

ACCREDITED TESTING LABORATORY FOR ELECTROMAGNETIC FIELDS

Based on the measurement results and assessments presented in

TEST REPORT EMV-E 82/14 (2015-01-14) and **EXPERT OPINION EMV-E 83/14** (2015-01-14)
it can be stated that the investigated device, Walk Through Metal Detector model

HI-PE Plus

**manufactured by CEIA S.p.A, Costruzioni Elettroniche Industriali- Automatismi,
Zona Industriale Viciomaggio 54/G – 56; I-52041 Viciomaggio - Arezzo, Italy**

fulfils the requirements regarding personal safety in electromagnetic fields according to the given standards and limits listed below for all the investigated PO-settings (364LO; 50364; IEEE; ACGIH):

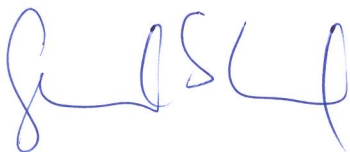
Document/Limit	PO-Setting			
	364LO	50364	IEEE	ACGIH
EC-Rec. 1999/519/EC ^{a)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
EC-Directive 2013/35/EC ^{b)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
EN 50364:2010 ^{c)} and EN 62369-1:2009 ^{d)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
EN 62311:2008 ^{e)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
EN 50499:2008 ^{f)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
ICNIRP Guidelines 1998 ^{g)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
ICNIRP Guidelines 2010 ^{h)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
IEEE C95.6-2002 ⁱ⁾ IEEE C95.1-2005 ^{j)} IEEE C95.3-2002 ^{k)} and IEEE C95.3.1-2010 ^{l)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
ACGIH 2014 ^{m)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
EN 50527-1:2010 ⁿ⁾ and EN 50527-2-1:2010 ^{o)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
RPB-SC-18 - 1976 ^{p)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
Nbs Special Publication 500.101 ^{q)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT
The national archives.org (UK) ^{r)}	COMPLIANT	COMPLIANT	COMPLIANT	COMPLIANT

For details of the listed standards and documents, see page 2 of this document.

Note: According to its technical specification the DUT does not emit ultraviolet-, ionizing-, microwave- and laser-radiation.

Date: 2015-01-14

Expert:



Authorized Signature:



Comment: The test results refer exclusively to the test subject.

1 – Standards / Limits on Human Exposure to Electromagnetic fields:

- a) European Council Recommendation 1999/519/EC on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz), 12. July 1999;
- b) European Directive 2013/35/EU on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields), 26. June, 2013;
- c) EN 50364:2010. Limitation of human exposure to electromagnetic fields from devices operating in the frequency range 0 Hz to 300 GHz, used in Electronic Article Surveillance (EAS), Radio Frequency Identification (RFID) and similar applications;
- d) EN 62369-1:2009 Evaluation of human exposure to electromagnetic fields from short range devices (SRDs) in various applications over the frequency range 0 GHz to 300 GHz - Part 1: Fields produced by devices used for electronic article surveillance, radio frequency identification and similar systems;
- e) EN 62311:2008. Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz);
- f) EN 50499:2008. Procedure for the assessment of the exposure of workers to electromagnetic fields;
- g) ICNIRP „Guidelines 1998. Guidelines For Limiting Exposure To Time-Varying Electric, Magnetic, And Electromagnetic Fields (Up To 300 GHz)", International Commission on Non-Ionizing Radiation Protection, Health Phys. 1998 April, Vol.74, No.4, 494-522;
- h) ICNIRP Guidelines 2010. Guidelines for limiting exposure to time-varying electric and magnetic fields (1 Hz to 100 kHz). International Commission on Non-Ionizing Radiation Protection, Health Physics, Vol. 99:818-836 ;
- i) IEEE C95.6-2002. IEEE Standard for Safety Levels With Respect to Human Exposure to Electromagnetic Fields, 0-3 kHz;
- j) IEEE C95.1-2005. IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz;
- k) IEEE C95.3-2002. IEEE Recommended Practice for Measurements and Computations of Radio Frequency Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz-300 GHz;
- l) IEEE C95.3.1-2010. Recommended practice for measurements and computations of electric, magnetic, and electromagnetic fields with respect to human exposure to such fields, 0 Hz to 100 kHz;
- m) ACGIH, 2014 Threshold Limit Value (TLV) for 'Sub-Radiofrequency (30 kHz and below) Magnetic Fields';

2 - Standards / Limits on Immunity for carriers of Implantable medical devices:

- n) EN 50527-1:2010. Procedure for the assessment of the exposure to electromagnetic fields of workers bearing active implantable medical devices - Part 1: General;
- o) EN 50527-2-1:2011. Procedure for the assessment of the exposure to electromagnetic fields of workers bearing active implantable medical devices - Part 2-1: Specific assessment for workers with cardiac pacemakers;
- p) RPB-SC18, 1976: Recommended safety procedures for the selection, installation and use of active metal detectors, Health Canada;

3 - Standards / Limits on Immunity for Magnetic media:

- q) Nbs Special Publication 500.101 – Care and handling of computer magnetic storage media;
- r) Care, Handling and Storage of Removable Media (Section 4) – The national archives.org (UK).

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