FCC Test Report

Product Name	：	UHD751-P
Trade Name	：	Vestel
Model No.	：	UHD751-P
FCC ID.	：	XU6-UHD751P

Applicant	：	VESTEL TRADE CO.
Address	：	Organize Sanayi Bölgesi (45030) Manisa/Türkiye

Date of Receipt	：	Mar. 21, 2017
Issued Date	：	Aug. 21, 2017
Report No.	：	1770382R-RFUSP01V00-B
Report Version	：	V3.0

Testing Laboratory
3024

Test Report Certification

Issued Date : Aug. 21, 2017
Report No. : 1770382R-RFUSP01V00-B

Product Name	:	UHD751-P
Applicant	:	VESTEL TRADE CO.
Address	:	Organize Sanayi Bölgesi (45030) Manisa/Türkiye
Manufacturer	:	VESTEL TRADE CO.
Model No.	:	UHD751-P
FCC ID.	:	XU6-UHD751P
EUT Voltage	:	AC 100-240V, 50-60Hz
Testing Voltage	:	AC 120V/60Hz
Trade Name	:	Vestel
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2015 ANSI C63.10: 2013
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 : Carter Hsu

(Carter Hsu / Senior Engineer)

Approved By : Roy Wang

(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1770382R-RFUSP01V00-B	V3.0	Initial issue of report	Aug. 21, 2017

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1. General Information

1.1. EUT Description

Product Name	UHD751-P
Trade Name	Vestel
Model No.	UHD751-P
Frequency Range/Channel Number	2402~2480MHz / 79 Channels
Type of Modulation	GFSK, π/4-DQPSK, 8-DPSK
HW version	MB120DS

Antenna Information	
Antenna Type	PIFA Antenna
Antenna Gain	2 dBi

Accessories Information	
Power Plugs	1 Set
IR Extender	1 Set
Tripod	1 Set
Remote Control	1 Set
Battery	1 Set

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 UHD751-P including 2.4GHz b/g/n (2x2), BT2.0, BT4.0 and 5GHz a/n (2x2) transmitting and receiving function.
2. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.

1.2. Test Mode

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

Test Mode	
TX	Mode 1: Tx_DH5 Mode 2: Tx_2DH5 Mode 3: Tx_3DH5

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

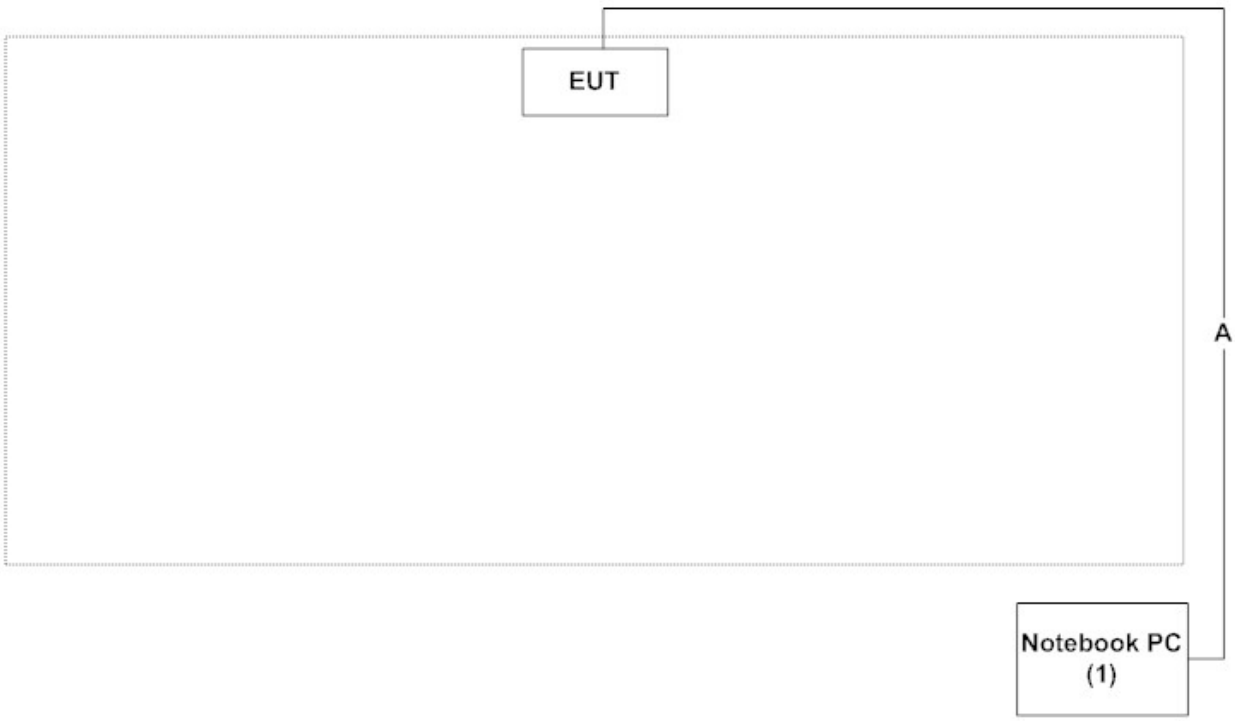
1.3. Tested System Details

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	ASUS	X522EP	E5N0CV043264197	DoC	Non-Shielded, 1.8m, one ferrite core bonded

1.4. Configuration of tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	USB Cable	Non-Shielded, 3m

1.5. EUT Exercise Software

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

1.6. Test Facility

Ambient conditions in the laboratory:

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

Note: Test Site information refers to Laboratory Information.

Laboratory Information

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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2. Conducted Emission

2.1. Test Equipment

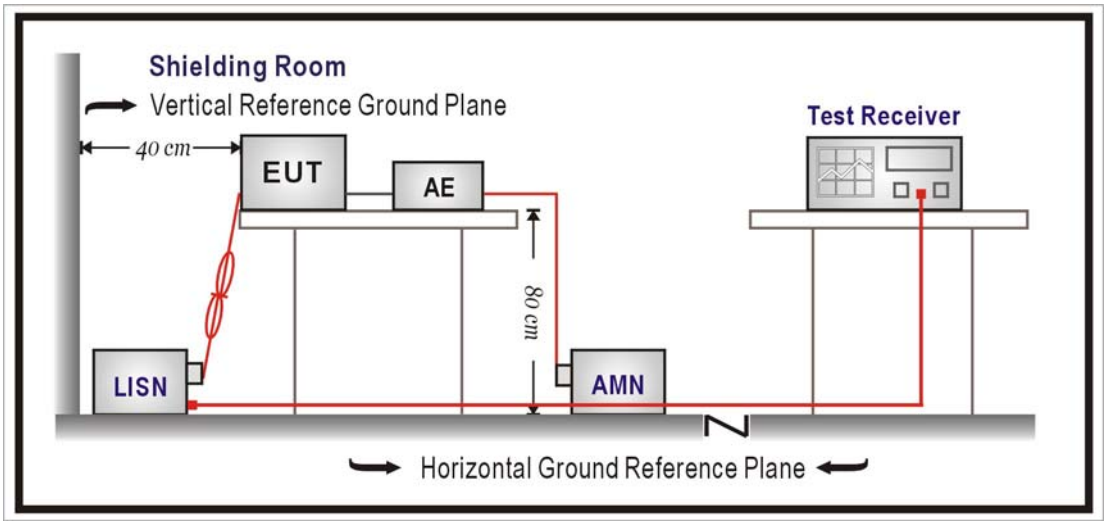
The following test equipment are used during the test:

Conducted Emission / SR2-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2018/02/05
LISN	R&S	ENV216	100092	2017/08/16
Test Receiver	R&S	ESCS 30	836858/022	2018/01/14

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

2.2. Test Setup



2.3. Limits

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

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

2.4. Test Procedure

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

2.5. Test Specification

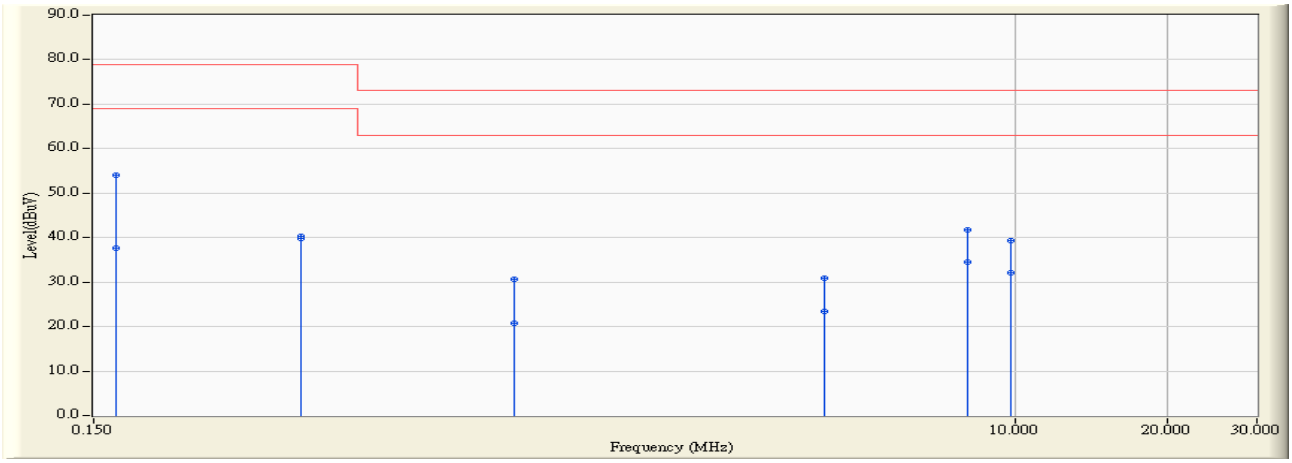
According to FCC Part 15 Subpart C Paragraph 15.207: 2015

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR2-H	**Time : 2017/08/09**
Limit : CISPR_A_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line1	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

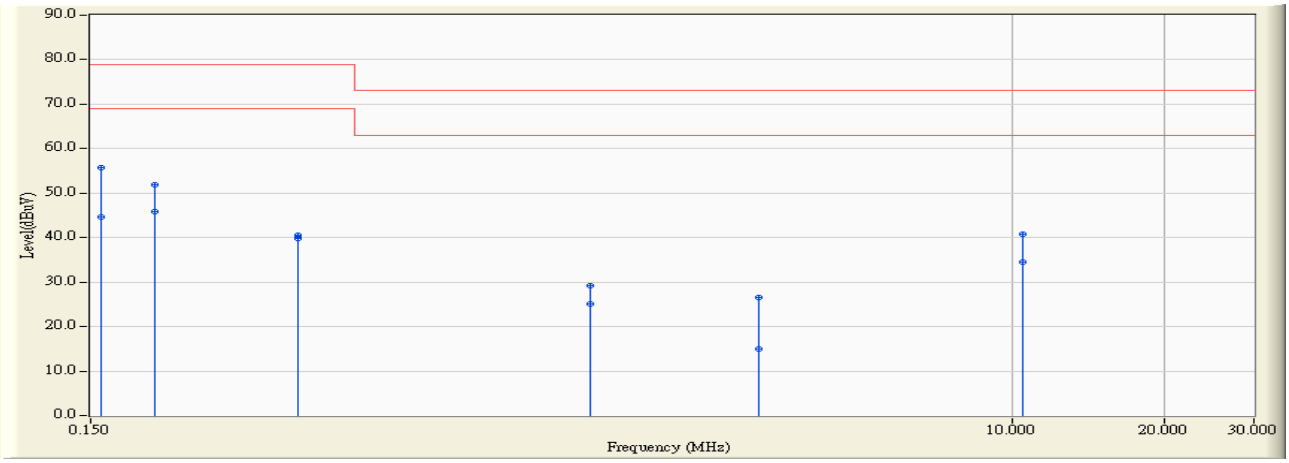


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.166	9.753	44.350	54.103	-24.897	79.000	QUASIPEAK
2		0.166	9.753	27.850	37.603	-28.397	66.000	AVERAGE
3		0.384	9.732	30.540	40.272	-38.728	79.000	QUASIPEAK
4		0.384	9.732	30.020	39.752	-26.248	66.000	AVERAGE
5		1.017	9.821	20.710	30.531	-42.469	73.000	QUASIPEAK
6		1.017	9.821	10.970	20.791	-39.209	60.000	AVERAGE
7		4.197	9.920	20.920	30.840	-42.160	73.000	QUASIPEAK
8		4.197	9.920	13.560	23.480	-36.520	60.000	AVERAGE
9		8.029	10.048	31.660	41.708	-31.292	73.000	QUASIPEAK
10		8.029	10.048	24.500	34.548	-25.452	60.000	AVERAGE
11		9.779	10.121	29.150	39.271	-33.729	73.000	QUASIPEAK
12		9.779	10.121	21.960	32.081	-27.919	60.000	AVERAGE

Note:

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

Site : SR2-H	**Time : 2017/08/09**
Limit : CISPR_A_00M_QP	**Margin : 10**
Probe : SR2_LISN(16A)-6_0712 - Line2	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.751	45.900	55.651	-23.349	79.000	QUASIPEAK
2		0.158	9.751	34.960	44.711	-21.289	66.000	AVERAGE
3		0.201	9.751	42.040	51.791	-27.209	79.000	QUASIPEAK
4	*	0.201	9.751	36.150	45.901	-20.099	66.000	AVERAGE
5		0.384	9.750	30.730	40.480	-38.520	79.000	QUASIPEAK
6		0.384	9.750	30.090	39.840	-26.160	66.000	AVERAGE
7		1.462	9.834	19.450	29.284	-43.716	73.000	QUASIPEAK
8		1.462	9.834	15.230	25.064	-34.936	60.000	AVERAGE
9		3.154	9.844	16.730	26.574	-46.426	73.000	QUASIPEAK
10		3.154	9.844	5.170	15.014	-44.986	60.000	AVERAGE
11		10.463	10.165	30.510	40.675	-32.325	73.000	QUASIPEAK
12		10.463	10.165	24.240	34.405	-25.595	60.000	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

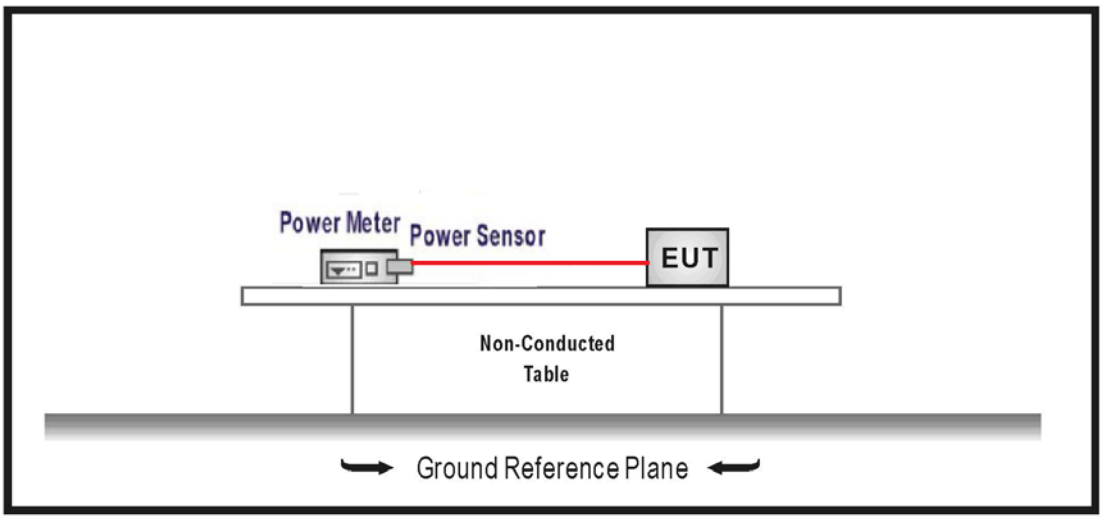
The following test equipment is used during the test:

Peak Power Output / SR10-H

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

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

3.2. Test Setup



3.3. Test procedures

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

3.4. Limits

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

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

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

3.5. Test Specification

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

3.6. Test Result

Product	UHD751-P		
Test Item	Peak Power Output		
Test Mode	Mode 1: Tx_DH5		
Date of Test	2017/03/21	Test Site	SR10-H

GFSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	-1.160	30	Pass
39	2441	-1.020	30	Pass
78	2480	-0.970	30	Pass

Product	UHD751-P		
Test Item	Peak Power Output		
Test Mode	Mode 2: Tx_2DH5		
Date of Test	2017/03/21	Test Site	SR10-H

π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	1.620	30	Pass
39	2441	1.890	30	Pass
78	2480	1.920	30	Pass

Product	UHD751-P		
Test Item	Peak Power Output		
Test Mode	Mode 3: Tx_3DH5		
Date of Test	2017/03/21	Test Site	SR10-H

8-DPSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	2.190	30	Pass
39	2441	2.370	30	Pass
78	2480	2.540	30	Pass

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the test:

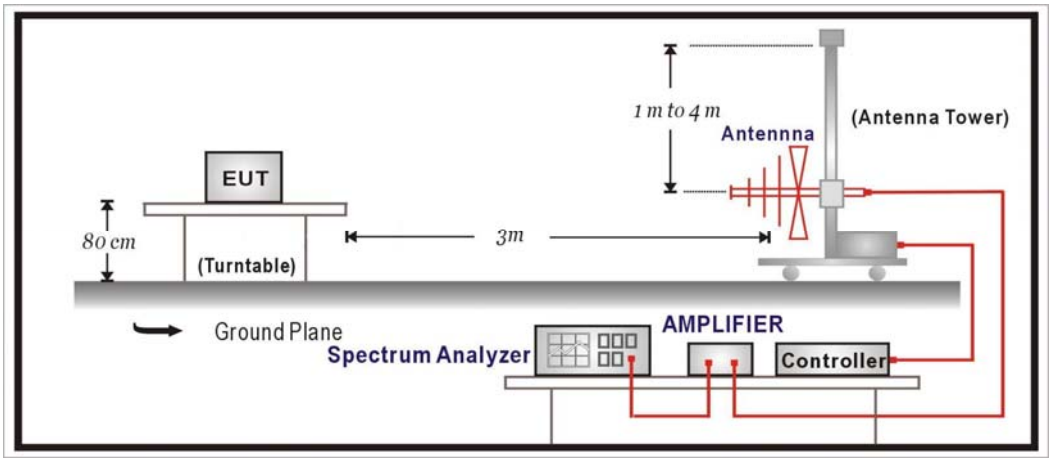
Radiated Emission / CB4-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Bilog Antenna	Schaffner	CBL6112B	2891	2017/08/14
Horn Antenna	Schwarzbeck	BBHA 9120	D312	2017/10/25
Pre-Amplifier	EMCI	EMC0031835	980233	2018/02/02
Pre-Amplifier	Schwarzbeck	DBL-1840N506	013	2017/09/29
Pre-Amplifier	Miteq	JS41-001040000-58-5P	1573954	2017/10/04
Horn Antenna	Schwarzbeck	BBHA 9170	203	2017/08/28
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22

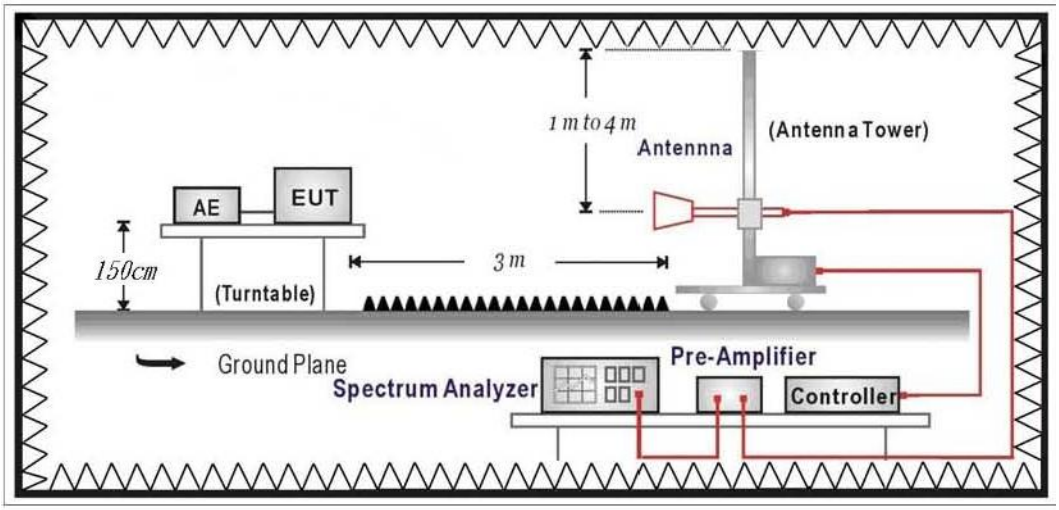
Note: All equipment that need to calibrate are with calibration period of 1 year.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

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

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

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

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

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

4.4. Test Procedure

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

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

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

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

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

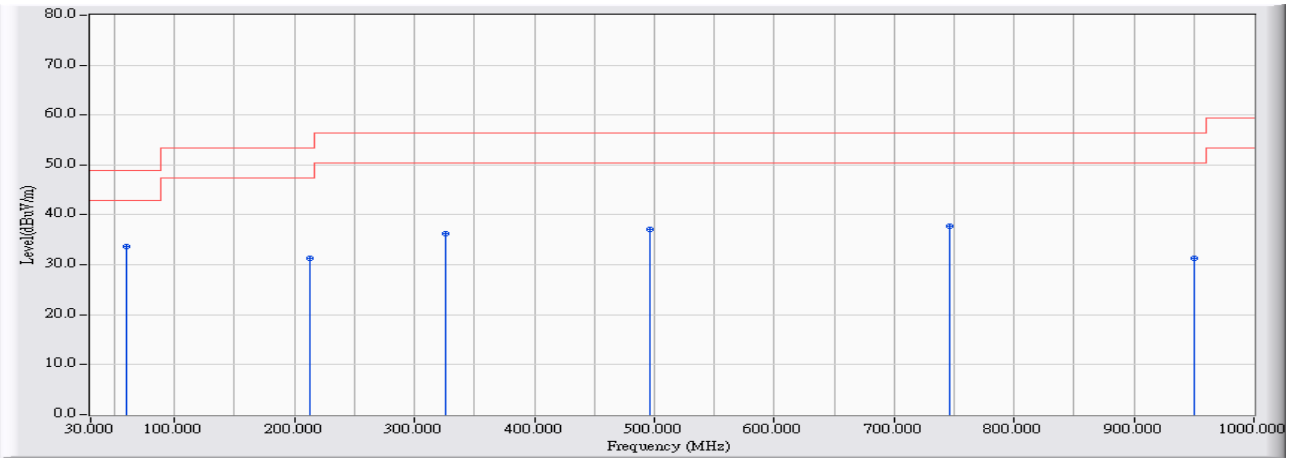
4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

4.6. Test Result

30MHz-1GHz Spurious

Site : CB4-H	**Time : 2017/08/01**
Limit : FCC_CLASS_A_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

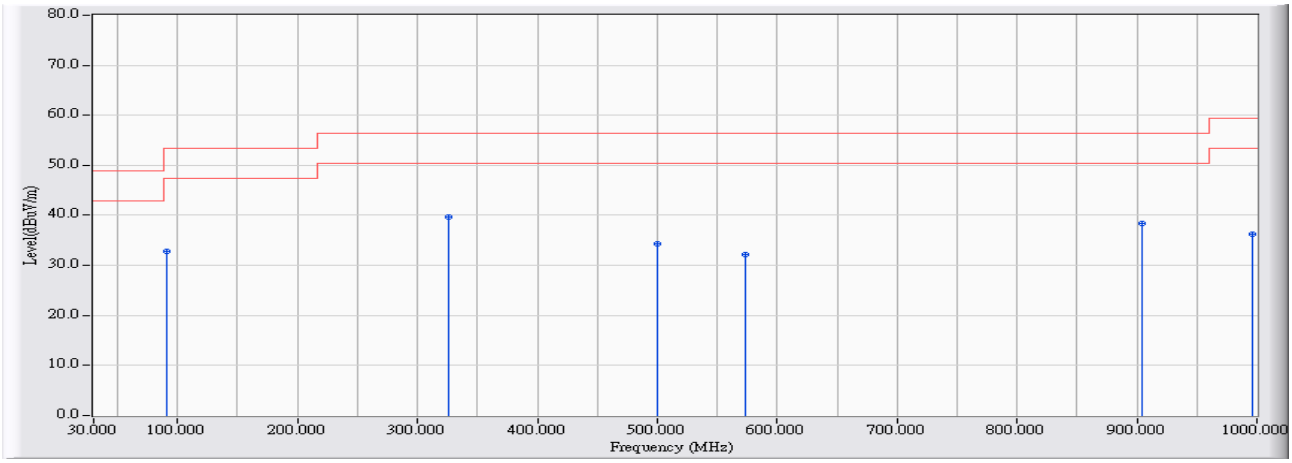


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	59.388	-28.026	61.758	33.732	-15.268	49.000	QUASIPEAK
2		213.409	-22.449	53.777	31.328	-22.172	53.500	QUASIPEAK
3		326.014	-18.770	54.947	36.178	-20.222	56.400	QUASIPEAK
4		496.620	-14.472	51.492	37.020	-19.380	56.400	QUASIPEAK
5		746.661	-11.656	49.349	37.693	-18.707	56.400	QUASIPEAK
6		949.856	-7.819	39.158	31.339	-25.061	56.400	QUASIPEAK

Note:

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

Site : CB4-H	**Time : 2017/08/01**
Limit : FCC_CLASS_A_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

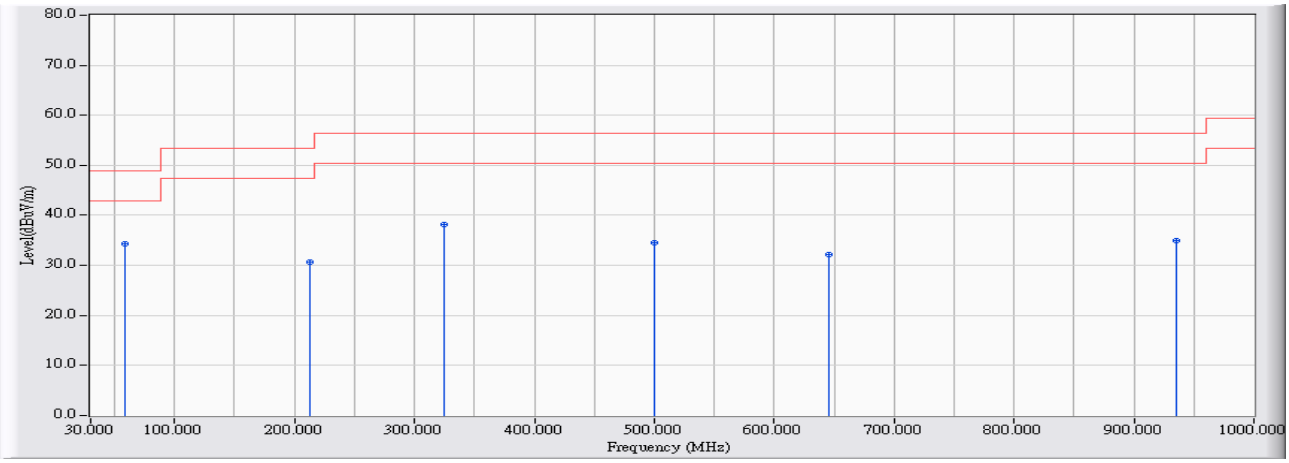


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		90.328	-25.415	58.266	32.851	-20.649	53.500	QUASIPEAK
2	*	325.432	-18.804	58.512	39.708	-16.692	56.400	QUASIPEAK
3		500.597	-14.400	48.620	34.220	-22.180	56.400	QUASIPEAK
4		573.922	-13.463	45.643	32.180	-24.220	56.400	QUASIPEAK
5		904.368	-9.876	48.226	38.350	-18.050	56.400	QUASIPEAK
6		996.508	-7.599	43.828	36.228	-23.272	59.500	QUASIPEAK

Note:

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

Site : CB4-H	**Time : 2017/08/01**
Limit : FCC_CLASS_A_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

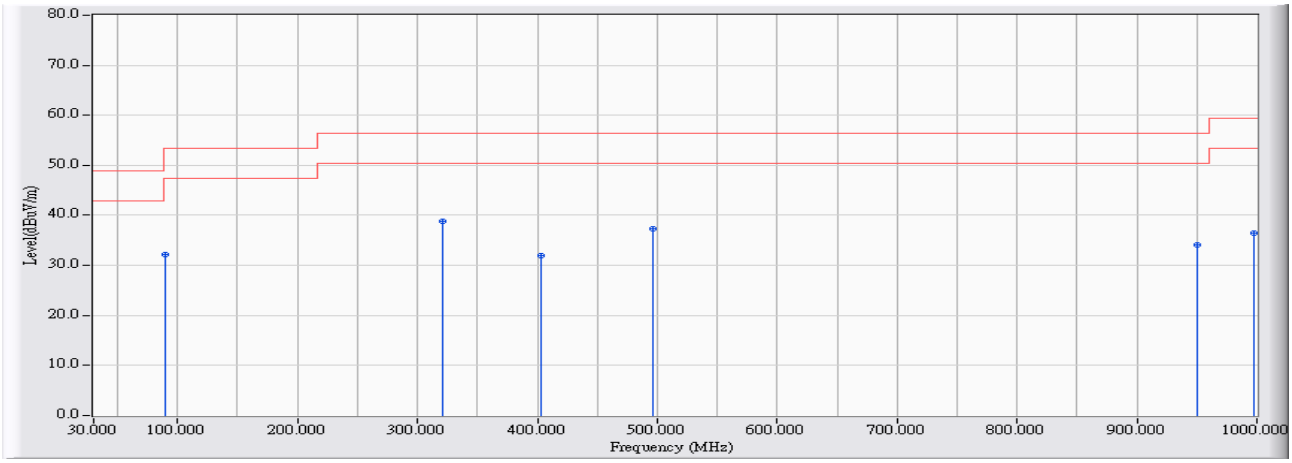


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	58.612	-27.815	62.120	34.306	-14.694	49.000	QUASIPEAK
2		212.924	-22.468	53.038	30.570	-22.930	53.500	QUASIPEAK
3		324.366	-18.868	57.133	38.266	-18.134	56.400	QUASIPEAK
4		500.306	-14.411	48.978	34.568	-21.832	56.400	QUASIPEAK
5		645.888	-13.311	45.476	32.165	-24.235	56.400	QUASIPEAK
6		935.792	-8.008	42.949	34.941	-21.459	56.400	QUASIPEAK

Note:

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

Site : CB4-H	**Time : 2017/08/01**
Limit : FCC_CLASS_A_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

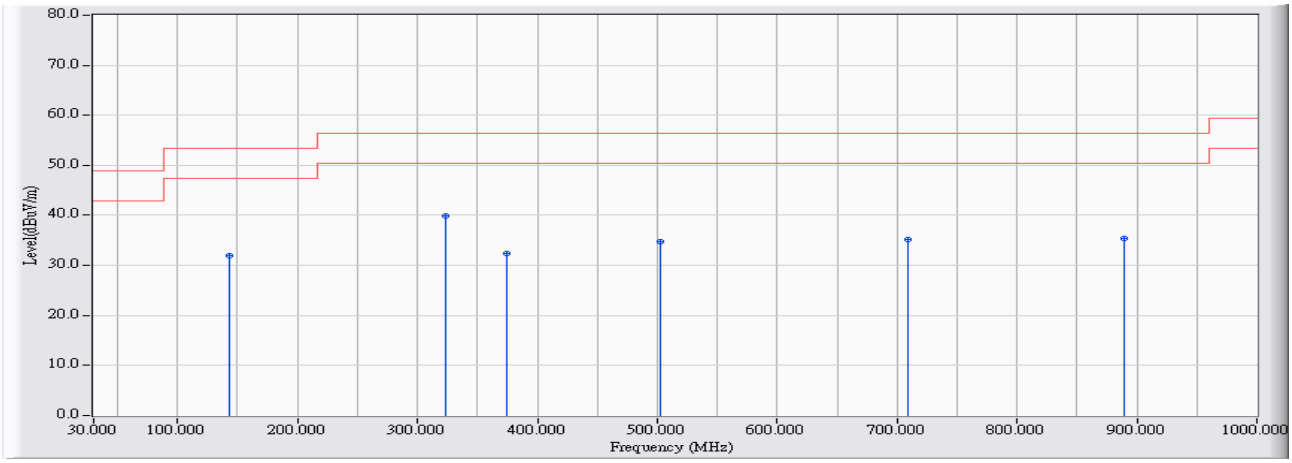


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		89.940	-25.485	57.691	32.205	-21.295	53.500	QUASIPEAK
2	*	321.456	-19.040	57.883	38.843	-17.557	56.400	QUASIPEAK
3		403.316	-15.945	48.006	32.062	-24.338	56.400	QUASIPEAK
4		496.523	-14.474	51.725	37.252	-19.148	56.400	QUASIPEAK
5		950.244	-7.829	41.874	34.045	-22.355	56.400	QUASIPEAK
6		997.866	-7.497	43.868	36.371	-23.129	59.500	QUASIPEAK

Note:

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

Site : CB4-H	**Time : 2017/08/01**
Limit : FCC_CLASS_A_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

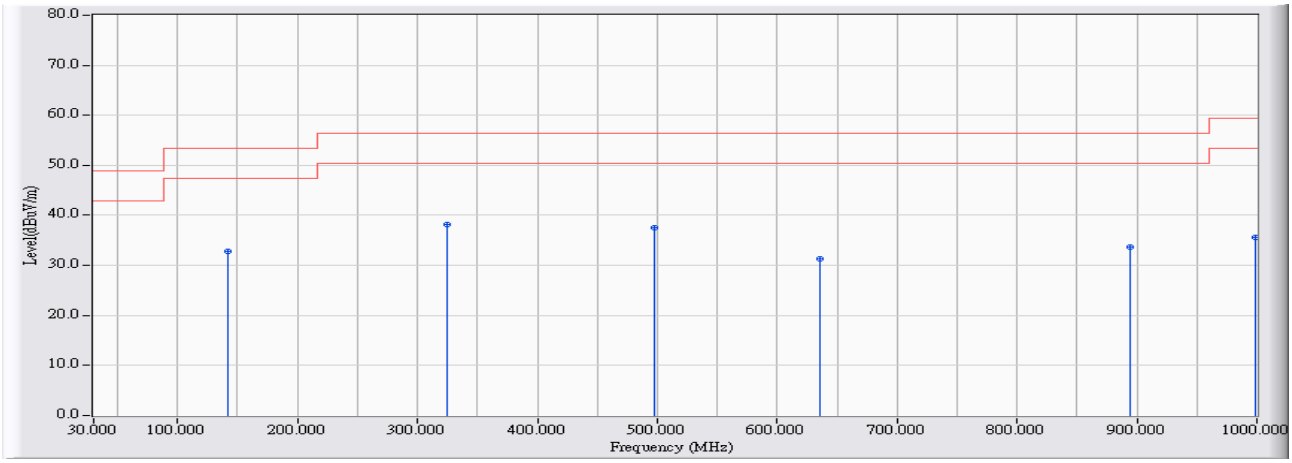


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		142.994	-21.812	53.749	31.937	-21.563	53.500	QUASIPEAK
2	*	322.911	-18.954	58.740	39.786	-16.614	56.400	QUASIPEAK
3		374.122	-17.301	49.662	32.361	-24.039	56.400	QUASIPEAK
4		502.440	-14.317	49.048	34.731	-21.669	56.400	QUASIPEAK
5		709.417	-12.315	47.393	35.078	-21.322	56.400	QUASIPEAK
6		889.916	-8.789	44.126	35.337	-21.063	56.400	QUASIPEAK

Note:

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

Site : CB4-H	**Time : 2017/08/01**
Limit : FCC_CLASS_A_03M_QP	**Margin : 6**
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**



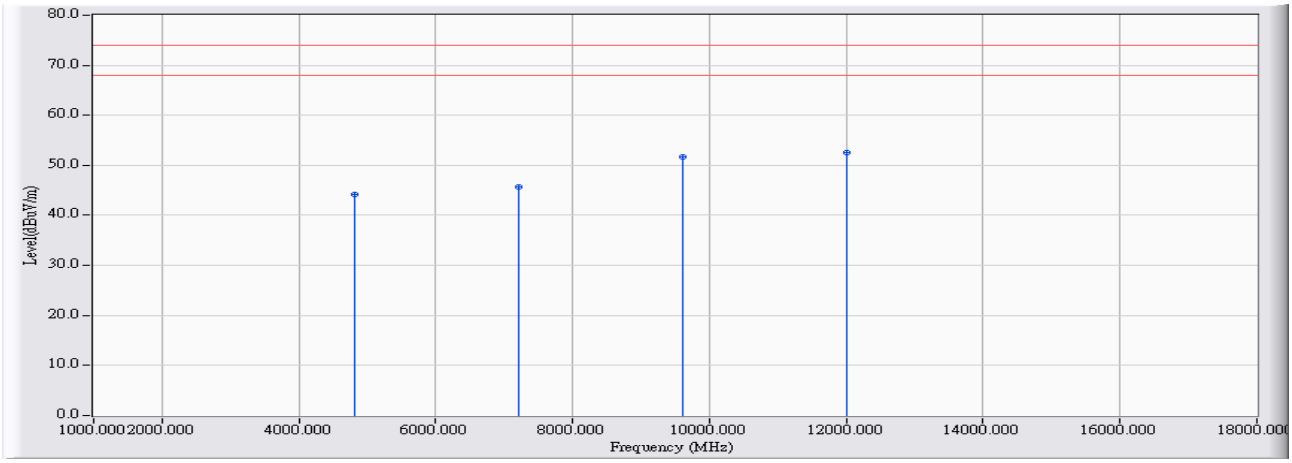
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		142.218	-21.764	54.563	32.799	-20.701	53.500	QUASIPEAK
2	*	324.269	-18.873	57.052	38.179	-18.221	56.400	QUASIPEAK
3		498.075	-14.453	52.021	37.568	-18.832	56.400	QUASIPEAK
4		636.189	-12.937	44.220	31.283	-25.117	56.400	QUASIPEAK
5		893.796	-8.992	42.685	33.693	-22.707	56.400	QUASIPEAK
6		999.224	-7.394	43.067	35.672	-23.828	59.500	QUASIPEAK

Note:

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

Harmonic & Spurious:

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

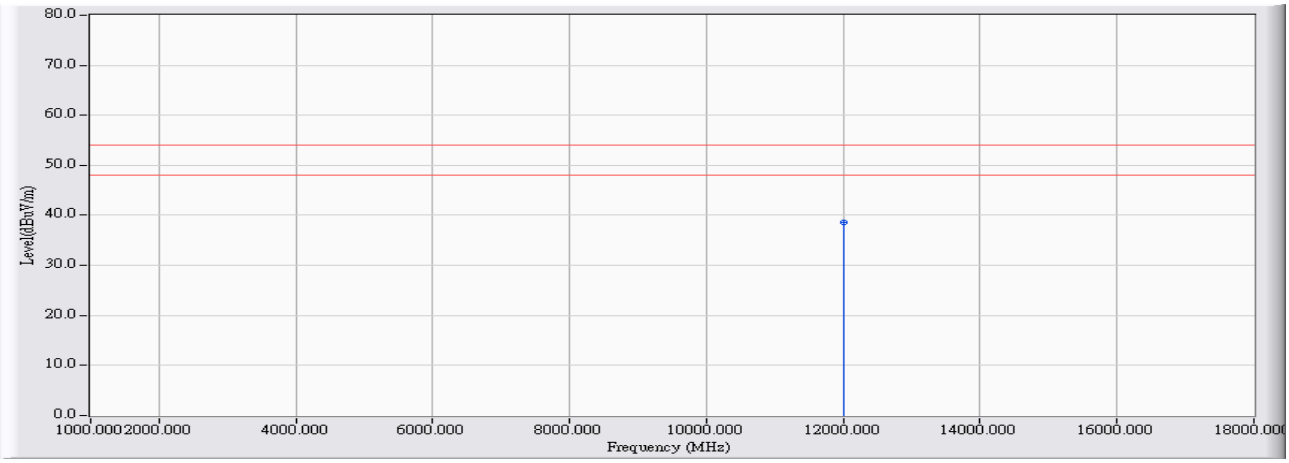


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.209	44.350	44.142	-29.858	74.000	PEAK
2		7206.000	6.970	38.640	45.609	-28.391	74.000	PEAK
3		9608.000	12.540	39.060	51.601	-22.399	74.000	PEAK
4	*	12010.000	15.516	37.110	52.626	-21.374	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

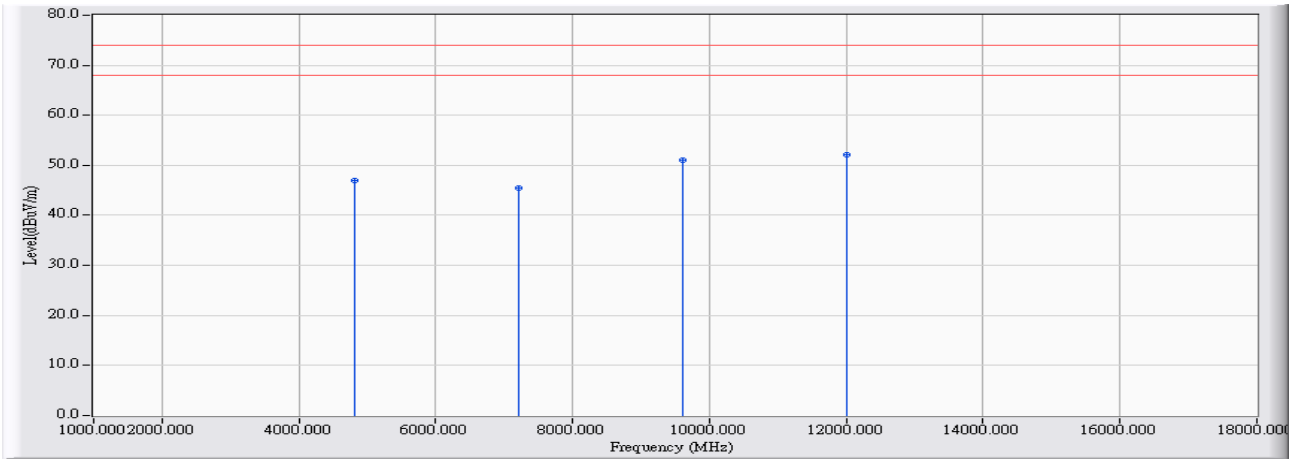


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12010.000	15.516	23.120	38.636	-15.364	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

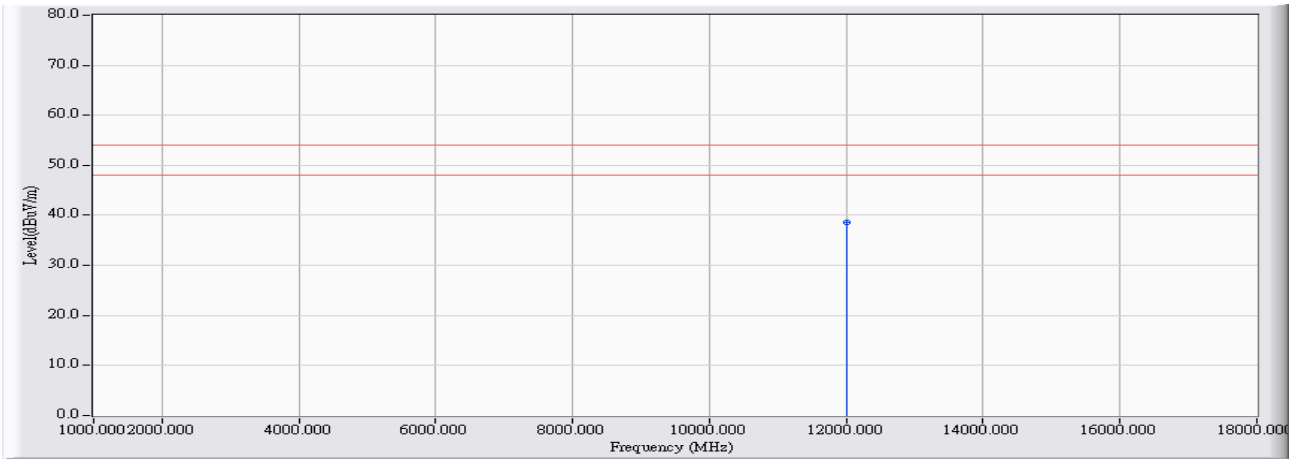


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.209	47.160	46.952	-27.048	74.000	PEAK
2		7206.000	6.970	38.602	45.571	-28.429	74.000	PEAK
3		9608.000	12.540	38.400	50.941	-23.059	74.000	PEAK
4	*	12010.000	15.516	36.640	52.156	-21.844	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

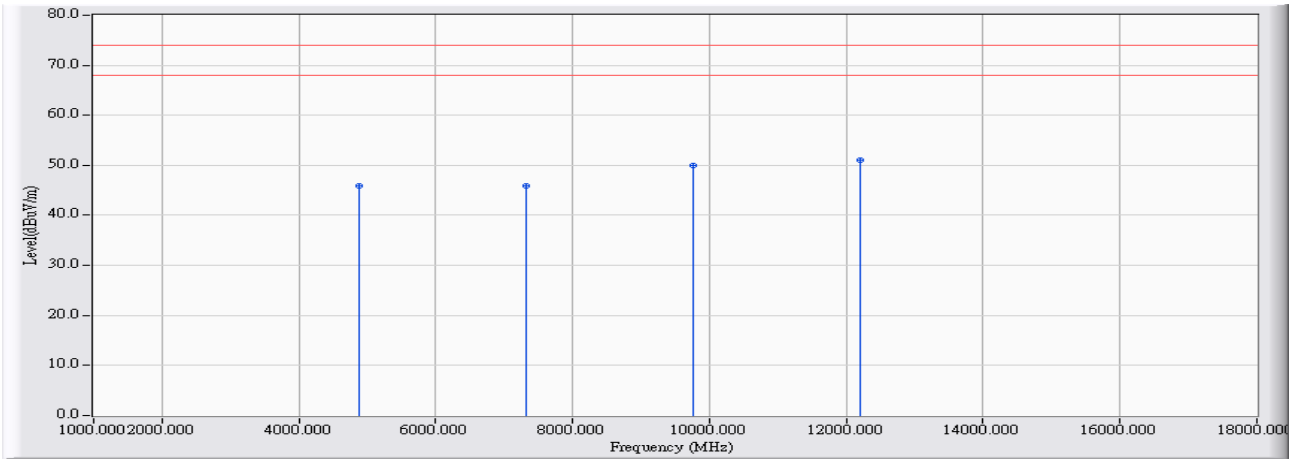


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12010.000	15.516	23.110	38.626	-15.374	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

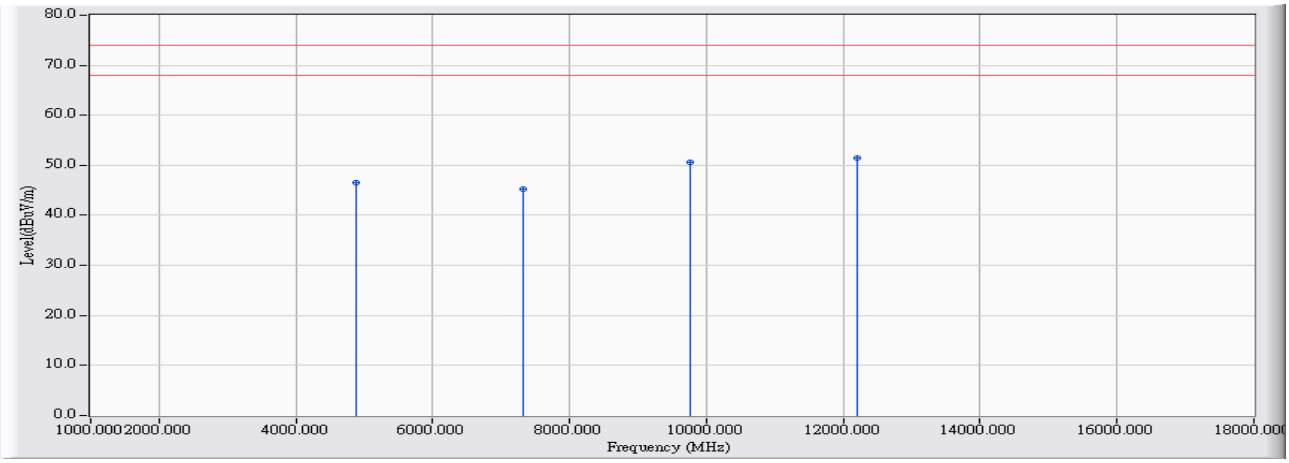


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-0.124	46.060	45.937	-28.063	74.000	PEAK
2		7323.000	7.448	38.430	45.877	-28.123	74.000	PEAK
3		9764.000	12.871	37.030	49.901	-24.099	74.000	PEAK
4	*	12205.000	14.834	36.170	51.004	-22.996	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

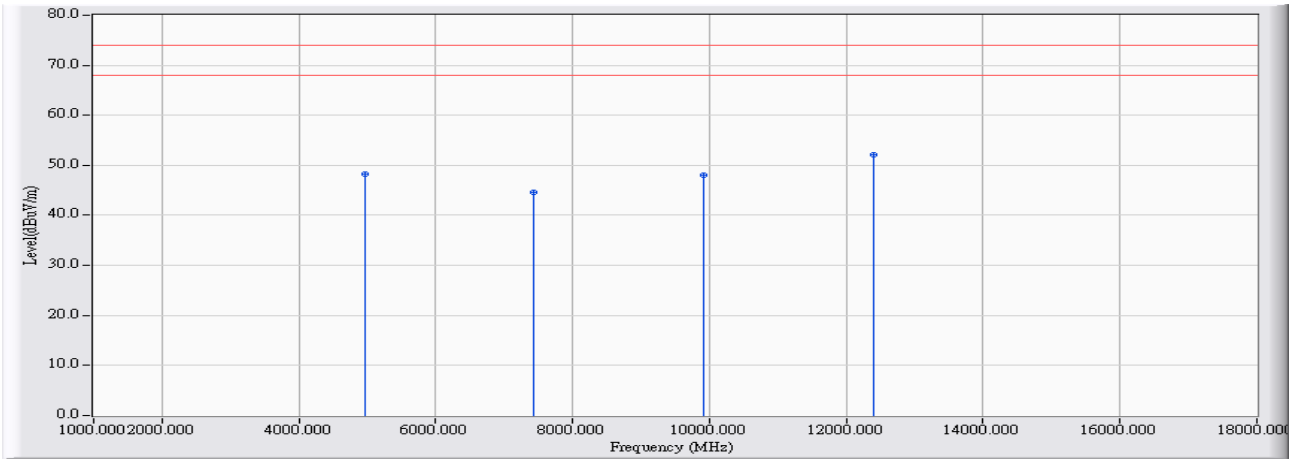


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-0.124	46.630	46.507	-27.493	74.000	PEAK
2		7323.000	7.448	37.900	45.347	-28.653	74.000	PEAK
3		9764.000	12.871	37.780	50.651	-23.349	74.000	PEAK
4	*	12205.000	14.834	36.650	51.484	-22.516	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2480MHz**

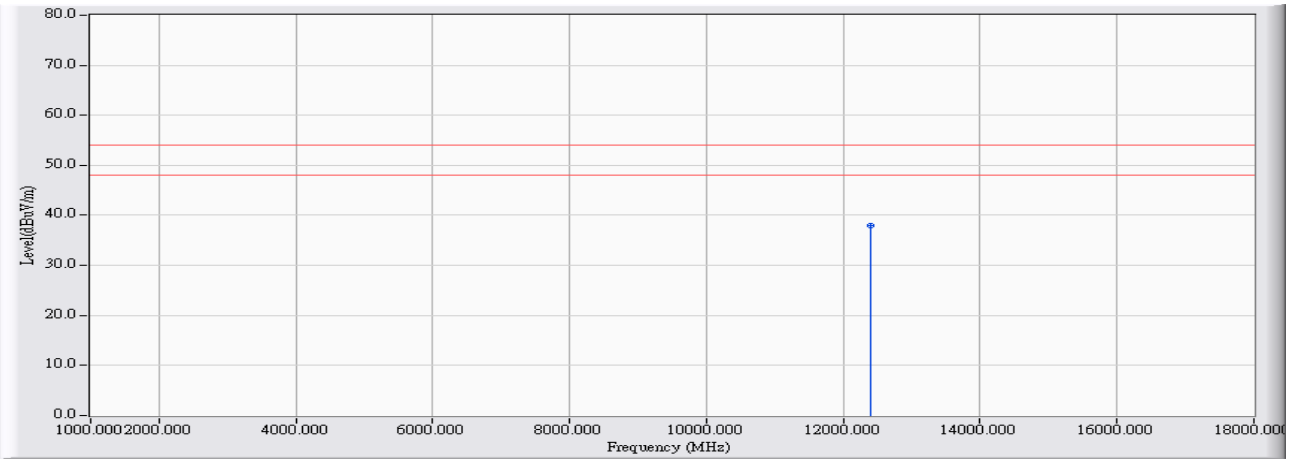


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-0.034	48.311	48.277	-25.723	74.000	PEAK
2		7440.000	7.868	36.850	44.718	-29.282	74.000	PEAK
3		9920.000	13.091	35.000	48.091	-25.909	74.000	PEAK
4	*	12400.000	15.733	36.460	52.193	-21.807	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2480MHz**

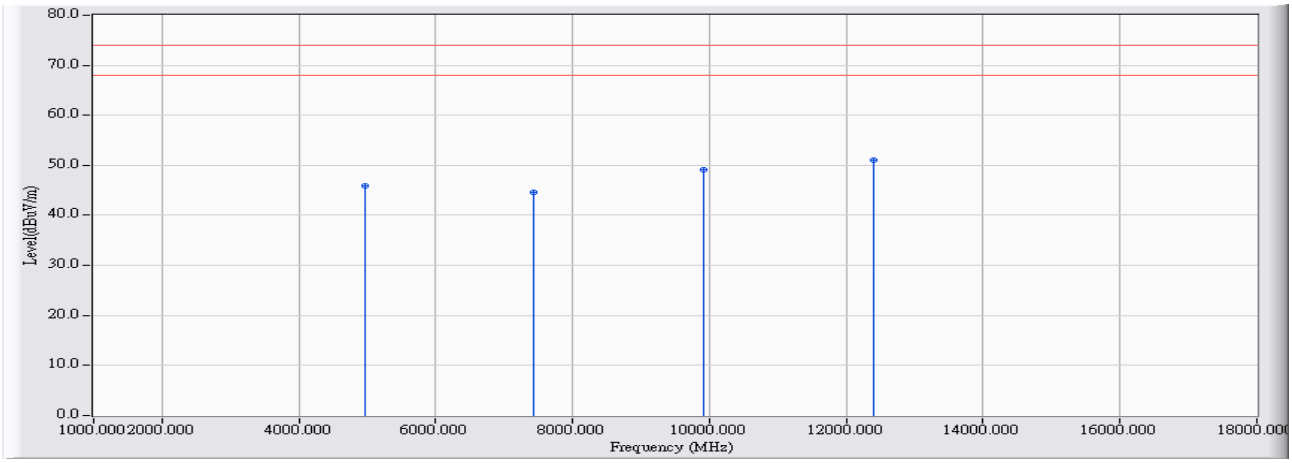


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12400.000	15.733	22.140	37.873	-16.127	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2480MHz**

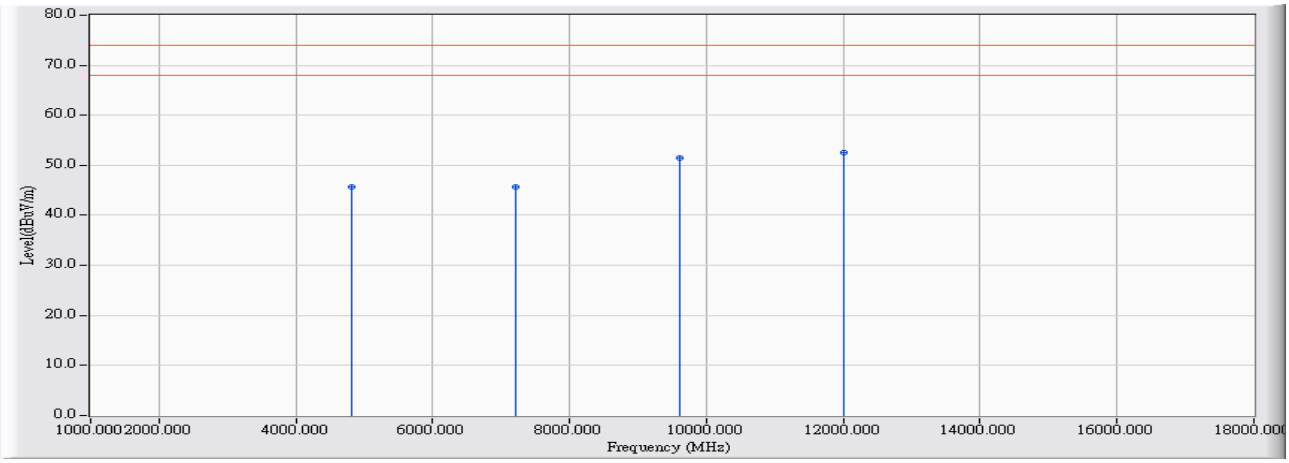


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-0.034	45.980	45.946	-28.054	74.000	PEAK
2		7440.000	7.868	36.670	44.538	-29.462	74.000	PEAK
3		9920.000	13.091	36.080	49.171	-24.829	74.000	PEAK
4	*	12400.000	15.733	35.380	51.113	-22.887	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2402MHz**

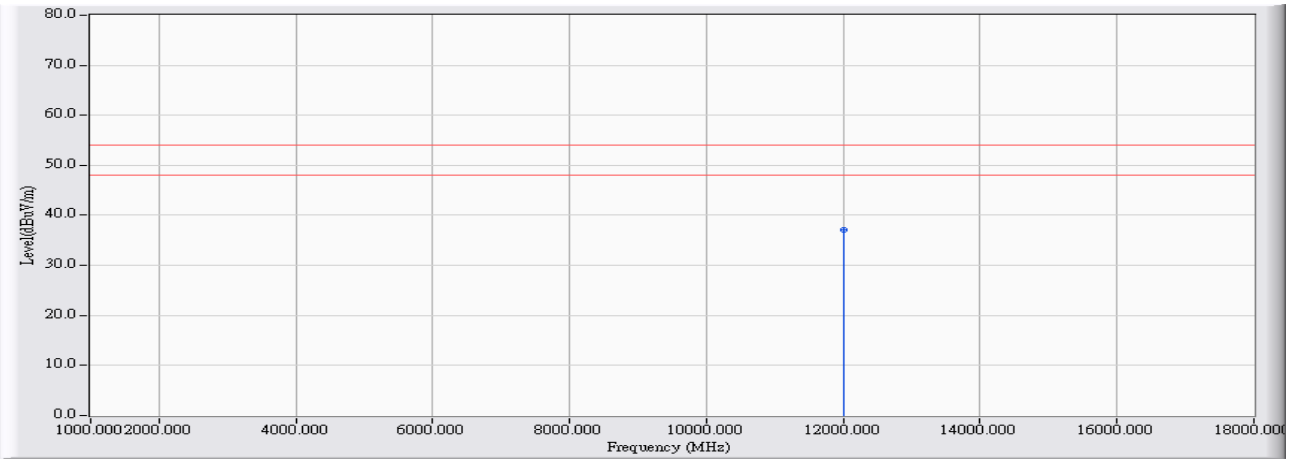


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.209	45.900	45.692	-28.308	74.000	PEAK
2		7206.000	6.970	38.720	45.689	-28.311	74.000	PEAK
3		9608.000	12.540	38.950	51.491	-22.509	74.000	PEAK
4	*	12010.000	15.516	36.980	52.496	-21.504	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2402MHz**

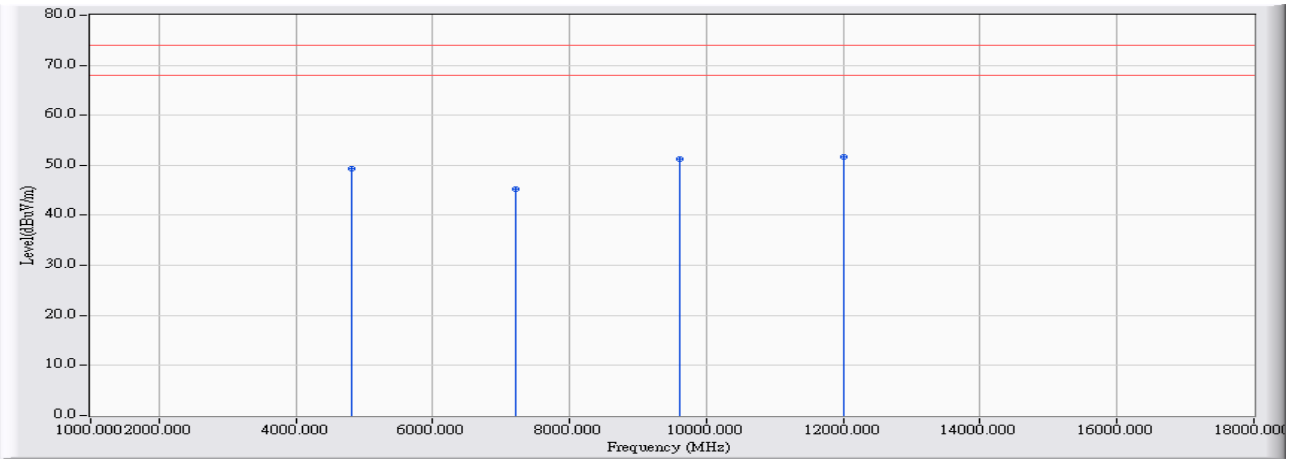


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	12010.000	15.516	21.650	37.166	-16.834	54.000	AVERAGE

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2402MHz**

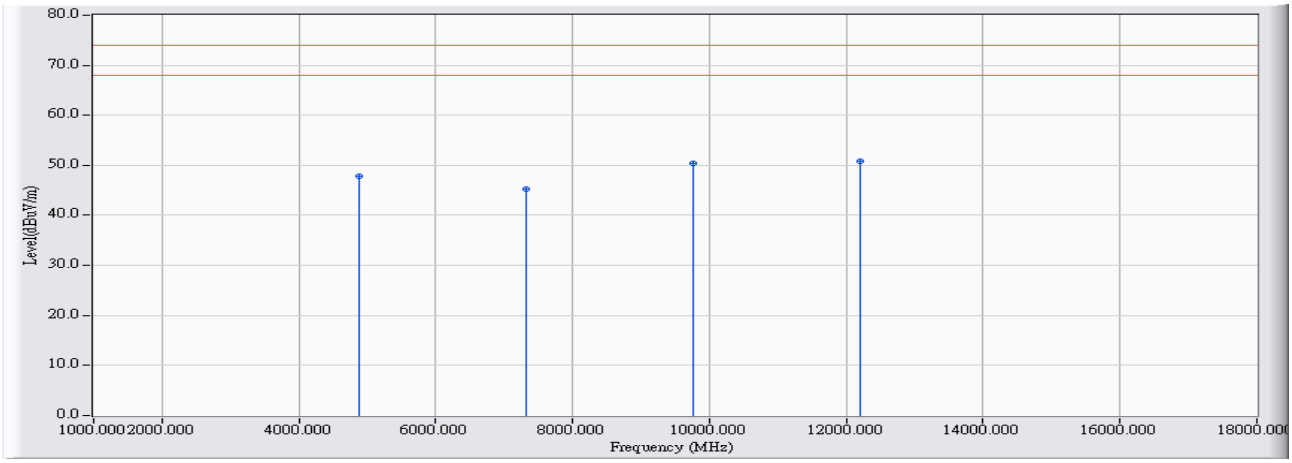


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.209	49.600	49.392	-24.608	74.000	PEAK
2		7206.000	6.970	38.260	45.229	-28.771	74.000	PEAK
3		9608.000	12.540	38.710	51.251	-22.749	74.000	PEAK
4	*	12010.000	15.516	36.120	51.636	-22.364	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

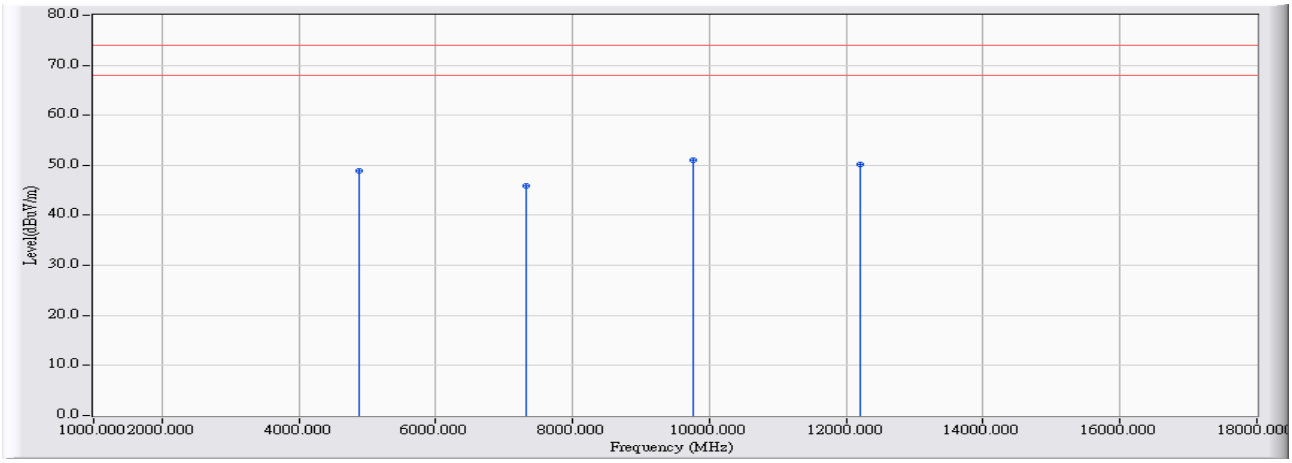


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-0.124	47.970	47.847	-26.153	74.000	PEAK
2		7323.000	7.448	37.910	45.357	-28.643	74.000	PEAK
3		9764.000	12.871	37.520	50.391	-23.609	74.000	PEAK
4	*	12205.000	14.834	36.030	50.864	-23.136	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

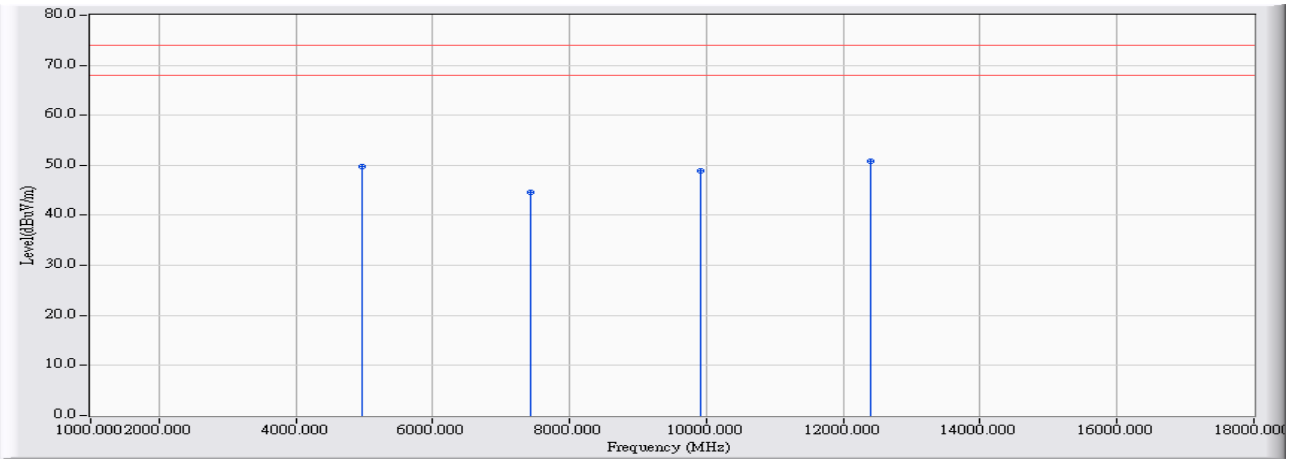


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-0.124	49.010	48.887	-25.113	74.000	PEAK
2		7323.000	7.448	38.350	45.797	-28.203	74.000	PEAK
3	*	9764.000	12.871	38.260	51.131	-22.869	74.000	PEAK
4		12205.000	14.834	35.350	50.184	-23.816	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2480MHz**

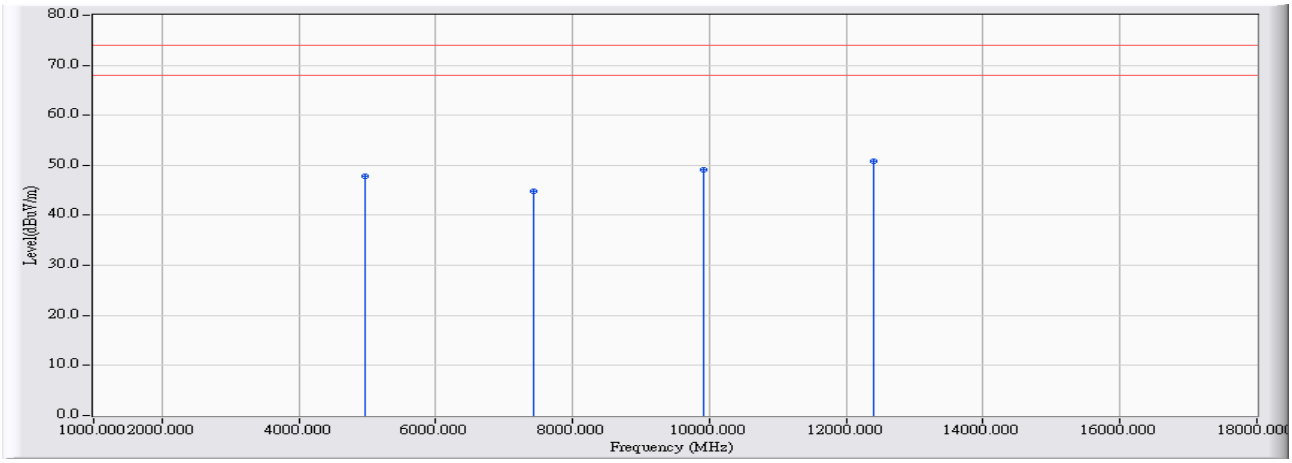


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-0.034	49.760	49.726	-24.274	74.000	PEAK
2		7440.000	7.868	36.800	44.668	-29.332	74.000	PEAK
3		9920.000	13.091	35.890	48.981	-25.019	74.000	PEAK
4	*	12400.000	15.733	35.160	50.893	-23.107	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2480MHz**

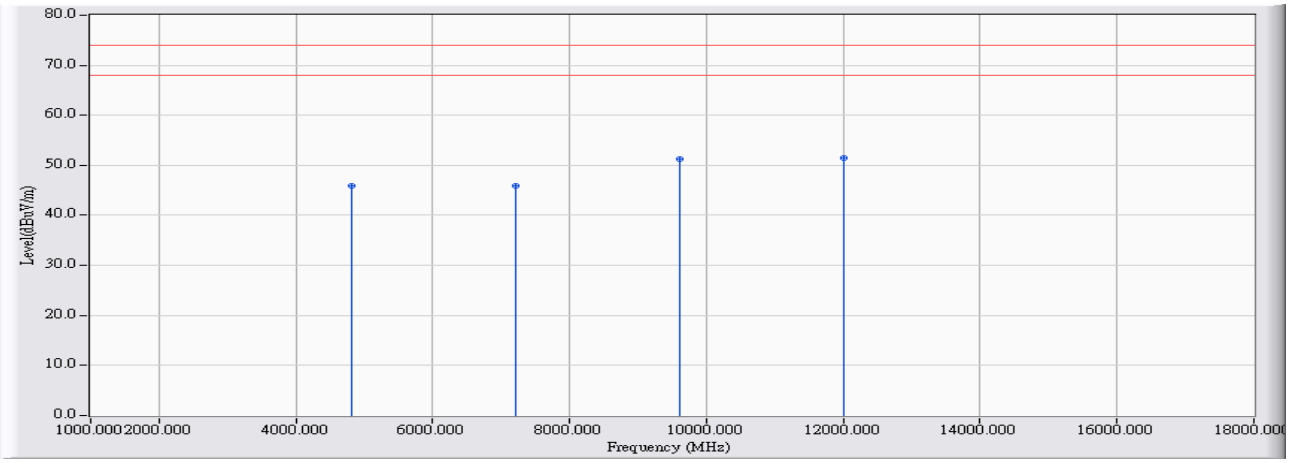


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-0.034	47.870	47.836	-26.164	74.000	PEAK
2		7440.000	7.868	36.950	44.818	-29.182	74.000	PEAK
3		9920.000	13.091	36.090	49.181	-24.819	74.000	PEAK
4	*	12400.000	15.733	35.200	50.933	-23.067	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2402MHz**

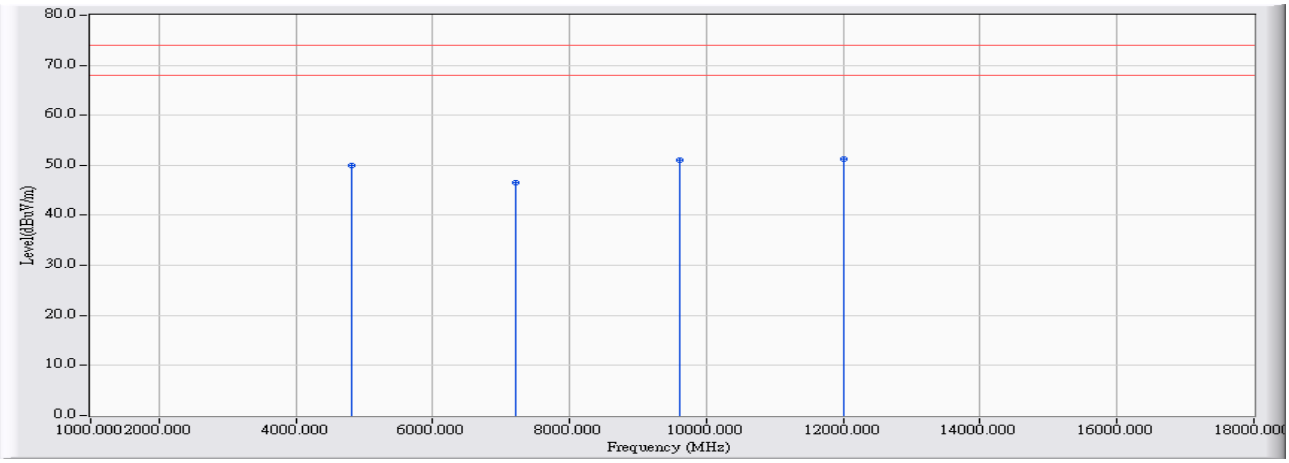


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.209	46.160	45.952	-28.048	74.000	PEAK
2		7206.000	6.970	38.860	45.829	-28.171	74.000	PEAK
3		9608.000	12.540	38.750	51.291	-22.709	74.000	PEAK
4	*	12010.000	15.516	35.930	51.446	-22.554	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2402MHz**

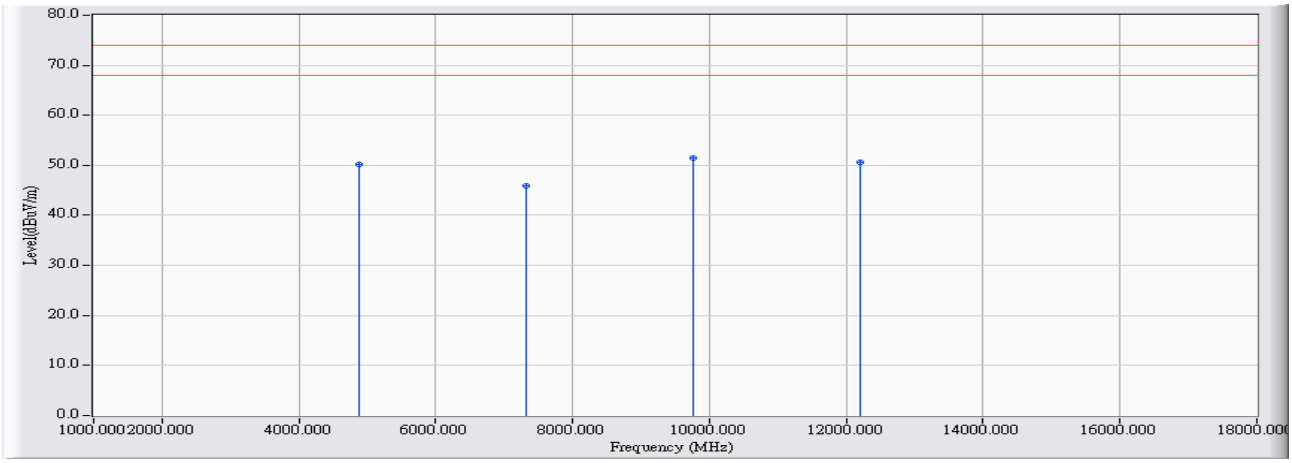


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.209	50.140	49.932	-24.068	74.000	PEAK
2		7206.000	6.970	39.610	46.579	-27.421	74.000	PEAK
3		9608.000	12.540	38.610	51.151	-22.849	74.000	PEAK
4	*	12010.000	15.516	35.840	51.356	-22.644	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

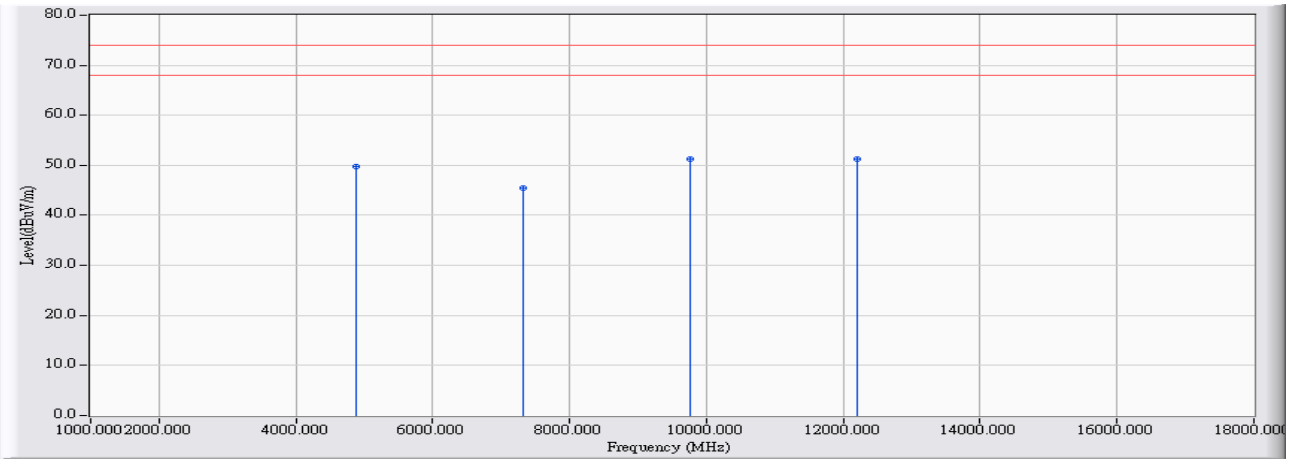


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-0.124	50.300	50.177	-23.823	74.000	PEAK
2		7323.000	7.448	38.450	45.897	-28.103	74.000	PEAK
3	*	9764.000	12.871	38.510	51.381	-22.619	74.000	PEAK
4		12205.000	14.834	35.770	50.604	-23.396	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

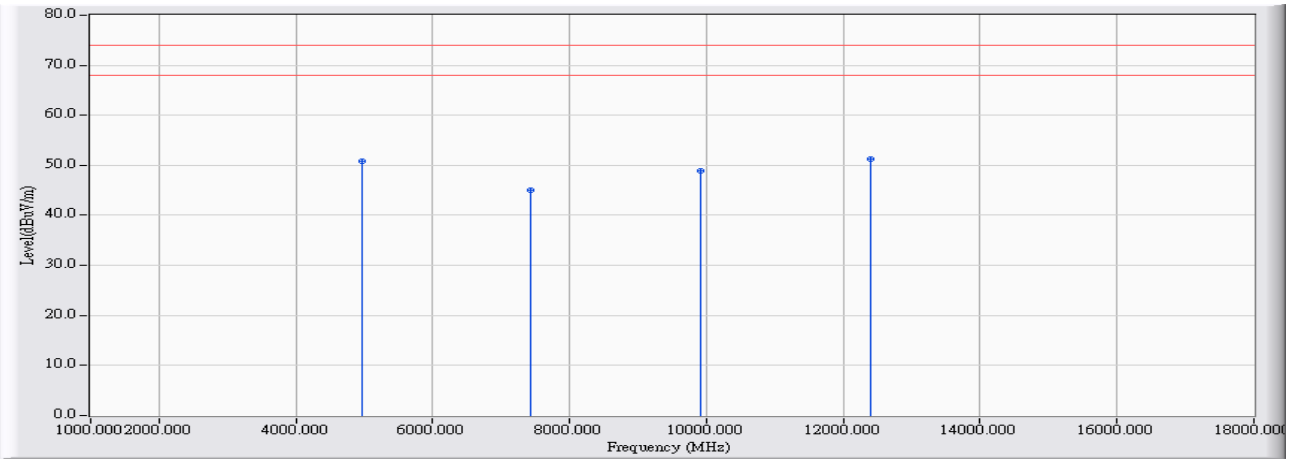


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.000	-0.124	49.960	49.837	-24.163	74.000	PEAK
2		7323.000	7.448	38.070	45.517	-28.483	74.000	PEAK
3		9764.000	12.871	38.330	51.201	-22.799	74.000	PEAK
4	*	12205.000	14.834	36.480	51.314	-22.686	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2480MHz**

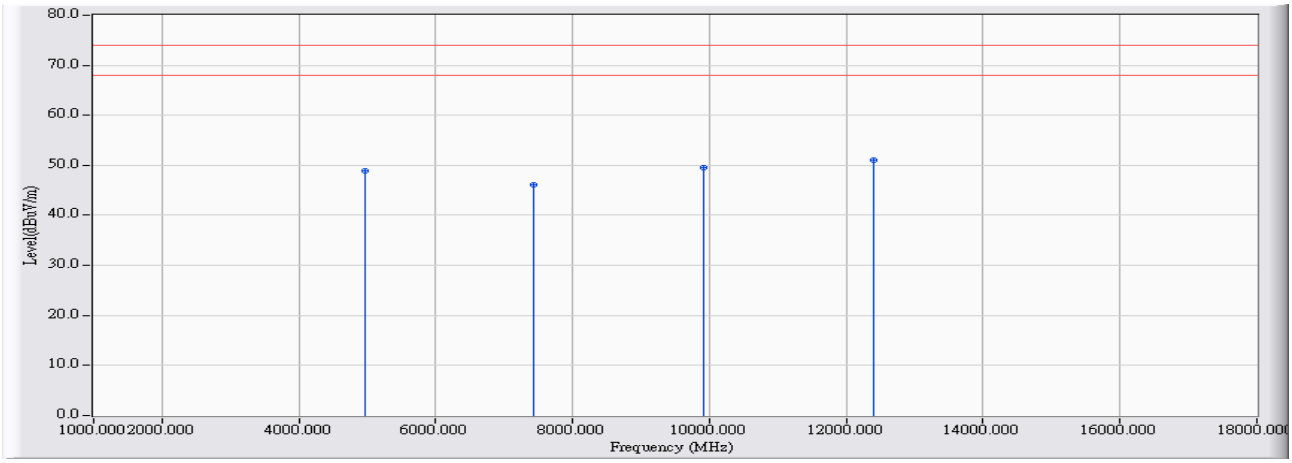


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-0.034	50.760	50.726	-23.274	74.000	PEAK
2		7440.000	7.868	37.220	45.088	-28.912	74.000	PEAK
3		9920.000	13.091	35.830	48.921	-25.079	74.000	PEAK
4	*	12400.000	15.733	35.450	51.183	-22.817	74.000	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	-0.034	48.990	48.956	-25.044	74.000	PEAK
2		7440.000	7.868	38.160	46.028	-27.972	74.000	PEAK
3		9920.000	13.091	36.410	49.501	-24.499	74.000	PEAK
4	*	12400.000	15.733	35.300	51.033	-22.967	74.000	PEAK

Note:

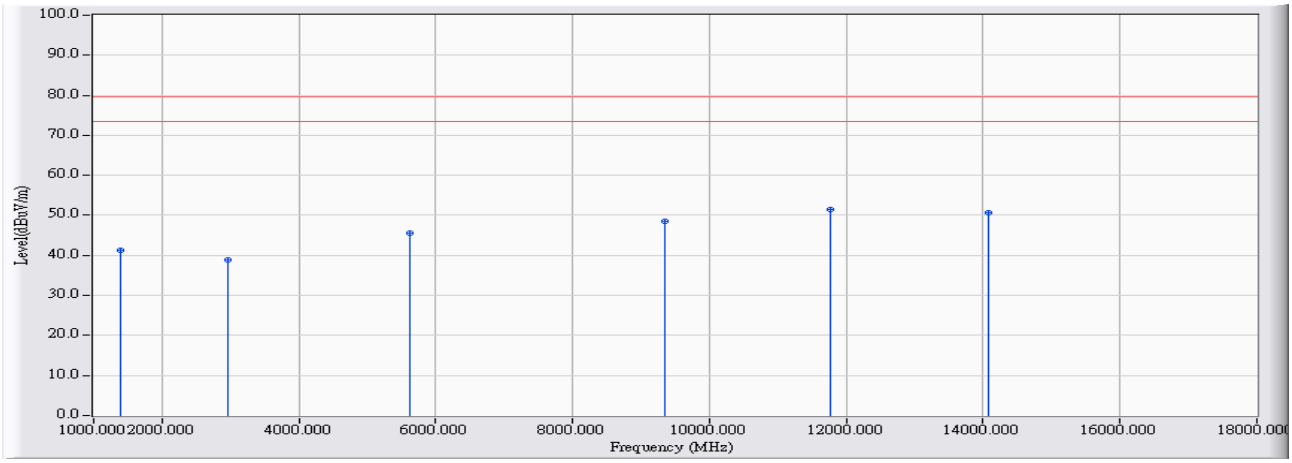
1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.
8. The Emission above 18GHz were not included is because their levels are too low.

4.7. Test Result for Co-location

Section 15.247 Subclause (d). Emission limitations radiated (Transmitter)

The test was performed with the equipment transmitting first in only 5 GHz WiFi mode and repeated with the 2.4 GHz BT radio transmitting simultaneously to check the impact of the co-location of both radio interfaces. The results and plots below show the worst results obtained in both modes.

Site : CB4-H	**Time : 2017/08/07**
Limit : FCC_A_(Above_1G)_3M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : 2.4G+BT_co-location mode**

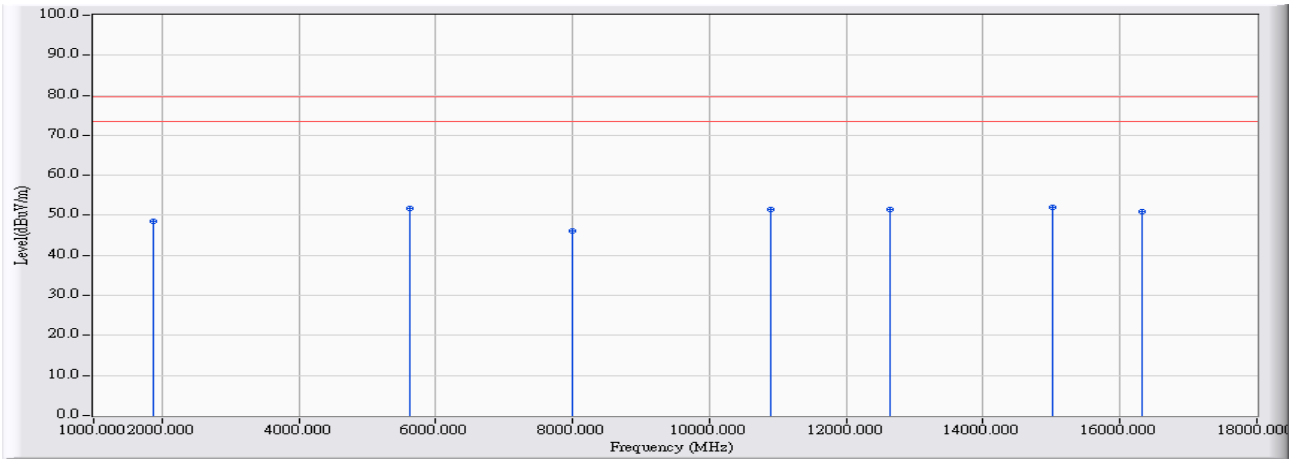


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1397.760	-13.243	54.487	41.243	-38.257	79.500	PEAK
2		2970.103	-7.209	46.011	38.802	-40.698	79.500	PEAK
3		5615.038	0.683	44.780	45.464	-34.036	79.500	PEAK
4		9358.064	12.252	36.260	48.513	-30.987	79.500	PEAK
5	*	11775.222	16.741	34.675	51.415	-28.085	79.500	PEAK
6		14076.792	18.593	32.037	50.630	-28.870	79.500	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB4-H	**Time : 2017/08/07**
Limit : FCC_A_(Above_1G)_3M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : 2.4G+BT_co-location mode**

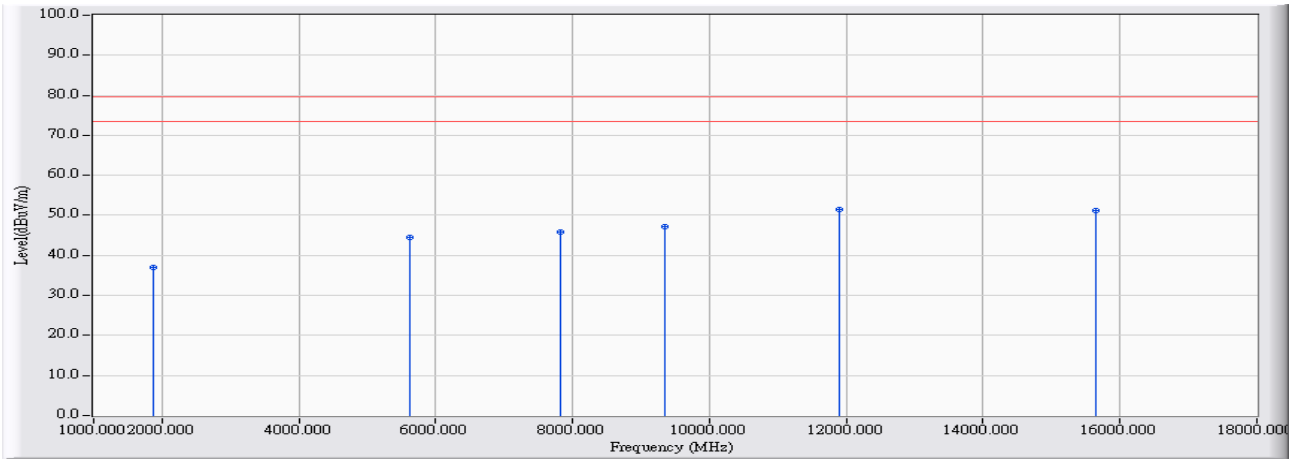


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1870.313	-11.561	60.033	48.471	-31.029	79.500	PEAK
2		5615.038	0.683	51.122	51.806	-27.694	79.500	PEAK
3		7996.500	9.530	36.710	46.240	-33.260	79.500	PEAK
4		10898.110	15.646	35.885	51.532	-27.968	79.500	PEAK
5		12640.435	16.450	34.953	51.403	-28.097	79.500	PEAK
6	*	15023.597	16.918	34.982	51.900	-27.600	79.500	PEAK
7		16327.366	13.695	37.171	50.866	-28.634	79.500	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB4-H	**Time : 2017/08/07**
Limit : FCC_A_(Above_1G)_3M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHH751-P	**Note : 5G+BT_co-location mode**

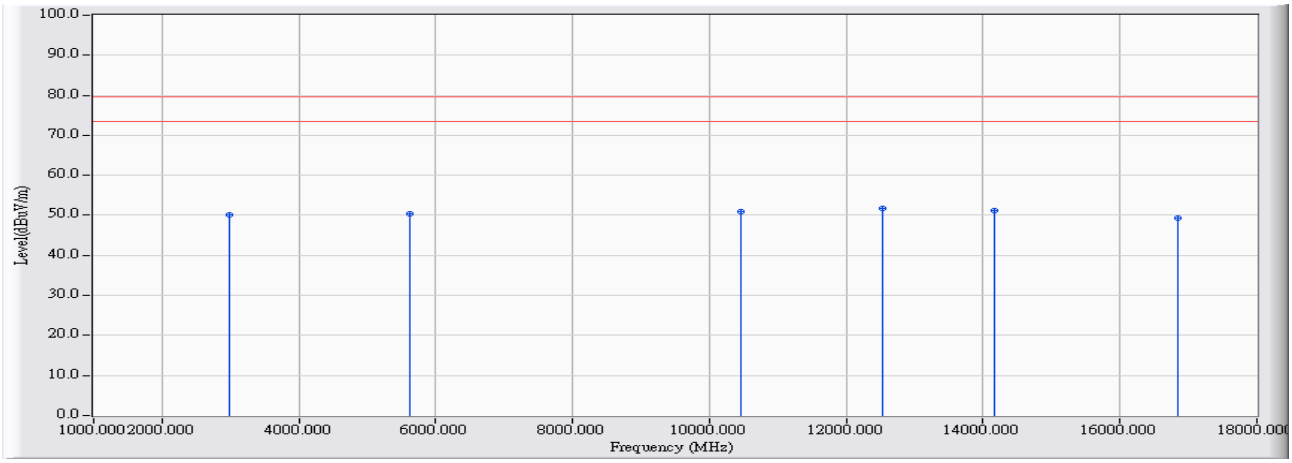


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1870.313	-11.561	48.610	37.048	-42.452	79.500	PEAK
2		5615.038	0.683	43.950	44.634	-34.866	79.500	PEAK
3		7819.718	9.069	36.844	45.912	-33.588	79.500	PEAK
4		9358.064	12.252	35.051	47.304	-32.196	79.500	PEAK
5	*	11907.809	16.055	35.424	51.479	-28.021	79.500	PEAK
6		15638.935	14.443	36.896	51.340	-28.160	79.500	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB4-H	**Time : 2017/08/07**
Limit : FCC_A_(Above_1G)_3M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHH751-P	**Note : 5G+BT_co-location mode**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2975.202	-7.194	57.218	50.024	-29.476	79.500	PEAK
2		5615.038	0.683	49.689	50.373	-29.127	79.500	PEAK
3		10454.454	14.635	36.319	50.954	-28.546	79.500	PEAK
4	*	12538.445	16.456	35.416	51.872	-27.628	79.500	PEAK
5		14166.883	18.576	32.622	51.198	-28.302	79.500	PEAK
6		16850.914	14.911	34.325	49.235	-30.265	79.500	PEAK

Note:

1. All Readings below 1GHz are Quasi-Peak, 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. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

5. RF antenna conducted test

5.1. Test Equipment

The following test equipment is used during the test:

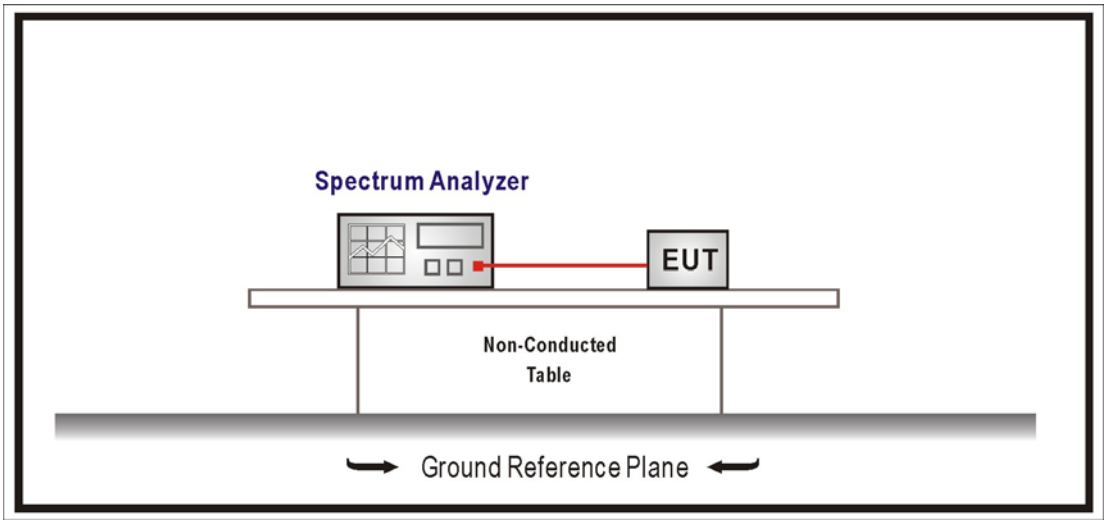
RF antenna conducted test / SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08

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

5.2. Test Setup

RF Conducted Measurement:



5.3. Limits

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

5.4. Test Procedure

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

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

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

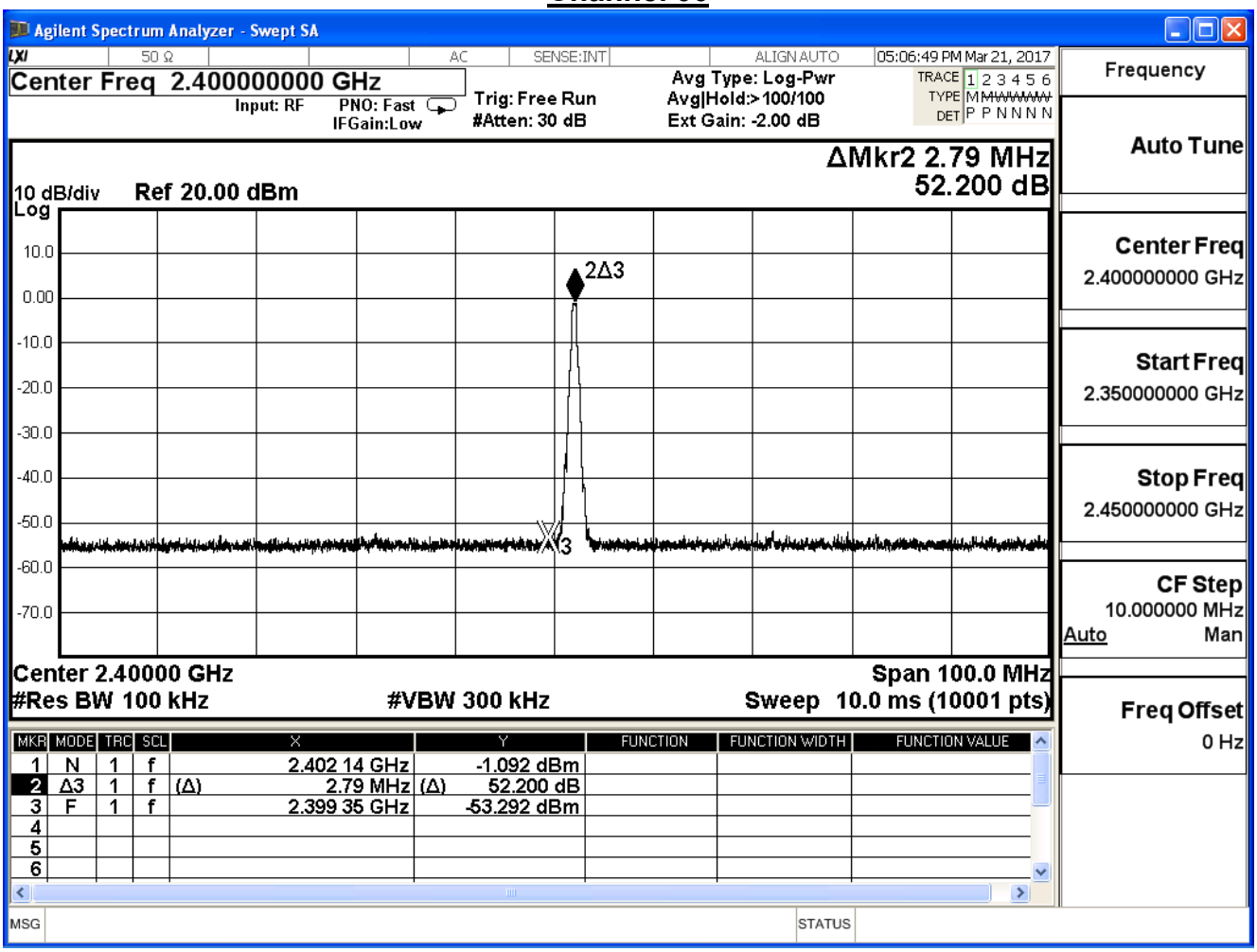
5.6. Test Result

Product	UHD751-P		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Tx_DH5		
Date of Test	2017/03/21	Test Site	SR10-H

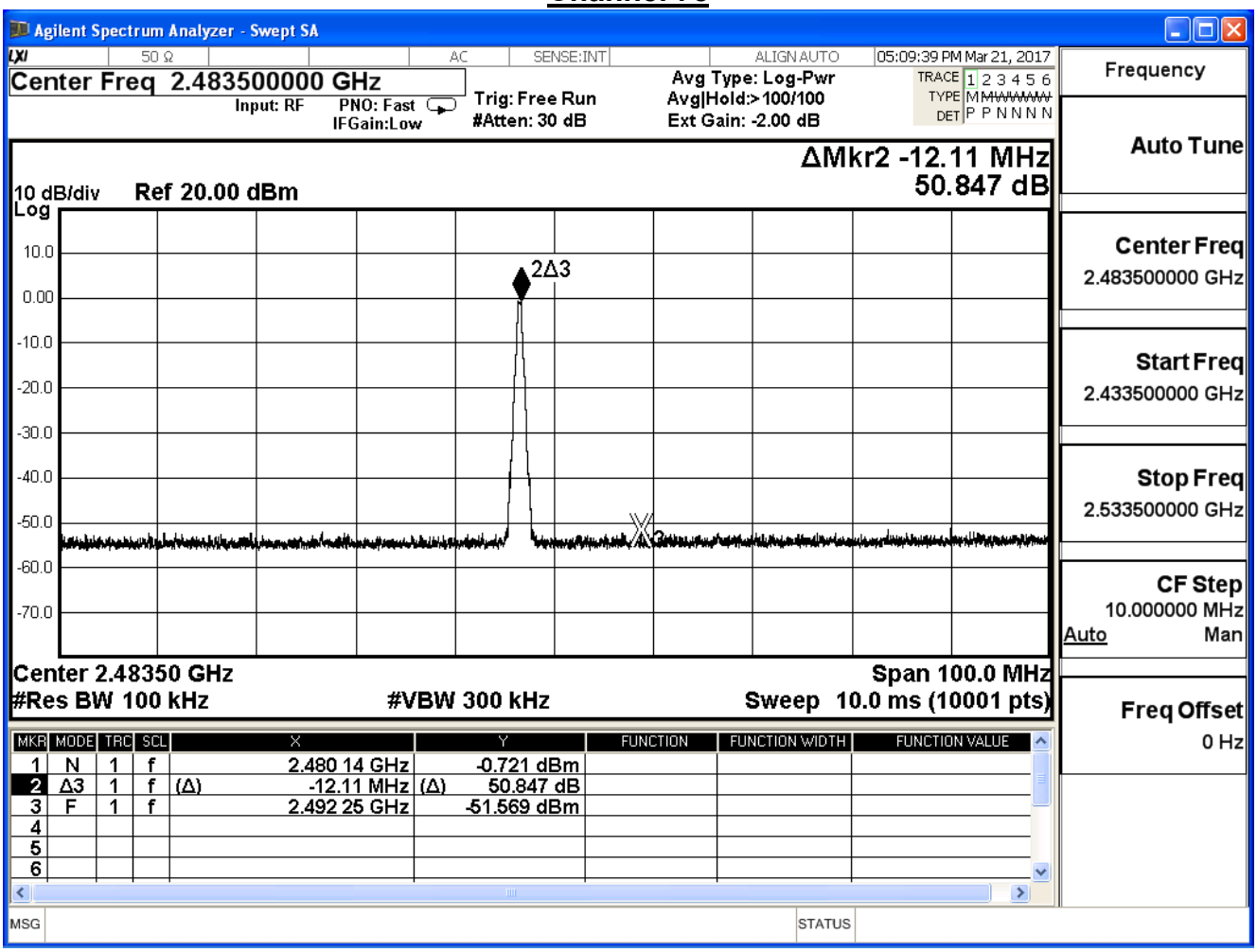
GFSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	52.200	≧20	Pass
78	2480	50.847	≧20	Pass

Channel 00



Channel 78

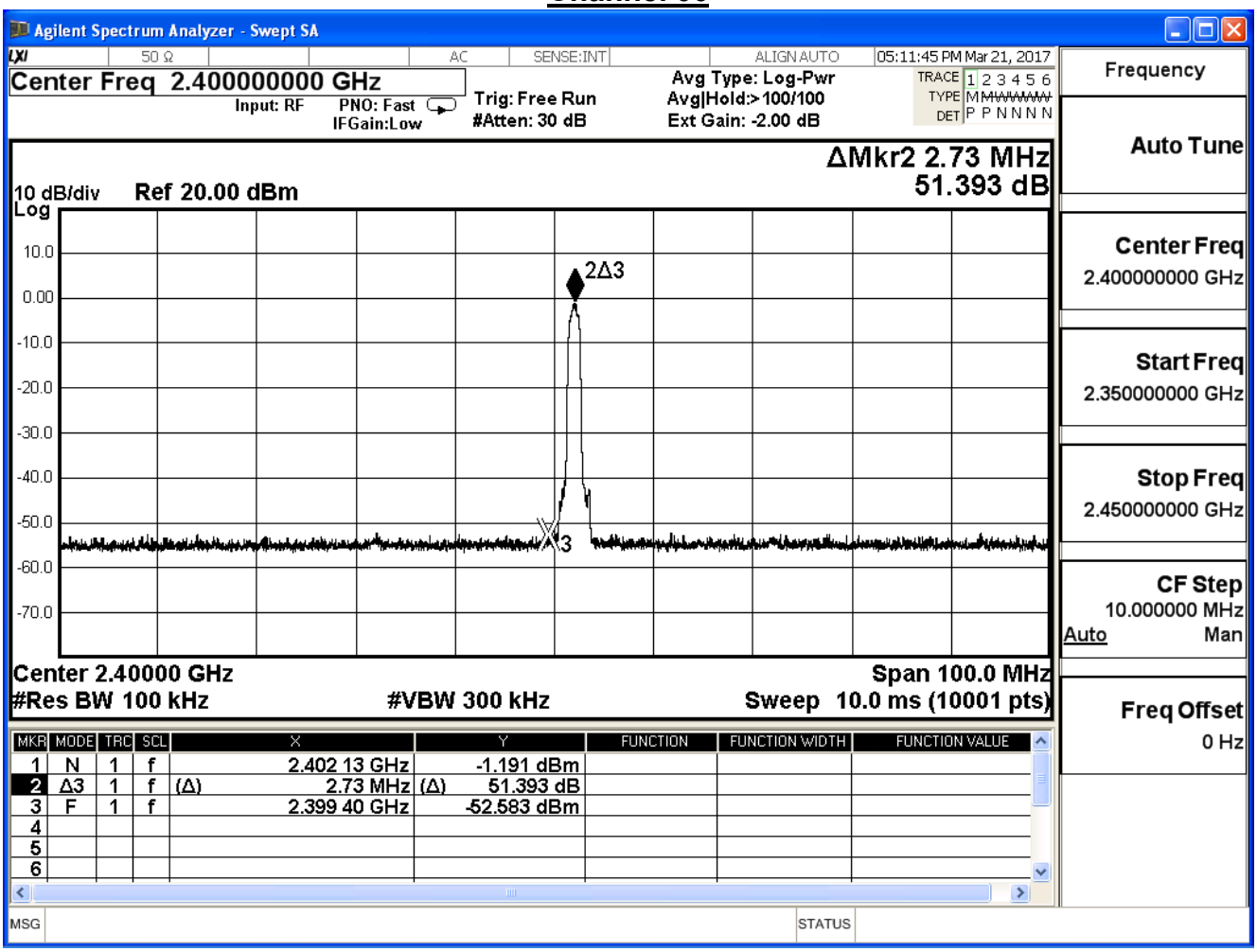

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:09:39 PM Mar 21, 2017
Center Freq 2.483500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P P N N N N
ΔMkr2 -12.11 MHz
50.847 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
2Δ3
Center 2.48350 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 10.0 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.480 14 GHz -0.721 dBm
2 Δ3 1 f (Δ) -12.11 MHz (Δ) 50.847 dB
3 F 1 f 2.492 25 GHz -51.569 dBm
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.433500000 GHz
Stop Freq
2.533500000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	UHD751-P		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Tx_2DH5		
Date of Test	2017/03/21	Test Site	SR10-H

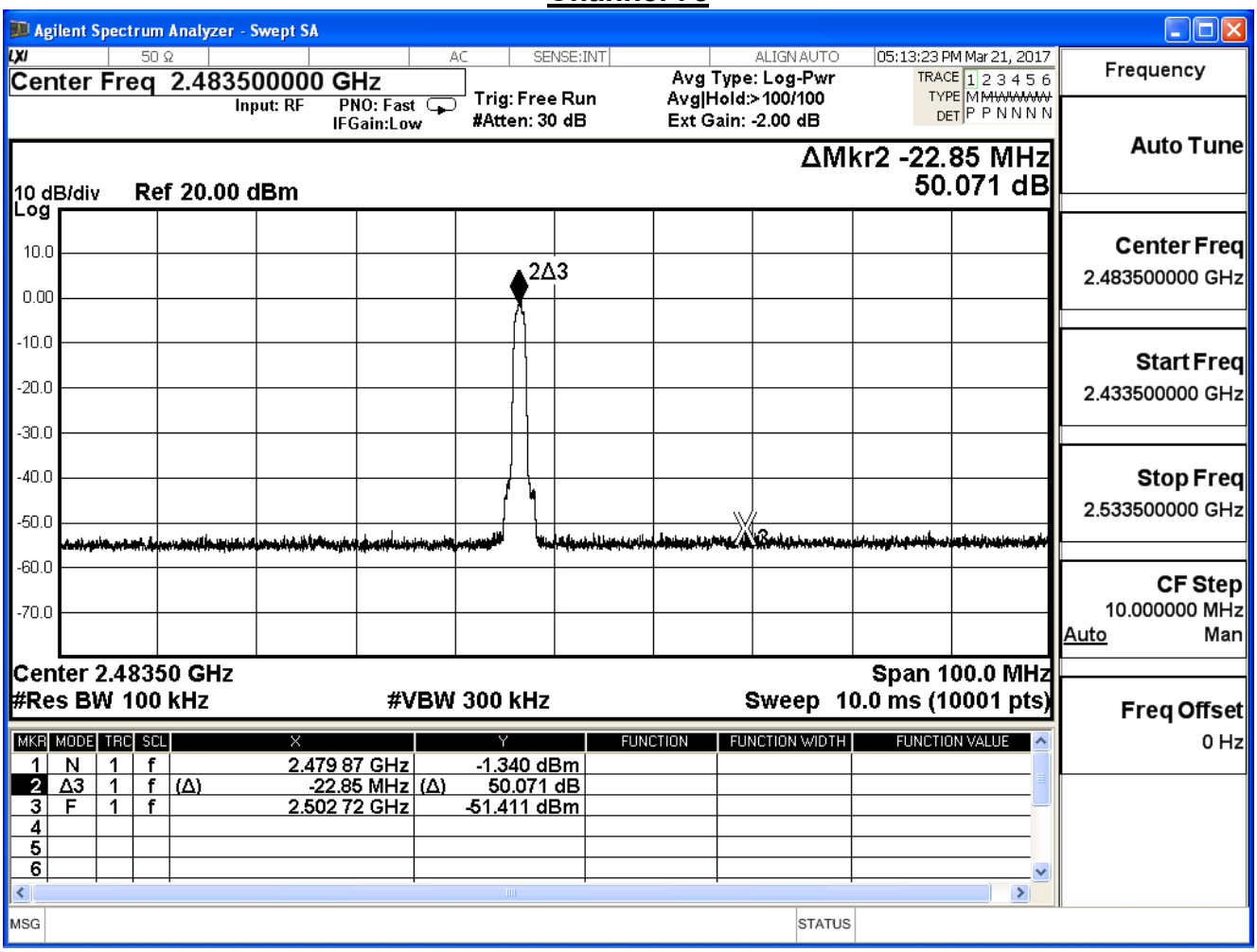
π/4-DQPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	51.393	≧20	Pass
78	2480	50.071	≧20	Pass

Channel 00



Channel 78

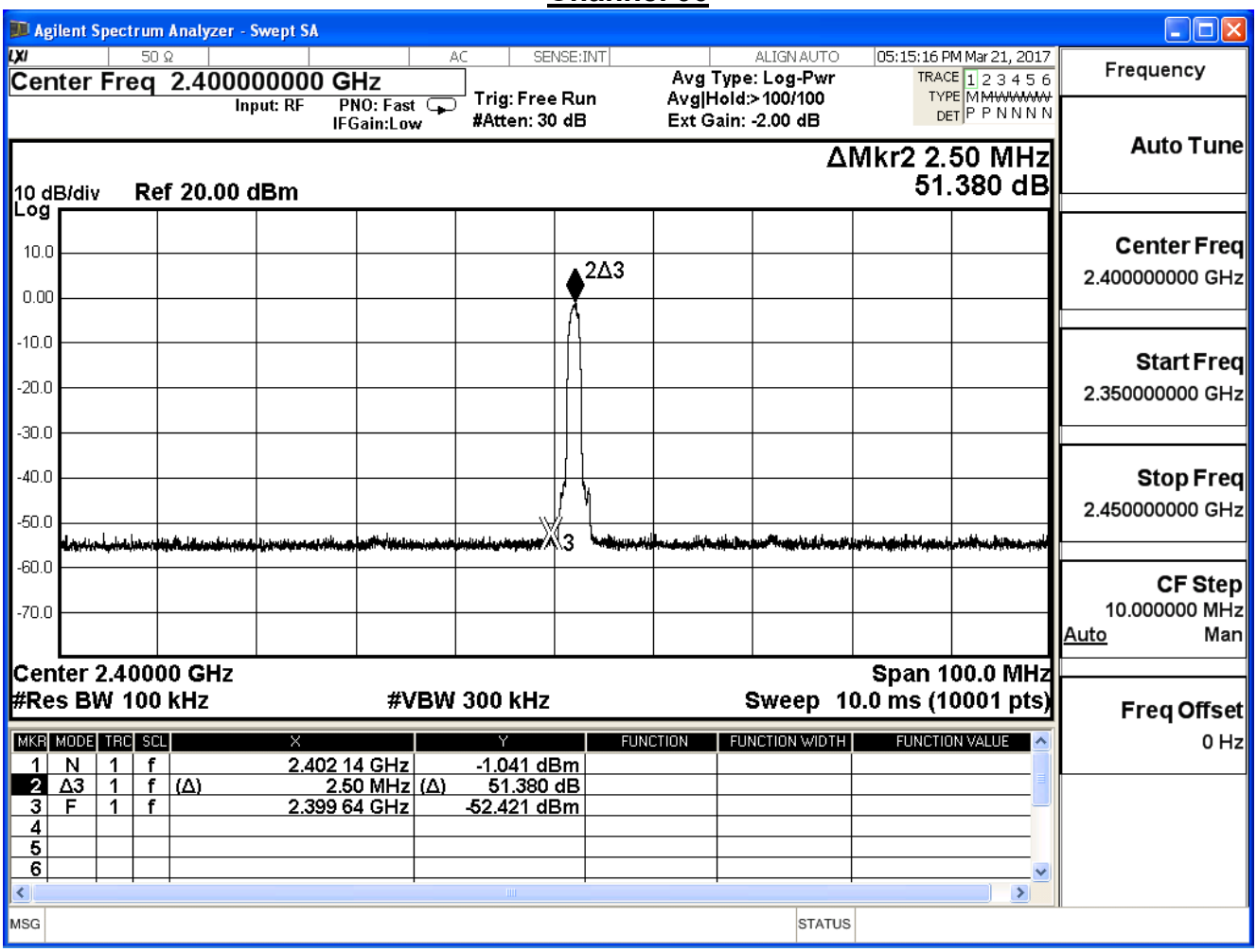

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:13:23 PM Mar 21, 2017
Center Freq 2.483500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P P N N N N
ΔMkr2 -22.85 MHz
50.071 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
2Δ3
Center 2.48350 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 10.0 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.479 87 GHz -1.340 dBm
2 Δ3 1 f (Δ) -22.85 MHz (Δ) 50.071 dB
3 F 1 f 2.502 72 GHz -51.411 dBm
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.433500000 GHz
Stop Freq
2.533500000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	UHD751-P		
Test Item	RF antenna conducted test		
Test Mode	Mode 3: Tx_3DH5		
Date of Test	2017/03/21	Test Site	SR10-H

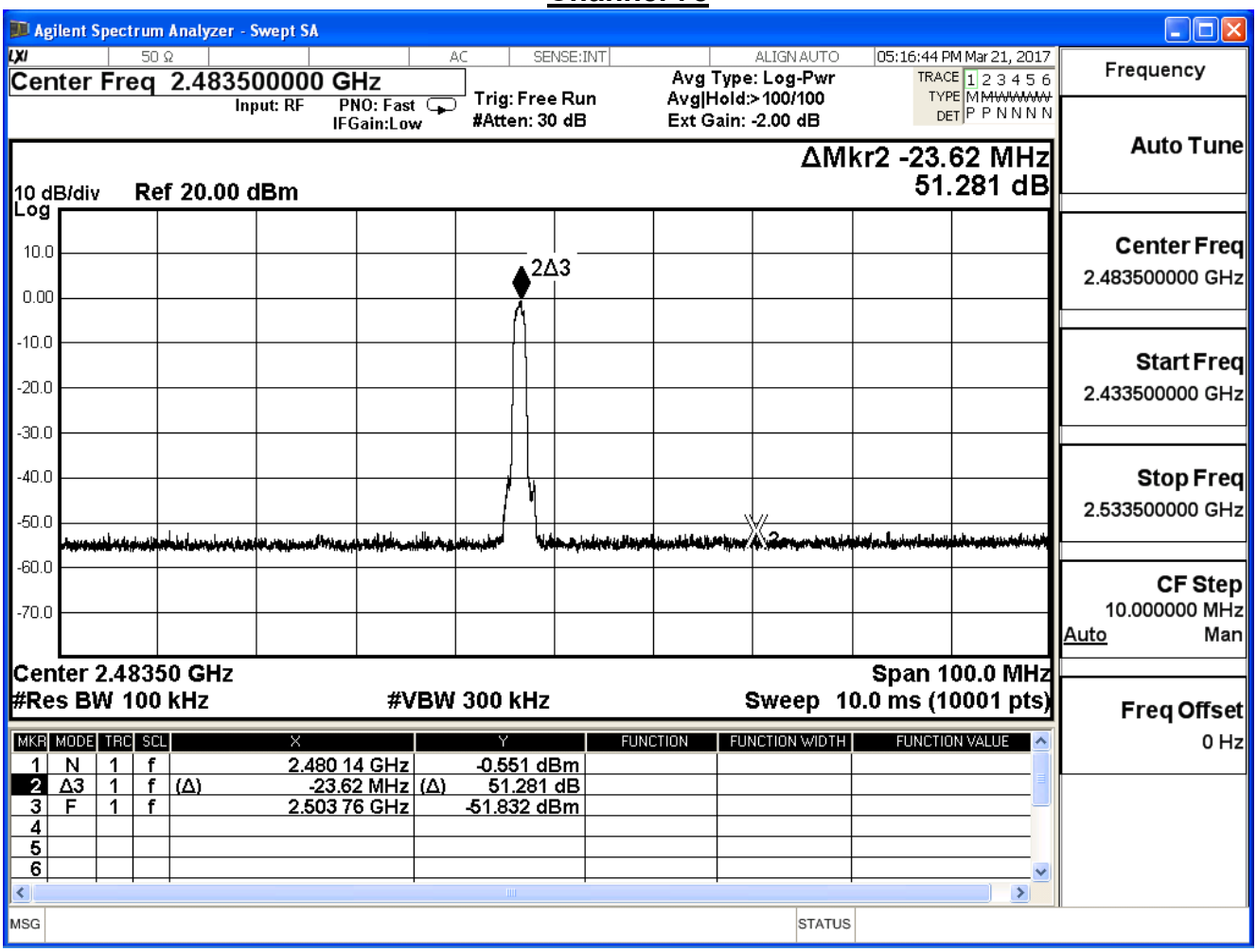
8-DPSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	51.380	≧20	Pass
78	2480	51.281	≧20	Pass

Channel 00

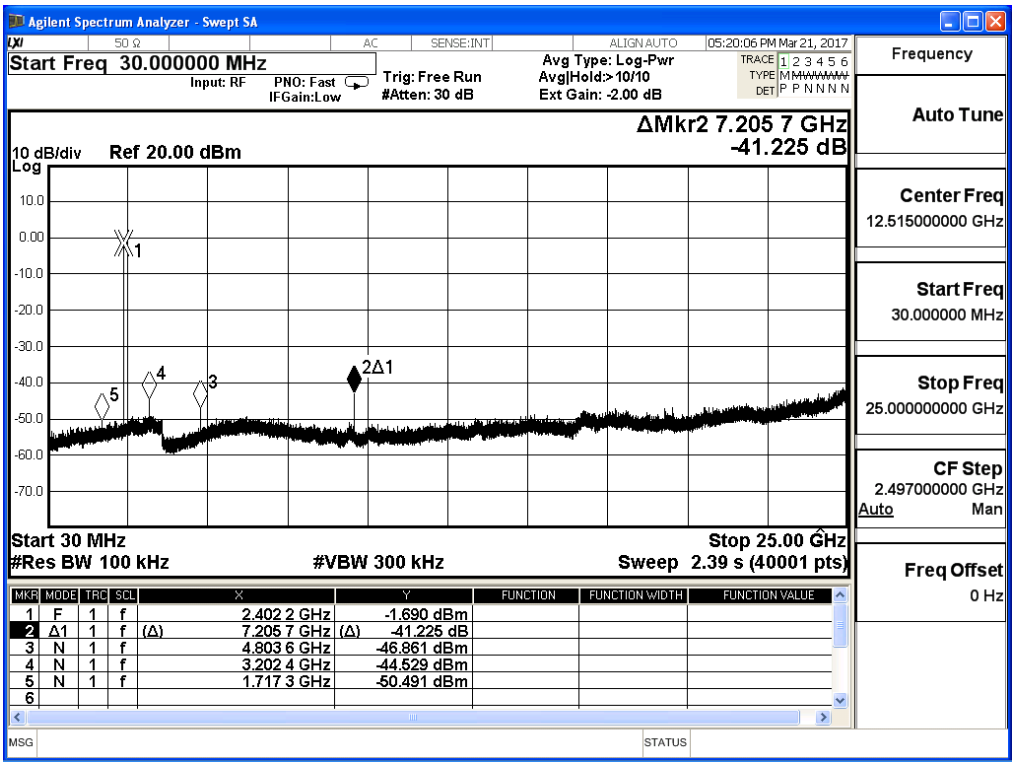


Channel 78

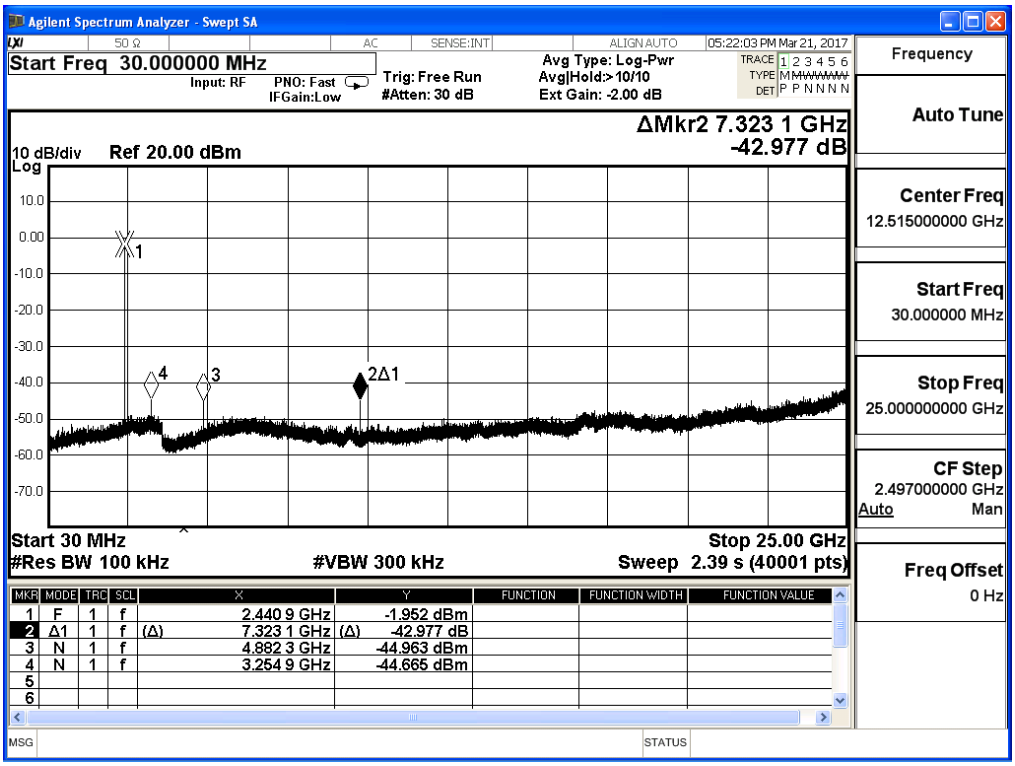

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:16:44 PM Mar 21, 2017
Center Freq 2.483500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P P N N N N
ΔMkr2 -23.62 MHz
51.281 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
2Δ3
Center 2.48350 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 100.0 MHz
Sweep 10.0 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.480 14 GHz -0.551 dBm
2 Δ3 1 f (Δ) -23.62 MHz (Δ) 51.281 dB
3 F 1 f 2.503 76 GHz -51.832 dBm
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.433500000 GHz
Stop Freq
2.533500000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	UHD751-P		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Tx_DH5		
Date of Test	2017/03/21	Test Site	SR10-H

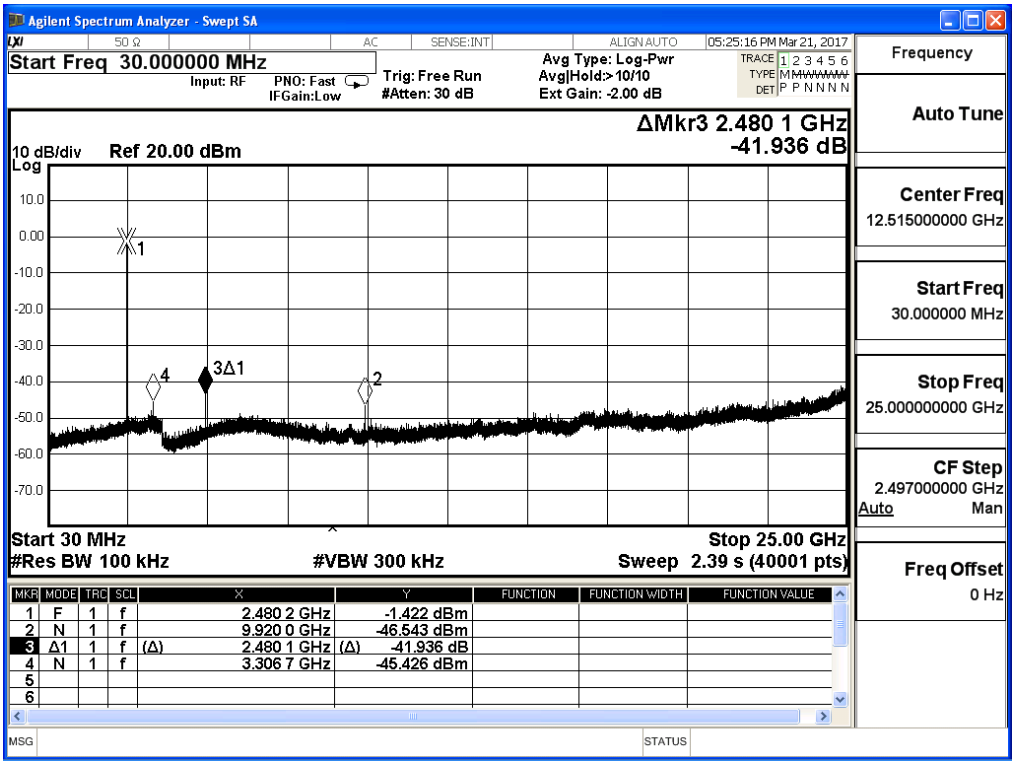
Channel 00 (30MHz-25GHz)- GFSK



Channel 39 (30MHz-25GHz)- GFSK

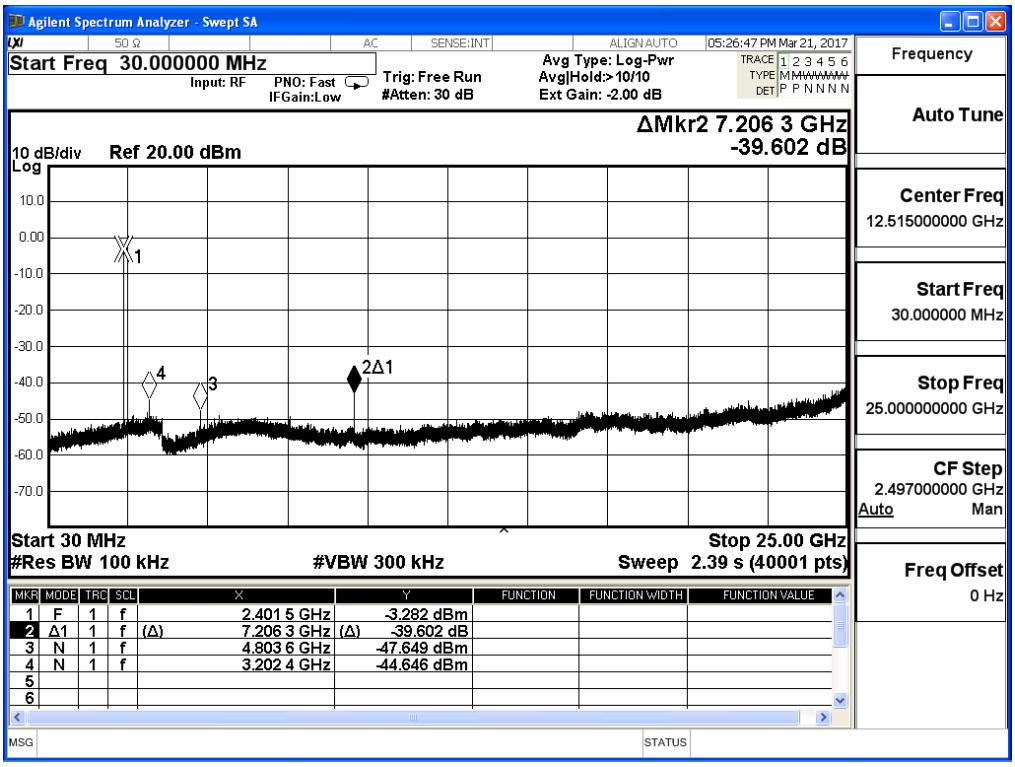


Channel 78 (30MHz-25GHz)- GFSK

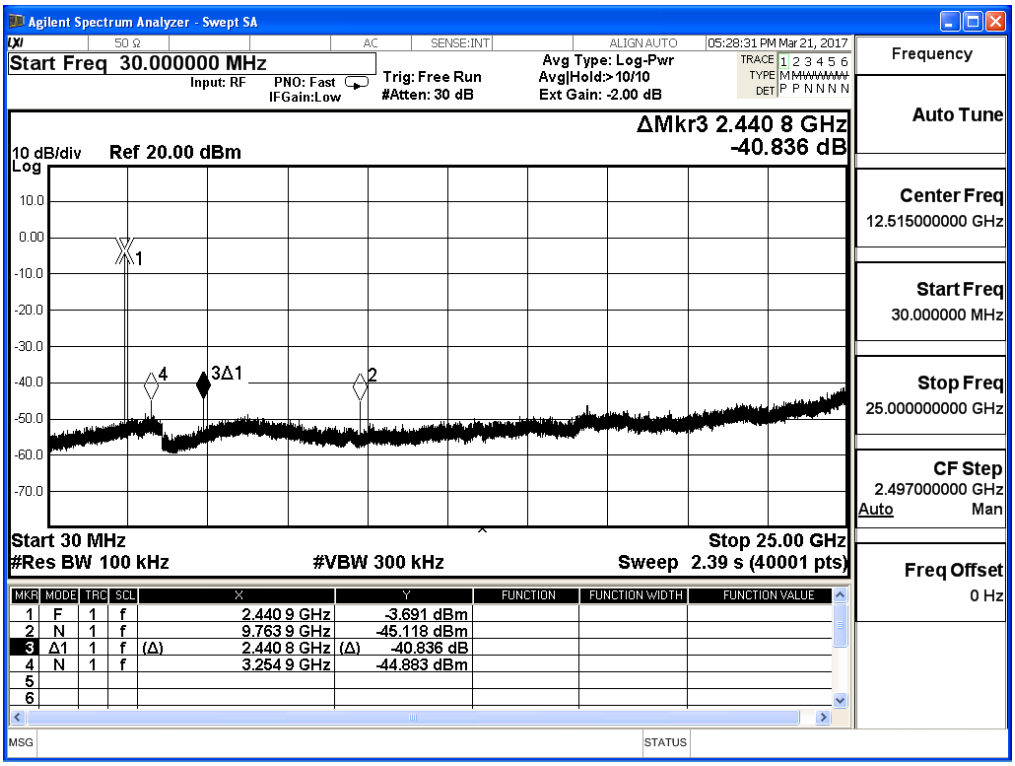


Product	UHD751-P		
Test Item	RF antenna conducted test		
Test Mode	Mode 2: Tx_2DH5		
Date of Test	2017/03/21	Test Site	SR10-H

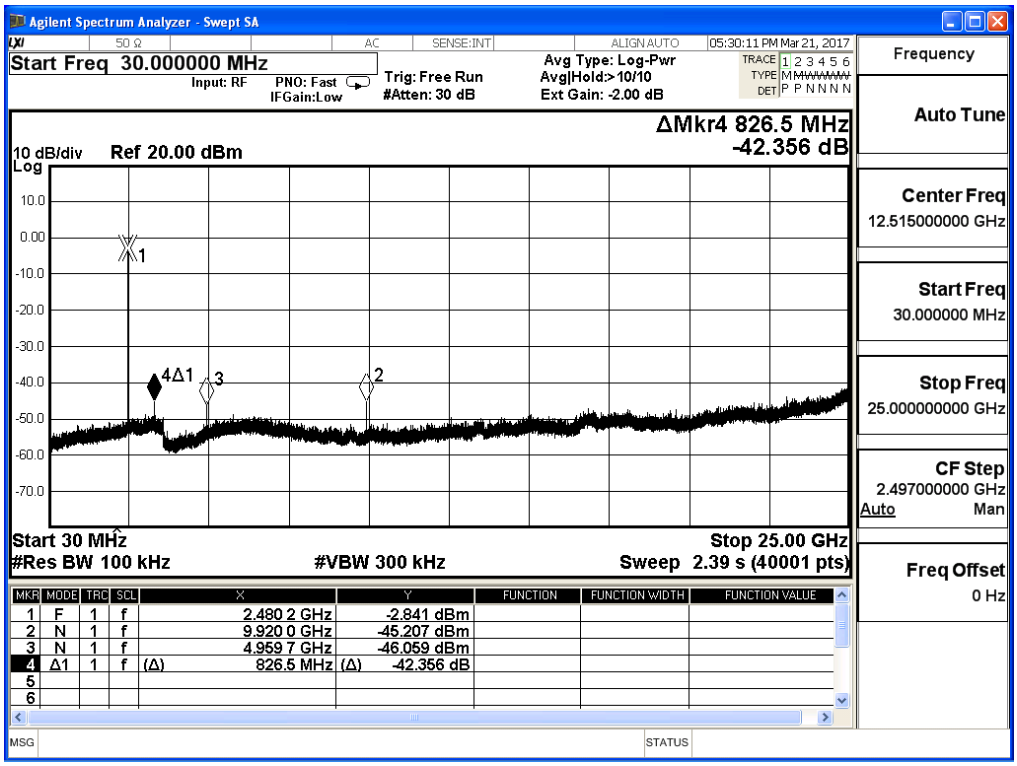
Channel 00 (30MHz-25GHz)- π/4-DQPSK



Channel 39 (30MHz-25GHz)- π/4-DQPSK

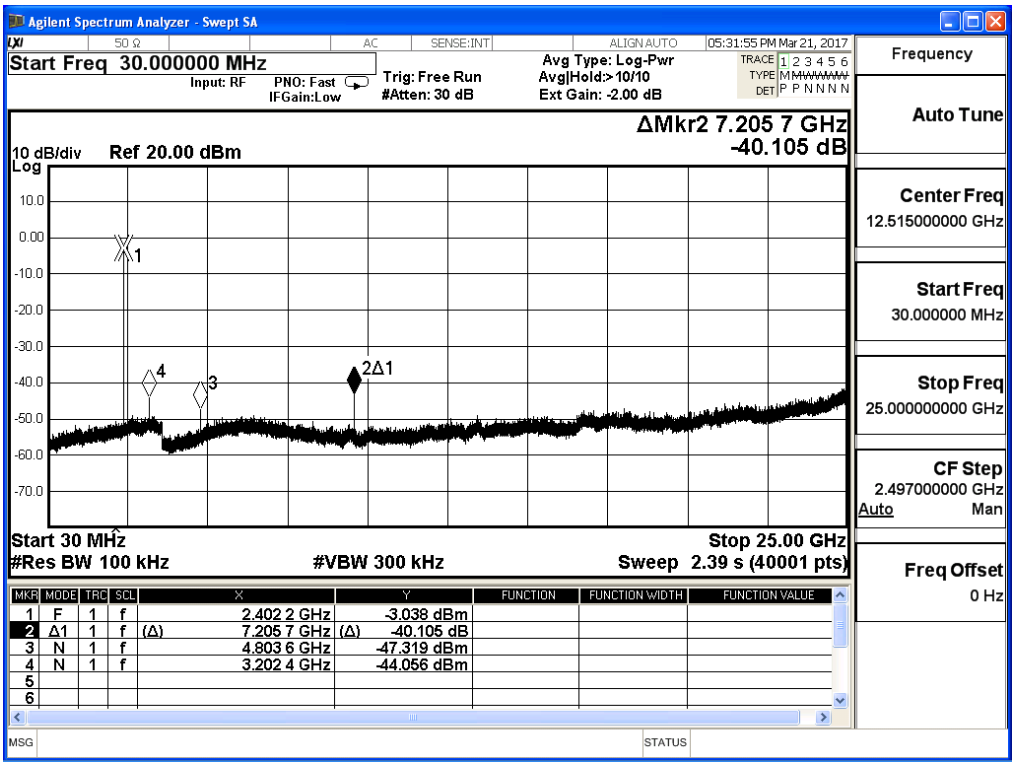


Channel 78 (30MHz-25GHz)- π/4-DQPSK

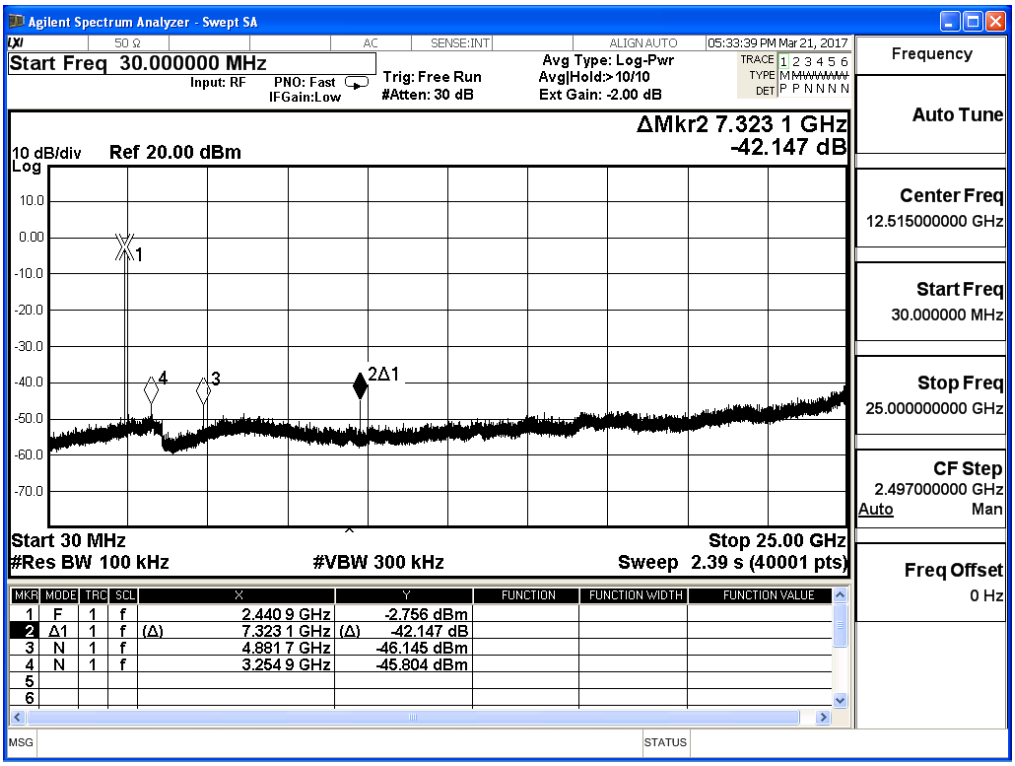


Product	UHD751-P		
Test Item	RF antenna conducted test		
Test Mode	Mode 3: Tx_3DH5		
Date of Test	2017/03/21	Test Site	SR10-H

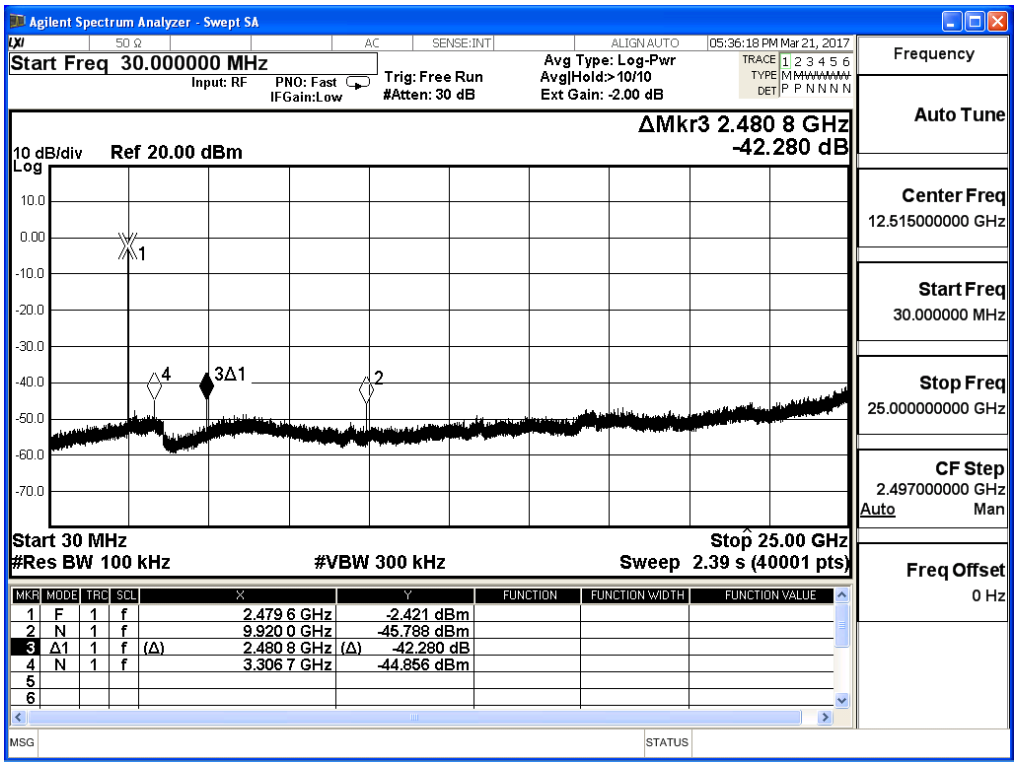
Channel 00 (30MHz-25GHz)- 8-DPSK



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



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



6. Band Edge

6.1. Test Equipment

The following test equipment are used during the test:

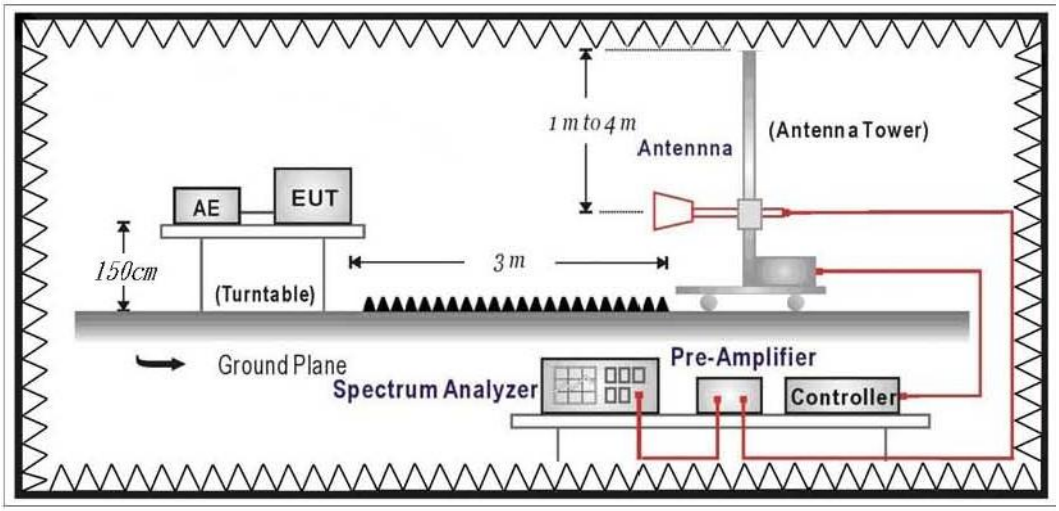
Band Edge / CB4-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Horn Antenna	Schwarzbeck	BBHA 9120	D312	2017/10/25
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/05

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

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

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

6.4. Test Procedure

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

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

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

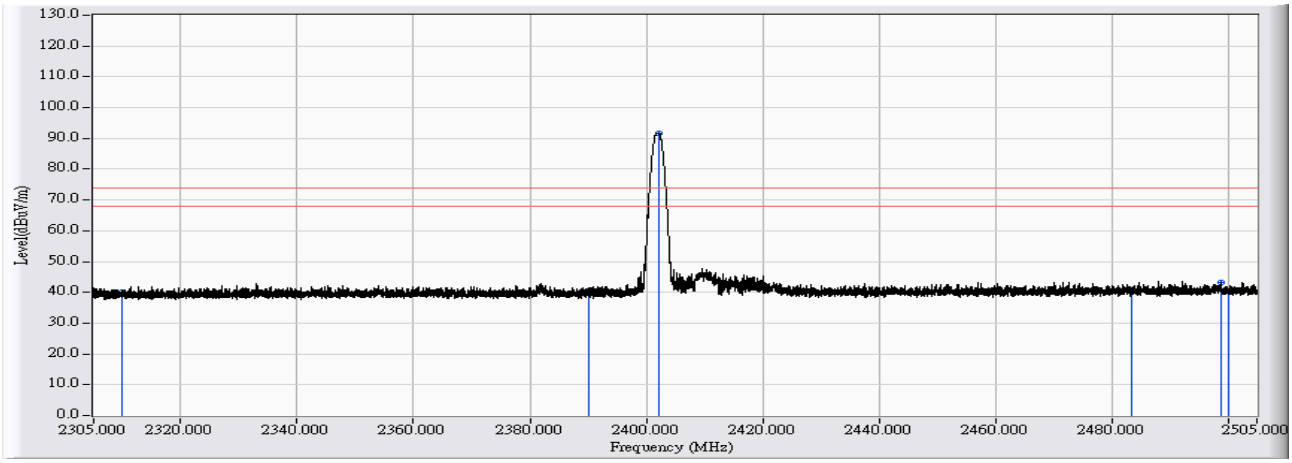
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

6.6. Test Result

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

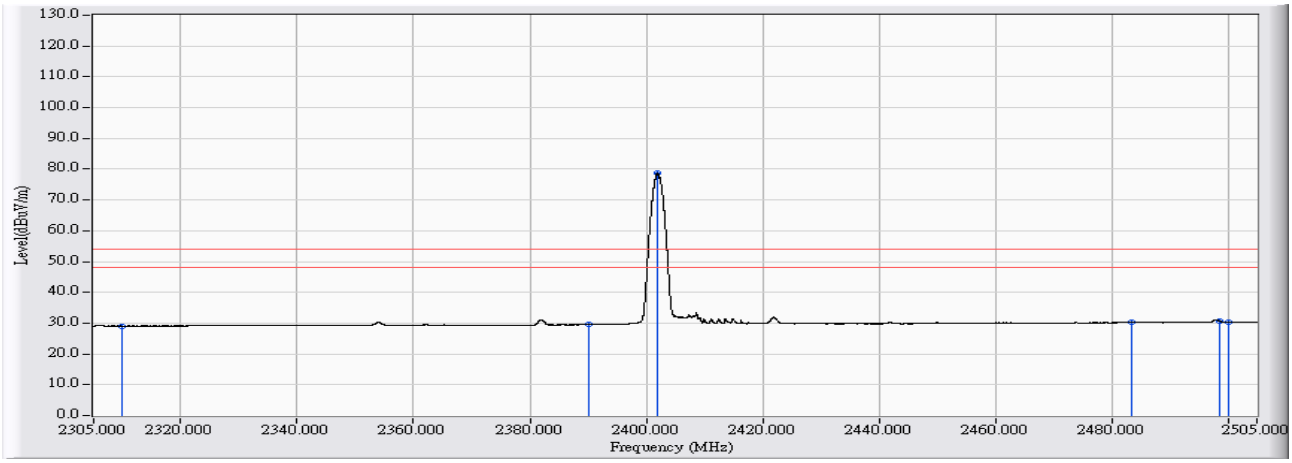


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.916	39.931	-34.069	74.000	PEAK
2		2390.000	11.544	28.524	40.068	-33.932	74.000	PEAK
3	*	2402.110	11.626	80.192	91.817	17.817	74.000	PEAK
4		2483.500	12.172	27.792	39.964	-34.036	74.000	PEAK
5		2498.861	12.269	30.801	43.070	-30.930	74.000	PEAK
6		2500.000	12.274	28.114	40.389	-33.611	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

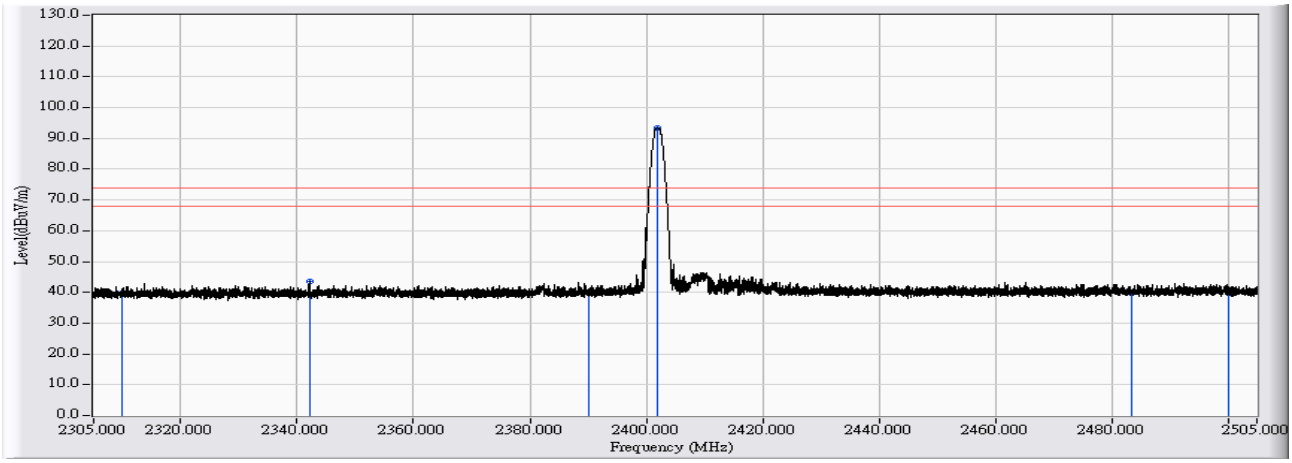


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.040	29.055	-24.945	54.000	AVERAGE
2		2390.000	11.544	18.094	29.638	-24.362	54.000	AVERAGE
3	*	2401.970	11.623	66.978	78.602	24.602	54.000	AVERAGE
4		2483.500	12.172	17.982	30.154	-23.846	54.000	AVERAGE
5		2498.481	12.267	18.448	30.715	-23.285	54.000	AVERAGE
6		2500.000	12.274	18.005	30.280	-23.720	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

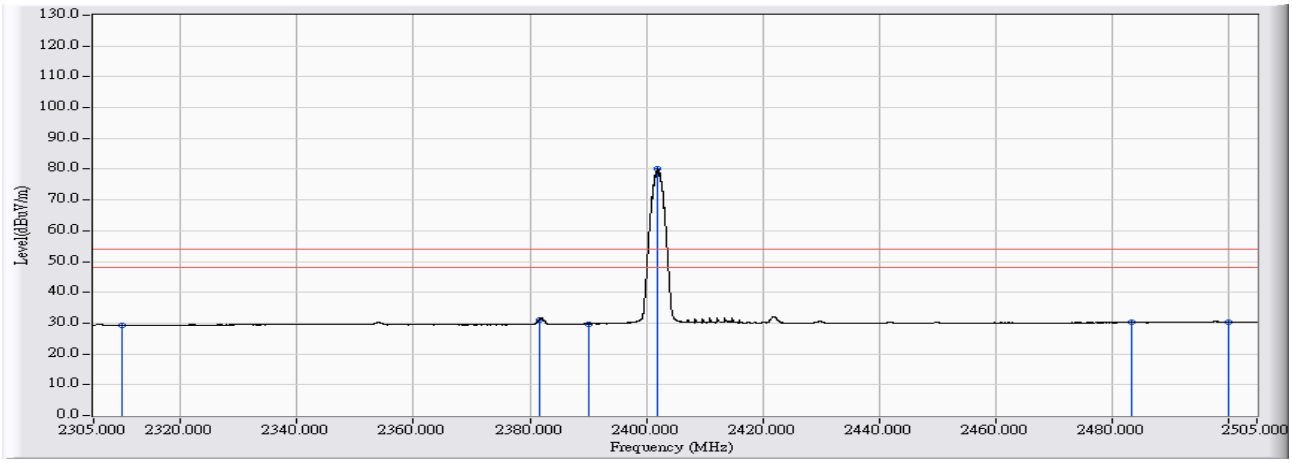


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.851	39.866	-34.134	74.000	PEAK
2		2342.056	11.226	32.392	43.619	-30.381	74.000	PEAK
3		2390.000	11.544	28.414	39.958	-34.042	74.000	PEAK
4	*	2401.830	11.623	81.894	93.517	19.517	74.000	PEAK
5		2483.500	12.172	27.463	39.635	-34.365	74.000	PEAK
6		2500.000	12.274	28.028	40.303	-33.697	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2402MHz**

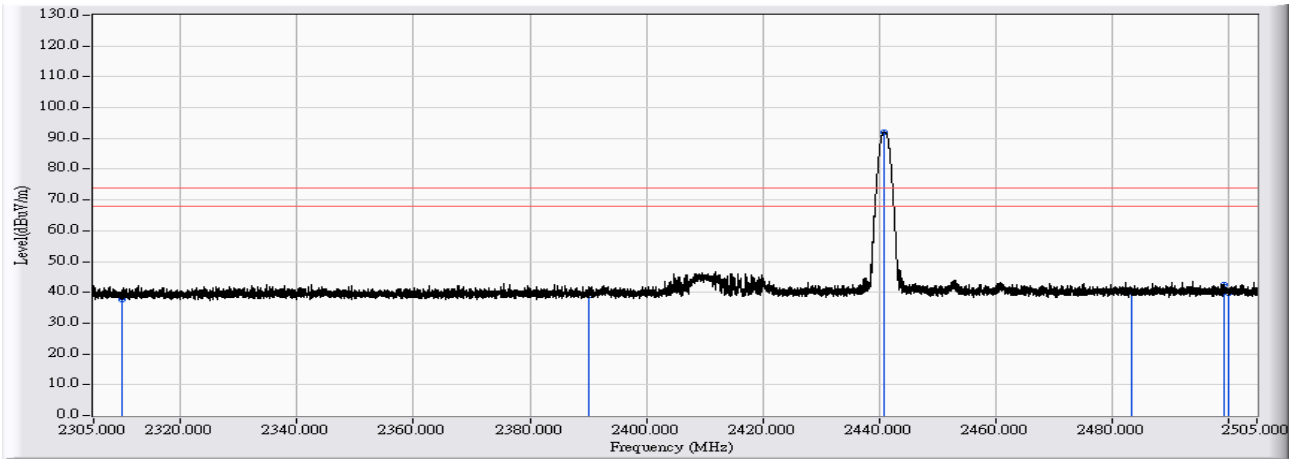


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.361	29.376	-24.624	54.000	AVERAGE
2		2381.592	11.488	19.674	31.162	-22.838	54.000	AVERAGE
3		2390.000	11.544	18.242	29.786	-24.214	54.000	AVERAGE
4	*	2401.950	11.623	68.415	80.039	26.039	54.000	AVERAGE
5		2483.500	12.172	18.028	30.200	-23.800	54.000	AVERAGE
6		2500.000	12.274	17.988	30.263	-23.737	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

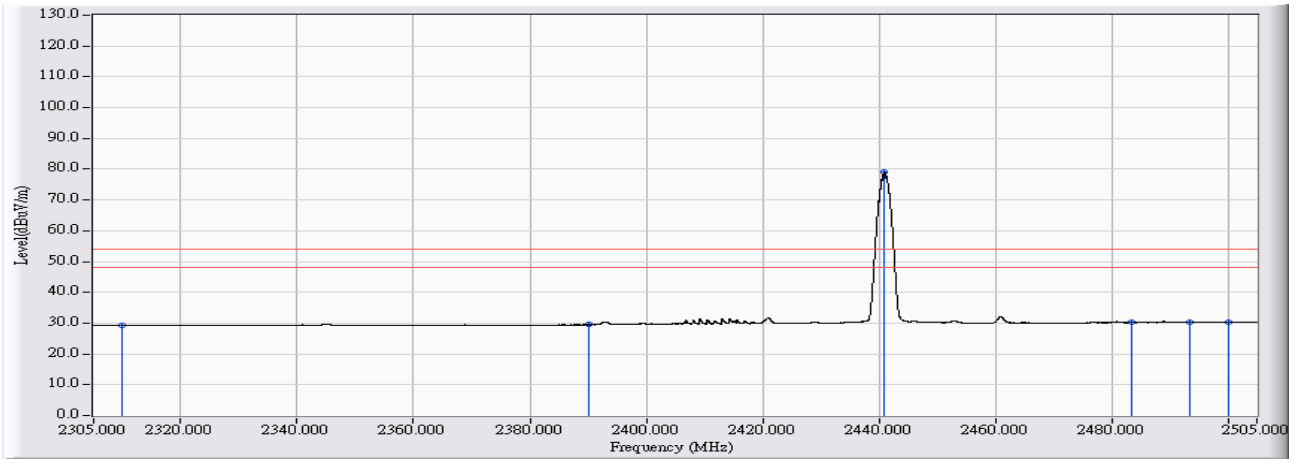


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	26.767	37.782	-36.218	74.000	PEAK
2		2390.000	11.544	27.349	38.893	-35.107	74.000	PEAK
3	*	2440.846	11.886	80.206	92.092	18.092	74.000	PEAK
4		2483.500	12.172	28.069	40.241	-33.759	74.000	PEAK
5		2499.321	12.272	30.301	42.573	-31.427	74.000	PEAK
6		2500.000	12.274	27.335	39.610	-34.390	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

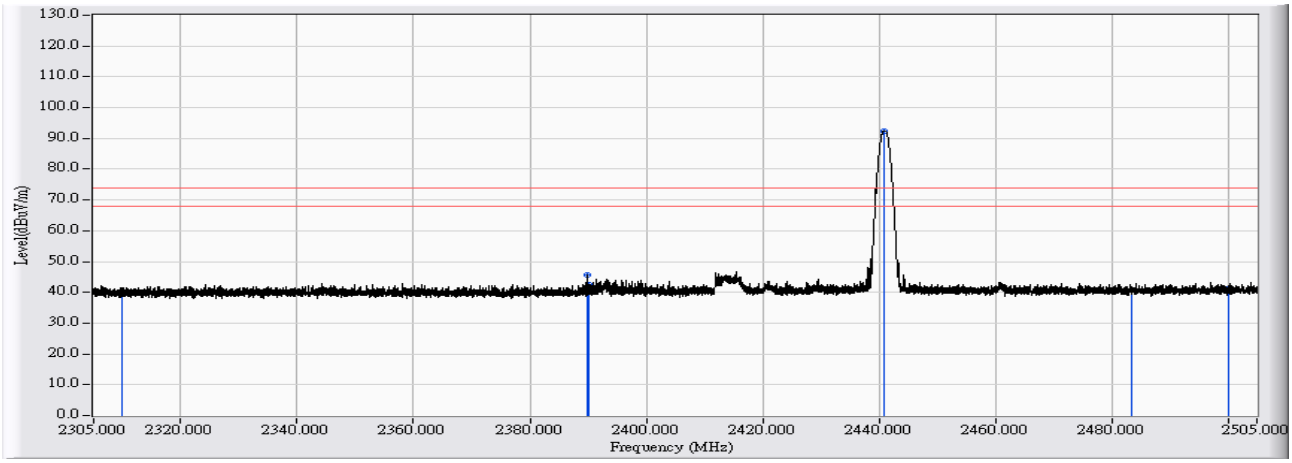


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.139	29.154	-24.846	54.000	AVERAGE
2		2390.000	11.544	17.936	29.480	-24.520	54.000	AVERAGE
3	*	2440.966	11.886	67.068	78.954	24.954	54.000	AVERAGE
4		2483.500	12.172	18.019	30.191	-23.809	54.000	AVERAGE
5		2493.341	12.237	17.970	30.207	-23.793	54.000	AVERAGE
6		2500.000	12.274	17.997	30.272	-23.728	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

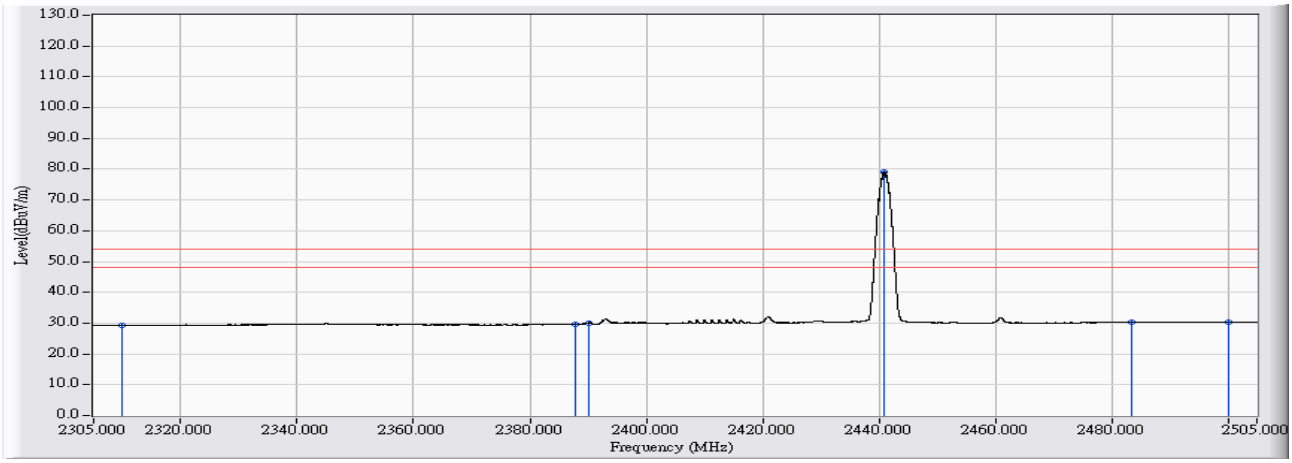


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.265	39.280	-34.720	74.000	PEAK
2		2389.911	11.543	34.058	45.601	-28.399	74.000	PEAK
3		2390.000	11.544	30.840	42.384	-31.616	74.000	PEAK
4	*	2440.826	11.886	80.561	92.446	18.446	74.000	PEAK
5		2483.500	12.172	28.722	40.894	-33.106	74.000	PEAK
6		2500.000	12.274	29.012	41.287	-32.713	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2441MHz**

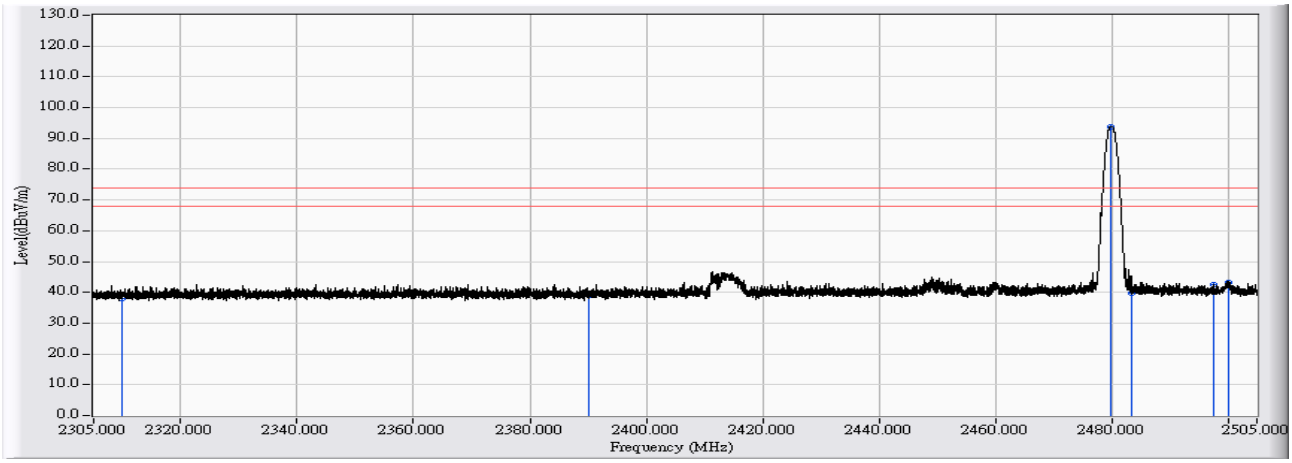


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.306	29.321	-24.679	54.000	AVERAGE
2		2387.712	11.529	18.029	29.558	-24.442	54.000	AVERAGE
3		2390.000	11.544	18.491	30.035	-23.965	54.000	AVERAGE
4	*	2440.966	11.886	67.335	79.221	25.221	54.000	AVERAGE
5		2483.500	12.172	18.064	30.236	-23.764	54.000	AVERAGE
6		2500.000	12.274	18.037	30.312	-23.688	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2480MHz**

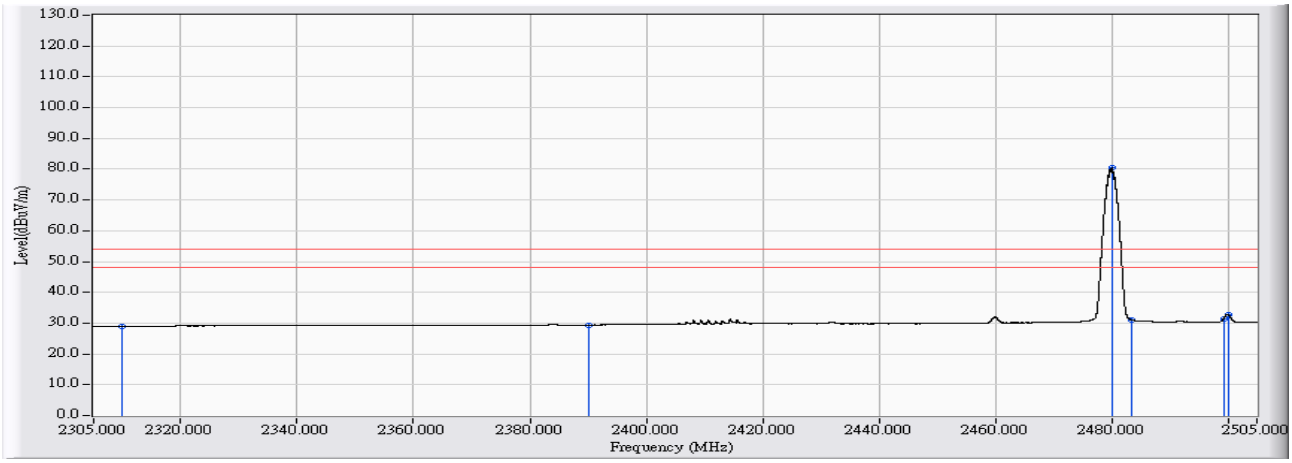


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	26.889	37.904	-36.096	74.000	PEAK
2		2390.000	11.544	27.525	39.069	-34.931	74.000	PEAK
3	*	2479.842	12.147	81.673	93.821	19.821	74.000	PEAK
4		2483.500	12.172	27.638	39.810	-34.190	74.000	PEAK
5		2497.501	12.262	30.303	42.566	-31.434	74.000	PEAK
6		2500.000	12.274	31.089	43.364	-30.636	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2480MHz**

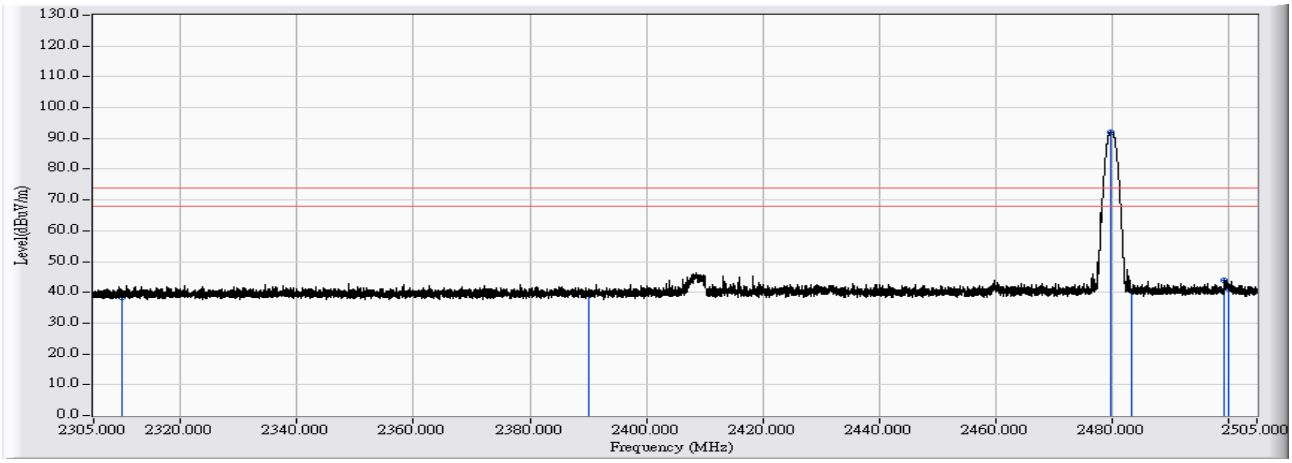


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.005	29.020	-24.980	54.000	AVERAGE
2		2390.000	11.544	17.872	29.416	-24.584	54.000	AVERAGE
3	*	2480.002	12.149	68.187	80.336	26.336	54.000	AVERAGE
4		2483.500	12.172	18.823	30.995	-23.005	54.000	AVERAGE
5		2499.241	12.271	19.060	31.331	-22.669	54.000	AVERAGE
6		2500.000	12.274	20.601	32.876	-21.124	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2480MHz**

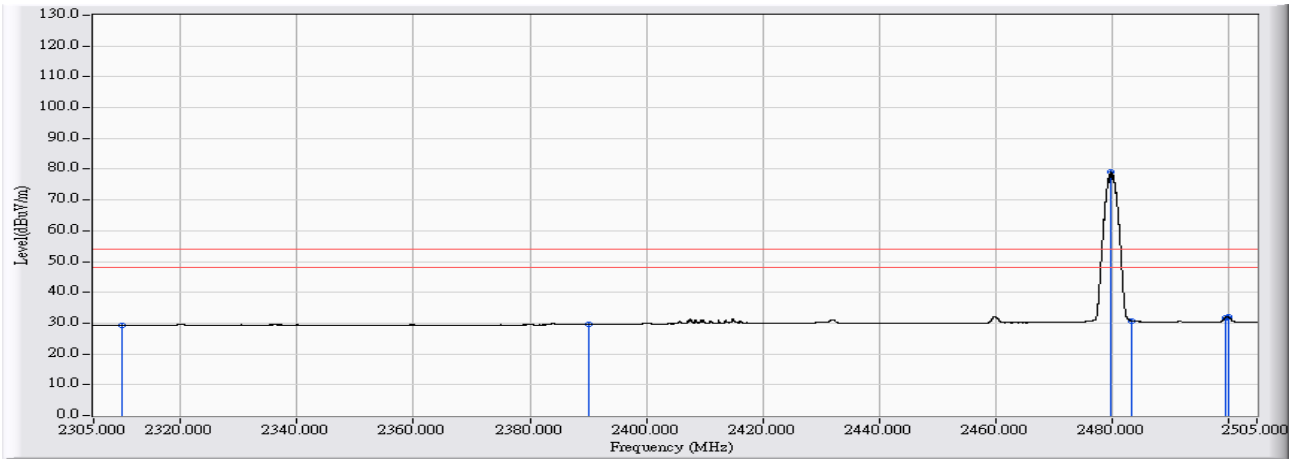


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	27.295	38.310	-35.690	74.000	PEAK
2		2390.000	11.544	27.790	39.334	-34.666	74.000	PEAK
3	*	2479.842	12.147	79.961	92.109	18.109	74.000	PEAK
4		2483.500	12.172	28.388	40.560	-33.440	74.000	PEAK
5		2499.281	12.271	31.501	43.773	-30.227	74.000	PEAK
6		2500.000	12.274	28.696	40.971	-33.029	74.000	PEAK

Note:

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

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 1: Tx_DH5_802.15.1_2480MHz**

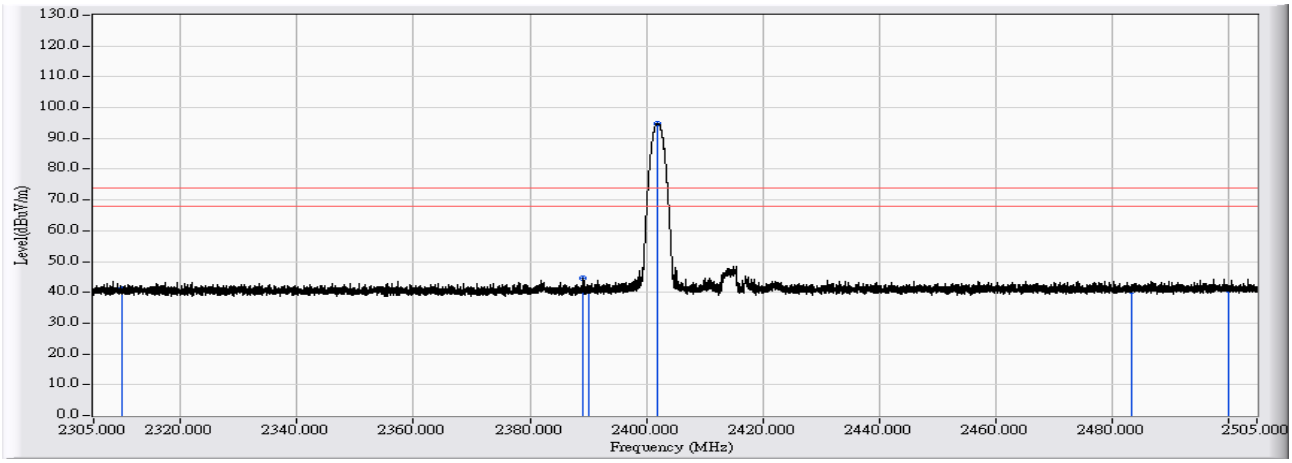


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.268	29.283	-24.717	54.000	AVERAGE
2		2390.000	11.544	17.959	29.503	-24.497	54.000	AVERAGE
3	*	2479.902	12.148	66.840	78.988	24.988	54.000	AVERAGE
4		2483.500	12.172	18.538	30.710	-23.290	54.000	AVERAGE
5		2499.560	12.273	19.474	31.747	-22.253	54.000	AVERAGE
6		2500.000	12.274	19.909	32.184	-21.816	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2402MHz**

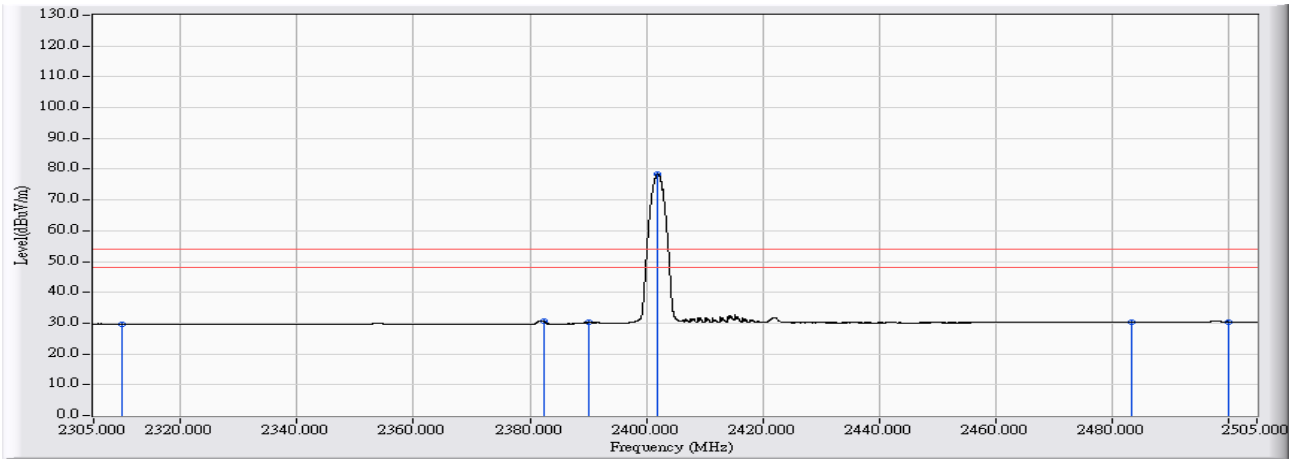


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.972	40.987	-33.013	74.000	PEAK
2		2389.152	11.538	33.008	44.546	-29.454	74.000	PEAK
3		2390.000	11.544	29.358	40.902	-33.098	74.000	PEAK
4	*	2401.850	11.623	83.341	94.964	20.964	74.000	PEAK
5		2483.500	12.172	28.105	40.277	-33.723	74.000	PEAK
6		2500.000	12.274	28.564	40.839	-33.161	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. If the readings given are average, peak measurement should also be supplied.

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2402MHz**

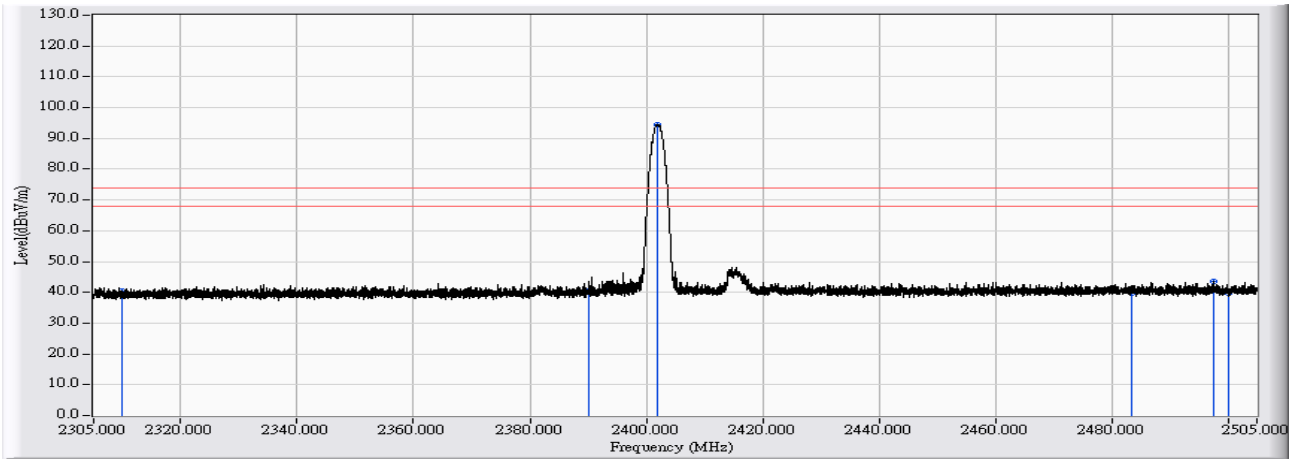


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.573	29.588	-24.412	54.000	AVERAGE
2		2382.312	11.492	19.120	30.613	-23.387	54.000	AVERAGE
3		2390.000	11.544	18.699	30.243	-23.757	54.000	AVERAGE
4	*	2401.950	11.623	66.895	78.519	24.519	54.000	AVERAGE
5		2483.500	12.172	18.221	30.393	-23.607	54.000	AVERAGE
6		2500.000	12.274	18.198	30.473	-23.527	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2402MHz**

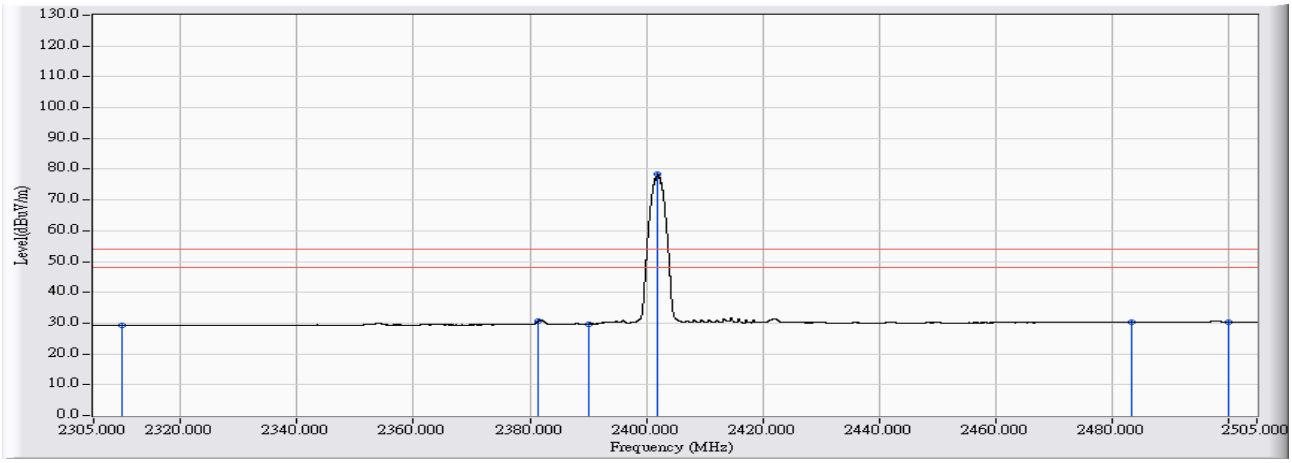


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.244	40.259	-33.741	74.000	PEAK
2		2390.000	11.544	28.785	40.329	-33.671	74.000	PEAK
3	*	2401.810	11.623	82.903	94.526	20.526	74.000	PEAK
4		2483.500	12.172	27.706	39.878	-34.122	74.000	PEAK
5		2497.681	12.263	31.324	43.587	-30.413	74.000	PEAK
6		2500.000	12.274	27.570	39.845	-34.155	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2402MHz**

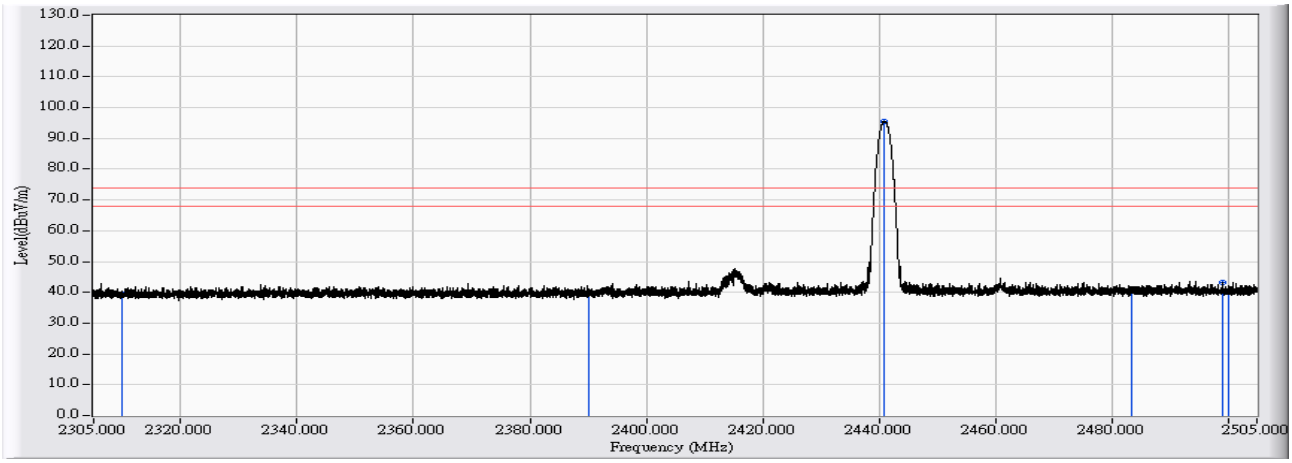


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.155	29.170	-24.830	54.000	AVERAGE
2		2381.472	11.487	19.161	30.648	-23.352	54.000	AVERAGE
3		2390.000	11.544	18.231	29.775	-24.225	54.000	AVERAGE
4	*	2401.950	11.623	66.650	78.274	24.274	54.000	AVERAGE
5		2483.500	12.172	18.202	30.374	-23.626	54.000	AVERAGE
6		2500.000	12.274	18.133	30.408	-23.592	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

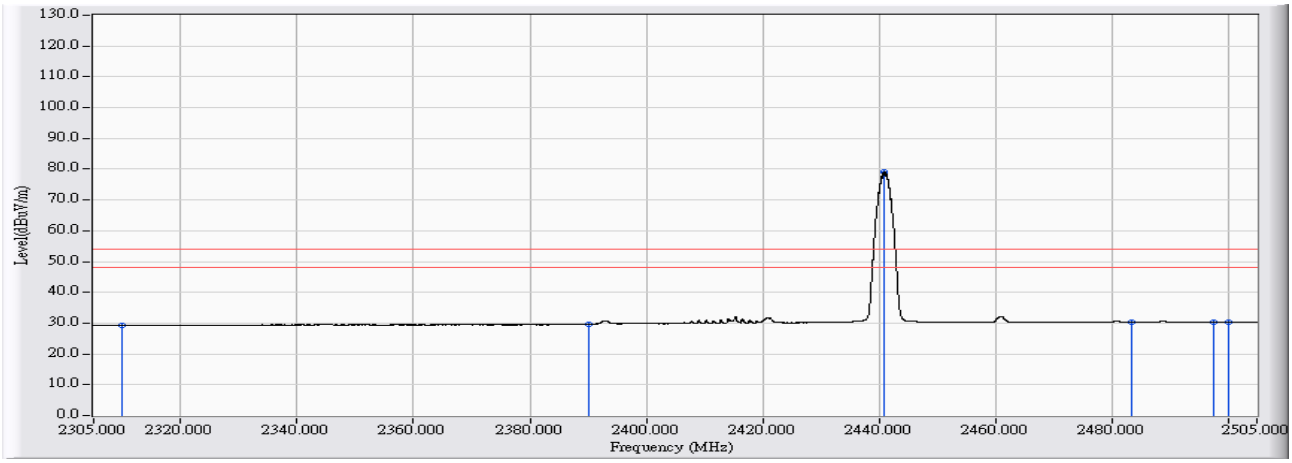


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.330	39.345	-34.655	74.000	PEAK
2		2390.000	11.544	28.480	40.024	-33.976	74.000	PEAK
3	*	2440.866	11.886	83.765	95.651	21.651	74.000	PEAK
4		2483.500	12.172	28.407	40.579	-33.421	74.000	PEAK
5		2499.201	12.271	30.889	43.160	-30.840	74.000	PEAK
6		2500.000	12.274	27.808	40.083	-33.917	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

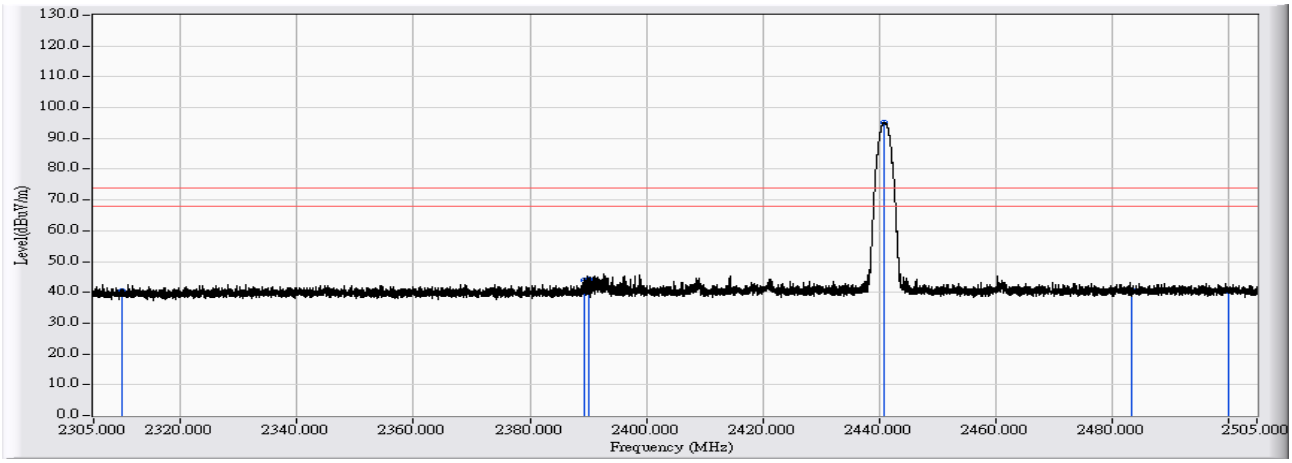


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.280	29.295	-24.705	54.000	AVERAGE
2		2390.000	11.544	18.043	29.587	-24.413	54.000	AVERAGE
3	*	2440.906	11.886	67.332	79.218	25.218	54.000	AVERAGE
4		2483.500	12.172	18.182	30.354	-23.646	54.000	AVERAGE
5		2497.441	12.262	18.149	30.411	-23.589	54.000	AVERAGE
6		2500.000	12.274	18.105	30.380	-23.620	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

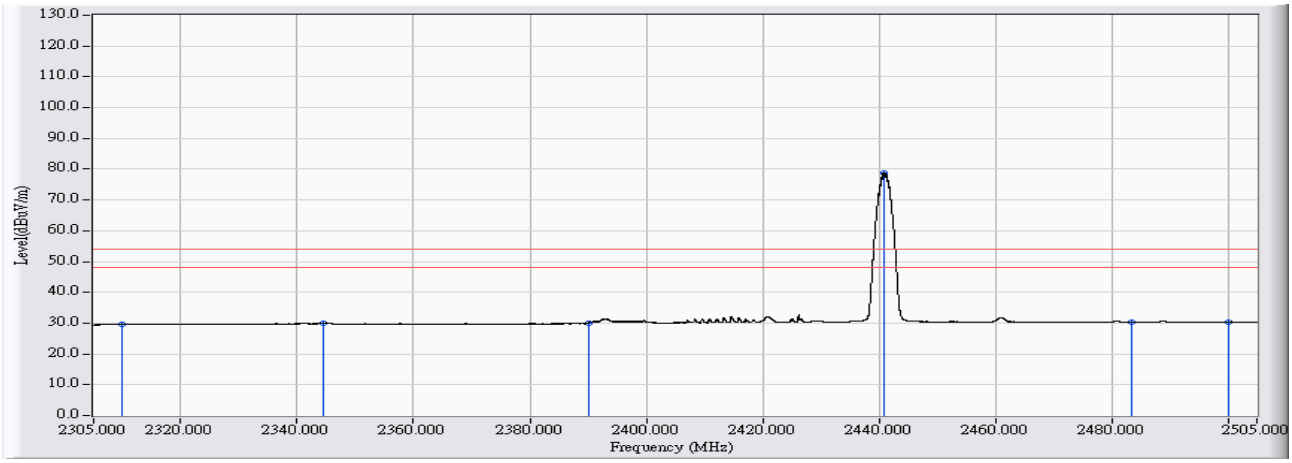


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.398	40.413	-33.587	74.000	PEAK
2		2389.272	11.538	32.273	43.812	-30.188	74.000	PEAK
3		2390.000	11.544	32.865	44.409	-29.591	74.000	PEAK
4	*	2440.866	11.886	83.350	95.236	21.236	74.000	PEAK
5		2483.500	12.172	28.744	40.916	-33.084	74.000	PEAK
6		2500.000	12.274	28.171	40.446	-33.554	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2441MHz**

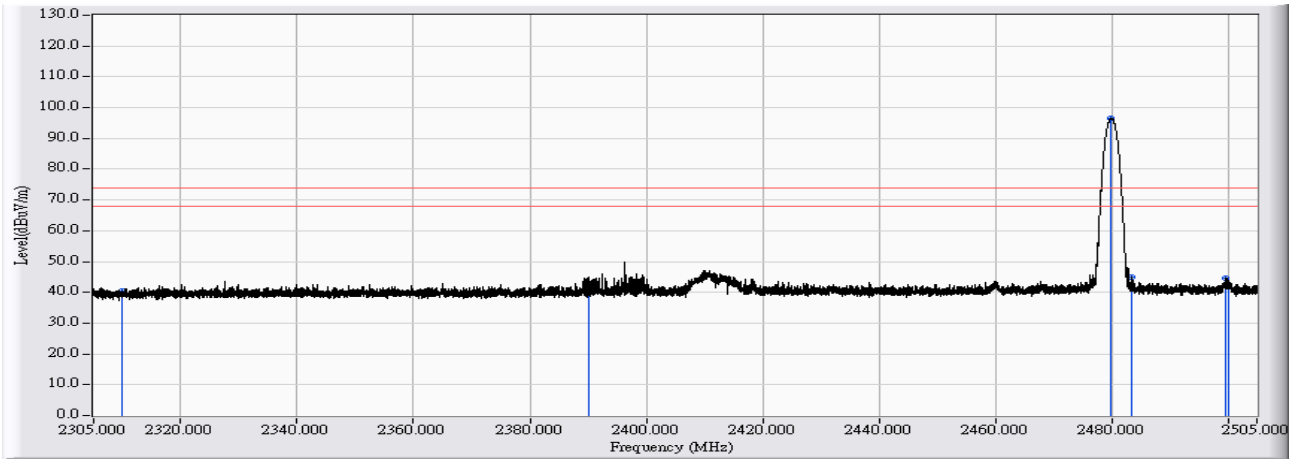


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.497	29.512	-24.488	54.000	AVERAGE
2		2344.556	11.243	18.839	30.082	-23.918	54.000	AVERAGE
3		2390.000	11.544	18.417	29.961	-24.039	54.000	AVERAGE
4	*	2440.926	11.886	67.004	78.890	24.890	54.000	AVERAGE
5		2483.500	12.172	18.192	30.364	-23.636	54.000	AVERAGE
6		2500.000	12.274	18.154	30.429	-23.571	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2480MHz**

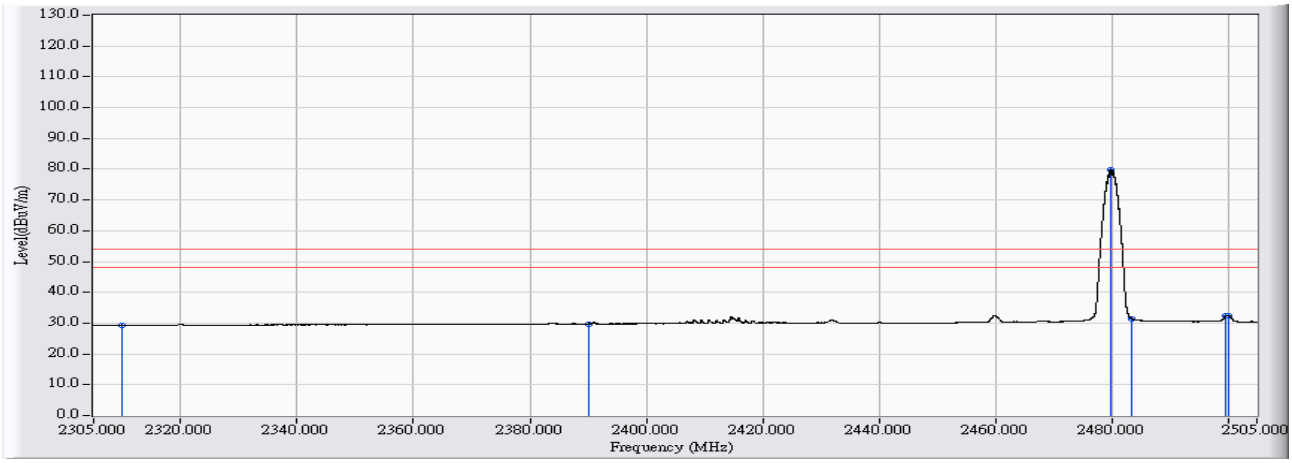


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.251	40.266	-33.734	74.000	PEAK
2		2390.000	11.544	30.448	41.992	-32.008	74.000	PEAK
3	*	2479.862	12.148	84.319	96.467	22.467	74.000	PEAK
4		2483.500	12.172	32.636	44.808	-29.192	74.000	PEAK
5		2499.520	12.273	32.370	44.643	-29.357	74.000	PEAK
6		2500.000	12.274	29.458	41.733	-32.267	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2480MHz**

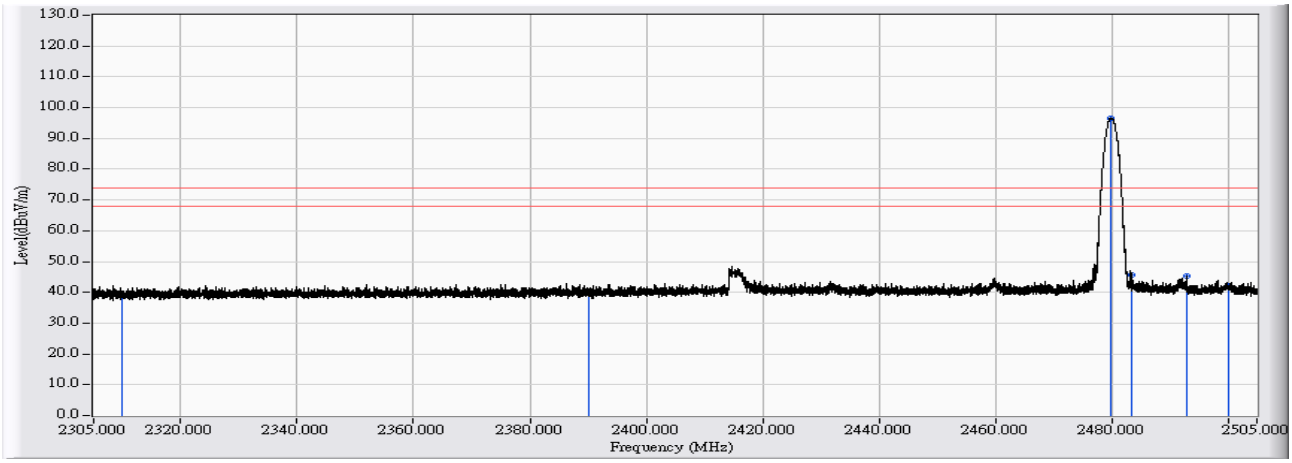


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.213	29.228	-24.772	54.000	AVERAGE
2		2390.000	11.544	18.212	29.756	-24.244	54.000	AVERAGE
3	*	2479.902	12.148	67.785	79.933	25.933	54.000	AVERAGE
4		2483.500	12.172	19.189	31.361	-22.639	54.000	AVERAGE
5		2499.600	12.274	19.981	32.254	-21.746	54.000	AVERAGE
6		2500.000	12.274	20.214	32.489	-21.511	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2480MHz**

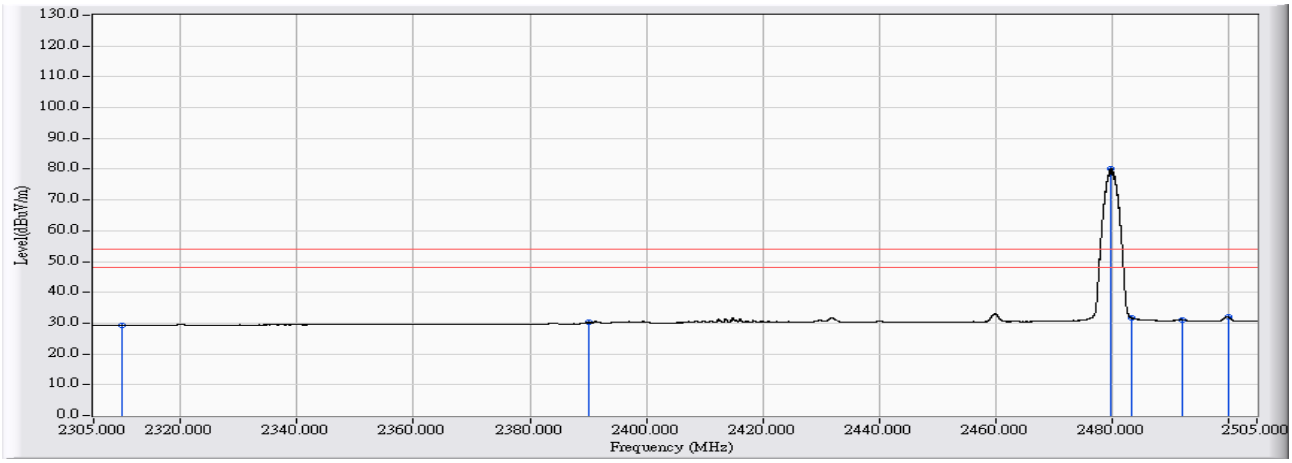


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	27.705	38.720	-35.280	74.000	PEAK
2		2390.000	11.544	28.810	40.354	-33.646	74.000	PEAK
3	*	2479.822	12.147	84.405	96.553	22.553	74.000	PEAK
4		2483.500	12.172	33.552	45.724	-28.276	74.000	PEAK
5		2492.901	12.234	32.911	45.145	-28.855	74.000	PEAK
6		2500.000	12.274	30.025	42.300	-31.700	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 2: Tx_2DH5_802.15.1_2480MHz**

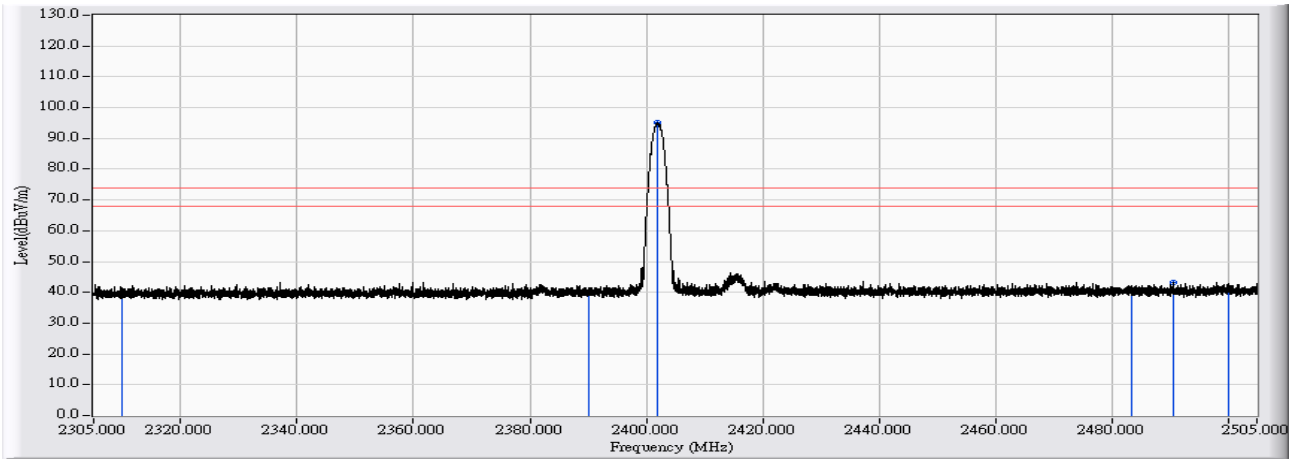


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.207	29.222	-24.778	54.000	AVERAGE
2		2390.000	11.544	18.704	30.248	-23.752	54.000	AVERAGE
3	*	2479.882	12.148	67.903	80.051	26.051	54.000	AVERAGE
4		2483.500	12.172	19.420	31.592	-22.408	54.000	AVERAGE
5		2492.061	12.229	18.929	31.158	-22.842	54.000	AVERAGE
6		2500.000	12.274	19.717	31.992	-22.008	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2402MHz**

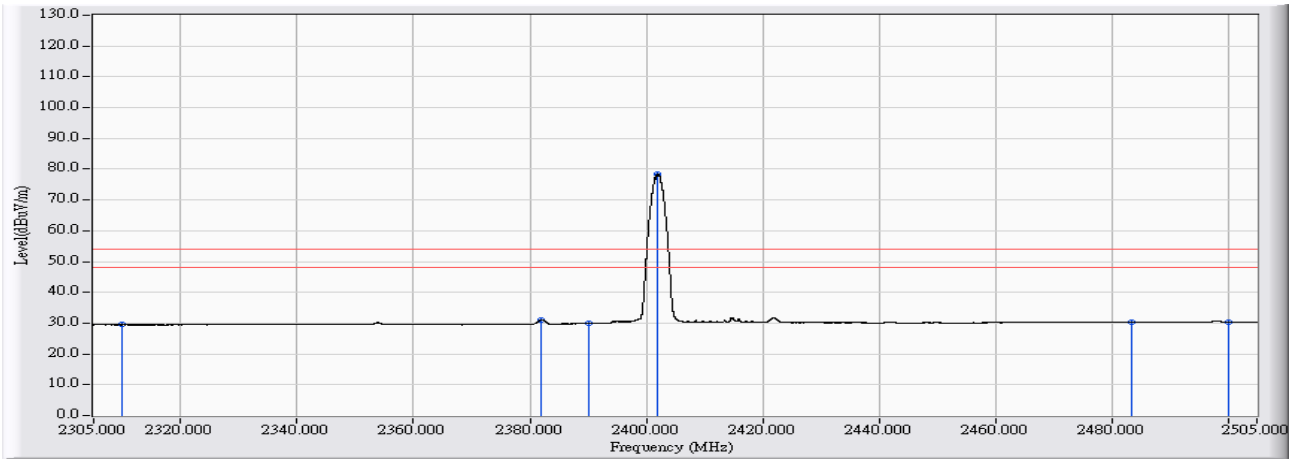


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.443	39.458	-34.542	74.000	PEAK
2		2390.000	11.544	28.140	39.684	-34.316	74.000	PEAK
3	*	2401.930	11.623	83.471	95.095	21.095	74.000	PEAK
4		2483.500	12.172	28.220	40.392	-33.608	74.000	PEAK
5		2490.761	12.221	30.864	43.084	-30.916	74.000	PEAK
6		2500.000	12.274	27.847	40.122	-33.878	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2402MHz**

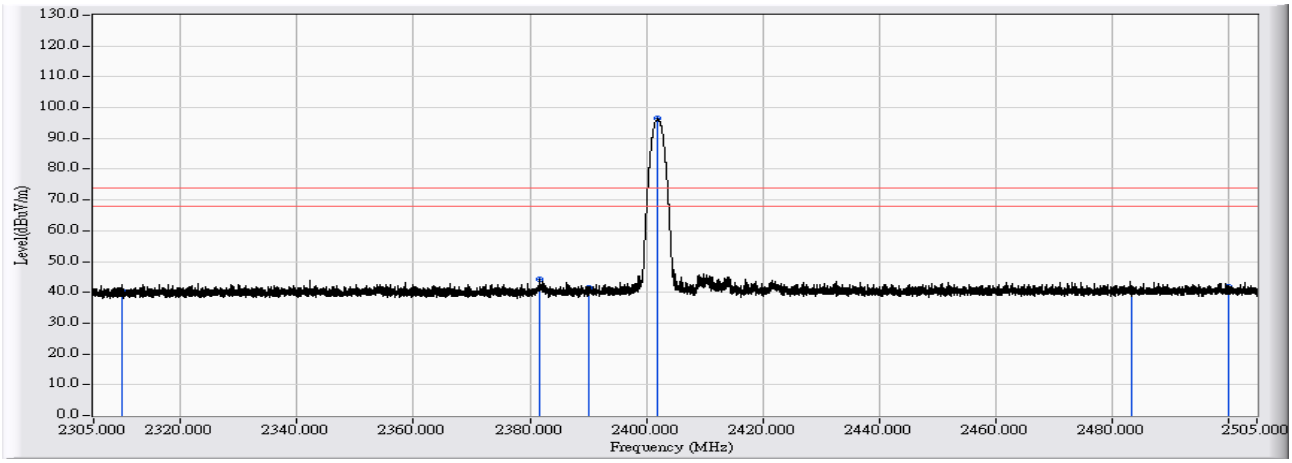


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.491	29.506	-24.494	54.000	AVERAGE
2		2381.912	11.491	19.692	31.182	-22.818	54.000	AVERAGE
3		2390.000	11.544	18.415	29.959	-24.041	54.000	AVERAGE
4	*	2402.010	11.625	66.867	78.491	24.491	54.000	AVERAGE
5		2483.500	12.172	18.235	30.407	-23.593	54.000	AVERAGE
6		2500.000	12.274	18.119	30.394	-23.606	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2402MHz**

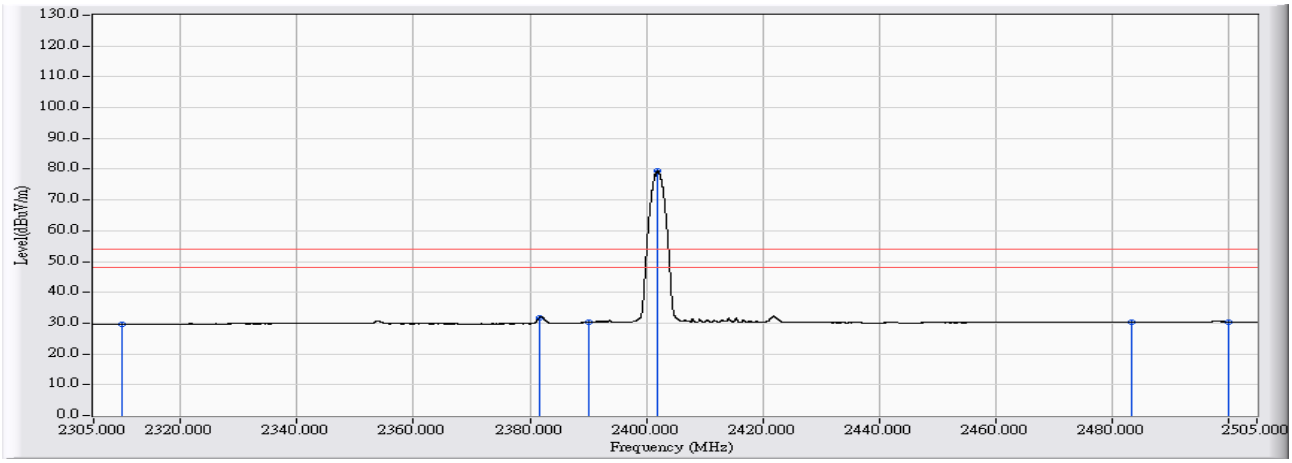


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.312	40.327	-33.673	74.000	PEAK
2		2381.712	11.488	32.856	44.345	-29.655	74.000	PEAK
3		2390.000	11.544	29.857	41.401	-32.599	74.000	PEAK
4	*	2401.970	11.623	84.746	96.370	22.370	74.000	PEAK
5		2483.500	12.172	27.757	39.929	-34.071	74.000	PEAK
6		2500.000	12.274	29.638	41.913	-32.087	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2402MHz**

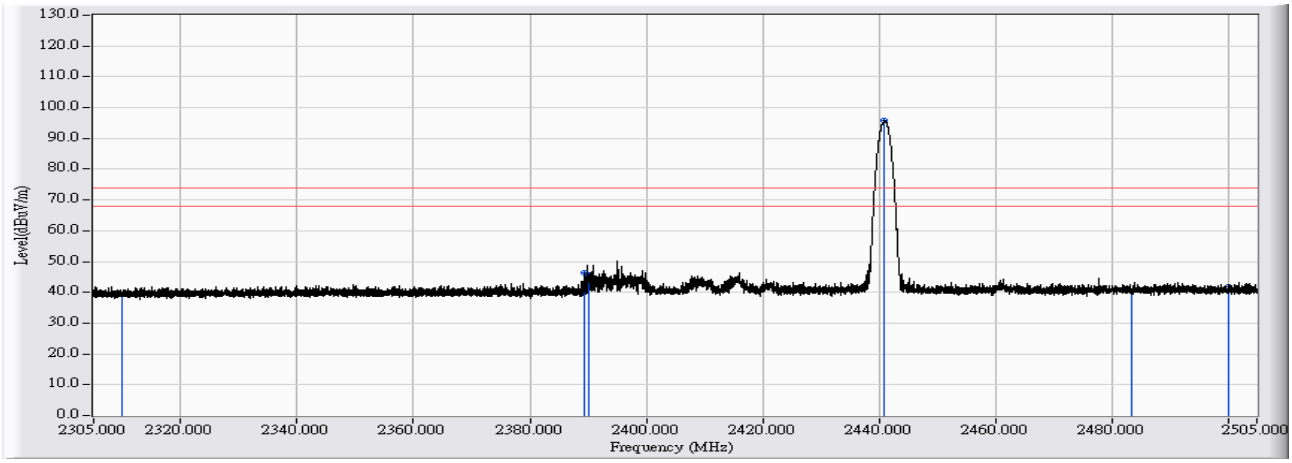


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.478	29.493	-24.507	54.000	AVERAGE
2		2381.632	11.488	20.202	31.690	-22.310	54.000	AVERAGE
3		2390.000	11.544	18.908	30.452	-23.548	54.000	AVERAGE
4	*	2401.990	11.623	67.886	79.510	25.510	54.000	AVERAGE
5		2483.500	12.172	18.204	30.376	-23.624	54.000	AVERAGE
6		2500.000	12.274	18.115	30.390	-23.610	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

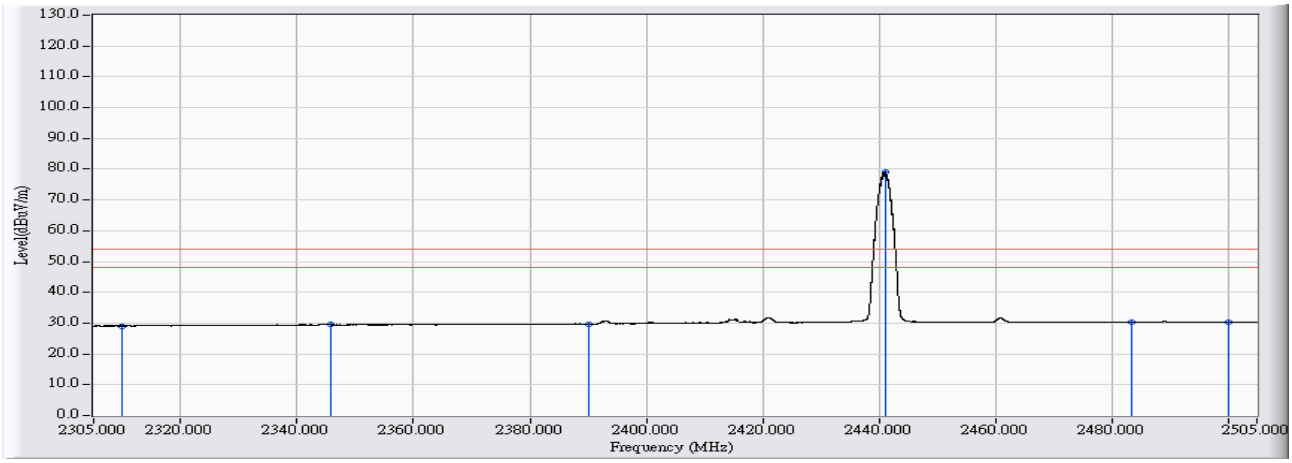


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	28.390	39.405	-34.595	74.000	PEAK
2		2389.391	11.540	34.685	46.225	-27.775	74.000	PEAK
3		2390.000	11.544	34.085	45.629	-28.371	74.000	PEAK
4	*	2440.966	11.886	83.880	95.766	21.766	74.000	PEAK
5		2483.500	12.172	28.250	40.422	-33.578	74.000	PEAK
6		2500.000	12.274	29.627	41.902	-32.098	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

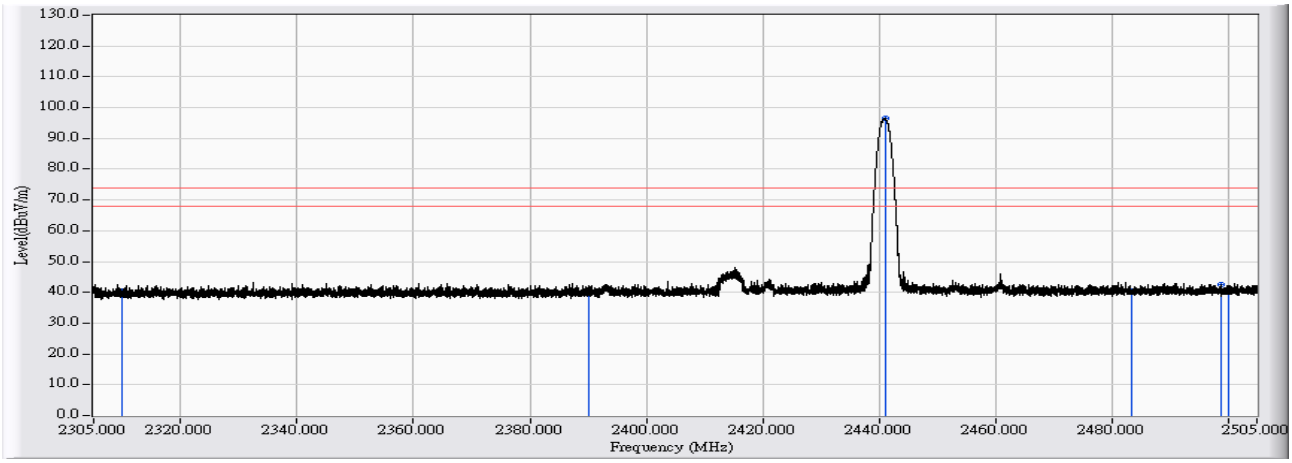


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.066	29.081	-24.919	54.000	AVERAGE
2		2345.656	11.251	18.317	29.567	-24.433	54.000	AVERAGE
3		2390.000	11.544	18.243	29.787	-24.213	54.000	AVERAGE
4	*	2441.026	11.887	67.078	78.965	24.965	54.000	AVERAGE
5		2483.500	12.172	18.142	30.314	-23.686	54.000	AVERAGE
6		2500.000	12.274	18.156	30.431	-23.569	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

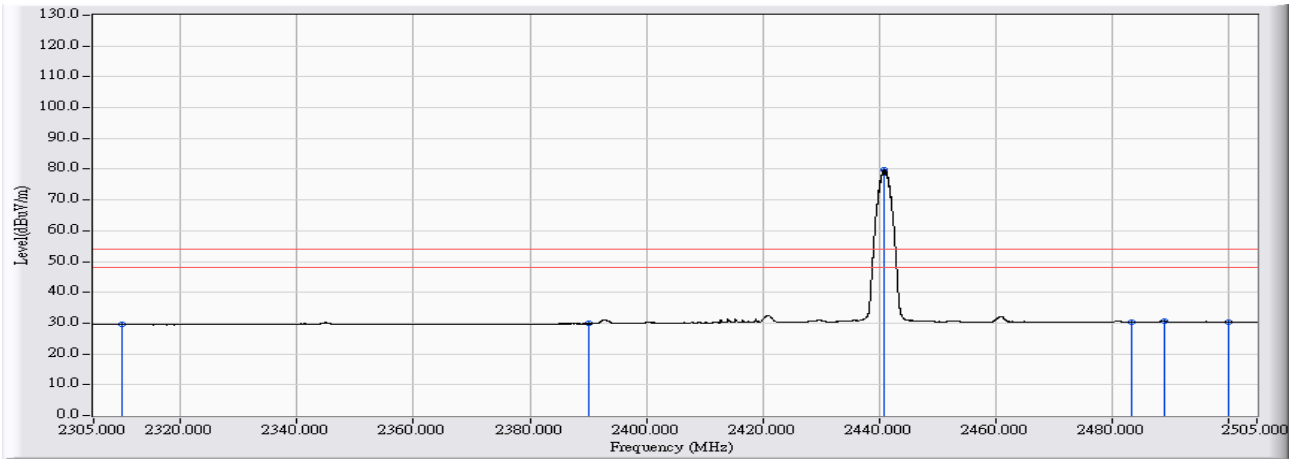


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.303	40.318	-33.682	74.000	PEAK
2		2390.000	11.544	27.742	39.286	-34.714	74.000	PEAK
3	*	2441.126	11.887	84.756	96.643	22.643	74.000	PEAK
4		2483.500	12.172	28.394	40.566	-33.434	74.000	PEAK
5		2498.781	12.269	30.336	42.605	-31.395	74.000	PEAK
6		2500.000	12.274	28.326	40.601	-33.399	74.000	PEAK

Note:

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

Site : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2441MHz**

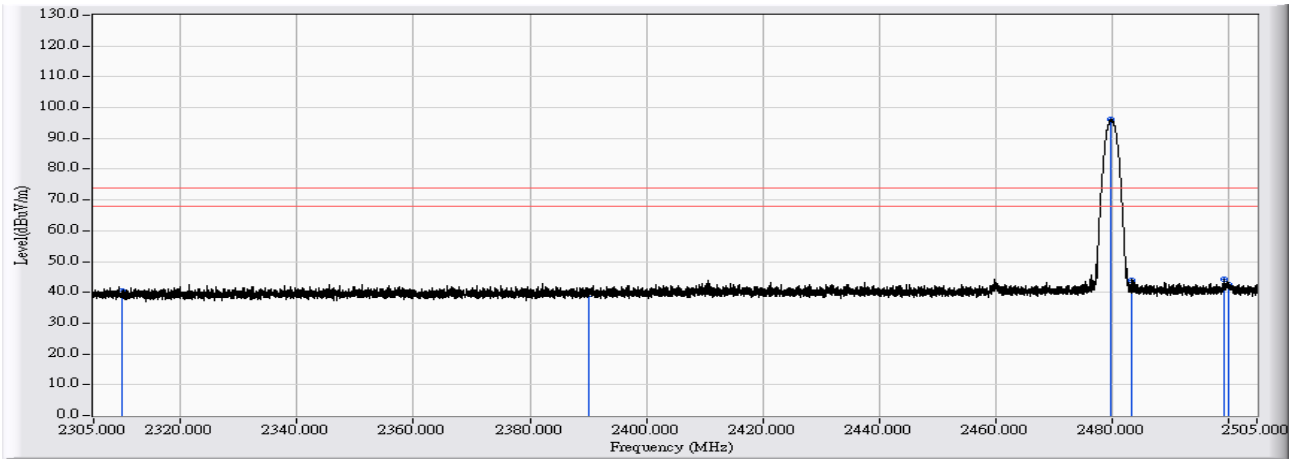


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.523	29.538	-24.462	54.000	AVERAGE
2		2390.000	11.544	18.293	29.837	-24.163	54.000	AVERAGE
3	*	2440.966	11.886	67.958	79.844	25.844	54.000	AVERAGE
4		2483.500	12.172	18.283	30.455	-23.545	54.000	AVERAGE
5		2489.002	12.208	18.396	30.605	-23.395	54.000	AVERAGE
6		2500.000	12.274	18.187	30.462	-23.538	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2480MHz**

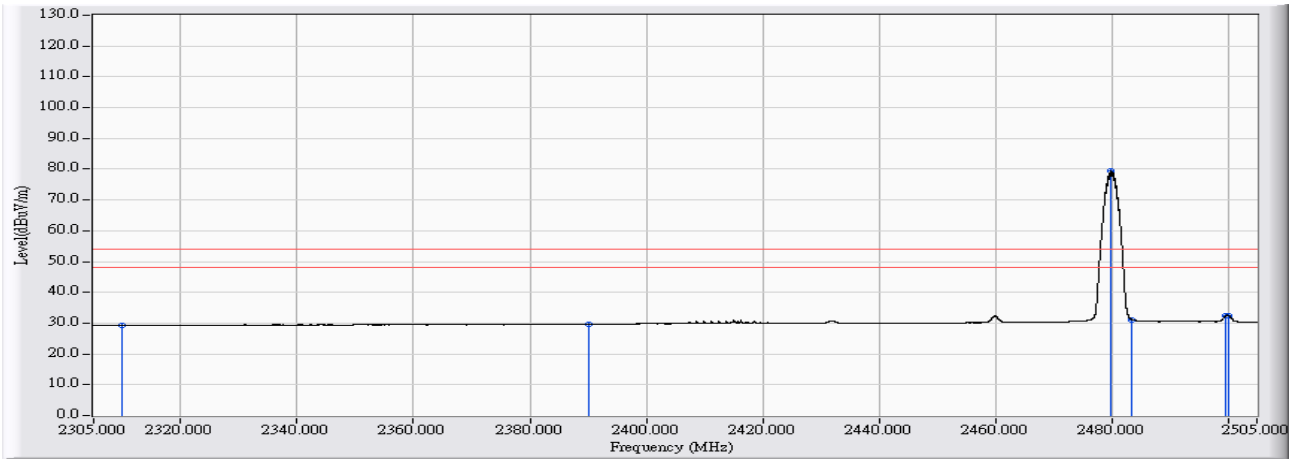


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	29.261	40.276	-33.724	74.000	PEAK
2		2390.000	11.544	27.956	39.500	-34.500	74.000	PEAK
3	*	2479.982	12.149	83.980	96.129	22.129	74.000	PEAK
4		2483.500	12.172	31.666	43.838	-30.162	74.000	PEAK
5		2499.440	12.272	32.068	44.340	-29.660	74.000	PEAK
6		2500.000	12.274	30.328	42.603	-31.397	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2480MHz**

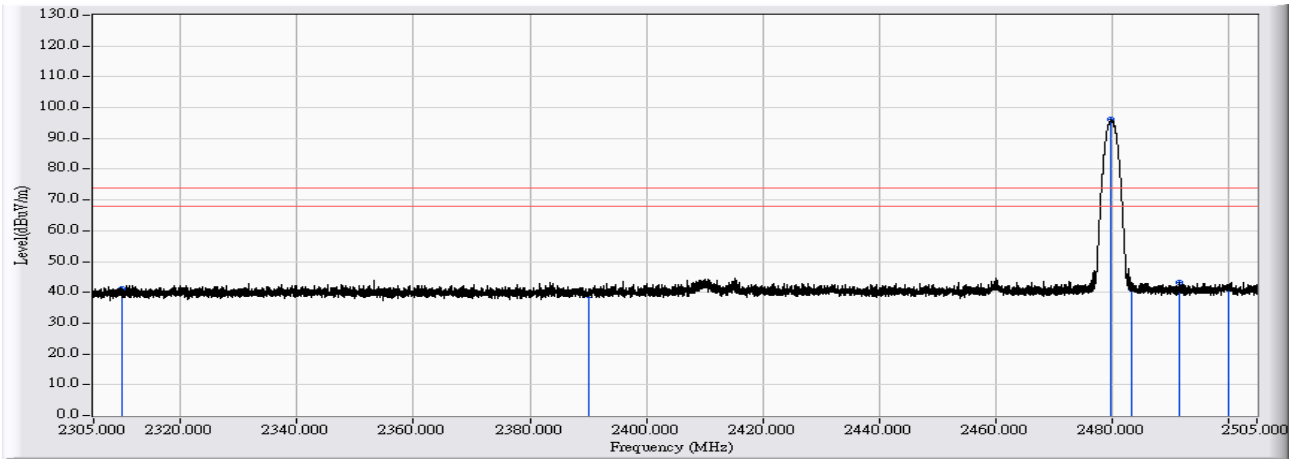


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.198	29.213	-24.787	54.000	AVERAGE
2		2390.000	11.544	18.096	29.640	-24.360	54.000	AVERAGE
3	*	2479.982	12.149	67.162	79.311	25.311	54.000	AVERAGE
4		2483.500	12.172	19.009	31.181	-22.819	54.000	AVERAGE
5		2499.560	12.273	19.974	32.247	-21.753	54.000	AVERAGE
6		2500.000	12.274	20.295	32.570	-21.430	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2480MHz**

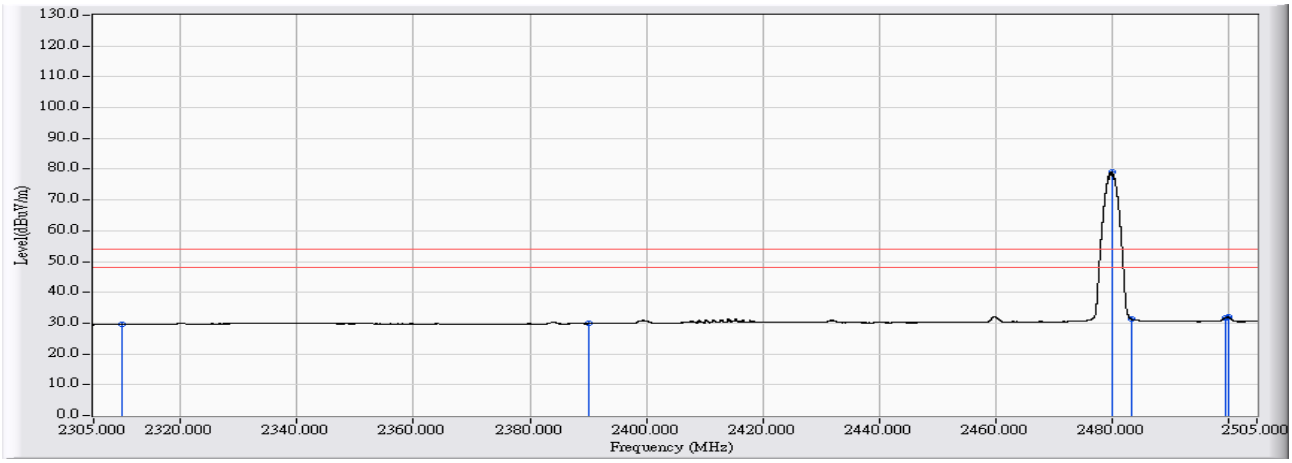


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	30.141	41.156	-32.844	74.000	PEAK
2		2390.000	11.544	27.536	39.080	-34.920	74.000	PEAK
3	*	2479.942	12.149	83.887	96.035	22.035	74.000	PEAK
4		2483.500	12.172	28.851	41.023	-32.977	74.000	PEAK
5		2491.761	12.226	30.919	43.146	-30.854	74.000	PEAK
6		2500.000	12.274	29.279	41.554	-32.446	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 : CB4-H	**Time : 2017/08/04**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB4_FCC_EFS_B091_1-18GHz_3M_0117 - VERTICAL	**Power : AC 120V/60Hz**
EUT : UHD751-P	**Note : Mode 3: Tx_3DH5_802.15.1_2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.014	18.566	29.581	-24.419	54.000	AVERAGE
2		2390.000	11.544	18.278	29.822	-24.178	54.000	AVERAGE
3	*	2480.022	12.149	67.076	79.225	25.225	54.000	AVERAGE
4		2483.500	12.172	19.063	31.235	-22.765	54.000	AVERAGE
5		2499.580	12.273	19.441	31.714	-22.286	54.000	AVERAGE
6		2500.000	12.274	19.663	31.938	-22.062	54.000	AVERAGE

Note:

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

7. Number of hopping frequency

7.1. Test Equipment

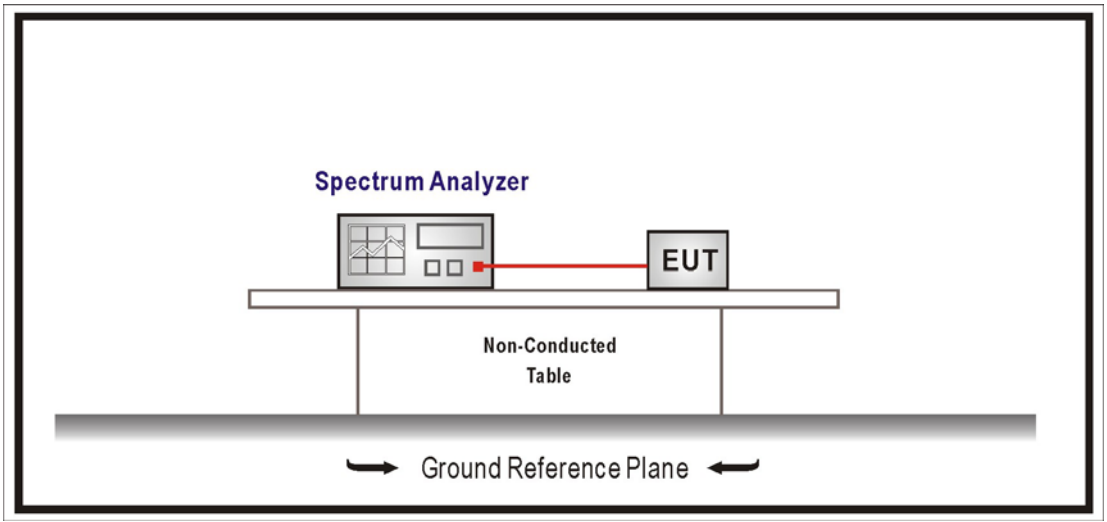
The following test equipment is used during the test:

Number of hopping frequency / SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08

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

7.2. Test Setup



7.3. Limits

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

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

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

7.4. Test Procedures

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

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

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

7.5. Test Specification

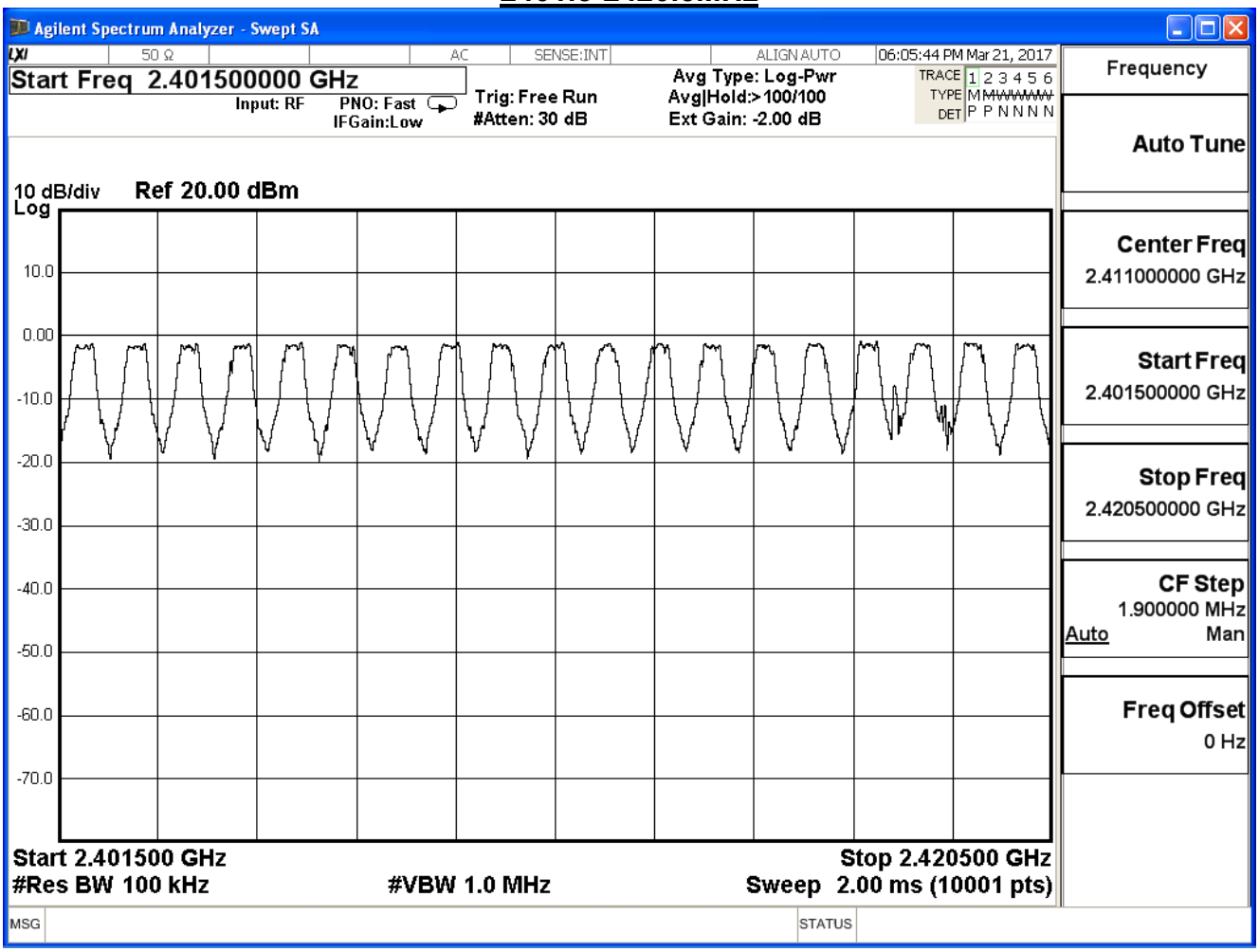
According to FCC Part 15 Subpart C Paragraph 15.247: 2015

7.6. Test Result

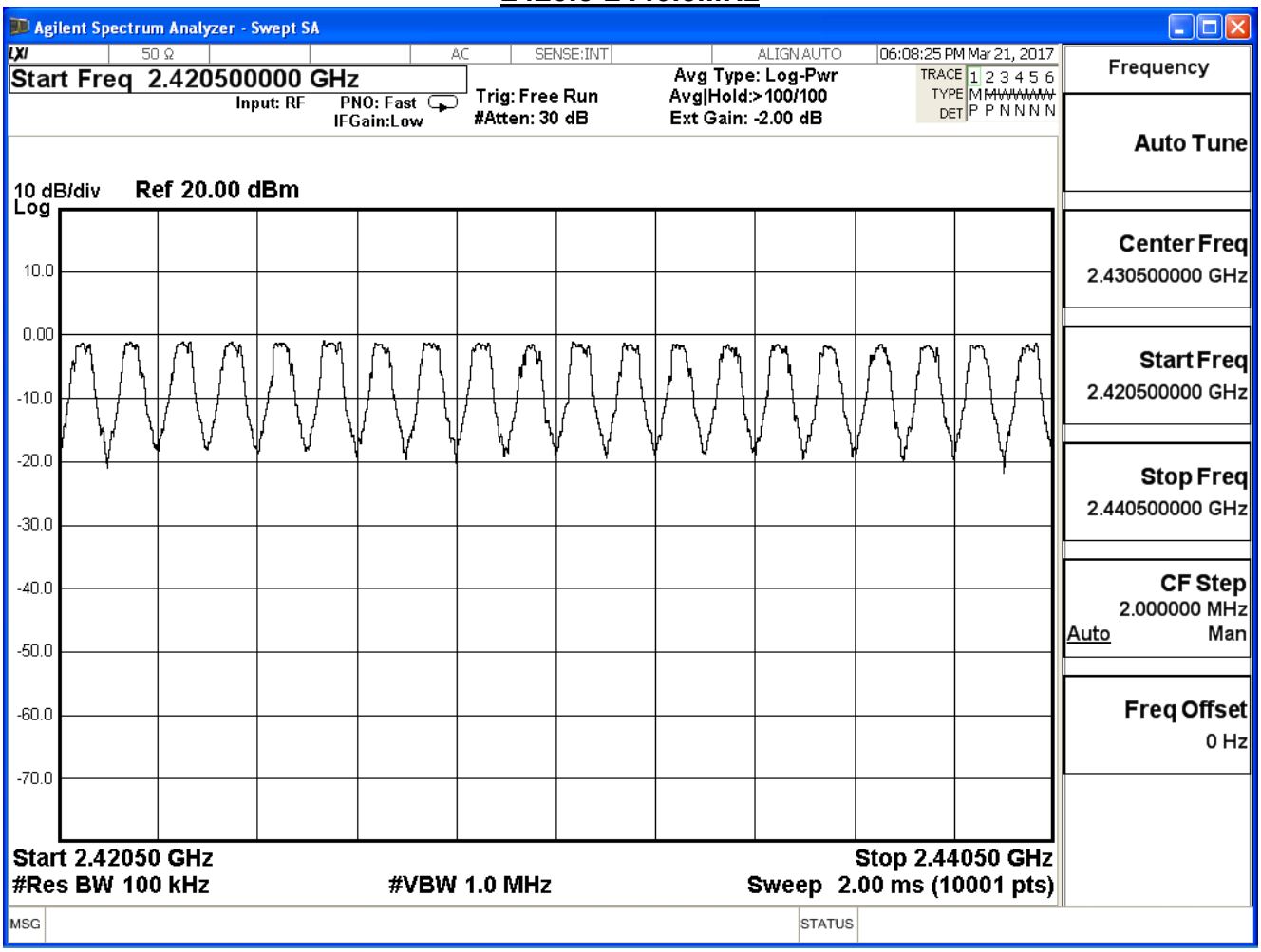
Product	UHD751-P		
Test Item	Number of hopping frequency		
Test Mode	Mode 1: Tx_DH5		
Date of Test	2017/03/21	Test Site	SR10-H

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

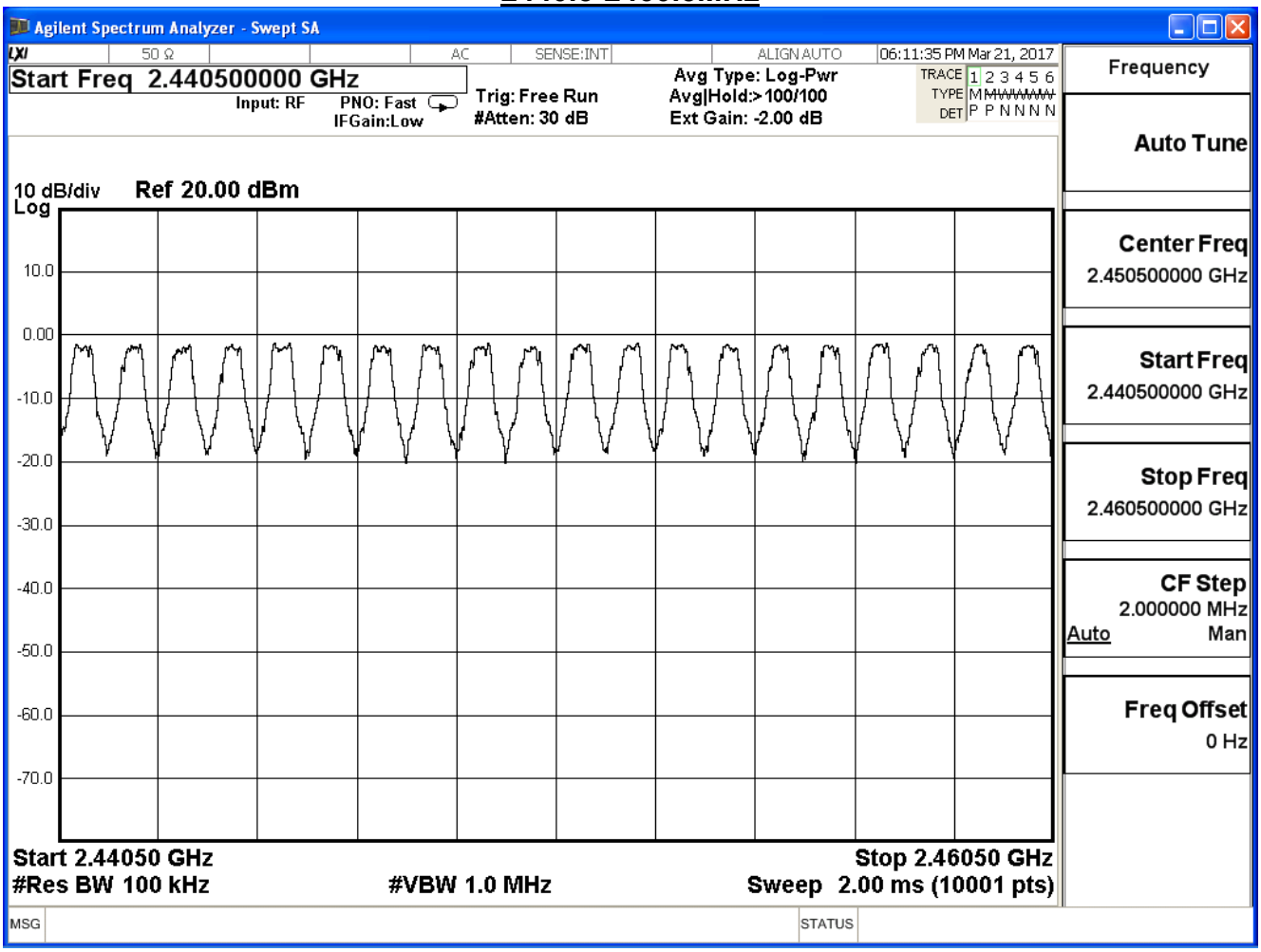
2401.5-2420.5MHz



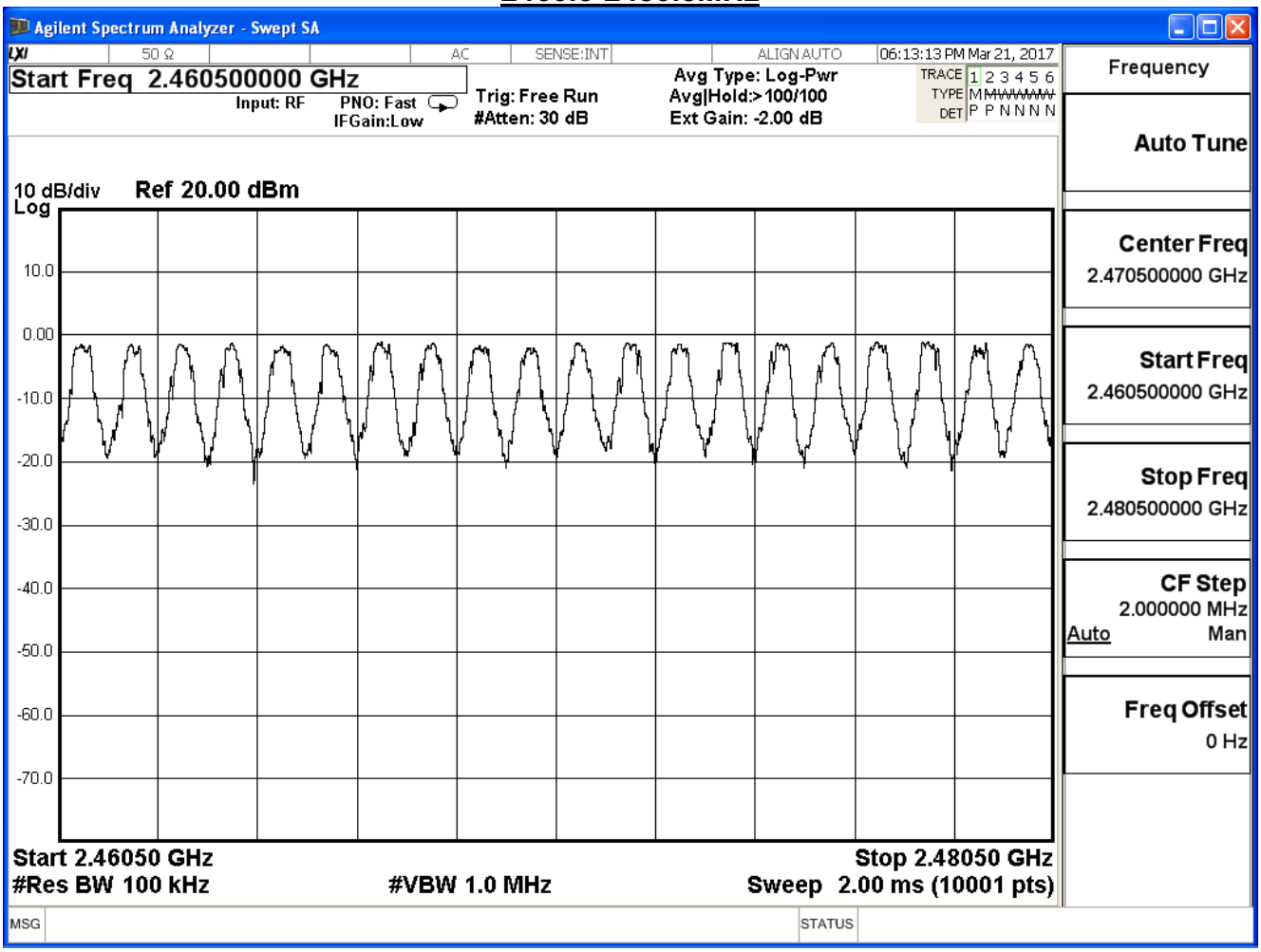
2420.5-2440.5MHz



2440.5-2460.5MHz



2460.5-2480.5MHz



8. Carrier Frequency Separation

8.1. Test Equipment

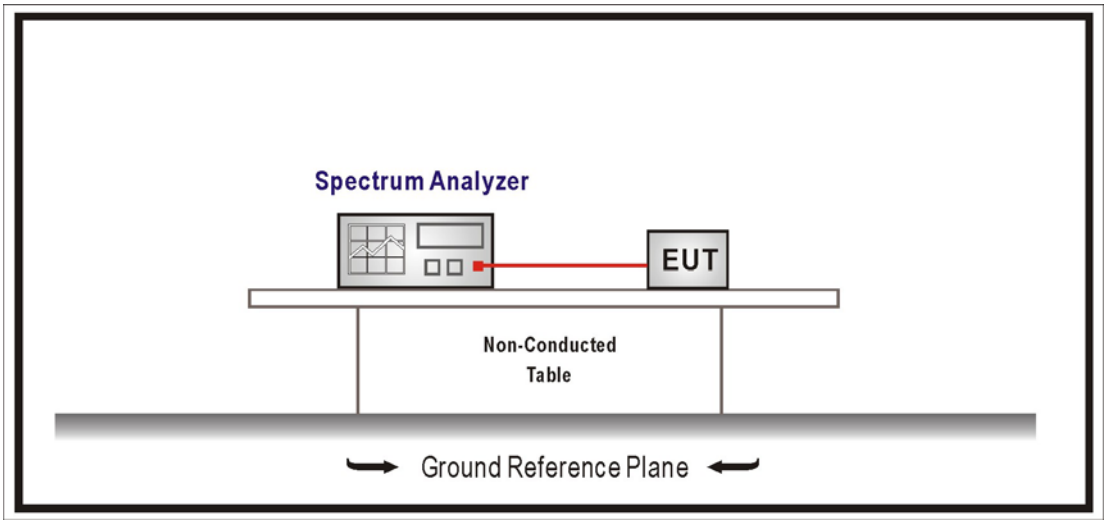
The following test equipment is used during the test:

Carrier Frequency Separation / SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08

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

8.2. Test Setup



8.3. Limits

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

8.4. Test Procedures

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

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

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

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

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

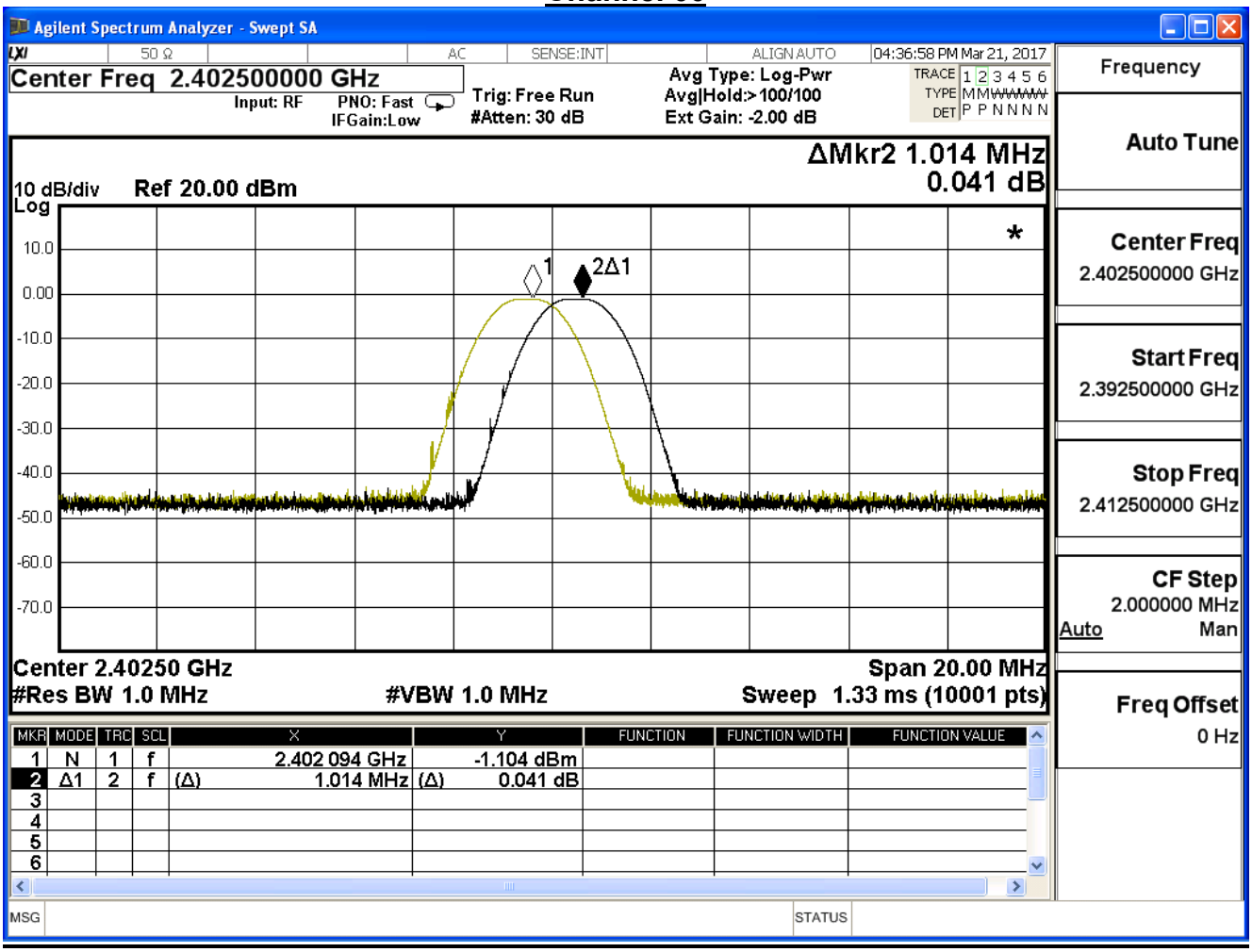
8.6. Test Result

Product	UHD751-P		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Tx_DH5		
Date of Test	2017/03/21	Test Site	SR10-H

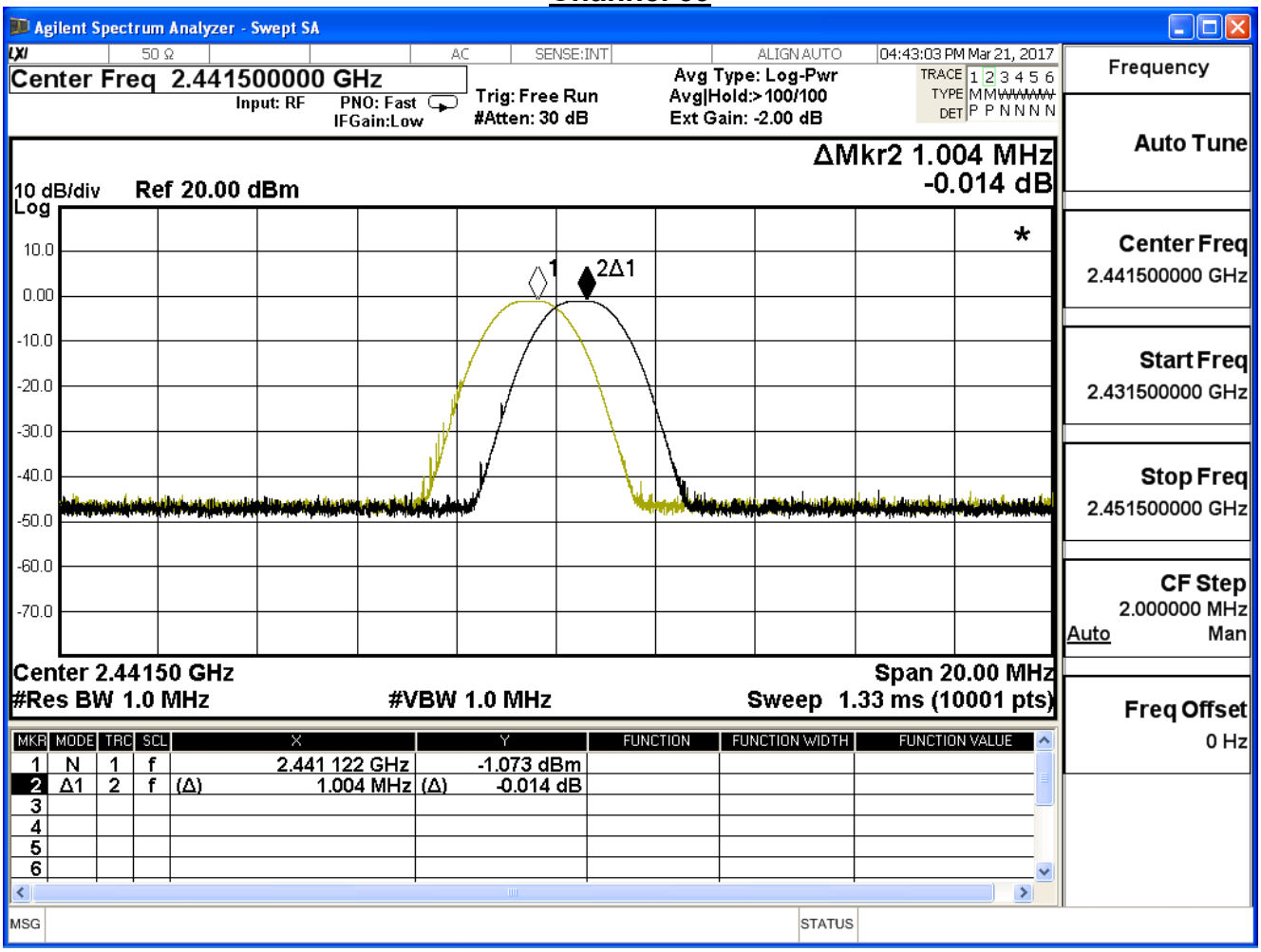
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.014	0.738	Pass
39	2441	1.004	0.739	Pass
78	2480	1.026	0.738	Pass

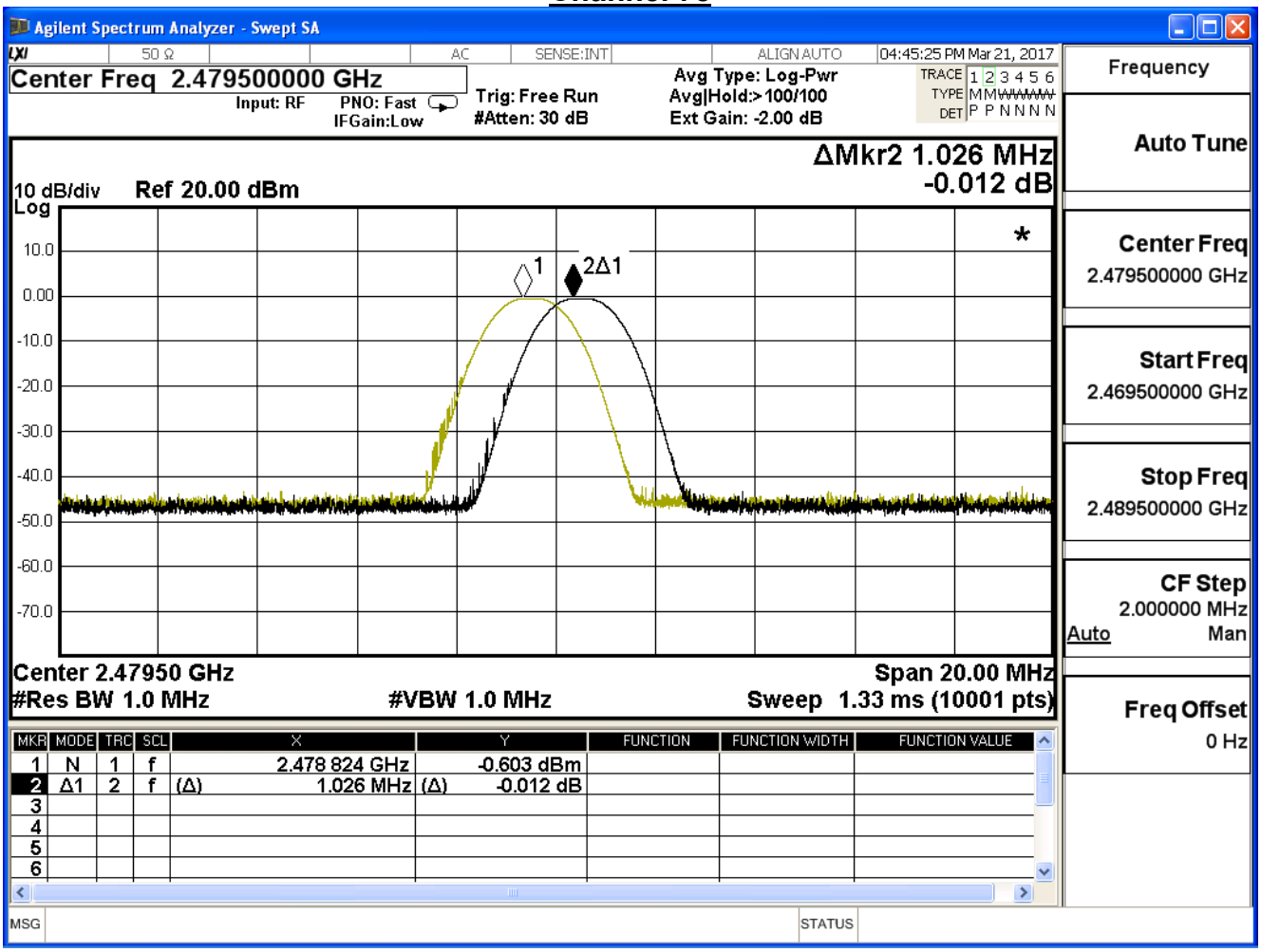
Channel 00



Channel 39


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
04:43:03 PM Mar 21, 2017
ΔMkr2 1.004 MHz
-0.014 dB
10 dB/div
Log
Ref 20.00 dBm
Center 2.44150 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
Sweep 1.33 ms (10001 pts)
1 N 1 f 2.441 122 GHz -1.073 dBm
2 Δ1 2 f (Δ) 1.004 MHz (Δ) -0.014 dB
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.431500000 GHz
Stop Freq
2.451500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 78

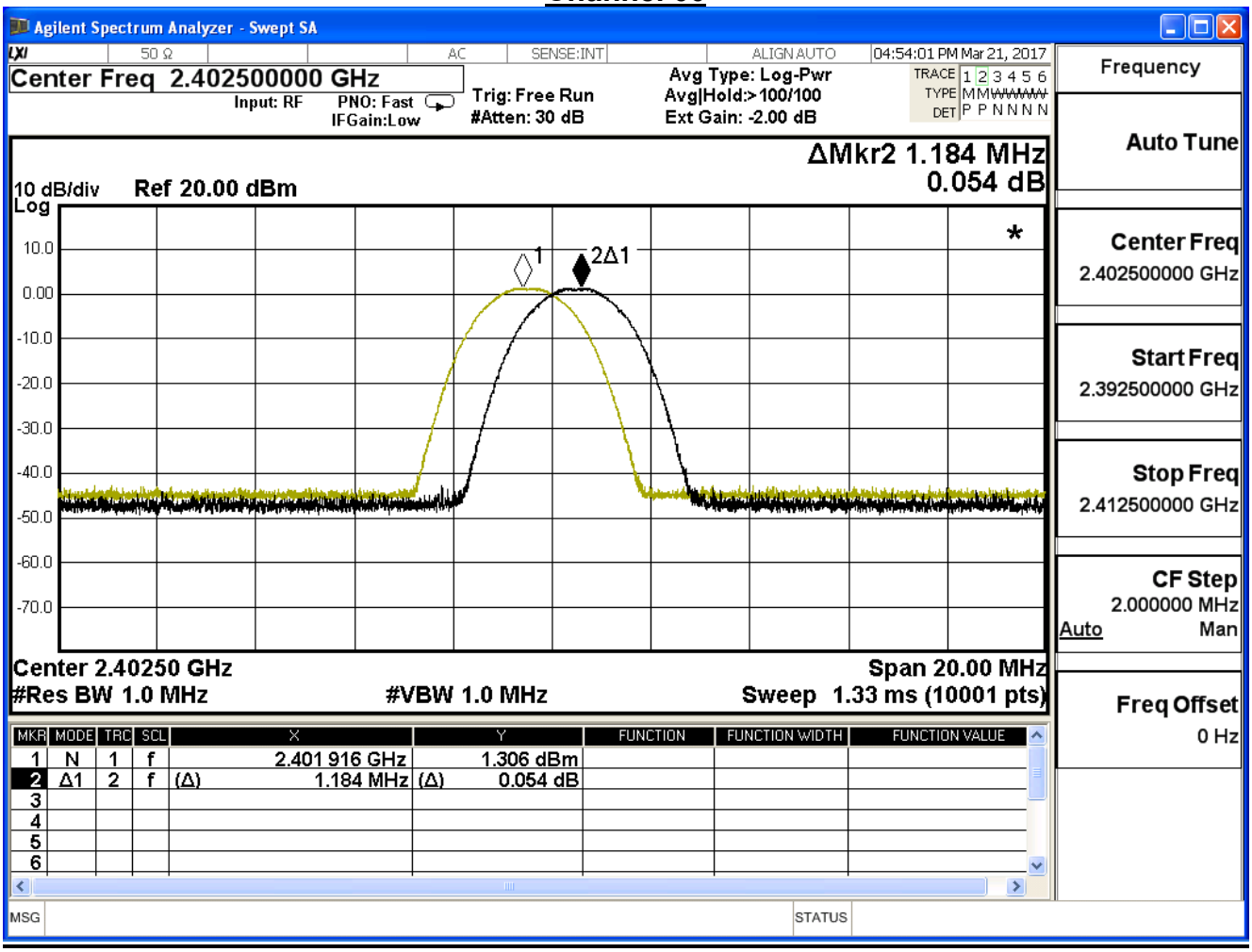

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:45:25 PM Mar 21, 2017
Center Freq 2.479500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
ΔMkr2 1.026 MHz
-0.012 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
1
2Δ1
Center 2.47950 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
Sweep 1.33 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.478 824 GHz -0.603 dBm
2 Δ1 2 f (Δ) 1.026 MHz (Δ) -0.012 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.479500000 GHz
Start Freq
2.469500000 GHz
Stop Freq
2.489500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	UHD751-P		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 2: Tx_2DH5		
Date of Test	2017/03/21	Test Site	SR10-H

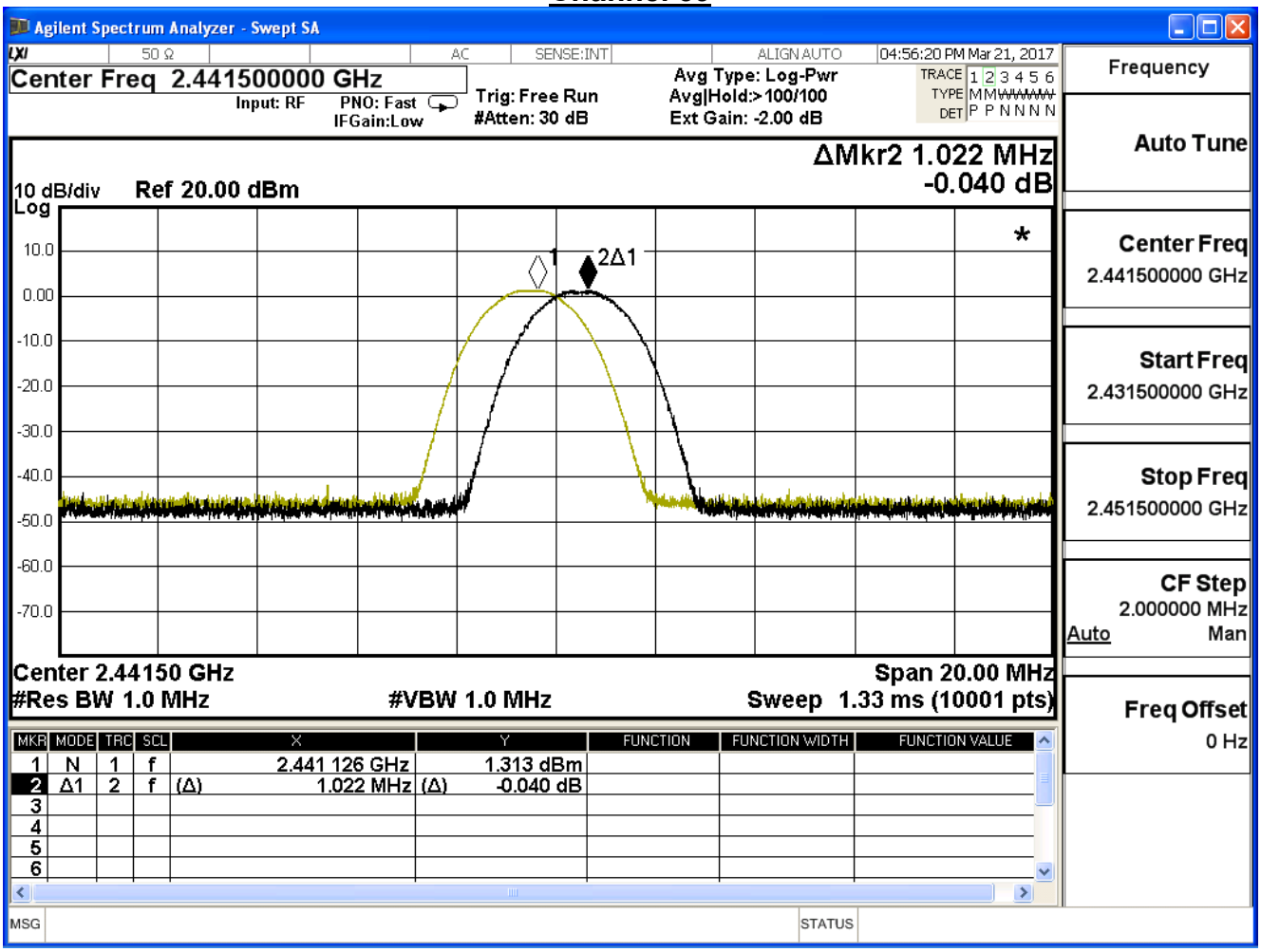
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.184	0.926	Pass
39	2441	1.022	0.929	Pass
78	2480	1.236	0.927	Pass

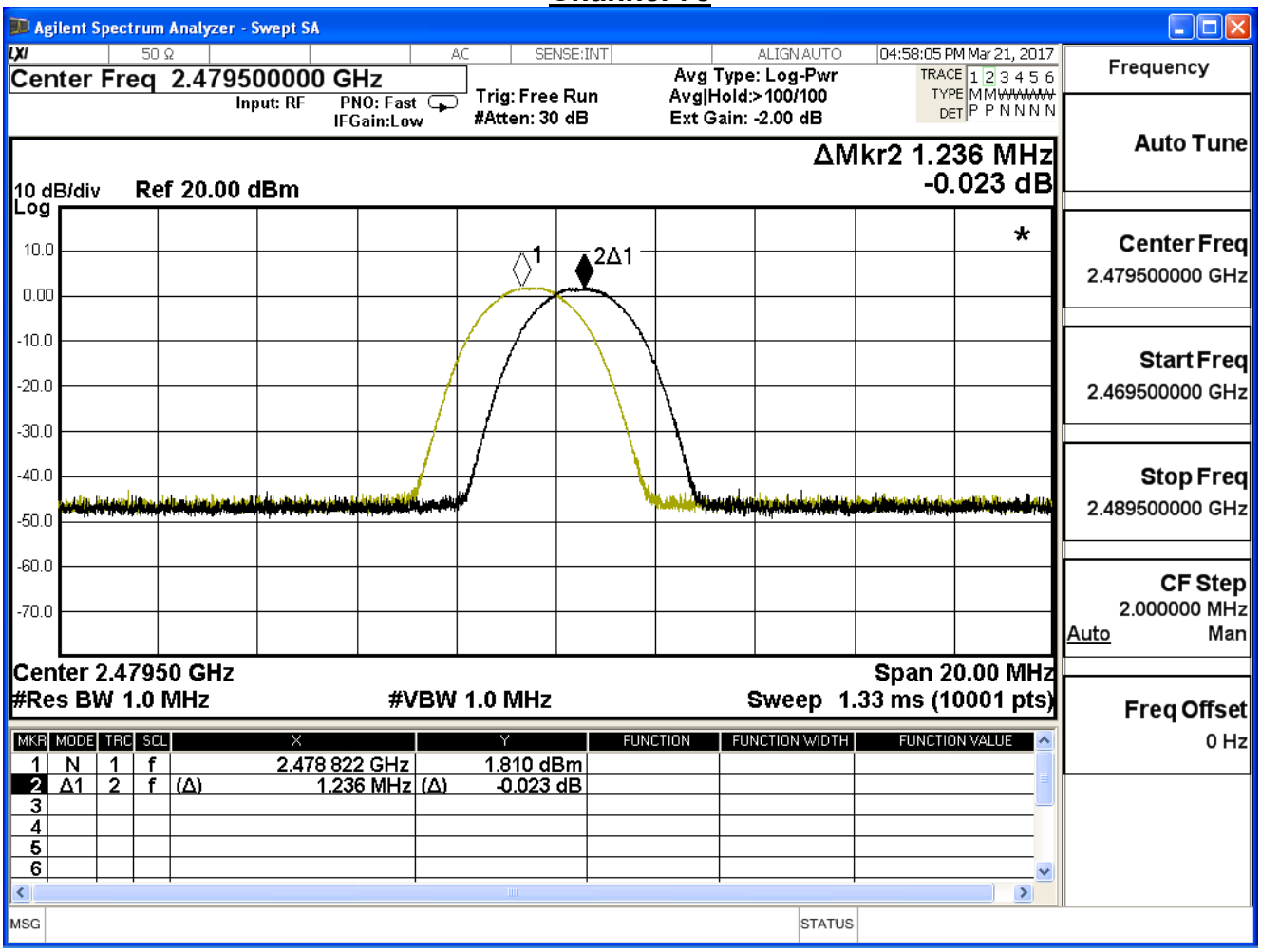
Channel 00



Channel 39


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:56:20 PM Mar 21, 2017
Center Freq 2.441500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
ΔMkr2 1.022 MHz
-0.040 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
1
2Δ1
Center 2.44150 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
Sweep 1.33 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.441 126 GHz 1.313 dBm
2 Δ1 2 f (Δ) 1.022 MHz (Δ) -0.040 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.431500000 GHz
Stop Freq
2.451500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 78

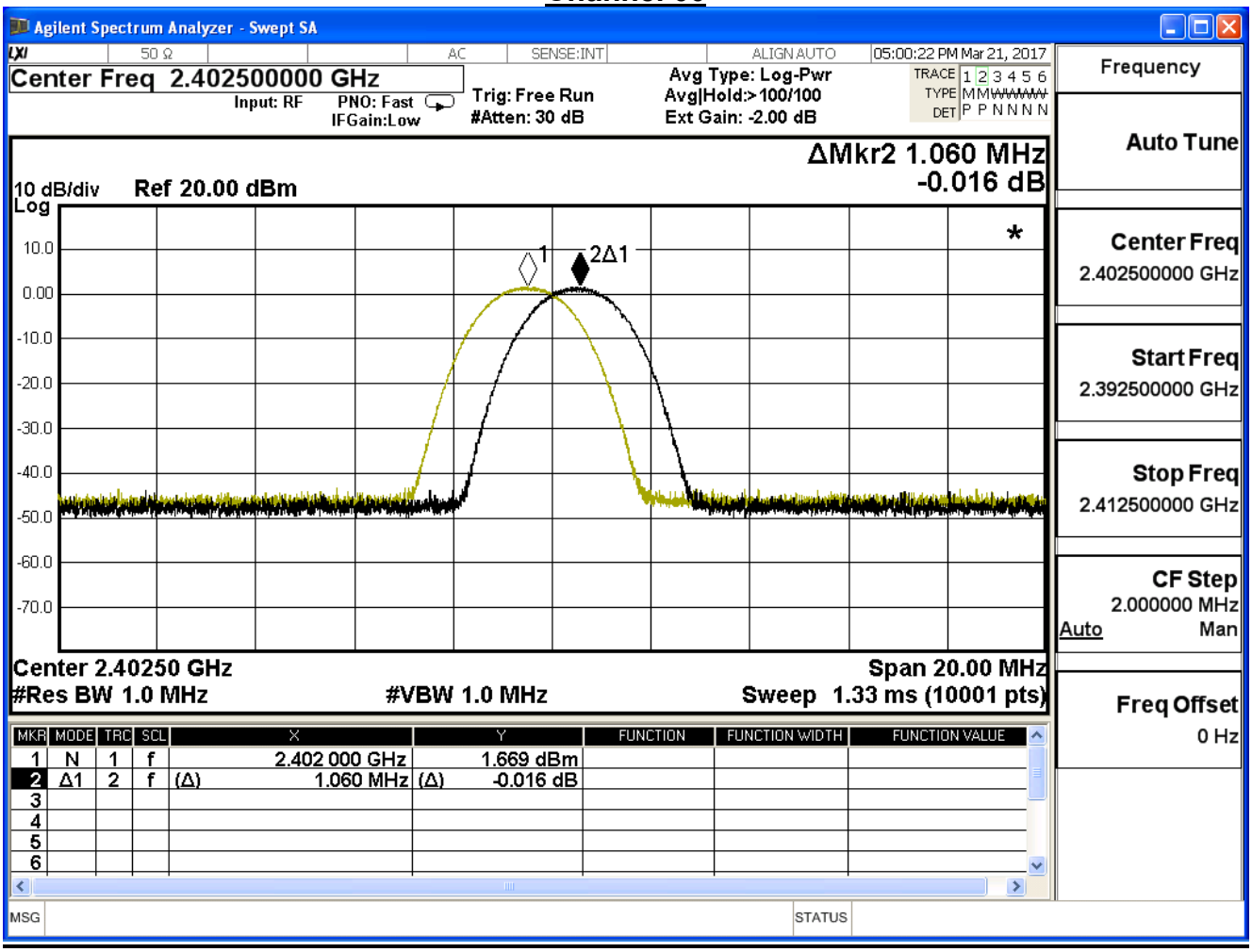

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:58:05 PM Mar 21, 2017
Center Freq 2.479500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
ΔMkr2 1.236 MHz
-0.023 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
1
2Δ1
*
Center 2.47950 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
Sweep 1.33 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.478 822 GHz 1.810 dBm
2 Δ1 2 f (Δ) 1.236 MHz (Δ) -0.023 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.479500000 GHz
Start Freq
2.469500000 GHz
Stop Freq
2.489500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Product	UHD751-P		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 3: Tx_3DH5		
Date of Test	2017/03/21	Test Site	SR10-H

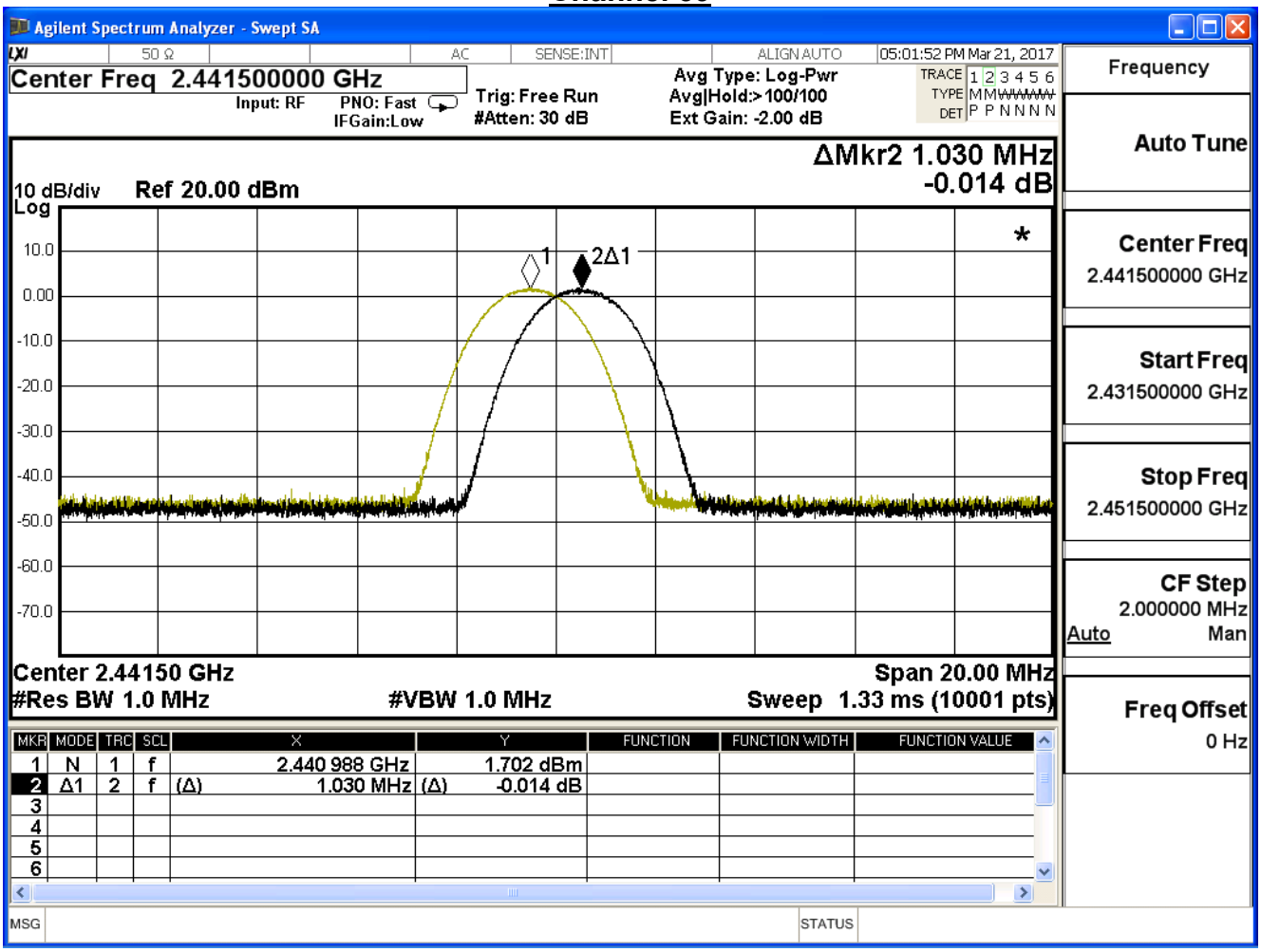
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.060	0.926	Pass
39	2441	1.030	0.926	Pass
78	2480	1.010	0.927	Pass

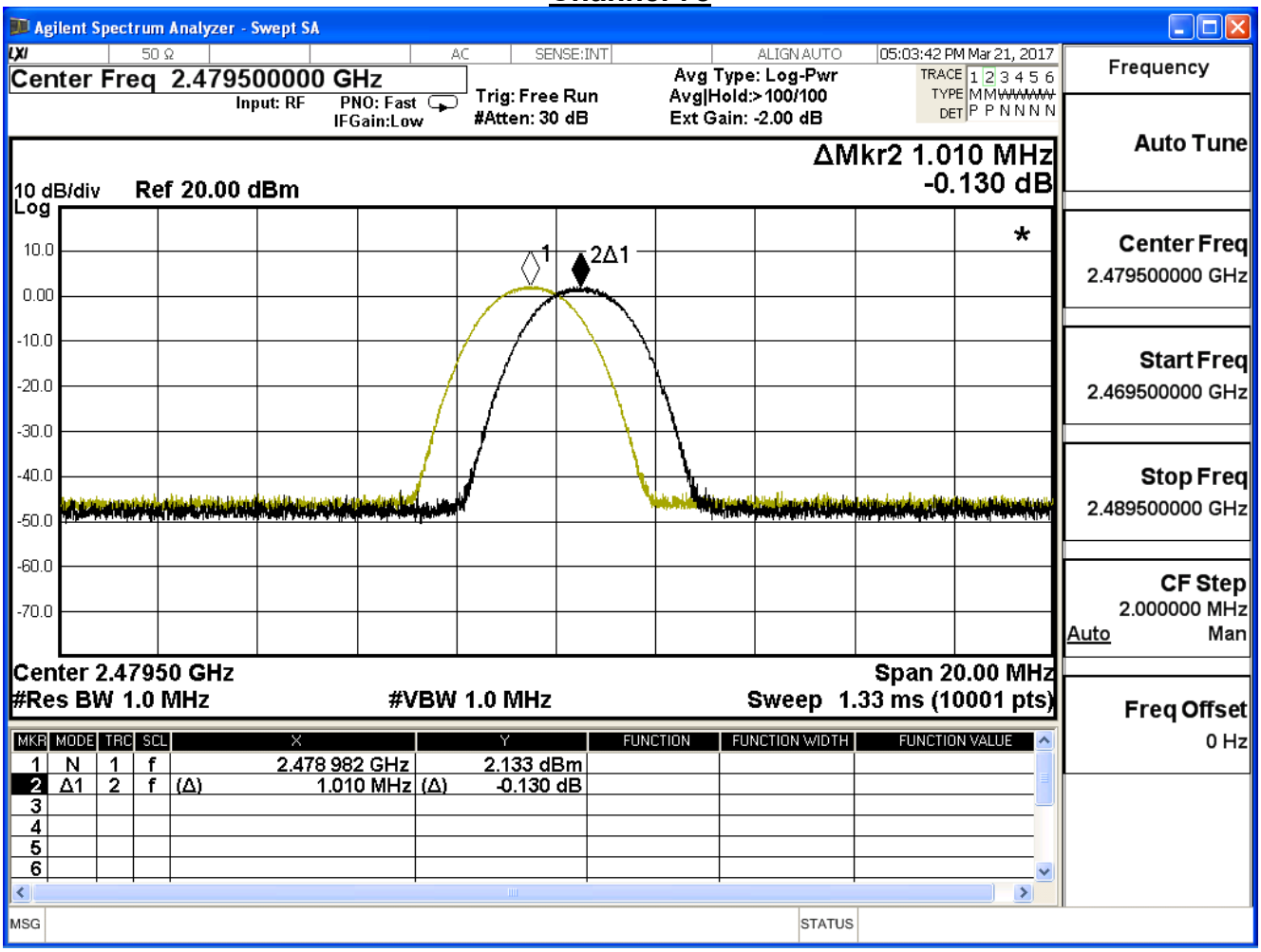
Channel 00



Channel 39


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:01:52 PM Mar 21, 2017
Center Freq 2.441500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
ΔMkr2 1.030 MHz
-0.014 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
1
2Δ1
*
Center 2.44150 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
Sweep 1.33 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.440 988 GHz 1.702 dBm
2 Δ1 2 f (Δ) 1.030 MHz (Δ) -0.014 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.431500000 GHz
Stop Freq
2.451500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 78


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:03:42 PM Mar 21, 2017
Center Freq 2.479500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ext Gain: -2.00 dB
TRACE 1 2 3 4 5 6
TYPE M M W W W W W
DET P P N N N N N
ΔMkr2 1.010 MHz
-0.130 dB
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
1
2Δ1
*
Center 2.47950 GHz
#Res BW 1.0 MHz
#VBW 1.0 MHz
Span 20.00 MHz
Sweep 1.33 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.478 982 GHz 2.133 dBm
2 Δ1 2 f (Δ) 1.010 MHz (Δ) -0.130 dB
3
4
5
6
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.479500000 GHz
Start Freq
2.469500000 GHz
Stop Freq
2.489500000 GHz
CF Step
2.000000 MHz
Auto
Man
Freq Offset
0 Hz

9. Occupied Bandwidth

9.1. Test Equipment

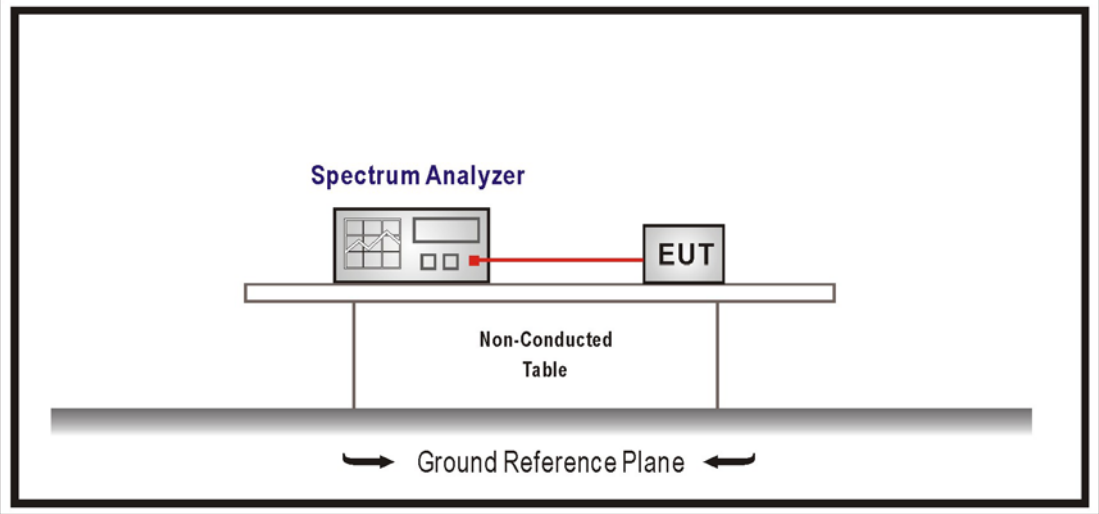
The following test equipment is used during the test:

Occupied Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08

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

9.2. Test Setup



9.3. Limits

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

For frequency hopping systems operating in the 5725-5850 MHz bands. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.

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

9.4. Test Procedures

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

Use the following spectrum analyzer settings:

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

9.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

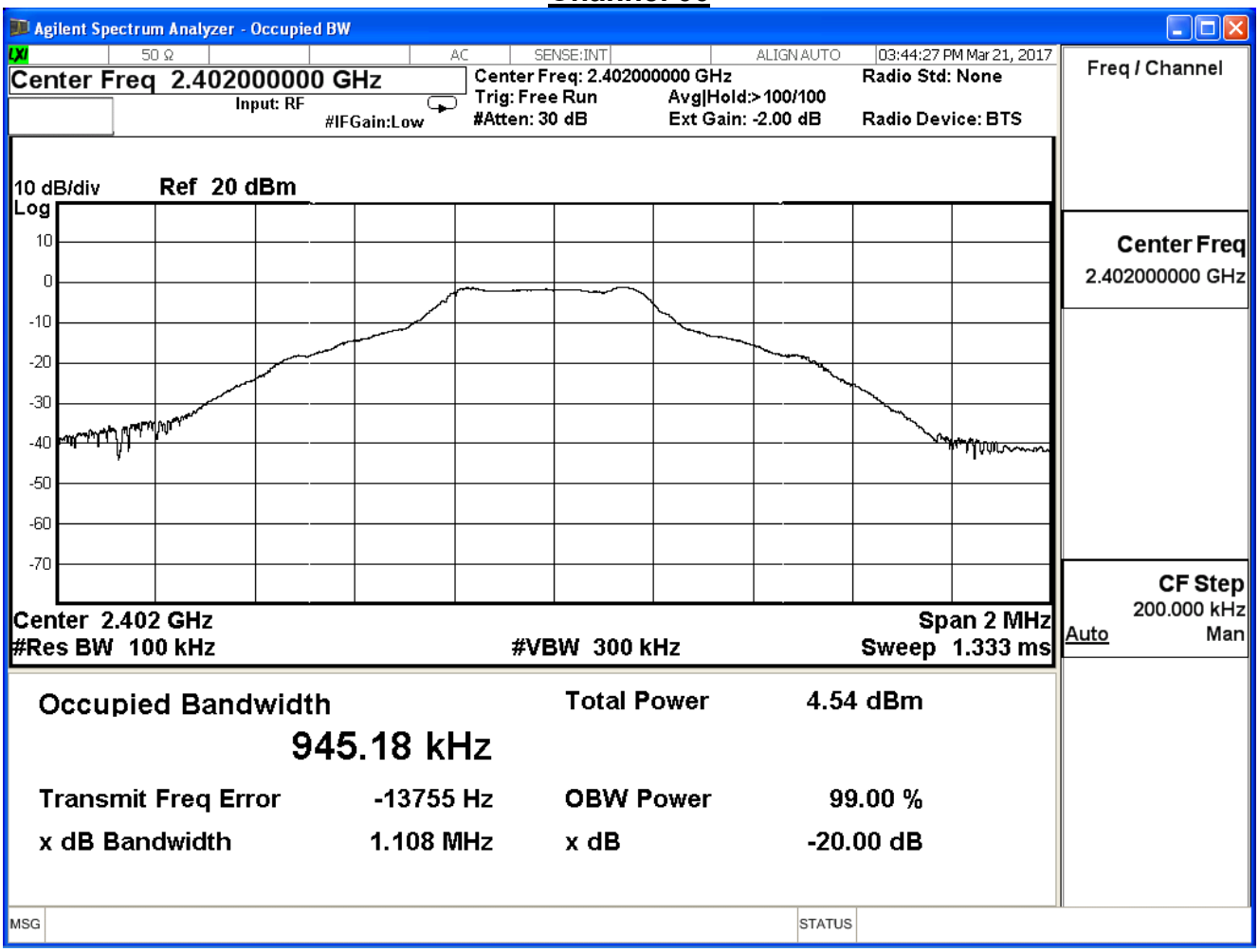
9.6. Test Result

Product	UHD751-P		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Tx_DH5		
Date of Test	2017/03/21	Test Site	SR10-H

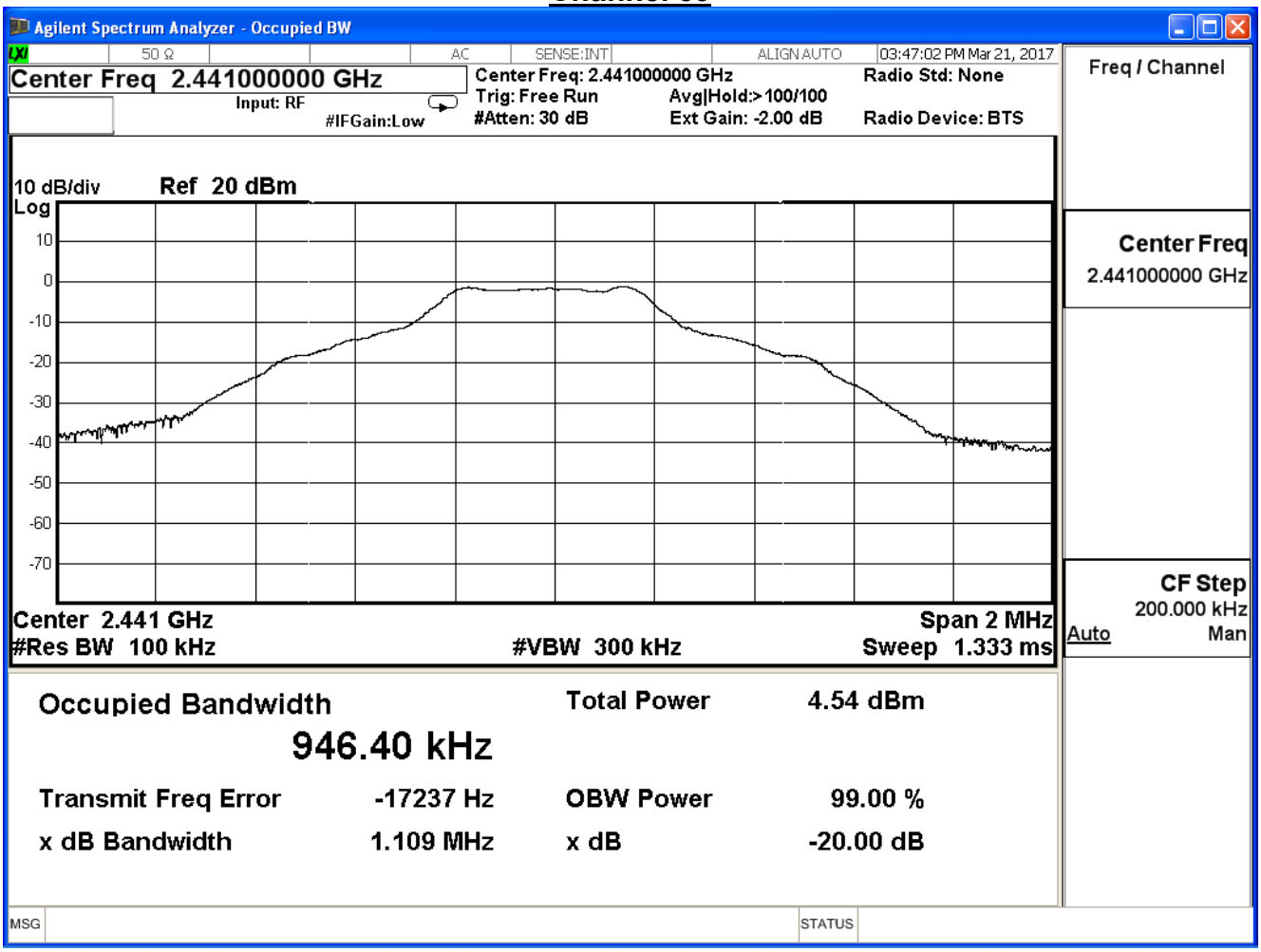
GFSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.108	--	Pass
39	2441	1.109	--	Pass
78	2480	1.108	--	Pass

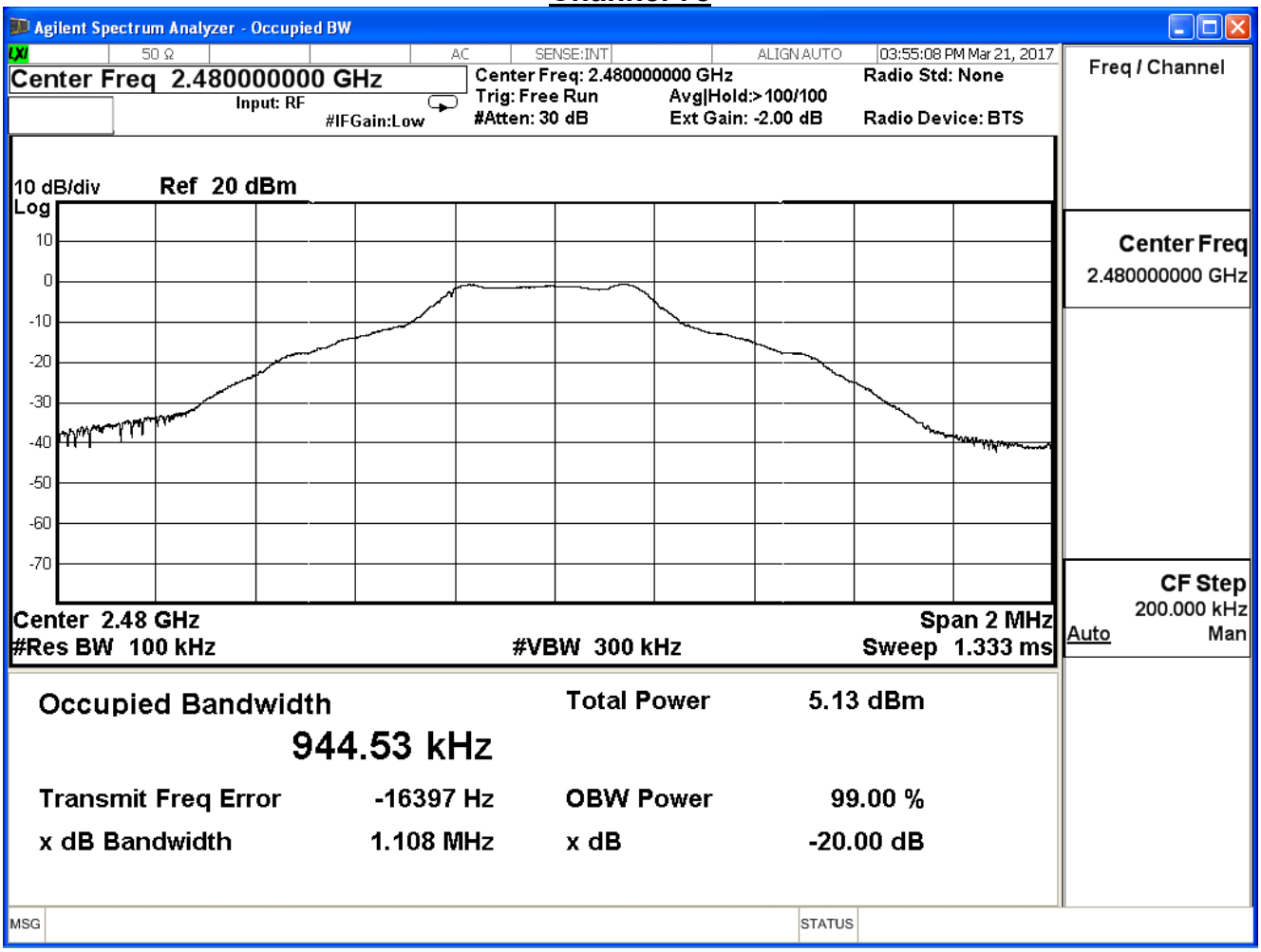
Channel 00



Channel 39


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:47:02 PM Mar 21, 2017
Center Freq 2.441000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.441000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -2.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center Freq
2.441000000 GHz
Center 2.441 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 2 MHz
Sweep 1.333 ms
CF Step
200.000 kHz
Auto
Man
Occupied Bandwidth
946.40 kHz
Total Power
4.54 dBm
Transmit Freq Error
-17237 Hz
OBW Power
99.00 %
x dB Bandwidth
1.109 MHz
x dB
-20.00 dB
MSG
STATUS

Channel 78

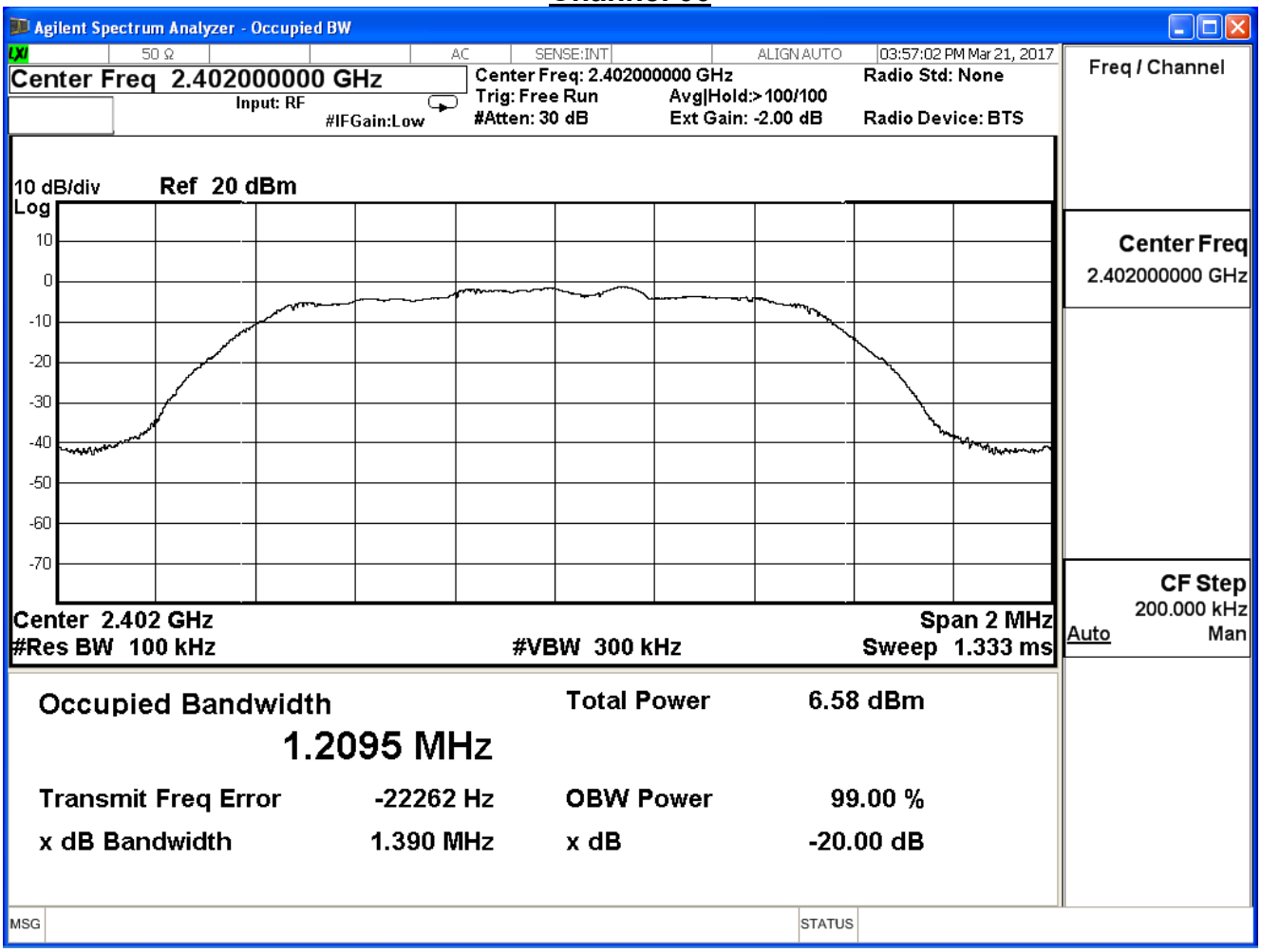

Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
03:55:08 PM Mar 21, 2017
Center Freq 2.480000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.480000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -2.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 2 MHz
Sweep 1.333 ms
CF Step
200.000 kHz
Auto
Man
Occupied Bandwidth
944.53 kHz
Total Power
5.13 dBm
Transmit Freq Error
-16397 Hz
OBW Power
99.00 %
x dB Bandwidth
1.108 MHz
x dB
-20.00 dB
MSG
STATUS

Product	UHD751-P		
Test Item	Occupied Bandwidth		
Test Mode	Mode 2: Tx_2DH5		
Date of Test	2017/03/21	Test Site	SR10-H

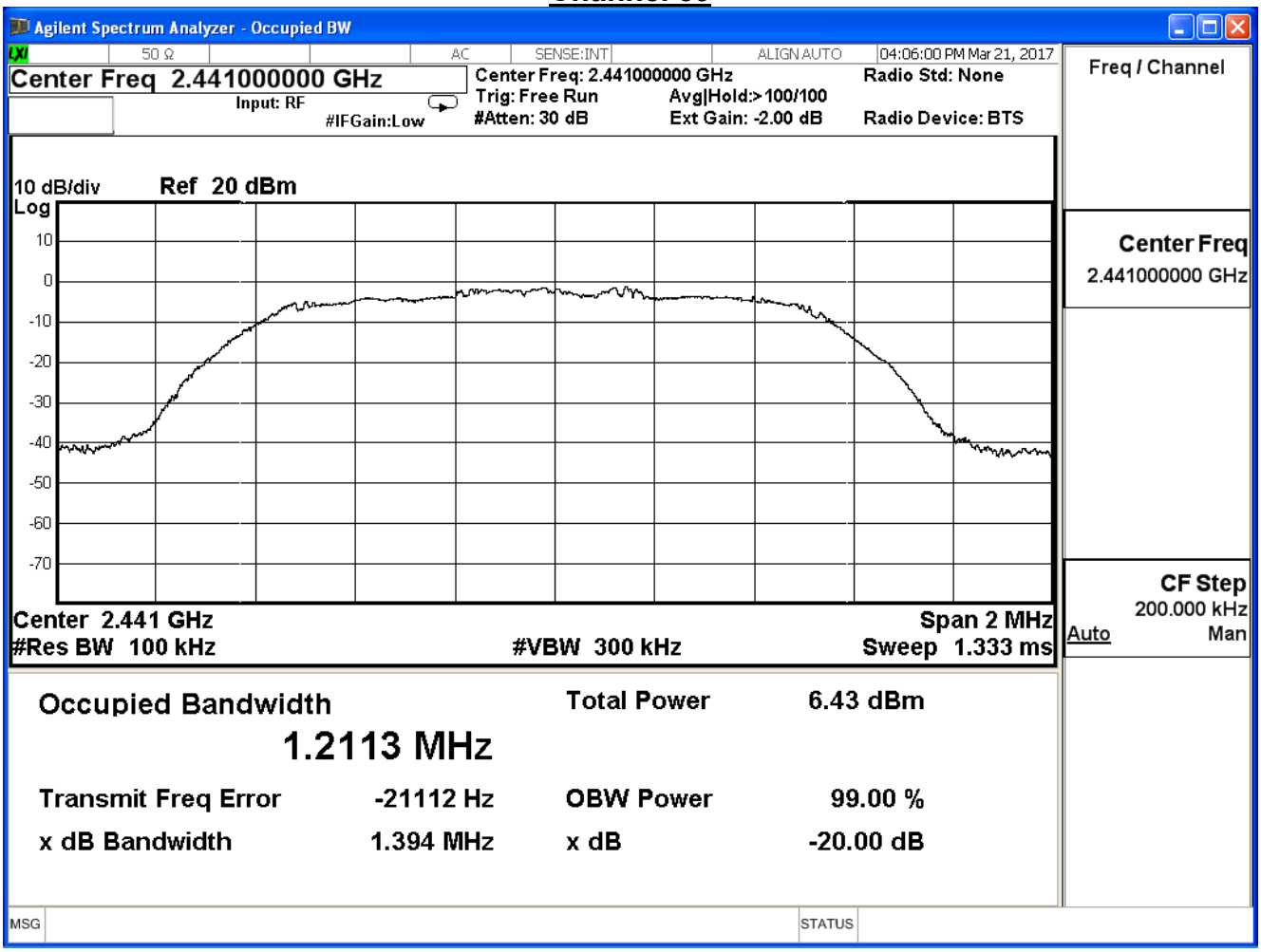
π/4-DQPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.390	--	Pass
39	2441	1.394	--	Pass
78	2480	1.391	--	Pass

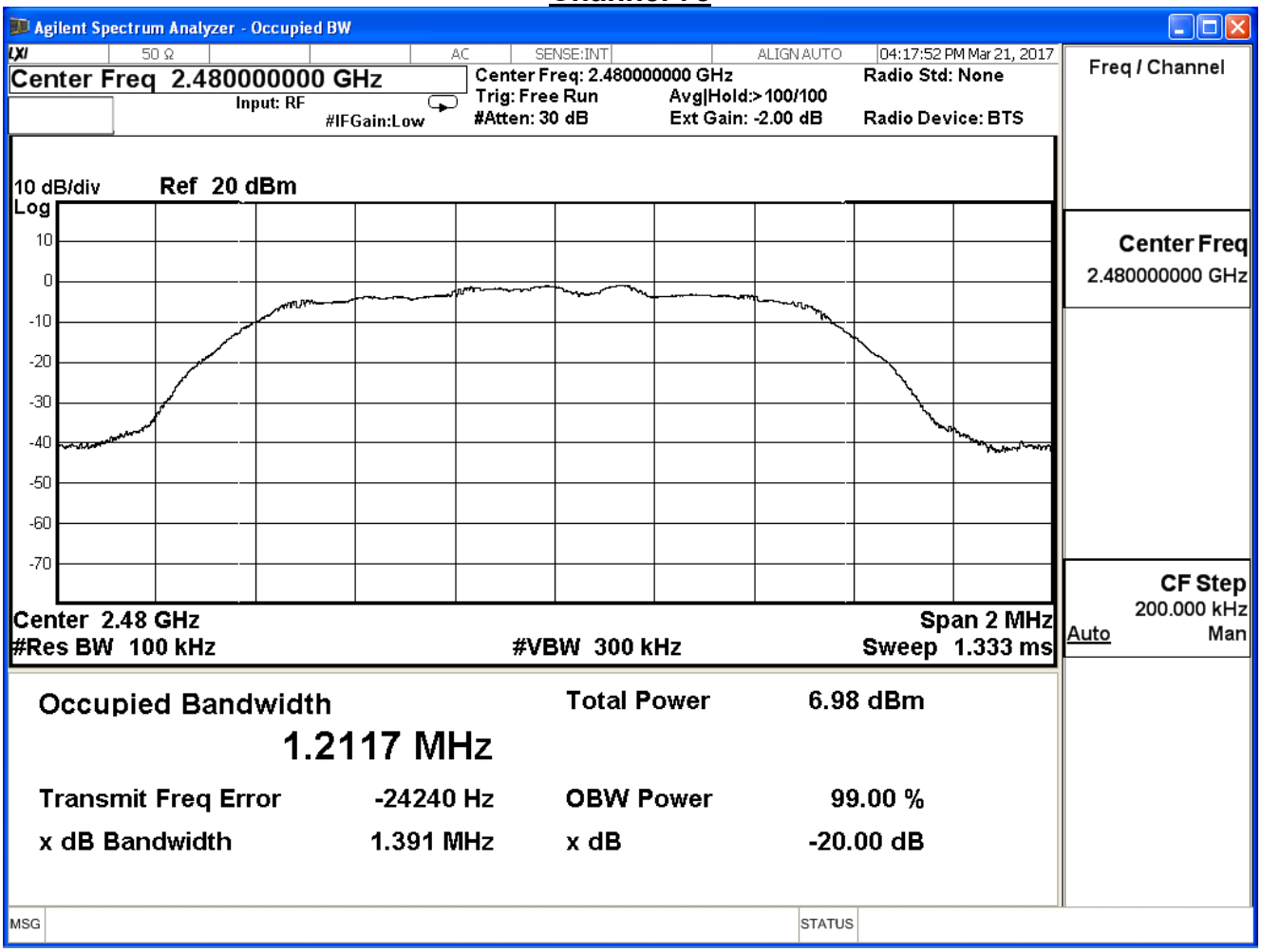
Channel 00



Channel 39


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:06:00 PM Mar 21, 2017
Center Freq 2.441000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.441000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -2.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center Freq
2.441000000 GHz
Center 2.441 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 2 MHz
Sweep 1.333 ms
CF Step
200.000 kHz
Auto
Man
Occupied Bandwidth
1.2113 MHz
Total Power
6.43 dBm
Transmit Freq Error
-21112 Hz
OBW Power
99.00 %
x dB Bandwidth
1.394 MHz
x dB
-20.00 dB
MSG
STATUS

Channel 78

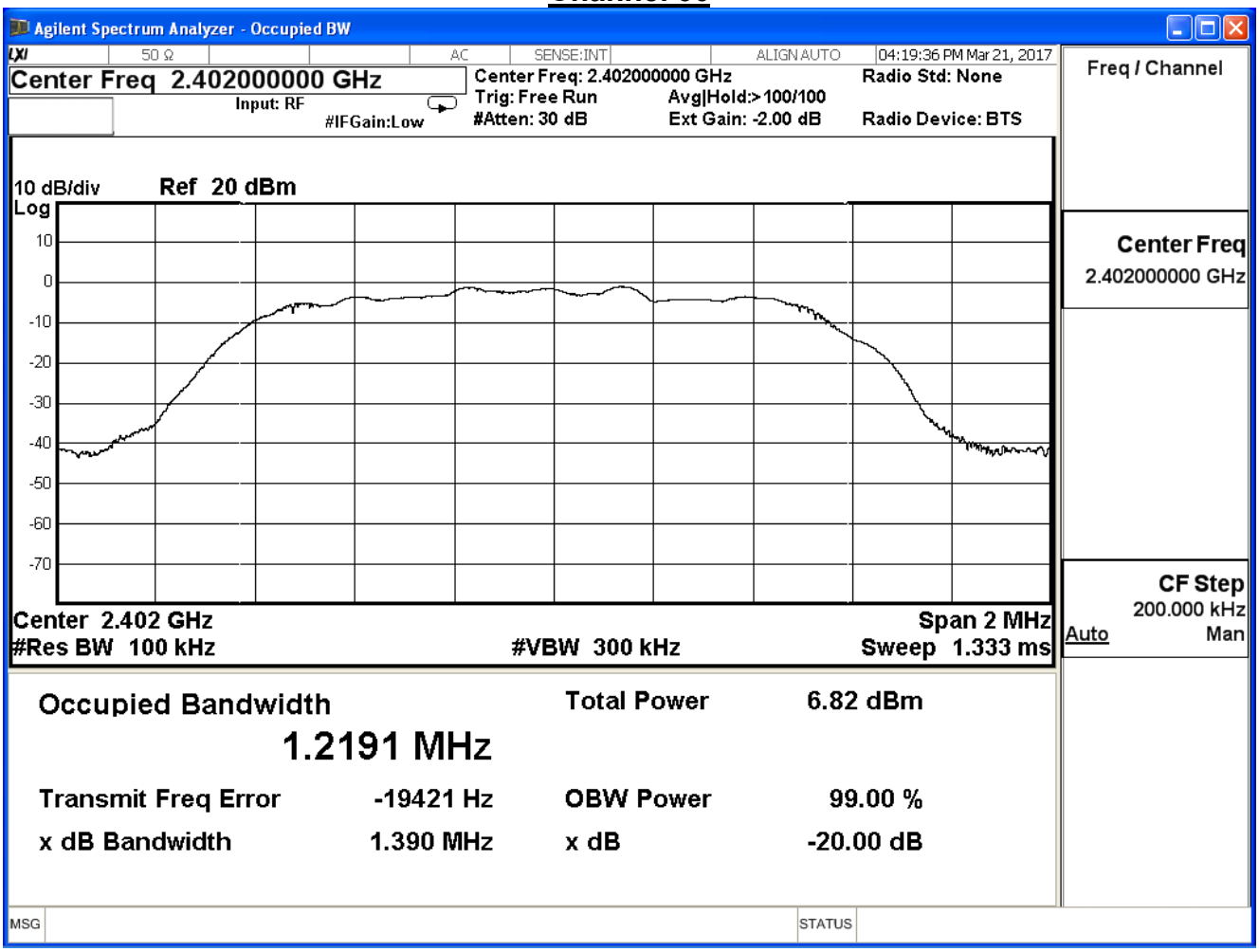

Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:17:52 PM Mar 21, 2017
Center Freq 2.480000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.480000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -2.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 2 MHz
Sweep 1.333 ms
CF Step
200.000 kHz
Auto
Man
Occupied Bandwidth
1.2117 MHz
Total Power
6.98 dBm
Transmit Freq Error
-24240 Hz
OBW Power
99.00 %
x dB Bandwidth
1.391 MHz
x dB
-20.00 dB
MSG
STATUS

Product	UHD751-P		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: Tx_3DH5		
Date of Test	2017/03/21	Test Site	SR10-H

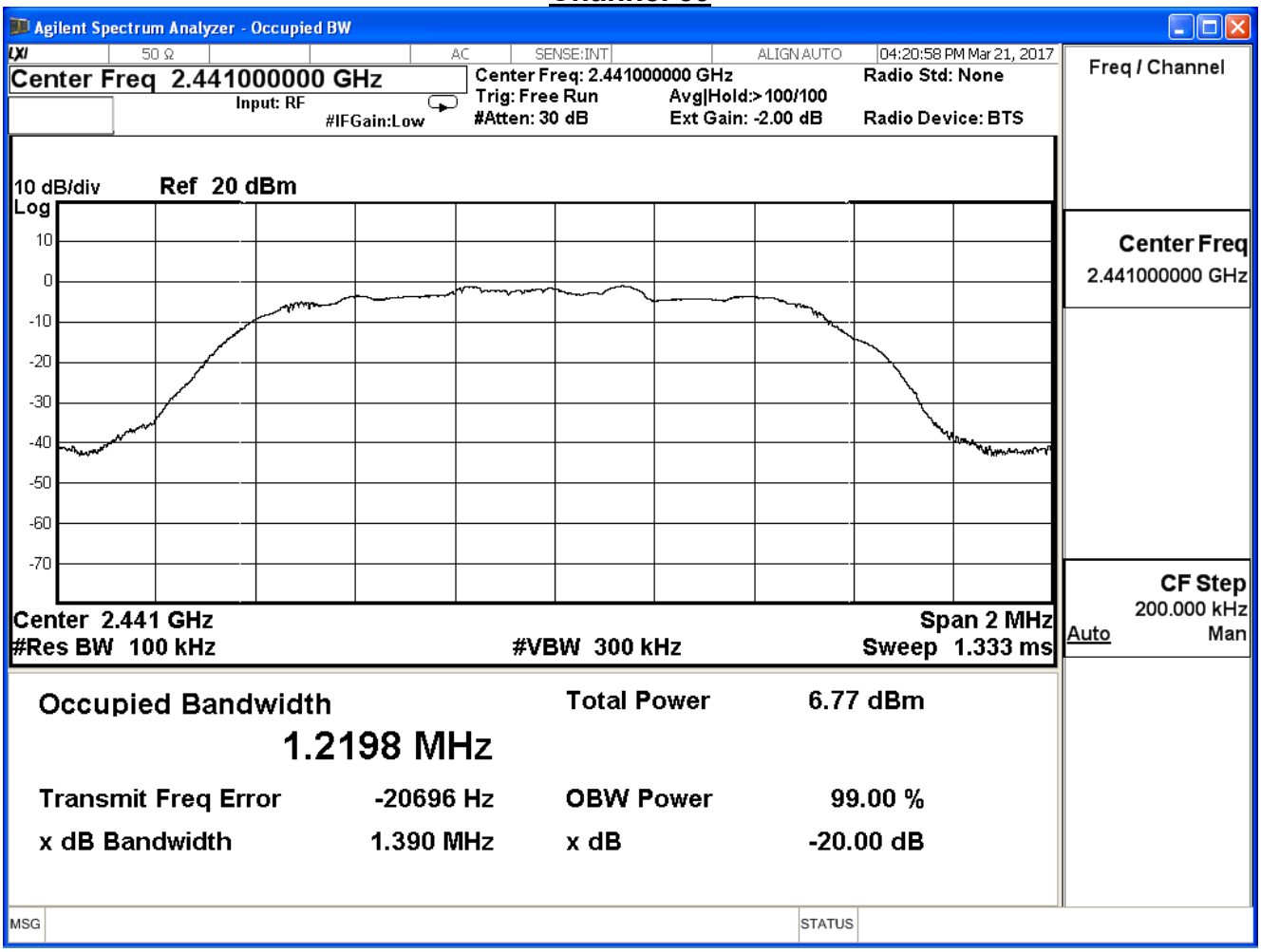
8-DPSK

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402	1.390	--	Pass
39	2441	1.390	--	Pass
78	2480	1.391	--	Pass

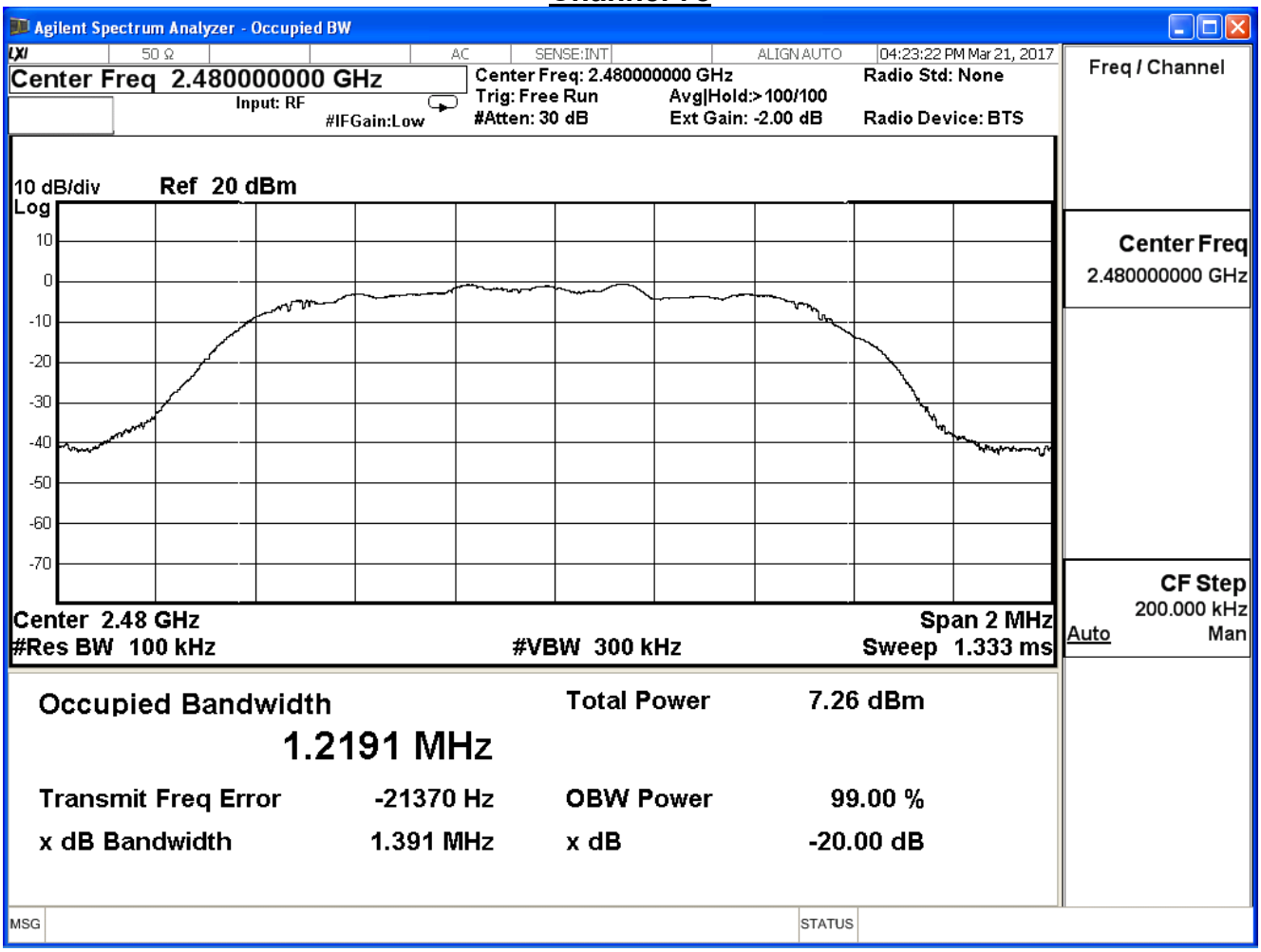
Channel 00



Channel 39


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:20:58 PM Mar 21, 2017
Center Freq 2.441000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.441000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -2.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center Freq
2.441000000 GHz
Center 2.441 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 2 MHz
Sweep 1.333 ms
CF Step
200.000 kHz
Auto
Man
Occupied Bandwidth
1.2198 MHz
Total Power
6.77 dBm
Transmit Freq Error
-20696 Hz
OBW Power
99.00 %
x dB Bandwidth
1.390 MHz
x dB
-20.00 dB
MSG
STATUS

Channel 78


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
04:23:22 PM Mar 21, 2017
Center Freq 2.480000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.480000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -2.00 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 2 MHz
Sweep 1.333 ms
CF Step
200.000 kHz
Auto
Man
Occupied Bandwidth
1.2191 MHz
Total Power
7.26 dBm
Transmit Freq Error
-21370 Hz
OBW Power
99.00 %
x dB Bandwidth
1.391 MHz
x dB
-20.00 dB
MSG
STATUS

10. Dwell Time

10.1. Test Equipment

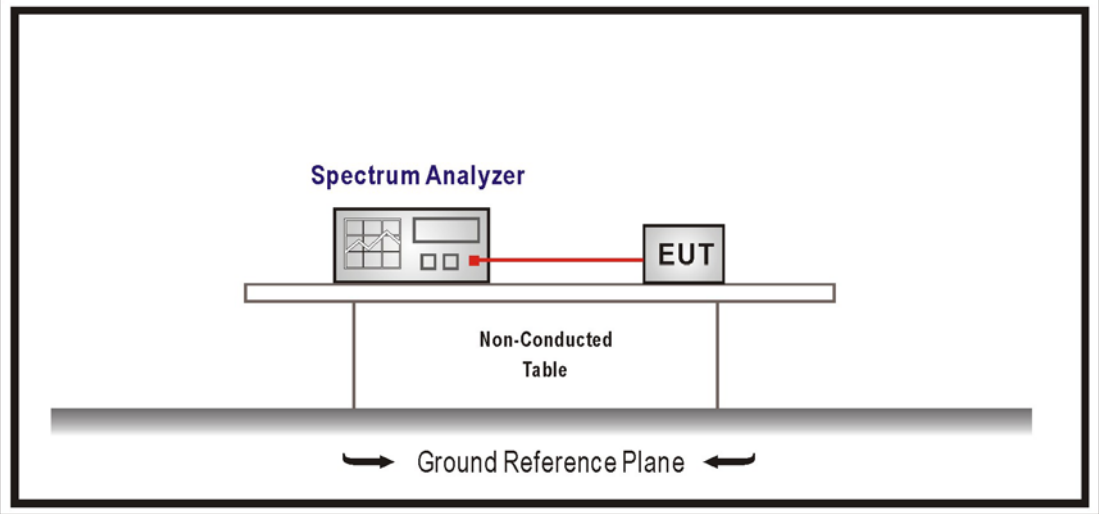
The following test equipment is used during the test:

Dwell Time / SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08

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

10.2. Test Setup



10.3. Limits

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

10.4. Test Procedures

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

Span = zero span, centered on a hopping channel, RBW = 1 MHz, VBW ≥ RBW,

Sweep = as necessary to capture the entire dwell time per hopping channel,

Detector function = peak, Trace = max hold.

10.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

10.6. Test Result

Product	UHD751-P		
Test Item	Dwell Time		
Test Mode	Mode 1: Tx_DH5		
Date of Test	2017/03/21	Test Site	SR10-H

GFSK

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.886 ms = 0.002886 sec

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

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.888 ms = 0.002888 sec

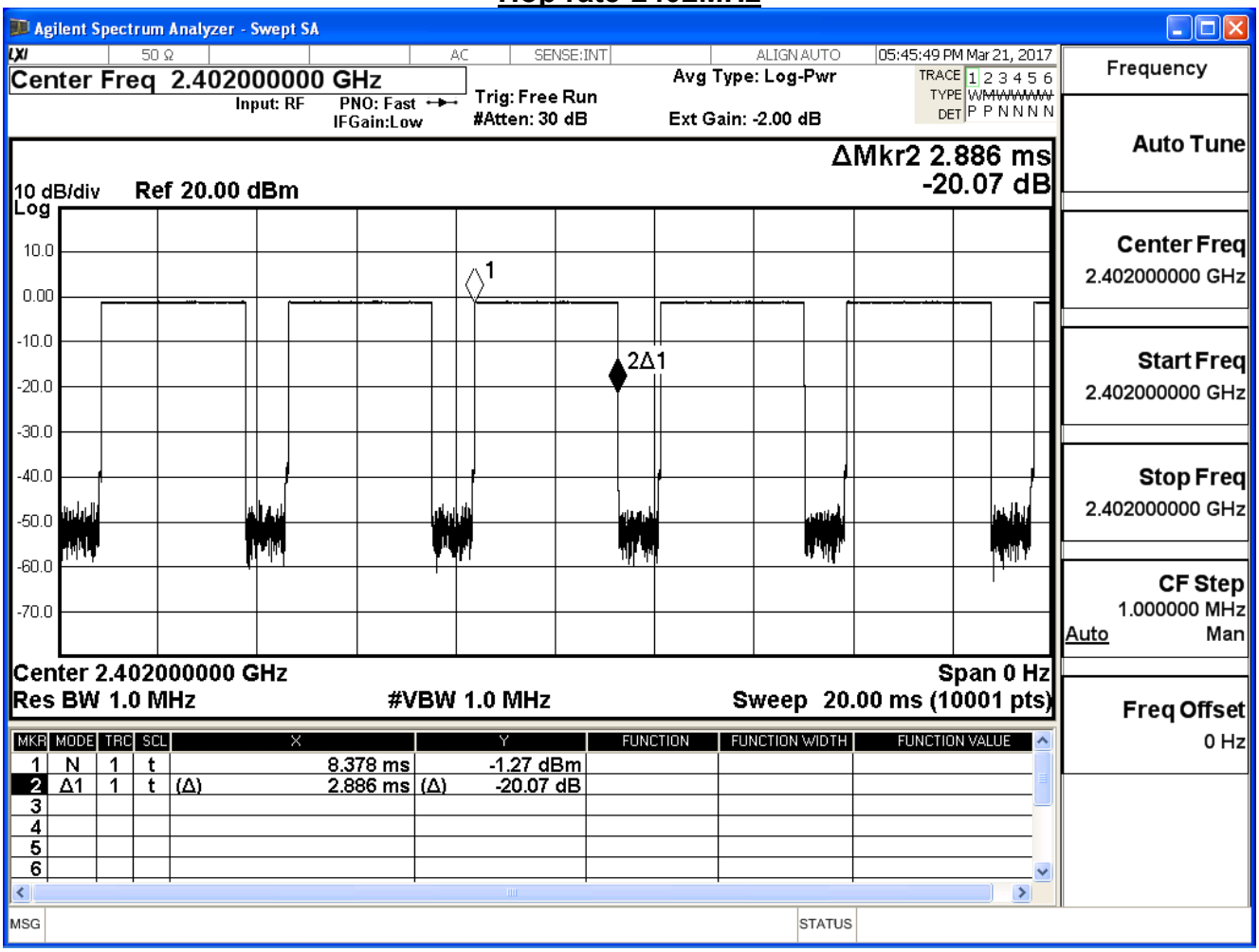
Dwell Time : 0.002888 *(266.67/79)* 31.60= 0.3081 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.888 ms = 0.002888 sec

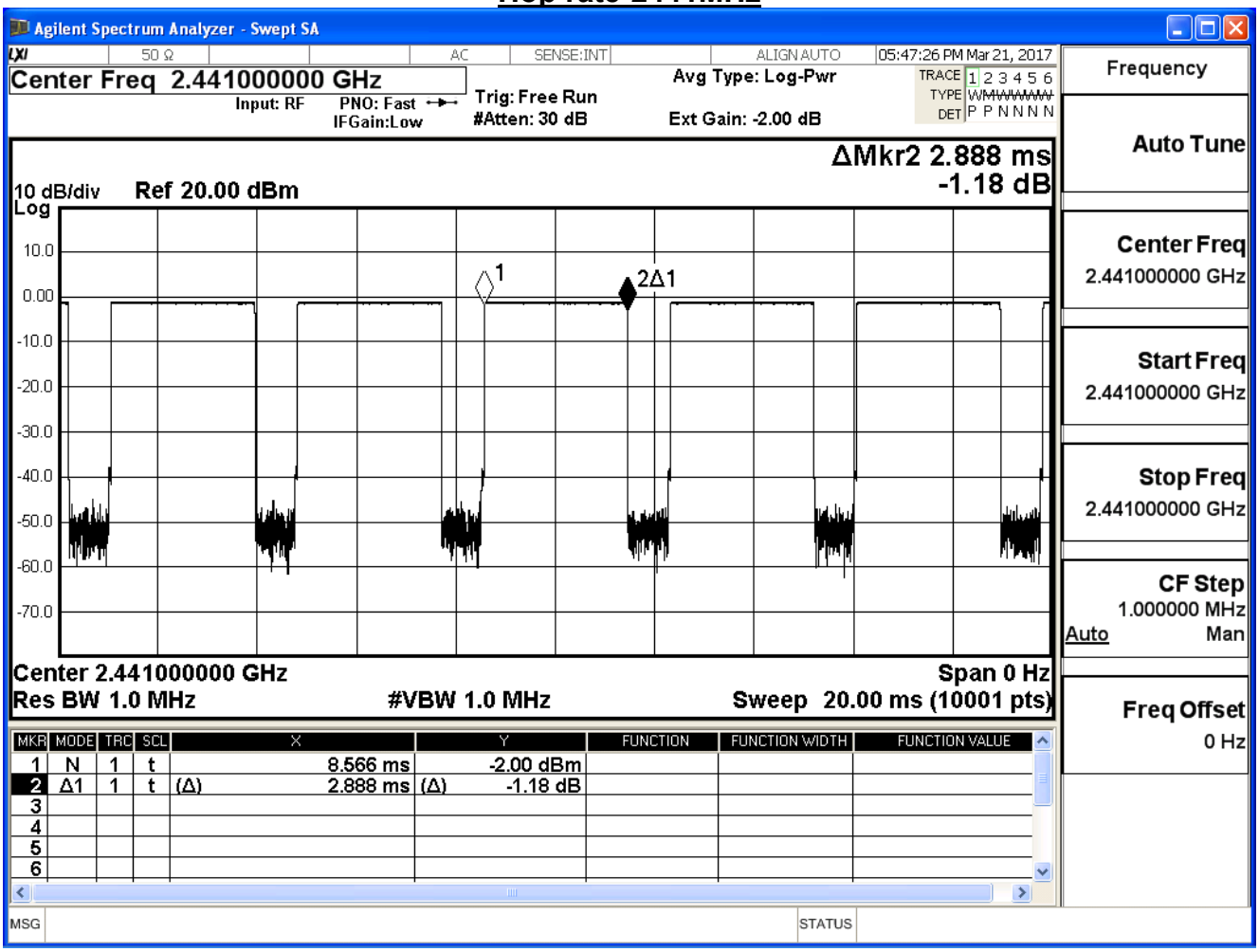
Dwell Time : 0.002888 *(266.67/79)* 31.60= 0.3081 sec。

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

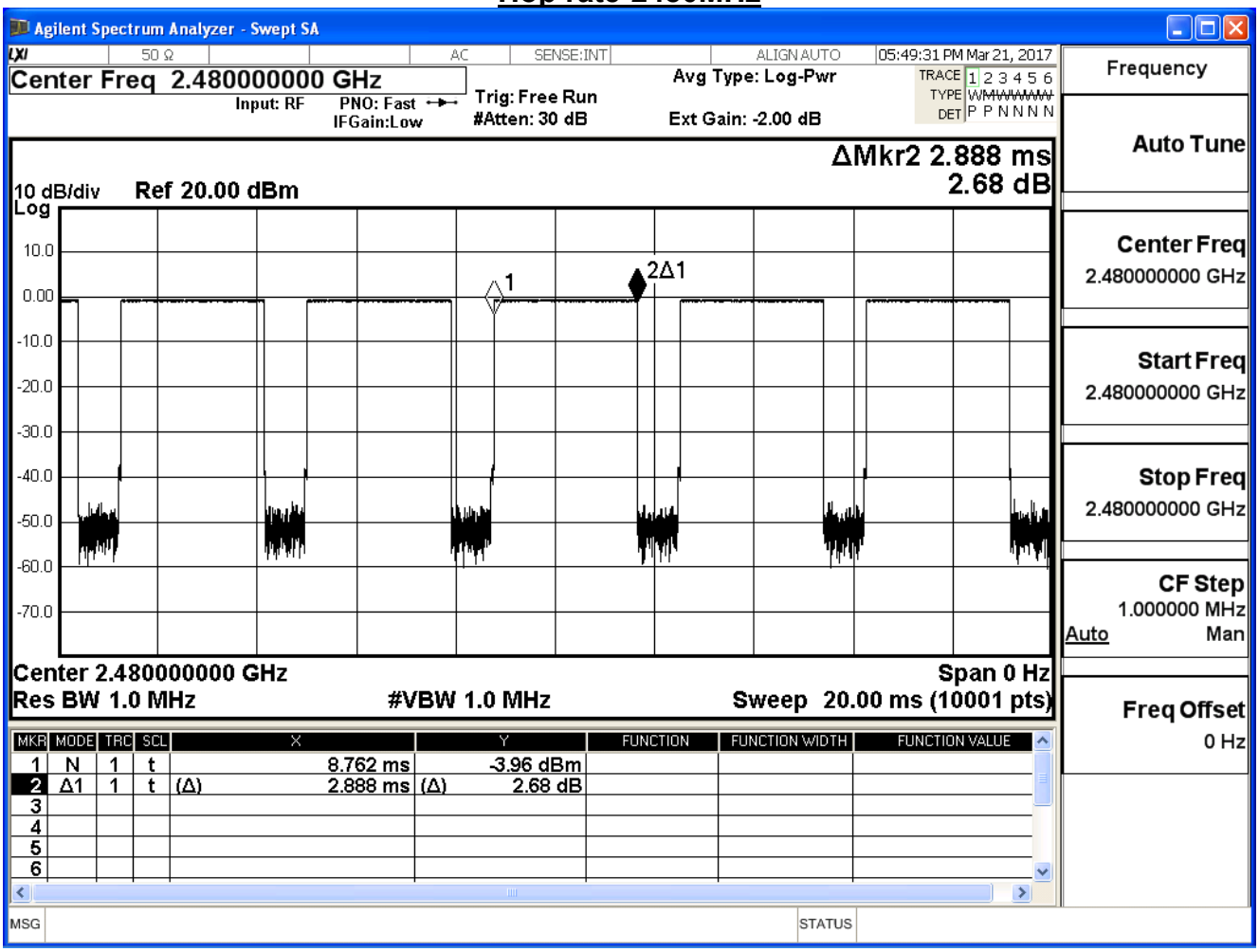
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



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

Product	UHD751-P		
Test Item	Dwell Time		
Test Mode	Mode 2: Tx_2DH5		
Date of Test	2017/03/21	Test Site	SR10-H

π/4-DQPSK

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.892 ms = 0.002892 sec

Dwell Time : 0.002892*(266.67/79)* 31.60= 0.3085 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.890 ms = 0.002890 sec

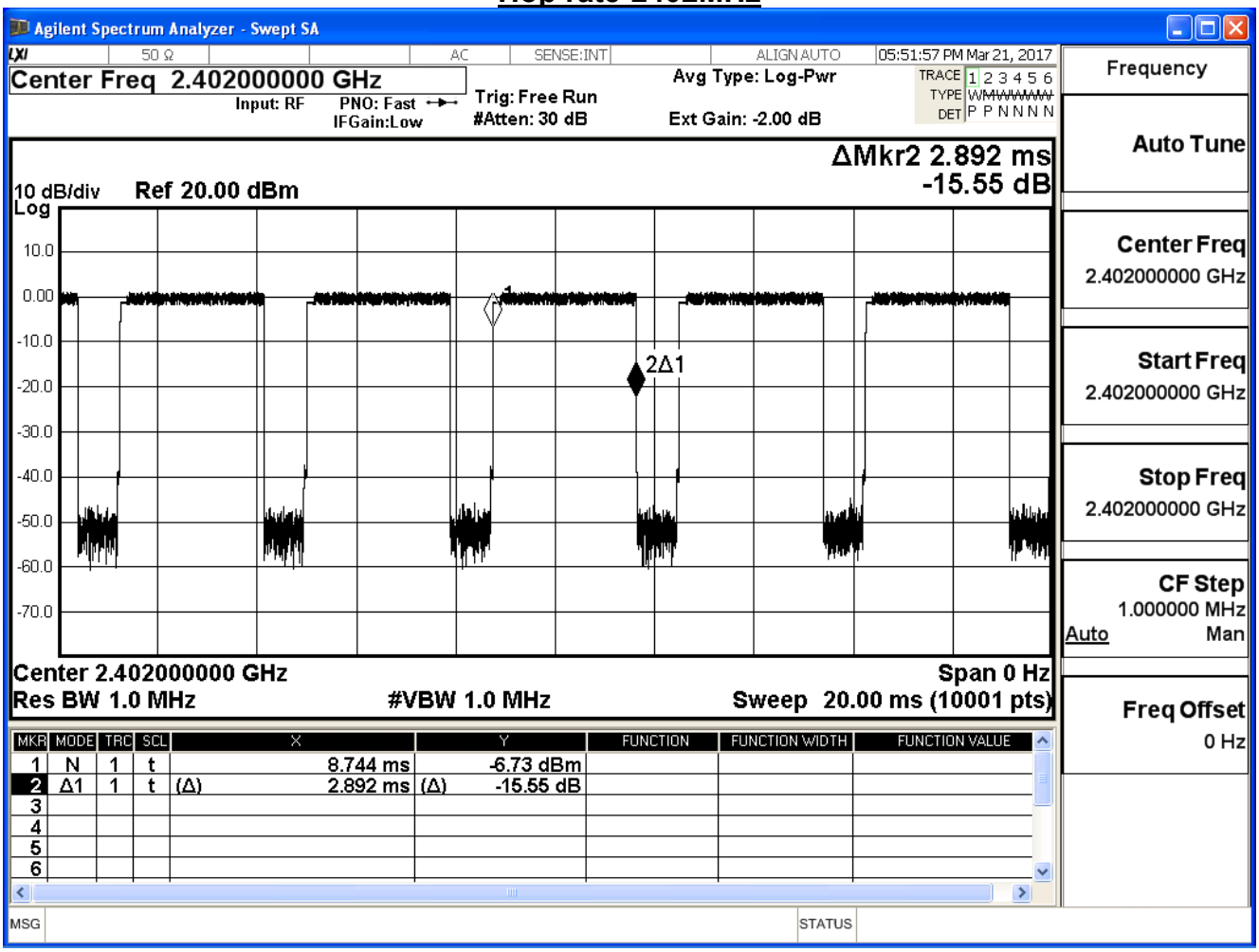
Dwell Time : 0.002890*(266.67/79)* 31.60= 0.3083 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.890 ms = 0.002890 sec

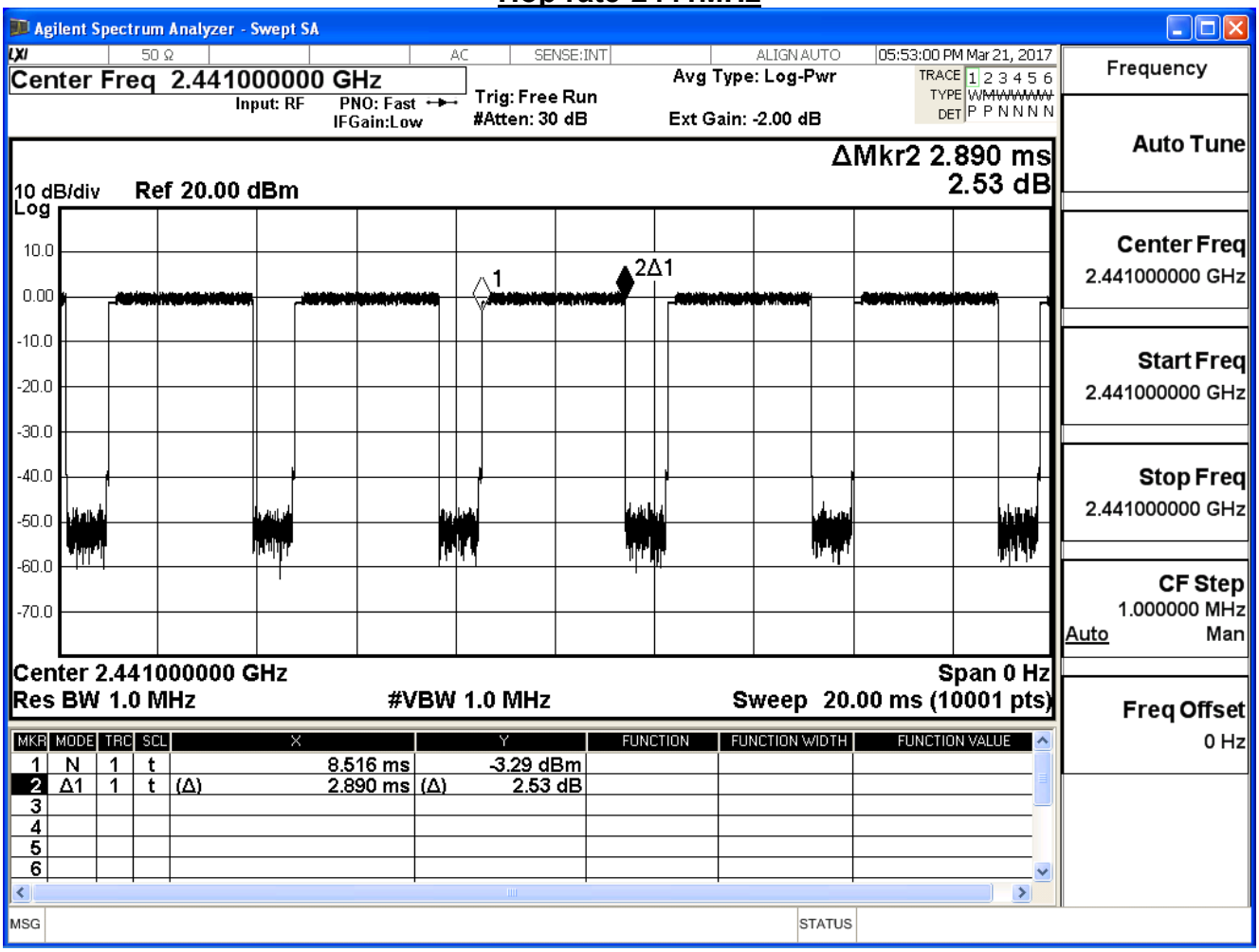
Dwell Time : 0.002890*(266.67/79)* 31.60= 0.3083 sec。

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

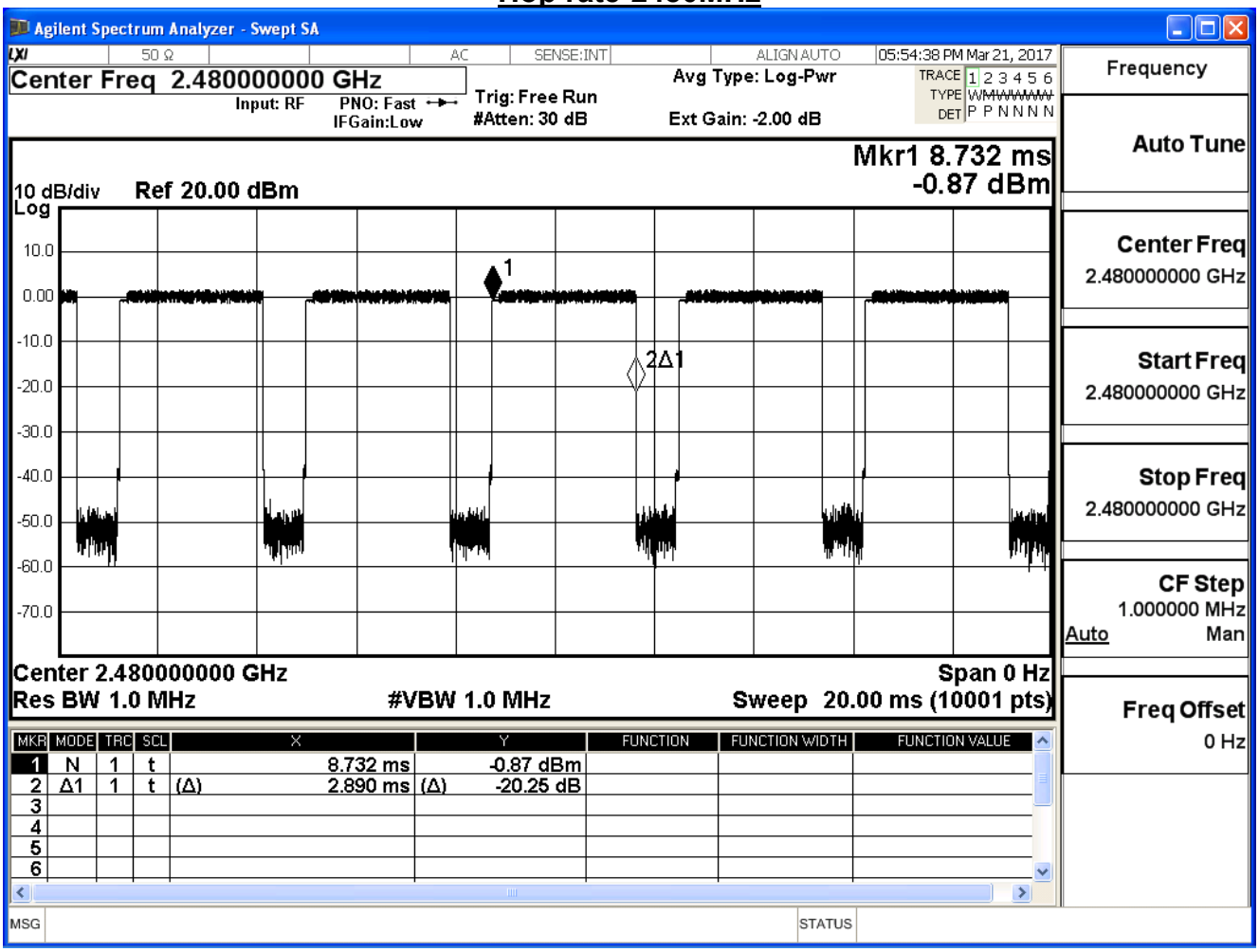
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



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

Product	UHD751-P		
Test Item	Dwell Time		
Test Mode	Mode 3: Tx_3DH5		
Date of Test	2017/03/21	Test Site	SR10-H

8-DPSK

Occupancy Time of Frequency Hopping System

A) 2402MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.894ms = 0.002894 sec

Dwell Time : 0.002894*(266.67/79)* 31.60=0.3087 sec。

B) 2441MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.894 ms = 0.002894 sec

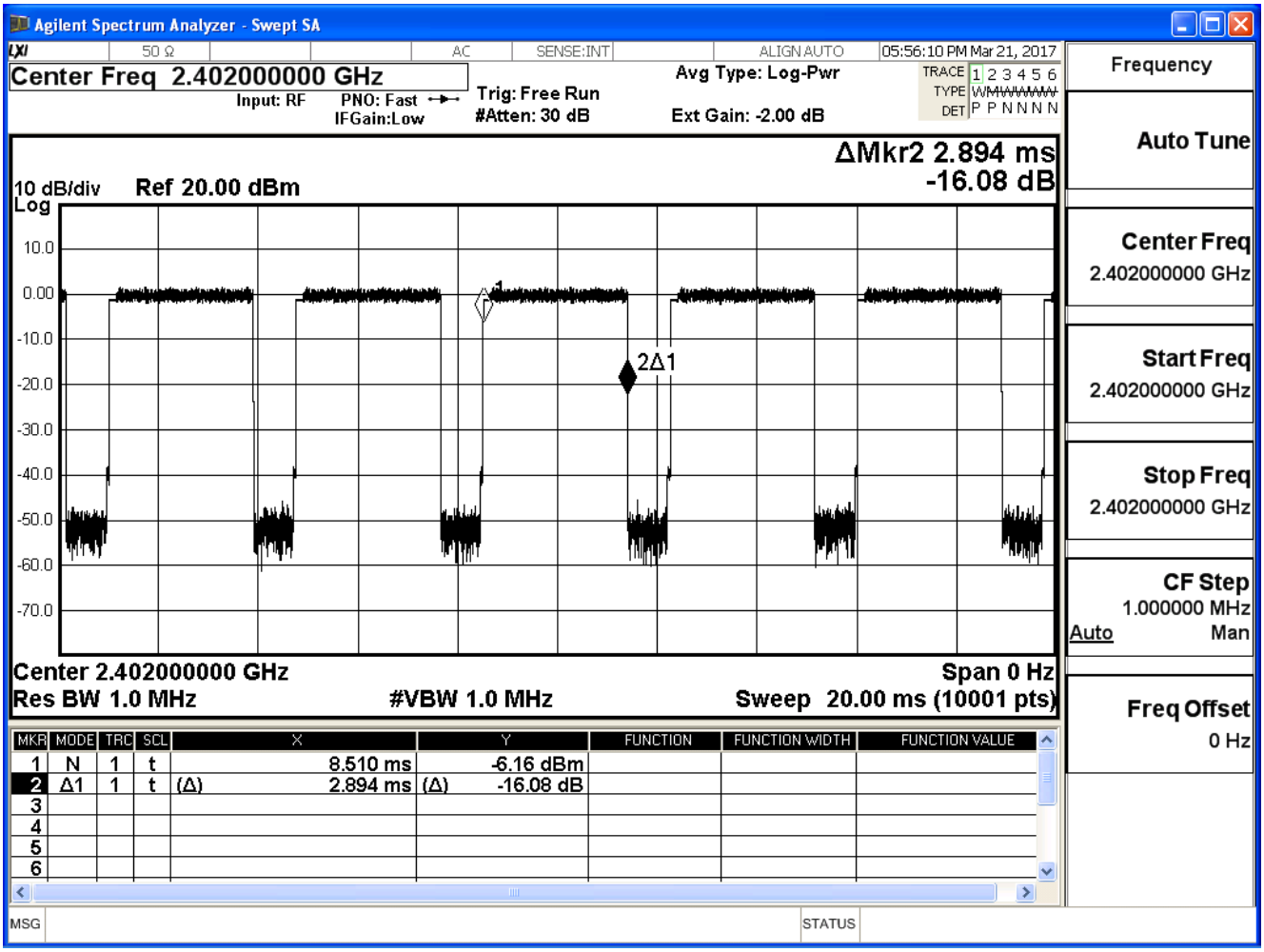
Dwell Time : 0.002894*(266.67/79)* 31.60=0.3087 sec。

C) 2480MHz Test Time Period: 0.4*79=31.60sec，Time slot length : 2.894 ms = 0.002894 sec

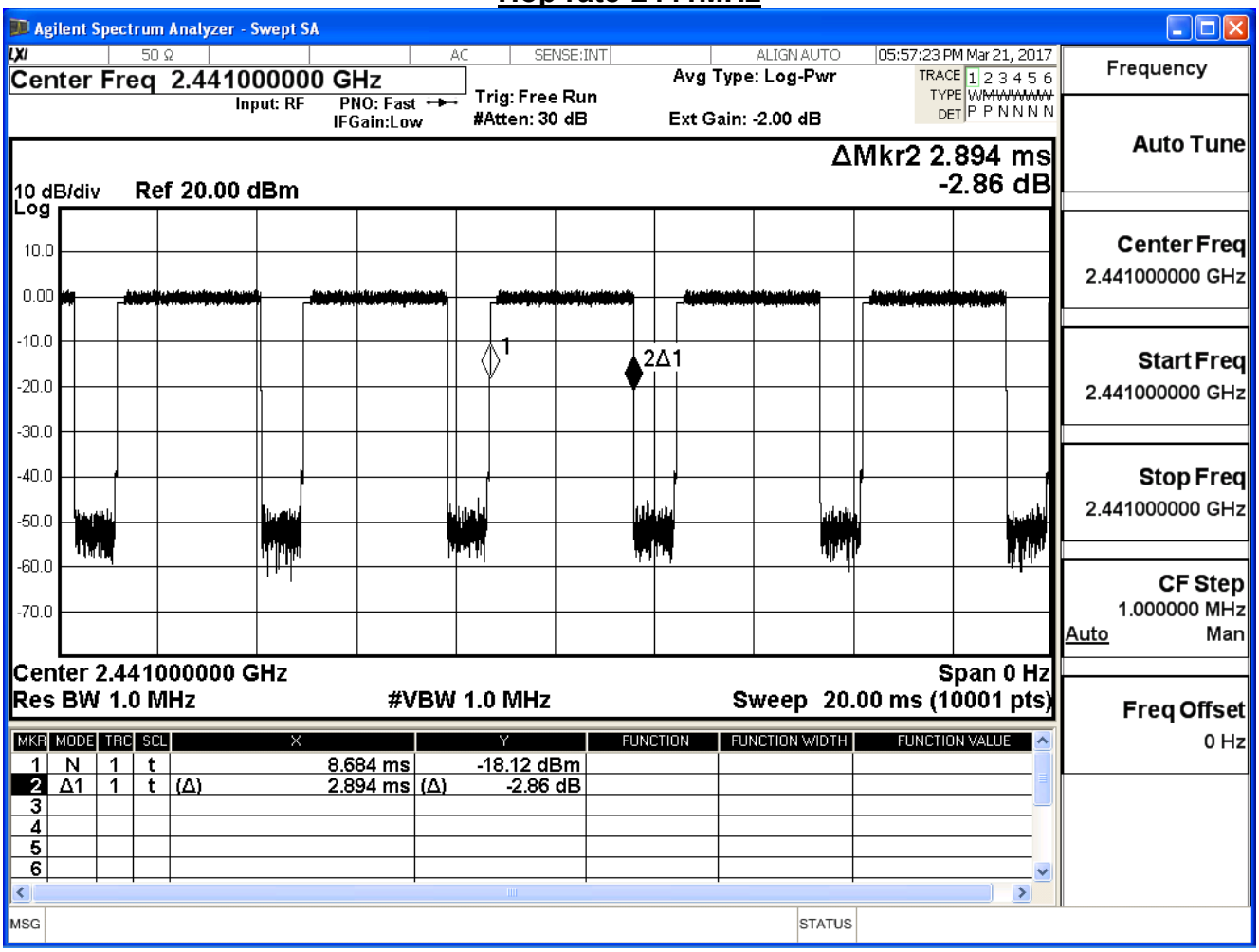
Dwell Time : 0.002894*(266.67/79)* 31.60=0.3087 sec。

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

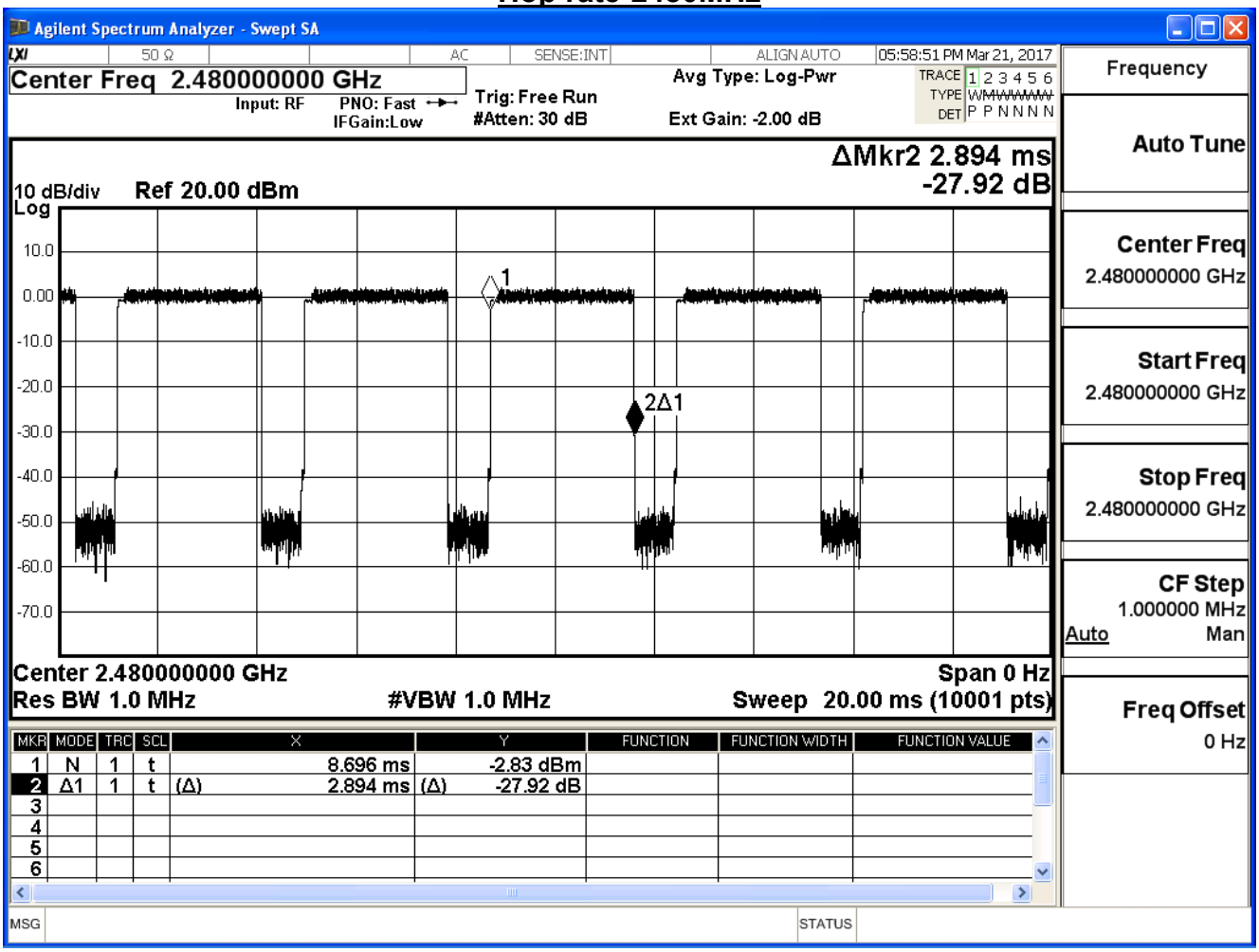
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



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