FCC TEST REPORT

Test report On Behalf of R-Go Tools BV For R-Go HE Mouse Medium wireless Model No.: RGOHEWL and RGOHEWLL

FCC ID: 2AMPY-RGOHEWLL

Prepared for :	R-Go Tools BV
	Techniekweg 15, 4143 HW, Leerdam,Netherlands

Prepared By :Laboratory of Shenzhen United Testing Technology Co., LtdRoom 316-319, Block B, Honghualing Industrial Park of the Fifth Zone, Taoyuan
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Date of Test:	Jun. 20, 2017 ~ Jun. 26, 2017
Date of Report:	Jun. 26, 2017
Report Number:	UNI170620047-E

TEST RESULT CERTIFICATION

Applicant's name:	R-Go Tools BV
Address:	Techniekweg 15, 4143 HW, Leerdam,Netherlands
Manufacture's Name:	R-Go Tools BV
Address:	Techniekweg 15, 4143 HW, Leerdam,Netherlands
Product description	
Trade Mark:	R-Go Tools
	R-Go Tools R-Go HE Mouse Medium wireless
	R-Go HE Mouse Medium wireless

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Date of Test	
Date (s) of performance of tests	Jun. 20, 2017 ~ Jun. 26, 2017
Date of Issue	Jun. 26, 2017
Test Result	Pass

:

1

Testing Engineer

2m Xie

(Eric Xie)

Technical Manager

Dota Qin

(Dora Qin)

Authorized Signatory :

(Kait Chen)

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1. TEST SUMMARY

1.1 TEST PROCEDURES AND RESULTS

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

1.2 TEST FACILITY

Test Firm	: QTC Certification & Testing Co., Ltd.
	Certificated by FCC, Registration No.: 588523
Address	2nd Floor,B1 Building,Fengyeyuan Industrial Plant, Liuxian 2st. Road,
	Xin'an Street, Bao'an District, Shenzhen, 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	R-Go HE Mouse Medium wireless
Model Name	RGOHEWL and RGOHEWLL
Serial Model	/
Model Difference	/
FCC ID	2AMPY-RGOHEWLL
Antenna Type	PCB Antenna
Antenna Gain	0dBi
BT Operation frequency	2407-2477MHz
Number of Channels	16CH
Modulation Type	GFSK
Power Source	DC Voltage
Power Rating	DC 3.7 V for battery or DC 5V form Adapter

2.1.1 Carrier Frequency of Channels

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2407	07	2437	14	2469
01	2408	08	2440	15	2477
02	2410	09	2441	/	/
03	2414	10	2442	/	/
04	2421	11	2455	/	/
05	2428	12	2467	/	/
06	2435	13	2468	/	/

2.2 Operation of EUT during testing

Operating Mode

The mode is used: Transmitting mode

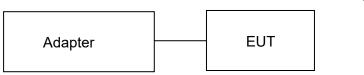
Low Channel: 2407MHz Middle Channel: 2440MHz High Channel: 2477MHz

2.3 DESCRIPTION OF TEST SETUP

Operation of EUT during conducted testing:

Operation of EUT during radiation testing:

EUT



2.4 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1.	EMI Receiver	Rohde & Schwarz	ESCI	100627	Feb. 18, 2017	Feb. 17, 2018
2.	LISN	SchwarzBeck	NSLK 8126	8126377	Feb. 18, 2017	Feb. 17, 2018
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Feb. 18, 2017	1 Year
4.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
5.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Feb. 18, 2017	Feb. 17, 2018
6.	Trilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Feb. 18, 2017	Feb. 17, 2018
7.	Pre-amplifier	Compliance Direction	PAP-0203	22008	Feb. 18, 2017	Feb. 17, 2018
8.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
9.	EMI Receiver	Rohde & Schwarz	ESCI	100627	Feb. 18, 2017	Feb. 17, 2018
10.	LISN	SchwarzBeck	NSLK 8126	8126377	Feb. 18, 2017	Feb. 17, 2018
11.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Feb. 18, 2017	Feb. 17, 2018
12.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
13.	EMI Receiver	Rohde & Schwarz	ESCI	100627	Feb. 18, 2017	Feb. 17, 2018
14.	EMI Receiver	Rohde & Schwarz	ESCI	100627	Feb. 18, 2017	Feb. 17, 2018
15.	LISN	SchwarzBeck	NSLK 8126	8126377	Feb. 18, 2017	Feb. 17, 2018
16.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Feb. 18, 2017	Feb. 17, 2018
17.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
18.	Power Meter	R&S	NRVD	SEL0069	Feb. 18, 2017	Feb. 17, 2018
19.	Power Sensor	R&S	URV5-Z2	SEL0071	Feb. 18, 2017	Feb. 17, 2018
20.	Power Sensor	R&S	URV5-Z2	SEL0072	Feb. 18, 2017	Feb. 17, 2018
21.	Software EMC32	R&S	EMC32-S	SEL0082	N/A	N/A
22.	Log-periodic Antenna	Amplifier Reasearch	APT1.580	SEL0073	Feb. 18, 2017	Feb. 17, 2018
23.	Loop Antenna	Schwarz beck	FMZB 1516	9773	Feb. 18, 2017	Feb. 17, 2018
24.	Broadband Antenna	Schwarz beck	VULB9163	9163-333	Feb. 18, 2017	Feb. 17, 2018
25.	Horn Antenna	ETS	3117	00086197	Feb. 18, 2017	Feb. 17, 2018
26.	Horn Antenna	Schwarzbeck	BBHA9170	BBHA91705 82	Feb. 18, 2017	Feb. 17, 2018
27.	Antenna Tripod	Amplifier Reasearch	TP1000A	SEL0074	Feb. 18, 2017	Feb. 17, 2018
28.	High Gain Horn Antenna	Amplifier Reasearch	AT4002A	SEL0075	Feb. 18, 2017	Feb. 17, 2018
29.	Spectrum analyzer	Agilent	N9020A	MY49911004 8	Feb. 18, 2017	Feb. 17, 2018
30.	Spectrum analyzer	Agilent	E4407B	MY46184326	Feb. 18, 2017	Feb. 17, 2018
31.	Spectrum analyzer	R&S	FSP30	836079/035	Feb. 18, 2017	Feb. 17, 2018
32.	RF Cable	Micable	C10-01-01-1	100309	Feb. 18, 2017	Feb. 17, 2018

3. CONDUCTED EMISSIONS TEST

3.1 Conducted Power Line Emission Limit

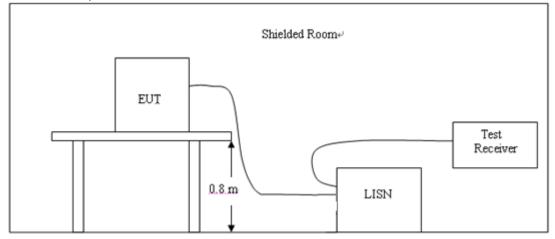
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

Frequency	Maximum RF Line Voltage (dBµV)				
Frequency (MHz)	CLASS A		CLASS B		
(11112)	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	

* 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

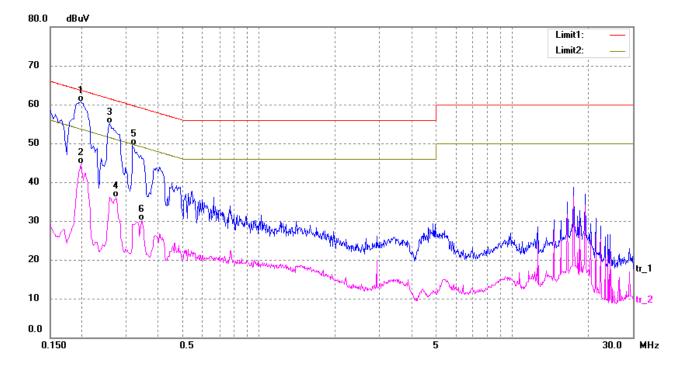
- 1, The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2, Support equipment, if needed, was placed as per 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

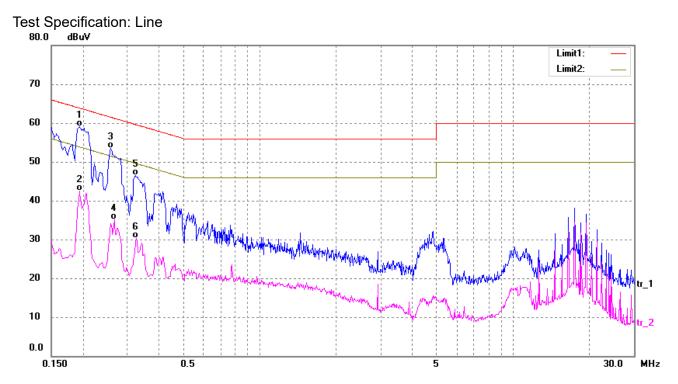
PASS

All the test modes completed for test. The worst case of Conducted Emission is CH 2407; the test data of this mode was reported.

Test Specification: Neutral



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1980	50.98	9.80	60.78	63.69	-2.91	QP
2	0.1980	34.93	9.80	44.73	53.69	-8.96	AVG
3	0.2580	45.36	9.80	55.16	61.50	-6.34	QP
4	0.2740	26.35	9.80	36.15	51.00	-14.85	AVG
5	0.3180	39.64	9.80	49.44	59.76	-10.32	QP
6	0.3460	20.27	9.80	30.07	49.06	-18.99	AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1940	49.31	9.81	59.12	63.86	-4.74	QP
2	0.1940	32.62	9.81	42.43	53.86	-11.43	AVG
3	0.2580	43.79	9.80	53.59	61.50	-7.91	QP
4	0.2660	25.28	9.80	35.08	51.24	-16.16	AVG
5	0.3220	36.74	9.80	46.54	59.66	-13.12	QP
6	0.3260	20.56	9.80	30.36	49.55	-19.19	AVG

4 RADIATED EMISSION TEST

4.1 Radiation Limit

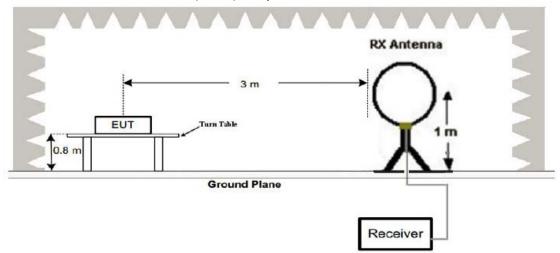
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

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

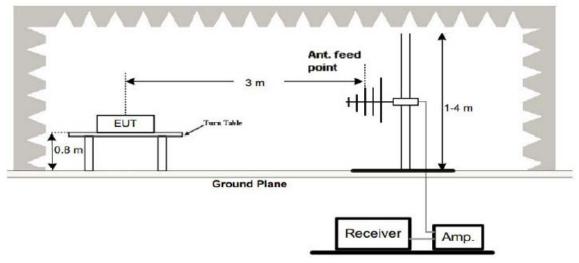
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

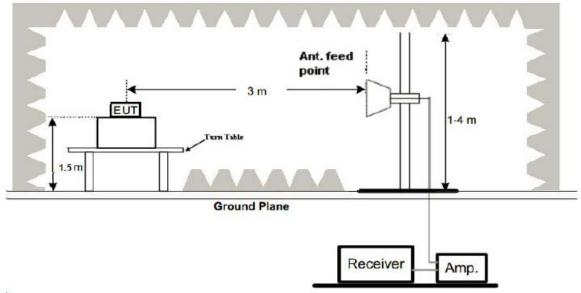
4.2 Test Setup

(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:

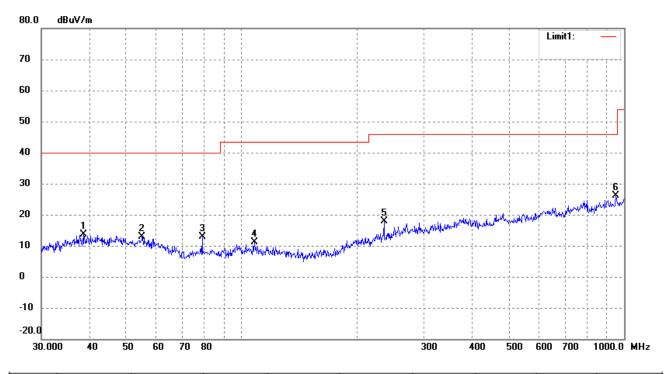
For battery operated equipment, the equipment tests shall be performed using a new battery.

4.4 Test Result

PASS

All the test modes completed for test. The worst case of Radiated Emission is CH 2407; the test data of this mode was reported.

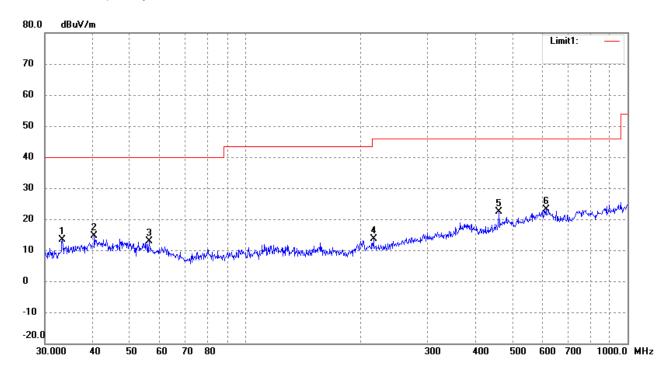
Below 1GHz Test Results: Antenna polarity: H



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	()	(cm)	
1	38.6161	21.58	-8.05	13.53	40.00	-26.47	107	100	peak
2	55.0274	21.84	-8.95	12.89	40.00	-27.11	169	100	peak
3	78.9652	25.04	-12.07	12.97	40.00	-27.03	59	100	peak
4	108.2667	22.31	-11.11	11.20	43.50	-32.30	93	100	peak
5	235.8164	26.29	-8.44	17.85	46.00	-28.15	284	100	peak
6	952.0937	22.31	3.85	26.16	46.00	-19.84	152	100	peak

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Antenna polarity: V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	()	(cm)	
1	33.3279	22.78	-9.46	13.32	40.00	-26.68	62	100	peak
2	40.4172	22.31	-7.70	14.61	40.00	-25.39	91	100	peak
3	56.1974	21.93	-9.10	12.83	40.00	-27.17	89	100	peak
4	216.7828	22.47	-8.81	13.66	46.00	-32.34	144	100	peak
5	460.7271	24.90	-2.63	22.27	46.00	-23.73	156	100	peak
6	612.0642	22.57	0.68	23.25	46.00	-22.75	175	100	peak

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 (2407MHz)

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type		
2407	112.87	-5.84	107.03	114	-6.97	peak		
2407	84.21	-5.84	78.37	94	-15.63	AVG		
4814	56.18	-3.64	52.54	74	-21.46	peak		
4814	45.29	-3.64	41.65	54	-12.35	AVG		
7221	54.11	-0.95	53.16	74	-20.84	peak		
7221	42.12	-0.95	41.17	54	-12.83	AVG		
	Pemark: Factor - Antonno Factor + Cable Leas - Dra amplifier							

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		
2407	110.42	-5.84	104.58	114	-9.42	peak		
2407	84.33	-5.84	78.49	94	-15.51	AVG		
4814	55.08	-3.64	51.44	74	-22.56	peak		
4814	44.19	-3.64	40.55	54	-13.45	AVG		
7221	53.29	-0.95	52.34	74	-21.66	peak		
7221	37.18	-0.95	36.23	54	-17.77	AVG		
Remark: Facto	Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

CH Middle (2440MHz)

Horizontal	:
TIONZOIIItai	•

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type		
2440	109.23	-5.71	103.52	114	-10.48	peak		
2440	83.11	-5.71	77.4	94	-16.6	AVG		
4880	57.82	-3.51	54.31	74	-19.69	peak		
4880	45.29	-3.51	41.78	54	-12.22	AVG		
7320	52.41	-0.82	51.59	74	-22.41	peak		
7320	38.22	-0.82	37.4	54	-16.6	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		
2440	107.47	-5.71	101.76	114	-12.24	peak		
2440	84.19	-5.71	78.48	94	-15.52	AVG		
4880	54.96	-3.51	51.45	74	-22.55	peak		
4880	44.32	-3.51	40.81	54	-13.19	AVG		
7320	53.17	-0.82	52.35	74	-21.65	peak		
7320	36.29	-0.82	35.47	54	-18.53	AVG		
Remark: Facto	Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

CH High (2477MHz)

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2477	108.97	-5.65	103.32	114	-10.68	peak
2477	83.18	-5.65	77.53	94	-16.47	AVG
4954	57.93	-3.43	54.5	74	-19.5	peak
4954	44.23	-3.43	40.8	54	-13.2	AVG
7431	54.44	-0.75	53.69	74	-20.31	peak
7431	37.41	-0.75	36.66	54	-17.34	AVG
Remark: Facto	or = Antenna Fac	tor + Cable I o	ss – Pre-amplifier.			

Horizontal:

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)	Detector Type
2477	107.22	-5.65	101.57	114	-12.43	peak
2477	84.06	-5.65	78.41	94	-15.59	AVG
4954	52.11	-3.43	48.68	74	-25.32	peak
4954	43.17	-3.43	39.74	54	-14.26	AVG
7431	53.96	-0.75	53.21	74	-20.79	peak
7431	37.31	-0.75	36.56	54	-17.44	AVG
			on Dro omplifion			

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.

(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.

5 BAND EDGE

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

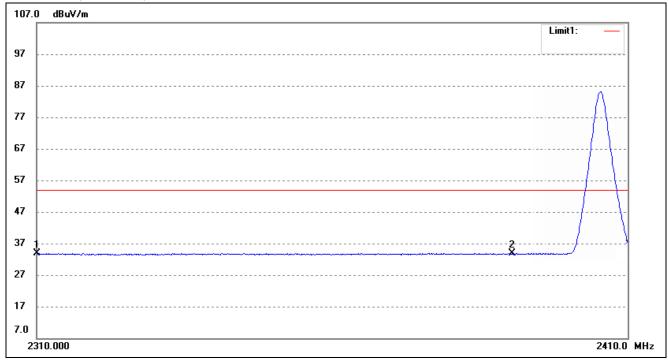
The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height 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

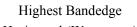
PASS

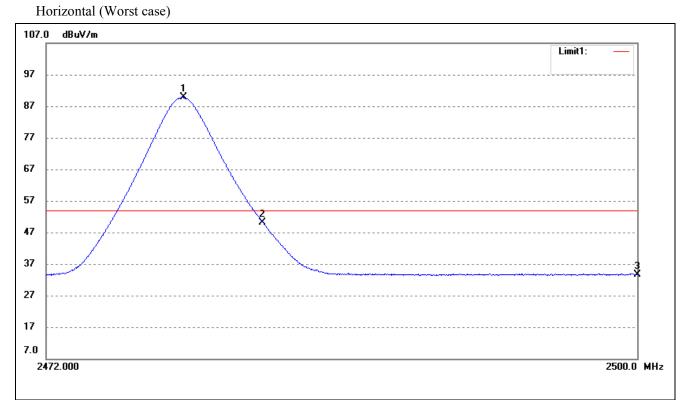
Restricted Bandedge (Radiated) Lowest Bandedge

Horizontal (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark	
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)		
1	2310.00	34.84	-1.00	33.84	54.00	-20.16	Average Detector	
	2310.00	47.35	-1.00	46.35	74.00	-27.65	Peak Detector	
2	2390.00	34.65	-0.88	33.77	54.00	-20.23	Average Detector	
	2390.00	46.27	-0.88	45.39	74.00	-28.61	Peak Detector	





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2477.03	90.55	-0.73	89.82	/	/	Average Detector
	2476.98	94.55	-0.73	93.82	/	/	Peak Detector
2	2483.50	50.80	-0.73	50.07	54.00	-3.93	Average Detector
	2483.50	56.51	-0.73	55.78	74.00	-18.22	Peak Detector
3	2500.00	34.31	-0.70	33.61	54.00	-20.39	Average Detector
	2500.00	46.28	-0.70	45.58	74.00	-28.42	Peak Detector

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 FCC Part15 C Section 15.249(a): RBW= 30KHz. VBW= 100 KHz, Span=3MHz.
- 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)	99% Bandwidth (MHz)	Result	
2407 MHz	1.143	1.087	PASS	
2440MHz	1.143	1.086	PASS	
2477 MHz	1.143	1.082	PASS	

CH: 2407MHz

L III		100	nter Freq: 2.407000	ALIGNAUT	Radio Std: None	Trace/Detector
ef Value 10.00 dBm #FGain:Low			g: Free Run tten: 20 dB	Avg Hold>10/10	Radio Device: BT	s
0 dB/div	Ref 10.00 dBm	·				
0.00		M	nn	~		Clear Write
00	m			The		Averag
0.0						~
0.0						Max Hol
enter 2.407 Res BW 301			#VBW 100 kH	łz	Span 3 M Sweep 3.2	
Occupied	Bandwidth 1.0	1 0873 MHz				Detecto
Transmit F x dB Band		-53.111 kHz 1.143 MHz	OBW Po x dB		99.00 % 0.00 dB	Peak Auto <u>Ma</u>
a				STA		

CH: 2440MHz

L	RF 50.0 AC			ALSERLAUTO	Trace/Detector
Center Freq 2.440000000 GHz			er Freq: 2.440000000 GHz Free Run Avg Hold n: 20 dB	Radio Std: No >10/10 Radio Device	me .
10 dB/div	Ref 10.00 dBn	n			
10.00		M	ham		Clear Write
20.0 30.0 40.0 50.0	h			m	Average
60.0 70.0 80.0					Max Hold
Center 2.44 Res BW 3	30 kHz		VBW 100 kHz	Span Sweep	3 MHz 3.2 ms Min Hole
Occupi	ed Bandwidt 1.	^h 0865 MHz			Detecto
Transmi x dB Ba	it Freq Error ndwidth	-54.630 kHz 1.143 MHz	OBW Power x dB	99.00 % -20.00 dB	Peak Auto <u>Mar</u>
50				STATUS	

CH: 2477MHz

x dB -20.00 dB	Ce	nter Freq: 2.477000000 GHz g: Free Run Avg Hol ten: 20 dB	d>10/10	Std: None Device: BTS	Trace/Detector
10 dB/div Ref 10.00 dB	3m				
20.0	h	m			Clear Write
400 500			my	~~~~	Average
60.0 70.0 80.0					Max Hold
Center 2.477 GHz #Res BW 30 kHz		#VBW 100 kHz		Span 3 MHz reep 3.2 ms	Min Hold
Occupied Bandwig	ith I.0824 MHz			0	Detector
Transmit Freq Error x dB Bandwidth	-56.326 kHz 1.143 MHz	OBW Power x dB	99.00 % -20.00 dB	S	Peak≯ Auto <u>Man</u>
450			STATUS		

7 ANTENNA REQUIREMENT

Standard Applicable

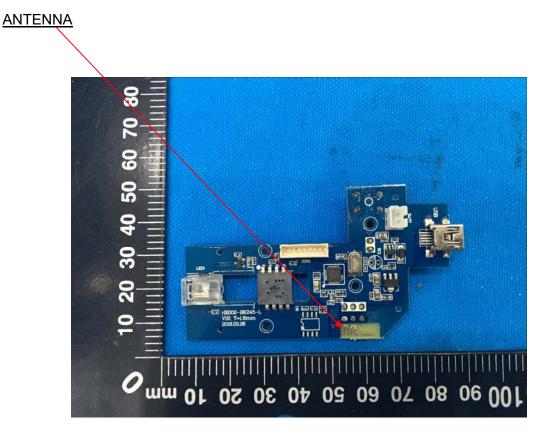
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.249, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

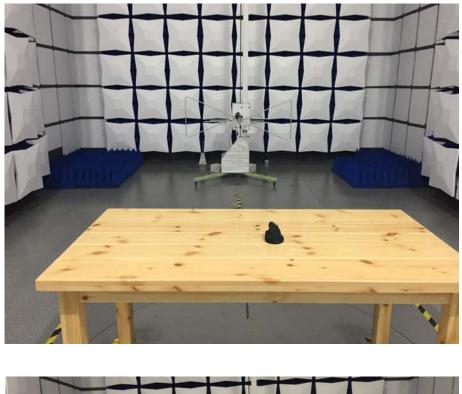
Antenna Connected Construction

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



8 PHOTOGRAPH OF TEST

8.1 Radiated Emission





8.2 Conducted Emission

