

FCC PART 15C TEST REPORT FOR CERTIFICATION

On Behalf of

Suzhou BesCon Electronics Co.,Ltd

Remote Control

Model No. : BRC0712106

FCC ID : 2AB9RBRC712106

Prepared for

**Suzhou BesCon Electronics Co.,Ltd**

Building 2405, Qingjianghu Science & Technology park , No.58 Weixin Road, Suzhou  
Industrial Park, Jiangsu Province, China 515122

Prepared by

**Audix Technology (Wujiang) Co., Ltd. EMC Dept.**

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Report Number : ACWE-F1509002

Date of Test : Aug.28~Sep.11, 2015

Date of Report : Sep.16, 2015

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## TEST REPORT CERTIFICATION

Applicant : Suzhou BesCon Electronics Co.,Ltd  
 Manufacturer : Suzhou BesCon Electronics Co.,Ltd  
 EUT Description : Remote Control  
 FCC ID : 2AB9RBRC712106  
 (A) Model No. : BRC0712106  
 (B) Power Supply : DC 3V  
 (C) Test Voltage : AC 120V, 60Hz

Applicable Standards:

**FCC RULES AND REGULATIONS PART 15 SUBPART C, Oct. 2014**  
**ANSI C63.10:2009**

The device described above was tested by Audix Technology (Wujiang) Co., Ltd. EMC Dept. to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart C limits.

The measurement results are contained in this test report and Audix Technology (Wujiang) Co., Ltd. EMC Dept. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Wujiang) Co., Ltd. EMC Dept.

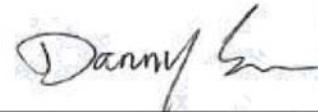
Date of Test: Aug.28~Sep.11, 2015

Date of Report: Sep.16, 2015

Prepared by

:   
 (Emma Hu/Assistant Administrator)

Reviewer

:   
 (Danny Sun/ Section Manager)

Approved & Authorized Signer

:   
 (Ken Lu/Assistant General Manager)

## 1. SUMMARY OF MEASUREMENTS AND RESULTS

The EUT has been tested according to the applicable standards and test results are referred as below.

Description of Test Item	Standard	Results	Remark
CONDUCTED EMISSION	FCC 47 CFR Part 15 Subpart C/ Section 15.207 ANSI C63.10:2009	Note	---
RADIATED EMISSION	FCC 47 CFR Part 15 Subpart C/ Section 15.209& Section 15.249 ANSI C63.10:2009	PASS	Minimum passing margin is 20.52 dB at 14104.00MHz
20 dB BANDWIDTH	FCC 47 CFR Part 15 Subpart C/ Section 15.215 ANSI C63.10:2009	PASS	---
BAND EDGES	FCC 47 CFR Part 15 Subpart C/ Section 15.249 ANSI C63.10:2009	PASS	Minimum passing margin is 10.08 kHz at 2400MHz

Note: Due to the EUT is powered by battery, so it's no need to test.

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

Description : Remote Control

Model No. : BRC0712106

FCC ID : 2AB9RBRC712106

Applicant : Suzhou BesCon Electronics Co.,Ltd  
Building 2405,Qingjianghu Science &  
Technology park , No.58 Weixin Road, Suzhou  
Industrial Park, Jiangsu Province, China 515122

Manufacturer : Suzhou BesCon Electronics Co.,Ltd  
Building 2405,Qingjianghu Science &  
Technology park , No.58 Weixin Road, Suzhou  
Industrial Park, Jiangsu Province, China 515122

Antenna Gain : 2.8dBi

Fundamental Range : 2402 MHz -2480MHz

Highest Working Frequency : 2.4GHz

Power Rating : DC 3V

Modulation type : GFSK

Date of Receipt of Sample : Jul.30, 2015

Date of Test : Aug.28~Sep.11, 2015

## 2.2. Description of Test Facility

Name of Firm : **Audix Technology (Wujiang) Co., Ltd. EMC Dept.**

Site Location : No. 1289 Jiangxing East Road, the Eastern Part of Wujiang Economic Development Zone Jiangsu China 215200

Test Facilities : **No.1 Conducted Shielding Enclosure**  
**No.1 3m Semi-anechoic Chamber**  
 Date of Validity: May. 23, 2015  
 FCC Registration No.: 897661  
 IC Registration No.: 5183D-2

NVLAP Lab Code : 200786-0  
 Valid until on Sep. 30, 2015  
 (NVLAP is a signatory member of ILAC MRA)  
 Remark: This report shall not be imply endorsement, certification or approval by NVLAP, NIST, or any agency of the U.S. Federal Government.

## 2.3. Measurement Uncertainty

Test Item	Range Frequency	Uncertainty
Radiated Disturbance Measurement (At 3m Chamber)	Below 1GHz	± 4.50dB
Radiated Disturbance Measurement (At 3m Chamber)	Above 1GHz	± 5.15dB

Remark: Uncertainty =  $ku_c(y)$

Test Item	Uncertainty
6 dB Bandwidth	± 0.16 MHz
Band Edges	± 0.38dB
Emission Limitations	± 0.38dB

Remark: Uncertainty =  $ku_c(y)$

### 3. RADIATED EMISSION MEASUREMENT

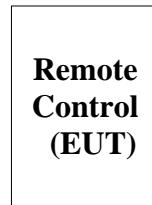
#### 3.1. Test Equipment

The following test equipment was used during the radiated emission measurement:  
At 3m Semi-Anechoic Chamber

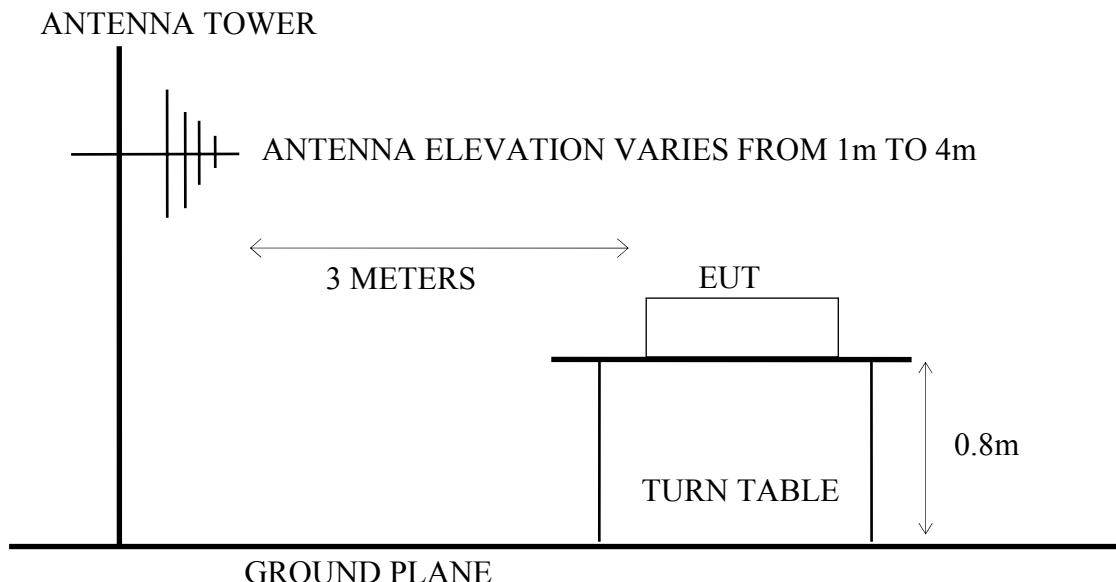
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Preamplifier	Agilent	8449B	3008A02233	2015-01-05	2016-01-04
2.	Preamplifier	Agilent	8447D	2944A10921	2015-07-03	2016-07-02
3.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2015-06-23	2016-06-22
4.	Test Receiver	R&S	ESCI	100361	2015-01-05	2016-01-04
5.	Bi-log Antenna	Schaffner	CBL6112D	22251	2015-05-20	2016-05-19
6.	Horn Antenna	EMCO	3115	00062960	2015-06-30	2016-05-29
7.	Test Receiver	R&S	ESCI	100361	2015-01-05	2016-01-04
8.	RF Cable #1	Yuhang CSYH	cable-3m	001(0.5m)	2015-01-05	2016-01-04
9.	RF Cable #2	Yuhang CSYH	cable-3m	002(0.5m)	2015-01-05	2016-01-04
10.	RF Cable #3	Yuhang CSYH	cable-3m	003(3.0m)	2015-01-05	2016-01-04

#### 3.2. Block Diagram of Test Setup

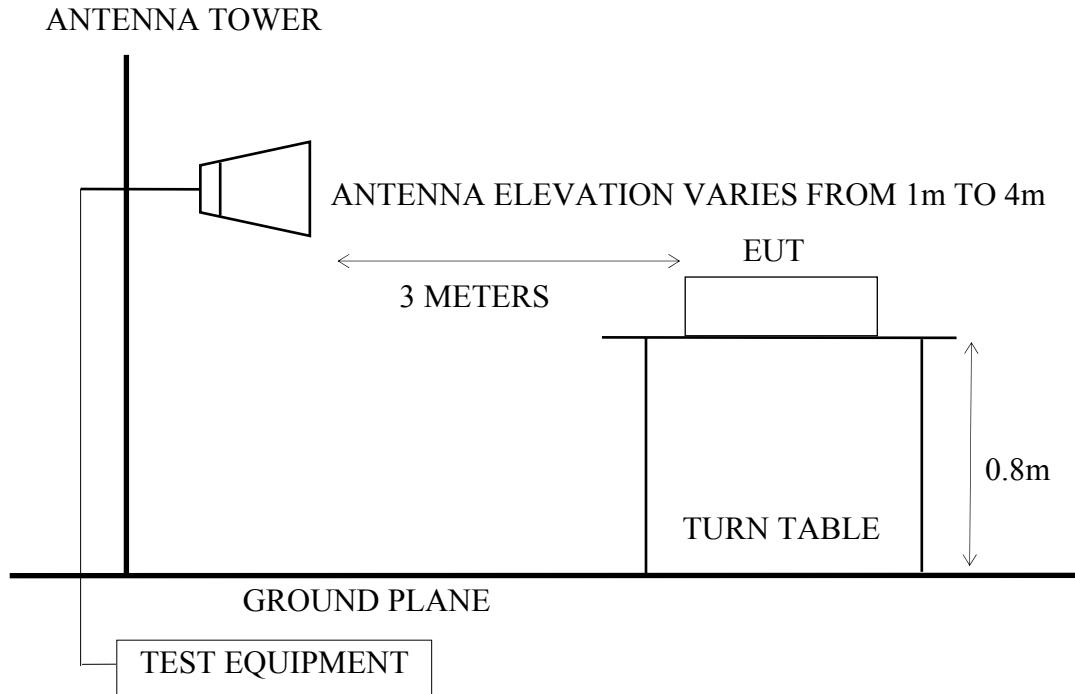
##### 3.2.1. Block Diagram of Test Setup between EUT and simulators



##### 3.2.2. No. 1 3m Semi-Anechoic Chamber Setup Diagram (Test distance:3m) for 30-1000MHz



## 3.2.3. No. 1 3m Semi-Anechoic Chamber Setup Diagram (Test distance: 3m) for above 1GHz



## 3.3. Radiated Emission Limits

Radiated Emission Limits (FCC Part15 C, section 15.209 &amp; 15.249)

Frequency MHz	Distance Meters	Field Strengths Limits	
		$\mu$ V/m	dB $\mu$ V/m
30~88	3	100	40
88~216	3	150	43.5
261~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0 dB $\mu$ V/m (Peak) 54.0 dB $\mu$ V/m (Average)	
Field Strength of fundamental emissions for 2.4GHz-2.4835GHz	3	114.0 dB $\mu$ V/m (Peak) 94.0 dB $\mu$ V/m (Average)	

Remark : (1) Emission level (dB $\mu$ V) = 20 log Emission level ( $\mu$ 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.
- (4)The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

### 3.4. Test Procedure

The measuring process is according to FCC Part15 Subpart C and laboratory internal procedure TKC-301-001.

In the radiated disturbance measurement, the EUT and all simulators were set up on a non-metallic turn table which was 0.8 meters above the ground plane. Measurement distance between EUT and receiving antennas was set at 10 meters at 30MHz~1000MHz and 3 meters at above 1GHz. The specified distance is the distance between the antennas and the closest periphery of EUT. During the radiated measurement, the EUT was rotated 360° and receiving antennas were moved from 1 ~ 4 meters for finding maximum emission. Two receiving antennas were used for both horizontal and vertical polarization detection for 30MHz~1GHz, One receiving antennas was used for both horizontal and vertical polarization detection for above 1GHz (the absorbing material was added when testing of above 1GHz was done). All of the interface cables must be manipulated according to ANSI C63.10-2009 on radiated emission test.

The bandwidth of measuring receiver (or spectrum analyzer) was set to:

RBW (120 kHz), VBW (300 kHz) for QP detector below 1GHz

RBW (1 MHz), VBW (1MHz) for Peak detector above 1GHz

A duty cycle factor was used to calculate average level based measured peak level.

The frequency range from 30MHz to 10th harmonic (25GHz) are checked, and no any emissions were found from 18GHz to 25GHz.

The emission level is calculated automatically by the test system which uses the following equation :

1. For 30-1000MHz measurement:

Emission Level (dB $\mu$ V/m) = Reading (dB $\mu$ V)+Antenna Factor (dB/m)+Cable Loss (dB)

2. For Above 1GHz measurement:

Emission Level (dB $\mu$ V/m) = Reading (dB $\mu$ V)+Antenna Factor (dB/m)+Cable Loss(dB)  
-Pre-amplifier factor (dB)

### 3.5. Assessment In All Three Orthogonal Planes

After assessment in all three orthogonal planes, when choosing 2440MHz test in the radiation, found that YZ plan is the worst mode in Horizontal and YZ plan is the worst mode in Vertical, so in the test of radiation, all with YZ plan(in Horizontal) & YZ plan(in Vertical) model test, refer to the following specific data.

#### Test Mode:XY Plan

Polarization	Frequency (MHz)	Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)	Remark
Horizontal	2440.00	90.69	28.28	4.340	34.95	88.42	114.00	25.58	Peak
Vertical	2440.19	90.45	28.28	4.340	34.95	88.18	114.00	25.82	Peak

#### Test Mode:XZ Plan

Polarization	Frequency (MHz)	Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)	Remark
Horizontal	2441.65	90.43	28.28	4.340	34.95	88.18	114.00	25.82	Peak
Vertical	2440.00	85.37	28.28	4.340	34.95	83.10	114.00	30.90	Peak

#### Test Mode:YZ Plan

Polarization	Frequency (MHz)	Reading dB ( $\mu$ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB ( $\mu$ V/m)	Limits dB ( $\mu$ V/m)	Margin (dB)	Remark
Horizontal	2441.00	91.26	28.28	4.340	34.95	89.01	114.00	24.99	Peak
Vertical	2440.00	91.40	28.28	4.340	34.95	89.15	114.00	24.85	Peak

### 3.6. Measurement Results

#### PASSED

##### 3.6.1. For Restricted Bands:

The EUT was tested in restricted bands and all the test results are listed in section 4.6 & 4.7.  
(The restricted bands defined in part 15.209)

For Frequency range: below 1GHz

No.	Test Mode and Frequency	Reference Test Data No.	
		Horizontal	Vertical
1.	Transmitting	2402MHz	# 1
2.		2440MHz	# 3
3.		2480MHz	# 5
			# 2
			# 4
			# 6

For Frequency range: above 1GHz

No.	Test Mode and Frequency	Reference Test Data No.	
		Horizontal	Vertical
1.	Transmitting	2402MHz	# 7
2.		2440MHz	# 9
3.		2480MHz	# 11
			# 8
			# 10
			# 12

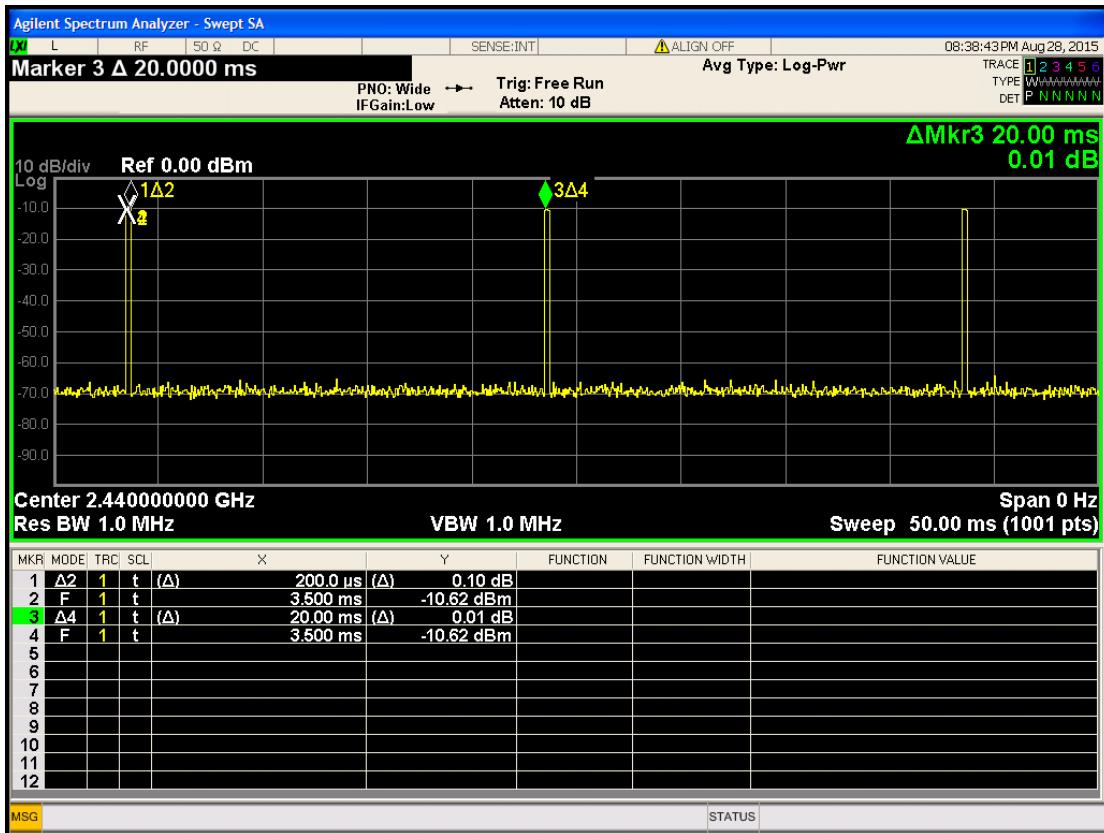
##### 3.6.2. For Band Edge Emission

The EUT was tested in restricted bands and all the test results are listed in section 4.8. The restricted bands defined in part 15.209)

No.	Test Mode and Frequency	Reference Test Data No.	
		Horizontal	Vertical
1.	Transmitting	2402MHz	# 13
2.		2480MHz	# 15
			# 14
			# 16

Duty cycle=0.20/20=1.1%

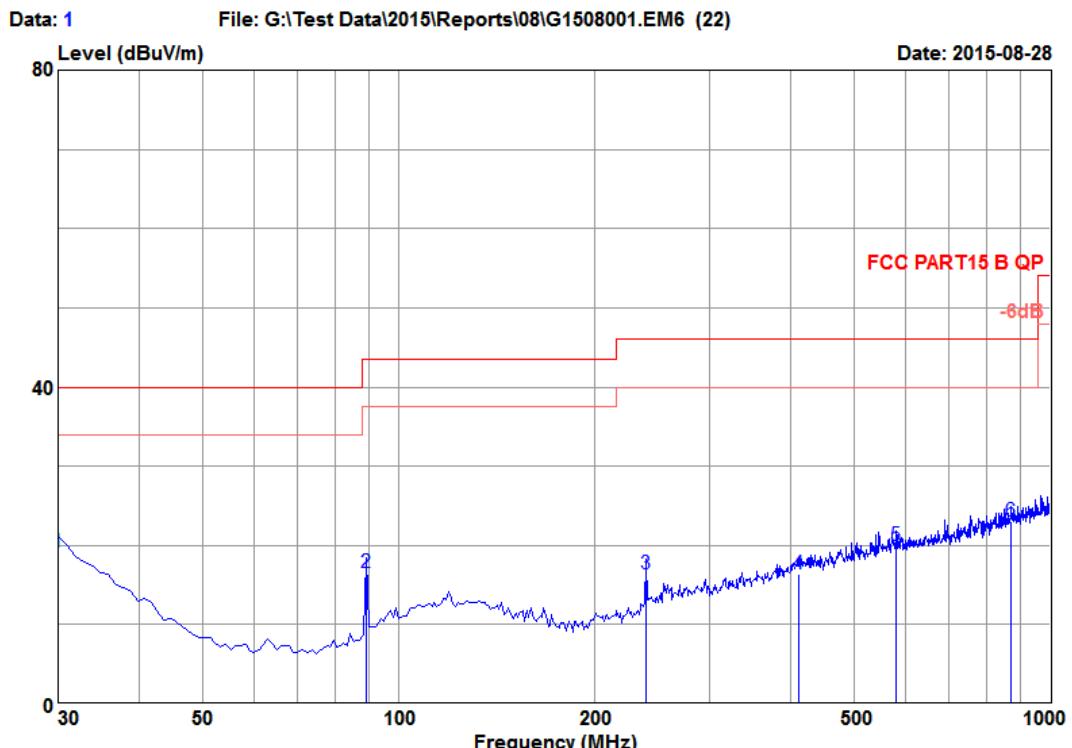
Duty cycle factor=20log(duty cycle)= -40



## 3.7. Restricted Bands Measurement Results (For Below 1GHz)



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Site NO. : 3m chamber Data NO. :1  
 Dis. / Ant. : 3m 6112D(22251)-150520 Ant. pol. : HORIZONTAL  
 Limit : FCC PART15 B QP  
 Env. / Ins. : 20.4°C&48%N9030A Engineer : Mickey  
 EUT : Remote Control  
 M/N : BRC0712106  
 Power Rating : DC 3V  
 Test Mode : TX 2402MHz  
 Memo :

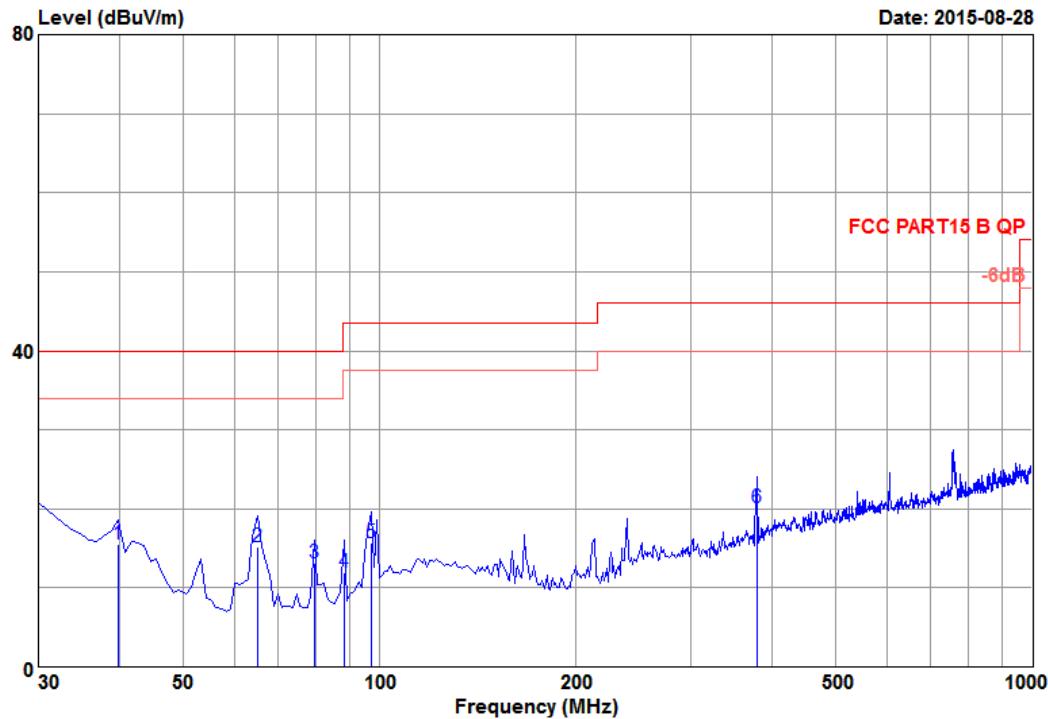
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission				Remark
				Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)		
1 30.00	21.20	0.23	25.11	19.19	40.00	20.81	QP	
2 89.17	9.15	0.51	34.04	16.48	43.50	27.02	QP	
3 239.52	12.25	1.29	29.49	16.31	46.00	29.69	QP	
4 410.24	17.20	1.74	24.81	16.40	46.00	29.60	QP	
5 579.99	19.00	2.14	26.64	19.90	46.00	26.10	QP	
6 870.99	21.42	2.74	26.12	22.96	46.00	23.04	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit  
 are not reported.



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Data: 2 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m chamber  
Dis. / Ant. : 3m 6112D(22251)-150520  
Limit : FCC PART15 B QP  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating : DC 3V  
Test Mode : TX 2402MHz  
Memo :

Data NO. :2  
Ant. pol. : VERTICAL  
Engineer : Mickey

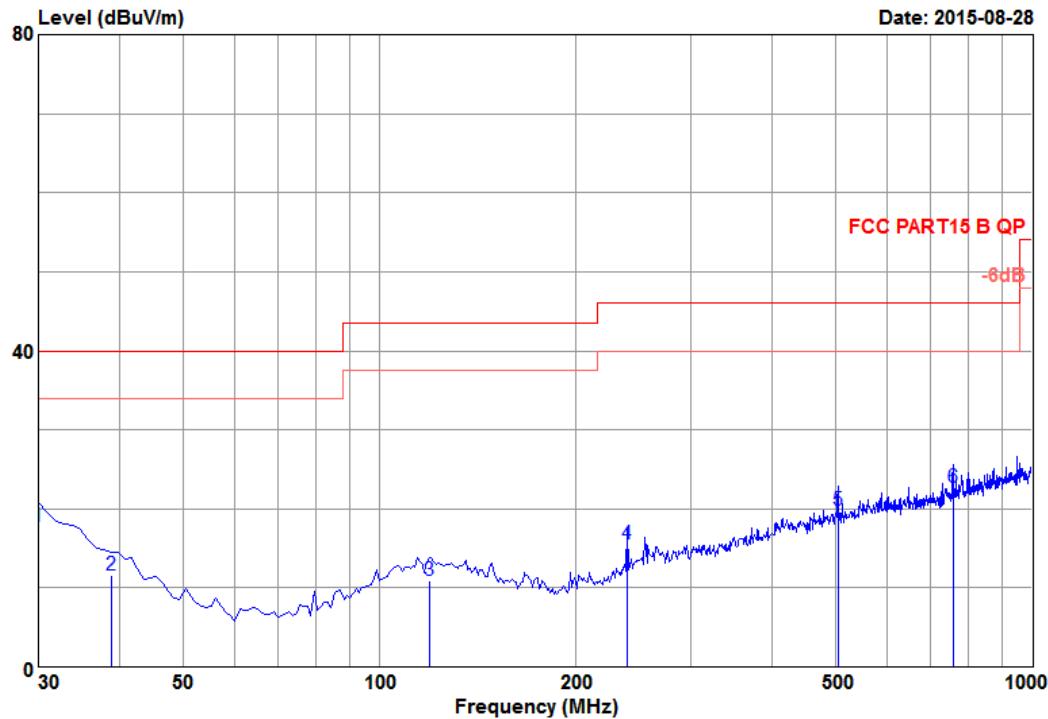
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 39.70	13.91	0.26	28.77	15.61	40.00	24.39	QP
2 64.92	6.65	0.36	35.45	15.19	40.00	24.81	QP
3 79.47	7.45	0.42	32.43	13.06	40.00	26.94	QP
4 88.20	8.86	0.50	29.87	12.01	43.50	31.49	QP
5 96.93	10.93	0.58	31.41	15.71	43.50	27.79	QP
6 378.23	15.83	1.64	29.76	20.08	46.00	25.92	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit  
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Data: 3 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. :	3m chamber	Data NO. :	3
Dis. / Ant. :	3m 6112D(22251)-150520	Ant. pol. :	HORIZONTAL
Limit :	FCC PART15 B QP		
Env. / Ins. :	20.4*C&48%/N9030A	Engineer :	Mickey
EUT :	Remote Control		
M/N :	BRC0712106		
Power Rating :	DC 3V		
Test Mode :	TX 2440MHz		
Memo :			

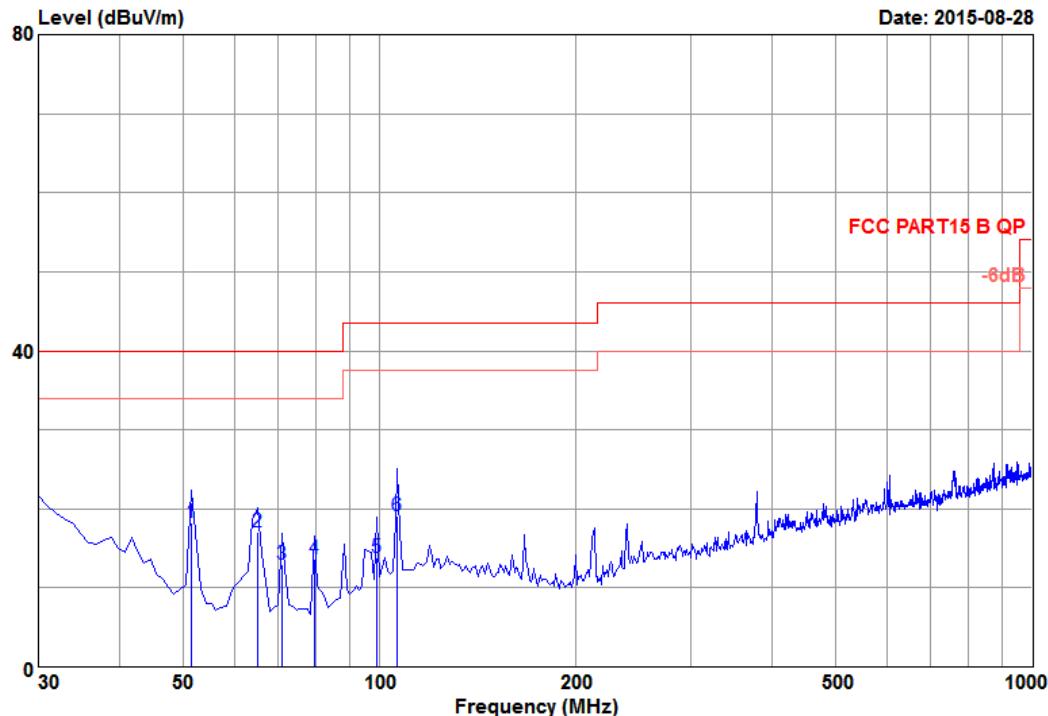
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 30.00	21.20	0.23	23.69	17.77	40.00	22.23	QP
2 38.73	14.59	0.26	24.00	11.52	40.00	28.48	QP
3 119.24	13.02	0.76	24.25	10.91	43.50	32.59	QP
4 239.52	12.25	1.29	28.78	15.60	46.00	30.40	QP
5 504.33	17.99	2.08	27.58	19.85	46.00	26.15	QP
6 756.53	20.33	2.48	27.51	22.63	46.00	23.37	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit  
are not reported.



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Data: 4 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m chamber  
Dis. / Ant. : 3m 6112D(22251)-150520  
Limit : FCC PART15 B QP  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating : DC 3V  
Test Mode : TX 2440MHz  
Memo :

Data NO. : 4  
Ant. pol. : VERTICAL  
Engineer : Mickey

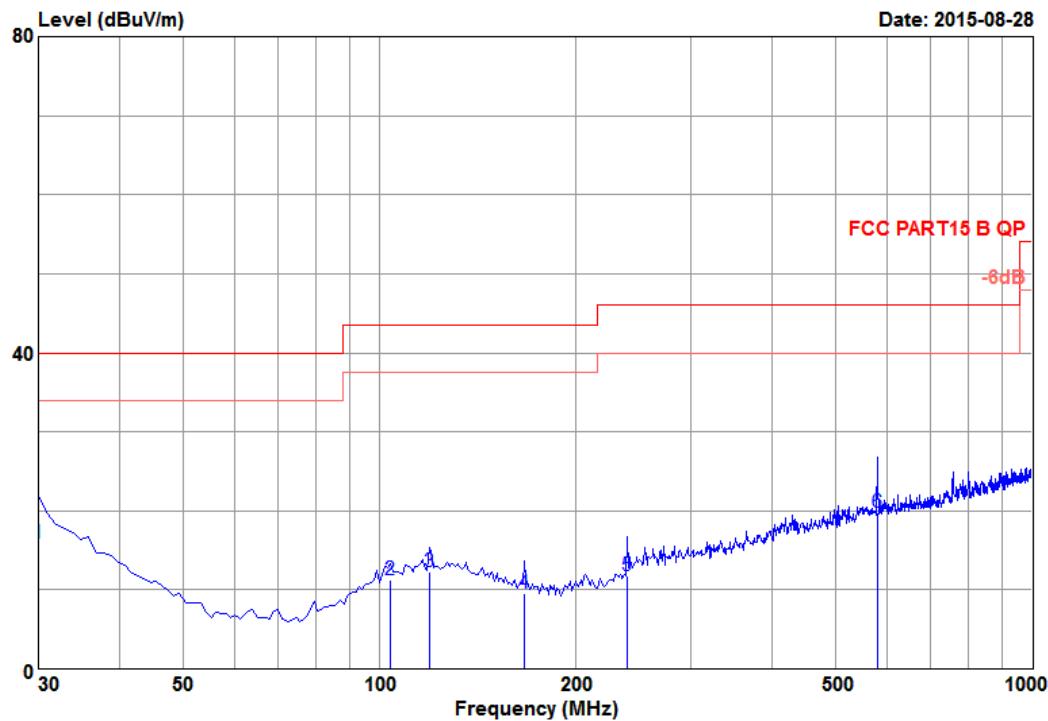
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 51.34	8.46	0.30	36.82	18.28	40.00	21.72	QP
2 64.92	6.65	0.36	37.40	17.14	40.00	22.86	QP
3 70.74	6.84	0.39	32.96	12.93	40.00	27.07	QP
4 79.47	7.45	0.42	33.00	13.63	40.00	26.37	QP
5 98.87	11.33	0.60	29.16	13.89	43.50	29.61	QP
6 106.63	12.26	0.67	33.36	19.12	43.50	24.38	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit  
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Data: 5 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. :	3m chamber	Data NO. :	5
Dis. / Ant. :	3m 6112D(22251)-150520	Ant. pol. :	HORIZONTAL
Limit :	FCC PART15 B QP		
Env. / Ins. :	20.4*C&48%/N9030A	Engineer :	Mickey
EUT :	Remote Control		
M/N :	BRC0712106		
Power Rating :	DC 3V		
Test Mode :	TX 2480MHz		
Memo :			

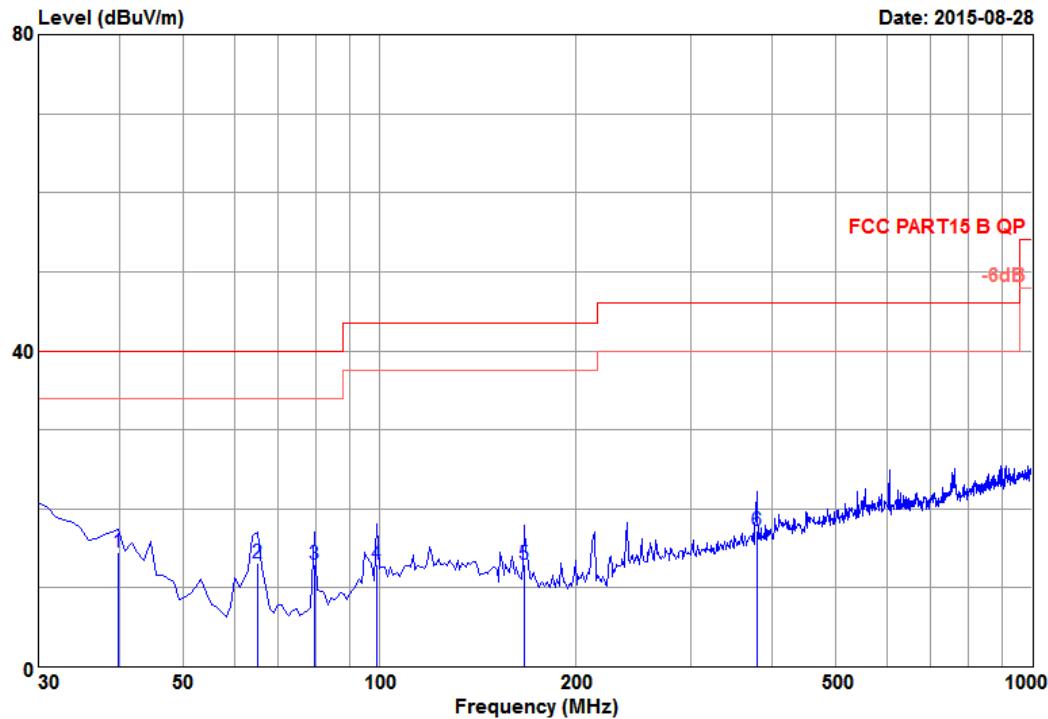
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 30.00	21.20	0.23	21.75	15.83	40.00	24.17	QP
2 103.72	11.97	0.64	25.87	11.29	43.50	32.21	QP
3 119.24	13.02	0.76	25.71	12.37	43.50	31.13	QP
4 166.77	10.46	1.05	25.06	9.64	43.50	33.86	QP
5 239.52	12.25	1.29	24.90	11.72	46.00	34.28	QP
6 579.99	19.00	2.14	26.57	19.83	46.00	26.17	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit  
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Data: 6 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m chamber  
Dis. / Ant. : 3m 6112D(22251)-150520  
Limit : FCC PART15 B QP  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating : DC 3V  
Test Mode : TX 2480MHz  
Memo :

Data NO. :6  
Ant. pol. : VERTICAL  
Engineer : Mickey

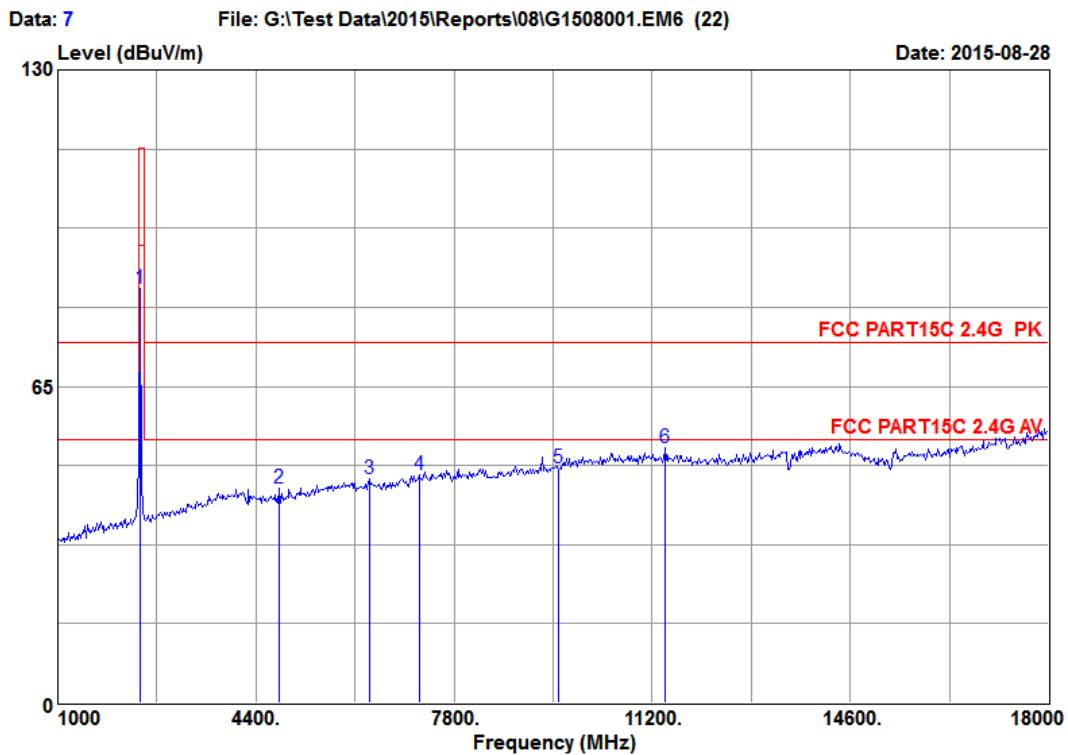
Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 39.70	13.91	0.26	27.65	14.49	40.00	25.51	QP
2 64.92	6.65	0.36	33.40	13.14	40.00	26.86	QP
3 79.47	7.45	0.42	32.39	13.02	40.00	26.98	QP
4 98.87	11.33	0.60	28.27	13.00	43.50	30.50	QP
5 166.77	10.46	1.05	28.38	12.96	43.50	30.54	QP
6 378.23	15.83	1.64	26.86	17.18	46.00	28.82	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit  
are not reported.

## 3.8. Restricted Bands Measurement Results (For Above 1GHz)



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Site NO. : 3m Semi-Anechoic Chamber  
 Dis. / Ant. : 3m 3115-62961-140903  
 Limit : FCC PART15C 2.4G PK  
 Env. / Ins. : 20.4\*C&40%\*N9030A  
 EUT : Remote Control  
 M/N : BRC0712106  
 Power Rating: DC 3V  
 Test Mode : TX 2402MHz  
 Memo :

Data NO. : 7  
 Ant. pol. : HORIZONTAL  
 Engineer : Mickey

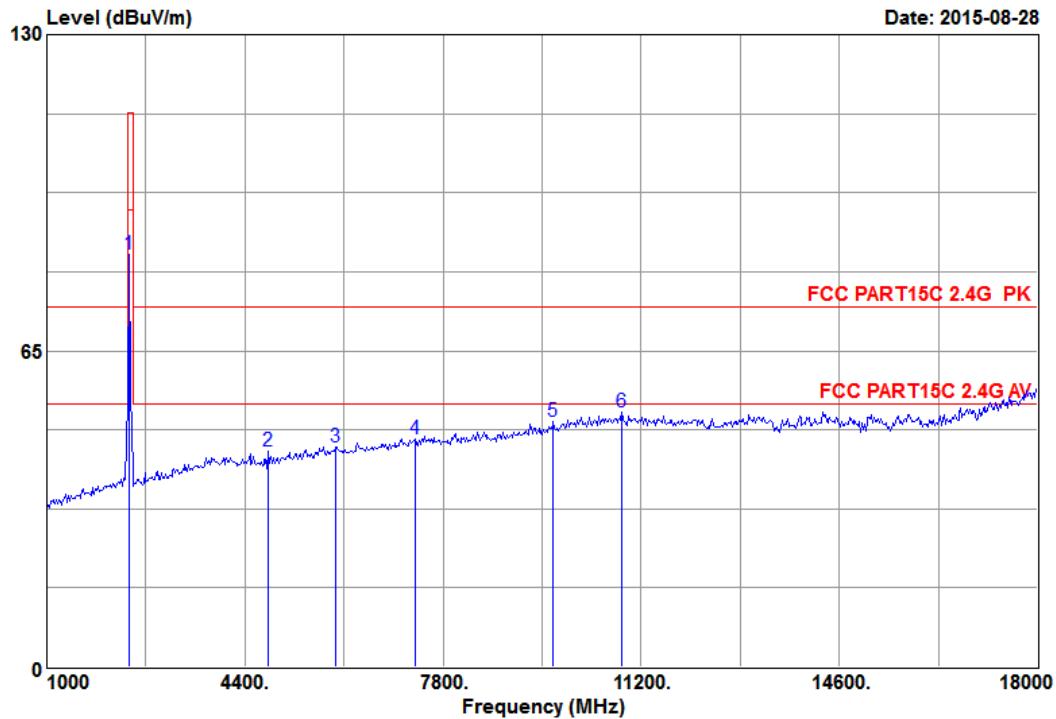
Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2402.61	28.19	4.38	87.60	34.94	85.23	114.00	28.77	Peak
2 4800.00	32.96	6.36	39.05	34.37	44.00	74.00	30.00	Peak
3 6355.00	34.50	7.79	37.71	33.86	46.14	74.00	27.86	Peak
4 7200.00	35.90	8.11	36.66	33.83	46.84	74.00	27.16	Peak
5 9600.00	38.42	9.66	35.03	34.78	48.33	74.00	25.67	Peak
6 11416.00	39.33	10.63	36.42	33.88	52.50	74.00	21.50	Peak

Remarks: 1. Emission Level = Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 8 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2402MHz  
Memo :

Data NO. : 8  
Ant. pol. : VERTICAL  
Engineer : Mickey

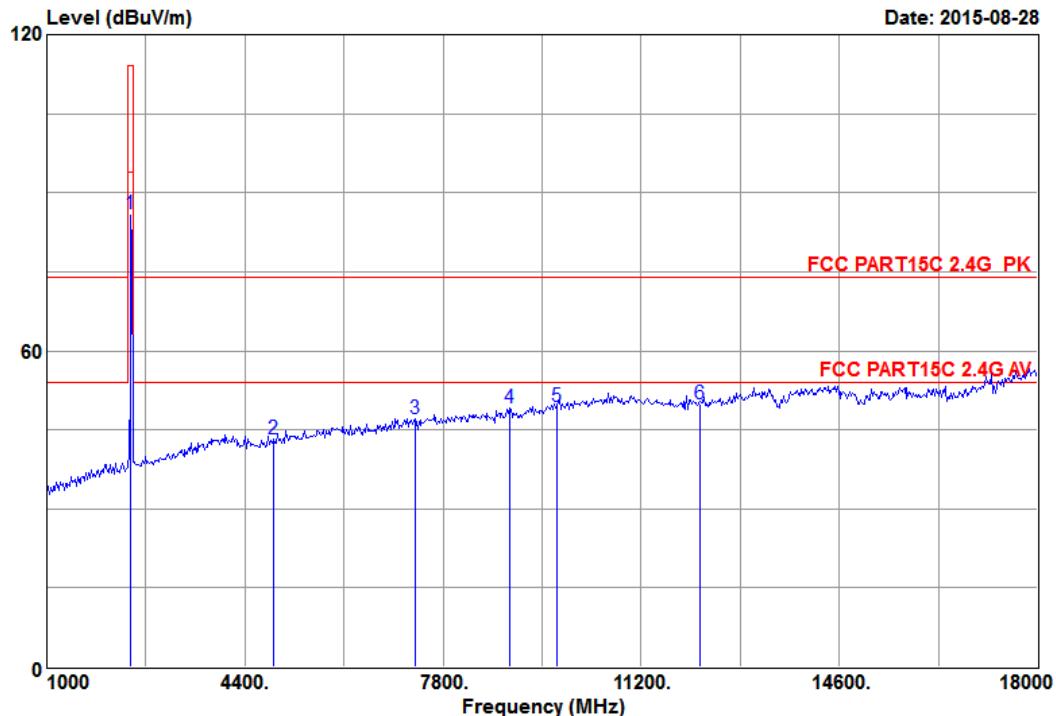
Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2402.00	28.15	4.38	87.29	34.94	84.88	114.00	29.12	Peak
2 4801.00	32.96	6.36	39.35	34.37	44.30	74.00	29.70	Peak
3 5956.00	34.47	7.64	37.06	34.02	45.15	74.00	28.85	Peak
4 7321.00	36.19	8.22	36.43	33.97	46.87	74.00	27.13	Peak
5 9694.00	38.53	9.77	37.01	34.74	50.57	74.00	23.43	Peak
6 10870.00	39.02	10.60	36.65	33.76	52.51	74.00	21.49	Peak

Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 9 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2440MHz  
Memo :

Data NO. : 9  
Ant. pol. : HORIZONTAL  
Engineer : Mickey

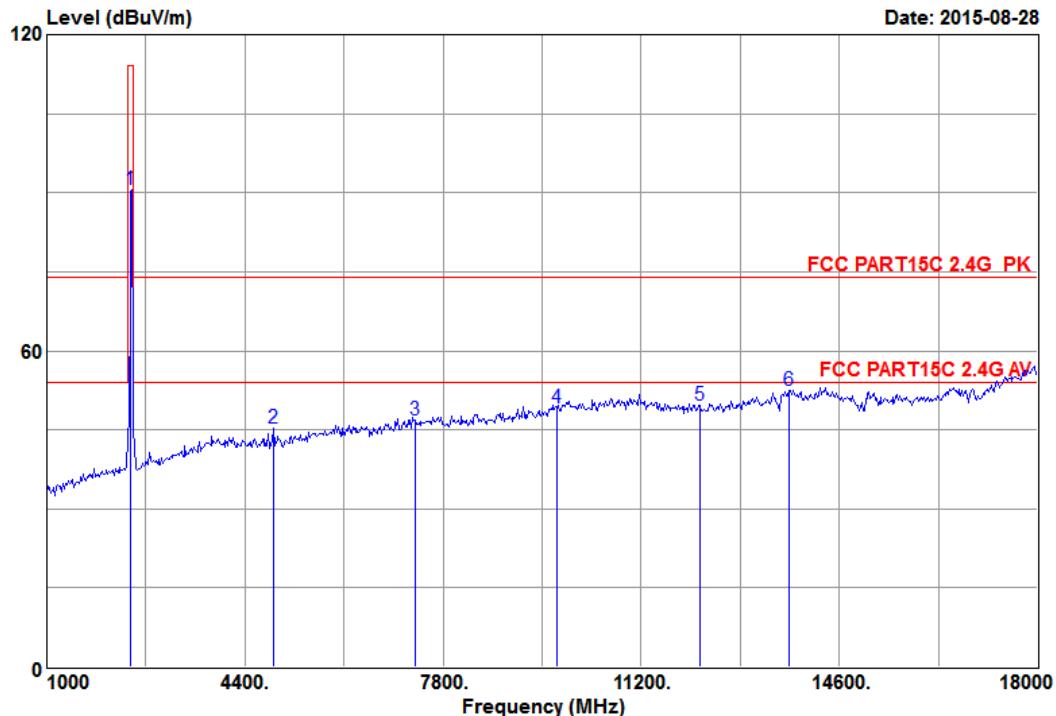
Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2441.25	28.28	4.42	88.25	34.95	86.00	114.00	28.00	Peak
2 4880.00	33.08	6.39	38.12	34.37	43.22	74.00	30.78	Peak
3 7320.00	36.19	8.22	36.76	33.97	47.20	74.00	26.80	Peak
4 8938.00	37.93	9.00	37.06	34.95	49.04	74.00	24.96	Peak
5 9760.00	38.61	9.86	35.65	34.72	49.40	74.00	24.60	Peak
6 12200.00	39.31	10.76	33.62	33.86	49.83	74.00	24.17	Peak

Remarks: 1. Emission Level = Ant. Factor + Cable Loss + Reading - Preamp. Factor.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 10 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4°C&48%N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2440MHz  
Memo :

Data NO. : 10  
Ant. pol. : VERTICAL  
Engineer : Mickey

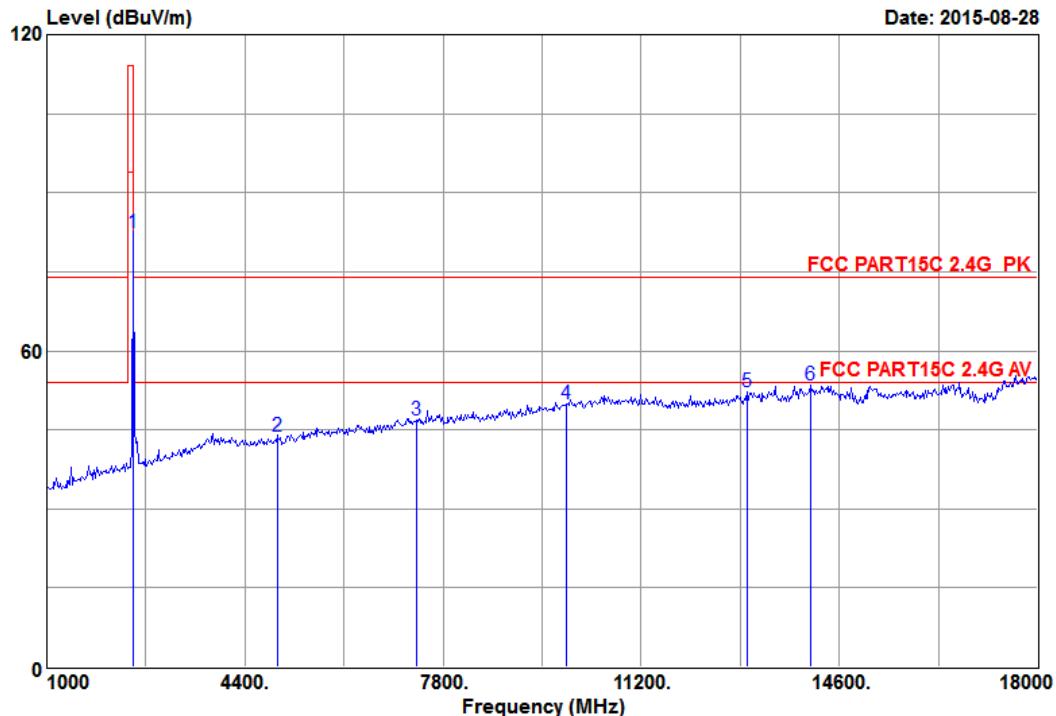
Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2441.18	28.28	4.42	92.78	34.95	90.53	114.00	23.47	Peak
2 4880.00	33.08	6.39	40.31	34.37	45.41	74.00	28.59	Peak
3 7320.00	36.19	8.22	36.31	33.97	46.75	74.00	27.25	Peak
4 9760.00	38.61	9.86	35.37	34.72	49.12	74.00	24.88	Peak
5 12200.00	39.31	10.76	33.45	33.86	49.66	74.00	24.34	Peak
6 13726.00	41.01	11.91	31.34	31.67	52.59	74.00	21.41	Peak

Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 11 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4°C&48%N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2480MHz  
Memo :

Data NO. : 11  
Ant. pol. : HORIZONTAL  
Engineer : Mickey

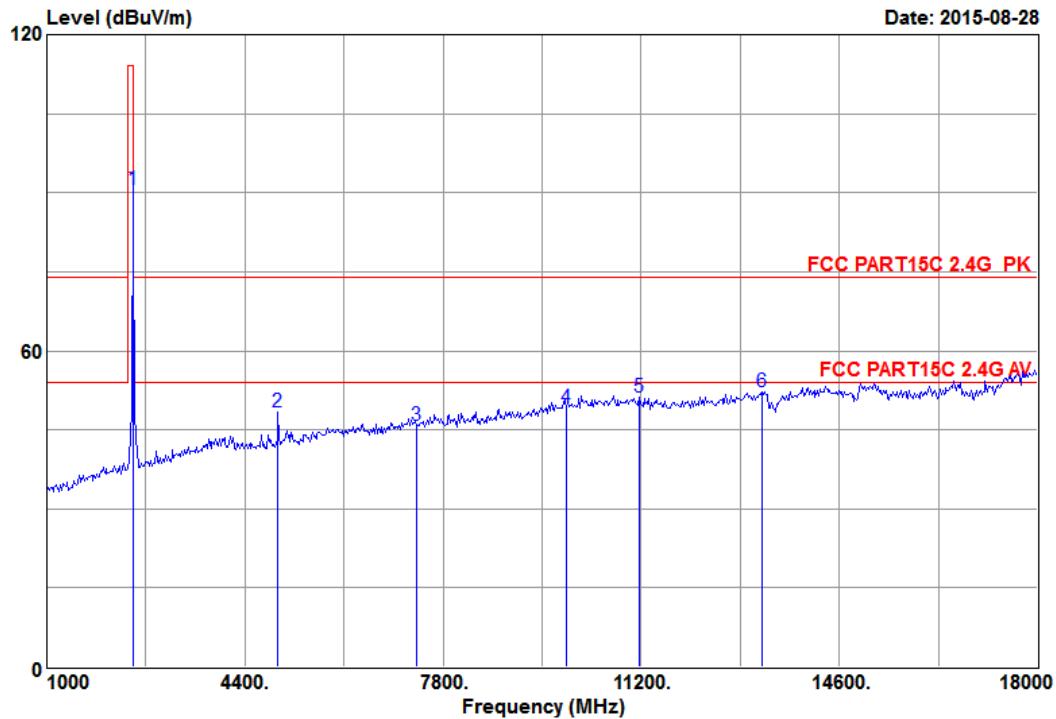
Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2480.15	28.36	4.44	84.52	34.96	82.36	114.00	31.64	Peak
2 4960.00	33.24	6.42	38.34	34.36	43.64	74.00	30.36	Peak
3 7340.00	36.23	8.24	36.36	34.00	46.83	74.00	27.17	Peak
4 9920.00	38.82	10.03	35.81	34.67	49.99	74.00	24.01	Peak
5 13012.00	39.63	11.50	33.31	32.29	52.15	74.00	21.85	Peak
6 14104.00	41.70	12.09	31.31	31.62	53.48	74.00	20.52	Peak

Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 12 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4°C&48%N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2480MHz  
Memo :

Data NO. : 12  
Ant. pol. : VERTICAL  
Engineer : Mickey

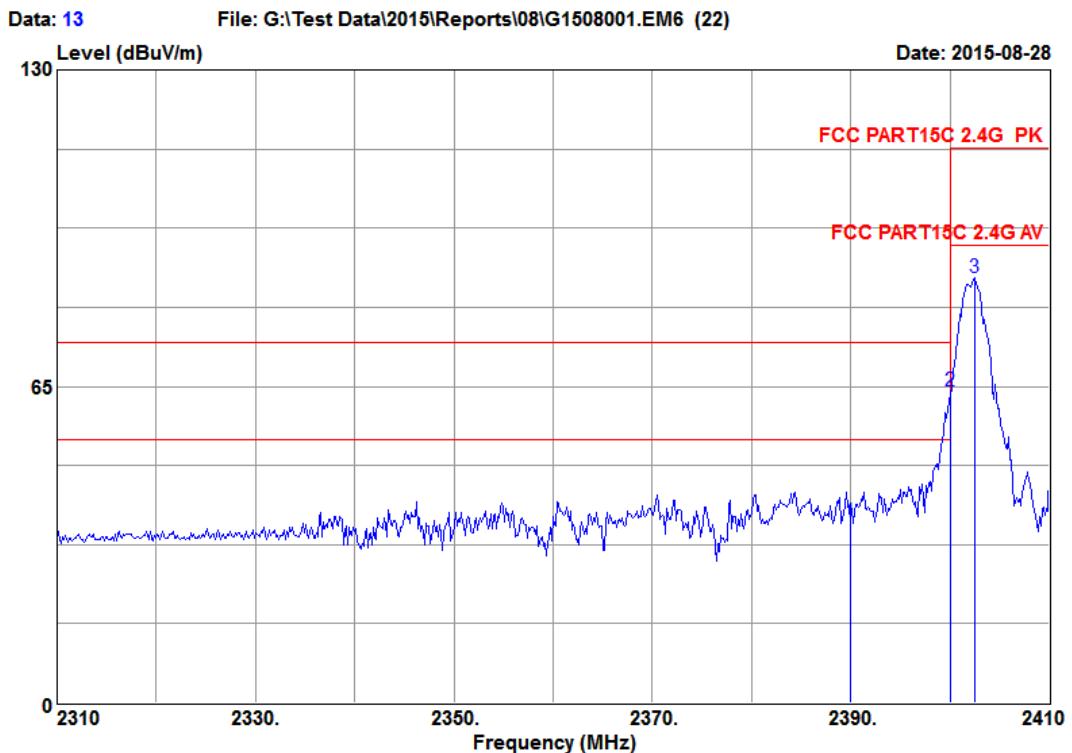
Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2480.25	28.36	4.44	92.63	34.96	90.47	114.00	23.53	Peak
2 4960.00	33.24	6.42	42.94	34.36	48.24	74.00	25.76	Peak
3 7340.00	36.23	8.24	35.23	34.00	45.70	74.00	28.30	Peak
4 9920.00	38.82	10.03	34.96	34.67	49.14	74.00	24.86	Peak
5 11164.00	39.13	10.65	35.16	33.74	51.20	74.00	22.80	Peak
6 13285.00	40.13	11.66	32.41	32.05	52.15	74.00	21.85	Peak

Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.

## 3.9. Spurious Emission Measurement Results in Band Edge Emission (FCC Part 15, 15.205)



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Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2402MHz  
Memo :

Data NO. : 13  
Ant. pol. : HORIZONTAL  
Engineer : Mickey

Freq.	Ant.	Cable	Preamp	Emission	Margin	Remark			
(MHz)	Factor	Loss	Reading	Factor	Level	Limits			
	(dB)	(dB)	(dBuV)	(dB)	(dBuV/m)	(dB)			
1	2390.00	28.15	4.38	39.69	34.94	37.28	74.00	36.72	Peak
2	2400.00	28.15	4.38	66.33	34.94	63.92	74.00	10.08	Peak
3	2402.54	28.19	4.38	89.66	34.94	87.29	114.00	26.71	Peak

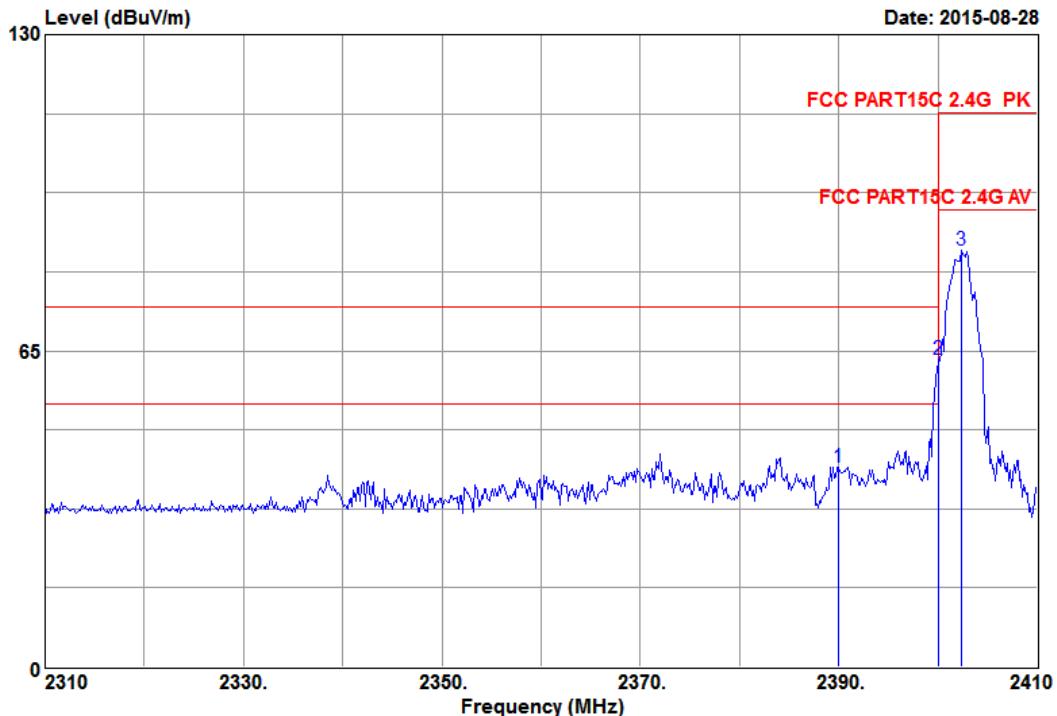
Remarks: 1. Emission Level = Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak Level (dBuV/m)	Duty cycle Factor (dB)	AV Level (dBuV/m)	Limit(dBuV/m)	Result
2400.00	63.92	-40	23.92	54	Pass



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Data: 14 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2402MHz  
Memo :

Data NO. : 14  
Ant. pol. : VERTICAL  
Engineer : Mickey

Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2390.00	28.15	4.38	43.32	34.94	40.91	74.00	33.09	Peak
2 2400.00	28.15	4.38	65.50	34.94	63.09	74.00	10.91	Peak
3 2402.40	28.15	4.38	88.00	34.94	85.59	114.00	28.41	Peak

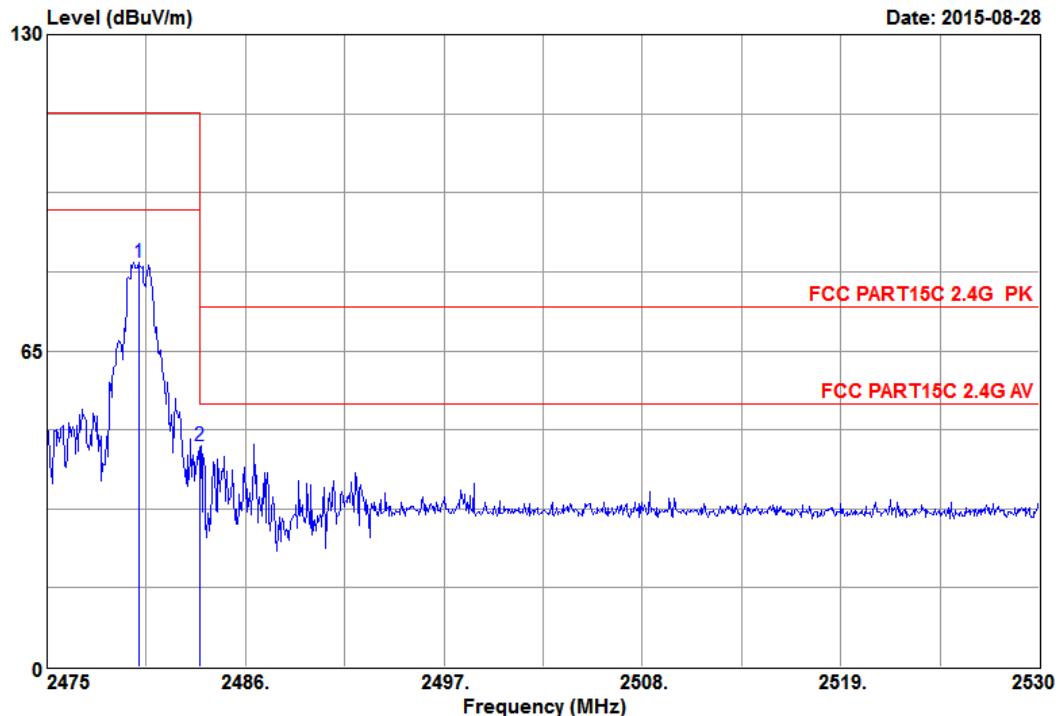
Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak Level (dBuV/m)	Duty cycle Factor (dB)	AV Level (dBuV/m)	Limit (dBuV/m)	Result
2400.00	63.09	-40	23.09	54	Pass



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Economic Development Zone, JiangSu, China  
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Data: 15 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2480MHz  
Memo :

Data NO. : 15  
Ant. pol. : HORIZONTAL  
Engineer : Mickey

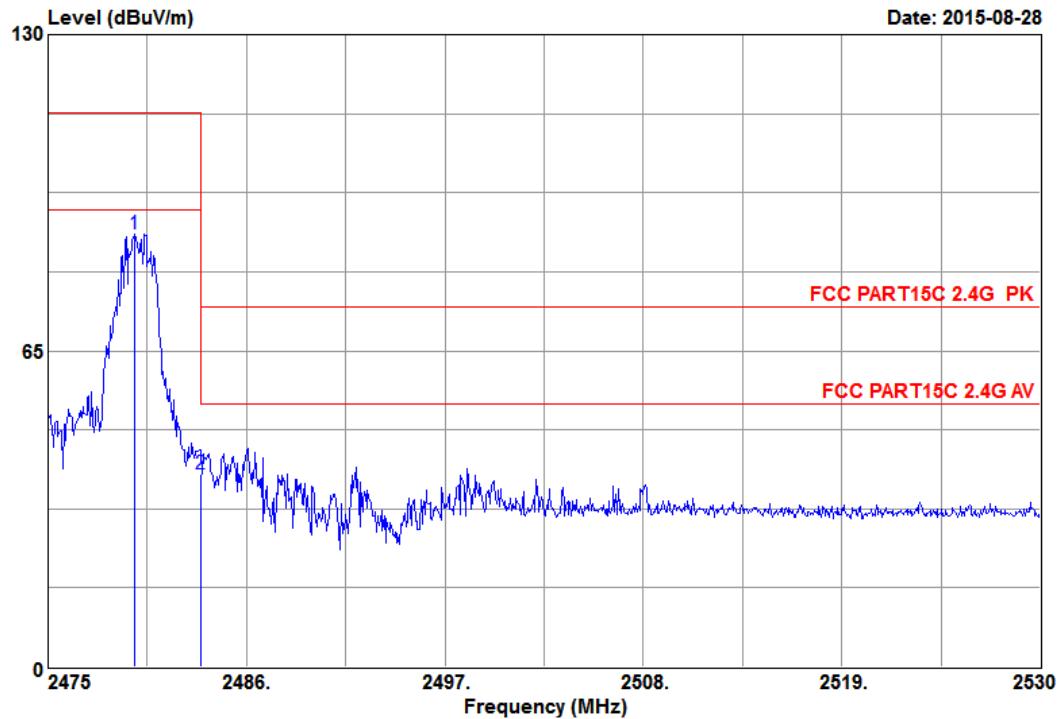
Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2480.06	28.36	4.44	85.32	34.96	83.16	114.00	30.84	Peak
2 2483.50	28.36	4.44	47.72	34.96	45.56	74.00	28.44	Peak

Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 16 File: G:\Test Data\2015\Reports\08\G1508001.EM6 (22)



Site NO. : 3m Semi-Anechoic Chamber  
Dis. / Ant. : 3m 3115-62961-140903  
Limit : FCC PART15C 2.4G PK  
Env. / Ins. : 20.4\*C&48%/N9030A  
EUT : Remote Control  
M/N : BRC0712106  
Power Rating: DC 3V  
Test Mode : TX 2480MHz  
Memo :

Data NO. : 16  
Ant. pol. : VERTICAL  
Engineer : Mickey

Freq. (MHz)	Ant. (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2479.79	28.36	4.44	91.09	34.96	88.93	114.00	25.07	Peak
2 2483.50	28.36	4.44	41.86	34.96	39.70	74.00	34.30	Peak

Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.  
2. The emission levels that are 20dB below the official limit are not reported.

## 4. 20 dB BANDWIDTH MEASUREMENT

### 4.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2015-06-23	2016-06-22

### 4.2. Specification Limits

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in section 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

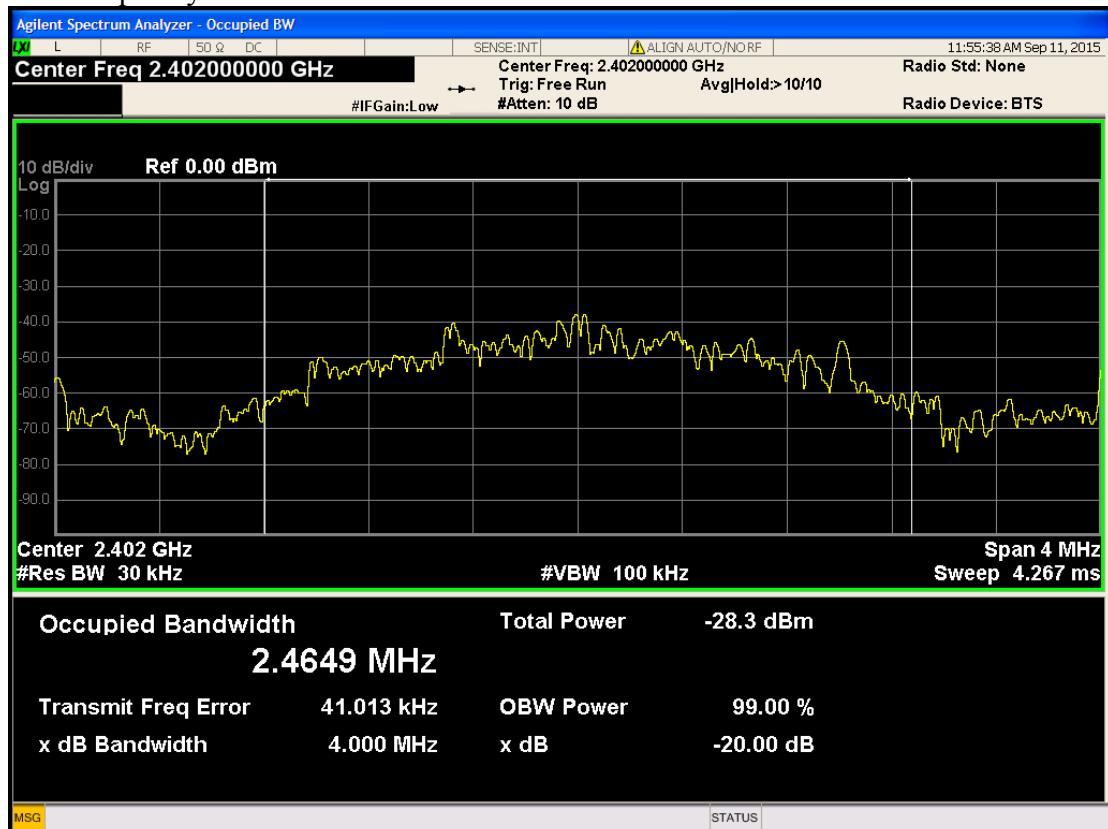
### 4.3. Test Results

**PASSED.**

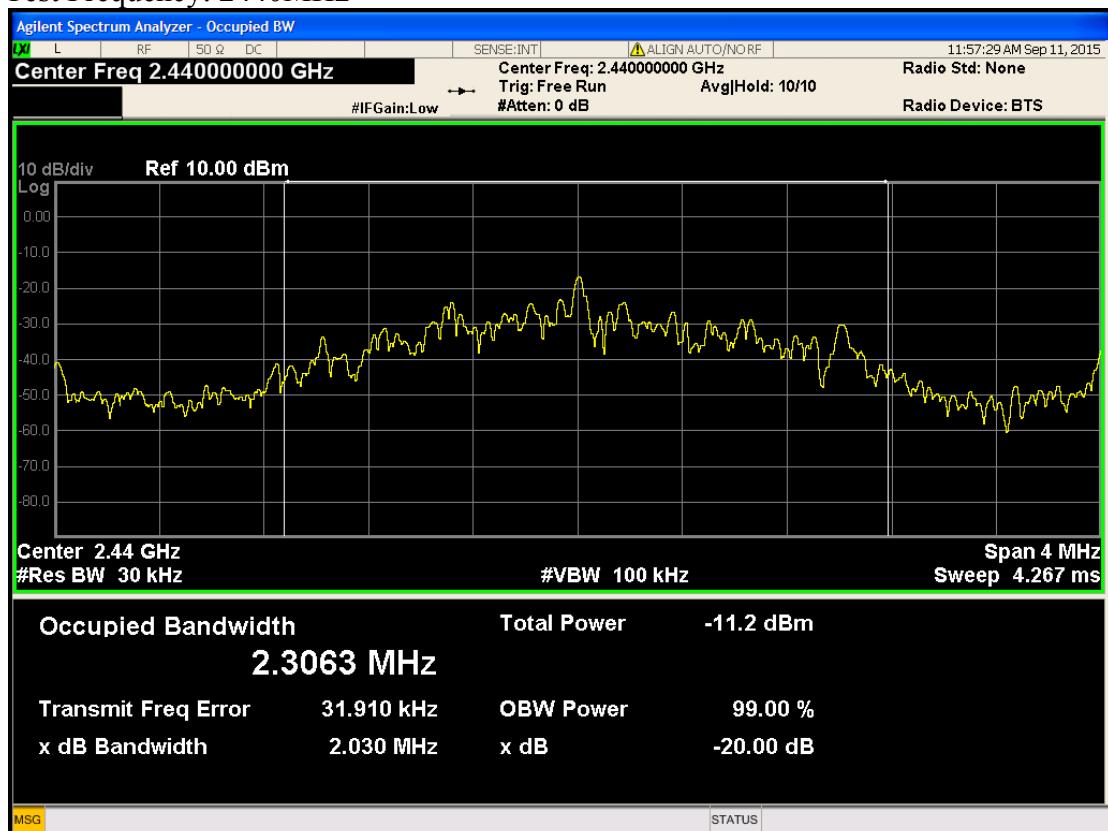
All the test results are attached in next pages.

Center Frequency(MHz)	-20 dB Bandwidth(MHz)
2402	<b>4.000</b>
2440	<b>2.030</b>
2480	<b>3.131</b>

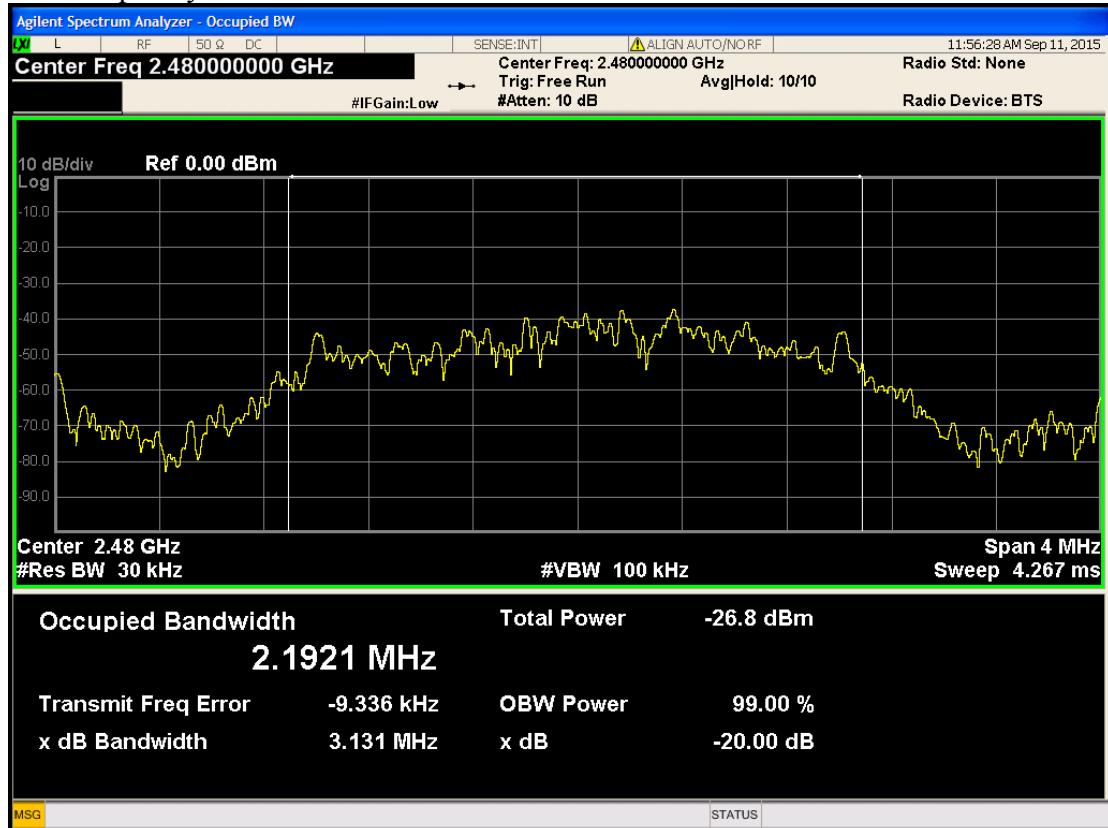
## Test Frequency: 2402MHz



## Test Frequency: 2440MHz



Test Frequency: 2480MHz



## 5. ANTENNA REQUIREMENT

Result: PASS

Test standard: FCC Part 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The best case gain of the antenna is 2.8dBi



## 6. DEVIATION TO TEST SPECIFICATIONS

【NONE】