Microtest
微测检测

Test Report

FCC ID: 2AJ3O-U3

Date of issue: May 03, 2018

Report Number:	MTi180503E010
Sample Description:	MICROPHONE WIRELESS SYSTEM
Model(s):	U3
Applicant:	SHENZHEN FZONE TECHNOLOGY CO.,LTD
Address:	2nd floor, Building12, Xicheng Industrial Area, Xixiang Town, Baoan District, Shenzhen Guangdong China
Date of Test:	Apr.19, 2018 to May 03, 2018

Shenzhen Microtest Co., Ltd.
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Test Result Certification

Applicant's name:	SHENZHEN FZONE TECHNOLOGY CO.,LTD
Address:	2nd floor, Building12, Xicheng Industrial Area, Xixiang Town, Baoan District, Shenzhen Guangdong China
Manufacture's Name:	SHENZHEN FZONE TECHNOLOGY CO.,LTD
Address:	2nd floor, Building12, Xicheng Industrial Area, Xixiang Town, Baoan District, Shenzhen Guangdong China
Product name:	MICROPHONE WIRELESS SYSTEM
Trademark:	XVIVE
Model name:	U3
Standards:	FCC Part 15.249
Test Procedure:	ANSI C63.10-2013

This device described above has been tested by Shenzhen Microtest Co., Ltd. and the test results show that the equipment under test (EUT) compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Tested by:	Demi Mu	May. 03, 2018
Reviewed by:	Blue Zheng	May. 03, 2018
Approved by:	Smith Chen	May. 03, 2018

1 General description

1.1 Feature of equipment under test (EUT)

Equipment:	MICROPHONE WIRELESS SYSTEM
Trade Name:	XVIVE
Model Name:	U3
Serial Model:	N/A
Model Difference:	N/A
Operation Frequency:	2400-2483.5MHz
Modulation Type:	GFSK
Antenna Tpye:	Helical antenna
Antenna Gain:	2 dBi
Max. Field Strength	78.83 dBuV/m
Power supply	DC 5V from AC adapter 120V/60Hz
Hardware Version:	V 0.52
Software Version:	V 0.52

1.2 Operation channel list

Channel	Frequency(MHz)		
1	2402	2480	2482
2	2408	2472	2474
3	2416	2464	2466
4	2434	2440	2442
5	2427	2448	2450
6	2422	2456	2458

1.3 Test Frequency Channel

Channel	Frequency(MHz)
Low	2402
Middle	2448
High	2482

1.4 EUT operation mode

During testing, RF test program provided by the manufacture to control the Tx operation followed the test requirement.

1.5 Ancillary equipment list

Equipment	Model	S/N	Manufacturer
microphone	SM58	/	/

2 Summary of Test Result

Test procedures according to the technical standards:

Item	FCC Part No.	Description of Test	Result
1	FCC Part15.203	Antenna Requirement	Pass
2	FCC Part15.207	AC power line conducted emission	Pass
3	FCC Part15.249(a)	Field strength of fundamental and harmonic emissions	Pass
4	FCC Part 15.215	20dB and 99% Bandwidth	Pass
5	FCC Part15.249(d)	Radiated spurious emission	Pass

3 Test Facilities and Accreditations

3.1 Test laboratory

Test Laboratory	Shenzhen Microtest Co., Ltd
Location	No.102A & 302A, East Block, Hengfang Industrial Park, Xingye Road, Xixiang, Bao'an District, Shenzhen, Guangdong, China
FCC Registration No.	448573

3.2 Environmental conditions

Temperature:	20ºC~30ºC
Humidity	30%~70%
Atmospheric pressure	98kPa~101kPa

3.3 Measurement uncertainty

The reported uncertainty of measurement y ± U，where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2，providing a level of confidence of approximately 95 %

RF frequency	1 x 10-7
RF power, conducted	± 1 dB
Conducted emission(150kHz~30MHz)	± 2.5 dB
Radiated emission(30MHz~1GHz)	± 4.2 dB
Radiated emission (above 1GHz)	± 4.3 dB
Temperature	±1 degree
Humidity	± 5 %

3.4 Test software

Software Name	Manufacturer	Model	Version
RF Test System	Farad	LZ-RF	Lz_Rf 3A3

4 List of test equipment

Equipment No.	Equipment Name	Manufacturer	Model	Serial No.	Calibration date	Due date
MTI-E001	Spectrum Analyzer	Agilent	E4407B	MY41441082	2017/09/18	2018/09/17
MTI-E002	CMU 200 universal radio communication tester	Rohde&schwarz	CMU 200	114587	2017/09/18	2018/09/17
MTI-E004	EMI Test Receiver	Rohde&schwarz	ESPI	1000314	2017/09/18	2018/09/17
MTI-E006	Broadband antenna	schwarabeck	VULB9163	872	2017/09/18	2018/09/17
MTI-E007	Horn antenna	schwarabeck	BBHA9120D	1201	2017/09/18	2018/09/17
MTI-E014	amplifier	America	8447D	3113A06150	2017/09/18	2018/09/17
MTI-E015	Conduction Immunity Signal Generator	Schloder	CDG6000	126A1343/2015	2017/09/18	2018/09/17
MTI-E016	Coupled decoupling network	Schloder	CDA M2/M3	A2210332/2015	2017/09/18	2018/09/17
MTI-E032	Comprehensive test instrument	Rohde&schwarz	CMW500	124192	2017/09/13	2018/09/12
MTI-E034	amplifier	Agilent	8449B	3008A02400	2017/08/22	2018/08/21
MTI-E040	Spectrum analyzer	Agilent	N9020A	MY49100060	2017/09/05	2018/09/04
MTI-E041	Signal generator	Agilent	N5182A	MY49060455	2017/09/23	2018/09/22
MTI-E042	Analog signal generator	Agilent	E4421B	GB40051240	2017/09/23	2018/09/22
MTI-E043	Power probe	Dare Instruments	RPR3006W	16I00054SNO16	2017/09/29	2018/09/28
MTI-E047	10dB attenuator	Mini-Circuits	UNAT-10+	15542	2017/09/24	2018/09/23
MTI-E049	spectrum analyzer	Rohde&schwarz	FSP-38	100019	2017/09/18	2018/09/17
MTI-E050	PSG Signal generator	Agilent	E8257D	MY46520873	2017/09/24	2018/09/23
MTI-E051	Active Loop Antenna 9kHz - 30MHz	Schwarzbeek	FMZB 1519 B	00044	201709/26	2018/09/25
MTI-E052	18-40GHz amplifier	Chengdu step Micro Technology	ZLNA-18-40G-21	1608001	2017/09/18	2018/09/17
MTI-E053	15-40G Antenna	Schwarzbeek	BBHA9170	BBHA9170582	2017/09/18	2018/09/17
Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).						

5 Test Result

5.1 Antenna requirement

5.1.1 Standard requirement

FCC PART 15.203 and 15.247(b);

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

5.1.2 EUT Antenna

The antenna is an Helical antenna, which was permanently affixed to the device and un-replaced, complies with 15.203. In addition, the maximum antenna gain is 2dBi.

5.2 AC power line conducted emission

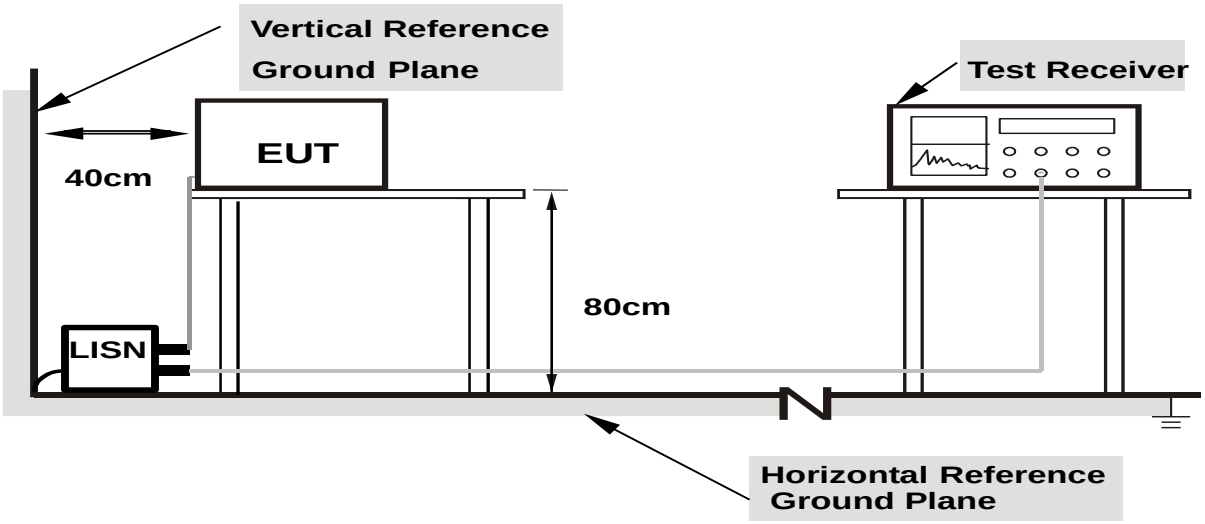
5.2.1 Limits

FCC §15.207;

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 note2	56 - 46 note2
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00
Note1: The tighter limit applies at the band edges. *Note2: The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.*		

5.2.2 Test setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

5.2.3 Test procedure

a. EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

b. The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

c. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

d. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

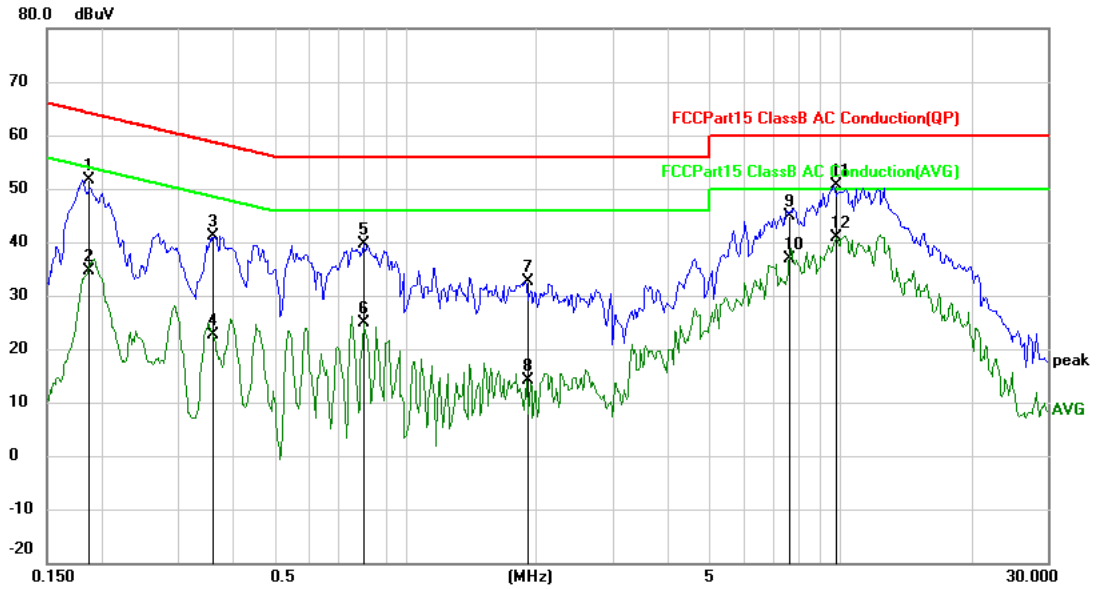
e. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

f. LISN at least 80 cm from nearest part of EUT chassis.

For the actual test configuration, please refer to the related Item –EUT Test Photos.

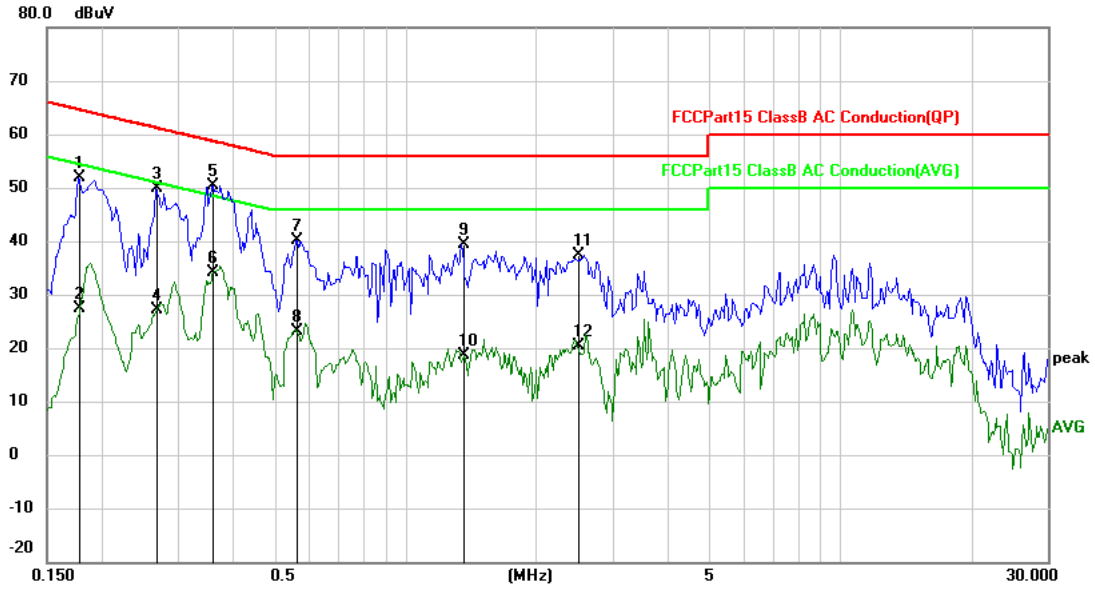
5.2.4 Test results

EUT：	MICROPHONE WIRELESS SYSTEM	Model Name. ：	U3
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase :	L
Test Voltage ：	DC 5V from AC adapter 120V/60Hz	Test Mode：	TX



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1864	50.04	1.57	51.61	64.20	-12.59	QP	
2		0.1864	33.06	1.57	34.63	54.20	-19.57	AVG	
3		0.3613	39.55	1.57	41.12	58.70	-17.58	QP	
4		0.3613	21.02	1.57	22.59	48.70	-26.11	AVG	
5		0.8023	38.01	1.57	39.58	56.00	-16.42	QP	
6		0.8023	23.22	1.57	24.79	46.00	-21.21	AVG	
7		1.9075	31.16	1.59	32.75	56.00	-23.25	QP	
8		1.9075	12.59	1.59	14.18	46.00	-31.82	AVG	
9		7.6463	44.59	0.38	44.97	60.00	-15.03	QP	
10		7.6463	36.58	0.38	36.96	50.00	-13.04	AVG	
11		9.7888	50.14	0.39	50.53	60.00	-9.47	QP	
12	*	9.7888	40.56	0.39	40.95	50.00	-9.05	AVG	

EUT：	MICROPHONE WIRELESS SYSTEM	Model Name. ：	U3
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase :	N
Test Voltage ：	DC 5V from AC adapter 120V/60Hz	Test Mode：	TX



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1785	50.24	1.57	51.81	64.56	-12.75	QP	
2		0.1785	25.88	1.57	27.45	54.56	-27.11	AVG	
3		0.2686	48.31	1.57	49.88	61.16	-11.28	QP	
4		0.2686	25.51	1.57	27.08	51.16	-24.08	AVG	
5	*	0.3613	48.85	1.57	50.42	58.70	-8.28	QP	
6		0.3613	32.45	1.57	34.02	48.70	-14.68	AVG	
7		0.5636	38.63	1.57	40.20	56.00	-15.80	QP	
8		0.5636	21.46	1.57	23.03	46.00	-22.97	AVG	
9		1.3608	37.73	1.58	39.31	56.00	-16.69	QP	
10		1.3608	17.13	1.58	18.71	46.00	-27.29	AVG	
11		2.4868	36.11	1.25	37.36	56.00	-18.64	QP	
12		2.4868	19.03	1.25	20.28	46.00	-25.72	AVG	

5.3 Field strength of fundamental and harmonic emissions

5.3.1 Limits

FCC §15.249(a);

The field strength of fundamental and harmonic emissions, measured at 3 m, shall not

exceed 50 mV/m and 0.5 mV/m respectively.

The field strength limits shall be measured using an average detector, except for the fundamental emission in the frequency band 902-928 MHz, which is based on measurements using an International Special Committee on Radio Interference (CISPR) quasi-peak detector

Frequency	Field Strength(dBuv/m)	Detector
Fundamental	114	PK
Fundamental	94	AV
Harmonic emissions	74	PK
Harmonic emissions	54	AV

5.3.2 Test Method

1. The EUT is placed on a turntable, which is 0.8m above ground plane for test frequency range blew 1GHz, and 1.5m above ground plane for test frequency range above 1GHz.

2. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.

3. Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured, RBW = 1 MHz for f ≥ 1GHz, 100 kHz for f < 1 GHz, VBW ≥ RBW, Sweep = auto, Detector function = peak, Trace = max hold

4. Follow the guidelines in ANSI C63.4-2014 with respect to maximizing the emission by rotating the EUT, adjusting the measurement antenna height and polarization, etc. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, submit this data. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

5. The peak level, once corrected, must comply with the limit specified in Section 15.209. Set the RBW = 1MHz, VBW = 10Hz, Detector = PK for AV value, while maintaining all of the other instrument settings.

5.3.3 Test Result

Transmitter channel: 2402MHz

Frequency	Ant. Polarization	Emission level	Limits	Detector	Result
(MHz)	H / V	dBμV/m	dBμV/m		
2402	V	78.83	114	PK	
2402	H	76.44	114	PK	
2402	V	62.62	94	AV	
2402	H	60.74	94	AV	
4804	V	40.86	74	PK	
4804	H	43.44	74	PK	

Transmitter channel: 2448MHz

Frequency	Ant. Polarization	Emission level	Limits	Detector	Result
(MHz)	H / V	dBμV/m	dBμV/m		
2448	V	77.54	114	PK	
2448	H	76.34	114	PK	
2448	V	61.52	94	AV	
2448	H	60.39	94	AV	
4896	V	38.96	74	PK	
4896	H	41.73	74	PK	

Transmitter channel: 2482MHz

Frequency	Ant. Polarization	Emission level	Limits	Detector	Result
(MHz)	H / V	dBμV/m	dBμV/m		
2482	V	78.17	114	PK	
2482	H	75.78	114	PK	
2482	V	62.32	94	AV	
2482	H	59.34	94	AV	
4964	V	40.09	74	PK	
4964	H	41.55	74	PK	

Note: If the PK measured values lower than average mode limit, the EUT shall be deemed to meet average limits and then no additional average mode measurement performed.

5.4 20dB and 99% bandwidth

5.4.1 Limits

FCC §15.215(c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, 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.

5.4.2 Test method

Use the following spectrum analyzer settings:

For 20 dB bandwidth

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel
RBW ≥1% of the 20 dB bandwidth
VBW ≥RBW
Sweep = auto
Detector function = peak
Trace = max hold

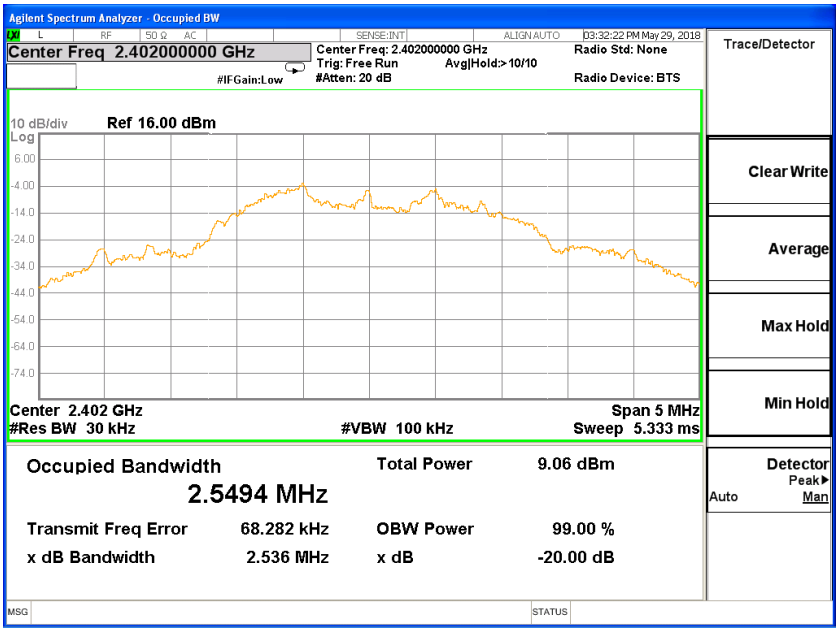
The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 20 dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 20 dB bandwidth and 99% occupied bandwidth of the emission

5.4.3 Test result

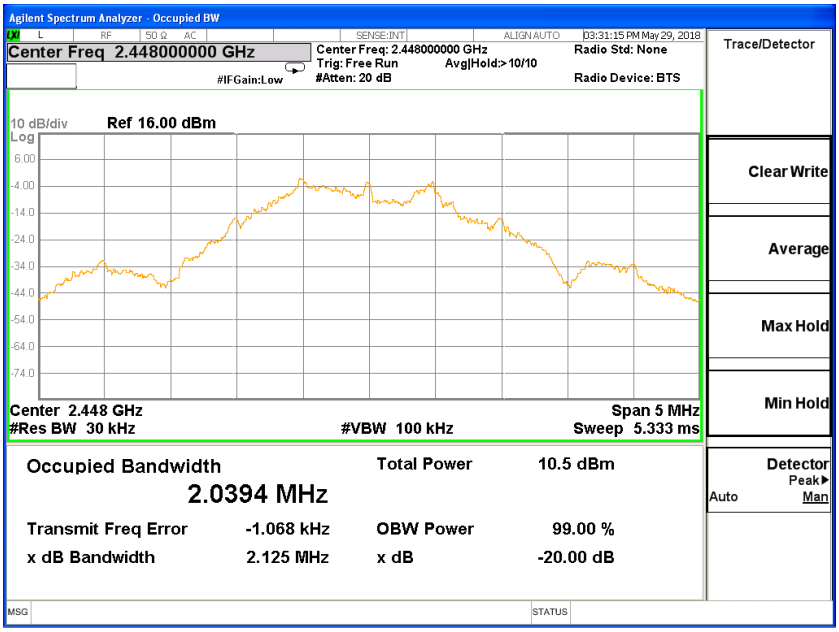
Frequency (MHz)	20dB bandwidth (MHz)
2402	2.536
2448	2.125
2482	2.337

Test plots

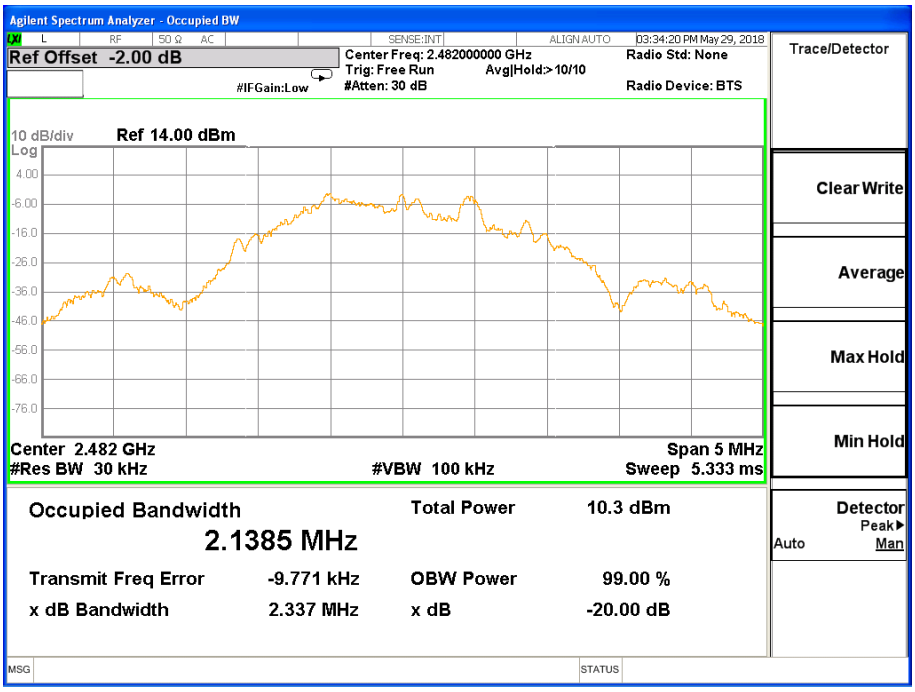
2402MHz



2448MHz



2482MHz


Agilent Spectrum Analyzer - Occupied BW
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
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Ref Offset -2.00 dB
#IFGain:Low
Center Freq: 2.482000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Trace/Detector
10 dB/div
Log
Ref 14.00 dBm
4.00
-6.00
-16.0
-26.0
-36.0
-46.0
-56.0
-66.0
-76.0
Center 2.482 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 5 MHz
Sweep 5.333 ms
Occupied Bandwidth
2.1385 MHz
Total Power 10.3 dBm
Transmit Freq Error -9.771 kHz
OBW Power 99.00 %
x dB Bandwidth 2.337 MHz
x dB -20.00 dB
Clear Write
Average
Max Hold
Min Hold
Detector
Peak
Auto
Man
MSG
STATUS

5.5 Radiated spurious emission

5.5.1 Limit

FCC PART 15.249(a);

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Frequency (MHz)	Field Strength of Fundamental (mV/m)	Field Strength of Harmonics (μV/m)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
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

5.5.2 Test method

a) The EUT is placed on a turntable, which is 0.8m above ground plane for test frequency range blew 1GHz, and 1.5m above ground plane for test frequency range above 1GHz.

b) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.

c) Use the following spectrum analyzer settings:

   1) Span = wide enough to fully capture the emission being measured

   2) RBW = 1 MHz for f ≥ 1GHz, 100 kHz for f < 1 GHz

   3) VBW ≥ RBW, Sweep = auto

   4) Detector function = peak

   5) Trace = max hold

d) Follow the guidelines in ANSI C63.4-2014 with respect to maximizing the emission by rotating the EUT, adjusting the measurement antenna height and polarization, etc. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, submit this data. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

e) The peak level, once corrected, must comply with the limit specified in Section 15.209. Set the RBW = 1MHz, VBW = 10Hz, Detector = PK for AV value, while maintaining all of the other instrument settings.

5.5.3 Test Result

Note: If the PK measured values lower than average mode limit, the EUT shall be deemed to meet average limits and then no additional average mode measurement performed.

Below 30MHz

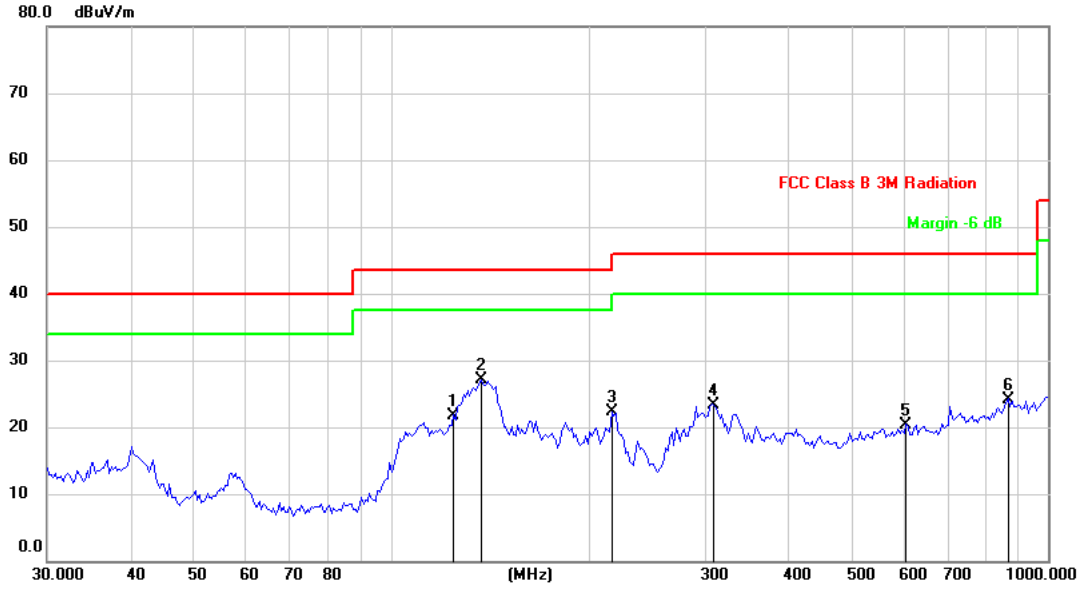
EUT：	MICROPHONE WIRELESS SYSTEM	Model Name. ：	U3
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage：	DC 5V from AC adapter 120V/60Hz
Test Mode：	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	Pass
--	--	--	--	Pass

Note:
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuV) + distance extrapolation factor.

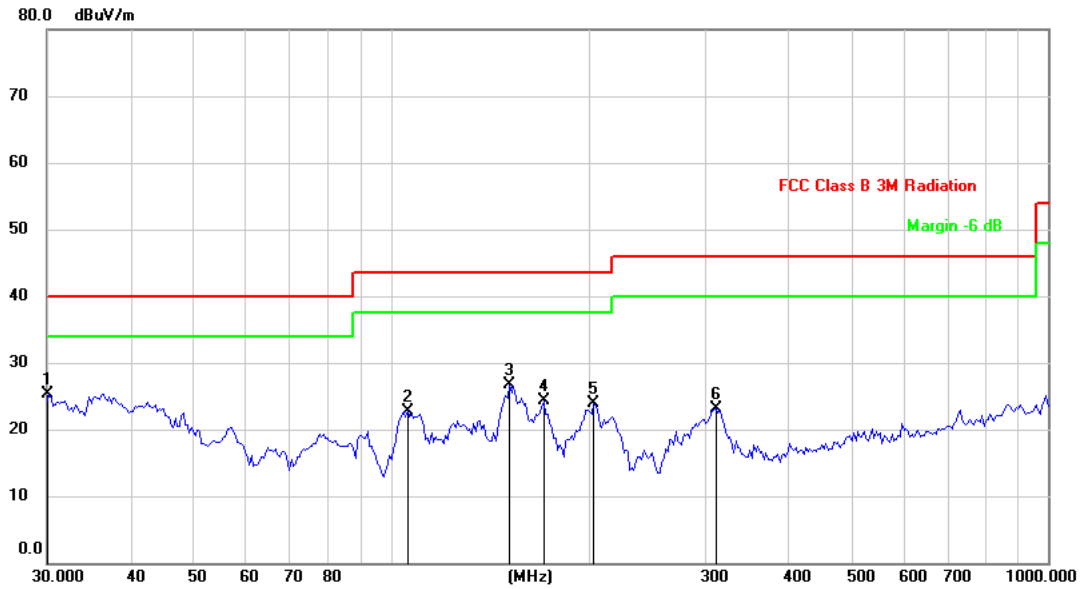
Radiation (30MHz – 1GHz)

EUT：	MICROPHONE WIRELESS SYSTEM	Model Name. ：	U3
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Polarziation:	H
Test Voltage ：	DC 5V from AC adapter 120V/60Hz	Test Mode：	Normal work



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		124.5690	35.18	-13.38	21.80	43.50	-21.70	QP			
2	*	137.4202	40.58	-13.48	27.10	43.50	-16.40	QP			
3		216.7828	36.71	-14.41	22.30	46.00	-23.70	QP			
4		307.8313	34.70	-11.30	23.40	46.00	-22.60	QP			
5		607.7867	27.08	-6.68	20.40	46.00	-25.60	QP			
6		869.1302	27.52	-3.32	24.20	46.00	-21.80	QP			

EUT：	MICROPHONE WIRELESS SYSTEM	Model Name. ：	U3
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Polarziation:	V
Test Voltage ：	DC 5V from AC adapter 120V/60Hz	Test Mode：	Normal work



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	30.2108	37.17	-11.87	25.30	40.00	-14.70	QP			
2		106.0126	37.70	-14.90	22.80	43.50	-20.70	QP			
3		151.5971	41.46	-14.76	26.70	43.50	-16.80	QP			
4		170.7923	39.65	-15.35	24.30	43.50	-19.20	QP			
5		203.5226	38.61	-14.71	23.90	43.50	-19.60	QP			
6		312.1792	33.17	-10.07	23.10	46.00	-22.90	QP			

Above 1GHz:

Low Channel (2402 MHz)

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
H	4332	43.65	-4.49	39.16	74	-34.84	Peak
H	7120	40.49	-2.84	37.65	74	-36.35	Peak
H	8361	42.8	-1.94	40.86	74	-33.14	Peak
H	10673	38.17	2.28	40.45	74	-33.55	Peak
H	13682	35.74	5.17	40.91	74	-33.09	Peak
H	14277	37.81	5.57	43.38	74	-30.62	Peak

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
V	2955	49.34	-6.96	42.38	74	-31.62	Peak
V	4808	50.34	-8.93	41.41	74	-32.59	Peak
V	8038	42.79	-3.6	39.19	74	-34.81	Peak
V	10010	40.92	-0.21	40.71	74	-33.29	Peak
V	11948	41.48	0.26	41.74	74	-32.26	Peak
V	14294	38.04	5.4	43.44	74	-30.56	Peak

Mid Channel (2448 MHz)

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
H	4893	52.27	-7.67	44.6	74	-29.4	Peak
H	7885	41.55	-2.06	39.49	74	-34.51	Peak
H	9993	37.87	1.87	39.74	74	-34.26	Peak
H	11931	38.56	2.46	41.02	74	-32.98	Peak
H	13869	36.13	5.81	41.94	74	-32.06	Peak
H	14328	38.65	5.44	44.09	74	-29.91	Peak

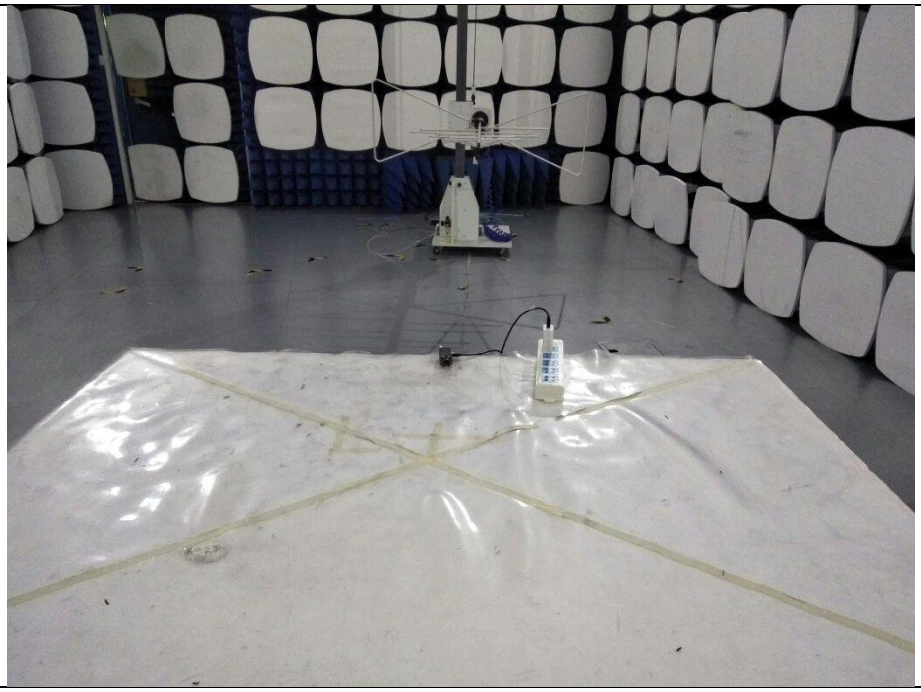
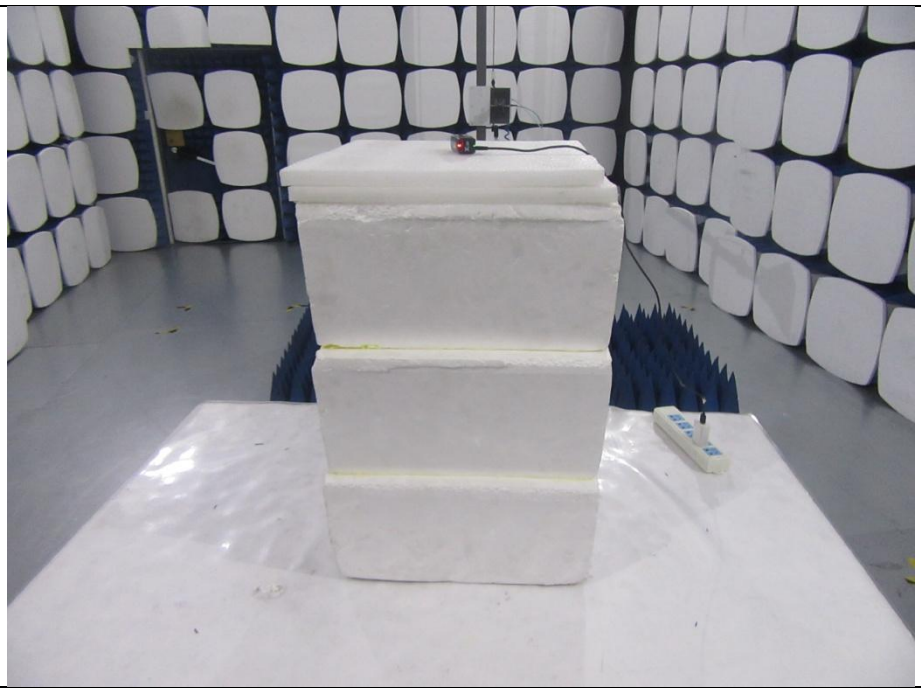
Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
V	4893	51.45	-9.39	42.06	74	-31.94	Peak
V	7902	43.21	-3.78	39.43	74	-34.57	Peak
V	9772	42.01	-0.71	41.3	74	-32.7	Peak
V	10571	40.59	0.23	40.82	74	-33.18	Peak
V	11591	40.05	0.37	40.42	74	-33.58	Peak
V	14073	37.79	5.75	43.54	74	-30.46	Peak

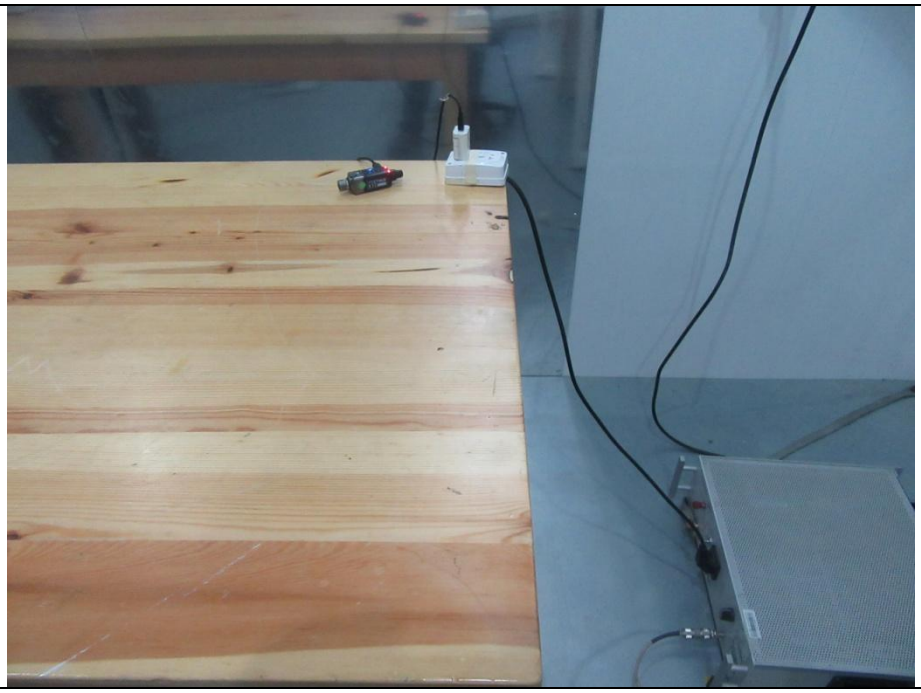
High Channel (2482 MHz)

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H	4978	53.91	-8.16	45.75	74	-28.25	Peak
H	6321	42.1	-4.89	37.21	74	-36.79	Peak
H	7443	47.95	-2.74	45.21	74	-28.79	Peak
H	9755	39.54	1.14	40.68	74	-33.32	Peak
H	12152	38.93	2.61	41.54	74	-32.46	Peak
H	14209	37.76	5.74	43.5	74	-30.5	Peak

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	4978	58.48	-9.86	48.62	74	-25.38	Peak
V	7103	42.73	-4.68	38.05	74	-35.95	Peak
V	8055	43.72	-3.58	40.14	74	-33.86	Peak
V	11387	40.15	0.37	40.52	74	-33.48	Peak
V	12696	39.91	1.16	41.07	74	-32.93	Peak
V	13903	37.67	5.4	43.07	74	-30.93	Peak

Photographs of the Test Setup

Radiated emission – below 1GHz

Radiated emission – above 1GHz


Conducted emission


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