CONFORMITY ASSESSMENT

Swiss Hydrogen Booster

for the purpose of CE marking

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1. INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report was commissioned by Mam Nature Swiss AG (**'the Applicant'**) and compiled by Certification Company. The purpose of this report is to establish a presumption of conformity with the investigated Product of the Applicant with the following European Directives:

- Directive 2014/30/EU on the harmonisation of the laws of the Member States relating to electromagnetic compatibility ('**EMC Directive**' or '**EMC**')

- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (**'RoHS Directive'** or '**RoHS**')

This chapter deals with identification (§ 1.2) and legal classification (§ 1.3) of the Product, the legal classification of the Applicant as an economic operator (§ 1.4) and provides an overview of compliance documentation submitted by the Applicant (§ 1.5).

Electrical Safety Recommendations for the Hydrogen Booster

The Hydrogen Booster operates at a voltage of 5V DC, which falls below the voltage range covered by the Low Voltage Directive (LVD). Consequently, the LVD requirements are not applicable to this product.

However, in accordance with the General Product Safety Regulation (EU) 2023/988, ensuring the highest safety standards for end users remains a priority. To meet consumer safety expectations, the Certification Company has recommends conducting electrical safety testing based on harmonized electrical safety standards. This approach ensures that the module complies with rigorous safety criteria and mitigates potential risks associated with electrical components.

By following these guidelines, the Hydrogen Booster aligns with best practices for product safety and regulatory compliance, enhancing consumer confidence in its reliability and safety.

1.2 PRODUCT IDENTIFICATION

For the purpose of this investigation the following Product has been taken into account:

#	PRODUCT NAME	INTENDED USE	PHOTOGRAPHIC EXAMPLE
1	Swiss Hydrogen Booster	The Swiss Hydrogen Booster is a mobile water electrolysis device that uses a PEM (Polymer Electrolyte Membrane) cell to produce hydrogen-enriched water.	
Remark: see **Annex I** for additional pictures			

1.3 PRODUCT CLASSIFICATION

The Product is primarily classified as **apparatus** in accordance with the Electromagnetic Compatibility Directive . According to article 3, paragraph 1, subparagraph (2) of the EMC Directive, apparatus means:

> *Any finished appliance or combination thereof made available on the market as a single functional unit, intended for the end-user and liable to generate electromagnetic disturbance, or the performance of which is liable to be affected by such disturbance;*

- **Justification:** Since the equipment is a finished electronic component, directly intended to be used by the end-user and liable to generate electromagnetic disturbance, or the performance of which is liable to be affected by such disturbance.

The product is also classified as an electrical equipment in accordance with restrictions on the use of hazardous substances (ROHS). According to article 3 of the restrictions on the use of hazardous substances (ROHS) electrical equipment means:

> *'electrical and electronic equipment' or 'EEE' means equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1 000 volts for alternating current and 1 500 volts for direct current;*

- **Justification:** Applies to 'electrical and electronic equipment' (It contains electronic components)

1.4 ECONOMIC OPERATOR CLASSIFICATION

According to article 3 of the EMC Directive, there are four economic operators: the manufacturer, the authorized representative, the importer and the distributor.

The Applicant is classified as the **manufacturer** in accordance with the EMC Directive. According to article 3, paragraph 1, subparagraph (11) of the EMC Directive, a manufacturer means:

> *"any natural or legal person who manufactures apparatus or has apparatus designed or manufactured, and markets that apparatus under his name or trade mark"*

- **Justification:** The Applicant is a legal person who has designed or manufactured apparatus and markets that apparatus under his name or trade mark. Therefore, the Applicant must be considered as the manufacturer of apparatus within the scope of the EMC Directive.

1.5 OVERVIEW COMPLIANCE DOCUMENTATION

The Applicant provided the following compliance documentation as part of the conformity assessment.

#	DOCUMENT NAME	DOCUMENT TYPE	INTERNAL REFERENCE NUMBER
1	Mam Nature Swiss HYDROGEN BOOSTER_Documentation_CE Certification.pdf	I	TD-01-01
2	Sticker_Bottom_Swiss Hydrogen Booster.pdf	L	TD-01-02
3	SY-F2_BOM_e20250219.pdf	I	TD-01-03
4	Contact water BOM 20250220.pdf	I	TD-01-04
5	BOM.pdf	I	TD-01-05
6	Mam Nature Hydrogen Booster_Electrical schematic diagram.pdf	D	TD-02-01
7	SY-F2_Mam Nature Hydrogen Booster_Techn.Drawings_20250219.pdf	D	TD-02-02
8	User Manual_MamNature_The Swiss Hydrogen Booster_e_2025.01.pdf	M	TD-03-01
9	2025-005-EMC.pdf	R	TD-04-01
10	0313 TT202404395 ROHS report.pdf	R	TD-07-01
11	LWP-F2_CE_complete.pdf	R	TD-07-02
12	LWP-F2-FCC_complete.pdf	R	TD-07-03
13	2 HX241102012097 ROHS2.0.pdf	R	TD-07-04
14	U10205241108605-1Z RoHS.pdf	R	TD-07-05
15	User Manual_MamNature_The Swiss Hydrogen Booster_e_2025.04.pdf	M	TD-03-01
16	User Manual_MamNature_The Swiss Hydrogen Booster_e_2025.04.pdf	M	TD-03-02
17	Images: IMG_7106 IMG_7108	I	TD-05-01

Legend: (C): certificate / (R): Report / (D): Drawing / (M): Manual / (L): Label / (I): Information reference / (P): Packaging

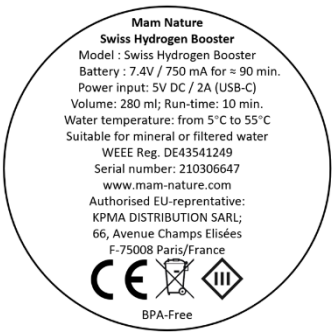
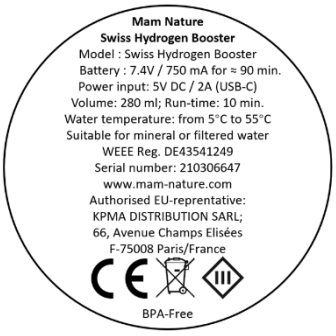
Remark: the documentation made available and the results and / or conclusions resulting therefrom are assumed to be authentic. The internal reference numbers mentioned above will be used throughout this report as part of compliance evidence.

2. CONFORMITY ASSESSMENT PROCEDURE MANUFACTURER

The applicable Directives require the Applicant to comply with specific legal obligations. Certification Company has mapped out and independently assessed these obligations. An overview of the obligations as well as the results are set out below.

CONFORMITY ASSESSMENT PROCEDURE MANUFACTURER (in accordance with article 7 EMC Directive and article 7 RoHS Directive)		
OBLIGATIONS	**LEGAL BASIS**	**ASSESSMENT**
OBLIGATIONS MANUFACTURER		
1) When placing their electrical equipment on the market, manufacturers shall ensure that it has been designed and manufactured in accordance with the established safety requirements.	Article 7, section 1, EMC Directive ~ Article 7, sub a, RoHS Directive	**IN COMPLIANCE** Certification Company has assessed the essential safety. See Chapter 3 and relevant annexes for the results of the assessment.
2) Manufacturers shall draw up technical documentation and carry out the conformity assessment procedure or have it carried out.	Article 7, section 2, first paragraph, EMC Directive ~ Article 7, sub b, RoHS Directive	**IN COMPLIANCE** Certification Company has reviewed the Technical Documentation provided by the Applicant. See Chapter 4 for the assessment.
3) When it has been determined that the electrical equipment meets the stated safety requirements, manufacturers shall issue an EU Declaration of Conformity and affix the CE marking.	Article 7, section 2, second paragraph, EMC Directive ~ Article 7, sub c, RoHS Directive	**IN COMPLIANCE** Certification Company shall draw up the EU Declaration of Conformity on behalf of the Applicant once full conformity has been determined. **Remark:** for rules on how to affix the CE marking, please refer to Annex II.

CONFORMITY ASSESSMENT PROCEDURE MANUFACTURER (in accordance with article 7 EMC Directive and article 7 RoHS Directive)		
OBLIGATIONS	**LEGAL BASIS**	**ASSESSMENT**
4) Manufacturers shall keep the technical documentation and the EU Declaration of Conformity for 10 years after the electrical equipment has been placed on the market.	Article 7, section 3, EMC Directive ~ Article 7, sub d, RoHS Directive	**INFORMATION REQUIREMENT** Certification Company has informed the Applicant about his responsibility to keep the Technical Documentation as well as the EU declaration of conformity for a period of 10 years after the Product has been placed on the market. **Remark:** it is the responsibility of the Applicant to keep the technical documentation and EU Declaration of Conformity.
5) Manufacturers shall ensure that procedures to ensure compliance are in place for series production.	Article 7, section 4, first paragraph, EMC Directive ~ Article 7, sub e, RoHS Directive	**IN COMPLIANCE** The Applicant is currently in the process of obtaining ISO 13485 certification. This certification demonstrates strict compliance with traceability requirements for both their own production processes and those of their subcontractors, ensuring adherence to quality management standards. The certification company assumes that this process will be completed with a positive outcome while drafting the declaration of conformity. Remark: an ISO 9001 (Quality Management System) certificate or another certified quality system with a relevant scope is advisable to be obtained.
6) When deemed appropriate with regard to the risks presented by the electrical equipment, manufacturers shall, to protect the health and safety of consumers, carry out sample testing of electrical equipment made available on the market, investigate, and, if necessary, keep a register of complaints, of non-conforming electrical equipment and electrical equipment recalls, and shall keep distributors informed of any such monitoring.	Article 7, section 4, second paragraph, EMC Directive ~ Article 7, sub f, RoHS Directive	**INFORMATION REQUIREMENT** Certification Company has informed the Applicant of his responsibility to carry out random checks, to investigate complaints about non-compliant or recalled Products and to keep a register of these actions.

CONFORMITY ASSESSMENT PROCEDURE MANUFACTURER (in accordance with article 7 EMC Directive and article 7 RoHS Directive)		
OBLIGATIONS	**LEGAL BASIS**	**ASSESSMENT**
7) Manufacturers shall ensure that electrical equipment which they have placed on the market bears a type, batch or serial number or other element allowing its identification, or, where the size or nature of the electrical equipment does not allow it, that the required information is provided on its packaging or in a document accompanying the electrical equipment.	Article 7, section 5, EMC Directive ~ Article 7, sub g, RoHS Directive	**IN COMPLIANCE** The applicant has provided a label containing a type, batch, or serial number, which allows for clear identification of the product.  Mam Nature Swiss Hydrogen Booster Model : Swiss Hydrogen Booster Battery : 7.4V / 750 mA for ≈ 90 min. Power input: 5V DC / 2A (USB-C) Volume: 280 ml; Run-time: 10 min. Water temperature: from 5°C to 55°C Suitable for mineral or filtered water WEEE Reg. DE43541249 Serial number: 210306647 www.mam-nature.com Authorised EU-reprentative: KPMA DISTRIBUTION SARL; 66, Avenue Champs Elisées F-75008 Paris/France BPA-Free **See Annex III for additional background information.**
8) Manufacturers shall indicate on the electrical equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted or, where that is not possible, on its packaging or in a document accompanying the electrical equipment. The address shall indicate a single point at which the manufacturer can be contacted. The contact details shall be in a language easily understood by end-users and market surveillance authorities.	Article 7, section 6, EMC Directive ~ Article 7, sub h, RoHS Directive	**IN COMPLIANCE** The Applicant has provided a label containing their name, registered trade name or trademark, along with the postal address for contact, ensuring clear identification.  Mam Nature Swiss Hydrogen Booster Model : Swiss Hydrogen Booster Battery : 7.4V / 750 mA for ≈ 90 min. Power input: 5V DC / 2A (USB-C) Volume: 280 ml; Run-time: 10 min. Water temperature: from 5°C to 55°C Suitable for mineral or filtered water WEEE Reg. DE43541249 Serial number: 210306647 www.mam-nature.com Authorised EU-reprentative: KPMA DISTRIBUTION SARL; 66, Avenue Champs Elisées F-75008 Paris/France BPA-Free **See Annex III for additional background information.**

CONFORMITY ASSESSMENT PROCEDURE MANUFACTURER (in accordance with article 7 EMC Directive and article 7 RoHS Directive)		
OBLIGATIONS	**LEGAL BASIS**	**ASSESSMENT**
9) Manufacturers shall ensure that the electrical equipment is accompanied by instructions and safety information in a language which can be easily understood by consumers and other end-users, as determined by the Member State concerned. Such instructions and safety information, as well as any labelling, shall be clear, understandable and intelligible.	Article 7, section 7, EMC Directive	**IN COMPLIANCE** **Please refer to Chapter 5 for the assessment of the instructions for use provided by the Applicant.** Internal Reference:TD-03-01 TD-03-02 TD-03-03
10) Manufacturers who consider or have reason to believe that electrical equipment which they have placed on the market is not in conformity with this Directive shall immediately take the corrective measures necessary to bring that electrical equipment into conformity, to withdraw it or recall it, if appropriate. Furthermore, where the electrical equipment presents a risk, manufacturers shall immediately inform the competent national authorities of the Member States in which they made the electrical equipment available on the market to that effect, giving details, in particular, of the non-compliance and of any corrective measures taken.	Article 7, section 8, EMC Directive ~ Article 7, sub i, RoHS Directive	**INFORMATION REQUIREMENT** Certification Company has informed the Applicant of his responsibility to take corrective measures and to inform the competent national authorities if the Product is at risk.

CONFORMITY ASSESSMENT PROCEDURE MANUFACTURER (in accordance with article 7 EMC Directive and article 7 RoHS Directive)		
OBLIGATIONS	**LEGAL BASIS**	**ASSESSMENT**
11) Manufacturers shall, further to a reasoned request from a competent national authority, provide it with all the information and documentation in paper or electronic form necessary to demonstrate the conformity of the electrical equipment with this Directive, in a language which can be easily understood by that authority. They shall cooperate with that authority, at its request, on any action taken to eliminate the risks posed by electrical equipment which they have placed on the market.	Article 7, section 9, EMC Directive ~ Article 7, sub j, RoHS Directive	**INFORMATION REQUIREMENT** Certification Company has informed the Applicant of his responsibility to cooperate with the competent national authorities.

***** END CHECKLIST *****

3. ESSENTIAL SAFETY REQUIREMENTS

The applicable Directives obligate the Applicant to ensure that their products comply to the essential safety requirements. Certification Company has mapped out and independently assessed the essential requirements on the basis of relevant European harmonised standards. An overview of the essential safety requirements as well the results are set out below.

3.1 ASSESSMENT OF ESSENTIAL REQUIREMENTS (EMC)

EMC ESSENTIAL REQUIREMENTS CHECKLIST (In accordance with article 7(1) and Annex I of the EMC Directive)		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
1) Manufacturers shall ensure that the equipment is designed and manufactured in compliance with the requirements set out in Annex I.	Article 7(1) ~ Annex I	**IN COMPLIANCE** Please refer to Annex IV for detailed test results with respect to electromagnetic compatibility as set out in Directive 2014/30/EU.

3.2 ASSESSMENT OF ESSENTIAL REQUIREMENTS (ROHS)

ESSENTIAL REQUIREMENTS (In accordance with article 7 of the RoHS Directive)		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
1) Member States shall ensure that:		
a) when placing EEE on the market, manufacturers ensure that it has been designed and manufactured in accordance with the requirements set out in Article 4.	Article 7, sub a	**IN COMPLIANCE** Please refer to Annex V for detailed test results.

***** END CHECKLIST *****

4. TECHNICAL DOCUMENTATION

It is responsibility of the Manufacturer to compile the Technical Documentation. The Technical Documentation must be able to assess whether the Product meets the essential safety requirements.

The Technical Documentation consists of the documents listed in Annex II, Point 3 of the EMC Directive and Annex II, Module A, Point 3 of the Decision 768/2008/EC. An overview of both the requirements and the results is shown in the below table.

The Applicant has to provide technical documentation drafted according to the checklist below, once received, Certification Company will assess it and propose modifications if needed.

TECHNICAL DOCUMENTATION (in accordance with Annex II, Point 3, EMC Directive and Annex II, Module A, Point 2, Decision 768/2008/EC)		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT** **(Yes (Y); No (N) or n/a)**
GENERAL REQUIREMENTS		
1) A general description of the electrical equipment.	Annex II, Point 3, Sub a, EMC Directive ~ Annex II, Module A, Point 2, first paragraph, Decision 768/2008/EC	**Y** Internal document: TD-01-01 TD-03-01
2) Conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.	Annex II, Point 3, Sub b, EMC Directive ~ Annex II, Module A, Point 2, second paragraph, Decision 768/2008/EC	**Y** Internal document: TD-02-01 TD-02-02
3) Descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the electrical equipment.	Annex II, Point 3, Sub c, EMC Directive ~ Annex II, Module A, Point 2, third paragraph, Decision 768/2008/EC	**Y** Internal document: TD-02-01 TD-02-02

TECHNICAL DOCUMENTATION (in accordance with Annex II, Point 3, EMC Directive and Annex II, Module A, Point 2, Decision 768/2008/EC)		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT** **(Yes (Y); No (N) or n/a)**
4) A list of the harmonised standards applied in full or in part and where those standards have not been applied, descriptions of the solutions adopted to meet the safety objectives of the Directives.	Annex II, Point 3, Sub d, EMC Directive ~ Annex II, Module A, Point 2, fourth paragraph, Decision 768/2008/EC	**Y** A list of the standards applied in full or in part will be mentioned on the EU Declaration of Conformity.
5) Results of design calculations made, examinations carried out, etc.	Annex II, Point 3, Sub e, EMC Directive ~ Annex II, Module A, Point 2, fifth paragraph, Decision 768/2008/EC	**Y** See Chapter 3 and relevant annexes.
6) Test reports	Annex II, Point 3, Sub f, EMC Directive ~ Annex II, Module A, Point 2, sixth paragraph, Decision 768/2008/EC	**Y** See Chapter 3 and relevant annexes.

***** END CHECKLIST *****

5. SAFETY INFORMATION

Pursuant to article 6(7) of the Low Voltage Directive and article 7(7) of the EMC Directive, manufacturers shall ensure that the electrical equipment is accompanied by instructions and safety information. Certification Company has independently assess the Instructions of Use manual. The assessment is based on generic standard IEC 82079 *"Preparation of instructions for use"*. An overview of both the requirements and the results can be found in the below table.

Certification Company assessed the compliance with the below requirements based on the Instructions for use provided by the Applicant under internal document **TD-03-01**

Rev1: The Applicant has provided the revised version of the manual under the internal document **TD-03-02**

Rev1: The Applicant has provided the revised version of the manual under the internal document **TD-03-03**

Manufacturers shall ensure that the electrical equipment is accompanied by instructions and safety information shall be accompanied in a language which can be easily understood by consumers and other end-users, as determined by the Member State concerned. See Annex VI for an overview of official EU languages.

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
IDENTIFICATION		
1) Brand and type designation	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
2) No. of model, version, type, subgroup	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
3) Expiry date	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
4) Up-to-date check / for example date of publication of the handbook, coverage of product modifications	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
5) Supplier and provider of special tools, material, etc. and technical assistance	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
6) Contact details of supplier/service agency	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
7) Certification references	Annex B, Table B.1, IEC 82079	**INFORMATION REQUIREMENT**
8) Requirements of specific product standards	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
TECHNICAL SPECIFICATION OF THE PRODUCT AND ITS RESIDUAL HAZARDS		
9) Functions and range of application	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
10) Safe and correct use; principal residual hazards, general warnings about product or use	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
11) Dimensions — mass — capacity	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
12) Chemical composition	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
13) Performance data	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
14) Supply data for power, gas, water and other consumables (for example detergents, lubricants)	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
15) Energy consumption and methods of measurement used.	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
16) Emission of noise, waste, water, etc., with the methods of measurement use	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
17) Expected product life and intended disposal	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
18) Information on personal protection (for example clothing)	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
19) Information on dangers to particular vulnerable groups (for example potential allergy or strobe effects)	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
PREPARING THE PRODUCT FOR USE		
20) Safety precautions before installation	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
21) Unpacking instructions	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
22) Safe disposal of packaging	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
23) Installation and assembly (for example special tools, space for maintenance and repair)	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
24) Storage and protection during intervals in normal use	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
25) Repackaging to prevent damage in transport	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
26) Information on operations to be carried out only by skilled persons. Separation of this information from instructions for use to users. Comprehensiveness of instructions for use to experts.	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
OPERATION OF PRODUCTS		
27) Basic functions: – Complete for correct intended use – Complete for safe intended use – Complete for reasonably foreseeable misuse – Conformity with minimum list in relevant product standard(s)	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
28) Secondary functions	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
29) Optional modules and extras	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
30) Personal protection	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
31) Quick references – by reminder cards, stickers or labels – by reference to handbook, etc.	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
32) Disposal of waste products	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
INFORMATION NEEDED BY USER		
33) Explanations of visible and audible signals	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
34) Distinctions between characteristics of normal and faulty/dangerous operation	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
35) Trouble-shooting advice (for example in the form of Frequently Asked Questions and fault detection procedures) – intelligible to consumers and paying due regard to safety	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
MAINTENANCE OF THE PRODUCT		
36) Safety precautions (for example personal protection, special tools)	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
37) Product maintenance by non-skilled persons	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
38) Product maintenance by skilled persons	Annex B, Table B.1, IEC 82079	**NOT APPLICABLE**
39) Safety/deterioration checks during maintenance	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
CRITICAL SAFETY AND HEALTH INFORMATION		
40) Warning messages: – correct locations • on product and/or • on packaging and/or • in instructions for use – if relevant, visibility at point of sale – correct use of terms – correct use of signal words – use of simple /standardized phrases – durability of warnings – conformity with requirements in relevant product standard(s)	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
41) Safety signals	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
42) Information on residual risk	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
43) Safe disposal of product at the end of its useful life	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
44) Environmental impacts of using the product	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
CONSISTENCY IN DESIGN OF INFORMATION AND OF THE WHOLE 'PRODUCT' OFFERED		
45) Integrated design of product and instructions for use – No compensation for design deficiencies	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
46) Consistent terminology on the product itself; on the packaging; in accompanying material, on Web site resources and in marketing media	Annex B, Table B.1, IEC 82079	**INFORMATION REQUIREMENT** Certification Company suggests that applicant should ensure that all the Instructions will be updated digitally.
47) Structure of text and graphics – structure follows communication principles – meaningful headings used – unnecessary material excluded to avoid information overload	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
48) Location(s) and presentation of instructions for use	Annex B, Table B.1, IEC 82079	**INFORMATION REQUIREMENT** Certification Company suggests that applicant should ensure that all the Instructions will be updated digitally.
49) Numbered pages and/or paragraphs, with table of contents and/or index appropriate to length and complexity of text. Use of keywords	Annex B, Table B.1, IEC 82079	**IN COMPLIANCE**
TARGET GROUPS		
50) Target group/s specified	Annex C, Table C.1, IEC 82079	**NOT APPLICABLE**
51) Instructions for use adequately presented for target Group/s	Annex C, Table C.1, IEC 82079	**NOT APPLICABLE**
LOCATION AND MEDIUM		
52) Placement on product, on packaging or in accompanying media meets needs of availability and durability	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
53) Alerting function is appropriate to user's needs (prominence/ visibility distance, etc)	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
54) Place in order or sequence with respect to other information following communication principles	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
55) Grouped under appropriate heading and found in index	Annex C, Table C.1, IEC 82079	**NOT APPLICABLE**
56) Instructions for use and supporting media available on supplier's Web site to users with a wide range of individual access needs	Annex C, Table C.1, IEC 82079	**INFORMATION REQUIREMENT** Please refer to point 48.
LEGIBILITY OF TEXT		
57) Clear typeface and adequate font size (depending on reading distance)	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
58) Line length and line spacing	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
59) Contrast with background	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
60) Effective use of white space	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
61) Durability of legibility of on-product (or on-packaging) text	Annex C, Table C.1, IEC 82079	**NOT APPLICABLE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
WORDING AND STRUCTURE OF TEXT		
62) Text/use of words - words and phrases not complicated or over-sophisticated - short phrases - one sentence-one command. Not too much information in one sentence - direct active voice and assertive commands	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
63) Terms used for features and user actions - terms familiar to consumers used if possible - technical features and terms well explained - consistent use of terms	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
64) Communication principles - encouraging quick reactions (for example simple and easy information for an emergency) - setting out learning process for complex functions -answering the questions WHERE? WHO? WHAT? WHEN? HOW? WHY?	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
MULTIPLE LANGUAGE VARIANTS		
65) Clear differentiation/ identification of languages	Annex C, Table C.1, IEC 82079	**INFORMATION REQUIREMENT**
66) Each language version checked by a native speaker for comprehensibility and absence of linguistic errors	Annex C, Table C.1, IEC 82079	**INFORMATION REQUIREMENT**
ILLUSTRATIONS		
67) Clarity of features and actions illustrated at intended viewing distance (lack of ambiguity; self-explanatory without text whenever possible)	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
68) Sufficient number of illustrations for each one to provide clear and specific information	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
69) Illustrations supported by clear and helpful captions	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
70) Clear connections or cross-references between text and illustrations	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
71) Can be viewed adjacent to relevant text when necessary	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
72) Repeated illustrations where necessary	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
USE OF GRAPHICAL SYMBOLS		
73) Adequate size to be comprehensible at intended viewing distance	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
74) Standardized symbols used where possible (in standard colours)	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
75) Standard design principles (for example shape and colour) followed for any new symbols	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
76) Each symbol clearly explained in text	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
77) Durability of on-product (or on-packaging) symbols	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
TABLES, CONCEPTUAL DIAGRAMS AND FLOW CHARTS		
78) Provided and located where appropriate	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
79) Clearly set out and informative	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
80) Repeated tables, diagrams and flow charts where necessary	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
USE OF COLOURS		
81) Functional	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
82) Clear and easily distinguishable	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
83) Consistent	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
EXPLANATION OF VISUAL AND AUDIBLE SIGNALS		
84) Clarity of information provided to users	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
85) Lights, sounds, text displays (or other indications) that may be given by the product at each stage are explained and referred to at each relevant point in the text	Annex C, Table C.1, IEC 82079	**IN COMPLIANCE**
INSTRUCTIONS FOR USE OF ELECTRONIC MEDIA		
86) Indicate whether supplementing or replacing instructions for use in text	Annex C, Table C.1, IEC 82079	**INFORMATION REQUIREMENT** Certification company suggests to the applicant update product digitally to enhance product usability by providing users with engaging, easily navigable information, which improves satisfaction and contributes to safe, effective use.

INSTRUCTIONS FOR USE (in accordance with NEN-EN-IEC 82079-1 "Preparation of instructions of use")		
REQUIREMENTS	**LEGAL BASIS**	**ASSESSMENT**
87) Follow structure and language of text except when this is unsuitable to medium	Annex C, Table C.1, IEC 82079	**INFORMATION REQUIREMENT** Certification company suggests to the applicant update product digitally to enhance product usability by providing users with engaging, easily navigable information, which improves satisfaction and contributes to safe, effective use.
88) Offer multi-lingual and text/audio options	Annex C, Table C.1, IEC 82079	**INFORMATION REQUIREMENT** Certification company suggests to the applicant update product digitally to enhance product usability by providing users with engaging, easily navigable information, which improves satisfaction and contributes to safe, effective use.
DURABILITY		
89) Those items of instructions for use that need to be kept for reference or new users should be in media that offer adequate provision against loss or deterioration in expected (normal) life of product and discouragement of their disposal.	Annex C, Table C.1, IEC 82079	**INFORMATION REQUIREMENT** Certification company suggests to the applicant update product digitally to enhance product usability by providing users with engaging, easily navigable information, which improves satisfaction and contributes to safe, effective use.

***** END CHECKLIST *****

6. CONCLUSION

Certification Company carried out a CE conformity assessment on behalf of Mam Nature Swiss AG with the purpose of establishing conformity with the investigated products and in accordance with the following Directives/Regulations:

- Directive 2014/30/EU on the harmonisation of the laws of the Member States relating to electromagnetic compatibility ('**EMC Directive**' or '**EMC**')

- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (**'RoHS Directive'** or '**RoHS**')

The conformity assessment lead to the following conclusions:

#	ASSESSMENT	REMARK(S)
1	**MANUFACTURER COMPLIANCE PROCEDURE**	
1.1	**IN COMPLIANCE**	**See Chapter 2 for remarks**
2	**ASSESSMENT OF ESSENTIAL SAFETY REQUIREMENTS**	
2.1	**IN COMPLIANCE**	**See Chapter 3 for remarks**
3	**TECHNICAL DOCUMENTATION**	
3.1	**IN COMPLIANCE**	**See Chapter 4 for remarks**
4	**MANUAL**	
4.1	**IN COMPLIANCE**	**See Chapter 5 for remarks**
FINAL CONCLUSION		**IN COMPLIANCE**

The Applicant is requested to address the under-assessment points within **30 days** after this report has been released in order to establish compliance with the applicable legislation. Depending on the non-conformity, compliance can be based on digital photograph's and/or supporting documentation and/or re-testing.

Almere, The Netherlands
Rev 1: 22nd of April 2025

CERTIFICATION COMPANY B.V.

ANNEX I PRODUCT PICTURES

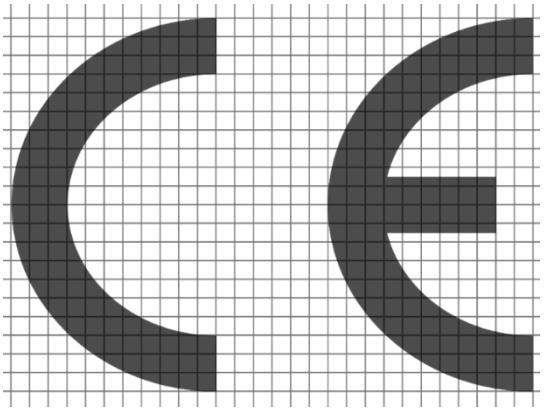





ANNEX II GENERAL PRINCIPLES CE MARKING

The following principals are drawn in accordance with Article 30 of the Regulation (EC) No. 765/2008 of the European Parliament and of the council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93.

- The CE marking shall be affixed only by the manufacturer or his authorised representative.
- The CE marking as shown below shall be affixed only to products to which its affixing is provided for by specific Community harmonisation legislation and shall not be affixed to any other product.



- If the CE marking is reduced or enlarged, the proportions given in the graduated drawing above shall be respected.
- Where specific legislation does not impose specific dimensions, the CE marking shall be at least 5 mm high.
- By affixing or having affixed the CE marking, the manufacturer indicates that he takes responsibility for the conformity of the product with all applicable requirements set out in the relevant Community harmonisation legislation providing for its affixing.
- The CE marking shall be the only marking which attests the conformity of the product with the applicable requirements of the relevant Community harmonisation legislation providing for its affixing.
- The affixing to a product of markings, signs or inscriptions which are likely to mislead third parties regarding the meaning or form of the CE marking shall be prohibited. Any other marking may be affixed to the product provided that the visibility, legibility and meaning of the CE marking is not thereby impair.

ANNEX III TRACEABILITY PROVISIONS

The requirement to indicate name and address for manufacturers

The manufacturers must indicate the following three elements: their (1) name, (2) registered trade name or registered trade mark and (3) the address at which they can be contacted on the product, or, where that is not possible, on its packaging and/or in a document accompanying the product.

The name and address must, as a rule, be affixed to the product. However, it may exceptionally be moved from the product if this rule cannot be followed. This would be justified where affixing it to the product was not possible under reasonable technical or economic conditions excluding however esthetical reasons. It is up to the manufacturer to make this assessment. This assessment has to be done according to the size or nature of the product. Some products, e.g. hearing aids, sensors or the like are simply too small to carry such information. In such cases the order of priority is that as a first alternative the information should be on the packaging, as a second alternative on an accompanying document, except for the cases where sectoral Union harmonisation legislation requires the information to be on both the packaging and accompanying documents.

The manufacturer has to comply with this obligation regardless of his location (within or outside the EU). This provision implies that products sold without packaging or any accompanying documents, must bear the name and address of the manufacturer on the product itself.

The address must indicate a single point at which the manufacturer can be contacted, in particular by market surveillance authorities. The legal text obliges the manufacturer to put a single contact point on the product. Only one single contact point in each product is allowed. This is not necessarily the address where the manufacturer is actually established. This address can for example be the one of the authorised representative or of the customer services.

The single contact point does not need to be in every Member State where the product is made available. The manufacturer may however put other addresses provided that it is clear which one is the single contact point. The latter is then to be indicated on the product/documentation as the 'single contact point'. The address or the country does not necessarily have to be translated into the language of the Member State where the product is made available on the market but the characters of the language used must allow identifying the origin and the name of the company.

A website is additional information, but is not enough as an address. Normally an address consists of a street and number or post-box and number and the postal code and town, but some countries might deviate from this model.

Identification element(s)

The product must bear a type, batch, serial or model number or other element allowing its identification. The identification must, as a rule, be affixed to the product. However, it may exceptionally be moved from the product if this rule cannot be followed. This would be justified where the size and/or the nature of the product makes the indication illegible or technically impossible. In such cases, the identification has to be affixed to the packaging, if it exists, and/or to the accompanying document. The identification on the product may neither be omitted nor be moved to the packaging or accompanying documents on purely aesthetic or economic grounds. It is up to the manufacturer to make this assessment.

This provision implies that if the product has no packaging or is not accompanied by any document, the identification must be on the product itself.

The requirement gives the freedom to the manufacturers to choose the element they want to use as identification of the product, as long as traceability is ensured. The identification element used must ensure a clear link to the relevant documentation that demonstrates the conformity of the specific type of product, in particular the EU declaration of conformity. This identification element of the product shall be the same as on the EU declaration of conformity. The identification element chosen by the manufacturer is also important in case of a withdrawal or recall, since all products bearing the same identification element will have to be withdrawn or recalled from the market.

In some cases, e.g. when a product consists of several parts or is an assembly of several parts, its nature does not allow for the affixing of the identification element. The identification of the product has in these cases to be affixed to the packaging (or accompanying document). In addition to the marking with an identification element on the packaging, additional marking of individual products/parts/components can be made based on the manufacturer's internal rules and ambitions to minimise the extent of a potential recall by having an advanced system for traceability of individual items (e.g. batch codes, production dates).

According to some economic operators, one way to refer to products is to use an item number (a so-called 'SKU'-'Stock keeping unit') as identification. This item number can also be used as an identifier on the EU declaration of conformity together with other elements allowing traceability.

ANNEX IV ASSESSMENT EMC

1. PRODUCT (EUT) DESCRIPTION

1.1 TECHNICAL INFORATION OF THE PRODUCT (EUT)

Item	Description
Name	Hydrogen booster
Manufacturer	-
Brand name	-
Type or model no.	N/A
Serial no.	-
Rated voltage	Battery operated (powered via USB-C plug)
Rated current /power	N/A
Software version	N/A
Hardware version	Unknown
Dimensions	-
Protection Class	III
Environmental to be used	Domestic
Peripheral equipment	March 2025
General remarks	-

1.2 CABLES AND ANCILLARY EQUIPMENT

Description	Port type	Type of cable	Cable length (cm)	Fixing shield	Load at port
Power port[1]	UCB-C	Unshielded	50	Not applicable	N/A

[1]) EUT powered by an external universal USB adapter

1.3 GENERAL DESCRIPTION

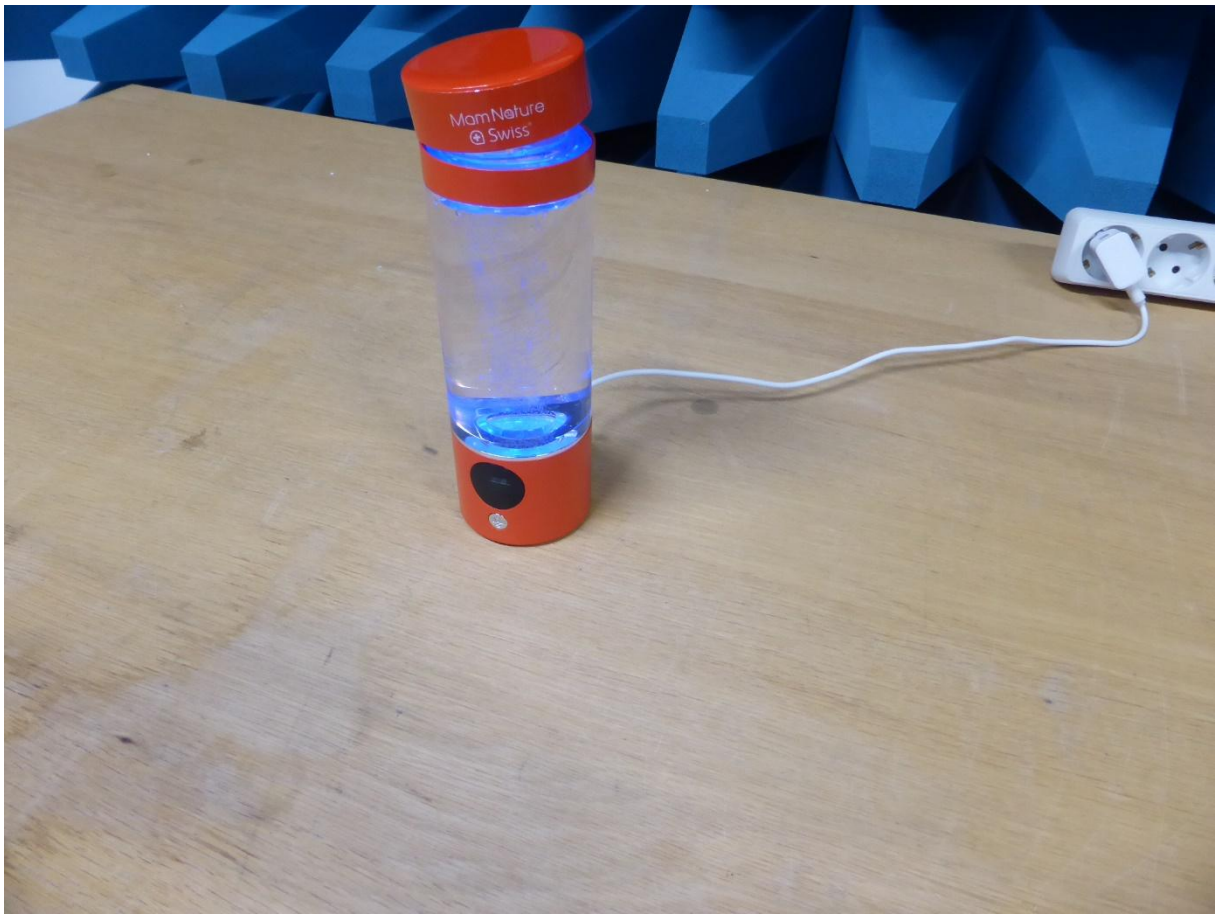


Photo 1 - Front View

1.4 MODES OF OPERATION AND PERFORMANCE CRITERIA

The modes of operation can be find in the table below:

Mode of operation	Description
Mode 1	Normal operational, during immunity testing the fan speed and the internal LED's are monitored

Performance criterion during the immunity test are verified according the information that is laid down in the table below:

Mode of operation	Performance criteria
Mode 1	**Performance criteria A**: During testing, normal performance within the specification of the EUT **Performance criteria B**: During testing, temporary degradation, or loss of function or performance is allowed if it is self-recovering. **Performance criteria C**: During testing, temporary degradation, or loss of function or performance is allowed which requires operator intervention or system reset.

1.5 STANDARDS AND MEASUREMENTS RESULTS

The following standard(s) are used to verify if the EUT is in compliance with the essential requirements of the EMC Directive 2014/30/EU.

Phenomena	Standard	Result
Emission	EN55014-1:2017	**PASS**
Immunity	EN55014-2:2015	**PASS**

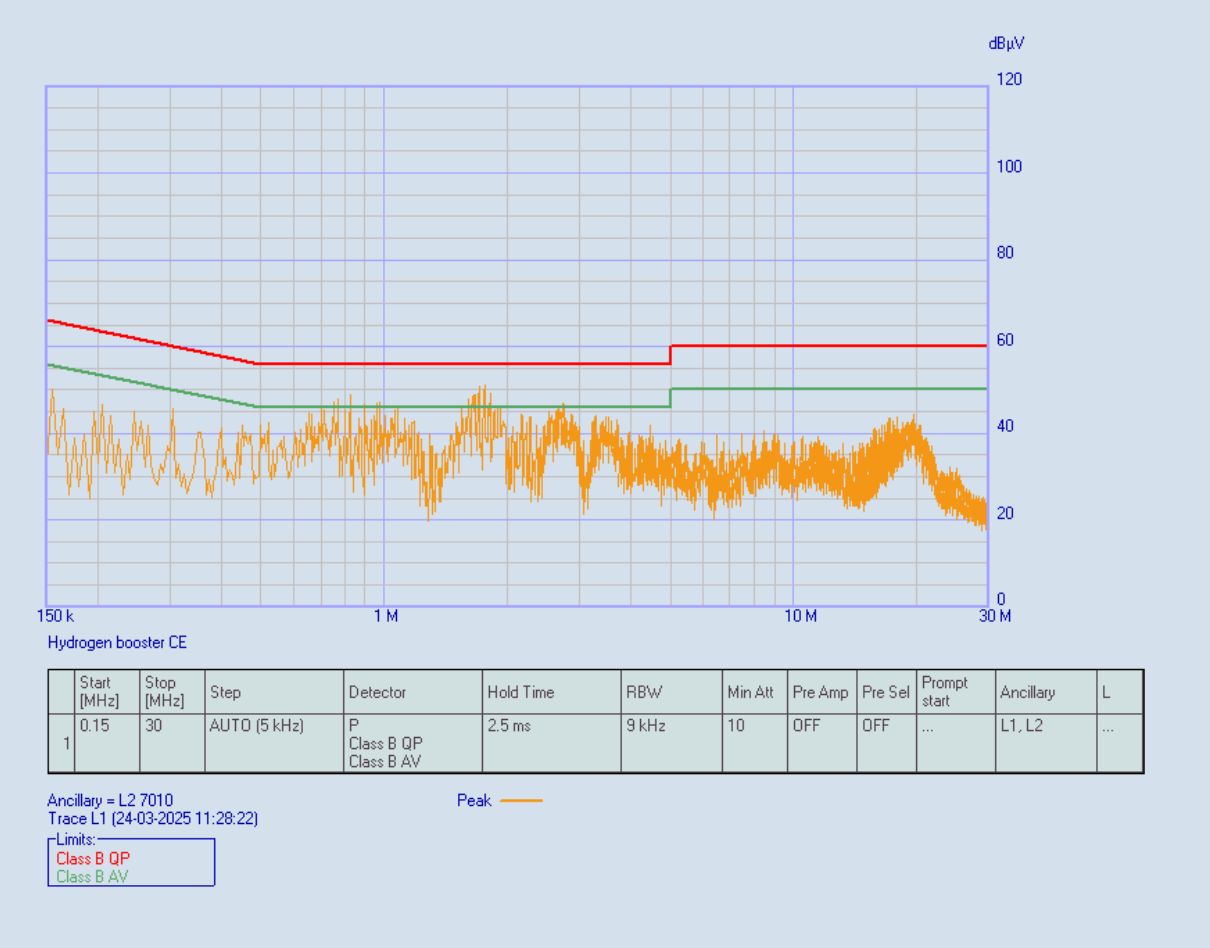
Detailed test information:

Test sequence	Test phenomena	Basic standard	Result (Pass/Fail)
1	Conducted emission (150 kHz – 30 MHz, CLASS B)	EN 55014-1:2017	**PASS**
2	Radiated emission (30 – 1000 MHz)	EN 55014-1:2017	**PASS**
3	Conducted immunity (0.15 – 80 MHz, CLASS B)	EN 61000-4-6:2014	**PASS**
4	Radiated immunity (80 – 1000 MHz)	EN 61000-4-3:2016/A1:2008	**PASS**
5	EFT tests	EN 61000-4-4:2012	**PASS**
6	Surge test	EN 61000-4-5:2014	**PASS**
7	ESD tests	EN 61000-4-2:2009	**PASS**
8	Voltage dips and interrupts	EN61000-4-11:2004/A1:2017	**PASS**
Remark			

2. CONDUCTED EMISSION RESULTS

Temperature	21 °C	**Air pressure**	1014 hpa
Humidity	60 %	**Remarks**	Class B

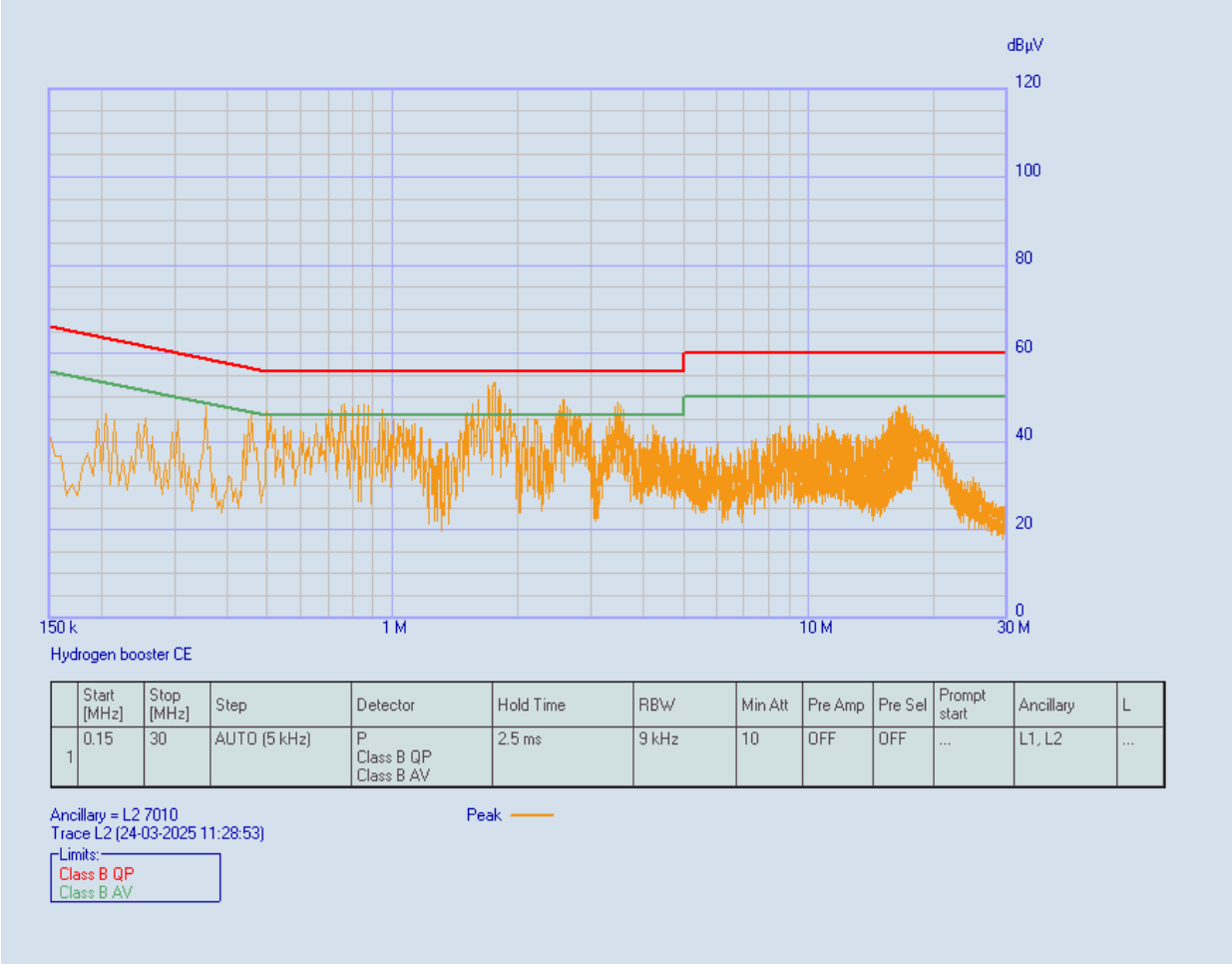
Description	Description: 6) Setting: Frequency band From 150 kHz to 30 MHz
Note	Line



	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary	L
1	0.15	30	AUTO (5 kHz)	P Class B QP Class B AV	2.5 ms	9 kHz	10	OFF	OFF	...	L1, L2	...

(some) Detected Peaks Line									
Peak Number	**Frequency**	**Quasi-Peak**	**Quasi-Peak Limit**	**Quasi-Peak Delta**	**Average**	**Average Limit**	**Average Delta**		**Status**
1	0.155	48.03	65.73	-17.70	34.53	55.73	-21.20		**Pass**
2	0.825	45.18	56.00	-10.82	34.41	46.00	-11.59		**Pass**
3	1.61	46.40	56.00	-9.60	36.48	46.00	-9.52		**Pass**
4	1.665	43.40	56.00	-12.60	33.30	46.00	-12.70		**Pass**
5	1.695	47.22	56.00	-8.78	37.91	46.00	-8.09		**Pass**
6	1.755	48.72	56.00	-7.28	41.34	46.00	-4.66		**Pass**
7	1.805	46.57	56.00	-9.43	39.61	46.00	-6.39		**Pass**
8	2.57	43.41	56.00	-12.59	35.58	46.00	-10.42		**Pass**
RESULT	**Pass**								

Description	Description: 8) Setting: Frequency band From 150 kHz to 30 MHz
Note	Neutral



(some) Detected Peaks Neutral									
Peak Number	**Frequency**	**Quasi-Peak**	**Quasi-Peak Limit**	**Quasi-Peak Delta**	**Average**	**Average Limit**	**Average Delta**		**Status**
1	0.155	48.19	65.73	-17.54	35.35	55.73	-20.38		**Pass**
2	0.825	46.22	56.00	-9.78	34.75	46.00	-11.25		**Pass**
3	1.61	48.04	56.00	-7.96	36.50	46.00	-9.50		**Pass**
4	1.665	45.29	56.00	-10.71	33.12	46.00	-12.88		**Pass**
5	1.695	49.37	56.00	-6.63	38.25	46.00	-7.75		**Pass**
6	1.755	50.67	56.00	-5.33	42.00	46.00	-4.00		**Pass**
7	1.805	48.54	56.00	-7.46	40.26	46.00	-5.74		**Pass**
8	2.57	45.86	56.00	-10.14	35.96	46.00	-10.04		**Pass**
RESULT	**Pass**								

Photo measurement set-up

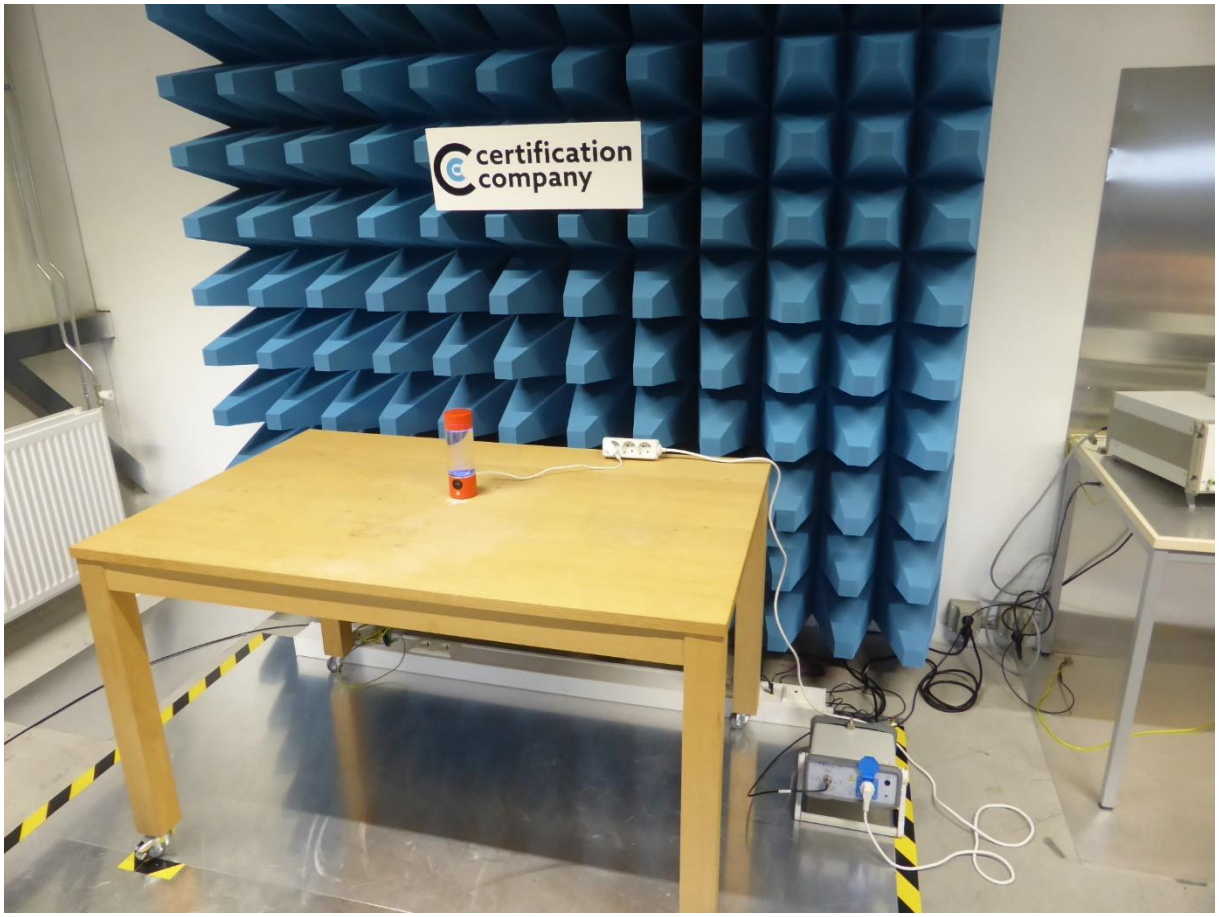


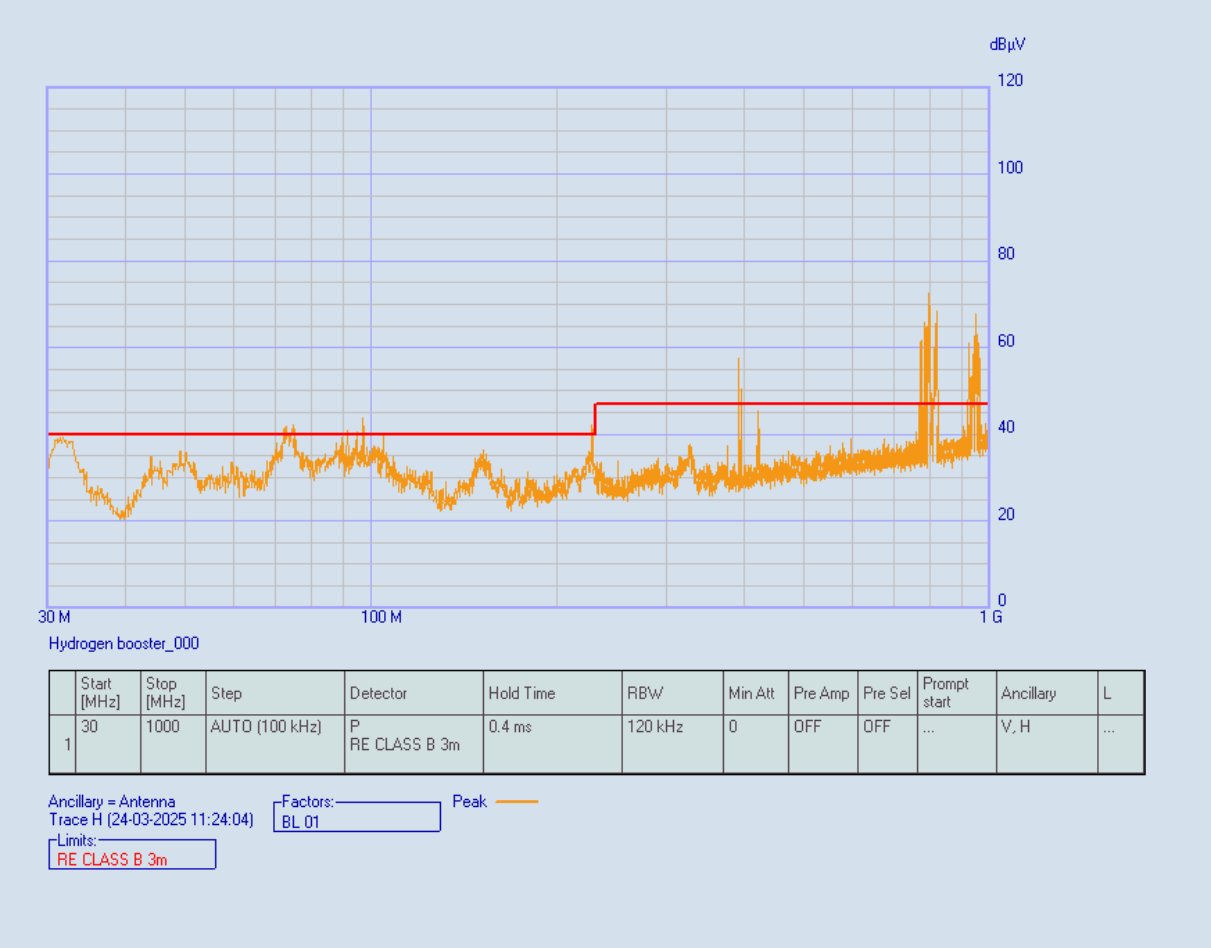
Photo 2 - Test set-up

Used	Description	Type	Manufacturer	ID
√	EMI Receiver	PMM7010	Narda	NC001

3. RADIATED EMISSION RESULTS

Temperature	21 °C	**Air pressure**	1014 hpa
Humidity	60 %	**Frequency steps**	
Remark(s):			

Description	Description: 9) Setting: Frequency band From 30 MHz to 1000 MHz, Class B
Note	Antenna Horizontal



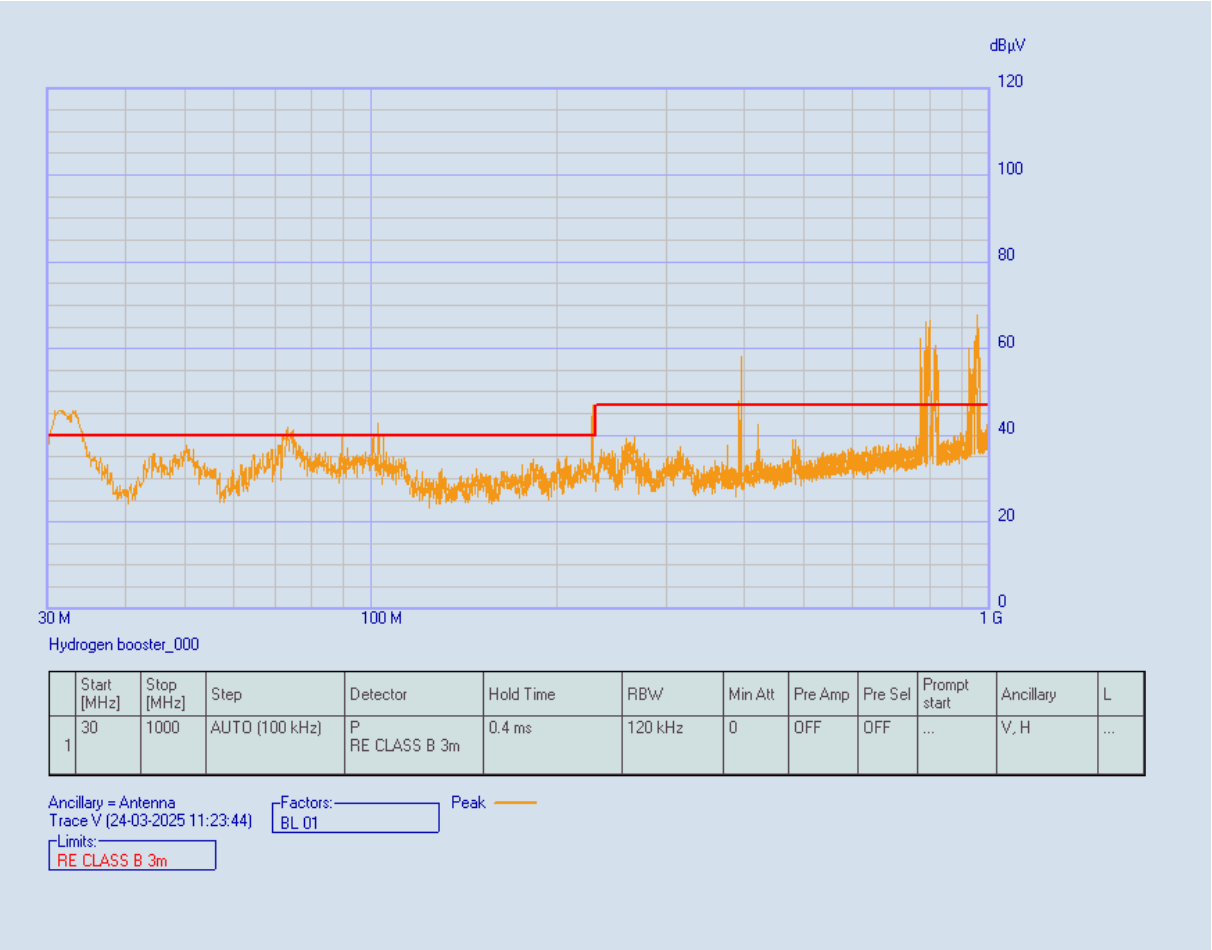
	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary	L
1	30	1000	AUTO (100 kHz)	P RE CLASS B 3m	0.4 ms	120 kHz	0	OFF	OFF	...	V, H	...

Ambient noise 30-34, 70-80MHz, 220MHz , due FM (90-100Mhz), C2000 (390MHz), ISM(420MHz) and GSM around 800Mhz and 900 MHz.

(Additional measurements were performed to check that EUT emissions where not hidden by the ambient noise)

Detected Peaks									
Peak Number	**Frequency**	**Quasi-Peak**	**Quasi-Peak Limit**	**Quasi-Peak Delta**					**Status**
--									
RESULT									

Description	Description: 9) Setting: Frequency band From 30 MHz to 1000 MHz, Class B
Note	Antenna Vertical



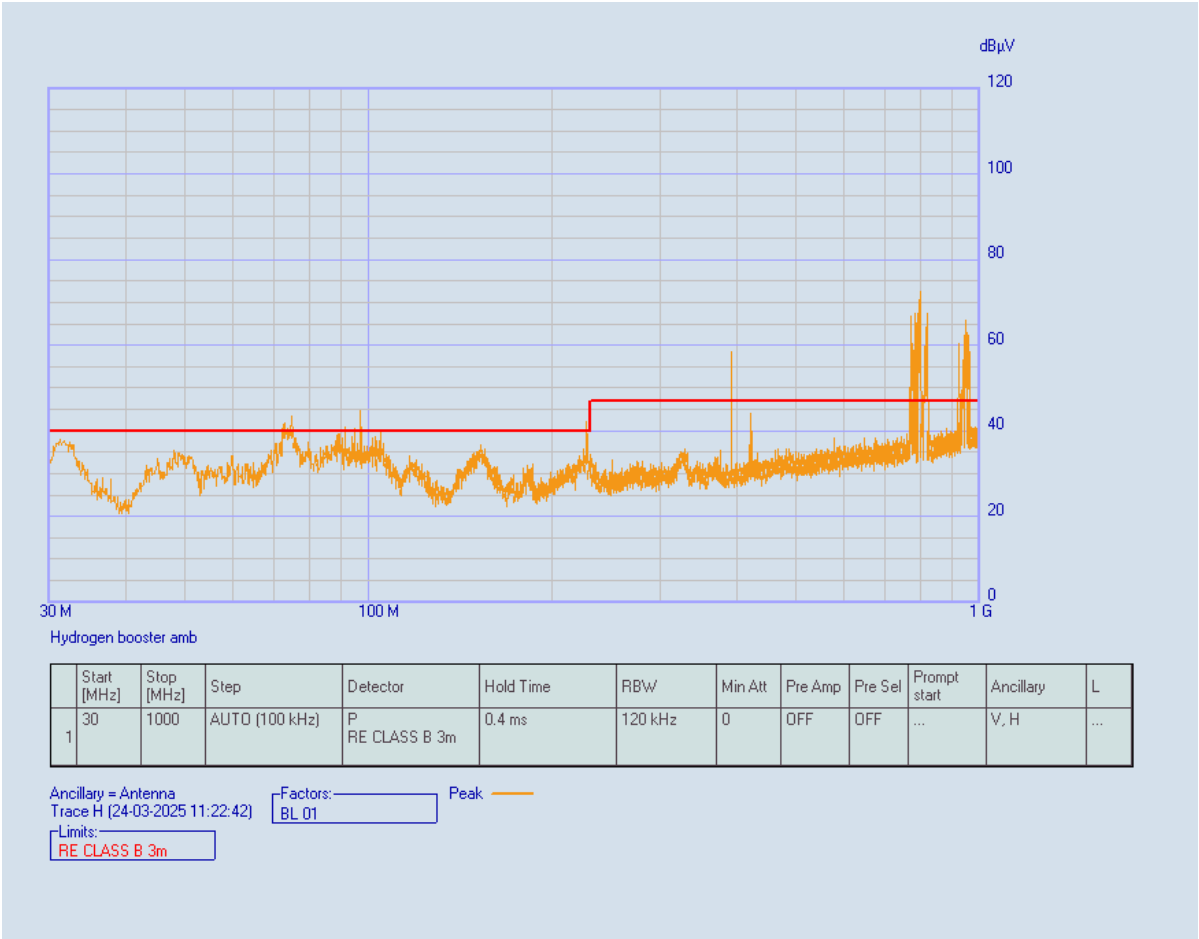
Ambient noise 30-34, 70-80MHz, 220MHz , due FM (90-100Mhz), C2000 (390MHz), ISM(420MHz) and GSM around 800Mhz and 900 MHz.

(Additional measurements were performed to check that EUT emissions where not hidden by the ambient noise)

Detected Peaks									
Peak Number	**Frequency**	**Quasi-Peak**	**Quasi-Peak Limit**	**Quasi-Peak Delta**					**Status**
--									
RESULT									

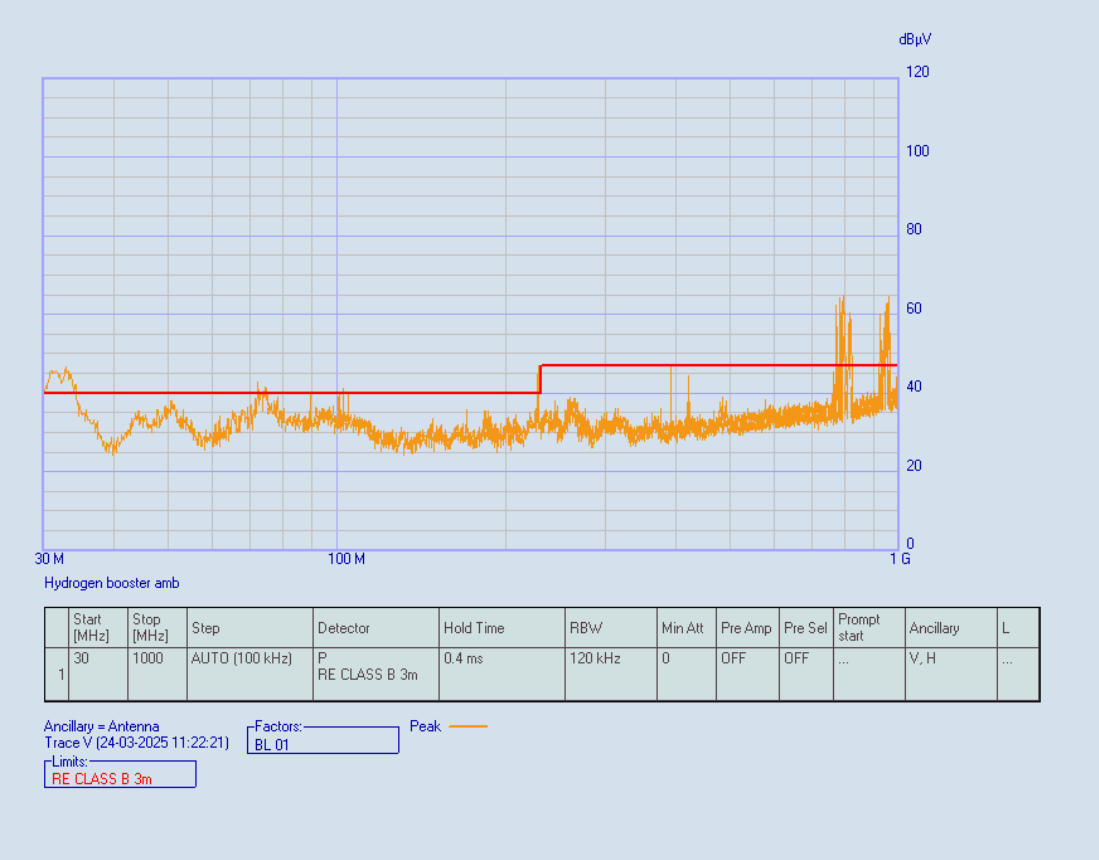
Ambient noise:

Horizontal



	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary	L
1	30	1000	AUTO (100 kHz)	P RE CLASS B 3m	0.4 ms	120 kHz	0	OFF	OFF	...	V, H	...

Vertical



	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary	L
1	30	1000	AUTO (100 kHz)	P RE CLASS B 3m	0.4 ms	120 kHz	0	OFF	OFF	...	V, H	...

Photo measurement set-up

Photo 3 - Test set-up

Used	Description	Type	Manufacturer	ID
√	EMI Receiver	PMM7010	Narda	NC001
√	Antenna	BL-01	Narda	NC002

4. RADIATED IMMUNITY RESULTS

Temperature	21 °C	**Air pressure**	1014 hpa
Humidity	45 %	**Frequency steps**	2 %
Modulation	1 kHz, 80 % AM	**Frequency range**	80 – 1000 MHz
Dwell time	2 sec.		

Performance criteria: A			
Antenna / EUT position	**Test Level**	**Remarks**	**Pass/Fail**
H and V	3 V/m	No influence detected	**Pass**
Photo measurement set-up			

Photo 4 - Test set-up

Used	Description	Type	Manufacturer	ID
√	Signal generator	DSG815	Rigol	NC003
√	Amplifier	ZHL-20W-13	Mini Circuits	NC007
√	Antenna	BL-01	Narda	NC002

5. CONDUCTED IMMUNITY RESULTS

Temperature	21 °C	**Air pressure**	1014 hpa
Humidity	45 %	**Frequency steps**	2 %
Modulation	1 kHz, 80 % AM	**Frequency range**	0.15 – 80 MHz
Dwell time	2 sec.		

Performance criteria: A			
Tested port	**Test Level**	**Remarks**	**Pass/Fail**
Power port	3 Vrms	No influence detected	**Pass**

Photo measurement set-up

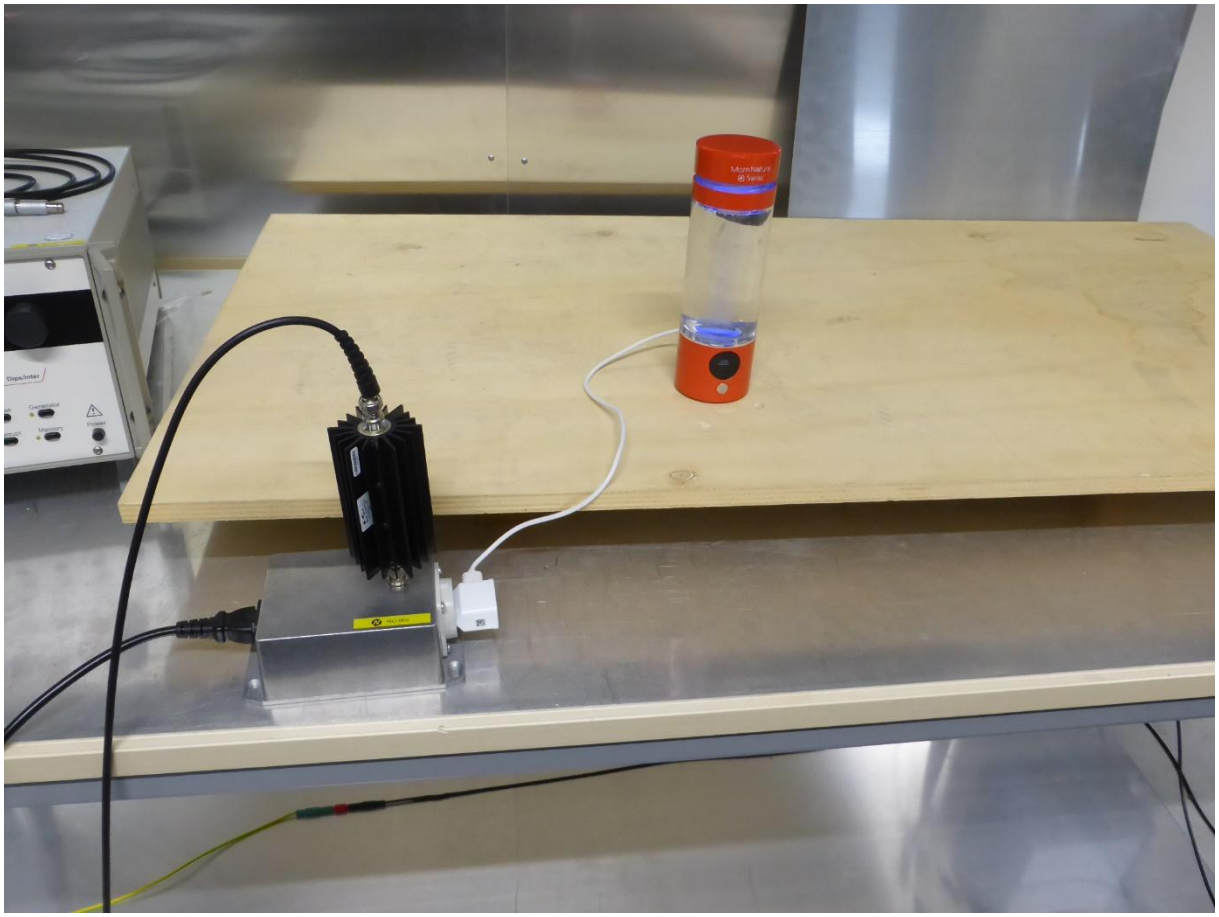


Photo 5 - Test set-up

Used	Description	Type	Manufacturer	ID
√	Signal generator	DSG815	Rigol	NC003
√	Amplifier	LZY-22	Mini Circuits	NC006
√	CDN	CDN-16A	EMCMCC	NC015

6. EFT RESULTS

Temperature	21 °C	**Air pressure**	1014 hpa
Humidity	60 %	**Repetition mode**	5 kHz
Burst duration	15 msec	**Burst period**	300 msec

Performance criteria B			
Tested I/O port	**Test level**	**Remarks**	**Pass/Fail**
Power port	± 1kV L-L	No influence detected	**Pass**

Photo measurement set-up

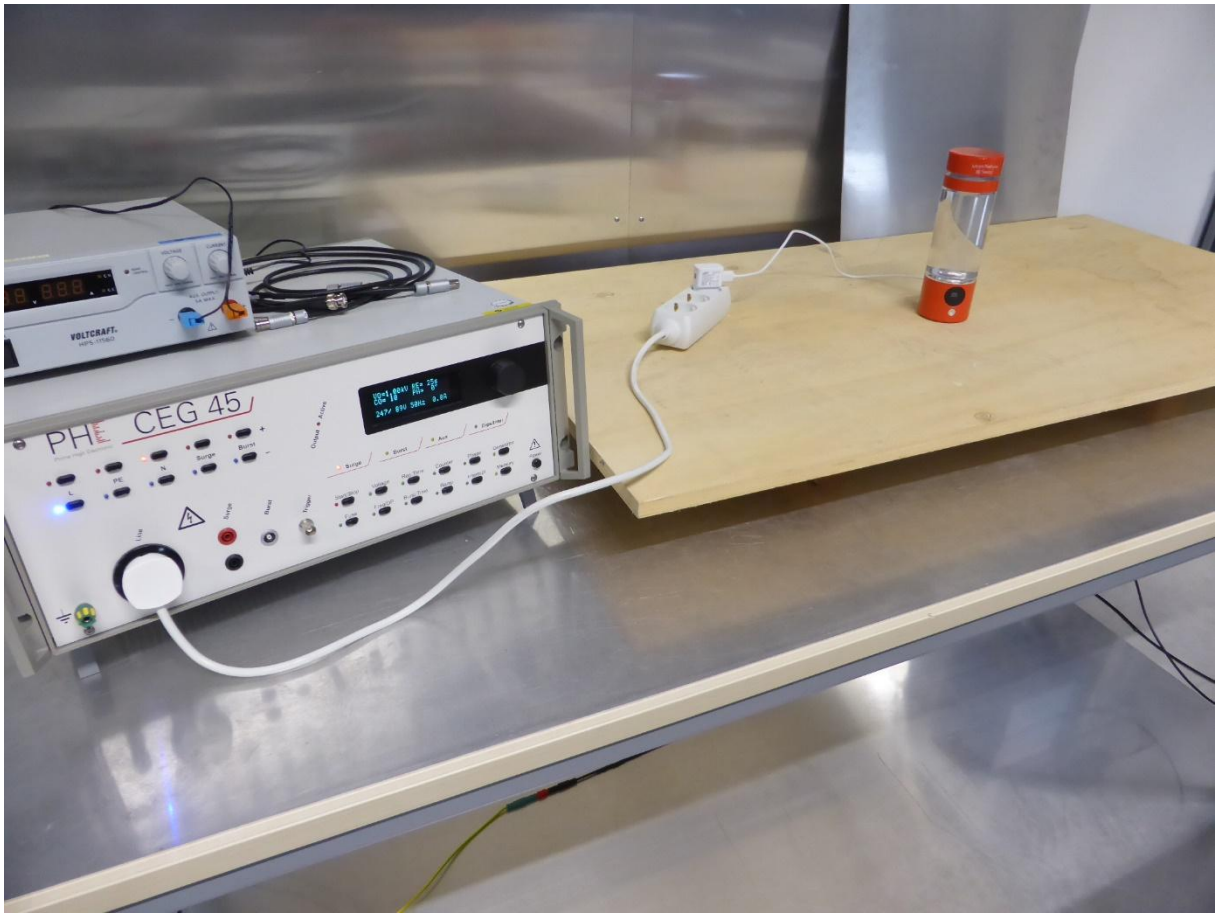


Photo 6 - Test set-up

Used	**Description**	**Type**	**Manufacturer**	**ID**
√	EFT generator	CEG4500	Hofbauer	NC004

7. ESD RESULTS

Temperature	21 °C	**Air pressure**	1014 hpa
Humidity	60 %	**Remarks**	---

Performance criteria B			
Indirect contact discharge			
Location of discharge	**Test level**	**Remarks**	**Pass/Fail**
Horizontal coupling plane	± 2-4 kV	No influence detected	**Pass**
Vertical coupling plane	± 2-4 kV	No influence detected	**Pass**
Contact discharge			
All metal parts at the outside of the enclosure	± 2-4 kV	No influence detected	**Pass**
Air discharge			
Enclosure/non-conductive parts	± 6-8 kV	No influence detected	**Pass**

Photo measurement set-up

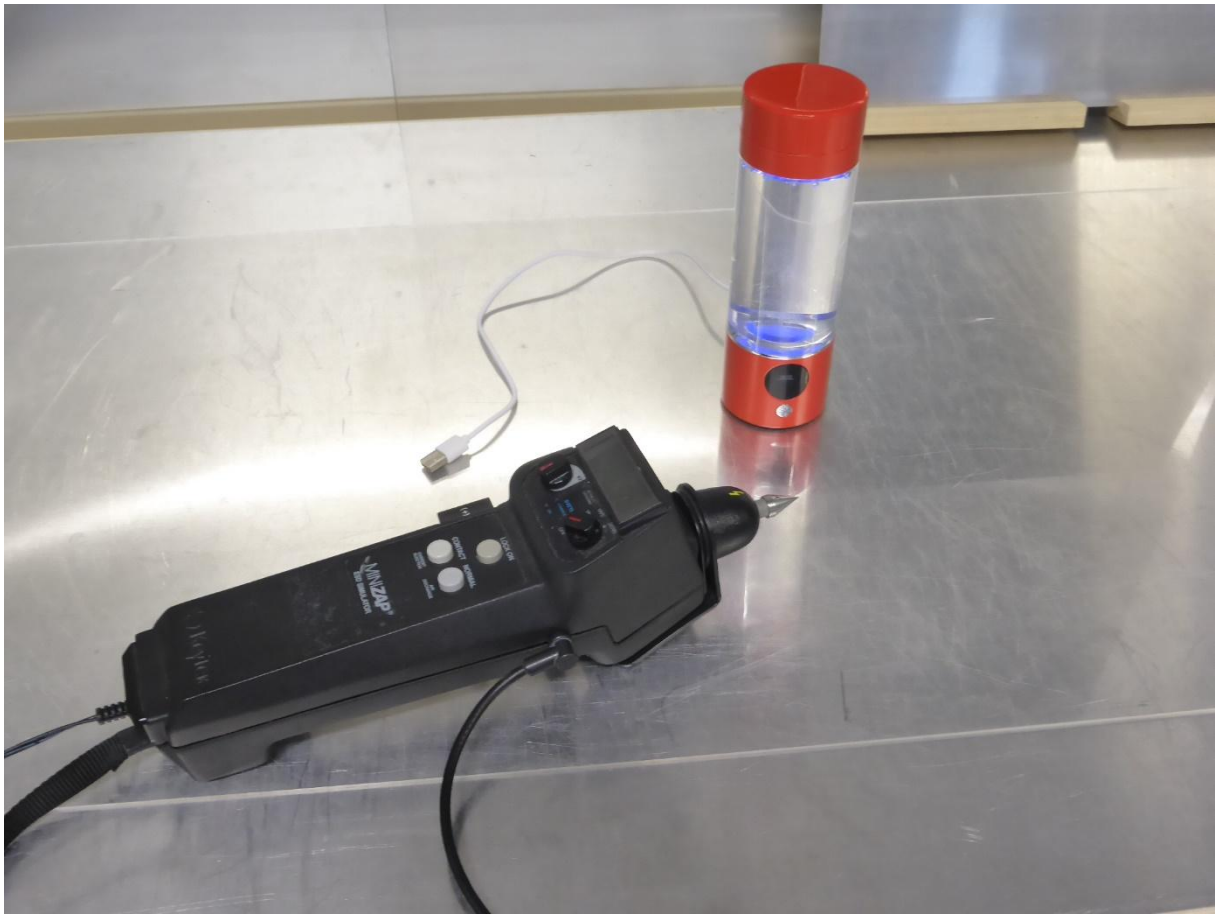


Photo 7 - Test set-up

Used	Description	Type	Manufacturer	ID
√	ESD generator	MiniZap MZ-15	KeyTek	NC-20
√	ESD table	--	--	--
√	Horizontal coupling plane	--	--	--
√	Vertical coupling plane	--	--	--

8. SURGE RESULTS

Temperature:	21 °C	**Air pressure:**	1014 hpa
Humidity:	60 %	**Remarks:**	-

Performance criteria B			
Tested I/O port	**Test level**	**Remarks**	**Pass/Fail**
Power port	± 1kV L-L	No influences detected	**Pass**

Photo measurement set-up

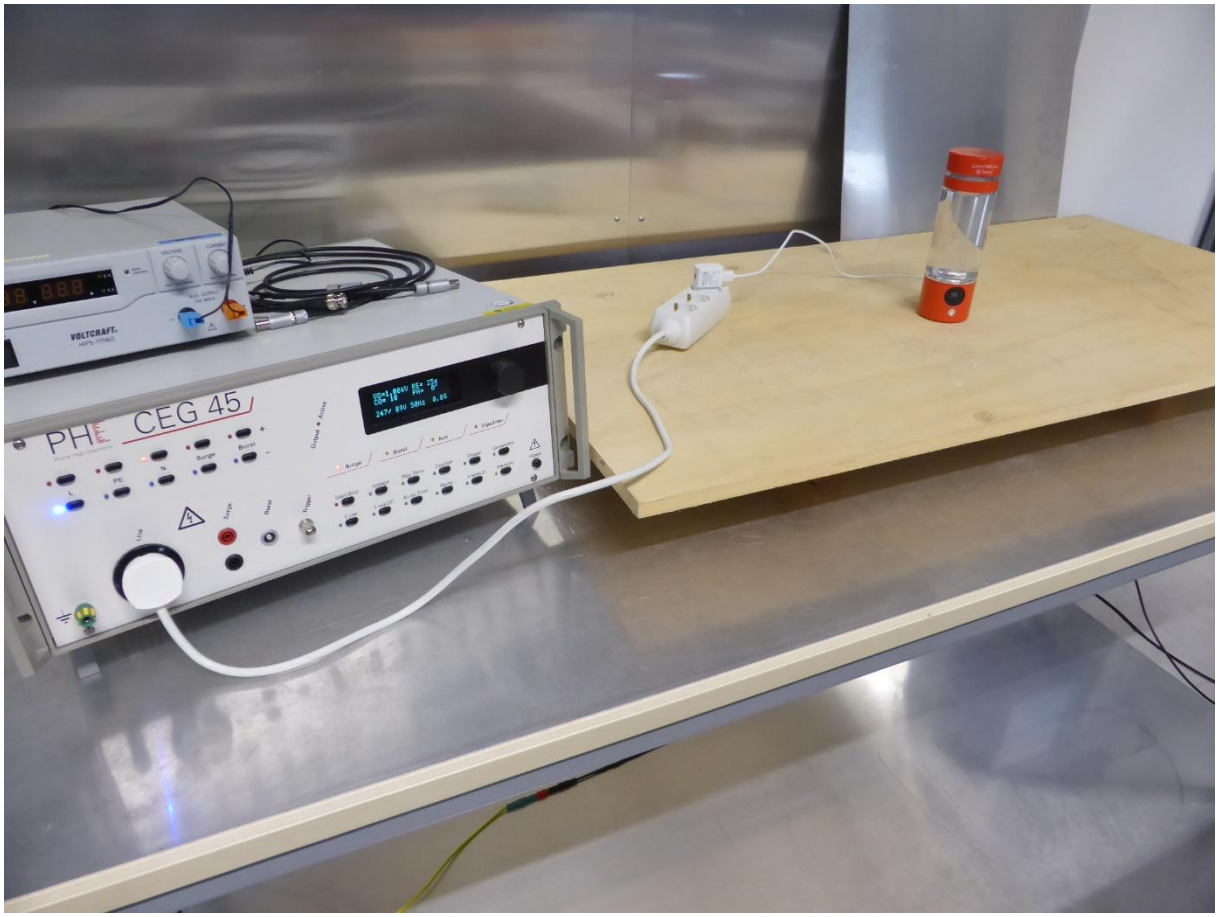


Photo 8 - Test set-up

Used	Description	Type	Manufacturer	ID
√	Surge generator	CEG4500	Hofbauer	NC004

9. Power dips /interrupts RESULTS

Temperature	21 °C	Air pressure	1014 hpa
Humidity	60 %	Remarks:	PASS

Performance criteria B/C		
Voltage dip to	**Remarks**	**Pass/Fail**
40%, 10 periods	No influences detected	PASS
70%, 50 periods	No influences detected	PASS

Performance criteria C		
Voltage short interrupt	**Remarks**	**Pass/Fail**
0%, 0.5 periods	No influences detected	PASS

Photo measurement set-up

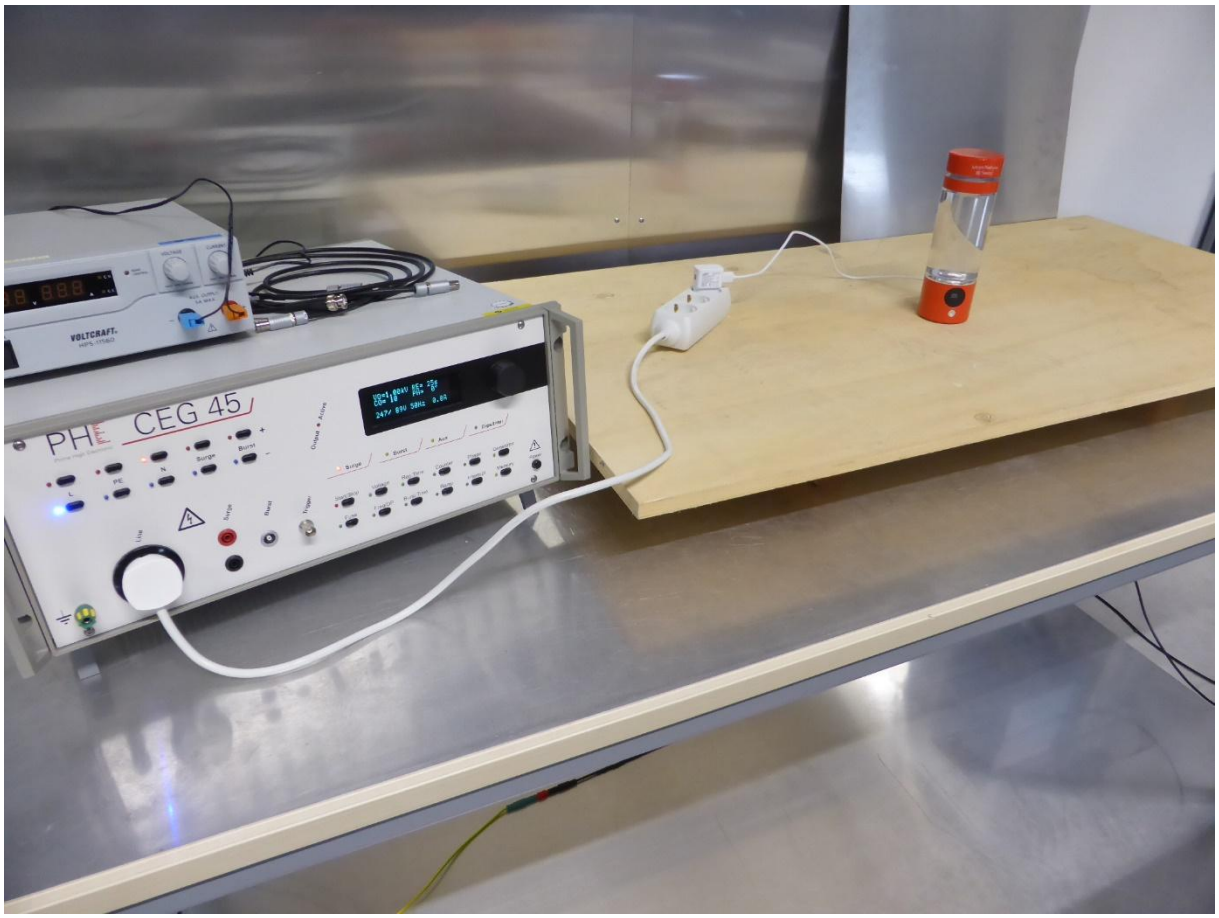


Photo 9 - Test set-up

Used	Description	Type	Manufacturer	ID
√	EFT Generator	CEG4500	Hofbauer	NC004

***** END EMC REPORT *****

ANNEX V ASSESSMENT ROHS

The Product's components need to comply with RoHS restriction requirements. Components which dependent on electric currents or electromagnetic fields in order to work properly needs to be affixed with a CE mark and accompanied by an EU Declaration of Conformity. Applicant is responsible to deliver a full list of components and materials according to table below.

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LIST OF COMPONENTS & MATERIALS				
#	**DESCRIPTION**	**MANUFACTURER**	**TYPE / MODEL**	**EU DECLARATION / TEST REPORT / MATERIAL CERTIFICATE**
1	Swiss Hydrogen Booster	Mam Nature Swiss AG	-	Test report
2	type-c Charging cable	Shenzhen City Yi Chang Long Electronics Technology Co.Ltd	Size: 500mm Color: white	Test report
Remark: The documentation made available and the results and / or conclusions resulting therefrom are assumed to be authentic.				

***** END ROHS RAPPORT *****

ANNEX VI OFFICIAL EU LANGUAGES

COUNTRY	LANUGAUGE	COUNTRY	LANGUAGE
Austria	German	Latvia	Latvian
Belgium	Dutch, French and German	Lithuania	Lithuanian
Blgaria	Bulgarian	Luxembourg	French and German
Cyprus	Greek	Malta	English and Maltese
Czech Republic	Czech	Netherlands	Dutch
Denmark	Danish	Poland	Polish
Estonia	Estonian	Portugal	Portuguese
Finland	Finnish and Swedish	Romania	Romanian
France	French	Slovakia	Slovak
Germany	German	Slovenia	Slovenian
Greece	Greek	Spain	Spanish
Hungary	Hungarian	Sweden	Swedish
Ierland	English and Irish (Gaelic)		
Italy	Italian		
Opmerking: ---			

***** END REPORT *****