FCC Test Report

Product Name	：	TWO WAY RADIO/TRANSCEIVER
Trade Name	：	Wireless Pacific
Model No.	：	X10DRMD-AU2, X10DRMD-PU2, X10DRMD-LU2, X10DRMD-EU2, X10DRMD-AX2, X10DRMD-EX2, X10DRMD-XU2, X10DRMD-XX2, X10DRMD-SU2, X10DRMD-SX2, PTT500MD2, SMWMD2, NCXMD
FCC ID.	：	2AGEY-XG2

Applicant	：	Wireless Corporation Limited
Address	：	503, Tower 2, Lippo Center 89 Queensway, Admiralty, Hong Kong

Date of Receipt	：	Sep. 01, 2016
Issued Date	：	Jan. 17, 2017
Report No.	：	1690080R-RFUSP01V00
Report Version	：	V1.0

Testing Laboratory
3024

Test Report Certification

Issued Date : Jan. 17, 2017
Report No. : 1690080R-RFUSP01V00

Product Name	:	TWO WAY RADIO/TRANSCEIVER
Applicant	:	Wireless Corporation Limited
Address	:	503, Tower 2, Lippo Center 89 Queensway, Admiralty, Hong Kong
Manufacturer	:	Wireless Corporation Limited
Model No.	:	X10DRMD-AU2, X10DRMD-PU2, X10DRMD-LU2, X10DRMD-EU2, X10DRMD-AX2, X10DRMD-EX2, X10DRMD-XU2, X10DRMD-XX2, X10DRMD-SU2, X10DRMD-SX2, PTT500MD2, SMWMD2, NCXMD
FCC ID.	:	2AGEY-XG2
EUT Voltage	:	DC 13.8V
Testing Voltage	:	DC 13.8V
Trade Name	:	Wireless Pacific
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2015
Test Lab	:	Hsin Chu Laboratory
Test Result	:	Complied

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of DEKRA Testing and Certification Co., Ltd..

Documented By : Lyla Yang
(Lyla Yang / Engineering Adm. Assistant)

Tested By : Elwin Lin
(Elwin Lin / Assistant Engineer)

Approved By : Roy Wang
(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1690080R-RFUSP01V00	V1.0	Initial issue of report.	Jan. 17, 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: 834100**
Canada	**:**	**IC, Submission No: 181665 / IC Registration Number: 4075C-4**

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 contact information is as below:

Hsin Chu Laboratory :

No. 75-2, 3rd Lin, WangYe Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan (R.O.C.)
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : info.tw@dekra.com
No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan
No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan
TEL: +886-3-582-8001 / FAX: +886-3-582-8958 E-Mail : info.tw@dekra.com

Lin Kou Laboratory :

No. 5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan (R.O.C.)
TEL : +886-2-8601-3788 / FAX : +886-2-8601-3789 E-Mail : info.tw@dekra.com

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	TWO WAY RADIO/TRANSCEIVER
Trade Name	Wireless Pacific
Model No.	X10DRMD-AU2, X10DRMD-PU2, X10DRMD-LU2, X10DRMD-EU2, X10DRMD-AX2, X10DRMD-EX2, X10DRMD-XU2, X10DRMD-XX2, X10DRMD-SU2, X10DRMD-SX2, PTT500MD2, SMWMD2, NCXMD
Frequency Range	2402~2480MHz
Channel Number	79 Channels
Type of Modulation	GFSK / π/-4DQPSK / 8DPSK

Antenna Information	
Model Name	XMMA, XMPA, XDMA
Antenna Type	Dipole Antenna
Antenna Gain	2.0dBi, 2.2dBi, 14dBi

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 TWO WAY RADIO/TRANSCEIVER including BT 3.0 transmitting and receiving function.
2. These test results on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. The variation of model number is for different strategy of marketing.
4. 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.
5. It is a Class B personal computer and peripheral. Its test report number is 1690080R-RFUSP01V00-A under part 15B with Declaration of Conformity.

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:

Pre-Test Mode	
TX	Mode 1: Transmit Mode_Ant 1 Mode 2: Transmit Mode_Ant 2
Final Test Mode	
TX	Mode 1: Transmit Mode_Ant 1 Mode 2: Transmit Mode_Ant 2

Emission	Mode 1	Mode 2
Conducted Emission	No	No
The maximum peak conducted output power	Yes	Yes
Radiated Emission	Yes	Yes
RF antenna conducted test	Yes	No
Band Edge	Yes	Yes
Number of hopping Frequency	Yes	No
Carrier Frequency Separation	Yes	No
Occupied Bandwidth	Yes	No
Dwell Time	Yes	No

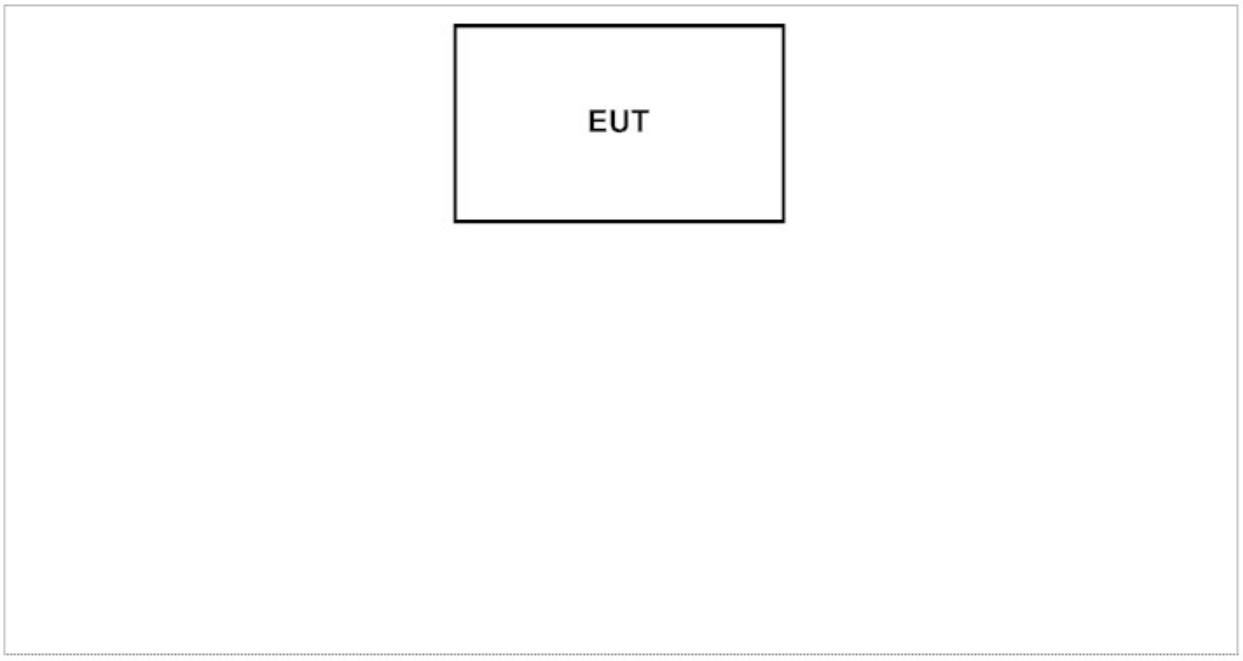
1.3. Tested System Details

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

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	N/A					

1.4. Configuration of tested System

Connection Diagram



1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Turn on the EUT and tested equipment power.
3	Execute the test program software of “BuleTest”.
4	The RF signal’s status will continue transmit through EUT.
5	Repeat the above procedure.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.247 The maximum peak conducted output power	15 - 35	24
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
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
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
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
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
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
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
Humidity (%RH)		25 - 75	45
Barometric pressure (mbar)		860 - 1060	950-1000

2. Conducted Emission

2.1. Test Equipment

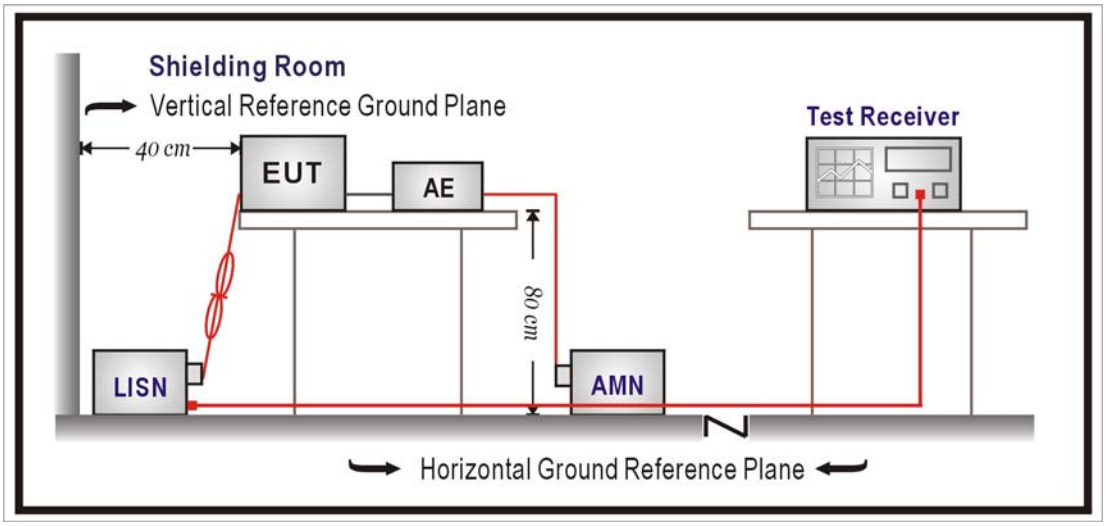
The following test equipments are used during the test:

Conducted Emission / SR3

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
LISN	R&S	ENV216	100096	2017/08/22
LISN	R&S	ESH3-Z5	836679/022	2016/11/30
Test Receiver	R&S	ESCS 30	825442/017	2017/01/04

Note: All equipments 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: 2013 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 15.247: 2015

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Owing to the DC operation of EUT, this test item is not performed.

3. The maximum peak conducted output power

3.1. Test Equipment

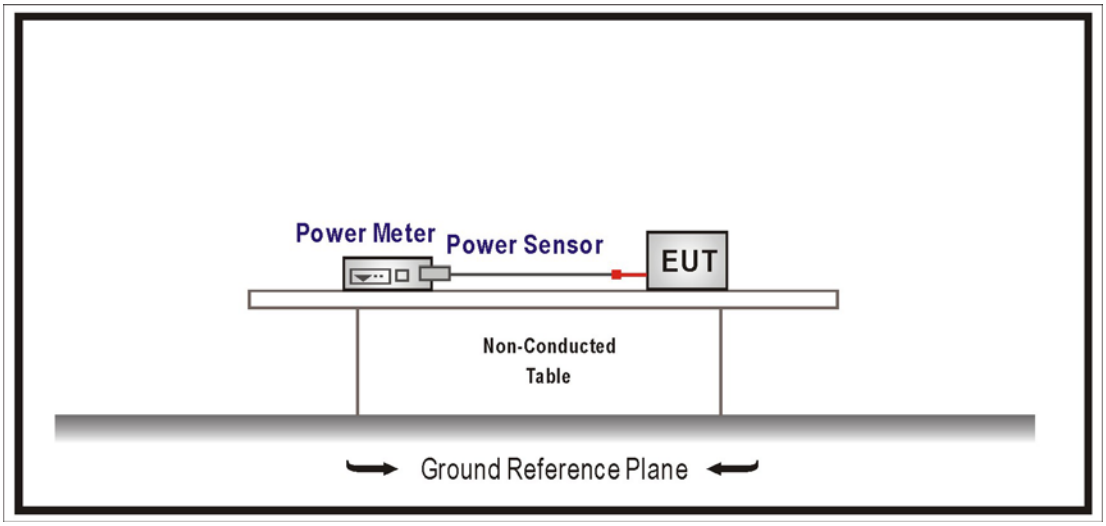
The following test equipment is used during the test:

The maximum peak conducted output power / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Power Meter	Agilent	N1911A	MY45101353	2017/09/29
Power Sensor	Agilent	N1921A	MY45241670	2017/09/28
USB Power Sensor	Keysight	U2021XA	MY54070005	NCR
Temperature & Humidity Chamber	WIT	TH-1S-B	1082101	2017/01/18

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 KDB 558074 D01 for compliance to FCC 47CFR 15.247 requirements.

3.4. Limits

(1)For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.
(2) 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, but at least 25 hopping channels.

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

3.6. Test Result

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	The maximum peak conducted output power		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

GFSK ; Antenna :14dBi

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	17.500	≦22	Pass
39	2441	17.660	≦22	Pass
78	2480	17.650	≦22	Pass

π/4-DQPSK ; Antenna :14dBi

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	19.110	≦22	Pass
39	2441	19.300	≦22	Pass
78	2480	19.340	≦22	Pass

8-DPSK ; Antenna :14dBi

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	19.170	≦22	Pass
39	2441	19.270	≦22	Pass
78	2480	19.300	≦22	Pass

Antenna gain:14dBi

Limit = 30 -(14-6)=22dBm

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	The maximum peak conducted output power		
Test Mode	Mode 2: Transmit Mode_Ant 2		
Date of Test	2016/10/04	Test Site	SR7

GFSK; Antenna :2.2dBi

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	17.500	≦30	Pass
39	2441	17.660	≦30	Pass
78	2480	17.650	≦30	Pass

π/4-DQPSK; Antenna :2.2dBi

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	19.110	≦30	Pass
39	2441	19.300	≦30	Pass
78	2480	19.340	≦30	Pass

8-DPSK; Antenna :2.2dBi

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	19.170	≦30	Pass
39	2441	19.270	≦30	Pass
78	2480	19.300	≦30	Pass

4. Radiated Emission

4.1. Test Equipment

The following test equipments are used during the test:

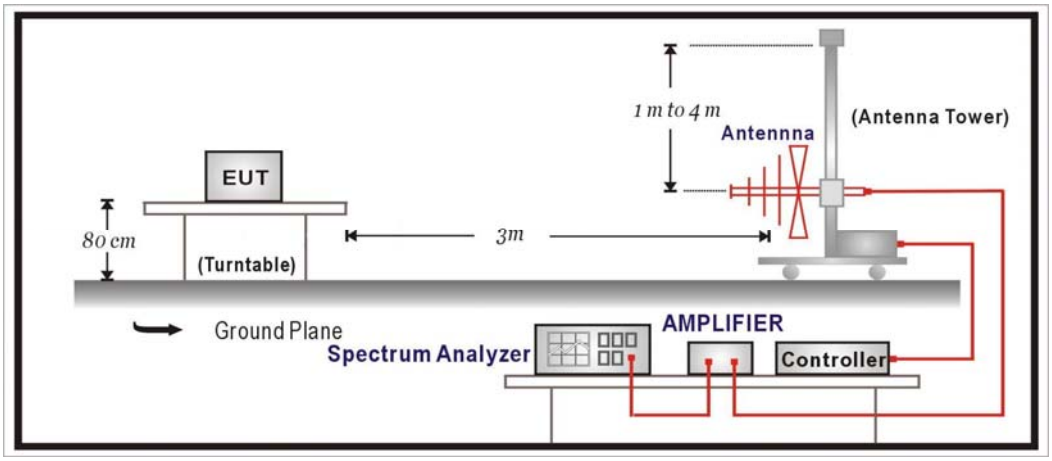
Radiated Emission / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Bilog Antenna	Schaffner	CBL6112B	2895	2017/08/14
Double Ridged Guide Horn Antenna	Schwarzbeck	BBHA 9120	D743	2017/01/14
Pre-Amplifier	EMCI	EMC0031835	4583/10/13	2017/01/26
Pre-Amplifier	DEKRA	AP-025C	CHM-0706049	2017/01/03
Spectrum Analyzer	Agilent	E4440A	MY46187335	2016/12/24
k Type Cable	Huber+Suhner	SF 102	25623/2	2017/01/11
Horn Antenna	Schwarzbeck	BBHA 9170	203	2017/08/28
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05

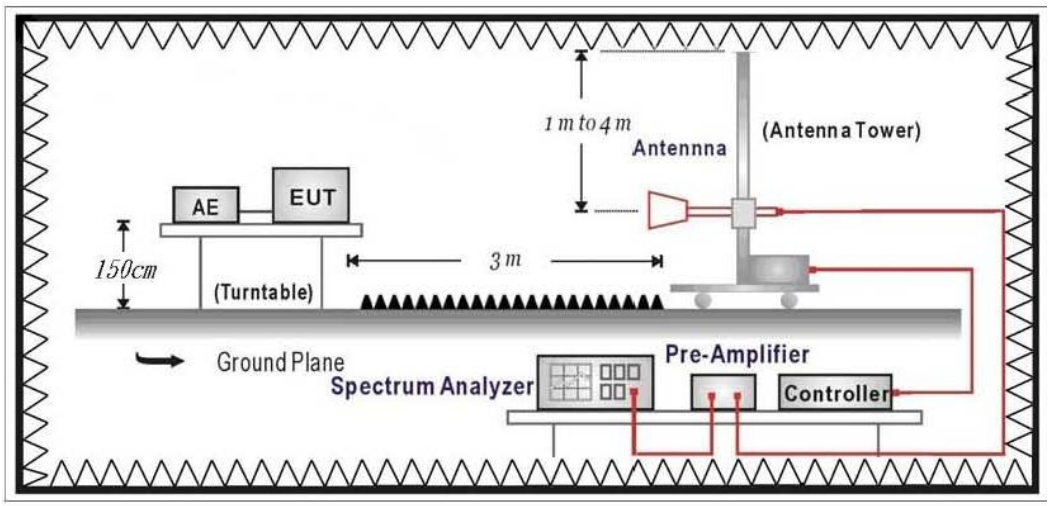
Note: All equipments that need to calibrate are with calibration period of 1 year.

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 KDB 558074 D01 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 meter or 1.5m 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.

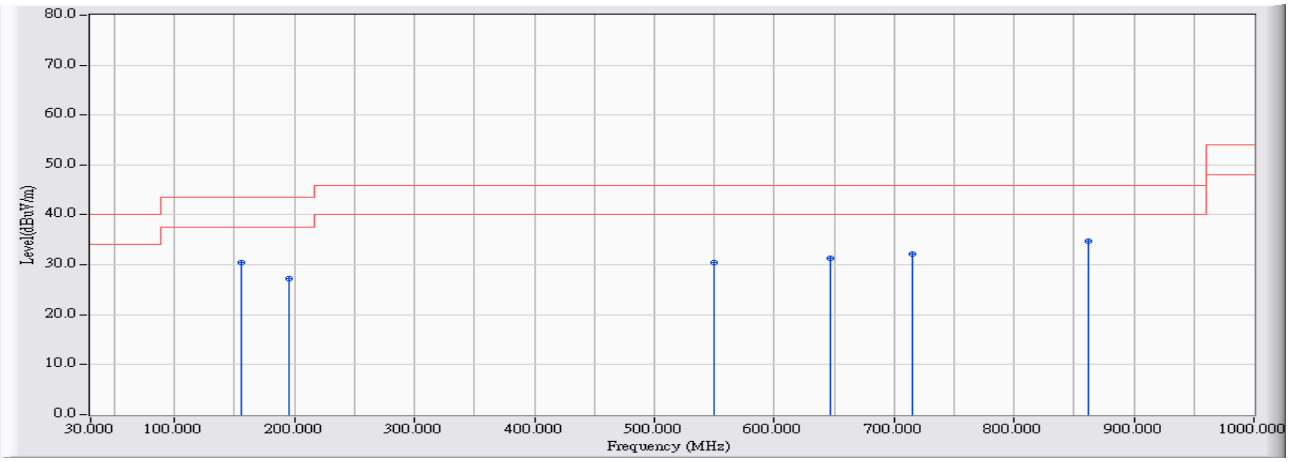
4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

4.6. Test Result

30MHz-1GHz Spurious

Site : CB1	**Time : 2016/09/12 - 17:48**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1 802.15.1_DH5_2441MHz**

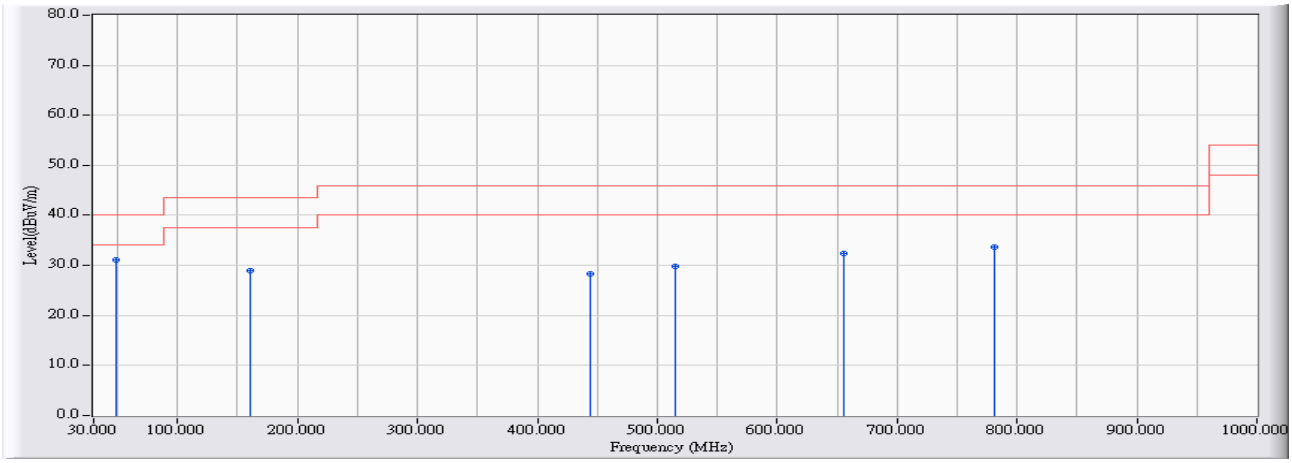


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		155.602	17.890	12.636	30.526	-12.974	43.500	QUASIPEAK
2		195.950	12.638	14.536	27.174	-16.326	43.500	QUASIPEAK
3		550.062	18.729	11.777	30.506	-15.494	46.000	QUASIPEAK
4		646.373	20.333	10.970	31.304	-14.696	46.000	QUASIPEAK
5		714.849	21.249	11.022	32.272	-13.728	46.000	QUASIPEAK
6	*	861.595	23.019	11.687	34.706	-11.294	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 : CB1	**Time : 2016/09/12 - 17:55**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2441MHz**

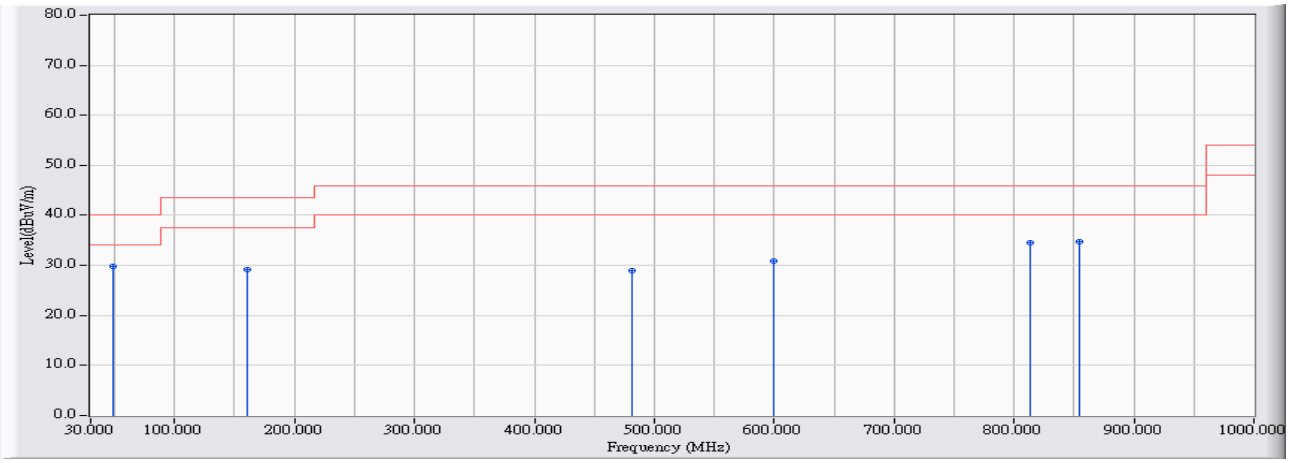


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	48.040	11.810	19.193	31.004	-8.996	40.000	QUASIPEAK
2		160.258	17.924	11.108	29.032	-14.468	43.500	QUASIPEAK
3		443.858	17.007	11.198	28.206	-17.794	46.000	QUASIPEAK
4		514.952	18.045	11.844	29.888	-16.112	46.000	QUASIPEAK
5		655.975	20.464	11.825	32.289	-13.711	46.000	QUASIPEAK
6		780.996	22.085	11.506	33.590	-12.410	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 : CB1	**Time : 2016/09/12 - 18:08**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2441MHz**

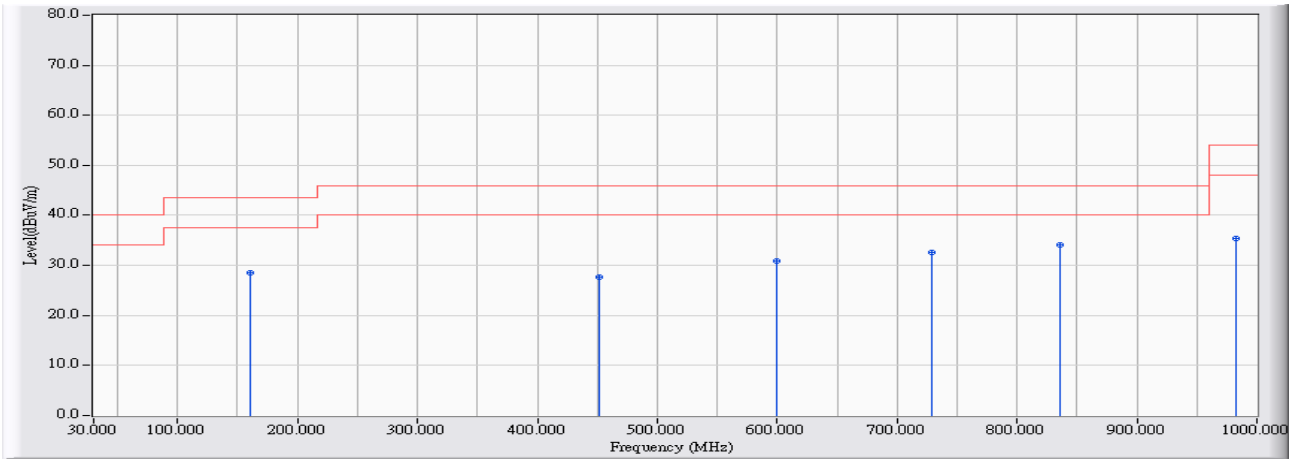


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	48.040	11.810	18.065	29.876	-10.124	40.000	QUASIPEAK
2		159.967	17.975	11.254	29.230	-14.270	43.500	QUASIPEAK
3		481.684	17.533	11.444	28.977	-17.023	46.000	QUASIPEAK
4		599.527	19.694	11.259	30.953	-15.047	46.000	QUASIPEAK
5		813.003	22.470	12.090	34.561	-11.439	46.000	QUASIPEAK
6		854.030	22.934	11.778	34.712	-11.288	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 : CB1	**Time : 2016/09/12 - 18:12**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2441MHz**

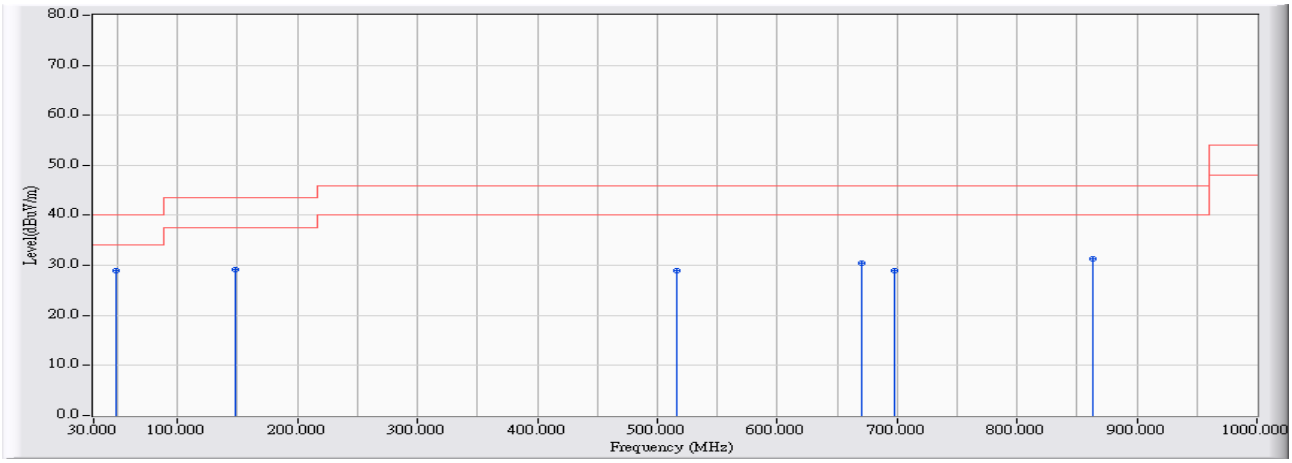


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		160.646	17.850	10.752	28.603	-14.897	43.500	QUASIPEAK
2		451.520	17.171	10.405	27.577	-18.423	46.000	QUASIPEAK
3		599.042	19.684	11.140	30.825	-15.175	46.000	QUASIPEAK
4		729.106	21.430	11.089	32.519	-13.481	46.000	QUASIPEAK
5	*	836.280	22.733	11.275	34.008	-11.992	46.000	QUASIPEAK
6		982.154	24.238	11.106	35.344	-18.656	54.000	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 : CB1	**Time : 2016/09/12 - 18:13**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2441MHz**

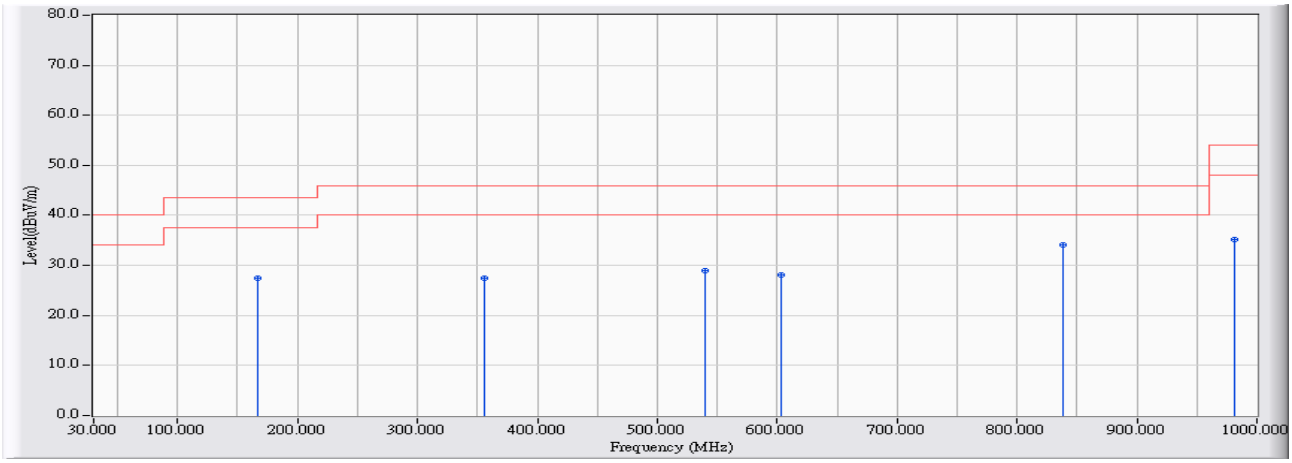


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	48.040	11.810	17.094	28.905	-11.095	40.000	QUASIPEAK
2		147.940	17.426	11.725	29.150	-14.350	43.500	QUASIPEAK
3		515.824	18.062	10.827	28.888	-17.112	46.000	QUASIPEAK
4		669.942	20.654	9.882	30.536	-15.464	46.000	QUASIPEAK
5		697.196	21.025	7.893	28.917	-17.083	46.000	QUASIPEAK
6		862.662	23.031	8.339	31.370	-14.630	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 : CB1	**Time : 2016/09/12 - 18:14**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2441MHz**

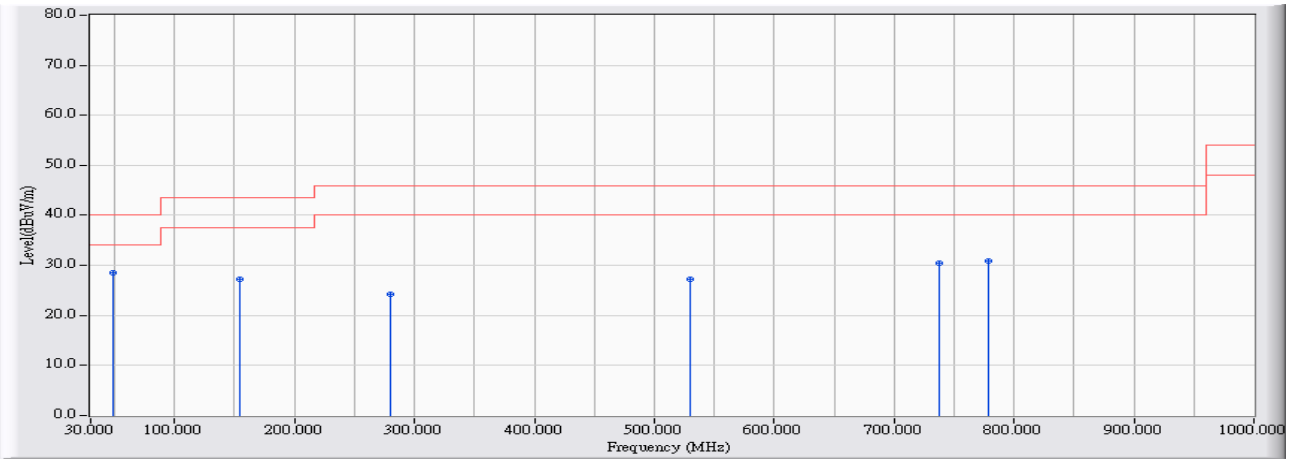


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		166.853	16.658	10.709	27.368	-16.132	43.500	QUASIPEAK
2		356.081	14.957	12.389	27.347	-18.653	46.000	QUASIPEAK
3		539.878	18.531	10.493	29.024	-16.976	46.000	QUASIPEAK
4		602.728	19.740	8.376	28.117	-17.883	46.000	QUASIPEAK
5	*	838.026	22.753	11.436	34.189	-11.811	46.000	QUASIPEAK
6		980.990	24.227	10.965	35.192	-18.808	54.000	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 : CB1	**Time : 2016/09/13 - 10:05**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_DH5_2441MHz**

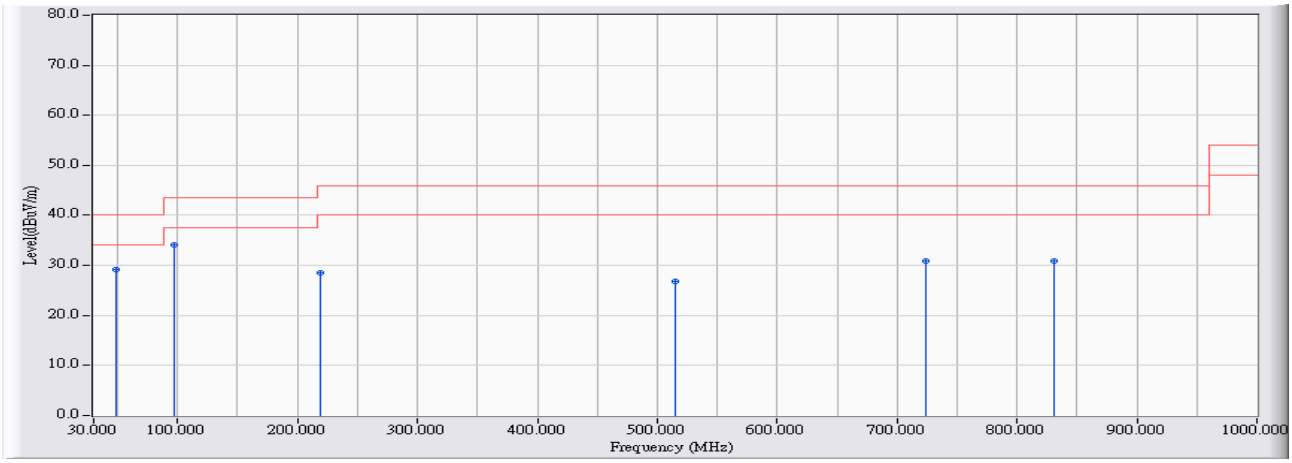


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	48.040	11.810	16.702	28.513	-11.487	40.000	QUASIPEAK
2		153.954	17.857	9.425	27.282	-16.218	43.500	QUASIPEAK
3		279.944	13.228	11.043	24.271	-21.729	46.000	QUASIPEAK
4		530.373	18.345	8.835	27.180	-18.820	46.000	QUASIPEAK
5		737.835	21.540	8.841	30.381	-15.619	46.000	QUASIPEAK
6		778.571	22.053	8.832	30.886	-15.114	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 : CB1	**Time : 2016/09/13 - 10:21**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_DH5_2441MHz**

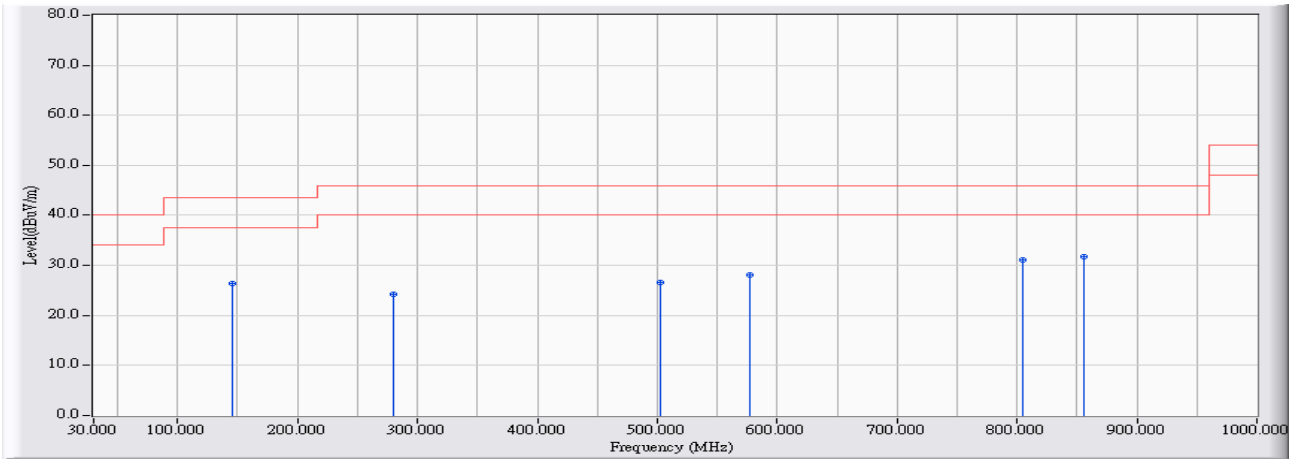


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		48.040	11.810	17.251	29.062	-10.938	40.000	QUASIPEAK
2	*	96.826	12.262	21.922	34.184	-9.316	43.500	QUASIPEAK
3		218.549	12.266	16.356	28.622	-17.378	46.000	QUASIPEAK
4		515.533	18.055	8.804	26.860	-19.140	46.000	QUASIPEAK
5		723.869	21.364	9.609	30.973	-15.027	46.000	QUASIPEAK
6		830.752	22.671	8.261	30.932	-15.068	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 : CB1	**Time : 2016/09/13 - 10:30**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_2DH5_2441MHz**

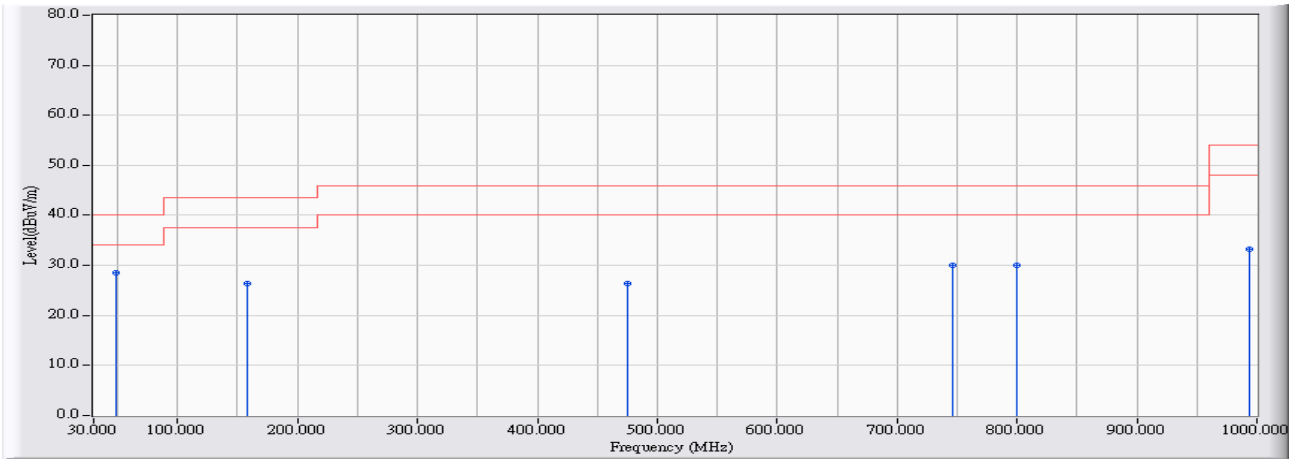


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		146.000	17.092	9.344	26.436	-17.064	43.500	QUASIPEAK
2		279.944	13.228	11.038	24.266	-21.734	46.000	QUASIPEAK
3		502.440	17.800	8.825	26.625	-19.375	46.000	QUASIPEAK
4		577.704	19.269	8.932	28.200	-17.800	46.000	QUASIPEAK
5		805.340	22.385	8.652	31.036	-14.964	46.000	QUASIPEAK
6	*	856.357	22.960	8.710	31.670	-14.330	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 : CB1	**Time : 2016/09/13 - 10:33**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_2DH5_2441MHz**

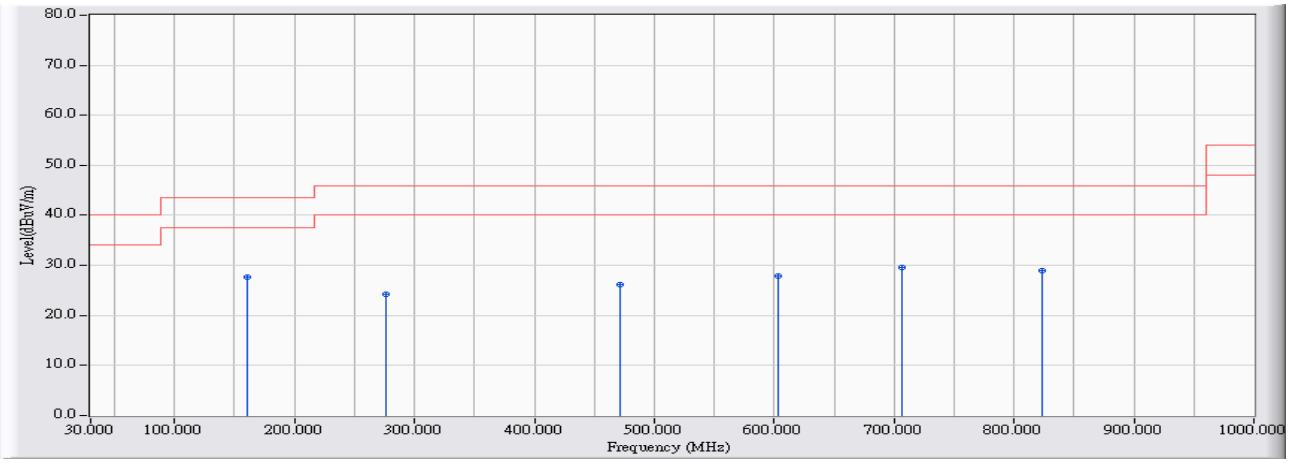


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	48.137	11.805	16.809	28.614	-11.386	40.000	QUASIPEAK
2		158.221	17.941	8.351	26.292	-17.208	43.500	QUASIPEAK
3		475.379	17.458	8.838	26.296	-19.704	46.000	QUASIPEAK
4		745.788	21.640	8.296	29.936	-16.064	46.000	QUASIPEAK
5		799.715	22.321	7.625	29.945	-16.055	46.000	QUASIPEAK
6		993.793	24.349	8.867	33.217	-20.783	54.000	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 : CB1	**Time : 2016/09/13 - 10:42**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_3DH5_2441MHz**

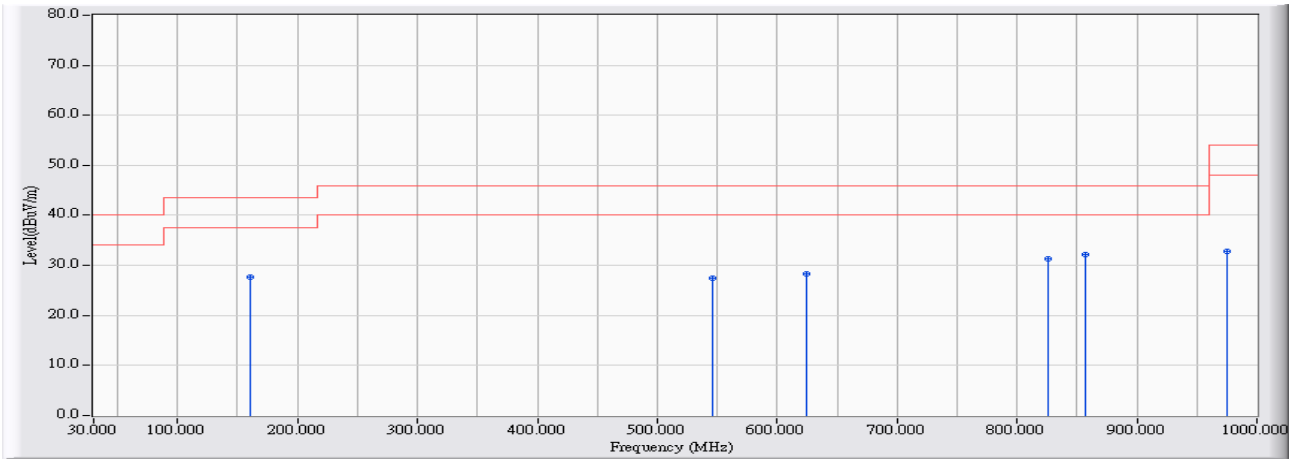


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	160.064	17.960	9.615	27.575	-15.925	43.500	QUASIPEAK
2		275.967	13.107	11.113	24.220	-21.780	46.000	QUASIPEAK
3		471.694	17.413	8.784	26.198	-19.802	46.000	QUASIPEAK
4		603.601	19.752	8.196	27.948	-18.052	46.000	QUASIPEAK
5		706.992	21.151	8.386	29.537	-16.463	46.000	QUASIPEAK
6		822.799	22.581	6.381	28.962	-17.038	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 : CB1	**Time : 2016/09/13 - 10:42**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_3DH5_2441MHz**



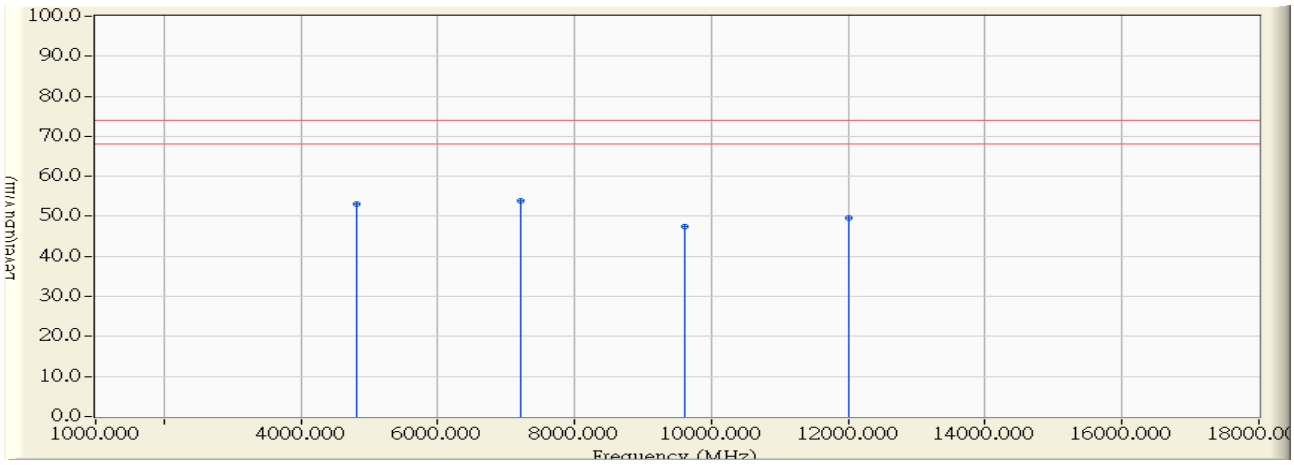
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		160.064	17.960	9.615	27.575	-15.925	43.500	QUASIPEAK
2		546.085	18.652	8.718	27.370	-18.630	46.000	QUASIPEAK
3		624.260	20.033	8.276	28.309	-17.691	46.000	QUASIPEAK
4		825.708	22.614	8.604	31.218	-14.782	46.000	QUASIPEAK
5	*	857.133	22.968	9.229	32.198	-13.802	46.000	QUASIPEAK
6		975.364	24.173	8.672	32.845	-21.155	54.000	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.

Above 1GHz Spurious:

Site : CB1	**Time : 2016/11/19 - 22:04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2402MHz**

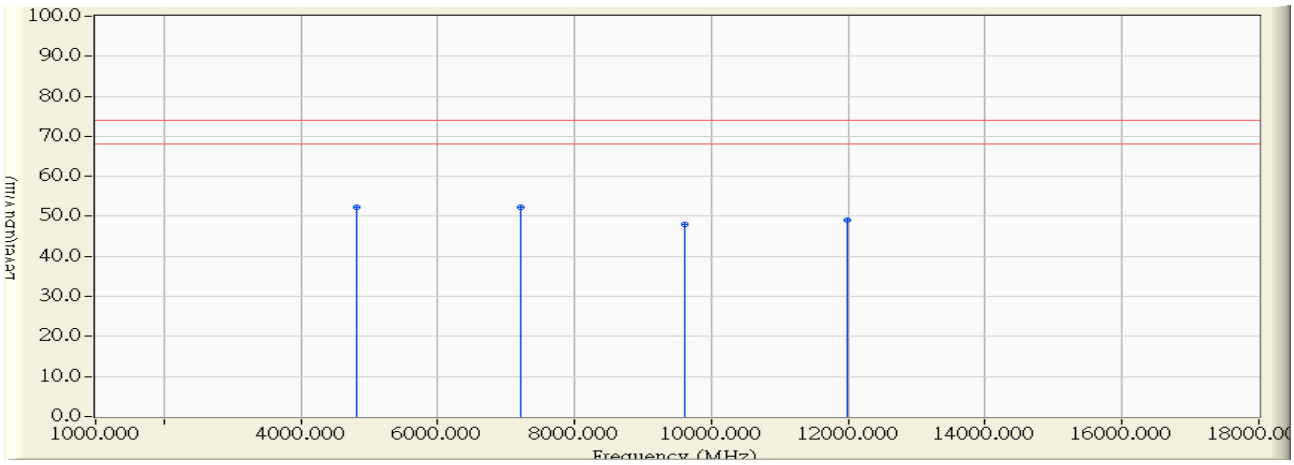


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-2.613	55.580	52.967	-21.033	74.000	PEAK
2	*	7205.000	5.865	48.060	53.925	-20.075	74.000	PEAK
3		9606.000	7.431	40.130	47.561	-26.439	74.000	PEAK
4		11996.000	10.414	39.290	49.703	-24.297	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 : CB1	**Time : 2016/11/19 - 21:45**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2402MHz**

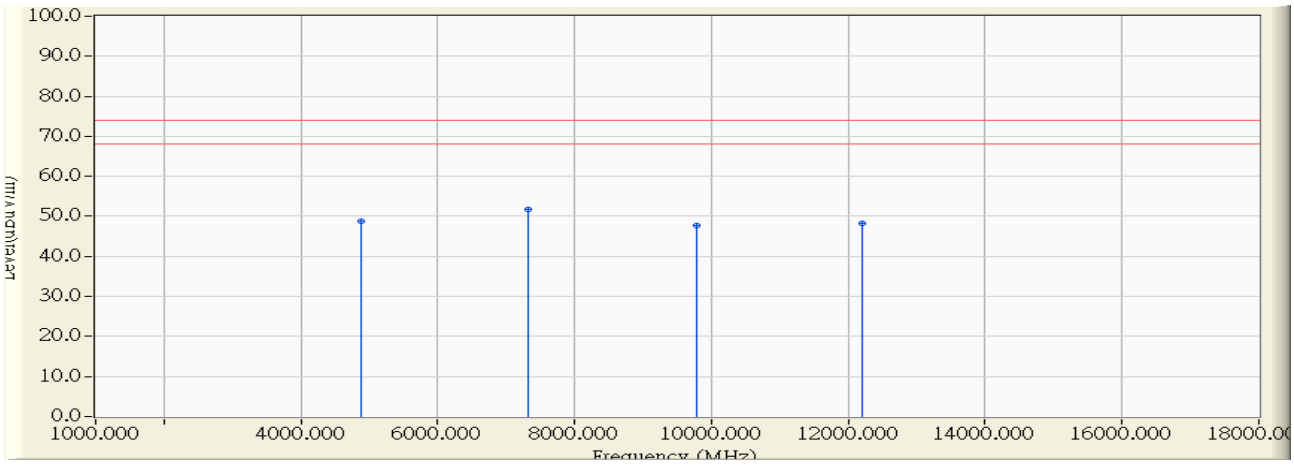


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-1.666	53.860	52.194	-21.806	74.000	PEAK
2	*	7206.000	5.366	46.870	52.237	-21.763	74.000	PEAK
3		9608.000	7.004	41.060	48.065	-25.935	74.000	PEAK
4		11990.000	9.928	39.210	49.138	-24.862	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 : CB1	**Time : 2016/11/19 - 22:15**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2441MHz**

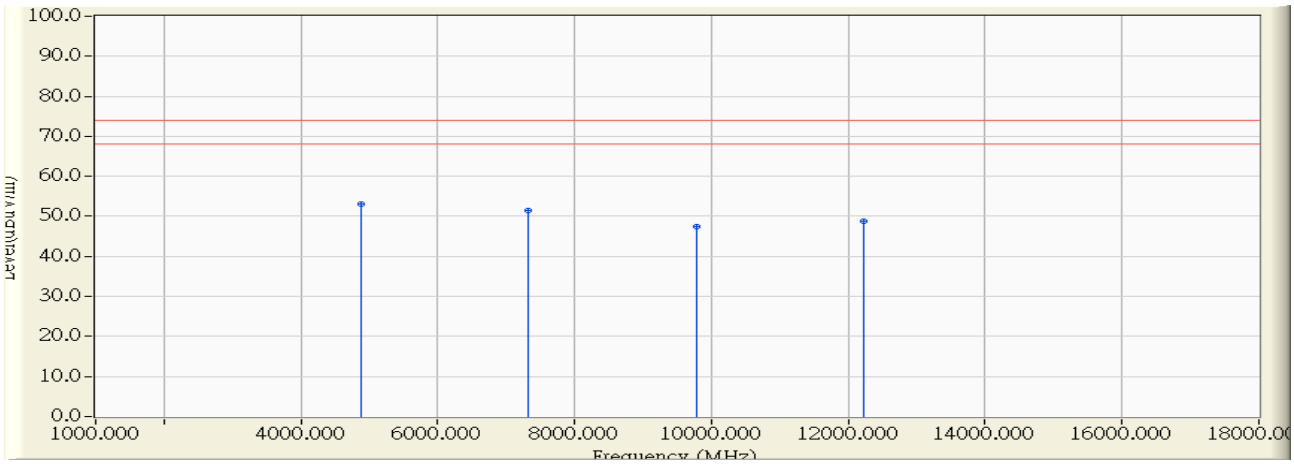


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-2.404	51.320	48.916	-25.084	74.000	PEAK
2	*	7322.000	6.095	45.610	51.705	-22.295	74.000	PEAK
3		9775.000	8.347	39.320	47.666	-26.334	74.000	PEAK
4		12212.000	10.156	38.230	48.386	-25.614	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 : CB1	**Time : 2016/11/19 - 22:23**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2441MHz**

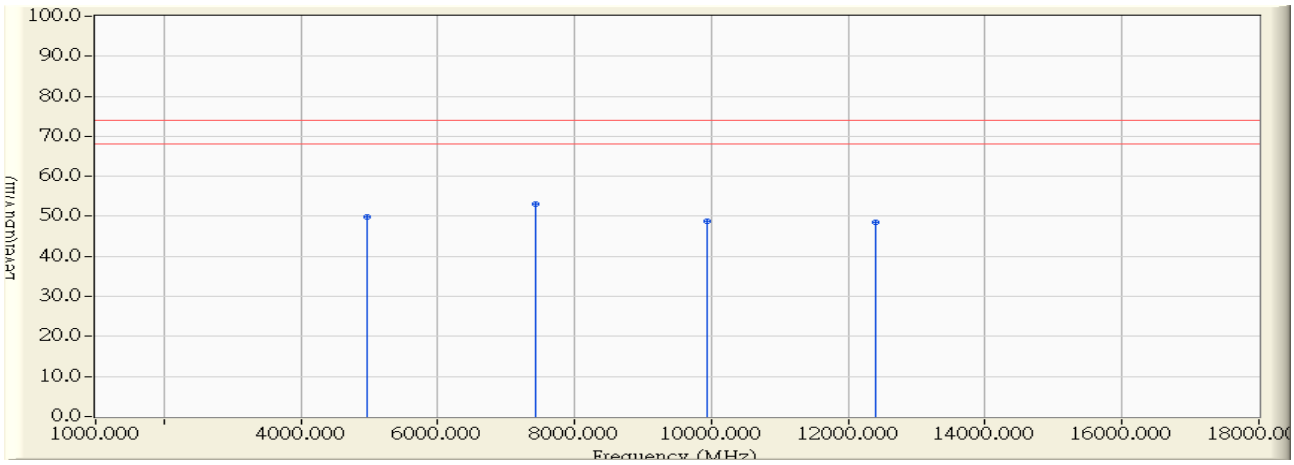


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-1.651	54.700	53.049	-20.951	74.000	PEAK
2		7322.000	5.595	46.010	51.605	-22.395	74.000	PEAK
3		9779.000	7.674	39.730	47.404	-26.596	74.000	PEAK
4		12220.000	9.884	38.890	48.774	-25.226	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 : CB1	**Time : 2016/11/19 - 22:36**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2480MHz**

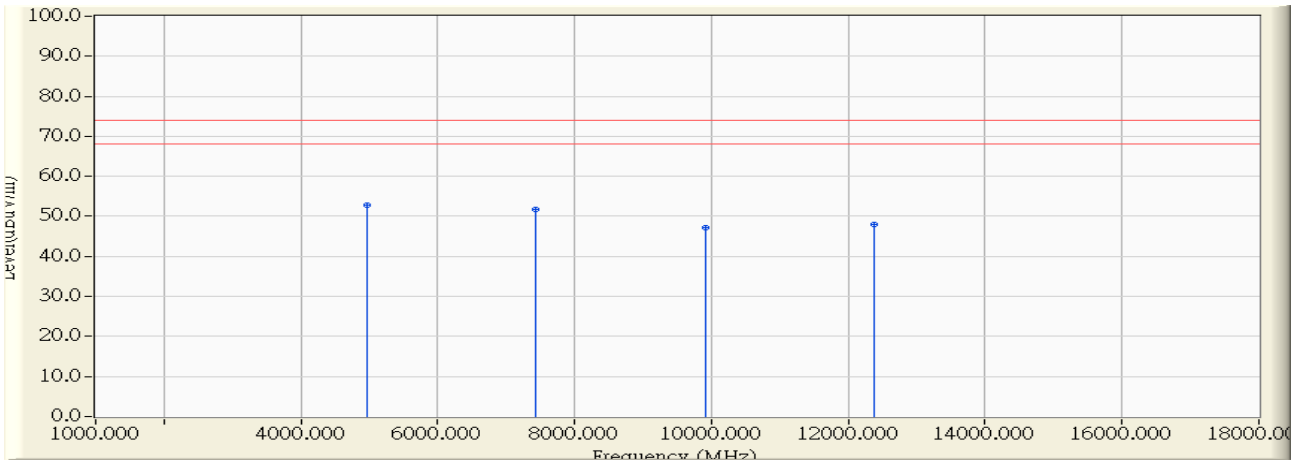


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4959.000	-2.197	52.030	49.833	-24.167	74.000	PEAK
2	*	7439.000	6.326	46.870	53.195	-20.805	74.000	PEAK
3		9938.000	9.229	39.650	48.879	-25.121	74.000	PEAK
4		12404.000	9.927	38.640	48.567	-25.433	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 : CB1	**Time : 2016/11/19 - 22:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2480MHz**

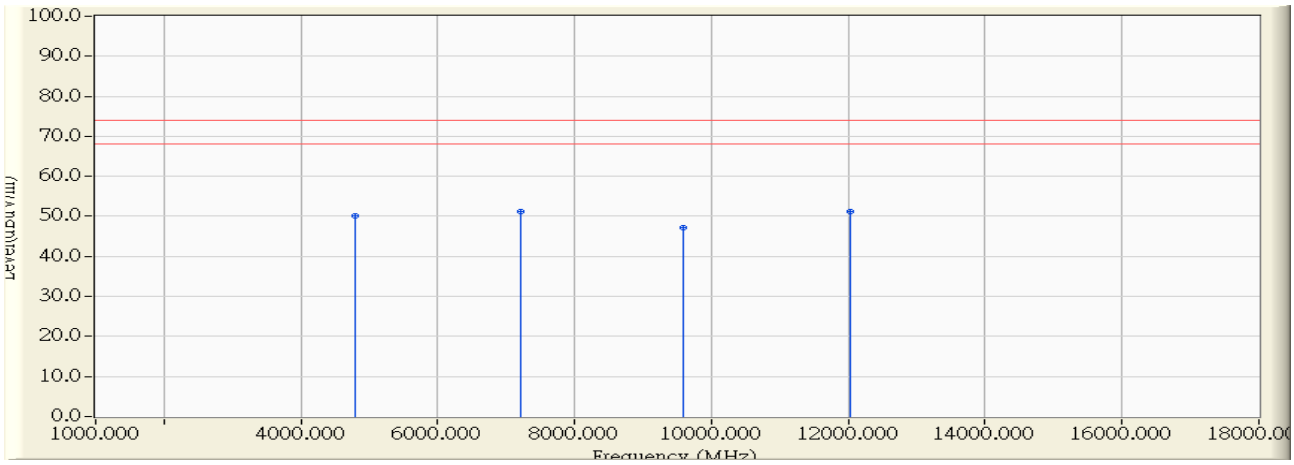


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4959.000	-1.637	54.440	52.803	-21.197	74.000	PEAK
2		7439.000	5.826	46.010	51.835	-22.165	74.000	PEAK
3		9919.000	8.222	39.080	47.302	-26.698	74.000	PEAK
4		12387.000	9.851	38.120	47.971	-26.029	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 : CB1	**Time : 2016/11/19 - 22:50**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2402MHz**

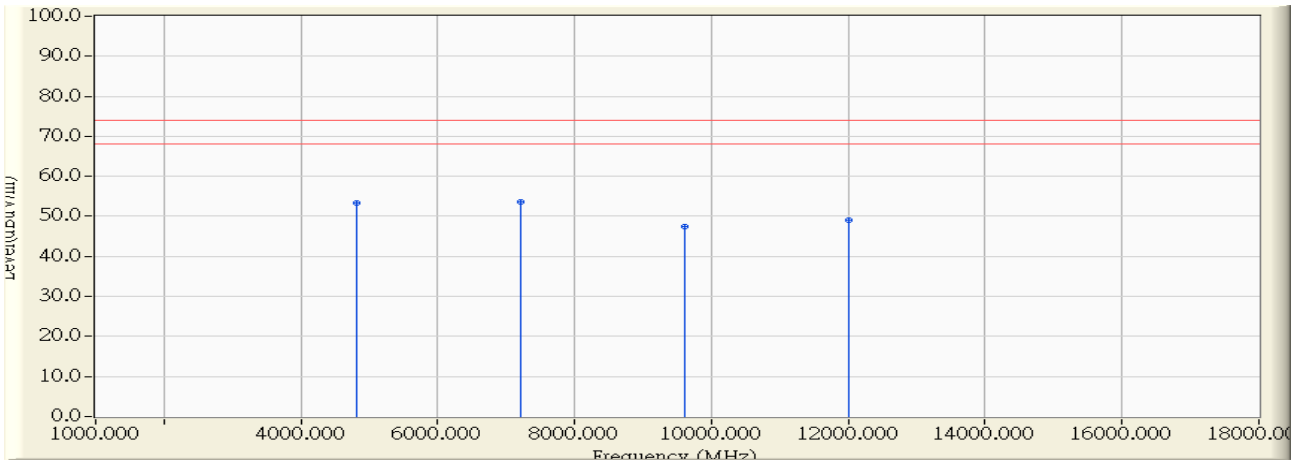


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4803.000	31.920	52.630	50.014	-23.986	74.000	PEAK
2	*	7205.000	40.609	45.330	51.195	-22.805	74.000	PEAK
3		9589.000	42.297	39.860	47.199	-26.801	74.000	PEAK
4		12027.000	44.541	40.780	51.157	-22.843	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 : CB1	**Time : 2016/11/19 - 22:58**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2402MHz**

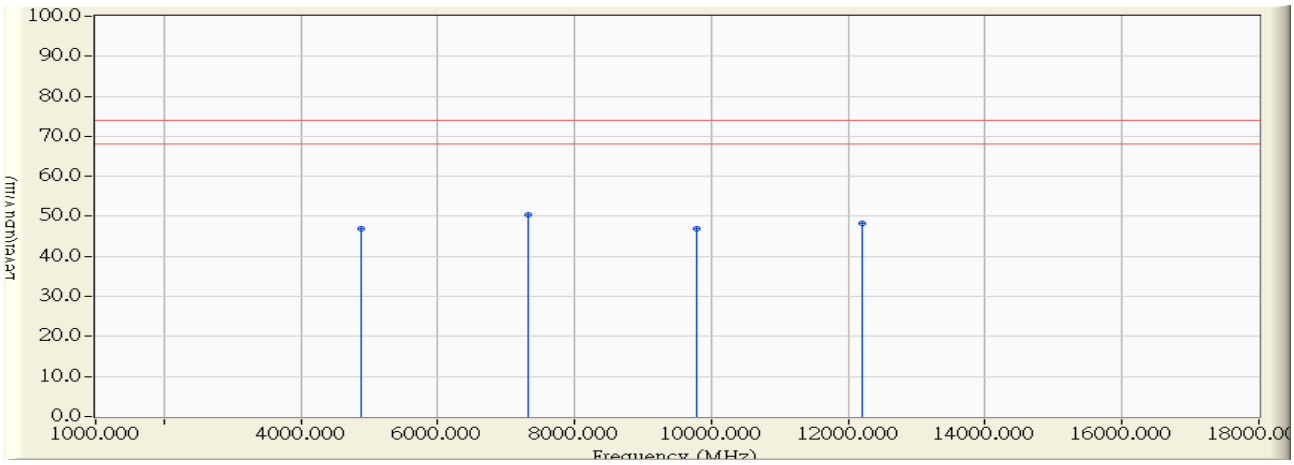


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-1.666	55.130	53.464	-20.536	74.000	PEAK
2	*	7206.000	5.366	48.250	53.617	-20.383	74.000	PEAK
3		9607.000	7.001	40.460	47.461	-26.539	74.000	PEAK
4		12017.000	9.922	39.220	49.143	-24.857	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 : CB1	**Time : 2016/11/19 - 23:16**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2441MHz**

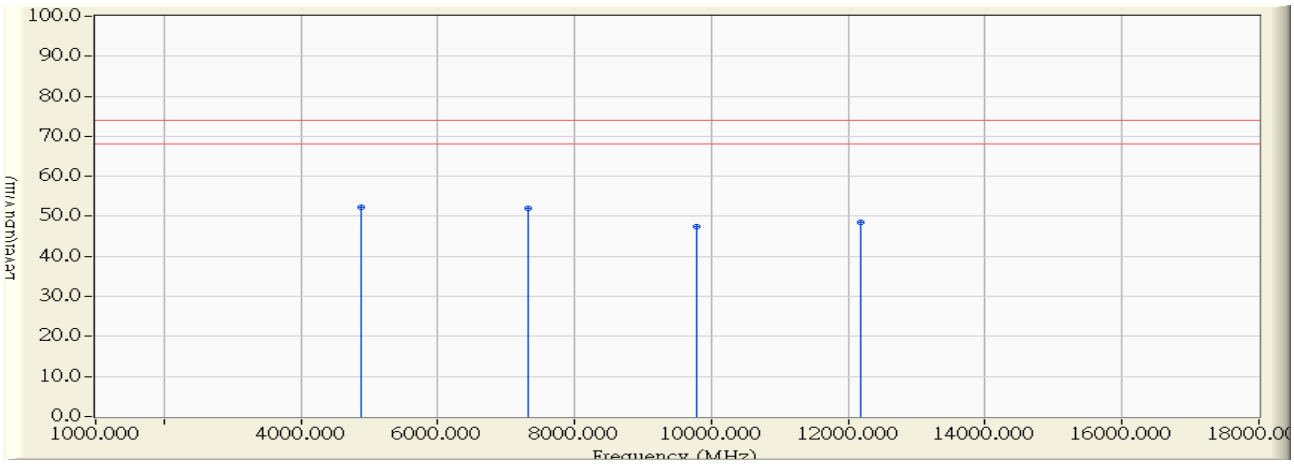


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-2.404	49.390	46.986	-27.014	74.000	PEAK
2	*	7323.000	6.097	44.340	50.437	-23.563	74.000	PEAK
3		9781.000	8.379	38.630	47.009	-26.991	74.000	PEAK
4		12200.000	10.171	38.100	48.270	-25.730	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 : CB1	**Time : 2016/11/19 - 23:10**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2441MHz**

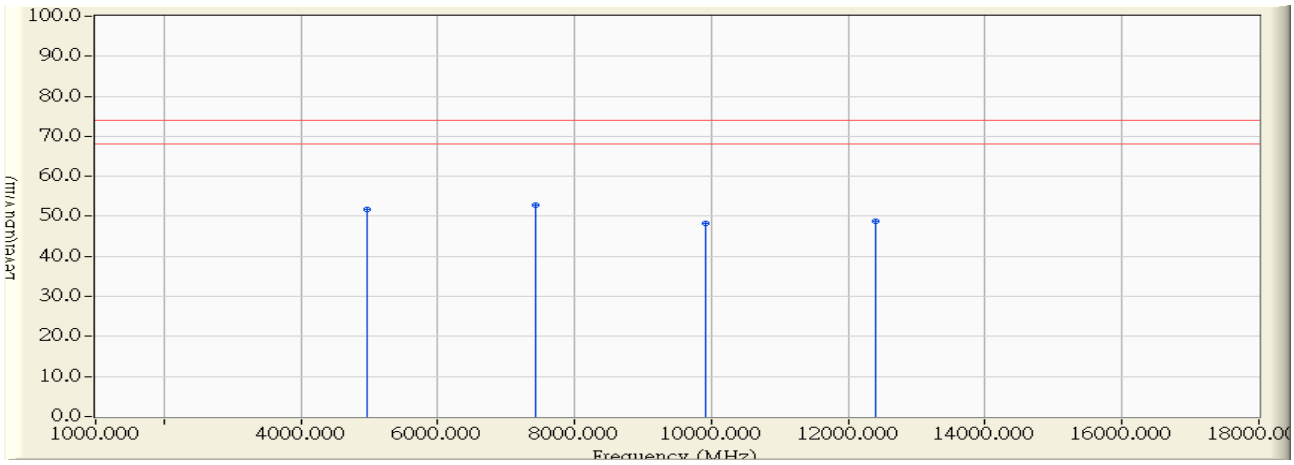


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-1.651	54.040	52.389	-21.611	74.000	PEAK
2		7322.000	5.595	46.370	51.965	-22.035	74.000	PEAK
3		9779.000	7.674	39.660	47.334	-26.666	74.000	PEAK
4		12187.000	9.889	38.550	48.440	-25.560	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 : CB1	**Time : 2016/11/19 - 23:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2480MHz**

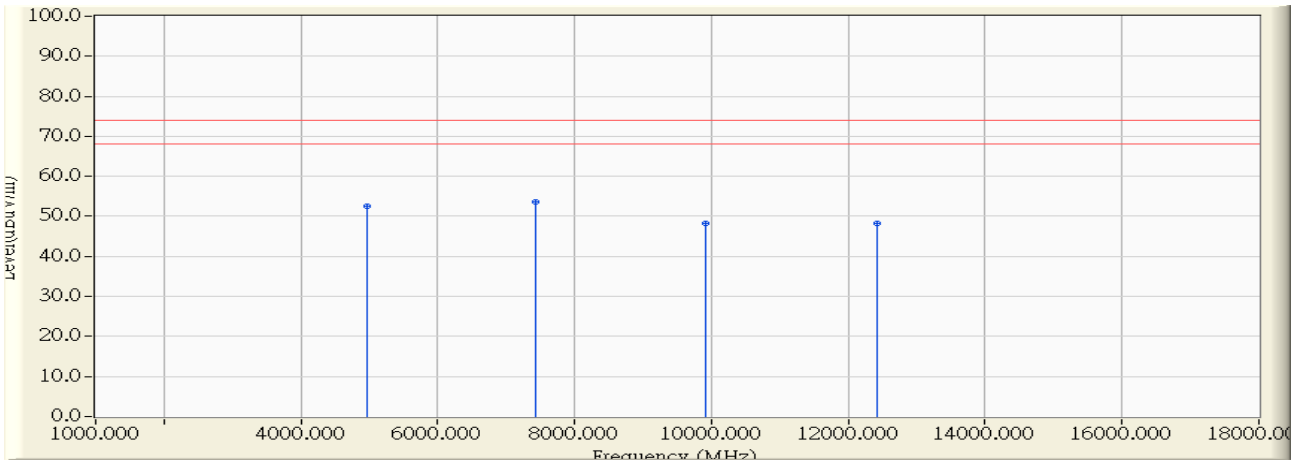


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-2.195	53.880	51.685	-22.315	74.000	PEAK
2	*	7439.000	6.326	46.390	52.715	-21.285	74.000	PEAK
3		9924.000	9.153	39.170	48.323	-25.677	74.000	PEAK
4		12397.000	9.935	38.930	48.866	-25.134	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 : CB1	**Time : 2016/11/19 - 23:32**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2480MHz**

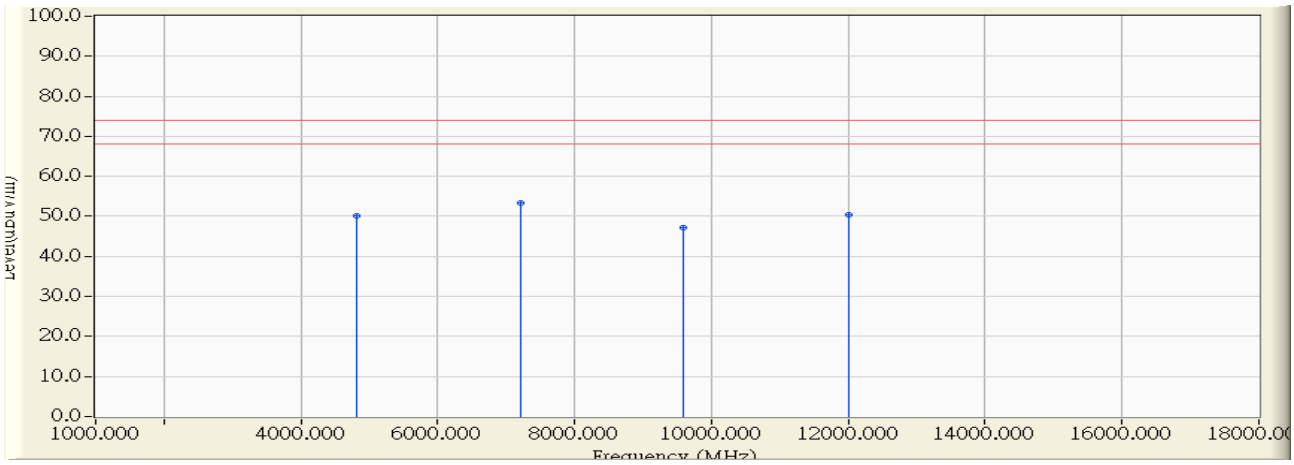


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4959.000	-1.637	54.230	52.593	-21.407	74.000	PEAK
2	*	7440.000	5.828	47.830	53.657	-20.343	74.000	PEAK
3		9920.000	8.226	40.080	48.306	-25.694	74.000	PEAK
4		12416.000	9.845	38.500	48.346	-25.654	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 : CB1	**Time : 2016/11/19 - 23:52**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2402MHz**

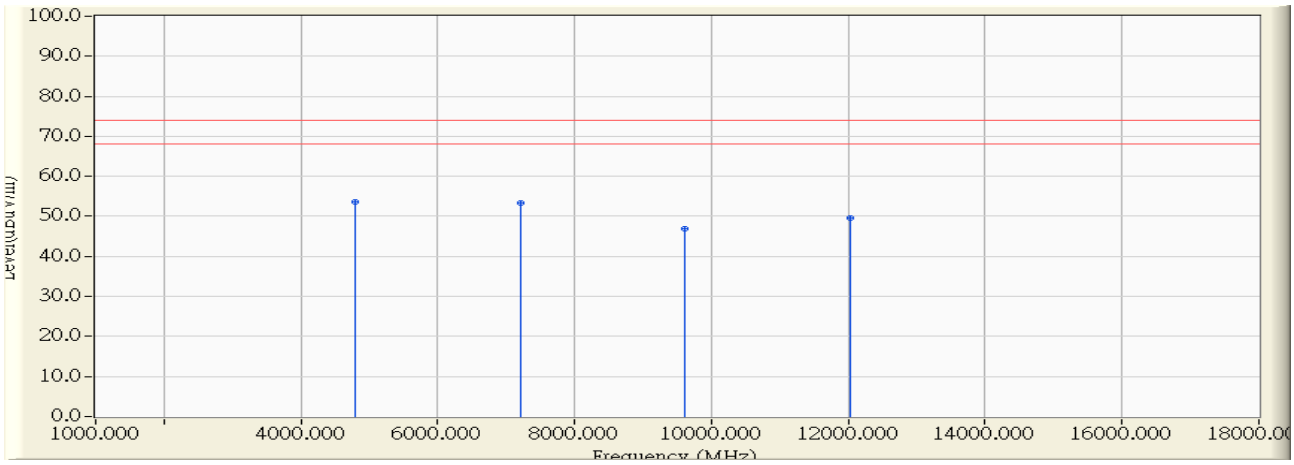


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-2.613	52.870	50.257	-23.743	74.000	PEAK
2	*	7206.000	5.866	47.550	53.417	-20.583	74.000	PEAK
3		9589.000	7.339	39.930	47.269	-26.731	74.000	PEAK
4		11999.000	10.411	40.100	50.510	-23.490	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 : CB1	**Time : 2016/11/19 - 23:39**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2402MHz**

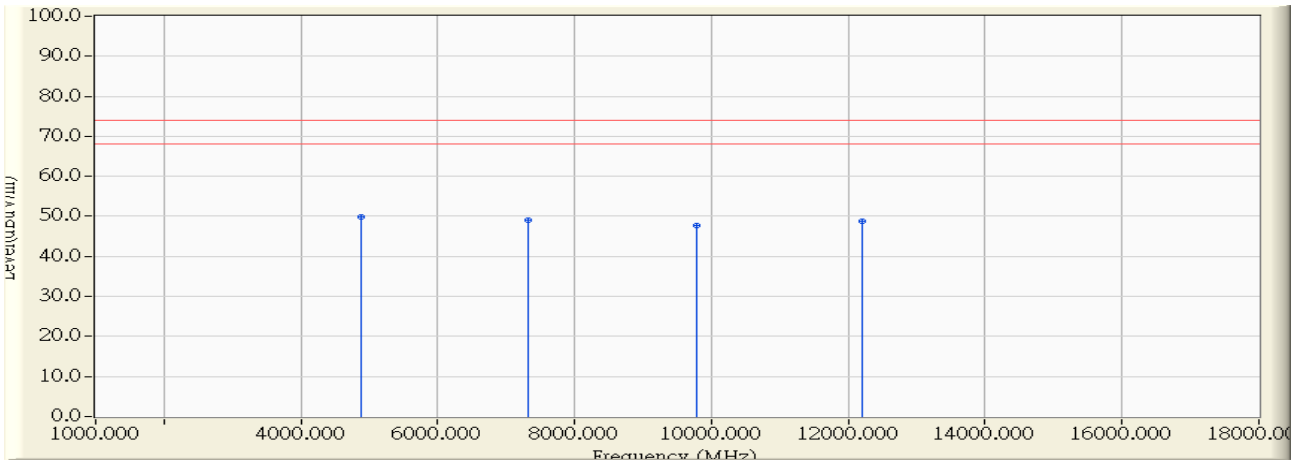


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4803.000	-1.666	55.360	53.694	-20.306	74.000	PEAK
2		7205.000	5.365	48.050	53.415	-20.585	74.000	PEAK
3		9607.000	7.001	39.980	46.981	-27.019	74.000	PEAK
4		12023.000	9.921	39.700	49.621	-24.379	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 : CB1	**Time : 2016/11/19 - 23:59**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2441MHz**

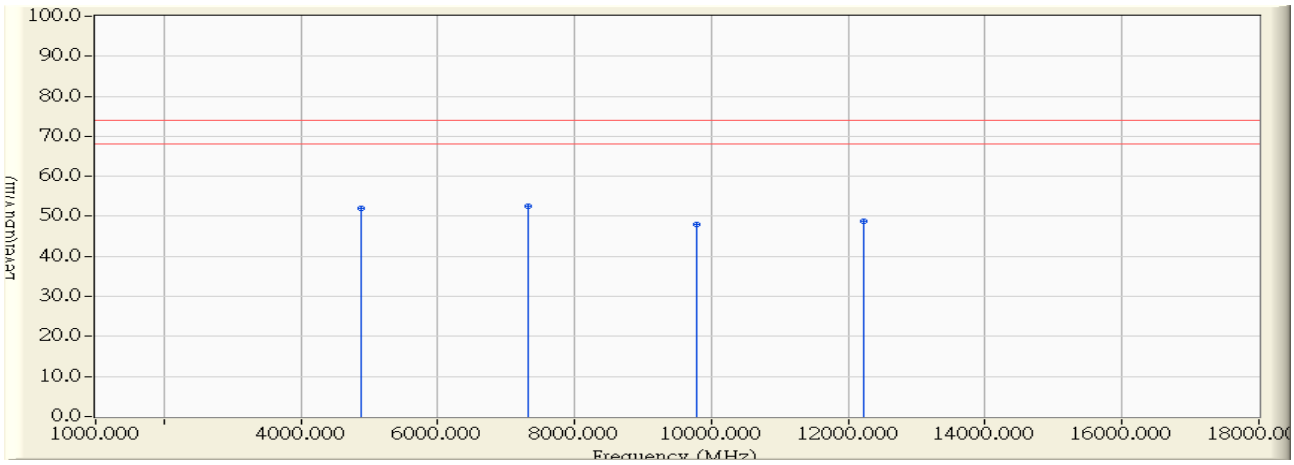


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-2.404	52.320	49.916	-24.084	74.000	PEAK
2		7322.000	6.095	42.850	48.945	-25.055	74.000	PEAK
3		9781.000	8.379	39.400	47.779	-26.221	74.000	PEAK
4		12211.000	10.157	38.540	48.697	-25.303	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 : CB1	**Time : 2016/11/20 - 00:06**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2441MHz**

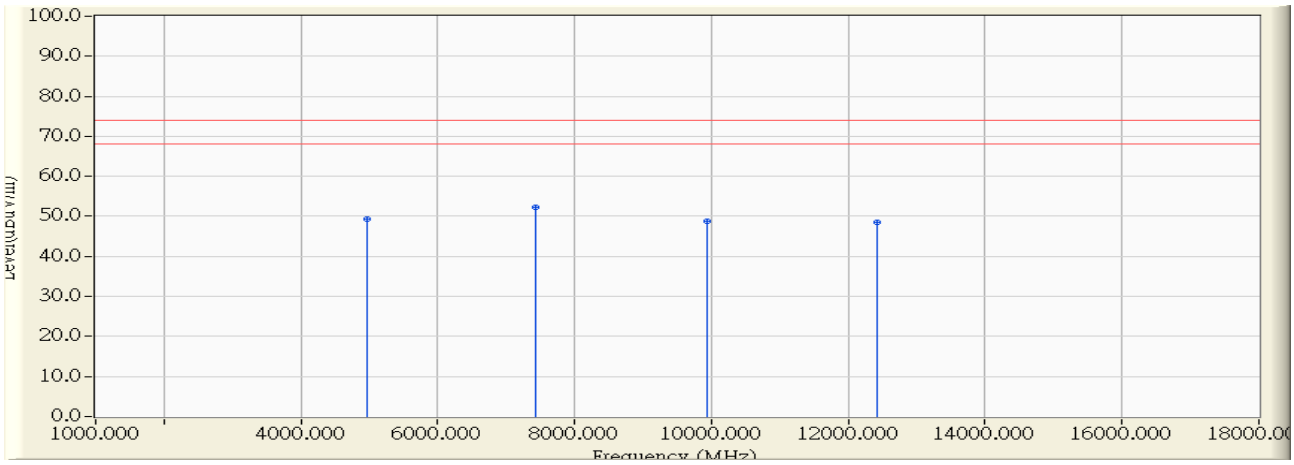


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4881.000	-1.652	53.720	52.068	-21.932	74.000	PEAK
2	*	7323.000	5.597	47.010	52.607	-21.393	74.000	PEAK
3		9781.000	8.379	39.720	48.099	-25.901	74.000	PEAK
4		12220.000	10.147	38.560	48.707	-25.293	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 : CB1	**Time : 2016/11/20 - 00:23**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2480MHz**

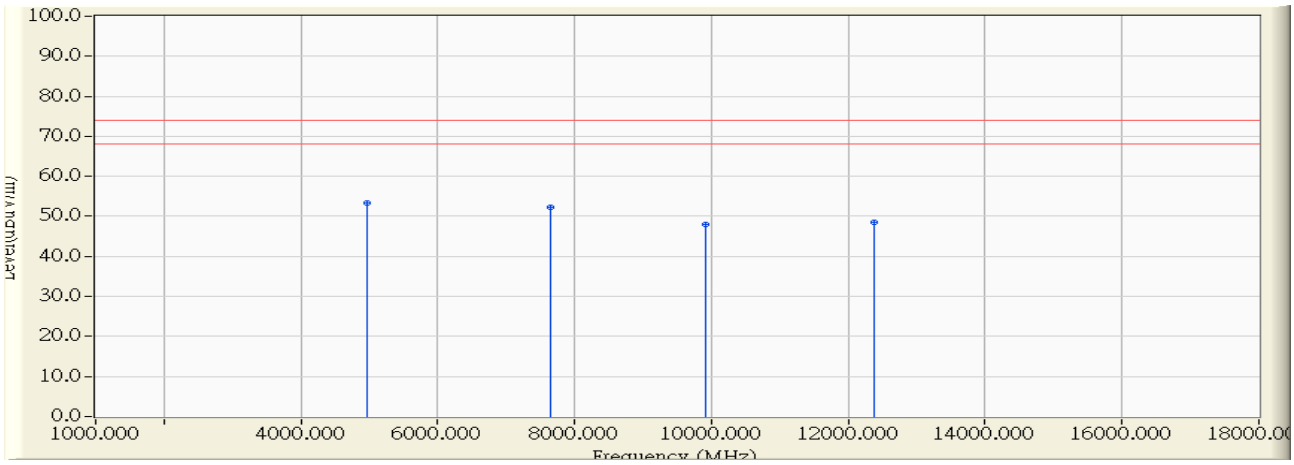


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4959.000	-2.197	51.440	49.243	-24.757	74.000	PEAK
2	*	7440.000	6.328	45.910	52.237	-21.763	74.000	PEAK
3		9934.000	9.207	39.590	48.798	-25.202	74.000	PEAK
4		12420.000	9.846	38.640	48.485	-25.515	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 : CB1	**Time : 2016/11/20 - 00:15**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2480MHz**

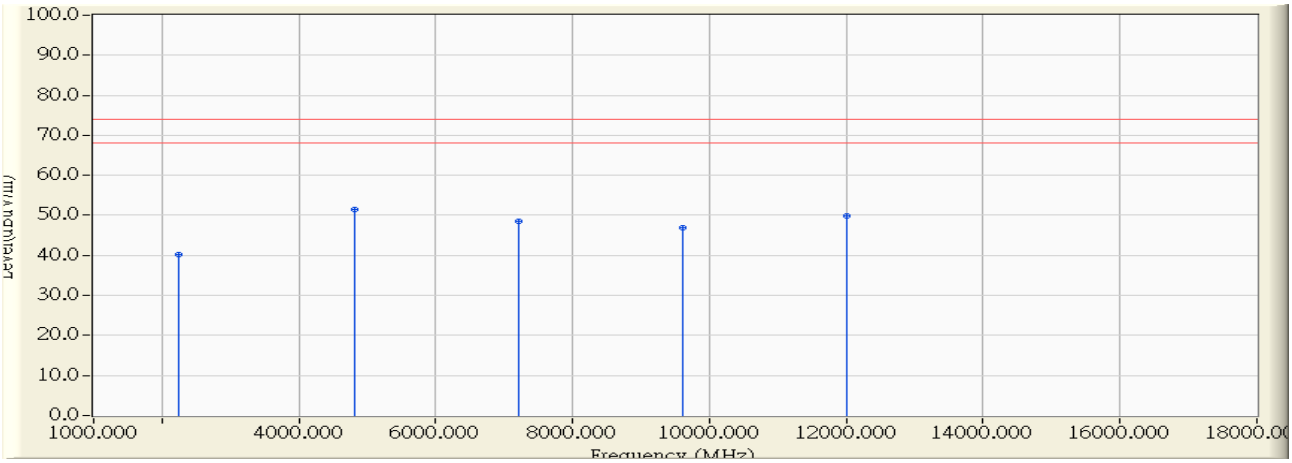


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4959.000	-1.637	54.950	53.313	-20.687	74.000	PEAK
2		7639.000	6.158	46.120	52.278	-21.722	74.000	PEAK
3		9919.000	8.222	39.700	47.922	-26.078	74.000	PEAK
4		12385.000	9.852	38.730	48.582	-25.418	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 : CB1	**Time : 2016/10/07 - 12:33**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2402MHz**

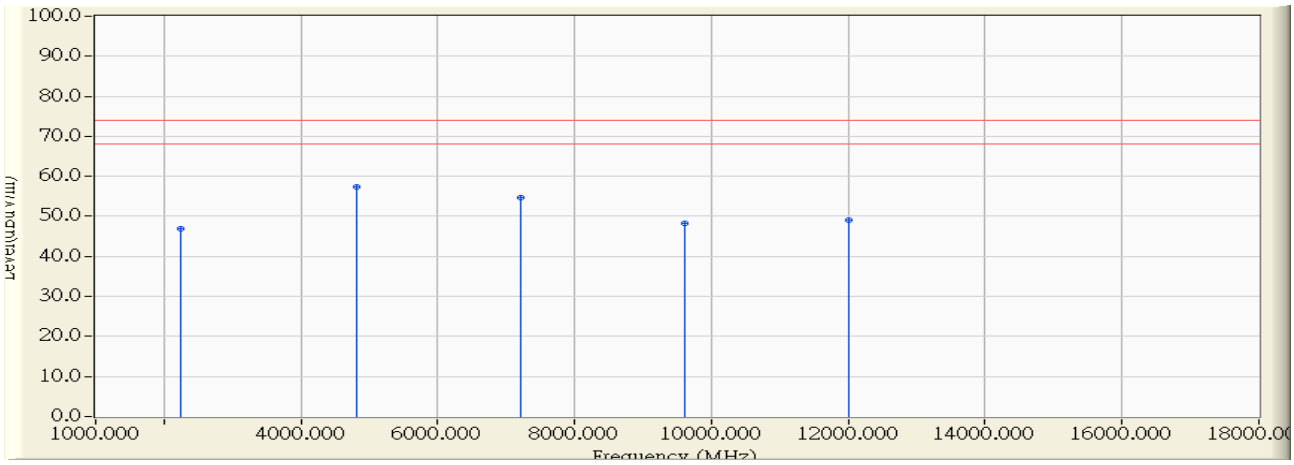


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2249.000	-6.457	46.560	40.103	-33.897	74.000	PEAK
2	*	4804.000	-1.666	53.250	51.584	-22.416	74.000	PEAK
3		7206.000	5.366	43.190	48.557	-25.443	74.000	PEAK
4		9608.000	7.004	39.790	46.795	-27.205	74.000	PEAK
5		12010.000	9.925	40.000	49.924	-24.076	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 : CB1	**Time : 2016/10/07 - 11:09**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2402MHz**

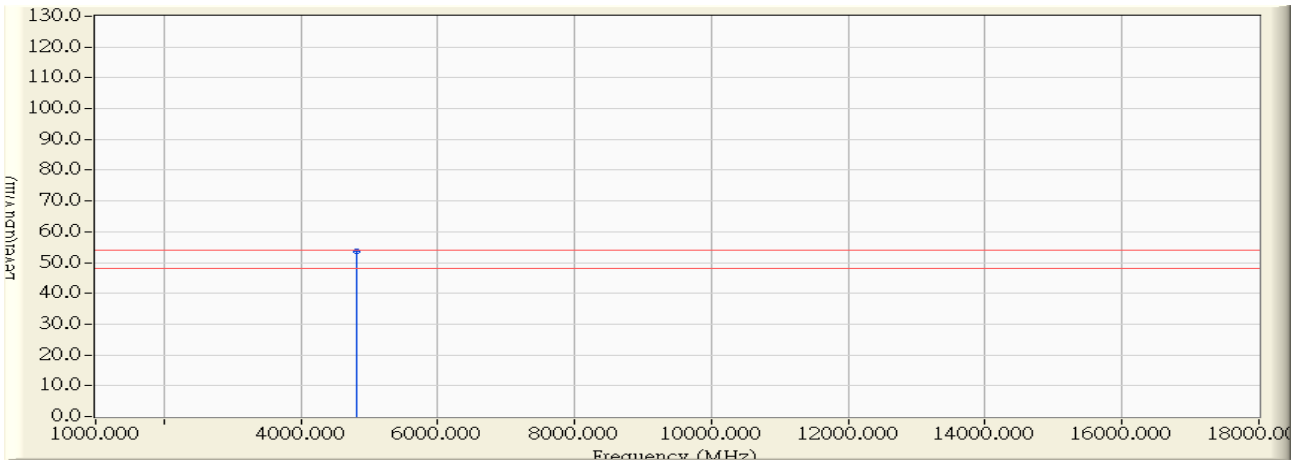


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2249.000	-6.457	53.420	46.963	-27.037	74.000	PEAK
2	*	4804.000	-1.666	59.080	57.414	-16.586	74.000	PEAK
3		7206.000	5.366	49.290	54.657	-19.343	74.000	PEAK
4		9607.000	7.001	41.340	48.341	-25.659	74.000	PEAK
5		12014.000	9.923	39.190	49.113	-24.887	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 : CB1	**Time : 2016/10/07 - 11:45**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2402MHz**

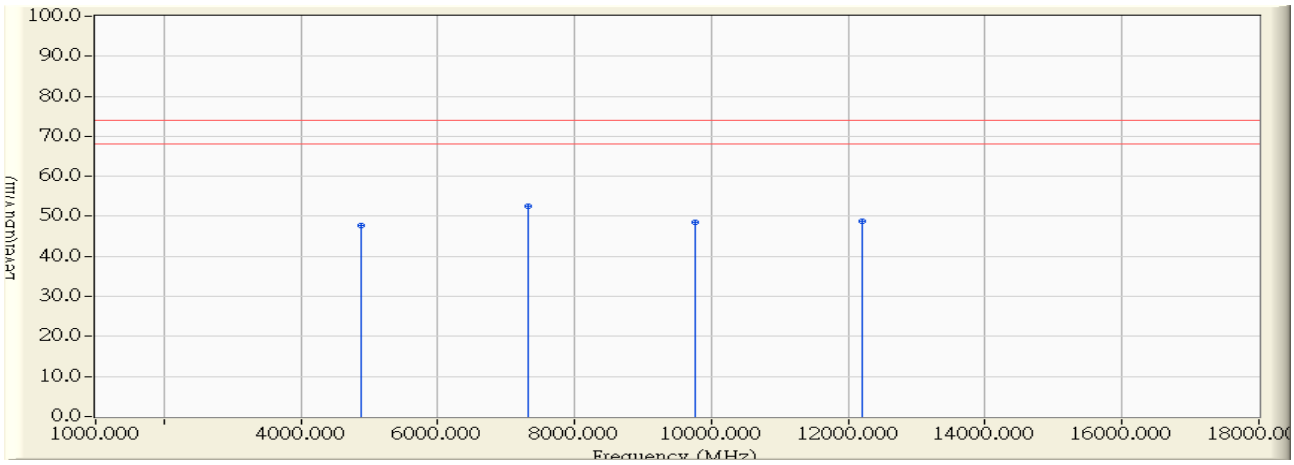


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4804.000	-1.666	55.260	53.594	-0.406	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 13:00**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2441MHz**

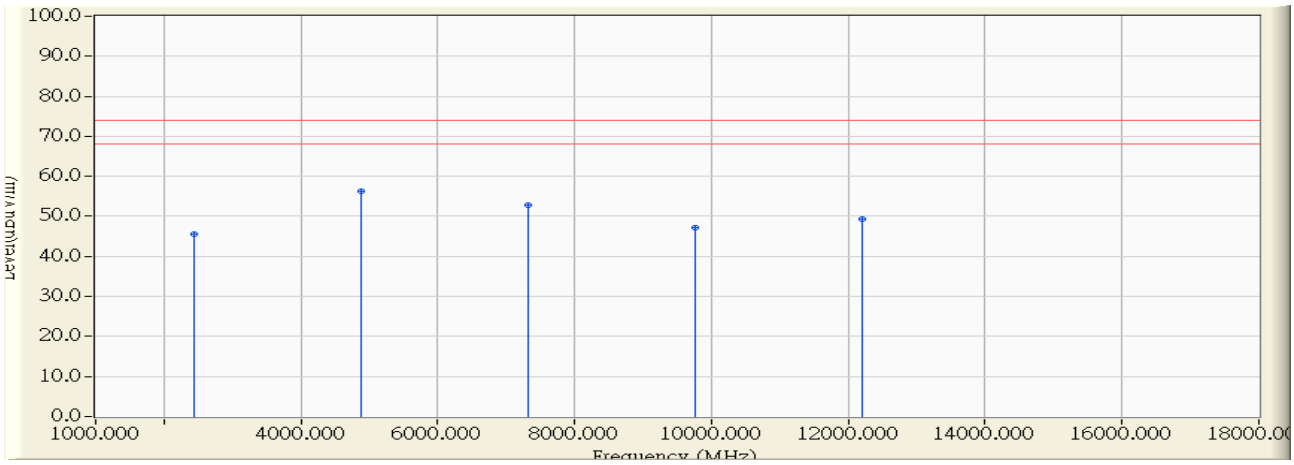


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-2.404	50.010	47.606	-26.394	74.000	PEAK
2	*	7322.000	6.095	46.540	52.635	-21.365	74.000	PEAK
3		9763.000	8.281	40.120	48.401	-25.599	74.000	PEAK
4		12201.000	10.169	38.580	48.749	-25.251	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 : CB1	**Time : 2016/10/07 - 13:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2441MHz**

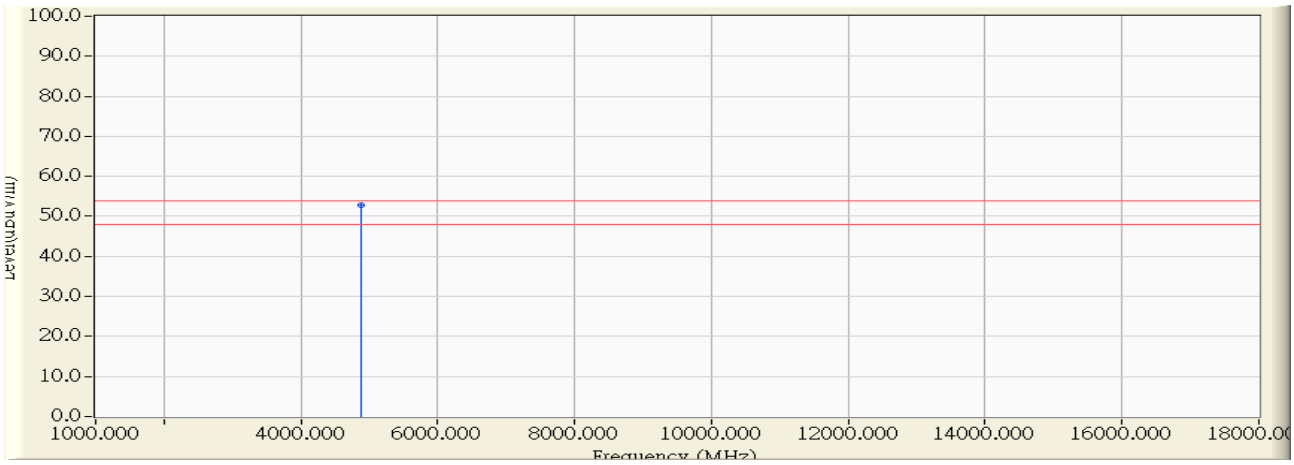


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2445.000	-4.176	49.720	45.545	-28.455	74.000	PEAK
2	*	4884.000	-1.652	57.910	56.259	-17.741	74.000	PEAK
3		7322.000	5.595	47.220	52.815	-21.185	74.000	PEAK
4		9764.000	7.615	39.490	47.105	-26.895	74.000	PEAK
5		12205.000	9.887	39.360	49.246	-24.754	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 : CB1	**Time : 2016/10/07 - 13:14**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2441MHz**

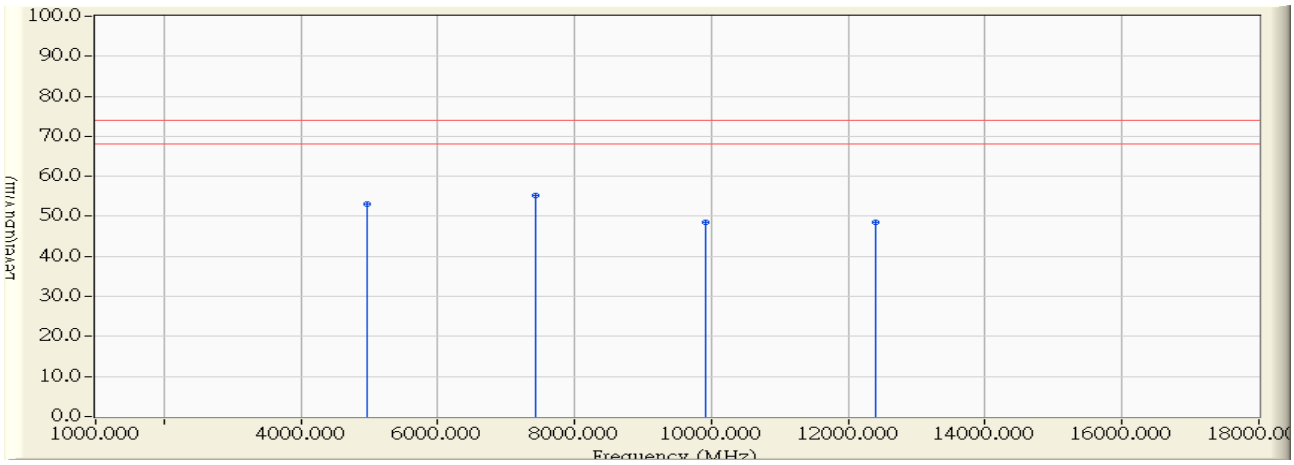


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4884.000	-1.651	54.560	52.909	-1.091	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 14:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2480MHz**

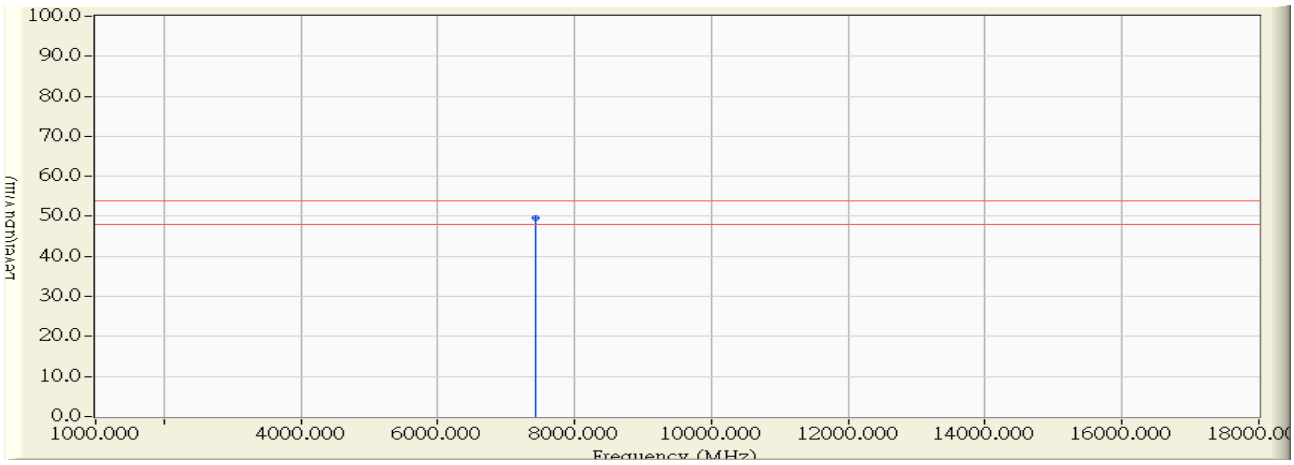


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-2.195	55.390	53.195	-20.805	74.000	PEAK
2	*	7440.000	6.328	48.850	55.177	-18.823	74.000	PEAK
3		9920.000	9.132	39.300	48.432	-25.568	74.000	PEAK
4		12400.000	9.933	38.680	48.612	-25.388	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 : CB1	**Time : 2016/10/07 - 19:55**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2480MHz**

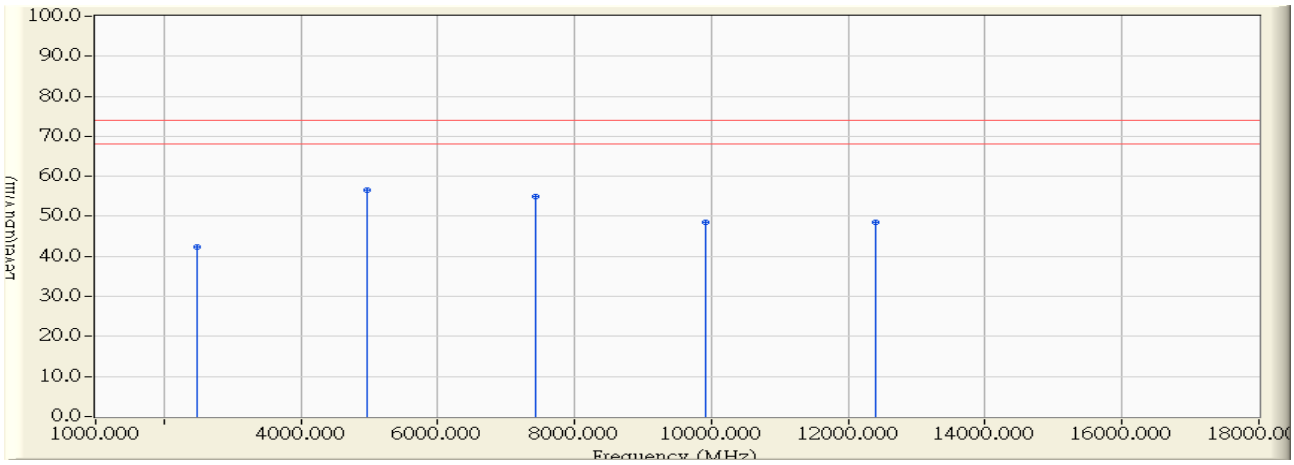


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7440.000	6.328	43.150	49.477	-4.523	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 13:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2480MHz**

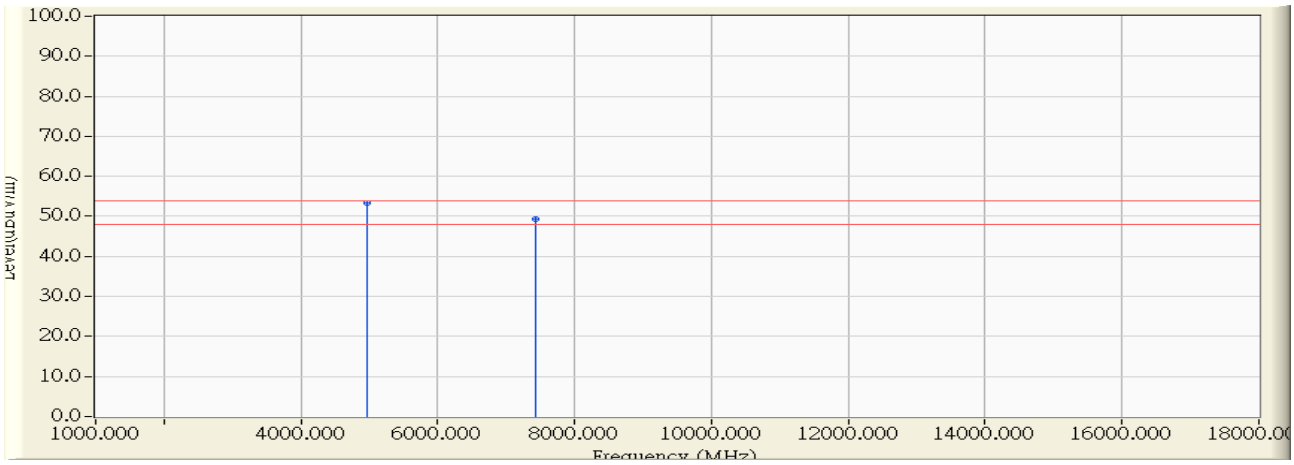


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2479.000	-3.779	46.120	42.340	-31.660	74.000	PEAK
2	*	4959.000	-1.637	58.250	56.613	-17.387	74.000	PEAK
3		7440.000	5.828	49.100	54.927	-19.073	74.000	PEAK
4		9919.000	8.222	40.410	48.632	-25.368	74.000	PEAK
5		12396.000	9.849	38.680	48.530	-25.470	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 : CB1	**Time : 2016/10/07 - 13:30**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2480MHz**

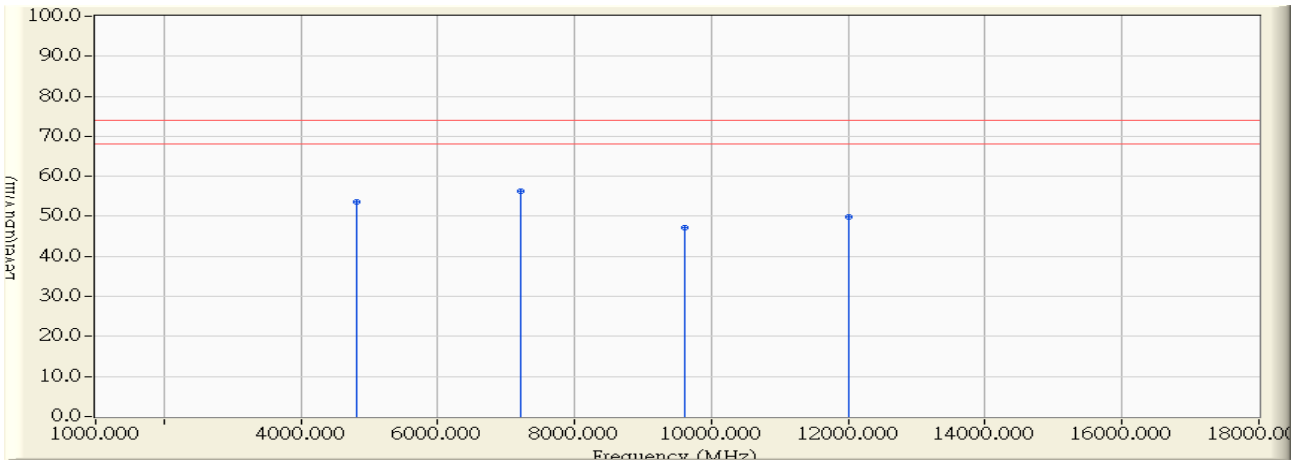


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4959.000	-1.638	54.920	53.283	-0.717	54.000	AVERAGE
2		7440.000	5.828	43.410	49.237	-4.763	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 14:28**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

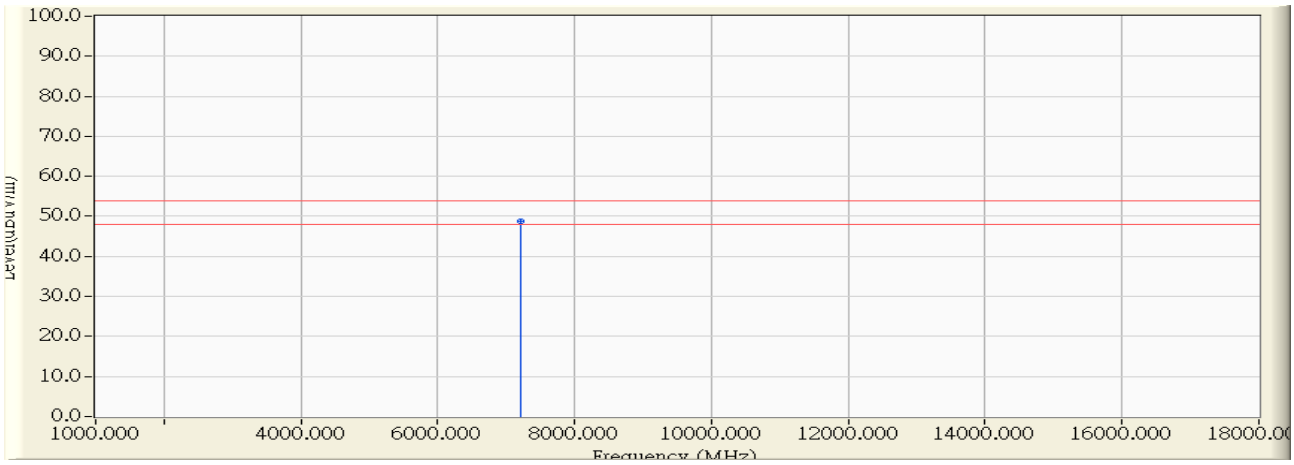


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-2.613	56.280	53.667	-20.333	74.000	PEAK
2	*	7206.000	5.866	50.440	56.307	-17.693	74.000	PEAK
3		9605.000	7.426	39.670	47.096	-26.904	74.000	PEAK
4		12010.000	10.398	39.460	49.857	-24.143	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 : CB1	**Time : 2016/10/07 - 14:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

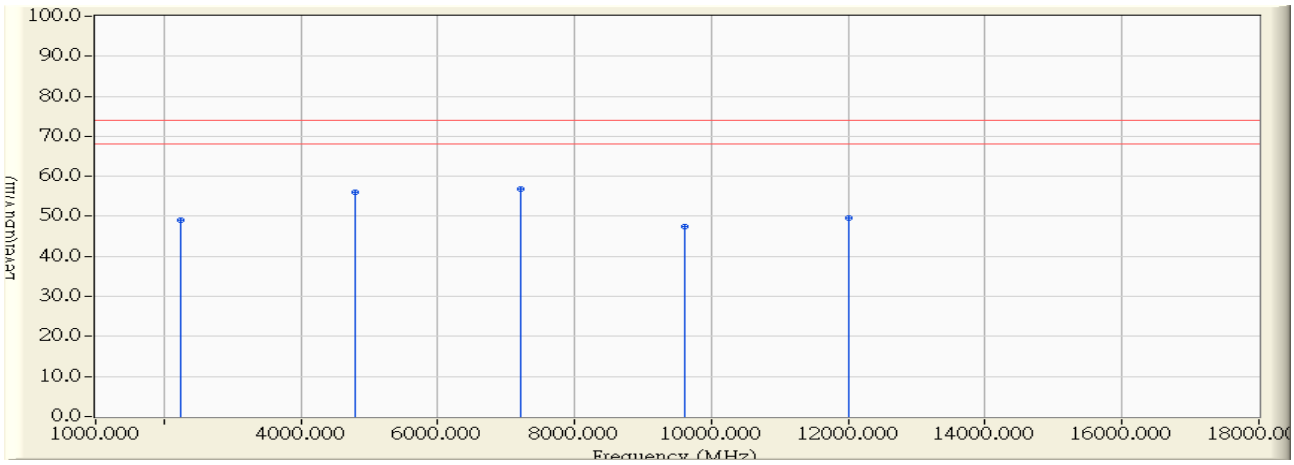


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7206.000	5.866	42.880	48.747	-5.253	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 14:44**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

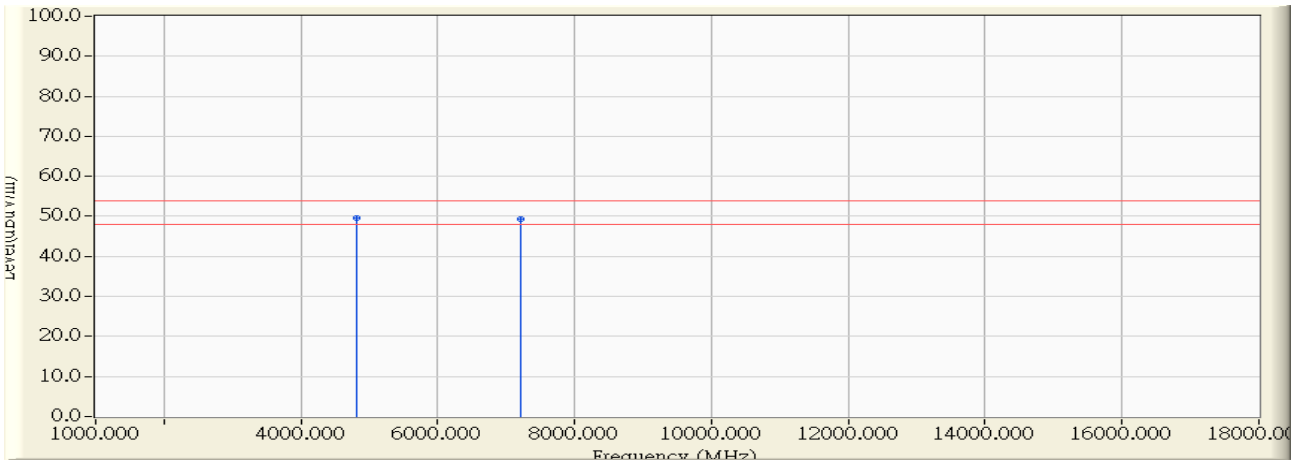


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2249.000	-6.457	55.430	48.973	-25.027	74.000	PEAK
2		4803.000	-1.666	57.820	56.154	-17.846	74.000	PEAK
3	*	7205.000	5.365	51.600	56.965	-17.035	74.000	PEAK
4		9607.000	7.001	40.470	47.471	-26.529	74.000	PEAK
5		12006.000	9.924	39.710	49.635	-24.365	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 : CB1	**Time : 2016/10/07 - 14:45**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

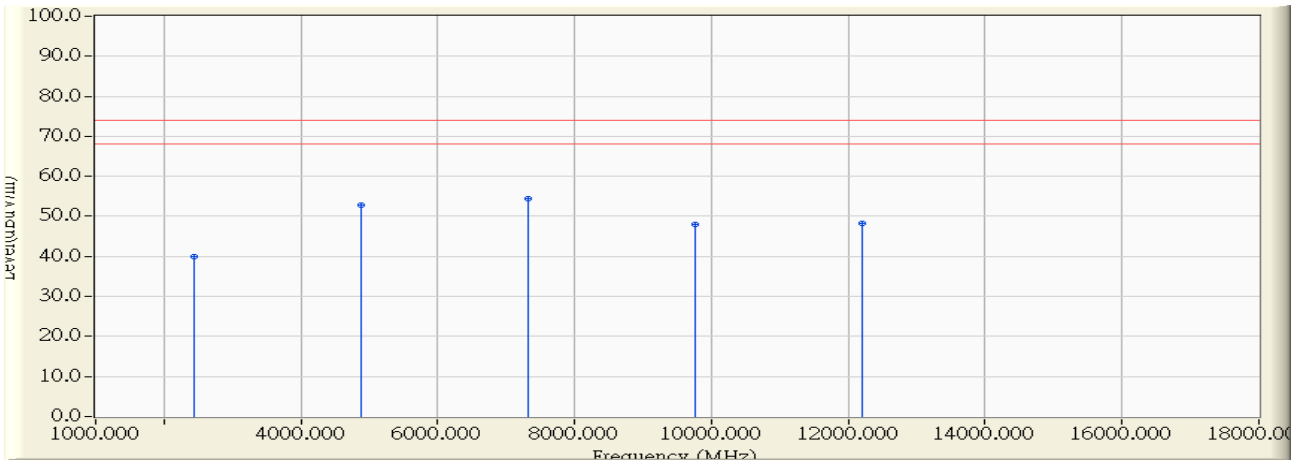


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4803.000	-1.666	51.190	49.524	-4.476	54.000	AVERAGE
2		7205.000	5.365	44.090	49.455	-4.545	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 15:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2441MHz**

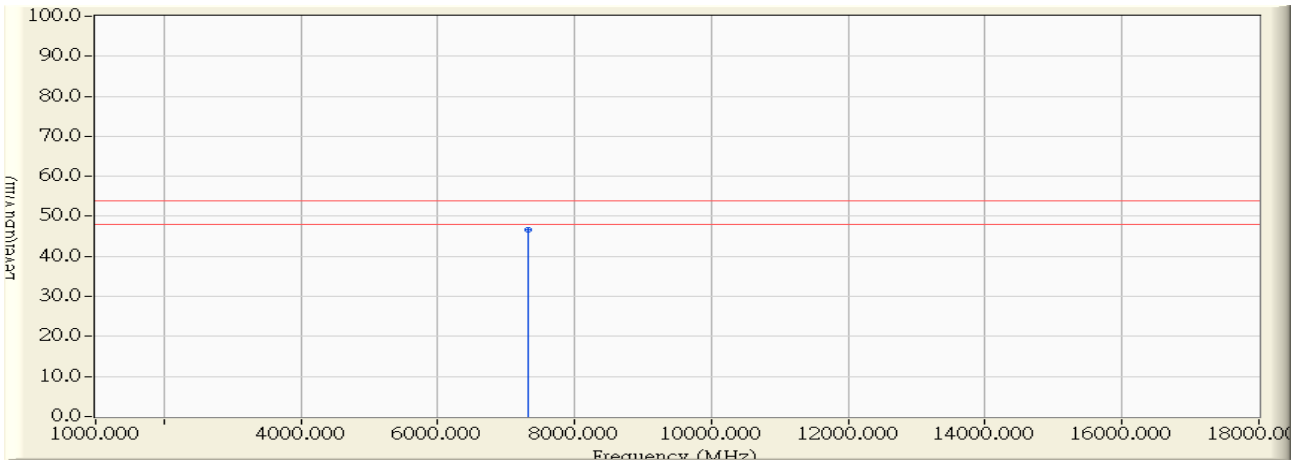


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2445.000	-5.100	45.170	40.071	-33.929	74.000	PEAK
2		4884.000	-2.399	55.210	52.811	-21.189	74.000	PEAK
3	*	7322.000	6.095	48.390	54.485	-19.515	74.000	PEAK
4		9769.000	8.314	39.570	47.884	-26.116	74.000	PEAK
5		12209.000	10.160	38.130	48.290	-25.710	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 : CB1	**Time : 2016/10/07 - 15:17**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2441MHz**

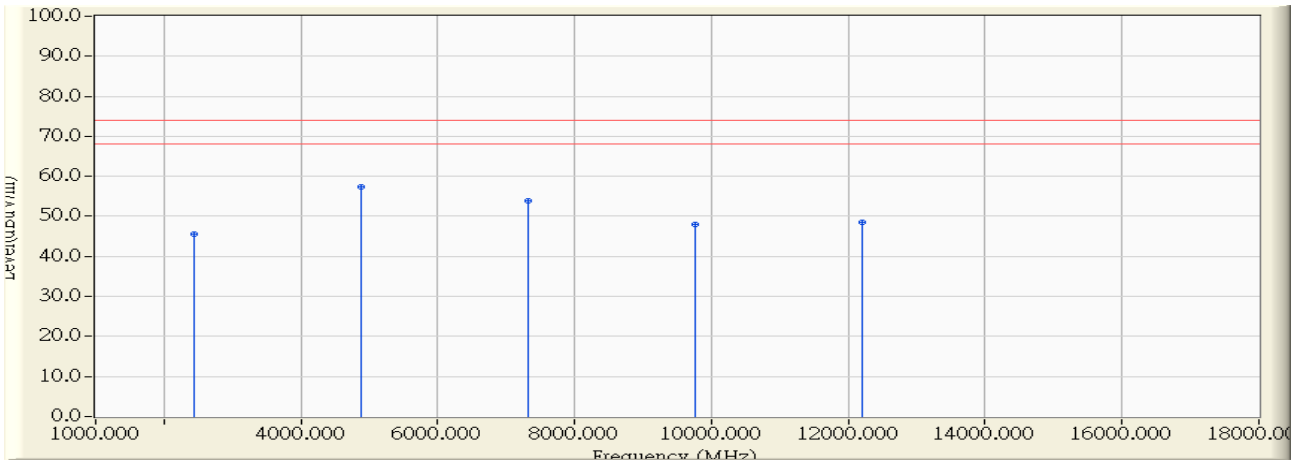


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7322.000	6.095	40.460	46.555	-7.445	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 15:01**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2441MHz**

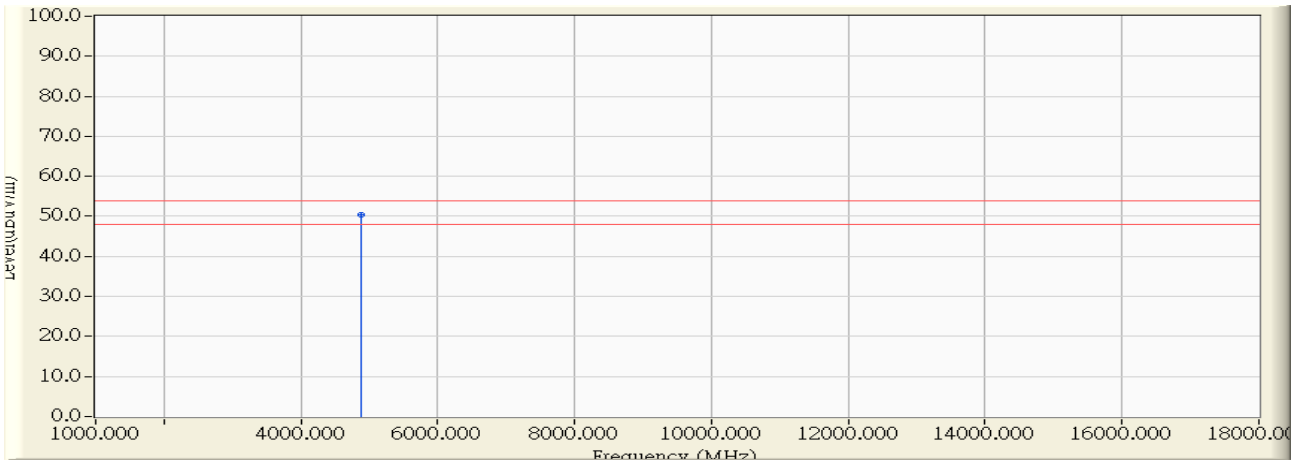


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2445.000	-4.176	49.790	45.615	-28.385	74.000	PEAK
2	*	4882.000	-1.651	58.900	57.249	-16.751	74.000	PEAK
3		7322.000	5.595	48.300	53.895	-20.105	74.000	PEAK
4		9764.000	7.615	40.410	48.025	-25.975	74.000	PEAK
5		12202.000	9.887	38.700	48.587	-25.413	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 : CB1	**Time : 2016/10/07 - 15:04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2441MHz**

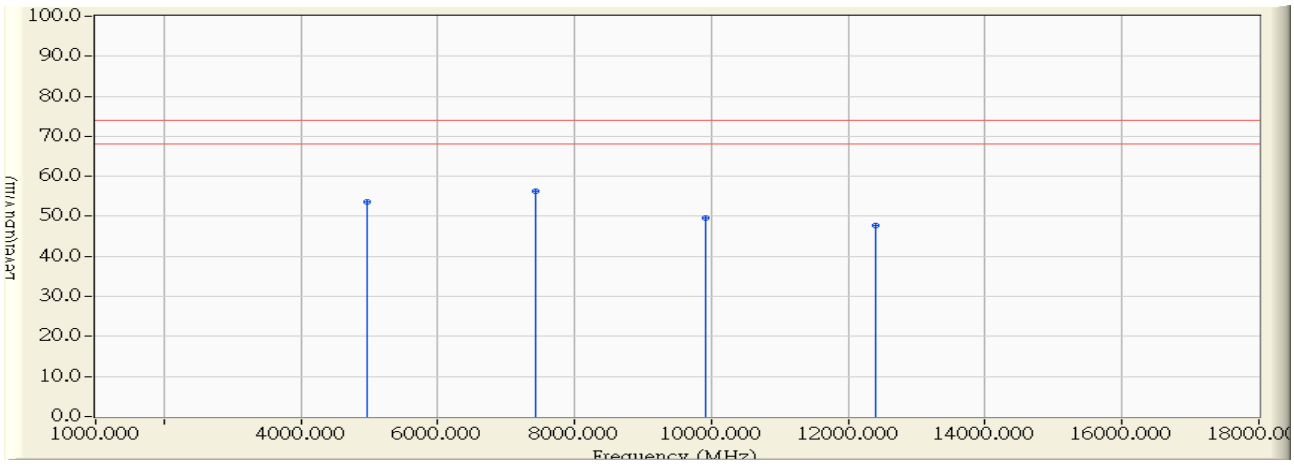


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-1.651	51.960	50.309	-3.691	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 15:34**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2480MHz**

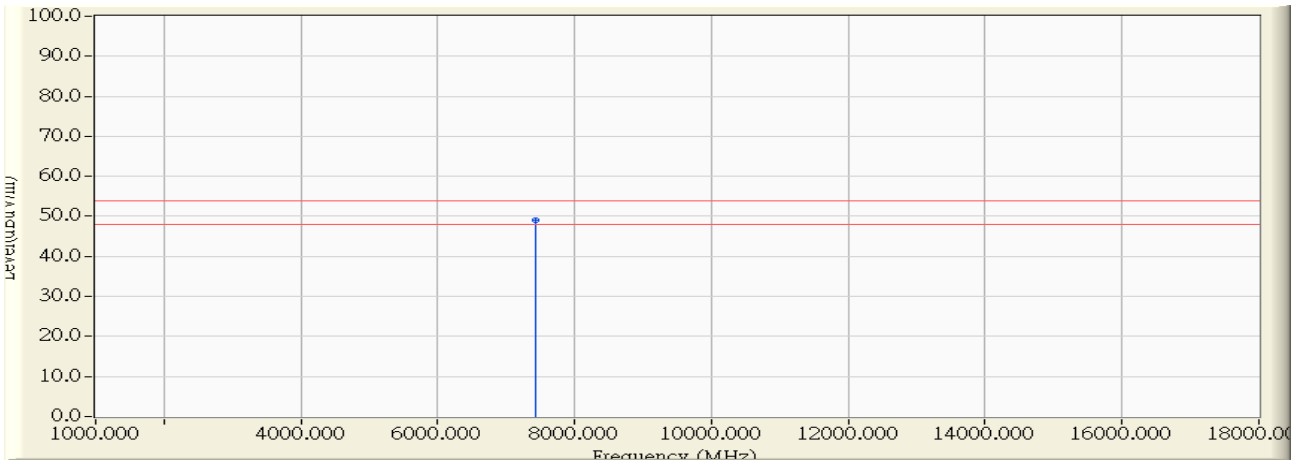


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4959.000	-2.197	55.890	53.693	-20.307	74.000	PEAK
2	*	7440.000	6.328	49.900	56.227	-17.773	74.000	PEAK
3		9920.000	9.132	40.460	49.592	-24.408	74.000	PEAK
4		12399.000	9.934	37.920	47.853	-26.147	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 : CB1	**Time : 2016/10/07 - 15:38**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2480MHz**

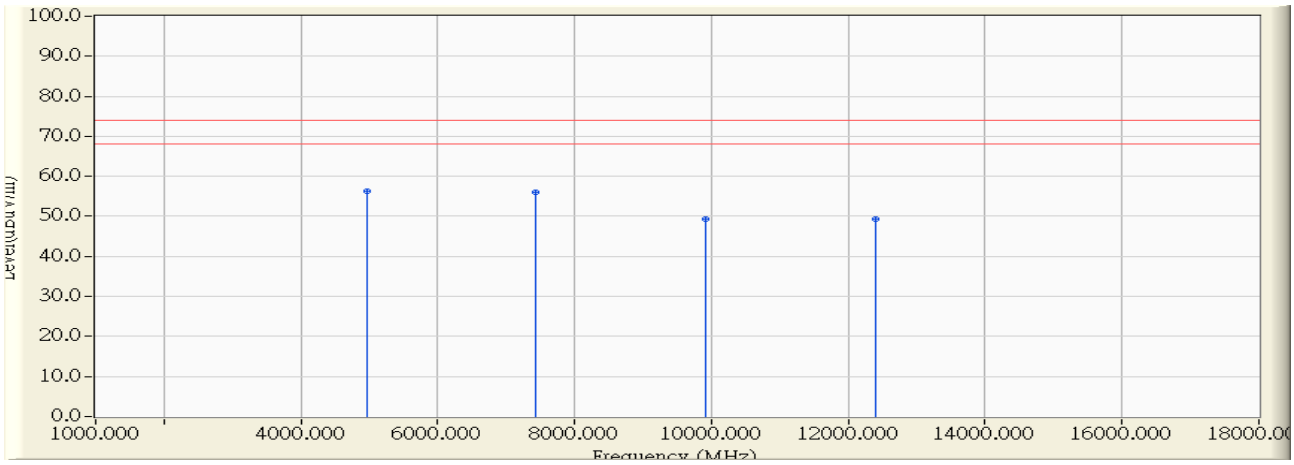


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7440.000	6.328	42.680	49.007	-4.993	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 16:01**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2480MHz**

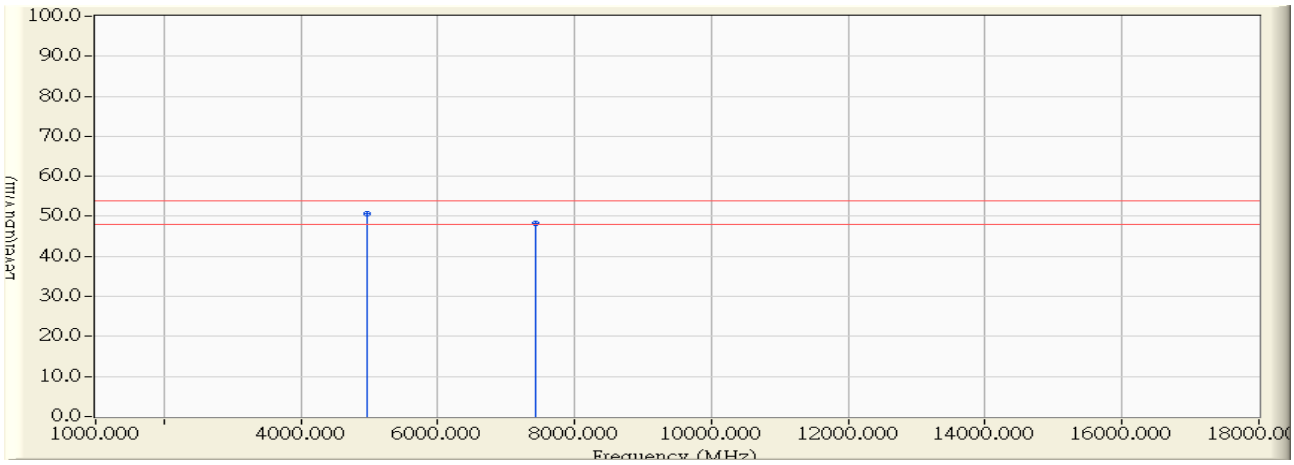


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4959.000	-1.637	57.910	56.273	-17.727	74.000	PEAK
2		7439.000	5.826	50.250	56.075	-17.925	74.000	PEAK
3		9919.000	8.222	41.110	49.332	-24.668	74.000	PEAK
4		12400.000	9.850	39.480	49.329	-24.671	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 : CB1	**Time : 2016/10/07 - 16:02**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2480MHz**

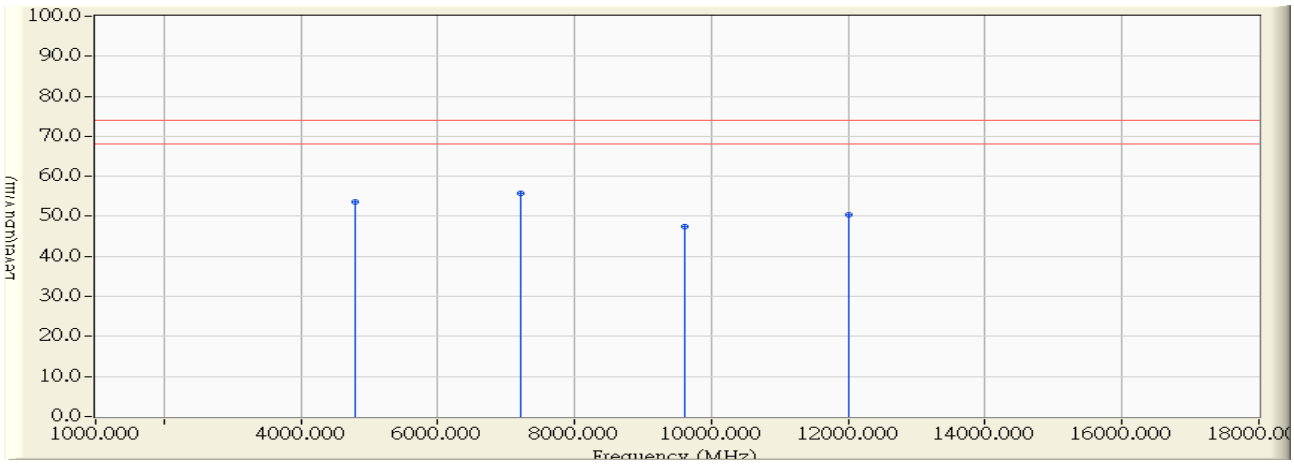


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4959.000	-1.637	52.250	50.613	-3.387	54.000	AVERAGE
2		7439.000	5.826	42.520	48.345	-5.655	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 16:39**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

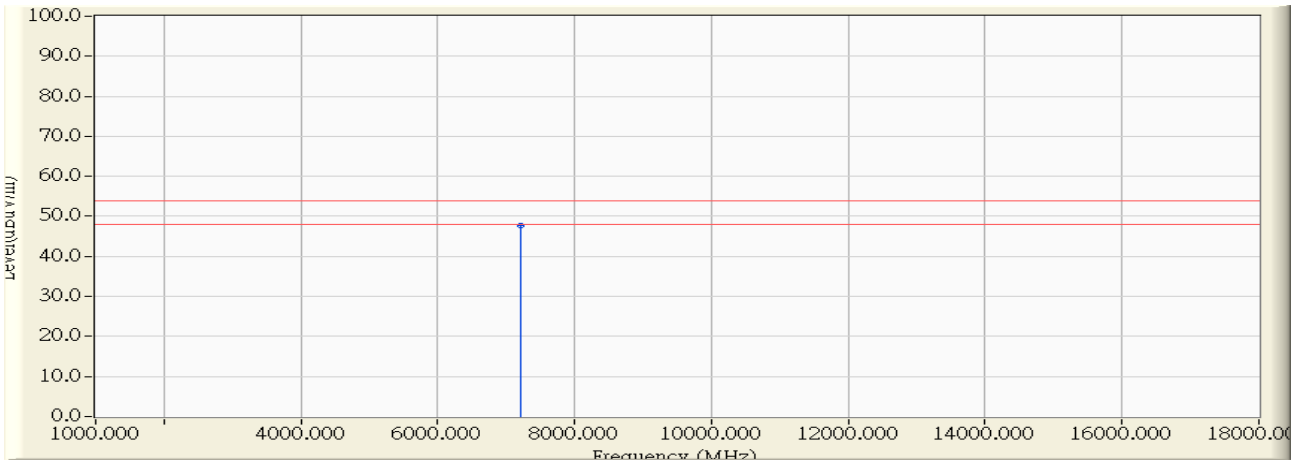


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4803.000	-2.616	56.240	53.624	-20.376	74.000	PEAK
2	*	7205.000	5.865	49.880	55.745	-18.255	74.000	PEAK
3		9608.000	7.442	39.930	47.372	-26.628	74.000	PEAK
4		12011.000	10.395	39.900	50.296	-23.704	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 : CB1	**Time : 2016/10/07 - 16:40**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

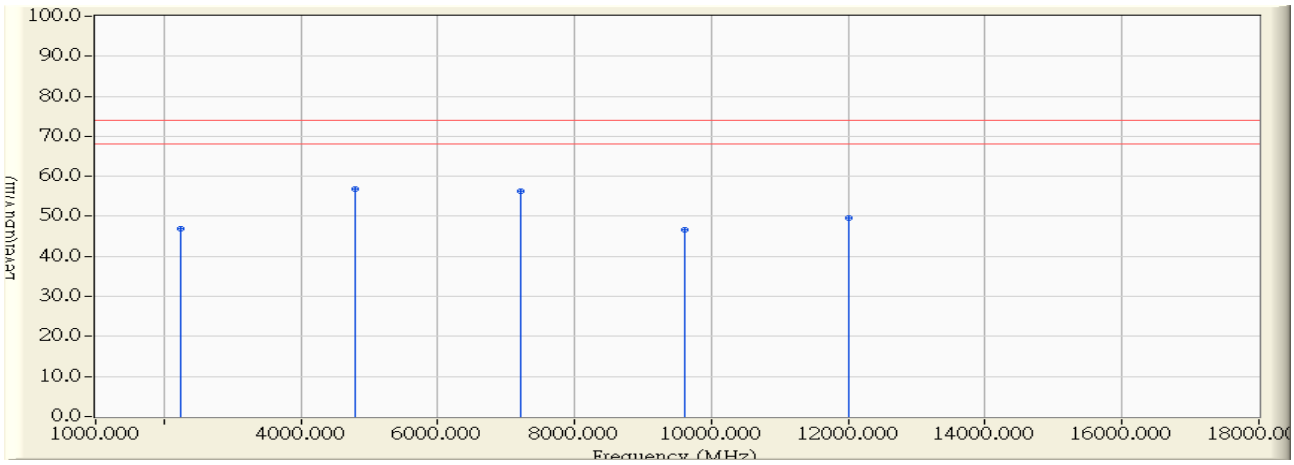


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7205.000	5.866	41.780	47.647	-6.353	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 16:20**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

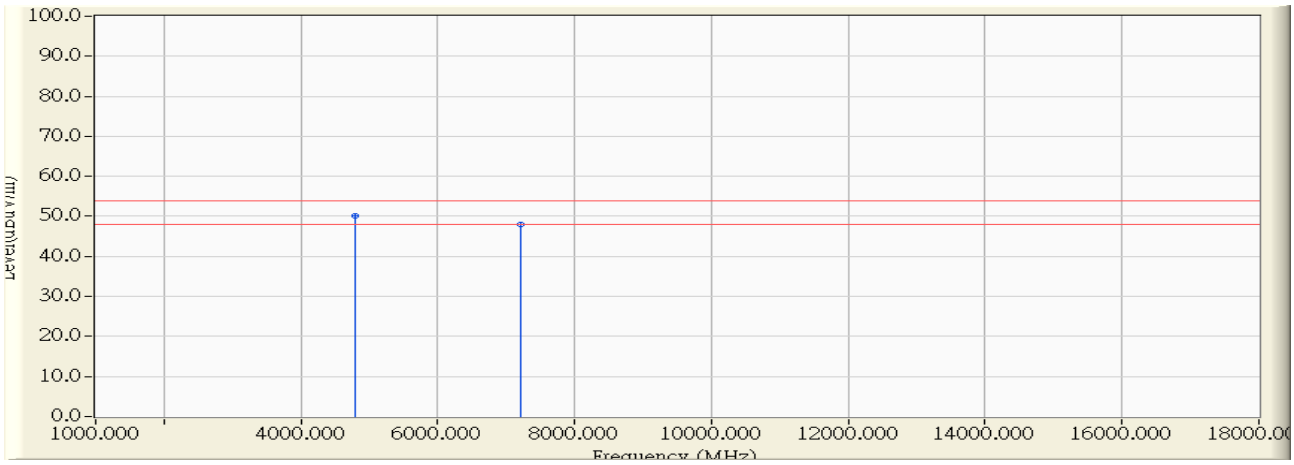


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2249.000	-6.457	53.410	46.953	-27.047	74.000	PEAK
2	*	4803.000	-1.666	58.390	56.724	-17.276	74.000	PEAK
3		7206.000	5.366	51.040	56.407	-17.593	74.000	PEAK
4		9605.000	6.993	39.780	46.773	-27.227	74.000	PEAK
5		12013.000	9.923	39.610	49.533	-24.467	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 : CB1	**Time : 2016/10/07 - 16:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

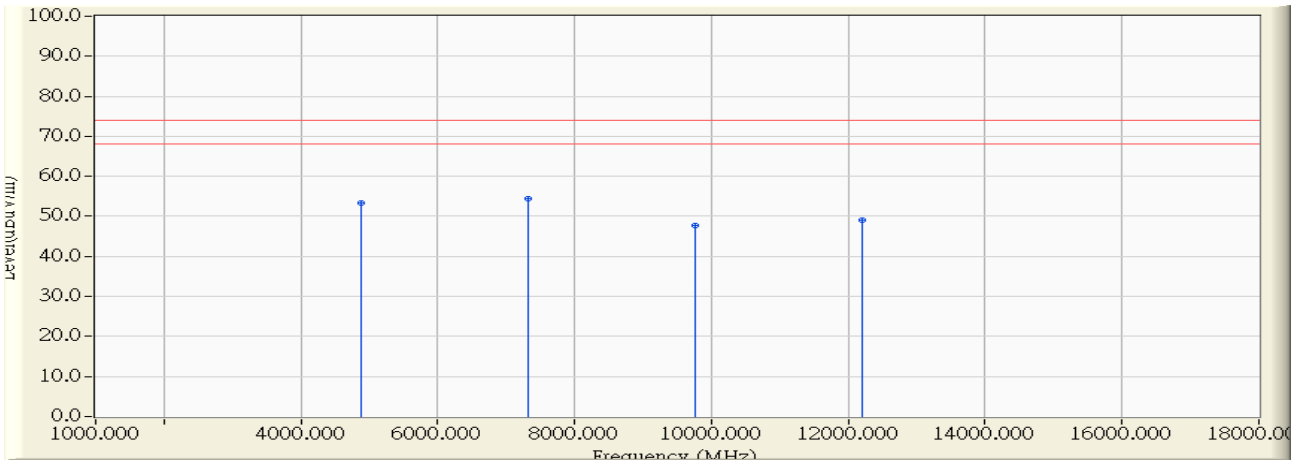


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4803.000	-1.666	51.730	50.064	-3.936	54.000	AVERAGE
2		7206.000	5.366	42.540	47.907	-6.093	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 17:19**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2441MHz**

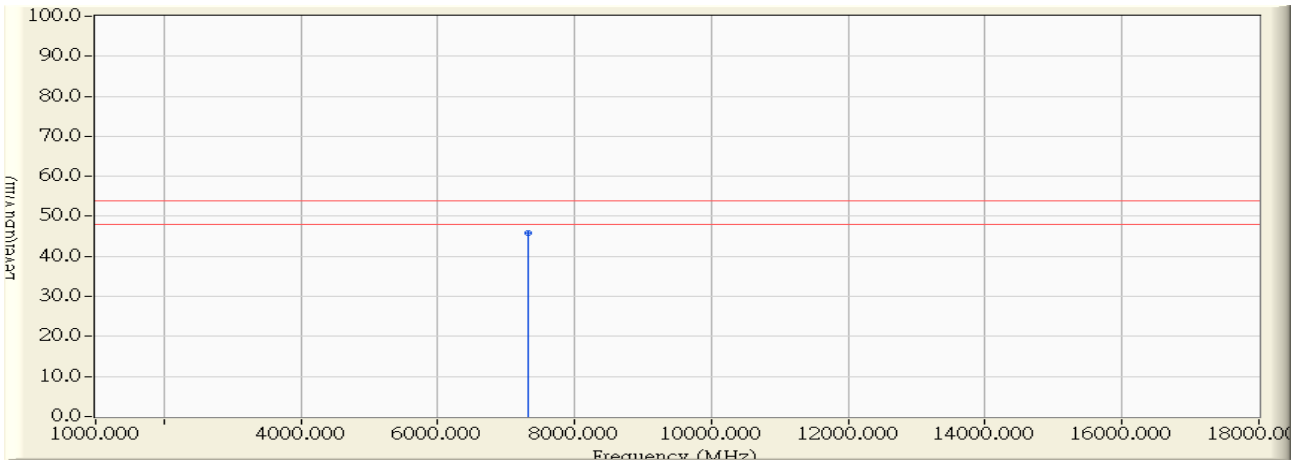


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-2.404	55.810	53.406	-20.594	74.000	PEAK
2	*	7323.000	6.097	48.420	54.517	-19.483	74.000	PEAK
3		9764.000	8.287	39.330	47.617	-26.383	74.000	PEAK
4		12209.000	10.160	38.770	48.930	-25.070	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 : CB1	**Time : 2016/10/07 - 17:19**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2441MHz**

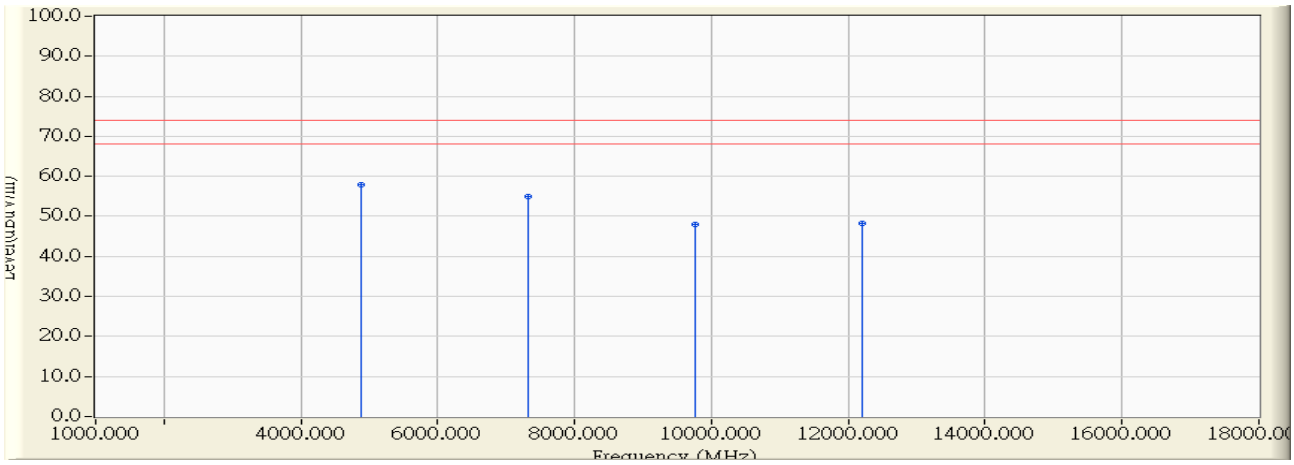


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7323.000	6.097	39.680	45.777	-8.223	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 17:20**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2441MHz**

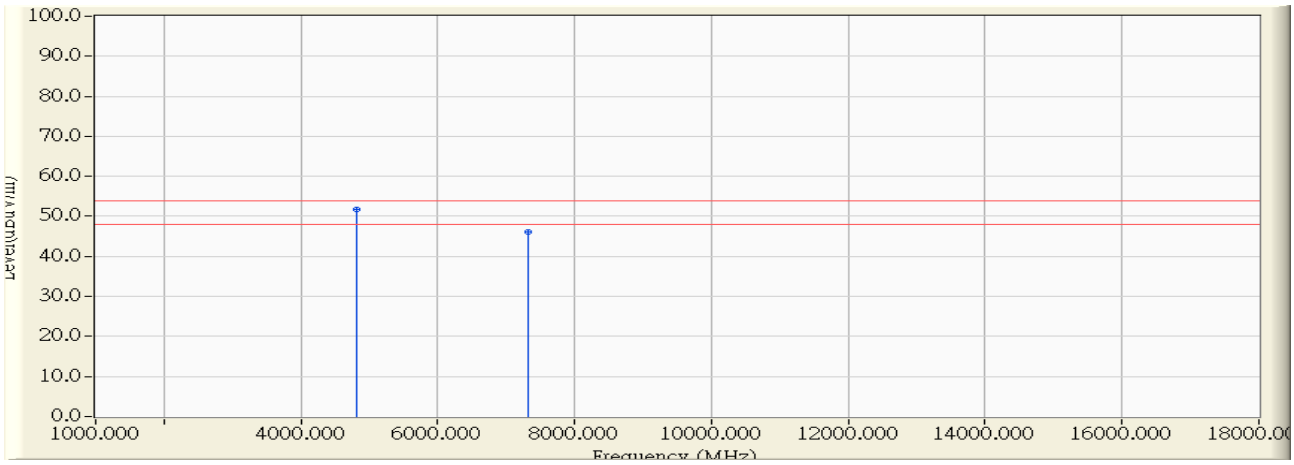


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4882.000	-1.651	59.640	57.989	-16.011	74.000	PEAK
2		7322.000	5.595	49.290	54.885	-19.115	74.000	PEAK
3		9764.000	7.615	40.350	47.965	-26.035	74.000	PEAK
4		12200.000	9.888	38.490	48.377	-25.623	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 : CB1	**Time : 2016/10/07 - 17:21**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2441MHz**

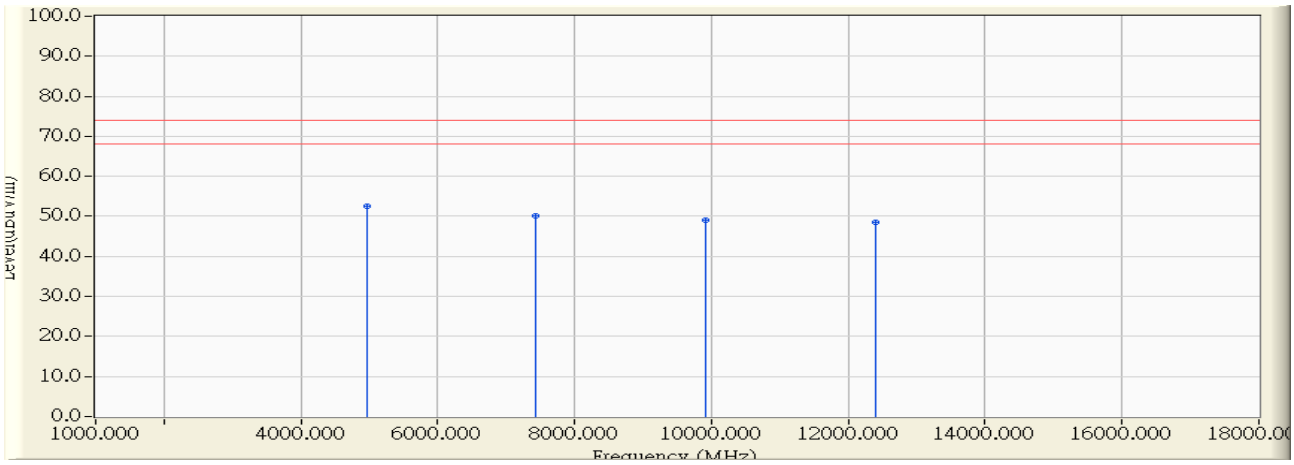


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4822.000	-1.662	53.330	51.668	-22.332	74.000	AVERAGE
2	*	7322.000	5.595	40.640	46.235	-7.765	54.000	AVERAGE

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 : CB1	**Time : 2016/10/07 - 17:40**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2480MHz**

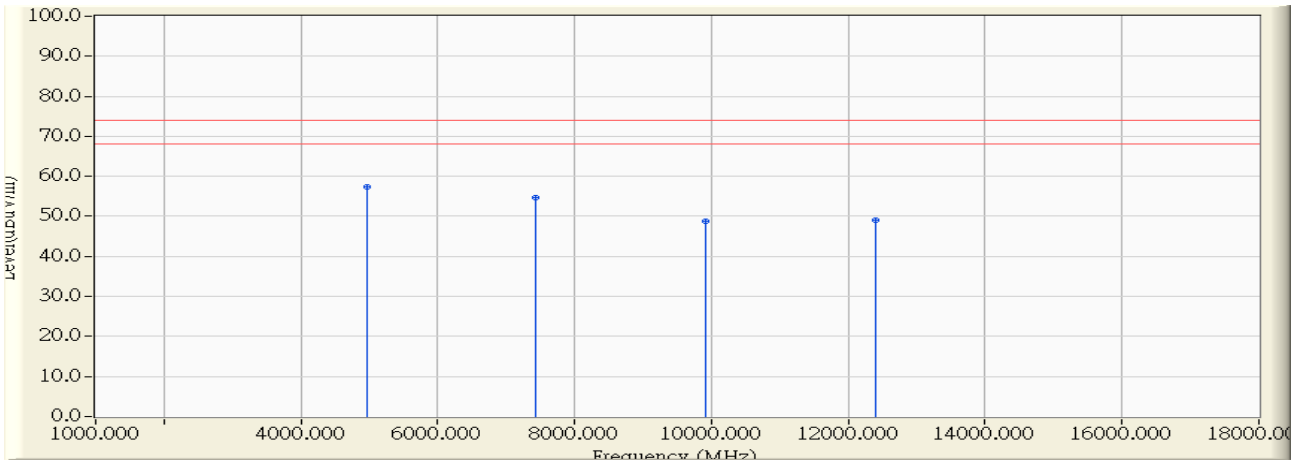


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4959.000	-2.197	54.830	52.633	-21.367	74.000	PEAK
2		7440.000	6.328	43.790	50.117	-23.883	74.000	PEAK
3		9919.000	9.126	39.880	49.006	-24.994	74.000	PEAK
4		12404.000	9.927	38.480	48.407	-25.593	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 : CB1	**Time : 2016/10/07 - 17:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2480MHz**

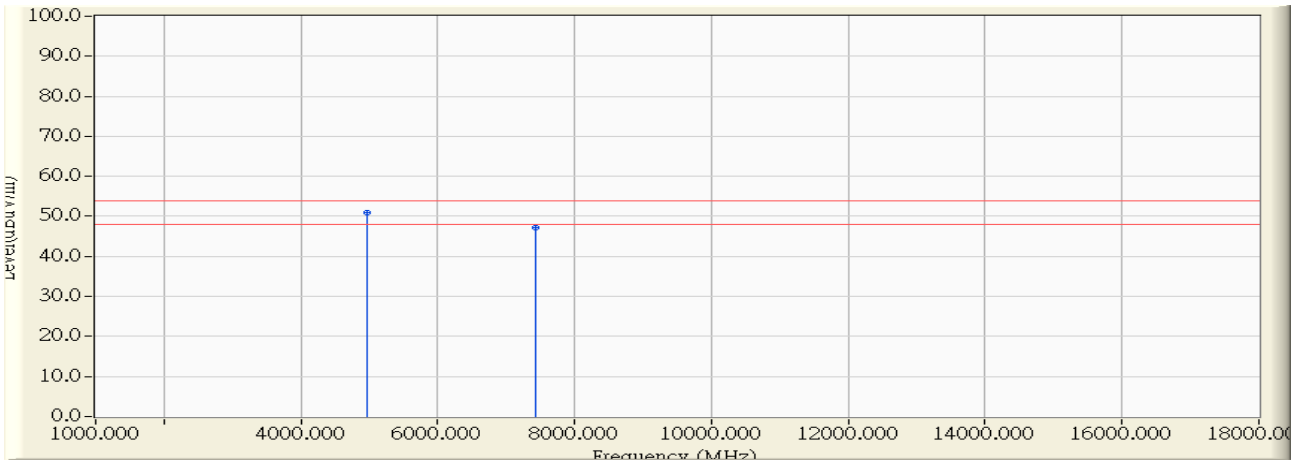


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4960.000	-1.638	59.050	57.413	-16.587	74.000	PEAK
2	*	7440.000	5.828	48.890	54.717	-19.283	74.000	PEAK
3		9920.000	8.227	40.660	48.886	-25.114	74.000	PEAK
4		12404.000	9.848	39.120	48.968	-25.032	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 : CB1	**Time : 2016/10/07 - 17:26**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	4960.000	-1.638	52.660	51.023	-2.977	54.000	AVERAGE
2		7440.000	5.828	41.430	47.257	-6.743	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:

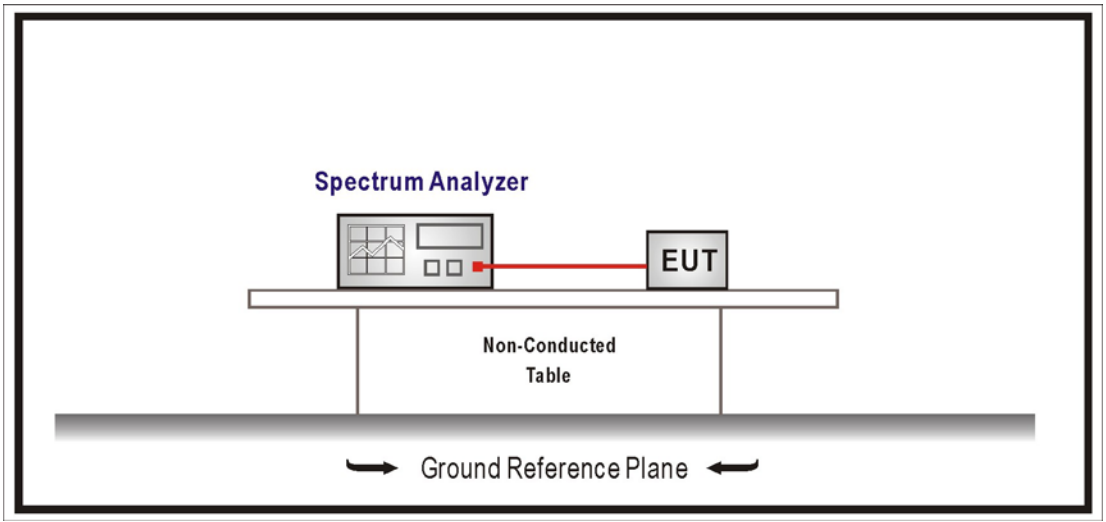
RF antenna conducted test / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments 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 KDB 558074 D01 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

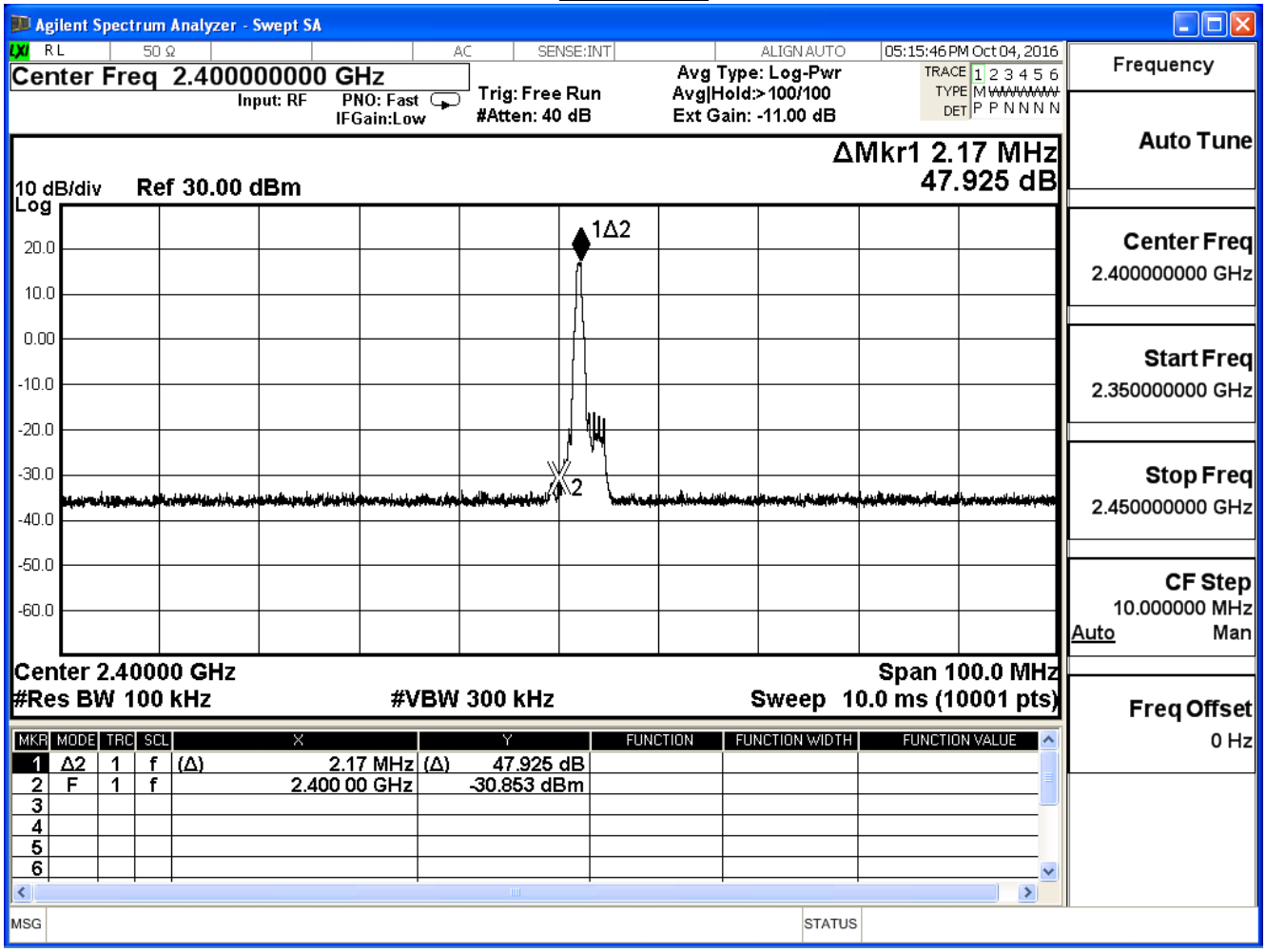
5.6. Test Result

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/06	Test Site	SR7

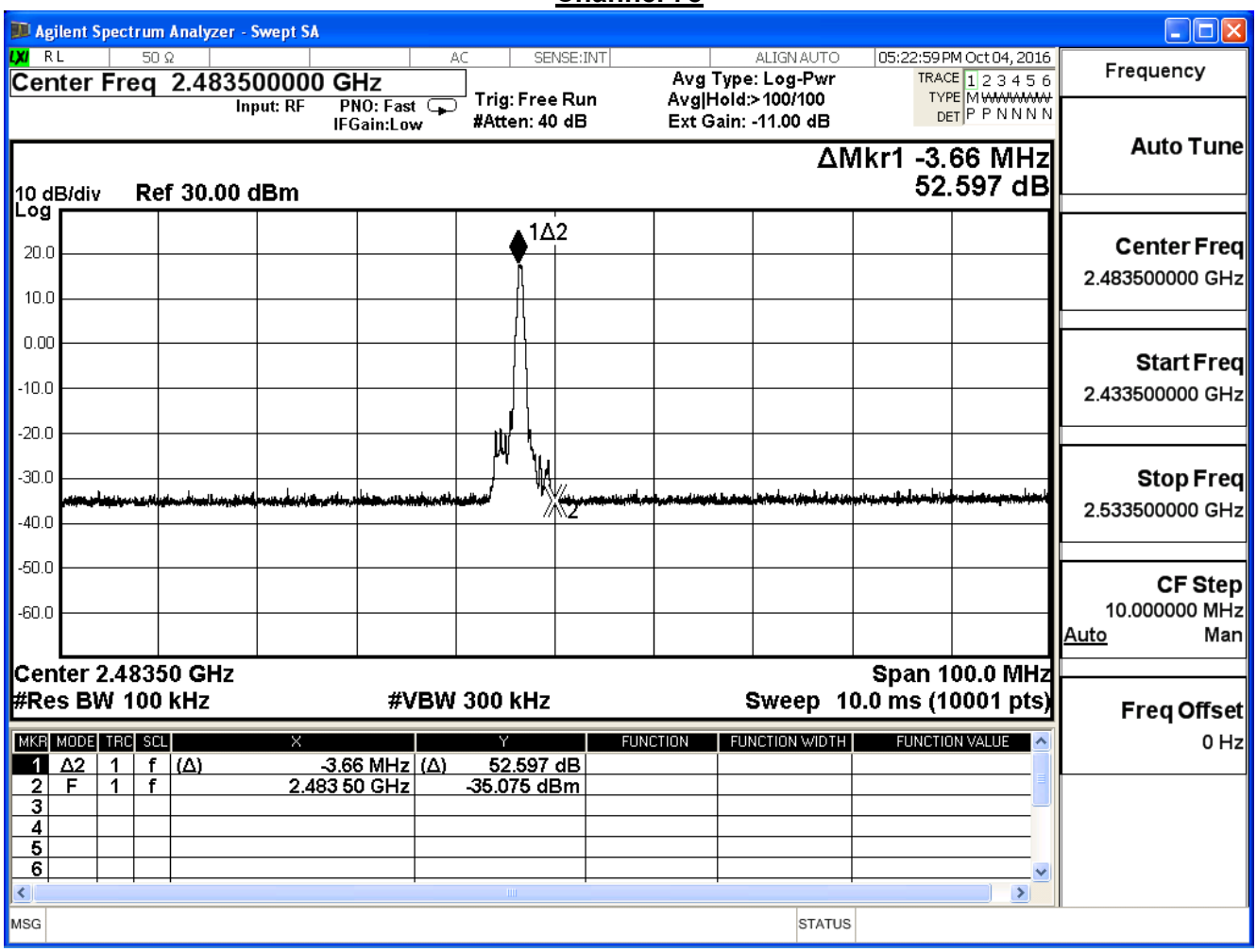
GFSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	47.925	≧20	Pass
78	2480	52.597	≧20	Pass

Channel 00



Channel 78

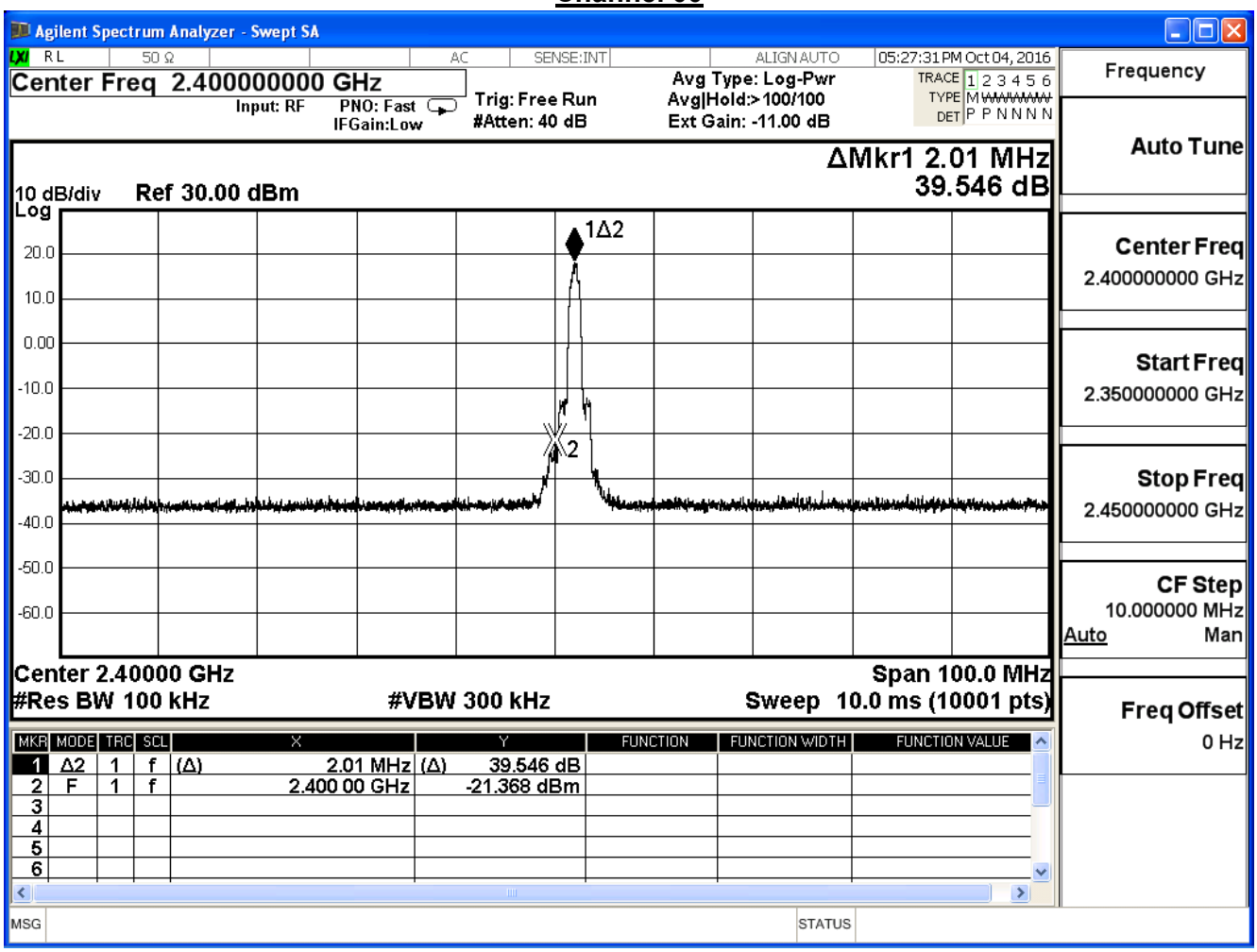

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:22:59 PM Oct 04, 2016
Center Freq 2.483500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P P N N N N
ΔMkr1 -3.66 MHz
52.597 dB
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1Δ2
Center 2.48350 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 10.0 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 Δ2 1 f (Δ) -3.66 MHz (Δ) 52.597 dB
2 F 1 f 2.483 50 GHz -35.075 dBm
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.433500000 GHz
Stop Freq
2.533500000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/06	Test Site	SR7

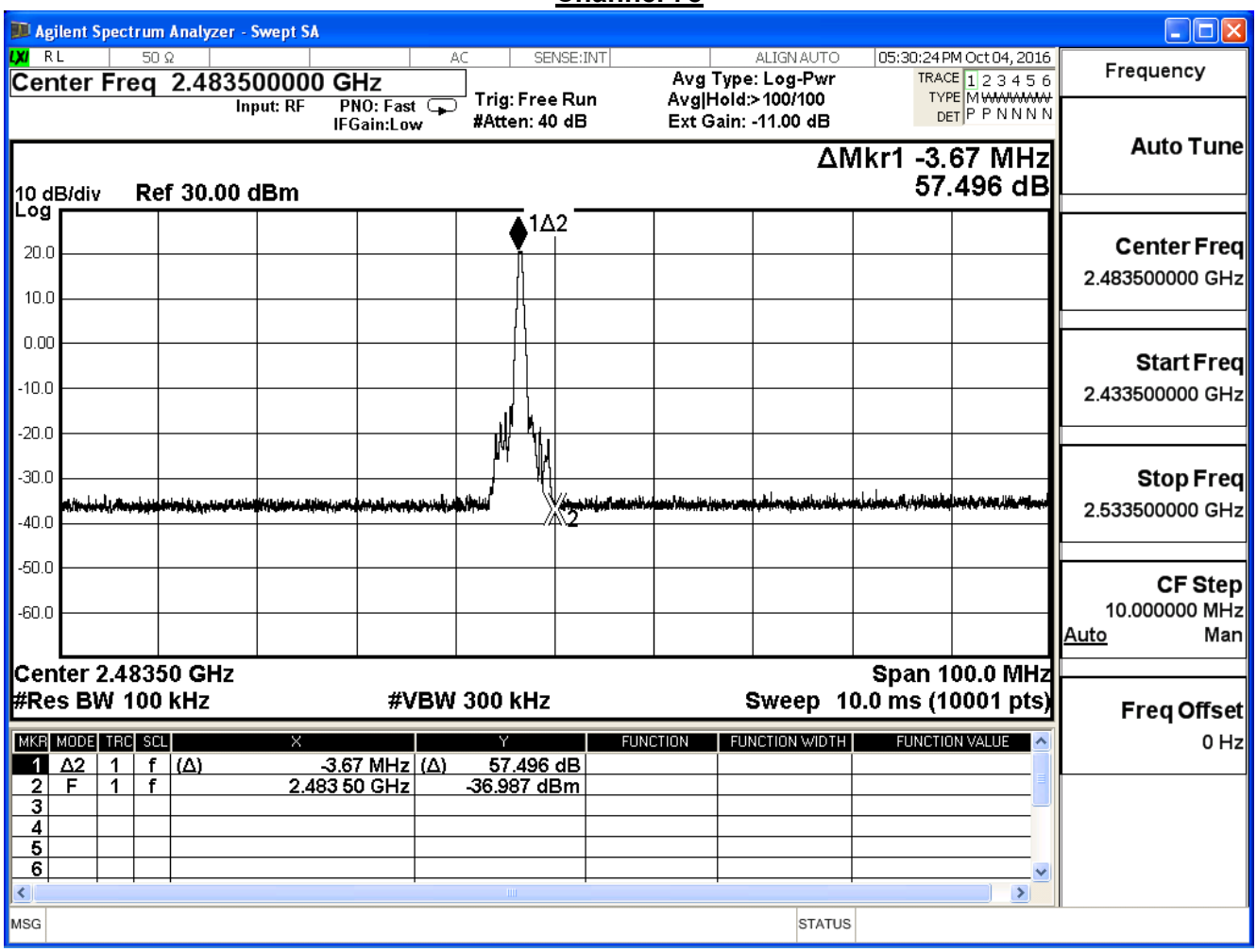
π/4-DQPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	39.546	≧20	Pass
78	2480	57.496	≧20	Pass

Channel 00



Channel 78

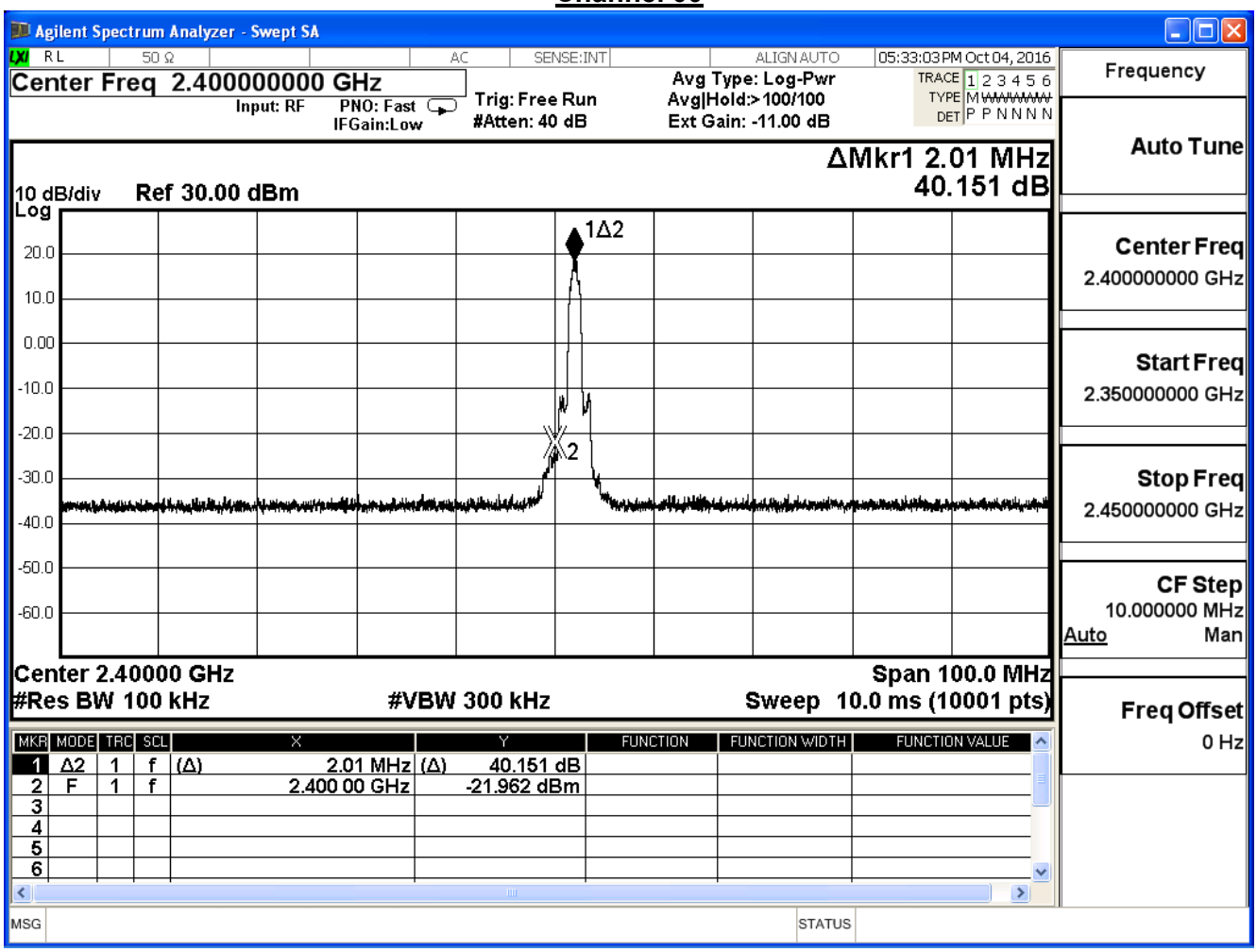

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:30:24 PM Oct 04, 2016
Center Freq 2.483500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P P N N N N
ΔMkr1 -3.67 MHz
57.496 dB
10 dB/div
Log
Ref 30.00 dBm
1Δ2
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Center 2.48350 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 10.0 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 Δ2 1 f (Δ) -3.67 MHz (Δ) 57.496 dB
2 F 1 f 2.483 50 GHz -36.987 dBm
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.433500000 GHz
Stop Freq
2.533500000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/06	Test Site	SR7

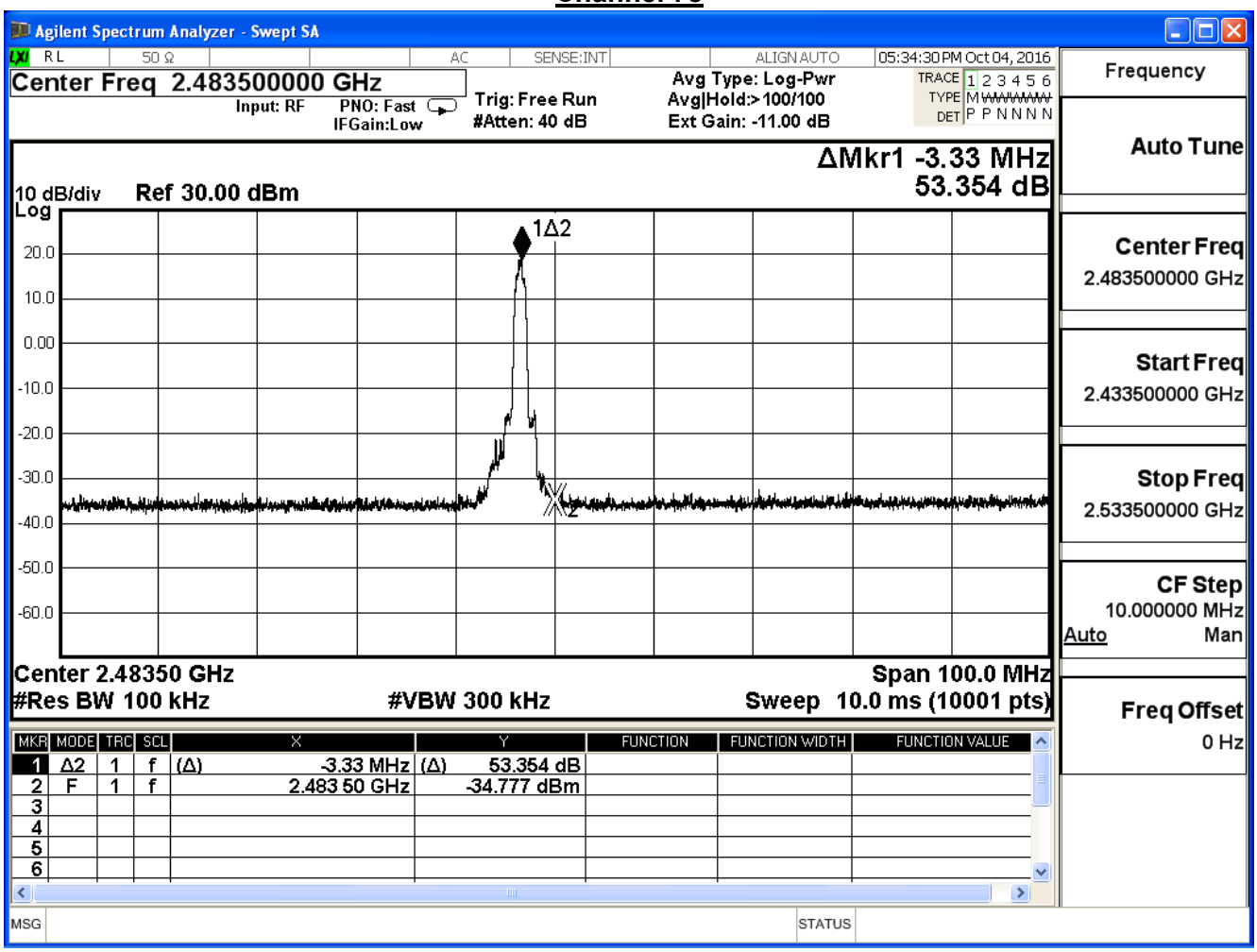
8-DPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	40.151	≧20	Pass
78	2480	53.354	≧20	Pass

Channel 00

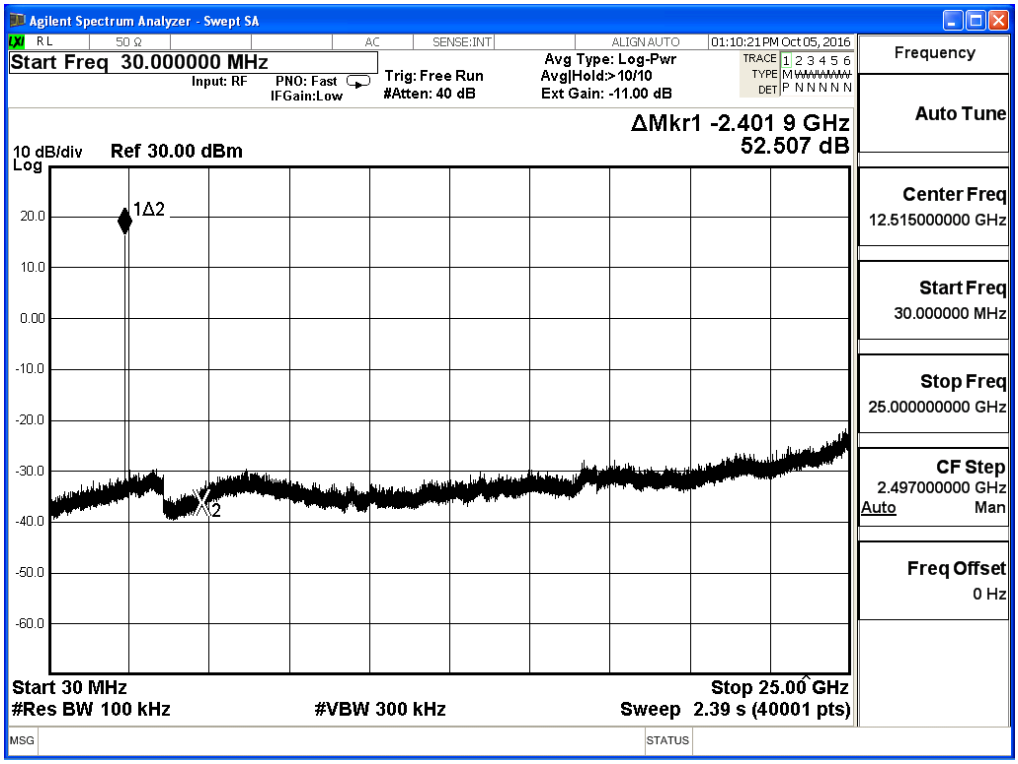


Channel 78

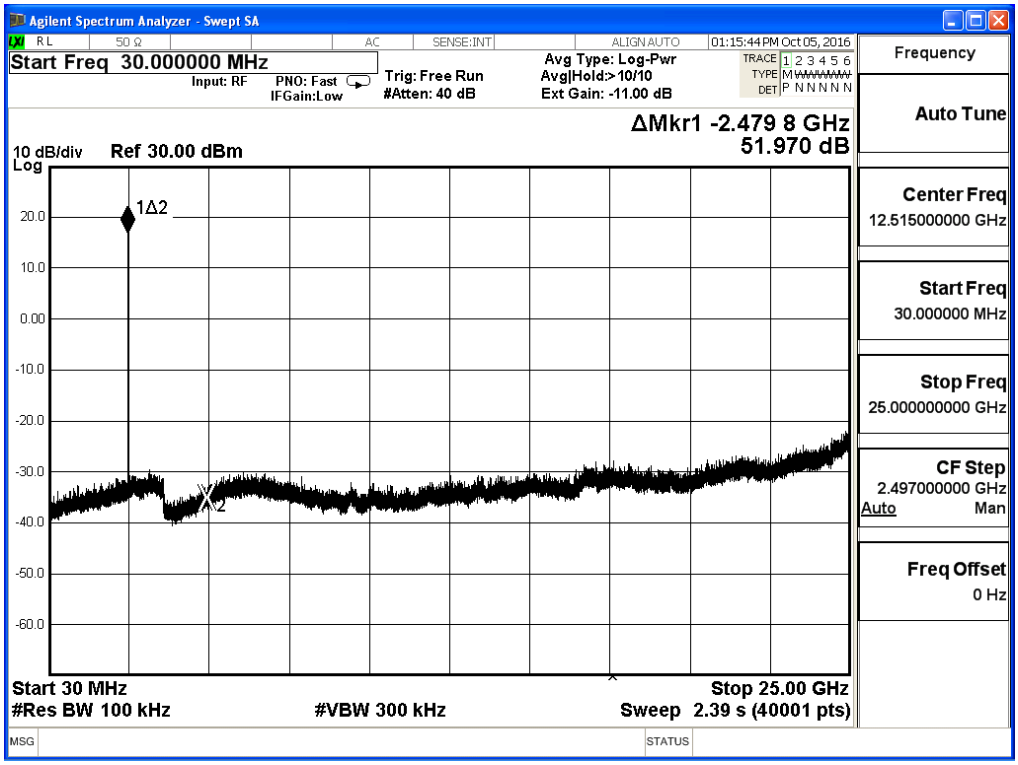

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:34:30 PM Oct 04, 2016
Center Freq 2.483500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P P N N N N
ΔMkr1 -3.33 MHz
53.354 dB
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1Δ2
Center 2.48350 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 10.0 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 Δ2 1 f (Δ) -3.33 MHz (Δ) 53.354 dB
2 F 1 f 2.483 50 GHz -34.777 dBm
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.433500000 GHz
Stop Freq
2.533500000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/06	Test Site	SR7

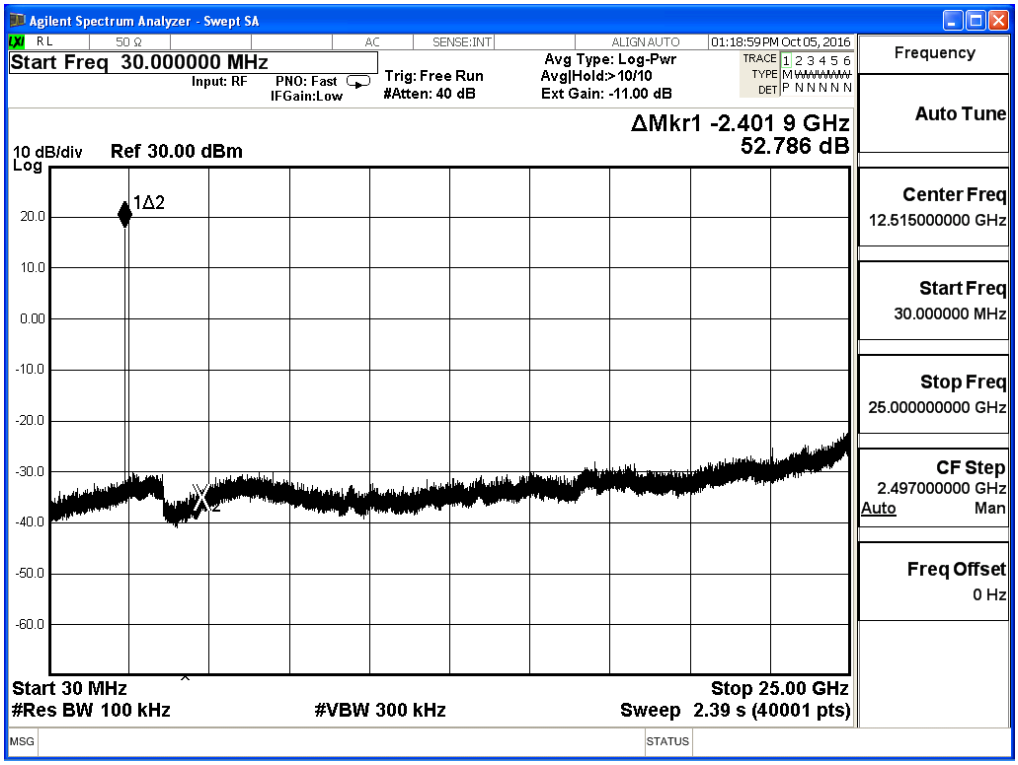
Channel 00 (30MHz-25GHz)- GFSK



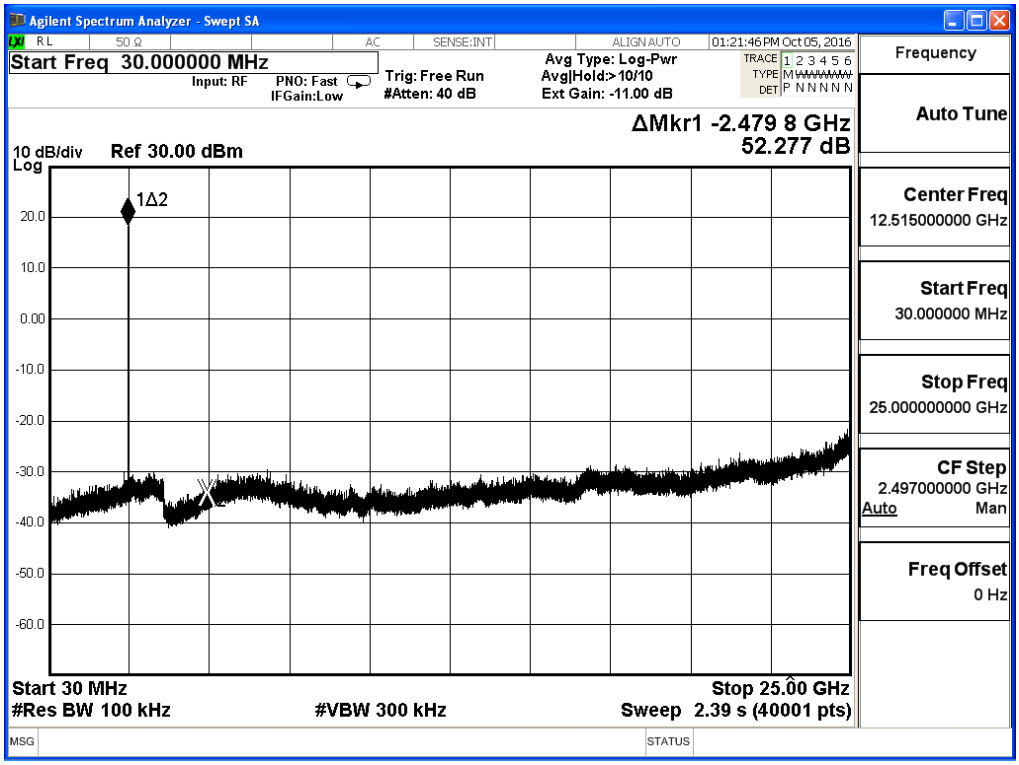
Channel 78 (30MHz-25GHz)- GFSK



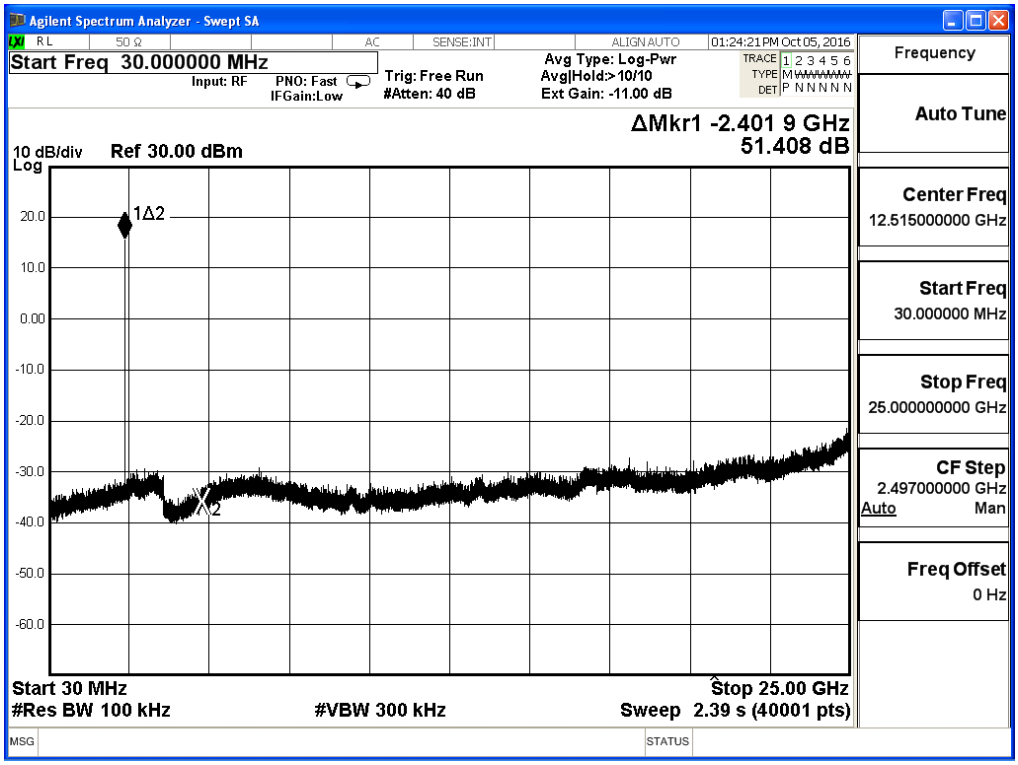
Channel 00 (30MHz-25GHz)- π/4-DQPSK



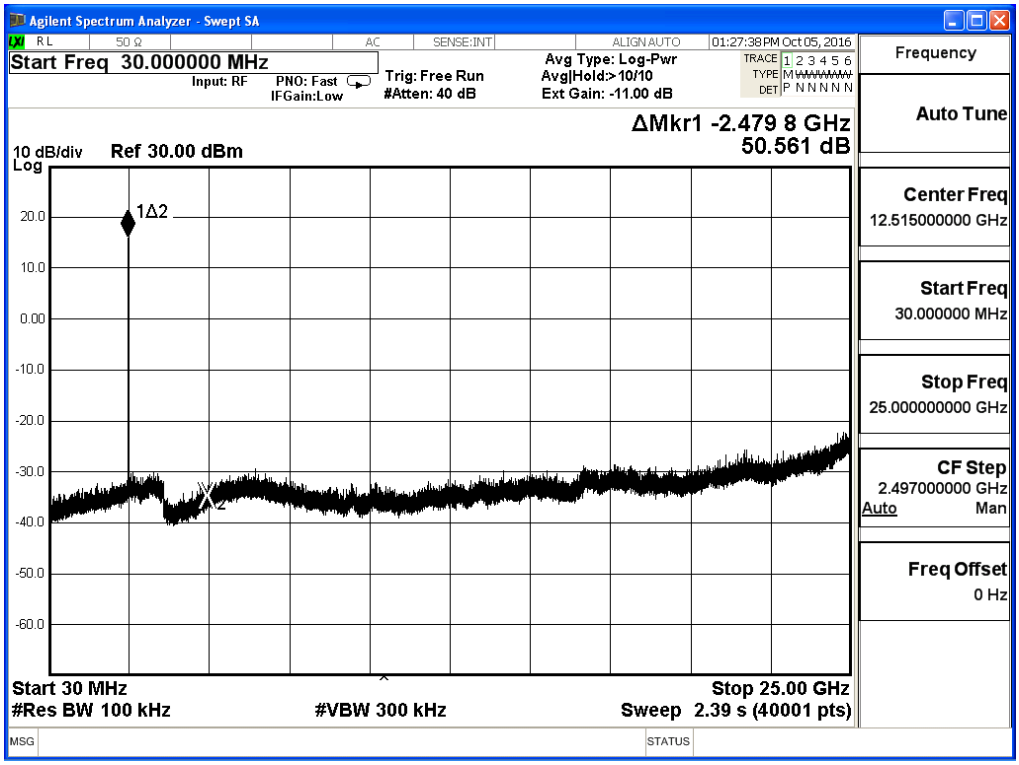
Channel 78 (30MHz-25GHz)- π/4-DQPSK



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



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



6. Band Edge

6.1. Test Equipment

The following test equipments are used during the test:

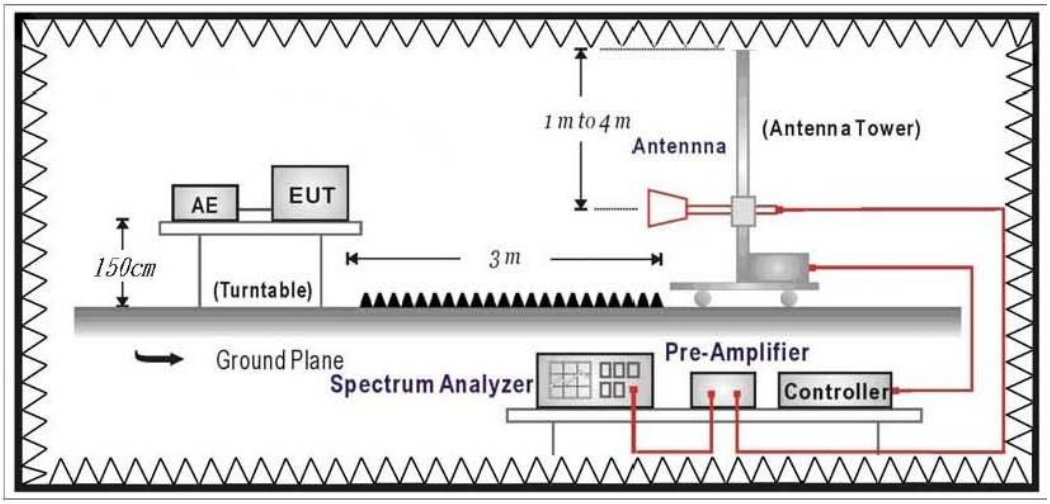
Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Double Ridged Guide Horn Antenna	Schwarzbeck	BBHA 9120	D743	2017/01/14
Spectrum Analyzer	Agilent	E4440A	MY46187335	2016/12/24
k Type Cable	Huber+Suhner	SF 102	25623/2	2017/01/11
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05

Note: All equipments 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 KDB 558074 D01 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.

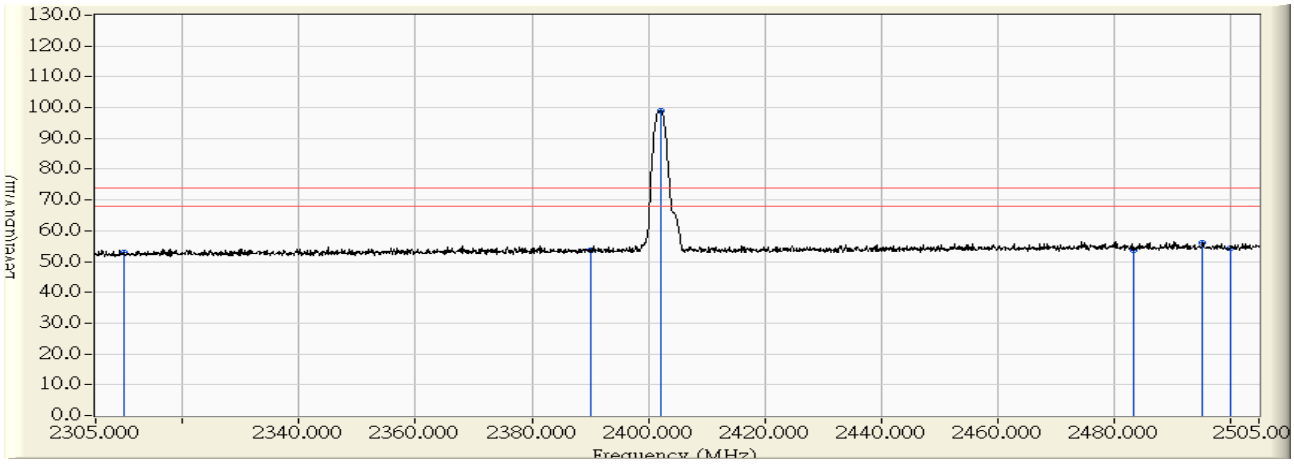
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

6.6. Test Result

Site : CB1	**Time : 2016/11/19 - 20:42**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2402MHz**

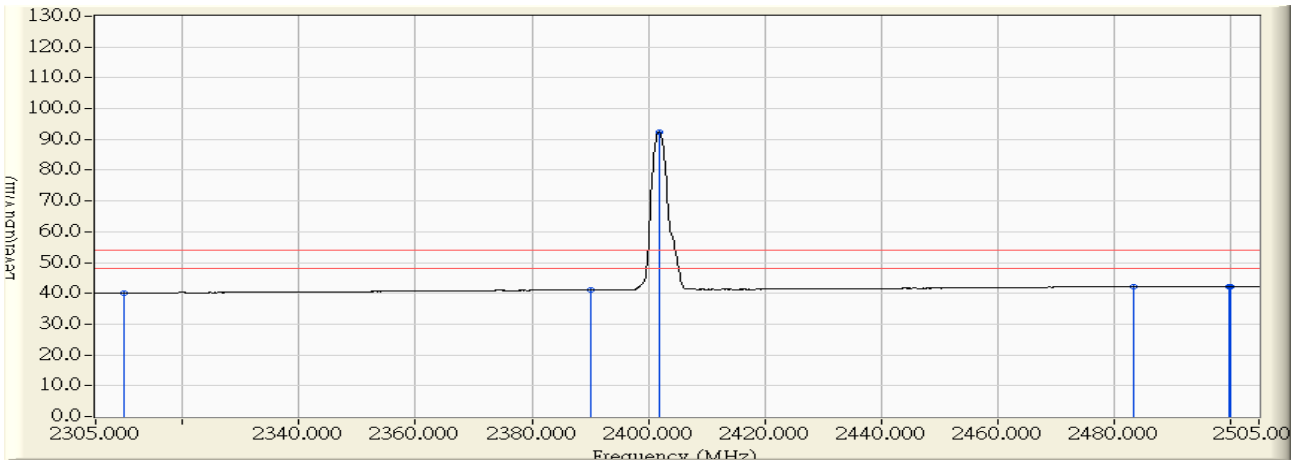


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	24.846	52.976	-21.024	74.000	PEAK
2		2390.000	28.933	24.775	53.708	-20.292	74.000	PEAK
3	*	2402.200	29.055	69.916	98.972	24.972	74.000	PEAK
4		2483.500	29.829	23.733	53.562	-20.438	74.000	PEAK
5		2495.300	29.835	26.358	56.193	-17.807	74.000	PEAK
6		2500.000	29.826	24.549	54.374	-19.626	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 : CB1	**Time : 2016/11/19 - 20:04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2402MHz**

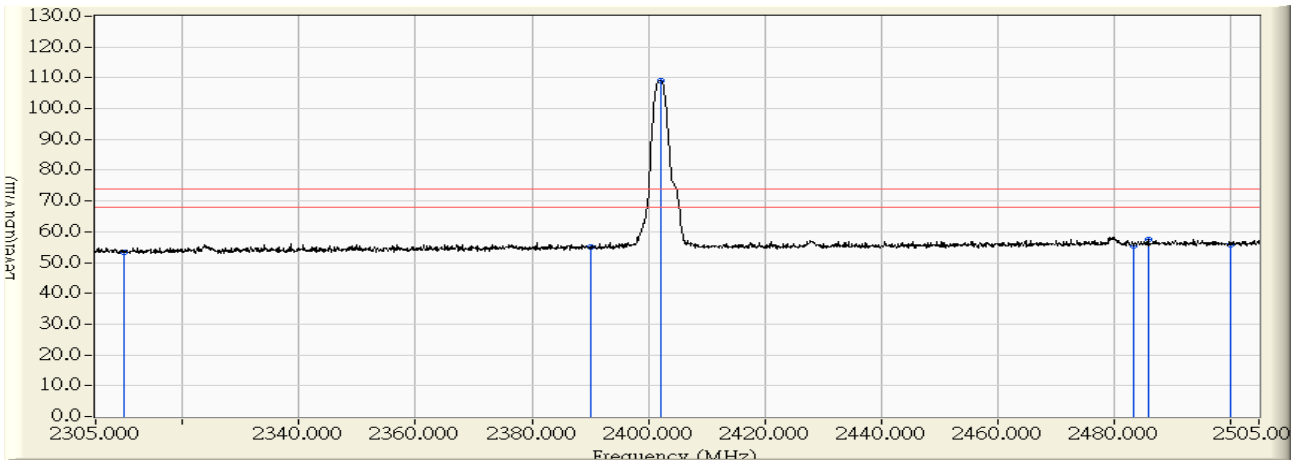


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	11.957	40.087	-13.913	54.000	AVERAGE
2		2390.000	28.933	12.182	41.115	-12.885	54.000	AVERAGE
3	*	2401.800	29.051	63.431	92.483	38.483	54.000	AVERAGE
4		2483.500	29.829	12.387	42.216	-11.784	54.000	AVERAGE
5		2499.900	29.826	12.398	42.224	-11.776	54.000	AVERAGE
6		2500.000	29.826	12.401	42.226	-11.774	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 20:40**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2402MHz**

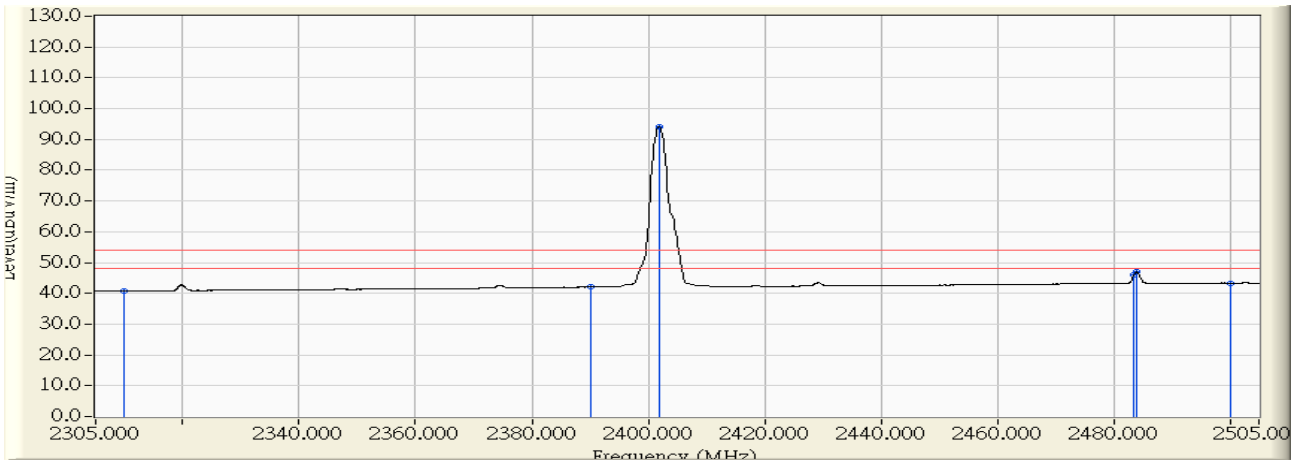


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.671	53.455	-20.545	74.000	PEAK
2		2390.000	29.747	25.428	55.175	-18.825	74.000	PEAK
3	*	2402.100	29.892	79.333	109.226	35.226	74.000	PEAK
4		2483.500	30.830	24.520	55.350	-18.650	74.000	PEAK
5		2485.900	30.836	26.512	57.348	-16.652	74.000	PEAK
6		2500.000	30.860	24.742	55.601	-18.399	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 : CB1	**Time : 2016/11/19 - 19:47**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2402MHz**

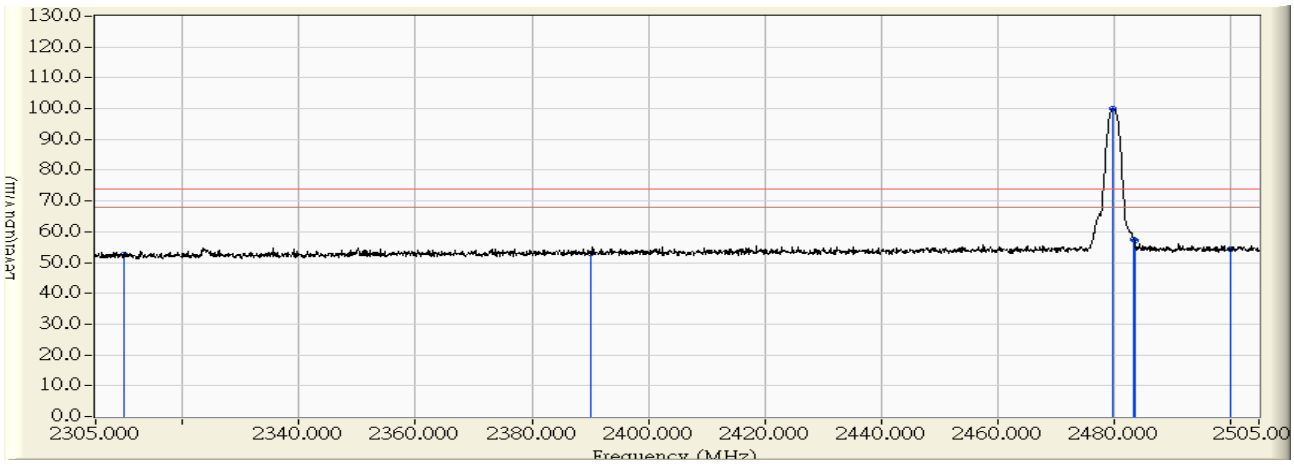


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.004	40.788	-13.212	54.000	AVERAGE
2		2390.000	29.747	12.310	42.057	-11.943	54.000	AVERAGE
3	*	2401.900	29.890	64.264	94.154	40.154	54.000	AVERAGE
4		2483.500	30.830	15.128	45.958	-8.042	54.000	AVERAGE
5		2484.000	30.832	16.050	46.881	-7.119	54.000	AVERAGE
6		2500.000	30.860	12.427	43.286	-10.714	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 20:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2480MHz**

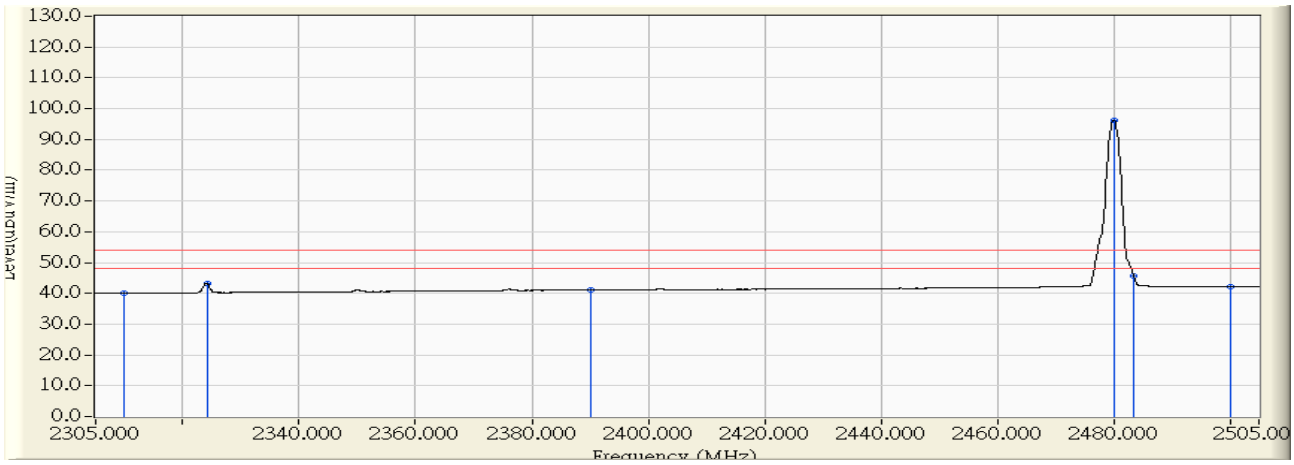


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	24.360	52.490	-21.510	74.000	PEAK
2		2390.000	28.933	24.171	53.104	-20.896	74.000	PEAK
3	*	2479.900	29.827	70.093	99.920	25.920	74.000	PEAK
4		2483.500	29.829	27.619	57.448	-16.552	74.000	PEAK
5		2483.600	29.829	27.202	57.031	-16.969	74.000	PEAK
6		2500.000	29.826	24.443	54.268	-19.732	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 : CB1	**Time : 2016/11/19 - 20:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2480MHz**

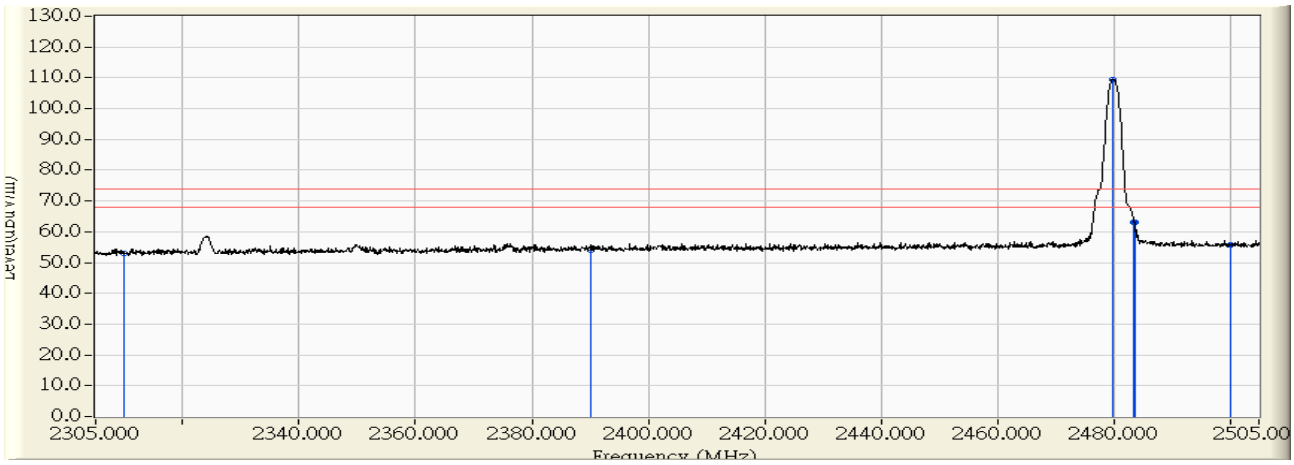


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	11.949	40.079	-13.921	54.000	AVERAGE
2		2324.200	28.273	14.974	43.246	-10.754	54.000	AVERAGE
3		2390.000	28.933	12.167	41.100	-12.900	54.000	AVERAGE
4	*	2480.000	29.827	66.481	96.308	42.308	54.000	AVERAGE
5		2483.500	29.829	15.746	45.575	-8.425	54.000	AVERAGE
6		2500.000	29.826	12.335	42.160	-11.840	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 20:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.281	53.065	-20.935	74.000	PEAK
2		2390.000	29.747	24.155	53.902	-20.098	74.000	PEAK
3	*	2479.800	30.821	78.543	109.364	35.364	74.000	PEAK
4		2483.500	30.830	32.330	63.160	-10.840	74.000	PEAK
5		2483.600	30.831	32.110	62.940	-11.060	74.000	PEAK
6		2500.000	30.860	24.912	55.771	-18.229	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.

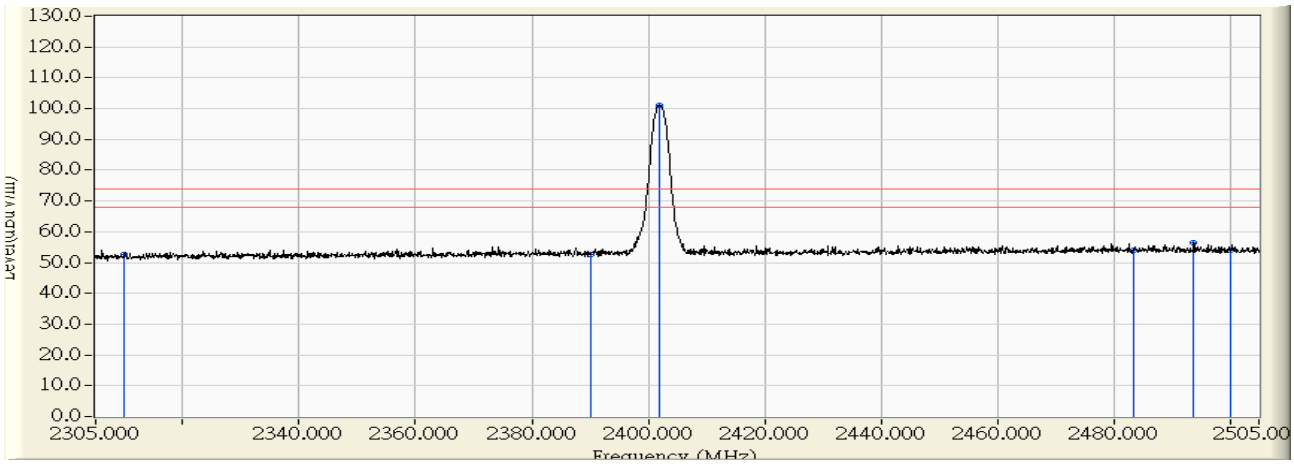
Site : CB1	**Time : 2016/11/19 - 20:24**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_DH5_2480MHz**

		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	11.967	40.751	-13.249	54.000	AVERAGE
2		2324.200	28.955	22.902	51.857	-2.143	54.000	AVERAGE
3		2390.000	29.747	12.177	41.924	-12.076	54.000	AVERAGE
4	*	2480.100	30.821	74.459	105.281	51.281	54.000	AVERAGE
5		2483.500	30.830	20.677	51.507	-2.493	54.000	AVERAGE
6		2500.000	30.860	12.424	43.283	-10.717	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 20:33**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2402MHz**

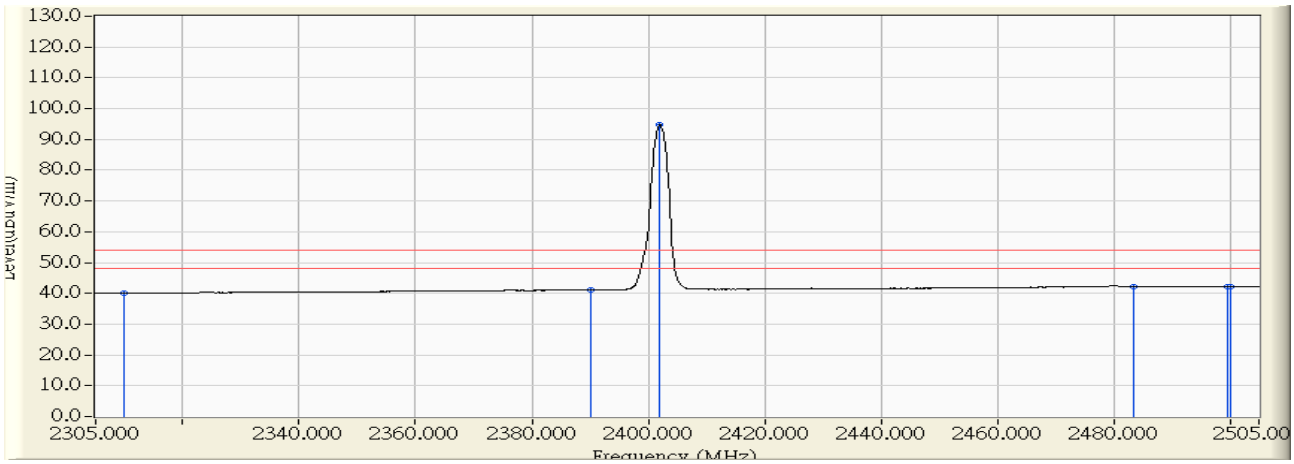


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	24.522	52.652	-21.348	74.000	PEAK
2		2390.000	28.933	23.525	52.458	-21.542	74.000	PEAK
3	*	2401.900	29.052	71.989	101.042	27.042	74.000	PEAK
4		2483.500	29.829	24.348	54.177	-19.823	74.000	PEAK
5		2493.800	29.834	26.557	56.391	-17.609	74.000	PEAK
6		2500.000	29.826	24.358	54.183	-19.817	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 : CB1	**Time : 2016/11/19 - 20:33**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2402MHz**

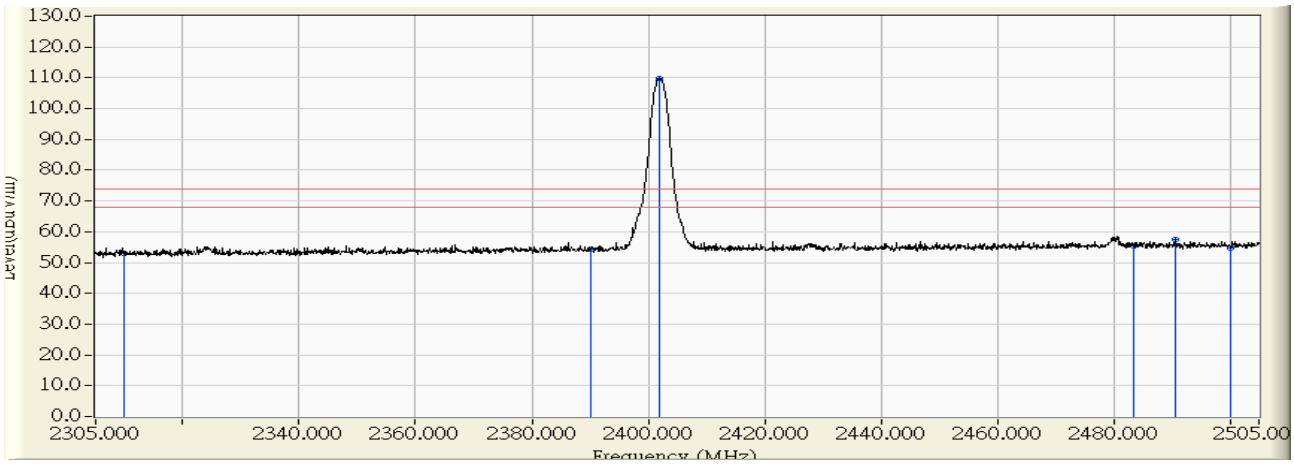


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	11.970	40.100	-13.900	54.000	AVERAGE
2		2390.000	28.933	12.234	41.167	-12.833	54.000	AVERAGE
3	*	2402.000	29.053	65.750	94.804	40.804	54.000	AVERAGE
4		2483.500	29.829	12.357	42.186	-11.814	54.000	AVERAGE
5		2499.500	29.826	12.348	42.175	-11.825	54.000	AVERAGE
6		2500.000	29.826	12.348	42.173	-11.827	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 20:36**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2402MHz**

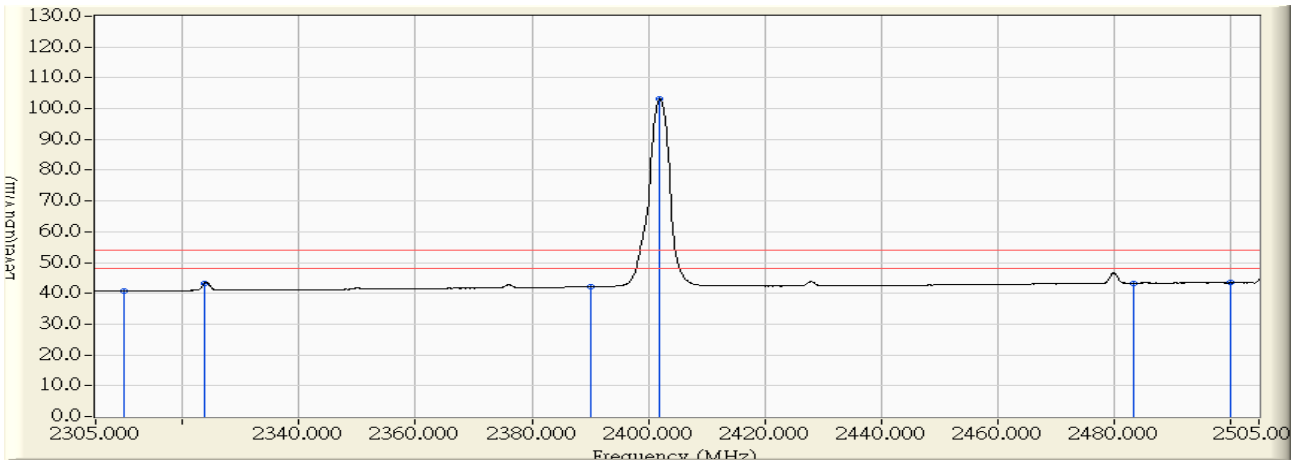


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.117	52.901	-21.099	74.000	PEAK
2		2390.000	29.747	24.519	54.266	-19.734	74.000	PEAK
3	*	2401.900	29.890	79.838	109.728	35.728	74.000	PEAK
4		2483.500	30.830	24.654	55.484	-18.516	74.000	PEAK
5		2490.600	30.848	26.814	57.662	-16.338	74.000	PEAK
6		2500.000	30.860	23.833	54.692	-19.308	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 : CB1	**Time : 2016/11/19 - 20:35**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2402MHz**

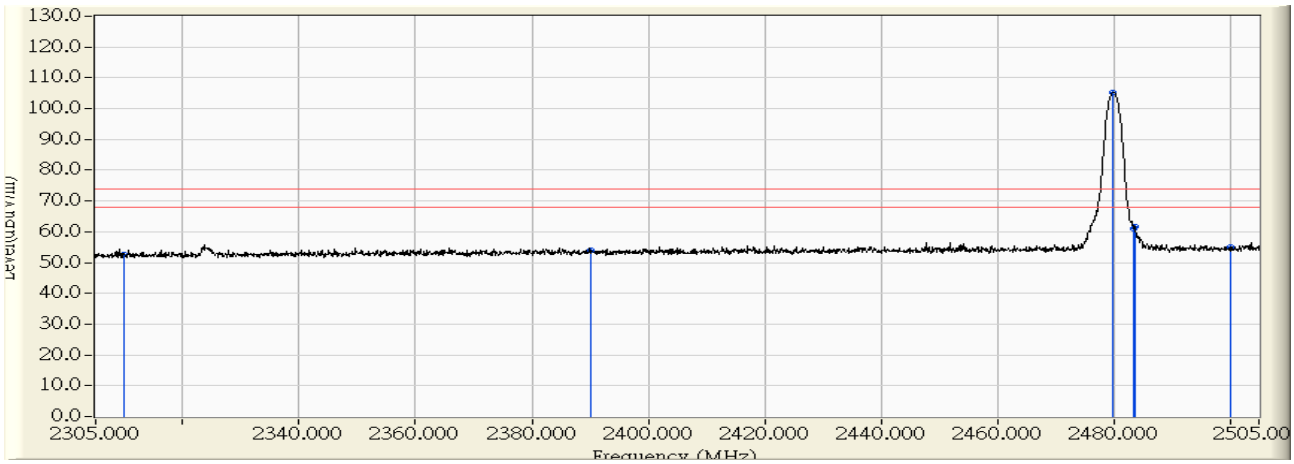


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.004	40.788	-13.212	54.000	AVERAGE
2		2323.600	28.947	14.139	43.087	-10.913	54.000	AVERAGE
3		2390.000	29.747	12.384	42.131	-11.869	54.000	AVERAGE
4	*	2402.000	29.891	73.178	103.070	49.070	54.000	AVERAGE
5		2483.500	30.830	12.511	43.341	-10.659	54.000	AVERAGE
6		2500.000	30.860	12.551	43.410	-10.590	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 20:47**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2480MHz**

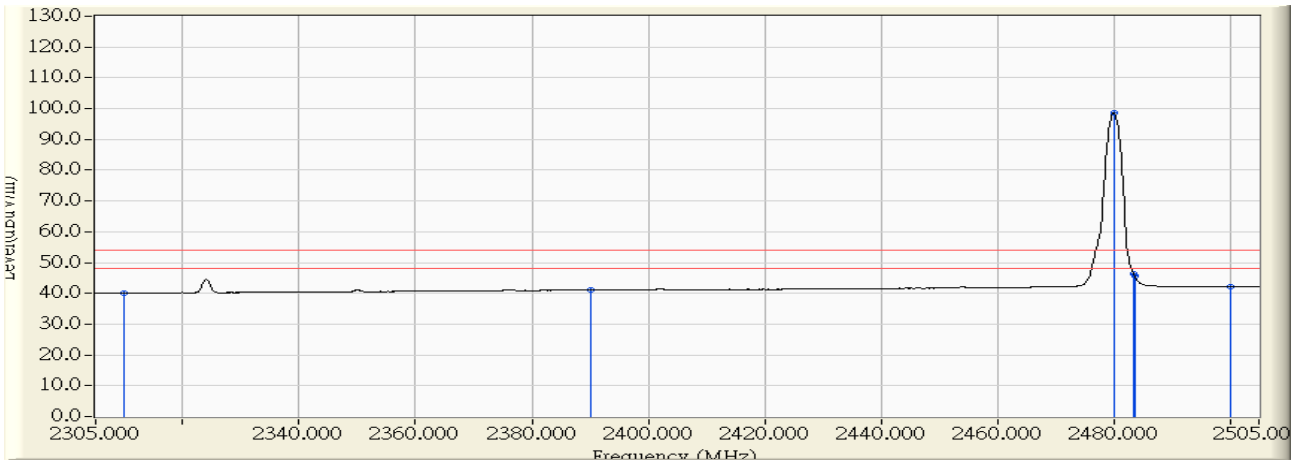


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	24.548	52.678	-21.322	74.000	PEAK
2		2390.000	28.933	24.956	53.889	-20.111	74.000	PEAK
3	*	2479.900	29.827	75.434	105.261	31.261	74.000	PEAK
4		2483.500	29.829	31.203	61.032	-12.968	74.000	PEAK
5		2483.600	29.829	31.847	61.676	-12.324	74.000	PEAK
6		2500.000	29.826	25.188	55.013	-18.987	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 : CB1	**Time : 2016/11/19 - 20:46**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2480MHz**

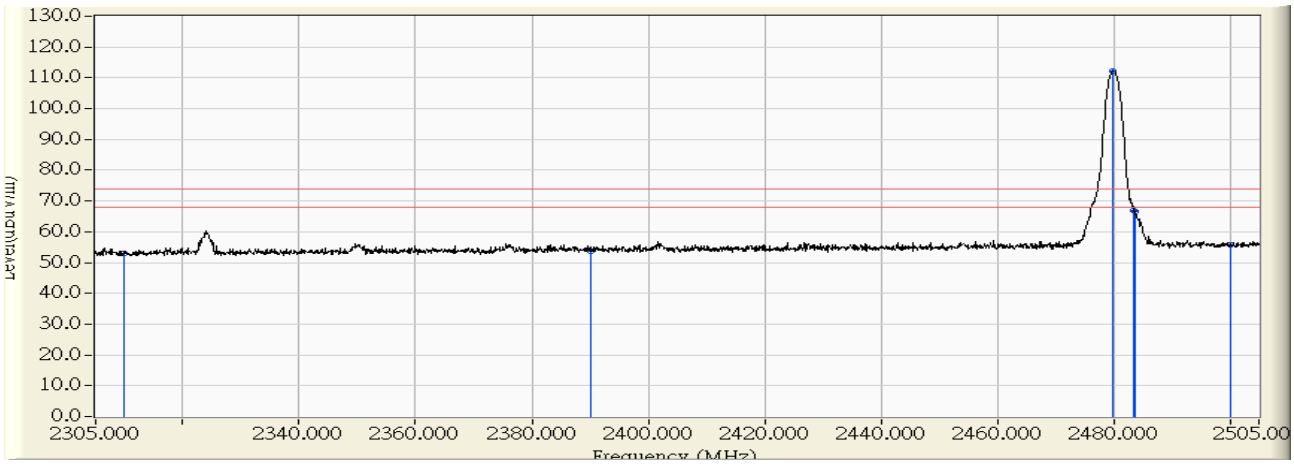


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	11.972	40.102	-13.898	54.000	AVERAGE
2		2390.000	28.933	12.149	41.082	-12.918	54.000	AVERAGE
3	*	2480.000	29.827	68.845	98.672	44.672	54.000	AVERAGE
4		2483.500	29.829	16.415	46.244	-7.756	54.000	AVERAGE
5		2483.600	29.829	15.985	45.814	-8.186	54.000	AVERAGE
6		2500.000	29.826	12.348	42.173	-11.827	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 20:50**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2480MHz**

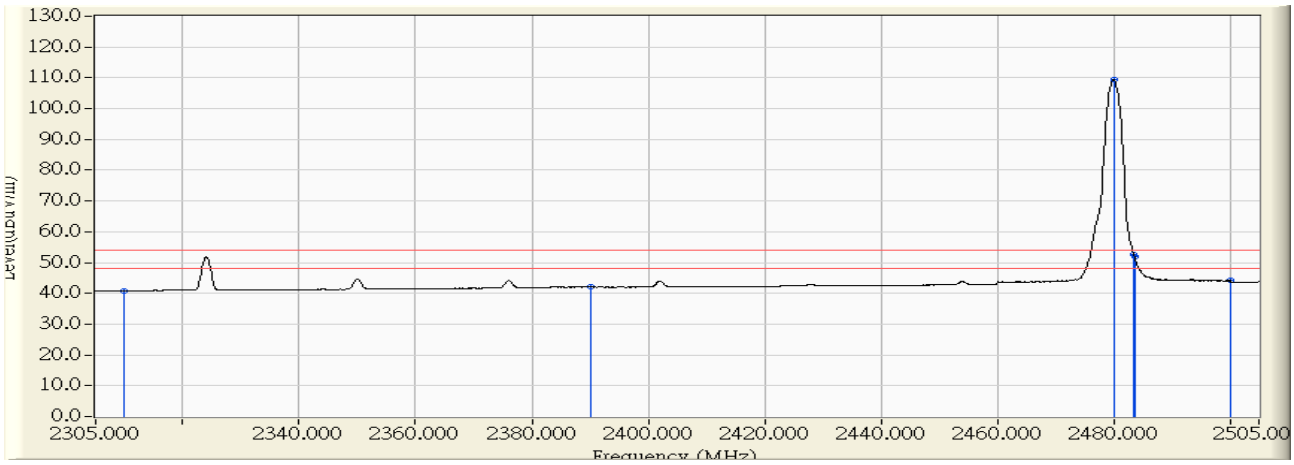


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.191	52.975	-21.025	74.000	PEAK
2		2390.000	29.747	24.068	53.815	-20.185	74.000	PEAK
3	*	2479.800	30.821	81.368	112.189	38.189	74.000	PEAK
4		2483.500	30.830	36.010	66.840	-7.160	74.000	PEAK
5		2483.700	30.831	35.700	66.531	-7.469	74.000	PEAK
6		2500.000	30.860	24.875	55.734	-18.266	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 : CB1	**Time : 2016/11/19 - 20:49**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_2DH5_2480MHz**

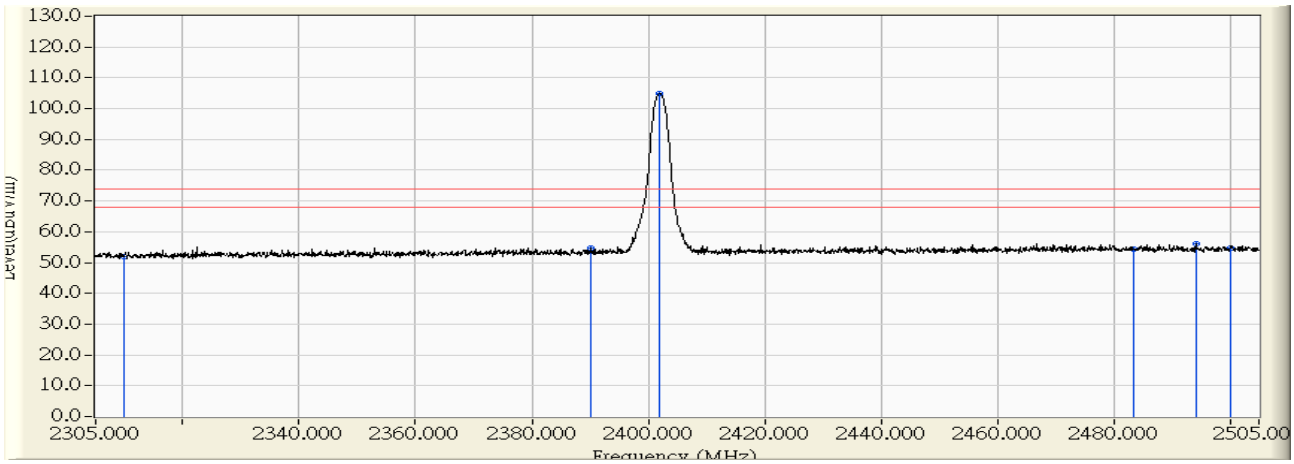


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.042	40.826	-13.174	54.000	AVERAGE
2		2390.000	29.747	12.280	42.027	-11.973	54.000	AVERAGE
3	*	2480.000	30.821	78.711	109.532	55.532	54.000	AVERAGE
4		2483.500	30.830	21.766	52.596	-1.404	54.000	AVERAGE
5		2483.600	30.831	21.086	51.916	-2.084	54.000	AVERAGE
6		2500.000	30.860	13.241	44.100	-9.900	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 21:08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2402MHz**

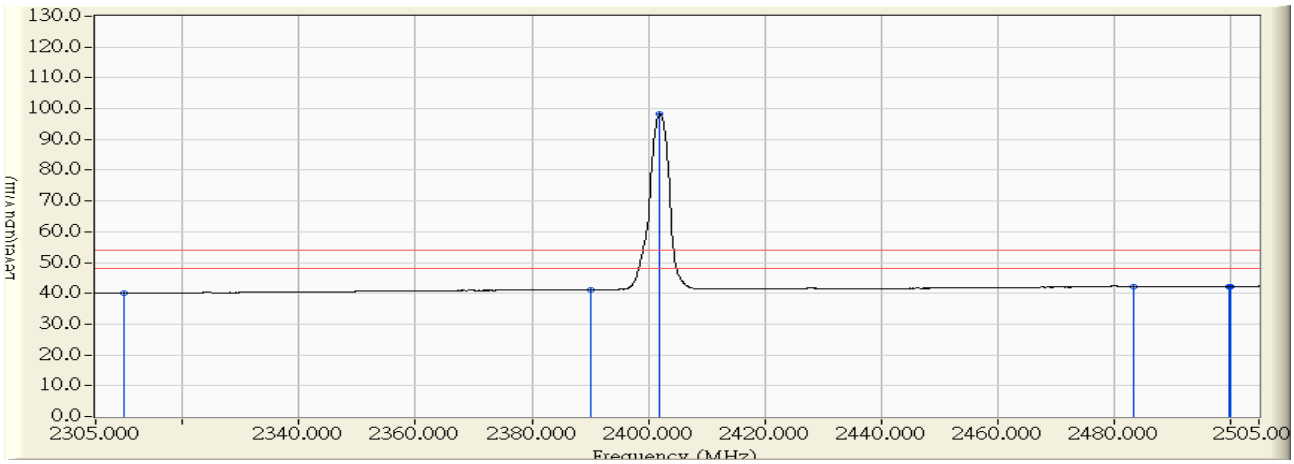


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	23.671	51.801	-22.199	74.000	PEAK
2		2390.000	28.933	25.941	54.874	-19.126	74.000	PEAK
3	*	2402.000	29.053	75.879	104.933	30.933	74.000	PEAK
4		2483.500	29.829	24.534	54.363	-19.637	74.000	PEAK
5		2494.200	29.834	26.331	56.165	-17.835	74.000	PEAK
6		2500.000	29.826	24.945	54.770	-19.230	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 : CB1	**Time : 2016/11/19 - 21:09**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2402MHz**

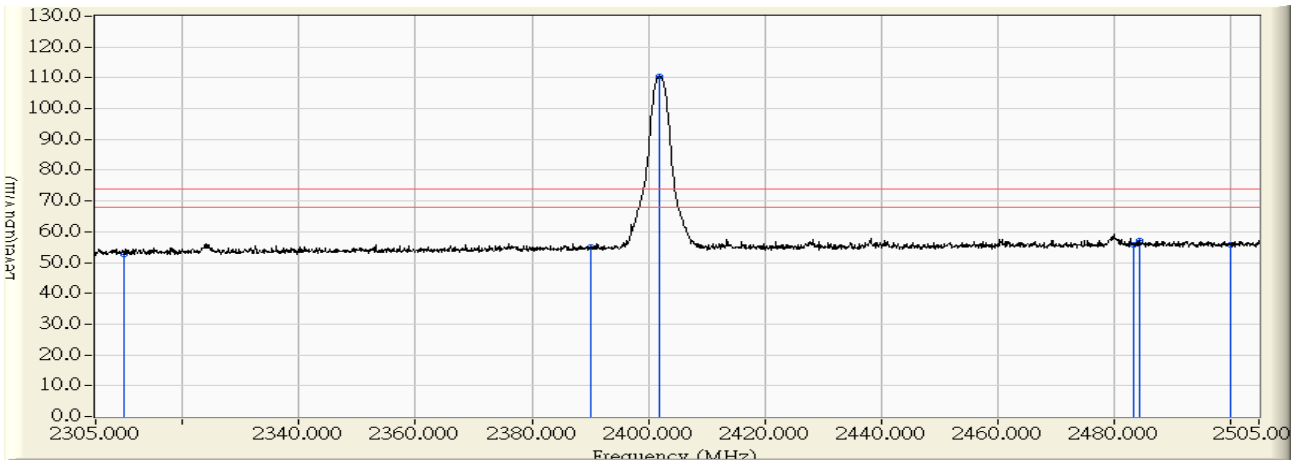


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	11.939	40.069	-13.931	54.000	AVERAGE
2		2390.000	28.933	12.211	41.144	-12.856	54.000	AVERAGE
3	*	2402.000	29.053	69.140	98.194	44.194	54.000	AVERAGE
4		2483.500	29.829	12.341	42.170	-11.830	54.000	AVERAGE
5		2499.800	29.826	12.357	42.183	-11.817	54.000	AVERAGE
6		2500.000	29.826	12.370	42.195	-11.805	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 21:06**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2402MHz**

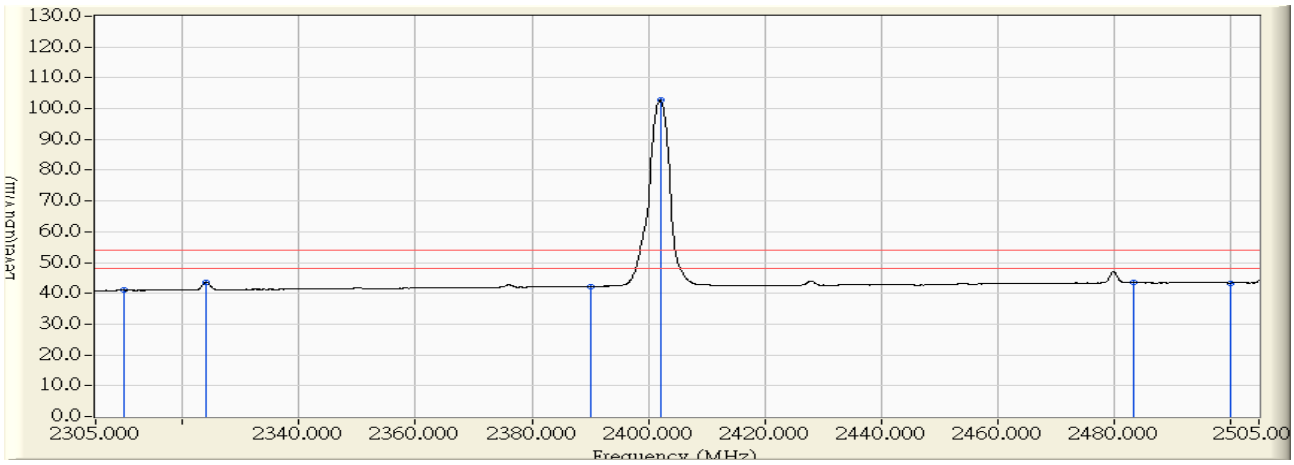


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.010	52.794	-21.206	74.000	PEAK
2		2390.000	29.747	25.404	55.151	-18.849	74.000	PEAK
3	*	2402.000	29.891	80.708	110.600	36.600	74.000	PEAK
4		2483.500	30.830	24.808	55.638	-18.362	74.000	PEAK
5		2484.400	30.832	26.273	57.105	-16.895	74.000	PEAK
6		2500.000	30.860	25.046	55.905	-18.095	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 : CB1	**Time : 2016/11/19 - 20:57**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2402MHz**

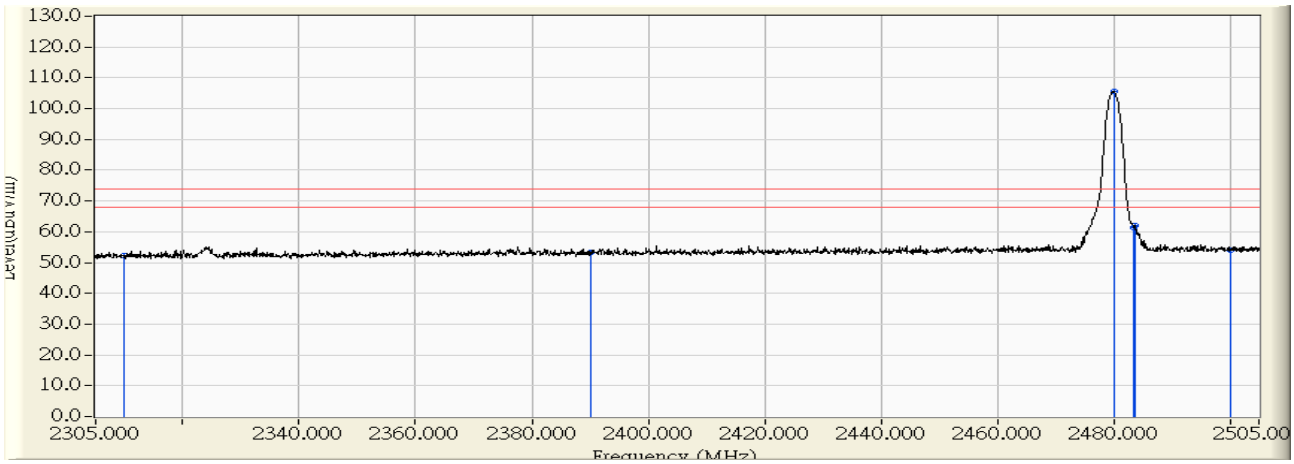


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.189	40.973	-13.027	54.000	AVERAGE
2		2323.900	28.952	14.727	43.678	-10.322	54.000	AVERAGE
3		2390.000	29.747	12.526	42.273	-11.727	54.000	AVERAGE
4	*	2402.100	29.892	72.852	102.745	48.745	54.000	AVERAGE
5		2483.500	30.830	12.639	43.469	-10.531	54.000	AVERAGE
6		2500.000	30.860	12.526	43.385	-10.615	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 21:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2480MHz**

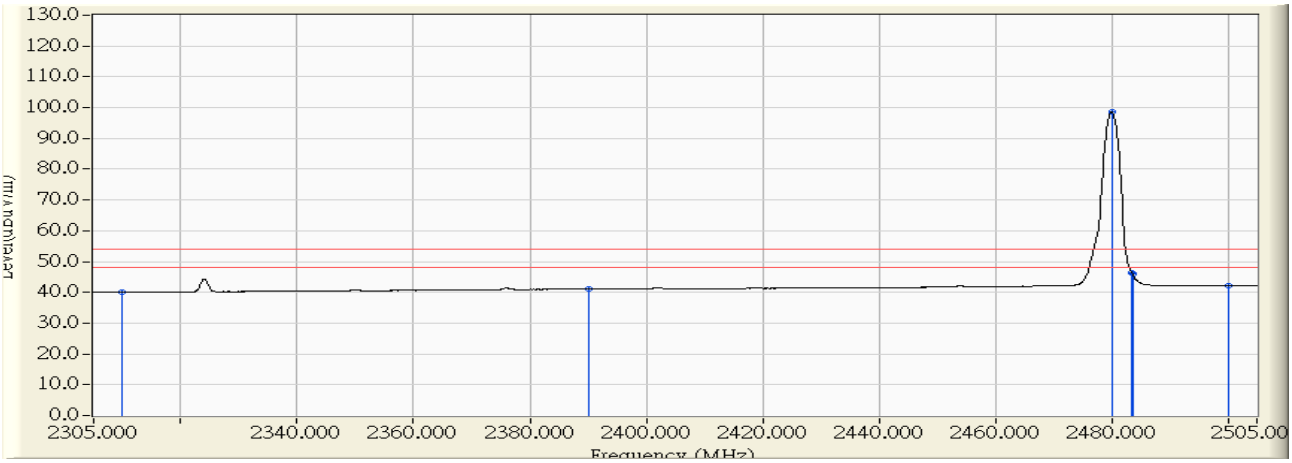


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	23.994	52.124	-21.876	74.000	PEAK
2		2390.000	28.933	24.462	53.395	-20.605	74.000	PEAK
3	*	2480.000	29.827	75.633	105.460	31.460	74.000	PEAK
4		2483.500	29.829	31.612	61.441	-12.559	74.000	PEAK
5		2483.600	29.829	32.065	61.894	-12.106	74.000	PEAK
6		2500.000	29.826	24.267	54.092	-19.908	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 : CB1	**Time : 2016/11/19 - 21:14**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2480MHz**

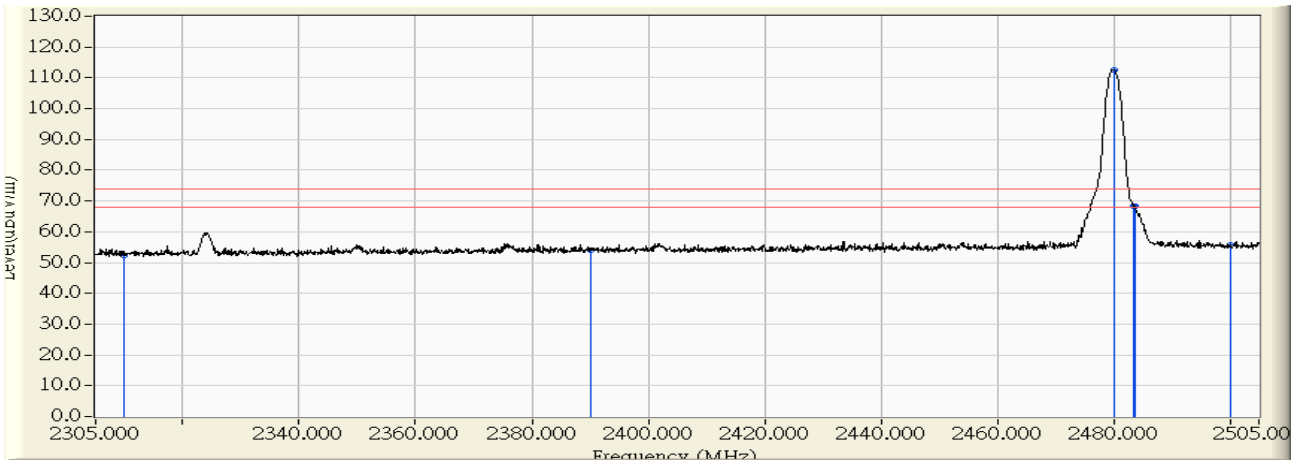


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	11.936	40.066	-13.934	54.000	AVERAGE
2		2390.000	28.933	12.168	41.101	-12.899	54.000	AVERAGE
3	*	2480.000	29.827	68.848	98.675	44.675	54.000	AVERAGE
4		2483.500	29.829	16.502	46.331	-7.669	54.000	AVERAGE
5		2483.600	29.829	16.083	45.912	-8.088	54.000	AVERAGE
6		2500.000	29.826	12.354	42.179	-11.821	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/11/19 - 21:17**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2480MHz**

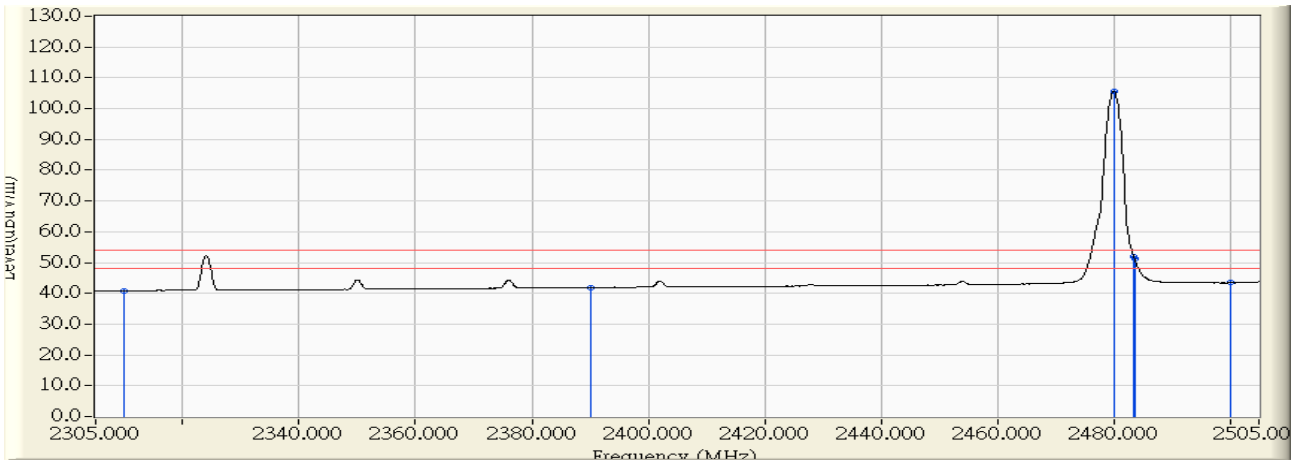


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	23.385	52.169	-21.831	74.000	PEAK
2		2390.000	29.747	24.294	54.041	-19.959	74.000	PEAK
3	*	2480.000	30.821	81.924	112.745	38.745	74.000	PEAK
4		2483.500	30.830	37.630	68.460	-5.540	74.000	PEAK
5		2483.600	30.831	37.571	68.401	-5.599	74.000	PEAK
6		2500.000	30.860	24.746	55.605	-18.395	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 : CB1	**Time : 2016/11/19 - 21:17**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 1: Transmit Mode_Ant 1** **802.15.1_3DH5_2480MHz**

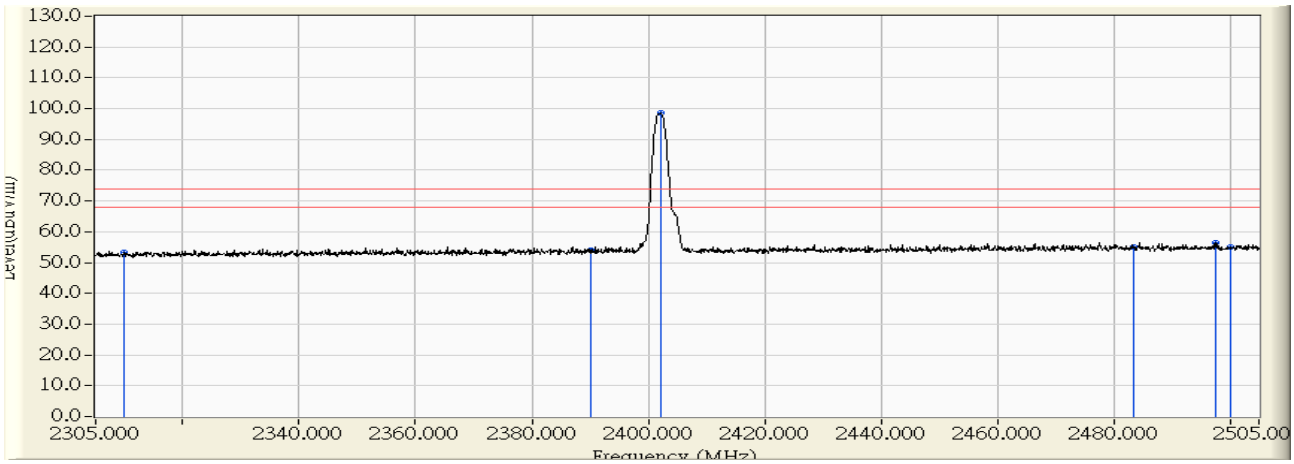


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.004	40.788	-13.212	54.000	AVERAGE
2		2390.000	29.747	12.191	41.938	-12.062	54.000	AVERAGE
3	*	2480.000	30.821	74.794	105.615	51.615	54.000	AVERAGE
4		2483.500	30.830	21.043	51.873	-2.127	54.000	AVERAGE
5		2483.600	30.831	20.570	51.400	-2.600	54.000	AVERAGE
6		2500.000	30.860	12.577	43.436	-10.564	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 21:38**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2402MHz**

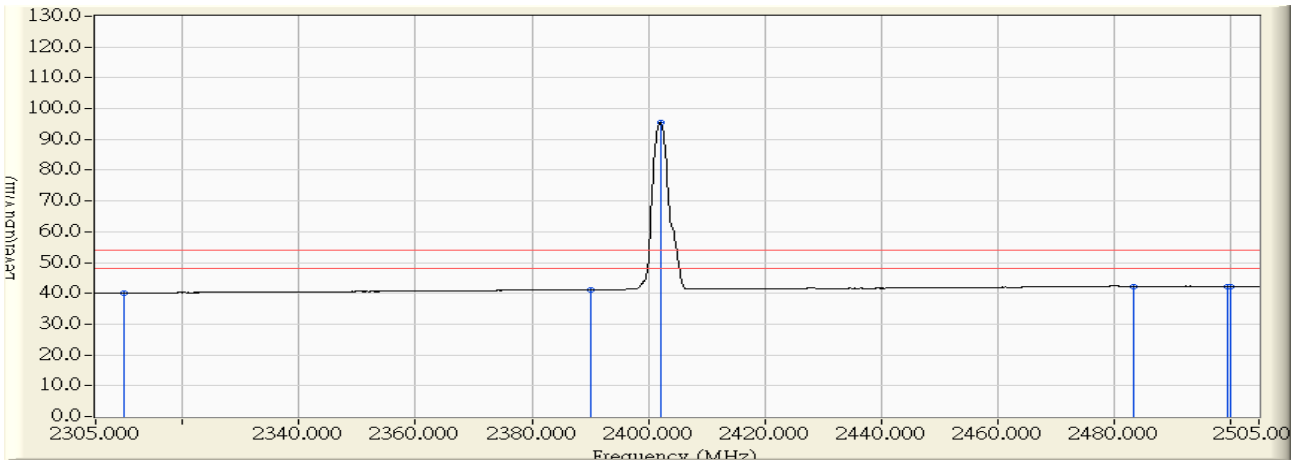


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	25.139	53.269	-20.731	74.000	PEAK
2		2390.000	28.933	25.173	54.106	-19.894	74.000	PEAK
3	*	2402.200	29.055	69.425	98.481	24.481	74.000	PEAK
4		2483.500	29.829	25.119	54.948	-19.052	74.000	PEAK
5		2497.500	29.832	26.481	56.313	-17.687	74.000	PEAK
6		2500.000	29.826	25.075	54.900	-19.100	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 : CB1	**Time : 2016/10/05 - 19:40**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2402MHz**

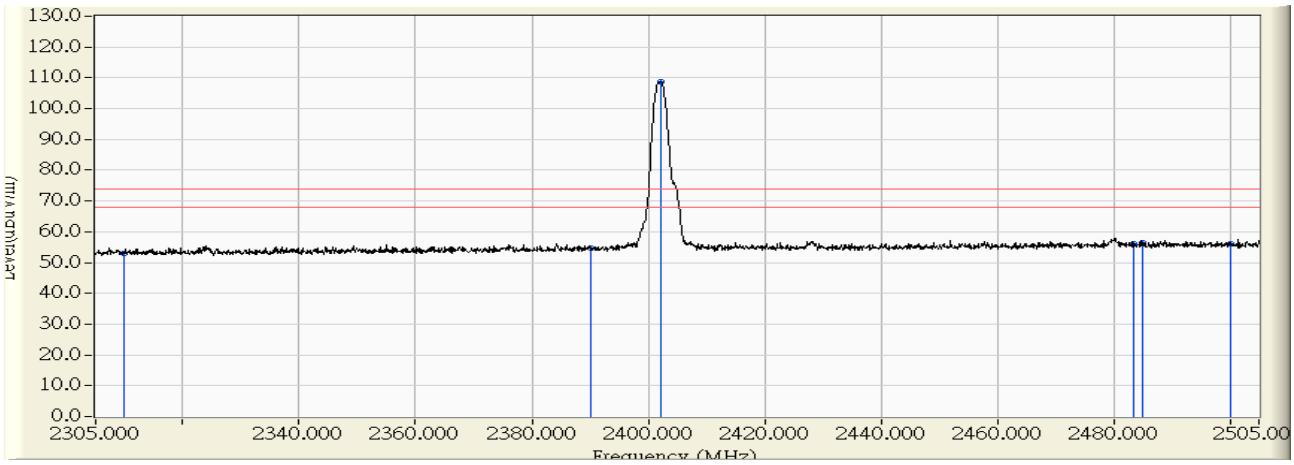


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.029	40.159	-13.841	54.000	AVERAGE
2		2390.000	28.933	12.272	41.205	-12.795	54.000	AVERAGE
3	*	2402.100	29.054	66.373	95.428	41.428	54.000	AVERAGE
4		2483.500	29.829	12.415	42.244	-11.756	54.000	AVERAGE
5		2499.500	29.826	12.439	42.266	-11.734	54.000	AVERAGE
6		2500.000	29.826	12.430	42.255	-11.745	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 19:29**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2402MHz**

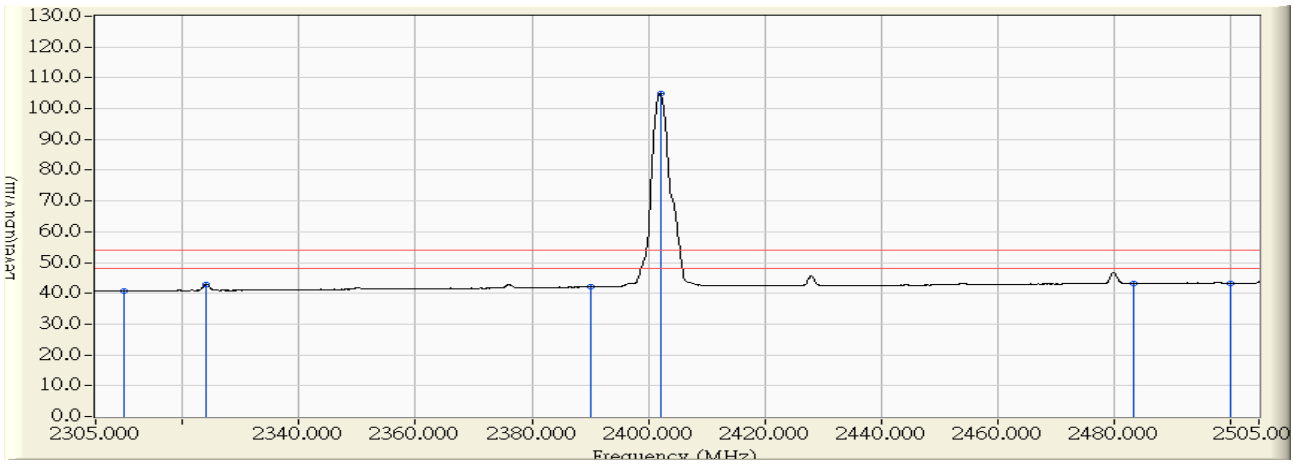


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.133	52.917	-21.083	74.000	PEAK
2		2390.000	29.747	24.865	54.612	-19.388	74.000	PEAK
3	*	2402.200	29.894	78.741	108.635	34.635	74.000	PEAK
4		2483.500	30.830	25.204	56.034	-17.966	74.000	PEAK
5		2485.100	30.834	25.800	56.634	-17.366	74.000	PEAK
6		2500.000	30.860	25.127	55.986	-18.014	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 : CB1	**Time : 2016/10/05 - 19:27**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2402MHz**

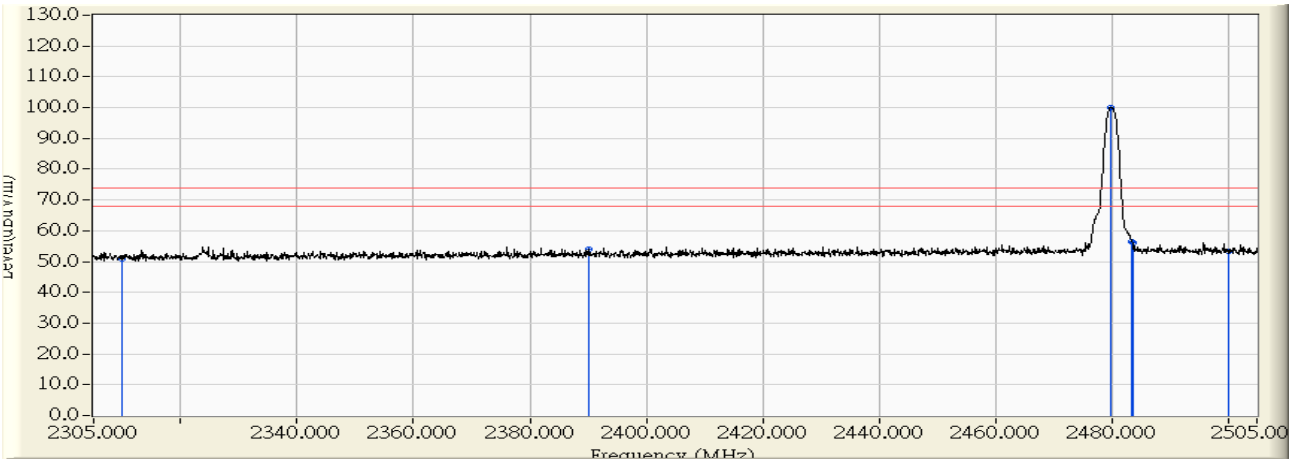


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	11.967	40.751	-13.249	54.000	AVERAGE
2		2324.100	28.954	13.910	42.864	-11.136	54.000	AVERAGE
3		2390.000	29.747	12.351	42.098	-11.902	54.000	AVERAGE
4	*	2402.100	29.892	75.173	105.066	51.066	54.000	AVERAGE
5		2483.500	30.830	12.472	43.302	-10.698	54.000	AVERAGE
6		2500.000	30.860	12.448	43.307	-10.693	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 20:09**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2480MHz**

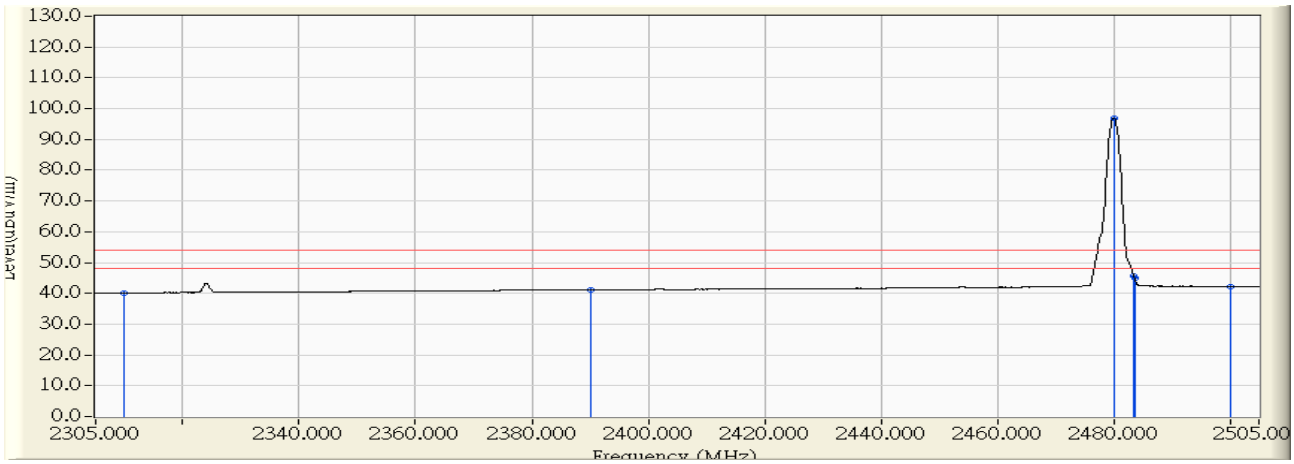


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	22.885	51.015	-22.985	74.000	PEAK
2		2390.000	28.933	25.193	54.126	-19.874	74.000	PEAK
3	*	2479.800	29.827	70.290	100.117	26.117	74.000	PEAK
4		2483.500	29.829	26.717	56.546	-17.454	74.000	PEAK
5		2483.600	29.829	26.432	56.261	-17.739	74.000	PEAK
6		2500.000	29.826	23.619	53.444	-20.556	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 : CB1	**Time : 2016/10/05 - 20:08**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2480MHz**

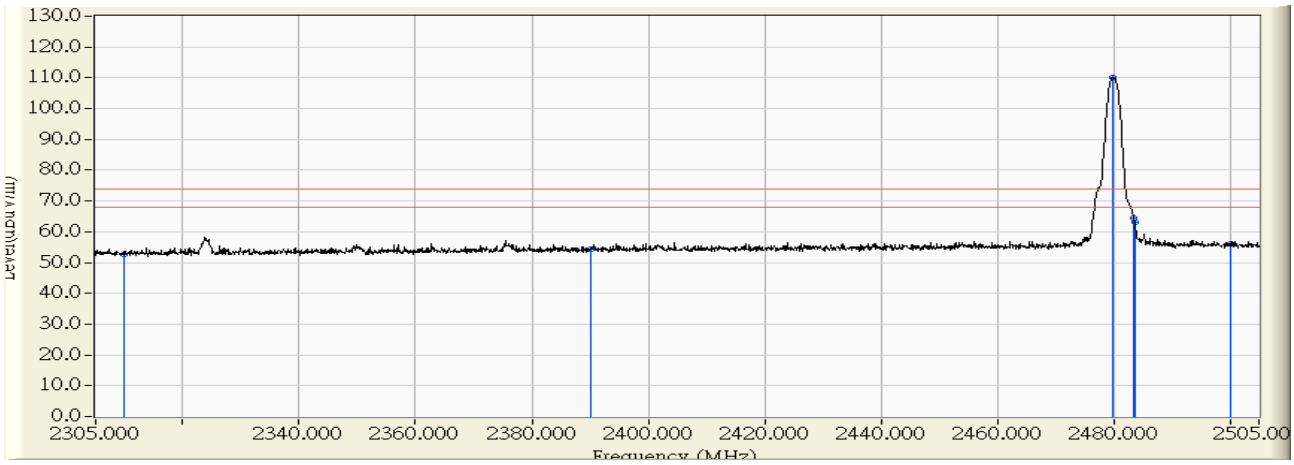


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.015	40.145	-13.855	54.000	AVERAGE
2		2390.000	28.933	12.246	41.179	-12.821	54.000	AVERAGE
3	*	2480.100	29.827	67.152	96.979	42.979	54.000	AVERAGE
4		2483.500	29.829	15.851	45.680	-8.320	54.000	AVERAGE
5		2483.600	29.829	15.220	45.049	-8.951	54.000	AVERAGE
6		2500.000	29.826	12.419	42.244	-11.756	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 19:50**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_DH5_2480MHz**

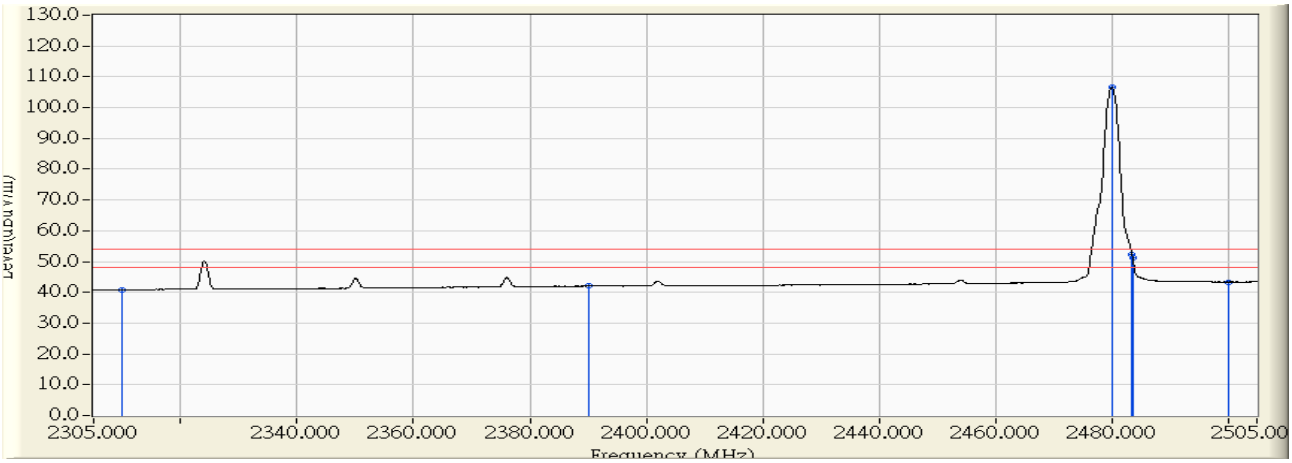


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	23.830	52.614	-21.386	74.000	PEAK
2		2390.000	29.747	24.519	54.266	-19.734	74.000	PEAK
3	*	2479.800	30.821	79.196	110.017	36.017	74.000	PEAK
4		2483.500	30.830	33.585	64.415	-9.585	74.000	PEAK
5		2483.600	30.831	32.344	63.174	-10.826	74.000	PEAK
6		2500.000	30.860	25.394	56.253	-17.747	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 : CB1	**Time : 2016/10/05 - 19:49**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_DH5_2480MHz**

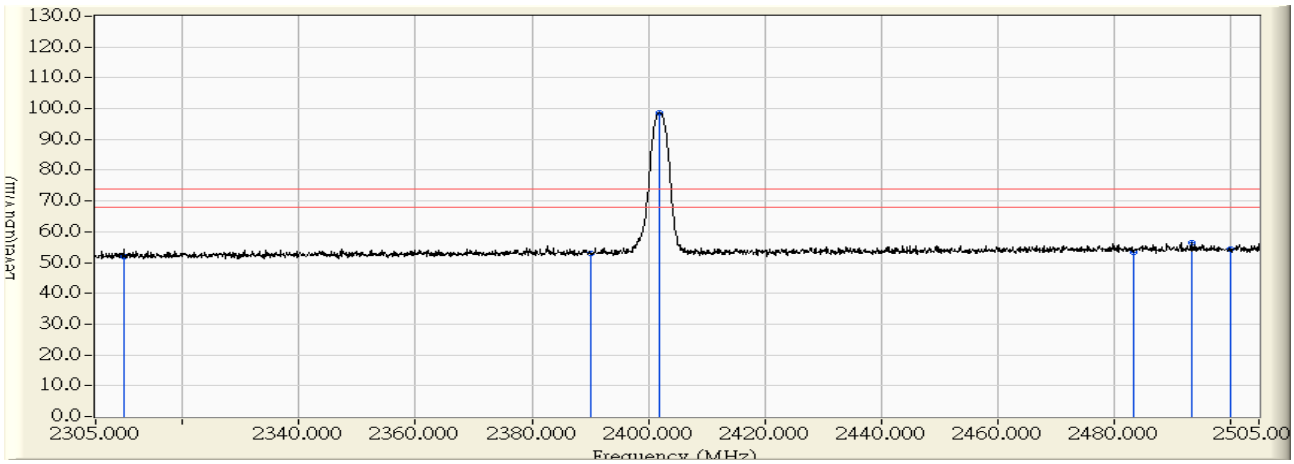


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.027	40.811	-13.189	54.000	AVERAGE
2		2390.000	29.747	12.289	42.036	-11.964	54.000	AVERAGE
3	*	2480.000	30.821	75.713	106.534	52.534	54.000	AVERAGE
4		2483.500	30.830	21.487	52.317	-1.683	54.000	AVERAGE
5		2483.600	30.831	20.562	51.392	-2.608	54.000	AVERAGE
6		2500.000	30.860	12.489	43.348	-10.652	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 20:25**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

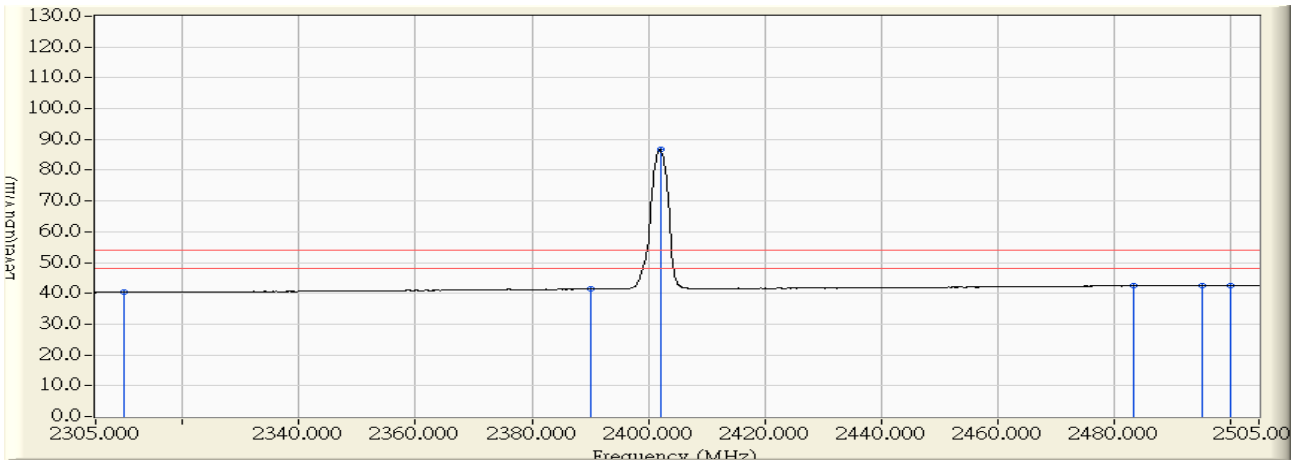


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	23.913	52.043	-21.957	74.000	PEAK
2		2390.000	28.933	24.054	52.987	-21.013	74.000	PEAK
3	*	2401.800	29.051	69.738	98.790	24.790	74.000	PEAK
4		2483.500	29.829	23.586	53.415	-20.585	74.000	PEAK
5		2493.500	29.834	26.517	56.351	-17.649	74.000	PEAK
6		2500.000	29.826	24.435	54.260	-19.740	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 : CB1	**Time : 2016/10/05 - 20:26**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

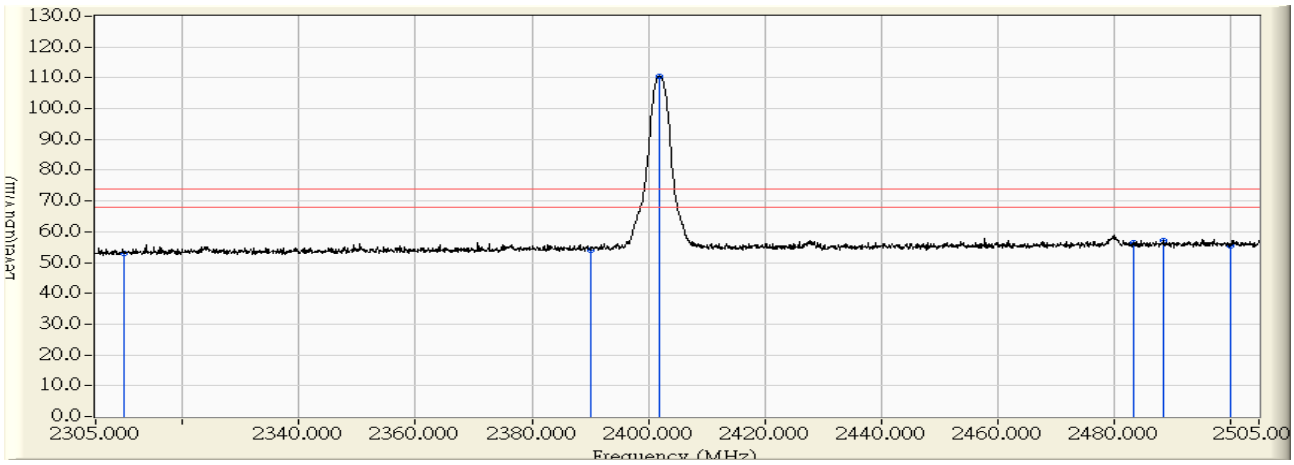


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.174	40.304	-13.696	54.000	AVERAGE
2		2390.000	28.933	12.498	41.431	-12.569	54.000	AVERAGE
3	*	2402.100	29.054	57.651	86.706	32.706	54.000	AVERAGE
4		2483.500	29.829	12.590	42.419	-11.581	54.000	AVERAGE
5		2495.300	29.835	12.689	42.524	-11.476	54.000	AVERAGE
6		2500.000	29.826	12.644	42.469	-11.531	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 20:21**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

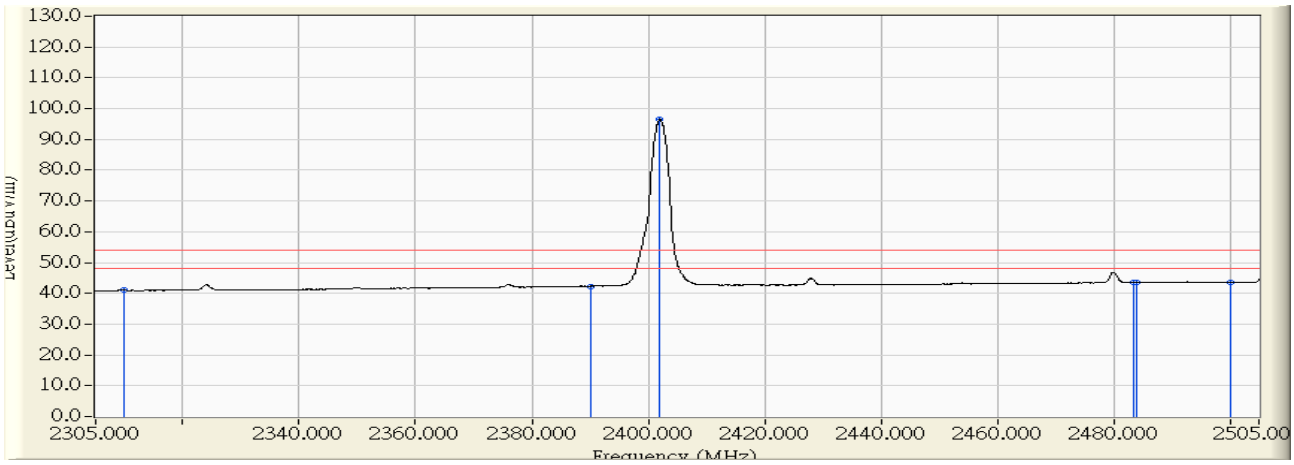


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.254	53.038	-20.962	74.000	PEAK
2		2390.000	29.747	24.383	54.130	-19.870	74.000	PEAK
3	*	2401.900	29.890	80.590	110.480	36.480	74.000	PEAK
4		2483.500	30.830	25.530	56.360	-17.640	74.000	PEAK
5		2488.500	30.843	26.475	57.317	-16.683	74.000	PEAK
6		2500.000	30.860	24.614	55.473	-18.527	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 : CB1	**Time : 2016/10/05 - 20:20**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2402MHz**

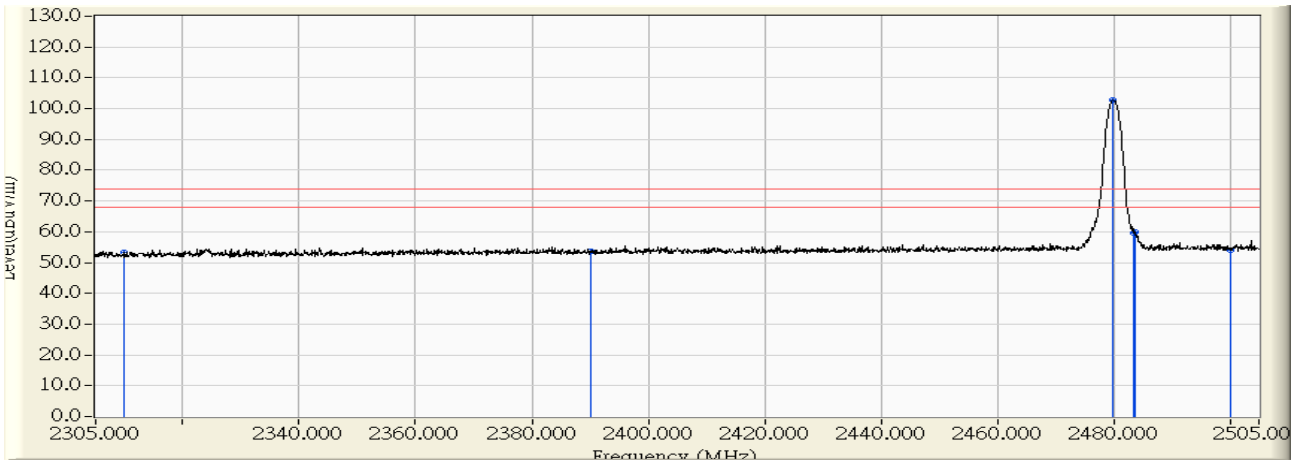


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.191	40.975	-13.025	54.000	AVERAGE
2		2390.000	29.747	12.588	42.335	-11.665	54.000	AVERAGE
3	*	2402.000	29.891	66.807	96.699	42.699	54.000	AVERAGE
4		2483.500	30.830	12.721	43.551	-10.449	54.000	AVERAGE
5		2483.900	30.831	12.775	43.606	-10.394	54.000	AVERAGE
6		2500.000	30.860	12.613	43.472	-10.528	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 20:39**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_2DH5_2480MHz**

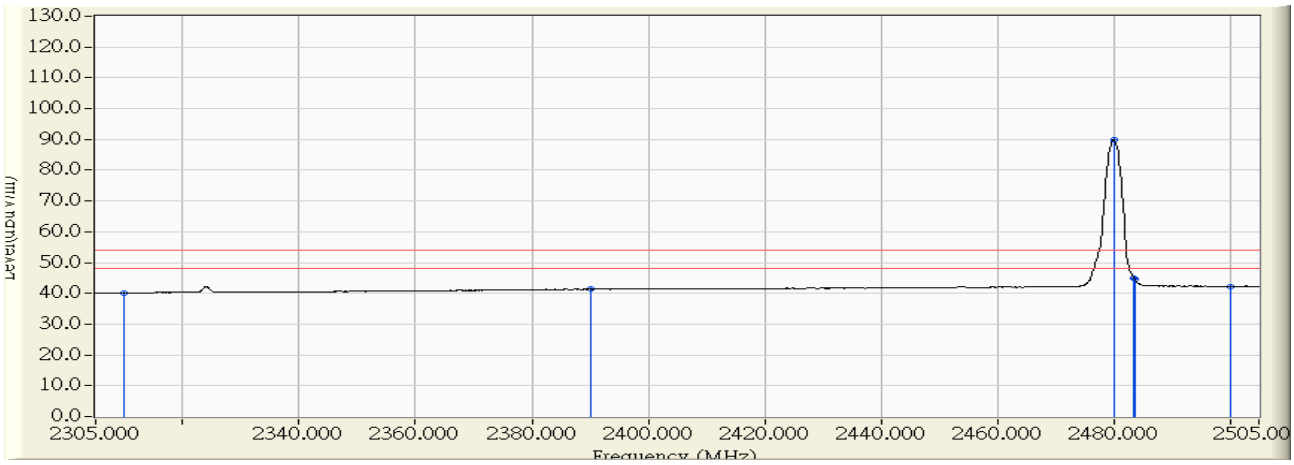


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	25.057	53.187	-20.813	74.000	PEAK
2		2390.000	28.933	24.758	53.691	-20.309	74.000	PEAK
3	*	2479.900	29.827	72.850	102.677	28.677	74.000	PEAK
4		2483.500	29.829	29.704	59.533	-14.467	74.000	PEAK
5		2483.600	29.829	29.995	59.824	-14.176	74.000	PEAK
6		2500.000	29.826	24.130	53.955	-20.045	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 : CB1	**Time : 2016/10/05 - 20:40**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2480MHz**

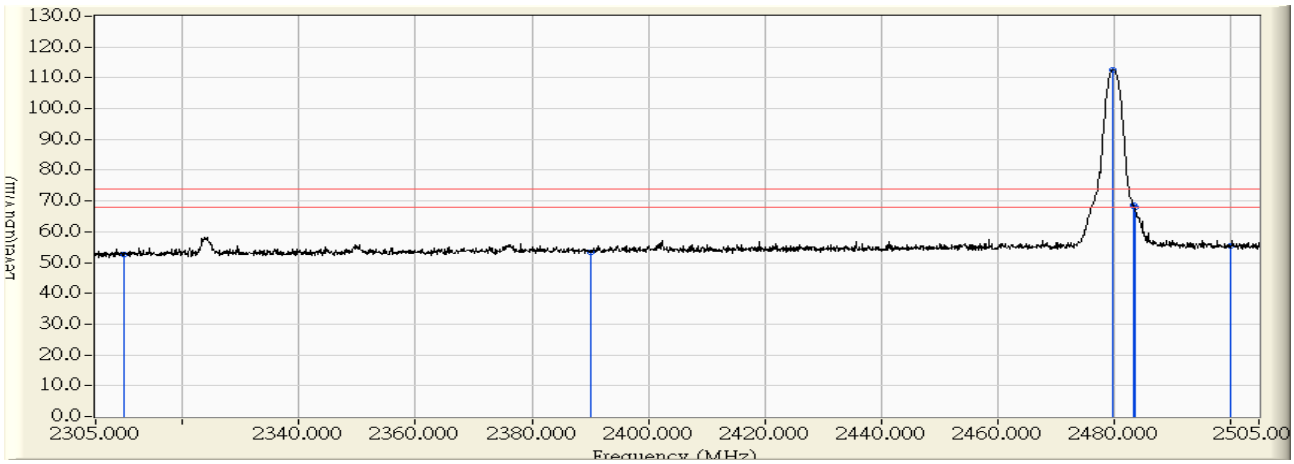


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.063	40.193	-13.807	54.000	AVERAGE
2		2390.000	28.933	12.455	41.388	-12.612	54.000	AVERAGE
3	*	2480.000	29.827	60.185	90.012	36.012	54.000	AVERAGE
4		2483.500	29.829	15.131	44.960	-9.040	54.000	AVERAGE
5		2483.600	29.829	14.811	44.640	-9.360	54.000	AVERAGE
6		2500.000	29.826	12.466	42.291	-11.709	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 20:33**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_2DH5_2480MHz**

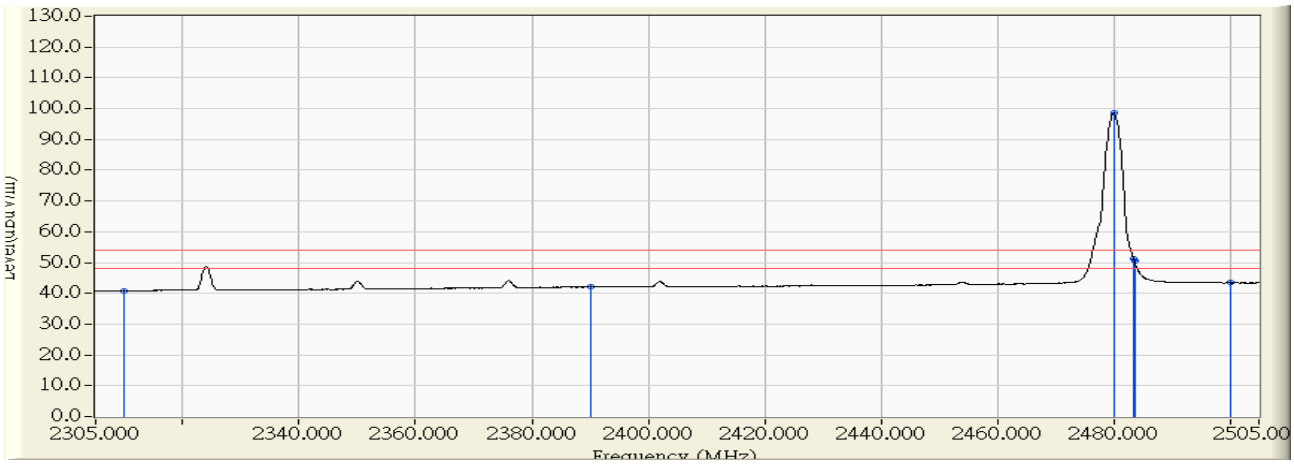


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	23.779	52.563	-21.437	74.000	PEAK
2		2390.000	29.747	23.436	53.183	-20.817	74.000	PEAK
3	*	2479.900	30.821	81.852	112.673	38.673	74.000	PEAK
4		2483.500	30.830	37.896	68.726	-5.274	74.000	PEAK
5		2483.600	30.831	37.102	67.932	-6.068	74.000	PEAK
6		2500.000	30.860	24.480	55.339	-18.661	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 : CB1	**Time : 2016/10/05 - 20:32**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_2DH5_2480MHz**

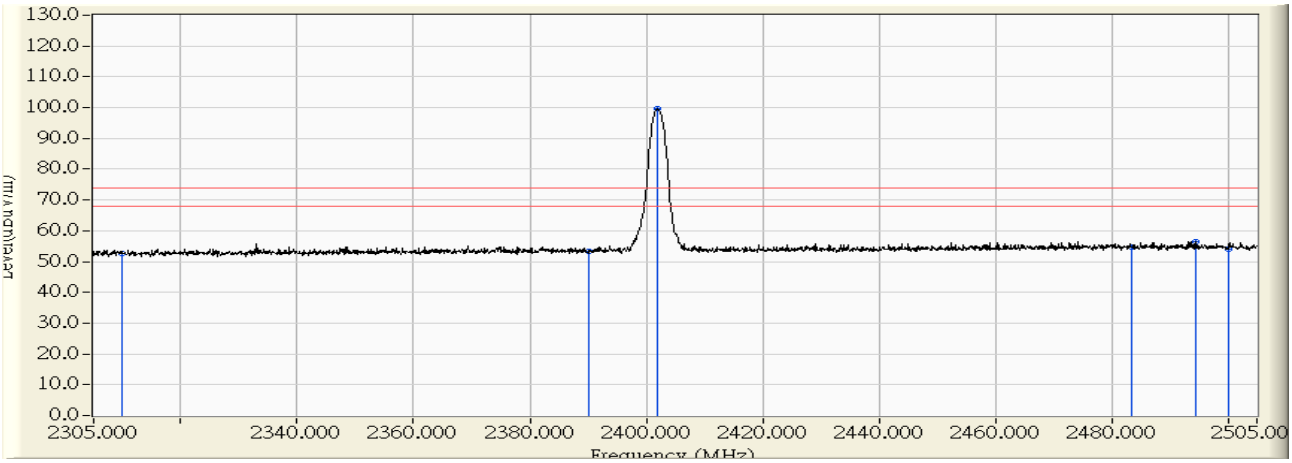


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.063	40.847	-13.153	54.000	AVERAGE
2		2390.000	29.747	12.331	42.078	-11.922	54.000	AVERAGE
3	*	2480.000	30.821	67.731	98.552	44.552	54.000	AVERAGE
4		2483.500	30.830	20.378	51.208	-2.792	54.000	AVERAGE
5		2483.600	30.831	19.586	50.416	-3.584	54.000	AVERAGE
6		2500.000	30.860	12.553	43.412	-10.588	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 20:59**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

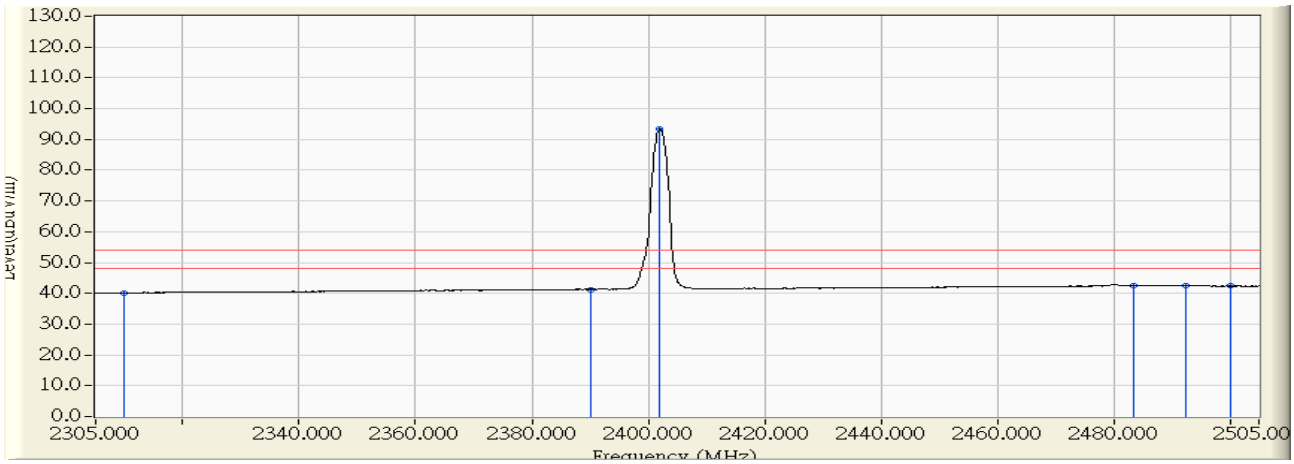


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	24.377	52.507	-21.493	74.000	PEAK
2		2390.000	28.933	24.234	53.167	-20.833	74.000	PEAK
3	*	2402.000	29.053	70.500	99.554	25.554	74.000	PEAK
4		2483.500	29.829	24.904	54.733	-19.267	74.000	PEAK
5		2494.600	29.834	26.559	56.394	-17.606	74.000	PEAK
6		2500.000	29.826	24.204	54.029	-19.971	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 : CB1	**Time : 2016/10/05 - 21:00**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

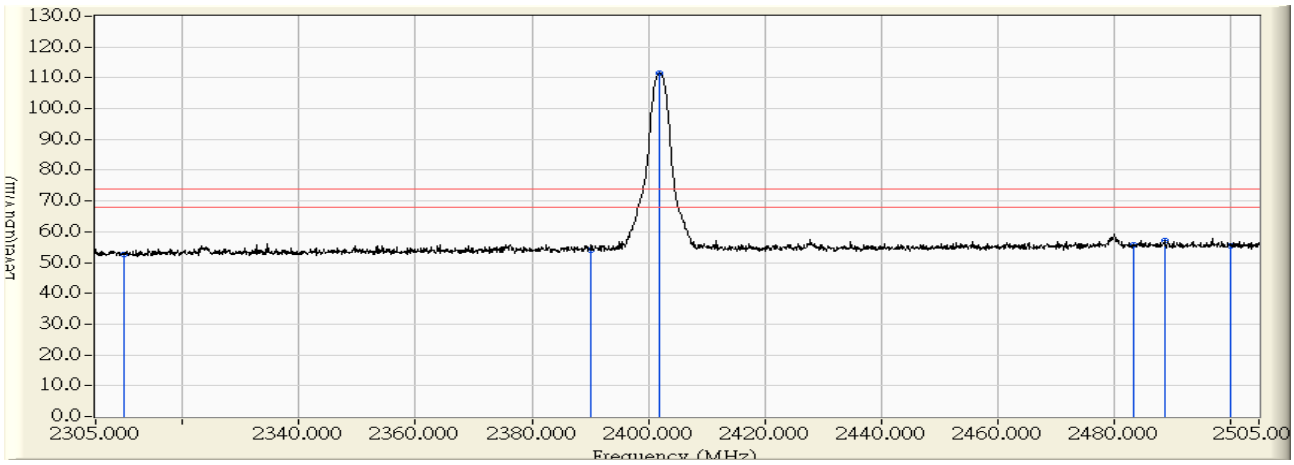


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.016	40.146	-13.854	54.000	AVERAGE
2		2390.000	28.933	12.323	41.256	-12.744	54.000	AVERAGE
3	*	2402.000	29.053	64.516	93.570	39.570	54.000	AVERAGE
4		2483.500	29.829	12.571	42.400	-11.600	54.000	AVERAGE
5		2492.400	29.833	12.718	42.551	-11.449	54.000	AVERAGE
6		2500.000	29.826	12.551	42.376	-11.624	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 20:47**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

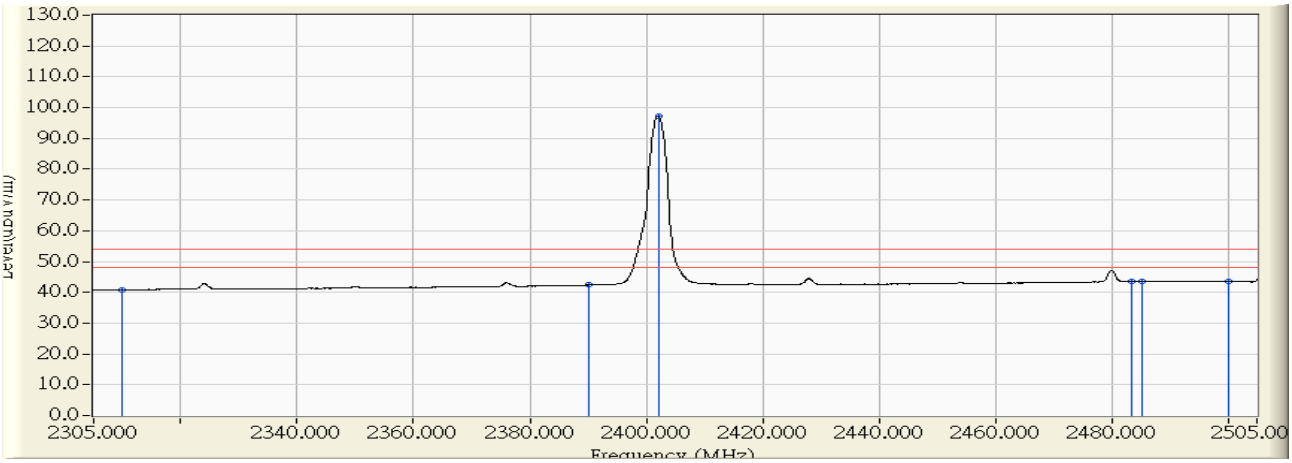


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	23.970	52.754	-21.246	74.000	PEAK
2		2390.000	29.747	24.344	54.091	-19.909	74.000	PEAK
3	*	2402.000	29.891	81.654	111.546	37.546	74.000	PEAK
4		2483.500	30.830	24.967	55.797	-18.203	74.000	PEAK
5		2488.800	30.843	26.438	57.281	-16.719	74.000	PEAK
6		2500.000	30.860	24.696	55.555	-18.445	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 : CB1	**Time : 2016/10/05 - 20:46**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2402MHz**

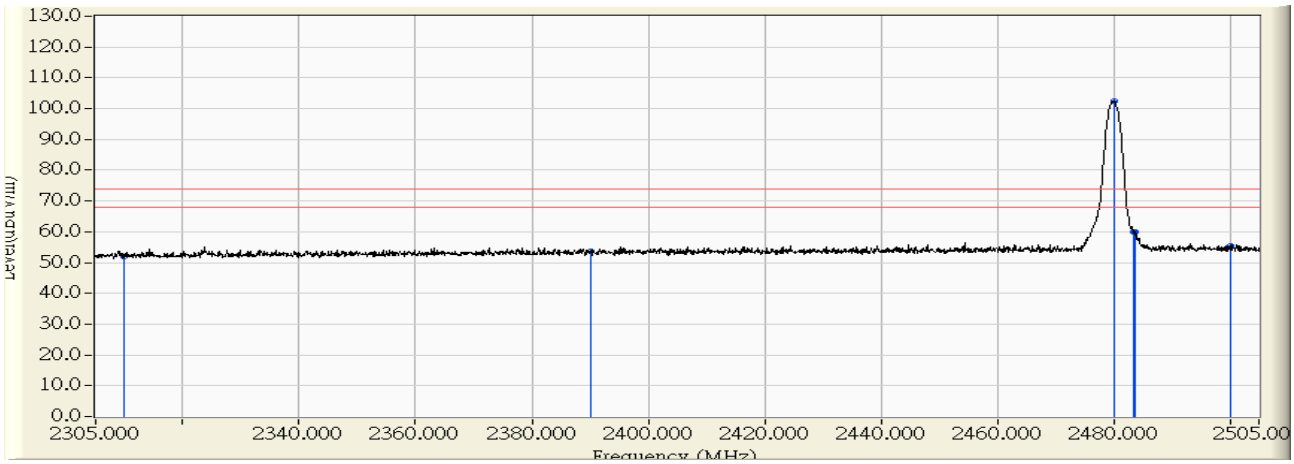


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.056	40.840	-13.160	54.000	AVERAGE
2		2390.000	29.747	12.634	42.381	-11.619	54.000	AVERAGE
3	*	2402.100	29.892	67.498	97.391	43.391	54.000	AVERAGE
4		2483.500	30.830	12.606	43.436	-10.564	54.000	AVERAGE
5		2485.200	30.834	12.782	43.616	-10.384	54.000	AVERAGE
6		2500.000	30.860	12.564	43.423	-10.577	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 21:13**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2480MHz**

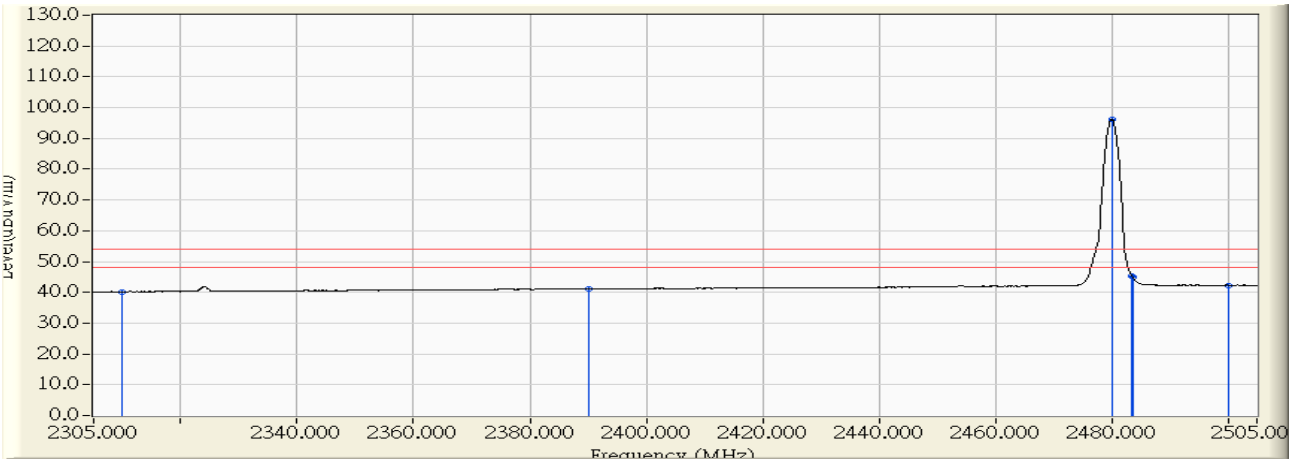


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	23.825	51.955	-22.045	74.000	PEAK
2		2390.000	28.933	24.717	53.650	-20.350	74.000	PEAK
3	*	2480.000	29.827	72.570	102.397	28.397	74.000	PEAK
4		2483.500	29.829	30.136	59.965	-14.035	74.000	PEAK
5		2483.700	29.830	30.045	59.874	-14.126	74.000	PEAK
6		2500.000	29.826	25.612	55.437	-18.563	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 : CB1	**Time : 2016/10/05 - 21:14**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2480MHz**

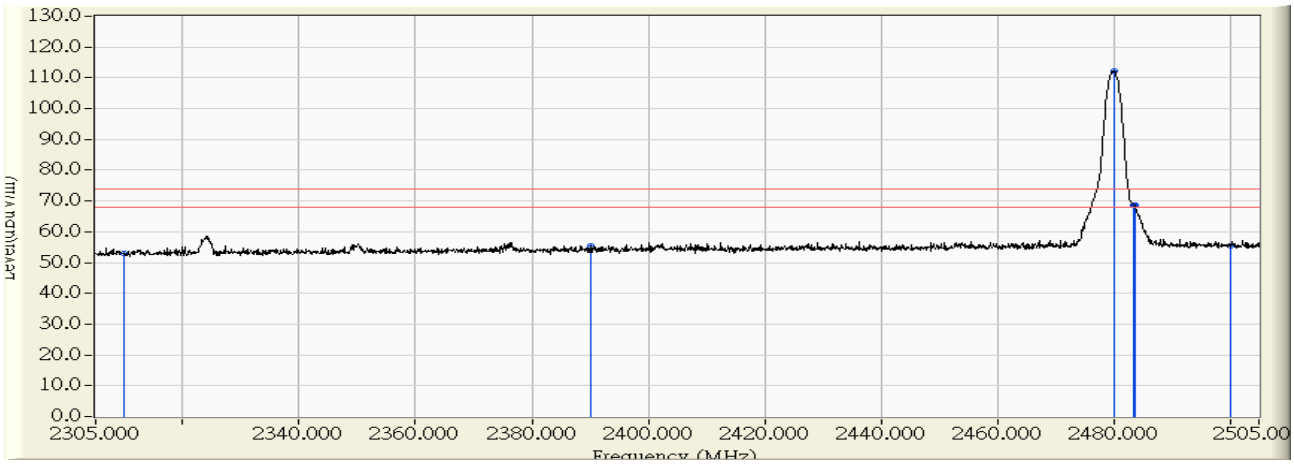


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.072	40.202	-13.798	54.000	AVERAGE
2		2390.000	28.933	12.219	41.152	-12.848	54.000	AVERAGE
3	*	2480.000	29.827	66.413	96.240	42.240	54.000	AVERAGE
4		2483.500	29.829	15.598	45.427	-8.573	54.000	AVERAGE
5		2483.600	29.829	15.270	45.099	-8.901	54.000	AVERAGE
6		2500.000	29.826	12.514	42.339	-11.661	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. If the readings given are average, peak measurement should also be supplied.

Site : CB1	**Time : 2016/10/05 - 21:08**
Limit : FCC_SpartC_15.247_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2** **802.15.1_3DH5_2480MHz**

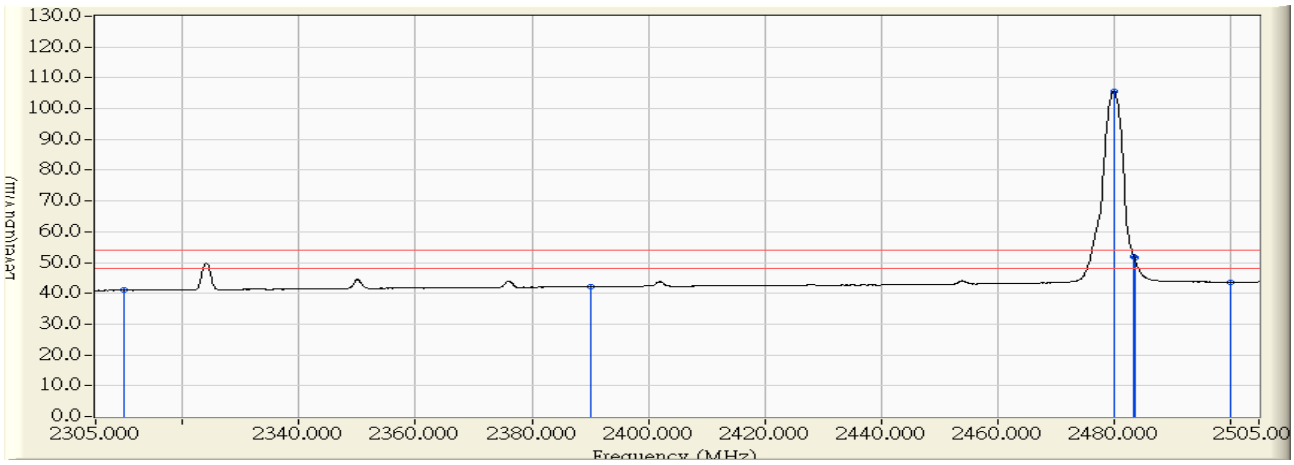


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	24.114	52.898	-21.102	74.000	PEAK
2		2390.000	29.747	25.498	55.245	-18.755	74.000	PEAK
3	*	2480.000	30.821	81.273	112.094	38.094	74.000	PEAK
4		2483.500	30.830	37.960	68.790	-5.210	74.000	PEAK
5		2483.600	30.831	37.701	68.531	-5.469	74.000	PEAK
6		2500.000	30.860	24.675	55.534	-18.466	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 : CB1	**Time : 2016/10/05 - 21:07**
Limit : FCC_SpartC_15.247_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : DC 13.8V**
EUT : TWO WAY RADIO/TRANSCEIVER	**Note : Mode 2: Transmit Mode_Ant 2 802.15.1_3DH5_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.173	40.957	-13.043	54.000	AVERAGE
2		2390.000	29.747	12.479	42.226	-11.774	54.000	AVERAGE
3	*	2480.100	30.821	74.768	105.590	51.590	54.000	AVERAGE
4		2483.500	30.830	21.146	51.976	-2.024	54.000	AVERAGE
5		2483.600	30.831	20.684	51.514	-2.486	54.000	AVERAGE
6		2500.000	30.860	12.815	43.674	-10.326	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. If the readings given are average, peak measurement should also be supplied.

7. Number of hopping frequency

7.1. Test Equipment

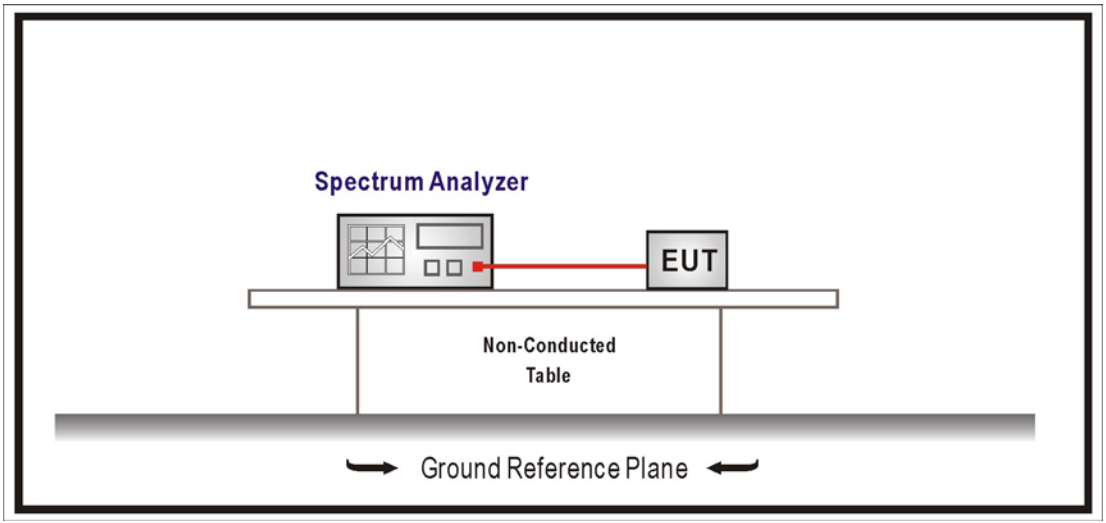
The following test equipment is used during the test:

Number of hopping frequency / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments 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 KDB 558074 D01 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

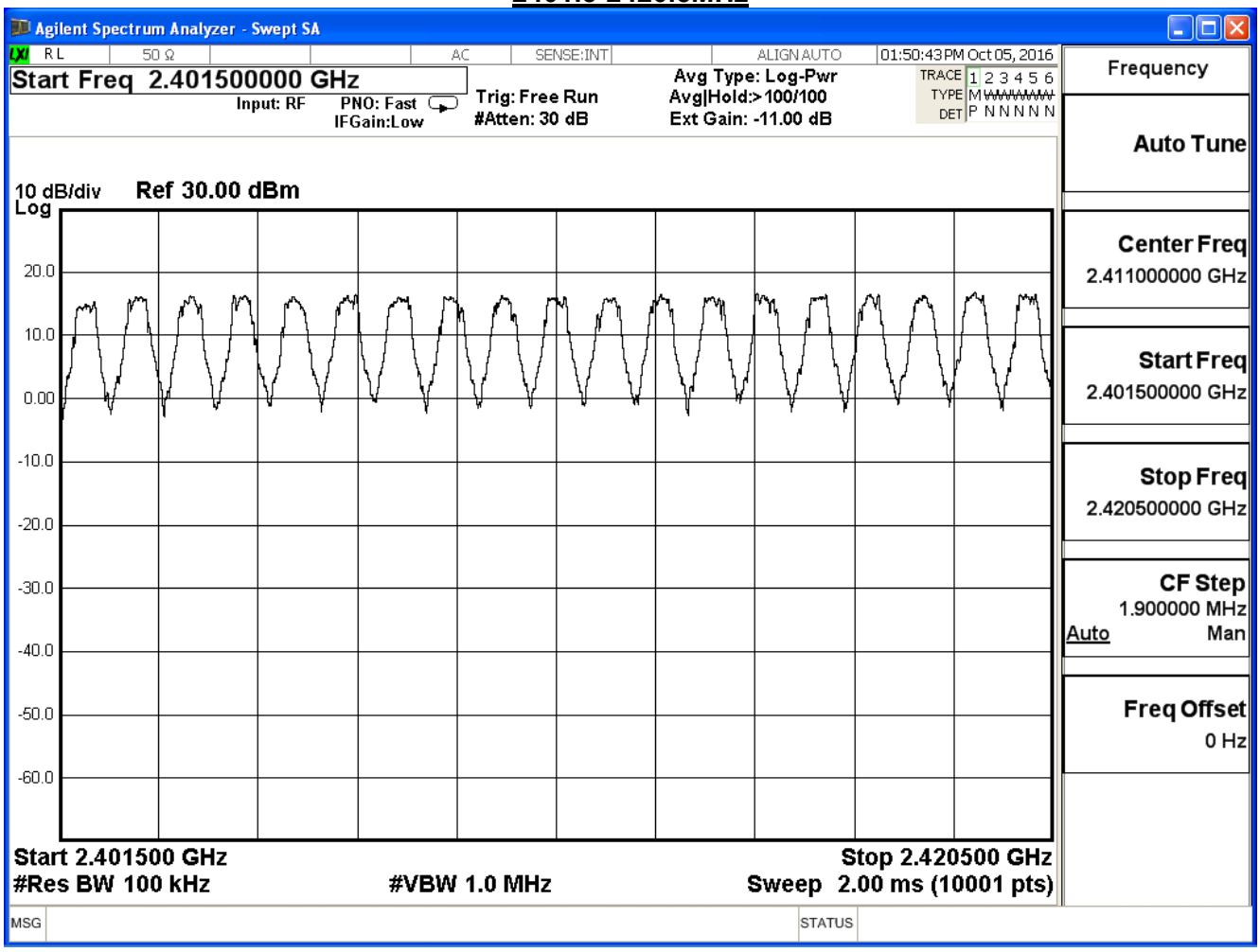
According to FCC Part 15 Subpart C Paragraph 15.247: 2015

7.6. Test Result

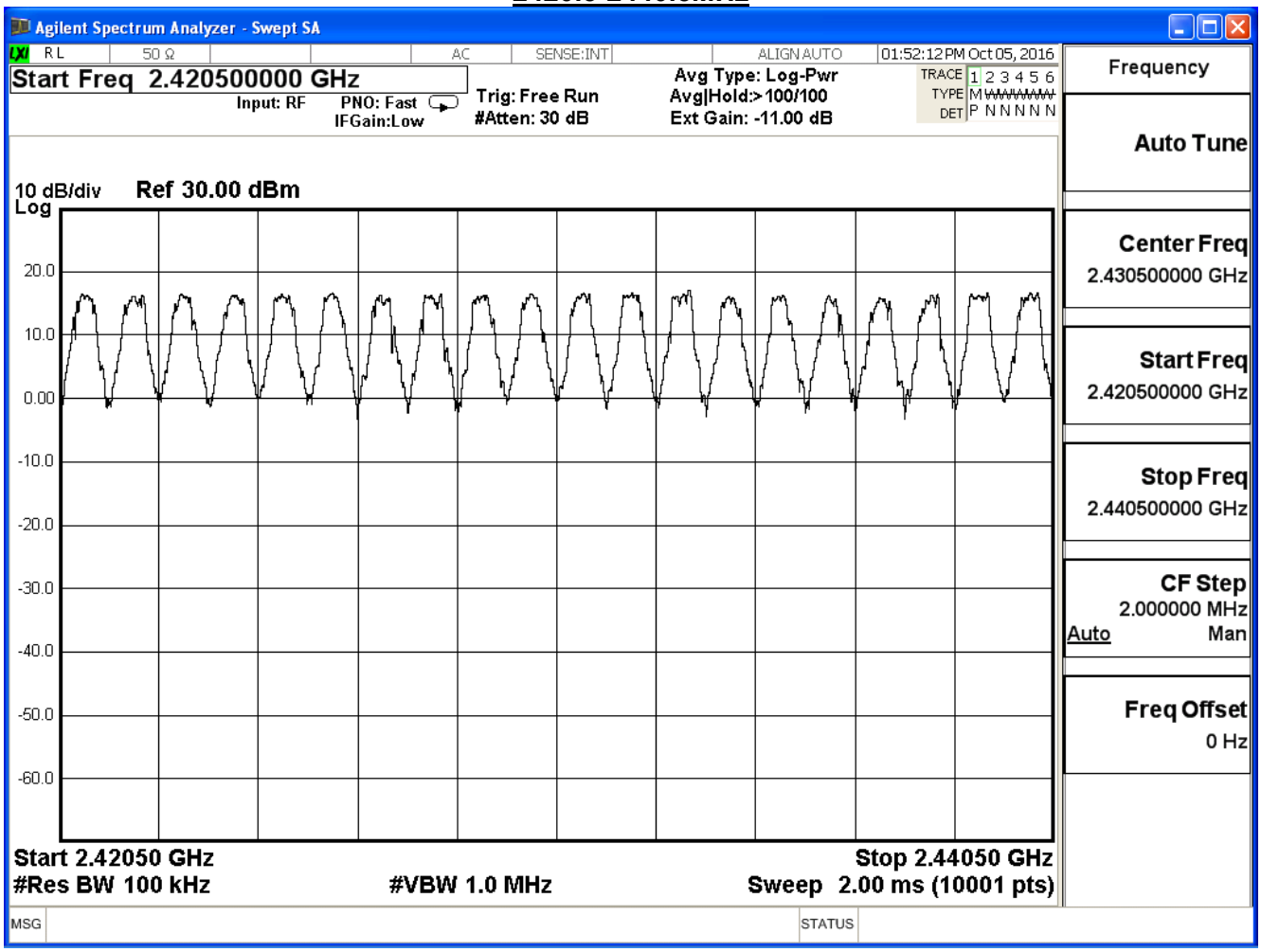
Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Number of hopping frequency		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

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

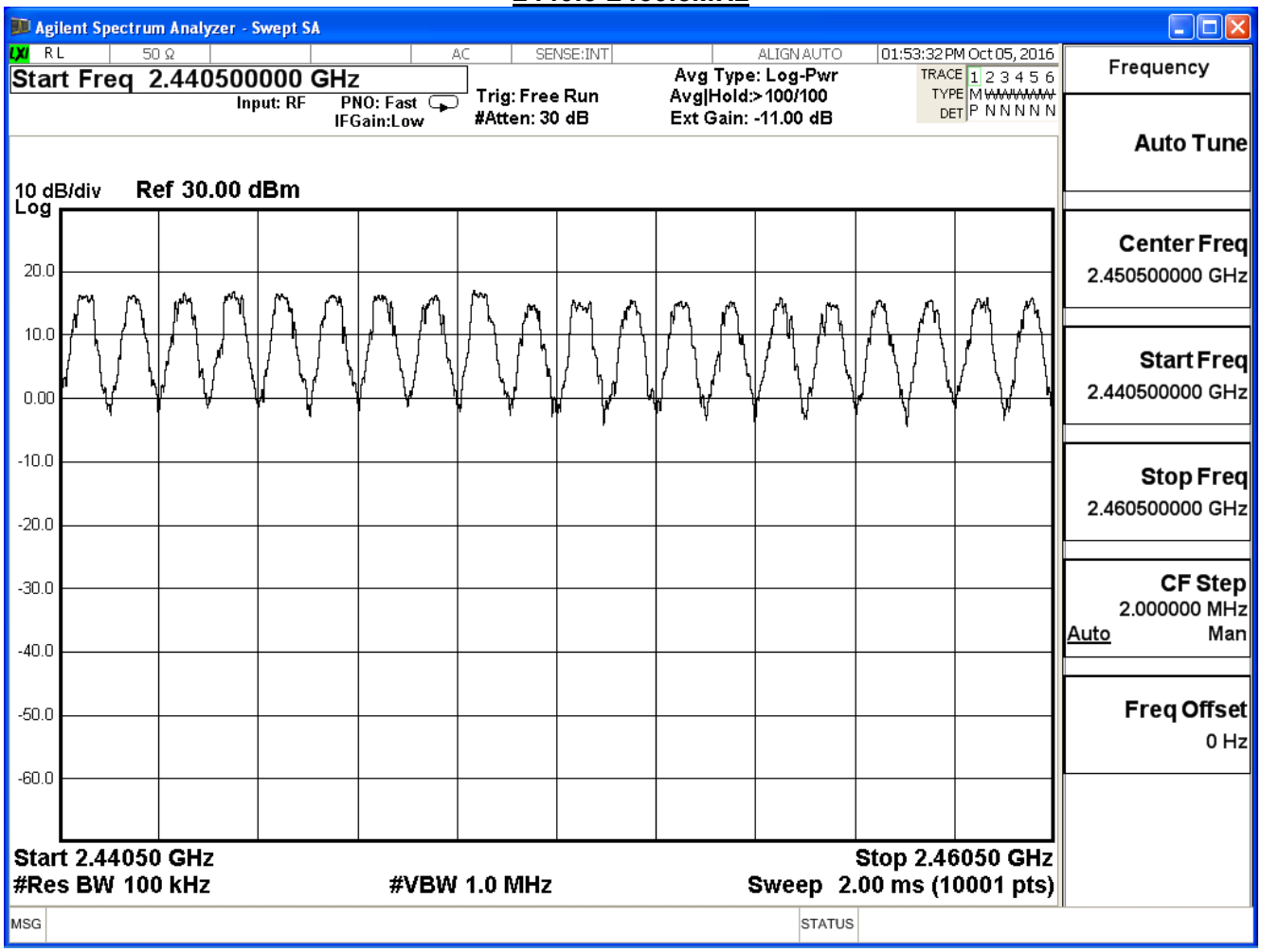
2401.5-2420.5MHz



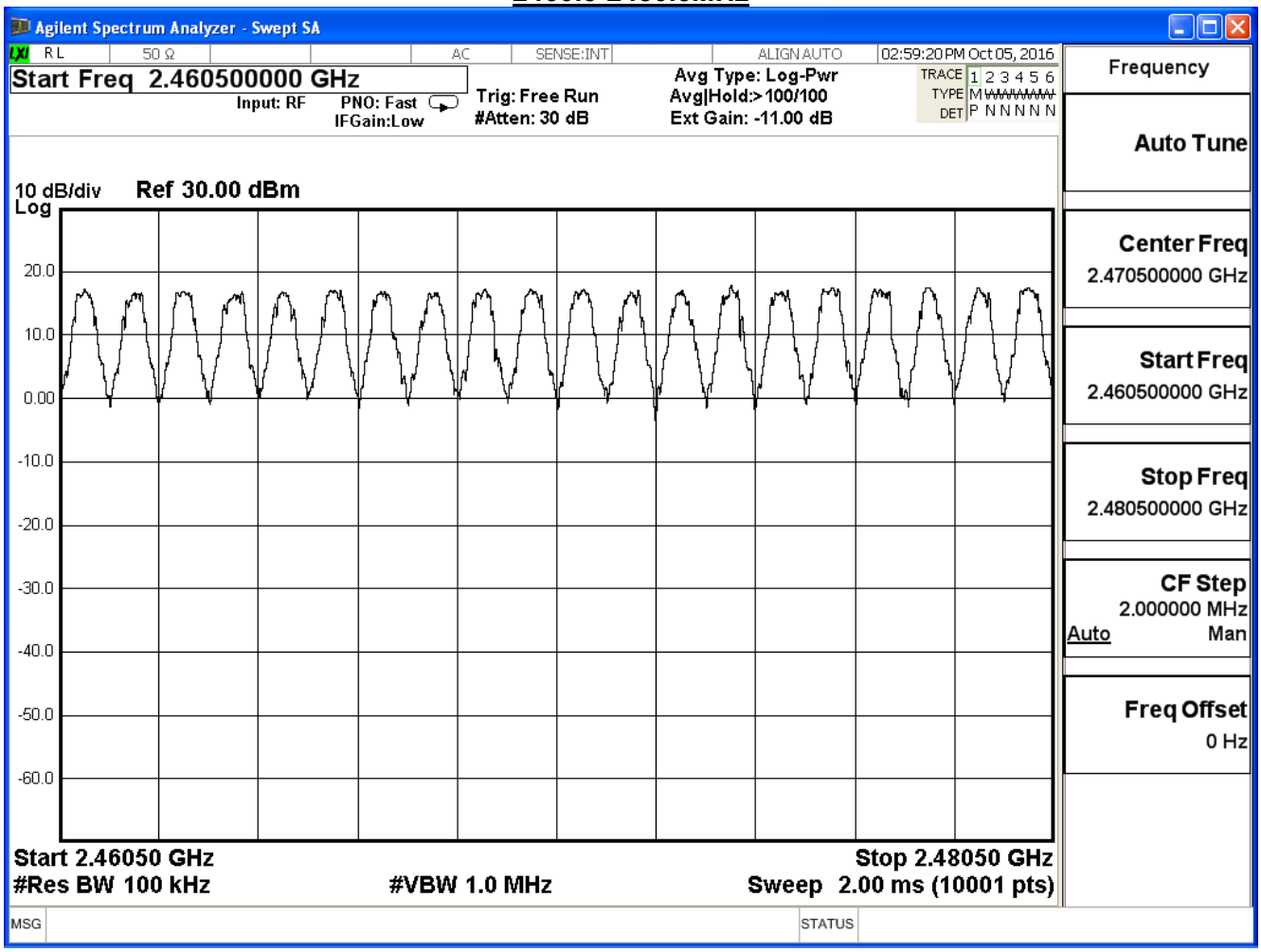
2420.5-2440.5MHz



2440.5-2460.5MHz



2460.5-2480.5MHz



8. Carrier Frequency Separation

8.1. Test Equipment

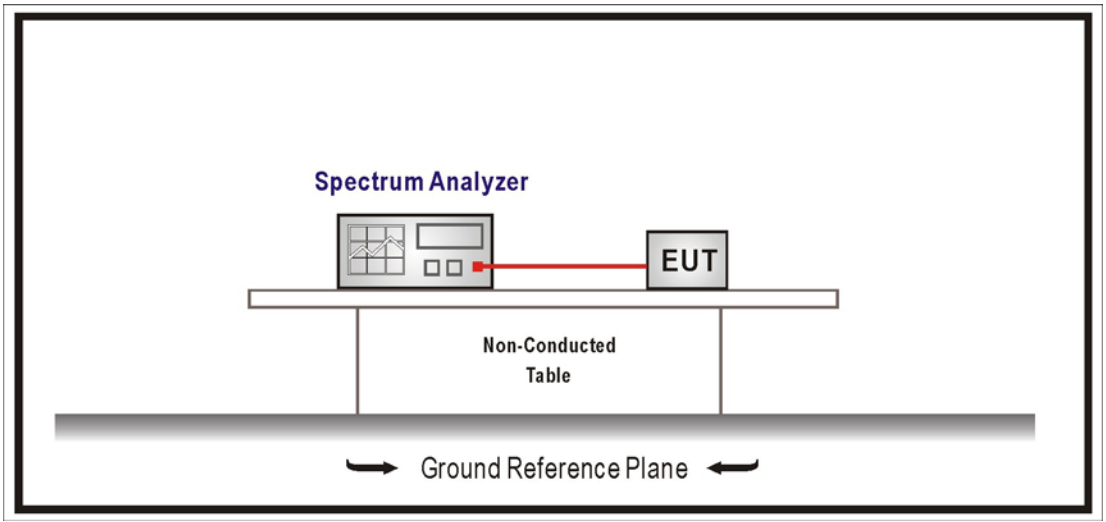
The following test equipment is used during the test:

Carrier Frequency Separation / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments 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 KDB 558074 D01 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

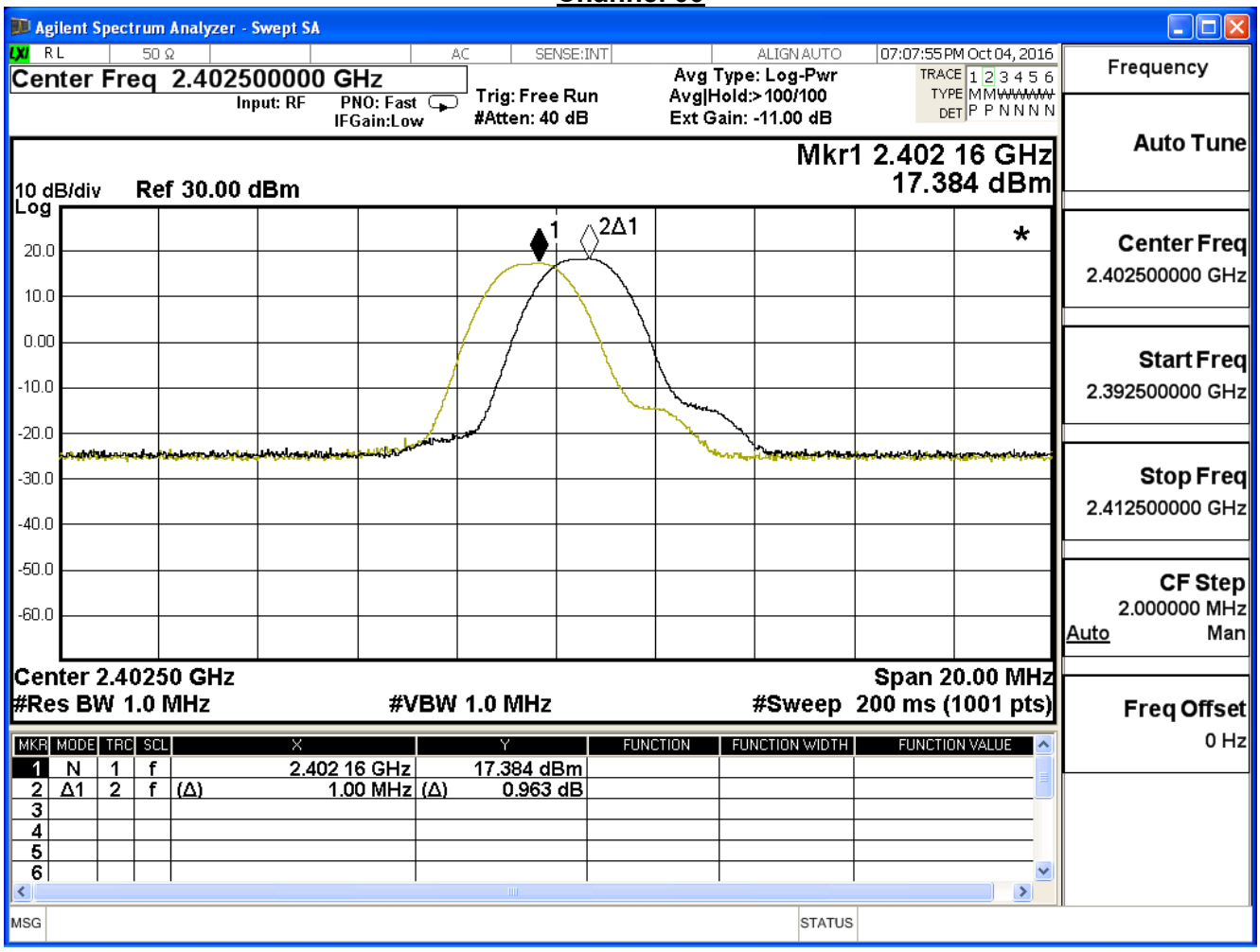
8.6. Test Result

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/06	Test Site	SR7

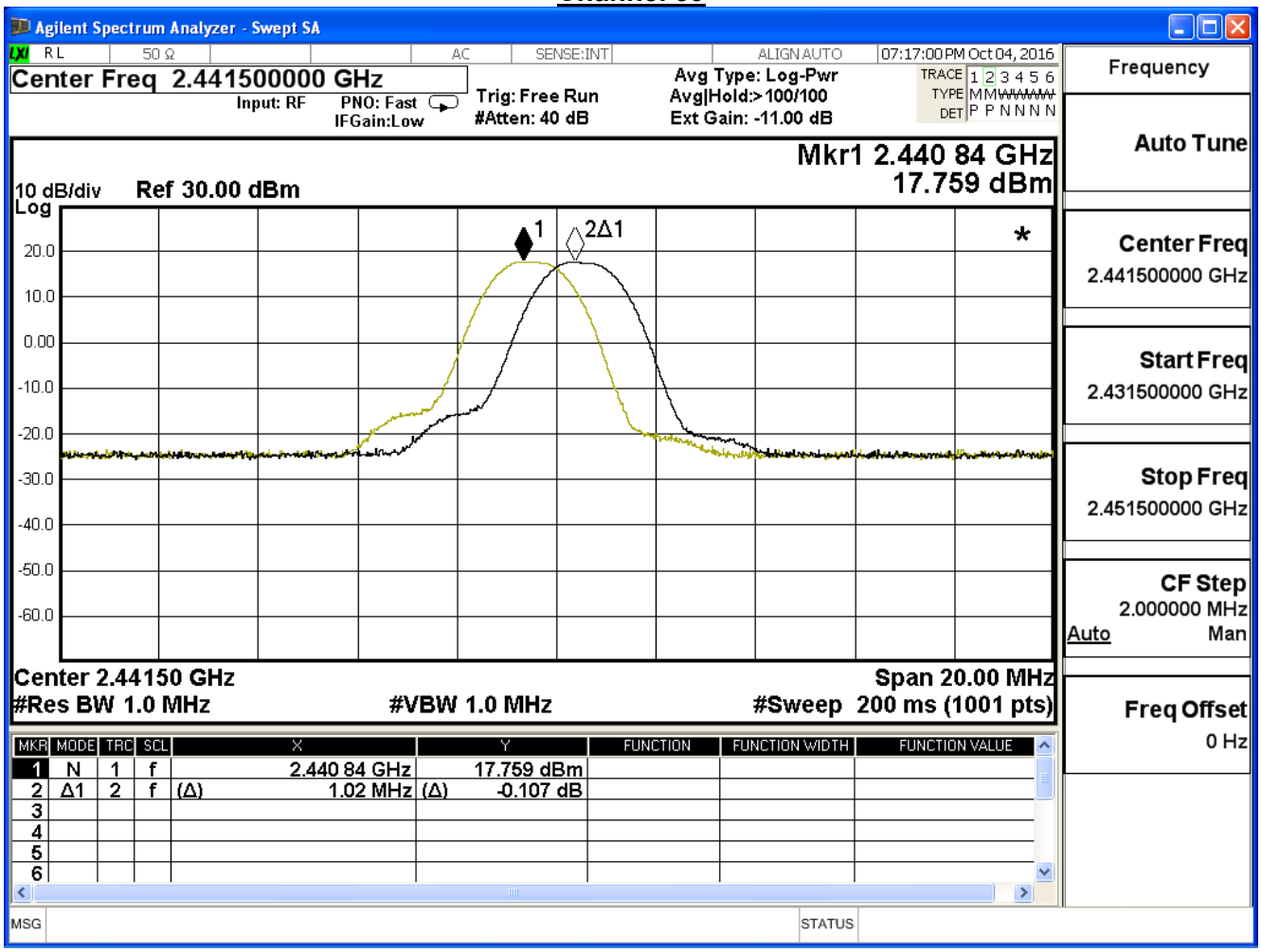
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.000	>0.747	Pass
39	2441	1.020	>0.744	Pass
78	2480	1.000	>0.745	Pass

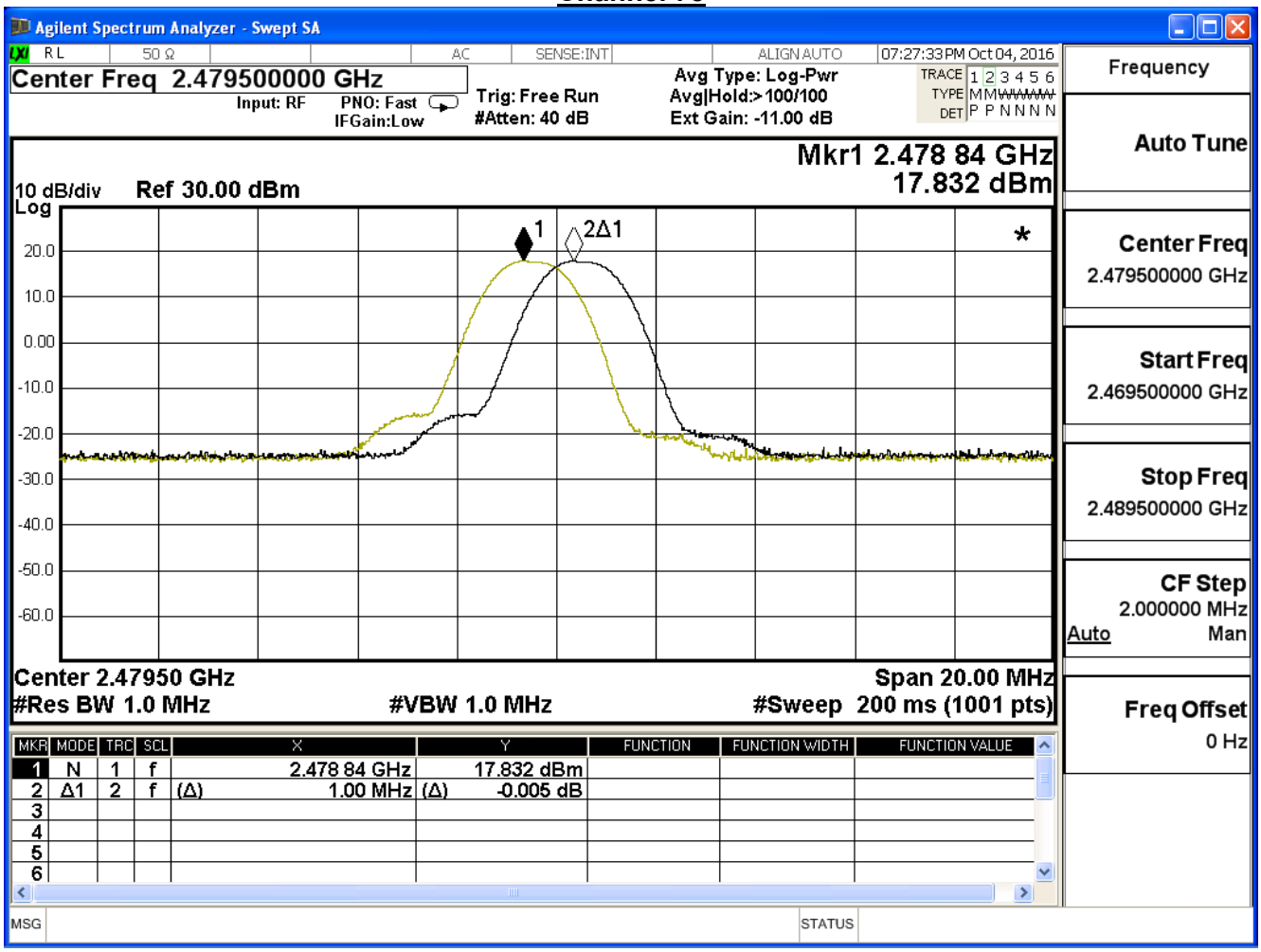
Channel 00



Channel 39


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
07:17:00 PM Oct 04, 2016
Center Freq 2.441500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
Mkr1 2.440 84 GHz
17.759 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1
2Δ1
*
Center 2.44150 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
#Sweep 200 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.440 84 GHz 17.759 dBm
2 Δ1 2 f (Δ) 1.02 MHz (Δ) -0.107 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.431500000 GHz
Stop Freq
2.451500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 78

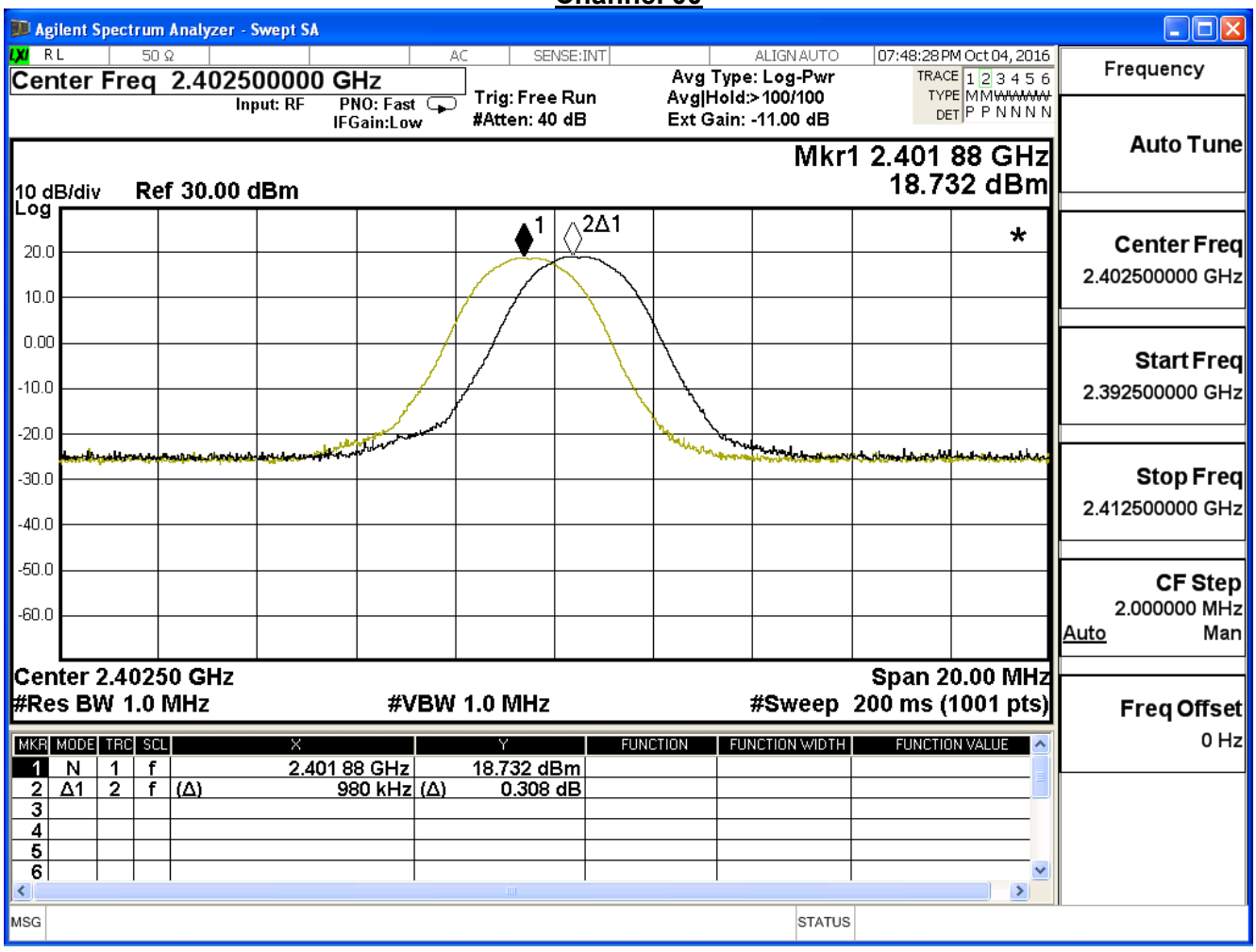

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
07:27:33 PM Oct 04, 2016
Center Freq 2.479500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
Mkr1 2.478 84 GHz
17.832 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1
2Δ1
*
Center 2.47950 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
#Sweep 200 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.478 84 GHz 17.832 dBm
2 Δ1 2 f (Δ) 1.00 MHz (Δ) -0.005 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.479500000 GHz
Start Freq
2.469500000 GHz
Stop Freq
2.489500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/06	Test Site	SR7

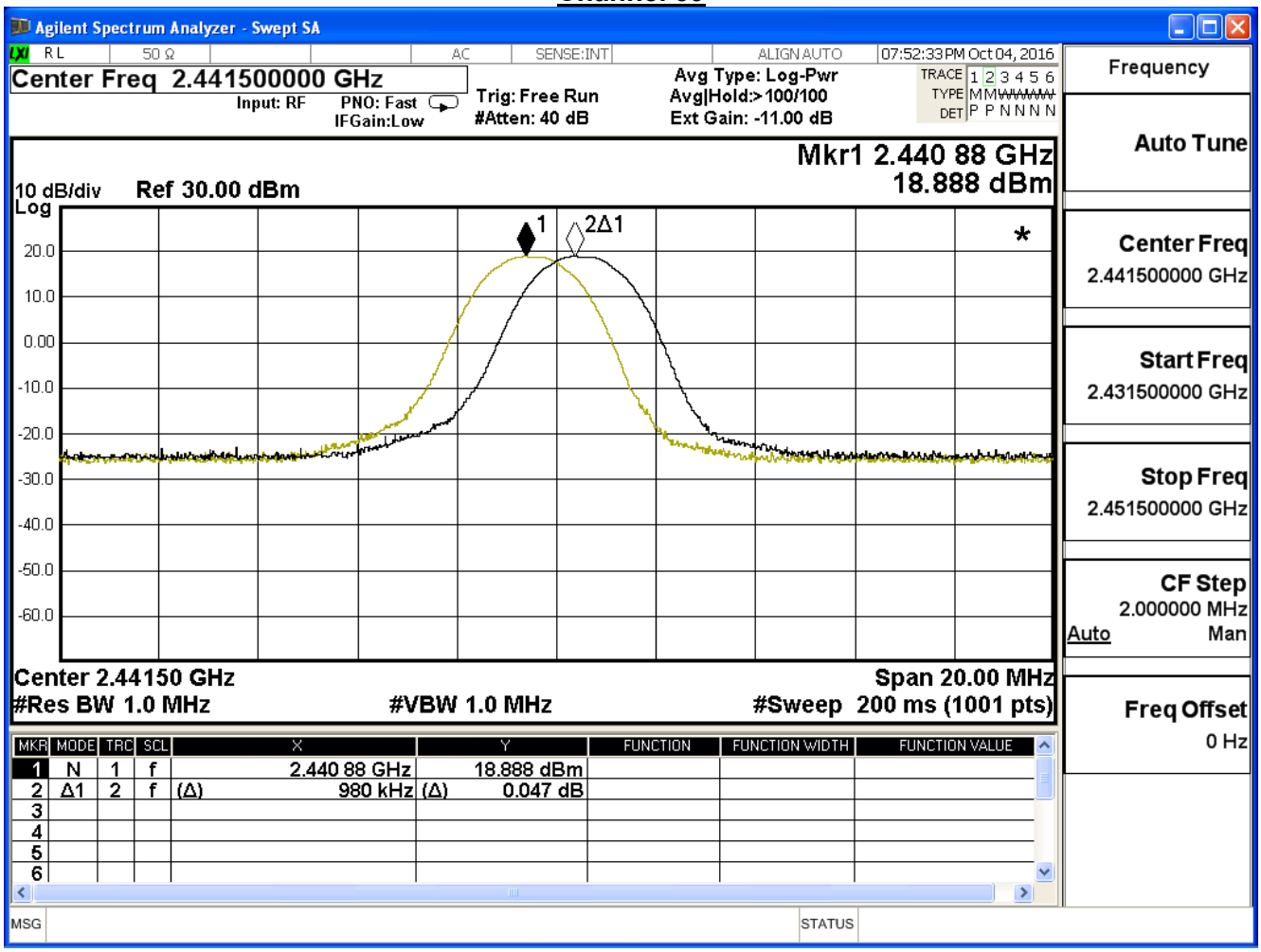
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	0.980	>0.921	Pass
39	2441	0.980	>0.914	Pass
78	2480	0.960	>0.916	Pass

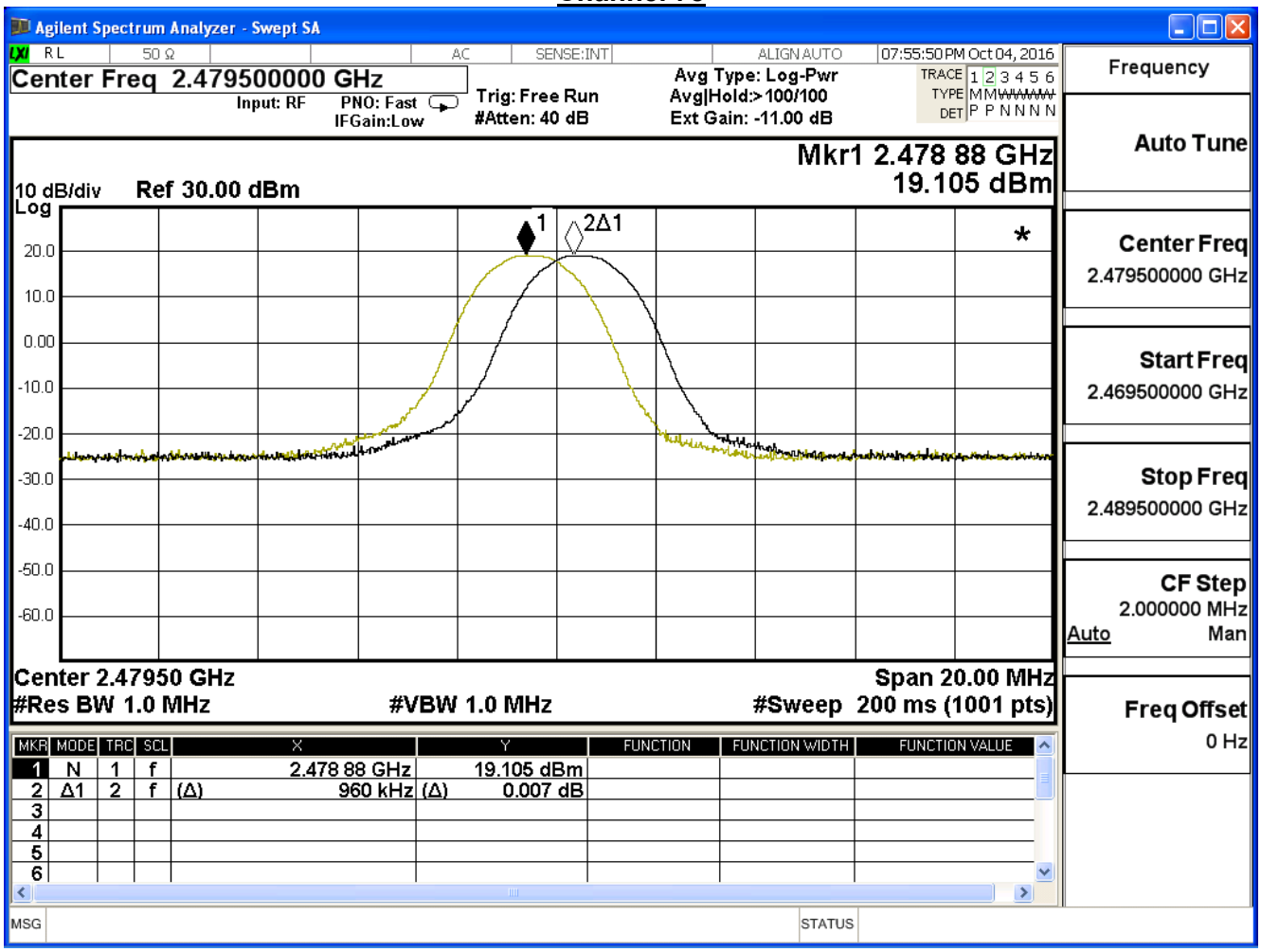
Channel 00



Channel 39


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
07:52:33 PM Oct 04, 2016
Center Freq 2.441500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
Mkr1 2.440 88 GHz
18.888 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1
2Δ1
*
Center 2.44150 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
#Sweep 200 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.440 88 GHz 18.888 dBm
2 Δ1 2 f (Δ) 980 kHz (Δ) 0.047 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.431500000 GHz
Stop Freq
2.451500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 78

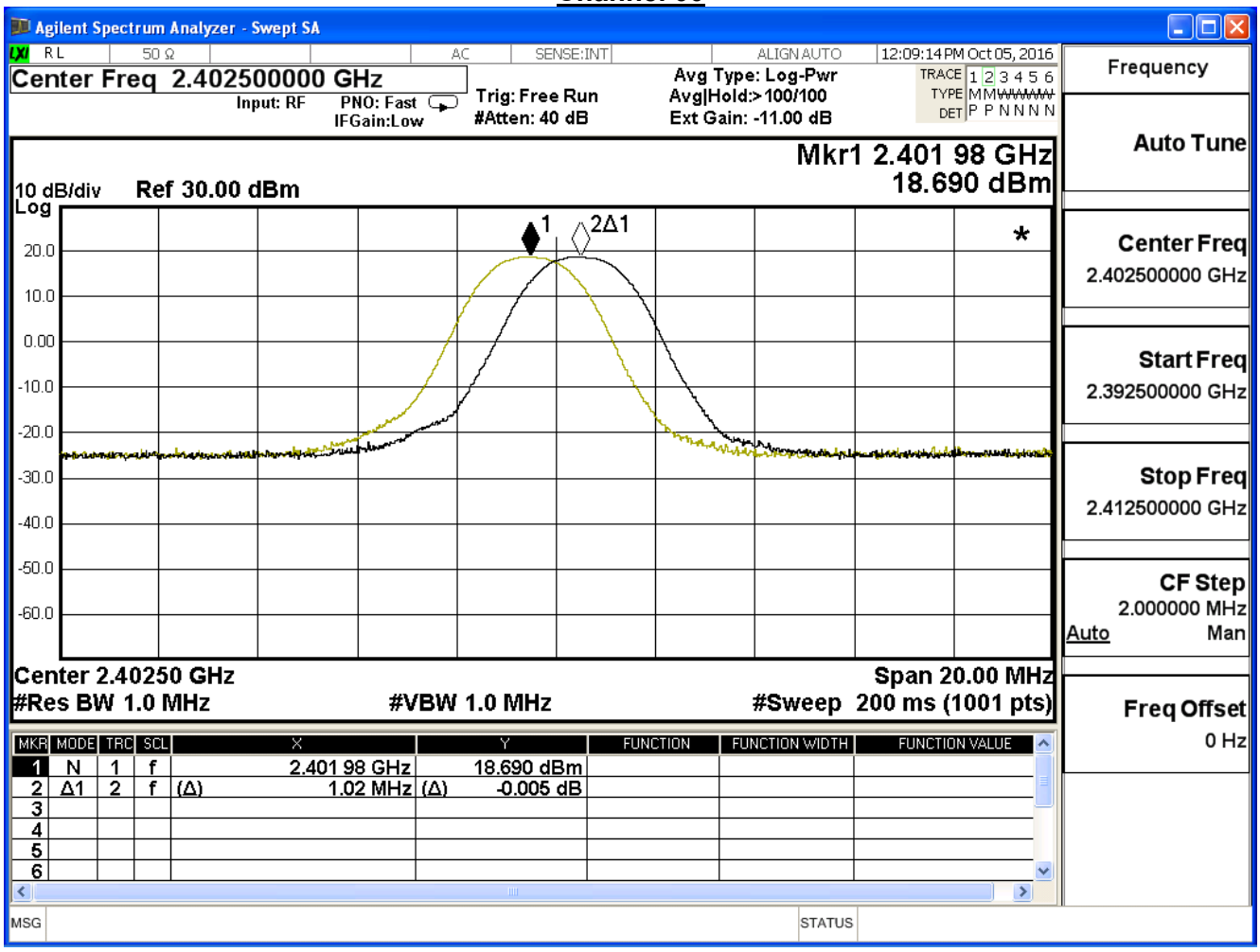

Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
07:55:50 PM Oct 04, 2016
Center Freq 2.479500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE MMWWWWW
DET P P N N N N
Mkr1 2.478 88 GHz
19.105 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1
2Δ1
*
Center 2.47950 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
#Sweep 200 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.478 88 GHz 19.105 dBm
2 Δ1 2 f (Δ) 960 kHz (Δ) 0.007 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.479500000 GHz
Start Freq
2.469500000 GHz
Stop Freq
2.489500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/06	Test Site	SR7

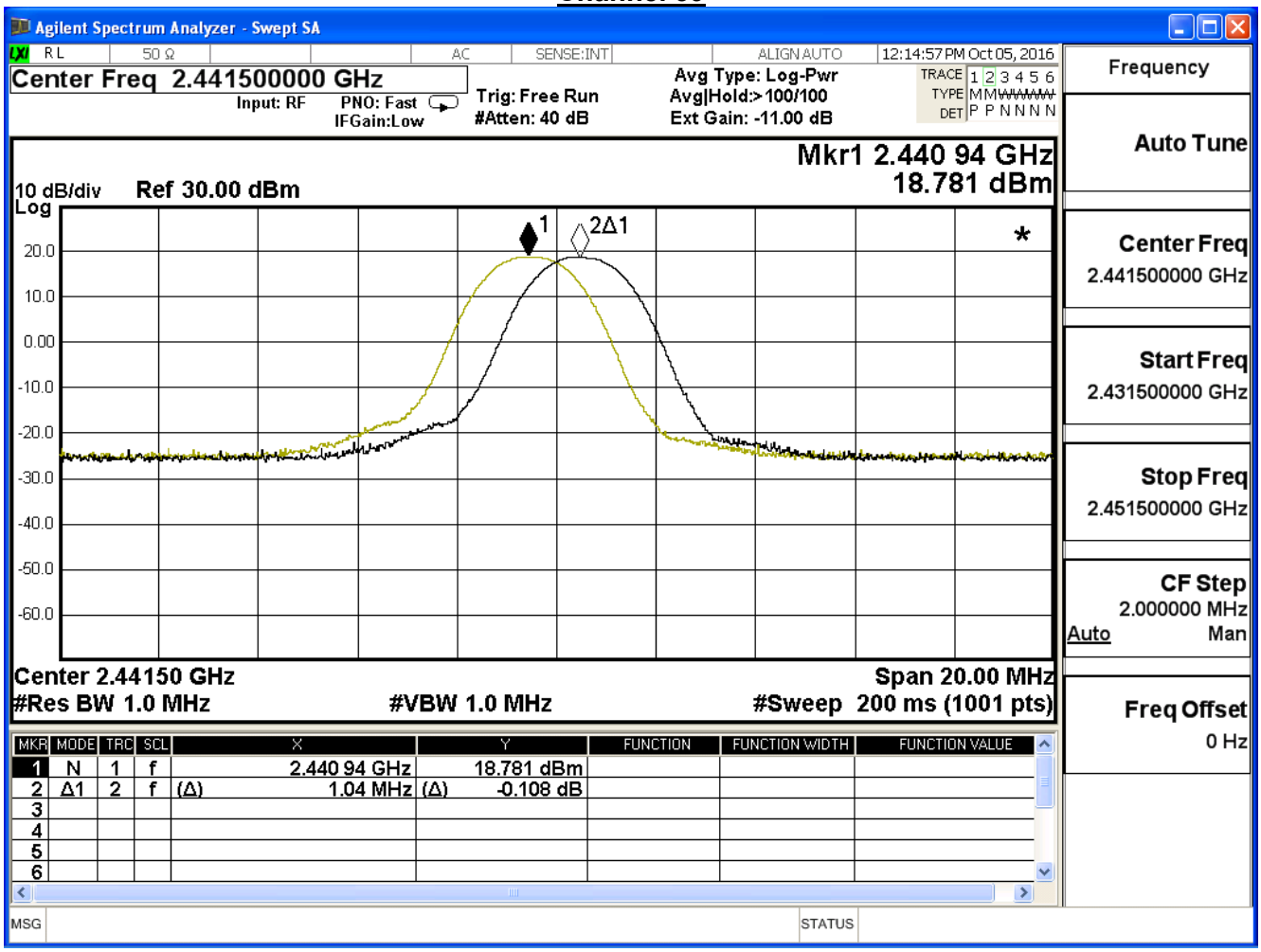
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.020	>0.927	Pass
39	2441	1.040	>0.920	Pass
78	2480	1.020	>0.919	Pass

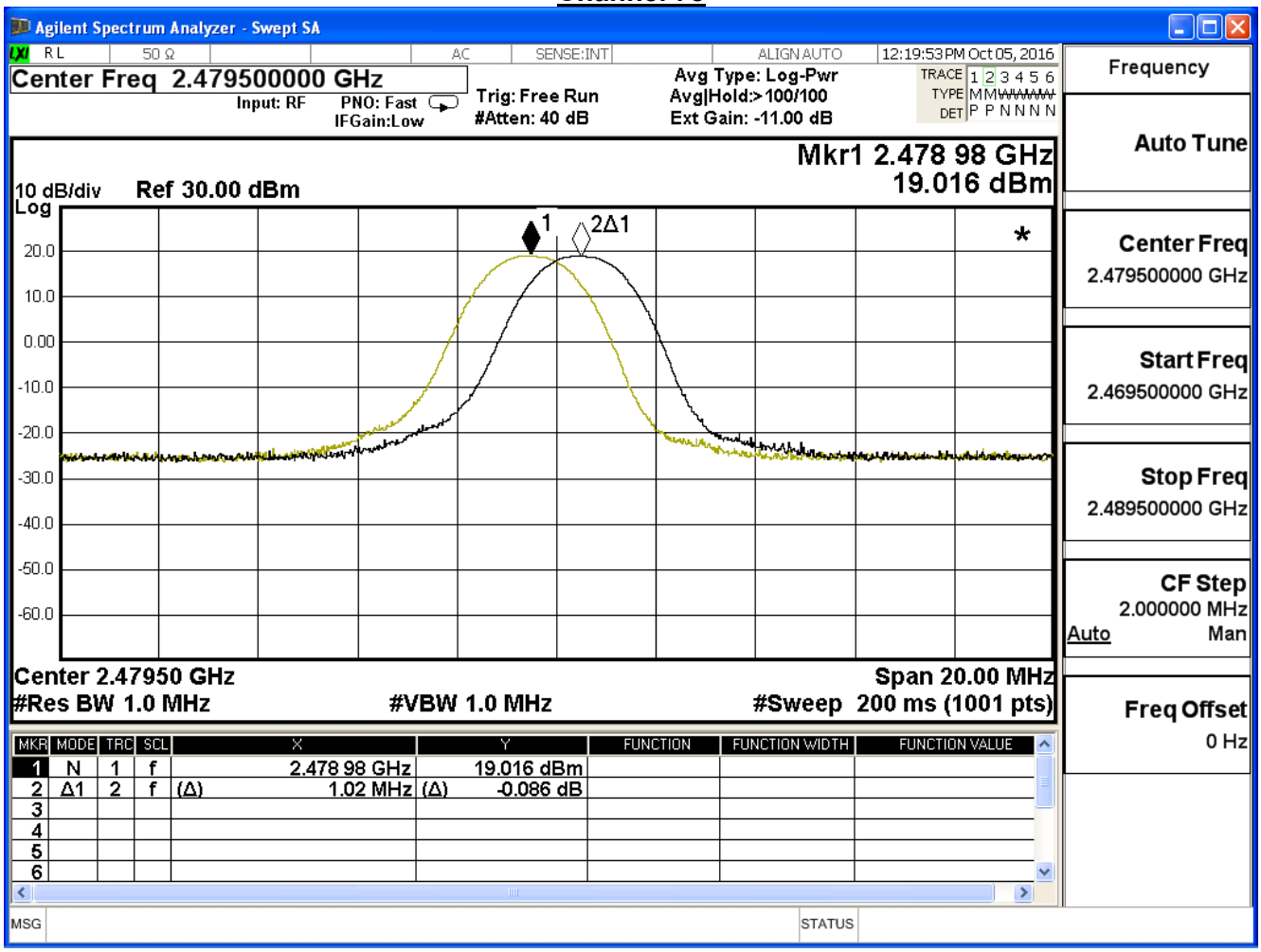
Channel 00



Channel 39


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
12:14:57 PM Oct 05, 2016
Center Freq 2.441500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
Mkr1 2.440 94 GHz
18.781 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Center 2.44150 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
#Sweep 200 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.440 94 GHz 18.781 dBm
2 Δ1 2 f (Δ) 1.04 MHz (Δ) -0.108 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.431500000 GHz
Stop Freq
2.451500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 78


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
12:19:53 PM Oct 05, 2016
Center Freq 2.479500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -11.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
Mkr1 2.478 98 GHz
19.016 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1
2Δ1
*
Center 2.47950 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
#Sweep 200 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.478 98 GHz 19.016 dBm
2 Δ1 2 f (Δ) 1.02 MHz (Δ) -0.086 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.479500000 GHz
Start Freq
2.469500000 GHz
Stop Freq
2.489500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

9. Occupied Bandwidth

9.1. Test Equipment

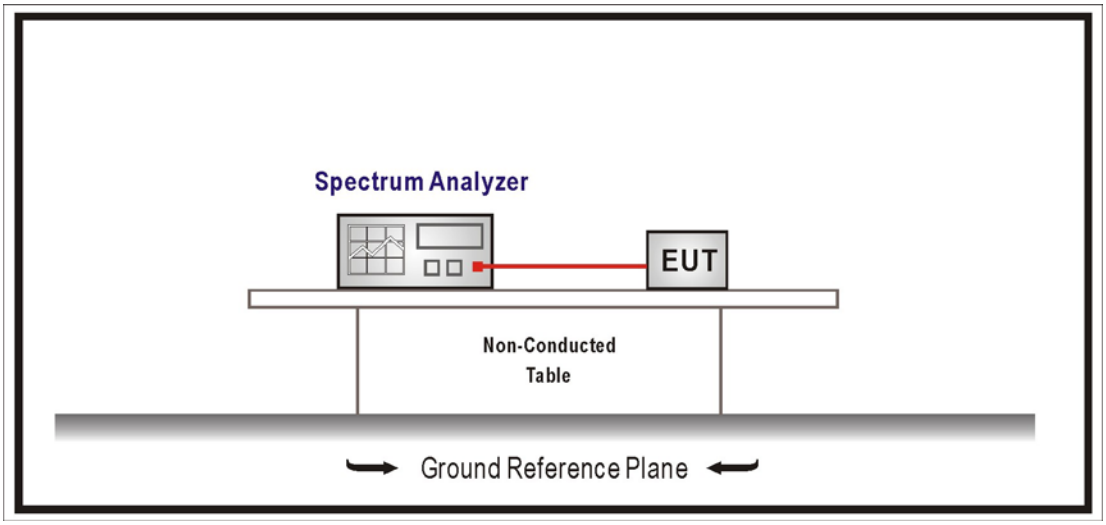
The following test equipment is used during the test:

Occupied Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments 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 KDB 558074 D01 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

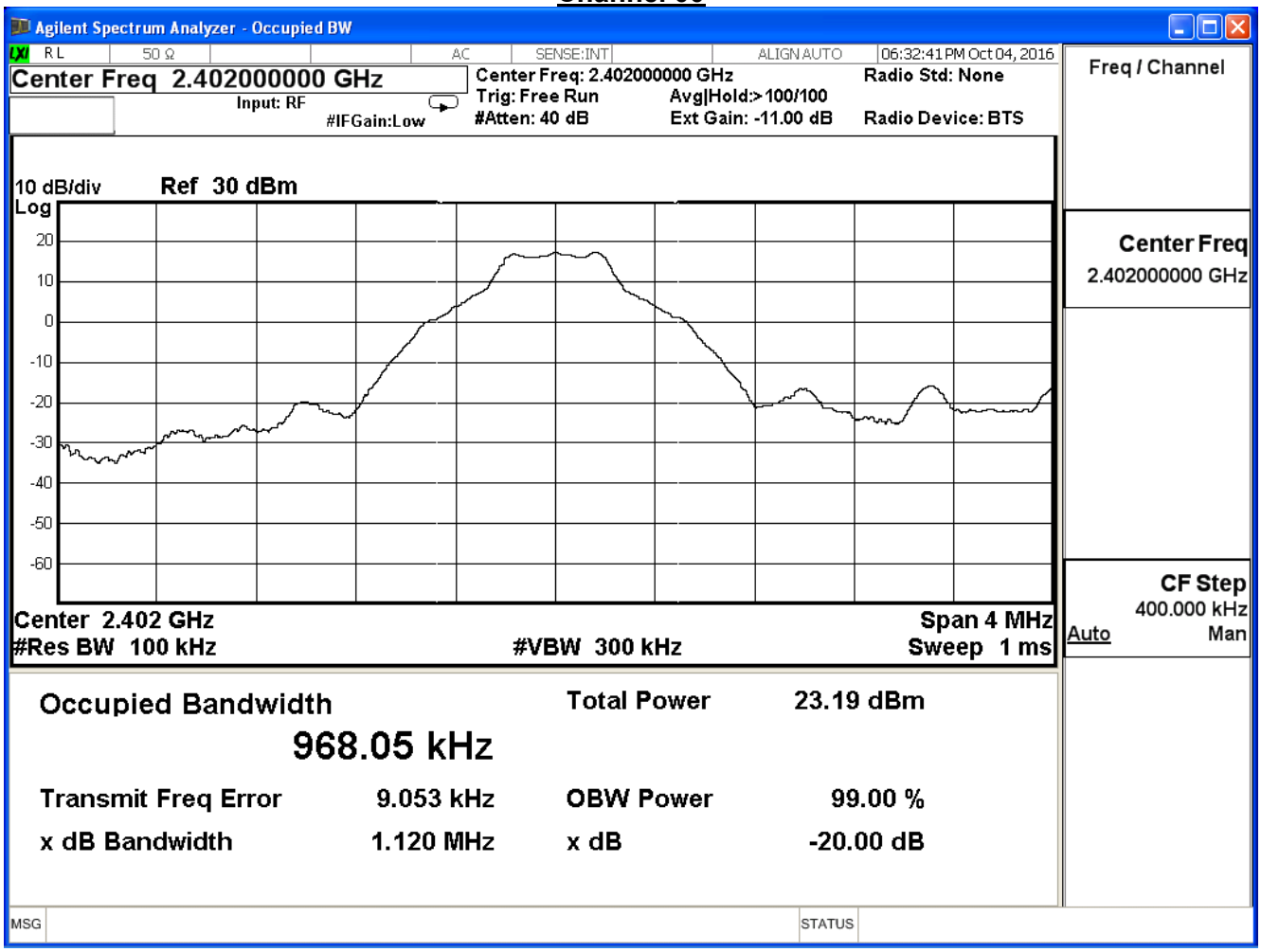
9.6. Test Result

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

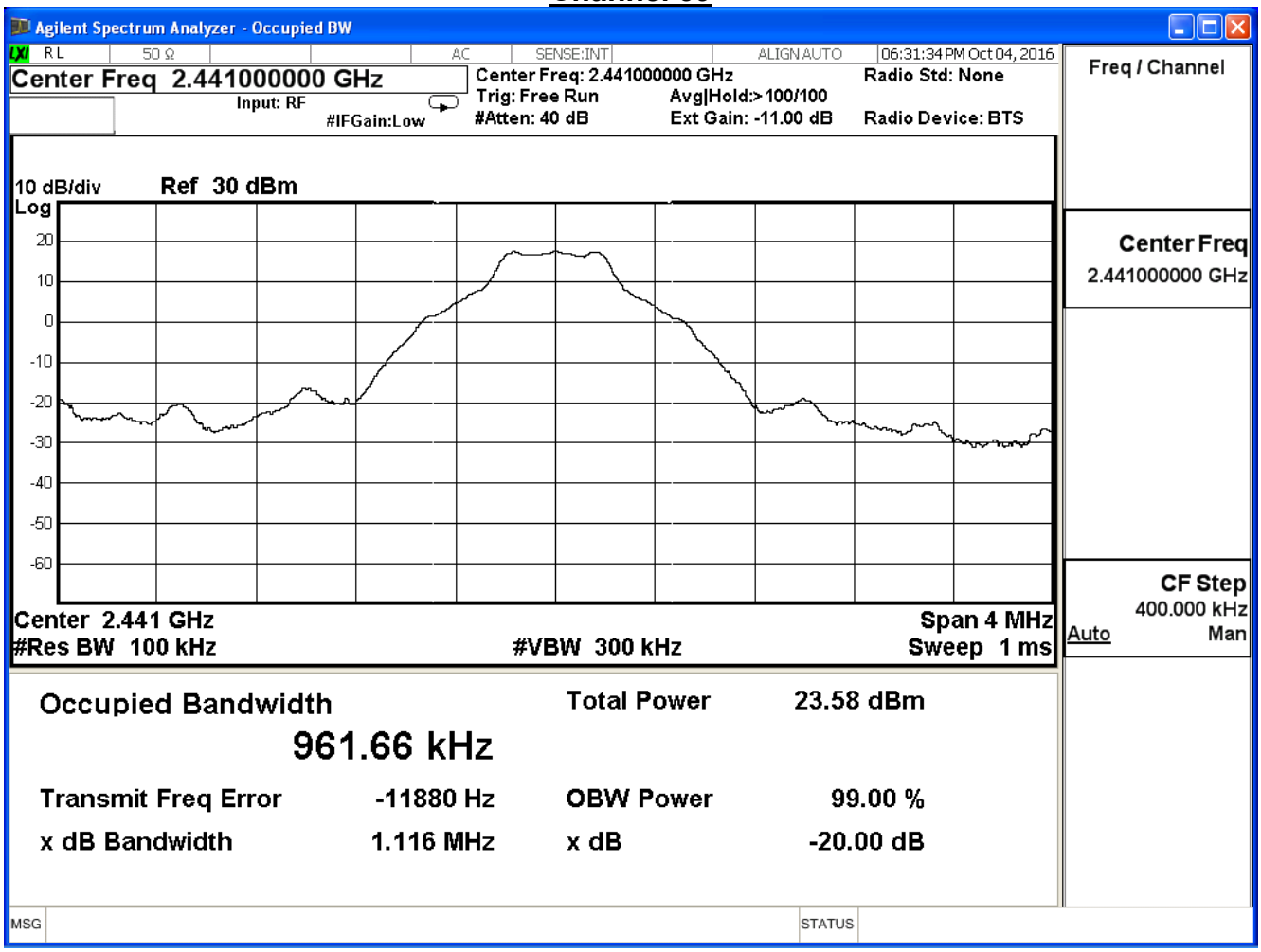
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.120	--	Pass
39	2441	1.116	--	Pass
78	2480	1.117	--	Pass

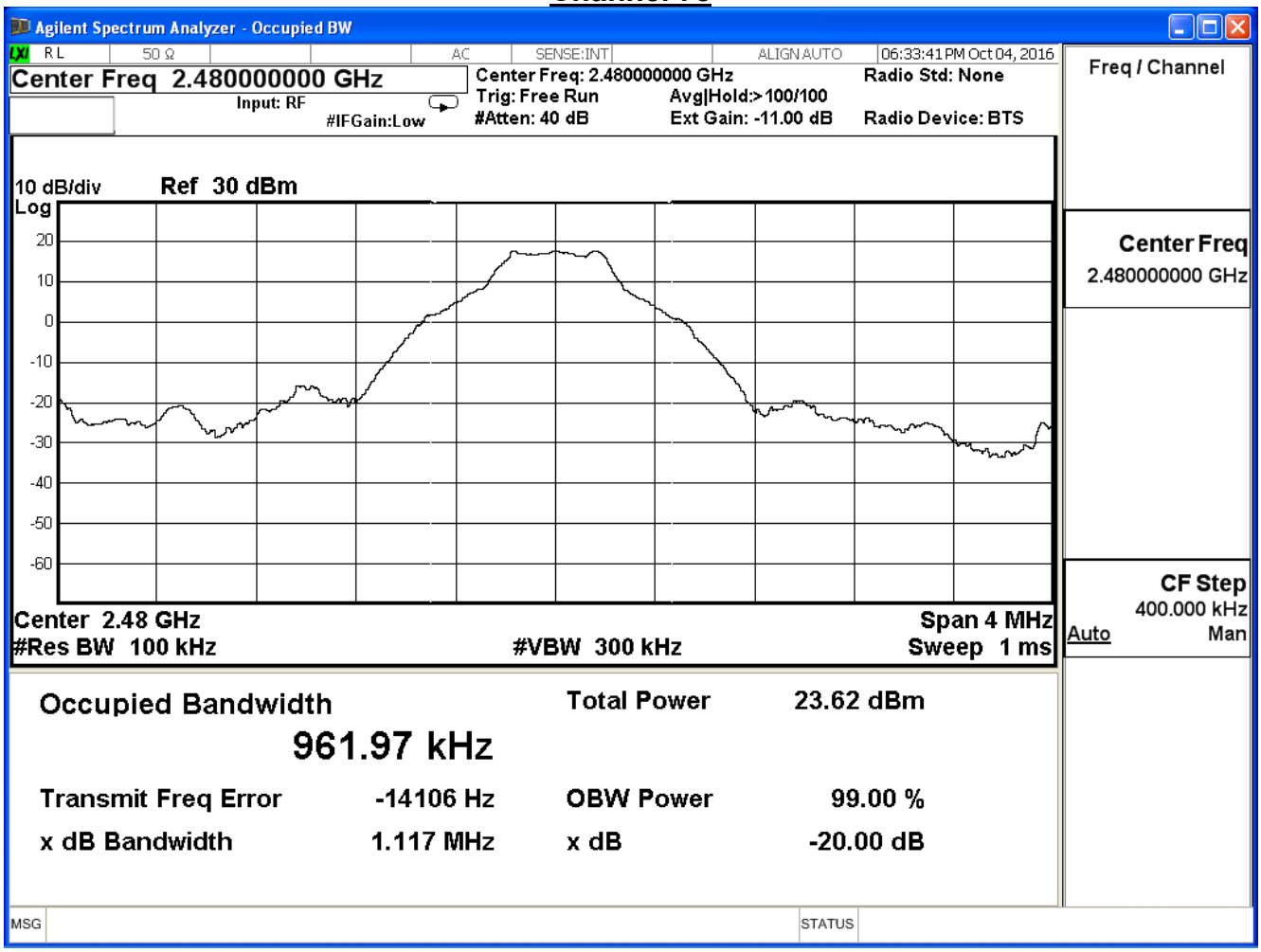
Channel 00



Channel 39


Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
06:31:34 PM Oct 04, 2016
Center Freq 2.441000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.441000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 40 dB
Ext Gain: -11.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.441000000 GHz
Center 2.441 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
CF Step
400.000 kHz
Auto
Man
Occupied Bandwidth
961.66 kHz
Total Power
23.58 dBm
Transmit Freq Error
-11880 Hz
OBW Power
99.00 %
x dB Bandwidth
1.116 MHz
x dB
-20.00 dB
MSG
STATUS

Channel 78

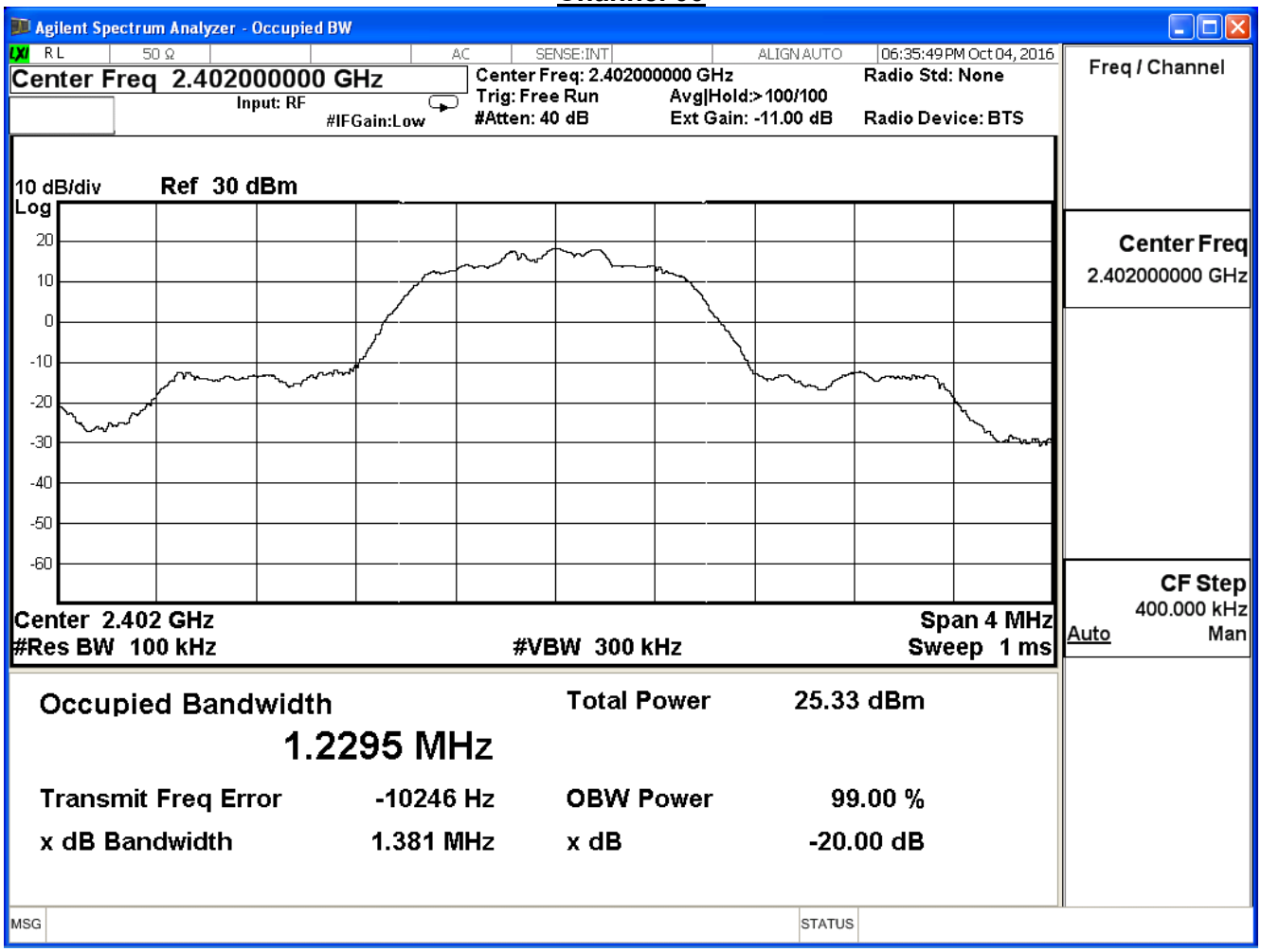

Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
06:33:41 PM Oct 04, 2016
Center Freq 2.480000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.480000000 GHz
Trig: Free Run
#Atten: 40 dB
Avg|Hold:>100/100
Ext Gain: -11.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
CF Step
400.000 kHz
Auto
Man
Occupied Bandwidth
961.97 kHz
Total Power
23.62 dBm
Transmit Freq Error
-14106 Hz
OBW Power
99.00 %
x dB Bandwidth
1.117 MHz
x dB
-20.00 dB
MSG
STATUS

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

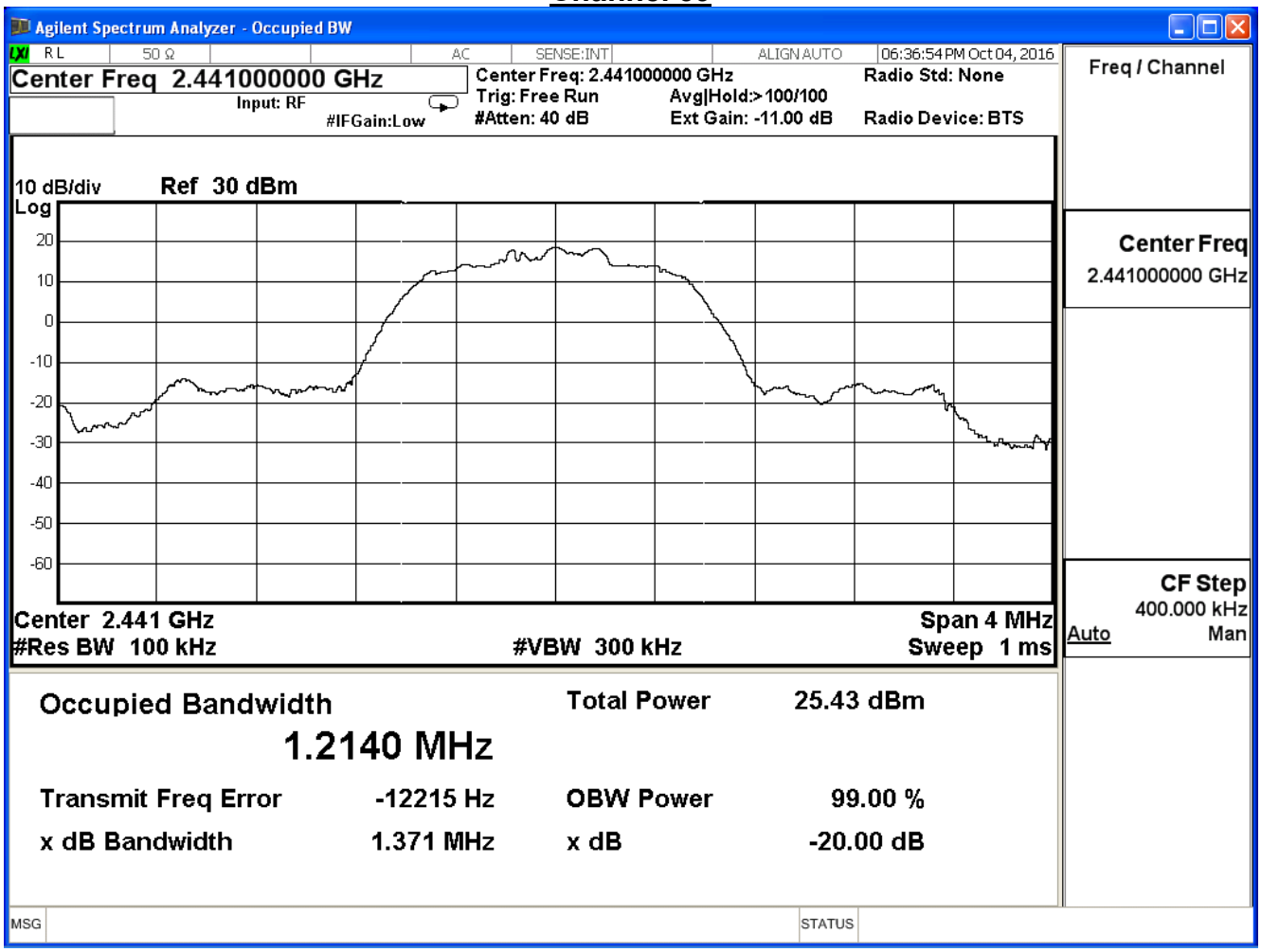
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.381	--	Pass
39	2441	1.371	--	Pass
78	2480	1.374	--	Pass

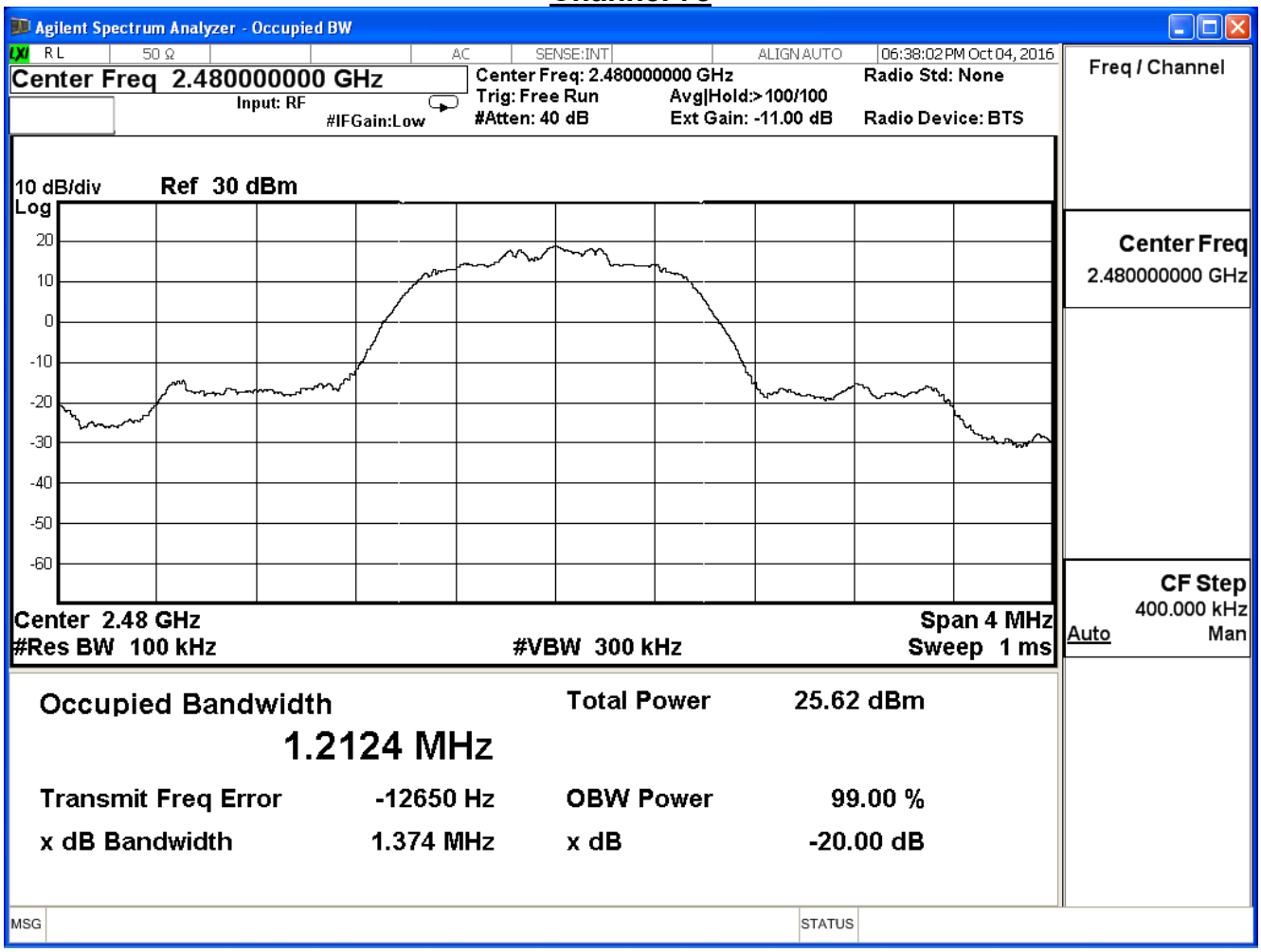
Channel 00



Channel 39


Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
06:36:54 PM Oct 04, 2016
Center Freq 2.441000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.441000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 40 dB
Ext Gain: -11.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.441000000 GHz
Center 2.441 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
CF Step
400.000 kHz
Auto
Man
Occupied Bandwidth
1.2140 MHz
Total Power
25.43 dBm
Transmit Freq Error
-12215 Hz
OBW Power
99.00 %
x dB Bandwidth
1.371 MHz
x dB
-20.00 dB
MSG
STATUS

Channel 78

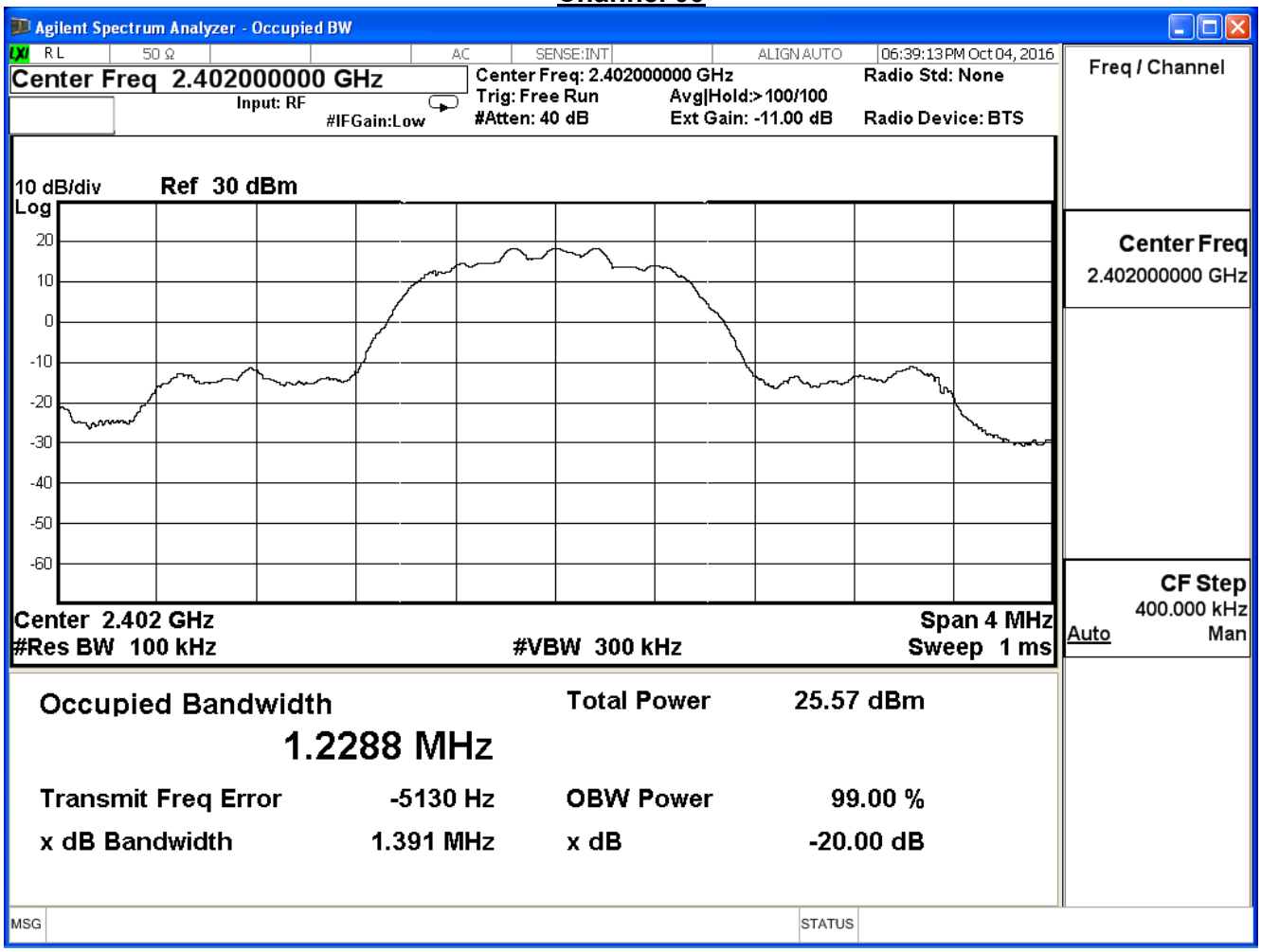

Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
06:38:02 PM Oct 04, 2016
Center Freq 2.480000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.480000000 GHz
Trig: Free Run
#Atten: 40 dB
Avg|Hold:>100/100
Ext Gain: -11.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
CF Step
400.000 kHz
Auto
Man
Occupied Bandwidth
1.2124 MHz
Total Power
25.62 dBm
Transmit Freq Error
-12650 Hz
OBW Power
99.00 %
x dB Bandwidth
1.374 MHz
x dB
-20.00 dB
MSG
STATUS

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

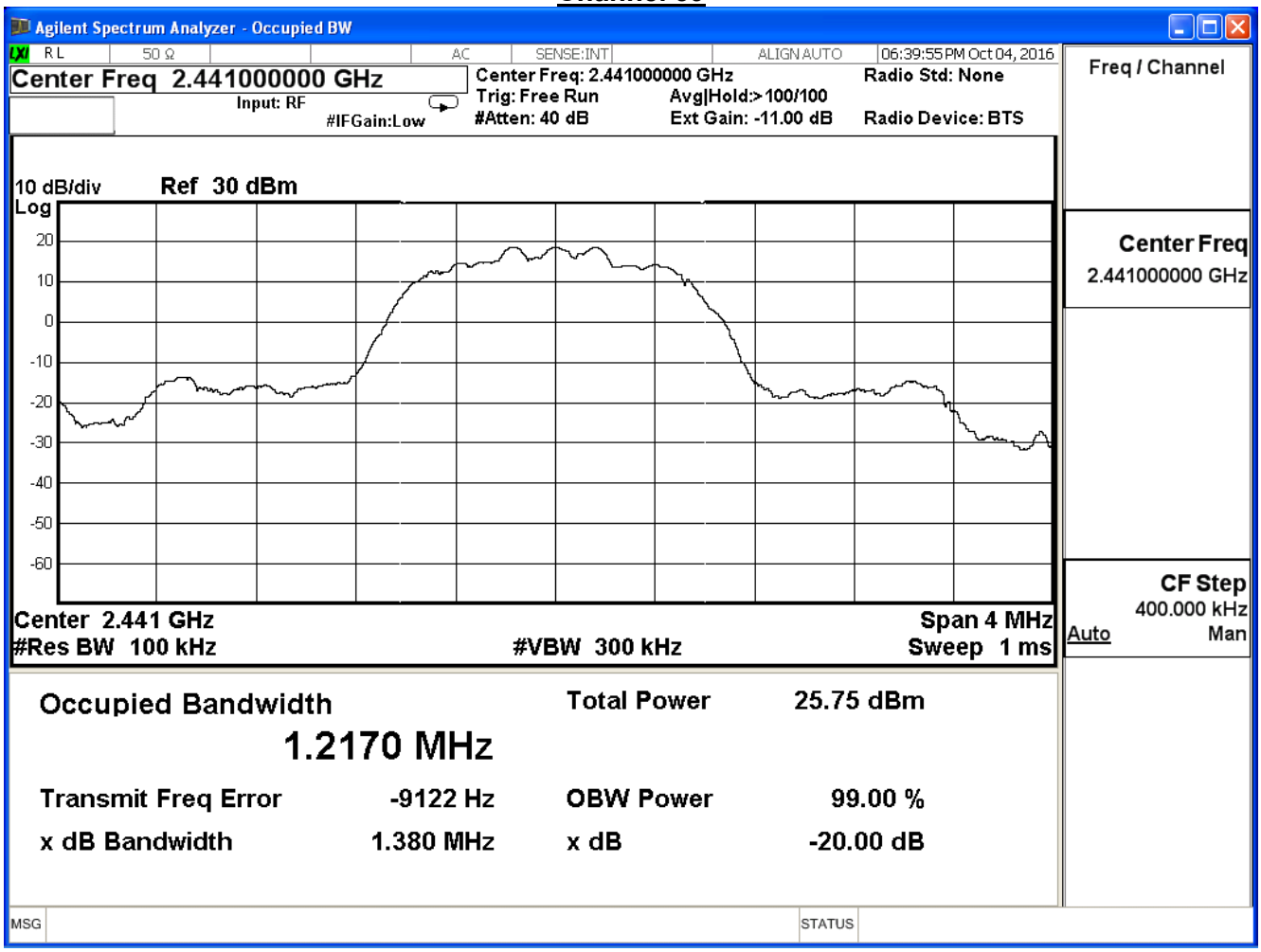
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.391	--	Pass
39	2441	1.380	--	Pass
78	2480	1.379	--	Pass

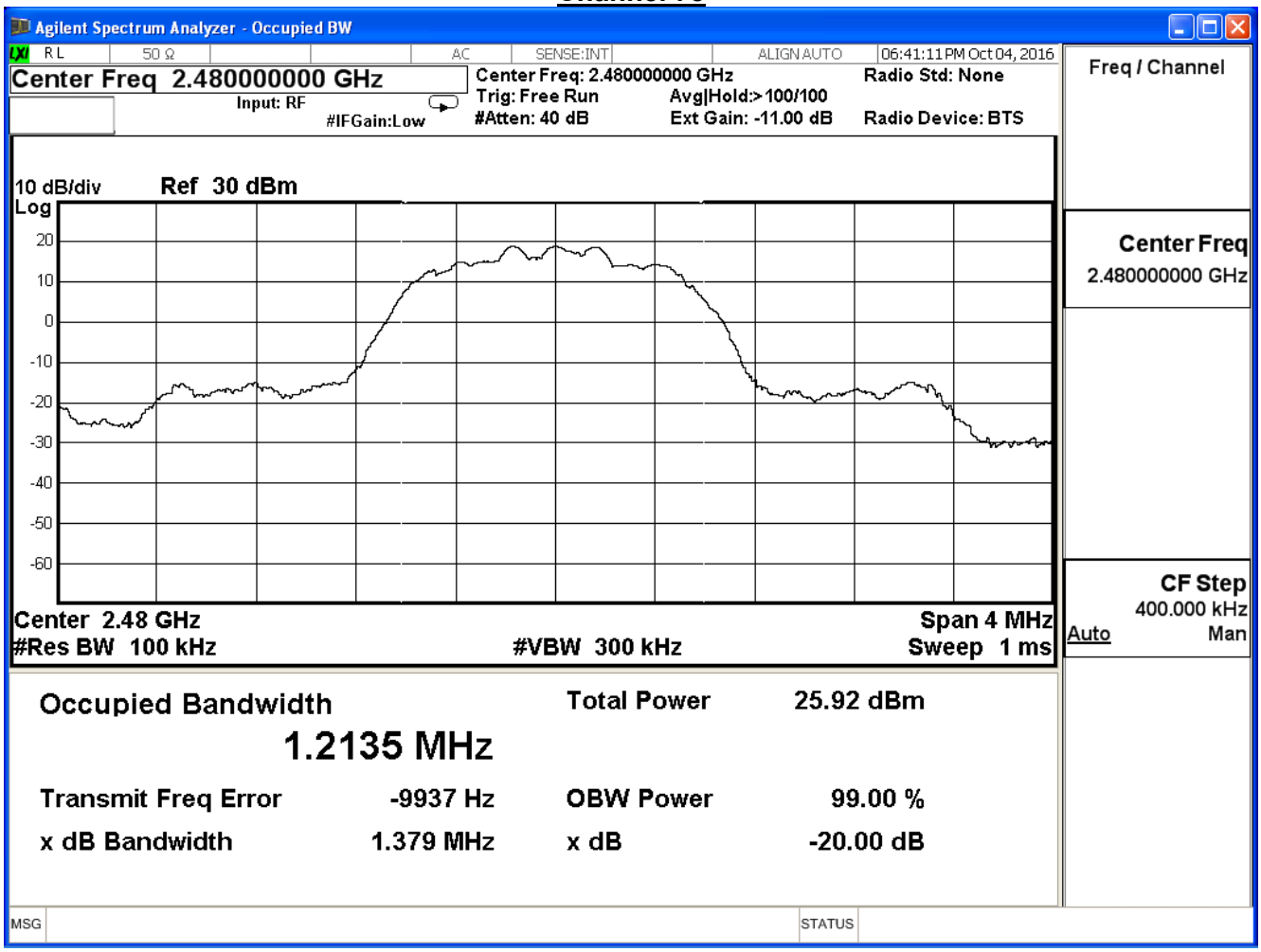
Channel 00



Channel 39


Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
06:39:55 PM Oct 04, 2016
Center Freq 2.441000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.441000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 40 dB
Ext Gain: -11.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.441000000 GHz
Center 2.441 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
CF Step
400.000 kHz
Auto
Man
Occupied Bandwidth
1.2170 MHz
Total Power
25.75 dBm
Transmit Freq Error
-9122 Hz
OBW Power
99.00 %
x dB Bandwidth
1.380 MHz
x dB
-20.00 dB
MSG
STATUS

Channel 78


Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
06:41:11 PM Oct 04, 2016
Center Freq 2.480000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 40 dB
Ext Gain: -11.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 4 MHz
Sweep 1 ms
CF Step
400.000 kHz
Auto
Man
Occupied Bandwidth
1.2135 MHz
Total Power
25.92 dBm
Transmit Freq Error
-9937 Hz
OBW Power
99.00 %
x dB Bandwidth
1.379 MHz
x dB
-20.00 dB
MSG
STATUS

10. Dwell Time

10.1. Test Equipment

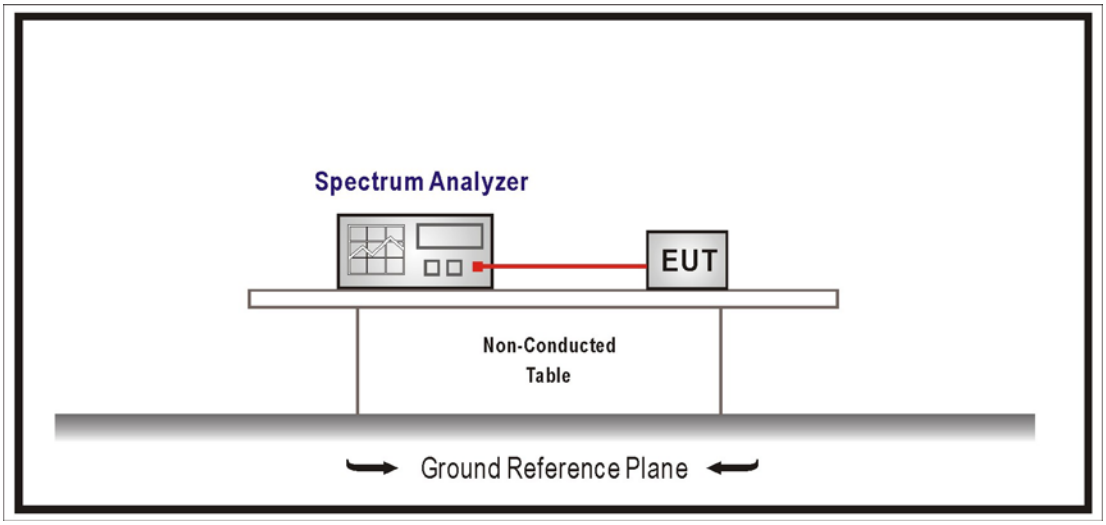
The following test equipment is used during the test:

Dwell Time / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments 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 KDB 558074 D01 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	TWO WAY RADIO/TRANSCEIVER		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

GFSK, DH5

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.902ms = 0.002902 sec

Dwell Time : 0.002902 *(266.67/79)* 31.60=0.3095 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.902ms = 0.002902 sec

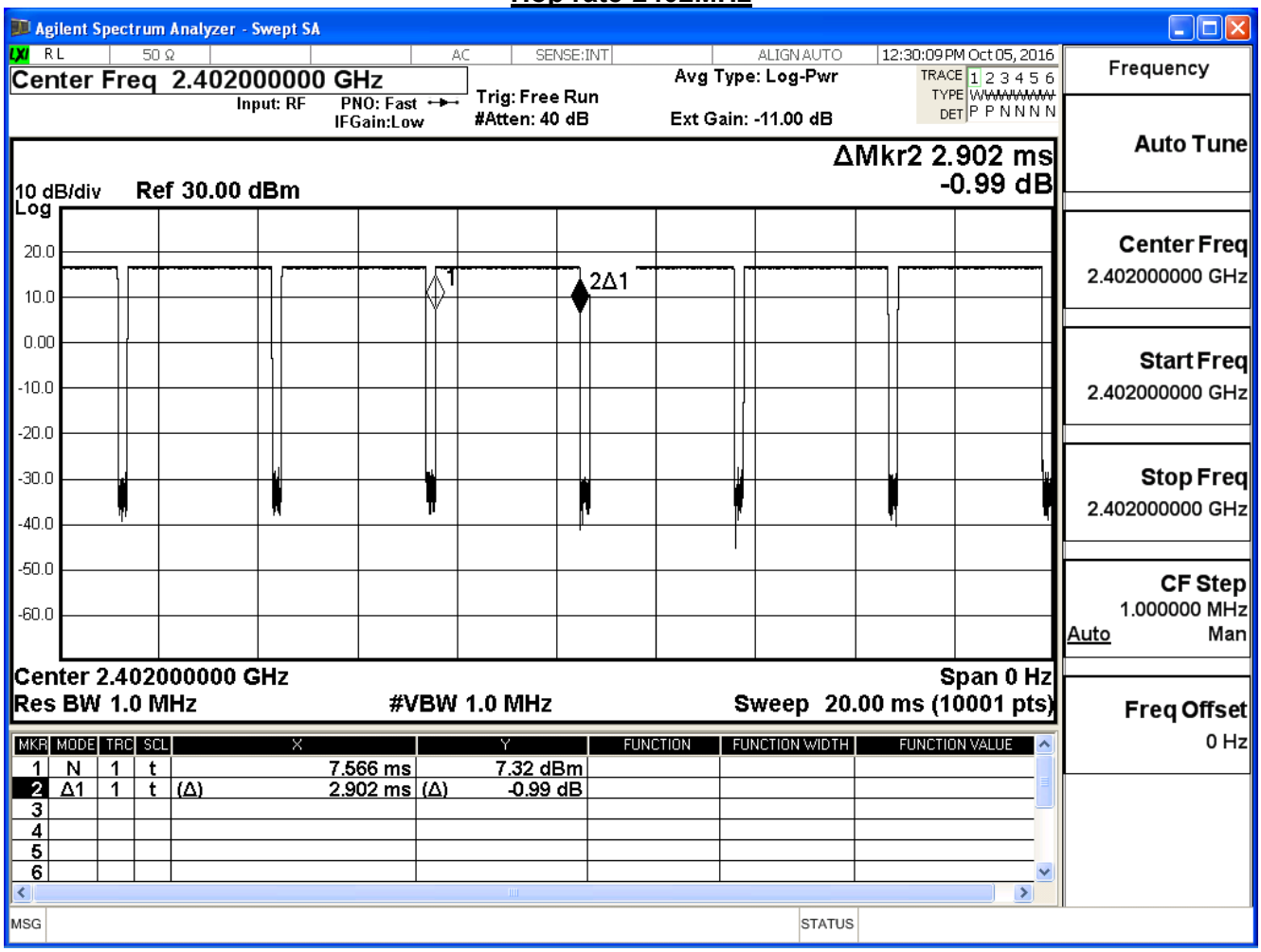
Dwell Time : 0.002902 *(266.67/79)* 31.60=0.3095 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.904ms = 0.002904 sec

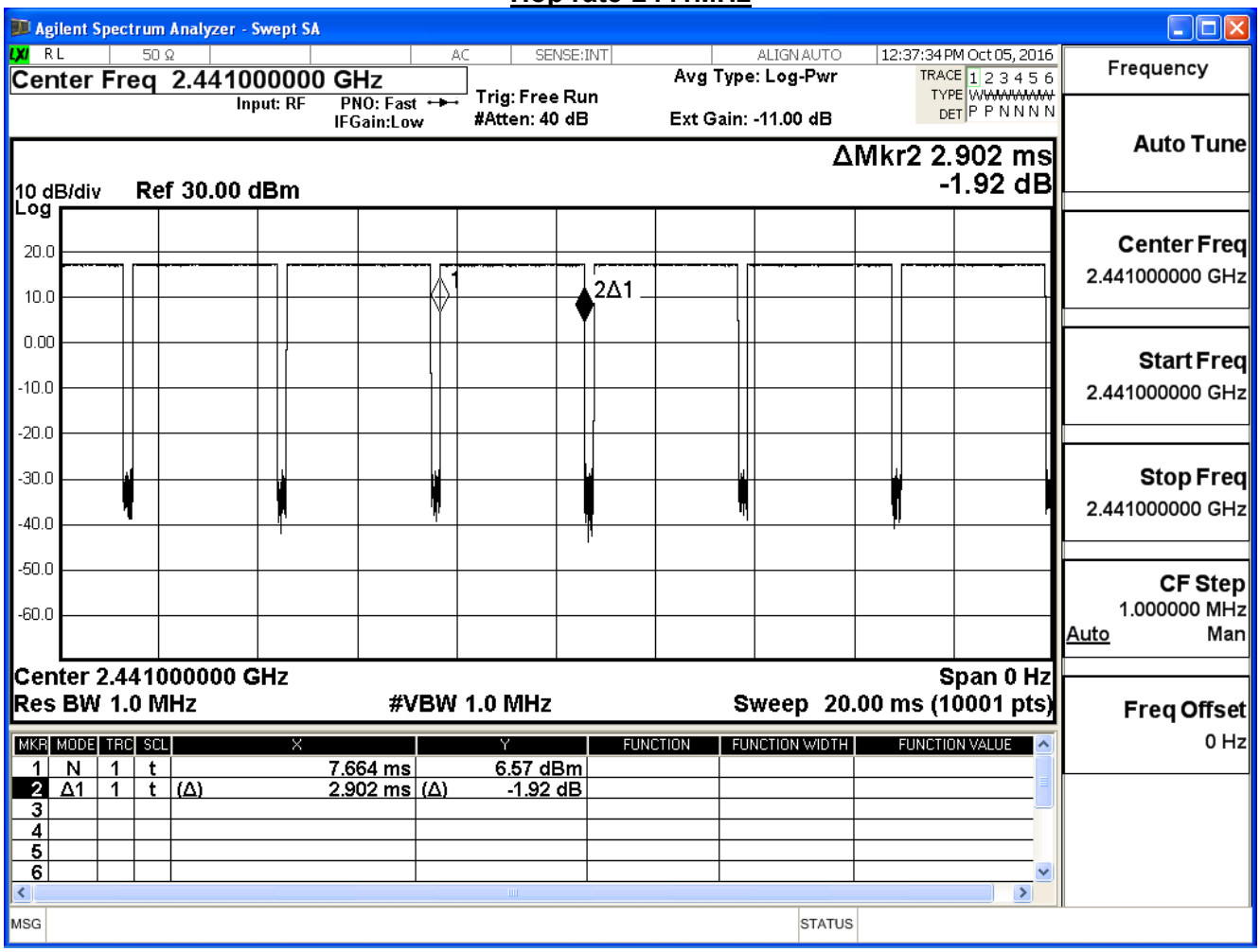
Dwell Time : 0.002904 *(266.67/79)* 31.60=0.3098 sec。

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

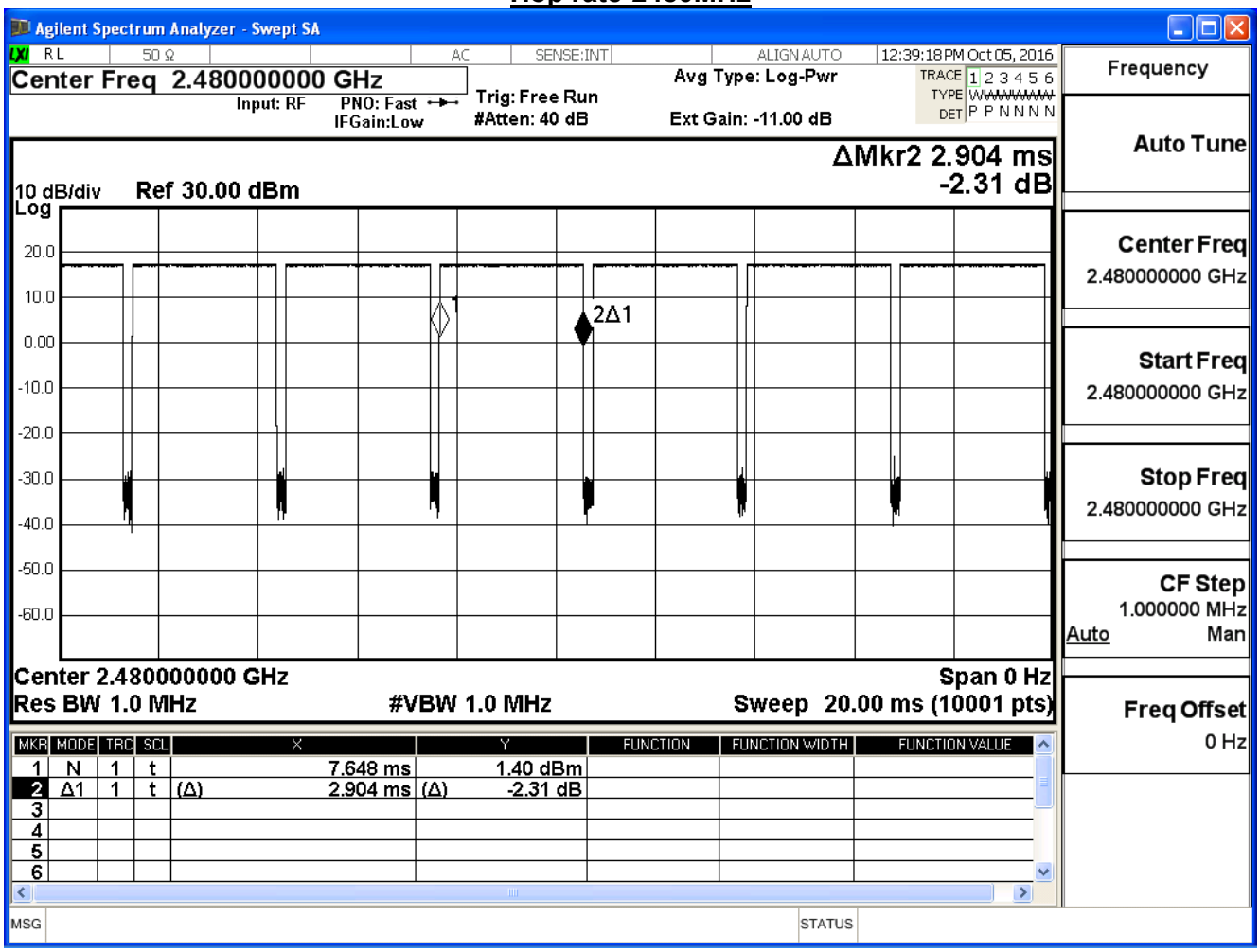
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



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

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

π/4-DQPSK, 2DH5

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.916ms = 0.002916 sec

Dwell Time : 0.002916 *(266.67/79)* 31.60=0.311 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.916ms = 0.002916 sec

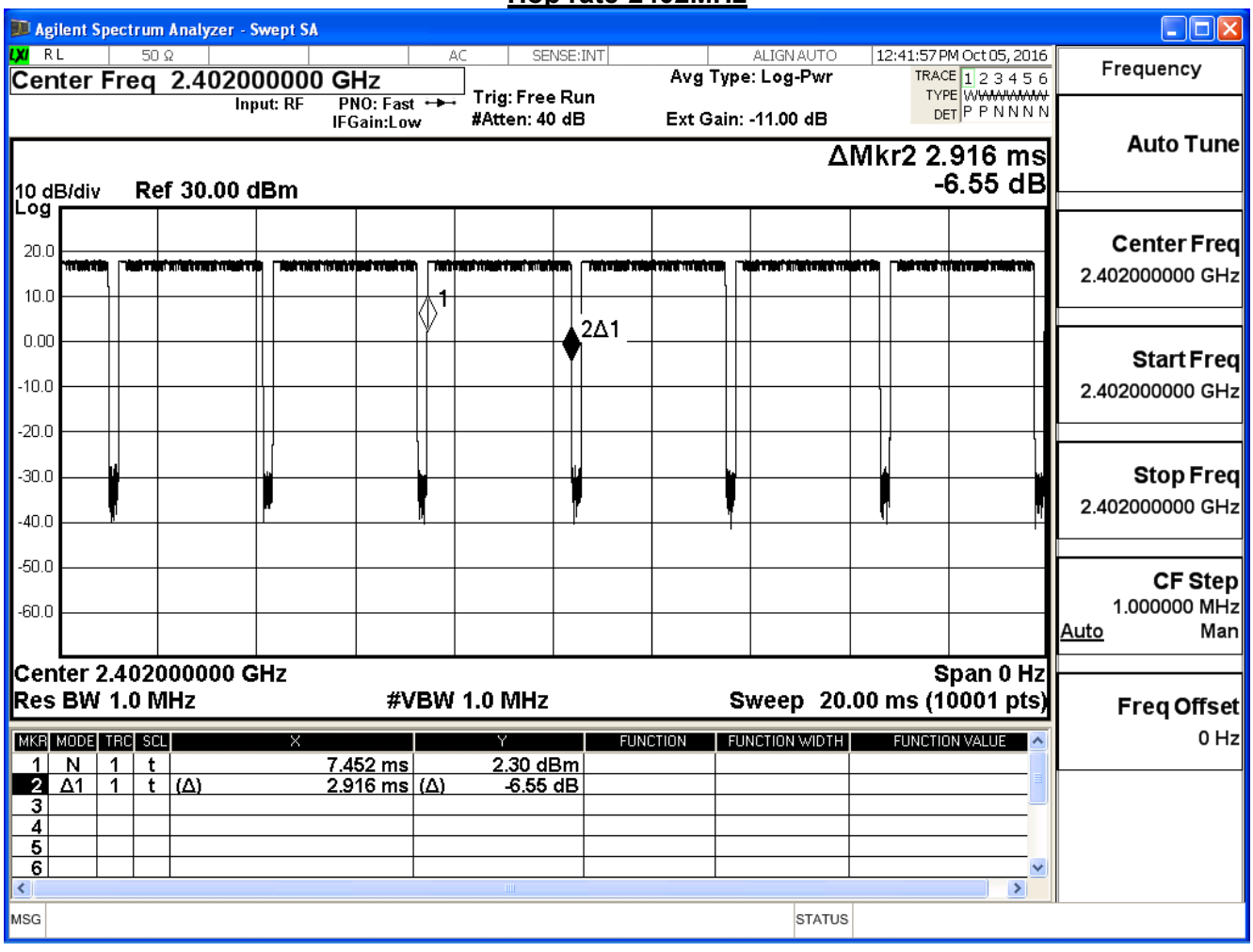
Dwell Time : 0.002916 *(266.67/79)* 31.60=0.311 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.922ms = 0.002922 sec

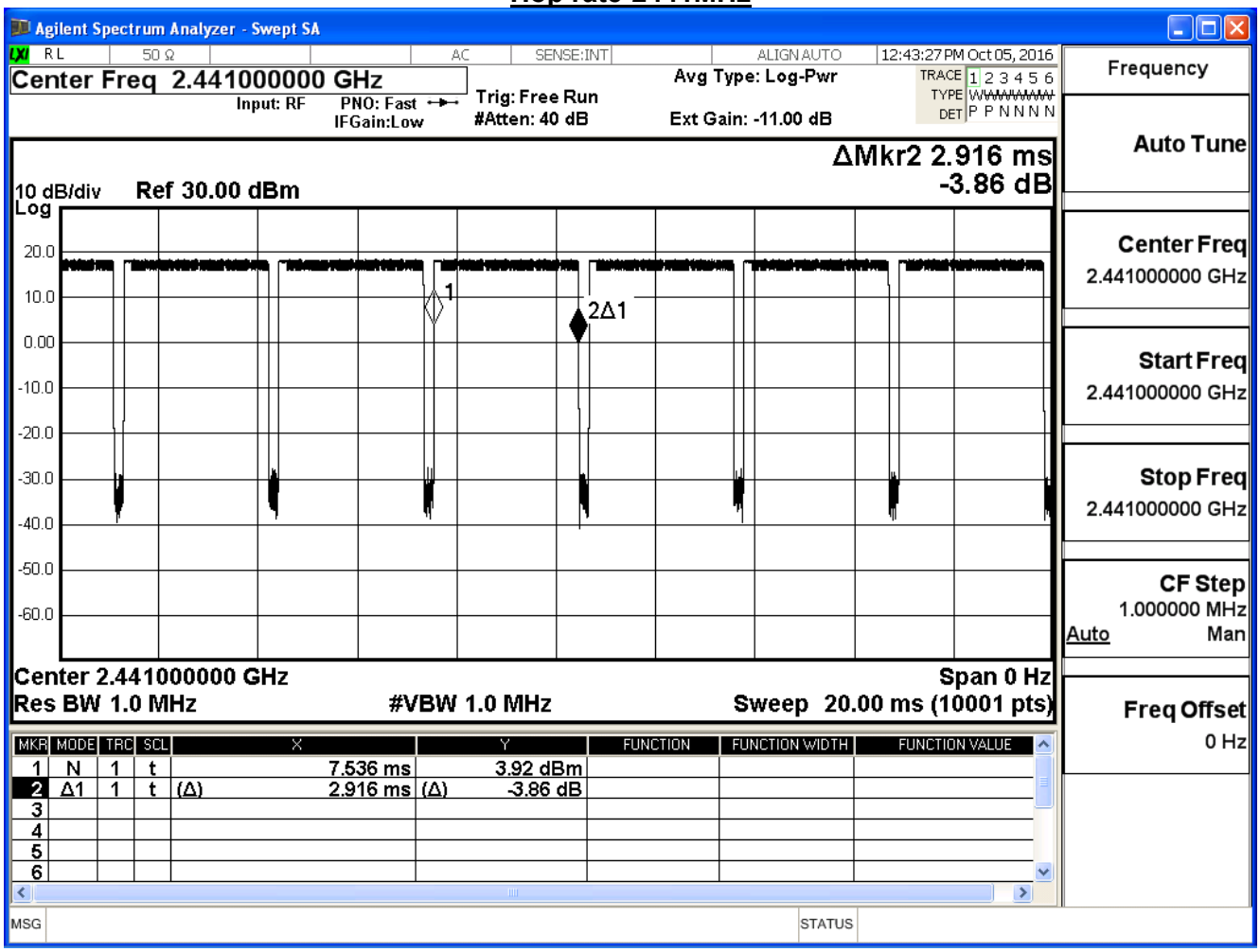
Dwell Time : 0.002922 *(266.67/79)* 31.60=0.3117 sec。

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

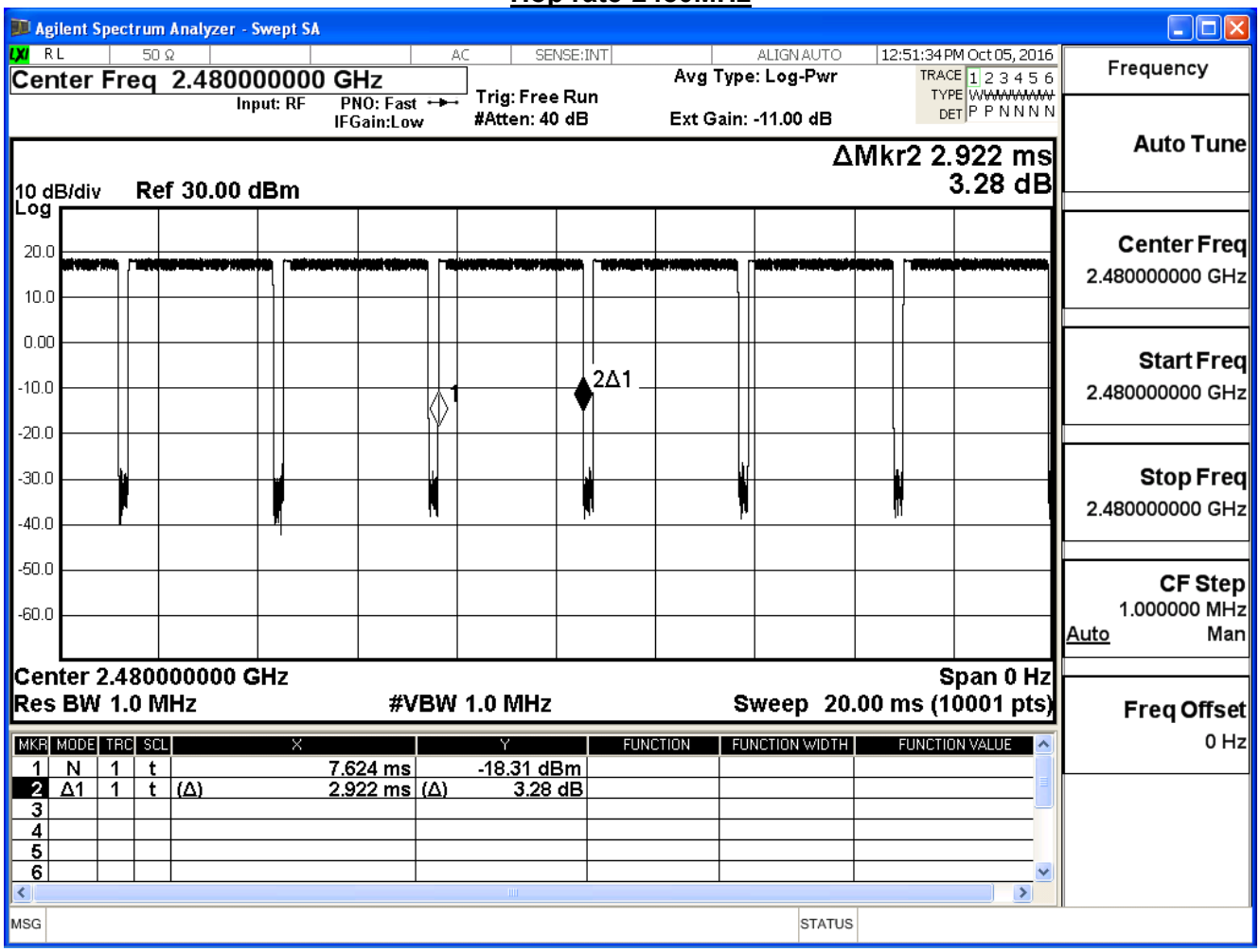
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



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

Product	TWO WAY RADIO/TRANSCEIVER		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit Mode_Ant 1		
Date of Test	2016/10/04	Test Site	SR7

8-DPSK, 3DH5

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.918ms = 0.002918 sec

Dwell Time : 0.002918 *(266.67/79)* 31.60=0.3113 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.914ms = 0.002914 sec

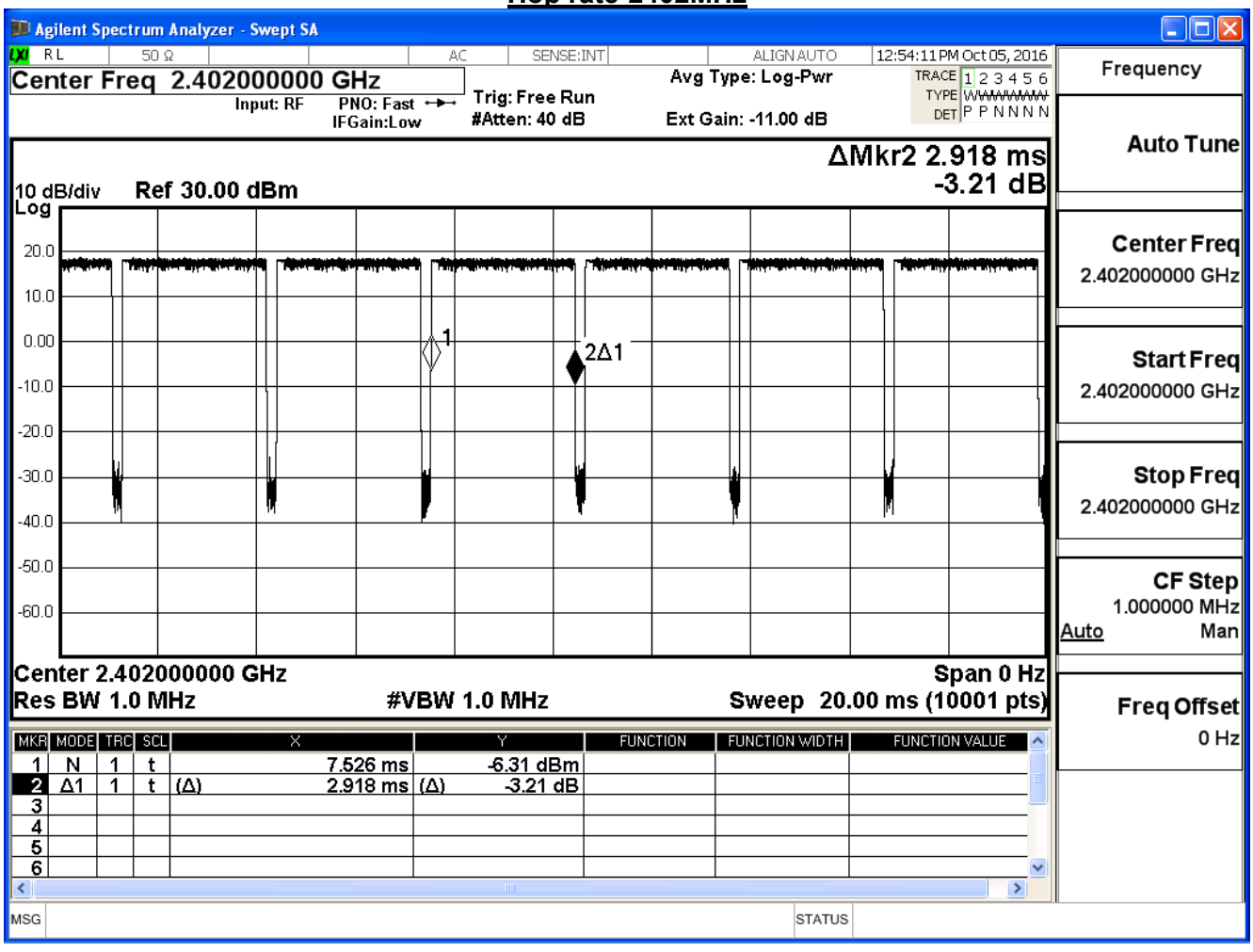
Dwell Time : 0.002914 *(266.67/79)* 31.60=0.3108 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.914ms = 0.002914 sec

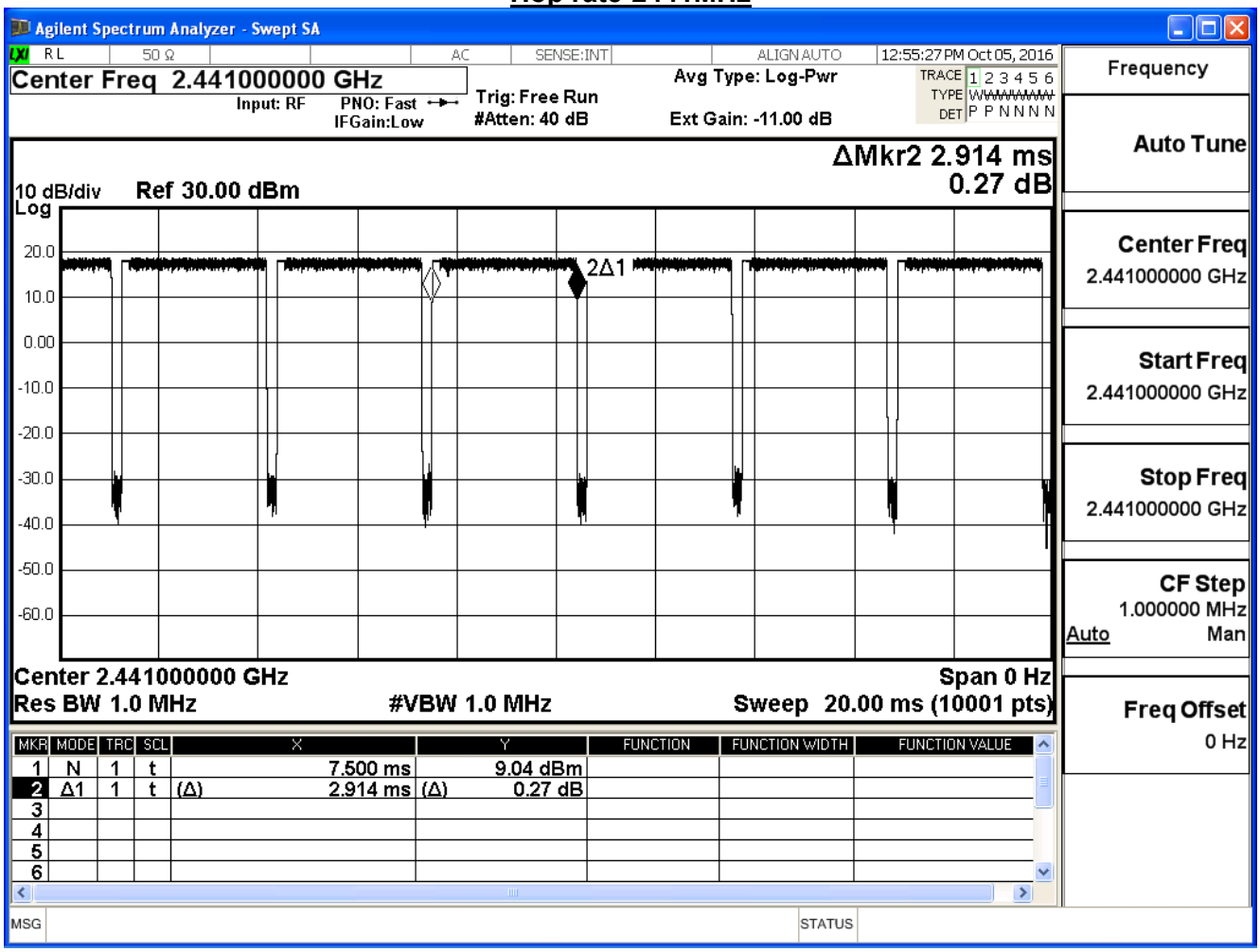
Dwell Time : 0.002914 *(266.67/79)* 31.60=0.3108 sec。

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

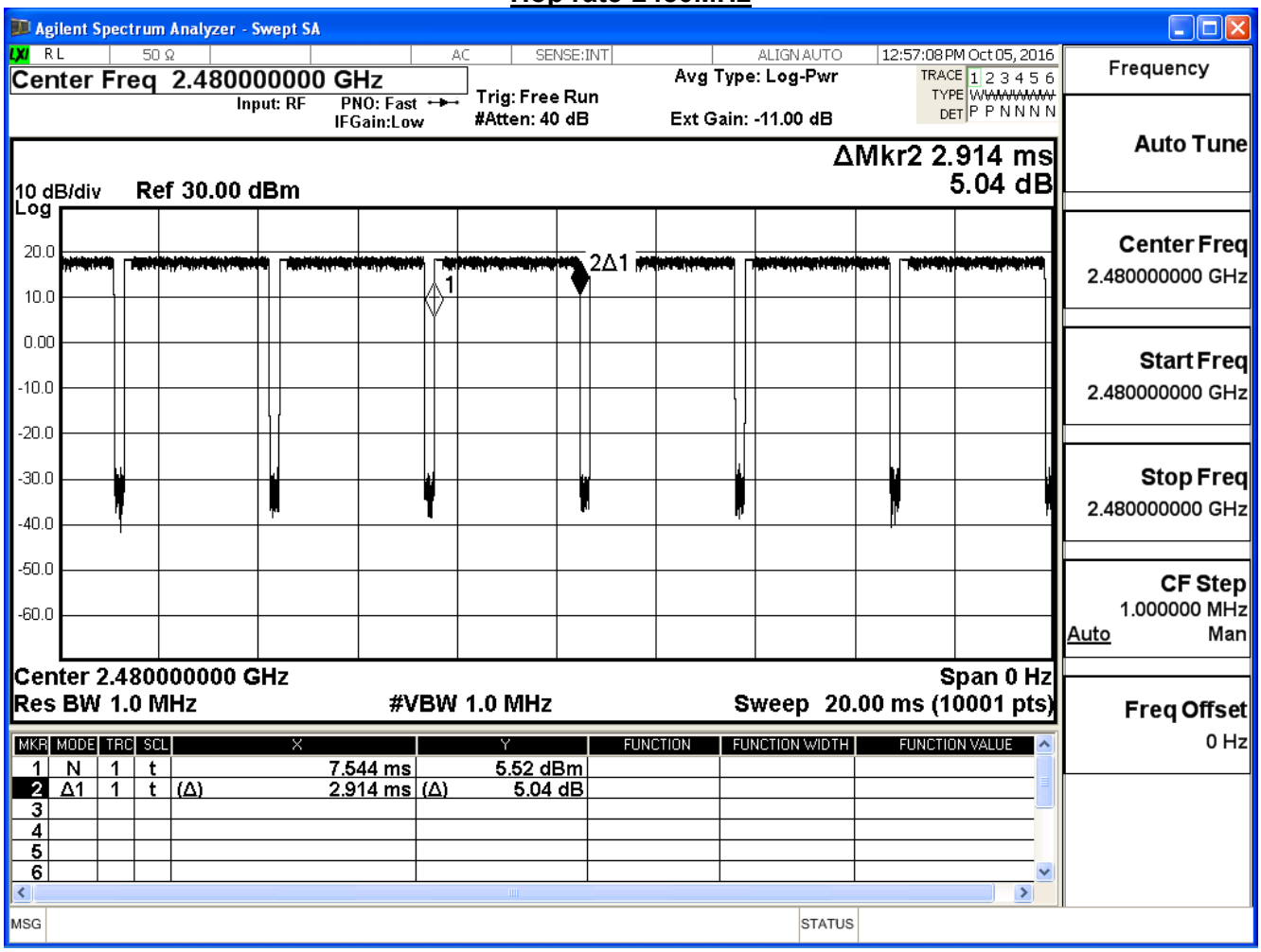
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



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