

FCC Test Report

Product Name : Beta+

Trade Name : Raptor

Model No. : EV1000A-00

FCC ID. : 2AH97-EVG1

Applicant : Eversight Ltd.

Address : Andrei Sakharov 9, Advance Technology Center,
Building 3, Haifa 3508409, Israel

Date of Receipt : May 08, 2017

Issued Date : Aug. 23, 2017

Report No. : 1750190R-RFUSP25V00

Report Version : V1.0



The test results relate only to the samples tested.

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Test Report Certification

Issued Date : Aug. 23, 2017

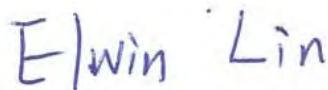
Report No. : 1750190R-RFUSP25V00



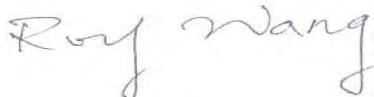
Product Name : Beta+
Applicant : EverySight Ltd.
Address : Andrei Sakharov 9, Advance Technology Center, Building 3, Haifa 3508409, Israel
Manufacturer : EverySight Ltd.
Model No. : EV1000A-00
FCC ID. : 2AH97-EVG1
EUT Voltage : Mode 1: DC 5V
Mode 2: AC 120V/60Hz
Testing Voltage : Mode 1: DC 5V
Mode 2: AC 120V/60Hz
Trade Name : Raptor
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2015
KDB 558074 D01 v04
Laboratory Name : Hsin Chu Laboratory
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Test Result : Complied

Documented By : 

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Tested By : 

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Approved By : 

(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1750190R-RFUSP25V00	V1.0	Initial issue of report	Aug. 23, 2017

Laboratory Information

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

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

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site :

<http://www.dekra.com.tw/english/about/certificates.aspx?bval=5>

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site : http://www.dekra.com.tw/index_en.aspx

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

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1. General Information

1.1. EUT Description

Product Name	Beta+
Trade Name	Raptor
Model No.	EV1000A-00
Frequency Range/ Channel Number	2402~2480MHz / 40 Channels
Type of Modulation	Bluetooth 4.0 (GFSK)

Antenna Information	
Antenna Type	PCB Antenna
Antenna Gain	2.32dBi

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

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00	2402 MHz	Channel 10	2422 MHz	Channel 20	2442 MHz	Channel 30	2462 MHz
Channel 01	2404 MHz	Channel 11	2424 MHz	Channel 21	2444 MHz	Channel 31	2464 MHz
Channel 02	2406 MHz	Channel 12	2426 MHz	Channel 22	2446 MHz	Channel 32	2466 MHz
Channel 03	2408 MHz	Channel 13	2428 MHz	Channel 23	2448 MHz	Channel 33	2468 MHz
Channel 04	2410 MHz	Channel 14	2430 MHz	Channel 24	2450 MHz	Channel 34	2470 MHz
Channel 05	2412 MHz	Channel 15	2432 MHz	Channel 25	2452 MHz	Channel 35	2472 MHz
Channel 06	2414 MHz	Channel 16	2434 MHz	Channel 26	2454 MHz	Channel 36	2474 MHz
Channel 07	2416MHz	Channel 17	2436 MHz	Channel 27	2456 MHz	Channel 37	2476 MHz
Channel 08	2418 MHz	Channel 18	2438 MHz	Channel 28	2458 MHz	Channel 38	2478 MHz
Channel 09	2420 MHz	Channel 19	2440 MHz	Channel 29	2460 MHz	Channel 39	2480 MHz

Note:

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

1.2. Test Mode

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

Test Mode	
Tx	Mode 1: Transmit-Power by PC Mode 2: Transmit-Power by Adapter

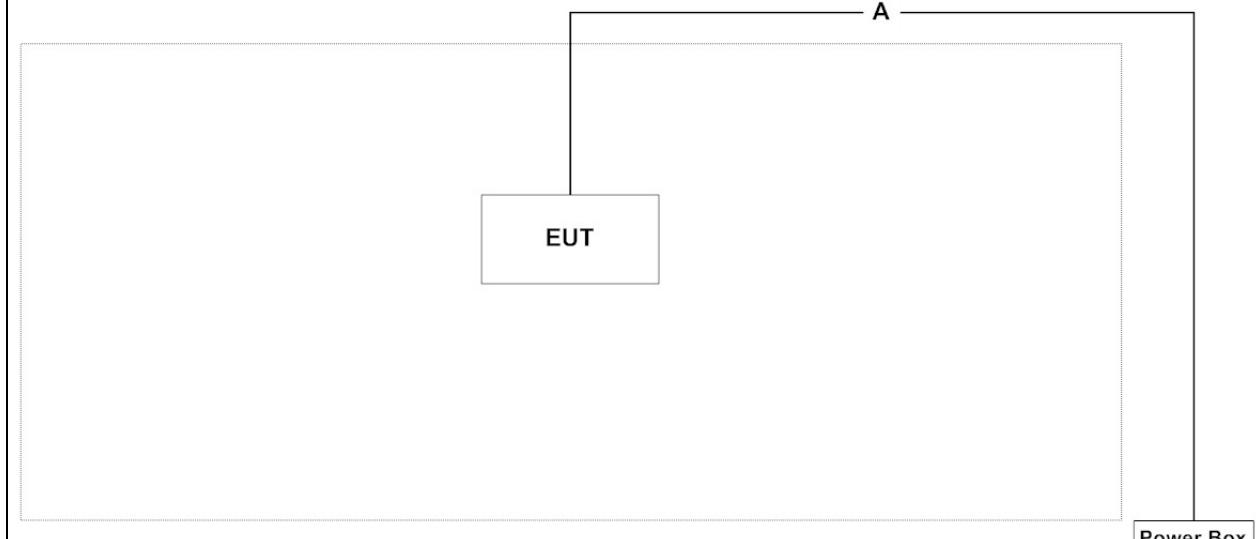
Test Items	Modulation	Channel	Result
Conducted Emission	GFSK	19	Complies
Peak Power Output	GFSK	00/19/39	Complies
Radiated Emission	GFSK	00/19/39	Complies
RF antenna conducted test	GFSK	00/19/39	Complies
Radiated Emission Band Edge	GFSK	00/19/39	Complies
Occupied Bandwidth	GFSK	00/19/39	Complies
Power Density	GFSK	00/19/39	Complies

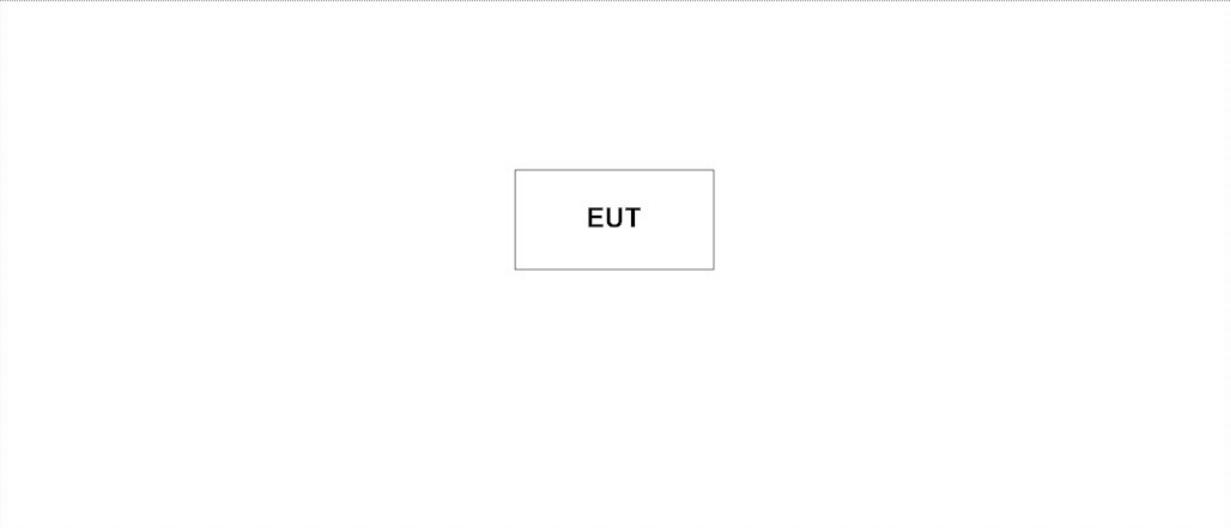
1.3. Tested System Details

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

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

1.4. Configuration of tested System

Test Mode	Mode 1: Transmit-Power by PC
Connection Diagram	
 <p>The diagram illustrates the connection setup. A central box labeled 'EUT' is connected to a vertical line that extends upwards and then turns right, leading to a box labeled 'Power Box (1)'. A horizontal line labeled 'A' extends from the top of this vertical connection to the right, indicating the path of the signal cable.</p>	
Signal Cable Type	Signal cable Description
A	USB CDD Cable Shielded, 1.5m

Test Mode	Mode 2: Transmit-Power by Adapter
Connection Diagram	
 EUT	

1.5. EUT Exercise Software

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

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual	Test Site
Temperature (°C)	FCC PART 15 C 15.207 Conducted Emission	15 - 35	20	3
Humidity (%RH)		25 - 75	50	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Peak Power Output	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	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	15 - 35	25	2
Humidity (%RH)		25 - 75	50	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth	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	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 C 15.247 Power Density	15 - 35	24	3
Humidity (%RH)		25 - 75	45	
Barometric pressure (mbar)		860 - 1060	950-1000	

Note: Test Site information refers to Laboratory Information.

2. Conducted Emission

2.1. Test Equipment

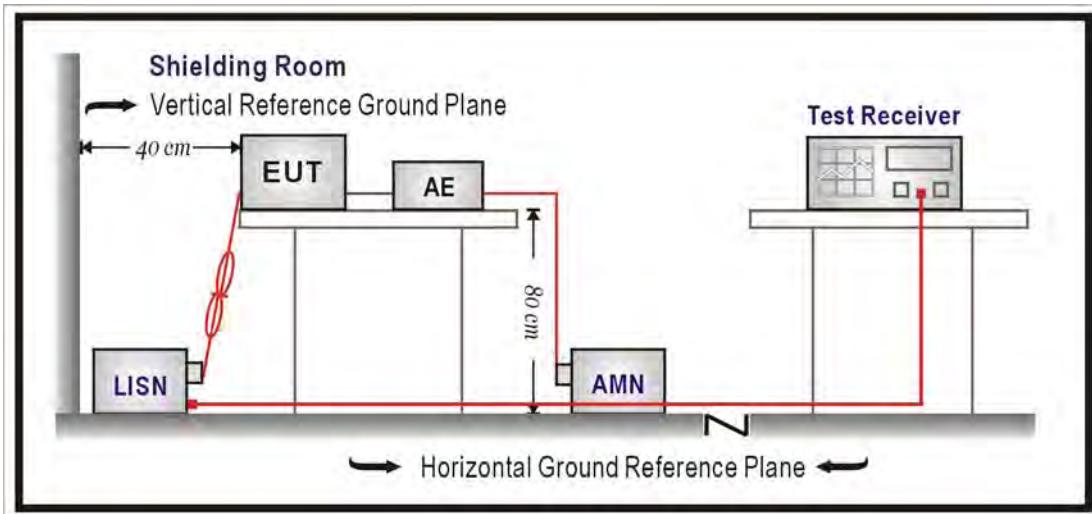
The following test equipment are used during the test:

Conducted Emission / SR2-H

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

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

2.2. Test Setup



2.3. Limits

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

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

2.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to DTS test procedure of KDB558074 D01 V04 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.5. Test Specification

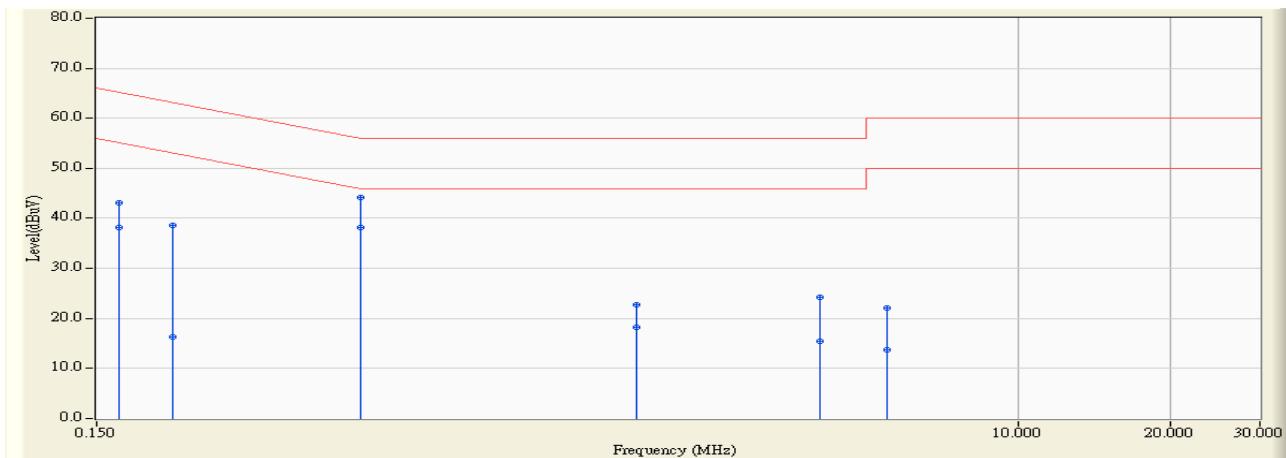
According to FCC Part 15 Subpart C Paragraph 15.207: 2015

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR2-H	Time : 2017/08/17
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2_LISN(16A)-6_0712 - Line1	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2440MHz

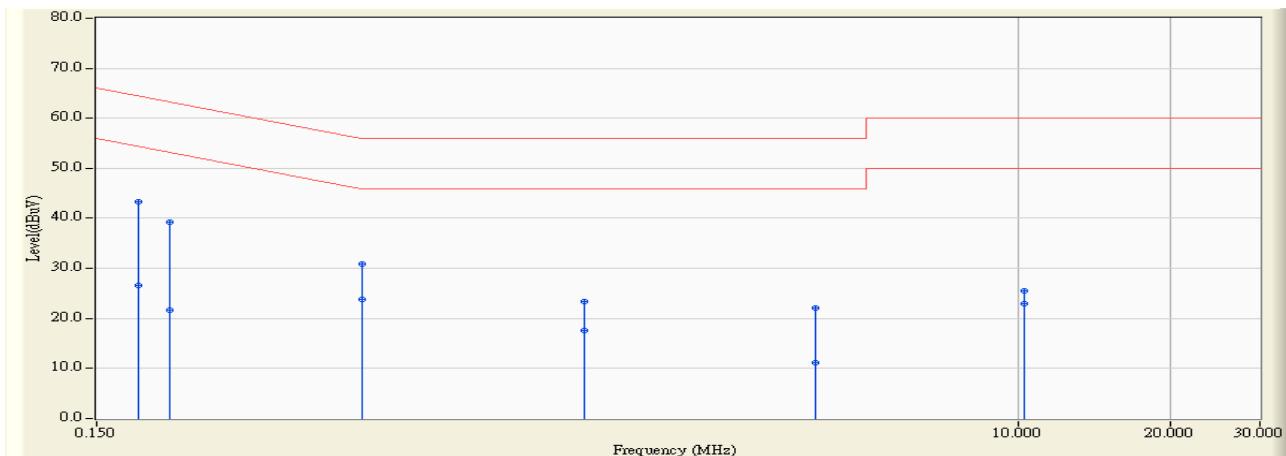


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	0.166	9.753	33.410	43.163	-22.014	65.177	QUASIPEAK
2	0.166	9.753	28.390	38.143	-17.034	55.177	AVERAGE
3	0.212	9.749	28.890	38.639	-24.468	63.107	QUASIPEAK
4	0.212	9.749	6.570	16.319	-36.788	53.107	AVERAGE
5	0.498	9.729	34.530	44.259	-11.780	56.039	QUASIPEAK
6	* 0.498	9.729	28.410	38.139	-7.900	46.039	AVERAGE
7	1.752	9.850	12.880	22.730	-33.270	56.000	QUASIPEAK
8	1.752	9.850	8.280	18.130	-27.870	46.000	AVERAGE
9	4.033	9.920	14.290	24.210	-31.790	56.000	QUASIPEAK
10	4.033	9.920	5.550	15.470	-30.530	46.000	AVERAGE
11	5.482	9.941	12.050	21.992	-38.008	60.000	QUASIPEAK
12	5.482	9.941	3.840	13.782	-36.218	50.000	AVERAGE

Note:

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

Site : SR2-H	Time : 2017/08/17
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2_LISN(16A)-6_0712 - Line2	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2440MHz

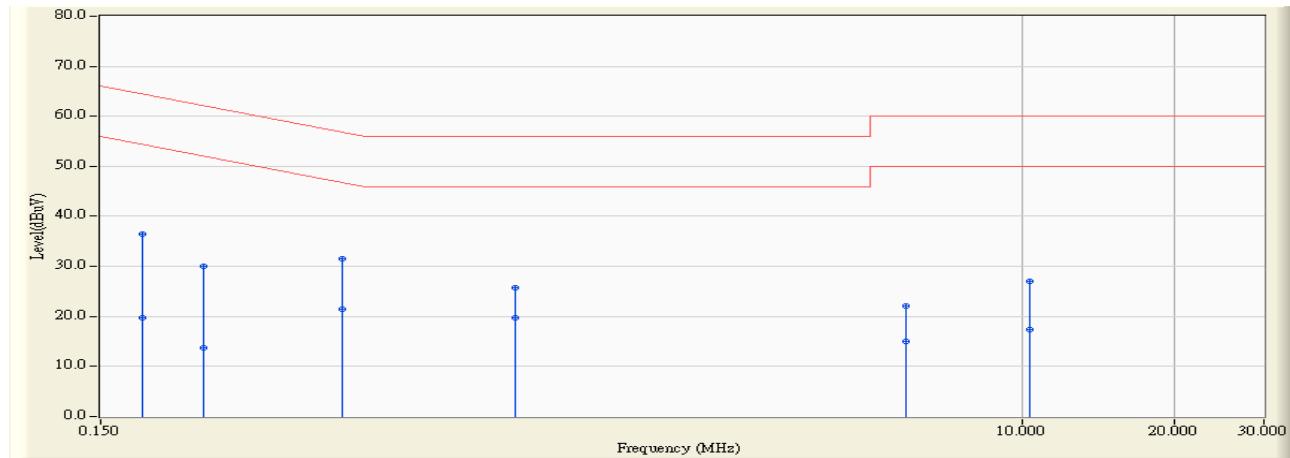


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.181	9.752	33.590	43.342	-21.086	64.428	QUASIPEAK
2		0.181	9.752	16.910	26.662	-27.766	54.428	AVERAGE
3		0.209	9.750	29.440	39.190	-24.071	63.261	QUASIPEAK
4		0.209	9.750	11.830	21.580	-31.681	53.261	AVERAGE
5		0.502	9.746	21.190	30.936	-25.064	56.000	QUASIPEAK
6		0.502	9.746	13.980	23.726	-22.274	46.000	AVERAGE
7		1.380	9.831	13.510	23.341	-32.659	56.000	QUASIPEAK
8		1.380	9.831	7.860	17.691	-28.309	46.000	AVERAGE
9		3.955	9.840	12.280	22.120	-33.880	56.000	QUASIPEAK
10		3.955	9.840	1.380	11.220	-34.780	46.000	AVERAGE
11		10.240	10.158	15.360	25.518	-34.482	60.000	QUASIPEAK
12		10.240	10.158	12.820	22.978	-27.022	50.000	AVERAGE

Note:

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

Site : SR2-H	Time : 2017/08/17
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Beta+	Note : Mode 2: Transmit-Power by Adapter_802.15.1_BLE_2440MHz

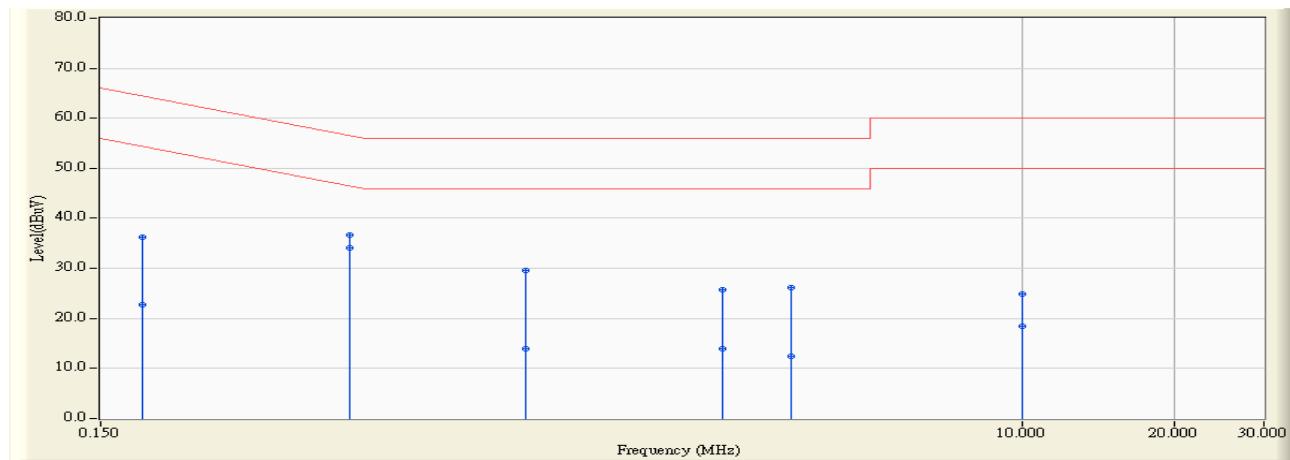


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.181	9.752	26.740	36.492	-27.936	64.428	QUASIPEAK
2		0.181	9.752	9.890	19.642	-34.786	54.428	AVERAGE
3		0.240	9.746	20.200	29.946	-32.156	62.102	QUASIPEAK
4		0.240	9.746	4.020	13.766	-38.336	52.102	AVERAGE
5	*	0.451	9.729	21.830	31.559	-25.302	56.861	QUASIPEAK
6		0.451	9.729	11.700	21.429	-25.432	46.861	AVERAGE
7		0.994	9.819	15.830	25.649	-30.351	56.000	QUASIPEAK
8		0.994	9.819	9.970	19.789	-26.211	46.000	AVERAGE
9		5.884	9.958	12.210	22.168	-37.832	60.000	QUASIPEAK
10		5.884	9.958	4.960	14.918	-35.082	50.000	AVERAGE
11		10.361	10.136	16.840	26.976	-33.024	60.000	QUASIPEAK
12		10.361	10.136	7.260	17.396	-32.604	50.000	AVERAGE

Note:

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

Site : SR2-H	Time : 2017/08/17
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Beta+	Note : Mode 2: Transmit-Power by Adapter_802.15.1_BLE_2440MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.181	9.752	26.580	36.332	-28.096	64.428	QUASIPEAK
2		0.181	9.752	12.920	22.672	-31.756	54.428	AVERAGE
3		0.466	9.747	26.890	36.637	-19.941	56.578	QUASIPEAK
4	*	0.466	9.747	24.400	34.147	-12.431	46.578	AVERAGE
5		1.041	9.821	19.790	29.611	-26.389	56.000	QUASIPEAK
6		1.041	9.821	4.120	13.941	-32.059	46.000	AVERAGE
7		2.552	9.847	15.860	25.707	-30.293	56.000	QUASIPEAK
8		2.552	9.847	4.120	13.967	-32.033	46.000	AVERAGE
9		3.494	9.843	16.400	26.243	-29.757	56.000	QUASIPEAK
10		3.494	9.843	2.700	12.543	-33.457	46.000	AVERAGE
11		9.982	10.149	14.780	24.929	-35.071	60.000	QUASIPEAK
12		9.982	10.149	8.230	18.379	-31.621	50.000	AVERAGE

Note:

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

3. Peak Power Output

3.1. Test Equipment

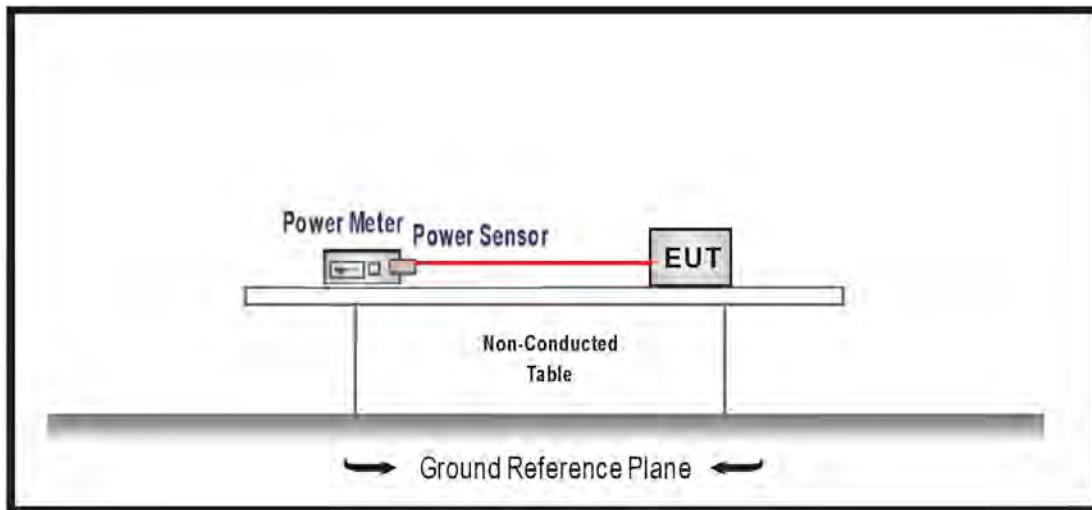
The following test equipment is used during the test:

Peak Power Output / SR10-H

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

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

3.2. Test Setup



3.3. Test procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB558074 D01 V04 for compliance to FCC 47CFR 15.247 requirements.

3.4. Limits

The maximum peak power shall be less 1 Watt.

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247

3.6. Test Result

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

GFSK

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	4.617	≤30	Pass
19	2440	4.613	≤30	Pass
39	2480	4.365	≤30	Pass

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the test:

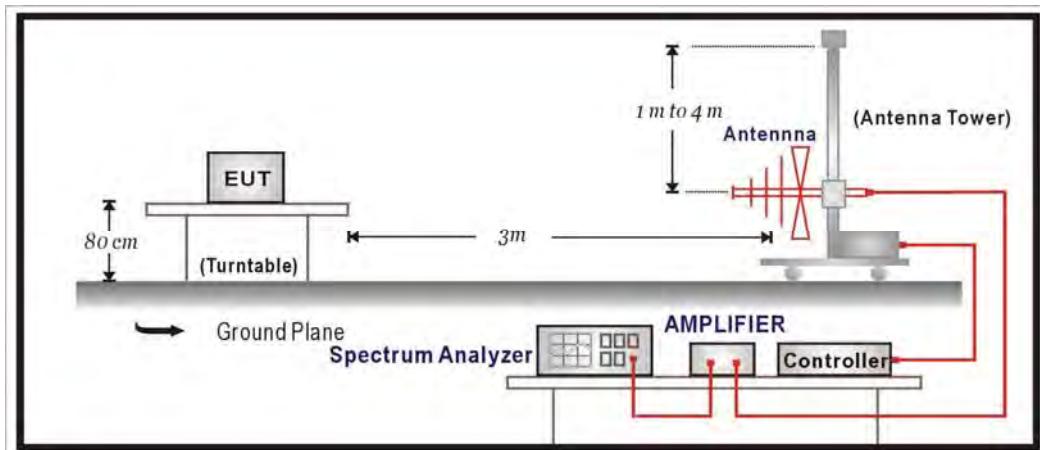
Radiated Emission / CB2-H

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

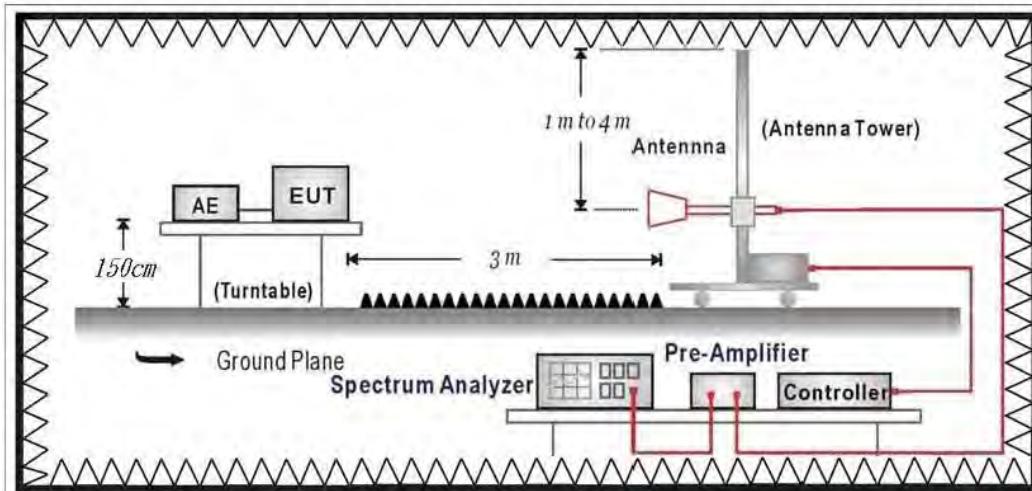
Note: All equipment that need to calibrate are with calibration period of 1 year.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

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

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

Remarks : 1. RF Voltage (dBuV) = $20 \log \text{RF Voltage (uV)}$

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 DTS test procedure of KDB558074 D01 V04 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.

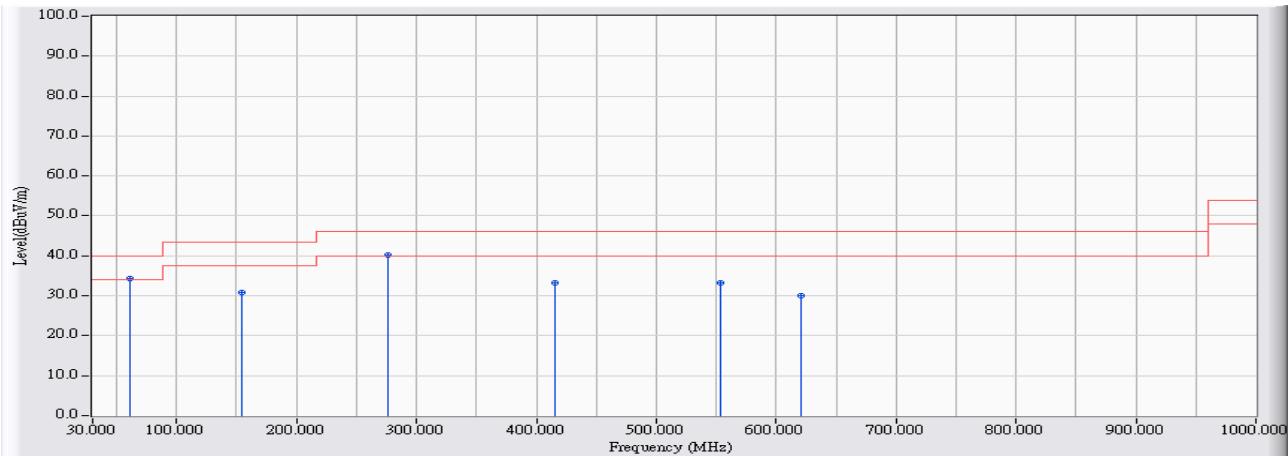
4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247

4.6. Test Result

30MHz-1GHz Spurious

Site : CB2-H	Time : 2017/08/04
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2440MHz

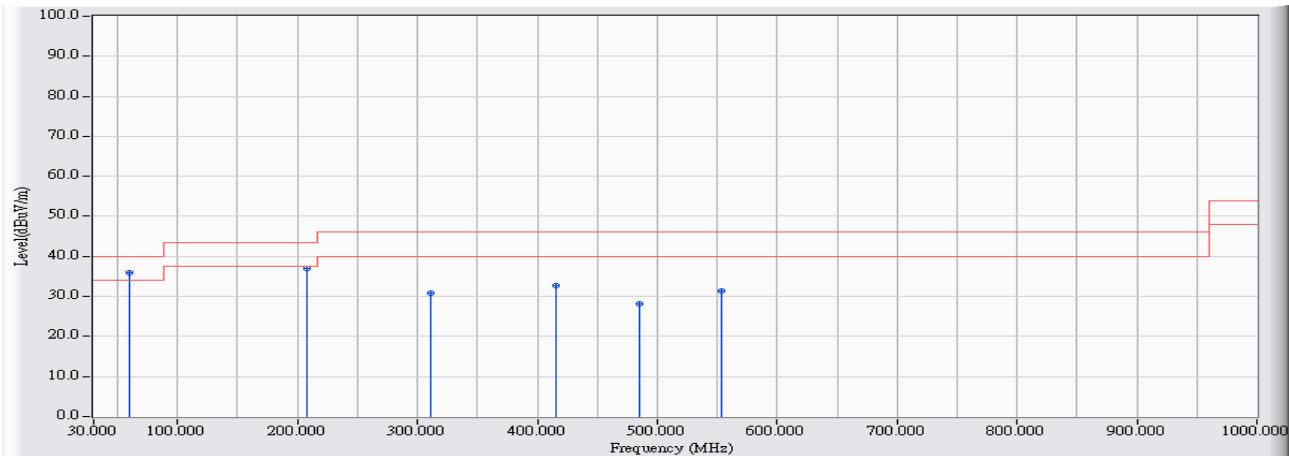


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	60.649	-28.180	62.617	34.437	-5.563	40.000	QUASIPEAK
2		154.342	-22.548	53.258	30.709	-12.791	43.500	QUASIPEAK
3		275.967	-19.791	60.046	40.255	-5.745	46.000	QUASIPEAK
4		415.536	-16.009	49.273	33.264	-12.736	46.000	QUASIPEAK
5		553.069	-13.576	46.819	33.243	-12.757	46.000	QUASIPEAK
6		620.768	-12.330	42.409	30.080	-15.920	46.000	QUASIPEAK

Note:

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

Site : CB2-H	Time : 2017/08/04
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2440MHz

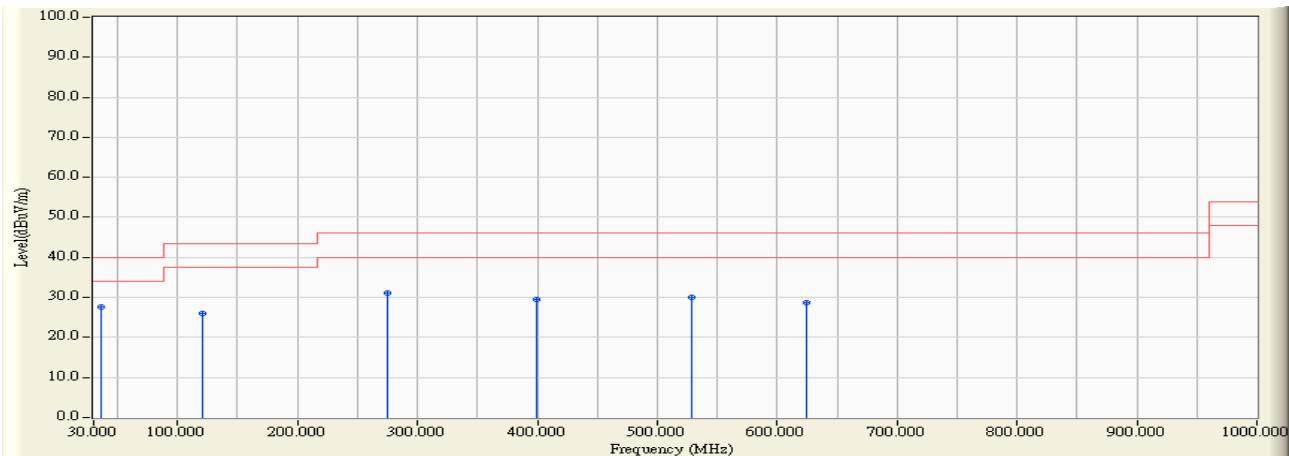


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	59.582	-28.076	63.895	35.820	-4.180	40.000	QUASIPEAK
2		207.492	-22.772	59.757	36.984	-6.516	43.500	QUASIPEAK
3		311.660	-19.396	50.156	30.761	-15.239	46.000	QUASIPEAK
4		415.439	-16.006	48.823	32.817	-13.183	46.000	QUASIPEAK
5		484.788	-14.730	42.883	28.153	-17.847	46.000	QUASIPEAK
6		553.069	-13.576	44.933	31.357	-14.643	46.000	QUASIPEAK

Note:

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

Site : CB2-H	Time : 2017/08/19
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	Power : AC 120V / 60Hz
EUT : Beta+	Note : Mode 2: Transmit-Power by Adapter_802.15.1_BLE_2440MHz

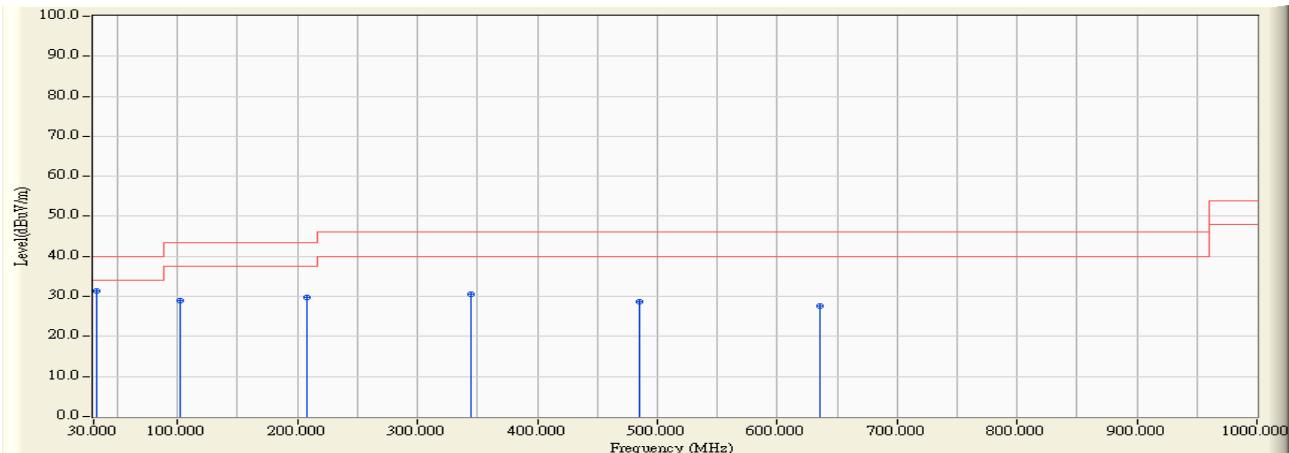


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	36.305	-16.673	44.237	27.564	-12.436	40.000	QUASIPEAK
2		120.210	-21.137	47.113	25.975	-17.525	43.500	QUASIPEAK
3		275.410	-19.638	50.830	31.191	-14.809	46.000	QUASIPEAK
4		399.570	-15.764	45.147	29.384	-16.616	46.000	QUASIPEAK
5		528.095	-13.848	43.868	30.019	-15.981	46.000	QUASIPEAK
6		624.125	-11.947	40.653	28.706	-17.294	46.000	QUASIPEAK

Note:

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

Site : CB2-H	Time : 2017/08/19
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB2_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	Power : AC 120V / 60Hz
EUT : Beta+	Note : Mode 2: Transmit-Power by Adapter_802.15.1_BLE_2440MHz



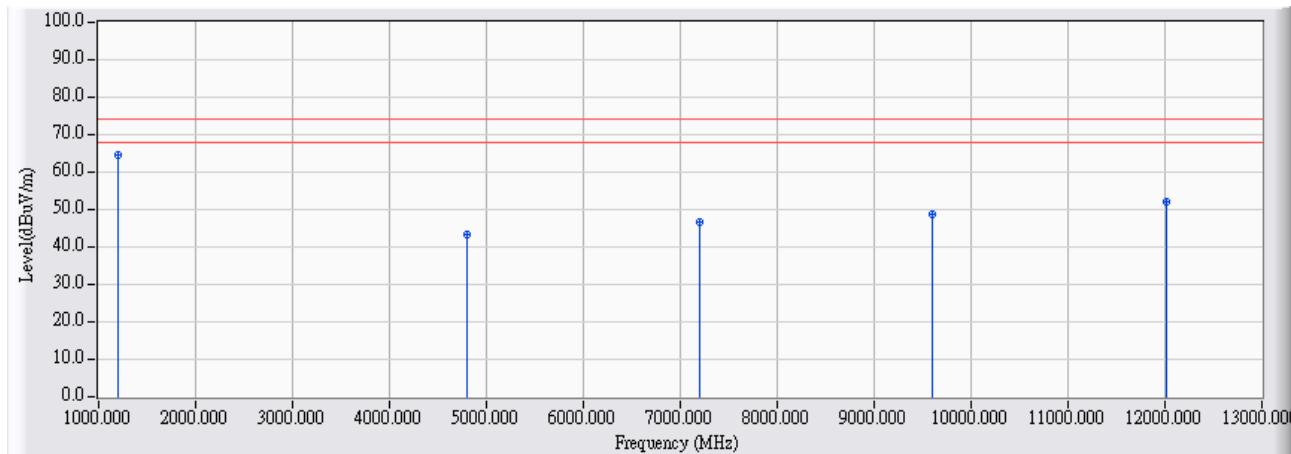
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	31.940	-16.694	47.976	31.283	-8.717	40.000	QUASIPEAK
2		101.780	-23.174	52.054	28.880	-14.620	43.500	QUASIPEAK
3		207.995	-22.625	52.426	29.801	-13.699	43.500	QUASIPEAK
4		344.765	-17.484	48.014	30.531	-15.469	46.000	QUASIPEAK
5		484.930	-14.356	42.962	28.606	-17.394	46.000	QUASIPEAK
6		635.765	-12.476	40.212	27.735	-18.265	46.000	QUASIPEAK

Note:

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

Harmonic & Spurious:

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2402MHz

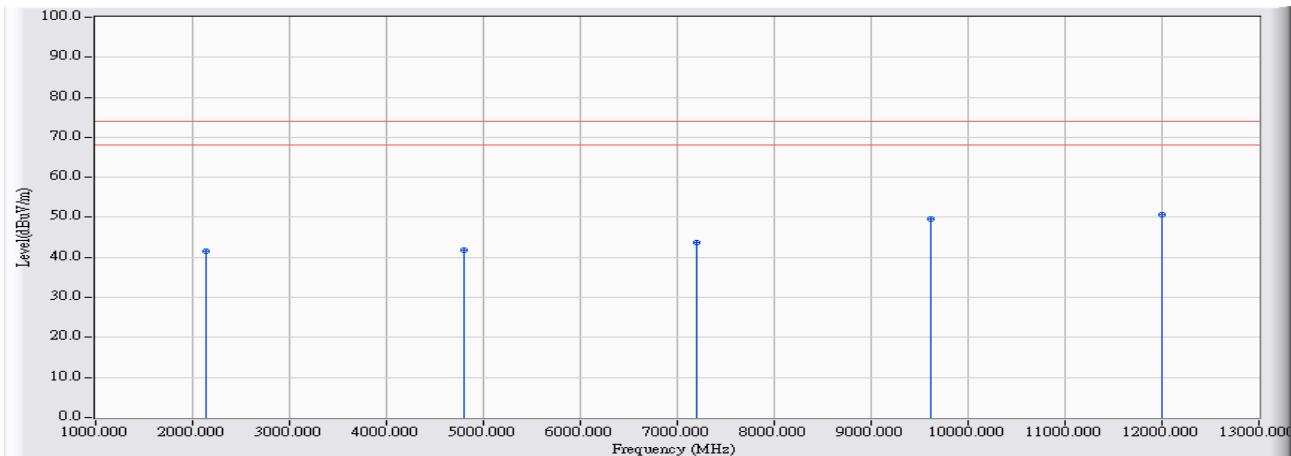


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	1199.800	5.781	58.890	64.670	-9.330	74.000	PEAK
2		4804.240	0.649	42.780	43.429	-30.571	74.000	PEAK
3		4804.240	0.649	42.770	43.419	-30.581	74.000	PEAK
4		7204.960	6.623	40.050	46.672	-27.328	74.000	PEAK
5		9606.430	12.336	36.230	48.566	-25.434	74.000	PEAK
6		12012.300	37.575	14.644	52.219	-21.781	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2402MHz

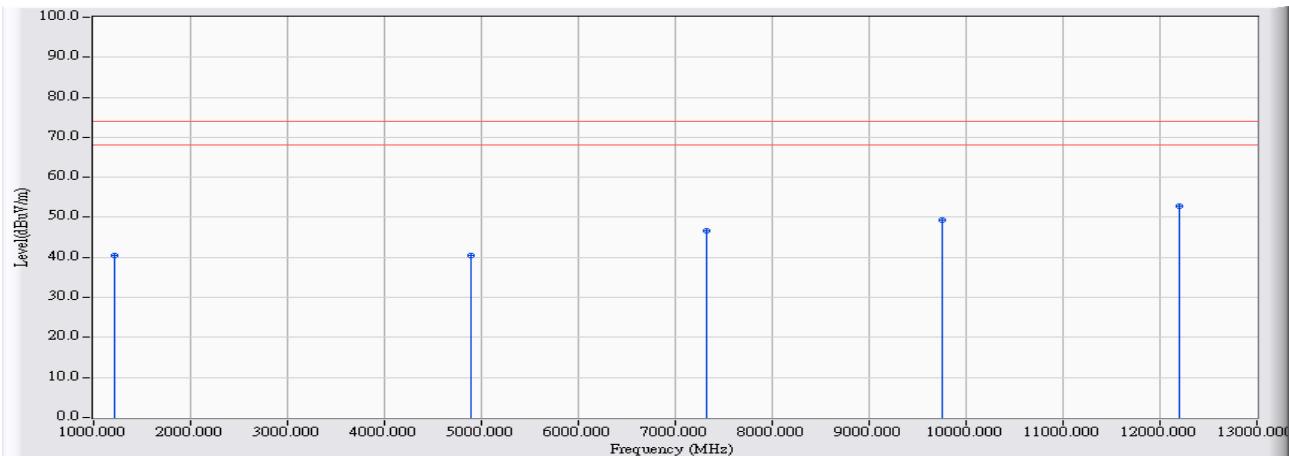


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2130.900	-10.118	51.720	41.602	-32.398	74.000	PEAK
2	4799.100	0.645	41.050	41.695	-32.305	74.000	PEAK
3	7206.100	6.636	36.990	43.625	-30.375	74.000	PEAK
4	9608.600	12.343	37.130	49.473	-24.527	74.000	PEAK
5	*	16.225	34.550	50.775	-23.225	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2440MHz

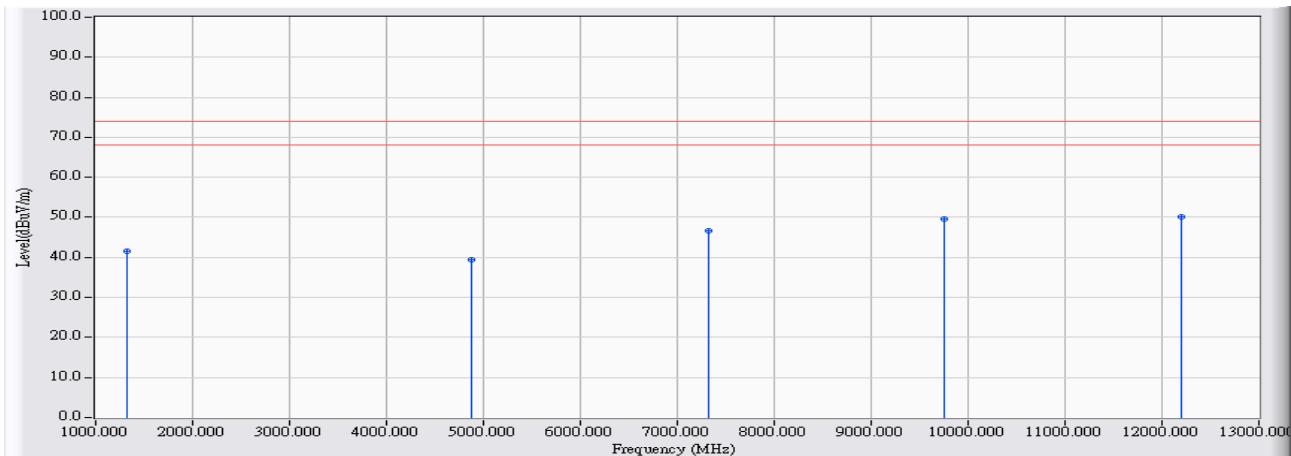


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1220.200	-13.466	53.890	40.424	-33.576	74.000	PEAK
2	4887.500	0.673	39.770	40.443	-33.557	74.000	PEAK
3	7320.400	7.194	39.370	46.564	-27.436	74.000	PEAK
4	9757.800	12.662	36.760	49.422	-24.578	74.000	PEAK
5	*	15.275	37.550	52.825	-21.175	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2440MHz

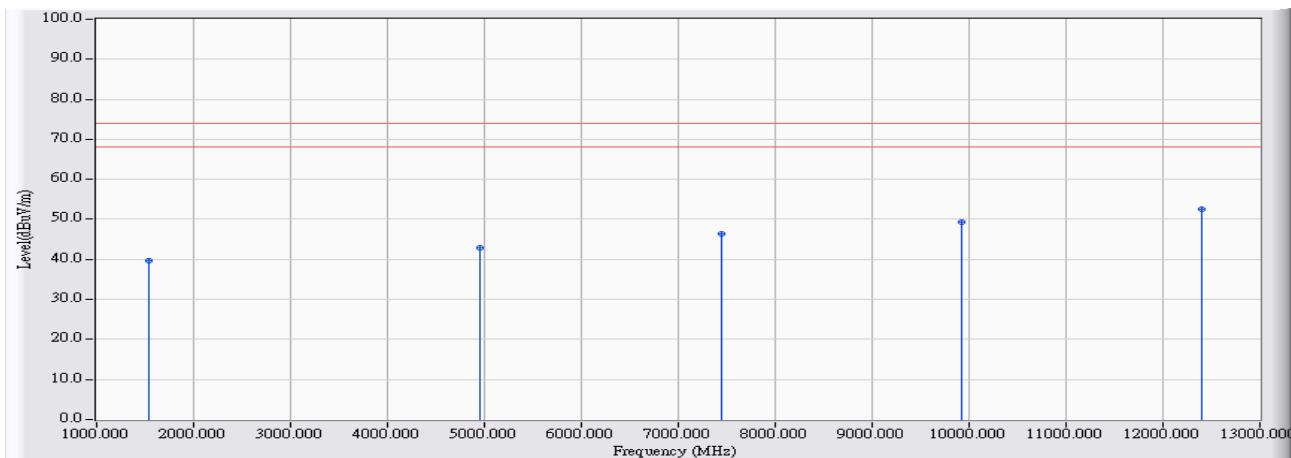


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1330.600	-12.981	54.540	41.559	-32.441	74.000	PEAK
2	4882.500	0.672	38.860	39.531	-34.469	74.000	PEAK
3	7318.140	7.185	39.540	46.724	-27.276	74.000	PEAK
4	9759.020	12.664	36.860	49.524	-24.476	74.000	PEAK
5	*	15.275	34.860	50.135	-23.865	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2480MHz

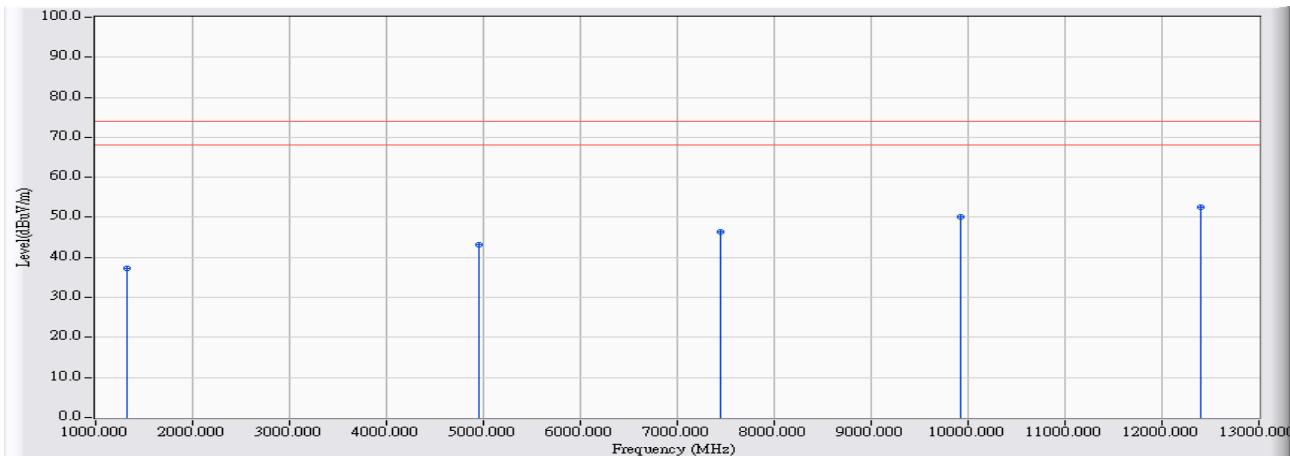


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	
1	1535.700	-12.113	51.880	39.767	-34.233	74.000	PEAK	
2	4958.700	0.696	42.180	42.877	-31.123	74.000	PEAK	
3	7440.900	7.725	38.530	46.254	-27.746	74.000	PEAK	
4	9921.500	12.893	36.550	49.443	-24.557	74.000	PEAK	
5	*	12398.400	15.863	36.560	52.424	-21.576	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2480MHz



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	1330.600	-12.981	50.160	37.179	-36.821	74.000	PEAK
2	4960.300	0.697	42.520	43.218	-30.782	74.000	PEAK
3	7438.900	7.715	38.600	46.316	-27.684	74.000	PEAK
4	9921.300	12.893	37.150	50.043	-23.957	74.000	PEAK
5	*	15.876	36.713	52.588	-21.412	74.000	PEAK

Note:

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

5. RF antenna conducted test

5.1. Test Equipment

The following test equipment is used during the test:

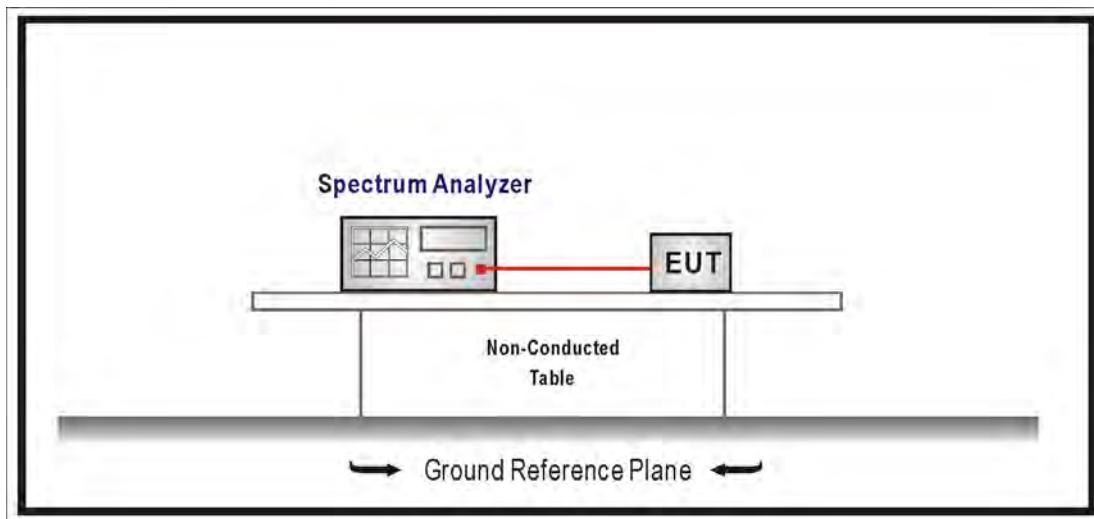
RF antenna conducted test / SR10-H

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

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

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 DTS test procedure of KDB558074 D01 V04 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

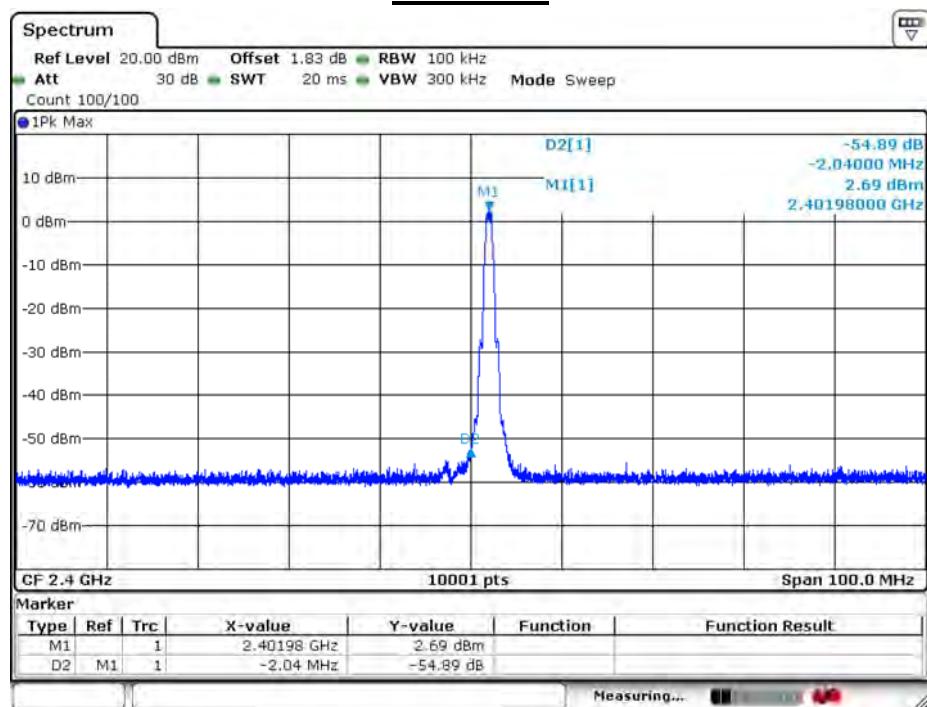
5.6. Test Result

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

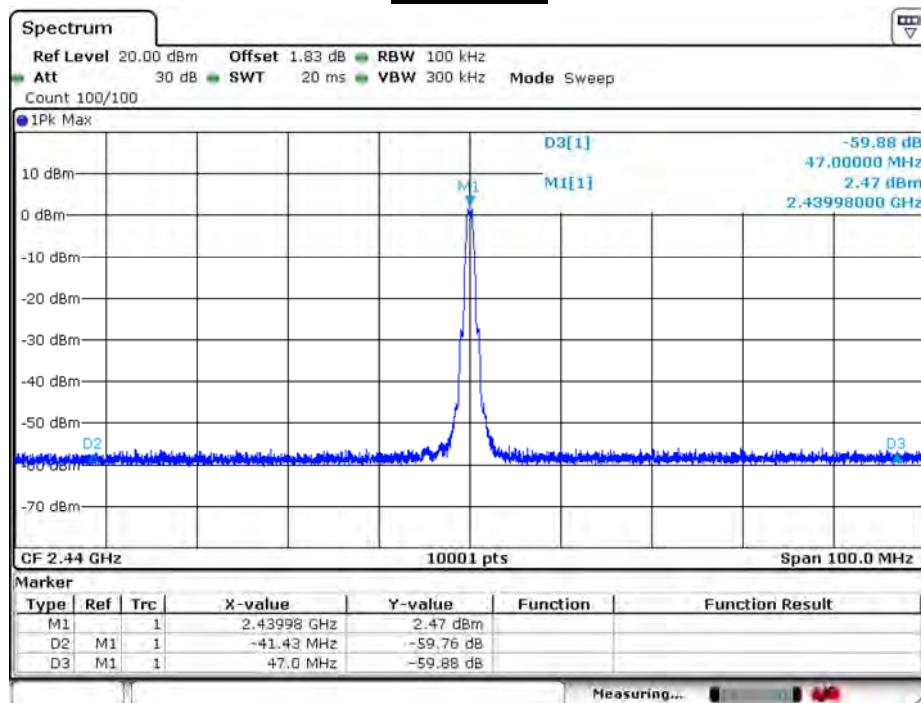
GFSK

Channel	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
00	2402	54.890	≥20	Pass
19	2440	59.760	≥20	Pass
39	2480	58.020	≥20	Pass

Channel 00

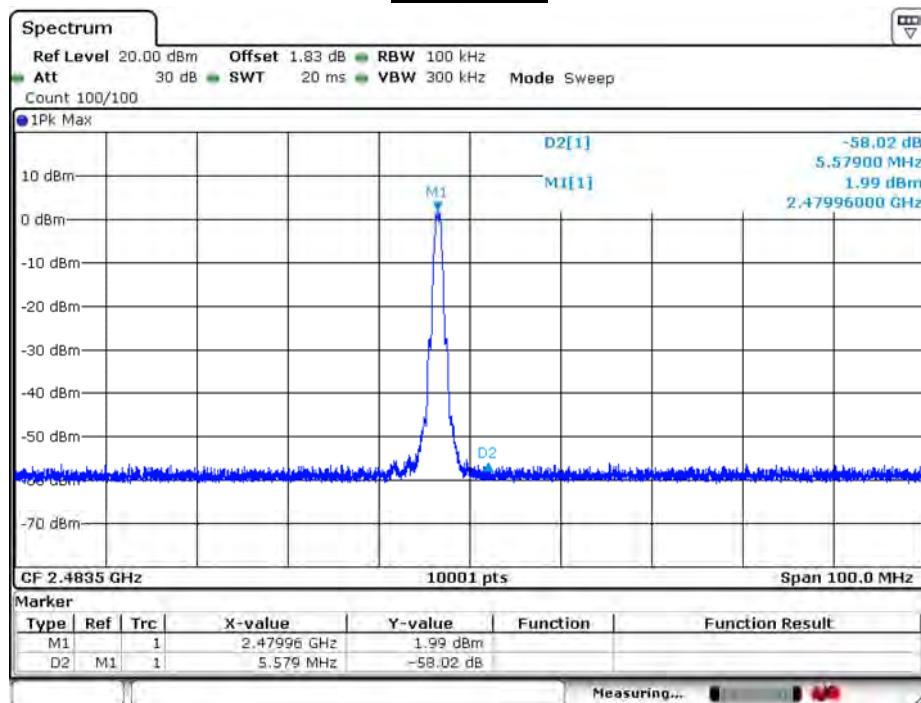


Channel 19



Date: 9 AUG 2017 03:31:27

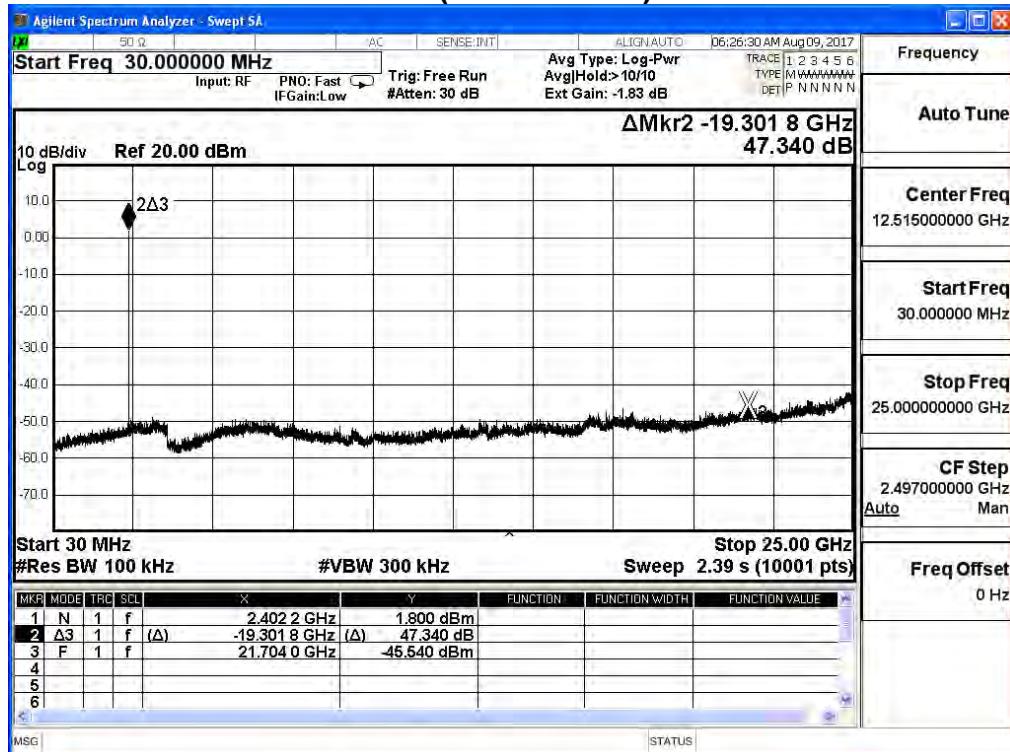
Channel 39



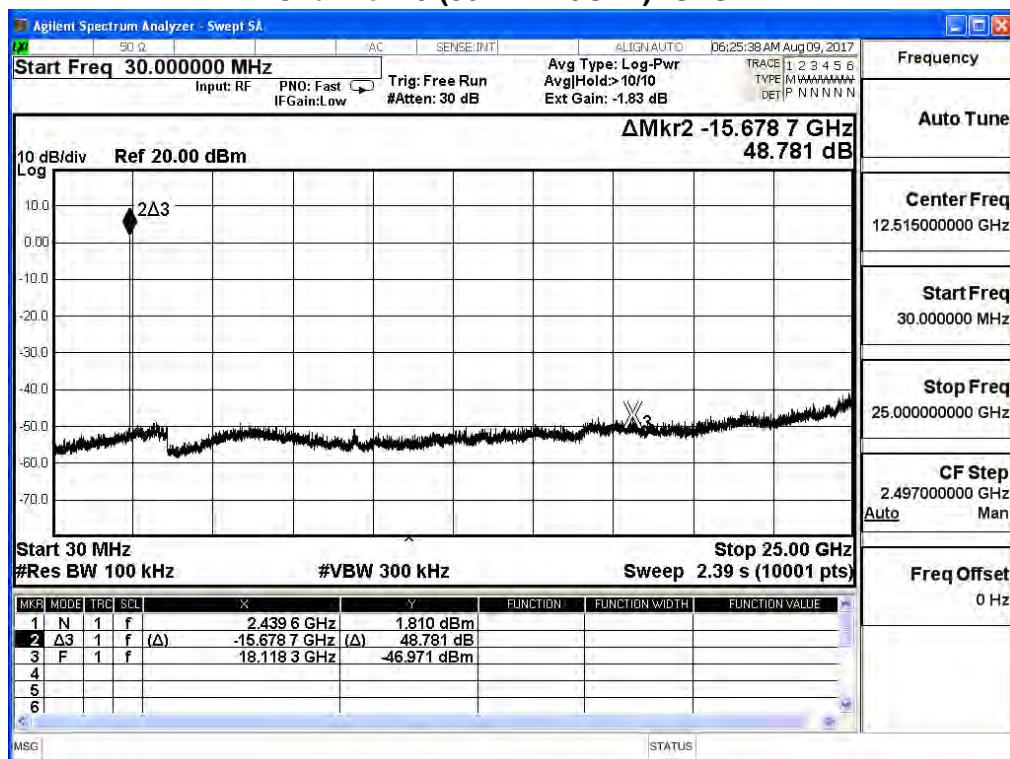
Date: 9 AUG 2017 03:32:00

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

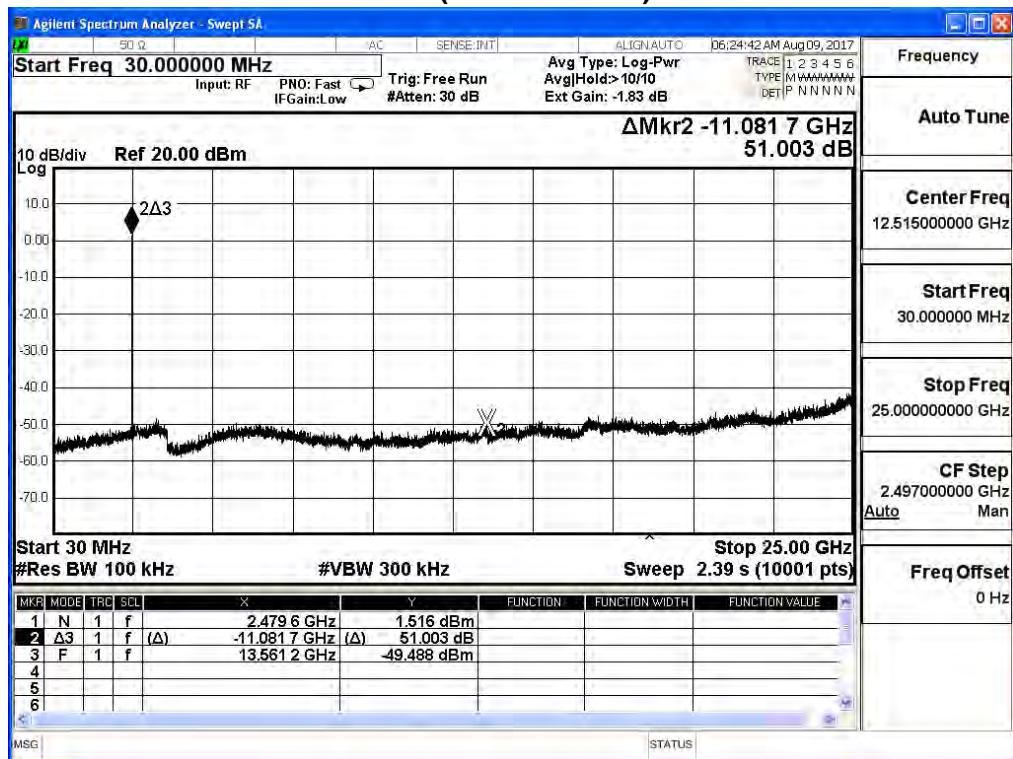
Channel 00 (30MHz-25GHz)- GFSK



Channel 19 (30MHz-25GHz)- GFSK



Channel 39 (30MHz-25GHz)- GFSK



6. Band Edge

6.1. Test Equipment

The following test equipment are used during the test:

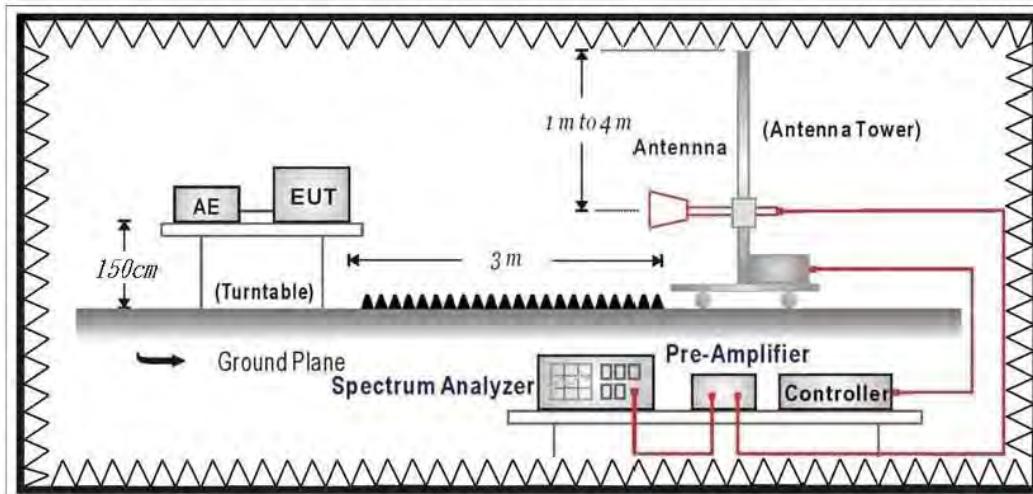
Band Edge / CB2-H

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

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

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

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

6.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB558074 D01 V04 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table which is 0.8 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.

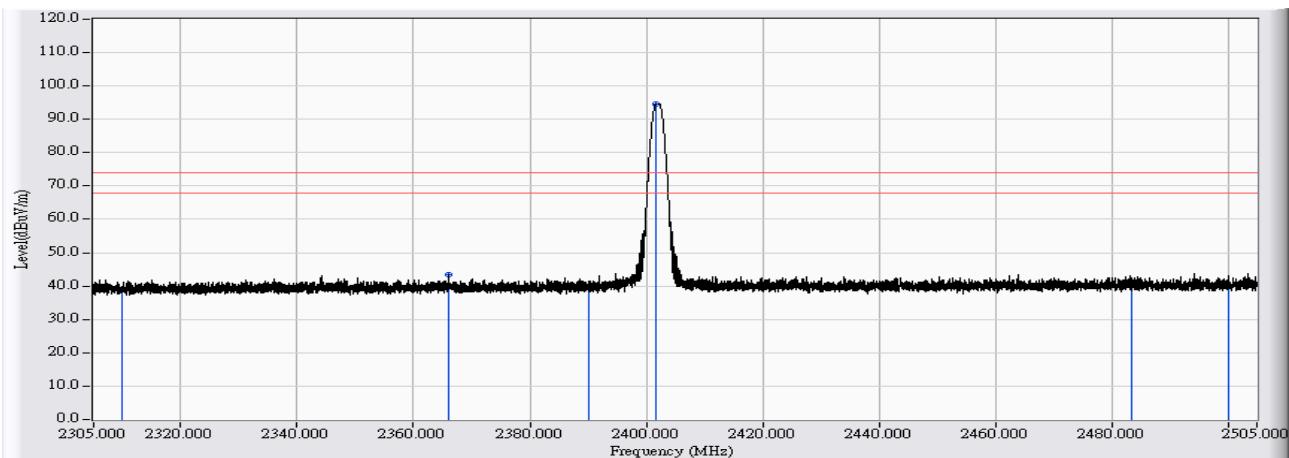
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247

6.6. Test Result

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1 BLE 2402MHz

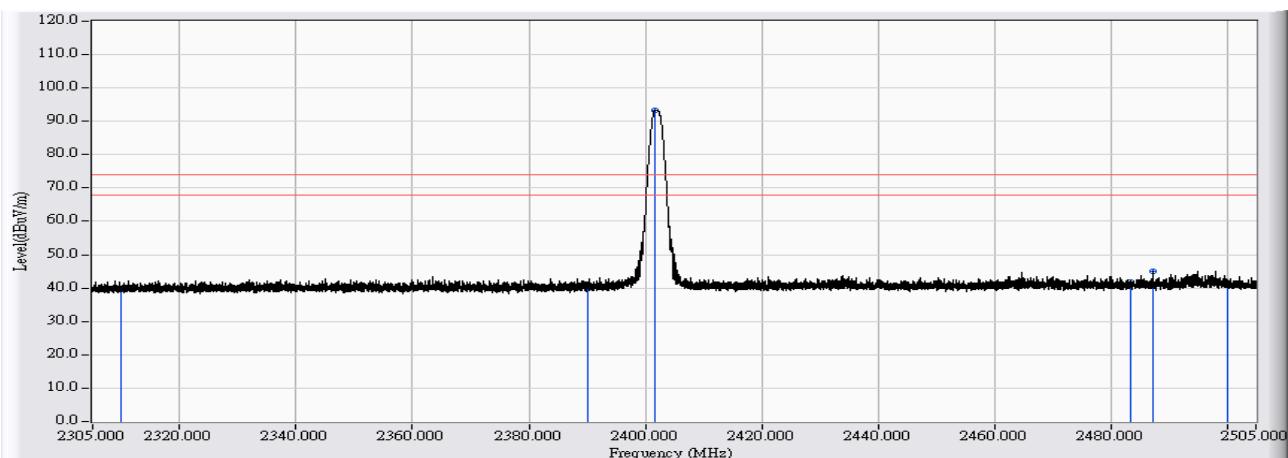


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2310.000	11.142	27.728	38.871	-35.129	74.000	PEAK
2	2366.074	11.447	31.875	43.321	-30.679	74.000	PEAK
3	2390.000	11.576	27.918	39.494	-34.506	74.000	PEAK
4	* 2401.690	11.640	83.046	94.686	20.686	74.000	PEAK
5	2483.500	12.091	29.248	41.340	-32.660	74.000	PEAK
6	2500.000	12.180	28.069	40.250	-33.750	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1 BLE 2402MHz

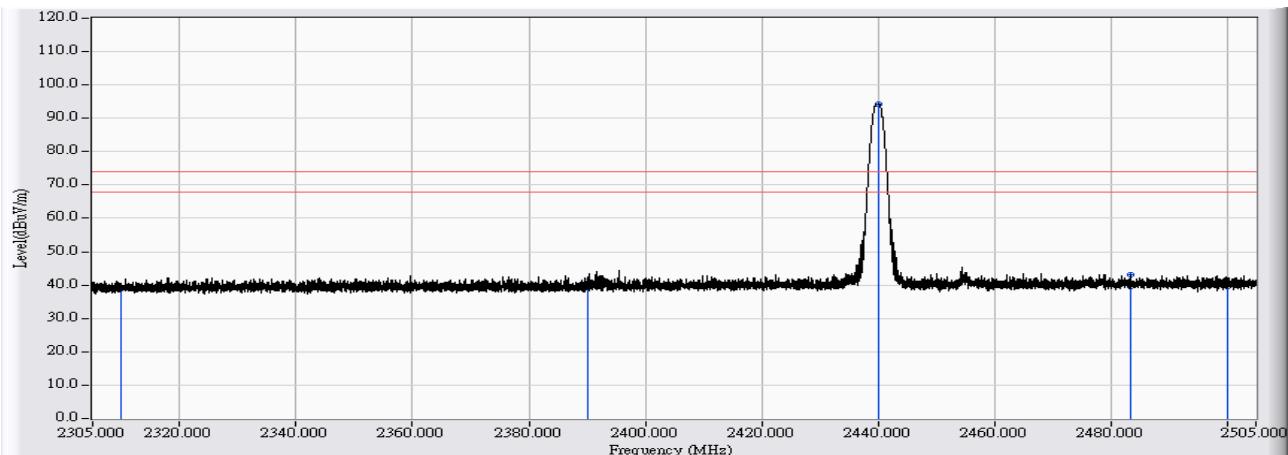


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.142	28.576	39.719	-34.281	74.000	PEAK
2		2390.000	11.576	28.180	39.756	-34.244	74.000	PEAK
3	*	2401.730	11.640	81.635	93.275	19.275	74.000	PEAK
4		2483.500	12.091	29.645	41.737	-32.263	74.000	PEAK
5		2487.182	12.112	32.768	44.880	-29.120	74.000	PEAK
6		2500.000	12.180	29.222	41.403	-32.597	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1 BLE 2440MHz

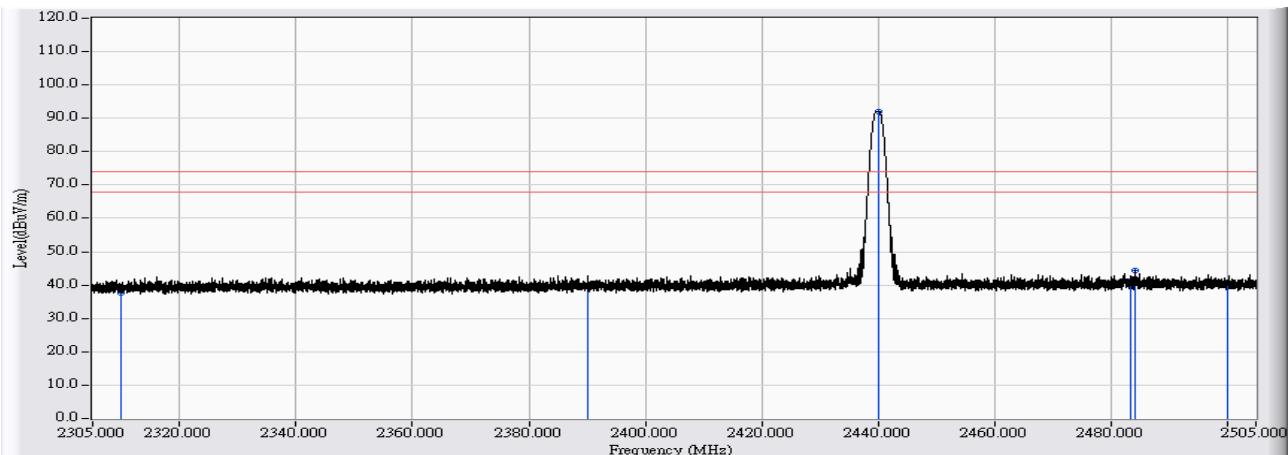


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.142	27.691	38.834	-35.166	74.000	PEAK
2		2390.000	11.576	29.574	41.150	-32.850	74.000	PEAK
3	*	2440.206	11.853	82.386	94.239	20.239	74.000	PEAK
4		2483.500	12.091	27.377	39.469	-34.531	74.000	PEAK
5		2483.542	12.092	31.177	43.269	-30.731	74.000	PEAK
6		2500.000	12.180	27.383	39.564	-34.436	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1 BLE 2440MHz

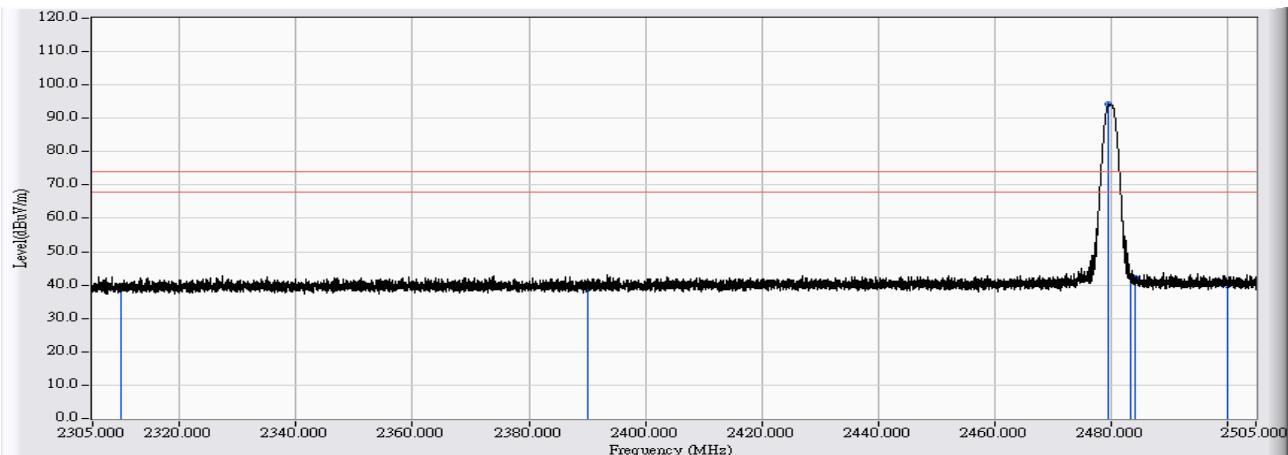


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.142	26.588	37.731	-36.269	74.000	PEAK
2		2390.000	11.576	28.042	39.618	-34.382	74.000	PEAK
3	*	2440.206	11.853	80.242	92.095	18.095	74.000	PEAK
4		2483.500	12.091	29.003	41.095	-32.905	74.000	PEAK
5		2484.142	12.095	32.363	44.459	-29.541	74.000	PEAK
6		2500.000	12.180	28.538	40.719	-33.281	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 = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2480MHz

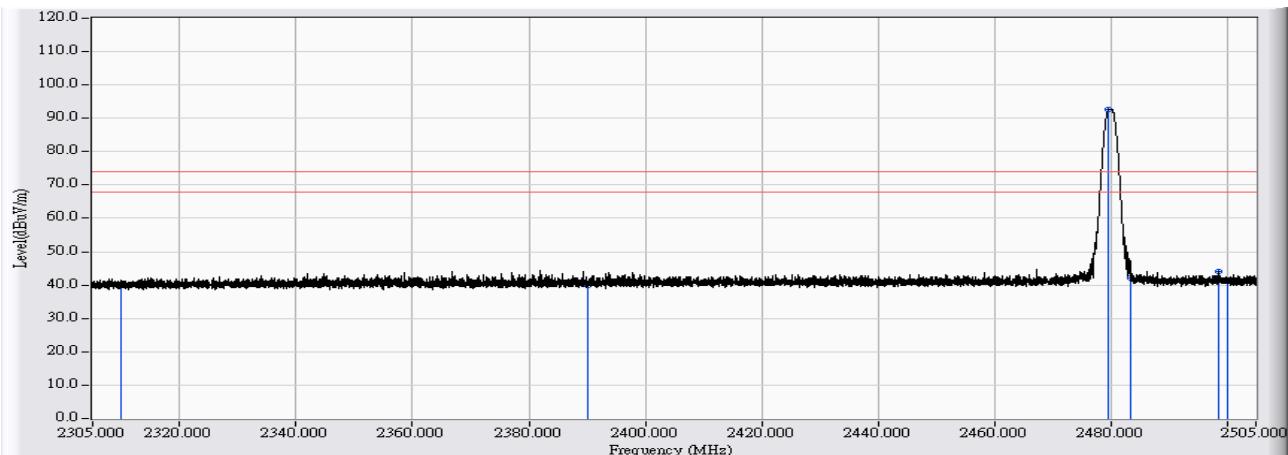


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.142	28.735	39.878	-34.122	74.000	PEAK
2		2390.000	11.576	27.841	39.417	-34.583	74.000	PEAK
3	*	2479.702	12.071	82.069	94.140	20.140	74.000	PEAK
4		2483.500	12.091	30.361	42.453	-31.547	74.000	PEAK
5		2484.242	12.096	30.157	42.253	-31.747	74.000	PEAK
6		2500.000	12.180	27.661	39.842	-34.158	74.000	PEAK

Note:

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

Site : CB2-H	Time : 2017/07/31
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB2_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 5V
EUT : Beta+	Note : Mode 1: Transmit-Power by PC 802.15.1_BLE_2480MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	11.142	28.599	39.742	-34.258	74.000	PEAK
2		2390.000	11.576	28.282	39.858	-34.142	74.000	PEAK
3	*	2479.722	12.071	80.630	92.701	18.701	74.000	PEAK
4		2483.500	12.091	29.922	42.014	-31.986	74.000	PEAK
5		2498.480	12.173	31.861	44.034	-29.966	74.000	PEAK
6		2500.000	12.180	28.952	41.133	-32.867	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 = 3 MHz, 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. Occupied Bandwidth

7.1. Test Equipment

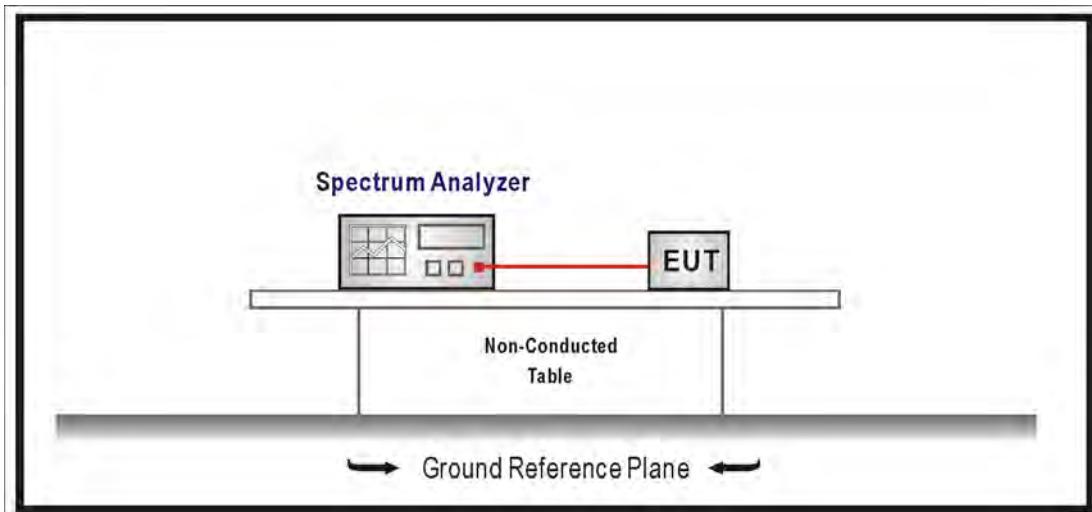
The following test equipment is used during the test:

Occupied Bandwidth / SR10-H

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

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

7.2. Test Setup



7.3. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.4. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB558074 D01 V04 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 1% of EBW, Span greater than RBW.

7.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247

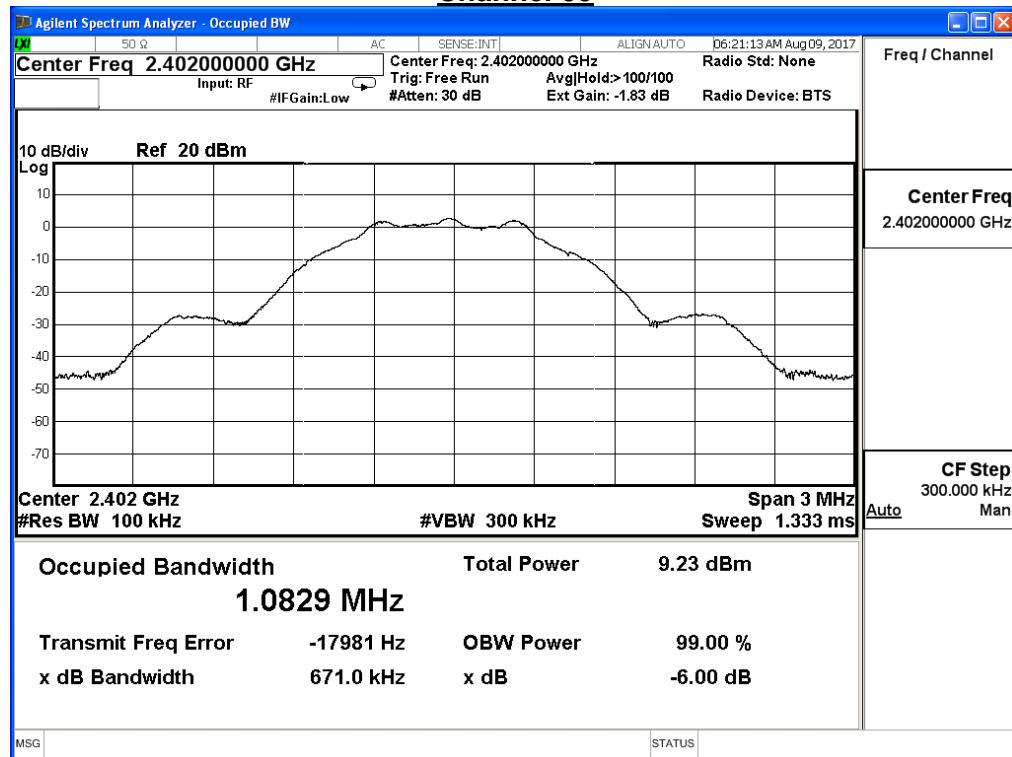
7.6. Test Result

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

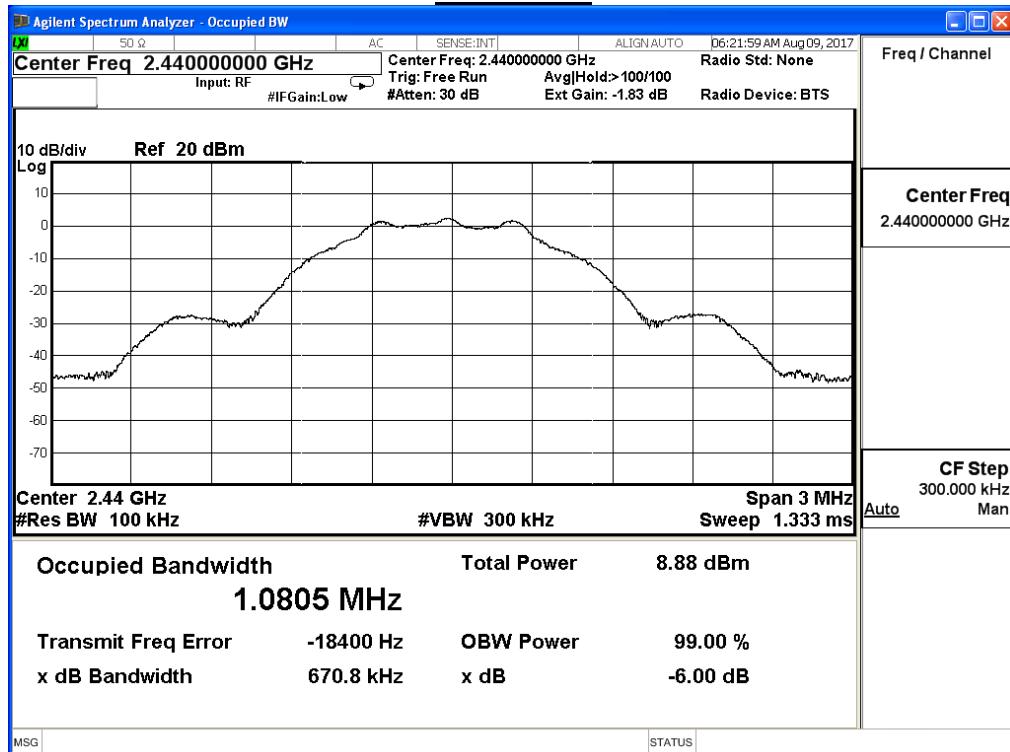
GFSK

Channel No.	Frequency (MHz)	Measure Level (KHz)	Limit (kHz)	Result
00	2402	671.000	≥ 500	Pass
19	2440	670.800	≥ 500	Pass
39	2480	665.500	≥ 500	Pass

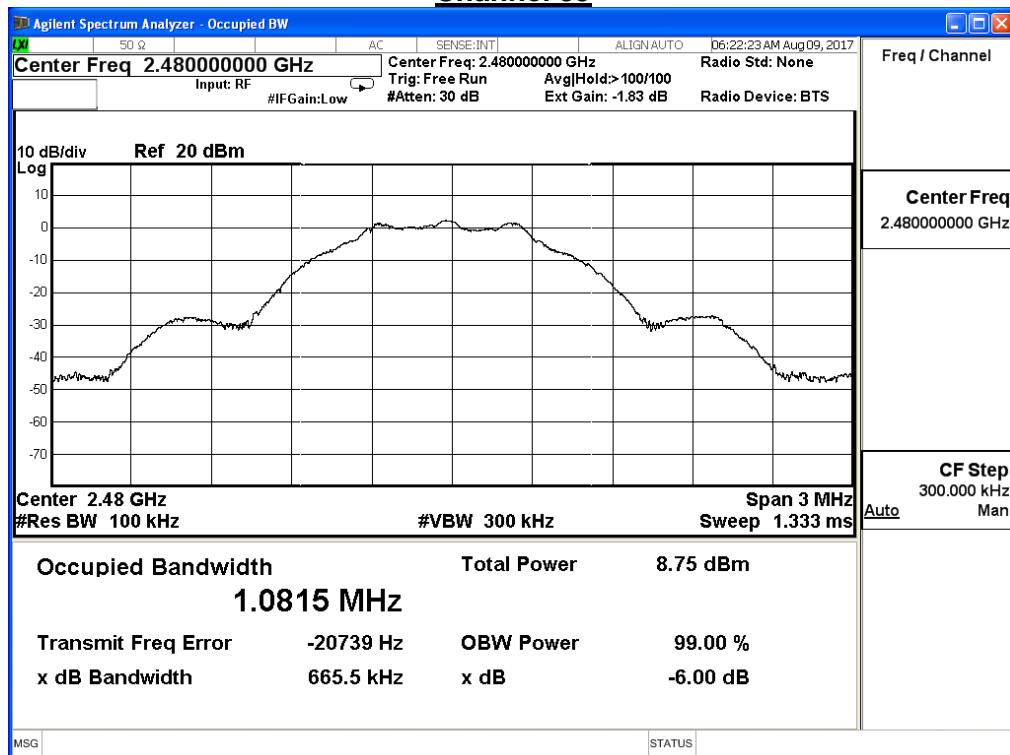
Channel 00



Channel 19



Channel 39



8. Power Density

8.1. Test Equipment

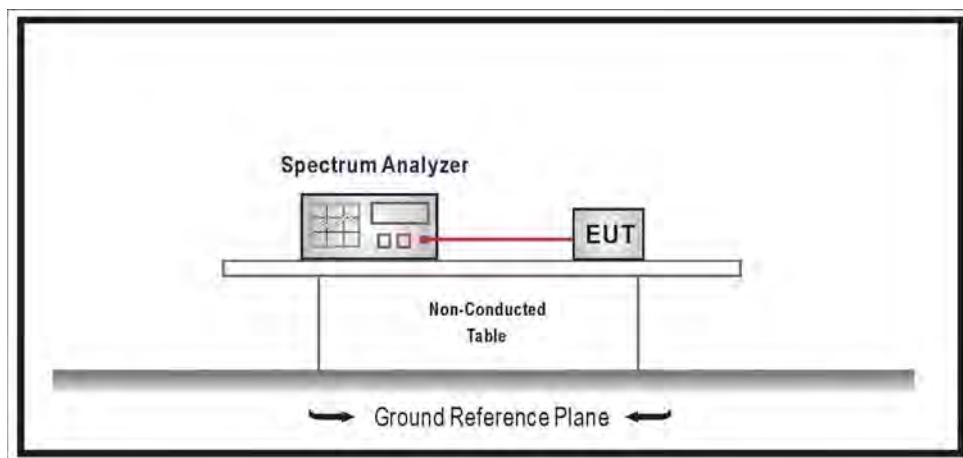
The following test equipment is used during the test:

Power Density / SR10-H

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

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

8.2. Test Setup



8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

8.4. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB558074 D01 V04 for compliance to FCC 47CFR 15.247 requirements.

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247

8.6. Uncertainty

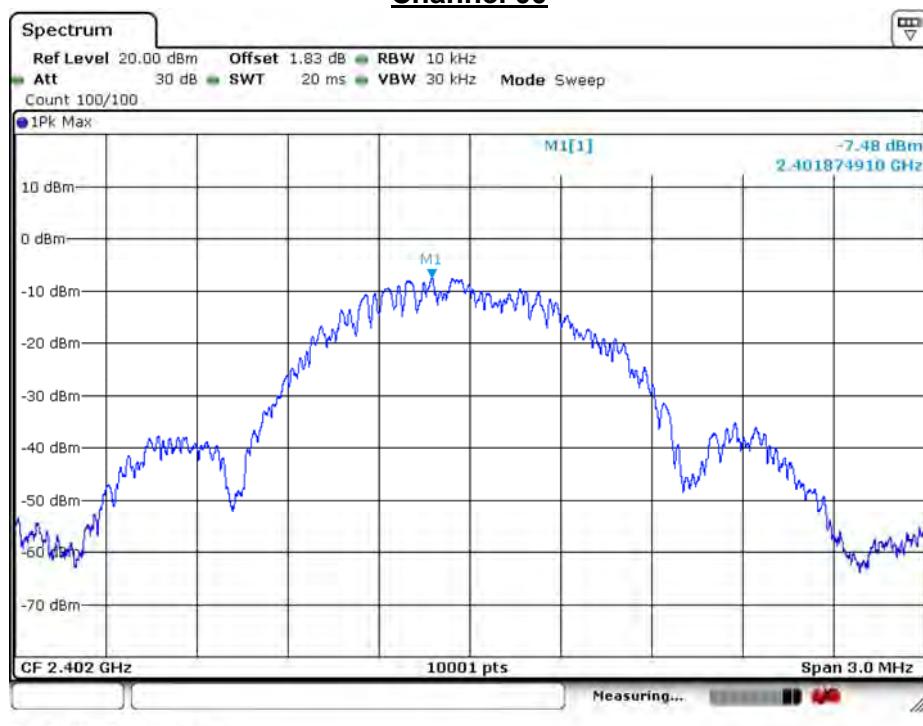
The measurement uncertainty is defined as $\pm 1.27\text{dB}$.

8.7. Test Result

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

Channel No.	Frequency (MHz)	Measure Level(dBm)	Limit (dBm)	Result
00	2402	-7.480	≤8	Pass
19	2440	-7.720	≤8	Pass
39	2480	-7.850	≤8	Pass

Channel 00



Channel 19

Date: 9 AUG 2017 03:28:56

Channel 39

Date: 9 AUG 2017 03:27:34