

FCC TEST REPORT

Report No.....: AB26030241FW03
FCC ID.....: **2BVD9-OXBOT-R1**
Applicant.....: Zhuhai Oxbot Technology Co., Ltd.
Address.....: Room 3710, No. 99 Yunqi Street, Xiangzhou District, Zhuhai, China
Manufacturer.....: Zhuhai Oxbot Technology Co., Ltd.
Address.....: Room 3710, No. 99 Yunqi Street, Xiangzhou District, Zhuhai, China
Product Name.....: OXBOT R1
Trade Mark.....: OXBOT
Test Model.....: R1
Additional Model(s).....: R
Standard.....: FCC 47 CFR Part 15 Sub part C (Part 15.249)
Date of Receipt.....: 2026.03.23
Date of Test Date.....: 2026.03.23-2026.04.09
Date of Issue.....: 2026.04.09
Test Result.....: Pass

Compiled by: (Printed Name + Signature)	Huaijie Li	
Supervised by: (Printed Name + Signature)	David Huang	
Approved by: (Printed Name + Signature)	Jay Liu	

Testing Laboratory Name.....: Aibo Standard Technology (Shenzhen) Co., Ltd.
Address.....: 101, Building B, Tuori New Energy Industrial Park, High-tech Park,
Tianliao Community, Yutang Street, Guangming District, Shenzhen
City, Guangdong Province, China

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FCC TEST REPORT

EUT.....	: OXBOT R1
Test Model.....	: R1
Applicant.....	: Zhuhai Oxbot Technology Co., Ltd.
Address.....	: Room 3710, No. 99 Yunqi Street, Xiangzhou District, Zhuhai, China
Manufacturer.....	: Zhuhai Oxbot Technology Co., Ltd.
Address.....	: Room 3710, No. 99 Yunqi Street, Xiangzhou District, Zhuhai, China

Test Result	Positive
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The test report merely corresponds to the test sample.

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REPORT VERSION

Version No.	Issue Date	Description
01	2026.04.09	Initial Issue

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1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

Product Name:	OXBOT R1
Trade Mark:	OXBOT
Test Model:	R1
Additional Model(s):	R
Model Difference:	All models are the same circuit and RF module, except the model name
Hardware Version:	V1.0
Software Version:	V1.0
Power Supply:	Input:5V/1A
Battery:	3.7V/3500mAh*2
Test Sample(s) Number:	AB26030241-01 (Engineer Sample) AB26030241-02 (Normal Sample)
Radio Specification Subject to this Report	
Frequency Range:	2441MHz
Channel Spacing:	2MHz
Channel Number(s):	1
Antenna Type:	FPC antenna with IPEX connector
Antenna Gain:	1.58dBi

1.2. DESCRIPTION OF SUPPORT EQUIPMENT

Description	Manufacturer	Model	Serial Number	Supplied by
Serial port board	/	/	/	Applicant
Computer	ACER	N22C5	NXEGXCN0022400 3D943400	Applicant
Fast Charger	Shenzhen ACT Industrial Co.,Ltd.	APS-KI015AWE-G	---	Applicant

1.3. DESCRIPTION OF EXTERNAL I/O

I/O Port Description	Quantity	Cable
USB Type-C Interface	1	0.8m, unshielded

1.4. GENERAL DESCRIPTION OF APPLIED STANDARDS

The tests were performed according to following standards:

[FCC Rules Part 15.249](#) - Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz and 24.0-24.25 GHz.

[IEEE/ANSI/USEMCSC C63.10-2020](#) - American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

1.5. DESCRIPTION OF TEST FACILITY

Test Lab: Aibo Standard Technology (Shenzhen) Co., Ltd.

Address: 101, Building B, Tuori New Energy Industrial Park, High-tech Park, Tianliao Community, Yutang Street, Guangming District, Shenzhen City, Guangdong Province, China

Tel.: +(86) 0755 85250797

E-mail: aibo@aibonorm.com

Website: www.Aibonorm.com

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Certificate No.: 7514.01

Aibo Standard Technology (Shenzhen) Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC Accredited Lab.

Designation Number: CN1411

Test Firm Registration Number: 567066

ISED Wireless Device Testing Laboratories

Company Number: 33924

CAB identifier: CN0185

1.6. MEASUREMENT UNCERTAINTY

The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Items	Measurement Uncertainty
Power Line Conducted Emission (9kHz~ 150kHz)	±3.62dB
Power Line Conducted Emission (150kHz~30MHz)	±3.38dB
Radiated Emission (9kHz~30MHz)	±3.10dB
Radiated Emission (30MHz~ 1GHz)	±4.90dB
Radiated Emission (1GHz~ 18GHz)	±3.88dB
Radiated Emission (8GHz~40GHz)	±5.32dB
RF Conducted Power	±0.57dB
Conducted Spurious Emissions	±1.60dB
RF Frequency	±6.0 x 10 ⁻⁷
Occupied Channel Bandwidth	±28.87KHz

Note: All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95 % level of confidence.

1.7. ENVIRONMENTAL CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	+15°C ~ +35°C
Lative Humidity	20 % ~ 75 %
Air Pressure	98KPa ~ 101KPa

1.8. DESCRIPTION OF TEST MODES

The EUT was tested under the following mode.

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE<1G	RE≥1G	PLC	BW	
A	√	√	√	√	DC 3.7V from Battery

Where **RE<1G**: Radiated Emission below
1GHz **PLC**: Power Line Conducted
Emission

RE≥1G: Radiated Emission above
1GHz **BW**: 20db bandwidth

Following channel(s) was (were) selected for the test as listed below.

TESTED CHANNEL	TESTED FREQUENCY
1	2441 MHz

Channel List

Channel	Freq. (MHz)
1	2441

Note: The more detailed channel, please refer to the product specifications

Power setting during the test:

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Frequency	2441MHz
RF Power Parameter(s)	Default

2. SUMMARY OF TEST RESULT

FCC 47 CFR Part 15 Subpart C (SECTION 15.249)&RSS-210 Test Cases			
FCC&IC Rule	Description of Test Item(s)	Result	REMARK
Part 15.203	Antenna Requirement	Pass	No antenna connector is used
Part 15.207(a) RSS-Gen 8.8	Conducted Emission	Pass	Compliant
Part 15.205 RSS-Gen 8.10 Table 7	Restricted Band of Operation	Pass	Compliant
Part 15.209,Part 15.249(a) RSS-210B10 (a),B10 (b)	Radiated Emission	Pass	Compliant
Part 15.215(c) RSS-Gen 6.7	20dB Bandwidth Test&Occupied Bandwidth Measurement	Pass	Compliant

3. MEASUREMENT INSTRUMENTS LIST

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
1	Loop Antenna	Schwarzbeck	FMZB 1519	1519-025	01/18/2026	01/17/2028
2	Power Amplifier	HZEMC	HPA-9K0133	HYP A23029	01/20/2026	01/19/2027
3	Broadband Antenna	Schwarzbeck	VULB 9168	01763	01/29/2026	01/28/2028
4	Attenuator	PRM	ATT50-6-3	ATT50-6-3	01/20/2026	01/19/2027
5	Spectrum Analyzer	R&S	FSV40-N	101365	01/20/2026	01/19/2027
6	Horn Antenna	Schwarzbeck	BBHA 9120 D	02786	02/19/2026	02/18/2028
7	Horn Antenna	Schwarzbeck	ZLB7-18-40G-77	072410839	02/19/2026	02/18/2028
8	Power Amplifier	HZEMC	PA0118-43	HYP A23030	01/20/2026	01/19/2027
9	Power Amplifier	HZEMC	PA01840-45	HYP A23031	01/20/2026	01/19/2027
10	EMI Test Receiver	R&S	ESCI	101196	01/20/2026	01/19/2027
11	LISN	R&S	ENV216	102374	01/20/2026	01/19/2027
12	Pulse Limiter	Schwarzbeck	ESH3-Z2	0357.8810.54	01/20/2026	01/19/2027
13	MXA Signal Analyzer	Keysight	N9020A	MY52091389	01/20/2026	01/19/2027
14	Power Sensor	Agilent	U2021XA	MY54110007	01/20/2026	01/19/2027
15	Power Sensor	Agilent	U2021XA	MY54110009	01/20/2026	01/19/2027
16	MXG Vector Signal Generator	Agilent	N5182A	MY47070153	01/20/2026	01/19/2027
17	Analog Signal Source	Keysight	N5173B	MY60403029	01/20/2026	01/19/2027
18	Vector Signal Generator	R&S	SMCV100B	106103	01/20/2026	01/19/2027
19	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW500	118780	01/20/2026	01/19/2027
20	DC POWER SUPPLY	MAISHENG	MT-305DS	2021040016	02/28/2026	02/27/2027
21	Const Temp. & Humidity Chamber	GRT	GR-HWX-150L	GR25010601	01/20/2026	01/19/2027

Test Software		
Software name	Model	Version
Conducted Emission Measurement Software	FASLAB	V4.1
Radiated Emission Measurement Software	FASLAB	V4.1
Bluetooth and WIFI Test System	MTS 8310	V3.0.0.0

4. RADIATED EMISSIONS MEASUREMENT

4.1. LIMIT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in FCC 15.209 and IC RSS-210 as following:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

According to § 15.249(a) and IC RSS-210, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field strength of fundamental (milli-volts/meter)	Field strength of harmonics (micro-volts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

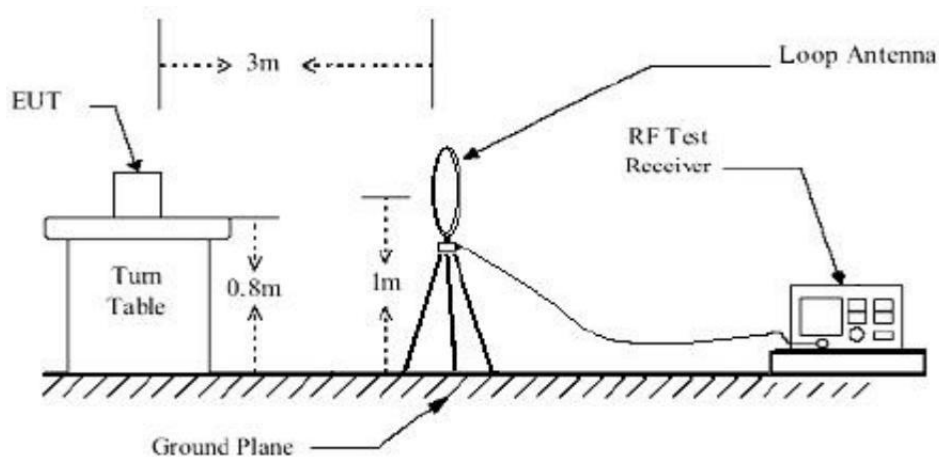
The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in § 15.35 for limiting peak emissions apply.

NOTE:

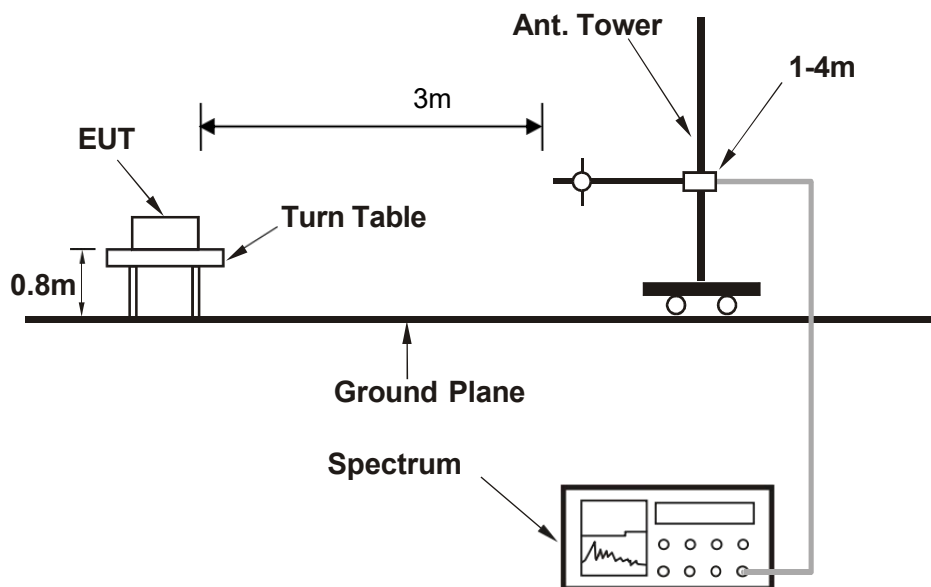
1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.2. TEST SETUP

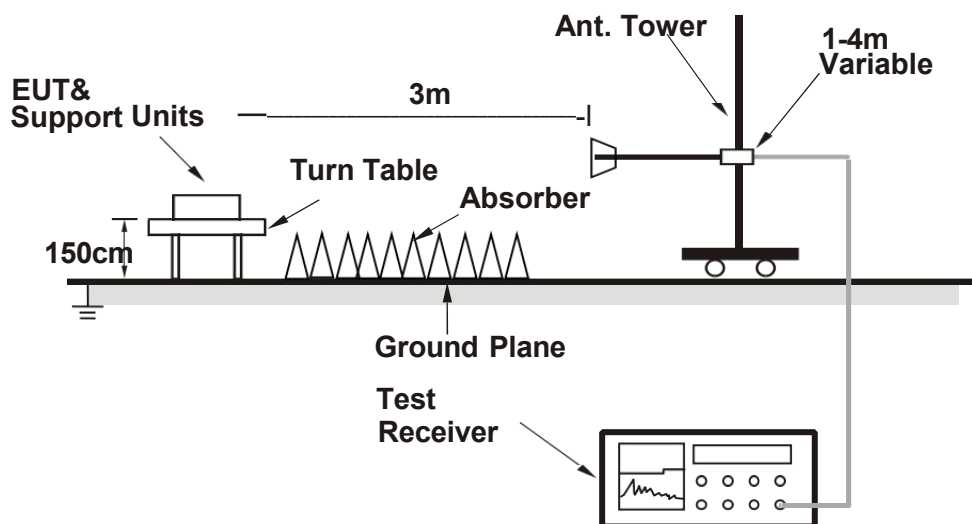
Below 30MHz test setup



Below 1GHz test setup



Above 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.3. TEST PROCEDURE

- a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.
- g. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

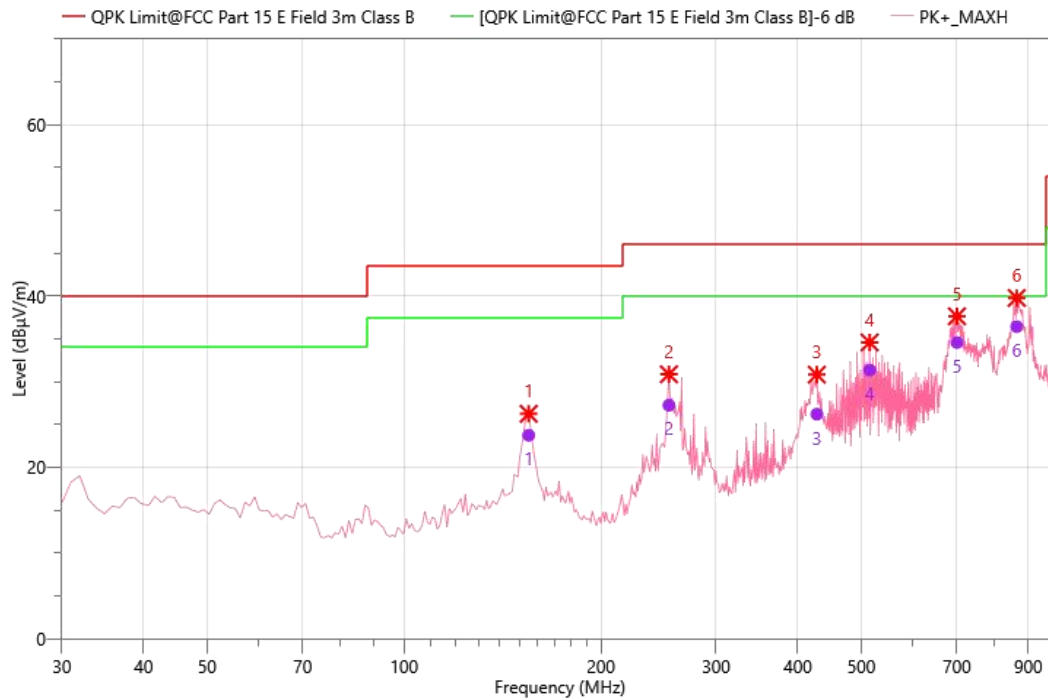
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The testing of the EUT was performed on all 3 orthogonal axes; the worst-case test configuration was reported on the file test setup photo.

4.4. TEST RESULT

BELOW 1GHz

Radiated Emission Test Data (30MHz to 1GHz)

Environmental Conditions	24.6°C, 53.4% RH	Test Engineer	He Chen
Test Mode:	2441MHz	Polarity:	Horizontal



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Azimuth (deg)	Verdict
1	155.130	35.46	-11.71	23.75	43.50	19.75	QPK	100	H	263.9	PASS
2	254.070	40.60	-13.34	27.26	46.00	18.74	QPK	100	H	189.9	PASS
3	427.700	35.02	-8.81	26.21	46.00	19.79	QPK	100	H	120.1	PASS
4	515.000	38.56	-7.2	31.36	46.00	14.64	QPK	100	H	131.2	PASS
5	700.270	37.99	-3.41	34.58	46.00	11.42	QPK	100	H	293.5	PASS
6	864.200	37.96	-1.52	36.44	46.00	9.56	QPK	100	H	357.9	PASS

Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

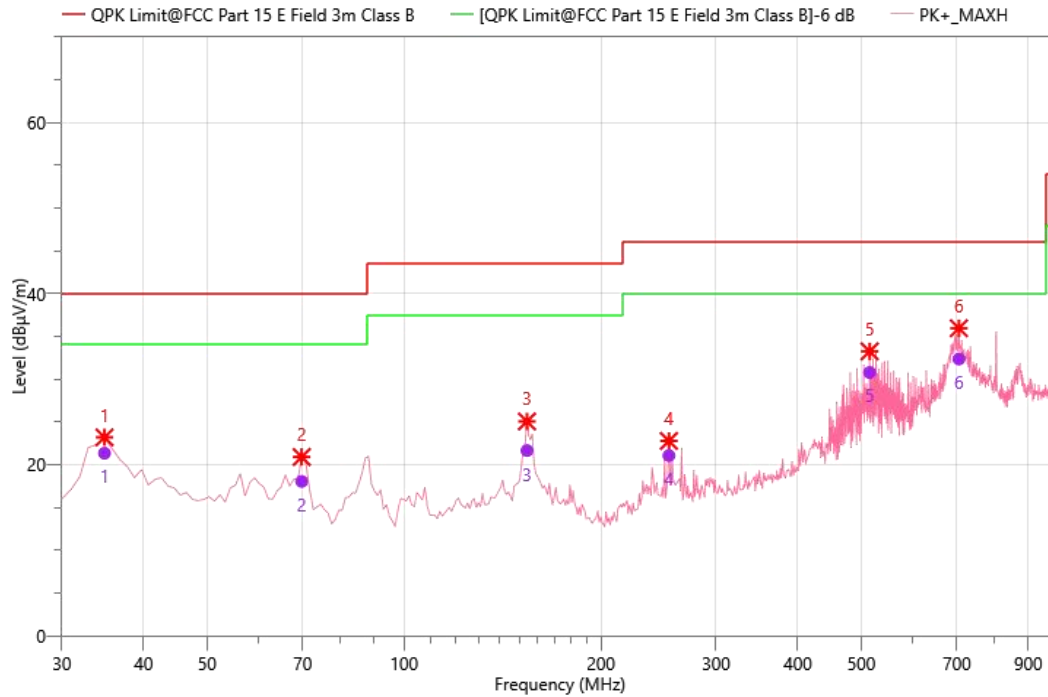
Margin=Limit - Emission Level.

9KHz~30MHz have been test and test data more than 20dB margin.

Radiated Emission Test Data (30MHz to 1GHz)



Environmental Conditions	24.6°C, 53.4% RH	Test Engineer	He Chen
Test Mode:	2441MHz	Polarity:	Vertical



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Height (cm)	Pol.	Azimuth (deg)	Verdict
1	34.850	34.71	-13.37	21.34	40.00	18.66	QPK	100	V	329.4	PASS
2	69.770	33.64	-15.59	18.05	40.00	21.95	QPK	100	V	270.2	PASS
3	154.160	33.36	-11.7	21.66	43.50	21.84	QPK	100	V	9.2	PASS
4	254.070	34.41	-13.34	21.07	46.00	24.93	QPK	100	V	189.1	PASS
5	515.000	37.98	-7.2	30.78	46.00	15.22	QPK	100	V	270.2	PASS
6	705.120	35.70	-3.34	32.36	46.00	13.64	QPK	100	V	108.1	PASS

Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin=Limit - Emission Level.



Field strength of fundamental&Radiated Emission Test Data (Above 1GHz)							
Environmental Conditions		24.6℃ , 53.4% RH		Test Engineer		He Chen	
1 Channel							
Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (PEAK/AVG)	Polar (H/V)
1380.000	45.12	-11.06	34.06	74.00	-39.94	PK+	H
1382.000	40.93	-11.06	29.87	54.00	-24.13	AVG	H
2130.000	59.07	-9.03	50.04	74.00	-23.96	PK+	H
2130.000	54.55	-9.03	45.52	54.00	-8.48	AVG	H
*2441.060	101.14	-3.64	97.50	114.00	-16.5	PK+	H
*2441.060	96.63	-3.64	92.99	94.00	-1.01	AVG	H
4875.000	63.75	-12.93	50.82	74.00	-23.18	PK+	H
4875.000	48.82	-12.93	35.89	54.00	-18.11	AVG	H
7320.000	53.82	-6.5	47.32	74.00	-26.68	PK+	H
7320.000	40.18	-6.5	33.68	54.00	-20.32	AVG	H
13530.000	32.36	0.56	32.92	54.00	-21.08	AVG	H
13545.000	43.74	0.54	44.28	74.00	-29.72	PK+	H
18000.000	40.35	7.7	48.05	74.00	-25.95	PK+	H
18000.000	30.31	7.7	38.01	54.00	-15.99	AVG	H
1376.000	41.41	-11.05	30.36	54.00	-23.64	AVG	V
1382.000	45.65	-11.06	34.59	74.00	-39.41	PK+	V
2118.000	43.63	-9.05	34.58	54.00	-19.42	AVG	V
2130.000	47.47	-9.03	38.44	74.00	-35.56	PK+	V
*2441.060	100.70	-3.64	97.06	114.00	-16.94	PK+	V
*2441.060	97.19	-3.64	93.55	94.00	-0.45	AVG	V
4875.000	56.24	-12.93	43.31	74.00	-30.69	PK+	V
4875.000	42.93	-12.93	30.00	54.00	-24	AVG	V
7320.000	53.74	-6.5	47.24	74.00	-26.76	PK+	V
7320.000	40.77	-6.5	34.27	54.00	-19.73	AVG	V
11115.000	44.39	-0.8	43.59	74.00	-30.41	PK+	V
11220.000	33.34	-0.68	32.66	54.00	-21.34	AVG	V
17835.000	43.08	6.44	49.52	74.00	-24.48	PK+	V
18000.000	30.46	7.7	38.16	54.00	-15.84	AVG	V
Remark: Emission Level = Reading + Factor; Factor = Antenna Factor + Cable Loss – Pre-amplifier; Margin= Limit - Emission Level. Testing is carried out with frequency rang 9kHz to the tenth harmonics. The measurements greater than 20dB below the limit from 18GHz to 25GHz.							

Radiated Band Edges Test Data							
Environmental Conditions		24.6℃ , 53.4% RH		Test Engineer		He Chen	
Lowest Channel (Worst Case: LoRa_2441MHz)							
Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (PEAK/AVG)	Polar (H/V)
2310.000	43.24	-3.62	39.62	74.00	34.38	PK+	H
2310.000	38.84	-3.62	35.22	54.00	18.78	AVG	H
2390.080	43.59	-3.67	39.92	74.00	34.08	PK+	H
2390.080	39.01	-3.67	35.34	54.00	18.66	AVG	H
2400.020	45.07	-3.68	41.39	74.00	32.61	PK+	H
2400.020	41.32	-3.68	37.64	54.00	16.36	AVG	H
2310.000	44.22	-3.62	40.60	74.00	33.40	PK+	V
2310.000	39.87	-3.62	36.25	54.00	17.75	AVG	V
2390.080	44.49	-3.67	40.82	74.00	33.18	PK+	V
2390.080	39.78	-3.67	36.11	54.00	17.89	AVG	V
2399.880	46.03	-3.68	42.35	74.00	31.65	PK+	V
2399.880	41.97	-3.68	38.29	54.00	15.71	AVG	V
Highest Channel (Worst Case: LoRa_2441MHz)							
Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (PEAK/AVG)	Polar (H/V)
2483.480	45.78	-3.54	42.24	74.00	31.76	PK+	H
2483.480	41.80	-3.54	38.26	54.00	15.74	AVG	H
2500.000	45.96	-3.5	42.46	74.00	31.54	PK+	H
2500.000	41.99	-3.5	38.49	54.00	15.51	AVG	H
2483.550	45.15	-3.54	41.61	74.00	32.39	PK+	V
2483.550	40.79	-3.54	37.25	54.00	16.75	AVG	V
2500.000	45.60	-3.5	42.10	74.00	31.90	PK+	V
2500.000	41.50	-3.5	38.00	54.00	16.00	AVG	V
Remark: Emission Level = Reading + Factor; Factor = Antenna Factor + Cable Loss – Pre-amplifier; Margin=Emission Level - Limit . The emission levels of other frequencies were greater than 20dB margin.							

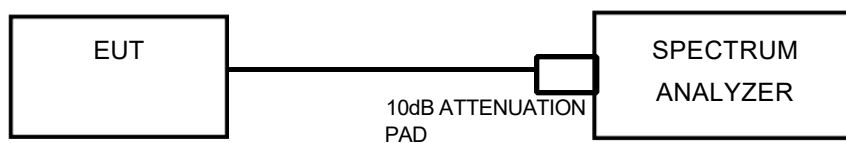
5. 20DB BANDWIDTH AND OCCUPIED BANDWIDTH

5.1. LIMIT

According to FCC 15.215(c) and RSS-Gen, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

According to RSS-Gen 6.7, The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

5.2. TEST SETUP



5.3. TEST PROCEDURE

For 20dB Bandwidth Measurement:

- Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.
- Repeat above procedures until all frequencies measured were complete.
- The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30 KHz RBW and 100 KHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB. Measured the 20dB bandwidth by related function of the spectrum analyzer.

For 99% Occupied Bandwidth Measurement:

- Span = approximately 1.5 to 5 times the OBW, centered on the test channel.
- RBW = 1% to 5% of the OBW.
- $VBW \geq 3 \times RBW$
- Sweep = auto;
- Detector function = peak
- Trace = max hold

g. Use the 99% power bandwidth function of the instrument to measure the Occupied Bandwidth and recoded.

5.4. TEST RESULT

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	20dB BANDWIDTH (MHz)
Middle	2441	902.43	1.053

Test Data: Middle channel



6. POWER LINE CONDUCTED EMISSION

6.1. LIMIT

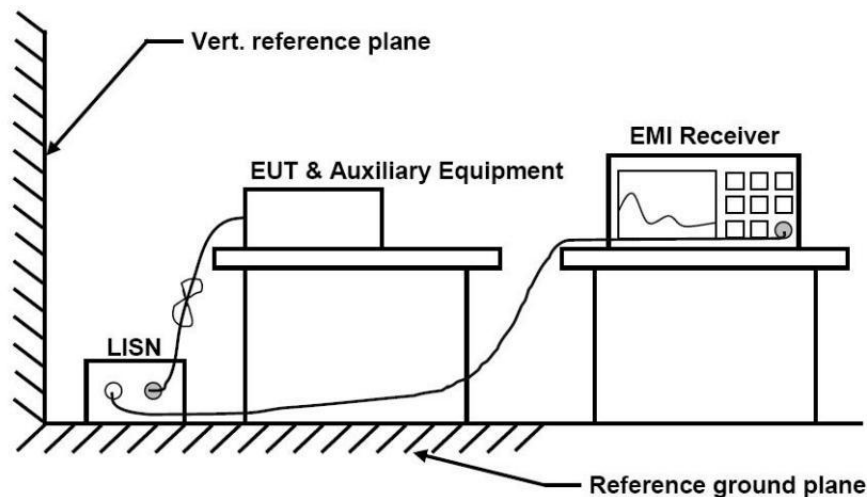
According to the rule FCC Part 15.207 and IC RSS-Gen 8.8, Conducted emissions limit, the limit for a wireless device as below:

Frequency Range (MHz)	Conducted emissions (dBuV)	
	Quasi-peak	Average
0.15~0.5	66 to 56	56 to 46
0.5~5	56	46
5~30	60	50

Remark:

- The lower limit shall apply at the transition frequencies.
- The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50MHz.

6.2. TEST SETUP



6.3. TEST PROCEDURE

Test frequency range :150KHz-30MHz

- The mains terminal disturbance voltage test was conducted in a shielded room.
- The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane.



This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

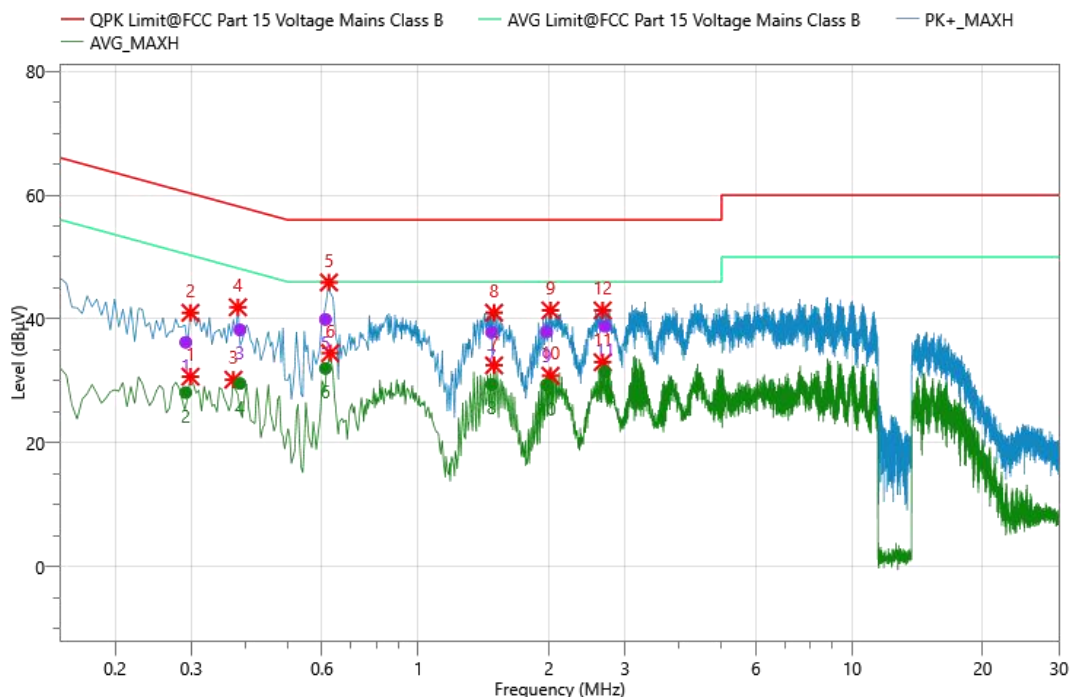
e) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

6.4. TEST RESULT

Pass.

Test Plots and Data of Conducted Emissions (LoRa)

Environmental Conditions	24.6°C, 53.4% RH	Test Engineer	He Chen
Test Voltage:	AC 120V/60Hz	Test Power Line:	Line



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE
1	0.291	26.16	10.06	36.22	60.50	24.28	QPK	L1	GND
2	0.291	18.04	10.06	28.10	50.50	22.40	AVG	L1	GND
3	0.388	28.12	10.11	38.23	58.11	19.88	QPK	L1	GND
4	0.388	19.47	10.11	29.58	48.11	18.53	AVG	L1	GND
5	0.611	29.78	10.14	39.92	56.00	16.08	QPK	L1	GND
6	0.611	21.87	10.14	32.01	46.00	13.99	AVG	L1	GND
7	1.476	27.58	10.28	37.86	56.00	18.14	QPK	L1	GND
8	1.476	19.14	10.28	29.42	46.00	16.58	AVG	L1	GND
9	1.976	27.59	10.33	37.92	56.00	18.08	QPK	L1	GND
10	1.976	19.02	10.33	29.35	46.00	16.65	AVG	L1	GND
11	2.693	28.42	10.4	38.82	56.00	17.18	QPK	L1	GND
12	2.693	21.05	10.4	31.45	46.00	14.55	AVG	L1	GND

Remark:

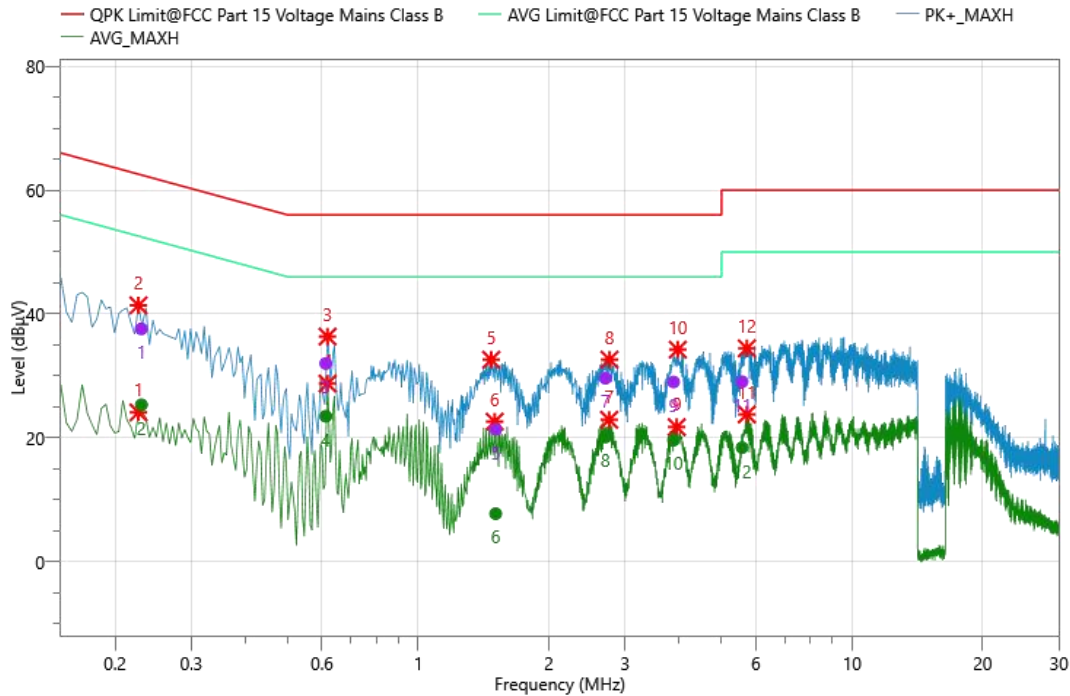
Emission Level = Reading + Correct Factor;

Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Attenuation Factor

Margin=Limit - Emission Level .

Test Plots and Data of Conducted Emissions (LoRa)

Environmental Conditions	24.6°C, 53.4% RH	Test Engineer	He Chen
Test Voltage:	AC 120V/60Hz	Test Power Line:	Neutral



No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE
1	0.230	27.56	10.03	37.59	62.45	24.86	QPK	N	GND
2	0.230	15.30	10.03	25.33	52.45	27.12	AVG	N	GND
3	0.612	21.86	10.14	32.00	56.00	24.00	QPK	N	GND
4	0.612	13.34	10.14	23.48	46.00	22.52	AVG	N	GND
5	1.508	11.09	10.29	21.38	56.00	34.62	QPK	N	GND
6	1.508	-2.55	10.29	7.74	46.00	38.26	AVG	N	GND
7	2.700	19.21	10.4	29.61	56.00	26.39	QPK	N	GND
8	2.700	9.72	10.4	20.12	46.00	25.88	AVG	N	GND
9	3.876	18.50	10.52	29.02	56.00	26.98	QPK	N	GND
10	3.876	9.09	10.52	19.61	46.00	26.39	AVG	N	GND
11	5.578	18.33	10.73	29.06	60.00	30.94	QPK	N	GND
12	5.578	7.68	10.73	18.41	50.00	31.59	AVG	N	GND

Remark:

Emission Level = Reading + Correct Factor;

Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Attenuation Factor

Margin=Limit - Emission Level .

7. PHOTOGRAPHS OF TEST SETUP

Please refer to Appendix A for Test Setup Photos of the EUT.

8. EXTERNAL PHOTOGRAPHS OF THE EUT

Please refer to Appendix B for External Photos of the EUT.

9. INTERNAL PHOTOGRAPHS OF THE EUT

Please refer to Appendix C for Internal Photos of the EUT.

*****THE END*****