

Prüfbericht-Nr.: Test report no.:	CN24WR67 003	Auftrags-Nr.: Order no.:	168458166	Seite 1 von 26 Page 1 of 26
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2023-12-22	
Auftraggeber: Client:	Measurement Specialties (China), Ltd. No.26 LangShan Road, Nanshan District, Shenzhen City, 518057 Guangdong, P. R China			
Prüfgegenstand: Test item:	WIRELESS LORAWAN® and BLUETOOTH® TEMPERATURE SENSOR			
Bezeichnung / Typ-Nr.: Identification / Type no.:	7XXXN-XX-X-XX, the variables "X" stands for the contents as detailed in Section 3.1			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 3 February 2023 RSS-Gen Issue 5 March 2019			
Wareneingangsdatum: Date of sample receipt:	2024-08-19	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no.:	A003785824-003~004			
Prüfzeitraum: Testing period:	2024-09-02 - 2024-09-03			
Ort der Prüfung: Place of testing:	Shenzhen PSI Testing Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:			genehmigt von: authorized by:	
Datum: Date:	2024-11-26	Signed by: Bell Hu	Ausstellungsdatum: Issue date:	2024-11-26 Signed by: Jonathan Li
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: 2A85PA7XXXN IC: 29620-A7XXXN, HVIN: 7, FVIN: SW_79XX_HCC512B_3.4.1_all.hex,SW_75XX_HCC512B_3.4.1_all.hex PMN: WIRELESS LORAWAN® and BLUETOOTH® TEMPERATURE SENSOR			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
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Anmerkungen
Remarks

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4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM PEAK OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Pass

5.1.4 6dB BANDWIDTH

RESULT: Pass

5.1.5 20dB BANDWIDTH

RESULT: Pass

5.1.6 99% BANDWIDTH

RESULT: Pass

5.1.7 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH

RESULT: Pass

5.1.8 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.9 CARRIER FREQUENCY SEPARATION

RESULT: Pass

5.1.10 NUMBER OF HOPPING FREQUENCY

RESULT: Pass

5.1.11 TIME OF OCCUPANCY

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of LoRa.

Appendix B: Photographs of the Test Set-up.

2 Test Sites

2.1 Test Facilities

Shenzhen PSI Testing Co., Ltd.

1-2F, Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

FCC Registration Number: 916281

IC Registration Number: 31123 and the CAB identifier: CN0158

Note: TÜV Rheinland (Shenzhen) Co., Ltd. subcontracts the all test to Shenzhen PSI Testing Co., Ltd., the tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2023.12.20	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2023.12.19	1 Year
3.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2023.04.03	2 Year
4.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2022.12.26	2 Year
5.	Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101648	3.70	2023.12.19	1 Year
6.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2022.12.26	2 Year
7.	Amplifier	SKET	LAPA_01G18 G-45dB	SK2022032901	/	2023.12.19	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2022.12.26	2 Year
9.	Amplifier	SKET	LNPA_0118G-45	SK2020010801	/	2023.12.19	1 Year
10.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02-117725-vh	/	2023.12.19	1 Year
11.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02-1111533-Fz	/	2023.12.19	1 Year
12.	Vector Signal Generator	Agilent	N5182A	MY47420724	/	2023.12.19	1 Year
13.	Analog signal generator	Agilent	N5181A	MY50145363	/	2023.12.19	1 Year
14.	Comprehensive Test Instrument	Rohde&Schwarz	CMW 500	145266	/	2023.12.19	1 Year
15.	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2023.12.19	1 Year
16.	Temp. & Humid Chamber	Auchno	9606	/	/	2023.12.19	1 Year
17.	Regulated DC Power Supply	Xinouhua	ADC120V10 A	202211251638		2023.12.19	1 Year

For Test Software Information

Item	Software Name	Manufacturer	Version
RE	EZ EMC	Farad	PSI-3A1
RF	RTS	TACHOY	V1.0.0

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Table 2: Measurement Uncertainty

Parameter	Frequency Range	Uncertainty
RF output power, conducted	100KHz~6GHz	0.41
RF power density, conducted	100KHz~6GHz	0.39
Unwanted Emissions, conducted	9KHz~18GHz	0.59
Radiated Emission of Transmitter & Receiver	0.009~30 MHz	3.50
	30~1000 MHz(V)	4.17
	30~1000 MHz(H)	4.08
	1~18 GHz(V)	4.29
	1~18 GHz(H)	4.82
	18~40 GHz(V)	4.31
	18~40 GHz(H)	4.30

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Shenzhen PSI Testing Co., Ltd. Test facility located at 1-2F, Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104 is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The product is Wireless Temperature Sensor which support 915MHz LoRa and BLE functions.

This product has multiple models 7XXN-XX-X-XX, differences among them are as following, which have no impacts on EMC/RF characteristics.

The X is a variable, details listed as below.

The first variable X=5 or 9 (5 represents supporting BLE only, 9 represents supporting both BLE and LoRa. They share the same hardware, only different in software version).

Type No.:	Software Version	Remarks
79XXN-XX-E-XX	SW_79XX_HCC512B_3.4.1_all.hex	1.All of them share the same hardware. 2.The 79XXN-XX-E-XX supports 868MHz LoRa and BLE, corresponding to FVIN SW_79XX_HCC512B_3.4.1_all.hex.
75XXN-XX-B-XX	SW_75XX_HCC512B_3.4.1_all.hex	3.As to 75XXN-XX-B-XX, the 868MHz LoRa disabled via Firmware setting, only BLE reserved, corresponding to FVIN SW_75XX_HCC512B_3.4.1_all.hex.

The second variable X=1 (represents the installment type-pipe surface).

The third variable X=1(represents RTD, Resistance temperature detector).

The fourth and fifth variable XX=NX or EX (EX represents Explosive Atmospheres, NX represents Ordinary installations).

The sixth variable X=B or A (A represents US market, B represents BLE)

The seventh variable X=A, B or 0(It represents the pipe size that the product will be installed on. A=1-2.5", B=1-4" or 0=not specified).

The eighth variable X=0 (It represents no port)

7	X	X	X	N	-	X	X	-	X	-	X	X
SENSOR TYPE	COMMUNICATION	TEMPERATURE	TECHNOLOGY	PLATFORM		CERTIFICATION			REGION		TEMPERATURE	PORT
Code: 7 Type: T C	Code: 5 Type: BLE5	Code: 1 Type: Pipe Surface	Code: 1 Type: RTD	Code: N Type: InHd IOT		Code: NX Type: None			Code: A Type: 502-928MHz (US)		Code: A Type: 1-2.5"	Code: 0 Type: no port
	Code: 9 Type: BLE+LoRaW					Code: EX Type: ATEX			Code: B Type: 2400MHz (BLE5)		Code: B Type: 1-4"	
									Code: C Type: 470-510MHz (CN)		Code: 0 Type: not specified	
									Code: D Type: 433MHz			
									Code: E Type: 863-870MHz (EU)			
									Code: F Type: 865-867MHz (RU)			
									Code: G Type: 915-928MHz (AU)			
									Code: H Type: 920-923MHz (AS)			
									Code: J Type: 923-925MHz (AS)			
									Code: K Type: 920-923MHz (KR)			
									Code: L Type: 915-921MHz (AS)			

Above differences share the same hardware which will not affect the test result specified in this standard, and the tests were conducted on model 7911N-NX-A-A0.

Data Rate	Configuration	Indicative physical bit rate [bit/sec]
0	LoRa Modulation: SF10 / Bandwidth 125 kHz	980
1	LoRa Modulation: SF9 / Bandwidth 125 kHz	1760
2	LoRa Modulation: SF8 / Bandwidth 125 kHz	3125
3	LoRa Modulation: SF7 / Bandwidth 125 kHz	5470
4	LoRa Modulation: SF8 / Bandwidth 500 kHz	12500

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	WIRELESS LORAWAN® and BLUETOOTH® TEMPERATURE SENSOR
Type Designation	7XXXN-XX-X-XX, the variables "X" stands for the contents as detailed in Section 3.1
FCC ID	2A85PA7XXXN
IC ID	29620-A7XXXN
PMN	WIRELESS LORAWAN® and BLUETOOTH® TEMPERATURE SENSOR
HVIN	7
FVIN	SW_79XX_HCC512B_3.4.1_all.hex; SW_75XX_HCC512B_3.4.1_all.hex.
Operating Voltage	3.6V DC (Supplied by internal battery)
Testing Voltage	3.6V DC (Full battery)
Extreme Temperature Range	-30°C to +60 °C
Technical Specification of LoRa DTS	
Operating Frequency	903 – 914.2MHz
Type of Modulation	LoRa
Data Rate	SF8 / DR4
Channel Number	8 channels (Upstream)
Channel Separation	1.6 MHz
Occupied Bandwidth	500 kHz
Antenna Type	Integral Antenna
Antenna Gain	-0.66 dBi (Declared by client)
Technical Specification of LoRa FHSS	
Frequency Range	902.3 – 914.9MHz
Type of Modulation	LoRa
Data Rate	SF7 to SF10 / DR0 to DR3
Channel Number	64 channels (Upstream)
Channel Separation	200 kHz
Occupied Bandwidth	125 kHz
Antenna Type	Integral Antenna
Antenna Gain	-0.66 dBi (Declared by client)

Table 4: RF Channel and Frequency of LoRa DTS

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
64	903.0	66	906.2	68	909.4	70	912.6
65	904.6	67	907.8	69	911.0	71	914.2

Table 5: RF Channel and Frequency of LoRa FHSS

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
0	902.3	16	905.5	32	908.7	48	911.9
1	902.5	17	905.7	33	908.9	49	912.1
2	902.7	18	905.9	34	909.1	50	912.3
3	902.9	19	906.1	35	909.3	51	912.5
4	903.1	20	906.3	36	909.5	52	912.7
5	903.3	21	906.5	37	909.7	53	912.9
6	903.5	22	906.7	38	909.9	54	913.1
7	903.7	23	906.9	39	910.1	55	913.3
8	903.9	24	907.1	40	910.3	56	913.5
9	904.1	25	907.3	41	910.5	57	913.7
10	904.3	26	907.5	42	910.7	58	913.9
11	904.5	27	907.7	43	910.9	59	914.1
12	904.7	28	907.9	44	911.1	60	914.3
13	904.9	29	908.1	45	911.3	61	914.5
14	905.1	30	908.3	46	911.5	62	914.7
15	905.3	31	908.5	47	911.7	63	914.9

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, LoRa transmitting mode (FHSS)
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- B. On, LoRa transmitting mode (DTS)
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- C. On, Transmitting on Hopping channel (LoRa FHSS)
- D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- FCC/IC Label and Location Info
- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013 and ANSI C63.4: 2014.

According to clause 3.1, all tests were performed on model 7911N-EX-A-A0 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 6: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Laptop	Dell	Latitude 3490	/
Smart Phone	HUAWEI	/	/
LoRaWAN Gateway	MILESIGHT	UG65	E009479

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

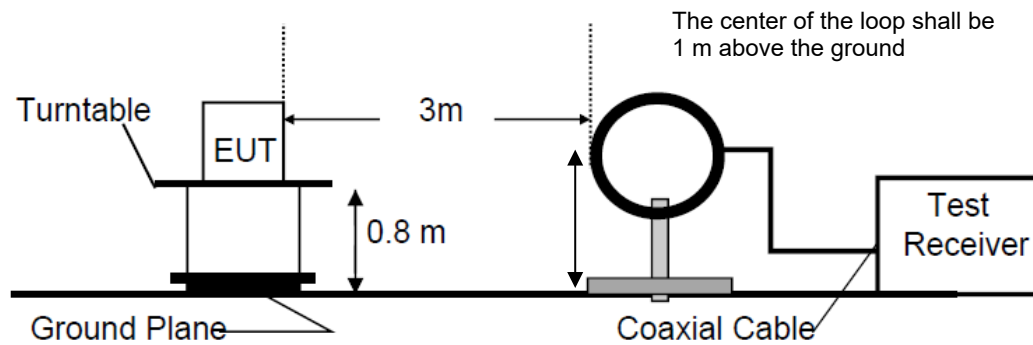


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

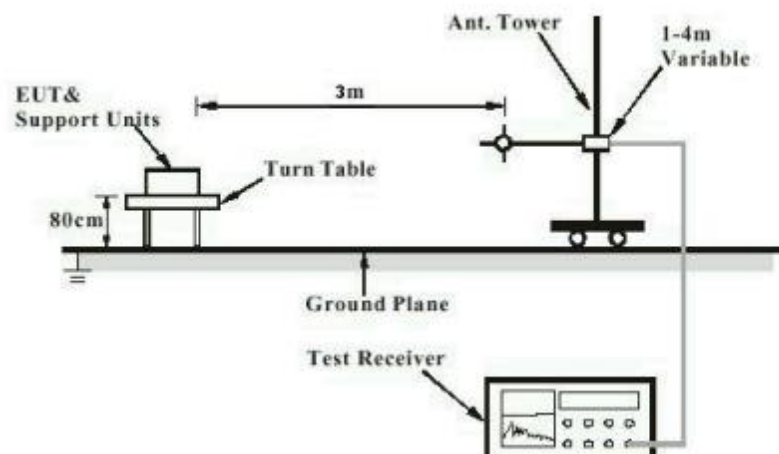


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

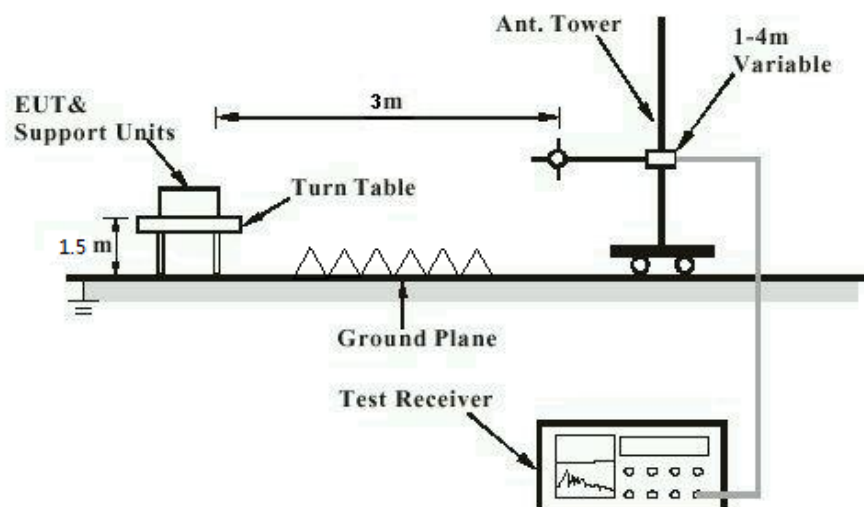


Diagram of Measurement Configuration for Mains Conduction Measurement

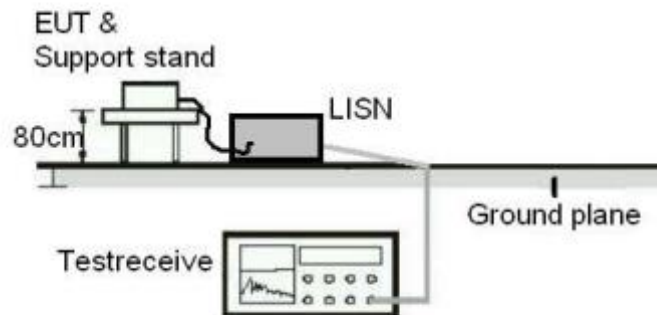
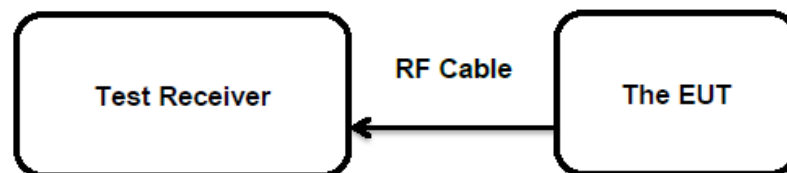


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203
RSS-Gen Clause 6.8

The EUT has an Integral antenna, the maximum directional gain of antenna is -0.66dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.

Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Output Power

RESULT:
Pass
Test Specification

Test standard : FCC Part 15.247(b)(2)&(3)
RSS-247 Clause 5.4(a)&(d)

Basic standard : ANSI C63.10: 2013

Limits : < 1.0 W (30 dBm) for antenna gain less than 6dBi

Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-09-03

Input voltage : Full Battery

Operation mode : A, B

Test channel : Low / Middle / High

Ambient temperature : 24 °C

Relative humidity : 56 %

Atmospheric pressure : 101.3 kPa

Table 7: Test Result of Maximum Conducted Output Power

Test Mode	Test Channel (MHz)	Maximum Conducted Peak Power		Limit (W)
		(dBm)	(W)	
LoRa DTS SF8	903.0	14.05	0.0254	< 1.0
	907.8	14.15	0.0260	
	914.2	14.12	0.0258	
LoRa FHSS SF7	902.3	13.90	0.0245	< 1.0
	908.5	13.91	0.0246	
	914.9	13.89	0.0245	
LoRa FHSS SF10	902.3	14.04	0.0254	< 1.0
	908.5	14.15	0.0260	
	914.9	14.13	0.0259	
Max. Measured Value		14.15	0.0260	

Note: The power level setting:14

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G): -0.66 dBi,
Maximum e.i.r.p.=14.15-0.66=13.49dBm, which is far below the 4 W.

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5.1.3 Conducted Power Spectral Density

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(e), FCC Part 15.247(f)
RSS-247 Clause 5.2(b), RSS-247 Clause 5.3
Basic standard : ANSI C63.10: 2013
Limits : < 8 dBm / 3kHz for antenna gain less than 6dBi
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-09-03
Input voltage : Full Battery
Operation mode : B
Test channel : Low / Middle / High
Ambient temperature : 24 °C
Relative humidity : 56 %
Atmospheric pressure : 101.3 kPa

For the measurement records, refer to the appendix A.

5.1.4 6dB Bandwidth

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(a)(2) RSS-247 Clause 5.2(a)
Basic standard	: ANSI C63.10: 2013
Limits	: At least 500kHz for bandwidth(DTS)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-09-03
Input voltage	: Full Battery
Operation mode	: B
Test channel	: Low / Middle / High
Ambient temperature	: 24 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101.3 kPa

For the measurement records, refer to the appendix A.

5.1.5 20dB Bandwidth**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.247(a)(1) (i) RSS-247 Clause 5.1(a)
Basic standard	: ANSI C63.10: 2013 Not more than 500kHz and
Limits	: < 250KHz for at least 50 hopping frequencies >=250KHz for at least 25 hopping frequencies
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-09-03
Input voltage	: Full Battery
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101.3 kPa

For the measurement records, refer to the appendix A.

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5.1.6 99% Bandwidth

RESULT:

Pass

Test Specification

Test standard : RSS-Gen Clause 6.7
Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-09-03
Input voltage : Full Battery
Operation mode : A, B
Test channel : Low / Middle / High
Ambient temperature : 24 °C
Relative humidity : 56 %
Atmospheric pressure : 101.3 kPa

For the measurement records, refer to the appendix A.

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Page 21 of 26**5.1.7 Conducted Spurious Emissions Measured in 100 kHz Bandwidth****RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	: ANSI C63.10: 2013
Limits	: 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-09-03
Input voltage	: Full Battery
Operation mode	: A, B
Test channel	: Low / Middle / High
Ambient temperature	: 24 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101.3 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A.

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5.1.8 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.247(d) & FCC Part 15.205
RSS-247 Clause 3.3

Basic standard : ANSI C63.10: 2013

Limits : Refer to 15.209(a) of FCC part 15.247(d)

Kind of test site : 3m Semi-anechoic Chamber

Test Setup

Date of testing : 2024-09-02

Input voltage : Full Battery

Operation mode : A, B

Test channel : Low / Middle / High

Ambient temperature : 26 °C

Relative humidity : 54 %

Atmospheric pressure : 101.3 kPa

Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

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5.1.9 Carrier Frequency Separation

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(a)(1)
RSS-247 Clause 5.1(b)
Basic standard : ANSI C63.10: 2013
Limits : $\geq 20\text{dB}$ bandwidth
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-09-03
Input voltage : Full Battery
Operation mode : C
Test channel : Low / Middle / High
Ambient temperature : 24 °C
Relative humidity : 56 %
Atmospheric pressure : 101.3 kPa

For the measurement records, refer to the appendix A.

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5.1.10 Number of Hopping Frequency

RESULT:

Pass

Test Specification

Test standard : FCC part 15.247(a)(1)(iii)
RSS-247 Clause 5.1(d)
Basic standard : ANSI C63.10: 2013
Limits : ≥ 50 non-overlapping channels
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-09-03
Input voltage : Full Battery
Operation mode : C
Ambient temperature : 24 °C
Relative humidity : 56 %
Atmospheric pressure : 101.3 kPa

For the measurement records, refer to the appendix A.

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5.1.11 Time of Occupancy

RESULT:

Pass

Test Specification

Test standard : FCC part 15.247(f)
RSS-247 Clause 5.3
Basic standard : ANSI C63.10: 2013
Limits : < 0.4s
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-09-03
Input voltage : Full Battery
Operation mode : C
Test channel : Low / Middle / High
Ambient temperature : 24 °C
Relative humidity : 56 %
Atmospheric pressure : 101.3 kPa

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix A.

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