E-field location relative to DUT:
x: 44.00 mm, y: -168.67 mm, z: 0.00 m

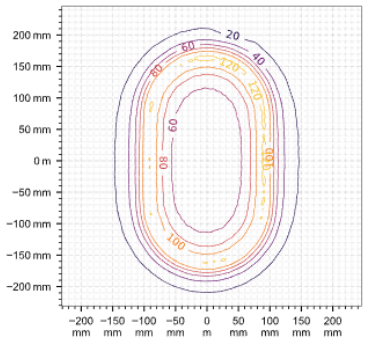
Distance to -20.0 dB boundary:
69.18 mm

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 homogeous phantom at the peak frequency

(f = 85.00 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

	Peak incident fields [RMS]		Peak E_{ind} [V/m, RMS]			Peak J_{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
Distance [mm]	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	188	114	3.20	3.23	3.24	2.26	6.02	4.50	184	1%	89%	37%

Compliance evaluation (Field values at the peak frequency)

(f=85.00 kHz, total field evaluation, coverage evaluation)

	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]	
Distance	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
[mm]	[A/m]	[V/m]	[V/m]	[mW/kg]	[A/m]	[V/m]	[A/m²]	[mW/kg]	[A/m]	[V/m]	[V/m]	[mW/kg]	[A/m]	[V/m]	[V/m]	[mW/kg]	[A/m]	[V/m]	[V/m]	[mW/kg]
0.00	188	114	24.2	4.50	188	114	2.26	4.50	188	114	12.6	4.50	188	114	N/A	6.02	188	114	34.5	6.02

Coverage factors: $w_{E_{ind,\,cube\,avg.}}$ = [7.56], $w_{E_{ind,\,local}}$ = [10.67], $w_{E_{ind,\,line\,avg.}}$ = [3.88]

Compliance evaluation (Exposure ratios)

(with multi-frequency enhancement, total field evaluation, coverage evaluation, ratios in dB)

	ICNIRP 2010/2020						ICNIRP 1998				IEEE 2019						FCC				HC Code 6					
	RL				BR		RL		BR		ERL				DRL		MPE		BR		RL				BR	
Distance [mm]	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
	NS	TH	NS	TH	NS	TH	N/A	N/A	NS	TH	NS	TH	NS	TH	NS	TH	N/A	N/A	N/A	TH	NS	TH	NS	TH	NS	TH
0.00	19.0	N/A	15.3	N/A	6.48	N/A	31.5	14.8	22.5	N/A	1.25	N/A	-2.09	N/A	-3.01	N/A	6.41	8.2	N/A	N/A	6.41	N/A	15.3	N/A	9.56	N/A

Coverage factors: $w_{E_{ind,\,cube\,avg.}}$ = [7.56], $w_{E_{ind,\,local}}$ = [10.67], $w_{E_{ind,\,line\,avg.}}$ = [3.88]

Document generated at 2025/12/30 08:09:43, simulation performed at 2025/12/18 11:43:01 using Sim4Life version 9.0.0.18820

DASY8 Module WPT Measurement Report

Device under test

Info:
System Check

Serial number:
not set

Scenario:
not set

Tool info

DASY software version:
DASY8 Module WPT 3.0.0.6328

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000226, *2025/09/08*

Software version:
3.0.22, *backend: 3.0.22*

Scan info

Center location:
x: -4.69 mm, y: 21.55 mm, z: 37.30 mm

Dimensions:
x: 389.0 mm, y: 476.0 mm, z: 36.7 mm

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

Completed on:
2025/12/29 09:55:05

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 123.12 A/m
x: 96.46 A/m, y: 47.03 A/m, z: 60.35 A/m

Maximum H-field location relative to DUT:
x: 77.00 mm, y: 113.67 mm, z: 8.50 mm

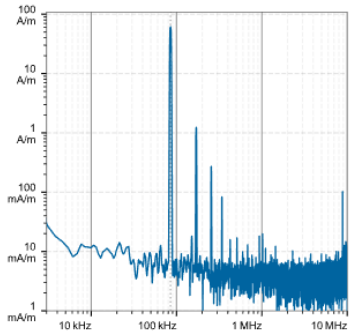
Maximum E-field [RMS]:
MAGNITUDE: 111.06 V/m
x: 12.43 V/m, y: 7.32 V/m, z: 110.12 V/m

Maximum E-field location relative to DUT:
x: 44.00 mm, y: -168.67 mm, z: 0.00 m

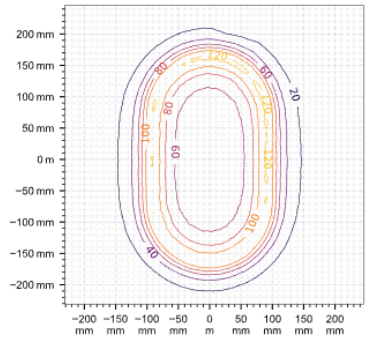
Distance to -20.0 dB boundary:
67.61 mm

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 homogeous phantom at the peak frequency

(f = 85.00 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)

	Peak incident fields [RMS]		Peak E_{ind} [V/m, RMS]			Peak J_{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
Distance [mm]	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	189	111	3.20	3.23	3.24	2.26	6.02	4.50	184	2%	89%	37%

Compliance evaluation (Field values at the peak frequency)

(f=85.00 kHz, total field evaluation, coverage evaluation)

	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]	
Distance [mm]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pJ_{ind} [A/m²]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]
0.00	189	111	24.2	4.50	189	111	2.26	4.50	189	111	12.6	4.50	189	111	N/A	6.02	189	111	34.5	6.02

Coverage factors: $w_{E_{ind,\,cube\,avg.}}$ = [7.55], $w_{E_{ind,\,local}}$ = [10.67], $w_{E_{ind,\,line\,avg.}}$ = [3.88]

Compliance evaluation (Exposure ratios)

(with multi-frequency enhancement, total field evaluation, coverage evaluation, ratios in dB)

	ICNIRP 2010/2020						ICNIRP 1998				IEEE 2019						FCC				HC Code 6					
	RL				BR		RL		BR		ERL				DRL		MPE		BR		RL				BR	
Distance [mm]	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
	NS	TH	NS	TH	NS	TH	N/A	N/A	NS	TH	NS	TH	NS	TH	NS	TH	N/A	N/A	N/A	TH	NS	TH	NS	TH	NS	TH
0.00	19.1	N/A	15.1	N/A	6.49	N/A	31.6	14.6	22.5	N/A	1.3	N/A	-2.27	N/A	-3.0	N/A	6.46	7.94	N/A	N/A	6.46	N/A	15.1	N/A	9.56	N/A

Coverage factors: $w_{E_{ind,\,cube\,avg.}}$ = [7.55], $w_{E_{ind,\,local}}$ = [10.67], $w_{E_{ind,\,line\,avg.}}$ = [3.88]

Document generated at 2025/12/30 08:10:10, simulation performed at 2025/12/29 10:01:50 using Sim4Life version 9.0.0.18820

APPENDIX C: MEASUREMENT SCANS

Plot 4

DASY8 Module WPT Measurement Report

Device under test

Info:
OMNI MAX

Serial number:
not set

Scenario:
Back 0mm

Tool info

DASY software version:
DASY8 Module WPT 3.0.0.6328

Probe model, serial no. and configuration date:
MAGPy-8H3D+E3Dv2, WP000226, *2025/09/08*

Software version:
3.0.22, *backend: 3.0.22*

Scan info

Center location:
x: -8.69 mm, y: -34.96 mm, z: 26.38 mm

Dimensions:
x: 345.0 mm, y: 389.0 mm, z: 36.6 mm

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

Completed on:
2025/12/05 14:53:00

Measurement results

Maximum H-field [RMS]:
MAGNITUDE: 72.67 A/m
x: 10.20 A/m, y: 67.88 A/m, z: 23.86 A/m

Maximum H-field location relative to DUT:
x: 40.33 mm, y: 113.67 mm, z: 8.50 mm

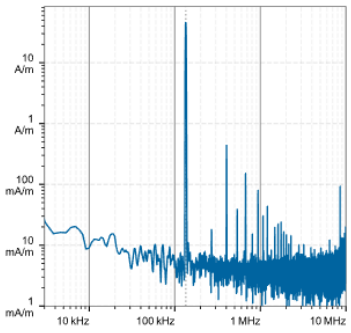
Maximum E-field [RMS]:
MAGNITUDE: 1.68 kV/m
x: 42.47 V/m, y: 174.91 V/m, z: 1.67 kV/m

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

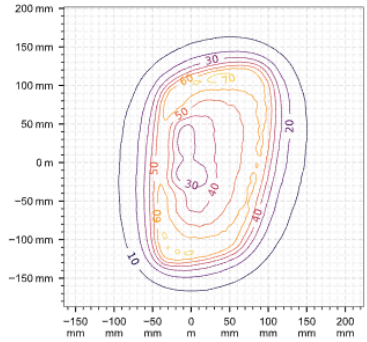
Distance to -20.0 dB boundary:
59.12 mm

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 = 134.20 kHz, σ = 0.750 S/m, tissue density = 1,000 kg/m³)*

	Peak incident fields [RMS]		Peak E_{ind} [V/m, RMS]			Peak J_{ind} [A/m², RMS]	psSAR [mW/kg]		H-field extent	Warnings		
Distance [mm]	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	119	1,681	2.43	2.45	2.46	1.69	3.30	2.32	142	2%	55%	36%

Compliance evaluation (Field values at the peak frequency) *(f=134.20 kHz, total field evaluation, coverage evaluation)*

	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]	
Distance [mm]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pJ_{ind} [A/m²]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]	pH_{inc} [A/m]	pE_{inc} [V/m]	pE_{ind} [V/m]	psSAR [mW/kg]
0.00	119	1,681	16.9	2.32	119	1,681	1.74	2.32	119	1,681	8.94	2.32	119	1,681	N/A	3.30	119	1,681	24.1	3.30

Coverage factors: $w_{E_{ind,\,cube\,avg.}}$ = [6.93], $w_{E_{ind,\,local}}$ = [9.78], $w_{E_{ind,\,line\,avg.}}$ = [3.61]

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

	ICNIRP 2010/2020						ICNIRP 1998				IEEE 2019						FCC				HC Code 6			
	RL				BR		RL		BR		ERL				DRL		MPE		BR		RL			
Distance [mm]	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
	NS	TH	NS	TH	NS	TH	N/A	N/A	NS	TH	NS	TH	NS	TH	NS	TH	N/A	N/A	N/A	TH	NS	TH	NS	TH	NS	TH
0.00	15.1	10.3	26.1	-4.23	-0.62	-29.3	27.6	25.7	16.2	-29.3	-2.7	-7.12	8.75	1.76	-9.94	-29.3	37.3	8.75	N/A	-26.9	2.46	26.8	26.1	N/A	2.47	-26.9

Coverage factors: $w_{E_{ind,\,cube\,avg.}}$ = [6.93], $w_{E_{ind,\,local}}$ = [9.78], $w_{E_{ind,\,line\,avg.}}$ = [3.61]

Document generated at 2025/12/30 08:13:06, simulation performed at 2025/12/09 14:30:37 using Sim4Life version 9.0.0.18820

APPENDIX D: PROBE CALIBRATION CERTIFICATES

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
S 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 Verkotan, Oulu, Finland

Certificate No. MAGPy-8H3D-3073_Sep25

CALIBRATION CERTIFICATE

Object	MAGPy-8H3D+E3DV2 SN:3073 MAGPy-DASV2 SN:3060
Calibration procedure(s)	QA CAL-46.v1 Calibration Procedure for MAGPy–8H3D+E3D Near-field Electric and Magnetic Field Sensor System
Calibration date	September 08, 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: 110918	03-Sep-24 (No. 4030A315008835)	Sep-25
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: MY49810822	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	

Issued: September 08, 2025

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

Certificate No: MAGPy-8H3D-3073_Sep25 Page 1 of 26

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

ilac-MRA SWISS ACCREDITATION sas.admin.ch SCS 0108

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

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 $\phi = 0° ... 360°$; $\vartheta = 90°$, 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 $\phi = 0° ... 360°$; $\vartheta = 90°$, 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%.

MAGPy-8H3D+E3DV2 SN:3073
MAGPy-DASV2 SN:3060

September 08, 2025

Measurement Conditions

Unit Type	MAGPy–8H3D+E3DV2 (SP MGY 303 AA)	3073
	MAGPy–DASV2 (SE UMS 303 AE)	3060
	MAGPy FPGA Board	WP000226
Adjustment Date	Last MAGPy Adjustment	September 08, 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)
0.390	0.370	0.360	0.400	0.380	0.380	0.22	0.23	0.47	±1.00
0.530	0.510	0.490	0.550	0.520	0.510	0.32	0.17	0.35	±1.00
0.720	0.700	0.680	0.740	0.710	0.700	0.24	0.12	0.25	±1.00
0.940	0.910	0.890	0.930	0.930	0.890	−0.09	0.19	0.00	±1.00
1.28	1.24	1.20	1.27	1.26	1.20	−0.07	0.14	0.00	±1.00
1.75	1.70	1.64	1.76	1.70	1.64	0.05	0.00	0.00	±1.00
2.33	2.27	2.19	2.32	2.26	2.19	−0.04	−0.04	0.00	±0.20
3.11	3.03	2.92	3.11	3.02	2.91	0.00	−0.03	−0.03	±0.20
4.22	4.11	3.96	4.22	4.12	3.96	0.00	0.02	0.00	±0.20
5.71	5.56	5.35	5.71	5.55	5.37	0.00	−0.02	0.03	±0.20
7.66	7.48	7.20	7.66	7.48	7.20	0.00	0.00	0.00	±0.20
10.2	9.99	9.61	10.2	10.0	9.61	0.00	0.01	0.00	±0.20
13.8	13.5	13.0	13.8	13.5	13.0	0.00	0.00	0.00	±0.20
18.6	18.2	17.5	18.7	18.2	17.5	0.05	0.00	0.00	±0.20
25.1	24.6	23.6	25.2	24.6	23.7	0.03	0.00	0.04	±0.20
33.5	32.8	31.6	33.7	33.0	31.8	0.05	0.05	0.05	±0.20
45.2	44.3	42.7	45.5	44.5	42.9	0.06	0.04	0.04	±0.20
61.3	60.2	58.0	61.6	60.4	58.2	0.04	0.03	0.03	±0.20
84.3	82.6	79.7	84.0	82.3	79.4	−0.03	−0.03	−0.03	±0.20
110	108	104	110	108	104	0.00	0.00	0.00	±0.20
151	148	144	151	148	143	0.00	0.00	−0.06	±0.20
210	205	199	210	205	199	0.00	0.00	0.00	±0.20
291	285	276	293	280	271	0.06	−0.15	−0.16	±0.20
430	420	408	425	415	403	−0.10	−0.10	−0.11	±0.20
594	579	563	591	576	561	−0.04	−0.05	−0.03	±0.20
889	865	843	894	870	847	0.05	0.05	0.04	±0.20
1350	1310	1280	1370	1340	1300	0.13	0.20	0.13	±0.30
1840	1790	1740	1900	1840	1790	0.28	0.24	0.25	±0.30
3010	2910	2840	3130	3030	2950	0.34	0.35	0.33	±0.50
3570	3450	3360	3730	3600	3520	0.38	0.37	0.40	±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%).

APPENDIX E: WPT VERIFICATION & VALIDATION SOURCE CALIBRATION CERTIFICATES

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

Client	**Verkotan** **Oulu, Finland**	**Certificate No:**	**V-Coil350/85V2-1030_May30**

CALIBRATION CERTIFICATE

Object	V-Coil350/85V2 - SN: 1030
Calibration procedure(s)	QA CAL-47.v13 Calibration Procedure for WPT Verification & Validation Sources
Calibration date:	May 30, 2024

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

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

Calibration Equipment used (M&TE critical for calibration)

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

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

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

Issued: June 11, 2024

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

Glossary:

WPT	wireless power transfer
V&V	verification & validation

Calibration is Performed According to the Following Standards:

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

Additional Documentation:

a) cDASY6/DASY8 Module WPT Manual

Methods Applied and Interpretation of Parameters:

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

Calibrated Quantity

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

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

Measurement Conditions

Software version	cDASY6 Module WPT	2.4.0.4346
	Notebook GUI	2.4.0.2
	Sim4Life	7.2.4
Scan setup	Grid dimensions	x: 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	206	1.13
2	188	1.13

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	2.34	3.32	3.35	3.36	6.38	4.74
2	2.20	3.13	3.16	3.16	5.70	4.30

Voltage measurement

Total voltage (V)	Voltages at harmonics (dBc)
0.408	Highest harmonic: -34.3 2nd highest harmonic: -47.9

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

Measurement report

cDASY6 Module WPT Measurement Report

Device under test

Info:
V-Coil350/85

Serial number:
1030

Scenario:
source calibration

Tool info

DASY software version:
cDASY6 Module WPT 2.4.0.4346

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

Software version:
2.0.49, *backend: 2.2.3*

Scan info

Center location:
x: -48.08 mm, y: -119.86 mm, z: 36.40 mm

Dimensions:
x: 477.0 mm, y: 389.0 mm, z: 36.7 mm

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

Completed on:
2024/05/30 00:03:54

Measurement results

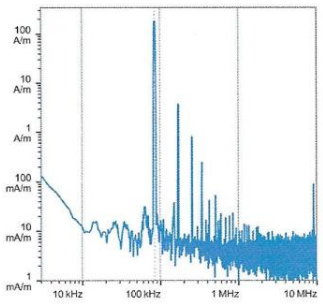
Maximum H-field [RMS]:
MAGNITUDE: 131.24 A/m
x: 111.90 A/m, y: 32.40 A/m, z: 60.45 A/m

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

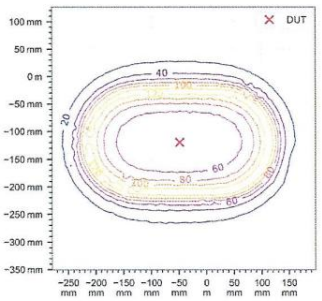
Distance to -20.0 dB boundary:
51.33 mm

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

H-field magnitude [RMS] at maximum location



H-field magnitude [RMS] at lowest plane



Incident fields, and induced quantities in the anatomical model *(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	Errors		
	H_{inc} [A/m]	Cube avg.	Local	Line avg.	Surface avg.	1g avg.	10g avg.	-20 dB radius [mm]	Sign	Vector potential	Boundary effect
0.0	206.0	3.32	3.35	3.36	2.34	6.38	4.74	181.0	1%	96%	37%
2.0	188.0	3.13	3.16	3.16	2.2	5.7	4.3	184.0	1%	96%	39%

Standard compliance evaluation, Absolute

	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]	
Distance	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
[mm]	[A/m]	[V/m]	[mW/kg]	[A/m]	[A/m²]	[mW/kg]	[A/m]	[V/m]	[mW/kg]	[A/m]	[V/m]	[mW/kg]	[A/m]	[V/m]	[mW/kg]
0.0	206.0	3.32	4.74	206.0	2.34	4.74	206.0	3.36	4.74	206.0	N/A	6.38	206.0	3.35	6.38
2.0	188.0	3.13	4.3	188.0	2.2	4.3	188.0	3.16	4.3	188.0	N/A	5.7	188.0	3.16	5.7

Standard compliance evaluation, Relative

	ICNIRP 2010/2020 [dB]			ICNIRP 1998 [dB]			IEEE 2019 [dB]			FCC [dB]			HC Code 6 [dB]		
	RL	BR		RL	BR		ERL	DRL		MPE	BR		RL	BR	
Distance [mm]	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pJ_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR	pH_{inc}	pE_{ind}	psSAR
0.0	19.8	-10.8	-26.2	32.3	22.8	-26.2	2.0	-14.5	-26.2	7.2	N/A	N/A	27.6	-10.7	-24.0
2.0	19.0	-11.3	-26.7	31.5	22.2	-26.7	1.2	-15.0	-26.7	6.4	N/A	N/A	26.8	-11.2	-24.5

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