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ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPARTC REQUIREMENT

OF

5” color flatscreen video monitor

MODEL No.: 2313TX

FCC ID: PJF-2313TX

Trademark: N/A

REPORT NO: ES140626270E

ISSUE DATE: July 17, 2014

Prepared for
Baby’s Journey, Inc.

22 Shore Rd, Narragansett, Rhode Island, United States

Prepared by
SHENZHEN EMTEK CO., LTD

Bldg 69, Majialong Industry Zone, Nanshan District,
Shenzhen, Guangdong, China
TEL: 86-755-26954280
FAX: 86-755-26954282

VERIFICATION OF COMPLIANCE

Applicant:	Baby's Journey, Inc. 22 Shore Rd, Narragansett, Rhode Island, United States
Manufacturer:	Easton Ward Electronics Technology Limited Room B3, Block B, 15/F, Wong King Industrial Building, 2-4 Tai Yau Street, San Po Kong, Kowloon, HK
Product Description:	5" color flatscreen video monitor
Model Number:	2313TX
Serial Number:	N/A
File Number:	ES140626270E

We hereby certify that:

The above equipment was tested by SHENZHEN EMTEK CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2009) and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.247.

The test results of this report relate only to the tested sample identified in this report.

Date of Test : July 5, 2014 to July 17, 2014

Prepared by : Joe Xia

Joe Xia/Editor

Reviewer : June Xie

June Xie/Supervisor

Approve & Authorized Signer :

Lisa Wang/Manager

Table of Contents

1. GENERAL INFORMATION

1.1 Product Description

The EUT is a short range, lower power a Device. It is designed by way of utilizing the GFSK, modulation achieves the system operating.

A major technical descriptions of EUT is described as following:

A). Operation Frequency: 2409-2469.8MHz
B). Modulation: GFSK
C). Number of Channel: 18
D). Channel space: 3.4MHz
E). RF Output Power: 13.62dBm
F). Antenna Type: Monopole antenna
G). Antenna Gain: 0dBi
H). Power Supply: DC 7.5V from Adapter
I). Adapter: Model: P5 0750500
Input: AC 120V~240V, 250mA, 50~60Hz
Output: DC 7.5V, 500mA

1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: PJF-2313TX filing to comply with Section 15.247 of the FCC Part 15 Subpart C Rules.

1.3 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4 (2009) and FCC Public Notice DA 00-705. Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4 Special Accessories

Not available for this EUT intended for grant.

1.5 Equipment Modifications

Not available for this EUT intended for grant.

1.6 Test Facility

Site Description

EMC Lab. : Accredited by CNAS, 2013.10.29
The certificate is valid until 2016.10.28
The Laboratory has been assessed and proved to be in compliance with CNAS/CL01:2006(identical to ISO/IEC17025: 2005)
The Certificate Registration Number is L2291

Accredited by TUV Rheinland Shenzhen 2010.5.25
The Laboratory has been assessed according to the requirements ISO/IEC 17025

Accredited by FCC, April 17, 2013
The Certificate Registration Number is 406365.

Accredited by Industry Canada, March 5, 2010
The Certificate Registration Number is 4480A-2.

Name of Firm : SHENZHEN EMTEK CO., LTD

Site Location : Bldg 69, Majialong Industry Zone,
Nanshan District, Shenzhen, Guangdong, China

2. System Test Configuration

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4-2009 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter(EUT) was rotated through three orthogonal axes according to the requirements in Section 13.1.4.1 of ANSI C63.4-2009.

2.4 Limitation

(1) Channel Separation test

FCC Part 15, Subpart C Section 15.247(a)(1) Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or the 20 Bandwidth of the hopping channel, whichever is greater.

Frequency Range (MHz)	Limit(kHz)
902-928	>25kHz
2400-2483.5	>25kHz
5725-5850	>25kHz

(2)

Frequency Range(MHz)	20dB Bandwidth Limit(kHz)			
Quantity of Hopping Channel	50	25	15	75
902-928	<250	>250	NA	NA
2400-2483.5	NA	NA	>1000	<1000

(3) Quantity of Hopping Channel

FCC Part 15, Subpart C Section 15.247

Frequency Range (MHz)	Limit(Quantity of Hopping Channel) 20dB bandwidth <250kHz	20dB bandwidth >250 kHz	20dB bandwidth <1MHz	20dB bandwidth >1MHz
902-928	50	25	NA	NA
2400-2483.5	NA	NA	75	15
5725-5850	NA	NA	75	NA

(4) Time of Occupancy(Dwell Time)

FCC Part 15, Subpart C Section 15.247

Frequency Range (MHz)	LIMIT(rms) 20dB bandwidth <250kHz(50Channel)	20dB bandwidth >250kHz(25Channel)	20dB bandwidth <1MHz(75Channel)
902-928	400(20S)	400(10S)	NA
2400-2483.5	NA	NA	400(30S)
5725-5850	NA	NA	400(30S)

Note: The "()"is all channel's average time of occupancy.

(5) Maximum Peak Output Power

FCC Part 15, Subpart C Section 15.247

Frequency Range (MHz)	Quantity of Hopping Channel	LIMIT(W) 50	25	15	75
902-928		1(30dBm)	0.125(21dBm)	NA	NA
2400-2483.5		NA	NA	0.125(21dBm)	1(30dBm)
5725-5850		NA	NA	NA	1(30dBm)

(6) Band edge

FCC Part15, Subpart C Section 15.247, In any 100kHz bandwidth outside the frequency band in with the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, attenuation below the general limits specified in section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a).

Operating Frequency Range(MHz)	Spurious emission frequency	Limit	
		Peak power ration to emission(dBc)	Emission level(dBuV/m)
902-928	<902	>20	NA
	>928	>20	NA
	960-1240	NA	54
2400-2483.5	<2400	>20	NA
	>2483.5-2500	NA	54
5725-5850	<5350-5460	NA	54
	<5725	>20	NA
	>5850	>20	NA

(7) Conducted Emission

Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note:

1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

(8) Radiated Emission

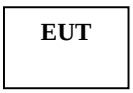
FCC Part 15, Subpart C Section 15.209 limit of radiated emission for frequency below 1000GHz. The emissions from an intentional radiator shall not exceed the field strength level specified in the following table:

Frequency (MHz)	Field strength μV/m	Distance(m)	Field strength at 3m dBμV/m
0.009~0.490	2400/F(KHz)	300	See the remark
0.490~1.705	2400/F(KHz)	30	
1.705~30.0	30	30	
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

Remark: 1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Distance extrapolation factor =40log(Specific distance/ test distance)(dB);
Limit line=Specific limits(dBuV) + distance extrapolation factor.

2.5 Configuration of Tested System

Fig. 2-1 Configuration of Tested System



2.6 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
1.	5” color flatscreen video monitor	N/A	2313TX	PJF-2313TX	N/A	***EUT***

Note:

(1) Unless otherwise denoted as EUT in『Remark』column , device(s) used in tested system is a support equipment.

2.7 Description of test modes

The EUT has been tested under TX operating condition.
This EUT is a FHSS system, were conducted to determine the final configuration from all possible combinations. We use software control the EUT, Let EUT hopping on and transmit with highest power, All the modes GFSK have been tested. 18 Channels are provided by EUT. The 3 channels of lower, medium and higher were chosen for test.

Channel	Frequency(MHz)
1	2409
9	2437.2
18	2469.8

3. Summary of Test Results

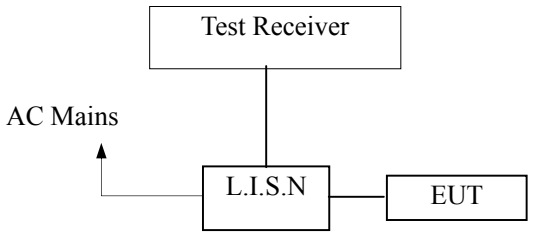
FCC Rule	Description Of Test	Result
15.247(a)(1)	Channel Separation test	Pass
15.247(a)(1)	20dB Bandwidth	Pass
15.247(a)(1)	Quantity of Hopping Channel	Pass
15.247(a)(1)	Time of Occupancy (Dwell Time)	Pass
15.247(b)(1)	Max Peak output Power test	Pass
15.247(d)	Band edge test	Pass
15.207	AC Power Conducted Emission	Pass
15.247(d)	Radiated Emission	Pass
§15.247(d)	Antenna Port Emission	Pass
15.203&15.247(b)	Antenna Application	Pass

4. Conducted Emissions Test

4.1 Measurement Procedure:

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

4.2 Test SET-UP (Block Diagram of Configuration)



4.3 Measurement Equipment Used:

Conducted Emission Test Site # 4					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL DUE.**
Test Receiver	Rohde & Schwarz	ESCS30	828985/018	05/17/2014	05/16/2015
L.I.S.N	Rohde & Schwarz	ESH2-Z5	834549/005	05/17/2014	05/16/2015
50ΩCoaxial Switch	Anritsu	MP59B	M20531	05/17/2014	05/16/2015

4.4 Conducted Emission Limit

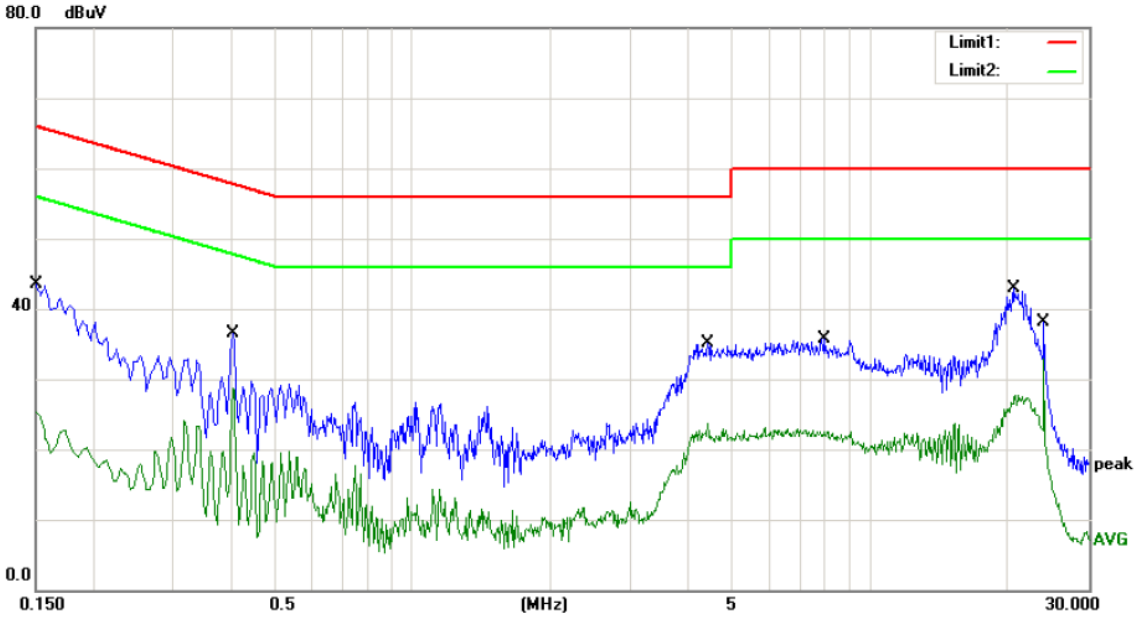
(7) Conducted Emission

Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note:

1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

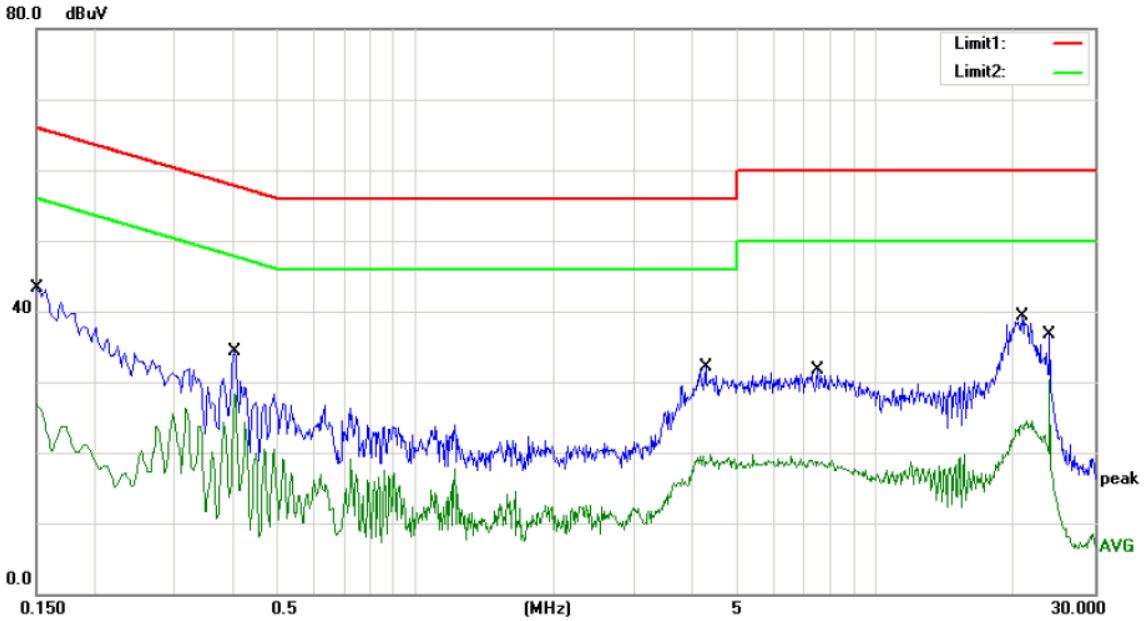
4.5 Measurement Result:



Site Conduction #1 Phase: *L1* Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: 5"color flatscreen video monitor
M/N: PJF-2313TX
Mode: ON
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	43.54	0.00	43.54	66.00	-22.46	QP	
2		0.1500	25.36	0.00	25.36	56.00	-30.64	AVG	
3		0.4060	36.45	0.00	36.45	57.73	-21.28	QP	
4		0.4060	28.69	0.00	28.69	47.73	-19.04	AVG	
5		4.4260	35.09	0.00	35.09	56.00	-20.91	QP	
6		4.4260	23.78	0.00	23.78	46.00	-22.22	AVG	
7		7.9540	35.77	0.00	35.77	60.00	-24.23	QP	
8		7.9540	22.94	0.00	22.94	50.00	-27.06	AVG	
9	*	20.4940	42.85	0.00	42.85	60.00	-17.15	QP	
10		20.4940	27.76	0.00	27.76	50.00	-22.24	AVG	
11		24.0020	38.09	0.00	38.09	60.00	-21.91	QP	
12		24.0020	32.82	0.00	32.82	50.00	-17.18	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Cai



Site Conduction #1 Phase: N Temperature: 26
Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 60 %
EUT: 5"color flatscreen video monitor
M/N: PJF-2313TX
Mode: ON
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	43.38	0.00	43.38	66.00	-22.62	QP	
2		0.1500	26.85	0.00	26.85	56.00	-29.15	AVG	
3		0.4060	34.38	0.00	34.38	57.73	-23.35	QP	
4	*	0.4060	28.23	0.00	28.23	47.73	-19.50	AVG	
5		4.2900	32.05	0.00	32.05	56.00	-23.95	QP	
6		4.2900	19.72	0.00	19.72	46.00	-26.28	AVG	
7		7.5100	31.73	0.00	31.73	60.00	-28.27	QP	
8		7.5100	19.47	0.00	19.47	50.00	-30.53	AVG	
9		20.8380	39.24	0.00	39.24	60.00	-20.76	QP	
10		20.8380	24.51	0.00	24.51	50.00	-25.49	AVG	
11		24.0020	36.66	0.00	36.66	60.00	-23.34	QP	
12		24.0020	30.26	0.00	30.26	50.00	-19.74	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: Cai

5. Radiated Emission Test

5.1 Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured was complete.

When spectrum scanned from 30 MHz to 1GHz setting resolution bandwidth 120 kHz and video bandwidth 300kHz.

EMI Test Receiver	Setting
Attenuation	Auto
RB	120kHz
VB	300kHz
Detector	QP
Trace	Max hold

When spectrum scanned above 1GHz setting resolution bandwidth 1MHz, video bandwidth 3MHz.

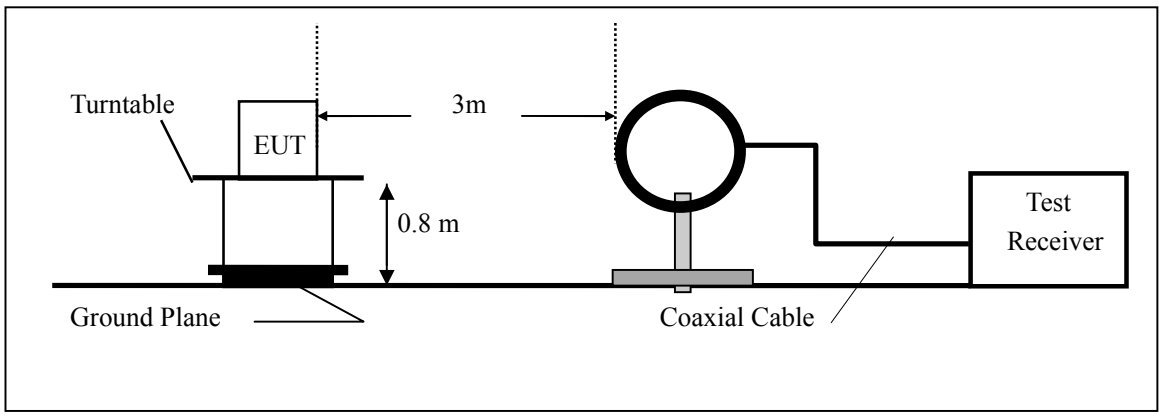
EMI Test Receiver	Setting
Attenuation	Auto
RB	1MHz
VB	3MHz
Detector	Peak
Trace	Max hold

When spectrum scanned above 1GHz setting resolution bandwidth 1MHz, video bandwidth 10Hz.

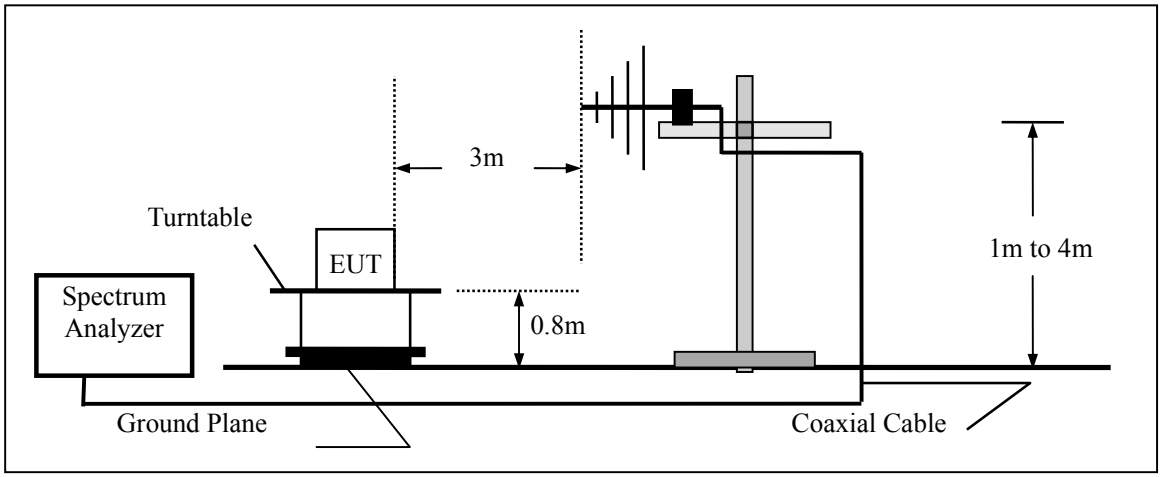
EMI Test Receiver	Setting
Attenuation	Auto
RB	1MHz
VB	10Hz
Detector	AVG
Trace	Max hold

5.2 Test SET-UP (Block Diagram of Configuration)

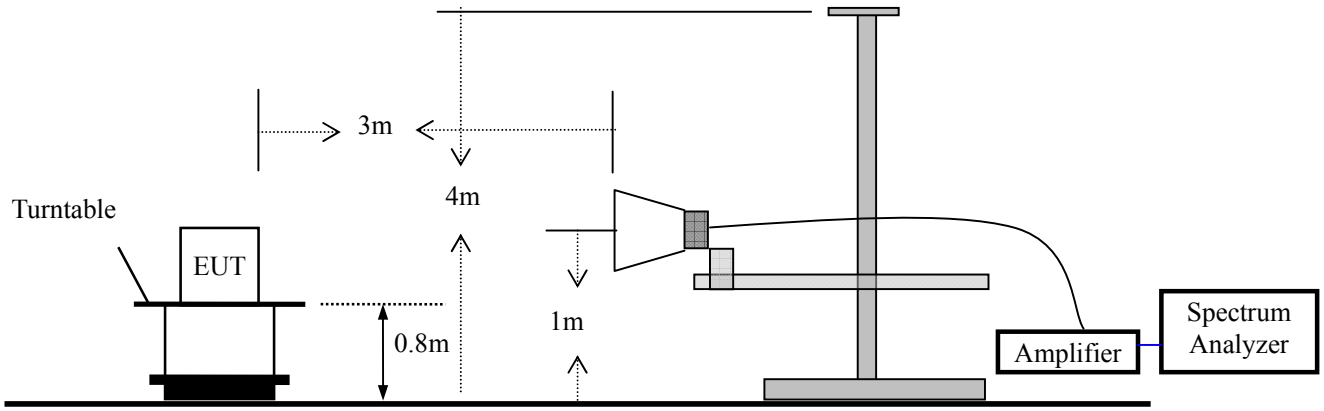
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



5.3 Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Rohde & Schwarz	FSP7	839511/010	05/17/2014	05/16/2015
Spectrum Analyzer	HP	E4407B	839840481	05/17/2014	05/16/2015
EMI Test Receiver	Rohde & Schwarz	ESCS30	828985/018	05/17/2014	05/16/2015
Pre-Amplifier	HP	8447D	2944A07999	05/17/2014	05/16/2015
Bilog Antenna	Schwarzbeck	VULB9163	142	05/17/2014	05/16/2015
Loop Antenna	ARA	PLA-1030/B	1029	05/17/2014	05/16/2015
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170399	05/17/2014	05/16/2015
Horn Antenna	Schwarzbeck	BBHA 9120	D143	05/17/2014	05/16/2015

5.4 Measurement Result

All the modulation modes were tested the data of the worst mode (GFSK) are recorded in the following pages and all modulation methods do not exceed the above mentioned limits.

Operation Mode:	TX Mode	Test Date :	July 10, 2014
Frequency Range:	9KHz~30MHz	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %
Measured Distance:	3m	Test By:	WOLF

Freq. (MHz)	Ant.Pol. H/V	Emission Level (dBuV/m)	Limit 3m (dBuV/m)	Over (dB)
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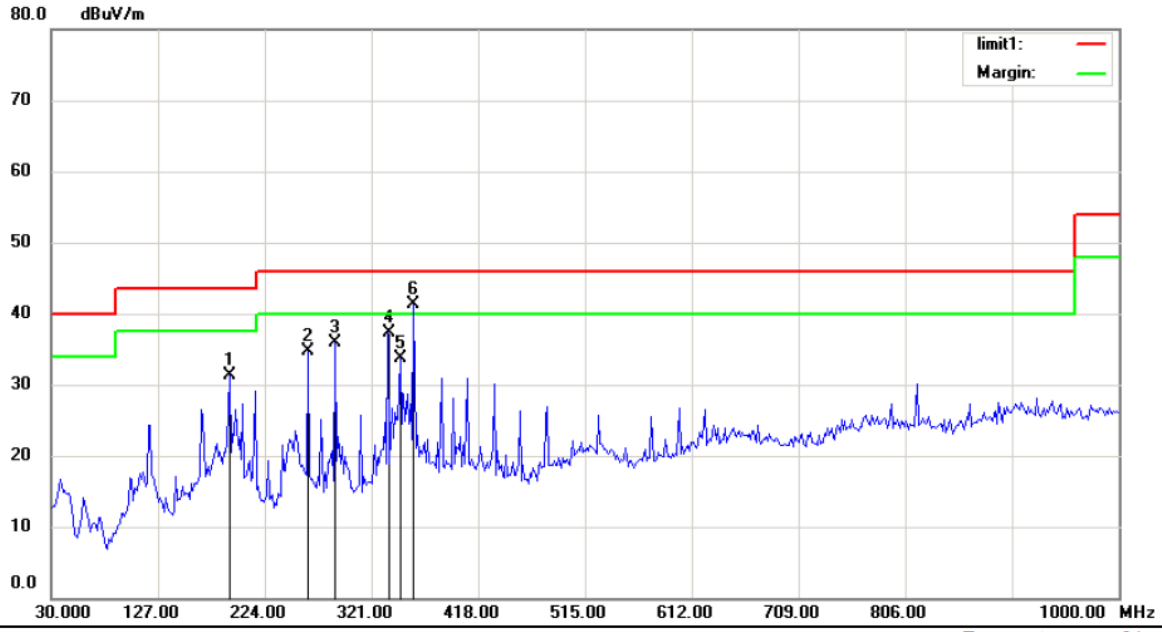
Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.



Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT:

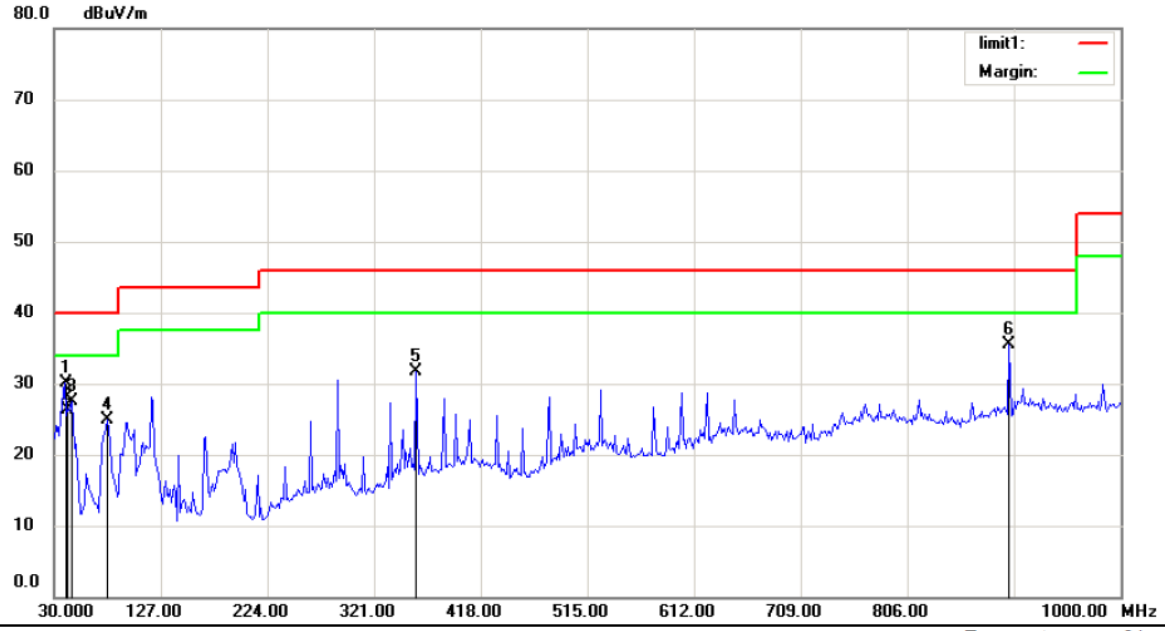
M/N: PJF-2313TX

Mode: TX 2409

Note: Eut:5" Color Flatscreen Video Monitor

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		191.6665	21.03	10.29	31.32	43.50	-12.18	QP			
2		263.1730	20.12	14.59	34.71	46.00	-11.29	QP			
3		288.0448	21.04	14.92	35.96	46.00	-10.04	QP			
4		336.2340	22.05	15.23	37.28	46.00	-8.72	QP			
5		347.1152	17.53	16.19	33.72	46.00	-12.28	QP			
6	*	359.5511	24.27	17.00	41.27	46.00	-4.73	QP			

*:Maximum data x:Over limit !:over margin Operator: KK



Site 3m Chamber #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT:

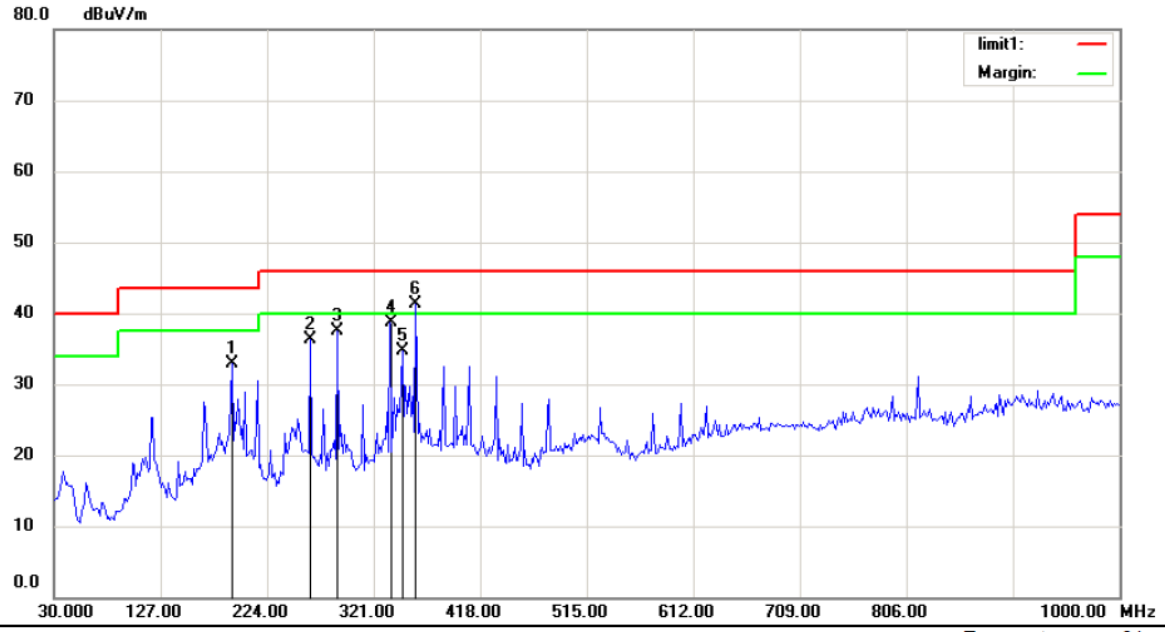
M/N: PJF-2313TX

Mode: TX 2409

Note: Eut:5" Color Flatscreen Video Monitor

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	39.3270	16.16	13.98	30.14	40.00	-9.86	QP			
2		42.4358	11.41	14.94	26.35	40.00	-13.65	QP			
3		45.5448	13.34	14.11	27.45	40.00	-12.55	QP			
4		78.1890	17.73	7.26	24.99	40.00	-15.01	QP			
5		359.5511	14.66	17.00	31.66	46.00	-14.34	QP			
6		898.9583	9.48	26.10	35.58	46.00	-10.42	QP			

*:Maximum data x:Over limit !:over margin Operator: KK



Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT:

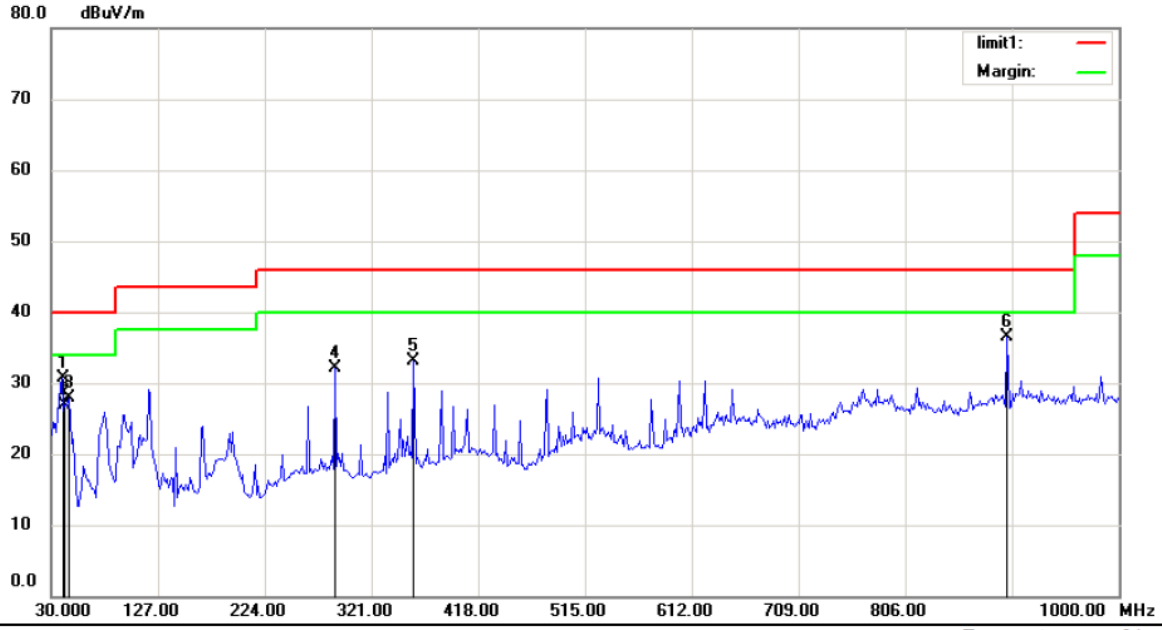
M/N: PJF-2313TX

Mode:TX 2437.2

Note: Eut:5" Color Flatscreen Video Monitor

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		191.6665	22.52	10.29	32.81	43.50	-10.69	QP			
2		263.1730	21.62	14.59	36.21	46.00	-9.79	QP			
3		288.0448	22.54	14.92	37.46	46.00	-8.54	QP			
4		336.2340	23.55	15.23	38.78	46.00	-7.22	QP			
5		347.1152	18.53	16.19	34.72	46.00	-11.28	QP			
6	*	359.5511	24.27	17.00	41.27	46.00	-4.73	QP			

*:Maximum data x:Over limit !:over margin Operator: KK



Site 3m Chamber #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT:

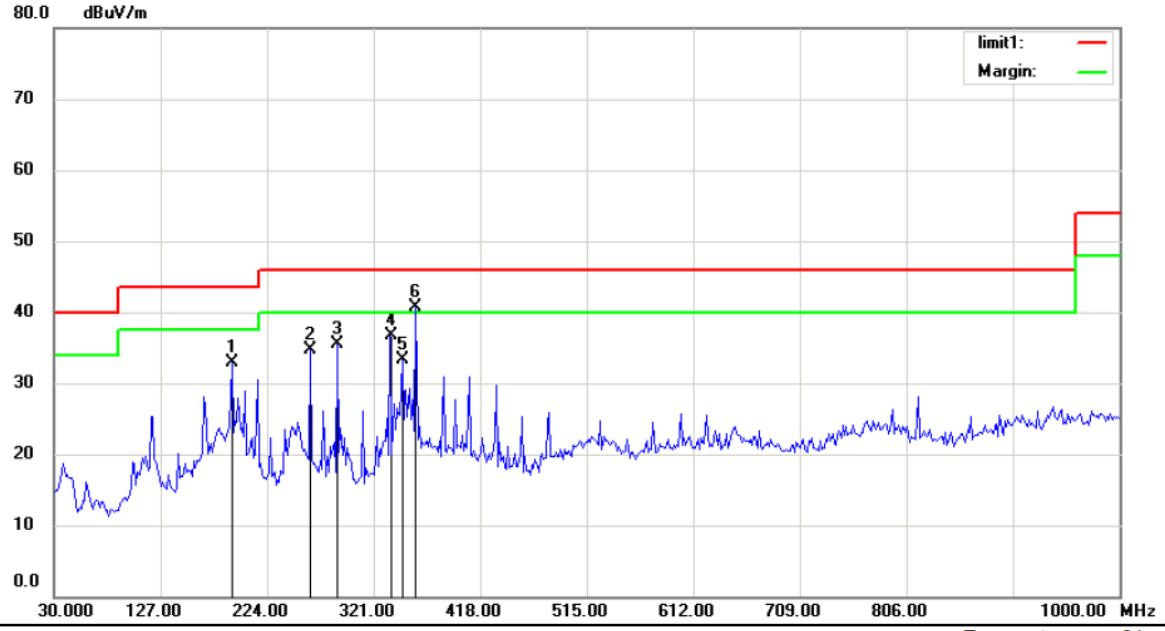
M/N: PJF-2313TX

Mode:TX 2437.2

Note: Eut:5" Color Flatscreen Video Monitor

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	39.3270	16.66	13.98	30.64	40.00	-9.36	QP			
2		42.4358	11.91	14.94	26.85	40.00	-13.15	QP			
3		45.5448	13.84	14.11	27.95	40.00	-12.05	QP			
4		288.0448	17.11	14.92	32.03	46.00	-13.97	QP			
5		359.5511	16.16	17.00	33.16	46.00	-12.84	QP			
6		898.9583	10.48	26.10	36.58	46.00	-9.42	QP			

*:Maximum data x:Over limit !:over margin Operator: KK



Site 3m Chamber #1 Polarization: *Horizontal* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT:

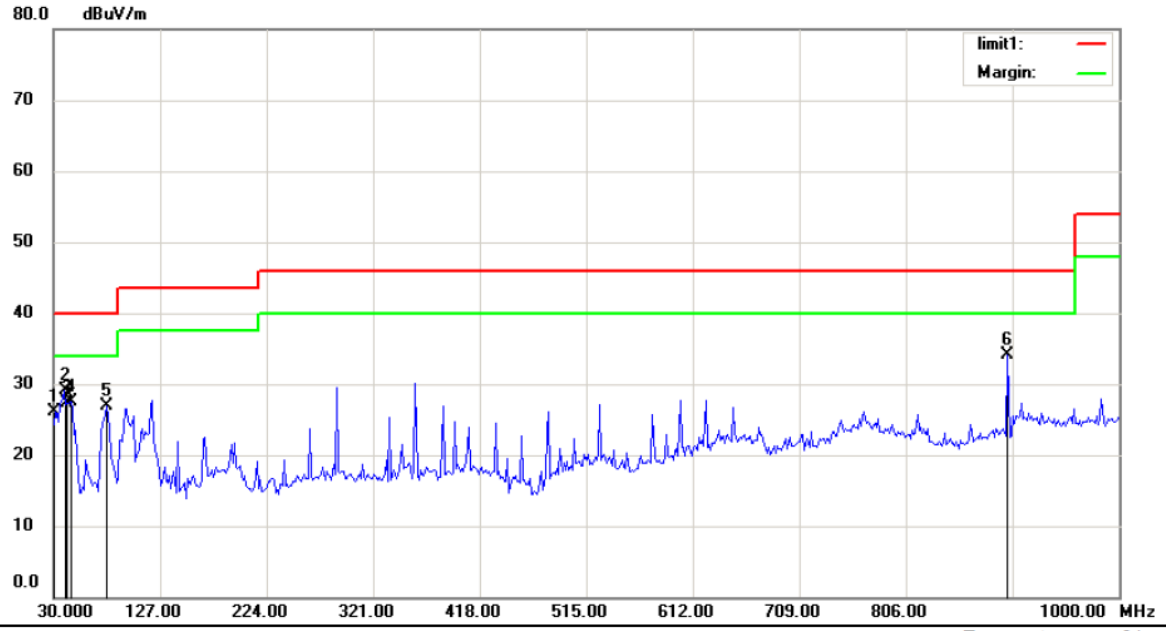
M/N: PJF-2313TX

Mode:TX 2469.8

Note: Eut:5" Color Flatscreen Video Monitor

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		191.6665	22.52	10.29	32.81	43.50	-10.69	QP			
2		263.1730	20.12	14.59	34.71	46.00	-11.29	QP			
3		288.0448	20.54	14.92	35.46	46.00	-10.54	QP			
4		336.2340	21.55	15.23	36.78	46.00	-9.22	QP			
5		347.1152	17.03	16.19	33.22	46.00	-12.78	QP			
6	*	359.5511	23.77	17.00	40.77	46.00	-5.23	QP			

*:Maximum data x:Over limit !:over margin Operator: KK



Site 3m Chamber #1 Polarization: *Vertical* Temperature: 24

Limit: (RE)FCC PART 15 CLASS B Power: AC 120V/60Hz Humidity: 53 %

EUT:

M/N: PJF-2313TX

Mode:TX 2469.8

Note: Eut:5" Color Flatscreen Video Monitor

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		31.5544	13.61	12.46	26.07	40.00	-13.93	QP			
2	*	39.3270	15.16	13.98	29.14	40.00	-10.86	QP			
3		42.4358	12.41	14.94	27.35	40.00	-12.65	QP			
4		45.5448	13.34	14.11	27.45	40.00	-12.55	QP			
5		78.1890	19.73	7.26	26.99	40.00	-13.01	QP			
6		898.9583	7.98	26.10	34.08	46.00	-11.92	QP			

*:Maximum data x:Over limit !:over margin Operator: KK

Operation Mode:	2409MHz	Test Date :	July 10, 2014
Frequency Range:	1-25GHz	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %
Measured Distance:	3m	Test By:	KL
Test mode:	GFSK		

Freq.	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin(dB)	
(MHz)	H/V	PK	AV	PK	AV	PK	AV
5357.61	V	43.13	26.50	74.00	54.00	-30.87	-27.50
7794.34	V	46.53	29.04	74.00	54.00	-27.47	-24.96
7918.50	V	46.40	30.08	74.00	54.00	-27.60	-23.92
9964.18	V	52.39	34.77	74.00	54.00	-21.61	-19.23
11135.66	V	51.68	34.58	74.00	54.00	-22.32	-19.42
14130.07	V	50.72	34.84	74.00	54.00	-23.28	-19.16
5360.03	H	44.61	27.41	74.00	54.00	-29.39	-26.59
7791.92	H	48.56	31.66	74.00	54.00	-25.44	-22.34
7918.49	H	48.90	30.99	74.00	54.00	-25.10	-23.01
9964.21	H	50.90	33.83	74.00	54.00	-23.10	-20.17
10618.08	H	49.25	34.60	74.00	54.00	-24.75	-19.40
14456.90	H	48.48	42.09	74.00	54.00	-25.52	-11.91

No others harmonics emissions are higher than 20dB below the limits of 47 CFR Part 15.247.

Note: (1) All Readings are Peak Value and AV.

(2) Emission Level= Reading Level+Probe Factor +Cable Loss.

(3) Data of measurement within this frequency range shown " -- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Operation Mode:	2437.2MHz	Test Date :	July 10, 2014
Frequency Range:	1-25GHz	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %
Measured Distance:	3m	Test By:	KL
Test mode:	GFSK		

Freq.	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin(dB)	
(MHz)	H/V	PK	AV	PK	AV	PK	AV
5357.59	V	42.83	26.22	74.00	54.00	-31.17	-27.78
7794.34	V	46.35	28.81	74.00	54.00	-27.65	-25.19
7920.97	V	46.09	29.81	74.00	54.00	-27.91	-24.19
9961.71	V	52.26	34.52	74.00	54.00	-21.74	-19.48
11135.59	V	51.51	34.36	74.00	54.00	-22.49	-19.64
14129.97	V	50.61	34.56	74.00	54.00	-23.39	-19.44
5357.45	H	44.45	27.27	74.00	54.00	-29.55	-26.73
7794.28	H	48.38	31.42	74.00	54.00	-25.62	-22.58
7918.36	H	48.70	30.73	74.00	54.00	-25.30	-23.27
9961.68	H	50.80	33.63	74.00	54.00	-23.20	-20.37
10617.96	H	49.10	34.30	74.00	54.00	-24.90	-19.70
14456.89	H	48.25	41.90	74.00	54.00	-25.75	-12.10

No others harmonics emissions are higher than 20dB below the limits of 47 CFR Part 15.247.

Note: (1) All Readings are Peak Value and AV.
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) Data of measurement within this frequency range shown " -- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Operation Mode:	2469.8MHz	Test Date :	July 10, 2014
Frequency Range:	1-25GHz	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %
Measured Distance:	3m	Test By:	KL
Test mode:	GFSK		

Freq.	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin(dB)	
(MHz)	H/V	PK	AV	PK	AV	PK	AV
5360.02	V	42.70	25.99	74.00	54.00	-31.30	-28.01
7791.93	V	46.20	28.74	74.00	54.00	-27.80	-25.26
7920.93	V	45.95	29.58	74.00	54.00	-28.05	-24.42
9961.79	V	52.02	34.34	74.00	54.00	-21.98	-19.66
11133.23	V	51.22	34.09	74.00	54.00	-22.78	-19.91
14132.48	V	50.35	34.30	74.00	54.00	-23.65	-19.70
5360.07	H	44.22	26.98	74.00	54.00	-29.78	-27.02
7791.84	H	48.25	31.20	74.00	54.00	-25.75	-22.80
7920.85	H	48.63	30.47	74.00	54.00	-25.37	-23.53
9961.70	H	50.60	33.45	74.00	54.00	-23.40	-20.55
10615.46	H	48.97	34.06	74.00	54.00	-25.03	-19.94
14459.34	H	48.05	41.62	74.00	54.00	-25.95	-12.38

No others harmonics emissions are higher than 20dB below the limits of 47 CFR Part 15.247.

Note: (1) All Readings are Peak Value and AV.

(2) Emission Level= Reading Level+Probe Factor +Cable Loss.

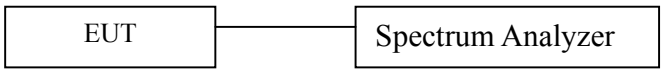
(3) Data of measurement within this frequency range shown " -- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

6. Channel Separation test

6.1 Measurement Procedure

The EUT was operating in hopping mode or could be controlled its channel. Printed out the test result from the spectrum by hard copy function.

6.2 Test SET-UP (Block Diagram of Configuration)



6.3 Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4407B	88156318	05/17/2014	05/16/2015

6.4 Measurement Results:

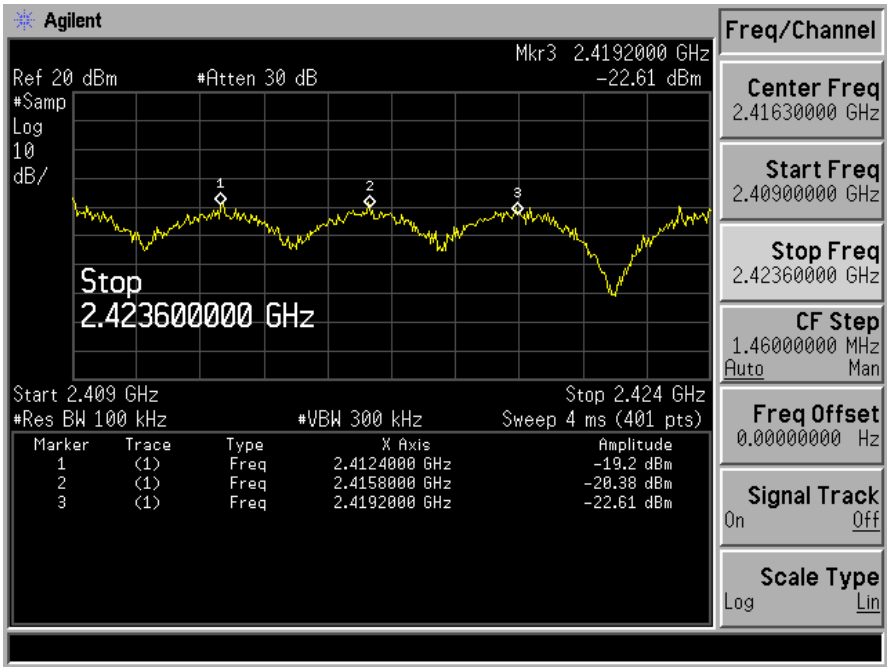
The following table is the setting of spectrum analyzer.

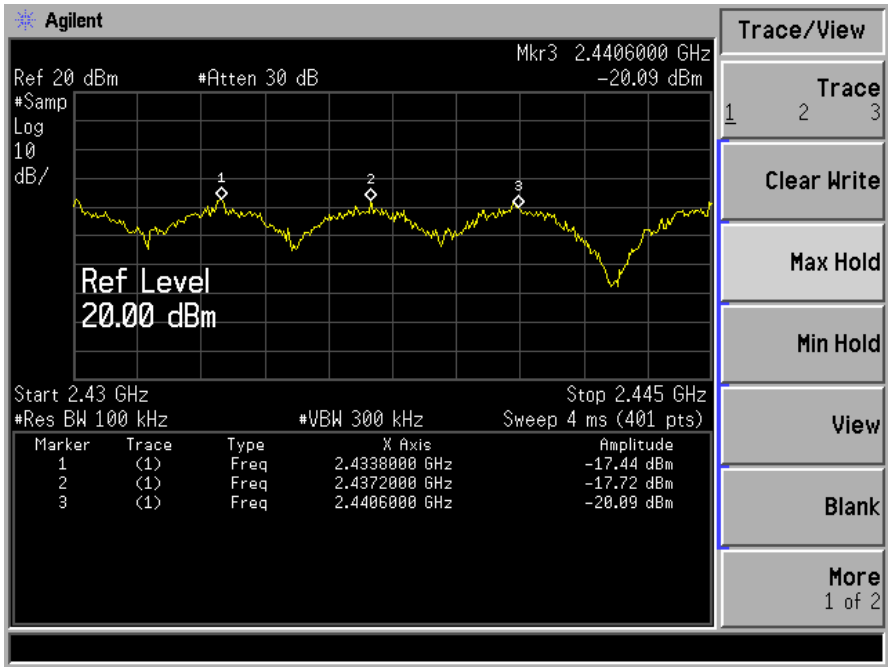
EMI Test Receiver	Setting
Attenuation	Auto
RB	100kHz
VB	300kHz
Detector	Peak
Trace	Max hold

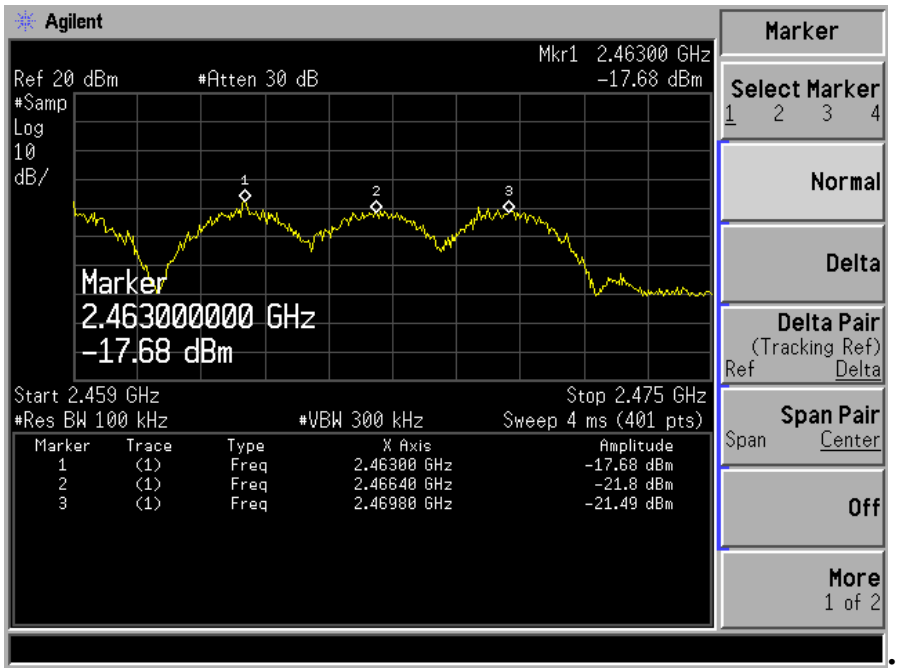
All the modes GFSK have been tested and the result were recorded in the following pages and the others modulation methods do not exceed the limits.
Refer to attached data chart.

Spectrum Detector:	PK	Test Date :	July 12, 2014
Test By:	Joe	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %
Modulation:	GFSK		

Channel number	Channel frequency (MHz)	Separation Read Value (kHz)	Separation Limit
1	2409	3400	>2455.33
9	2437.2	3400	>2525.33
18	2469.8	3400	>2537.33




Agilent
Mkr3 2.4406000 GHz
Ref 20 dBm
#Atten 30 dB
-20.09 dBm
#Samp
Log
10
dB/
Ref Level
20.00 dBm
Start 2.43 GHz
Stop 2.445 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 4 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4338000 GHz -17.44 dBm
2 (1) Freq 2.4372000 GHz -17.72 dBm
3 (1) Freq 2.4406000 GHz -20.09 dBm
Trace/View
Trace
1 2 3
Clear Write
Max Hold
Min Hold
View
Blank
More
1 of 2


Agilent
Mkr1 2.46300 GHz
Ref 20 dBm
#Atten 30 dB
-17.68 dBm
#Samp
Log
10
dB/
Marker
2.463000000 GHz
-17.68 dBm
Start 2.459 GHz
Stop 2.475 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 4 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.46300 GHz -17.68 dBm
2 (1) Freq 2.46640 GHz -21.8 dBm
3 (1) Freq 2.46980 GHz -21.49 dBm
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

7. 20dB Bandwidth test

7.1 Measurement Procedure

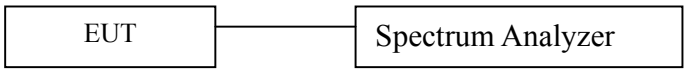
1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

2 Set to the maximum power setting and enable the EUT transmit continuously

3. Make the measurement with the spectrum analyzer 's resolution bandwidth (RBW) = 100 kHz.Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement The 20dB bandwidth.

4. Measure and record the results in the test report.

7.2 Test SET-UP (Block Diagram of Configuration)



7.3 Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4407B	88156318	05/17/2014	05/16/2015

7.4 Measurement Results:

The following table is the setting of spectrum analyzer.

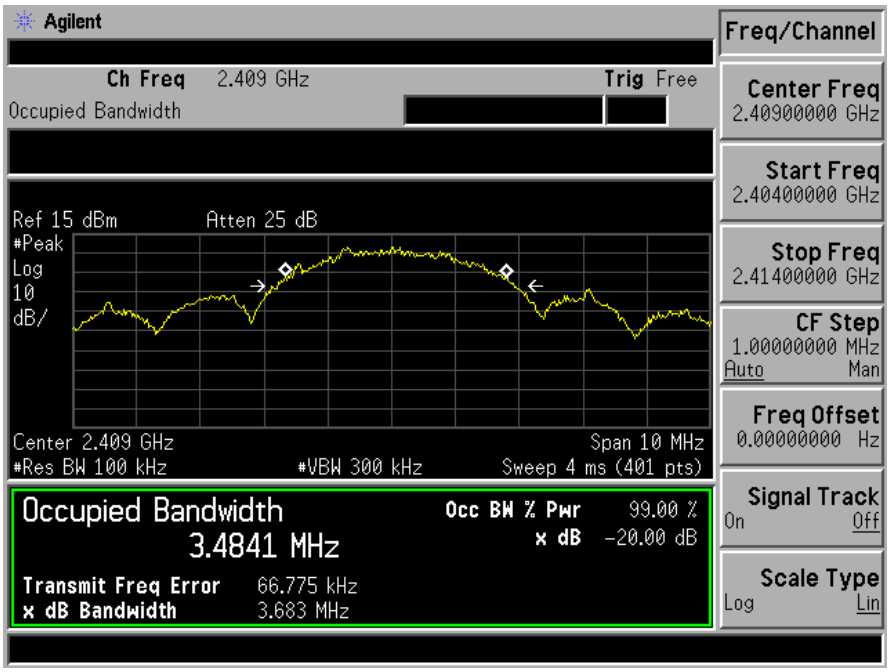
EMI Test Receiver	Setting
Attenuation	Auto
Span	10MHz
RB	100kHz
VB	300kHz
Detector	Peak
Trace	Max hold

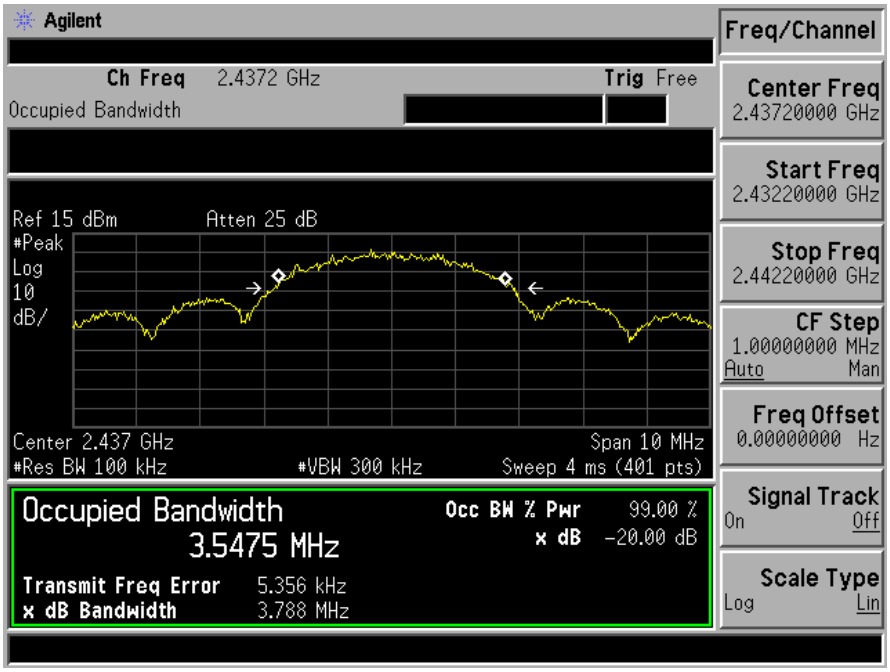
All the modes GFSK have been tested and the result recorded in the following pages.

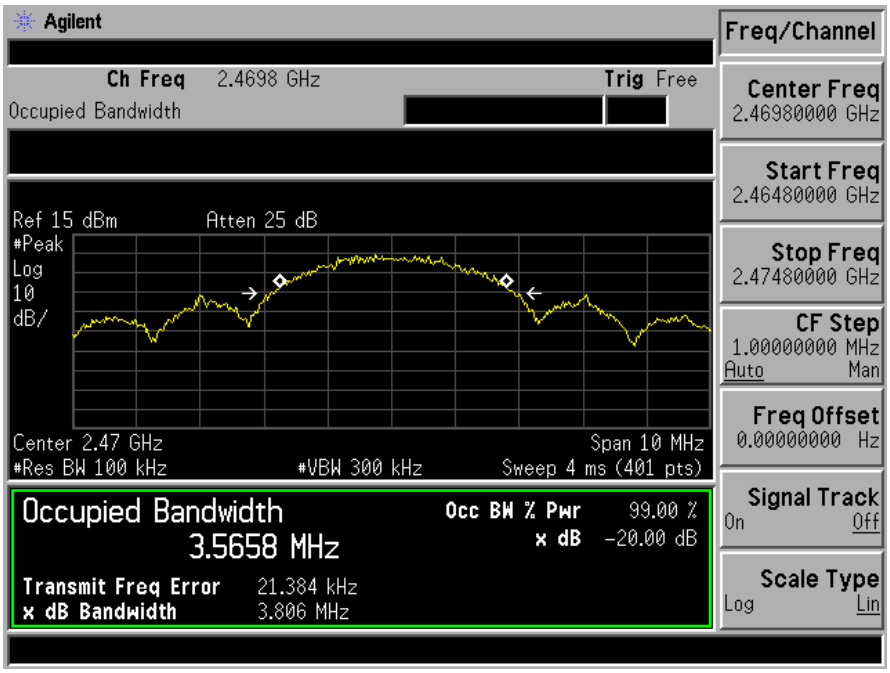
7.4.1. 20dB Bandwidth test data Chart:
Refer to attached data chart.

Spectrum Detector:	PK	Test Date :	July 12, 2014
Test By:	Joe	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %
Modulation:	GFSK		

Channel number	Channel frequency (MHz)	20dB Down BW(kHz)
1	2409	3683
9	2437.2	3788
18	2469.8	3806




Agilent
Ch Freq 2.4372 GHz
Trig Free
Occupied Bandwidth
Ref 15 dBm
Atten 25 dB
#Peak
Log
10
dB/
Center 2.437 GHz
Span 10 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 4 ms (401 pts)
Occupied Bandwidth
3.5475 MHz
Occ BW % Pwr 99.00 %
x dB -20.00 dB
Transmit Freq Error 5.356 kHz
x dB Bandwidth 3.788 MHz
Freq/Channel
Center Freq
2.43720000 GHz
Start Freq
2.43220000 GHz
Stop Freq
2.44220000 GHz
CF Step
1.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

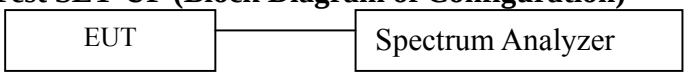

Agilent
Ch Freq 2.4698 GHz
Trig Free
Occupied Bandwidth
Ref 15 dBm
Atten 25 dB
#Peak
Log
10
dB/
Center 2.47 GHz
Span 10 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 4 ms (401 pts)
Occupied Bandwidth
3.5658 MHz
Occ BW % Pwr 99.00 %
x dB -20.00 dB
Transmit Freq Error 21.384 kHz
x dB Bandwidth 3.806 MHz
Freq/Channel
Center Freq
2.46980000 GHz
Start Freq
2.46480000 GHz
Stop Freq
2.47480000 GHz
CF Step
1.00000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Scale Type
Log Lin

8. Quantity of Hopping Channel Test

8.1 Measurement Procedure

The EUT was operating in hopping mode or could be controlled its channel. Printed out the test result from the spectrum by hard copy function.

8.2 Test SET-UP (Block Diagram of Configuration)



8.3 Measurement Equipment Used:

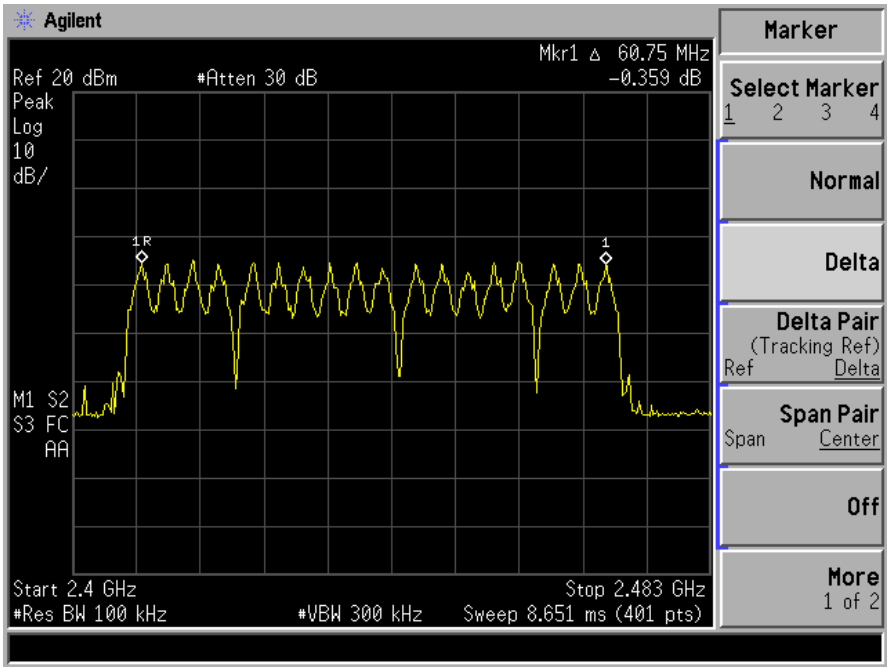
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4407B	88156318	05/17/2014	05/16/2015

8.4 Measurement Results:

All the modulation modes were tested the data of the mode (GFSK) is recorded as below

Spectrum Detector:	PK	Test Date :	July 12, 2014
Test By:	Joe	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %

Hopping Channel Frequency Range	Quantity of Hopping Channel	Quantity of Hopping Channel limit
2409-2469.8	18	＞15

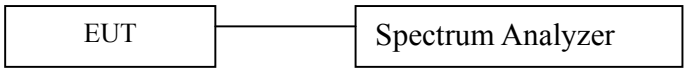

Agilent
Mkr1 Δ 60.75 MHz
Ref 20 dBm
#Atten 30 dB
-0.359 dB
Peak
Log
10
dB/
1R
1
M1 S2
S3 FC
AA
Start 2.4 GHz
Stop 2.483 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 8.651 ms (401 pts)
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

9. Time of Occupancy (Dwell Time) test

9.1 Measurement Procedure

a. Check the calibration of the measuring instrument(SA) using either an internal calibrator or a known signal from an external generator.
b. Turn on the EUT and connect its antenna terminal to measurement 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. Adjust the center frequency of SA on any frequency be measured and set SA to zero span mode. And then, set RBW and VBW of spectrum analyzer to proper value.
d. Measure the time duration of one transmission on the measured frequency. And then plot the result with time difference of this time duration.
e. Repeat above procedures until all different time-slot modes have been completed.

9.2 Test SET-UP (Block Diagram of Configuration)



9.3 Measurement Equipment Used:

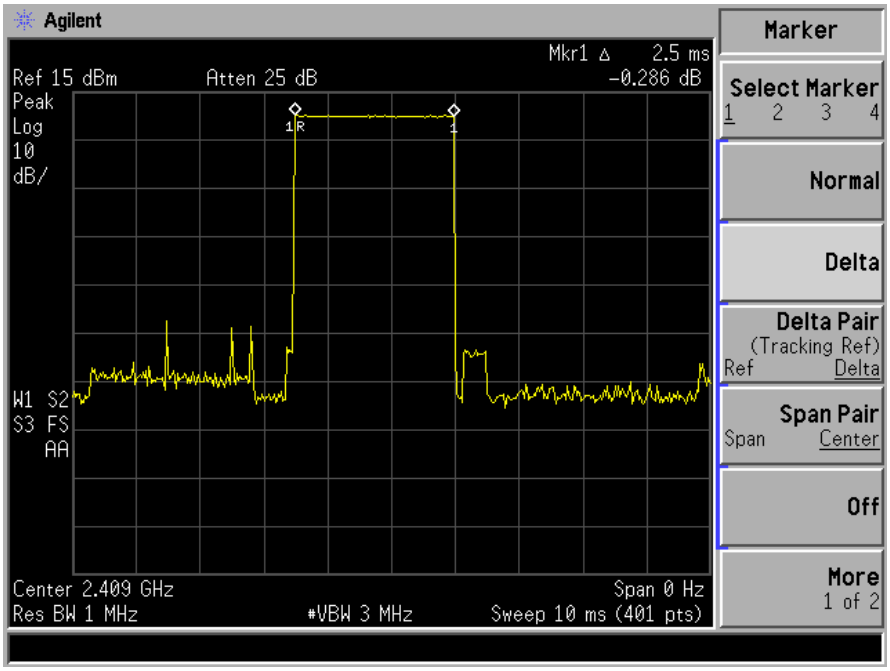
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4407B	88156318	05/17/2014	05/16/2015

9.4 Measurement Results:

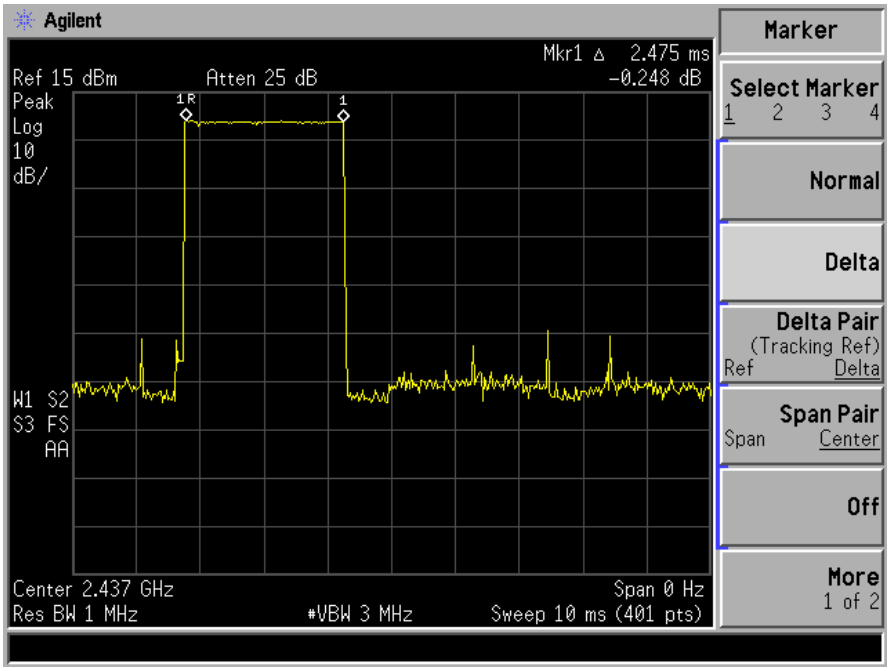
Spectrum Detector:	PK	Test Date :	July 14, 2014
Test By:	Joe	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %

Channel number	Dwell Time	Length of transmissions time(msec)	Result (msec)	Limit (msec)
1	20*0.4*18* Length of transmissions time	2.5	360	400
9	20*0.4*18* Length of transmissions time	2.475	356.4	400
18	20*0.4*18* Length of transmissions time	2.5	360	400

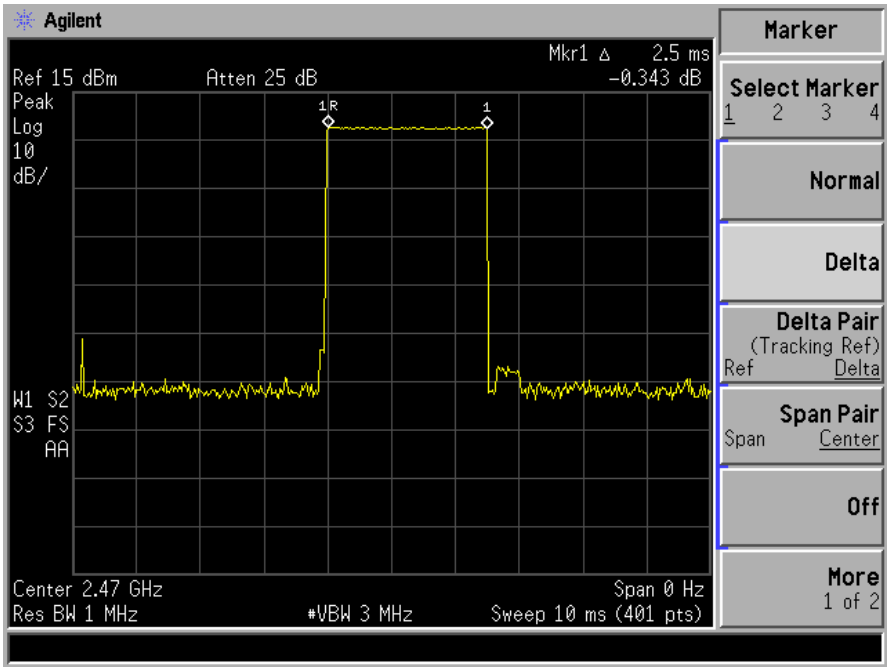
Channel 1



Channel 9



Channel 18

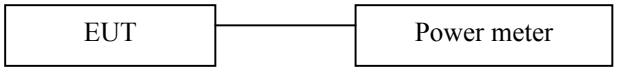

Agilent
Mkr1 Δ 2.5 ms
Ref 15 dBm
Atten 25 dB
-0.343 dB
Peak
Log
10
dB/
1R
1
W1 S2
S3 FS
AA
Center 2.47 GHz
Res BW 1 MHz
#VBW 3 MHz
Span 0 Hz
Sweep 10 ms (401 pts)
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

10. MAX IMUM PEAK OUTPUT POWER TEST

10.1 Measurement Procedure

a. The testing follows FCC public Notice DA 00-705 Measurement Guidelines.
b. The RF output of EUT was connected to the power meter by RF cable and attnuator. The path loss was compensated to the results for each measurement.
c. Set to the maximum output power setting and enable the EUT transmit continuously.
d. Measure the conducted output power with cable loss and record the results in the test report.
e. Measure and record the results in the report.

10.2 Test SET-UP (Block Diagram of Configuration)



10.3 Measurement Equipment Used:

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Power meter	Boonton	4232A	29001	05/17/2014	05/16/2015
Power sensor	Boonton	51011-EMC	31184	05/17/2014	05/16/2015

10.4 Measurement Results:

All the modes GFSK have been tested and the result recorded in the following pages and the others modulation methods do not exceed the limits.

Spectrum Detector:	PK	Test Date :	July 14, 2014
Test By:	Joe	Temperature :	25℃
Test Result:	PASS	Humidity :	55 %
Modulation:	GFSK		

Channel number	Channel Frequency (MHz)	Peak Power output(dBm)	Peak Power Limit(mW)	Pass/Fail
1	2409	13.62	125mW	PASS
9	2437.2	12.95	125mW	PASS
18	2469.8	11.30	125mW	PASS

11. Band EDGE test

11.1 Measurement Procedure

1. 1. The testing follows the guidelines in Spurious Radiated Emissions of FCC Public Notice DA00-705 Measurement Guidelines.
2. 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. 3. The EUT was placed on a turntable with 0.8 meter above ground.
4. 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. 5. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
6. 6. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz for f < 1 GHz; VBW≥RBW; Sweep = auto; Detector function = peak;Trace = max hold;
   (3)Set RBW = 1 MHz, VBW= 3MHz for f≥1 GHz for peak measurement.
   For average measurement:
   The RBW of test receiver/spectrum analyzer is 1MHz and the VBW for Average detection (AV) of test receiver/spectrum analyzer is 10Hz above 1GHz.

   The highest emission amplitudes relative to the appropriate limit were measured and recorded in this report.

EMI Test Receiver	Setting
Attenuation	Auto
RB	1MHz
VB	3MHz
Detector	Peak
Trace	Max hold

EMI Test Receiver	Setting
Attenuation	Auto
RB	1MHz
VB	10Hz
Detector	AVG
Trace	Max hold

.

11.2 Test SET-UP (Block Diagram of Configuration)

As 5.2 Test set up (B) and (C)

11.3 Measurement Equipment Used:

Same as 5.3 Radiated Emission Measurement.

11.4 Measurement Results:

All the modes GFSK and hopping mode have been tested and the result recorded as below.

Spectrum Detector:	PK/AV	Test Date :	July 14, 2014
Test By:	Joe	Temperature :	25℃
Test channel:	1	Humidity :	55 %
Modulation:	GFSK		

Frequency (MHz)	Polarity	Level (dBuV/m)		Limited (dBuV/m)	
		PK	AV	PK	AV
2390.00	H	46.91	36.05	74	54
2390.00	V	47.06	36.19	74	54

Spectrum Detector:	PK/AV	Test Date :	July 14, 2014
Test By:	Joe	Temperature :	25℃
Test channel:	79	Humidity :	55 %
Modulation:	GFSK		

Frequency (MHz)	Polarity	Level (dBuV/m)		Limited (dBuV/m)	
		PK	AV	PK	AV
2483.50	H	45.69	35.25	74	54
2483.50	V	45.86	35.13	74	54

Spectrum Detector:	PK/AV	Test Date :	July 14, 2014
Test By:	Joe	Temperature :	25℃
Mode:	Hopping mode	Humidity :	55 %

Frequency (MHz)	Polarity	Level (dBuV/m)		Limited (dBuV/m)	
		PK	AV	PK	AV
2390.00	H	46.66	35.44	74	54
2390.00	V	45.90	34.64	74	54
2483.51	H	45.97	34.80	74	54
2483.51	V	45.79	34.44	74	54

12. Antenna Port Emission

12.1 Test Equipment

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	Agilent	E4407B	88156318	05/17/2014	05/16/2015

12.2 Measuring Instruments and setting

All the modulation modes were tested and the data of the GFSK mode are recorded in the following pages and the others modulation methods do not exceed the limits.

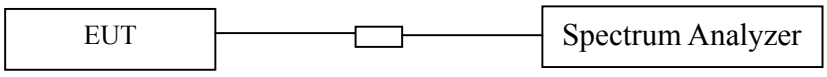
The following table is the setting of spectrum analyzer.

EMI Test Receiver	Setting
Attenuation	Auto
RB	100kHz
VB	300kHz
Detector	Peak
Trace	Max hold

12.3 Test Procedures

The conducted spurious emissions were measured conducted using a spectrum analyzer at low, mid, and hi channels, the limit was determined by attenuation 20dB of the RF peak power output.

12.4 Block Diagram of Test setup

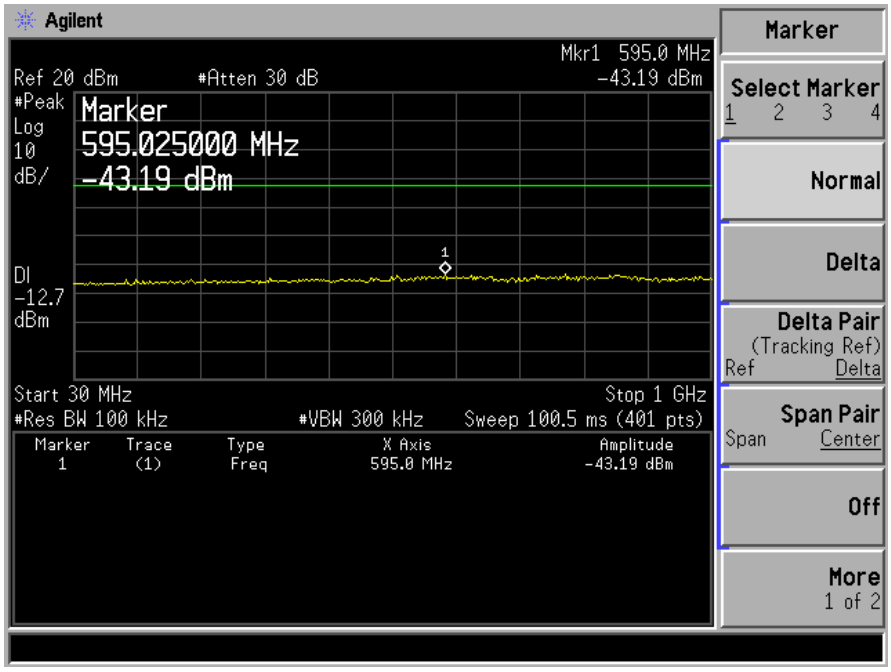


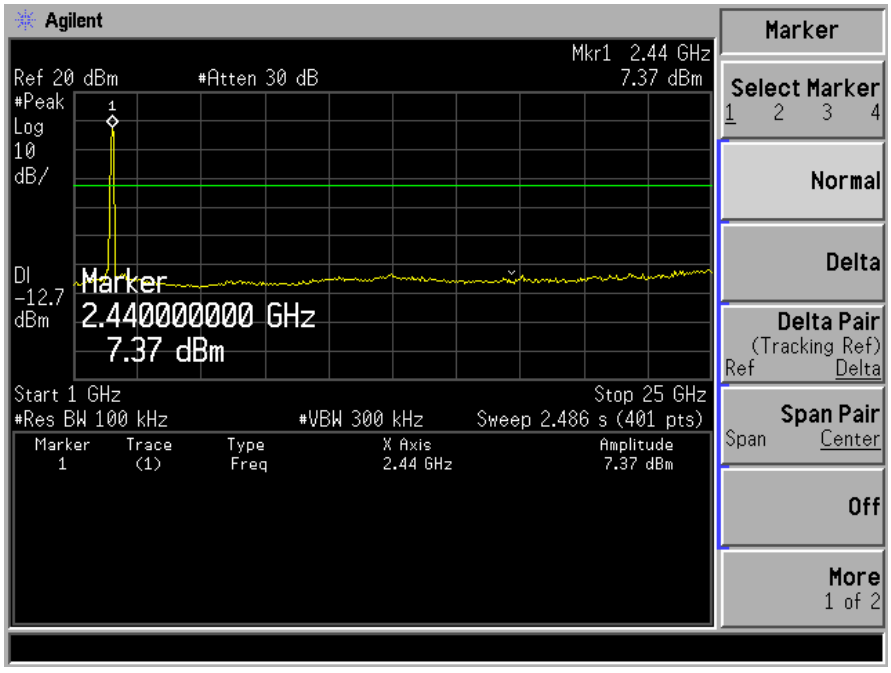
12.5 Test Result

PASS.

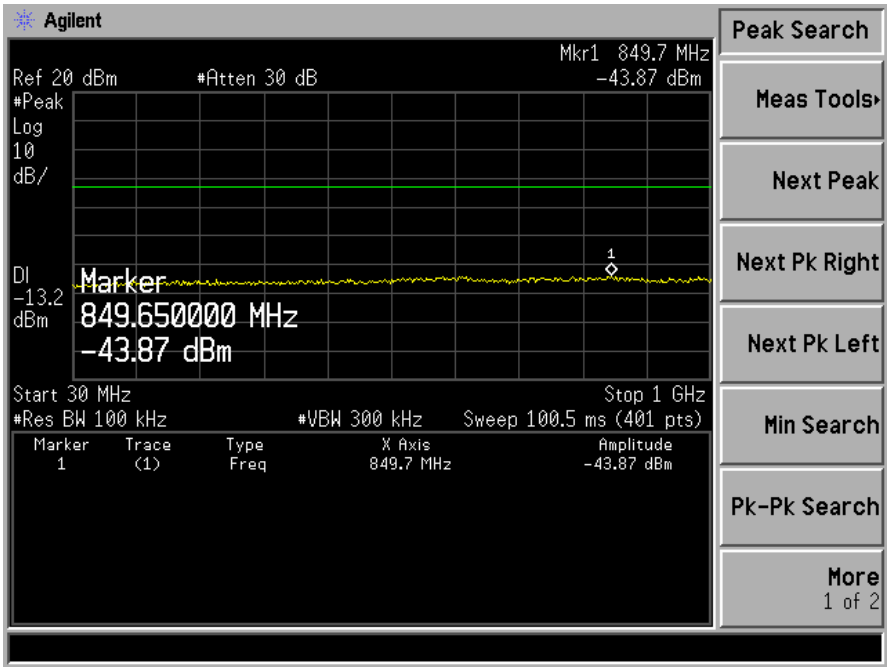
All the modes GFSK have been tested and the worst result recorded in the following pages.

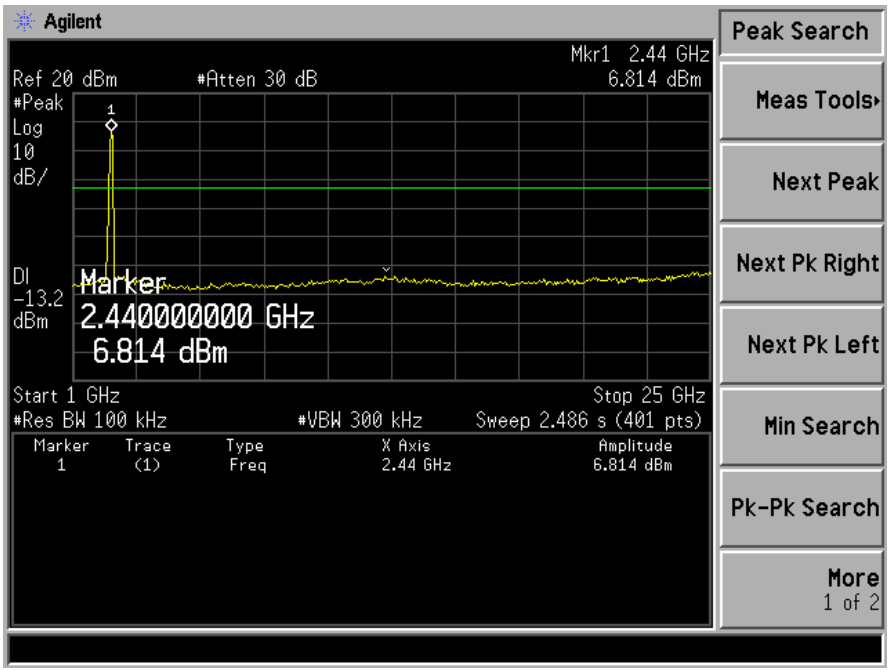
TX 2409MHz


Agilent
Mkr1 595.0 MHz
Ref 20 dBm
#Atten 30 dB
-43.19 dBm
#Peak
Log
10
dB/
Marker
595.025000 MHz
-43.19 dBm
Dl
-12.7
dBm
Start 30 MHz
Stop 1 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 100.5 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 595.0 MHz -43.19 dBm
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

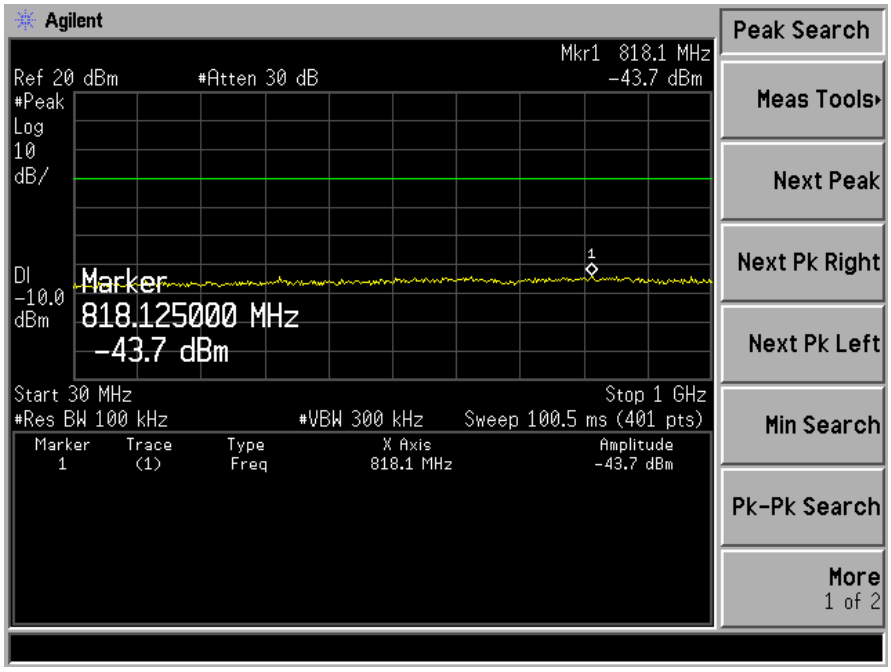

Agilent
Mkr1 2.44 GHz
Ref 20 dBm
#Atten 30 dB
7.37 dBm
#Peak
Log
10
dB/
Marker
2.440000000 GHz
7.37 dBm
Dl
-12.7
dBm
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 7.37 dBm
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

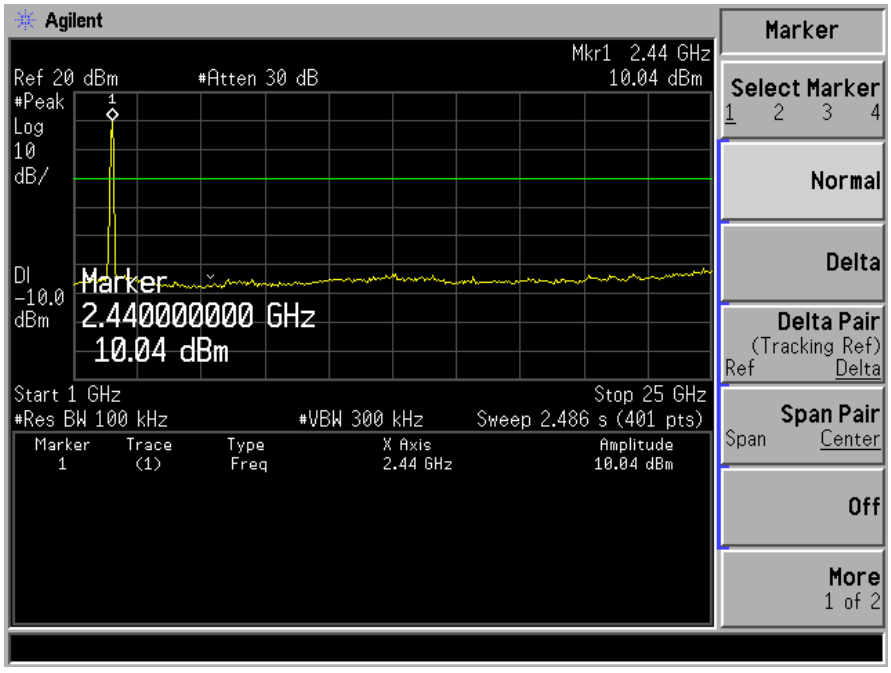
TX 2437.2MHz


Agilent
Mkr1 849.7 MHz
Ref 20 dBm
#Atten 30 dB
-43.87 dBm
#Peak
Log
10
dB/
Dl
-13.2
dBm
Marker
849.650000 MHz
-43.87 dBm
Start 30 MHz
Stop 1 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 100.5 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 849.7 MHz -43.87 dBm
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 2.44 GHz
Ref 20 dBm
#Atten 30 dB
6.814 dBm
#Peak
Log
10
dB/
Dl
-13.2
dBm
Marker
2.440000000 GHz
6.814 dBm
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 6.814 dBm
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

TX 2469.8MHz


Agilent
Mkr1 818.1 MHz
Ref 20 dBm
#Atten 30 dB
-43.7 dBm
#Peak
Log
10
dB/
Marker
818.125000 MHz
-43.7 dBm
Start 30 MHz
Stop 1 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 100.5 ms (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 818.1 MHz -43.7 dBm
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Mkr1 2.44 GHz
Ref 20 dBm
#Atten 30 dB
10.04 dBm
#Peak
Log
10
dB/
Marker
2.440000000 GHz
10.04 dBm
Start 1 GHz
Stop 25 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.486 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 10.04 dBm
Marker
Select Marker
1 2 3 4
Normal
Delta
Delta Pair
(Tracking Ref)
Ref Delta
Span Pair
Span Center
Off
More
1 of 2

13. Antenna Application

13.1 Antenna requirement

The EUT'S antenna is met the requirement of FCC part 15C section 15.203 and 15.247

FCC part 15C section 15.247 requirements:
Systems operating in the 2409-2469.8MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

13.2 Result

The EUT's antenna is monopole Antenna, The antenna's gain is 0dBi and meets the requirement.