



**FCC TEST REPORT** 

Test report
On Behalf of
BOLEY INT'L (HK) LTD
For
RC RACING BOAT
Model No.: 53252, 53253, 53256

...., ....,

FCC ID: 2ATG3-5325X

Prepared for : BOLEY INT'L (HK) LTD

RM.504-7, TOWER B, NEW MANDARIN PLAZA,14 SCIENCE MUSEUM ROAD,

TSIMSHATSUI EAST, KOWLOON, HONG KONG

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

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Date of Test: May 24, 2019 ~ May 28, 2019

Date of Report: May 28, 2019

Report Number: HK1905201081-E



**TEST RESULT CERTIFICATION** 

Applicant's name	BOLEY INT'L (HK) LT	D			
Address	RM.504-7, TOWER B TSIMSHATSUI EAST,	, NEW MANDARI KOWLOON, HOI	IN PI NG F	LAZA,14 SCIENC KONG	E MUSEUM ROAD,
Manufacture's Name.	BOLEY INT'L (HK) LT	D			
Address	RM.504-7, TOWER B TSIMSHATSUI EAST,	, NEW MANDARI KOWLOON, HOI	IN PI NG F	LAZA,14 SCIENC KONG	E MUSEUM ROAD,
Product description					
Trade Mark:	1				
Product name	RC RACING BOAT				
Model and/or type reference	53252, 53253, 53256				
Standards	FCC Rules and Regul ANSI C63.10: 2013	lations Part 15 Su	bpaı	rt C Section 15.24	9
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Date (s) of performance	of tests May 24, 2	2019 ~ May 28, 20	)19		
Date of Issue					
Test Result	Pass				
Te	sting Engineer :	Gogl	- <del>4</del>	ti an L	
		(Ga	ry Q	ian)	
Те	chnical Manager :	Edo	n	Hu	
		(Ed	den I	Hu)	
Au	thorized Signatory:	Jason	Λ	Zhou	

(Jason Zhou)





lable of Contents	Page
1. TEST SUMMARY	4
2 . GENERAL INFORMATION	5
2.1 GENERAL DESCRIPTION OF EUT	5
2.2 Carrier Frequency of Channels	6
2.3 Operation of EUT during testing	6
2.4 DESCRIPTION OF TEST SETUP	6
2.5 MEASUREMENT INSTRUMENTS LIST	7
3. CONDUCTED EMISSIONS TEST	8
3.1 Conducted Power Line Emission Limit	8
3.2 Test Setup	8
3.3 Test Procedure	8
3.4 Test Result	8
4 RADIATED EMISSION TEST	9
4.1 Radiation Limit	9
4.2 Test Setup	9
4.3 Test Procedure	10
4.4 Test Result	10
5 BAND EDGE	16
5.1 Limits	16
5.2 Test Procedure	16
5.3 Test Result	17
6 OCCUPIED BANDWIDTH MEASUREMENT	19
6.1 Test Setup	19
6.2 Test Procedure	19
6.3 Measurement Equipment Used	19
6.4 Test Result	19
7 ANTENNA REQUIREMENT	21
8 PHOTOGRAPH OF TEST	22
8.1 Radiated Emission	22
9 PHOTOS OF THE EUT	23





### 1. TEST SUMMARY

### 1.1 TEST PROCEDURES AND RESULTS

DESCRIPTION OF TEST
CONDUCTED EMISSIONS TEST
RADIATED EMISSION TEST
COMPLIANT
BAND EDGE
COMPLIANT
OCCUPIED BANDWIDTH MEASUREMENT
COMPLIANT
ANTENNA REQUIREMENT
COMPLIANT

#### 1.2 TEST FACILITY

Test Firm : Shenzhen HUAK Testing Technology Co., Ltd.

Address : 1F, B2 Building, Junfeng Zhongcheng Zhizao Innovation Park, Fuhai

Street, Bao'an District, Shenzhen City, China

### 1.3 MEASUREMENT UNCERTAINTY

Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2 Radiated emission expanded uncertainty(9kHz-30MHz) = 3.08dB, k=2 Radiated emission expanded uncertainty(30MHz-1000MHz) = 4.42dB, k=2 Radiated emission expanded uncertainty(Above 1GHz) = 4.06dB, k=2



# 2. GENERAL INFORMATION

## 2.1 GENERAL DESCRIPTION OF EUT

Equipment	RC RACING BOAT
Trade Mark	N/A
Model Name	53252
Serial Model	53253, 53256
Model Difference	All models the function, software and electric circuit are the same, only with a product color and model named different. Test sample model: 53252.
FCC ID	2ATG3-5325X
Antenna Type	Internal Antenna
Antenna Gain	0dBi
BT Operation frequency	2410MHZ to 2473MHz
Number of Channels	64CH
Modulation Type	GFSK
Power Source	DC 9V From Battery
Power Rating	DC 9V From Battery





## 2.2 Carrier Frequency of Channels

	Channel List											
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)					
01	2410	11	2420	21	2430	31	2440					
02	2411	12	2421	22	2431	32	2441					
03	2412	13	2422	23	2432	33	2442					
04	2413	14	2423	24	2433	34	2443					
05	2414	15	2424	25	2434	35	2444					
06	2415	16	2425	26	2435	36	2445					
07	2416	17	2426	27	2436	37	2446					
08	2417	18	2427	28	2437	38	2447					
09	2418	19	2428	29	2438	39	2448					
10	2419	20	2429	30	2439	40	2449					

	Channel List											
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)					
41	2450	51	2460	61	2470	1	/					
42	2451	52	2461	62	2471	1	/					
43	2452	53	2462	63	2472	1	/					
44	2453	54	2463	64	2473	1	/					
45	2454	55	2464	1	/	1	/					
46	2455	56	2465	1	/	1	/					
47	2456	57	2466	1	/	1	/					
48	2457	58	2467	1	/	1	/					
49	2458	59	2468	1	/	1	/					
50	2459	60	2469	1	/	1	/					

## 2.3 Operation of EUT during testing

**Operating Mode** 

The mode is used: Transmitting mode

Low Channel: 2410MHz Middle Channel: 2441MHz High Channel: 2473MHz

### 2.4 DESCRIPTION OF TEST SETUP

Operation of EUT during Radiation and Above1GHz Radiation testing:

EUT



## 2.5 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.
1.	L.I.S.N. Artificial Mains Network	R&S	ENV216	HKE-002	Dec. 27, 2018	1 Year
2.	Receiver	R&S	ESCI 7	HKE-010	Dec. 27, 2018	1 Year
3.	RF automatic control unit	Tonscend	JS0806-2	HKE-060	Dec. 27, 2018	1 Year
4.	Spectrum analyzer	R&S	FSP40	HKE-025	Dec. 27, 2018	1 Year
5.	Spectrum analyzer	Agilent	N9020A	HKE-048	Dec. 27, 2018	1 Year
6.	Preamplifier	Schwarzbeck	BBV 9743	HKE-006	Dec. 27, 2018	1 Year
7.	EMI Test Receiver	Rohde & Schwarz	ESCI 7	HKE-010	Dec. 27, 2018	1 Year
8.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	HKE-012	Dec. 27, 2018	1 Year
9.	Loop Antenna	Schwarzbeck	FMZB 1519 B	HKE-014	Dec. 27, 2018	1 Year
10.	Horn Antenna	Schewarzbeck	9120D	HKE-013	Dec. 27, 2018	1 Year
11.	Pre-amplifier	EMCI	EMC051845 SE	HKE-015	Dec. 27, 2018	1 Year
12.	Pre-amplifier	Agilent	83051A	HKE-016	Dec. 27, 2018	1 Year
13.	EMI Test Software EZ-EMC	Tonscend	JY3120-B Version	HKE-083	Dec. 27, 2018	N/A
14.	Power Sensor	Agilent	E9300A	HKE-086	Dec. 27, 2018	1 Year
15.	Spectrum analyzer	Agilent	N9020A	HKE-048	Dec. 27, 2018	1 Year
16.	Signal generator	Agilent	N5182A	HKE-029	Dec. 27, 2018	1 Year
17.	Signal Generator	Agilent	83630A	HKE-028	Dec. 27, 2018	1 Year
18.	Shielded room	Shiel Hong	4*3*3	HKE-039	Dec. 27, 2018	3 Year



### CONDUCTED EMISSIONS TEST

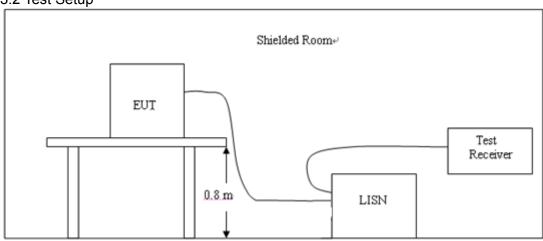
### 3.1 Conducted Power Line Emission Limit

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

Eroguanov	M	Maximum RF Line Voltage (dBμV)							
Frequency (MHz)	CLAS	SS A	CLASS B						
(IIII 12)	Q.P.	Ave.	Q.P.	Ave.					
0.15 - 0.50	79	66	66-56*	56-46*					
0.50 - 5.00	73	60	56	46					
5.00 - 30.0	73	60	60	50					

<sup>\*</sup> Decreasing linearly with the logarithm of the frequency
For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

### 3.2 Test Setup



### 3.3 Test Procedure

- 1, The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2, Support equipment, if needed, was placed as per ANSI C63.10.
- 3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4, If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5, All support equipments received AC power from a second LISN, if any.
- 6, The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7, Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.

### 3.4 Test Result

N/A



### **4 RADIATED EMISSION TEST**

### 4.1 Radiation Limit

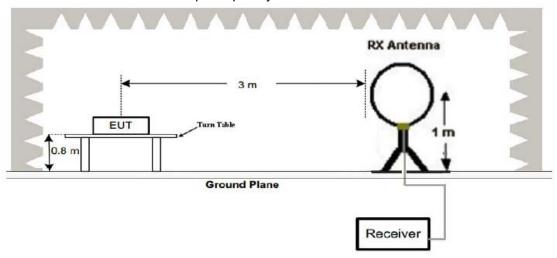
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency	Distance	Radiated	Radiated
(MHz)	(Meters)	(dBµV/m)	(μV/m)
30-88	3	40	100
88-216	3	43.5	150
216-960	3	46	200
Above 960	3	54	500

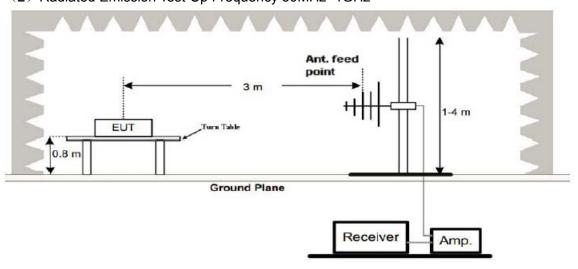
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

## 4.2 Test Setup

### (1) Radiated Emission Test-Up Frequency Below 30MHz

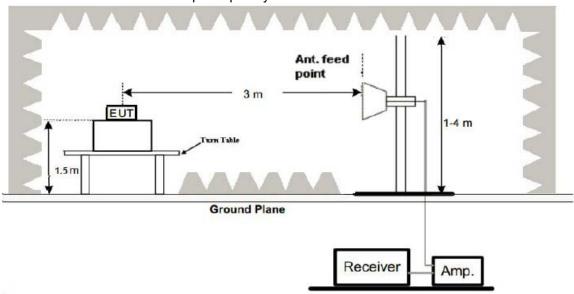


## (2) Radiated Emission Test-Up Frequency 30MHz~1GHz





(3) Radiated Emission Test-Up Frequency Above 1GHz



#### 4.3 Test Procedure

- 1. Below 1GHz measurement the EUT is placed on turntable which is 0.8m above ground plane. And above 1GHz measurement EUT was placed on low permittivity and low tangent turn table which is 1.5m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.
- 7. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a).

#### Note:

For battery operated equipment, the equipment tests shall be performed using a new battery.

### 4.4 Test Result

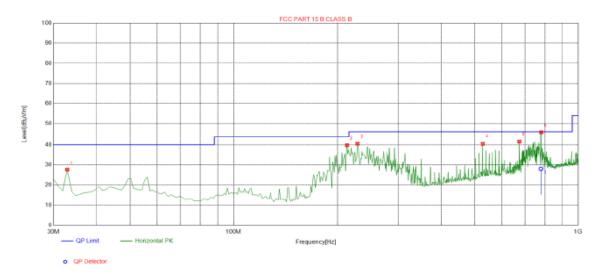
#### **PASS**

All the test modes completed for test. The worst case of Radiated Emission is CH 2410; the test data of this mode was reported.



Below 1GHz Test Results:

## Antenna polarity: H

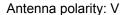


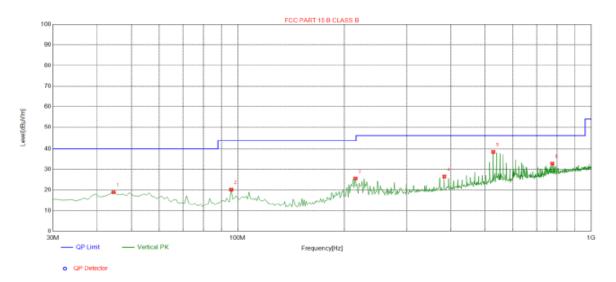
Susp	ected List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.9100	27.66	-16.23	40.00	12.34	100	351	Horizontal
2	213.330	39.79	-14.72	43.50	3.71	100	250	Horizontal
3	228.850	40.51	-14.35	46.00	5.49	100	244	Horizontal
4	528.580	40.45	-7.49	46.00	5.55	100	24	Horizontal
5	675.050	41.54	-4.72	46.00	4.46	100	345	Horizontal
6	781.750	45.76	-3.26	46.00	0.24	100	259	Horizontal

Final I	Final Data List											
NO.	Freq.	Factor	QP Value	QP Limit	QP Margin	Height	Angle	Polarity				
NO.	[MHz]	[dB]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity				
1	780.014	-3.26	28.01	46.00	17.99	190	300.6	Horizontal				

Remark: Transd = Cable lose + Antenna factor - Pre-amplifier; Margin = Limit – Level







Susp	ected List							
NO	Freq.	Level	Factor	Limit	Margin	Height	Angle	Dolovitu
NO.	[MHz]	[dBµV/m]	[dB]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
1	44.5500	18.94	-13.73	40.00	21.06	100	282	Vertical
2	95.9600	20.23	-16.07	43.50	23.27	100	184	Vertical
3	215.270	25.62	-14.67	43.50	17.88	100	109	Vertical
4	384.050	26.60	-10.75	46.00	19.40	100	12	Vertical
5	528.580	38.54	-7.49	46.00	7.46	100	65	Vertical
6	775.930	32.85	-3.26	46.00	13.15	100	249	Vertical

Remark: Transd = Cable lose + Antenna factor - Pre-amplifier; Margin = Limit – Level

#### Remark:

- (1) Measuring frequencies from 9 KHz to the 1 GHz, Radiated emission test from 9KHz to 30MHz was verified, and no any emission was found except system noise floor.
- (2) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.



Above 1 GHz Test Results: CH Low (2410MHz)

## Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	5			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type			
2410	111.45	-5.84	105.61	114	-8.39	peak			
2410	86.98	-5.84	81.14	94	-12.86	AVG			
4820	56.33	-3.64	52.69	74	-21.31	peak			
4820	46.87	-3.64	43.23	54	-10.77	AVG			
7230	52.46	-0.95	51.51	74	-22.49	peak			
7230	40.45	-0.95	39.5	54	-14.5	AVG			
Remark: Facto	Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.								

## Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2410	110.44	-5.84	104.6	114	-9.4	peak
2410	84.98	-5.84	79.14	94	-14.86	AVG
4820	56.37	-3.64	52.73	74	-21.27	peak
4820	47.98	-3.64	44.34	54	-9.66	AVG
7230	54.45	-0.95	53.5	74	-20.5	peak
7230	39.76	-0.95	38.81	54	-15.19	AVG

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



# CH Middle (2441MHz)

# Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	5		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type		
2441	110.09	-5.71	104.38	114	-9.62	peak		
2441	84.27	-5.71	78.56	94	-15.44	AVG		
4882	54.29	-3.51	50.78	74	-23.22	peak		
4882	44.39	-3.51	40.88	54	-13.12	AVG		
7323	52.08	-0.82	51.26	74	-22.74	peak		
7323	38.68	-0.82	37.86	54	-16.14	AVG		
Remark: Facto	Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

## Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	]
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2441	107.43	-5.71	101.72	114	-12.28	peak
2441	83.87	-5.71	78.16	94	-15.84	AVG
4882	54.78	-3.51	51.27	74	-22.73	peak
4882	44.97	-3.51	41.46	54	-12.54	AVG
7323	55.24	-0.82	54.42	74	-19.58	peak
7323	42.67	-0.82	41.85	54	-12.15	AVG



#### CH High (2473MHz)

#### Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2473	106.76	-5.65	101.11	114	-12.89	peak
2473	83.47	-5.65	77.82	94	-16.18	AVG
4946	53.46	-3.43	50.03	74	-23.97	peak
4946	42.87	-3.43	39.44	54	-14.56	AVG
7419	52.54	-0.75	51.79	74	-22.21	peak
7419	37.44	-0.75	36.69	54	-17.31	AVG
	or = Antenna Fac	tor + Cable I c	oss – Pre-amplifier.			•

### Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	5		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type		
2473	105.08	-5.65	99.43	114	-14.57	peak		
2473	84.78	-5.65	79.13	94	-14.87	AVG		
4946	54.22	-3.43	50.79	74	-23.21	peak		
4946	43.76	-3.43	40.33	54	-13.67	AVG		
7419	52.66	-0.75	51.91	74	-22.09	peak		
7419	38.51	-0.75	37.76	54	-16.24	AVG		
Remark: Facto	Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

### Remark:

- (1) Measuring frequencies from 1 GHz to the 25 GHz •
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.
- (7)All modes of operation were investigated and the worst-case emissions are reported.





5.1 Limits

FCC PART 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

### 5.2 Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW to 100KHz and VBM to 300KHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength. The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW to 100 KHz and VBW to 300 KHz, to measure the conducted peak band edge.



## 5.3 Test Result

## **PASS**

Radiated Band Edge Test:

Operation Mode: TX CH Low (2410MHz)

Horizontal (Worst case)

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре			
2310	57.38	-5.81	51.57	74	-22.43	peak			
2310	1	-5.81	1	54	1	AVG			
2390	54.37	-5.84	48.53	74	-25.47	peak			
2390	1	-5.84	1	54	1	AVG			
2400	52.68	-5.84	46.84	74	-27.16	peak			
2400	1	-5.84	1	54	1	AVG			
	r – Antonno For								

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

## Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Type
2310	54.98	-5.81	49.17	74	-24.83	peak
2310	1	-5.81	1	54	1	AVG
2390	52.26	-5.84	46.42	74	-27.58	peak
2390	1	-5.84	1	54	1	AVG
2400	53.77	-5.84	47.93	74	-26.07	peak
2400	1	-5.84	1	54	1	AVG

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



Operation Mode: TX CH High (2473MHz)

Horizontal (Worst case)

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.50	55.63	-5.65	49.98	74	-24.02	peak
2483.50	1	-5.65	1	54	1	AVG
2500.00	53.67	-5.65	48.02	74	-25.98	peak
2500.00	1	-5.65	1	54	1	AVG

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

## Vertical:

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.50	54.87	-5.65	49.22	74	-24.78	peak
2483.50	1	-5.65	1	54	1	AVG
2500.00	53.29	-5.65	47.64	74	-26.36	peak
2500.00	1	-5.65	1	54	1	AVG

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

Remark: All the other emissions not reported were too low to read and deemed to comply with FCC limit.



### 6 OCCUPIED BANDWIDTH MEASUREMENT

### 6.1 Test Setup

Same as Radiated Emission Measurement

### 6.2 Test Procedure

- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. Set EUT as normal operation.
- 3. Based on ANSI C63.10 section 6.9.2: RBW= 30KHz. VBW= 100 KHz, Span=4MHz.
- 4. The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.

## 6.3 Measurement Equipment Used

Same as Radiated Emission Measurement

### 6.4 Test Result

### **PASS**

Frequency	20dB Bandwidth (MHz)	Result
2410 MHz	0.8301	PASS
2441MHz	0.8331	PASS
2473 MHz	0.8322	PASS

CH: 2410MHz





## CH: 2441MHz



### CH: 2473MHz







### 7 ANTENNA REQUIREMENT

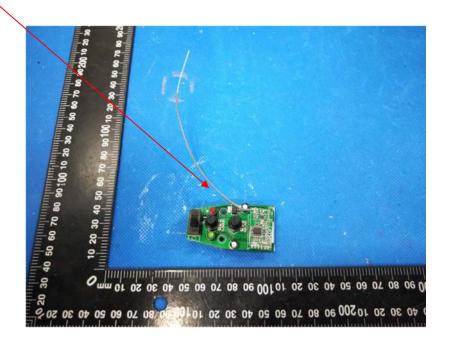
### **Standard Applicable**

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.249, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### **Antenna Connected Construction**

The antenna used in this product is a Internal Antenna, The directional gains of antenna used for transmitting is 0dBi.

## **BT ANTENNA**





## 8 PHOTOGRAPH OF TEST

## 8.1 Radiated Emission







# 9 PHOTOS OF THE EUT

Reference to the reporter:	ANNEX A of external	photos and ANNEX B	of internal photos
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-----End of test report-----