# FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

inMusic Brands, Inc

Wireless Or Wired DJ Headphones

Model Number: HF WIRELESS

FCC ID: Y4O-NPHA

Prepared for: inMusic Brands, Inc

200 Scenic View Drive, Suite 201 Cumberland, RI 02864, USA

Prepared By: EST Technology Co., Ltd.

Santun(guantai Road), Houjie Town, DongGuan City,

GuangDong, China.

Tel: 86-769-83081888-808

Report Number: ESTE-R1504011

Date of Test : March 26,2015~ April 20, 2015

Date of Report: April 22, 2015

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**Test Report Verification** 

		t verification					
Applicant:	inMusic Brands, Inc						
Address:	200 Scenic View Drive, Suite 201 Cumberland, RI 02864, USA						
Manufacturer	inMusic Brands, Inc						
Address:	200 Scenic View Drive, S	200 Scenic View Drive, Suite 201 Cumberland, RI 02864, USA					
E.U.T:	Wireless Or Wired DJ He	adphones					
Model Number:	HF WIRELESS						
D C	DC 3.7V From Internal E	OC 3.7V From Internal Battery					
Power Supply:	DC 5V From USB for Charging						
Test Voltage:	DC 3.7V						
Trade Name:	Numark	Serial No.:					
Date of Receipt:	March 26,2015	Date of Test:	March 26,2015~ April 20, 2015				
<b>Test Specification:</b>	FCC Rules and Regulation ANSI C63.10:2013	•					
Test Result:	measurement results wer Co., Ltd. was assumed fu of these measurements. A technically compliance w	e contained in this all responsibility fo also, this report sho	T Technology Co., Ltd The test report and EST Technology r the accuracy and completeness ows that the EUT to be and Regulations Part 15 Subpart				
	C requirements.  This report applies to about a part without written applies.		only and shall not be reproduced hnology Co., Ltd. 5				
Prepared by:	Tested by:		Approved by:				
Ada	Stom	2	Trementhe				
Ada / Assistant	Tony.Tang/ Engineer IcemanHu / Manager						
Other Aspects: None.							
Abbreviations: OK/P=pass	sed fail/F=failed n.a/N	=not applicable E	.U.T=equipment under tested				
_	a a single evaluation of one samp out written approval of EST Tech		products ,It is not permitted to be				



## 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

Product Name	:	Wireless Or Wired DJ Headphones			
Model Number	:	HF WIRE	LESS		
FCC ID	:	Y4O-NPHA			
Operation frequency	:	2402MHz~2480MHz			
Number of channel	:	79	40		
Antenna	:	Internal antenna,	1.9 dBi gain		
Modulation	•	FHSS (GFSK, π/4-DQPSK, 8-DPSK)	BLE (GFSK)		
		(= = 7.11	( - ~ - )		



## 2. SUMMARY OF TEST

## 2.1. Summary of test result

<b>Description of Test Item</b>	Standard	Results
Maximum Peak Output Power	FCC Part 15: 15.247(b)(1) DA 00-705	PASS
20dB Bandwidth	FCC Part 15: 15.215 DA 00-705	PASS
Carrier Frequency Separation	FCC Part 15: 15.247(a)(1) DA 00-705	PASS
Number Of Hopping Channel	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Dwell Time	FCC Part 15: 15.247(a)(1)(iii) DA 00-705	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.10:2013 DA 00-705	PASS
Band Edge Compliance	FCC Part 15: 15.247(d) DA 00-705	PASS
Power Line Conducted Emissions	FCC Part 15: 15.207 ANSI C63.10:201 DA 00-705	PASS
Antenna requirement	FCC Part 15: 15.203	PASS



#### 2.2. Test Facilities

EMC Lab : Certificated by CNAL, CHINA

Registration No.: L5288

Date of registration: Nov 23, 2014

Certificated by FCC, USA Registration No.: 989591

Date of registration: November 20, 2013

Certificated by Industry Canada Registration No.: 9405A-1

Date of registration: January 03, 2013

Certificated by VCCI, Japan

Registration No.: R-3663 & C-4103 Date of registration: July 25, 2011

Certificated by TUV Rheinland, Germany Registration No.: UA 50195514 0001 Date of registration: January 07, 2011

Certificated by TUV/PS, Shenzhen

Registration No.: SCN1017

Date of registration: January 27, 2011

Certificated by Intertek ETL SEMKO Registration No.: 2011-RTL-L1-18 Date of registration: April 28, 2011

Certificated by Siemic, Inc. Registration No.: SLCN021

Date of registration: November 8, 2011

Certificated by Nemko, Hong Kong

Registration No.: 175193

Date of registration: May 4, 2011

Name of Firm : EST Technology Co., Ltd.

Site Location : San Tun Management Zone, Houjie Town, Dongguan,

Guangdong, China



## 2.3. Assistant equipment used for test

## 2.3.1. PC

Manufacturer : DELL

M/N : Laititude E6420 Adapter : M/N: DA90PM111

Input: AC 100-240V~50/60Hz 1.5A

Output: DC 19.5V/4.62A

## 2.4. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.1 meter high above ground.EUT was be set into BT test mode by software before test.

**EUT** 

(EUT: Wireless Or Wired DJ Headphones)

EST

## 2.5. Test mode

The test software was used to control EUT work in Continuous TX mode, and select test channel, wireless mode

Mode	Channel	Frequency
	Low	2402MHz
GFSK	Middle	2441MHz
	High	2480MHz
	Low	2402MHz
8-DPSK	Middle	2441MHz
	High	2480MHz

## 2.6. Channel List for Bluetooth

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
No.	(MHz)	No.	(MHz)	No.	(MHz)	No.	(MHz)
1	2402	2	2403	3	2404	4	2405
5	2406	6	2407	7	2408	8	2409
9	2410	10	2411	11	2412	12	2413
13	2414	14	2415	15	2416	16	2417
17	2418	18	2419	19	2420	20	2421
21	2422	22	2423	23	2424	24	2425
25	2426	26	2427	27	2428	28	2429
29	2430	30	2431	31	2432	32	2433
33	2434	34	2435	35	2436	36	2437
37	2438	38	2439	39	2440	40	2441
41	2442	42	2443	43	2444	44	2445
45	2446	46	2447	47	2448	48	2449
49	2450	50	2451	51	2452	52	2453
53	2454	54	2455	55	2456	56	2457
57	2458	58	2459	59	2460	60	2461
61	2462	62	2463	63	2464	64	2465
65	2466	66	2467	67	2468	68	2469
69	2470	70	2471	71	2472	72	2473
73	2474	74	2475	75	2476	76	2477
77	2478	78	2479	79	2480	-	-

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## 2.7. Test Equipment

## 2.7.1. For conducted emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESHS30	832354	June,28,14	1 Year
Artificial Mains Networ	Rohde & Schwarz	ENV216	101260	June,28,14	1 Year
Pulse Limiter	Rohde & Schwarz	ESHF	101100		
		WIRELESS-Z		June,28,14	1 Year
		2			

## 2.7.2. For radiated emission test(30-1000MHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESVS10	100004	June,28,14	1 Year
Spectrum Analyzer	Agilent	E4411B	MY5014069 7	June,28,14	1 Year
Bilog Antenna	Teseq	CBL 6111D	27090	June,28,14	1 Year
Signal Amplifier	Agilent	310N	187037	June,28,14	1 Year

## 2.7.3. For radiated emission test(above 1GHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	SCHWARZB	BBHA 9120 D	BBHA9120D1	June,28,1	1 Year
	ECK		002	4	1 feat
Signal Amplifier	SCHWARZB	BBV9718	9718-212	June,28,1	1 Year
	ECK			4	1 feat
Spectrum Analyzer	Agilent	E4408B	MY44211139	June,28,1	1 V22#
	_			4	1 Year
RF Cable	Hubersuhner	RG 214/U	513423	June,28,1	1 Year
Kr Cable	Trubersumer	KG 214/U	313423	4	1 Teal

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## 3. MAXIMUM PEAK OUTPUT POWER

## 3.1. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W

## 3.2. Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

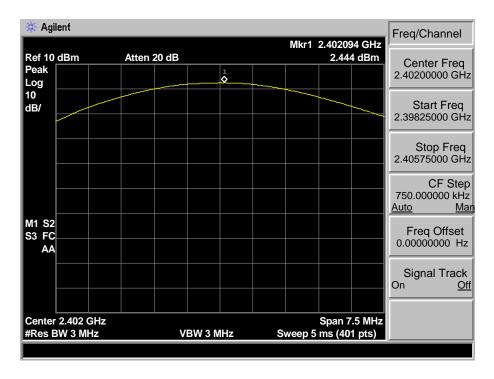
## 3.3. Test Result

EUT: Wireless Or Wired DJ Headphones M/N: HF WIRELESS							
Test date: 20		Test site: RF site	Tested b	y: Tony Tang	)		
Test date. 20	15 01 05	Test site. It site	Tested 8	y. Tony Tung			
	Errog	Result	L	imit	Margin (dB)		
Mode	Freq (MHz)	(dBm)			_		
	(WITZ)	(ubiii)	dBm	W	(ub)		
	2402	2.444	30.00	1	27.556		
GFSK	2441	1.938	30.00	1	28.062		
	2480	2.062	30.00	1	27.938		
	2402	0.671	21.00	0.125	20.329		
8-DPSK	2441	0.887	21.00	0.125	20.113		
	2480	1.041	21.00	0.125	19.959		
Conclusion: PASS							

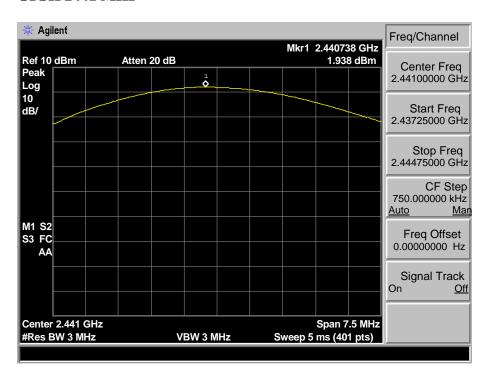
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## 3.4. Test Data

#### GFSK 2402 MHz

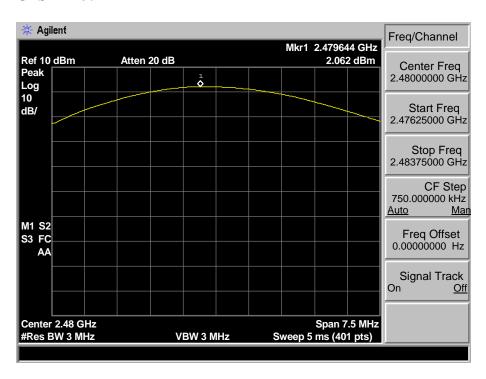


#### **GFSK 2441 MHz**



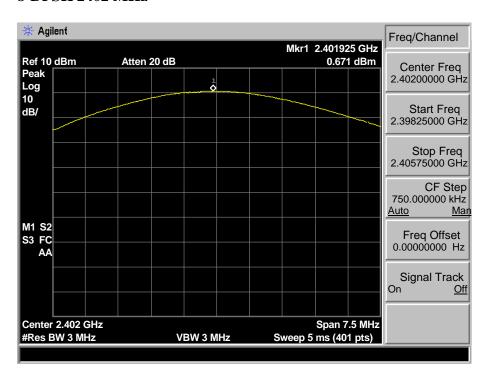


#### GFSK 2480 MHz

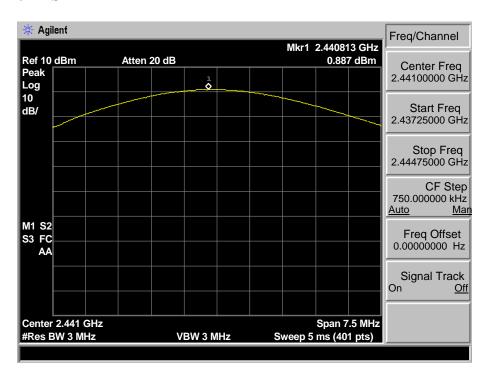




#### 8-DPSK 2402 MHz

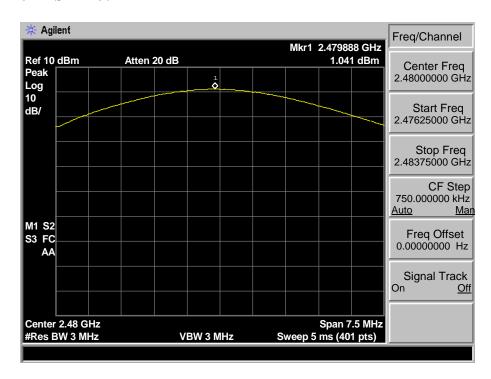


#### 8-DPSK 2441 MHz





#### 8-DPSK 2480 MHz





## 4. 20 DB BANDWIDTH

#### 4.1. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 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.

#### 4.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

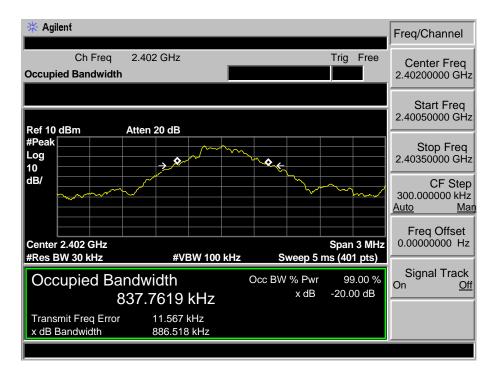
#### 4.3. Test Result

EUT: Wireless Or Wired DJ Headphones							
M/N: HF WIRELESS							
Test date: 201	15-04-05	Test site: RF site	Tested by	: Tony Tang			
Mode Freq (MHz)		20dB Bandwidth (MHz)	Limit (kHz)	Conclusion			
	2402	0.887	/	PASS			
GFSK	2441	0.866	/	PASS			
	2480	0.860	/	PASS			
	2402	1.214	/	PASS			
8-DPSK	2441	1.218	/	PASS			
	2480	1.218	/	PASS			

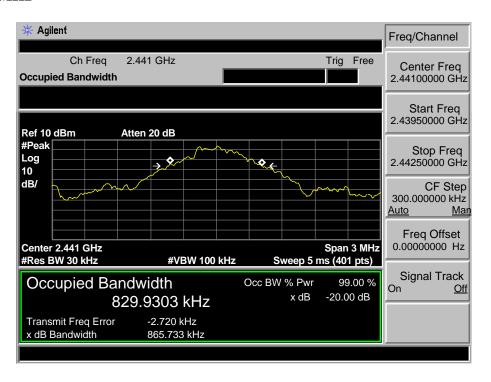
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#### 4.4. Test Data

#### GFSK 2402MHz

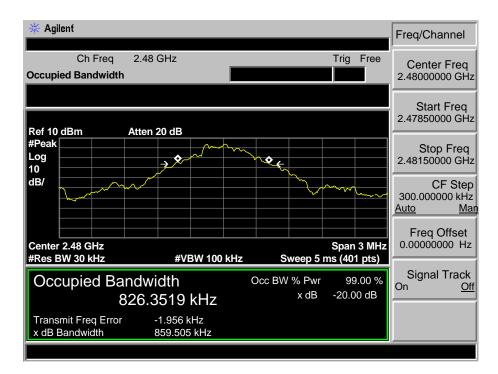


#### GFSK 2441MHz



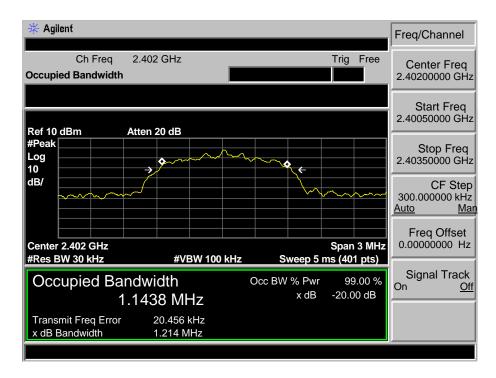


#### GFSK 2480MHz

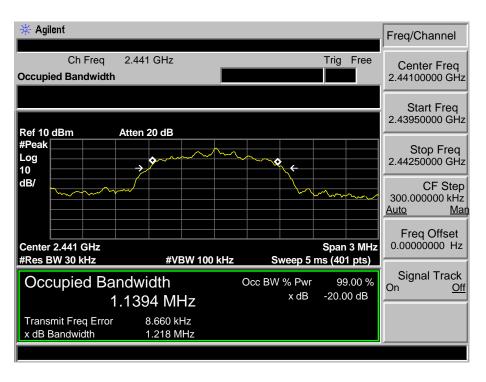




#### 8-DPSK 2402MHz

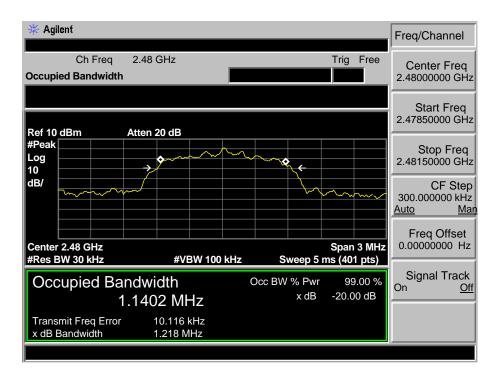


#### 8-DPSK 2441MHz





#### 8-DPSK 2480MHz





## 5. CARRIER FREQUENCY SEPARATION

#### 5.1. Limit

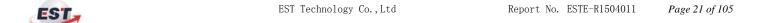
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW

#### 5.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The carrier frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW.

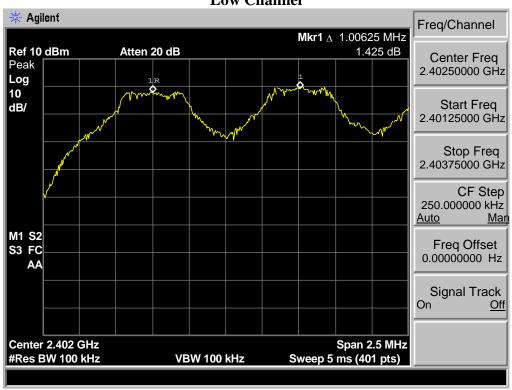
#### 5.3. Test Result

EUT: Wireless Or Wired DJ Headphones				
M/N: HF WIRELESS				
Test date: 2015-04-05			Test site: RF site Tested by: Tony Tang	
Mode	Channel	Channel		
		separation	Limit	Conclusion
		(MHz)		
GFSK	Low CH	1.006	0.887 MHz	PASS
	Mid CH	1.000	0.866MHz	PASS
	High CH	1.000	0.860MHz	PASS
8-DPSK	Low CH	1.000	> 2/3 of the 20dB Bandwidth or 25[kHz]( whichever is greater)	PASS
	Mid CH	1.013		PASS
	High CH	1.000		PASS

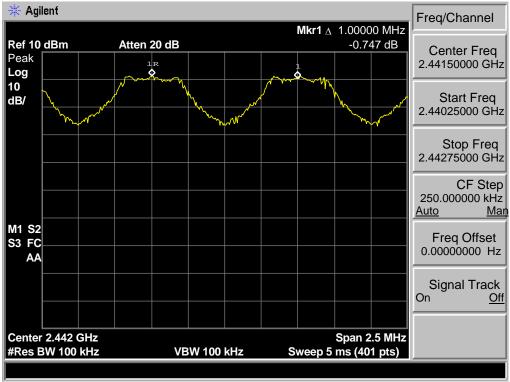


#### 5.4. Test Data

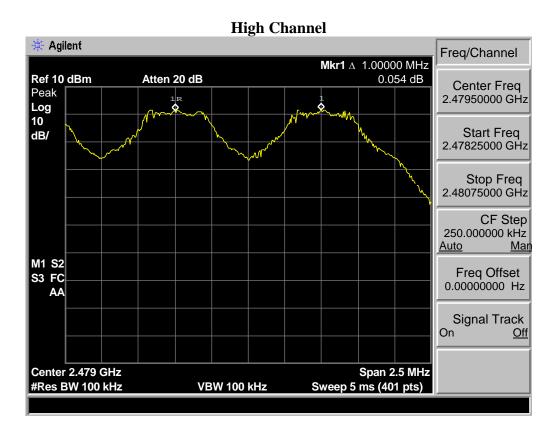
GFSK Low Channel



#### **Mid Channel**

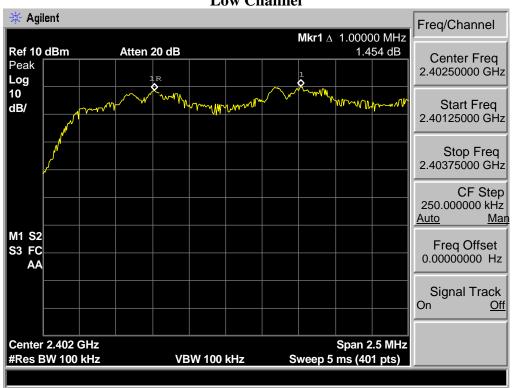




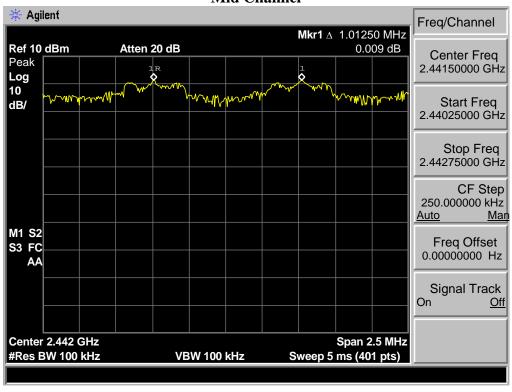




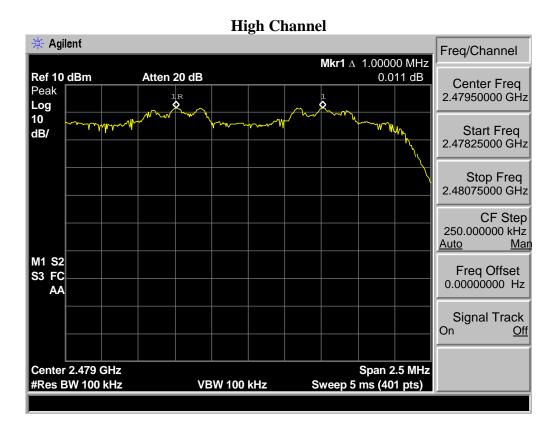
8-DPSK **Low Channel** 



#### **Mid Channel**









## 6. NUMBER OF HOPPING CHANNEL

## 6.1. Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

## 6.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The number of hopping channel was measured by spectrum analyzer with 300kHz RBW and 300kHz VBW.

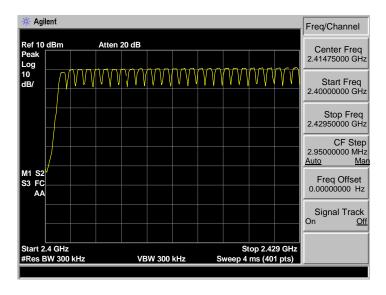
## 6.3. Test Result

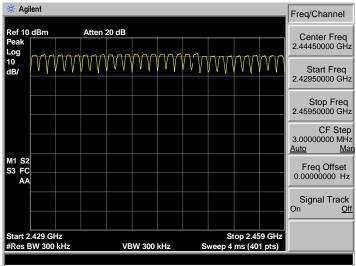
EUT: Wireless Or Wired DJ Headphones M/N: HF WIRELESS				
Test date: 2015-04-05 Test site: R		Test site: RF site	Tested by: Tony.Tang	
Mode	Number of hopping channel		Limit	Conclusion
GFSK	79		>15	PASS
8-DPSK	79		>15	PASS

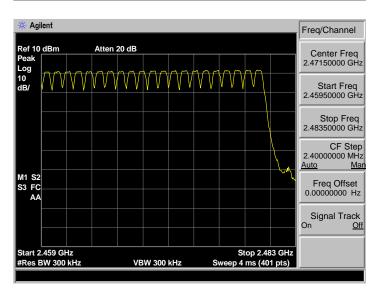


## 6.4. Test Data

#### **GFSK**

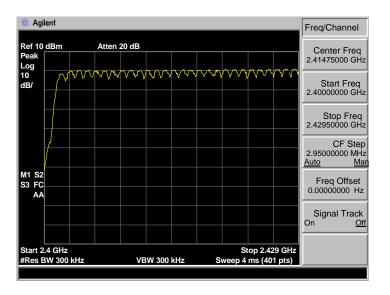


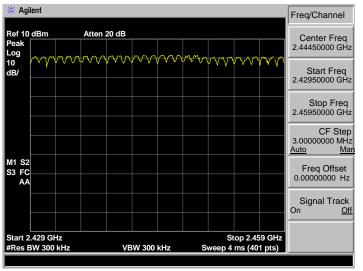


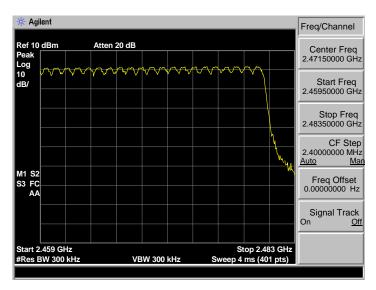




#### 8-DPSK









## 7. DWELL TIME

#### 7.1. Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

#### 7.2. Test Procedure

- 1. Connect the antenna port of the EUT to the spectrum analyzer by a low lost cable.
- 2. Set the EUT to proper test mode with relative test software and hardware.
- 3. Spectrum analyzer setting: Centered Frequency = measured channel, RBW = 1MHz, VBW= 1MHz, Frequency Span = 0 Hz.
- 4. Set sweep time properly to capture the entire dwell time per hopping channel.
- 5. Set detector type to Peak and trace mode to Max Hold and make the measurement.
- 6. Repeat step 3-5 until all channels measured were complete.

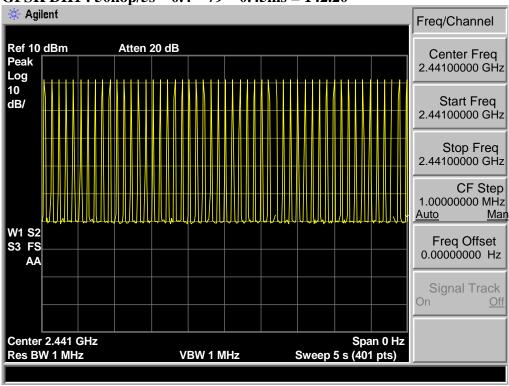
#### 7.3. Test Result

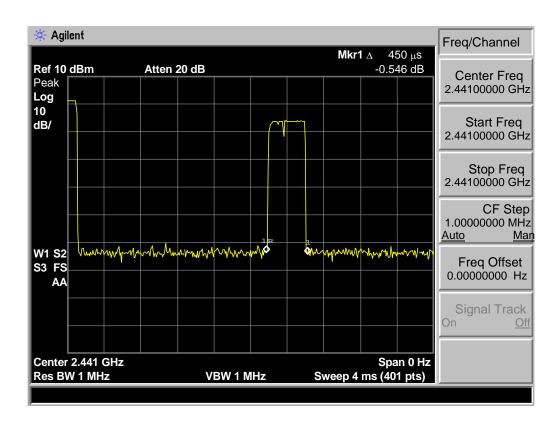
EUT: Wireless Or Wired DJ Headphones M/N: HF WIRELESS				
Test date: 2015-04-05	Test site: RF site	Tested by: To	ny Tang	
Mode	Dwell time (ms)	Limit	Conclusion	
GFSK DH1	142.20	<400ms	PASS	
GFSK DH3	274.92	<400ms	PASS	
GFSK DH5	321.25	<400ms	PASS	
8-DPSK 3DH1	151.68	<400ms	PASS	
8-DPSK 3DH5	281.24	<400ms	PASS	
8-DPSK 3DH5	319.10	<400ms	PASS	



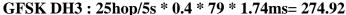
#### 7.4. Test Data

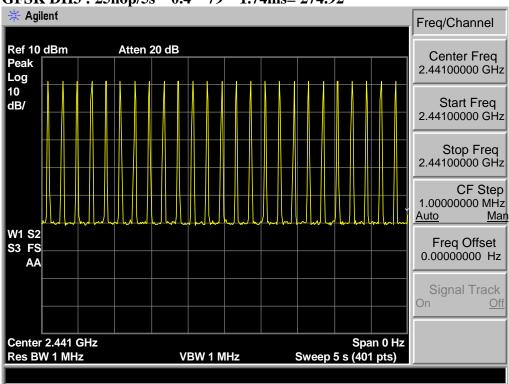
GFSK DH1: 50hop/5s \* 0.4 \* 79 \* 0.45ms = 142.20

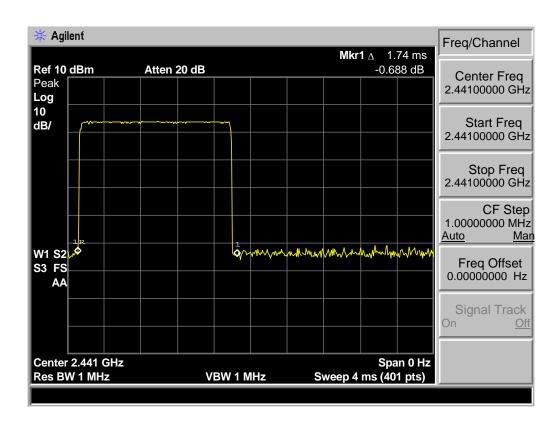




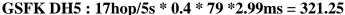


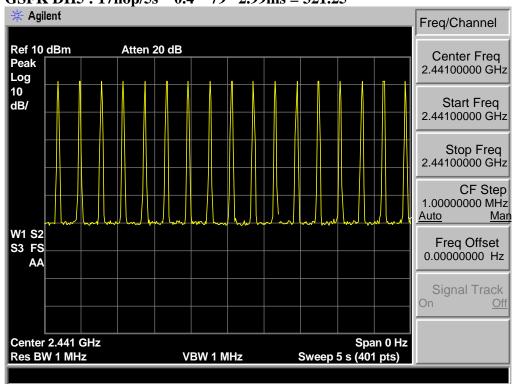


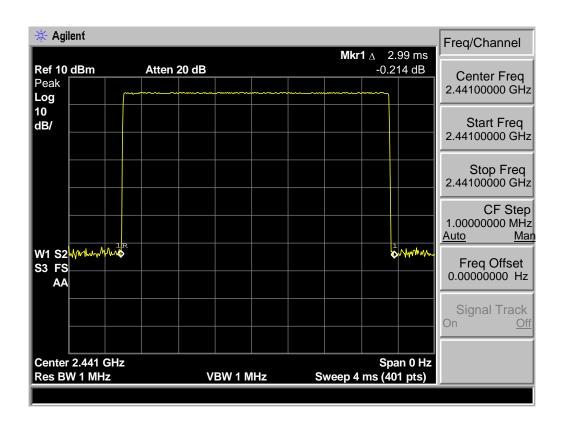






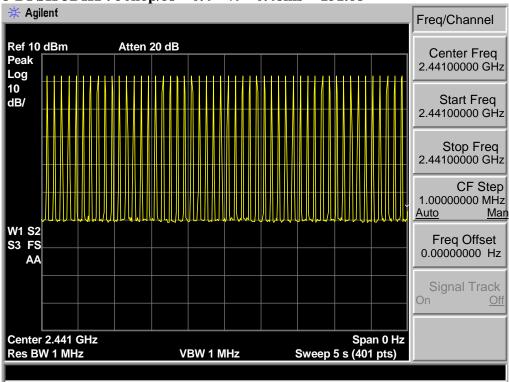


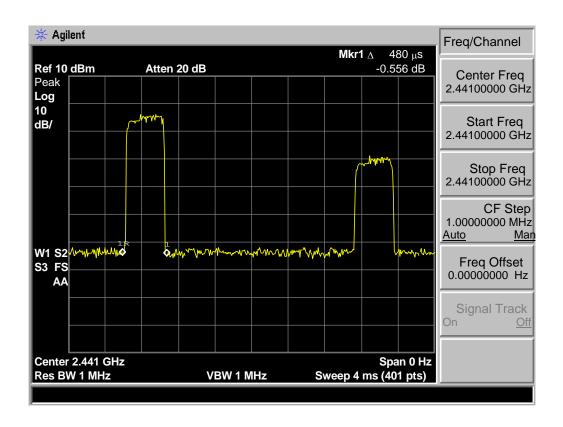




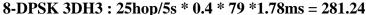


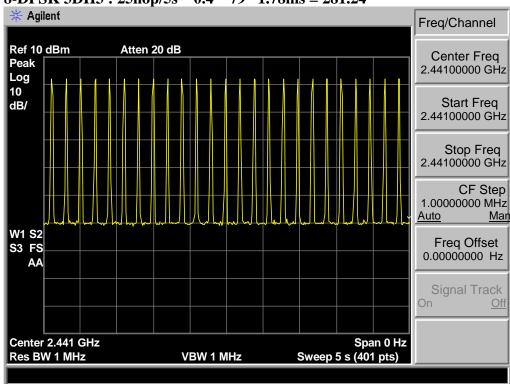


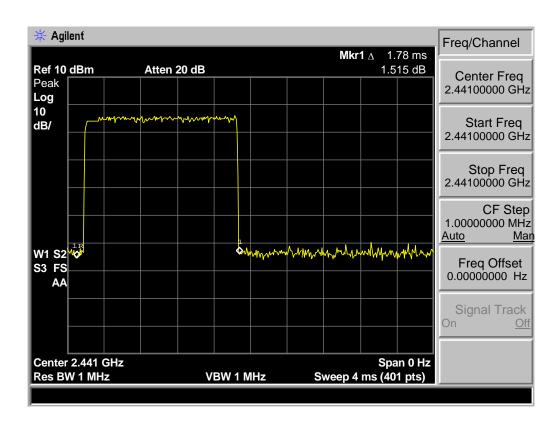






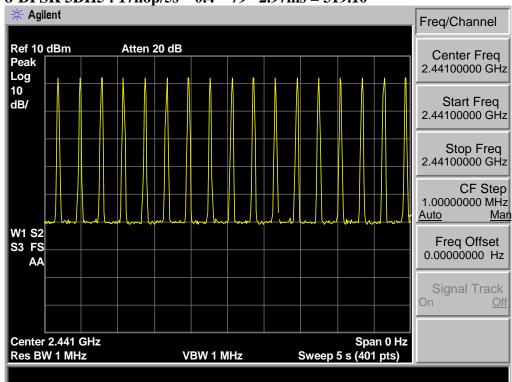


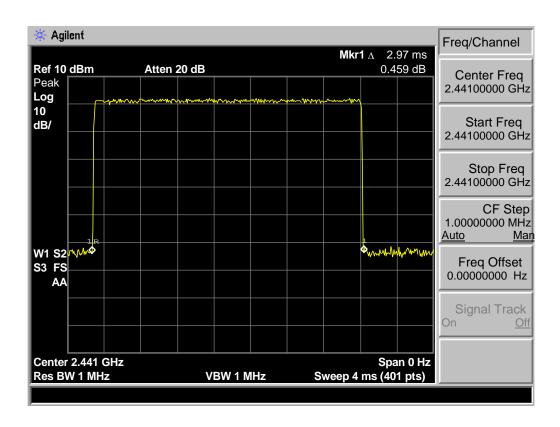














## 8. RADIATED EMISSIONS

## 8.1. Limit

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

## 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)

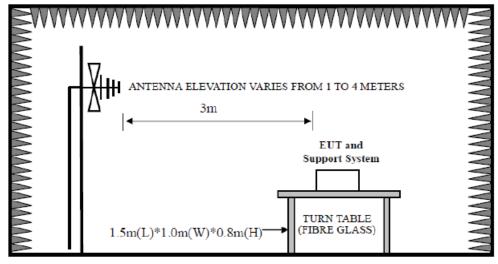
15.209 Limit

FREQ	FREQUENCY DISTANCE		FIELD STRENGTHS LIMIT	
MHz		Meters	μV/m	dB(μV)/m
30 ~ 88		3	100	40.0
88 ~ 216		3	150	43.5
216 ~ 960		3	200	46.0
960 ~ 1000		3	500	54.0
Above	1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

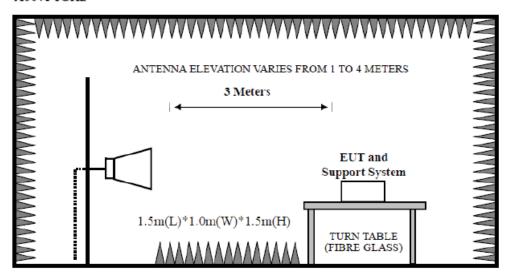
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### 8.2. Block Diagram of Test setup

30~1000MHz



Above 1GHz



### 8.3. Test Procedure

EUT was placed on a turn table, which is 10 cm high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

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PEAK detector, 1MHz/1MHz for PAEK measurement,

PEAK detector, 1MHz/10Hz for Average measurement

The frequency range from 30MHz to 10th harmonic (25GHz) are checked.



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# 8.4. Test Result

30MHz—25GHz Radiated emissison Test result
EUT: Wireless Or Wired DJ Headphones
M/N: HF WIRELESS
Power: DC 3.7V
Test date: 2015-04-02~2015-04-20 Test site: 3m Chamber Tested by: Tony Tang
Test mode: Tx Mode
Pass

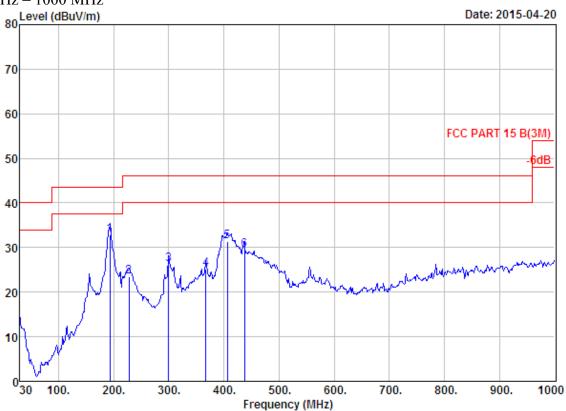
Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

2. The frequency 2402MHz . 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

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## 8.5. Test Data

### 30 MHz - 1000 MHz



: 1# 966 chamber Data no. : 129 Site no. : 3m 27137 Ant. pol. : HORIZONTAL Dis. / Ant.

: FCC PART 15 B(3M) Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

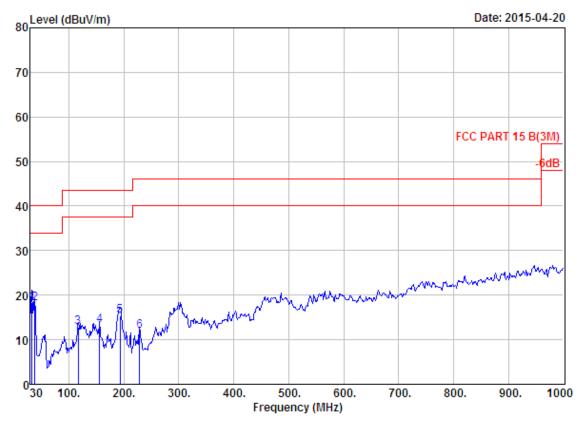
: Wireless Or Wired DJ Headphones EUT

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	23.33	32.95	43.50	10.55	QP
2	227.88	9.46	2.09	11.93	23.48	46.00	22.52	QP
3	299.66	13.01	2.38	10.86	26.25	46.00	19.75	QP
4	367.56	14.76	2.68	7.70	25.14	46.00	20.86	QP
5	406.36	16.20	2.64	12.52	31.36	46.00	14.64	QP
6	437.40	16.20	2.85	10.39	29.44	46.00	16.56	QP







Site no. : 1# 966 chamber Data no. : 130
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

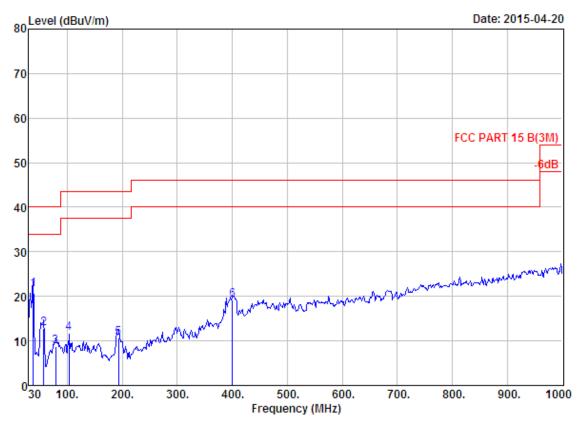
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2402MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
 1	32.91	16.62	0.69	1.02	18.33	40.00	21.67	QP
2	37.76	14.05	0.79	3.38	18.22	40.00	21.78	QP
3	117.30	11.02	1.47	0.37	12.86	43.50	30.64	QP
4	156.10	10.61	1.67	0.90	13.18	43.50	30.32	QP
5	192.96	7.85	1.77	5.70	15.32	43.50	28.18	QP
6	228.85	9.45	2.08	0.37	11.90	46.00	34.10	QP





Site no. : 1# 966 chamber Data no. : 131
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

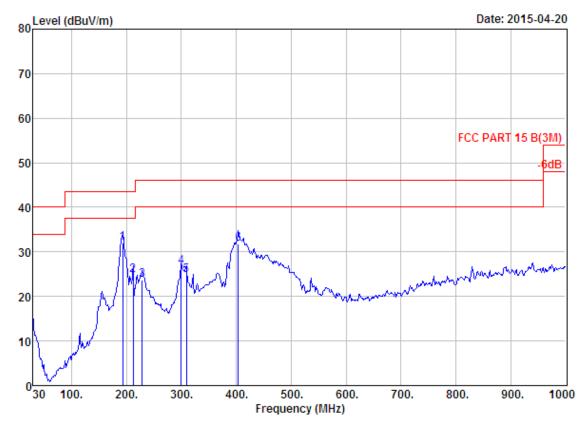
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
 1	37.76	14.05	0.79	6.71	21.55	40.00	18.45	QP
2	57.16	5.06	0.99	6.77	12.82	40.00	27.18	QP
3	78.50	6.89	1.22	0.57	8.68	40.00	31.32	QP
4	102.75	9.75	1.35	0.55	11.65	43.50	31.85	QP
5	192.96	7.85	1.77	1.01	10.63	43.50	32.87	QP
6	400.54	16.07	2.66	0.44	19.17	46.00	26.83	OP





Site no. : 1# 966 chamber Data no. : 132
Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

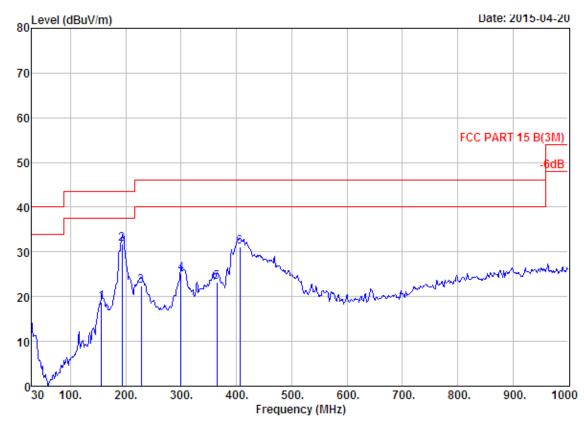
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	22.47	32.09	43.50	11.41	QP
2	212.36	8.56	1.91	14.38	24.85	43.50	18.65	QP
3	228.85	9.45	2.08	12.19	23.72	46.00	22.28	QP
4	299.66	13.01	2.38	11.23	26.62	46.00	19.38	QP
5	309.36	13.18	2.36	9.28	24.82	46.00	21.18	QP
6	403.45	16.14	2.69	12.91	31.74	46.00	14.26	QP





Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

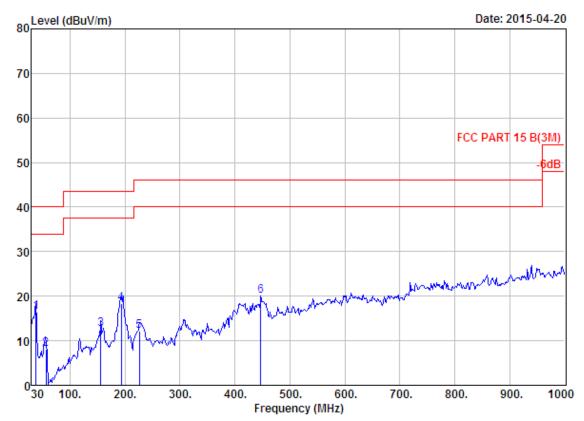
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
 1	156.10	10.61	1.67	6.39	18.67	43.50	24.83	QP
2	192.96	7.85	1.77	22.21	31.83	43.50	11.67	QP
3	227.88	9.46	2.09	10.87	22.42	46.00	23.58	QP
4	299.66	13.01	2.38	9.76	25.15	46.00	20.85	QP
5	364.65	14.65	2.63	6.07	23.35	46.00	22.65	QP
6	406.36	16.20	2.64	12.31	31.15	46.00	14.85	QP





: 1# 966 chamber Data no. : 134 Site no. Ant. pol. : VERTICAL Dis. / Ant. : 3m 27137

: FCC PART 15 B(3M) Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

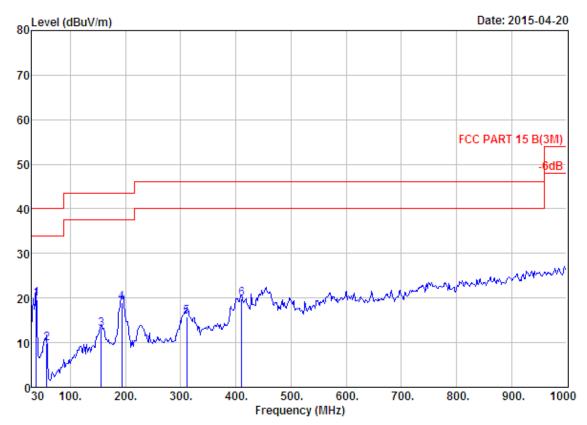
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

: DC 3.7V Power : HF WIRELESS M/N Test Mode : GFSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.76	14.05	0.79	1.61	16.45	40.00	23.55	QP
2	56.19	5.21	0.96	1.85	8.02	40.00	31.98	QP
3	156.10	10.61	1.67	0.33	12.61	43.50	30.89	QP
4	192.96	7.85	1.77	8.65	18.27	43.50	25.23	QP
5	225.94	9.47	1.99	0.72	12.18	46.00	33.82	QP
6	447.10	16.40	2.98	0.58	19.96	46.00	26.04	QP

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Site no. : 1# 966 chamber Data no. : 135
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

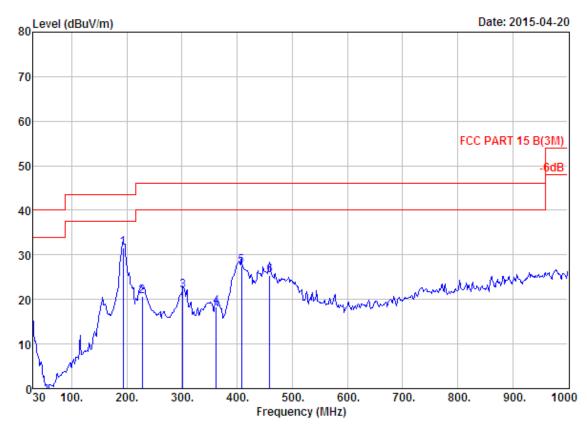
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.76	14.05	0.79	5.05	19.89	40.00	20.11	QP
2	57.16	5.06	0.99	3.69	9.74	40.00	30.26	QP
3	156.10	10.61	1.67	0.77	13.05	43.50	30.45	QP
4	192.96	7.85	1.77	9.34	18.96	43.50	24.54	QP
5	311.30	13.24	2.33	0.24	15.81	46.00	30.19	QP
6	410.24	16.29	2.71	0.76	19.76	46.00	26.24	QP





Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

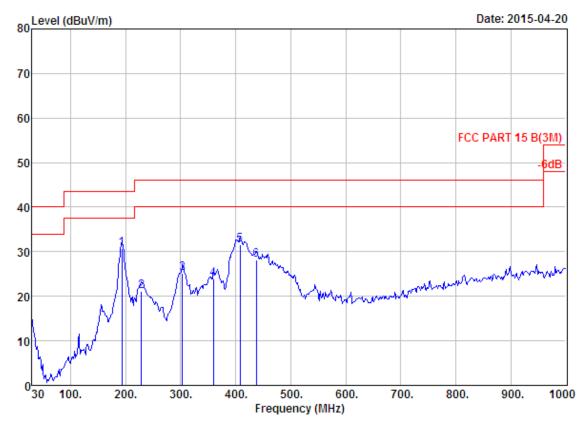
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	21.91	31.53	43.50	11.97	QP
2	227.88	9.46	2.09	9.13	20.68	46.00	25.32	QP
3	301.60	13.04	2.39	6.51	21.94	46.00	24.06	QP
4	361.74	14.53	2.63	1.09	18.25	46.00	27.75	QP
5	408.30	16.25	2.68	8.51	27.44	46.00	18.56	QP
6	458.74	16.80	3.00	5.50	25.30	46.00	20.70	QP





Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

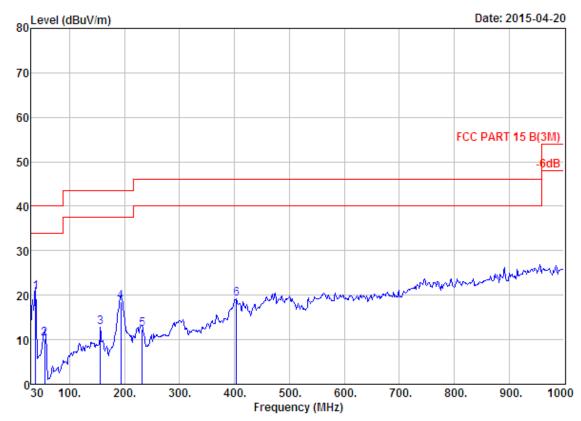
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	21.08	30.70	43.50	12.80	QP
2	228.85	9.45	2.08	9.63	21.16	46.00	24.84	QP
3	303.54	13.08	2.43	9.71	25.22	46.00	20.78	QP
4	359.80	14.45	2.59	6.95	23.99	46.00	22.01	QP
5	408.30	16.25	2.68	12.61	31.54	46.00	14.46	QP
6	437.40	16.20	2.85	9.07	28.12	46.00	17.88	QP





Site no. : 1# 966 chamber Data no. : 138
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

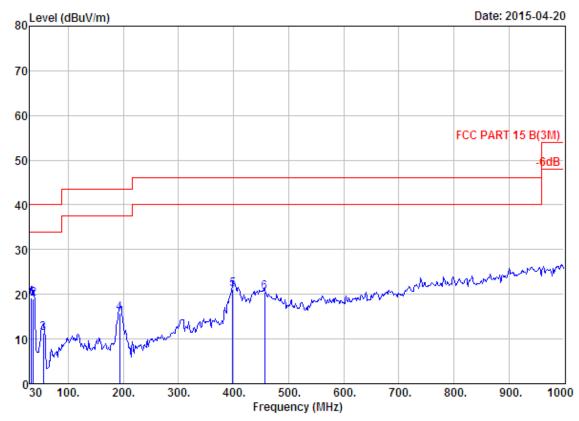
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.76	14.05	0.79	5.89	20.73	40.00	19.27	QP
2	54.25	5.82	0.93	3.55	10.30	40.00	29.70	QP
3	156.10	10.61	1.67	0.52	12.80	43.50	30.70	QP
4	192.96	7.85	1.77	8.87	18.49	43.50	25.01	QP
5	231.76	9.54	2.07	0.70	12.31	46.00	33.69	QP
6	403.45	16.14	2.69	0.33	19.16	46.00	26.84	QP





Site no. : 1# 966 chamber Data no. : 139
Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

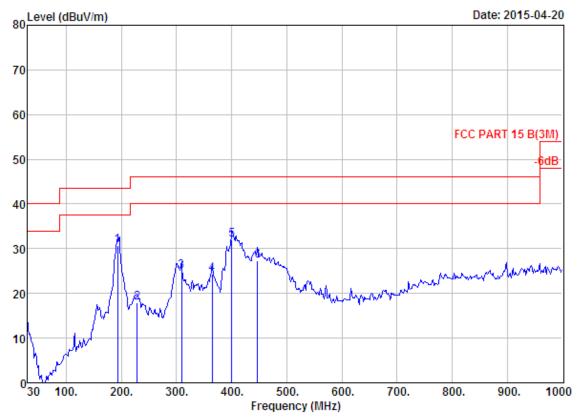
Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	32.91	16.62	0.69	1.89	19.20	40.00	20.80	QP
2	36.79	14.52	0.78	3.69	18.99	40.00	21.01	QP
3	54.25	5.82	0.93	4.62	11.37	40.00	28.63	QP
4	192.96	7.85	1.77	6.16	15.78	43.50	27.72	QP
5	398.60	16.00	2.67	2.35	21.02	46.00	24.98	QP
6	456.80	16.73	2.93	0.79	20.45	46.00	25.55	QP





Site no. : 1# 966 chamber Data no. : 140
Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL

Limit : FCC PART 15 B(3M)

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

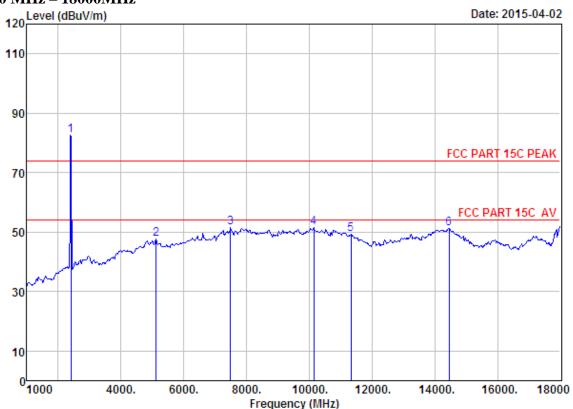
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.96	7.85	1.77	21.06	30.68	43.50	12.82	QP
2	228.85	9.45	2.08	6.37	17.90	46.00	28.10	QP
3	309.36	13.18	2.36	9.46	25.00	46.00	21.00	QP
4	364.65	14.65	2.63	7.09	24.37	46.00	21.63	QP
5	400.54	16.07	2.66	13.33	32.06	46.00	13.94	QP
6	447.10	16.40	2.98	7.95	27.33	46.00	18.67	QP



### 1000 MHz - 18000 MHz



Site no. : 1# 966 chamber Data no. : 54
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

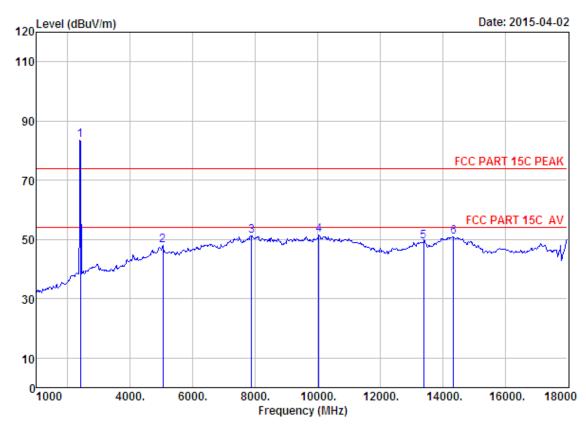
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.18	82.62	82.67	74.00	-8.67	Peak
2	5114.00	31.62	12.45	32.17	35.78	47.68	74.00	26.32	Peak
3	7494.00	36.48	11.62	31.87	35.18	51.41	74.00	22.59	Peak
4	10146.00	38.36	11.51	32.05	33.60	51.42	74.00	22.58	Peak
5	11336.00	39.30	11.04	34.29	33.11	49.16	74.00	24.84	Peak
6	14464.00	41.85	10.93	32.96	31.39	51.21	74.00	22.79	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





: 1# 966 chamber Site no.

Data no. : 55 Ant. pol. : HORIZONTAL : 3m ANT 1-18G Dis. / Ant.

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

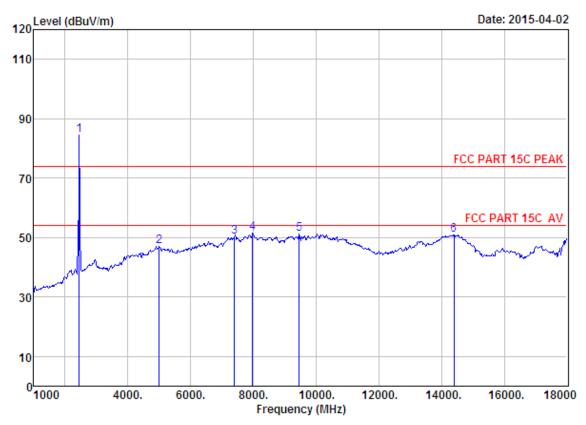
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V : HF WIRELESS M/N Test Mode : GFSK TX 2402MHz

		Ant.	Cable	Amp		Emission				
	Freq. (MHz)	-	Factor (dB/m)	Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.18	83.45	83.50	74.00	-9.50	Peak	
2	5046.00	31.57	12.53	32.08	36.12	48.14	74.00	25.86	Peak	
3	7885.00	36.78	11.45	31.33	34.34	51.24	74.00	22.76	Peak	
4	10044.00	38.18	11.56	31.85	33.56	51.45	74.00	22.55	Peak	
5	13393.00	39.83	11.49	35.03	33.13	49.42	74.00	24.58	Peak	
6	14345.00	41.76	10.92	32.93	31.24	50.99	74.00	23.01	Peak	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

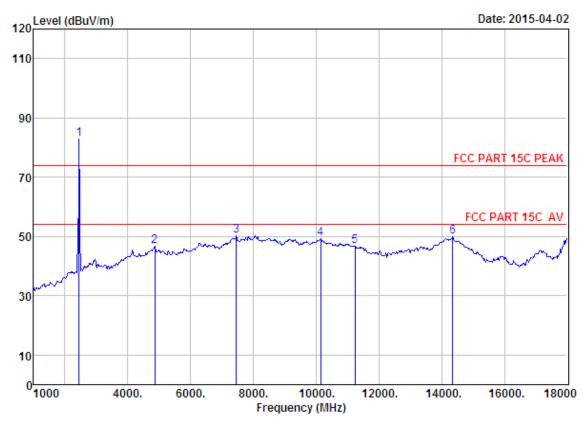
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2441MHz

		Ant.	Cable	Amp		Emission			
	Freq. (MHz)	•			Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.12	84.47	84.62	74.00	-10.62	Peak
2	4995.00	31.54	12.59	32.00	34.96	47.09	74.00	26.91	Peak
3	7392.00	36.57	11.59	31.97	33.97	50.16	74.00	23.84	Peak
4	7970.00	36.94	11.41	31.25	34.45	51.55	74.00	22.45	Peak
5	9466.00	38.02	11.69	31.95	33.45	51.21	74.00	22.79	Peak
6	14396.00	41.79	10.92	32.83	30.97	50.85	74.00	23.15	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 59
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

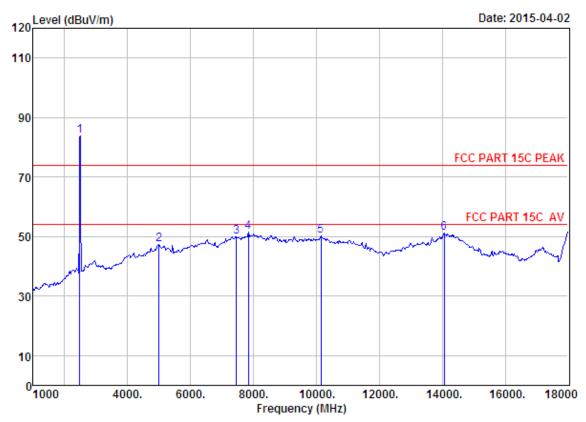
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.12	82.61	82.76	74.00	-8.76	Peak
2	4859.00	31.34	11.99	31.88	35.14	46.59	74.00	27.41	Peak
3	7460.00	36.52	11.61	31.91	34.13	50.35	74.00	23.65	Peak
4	10146.00	38.36	11.51	32.05	31.41	49.23	74.00	24.77	Peak
5	11234.00	39.37	11.12	34.10	30.44	46.83	74.00	27.17	Peak
6	14345.00	41.76	10.92	32.93	30.22	49.97	74.00	24.03	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 60
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

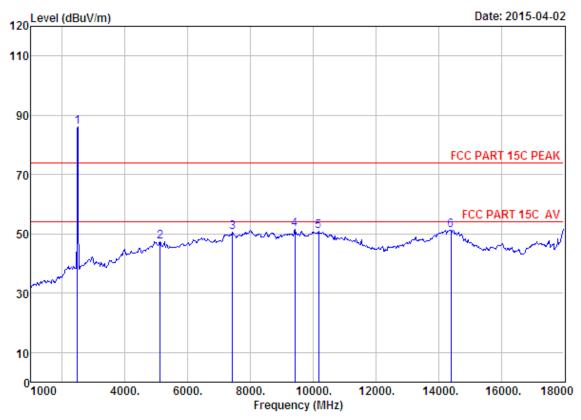
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	83.49	83.75	74.00	-9.75	Peak
2	4995.00	31.54	12.59	32.00	35.27	47.40	74.00	26.60	Peak
3	7460.00	36.52	11.61	31.91	33.71	49.93	74.00	24.07	Peak
4	7834.00	36.68	11.47	31.40	34.64	51.39	74.00	22.61	Peak
5	10146.00	38.36	11.51	32.05	32.52	50.34	74.00	23.66	Peak
6	14056.00	41.51	10.90	33.80	32.69	51.30	74.00	22.70	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

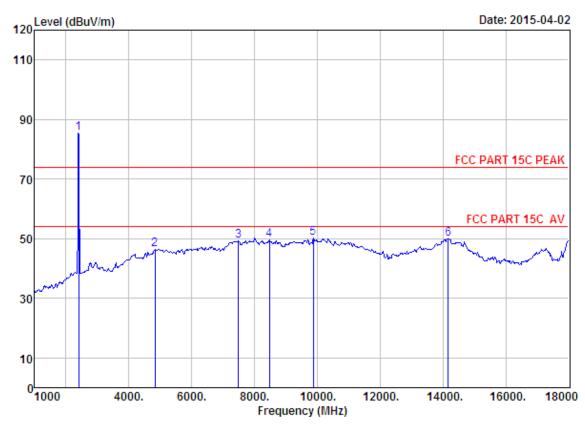
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2480MHz

		Freq.	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1	2480.00	27.58	6.71	34.03	85.69	85.95	74.00	-11.95	Peak
- 2	2	5114.00	31.62	12.45	32.17	35.59	47.49	74.00	26.51	Peak
3	3	7426.00	36.56	11.60	31.95	34.40	50.61	74.00	23.39	Peak
4	4	9415.00	38.07	11.67	31.99	33.67	51.42	74.00	22.58	Peak
5	5	10180.00	38.42	11.49	32.11	33.06	50.86	74.00	23.14	Peak
6	6	14396.00	41.79	10.92	32.83	31.28	51.16	74.00	22.84	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

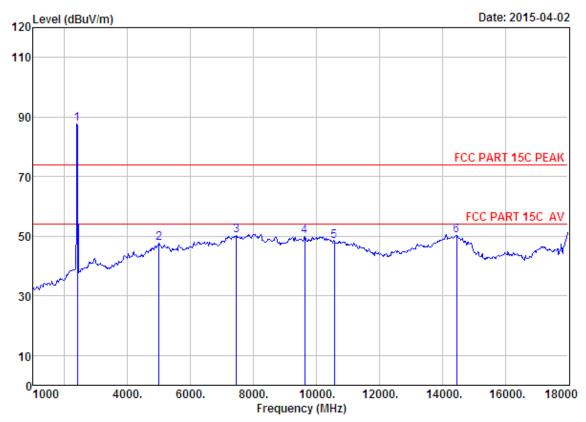
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)		Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.18	85.41	85.46	74.00	-11.46	Peak
2	4825.00	31.28	11.84	31.83	35.24	46.53	74.00	27.47	Peak
3	7494.00	36.48	11.62	31.87	32.97	49.20	74.00	24.80	Peak
4	8480.00	36.91	11.45	31.89	33.05	49.52	74.00	24.48	Peak
5	9874.00	38.15	11.62	31.77	32.09	50.09	74.00	23.91	Peak
6	14175.00	41.61	10.91	33.44	30.93	50.01	74.00	23.99	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 65
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

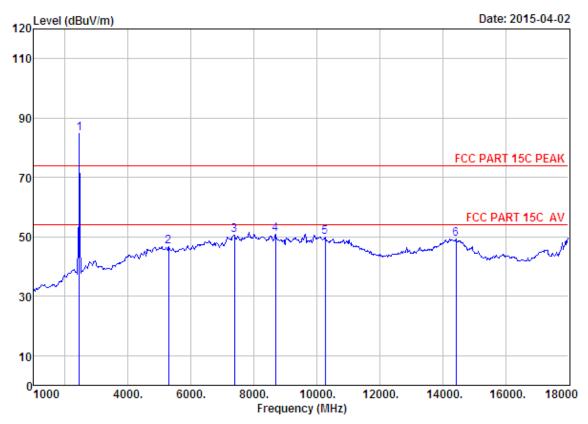
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2402MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	27.61	6.62	34.18	87.62	87.67	74.00	-13.67	Peak
2	4995.00	31.54	12.59	32.00	35.57	47.70	74.00	26.30	Peak
3	7460.00	36.52	11.61	31.91	33.90	50.12	74.00	23.88	Peak
4	9636.00	37.96	11.68	31.91	32.26	49.99	74.00	24.01	Peak
5	10571.00	39.05	11.31	32.85	30.78	48.29	74.00	25.71	Peak
6	14464.00	41.85	10.93	32.96	30.32	50.14	74.00	23.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

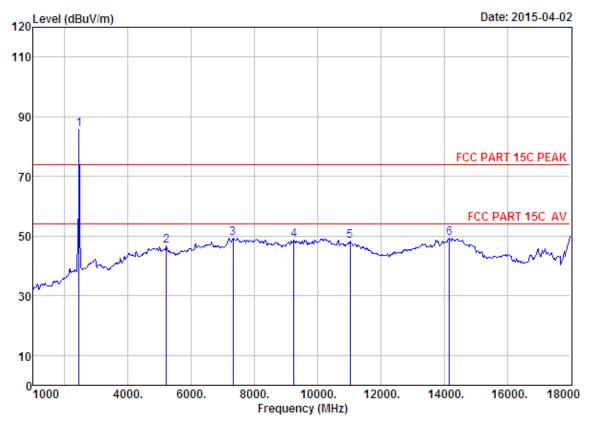
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.12	84.73	84.88	74.00	-10.88	Peak
2	5284.00	31.70	12.25	32.22	34.92	46.65	74.00	27.35	Peak
3	7375.00	36.57	11.59	31.98	34.34	50.52	74.00	23.48	Peak
4	8684.00	37.32	11.45	32.43	34.60	50.94	74.00	23.06	Peak
5	10265.00	38.56	11.44	32.27	32.11	49.84	74.00	24.16	Peak
6	14430.00	41.82	10.93	32.84	29.43	49.34	74.00	24.66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 69
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

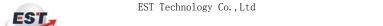
Engineer : Dick

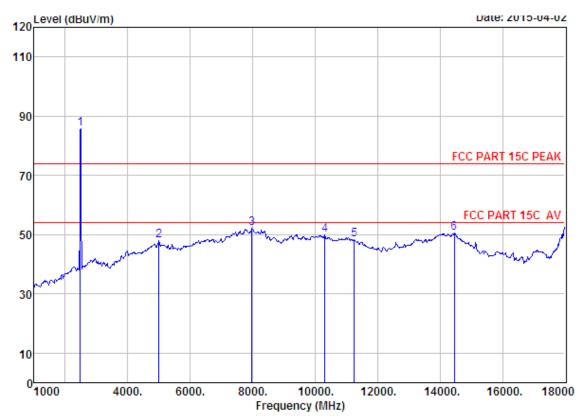
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2441MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2441.00	27.60	6.67	34.12	85.49	85.64	74.00	-11.64	Peak
2	5216.00	31.68	12.33	32.17	34.77	46.61	74.00	27.39	Peak
3	7324.00	36.55	11.57	31.99	33.24	49.37	74.00	24.63	Peak
4	9245.00	37.83	11.58	32.26	31.59	48.74	74.00	25.26	Peak
5	11030.00	39.50	11.27	33.71	31.17	48.23	74.00	25.77	Peak
6	14175.00	41.61	10.91	33.44	30.24	49.32	74.00	24.68	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 70
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

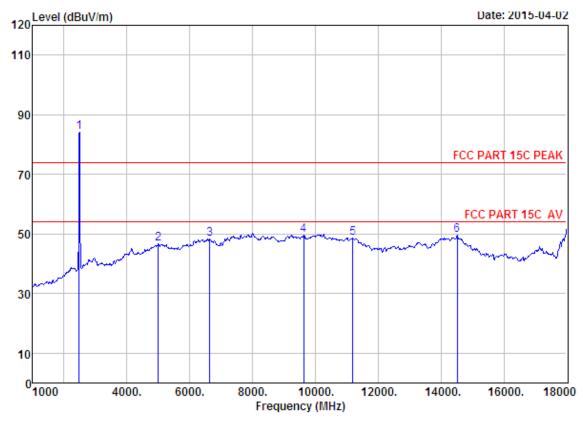
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	85.41	85.67	74.00	-11.67	Peak
2	4995.00	31.54	12.59	32.00	35.96	48.09	74.00	25.91	Peak
3	7970.00	36.94	11.41	31.25	34.93	52.03	74.00	21.97	Peak
4	10316.00	38.65	11.41	32.37	32.14	49.83	74.00	24.17	Peak
5	11251.00	39.35	11.10	34.13	31.89	48.21	74.00	25.79	Peak
6	14464.00	41.85	10.93	32.96	30.74	50.56	74.00	23.44	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

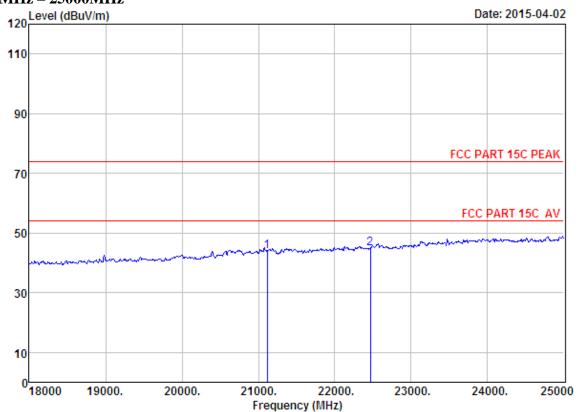
Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2480MHz

	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	83.82	84.08	74.00	-10.08	Peak
2	4995.00	31.54	12.59	32.00	34.55	46.68	74.00	27.32	Peak
3	6644.00	34.48	12.02	32.20	34.05	48.35	74.00	25.65	Peak
4	9636.00	37.96	11.68	31.91	32.02	49.75	74.00	24.25	Peak
5	11200.00	39.39	11.14	34.03	32.12	48.62	74.00	25.38	Peak
6	14515.00	41.89	10.93	33.14	29.96	49.64	74.00	24.36	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.



### 18000MHz - 25000MHz



Site no. : 1# 966 chamber Data no. : 74

Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2402MHz

Freq.	Loss	Factor	Reading	Emission Level (dBuV/m)		Margin (dB)	Remark
1 21115.00 2 22466.00				43.85 44.90	74.00 74.00	30.15 29.10	Peak Peak

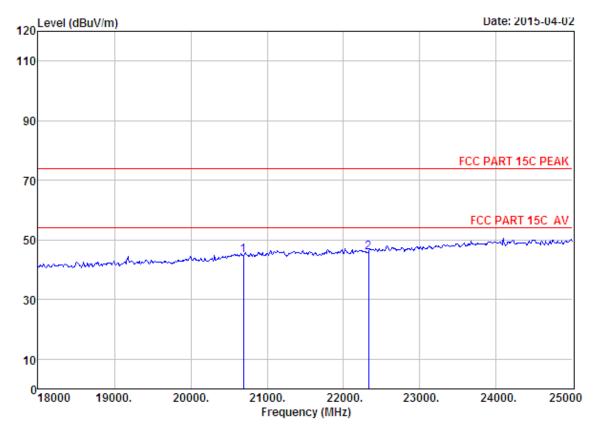
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

The emission levels that are 20dB below the official limit are not reported.



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Site no. : 1# 966 chamber

Data no. : 75 Ant. pol. : HORIZONTAL Dis. / Ant. : 3m ANT ABVOE 18G

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

: Dick Engineer

EUT : Wireless Or Wired DJ Headphones

: DC 3.7V Power : HF WIRELESS Test Mode : GFSK TX 2402MHz

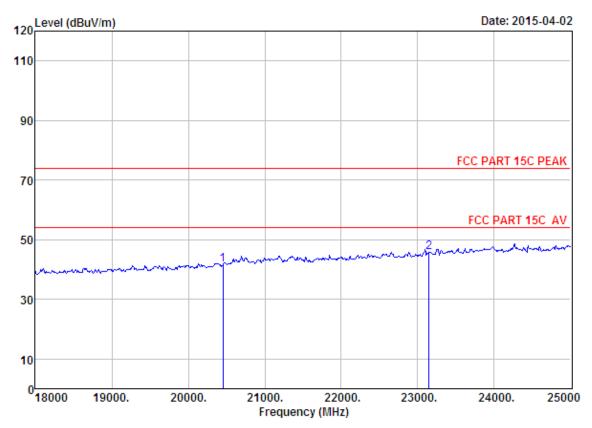
	Freq.	Factor	Factor	Reading (dBuV)		Limits (dBuV/m)	Margin (dB)	Remark
_	20688.00		 		44.81 45.92	74.00 74.00	29.19 28.08	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

2. The emission levels that are 20dB below the official limit are not reported.



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Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

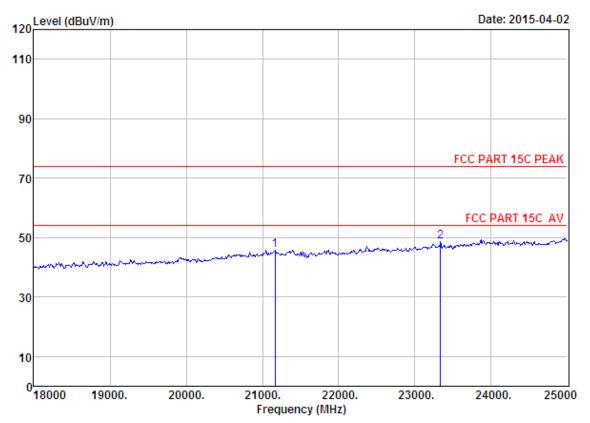
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2441MHz

Freq.		-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
 0450.00 3145.00	 		12.16 12.46	41.75 45.68	74.00 74.00	32.25 28.32	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 77
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

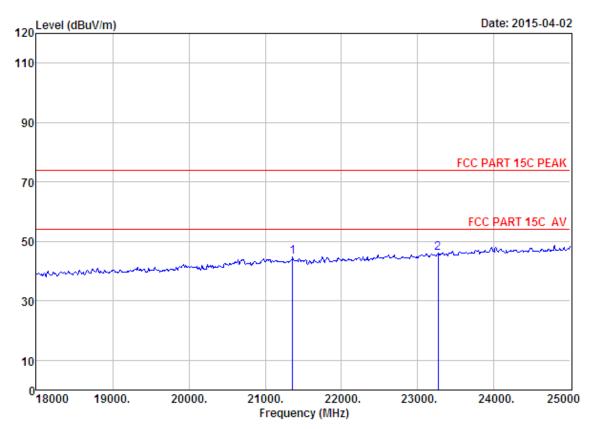
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2441MHz

Freq.	Loss	Factor	Reading	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
21164.00 23334.00				45.87 48.71	74.00 74.00	28.13 25.29	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 78
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

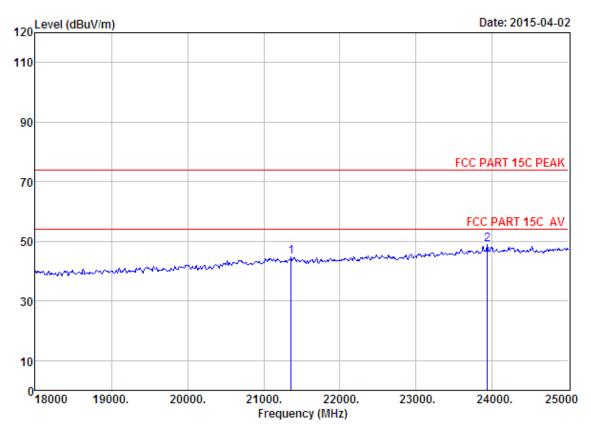
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2480MHz

Freq. (MHz)	Loss	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 21360.00 2 23264.00				44.66 46.02	74.00 74.00	29.34 27.98	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

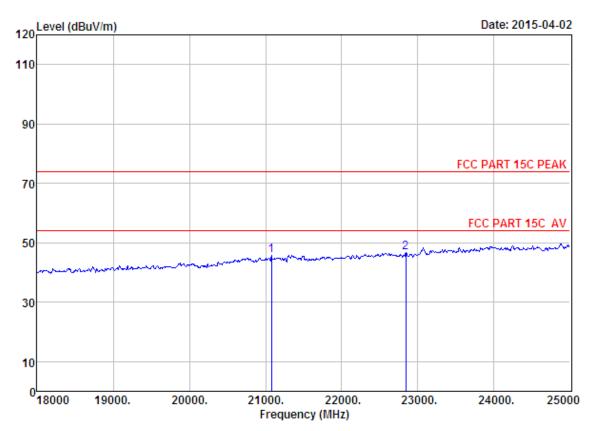
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : GFSK TX 2480MHz

-	Factor	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
21360.00 23936.00			13.93 14.25	44.80 48.97	74.00 74.00	29.20 25.03	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

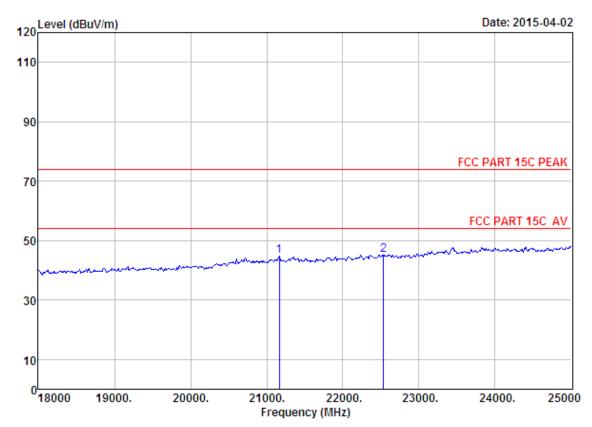
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2402MHz

	Freq. (MHz)	Factor		Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
_	21080.00 22844.00		 		45.72 46.77	74.00 74.00	28.28 27.23	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 81
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

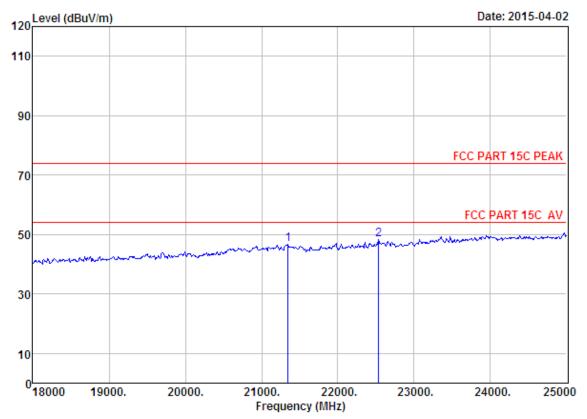
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2402MHz

	-	Factor		Factor	_	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	21164.00	46.20	20.20	35.64	13.89	44.65	74.00	29.35	Peak
2	22536.00	45.79	20.88	34.35	12.95	45.27	74.00	28.73	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 82
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

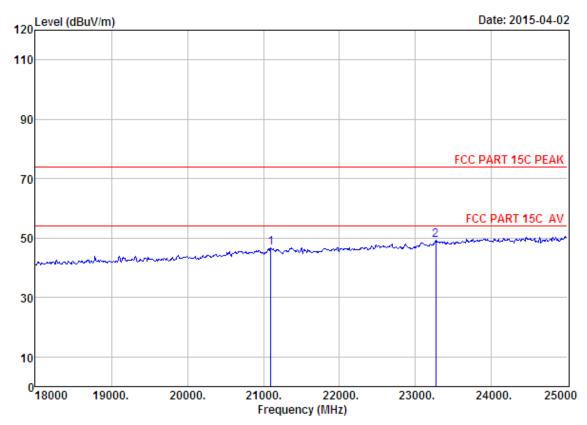
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2441MHz

Freq.		Factor	_	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
21346.00 22536.00	 			46.69 48.33	74.00 74.00	27.31 25.67	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

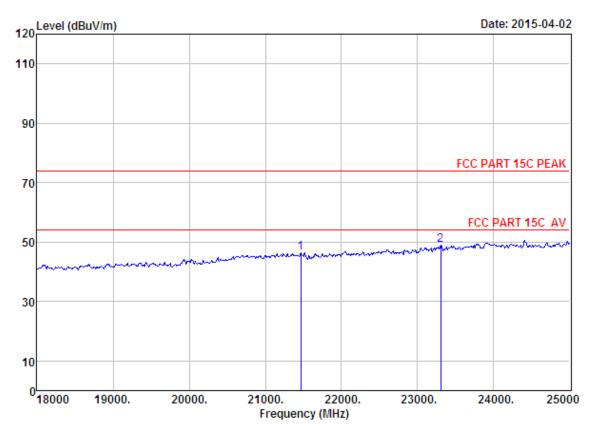
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2441MHz

Freq.	Factor	Factor	Emission Level (dBuV/m)		Margin (dB)	Remark
21094.00 23264.00		 	46.70 49.31	74.00 74.00	27.30 24.69	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT ABVOE 18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

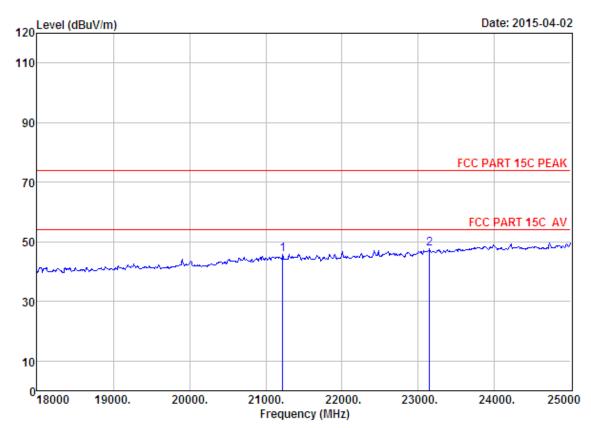
EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2480MHz

	Freq. (MHz)			•	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	21465.00				15.46	46.43	74.00	27.57	Peak
2	23306.00	45.66	21.43	33.53	15.29	48.85	74.00	25.15	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 85
Dis. / Ant. : 3m ANT ABOVE 18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS Test Mode : 8-DPSK TX 2480MHz

	Freq. (MHz)	Factor	Cable Loss (dB)	Factor	_	Emission Level (dBuV/m)		Margin (dB)	Remark
_	21220.00 23145.00					45.86 47.54	74.00 74.00	28.14 26.46	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

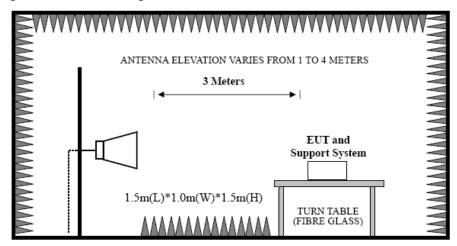


#### 9. BAND EDGE COMPLIANCE

#### 9.1. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

#### 9.2. Block Diagram of Test setup



#### 9.3. Test Procedure

EUT was placed on a turn table, which is 1.5 m high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test

Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of emissions

Peak: RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto. AV: RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto.

#### 9.4. Test Result

EUT: Wireless Or Wired DJ Headphones
M/N: HF WIRELESS
Power: DC 3.7V
Test date: 2015-04-02 Test site: 3m Chamber Tested by: Tony Tang
Test mode: Tx Mode (Hopping On & No Hopping)
Pass

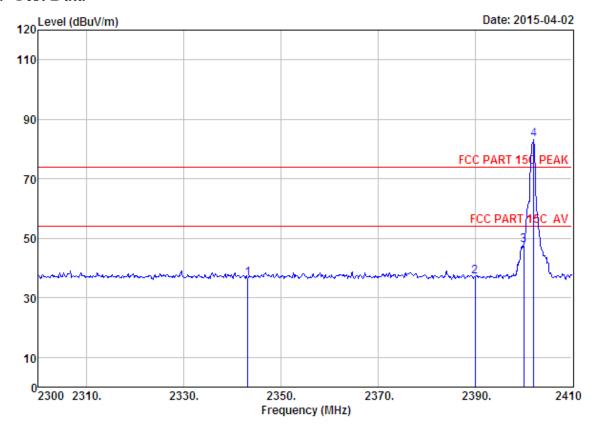
Note: 1. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

2. The frequency 2402MHz . 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

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#### 9.5. Test Data



Site no. : 1# 966 chamber Data no. : 56

Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

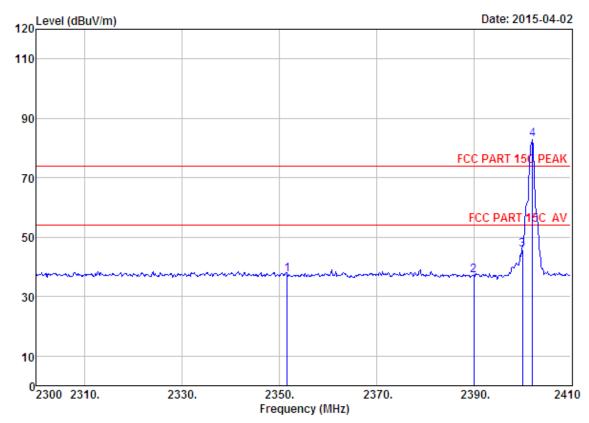
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : GFSK TX 2402MHz(No Hopping)

	Freq.			•	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2343.12	27.70	6.56	34.22	36.59	36.63	74.00	37.37	Peak
2	2390.00	27.64	6.62	34.19	37.15	37.22	74.00	36.78	Peak
3	2400.00	27.61	6.62	34.18	47.50	47.55	74.00	26.45	Peak
4	2402.08	27.61	6.62	34.18	83.04	83.09	74.00	-9.09	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber

Data no. : 57 Ant. pol. : VERTICAL Dis. / Ant. : 3m ANT 1-18G

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

: Dick Engineer

EUT : Wireless Or Wired DJ Headphones

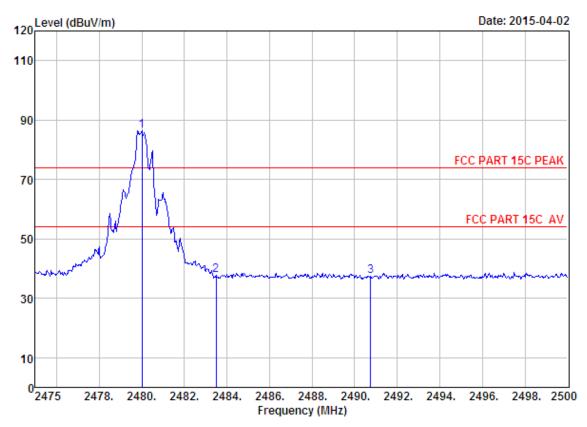
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : GFSK TX 2402MHz(No Hopping)

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2351.59	27.70	6.58	34.22	37.47	37.53	74.00	36.47	Peak
2	2390.00	27.64	6.62	34.19	36.96	37.03	74.00	36.97	Peak
3	2400.00	27.61	6.62	34.18	45.68	45.73	74.00	28.27	Peak
4	2402.08	27.61	6.62	34.18	82.95	83.00	74.00	-9.00	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS

Test Mode : GFSK TX 2480MHz (No Hopping)

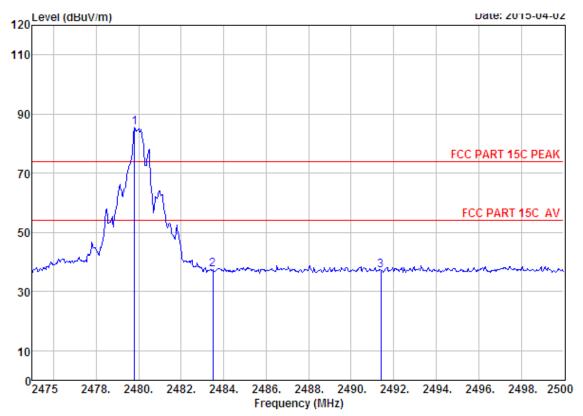
	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2480.00	27.58	6.71	34.03	86.17	86.43	74.00	-12.43	Peak
2	2483.50	27.58	6.71	34.03	37.60	37.86	74.00	36.14	Peak
3	2490.75	27.58	6.73	34.03	37.22	37.50	74.00	36.50	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

The emission levels that are 20dB below the official limit are not reported.

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Site no. : 1# 966 chamber Data no. : 63
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

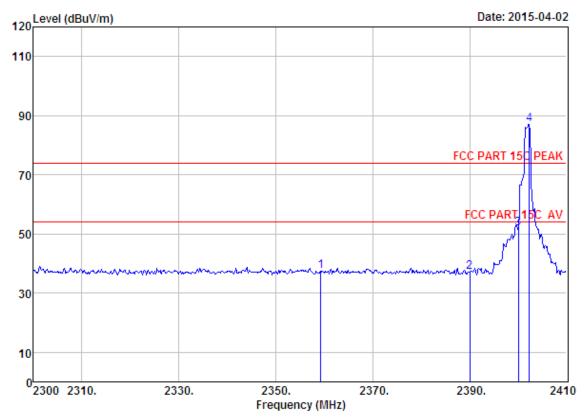
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : GFSK TX 2480MHz(No Hopping)

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2 3	2479.80 2483.50 2491.40	27.58	6.71	34.03	85.12 37.15 36.94	85.38 37.41 37.22	74.00 74.00 74.00	-11.38 36.59 36.78	Peak Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 66
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

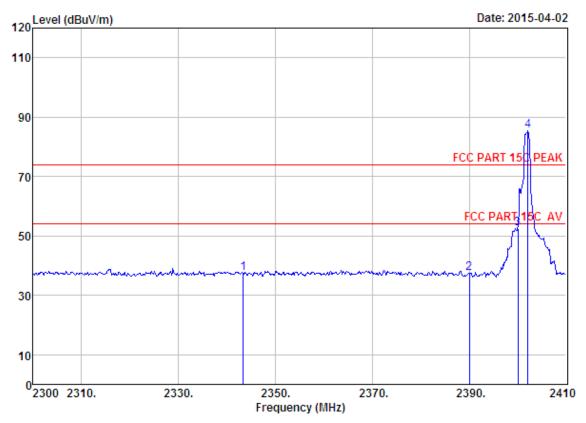
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2402MHz (No Hopping)

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2359.29	27.67	6.58	34.20	37.26	37.31	74.00	36.69	Peak
2	2390.00	27.64	6.62	34.19	36.90	36.97	74.00	37.03	Peak
3	2400.00	27.61	6.62	34.18	51.65	51.70	74.00	22.30	Peak
4	2402.30	27.61	6.62	34.18	87.08	87.13	74.00	-13.13	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

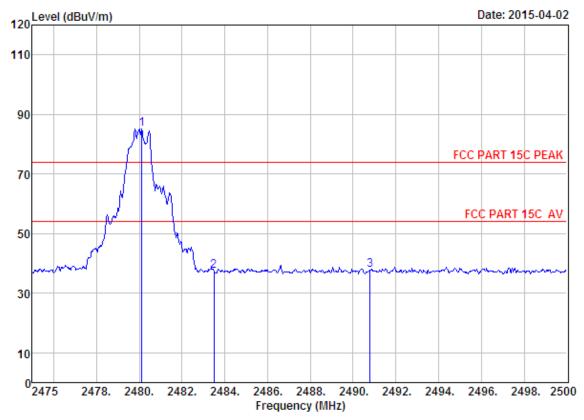
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2402MHz(No Hopping)

	Freq.		Loss	Amp Factor (dB)		Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2343.34	27.70	6.56	34.22	37.38	37.42	74.00	36.58	Peak
2	2390.00	27.64	6.62	34.19	37.34	37.41	74.00	36.59	Peak
3	2400.00	27.61	6.62	34.18	52.29	52.34	74.00	21.66	Peak
4	2402.08	27.61	6.62	34.18	85.51	85.56	74.00	-11.56	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber

Data no. : 72 Ant. pol. : HORIZONTAL : 3m ANT 1-18G Dis. / Ant.

: FCC PART 15C PEAK Limit

Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

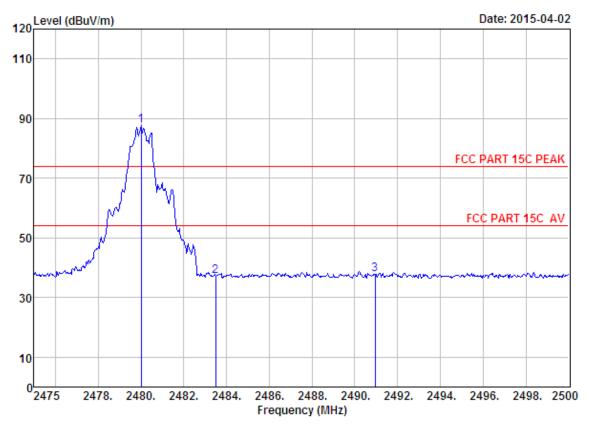
: DC 3.7V Power M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2480MHz(No Hopping)

		Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	L	2480.13	27.58	6.71	34.03	84.94	85.20	74.00	-11.20	Peak
- 2	2	2483.50	27.58	6.71	34.03	37.07	37.33	74.00	36.67	Peak
3	3	2490.80	27.58	6.73	34.03	37.37	37.65	74.00	36.35	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 73
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2480MHz (No Hopping)

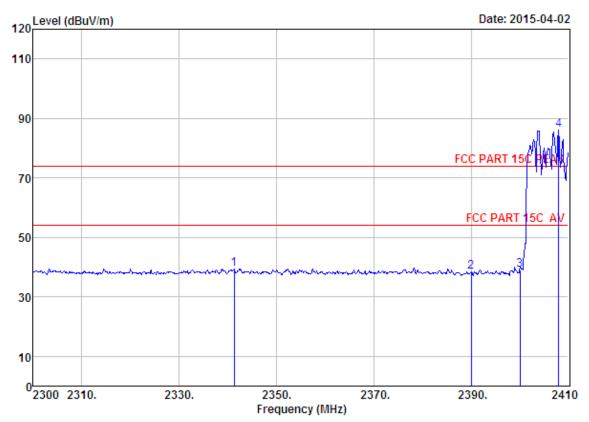
	Freq.		-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
	2480.00			87.34	87.60	74.00	-13.60	Peak
2 3	2483.50 2490.95			36.73 37.45	36.99 37.73	74.00 74.00	37.01 36.27	Peak Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

The emission levels that are 20dB below the official limit are not reported.



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Site no. : 1# 966 chamber Data no. : 86
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

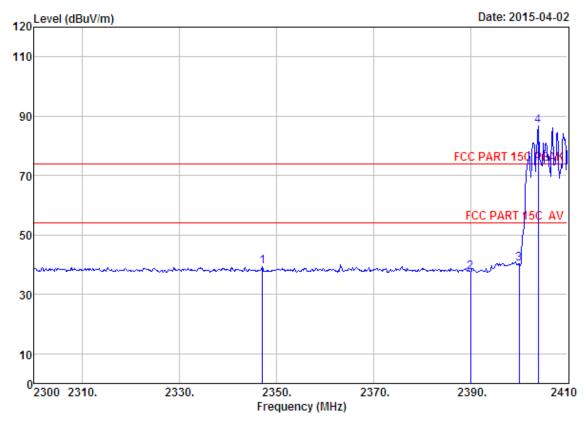
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : GFSK TX 2402MHz (Hopping On)

	Freq. (MHz)			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2341.25	27.70	6.56	34.22	39.31	39.35	74.00	34.65	Peak
2	2390.00	27.64	6.62	34.19	38.35	38.42	74.00	35.58	Peak
3	2400.00	27.61	6.62	34.18	38.93	38.98	74.00	35.02	Peak
4	2408.02	27.61	6.64	34.18	86.09	86.16	74.00	-12.16	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

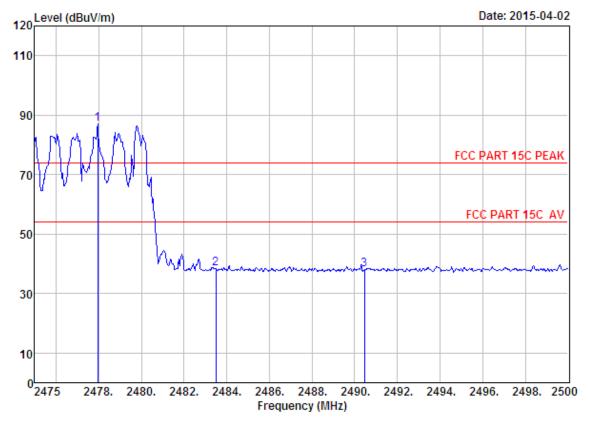
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : GFSK TX 2402MHz (Hopping On)

	Freq.			-	_	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2347.08	27.70	6.56	34.22	39.29	39.33	74.00	34.67	Peak
2	2390.00	27.64	6.62	34.19	37.30	37.37	74.00	36.63	Peak
3	2400.00	27.61	6.62	34.18	40.14	40.19	74.00	33.81	Peak
4	2403.95	27.61	6.64	34.18	86.74	86.81	74.00	-12.81	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

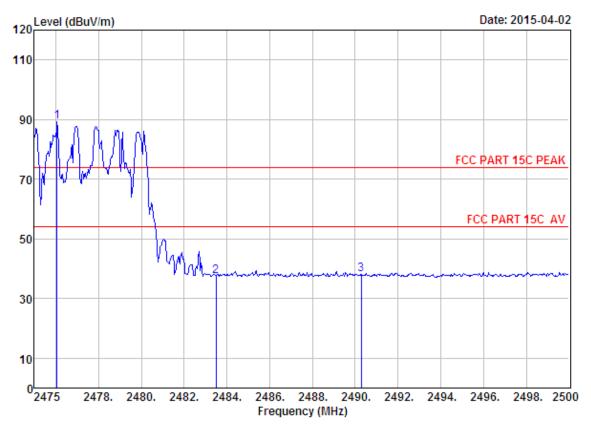
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : GFSK TX 2480MHz (Hopping On)

	Freq. (MHz)		Loss	Factor	Reading	Emission Level (dBuV/m)		Margin (dB)	Remark
 1	2477.95	27.58	6.71	34.03	86.72	86.98	74.00	-12.98	Peak
2	2483.50	27.58	6.71	34.03	37.98	38.24	74.00	35.76	Peak
3	2490.45	27.58	6.73	34.03	37.81	38.09	74.00	35.91	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 89
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS

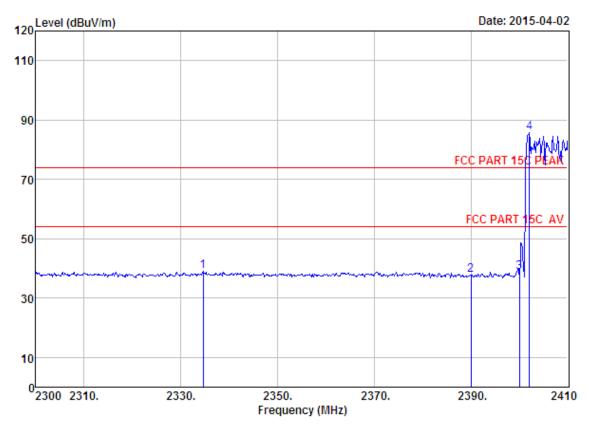
Test Mode : GFSK TX 2480MHz (Hopping On)

	Freq. (MHz)		Loss		Reading	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
 1	2476.05	27.58	6.71	34.06	88.93	89.16	74.00	-15.16	Peak
2	2483.50	27.58	6.71	34.03	37.21	37.47	74.00	36.53	Peak
3	2490.28	27.58	6.73	34.03	37.65	37.93	74.00	36.07	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

The emission levels that are 20dB below the official limit are not reported.

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Site no. : 1# 966 chamber Data no. : 90
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

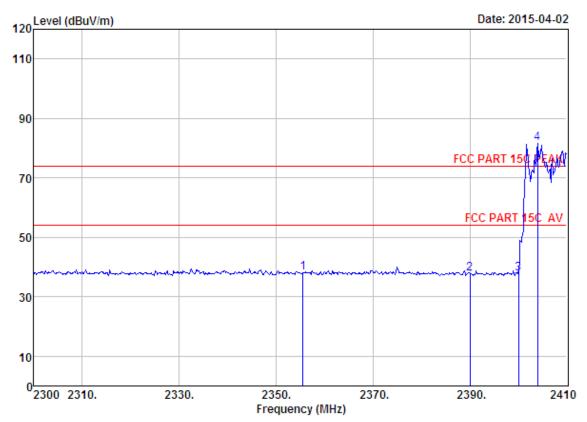
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2402MHz (Hopping On)

	Freq.			•	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2334.65	27.73	6.56	34.23	39.12	39.18	74.00	34.82	Peak
2	2390.00	27.64	6.62	34.19	37.59	37.66	74.00	36.34	Peak
3	2400.00	27.61	6.62	34.18	38.64	38.69	74.00	35.31	Peak
4	2402.08	27.61	6.62	34.18	85.75	85.80	74.00	-11.80	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

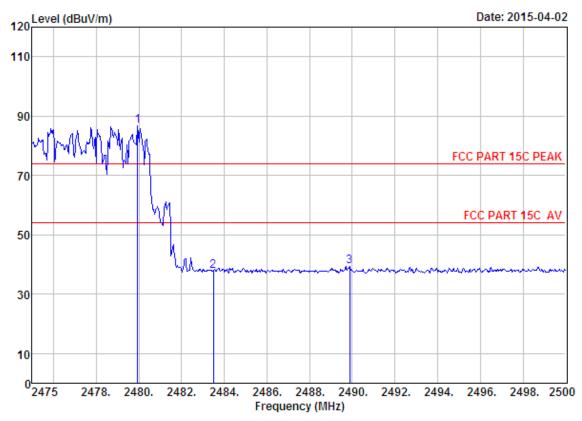
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2402MHz (Hopping On)

	Freq.			-	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2355.55	27.70	6.58	34.22	38.03	38.09	74.00	35.91	Peak
2	2390.00	27.64	6.62	34.19	37.82	37.89	74.00	36.11	Peak
3	2400.00	27.61	6.62	34.18	37.81	37.86	74.00	36.14	Peak
4	2403.95	27.61	6.64	34.18	81.46	81.53	74.00	-7.53	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

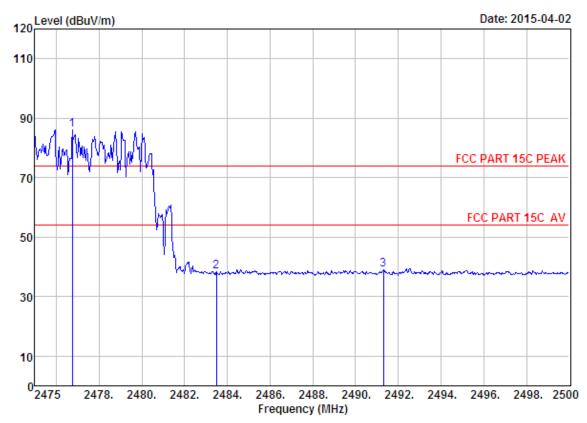
Power : DC 3.7V M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2480MHz (Hopping On)

	Freq.		Loss		Reading	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.95	27.58	6.71	34.03	86.45	86.71	74.00	-12.71	Peak
2	2483.50	27.58	6.71	34.03	37.34	37.60	74.00	36.40	Peak
3	2489.88	27.58	6.73	34.03	38.95	39.23	74.00	34.77	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.





Site no. : 1# 966 chamber Data no. : 93
Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : Temp:23.6'; Humi:56%; Press:101.52kPa

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones

Power : DC 3.7V M/N : HF WIRELESS

Test Mode : 8-DPSK TX 2480MHz (Hopping On)

	Freq.	Factor			_	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2476.75	27.58	6.71	34.06	85.79	86.02	74.00	-12.02	Peak
2	2483.50	27.58	6.71	34.03	38.25	38.51	74.00	35.49	Peak
3	2491.30	27.58	6.73	34.03	38.63	38.91	74.00	35.09	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

The emission levels that are 20dB below the official limit are not reported.

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#### 10. POWER LINE CONDUCTED EMISSIONS

#### 10.1.Limit

	Maximum RF Line Voltage					
Frequency	Quasi-Peak Level	Average Level				
	dB(µV)	dB(µV)				
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*				
$500\text{kHz} \sim 5\text{MHz}$	56	46				
5MHz ~ 30MHz	60	50				

Notes: 1. \* Decreasing linearly with logarithm of frequency.

#### 10.2.Test Procedure

The EUT was placed on a non-metallic table, 10cm above the ground plane. The EUT was charged form PC's USB port which connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#).. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS30) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

#### 10.3. Test Result

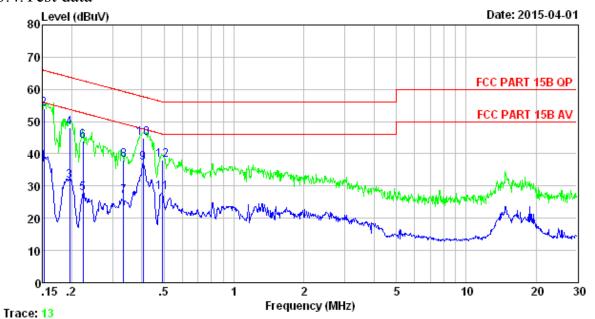
0.15MHz—30MHz Conducted emissison Test result								
EUT: Wireless Or Wired DJ Headphones M/N:HF WIRELESS								
Power: DC 5V From PC Input AC 120V/60Hz								
Fest date: 2015-04-01 Test site: 3m Chamber Tested by: Tony.Tang								
Test mode: Tx Mode								
Pass								

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<sup>2.</sup> The lower limit shall apply at the transition frequencies.

#### 10.4. Test data



Site no : 844 Shield Room Data no. : 14 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE

Limit : FCC PART 15B QP

Engineer : Dick

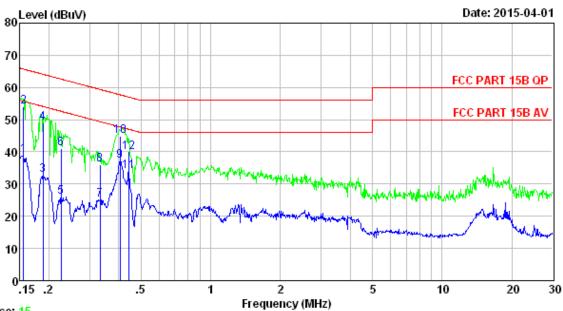
EUT : Wireless Or Wired DJ Headphones Power : DC 5V From PC Input AC 120V/60Hz

M/N : HF WIRELESS
Test Mode : TX Mode

	Freq. (MHz)	Lisn Factor (db)	Cable Loss (db)	Reading dBuV)	Emission Level (dBuv/m)	Limits (dBuv/m)	Margin (dB)	Remark
1	0.15	9.61	9.81	18.21	37.63	55.91	18.28	Average
2	0.15	9.61	9.81	34.58	54.00	65.91	11.91	QP
3	0.20	9.61	9.80	12.23	31.64	53.80	22.16	Average
4	0.20	9.61	9.80	28.59	48.00	63.80	15.80	QP
5	0.22	9.61	9.80	8.23	27.64	52.70	25.06	Average
6	0.22	9.61	9.80	24.59	44.00	62.70	18.70	QP
7	0.33	9.61	9.83	7.32	26.76	49.35	22.59	Average
8	0.33	9.61	9.83	18.56	38.00	59.35	21.35	QP
9	0.41	9.61	9.82	17.68	37.11	47.73	10.62	Average
10	0.41	9.61	9.82	25.57	45.00	57.73	12.73	QP
11	0.49	9.61	9.81	8.56	27.98	46.14	18.16	Average
12	0.49	9.61	9.81	18.58	38.00	56.14	18.14	QP



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Trace: 15

Site no : 844 Shield Room Data no. : 16
Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL

Limit : FCC PART 15B QP

Engineer : Dick

EUT : Wireless Or Wired DJ Headphones
Power : DC 5V From PC Input AC 120V/60Hz

M/N : HF WIRELESS Test Mode : TX Mode

	Freq. (MHz)	Lisn Factor (db)	Cable Loss (db)	Reading dBuV)	Emission Level (dBuv/m)	Limits (dBuv/m)	Margin (dB)	Remark
1	0.16	9.48	9.81	19.60	38.89	55.69	16.80	Average
2	0.16	9.48	9.81	34.71	54.00	65.69	11.69	QP
3	0.19	9.57	9.80	13.34	32.71	54.11	21.40	Average
4	0.19	9.57	9.80	29.63	49.00	64.11	15.11	QP
5	0.23	9.60	9.80	6.57	25.97	52.61	26.64	Average
6	0.23	9.60	9.80	21.60	41.00	62.61	21.61	QP
7	0.33	9.59	9.83	5.77	25.19	49.40	24.21	Average
8	0.33	9.59	9.83	16.58	36.00	59.40	23.40	QP
9	0.41	9.59	9.82	17.87	37.28	47.73	10.45	Average
10	0.41	9.59	9.82	25.59	45.00	57.73	12.73	QP
11	0.44	9.59	9.81	14.54	33.94	47.02	13.08	Average
12	0.44	9.59	9.81	20.60	40.00	57.02	17.02	QP



### 11. ANTENNA REQUIREMENTS

#### 11.1.Limit

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 15.247 (b), 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.

#### 11.2.Result

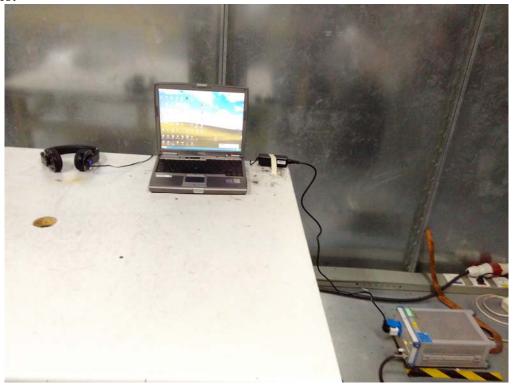
The antennas used for this product are integral Patch Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 1.9dBi.

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## 12. TEST SETUP PHOTO

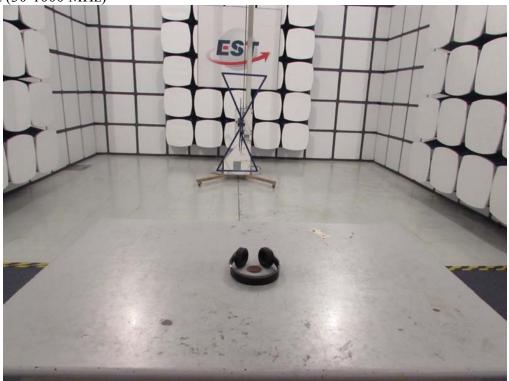
Conducted Test



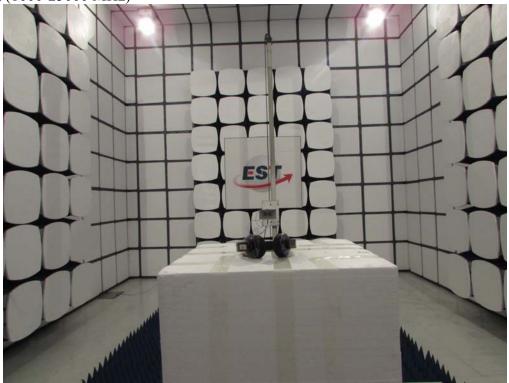




Radiated Test (30-1000 MHz)



### Radiated Test (1000-25000 MHz)





## 13.PHOTOS OF EUT

**External Photos** M/N: HF WIRELESS







**External Photos** M/N: HF WIRELESS







**External Photos** M/N: HF WIRELESS







**External Photos** M/N: HF WIRELESS

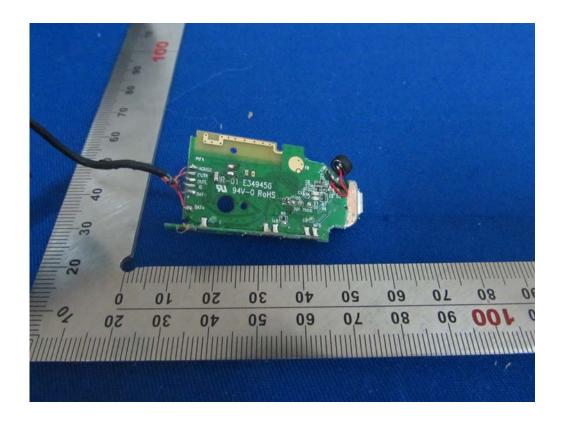






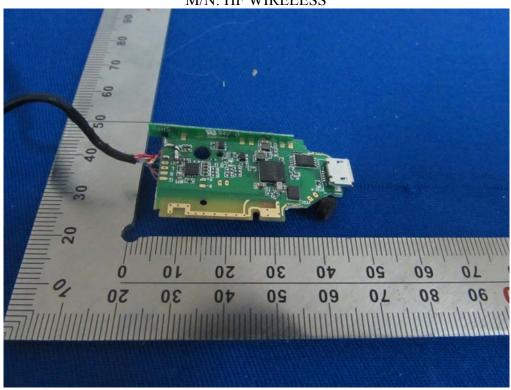
# **Internal Photos** M/N: HF WIRELESS

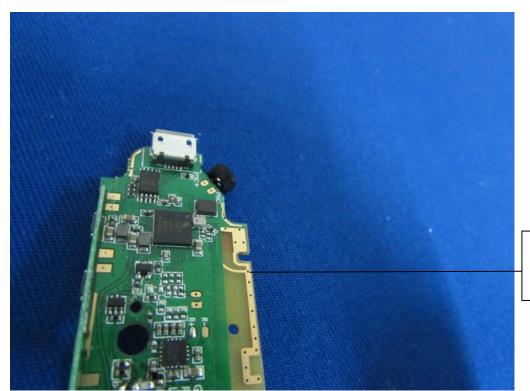






# **Internal Photos** M/N: HF WIRELESS

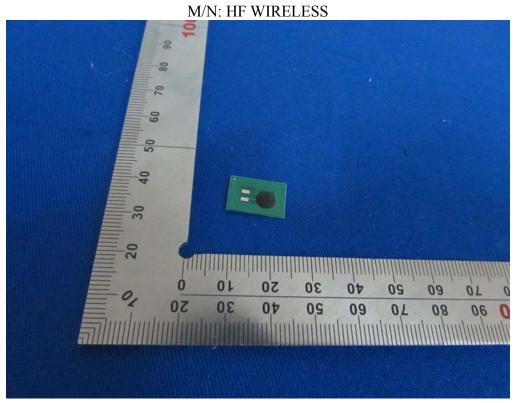


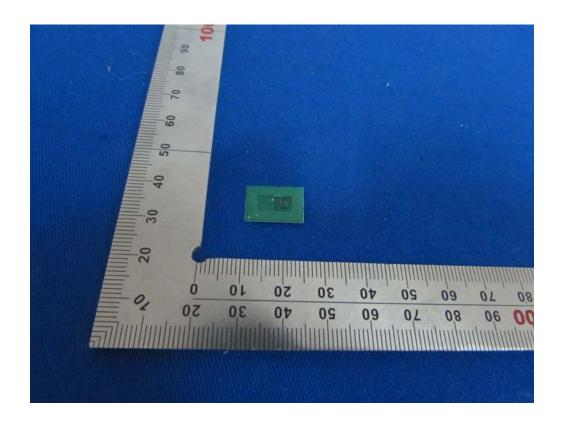


Bluetooth Antenna



## Internal Photos







Internal Photos

