FCC Test Report

Product Name ： Verizon Mesh Router

Trade Name ： ASUS

Model No. ： VZMESHROUTER, VZMESHWAR, VZW-AC1300

FCC ID. ： MSQ-RTACHQ00

Applicant ： ASUSTeK COMPUTER INC.

Address ： 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Date of Receipt ： Oct. 23, 2017

Issued Date ： Dec. 04, 2017

Report No. ： 17A0318R-RFUSP01V01

Report Version ： V1.0

Testing Laboratory

3024

Test Report Certification

Issued Date : Dec. 04, 2017
Report No. : 17A0318R-RFUSP01V01

Product Name	:	Verizon Mesh Router
Applicant	:	ASUSTeK COMPUTER INC.
Address	:	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
Manufacturer	:	ASUSTeK COMPUTER INC.
Model No.	:	VZMESHROUTER, VZMESHWAR, VZW-AC1300
FCC ID.	:	MSQ-RTACHQ00
EUT Voltage	:	AC 100-240V, 50-60Hz
Testing Voltage	:	AC 120V/60Hz
Trade Name	:	ASUS
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2016
Laboratory Name	:	Hsin Chu Laboratory
Address	:	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C. TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result	:	Complied

Documented By : Lyla Yang

(Lyla Yang / Engineering Adm. Specialist)

Tested By : Scott Chang

(Scott Chang / Engineer)

Approved By : Roy Wang

(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
17A0318R-RFUSP01V01	V1.0	Initial issue of report	Dec. 04, 2017

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1. General Information

1.1. EUT Description

Product Name	Verizon Mesh Router
Trade Name	ASUS
Model No.	VZMESHROUTER, VZMESHWAR, VZW-AC1300
Frequency Range/Channel Number	2402~2480MHz / 79 Channels
Type of Modulation	GFSK, π/4-DQPSK, 8-DPSK

Antenna Information	
MFR. /Model No.	Unictron / H2U34W1H1Z0100
Antenna Type	Chip Antenna
Antenna Gain	2.5 dBi

Accessories Information	
Power Adapter (Level 6)	APD, WB-18D12FU I/P : 100-240V~ 50/60Hz 0.5A Max. O/P : 12V ⎓ 1.5A Cable Out: Non-Shielded, 2 m

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 Verizon Mesh Router support 2.4GHz b/g/n and 5GHz a/n/ac and BT2.0/BT4.0 transmitting and receiving function.
2. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.

1.2. Test Mode

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

Test Mode	Mode 1: Transmit Mode

Emission	Mode 1
Conducted Emission	Yes
Peak Power Output	Yes
Radiated Emission	Yes
RF antenna conducted test	Yes
Band Edge	Yes
Number of hopping Frequency	Yes
Carrier Frequency Separation	Yes
Occupied Bandwidth	Yes
Dwell Time	Yes

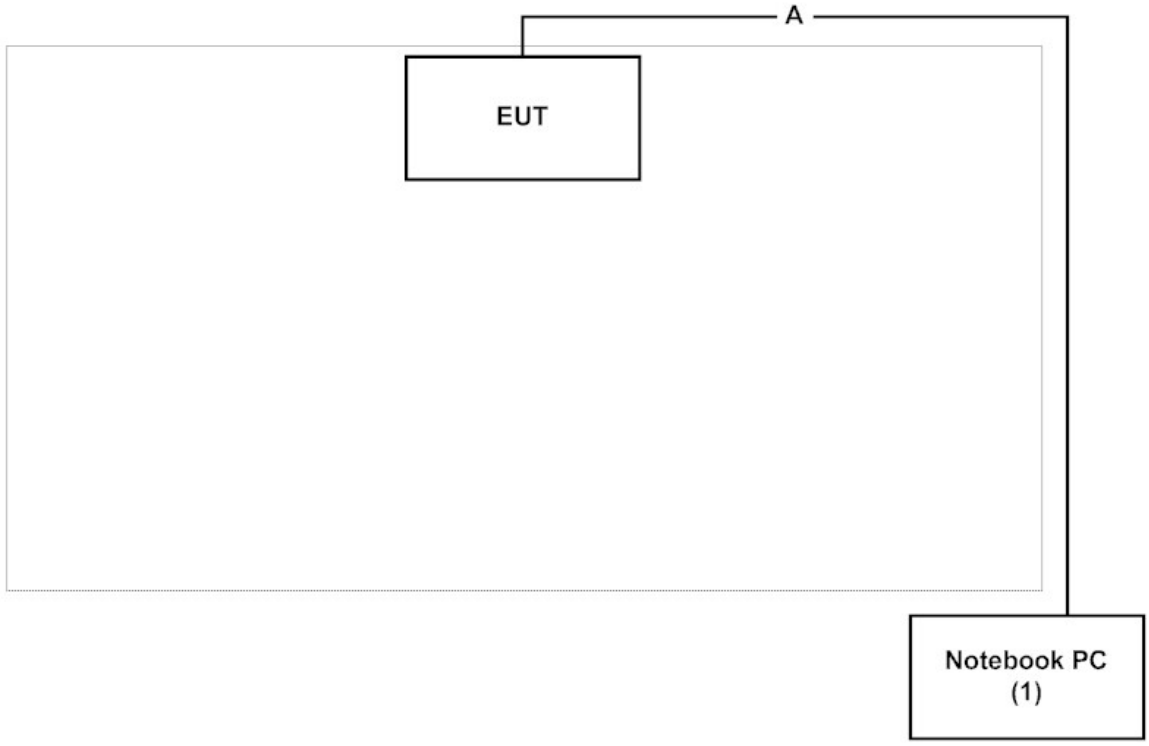
1.3. Tested System Details

The types for all equipment, 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	Notebook PC	DELL	Latitude 600	N/A	DoC	Non-Shielded, 1.7m, one ferrite core bonded

1.4. Configuration of tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 4m

1.5. EUT Exercise Software

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

1.6. Test Facility

Ambient conditions in the laboratory:

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

Note: Test site information refers to Laboratory Information.

USA : FCC, Registration Number: TW3024

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

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

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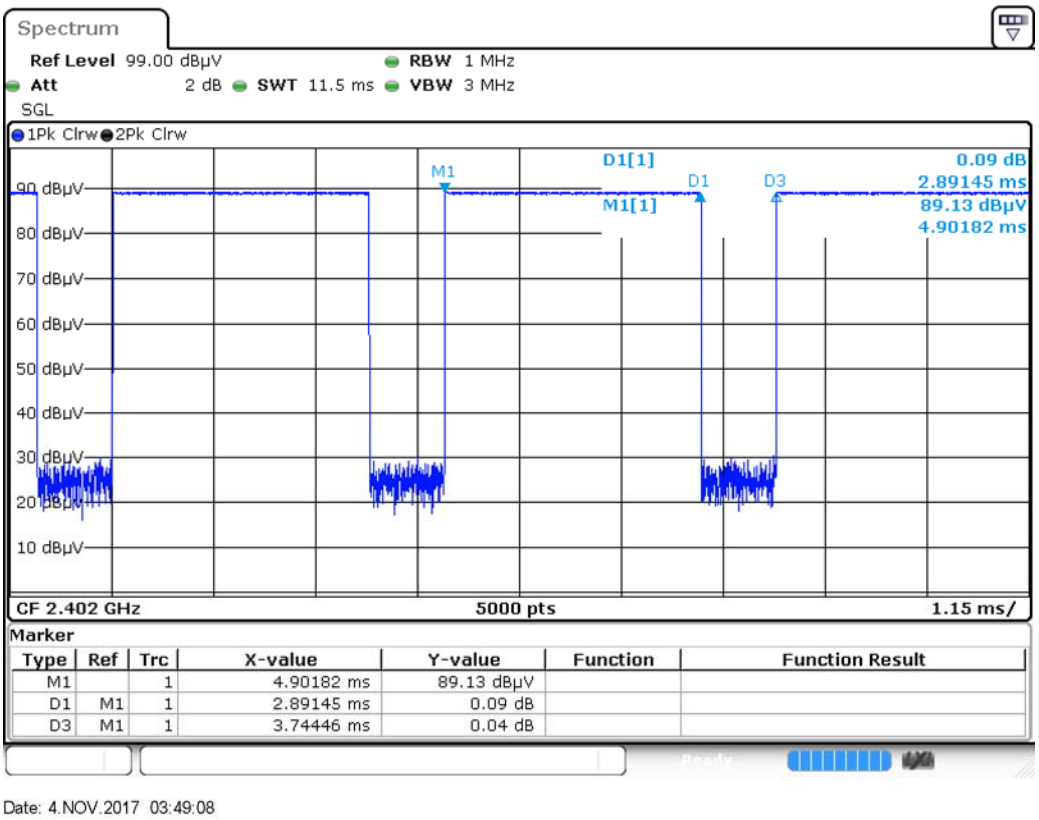
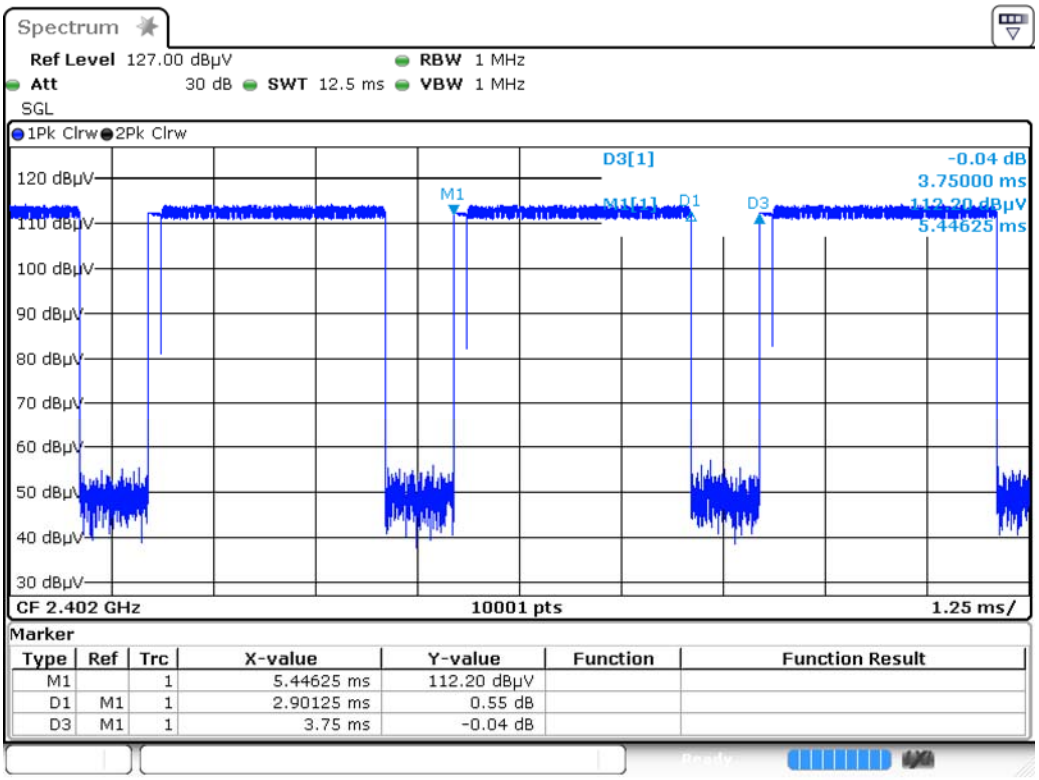
1.7. Duty Cycle

Mode	On Time (ms)	Off Time (ms)	Duty Cycle (%)	Off Set (dB)
DH5	2.891	3.744	77.219%	-2.245
2DH5	2.901	3.750	77.367%	-2.229
3DH5	2.905	3.750	77.467%	-2.218

DH5



2DH5



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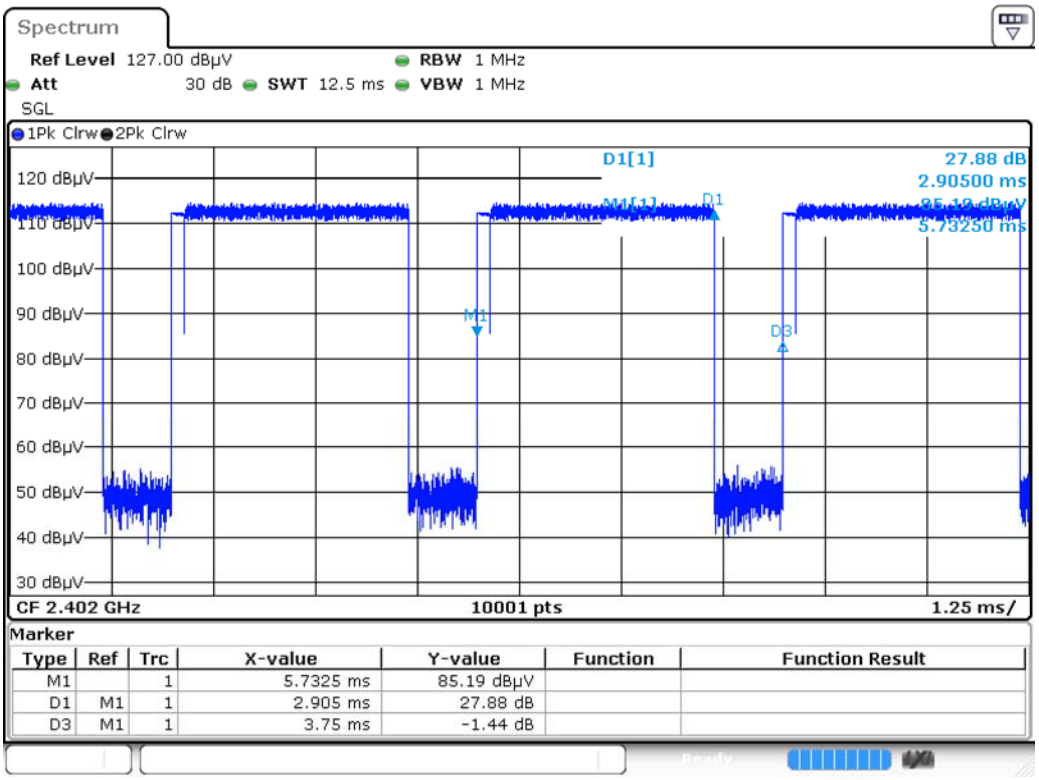
3DH5



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2. Conducted Emission

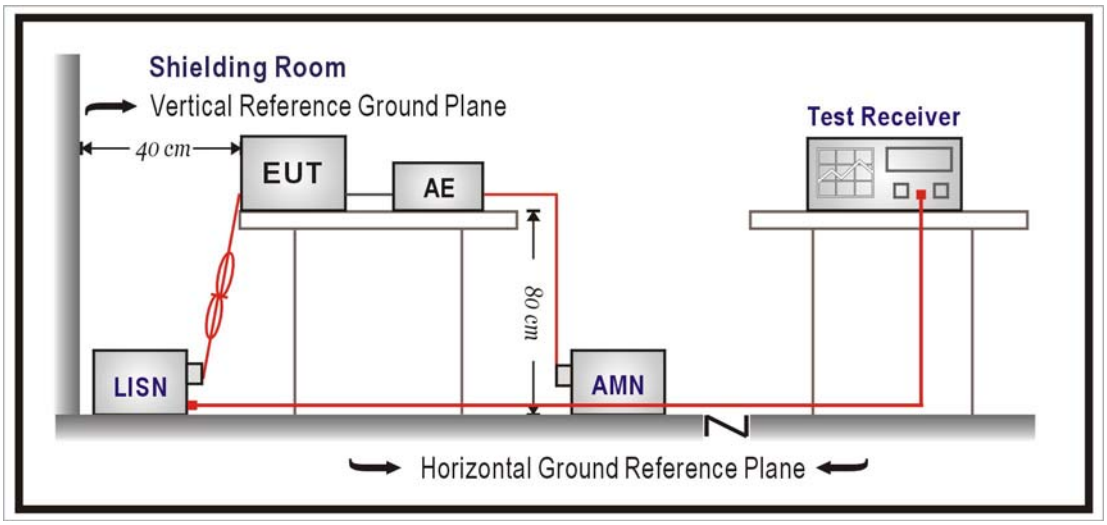
2.1. Test Equipment

The following test equipment's are used during the test:

Conducted Emission /SR2-H

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

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

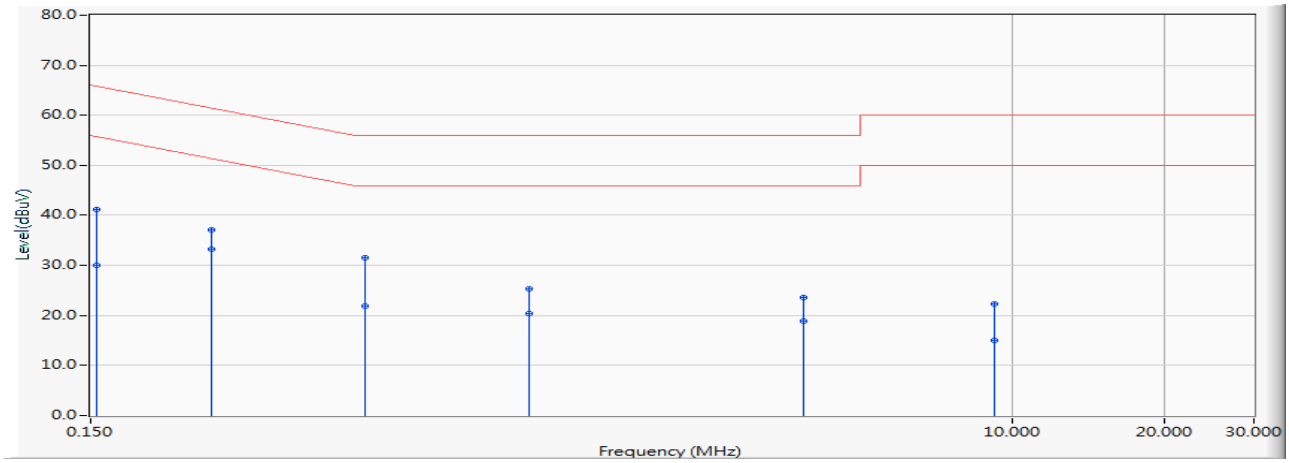
According to FCC Part 15 Subpart C Paragraph 15.207: 2016

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR2-H	**Time : 2017/11/15**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line1	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**

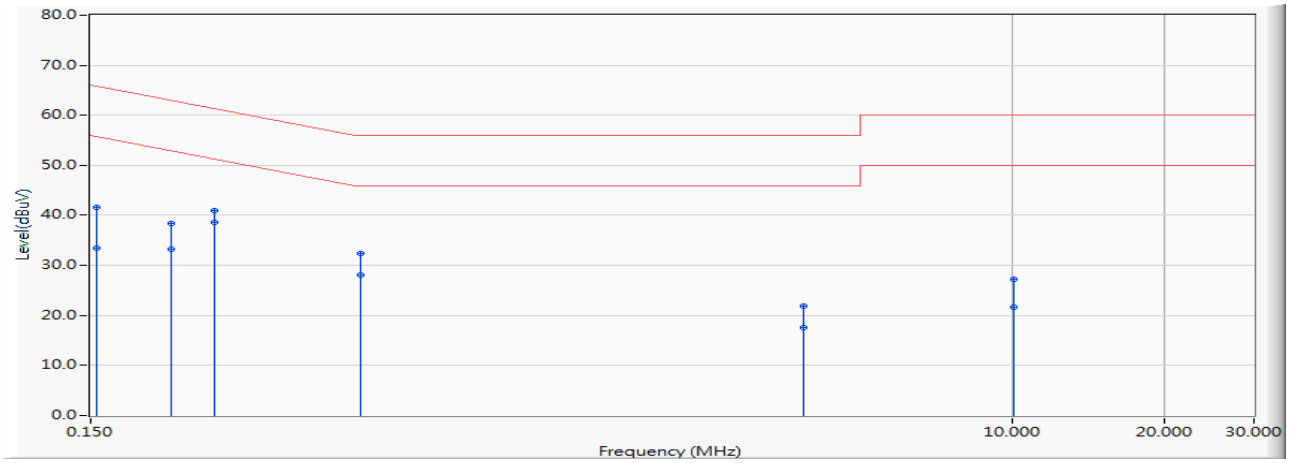


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.747	31.500	41.246	-24.540	65.786	QUASIPEAK
2		0.154	9.747	20.330	30.076	-25.710	55.786	AVERAGE
3		0.259	9.744	27.310	37.054	-24.397	61.451	QUASIPEAK
4	*	0.259	9.744	23.460	33.204	-18.247	51.451	AVERAGE
5		0.525	9.733	21.780	31.513	-24.487	56.000	QUASIPEAK
6		0.525	9.733	12.250	21.983	-24.017	46.000	AVERAGE
7		1.103	9.824	15.440	25.264	-30.736	56.000	QUASIPEAK
8		1.103	9.824	10.610	20.434	-25.566	46.000	AVERAGE
9		3.853	9.916	13.750	23.666	-32.334	56.000	QUASIPEAK
10		3.853	9.916	8.880	18.796	-27.204	46.000	AVERAGE
11		9.216	10.098	12.240	22.337	-37.663	60.000	QUASIPEAK
12		9.216	10.098	4.900	14.997	-35.003	50.000	AVERAGE

Note:

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

Site : SR2-H	**Time : 2017/11/15**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line2	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.747	31.800	41.546	-24.240	65.786	QUASIPEAK
2		0.154	9.747	23.640	33.386	-22.400	55.786	AVERAGE
3		0.216	9.750	28.660	38.410	-24.546	62.956	QUASIPEAK
4		0.216	9.750	23.560	33.310	-19.646	52.956	AVERAGE
5		0.263	9.750	31.150	40.900	-20.427	61.327	QUASIPEAK
6	*	0.263	9.750	28.880	38.630	-12.697	51.327	AVERAGE
7		0.513	9.747	22.680	32.427	-23.573	56.000	QUASIPEAK
8		0.513	9.747	18.310	28.057	-17.943	46.000	AVERAGE
9		3.853	9.841	12.120	21.961	-34.039	56.000	QUASIPEAK
10		3.853	9.841	7.810	17.651	-28.349	46.000	AVERAGE
11		10.060	10.152	17.040	27.192	-32.808	60.000	QUASIPEAK
12		10.060	10.152	11.600	21.752	-28.248	50.000	AVERAGE

Note:

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

3. Peak Power Output

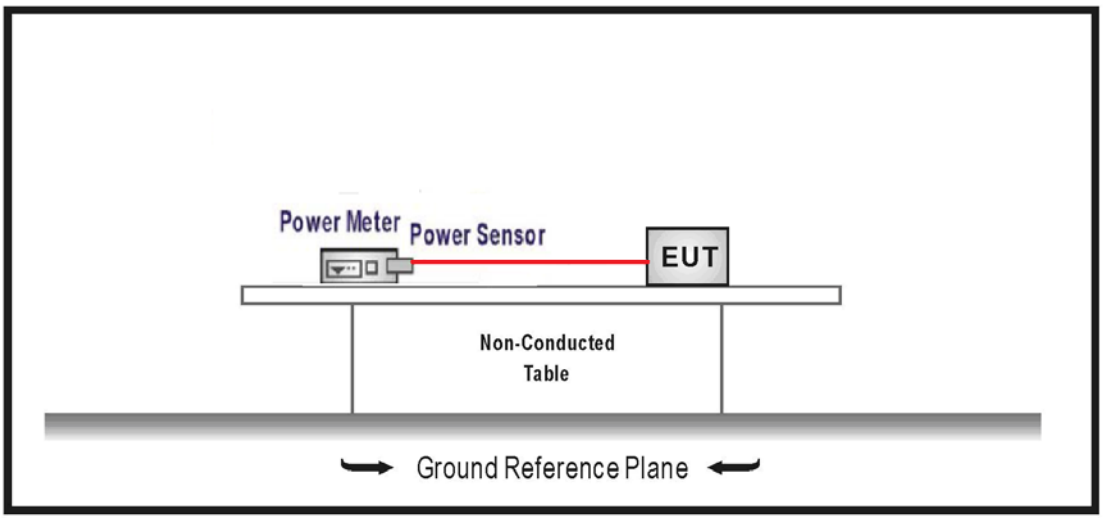
3.1. Test Equipment

The following test equipment is used during the test:

Peak Power Output / SR10-H

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

3.2. Test Setup



3.3. Test procedures

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

3.4. Limits

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

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

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

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2016.

3.6. Test Result

Product	Verizon Mesh Router		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

GFSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	8.550	30	Pass
39	2441	9.610	30	Pass
78	2480	10.300	30	Pass

π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	11.010	30	Pass
39	2441	12.070	30	Pass
78	2480	12.080	30	Pass

8-DPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	11.550	30	Pass
39	2441	12.500	30	Pass
78	2480	13.090	30	Pass

4. Radiated Emission

4.1. Test Equipment

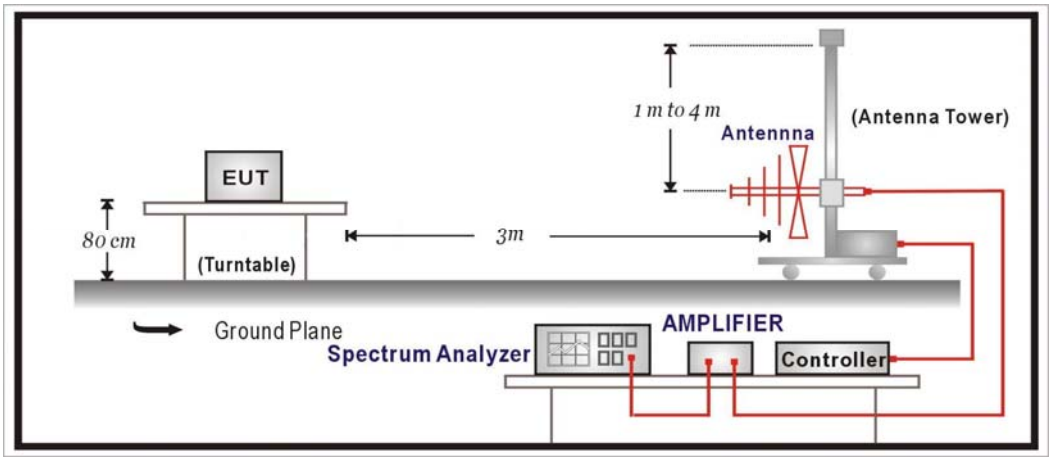
The following test equipment are used during the test:

Radiated Emission / CB2-H

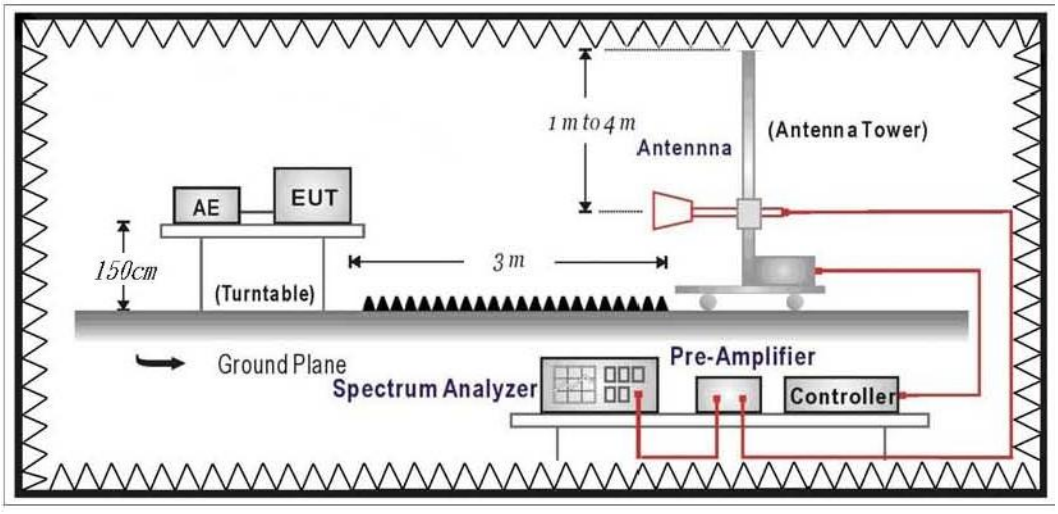
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12
Bilog Antenna	Teseq	CBL6112D	23191	2017/06/28	2018/06/27
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2017/06/14	2018/06/13
Horn Antenna	Schwarzbeck	BBHA 9170	202	2017/02/15	2018/02/14
Pre-Amplifier	RF Bay Inc.	LNA-1330	12162511	2017/03/09	2018/03/08
Pre-Amplifier	EMCI	EMCI 1830I	980366	2017/01/23	2018/01/22
Pre-Amplifier	MITEQ	JS44-45-8P	2014754	2016/12/26	2017/12/25
Magnetic Loop Antenna	Teseq	HLA 6121	44287	2017/10/13	2018/10/12

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

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

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

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.
On any frequency or frequencies form 9KHz(inculde The the lowest oscillator frequency generated within the device up to the 10th harmonic) 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.

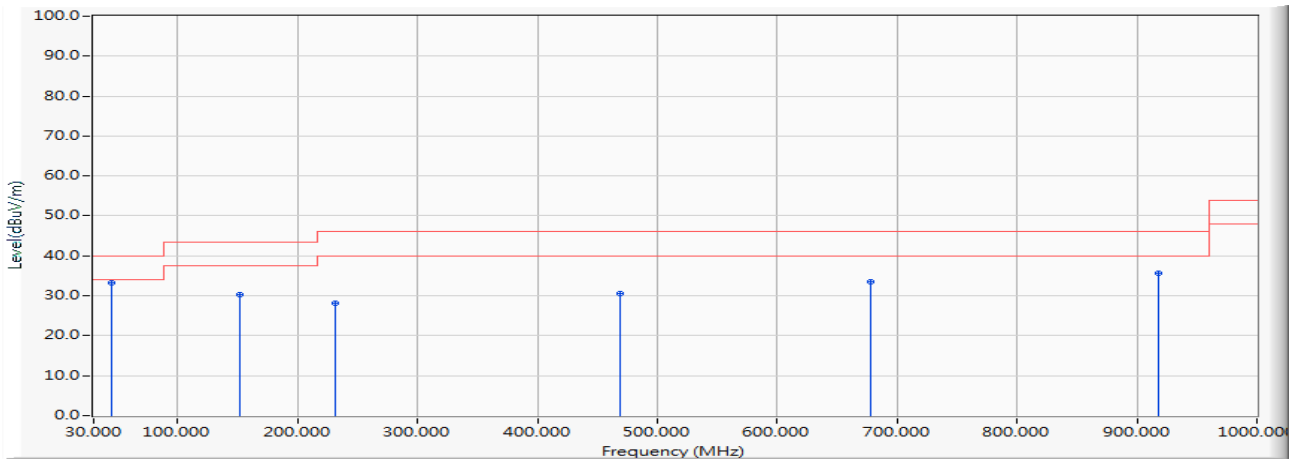
4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2016

4.6. Test Result

30MHz-1GHz Spurious

Site : DEKRA Taiwan CB2-H	Time : 2017/10/24
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	Power : AC 120V/60Hz
EUT : Verizon Mesh Router	Note : Mode 1: Transmit Mode_802.15.1_DH5_2441MHz

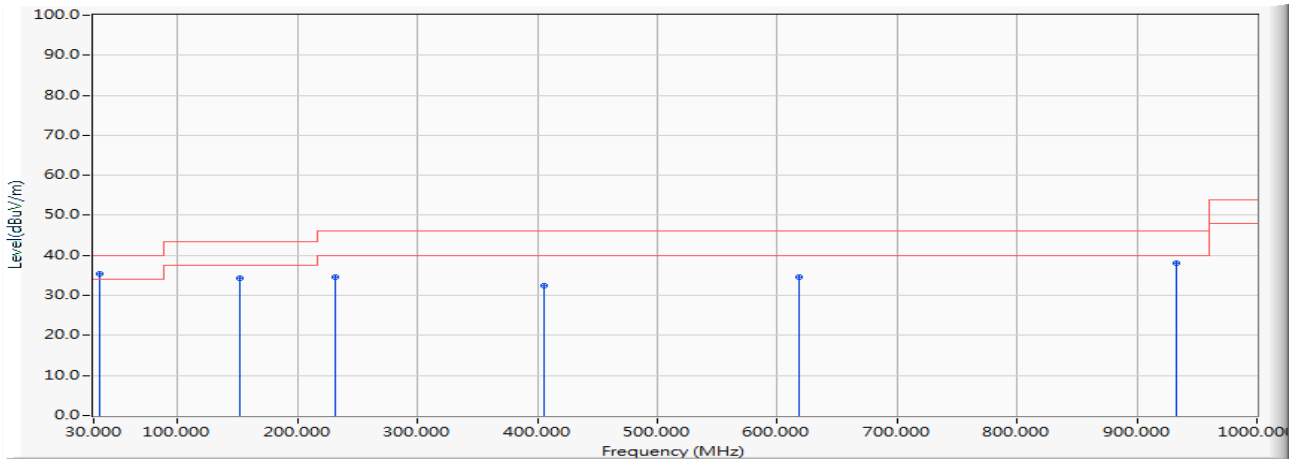


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	44.841	-22.438	55.750	33.312	-6.688	40.000	QUASIPEAK
2		151.638	-22.570	52.845	30.275	-13.225	43.500	QUASIPEAK
3		231.566	-21.515	49.651	28.137	-17.863	46.000	QUASIPEAK
4		469.313	-14.901	45.485	30.584	-15.416	46.000	QUASIPEAK
5		677.669	-12.481	45.928	33.447	-12.553	46.000	QUASIPEAK
6		918.520	-9.608	45.388	35.780	-10.220	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.
4. The emission form 9KHz to 30MHz Radiated emission were not show in test report., because Pre-Scan lower than the limit line. The worst case is 6.449 uV/m.

Site : DEKRA Taiwan CB2-H	**Time : 2017/10/24**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2441MHz**

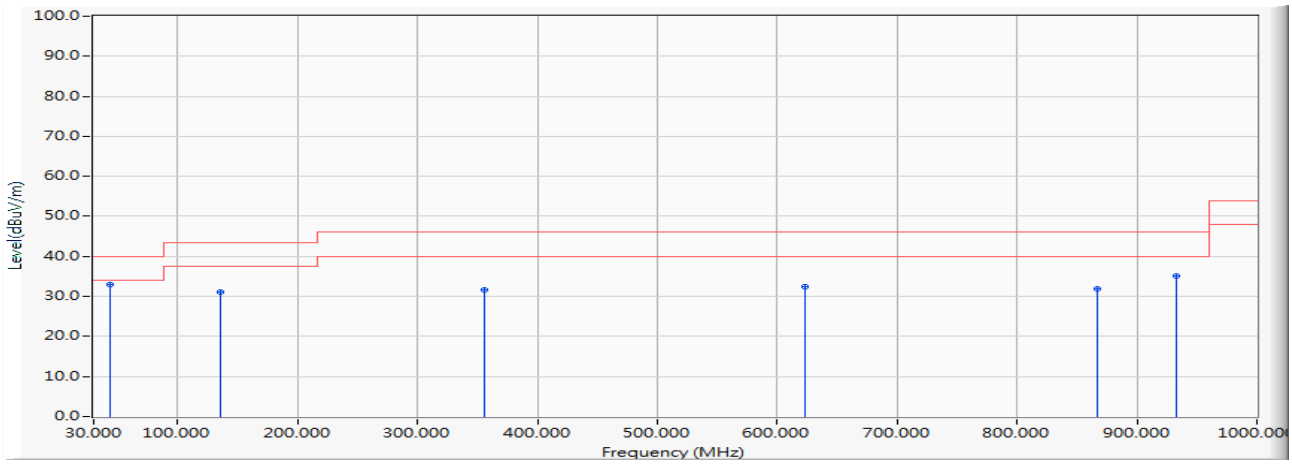


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	35.529	-16.824	52.177	35.352	-4.648	40.000	QUASIPEAK
2		151.638	-22.570	56.945	34.375	-9.125	43.500	QUASIPEAK
3		231.566	-21.515	56.088	34.574	-11.426	46.000	QUASIPEAK
4		405.972	-15.855	48.416	32.560	-13.440	46.000	QUASIPEAK
5		618.305	-13.103	47.640	34.537	-11.463	46.000	QUASIPEAK
6		932.779	-9.119	47.282	38.163	-7.837	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.
4. The emission form 9KHz to 30MHz Radiated emission were not show in test report., because Pre-Scan lower than the limit line. The worst case is 6.449 uV/m.

Site : DEKRA Taiwan CB2-H	**Time : 2017/10/24**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2441MHz**

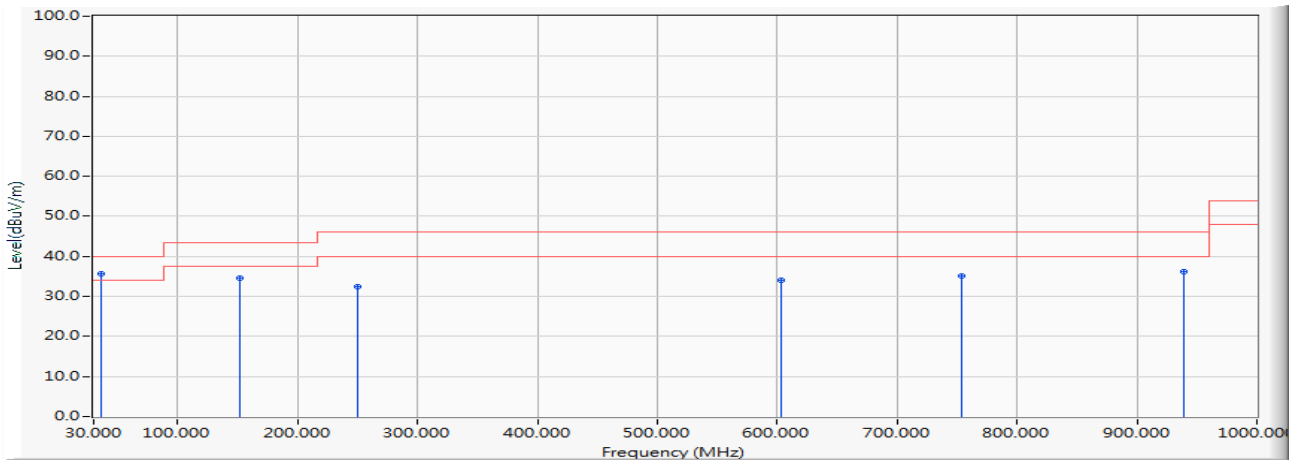


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	43.095	-20.389	53.427	33.039	-6.961	40.000	QUASIPEAK
2		135.827	-21.853	52.952	31.100	-12.400	43.500	QUASIPEAK
3		356.211	-17.333	48.892	31.559	-14.441	46.000	QUASIPEAK
4		623.737	-13.047	45.537	32.490	-13.510	46.000	QUASIPEAK
5		866.819	-10.303	42.132	31.829	-14.171	46.000	QUASIPEAK
6		932.682	-9.122	44.145	35.023	-10.977	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.
4. The emission form 9KHz to 30MHz Radiated emission were not show in test report., because Pre-Scan lower than the limit line. The worst case is 6.449 uV/m.

Site : DEKRA Taiwan CB2-H	**Time : 2017/10/24**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2441MHz**

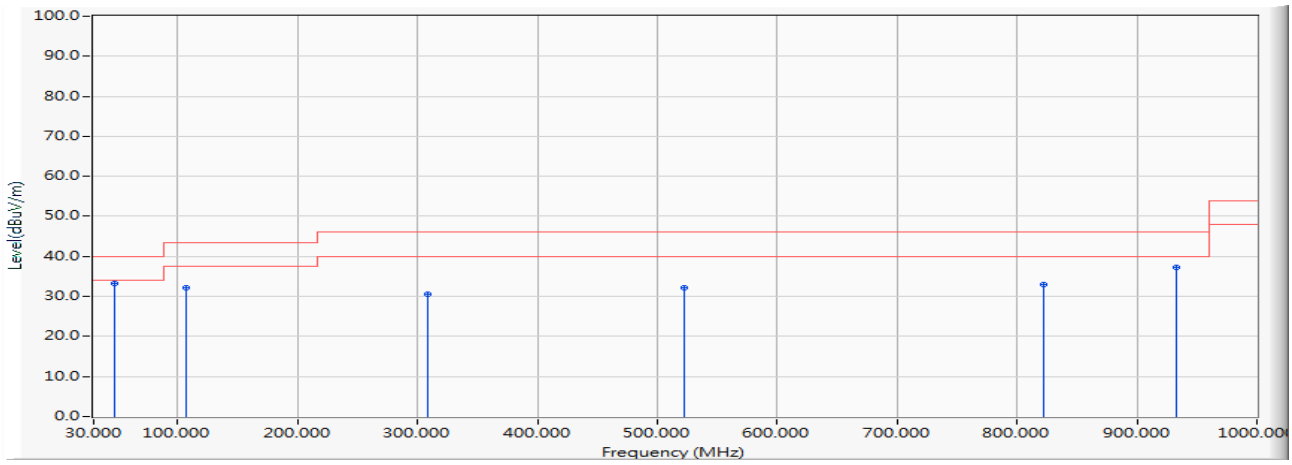


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	36.014	-16.804	52.510	35.707	-4.293	40.000	QUASIPEAK
2		151.638	-22.570	57.101	34.531	-8.969	43.500	QUASIPEAK
3		249.996	-20.377	52.721	32.343	-13.657	46.000	QUASIPEAK
4		602.979	-13.202	47.138	33.935	-12.065	46.000	QUASIPEAK
5		753.911	-11.636	46.832	35.196	-10.804	46.000	QUASIPEAK
6		938.599	-8.933	45.192	36.259	-9.741	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.
4. The emission form 9KHz to 30MHz Radiated emission were not show in test report., because Pre-Scan lower than the limit line. The worst case is 6.449 uV/m.

Site : DEKRA Taiwan CB2-H	**Time : 2017/10/24**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**

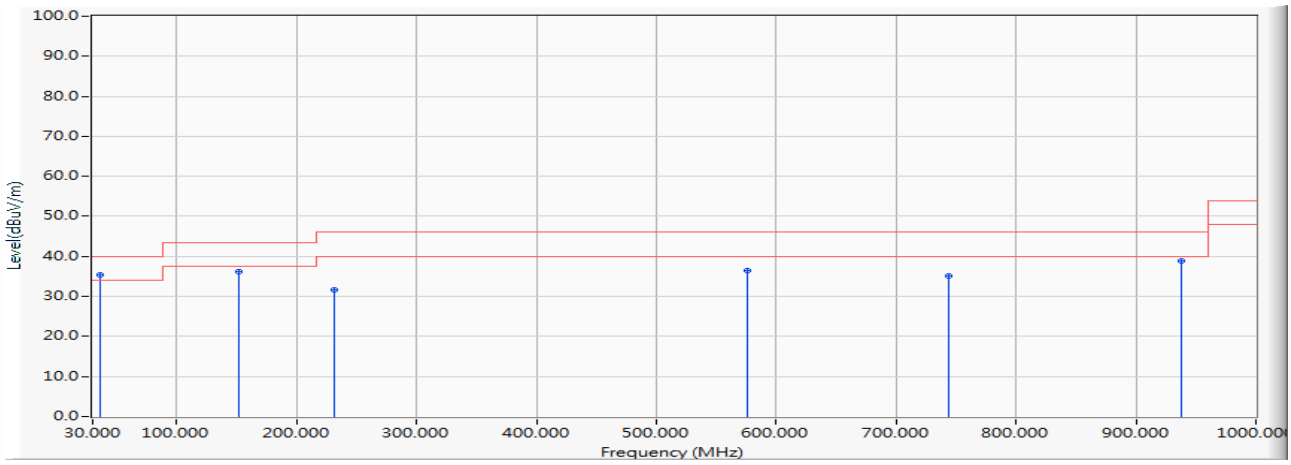


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	47.945	-24.473	57.817	33.344	-6.656	40.000	QUASIPEAK
2		106.727	-22.871	55.013	32.142	-11.358	43.500	QUASIPEAK
3		308.293	-18.878	49.479	30.602	-15.398	46.000	QUASIPEAK
4		522.275	-14.231	46.518	32.288	-13.712	46.000	QUASIPEAK
5		822.684	-10.830	43.854	33.024	-12.976	46.000	QUASIPEAK
6		932.682	-9.122	46.271	37.149	-8.851	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.
4. The emission form 9KHz to 30MHz Radiated emission were not show in test report., because Pre-Scan lower than the limit line. The worst case is 6.449 uV/m.

Site : DEKRA Taiwan CB2-H	**Time : 2017/10/24**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**



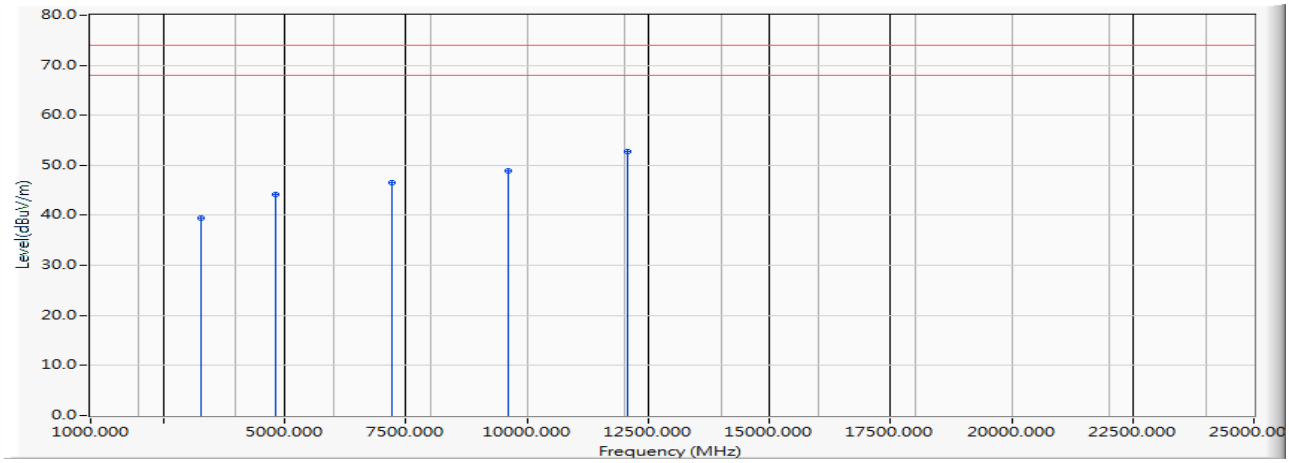
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	35.917	-16.809	52.328	35.520	-4.480	40.000	QUASIPEAK
2		151.541	-22.565	58.693	36.128	-7.372	43.500	QUASIPEAK
3		231.469	-21.520	53.115	31.595	-14.405	46.000	QUASIPEAK
4		575.819	-13.524	49.886	36.363	-9.637	46.000	QUASIPEAK
5		743.532	-11.814	46.988	35.174	-10.826	46.000	QUASIPEAK
6		937.338	-8.974	47.854	38.881	-7.119	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.
4. The emission form 9KHz to 30MHz Radiated emission were not show in test report., because Pre-Scan lower than the limit line. The worst case is 6.449 uV/m.

Harmonic & Spurious:

Site : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2402MHz**

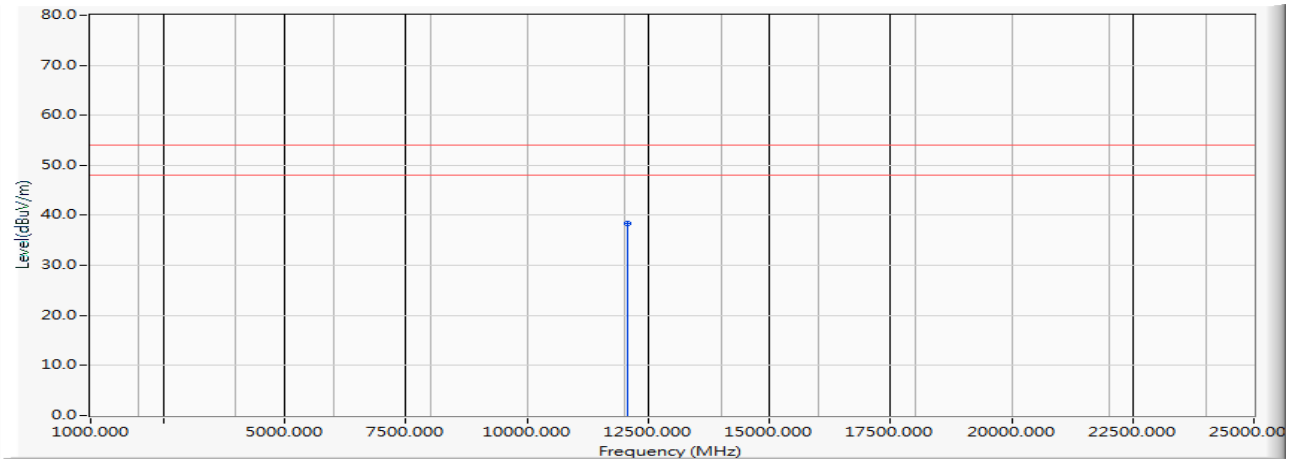


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3262.770	-6.690	46.130	39.440	-34.560	74.000	PEAK
2		4804.900	41.304	44.390	44.183	-29.817	74.000	PEAK
3		7204.500	46.931	39.480	46.437	-27.563	74.000	PEAK
4		9605.030	51.338	36.350	48.882	-25.118	74.000	PEAK
5	*	12069.000	53.719	37.440	52.747	-21.253	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2402MHz**

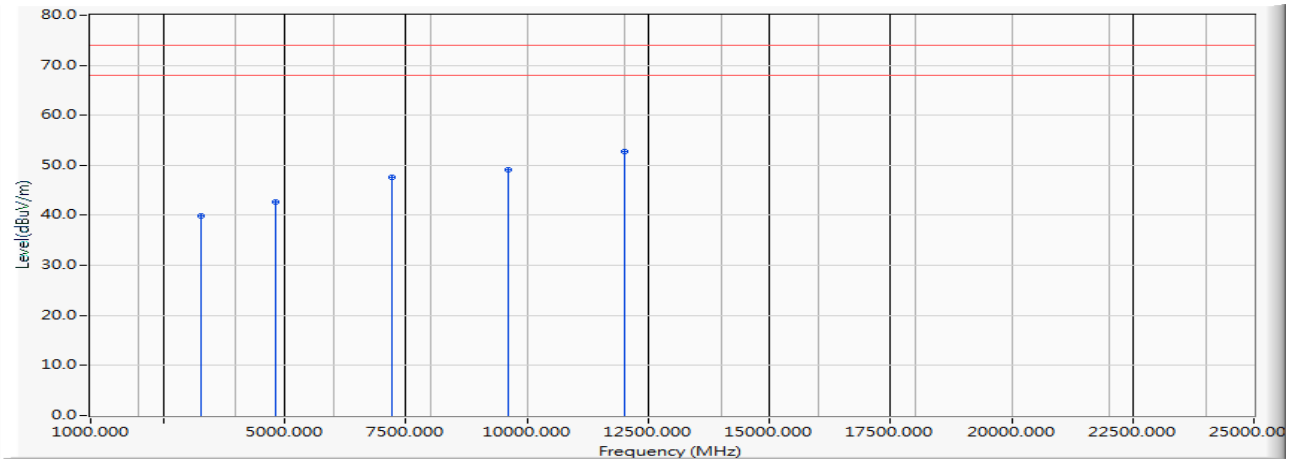


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12069.000	15.307	23.120	38.427	-15.573	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2402MHz**

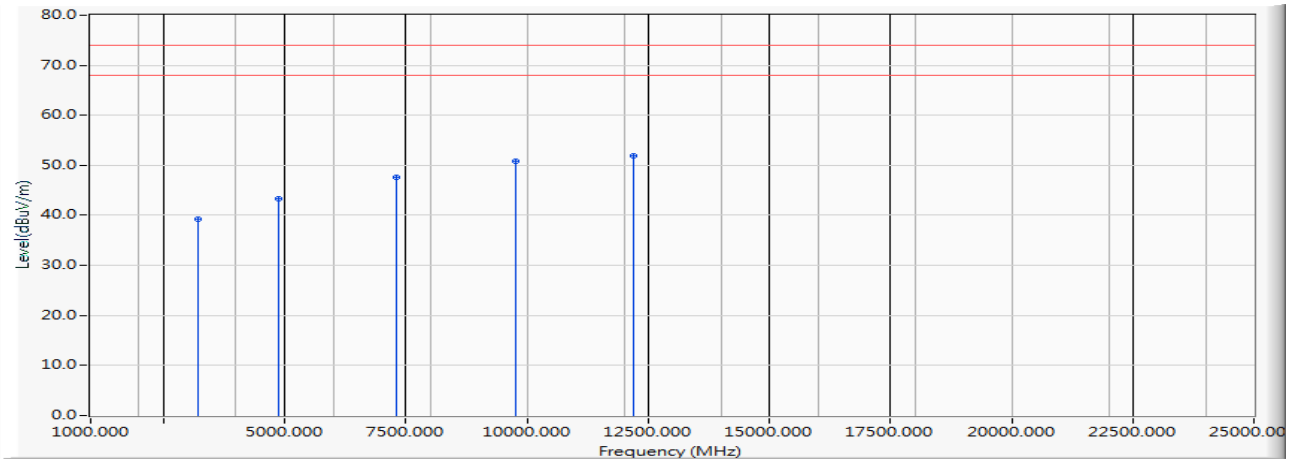


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3262.770	-6.690	46.550	39.860	-34.140	74.000	PEAK
2		4806.260	-0.204	42.990	42.785	-31.215	74.000	PEAK
3		7202.740	6.952	40.660	47.612	-26.388	74.000	PEAK
4		9608.300	12.542	36.640	49.182	-24.818	74.000	PEAK
5	*	12008.900	15.521	37.200	52.721	-21.279	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2441MHz**

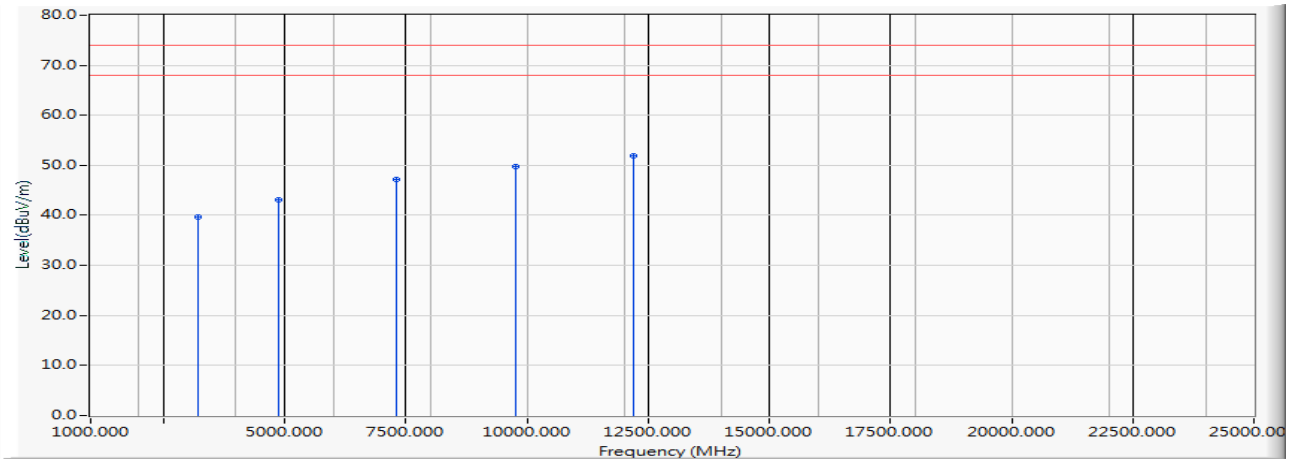


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.500	-6.749	46.080	39.330	-34.670	74.000	PEAK
2		4881.540	-0.124	43.390	43.266	-30.734	74.000	PEAK
3		7318.200	7.430	40.110	47.540	-26.460	74.000	PEAK
4		9767.600	12.876	37.880	50.756	-23.244	74.000	PEAK
5	*	12200.800	14.849	36.980	51.829	-22.171	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2441MHz**

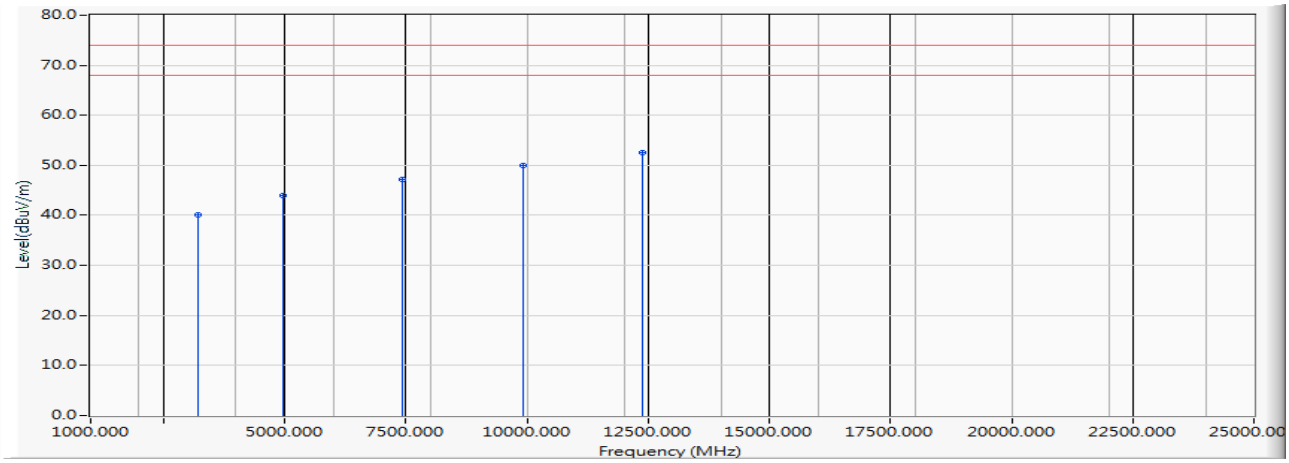


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3224.900	-6.757	46.440	39.683	-34.317	74.000	PEAK
2		4881.400	-0.124	43.200	43.076	-30.924	74.000	PEAK
3		7320.300	7.438	39.800	47.238	-26.762	74.000	PEAK
4		9767.200	12.875	36.890	49.765	-24.235	74.000	PEAK
5	*	12200.560	14.849	36.970	51.820	-22.180	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2480MHz**

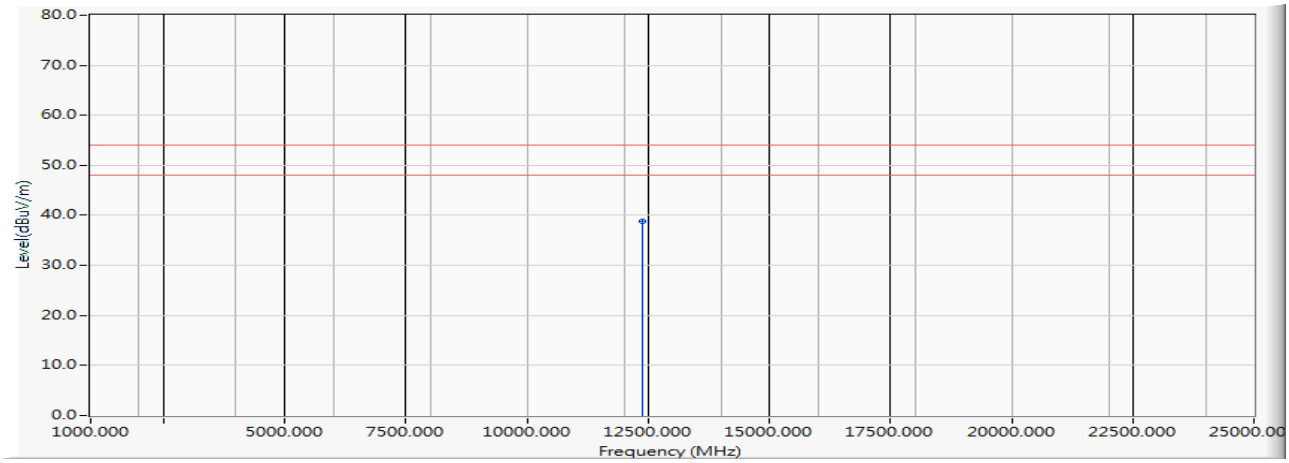


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.500	-6.749	46.780	40.030	-33.970	74.000	PEAK
2		4959.800	-0.034	43.980	43.945	-30.055	74.000	PEAK
3		7438.000	7.862	39.420	47.281	-26.719	74.000	PEAK
4		9920.900	13.092	36.840	49.932	-24.068	74.000	PEAK
5	*	12398.500	15.722	36.810	52.533	-21.467	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2480MHz**

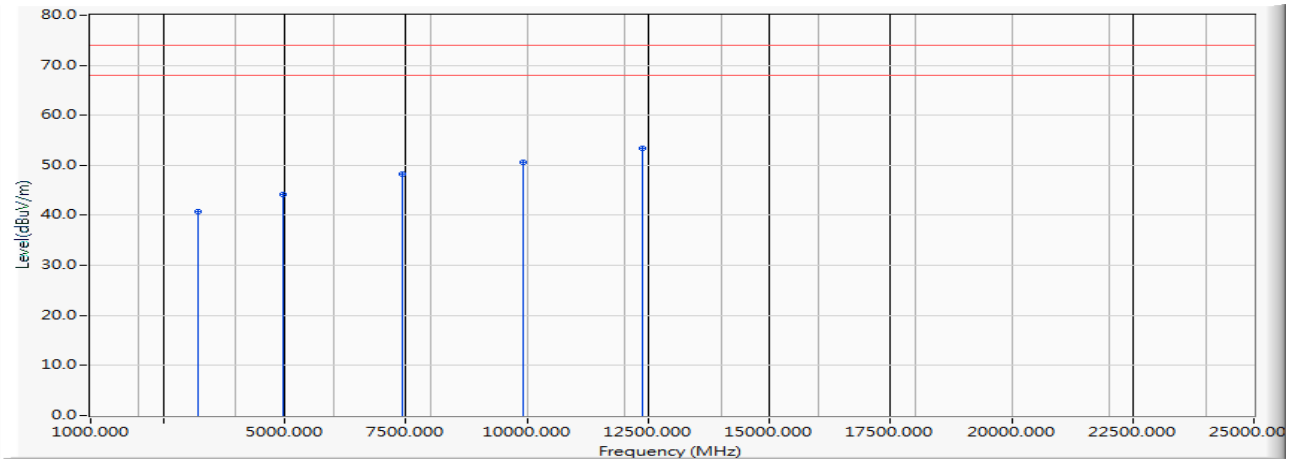


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12398.500	15.722	23.050	38.773	-15.227	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2480MHz**

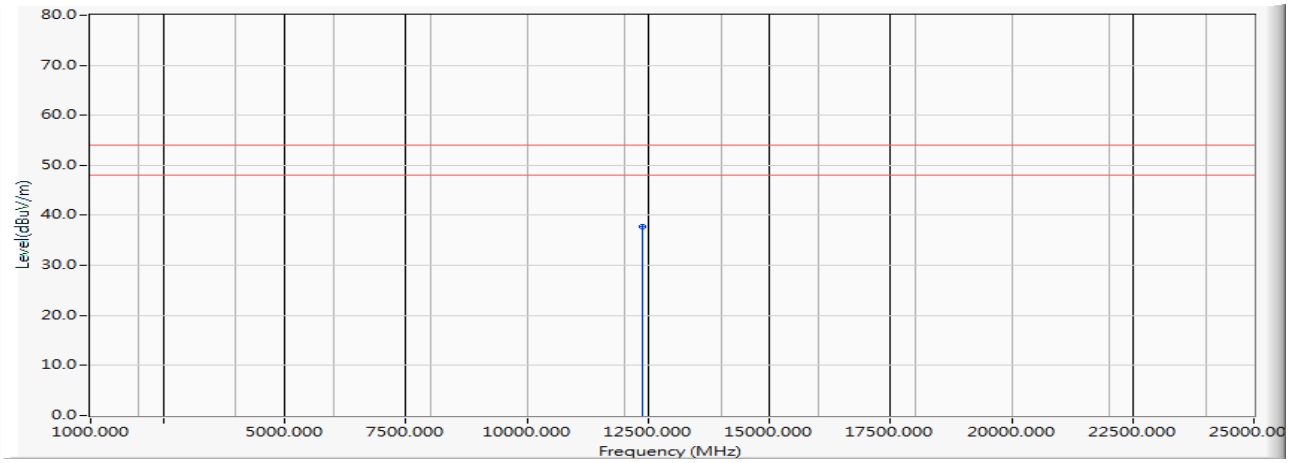


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.500	-6.749	47.480	40.730	-33.270	74.000	PEAK
2		4955.810	-0.039	44.155	44.116	-29.884	74.000	PEAK
3		7438.000	7.862	40.320	48.181	-25.819	74.000	PEAK
4		9920.450	13.092	37.550	50.642	-23.358	74.000	PEAK
5	*	12396.540	15.709	37.770	53.479	-20.521	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2480MHz**

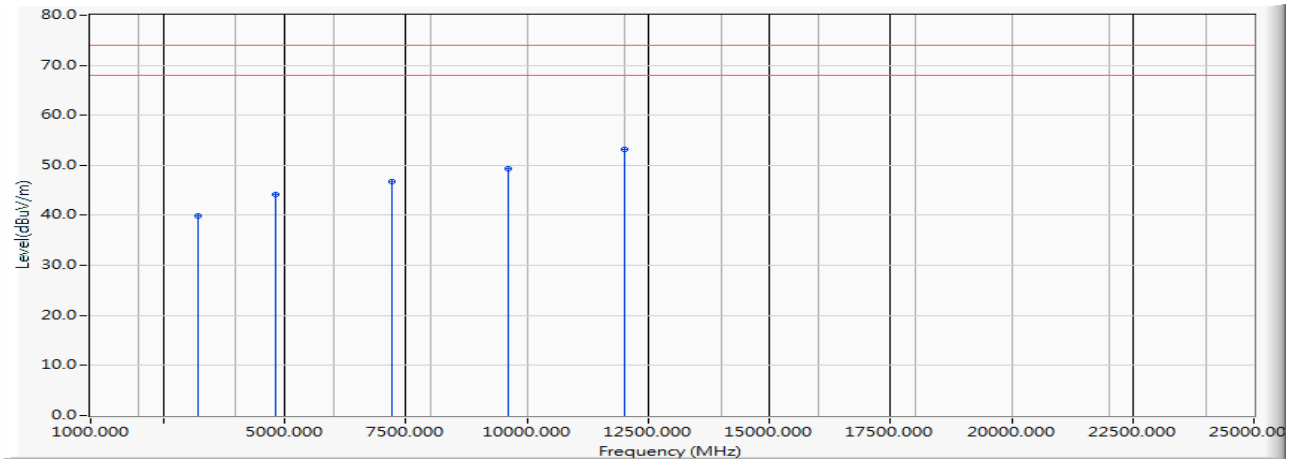


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12396.650	15.710	22.070	37.779	-16.221	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2402MHz**

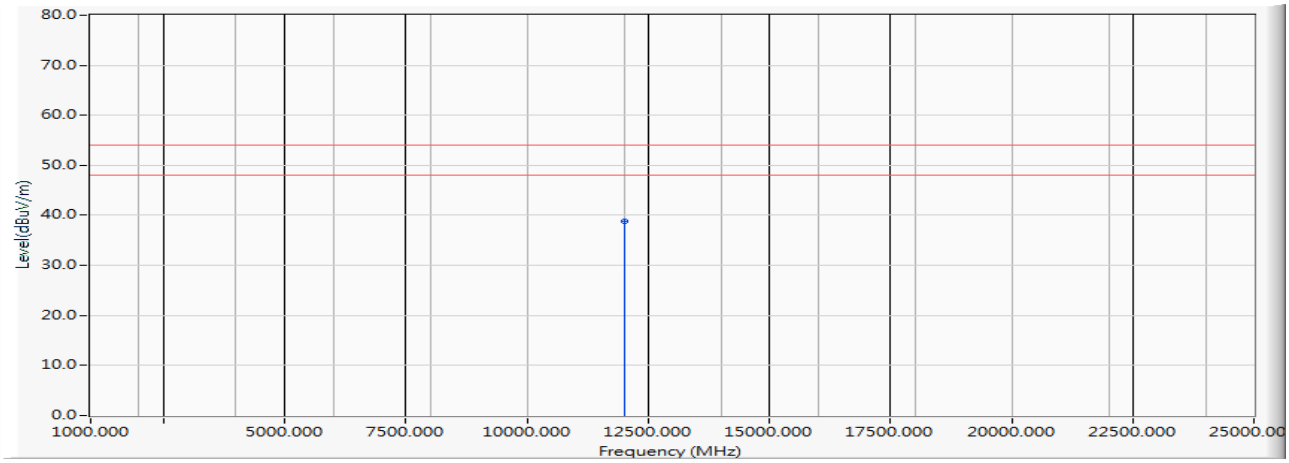


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.180	-6.749	46.610	39.860	-34.140	74.000	PEAK
2		4803.740	-0.209	44.460	44.252	-29.748	74.000	PEAK
3		7200.200	6.945	39.820	46.765	-27.235	74.000	PEAK
4		9610.700	12.549	36.770	49.319	-24.681	74.000	PEAK
5	*	12005.300	15.536	37.680	53.216	-20.784	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2402MHz**

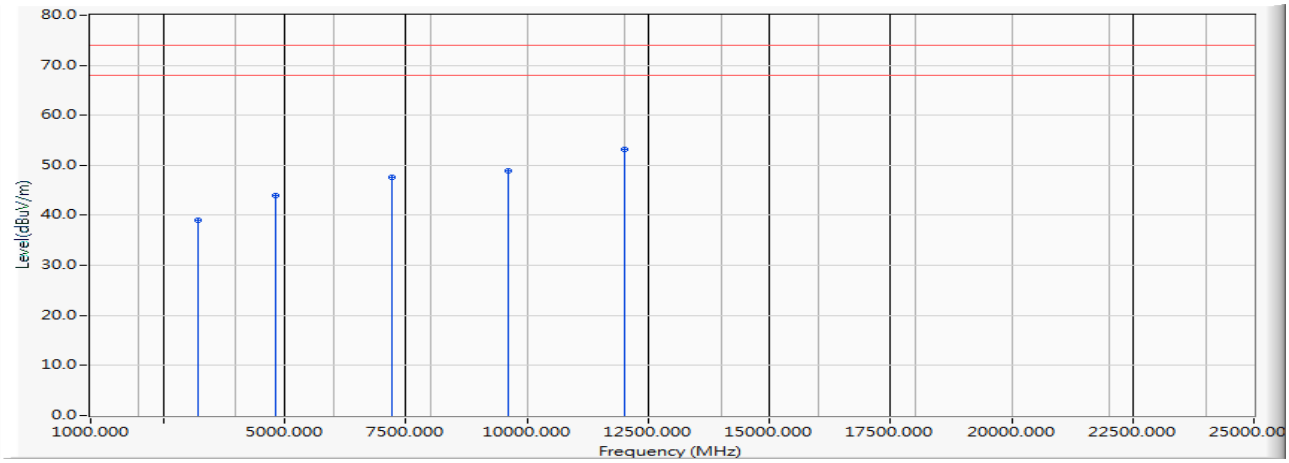


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12005.300	15.536	23.350	38.886	-15.114	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2402MHz**

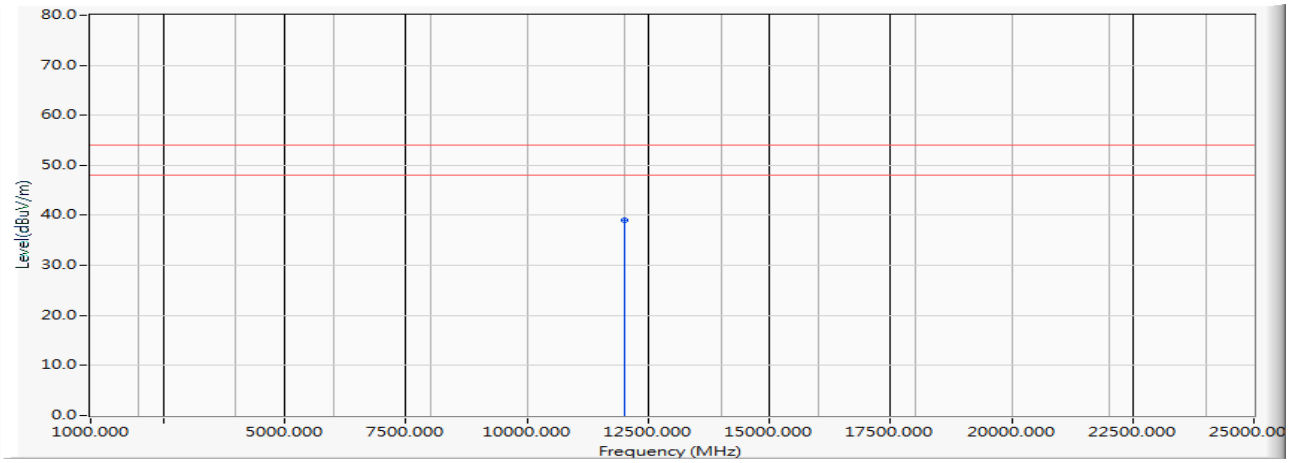


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.080	-6.750	45.840	39.090	-34.910	74.000	PEAK
2		4804.330	-0.207	44.200	43.992	-30.008	74.000	PEAK
3		7201.240	6.948	40.580	47.528	-26.472	74.000	PEAK
4		9608.500	12.543	36.450	48.992	-25.008	74.000	PEAK
5	*	12013.600	15.501	37.720	53.221	-20.779	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2402MHz**

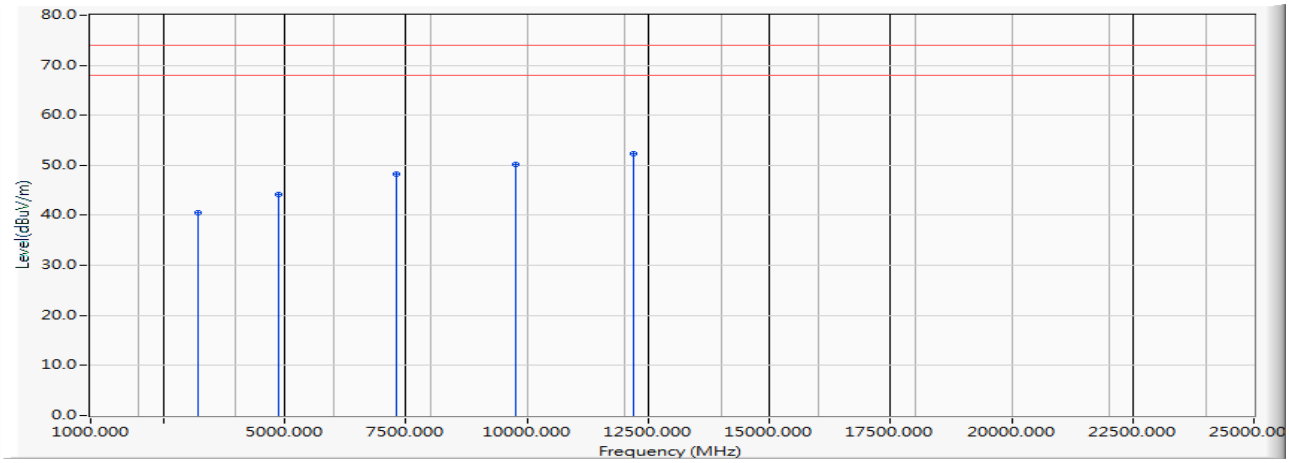


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12013.600	15.501	23.570	39.071	-14.929	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2441MHz**

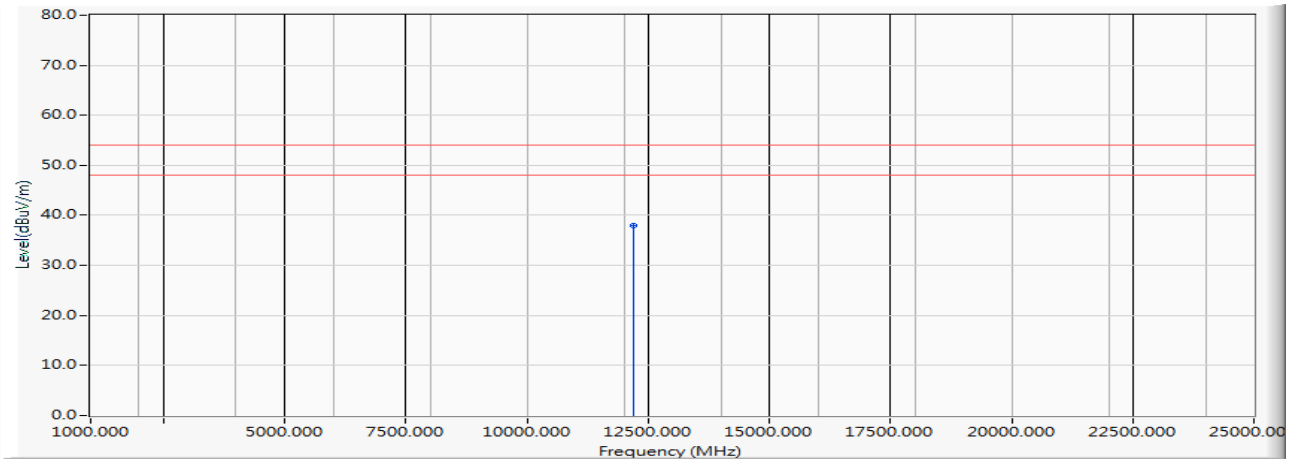


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.180	-6.749	47.270	40.520	-33.480	74.000	PEAK
2		4882.100	-0.124	44.200	44.077	-29.923	74.000	PEAK
3		7321.600	7.442	40.750	48.192	-25.808	74.000	PEAK
4		9761.800	12.868	37.280	50.148	-23.852	74.000	PEAK
5	*	12201.500	14.847	37.560	52.406	-21.594	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2441MHz**

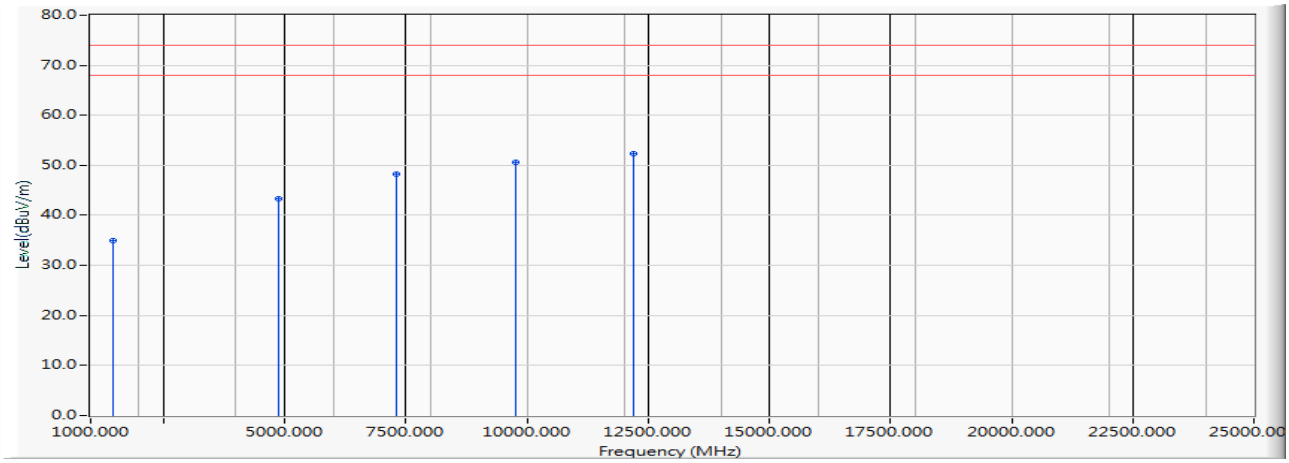


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12201.500	14.847	23.070	37.916	-16.084	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_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		1475.750	-12.930	47.970	35.040	-38.960	74.000	PEAK
2		4882.150	-0.124	43.380	43.257	-30.743	74.000	PEAK
3		7322.300	7.444	40.740	48.185	-25.815	74.000	PEAK
4		9768.870	12.878	37.680	50.558	-23.442	74.000	PEAK
5	*	12200.500	14.849	37.440	52.290	-21.710	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.
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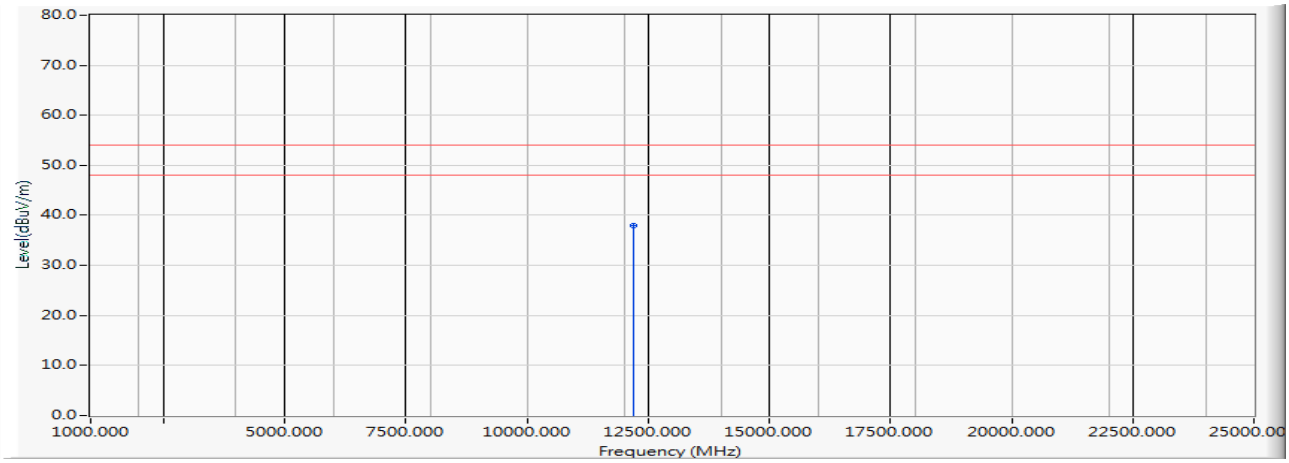
Site : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12200.500	14.849	23.150	38.000	-16.000	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
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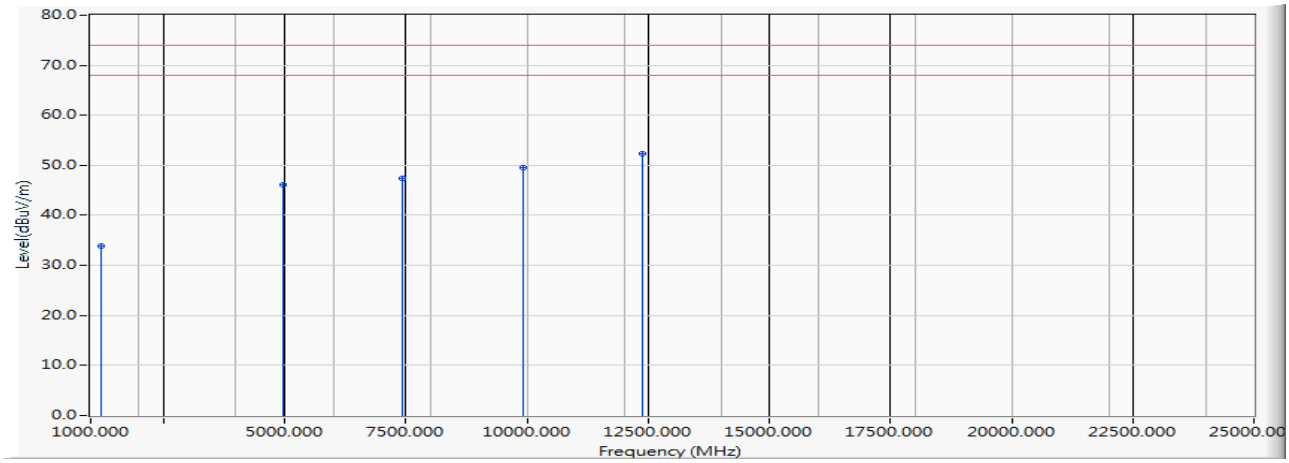
Site : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2480MHz**

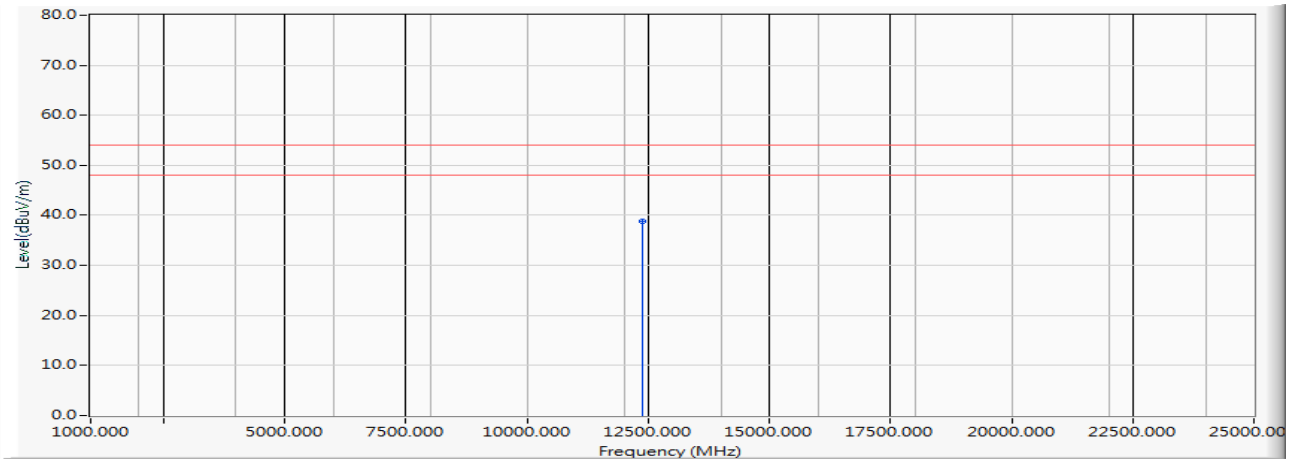


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1204.500	-14.016	47.930	33.915	-40.085	74.000	PEAK
2		4959.970	-0.034	46.050	46.016	-27.984	74.000	PEAK
3		7440.000	7.868	39.500	47.368	-26.632	74.000	PEAK
4		9921.000	13.092	36.550	49.643	-24.357	74.000	PEAK
5	*	12398.800	15.725	36.620	52.345	-21.655	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_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	*	12398.800	15.725	23.130	38.855	-15.145	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
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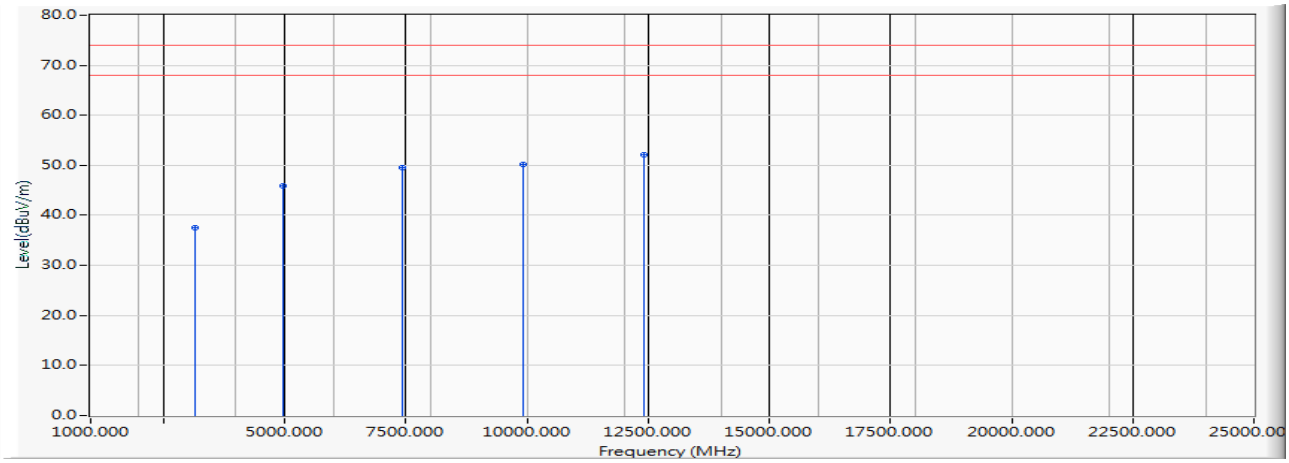
Site : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3149.100	-6.882	44.490	37.607	-36.393	74.000	PEAK
2		4959.870	-0.034	45.910	45.876	-28.124	74.000	PEAK
3		7440.410	7.870	41.640	49.510	-24.490	74.000	PEAK
4		9918.800	13.089	37.090	50.179	-23.821	74.000	PEAK
5	*	12401.200	15.741	36.330	52.072	-21.928	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.
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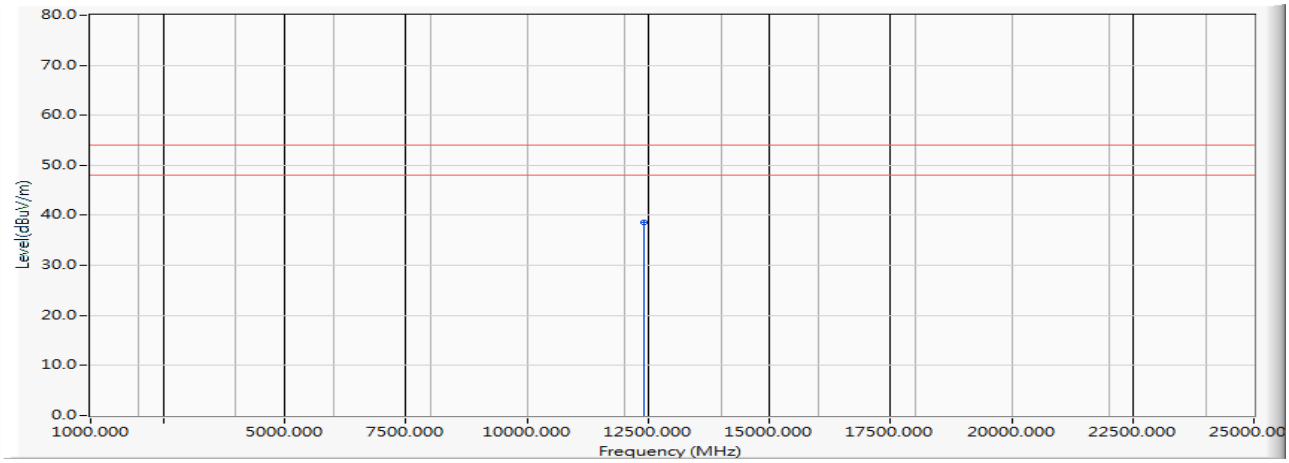
Site : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12401.200	15.741	22.850	38.592	-15.408	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
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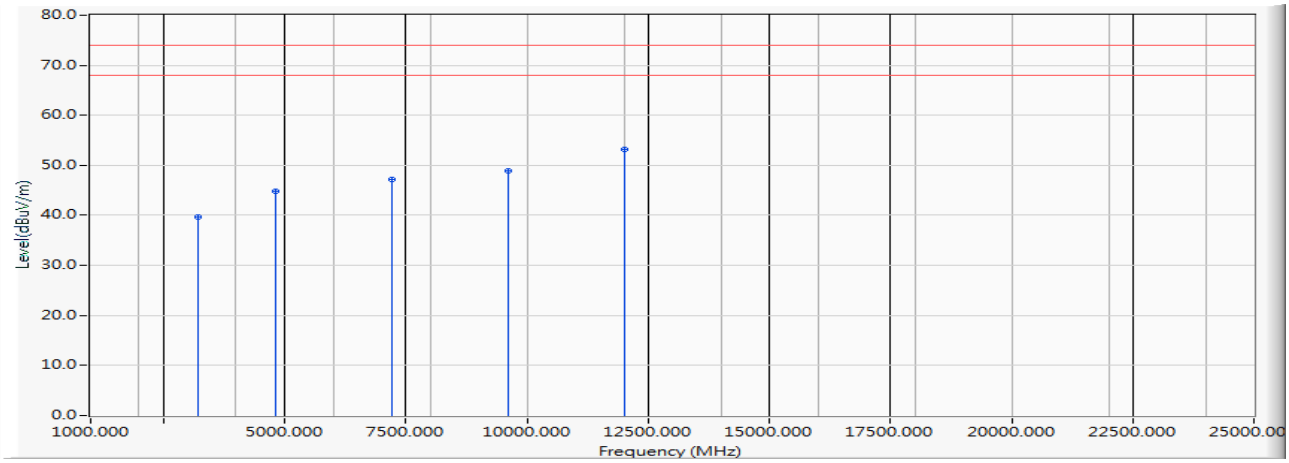
Site : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2402MHz**

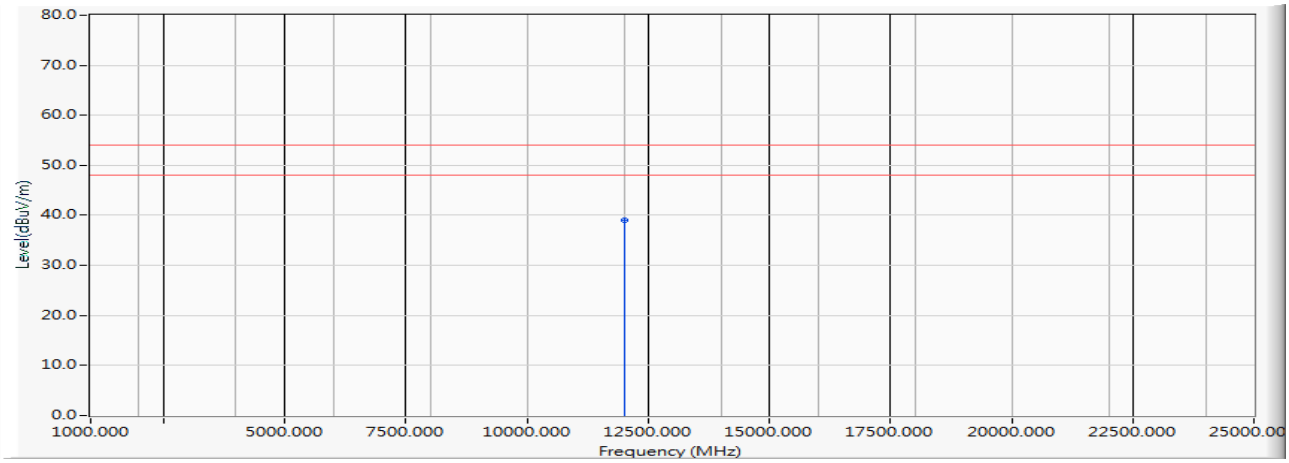


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3228.700	-6.751	46.370	39.619	-34.381	74.000	PEAK
2		4803.920	-0.208	45.080	44.872	-29.128	74.000	PEAK
3		7206.530	6.975	40.150	47.125	-26.875	74.000	PEAK
4		9610.800	12.549	36.380	48.929	-25.071	74.000	PEAK
5	*	12006.500	15.530	37.690	53.221	-20.779	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2402MHz**

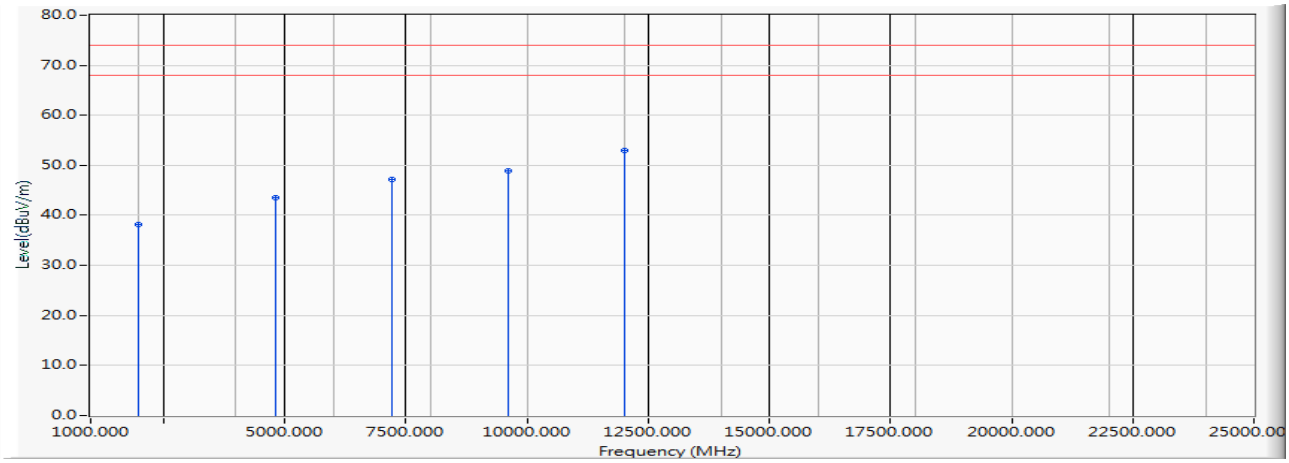


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12008.600	15.522	23.520	39.042	-14.958	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2402MHz**

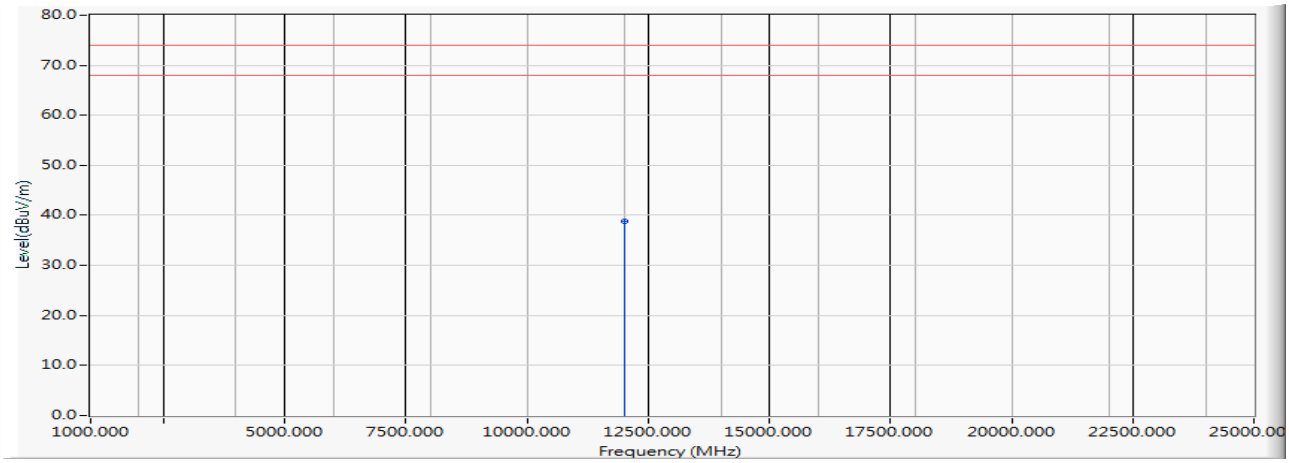


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1984.900	-11.185	49.460	38.275	-35.725	74.000	PEAK
2		4804.250	-0.208	43.770	43.562	-30.438	74.000	PEAK
3		7207.500	6.985	40.230	47.215	-26.785	74.000	PEAK
4		9606.800	12.537	36.460	48.997	-25.003	74.000	PEAK
5	*	12008.600	15.522	37.520	53.042	-20.958	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2402MHz**

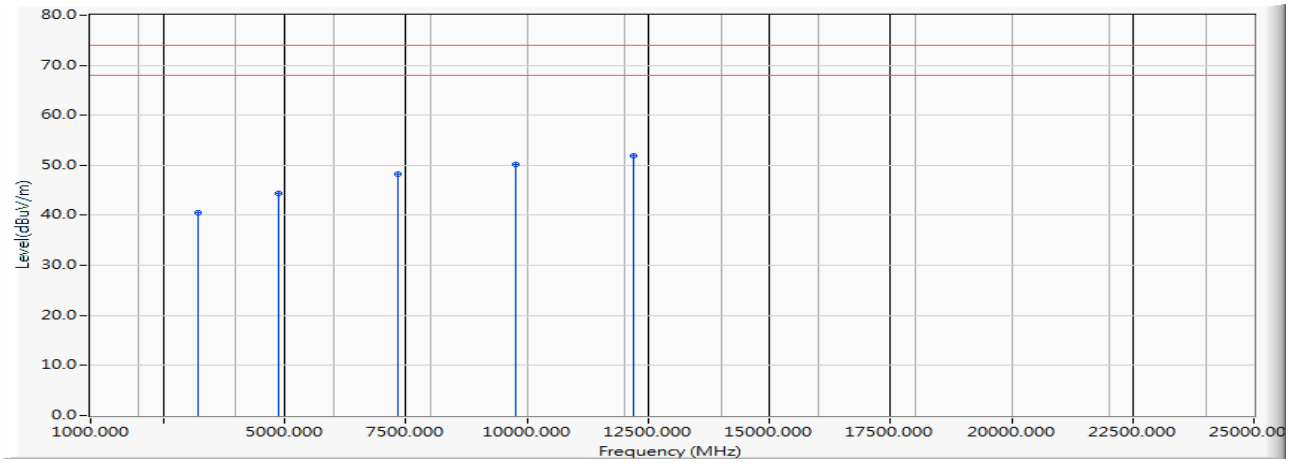


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12008.600	15.522	23.220	38.742	-15.258	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**

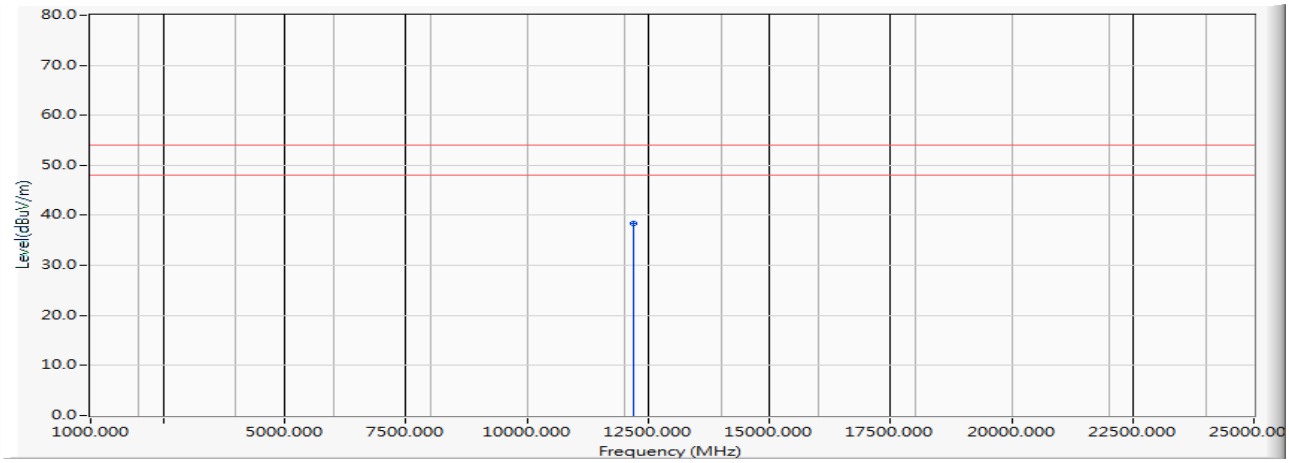


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.580	-6.749	47.260	40.511	-33.489	74.000	PEAK
2		4881.700	-0.124	44.560	44.436	-29.564	74.000	PEAK
3		7327.800	7.464	40.740	48.205	-25.795	74.000	PEAK
4		9767.900	12.876	37.370	50.246	-23.754	74.000	PEAK
5	*	12202.100	14.845	37.090	51.934	-22.066	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**

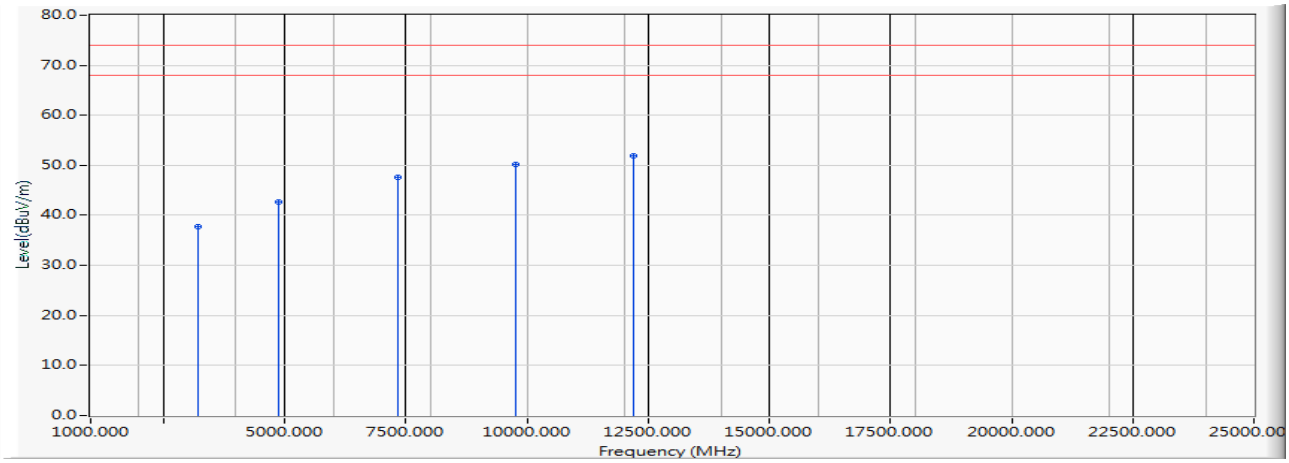


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12202.100	14.845	23.640	38.484	-15.516	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**

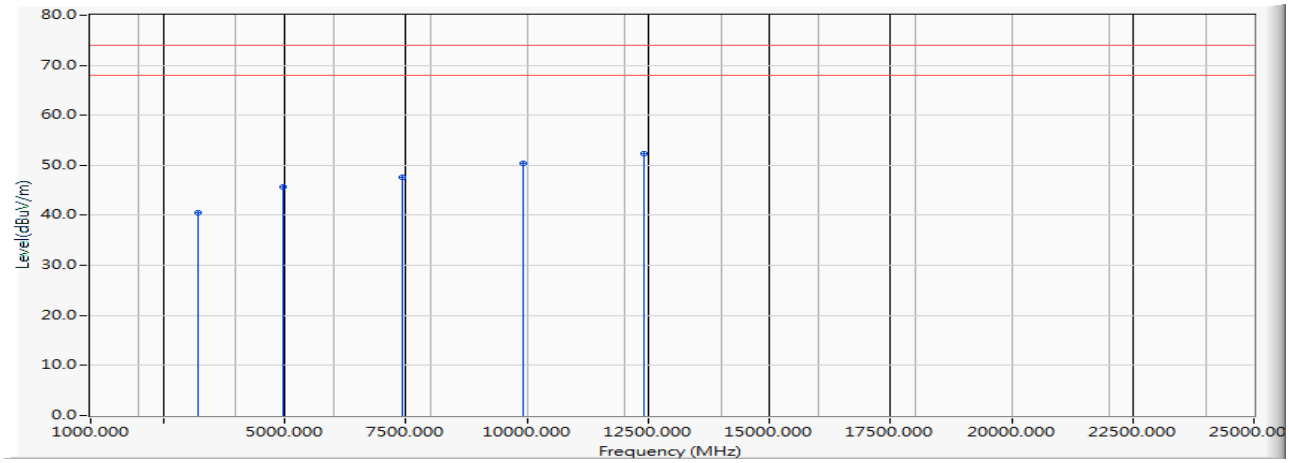


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.580	-6.749	44.430	37.681	-36.319	74.000	PEAK
2		4881.190	-0.124	42.710	42.586	-31.414	74.000	PEAK
3		7323.500	7.449	40.200	47.649	-26.351	74.000	PEAK
4		9766.640	12.875	37.350	50.225	-23.775	74.000	PEAK
5	*	12200.900	14.849	36.990	51.839	-22.161	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2480MHz**

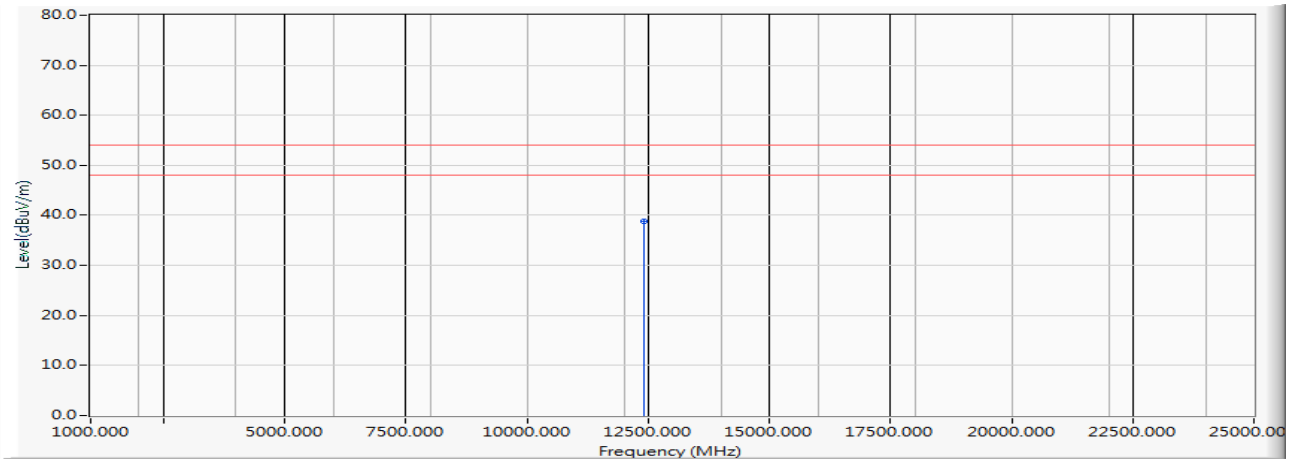


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.100	-6.750	47.340	40.590	-33.410	74.000	PEAK
2		4959.800	-0.034	45.800	45.765	-28.235	74.000	PEAK
3		7440.200	7.869	39.710	47.579	-26.421	74.000	PEAK
4		9915.800	13.086	37.210	50.295	-23.705	74.000	PEAK
5	*	12402.900	15.754	36.540	52.294	-21.706	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2480MHz**

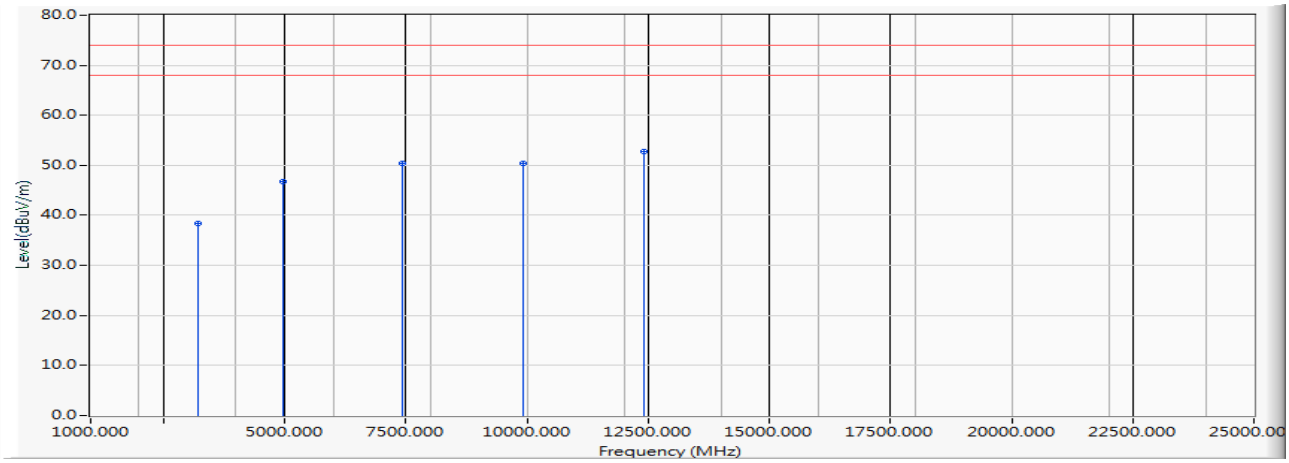


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12402.900	15.754	23.150	38.904	-15.096	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2480MHz**

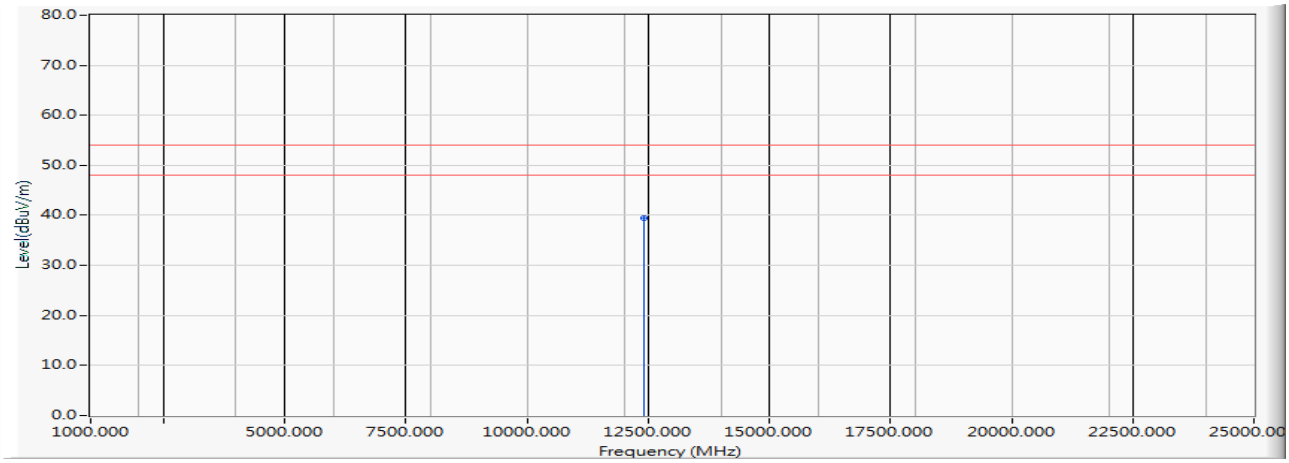


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		3229.100	-6.750	45.170	38.420	-35.580	74.000	PEAK
2		4959.800	-0.034	46.780	46.745	-27.255	74.000	PEAK
3		7440.140	7.868	42.480	50.349	-23.651	74.000	PEAK
4		9915.600	13.085	37.300	50.385	-23.615	74.000	PEAK
5	*	12404.700	15.766	36.890	52.657	-21.343	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/08**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_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	*	12404.700	15.766	23.660	39.427	-14.573	54.000	AVERAGE

Note:

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

5. RF antenna conducted test

5.1. Test Equipment

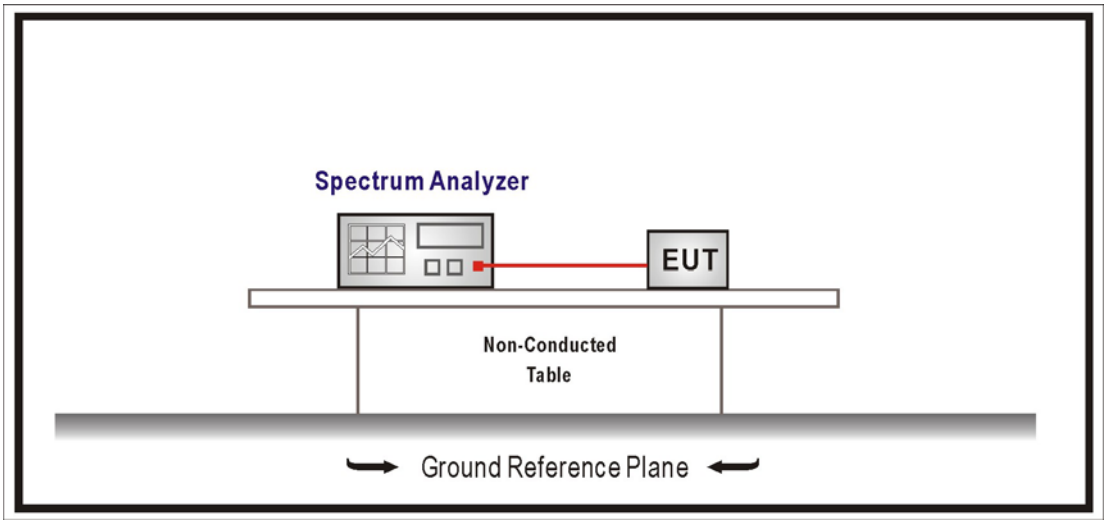
The following test equipment is used during the test:

RF antenna conducted test / SR10-H

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

5.2. Test Setup

RF Conducted Measurement:



5.3. Limits

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

5.4. Test Procedure

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

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

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2016

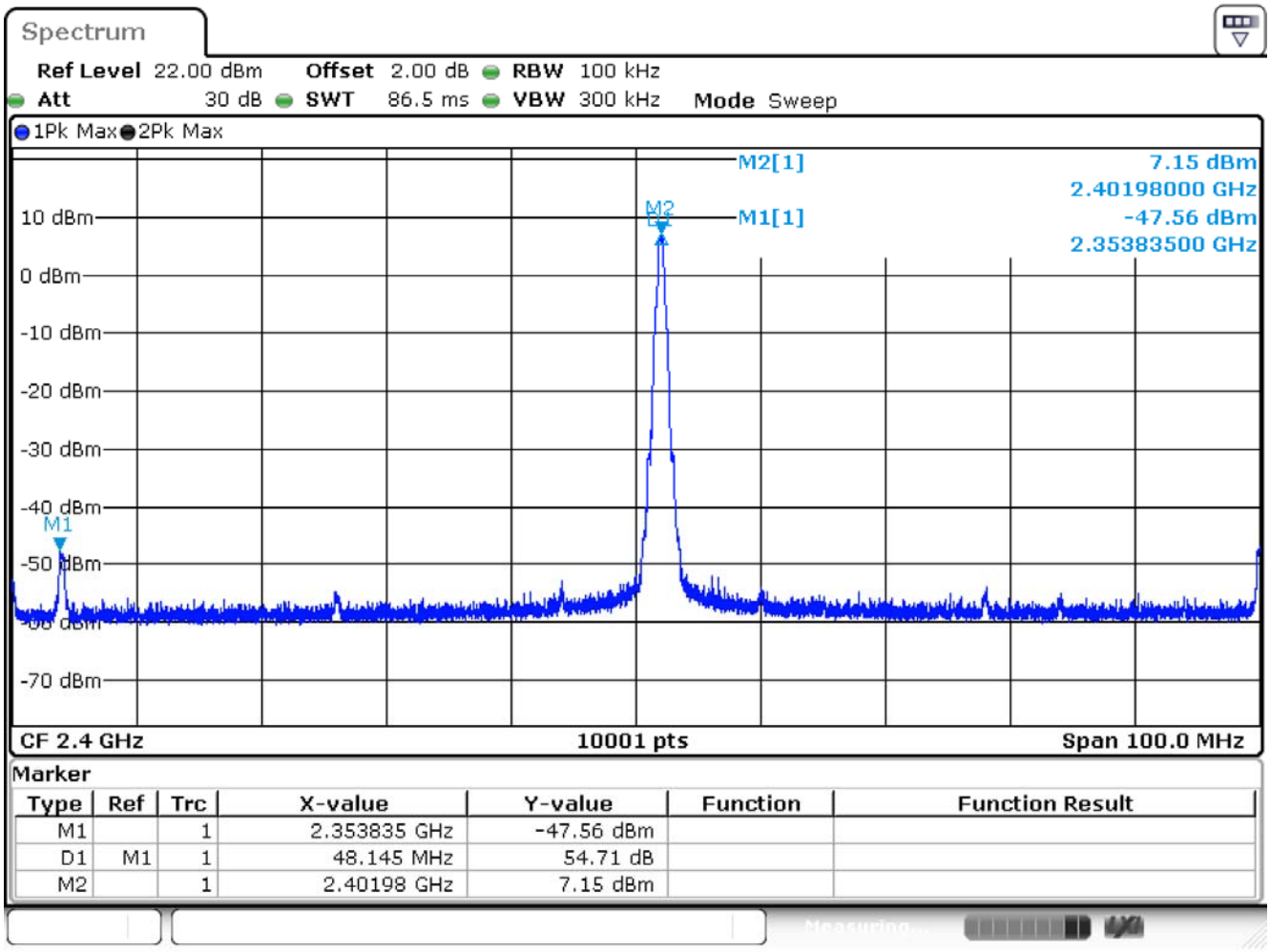
5.6. Test Result

Product	Verizon Mesh Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

GFSK

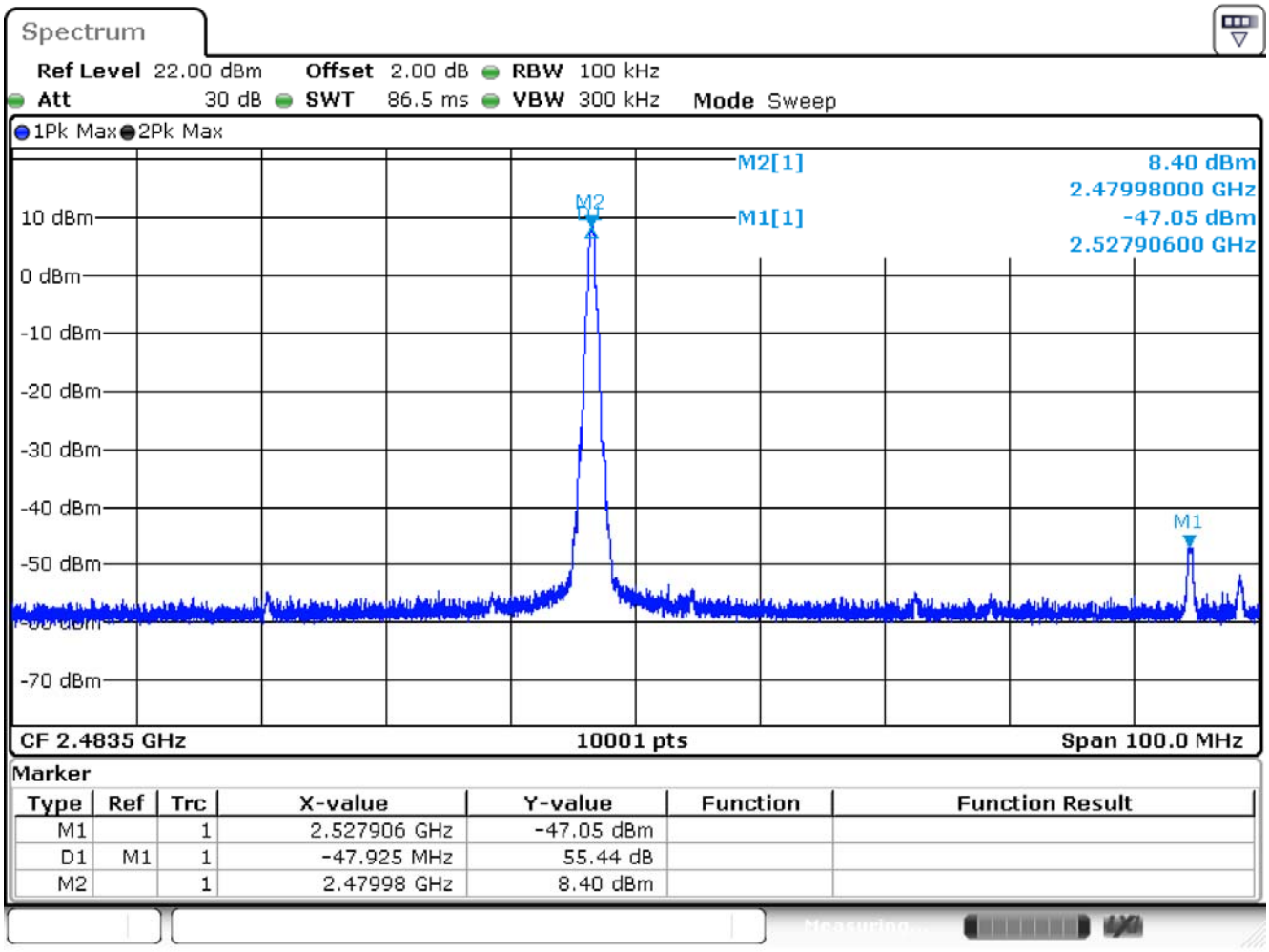
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	54.710	≧20	Pass
78	2480	55.440	≧20	Pass

Channel 00



Date: 5.NOV.2017 08:07:22

Channel 78



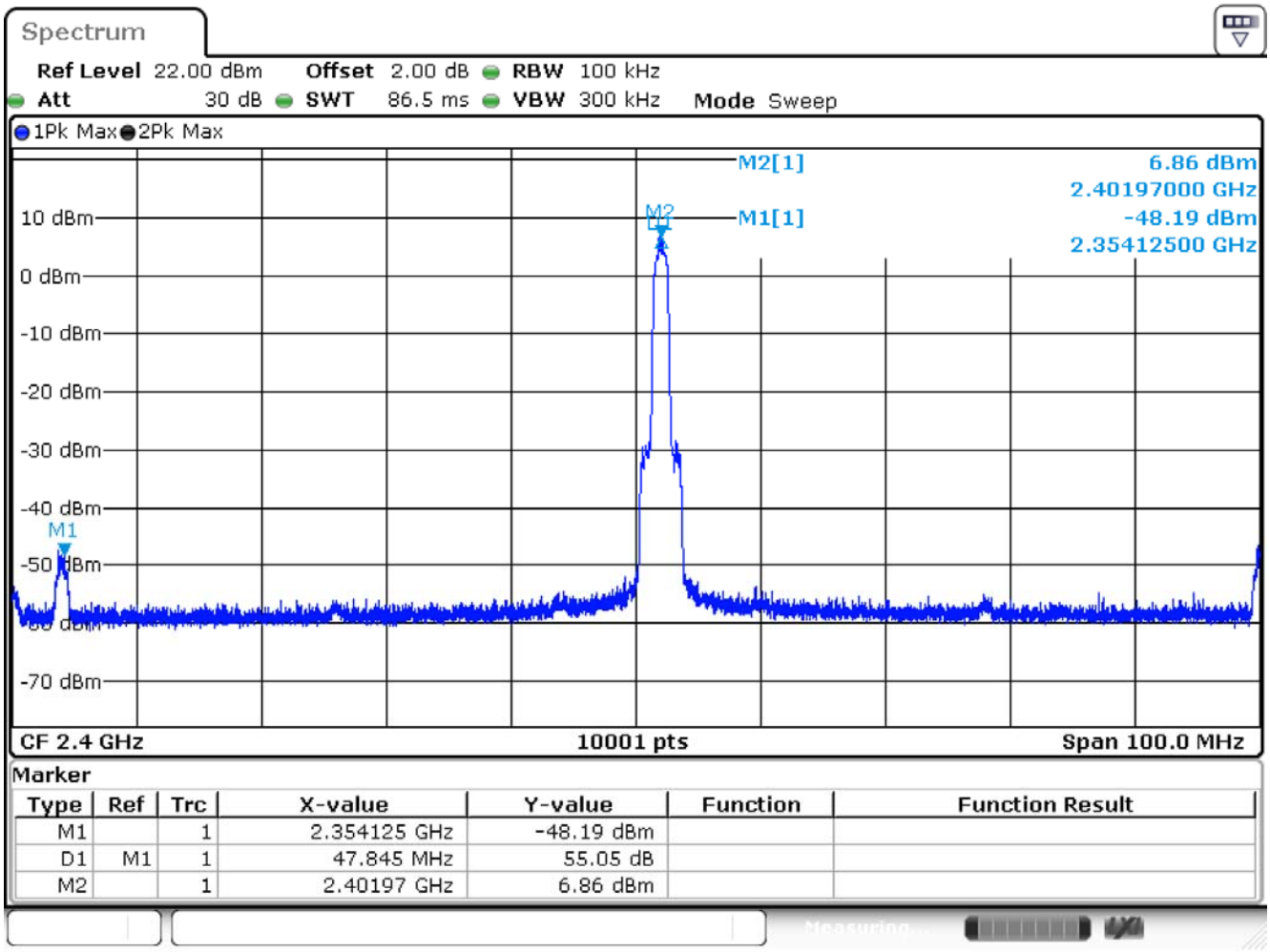
Date: 5.NOV.2017 08:05:45

Product	Verizon Mesh Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

π/4-DQPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	55.050	≧20	Pass
78	2480	54.840	≧20	Pass

Channel 00



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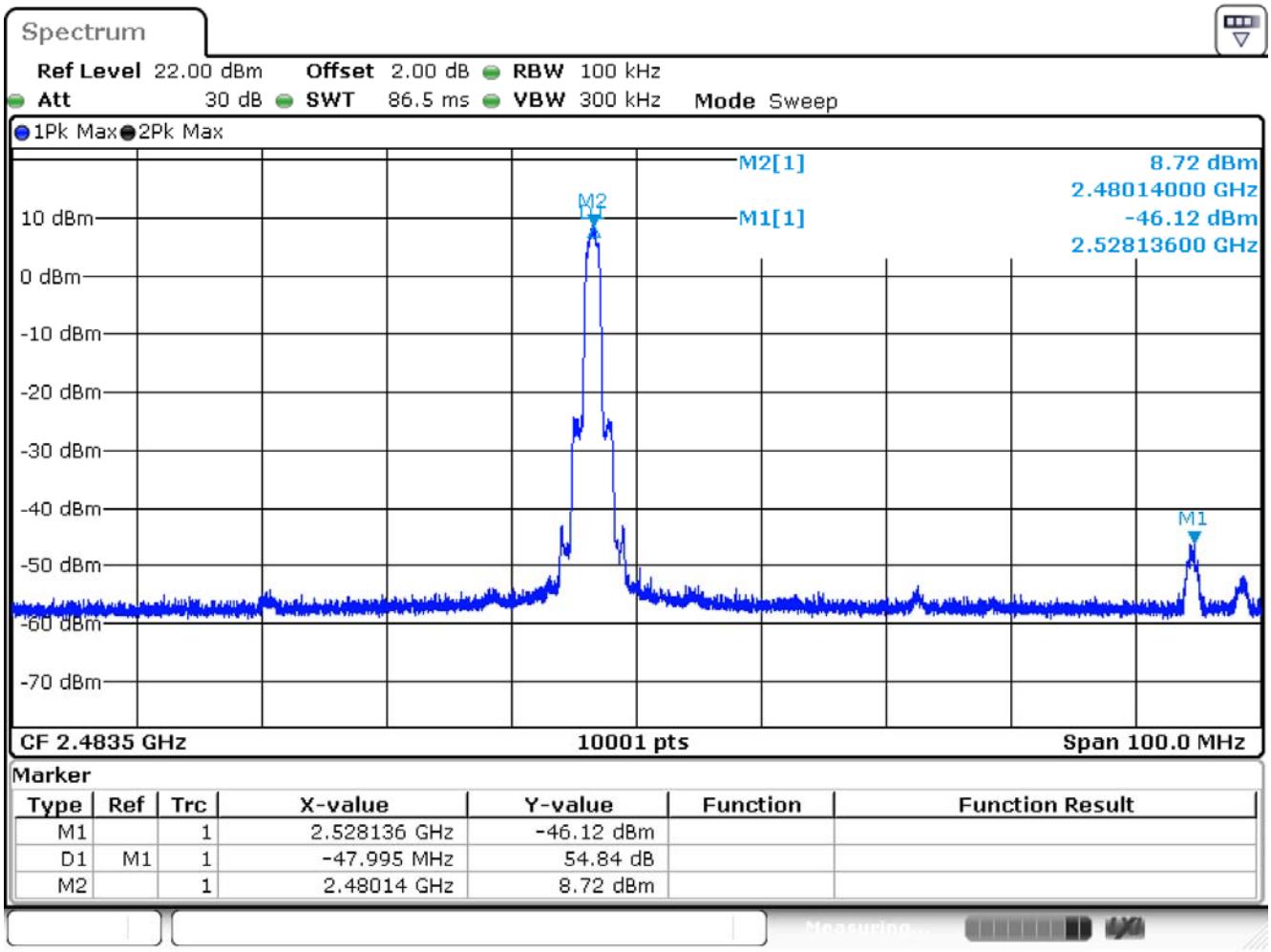
Channel 78



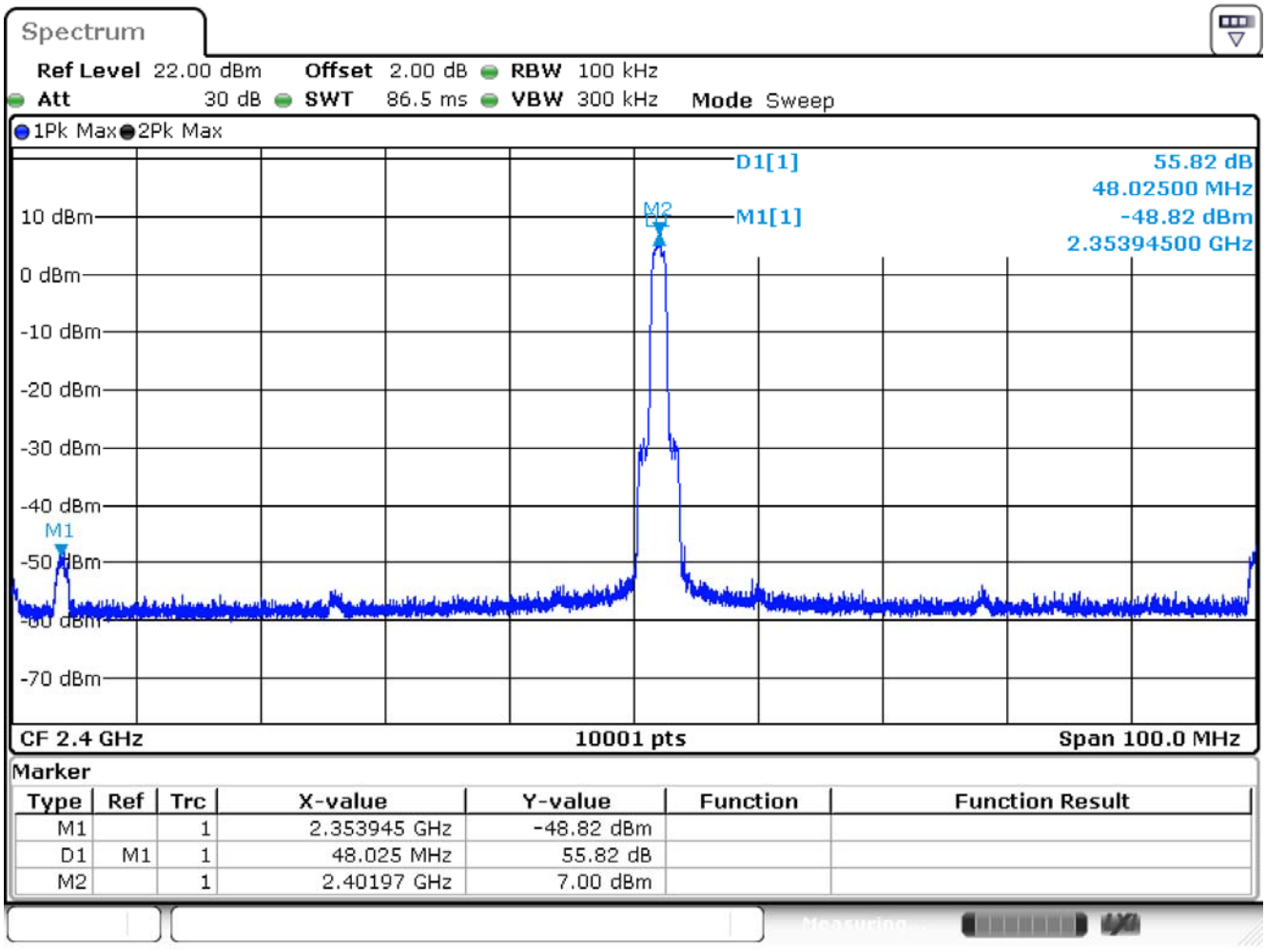
Date: 5.NOV.2017 08:02:11

Product	Verizon Mesh Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

8-DPSK

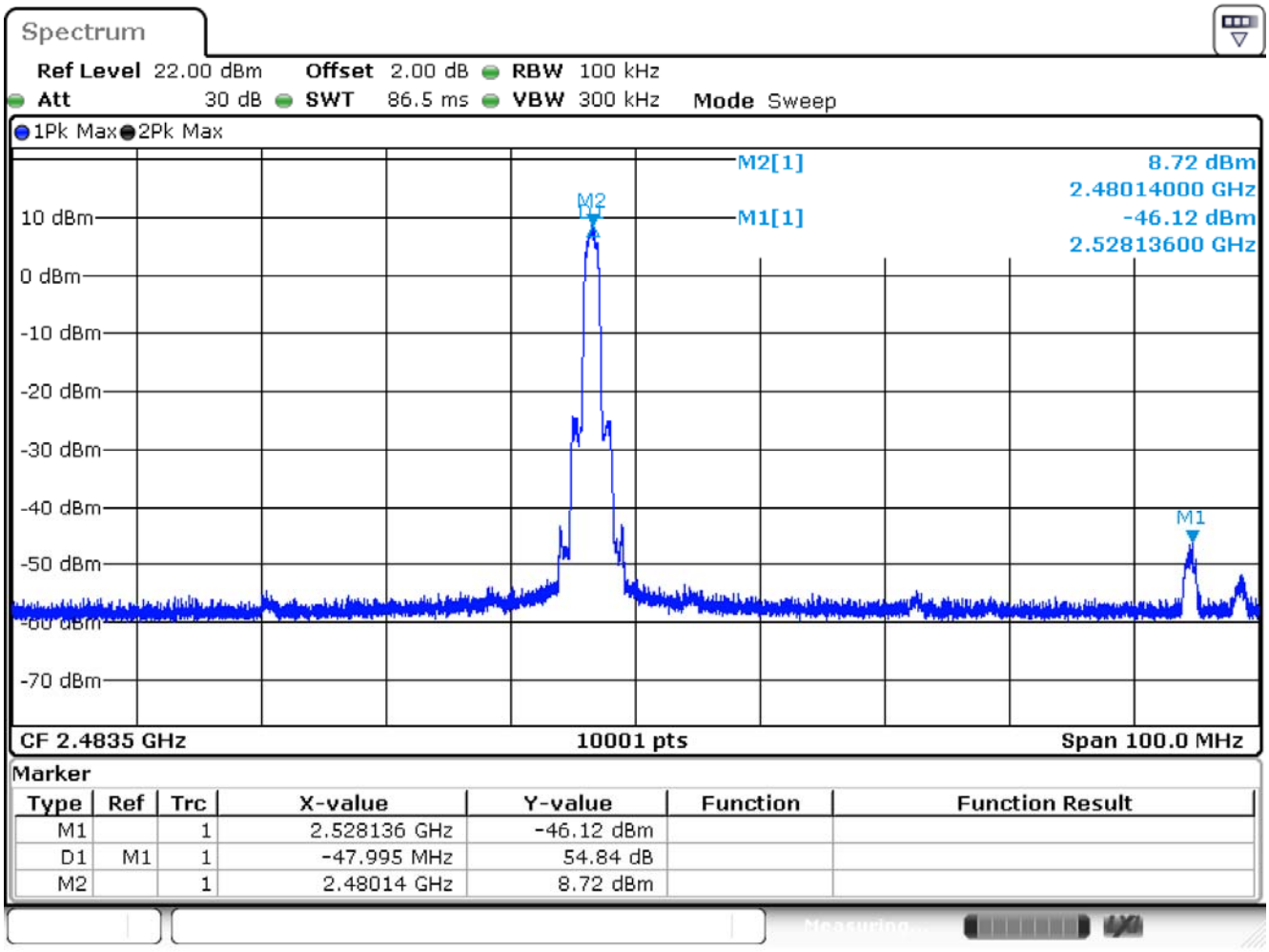
Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	55.820	≧20	Pass
78	2480	54.840	≧20	Pass

Channel 00



Date: 5.NOV.2017 07:59:09

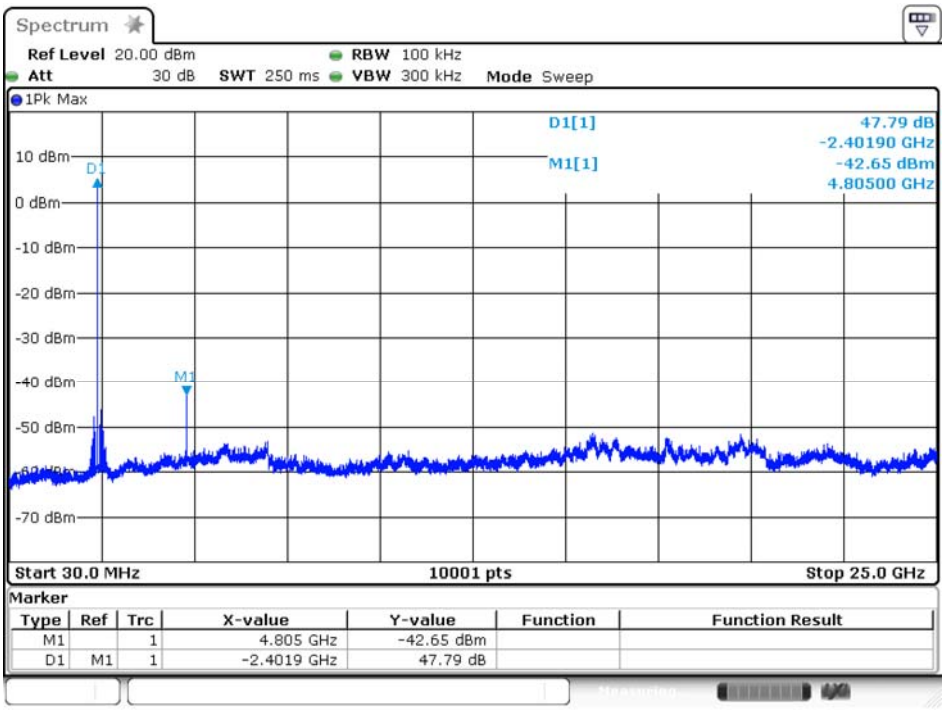
Channel 78



Date: 5.NOV.2017 08:01:03

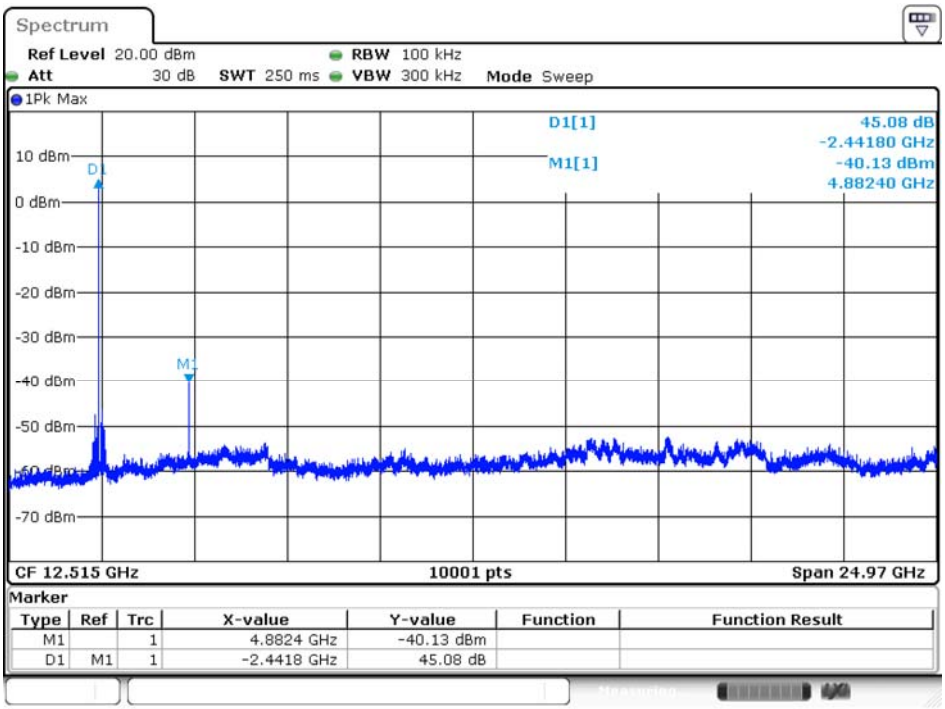
Product	Verizon Mesh Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

Channel 00 (30MHz-25GHz)-GFSK



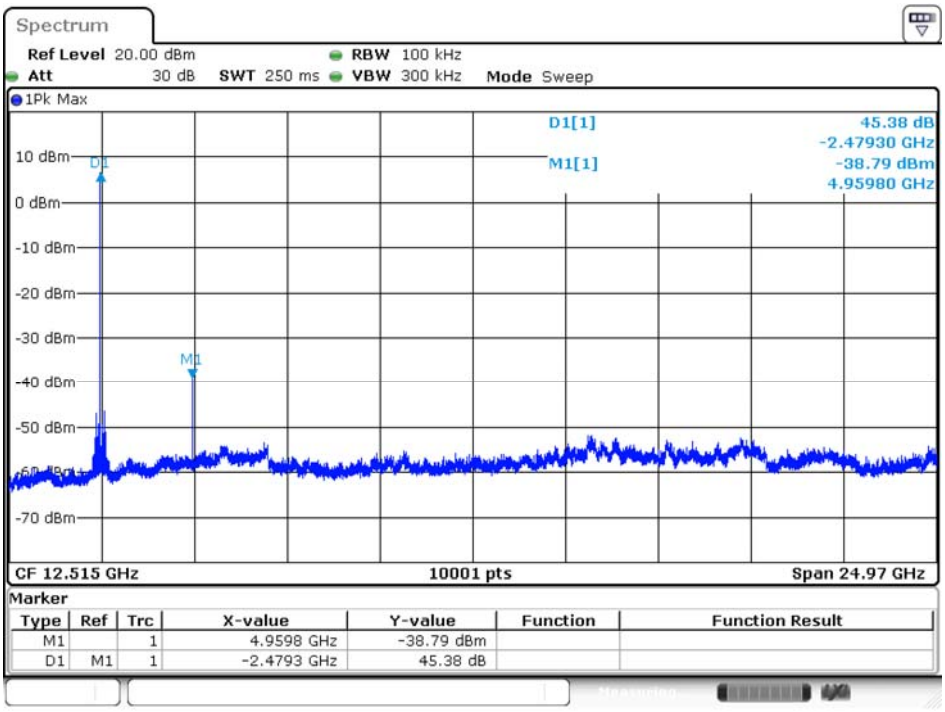
Date: 5.NOV.2017 08:10:59

Channel 39 (30MHz-25GHz)-GFSK



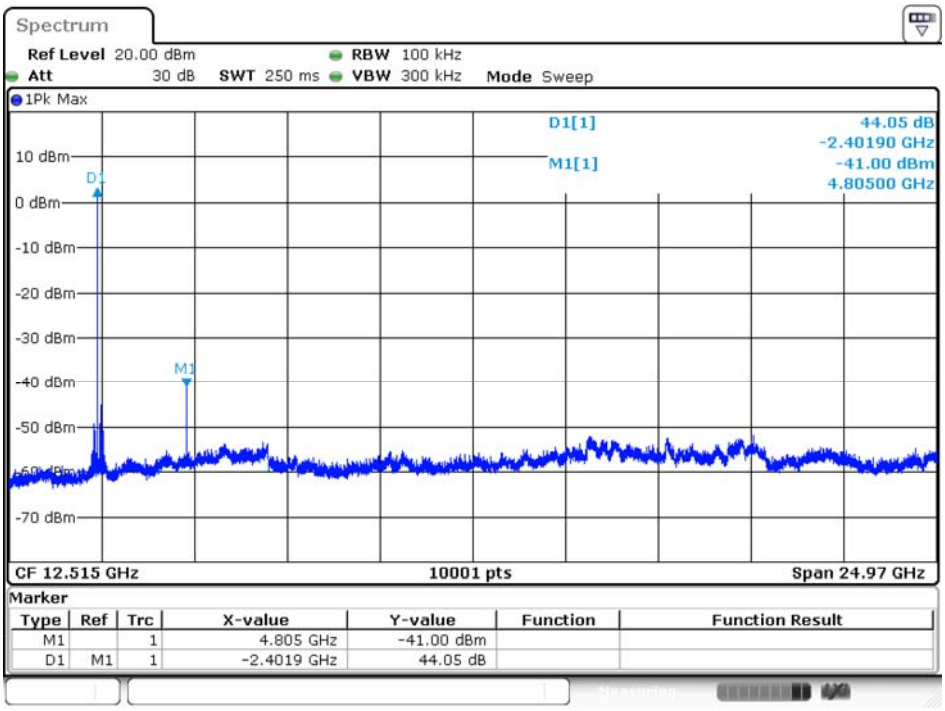
Date: 5.NOV.2017 08:13:09

Channel 78 (30MHz-25GHz)-GFSK



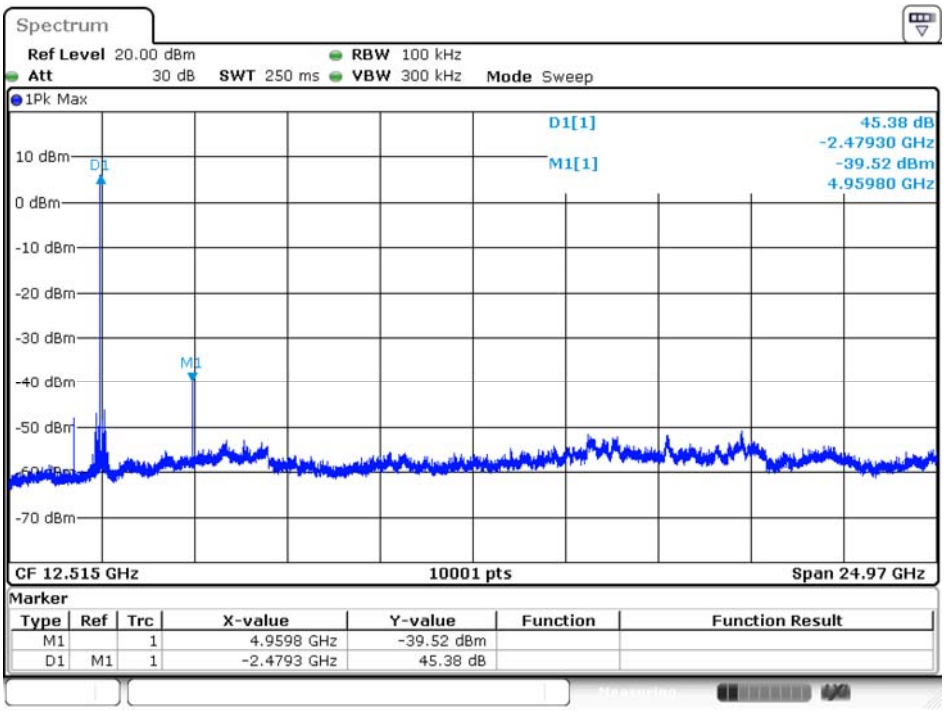
Date: 5.NOV.2017 08:14:33

Channel 00 (30MHz-25GHz)-π/4-DQPSK



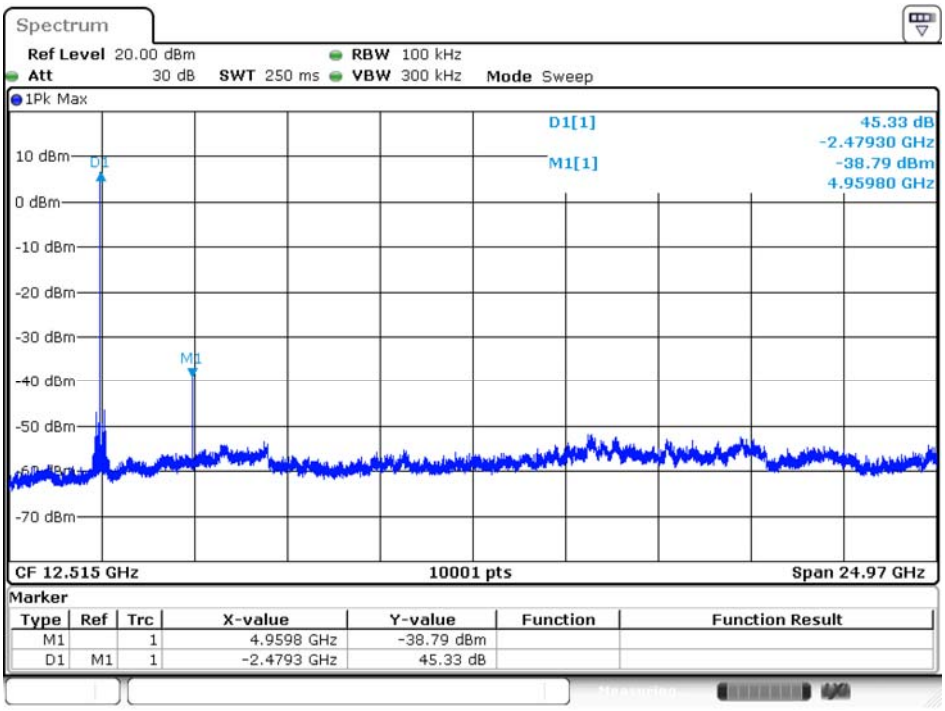
Date: 5.NOV.2017 08:21:29

Channel 39 (30MHz-25GHz)-π/4-DQPSK



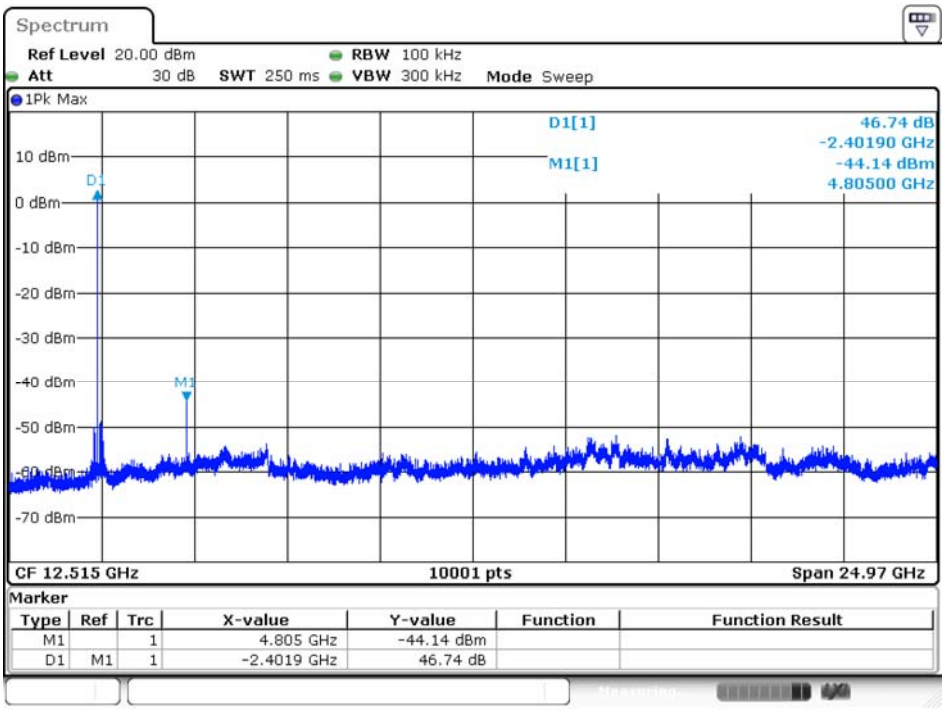
Date: 5.NOV.2017 08:16:20

Channel 78 (30MHz-25GHz)-π/4-DQPSK



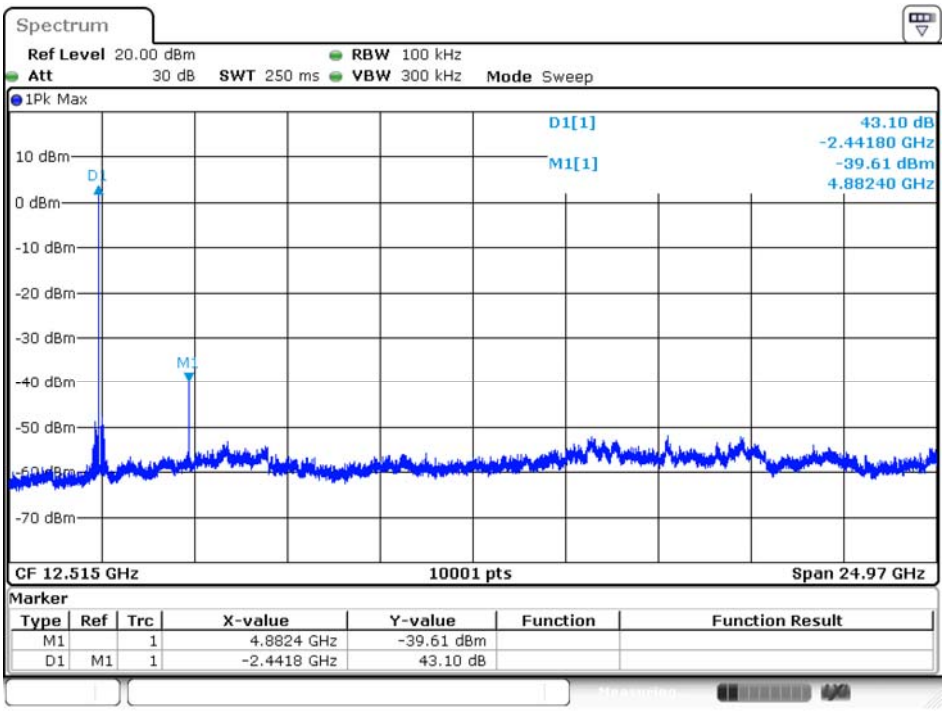
Date: 5.NOV.2017 08:14:33

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



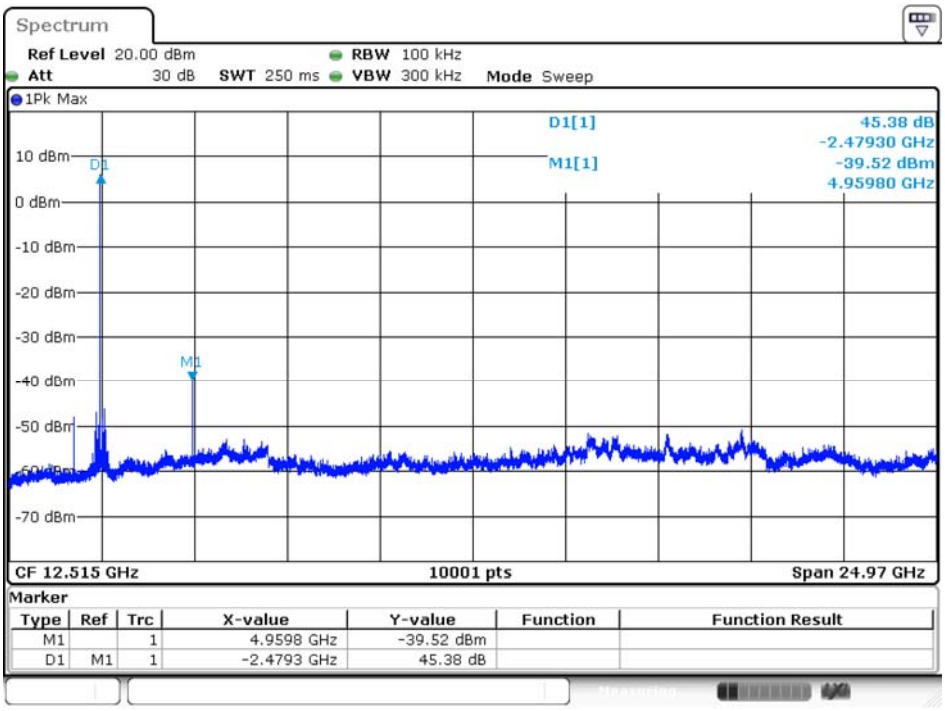
Date: 5.NOV.2017 08:21:53

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



Date: 5.NOV.2017 08:20:29

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



Date: 5.NOV.2017 08:16:20

6. Band Edge

6.1. Test Equipment

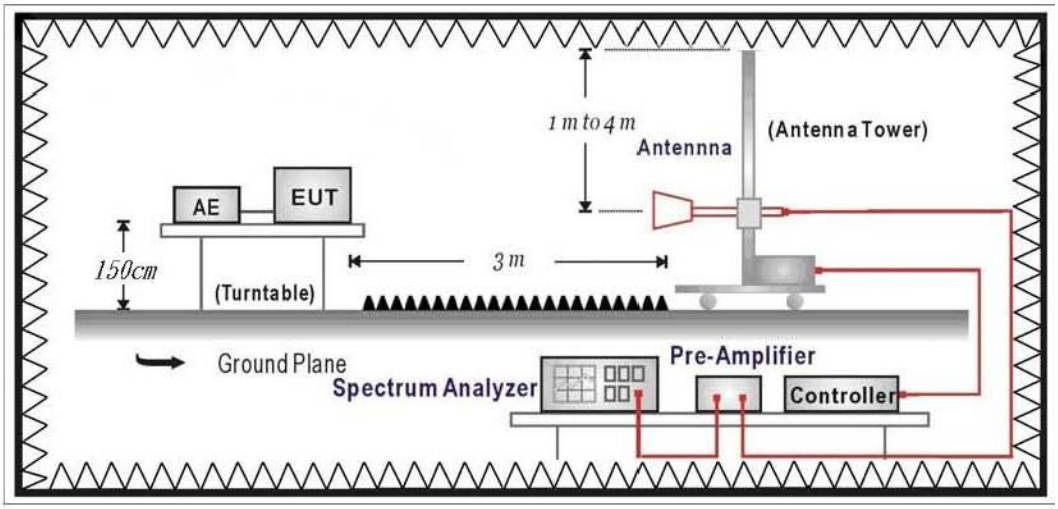
The following test equipment are used during the test:

Band Edge / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/23	2018/01/22
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2017/03/13	2018/03/12
Bilog Antenna	Teseq	CBL6112D	23191	2017/06/28	2018/06/27
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2017/06/14	2018/06/13
Horn Antenna	Schwarzbeck	BBHA 9170	202	2017/02/15	2018/02/14
Pre-Amplifier	RF Bay Inc.	LNA-1330	12162511	2017/03/09	2018/03/08
Pre-Amplifier	EMCI	EMCI 1830I	980366	2017/01/23	2018/01/22
Pre-Amplifier	MITEQ	JS44-45-8P	2014754	2017/12/13	2018/12/12

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

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

6.4. Test Procedure

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

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

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

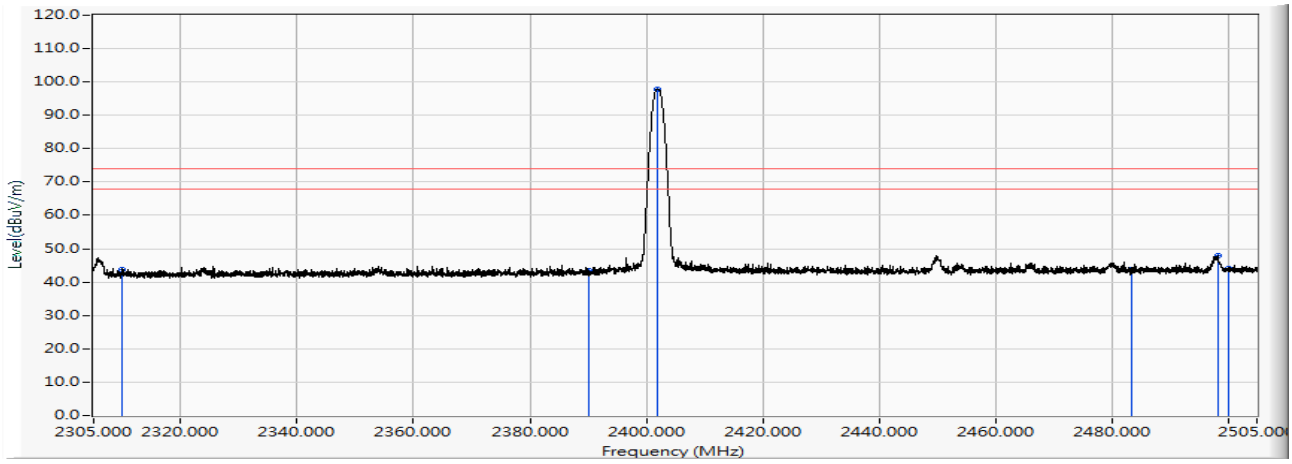
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2016

6.6. Test Result

Site : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2402MHz**

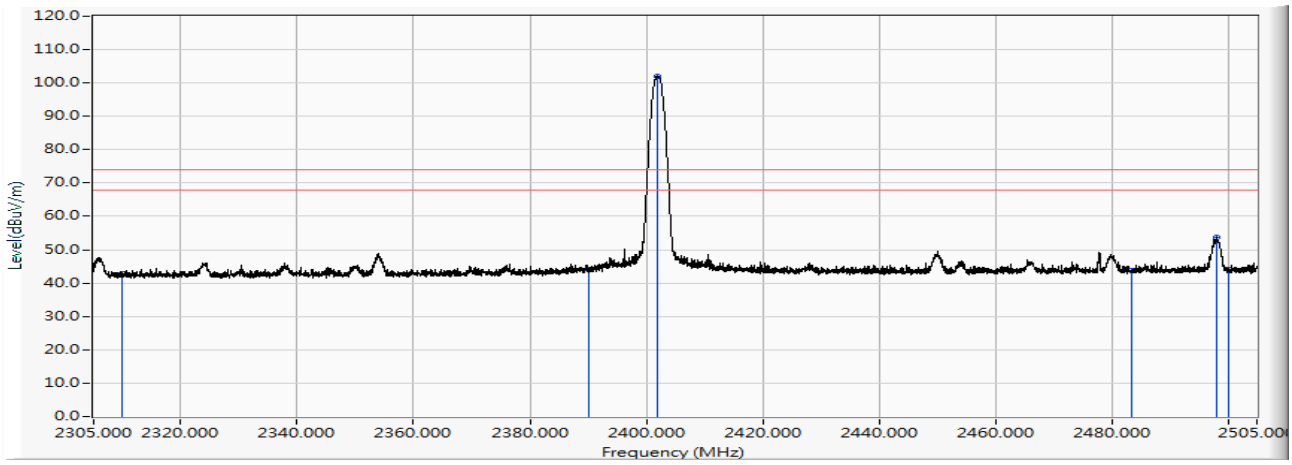


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	32.739	43.754	-30.246	74.000	PEAK
2		2390.000	11.544	31.884	43.428	-30.572	74.000	PEAK
3	*	2401.859	11.623	86.306	97.929	23.929	74.000	PEAK
4		2483.500	12.172	31.608	43.780	-30.220	74.000	PEAK
5		2498.239	12.266	35.582	47.848	-26.152	74.000	PEAK
6		2500.000	12.274	31.796	44.071	-29.929	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2402MHz**

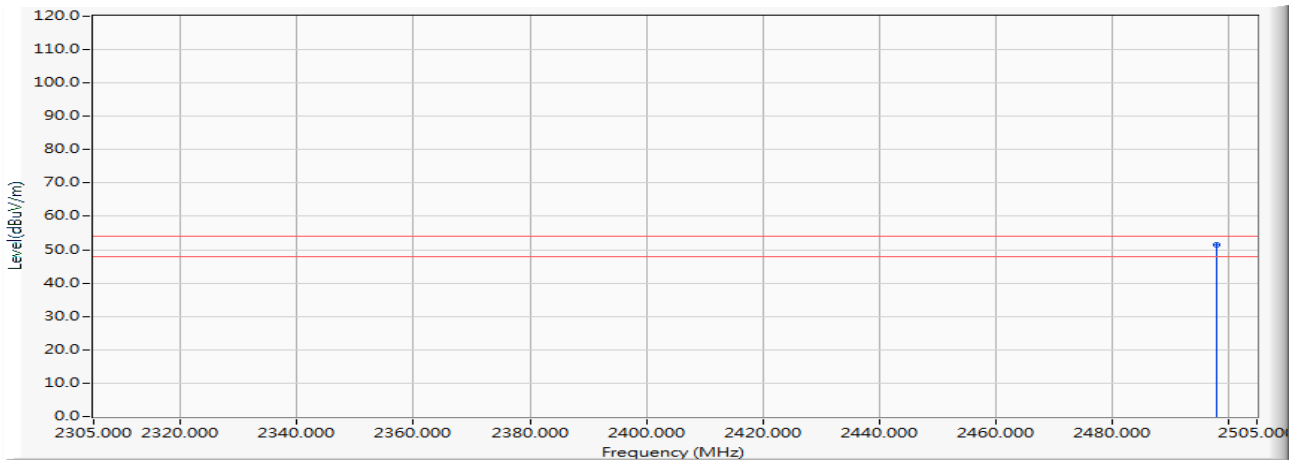


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.716	42.731	-31.269	74.000	PEAK
2		2390.000	11.544	32.493	44.037	-29.963	74.000	PEAK
3	*	2401.819	11.623	90.269	101.892	27.892	74.000	PEAK
4		2483.500	12.172	31.521	43.693	-30.307	74.000	PEAK
5		2498.079	12.266	41.562	53.827	-20.173	74.000	PEAK
6		2500.000	12.274	31.819	44.094	-29.906	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2402MHz**

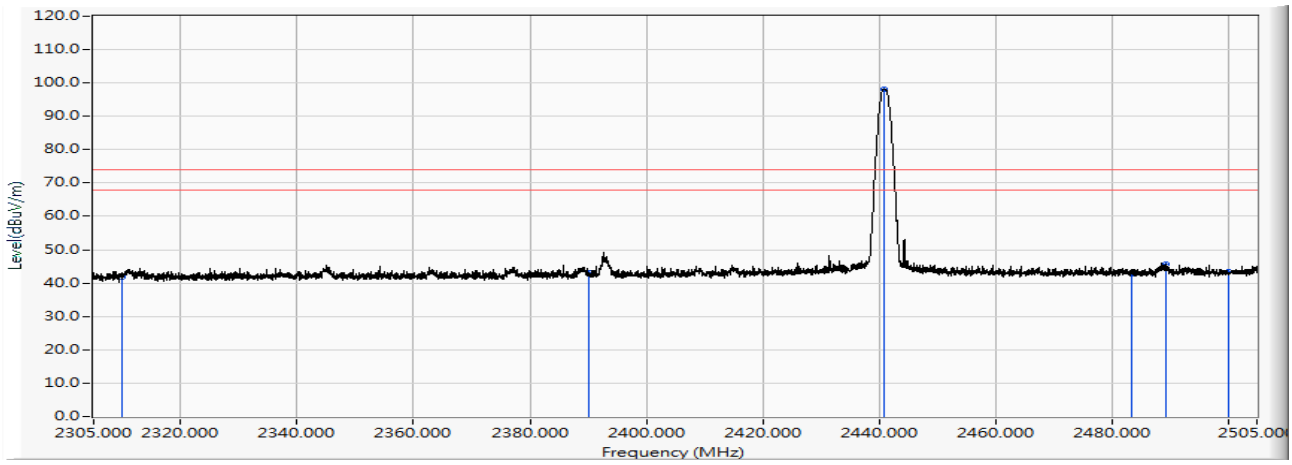


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2498.079	12.266	39.317	51.582	-2.418	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2441MHz**

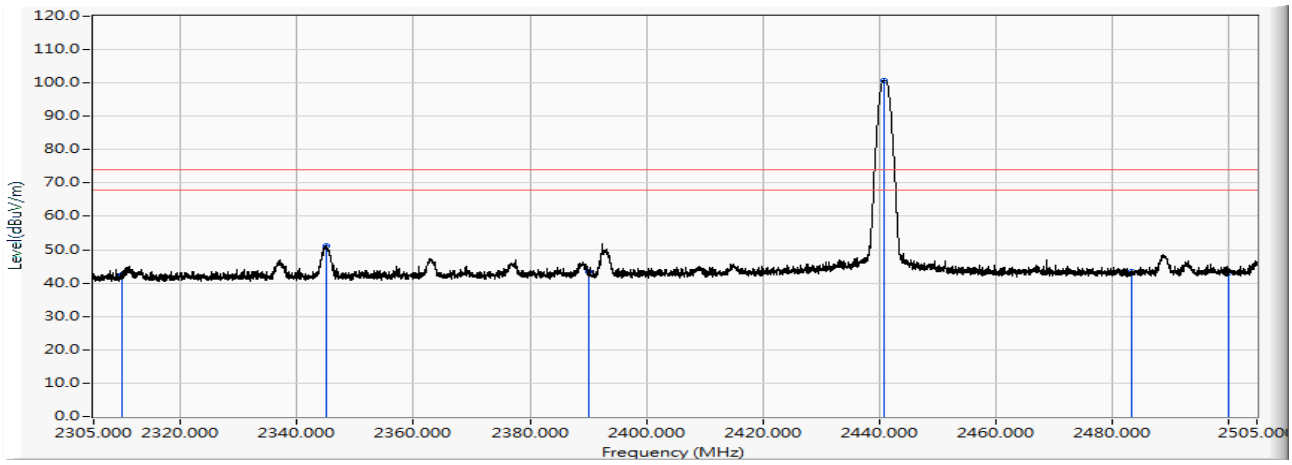


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	30.954	41.969	-32.031	74.000	PEAK
2		2390.000	11.544	31.429	42.973	-31.027	74.000	PEAK
3	*	2440.827	11.886	86.196	98.081	24.081	74.000	PEAK
4		2483.500	12.172	30.668	42.840	-31.160	74.000	PEAK
5		2489.277	12.210	33.574	45.784	-28.216	74.000	PEAK
6		2500.000	12.274	31.152	43.427	-30.573	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2441MHz**

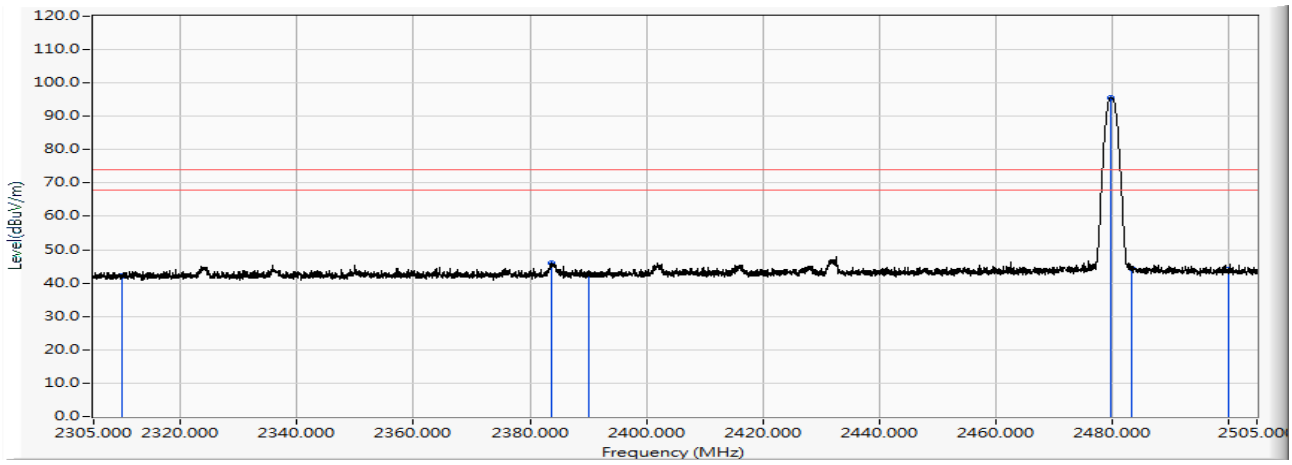


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.585	42.600	-31.400	74.000	PEAK
2		2344.888	11.246	39.873	51.118	-22.882	74.000	PEAK
3		2390.000	11.544	31.858	43.402	-30.598	74.000	PEAK
4	*	2440.827	11.886	88.948	100.833	26.833	74.000	PEAK
5		2483.500	12.172	31.182	43.354	-30.646	74.000	PEAK
6		2500.000	12.274	30.857	43.132	-30.868	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2480MHz**

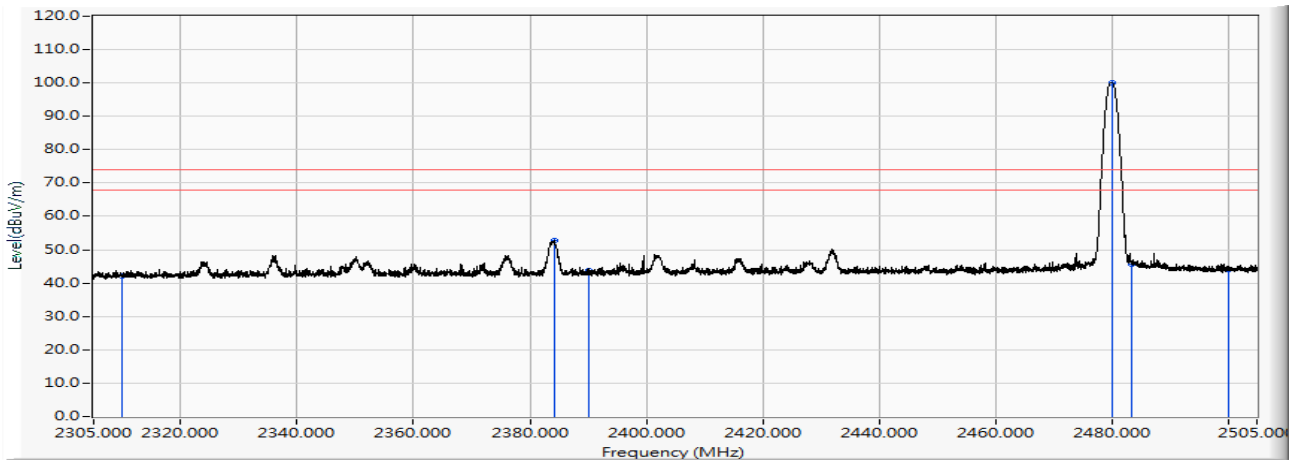


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.248	42.263	-31.737	74.000	PEAK
2		2383.696	11.502	34.571	46.073	-27.927	74.000	PEAK
3		2390.000	11.544	30.921	42.465	-31.535	74.000	PEAK
4	*	2479.835	12.147	83.412	95.560	21.560	74.000	PEAK
5		2483.500	12.172	32.081	44.253	-29.747	74.000	PEAK
6		2500.000	12.274	31.754	44.029	-29.971	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2480MHz**

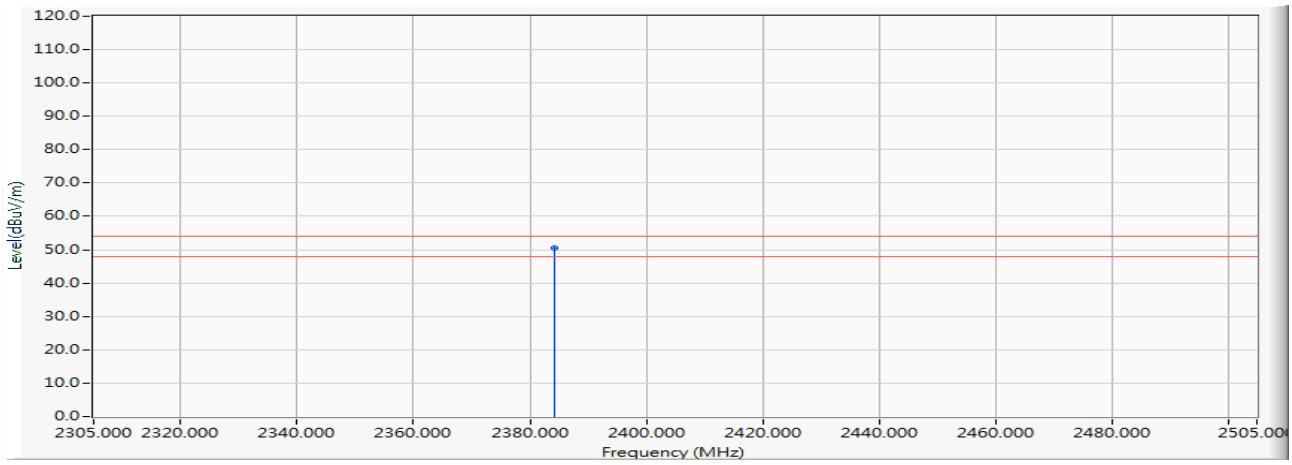


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.004	42.019	-31.981	74.000	PEAK
2		2384.216	11.505	41.338	52.843	-21.157	74.000	PEAK
3		2390.000	11.544	32.184	43.728	-30.272	74.000	PEAK
4	*	2480.115	12.149	87.895	100.045	26.045	74.000	PEAK
5		2483.500	12.172	33.581	45.753	-28.247	74.000	PEAK
6		2500.000	12.274	31.917	44.192	-29.808	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_2480MHz**

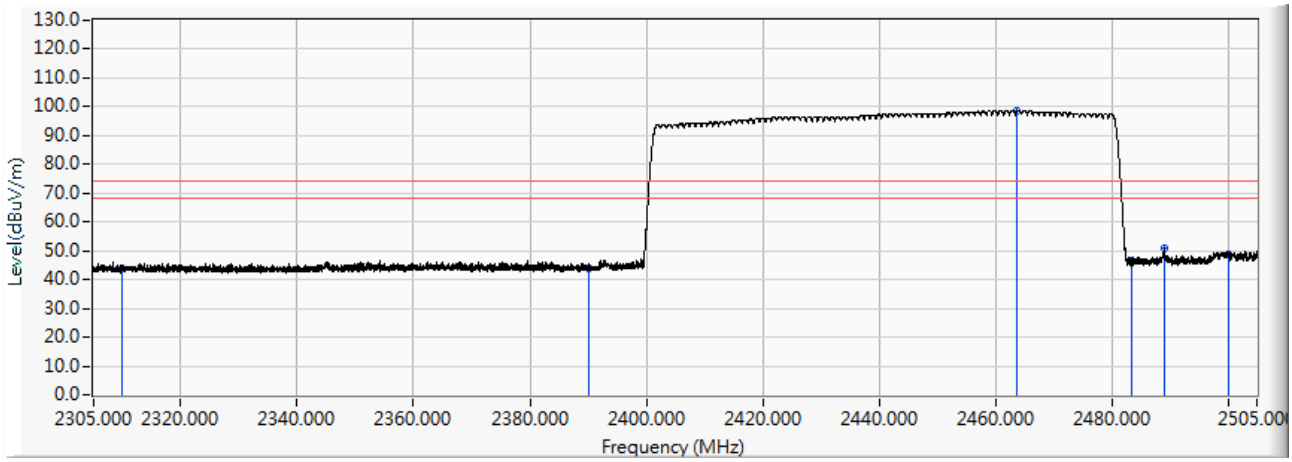


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2384.216	11.505	39.093	50.598	-3.402	54.000	AVERAGE

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 : DEKRA Taiwan CB2-H	**Time : 2018/01/02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_Hopping**

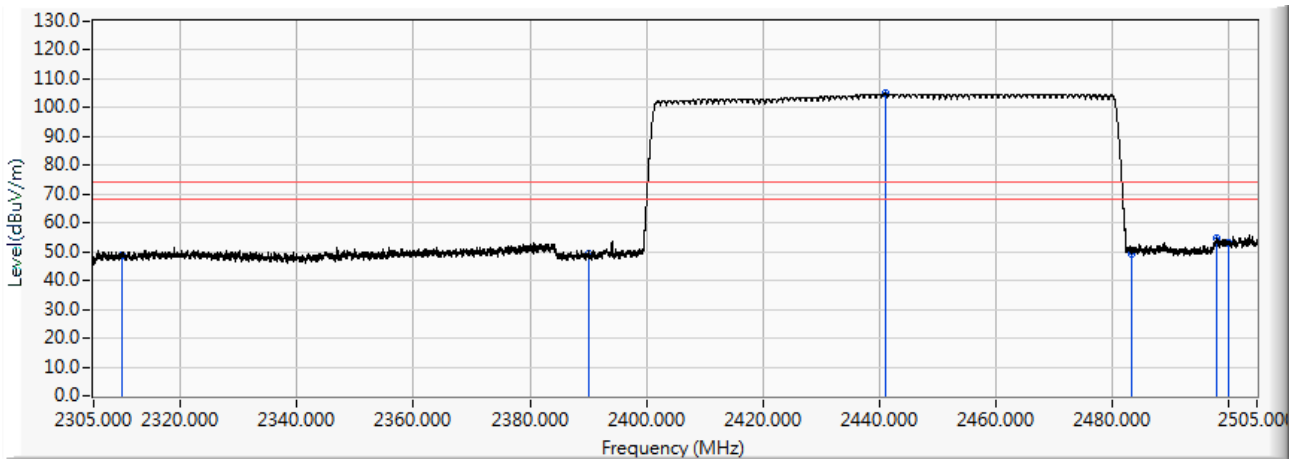


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	12.384	31.387	43.771	-30.229	74.000	PEAK
2		2390.000	12.911	30.732	43.643	-30.357	74.000	PEAK
3	*	2463.800	13.398	85.108	98.505	24.505	74.000	PEAK
4		2483.500	13.527	32.942	46.469	-27.531	74.000	PEAK
5		2489.100	13.564	37.318	50.882	-23.118	74.000	PEAK
6		2500.000	13.629	35.129	48.758	-25.242	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 : DEKRA Taiwan CB2-H	**Time : 2018/01/02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_DH5_Hopping**

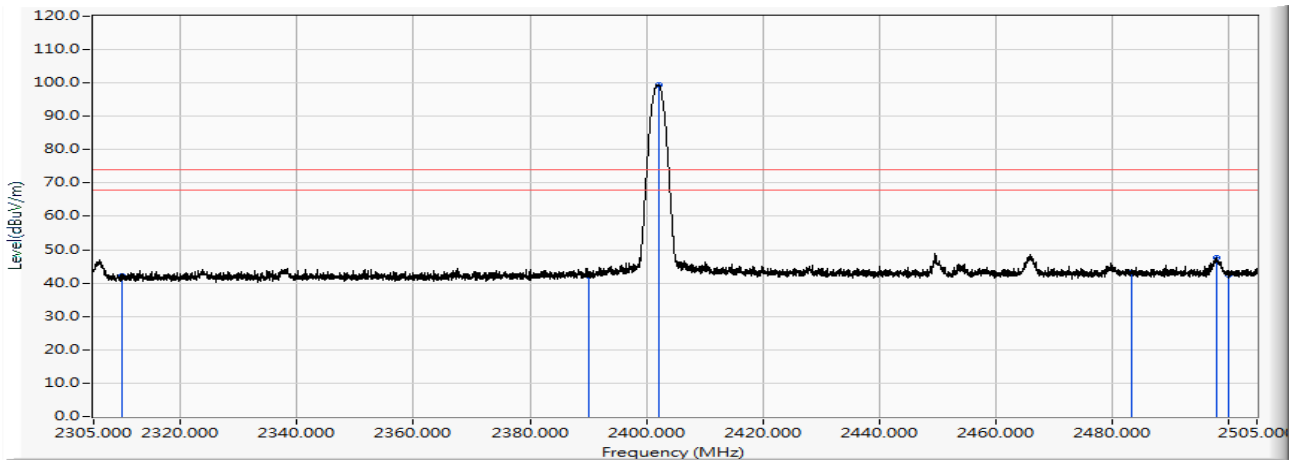


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	12.384	36.292	48.676	-25.324	74.000	PEAK
2		2390.000	12.911	36.466	49.377	-24.623	74.000	PEAK
3	*	2441.080	13.248	91.571	104.819	30.819	74.000	PEAK
4		2483.500	13.527	36.018	49.545	-24.455	74.000	PEAK
5		2498.120	13.620	41.180	54.800	-19.200	74.000	PEAK
6		2500.000	13.629	39.388	53.017	-20.983	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2402MHz**

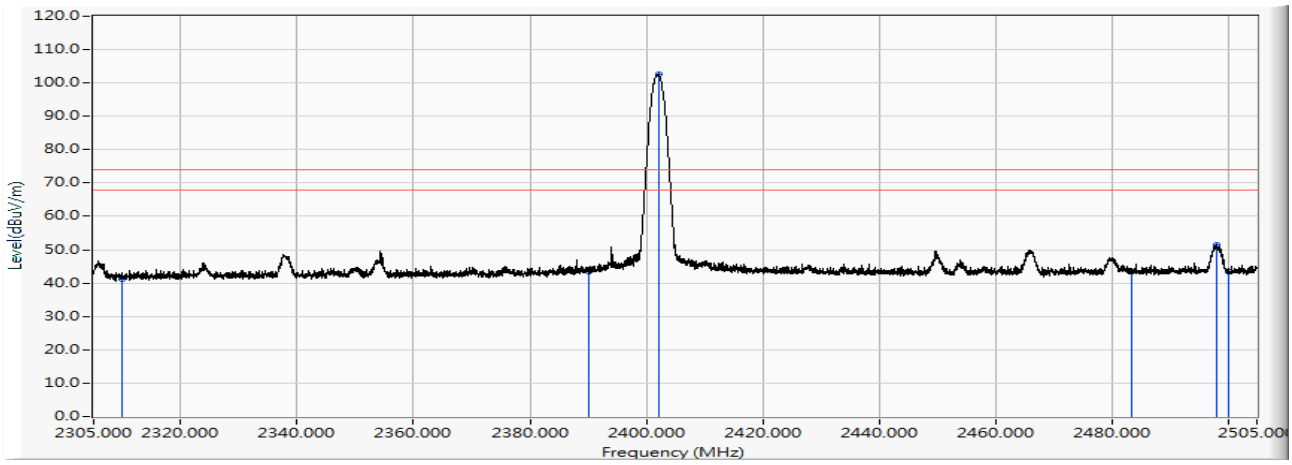


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.012	42.027	-31.973	74.000	PEAK
2		2390.000	11.544	30.647	42.191	-31.809	74.000	PEAK
3	*	2402.099	11.626	87.794	99.419	25.419	74.000	PEAK
4		2483.500	12.172	30.922	43.094	-30.906	74.000	PEAK
5		2498.039	12.266	35.301	47.566	-26.434	74.000	PEAK
6		2500.000	12.274	30.330	42.605	-31.395	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2402MHz**

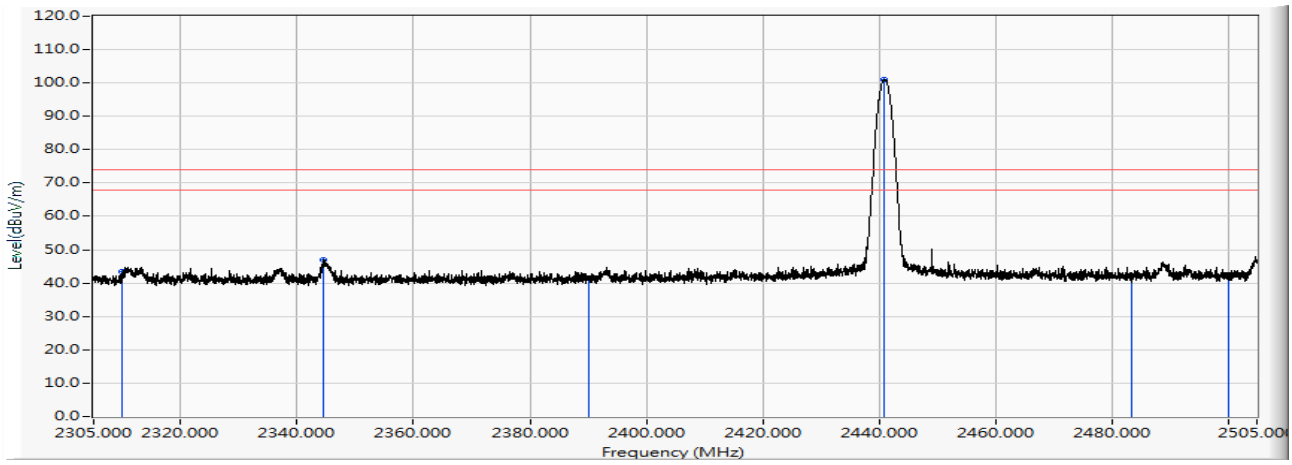


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	30.218	41.233	-32.767	74.000	PEAK
2		2390.000	11.544	31.739	43.283	-30.717	74.000	PEAK
3	*	2402.099	11.626	90.979	102.604	28.604	74.000	PEAK
4		2483.500	12.172	31.307	43.479	-30.521	74.000	PEAK
5		2497.999	12.265	39.089	51.354	-22.646	74.000	PEAK
6		2500.000	12.274	31.254	43.529	-30.471	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2441MHz**

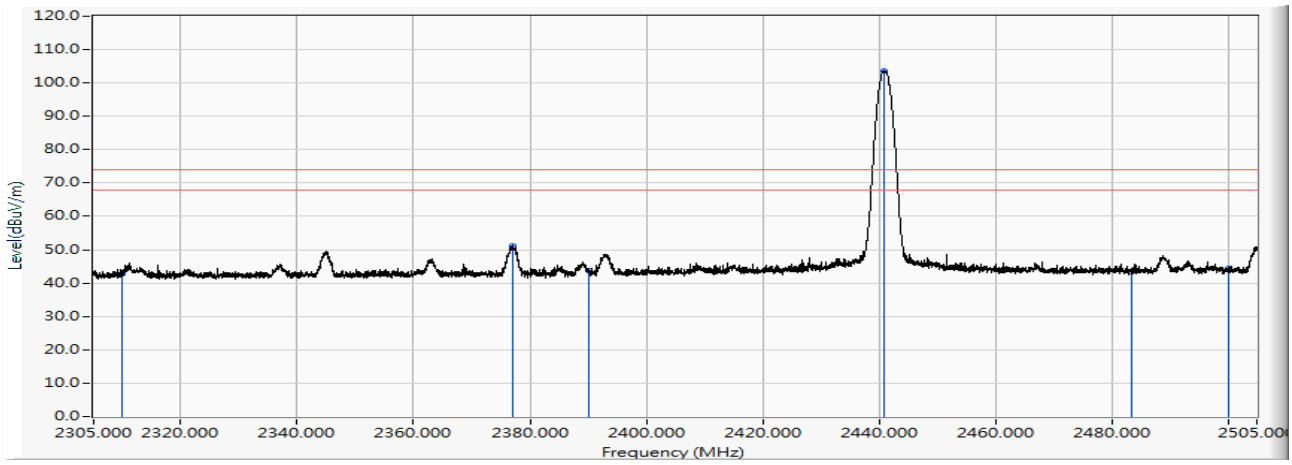


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	32.312	43.327	-30.673	74.000	PEAK
2		2344.528	11.242	35.648	46.891	-27.109	74.000	PEAK
3		2390.000	11.544	29.910	41.454	-32.546	74.000	PEAK
4	*	2440.907	11.886	89.060	100.946	26.946	74.000	PEAK
5		2483.500	12.172	30.036	42.208	-31.792	74.000	PEAK
6		2500.000	12.274	29.912	42.187	-31.813	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2441MHz**

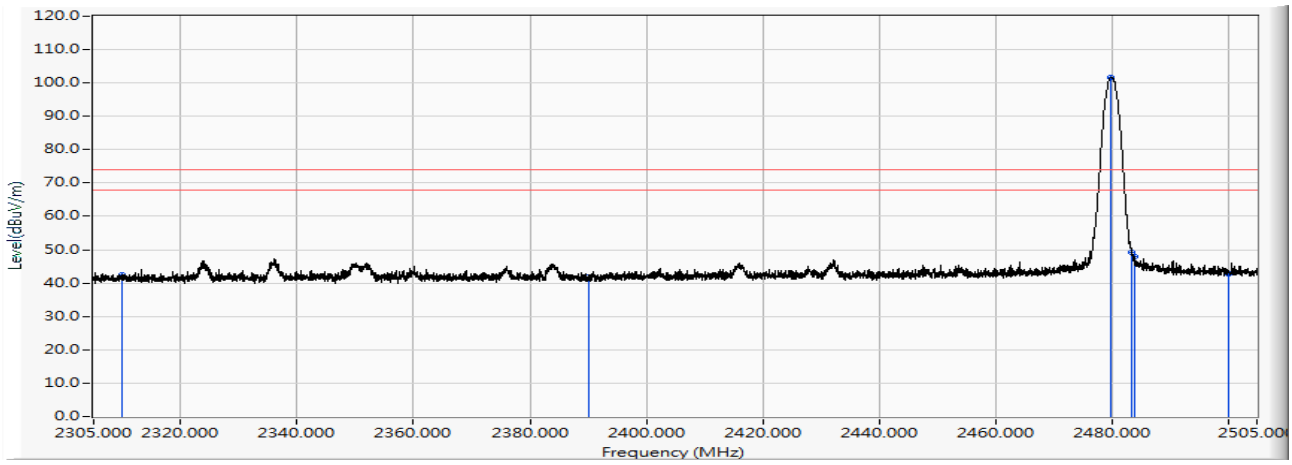


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.668	42.683	-31.317	74.000	PEAK
2		2377.054	11.458	39.551	51.009	-22.991	74.000	PEAK
3		2390.000	11.544	32.321	43.865	-30.135	74.000	PEAK
4	*	2440.787	11.886	91.824	103.709	29.709	74.000	PEAK
5		2483.500	12.172	31.332	43.504	-30.496	74.000	PEAK
6		2500.000	12.274	32.020	44.295	-29.705	74.000	PEAK

Note:

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

Site : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2480MHz**

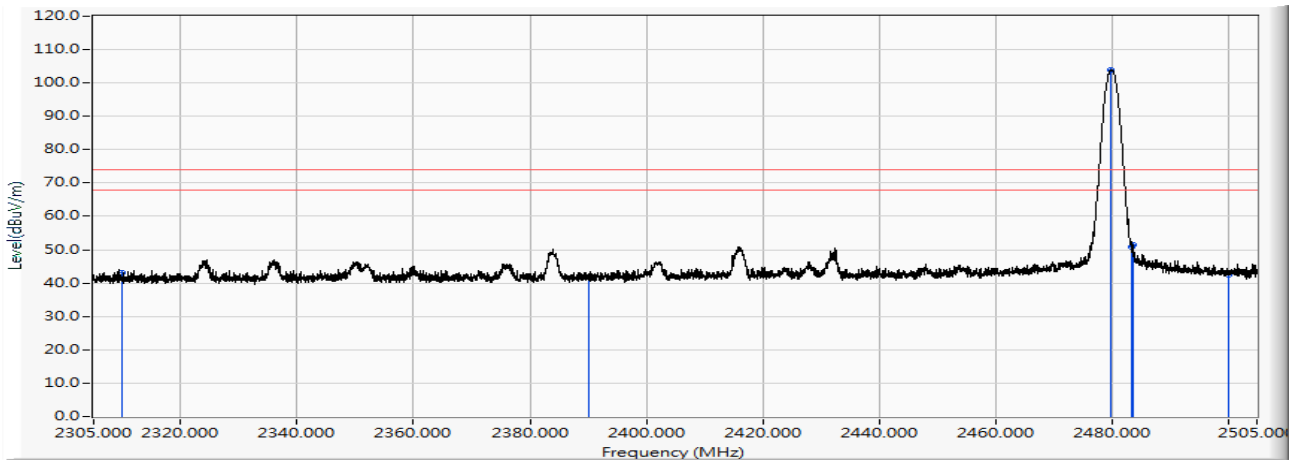


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.520	42.535	-31.465	74.000	PEAK
2		2390.000	11.544	30.150	41.694	-32.306	74.000	PEAK
3	*	2479.955	12.149	89.485	101.634	27.634	74.000	PEAK
4		2483.500	12.172	37.191	49.363	-24.637	74.000	PEAK
5		2483.916	12.175	35.630	47.805	-26.195	74.000	PEAK
6		2500.000	12.274	30.672	42.947	-31.053	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_2480MHz**

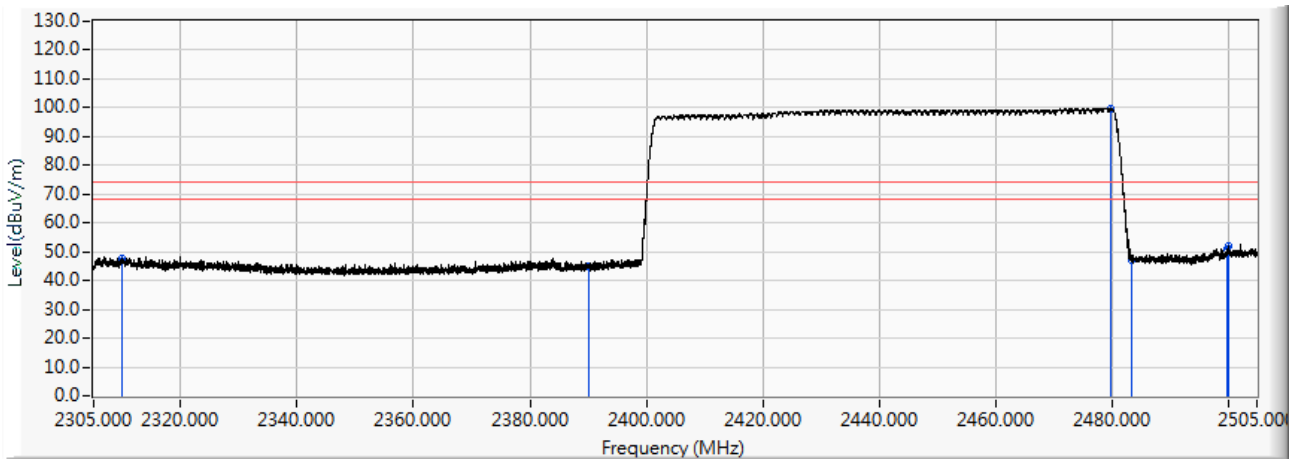


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	32.093	43.108	-30.892	74.000	PEAK
2		2390.000	11.544	30.265	41.809	-32.191	74.000	PEAK
3	*	2479.875	12.148	91.732	103.880	29.880	74.000	PEAK
4		2483.500	12.172	38.743	50.915	-23.085	74.000	PEAK
5		2483.596	12.172	39.250	51.423	-22.577	74.000	PEAK
6		2500.000	12.274	30.175	42.450	-31.550	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 : DEKRA Taiwan CB2-H	**Time : 2018/01/02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_Hopping**

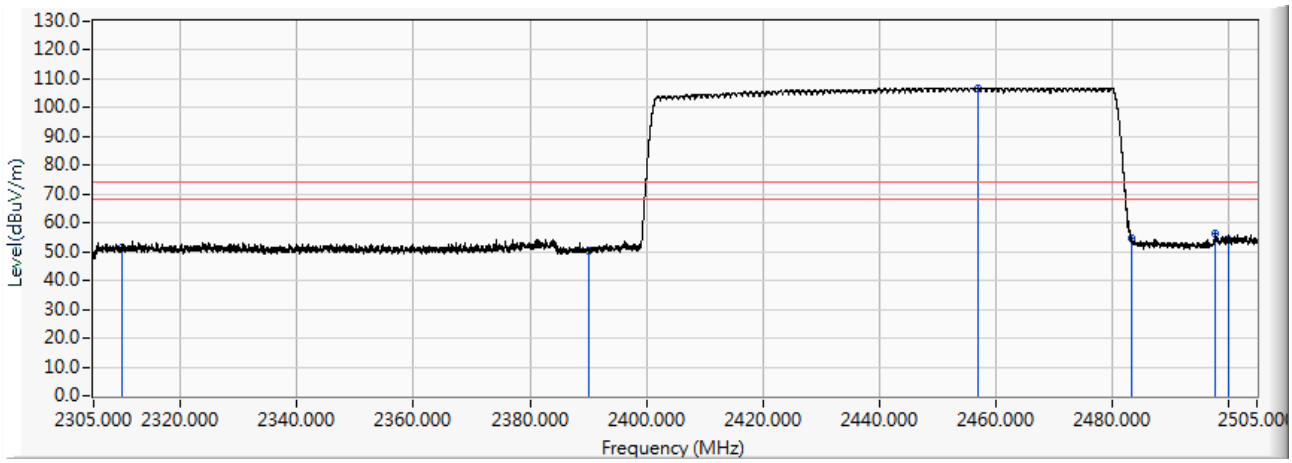


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	12.384	35.234	47.618	-26.382	74.000	PEAK
2		2390.000	12.911	31.945	44.856	-29.144	74.000	PEAK
3	*	2479.880	13.504	86.328	99.831	25.831	74.000	PEAK
4		2483.500	13.527	33.511	47.038	-26.962	74.000	PEAK
5		2499.860	13.628	37.493	51.122	-22.878	74.000	PEAK
6		2500.000	13.629	38.383	52.012	-21.988	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 : DEKRA Taiwan CB2-H	**Time : 2018/01/02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_2DH5_Hopping**

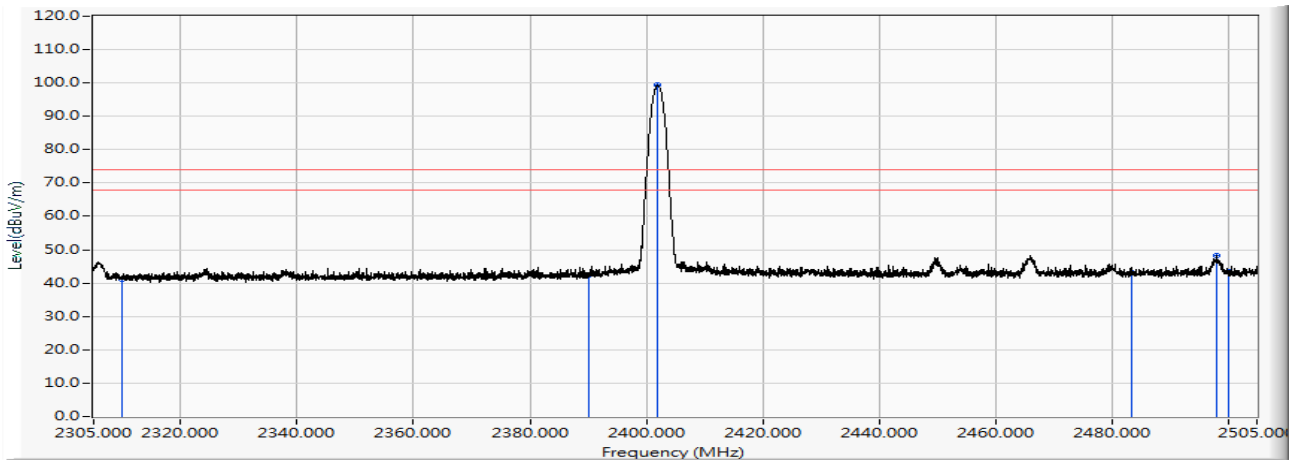


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	12.384	38.838	51.222	-22.778	74.000	PEAK
2		2390.000	12.911	37.507	50.418	-23.582	74.000	PEAK
3	*	2457.080	13.353	93.592	106.945	32.945	74.000	PEAK
4		2483.500	13.527	41.348	54.875	-19.125	74.000	PEAK
5		2497.760	13.618	42.495	56.113	-17.887	74.000	PEAK
6		2500.000	13.629	40.508	54.137	-19.863	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2402MHz**

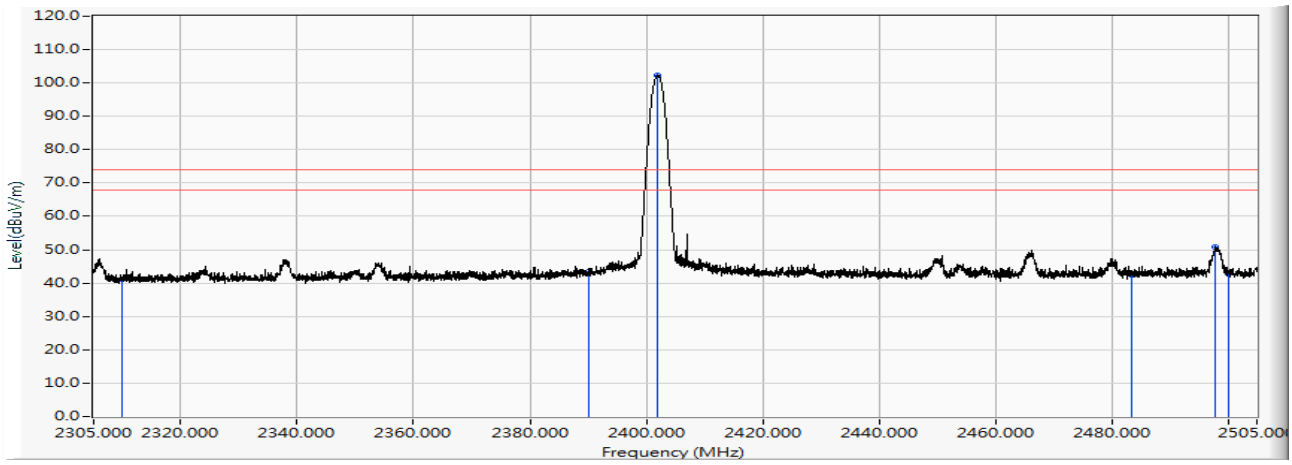


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	30.043	41.058	-32.942	74.000	PEAK
2		2390.000	11.544	31.064	42.608	-31.392	74.000	PEAK
3	*	2401.939	11.623	87.717	99.341	25.341	74.000	PEAK
4		2483.500	12.172	30.820	42.992	-31.008	74.000	PEAK
5		2498.119	12.266	35.868	48.134	-25.866	74.000	PEAK
6		2500.000	12.274	31.072	43.347	-30.653	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2402MHz**

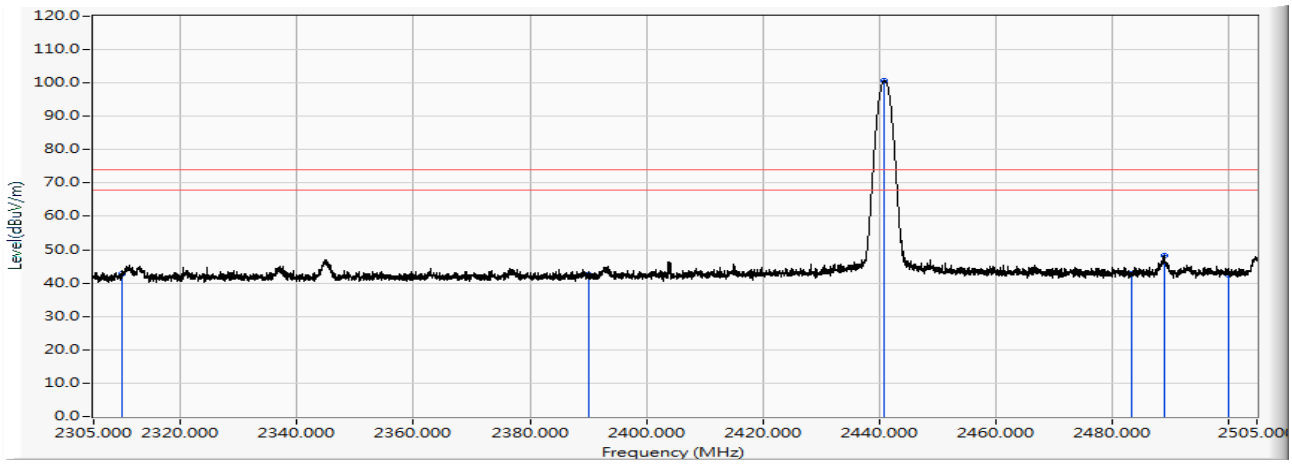


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	30.036	41.051	-32.949	74.000	PEAK
2		2390.000	11.544	31.730	43.274	-30.726	74.000	PEAK
3	*	2401.979	11.623	90.835	102.459	28.459	74.000	PEAK
4		2483.500	12.172	30.362	42.534	-31.466	74.000	PEAK
5		2497.799	12.264	38.535	50.799	-23.201	74.000	PEAK
6		2500.000	12.274	30.537	42.812	-31.188	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**

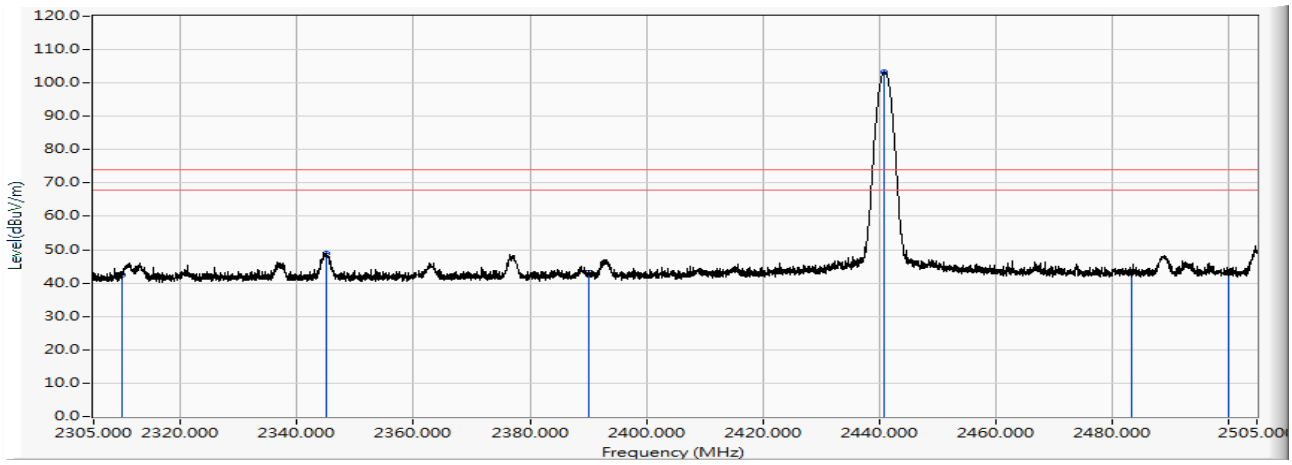


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.701	42.716	-31.284	74.000	PEAK
2		2390.000	11.544	30.842	42.386	-31.614	74.000	PEAK
3	*	2440.947	11.886	88.866	100.752	26.752	74.000	PEAK
4		2483.500	12.172	30.472	42.644	-31.356	74.000	PEAK
5		2489.157	12.210	36.142	48.352	-25.648	74.000	PEAK
6		2500.000	12.274	30.190	42.465	-31.535	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2441MHz**

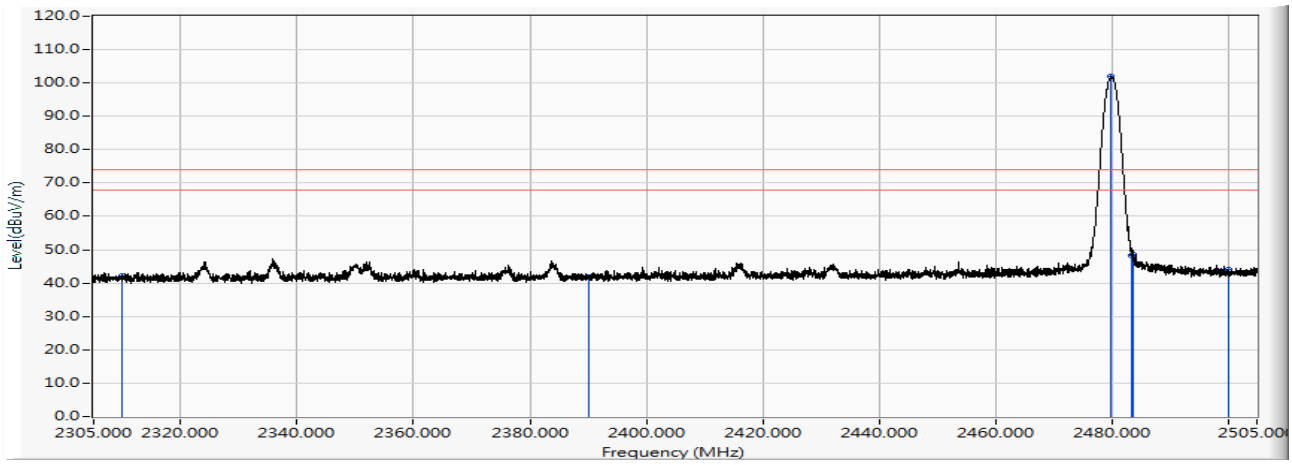


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.539	42.554	-31.446	74.000	PEAK
2		2345.008	11.246	37.699	48.945	-25.055	74.000	PEAK
3		2390.000	11.544	31.471	43.015	-30.985	74.000	PEAK
4	*	2440.987	11.887	91.416	103.303	29.303	74.000	PEAK
5		2483.500	12.172	31.034	43.206	-30.794	74.000	PEAK
6		2500.000	12.274	31.275	43.550	-30.450	74.000	PEAK

Note:

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

Site : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2480MHz**

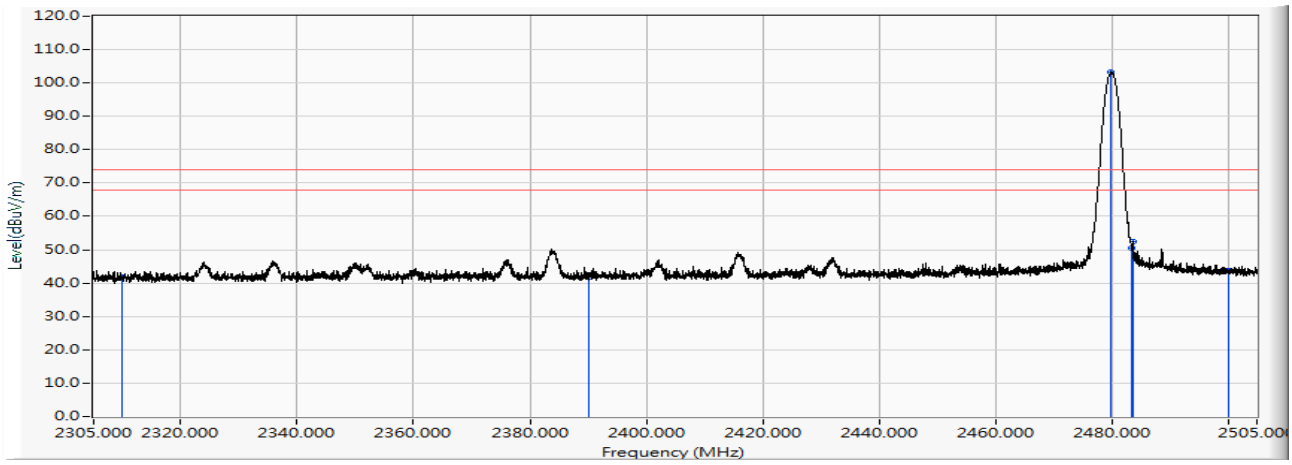


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	31.060	42.075	-31.925	74.000	PEAK
2		2390.000	11.544	30.273	41.817	-32.183	74.000	PEAK
3	*	2479.955	12.149	89.762	101.911	27.911	74.000	PEAK
4		2483.500	12.172	36.122	48.294	-25.706	74.000	PEAK
5		2483.596	12.172	36.365	48.538	-25.462	74.000	PEAK
6		2500.000	12.274	31.887	44.162	-29.838	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 : DEKRA Taiwan CB2-H	**Time : 2017/11/07**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_2480MHz**

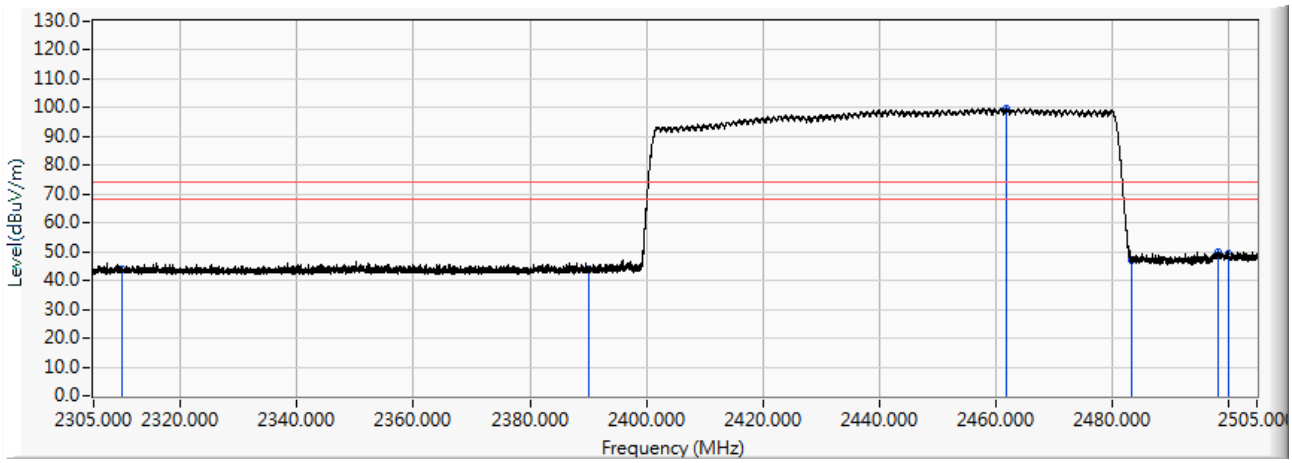


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	30.968	41.983	-32.017	74.000	PEAK
2		2390.000	11.544	30.368	41.912	-32.088	74.000	PEAK
3	*	2479.955	12.149	91.086	103.235	29.235	74.000	PEAK
4		2483.500	12.172	38.257	50.429	-23.571	74.000	PEAK
5		2483.596	12.172	40.363	52.536	-21.464	74.000	PEAK
6		2500.000	12.274	31.533	43.808	-30.192	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 : DEKRA Taiwan CB2-H	**Time : 2018/01/02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_Hopping**

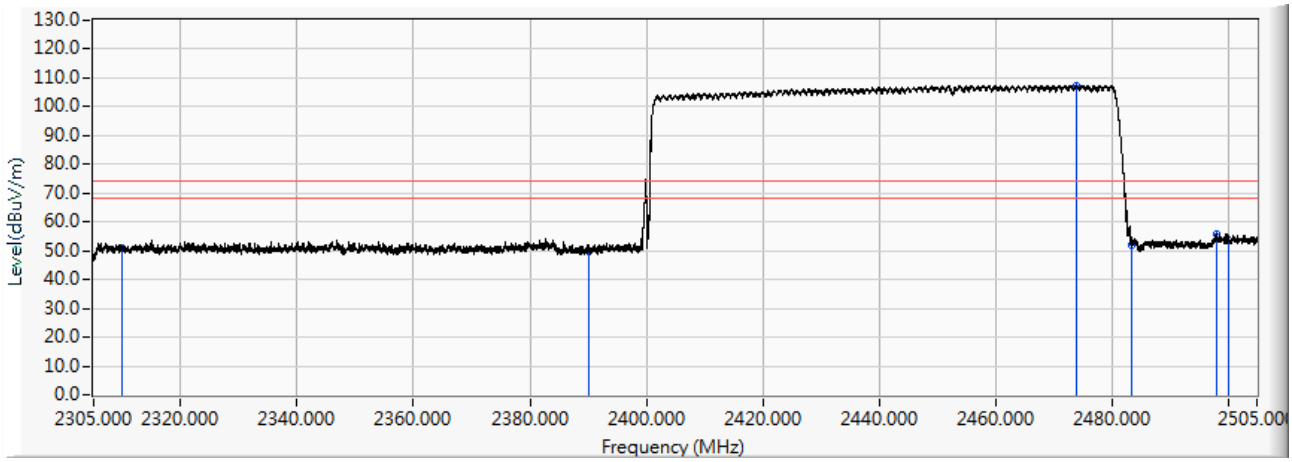


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	12.384	31.270	43.654	-30.346	74.000	PEAK
2		2390.000	12.911	31.153	44.064	-29.936	74.000	PEAK
3	*	2461.980	13.386	86.281	99.666	25.666	74.000	PEAK
4		2483.500	13.527	33.778	47.305	-26.695	74.000	PEAK
5		2498.460	13.621	36.032	49.654	-24.346	74.000	PEAK
6		2500.000	13.629	35.627	49.256	-24.744	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 : DEKRA Taiwan CB2-H	**Time : 2018/01/02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB2_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : Verizon Mesh Router	**Note : Mode 1: Transmit Mode_802.15.1_3DH5_Hopping**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	12.384	38.795	51.179	-22.821	74.000	PEAK
2		2390.000	12.911	37.069	49.980	-24.020	74.000	PEAK
3	*	2474.020	13.464	93.899	107.364	33.364	74.000	PEAK
4		2483.500	13.527	38.559	52.086	-21.914	74.000	PEAK
5		2497.960	13.619	42.128	55.747	-18.253	74.000	PEAK
6		2500.000	13.629	40.213	53.842	-20.158	74.000	PEAK

Note:

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

7. Number of hopping frequency

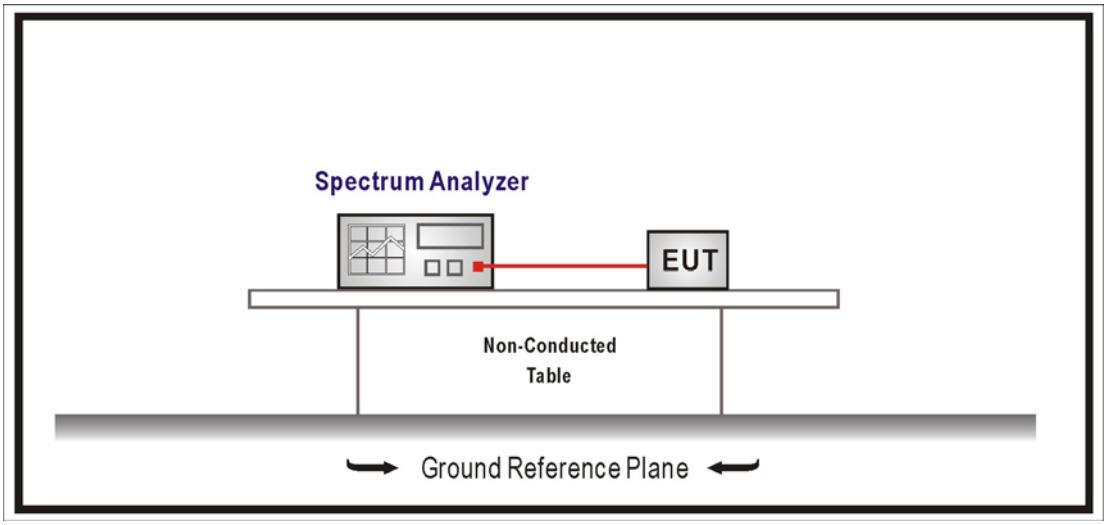
7.1. Test Equipment

The following test equipment is used during the test:

Number of hopping frequency / SR10-H

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

7.2. Test Setup



7.3. Limits

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

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

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

7.4. Test Procedures

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

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

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

7.5. Test Specification

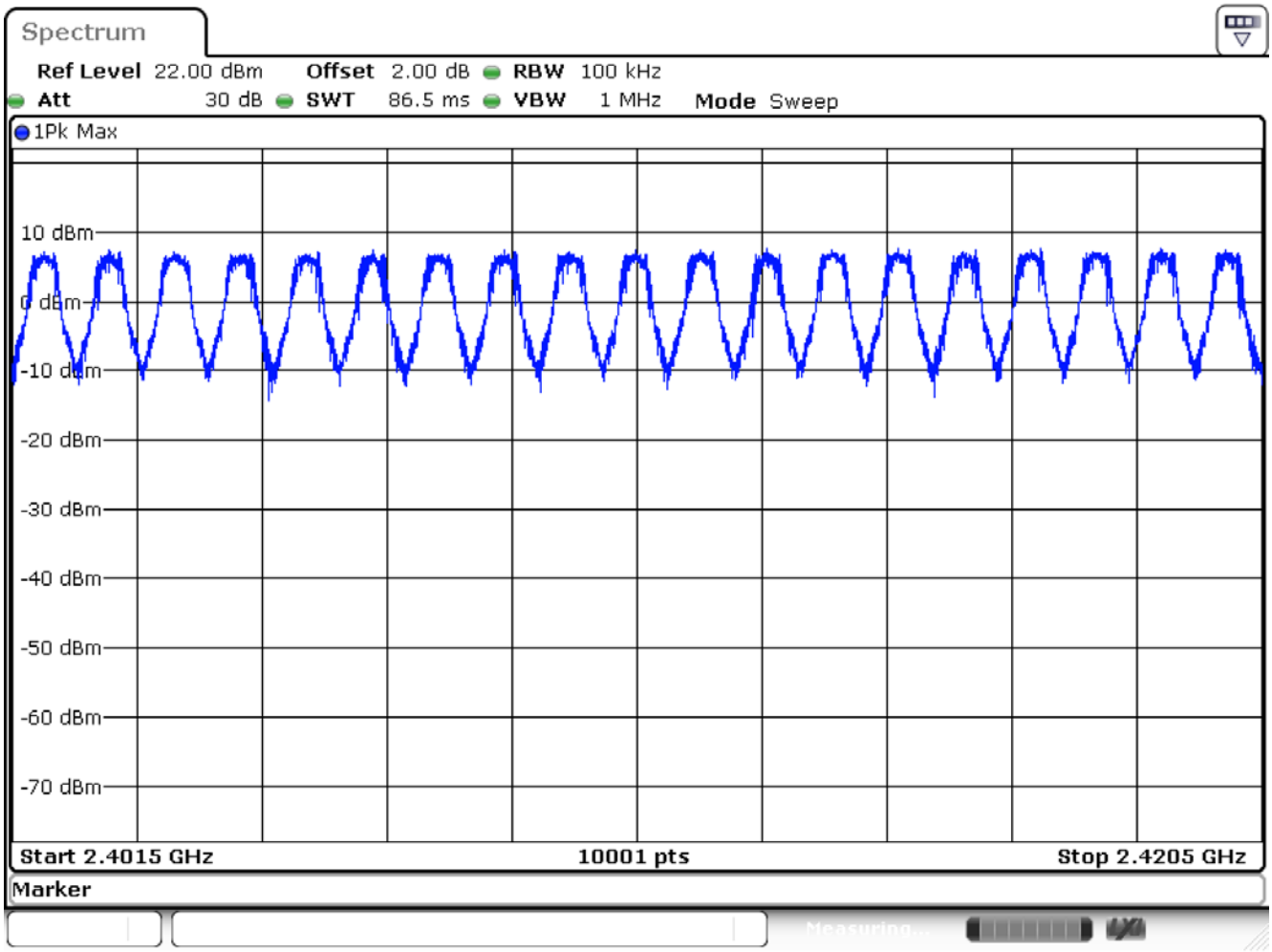
According to FCC Part 15 Subpart C Paragraph 15.247: 2016

7.6. Test Result

Product	Verizon Mesh Router		
Test Item	Number of hopping frequency		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

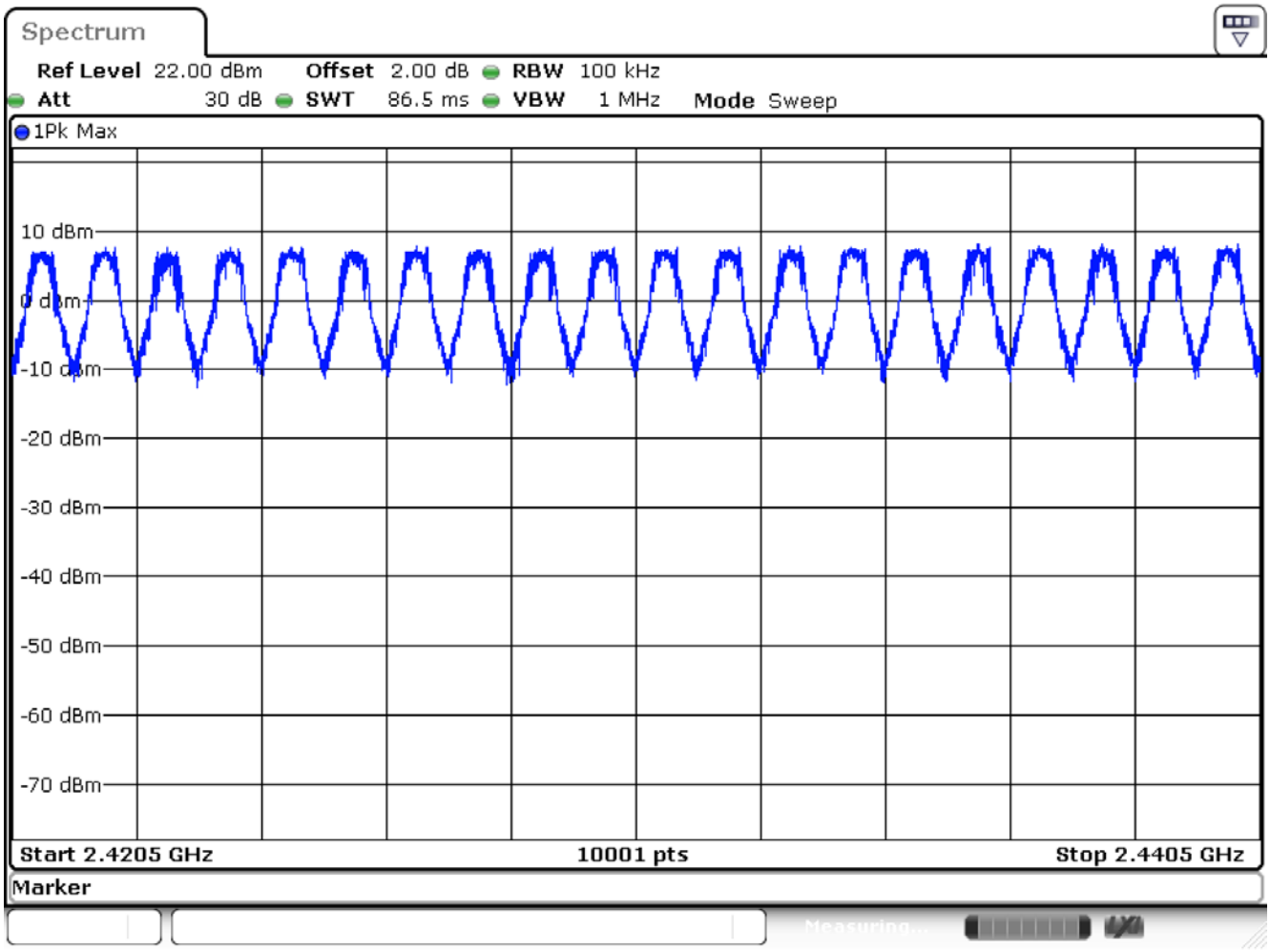
Frequency Range (MHz)	Measure Level (Channels)	Limit (Channels)	Result
2402 - 2480	79	≧ 75	Pass

2401.5-2420.5MHz



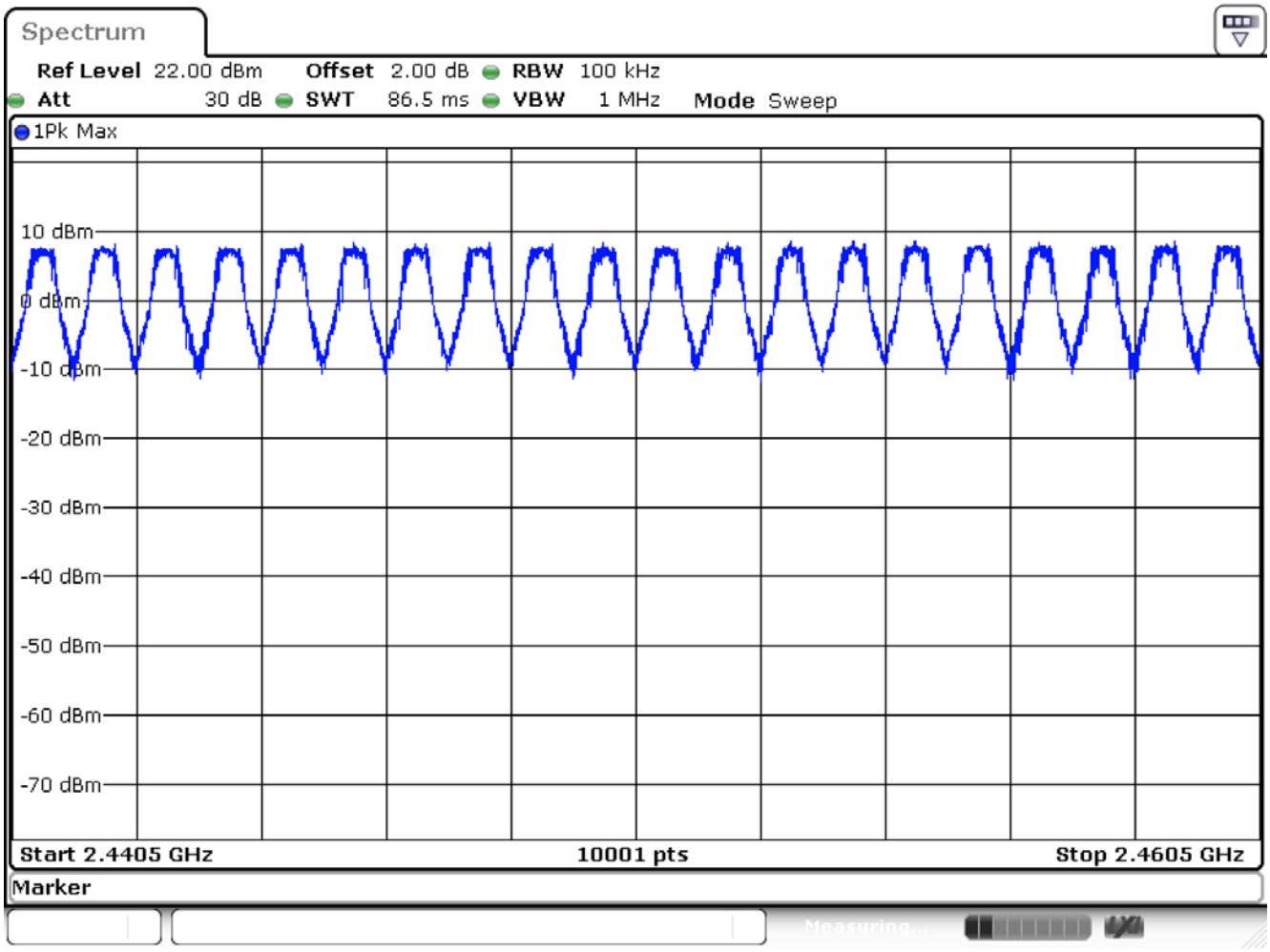
Date: 5.NOV.2017 07:00:13

2420.5-2440.5MHz



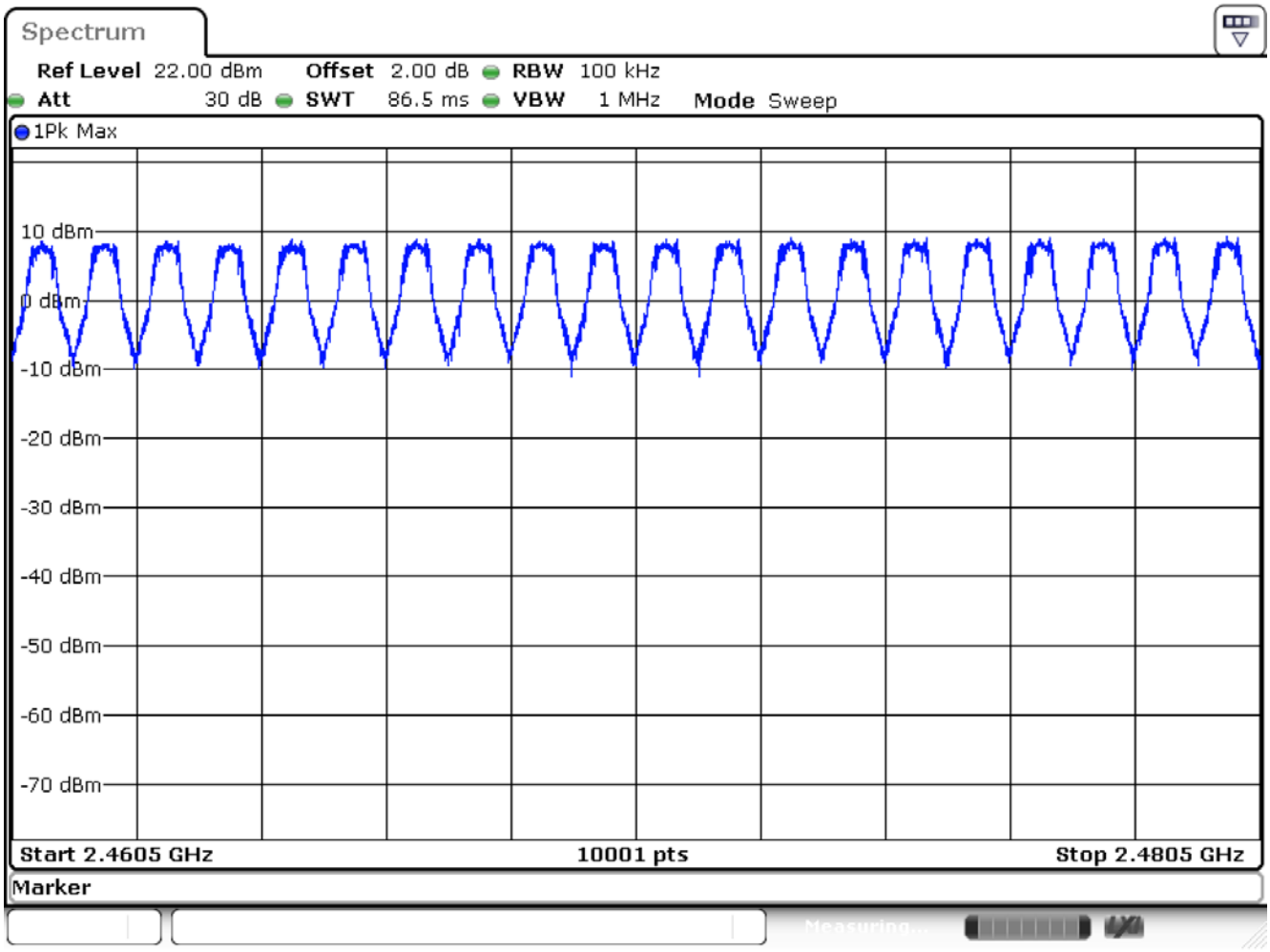
Date: 5.NOV.2017 07:03:23

2440.5-2460.5MHz



Date: 5.NOV.2017 07:07:40

2460.5-2480.5MHz



Date: 5.NOV.2017 07:11:34

8. Carrier Frequency Separation

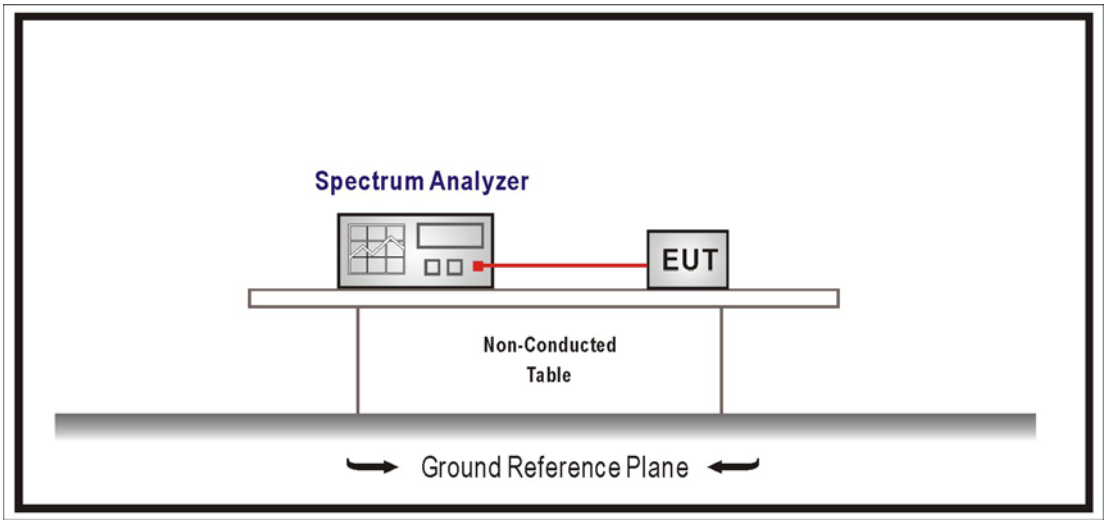
8.1. Test Equipment

The following test equipment is used during the test:

Carrier Frequency Separation / SR10-H

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

8.2. Test Setup



8.3. Limits

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

8.4. Test Procedures

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

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

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

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

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2016

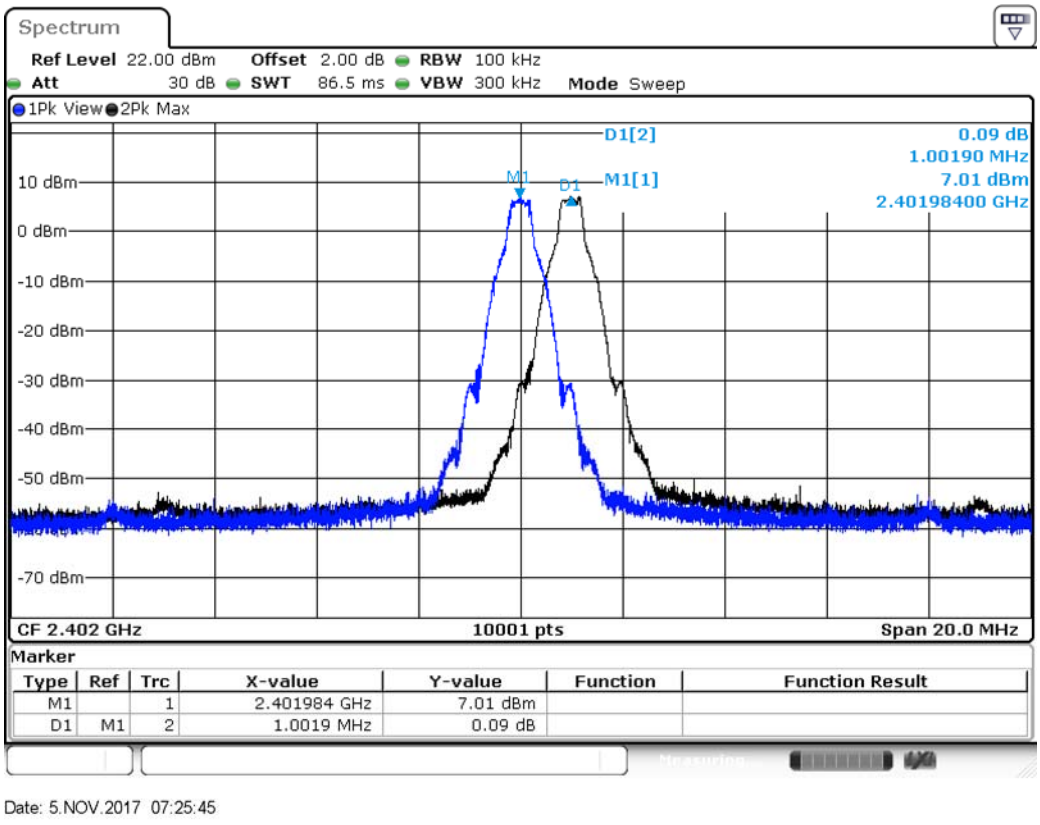
8.6. Test Result

Product	Verizon Mesh Router		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

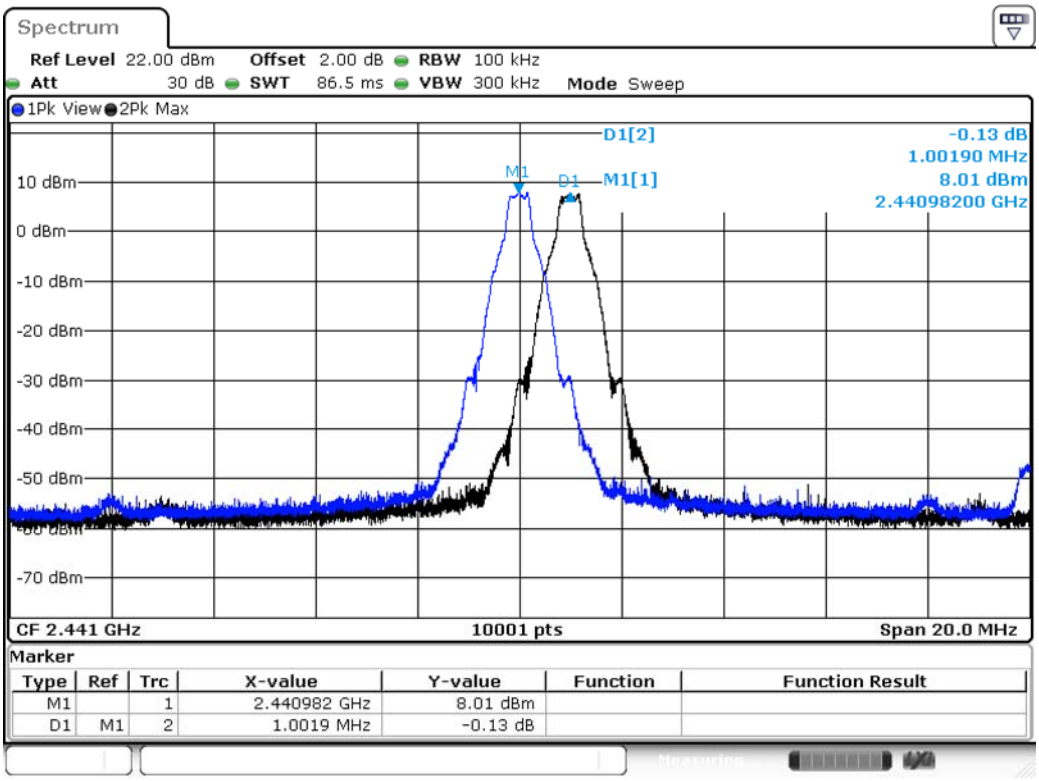
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.002	0.746	Pass
39	2441	1.002	0.746	Pass
78	2480	1.004	0.747	Pass

Channel 00



Channel 39



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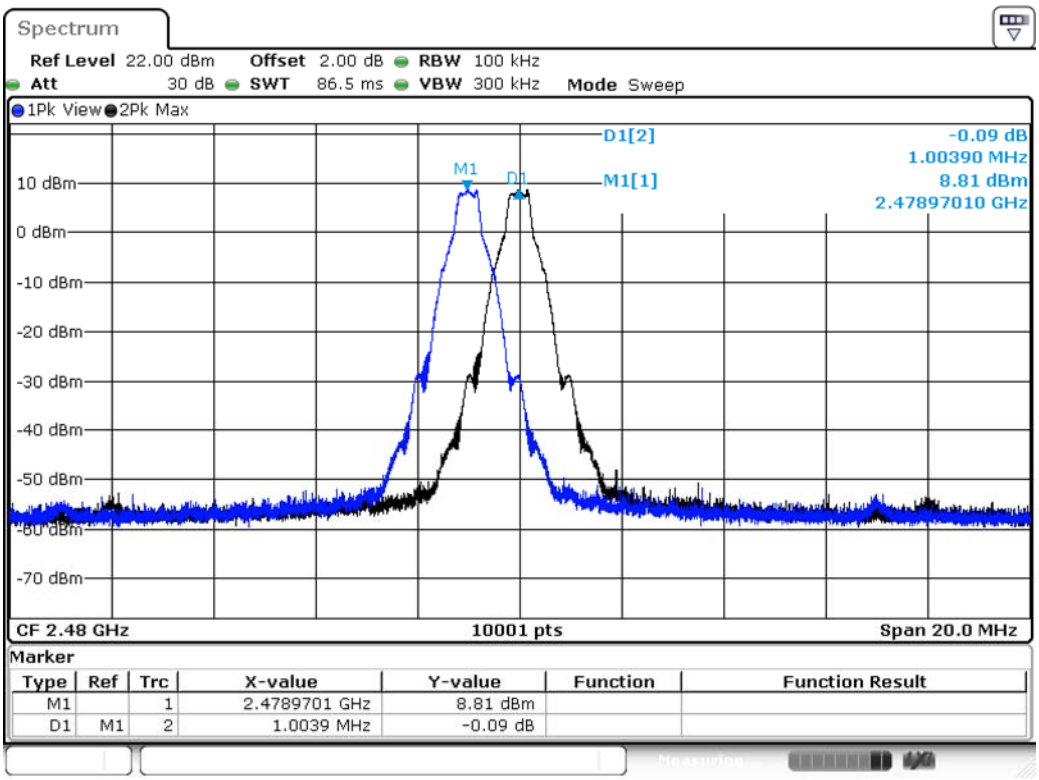
Channel 78



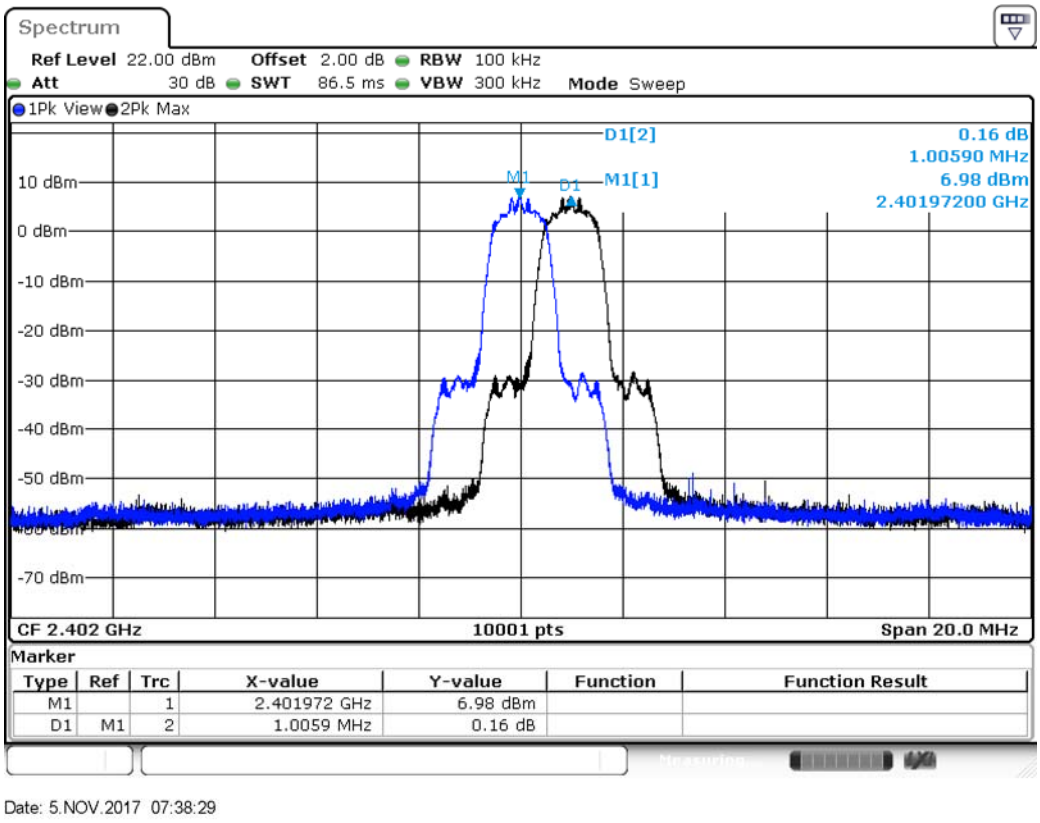
Date: 5.NOV.2017 07:31:58

Product	Verizon Mesh Router		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

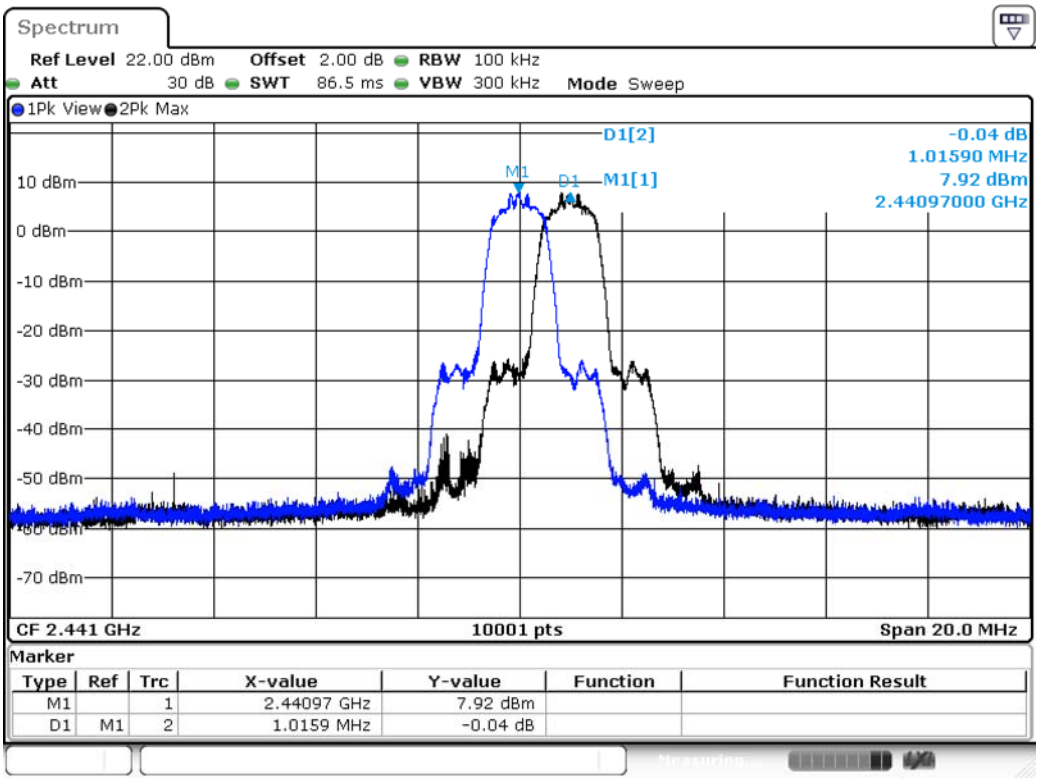
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.006	0.926	Pass
39	2441	1.016	0.930	Pass
78	2480	0.999	0.928	Pass

Channel 00

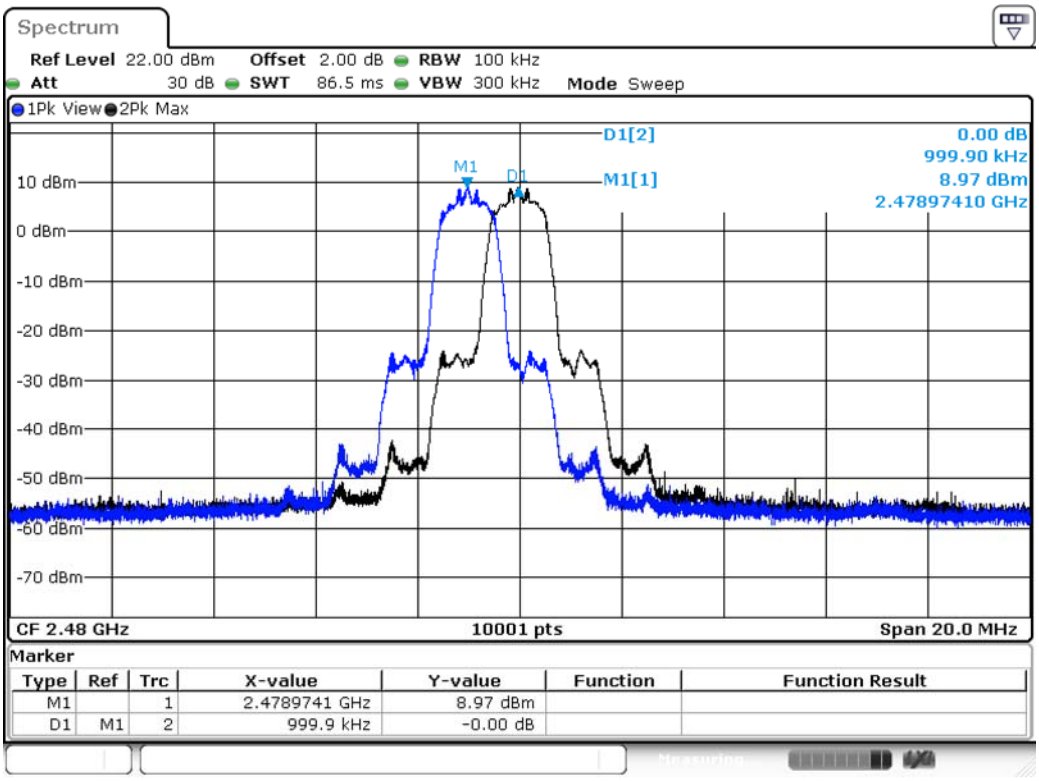


Channel 39



Date: 5.NOV.2017 07:36:28

Channel 78



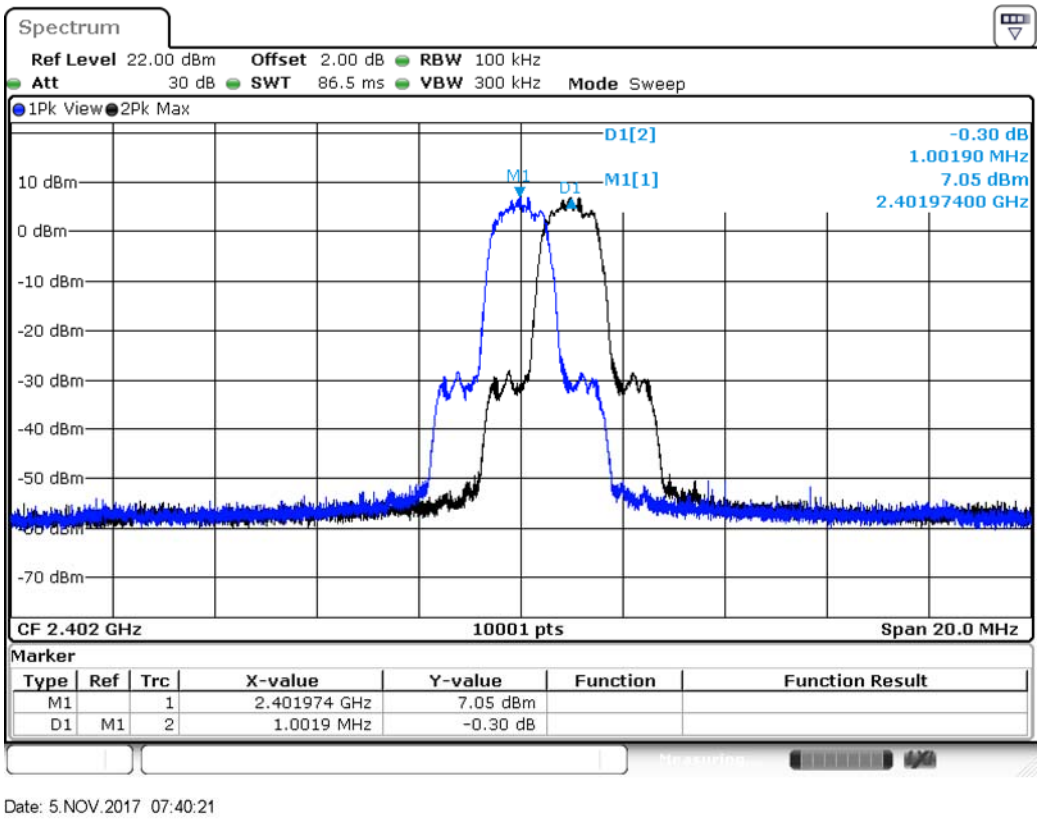
Date: 5.NOV.2017 07:34:32

Product	Verizon Mesh Router		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

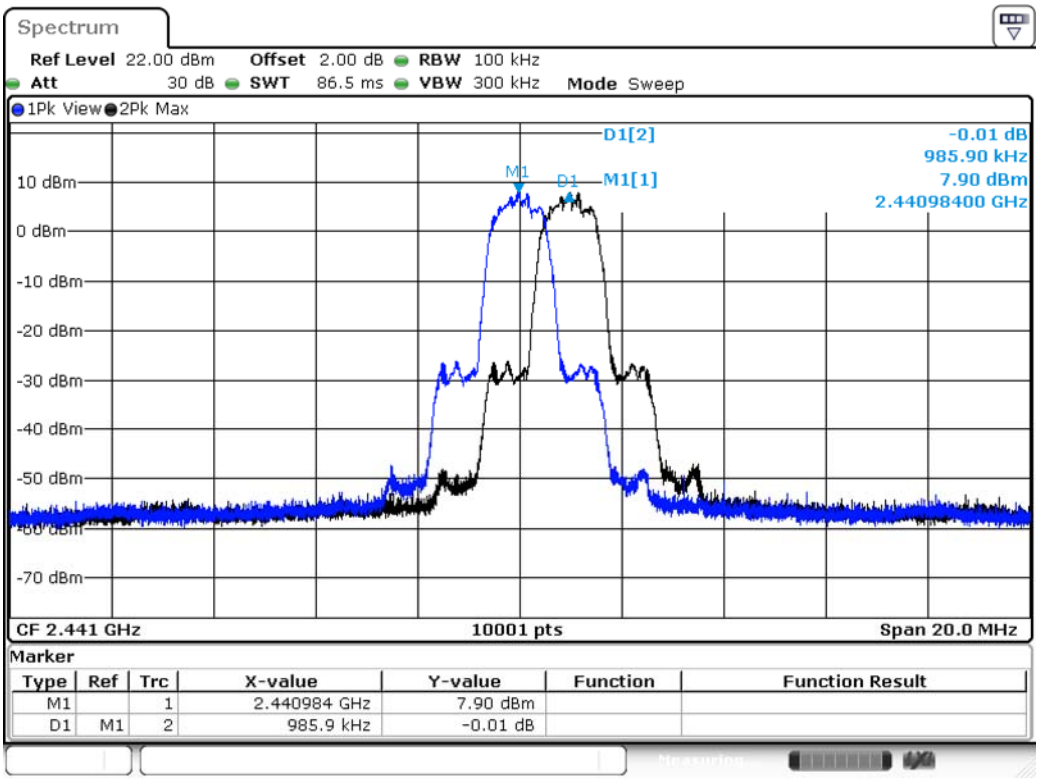
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.002	0.925	Pass
39	2441	0.986	0.925	Pass
78	2480	1.002	0.924	Pass

Channel 00

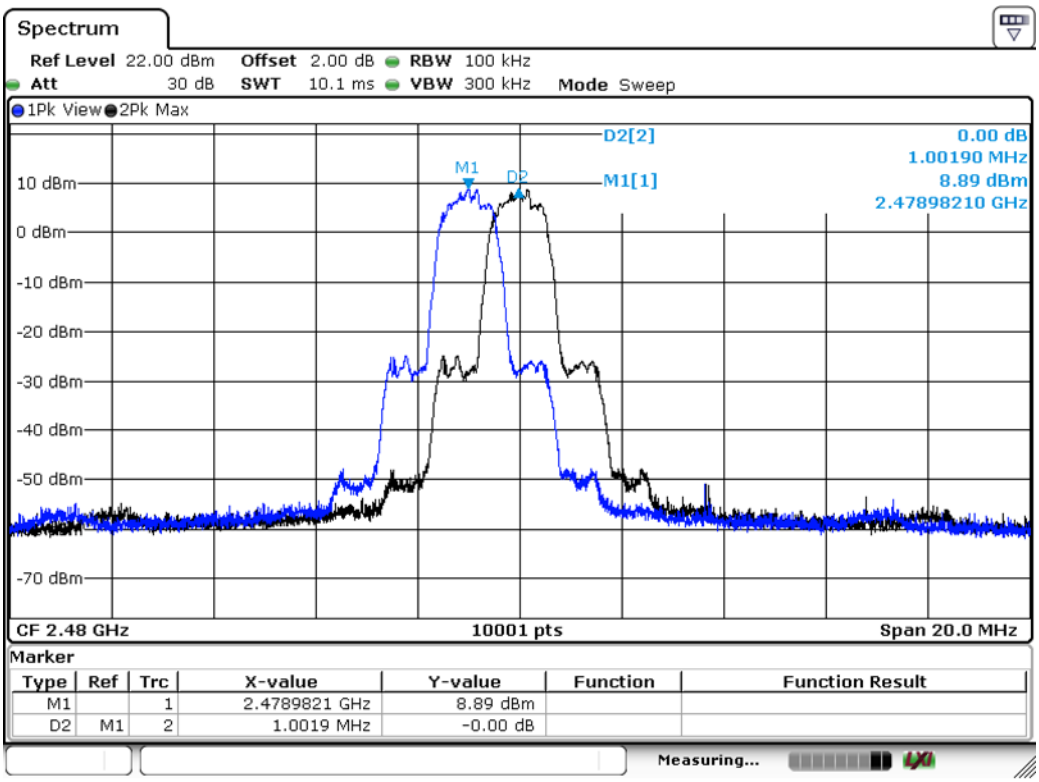


Channel 39



Date: 5.NOV.2017 07:42:24

Channel 78



Date: 24.NOV.2017 16:35:16

9. Occupied Bandwidth

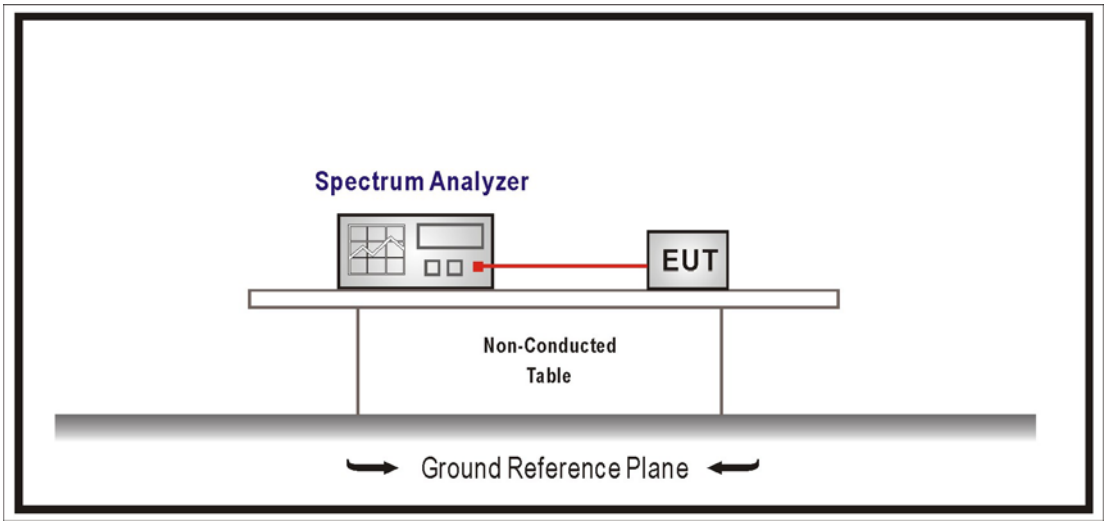
9.1. Test Equipment

The following test equipment is used during the test:

Occupied Bandwidth / SR10-H

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

9.2. Test Setup



9.3. Limits

N/A

9.4. Test Procedures

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

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW , Sweep = auto, Detector function = peak, Trace = max hold , The EUT should be transmitting at its maximum data rate.

9.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2016

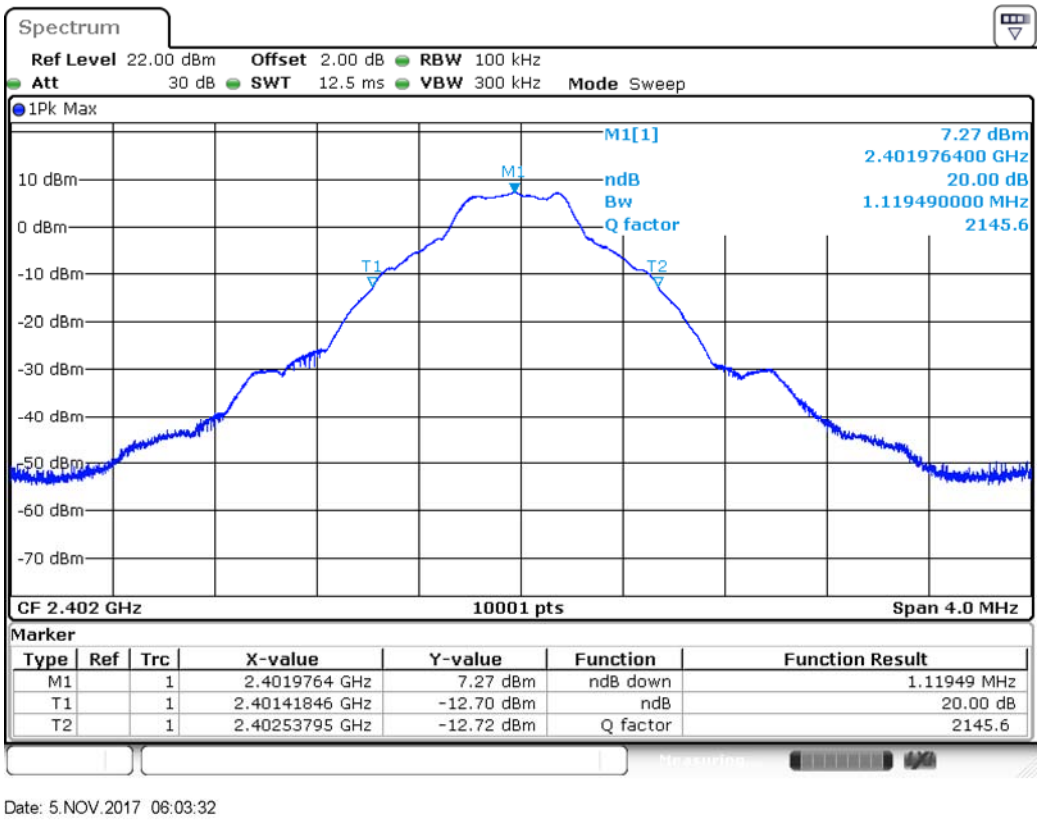
9.6. Test Result

Product	Verizon Mesh Router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

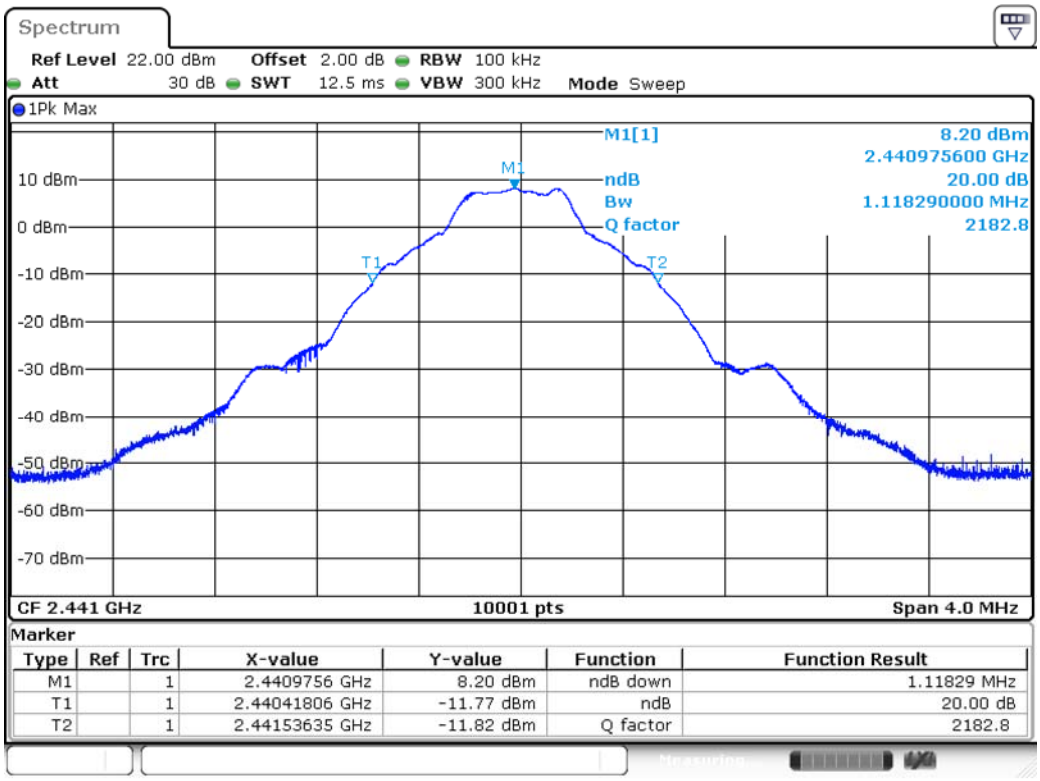
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.119	--	Pass
39	2441	1.118	--	Pass
78	2480	1.120	--	Pass

Channel 00

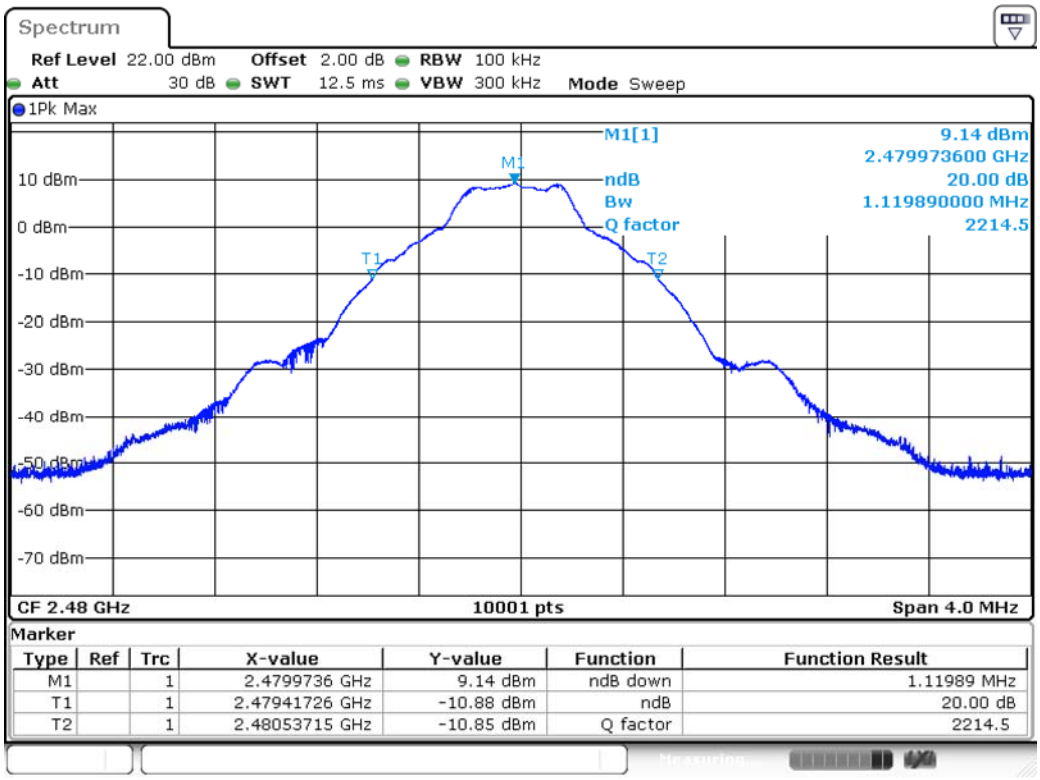


Channel 39



Date: 5.NOV.2017 06:01:48

Channel 78



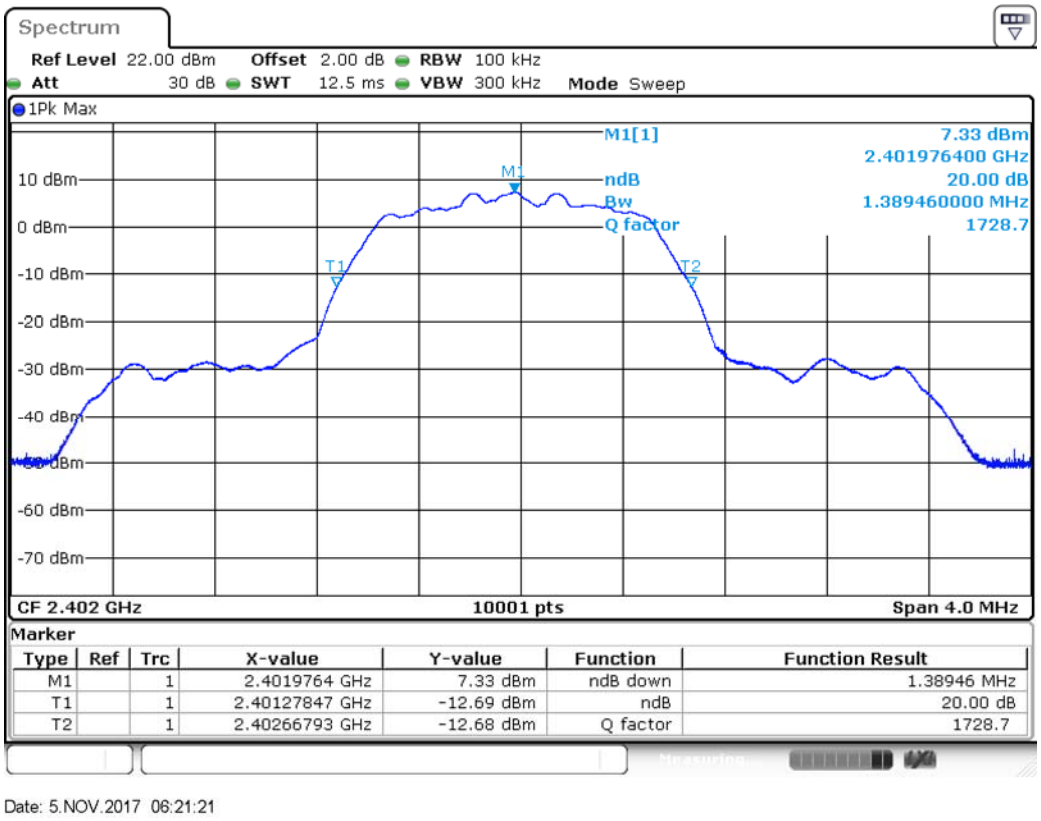
Date: 5.NOV.2017 05:59:28

Product	Verizon Mesh Router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

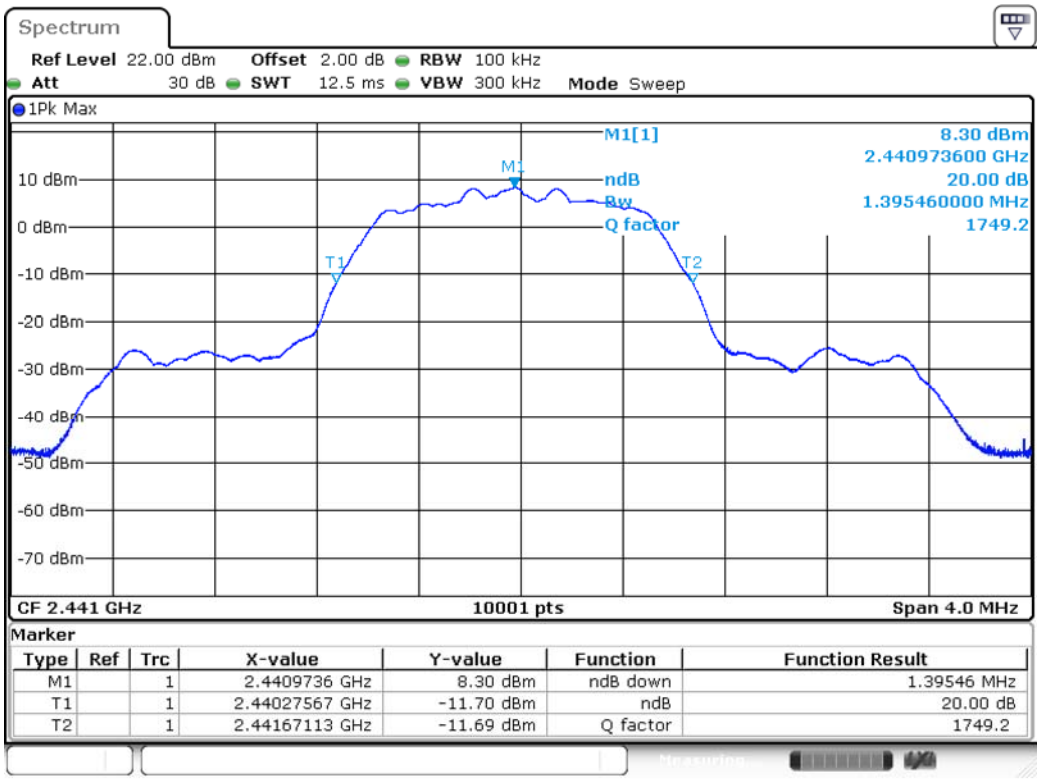
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.389	--	Pass
39	2441	1.395	--	Pass
78	2480	1.392	--	Pass

Channel 00



Channel 39

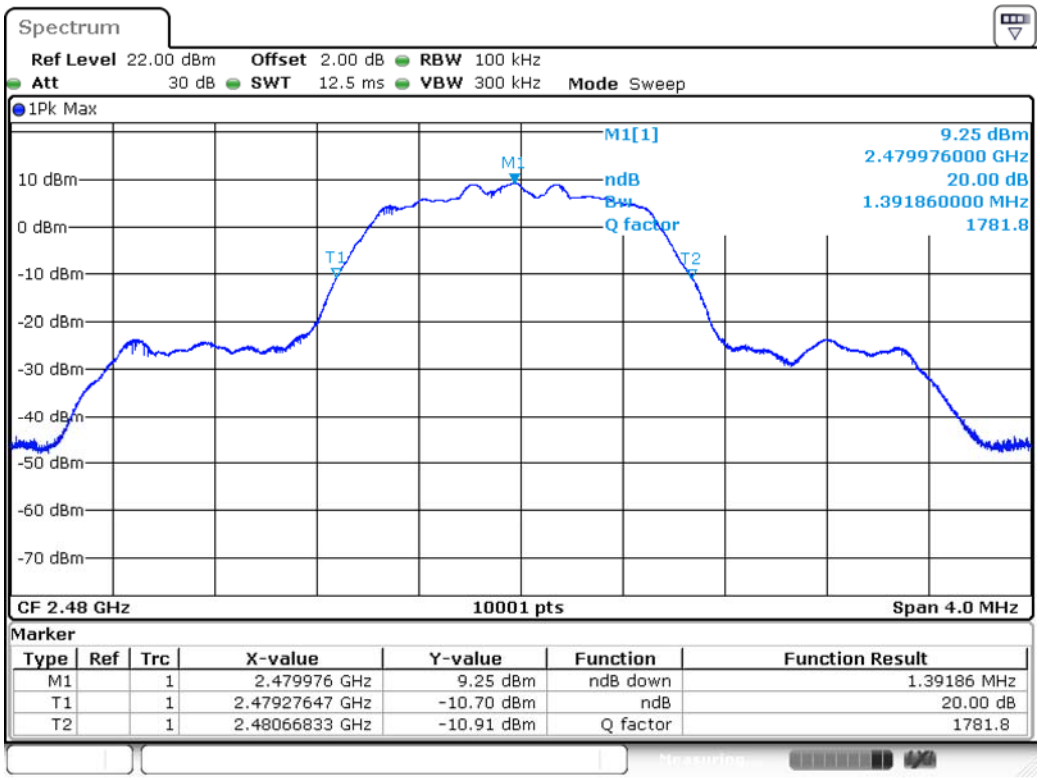


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4409736 GHz	8.30 dBm	ndB down	1.39546 MHz
T1		1	2.44027567 GHz	-11.70 dBm	ndB	20.00 dB
T2		1	2.44167113 GHz	-11.69 dBm	Q factor	1749.2

Date: 5.NOV.2017 06:43:10

Channel 78



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.479976 GHz	9.25 dBm	ndB down	1.39186 MHz
T1		1	2.47927647 GHz	-10.70 dBm	ndB	20.00 dB
T2		1	2.48066833 GHz	-10.91 dBm	Q factor	1781.8

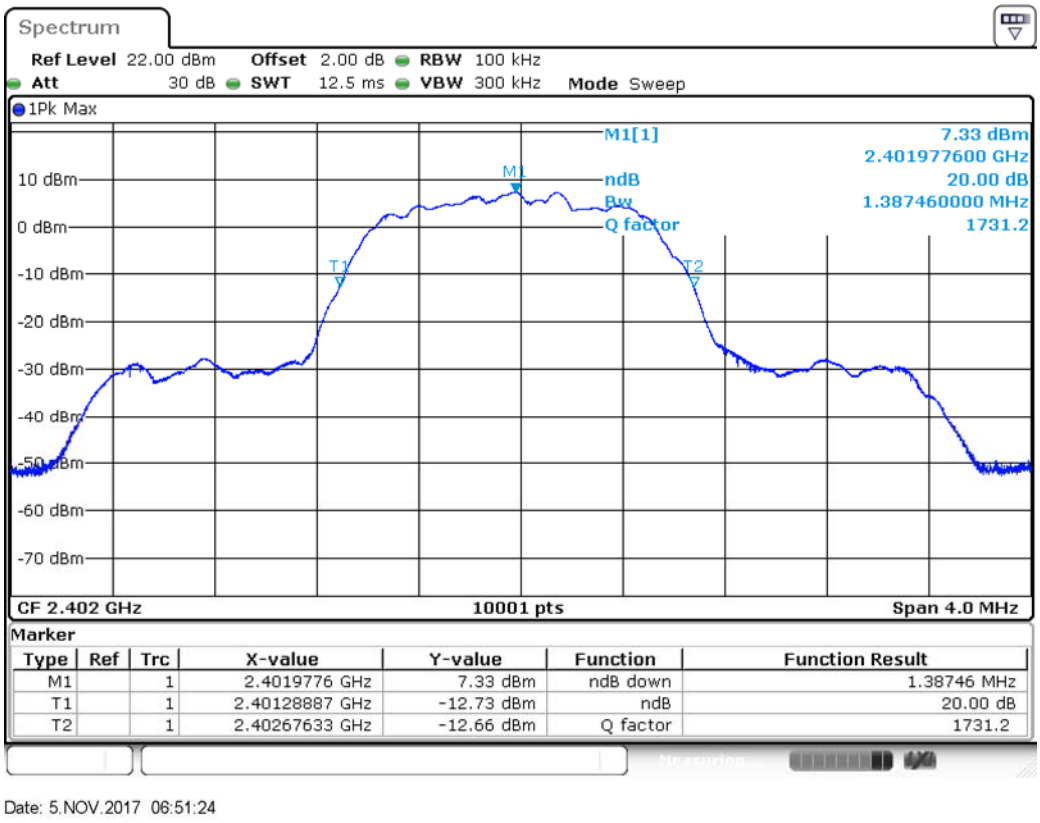
Date: 5.NOV.2017 06:45:48

Product	Verizon Mesh Router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

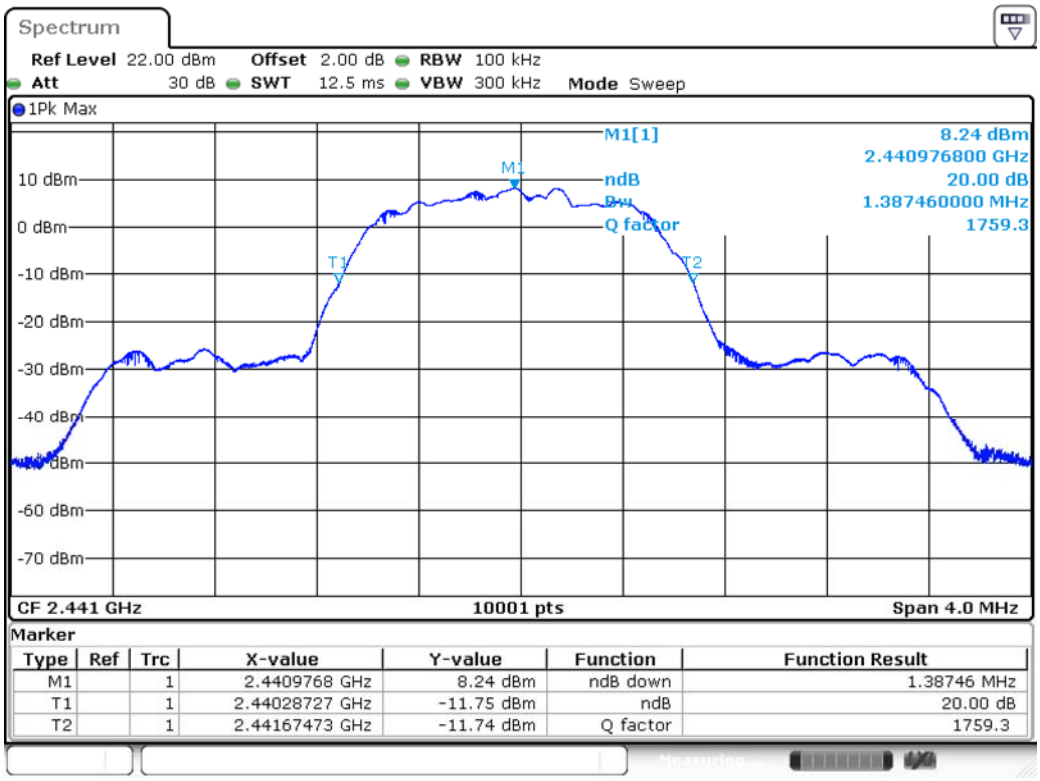
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.387	--	Pass
39	2441	1.387	--	Pass
78	2480	1.385	--	Pass

Channel 00



Channel 39



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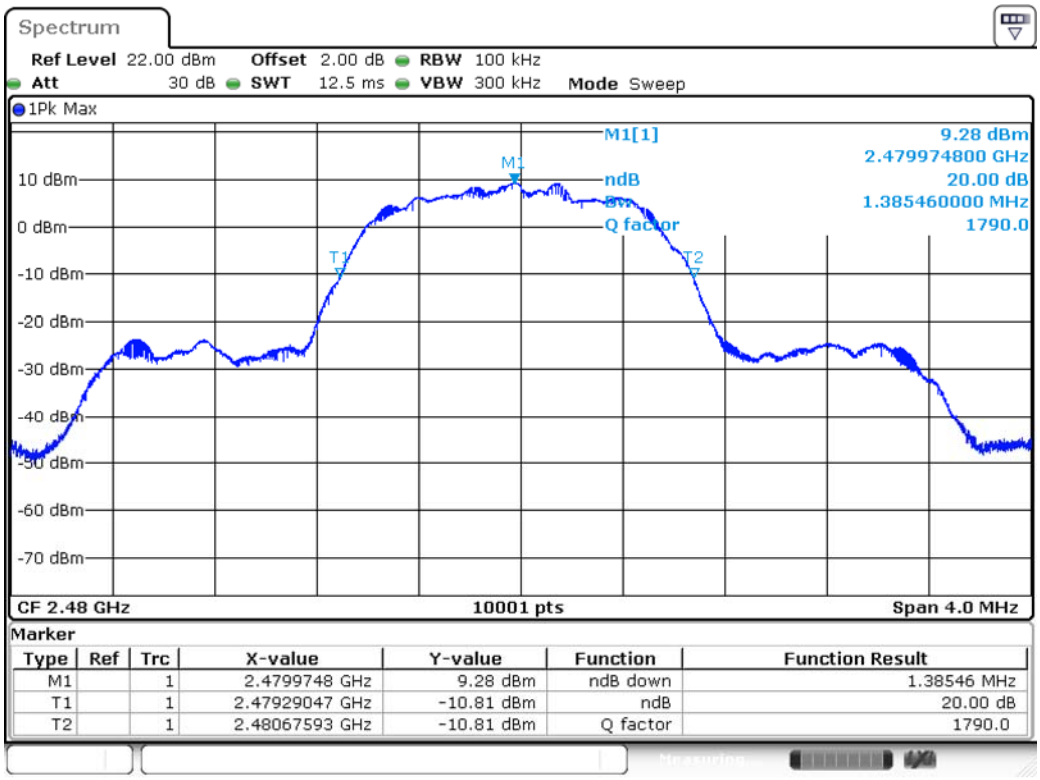
Channel 78



Date: 5.NOV.2017 06:47:27

10. Dwell Time

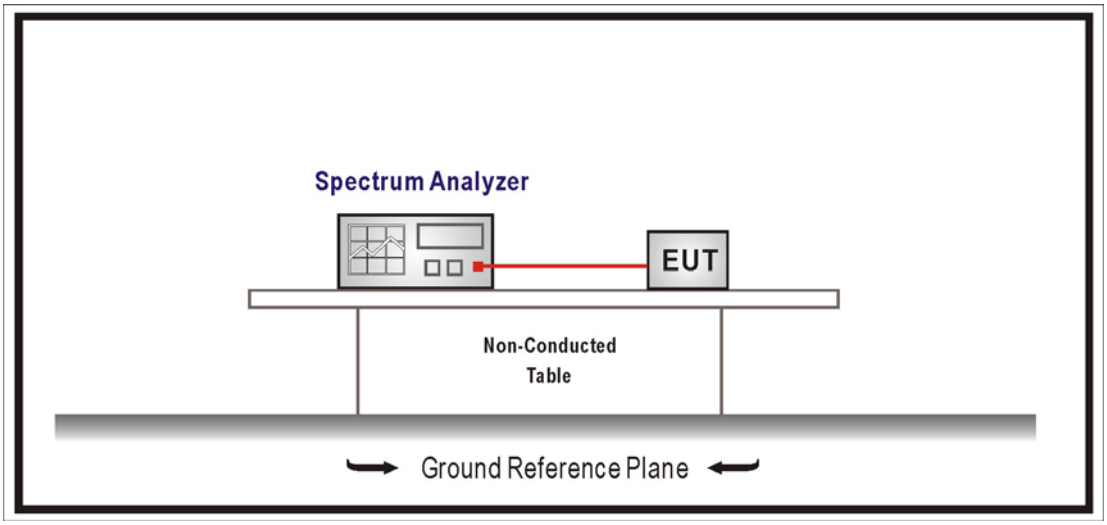
10.1. Test Equipment

The following test equipment is used during the test:

Dwell Time / SR10-H

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

10.2. Test Setup



10.3. Limits

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

10.4. Test Procedures

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

10.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2016

10.6. Test Result

Product	Verizon Mesh Router		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

GFSK, DH5

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.898 ms = 0.002898 sec

Dwell Time : 0.002898 *(266.67/79)* 31.60= 0.3091 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.899 ms = 0.002899 sec

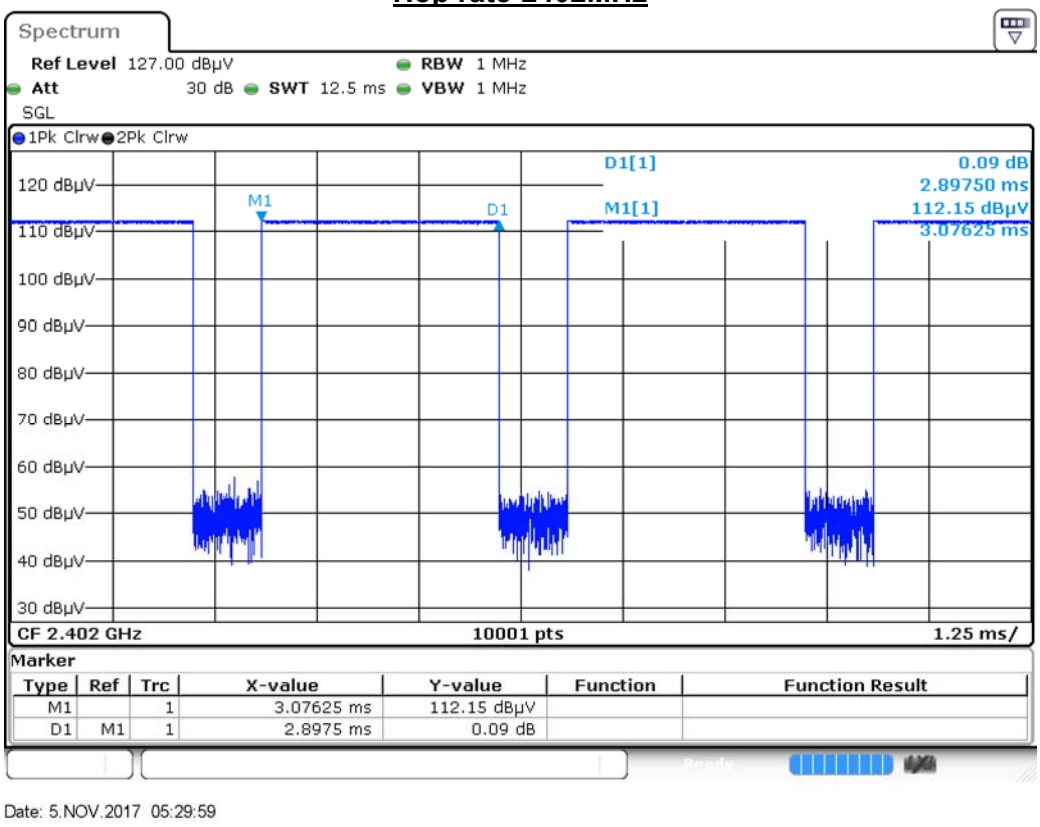
Dwell Time : 0.002899 *(266.67/79)* 31.60= 0.3092 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.899 ms = 0.002899 sec

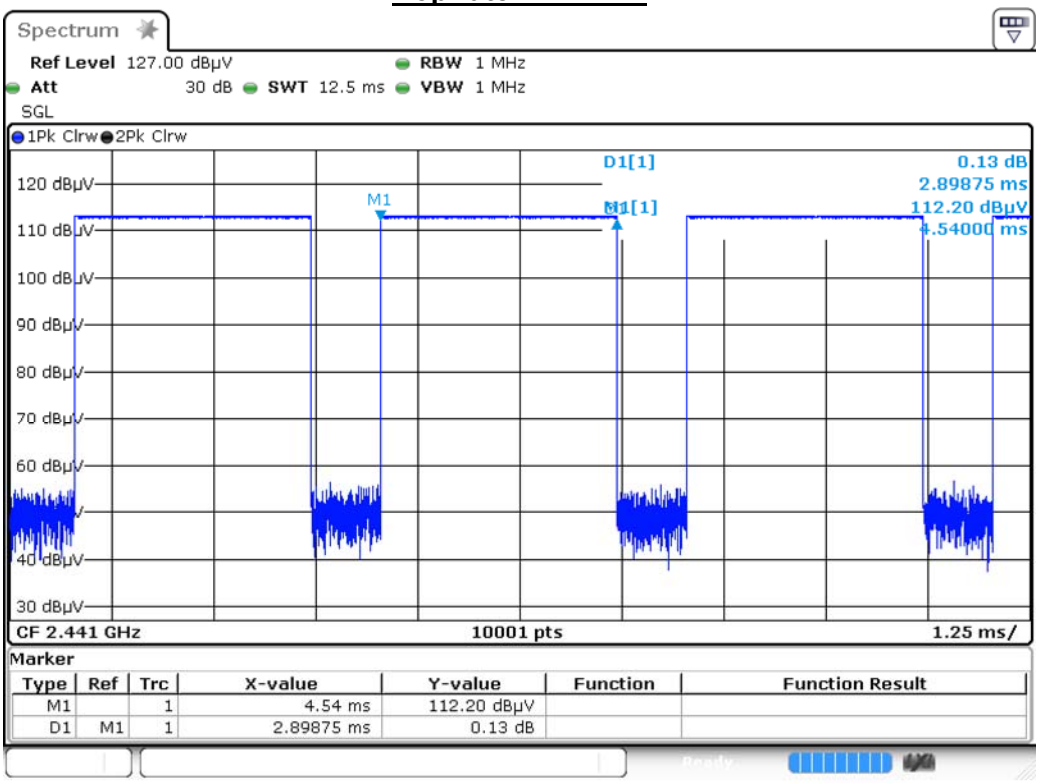
Dwell Time : 0.002899 *(266.67/79)* 31.60= 0.3092 sec。

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



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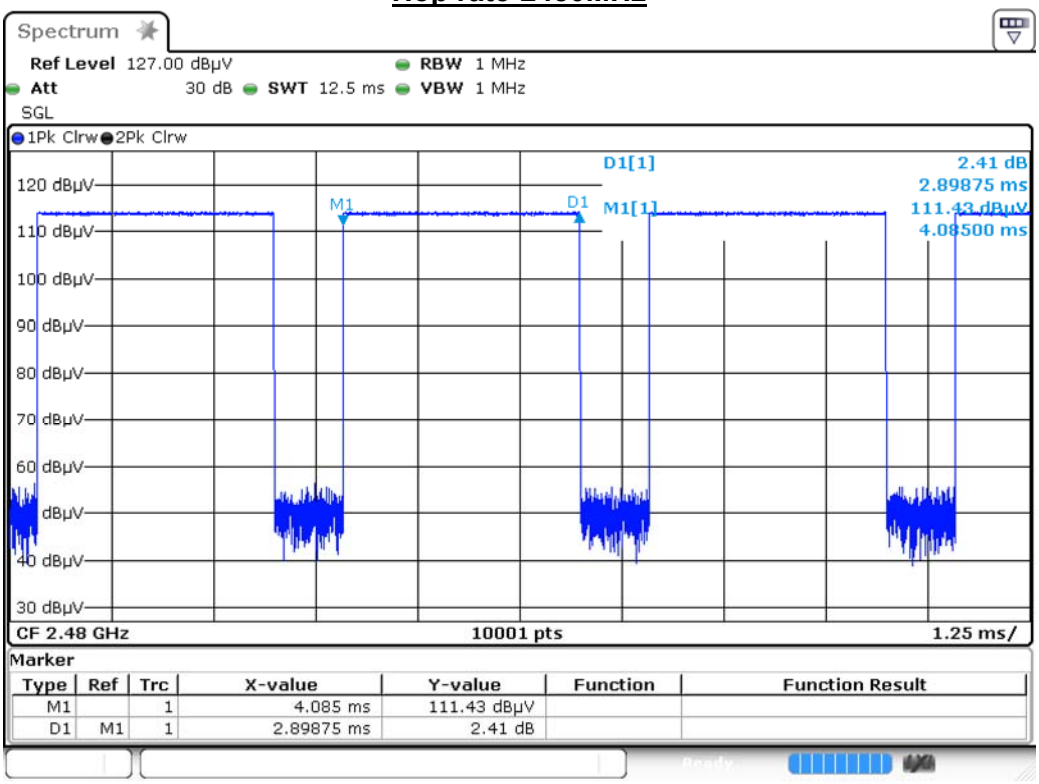
Hop rate-2480MHz



Date: 5.NOV.2017 05:33:57

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

Product	Verizon Mesh Router		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

π/4-DQPSK, 2DH5

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.903 ms = 0.00903 sec

Dwell Time : 0.002903 *(266.67/79)* 31.60= 0.3096 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.901 ms = 0.00901 sec

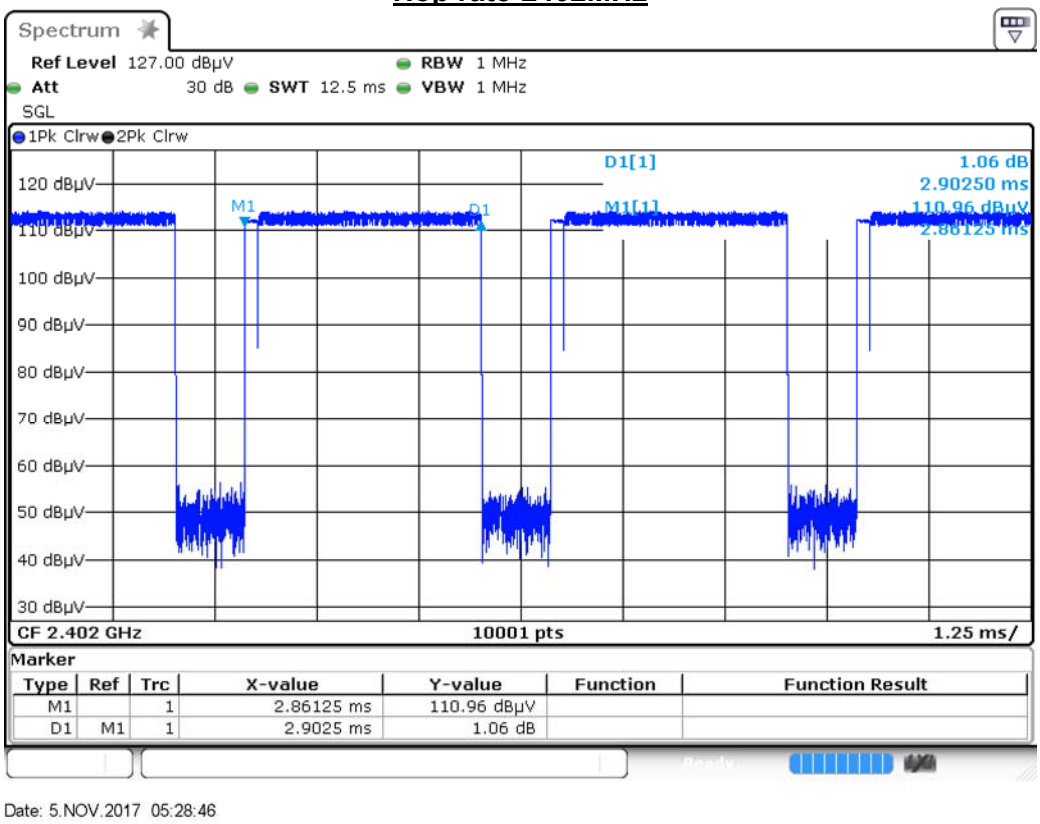
Dwell Time : 0.002901 *(266.67/79)* 31.60= 0.3095 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.903 ms = 0.00903 sec

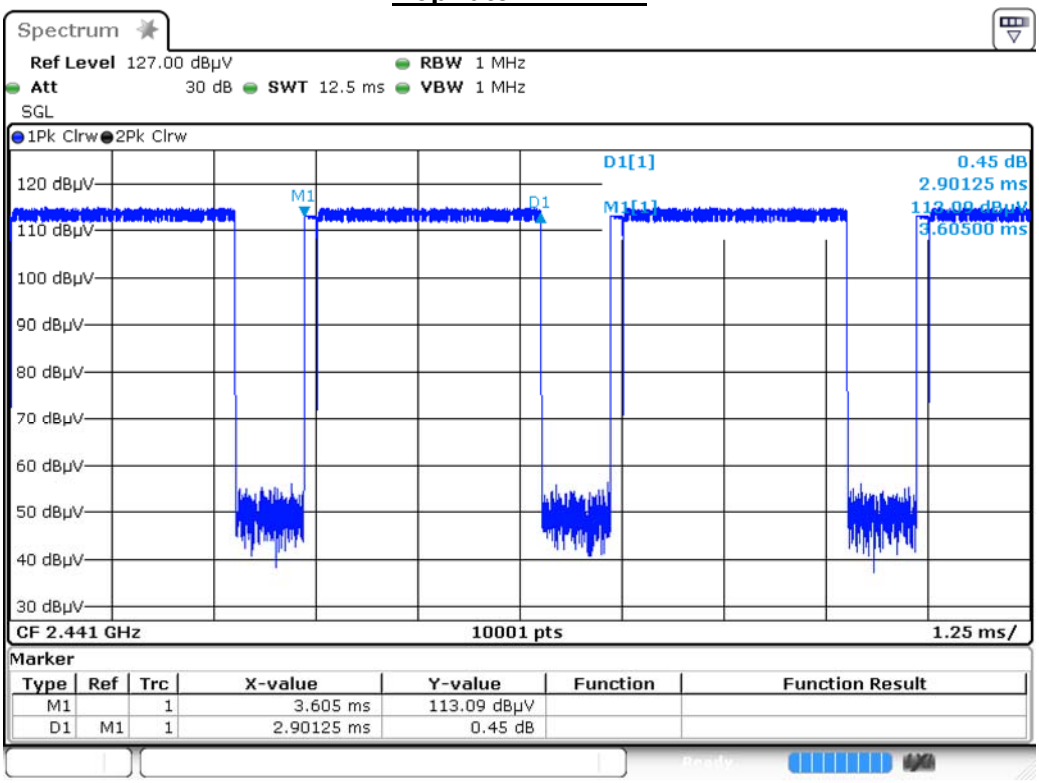
Dwell Time : 0.002903 *(266.67/79)* 31.60= 0.3096 sec。

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

Hop rate-2402MHz

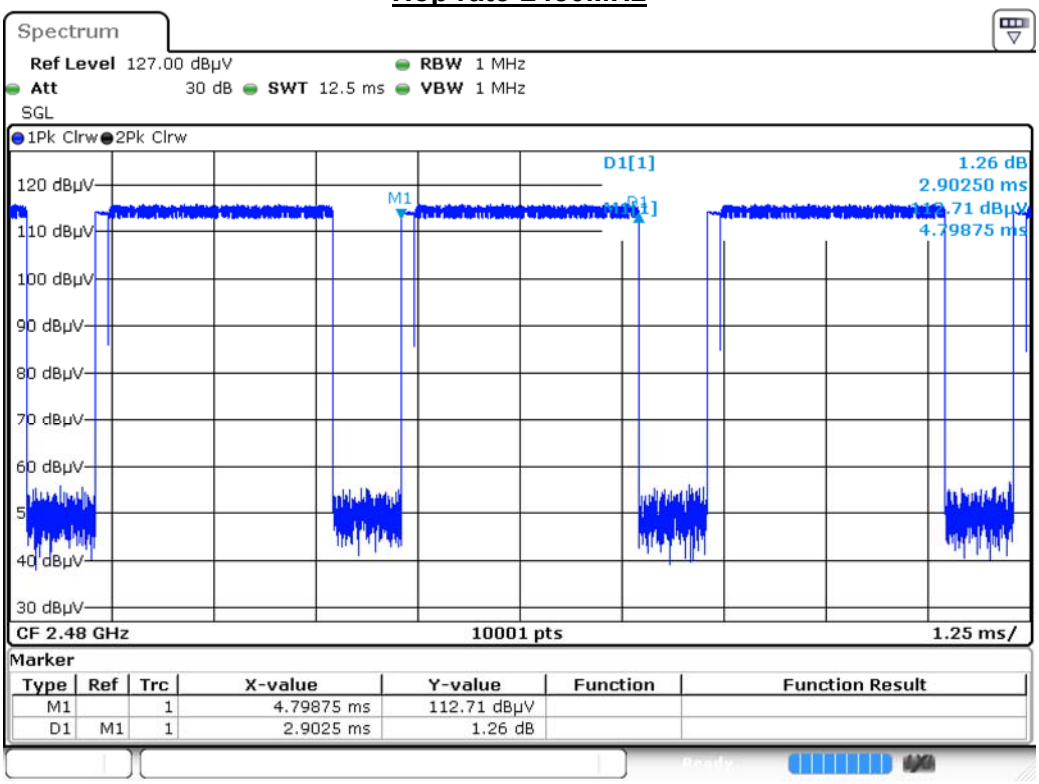


Hop rate-2441MHz



Date: 5.NOV.2017 05:27:09

Hop rate-2480MHz



Date: 5.NOV.2017 05:25:06

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

Product	Verizon Mesh Router		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit Mode		
Date of Test	2017/11/05	Test Site	SR10-H

8-DPSK, 3DH5

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.905 ms = 0.002905 sec

Dwell Time : 0.002905 *(266.67/79)* 31.60= 0.3099 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.908 ms = 0.002908 sec

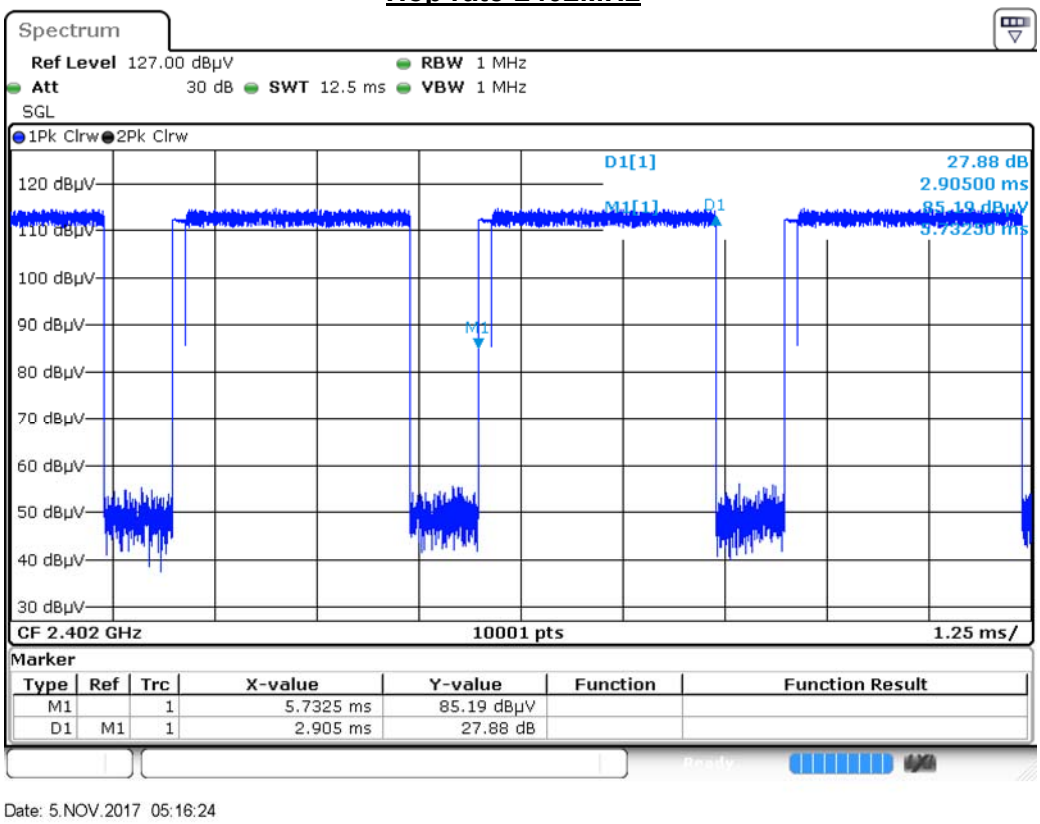
Dwell Time : 0.002908 *(266.67/79)* 31.60= 0.3101 sec。

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

Dwell Time : 0.002904 *(266.67/79)* 31.60= 0.3097 sec。

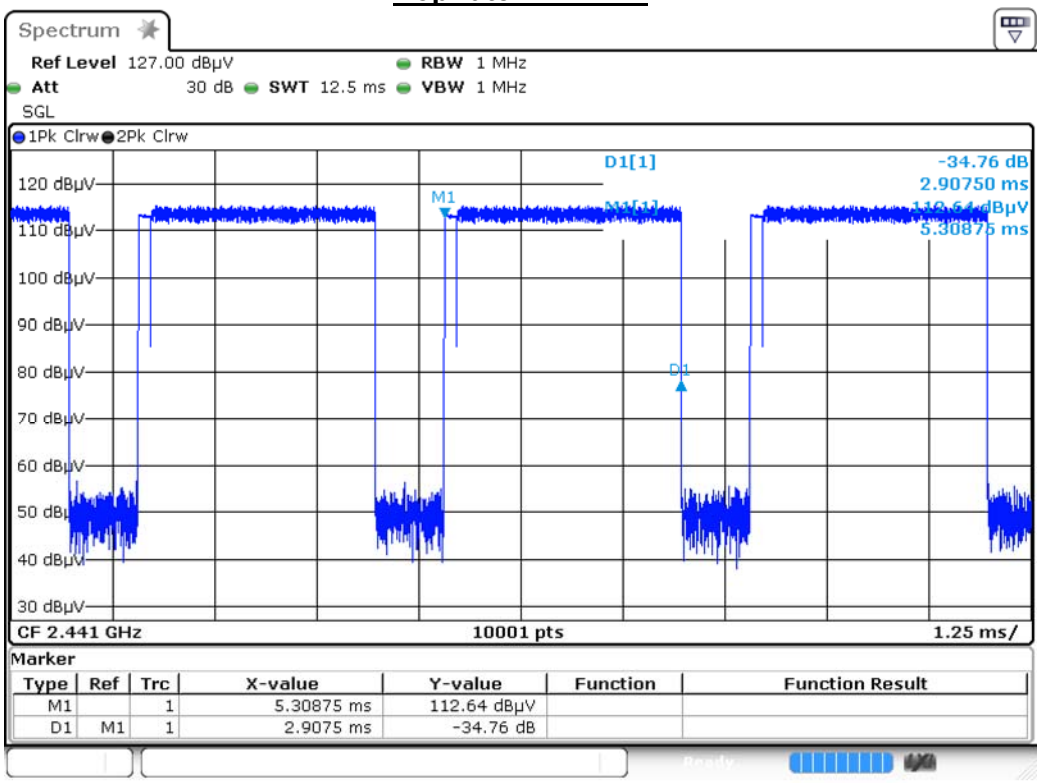
Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

Hop rate-2402MHz



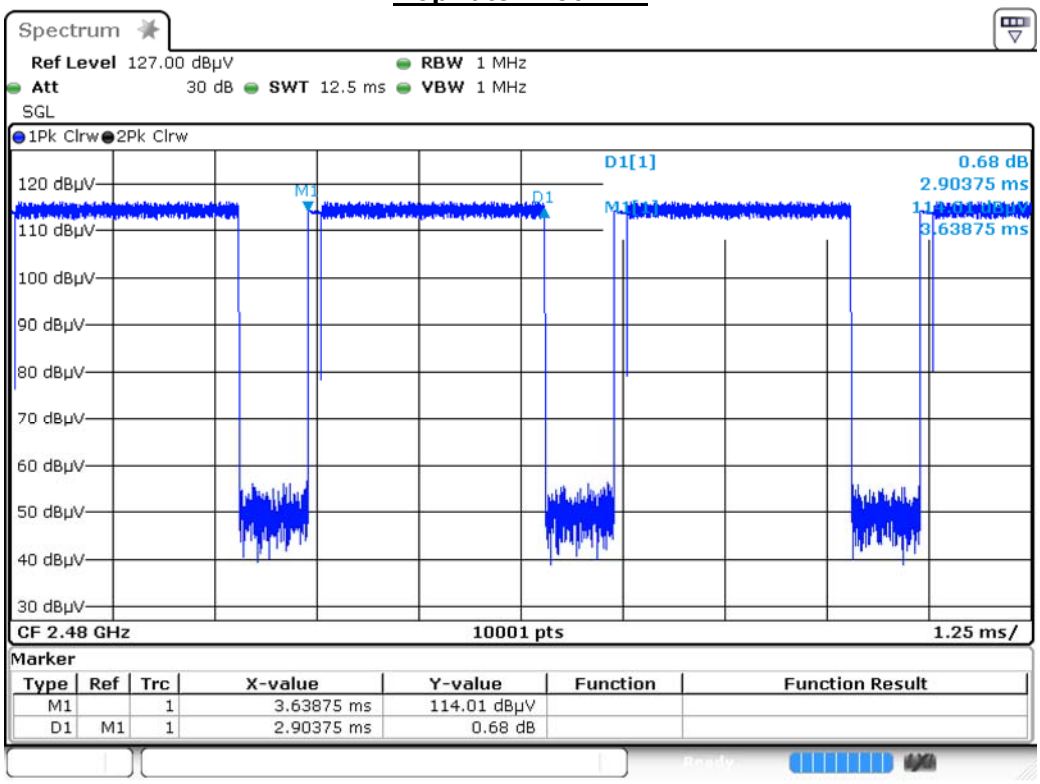
Date: 5.NOV.2017 05:16:24

Hop rate-2441MHz



Date: 5.NOV.2017 05:19:30

Hop rate-2480MHz



Date: 5.NOV.2017 05:21:00

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