



Test Report

Product Name : BLE Transparent Transmission Module

Model No. : BCM-7602-G01

Applicant : HOLTEK SEMICONDUCTOR INC

Address : No.3, Creation Rd. II, Science Park, Hsinchu 300,
Taiwan, R.O.C.

Date of Receipt : Feb. 21, 2017

Issued Date : Apr. 07, 2017

Report No. : 1730033A-S

Version : V1.0

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of DEKRA Testing and Certification Co., Ltd.

Test Report

Issued Date : Apr. 07, 2017

Report No. : 1730033A-S



Product Name : BLE Transparent Transmission Module
 Applicant : HOLTEK SEMICONDUCTOR INC
 Address : No.3, Creation Rd. II, Science Park, Hsinchu 300, Taiwan,
 R.O.C.
 Manufacturer : HOLTEK SEMICONDUCTOR INC
 Model No. : BCM-7602-G01
 EUT Voltage : DC 3V (Power by Battery)
 Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2015
 ANSI C63.10: 2013
 ETSI EN 300 328 V2.1.1 (2016-11)
 Test Lab : Hsin Chu Laboratory
 Test Result : Pass

Test Item		
FCC		
Peak Power Output	☒ Pass	☐ Fail
Radiated Emission	☒ Pass	☐ Fail
Radiated Emission Band Edge	☒ Pass	☐ Fail
DTS Bandwidth	☒ Pass	☐ Fail
Power density	☒ Pass	☐ Fail
CE		
Effective isotropic radiated power	☒ Pass	☐ Fail
Fundamental	☒ Pass	☐ Fail
Maximum spectral power density	☒ Pass	☐ Fail
Occupied Channel Bandwidth	☒ Pass	☐ Fail
Transmitter unwanted emissions in the out-of-band domain	☒ Pass	☐ Fail
Transmitter spurious emission	☒ Pass	☐ Fail
Receiver spurious emission	☒ Pass	☐ Fail



(Roy Wang / Director)



(Bruno Tsai / Senior Engineer)

TABLE OF CONTENTS

Description	Page
1. Peak Power Output	4
1.1. Test Result.....	4
2. Radiated Emission	5
2.1. Test Result.....	5
3. Radiated Emission Band Edge	17
3.1. Test Result.....	17
4. DTS Bandwidth	25
4.1. Test Result.....	25
5. Power Spectral Density	27
5.1. Test Result.....	27
6. Effective isotropic radiated power	29
6.1. Test Result.....	29
7. Fundamental	30
7.1. Test Result.....	30
8. Maximum spectral power density.....	32
8.1. Test Result.....	32
9. Occupied Channel Bandwidth.....	33
9.1. Test Result.....	33
10. Transmitter unwanted emissions in the out-of-band domain	34
10.1. Test Result.....	34
11. Transmitter spurious emission	36
11.1. Test Result.....	36
12. Receiver spurious emission	44
12.1. Test Result.....	44
13. Attachment	52

FCC Test Data**1. Peak Power Output****1.1. Test Result**

Product	BLE Transparent Transmission Module		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit		
Date of Test	2017/03/24	Test Site	SR10-H

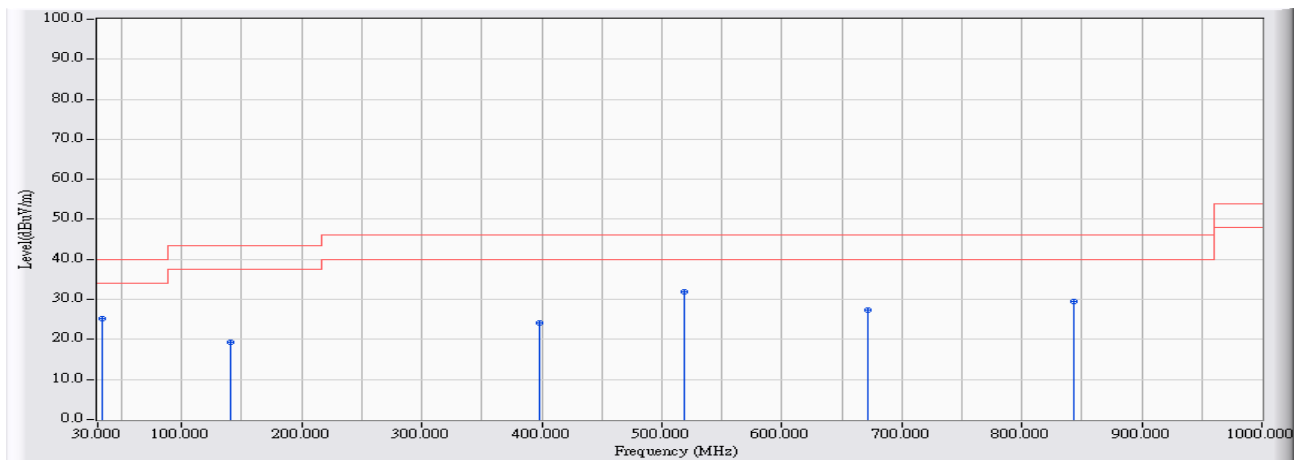
Modulation	Channel	Meter Power (Average)	Limit
802.115.1	2402 MHz	0.94	30.00
	2440 MHz	0.60	30.00
	2480 MHz	0.36	30.00

2. Radiated Emission

2.1. Test Result

30MHz-1GHz Spurious

Site : CB4-H	Time : 2017/04/07 - 09:40
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	Power :
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2440MHz_RE-TX

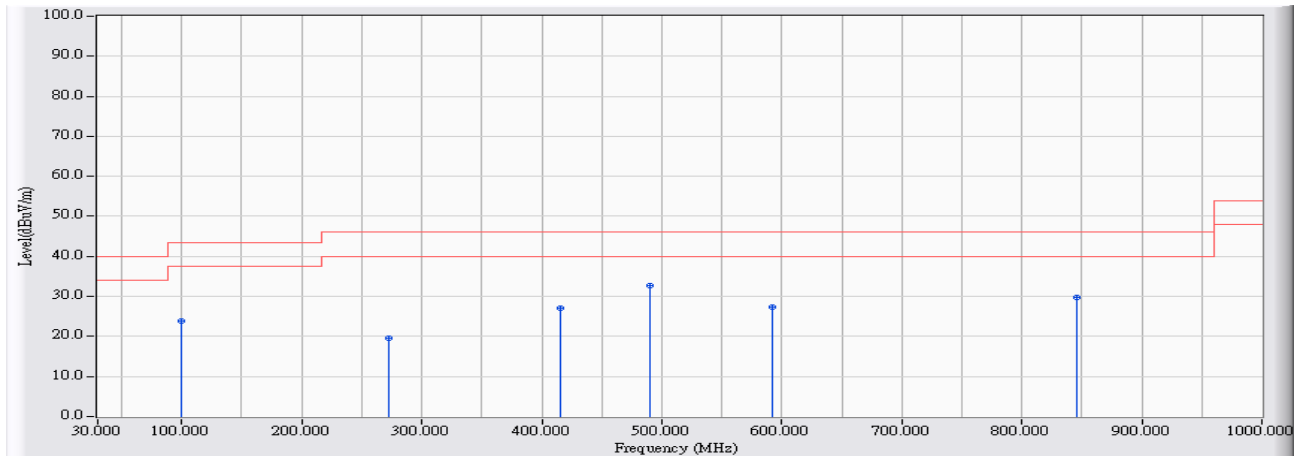


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		33.201	-16.732	42.060	25.328	-14.672	40.000	QUASIPeAK
2		140.472	-21.622	40.938	19.315	-24.185	43.500	QUASIPeAK
3		398.466	-15.826	39.933	24.107	-21.893	46.000	QUASIPeAK
4	*	518.540	-13.561	45.450	31.889	-14.111	46.000	QUASIPeAK
5		671.300	-11.471	38.817	27.346	-18.654	46.000	QUASIPeAK
6		843.167	-9.228	38.675	29.447	-16.553	46.000	QUASIPeAK

Note:

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

Site : CB4-H	Time : 2017/04/07 - 09:44
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	Power :
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2440MHz_RE-TX

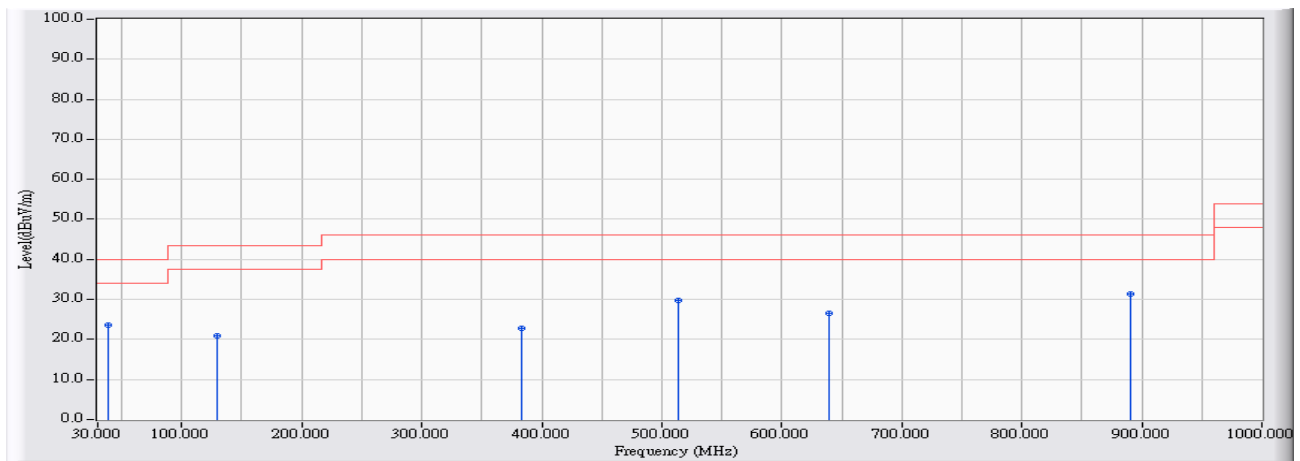


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		99.154	-23.558	47.330	23.771	-19.729	43.500	QUASIPeAK
2		272.767	-19.809	39.361	19.552	-26.448	46.000	QUASIPeAK
3		415.051	-15.683	42.681	26.997	-19.003	46.000	QUASIPeAK
4	*	490.122	-14.194	46.937	32.743	-13.257	46.000	QUASIPeAK
5		591.962	-13.192	40.510	27.318	-18.682	46.000	QUASIPeAK
6		845.591	-9.279	39.124	29.845	-16.155	46.000	QUASIPeAK

Note:

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

Site : CB4-H	Time : 2017/04/07 - 09:46
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	Power :
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2440MHz_RE-RX

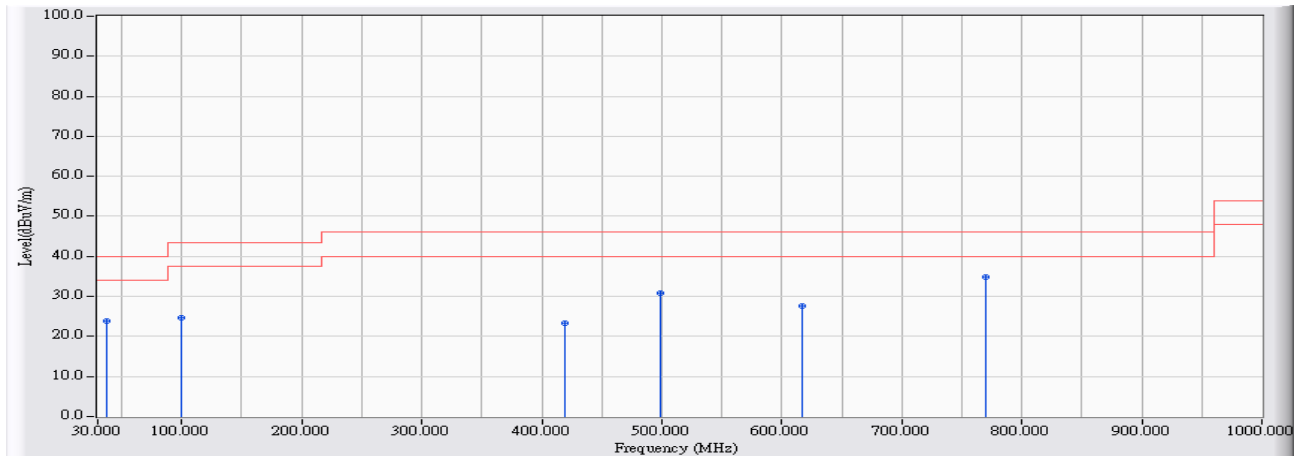


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		39.214	-16.415	40.090	23.675	-16.325	40.000	QUASIPeAK
2		129.997	-21.261	42.068	20.807	-22.693	43.500	QUASIPeAK
3		383.530	-16.478	39.258	22.780	-23.220	46.000	QUASIPeAK
4		514.176	-13.576	43.418	29.842	-16.158	46.000	QUASIPeAK
5		639.681	-12.697	39.196	26.499	-19.501	46.000	QUASIPeAK
6	*	890.789	-8.341	39.797	31.456	-14.544	46.000	QUASIPeAK

Note:

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

Site : CB4-H	Time : 2017/04/07 - 09:53
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : CB4_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	Power :
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2440MHz_RE-RX



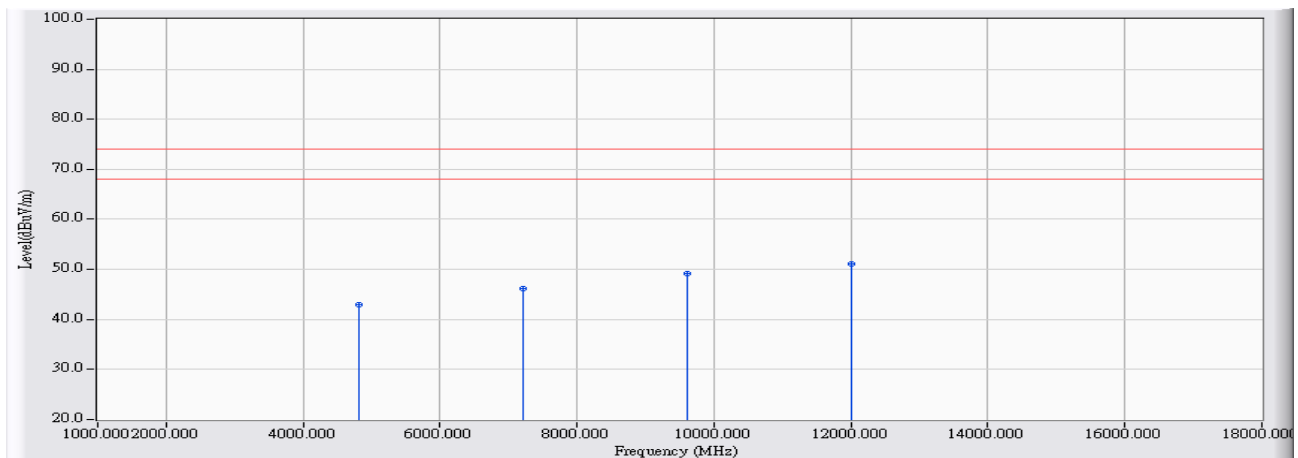
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		36.886	-16.622	40.474	23.853	-16.147	40.000	QUASIPeAK
2		99.154	-23.558	48.225	24.666	-18.834	43.500	QUASIPeAK
3		419.125	-15.824	39.120	23.296	-22.704	46.000	QUASIPeAK
4		499.336	-14.056	44.973	30.916	-15.084	46.000	QUASIPeAK
5		617.470	-11.921	39.655	27.734	-18.266	46.000	QUASIPeAK
6	*	770.133	-10.437	45.302	34.865	-11.135	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.

Above 1GHz Spurious

Site : CB4-H	Time : 2017/02/21 - 15:58
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX

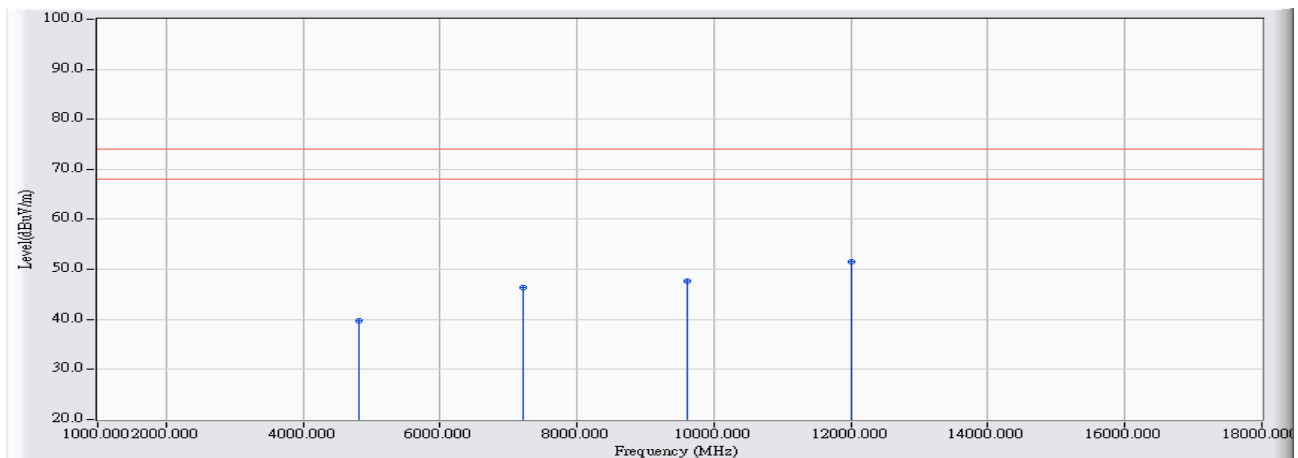


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.376	43.250	42.874	-31.126	74.000	PEAK
2		7206.000	7.031	39.210	46.242	-27.758	74.000	PEAK
3		9608.000	12.053	37.120	49.174	-24.826	74.000	PEAK
4	*	12010.000	17.181	33.930	51.111	-22.889	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 18GHz were not included is because their levels are too low.

Site : CB4-H	Time : 2017/02/21 - 16:03
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX

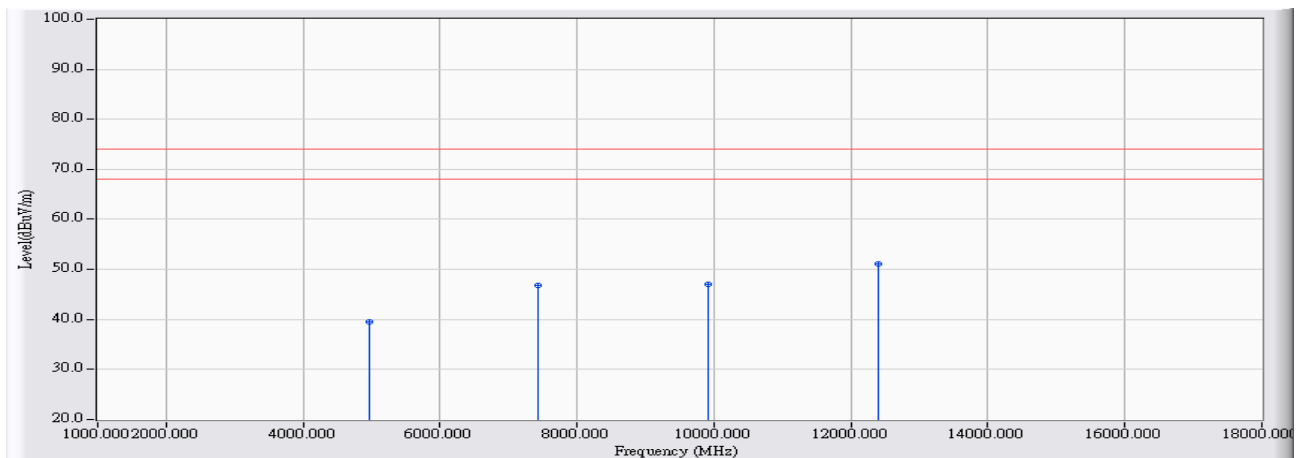


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4804.000	-0.376	40.130	39.754	-34.246	74.000	PEAK
2		7206.000	7.031	39.420	46.452	-27.548	74.000	PEAK
3		9608.000	12.053	35.560	47.614	-26.386	74.000	PEAK
4	*	12010.000	17.181	34.260	51.441	-22.559	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 18GHz were not included is because their levels are too low.

Site : CB4-H	Time : 2017/02/21 - 15:42
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_TX

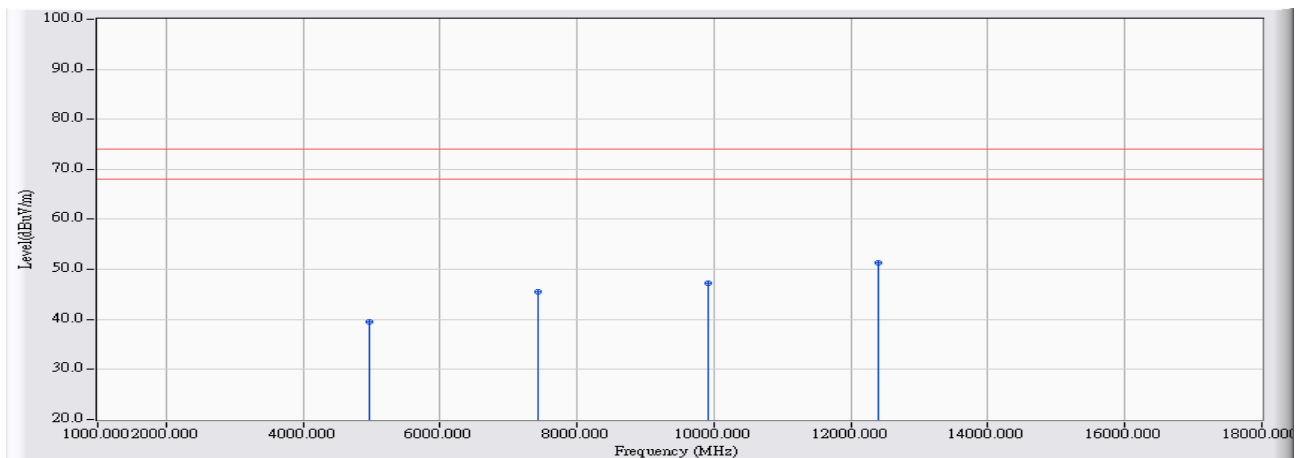


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	0.011	39.420	39.431	-34.569	74.000	PEAK
2		7440.000	8.200	38.660	46.860	-27.140	74.000	PEAK
3		9920.000	12.520	34.540	47.060	-26.940	74.000	PEAK
4	*	12400.000	16.417	34.770	51.187	-22.813	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 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 18GHz were not included is because their levels are too low.

Site : CB4-H	Time : 2017/02/21 - 15:49
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_TX

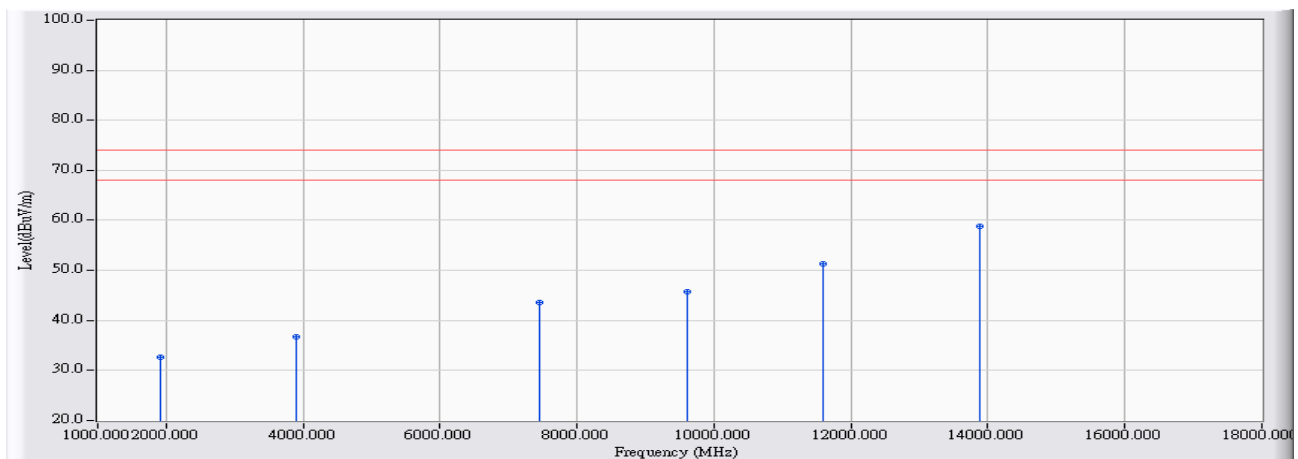


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4960.000	0.011	39.560	39.571	-34.429	74.000	PEAK
2		7440.000	8.200	37.300	45.500	-28.500	74.000	PEAK
3		9920.000	12.520	34.790	47.310	-26.690	74.000	PEAK
4	*	12400.000	16.417	34.950	51.367	-22.633	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 18GHz were not included is because their levels are too low.

Site : CB4-H	Time : 2017/02/21 - 16:06
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_RX

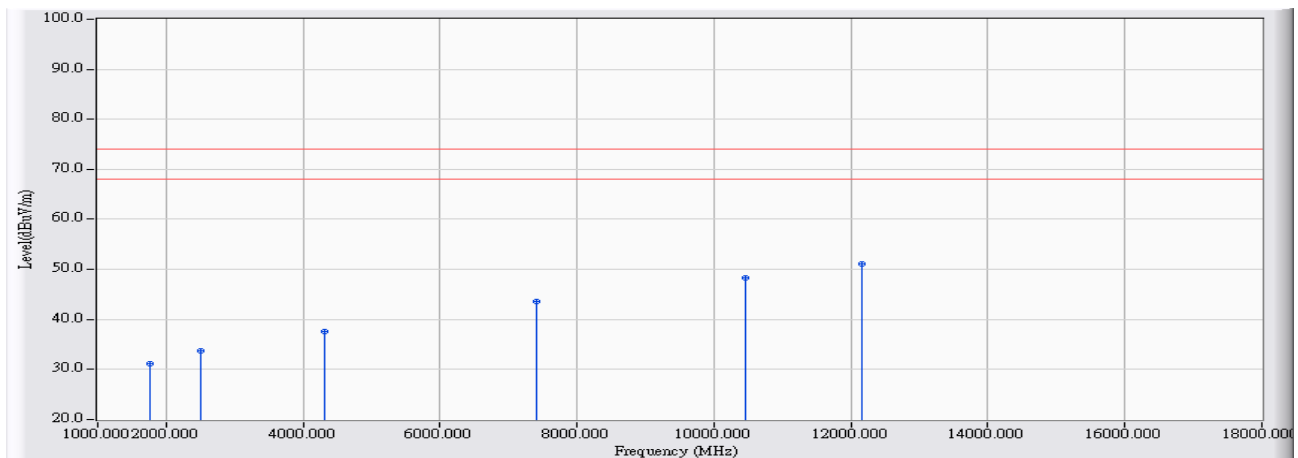


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1918.000	-9.849	42.443	32.594	-41.406	74.000	PEAK
2		3898.500	-3.008	39.781	36.774	-37.226	74.000	PEAK
3		7443.000	8.216	35.346	43.562	-30.438	74.000	PEAK
4		9610.500	12.057	33.750	45.808	-28.192	74.000	PEAK
5		11591.000	16.868	34.372	51.240	-22.760	74.000	PEAK
6	*	13877.500	21.123	37.655	58.779	-15.221	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 18GHz were not included is because their levels are too low.

Site : CB4-H	Time : 2017/02/21 - 16:10
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_RX

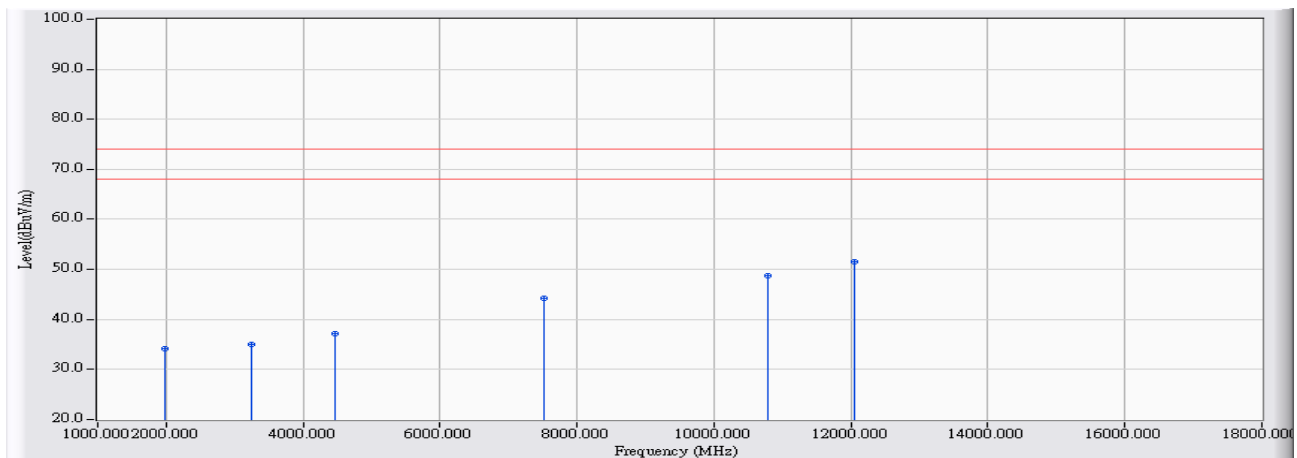


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1756.500	-10.397	41.586	31.189	-42.811	74.000	PEAK
2		2504.500	-7.515	41.238	33.724	-40.276	74.000	PEAK
3		4306.500	-1.634	39.169	37.536	-36.464	74.000	PEAK
4		7417.500	8.085	35.522	43.606	-30.394	74.000	PEAK
5		10460.500	14.129	34.196	48.325	-25.675	74.000	PEAK
6	*	12152.000	16.927	34.066	50.993	-23.007	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 18GHz were not included is because their levels are too low.

Site : CB4-H	Time : 2017/02/21 - 16:13
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_RX

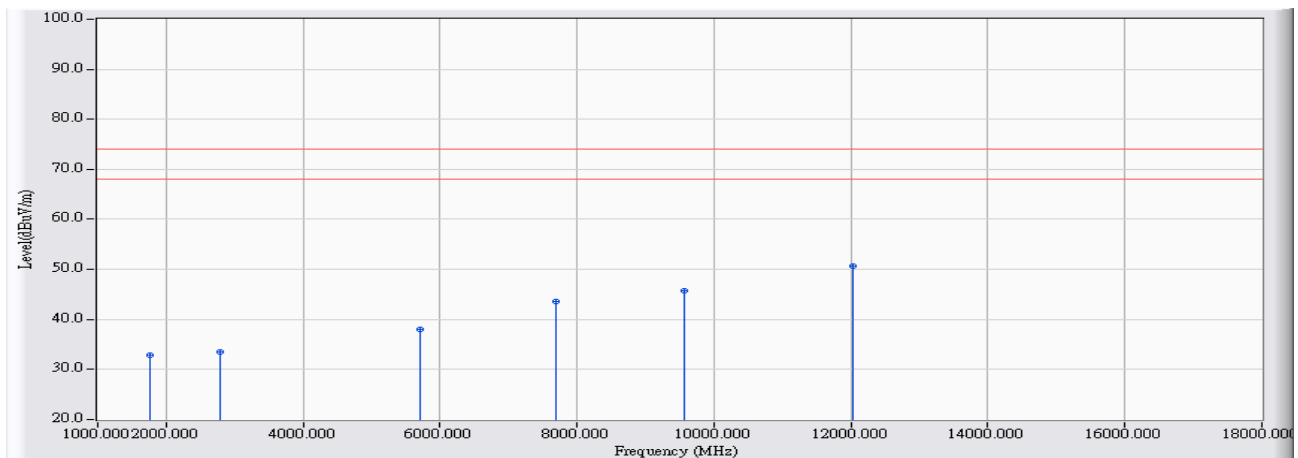


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1986.000	-9.609	43.747	34.138	-39.862	74.000	PEAK
2		3244.000	-5.377	40.431	35.053	-38.947	74.000	PEAK
3		4468.000	-1.171	38.386	37.214	-36.786	74.000	PEAK
4		7519.500	8.482	35.680	44.162	-29.838	74.000	PEAK
5		10783.500	15.056	33.784	48.839	-25.161	74.000	PEAK
6	*	12050.000	17.112	34.439	51.551	-22.449	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 18GHz were not included is because their levels are too low.

Site : CB4-H	Time : 2017/02/21 - 16:16
Limit : FCC_B_(Above_1G)_3M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_RX



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		1765.000	-10.367	43.336	32.969	-41.031	74.000	PEAK
2		2776.500	-6.525	40.134	33.609	-40.391	74.000	PEAK
3		5709.000	1.323	36.731	38.054	-35.946	74.000	PEAK
4		7698.000	8.216	35.405	43.620	-30.380	74.000	PEAK
5		9568.000	11.979	33.667	45.646	-28.354	74.000	PEAK
6	*	12033.000	17.142	33.434	50.576	-23.424	74.000	PEAK

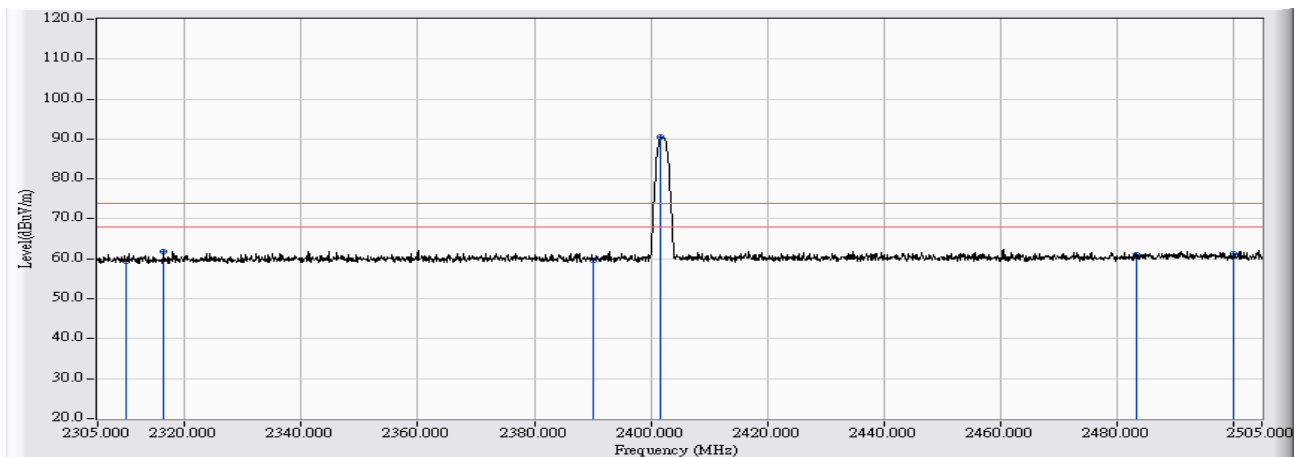
Note:

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 18GHz were not included is because their levels are too low.

3. Radiated Emission Band Edge

3.1. Test Result

Site : CB4-H	Time : 2017/03/24 - 15:10
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_BLE_2402MHz_RF-TX

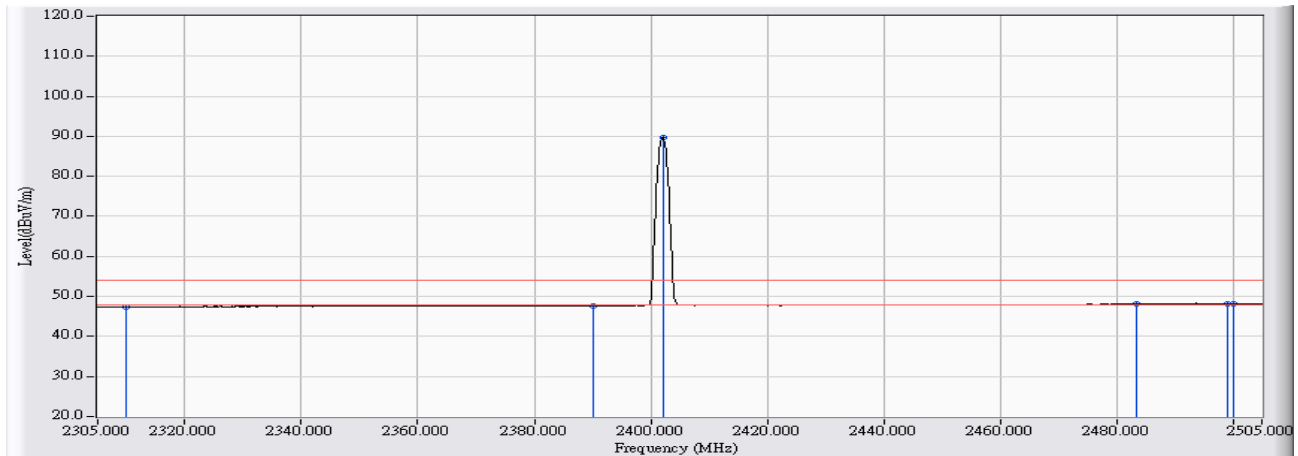


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	67.832	59.537	-14.463	74.000	PEAK
2		2316.300	-8.270	70.147	61.878	-12.122	74.000	PEAK
3		2390.000	-7.969	67.600	59.631	-14.369	74.000	PEAK
4	*	2401.700	-7.921	98.298	90.376	16.376	74.000	PEAK
5		2483.500	-7.596	68.669	61.073	-12.927	74.000	PEAK
6		2500.000	-7.532	68.816	61.285	-12.715	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 fundamental only for reference, it's not restricted by unwanted emission limit.

Site : CB4-H	Time : 2017/03/24 - 15:09
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1 BLE_2402MHz_RF-TX

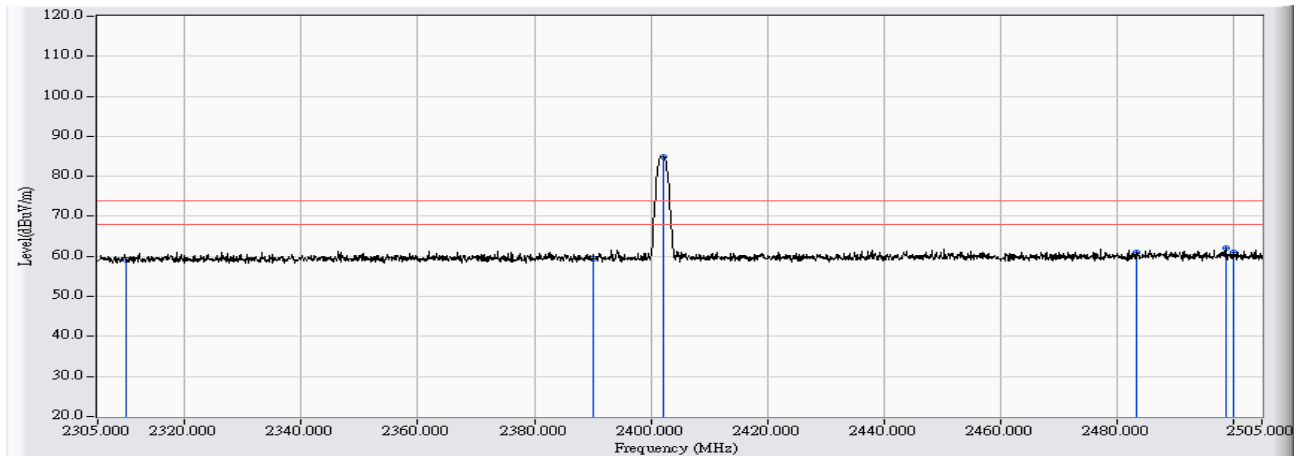


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	55.688	47.393	-6.607	54.000	AVERAGE
2		2390.000	-7.969	55.625	47.656	-6.344	54.000	AVERAGE
3	*	2402.100	-7.920	97.703	89.783	35.783	54.000	AVERAGE
4		2483.500	-7.596	55.688	48.092	-5.908	54.000	AVERAGE
5		2499.000	-7.535	55.641	48.106	-5.894	54.000	AVERAGE
6		2500.000	-7.532	55.634	48.103	-5.897	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 = 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 fundamental only for reference, it's not restricted by unwanted emission limit.

Site : CB4-H	Time : 2017/03/24 - 15:18
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_BLE_2402MHz_RF-TX

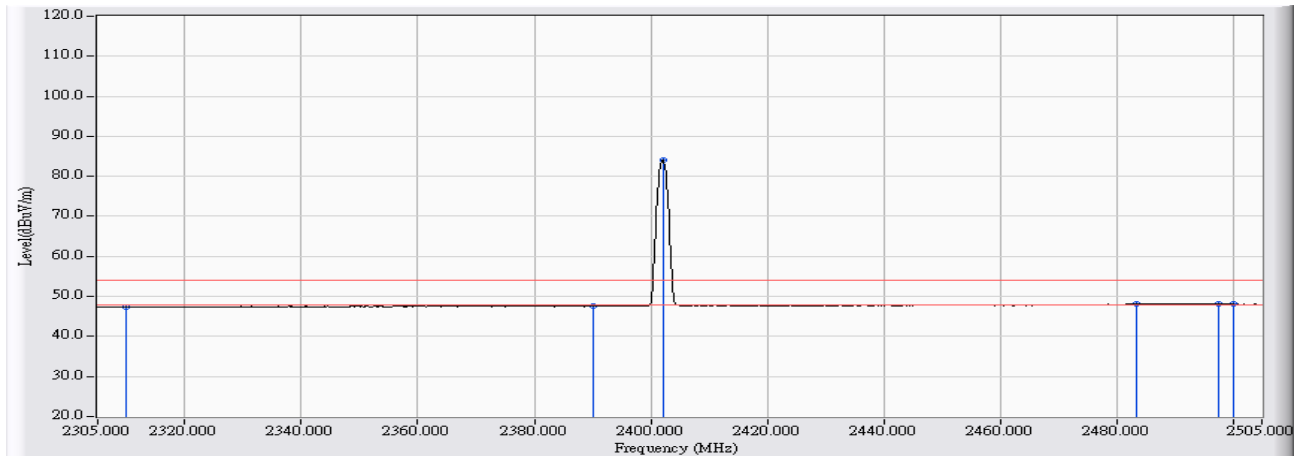


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	67.401	59.106	-14.894	74.000	PEAK
2		2390.000	-7.969	67.275	59.306	-14.694	74.000	PEAK
3	*	2402.200	-7.920	92.887	84.967	10.967	74.000	PEAK
4		2483.500	-7.596	68.550	60.954	-13.046	74.000	PEAK
5		2498.800	-7.535	69.696	62.161	-11.839	74.000	PEAK
6		2500.000	-7.532	68.456	60.925	-13.075	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 fundamental only for reference, it's not restricted by unwanted emission limit.

Site : CB4-H	Time : 2017/03/24 - 15:19
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_BLE_2402MHz_RF-TX

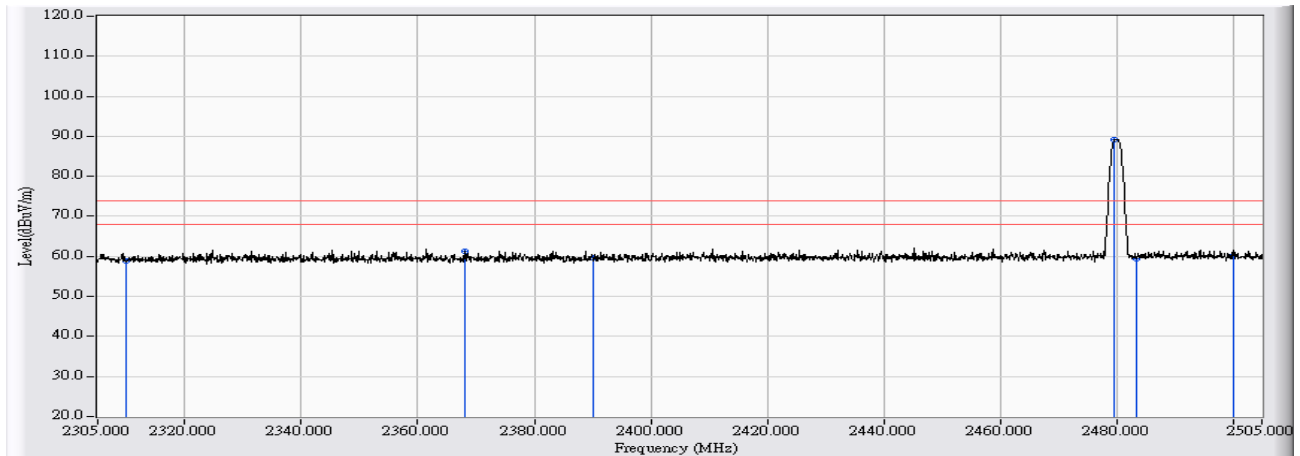


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	55.593	47.298	-6.702	54.000	AVERAGE
2		2390.000	-7.969	55.511	47.542	-6.458	54.000	AVERAGE
3	*	2402.100	-7.920	92.099	84.179	30.179	54.000	AVERAGE
4		2483.500	-7.596	55.622	48.026	-5.974	54.000	AVERAGE
5		2497.600	-7.540	55.686	48.146	-5.854	54.000	AVERAGE
6		2500.000	-7.532	55.567	48.036	-5.964	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 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 fundamental only for reference, it's not restricted by unwanted emission limit.

Site : CB4-H	Time : 2017/03/24 - 15:25
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1 BLE_2480MHz_RF-TX

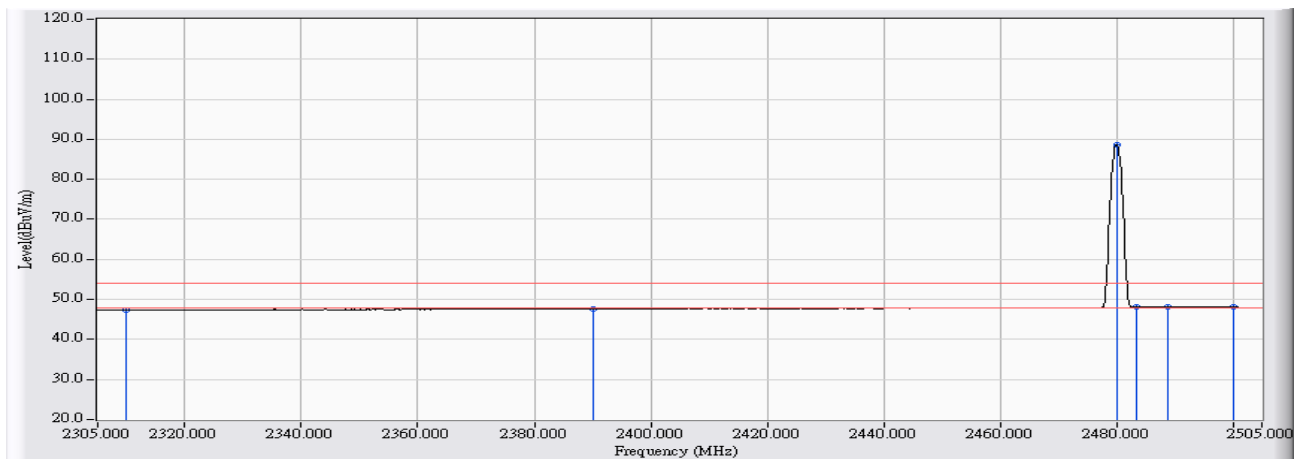


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	67.235	58.940	-15.060	74.000	PEAK
2		2368.200	-8.057	69.467	61.409	-12.591	74.000	PEAK
3		2390.000	-7.969	67.580	59.611	-14.389	74.000	PEAK
4	*	2479.700	-7.611	96.888	89.277	15.277	74.000	PEAK
5		2483.500	-7.596	67.055	59.459	-14.541	74.000	PEAK
6		2500.000	-7.532	67.879	60.348	-13.652	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 fundamental only for reference, it's not restricted by unwanted emission limit.

Site : CB4-H	Time : 2017/03/24 - 15:26
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1 BLE_2480MHz_RF-TX

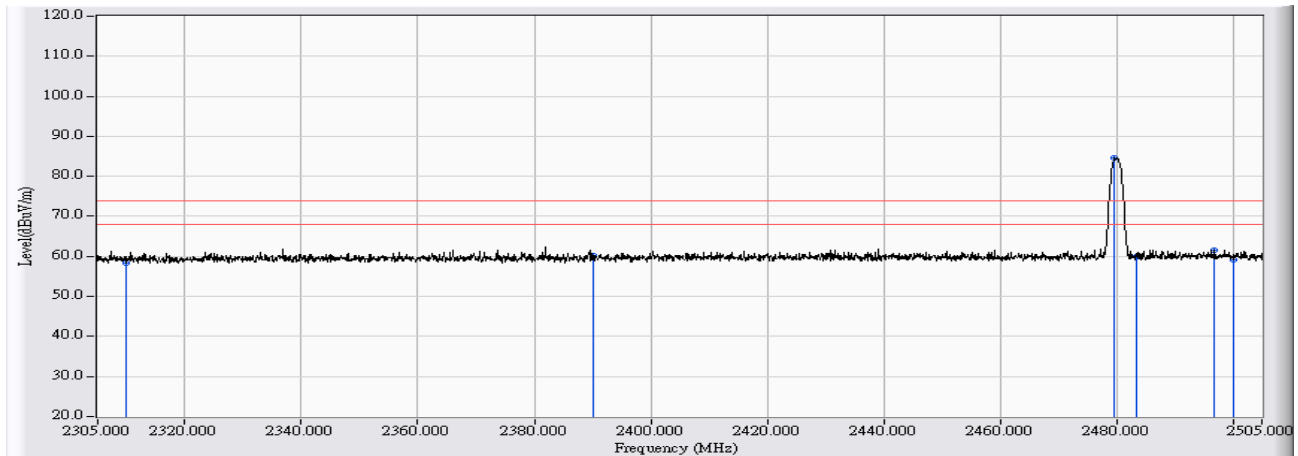


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	55.579	47.284	-6.716	54.000	AVERAGE
2		2390.000	-7.969	55.518	47.549	-6.451	54.000	AVERAGE
3	*	2480.000	-7.610	96.310	88.700	34.700	54.000	AVERAGE
4		2483.500	-7.596	55.663	48.067	-5.933	54.000	AVERAGE
5		2488.800	-7.575	55.717	48.142	-5.858	54.000	AVERAGE
6		2500.000	-7.532	55.592	48.061	-5.939	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 = 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 fundamental only for reference, it's not restricted by unwanted emission limit.

Site : CB4-H	Time : 2017/03/24 - 15:34
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1 BLE_2480MHz_RF-TX

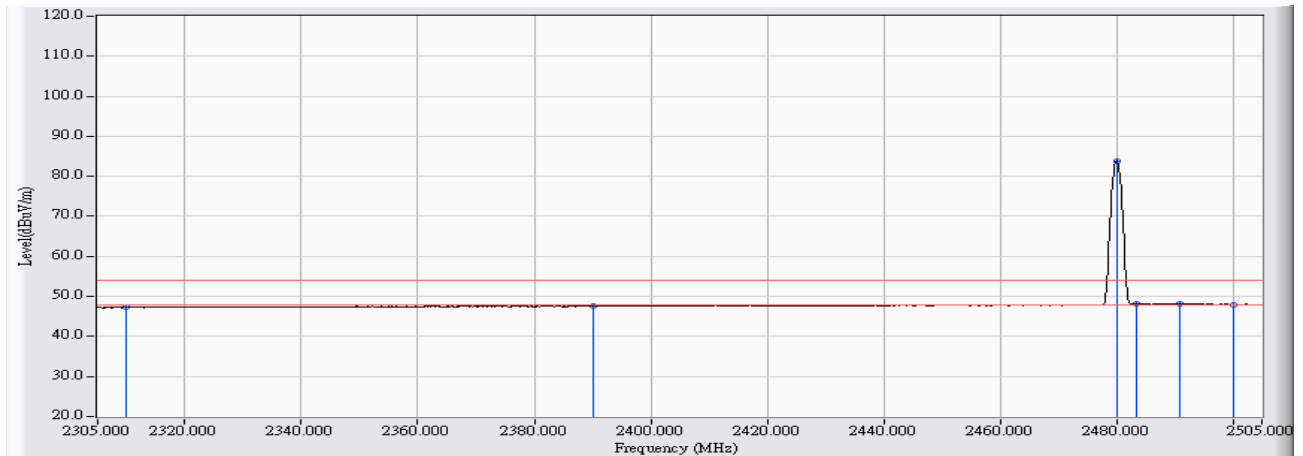


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	66.629	58.334	-15.666	74.000	PEAK
2		2390.000	-7.969	68.174	60.205	-13.795	74.000	PEAK
3	*	2479.700	-7.611	92.135	84.524	10.524	74.000	PEAK
4		2483.500	-7.596	67.429	59.833	-14.167	74.000	PEAK
5		2496.900	-7.543	69.200	61.657	-12.343	74.000	PEAK
6		2500.000	-7.532	66.615	59.084	-14.916	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 fundamental only for reference, it's not restricted by unwanted emission limit.

Site : CB4-H	Time : 2017/03/24 - 15:34
Limit : FCC_SpartC_15.209_03M_AV	Margin : 6
Probe : CB4-H_FCC_EFS_B432_1-18GHz_3M_1116 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1 BLE_2480MHz_RF-TX



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	-8.295	55.569	47.274	-6.726	54.000	AVERAGE
2		2390.000	-7.969	55.510	47.541	-6.459	54.000	AVERAGE
3	*	2480.100	-7.609	91.315	83.706	29.706	54.000	AVERAGE
4		2483.500	-7.596	55.667	48.071	-5.929	54.000	AVERAGE
5		2490.800	-7.566	55.700	48.133	-5.867	54.000	AVERAGE
6		2500.000	-7.532	55.474	47.943	-6.057	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 = 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 fundamental only for reference, it's not restricted by unwanted emission limit.

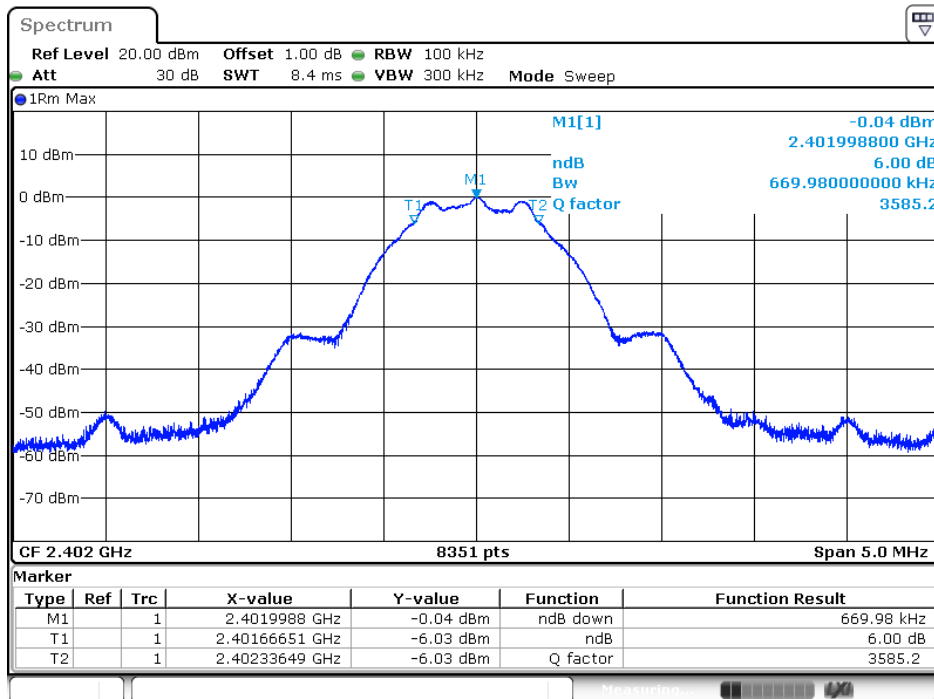
4. DTS Bandwidth

4.1. Test Result

Product	BLE Transparent Transmission Module		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2017/03/24	Test Site	SR10-H

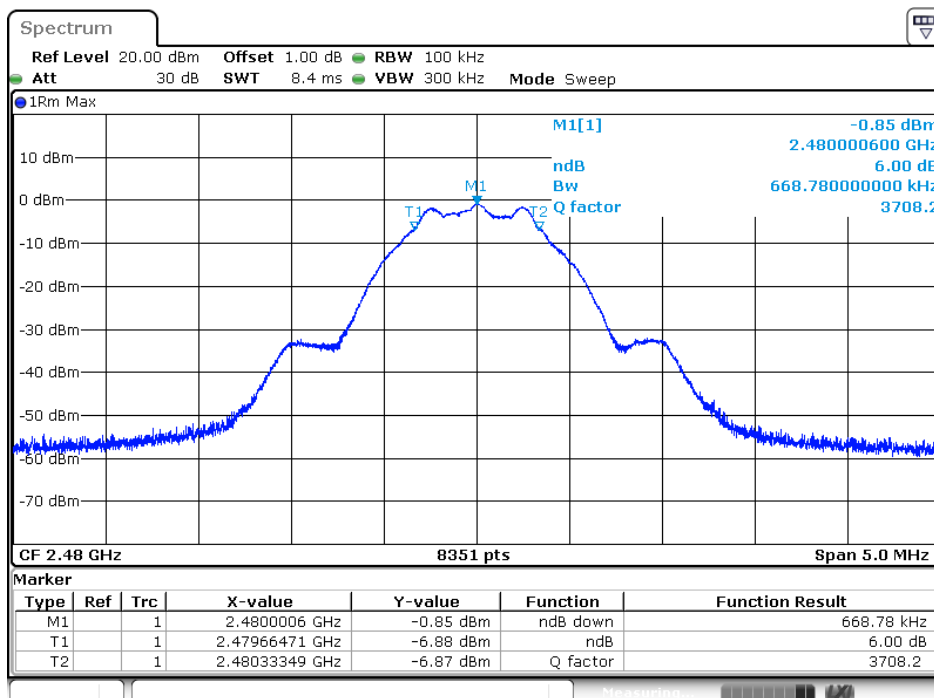
Modulation	Channel	(RF) DTS BW
802.115.1	2402 MHz	669.98
	2440 MHz	--
	2480 MHz	668.78

2402 MHz



Date: 24 MAR 2017 17:22:50

2480 MHz



Date: 24 MAR 2017 17:22:18

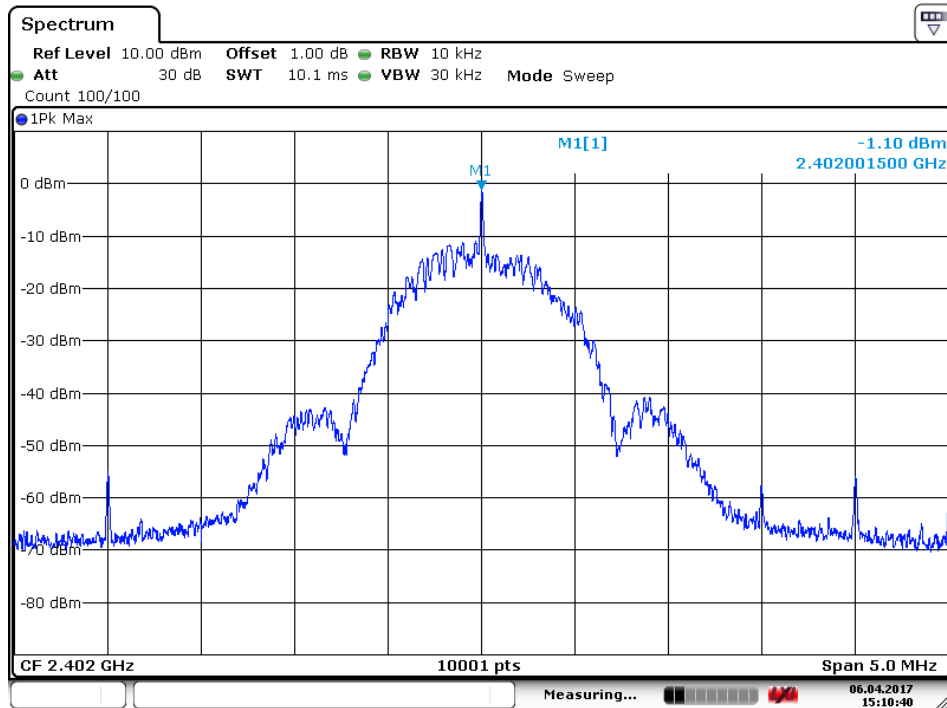
5. Power Spectral Density

5.1. Test Result

Product	BLE Transparent Transmission Module		
Test Item	Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2017/04/06	Test Site	SR10-H

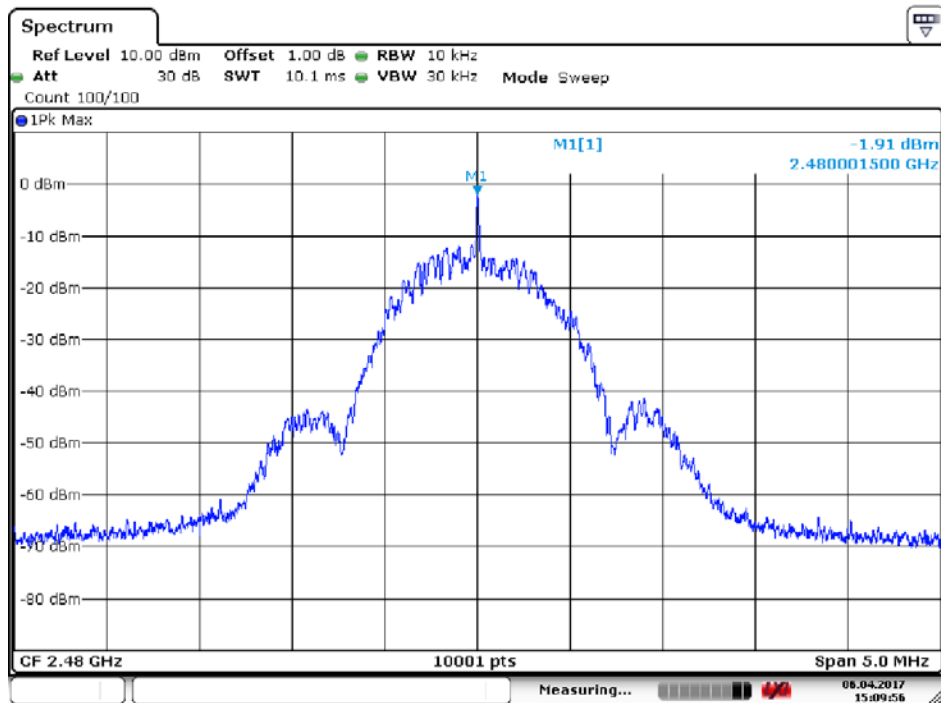
Modulation	Channel	Measure level	Limit
802.115.1	2402 MHz	-1.100	8
	2440 MHz	--	8
	2480 MHz	-1.910	8

2402 MHz



Date: 6 APR 2017 15:10:41

2480 MHz



Date: 6 APR 2017 15:09:56

CE Test Data**6. Effective isotropic radiated power****6.1. Test Result**

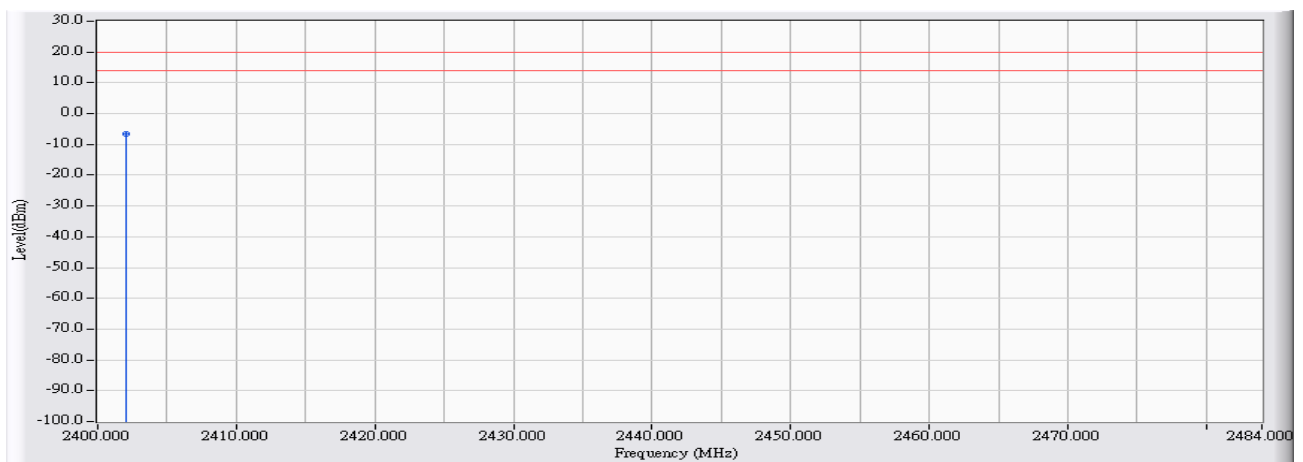
Product	BLE Transparent Transmission Module		
Test Item	Effective isotropic radiated power		
Test Mode	Mode 1: Transmit		
Date of Test	2017/03/24	Test Site	SR10-H

Modulation	Frequency	Meter Power (average,dBm)		
		Reading Level	Measure Level	Limit
BLE	2402	0.940	2.940	20
	2440	0.600	2.600	20
	2480	0.360	2.360	20

7. Fundamental

7.1. Test Result

Site : CB3-H	Time : 2017/03/24 - 16:17
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3_CE_Sub_B433_1-18GHz_3M_0217 - HORIZONTAL	Power :
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX

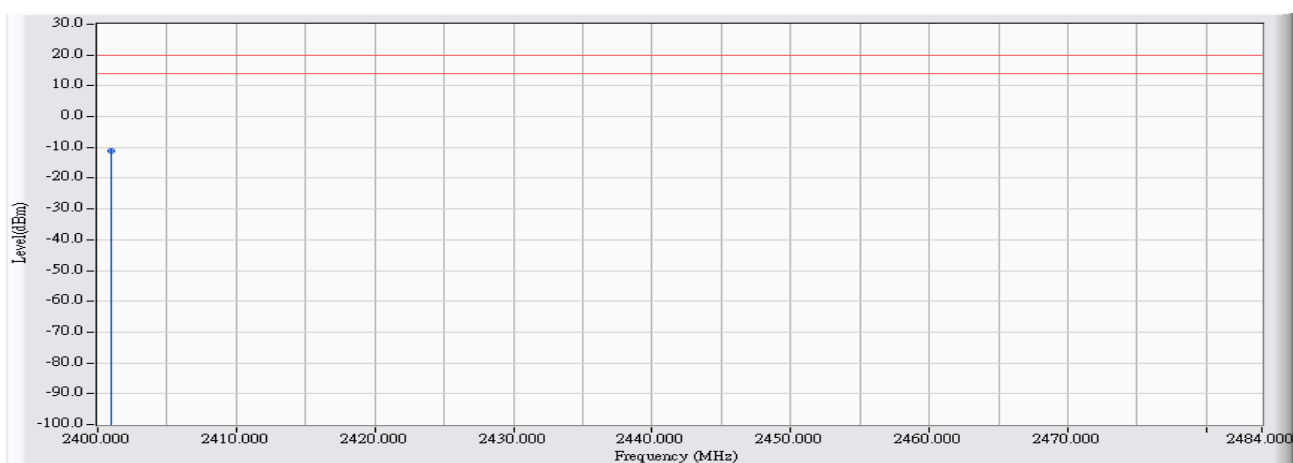


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	2402.000	45.368	-51.800	-6.432	-26.432	20.000	PEAK

Note:

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

Site : CB3-H	Time : 2017/03/24 - 16:24
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3_CE_Sub_B433_1-18GHz_3M_0217 - VERTICAL	Power :
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1	*	2401.000	45.572	-56.540	-10.968	-30.968	20.000	PEAK

Note:

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

8. Maximum spectral power density

8.1. Test Result

Product	BLE Transparent Transmission Module		
Test Item	Maximum spectral power density		
Test Mode	Mode 1: Transmit		
Date of Test	2017/03/24	Test Site	SR10-H

Modulation	Power Density		
	Frequency (MHz)	Measure Level	Limit
BLE	2402	2.903	10
	2440	--	10
	2480	2.235	10

9. Occupied Channel Bandwidth

9.1. Test Result

Product	BLE Transparent Transmission Module		
Test Item	Occupied Channel Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2017/03/24	Test Site	SR10-H

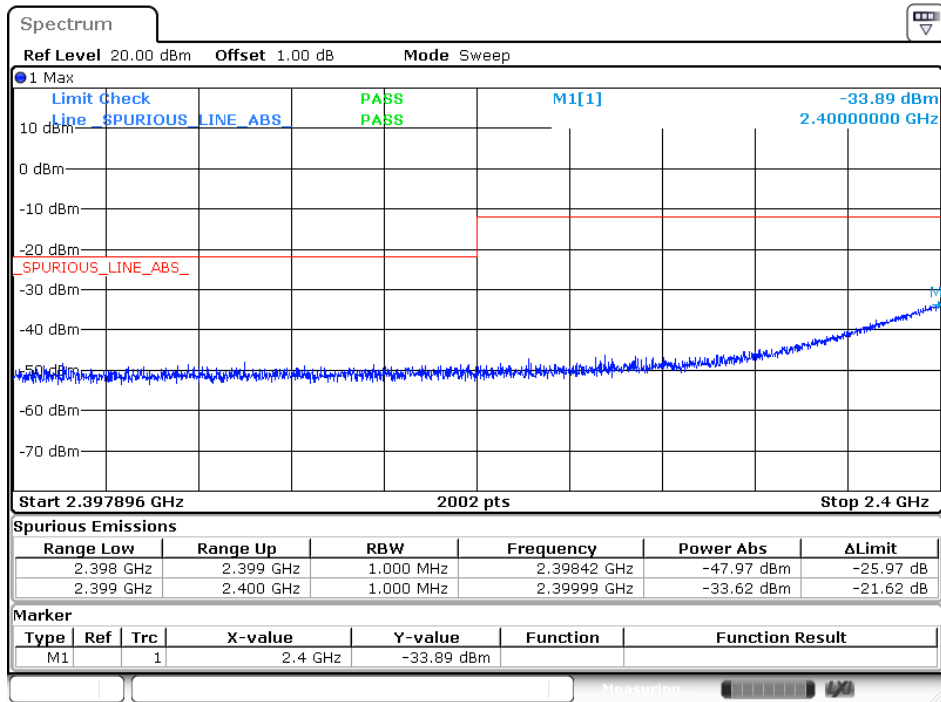
Modulation	99%Occupied Bandwidth		
	Frequency (MHz)	Measure Value	Limit
BLE	2402	2401.998	>2400
	2440	--	--
	2480	2480.006	<2483.5

10. Transmitter unwanted emissions in the out-of-band domain**10.1. Test Result**

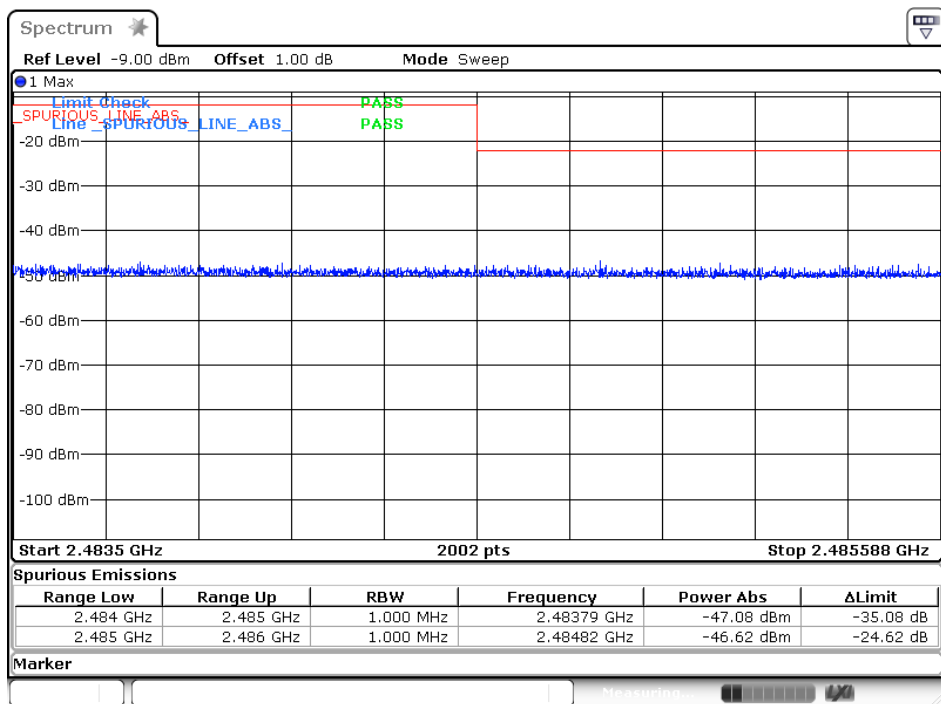
Product	BLE Transparent Transmission Module		
Test Item	Transmitter unwanted emissions in the out-of-band domain		
Test Mode	Mode 1: Transmit		
Date of Test	2017/03/23	Test Site	SR10-H

Modulation	Frequency	Bandwidth	Frequency range (MHz)	Reading Level (dBm/MHz)	Limit (dBm/MHz)
BLE	2402	1.052	2397.896	-47.970	-22
			2398.948	-33.620	-12
	2480	1.044	2484.544	-47.080	-12
			2485.588	-46.620	-22

2402MHz



2480MHz

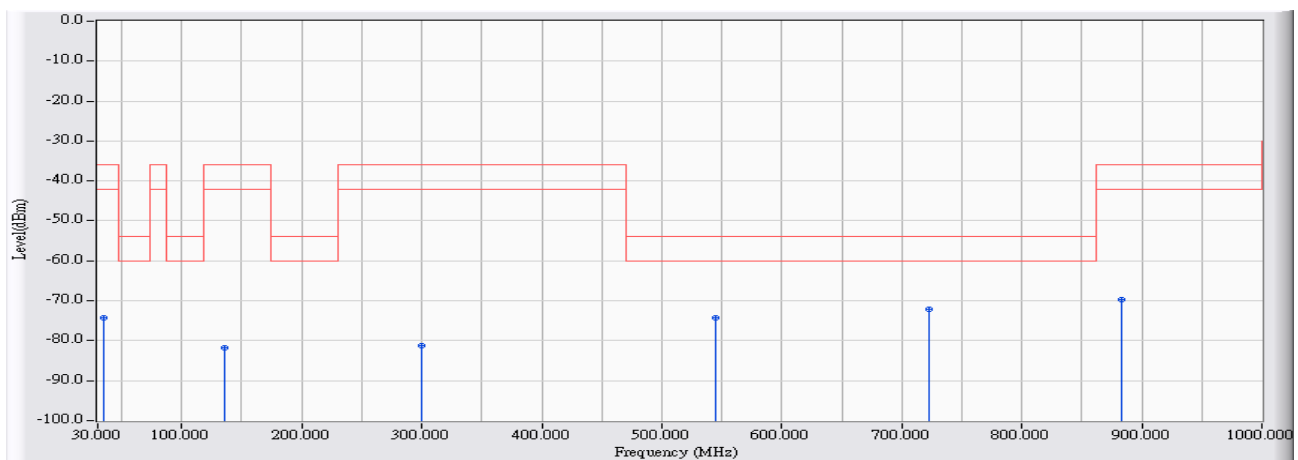


11. Transmitter spurious emission

11.1. Test Result

30MHz-1GHz Spurious:

Site : CB3-H	Time : 2017/02/21 - 13:53
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX

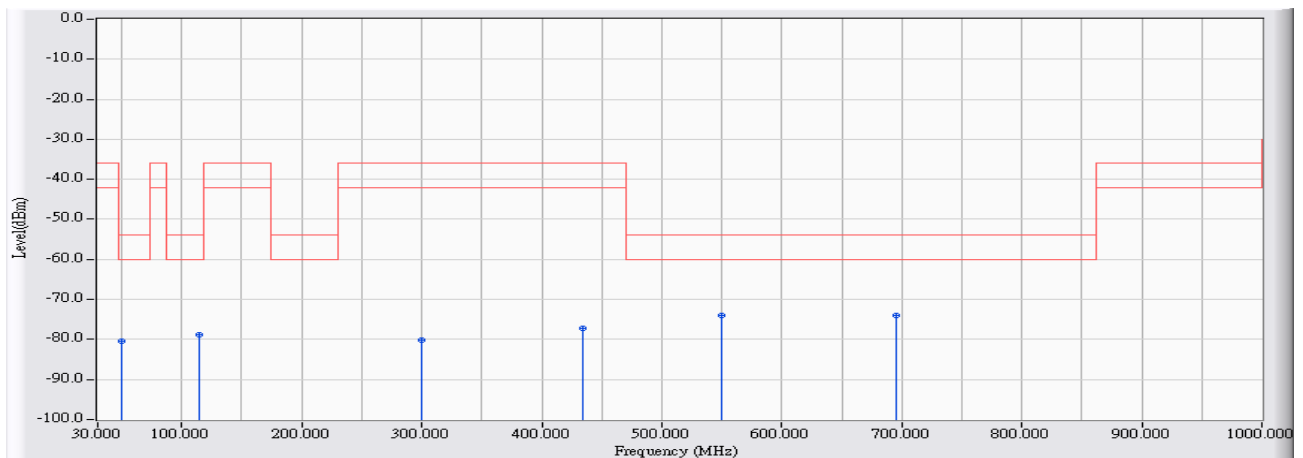


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		35.238	-16.308	-57.882	-74.190	-38.190	-36.000	PEAK
2		135.148	-20.335	-61.531	-81.866	-45.866	-36.000	PEAK
3		299.951	-17.039	-64.079	-81.118	-45.118	-36.000	PEAK
4		545.167	-8.393	-65.937	-74.329	-20.329	-54.000	PEAK
5	*	722.774	-7.197	-64.975	-72.172	-18.172	-54.000	PEAK
6		882.921	-5.211	-64.538	-69.750	-33.750	-36.000	PEAK

Note:

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

Site : CB3-H	Time : 2017/02/21 - 13:55
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX

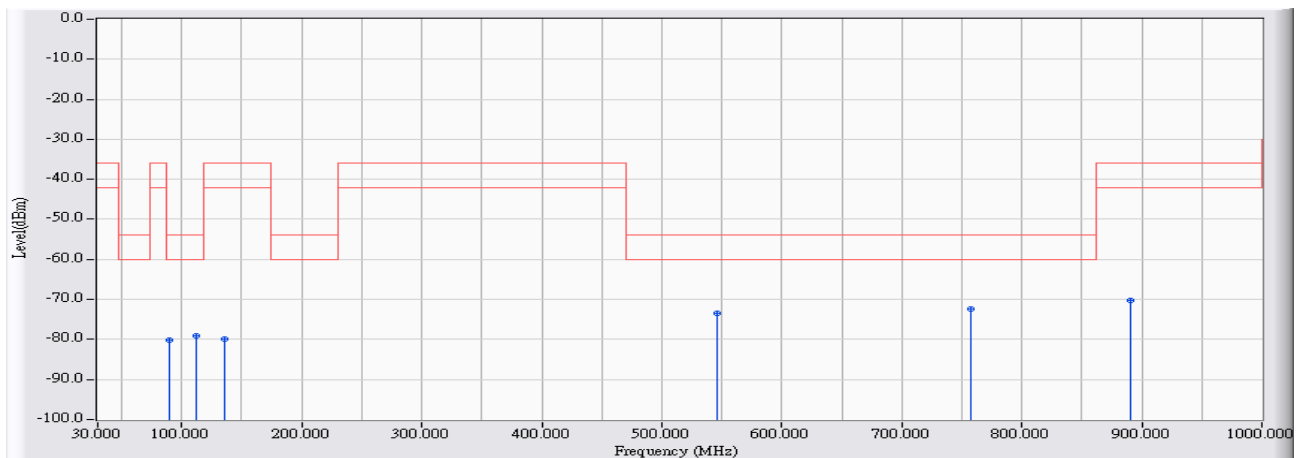


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		49.400	-19.419	-60.945	-80.364	-26.364	-54.000	PEAK
2		114.681	-18.768	-60.162	-78.930	-24.930	-54.000	PEAK
3		299.951	-17.838	-62.306	-80.144	-44.144	-36.000	PEAK
4		434.684	-12.932	-64.328	-77.261	-41.261	-36.000	PEAK
5		550.017	-7.856	-66.075	-73.932	-19.932	-54.000	PEAK
6	*	694.838	-8.819	-65.100	-73.920	-19.920	-54.000	PEAK

Note:

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

Site : CB3-H	Time : 2017/02/21 - 13:58
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_TX

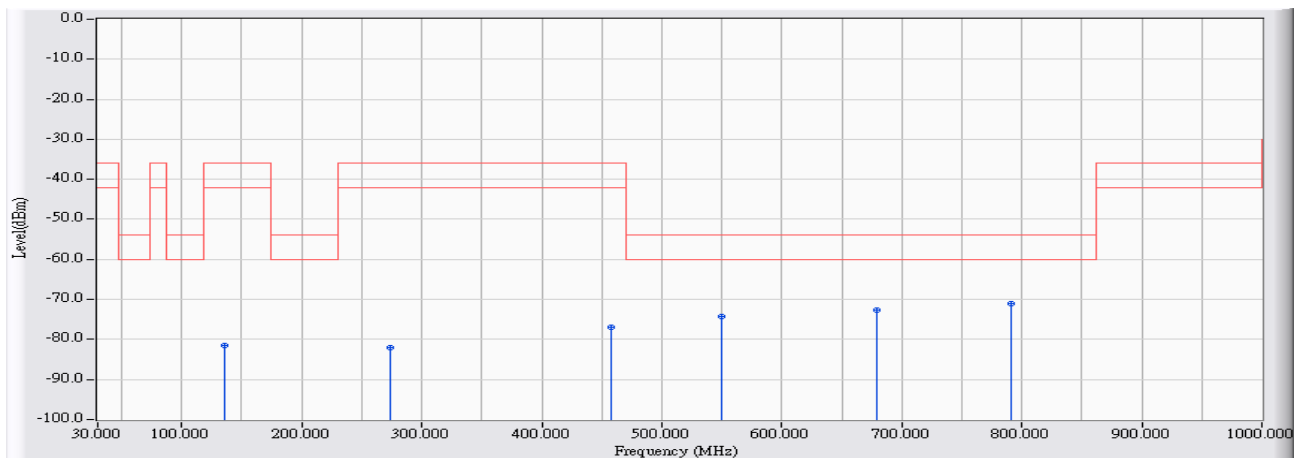


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		90.237	-22.014	-58.191	-80.205	-26.205	-54.000	PEAK
2		112.159	-18.838	-60.375	-79.214	-25.214	-54.000	PEAK
3		135.148	-19.935	-59.895	-79.830	-43.830	-36.000	PEAK
4		546.040	-7.978	-65.434	-73.412	-19.412	-54.000	PEAK
5	*	757.306	-7.189	-65.101	-72.291	-18.291	-54.000	PEAK
6		890.972	-5.171	-64.994	-70.165	-34.165	-36.000	PEAK

Note:

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

Site : CB3-H	Time : 2017/02/21 - 14:00
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_TX



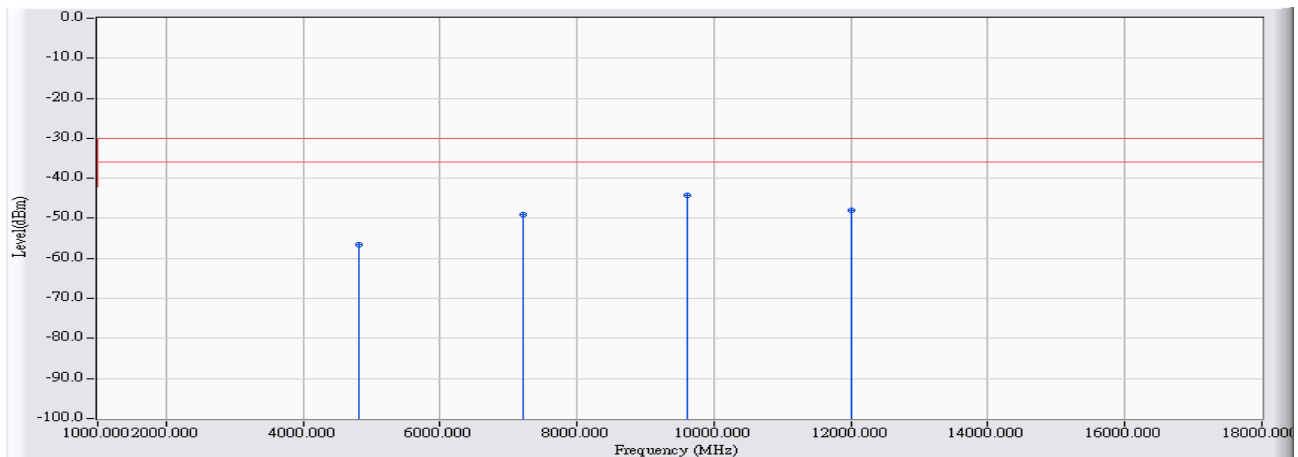
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		135.148	-20.335	-61.085	-81.420	-45.420	-36.000	PEAK
2		273.276	-18.183	-63.982	-82.165	-46.165	-36.000	PEAK
3		458.352	-11.609	-65.370	-76.979	-40.979	-36.000	PEAK
4		550.017	-8.420	-65.844	-74.264	-20.264	-54.000	PEAK
5		679.124	-7.553	-65.235	-72.788	-18.788	-54.000	PEAK
6	*	791.256	-6.245	-64.807	-71.052	-17.052	-54.000	PEAK

Note:

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

Above 1GHz Spurious:

Site : CB3-H	Time : 2017/02/21 - 11:42
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX

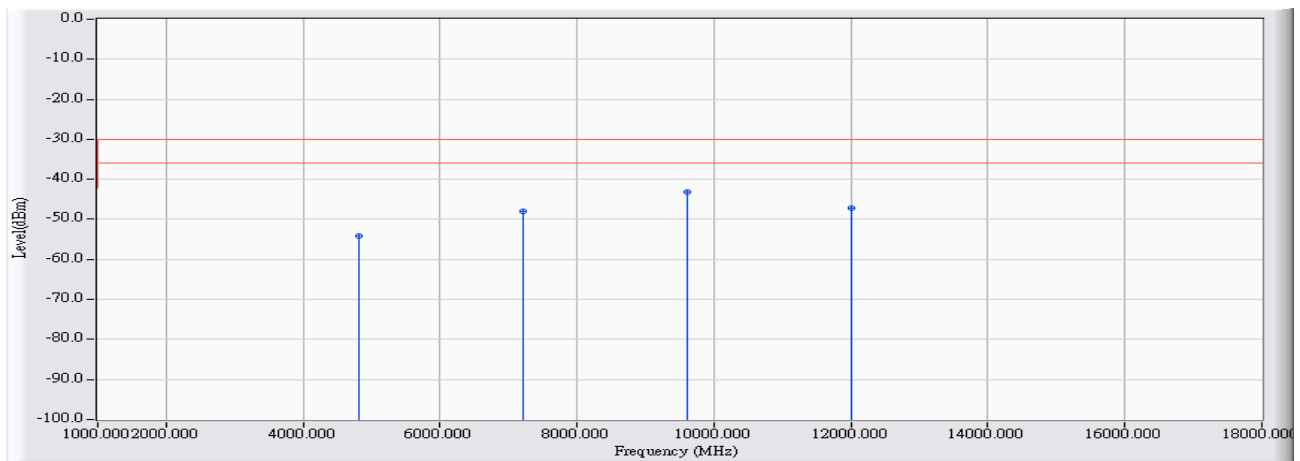


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		4804.000	1.200	-57.680	-56.480	-26.480	-30.000	PEAK
2		7206.000	8.385	-57.430	-49.045	-19.045	-30.000	PEAK
3	*	9608.000	15.903	-60.110	-44.207	-14.207	-30.000	PEAK
4		12010.000	16.898	-64.790	-47.892	-17.892	-30.000	PEAK

Note:

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

Site : CB3-H	Time : 2017/02/21 - 11:47
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_TX

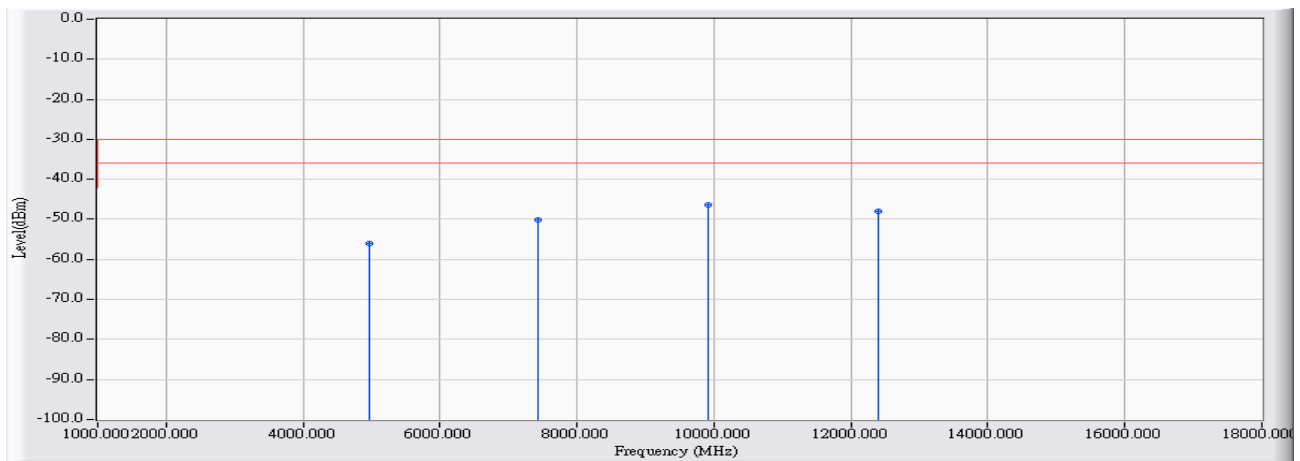


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		4804.000	1.173	-55.420	-54.246	-24.246	-30.000	PEAK
2		7206.000	7.484	-55.400	-47.916	-17.916	-30.000	PEAK
3	*	9608.000	16.322	-59.550	-43.228	-13.228	-30.000	PEAK
4		12010.000	17.199	-64.440	-47.242	-17.242	-30.000	PEAK

Note:

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

Site : CB3-H	Time : 2017/02/21 - 11:57
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_TX

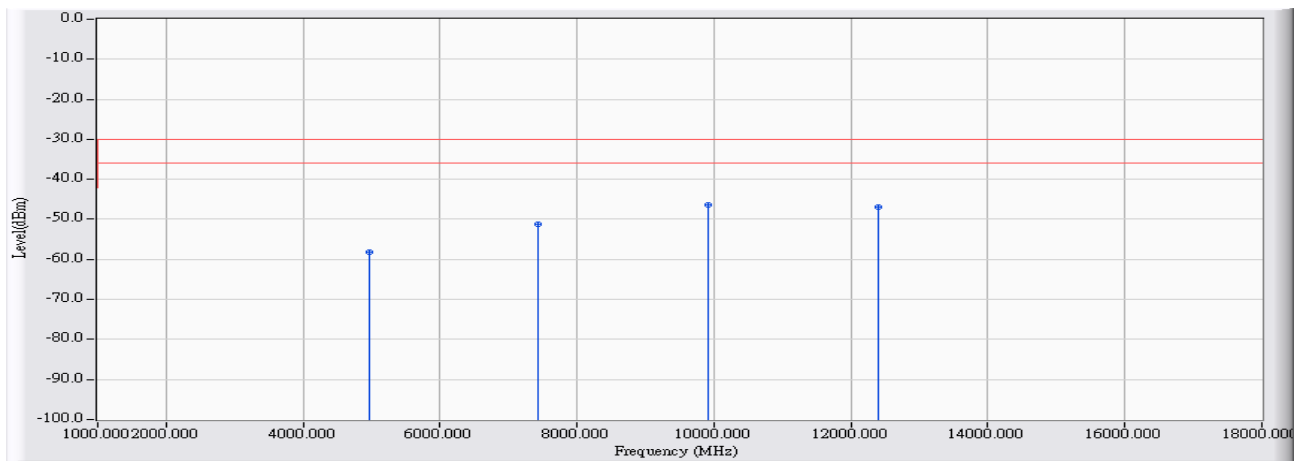


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		4960.000	0.884	-56.900	-56.017	-26.017	-30.000	PEAK
2		7440.000	8.409	-58.600	-50.191	-20.191	-30.000	PEAK
3	*	9920.000	15.192	-61.610	-46.418	-16.418	-30.000	PEAK
4		12400.000	17.067	-64.980	-47.913	-17.913	-30.000	PEAK

Note:

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

Site : CB3-H	Time : 2017/02/21 - 11:52
Limit : ETSI_300328_V191_TX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_TX



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		4960.000	1.127	-59.210	-58.083	-28.083	-30.000	PEAK
2		7440.000	8.122	-59.240	-51.118	-21.118	-30.000	PEAK
3	*	9920.000	15.377	-61.860	-46.482	-16.482	-30.000	PEAK
4		12400.000	17.849	-64.750	-46.901	-16.901	-30.000	PEAK

Note:

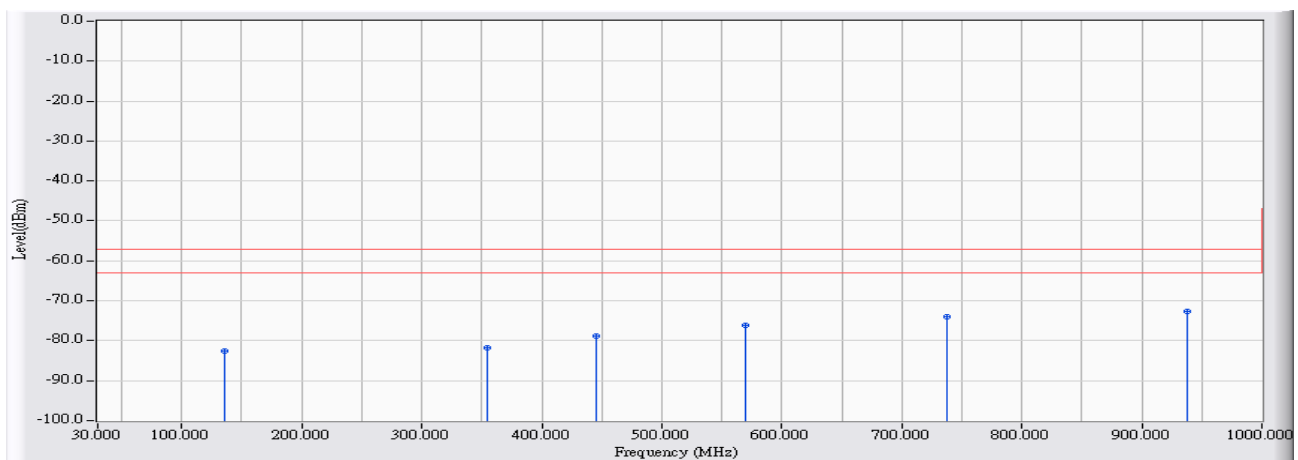
1. All Reading Levels are Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

12. Receiver spurious emission

12.1. Test Result

30MHz-1GHz Spurious:

Site : CB3-H	Time : 2017/02/21 - 14:02
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_RX

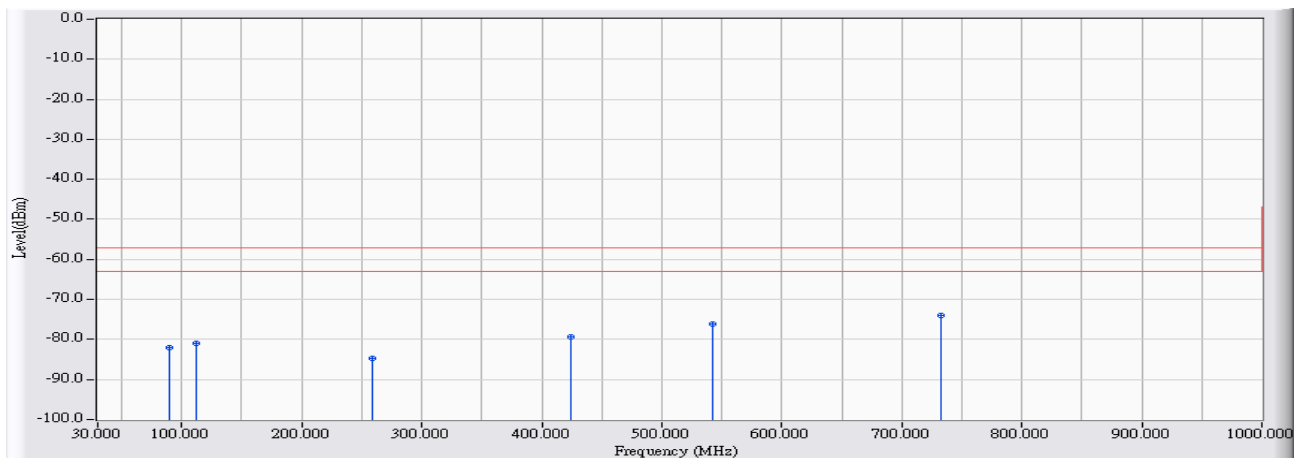


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		135.148	-20.335	-62.299	-82.634	-25.634	-57.000	RMS
2		353.980	-15.307	-66.434	-81.741	-24.741	-57.000	RMS
3		445.257	-12.547	-66.397	-78.945	-21.945	-57.000	RMS
4		569.514	-9.436	-66.815	-76.251	-19.251	-57.000	RMS
5		737.518	-6.822	-67.081	-73.903	-16.903	-57.000	RMS
6	*	938.017	-5.114	-67.445	-72.558	-15.558	-57.000	RMS

Note:

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

Site : CB3-H	Time : 2017/02/21 - 14:04
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_RX

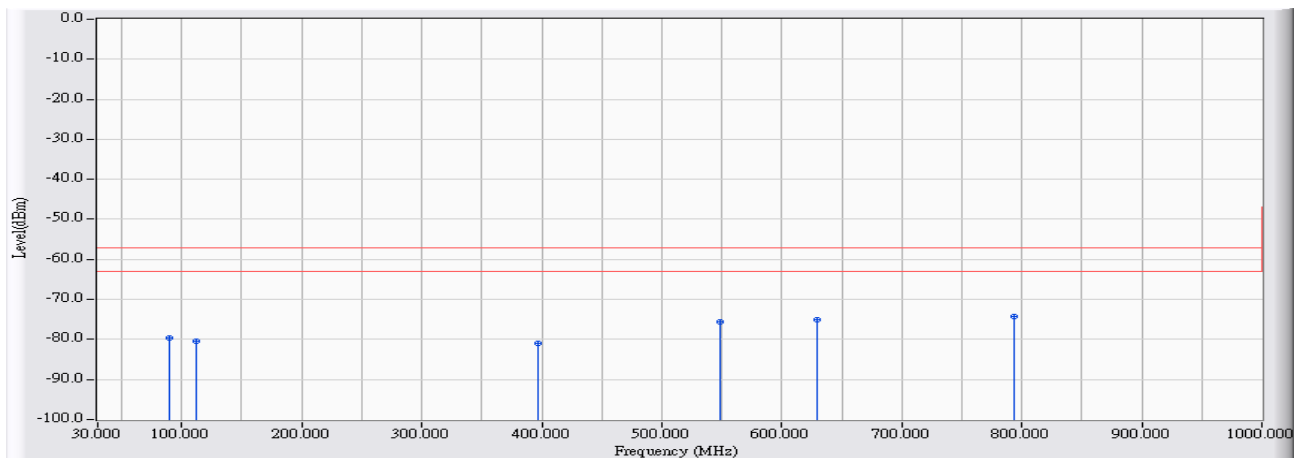


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		89.073	-22.167	-59.932	-82.099	-25.099	-57.000	RMS
2		112.062	-18.844	-62.011	-80.855	-23.855	-57.000	RMS
3		259.405	-17.185	-67.445	-84.630	-27.630	-57.000	RMS
4		424.014	-13.009	-66.304	-79.313	-22.313	-57.000	RMS
5		542.354	-8.650	-67.496	-76.146	-19.146	-57.000	RMS
6	*	732.959	-6.247	-67.697	-73.944	-16.944	-57.000	RMS

Note:

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

Site : CB3-H	Time : 2017/02/21 - 14:06
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_RX

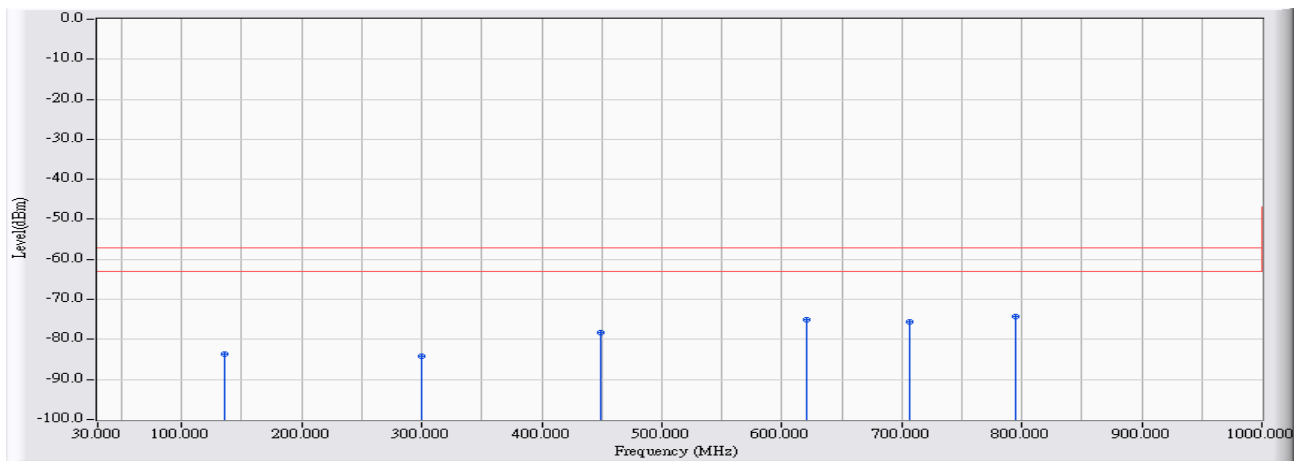


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		89.073	-22.167	-57.428	-79.595	-22.595	-57.000	RMS
2		112.062	-18.844	-61.468	-80.312	-23.312	-57.000	RMS
3		396.272	-14.009	-67.023	-81.032	-24.032	-57.000	RMS
4		548.659	-8.038	-67.656	-75.693	-18.693	-57.000	RMS
5		629.848	-7.966	-67.212	-75.178	-18.178	-57.000	RMS
6	*	794.069	-6.435	-67.792	-74.226	-17.226	-57.000	RMS

Note:

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

Site : CB3-H	Time : 2017/02/21 - 14:07
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_30M-1GHz_3M_0217 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_RX



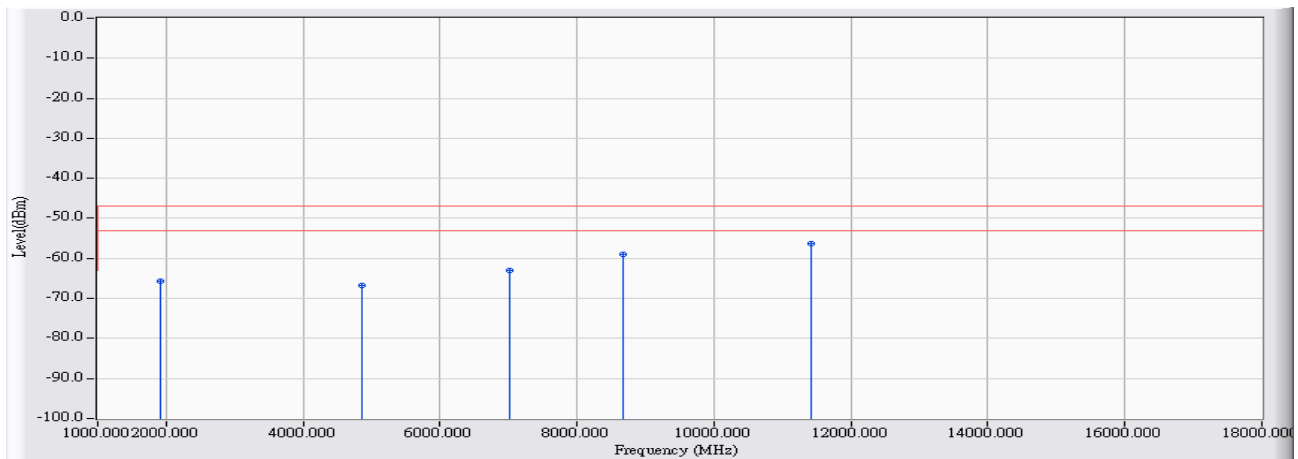
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		135.148	-20.335	-63.332	-83.667	-26.667	-57.000	RMS
2		299.951	-17.039	-67.169	-84.208	-27.208	-57.000	RMS
3		449.525	-12.136	-66.198	-78.334	-21.334	-57.000	RMS
4		621.215	-7.901	-67.286	-75.187	-18.187	-57.000	RMS
5		706.575	-8.646	-66.841	-75.488	-18.488	-57.000	RMS
6	*	795.330	-6.519	-67.787	-74.306	-17.306	-57.000	RMS

Note:

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

Above 1GHz Spurious:

Site : CB3-H	Time : 2017/02/21 - 11:59
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_RX

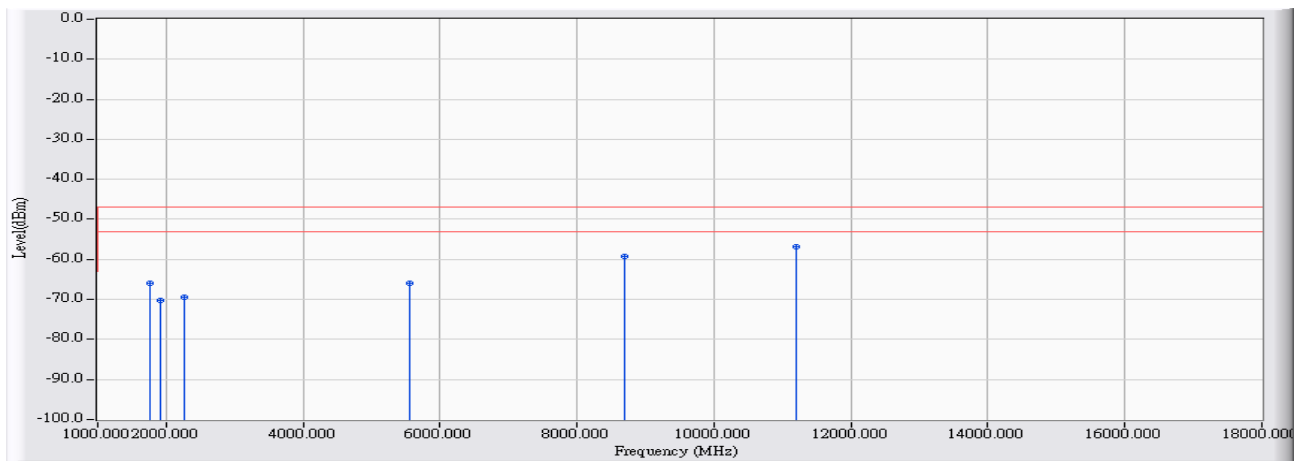


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1919.700	-8.121	-57.436	-65.556	-18.556	-47.000	RMS
2		4859.000	1.089	-67.958	-66.869	-19.869	-47.000	RMS
3		7006.100	7.459	-70.585	-63.125	-16.125	-47.000	RMS
4		8670.400	12.558	-71.500	-58.941	-11.941	-47.000	RMS
5	*	11426.100	17.237	-73.660	-56.423	-9.423	-47.000	RMS

Note:

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

Site : CB3-H	Time : 2017/02/21 - 12:01
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2402MHz_RX

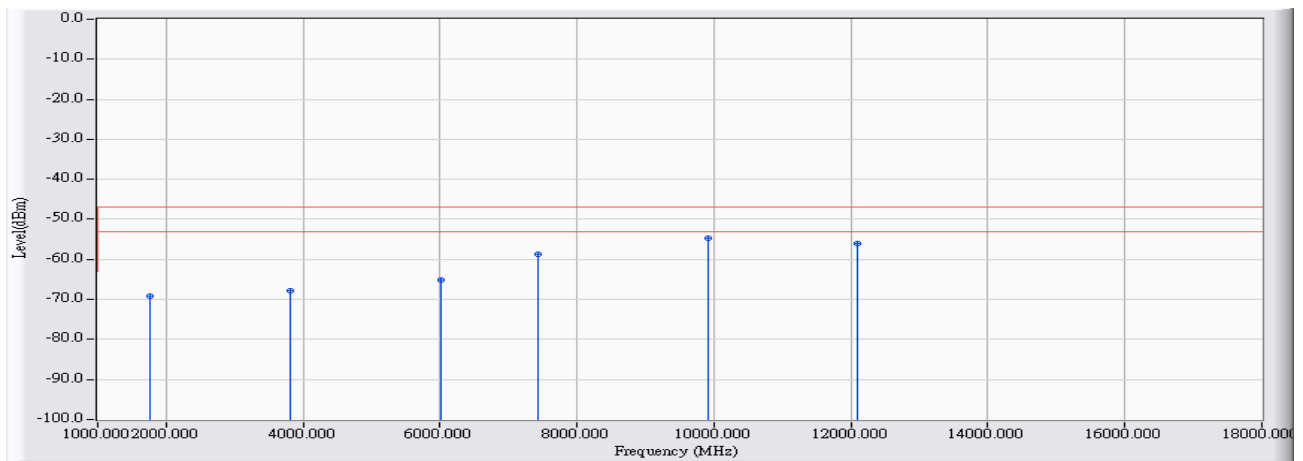


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1759.900	-9.380	-56.635	-66.015	-19.015	-47.000	RMS
2		1919.700	-8.043	-62.231	-70.273	-23.273	-47.000	RMS
3		2259.700	-3.467	-66.003	-69.470	-22.470	-47.000	RMS
4		5549.200	3.376	-69.350	-65.975	-18.975	-47.000	RMS
5		8687.400	12.494	-71.770	-59.275	-12.275	-47.000	RMS
6	*	11203.400	16.663	-73.388	-56.726	-9.726	-47.000	RMS

Note:

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

Site : CB3-H	Time : 2017/02/21 - 12:06
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - VERTICAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_RX

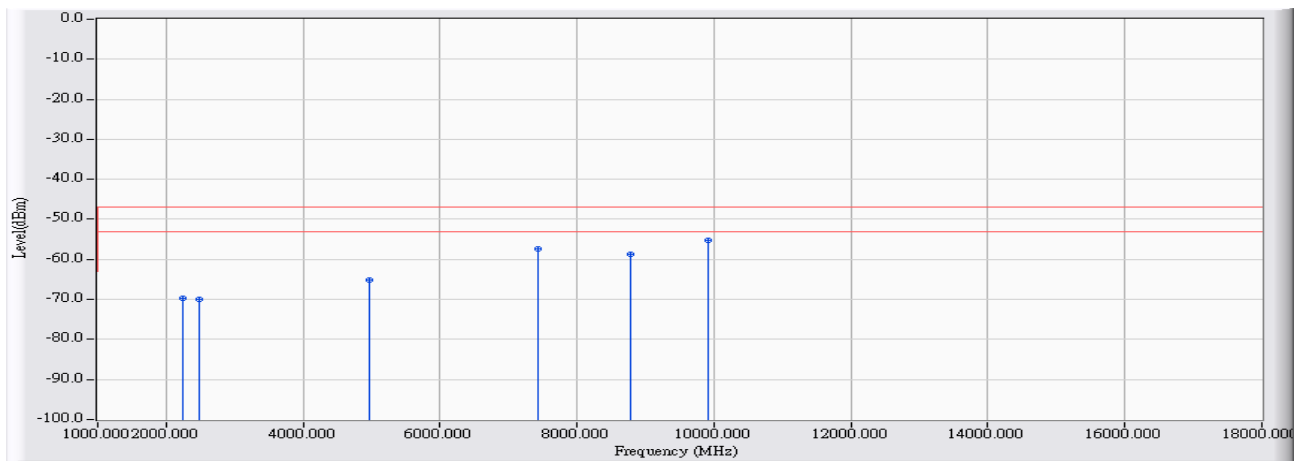


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1758.200	-9.393	-59.704	-69.097	-22.097	-47.000	RMS
2		3818.600	-1.235	-66.693	-67.928	-20.928	-47.000	RMS
3		6016.700	4.236	-69.347	-65.111	-18.111	-47.000	RMS
4		7439.600	8.121	-66.785	-58.665	-11.665	-47.000	RMS
5	*	9919.900	15.378	-70.073	-54.694	-7.694	-47.000	RMS
6		12087.400	17.313	-73.322	-56.009	-9.009	-47.000	RMS

Note:

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

Site : CB3-H	Time : 2017/02/21 - 12:08
Limit : ETSI_300328_V191_RX_00M_PK	Margin : 6
Probe : CB3-H_CE_Sub_B433_1-18G_1M_0217V2 - HORIZONTAL	Power : DC 3V (Power by Battery)
EUT : BLE Transparent Transmission Module	Note : 802.15.1_2480MHz_RX



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		2234.200	-3.618	-66.096	-69.714	-22.714	-47.000	RMS
2		2479.000	-5.263	-64.597	-69.860	-22.860	-47.000	RMS
3		4959.300	0.885	-66.008	-65.123	-18.123	-47.000	RMS
4		7439.600	8.410	-65.783	-57.374	-10.374	-47.000	RMS
5		8784.300	13.167	-71.787	-58.620	-11.620	-47.000	RMS
6	*	9919.900	15.192	-70.508	-55.315	-8.315	-47.000	RMS

Note:

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

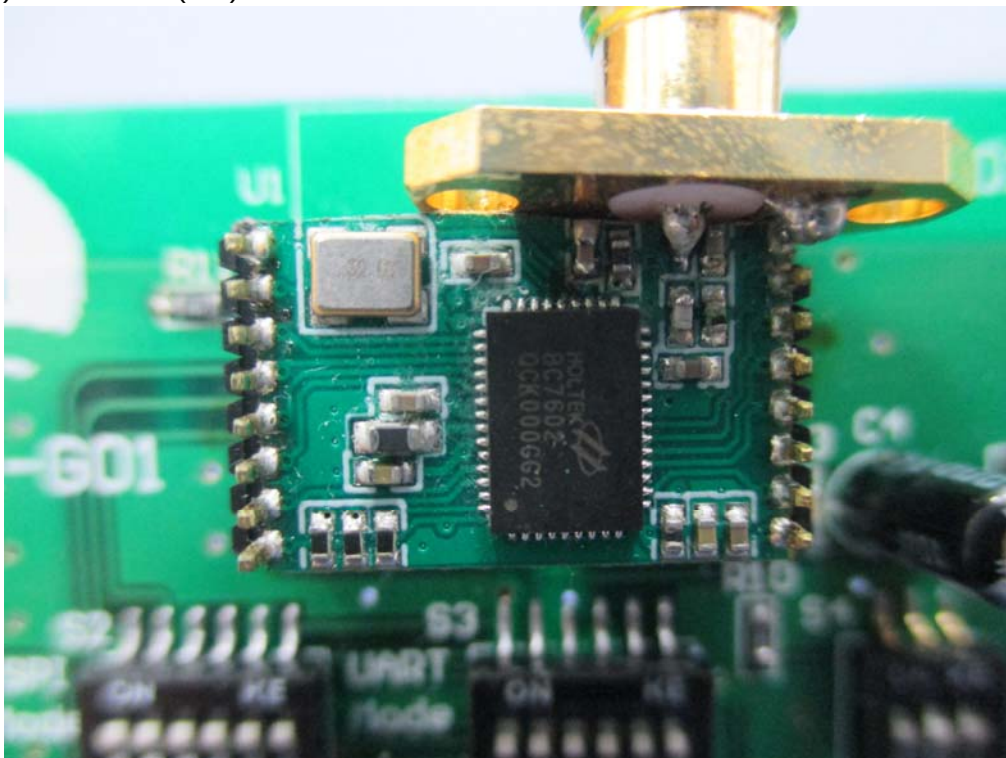
13. Attachment

➤ EUT Photograph

(1) EUT Photo (With SMA Connector)



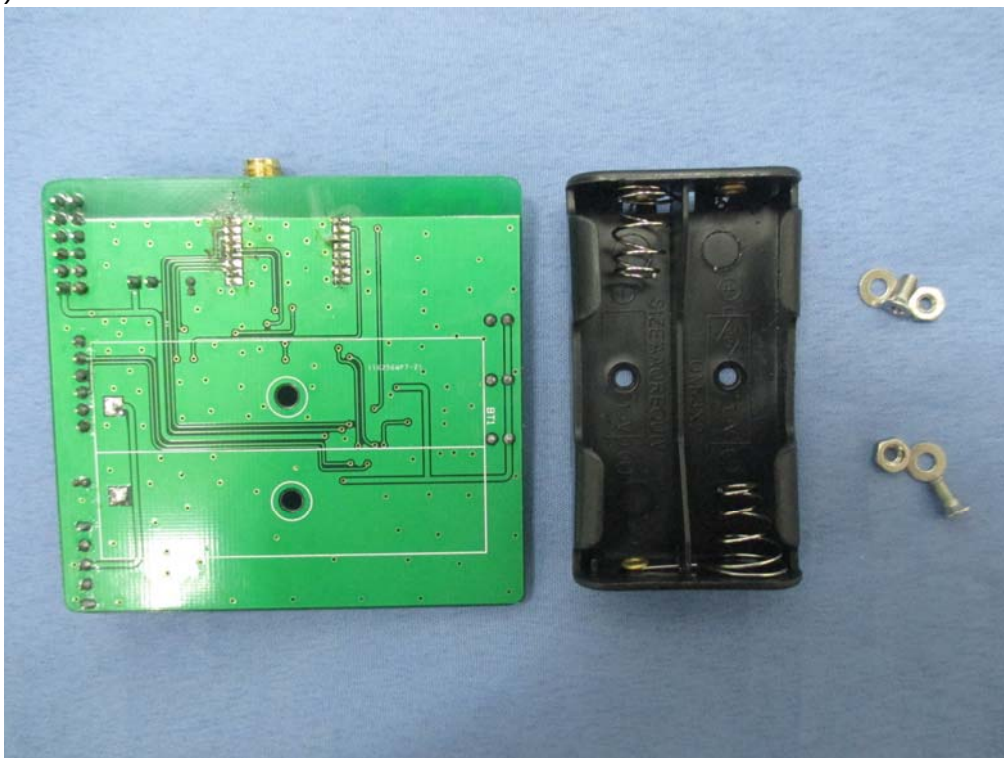
(2) EUT Photo (MB)



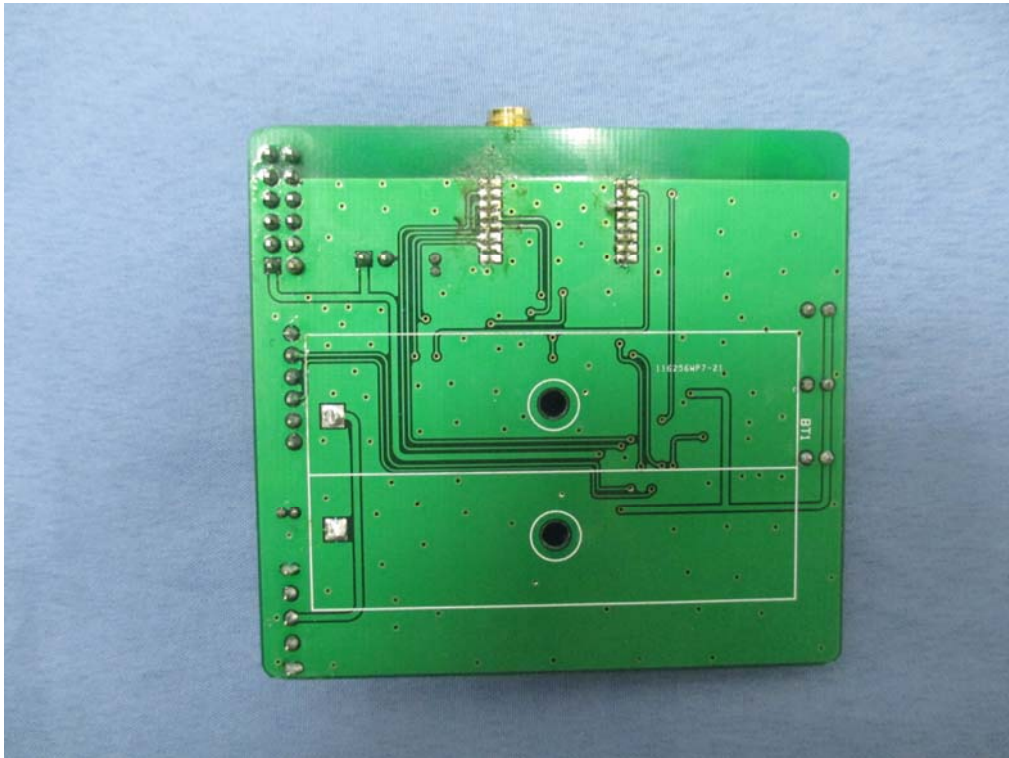
(3) EUT Photo



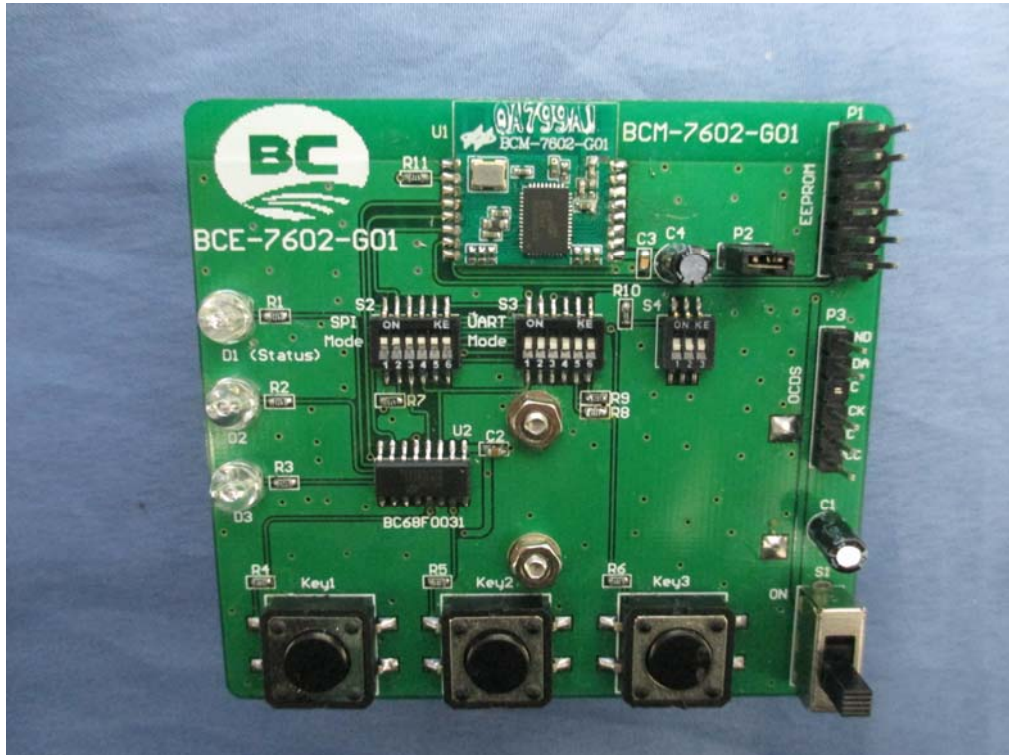
(4) EUT Photo



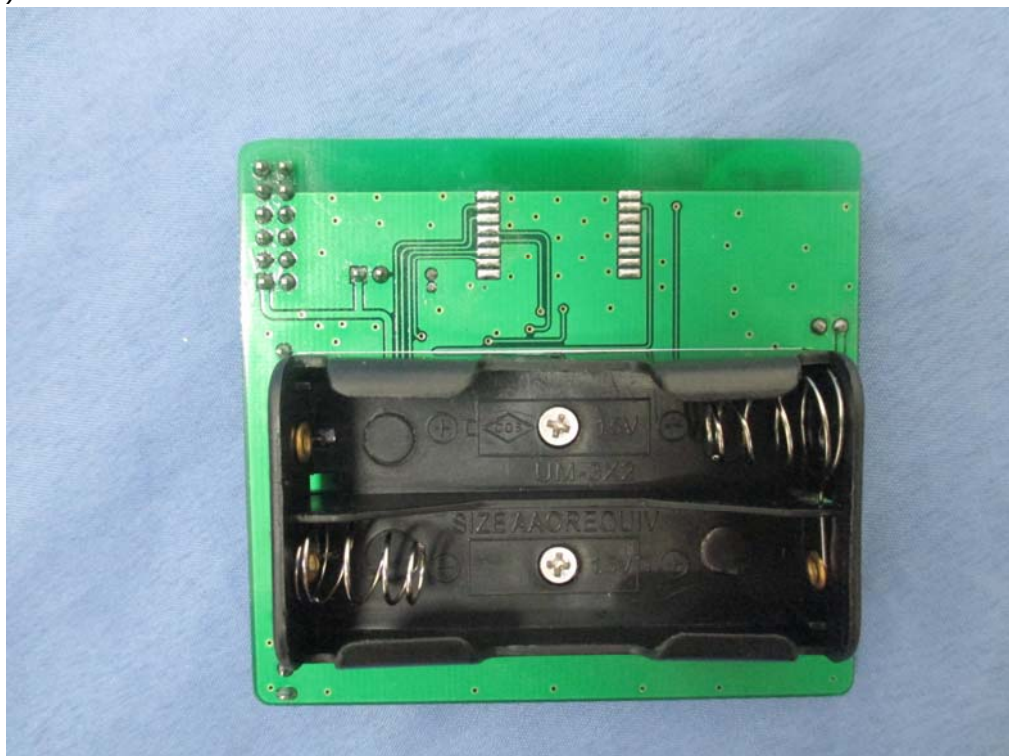
(5) EUT Photo



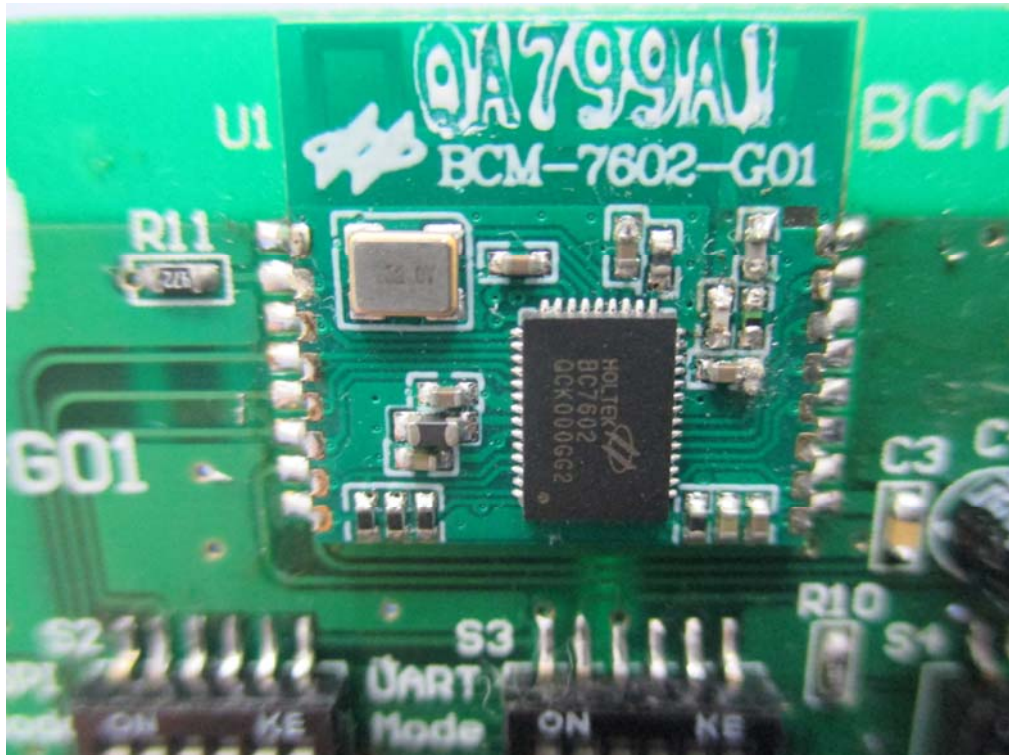
(6) EUT Photo (With Antenna)



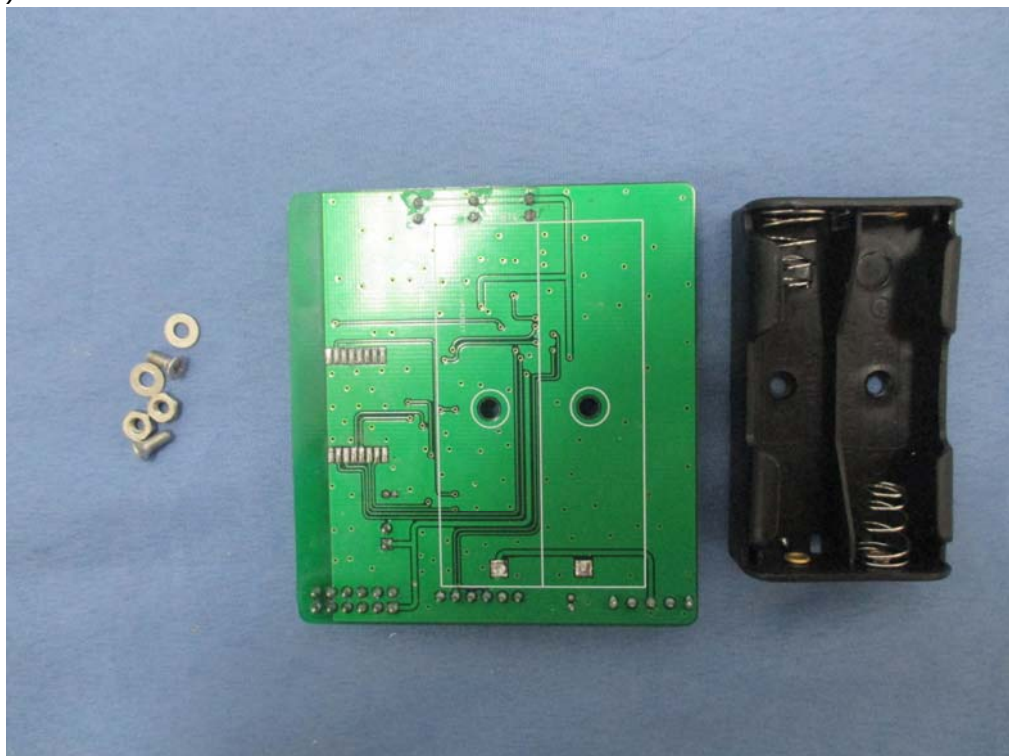
(7) EUT Photo



(8) EUT Photo (MB)



(9) EUT Photo



(10) EUT Photo

