

# Shenzhen Toby Technology Co., Ltd.

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# **FCC Radio Test Report** FCC ID: 2AFSGHX-P270

## **Original Grant**

Report No. TB-FCC145251

**Applicant** Dongguan Jin wen hua digital technology Co., LTD.

**Equipment Under Test (EUT)** 

**EUT Name** Daze speaker

HX-P270 Model No.

Series Model No. N/A

**Brand Name HMDX** 

**Receipt Date** 2015-08-28

**Test Date** 2015-08-28 to 2015-09-10

**Issue Date** 2015-09-11

**Standards** FCC Part 15: 2014, Subpart C(15.247)

**Test Method** ANSI C63.10:2013

**Conclusions PASS** 

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC requirements

**Test/Witness Engineer** 

**Approved& Authorized** 

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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## 1. General Information about EUT

### 1.1 Client Information

**Applicant**: Dongguan Jin wen hua digital technology Co., LTD.

Address : NO.1 Hua Da Road, Long Bei Ling Village, Tangxia Town, Dongguan

City, Guangdong, China

Manufacturer : Dongguan Jin wen hua digital technology Co., LTD.

Address : NO.1 Hua Da Road, Long Bei Ling Village, Tangxia Town, Dongguan

City, Guangdong, China

## 1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Daze speaker				
Models No.	<b>)</b> :	HX-P270	HX-P270			
Model Difference		N/A				
60033		Operation Frequency: Bluetooth:2402~2480MHz				
		Number of Channel:	Bluetooth:79 Channels see note (2)			
Product Description		Max Peak Output Power:	GFSK:-10.0 dBm (Conducted Power)			
Description		Antenna Gain:	2.1 dBi PCB Antenna			
		Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)			
Power Supply	:	DC Voltage supplied from	Host System by USB cable.			
		DC power by Li-ion Battery.				
Power Rating	3	DC 5.0V by USB cable. DC 3.7V Li-ion Battery.	LONG LINE			
Connecting I/O Port(S)		Please refer to the User's Manual				

### Note:

- (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (2) This Test Report is FCC Part 15.247 for Bluetooth, and test procedure in accordance with Public Notice: DA 00-705.

### (3) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458



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

(4) The Antenna information about the equipment is provided by the applicant.

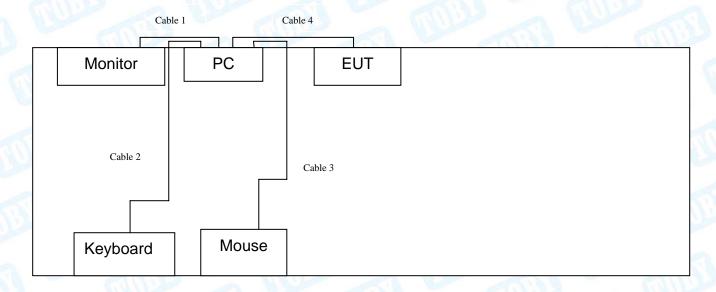
## 1.3 Block Diagram Showing the Configuration of System Tested

TX Mode		
	EUT	



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### **USB Charging with TX Mode**



## 1.4 Description of Support Units

Equipment Information				
Name	Model	FCC ID/DOC	Manufacturer	Used "√"
LCD Monitor	E170Sc	DOC	DELL	<b>√</b>
PC	OPTIPLEX380	DOC	DELL	<b>√</b>
Keyboard	L100	DOC	DELL	<b>√</b>
Mouse	M-UARDEL7	DOC	DELL	<b>√</b>
		Cable Information		
Number	Shielded Type	Ferrite Core	Length	Note
Cable 1	YES	YES	1.5M	4000
Cable 2	YES	YES	1.5M	
Cable 2	YES	NO	1.5M	
Cable 3	NO	YES	0.8M	N. Carlotte

## 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.



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	For Conducted Test
Final Test Mode	Description
Mode 1	USB Charging with TX GFSK Mode

For Radiated Test			
Final Test Mode	Description		
Mode 1	USB Charging with TX GFSK Mode		
Mode 2 TX Mode(GFSK) Channel 00			
Mode 3 TX Mode( π /4-DQPSK) Channel 00/3			
Mode 4 TX Mode(8-DPSK) Channel 00/39/78			
Mode 5	Hopping Mode(GFSK)		
Mode 6 Hopping Mode( π /4-DQPSK)			
Mode 7 Hopping Mode(8-DPSK)			

#### Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate. We have pretested all the test mode above.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

TX Mode: GFSK (1 Mbps)
TX Mode: #\pi/4-DQPSK (2 Mbps)
TX Mode: 8-DPSK (3 Mbps)

(2) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on X-plane as the normal use. Therefore only the test data of this X-plane was used for radiated emission measurement test.

## 1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of Bluetooth mode.

Test Software Version AppoTech RF Control Kit 4.0			4.0
Frequency	2402 MHz	2441MHz	2480 MHz
GFSK	DEF	DEF	DEF
π /4-DQPSK	DEF	DEF	DEF
8-DPSK	DEF	DEF	DEF



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## 1.7 Measurement Uncertainty

The reported uncertainty of measurement y  $\pm$  U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )
	Level Accuracy:	3
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Radiated Emission	Level Accuracy:	±4.60 dB
Radiated Effilssion	9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy:	±4.40 dB
Radiated Effilssion	30MHz to 1000 MHz	±4.40 db
Radiated Emission	Level Accuracy:	.4.20 dB
Radiated Emission	Above 1000MHz	±4.20 dB

## 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

### **CNAS (L5813)**

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

### FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

### IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.

May 22, 2014 certificated by TUV Rheinland(China) Co., Ltd. with TUV certificate No.: UA 50282953 0001 and report No.: 17026822 002. The certificate is valid until the next scheduled audit or up to 18 months, at the discretion of TUV Rhineland.



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# 2. Test Summary

FCC Part 15 Subpart C(15.247)/ RSS 247 Issue 1						
Standard Section		T(11		_		
FCC	IC	Test Item	Judgment	Remark		
15.203		Antenna Requirement	PASS	N/A		
15.207	RSS-GEN 7.2.2	Conducted Emission	PASS	N/A		
15.205	RSS-Gen 7.2.3	Restricted Bands	PASS	N/A		
15.247(a)(1)	RSS 247 5.1 (2)	Hopping Channel Separation	PASS	N/A		
15.247(a)(1)	RSS 247 5.1 (4)	Dwell Time	PASS	N/A		
15.247(b)(1)	RSS 247 5.4 (2)	Peak Output Power	PASS	N/A		
15.247(b)(1)	RSS 247 5.1 (4)	Number of Hopping Frequency	PASS	N/A		
15.247(c)	RSS 247 5.5	Radiated Spurious Emission	PASS	N/A		
15.247(a)	RSS 247 5.1 (1)	99% Occupied Bandwidth & 20dB Bandwidth	PASS	99%OBW GFSK:990.8984kHz π /4-DQPSK: 1064.60kHz 8-DPSK: 1139.50kHz		

**Note:** N/A is an abbreviation for Not Applicable.



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# 3. Test Equipment

Conducted Emission Test								
Equipment Manufacturer Model No. Serial No. Last Cal. Cal. Due Date								
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Aug. 07, 2015	Aug. 06, 2016			
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Aug. 07, 2015	Aug. 06, 2016			
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 07, 2015	Aug. 06, 2016			
LISN	Rohde & Schwarz	ENV216	101131	Aug. 07, 2015	Aug. 06, 2016			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Date			
Radiation	Emission Tes	τ		T	Cal. Due			
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 29, 2015	Aug. 28, 2016			
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016			
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 28, 2015	Mar. 27, 2016			
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar. 28, 2015	Mar. 27, 2016			
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 28, 2015	Mar. 27, 2016			
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar. 28, 2015	Mar. 27, 2016			
Pre-amplifier	Sonoma	310N	185903	Mar. 28, 2015	Mar. 27, 2016			
Pre-amplifier	HP	8447B	3008A00849	Mar. 28, 2015	Mar. 27, 2016			
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 28, 2015	Mar. 27, 2016			
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A			



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## 4. Conducted Emission Test

### 4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

#### 4.1.2 Test Limit

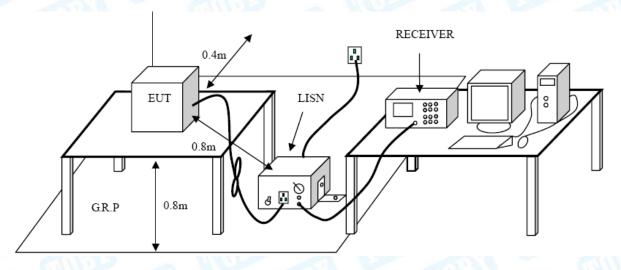
### **Conducted Emission Test Limit**

Evaguanov	Maximum RF Line Voltage (dBμV)			
Frequency	Quasi-peak Level	Average Level		
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *		
500kHz~5MHz	56	46		
5MHz~30MHz	60	50		

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

## 4.2 Test Setup



### 4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.



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I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

## 4.4 EUT Operating Mode

Please refer to the description of test mode.

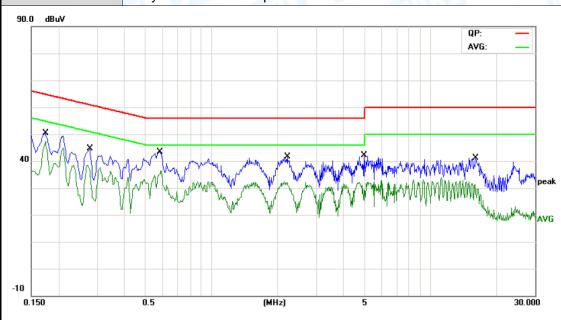
### 4.5 Test Data

Please see the next page.



EUT: HX-P270 Daze speaker **Model Name:** Temperature: 25 ℃ **Relative Humidity:** 55% **Test Voltage:** AC 120V/60 Hz Terminal: Line **Test Mode:** USB Charging with TX GFSK Mode 2402 MHz Remark: Only worse case is reported

TOBY



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBu∨	dB	dBu∀	dBu∨	dB	Detector
1	0.1740	38.18	9.97	48.15	64.76	-16.61	QP
2 *	0.1740	37.25	9.97	47.22	54.76	-7.54	AVG
3	0.2779	32.90	10.02	42.92	60.88	-17.96	QP
4	0.2779	25.66	10.02	35.68	50.88	-15.20	AVG
5	0.5820	32.02	10.06	42.08	56.00	-13.92	QP
6	0.5820	25.35	10.06	35.41	46.00	-10.59	AVG
7	2.2180	26.74	10.05	36.79	56.00	-19.21	QP
8	2.2180	21.79	10.05	31.84	46.00	-14.16	AVG
9	4.9660	28.22	9.96	38.18	56.00	-17.82	QP
10	4.9660	18.65	9.96	28.61	46.00	-17.39	AVG
11	16.0580	22.42	10.24	32.66	60.00	-27.34	QP
12	16.0580	17.97	10.24	28.21	50.00	-21.79	AVG



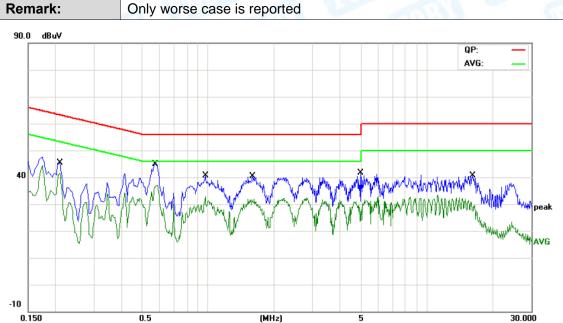
EUT:
Daze speaker
Model Name:
HX-P270

Temperature:
25 °C
Relative Humidity:
55%

Test Voltage:
AC 120V/60 Hz

Terminal:
Neutral

Test Mode:
USB Charging with TX GFSK Mode 2402 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBuV	dBu∀	dB	Detector
1		0.2100	33.94	10.02	43.96	63.20	-19.24	QP
2		0.2100	31.24	10.02	41.26	53.20	-11.94	AVG
3		0.5740	34.17	10.06	44.23	56.00	-11.77	QP
4	*	0.5740	26.76	10.06	36.82	46.00	-9.18	AVG
5		0.9700	28.52	10.07	38.59	56.00	-17.41	QP
6		0.9700	22.61	10.07	32.68	46.00	-13.32	AVG
7		1.5940	27.15	10.06	37.21	56.00	-18.79	QP
8		1.5940	21.56	10.06	31.62	46.00	-14.38	AVG
9		4.9660	27.58	9.96	37.54	56.00	-18.46	QP
10		4.9660	17.96	9.96	27.92	46.00	-18.08	AVG
11		16.1500	23.75	10.24	33.99	60.00	-26.01	QP
12		16.1500	17.29	10.24	27.53	50.00	-22.47	AVG



EUT: Daze speaker Model Name: HX-P270

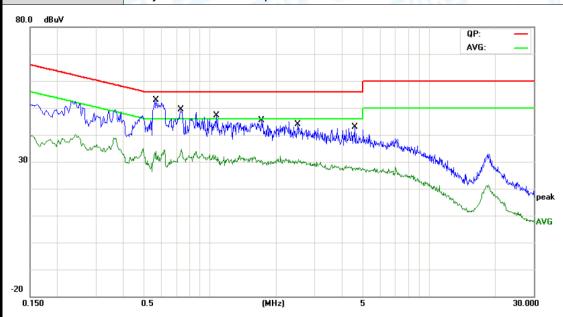
Temperature: 25 °C Relative Humidity: 55%

Test Voltage: AC 240V/60 Hz

Terminal: Line

Test Mode: USB Charging with TX GFSK Mode 2402 MHz

Remark: Only worse case is reported



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBu∀	dBu∨	dB	Detector
1	*	0.5660	37.96	10.05	48.01	56.00	-7.99	QP
2		0.5660	21.38	10.05	31.43	46.00	-14.57	AVG
3		0.7340	35.22	10.11	45.33	56.00	-10.67	QP
4		0.7340	22.95	10.11	33.06	46.00	-12.94	AVG
5		1.0700	27.81	10.06	37.87	56.00	-18.13	QP
6		1.0700	19.75	10.06	29.81	46.00	-16.19	AVG
7		1.7140	29.01	10.06	39.07	56.00	-16.93	QP
8		1.7140	20.01	10.06	30.07	46.00	-15.93	AVG
9		2.5020	25.67	10.04	35.71	56.00	-20.29	QP
10		2.5020	19.47	10.04	29.51	46.00	-16.49	AVG
11		4.5660	22.96	9.97	32.93	56.00	-23.07	QP
12		4.5660	16.80	9.97	26.77	46.00	-19.23	AVG



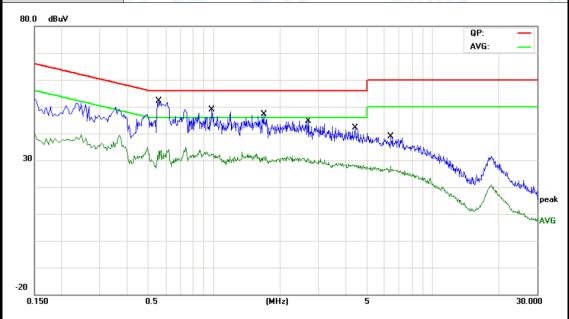
EUT: Daze speaker Model Name: HX-P270
Temperature: 25 °C Relative Humidity: 55%

Test Voltage: AC 240V/60 Hz

Terminal: Neutral

Test Mode: USB Charging with TX GFSK Mode 2402 MHz

Remark: Only worse case is reported



No. M	Λk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBu∨	dBu∀	dB	Detector
1 *	٠ (	0.5580	38.05	10.02	48.07	56.00	-7.93	QP
2	(	0.5580	21.76	10.02	31.78	46.00	-14.22	AVG
3	(	0.9780	28.22	10.15	38.37	56.00	-17.63	QP
4	(	0.9780	21.09	10.15	31.24	46.00	-14.76	AVG
5	,	1.6860	27.84	10.09	37.93	56.00	-18.07	QP
6	,	1.6860	19.49	10.09	29.58	46.00	-16.42	AVG
7	2	2.6940	25.46	10.06	35.52	56.00	-20.48	QP
8	2	2.6940	19.57	10.06	29.63	46.00	-16.37	AVG
9	4	4.4140	22.96	10.06	33.02	56.00	-22.98	QP
10	2	4.4140	17.33	10.06	27.39	46.00	-18.61	AVG
11	(	3.4180	21.79	10.06	31.85	60.00	-28.15	QP
12	(	3.4180	15.86	10.06	25.92	50.00	-24.08	AVG



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## 5. Radiated Emission Test

## 5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

### Radiated Emission Limit (9 kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

## Radiated Emission Limit (Above 1000MHz)

Frequency	Class B (dBuV/	m)(at 3m)
(MHz)	Peak	Average
Above 1000	74	54

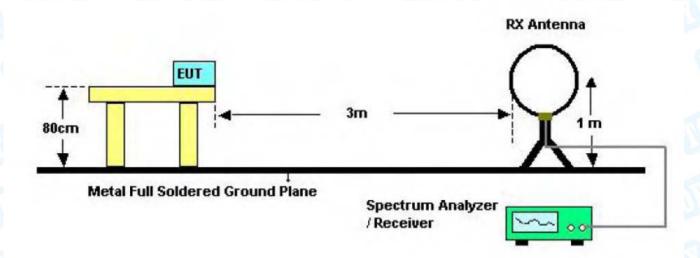
### Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m)

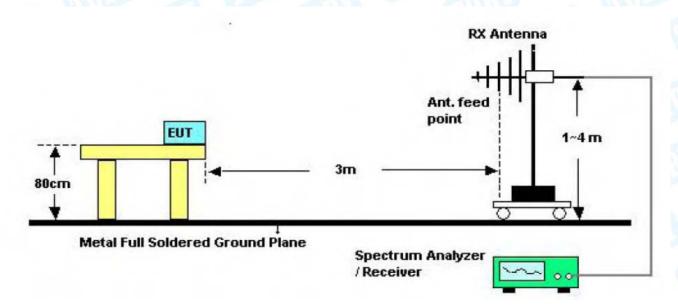


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## 5.2 Test Setup

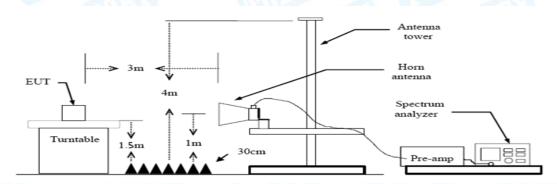


Bellow 30MHz Test Setup



**Bellow 1000MHz Test Setup** 





**Above 1GHz Test Setup** 

### 5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

## 5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power in TX mode.

### 5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1 Kz with Peak Detector for Average Values.

Test data please refer the following pages.



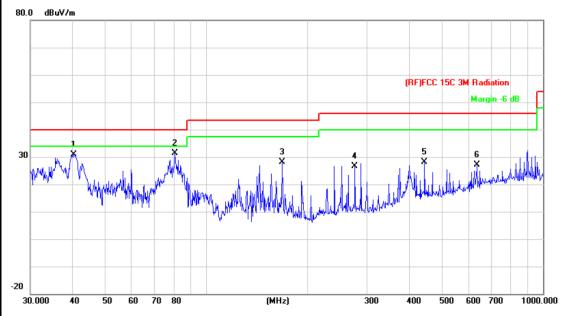
Page: 20 of 93

EUT:		Daze	speaker	A MAL	Model Na	ame :	HX-P2	.70
empe	rature:	25 ℃		33	Relative	Humidity:	55%	11/1
est Vo	oltage:	DC 5	V			-01	R.F.	
Ant. Po	ol.	Horiz	ontal	WILL STATE		MA		
Test Mo	ode:	TX G	FSK Mode	2402MHz	CITI'S	3	· GV	على
Remarl		Only	worse case	is reported	Comment		1	
80.0 dE	BuV/m							
30	1 **		2	3 *	* 5 * *	(RF)FCC 15C 3I	M Radiation Margin -6 d	6 ×
المرافيدا		ank I was	"V/Alahan"	and the property of the second second	MAIN TO THE			
-20 30.000		60 70	80	(MHz)	300	400 500	600 700	1000.000
-20 30.000	40 50	60 70	80 Reading Level		300 Measure- ment	400 500 Limit	600 700 Over	1000.000
-20 30.000	40 50 Mk. F		Reading	Correct I	Measure-			1000.000
-20 30.000	40 50 Mk. F	req.	Reading Level	Correct I Factor	Measure- ment	<b>Limit</b> dBuV/m	Over	
-20 30.000 No.	40 50 Mk. F	req. 1Hz	Reading Level	Correct I Factor	Measure- ment dBuV/m	Limit dBuV/m 40.00	<b>Over</b>	Detecto
-20 30.000 No.	Mk. F	req. 1Hz 2764	Reading Level dBuV 43.24	Correct I Factor dB/m -20.70	Measure- ment dBuV/m 22.54	Limit dBuV/m 40.00	Over dB -17.46	Detector peal
-20 30.000 No.	Mk. F 41.2 84.7	req. 1Hz 2764 1098	Reading Level dBuV 43.24 48.51	Correct Factor  dB/m -20.70 -23.03	Measure- ment dBuV/m 22.54 25.48 30.55	Limit  dBuV/m  40.00  40.00  43.50	Over  dB  -17.46  -14.52  -12.95	Detector peal peal
No. 1 2 3 4	Mk. F 41.2 84.7 167. 252.	req. 1Hz 2764 1098 8240 0627	Reading Level dBuV 43.24 48.51 51.59 52.69	Correct Factor  dB/m -20.70 -23.03 -21.04 -18.07	Measure- ment  dBuV/m  22.54  25.48  30.55  34.62	Limit  dBuV/m  40.00  40.00  43.50  46.00	Over  dB  -17.46  -14.52  -12.95  -11.38	Detector peal peal peal
No.	Mk. F 41.2 84.7 167. 252. * 287.	req. 1Hz 2764 1098 8240	Reading Level dBuV 43.24 48.51 51.59	Correct Factor  dB/m -20.70 -23.03 -21.04	Measure- ment dBuV/m 22.54 25.48 30.55	Limit  dBuV/m  40.00  40.00  43.50	Over  dB  -17.46  -14.52  -12.95	Detector peal peal



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Daze speaker	Model Name :	HX-P270					
25 ℃	Relative Humidity:	55%					
DC 5V		13					
Vertical							
TX GFSK Mode 2402MHz		LITT.					
Only worse case is reported	Only worse case is reported						
	25 °C  DC 5V  Vertical  TX GFSK Mode 2402MHz	25 °C Relative Humidity:  DC 5V  Vertical  TX GFSK Mode 2402MHz					



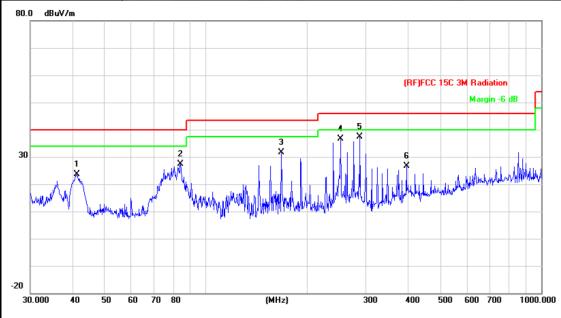
1 40.4172 51.29 -20.33 30.96 40.00 -9.04 per 2 * 80.6440 54.75 -23.25 31.50 40.00 -8.50 per 3 167.8240 49.25 -21.04 28.21 43.50 -15.29 per 4 276.1235 44.26 -17.55 26.71 46.00 -19.29 per 5 444.8514 40.63 -12.55 28.08 46.00 -17.92 per 3 -12.55 28.08 46.00		No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
2 * 80.6440 54.75 -23.25 31.50 40.00 -8.50 pe 3 167.8240 49.25 -21.04 28.21 43.50 -15.29 pe 4 276.1235 44.26 -17.55 26.71 46.00 -19.29 pe 5 444.8514 40.63 -12.55 28.08 46.00 -17.92 pe				MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
3 167.8240 49.25 -21.04 28.21 43.50 -15.29 pe 4 276.1235 44.26 -17.55 26.71 46.00 -19.29 pe 5 444.8514 40.63 -12.55 28.08 46.00 -17.92 pe	1			40.4172	51.29	-20.33	30.96	40.00	-9.04	peak
4 276.1235 44.26 -17.55 26.71 46.00 -19.29 pe 5 444.8514 40.63 -12.55 28.08 46.00 -17.92 pe	2	<u>-</u>	*	80.6440	54.75	-23.25	31.50	40.00	-8.50	peak
5 444.8514 40.63 -12.55 28.08 46.00 -17.92 pe	3	3		167.8240	49.25	-21.04	28.21	43.50	-15.29	peak
	4			276.1235	44.26	-17.55	26.71	46.00	-19.29	peak
6 636.1340 35.67 -8.61 27.06 46.00 -18.94 pe	5	5		444.8514	40.63	-12.55	28.08	46.00	-17.92	peak
	6	5		636.1340	35.67	-8.61	27.06	46.00	-18.94	peak

<sup>\*:</sup>Maximum data x:Over limit !:over margin



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EUT:	Daze speaker	Model Name :	HX-P270				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5V		77.0				
Ant. Pol.	Horizontal						
Test Mode:	TX π/4-DQPSK Mode 2402	MHz	CHILL				
Remark: Only worse case is reported							
80.0 dBuV/m							



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		41.2764	44.24	-20.70	23.54	40.00	-16.46	peak
2		84.1098	50.51	-23.03	27.48	40.00	-12.52	peak
3		167.8240	52.59	-21.04	31.55	43.50	-11.95	peak
4		252.0627	54.69	-18.07	36.62	46.00	-9.38	peak
5	*	287.9904	54.65	-17.32	37.33	46.00	-8.67	peak
6		396.2412	39.78	-13.05	26.73	46.00	-19.27	peak

<sup>\*:</sup>Maximum data x:Over limit !:over margin



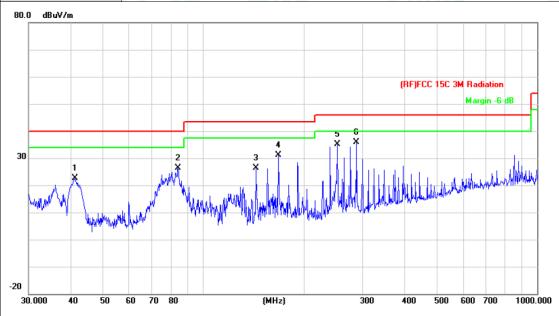
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UT:	Daze sp	peaker	- BAG	Model Nan	ne :	HX-P270	
emperature:	<b>25</b> ℃		33	Relative H	umidity:	55%	M
est Voltage:	DC 5V	ART				133	
nt. Pol.	Vertica	al			I AM		M.
est Mode:	<b>TX</b> π/	4-DQPSK	Mode 2402	MHz	9	· OI	المالية
emark:	Only w	orse case	is reported	Charles		1	
80.0 dBuV/m							
		2	3 ×		(RF)FCC 15	C 3M Radiation Margin -6 c	6 X
30	Allen James James A.	White and the	1.1			had a fill had a fill of the second	
30.000 40 50		80 Reading	(MHz)	300 Measure- ment	400 500 Limit	0 600 700 Over	1000.00
30.000 40 50 No. Mk. F		80	(MHz)  Correct Factor			Over	1000.00
No. Mk. F	req.	80 Reading Level	(MHz)	Measure- ment	Limit	Over	
No. Mk. F	req. 1Hz	Reading Level	(MHz)  Correct Factor  dB/m	Measure- ment dBuV/m	<b>Limit</b> dBuV/m	<b>Over</b>	Detecto
No. Mk. F  1 40.4 2 * 80.6	req. <sup>1Hz</sup> 4172	Reading Level dBuV 51.79	(MHz)  Correct Factor dB/m -20.33	Measure- ment dBuV/m 31.46	Limit dBuV/m 40.00	Over dB -8.54	Detecto <b>peak</b>
No. Mk. F  1 40.4 2 * 80.6 3 167.	req.  1Hz  4172  3440	Reading Level dBuV 51.79 56.25	Correct Factor dB/m -20.33 -23.25	Measurement dBuV/m 31.46 33.00	Limit dBuV/m 40.00 40.00	Over  dB  -8.54  -7.00	Detecto peak peak
No. Mk. F  1 40.4 2 * 80.6 3 167. 4 287.	req. 1Hz 4172 3440 8240	Reading Level dBuV 51.79 56.25 48.75	(MHz)  Correct Factor  dB/m  -20.33  -23.25  -21.04	Measure- ment dBuV/m 31.46 33.00 27.71	Limit dBuV/m 40.00 40.00 43.50	Over  dB  -8.54  -7.00  -15.79	Detecto peak peak peak



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EUT:	Daze speaker	Model Name :	HX-P270				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5V		13				
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX 8-DPSK Mode 2402 MHz		C. C. C.				
Remark:	Only worse case is reported						



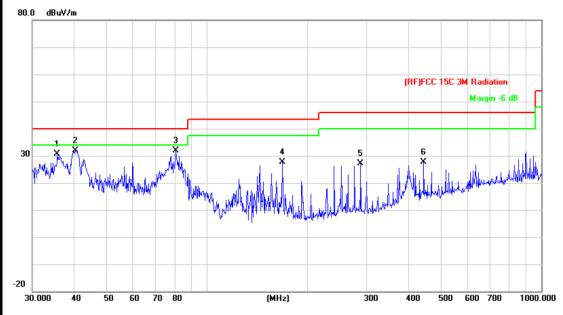
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		41.2765	43.24	-20.70	22.54	40.00	-17.46	peak
2		84.1100	49.51	-23.03	26.48	40.00	-13.52	peak
3		143.8295	47.96	-21.67	26.29	43.50	-17.21	peak
4		167.8243	52.09	-21.04	31.05	43.50	-12.45	peak
5		252.0627	53.19	-18.07	35.12	46.00	-10.88	peak
6	*	287.9904	53.15	-17.32	35.83	46.00	-10.17	peak

<sup>\*:</sup>Maximum data x:Over limit !:over margin



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EUT:	Daze speaker	Model Name :	HX-P270			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5V	300	13			
Ant. Pol.	Vertical					
Test Mode:	TX 8-DPSK Mode 2402MHz					
Remark:	Only worse case is reported					



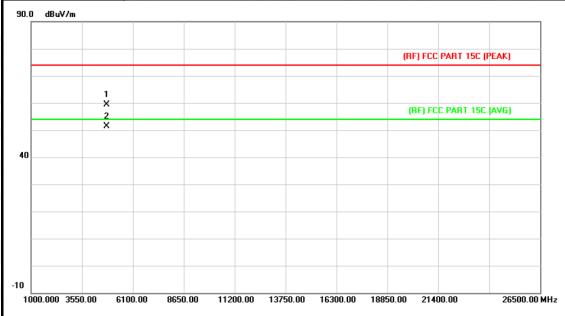
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		35.6240	48.19	-17.45	30.74	40.00	-9.26	peak
2		40.4172	52.29	-20.33	31.96	40.00	-8.04	peak
3	*	80.6442	55.25	-23.25	32.00	40.00	-8.00	peak
4		167.8243	48.75	-21.04	27.71	43.50	-15.79	peak
5		287.9904	44.33	-17.32	27.01	46.00	-18.99	peak
6		444.8514	40.13	-12.55	27.58	46.00	-18.42	peak

<sup>\*:</sup>Maximum data x:Over limit !:over margin



Report No.: TB-FCC145251 Page: 26 of 93

EUT:	Daze speaker	Model Name :	HX-P270				
	V 4 V 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5V	C 5V					
Ant. Pol.	Horizontal						
Test Mode:	TX GFSK Mode 2402MHz	TX GFSK Mode 2402MHz					
Remark:	No report for the emission v	No report for the emission which more than 10 dB below the					
	prescribed limit.						

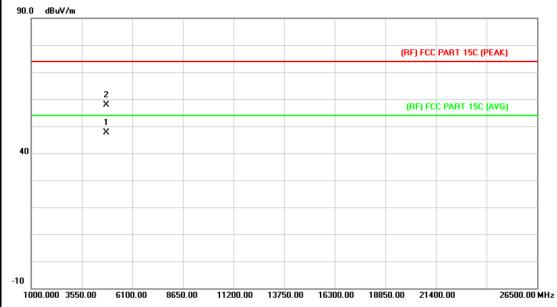


No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4803.880	46.02	13.44	59.46	74.00	-14.54	peak
2	*	4803.913	38.01	13.44	51.45	54.00	-2.55	AVG



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EUT:	Daze speaker	Model Name :	HX-P270			
Temperature:	25 ℃	Relative Humidity: 559				
Test Voltage:	DC 5V					
Ant. Pol.	Vertical	Vertical				
Test Mode:	TX GFSK Mode 2402MHz		CHILITIES			
Remark: No report for the emission which more than 10 dB below the prescribed limit.						

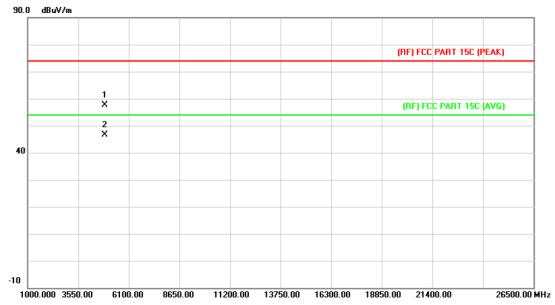


No	. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4803.907	34.09	13.44	47.53	54.00	-6.47	AVG
2		4803.952	44.54	13.44	57.98	74.00	-16.02	peak



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EUT:	Daze speaker	Model Name :	HX-P270				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5V						
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX GFSK Mode 2441MHz		LITTLE OF				
Remark:	Remark: No report for the emission which more than 10 dB below the prescribed limit.						

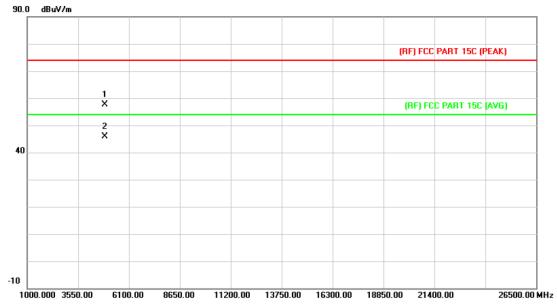


No	. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4881.928	43.81	13.90	57.71	74.00	-16.29	peak
2	*	4881.937	32.64	13.90	46.54	54.00	-7.46	AVG



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EUT:	Daze speaker	Model Name :	HX-P270			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5V					
Ant. Pol.	Vertical					
Test Mode:	TX GFSK Mode 2441MHz		LITTLE OF			
Remark:	No report for the emission w prescribed limit.	hich more than 10 dB b	elow the			

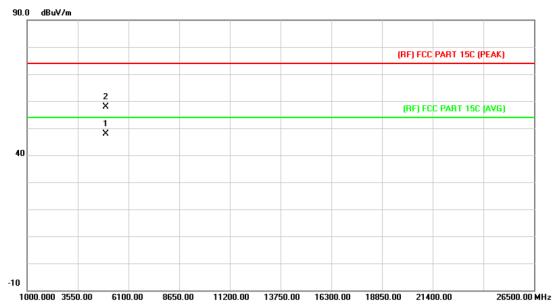


No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4881.793	43.80	13.90	57.70	74.00	-16.30	peak
2	*	4881.898	31.92	13.90	45.82	54.00	-8.18	AVG



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Daze speaker	Model Name :	HX-P270					
25 ℃	Relative Humidity:	55%					
DC 5V	DC 5V						
Horizontal							
TX GFSK Mode 2480MHz	CU1372	CHIT: N					
Remark: No report for the emission which more than 10 dB below the prescribed limit.							
	25 ℃ DC 5V Horizontal TX GFSK Mode 2480MHz No report for the emission will	25 °C Relative Humidity:  DC 5V  Horizontal  TX GFSK Mode 2480MHz  No report for the emission which more than 10 dB be					

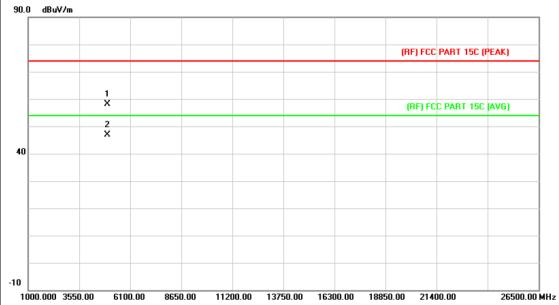


No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4960.021	33.49	14.36	47.85	54.00	-6.15	AVG
2		4960.393	43.55	14.36	57.91	74.00	-16.09	peak



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EUT:	Daze speaker	Model Name :	HX-P270
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5V		(3.9)
Ant. Pol.	Vertical		
Test Mode:	TX GFSK Mode 2480MHz		LINE TO SERVICE
Remark:	No report for the emission prescribed limit.	which more than 10 dB b	elow the
00 0 dD.3//m			

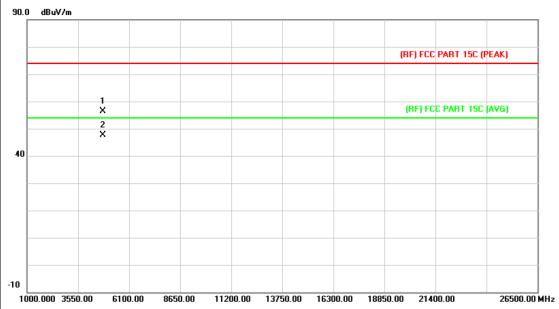


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4959.838	43.85	14.36	58.21	74.00	-15.79	peak
2	*	4959.976	32.44	14.36	46.80	54.00	-7.20	AVG



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EUT:	Daze speaker	Model Name :	HX-P270				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 5V		13				
Ant. Pol.	Horizontal						
Test Mode:	TX 8-DPSK Mode 2402MHz		UMILLE				
Remark:	Remark: No report for the emission which more than 10 dB below the prescribed limit.						
00.0 40.374							

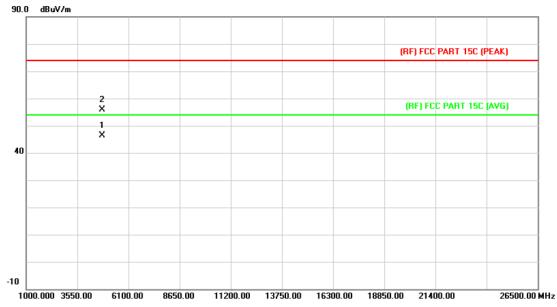


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	O∨er	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4803.588		13.44		74.00	-17.67	peak
2	*	4804.133	34.24	13.44	47.68	54.00	-6.32	AVG



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EUT:	Daze speaker	Model Name :	HX-P270
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		
Test Mode:	TX 8-DPSK Mode 2402MHz		CHITT: SO
Remark:	No report for the emission which prescribed limit.	h more than 10 dB bel	ow the

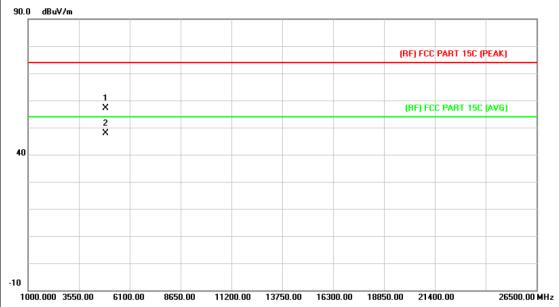


No	. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4803.927	32.87	13.44	46.31	54.00	-7.69	AVG
2		4804.222	42.40	13.44	55.84	74.00	-18.16	peak



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EUT:	Daze speaker	Model Name :	HX-P270
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 5V	1	(3/3)
Ant. Pol.	Horizontal		
Test Mode:	TX 8-DPSK Mode 2441MHz		LINE TO STATE OF THE PARTY OF T
Remark:	No report for the emission was prescribed limit.	hich more than 10 dB b	elow the

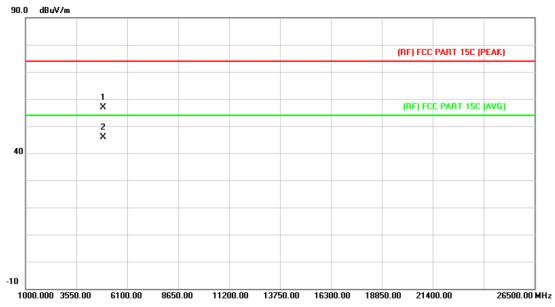


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4881.872	43.13	13.90	57.03	74.00	-16.97	peak
2	*	4882.270	34.08	13.90	47.98	54.00	-6.02	AVG



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EUT:	Daze speaker Model Name :		HX-P270			
Temperature:	25 ℃	25 ℃ Relative Humidity:				
Test Voltage:	DC 5V					
Ant. Pol.	Vertical					
Test Mode:	TX 8-DPSK Mode 2441MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

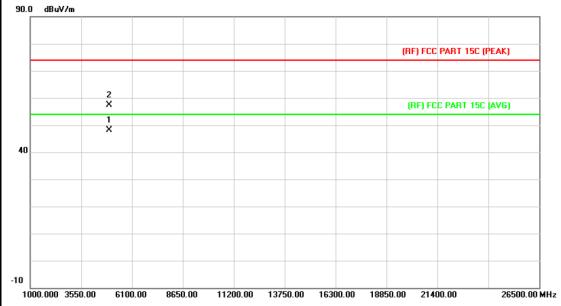


No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4881.873	42.95	13.90	56.85	74.00	-17.15	peak
2	*	4882.304	31.97	13.90	45.87	54.00	-8.13	AVG



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EUT:	Daze speaker	Model Name :	HX-P270			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5V					
Ant. Pol.	Horizontal					
Test Mode:	TX 8-DPSK Mode 2480MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

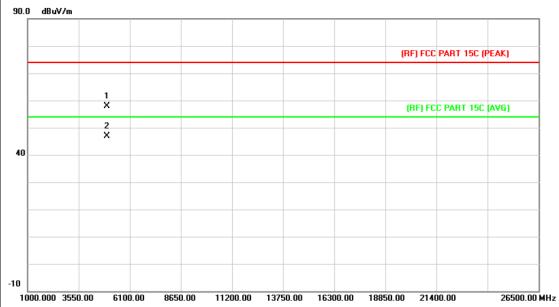


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4959.706	33.85	14.36	48.21	54.00	-5.79	AVG
2		4960.169	42.98	14.36	57.34	74.00	-16.66	peak



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EUT:	Daze speaker	Model Name :	HX-P270					
Temperature:	<b>25</b> ℃	55%						
Test Voltage:	DC 5V	DC 5V						
Ant. Pol.	Vertical	Vertical						
Test Mode:	TX 8-DPSK Mode 2480MH	z	O. C. C.					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.							



No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4959.643	43.54	14.36	57.90	74.00	-16.10	peak
2	*	4959.802	32.53	14.36	46.89	54.00	-7.11	AVG



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# 6. Restricted Bands Requirement

#### 6.1 Test Standard and Limit

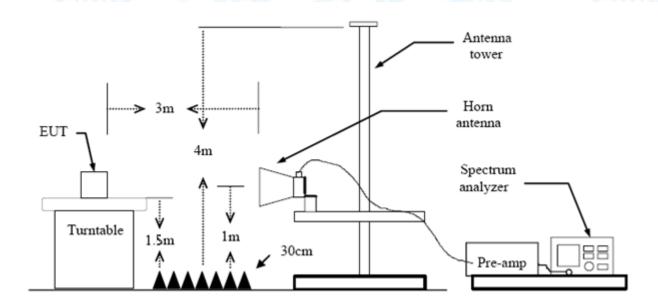
6.1.1 Test Standard FCC Part 15.209 FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Class B (dE	BuV/m)(at 3m)
Band (MHz)	Peak	Average
310 ~2390	74	54
2483.5 ~2500	74	54

Note: All restriction bands have been tested, only the worst case is reported.

# 6.2 Test Setup



#### 6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.



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(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

## 6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

#### 6.4 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=1 KHz with Peak Detector for Average Values.

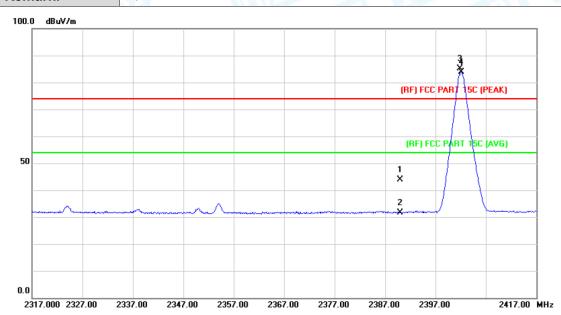
All restriction bands have been tested, only the worst case is reported.



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# (1) Radiation Test

EUT:	Daze speaker	Model Name :	HX-P270					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 5V	DC 5V						
Ant. Pol.	Horizontal		THUE OF					
Test Mode:	TX GFSK Mode 2402MHz	TX GFSK Mode 2402MHz						
Remark:	N/A							

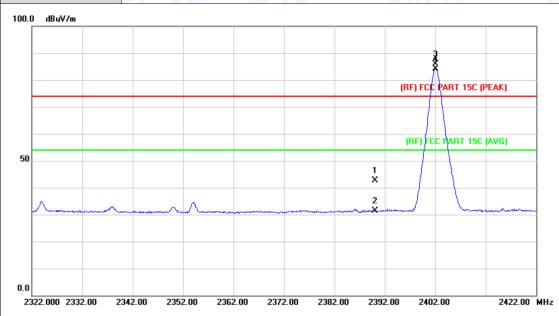


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	42.99	0.77	43.76	74.00	-30.24	peak
2		2390.000	30.93	0.77	31.70	54.00	-22.30	AVG
3	Х	2401.900	84.22	0.82	85.04	Fundamental Frequency		peak
4	*	2402.100	83.00	0.82	83.82	Fundamenta	al Frequency	AVG



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EUT:	Daze speaker	Model Name :	HX-P270					
Temperature:	<b>25</b> ℃	Relative Humidity:	55%					
Test Voltage:	DC 5V	DC 5V						
Ant. Pol.	Vertical							
Test Mode:	TX GFSK Mode 2402MHz	W. 197						
Remark:	N/A	The same of the sa						
100 0 dP.4//								

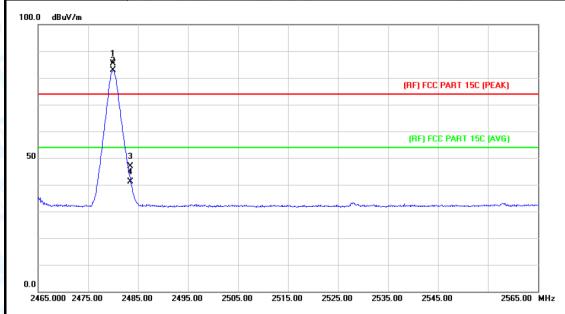


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	O∨er	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.89	0.77	42.66	74.00	-31.34	peak
2		2390.000	30.49	0.77	31.26	54.00	-22.74	AVG
3	Х	2402.000	85.15	0.82	85.97	Fundamental	Frequency	peak
4	*	2402.000	83.35	0.82	84.17	Fundamental	Frequency	AVG



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EUT:	Daze speaker	Model Name :	HX-P270					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 5V	DC 5V						
Ant. Pol.	Horizontal							
Test Mode:	TX GFSK Mode 2480 MHz	TX GFSK Mode 2480 MHz						
Remark:	N/A	Contract of the second						

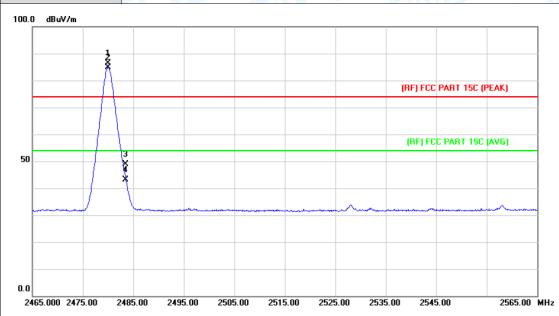


N	lo. Mk	ι. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	O∨er	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Х	2480.000	84.17	1.15	85.32	Fundamental	Frequency	peak
2	*	2480.000	81.61	1.15	82.76	Fundamental	Frequency	AVG
3		2483.500	45.78	1.17	46.95	74.00	-27.05	peak
4		2483.500	40.06	1.17	41.23	54.00	-12.77	AVG



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	EUT:	Daze speaker	Model Name :	HX-P270					
١	Temperature:	25 ℃	Relative Humidity:	55%					
	Test Voltage:	DC 5V		133					
	Ant. Pol.	Vertical							
	Test Mode:	TX GFSK Mode 2480 MHz	TX GFSK Mode 2480 MHz						
	Remark:	N/A	V/A						

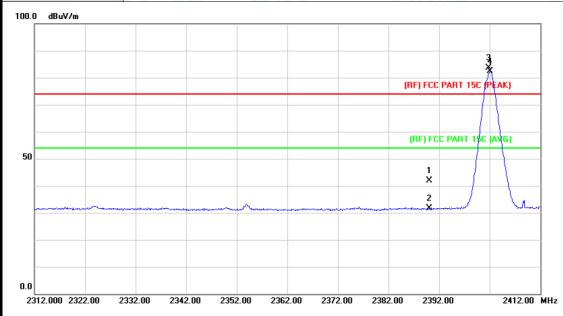


No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Х	2480.000	85.20	1.15	86.35	Fundamental Frequency		peak
2	*	2480.000	83.69	1.15	84.84	Fundamental Frequency		AVG
3		2483.500	47.70	1.17	48.87	74.00	-25.13	peak
4		2483.500	41.94	1.17	43.11	54.00	-10.89	AVG



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EUT:	Daze speaker Model Name :		HX-P270					
Temperature:	<b>25</b> ℃	25 °C Relative Humidity: 55%						
Test Voltage:	DC 5V	DC 5V						
Ant. Pol.	Horizontal							
Test Mode:	TX 8-DPSK Mode 2402MHz	TX 8-DPSK Mode 2402MHz						
Remark:	N/A	Charles and the second						

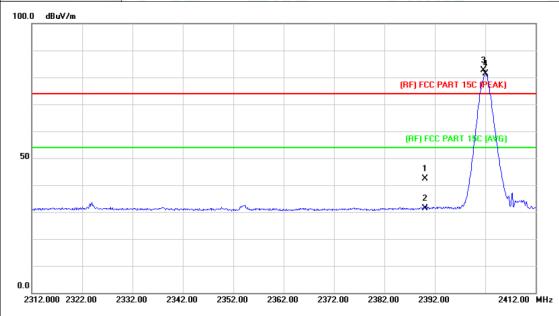


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	O∨er	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.19	0.77	41.96	74.00	-32.04	peak
2		2390.000	30.78	0.77	31.55	54.00	-22.45	AVG
3	Χ	2401.800	82.80	0.82	83.62	Fundamental	Frequency	peak
4	*	2402.000	81.47	0.82	82.29	Fundamental	Frequency	AVG



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EUT:	Daze speaker	Model Name :	HX-P270		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 5V				
Ant. Pol.	Vertical				
Test Mode:	TX 8-DPSK Mode 2402MHz				
Remark:	Remark: N/A				

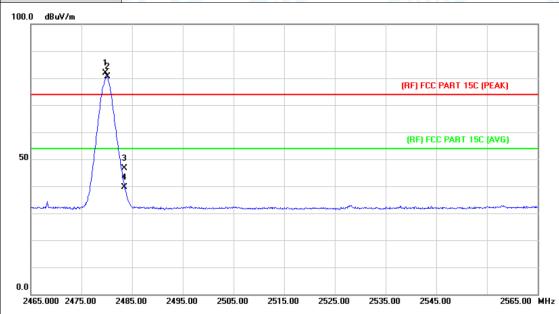


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.73	0.77	42.50	74.00	-31.50	peak
2		2390.000	30.53	0.77	31.30	54.00	-22.70	AVG
3	Х	2401.700	81.85	0.82	82.67	Fundamenta	I Frequency	peak
4	*	2402.100	80.57	0.82	81.39	Fundamenta	l Frequency	AVG



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EUT:	Daze speaker	Model Name :	HX-P270			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5V					
Ant. Pol.	Horizontal	Horizontal				
Test Mode:	TX 8-DPSK Mode 2480MHz					
Remark:	N/A					

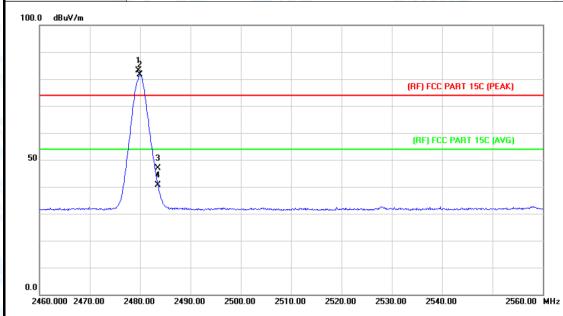


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Х	2479.700	80.66	1.15	81.81	Fundamental	Frequency	peak
2	*	2480.100	79.38	1.15	80.53	Fundamental	Frequency	AVG
3		2483.500	45.58	1.17	46.75	74.00	-27.25	peak
4		2483.500	38.40	1.17	39.57	54.00	-14.43	AVG



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EUT:	Daze speaker	Model Name :	HX-P270			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 5V	DC 5V				
Ant. Pol.	Vertical	Vertical				
Test Mode:	TX 8-DPSK Mode 2480MHz					
Remark: N/A						



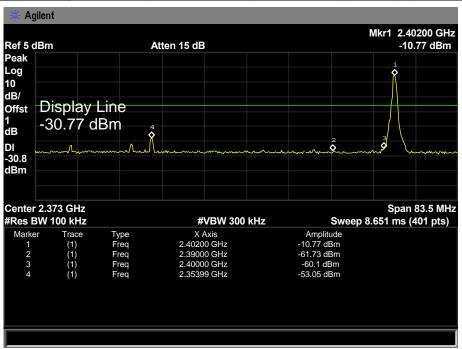
No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	O∨er	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Х	2479.700	81.96	1.15	83.11	Fundamental	Frequency	peak
2	*	2479.900	80.55	1.15	81.70	Fundamental	Frequency	AVG
3		2483.500	45.67	1.17	46.84	74.00	-27.16	peak
4		2483.500	39.44	1.17	40.61	54.00	-13.39	AVG

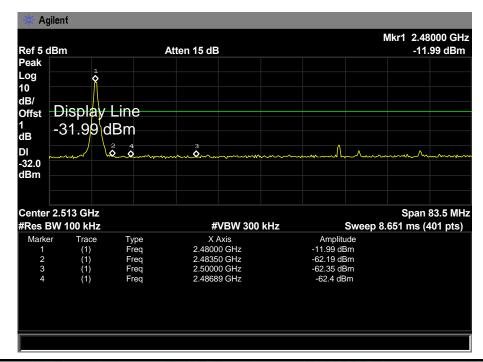




(2) Conducted Test

EUT:	Daze speaker	Model Name :	HX-P270		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.7V				
Test Mode:	TX GFSK Mode 2402MHz / 2480 MHz				
Remark:	Remark: N/A				







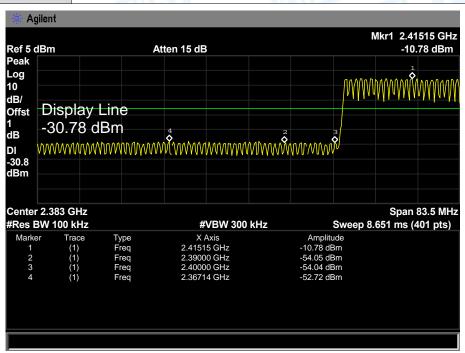
EUT: Daze speaker Model Name: HX-P270

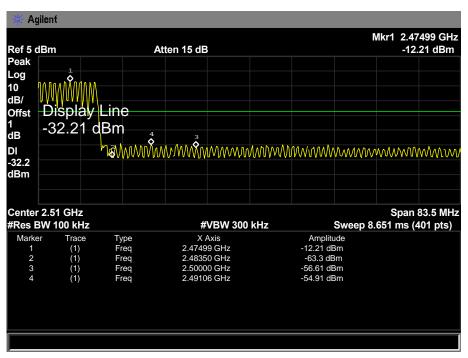
Temperature: 25 °C Relative Humidity: 55%

Test Voltage: DC 3.7V

Test Mode: GFSK Hopping Mode

Remark: N/A







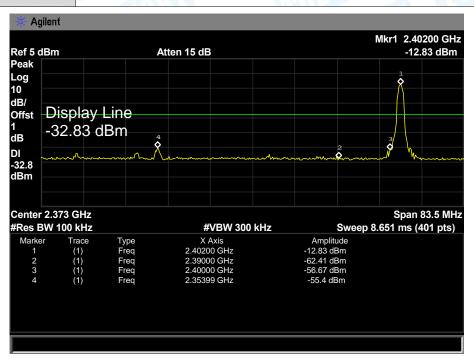
EUT: Daze speaker Model Name: HX-P270

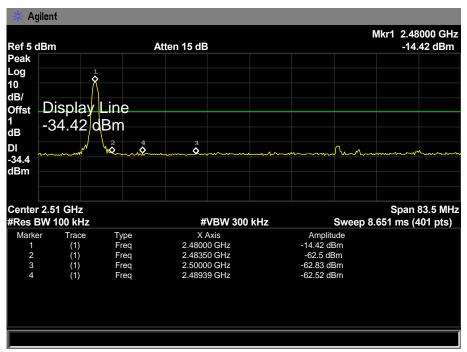
Temperature: 25 °C Relative Humidity: 55%

Test Voltage: DC 3.7V

Test Mode: TX 8-DPSK Mode 2402MHz / 2480 MHz

Remark: N/A







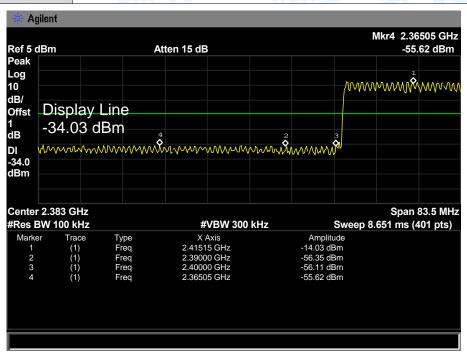
EUT: Daze speaker Model Name: HX-P270

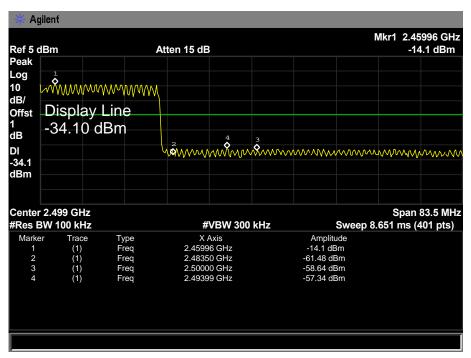
Temperature: 25 °C Relative Humidity: 55%

Test Voltage: DC 3.7V

Test Mode: 8-DPSK Hopping Mode

Remark: N/A







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# 7. Number of Hopping Channel

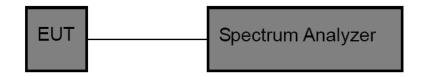
### 7.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.247 (a)(1)

6.1.2 Test Limit

Section	Test Item	Limit
15.247	Number of Hopping Channel	>15

# 7.2 Test Setup



#### 7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=100 KHz, VBW=100 KHz, Sweep time= Auto.

# 7.4 EUT Operating Condition

The EUT was set to the Hopping Mode by the Customer.

## 7.5 Test Data



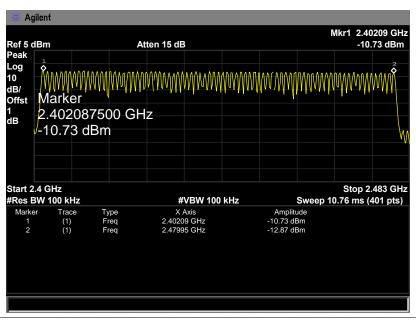
Report No.: TB-FCC145251 Page: 53 of 93

EUT:	Daze speaker	Model Name :	HX-P270
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	W Comment	33

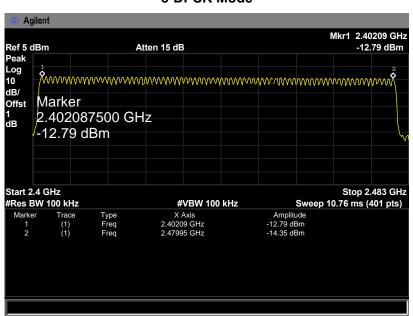
**Test Mode:** Hopping Mode (GFSK/ 8-DPSK)

Frequency Range	Quantity of Hopping Channel	Limit
2402MU- 2400MU-	79	<b>\1</b> E
2402MHz~2480MHz	79	>15

#### **GFSK Mode**



#### 8-DPSK Mode





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# 8. Average Time of Occupancy

#### 8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (a)(1)

8.1.2 Test Limit

Section	Test Item	Limit	
15.247(a)(1)/ RSS-210	Average Time of	0.4.000	
Annex 8(A8.1d)	Occupancy	0.4 sec	

# 8.2 Test Setup



#### 8.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=1MHz, VBW=1MHz.
- (3) Use video trigger with the trigger level set to enable triggering only on full pulses.
- (4) Sweep Time is more than once pulse time.
- (5) Set the center frequency on any frequency would be measure and set the frequency span to zero.
- (6) Measure the maximum time duration of one single pulse.
- (7) Set the EUT for packet transmitting.
- (8) Measure the maximum time duration of one single pulse.

# 8.4 EUT Operating Condition

The EUT was set to the Hopping Mode by the Customer.

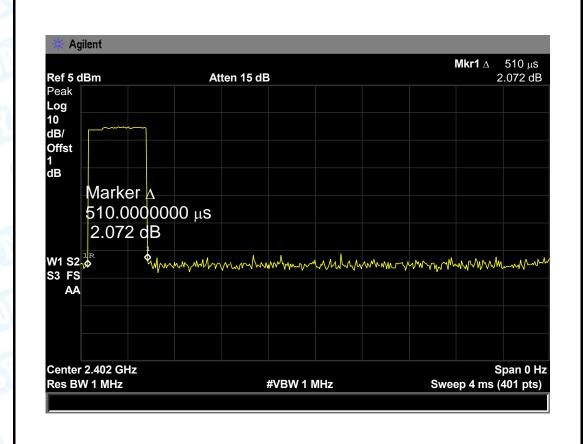


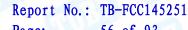
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### 8.5 Test Data

EUT:	UT:		Daze speaker Model Name :		:	HX-P270
Temperature		25 °C Relative Humidity: 55°C		55%		
Test Voltage:	Test Voltage: DC 3.7V			100		
Test Mode: Hopping Mode (GFSK DH1)				A HILL		
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		0.510	163.20			
2441		0.510	163.20	31.60	400	PASS
2480 0.510		0.510	163.20			
GESK Hopping Mode DH1						

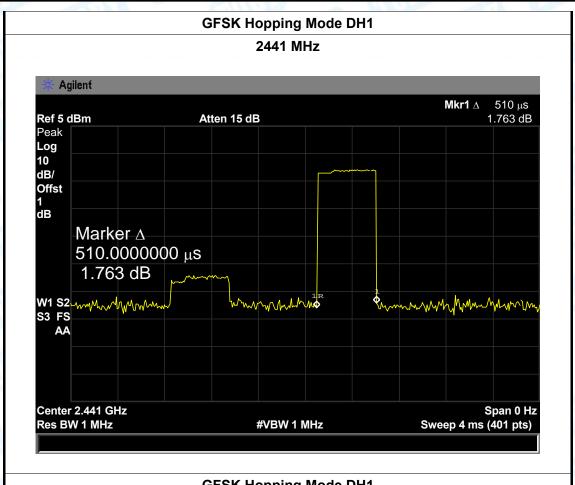
#### **GFSK Hopping Mode DH1**

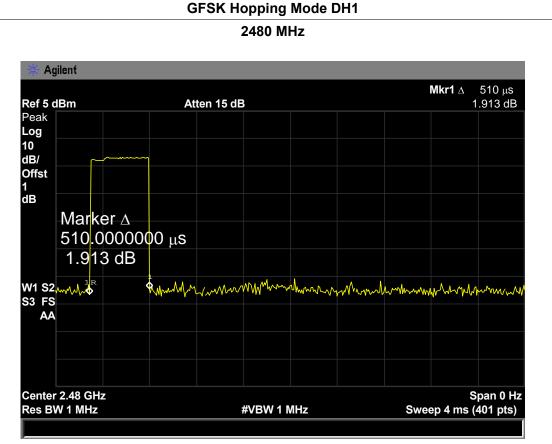






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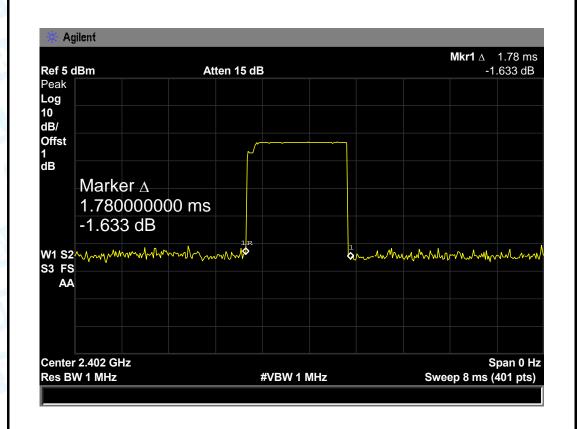




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EUT:		Daze speal	Daze speaker		ame :	HX-P270
Temperature		25 ℃		Relative Humidity:		55%
Test Voltage:		DC 3.7V				
Test Mode:		Hopping N	Mode (GFSK DH3)		Alle	
Channel (MHz)	Pu	ilse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result
2402		1.780	284.80			
2441		1.780	284.80	31.60	400	PASS
2480		1.780	284.80			

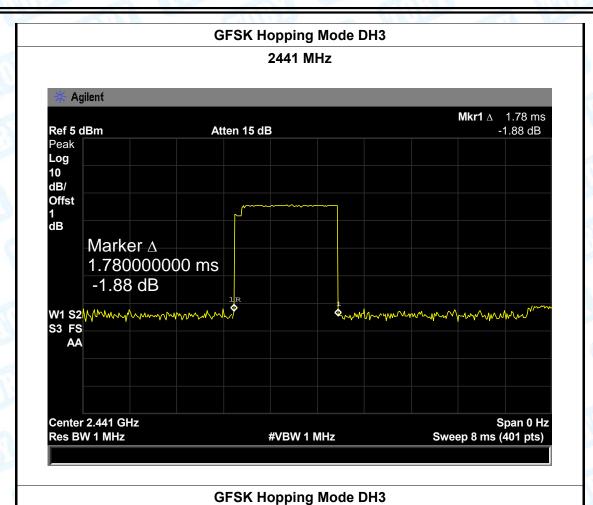
#### **GFSK Hopping Mode DH3**

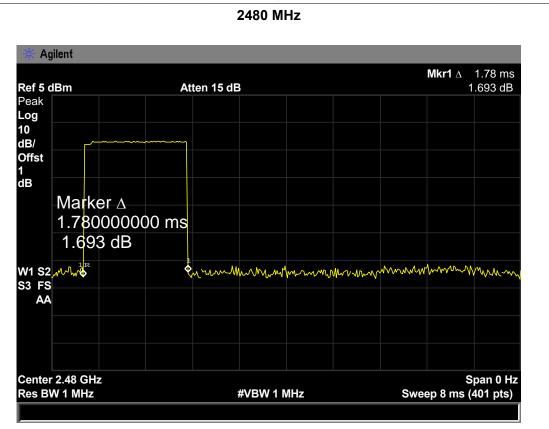






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2441

2480

3.060

3.060

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**PASS** 

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EUT:		Daze speal	ker	Model Na	ame :	HX-P270
Temperature	:	25 ℃		Relative Humidity:		55%
Test Voltage:		DC 3.7V				
Test Mode:		Hopping I	Mode (GFSK DH5)		Riber	
Channel (MHz)	Pu	lse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result
2402		3.060	326.40			

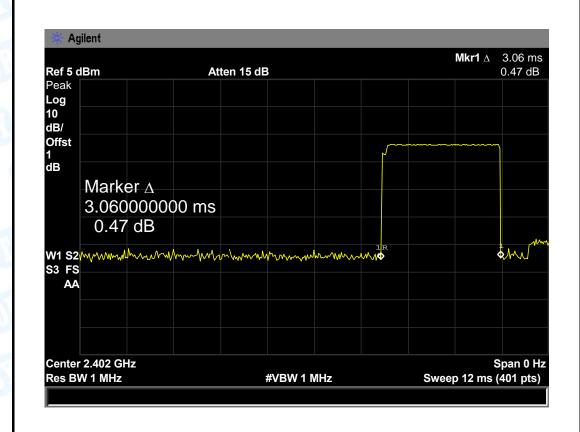
#### **GFSK Hopping Mode DH5**

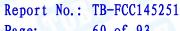
326.40

326.40

31.60

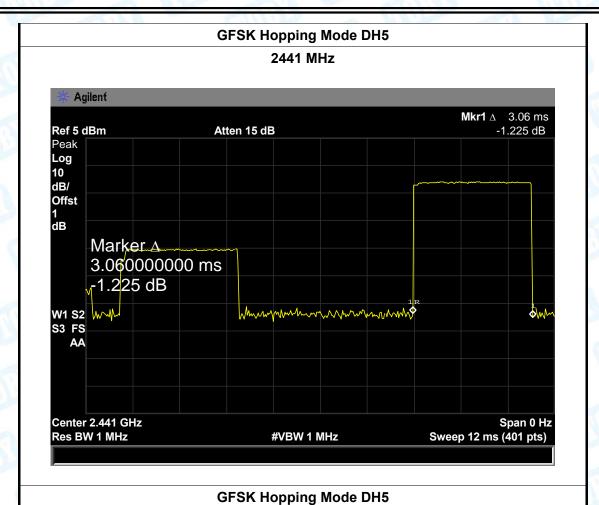
400

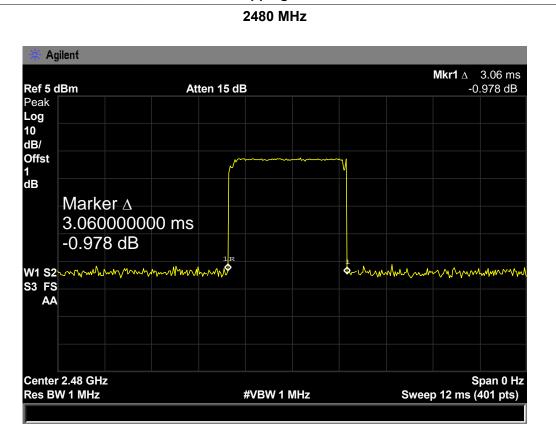






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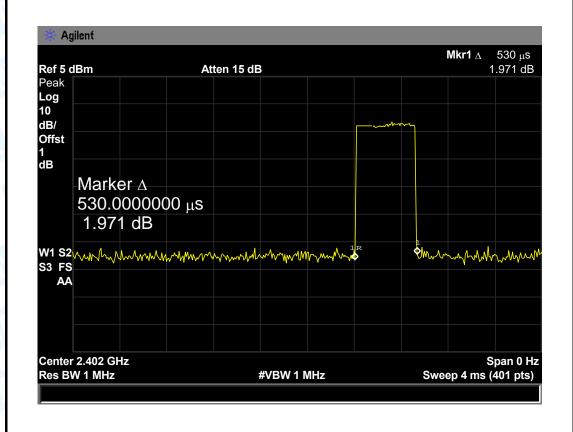




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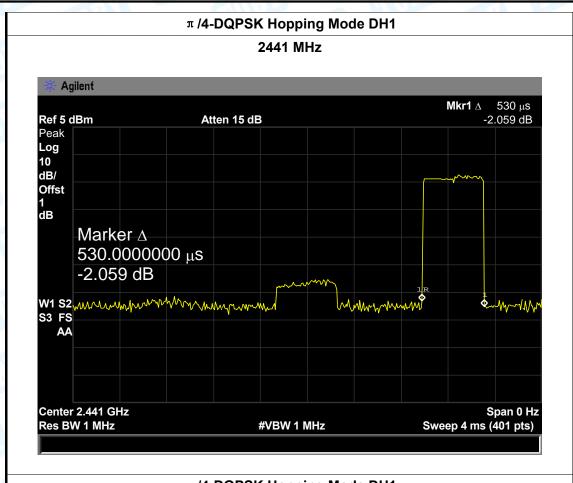
EUT:		Daze speak	Daze speaker			HX-P270
Temperature	:	25 ℃	Relative Humidity:		55%	
Test Voltage:		DC 3.7V		1		
Test Mode:		Hopping N	Mode (π/4-DQPSK [	DH1)	1111	1
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Dogulf
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		0.530	169.60			
2441		0.530	169.60	31.60	400	PASS
2480		0.530	169.60			
						1

#### $\pi$ /4-DQPSK Hopping Mode DH1



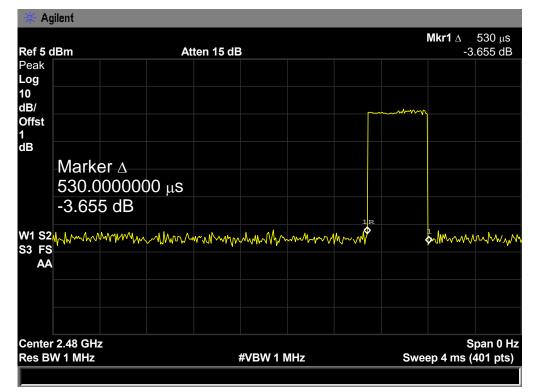


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# π /4-DQPSK Hopping Mode DH1



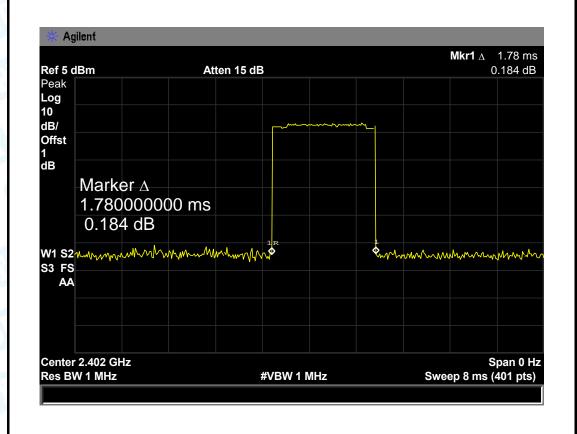




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EUT:		Daze speal	cer	Model Name	Model Name :	
Temperature		25 ℃		Relative Humidity:		55%
Test Voltage:		DC 3.7V				
Test Mode:		Hopping N	Mode (π/4-DQPSK	DH3)	All In	
Channel	Pu	Ise Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		1.780	284.80			
2441		1.800	288.00	31.60	400	PASS
2480		1.800	288.00			
- /A DODSK Hamping Mode DU2						

#### π /4-DQPSK Hopping Mode DH3

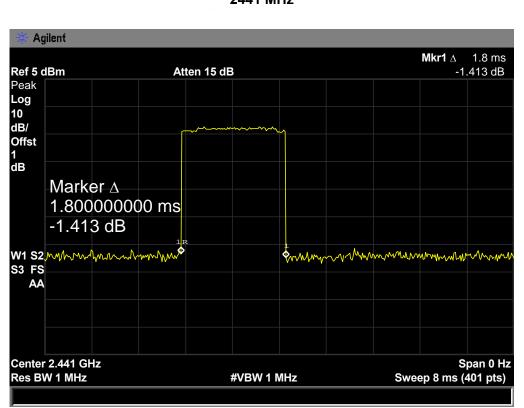




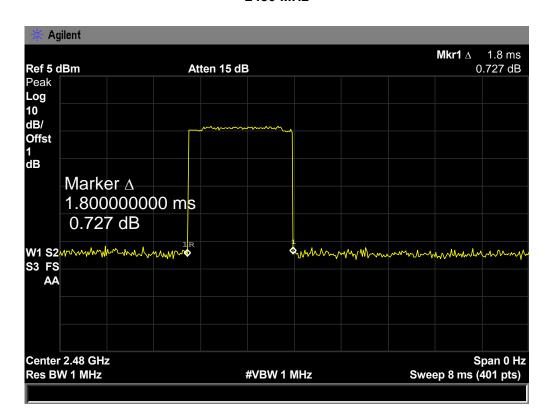
π /4-DQPSK Hopping Mode DH3

2441 MHz

Agilent



# $\pi$ /4-DQPSK Hopping Mode DH3

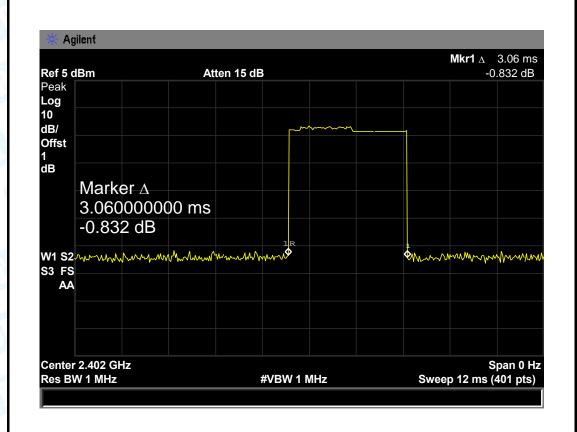


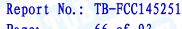


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EUT:		Daze speaker		Model Name		HX-P270
Temperature		25 ℃ Relative Humidity:		55%		
Test Voltage:		DC 3.7V		1		
Test Mode:		Hopping N	Mode (π/4-DQPSK [	DH5)	N. B.	
Channel	Pu	lse Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		3.060	326.40			
2441		3.060	326.40	31.60	400	PASS
2480		3.060	326.40			

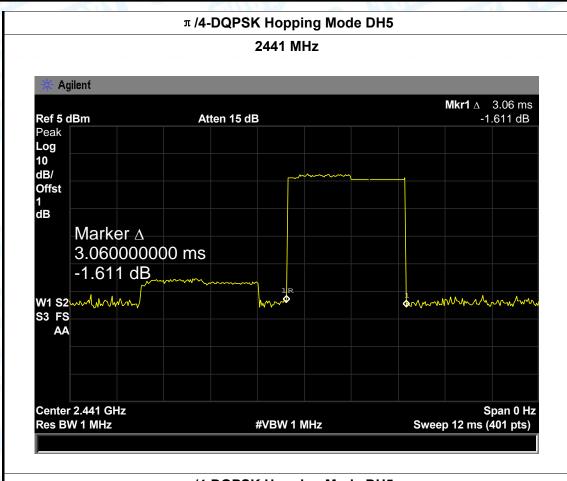
#### π /4-DQPSK Hopping Mode DH5

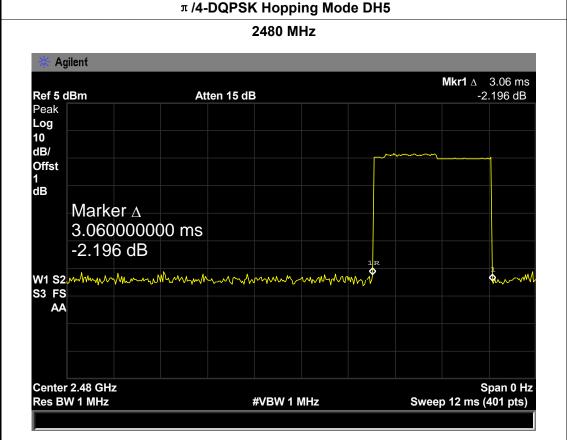






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2480

0.530

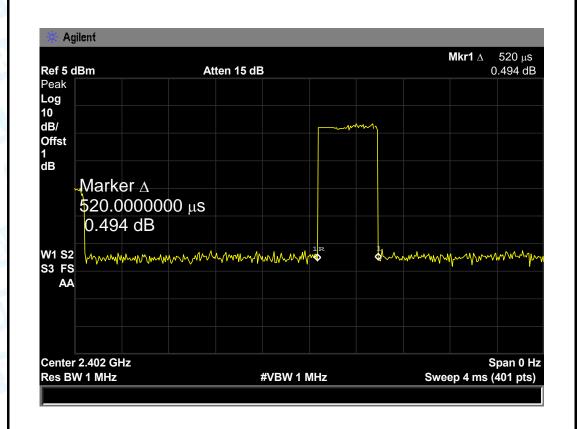
Report No.: TB-FCC145251

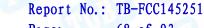
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EUT:	EUT:		Daze speaker		ime :	HX-P270		
Temperature	:	<b>25</b> ℃		25 ℃ Relati		Relative	Humidity:	55%
Test Voltage:	Test Voltage: DC 3.7V		DC 3.7V			3		
Test Mode:		Hopping I	Hopping Mode (8-DPSK DH1)					
Channel (MHz)	Pu	lse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result		
2402		0.520	166.40					
2441		0.530	169.60	31.60	400	PASS		

### 8-DPSK Hopping Mode DH1

169.60







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## 2480 MHz Agilent Mkr1 A 530 μs Ref 5 dBm Atten 15 dB 0.712 dB Peak Log 10 dB/ Offst 1 dB Marker A 530.0000000 μs 0.712 dB my way way way way mmhmmm 1 AΑ Center 2.48 GHz Span 0 Hz Res BW 1 MHz #VBW 1 MHz Sweep 4 ms (401 pts)

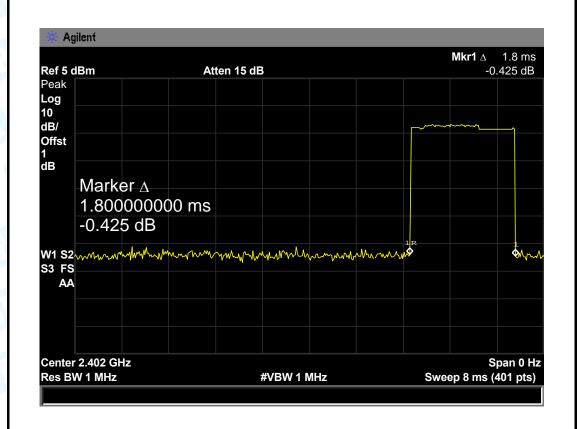


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EUT:	Daze spea	ker	Model Name :		HX-P270
Temperature	: <b>25</b> ℃		Relative Hum	idity:	55%
Test Voltage:	DC 3.7V	N. S. C.		TO S	3
Test Mode:	Hopping	Mode (8-DPSK DH3	3)		
Chamal	Dulas Timas		Period	!!4	

Channel (MHz)	Pulse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result
2402	1.800	288.00			
2441	1.800	288.00	31.60	400	PASS
2480	1.800	288.00			

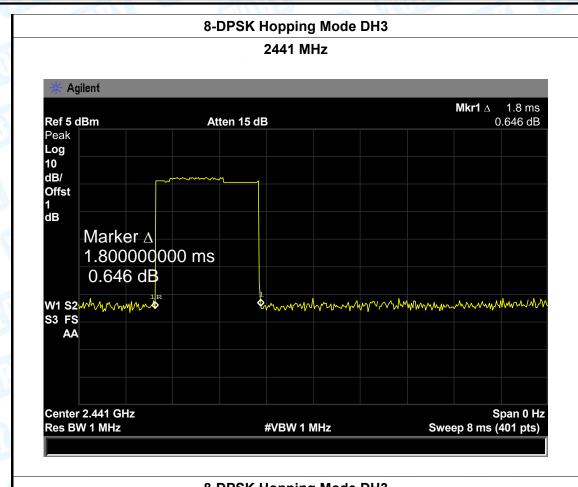
### 8-DPSK Hopping Mode DH3

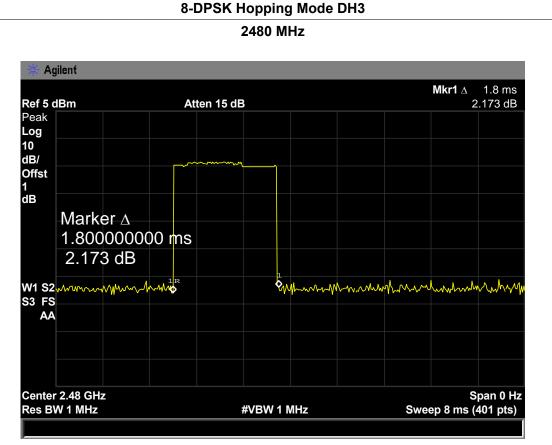






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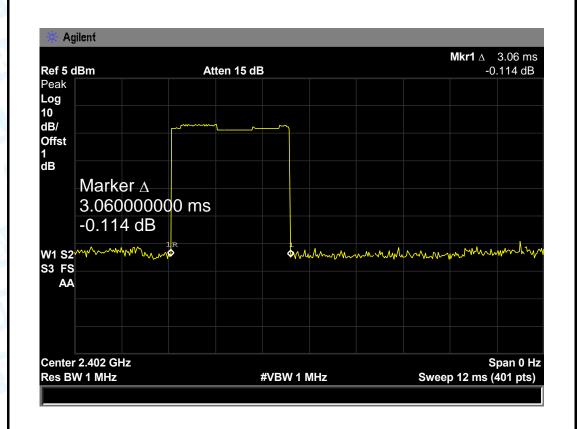
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EUT:	Daze speaker	Model Name :	HX-P270
Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		9
Test Mode:	Hopping Mode (8-DPSK DH5)		

rest wode.	1 lopping i	viode (6-DF 3K DI 13)		
Channel	Pulse Time		Period	
Citatillei	ruise IIIIle	Total of Dwell (ms)	Time	

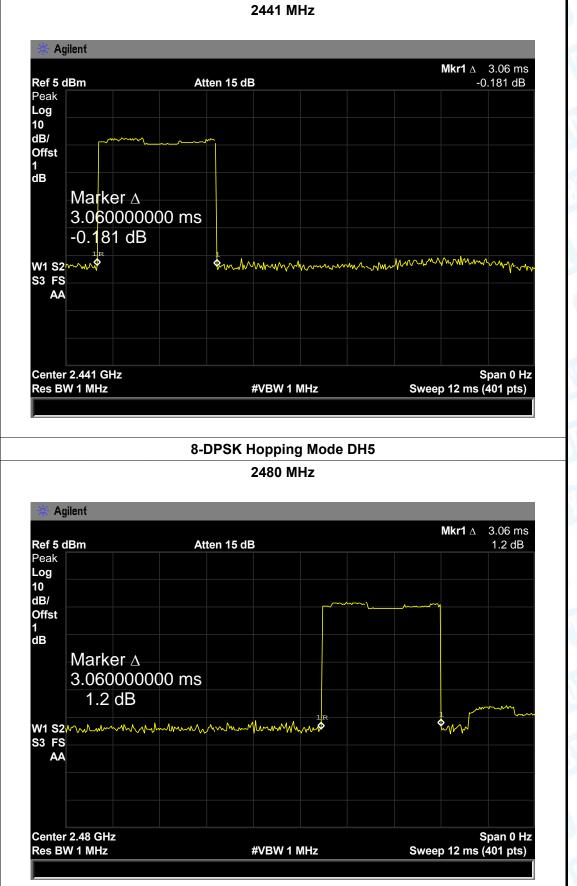
Channel (MHz)	Pulse Time (ms)	Total of Dwell (ms)	Period Time (s)	Limit (ms)	Result
2402	3.060	326.40			
2441	3.060	326.40	31.60	400	PASS
2480	3.060	326.40			

# 8-DPSK Hopping Mode DH5





8-DPSK Hopping Mode DH5 2441 MHz Agilent **Mkr1**  $\Delta$  3.06 ms -0.181 dB Ref 5 dBm Atten 15 dB Peak Log 10 dB/ Offst 1 dB Marker ∆ 3.060000000 ms -0.181 dB W1 S2<sup>№</sup> S3 FS AA Center 2.441 GHz Span 0 Hz Res BW 1 MHz #VBW 1 MHz Sweep 12 ms (401 pts) 8-DPSK Hopping Mode DH5 2480 MHz Agilent Mkr1  $\Delta$ 3.06 ms Ref 5 dBm Atten 15 dB 1.2 dB Peak Log 10 dB/ Offst 1 dB





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# 9. Channel Separation and Bandwidth Test

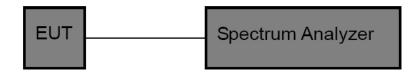
### 9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247

9.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Bandwidth	<=1 MHz (20dB bandwidth)	2400~2483.5
Channel Separation	>25KHz or >two-thirds of the 20 dB bandwidth Which is greater	2400~2483.5

## 9.2 Test Setup



## 9.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Channel Separation: RBW=30 kHz, VBW=100 kHz.

Bandwidth: RBW=30 kHz, VBW=100 kHz.

- (3) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
  - (4) Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:30 kHz, and Video Bandwidth:100 kHz. Sweep Time set auto.

# 9.4 EUT Operating Condition

The EUT was set to the Hopping Mode for Channel Separation Test and continuously transmitting for the Bandwidth Test.

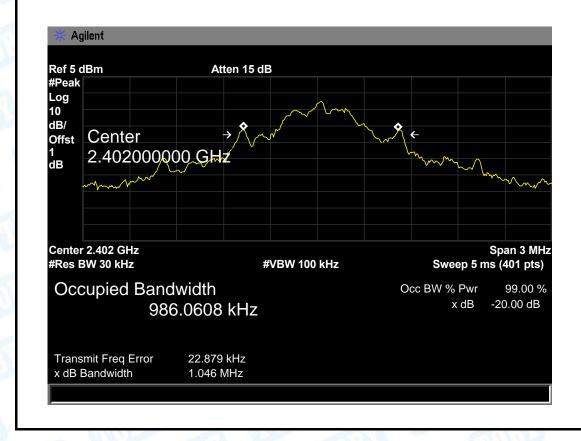


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## 9.5 Test Data

EUT:	Daze speaker		Model Name :	HX-P270
Temperature:	25	$^{\circ}$ C	Relative Humidity:	55%
Test Voltage:	DC	3.7V		
Test Mode:	TXI	Mode (GFSK)		a William
Channel frequent	су	99% OBW (kHz)	20dB Bandwidth (kHz)	20dB Bandwidth *2/3 (kHz)
2402		986.0608	1046.00	697.33
2441		984.0626	1045.00	696.67
2480		990.8984	1045.00	696.67
	-	GESK TY	( Mode	

#### **GFSK TX Mode**







**GFSK TX Mode** 2441 MHz Agilent Ref 5 dBm Atten 15 dB #Peak Log 10 dB/ Center Offst 2.441000000 GHz 1 dB Center 2.441 GHz Span 3 MHz #Res BW 30 kHz **#VBW 100 kHz** Sweep 5 ms (401 pts) Occupied Bandwidth 99.00 % Occ BW % Pwr x dB -20.00 dB 984.0626 kHz Transmit Freq Error 23.446 kHz x dB Bandwidth 1.045 MHz

#### Agilent Ref 5 dBm Atten 15 dB #Peak Log 10 dB/ Center Offst 1 dB 2.480000000 GHz Center 2.48 GHz Span 3 MHz #Res BW 30 kHz **#VBW 100 kHz** Sweep 5 ms (401 pts) Occupied Bandwidth Occ BW % Pwr 99.00 %

990.8984 kHz

24.198 kHz

1.045 MHz

Transmit Freq Error

x dB Bandwidth

GFSK TX Mode 2480 MHz

-20.00 dB



2402

2441

2480

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752.67

749.33

752.00

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Channel frequence (MHz)	99% OBW (kHz)	20dB Bandwidth (kHz)	20dB Bandwidth *2/3 (kHz)		
Test Mode:	TX Mode (π/4-DQPSK)				
Test Voltage:	DC 3.7V				
Temperature:	25 ℃	Relative Humidity:	55%		
EUT:	Daze speaker	Model Name :	HX-P270		

π/4-DQPSK TX Mode

1129.00

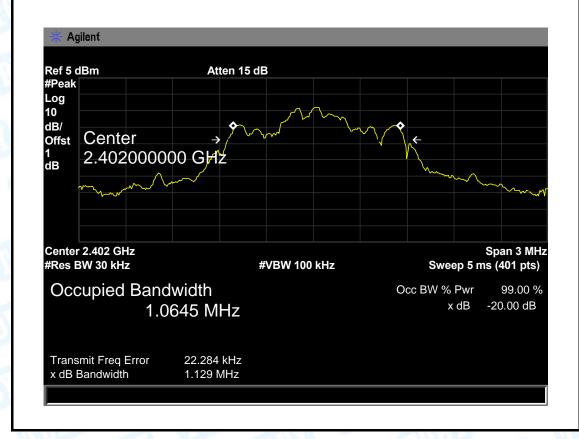
1124.00

1128.00

1064.50

1062.90

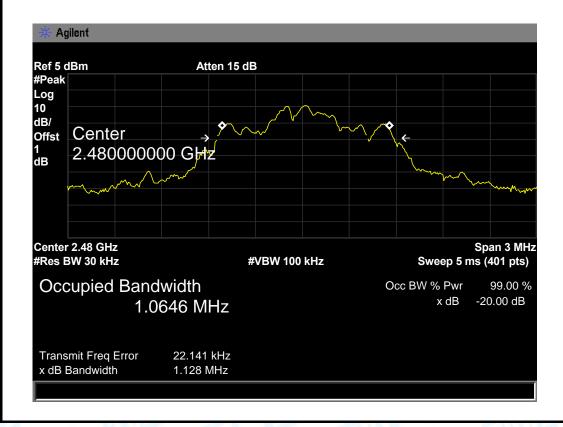
1064.60







π/4-DQPSK TX Mode 2441 MHz Agilent Ref 5 dBm Atten 15 dB #Peak Log 10 dB/ Center Offst 2.441000000 GHz 1 dB Center 2.441 GHz Span 3 MHz #Res BW 30 kHz **#VBW 100 kHz** Sweep 5 ms (401 pts) Occupied Bandwidth 99.00 % Occ BW % Pwr x dB -20.00 dB 1.0629 MHz Transmit Freq Error 23.453 kHz x dB Bandwidth 1.124 MHz π/4-DQPSK TX Mode

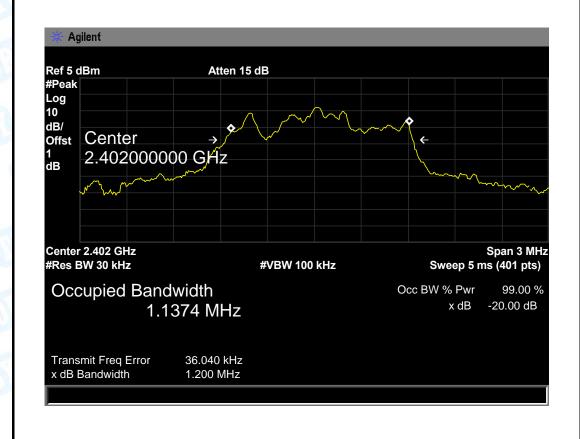




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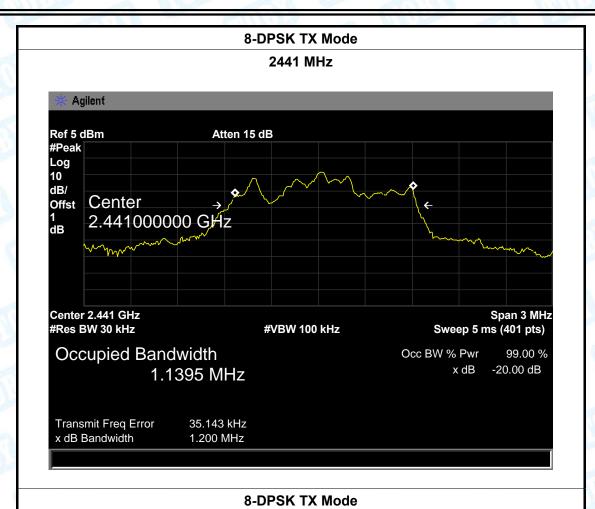
EUT:	Daze speaker	Model Name :	HX-P270
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		133
Test Mode:	TX Mode (8-DPSK)		
Channel frequence	annel frequency 99% OBW 20dB Bandwidth		20dB
(MHz)	(kHz)	(kHz)	Bandwidth *2/3
			(kHz)
2402	1137.40	1200.00	800.00
2441	1139.50	1200.00	800.00
2480	1139.00	1197.00	798.00

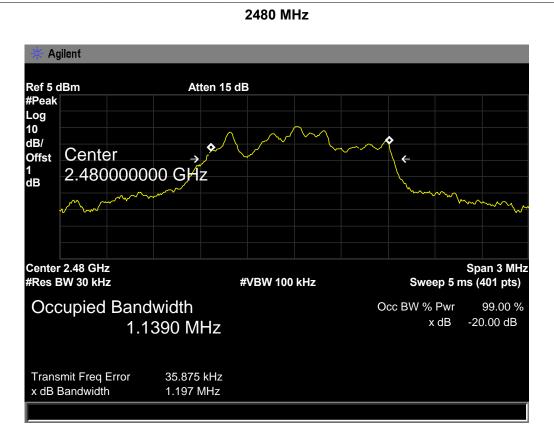
## 8-DPSK TX Mode 2402 MHz













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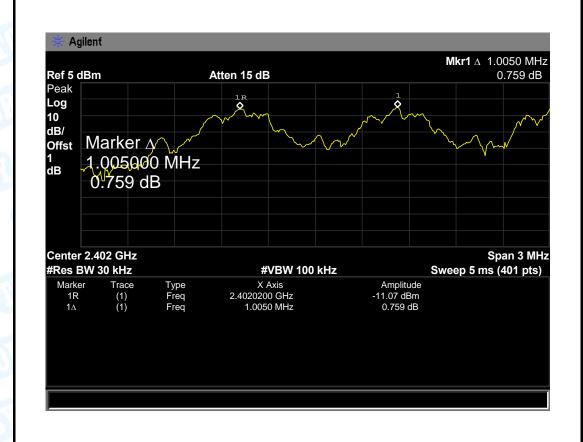
EUT:	Daze speaker	Model Name :	HX-P270
Temperature:	25 ℃	Relative Humidity:	55%
Toet Voltage:	DC 3.7V		THE STATE OF THE S

Test Voltage: DC 3.7V

Test Mode: Hopping Mode (GFSK)

Channel frequency (MHz)	Separation Read Value	Separation Limit (kHz)
	(kHz)	
2402	1005.00	697.33
2441	1005.00	696.67
2480	1005.00	696.67
		·

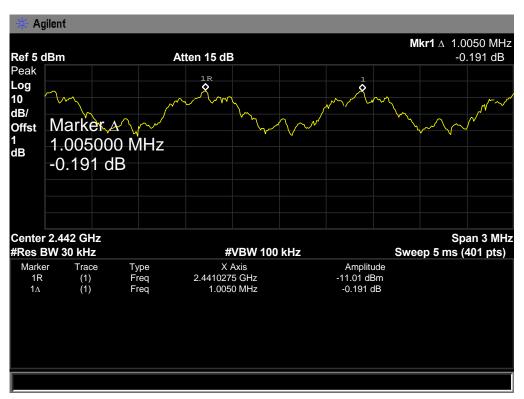
### **GFSK Hopping Mode**



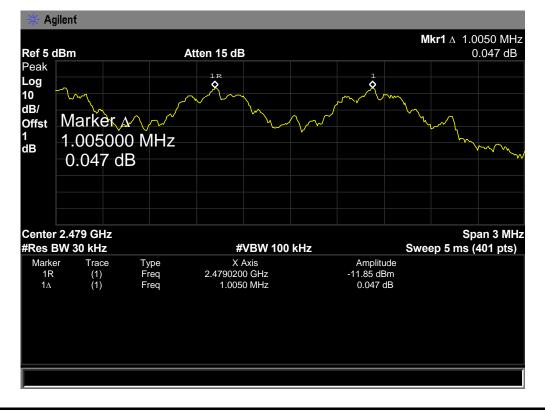




GFSK Hopping Mode
2441 MHz



# **GFSK Hopping Mode**





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EUT:	Daze speak	ker	Model Name :		HX-P270
Temperature:	25 ℃		Relative Humidity:		55%
Test Voltage:	DC 3.7V		1		
Test Mode:	Hopping Mode ( π /4-DQPSK)				
Channel frequency (MHz) Separation Read \		/alue Separation Limit (kHz)		Limit (kHz)	
		(kHz)			
2402	2402 1005.00 752.67		2.67		
2441		1005.00	1005.00 749.33		9.33
2480	1005.00			752	2.00
π /4-DQPSK Hopping Mode					

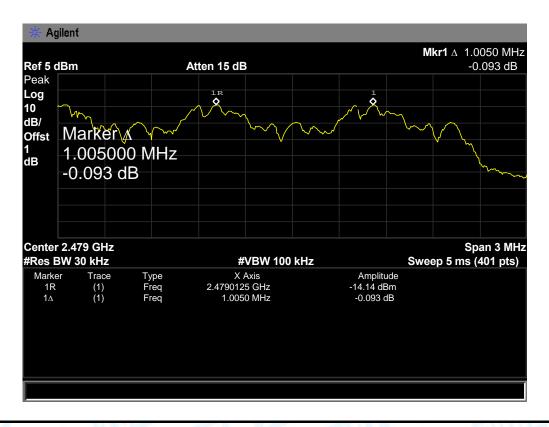






π /4-DQPSK Hopping Mode 2441 MHz Agilent Mkr1 A 1.0050 MHz Ref 5 dBm Atten 15 dB -0.007 dB Peak Log 10 dB/ Marker \Lambda Offst 1.005000 MHz dΒ -0.007 dB Center 2.442 GHz Span 3 MHz #Res BW 30 kHz **#VBW 100 kHz** Sweep 5 ms (401 pts) X Axis 2.4410200 GHz Amplitude Marker (1) (1) -13.38 dBm -0.007 dB 1.0050 MHz

# $\pi$ /4-DQPSK Hopping Mode





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EUT:	Daze speak	ker	Model N	lame :	HX-P270
Temperature:	25 ℃		Relative Humidity:		55%
Test Voltage:	DC 3.7V		6300		3
Test Mode:	Hopping N	Mode (8-DPSK)		Alle	
Channel frequency (MHz) Separation Read Value Separation Lin		Limit (kHz)			
		(kHz)			
2402		1005.00		800	0.00
2441		1005.00	800.00		0.00
2480	2480 1005.00 798.00		3.00		
8-DPSK Hopping Mode					

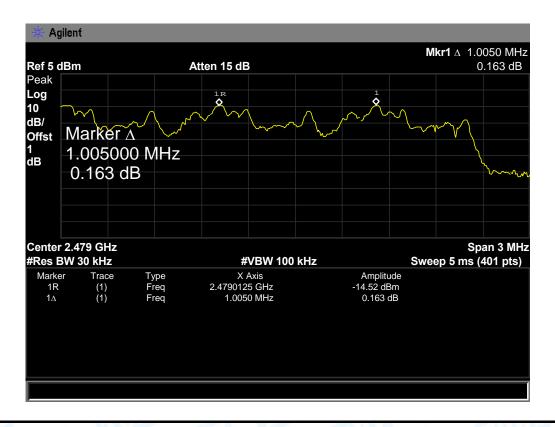






8-DPSK Hopping Mode 2441 MHz Agilent Mkr1 A 1.0050 MHz -0.07 dB Ref 5 dBm Atten 15 dB Peak Log 10 dB/ Marker A Offst 1.005000 MHz dΒ -0.07 dB Center 2.442 GHz Span 3 MHz #Res BW 30 kHz **#VBW 100 kHz** Sweep 5 ms (401 pts) Amplitude -13.53 dBm X Axis 2.4410200 GHz Marker (1) (1) 1.0050 MHz -0.07 dB

# 8-DPSK Hopping Mode





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# 10. Peak Output Power Test

### 10.1 Test Standard and Limit

10.1.1 Test Standard FCC Part 15.247 (b) (1)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Peak Output Power	Hopping Channels>75 Power<1W(30dBm) Other <125 mW(21dBm)	2400~2483.5

# 10.2 Test Setup



### 10.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Peak Detector: RBW=1 MHz, VBW=3 MHz for bandwidth less than 1MHz. RBW=3 MHz, VBW=3 MHz for bandwidth more than 1MHz.

# 10.4 EUT Operating Condition

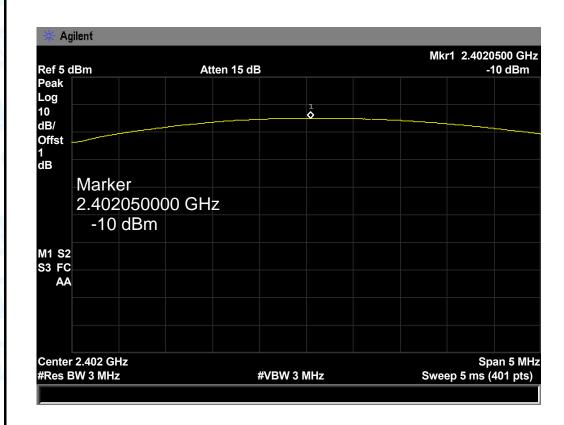
The EUT was set to continuously transmitting in the max power during the test.



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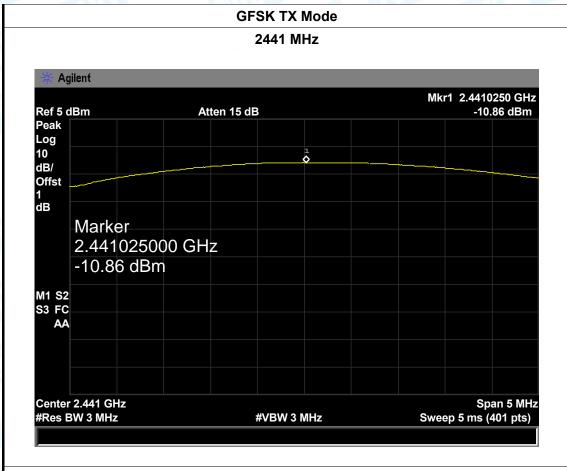
# 10.5 Test Data

EUT:	Daze spea	ker	Model Name :		HX-P270
Temperature:	25 ℃	Relative Humidity:		ve Humidity:	55%
Test Voltage:	DC 3.7V	DC 3.7V			MAN
Test Mode:	TX Mode	(GFSK)		THE STATE OF THE S	
Channel freque	ncy (MHz)	Test Result (dBr	n)	Limit	(dBm)
2402		-10.00			
2441		-10.86		21	
2480		-11.65			
		GFSK TX Mode	)		
		2402 MHz			

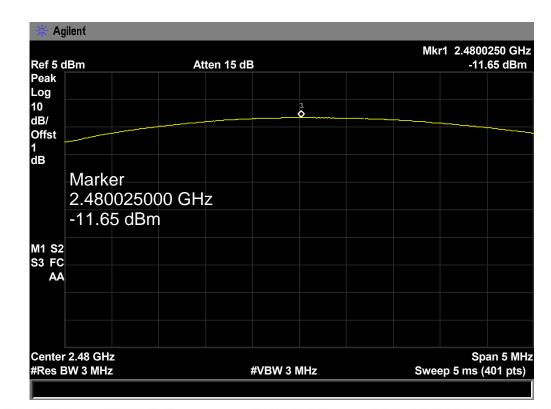




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#### **GFSK TX Mode**

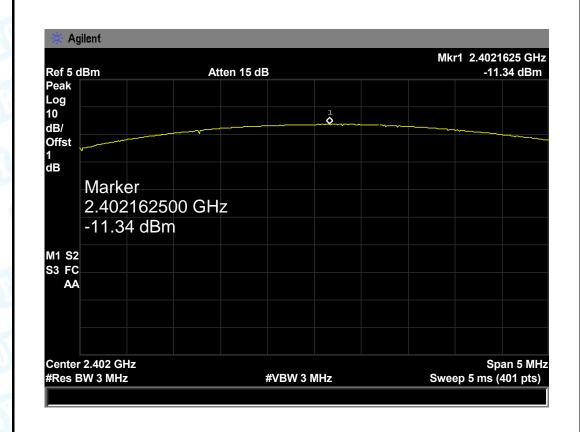




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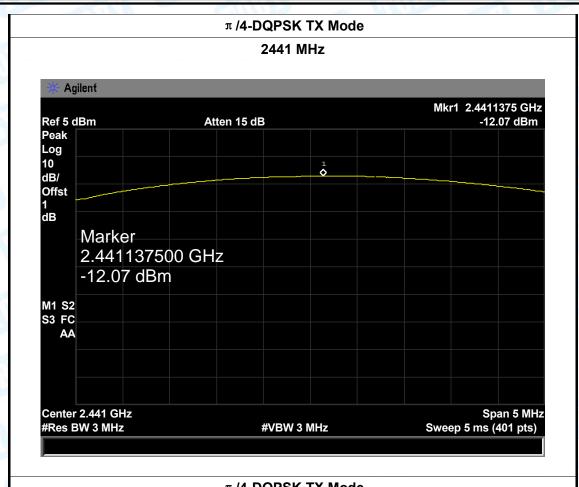
EUT:	Daze speak	(er	Model Name :	HX-P270
Temperature:	25 ℃		Relative Humidity:	55%
Test Voltage:	DC 3.7V			33
Test Mode:	TX Mode	( π /4-DQPSK)		
Channel frequen	Channel frequency (MHz) Test Result (		IBm) Lin	nit (dBm)
2402		-11.34		
2441		-12.07		21
2480		-12.85		
	,	~ /4 DODGK TY	Mada	

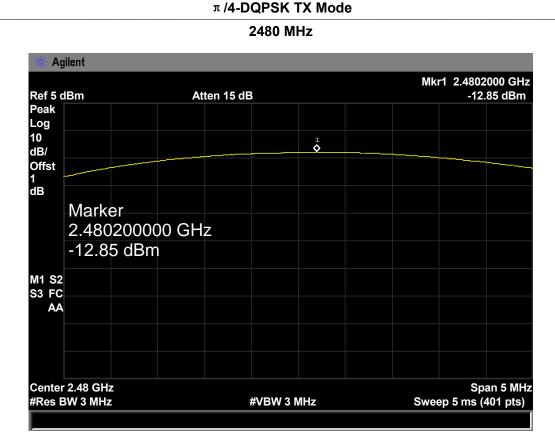
#### π /4-DQPSK TX Mode





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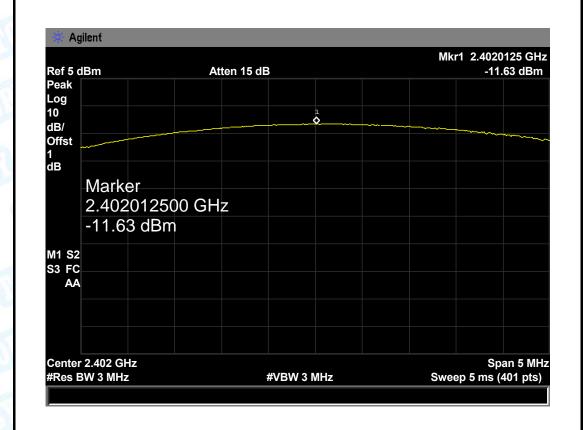




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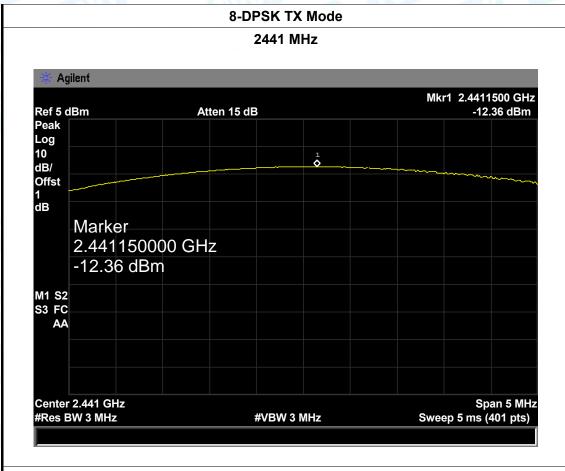
EUT:	Daze speak	cer	Model Name :	HX-P270	
Temperature:	25 ℃		Relative Humidity:	55%	
Test Voltage:	DC 3.7V				
Test Mode:	TX Mode	(8-DPSK)			
Channel frequen	Channel frequency (MHz) Test Result (		IBm) Lir	nit (dBm)	
2402		-11.63			
2441		-12.36		21	
2480		-13.20			
		0 DDCK TV M	la da		

### 8-DPSK TX Mode

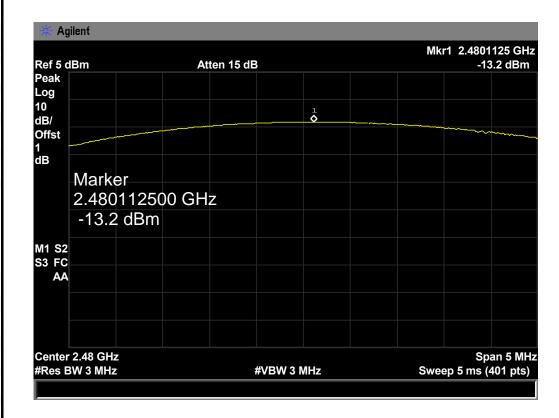




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#### 8-DPSK TX Mode





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# 11. Antenna Requirement

# 11.1 Standard Requirement

11.1.1 Standard FCC Part 15.203

### 11.1.2 Requirement

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

## 11.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 2.1 dBi, and the antenna connector is de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

The EUT antenna is a PCB antenna. It complies with the standard requirement.

Antenna Type	
e Gin	▼ Permanent attached antenna
	□ Unique connector antenna
	☐ Professional installation antenna