

# FCC Test Report

**Applicant** : Shenzhen FeiChi Electronic Co.,Ltd

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**Address** : Floor 5, building A, new retail Digital  
Industrial Park, Xixiang street Bao'an District,  
Shenzhen, 518126, China

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**Product Name** : microphone

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**Report Date** : Feb. 22, 2024

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**Shenzhen Anbotek Compliance Laboratory Limited**

**Shenzhen Anbotek Compliance Laboratory Limited**

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Code:AB-RF-05-b



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# Contents

1. General Information .....	6
1.1. Client Information .....	6
1.2. Description of Device (EUT) .....	6
1.3. Auxiliary Equipment Used During Test .....	7
1.4. Description of Test Configuration .....	7
1.5. Description Of Test Setup .....	8
1.6. Test Equipment List .....	9
1.7. Measurement Uncertainty .....	10
1.8. Description of Test Facility .....	10
1.9. Disclaimer .....	11
2. Summary of Test Results .....	12
3. Conducted Emission Test .....	13
3.1. Test Standard and Limit .....	13
3.2. Test Setup .....	13
3.3. Test Procedure .....	13
3.4. Test Data .....	13
4. RF Output Power Test .....	16
4.1. Test Standard and Limit .....	16
4.2. Test Setup .....	16
4.3. Test Procedure .....	16
4.4. Test Data .....	16
5. Frequency Stability Test .....	18
5.1. Test Standard and Limit .....	18
5.2. Test Setup .....	18
5.3. Test Procedure .....	18
5.4. Test Data .....	18
6. Operating Bandwidth & Emission Mask Test .....	21
6.1. Test Standard and Limit .....	21
6.2. Test Setup .....	21
6.3. Test Procedure .....	21
6.4. Test Data .....	21
7. Radiation Spurious Emission Test .....	25
7.1. Test Standard and Limit .....	25
7.2. Test Setup .....	25
7.3. Test Procedure .....	26
7.4. Test Data .....	26



APPENDIX I -- TEST SETUP PHOTOGRAPH ..... 31  
APPENDIX II -- EXTERNAL PHOTOGRAPH ..... 31  
APPENDIX III -- INTERNAL PHOTOGRAPH ..... 31





# TEST REPORT

Applicant : Shenzhen FeiChi Electronic Co.,Ltd  
Manufacturer : Shenzhen FeiChi Electronic Co.,Ltd  
Product Name : microphone  
Test Model No. : K300  
Reference Model No. : N/A  
Trade Mark : JUEER  
Rating(s) : Input: 5V $\equiv$  (with DC 3.7V, 2000mAh battery inside)  
**Test Standard(s) : FCC Part15 Subpart C, Section 15.236**  
**Test Method(s) : ANSI C63.10: 2020**

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

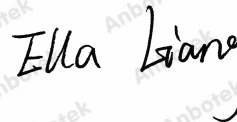
Date of receipt

Dec. 12, 2023

Date of Test

Dec. 12, 2023~Jan. 03, 2024

Prepared By



(Ella Liang)

Approved & Authorized Signer



(Edward Pan)



### Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Feb. 22, 2024



## 1. General Information

### 1.1. Client Information

Applicant	:	Shenzhen FeiChi Electronic Co.,Ltd
Address	:	Floor 5, building A, new retail Digital Industrial Park, Xixiang street Bao'an District, Shenzhen, 518126, China
Manufacturer	:	Shenzhen FeiChi Electronic Co.,Ltd
Address	:	Floor 5, building A, new retail Digital Industrial Park, Xixiang street Bao'an District, Shenzhen, 518126, China
Factory	:	Shenzhen FeiChi Electronic Co.,Ltd
Address	:	Floor 5, building A, new retail Digital Industrial Park, Xixiang street Bao'an District, Shenzhen, 518126, China

### 1.2. Description of Device (EUT)

Product Name	:	microphone
Test Model No.	:	K300
Reference Model No.	:	N/A
Trade Mark	:	JUEER
Test Power Supply	:	DC 5V from Adapter input AC 120V, 60Hz/ DC 3.7V Battery inside
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A
<b>RF Specification</b>		
Operation Frequency	:	Group A: 630~639MHz Group B: 650~659MHz
Number of Channel	:	Group A: 10 Channels Group B: 10 Channels
Modulation Type	:	Pi/4 DQPSK
Antenna Type	:	FPC Antenna
Antenna Gain(Peak)	:	1dBi
<b>Remark:</b> 1) All of the RF specification are provided by customer. 2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		





### 1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
Xiaomi 33W adapter	Xiaomi	MDY-11-EX	SA62212LA04358J

### 1.4. Description of Test Configuration

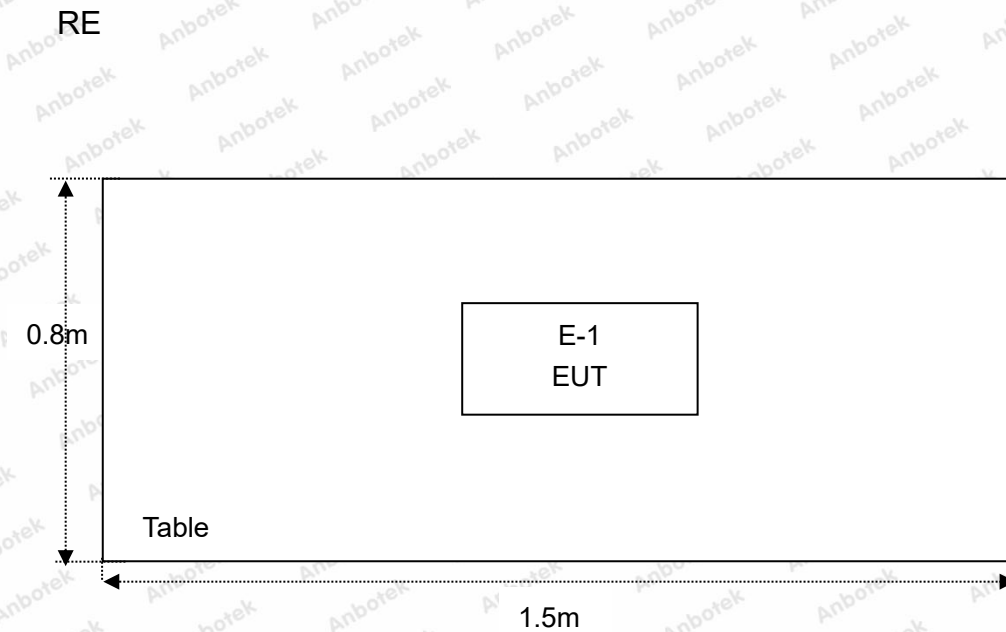
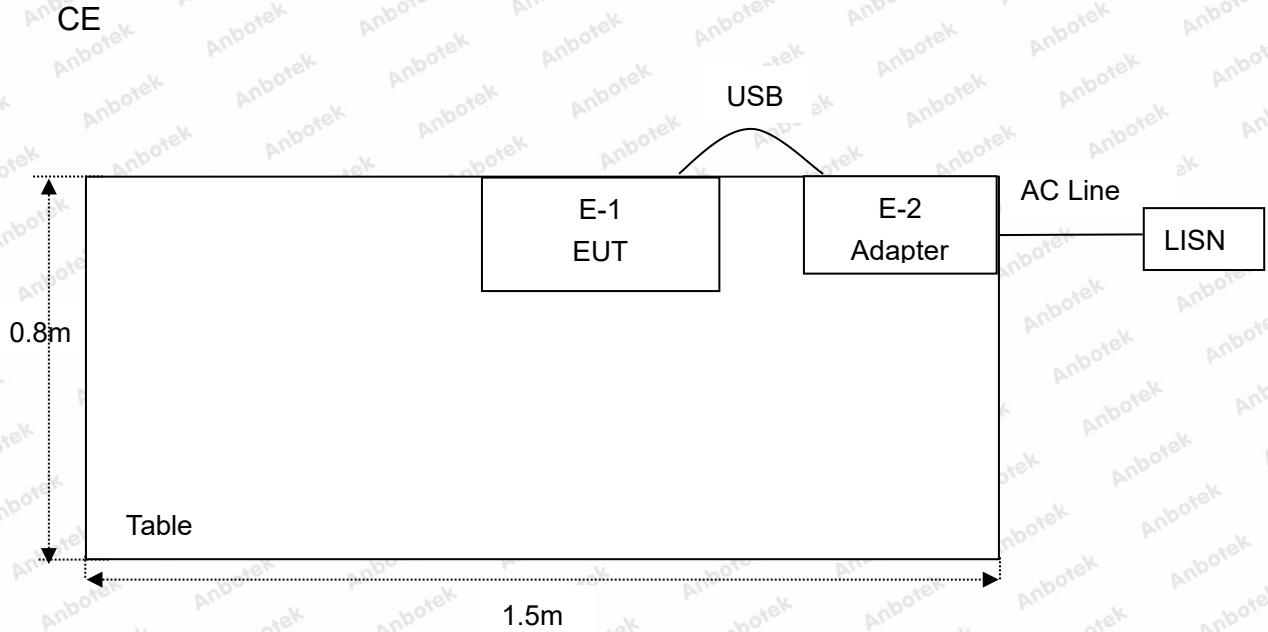
Group A		Group B	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
<b>1</b>	<b>630.00</b>	<b>1</b>	<b>650.00</b>
2	630.80	2	650.80
3	632.00	3	652.00
4	633.00	4	653.00
5	633.80	5	653.80
<b>6</b>	<b>635.00</b>	<b>6</b>	<b>655.00</b>
7	636.00	7	656.00
8	636.80	8	656.80
9	638.00	9	658.00
<b>10</b>	<b>639.00</b>	<b>10</b>	<b>659.00</b>

Note:

1. The engineering test program was provided and the EUT was programmed to be in continuously transmitting mode.
2. EUT was tested with Group A channel 1, 6, 10 and Group B channel 1, 6, 10.



### 1.5. Description Of Test Setup





## 1.6. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Oct. 12, 2023	1 Year
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040DT001	Jul. 05, 2023	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 12, 2023	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	Oct. 12, 2023	1 Year
5.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Oct. 12, 2023	1 Year
6.	EMI Preamplifier	SKET Electronic	LNPA-0118G -45	SKET-PA-002	Oct. 12, 2023	1 Year
7.	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	Oct. 16, 2022	3 Year
8.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	Oct. 23, 2022	3 Year
9.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	Oct. 12, 2023	1 Year
10.	Horn Antenna	A-INFO	LB-180400- KF	J211060628	Oct. 12, 2023	1 Year
11.	Pre-amplifier	SONOMA	310N	186860	Oct. 12, 2023	1 Year
12.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
13.	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY53280032	Oct. 12, 2023	1 Year
14.	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Oct. 12, 2023	1 Year
15.	Signal Generator	Agilent	E4421B	MY41000743	Oct. 12, 2023	1 Year
16.	DC Power Supply	IVYTECH	IV3605	1804D360510	Oct. 20, 2023	1 Year
17.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80 B	N/A	Oct. 16, 2023	1 Year
18.	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	101792	May. 26, 2023	1 Year



### 1.7. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.8dB
Occupied Bandwidth	925Hz
Conducted Output Power	0.76dB
Power Spectral Density	0.76dB
Conducted Spurious Emission	1.24dB
Radiated spurious emissions (Below 30MHz)	3.53dB
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.92dB; Vertical: 4.52dB
Radiated spurious emissions (above 1GHz)	1G-6GHz: 4.78dB; 6G-18GHz: 4.88dB 18G-40GHz: 5.68dB
The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

### 1.8. Description of Test Facility

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

#### FCC-Registration No.: 434132

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 434132.

#### ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

#### Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.





### 1.9. Disclaimer

1. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
2. The test report is invalid if there is any evidence and/or falsification.
3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
4. This document may not be altered or revised in any way unless done so by Anbotek and all revisions are duly noted in the revisions section.
5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.





## 2. Summary of Test Results

Standard Section	Test Item	Result
15.207	Conducted Emission	PASS
15.236(d)	RF Output Power	PASS
15.236(f)(3)	Frequency Stability	PASS
15.236(f)(g)	Operating Bandwidth & Emission Mask	PASS
15.236(g)	Radiated Spurious Emissions	PASS
<b>Remark:</b> "N/A" is an abbreviation for Not Applicable.		



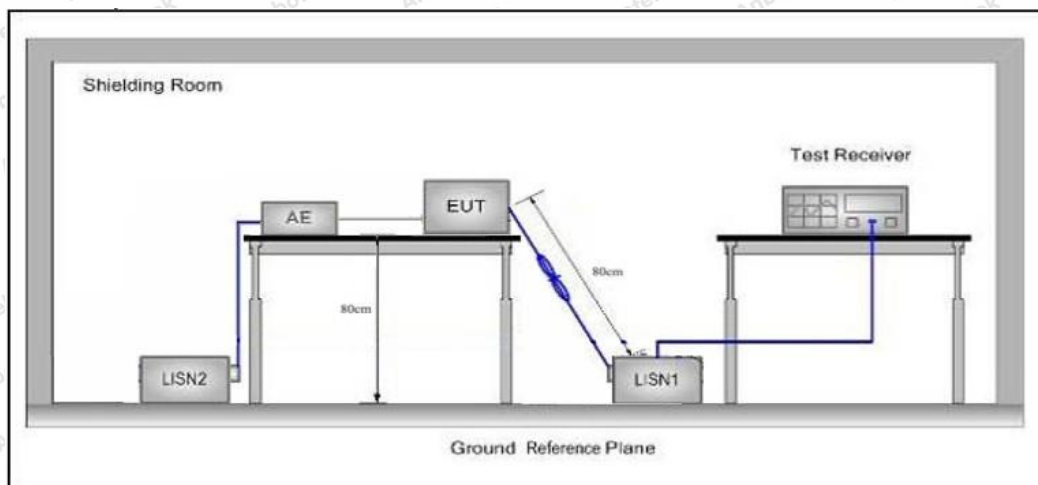
## 3. Conducted Emission Test

### 3.1. Test Standard and Limit

Test Standard	FCC Part15 Section 15.207		
	Frequency	Maximum RF Line Voltage (dBuV)	
		Quasi-peak Level	Average Level
Test Limit	150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
	500kHz~5MHz	56	46
	5MHz~30MHz	60	50

**Remark:** (1) \*Decreasing linearly with logarithm of the frequency.  
 (2) The lower limit shall apply at the transition frequency.

### 3.2. Test Setup



### 3.3. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.10: 2020 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

### 3.4. Test Data

#### PASS

During the test, pre-scan all modes, only the worst case is recorded in the report.

AC conducted emission pre-test at both at AC 120V/60Hz and AC 240V/60Hz modes, recorded worst case AC 120V/60Hz.

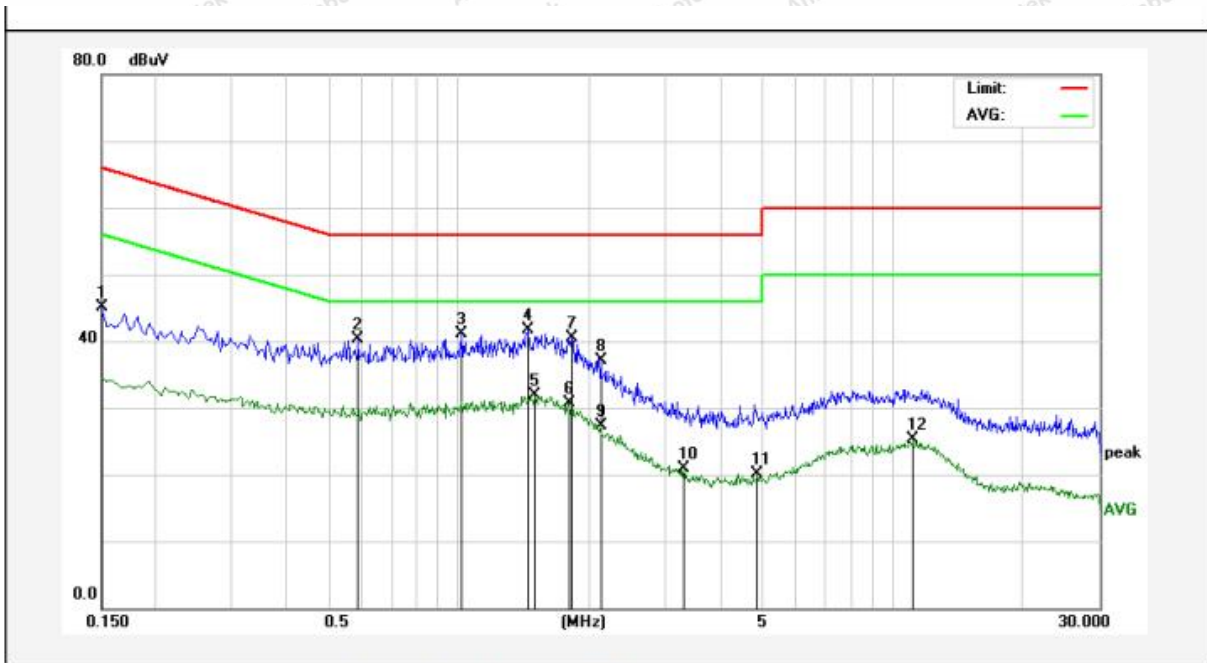
Please to see the following pages.





### Conducted Emission Test Data

Test Site: 1# Shielded Room  
 Operating Condition: 630MHz  
 Test Specification: DC 5V from Adapter input AC 120V, 60Hz  
 Comment: Live Line  
 Temp.(°C)/Hum.(%RH): 24.2°C/49%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1500	27.35	17.82	45.17	65.99	-20.82	QP	
2	0.5860	22.53	17.86	40.39	56.00	-15.61	QP	
3	1.0180	23.22	17.86	41.08	56.00	-14.92	QP	
4	1.4460	23.91	17.86	41.77	56.00	-14.23	QP	
5	1.4980	14.06	17.85	31.91	46.00	-14.09	AVG	
6	1.8020	12.85	17.86	30.71	46.00	-15.29	AVG	
7	1.8220	22.62	17.86	40.48	56.00	-15.52	QP	
8	2.1260	19.28	17.85	37.13	56.00	-18.87	QP	
9	2.1260	9.49	17.85	27.34	46.00	-18.66	AVG	
10	3.2940	3.15	17.85	21.00	46.00	-25.00	AVG	
11	4.8820	2.25	17.86	20.11	46.00	-25.89	AVG	
12	11.1500	7.20	18.01	25.21	50.00	-24.79	AVG	

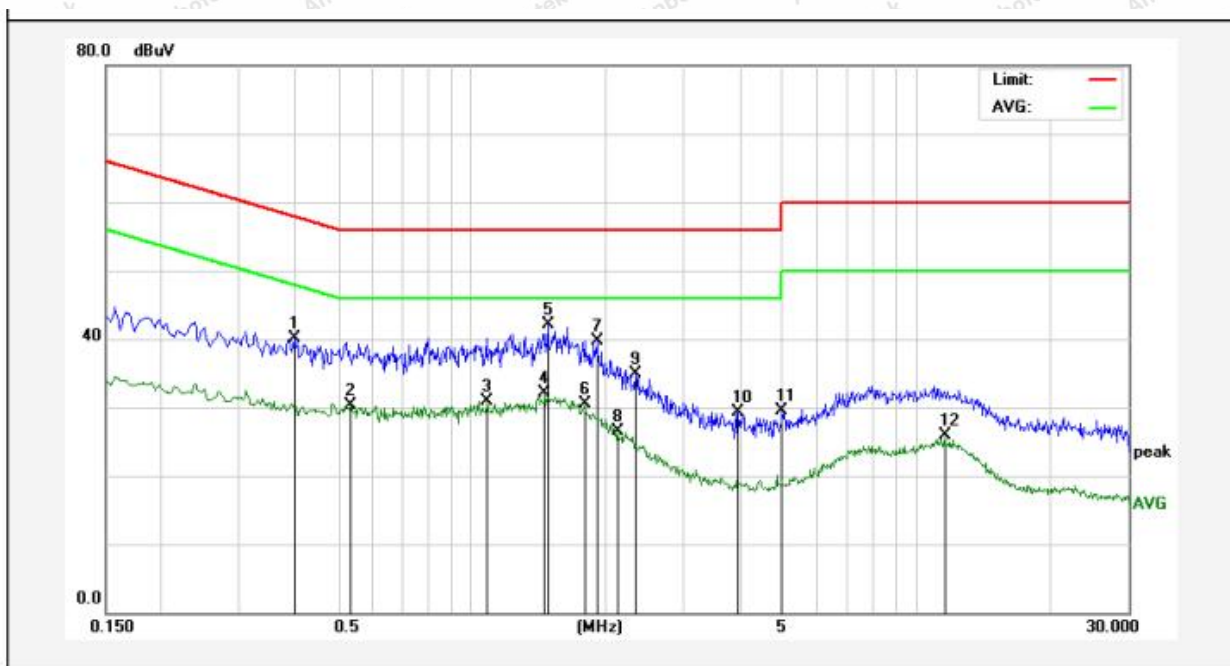
Note: Result = Reading + Factor    Over Limit = Result - Limit





### Conducted Emission Test Data

Test Site: 1# Shielded Room  
 Operating Condition: 630MHz  
 Test Specification: DC 5V from Adapter input AC 120V, 60Hz  
 Comment: Neutral Line  
 Temp.(°C)/Hum.(%RH): 24.2°C/49%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.3980	22.34	17.81	40.15	57.89	-17.74	QP	
2	0.5340	12.52	17.86	30.38	46.00	-15.62	AVG	
3	1.0859	13.14	17.86	31.00	46.00	-15.00	AVG	
4	1.4620	14.24	17.86	32.10	46.00	-13.90	AVG	
5	1.4860	24.29	17.86	42.15	56.00	-13.85	QP	
6	1.7980	12.57	17.86	30.43	46.00	-15.57	AVG	
7	1.9180	21.92	17.85	39.77	56.00	-16.23	QP	
8	2.1220	8.65	17.85	26.50	46.00	-19.50	AVG	
9	2.3380	17.11	17.85	34.96	56.00	-21.04	QP	
10	3.9740	11.53	17.86	29.39	56.00	-26.61	QP	
11	4.9899	11.67	17.86	29.53	56.00	-26.47	QP	
12	11.5780	7.78	18.03	25.81	50.00	-24.19	AVG	

Note: Result = Reading + Factor    Over Limit = Result - Limit

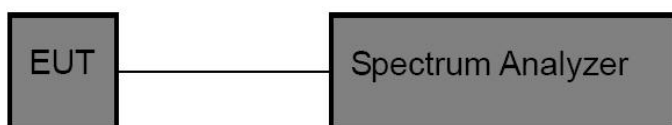


## 4. RF Output Power Test

### 4.1. Test Standard and Limit

Test Standard	FCC Part15 Subpart C, §15.236(d)
Test Limit	In the bands allocated and assigned for broadcast television and in the 600 MHz service band: 50 mW (17dBm) EIRP. In the 600 MHz guard band and the 600 MHz duplex gap: 20 mW (13dBm) EIRP.

### 4.2. Test Setup



### 4.3. Test Procedure

1. The EUT was connected to a spectrum analyzer for the output power test.
2. The output power was set to 50 mW.
3. The modulated output power was measured using a QP detector per ANSI C63.10: 2020 section 4.1.4.2.1.
4. The output power was measured at the low, middle, and high frequencies of the passband.
5. The cable loss from the EUT output to the spectrum analyzer input were input to the spectrum analyzer as correction factor before recording the output power.
6. RBW = 120 kHz, VBW = 3 x RBW, Detector = QP

### 4.4. Test Data

Test Item	:	Output Power	Test Mode	:	CH Low ~ CH High
Test Voltage	:	DC 3.7V Battery inside	Temperature	:	25.3°C
Test Result	:	PASS	Humidity	:	51.2 %

Group A				
Test Channel	Peak Power output (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Results
Low	-2.257	-1.257	17	PASS
Middle	-2.432	-1.432	17	PASS
High	-2.443	-1.443	17	PASS

Note: EIRP=Peak Power+ Antenna gain (dBi)



Group B				
Frequency (MHz)	Peak Power output (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Results
Low	-2.532	-1.532	17	PASS
Middle	-2.755	-1.755	17	PASS
High	-2.684	-1.684	17	PASS

Note: EIRP=Peak Power+ Antenna gain (dBi)



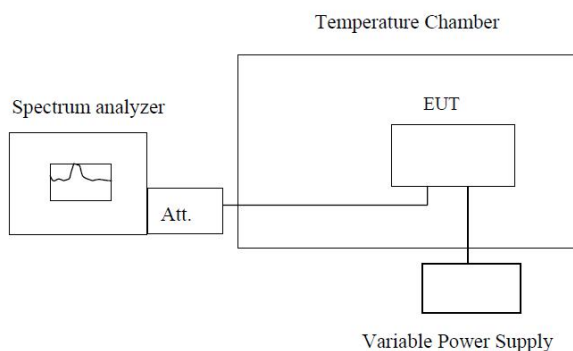


## 5. Frequency Stability Test

### 5.1. Test Standard and Limit

Test Standard	FCC Part15 Subpart C, 15.236(f)(3)
Test Limit	The frequency tolerance of the transmitter shall be $\pm 0.005$ percent.

### 5.2. Test Setup



**Note :** Measurement setup for testing on Antenna connector

### 5.3. Test Procedure

1. The EUT was placed in an environmental test chamber and the RF output was connected to a spectrum analyzer.
2. The temperature was varied from  $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  in  $10^{\circ}\text{C}$  increments. After a sufficient time for temperature stabilization the RF output frequency was measured.
3. At  $20^{\circ}\text{C}$  the power supply voltage to the EUT was varied from 85% to 115% of the nominal value and the RF output was measured.

### 5.4. Test Data

Test Item	: Frequency Stability	Test Mode	: CH Middle
Test Voltage	: DC 3.7V Battery inside	Temperature	: $23.6^{\circ}\text{C}$
Test Result	: PASS	Humidity	: 53 %



Group A					
Test Frequency:					
Test Frequency (MHz)	Temperature (°C)	Power Supplied (VDC)	Measured frequency (MHz)	Error (ppm)	Limit (ppm)
630	-20	3.7	630.007198	11.43	± 50
	-10		630.006661	10.57	± 50
	0		630.006320	10.03	± 50
	10		630.007222	11.46	± 50
	20		630.006856	10.88	± 50
	30		630.005734	9.10	± 50
	40		630.005588	8.87	± 50
	50		630.006051	9.61	± 50
	20	3.3	630.005710	9.06	± 50
	20	4.1	630.004514	7.17	± 50
635	-20	3.7	635.006992	11.01	± 50
	-10		635.006470	10.19	± 50
	0		635.006138	9.67	± 50
	10		635.007015	11.05	± 50
	20		635.006660	10.49	± 50
	30		635.005570	8.77	± 50
	40		635.005427	8.55	± 50
	50		635.005878	9.26	± 50
	20	3.3	635.005546	8.73	± 50
	20	4.1	635.004385	6.90	± 50
639	-20	3.7	639.008437	13.20	± 50
	-10		639.007808	12.22	± 50
	0		639.007407	11.59	± 50
	10		639.008466	13.25	± 50
	20		639.008037	12.58	± 50
	30		639.006721	10.52	± 50
	40		639.006549	10.25	± 50
	50		639.007093	11.10	± 50
	20	3.3	639.006692	10.47	± 50
	20	4.1	639.005291	8.28	± 50



Group B					
Test Frequency:					
Test Frequency (MHz)	Temperature (°C)	Power Supplied (VDC)	Measured frequency (MHz)	Error (ppm)	Limit (ppm)
650	-20	3.7	650.007537	11.60	± 50
	-10		650.006975	10.73	± 50
	0		650.006617	10.18	± 50
	10		650.007563	11.64	± 50
	20		650.007180	11.05	± 50
	30		650.006004	9.24	± 50
	40		650.005851	9.00	± 50
	50		650.006336	9.75	± 50
	20		650.005979	9.20	± 50
	20		3.3	650.004727	7.27
655	-20	3.7	655.006254	9.55	± 50
	-10		655.005788	8.84	± 50
	0		655.005491	8.38	± 50
	10		655.006275	9.58	± 50
	20		655.005957	9.09	± 50
	30		655.004982	7.61	± 50
	40		655.004855	7.41	± 50
	50		655.005258	8.03	± 50
	20		655.004961	7.57	± 50
	20		3.3	655.003922	5.99
659	-20	3.7	659.008083	12.27	± 50
	-10		659.007480	11.35	± 50
	0		659.007097	10.77	± 50
	10		659.008110	12.31	± 50
	20		659.007699	11.68	± 50
	30		659.006439	9.77	± 50
	40		659.006275	9.52	± 50
	50		659.006795	10.31	± 50
	20		659.006412	9.73	± 50
	20		3.3	659.005069	7.69



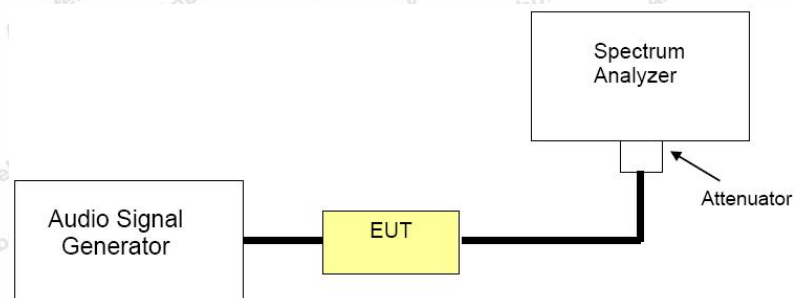


## 6. Operating Bandwidth & Emission Mask Test

### 6.1. Test Standard and Limit

Test Standard	FCC Part15 Subpart C, §15.236 (f)(g)
Test Limit	The operating bandwidth shall not exceed 200 kHz. Emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in § 8.3 of ETSI EN 300 422-1 V1.4.2 (2011-08), Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 1: Technical characteristics and methods of measurement. Emissions outside of this band shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 V1.4.2 (2011-08).

### 6.2. Test Setup



### 6.3. Test Procedure

The OBW is according to ANSI C63.10: 2020

The Emission Mask is according to section 8.3 of ETSI EN 300 422-1 V1.4.2 (2011-08).

### 6.4. Test Data

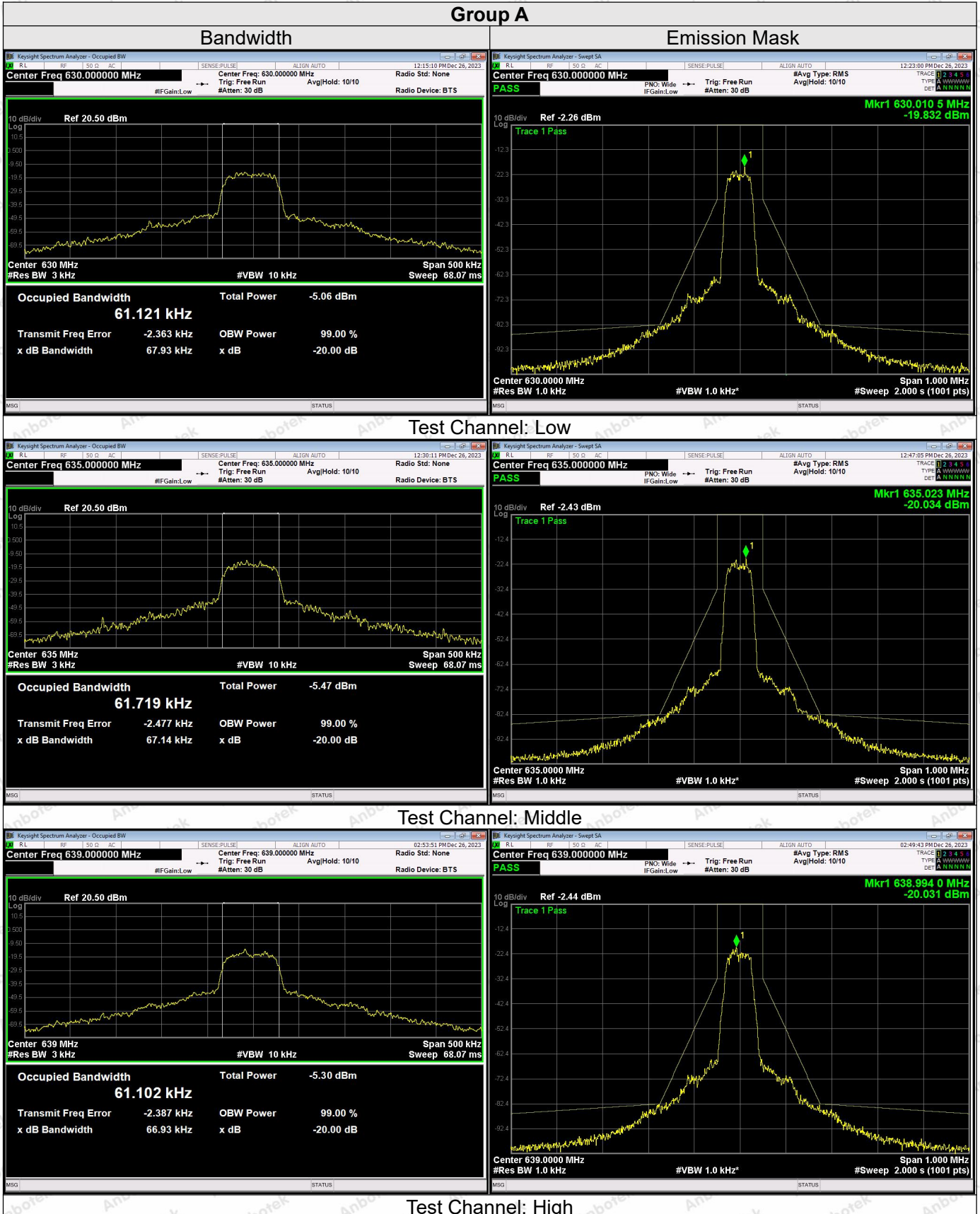
Test Item	:	Bandwidth	Test Mode	:	CH Low ~ CH High
Test Voltage	:	DC 3.7V Battery inside	Temperature	:	24℃
Test Result	:	PASS	Humidity	:	57 %

Group A			
Test Channel	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	61.121	200	Pass
Middle	61.719	200	Pass
High	61.102	200	Pass

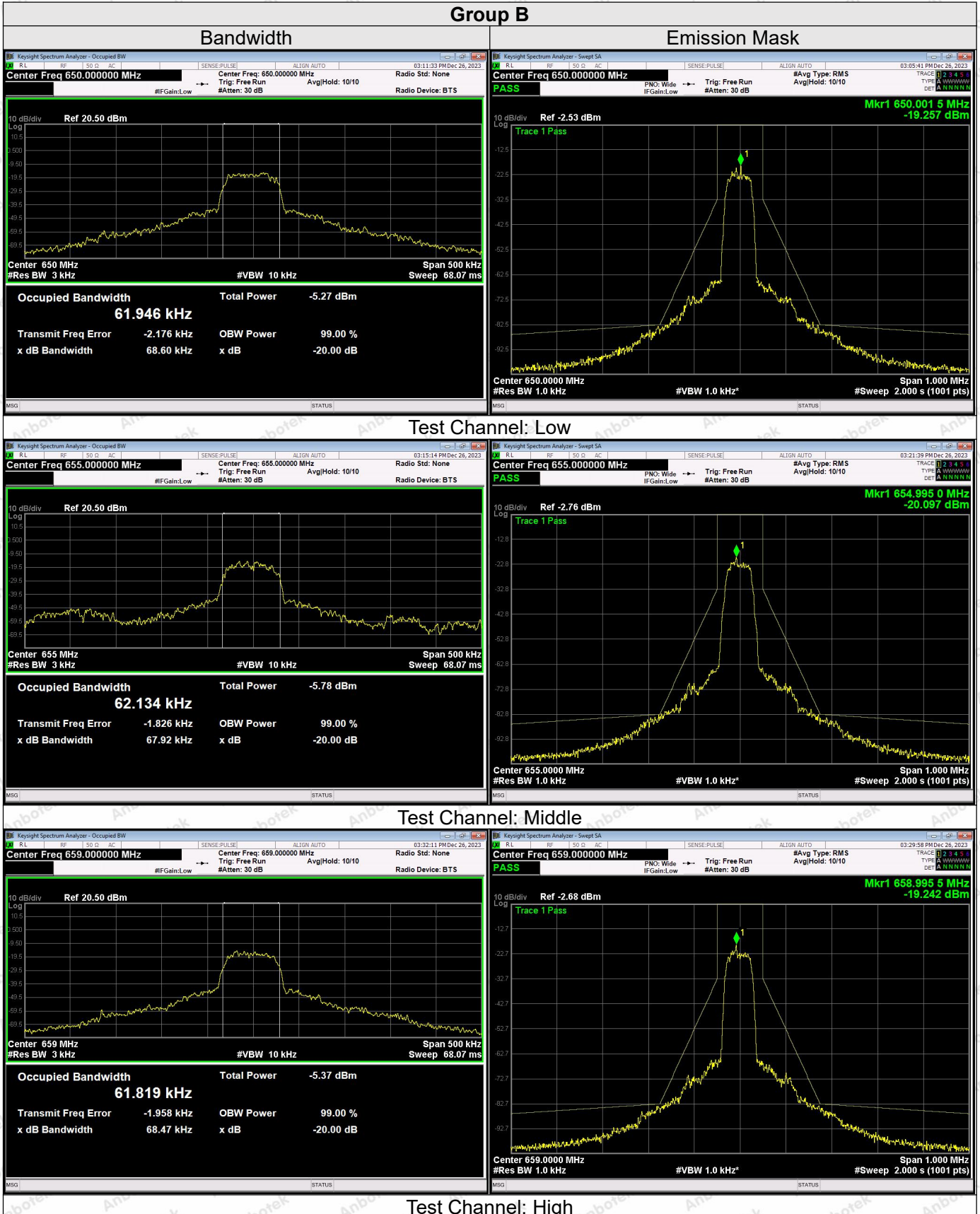


Group B			
Test Channel	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	61.946	200	Pass
Middle	61.134	200	Pass
High	61.819	200	Pass









## 7. Radiation Spurious Emission Test

### 7.1. Test Standard and Limit

Test Standard	FCC Part15 Subpart C, §15.236(g)
Test Limit	The operating bandwidth shall not exceed 200 kHz. Emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in § 8.3 of ETSI EN 300 422-1 V1.4.2 (2011-08), Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 1: Technical characteristics and methods of measurement. Emissions outside of this band shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 V1.4.2 (2011-08).

### 7.2. Test Setup

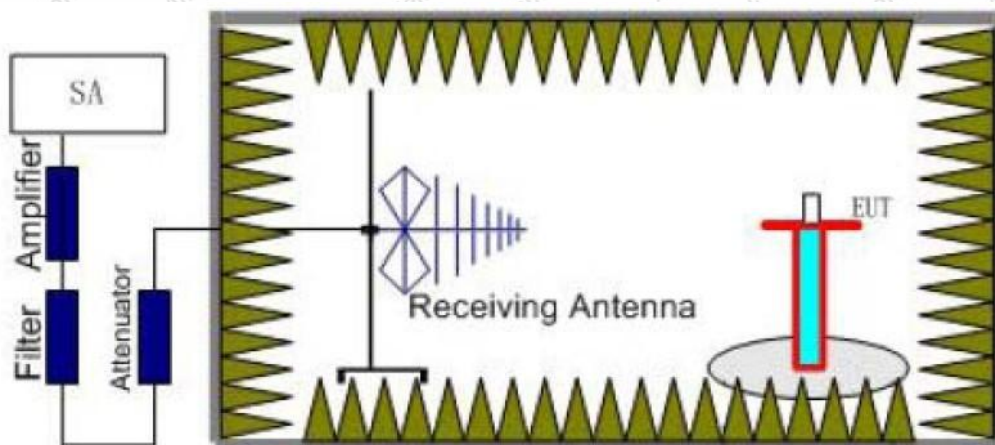


Figure 1

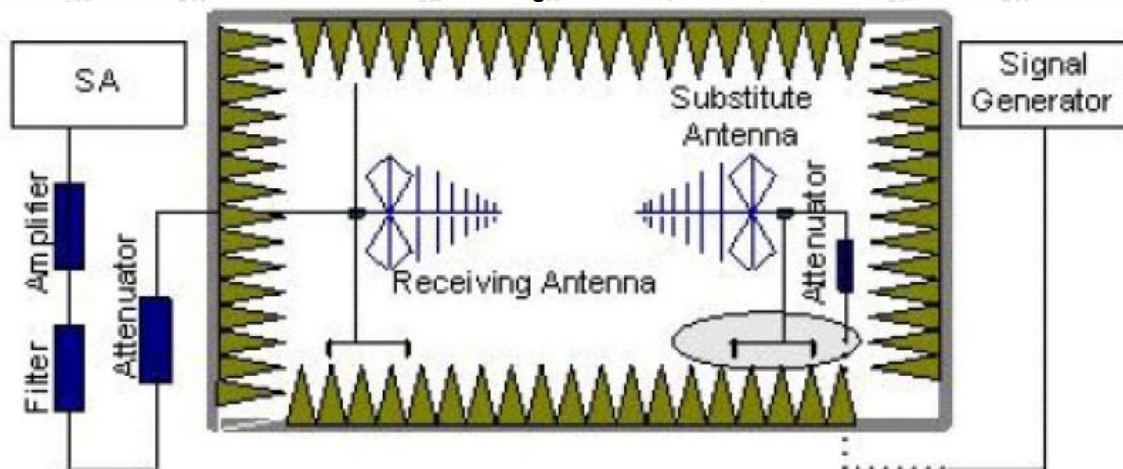


Figure 2





### 7.3. Test Procedure

1. EUT was placed on a 0.8 meter for below 1GHz and 1.5 meter for above 1GHz high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.0m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz for above 1GHz and RBW=100kHz, VBW=300kHz for 30MHz to 1GHz, And the maximum value of the receiver should be recorded as (Pr).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl), the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAG) should be recorded after test.
6. The measurement results are obtained as described below:  
Power(EIRP)=PMea- PAG - Pcl + Ga  
We used SMF100A microwave signal generator which signal level can up to 33dBm,so we not used power Amplifier for substitution test; The measurement results are amend as described below:  
Power(EIRP)=PMea- Pcl + Ga
7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.  
ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

### 7.4. Test Data

#### PASS

During the test, pre-scan all modes, only the worst case is recorded in the report.

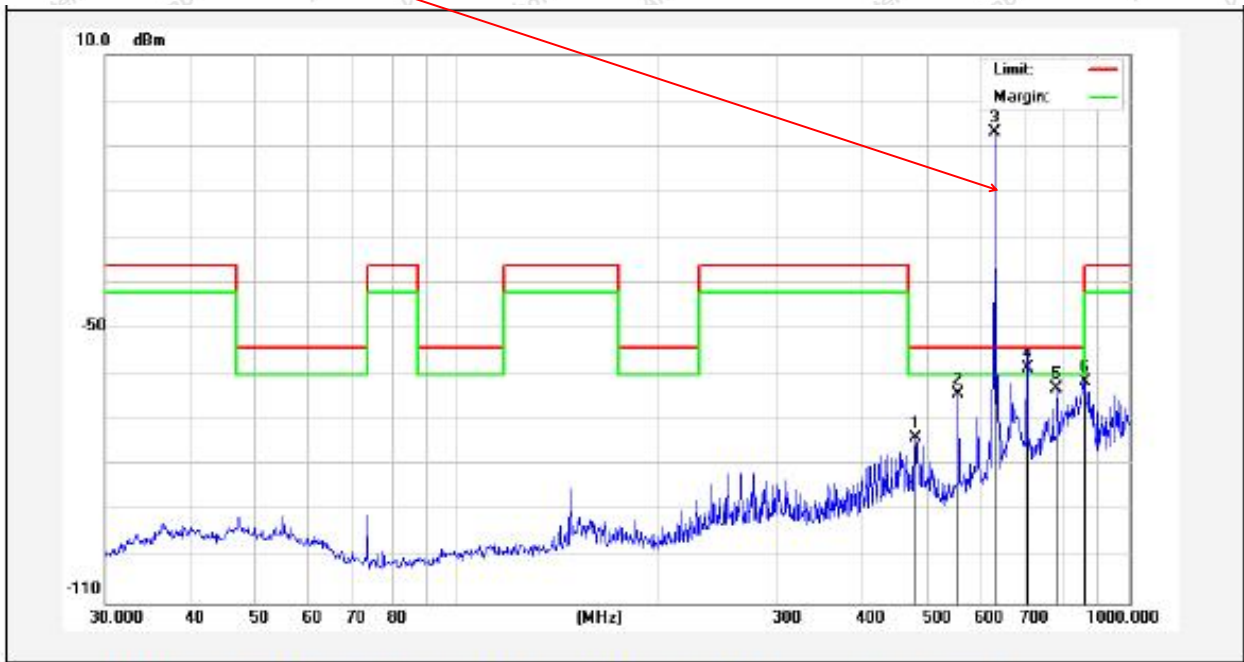




**Test Results:**

Operating Condition: 630MHz  
 Test Specification: DC 3.7V Battery inside  
 Polarization: Vertical  
 Temp.(°C)/Hum.(%RH): 23.5°C/49%RH

Fundamental signal

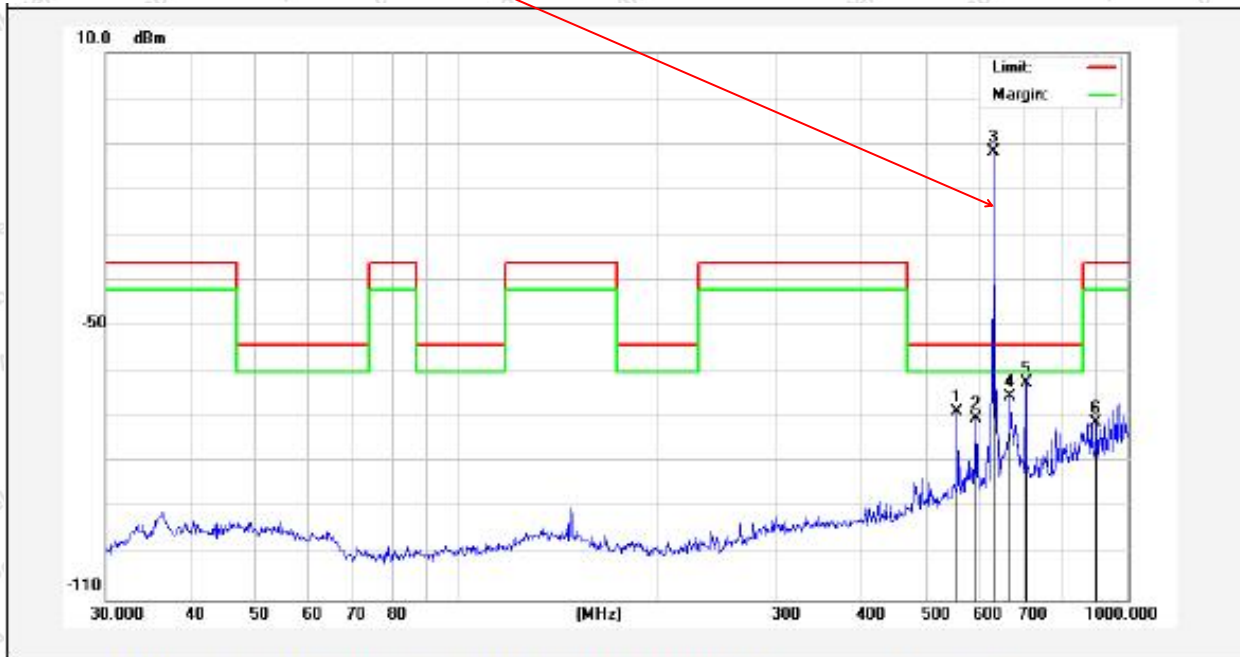


No.	Freq. (MHz)	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	480.5276	-59.46	-14.43	-73.89	-54.00	-19.89	QP			
2	556.7744	-52.60	-11.61	-64.21	-54.00	-10.21	QP			
3	631.6884	3.76	-10.62	-6.86	/	/	peak			
4	703.7360	-48.63	-9.86	-58.49	-54.00	-4.49	QP			
5	779.6068	-54.49	-8.66	-63.15	-54.00	-9.15	QP			
6	860.0352	-54.42	-7.24	-61.66	-54.00	-7.66	QP			

Note: Result = Reading + Factor      Over Limit = Result - Limit



Operating Condition: 630MHz  
 Test Specification: DC 3.7V Battery inside  
 Polarization: Horizontal  
 Temp.(°C)/Hum.(%RH): 23.5°C/49%RH  
 Fundamental signal



No.	Freq. (MHz)	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	556.7744	-57.26	-11.61	-68.87	-54.00	-14.87	QP			
2	593.0497	-59.49	-10.69	-70.18	-54.00	-16.18	QP			
3	631.6884	-1.06	-10.62	-11.68	/	/	peak			
4	668.1423	-54.94	-10.39	-65.33	-54.00	-11.33	QP			
5	704.2261	-52.67	-9.86	-62.53	-54.00	-8.53	QP			
6	896.9965	-65.00	-6.29	-71.29	-36.00	-35.29	QP			

Note: Result = Reading + Factor      Over Limit = Result - Limit





**Above 1GHz:**

Group A				
Test Channel: Low				
Frequency MHz	Measurement (dBm)	Limit (dBm)	Margin (dB)	Antenna Polar (H/V)
1260.00	-30.47	-30.00	-0.47	H
1890.00	-47.08	-30.00	-17.08	H
2520.00	-51.14	-30.00	-21.14	H
1260.00	-33.44	-30.00	-3.44	V
1890.00	-53.48	-30.00	-23.48	V
2520.00	-53.67	-30.00	-23.67	V
Test Channel: Middle				
Frequency MHz	Measurement (dBm)	Limit (dBm)	Margin (dB)	Antenna Polar (H/V)
1270.00	-30.46	-30.00	-0.46	H
1905.00	-44.46	-30.00	-14.46	H
2540.00	-51.55	-30.00	-21.55	H
1270.00	-36.13	-30.00	-6.13	V
1905.00	-47.81	-30.00	-17.81	V
2540.00	-47.38	-30.00	-17.38	V
Test Channel: High				
Frequency MHz	Measurement (dBm)	Limit (dBm)	Margin (dB)	Antenna Polar (H/V)
1278.00	-32.18	-30.00	-2.18	H
1917.00	-46.25	-30.00	-16.25	H
2556.00	-53.12	-30.00	-23.12	H
1278.00	-37.35	-30.00	-7.35	V
1917.00	-47.92	-30.00	-17.92	V
2556.00	-52.76	-30.00	-22.76	V

Remark: Margin = Measurement - Limit





**Above 1GHz:**

<b>Group B</b>				
<b>Test Channel: Low</b>				
Frequency MHz	Measurement (dBm)	Limit (dBm)	Margin (dB)	Antenna Polar (H/V)
1300.00	-31.17	-30.00	-1.17	H
1950.00	-47.64	-30.00	-17.64	H
2600.00	-52.82	-30.00	-22.82	H
1300.00	-37.90	-30.00	-7.90	V
1950.00	-49.63	-30.00	-19.63	V
2600.00	-46.67	-30.00	-16.67	V
<b>Test Channel: Middle</b>				
Frequency MHz	Measurement (dBm)	Limit (dBm)	Margin (dB)	Antenna Polar (H/V)
1310.00	-31.21	-30.00	-1.21	H
1965.00	-43.60	-30.00	-13.60	H
2620.00	-52.23	-30.00	-22.23	H
1310.00	-33.35	-30.00	-3.35	V
1965.00	-51.09	-30.00	-21.09	V
2620.00	-48.65	-30.00	-18.65	V
<b>Test Channel: High</b>				
Frequency MHz	Measurement (dBm)	Limit (dBm)	Margin (dB)	Antenna Polar (H/V)
1318.00	-31.83	-30.00	-1.83	H
1977.00	-45.81	-30.00	-15.81	H
2636.00	-53.00	-30.00	-23.00	H
1318.00	-36.20	-30.00	-6.20	V
1977.00	-53.97	-30.00	-23.97	V
2636.00	-50.68	-30.00	-20.68	V

Remark: Margin = Measurement - Limit



## **APPENDIX I -- TEST SETUP PHOTOGRAPH**

Please refer to separated files Appendix I -- Test Setup Photograph

## **APPENDIX II -- EXTERNAL PHOTOGRAPH**

Please refer to separated files Appendix II -- External Photograph

## **APPENDIX III -- INTERNAL PHOTOGRAPH**

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----

