
FCC Test Report

Report No.: AGC07357160602FE03

FCC ID : 2AALA1332C

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION : REMOTE CONTROL FOR RC DRONE

BRAND NAME : N/A

MODEL NAME : 1332C,1327,1327W,1327S,1332,1332W,1331,
1331W,1331S, Irdrone X7WG, IrdroneX8S,
1325,1325W,1325C,1325,1339

CLIENT : Shantou City Hengdi Industry Co., Ltd

DATE OF ISSUE : July 01, 2016

**STANDARD(S)
TEST PROCEDURE(S)** : FCC Part 15 Rules

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



CAUTION:

This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.



Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	July 01, 2016	Valid	Original Report

TABLE OF CONTENTS

- 1. VERIFICATION OF CONFORMITY..... 4**
- 2. GENERAL INFORMATION 5**
 - 2.1. PRODUCT DESCRIPTION 5
 - 2.2. TABLE OF CARRIER FREQUENCY..... 6
- 3. MEASUREMENT UNCERTAINTY 7**
- 4. DESCRIPTION OF TEST MODES 7**
- 5. SYSTEM TEST CONFIGURATION..... 8**
 - 5.1. CONFIGURATION OF EUT SYSTEM..... 8
 - 5.2. EQUIPMENT USED IN EUT SYSTEM..... 8
 - 5.3. SUMMARY OF TEST RESULTS..... 8
- 6. TEST FACILITY..... 9**
- 7. RADIATED EMISSION..... 10**
 - 7.1 TEST LIMIT 10
 - 7.2. MEASUREMENT PROCEDURE11
 - 7.3. TEST SETUP 13
 - 7.4. TEST RESULT 14
- 8. BAND EDGE EMISSION..... 19**
 - 8.1. MEASUREMENT PROCEDURE 19
 - 8.2 TEST SETUP 19
 - 8.3 RADIATED TEST RESULT 19
- 9. 20DB BANDWIDTH..... 24**
 - 9.1. MEASUREMENT PROCEDURE 24
 - 9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION) 24
 - 9.3. MEASUREMENT RESULTS 24
- APPENDIX A: PHOTOGRAPHS OF TEST SETUP..... 27**
- APPENDIX B: PHOTOGRAPHS OF EUT..... 28**

1. VERIFICATION OF CONFORMITY

Applicant	Shantou City Hengdi Industry Co., Ltd
Address	West of NingchuanBei Road and South of Huancui Roda, Guangyi St, Chenghai District, Shantou, Guangdong, China
Manufacturer	GUANGDONG HENGDI TECHNOLOGY CORP.,LTD.
Address	Xiongye Industrial Park,Dengfeng Road, Chenghai District,Shantou City,Guangdong,China.
Product Designation	REMOTE CONTROL FOR RC DRONE
Brand Name	N/A
Test Model	1332C
Series Model	1327,1327W,1327S,1332,1332W,1331,1331W,1331S, Irdrone X7WG, IrdroneX8S,1325,1325W,1325C,1325,1339
Model Difference	All the same except for the model name and appearance.
Date of test	Jun.20, 2016 to Jun.22, 2016
Deviation	None
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-BR/RF

We hereby certify that:

The above equipment was tested 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 ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.249.

Tested by

Max Zhang

Max Zhang(Zhang Yi) July 01, 2016

Reviewed by

Rock Huang

Rock Huang(Huang Dinglue) July 01, 2016

Approved by

Solger Zhang

Solger Zhang(Zhang Hongyi) July 01, 2016
Authorized Officer

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

Operation Frequency	2.410 GHz to 2.473GHz
Maximum field strength	78.71dBuV/m@3m(AV)
Modulation	GFSK
Number of channels	64
Antenna Gain	0dBi
Antenna Designation	Wire Antenna (Met 15.203 Antenna requirement)
Hardware Version	HM1332T
Software Version	N/A
Power Supply	DC 6V by battery

2.2. TABLE OF CARRIER FREQUENCY

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2410	23	2432	45	2454
2	2411	24	2433	46	2455
3	2412	25	2434	47	2456
4	2413	26	2435	48	2457
5	2414	27	2436	49	2458
6	2415	28	2437	50	2459
7	2416	29	2438	51	2460
8	2417	30	2439	52	2461
9	2418	31	2440	53	2462
10	2419	32	2441	54	2463
11	2420	33	2442	55	2464
12	2421	34	2443	56	2465
13	2422	35	2444	57	2466
14	2423	36	2445	58	2467
15	2424	37	2446	59	2468
16	2425	38	2447	60	2469
17	2426	39	2448	61	2470
18	2427	40	2449	62	2471
19	2428	41	2450	63	2472
20	2429	42	2451	64	2473
21	2430	43	2452		
22	2431	44	2453		

3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded 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	$\pm 3.18\text{dB}$
2	All emissions, radiated	$\pm 3.91\text{dB}$
3	Temperature	$\pm 0.5^\circ\text{C}$
4	Humidity	$\pm 2\%$

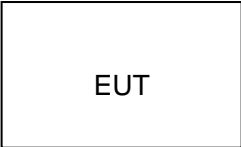
4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX in GFSK modulation
2	Middle channel TX in GFSK modulation
3	High channel TX in GFSK modulation
Note: 1. Only the result of the worst case was recorded in the report, if no other cases. 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.	

5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure :



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	REMOTE CONTROL FOR RC DRONE	1332C	FCC ID:2AALA1332C	EUT

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.249	Radiated Emission	Compliant
§15.249	Band Edges	Compliant
§15.215	20dB bandwidth	Compliant

6. 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 C63.10:2013.

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, 2015	July 3, 2016
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 4, 2015	July 3, 2016
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 4, 2015	July 3, 2016
RF Cable	SCHWARZBECK	AK9515E	96221	July 4, 2015	July 3, 2016
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 3, 2016	June 2, 2017
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A
Active loop antenna (9K-30MHz)	Schwarzbeck	FMZB1519	1519-038	June 3, 2016	June 2, 2017
Spectrum analyzer	Agilent	E4407B	MY46185649	June 3, 2016	June 2, 2017
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	June 3, 2016	June 2, 2017
Horn Ant (18G-40GHz)	Schwarzbeck	BBHA 9170	9170-181	June 3, 2016	June 2, 2017

Conducted Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2015	July 3, 2016
Artificial Mains Network	Narda	L2-16B	000WX31025	July 8, 2015	July 7, 2016
Artificial Mains Network (AUX)	Narda	L2-16B	000WX31026	July 8, 2015	July 7, 2016
RF Cable	SCHWARZBECK	AK9515E	96222	July 4, 2015	July 3, 2016
Shielded Room	CHENGYU	843	PTS-002	June 3, 2016	June 2, 2017

7. RADIATED EMISSION

7.1 TEST LIMIT

Standard FCC15.249

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
900-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

Standard FCC 15.209

Frequency (MHz)	Distance Meters	Field Strengths Limit	
		μ V/m	dB(μ V)/m
0.009 ~ 0.490	300	2400/F(kHz)	---
0.490 ~ 1.705	30	24000/F(kHz)	---
1.705 ~ 30	30	30	---
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	Other:74.0 dB(μ V)/m (Peak) 54.0 dB(μ V)/m (Average)	

Remark: (1) Emission level dB μ V = 20 log Emission level μ V/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

7.2. MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

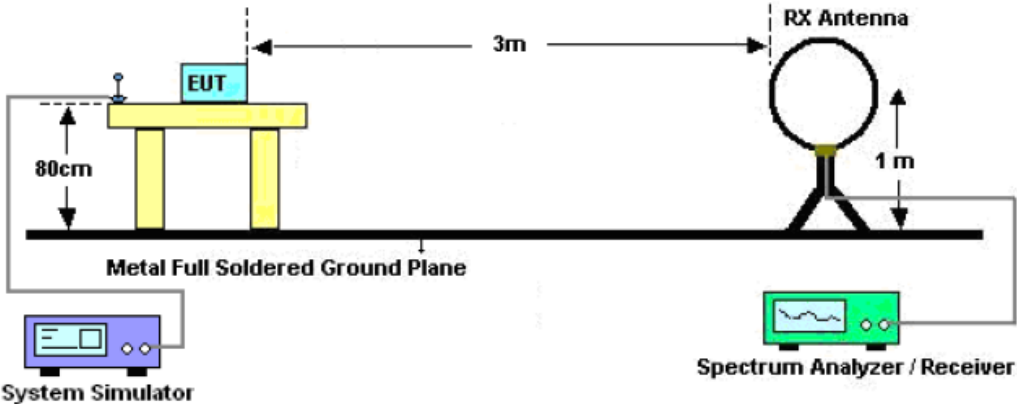
The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
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
Start ~Stop Frequency	1GHz~26.5GHz 1MHz/1MHz for Peak, 1MHz/10Hz for Average

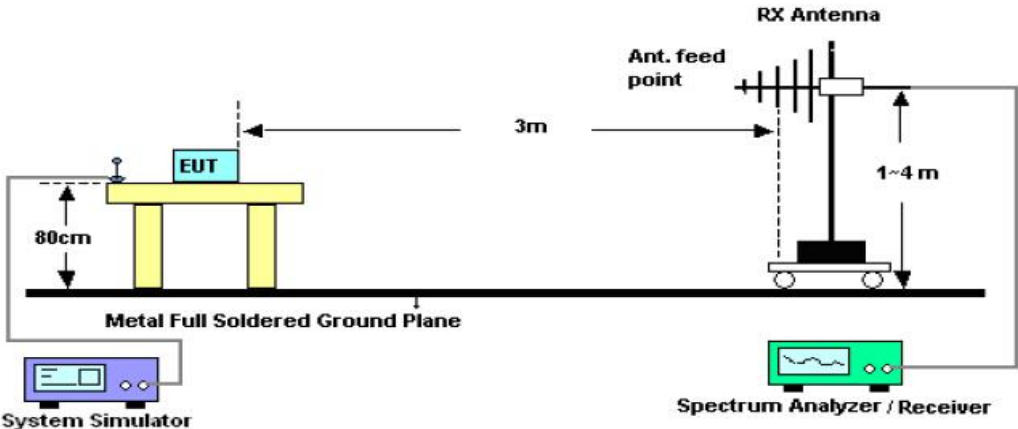
Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

7.3. TEST SETUP

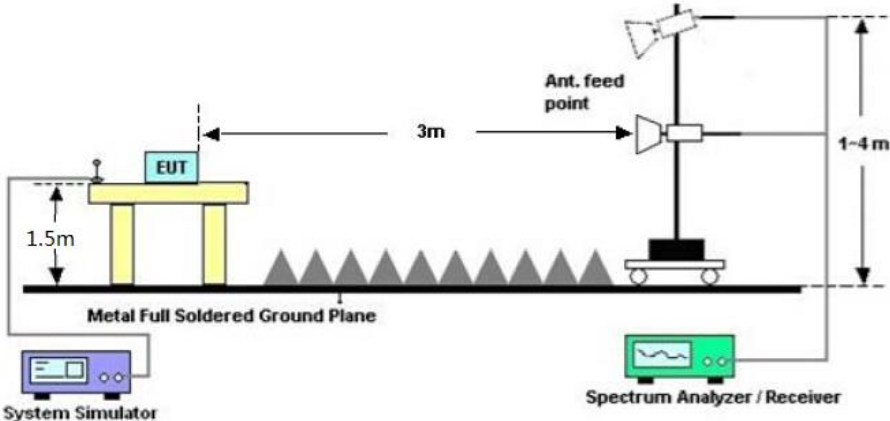
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



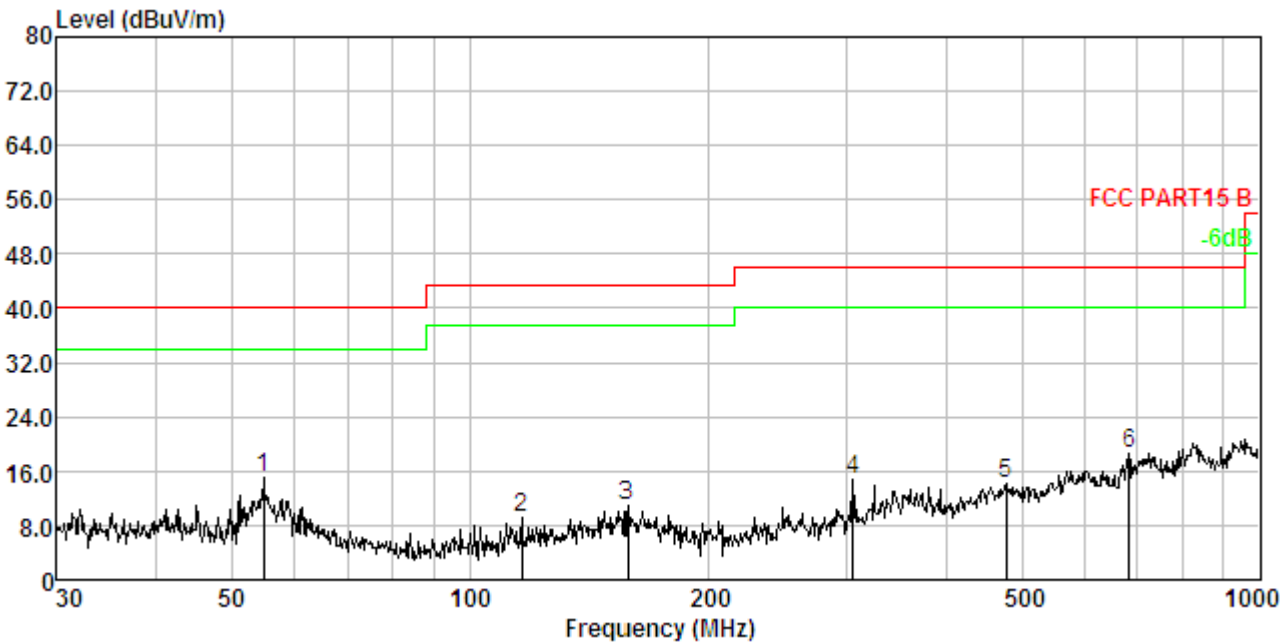
7.4. TEST RESULT

RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION 30MHz- 1GHZ

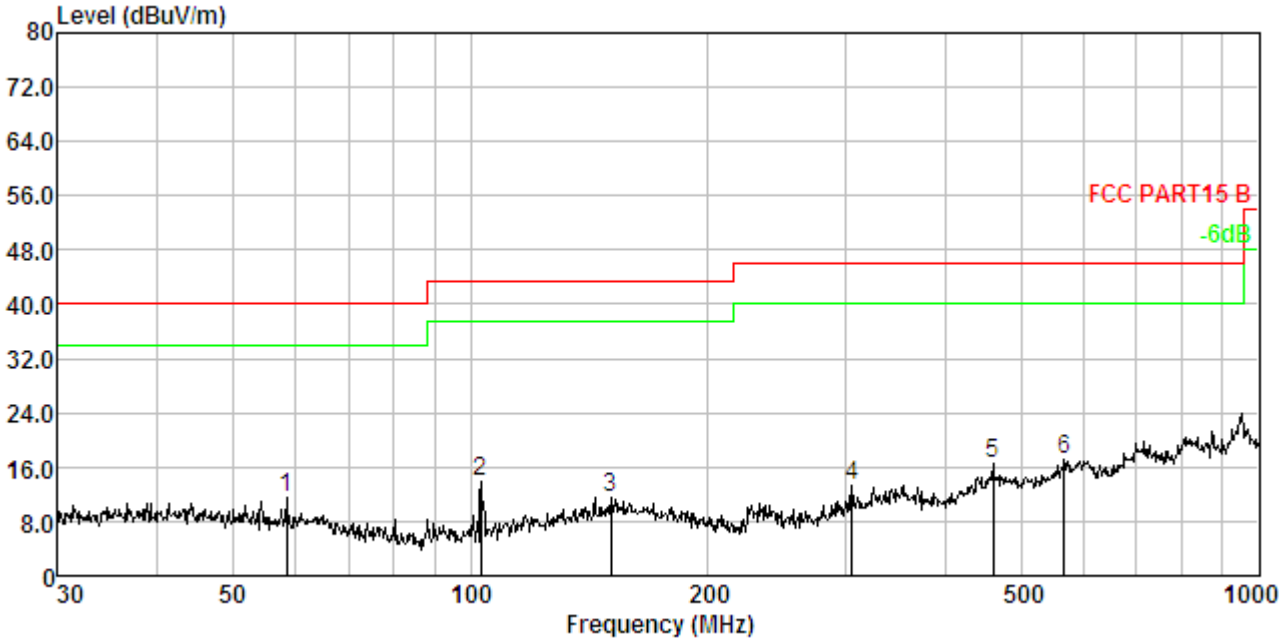
EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 1	Polarization :	Horizontal



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBuV	Preamp Factor dB	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	54.835	1.60	11.91	31.77	30.18	15.10	40.00	-24.90	Peak
2.	116.540	2.28	11.71	25.48	30.44	9.03	43.50	-34.47	Peak
3.	158.112	2.56	13.88	25.06	30.55	10.95	43.50	-32.55	Peak
4.	304.610	3.15	13.30	29.12	30.78	14.79	46.00	-31.21	Peak
5.	477.169	3.56	16.84	24.74	30.93	14.21	46.00	-31.79	Peak
6.	682.348	3.88	19.92	25.79	31.06	18.53	46.00	-27.47	Peak

RESULT: PASS

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 1	Polarization :	Vertical



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBuV	Preamplifier Factor dB	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	58.407	1.66	12.09	27.87	30.20	11.42	40.00	-28.58	Peak
2.	103.080	2.17	10.50	31.55	30.40	13.82	43.50	-29.68	Peak
3.	150.538	2.52	13.90	25.72	30.53	11.61	43.50	-31.89	Peak
4.	304.610	3.15	13.30	27.52	30.78	13.19	46.00	-32.81	Peak
5.	460.727	3.53	16.52	27.38	30.92	16.51	46.00	-29.49	Peak
6.	566.622	3.72	18.32	25.99	30.99	17.04	46.00	-28.96	Peak

RESULT: PASS

Note:

Factor=Antenna Factor + Cable loss, Margin=Result-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

The mode 1 is the worst case, and only the data of the worst case recorded in this test report.

RADIATED EMISSION ABOVE 1GHZ

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 1	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Value Type
2410.013	91.24	-9.37	81.87	114	-32.13	peak
2410.013	88.08	-9.37	78.71	94	-15.29	AVG
4820.026	48.21	3.74	51.95	74	-22.05	peak
4820.026	45.05	3.74	48.79	54	-5.21	AVG
7230.039	42.55	8.14	50.69	74	-23.31	peak
7230.039	39.24	8.14	47.38	54	-6.62	AVG

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

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 1	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Value Type
2410.013	89.24	-9.37	79.87	114	-34.13	peak
2410.013	85.94	-9.37	76.57	94	-17.43	AVG
4820.026	47.62	3.74	51.36	74	-22.64	peak
4820.026	44.18	3.74	47.92	54	-6.08	AVG
7230.039	41.04	8.14	49.18	74	-24.82	peak
7230.039	37.52	8.14	45.66	54	-8.34	AVG

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

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 2	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Value Type
2440.016	91.02	-9.63	81.39	114	-32.61	peak
2440.016	87.84	-9.63	78.21	94	-15.79	AVG
4880.032	48.22	3.76	51.98	74	-22.02	peak
4880.032	45.03	3.76	48.79	54	-5.21	AVG
7320.048	41.53	8.17	49.7	74	-24.3	peak
7320.048	38.15	8.17	46.32	54	-7.68	AVG

Remark:

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

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 2	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBµV)	Factor (dB)	Emission Level (dBµV/m)	Limits (dBµV/m)	Margin (dB)	Value Type
2440.016	88.34	-9.63	78.71	114	-35.29	peak
2440.016	86.11	-9.63	76.48	94	-17.52	AVG
4880.032	47.64	3.76	51.4	74	-22.6	peak
4880.032	44.23	3.76	47.99	54	-6.01	AVG
7320.048	40.03	8.17	48.2	74	-25.8	peak
7320.048	36.74	8.17	44.91	54	-9.09	AVG

Remark:

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

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 3	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2473.021	91.59	-9.61	81.98	114	-32.02	peak
2473.021	88.13	-9.61	78.52	94	-15.48	AVG
4946.042	49.12	3.83	52.95	74	-21.05	peak
4946.042	45.88	3.83	49.71	54	-4.29	AVG
7419.063	42.12	8.21	50.33	74	-23.67	peak
7419.063	38.74	8.21	46.95	54	-7.05	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 3	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
2473.021	88.44	-9.61	78.83	114	-35.17	peak
2473.021	85.12	-9.61	75.51	94	-18.49	AVG
4946.042	48.55	3.83	52.38	74	-21.62	peak
4946.042	45.12	3.83	48.95	54	-5.05	AVG
7419.063	41.88	8.21	50.09	74	-23.91	peak
7419.063	38.26	8.21	46.47	54	-7.53	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

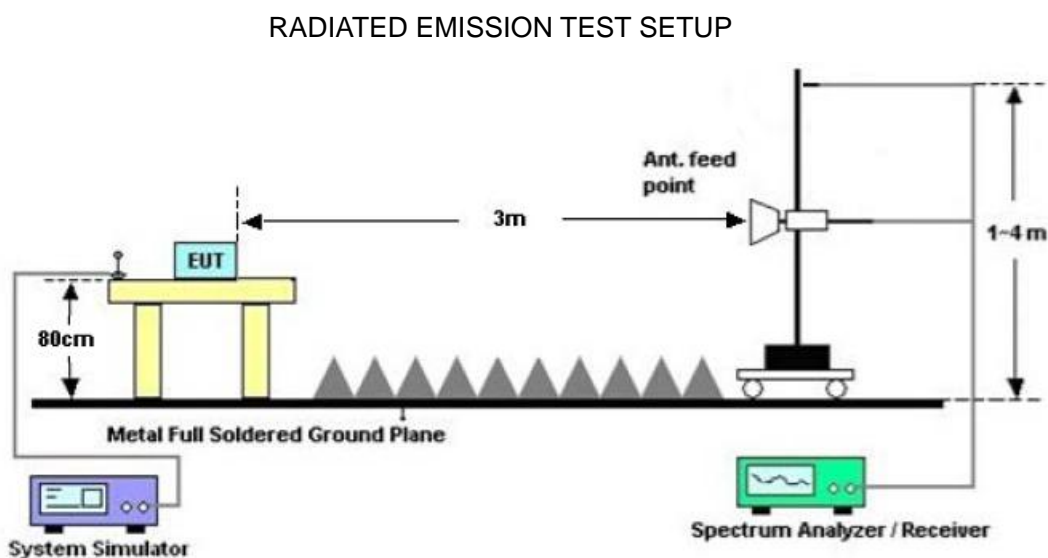
Note: Other emissions from 8G to 25 GHz are considered as ambient noise. No recording in the test report.
Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Measurement-Limit.
The “Factor” value can be calculated automatically by software of measurement system.

8. BAND EDGE EMISSION

8.1. MEASUREMENT PROCEDURE

1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.
2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission: (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz ; VBW=1/on time(1KHz) / Sweep=AUTO
3. Other procedures refer to clause 7.2.

8.2 TEST SETUP



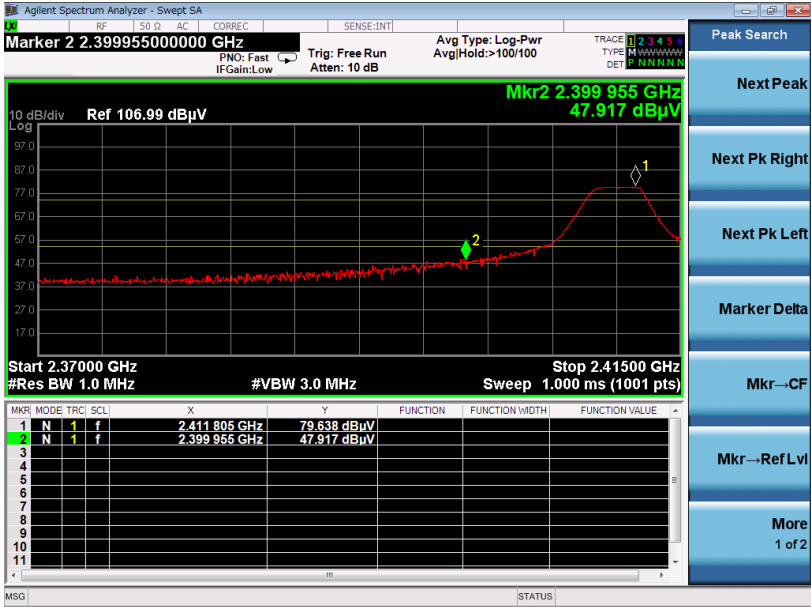
8.3 RADIATED TEST RESULT

Note:

1. Factor=Antenna Factor + Cable loss - Amplifier gain. Field Strength=Factor + Reading level
2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μ V) to represent the Amplitude. Use the F dB(μ V/m) to represent the Field Strength. So A=F.

EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 1	Polarization :	Vertical

PK Value

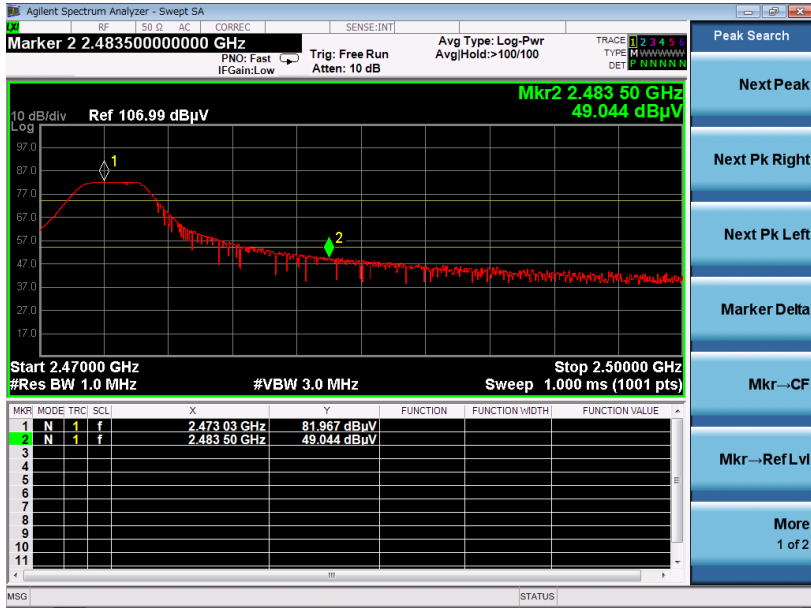


AV Value



EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 3	Polarization :	Horizontal

PK Value



AV Value



EUT :	REMOTE CONTROL FOR RC DRONE	Model Name. :	1332C
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC6V
Test Mode :	Mode 3	Polarization :	Vertical

PK Value



AV Value



Note:

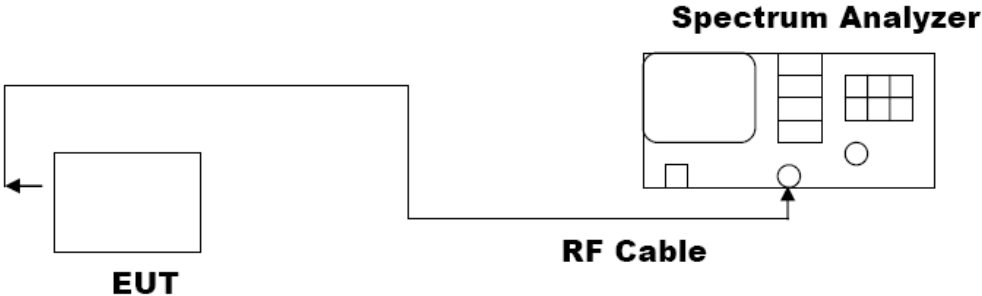
Factor=Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.
 The "Factor" value can be calculated automatically by software of measurement system.

9. 20DB BANDWIDTH

9.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set SPA Centre Frequency = Operation Frequency, RBW= 1% of SPAN, VBW \geq 3 \times RBW.
4. Set SPA Trace 1 Max hold, then View.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

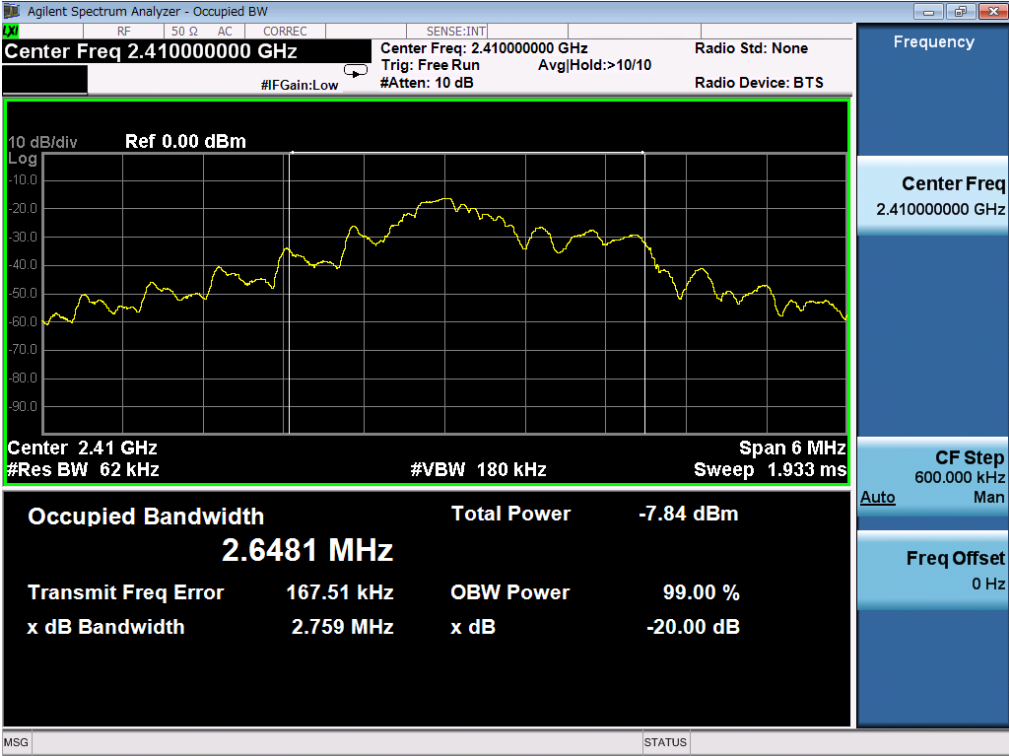


9.3. MEASUREMENT RESULTS

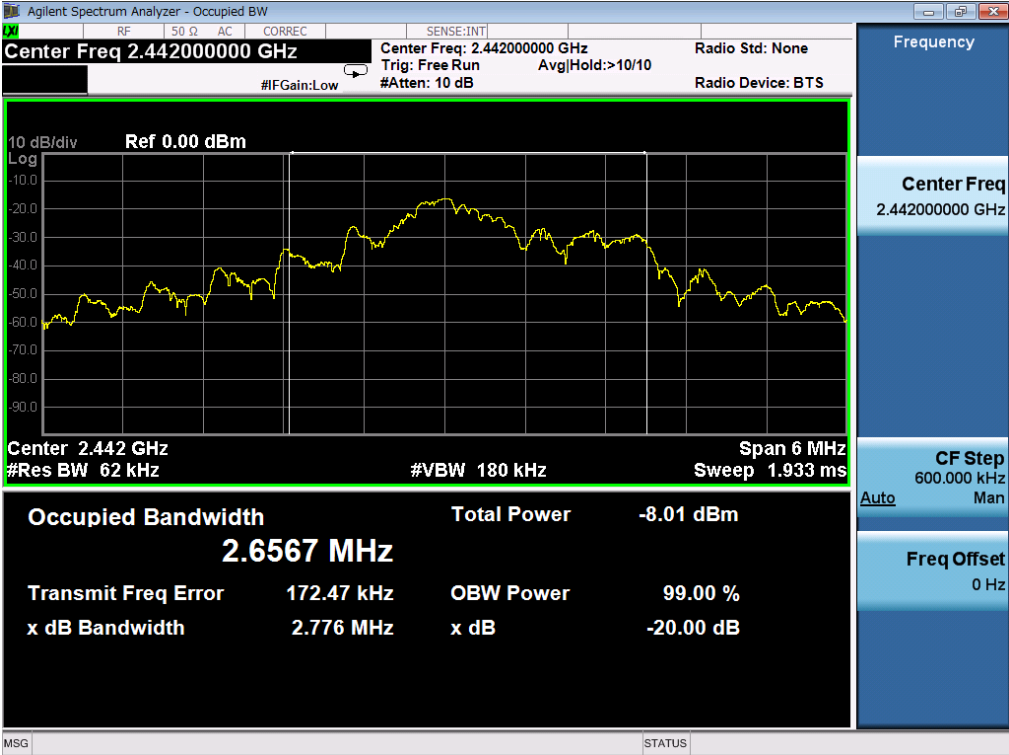
TEST ITEM	20DB BANDWIDTH
TEST MODE	Mode1;Mode2;Mode3

Test Data (MHz)		Criteria
Low Channel	2.759	PASS
Middle Channel	2.776	PASS
High Channel	2.933	PASS

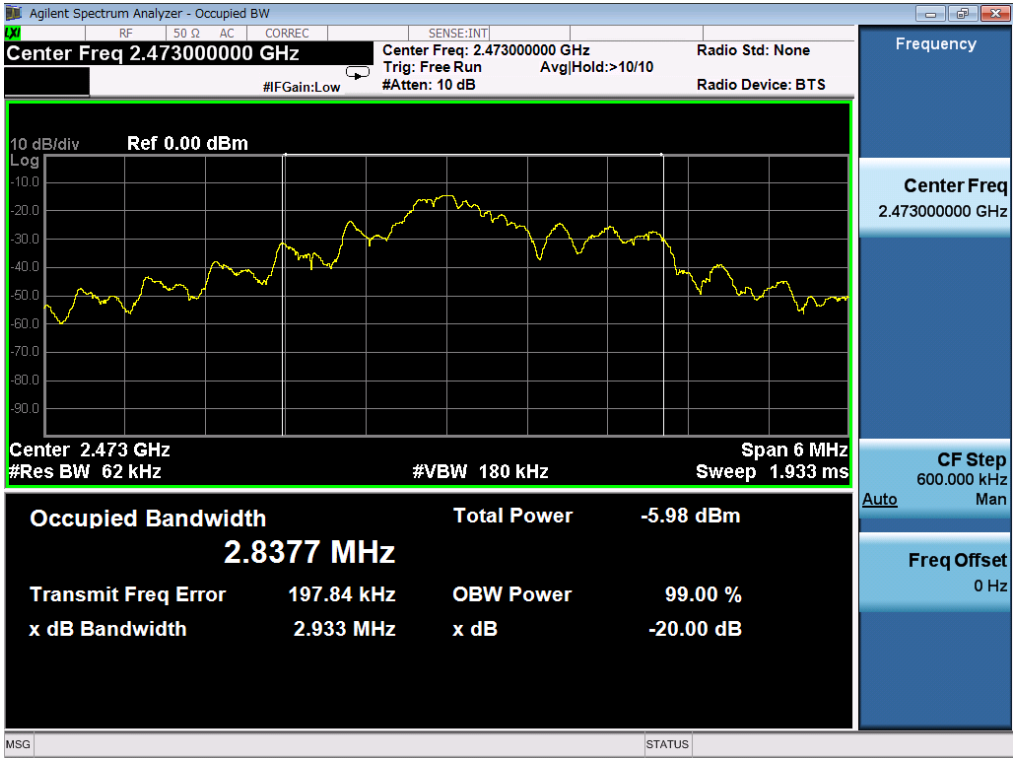
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



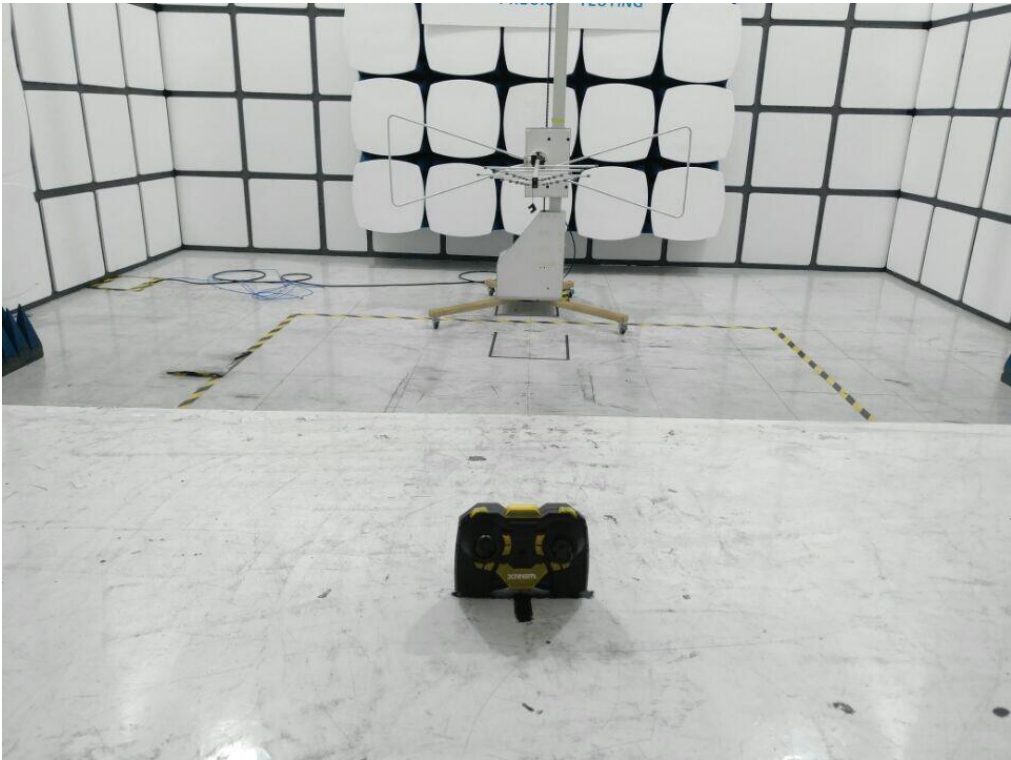
TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



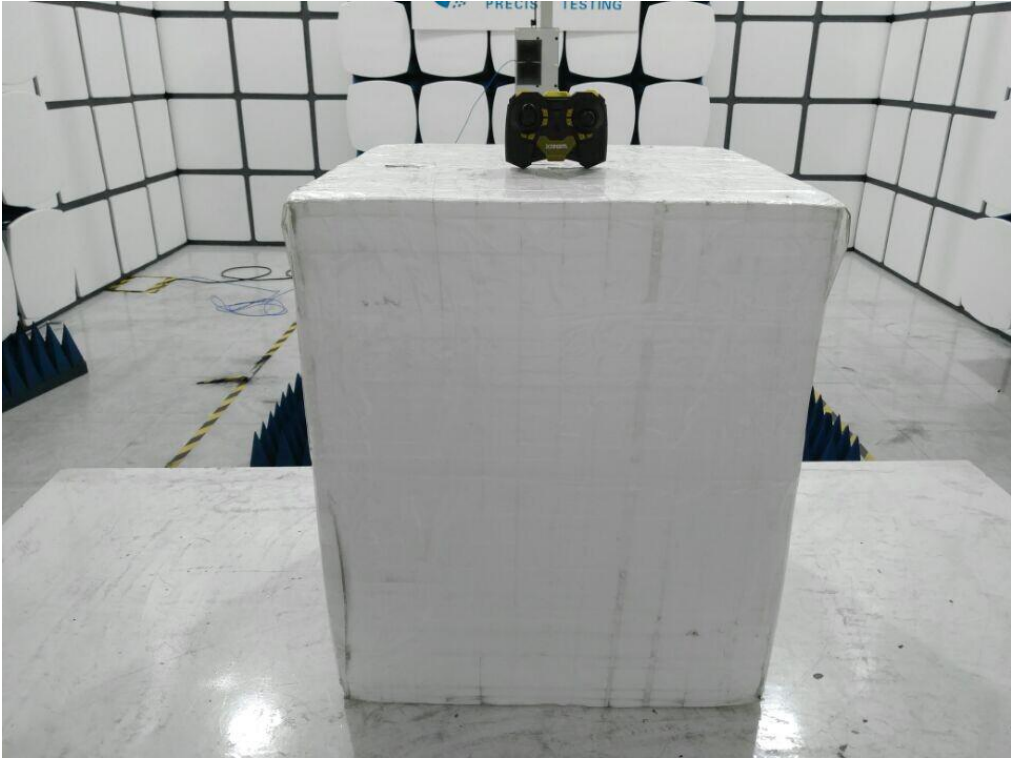
TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



APPENDIX A: PHOTOGRAPHS OF TEST SETUP
RADIATED EMISSION TEST SETUP BELOW 1GHz



RADIATED EMISSION TEST SETUP ABOVE 1GHz



APPENDIX B: PHOTOGRAPHS OF EUT

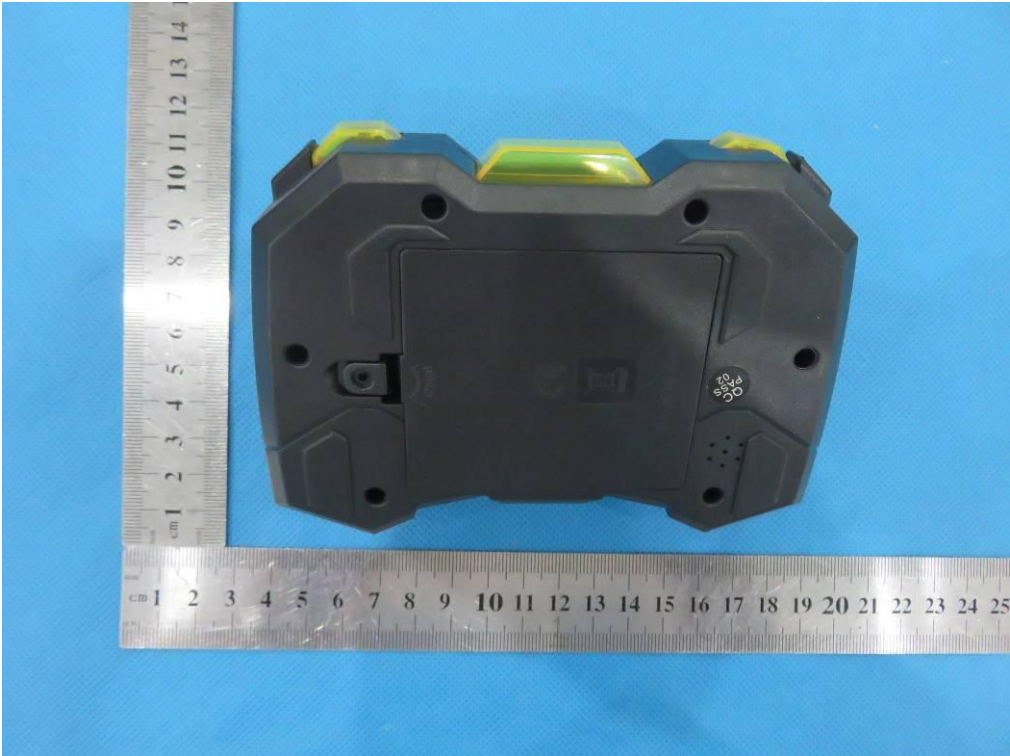
TOTAL VIEW OF EUT



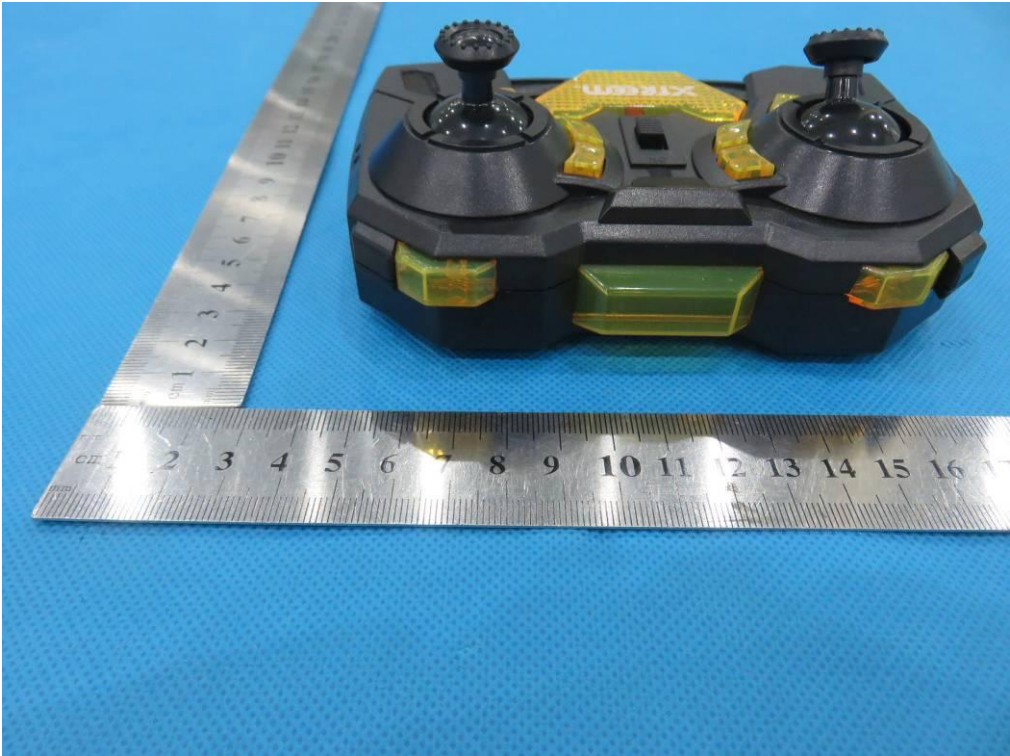
TOP VIEW OF EUT



BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



BACK VIEW OF EUT



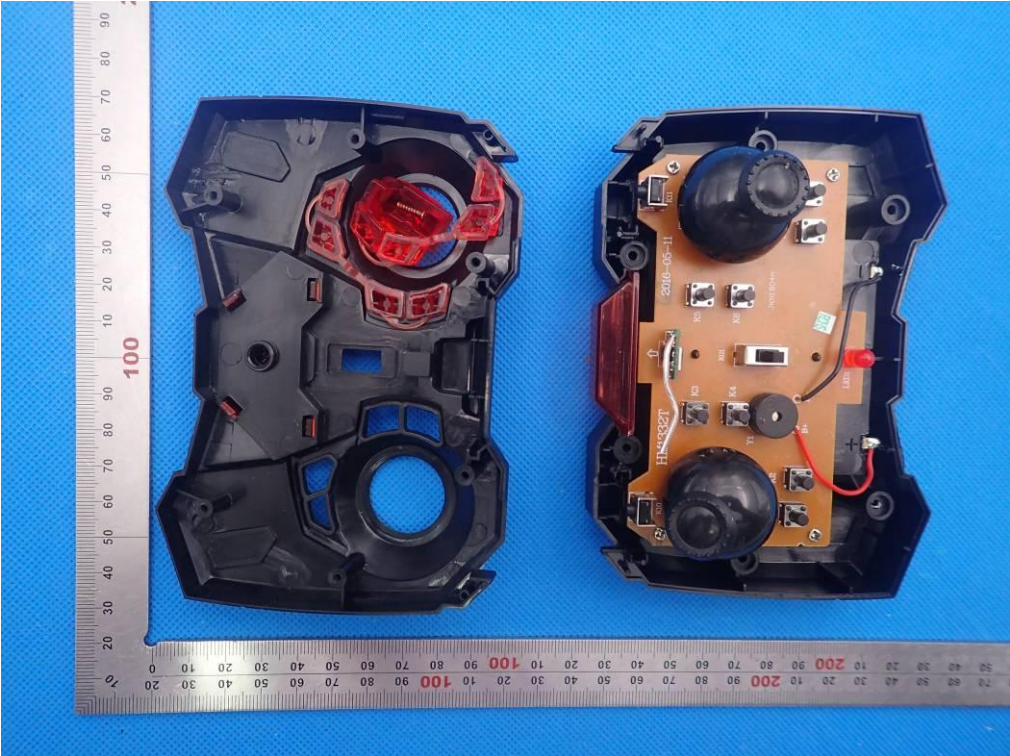
LEFT VIEW OF EUT



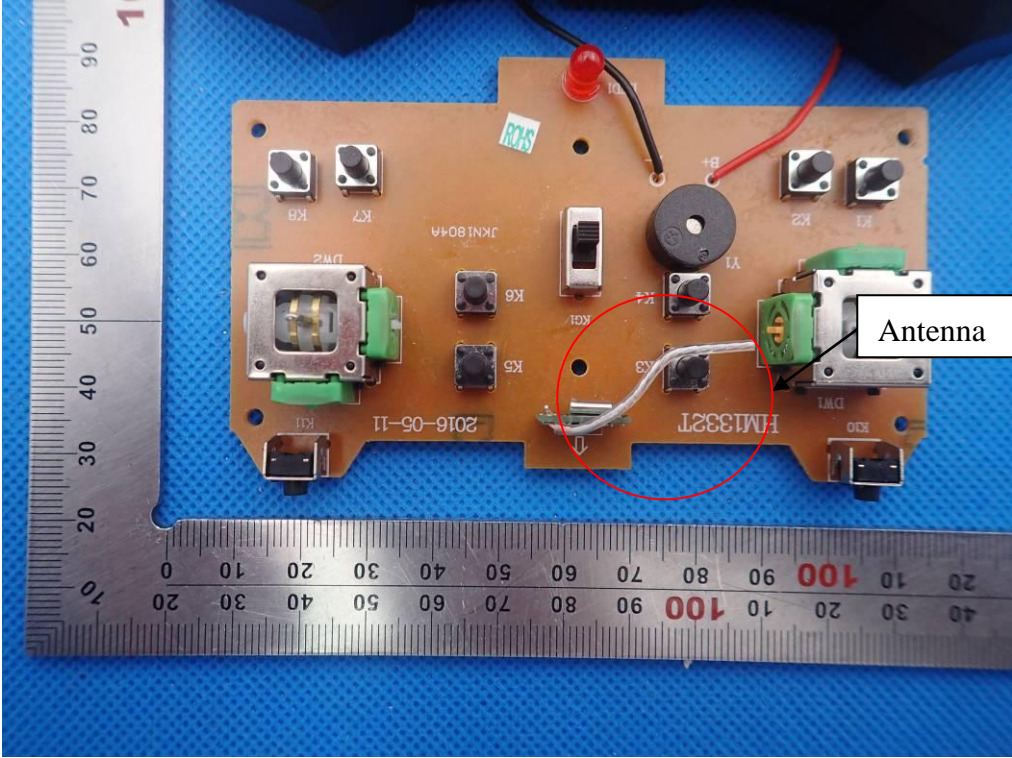
RIGHT VIEW OF EUT



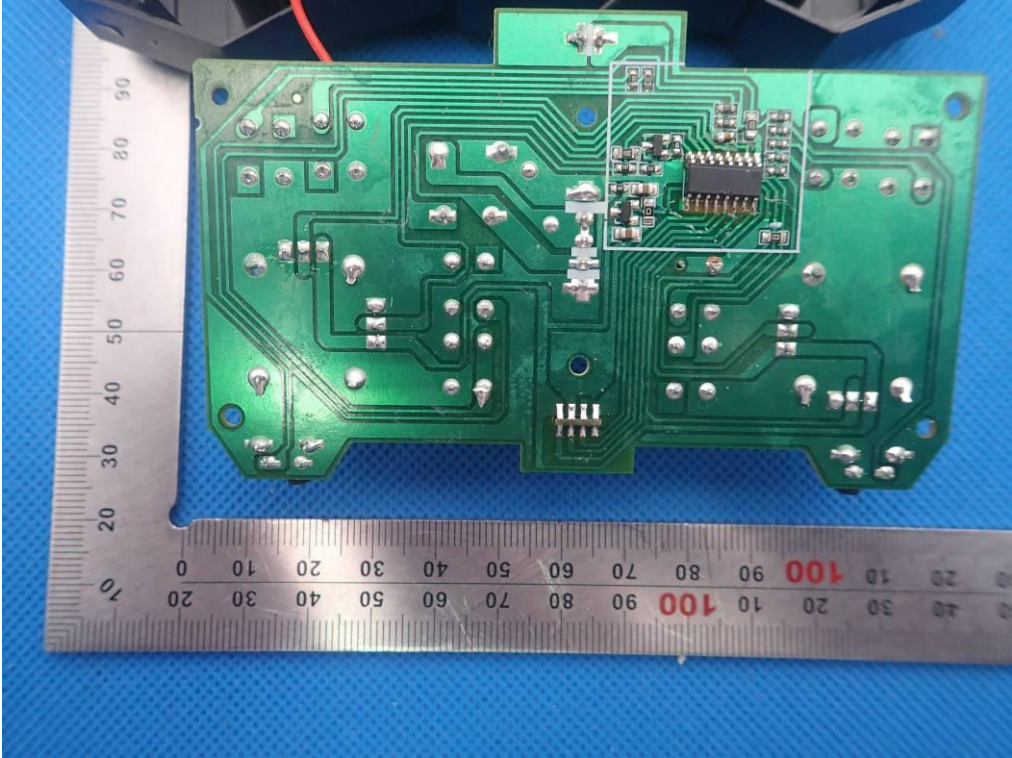
OPEN VIEW OF EUT



INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



----END OF REPORT----