



FCC Part 95 Rules
TEST REPORT

Report No.: HUAK180814793E

Test report
On Behalf of
TYT Electronics Co., Ltd.
For
Analog Transceiver
Model No.: TC-568

FCC ID: POD-FRS

Prepared for: TYT Electronics Co., Ltd.

Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian,

China.

Prepared By: Shenzhen HUAK Testing Technology Co., Ltd.

1F, B2 Building, Junfeng Zhongcheng Zhizao Innovation Park, Fuhai Street, Bao'an

District, Shenzhen City, China

Date of Test: July 28, 2018 to Aug, 23, 2018

Date of Report: Aug. 31, 2018

Report Number: HUAK180814793E



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TEST RESULT CERTIFICATION

Applicant's name:	TYT Electronics Co., Ltd.			
Address:	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.			
Manufacture's Name:	ame: TYT Electronics Co., Ltd.			
Address:	Block 39-1, Optoelectronics-information industry base, Nan'an, Quanzhou, Fujian, China.			
Product description	Analog Transceiver			
Brand Name	TYT			
Mode Name	TC-568			
Standards:	FCC Rules and Regulations Part 95			
material. Shenzhen HUAK Testing	: July 28, 2018 to Aug, 23,2018 : Aug. 31, 2018			
Testing Engir	neer : Gary Qian)			
Technical Ma				
	(Eden Hu)			
Authorized S	ignatory: Lason Zhari			

(Jason Zhou)



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Revision	Issue Date	Revisions	Revised By
V1.0	Aug. 31, 2018	Initial Issue	Jason Zhou



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1. GENERAL INFORMATION

1.1 PRODUCT DESCRIPTION

The EUT is a FRS Radio designed for voice communication. It is designed by way of utilizing the FM modulation achieves the system operating.

A major technical description of EUT is described as following:

Hardware Version	A173201-BKEM2U-V1.2
Software Version	V1.31
Modulation	FM
Channel Separation	12.5KHz
Emission Type	11K0F3E
Emission Bandwidth	10.19KHz
Maximum Transmitter Power	32.87dBm
Rated Output power	2W (It was fixed by the manufacturer, any individual can't arbitrarily change it.)
Antenna Designation Inseparable	
Antenna Gain	1.5dBi
Power Supply	DC 3.7V, 1200mAh (by battery)
Limiting Voltage	DC 3.15 V-4.25 V
Operation Frequency Range and Channel	FRS: 462.5500MHz -462.7250MHz Test Channel :4 and 18 channel
Frequency Tolerance	1.055ppm



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Channel List:

CH. No	CH. Freq	CH. No	CH. Freq
1	462.5625	16	462.5750
2	462.5875	17	462.6000
3	462.6125	18	462.6250
4	462.6375	19	462.6500
5	462.6625	20	462.6750
6	462.6875	21	462.7000
7	462.7125	22	462.7250
15	462.5500	1	/



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1.2 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for FCC ID: **POD-FRS**, filing to comply with the FCC Part 95 requirements.

1.3 TEST METHODOLOGY.

The radiated emission testing was performed according to the procedures of TIA/EIA 603.

1.4 TEST FACILITY

Test Site	Shenzhen HUAK Testing Technology Co., Ltd.		
Location	1F, B2 Building, Junfeng Zhongcheng Zhizao Innovation Park, Fuhai Street, Bao'an District, Shenzhen City, China		
Designation Number	CN1229		
Test Firm Registration Number: 616276			

1.5 SPECIAL ACCESSORIES

Not available for this EUT intended for grant.

1.6 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.



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2. SYSTEM TEST CONFIGURATION

2.1 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.

2.2 EUT EXERCISE

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



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2.4 CONFIGURATION OF TESTED SYSTEM

Fig. 2-1 Configuration of Tested System

EUT

Table 2-1 Equipment Used in Tested System

Item	Equipment	Model No.	Identifier	Note
1	Analog Transceiver	TC-568	FCC ID: POD-FRS	EUT

3. SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§ 95.567	Maximum Transmitter Power	Compliant
§ FCC part 2.1047(a) § 95.575	Modulation Characteristics	Compliant
§ FCC part 2.1049 § 95.573 § 95.579	Occupied Bandwidth and Emission Mask	Compliant
§ FCC Part 2.1055 § 95.565	Frequency Stability	Compliant
§ 95.579(a3)	Transmitter Radiated Spurious Emission	Compliant



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LIST OF EQUIPMENTS USED

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
Receiver	R&S ESCI 7		HKE-010	2017/12/28	2019/12/26
Spectrum analyzer	Agilent	N9020A	HKE-048	2017/12/28	2018/12/27
Horn Antenna	Schewarzbeck	9120D	HKE-013	2017/12/28	2019/12/26
Preamplifier	EMCI	EMC051845SE	HKE-015	2017/12/28	2018/12/27
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	HKE-087	2017/12/28	2018/12/27
Preamplifier	Schwarzbeck	BBV 9743	HKE-006	2017/12/28	2018/12/27
Bilog Broadband Antenna	Schwarzbeck	VULB9163	HKE-012	2017/12/28	2018/12/27
Loop Antenna	Schewarzbeck	Schewarzbeck FMZB 1519 B		2017/12/28	2018/12/27
Small environmental tester	ESPEC	SH-242	HKE-088	2018/03/02	2019/03/01
RF Communication Test Set	HP	HP8920B	HKE-089	2018/06/12	2019/06/11
ANTENNA	A.H.	SAS-521-4	HKE-091	2018/03/01	2020/02.28
ANTENNA	Schwarzbeck	9168	HKE-095	2018/03/01	2020/02.28
HORN ANTENNA	E.M.	EM-AH-10180	HKE-090	2018/03/01	2020/02.28
Horn Ant (18G-40GHz)	Schwarzbeck	BBHA 9170	HKE-094	2018/03/01	2020/02.28
Horn Ant (18G-40GHz)	ETS	QWH_SL_18_40_K_SG	HKE-092	2018/03/01	2020/02.28



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4. DESCRIPTION OF TEST MODES

RF TEST MODES

The EUT (Two way radio) has been tested under normal operating condition. (FRS TX) are chosen for testing at each channel separation.

No.	TEST MODES	CHANNEL SEPARATION
1	FRS TX	12.5 KHz

Note: Only the result of the worst case was recorded in the report.



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5. FREQUENCY TOLERANCE

5.1 PROVISIONS APPLICABLE

Standard Applicable [Part 95.565, Part 95.565] The carrier frequency stability is the ability of the transmitter to maintain an assigned carrier frequency.

FRS: The carrier frequency tolerance shall be better than ±2.5 ppm.

5.2 MEASUREMENT PROCEDURE

5.2.1 Frequency stability versus environmental temperature

- 1. Setup the configuration per figure 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.

5.2.2 Frequency stability versus input voltage

- Setup the configuration per figure 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. The EUT shall be powered by DC 4.8V.
- 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.
- 3. Supply the EUT primary voltage at the operating end point which is specified by manufacturer and record the frequency.

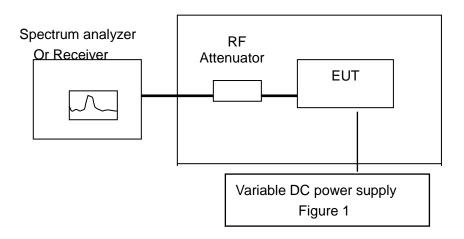


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5.3 TEST SETUP BLOCK DIAGRAM

Temperature Chamber





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5.4 TEST RESULT

(1) Frequency stability versus input voltage (Supply nominal voltage is 3.70V)

Environment	Power	Reference	Limit:	
Temperature(°C)	(V)	462.6375MHz	462.6250MHz	ppm
50	DC 380 V	0.994	0.866	
40	DC 3.70 V	0.884	0.764	
30	DC 3.70 V	0.783	0.645	
20	DC 3.70 V	0.874	0.643	±2.5for
10	DC 3.70 V	0.770	0.756	FRS
0	DC 3.70 V	0.684	0.779	FRS
-10	DC 3.70 V	0.586	0.667	
-20	DC 3.70 V	0.758	0.754	
-30	DC 3.70 V	0.887	0.846	
Result		Pa	ass	

(2) Frequency stability versus input voltage (Battery limiting voltage is 3.15V)

Environment	Power	Reference	e Frequency	Limit:
Temperature(°C)	(V)	462.6375MHz	462.6250MHz	ppm
50	DC 3.15	0.745	0.843	
40	DC 3.15	0.846	0.759	
30	DC 3.15	0.947	0.684	
20	DC 3.15	0.657	0.876	±2.5for
10	DC 3.15	0.832	0978	FRS
0	DC 3.15	0.743	0.578	FRS
-10	DC 3.15	0.747	0.863	
-20	DC 3.15	0.635	0.763	
-30	DC 3.15	0.557	0.793	
Result		 Pa	ass	_

(3) Frequency stability versus input voltage (Battery Fully Charged voltage is 4.25V)

(3) Frequency stability versus input voltage (Battery Fully Charged voltage is 4.25V)				
Environment	Power	Reference	Frequency	Limit:
Temperature(°C)	(V)	462.6375MHz	462.6250MHz	ppm
50	DC 4.25	0.715	0.748	
40	DC 4.25	0.874	0.876	
30	DC 4.25	0.983	0.688	
20	DC 4.25	0.731	0.627	±2.5for
10	DC 4.25	0.858	1.055	FRS
0	DC 4.25	0.683	0.867	FKS
-10	DC 4.25	0.535	0.755	
-20	DC 4.25	0.878	0.676	
-30	DC 4.25	0.964	0.767	
Result		Pa	ass	



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6. EMISSION BANDWIDTH

6.1 PROVISIONS APPLICABLE

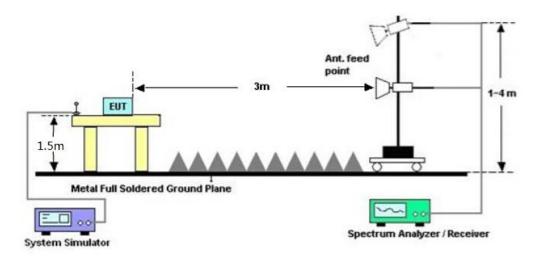
FCC Part 95.573: FRS: The authorized bandwidth for an FRS unit is 12.5 kHz.

Occupied Bandwidth (Section 2.1049, 95.573): The EUT was connected to the audio signal generator and the spectrum analyzer via the main RF connector, and through an appropriate attenuator. The EUT was controlled to transmit its maximum power. Then the bandwidth of 99% power can be measured by the spectrum analyzer.

6.2 MEASUREMENT PROCEDURE

- 1). The EUT was modulated by 2.5 KHz Sine wave audio signal, The level of the audio signal employed is 16 dB greater than that necessary to produce 50% of rated system deviation. Rated system deviation is 2.5 kHz (12.5 kHz channel spacing).
 - 2). Set SPA Center Frequency = fundamental frequency, RBW=100Hz.VBW= 300 Hz, Span =50 KHz.
 - 3). Set SPA Max hold. Mark peak, -26 dB.

6.3 TEST SETUP BLOCK DIAGRAM

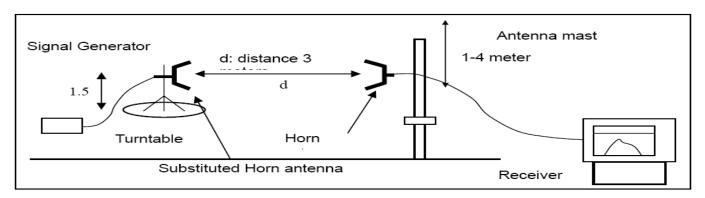




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SUBSTITUTION METHOD:

RADIATED ABOVE 1 GHZ



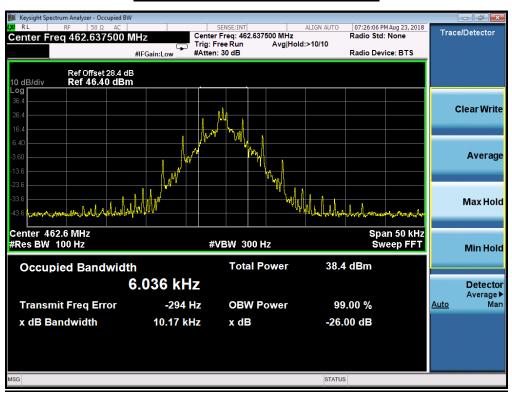


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6.4 MEASUREMENT RESULT

26 dB Bandwidth Measurement Result				
Operating Frequency		12.5 KHz Channel Separa	ation	
Operating Frequency	Test Data	Limits	Result	
462.6375MHz	10.17KHz	11.25 KHz	Pass	
462.6250MHz	10.19KHz	11.25 KHz	Pass	

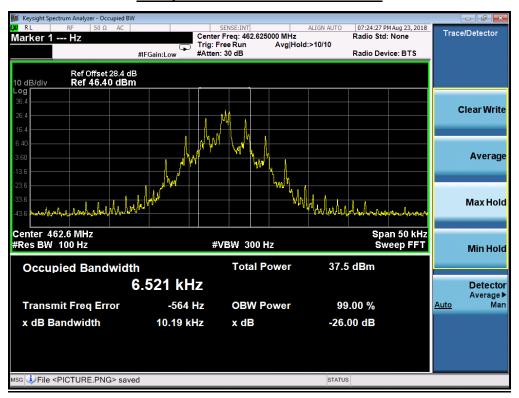
Occupied bandwidth of 462.6375MHz





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Occupied bandwidth of 462.6250MHz



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7. UNWANTED RADIATION

7.1 PROVISIONS APPLICABLE

Standard Applicable [FCC Part 95.579]

According to FCC section 95.579, the unwanted emission should be attenuated below TP by at least 43+10 log(Transmit Power) dB.

7.2 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.
- (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.

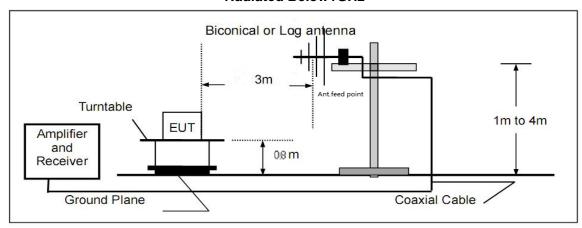


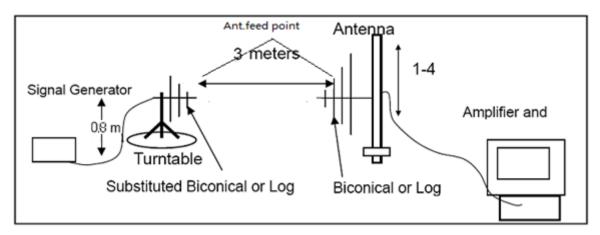
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7.3 TEST SETUP BLOCK DIAGRAM

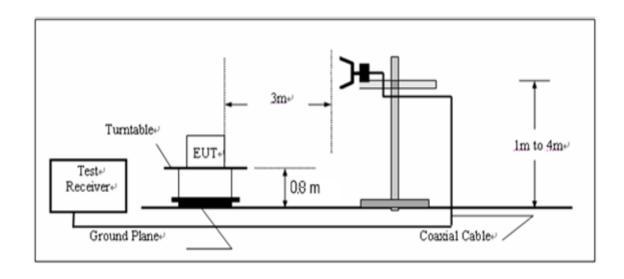
SUBSTITUTION METHOD: (Radiated Emissions)

Radiated Below1GHz



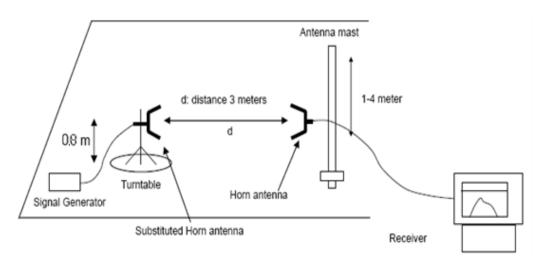


Radiated Above 1 GHz





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7.4 MEASUREMENT RESULTS:

the unwanted emission should be attenuated below TP by at least 43+10 log(Transmit Power) dB

Limit: At least 43+10 log (P) =43+10log (2) =46 (dBc) 33-46=-13dBm



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Measurement Result for 12.5 KHz Channel Separation @ 462.6375MHz

Emission Frequency (MHz)	Ant. Polarity(H/V)	Measurement Result (dBm)	Limit (dBm)	Result(P/F)
462.638	Н	0		pass
925.275	Н	-49.8	-13	pass
1387.91	Н	-40.8	-13	pass
1850.550	Н	-45.6	-13	pass
2313.188	Н	-36.6	-13	pass
2775.825	Н	-45.4	-13	pass
3238.463	Н	-50.2	-13	pass
3701.100	Н	-49.6	-13	pass
4163.738	Н	-48.6	-13	pass
4626.375	Н	-49.3	-13	pass

Emission Frequency (MHz)	Ant. Polarity(H/H)	Measurement Result (dBm)	Limit (dBm)	Result(P/F)
462.638	V	0		pass
925.275	V	-50.3	-13	pass
1387.91	V	-50.6	-13	pass
1850.550	V	-49.8	-13	pass
2313.188	V	-42.8	-13	pass
2775.825	V	-47.8	-13	pass
3238.463	V	-48.1	-13	pass
3701.100	V	-50.2	-13	pass
4163.738	V	-49.3	-13	pass
4626.375	V	-50.8	-13	pass

Measurement Result for 12.5 KHz Channel Separation @ 462.6250MHz

Emission Frequency (MHz)	Ant. Polarity(H/V)	Measurement Result (dBm)	Limit (dBm)	Result(P/F)
462.625	Н	0		pass
925.250	Н	-49.8	-13	pass
1387.875	Н	-42.6	-13	pass
1850.500	Н	-43.3	-13	pass
2313.125	Н	-41.5	-13	pass
2775.750	Н	-43.2	-13	pass
3238.375	Н	-48.3	-13	pass
3701.000	Н	-48.6	-13	pass
4163.625	Н	-48.9	-13	pass
4626.250	Н	-50.8	-13	pass



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Emission Frequency (MHz)	Ant. Polarity(H/V)	Measurement Result (dBm)	Limit (dBm)	Result(P/F)
462.625	V	0		pass
925.250	V	-50.7	-13	pass
1387.875	V	-49.4	-13	pass
1850.500	V	-49.8	-13	pass
2313.125	V	-50.7	-13	pass
2775.750	V	-51.7	-13	pass
3238.375	V	-49.5	-13	pass
3701.000	V	-50.5	-13	pass
4163.625	V	-46.0	-13	pass
4626.250	V	-48.8	-13	pass



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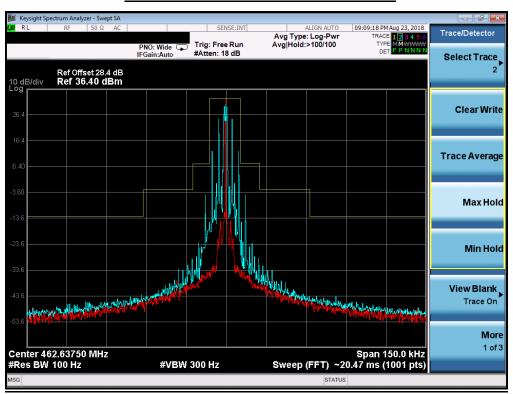
7.5 EMISSION MASK PLOT

Standard Applicable [FCC Part 95.579(a)] FRS: Unwanted emissions shall be attenuated below the unmodulated carrier power in accordance with the following:

- (a) Attenuation requirements. The power of unwanted emissions must be attenuated below the carrier power output in Watts (P) by at least:
- (1) 25 dB (decibels) in the frequency band 6.25 kHz to 12.5 kHz removed from the channel center frequency.
- (2) 35 dB in the frequency band 12.5 kHz to 31.25 kHz removed from the channel center frequency.
- (3) 43 + 10 log (P) dB in any frequency band removed from the channel center frequency by more than 31.25 kHz. The detailed procedure employed for Emission Mask measurements are specified as following:
- The transmitter shall be modulated by a 2.5 kHz audio signal,
- The level of the audio signal employed is 16 dB greater than that necessary to produce 50% of rated system deviation. Rated system deviation is 2.5 kHz.

Channel 1:

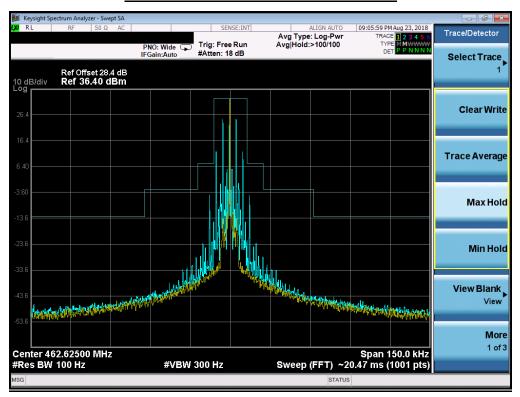
The Worst Emission Mask for channel 4



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CHANNEL 18:

The Worst Emission Mask for channel 18





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8. MAXIMUMN TRANSMITTER POWER

8.1 PROVISIONS APPLICABLE

Per FCC §2.1046 and §95.567: Maximum ERP is dependent upon the station's antenna HAAT and required service area.

FCC Part 95.567 For FRS, FRS transmitter type must be designed such that the effective radiated power (ERP) on channels 8 through 14 does not exceed 0.5 Watts and the ERP on channels 1 through 7 and 15 through 22 does not exceed 2.0 Watts.

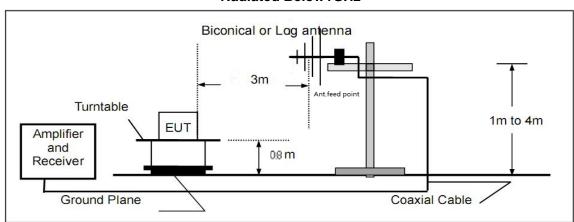
8.2 TEST PROCEDURE

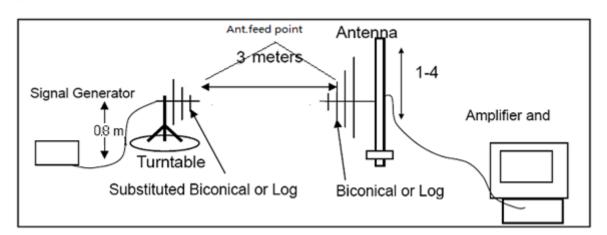
The RF output of Two-way Radio was conducted to a spectrum analyzer through an appropriate attenuator.

8.3 TEST CONFIGURATION

Effective Radiated Power

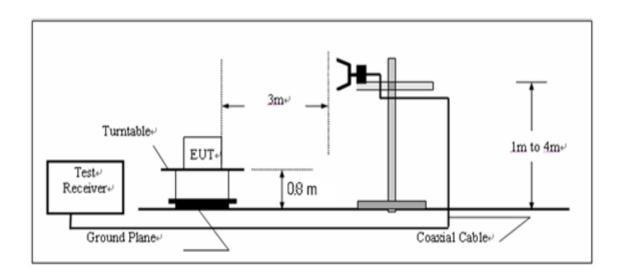
Radiated Below1GHz

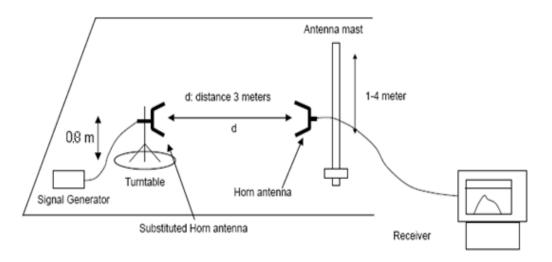




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Radiated Above 1 GHz





8.4 TEST RESULT

The maximum Power (CP) for UHF is

Analog: 0.5W for 12.5 KHz Channel Separation

Calculation Formula: CP = R + A + L

* Note:

CP: The final Conducted Power

R: The reading value from spectrum analyzer A: The attenuation value of the used attenuator

L: The loss of all connection cables



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Radiated Power Measurement Results			
Channal Sanaration	Channal	Measurement Result (dBm)	
Channel Separation	Channel	For 33.00dBm(2W)	
12.5 KHz	462.6375MHz	32.87	
	462.6250MHz	32.57	

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9. MODULATION CHARACTERISTICS

9.1 PROVISIONS APPLICABLE

According to [FCC Part 95.575, Part 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.

Each FRS transmitter type must be designed such that the peak frequency deviation does not exceed 2.5 kHz, and the highest audio frequency contributing substantially to modulation must not exceed 3.125 kHz.

Part 2.1047(a) A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz shall be submitted. For equipment required to have an audio low-pass filter, a curve showing thefrequency response of the filter, or of all circuitry installed between the modulation limiter and the modulated stage shallbe submitted.

9.2 MEASUREMENT METHOD

9.2.1 Modulation Limit

- (1). Configure the EUT as shown in figure 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, 1500 and 3000Hz in sequence.

9.2.2 Audio Frequency Response

Personal Radio Service stations that transmit voice emissions may also transmit audible or subaudible tones or other signals for the purpose of selective calling and/or receiver squelch activation. These tones and signals are ancillary to voice communications and are considered to be included within the voice emission types, e.g., A3E, F3E, and G3E.

- (a) Tones that are audible (having a frequency higher than 300 Hertz), must last no longer than 15 seconds at one time.
- (b) Tones that are subaudible (having a frequency of 300 Hertz or less), may be transmitted continuously during a communication session.
 - (1). Configure the EUT as shown in figure 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 10 KHz and record the frequency deviation.
 - (4). Audio Frequency Response = 20log10 (Deviation of test frequency/Deviation of 1 KHz reference).

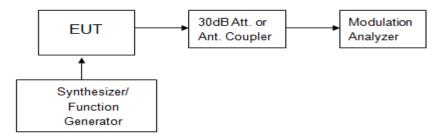


Figure 1: Modulation characteristic measurement configuration



9.3 MEASUREMENT RESULT

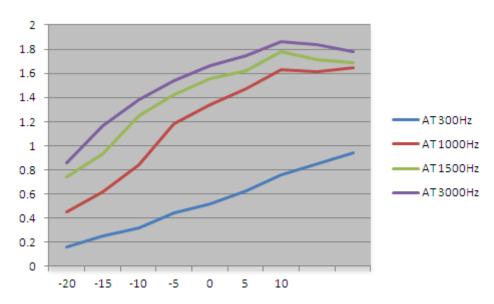
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TEST CHANNEL: 4

(A). MODULATION LIMIT:

462.6375MHz @ 12.5 KHz Channel Separations

Modulation Level (dB)	Peak Freq. Deviation At 300 Hz	Peak Freq. Deviation At 1000 Hz	Peak Freq. Deviation At 1500 Hz	Peak Freq. Deviation At 3000 Hz
-20	0.16	0.45	0.74	0.86
-15	0.25	0.62	0.93	1.17
-10	0.32	0.84	1.25	1.38
-5	0.44	1.18	1.42	1.54
0	0.52	1.34	1.56	1.66
+5	0.63	1.47	1.62	1.75
+10	0.76	1.63	1.78	1.86
+15	0.85	1.61	1.71	1.84
+20	0.94	1.65	1.69	1.78



Note: All the modes had been tested, but only the worst data recorded in the report.



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(B). AUDIO FREQUENCY RESPONSE:

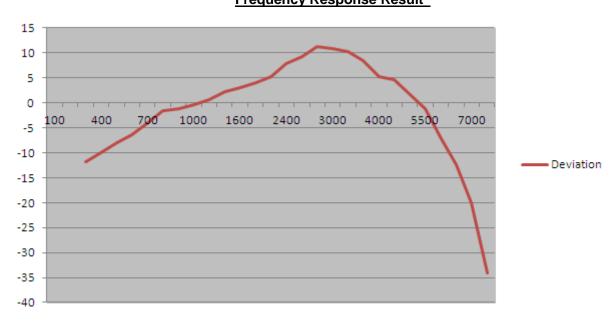
462.6375MHz @ 12.5 KHz Channel Separations

Deviation (KHz) Response(dB)		12.5 KHZ Chaimer Separa	Audio Frequency
100	Frequency (Hz)	Deviation (KHz)	
300 0.13 -11.70 400 0.16 -9.90 500 0.2 -7.96 600 0.24 -6.38 700 0.32 -3.88 800 0.42 -1.51 900 0.44 -1.11 1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.04 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05	100		
400 0.16 -9.90 500 0.2 -7.96 600 0.24 -6.38 700 0.32 -3.88 800 0.42 -1.51 900 0.44 -1.11 1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01	200		
500 0.2 -7.96 600 0.24 -6.38 700 0.32 -3.88 800 0.42 -1.51 900 0.44 -1.11 1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000	300	0.13	-11.70
500 0.2 -7.96 600 0.24 -6.38 700 0.32 -3.88 800 0.42 -1.51 900 0.44 -1.11 1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000	400	0.16	-9.90
700 0.32 -3.88 800 0.42 -1.51 900 0.44 -1.11 1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 </td <td>500</td> <td></td> <td>-7.96</td>	500		-7.96
800 0.42 -1.51 900 0.444 -1.11 1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	600	0.24	-6.38
900 0.44 -1.11 1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	700	0.32	-3.88
1000 0.48 -0.35 1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	800	0.42	-1.51
1200 0.54 0.67 1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000 18000	900	0.44	-1.11
1400 0.65 2.28 1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000 18000	1000	0.48	-0.35
1600 0.71 3.05 1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	1200	0.54	0.67
1800 0.79 3.97 2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 18000 18000	1400	0.65	2.28
2000 0.91 5.20 2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	1600	0.71	3.05
2400 1.24 7.89 2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	1800	0.79	3.97
2500 1.47 9.37 2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	2000	0.91	5.20
2800 1.82 11.22 3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 14000 18000	2400	1.24	7.89
3000 1.74 10.83 3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	2500	1.47	9.37
3200 1.64 10.32 3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	2800	1.82	11.22
3600 1.34 8.56 4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	3000	1.74	10.83
4000 0.92 5.30 4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	3200	1.64	10.32
4500 0.85 4.61 5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	3600	1.34	8.56
5000 0.61 1.73 5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	4000	0.92	5.30
5500 0.44 -1.11 6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	4500	0.85	4.61
6000 0.22 -7.13 6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	5000	0.61	1.73
6500 0.12 -12.40 7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	5500	0.44	-1.11
7000 0.05 -20.00 7500 0.01 -33.98 9000 10000 14000 18000	6000	0.22	-7.13
7500 0.01 -33.98 9000 10000 14000 18000	6500	0.12	-12.40
9000 10000 14000 18000	7000	0.05	-20.00
10000 14000 18000	7500	0.01	-33.98
14000 18000	9000		
18000	10000		
	14000		
20000	18000		
20000	20000		
30000	30000		



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Frequency Response Result



Note: All the modes had been tested, but only the worst data recorded in the report.

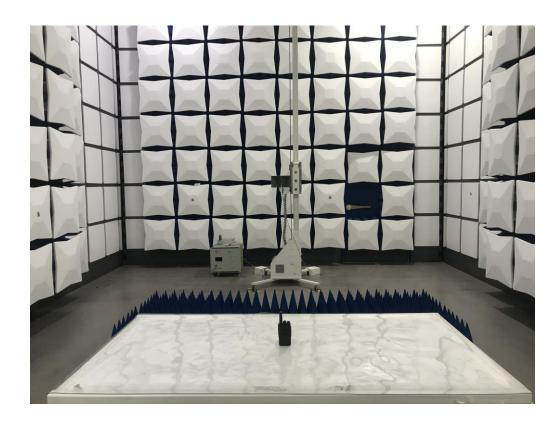


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APPENDIX I: PHOTOGRAPHS OF SETUP

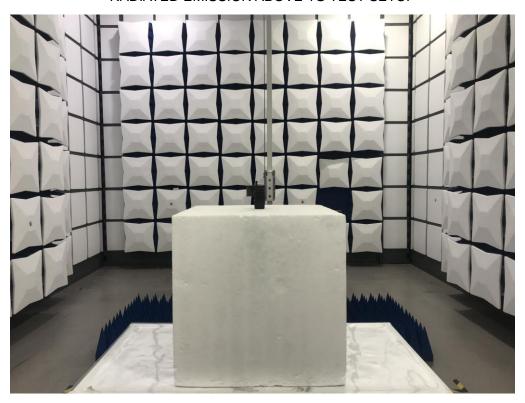
RADIATED EMISSION TEST SETUP







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APPENDIX II: EXTERNAL VIEW OF EUT

ALL VIEW OF EUT



TOP VIEW OF EUT





Page 36 of 41 Report No.: HUAK180814793E BOTTOM VIEW OF EUT



FRONT VIEW OF EUT





Page 37 of 41 Report No.: HUAK180814793E BACK VIEW OF EUT



LEFT VIEW OF EUT





Page 38 of 41 Report No.: HUAK180814793E RIGHT VIEW OF EUT



OPEN VIEW-1 OF EUT





Page 39 of 41 Report No.: HUAK180814793E OPEN VIEW-2 OF EUT

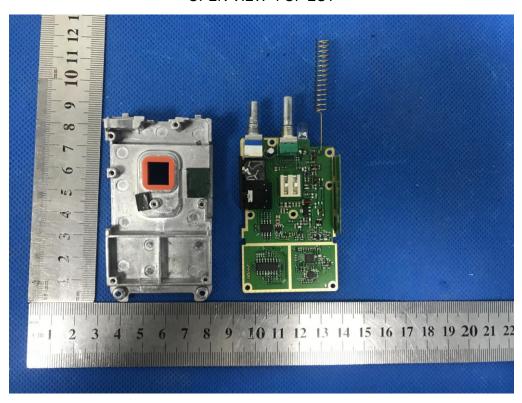


OPEN VIEW-3 OF EUT

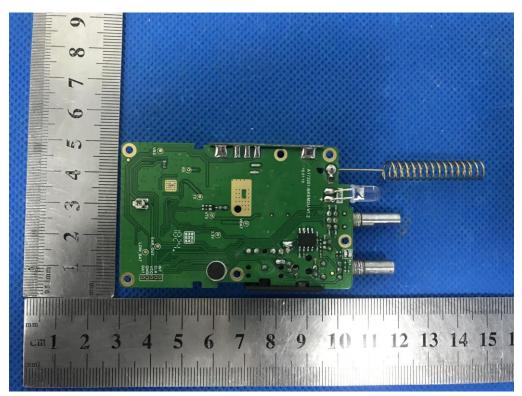




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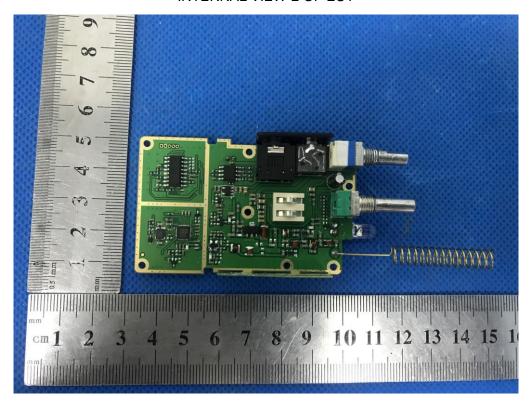


INTERNAL VIEW-1 OF EUT

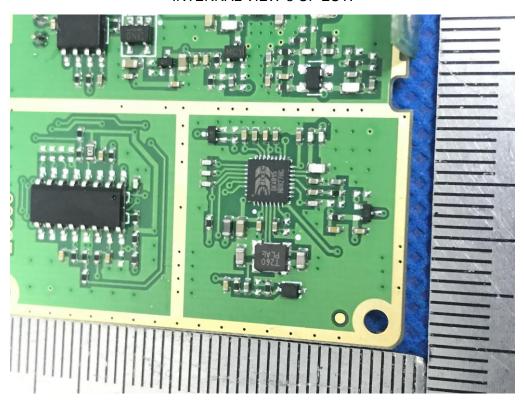




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INTERNAL VIEW-3 OF EUT.



----END OF REPORT----