This test report cancels and replaces RR-EVE-22P171-4A Ed.0
Test report issued under the responsibility of:
EMITECH MONTPELLIER laboratory
MRA US-EU Designation Number: FR0006
Canadian CAB Identifier: FR0003

RADIO TEST REPORT

FCC 47 CFR Part 15.247
RSS-247 Issue 2 : February 2017
(Patial tests)

Company ..... :	**EDGE TECHNOLOGIES SAS**
Address..... :	735 RUE DU LIEUTENANT PARAYRE 13290 - AIX EN PROVENCE FRANCE

Test item description. ..... :	**Autonomous connected industrial temperature sensor**
Trade Mark. ..... :	EDGE TECHNOLOGIES
Manufacturer..... :	EDGE TECHNOLOGIES SAS
Model/Type reference..... :	(SENSA915A / SENSAIO) inside HMN: SENSA.TEMP
FCC ID..... :	2A2T5-SENSA915A
IC. ..... :	29177-SENSA915A
Ratings..... :	2.4 V_{DC} to 3.7 V_{DC}

Testing Laboratory ..... :	**EMITECH MONTPELLIER laboratory**
Address..... :	145 rue de Massacan 34740 VENDARGUES FRANCE

Report Reference No..... :	**RR-EVE-22P171-4A**
Test procedure. ..... :	FCC IC Verification
Diffusion..... :	Mr LEVEQUE
Applicant's name. ..... :	EDGE TECHNOLOGIES SAS
Date of issue..... :	June 2, 2023
Total number of pages..... :	23
Revision..... :	1
Compiled by..... :	Morgan PATEY
Approved by (+ signature)..... :	Olivier HEYER (Laboratory Manager)

Duplication of this test report is only permitted for an integral photographic facsimile. It includes the number of pages referenced here above. This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of the whole manufactured products of the tested sample.

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REVISION HISTORY:

Revision	Date	Modified pages	Modifications
0	November 21, 2022	/	Creation
1	June 2, 2023	1, 5, 6, 9	Informations about EST (ID for FCC and IC, Model, type etc...) and RF exposure completed

1. GENERAL INFORMATIONS

This document submits the results of Radio tests performed on the equipment **Autonomous connected industrial temperature sensor SENSA.TEMP** (denominated hereafter E.U.T.: equipment under test) according to document(s) listed in §2 of this test report.

TESTING PROCEDURE AND TESTING LOCATION:	
Testing Location ..... :	EMITECH MONTPELLIER laboratory
Address. ..... :	145 rue de Massacan 34740 VENDARGUES FRANCE
Test procedure. ..... :	FCC IC Verification
Tested by ..... :	Morgan PATEY
Test supervisor ..... :	None
Date of receipt of test item ..... :	N/A
Date (s) of performance of tests ..... :	November 04th of 2022

APPLICANT'S GENERAL INFORMATIONS:	
Company name ..... :	EDGE TECHNOLOGIES SAS
Company address. ..... :	735 RUE DU LIEUTENANT PARAYRE 13290 - AIX EN PROVENCE FRANCE
Person(s) present during the tests. ..... :	Mr LEVEQUE
Responsible. ..... :	Mr LEVEQUE

GENERAL REMARKS:

The information in italics is declared by the manufacturer and is under his responsibility
The test results presented in this report relate only to the object tested.
The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.

"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.
Throughout this report the decimal separator is point.

POSSIBLE TEST CASE VERDICTS:	
Test case does not apply to the test object.:	N/A
Test case not performed..... :	N/P
Test object does meet the requirement..... :	P (Pass)
Test object does not meet the requirement. ..... :	F (Fail)

DEFINITIONS AND ABBREVIATIONS:

E.U.T.	Equipment Under Test	AE	Ancillary Equipment	Pk	Peak detector
RBW	Resolution BandWidth	VBW	Video BandWidth	QP	Quasi-peak detector
OATS	Open Area Test Site	FAR	Full Anechoic Room	Av	Average detector
VP	Vertical Polarization	HP	Horizontal Polarization	RMS	Root Mean Square
RF	Radio Frequency	N.T.R	Nothing To Report	N/C	Not Communicated

2. REFERENCE DOCUMENT(S)

NORMATIVE REFERENCES:
The following referenced documents are necessary for the application of the present test report. **FCC 47 CFR PART 15 : April 2022** Code of federal regulations. Title 47- Telecommunication Chapter 1- Federal Communication Commission. Part 15- Radio frequency devices Subpart B- Unintentional Radiators. Limits and methods of measurement of radio disturbance. Characteristic of information technology equipment. **FCC part 15.247** Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850MHz. (frequency hopping and digitally modulated) **RSS-247 Issue 2 : February 2017** Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices **RSS-Gen Issue 5 April : 2018 / AMD 1 : 2019 / AMD 2 : 2021** General Requirements for Compliance of Radio Apparatus **ANSI C 63.10: 2013** American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices **KDB 447498 D01** General RF Exposure Guidance V06 Although the product standard uses obsolete technical standards, the latest versions of standards achievable by the laboratory will be used for testing.
INFORMATIVE REFERENCES:
The following referenced documents are not necessary for the application of the present test report but they assist the user with regard to a particular subject area.

3. EQUIPMENT TECHNICAL DESCRIPTION

3.1. Test Conditions

Test item description. ..... :	Autonomous connected industrial temperature sensor
Model/Type reference..... :	(SENSA915A / SENSAIO) inside HMN: SENSA.TEMP
Trade Mark. ..... :	EDGE TECHNOLOGIES
Serial number (S/N)..... :	Not communicated
Part number (P/N). ..... :	N/A
Software version..... :	*N/A*
Firmware version. ..... :	*1.1.4*
Type of sample. ..... :	Pre-serial
Function(s)..... :	SensaIO is a range of autonomous connected industrial sensors. It is an assembly of two parts : a cartridge common to all sensors where BLE and LoRaWan communication are implemented, and a process connection which is dedicated to physical phenomenon sensing (temperature, pressure, vibration, acoustic, ...)
Manufacturer name. ..... :	EDGE TECHNOLOGIES SAS
Address. ..... :	735 RUE DU LIEUTENANT PARAYRE 13290 - AIX EN PROVENCE FRANCE

General product information:

N/A

3.2. EUT Marking plate

EUT did not have its marking plate during tests..

3.3. EUT General view

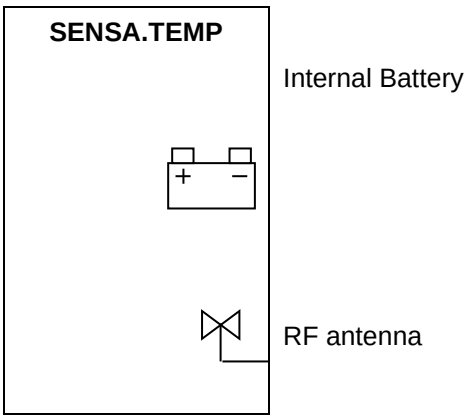
3.4. EUT Mechanical and Electrical Design

Power supply. ..... : *$3V_{DC}$*
Power supply range. ..... : *$2.4V_{DC}$ to $3.2V_{DC}$*
Power type. ..... : *Battery powered*
Power (W). ..... : *0.375*
Nominal current (A). ..... : *0.125*
Dimensions (L x W x H) (m). ..... : *0.45 x 0.06 (diameter)*
Weight (kg). ..... : *1*
Temperature range (°C). ..... : *-40 to +85*
Ground bounding strap. ..... : *No*

Comments:

N/A

3.5. EUT Input/Output ports



PORT	NAME	TYPE	LENGTH	CABLE TYPE	COMMENTS
0	Main frame	N/E	N/A	Metallic	N/A
1	Internal Battery	DC	N/A	N/A	$3V_{DC}$
2	RF antenna	RF	N/A	N/A	902MHz to 928MHz

AC/DC : AC/DC Converter port
AC ..... : Alternative current port
DC ..... : Discontinuous current port
I/O .....: Input or Output port
TP ..... : Telecommunication port
RF ..... : Radio frequency port
N/E .....: Non Electrical port

3.6. EUT Radio Specifications

a) GENERAL INFORMATIONS	
According to manufacturer's declarations :	
EUT type..... :	*Transceiver*
Technology ..... :	*BLE*
Environmental profile..... :	*Data transmissions*
Temperature range..... :	*-40°C to +85°C*
Antenna type ..... :	*Integrated*
Antenna Gain..... :	*-5 dBi*
Comments:	

b) TRANSMITTER PARAMETERS (TX)	
Frequency bands..... :	*2400 MHz to 2483.5 MHz*
RF Power..... :	*2.5 mW*
Number of channels / Separation..... :	*40 / 2MHz*
Modulation type ..... :	*GFSK*
Duty cycle ..... :	*2.5 %*
Tested frequency..... :	*2402 MHz : Low channel (ch.37)* *2426 MHz: Mid channel (ch.38)* *2480 MHz: High channel (ch.39)*

c) RECEIVER PARAMETERS (RX)	
Frequency bands..... :	*2400 MHz to 2483.5 MHz*
Bandwidth..... :	*Not communicated*

4. RESULT SUMMARY

TEST DESIGNATION	SEVERITY	VERDICT	BASIC STANDARDS / COMMENTS
Transmitter radiated spurious emissions at frequencies >30MHz			**FCC Part 15.209** **RSS-Gen**
- Radiated measurement / BLE / 30 MHz to 1 GHz	15.209	**PASS**	
- Radiated measurement / Temperature sensor / BLE / Low channel / 1 GHz to 18 GHz	15.209	**PASS**	
- Radiated measurement / Temperature sensor / BLE / Mid channel / 1 GHz to 18 GHz	15.209	**PASS**	
- Radiated measurement / Temperature sensor / BLE / High channel / 1 GHz to 18 GHz	15.209	**PASS**	
Equivalent isotropic radiated power			**FCC Part 15.247** **RSS-247**
- EIRP / BLE / Low channel	1W (30dBm)	**PASS**	
- EIRP / BLE / Mid channel	1W (30dBm)	**PASS**	
- EIRP / BLE / High channel	1W (30dBm)	**PASS**	

Sample subject to the test complies for tests done with the requirements of the reference document(s) listed in §2 of this test report and, where applicable, with deviation(s) specified in this document.

To declare, or not, the compliance with the specifications, it was not explicitly taken into account of uncertainty associated with the results.

5. MEASUREMENT UNCERTAINTY

PARAMETER	MAXIMAL EMITECH UNCERTAINTY	MINIMAL STANDARD UNCERTAINTY
Radio frequency	± 1 x 10^{-7}	±1 x 10^{-7}
Radiated emission (ERP / EIRP)		
f ≤ 62.5 MHz	± 5.7 dB	± 6 dB
62.5 MHz - 1 GHz	± 5.8 dB	± 6 dB
1 GHz - 18 GHz	± 5.6 dB	± 6 dB
18 GHz – 40 GHz	± 5.6 dB	± 6 dB
Radiated emission (electric field for FCC standard)		
9kHz – 30MHz	± 2.7 dB	/
30MHz – 1GHz	± 5.0 dB	/
1GHz – 18GHz	± 5.3 dB	/
18GHz – 40GHz	± 6.1 dB	/
40GHz – 140GHz	± 5.7 dB	/

For the calculation of expanded uncertainty, the confidence interval is 95 % (k=2).

6. RF EXPOSURE

Maximum EIRP = -12.4 dBm (0.05 mW) at 2426 MHz (see §7.2 of this document)

In accordance with KDB 447498 D01 General RF Exposure Guidance v06 and OET Bulletin 65:
PSD= EIRP/(4*π*R2)=0.05/(4*π*(20 cm)²)= 0.0001 mW/cm²
Limit= 1 mW/cm²

In accordance with RSS-102, Issue 5, Section 2.5.1., as EIRP is lower than 4.25 mW at 2426 MHz, SAR exemption for ISED can be considered for a distance ≤ 5cm.

7. TEST CONDITIONS AND RESULTS

7.1. Transmitter radiated spurious emissions at frequencies >30MHz

Reference standard:	FCC Part 15.209 RSS-Gen
Test method:	ANSI C63.10: 2013

General test setup:

The EUT is set on an insulating support at 80cm above the ground reference plane (150cm for f >1GHz).

Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 3-meter. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities.

Final measurements (quasi-peak or average) were then performed in a semi-anechoic chamber or Open Area Test Site that complies to CISPR 16. The EUT was rotated 360° about its azimuth and adjusting the receive antenna height from 1 to 4 m.

All frequencies were investigated, where applicable.

For portable equipements a research of maximum level is done on the 3 axes. Only the highest levels are recorded.

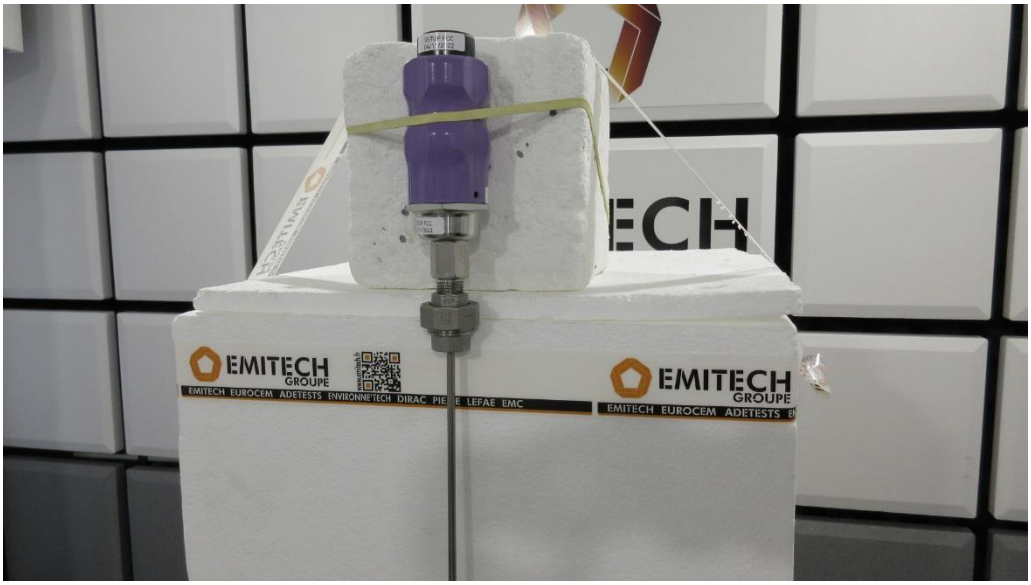
TESTED CONFIGURATION	PARAMETER	SEVERITY	RESULT TAB.	VERDICT
Radiated measurement / BLE / 30 MHz to 1 GHz	30MHz-1GHz	15.209	EMI4526	**PASS**
Radiated measurement / Temperature sensor / BLE / Low channel / 1 GHz to 18 GHz	1GHz-18GHz	15.209	EMI4532	**PASS**
Radiated measurement / Temperature sensor / BLE / Mid channel / 1 GHz to 18 GHz	1GHz-18GHz	15.209	EMI4553	**PASS**
Radiated measurement / Temperature sensor / BLE / High channel / 1 GHz to 18 GHz	1GHz-18GHz	15.209	EMI4554	**PASS**

LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	*See Graph(s)*
Relative Humidity	20 to 75 %	*See Graph(s)*
Atmospheric pressure	N/A	*See Graph(s)*
Test method deviation: N/A		
Supplementary information: N/A		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	ETS lindgren	3142E	14523	27/01/2022	27/03/2025
Antenna	AARONIA	Powerlog 70180	15306	24/07/2019	24/03/2023
Cable	Techniwave	N-1.5m	18341	25/01/2022	25/03/2024
Cable	Techniwave	N-1.5m	18342	25/01/2022	25/03/2024
Cable	/	N-1m	3622	10/11/2021	10/01/2024
Cable	SUCOFLEX	N-6,5m	14380	23/08/2021	23/10/2023
Cable	Techniwave	N-8m	18349	25/01/2022	25/03/2024
Cable	MegaPhase	TM18-N1N1-118	12842	02/12/2020	02/02/2023
Filter	Micro-Tronics	HPM 11630	4392	23/11/2021	23/01/2025
Filter	Micro-Tronics	HPM 15162	10273	26/11/2021	26/01/2025
Filter	Micro-Tronics	HPM18865	12843	24/08/2021	24/10/2024
Filter	Wainwright Instruments	WRCGV 2402/2480-2380/2500-40/10EE-200W	9771	15/03/2022	15/05/2025
Preamplifier	IMPULSE	CA118-546ACN	9169	26/04/2022	26/06/2023
Receiver	Rohde & Schwarz	ESW26	17791	23/04/2021	23/06/2023
Receiver	Rohde & Schwarz	FSW43	14830	10/08/2022	10/10/2024
Shielded enclosure	COMTEST	FAR-3m	18014	17/08/2021	17/10/2024
Shielded enclosure	COMTEST	SAC 3m	14494	02/10/2019	02/12/2022
Software	Nexio	BAT EMC	0000		
Thermohygrometer	Testo	608-H2	12269	07/06/2022	07/08/2024
Thermohygrometer	Bioblock Scientific	Météostar	0963	07/06/2021	07/08/2023

BAT-EMC software version: V3.18.0.26 Blank cells = Permanent validity

TEST SETUP PHOTO(S) – EUT POSITON



TEST SETUP PHOTO(S) - RADIATED MEASUREMENT / 30 MHZ TO 1 GHZ

TEST SETUP PHOTO(S) - RADIATED MEASUREMENT / 1 GHZ TO 18 GHZ

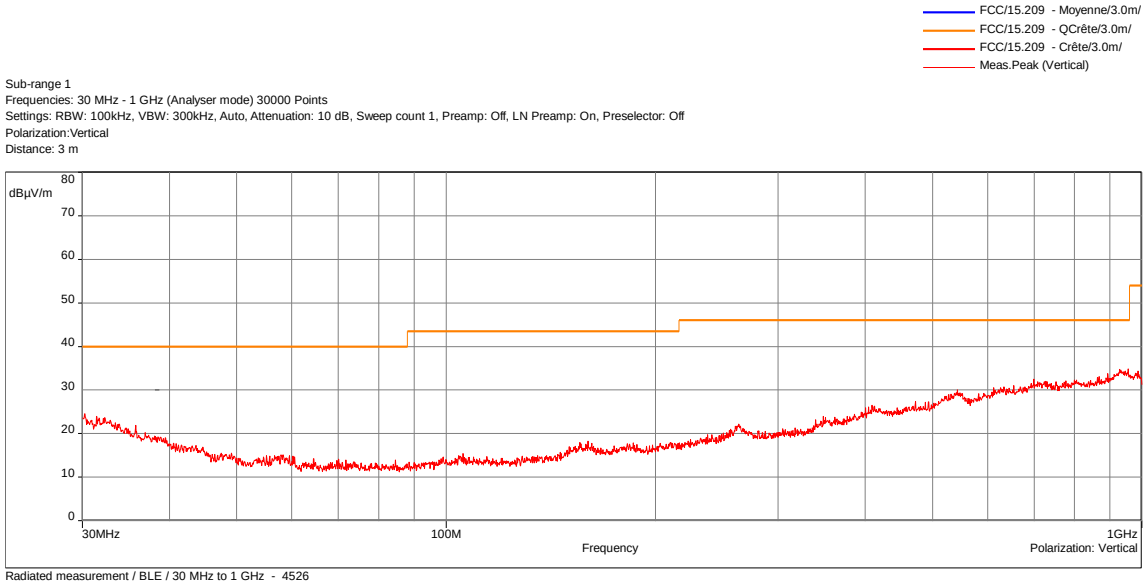
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ – TABULATED RESULTS					
RADIATED MEASUREMENT / BLE / 30 MHZ TO 1 GHZ					EMI4526
FREQUENCY (MHZ)	POLARIZATION	PEAK LEVEL (dBµV/m)	AVERAGE / QPEAK LEVEL (dBµV/m)	AVERAGE / QPEAK LIMIT (dBµV/m)	MARGING (dB)
N/A	N/A	N/A	N/A	N/A	N/A
Supplementary information: No spurious emissions were detected.					

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ – TABULATED RESULTS					
RADIATED MEASUREMENT / TEMPERATURE SENSOR / BLE / LOW CHANNEL / 1 GHZ TO 18 GHZ					EMI4532
FREQUENCY (MHZ)	POLARIZATION	PEAK LEVEL (dBµV/m)	AVERAGE LEVEL (dBµV/m)	AVERAGE LIMIT (dBµV/m)	MARGING
N/A	N/A	N/A	N/A	N/A	N/A
Supplementary information: No spurious emissions were detected.					

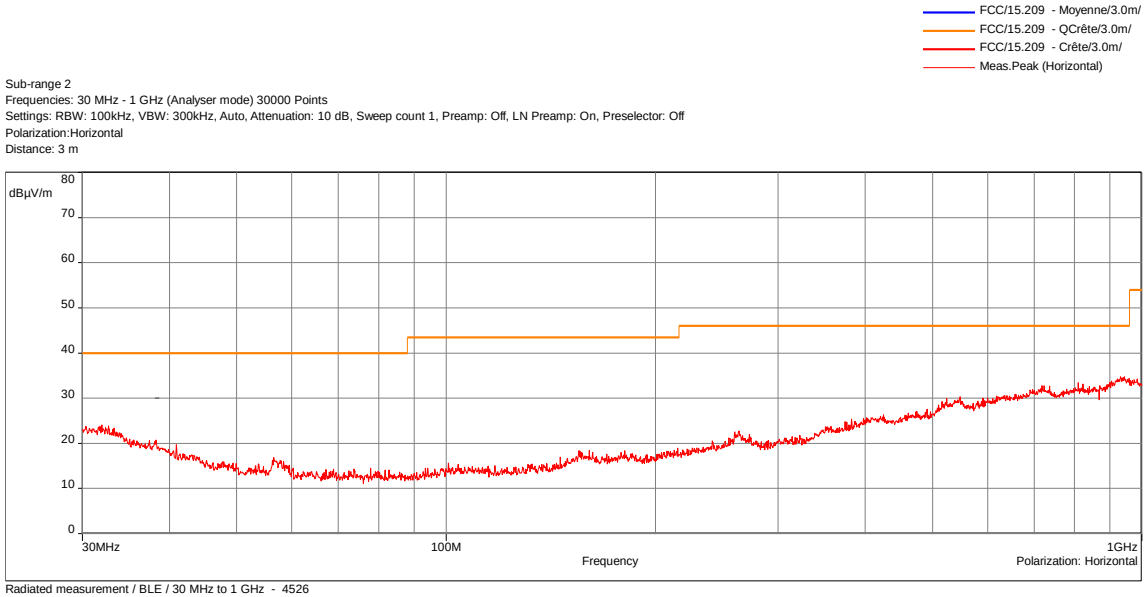
TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ – TABULATED RESULTS					
RADIATED MEASUREMENT / TEMPERATURE SENSOR / BLE / MID CHANNEL / 1 GHZ TO 18 GHZ					EMI4553
FREQUENCY (MHZ)	POLARIZATION	PEAK LEVEL (dBµV/m)	AVERAGE LEVEL (dBµV/m)	AVERAGE LIMIT (dBµV/m)	MARGING
N/A	N/A	N/A	N/A	N/A	N/A
Supplementary information: No spurious emissions were detected.					

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ – TABULATED RESULTS					
RADIATED MEASUREMENT / TEMPERATURE SENSOR / BLE / HIGH CHANNEL / 1 GHZ TO 18 GHZ					EMI4554
FREQUENCY (MHZ)	POLARIZATION	PEAK LEVEL (dBµV/m)	AVERAGE LEVEL (dBµV/m)	AVERAGE LIMIT (dBµV/m)	MARGING
N/A	N/A	N/A	N/A	N/A	N/A
Supplementary information: No spurious emissions were detected.					

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ - GRAPH			
RADIATED MEASUREMENT / BLE / 30 MHZ TO 1 GHZ		EMI4526	
EUT mode:	Tx mode	**T (°C):**	18.4
Test Date:	04/11/2022	**H (%):**	55.6
Test Operator:	MPA	**P (hPa):**	1008



Radiated measurement / BLE / 30 MHz to 1 GHz - 4526

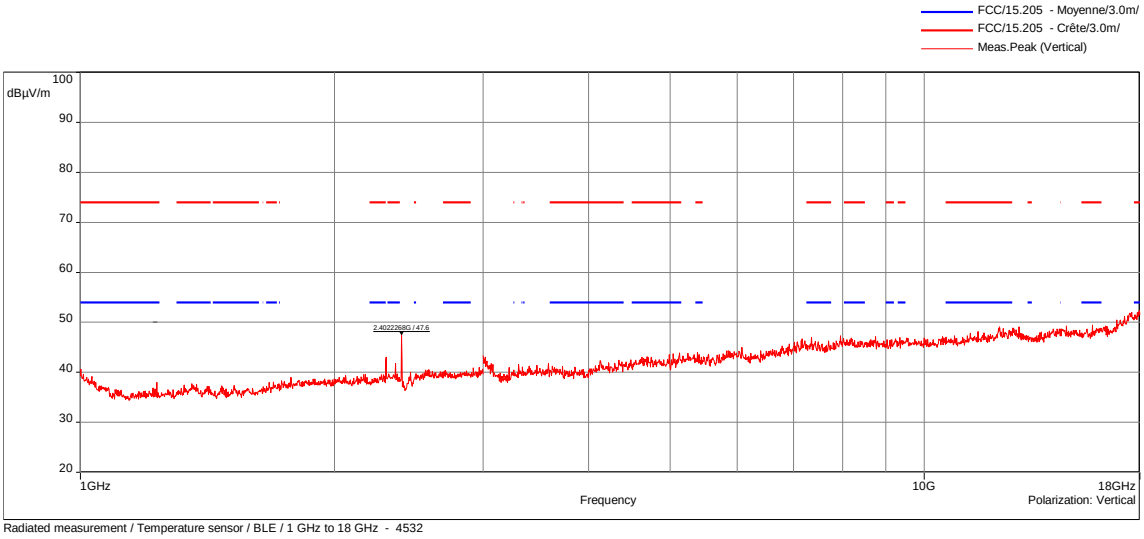


Radiated measurement / BLE / 30 MHz to 1 GHz - 4526

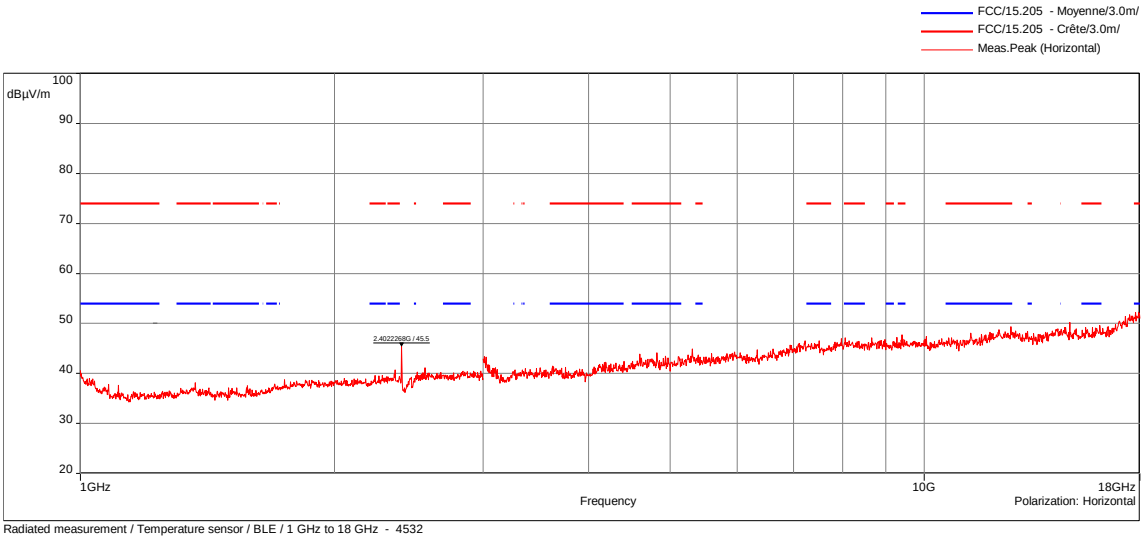
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	30MHz-1GHz	100kHz	300kHz	Peak
Horizontal	30MHz-1GHz	100kHz	300kHz	Peak
Configuration:	N/A			
Comments:	No spurious emissions were detected.			

EUT modification(s): N/A

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ - GRAPH			
RADIATED MEASUREMENT / TEMPERATURE SENSOR / BLE / LOW CHANNEL / 1 GHZ TO 18 GHZ		EMI4532	
EUT mode:	Tx mode	**T (°C):**	18.4
Test Date:	04/11/2022	**H (%):**	55.6
Test Operator:	MPA	**P (hPa):**	1008



Radiated measurement / Temperature sensor / BLE / 1 GHz to 18 GHz - 4532

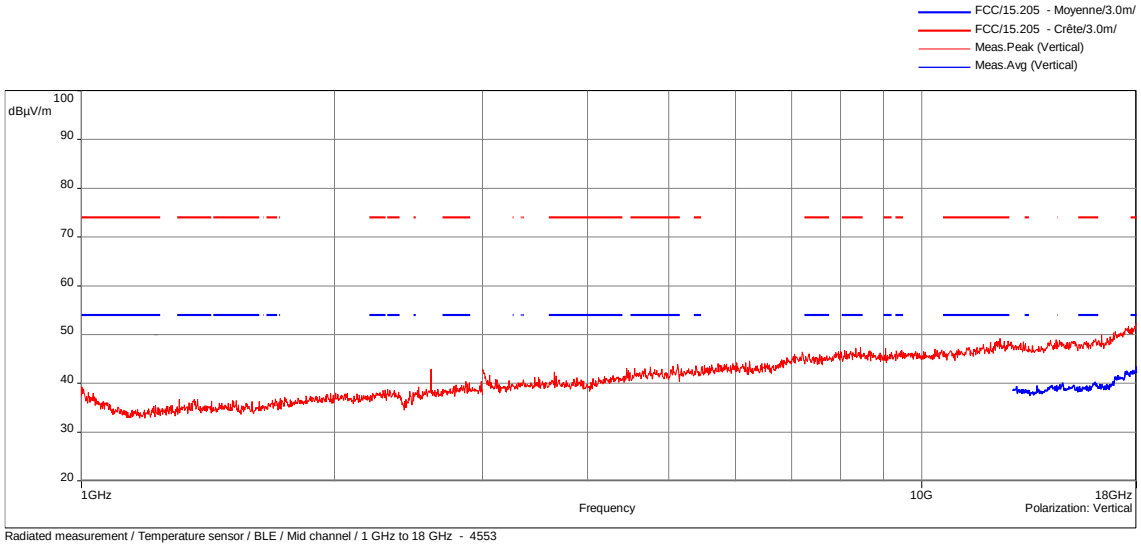


Radiated measurement / Temperature sensor / BLE / 1 GHz to 18 GHz - 4532

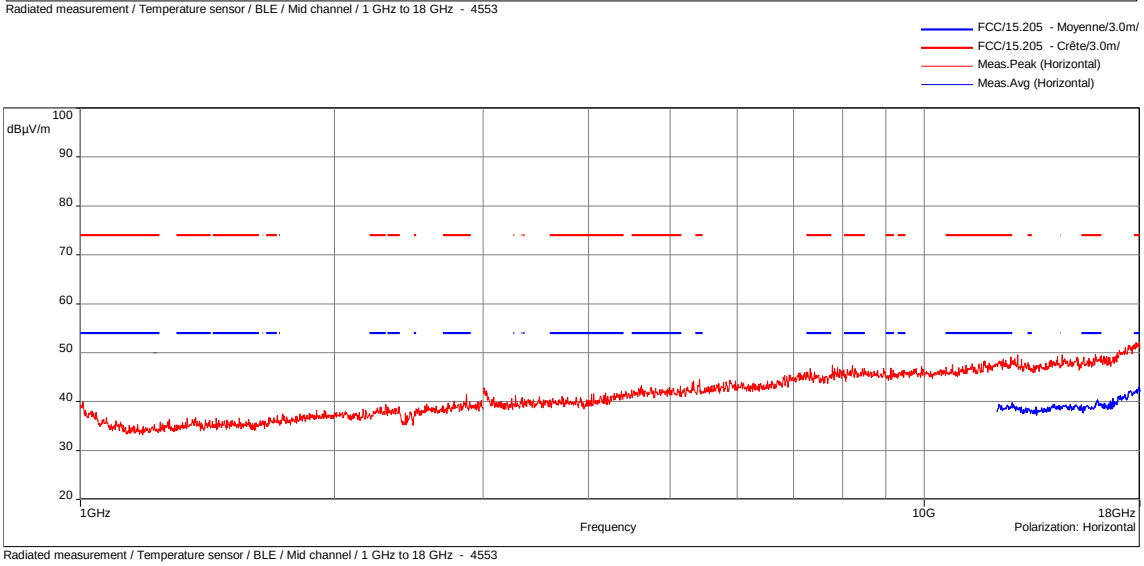
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	1GHz-3GHz	1MHz	3MHz	Peak
Horizontal	1GHz-3GHz	1MHz	3MHz	Peak
Vertical	3GHz-18GHz	1MHz	3MHz	Peak
Horizontal	3GHz-18GHz	1MHz	3MHz	Peak
Configuration:	N/A			
Comments:	2402 MHz : Util frequency.			

EUT modification(s): N/A

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ - GRAPH			
RADIATED MEASUREMENT / TEMPERATURE SENSOR / BLE / MID CHANNEL / 1 GHZ TO 18 GHZ		EMI4553	
EUT mode:	Tx mode	**T (°C):**	18.4
Test Date:	04/11/2022	**H (%):**	55.6
Test Operator:	MPA	**P (hPa):**	1008



Radiated measurement / Temperature sensor / BLE / Mid channel / 1 GHz to 18 GHz - 4553

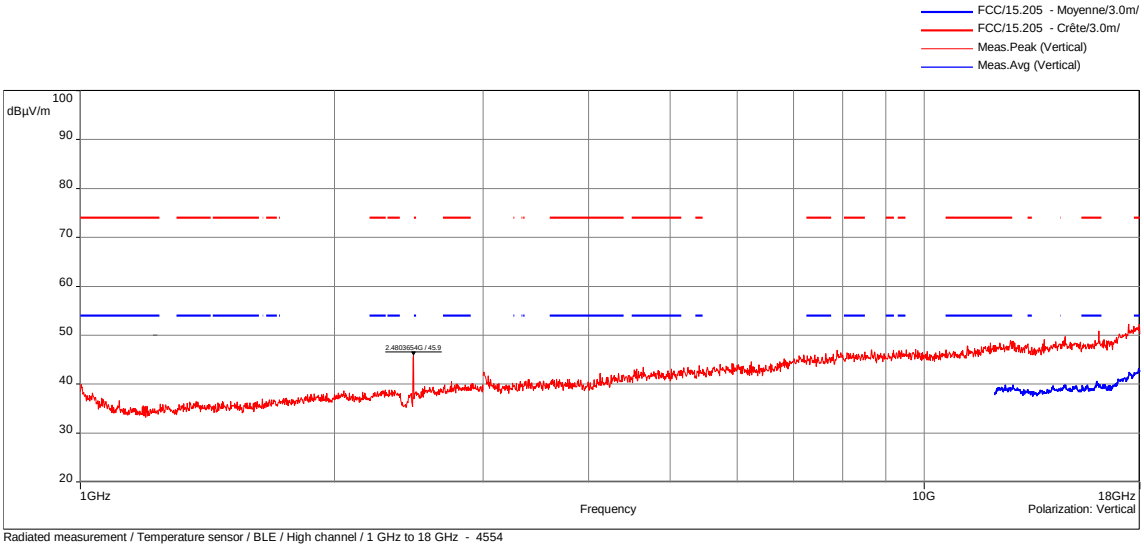


Radiated measurement / Temperature sensor / BLE / Mid channel / 1 GHz to 18 GHz - 4553

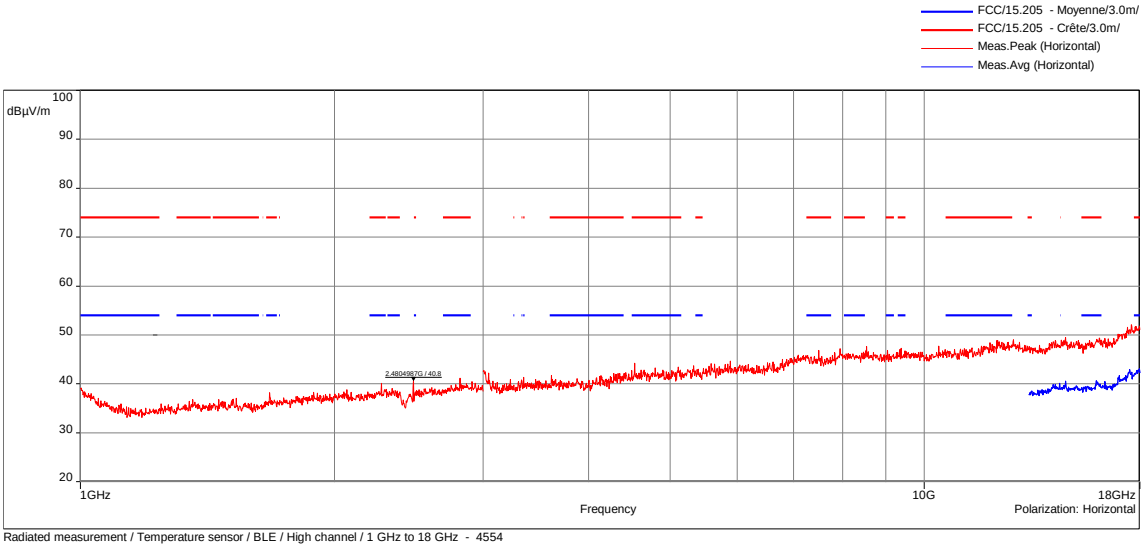
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	1GHz-3GHz	1MHz	3MHz	Peak
Horizontal	1GHz-3GHz	1MHz	3MHz	Peak
Vertical	3GHz-18GHz	1MHz	3MHz	Peak / Average
Horizontal	3GHz-18GHz	1MHz	3MHz	Peak / Average
Configuration:	N/A			
Comments:	N/A			

EUT modification(s): N/A

TRANSMITTER RADIATED SPURIOUS EMISSIONS AT FREQUENCIES >30MHZ - GRAPH			
RADIATED MEASUREMENT / TEMPERATURE SENSOR / BLE / HIGH CHANNEL / 1 GHZ TO 18 GHZ		EMI4554	
EUT mode:	Tx mode	**T (°C):**	18.4
Test Date:	04/11/2022	**H (%):**	55.6
Test Operator:	MPA	**P (hPa):**	1008



Radiated measurement / Temperature sensor / BLE / High channel / 1 GHz to 18 GHz - 4554



Radiated measurement / Temperature sensor / BLE / High channel / 1 GHz to 18 GHz - 4554

POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	1GHz-3GHz	1MHz	3MHz	Peak
Horizontal	1GHz-3GHz	1MHz	3MHz	Peak
Vertical	3GHz-18GHz	1MHz	3MHz	Peak / Average
Horizontal	3GHz-18GHz	1MHz	3MHz	Peak / Average
Configuration:	N/A			
Comments:	2480 MHz : Util frequency.			

EUT modification(s): N/A

7.2. Equivalent isotropic radiated power

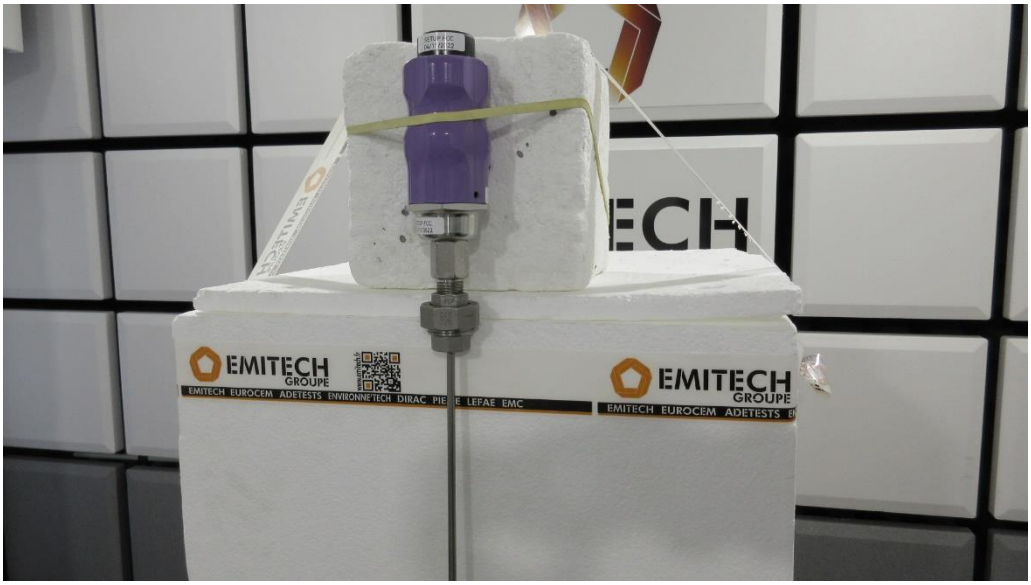
Reference standard:	FCC Part 15.247 RSS-247
Test method:	ANSI C63.10: 2013
Test description: b) (2) For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels, as permitted under paragraph (a)(1)(i) of this section. Only the highest levels are recorded.	

TESTED CONFIGURATION	RESULTS	SEVERITY	RESULT TAB.	VERDICT
EIRP / BLE / Low channel	-12.1 dBm	1W (30dBm)	EMI4402	**PASS**
EIRP / BLE / Mid channel	-12.9 dBm	1W (30dBm)	EMI4403	**PASS**
EIRP / BLE / High channel	-14.0 dBm	1W (30dBm)	EMI4404	**PASS**

LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	21 °C
Relative Humidity	20 to 75 %	37.9 %
Atmospheric pressure	N/A	1008 hPa
Test method deviation: N/A		
Supplementary information: Measurements are done in radiated. Only highest level are recorded.		

TEST EQUIPMENT USED					
CATEGORY	BRAND	TYPE	IDENTIFIER	CAL. DATE	CAL. DUE
Antenna	ETS lindgren	3143B	17930	12/08/2021	12/10/2024
Antenna	AARONIA	Powerlog 70180	15306	24/07/2019	24/03/2023
Attenuator	EMITECH	SUB.V4-H	18112	05/01/2022	05/03/2023
Attenuator	EMITECH	SUB.V4-V	18111	05/01/2022	05/03/2023
Cable	Techniwave	N-1.5m	18341	25/01/2022	25/03/2024
Cable	Techniwave	N-1.5m	18342	25/01/2022	25/03/2024
Cable	/	N-1m	3622	10/11/2021	10/01/2024
Cable	Techniwave	N-3.5m	18353	25/01/2022	25/03/2024
Cable	Techniwave	N-4m	18355	25/01/2022	25/03/2024
Preamplifier	IMPULSE	CA118-546ACN	9169	26/04/2022	26/06/2023
Receiver	Rohde & Schwarz	FSW43	14830	10/08/2022	10/10/2024
Shielded enclosure	COMTEST	FAR-3m	18014	17/08/2021	17/10/2024
Software	Nexio	BAT EMC	0000		
Thermohygrometer	Testo	608-H2	12269	07/06/2022	07/08/2024
Thermohygrometer	Bioblock Scientific	Météostar	0963	07/06/2021	07/08/2023

BAT-EMC software version: V3.18.0.26 Blank cells = Permanent validity

TEST SETUP PHOTO(S) – EUT POSITON


TEST SETUP PHOTO(S) – EIRP

EQUIVALENT ISOTROPIC RADIATED POWER - TABULATED RESULTS				
EIRP / BLE / LOW CHANNEL				EMI4402
FREQUENCY (MHz)	POLARIZATION	LEVEL (dBm)	LIMIT (dBm)	MARGIN (dB)
2402	Vertical	-13.9	30.00	-43.9
2402	Horizontal	-15.3	30.00	-45.3

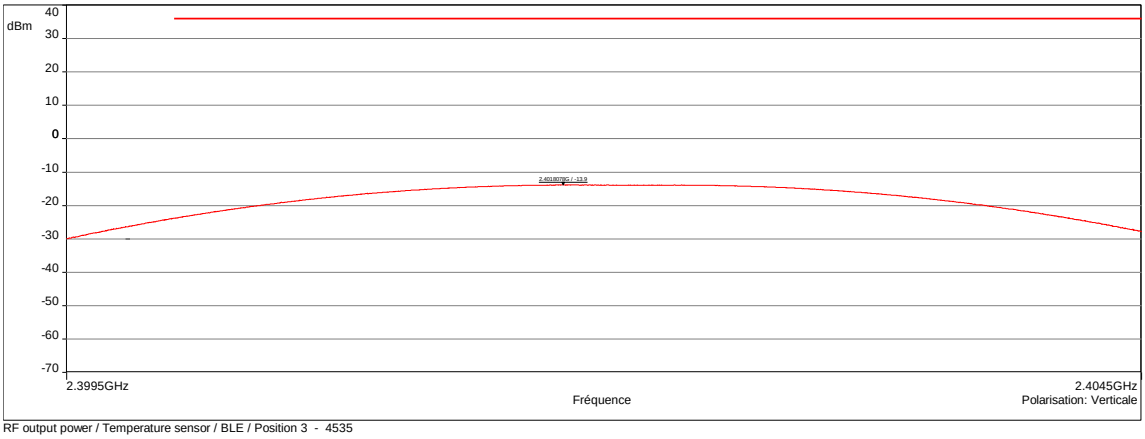
EQUIVALENT ISOTROPIC RADIATED POWER - TABULATED RESULTS				
EIRP / BLE / MID CHANNEL				EMI4403
FREQUENCY (MHz)	POLARIZATION	LEVEL (dBm)	LIMIT (dBm)	MARGIN (dB)
2426	Vertical	-12.4	30.00	-42.4
2426	Horizontal	-13.2	30.00	-43.2

EQUIVALENT ISOTROPIC RADIATED POWER - TABULATED RESULTS				
EIRP / BLE / HIGH CHANNEL				EMI4404
FREQUENCY (MHz)	POLARIZATION	LEVEL (dBm)	LIMIT (dBm)	MARGIN (dB)
2480	Vertical	-13.2	30.00	-43.2
2480	Horizontal	-14.2	30.00	-44.2

EQUIVALENT ISOTROPIC RADIATED POWER - GRAPH			
EIRP / BLE / LOW CHANNEL		EMI4402	
EUT mode:	Tx mode	**T (°C):**	18.4
Test Date:	04/11/2022	**H (%):**	55.6
Test Operator:	MPA	**P (hPa):**	1008

FCC/15.247 : 2017 F0 - Classe:F0 - Crête/3.0m/
Mes.Peak (Verticale)

Description Sous-bande 1
Fréquences:2.3995 GHz - 2.4045 GHz (Mode analyseur) 15000 Points
Réglages: RBW: 2MHz, VBW: 6MHz, Auto, Atténuation : 10 dB, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: Off
Polarisation:Verticale
Distance: 3 m



RF output power / Temperature sensor / BLE / Position 3 - 4535

FCC/15.247 : 2017 F0 - Classe:F0 - Crête/3.0m/
Mes.Peak (Horizontale)

Description Sous-bande 2
Fréquences:2.3995 GHz - 2.4045 GHz (Mode analyseur) 15000 Points
Réglages: RBW: 2MHz, VBW: 6MHz, Auto, Atténuation : 10 dB, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: Off
Polarisation:Horizontale
Distance: 3 m

RF output power / Temperature sensor / BLE / Position 3 - 4535

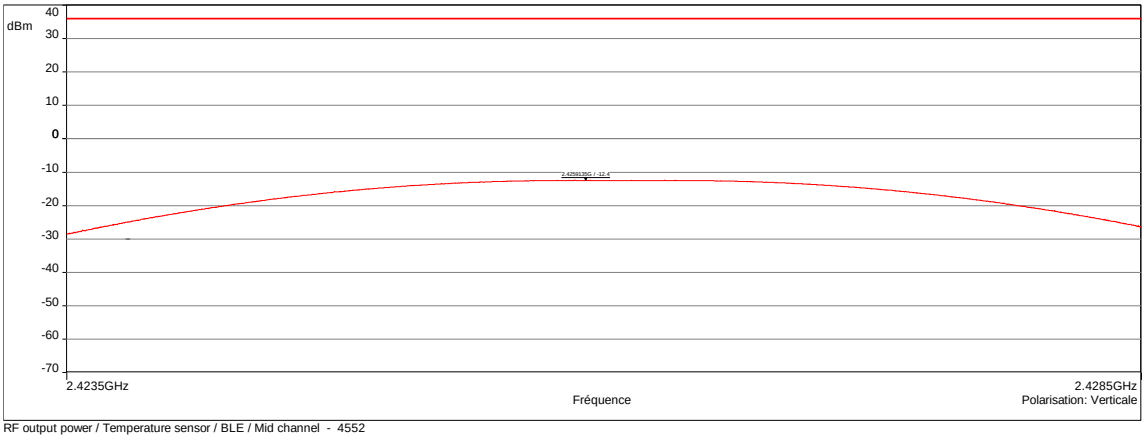
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	2.3995GHz-2.4045GHz	2 MHz	6 MHz	Peak
Horizontal	2.3995GHz-2.4045GHz	2 MHz	6 MHz	Peak
Configuration:	N/A			
Comments:	Only highest level are recorded.			

EUT modification(s): N/A

EQUIVALENT ISOTROPIC RADIATED POWER - GRAPH			
EIRP / BLE / MID CHANNEL		EMI4403	
EUT mode:	Tx mode	**T (°C):**	18.4
Test Date:	04/11/2022	**H (%):**	55.6
Test Operator:	MPA	**P (hPa):**	1008

FCC/15.247 : 2017 F0 - Classe:F0 - Crête/3.0m/
Mes.Peak (Verticale)

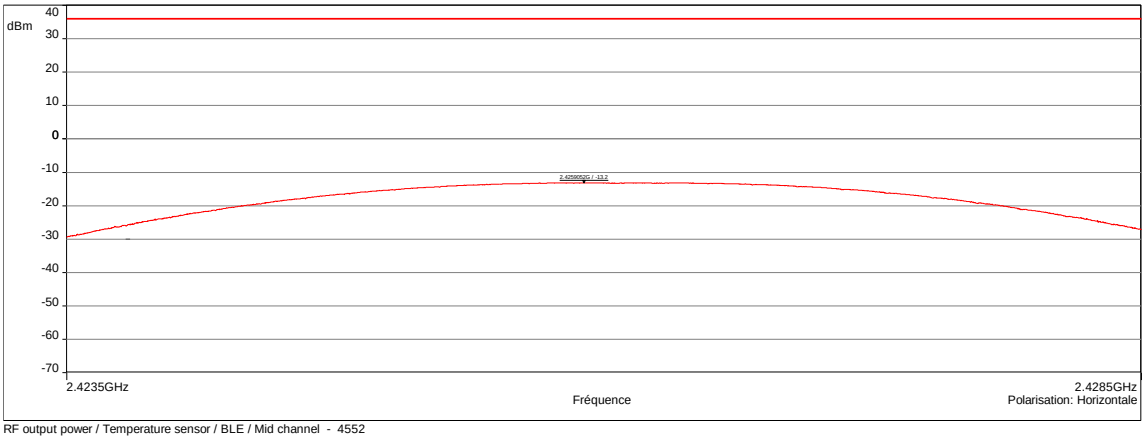
Description Sous-bande 1
Fréquences:2.4235 GHz - 2.4285 GHz (Mode analyseur) 15000 Points
Réglages: RBW: 2MHz, VBW: 6MHz, Auto, Atténuation : 10 dB, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: Off
Polarisation:Verticale
Distance: 3 m



RF output power / Temperature sensor / BLE / Mid channel - 4552

FCC/15.247 : 2017 F0 - Classe:F0 - Crête/3.0m/
Mes.Peak (Horizontale)

Description Sous-bande 2
Fréquences:2.4235 GHz - 2.4285 GHz (Mode analyseur) 15000 Points
Réglages: RBW: 2MHz, VBW: 6MHz, Auto, Atténuation : 10 dB, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: Off
Polarisation:Horizontale
Distance: 3 m



RF output power / Temperature sensor / BLE / Mid channel - 4552

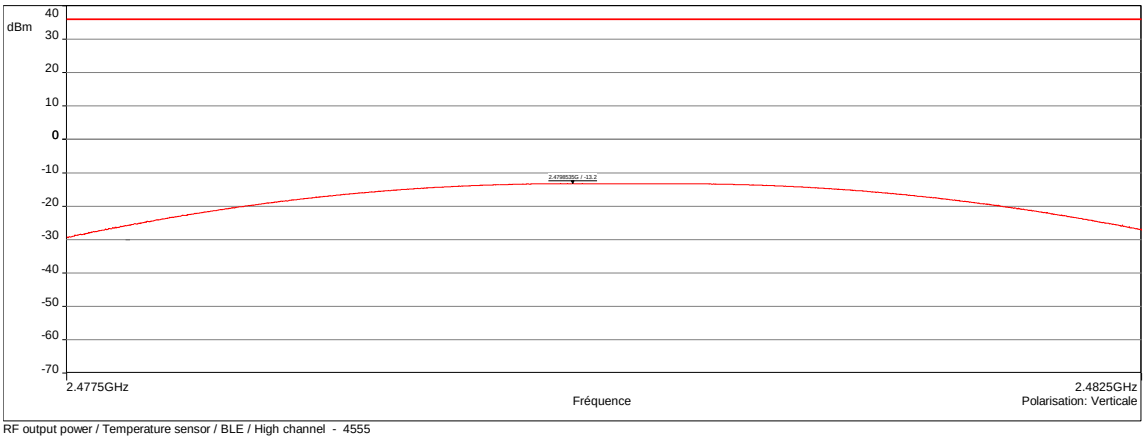
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	2.4235GHz-2.4285GHz	2 MHz	6 MHz	Peak
Horizontal	2.4235GHz-2.4285GHz	2 MHz	6 MHz	Peak
Configuration:	N/A			
Comments:	Only highest level are recorded.			

EUT modification(s): N/A

EQUIVALENT ISOTROPIC RADIATED POWER - GRAPH			
EIRP / BLE / HIGH CHANNEL		EMI4404	
EUT mode:	Tx mode	**T (°C):**	18.4
Test Date:	04/11/2022	**H (%):**	55.6
Test Operator:	MPA	**P (hPa):**	1008

FCC/15.247 : 2017 F0 - Classe:F0 - Crête/3.0m/
Mes.Peak (Verticale)

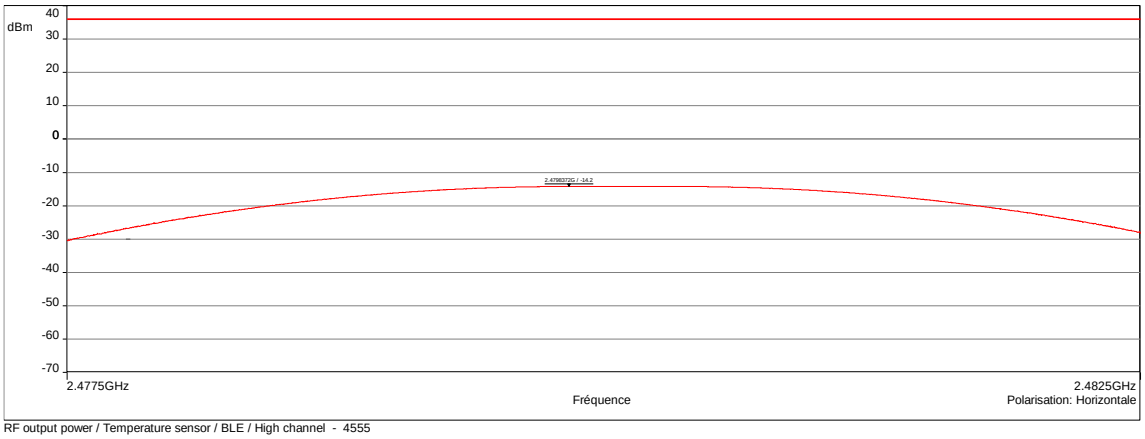
Description Sous-bande 1
Fréquences:2.4775 GHz - 2.4825 GHz (Mode analyseur) 15000 Points
Réglages: RBW: 2MHz, VBW: 6MHz, Auto, Atténuation : 10 dB, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: Off
Polarisation:Verticale
Distance: 3 m



RF output power / Temperature sensor / BLE / High channel - 4555

FCC/15.247 : 2017 F0 - Classe:F0 - Crête/3.0m/
Mes.Peak (Horizontale)

Description Sous-bande 2
Fréquences:2.4775 GHz - 2.4825 GHz (Mode analyseur) 15000 Points
Réglages: RBW: 2MHz, VBW: 6MHz, Auto, Atténuation : 10 dB, Nombre de Balayages : 1, Preamp : Off, LN Preamp : Off, Preselecteur: Off
Polarisation:Horizontale
Distance: 3 m



RF output power / Temperature sensor / BLE / High channel - 4555

POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Vertical	2.4775GHz-2.4825GHz	2 MHz	6 MHz	Peak
Horizontal	2.4775GHz-2.4825GHz	2 MHz	6 MHz	Peak
Configuration:	N/A			
Comments:	Only highest level are recorded.			

EUT modification(s): N/A

End of test report