

# **FCC TEST REPORT**

Test report
On Behalf of
RoyStyle Technology Co., Ltd.
For

BLUETOOTH HEADPHONE

Model No.: BT-006, BT-06, BT06, BH06, BTH06

FCC ID: 2AFLX-BT006

Prepared for: RoyStyle Technology Co., Ltd.

Room 2889, Floor 28th, Electronic Technology Building Block C, Huaqiang

North, Futian District, Shenzhen

Prepared By: WST Certification & Testing (HK) Limited

12/F., San Toi Building,137-139 Connaught Road Central,Hong Kong

Date of Test: Mar. 23, 2016 ~ Mar. 30, 2016

Date of Report: Mar. 31, 2016

Report Number: WST160326007-E



# **TEST RESULT CERTIFICATION**

Applicant's name:	RoyStyle Technology Co., Ltd.
Address:	Room 2889, Floor 28th, Electronic Technology Building Block C, Huaqiang North, Futian District, Shenzhen
Manufacture's Name:	RoyStyle Technology Co., Ltd.
Address:	Room 2889, Floor 28th, Electronic Technology Building Block C, Huaqiang North, Futian District, Shenzhen
Product description	
Trade Mark:	N/A
Product name:	BLUETOOTH HEADPHONE
Model and/or type reference :	BT-006, BT-06, BT06, BH06, BTH06
Standards:	FCC Rules and Regulations Part 15 Subpart C Section 15.249 ANSI C63.10: 2013
the material. WST Certification	
Date (s) of performance of tests	: Mar. 23, 2016 ~ Mar. 30, 2016
Date of Issue	
Test Result	Pass
Testing Engine	eer : Zin Xie (Eric Xie)
Technical Man	ager : Dota Q'in (Dora Qin)

(Kait Chen)

Authorized Signatory:

24



8.1 Radiated Emission

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#### 1.. TEST SUMMARY

#### 1.1. TEST PROCEDURES AND RESULTS

DESCRIPTION OF TEST

CONDUCTED EMISSIONS TEST

RADIATED EMISSION TEST

BAND EDGE

OCCUPIED BANDWIDTH MEASUREMENT

ANTENNA REQUIREMENT

RESULT

COMPLIANT

COMPLIANT

COMPLIANT

COMPLIANT

#### 1.2. TEST FACILITY

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

Certificated by FCC, Registration No.: 939433

Address : 1F,No.9 Building,TGK Science & Technology Park,Yangtian Rd.,

NO.72 Bao'an Dist., Shenzhen, Guangdong, China. 518101

Tel : (86)755-33916437 Fax : (86)755-27822175

#### 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	BLUETOOTH HEADPHONE
Model Name	BT-006, BT-06, BT06, BH06, BTH06
Serial No	1
Model Difference	All model's the function, software and electric circuit are the same, only with a product color and model named different. Test sample model: BT-006
FCC ID	2AFLX-BT006
Antenna Type	PCB Antenna
Antenna Gain	0dBi
BT Operation frequency	2402-2480MHz
Number of Channels	79CH
Modulation Type	GFSK
Power Source	DC Voltage
Power Rating	DC 5V from adapter
Adapter Model	/



2.1.1. Carrier Frequency of Channels

Channel	Frequency	Channel	Frequency	Channel	Frequency
	(MHz)		(MHz)		(MHz)
01	2402	31	2432	61	2462
02	2403	32	2433	62	2463
03	2404	33	2434	63	2464
04	2405	34	2435	64	2465
05	2406	35	2436	65	2466
06	2407	36	2437	66	2467
07	2408	37	2438	67	2468
08	2409	38	2439	68	2469
09	2410	39	2440	69	2470
10	2411	40	2441	70	2471
11	2412	41	2442	71	2472
12	2413	42	2443	72	2473
13	2414	43	2444	73	2474
14	2415	44	2445	74	2475
15	2416	45	2446	75	2476
16	2417	46	2447	76	2477
17	2418	47	2448	77	2478
18	2419	48	2449	78	2479
19	2420	49	2450	79	2480
20	2421	50	2451		
21	2422	51	2452		
22	2423	52	2453		
23	2424	53	2454		
24	2425	54	2455		
25	2426	55	2456		
26	2427	56	2457		
27	2428	57	2458		
28	2429	58	2459		
29	2430	59	2460		
30	2431	60	2461		





## Operation of EUT during testing

**Operating Mode** 

The mode is used: Transmitting mode

Low Channel: 2402MHz Middle Channel: 2440MHz High Channel: 2480MHz

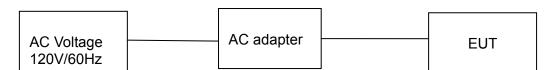
#### 2.2. DESCRIPTION OF TEST SETUP

Operation of EUT during testing

Mode 1:

EUT

Mode 2:



**Setup: Transmitting mode** 



## 2.3. MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
2.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	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	May 19, 2015	1 Year
6.	Trilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	May 17, 2015	1 Year
7.	Pre-amplifier	Compliance Direction	PAP-0203	22008	May 19, 2015	1 Year
8.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
9.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
10.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
11.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
12.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
13.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
14.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
15.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
16.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
17.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
18.	Programmable AC Power source	SOPH POWER	PAG-1050	630250	May 26, 2015	1 Year
19.	Harmonic and Flicker Analyzer	LAPLACE	AC2000A	272629	May 26, 2015	1 Year
20.	Harmonic and Flicker Test Software AC 2000A	LAPLACE	N/A	N/A	N/A	N/A
21.	ESD Simulators	KIKUSUI	KES4021	LJ003477	May 25, 2015	1 Year
22.	EFT Generator	EMPEK	EFT-4040B	0430928N	May 19, 2015	1 Year
23.	Shielding Room	ChangZhou ZhongYu	JB88	SEL0166	May 19, 2015	1 Year
24.	Signal Generator 9KHz~2.2GHz	R&S	SML02	SEL0143	May 19, 2015	1 Year
25.	Signal Generator 9KHz~1.1GHz	R&S	SML01	SEL0135	May 19, 2015	1 Year
26.	Power Meter	R&S	NRVS	SEL0144	May 19, 2015	1 Year
27.	RF Level Meter		URV35	SEL0137	May 19, 2015	1 Year
28.	Audio Analyzer	R&S	UPL	SEL0136	May 19, 2015	1 Year
29.	RF-Amplifier 150KHz~150MH z	BONN Elektronik	BSA1515-25	SEL0157	May 19, 2015	1 Year
30.	Stripline Test Cell	Erika Fiedler	VDE0872	SEL0167	N/A	N/A





TV Test Transmitter R&S SFM SEL0159 May 17, 2015 1 Year 31. TV Generator PAL R&S SGPF SEL0138 32. May 19, 2015 1 Year TV Generator Ntsc R&S SGMF SEL0140 33. May 19, 2015 1 Year TV Generator R&S SGSF SEL0139 34. May 19, 2015 1 Year Secam TV Test Transmitter R&S SFQ SEL0142 35. May 19, 2015 1 Year 0.3MHz~3300MHz MPEG2 R&S DVG SEL0141 36. Measurement May 19, 2015 1 Year Generator Spectrum Analyzer **FSP** SEL0177 R&S 37. May 19, 2015 1 Year **RAM** SEL0146 N/A Matching R&S 38. N/A N/A R&S **RAM** SEL0148 N/A Matching 39. **Absorbing Clamp** R&S MDS21 SEL0158 May 17, 2015 40. 1 Year Erika Fiedler SEL0149 Coupling Set Rco, Rci, N/A N/A 41. MC, AC, LC Filters SEL0150 N/A Erika Fiedler 42. Sr, LBS N/A N/A Matching Network SEL0151 N/A 43. Erika Fiedler MN, T1 Fully Anechoic ChangZhou SEL0169 Jun. 10, 2015 44. 854 1 Year ZhongYu Room Signal Generator SEL0068 May 17, 2015 1 Year 45. R&S SML03 **RF-Amplifier** Amplifier SEL0066 Oct. 24, 2015 46. 250W1000A 1 Year 30M~1GHz Reasearch RF-Amplifier SEL0065 Oct. 24, 2015 Amplifier 1 Year 47. 60S1G3 0.8~3.0GHz Reasearch NRVD SEL0069 May 17, 2015 Power Meter R&S 1 Year 48. R&S SEL0071 May 17, 2015 1 Year Power Sensor URV5-Z2 49. Power Sensor R&S SEL0072 May 17, 2015 50. URV5-Z2 1 Year Software R&S SEL0082 N/A N/A 51. EMC32-S EMC32 Amplifier SEL0073 N/A Log-periodic 52. AT1080 N/A Antenna Reasearch Antenna Tripod Amplifier SEL0074 N/A N/A 53. TP1000A Reasearch High Gain Horn SEL0075 N/A 54. Amplifier Antenna(0.8-5G AT4002A N/A Reasearch Hz)



#### 3.. CONDUCTED EMISSIONS TEST

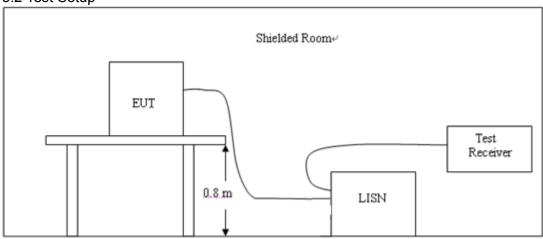
#### 3.1 Conducted Power Line Emission Limit

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

Eraguanav	M	Maximum RF Line Voltage (dBμV)						
Frequency (MHz)	CLAS	SS 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



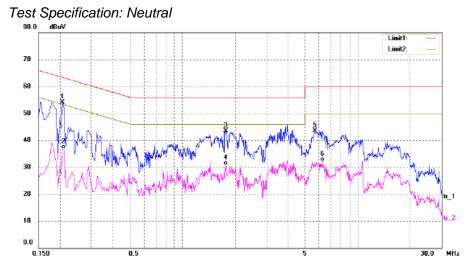
#### 3.3 Test Procedure

- 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.

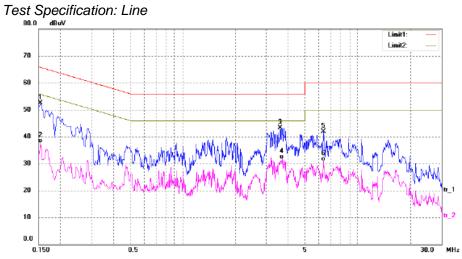
#### 3.4 Test Result

**PASS** 





No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.2060	44.55	9.50	54.05	63.37	-9.32	peak
2	0.2100	27.23	9.50	36.73	53.21	-16.48	AVG
3	1.7540	33.70	9.79	43.49	56.00	-12.51	peak
4	1.7540	20.88	9.79	30.67	46.00	-15.33	AVG
5	5.7100	33.22	10.26	43.48	60.00	-16.52	peak
6	6.2580	21.77	10.27	32.04	50.00	-17.96	AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1540	43.07	9.50	52.57	65.78	-13.21	peak
2	0.1540	28.27	9.50	37.77	55.78	-18.01	AVG
3*	3.5860	33.26	10.04	43.30	56.00	-12.70	peak
4	3.6820	21.64	10.06	31.70	46.00	-14.30	AVG
5	6.3580	31.68	10.27	41.95	60.00	-18.05	peak
6	6.3580	20.65	10.27	30.92	50.00	-19.08	AVG



#### **4 RADIATED EMISSION TEST**

#### 4.1 Radiation Limit

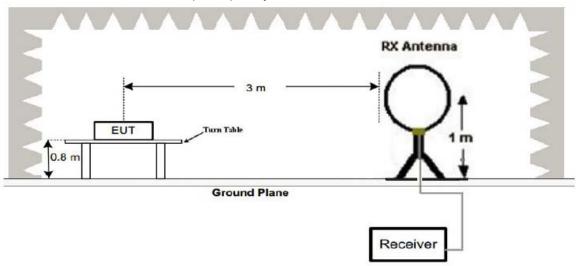
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

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

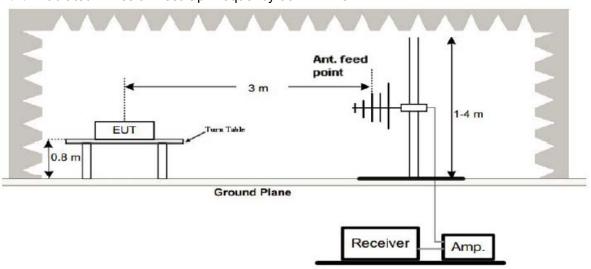
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

### 4.2 Test Setup

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

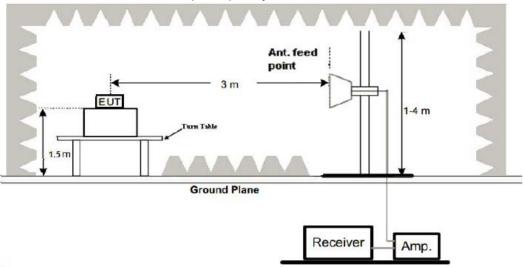


#### (2) Radiated Emission Test-Up Frequency 30MHz~1GHz





(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. Based on the Frequency Generator in the device include 26MHz. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a).

#### Note:

Three axes are chosen for pretest, the Y axis is the worst mode for final test. For battery operated equipment, the equipment tests shall be performed using a new battery.

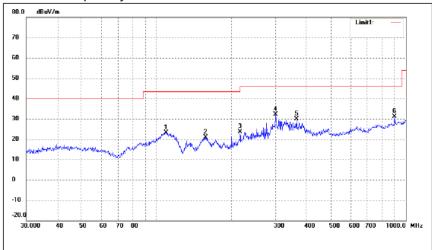
#### 4.4 Test Result

#### **PASS**

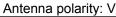
All the test modes completed for test. The worst case of Radiated Emission is CH 2480; the test data of this mode was reported.

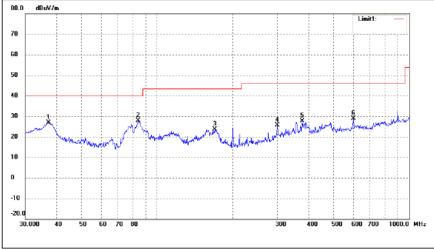


Below 1GHz Test Results: Antenna polarity: H



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	109.0286	34.33	-11.14	23.19	43.50	-20.31	100	100	peak
2	157.0074	33.29	-12.31	20.98	43.50	-22.52	100	100	peak
3	216.0240	32.52	-8.81	23.71	46.00	-22.29	100	100	peak
4	300.3673	37.84	-5.63	32.21	46.00	-13.79	100	100	peak
5	364.2595	32.76	-3.00	29.76	46.00	-16.24	100	100	peak
6	900.1474	27.90	3.15	31.05	46.00	-14.95	100	100	peak





No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	37.0249	35.45	-8.48	26.97	40.00	-13.03	100	100	peak
2	84.1100	40.25	-12.38	27.87	40.00	-12.13	100	100	peak
3	169.5990	35.42	-11.83	23.59	43.50	-19.91	100	100	peak
4	299.3158	31.20	-5.66	25.54	46.00	-20.46	100	100	peak
5	377.2591	29.92	-2.26	27.66	46.00	-18.34	100	100	peak
6	601.4265	28.98	-0.05	28.93	46.00	-17.07	100	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:

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector			
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V				
	Low Channel-2402MHz									
2402	84.08	-3.49	80.59	114	-33.47	Н	PK			
2402	75.05	-3.49	71.56	94	-22.42	Н	AV			
4804	60.81	0.57	61.38	74	-12.59	Н	PK			
4804	46.75	0.57	47.32	54	-6.66	Н	AV			
7206	40.82	7.18	48.02	74	-25.98	Н	PK			
7206	28.80	7.18	35.98	54	-18.02	Н	AV			
2402	83.22	-3.49	79.73	114	-34.27	V	PK			
2402	78.24	-3.49	74.75	94	-19.25	V	AV			
4804	48.39	0.57	48.96	74	-25.04	V	PK			
4804	35.12	0.57	35.69	54	-18.31	V	AV			
7206	40.12	5.89	46.01	74	-27.99	V	PK			
7206	28.10	6.15	34.25	54	-19.75	V	AV			

	Middle Channel-2440MHz										
2440	81.03	-3.43	77.60	114	-33.40	Н	PK				
2440	73.23	-3.43	69.80	94	-24.21	Н	AV				
4880	57.47	0.66	58.13	74	-15.87	Н	PK				
4880	42.89	0.66	43.55	54	-10.45	Н	AV				
7320	41.08	3.11	44.19	74	-29.81	Н	PK				
7320	28.93	3.33	32.26	54	-21.74	Н	AV				
2440	82.48	-3.43	79.05	114	-34.95	V	PK				
2440	75.13	-3.43	71.70	94	-22.30	V	AV				
4880	49.01	0.66	49.67	74	-24.33	V	PK				
4880	36.08	0.66	36.74	54	-17.26	V	AV				
7320	41.03	7.18	48.21	74	-25.79	V	PK				
7320	28.83	7.18	36.01	54	-17.99	V	AV				



Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector				
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V					
	High Channel-2480MHz										
2480	84.03	-3.33	80.70	114	-33.33	Н	PK				
2480	75.13	-3.33	71.80	94	-22.23	Н	AV				
4960	53.18	0.75	53.93	74	-20.07	Н	PK				
4960	39.56	0.75	40.31	54	-13.69	Н	AV				
7440	40.49	7.11	47.60	74	-26.40	Н	PK				
7440	28.70	7.18	35.88	54	-18.12	Н	AV				
2480	82.30	-3.33	78.97	114	-35.03	V	PK				
2480	76.15	-3.33	72.82	94	-21.18	V	AV				
4960	46.52	0.75	47.27	74	-26.73	V	PK				
4960	33.70	0.75	34.45	54	-19.55	V	AV				
7440	41.30	7.23	48.53	74	-25.47	V	PK				
7440	28.76	7.18	35.94	54	-18.06	V	AV				

#### 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 VBM to 300 KHz, to measure the conducted peak band edge.

#### 5.3 Test Result

#### **PASS**

Radiated Test:

Operation Mode: TX Low CH

Antenna Polarity: Hor.



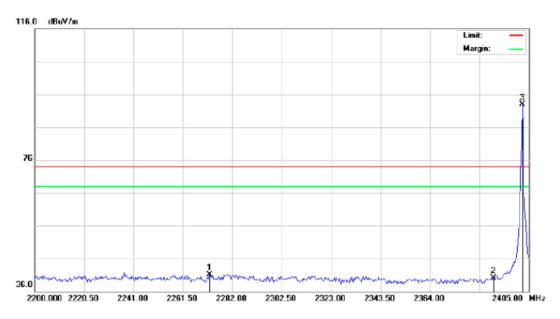
Site: Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

Mode: Low Channel TX

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2251.592	31.21	10.16	41.37	74.00	-32.63	peak			
2		2390.000	30.00	10.31	40.31	74.00	-33.69	peak			
3	*	2402.000	85.22	10.32	95.54	74.00	21.54	peak			



Operation Mode: TX Low CH Antenna Polarity: Ver.



Site: Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

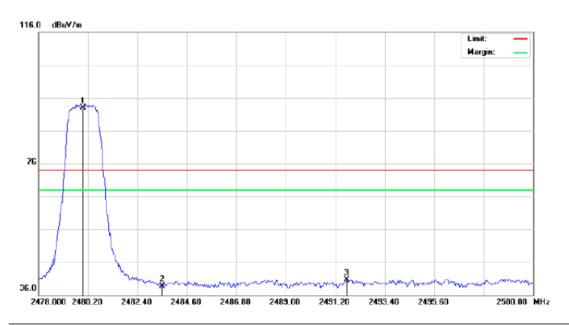
Mode: Low Channel TX

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2272.433	30.90	10.18	41.08	74.00	-32.92	peak			
2		2390.000	29.71	10.31	40.02	74.00	-33.98	peak			
3	*	2402.000	82.59	10.32	92.91	74.00	18.91	peak			



Operation Mode: TX High CH

Antenna Polarity: Hor.



Polarization: Horizontal Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power:

Temperature: 26 Humidity: 60 %

Mode: High Channel TX

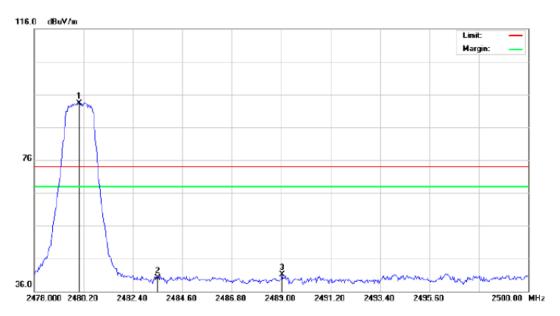
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.000	82.55	10.41	92.96	74.00	18.96	peak			
2		2483.500	28.19	10.41	38.60	74.00	-35.40	peak			
3		2491.713	30.20	10.42	40.62	74.00	-33.38	peak			

Humidity: 60 %



Operation Mode: TX High CH

Antenna Polarity: Ver.



Polarization: Vertical Temperature: 26 Power:

Limit: FCC Class B 3M Radiation above 1GHZ(PK) Mode: High Channel TX

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dBuV/m	dBuV/m	dBuV/m dBuV/m dB		cm degree			
1	*	2480.000	82.82	10.41	93.23	74.00	19.23	peak			
2		2483.500	29.76	10.41	40.17	74.00	-33.83	peak			
3		2489.037	30.67	10.42	41.09	74.00	-32.91	peak			



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 1.5m above ground plane.
- 2. Set EUT as normal operation.
- 3. Based on FCC Part15 C Section 15.239(a): RBW= 10KHz. VBW= 30 KHz, Span=1MHz.
- 4. The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.

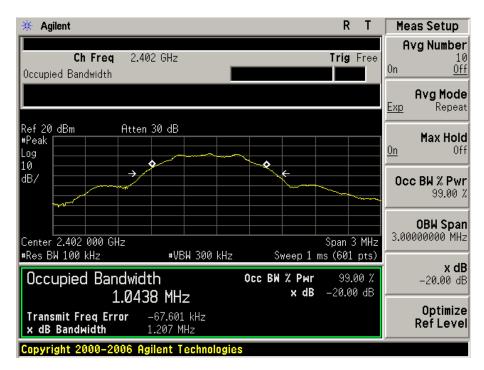
#### 6.3 Measurement Equipment Used

Same as Radiated Emission Measurement

#### 6.4 Test Result

#### **PASS**

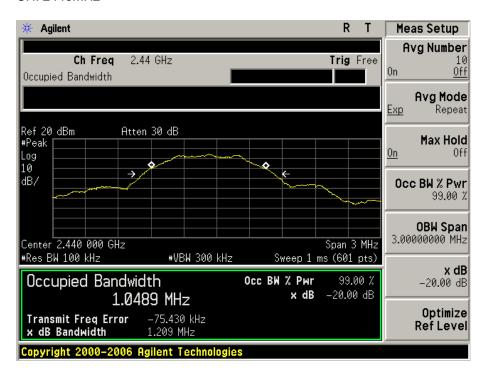
CH: 2402MHz



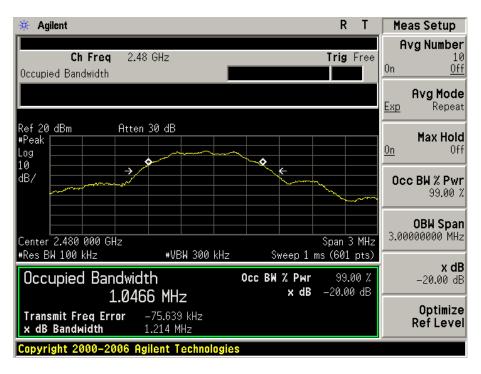




#### CH: 2440MHz



#### CH: 2480MHz





#### 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.

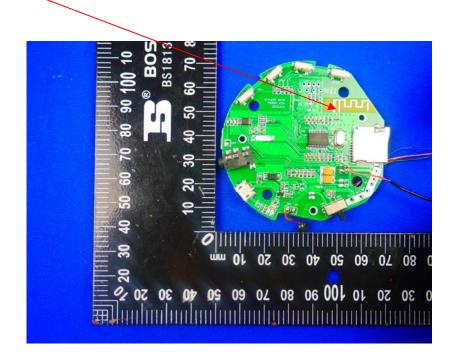
#### Refer to statement below for compliance.

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.

#### **ANTENNA**





# 8 PHOTOGRAPH OF TEST

# 8.1 Radiated Emission







# 8.2 Conducted Power Line Emission test

