FCC Test Report

Report No.: AGC03588150701FE02

FCC ID : ZRIVHF-06HHM

APPLICATION PURPOSE: ORIGINAL EQUIPMENT

PRODUCT DESIGNATION: Wireless Microphone

BRAND NAME : PROAUDIO, NADY

MODEL NAME : VHF-06HHM, WHT-120

CLIENT: PROAUDIO ELECTRONICS CO., LIMITED

DATE OF ISSUE : Jul 13, 2015

STANDARD(S) : FCC PART 74 RULES

REPORT VERSION: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd.

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Page 2 of 38

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul.13, 2015	Valid	Original Report

TABLE OF CONTENTS

1. VERIFICATION OF COMPLIANCE	
2. GENERAL INFORMATION	6
2.1 PRODUCT DESCRIPTION	6
2.2 RELATED SUBMITTAL(S) / GRANT (S)	
2.3 TEST METHODOLOGY	7
2.4 SPECIAL ACCESSORIE	7
2.5 EQUIPMENT MODIFICATIONS	7
2.6 DIFFERENCES BETWEEN MODELS	7
2.7 TEST FACILITY	8
3. SYSTEM TEST CONFIGURATION	
3.1 EUT CONFIGURATION	9
3.2 EUT EXERCISE	9
3.3 GENERAL TECHNICAL REQUIREMENTS	9
3.4 CONFIGURATION OF TESTED SYSTEM	10
4. SUMMARY OF TEST RESULTS	
5. DESCRIPTION OF TEST MODES	11
6. MAXIMUM TRANSMITTER POWER	12
6.1 PROVISIONS APPLICABLE	12
6.2 MEASUREMENT PROCEDURE	12
6.3 TEST SETUP BLOCK DAIGRAM	14
6.4 TEST RESULT	15
7. MODULATION CHARACTERISTICS	16
7.1 PROVISIONS APPLICABLE	16
7.2 MEASUREMENT METHOD	
7.3 TEST RESULT	17
8. FREQUENCY TOLERANCE	23
8.1 PROVISIONS APPLICABLE	23
8.2 MEASUREMENT PROCEDURE	23
8.3 TEST SETUP BLOCK DIAGRAM	24
8.4 TEST RESULT	24
9. EMISSION BANDWIDTH	26
9.1 PROVISIONS APPLICABLE	26
9.2 MEASUREMENT PROCEDURE	26
9.3 TEST SETUP BLOCK DIAGRAM	26
9.4 TEST RESULT	27

Page 4 of 38

10. UNWANTED RADIATION	28
10.1 PROVISIONS APPLICABLE	28
10.2 MEASUREMENT PROCEDURE	28
10.3 TEST SETUP BLOCK DIAGRAM	29
10.4 TEST RESULTS	31
APPENDIX I: PHOTOGRAPHS OF TEST SETUP	33
APPENDIX II: PHOTOGRAPHS OF EUT	34

Page 5 of 38

1. VERIFICATION OF COMPLIANCE

Applicant	PROAUDIO ELECTRONICS CO., LIMITED			
Address	FLAT 03H 15/F CARNIVAL COMMERCIAL BUILDING 18 JAVA ROAD NORTH POINT HK			
Manufacturer	PROAUDIO ELECTRONICS CO., LIMITED			
Address	FLAT 03H 15/F CARNIVAL COMMERCIAL BUILDING 18 JAVA ROAD NORTH POINT HK			
roduct Description Wireless Microphone				
Brand Name PROAUDIO, NADY				
Model Name VHF-06HHM				
Series Model	eries Model WHT-120			
Difference description All the same except for the model name and brand.				
Date of Test	Jun.28, 2015 to Jul.2, 2015			

We hereby certify that:

The report for the equipment was prepared by Dongguan Precise Testing Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in TIA/EIA 603; ANSI C 63.4:2009 and the sample tested as described in this report is in compliance with the FCC Rules Part 74 Subpart H. The test results of this report relate only to the tested sample identified in this report.

Tested By: Sally Wu

Sally Wu Jul.13, 2015

Reviewed By: Max Zhang

Max Zhang Jul.13, 2015

Approved By: Solyer Zhang

Solger Zhang Jul.13, 2015

Page 6 of 38

2. GENERAL INFORMATION

2.1 PRODUCT DESCRIPTION

The EUT is a Handheld Wireless Microphone designed as Low Power Auxiliary Stations for transmitting voice only. It is designed by way of utilizing the FM modulation achieves the system operating.

A major technical description of EUT is described as following:

Communication Type	Voice / Tone only
Modulation	FM
Emission Type	F3E
Emission Bandwidth	85.59kHz(Max)
Peak Frequency Deviation	47.45KHz(Max)
Audio Frequency Deviation	19.51 KHz(Max)
Maximum Output Power	1.33 mW
Output Power Modification	Fixed can't be changed
Antenna Designation	Integral
Power Supply	DC 3V
Battery Endpoint	DC 2.55V
Operation Frequency	Frequency Range: 171.905 or 215.200MHz
Range and Channel	Channel: High Channel: 215.200MHz, Low Channel: 171.905MHz
Frequency Tolerance	0.00238%

Page 7 of 38

2.2 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID**: **ZRIVHF-06HHM** filing to comply with the FCC Part 74, Subpart H Rules.

2.3 TEST METHODOLOGY

The radiated emission testing was performed according to the procedures of ANSI TIA/EIA 603 and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057

2.4 SPECIAL ACCESSORIE

Not available for this EUT intended for grant.

2.5 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.6 DIFFERENCES BETWEEN MODELS

Not available for this EUT intended for grant.

Page 8 of 38

2.7 TEST FACILITY

Site	Dongguan Precise Testing Service Co., Ltd.
Location	Building D,Baoding Technology Park,Guangming Road2,Dongcheng District, Dongguan, Guangdong, China,
FCC Registration No.	371540
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009.

ALL TEST EQUIPMENT LIST

Radiated Emission Test Site						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2014	July 3, 2015	
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 4, 2014	July 3, 2015	
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 4, 2014	July 3, 2015	
RF Cable	SCHWARZBECK	AK9515E	96221	July 4, 2014	July 3, 2015	
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 6, 2015	June 5, 2016	
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A	
Active loop antenna (9K-30MHz)	Schwarzbeck	FMZB1519	1519-038	June 6, 2015	June 5, 2016	
Spectrum analyzer	Agilent	E4407B	MY46185649	June 6, 2015	June 5, 2016	
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	July 11, 2014	July 10, 2015	
Spectrum Analyzer	Agilent	E4411B	MY4511453	July 4, 2014	July 3, 2015	
MODULATION ANALYZER	HP	8920B	3104A03367	July 16, 2014	July 15, 2015	
DC POWER SUPPLY	ZHAOXIN	RXN-605D	N/A	July 16, 2014	July 15, 2015	

NOTE: 8920B can generate audio modulation frequency.

Page 9 of 38

3. SYSTEM TEST CONFIGURATION

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

3.3 GENERAL TECHNICAL REQUIREMENTS

- a) Section 74.861 (e) 1: Maximum transmitter power less than 50mW
- b) Section 74.861 (e) 3: Peak Frequency Deviation less than ±75 KHz
- c) Section 74.861 (e) 4: Frequency Tolerance less than 0.005%
- d) Section 74.861 (e) 5: Emission Bandwidth shall less than 200 KHz
- e). Section 74.861 (e) 6: Unwanted radiation

According to Section 74.861 (e) - 6, the mean power of emission shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

- 1). At least 25 dB on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.
- 2). At least 35 dB on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.
- 4). At least 43 + 10 log10 (T) dB on any frequency removed from the center of the authorized bandwidth by more than 250%

Page 10 of 38

3.4 CONFIGURATION OF TESTED SYSTEM

Fig. 2-1 Configuration of Tested System

EUT

Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
1.	Wireless Microphone	PROAUDIO, NADY	VHF-06HHM	ZRIVHF-06HHM	N/A	EUT
			-	-		

Page 11 of 38

4. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§74.861 (e)-1	Carrier Power	Compliant
§74.861 (e)-3	Frequency Deviation	Compliant
§74.861 (e)-4	Frequency Tolerance	Compliant
§74.861 (e)-5	Operating Bandwidth	Compliant
§74.861 (e)-6	Unwanted Radiation	Compliant

5. DESCRIPTION OF TEST MODES

Test mode:

Mode 1: TX in Low Channel Mode 3: TX in high Channel

Note: The EUT has been tested under normal operating condition. Two channels (the Low channel and High channel) have been chosen for testing. On each channel three axes have been evaluated for radiated emission.

Page 12 of 38

6. MAXIMUM TRANSMITTER POWER

6.1 PROVISIONS APPLICABLE

According to FCC Part 74 Section 74.861(e) – 1: The power of the measured unmodulated carrier power at the output of the transmitter power amplifier may not exceed 50mW

6.2 MEASUREMENT PROCEDURE

- 1).On a test site, the EUT shall be placed on a turntable, and in the position closest to the normal use as declared by the user.
- 2). The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- 3). The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- 4). The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- 5). The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- 6). The transmitter shall than be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- 7). The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- 8). The maximum signal level detected by the measuring receiver shall be noted.
- 9). Replace the antenna with a proper Antenna (substitution antenna).
- 10). The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.

Page 13 of 38

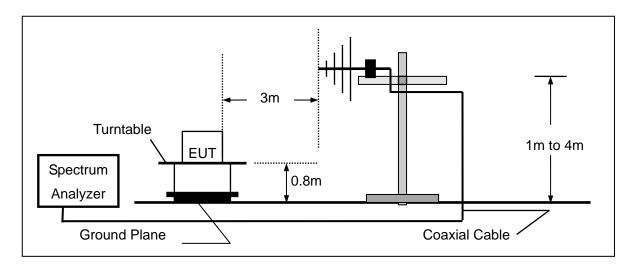
11). The substitution antenna shall be connected to a calibrated signal generator.

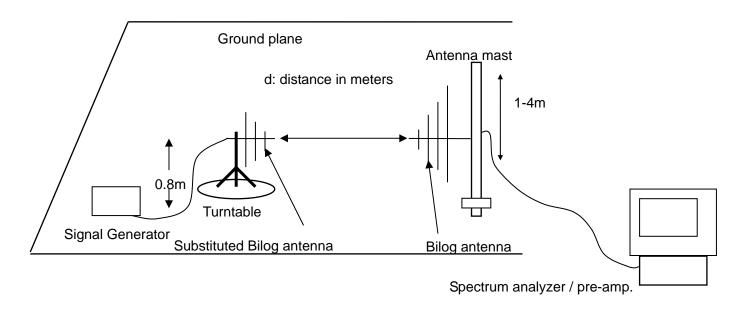
- 12). If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- 13). The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- 14). The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- 15). The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- 16). The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.
- 17). The measure of the effective radiated power is the larger of the two levels recorded, at the input to the substitution antenna, corrected for the gain of the substitution antenna if necessary.

Page 14 of 38

6.3 TEST SETUP BLOCK DAIGRAM

TEST SETUP OF SUBSTITUTION METHOD





Page 15 of 38

6.4 TEST RESULT

Test Result @Low Channel

Freq.	Antenna	Corrected Power		Limit
(MHz)	Polarity	(dBm) (mW)		(mW)
171.905	V	1.23	1.33	50
171.905	Н	-1.09	0.78	50

Test Result @High Channel

Freq.	Antenna	Corrected Power		Limit
(MHz)	Polarity	(dBm)	(mW)	(mW)
215.200	V	1.02	1.26	50
215.200	Н	-1.12	0.77	50

Page 16 of 38

7. MODULATION CHARACTERISTICS

7.1 PROVISIONS APPLICABLE

a). According to CFR 47 section 2.1047(a), for Voice Modulation Communication Equipment, the frequency response of the audio modulation circuit over a range of 100 to 5000Hz shall be measured.

b). According to CFR 47 section 74.861(e)-3, any form of modulation may be used. A maximum deviation of ±75 KHz is permitted when frequency modulation is employed.

7.2 MEASUREMENT METHOD

7.2.1 MODULATION LIMIT

- 1). Configure the EUT as shown in figure 6-1, adjust the audio input for 60% of rated system deviation at 1KHz using this level as a reference (0dB) and vary the input level from -20 to +20dB. Record the frequency deviation obtained as a function of the input level.
- 2). Repeat step 1 with input frequency changing to 300, 1000, 3000, and 12000 Hz in sequence.

7.2.2 AUDIO FREQUENCY RESPONSE

- 1). Configure the EUT as shown in figure 6-1.
- 2). Adjust the audio input for 20% of rated system deviation at 1 KHz using this level as a reference (0 dB).
- 3). Vary the Audio frequency from 100 Hz to 30 KHz and record the frequency deviation.
- 4). Audio Frequency Response = 20log10 (Deviation of test frequency/Deviation of 1 KHz reference).

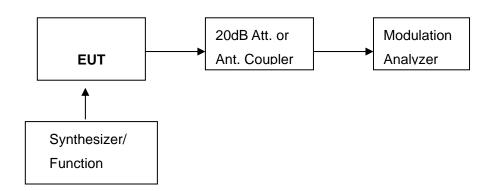


Figure 6-1: Modulation Characteristic Measurement Configuration

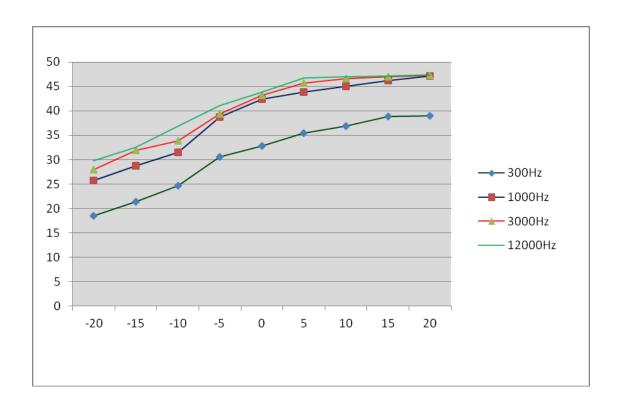
Report No.: AGC03588150701FE02 Page 17 of 38

7.3 TEST RESULT

a). Modulation Limit:

Test Result @Low Channel

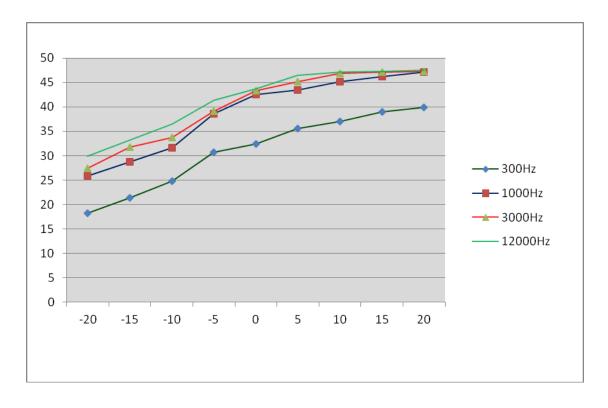
	Peak Freq.	Peak Freq.	Peak Freq.	Peak Freq.
Modulation 	Deviation	Deviation	Deviation	Deviation
Level	At 300 Hz	At 1000 Hz	At 3000 Hz	At 12000 Hz
(dB)	(KHz)	(KHz)	(KHz)	(KHz)
-20	18.52	25.76	27.98	29.75
-15	21.35	28.69	31.86	32.51
-10	24.68	31.53	33.82	36.85
-5	30.62	38.67	39.38	41.11
0	32.75	42.38	43.15	43.86
5	35.38	43.86	45.72	46.73
10	36.89	45.05	46.56	47.05
15	38.83	46.15	47.05	47.13
20	38.96	47.16	47.28	47.39



Report No.: AGC03588150701FE02 Page 18 of 38

Test Result @High Channel

Modulation Level (dB)	Peak Freq. Deviation At 300 Hz (KHz)	Peak Freq. Deviation At 1000 Hz (KHz)	Peak Freq. Deviation At 3000 Hz (KHz)	Peak Freq. Deviation At 12000 Hz (KHz)
-20	18.24	25.83	27.42	29.86
-15	21.41	28.76	31.73	33.15
-10	24.76	31.65	33.73	36.45
-5	30.76	38.58	39.14	41.28
0	32.46	42.51	43.34	43.72
5	35.51	43.43	45.17	46.52
10	37.02	45.18	46.83	47.15
15	38.96	46.17	47.12	47.21
20	39.86	47.06	47.19	47.45



Page 19 of 38

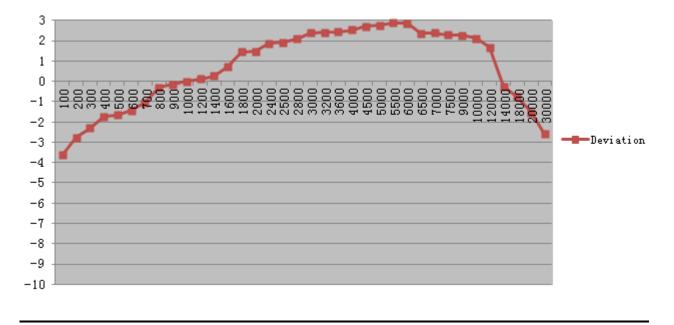
b). Audio Frequency Response:

Test Result @ Low Channel

Frequency (Hz)	Deviation (KHz)
100	9.18
200	10.14
300	10.69
400	11.43
500	11.51
600	11.83
700	12.35
800	13.46
900	13.69
1000	13.94
1200	14.12
1400	14.36
1600	15.15
1800	16.46
2000	16.53
2400	17.26
2500	17.38
2800	17.71
3000	18.34
3200	18.41
3600	18.45
4000	18.64
4500	19.03
5000	19.16
5500	19.42
6000	19.34
6500	18.29
7000	18.34
7500	18.15
9000	18.06
10000	17.78
12000	16.89
14000	13.53
18000	12.75
20000	11.68
30000	10.35
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Report No.: AGC03588150701FE02 Page 20 of 38

Audio Frequency Response @Low Channel



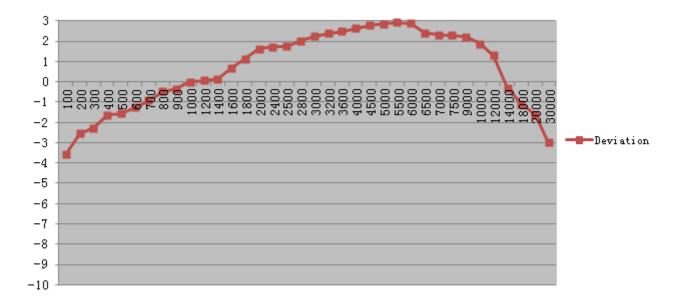
Page 21 of 38

Test Result @High Channel

Frequency (Hz)	Deviation (KHz)
100	9.21
200	10.38
300	10.71
400	11.53
500	11.64
600	12.05
700	12.53
800	13.18
900	13.35
1000	13.92
1200	14.02
1400	14.16
1600	15.07
1800	15.86
2000	16.75
2400	16.95
2800	17.03
3200	17.53
3600	18.01
4000	18.32
4500	18.51
5000	18.83
5500	19.15
6000	19.35
6500	19.51
7000	19.39
8000	18.36
9000	18.18
10000	18.11
12000	17.96
14000	17.28
16000	16.16
18000	13.43
20000	12.28
25000	11.53
30000	9.86

Report No.: AGC03588150701FE02 Page 22 of 38

Audio Frequency Response@ High Channel



Page 23 of 38

8. FREQUENCY TOLERANCE

8.1 PROVISIONS APPLICABLE

a). According to FCC Part 2 Section 2.1055(a)(1), the frequency stability shall be measured with variation of ambient temperature from −30°C to +50°C centigrade.

- b). According to FCC Part 2 Section 2.1055(d)(2), for hand carried battery powered equipment, the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point, which is specified by the manufacture.
- c). According to FCC Part 74 Section 74.861(e)-4, the frequency tolerance must be maintained within 0.005%.

8.2 MEASUREMENT PROCEDURE

8.2.1 FREQUENCY STABILITY VERSUS ENVIRONMENTAL TEMPERATURE

- 1) Setup the configuration per figure 7-1 for frequencies measurement inside an environment chamber, install new battery in the EUT.
- 2) Turn on EUT and set SA center frequency to the EUT radiated frequency. Set SA Resolution Bandwidth to 1KHz and Video Resolution Bandwidth to 1KHz and Frequency Span to 50KHz.Record this frequency as reference frequency.
- 3) Set the temperature of chamber to 50°C. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. While maintaining a constant temperature inside the chamber, turn the EUT on and measure the EUT operating frequency.
- 4) Repeat step 2 with a 10 ℃ decreased per stage until the lowest temperature -30 ℃ is measured, record all measured frequencies on each temperature step.

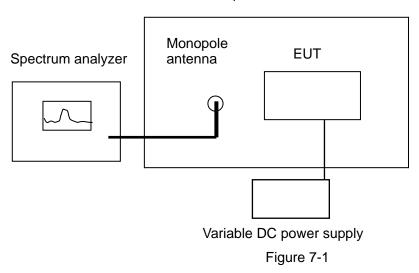
8.2.2 FREQUENCY STABILITY VERSUS INPUT VOLTAGE

- 1) Setup the configuration per figure 7-1 for frequencies measured at temperature if it is within 15℃ to 25℃. Otherwise, an environment chamber set for a temperature of 20℃ shall be used. Install new battery in the EUT.
- 2) Set SA center frequency to the EUT radiated frequency. Set SA Resolution Bandwidth to 1 KHz and Video Resolution Bandwidth to 1KHz. Record this frequency as reference frequency.
- For battery operated only device, supply the EUT primary voltage at the operating end point which is specified by manufacturer and record the frequency.

Page 24 of 38

8.3 TEST SETUP BLOCK DIAGRAM

Temperature Chamber



8.4 TEST RESULT

a) Frequency stability versus input voltage (battery operation end point voltage is 2.55 V)

Wireless Microphone	Reference Frequency (MHz)	Frequency Measured at End Point Voltage	Frequency Error (%)	Limit (%)
Low channel	171.905	171.90876	0.00219	0.005
High channel	215.200	215.20512	0.00238	0.005

Page 25 of 38

b) Frequency stability versus ambient temperature

Test Result @ Low Channel

Reference Frequency: 171.90	5MHz		Limit: ±0.005%
Environment Temperature (℃)	Power Supply	Frequency deviation measured with time Elapsed (30 minutes)	
, ,		(MHz)	%
50	DC 3V	171.90839	0.00197
40	DC 3V	171.91025	0.00305
30	DC 3V	171.90683 0.00106	
20	DC 3V	171.90652 0.00088	
10	DC 3V	171.90586	0.00050
0	DC 3V	171.90523	0.00013
-10	DC 3V	171.90793	0.00170
-20	DC 3V	171.90859	0.00209
-30	DC 3V	171.90883	0.00223

Test Result @ High Channel

Reference Frequency: 215.200 MHz				
Environment Temperature	Power Supply	Frequency deviation measured with time Elapsed (30 minutes)		
(°C)		(MHz)	%	
50	DC 3V	215.20513	0.00238	
40	DC 3V	215.20456	0.00212	
30	DC 3V	215.20397	0.00184	
20	DC 3V	215.20368	0.00171	
10	DC 3V	215.20312	0.00145	
0	DC 3V	215.20476	0.00221	
-10	DC 3V	215.20435	0.00202	
-20	DC 3V	215.20393	0.00183	
-30	DC 3V	215.20415	0.00193	

Page 26 of 38

9. EMISSION BANDWIDTH

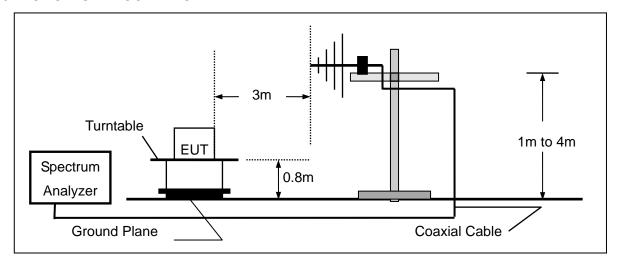
9.1 PROVISIONS APPLICABLE

According to FCC Part 74 Section 74.861(e)-5: The operation bandwidth shall not exceed 200 KHz

9.2 MEASUREMENT PROCEDURE

- 1). The EUT was placed on a turn table which is 0.8m above ground plane.
- 2). Set EUT as normal operation
- 3). Set SPA Center Frequency = fundamental frequency, RBW=10 KHz, VBW=30 KHz, Span =600 KHz.
- 4). Set SPA Max hold. Mark peak, -26dB.

9.3 TEST SETUP BLOCK DIAGRAM



Page 27 of 38

9.4 TEST RESULT

26 dB Test Result					
Operation Channel Test Data Limit Result					
Low Channel	85.59 KHz	≤200 KHz	Pass		
High Channel 84.96 KHz ≤200 KHz Pass					

Emission Bandwidth @ Low Channel



Note: All the above channels (High, middle, Low) were tested, there is only give the worst data.

Page 28 of 38

10. UNWANTED RADIATION

10.1 PROVISIONS APPLICABLE

According to Section 74.861(e)-6, the mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

- 1). On any frequency removed from the operating frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: at least 25 dB;
- 2). On any frequency removed from the operating frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: at least 35 dB;
- 3). On any frequency removed form the operating frequency by more than 250 percent of the authorized bandwidth:

at least 43 + 10 log10 (TP) dB

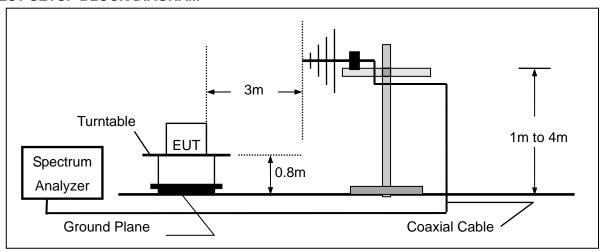
10.2 MEASUREMENT PROCEDURE

- 1). On a test site, the EUT shall be placed on a turntable, and in the position closest to the normal use as declared by the user.
- 2). The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- 3). The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- 4). The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- 5). The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- 6). The transmitter shall than be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- 7). The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- 8). The maximum signal level detected by the measuring receiver shall be noted.
- 9). The measurement shall be repeated with the test antenna set to horizontal polarization.

Page 29 of 38

- 10). Replace the antenna with a proper Antenna (substitution antenna).
- 11). The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- 12). The substitution antenna shall be connected to a calibrated signal generator.
- 13). If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- 14). The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- 15). The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- 16). The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- 17). The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.

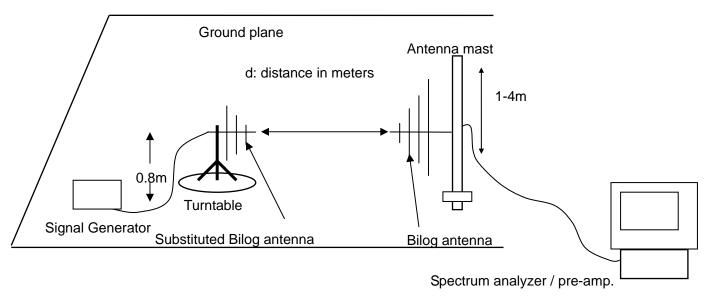
10.3 TEST SETUP BLOCK DIAGRAM



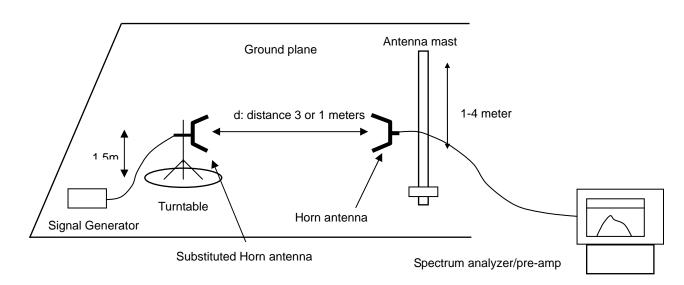
Page 30 of 38

Substitution Method:

Radiation below 1GHz



Radiation above 1GHz



Page 31 of 38

10.4 TEST RESULTS

Calculation: Limit (dBm)= EL-43-10lg (TP)

Notes: No emission found below 30MHz,EL is the emission level of the Output

Power expressed in dBm, TP=[10^(EL/10)]/1000 W.

Limit (dBm)=EL-43-10lg(TP) = -13dBm

Test Result @ Low Channel

Frequency MHz	Polarization	Level dBm	Limit dBm	Margin dB	Pass/Fail
343.8	V	-21.8	-13	8.8	Pass
515.7	V	-24.5	-13	11.5	Pass
687.6	V	-30.7	-13	17.7	Pass
343.8	Н	-23.9	-13	10.9	Pass
515.7	Н	-24.8	-13	11.8	Pass
687.6	Н	-30.9	-13	17.9	Pass
	V				
	Н				

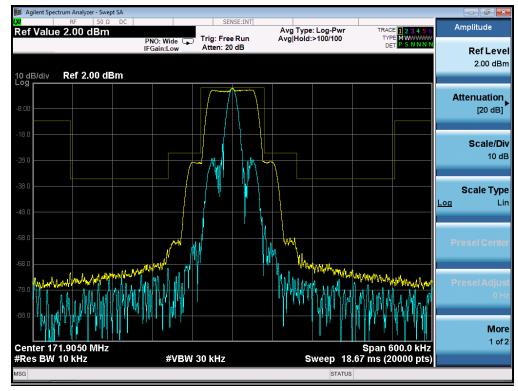
Test Result @ High Channel

Frequency MHz	Polarization	Level dBm	Limit dBm	Margin dB	Pass/Fail
430.4	V	-24.7	-13	11.7	Pass
645.6	V	-28.9	-13	15.9	Pass
860.8	V	-31.6	-13	18.6	Pass
430.4	Н	-25.8	-13	12.8	Pass
645.6	Н	-29.3	-13	16.3	Pass
860.8	Н	-32.4	-13	19.4	Pass
	V				
	Н				

Notes: -- means the output power of all the spurious frequency is at least 20dB down to the limit.

Report No.: AGC03588150701FE02 Page 32 of 38

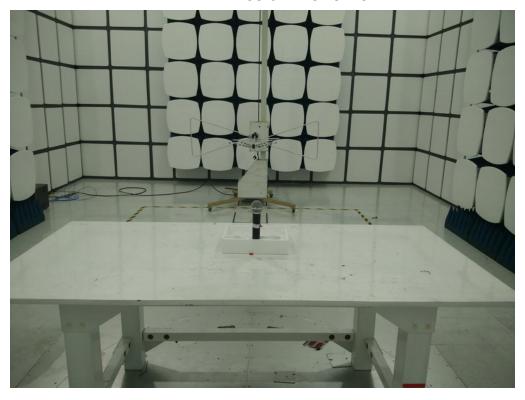
Emission Mask @ Low Channel



Report No.: AGC03588150701FE02 Page 33 of 38

APPENDIX I: PHOTOGRAPHS OF TEST SETUP

RADIATED EMISSION TEST SETUP



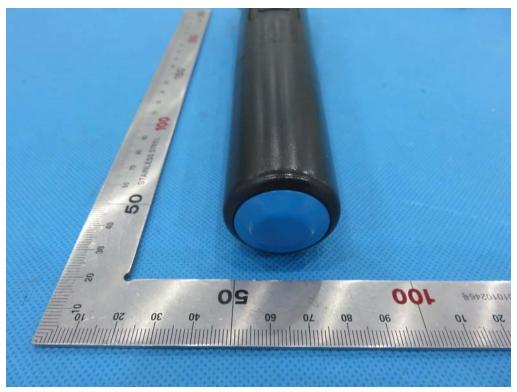
Page 34 of 38

APPENDIX II: PHOTOGRAPHS OF EUT

TOP VIEW OF EUT



BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



BACK VIEW OF EUT



Page 36 of 38

LEFT VIEW OF EUT



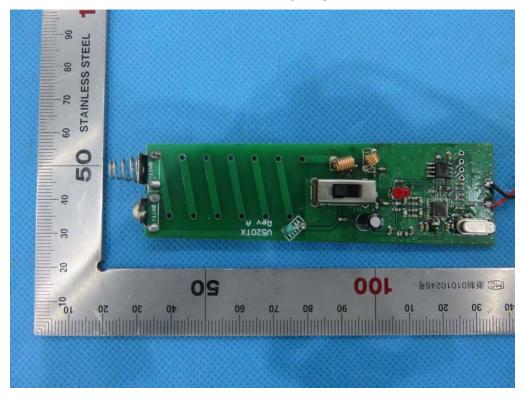
RIGHT VIEW OF EUT



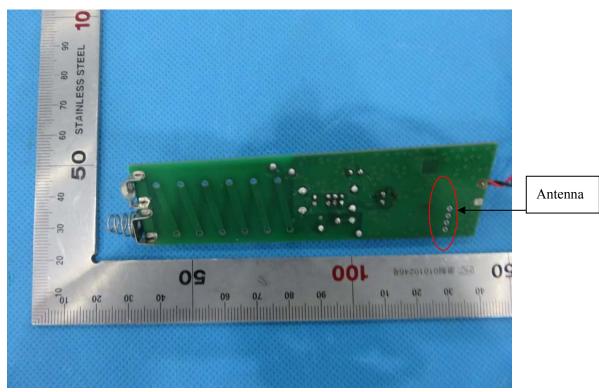
OPEN VIEW OF EUT



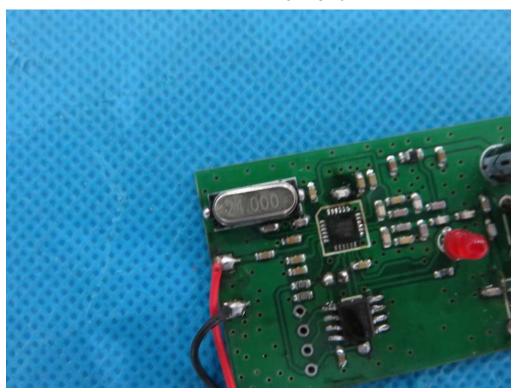
INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



INTERNAL VIEW OF EUT-3



---END OF REPORT---