

Test Report No:
2360394R-RFUSV01S-A

TEST REPORT

FCC Rules&Regulations

Product Name	TrackKing V5
Brand Name	Thermo King
Model No.	TKV5LA
FCC ID	Q37TKV5LA
Applicant's Name / Address	Thermo King Corporation 314 West 90th Street, Minneapolis, MN USA 55420
Manufacturer's Name / Address	Thermo King Corporation 314 West 90th Street, Minneapolis, MN USA 55420
Test Method Requested, Standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10-2013
Verdict Summary	IN COMPLIANCE
Documented By	 Amelia Wu
Approved By	 Rueyyan Lin
Date of Receipt	Jun. 12, 2023
Date of Issue	Sep. 25, 2023
Report Version	V1.0

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Appendix E. Test Result of Transmitter Radiated Spurious Emission

Appendix F. Test Result of Radiated Emissions Co-location

Appendix G. Test Setup Photograph

Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

General Conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Sep. 25, 2023

Summary of Test Result

Report Clause	Test Items	Result (PASS/FAIL)	Remark
-	AC Power Line Conducted Emission	N/A	Note
3	Occupied Bandwidth & DTS Bandwidth	PASS	-
4	Maximum Conducted Output Power	PASS	-
5	Maximum Power Spectral Density	PASS	-
6	Antenna Port Conducted Emission	PASS	-
7	Transmitter Radiated Spurious Emission	PASS	-
Note: It was supplied power by DC-Powered for EUT. It's not necessary to apply to AC Power Line Conducted Emission test.			

Comments and Explanations

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Comments and Remarks

The product specification and testing instructions for the EUT declared in the report are provided by the manufacturer who will take all responsibilities for the accuracy.

1. General Information

1.1. EUT Description

Frequency Range	2400 ~ 2483.5 MHz
Operating Frequency	1 Mbps: 2402 ~ 2480 MHz 2 Mbps: 2402 ~ 2480 MHz
Channel Number	1 Mbps: 40 Channels 2 Mbps: 40 Channels
Mode	Bluetooth LE
Type of Modulation	GFSK

Antenna Information				
Ant.	Brand Name	Model No.	Type	Gain (dBi)
0	N/A	N/A	PCB	2.8

1.2. EUT Information

EUT Power Type	From DC power supply			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point

1.3. Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- ♦ KDB 558074 D01 v05r02
- ♦ KDB 414788 D01 v01r01

1.4. Testing Location Information

Testing Location Information		
Test Laboratory : DEKRA Testing and Certification Co., Ltd.		
1	ADD: No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.	
(TAF: 3024)	TEL: +886-3-582-8001	FAX: +886-3-582-8958
2	ADD: No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.	
(TAF: 3024)	TEL: +886-3-582-8001	FAX: +886-3-582-8958
Test site number for address 1 includes HC-SR02. Test site number for address 2 includes HC-CB02, HC-CB03, HC-CB04, HC-SR10 and HC-SR12.		

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted Emission	HC-SR12	Clemens Fang	22 / 66	2023/06/30
Radiated Emission	HC-CB04	Scott Chang	21.5 / 55	2023/06/19

1.5. Measurement Uncertainty

Uncertainties have been calculated according to the DEKRA internal document with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Test item	Uncertainty
Occupied Bandwidth & DTS Bandwidth	± 282.55 Hz
Maximum Conducted Output Power	± 1.16 dB
Maximum Power Spectral Density	± 2.47 dB
Antenna Port Conducted Emission	± 2.47 dB
Transmitter Radiated Spurious Emission	± 3.52 dB below 1 GHz
	± 3.56 dB above 1 GHz

1.6. List of Test Equipment

HC-SR12

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	0.3-40 GHz	2022/11/02	2023/11/01
Pulse Power Sensor	Anritsu	MA2411B	1531043	0.3-40 GHz	2022/11/02	2023/11/01
EXA Signal Analyzer	Keysight	N9010A	MY51440132	10 Hz-44 GHz	2022/12/13	2023/12/12
Pulse Power Sensor	Anritsu	MA2411B	1531044	0.3-40 GHz	2022/11/02	2023/11/01
Signal & Spectrum Analyzer	R&S	FSV40	101869	10Hz-40GHz	2022/07/13	2023/07/12

HC-CB04

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
Signal and Spectrum Analyzer	R&S	FSVA40	101435	10 Hz-40 GHz	2023/05/29	2024/05/28
Signal Analyzer	R&S	FSVA40	101455	10 Hz-40 GHz	2022/09/29	2023/09/28
EXA Signal Analyzer	Keysight	N9010A	MY51440132	10 Hz-44 GHz	2022/12/13	2023/12/12
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	1209	30 MHz-2 GHz	2023/06/13	2024/06/12
Double Ridged Horn Antenna	RF SPIN	DRH18-E	211212A18EN	1G-18GHz	2022/11/15	2023/11/14
Horn Antenna	Schwarzbeck	BBHA 9170	203	18G-40GHz	2023/02/13	2024/02/12
Pre-Amplifier	EMCI	EMC01820I	980364	30M-8 GHz,20 dB	2023/06/06	2024/06/05
Pre-Amplifier	EMEC	EM01G18GA	060835	1-18 GHz,50 dB	2022/07/04	2023/07/03
Pre-Amplifier	DEKRA	AP-400C	201801231	18G-40 GHz,48 dB	2022/09/27	2023/09/26
EMI Test Receiver	R&S	ESR7	102260	10 Hz-7 GHz	2022/12/01	2023/11/30
Magnetic Loop Antenna	Teseq	HLA 6121	44287	0.01-30 MHz	2022/10/21	2023/10/20
Coaxial Cable(10m)	Suhner	SF102_SF104	HC-CB04	30M-18 GHz	2022/08/08	2023/08/07
Coaxial Cable(3m)	Suhner,Rosnol	SF102_UP0264	HC-CB04_1	18G-40 GHz	2022/08/14	2023/08/13
Radiated Software	AUDIX	e3 V9	HC-CB04_1	N/A	N/A	N/A

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

2. Test Configuration of EUT

2.1. Test Condition

EUT Operational Condition	
Testing Voltage	DC 14.2V

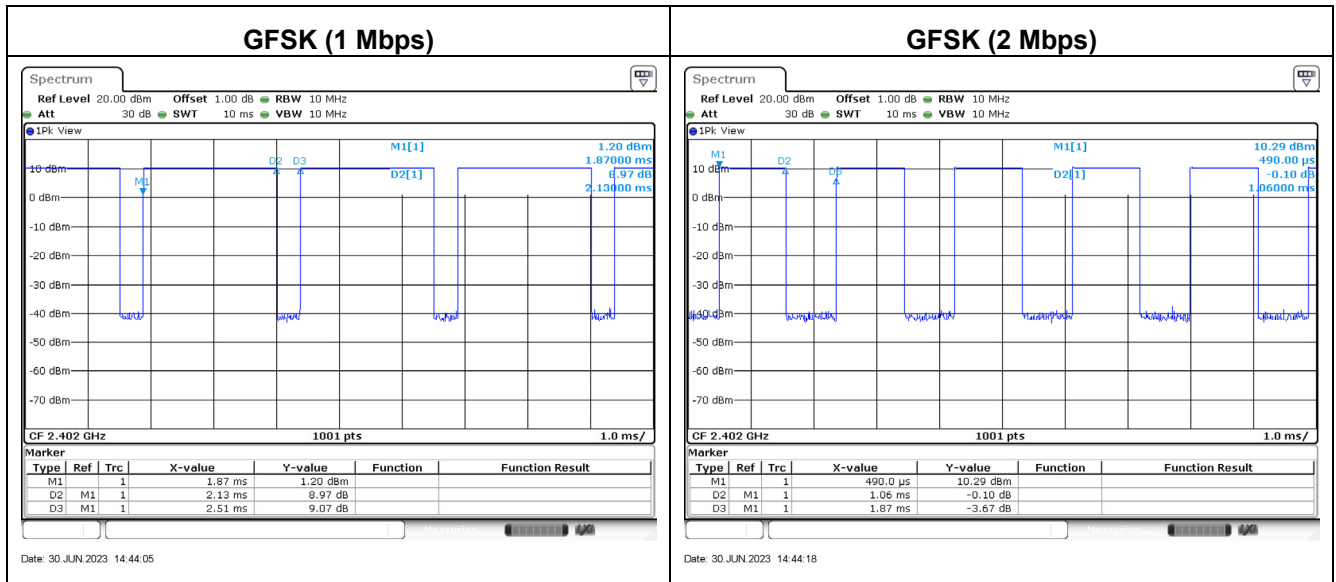
2.2. Test Frequency Mode

Test Software Version	bg tool v2.13.6-327
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Modulation	Frequency (MHz)	Power Setting
GFSK (1 Mbps)	2402	100
	2440	100
	2480	100
GFSK (2 Mbps)	2402	100
	2440	100
	2480	100

2.3. Duty Cycle

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
GFSK (1 Mbps)	2.130	2.510	84.86	0.71	0.469
GFSK (2 Mbps)	1.060	1.870	56.68	2.47	0.943



2.4. The Worst Case Measurement Configuration

Tests Item	Occupied Bandwidth & DTS Bandwidth Maximum Conducted Output Power Maximum Power Spectral Density Antenna Port Conducted Emission
Test Condition	Conducted measurement at transmit chains

Tests Item	Transmitter Radiated Spurious Emission
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Transmit
Operating Mode > 1GHz	Transmit
The EUT was performed at X axis, Y axis and Z axis position for transmitter radiated spurious emission test. The worst case was found at X axis, so the measurement will follow this same test configuration.	

Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Transmit
1	Bluetooth LE + GSM function
2	Bluetooth LE + WCDMA function
3	Bluetooth LE + LTE function
Refer to Appendix F for Radiated Emission Co-location.	

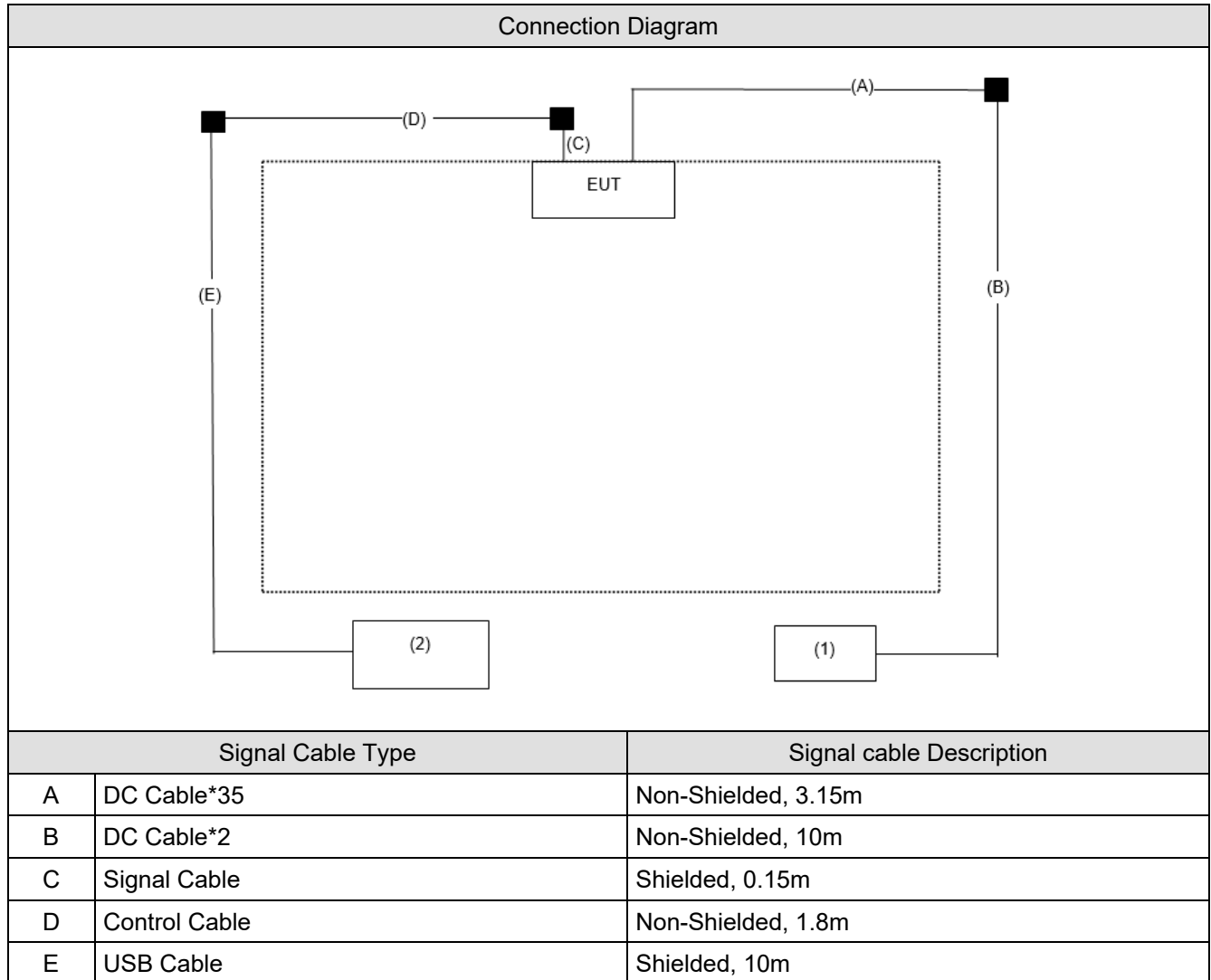
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	Transmit
1	Bluetooth LE + GSM function
2	Bluetooth LE + WCDMA function
3	Bluetooth LE + LTE function
Refer to DEKRA Test Report No.: 2360394R-RFUSV17S-A for Co-location RF Exposure Evaluation.	

Note: Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.5. Tested System Details

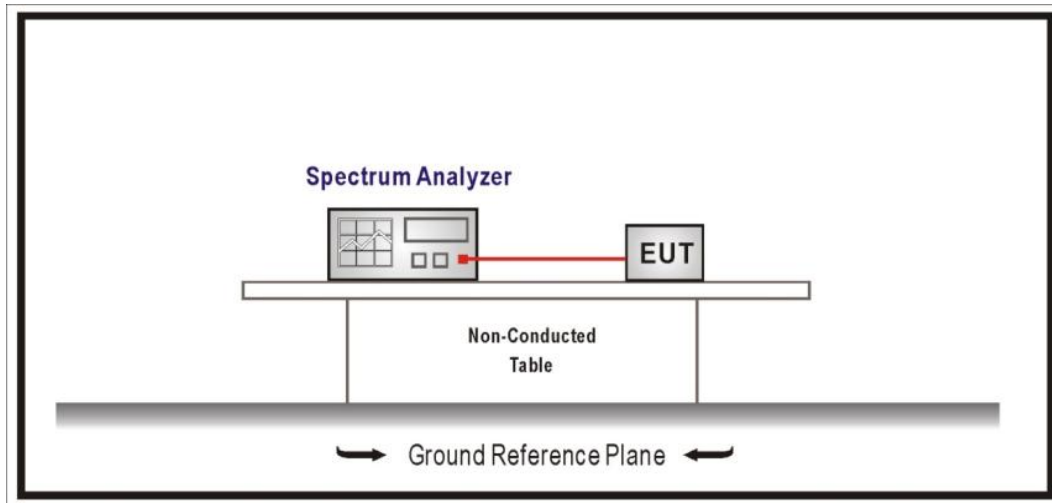
No.	Equipment	Brand Name	Model No.	Serial No.
1	Power Supply	Topward	6303D	8095908
2	Notebook	ASUS	E402S	GBN0CV14W224476

2.6. Configuration of Tested System



3. Occupied Bandwidth & DTS Bandwidth

3.1. Test Setup



3.2. Test Limit

The 6 dB bandwidth: ≥ 500 kHz.

Occupied Bandwidth: N/A

3.3. Test Procedures

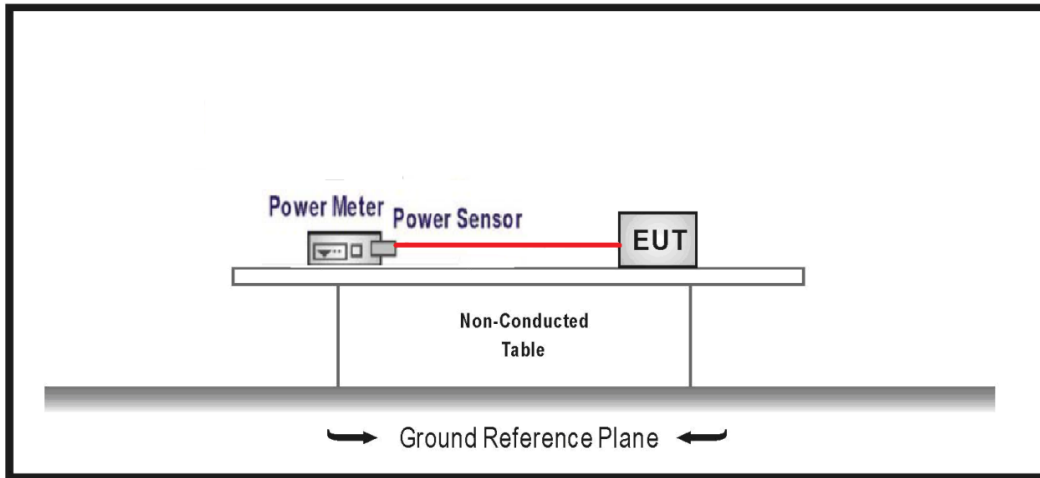
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

3.4. Test Result of Occupied Bandwidth & DTS Bandwidth

Refer as Appendix A

4. Maximum Conducted Output Power

4.1. Test Setup



4.2. Test Limit

The Maximum Conducted Output Power shall be less 1 Watt.

4.3. Test Procedures

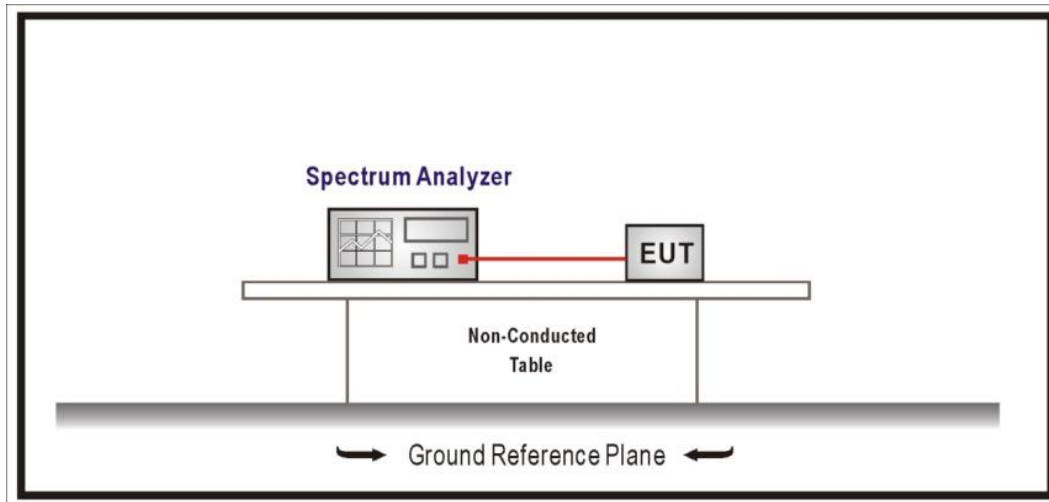
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

4.4. Test Result of Maximum Conducted Output Power

Refer as Appendix B

5. Maximum Power Spectral Density

5.1. Test Setup



5.2. Test Limit

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

5.3. Test Procedures

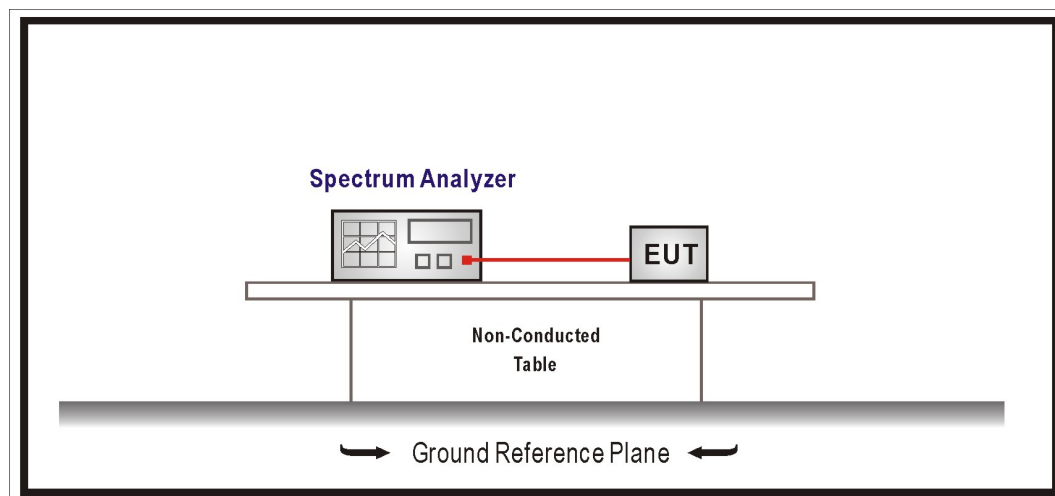
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

5.4. Test Result of Maximum Power Spectral Density

Refer as Appendix C

6. Antenna Port Conducted Emission

6.1. Test Setup



6.2. Test Limit

RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30

Remarks:

1. In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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 either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limit.
2. If the transmitter complies with the conducted power limit based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

6.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074.

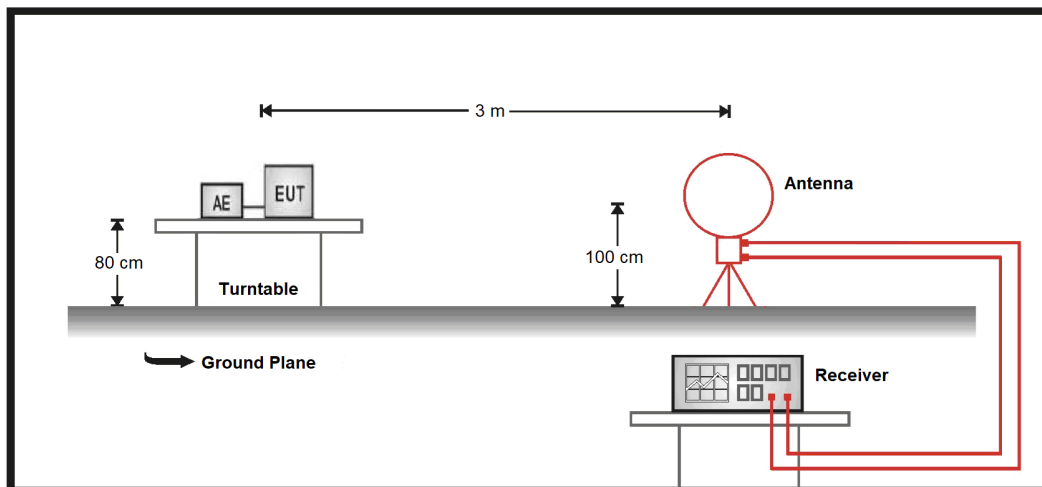
6.4. Test Result of Antenna Port Conducted Emission

Refer as Appendix D

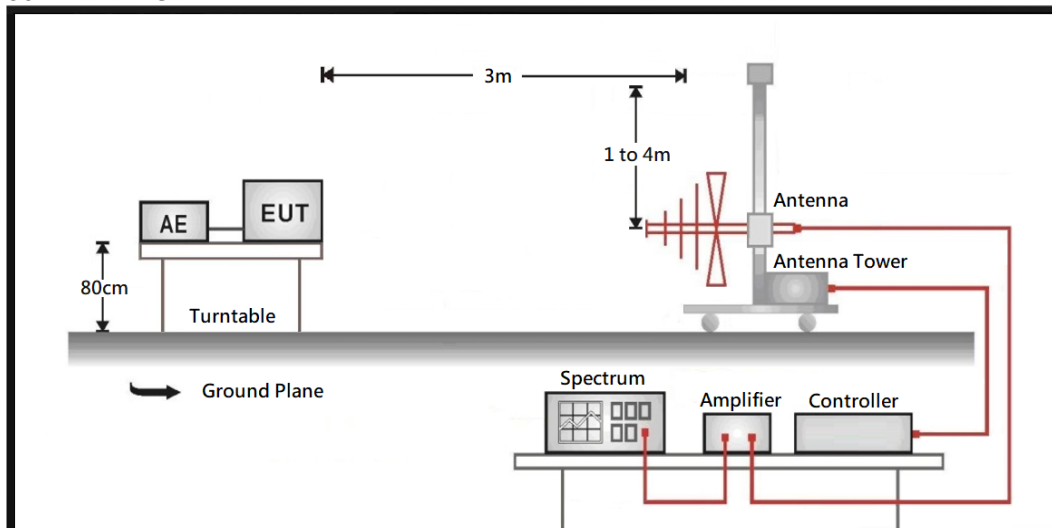
7. Transmitter Radiated Spurious Emission

7.1. Test Setup

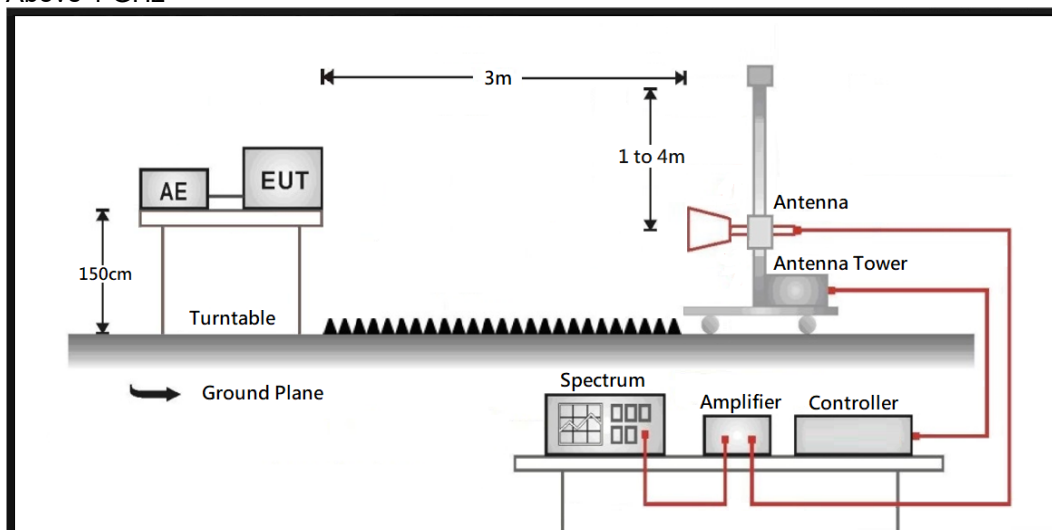
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



7.2. Test Limit

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	20 log (2400/F(kHz))	300
0.490 – 1.705	24000/F(kHz)	20 log (24000/F(kHz))	30
1.705 - 30	30	29.5	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

1. Field strength (dBuV/m) = 20 log Field strength (uV/m)
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.

7.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074.

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 from 9 kHz(include The the lowest oscillator frequency generated within the device up to the 10th harmonic) to 1000 MHz, the limit shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limit 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 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1 MHz.

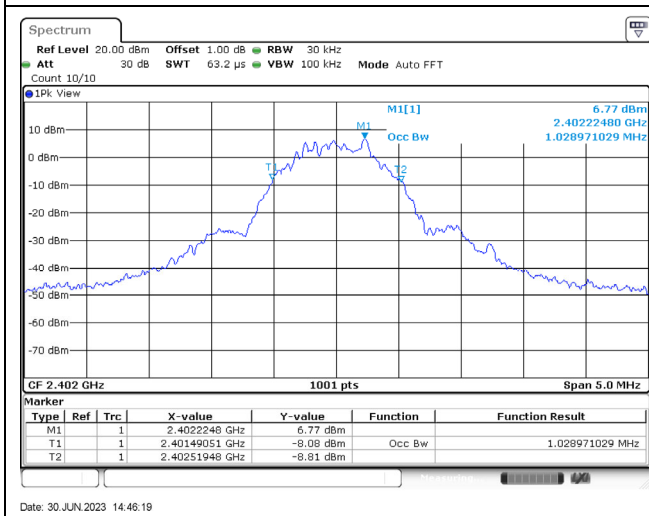
7.4. Test Result of Transmitter Radiated Spurious Emission

Refer as Appendix E

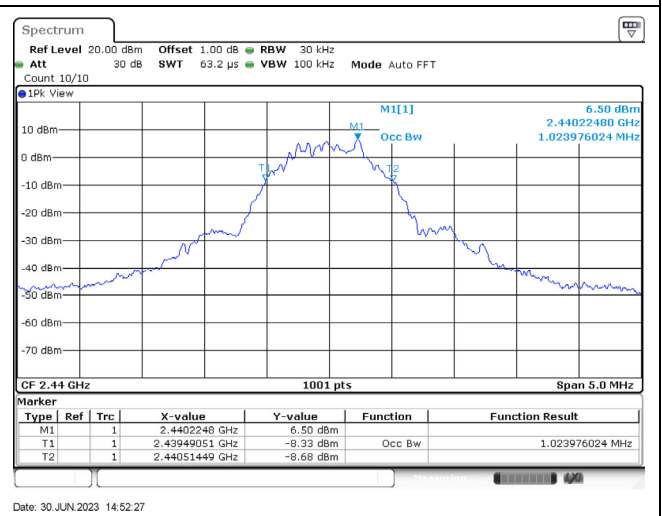
Appendix A.1 Test Result of Occupied Bandwidth

Modulation	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
GFSK (1 Mbps)	2402	1.028	-
	2440	1.023	-
	2480	1.028	-
GFSK (2 Mbps)	2402	2.092	-
	2440	2.102	-
	2480	2.107	-

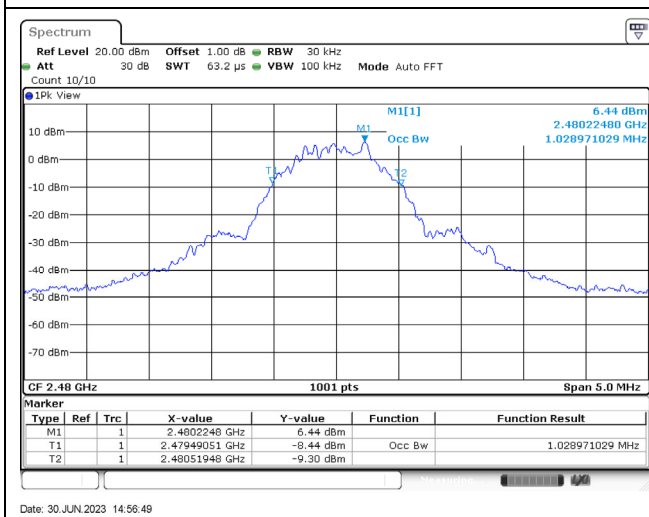
GFSK (1 Mbps) / 2402 MHz



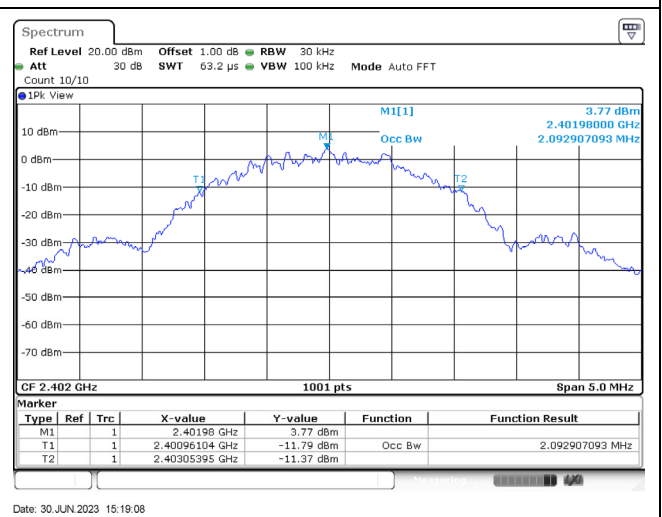
GFSK (1 Mbps) / 2440 MHz



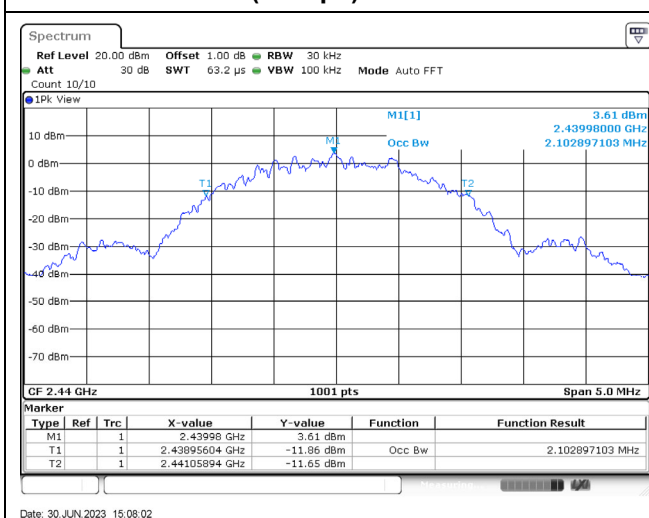
GFSK (1 Mbps) / 2480 MHz



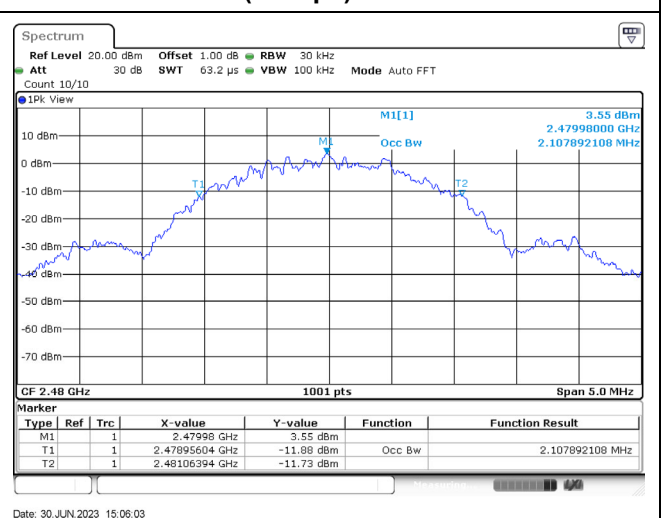
GFSK (2 Mbps) / 2402 MHz



GFSK (2 Mbps) / 2440 MHz



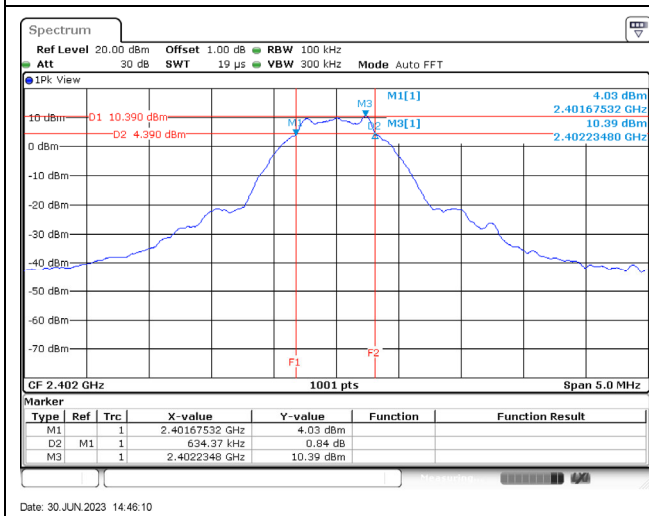
GFSK (2 Mbps) / 2480 MHz



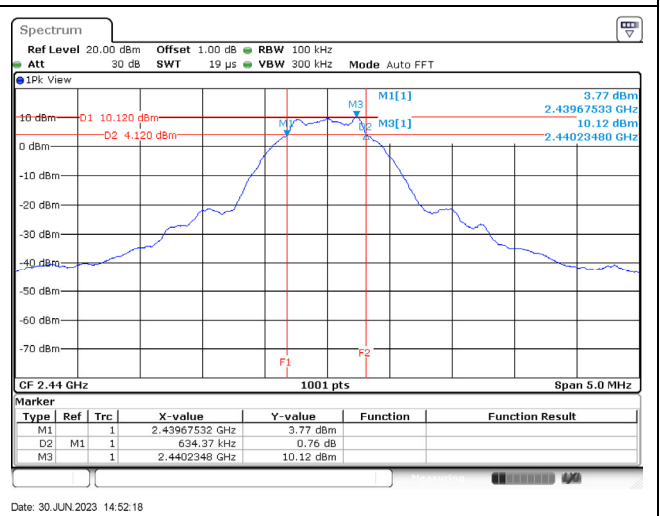
Appendix A.2 Test Result of DTS Bandwidth

Modulation	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
GFSK (1 Mbps)	2402	0.634	0.50	Pass
	2440	0.634	0.50	Pass
	2480	0.634	0.50	Pass
GFSK (2 Mbps)	2402	1.098	0.50	Pass
	2440	1.098	0.50	Pass
	2480	1.098	0.50	Pass

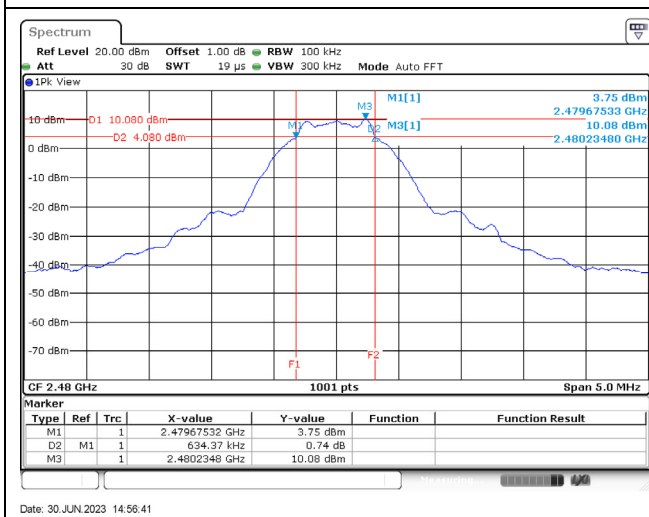
GFSK (1 Mbps) / 2402 MHz



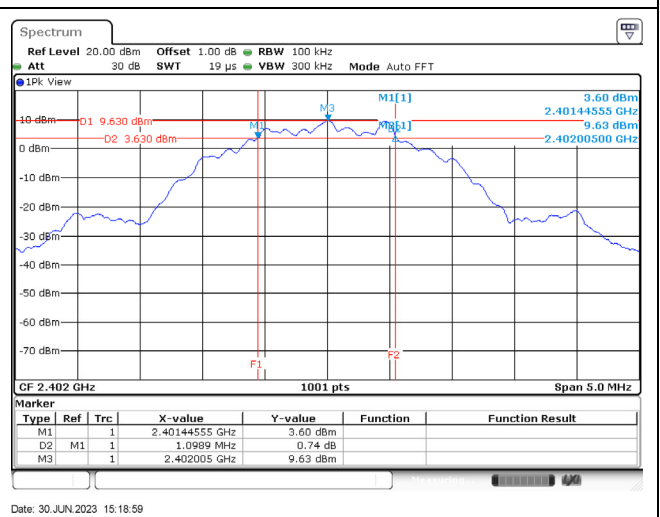
GFSK (1 Mbps) / 2440 MHz



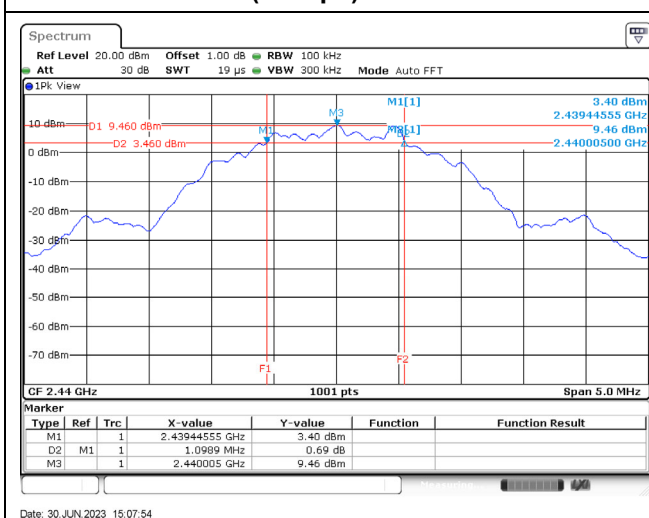
GFSK (1 Mbps) / 2480 MHz



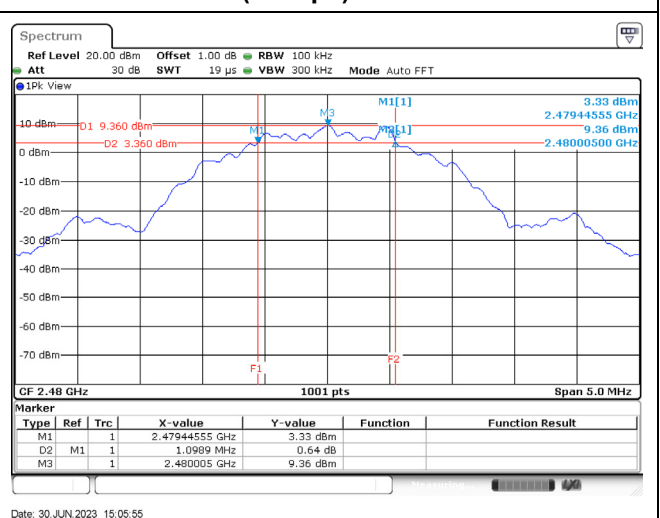
GFSK (2 Mbps) / 2402 MHz



GFSK (2 Mbps) / 2440 MHz



GFSK (2 Mbps) / 2480 MHz



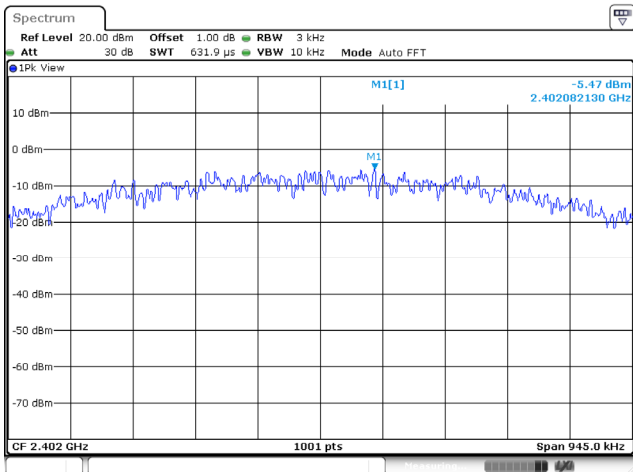
Appendix B. Test Result of Maximum Conducted Output Power

Modulation	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
GFSK (1 Mbps)	2402	10.85	30.00	Pass
	2440	10.83	30.00	Pass
	2480	10.84	30.00	Pass
GFSK (2 Mbps)	2402	10.86	30.00	Pass
	2440	10.84	30.00	Pass
	2480	10.85	30.00	Pass

Appendix C. Test Result of Maximum Power Spectral Density

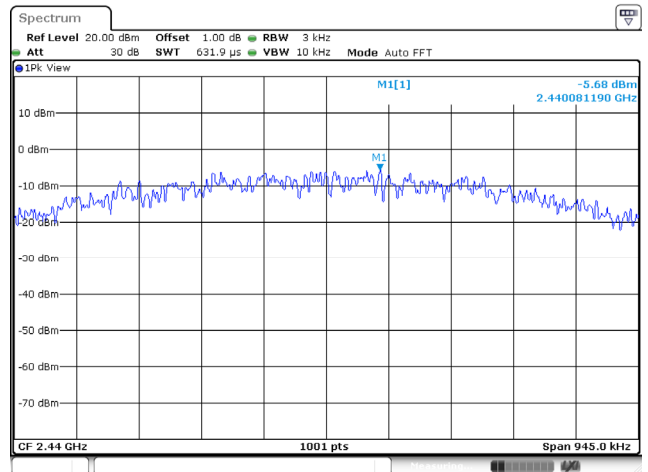
Modulation	Frequency (MHz)	Measure Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
GFSK (1 Mbps)	2402	-5.470	8.00	Pass
	2440	-5.680	8.00	Pass
	2480	-5.730	8.00	Pass
GFSK (2 Mbps)	2402	-7.100	8.00	Pass
	2440	-7.170	8.00	Pass
	2480	-7.270	8.00	Pass

GFSK (1 Mbps) / 2402 MHz



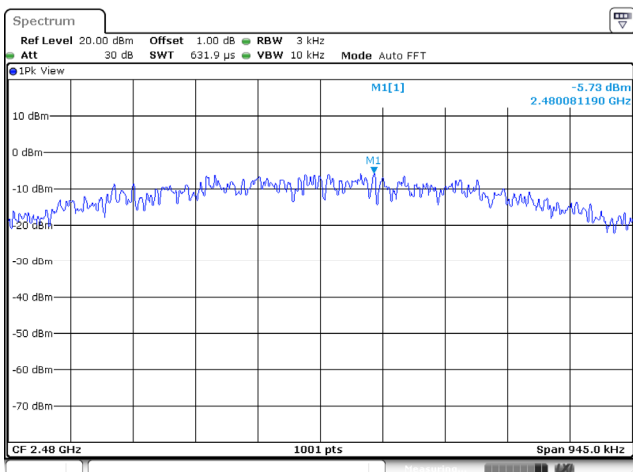
Date: 30 JUN 2023 14:46:29

GFSK (1 Mbps) / 2440 MHz



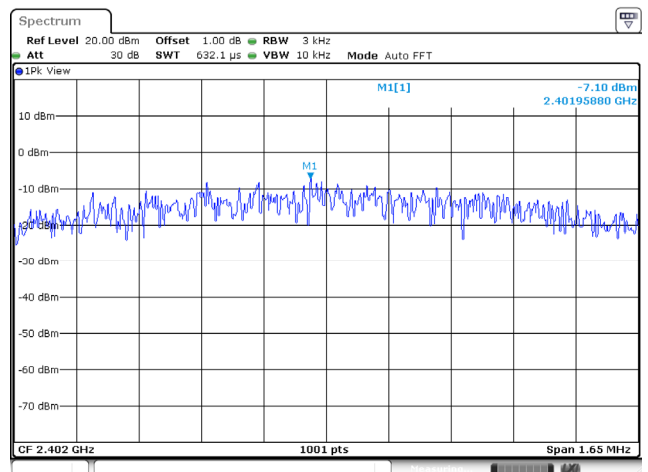
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GFSK (1 Mbps) / 2480 MHz



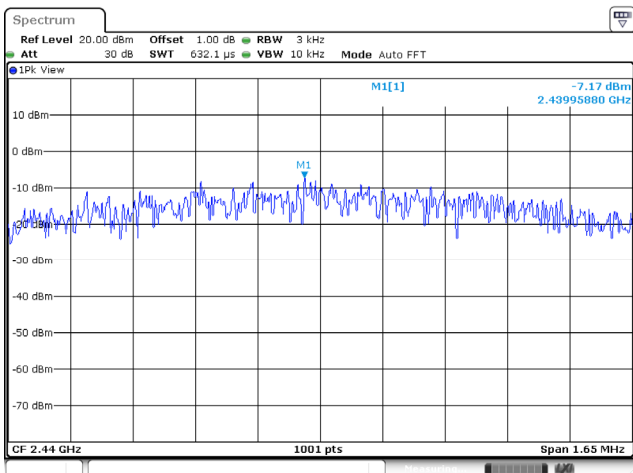
Date: 30 JUN 2023 14:57:00

GFSK (2 Mbps) / 2402 MHz



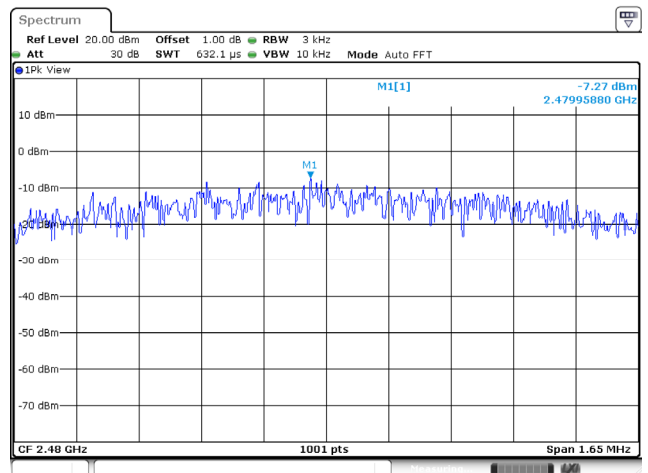
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GFSK (2 Mbps) / 2440 MHz



Date: 30 JUN 2023 15:08:13

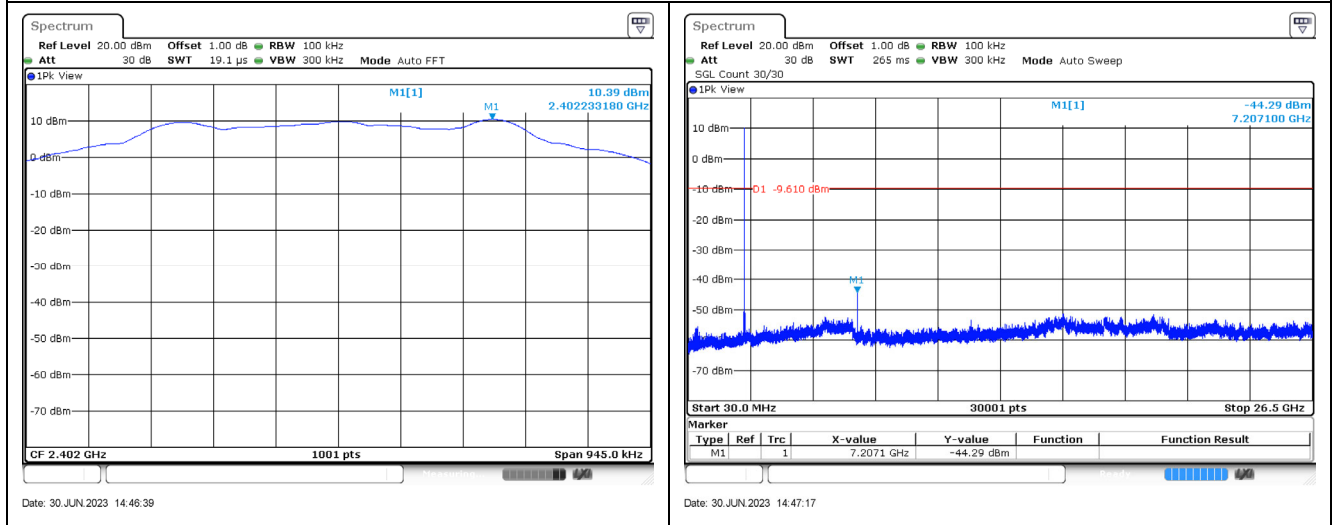
GFSK (2 Mbps) / 2480 MHz



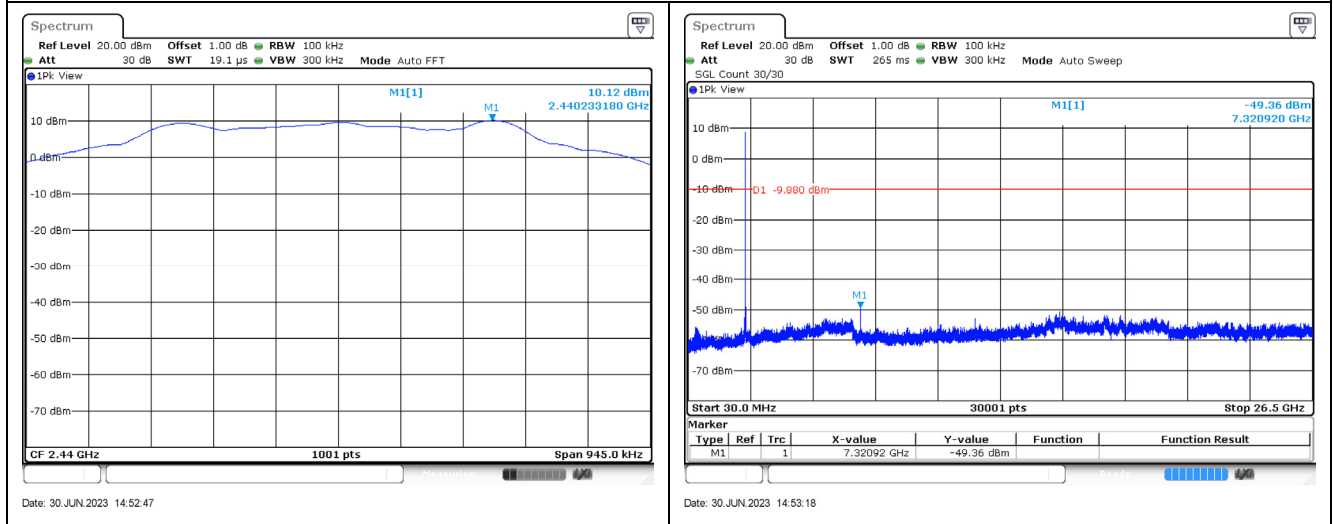
Date: 30 JUN 2023 15:06:14

Appendix D. Test Result of Antenna Port Conducted Emission

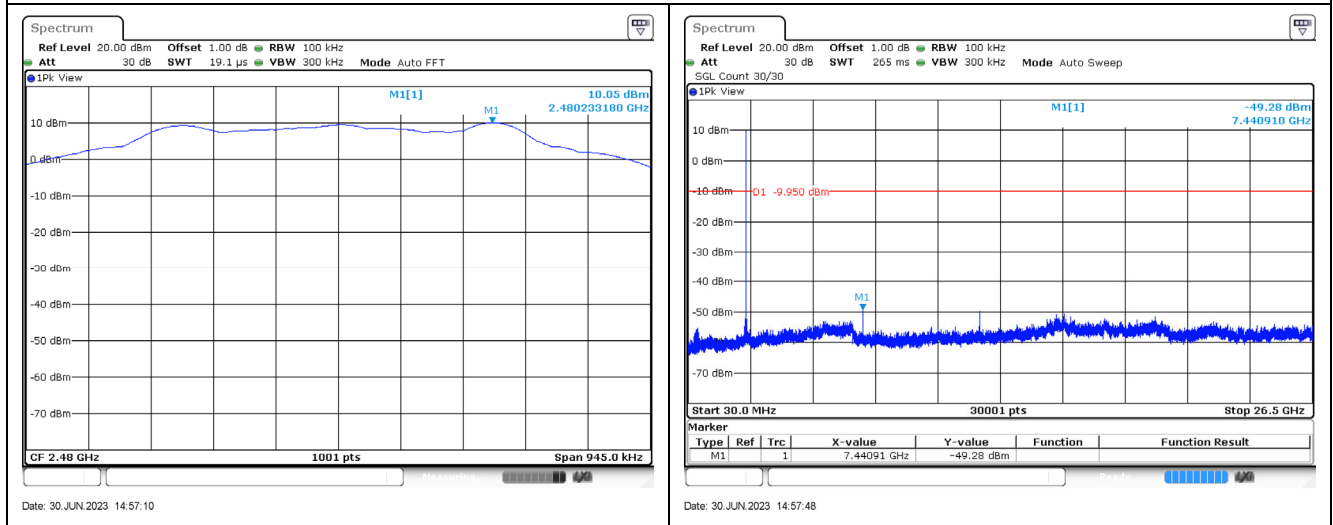
GFSK (1 Mbps) / 2402 MHz



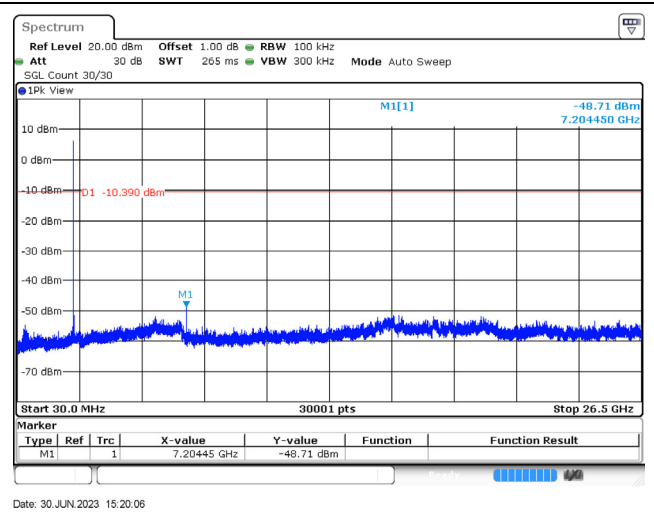
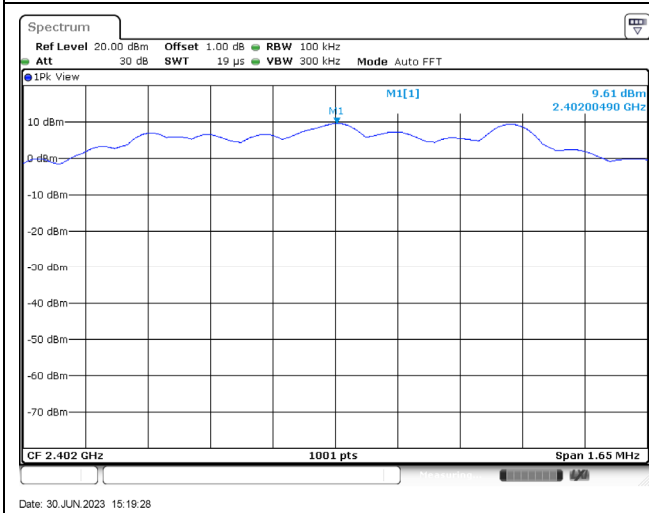
GFSK (1 Mbps) / 2440 MHz



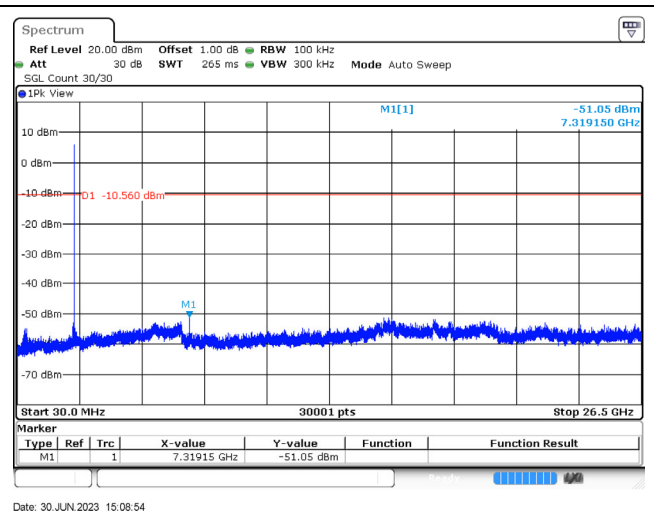
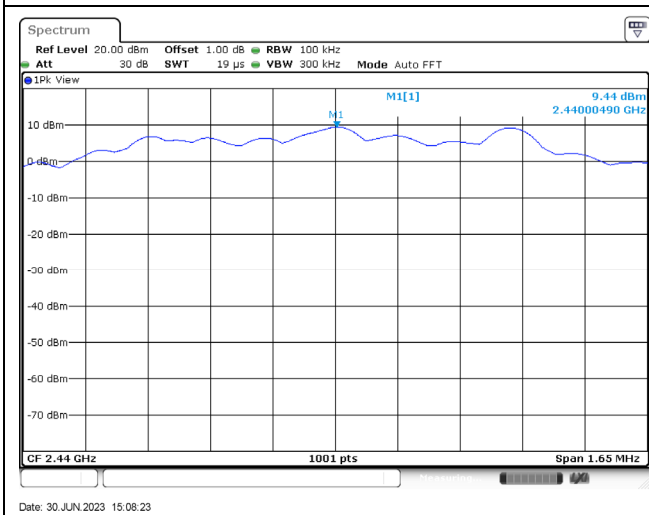
GFSK (1 Mbps) / 2480 MHz



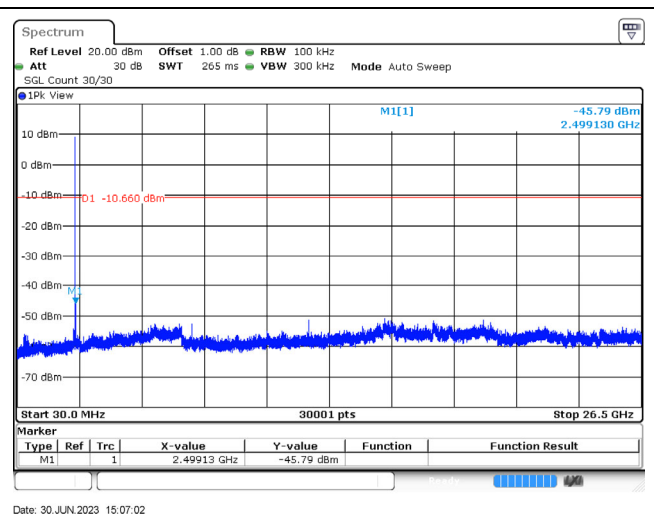
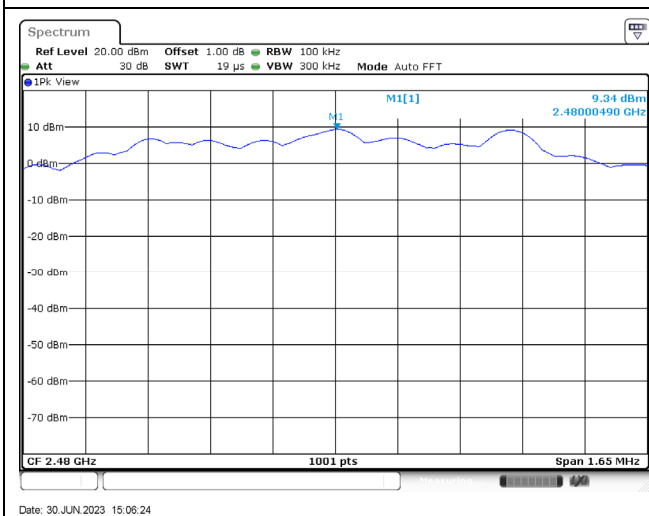
GFSK (2 Mbps) / 2402 MHz



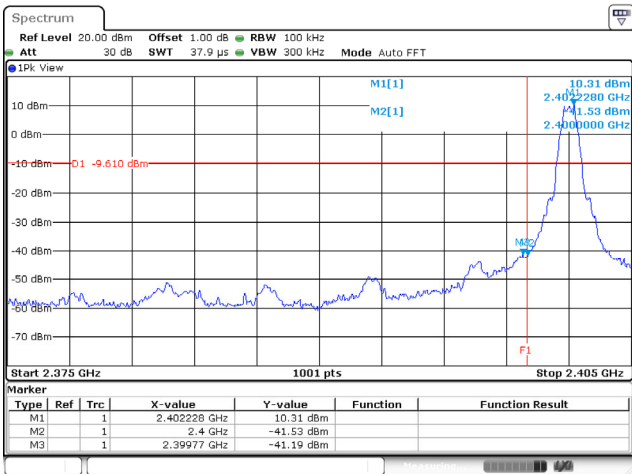
GFSK (2 Mbps) / 2440 MHz



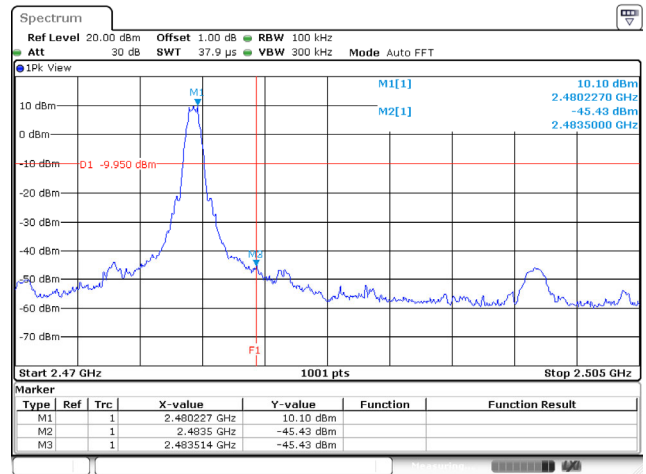
GFSK (2 Mbps) / 2480 MHz



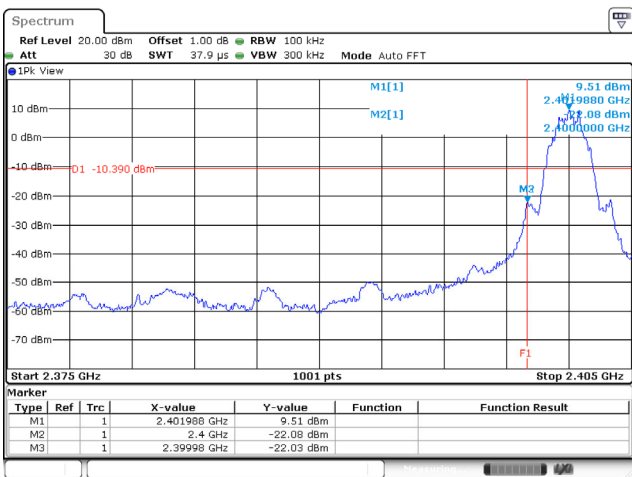
GFSK (1 Mbps) / 2402 MHz (Band Edge)



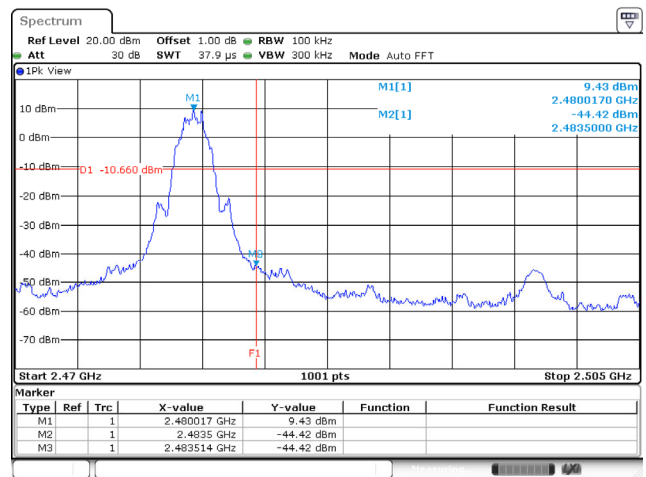
GFSK (1 Mbps) / 2480 MHz (Band Edge)



GFSK (2 Mbps) / 2402 MHz (Band Edge)



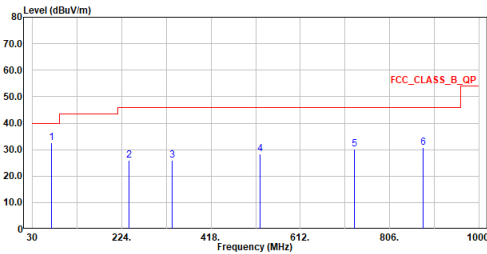
GFSK (2 Mbps) / 2480 MHz (Band Edge)



Appendix E. Test Result of Transmitter Radiated Spurious Emission

30 MHz ~ 1 GHz

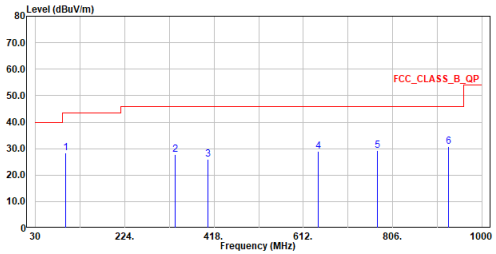
Site : HC-CB04
Condition : 3m Horizontal
Mode : LF_BLE_1M_TX_2480MHz
Test By : Scott



Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site : HC-CB04
Condition : 3m Vertical
Mode : LF_BLE_1M_TX_2480MHz
Test By : Scott

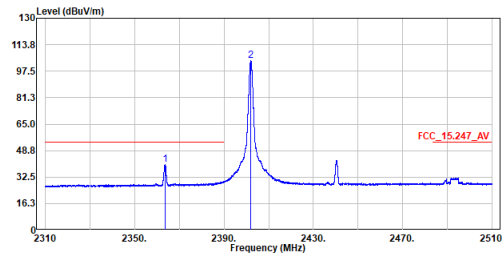


Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Above 1 GHz

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2402MHz_X-axis
Test By :Scott

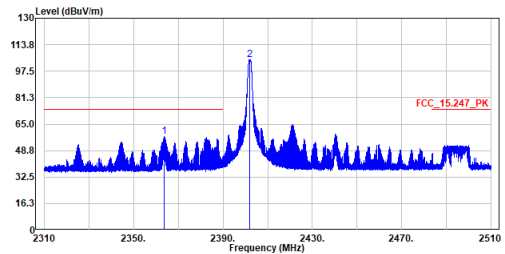


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	2363.650	40.34	54.00	-13.66	29.42	10.92	Average
2	2402.040	103.76	-----	-----	92.65	11.11	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2402MHz_X-axis
Test By :Scott

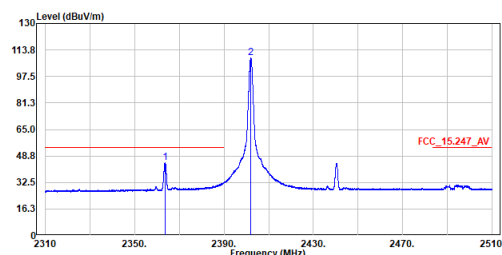


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	2363.630	57.33	74.00	-16.67	573.06	-515.73	Peak
2	2401.990	104.63	-----	-----	620.24	-515.61	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2402MHz_X-axis
Test By :Scott

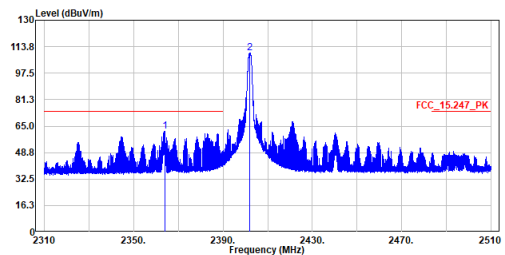


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	2363.610	44.82	54.00	-9.18	33.90	10.92	Average
2	2402.010	108.74	-----	-----	97.63	11.11	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2402MHz_X-axis
Test By :Scott

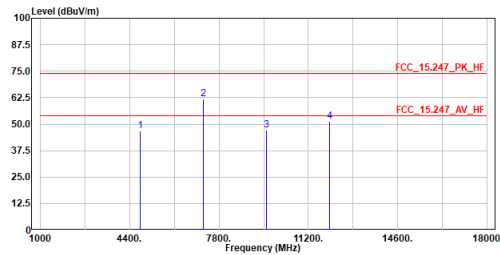


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	2363.890	61.82	74.00	-12.18	50.89	10.93	Peak
2	2401.790	109.68	-----	-----	98.57	11.11	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2402MHz
Test By :Scott

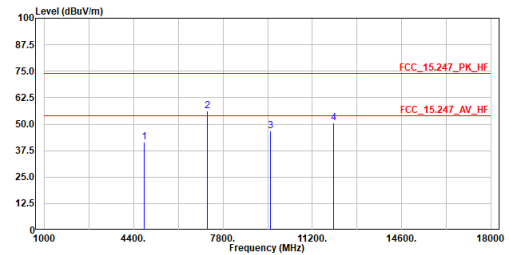


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4894.000	46.84	74.00	-27.16	64.67	-17.83	Peak
2	7296.000	61.75	74.00	-12.25	74.60	-12.85	Peak
3	9688.000	47.13	74.00	-26.87	56.33	-9.20	Peak
4	12010.000	51.19	74.00	-22.81	57.18	-5.99	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2402MHz
Test By :Scott

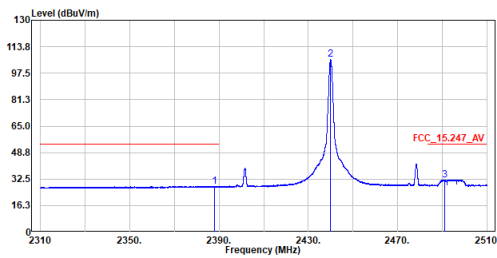


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4894.000	41.37	74.00	-32.63	59.20	-17.83	Peak
2	7296.000	56.06	74.00	-17.94	68.91	-12.85	Peak
3	9688.000	46.66	74.00	-27.34	55.86	-9.20	Peak
4	12010.000	50.55	74.00	-23.45	56.54	-5.99	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2440MHz_X-axis
Test By :Scott

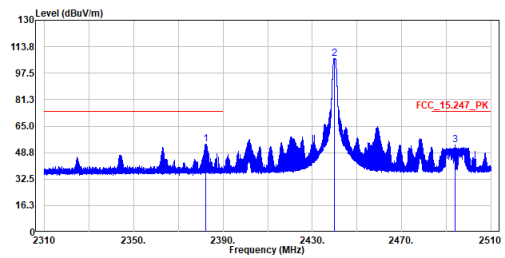


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2388.160	28.10	54.00	-25.90	17.05	11.05	Average
2	2440.010	105.83	-----	-----	94.54	11.29	Average
3	2491.150	32.08	54.00	-21.92	20.54	11.54	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2440MHz_X-axis
Test By :Scott

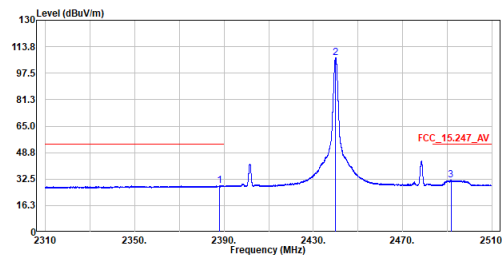


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2382.390	54.09	74.00	-19.91	43.36	10.73	Peak
2	2439.970	106.48	-----	-----	95.51	10.97	Peak
3	2494.030	53.25	74.00	-20.75	42.04	11.21	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2440MHz_X-axis
Test By :Scott

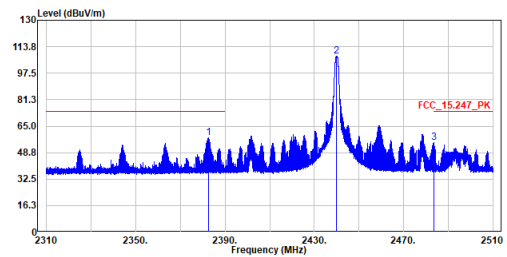


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2388.160	28.55	54.00	-25.45	17.50	11.05	Average
2	2439.960	107.06	-----	-----	95.77	11.29	Average
3	2491.640	31.68	54.00	-22.32	20.14	11.54	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2440MHz_X-axis
Test By :Scott

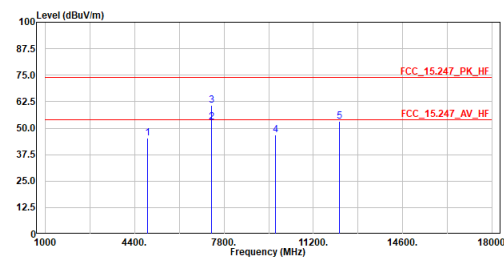


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2382.570	57.99	74.00	-16.01	47.26	10.73	Peak
2	2439.950	107.75	-----	-----	96.78	10.97	Peak
3	2483.610	54.88	74.00	-19.12	43.72	11.16	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2440MHz
Test By :Scott

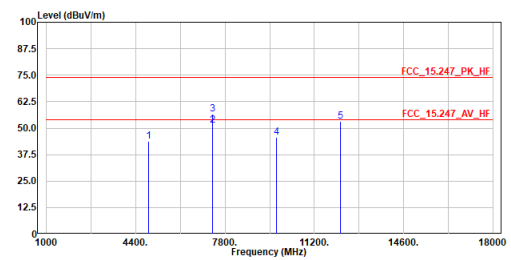


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4880.000	45.24	74.00	-28.76	62.83	-17.59	Peak
2	7320.000	52.94	54.00	-1.06	65.60	-12.66	Average
3	7320.000	60.72	74.00	-13.28	73.38	-12.66	Peak
4	9760.000	46.69	74.00	-27.31	55.72	-9.03	Peak
5	12200.000	53.23	74.00	-20.77	58.97	-5.74	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2440MHz
Test By :Scott

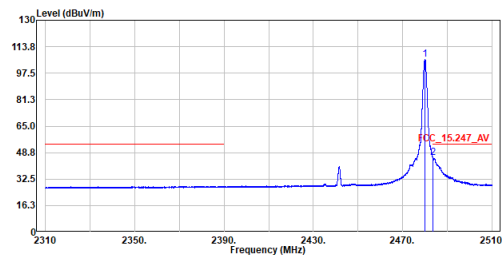


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4880.000	43.73	74.00	-30.27	61.32	-17.59	Peak
2	7320.000	51.33	54.00	-2.67	63.99	-12.66	Average
3	7320.000	56.64	74.00	-17.36	69.30	-12.66	Peak
4	9760.000	45.48	74.00	-28.52	54.51	-9.03	Peak
5	12200.000	53.15	74.00	-20.85	58.89	-5.74	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

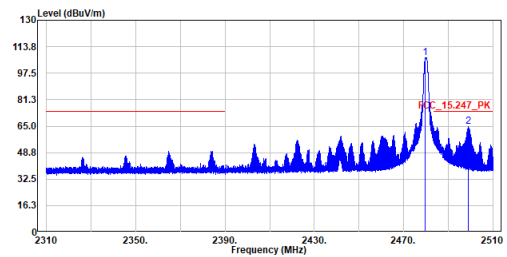
Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2480MHz_X-axis
Test By :Scott



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2480.010	105.93	-----	-----	94.44	11.49	Average
2	2483.500	45.86	54.00	-8.14	34.36	11.50	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

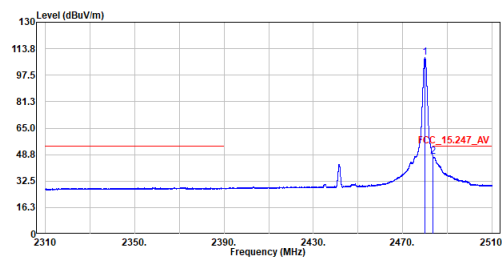
Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2480MHz_X-axis
Test By :Scott



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2479.750	106.87	-----	-----	95.38	11.49	Peak
2	2498.950	64.92	74.00	-9.08	53.33	11.59	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

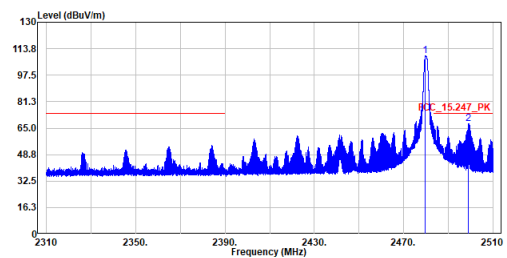
Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2480MHz_X-axis
Test By :Scott



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2480.000	108.25	-----	-----	96.76	11.49	Average
2	2483.500	47.78	54.00	-6.22	36.28	11.50	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

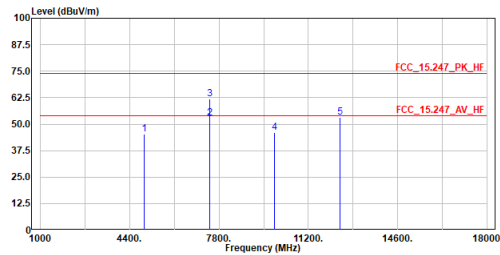
Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2480MHz_X-axis
Test By :Scott



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2479.760	109.19	-----	-----	97.70	11.49	Peak
2	2499.060	67.90	74.00	-6.10	56.31	11.59	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_1M_TX_2480MHz
Test By :Scott

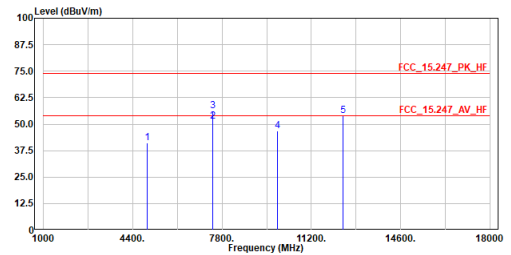


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4960.000	45.12	74.00	-28.88	62.46	-17.34	Peak
2	7440.000	52.98	54.00	-1.02	65.46	-12.48	Average
3	7440.000	62.04	74.00	-11.96	74.52	-12.48	Peak
4	9920.000	46.21	74.00	-27.79	55.06	-8.85	Peak
5	12400.000	53.07	74.00	-20.93	58.54	-5.47	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_1M_TX_2480MHz
Test By :Scott

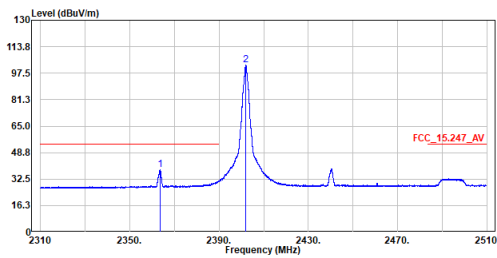


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4960.000	41.03	74.00	-32.97	58.37	-17.34	Peak
2	7440.000	51.14	54.00	-2.86	63.62	-12.48	Average
3	7440.000	56.26	74.00	-17.74	68.74	-12.48	Peak
4	9920.000	46.62	74.00	-27.38	55.47	-8.85	Peak
5	12400.000	53.85	74.00	-20.15	59.32	-5.47	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2480MHz_X-axis
Test By :Scott

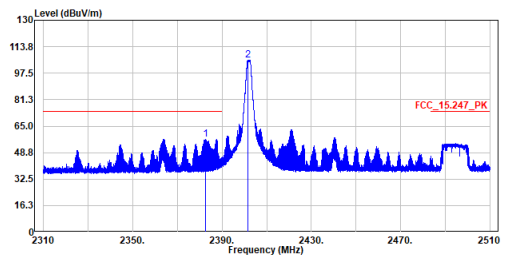


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2363.500	38.49	54.00	-15.51	27.57	10.92	Average
2	2402.000	102.65	-----	-----	91.54	11.11	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2480MHz_X-axis
Test By :Scott

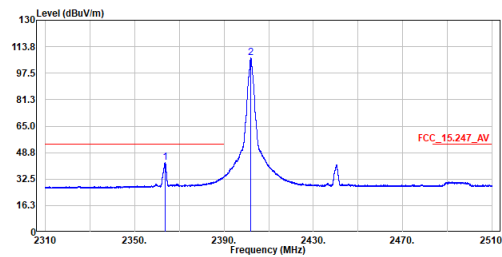


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2382.500	57.02	74.00	-16.98	46.00	11.02	Peak
2	2401.540	105.50	-----	-----	94.39	11.11	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2402MHz_X-axis
Test By :Scott

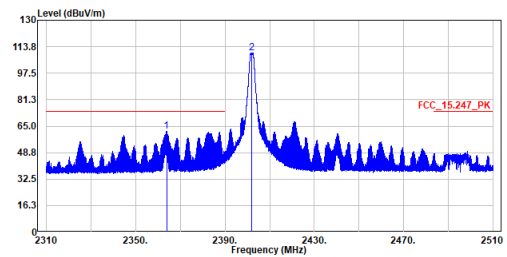


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2363.600	42.87	54.00	-11.13	31.95	10.92	Average
2	2401.970	106.83	-----	-----	95.72	11.11	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2402MHz_X-axis
Test By :Scott

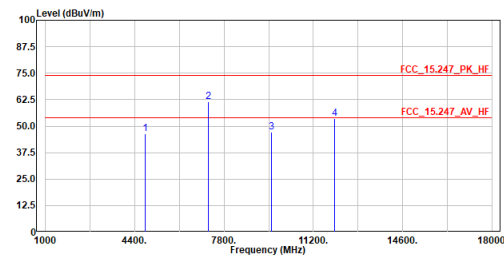


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2363.820	61.86	74.00	-12.14	50.94	10.92	Peak
2	2402.010	109.72	-----	-----	98.61	11.11	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2402MHz
Test By :Scott

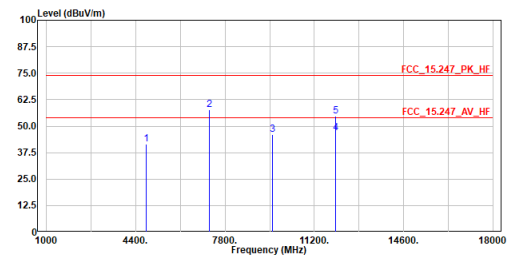


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4804.000	46.24	74.00	-27.76	64.07	-17.83	Peak
2	7206.000	61.41	74.00	-12.59	74.26	-12.85	Peak
3	9608.000	47.13	74.00	-26.87	56.33	-9.20	Peak
4	12010.000	53.63	74.00	-20.37	59.62	-5.99	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2402MHz
Test By :Scott

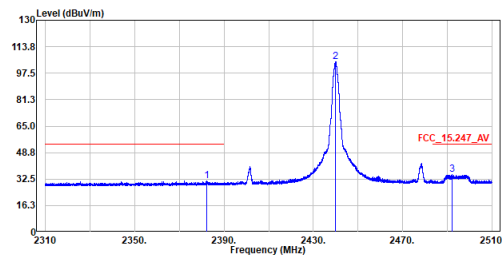


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4804.000	41.48	74.00	-32.52	59.31	-17.83	Peak
2	7206.000	57.86	74.00	-16.14	70.71	-12.85	Peak
3	9608.000	46.11	74.00	-27.89	55.31	-9.20	Peak
4	12010.000	46.88	54.00	-7.12	52.87	-5.99	Average
5	12010.000	54.65	74.00	-19.35	60.64	-5.99	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2440MHz_X-axis
Test By :Scott

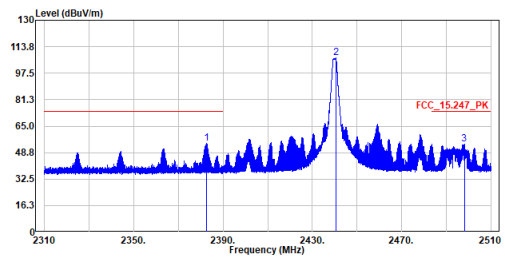


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2382.250	31.29	54.00	-22.71	20.27	11.02	Average
2	2440.040	104.72	-----	-----	93.43	11.29	Average
3	2492.310	35.50	54.00	-18.50	23.95	11.55	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2440MHz_X-axis
Test By :Scott

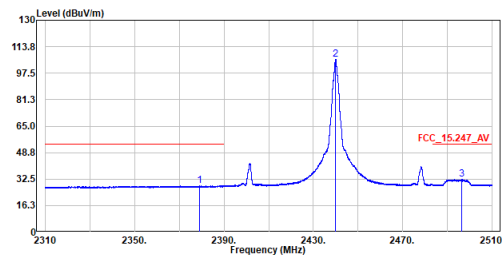


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2382.510	54.25	74.00	-19.75	43.23	11.02	Peak
2	2440.540	106.73	-----	-----	95.43	11.30	Peak
3	2498.070	53.80	74.00	-20.20	42.21	11.59	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2440MHz_X-axis
Test By :Scott

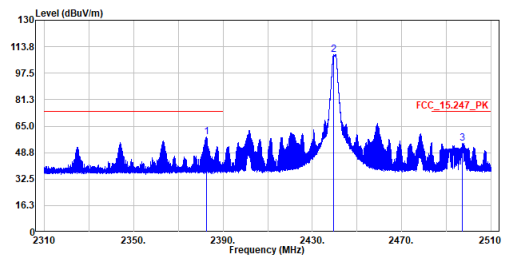


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2378.930	28.38	54.00	-25.62	17.38	11.00	Average
2	2440.000	105.90	-----	-----	94.61	11.29	Average
3	2496.630	32.30	54.00	-21.70	20.73	11.57	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2440MHz_X-axis
Test By :Scott

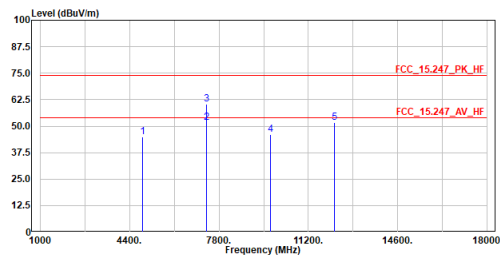


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2382.540	58.36	74.00	-15.64	47.34	11.02	Peak
2	2439.520	108.72	-----	-----	97.43	11.29	Peak
3	2497.320	54.56	74.00	-19.44	42.98	11.58	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2440MHz
Test By :Scott

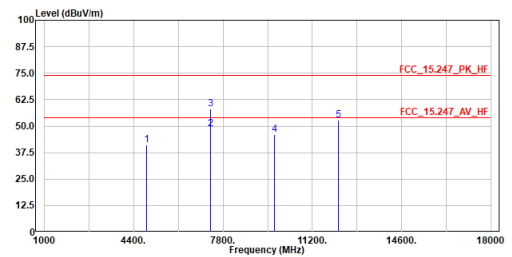


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4880.000	45.09	74.00	-28.91	62.68	-17.59	Peak
2	7320.000	51.72	54.00	-2.28	64.38	-12.66	Average
3	7320.000	60.51	74.00	-13.49	73.17	-12.66	Peak
4	9760.000	46.00	74.00	-28.00	55.03	-9.03	Peak
5	12200.000	51.87	74.00	-22.13	57.61	-5.74	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2440MHz
Test By :Scott

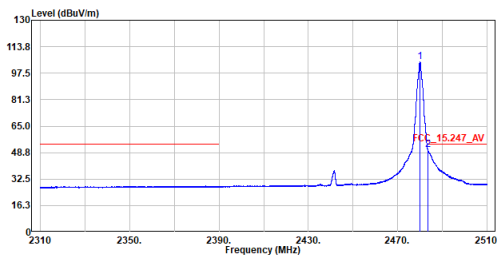


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4880.000	40.97	74.00	-33.03	58.56	-17.59	Peak
2	7320.000	48.78	54.00	-5.22	61.44	-12.66	Average
3	7320.000	58.01	74.00	-15.99	70.67	-12.66	Peak
4	9760.000	45.95	74.00	-28.05	54.98	-9.03	Peak
5	12200.000	53.00	74.00	-21.00	58.74	-5.74	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2480MHz_X-axis
Test By :Scott

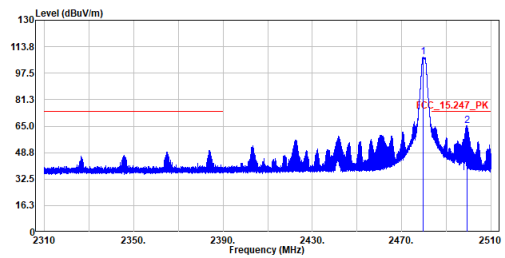


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2479.980	104.50	-----	-----	93.01	11.49	Average
2	2483.500	50.30	54.00	-3.70	38.80	11.50	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2480MHz_X-axis
Test By :Scott

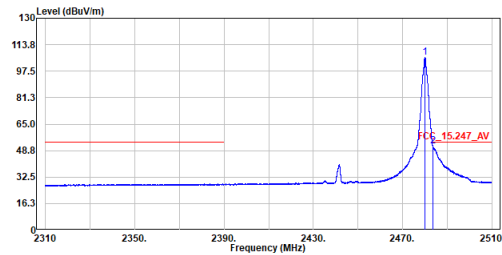


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2479.520	107.20	-----	-----	95.71	11.49	Peak
2	2499.160	65.41	74.00	-8.59	53.82	11.59	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2480MHz_X-axis
Test By :Scott

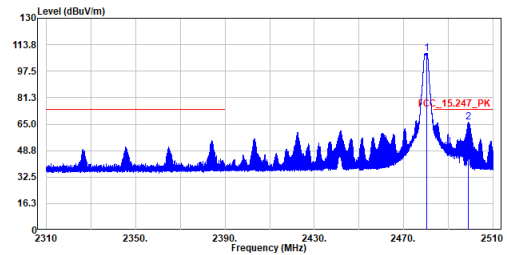


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2480.030	105.87	-----	-----	94.38	11.49	Average
2	2483.500	51.54	54.00	-2.46	40.04	11.50	Average

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2480MHz_X-axis
Test By :Scott

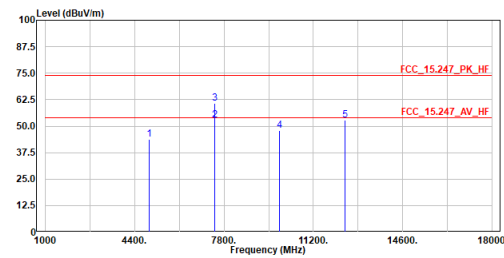


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2480.480	100.36	-----	-----	97.21	11.15	Peak
2	2499.140	66.07	74.00	-7.93	54.83	11.24	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Horizontal
Mode :BLE_2M_TX_2480MHz
Test By :Scott

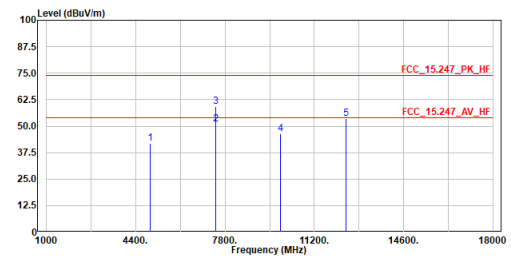


No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4960.000	43.80	74.00	-30.20	61.14	-17.34	Peak
2	7440.000	52.81	54.00	-1.19	65.29	-12.48	Average
3	7440.000	60.67	74.00	-13.33	73.15	-12.48	Peak
4	9920.000	48.10	74.00	-25.90	56.95	-8.85	Peak
5	12400.000	52.66	74.00	-21.34	58.13	-5.47	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :BLE_2M_TX_2480MHz
Test By :Scott



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4960.000	41.94	74.00	-32.06	59.28	-17.34	Peak
2	7440.000	50.86	54.00	-3.14	63.34	-12.48	Average
3	7440.000	59.30	74.00	-14.70	71.78	-12.48	Peak
4	9920.000	46.52	74.00	-27.48	55.37	-8.85	Peak
5	12400.000	53.66	74.00	-20.34	59.13	-5.47	Peak

Note:

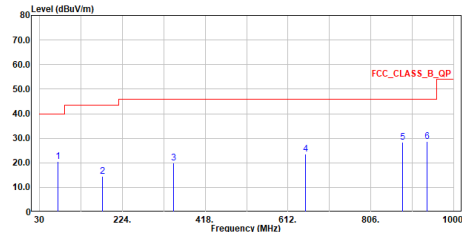
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Appendix F. Test Result of Radiated Emissions Co-location

1. Bluetooth LE + GSM function

30 MHz ~ 1 GHz:

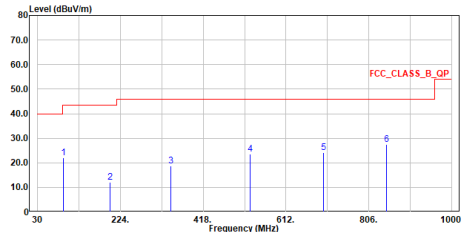
Site :HC-CB04
Condition :3m ,Horizontal
Mode :LF_Colocation_BLE_1M+GSM_850
Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	72.680	20.53	40.00	-19.47	25.61	-5.08	QP
2	178.119	14.35	43.50	-29.15	18.82	-4.47	QP
3	343.310	19.95	46.00	-26.05	21.65	-1.70	QP
4	653.807	23.49	46.00	-22.51	18.08	5.41	QP
5	880.011	28.27	46.00	-17.73	20.07	8.20	QP
6	938.599	28.76	46.00	-17.24	19.62	9.14	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :LF_Colocation_BLE_1M+GSM_850
Test By :Cyril

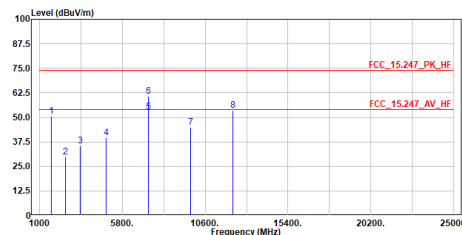


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	90.237	22.16	43.50	-21.34	31.05	-8.89	QP
2	200.429	12.07	43.50	-31.43	18.70	-6.63	QP
3	342.146	18.66	46.00	-27.34	20.37	-1.71	QP
4	527.319	23.53	46.00	-22.47	20.76	2.77	QP
5	699.494	24.09	46.00	-21.91	18.18	5.91	QP
6	847.128	27.39	46.00	-18.61	19.49	7.90	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Above 1 GHz:

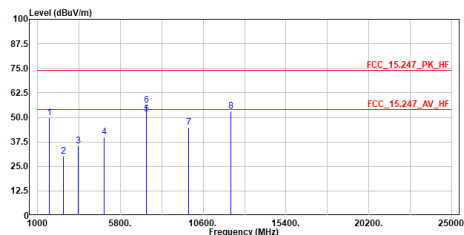
Site :HC-CB04
Condition :3m ,Horizontal
Mode :Colocation_BLE_1M+GSM_850
Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	1673.200	50.59	74.00	-23.41	76.73	-26.14	Peak
2	2509.000	29.73	74.00	-44.27	53.48	-23.75	Peak
3	3346.400	35.31	74.00	-38.69	57.18	-21.87	Peak
4	4880.000	39.49	74.00	-34.51	57.08	-17.59	Peak
5	7320.000	52.76	54.00	-1.24	65.42	-12.66	Average
6	7320.000	60.71	74.00	-13.29	73.37	-12.66	Peak
7	9760.000	44.72	74.00	-29.28	53.75	-9.03	Peak
8	12200.000	53.57	74.00	-20.43	59.31	-5.74	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :Colocation_BLE_1M+GSM_850
Test By :Cyril



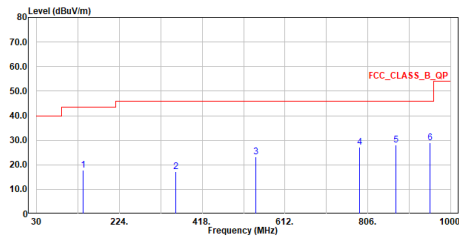
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	1673.200	49.76	74.00	-24.24	75.90	-26.14	Peak
2	2509.000	30.25	74.00	-43.75	54.00	-23.75	Peak
3	3346.400	35.34	74.00	-38.66	57.21	-21.87	Peak
4	4880.000	39.82	74.00	-34.18	57.41	-17.59	Peak
5	7320.000	51.68	54.00	-2.32	64.34	-12.66	Average
6	7320.000	56.28	74.00	-17.72	68.94	-12.66	Peak
7	9760.000	44.98	74.00	-29.02	54.01	-9.03	Peak
8	12200.000	53.32	74.00	-20.68	59.06	-5.74	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

2. Bluetooth LE + WCDMA function

30 MHz ~ 1 GHz:

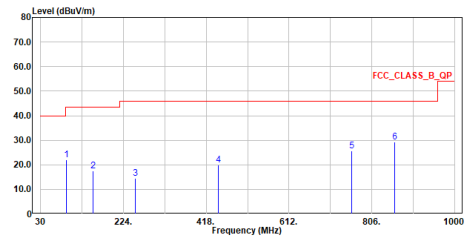
Site :HC-CB04
Condition :3m ,Horizontal
Mode :LF_Colocation_BLE_1M+WCDMA_B5
Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	138.349	17.78	43.50	-25.72	21.55	-3.77	QP
2	356.211	17.33	46.00	-28.67	18.77	-1.44	QP
3	543.712	23.34	46.00	-22.66	28.33	3.01	QP
4	786.212	27.27	46.00	-18.73	28.04	7.23	QP
5	871.766	28.00	46.00	-18.00	19.82	8.18	QP
6	951.403	28.86	46.00	-17.14	19.55	9.31	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :LF_Colocation_BLE_1M+WCDMA_B5
Test By :Cyril

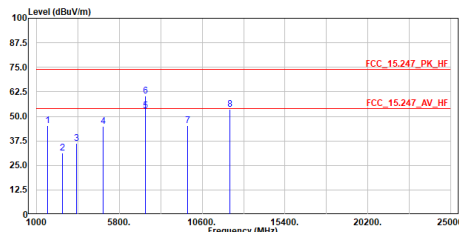


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	90.237	22.16	43.50	-21.34	31.05	-8.89	QP
2	153.578	17.47	43.50	-26.03	20.71	-3.24	QP
3	251.936	14.36	46.00	-31.64	18.76	-4.40	QP
4	446.421	20.07	46.00	-25.93	18.88	1.19	QP
5	759.246	25.61	46.00	-20.39	18.49	7.12	QP
6	860.029	29.21	46.00	-16.79	21.17	8.04	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Above 1 GHz:

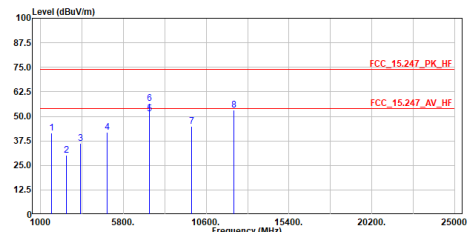
Site :HC-CB04
Condition :3m ,Horizontal
Mode :Colocation_BLE_1M+WCDMA_B5
Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1652.000	45.31	74.00	-28.69	71.52	-26.21	Peak
2	2479.200	31.29	74.00	-42.71	55.12	-23.83	Peak
3	3305.600	36.40	74.00	-37.60	58.33	-21.93	Peak
4	4880.000	45.03	74.00	-28.97	62.62	-17.59	Peak
5	7320.000	52.87	54.00	-1.13	65.53	-12.66	Average
6	7320.000	60.38	74.00	-13.62	73.04	-12.66	Peak
7	9760.000	45.45	74.00	-28.55	54.48	-9.03	Peak
8	12280.000	53.45	74.00	-20.55	59.19	-5.74	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :Colocation_BLE_1M+WCDMA_B5
Test By :Cyril



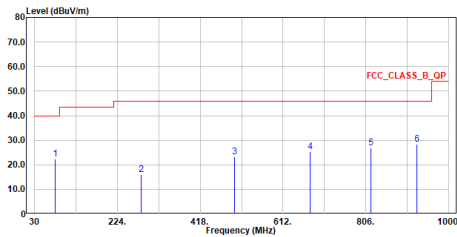
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1652.000	41.64	74.00	-32.36	67.85	-26.21	Peak
2	2479.200	30.33	74.00	-43.67	54.16	-23.83	Peak
3	3305.600	36.31	74.00	-37.69	58.24	-21.93	Peak
4	4880.000	42.07	74.00	-31.93	59.66	-17.59	Peak
5	7320.000	51.47	54.00	-2.53	64.13	-12.66	Average
6	7320.000	56.69	74.00	-17.31	69.35	-12.66	Peak
7	9760.000	44.73	74.00	-29.27	53.76	-9.03	Peak
8	12280.000	53.03	74.00	-20.97	58.77	-5.74	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

3. Bluetooth LE + LTE function

30 MHz ~ 1 GHz:

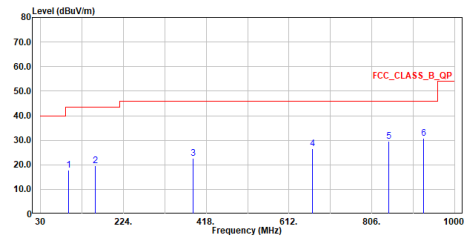
Site :HC-CB04
Condition :3m ,Horizontal
Mode :LF_Colocation_BLE_1M+LTE_B7
Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	78.597	22.38	40.00	-17.62	29.20	-6.82	QP
2	280.066	16.07	46.00	-29.93	19.07	-3.00	QP
3	498.025	23.34	46.00	-22.66	21.18	2.16	QP
4	676.117	25.26	46.00	-20.74	19.82	5.44	QP
5	817.834	26.84	46.00	-19.16	19.28	7.56	QP
6	925.698	28.49	46.00	-17.51	19.56	8.93	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :LF_Colocation_BLE_1M+LTE_B7
Test By :Cyril

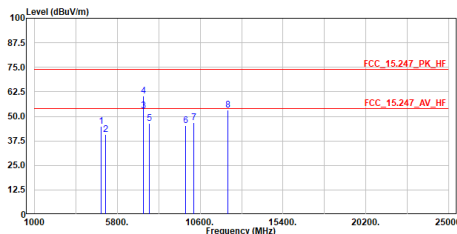


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	96.154	17.91	43.50	-25.59	26.31	-8.40	QP
2	158.719	19.66	43.50	-23.84	22.83	-3.17	QP
3	387.639	22.74	46.00	-23.26	23.24	-0.50	QP
4	667.387	26.66	46.00	-19.34	21.27	5.39	QP
5	846.158	29.68	46.00	-16.32	21.79	7.89	QP
6	927.832	30.85	46.00	-15.15	21.90	8.95	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Above 1 GHz:

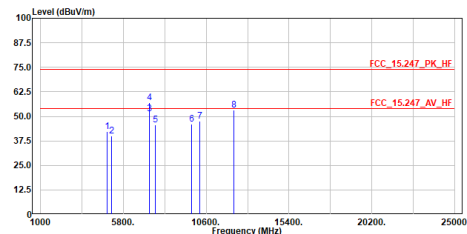
Site :HC-CB04
Condition :3m ,Horizontal
Mode :Colocation_BLE_1M+LTE_B7
Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4880.000	45.06	74.00	-28.94	62.65	-17.59	Peak
2	5110.000	40.58	74.00	-33.42	57.82	-17.24	Peak
3	7320.000	52.75	54.00	-1.25	65.41	-12.66	Average
4	7320.000	60.29	74.00	-13.71	72.95	-12.66	Peak
5	7665.000	46.56	74.00	-27.44	58.88	-12.32	Peak
6	9760.000	45.34	74.00	-28.66	54.37	-9.03	Peak
7	10220.000	46.82	74.00	-27.18	55.25	-8.43	Peak
8	12280.000	53.20	74.00	-20.80	58.94	-5.74	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB04
Condition :3m ,Vertical
Mode :Colocation_BLE_1M+LTE_B7
Test By :Cyril



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4880.000	42.18	74.00	-31.82	59.77	-17.59	Peak
2	5110.000	39.94	74.00	-34.06	57.18	-17.24	Peak
3	7320.000	51.25	54.00	-2.75	63.91	-12.66	Average
4	7320.000	56.86	74.00	-17.14	69.52	-12.66	Peak
5	7665.000	45.73	74.00	-28.27	58.05	-12.32	Peak
6	9760.000	46.07	74.00	-27.93	55.10	-9.03	Peak
7	10220.000	47.41	74.00	-26.59	55.84	-8.43	Peak
8	12280.000	53.06	74.00	-20.94	58.80	-5.74	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.