

# FCC RADIO TEST REPORT-BT FCC ID:Y4O-ENVOIGO

**Product**: Portable Speaker System (Tentative)

Trade Name : DENON PROFESSIONAL

Model Name: Envoi GO

Serial Model : N/A

Report No. : NTEK-2015NT0907659F

## **Prepared for**

INMUSIC BRANDS INC 200 Scenic View Drive, Suite 201 CUMBERLAND, Rhode Island 02864, United States

# Prepared by

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## TEST RESULT CERTIFICATION

Applicant's name:			
••	200 Scenic View Drive, Suite 201 CUMBERLAND, Rhode Island		
Autross	02864, United States		
Manufacture's Name:	INMUSIC	BRANDS INC	
Address:		ic View Drive, Suite 201 CUMBERLAND, Rhode Island nited States	
Product description			
Product name:	Portable S	Speaker System (Tentative)	
Model and/or type reference :	Envoi GO		
Serial Model :	N/A		
Standards	FCC Part	15.247: 01 Oct. 2015	
Test procedure	ANSI C63	8.10-2013	
	n complian	ted by NTEK, and the test results show that the ce with the FCC requirements. And it is applicable only t.	
		in full, without the written approval of NTEK, this EK, personnel only, and shall be noted in the revision of	
the document.			
Date of Test	:		
Date (s) of performance of tests	:	07 Sep. 2015 ~29 Oct. 2015	
Date of Issue	:	29 Oct. 2015	
Test Result	:	Pass	
Testing Engine	eer :	Jason chem	
	-	(Jason Chen)	
Technical Mar	ager :	Brownly	
	-	(Brown Lu)	
Authorized Sig	gnatory :	Sam. Chen	
		(Sam Chen)	



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## **1. SUMMARY OF TEST RESULTS**

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(a)(1)	Hopping Channel Separation	PASS	
15.247(b)(1)	Peak Output Power	PASS	
15.247(c)	Radiated Spurious Emission	PASS	
15.247(a)(iii)	Number of Hopping Frequency	PASS	
15.247(a)(iii)	Dwell Time	PASS	
15.247(a)(1)	Bandwidth	PASS	
15.205	Band Edge Emission	PASS	
15.203	Antenna Requirement	PASS	

## NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

## 1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd

Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

FCC Registration No.:238937; IC Registration No.:9270A-1 CNAS Registration No.:L5516

## **1.2 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** % °

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions, conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%



## 2. GENERAL INFORMATION

## 2.1 GENERAL DESCRIPTION OF EUT

Equipment	Portable Speaker System (Tentative)			
Trade Name	DENON PROFESSIONA	DENON PROFESSIONAL		
Model Name	Envoi GO			
Serial Model	N/A			
Model Difference	N/A			
	eaker System (Tentative)			
	Operation Frequency:	2402~2480 MHz		
	Modulation Type:	BT(1Mbps): GFSK		
		BT EDR(2Mbps): $\pi$ /4-DQPSK		
Product Description		BT EDR(3Mbps): 8-DPSK		
	Bit Rate of Transmitter	1Mbps/2Mbps/3Mbps		
	Number Of Channel	79 CH		
	Antenna Designation:	Please see Note 3.		
Channel List	Please refer to the Note 2.			
Adapter	N/A			
Battery	N/A			
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.

		Chann	el 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
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		
26	2428	53	2455		

3.

Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	PCB Antenna	N/A	1.0	BT Antenna

## 2.2 DESCRIPTION OF TEST MODES

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 above was evaluated respectively.

Pretest Mode	Description
Mode 1	CH00
Mode 2	CH39
Mode 3	CH78
Mode 4	Keeping TX mode

For Conducted Emission				
Final Test Mode Description				
Mode 4 Keeping TX mode				

For Radiated Emission			
Final Test Mode Description			
Mode 1	CH00		
Mode 2	CH39		
Mode 3	CH78		

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

(2) The data rate was set in 2Mbps for radiated emission due to the highest RF output power.

#### 2.3 TABLE OF PARAMETERS OF TEXT 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 FHSS

Test software Version	Test program			
Frequency	2402 MHz 2441 MHz 2480 MHz			
Parameters(1/2/3Mbps)	DEF	DEF	DEF	



## 2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



## 2.5 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Portable Speaker System (Tentative)	DENON PROFESSIONAL	Envoi GO	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in  $\[$ Length $\]$  column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".

## 2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

**Radiation Test equipment** 

Taula	ation rest equi						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibratio n period
1	Spectrum Analyzer	Agilent	E4407B	MY4510804 0	2015.07.06	2016.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2015.06.07	2016.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2015.07.06	2016.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 6	2015.06.07	2016.06.06	1 year
5	Spectrum Analyzer	ADVANTEST		150900201	2015.06.07	2016.06.06	1 year
6	Horn Antenna	EM	EM-AH-101 80	2011071402	2015.07.06	2016.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2015.07.06	2016.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2014.12.22	2015.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2015.06.08	2016.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2015.07.06	2016.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619. 05	2015.07.06	2016.07.05	1 year
12	Test Cable	N/A	R-01	N/A	2015.07.06	2016.07.05	1 year
13	Test Cable	N/A	R-02	N/A	2015.07.06	2016.07.05	1 year

#### **Conduction Test equipment**

Item	Kind of Equipment	Manufactu rer	Type No.	Serial No.	Last calibration	Calibrated until	Calibratio n period
1	Test Receiver	R&S	ESCI	101160	2015.06.06	2016.06.05	1 year
2	LISN	R&S	ENV216	101313	2015.08.24	2016.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2015.08.24	2016.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 7	2015.06.07	2016.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2015.06.07	2016.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2015.06.08	2016.06.07	1 year
7	Test Cable	N/A	C01	N/A	2015.06.08	2016.06.07	1 year
8	Test Cable	N/A	C02	N/A	2015.06.08	2016.06.07	1 year
9	Test Cable	N/A	C03	N/A	2015.06.08	2016.06.07	1 year
1	Attenuation	MCE	24-10-34	BN9258	2015.06.08	2016.06.07	1 year

## 3. EMC EMISSION TEST

## 3.1 CONDUCTED EMISSION MEASUREMENT

#### 3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

	Class A (dBuV)		Class B	Standard	
FREQUENCY (MHz)	Quasi-peak	Average	Quasi-peak	Average	Standard
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting		
Attenuation	10 dB		
Start Frequency	0.15 MHz		
Stop Frequency	30 MHz		
IF Bandwidth	9 kHz		



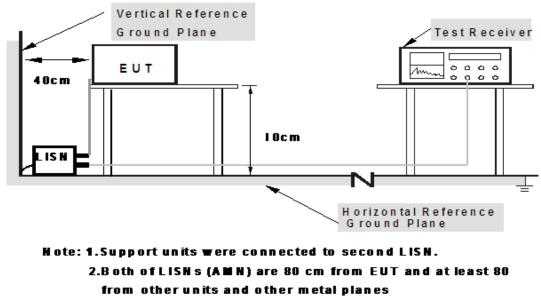
## 3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.1 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.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

#### 3.1.3 DEVIATION FROM TEST STANDARD

No deviation

#### 3.1.4 TEST SETUP



## 3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



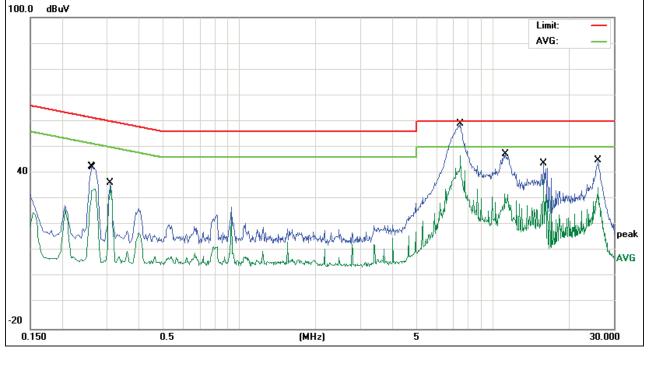
## 3.1.6 TEST RESULTS

EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>26</b> ℃	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 4

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Dement
(MHz)	(dBµV) (dB)		(dBµV)	(dBµV)	(dB)	Remark
0.2620	32.97	9.45	42.42	61.36	-18.94	QP
0.2660	24.53	9.45	33.98	51.24	-17.26	AVG
0.3099	26.67	9.44	36.11	59.97	-23.86	QP
0.3099	25.40	9.44	34.84	49.97	-15.13	AVG
7.4540	44.87	9.53	54.40	60.00	-5.60	QP
7.4540	37.22	9.53	46.75	50.00	-3.25	AVG
11.1777	37.79	9.70	47.49	60.00	-12.51	QP
11.1777	22.41	9.70	32.11	50.00	-17.89	AVG
15.8377	34.05	9.79	43.84	60.00	-16.16	QP
15.8377	27.77	9.79	37.56	50.00	-12.44	AVG
26.0899	35.10	9.96	45.06	60.00	-14.94	QP
26.0899	24.63	9.96	34.59	50.00	-15.41	AVG

Remark:

All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.

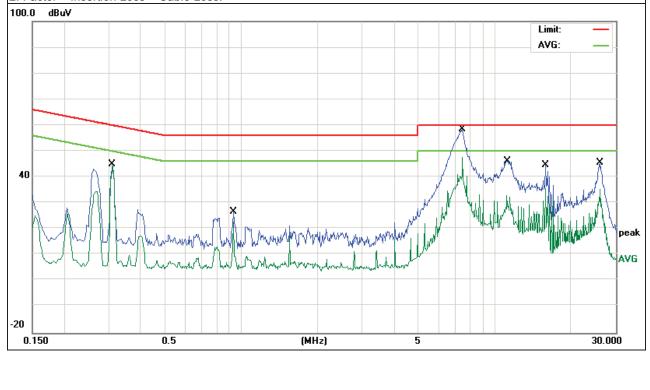




							1	
		Portable Speaker System (Tentative)		Model Name :		Envoi GO		
Temperature	:	<b>26</b> ℃			Relati	ve Humidity:	54%	
Pressure :		1010hPa			Phase	e :	N	
Test Voltage	:	AC 120V	/60Hz		Test N	/lode:	Mode 4	
Frequency	Rea	ding Level	Correct Factor	Measure	-ment	Limits	Margin	Remark
(MHz)	(	(dBµV)	(dB)	(dBµ	ıV)	(dBµV)	(dB)	Remark
0.3100		35.37	9.53	44.9	90	59.97	-15.07	QP
0.3100		34.99	9.53	44.	52	49.97	-5.45	AVG
0.9300		17.19	9.56	26.7	75	56.00	-29.25	QP
0.9300		13.22	9.56	22.7	78	46.00	-23.22	AVG
7.4540		45.30	9.70	55.0	00	60.00	-5.00	QP
7.4540		37.30	9.70	47.0	00	50.00	-3.00	AVG
11.1820		36.53	9.75	46.2	28	60.00	-13.72	QP
11.1820		23.30	9.75	33.0	)5	50.00	-16.95	AVG
15.8419		34.70	9.85	44.5	55	60.00	-15.45	QP
15.8419		25.89	9.85	35.7	74	50.00	-14.26	AVG
26.0940		35.49	9.94	45.4	43	60.00	-14.57	QP
26.0940		25.35	9.94	35.2	29	50.00	-14.71	AVG

Remark:

All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.





## 3.2 RADIATED EMISSION MEASUREMENT

#### 3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (dBuV/m) (at 3M)		
	PEAK	AVERAGE	
Above 1000	74	54	

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 - 1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower



Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average,
band)	PEAK DETECTOR IS USED FOR BOTH

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

#### 3.2.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. 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.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

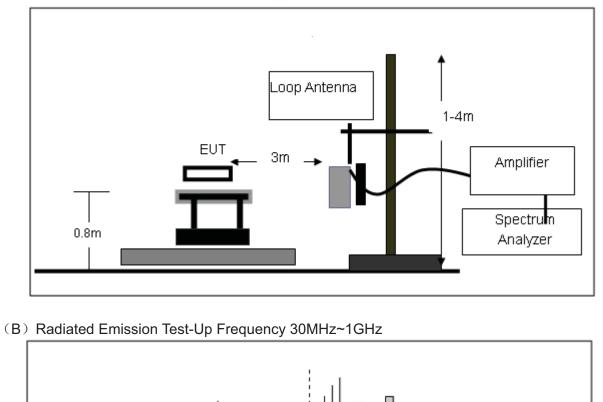
## 3.2.3 DEVIATION FROM TEST STANDARD

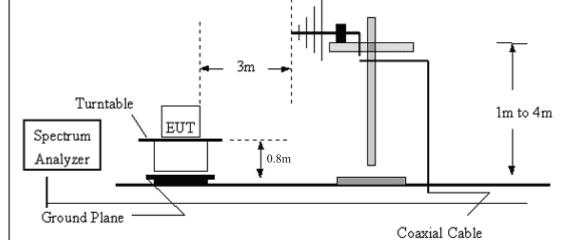
No deviation



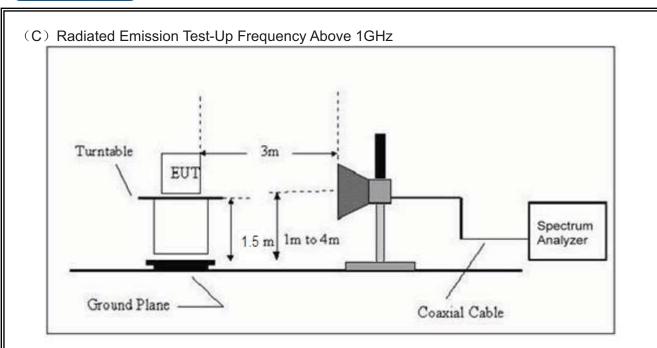
## 3.2.4 TEST SETUP

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









## 3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



## 3.2.6 TEST RESULTS (BELOW 30 MHZ)

EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>20</b> °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	ТХ	Polarization :	

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				Р
				Р

#### NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =20 log (specific distance/test distance)(dB); Limit line = specific limits(dBuv) + distance extrapolation factor.



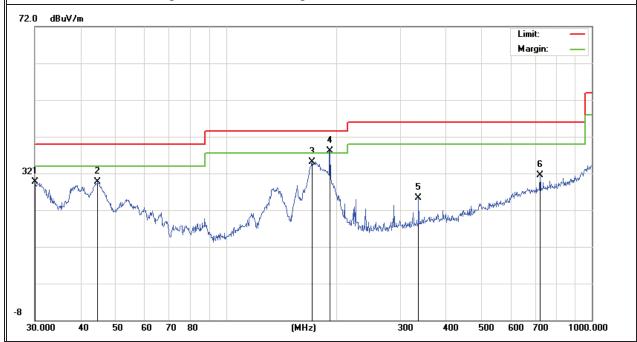
## 3.2.7 TEST RESULTS (BETWEEN 30M - 1000 MHZ)

EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>20</b> ℃	Relative Humidity :	48%
Pressure :	1010hPa	Test Mode :	GFSK(High CH)
Test Voltage :	AC 120V/60Hz		

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	rteniarit
V	30.0000	10.12	19.57	29.69	40.00	-10.31	QP
V	44.5868	17.73	12.06	29.79	40.00	-10.21	QP
V	171.9944	22.69	12.46	35.15	43.50	-8.35	QP
V	192.4186	26.77	11.35	38.12	43.50	-5.38	QP
V	336.0350	11.45	13.82	25.27	46.00	-20.73	QP
V	721.7259	10.02	21.44	31.46	46.00	-14.54	QP

#### **Remark:**

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit





Ро	-	Freq	uency		Meter eading	Factor	Emissior Level	Limits	Margin	Remark
(H/	<b>(V)</b>	(M	lHz)	(0	dBuV)	(dB)	(dBuV/m	) (dBuV/m)	(dB)	
ŀ	1	191	.7450	2	24.54	11.34	35.88	43.50	-7.62	QP
ŀ	1	210	.7860	2	22.54	11.02	33.56	43.50	-9.94	QP
ŀ		226	.0994	2	21.36	10.90	32.26	46.00	-13.74	QP
ŀ	ł	315	.4806	1	8.33	13.12	31.45	46.00	-14.55	QP
H		336	.0352	2	20.55	13.82	34.37	46.00	-11.63	QP
H	ł	721	.7259	1	3.21	21.44	34.65	46.00	-11.35	QP
72.0	) dBu	iV/m							Limit:	
72.0									Limit: Margin:	
32								5 4 X X	6 ×	
	hornorby	and and the second second	nakulan hara hera	willion .		www.		4 3 X X Malanda angle histolicate	Holdsmarten of Kitosubrister	
8										

Note: Mode GFSK(High CH) is the worst mode.



## 3.2.8 TEST RESULTS (ABOVE 1000 MHZ)

EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>20</b> ℃	Relative Humidity :	48%
Pressure :	1010hPa	Test Mode :	ТХ
Test Mode :	AC 120V/60Hz		

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark						
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)							
Frequency:2402MHz													
V	4803.666	54.96	-3.64	51.32	74.00	-22.68	peak						
V	7207.931	50.09	-0.95	49.14	74.00	-24.86	peak						
Н	4803.469	54.65	-3.64	51.01	74.00	-22.99	peak						
Н	7207.246	51.55	-0.95	50.60	74.00	-23.40	peak						
			Frequency	/:2441MHz									
V	4881.359	52.64	-3.67	48.97	74.00	-25.03	peak						
V	7322.681	50.40	-0.82	49.58	74.00	-24.42	peak						
Н	4881.866	50.91	-3.68	47.23	74.00	-26.77	peak						
Н	7322.027	49.74	-0.82	48.92	74.00	-25.08	peak						
			Frequency	/:2480MHz									
V	4960.948	53.03	-3.59	49.44	74.00	-24.56	peak						
V	7440.659	52.50	-0.68	51.82	74.00	-22.18	peak						
Н	4960.737	54.02	-3.59	50.43	74.00	-23.57	peak						
Н	7440.861	49.35	-0.68	48.67	74.00	-25.33	peak						
Remark	Remark:												
Absolut	te Level= Re	adingLevel+ Fac	ctor, Margi	n= Absolute Lev	vel - Limit		Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit						

Note:Pre-test GFSK ,PI/4DQPSK ,8DPSK mode,the GFSK mode is the worst mode, only recorded GFSK mode.

## 4. NUMBER OF HOPPING CHANNEL

## 4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C						
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247 (a)(1)(iii)	Number of Hopping Channel	≥15	2400-2483.5	PASS		

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW=100kHz
VB	$VBW \ge RBW$
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### 4.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100kHz, VBW=300kHz, Sweep time = Auto.

#### 4.1.2 DEVIATION FROM STANDARD

No deviation.

#### 4.1.3 TEST SETUP



## 4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



## 4.1.5 TEST RESULTS

UT :		Portable ( (Tentative	Speaker Sy e)	stem	Model	Name	; ;	Env	voi GO
emperatur	e :	<b>25</b> ℃			Relativ	e Hur	nidity :	60%	6
ressure :		1015 hPa			Test V	oltage	:	AC	120V/60Hz
est Mode	:	Hopping	Mode-GFSł	<					
N	lumbe	er of Hoppir	ig Channel					7	9
	🔆 Agi	lent					R	Т	Peak Search
	Ref 15	dBm	#Atten 20 dB	Ext PG -10	IB	Mkr2	2 2.4019 G -0.233 dl		
	Peak						0.235 (1	1	Meas Tools ►
	Log 10 dB/					YWW			Next Peak
								t	Next Pk Right
									Next Pk Left
		.4 GHz W 100 kHz r Trace (1)	#VE Type Freq	<b>3W 300 kHz</b> X Axis 2.4800 GH		8.651 r	op 2.483 G ns (401 pts Amplitude 0.671 dBm		Min Search
	2	(1)	Freq	2.4019 GH			0.233 dBm		Pk-Pk Search
									More 1 of 2

## 5. AVERAGE TIME OF OCCUPANCY

## 5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247), Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247 (a)(1)(iii)	Average Time of Occupancy	0.4sec	2400-2483.5	PASS	

## 5.1.1 TEST PROCEDURE

- a. The transmitter output (antenna port) was connected to the spectrum analyzer
- b. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- c. Use a video trigger with the trigger level set to enable triggering only on full pulses.
- d. Sweep Time is more than once pulse time.
- e. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- f. Measure the maximum time duration of one single pulse.
- g. Set the EUT for DH5, DH3 and DH1 packet transmitting.
- $\tilde{h}$ . Measure the maximum time duration of one single pulse.
- i. A Period Time = (channel number)\*0.4
  DH1 Time Slot: Reading \* (1600/2)\*31.6/(channel number)
  DH3 Time Slot: Reading \* (1600/4)\*31.6/(channel number)
  - DH5 Time Slot: Reading \* (1600/6)\*31.6/(channel number)

## 5.1.2 DEVIATION FROM STANDARD

No deviation.



## 5.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

## 5.1.4 EUT OPERATION CONDITIONS

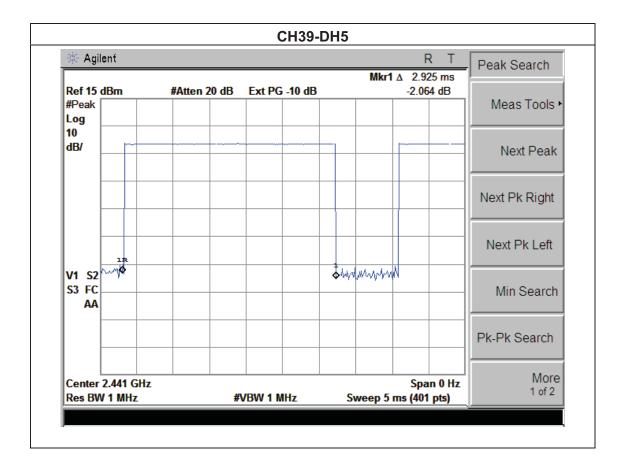
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



## 5.1.5 TEST RESULTS

	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>25</b> ℃	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH39-DH5 ,2DH5,3DH5		

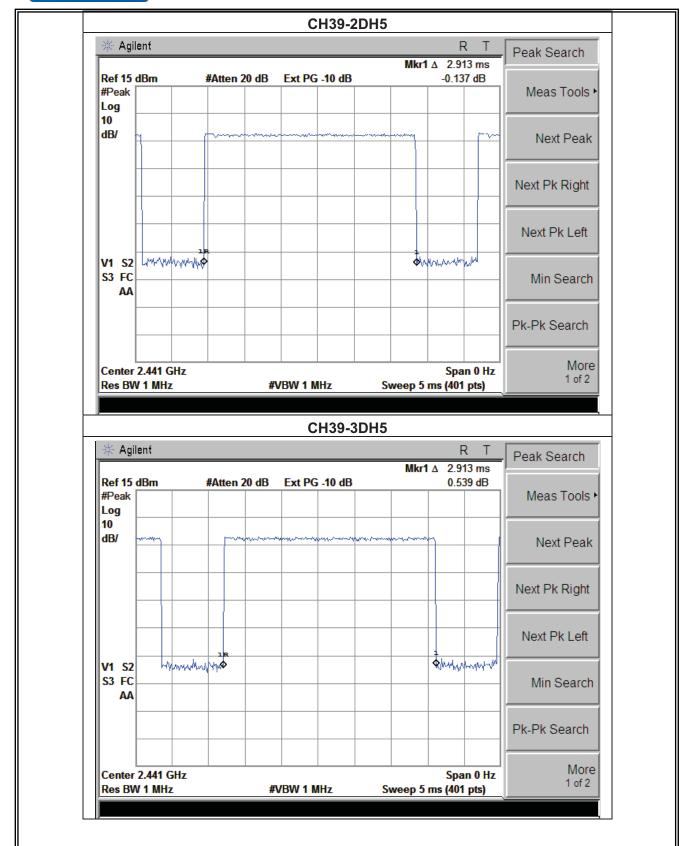
Data Packet	Frequency	Pulse Duration	Dwell Time	Limits
		(ms)	(s)	(s)
DH5	2441 MHz	2.93	0.31	0.4
2DH5	2441 MHz	2.91	0.31	0.4
3DH5	2441 MHz	2.91	0.31	0.4





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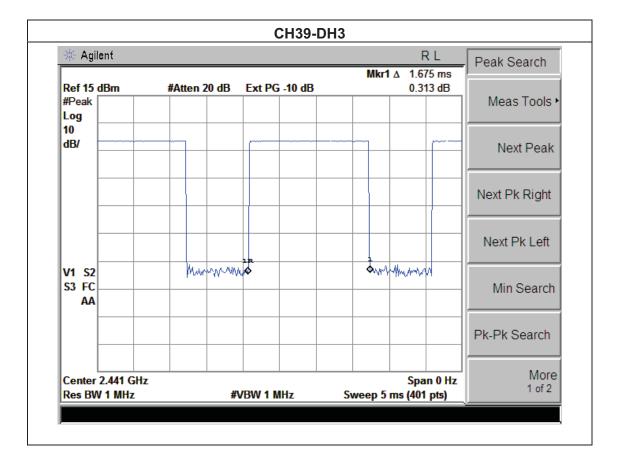
#### Report No.:NTEK-2015NT0907659F





EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>25</b> ℃	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH39-DH3,2DH3,3DH3		

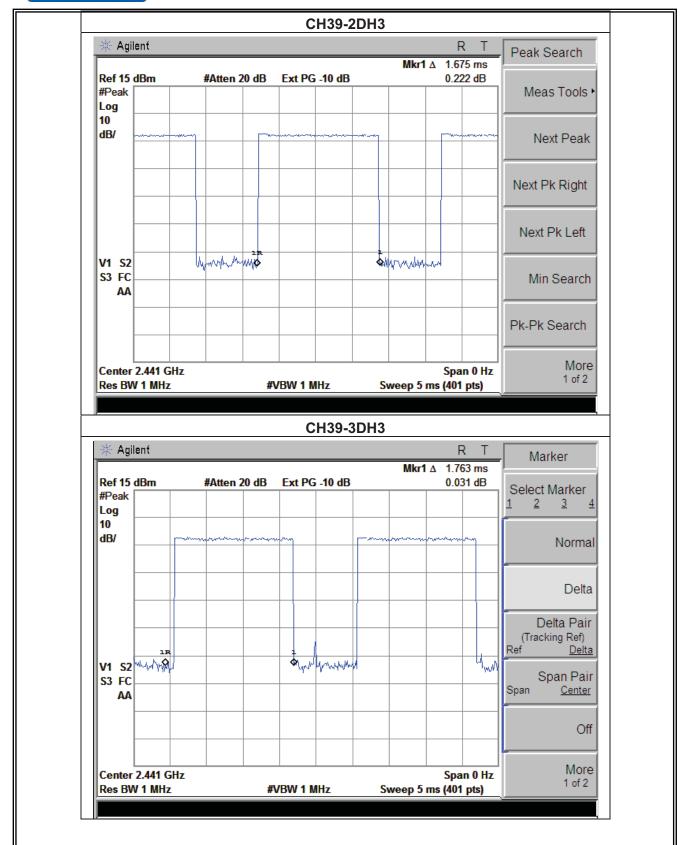
Data Packet	Frequency	Pulse Duration	Dwell Time	Limits
		(ms)	(s)	(s)
DH3	2441 MHz	1.68	0.27	0.4
2DH3	2441 MHz	1.68	0.27	0.4
3DH3	2441 MHz	1.76	0.28	0.4





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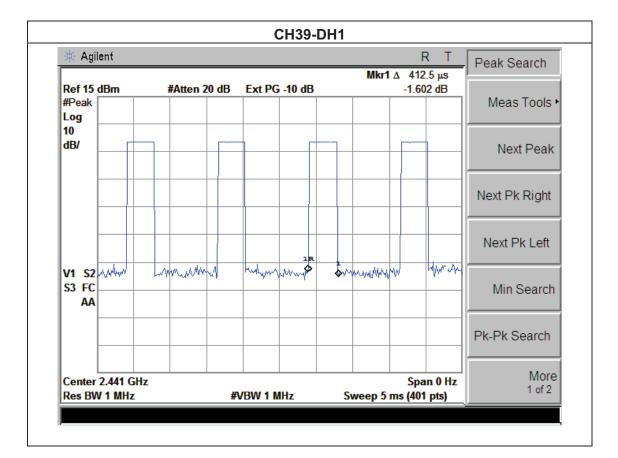
#### Report No.:NTEK-2015NT0907659F





EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>25</b> ℃	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH39-DH1,2DH1,3DH1		

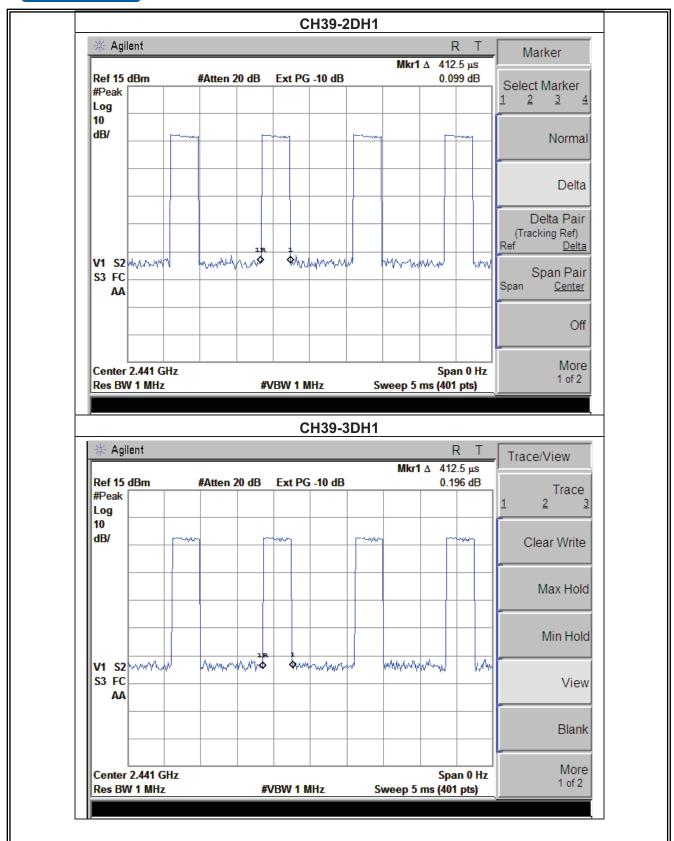
Data Packet	Frequency	Pulse Duration	Dwell Time	Limits
		(ms)	(s)	(s)
DH1	2441 MHz	0.41	0.13	0.4
2DH1	2441 MHz	0.41	0.13	0.4
3DH1	2441 MHz	0.41	0.13	0.4





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#### Report No.:NTEK-2015NT0907659F





## 6. HOPPING CHANNEL SEPARATION MEASUREMENT

#### 6.1 APPLIED PROCEDURES / LIMIT

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.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz (Channel Separation)
VB	100 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

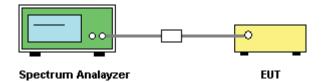
#### 6.1.1 TEST PROCEDURE

- a. The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
- b. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for channel separation measurement.

#### 6.1.2 DEVIATION FROM STANDARD

No deviation.

#### 6.1.3 TEST SETUP



## 6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

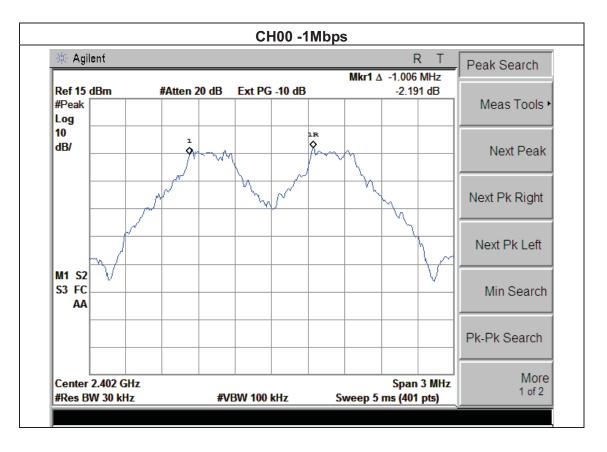


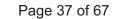
## 6.1.5 TEST RESULTS

EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>25</b> ℃	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH00 / CH39 /CH78 (1Mbps Mode)		

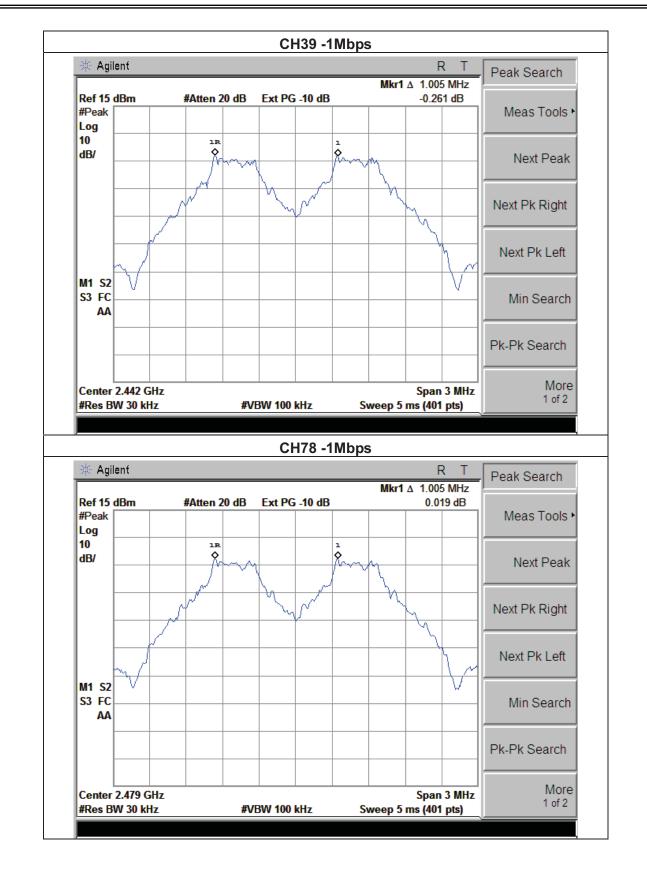
Frequency	Ch. Separation (MHz)	Result
2402 MHz	1.006	Complies
2441 MHz	1.005	Complies
2480 MHz	1.005	Complies

## Ch. Separation Limits: > 20dB bandwidth







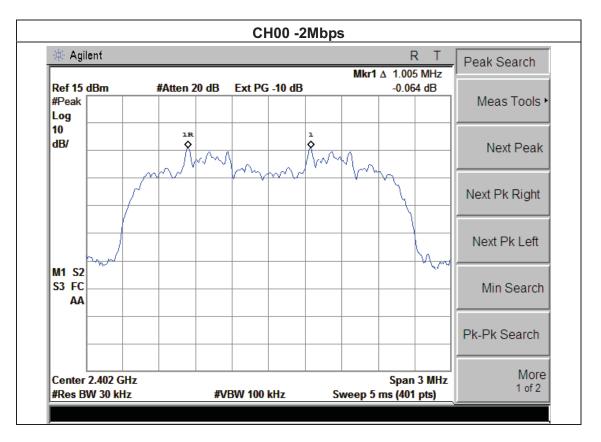




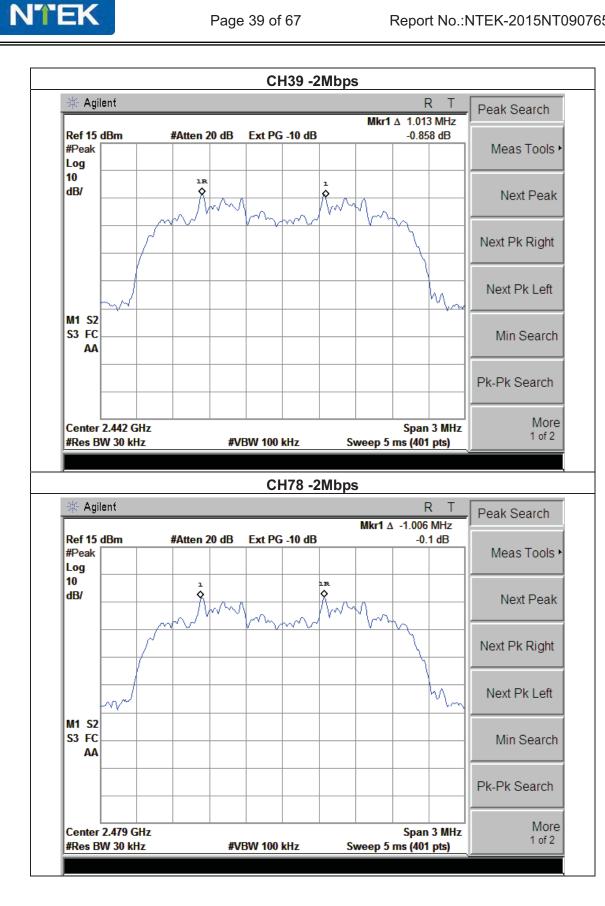
EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>25</b> ℃	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH00 / CH39 /CH78 (2Mbps Mode)		

Frequency	Ch. Separation (MHz)	Result
2402 MHz	1.005	Complies
2441 MHz	1.013	Complies
2480 MHz	1.006	Complies

## Ch. Separation Limits: >2/3 of 20dB bandwidth





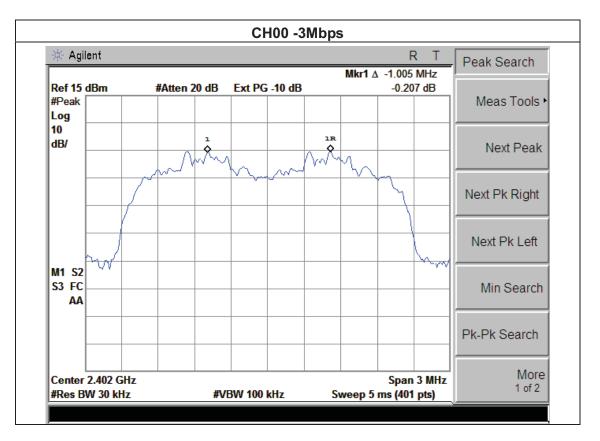




		Portable Speaker System		
EUT :		(Tentative)	Model Name :	Envoi GO
Tempe	rature :	<b>25</b> ℃	Relative Humidity :	60%
Pressu	re :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test M	ode :	CH00 / CH39 /CH78 (3Mbps Mode)		

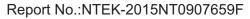
Frequency	Ch. Separation (MHz)	Result
2402 MHz	1.005	Complies
2441 MHz	1.006	Complies
2480 MHz	1.006	Complies

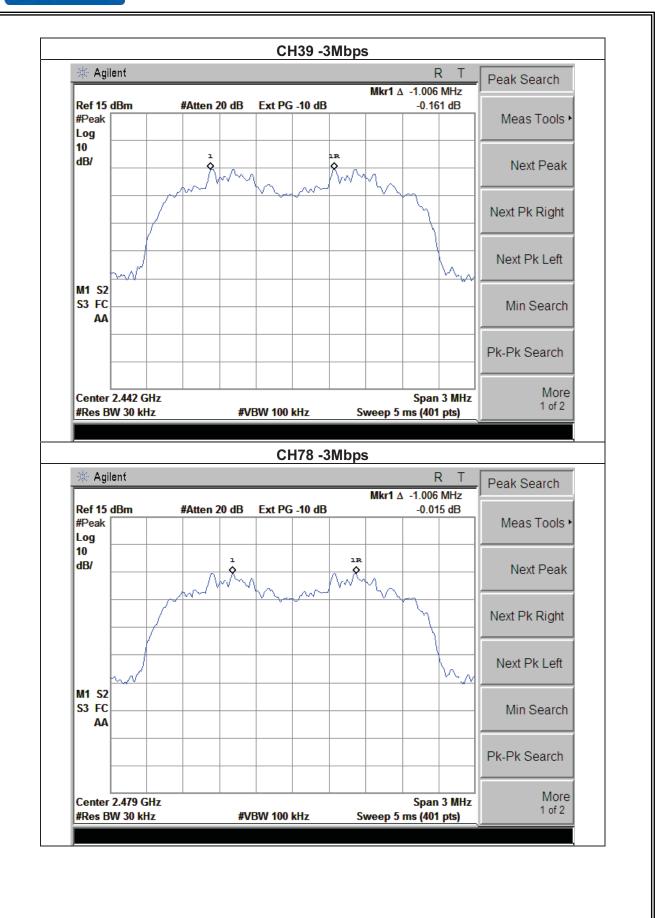
## Ch. Separation Limits: >2/3 of 20dB bandwidth





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## 7. BANDWIDTH TEST

## 7.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247 (a)(1)	Bandwidth	(20dB bandwidth)	2400-2483.5	PASS	

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz
VB	100 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

## 7.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 30KHz, VBW=100KHz, Sweep time = Auto.

## 7.1.2 DEVIATION FROM STANDARD

No deviation.

## 7.1.3 TEST SETUP



## 7.1.4 EUT OPERATION CONDITIONS

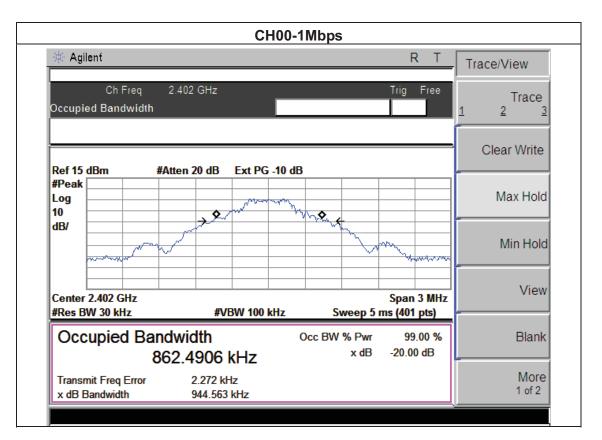
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



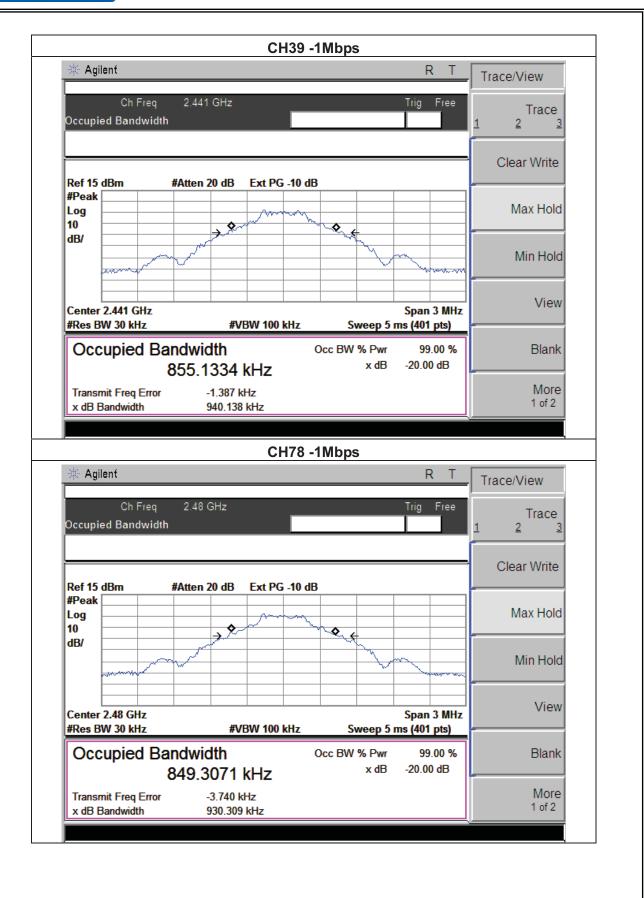
## 7.1.5 TEST RESULTS

EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO
Temperature :	<b>25</b> ℃	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH00 / CH39 /C78 <b>(1Mbps)</b>		

Frequency	20dB Bandwidth (kHz)	Result
2402 MHz	944.563	PASS
2441 MHz	940.138	PASS
2480 MHz	930.309	PASS





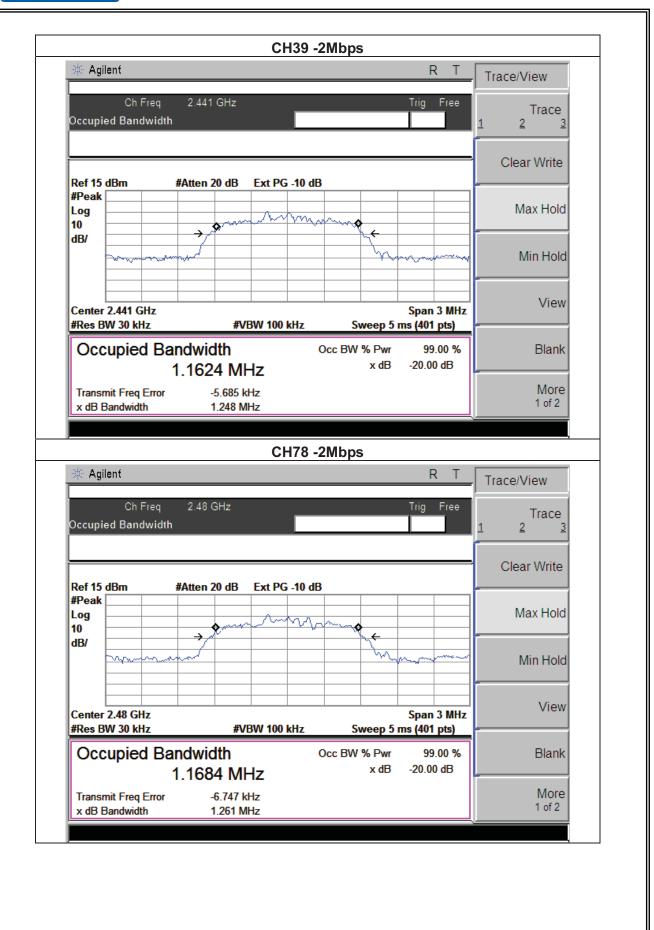




					Γ	
JT :	Portable Speaker System (Tentative)		Model Nam	ne :	Envoi GO	
mperature	· · · · · · · · · · · · · · · · · · ·			umidity :	60%	
essure :	1012 hPa		Test Voltag	e :	: AC 120V/60Hz	
st Mode :	CH00 / CH39 /C78	B(2Mbps)				
	Frequency	20dB Ba (MI			Result	
	2402 MHz	1.2	59		PASS	
	2441 MHz	1.2	48		PASS	
-	2480 MHz	1.2	61		PASS	
L				L		
		CH00 -	2Mbps			
	Agilent			R	TTrace/View	
Re					Clear Write Max Hold	
	nter 2.402 GHz	VBW 100 kHz	Sween 5	Span 3 M ms (401 pts)	Hz View	
	Decupied Bandwidth 1.1636 N		Occ BW % Pwr x dB	99.00 9 -20.00 dB	6 Blank	
	ransmit Freq Error -8.299 dB Bandwidth 1.259	kHz			More 1 of 2	



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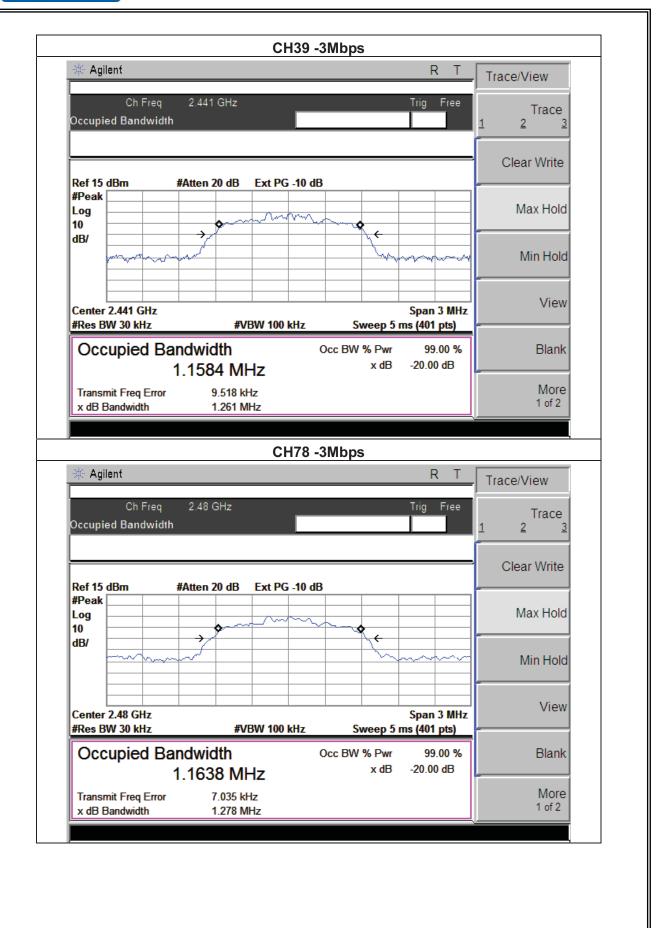




•	Portable Speaker	System			
•	(Tentative)		Model Nam	ne :	Envoi GO
erature	: <b>25</b> ℃	<b>25</b> ℃		umidity:	60%
ure :	1012 hPa	1012 hPa Test Voltage : A		AC 120V/60Hz	
Node :	CH00 / CH39 /C7	8 <b>(3Mbps)</b>			
	Frequency	20dB Ba (MF			Result
	2402 MHz	1.2	73		PASS
F	2441 MHz	1.2	61		PASS
	2480 MHz	1.2	78		PASS
L					
		CH00 -3	Mhns		
-36-	Agilent		лара	R	TreasAtion
					Trace/View
	Ch Freq 2.402 GHz	:		Trig Fre	e Trace
Occ	cupied Bandwidth				1 2 3
					Clear Write I
Re	f 15 dBm #Atten 20 dF	B Ext PG .10 dB			Clear Write
#Pe	f 15 dBm #Atten 20 dE eak	B Ext PG -10 dB			
	eak	B Ext PG -10 dB			Max Hold
#Pe Log	g	B Ext PG -10 dB	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Max Hold
#Pe Log 10 dB	eak	B Ext PG -10 dB	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Max Hold Min Hold
#Pe Log 10 dB	eak 9 1 mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm	3 Ext PG -10 dB		Span 3 M ms (401 pts)	Max Hold Min Hold View
#Pu Loy 10 dB Ce #Ru	eak g / / / / / / / / / / / / / / / / / /	#VBW 100 kHz		Span 3 M	Max Hold Min Hold View Blank
#Pe Log 10 dB Ce #Re	eak g / / / / / / / / / / / / / / / / / /	андалана #VBW 100 kHz ИНZ	Sweep 5	Span 3 M ms (401 pts) 99.00 9	Max Hold Min Hold View Ka Blank More
#Pu Loy 10 dB Ce #R C	eak 9 1 1 1 1 1 1 1 1 1 1 1 1 1	андалана #VBW 100 kHz ИНZ	Sweep 5	Span 3 M ms (401 pts) 99.00 9	Max Hold Min Hold Hz Blank
#Pu Loy 10 dB Ce #R C	eak 9 1 1 1 1 1 1 1 1 1 1 1 1 1	#VBW 100 kHz	Sweep 5	Span 3 M ms (401 pts) 99.00 9	Max Hold Min Hold View Ka Blank More



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## 8. PEAK OUTPUT POWER TEST

## 8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247 (b)(i)	Peak Output Power	0.125 w or 20.96dBm	2400-2483.5	PASS	

#### 8.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW > the 20 dB bandwidth of the emission being measured

Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel VBW  $\geq$  RBW

Sweep = auto

Detector function = peak

Trace = max hold

## 8.1.2 DEVIATION FROM STANDARD

No deviation.

## 8.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

## 8.1.4 EUT OPERATION CONDITIONS

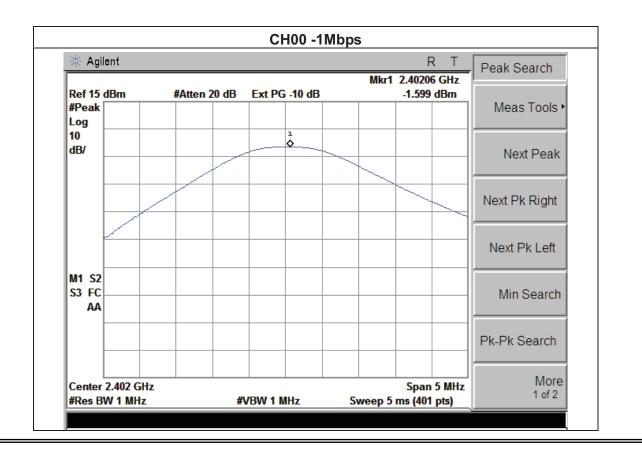
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



## 8.1.5 TEST RESULTS

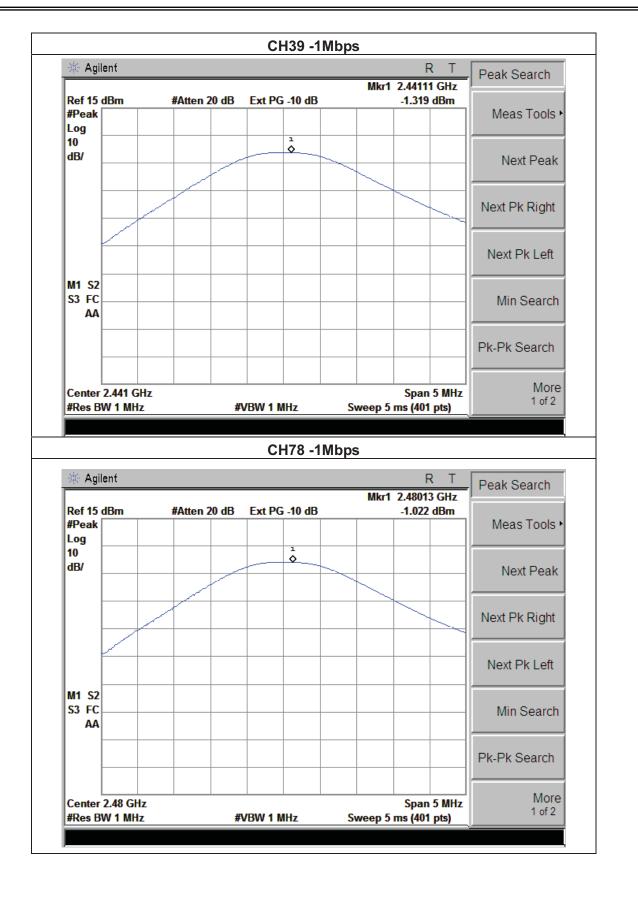
EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO			
Temperature :	<b>25</b> ℃	Relative Humidity :	60%			
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz			
Test Mode :	CH00/ CH39 /CH78 (1M/2M/3Mbps Mode)					

	-	1Mbps	
Test Channel	Frequency	Peak Output Power	LIMIT
	(MHz)	(dBm)	(dBm)
CH00	2402	-1.599	30
CH39	2441	-1.319	30
CH78	2480	-1.022	30
		2Mbps	
CH00	2402	-1.585	21
CH39	2441	-1.479	21
CH78	2480	-0.713	21
		3Mbps	
CH00	2402	-1.232	21
CH39	2441	-0.998	21
CH78	2480	-0.853	21

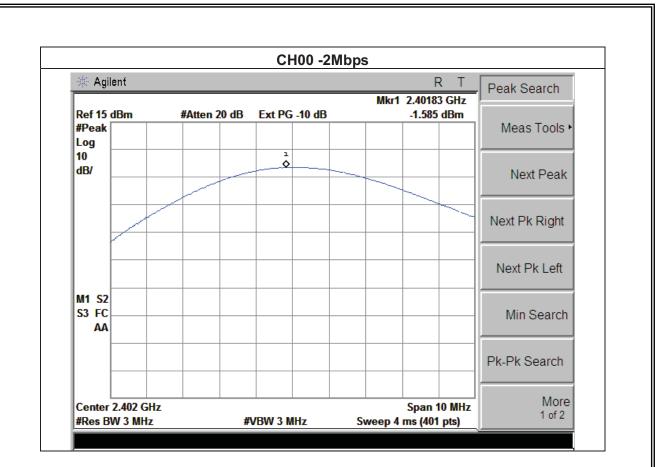






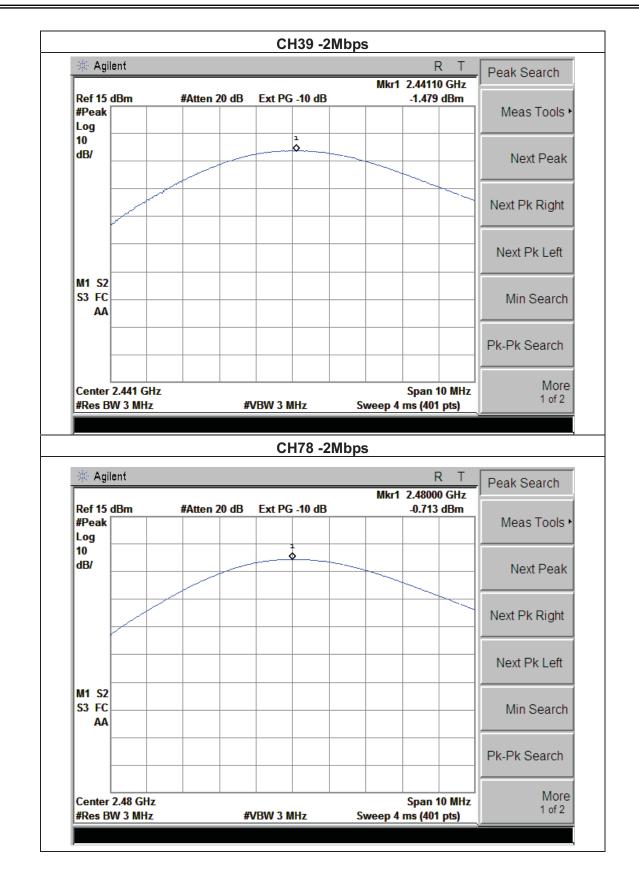




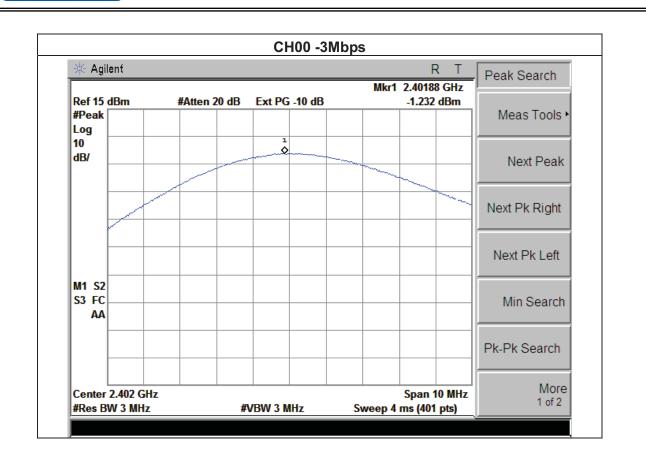






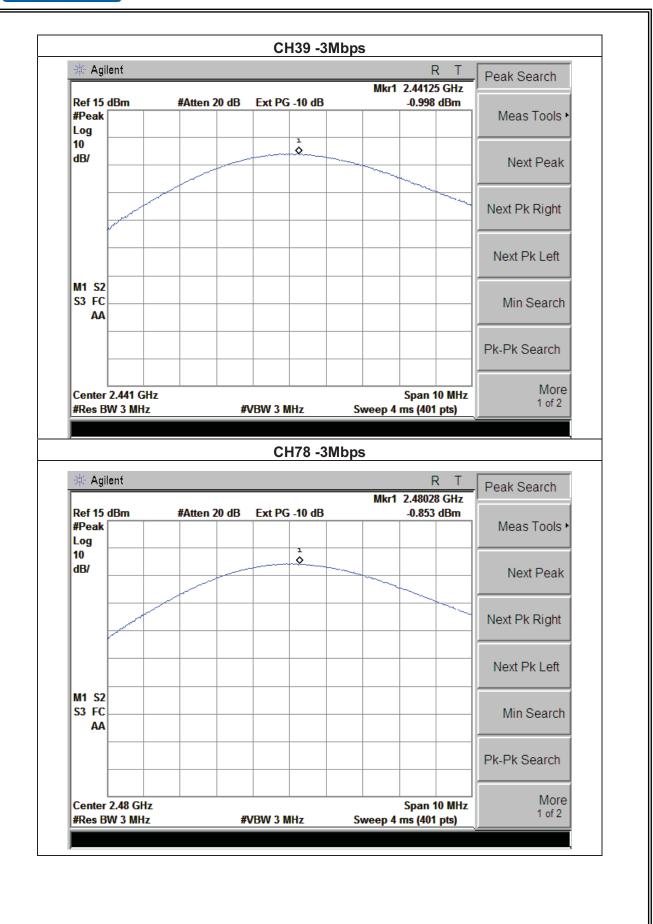












# 9. 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE APPLICABLE STANDARD

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

## **TEST PROCEDURE**

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- a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b) Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- c) Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- d) Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- e) Repeat above procedures until all measured frequencies were complete.

## 9.1 DEVIATION FROM STANDARD

No deviation.

## 9.2 TEST SETUP

EUT	SPECTRUM
	ANALYZER

## 9.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



## 9.4 TEST RESULTS

EUT :	Portable Speaker System (Tentative)	Model Name :	Envoi GO			
Temperature :	<b>25</b> ℃	Relative Humidity :	60%			
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz			
Test Mode :	CH00/ CH78 (1M/2M/3Mbps Mode)					

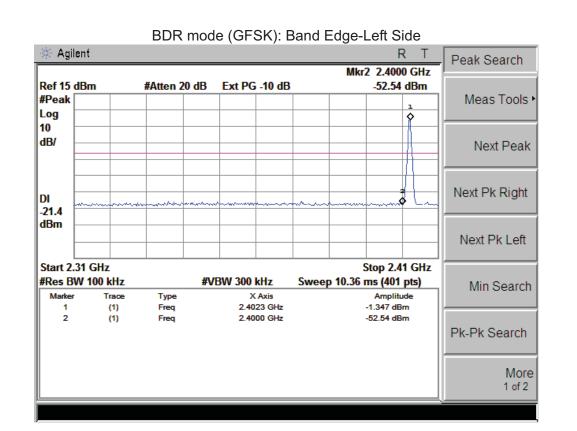
Frequency Band MHz	Delta Peak to band emission (dBc)	>Limit (dBc)	Result
	1Mbps Non-hopp	oing	
2400	51.19	20	Pass
2483.5	51.39	20	Pass
	2Mbps Non-hopp	bing	
2400	49.11	20	Pass
2483.5	51.83	20	Pass
	3Mbps Non-hopp	bing	
2400	49.93	20	Pass
2483.5	51.26	20	Pass
	1Mbps hopping	g	
2400 51.35		20	Pass
2483.5	2483.5 51.92		Pass
L. L	2Mbps hopping	g	
2400	49.77	20	Pass
2483.5	50.39	20	Pass
I	3Mbps hopping	g	
2400	49.54	20	Pass
2483.5	50.57	20	Pass

# Radiated band edge:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	
	1	1N	Abps Non-hopp	ping	1		
2390	58.90	-13.06	45.84	74.00	-28.16	peak	Vertical
2390	59.73	-13.06	46.67	74.00	-27.33	peak	Horizontal
2483.5	58.17	-12.78	45.39	74.00	-28.61	peak	Vertical
2483.5	59.69	-12.78	46.91	74.00	-27.09	peak	Horizontal
			1Mbps hoppin	g			
2390	60.19	-13.06	47.13	74.00	-26.87	peak	Vertical
2390	58.82	-13.06	45.76	74.00	-28.24	peak	Horizontal
2483.5	59.26	-12.78	46.48	74.00	-27.52	peak	Vertical
2483.5	60.18	-12.78	47.40	74.00	-26.60	peak	Horizontal
		21	Mbps Non-hopp	ing			
2390	58.80	-13.06	45.74	74.00	-28.26	peak	Vertical
2390	60.18	-13.06	47.12	74.00	-26.88	peak	Horizontal
2483.5	60.75	-12.78	47.97	74.00	-26.03	peak	Vertical
2483.5	59.26	-12.78	46.48	74.00	-27.52	peak	Horizontal
			2Mbps hopping	9			
2390	60.47	-13.06	47.41	74.00	-26.59	peak	Vertical
2390	59.14	-13.06	46.08	74.00	-27.92	peak	Horizontal
2483.5	61.28	-12.78	48.50	74.00	-25.50	peak	Vertical
2483.5	59.52	-12.78	46.74	74.00	-27.26	peak	Horizontal
		31	Mbps Non-hopp	ing			
2390	60.12	-13.06	47.06	74.00	-26.94	peak	Vertical
2390	59.41	-13.06	46.35	74.00	-27.65	peak	Horizontal
2483.5	58.08	-12.78	45.30	74.00	-28.70	peak	Vertical
2483.5	58.69	-12.78	45.91	74.00	-28.09	peak	Horizontal
			3Mbps hopping	g			
2390	60.21	-13.06	47.15	74.00	-26.85	peak	Vertical
2390	59.50	-13.06	46.44	74.00	-27.56	peak	Horizontal
2483.5	61.17	-12.78	48.39	74.00	-25.61	peak	Vertical
2483.5	58.78	-12.78	46.00	74.00	-28.00	peak	Horizontal

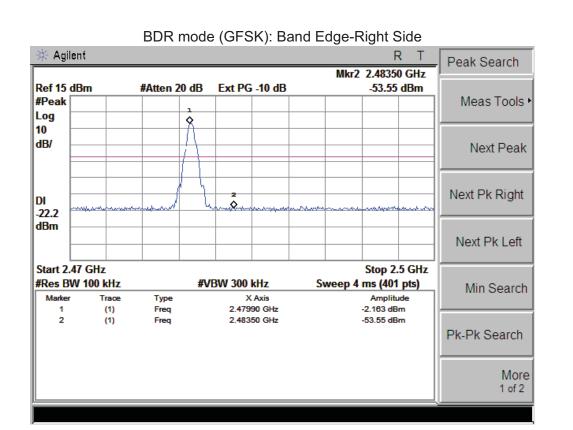
Note: Refer to chapter 3.2 test method, When PK value is lower than the Average value limit, average didn't record.



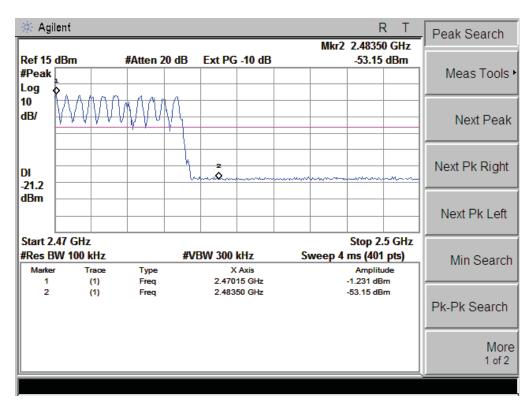


🔆 Agi	lent			F Mkr2 2,400		Peak Search
Ref 15	dBm	#Atten 20 dE	B Ext PG -10 dB	-52.78		
#Peak Log					1	Meas Tools
10 dB/						Next Peak
DI -21.4				server where		Next Pk Right
dBm						Next Pk Left
	.31 GHz			Stop 2.4		
Marker		Туре	VBW 300 kHz X Axis	Sweep 10.36 ms (401 Amplitu	de	Min Search
1 2	(1) (1)	Freq Freq	2.4068 GHz 2.4000 GHz	-1.427 dB -52.78 dB		Pk-Pk Search
						More 1 of 2

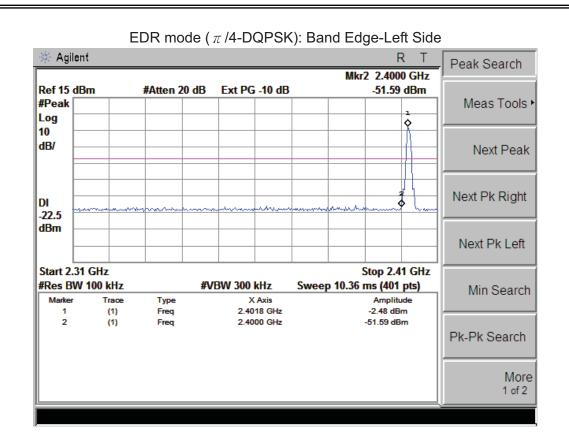




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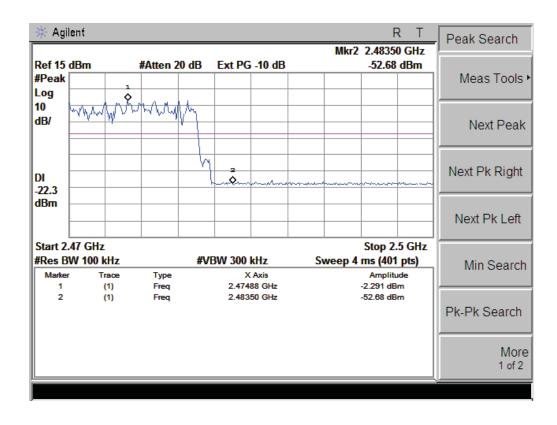




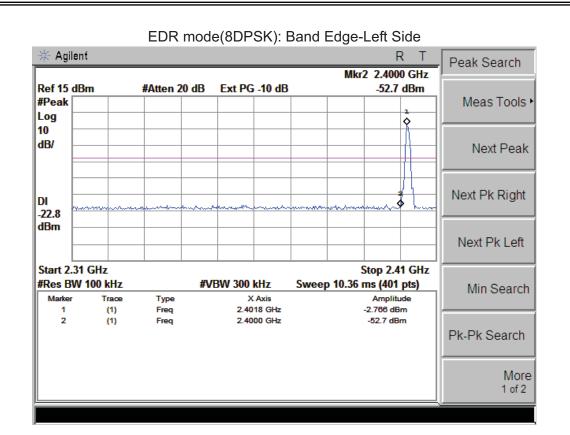
🔆 Agile	ent			R Mkr2 2.4000 G	T Peak Search
Ref 15 d #Peak	IBm	#Atten 20 dB	Ext PG -10 dB	-52.09 dB	
Log 10 dB/					Next Peak
DI -22.3			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Next Pk Right
dBm -					Next Pk Left
Marker	V 100 kHz Trace	Туре	BW 300 kHz X Axis	Stop 2.41 G Sweep 10.36 ms (401 pts Amplitude	
1 2	(1) (1)	Freq Freq	2.4098 GHz 2.4000 GHz	-2.322 dBm -52.09 dBm	Pk-Pk Search
					More 1 of 2

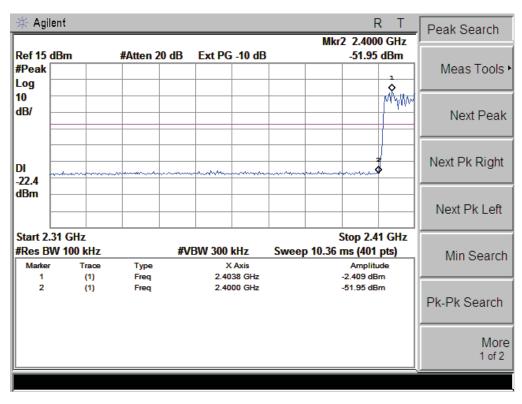


🔆 Agilent	ŧ					R	Γ	Peak Search
					Mkr2	2.48350 GH	z	
Ref 15 dB	m	#Atten 20 c	IB Ext P	G -10 dB		-53.95 dBn	n	
#Peak								Meas Tools
Log		<b></b>						
10 -		1	5					
dB/			+ $-$					Next Peak
			- kn					
		PM -	<u>' </u>					Next Pk Right
DI	markers	minund	- han			mon		Mext 1 K Kight
-21.1								
dBm –								
								Next Pk Left
Start 2.47						Ct 2 E Cl		
Start 2.47 #Res BW 1			#VBW 300		C	Stop 2.5 GH		
#Res DVV Marker	Trace	T			Sweep 4	ms (401 pts) Amplitude		Min Search
Marker 1	(1)	Type Freq		7983 GHz		-2.121 dBm	- 11	
2	(1)	Freq	2.48	350 GHz		-53.95 dBm	- 11	
								Pk-Pk Search
								More
							- 11	1 of 2



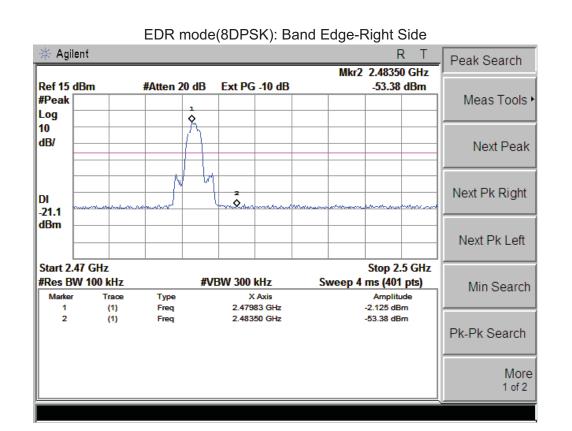


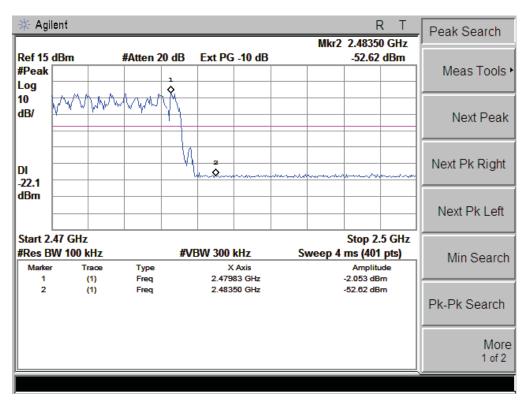












NOTE: Hopping enabled and disabled have evaluated, and the wortest data was reported



## **10. ANTENNA REQUIREMENT**

#### **10.1 STANDARD REQUIREMENT**

15.203 requirement: For intentional device, according to 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.

#### **10.2 EUT ANTENNA**

The EUT antenna is permanent attached antenna. It comply with the standard requirement.



# **11. EUT TEST PHOTO**







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# CONDUCTED EMISSION Photos

