FCC Test Report

Product Name	：	Beta+
Trade Name	：	Raptor
Model No.	：	EV1000A-00
FCC ID.	：	2AH97-EVG1

Applicant	：	Everysight Ltd.
Address	：	Andrei Sakharov 9, Advance Technology Center, Building 3, Haifa 3508409, Israel

Date of Receipt	：	May 08, 2017
Issued Date	：	Aug. 23, 2017
Report No.	：	1750190R-RFUSP23V00
Report Version	：	V1.0

Testing Laboratory
3024

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Test Report Certification

Issued Date : Aug. 23, 2017
Report No. : 1750190R-RFUSP23V00

Product Name	:	Beta+
Applicant	:	Everysight Ltd.
Address	:	Andrei Sakharov 9, Advance Technology Center, Building 3, Haifa 3508409, Israel
Manufacturer	:	Everysight Ltd.
Model No.	:	EV1000A-00
FCC ID.	:	2AH97-EVG1
EUT Voltage	:	Mode 1/2/3: DC 5V Mode 4: AC 120V/60Hz
Testing Voltage	:	Mode 1/2/3: DC 5V Mode 4: AC 120V/60Hz
Trade Name	:	Raptor
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2015
Laboratory Name	:	Hsin Chu Laboratory
Address	:	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C. TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result	:	Complied

Documented By :

(Demi Chang / Senior Engineering Adm. Specialist)

Tested By :

(Elwin Lin / Assistant Engineer)

Approved By :

(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1750190R-RFUSP23V00	V1.0	Initial issue of report	Aug. 23, 2017

Laboratory Information

We, **DEKRA Testing and Certification Co., Ltd.**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C.	**:**	**TAF, Accreditation Number: 3024**
USA	**:**	**FCC, Registration Number: TW3024**
Canada	**:**	**IC, Submission No: 181665 /** **IC Registration Number: 22397-1 / 22397-2 / 22397-3**

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site :
http://www.dekra.com.tw/english/about/certificates.aspx?bval=5
The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site : http://www.dekra.com.tw/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our test sites as below:

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TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	Beta+
Trade Name	Raptor
Model No.	EV1000A-00
Frequency Range/ Channel Number	2402~2480MHz / 79 Channels
Type of Modulation	GFSK, π/4-DQPSK, 8-DPSK

Antenna Information	
Antenna Type	PCB Antenna
Antenna Gain	2.32dBi

Accessories Information	
Power Adapter	PHIHONG, PSA05A-050QL6 I/P : 100-240V~0.2A 50-60Hz O/P : 5V ⎓ 1A
USB Cable	Shielded, 1m

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00	2402 MHz	Channel 20	2422 MHz	Channel 40	2442 MHz	Channel 60	2462 MHz
Channel 01	2403 MHz	Channel 21	2423 MHz	Channel 41	2443 MHz	Channel 61	2463 MHz
Channel 02	2404 MHz	Channel 22	2424 MHz	Channel 42	2444 MHz	Channel 62	2464 MHz
Channel 03	2405 MHz	Channel 23	2425 MHz	Channel 43	2445 MHz	Channel 63	2465 MHz
Channel 04	2406 MHz	Channel 24	2426 MHz	Channel 44	2446 MHz	Channel 64	2466 MHz
Channel 05	2407 MHz	Channel 25	2427 MHz	Channel 45	2447 MHz	Channel 65	2467 MHz
Channel 06	2408 MHz	Channel 26	2428 MHz	Channel 46	2448 MHz	Channel 66	2468 MHz
Channel 07	2409 MHz	Channel 27	2429 MHz	Channel 47	2449 MHz	Channel 67	2469 MHz
Channel 08	2410 MHz	Channel 28	2430 MHz	Channel 48	2450 MHz	Channel 68	2470 MHz
Channel 09	2411 MHz	Channel 29	2431 MHz	Channel 49	2451 MHz	Channel 69	2471 MHz
Channel 10	2412 MHz	Channel 30	2432 MHz	Channel 50	2452 MHz	Channel 70	2472 MHz
Channel 11	2413 MHz	Channel 31	2433 MHz	Channel 51	2453 MHz	Channel 71	2473 MHz
Channel 12	2414 MHz	Channel 32	2434 MHz	Channel 52	2454 MHz	Channel 72	2474 MHz
Channel 13	2415 MHz	Channel 33	2435 MHz	Channel 53	2455 MHz	Channel 73	2475 MHz
Channel 14	2416 MHz	Channel 34	2436 MHz	Channel 54	2456 MHz	Channel 74	2476 MHz
Channel 15	2417 MHz	Channel 35	2437 MHz	Channel 55	2457 MHz	Channel 75	2477 MHz
Channel 16	2418 MHz	Channel 36	2438 MHz	Channel 56	2458 MHz	Channel 76	2478 MHz
Channel 17	2419 MHz	Channel 37	2439 MHz	Channel 57	2459 MHz	Channel 77	2479 MHz
Channel 18	2420 MHz	Channel 38	2440 MHz	Channel 58	2460 MHz	Channel 78	2480 MHz
Channel 19	2421 MHz	Channel 39	2441 MHz	Channel 59	2461 MHz		

Note:

1. This device is a Beta+ including 2.4GHz b/g/n (1x1), BT2.0, BT4.0 and ANT+ transmitting and receiving function.
2. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.

1.2. Test Mode

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Test Mode	
TX	Mode 1: Transmit_DH5_Power by PC Mode 2: Transmit_2DH5_Power by PC Mode 3: Transmit_3DH5_Power by PC Mode 4: Transmit_ Power by Adapter

Test Items	Mode 1	Mode 2	Mode 3	Mode 4
Conducted Emission	Yes	No	No	Yes
Peak Power Output	Yes	Yes	Yes	No
Radiated Emission	Yes	Yes	Yes	Yes
RF antenna conducted test	Yes	Yes	Yes	No
Band Edge	Yes	Yes	Yes	No
Number of hopping Frequency	Yes	No	No	No
Carrier Frequency Separation	Yes	Yes	Yes	No
Occupied Bandwidth	Yes	Yes	Yes	No
Dwell Time	Yes	Yes	Yes	No

1.3. Tested System Details

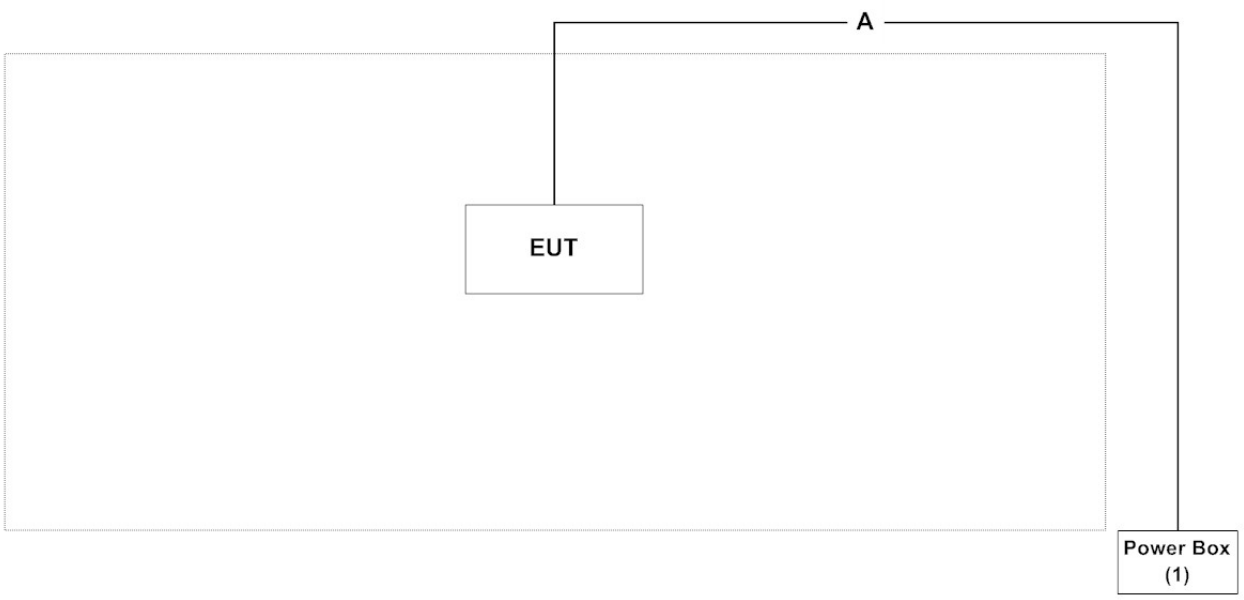
The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Test Mode		Mode 1: Transmit_DH5_Power by PC Mode 2: Transmit_2DH5_Power by PC Mode 3: Transmit_3DH5_Power by PC				
Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Notebook PC	Lenovo	B590	WB1529782	DoC	Non-Shielded, 1.8m, one ferrite core bonded
Test Mode		Mode 4: Transmit_ Power by Adapter				
Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
N/A						

1.4. Configuration of tested System

Test Mode	Mode 1: Transmit_DH5_Power by PC Mode 2: Transmit_2DH5_Power by PC Mode 3: Transmit_3DH5_Power by PC

Connection Diagram



Signal Cable Type		Signal cable Description
A	USB Cable	Shielded, 1.5m

Test Mode	Mode 4: Transmit_ Power by Adapter
Connection Diagram	

1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Execute the test program “QRCT”.
3	Configure the test mode, the test channel, and the data rate.
4	Press “Start TX” to start the continuous transmitting.
5	Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual	Test Site
Temperature (°C)	FCC PART 15 C 15.207 Conducted Emission (FHSS)	15 - 35	23	3
Humidity (%RH)		25 - 75	50	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Peak Power Output (FHSS)	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission (FHSS)	15 - 35	25	2
Humidity (%RH)		25 - 75	54	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Band Edge (FHSS)	15 - 35	25	2
Humidity (%RH)		25 - 75	50	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Number of hopping Frequency (FHSS)	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Carrier Frequency Separation (FHSS)	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth (FHSS)	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 RF antenna conducted test (FHSS)	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Dwell Time (FHSS)	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	

Note: Test Site information refers to Laboratory Information.

2. Conducted Emission

2.1. Test Equipment

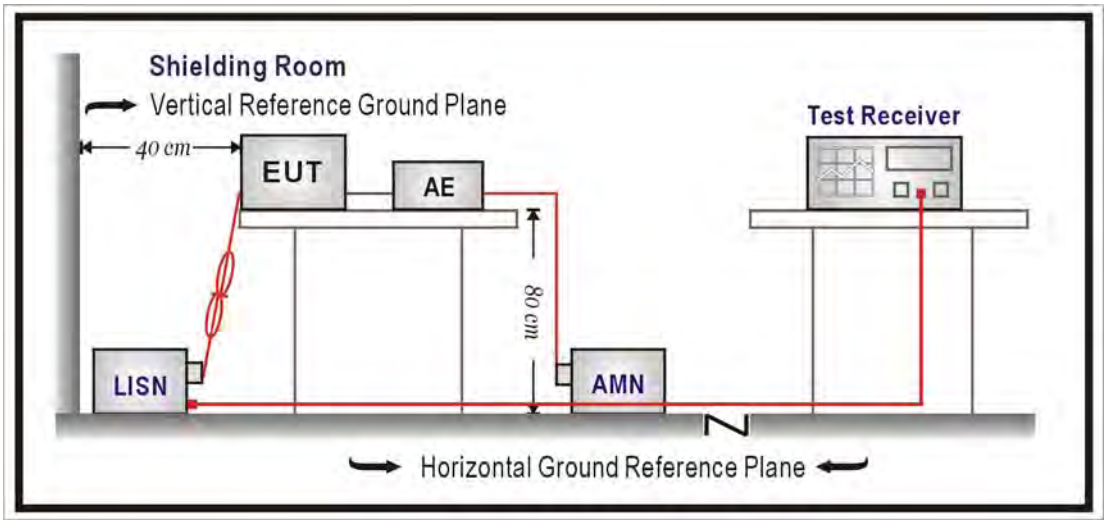
The following test equipment are used during the test:

Conducted Emission / SR2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2017/02/06	2018/02/05
Test Receiver	R&S	ESCS 30	836858/022	2017/04/12	2018/04/11
LISN	R&S	ENV216	100092	2017/07/31	2018/07/30

Note: All equipment that need to calibrate are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency MHz	QP	AV
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2009 on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.5. Test Specification

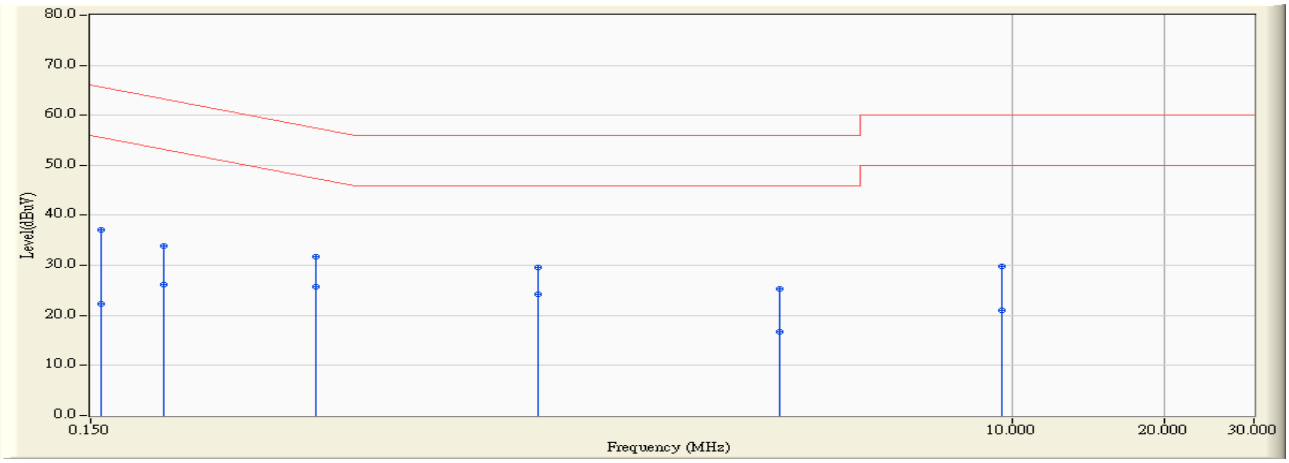
According to FCC Part 15 Subpart C Paragraph 15.207: 2015

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR2-H	**Time : 2017/08/17**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line1	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_3DH5_2441MHz**

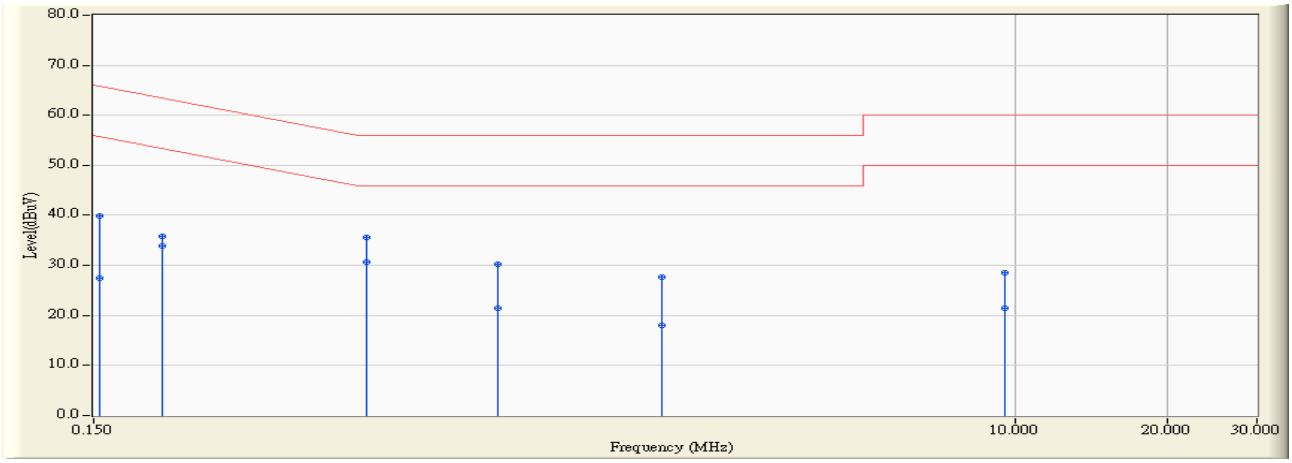


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.751	27.310	37.061	-28.517	65.578	QUASIPEAK
2		0.158	9.751	12.480	22.231	-33.347	55.578	AVERAGE
3		0.209	9.749	24.150	33.899	-29.362	63.261	QUASIPEAK
4		0.209	9.749	16.520	26.269	-26.992	53.261	AVERAGE
5		0.420	9.730	22.100	31.830	-25.628	57.457	QUASIPEAK
6	*	0.420	9.730	15.960	25.690	-21.768	47.457	AVERAGE
7		1.154	9.826	19.800	29.626	-26.374	56.000	QUASIPEAK
8		1.154	9.826	14.400	24.226	-21.774	46.000	AVERAGE
9		3.459	9.904	15.430	25.334	-30.666	56.000	QUASIPEAK
10		3.459	9.904	6.720	16.624	-29.376	46.000	AVERAGE
11		9.548	10.111	19.780	29.891	-30.109	60.000	QUASIPEAK
12		9.548	10.111	10.930	21.041	-28.959	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR2-H	**Time : 2017/08/17**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line2	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_3DH5_2441MHz**

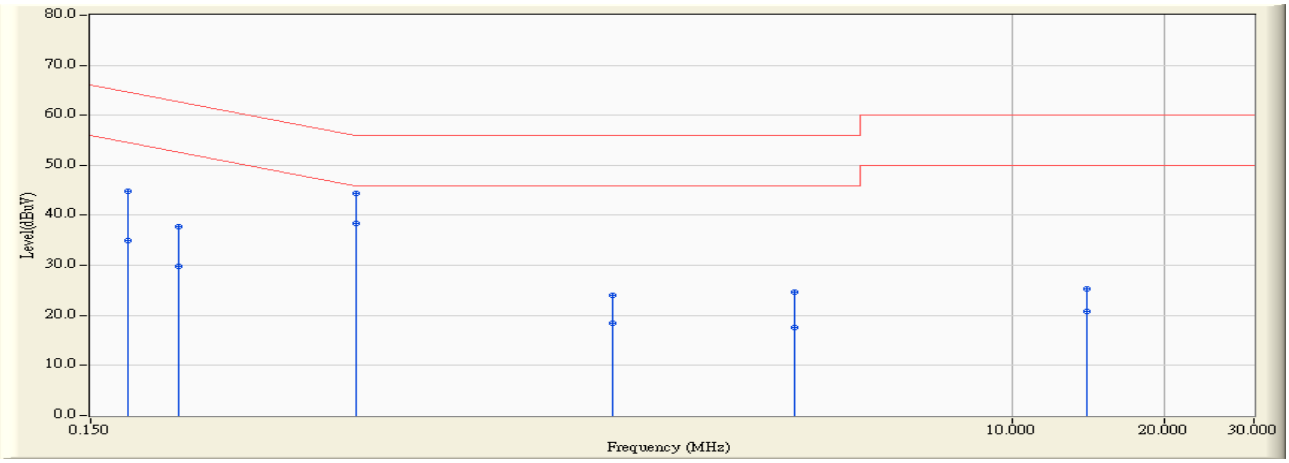


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.747	30.100	39.846	-25.940	65.786	QUASIPEAK
2		0.154	9.747	17.770	27.516	-28.270	55.786	AVERAGE
3		0.205	9.751	26.050	35.801	-27.618	63.418	QUASIPEAK
4		0.205	9.751	24.060	33.811	-19.608	53.418	AVERAGE
5		0.521	9.748	25.900	35.648	-20.352	56.000	QUASIPEAK
6	*	0.521	9.748	20.920	30.668	-15.332	46.000	AVERAGE
7		0.947	9.812	20.390	30.202	-25.798	56.000	QUASIPEAK
8		0.947	9.812	11.700	21.512	-24.488	46.000	AVERAGE
9		2.002	9.850	17.900	27.750	-28.250	56.000	QUASIPEAK
10		2.002	9.850	8.210	18.060	-27.940	46.000	AVERAGE
11		9.541	10.124	18.390	28.513	-31.487	60.000	QUASIPEAK
12		9.541	10.124	11.220	21.343	-28.657	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR2-H	**Time : 2017/08/17**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line1	**Power : AC 120V/60Hz**
EUT : Beta+	**Note : Mode 4: Transmit_ Power by Adapter_ 802.15.1_3DH5_2441MHz**

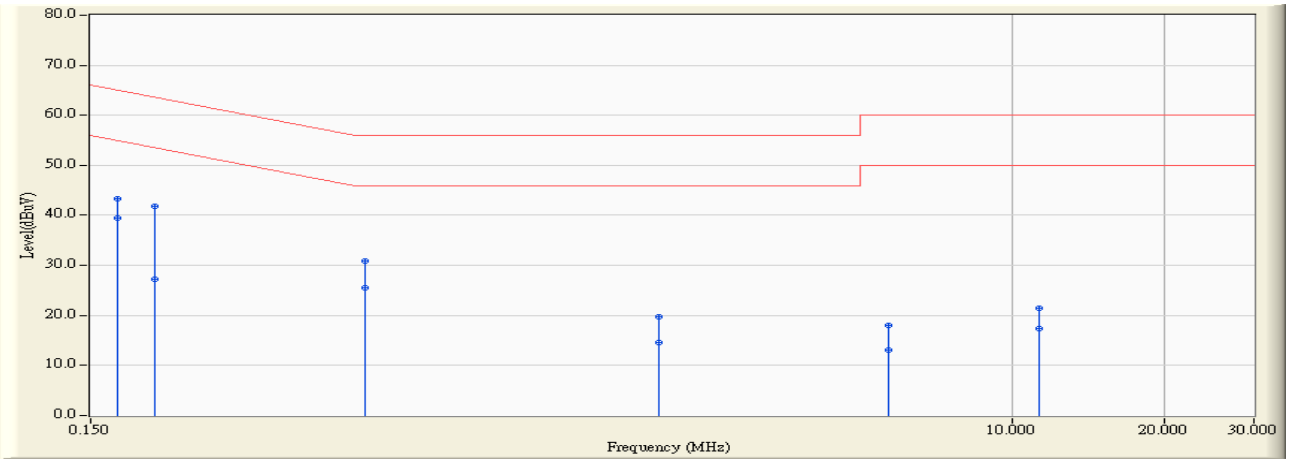


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.177	9.752	34.990	44.742	-19.867	64.609	QUASIPEAK
2		0.177	9.752	25.130	34.882	-19.727	54.609	AVERAGE
3		0.224	9.748	28.050	37.798	-24.864	62.661	QUASIPEAK
4		0.224	9.748	20.010	29.758	-22.904	52.661	AVERAGE
5		0.502	9.729	34.560	44.290	-11.710	56.000	QUASIPEAK
6	*	0.502	9.729	28.720	38.450	-7.550	46.000	AVERAGE
7		1.619	9.845	14.130	23.975	-32.025	56.000	QUASIPEAK
8		1.619	9.845	8.520	18.365	-27.635	46.000	AVERAGE
9		3.709	9.911	14.770	24.681	-31.319	56.000	QUASIPEAK
10		3.709	9.911	7.630	17.541	-28.459	46.000	AVERAGE
11		14.056	10.203	15.060	25.263	-34.737	60.000	QUASIPEAK
12		14.056	10.203	10.640	20.843	-29.157	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR2-H	**Time : 2017/08/17**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line2	**Power : AC 120V/60Hz**
EUT : Beta+	**Note : Mode 4: Transmit_ Power by Adapter_ 802.15.1_3DH5_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.170	9.753	33.610	43.363	-21.620	64.983	QUASIPEAK
2	*	0.170	9.753	29.760	39.513	-15.470	54.983	AVERAGE
3		0.201	9.751	32.130	41.881	-21.698	63.578	QUASIPEAK
4		0.201	9.751	17.580	27.331	-26.248	53.578	AVERAGE
5		0.525	9.749	21.190	30.939	-25.061	56.000	QUASIPEAK
6		0.525	9.749	15.870	25.619	-20.381	46.000	AVERAGE
7		2.002	9.850	9.840	19.690	-36.310	56.000	QUASIPEAK
8		2.002	9.850	4.840	14.690	-31.310	46.000	AVERAGE
9		5.689	9.899	8.150	18.049	-41.951	60.000	QUASIPEAK
10		5.689	9.899	3.150	13.049	-36.951	50.000	AVERAGE
11		11.306	10.192	11.200	21.392	-38.608	60.000	QUASIPEAK
12		11.306	10.192	7.120	17.312	-32.688	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

3. Peak Power Output

3.1. Test Equipment

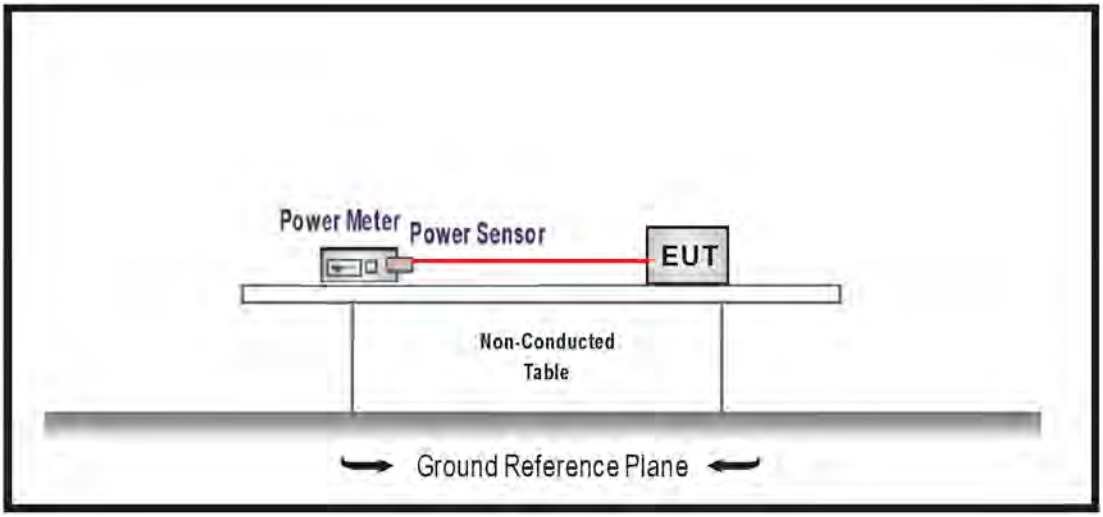
The following test equipment is used during the test:

Peak Power Output / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2017/01/20	2018/01/19
Pulse Power Sensor	Anritsu	MA2411B	1531043	2017/01/20	2018/01/19
Pulse Power Sensor	Anritsu	MA2411B	1531044	2017/01/20	2018/01/19

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

3.2. Test Setup



3.3. Test procedures

The EUT was setup according to ANSI C63.10:2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

3.4. Limits

For frequency hopping systems operating in the 902-928 MHz band: 1 Watt for systems employing at least 50 hopping channels; and, 0.25 Watts for systems employing less than 50 hopping channels.

For frequency hopping systems in the 2400-2483.5 MHz band employing at least 75 hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1Watt.

For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 Watt.

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015.

3.6. Test Result

Product	Beta+		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit_DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

GFSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	12.550	30	Pass
39	2441	12.661	30	Pass
78	2480	12.584	30	Pass

Product	Beta+		
Test Item	Peak Power Output		
Test Mode	Mode 2: Transmit_2DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	10.172	30	Pass
39	2441	10.311	30	Pass
78	2480	12.243	30	Pass

Product	Beta+		
Test Item	Peak Power Output		
Test Mode	Mode 3: Transmit_3DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

8-DPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	10.159	30	Pass
39	2441	10.302	30	Pass
78	2480	10.231	30	Pass

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the test:

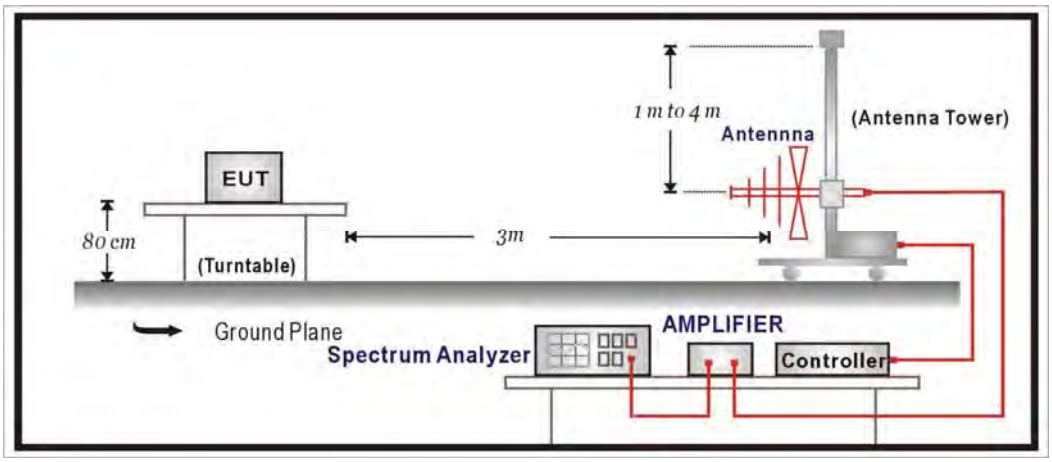
Radiated Emission / CB4-H, CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2016/11/28	2017/11/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12
Bilog Antenna	Teseq	CBL6112D	23191	2017/06/28	2018/06/27
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2017/06/14	2018/06/13
Horn Antenna	Schwarzbeck	BBHA 9170	203	2016/08/29	2017/08/28
Pre-Amplifier	RF Bay Inc.	LNA-1330	12162511	2017/03/09	2018/03/08
Pre-Amplifier	EMCI	EMCI 1830I	980366	2017/01/23	2018/01/22
Pre-Amplifier	MITEQ	JS44-45-8P	2014754	2016/12/26	2017/12/25

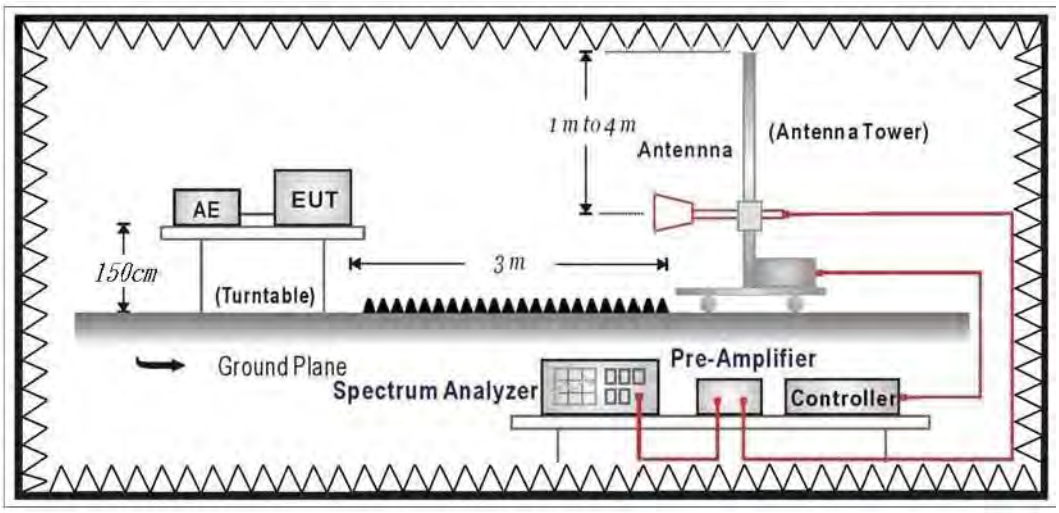
Note: All equipment that need to calibrate are with calibration period of 1 year.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m	dBuV/m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

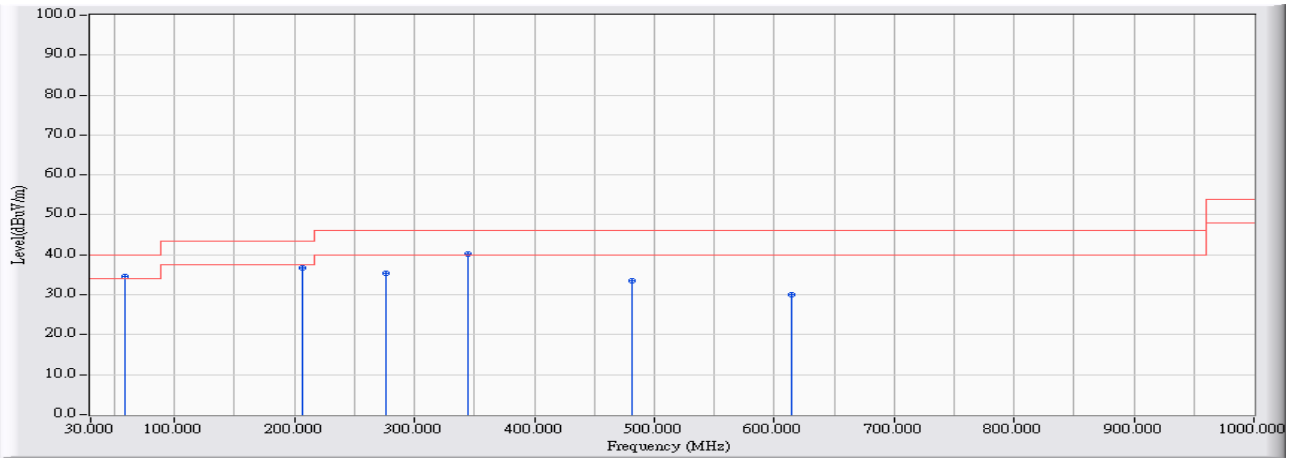
4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

4.6. Test Result

30MHz-1GHz Spurious

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1 _2441MHz**

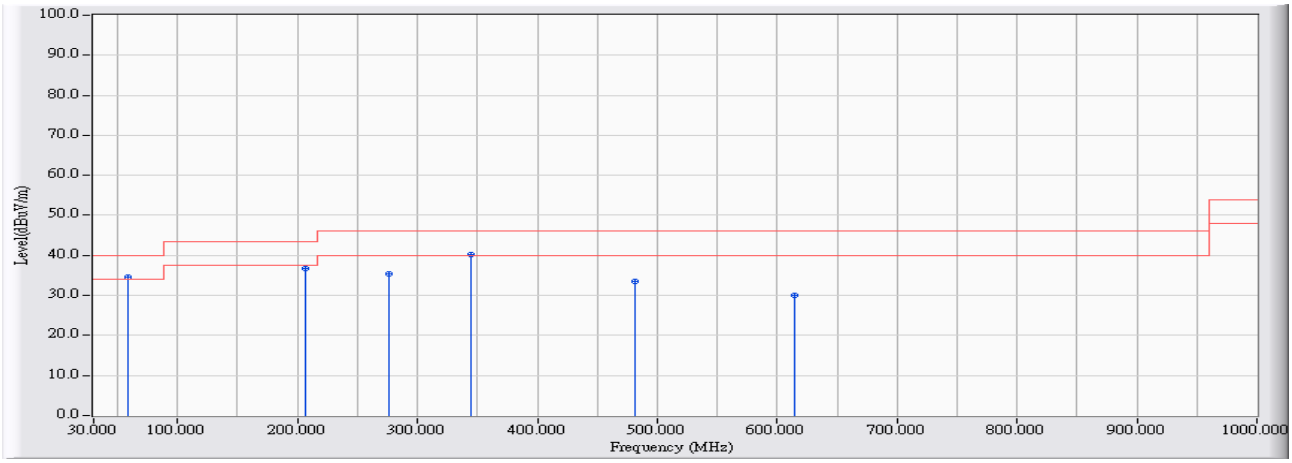


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	58.127	14.566	62.247	34.569	-5.431	40.000	QUASIPEAK
2		206.910	18.922	59.444	36.627	-6.873	43.500	QUASIPEAK
3		276.549	21.804	55.159	35.406	-10.594	46.000	QUASIPEAK
4		345.024	23.632	58.030	40.316	-5.684	46.000	QUASIPEAK
5		481.393	26.704	48.274	33.433	-12.567	46.000	QUASIPEAK
6		614.561	28.317	42.442	29.979	-16.021	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2441MHz**

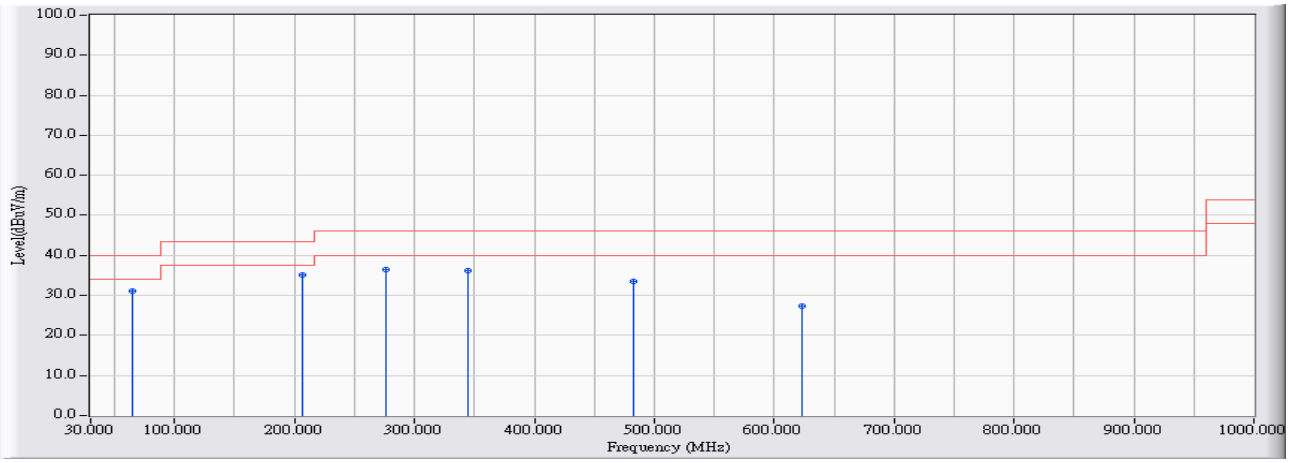


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	58.127	-27.677	62.247	34.569	-5.431	40.000	QUASIPEAK
2		206.910	-22.817	59.444	36.627	-6.873	43.500	QUASIPEAK
3		276.549	-19.753	55.159	35.406	-10.594	46.000	QUASIPEAK
4		345.024	-17.714	58.030	40.316	-5.684	46.000	QUASIPEAK
5		481.393	-14.841	48.274	33.433	-12.567	46.000	QUASIPEAK
6		614.561	-12.463	42.442	29.979	-16.021	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**

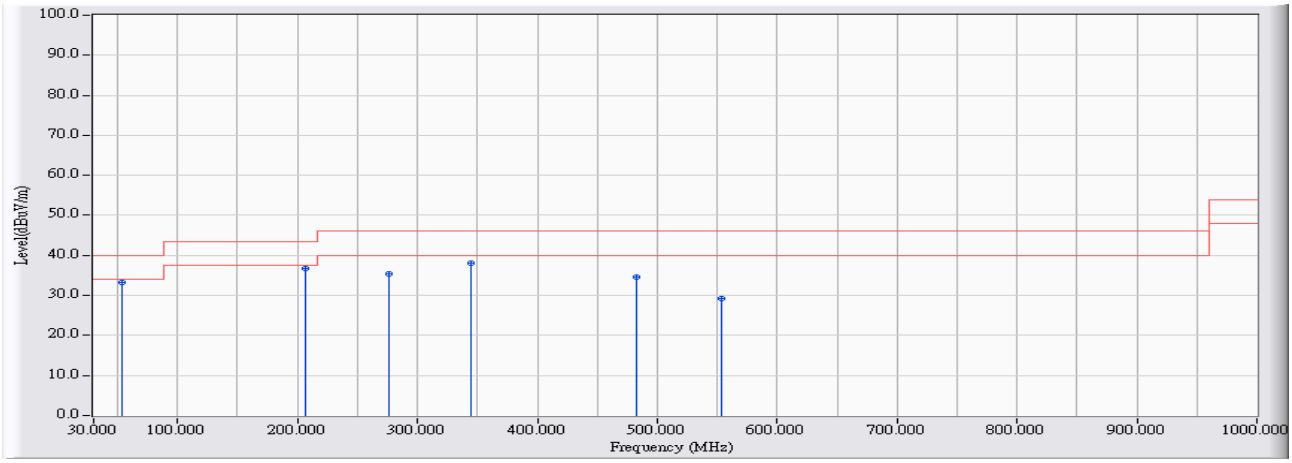


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		64.335	-28.052	59.272	31.220	-8.780	40.000	QUASIPEAK
2	*	206.910	-22.817	57.945	35.128	-8.372	43.500	QUASIPEAK
3		275.870	-19.797	56.323	36.526	-9.474	46.000	QUASIPEAK
4		344.928	-17.717	53.829	36.112	-9.888	46.000	QUASIPEAK
5		482.945	-14.791	48.276	33.486	-12.514	46.000	QUASIPEAK
6		623.387	-12.402	39.716	27.314	-18.686	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**

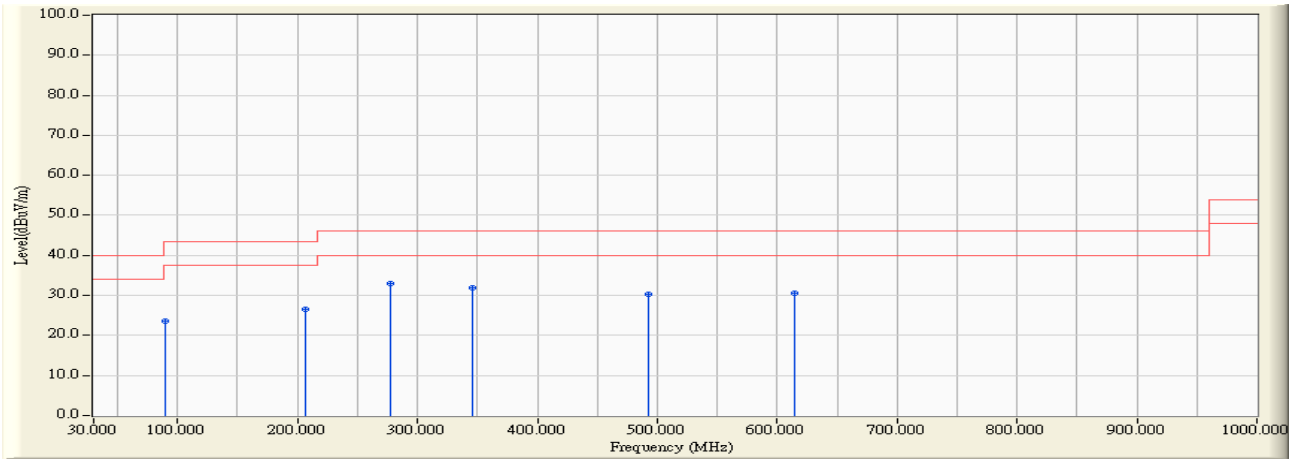


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	53.278	-26.313	59.476	33.163	-6.837	40.000	QUASIPEAK
2		207.007	-22.809	59.409	36.600	-6.900	43.500	QUASIPEAK
3		276.743	-19.742	55.050	35.309	-10.691	46.000	QUASIPEAK
4		344.928	-17.717	55.762	38.045	-7.955	46.000	QUASIPEAK
5		482.557	-14.803	49.260	34.457	-11.543	46.000	QUASIPEAK
6		553.069	-13.576	42.764	29.188	-16.812	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB4-H	**Time : 2017/08/19**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_DH5_2441MHz**

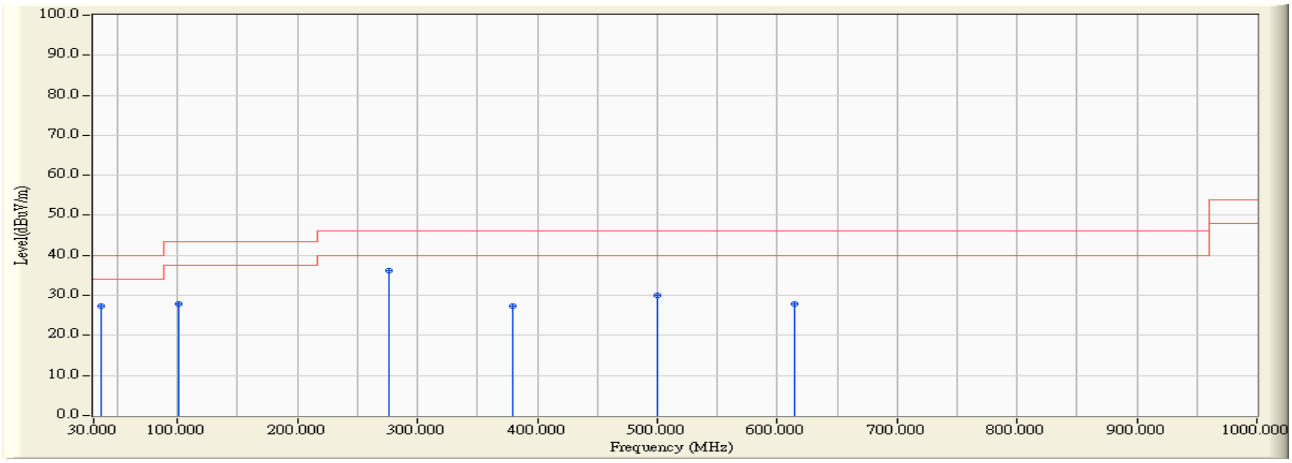


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		89.170	-25.645	49.175	23.530	-19.970	43.500	QUASIPEAK
2		207.025	-22.699	49.172	26.473	-17.027	43.500	QUASIPEAK
3	*	276.865	-19.545	52.584	33.039	-12.961	46.000	QUASIPEAK
4		345.735	-17.452	49.361	31.909	-14.091	46.000	QUASIPEAK
5		492.205	-14.160	44.356	30.195	-15.805	46.000	QUASIPEAK
6		614.425	-12.049	42.497	30.447	-15.553	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB4-H	**Time : 2017/08/19**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_DH5_2441MHz**

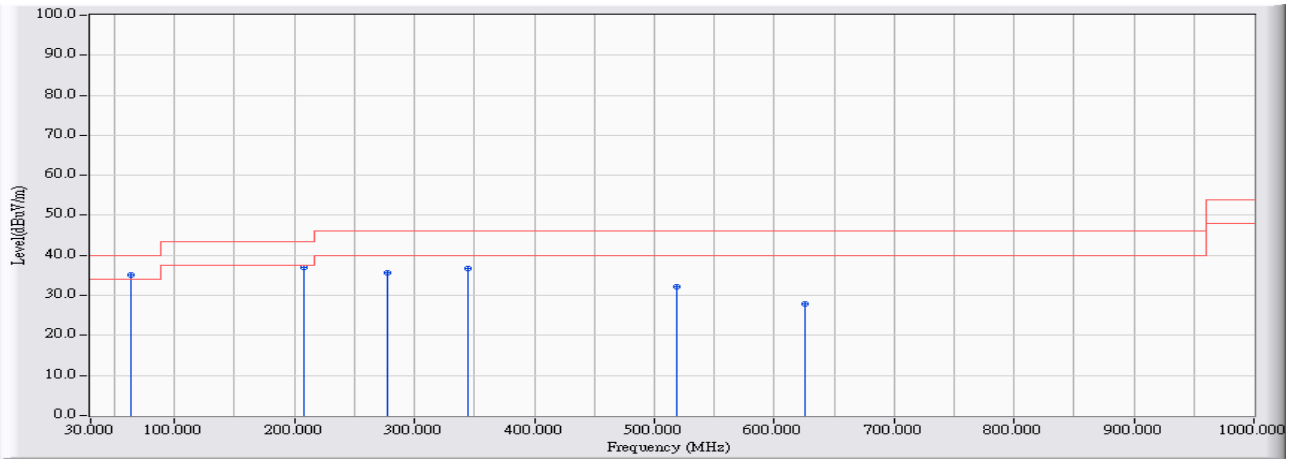


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		36.305	-16.673	44.009	27.336	-12.664	40.000	QUASIPEAK
2		100.810	-23.285	51.093	27.808	-15.692	43.500	QUASIPEAK
3	*	276.380	-19.576	55.665	36.089	-9.911	46.000	QUASIPEAK
4		379.200	-16.634	43.863	27.229	-18.771	46.000	QUASIPEAK
5		499.480	-14.055	43.961	29.906	-16.094	46.000	QUASIPEAK
6		614.425	-12.049	39.979	27.929	-18.071	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Beta+	**Note : Mode 4: Transmit_ Power by Adapter_ 802.15.1_2441MHz**

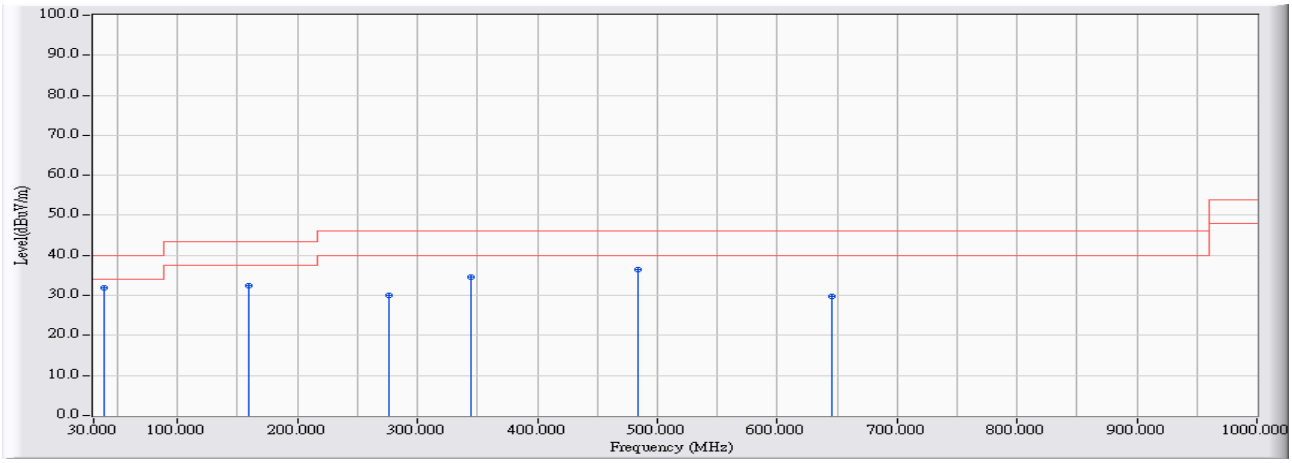


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	62.977	-28.100	63.280	35.181	-4.819	40.000	QUASIPEAK
2		207.589	-22.765	59.860	37.095	-6.405	43.500	QUASIPEAK
3		276.937	-19.729	55.421	35.693	-10.307	46.000	QUASIPEAK
4		344.928	-17.717	54.517	36.800	-9.200	46.000	QUASIPEAK
5		518.152	-13.959	46.074	32.115	-13.885	46.000	QUASIPEAK
6		626.296	-12.482	40.334	27.852	-18.148	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Beta+	**Note : Mode 4: Transmit_ Power by Adapter_ 802.15.1_2441MHz**



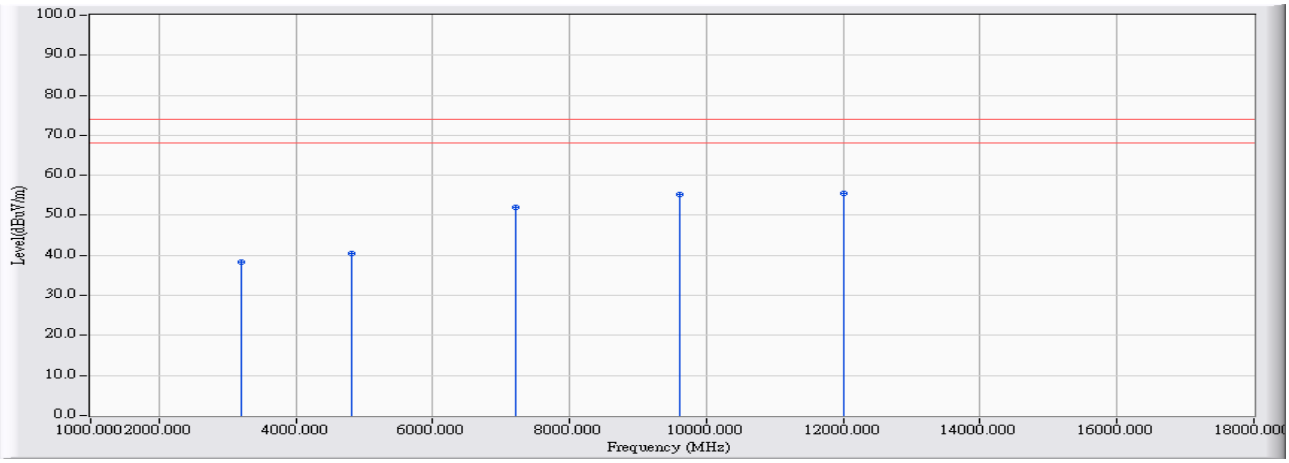
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	38.147	-16.286	48.199	31.913	-8.087	40.000	QUASIPEAK
2		158.803	-22.863	55.408	32.545	-10.955	43.500	QUASIPEAK
3		275.870	-19.797	49.746	29.949	-16.051	46.000	QUASIPEAK
4		344.928	-17.717	52.360	34.643	-11.357	46.000	QUASIPEAK
5		483.624	-14.768	51.334	36.566	-9.434	46.000	QUASIPEAK
6		645.306	-13.296	43.141	29.845	-16.155	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Harmonic & Spurious:

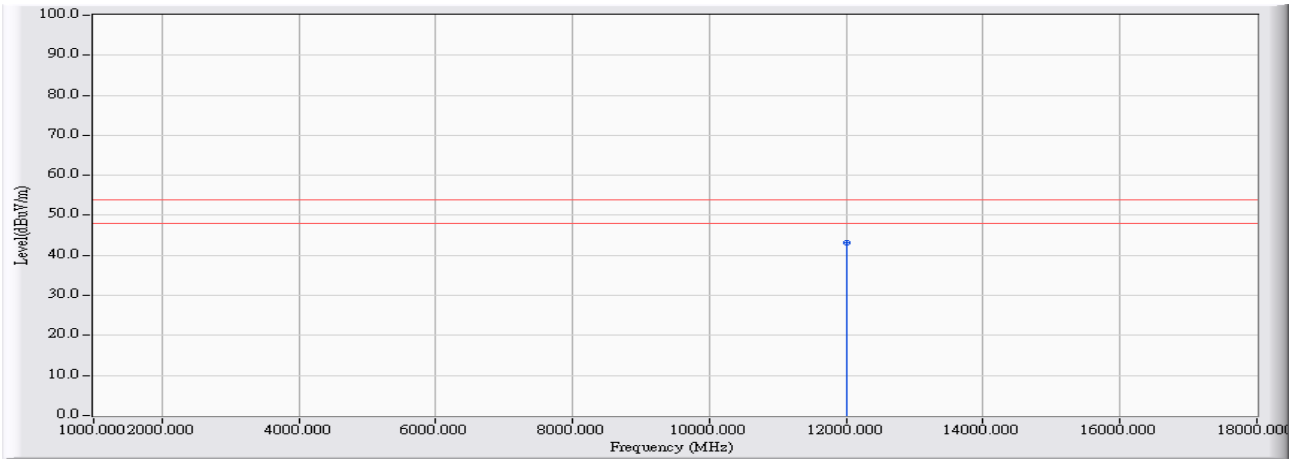
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3211.243	-6.781	45.234	38.454	-35.546	74.000	PEAK
2		4804.213	-0.208	40.814	40.606	-33.394	74.000	PEAK
3		7207.125	6.981	45.108	52.089	-21.911	74.000	PEAK
4		9608.241	12.542	42.608	55.150	-18.850	74.000	PEAK
5	*	12010.142	15.515	40.054	55.570	-18.430	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

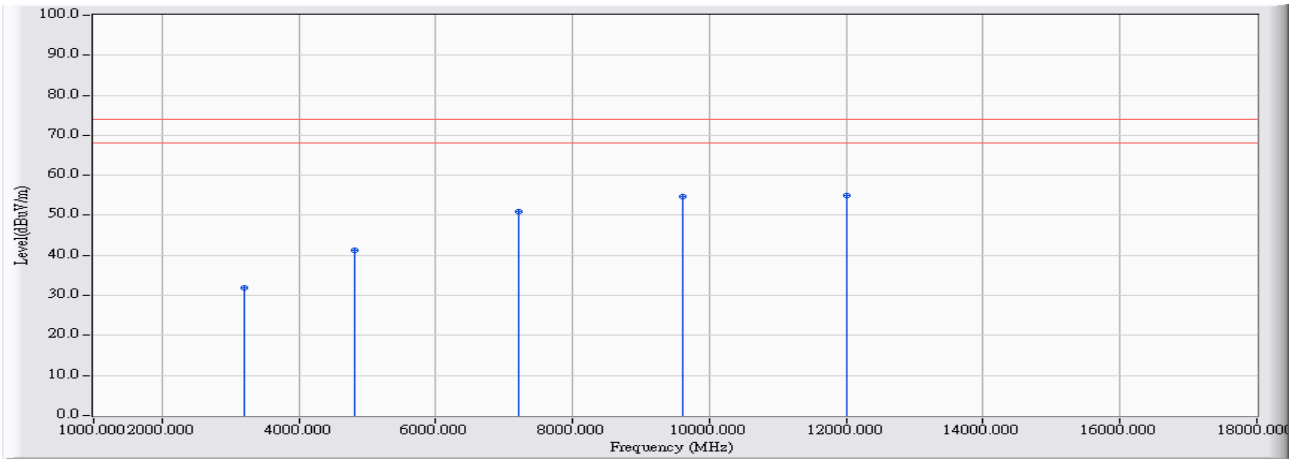
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12012.637	15.505	27.557	43.062	-10.938	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

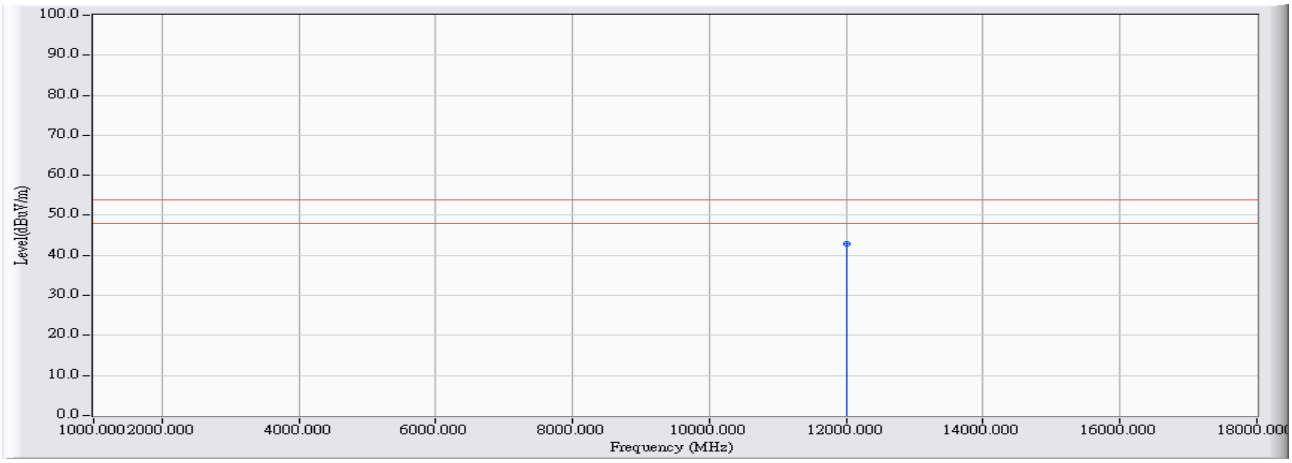
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1 _2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3203.237	-6.793	38.697	31.904	-42.096	74.000	PEAK
2		4804.234	-0.208	41.498	41.290	-32.710	74.000	PEAK
3		7204.237	6.957	44.077	51.033	-22.967	74.000	PEAK
4		9607.524	12.540	42.037	54.576	-19.424	74.000	PEAK
5	*	12013.379	15.502	39.526	55.028	-18.972	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

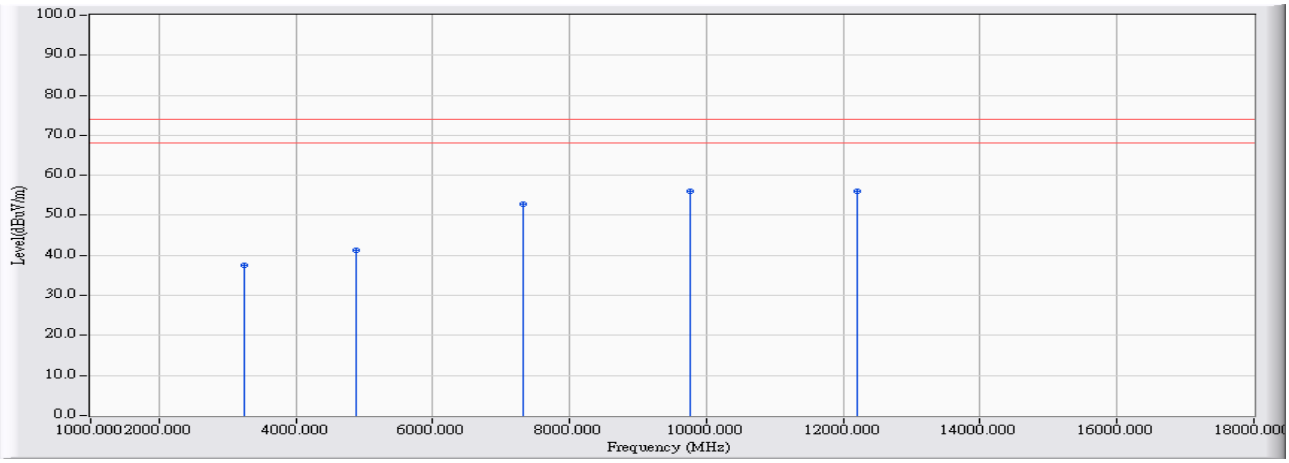
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12012.967	15.504	27.507	43.011	-10.989	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

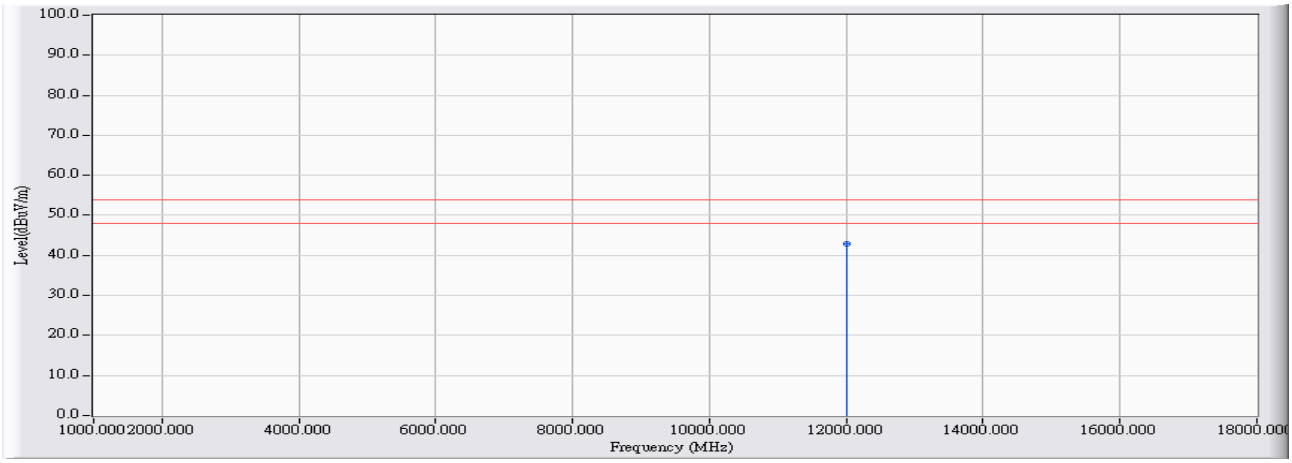
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3254.541	-6.706	44.210	37.504	-36.496	74.000	PEAK
2		4881.967	-0.124	41.315	41.192	-32.808	74.000	PEAK
3		7323.638	7.449	45.308	52.758	-21.242	74.000	PEAK
4		9761.566	12.867	43.108	55.976	-18.024	74.000	PEAK
5	*	12207.215	14.826	41.154	55.981	-18.019	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

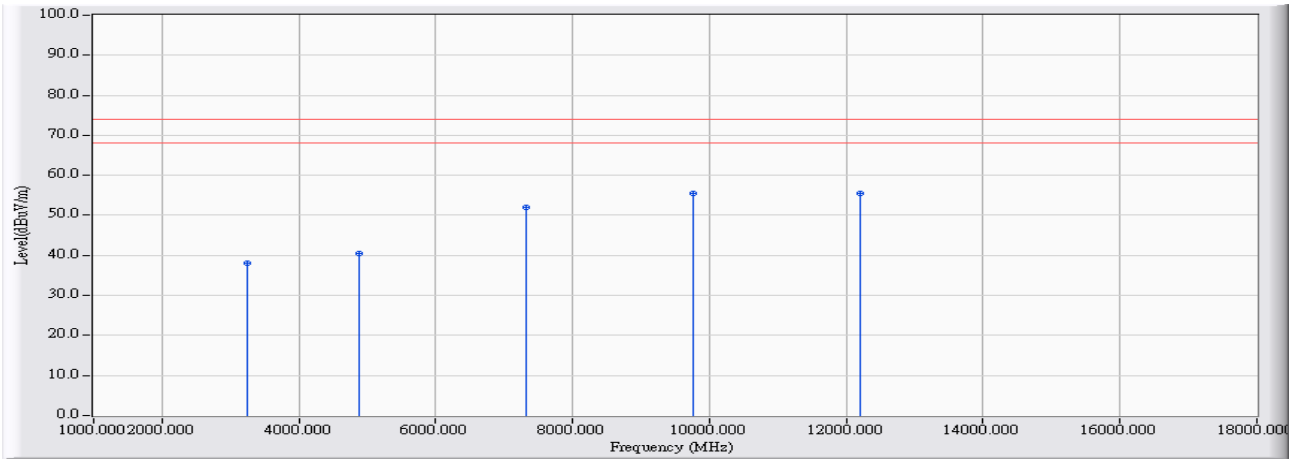
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12011.859	15.508	27.459	42.967	-11.033	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

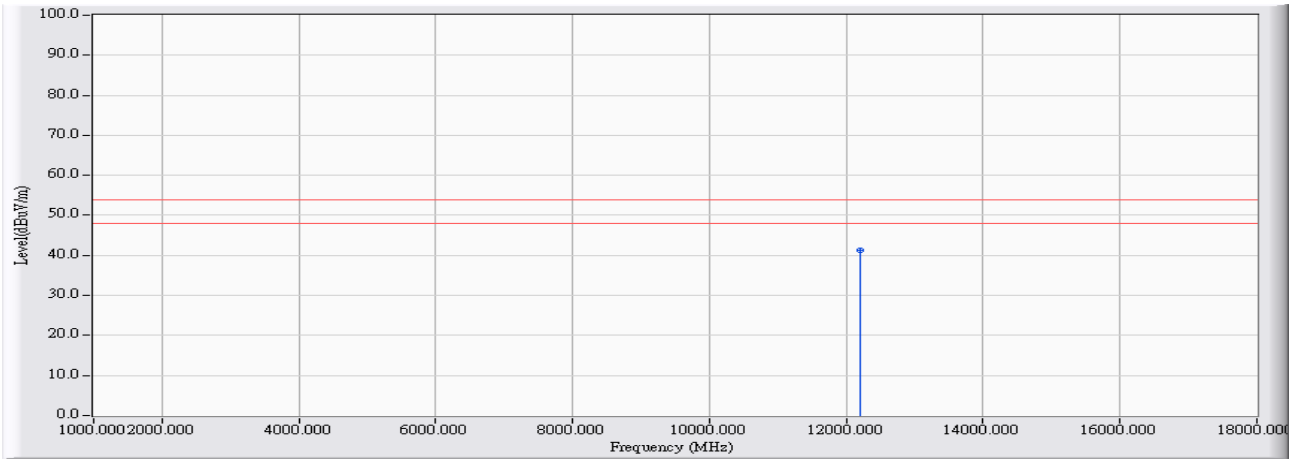
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	3254.589	-6.706	44.831	38.125	-15.875	54.000	PEAK
2		4882.697	-0.123	40.498	40.375	-33.625	74.000	PEAK
3		7323.428	7.449	44.577	52.026	-21.974	74.000	PEAK
4		9763.984	12.871	42.537	55.408	-18.592	74.000	PEAK
5		12207.253	14.826	40.724	55.550	-18.450	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

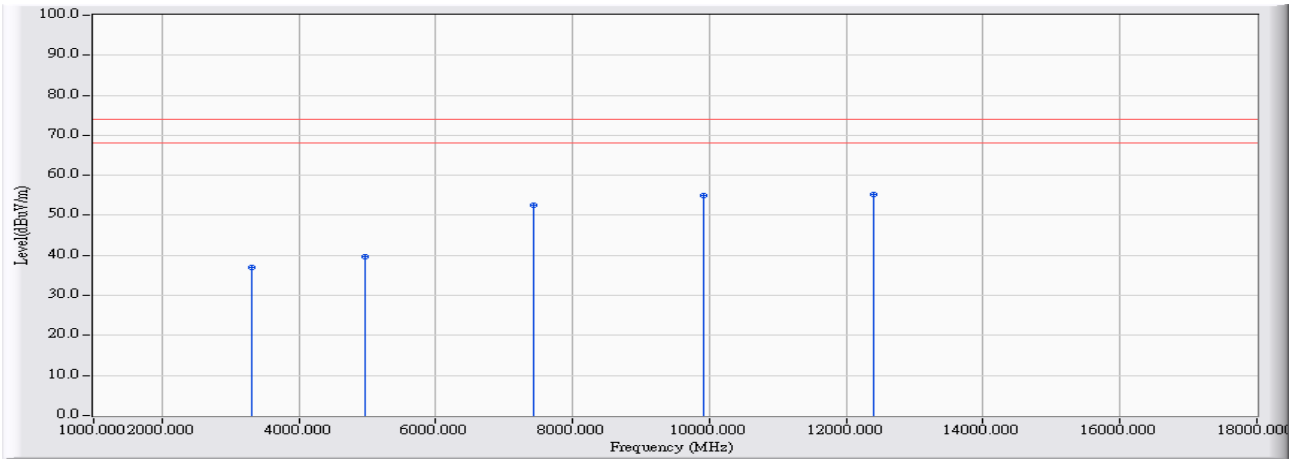
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12204.842	14.834	26.460	41.295	-32.705	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

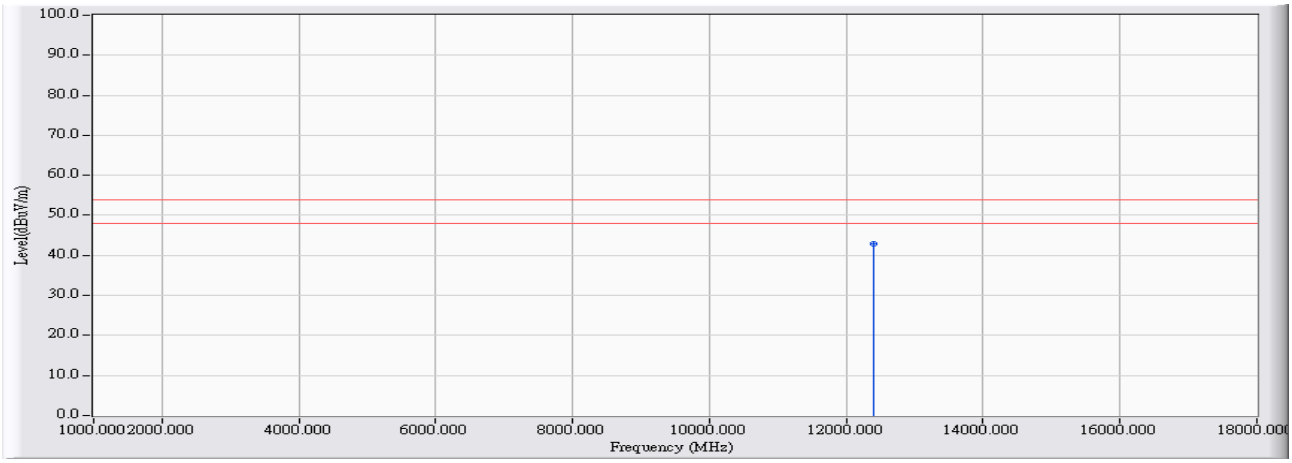
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3305.661	-6.604	43.624	37.020	-36.980	74.000	PEAK
2		4959.639	-0.035	39.732	39.697	-34.303	74.000	PEAK
3		7439.967	7.868	44.585	52.453	-21.547	74.000	PEAK
4		9921.315	13.093	41.911	55.004	-18.996	74.000	PEAK
5	*	12387.938	15.648	39.588	55.236	-18.764	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

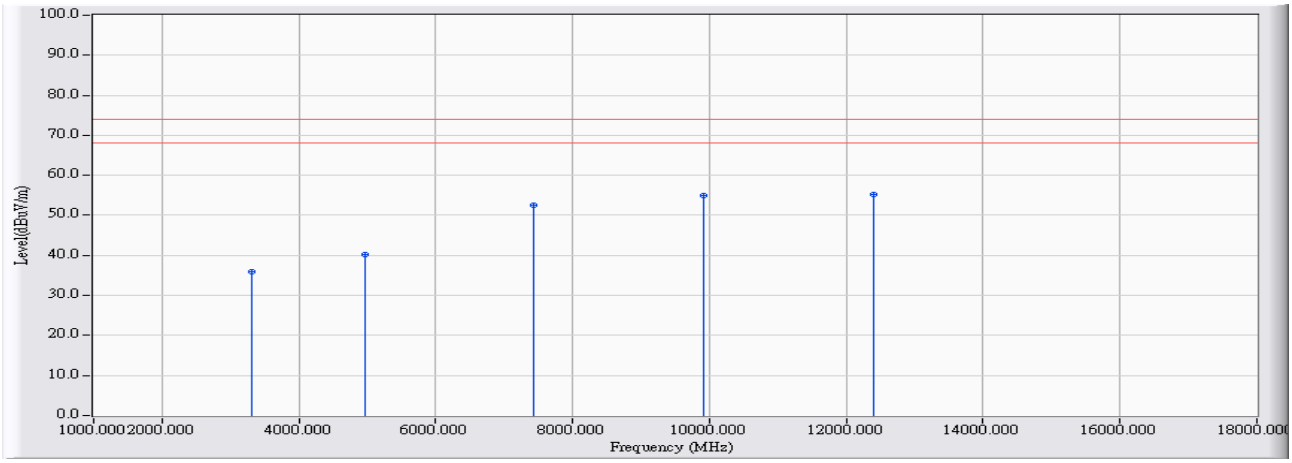
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12389.637	15.660	27.361	43.021	-10.979	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

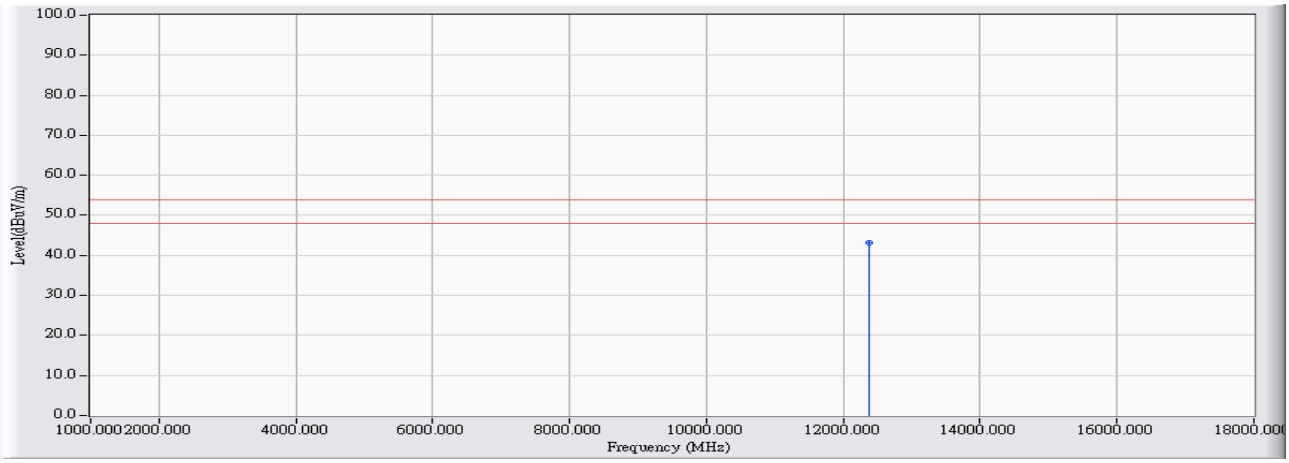
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3306.524	-6.602	42.467	35.864	-38.136	74.000	PEAK
2		4960.234	-0.035	40.115	40.081	-33.919	74.000	PEAK
3		7439.634	7.867	44.685	52.552	-21.448	74.000	PEAK
4		9921.052	13.092	41.910	55.003	-18.997	74.000	PEAK
5	*	12398.421	15.721	39.574	55.296	-18.704	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

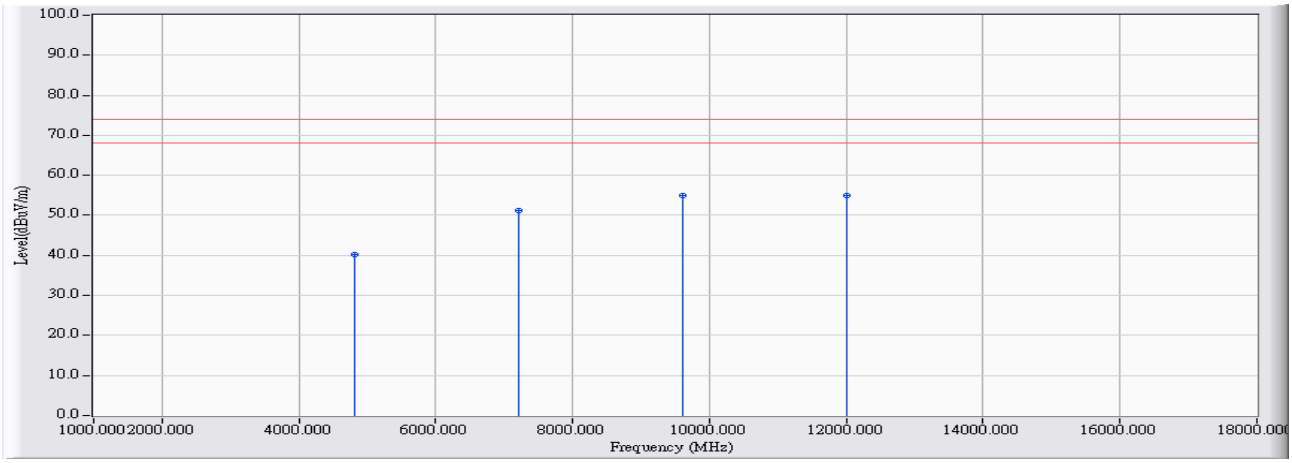
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12387.659	15.645	27.565	43.211	-10.789	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

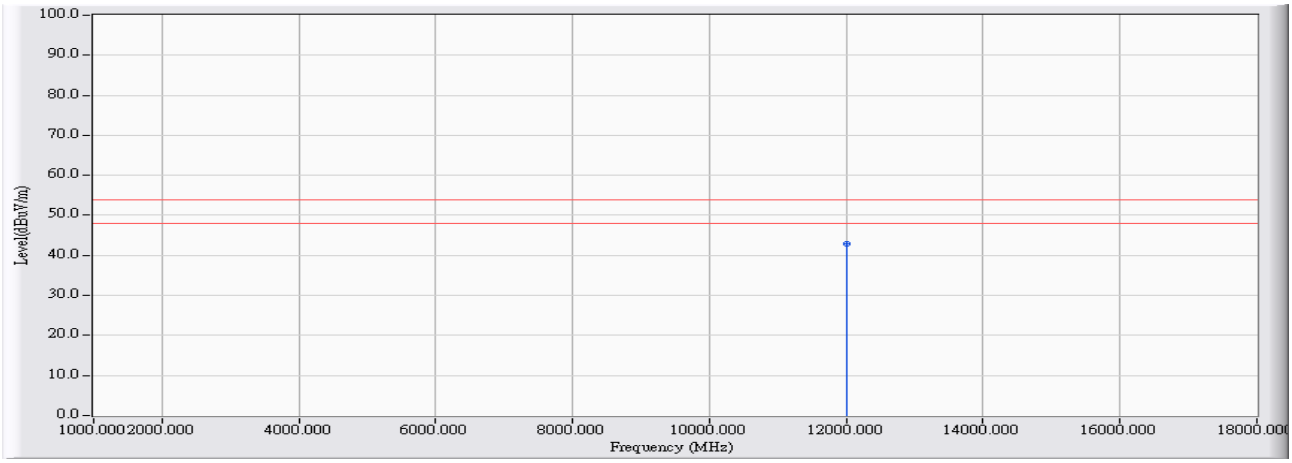
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4803.997	-0.209	40.361	40.153	-33.847	74.000	PEAK
2		7207.031	6.980	44.330	51.310	-22.690	74.000	PEAK
3	*	9608.011	12.540	42.427	54.968	-19.032	74.000	PEAK
4		12009.134	15.519	39.447	54.967	-19.033	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

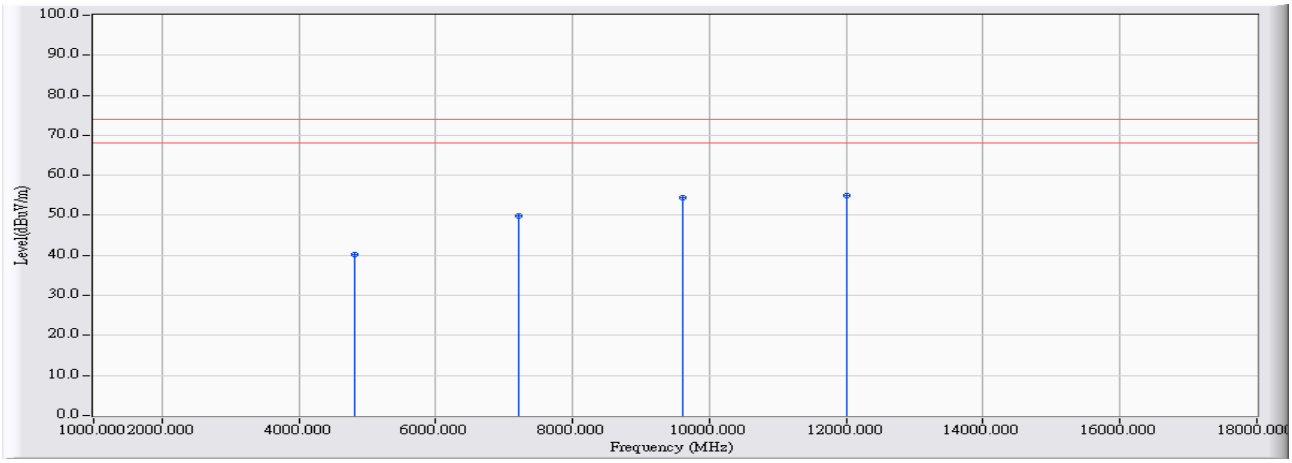
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12012.478	15.505	27.398	42.903	-11.097	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

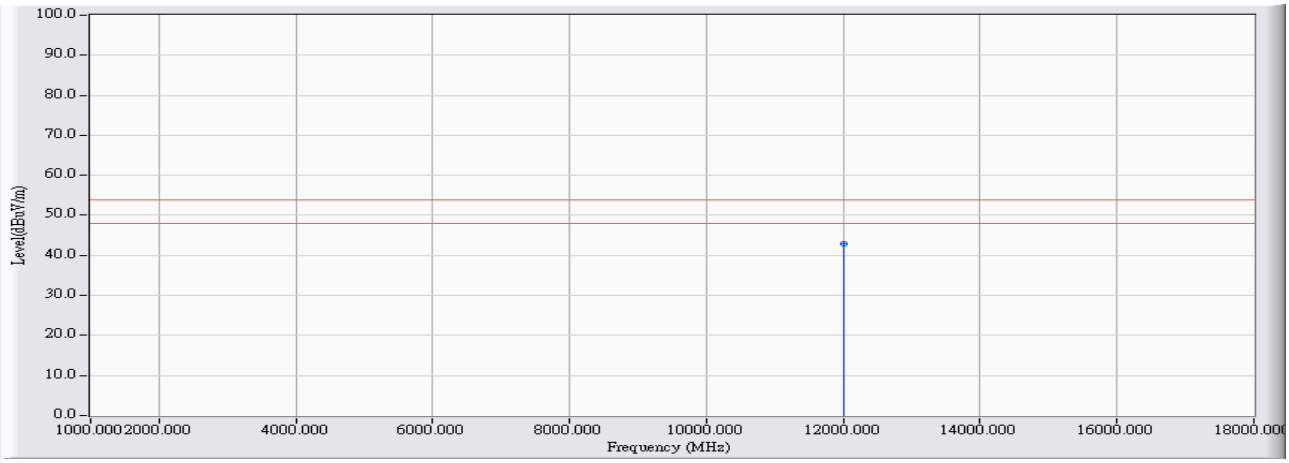
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.224	-0.208	40.534	40.326	-33.674	74.000	PEAK
2		7204.113	6.956	43.031	49.987	-24.013	74.000	PEAK
3		9607.541	12.540	41.858	54.398	-19.602	74.000	PEAK
4	*	12012.988	15.504	39.510	55.014	-18.986	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12015.415	15.493	27.402	42.896	-11.104	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
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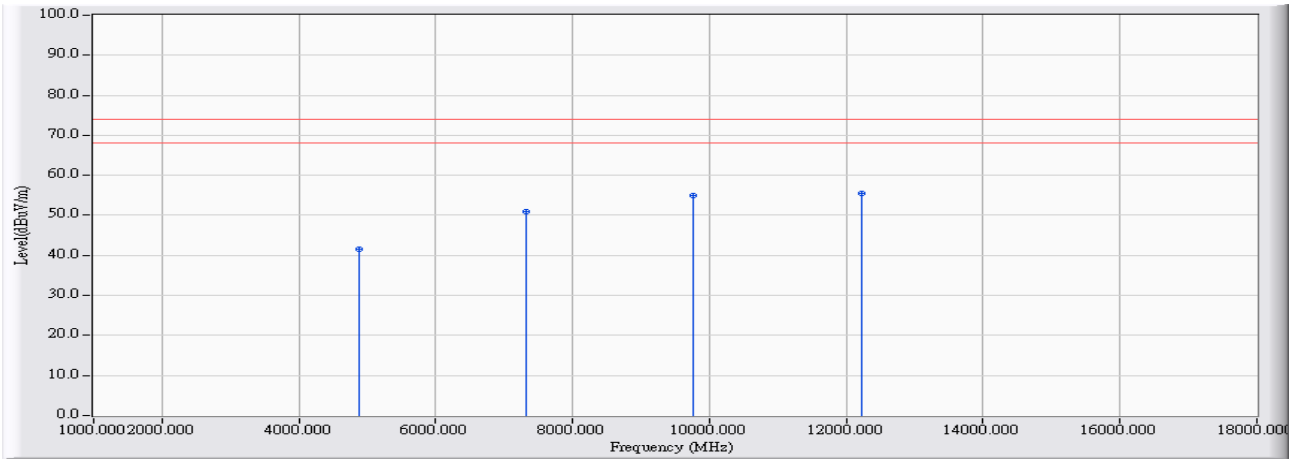
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.013	-0.124	41.657	41.534	-32.466	74.000	PEAK
2		7323.515	7.449	43.589	51.038	-22.962	74.000	PEAK
3		9760.974	12.867	42.097	54.964	-19.036	74.000	PEAK
4	*	12221.201	14.777	40.841	55.619	-18.381	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
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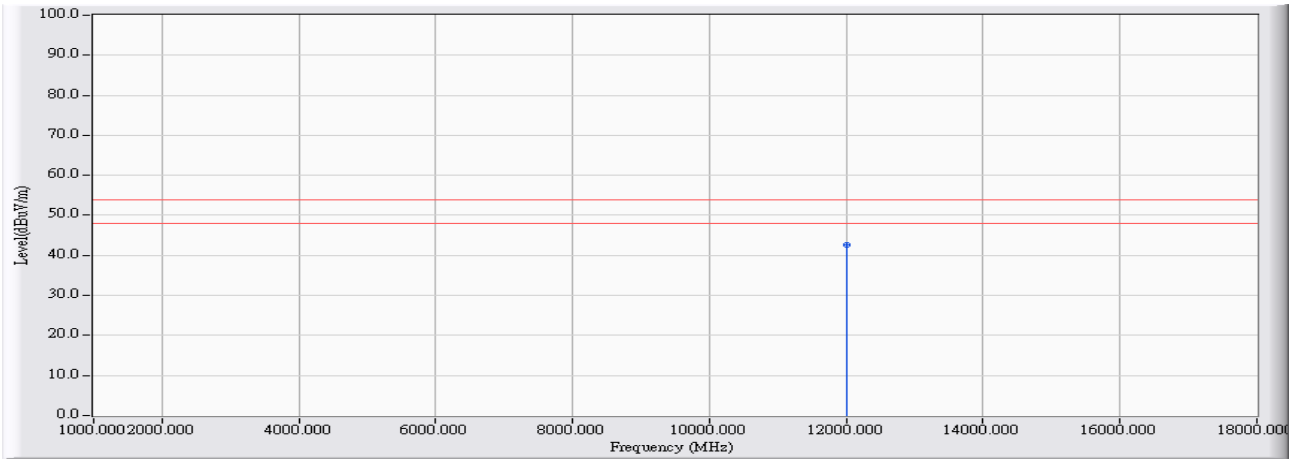
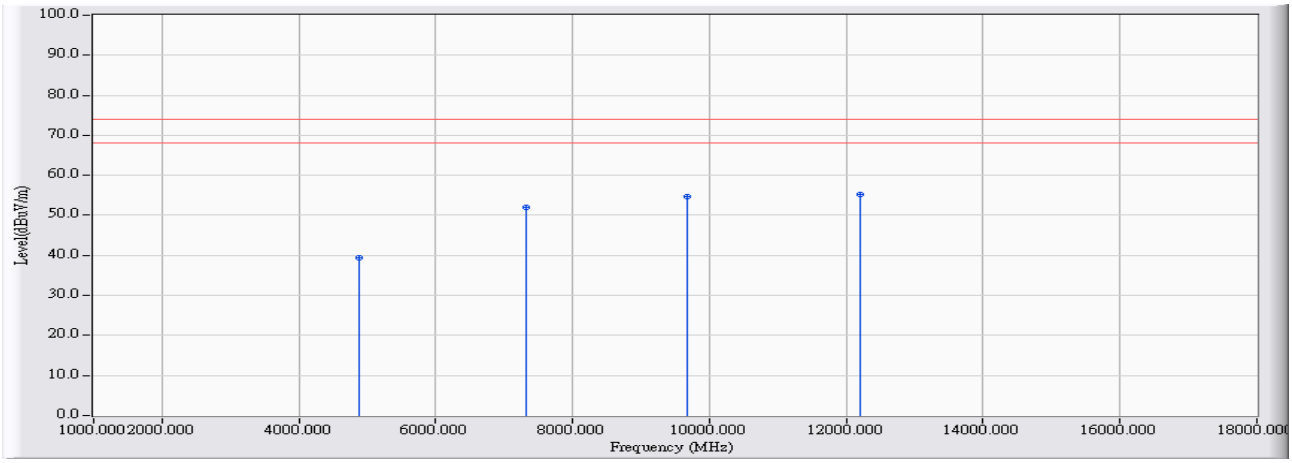
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12008.256	15.524	26.998	42.521	-11.479	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.658	-0.122	39.594	39.471	-34.529	74.000	PEAK
2		7323.302	7.449	44.519	51.967	-22.033	74.000	PEAK
3		9667.822	12.622	41.991	54.613	-19.387	74.000	PEAK
4	*	12201.214	14.847	40.273	55.120	-18.880	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
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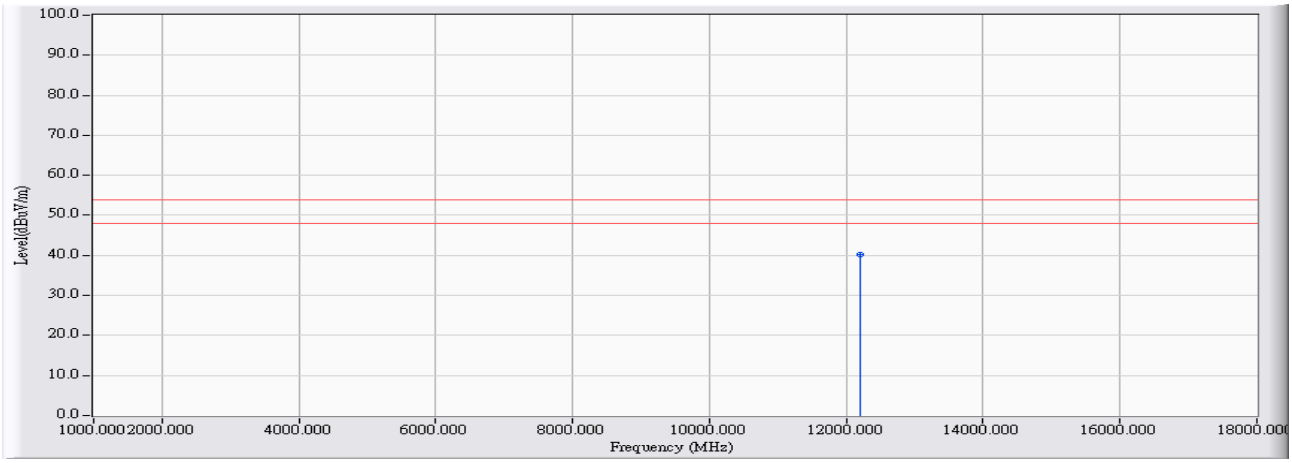
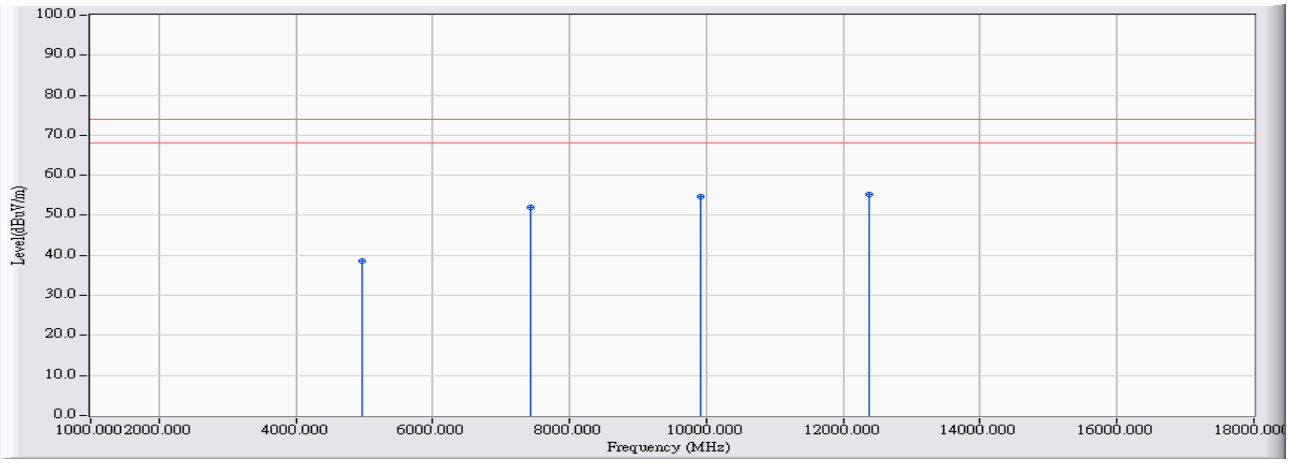
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12211.201	14.813	25.512	40.325	-13.675	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

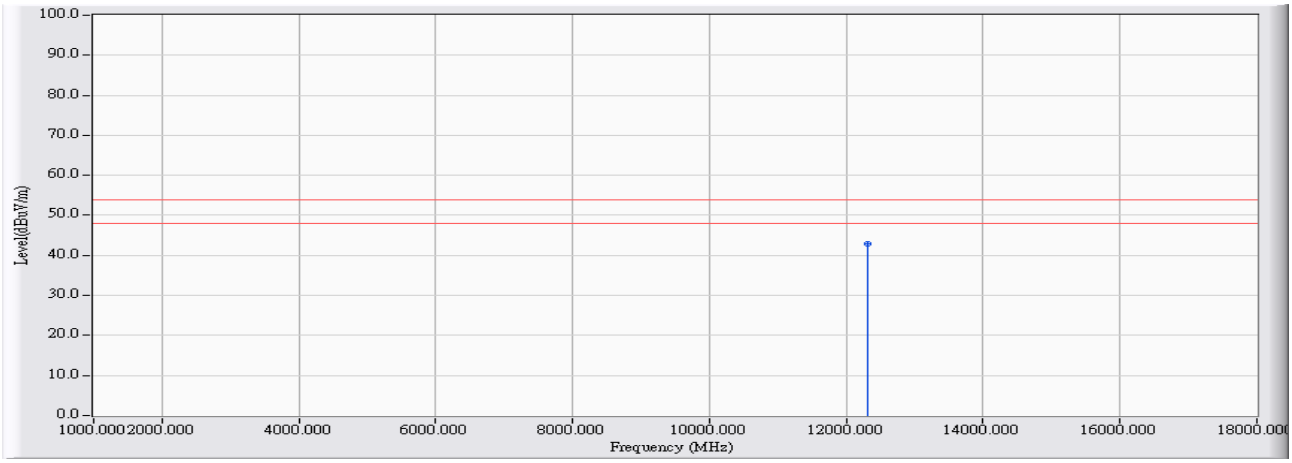
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4957.698	-0.037	38.668	38.631	-35.369	74.000	PEAK
2		7438.589	7.863	44.244	52.107	-21.893	74.000	PEAK
3		9921.548	13.093	41.627	54.720	-19.280	74.000	PEAK
4	*	12387.263	15.643	39.478	55.121	-18.879	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

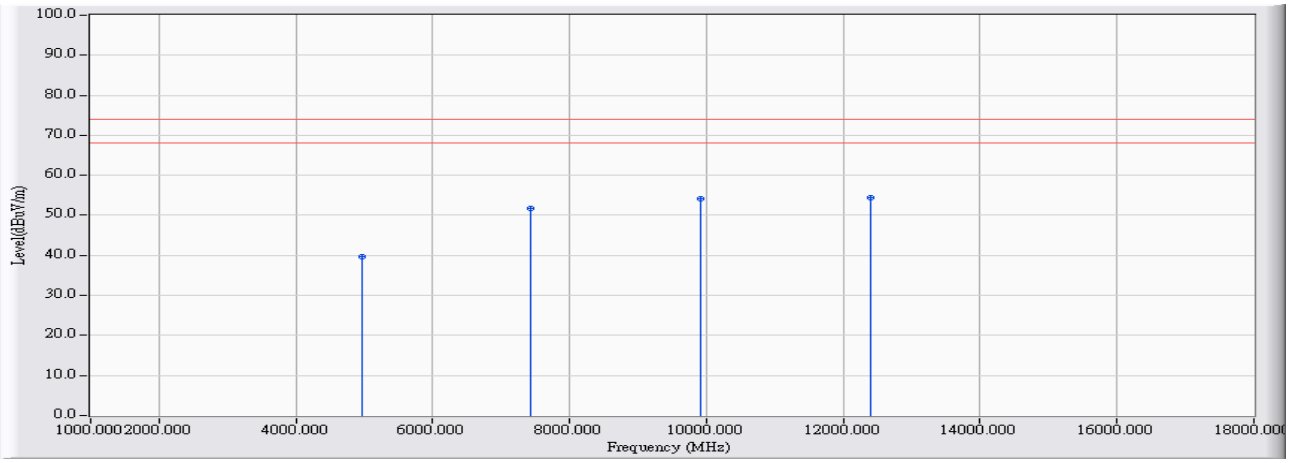
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12321.423	15.176	27.719	42.896	-11.104	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

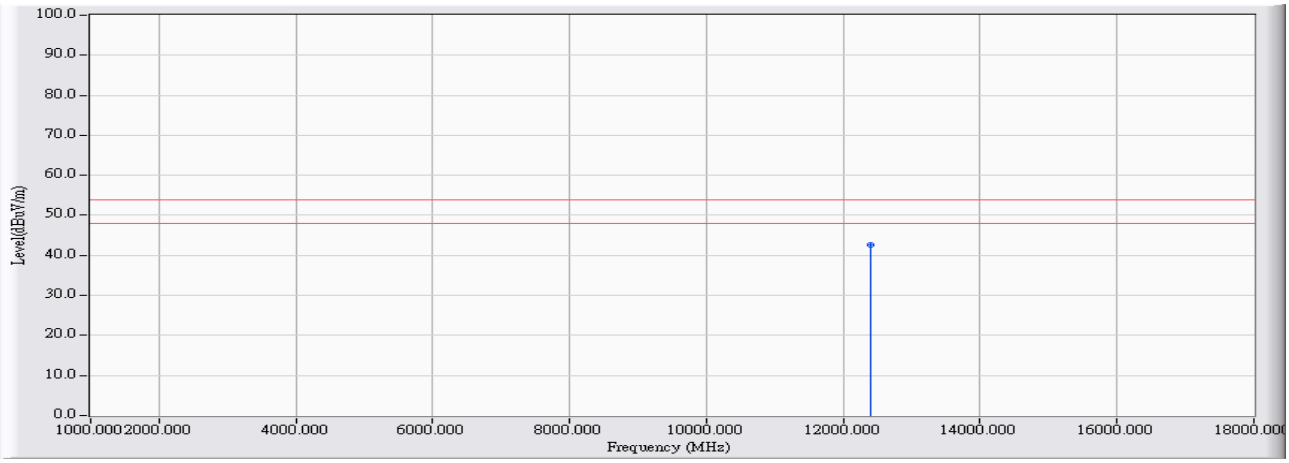
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4961.296	-0.032	39.700	39.667	-34.333	74.000	PEAK
2		7438.967	7.864	43.797	51.662	-22.338	74.000	PEAK
3		9920.987	13.092	41.116	54.209	-19.791	74.000	PEAK
4	*	12398.369	15.721	38.674	54.396	-19.604	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

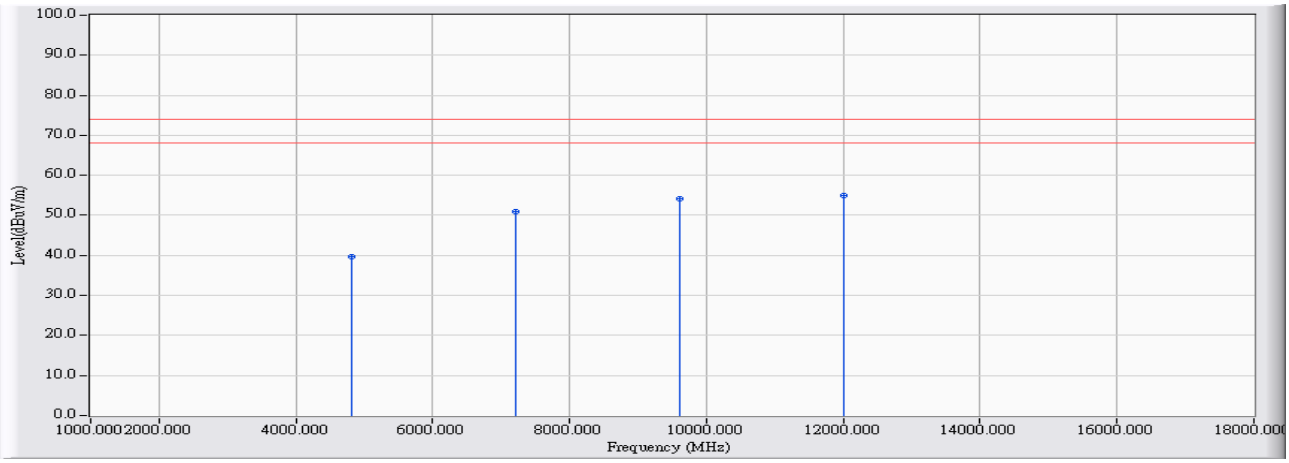
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12388.576	15.652	27.106	42.758	-11.242	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

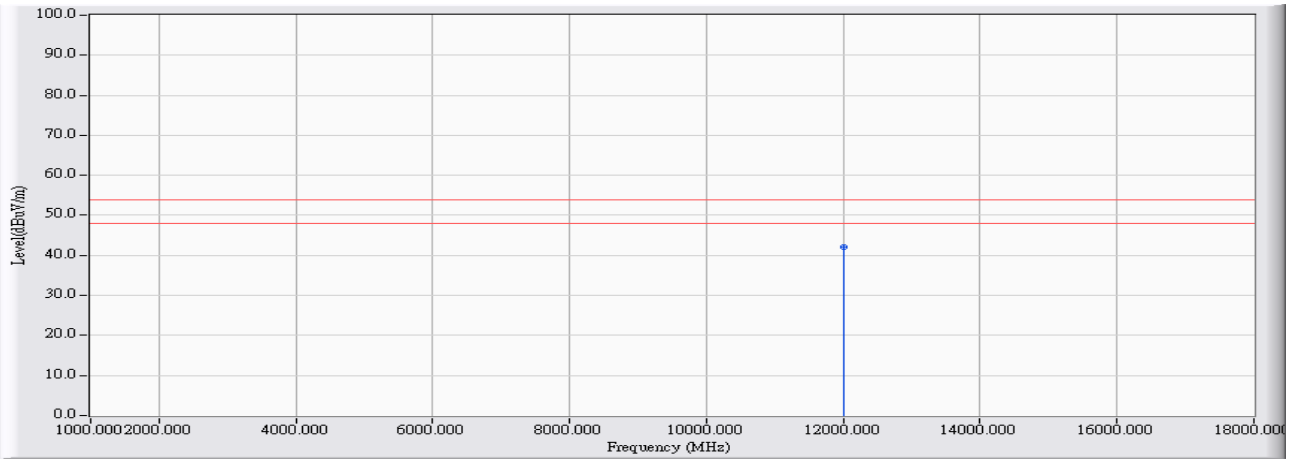
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4803.863	-0.209	39.987	39.778	-34.222	74.000	PEAK
2		7206.986	6.979	43.919	50.899	-23.101	74.000	PEAK
3		9607.987	12.540	41.712	54.253	-19.747	74.000	PEAK
4	*	12007.859	15.525	39.346	54.871	-19.129	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

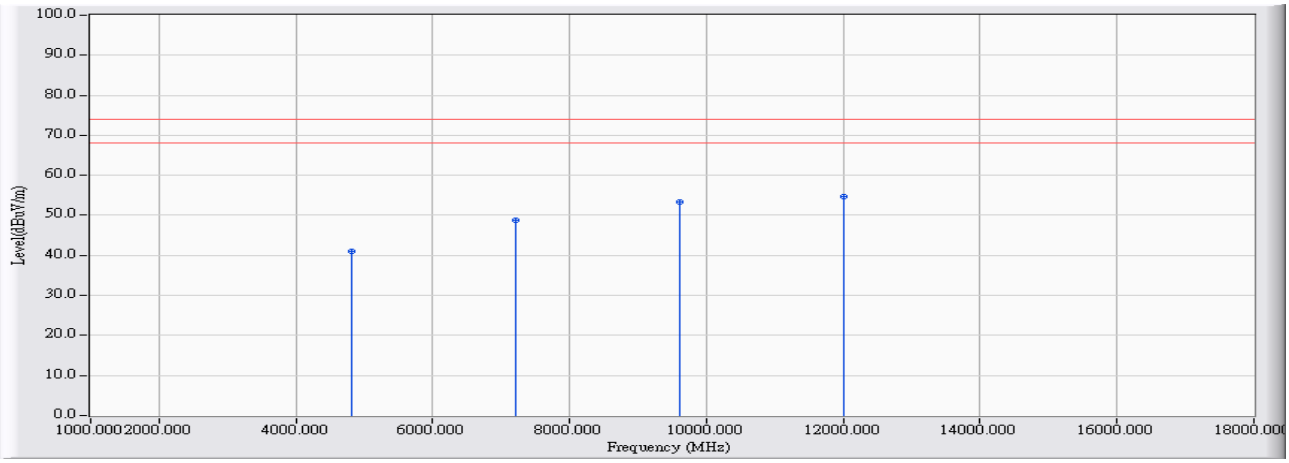
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12011.253	15.510	26.501	42.012	-11.988	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

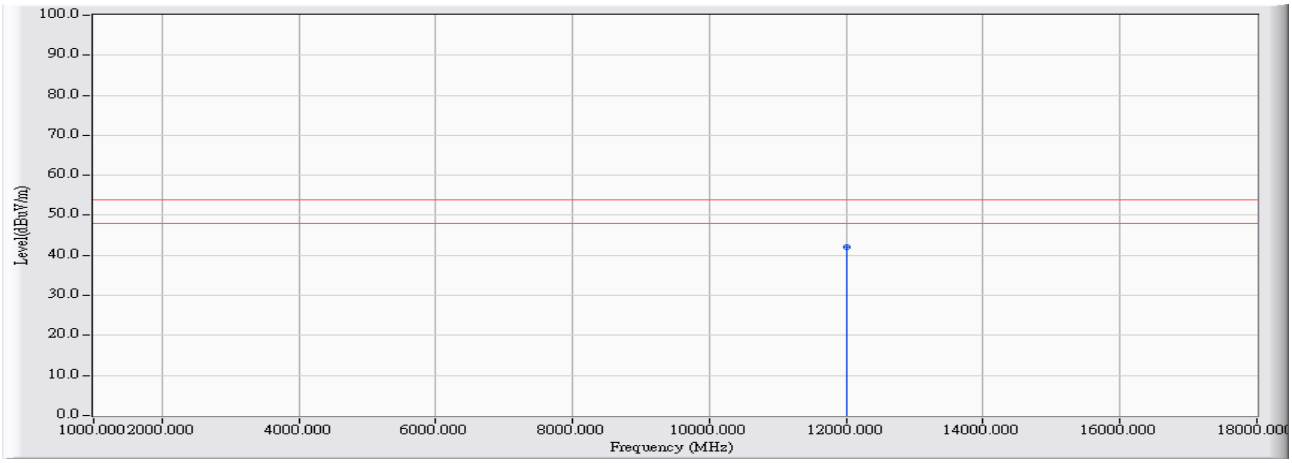
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.125	-0.208	41.223	41.015	-32.985	74.000	PEAK
2		7204.234	6.957	41.923	48.879	-25.121	74.000	PEAK
3		9606.859	12.537	40.703	53.241	-20.759	74.000	PEAK
4	*	12008.235	15.524	39.066	54.589	-19.411	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

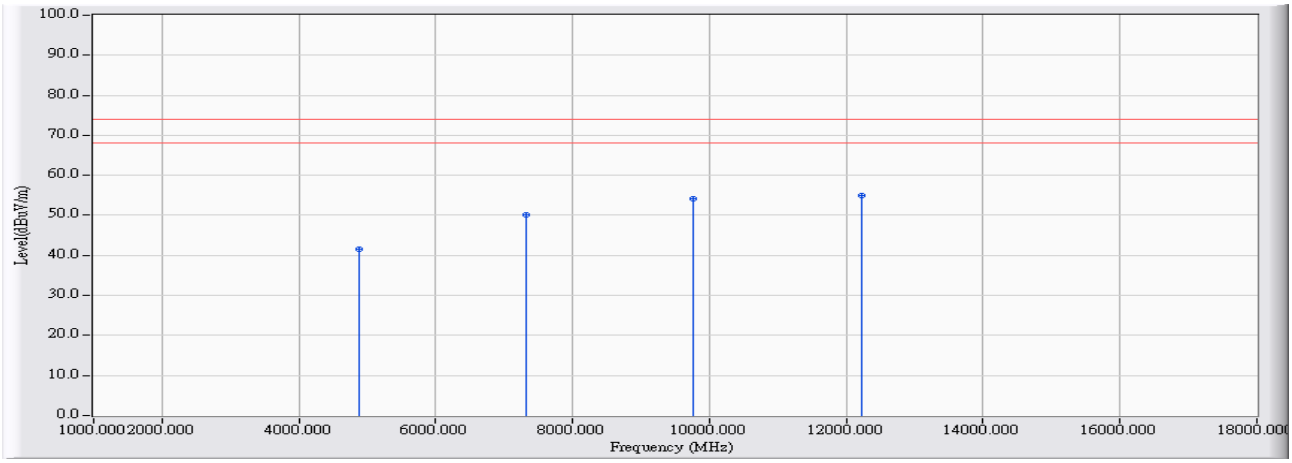
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2402MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12011.238	15.510	26.609	42.120	-11.880	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

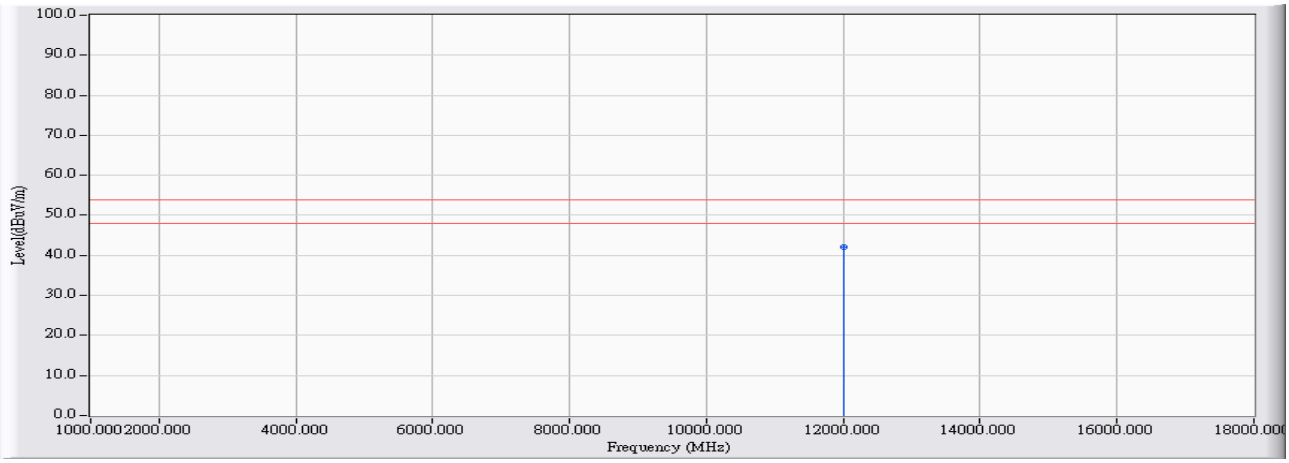
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.201	-0.124	41.652	41.529	-32.471	74.000	PEAK
2		7323.390	7.449	42.601	50.050	-23.950	74.000	PEAK
3		9760.125	12.866	41.369	54.235	-19.765	74.000	PEAK
4	*	12220.892	14.780	40.243	55.022	-18.978	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

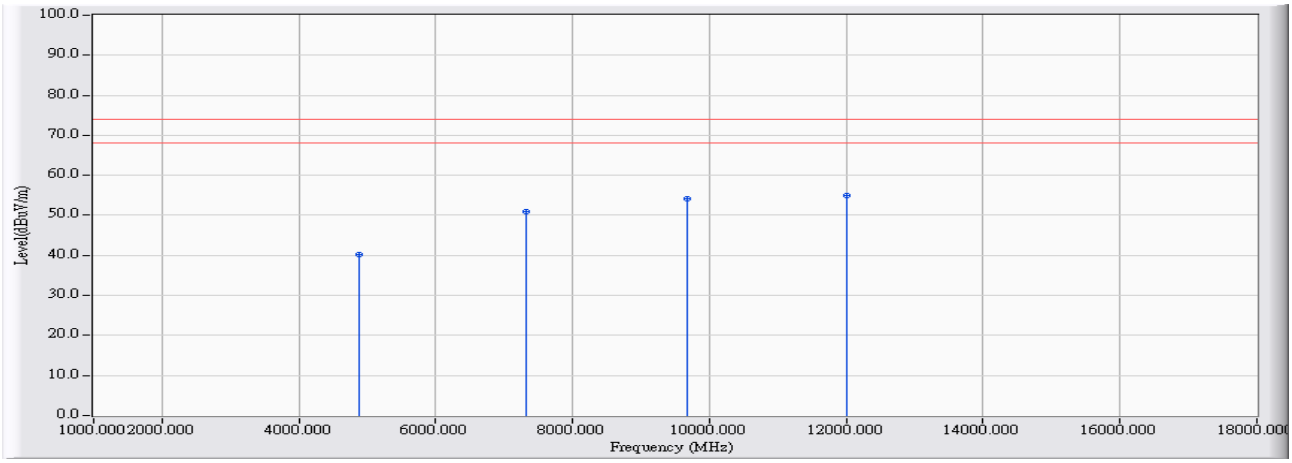
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12010.201	15.515	26.521	42.036	-11.964	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.253	-0.123	40.337	40.214	-33.786	74.000	PEAK
2		7323.205	7.448	43.411	50.859	-23.141	74.000	PEAK
3		9667.851	12.622	41.637	54.259	-19.741	74.000	PEAK
4	*	12012.238	15.507	39.388	54.895	-19.105	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
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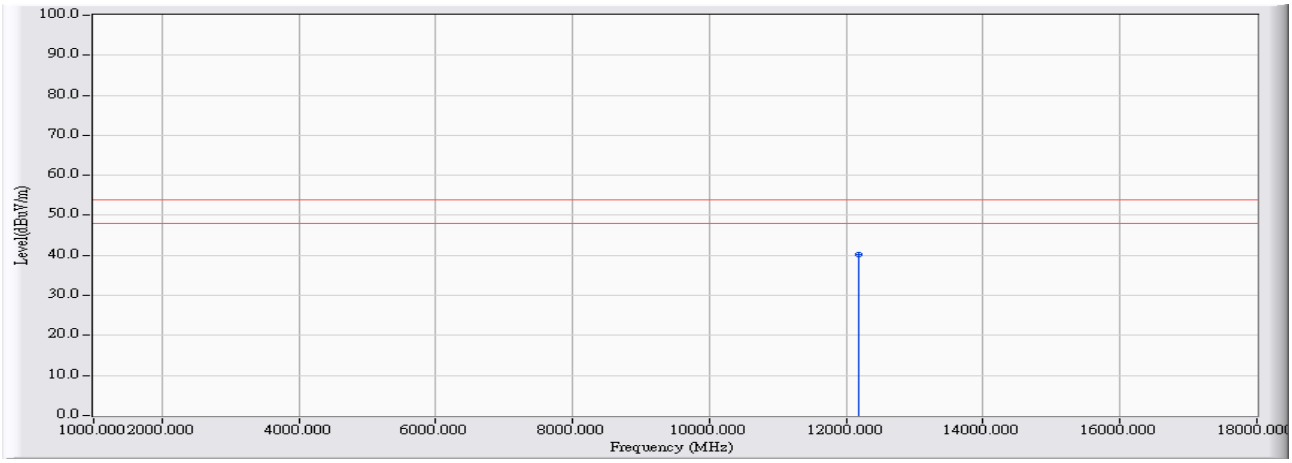
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12185.230	14.904	25.318	40.221	-13.779	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
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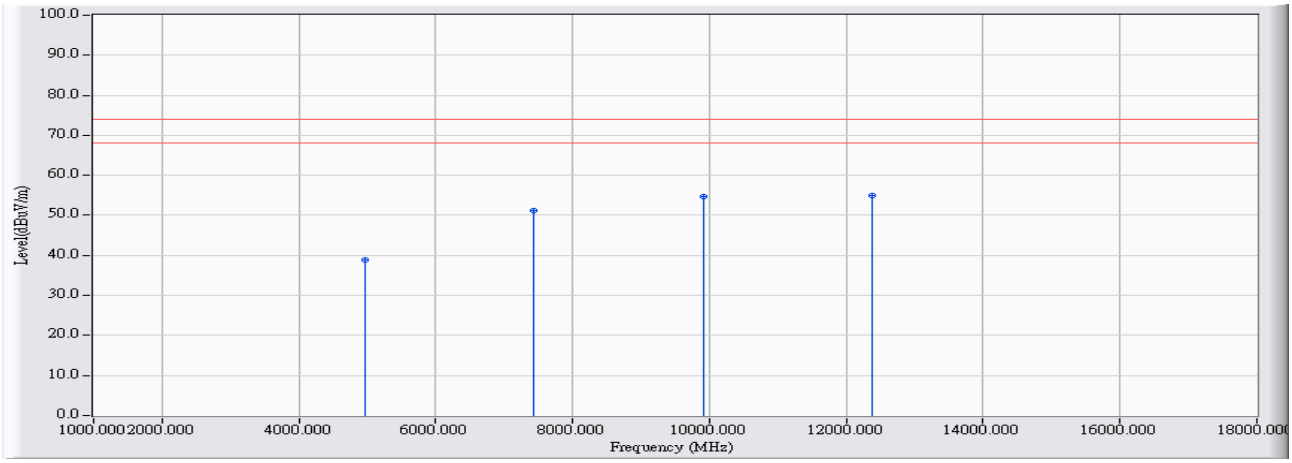
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4959.637	-0.035	38.909	38.874	-35.126	74.000	PEAK
2		7439.501	7.867	43.386	51.253	-22.747	74.000	PEAK
3		9920.631	13.093	41.490	54.582	-19.418	74.000	PEAK
4	*	12381.251	15.600	39.343	54.943	-19.057	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
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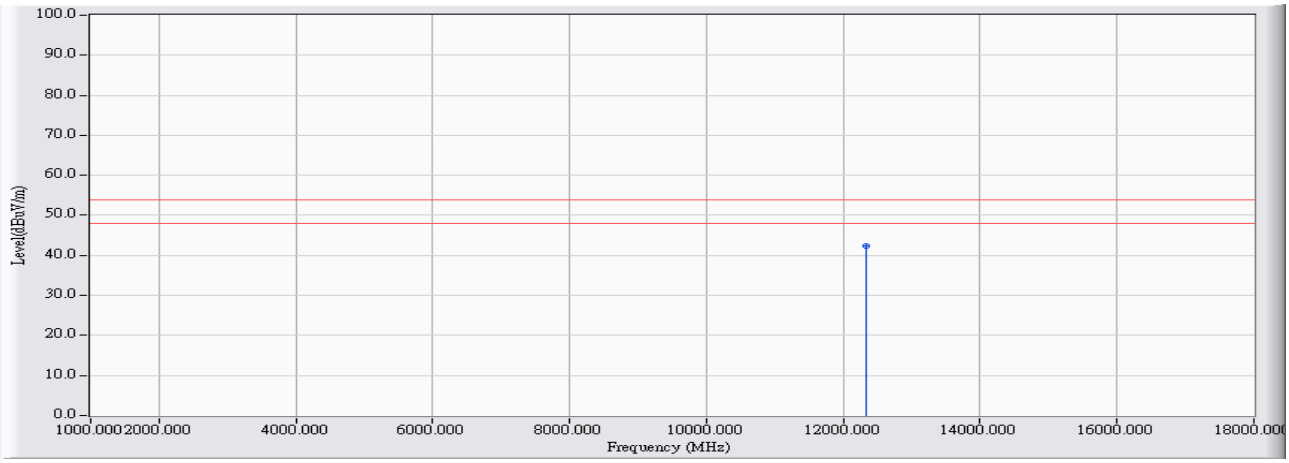
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12325.586	15.206	27.132	42.338	-11.662	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
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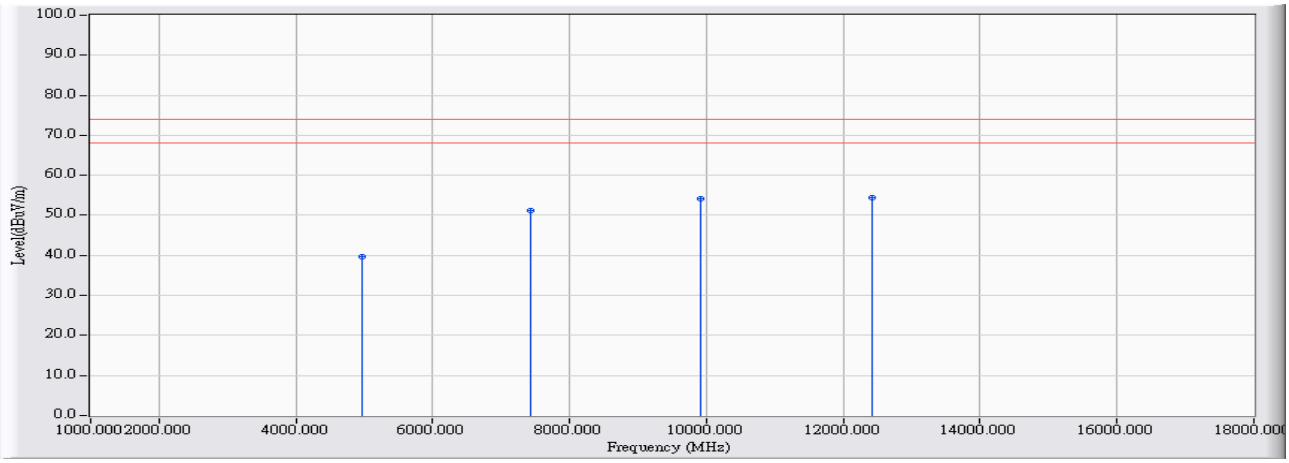
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.361	-0.034	39.601	39.567	-34.433	74.000	PEAK
2		7439.025	7.864	43.388	51.253	-22.747	74.000	PEAK
3		9920.985	13.092	40.959	54.052	-19.948	74.000	PEAK
4	*	12410.521	15.808	38.579	54.387	-19.613	74.000	PEAK

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
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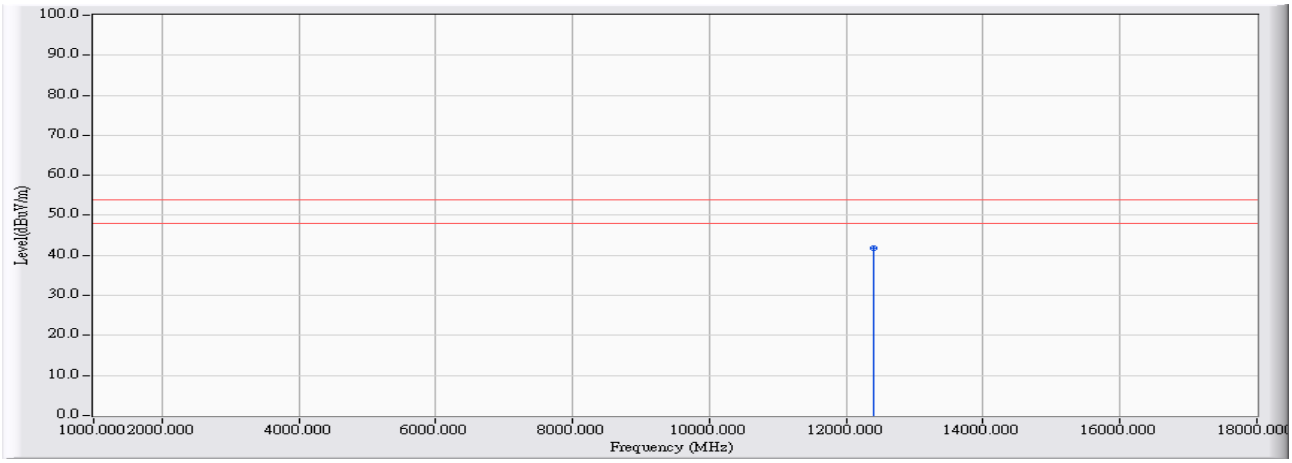
Site : CB2-H	**Time : 2017/08/11**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12398.458	15.722	26.175	41.897	-12.103	54.000	AVERAGE

Note: 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

5. RF antenna conducted test

5.1. Test Equipment

The following test equipment is used during the test:

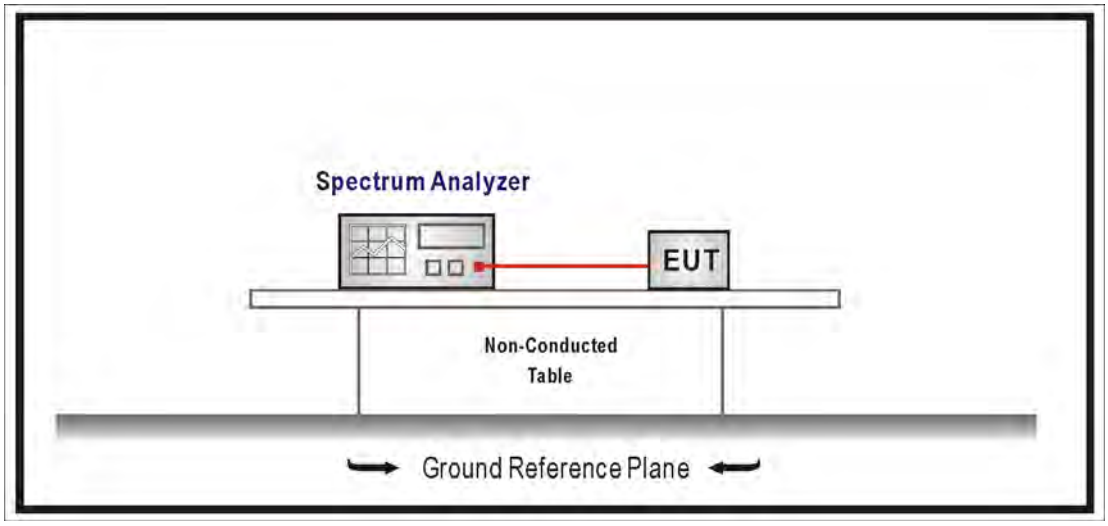
RF antenna conducted test / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12

Note: All equipment that need to calibrate are with calibration period of 1 year.

5.2. Test Setup

RF Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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 an RF conducted or 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) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

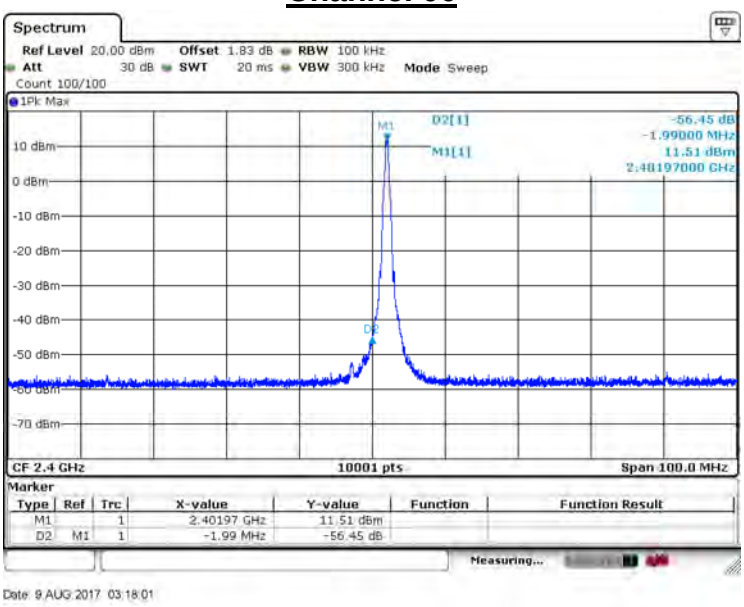
5.6. Test Result

Product	Beta+		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit_DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

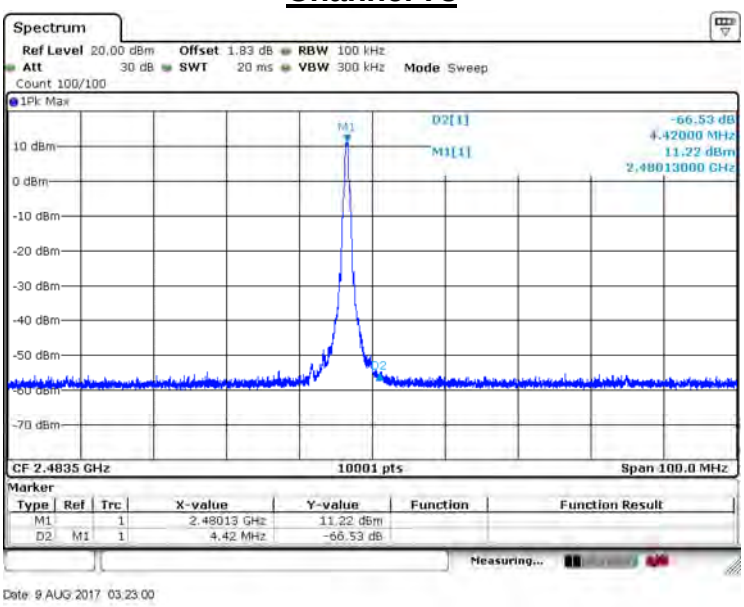
GFSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	56.450	≧20	Pass
78	2480	66.530	≧20	Pass

Channel 00



Channel 78

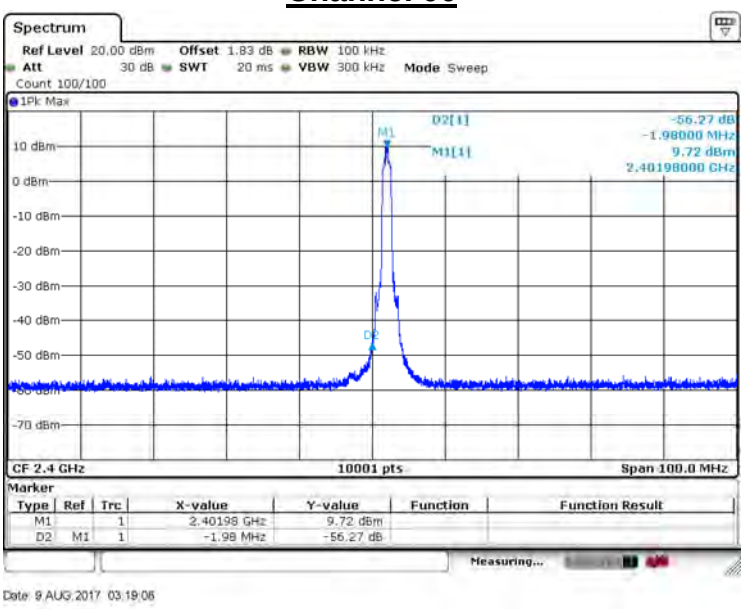


Product	Beta+		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_2DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

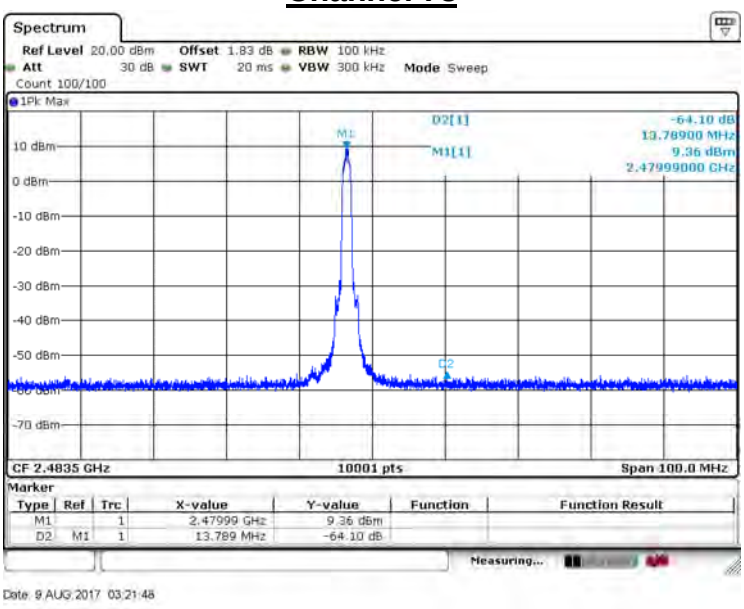
π/4-DQPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	56.270	≧20	Pass
78	2480	64.100	≧20	Pass

Channel 00



Channel 78

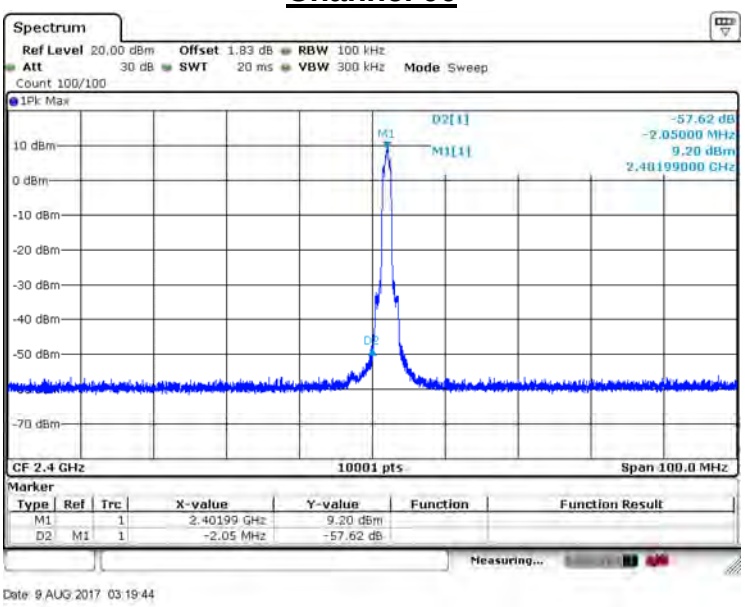


Product	Beta+		
Test Item	RF antenna conducted test		
Test Mode	Mode 3: Transmit_3DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

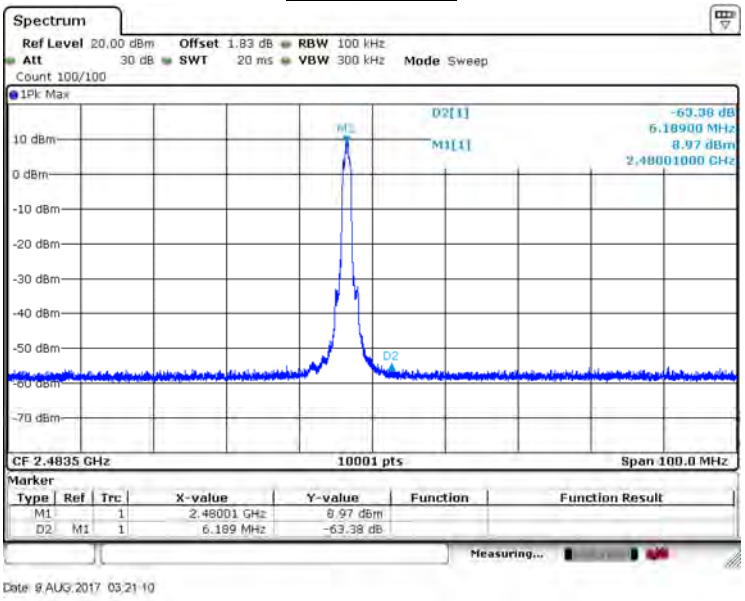
8-DPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	57.620	≧20	Pass
78	2480	63.380	≧20	Pass

Channel 00

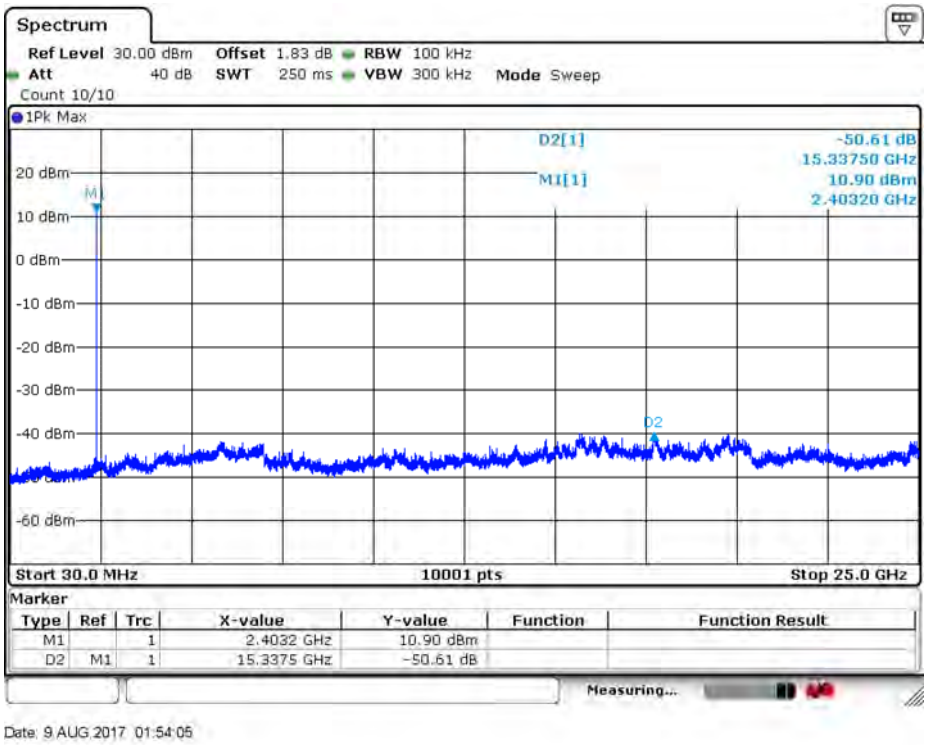


Channel 78

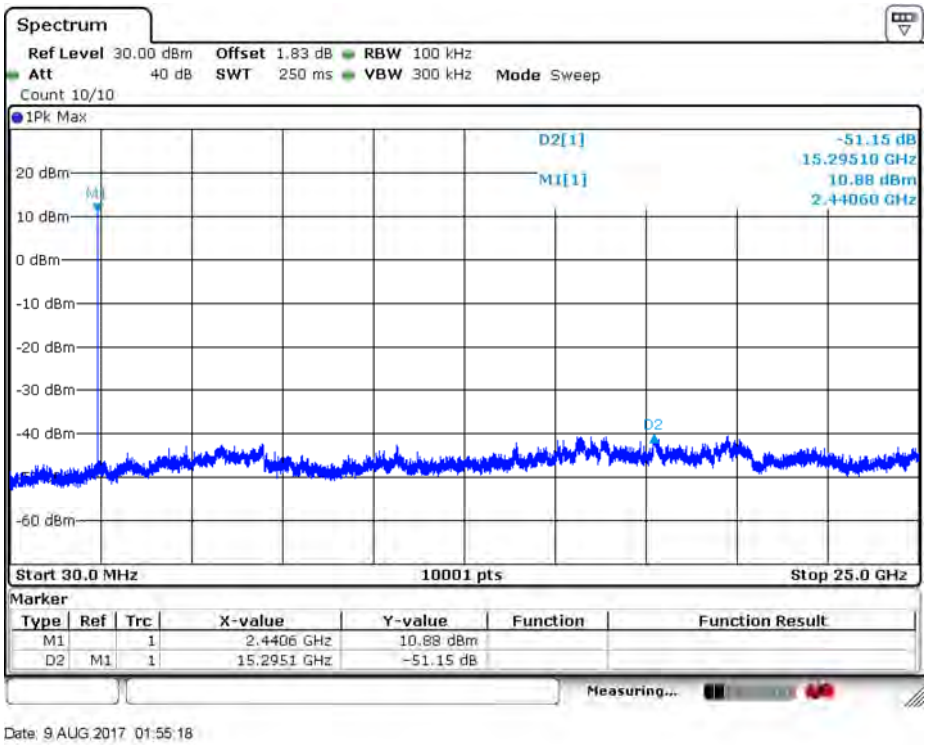


Product	Beta+		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit_DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

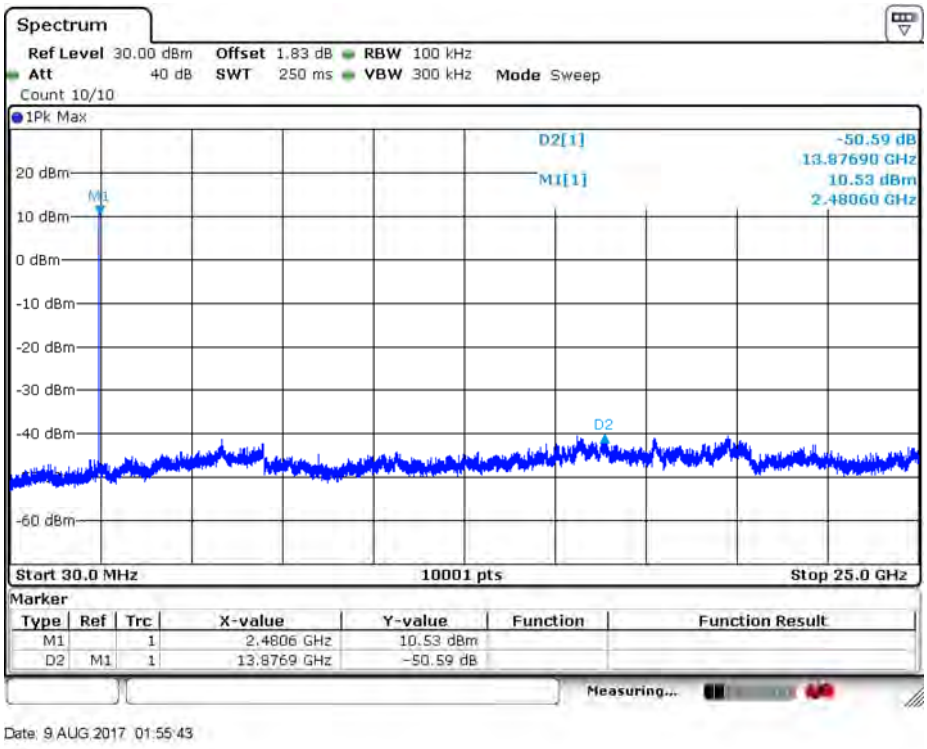
Channel 00 (30MHz-25GHz)- GFSK



Channel 39 (30MHz-25GHz)- GFSK

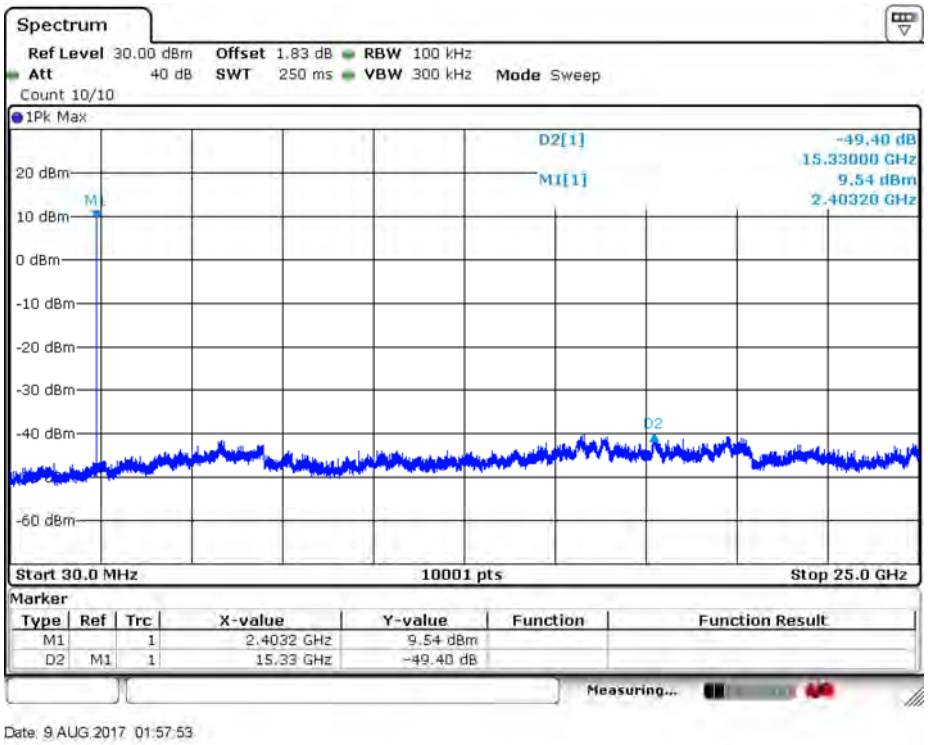


Channel 78 (30MHz-25GHz)- GFSK

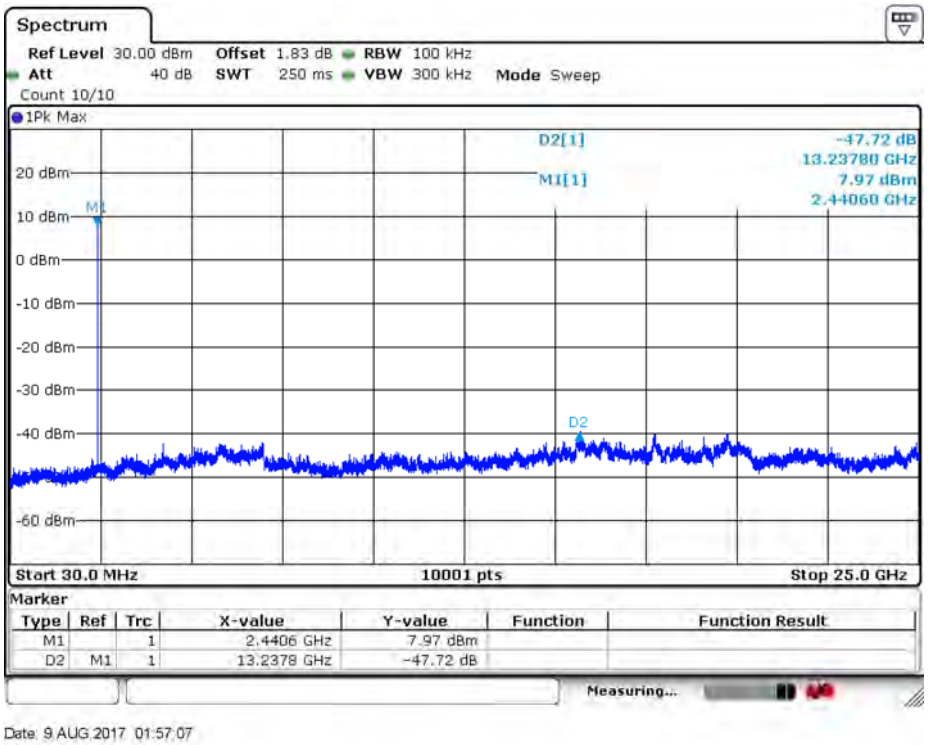


Product	Beta+		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Transmit_2DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

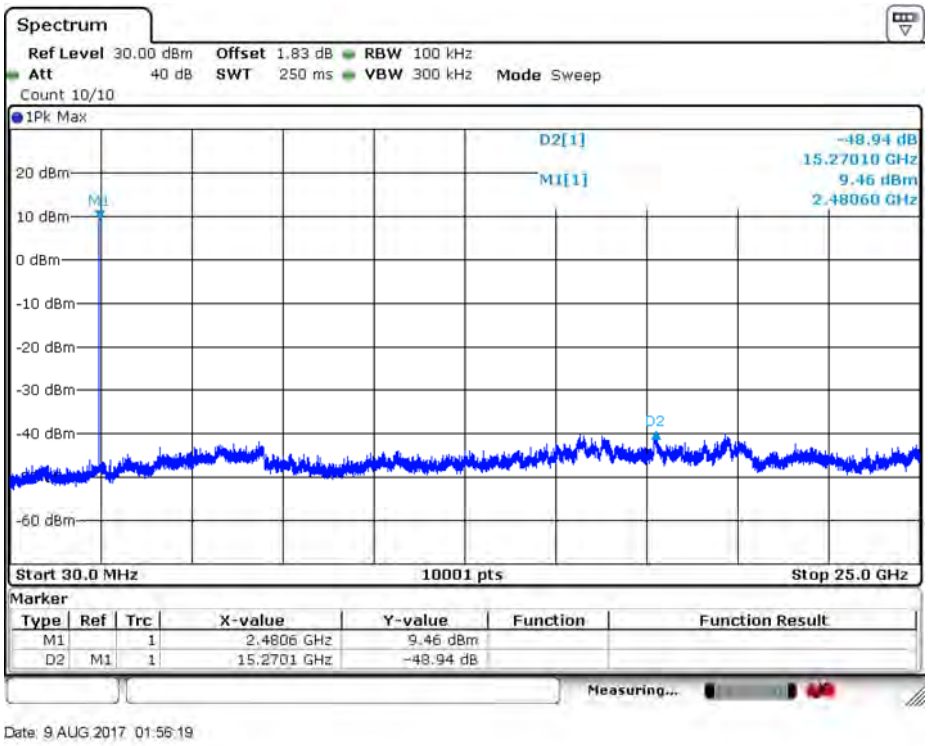
Channel 00 (30MHz-25GHz)- π/4-DQPSK



Channel 39 (30MHz-25GHz)- π/4-DQPSK

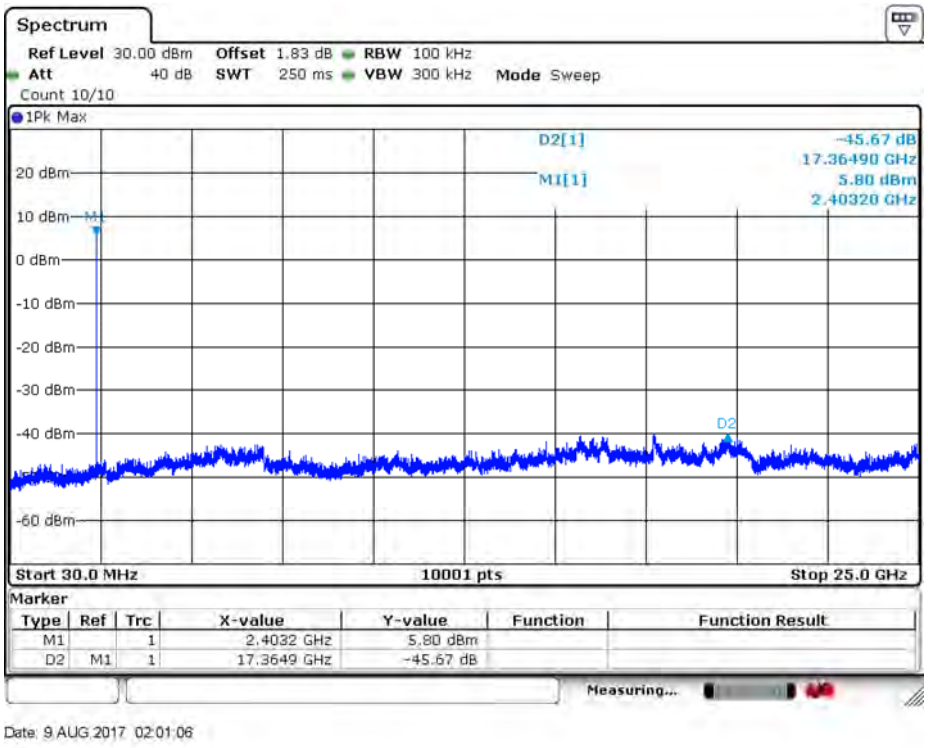


Channel 78 (30MHz-25GHz)- π/4-DQPSK

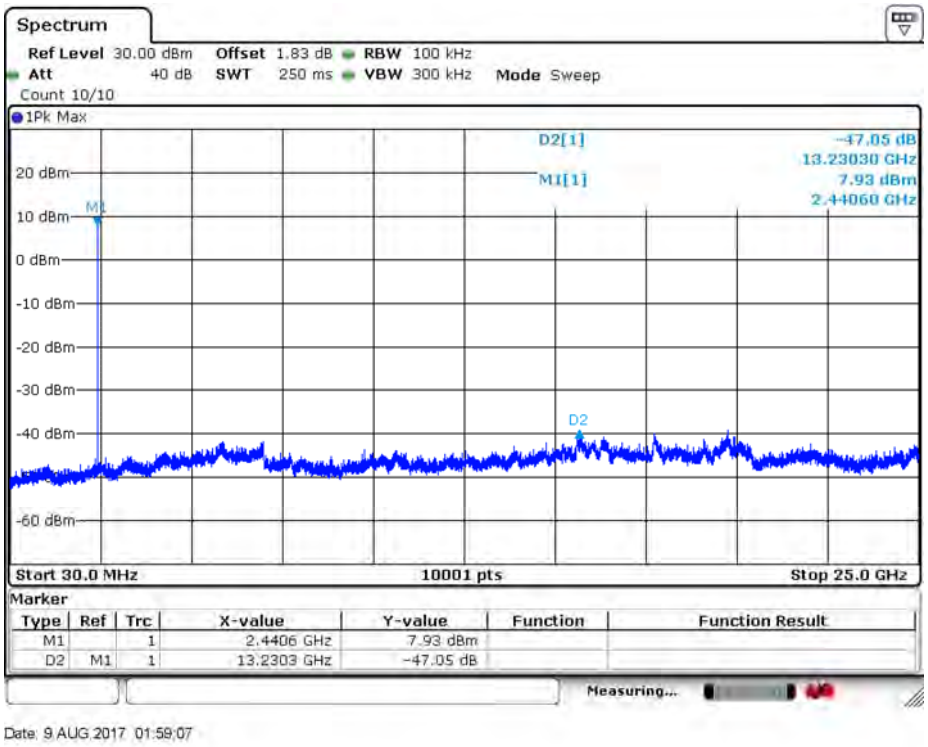


Product	Beta+		
Test Item	RF antenna conducted test		
Test Mode	Mode 3: Transmit_3DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

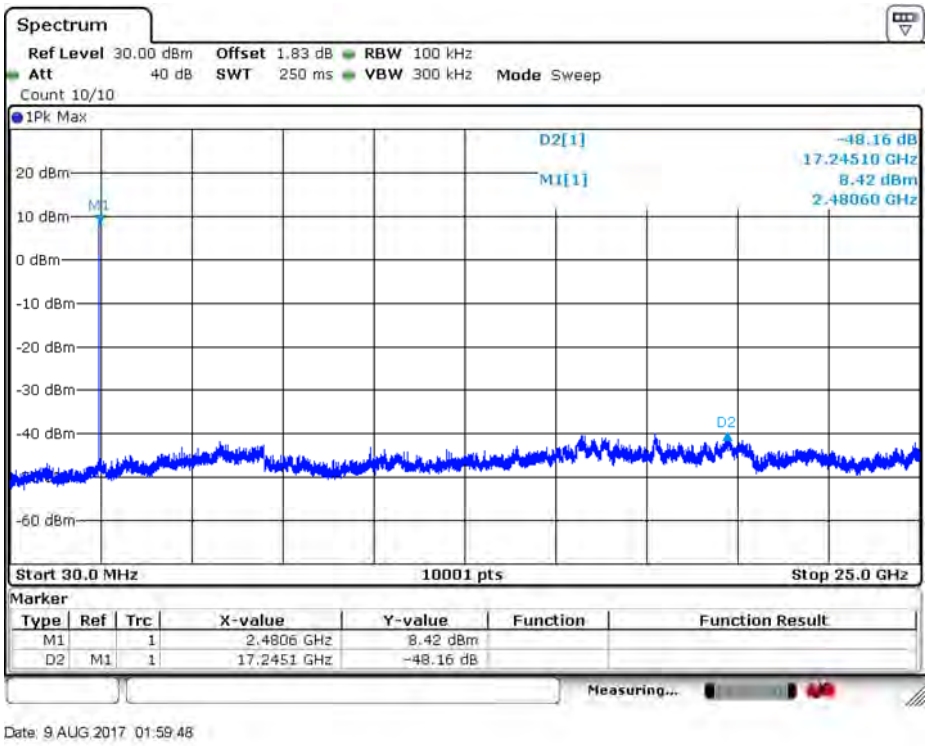
Channel 00 (30MHz-25GHz)- 8-DPSK



Channel 39 (30MHz-25GHz)- 8-DPSK



Channel 78 (30MHz-25GHz)- 8-DPSK



6. Band Edge

6.1. Test Equipment

The following test equipment are used during the test:

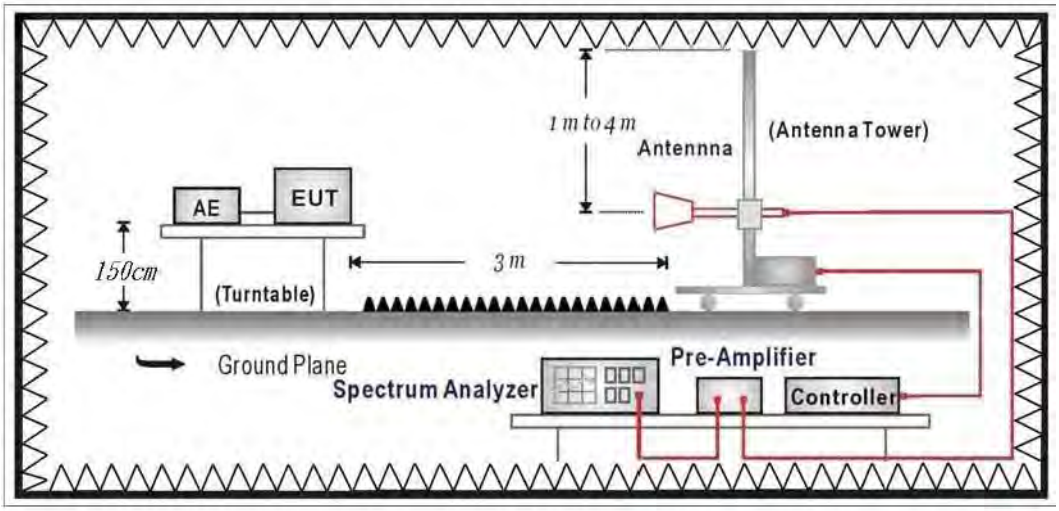
Band Edge / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2016/11/28	2017/11/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12
Bilog Antenna	Teseq	CBL6112D	23191	2017/06/28	2018/06/27
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2017/06/14	2018/06/13
Horn Antenna	Schwarzbeck	BBHA 9170	203	2016/08/29	2017/08/28
Pre-Amplifier	RF Bay Inc.	LNA-1330	12162511	2017/03/09	2018/03/08
Pre-Amplifier	EMCI	EMCI 1830I	980366	2017/01/23	2018/01/22
Pre-Amplifier	MITEQ	JS44-45-8P	2014754	2016/12/26	2017/12/25

Note: All equipment that need to calibrate are with calibration period of 1 year.

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

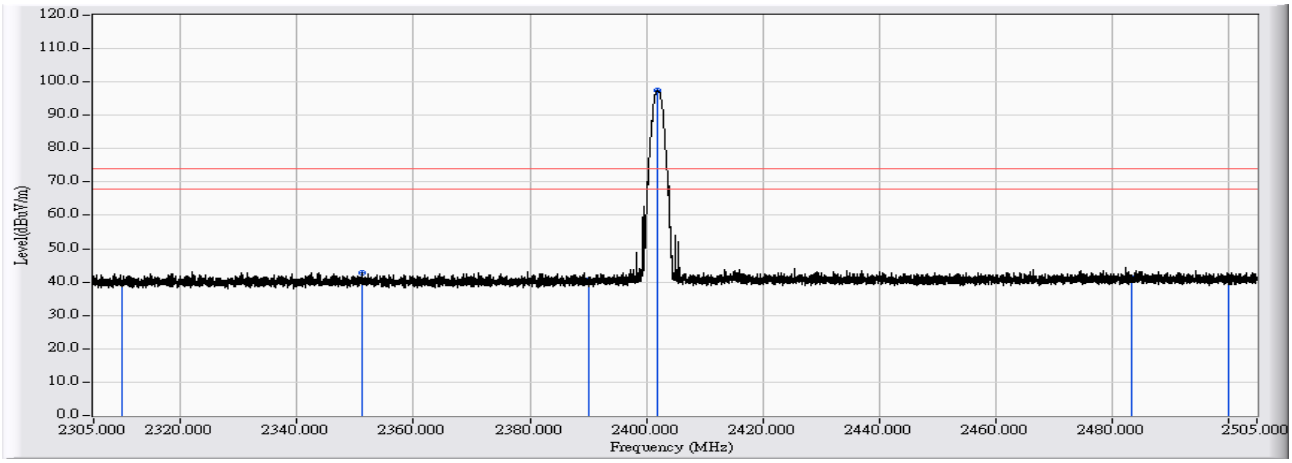
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

6.6. Test Result

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2402MHz**

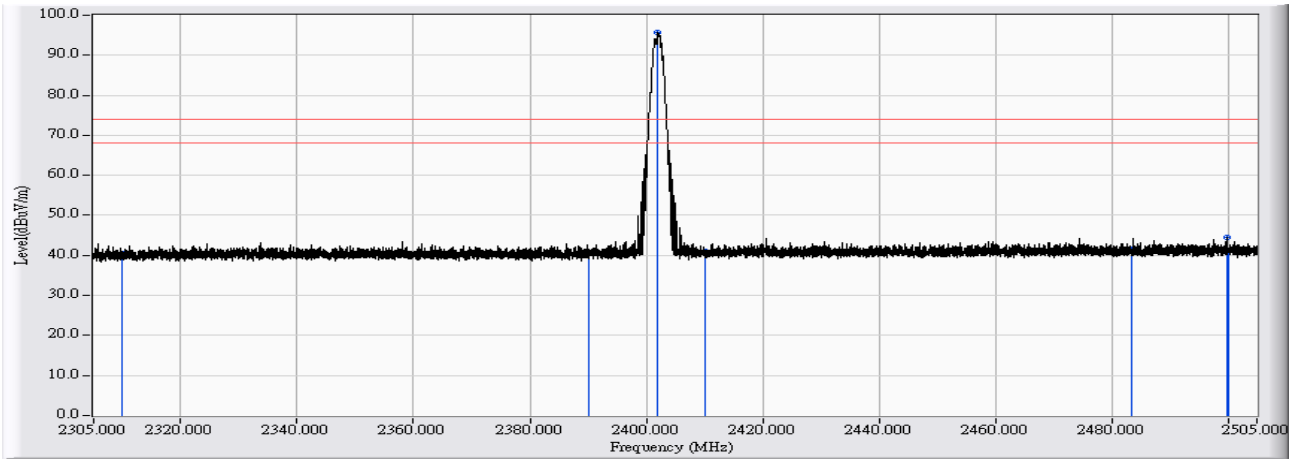


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.871	39.886	-34.114	74.000	PEAK
2		2351.135	11.287	31.650	42.937	-31.063	74.000	PEAK
3		2390.000	11.544	28.884	40.428	-33.572	74.000	PEAK
4	*	2402.010	11.625	85.771	97.395	23.395	74.000	PEAK
5		2483.500	12.172	28.973	41.145	-32.855	74.000	PEAK
6		2500.000	12.274	28.208	40.483	-33.517	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2402MHz**

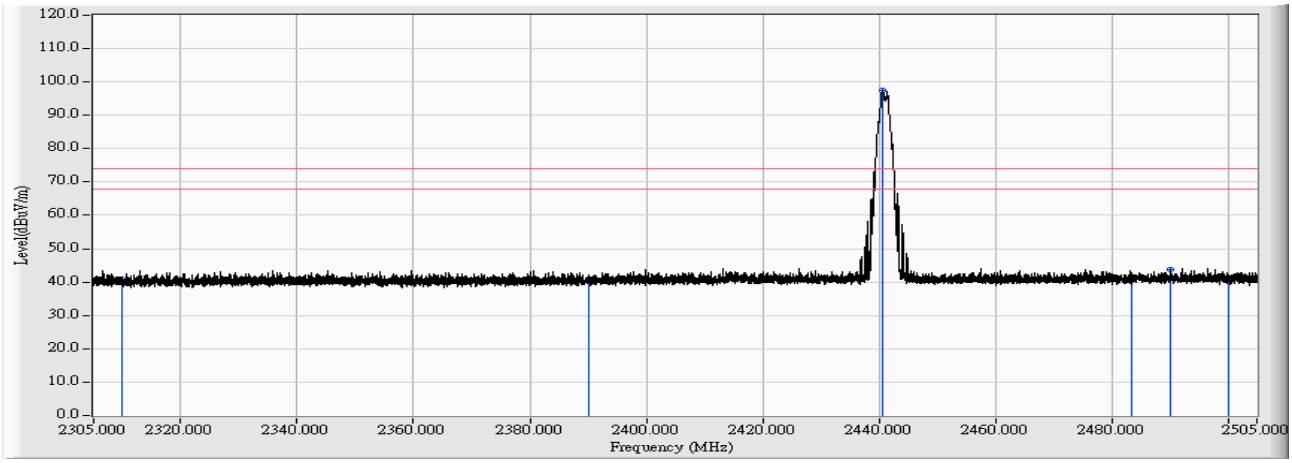


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.431	40.446	-33.554	74.000	PEAK
2		2390.000	11.544	29.251	40.795	-33.205	74.000	PEAK
3	*	2402.050	11.625	83.987	95.612	21.612	74.000	PEAK
4		2410.000	11.678	29.436	41.114	-32.886	74.000	PEAK
5		2483.500	12.172	29.258	41.430	-32.570	74.000	PEAK
6		2499.920	12.274	32.153	44.428	-29.572	74.000	PEAK
7		2500.000	12.274	28.906	41.181	-32.819	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2441MHz**

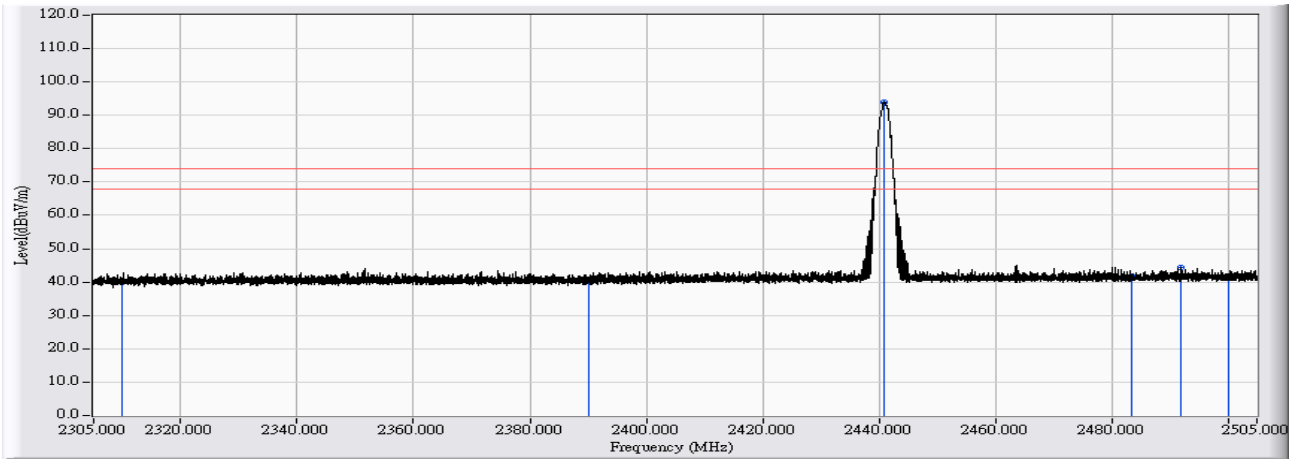


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.859	40.874	-33.126	74.000	PEAK
2		2390.000	11.544	28.824	40.368	-33.632	74.000	PEAK
3	*	2440.646	11.883	85.703	97.587	23.587	74.000	PEAK
4		2483.500	12.172	28.248	40.420	-33.580	74.000	PEAK
5		2490.001	12.215	31.567	43.782	-30.218	74.000	PEAK
6		2500.000	12.274	28.662	40.937	-33.063	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2441MHz**

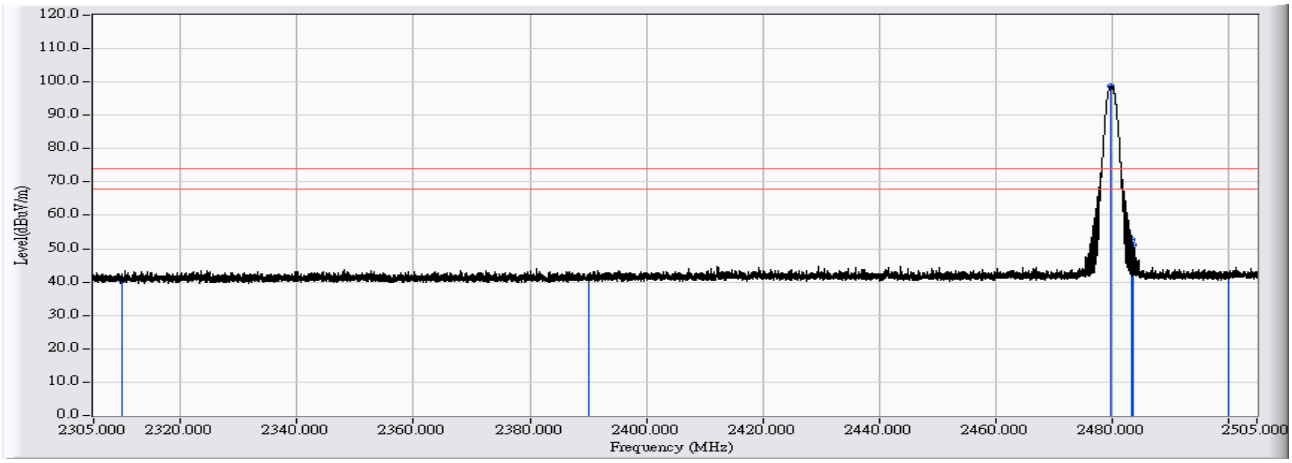


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.010	40.025	-33.975	74.000	PEAK
2		2390.000	11.544	29.073	40.617	-33.383	74.000	PEAK
3	*	2440.946	11.886	82.211	94.097	20.097	74.000	PEAK
4		2483.500	12.172	29.761	41.933	-32.067	74.000	PEAK
5		2491.861	12.228	32.190	44.418	-29.582	74.000	PEAK
6		2500.000	12.274	29.141	41.416	-32.584	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2480MHz**

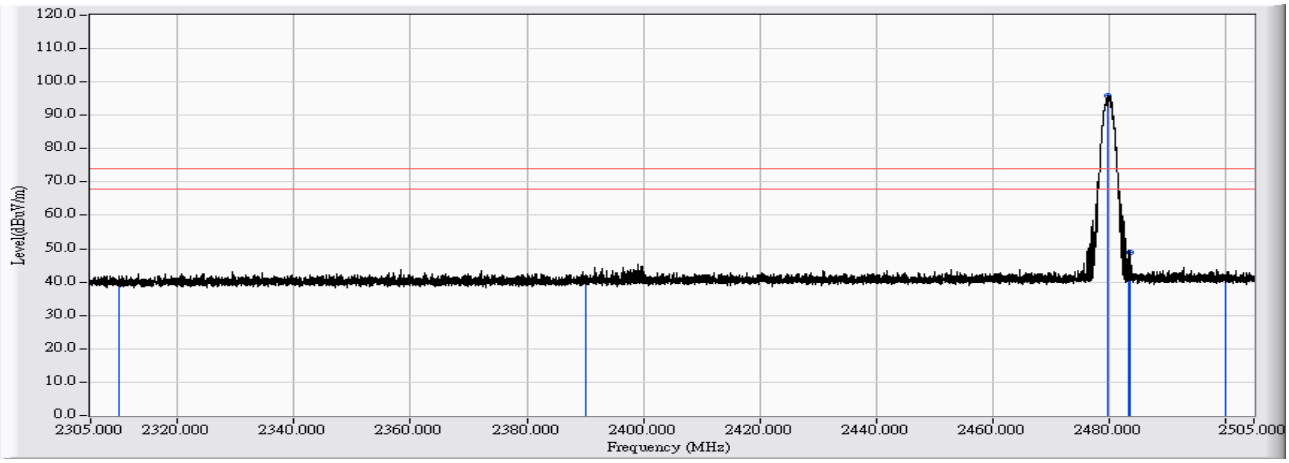


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.618	40.633	-33.367	74.000	PEAK
2		2390.000	11.544	29.711	41.255	-32.745	74.000	PEAK
3	*	2479.962	12.149	86.618	98.767	24.767	74.000	PEAK
4		2483.500	12.172	40.657	52.829	-21.171	74.000	PEAK
5		2483.722	12.174	39.071	51.245	-22.755	74.000	PEAK
6		2500.000	12.274	29.512	41.787	-32.213	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 1: Transmit_DH5_Power by PC_ 802.15.1_ 2480MHz**

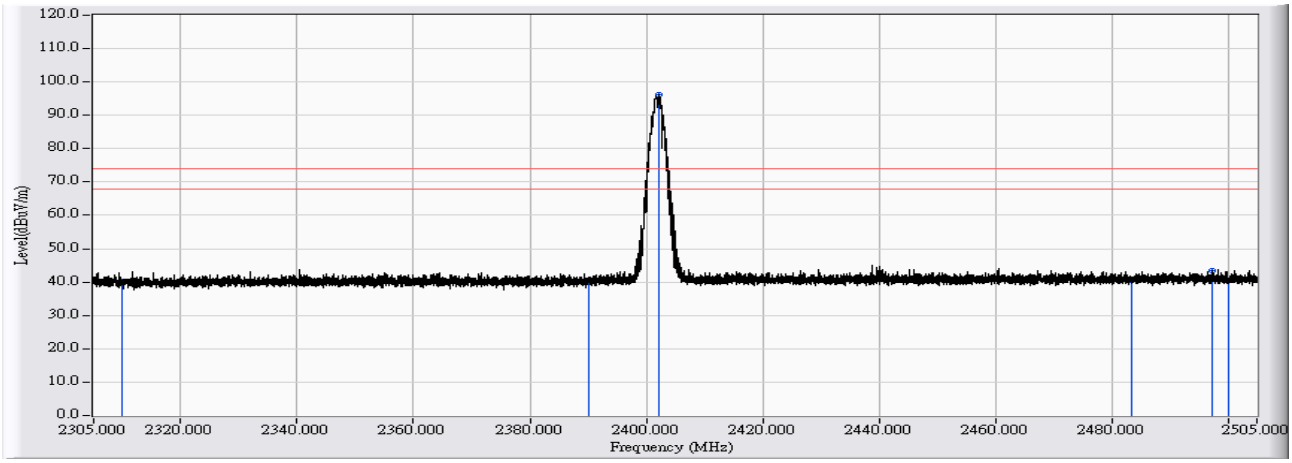


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.591	39.606	-34.394	74.000	PEAK
2		2390.000	11.544	29.197	40.741	-33.259	74.000	PEAK
3	*	2479.942	12.149	83.768	95.916	21.916	74.000	PEAK
4		2483.500	12.172	30.718	42.890	-31.110	74.000	PEAK
5		2483.722	12.174	36.695	48.869	-25.131	74.000	PEAK
6		2500.000	12.274	28.814	41.089	-32.911	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2402MHz**

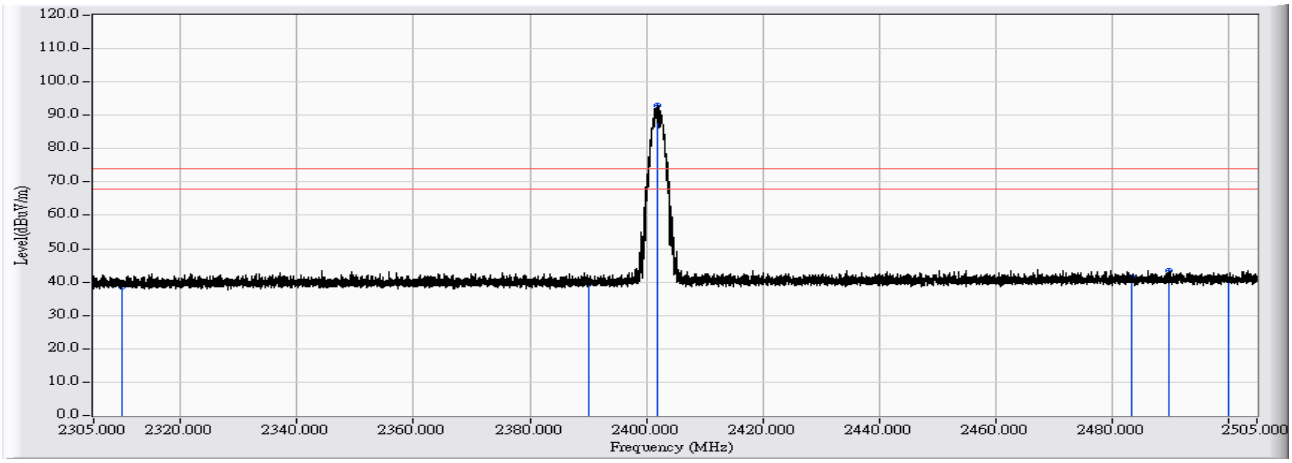


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.080	40.095	-33.905	74.000	PEAK
2		2390.000	11.544	28.744	40.288	-33.712	74.000	PEAK
3	*	2402.150	11.626	84.603	96.228	22.228	74.000	PEAK
4		2483.500	12.172	28.284	40.456	-33.544	74.000	PEAK
5		2497.321	12.262	31.148	43.410	-30.590	74.000	PEAK
6		2500.000	12.274	28.172	40.447	-33.553	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2402MHz**

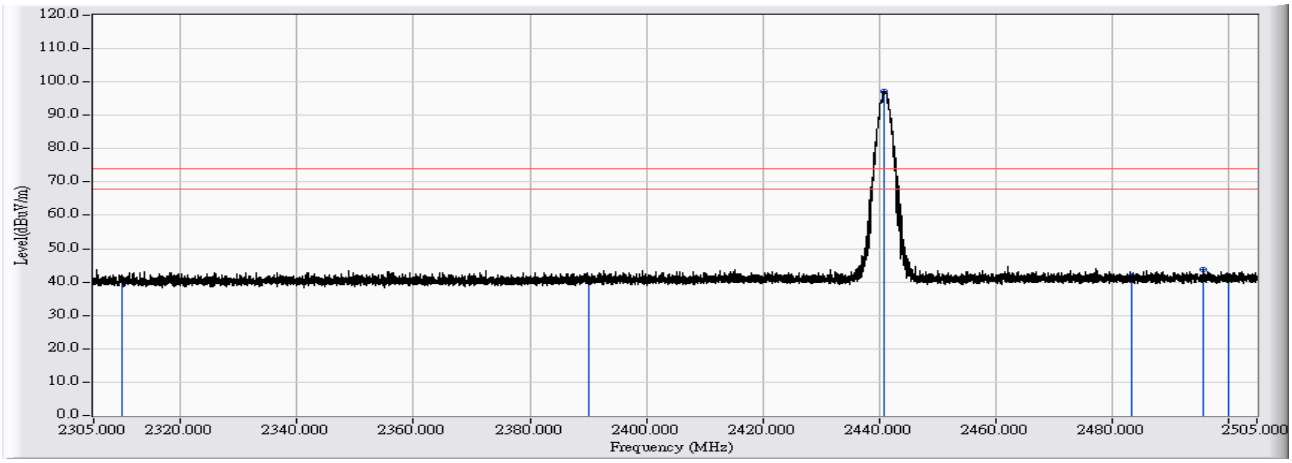


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	27.524	38.539	-35.461	74.000	PEAK
2		2390.000	11.544	28.059	39.603	-34.397	74.000	PEAK
3	*	2401.870	11.623	81.426	93.049	19.049	74.000	PEAK
4		2483.500	12.172	29.182	41.354	-32.646	74.000	PEAK
5		2489.801	12.214	31.057	43.271	-30.729	74.000	PEAK
6		2500.000	12.274	28.470	40.745	-33.255	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**

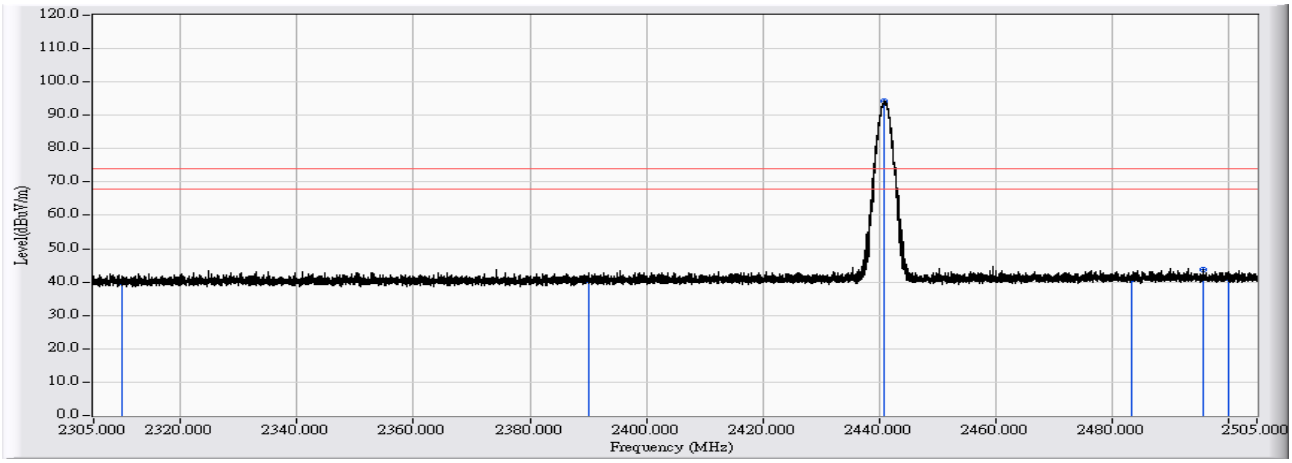


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.615	40.630	-33.370	74.000	PEAK
2		2390.000	11.544	28.589	40.133	-33.867	74.000	PEAK
3	*	2440.806	11.886	85.414	97.299	23.299	74.000	PEAK
4		2483.500	12.172	29.520	41.692	-32.308	74.000	PEAK
5		2495.821	12.254	31.444	43.698	-30.302	74.000	PEAK
6		2500.000	12.274	28.484	40.759	-33.241	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2441MHz**

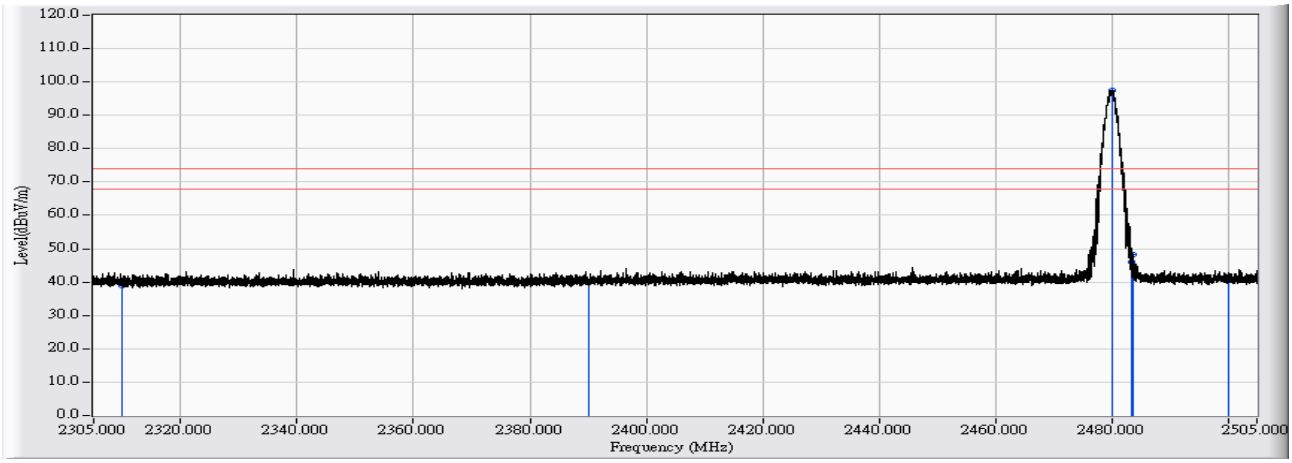


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.791	39.806	-34.194	74.000	PEAK
2		2390.000	11.544	28.901	40.445	-33.555	74.000	PEAK
3	*	2440.826	11.886	82.335	94.220	20.220	74.000	PEAK
4		2483.500	12.172	28.732	40.904	-33.096	74.000	PEAK
5		2495.701	12.254	31.573	43.826	-30.174	74.000	PEAK
6		2500.000	12.274	28.977	41.252	-32.748	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2480MHz**

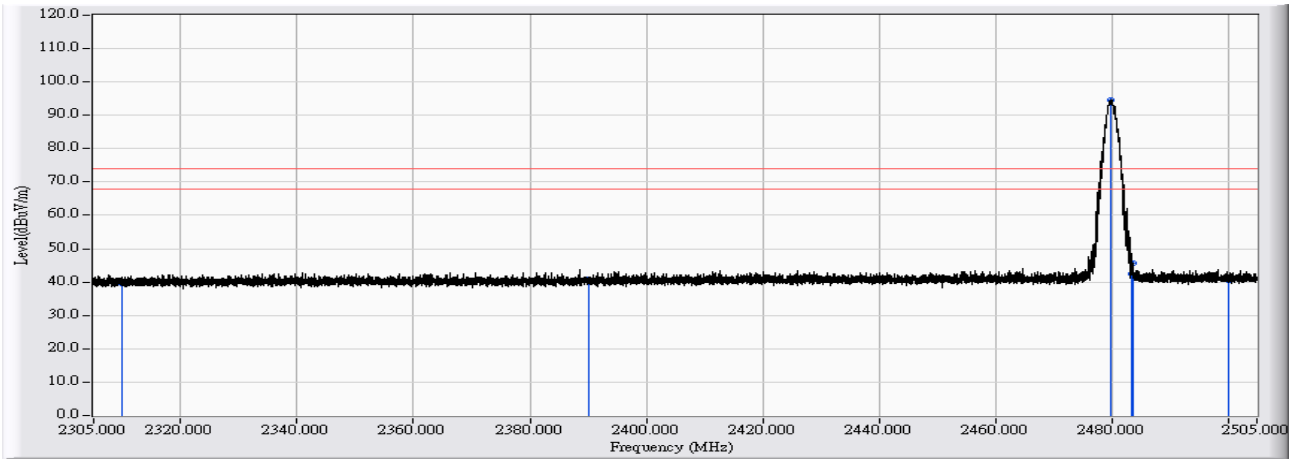


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	27.882	38.897	-35.103	74.000	PEAK
2		2390.000	11.544	28.815	40.359	-33.641	74.000	PEAK
3	*	2480.082	12.149	85.363	97.512	23.512	74.000	PEAK
4		2483.500	12.172	33.837	46.009	-27.991	74.000	PEAK
5		2483.622	12.172	36.087	48.260	-25.740	74.000	PEAK
6		2500.000	12.274	28.395	40.670	-33.330	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 2: Transmit_2DH5_Power by PC_ 802.15.1_2480MHz**

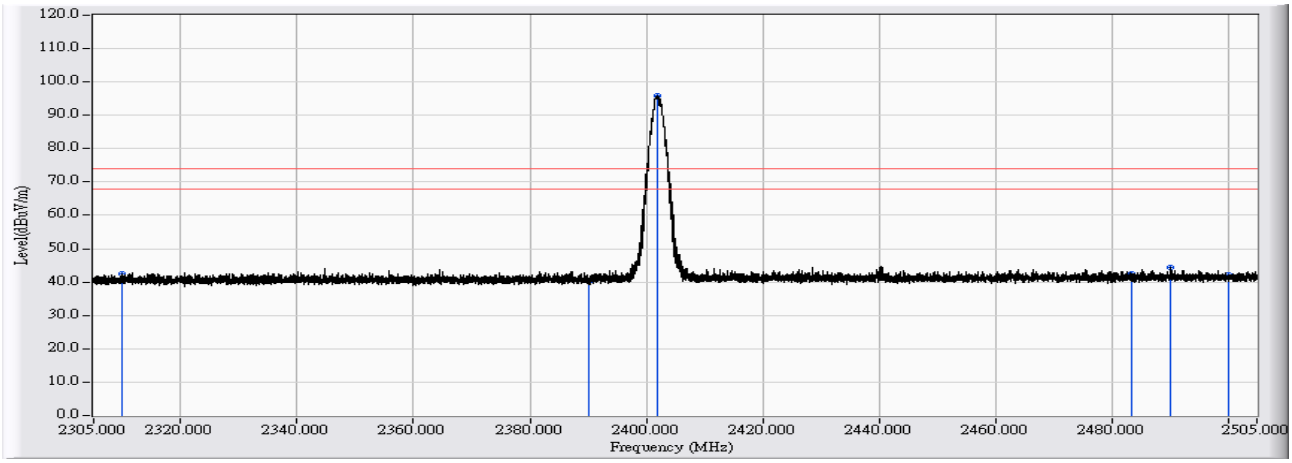


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.579	39.594	-34.406	74.000	PEAK
2		2390.000	11.544	29.314	40.858	-33.142	74.000	PEAK
3	*	2479.842	12.147	82.396	94.544	20.544	74.000	PEAK
4		2483.500	12.172	30.366	42.538	-31.462	74.000	PEAK
5		2483.622	12.172	33.513	45.686	-28.314	74.000	PEAK
6		2500.000	12.274	28.313	40.588	-33.412	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2402MHz**

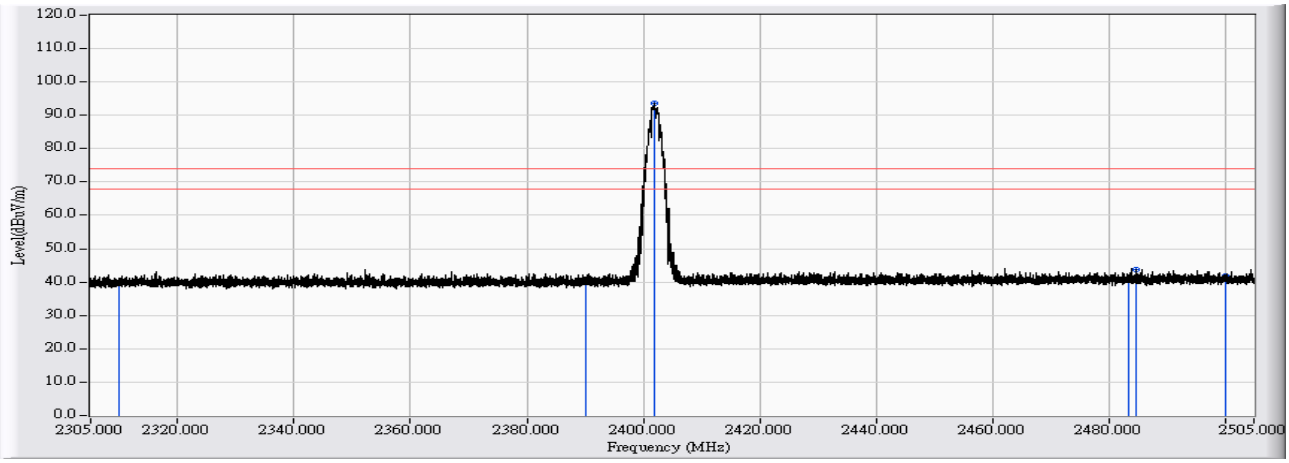


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.316	42.331	-31.669	74.000	PEAK
2		2390.000	11.544	28.666	40.210	-33.790	74.000	PEAK
3	*	2402.010	11.625	84.245	95.869	21.869	74.000	PEAK
4		2483.500	12.172	30.344	42.516	-31.484	74.000	PEAK
5		2490.161	12.216	32.101	44.317	-29.683	74.000	PEAK
6		2500.000	12.274	29.983	42.258	-31.742	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2402MHz**

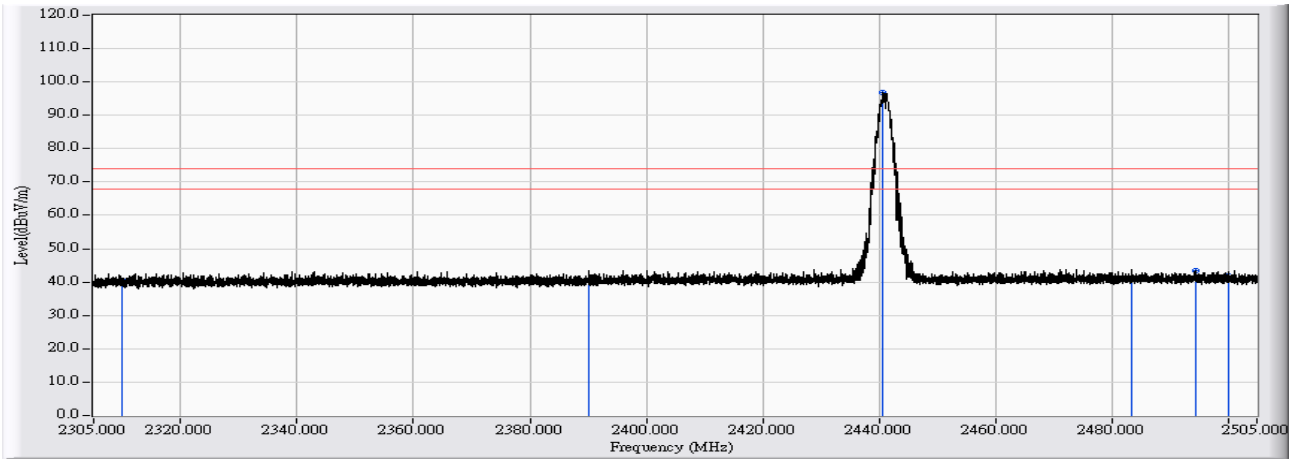


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.660	39.675	-34.325	74.000	PEAK
2		2390.000	11.544	29.026	40.570	-33.430	74.000	PEAK
3	*	2401.870	11.623	81.845	93.468	19.468	74.000	PEAK
4		2483.500	12.172	28.882	41.054	-32.946	74.000	PEAK
5		2484.742	12.181	31.585	43.765	-30.235	74.000	PEAK
6		2500.000	12.274	29.516	41.791	-32.209	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2441MHz**

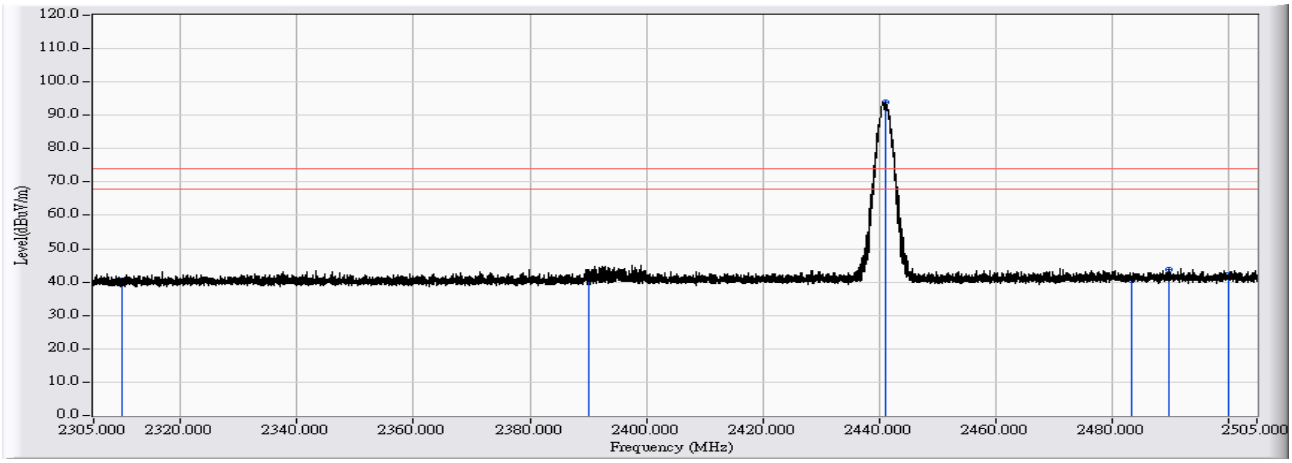


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.561	40.576	-33.424	74.000	PEAK
2		2390.000	11.544	28.901	40.445	-33.555	74.000	PEAK
3	*	2440.706	11.885	84.934	96.819	22.819	74.000	PEAK
4		2483.500	12.172	28.614	40.786	-33.214	74.000	PEAK
5		2494.421	12.244	31.039	43.283	-30.717	74.000	PEAK
6		2500.000	12.274	29.513	41.788	-32.212	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2441MHz**

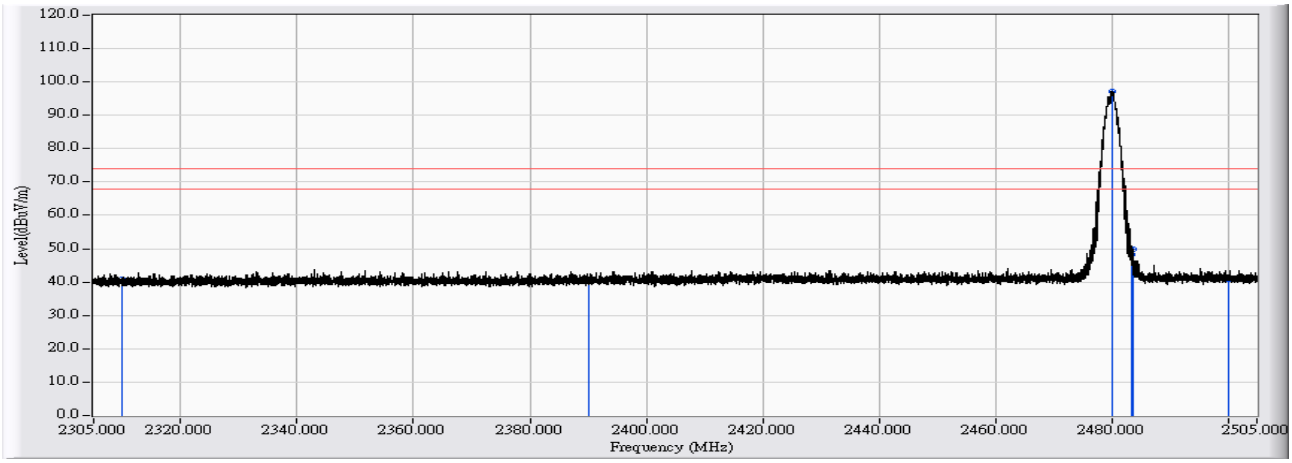


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.508	40.523	-33.477	74.000	PEAK
2		2390.000	11.544	30.621	42.165	-31.835	74.000	PEAK
3	*	2441.086	11.887	82.079	93.966	19.966	74.000	PEAK
4		2483.500	12.172	28.374	40.546	-33.454	74.000	PEAK
5		2489.781	12.214	31.616	43.830	-30.170	74.000	PEAK
6		2500.000	12.274	29.712	41.987	-32.013	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2480MHz**

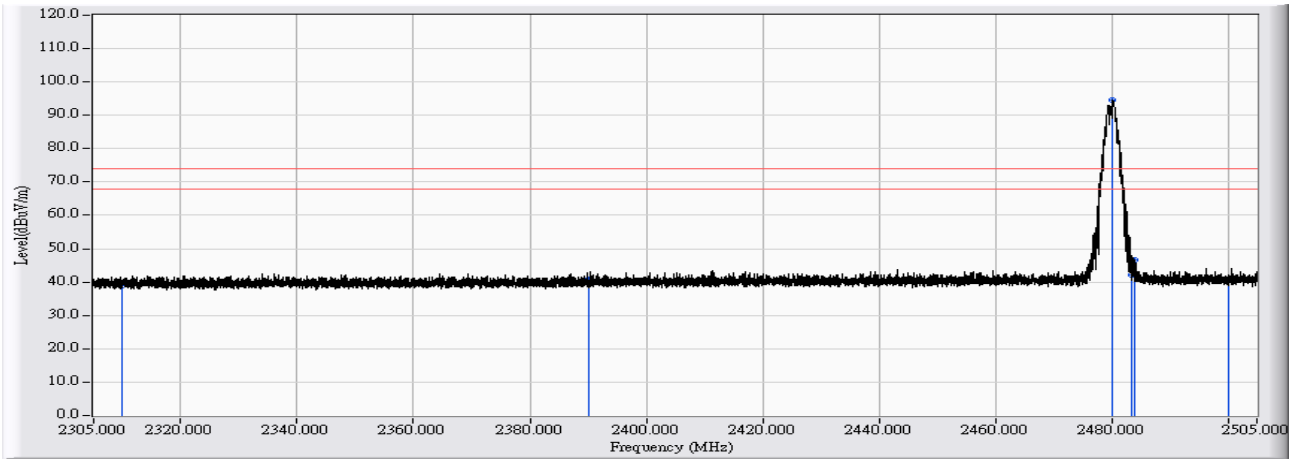


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.936	40.951	-33.049	74.000	PEAK
2		2390.000	11.544	28.831	40.375	-33.625	74.000	PEAK
3	*	2480.082	12.149	84.999	97.148	23.148	74.000	PEAK
4		2483.500	12.172	36.002	48.174	-25.826	74.000	PEAK
5		2483.602	12.172	37.683	49.856	-24.144	74.000	PEAK
6		2500.000	12.274	28.506	40.781	-33.219	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : DC 5V**
EUT : Beta+	**Note : Mode 3: Transmit_3DH5_Power by PC_ 802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	27.984	38.999	-35.001	74.000	PEAK
2		2390.000	11.544	29.221	40.765	-33.235	74.000	PEAK
3	*	2480.142	12.150	82.543	94.693	20.693	74.000	PEAK
4		2483.500	12.172	29.896	42.068	-31.932	74.000	PEAK
5		2484.022	12.175	34.528	46.704	-27.296	74.000	PEAK
6		2500.000	12.274	28.728	41.003	-32.997	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

7. Number of hopping frequency

7.1. Test Equipment

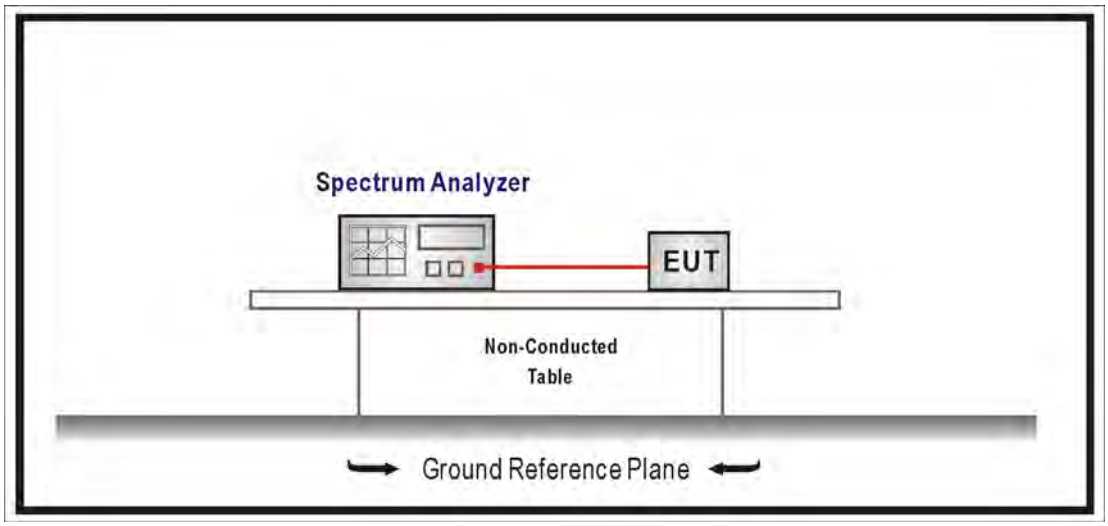
The following test equipment is used during the test:

Number of hopping frequency / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/07/26	2018/07/25

Note: All equipment that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

For frequency hopping systems operating in the 2400-2483.5 MHz bands, which use fewer than 75 hopping frequencies, may employ intelligent hopping techniques to avoid interference to other transmissions. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 non-overlapping channels are used.

For frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies.

7.4. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements,

Span = the frequency band of operation ,RBW ≥ 1% of the span, VBW ≥ RBW,

Sweep = auto, Detector function = peak, Trace = max hold.

7.5. Test Specification

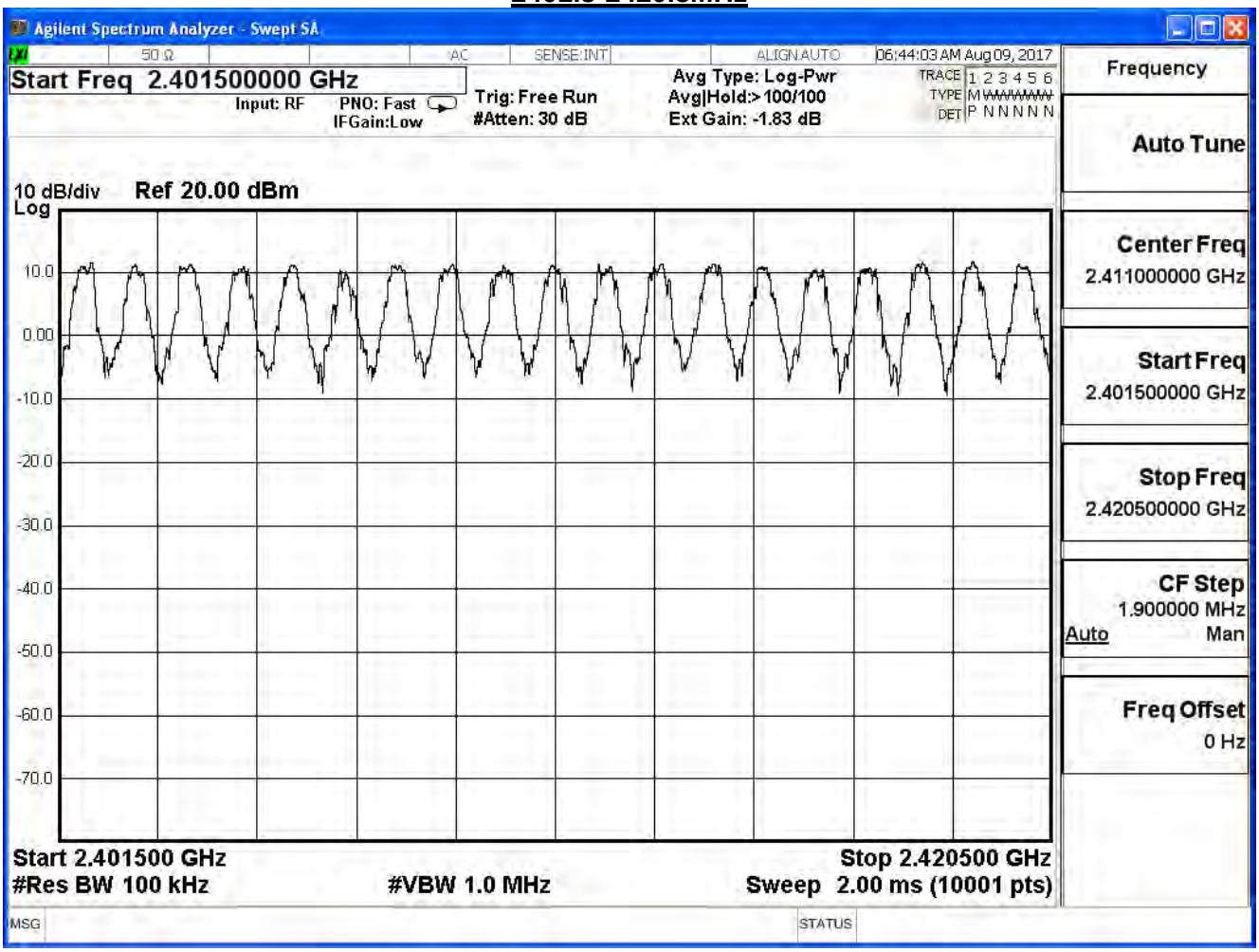
According to FCC Part 15 Subpart C Paragraph 15.247: 2015

7.6. Test Result

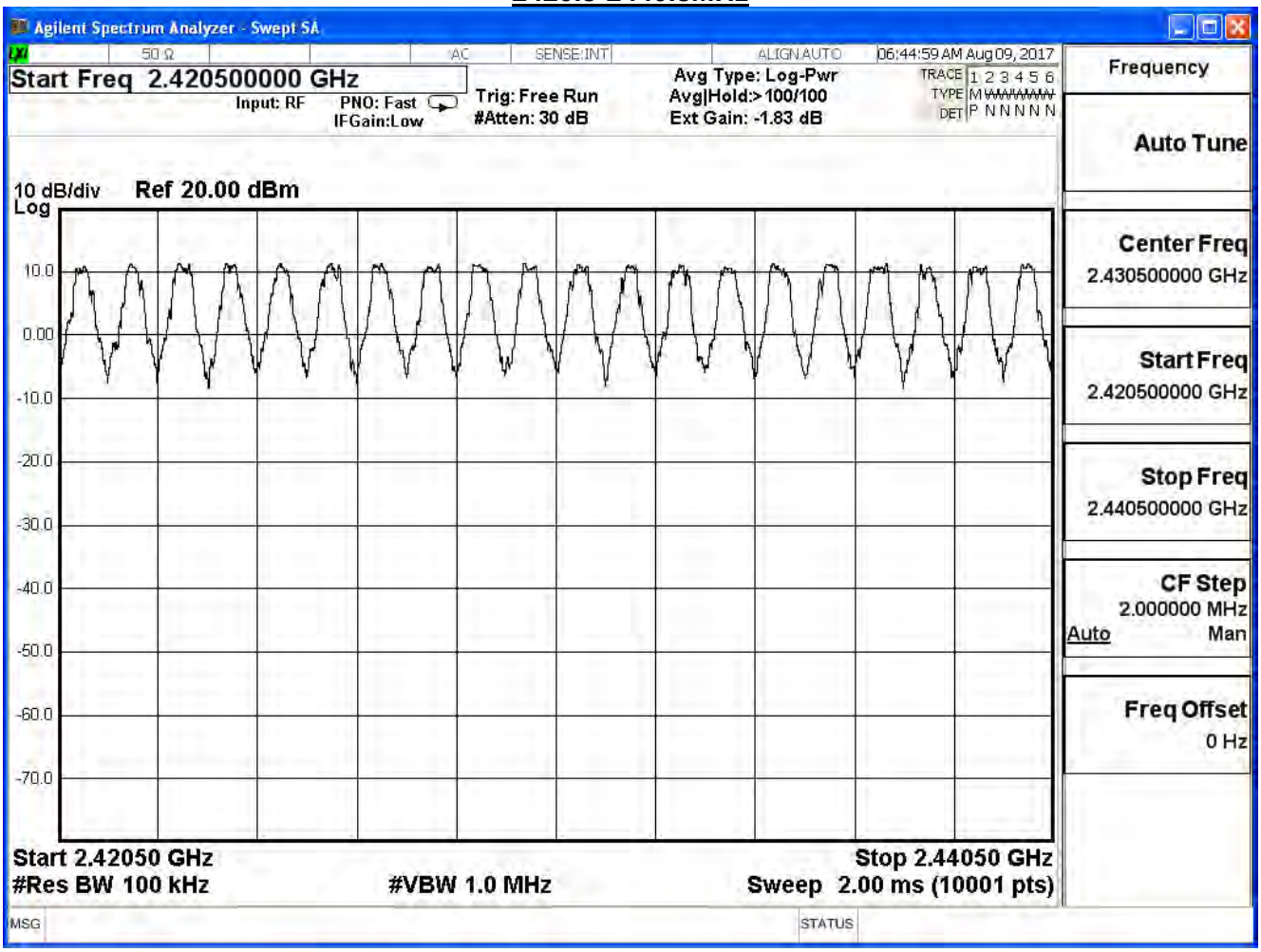
Product	Beta+		
Test Item	Number of hopping frequency		
Test Mode	Mode 1: Transmit_DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

Frequency Range (MHz)	Measure Level (Channels)	Limit (Channels)	Result
2402 - 2480	79	≧ 75	Pass

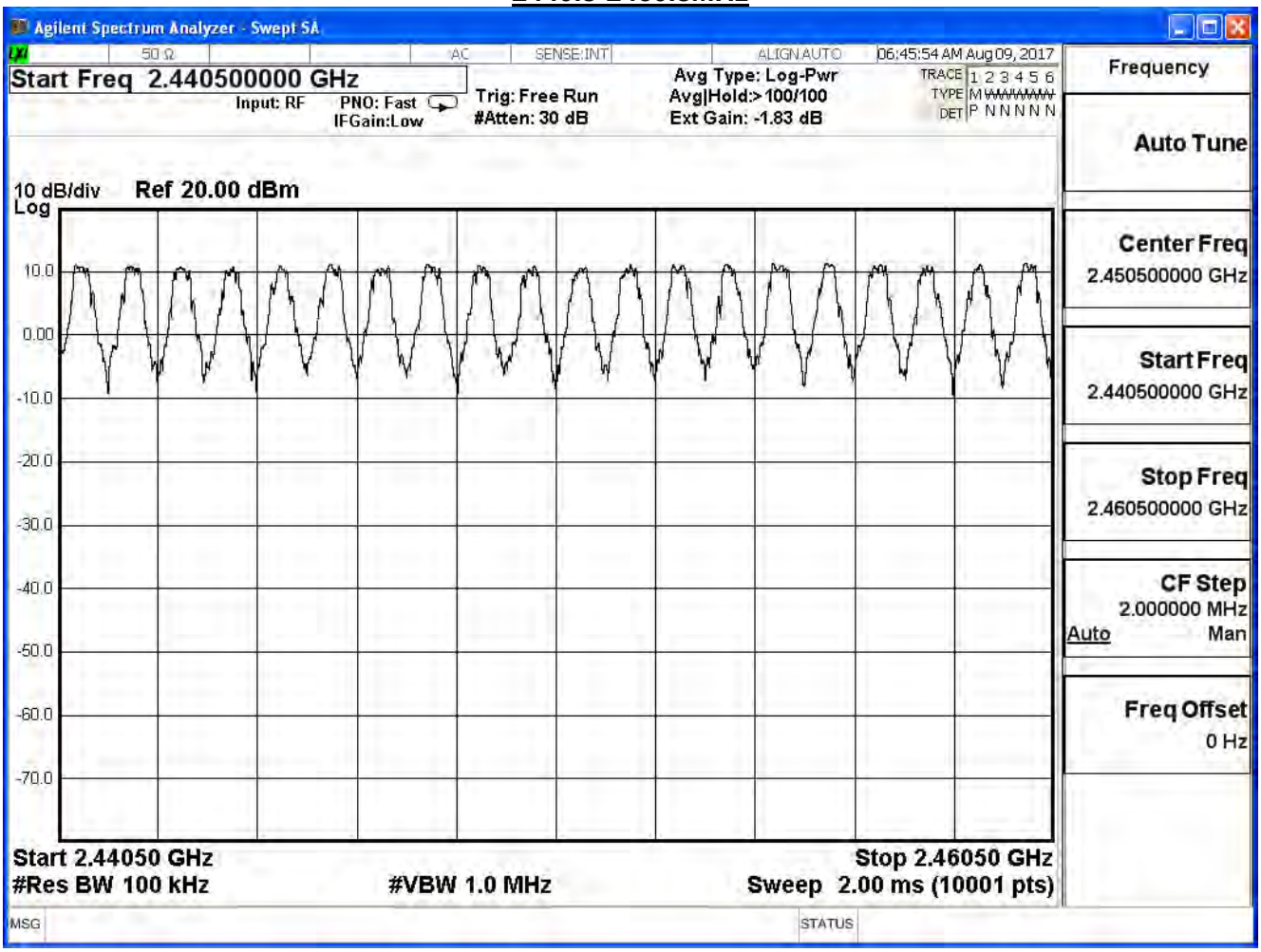
2401.5-2420.5MHz



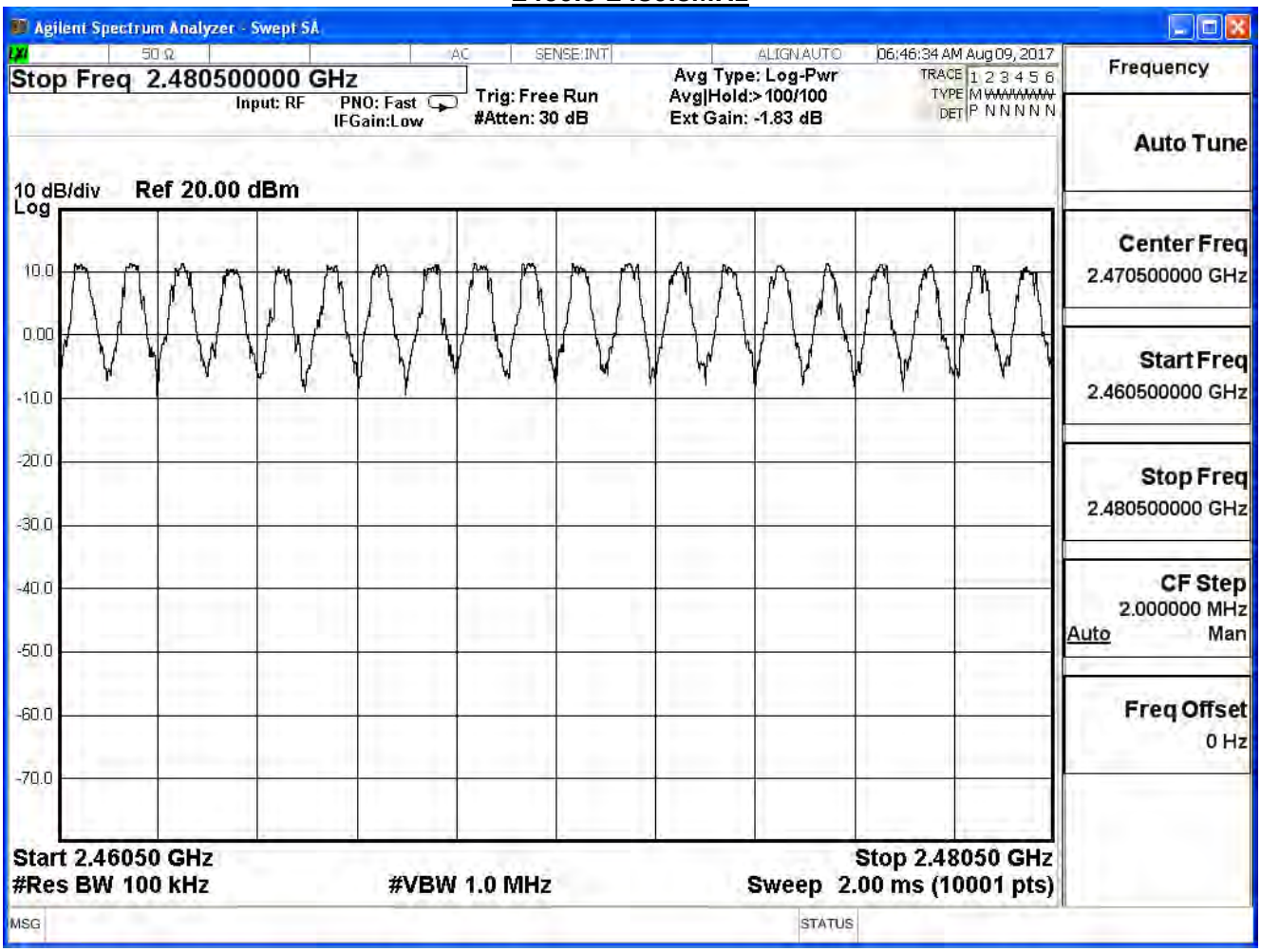
2420.5-2440.5MHz



2440.5-2460.5MHz



2460.5-2480.5MHz



8. Carrier Frequency Separation

8.1. Test Equipment

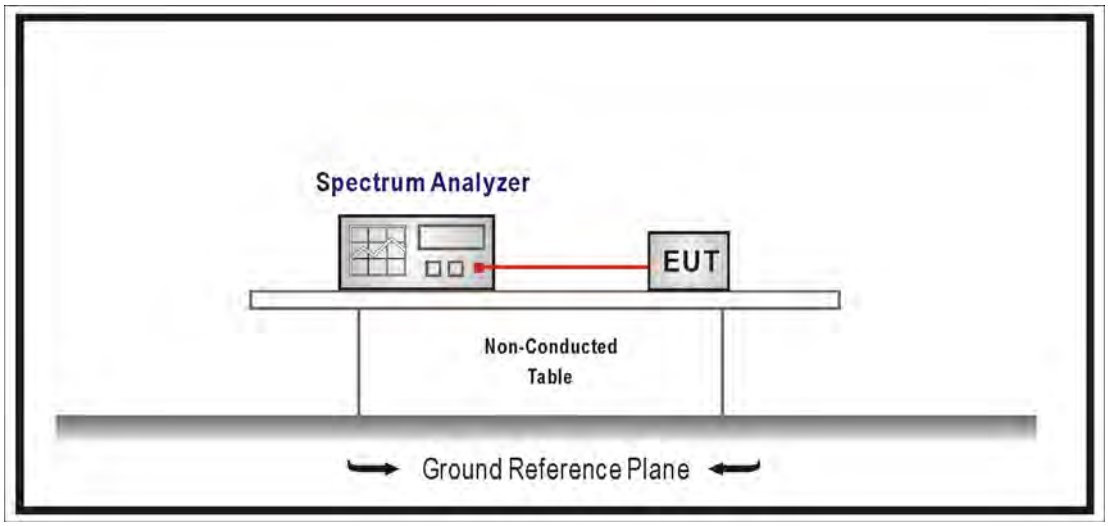
The following test equipment is used during the test:

Carrier Frequency Separation / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12

Note: All equipment that need to calibrate are with calibration period of 1 year.

8.2. Test Setup



8.3. Limits

For frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

8.4. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Span = wide enough to capture the peaks of two adjacent channels

Resolution Bandwidth (RBW) ≥ 1% of the span, VBW ≥ RBW

Sweep = auto, Detector function = peak, Trace = max hold

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

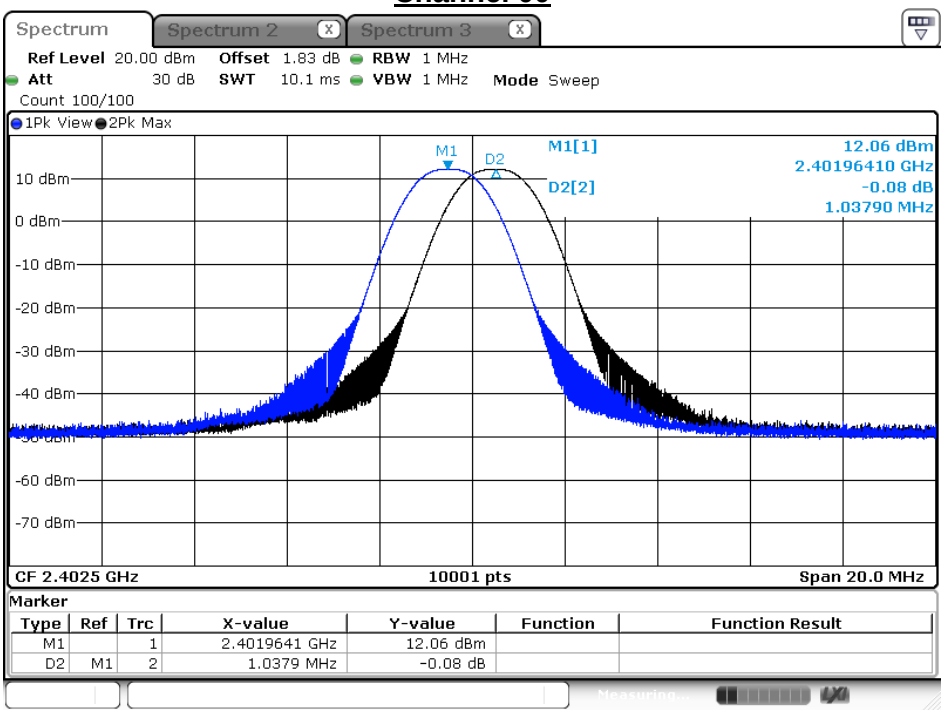
8.6. Test Result

Product	Beta+		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit_DH5_Power by PC		
Date of Test	2017/08/04	Test Site	SR10-H

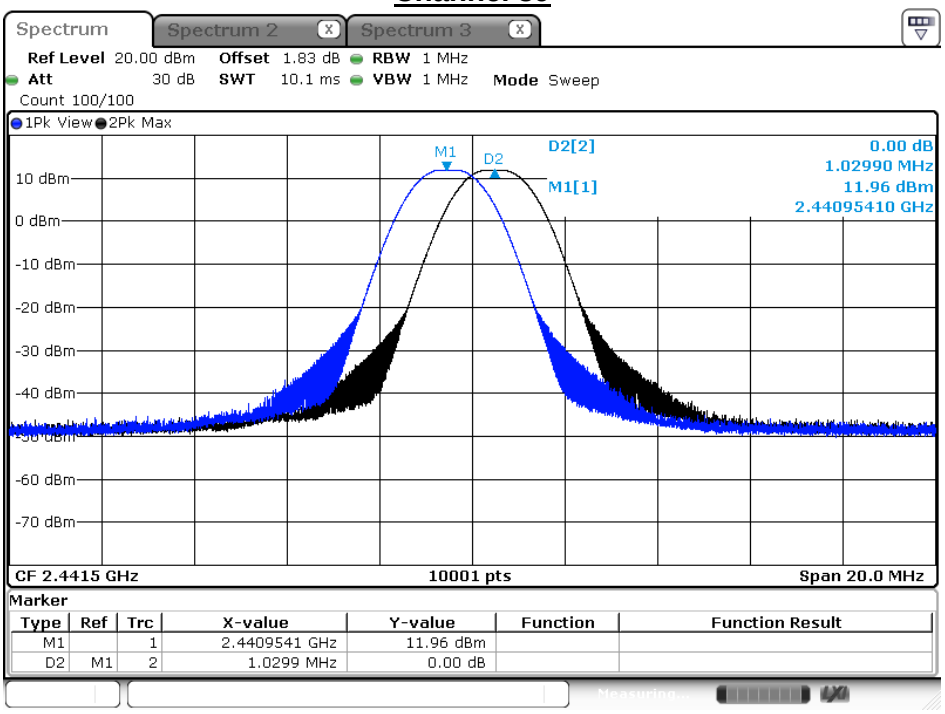
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.038	0.754	Pass
39	2441	1.030	0.747	Pass
78	2480	1.100	0.753	Pass

Channel 00

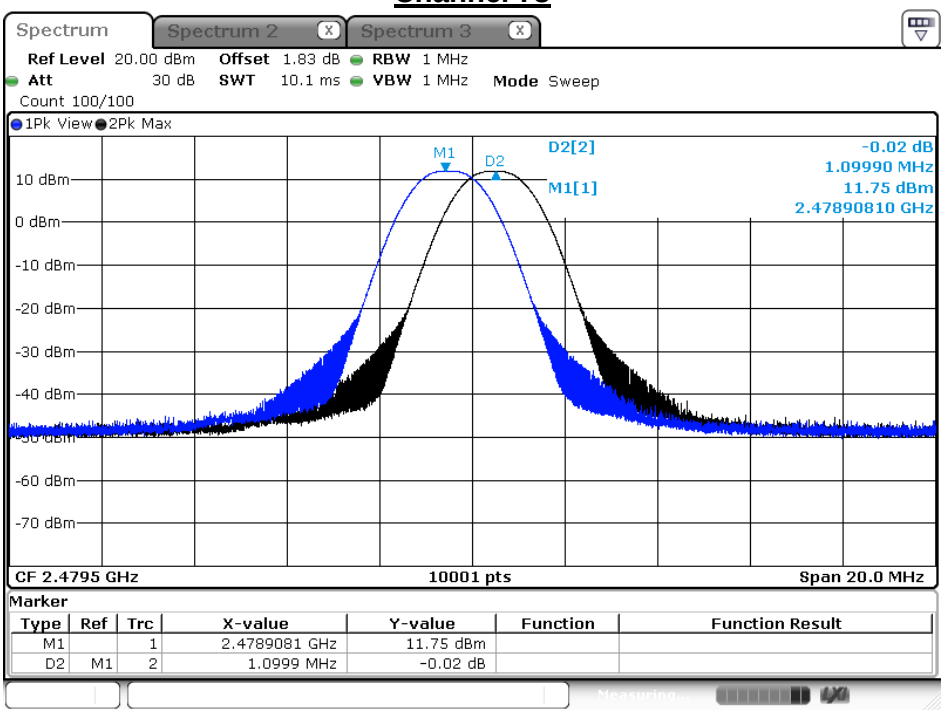


Channel 39



Date: 4.AUG.2017 08:25:22

Channel 78



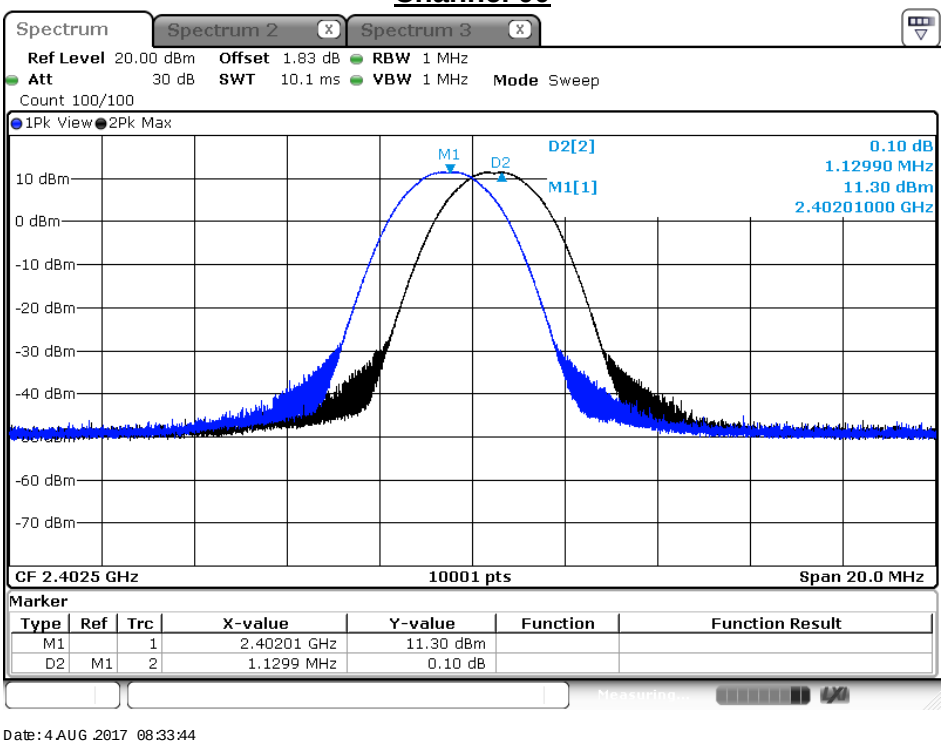
Date: 4.AUG.2017 08:40:32

Product	Beta+		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 2: Transmit_2DH5_Power by PC		
Date of Test	2017/08/04	Test Site	SR10-H

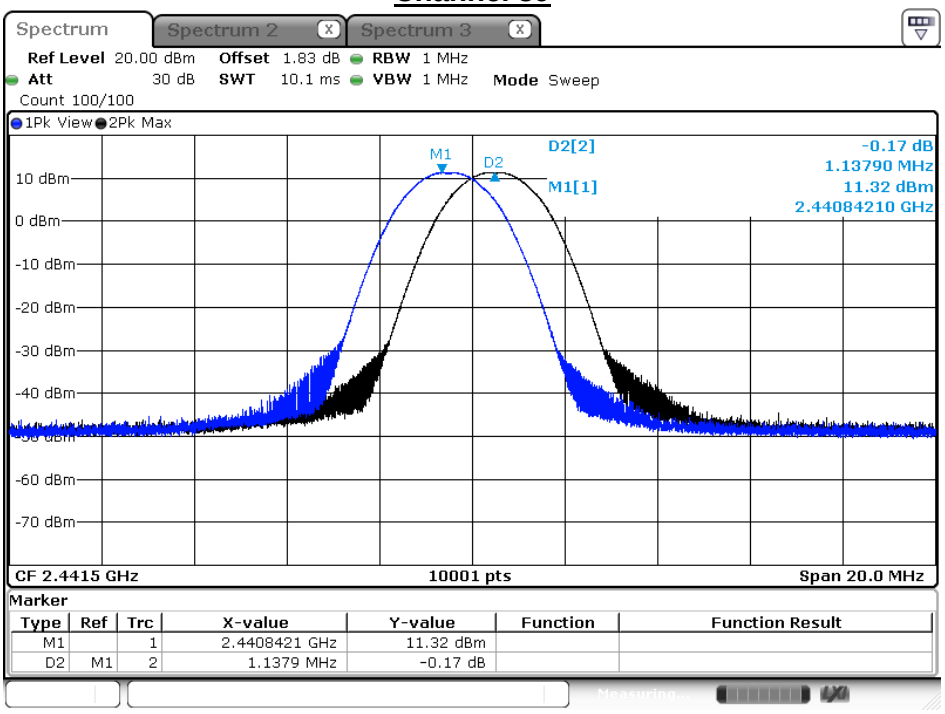
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.130	0.911	Pass
39	2441	1.138	0.917	Pass
78	2480	1.168	0.913	Pass

Channel 00

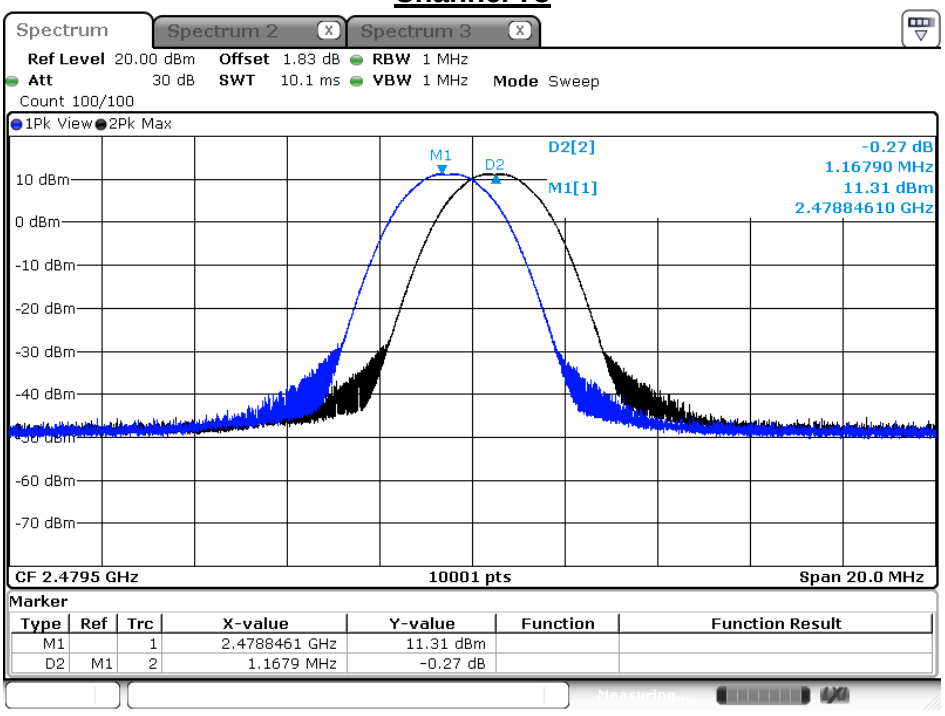


Channel 39



Date: 4.AUG.2017 08:23:43

Channel 78



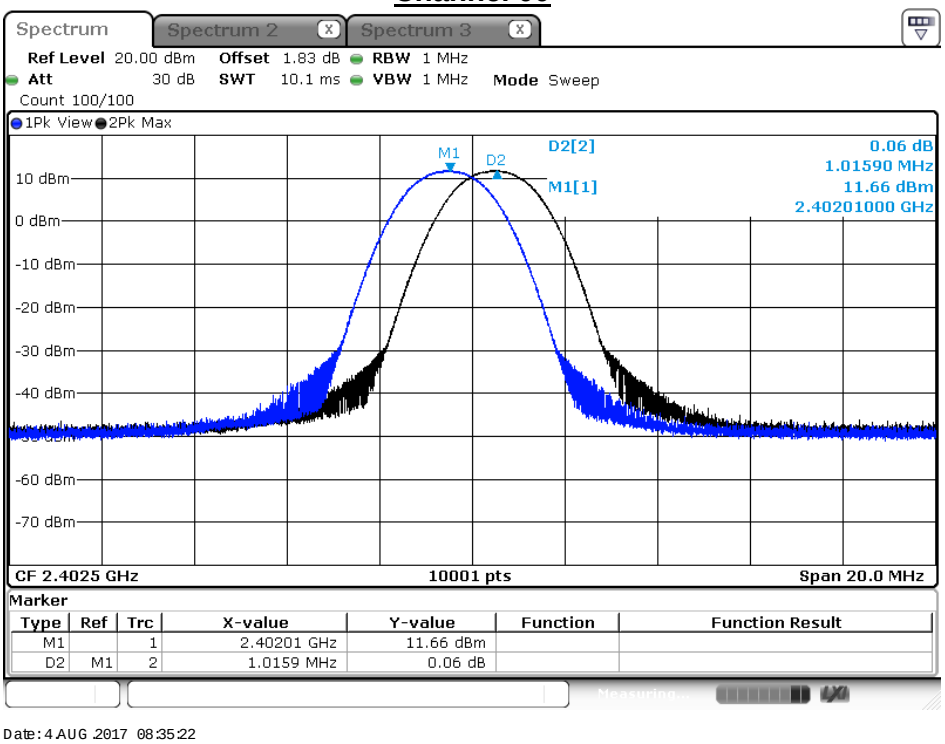
Date: 4.AUG.2017 08:38:36

Product	Beta+		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 3: Transmit_3DH5_Power by PC		
Date of Test	2017/08/04	Test Site	SR10-H

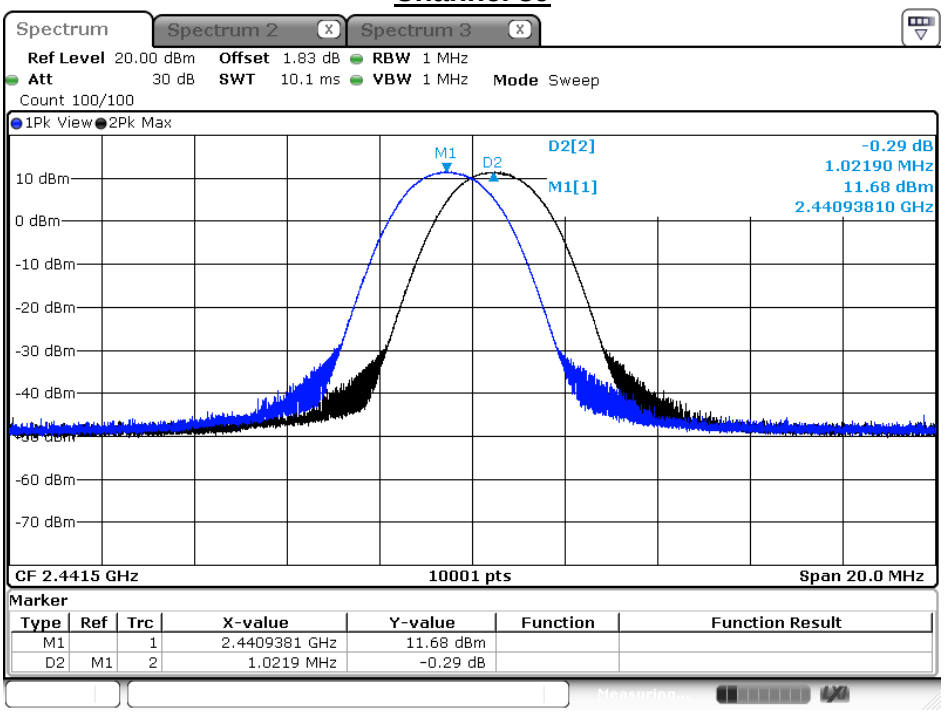
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.016	0.907	Pass
39	2441	1.022	0.916	Pass
78	2480	1.072	0.918	Pass

Channel 00

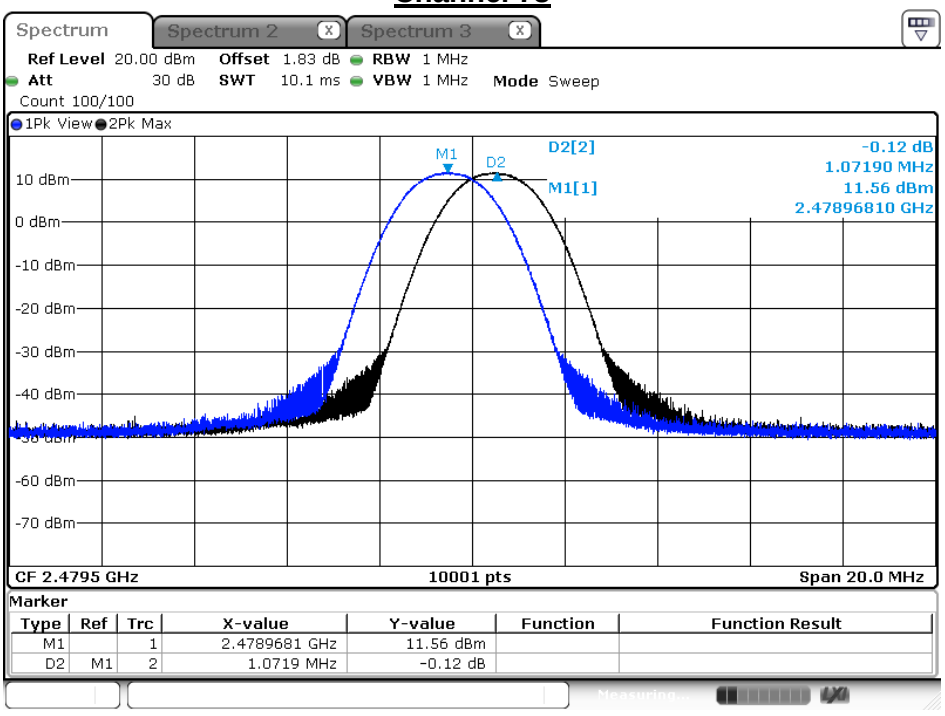


Channel 39



Date: 4.AUG.2017 08:22:00

Channel 78



Date: 4.AUG.2017 08:37:11

9. Occupied Bandwidth

9.1. Test Equipment

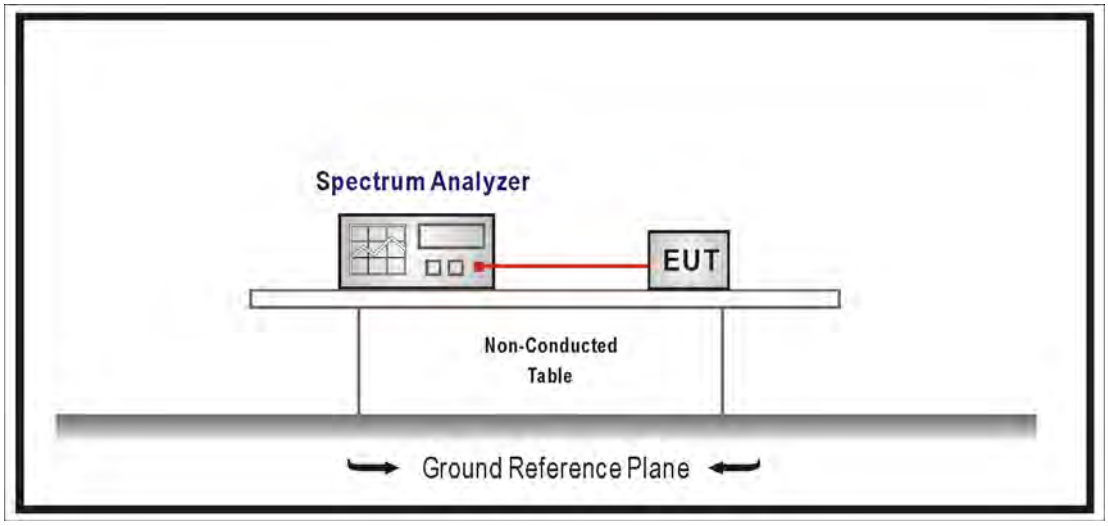
The following test equipment is used during the test:

Occupied Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/07/26	2018/07/25

Note: All equipment that need to calibrate are with calibration period of 1 year.

9.2. Test Setup



9.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
For frequency hopping systems operating in the 5725-5850 MHz bands. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.
For frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

9.4. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements
Use the following spectrum analyzer settings:
Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW , Sweep = auto, Detector function = peak, Trace = max hold , The EUT should be transmitting at its maximum data rate.

9.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

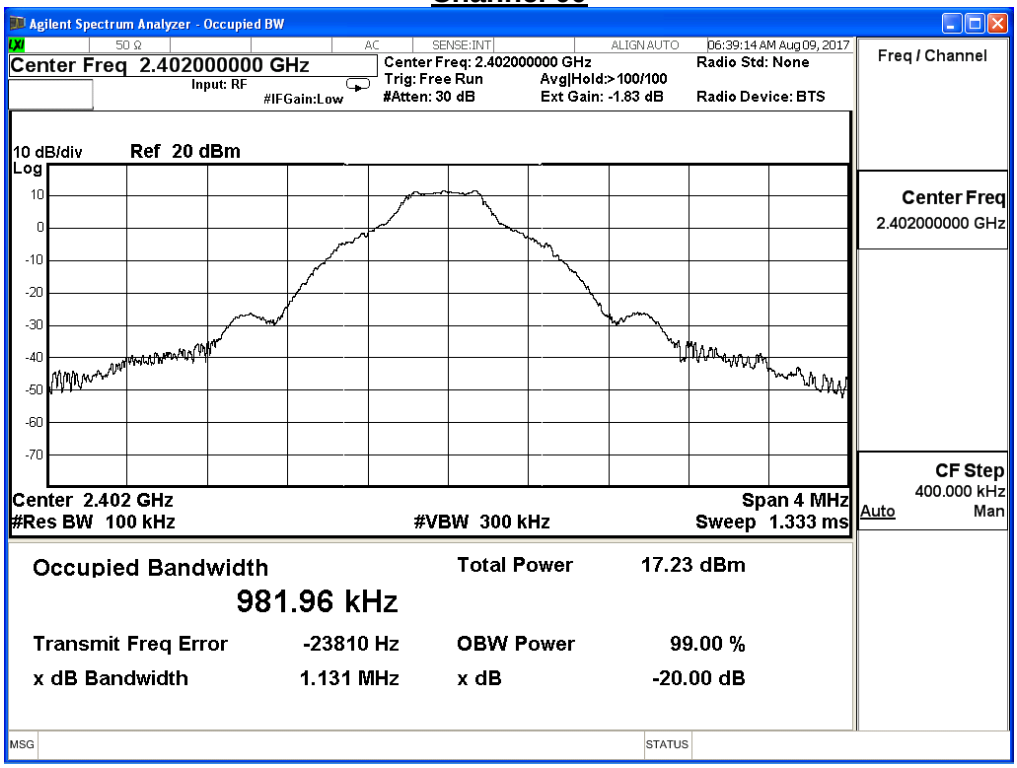
9.6. Test Result

Product	Beta+		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit_DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

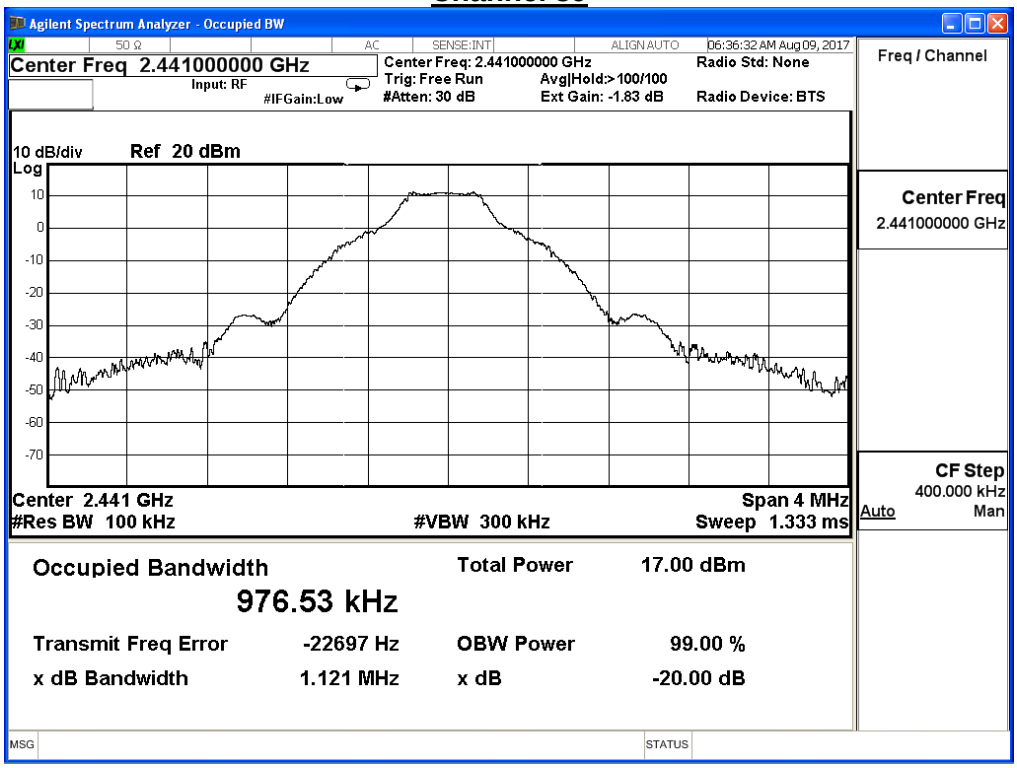
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.131	--	Pass
39	2441	1.121	--	Pass
78	2480	1.129	--	Pass

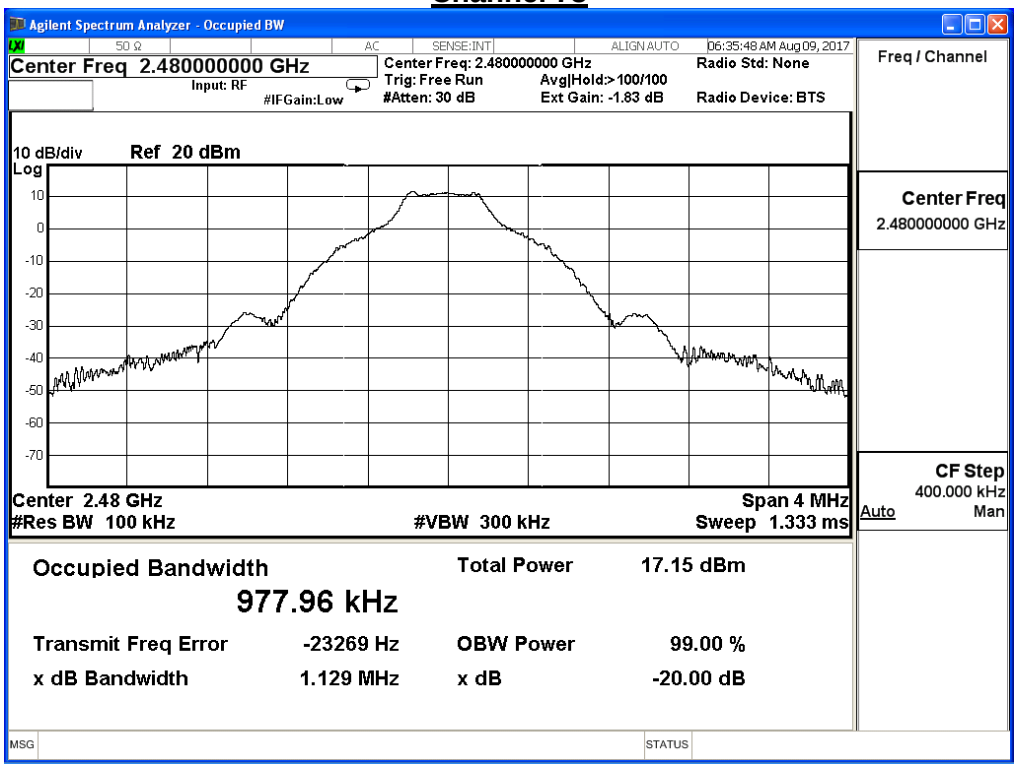
Channel 00



Channel 39



Channel 78

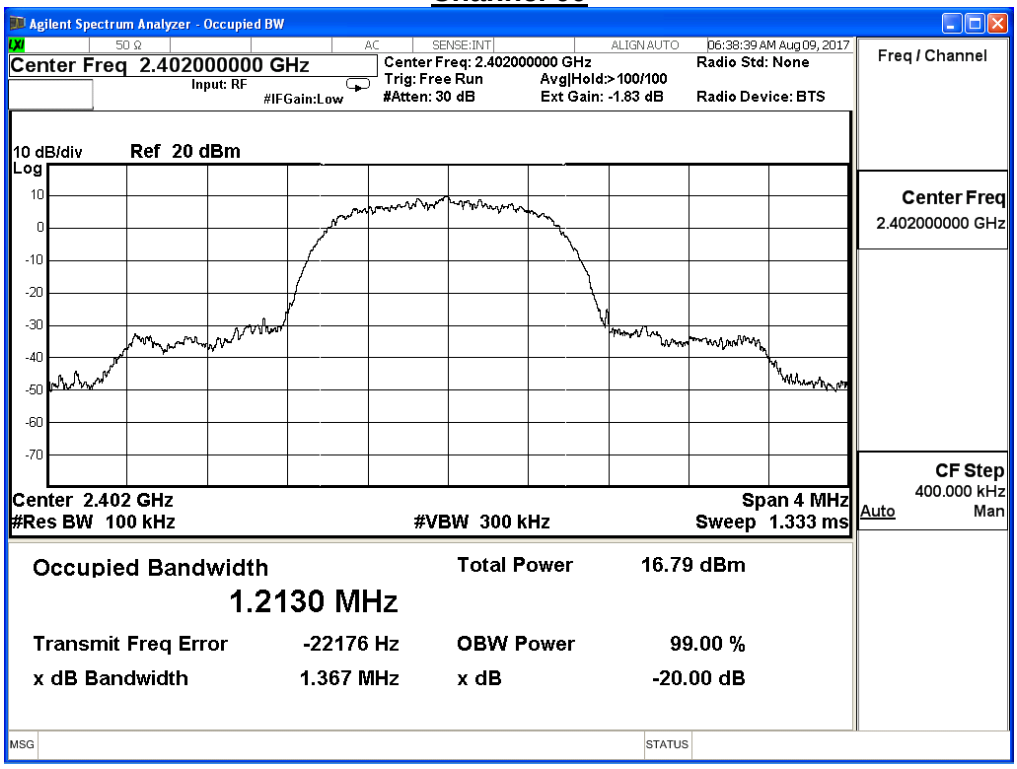


Product	Beta+		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: Transmit_2DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

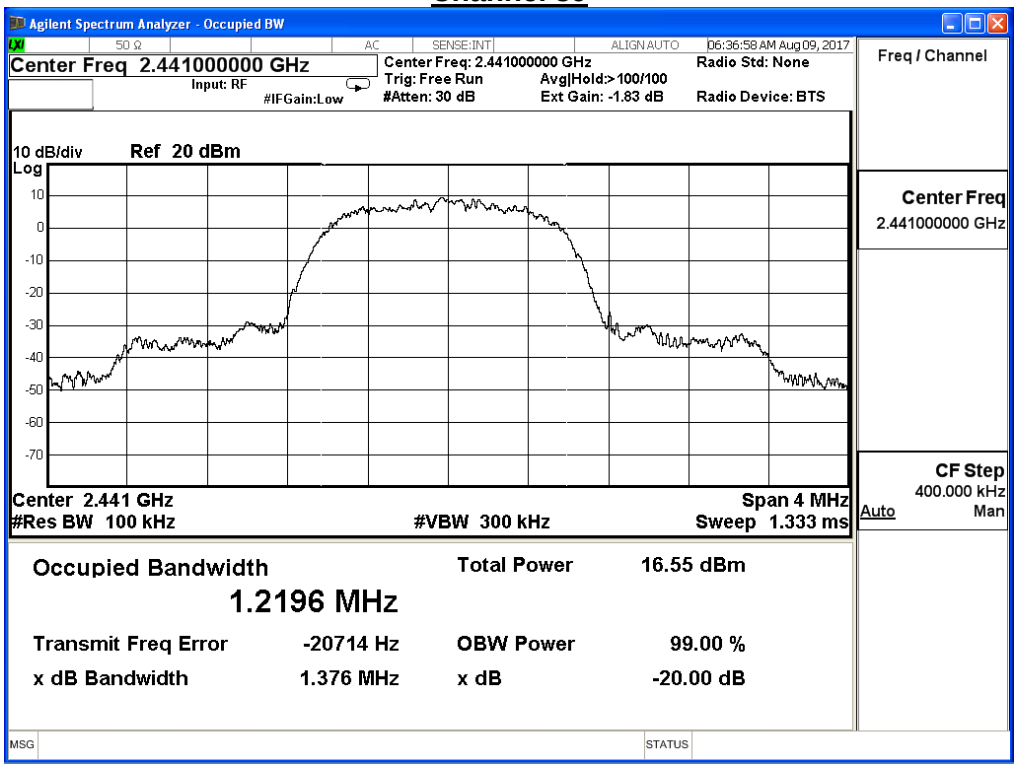
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.367	--	Pass
39	2441	1.376	--	Pass
78	2480	1.370	--	Pass

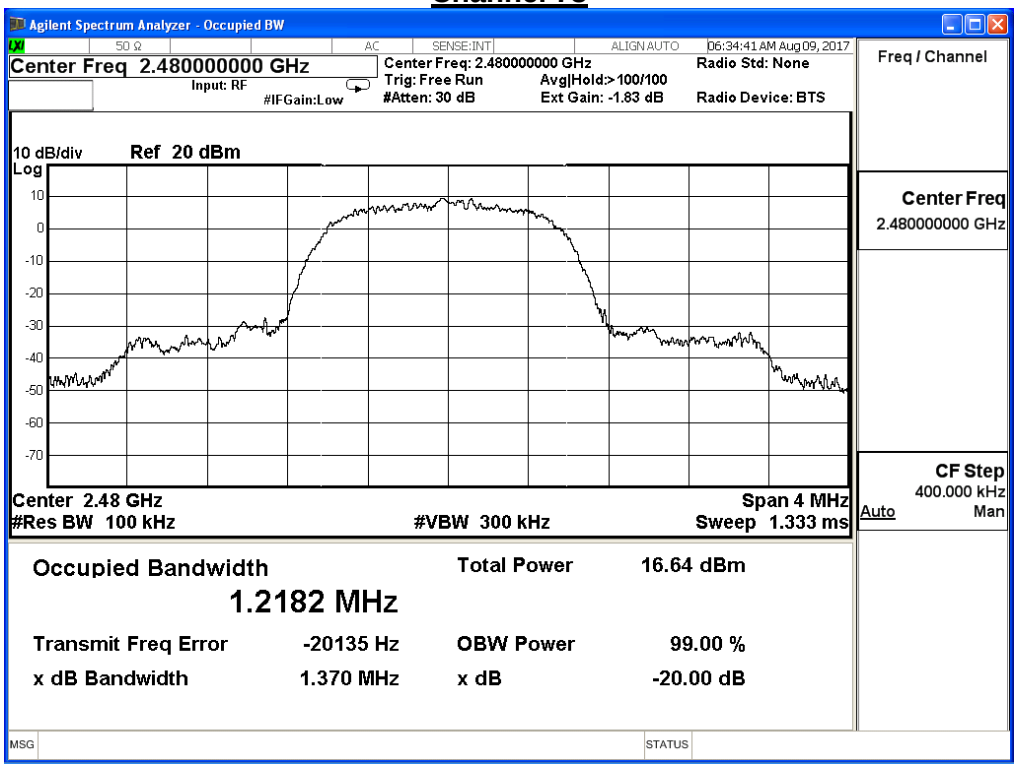
Channel 00



Channel 39



Channel 78

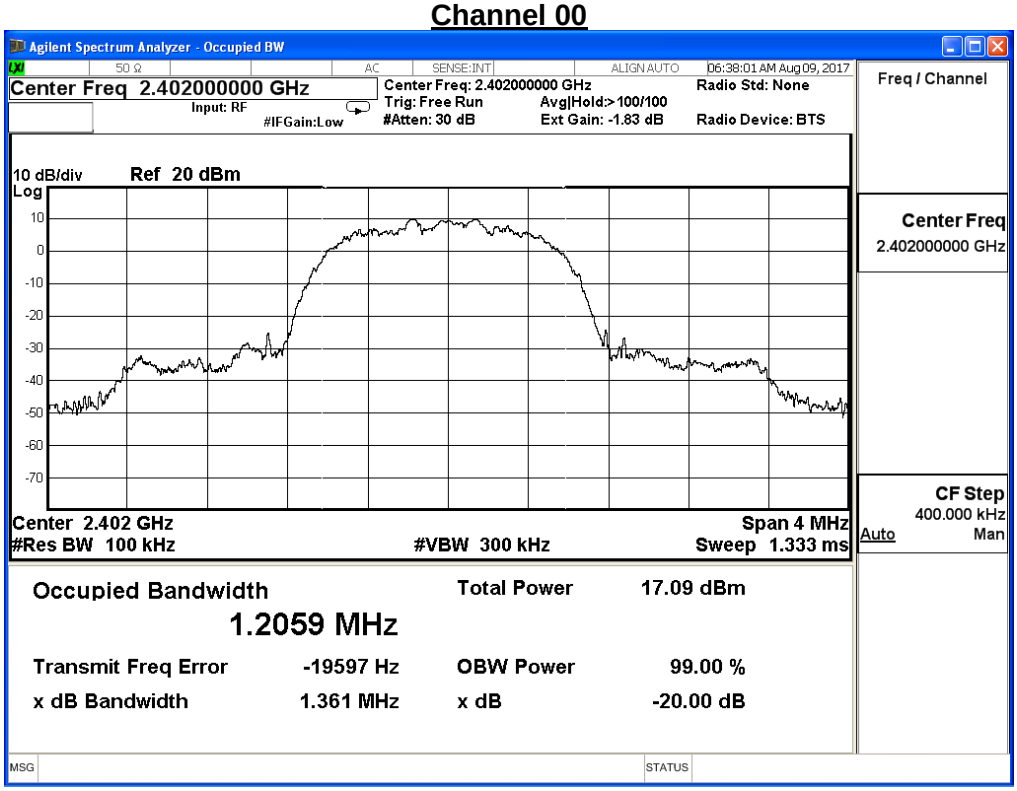


Product	Beta+		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: Transmit_3DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

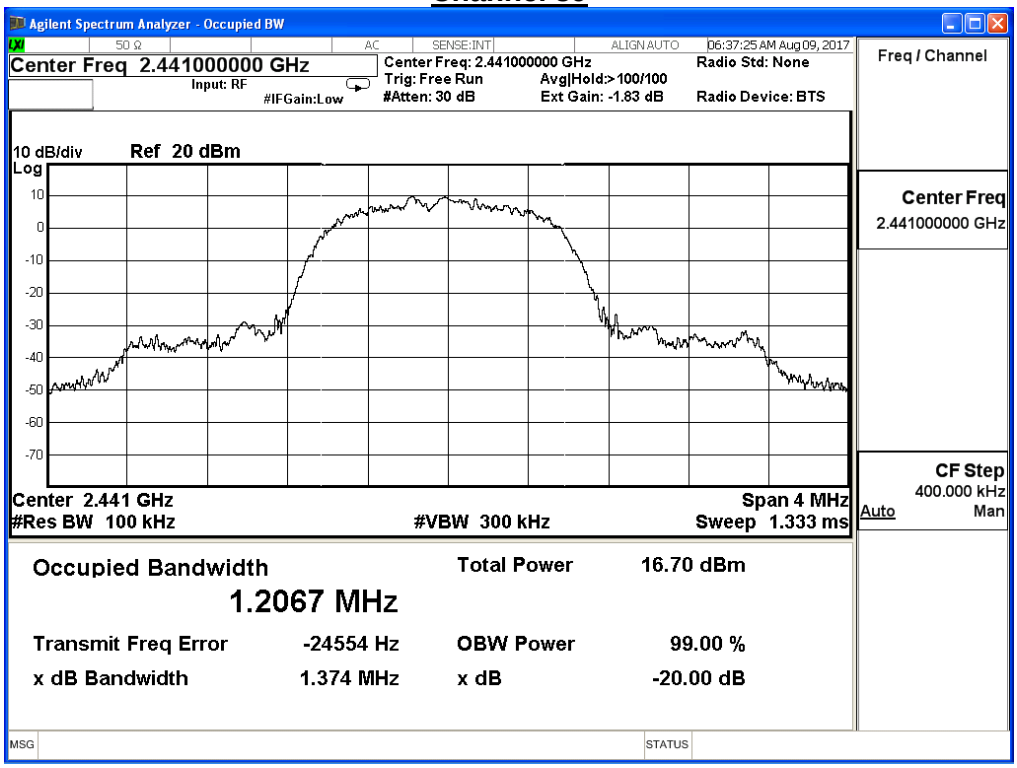
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.361	--	Pass
39	2441	1.374	--	Pass
78	2480	1.377	--	Pass

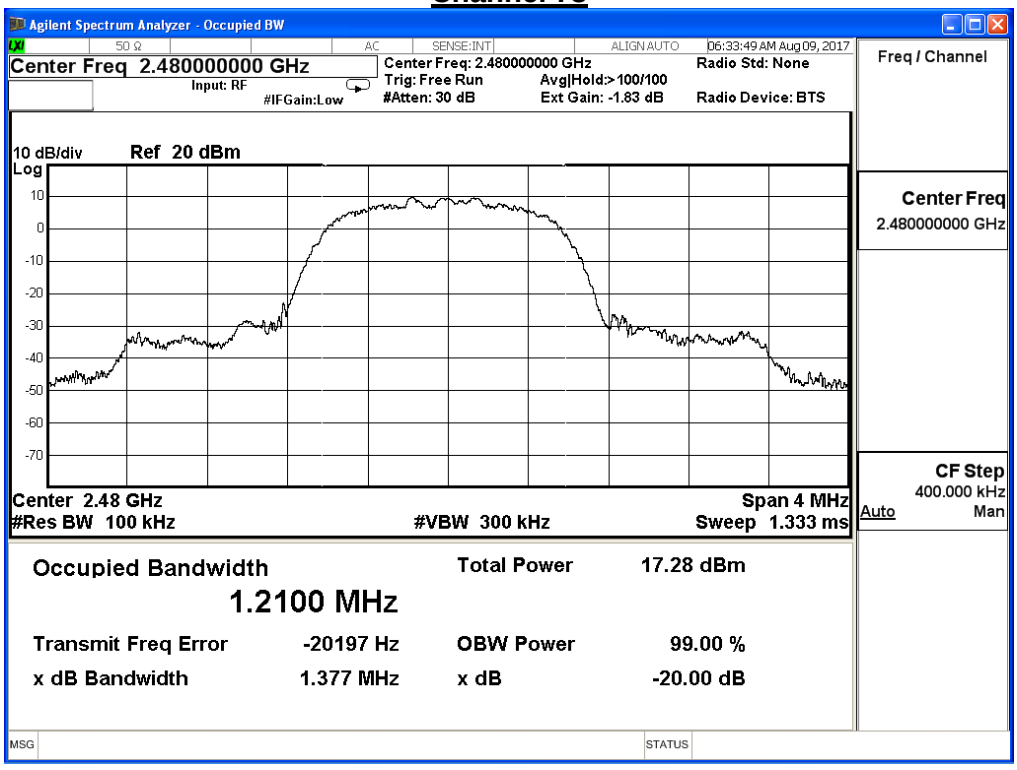
Channel 00



Channel 39



Channel 78



10. Dwell Time

10.1. Test Equipment

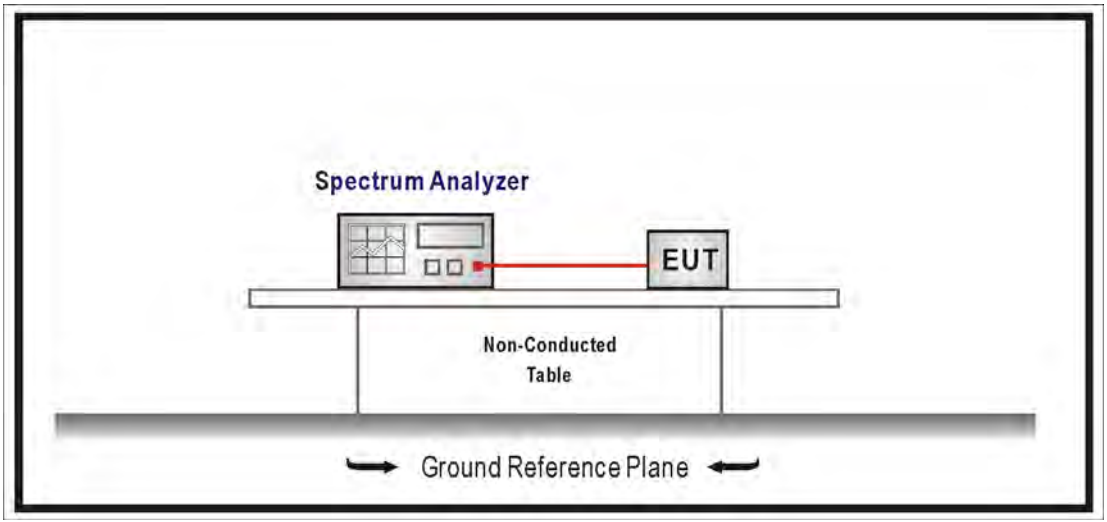
The following test equipment is used during the test:

Dwell Time / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12

Note: All equipment that need to calibrate are with calibration period of 1 year.

10.2. Test Setup



10.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.
For frequency hopping systems operating in the 2400-2483.5 MHz bands. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
For frequency hopping systems operating in the 5725-5850 MHz bands. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

10.4. Test Procedures

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements
Span = zero span, centered on a hopping channel, RBW = 1 MHz, VBW ≥ RBW,
Sweep = as necessary to capture the entire dwell time per hopping channel,
Detector function = peak, Trace = max hold.

10.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

10.6. Test Result

Product	Beta+		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit_DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

GFSK

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.878 ms = 0.002878 sec

Dwell Time : 0.002878 *(266.67/79)* 31.60= 0.3070 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.884 ms = 0.002884 sec

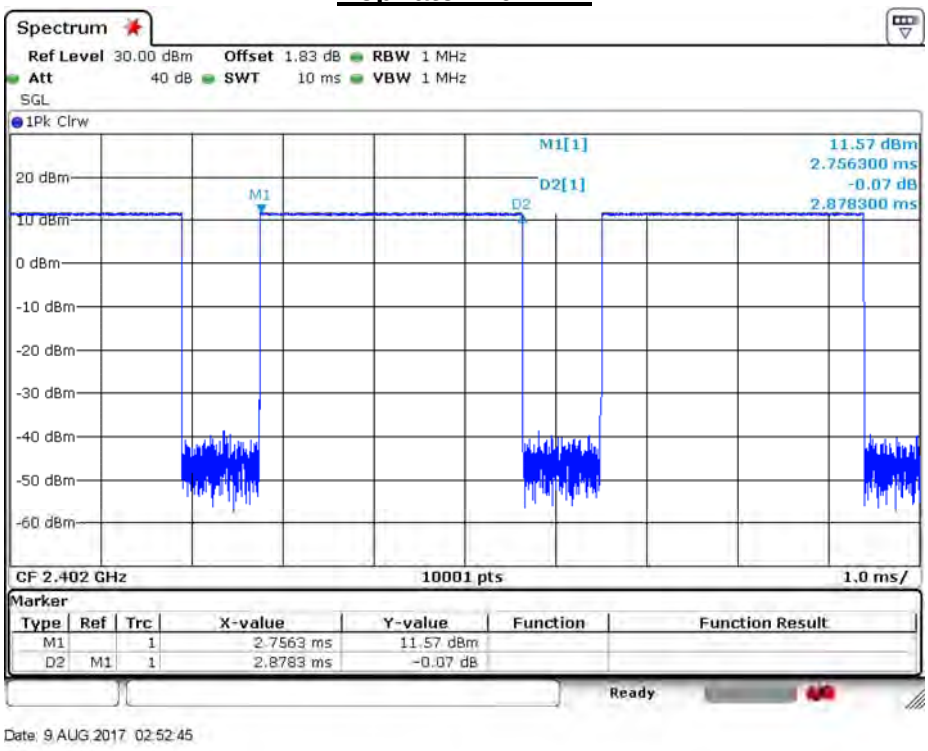
Dwell Time : 0.002884 *(266.67/79)* 31.60= 0.3076 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.882 ms = 0.002882 sec

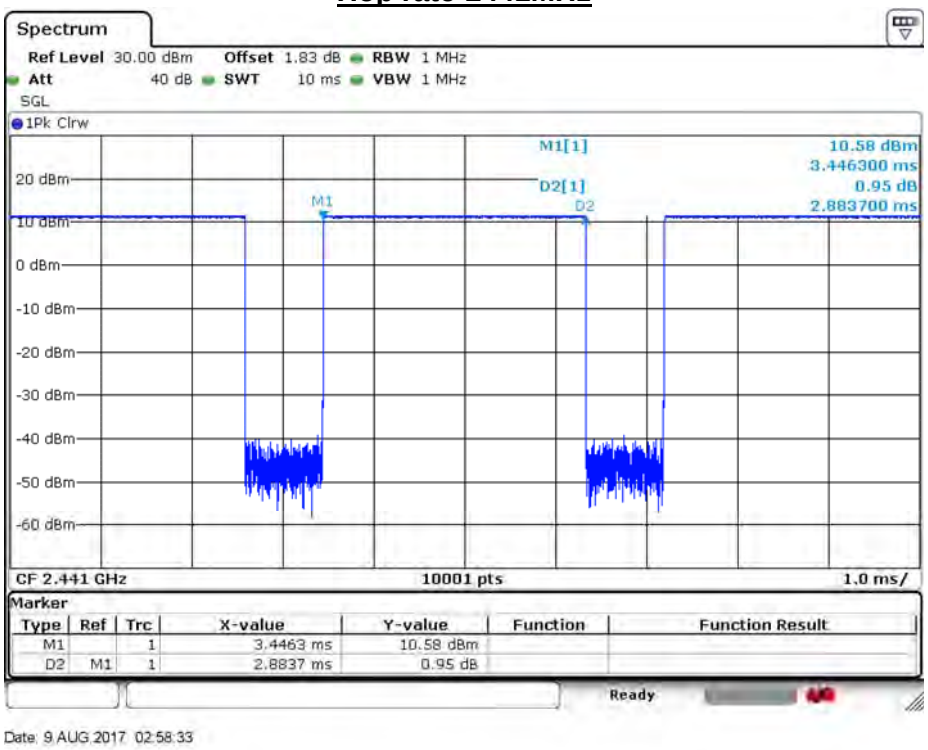
Dwell Time : 0.002882 *(266.67/79)* 31.60= 0.3074 sec。

Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

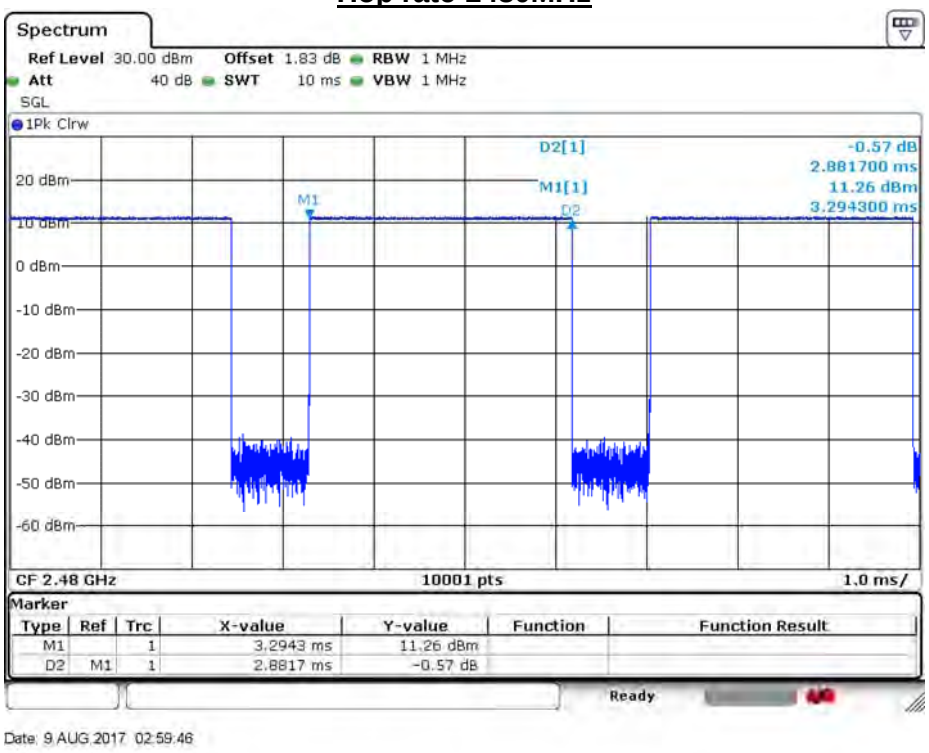
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



Note: Dwell time＝time slot length * hop rate / number of hopping channels * period

Product	Beta+		
Test Item	Dwell Time		
Test Mode	Mode 2: Transmit_2DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

π/4-DQPSK

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.878 ms = 0.002878 sec

Dwell Time : 0.002878*(266.67/79)* 31.60= 0.3070 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.886 ms = 0.002886 sec

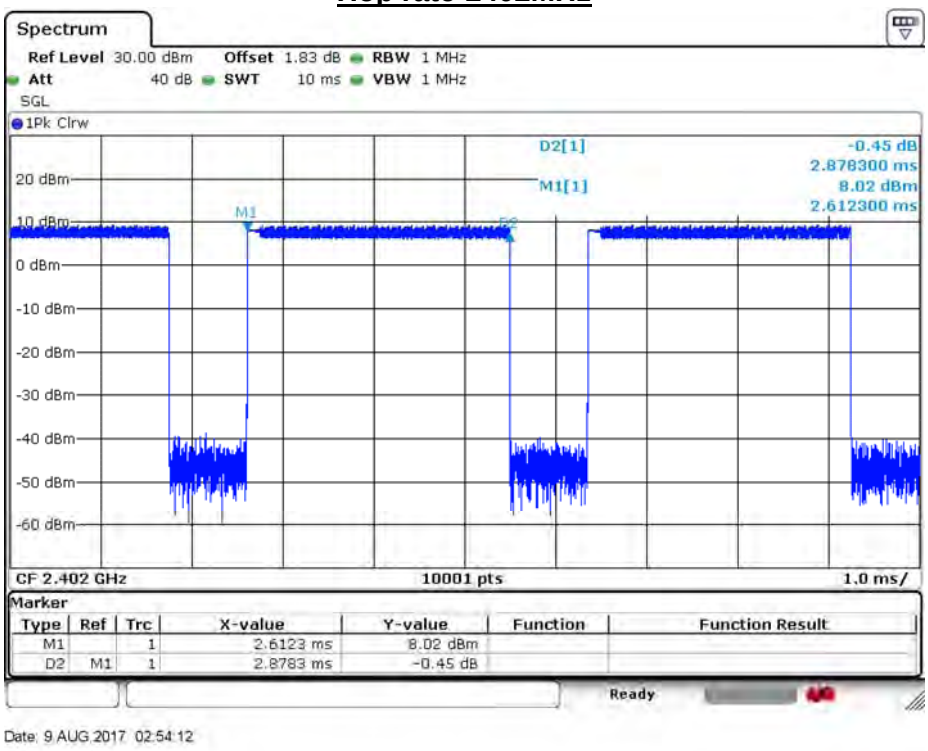
Dwell Time : 0.002886*(266.67/79)* 31.60= 0.3078 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.881 ms = 0.002881 sec

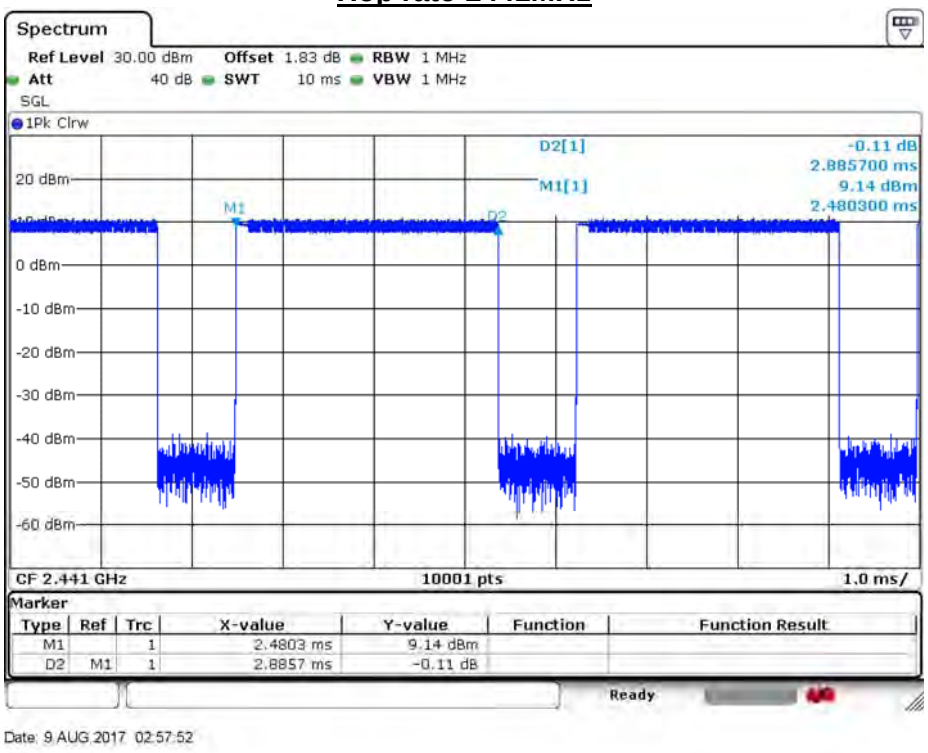
Dwell Time : 0.002881*(266.67/79)* 31.60= 0.3073 sec。

Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

Hop rate-2402MHz

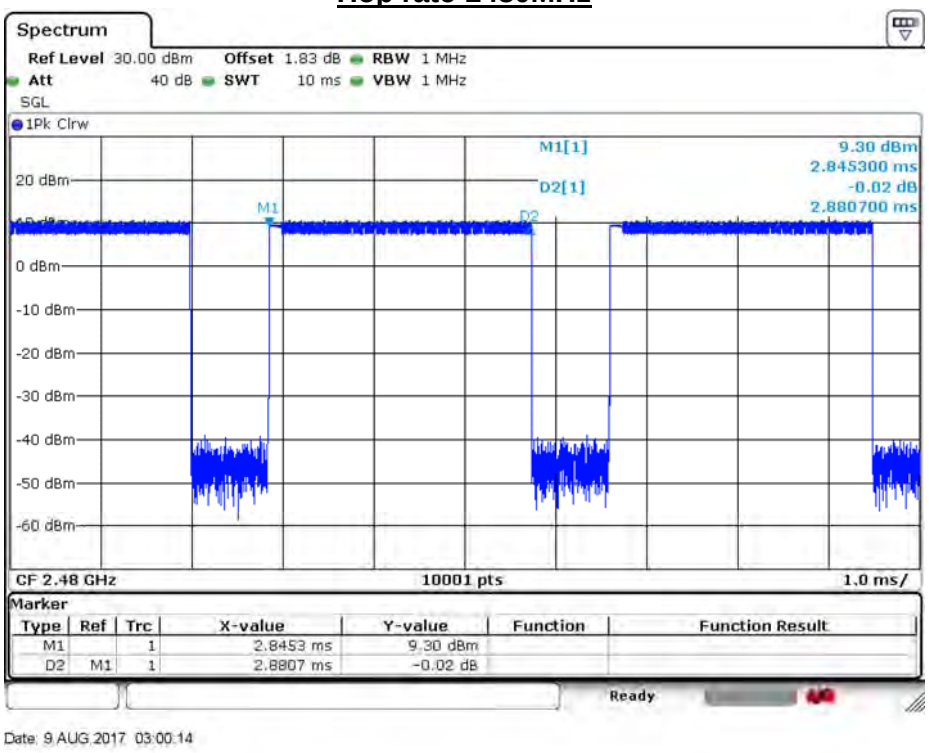


Hop rate-2441MHz



Date: 9.AUG.2017 02:57:52

Hop rate-2480MHz



Date: 9.AUG.2017 03:00:14

Note: Dwell time＝time slot length * hop rate / number of hopping channels * period

Product	Beta+		
Test Item	Dwell Time		
Test Mode	Mode 3: Transmit_3DH5_Power by PC		
Date of Test	2017/08/09	Test Site	SR10-H

8-DPSK

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.874ms = 0.002874 sec

Dwell Time : 0.002874*(266.67/79)* 31.60=0.3066 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.885 ms = 0.002885 sec

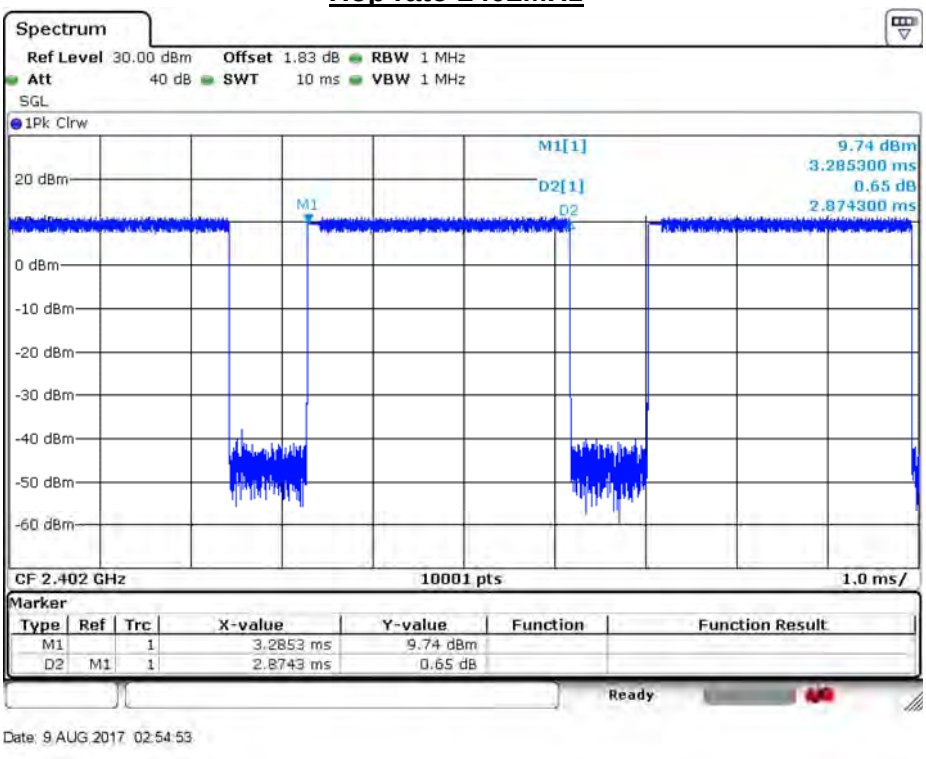
Dwell Time : 0.002885*(266.67/79)* 31.60=0.3077 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.884 ms = 0.002884 sec

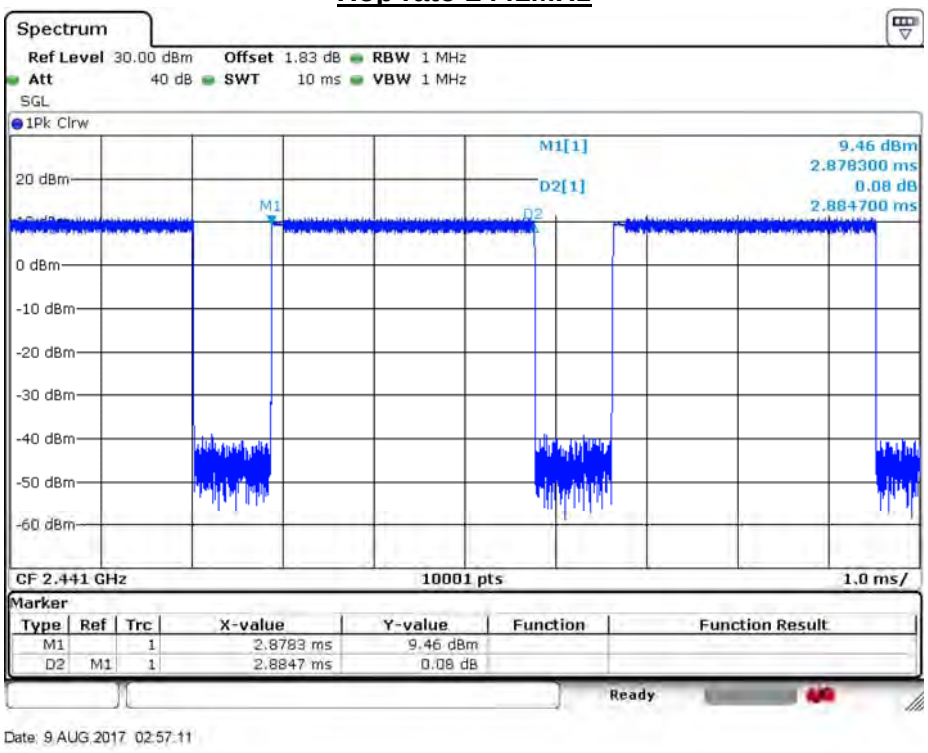
Dwell Time : 0.002884*(266.67/79)* 31.60=0.3076 sec。

Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

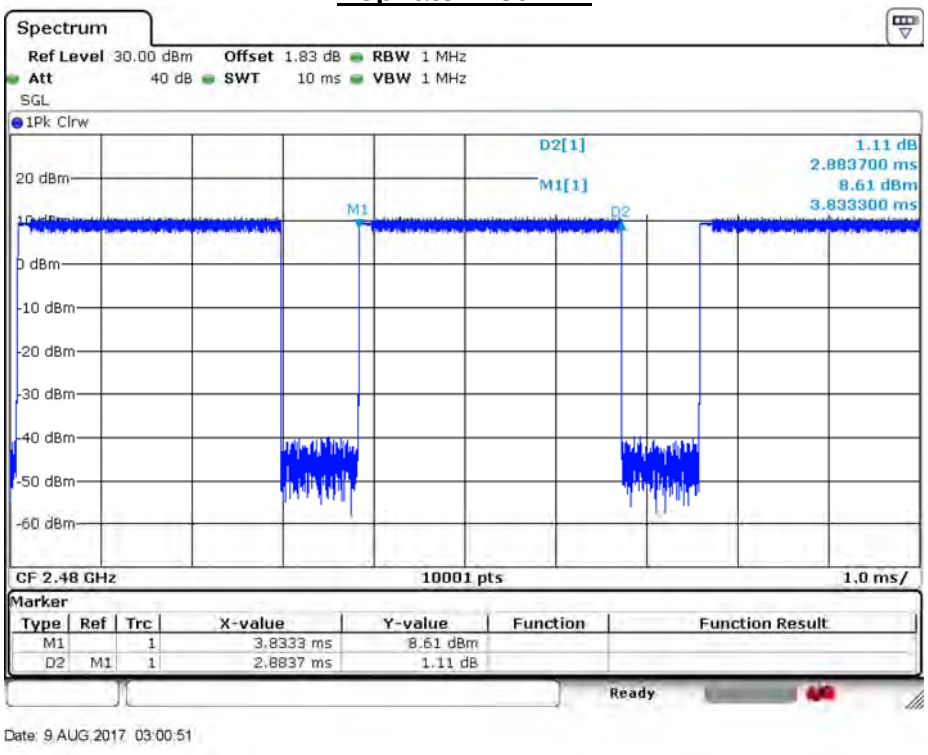
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



Note: Dwell time＝time slot length * hop rate / number of hopping channels * period