

Report on the FCC and IC Testing of the IEE S.A.

Model: VitaSense1.5

In accordance with FCC 47 CFR Part 1.1310, Part 2.1093 and RSS-102

Prepared for: IEE S.A.
1, rue du Campus
L-7795 Bissen
Luxembourg

FCC ID: NSZVITA015
IC: 3019A-VITA015



Product Service

Add value.
Inspire trust.

COMMERCIAL-IN-CONFIDENCE

Date: 2025-11-04

Document Number: TR-713382727-04 | Revision 0

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Project Management	Alexander Deese	2025-11-04	 SIGN-ID 1085770
Authorised Signatory	Alex Fink	2025-11-04	 SIGN-ID 1086131

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service document control rules.

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 1.1310, Part 2.1093 and RSS 102 Issue 5 (March 2015) + Amendment 1 (February 2021). The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	
Testing	Alexander Deese	2025-11-04	 SIGN-ID 1085770

Laboratory Accreditation

DAkkS Reg. No. D-PL-11321-11-03

DAkkS Reg. No. D-PL-11321-11-00

Laboratory recognition

Registration No. BNetzA-CAB-16/21-15

ISED Canada test site registration

3050A-2

EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 1.1310, Part 2.1093 and RSS 102 Issue 6

DISCLAIMER AND COPYRIGHT



Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question. It does not imply a general statement regarding the quality of products from regular production. For further details please see Testing, Certification, Validation and Verification Regulations, chapter A-3.3.

© 2025 TÜV SÜD Product Service.

Trade Register Munich
HRB 85742
VAT ID No. DE129484267
Information pursuant to Section 2(1)
DL-InfoV (Germany) at
www.tuev-sued.com/im

Supervisory Board:
Holger Lindner (Chairman)
Board of Management:
Wolfgang Hübl (CEO)
Karl Meier
Patrick van Welij

Phone: +49 (0) 9421 56 82-0
Fax: +49 (0) 9421 56 82-199
www.tuvsud.com

TÜV SÜD Product Service GmbH
Äußere Frühlingsstraße 45
94315 Straubing
Germany



Product Service

Contents

1	Report Summary	2
1.1	Report Modification Record.....	2
1.2	Introduction.....	2
1.3	Brief Summary of Results	3
1.4	Product Information	4
1.5	Test Configuration	4
1.6	Modes of Operation.....	4
1.7	Deviations from Standard.....	4
1.8	EUT Modification Record	5
1.9	Test Location	5
2	Test Details	6
3	Measurement Uncertainty	7



1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document. The current version replaces all previous versions.

Revision	Description of Change	Date of Issue
0	First Issue	2025-11-04

Table 1

1.2 Introduction

Applicant	IEE S.A.
Manufacturer	IEE S.A.
Model Number(s)	VitaSense1.5
Serial Number(s)	01-008538-02-10
Hardware Version(s)	25/30.00
Software Version(s)	25/30.00
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 1.1310 and Part 2.1093 RSS 102 Issue 6
Test Plan/Issue/Date	---
Order Number	2508211600
Date	2025-08-21
Date of Receipt of EUT	2025-09-15
Start of Test	2025-10-13
Finish of Test	2025-10-13
Name of Engineer(s)	Alexander Deese
Related Document(s)	KDB 447498 D04 Interim General RF Exposure Guidance v01 ANSI C63.10 (2013)



Product Service

1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 1.1310, Part 2.1093 and RSS-102 is shown below.

Section	Specification Clause	Test Description	Result	Comments/Base Standard
Configuration and Mode: Continuously transmitting with modulation				
2.1	1.1310 6.3	RF Exposure Evaluation	Pass	KDB 447498 D04 Interim General RF Exposure Guidance v01

Table 2

1.4 Product Information

Frequency Band: 57 GHz – 64 GHz

Supply Voltage: 12 V

Supply Frequency: DC

*Highest clock frequency
(radio part):* 64 GHz

*Highest clock frequency
(non-radio part):* ---



1.5 Test Configuration

The EUT was 12 V / DC supplied.

1.6 Modes of Operation

The EUT was programmed to transmit continuously via test software provided by the applicant.

1.7 Deviations from Standard



1.8 EUT Modification Record

The table below details modifications made to the EUT during the test programme.
The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
0	As supplied by the customer (S/N: 02)	Not Applicable	Not Applicable

Table 3

1.9 Test Location

TÜV SÜD Product Service conducted the following tests at our Straubing Test Laboratory.

Test Name	Name of Engineer(s)
Configuration and Mode: Transmitting continuously with modulation - 12 V DC power supply	
RF Exposure Evaluation	Alexander Deese

Table 4

Office Address:

Äußere Frühlingsstraße 45
94315 Straubing
Germany



2 **Test Details**

2.1 **RF Exposure Assessment**

2.1.1 **Specification Reference**

CFR 47 Pt.1.1310
RSS-102, 6.3

2.1.2 **Equipment Under Test and Modification State**

VitaSense1.5, S/N: 01-008538-02-10 - Modification State 0

2.1.3 **Test Method**

The test was performed in accordance with KDB 447498 D04 Interim General RF Exposure Guidance v01.
Evaluation distance is “less than 5 mm”.

2.1.4 **Test Results**

Maximum <i>EIRP</i> (worst case):	-5.72 dBm = 0.268 mW (Peak)
Frequency:	60 GHz to 64 GHz (> 5800 MHz)
FCC Limit	1.0 mW
ISED Limit:	1.0 mW
Result	Pass



3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

<i>Radio Interference Emission Testing</i>		
<i>Test Name</i>	<i>kp</i>	<i>Expanded Uncertainty</i>
Conducted Voltage Emission		
9 kHz to 150 kHz (50Ω/50μH AMN)	2	± 3.8 dB
150 kHz to 30 MHz (50Ω/50μH AMN)	2	± 3.4 dB
100 kHz to 200 MHz (50Ω/5μH AMN)	2	± 3.6 dB
Discontinuous Conducted Emission		
9 kHz to 150 kHz (50Ω/50μH AMN)	2	± 3.8 dB
150 kHz to 30 MHz (50Ω/50μH AMN)	2	± 3.4 dB
Conducted Current Emission		
9 kHz to 200 MHz	2	± 3.5 dB
Magnetic Fieldstrength		
9 kHz to 30 MHz (with loop antenna)	2	± 3.9 dB
9 kHz to 30 MHz (large-loop antenna 2 m)	2	± 3.5 dB
Radiated Emission		
30 MHz to 300 MHz	2	± 4.9 dB
300 MHz to 1 GHz	2	± 5.0 dB
1 GHz to 6 GHz	2	± 4.6 dB
Test distance 10 m		
30 MHz to 300 MHz	2	± 4.9 dB
300 MHz to 1 GHz	2	± 4.9 dB
The expanded uncertainty reported according to CISPR16-4-2: 2011 + A1 + A2 + Cor1 is based on a standard uncertainty multiplied by a coverage factor of $k_p = 2$, providing a level of confidence of $p = 95.45\%$		

Table 5 Measurement uncertainty based on CISPR 16-4-2



<i>Radio Interference Emission Testing</i>		
<i>Test Name</i>	<i>kp</i>	<i>Expanded Uncertainty</i>
Occupied Bandwidth	2	± 5 %
Conducted Power		
9 kHz ≤ f < 30 MHz	2	± 1.0 dB
30 MHz ≤ f < 1 GHz	2	± 1.5 dB
1 GHz ≤ f ≤ 40 GHz	2	± 2.5 dB
1 MS/s power sensor (TS8997)	2	± 1.5 dB
Occupied Bandwidth	2	± 5 %
Power Spectral Density	2	± 3.0 dB
Radiated Power		
25 MHz – 6 GHz	1.96	±4.4 dB
1 GHz – 18 GHz	1.96	±4.7 dB
18 GHz – 40 GHz	1.96	±4.9 dB
40 GHz – 325 GHz	1.96	±6.1 dB
Conducted Spurious Emissions	2	± 3.0 dB
Radiated Spurious Emissions	2	± 6.0 dB
Voltage		
DC	2	± 1.0 %
AC	2	± 2.0 %
Time (automatic)	2	± 5 %
Frequency	2	± 10 ⁻⁷
The expanded uncertainty reported according to ETSI TR 100 028:2001 is based on a standard uncertainty multiplied by a coverage factor of kp = 2, providing a level of confidence of p = 95.45%		

Table 6 Measurement uncertainty based on ETSI TR 100 028

The measurement uncertainty in the laboratory is less than or equal to the maximum measurement uncertainty according to CISPR16-4-2: 2011 + A1 + A2 + Cor1 (U_{CISPR}) and as specified in the test report below. This normative regulation means that the measured value is also the value to be assessed in relation to the limit value.



Test Name	Expanded Uncertainty
Occupied Bandwidth	±5 %
Conducted Power	
9 kHz ≤ f < 30 MHz	±1.0 dB
30 MHz ≤ f < 1 GHz	±1.5 dB
1 GHz ≤ f ≤ 40 GHz	±2.5 dB
1 MS/s power sensor (2.4 / 5 GHz band)	±1.5 dB
Power Spectral Density	±3.0 dB
Radiated Power	
25 MHz – 26.5 GHz	±6.0 dB
26.5 GHz – 66 GHz	±8.0 dB
40 GHz – 325 GHz	±10.0 dB
Conducted Spurious Emissions	±3.0 dB
Radiated Field Strength 9 kHz – 40 GHz	±6.0 dB
Voltage	
DC	± 1.0 %
AC	± 2.0 %
Time (automatic)	± 5 %
Frequency	± 10 ⁻⁷

Table 7 Decision Rule: Maximum allowed measurement uncertainty

END OF TEST REPORT