RADIO TEST REPORT
FCC ID: 2AJ3O-U3C

Product：	CONDENSER MICROPHONE WIRELESS SYSTEM
Trade Mark：	
Model Name：	U3C
Family Model：	N/A
Report No.：	S19042603901001

Prepared for

SHENZHEN FZONE TECHNOLOGY CO.,LTD

2nd floor, Building12, Xicheng Industrial Area, Xixiang Town, Baoan District, Shenzhen, Guangdong,China

Prepared by

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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
Manufacturer's Name..... :	SHENZHEN FZONE TECHNOLOGY CO.,LTD
Address ..... :	2nd floor, Building12, Xicheng Industrial Area, Xixiang Town, Baoan District, Shenzhen, Guangdong,China
Product description	
Product name..... :	CONDENSER MICROPHONE WIRELESS SYSTEM
Model and/or type reference :	U3C
Family Model :	N/A
Rating(s)..... :	DC 3.7V powered by Battery or DC 5V powered by USB port
Standards ..... :	FCC Part15.249
Test procedure	ANSI C63.10-2013

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

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Date of Test ..... :	
Date (s) of performance of tests..... :	20 Jun. 2019 ~ 15 Jul. 2019
Date of Issue..... :	23 Jul. 2019
Test Result..... :	**Pass**

Testing Engineer : Mary Hu

(Mary Hu)

Technical Manager : Jason Chen

(Jason Chen)

Authorized Signatory : Sam Chen

(Sam Chen)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.249)			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	Pass	
15.203	Antenna Requirement	Pass	
15.249 15.209	Radiated Spurious Emission	Pass	
15.249(2)	Frequency Tolerance	Pass	
15.249(a)	Fundamental Measurement	Pass	
15.205	Band Edge Emission	Pass	
15.249	Occupied Bandwidth	Pass	

1.1 TEST FACILITY

Shenzhen NTEK Testing Technology Co., Ltd
Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.
FCC FRN Registration No.:463705; IC Registration No.:9270A-1
CNAS Registration No.:L5516

1.2 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** %。

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	CONDENSER MICROPHONE WIRELESS SYSTEM
Trade Mark	Xvive
Model Name	U3C
Family Model	N/A
Model Difference	N/A
Product Description	The EUT is a CONDENSER MICROPHONE WIRELESS SYSTEM Operation Frequency: 2402MHz-2482MHz Modulation Type: FSK Antenna Designation: Metal Antenna Antenna Gain(Peak) 2 dBi Based on the application, features, or specification exhibited in User's Manual. More details of EUT technical specification, please refer to the User's Manual.
Channel List	Please refer to the Note 2.
Adapter	N/A
Battery	DC 3.7V powered by Battery or DC 5V powered by USB port
HW Version	N/A
SW Version	N/A

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel No.	Frequency	Frequency	Frequency
1	2402MHz	2480MHz	2482MHz
2	2408MHz	2472MHz	2474MHz
3	2416MHz	2464MHz	2466MHz
4	2434MHz	2440MHz	2442MHz
5	2427MHz	2448MHz	2450MHz
6	2422MHz	2456MHz	2458MHz

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	Metal Antenna	N/A	2	Antenna

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX 2402MHz
Mode 2	TX 2448MHz
Mode 3	TX 2482MHz

For Radiated Spurious Emission	
Pretest Mode	Description
Mode 1	TX 2402MHz
Mode 2	TX 2448MHz
Mode 3	TX 2482MHz

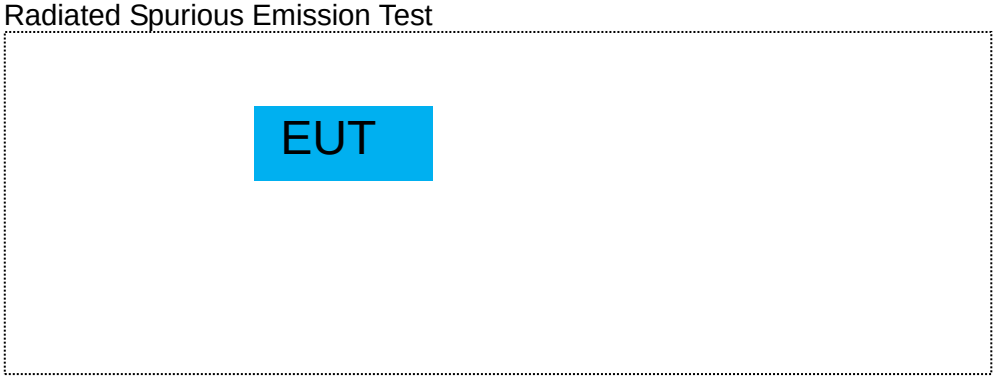
For Conducted Emission	
Final Test Mode	Description
Mode 1	TX 2402MHz
Mode 2	TX 2448MHz
Mode 3	TX 2482MHz

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note

Item	Cable Type	Shielded Type	Ferrite Core	Length	Note

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Aglient	E4407B	MY45108040	2019.05.13	2020.05.12	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2018.10.08	2019.10.07	1 year
3	EMI Test Receiver	Agilent	N9038A	MY53227146	2018.10.08	2019.10.07	1 year
4	Test Receiver	R&S	ESPI	101318	2019.05.13	2020.05.12	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2019.04.15	2020.04.14	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2018.05.19	2020.05.18	1 year
7	Horn Antenna	EM	EM-AH-10180	2011071402	2019.04.15	2020.04.14	1 year
8	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2018.12.11	2019.12.10	1 year
9	Amplifier	EMC	EMC051835SE	980246	2018.08.05	2019.08.04	1 year
10	Amplifier	MITEQ	TTA1840-35-HG	177156	2018.12.11	2019.12.10	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	2018.08.05	2019.08.04	1 year
12	Power Meter	DARE	RPR3006W	15I00041SNO84	2017.04.21	2020.04.20	1 year
13	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2017.04.21	2020.04.20	3 year
14	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2017.04.21	2020.04.20	3 year
15	High Test Cable(1G-40 GHz)	N/A	R-03	N/A	2017.04.21	2020.04.20	3 year
16	High Test Cable(1G-40 GHz)	N/A	R-04	N/A	2017.04.19	2020.04.18	3 year
17	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:
We will use the temporary antenna connector (soldered on the PCB board) When conducted test
And this temporary antenna connector is listed within the instrument list

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2019.05.13	2020.05.12	1 year
2	LISN	R&S	ENV216	101313	2018.10.08	2019.10.07	1 year
3	LISN	SCHWARZBECK	NNLK 8129	8129245	2019.05.13	2020.05.12	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2018.05.19	2020.05.18	1 year
5	Test Cable (9KHz-30MHz)	N/A	C01	N/A	2017.04.21	2020.04.20	3 year
6	Test Cable (9KHz-30MHz)	N/A	C02	N/A	2017.04.21	2020.04.20	3 year
7	Test Cable (9KHz-30MHz)	N/A	C03	N/A	2017.04.21	2020.04.20	3 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable which is scheduled for calibration every 3 years.

3. ANTENNA REQUIREMENT

3.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

3.2 EUT ANTENNA

The EUT antenna is permanent attached Metal antenna(Gain:2dBi). It comply with the standard requirement.

3.3 CONDUCTED EMISSION MEASUREMENT

3.3.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56*	56-46*
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. *Decreases with the logarithm of the frequency
2. The lower limit shall apply at the transition frequencies
3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

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

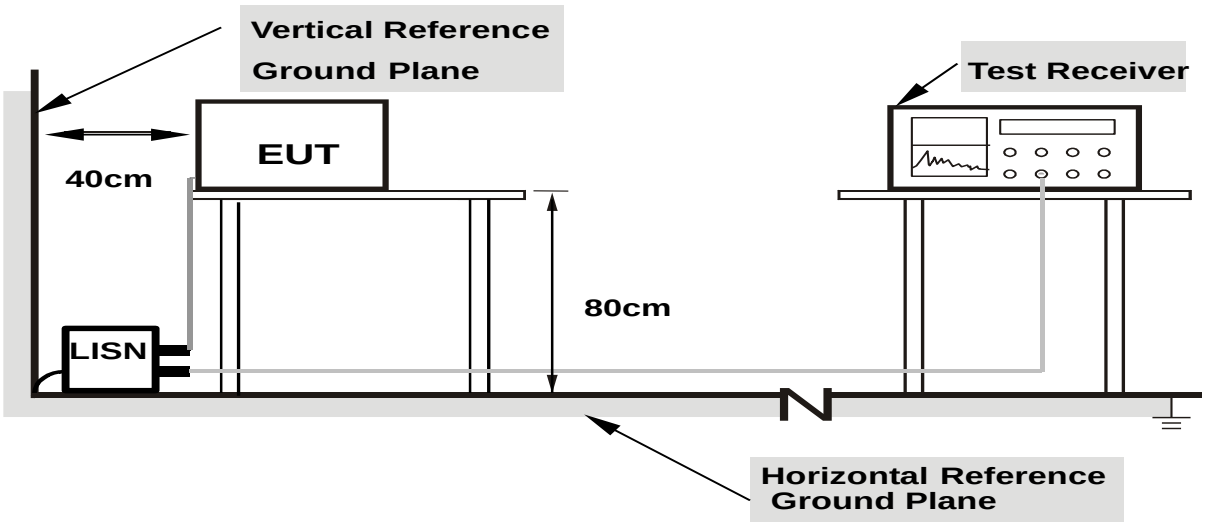
3.3.2 TEST PROCEDURE

a. The EUT was placed 0.4 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.
b. 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.
c. 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.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 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

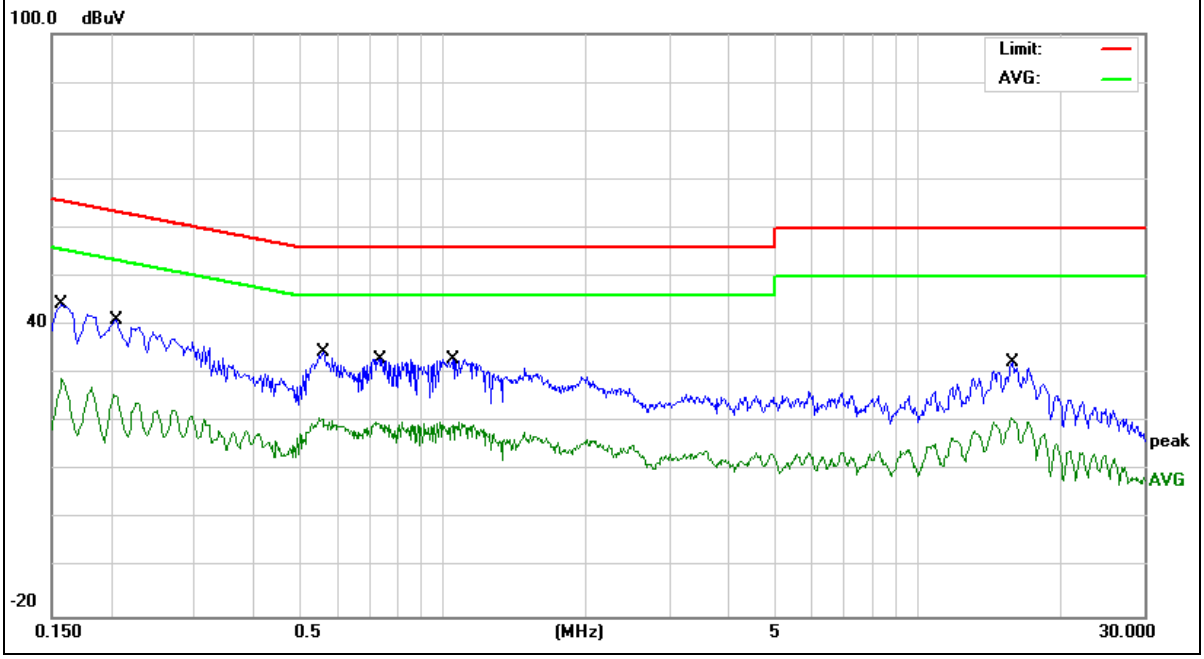
3.2.5 TEST RESULT

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	DC 5V from Adapter AC 120V/60Hz	Test Mode：	Mode 1

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1580	34.45	9.75	44.20	65.56	-21.36	QP
0.1580	19.20	9.75	28.95	55.56	-26.61	AVG
0.2058	31.33	9.76	41.09	63.37	-22.28	QP
0.2058	15.92	9.76	25.68	53.37	-27.69	AVG
0.5620	24.83	9.74	34.57	56.00	-21.43	QP
0.5620	11.18	9.74	20.92	46.00	-25.08	AVG
0.7378	23.25	9.74	32.99	56.00	-23.01	QP
0.7378	10.38	9.74	20.12	46.00	-25.88	AVG
1.0540	23.23	9.74	32.97	56.00	-23.03	QP
1.0540	10.25	9.74	19.99	46.00	-26.01	AVG
15.8178	22.18	10.12	32.30	60.00	-27.70	QP
15.8178	10.88	10.12	21.00	50.00	-29.00	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

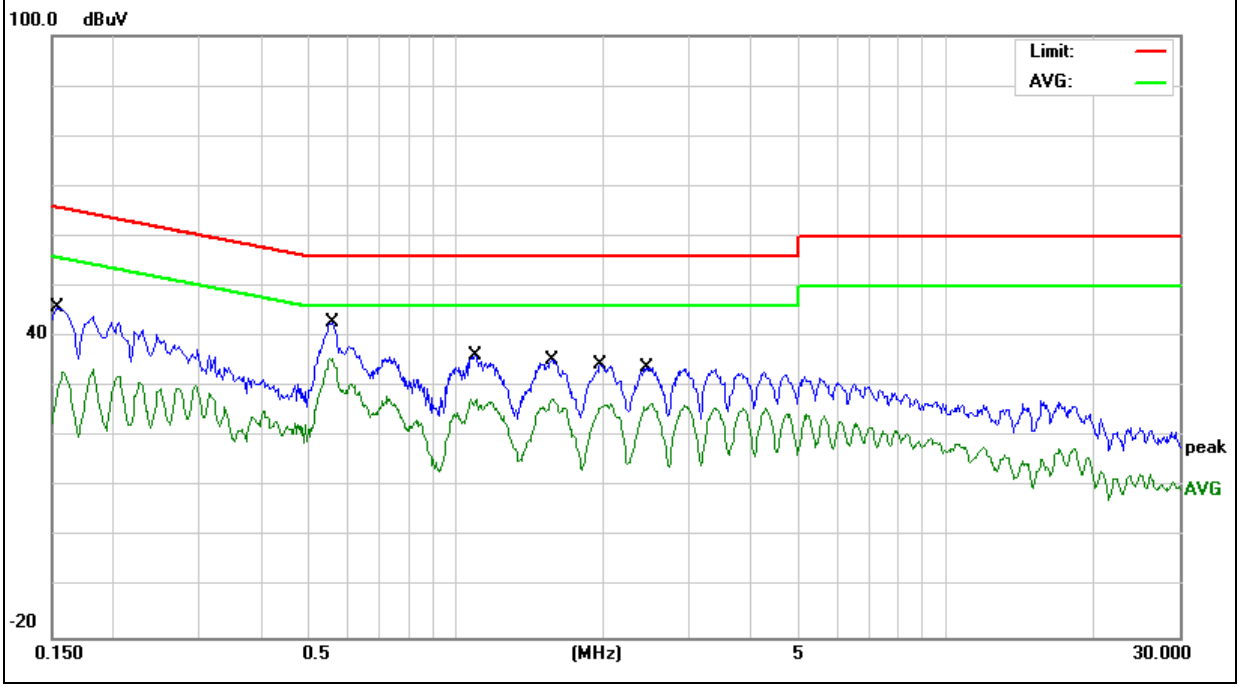


EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	DC 5V from Adapter AC 120V/60Hz	Test Mode：	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1539	35.98	9.74	45.72	65.78	-20.06	QP
0.1539	23.80	9.74	33.54	55.78	-22.24	AVG
0.5620	33.16	9.75	42.91	56.00	-13.09	QP
0.5620	25.92	9.75	35.67	46.00	-10.33	AVG
1.0980	26.41	9.75	36.16	56.00	-19.84	QP
1.0980	17.83	9.75	27.58	46.00	-18.42	AVG
1.5740	25.62	9.78	35.40	56.00	-20.60	QP
1.5740	17.85	9.78	27.63	46.00	-18.37	AVG
1.9899	24.37	9.79	34.16	56.00	-21.84	QP
1.9899	16.95	9.79	26.74	46.00	-19.26	AVG
2.4580	24.17	9.82	33.99	56.00	-22.01	QP
2.4580	16.87	9.82	26.69	46.00	-19.31	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

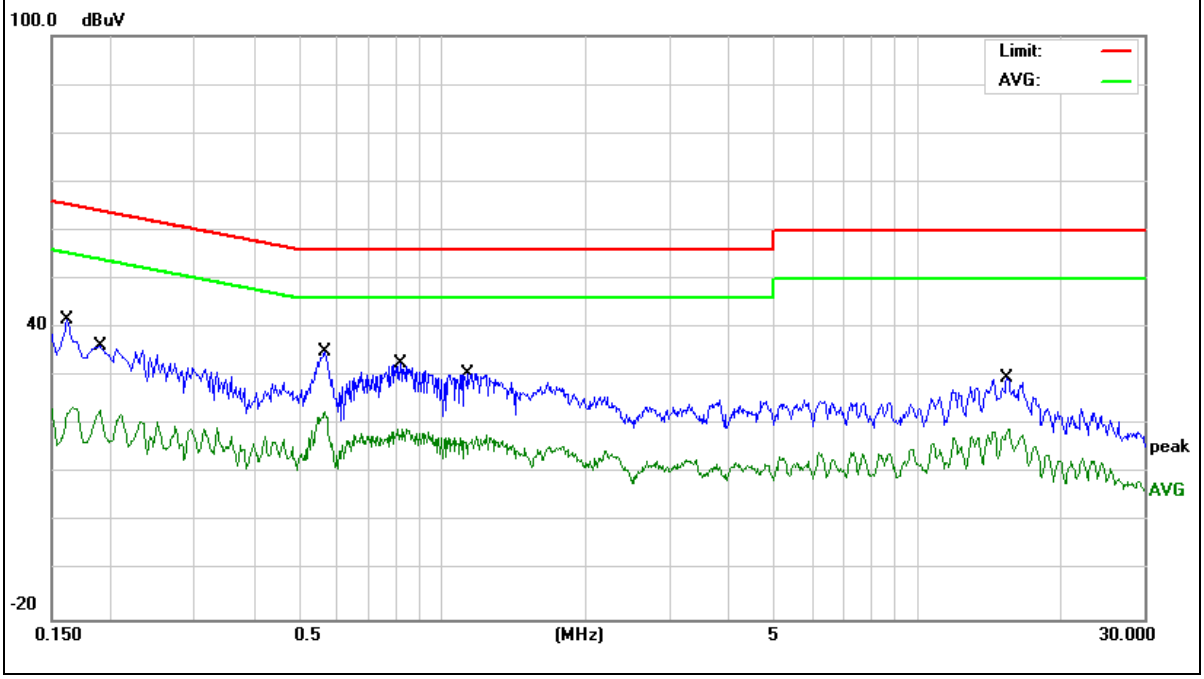


EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	DC 5V from Adapter AC 240V/60Hz	Test Mode：	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1620	31.99	9.76	41.75	65.36	-23.61	QP
0.1620	13.78	9.76	23.54	55.36	-31.82	AVG
0.1901	26.10	9.76	35.86	64.03	-28.17	QP
0.1901	13.19	9.76	22.95	54.03	-31.08	AVG
0.5658	25.28	9.74	35.02	56.00	-20.98	QP
0.5658	13.15	9.74	22.89	46.00	-23.11	AVG
0.8138	22.93	9.74	32.67	56.00	-23.33	QP
0.8138	9.49	9.74	19.23	46.00	-26.77	AVG
1.1338	20.81	9.74	30.55	56.00	-25.45	QP
1.1338	7.81	9.74	17.55	46.00	-28.45	AVG
15.4497	19.69	10.11	29.80	60.00	-30.20	QP
15.4497	9.07	10.11	19.18	50.00	-30.82	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

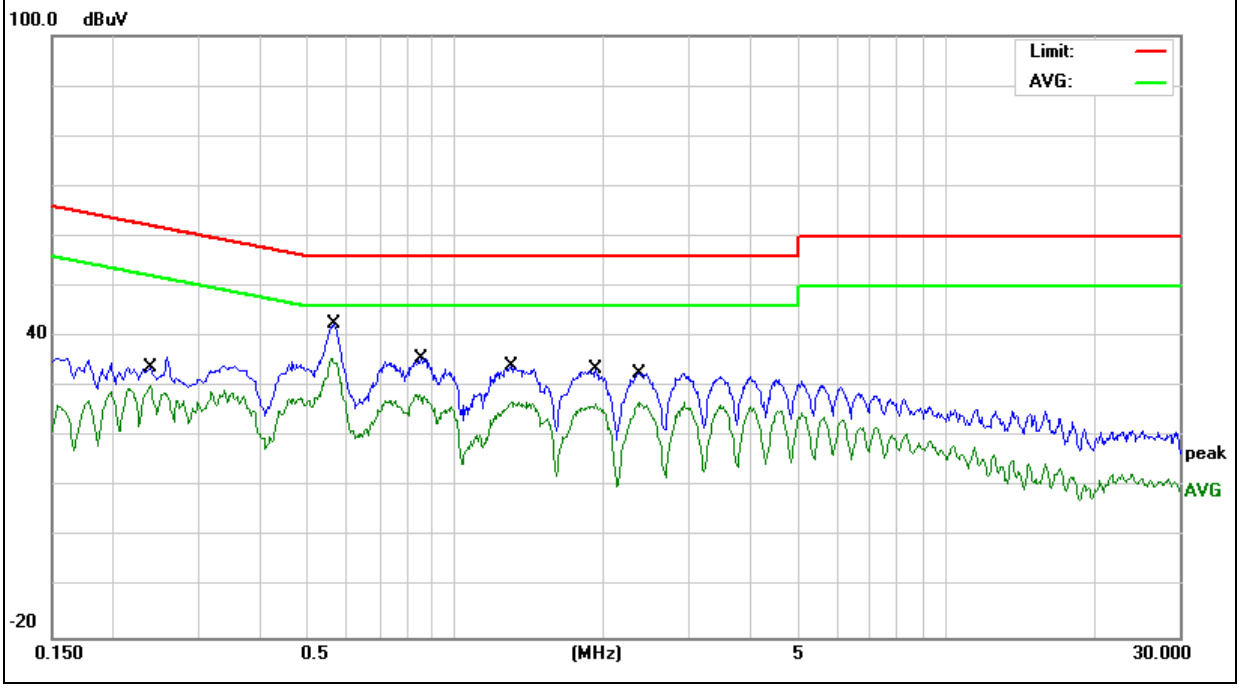


EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	DC 5V from Adapter AC 240V/60Hz	Test Mode：	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.2380	26.33	9.74	36.07	62.16	-26.09	QP
0.2380	20.39	9.74	30.13	52.16	-22.03	AVG
0.5660	32.67	9.75	42.42	56.00	-13.58	QP
0.5660	25.95	9.75	35.70	46.00	-10.30	AVG
0.8500	25.91	9.75	35.66	56.00	-20.34	QP
0.8500	18.72	9.75	28.47	46.00	-17.53	AVG
1.3020	24.37	9.76	34.13	56.00	-21.87	QP
1.3020	17.12	9.76	26.88	46.00	-19.12	AVG
1.9380	23.91	9.79	33.70	56.00	-22.30	QP
1.9380	16.86	9.79	26.65	46.00	-19.35	AVG
2.3620	22.94	9.81	32.75	56.00	-23.25	QP
2.3620	17.02	9.81	26.83	46.00	-19.17	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.4 RADIATED EMISSION MEASUREMENT

3.4.1 Radiated Emission Limits (FCC 15.209)

Frequencies (MHz)	Field Strength (micorvolts/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
Frequency (MHz)	Limit (dBuV)	
30~88	40	3
88~216	43.5	3
216~960	46	3
960 -10000	54.00	3
*902 - 928	94.00	3

Note:

(1) The tighter limit applies at the band edges.

(2) Emission level (dBuV/m)=20log Emission level (uV/m).

(3) *Note: This is the limit for the fundamental frequency.

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.249)

Frequency of Emission (MHz)	Field Strength of fundamental ((millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
2400-2483.5	50	500

Notes:

(1) 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 Section 15.209, whichever is the lesser attenuation.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.4.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

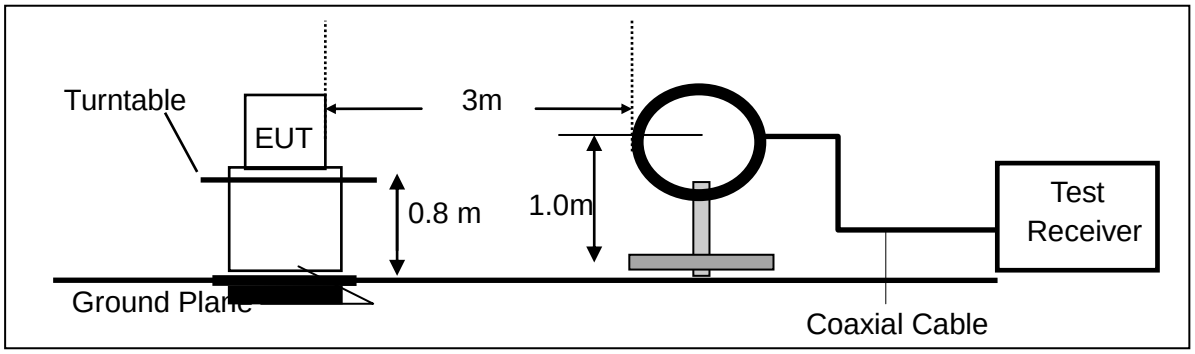
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.4.3 DEVIATION FROM TEST STANDARD

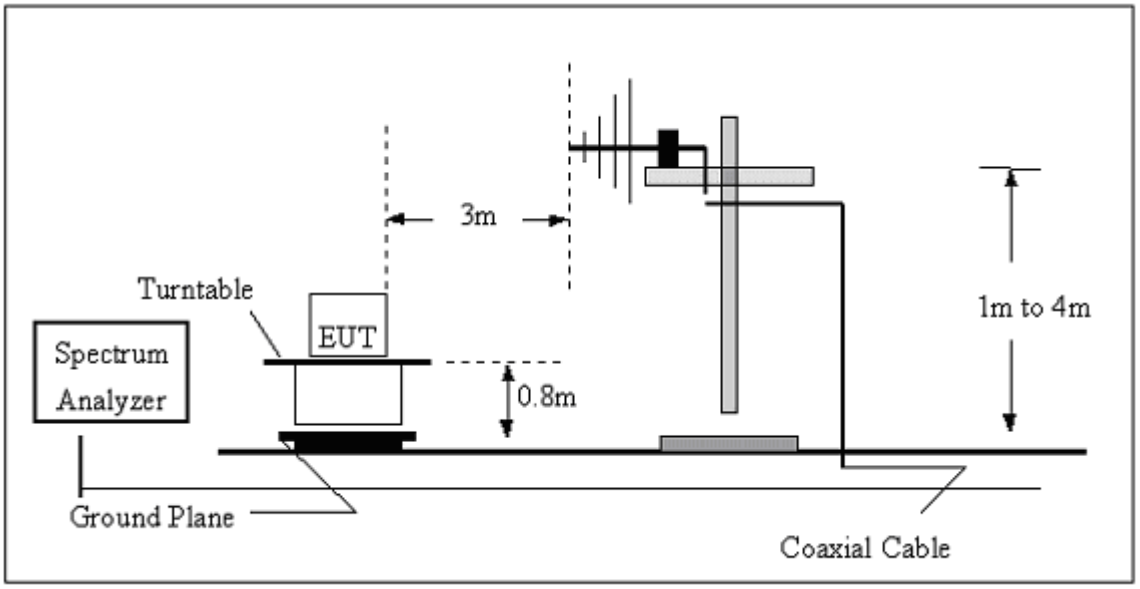
No deviation

（A）Radiated Emission Test-Up Frequency Below 30MHz

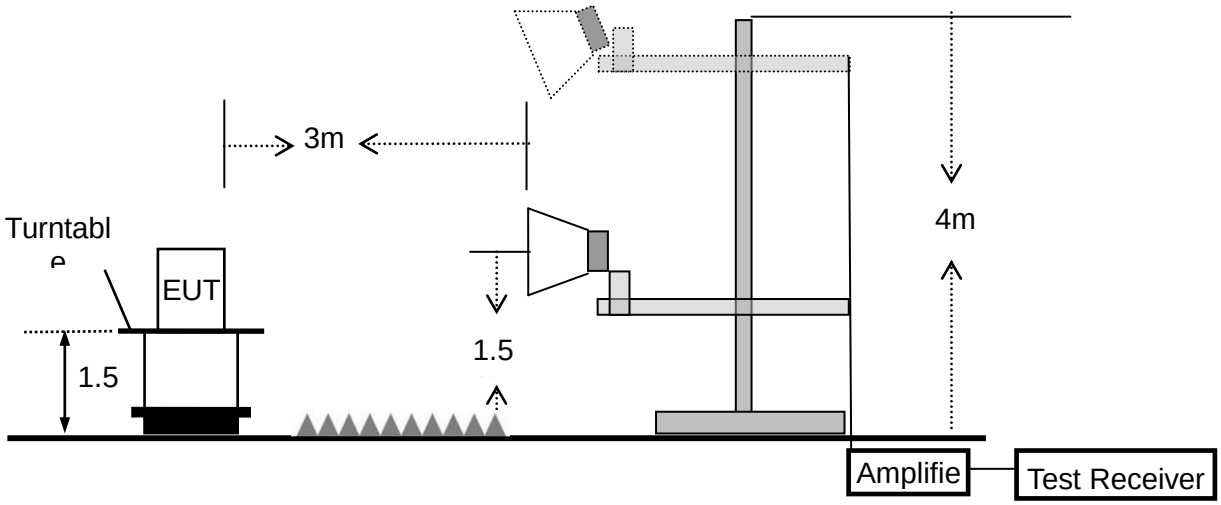
(a)



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.4.4 TEST RESULTS (BELOW 30MHz)

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name. ：	U3C
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
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.

Remark:1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

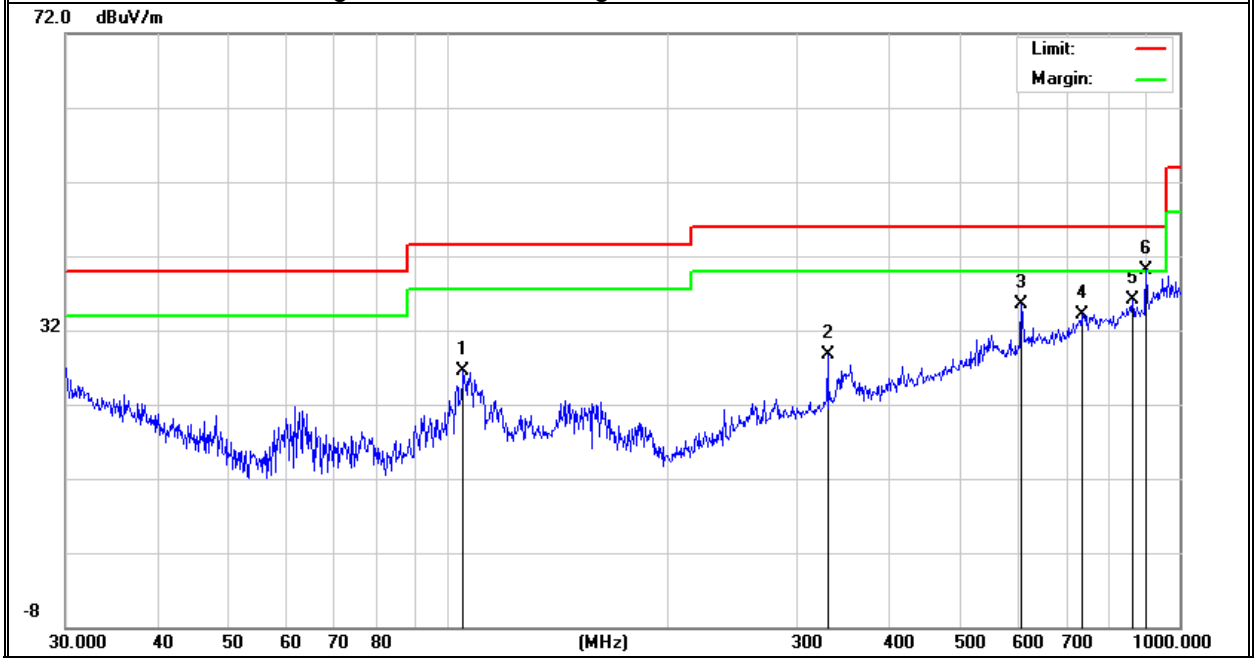
3. For Frequency 9kHz~30MHz:
Distance extrapolation factor =40log(Specific distance/ test distance)(dB);
Limit line=Specific limits(dBuV) + distance extrapolation factor.
For Frequency above 30MHz:
Distance extrapolation factor =20log(Specific distance/ test distance)(dB);
Limit line=Specific limits(dBuV) + distance extrapolation factor.

3.4.5 TEST RESULTS (BELOW 1000 MHz)

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	Model 1	Polarization：	Vertical

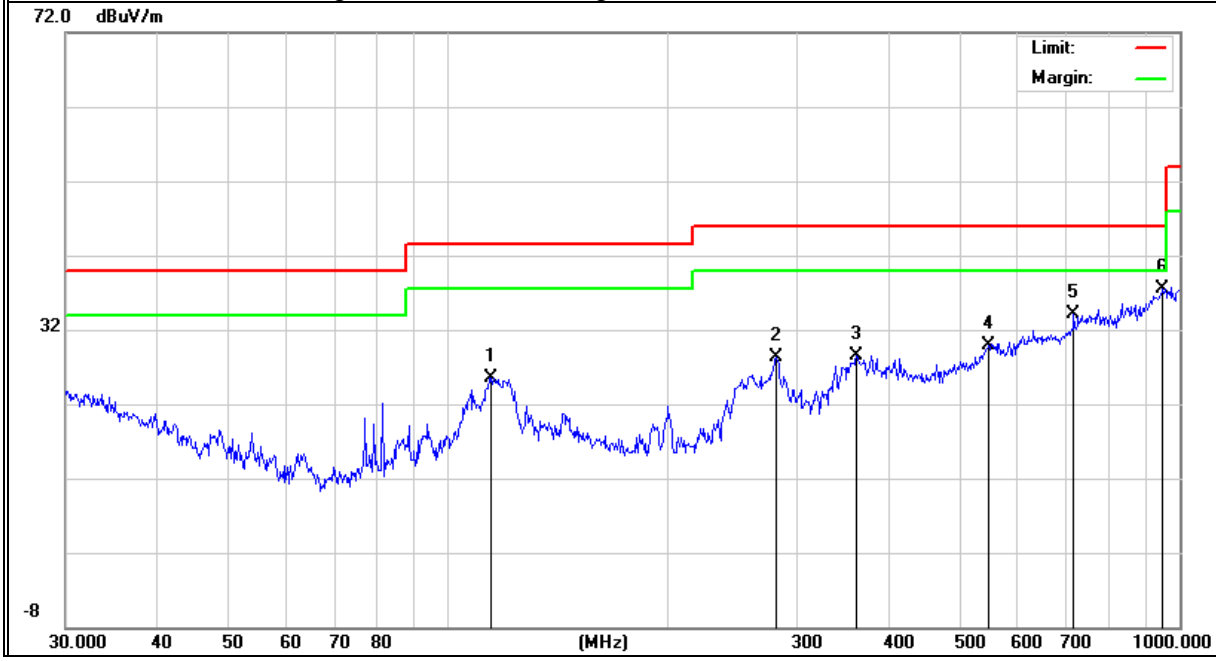
Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	104.9033	14.42	12.12	26.54	43.50	-16.96	QP
V	330.1949	11.95	16.79	28.74	46.00	-17.26	QP
V	607.7866	11.19	24.36	35.55	46.00	-10.45	QP
V	734.4913	6.60	27.43	34.03	46.00	-11.97	QP
V	863.0561	7.35	28.67	36.02	46.00	-9.98	QP
V	900.1473	11.27	28.92	40.19	46.00	-5.81	QP

Remark:
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
H	114.5146	12.46	13.14	25.60	43.50	-17.90	QP
H	281.0075	11.35	17.00	28.35	46.00	-17.65	QP
H	361.7139	10.66	17.89	28.55	46.00	-17.45	QP
H	549.0195	5.45	24.49	29.94	46.00	-16.06	QP
H	716.6820	7.74	26.32	34.06	46.00	-11.94	QP
H	948.7608	6.43	31.09	37.52	46.00	-8.48	QP

Remark:
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit

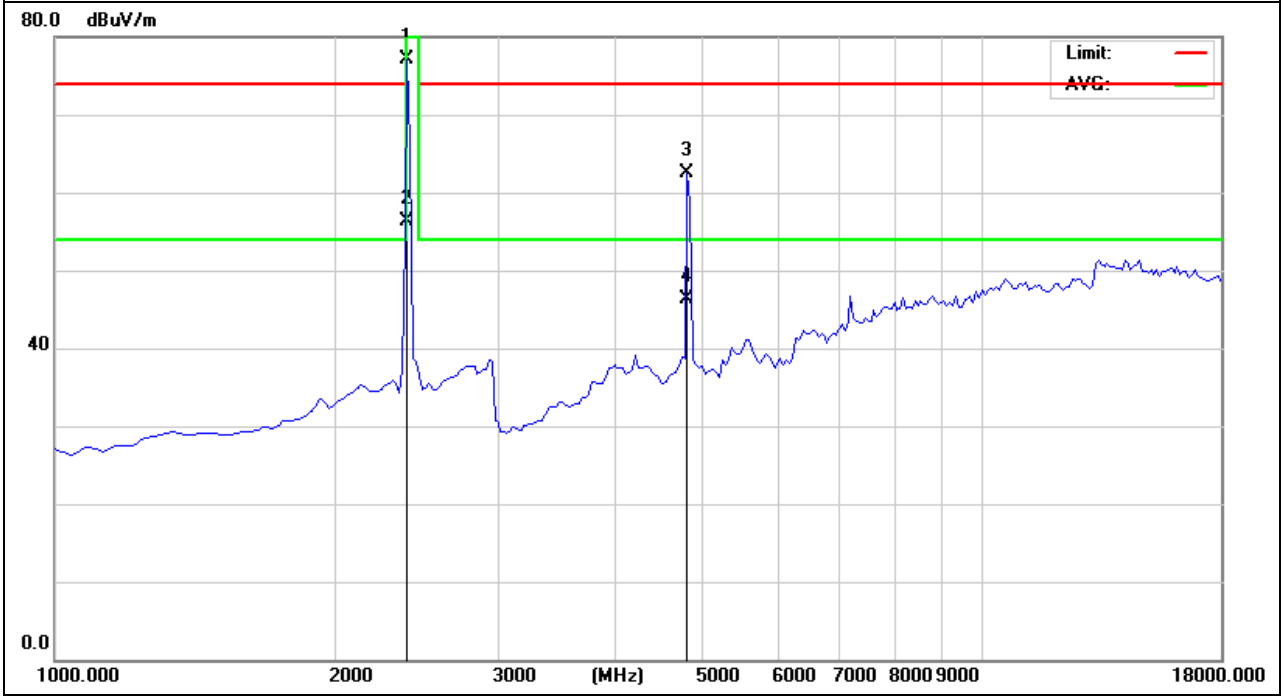


3.4.6 TEST RESULTS (ABOVE 1000 MHZ)

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2402MHz	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2402.125	81.63	-4.59	77.04	114.0	-36.96	peak
2402.125	60.95	-4.59	56.36	94.00	-37.64	AVG
4825.000	56.36	6.20	62.56	74.00	-11.44	peak
4825.000	40.14	6.20	46.34	54.00	-7.66	AVG

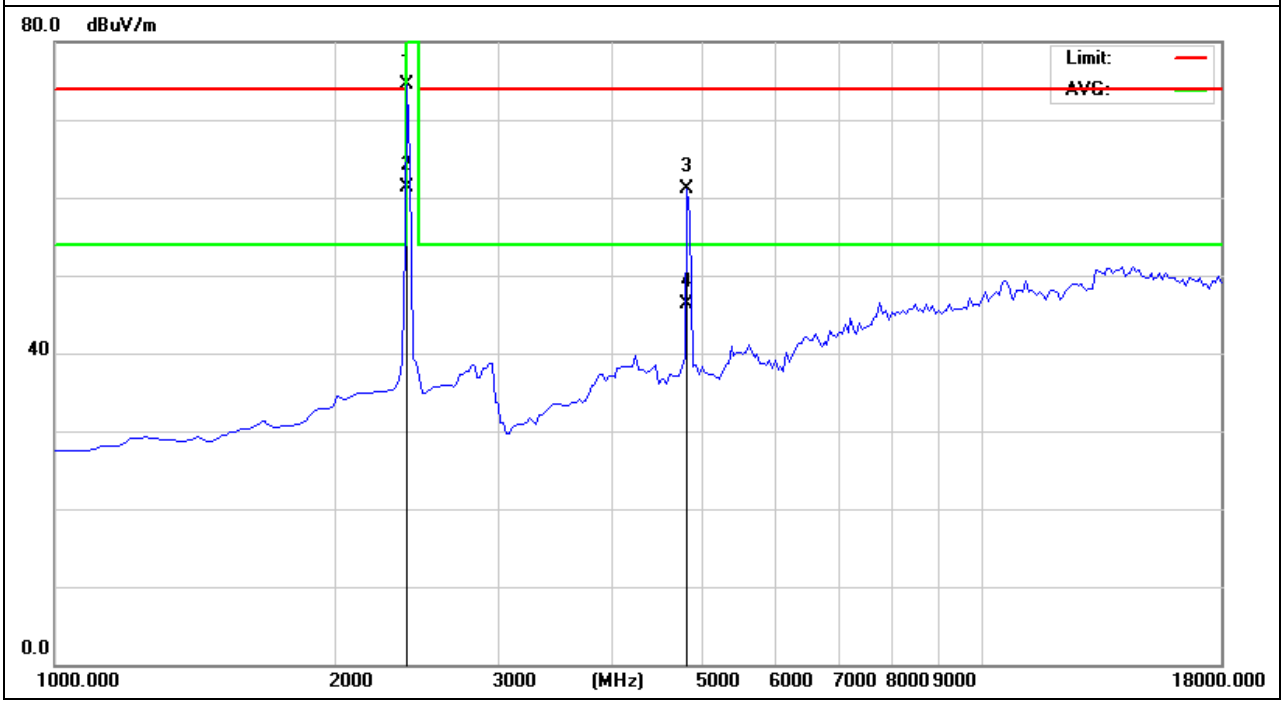
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2402MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2402.125	79.14	-4.59	74.55	114.0	-39.45	peak
2402.125	65.82	-4.59	61.23	94.00	-32.77	AVG
4825.000	54.96	6.20	61.16	74.00	-12.84	peak
4825.000	40.03	6.20	46.23	54.00	-7.77	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.

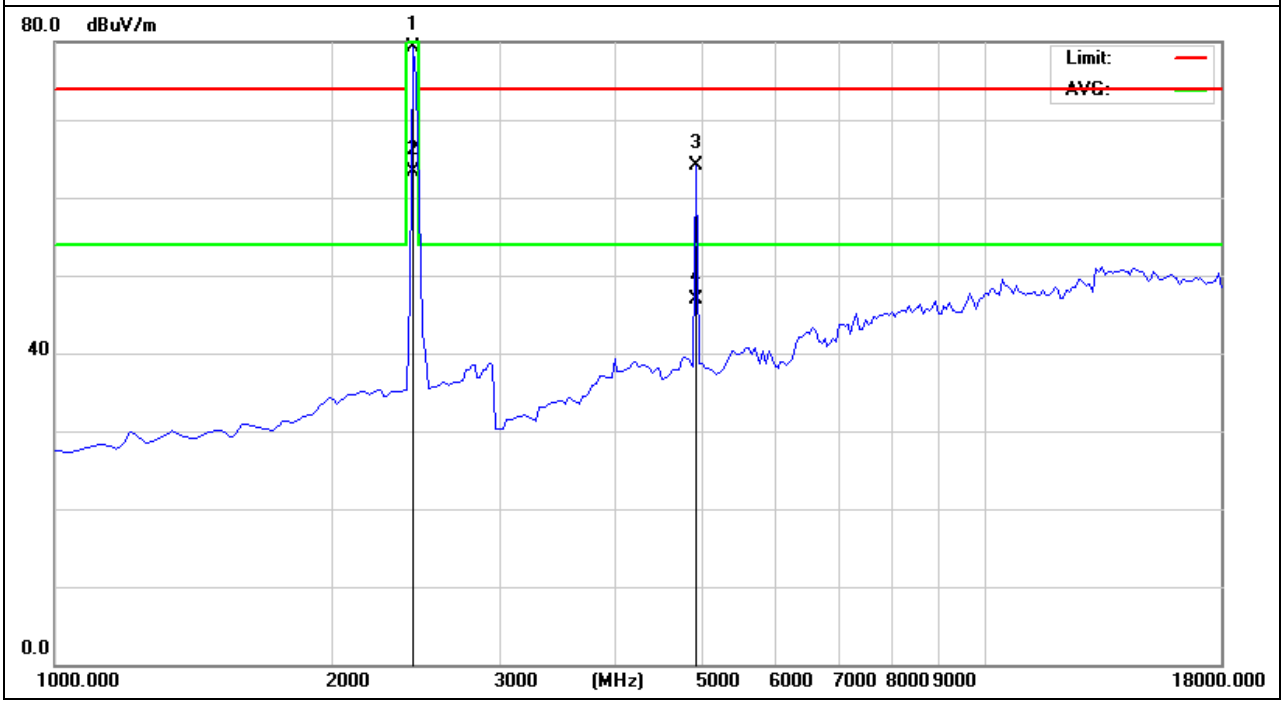


Note: EUT Pre-scan X/Y/Z orientation, only worst case is presented in the report(X orientation).

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2448MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2448.121	83.65	-4.42	79.23	114.0	-34.77	peak
2448.121	67.65	-4.42	63.23	94.00	-30.77	AVG
4896.000	58.37	5.72	64.09	74.00	-9.91	peak
4896.000	41.09	5.72	46.81	54.00	-7.19	AVG

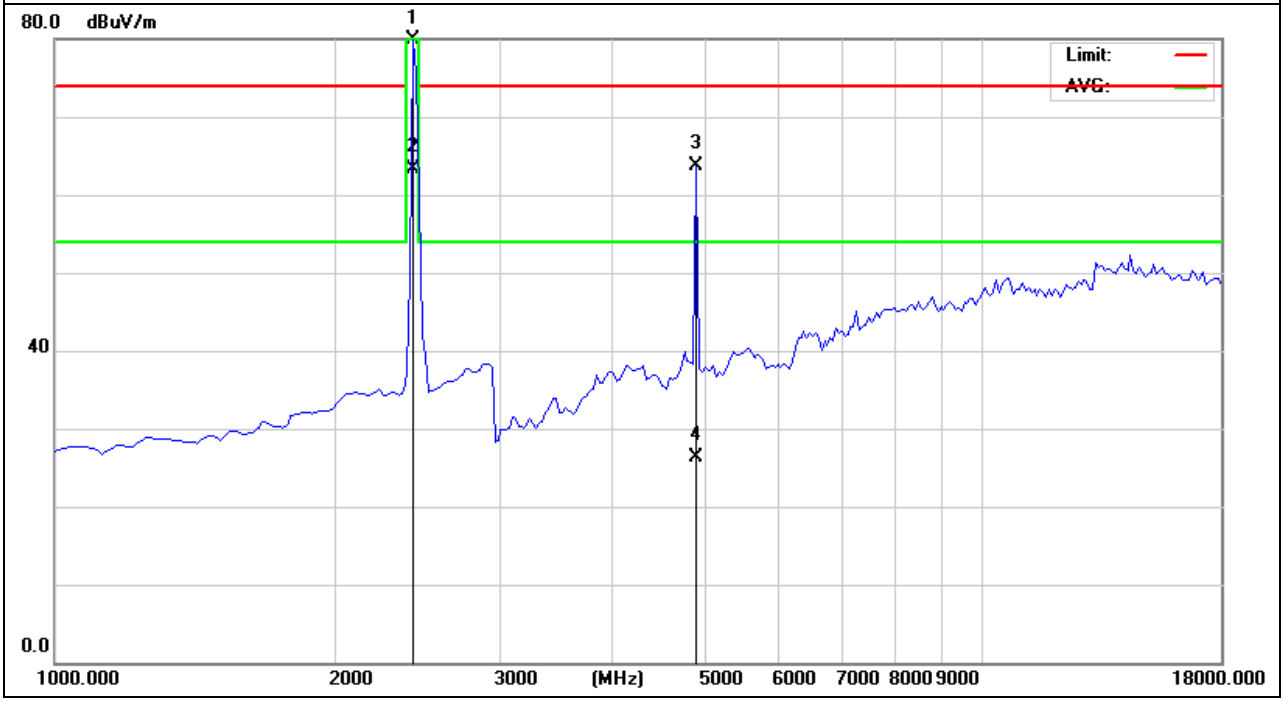
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2448MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2448.121	84.29	-4.42	79.87	114.0	-34.13	peak
2448.121	67.68	-4.42	63.26	94.00	-30.74	AVG
4896.000	57.90	5.72	63.62	74.00	-10.38	peak
4896.000	20.54	5.72	26.26	54.00	-27.74	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.

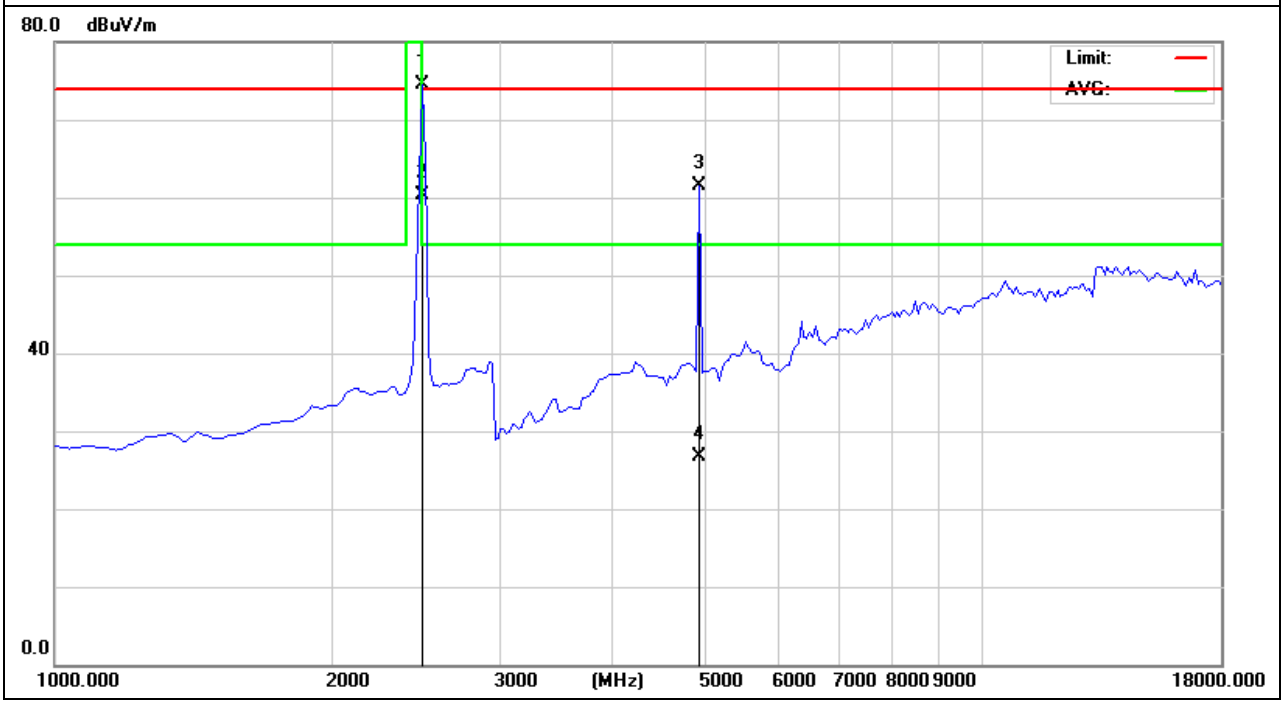


Note: EUT Pre-scan X/Y/Z orientation, only worst case is presented in the report(X orientation).

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2482MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2482.121	78.85	-4.28	74.57	114.0	-39.43	peak
2482.121	64.51	-4.28	60.23	94.00	-33.77	AVG
4964.000	56.03	5.49	61.52	74.00	-12.48	peak
4964.000	21.25	5.49	26.74	54.00	-27.26	AVG

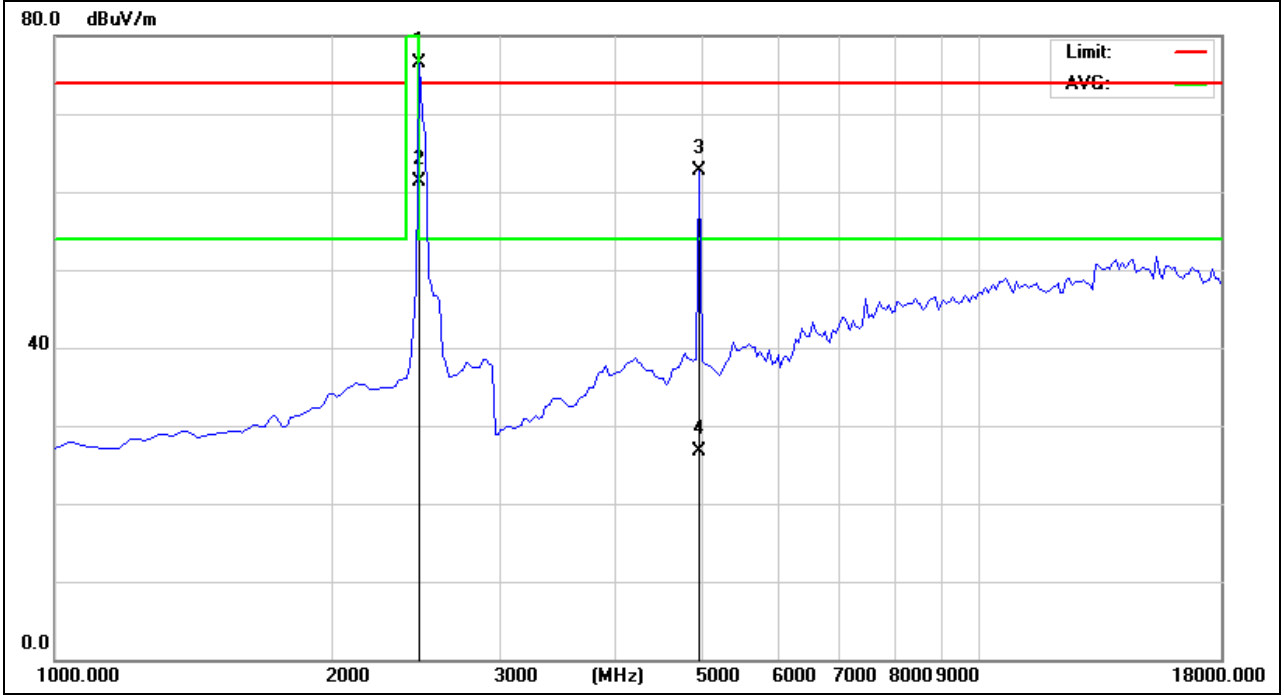
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2482MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2482.000	80.81	-4.33	76.48	114.0	-37.52	peak
2482.000	65.59	-4.33	61.26	94.00	-32.74	AVG
4964.000	57.20	5.49	62.69	74.00	-11.31	peak
4964.000	21.26	5.49	26.75	54.00	-27.25	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



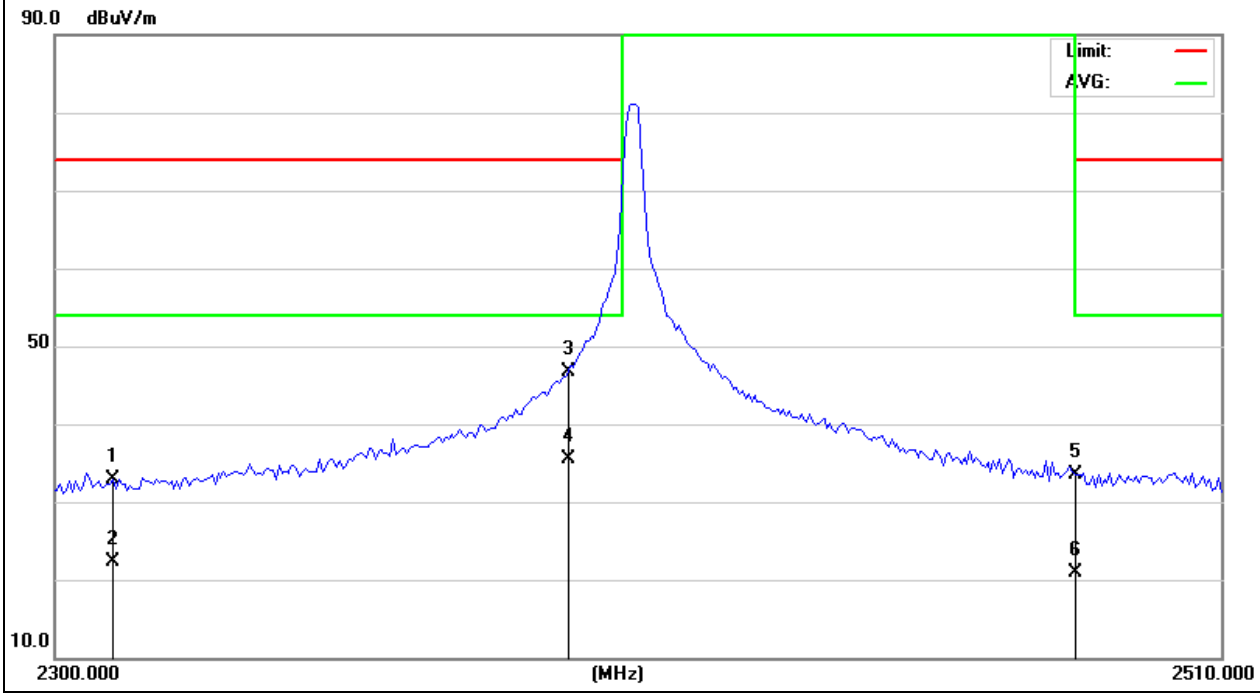
Note: EUT Pre-scan X/Y/Z orientation, only worst case is presented in the report(X orientation).

3.4.7 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2402MHz	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2310.000	37.38	-4.39	32.99	74.00	-41.01	peak
2310.000	26.75	-4.39	22.36	54.00	-31.64	AVG
2390.000	51.23	-4.57	46.66	74.00	-27.34	peak
2390.000	40.13	-4.57	35.56	54.00	-18.44	AVG
2483.500	37.78	-4.27	33.51	74.00	-40.49	peak
2483.500	25.13	-4.27	20.86	54.00	-33.14	AVG

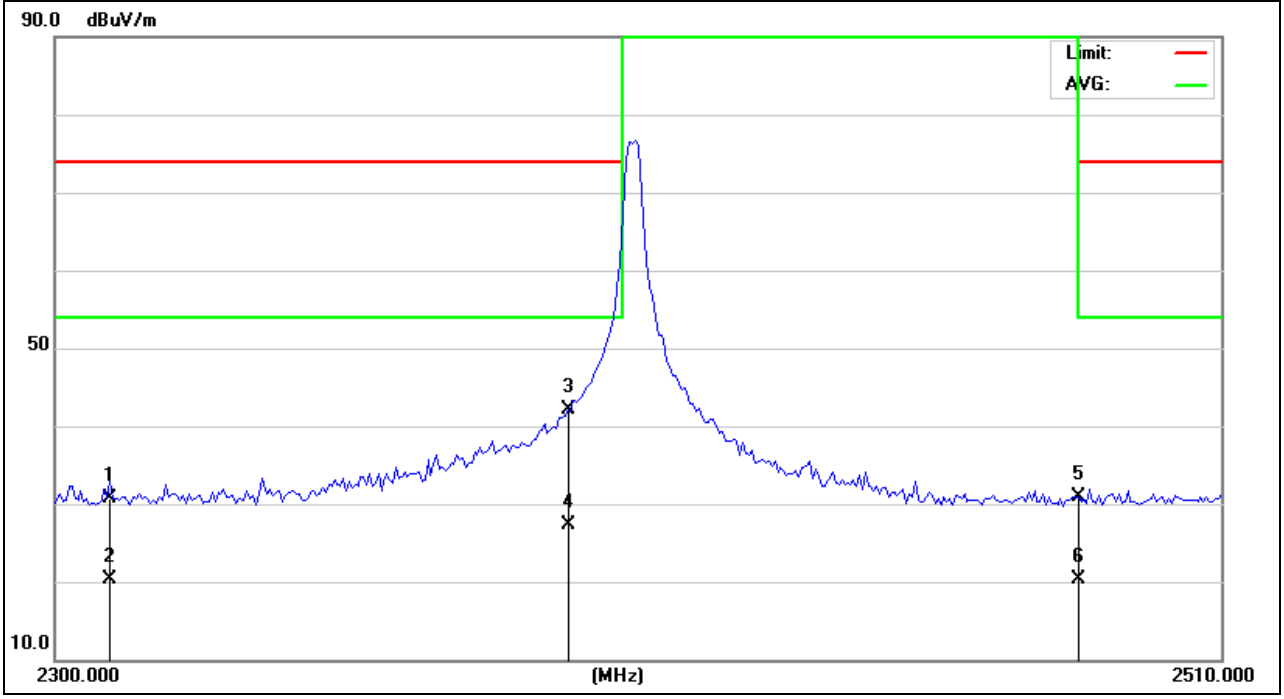
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2402MHz	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2310.000	35.03	-4.39	30.64	74.00	-43.36	peak
2310.000	24.75	-4.39	20.36	54.00	-33.64	AVG
2390.000	46.77	-4.57	42.20	74.00	-31.80	peak
2390.000	31.83	-4.57	27.26	54.00	-26.74	AVG
2483.500	35.22	-4.27	30.95	74.00	-43.05	peak
2483.500	24.63	-4.27	20.36	54.00	-33.64	AVG

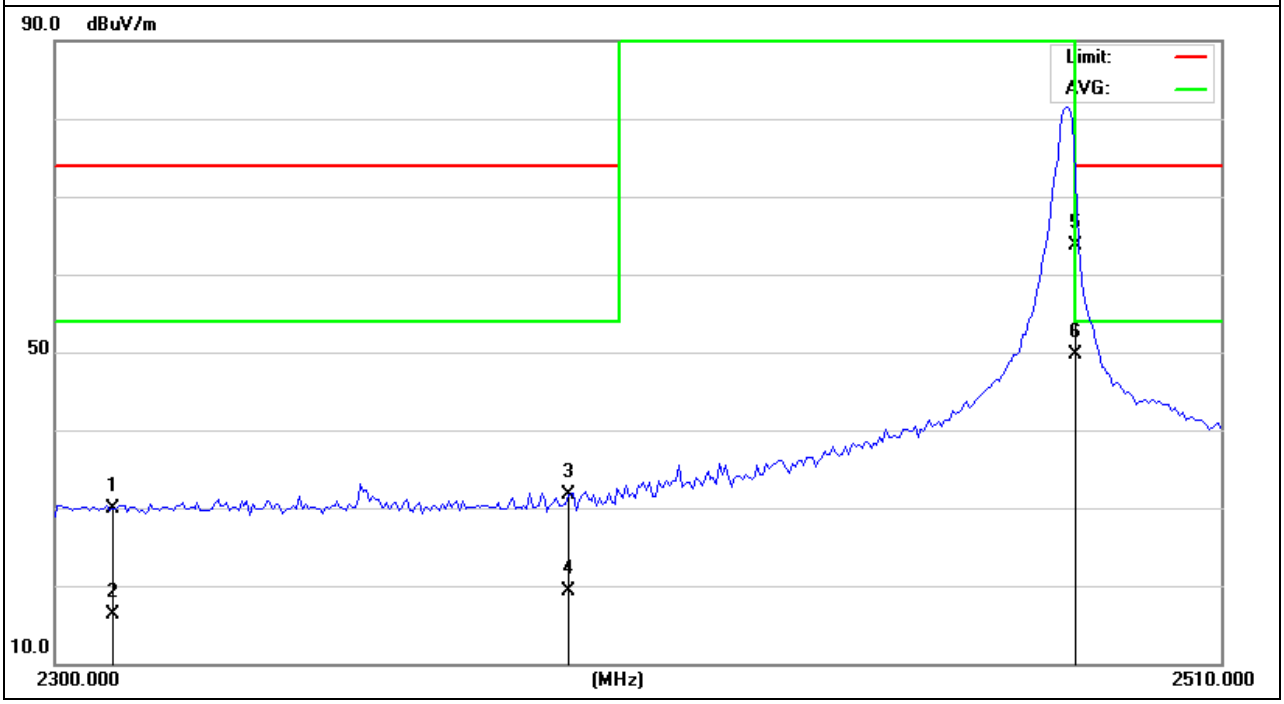
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2482MHz	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2310.000	34.21	-4.39	29.82	74.00	-44.18	peak
2310.000	20.62	-4.39	16.23	54.00	-37.77	AVG
2390.000	36.23	-4.57	31.66	74.00	-42.34	peak
2390.000	23.83	-4.57	19.26	54.00	-34.74	AVG
2483.500	68.04	-4.27	63.77	74.00	-10.23	peak
2483.500	53.89	-4.27	49.62	54.00	-4.38	AVG

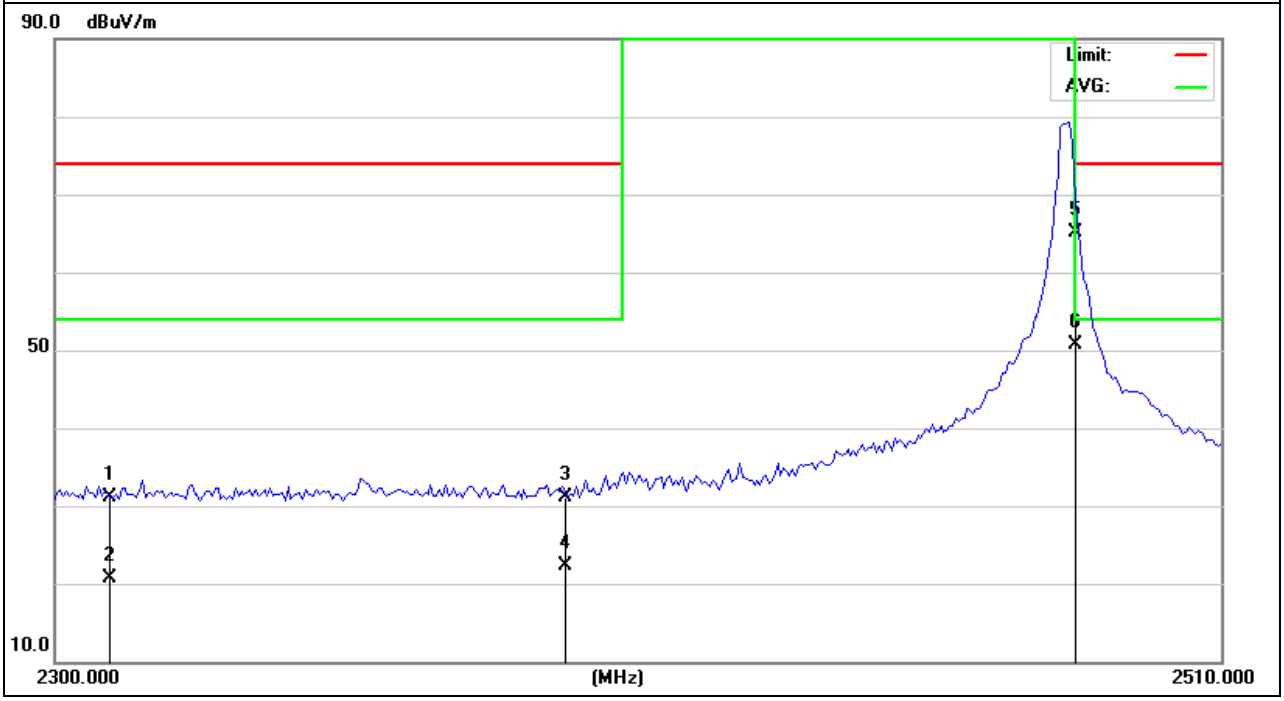
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	DC 3V
Test Mode ：	TX 2482MHz	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2310.000	35.50	-4.39	31.11	74.00	-42.89	peak
2310.000	25.04	-4.39	20.65	54.00	-33.35	AVG
2390.000	35.73	-4.57	31.16	74.00	-42.84	peak
2390.000	26.91	-4.57	22.34	54.00	-31.66	AVG
2483.500	69.38	-4.27	65.11	74.00	-8.89	peak
2483.500	54.96	-4.27	50.69	54.00	-3.31	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



4. FREQUENCY TOLERANCE

4.1 FREQUENCY TOLERANCE LIMITS

The frequency tolerance of the carrier signal shall be maintained within ±0.001% of the operating frequency over a temperature variation of −20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

4.2TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 10KHz, VBW≧RBW, Sweep time = Auto.

4.3 TEST SETUP

4.4 TEST RESULTS

EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	26 ℃	Relative Humidity：	53%
Pressure：	1020 hPa	Test Power ：	DC 3V
Test Mode ：	TX (2402MHz/2448MHz/2482MHz)		

2402MHz

Voltage (V)	Frequency(MHz)	Reading(MHz)	Frequency Tolerance(ppm)	LIMIT(ppm)
3.15	2402	2402.008	3.33	±10
3.7	2402	2402.007	2.91	±10
4.26	2402	2402.006	2.50	±10

Temperature (℃)	Frequency(MHz)	Reading(MHz)	Frequency Tolerance(ppm)	LIMIT(ppm)
-20	2402	2402.005	2.08	±10
-10	2402	2402.003	1.25	±10
0	2402	2402.004	1.67	±10
10	2402	2402.002	0.83	±10
20	2402	2402.003	1.25	±10
30	2402	2402.002	0.83	±10
40	2402	2402.002	0.83	±10
50	2402	2402.004	1.67	±10

2442MHz

Voltage (V)	Frequency(MHz)	Reading(MHz)	Frequency Tolerance(ppm)	LIMIT(ppm)
3.15	2448	2448.008	3.27	±10
3.7	2448	2448.002	0.82	±10
4.26	2448	2448.006	2.45	±10

Temperature (℃)	Frequency(MHz)	Reading(MHz)	Frequency Tolerance(ppm)	LIMIT(ppm)
-20	2448	2448.005	2.04	±10
-10	2448	2448.002	0.82	±10
0	2448	2448.004	1.63	±10
10	2448	2448.006	2.45	±10
20	2448	2448.005	2.04	±10
30	2448	2448.002	0.82	±10
40	2448	2448.003	1.23	±10
50	2448	2448.004	1.63	±10

2482MHz

Voltage (V)	Frequency(MHz)	Reading(MHz)	Frequency Tolerance(ppm)	LIMIT(ppm)
3.15	2482	2482.008	3.22	±10
3.7	2482	2482.007	2.82	±10
4.26	2482	2482.006	2.42	±10

Temperature (℃)	Frequency(MHz)	Reading(MHz)	Frequency Tolerance(ppm)	LIMIT(ppm)
-20	2482	2482.002	0.81	±10
-10	2482	2482.003	1.21	±10
0	2482	2482.002	0.81	±10
10	2482	2482.006	2.42	±10
20	2482	2482.008	3.22	±10
30	2482	2482.007	2.82	±10
40	2482	2482.004	1.61	±10
50	2482	2482.005	2.01	±10

5. BANDWIDTH TEST

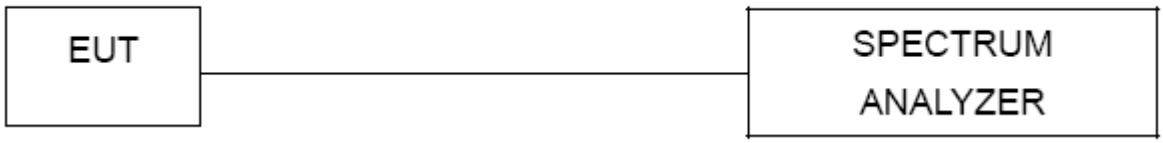
5.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 100KHz, VBW≧RBW, Sweep time = Auto.

5.1 DEVIATION FROM STANDARD

No deviation.

5.1 TEST SETUP

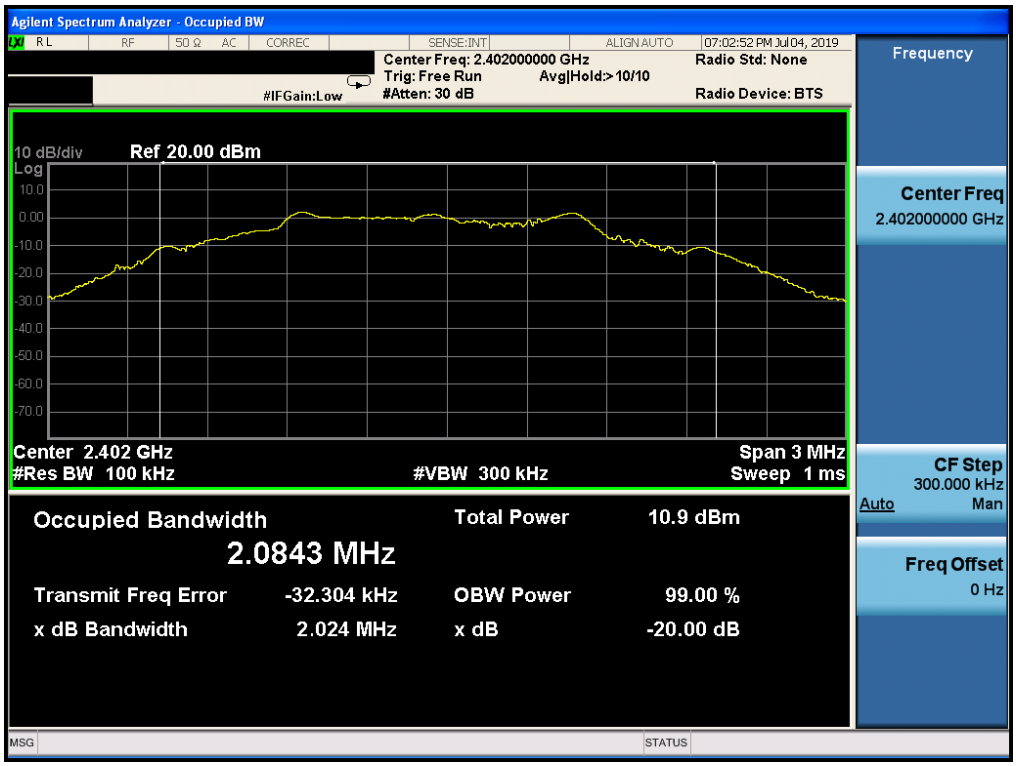


6. TEST RESULTS

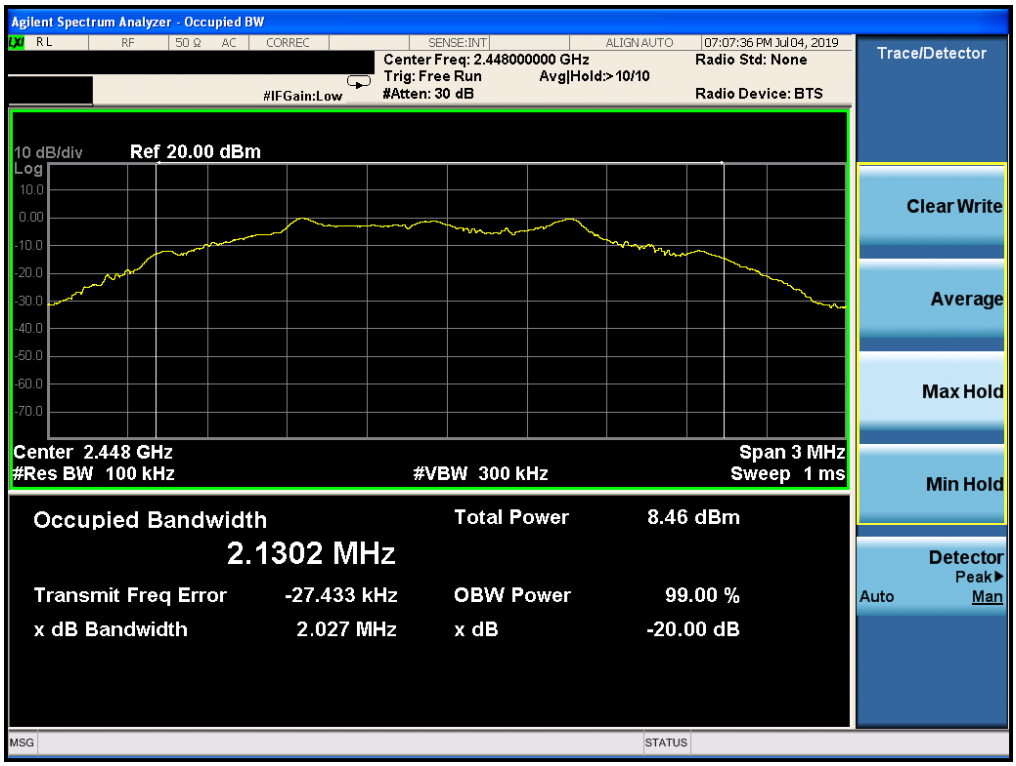
EUT：	CONDENSER MICROPHONE WIRELESS SYSTEM	Model Name ：	U3C
Temperature：	26 ℃	Relative Humidity：	53%
Pressure：	1020 hPa	Test Power ：	DC 3V
Test Mode ：	TX(2402MHz/2448MHz/2482MHz)		

Test Frequency (MHz)	20 dBc Bandwidth (MHz)
2402	2.024
2448	2.027
2482	2.029

2402 MHz



20 dBc Bandwidth 2448MHz



20 dBc Bandwidth 2482MHz