



Test Report No:
2570523R-RFNAV02S-J

TEST REPORT FCC Rules&Regulations

Product Name	Telematics Platform 2
Brand Name	PCI, LHP Telematics
Model No.	PCI-TP2
FCC ID	LY5-PCITP2V2
Applicant's Name / Address	PCI Private Limited 35 Pioneer Road North Singapore 628475 Singapore
Manufacturer's Name / Address (1)	PCI Private Limited 35 Pioneer Road North Singapore 628475 Singapore
Manufacturer's Name / Address (2)	LHP Telematics, LLC 17406 Tiller Court, Suite 100 Westfield, Indiana 46074, United States
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	<i>Jennie She</i> Jennie She
Approved By	<i>Allen Lin</i> Allen Lin
Date of Receipt	Aug. 05, 2024
Date of Issue	Aug. 27, 2025
Report Version	V1.0

INDEX

	page
Competences and Guarantees.....	4
General Conditions.....	4
Revision History.....	5
Permissive Change.....	6
Summary of Test Result.....	7
Comments and Remarks.....	7
1. General Information.....	8
1.1. EUT Description.....	8
1.2. EUT Information.....	8
1.3. Testing Applied Standards.....	9
1.4. Testing Location Information.....	9
1.5. Measurement Uncertainty.....	10
1.6. List of Test Equipment.....	10
2. Test Configuration of EUT.....	12
2.1. Test Condition.....	12
2.2. Test Frequency Mode.....	12
2.3. Duty Cycle.....	13
2.4. The Worst Case Measurement Configuration.....	14
2.5. Tested System Details.....	15
2.6. Configuration of Tested System.....	15
3. Occupied Bandwidth & DTS Bandwidth.....	16
3.1. Test Setup.....	16
3.2. Test Limit.....	16
3.3. Test Procedures.....	16
3.4. Test Result of Occupied Bandwidth & DTS Bandwidth.....	16
4. Maximum Conducted Output Power.....	17
4.1. Test Setup.....	17
4.2. Test Limit.....	17
4.3. Test Procedures.....	17
4.4. Test Result of Maximum Conducted Output Power.....	17
5. Maximum Power Spectral Density.....	18
5.1. Test Setup.....	18
5.2. Test Limit.....	18
5.3. Test Procedures.....	18
5.4. Test Result of Maximum Power Spectral Density.....	18
6. Antenna Port Conducted Emission.....	19

6.1.	Test Setup	19
6.2.	Test Limit	19
6.3.	Test Procedure	19
6.4.	Test Result of Antenna Port Conducted Emission	19
7.	Transmitter Radiated Spurious Emission	20
7.1.	Test Setup	20
7.2.	Test Limit	21
7.3.	Test Procedure	21
7.4.	Test Result of Transmitter Radiated Spurious Emission	21
Appendix A. Test Result of Occupied Bandwidth & DTS Bandwidth		
Appendix B. Test Result of Maximum Conducted Output Power		
Appendix C. Test Result of Maximum Power Spectral Density		
Appendix D. Test Result of Antenna Port Conducted Emission		
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	Aug. 27, 2025

Permissive Change

Report No.	Version	Description	Issued Date
2480097R-RFUSV01S-C	V1.0	Original application.	Oct. 18, 2024
2570523R-RFNAV02S-J	V1.0	<u>Class I Permissive Change:</u> 1. Add the Brand Name "LHP Telematics". 2. Add a new manufacturer "LHP Telematics, LLC". After evaluation, it is not necessary to re-test and all test data was from original report.	Aug. 27, 2025

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.

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)
1	Green Antenna	GADWIFI-DP01	FPC	2.96

1.2. EUT Information

EUT Power Type	From DC power supply			
EUT Function	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	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

1.4. Testing Location Information

Testing Location Information		
Test Laboratory : DEKRA Testing and Certification Co., Ltd.		
1 (TAF: 3024)	ADD: No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. TEL: +886-3-582-8001 FAX: +886-3-582-8958 Test site Designation No. TW3024 with FCC. Conformity Assessment Body Identifier (CABID) TW3024 with ISED.	
2 (TAF: 3024)	ADD: No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. TEL: +886-3-582-8001 FAX: +886-3-582-8958 Test site Designation No. TW3024 with FCC. Conformity Assessment Body Identifier (CABID) TW3024 with ISED.	
Test site number for address 1 includes HC-SR02 and HC-CB10. 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	21.5~25.5 / 55~61	2024/08/10~2024/08/16
Radiated Emission	HC-CB04	Ling Chen Cyril Chen	20~25 / 60~65	2024/08/09~2024/08/16
Radiated Emissions Co-location	HC-CB02	Scott Chang Gary Liao	22~25 / 51~58.5	2024/08/12~2024/08/16

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	2023/10/25	2024/10/24
Pulse Power Sensor	Anritsu	MA2411B	1531043	0.3-40 GHz	2023/10/25	2024/10/24
Signal & Spectrum Analyzer	R&S	FSV40	101869	10Hz-40GHz	2024/06/20	2025/06/19

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	2024/05/17	2025/05/16
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	1209	30 MHz-2 GHz	2024/06/11	2025/06/10
Double Ridged Horn Antenna	RF SPIN	DRH18-E	211212A18EN	1G-18GHz	2023/11/17	2024/11/16
Horn Antenna	Schwarzbeck	BBHA 9170	203	18G-40GHz	2024/02/02	2025/02/01
Pre-Amplifier	EMCI	EMC01820I	980364	30M-8 GHz,20 dB	2024/06/04	2025/06/03
Pre-Amplifier	EMEC	EM01G18GA	060835	1-18 GHz,50 dB	2024/07/16	2025/07/15
Pre-Amplifier	DEKRA	AP-400C	201801231	18G-40 GHz,48 dB	2023/10/03	2024/10/02
EMI Test Receiver	R&S	ESR7	102260	10 Hz-7 GHz	2023/11/27	2024/11/26
Magnetic Loop Antenna	Teseq	HLA 6121	44287	0.01-30 MHz	2023/10/13	2024/10/12
Coaxial Cable(11m)	Suhner	SF102_SF104	HC-CB04	30M-18 GHz	2023/08/08	2024/08/07
Coaxial Cable(11m)	Suhner	SF102_SF104	HC-CB04	30M-18 GHz	2024/08/07	2025/08/06
Coaxial Cable(3m)	Suhner,Rosnol	SF102_UP0264	HC-CB04-1	18G-40 GHz	2023/08/14	2024/08/13
Coaxial Cable(3m)	Suhner,Rosnol	SF102_UP0264	HC-CB04-1	18G-40 GHz	2024/08/13	2025/08/12
Radiated Software	Audix	e3 V9	HC-CB04_1	N/A	N/A	N/A

HC-CB02

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	10 Hz-40 GHz	2023/10/03	2024/10/02
EXA Signal Analyzer	Keysight	N9010A	MY51440132	10 Hz-44 GHz	2023/12/11	2024/12/10
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	1272	30 MHz-2 GHz	2024/04/29	2025/04/28
Horn Antenna	Schwarzbeck	BBHA 9170	203	18G-40GHz	2024/02/02	2025/02/01
Pre-Amplifier	EMCI	EMC01820I	980365	30M-8 GHz,20 dB	2024/04/02	2025/04/01
Pre-Amplifier	EMEC	EM01G18GA	060741	1G-18 GHz,50 dB	2024/04/23	2025/04/22
Pre-Amplifier	DEKRA	AP-400C	201801231	18G-40 GHz,48 dB	2023/10/03	2024/10/02
Radio Communication Tester	Anritsu	MT8821C	6261915489	LTE & Cat.M1 & NB-IOT	2023/10/30	2024/10/29
Coaxial Cable(13m)	Suhner	SF104	HC-CB02	30M-18 GHz	2024/08/07	2025/08/06
Coaxial Cable(3m)	Suhner,Rosnol	SF102_UP0264	HC-CB02-1	18G-40 GHz 3 m	2023/08/14	2024/08/13
Coaxial Cable(3m)	Suhner,Rosnol	SF102_UP0264	HC-CB02-1	18G-40 GHz 3 m	2024/08/13	2025/08/12
Radiated Software	Audix	e3 V9	HC-CB02_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 12V

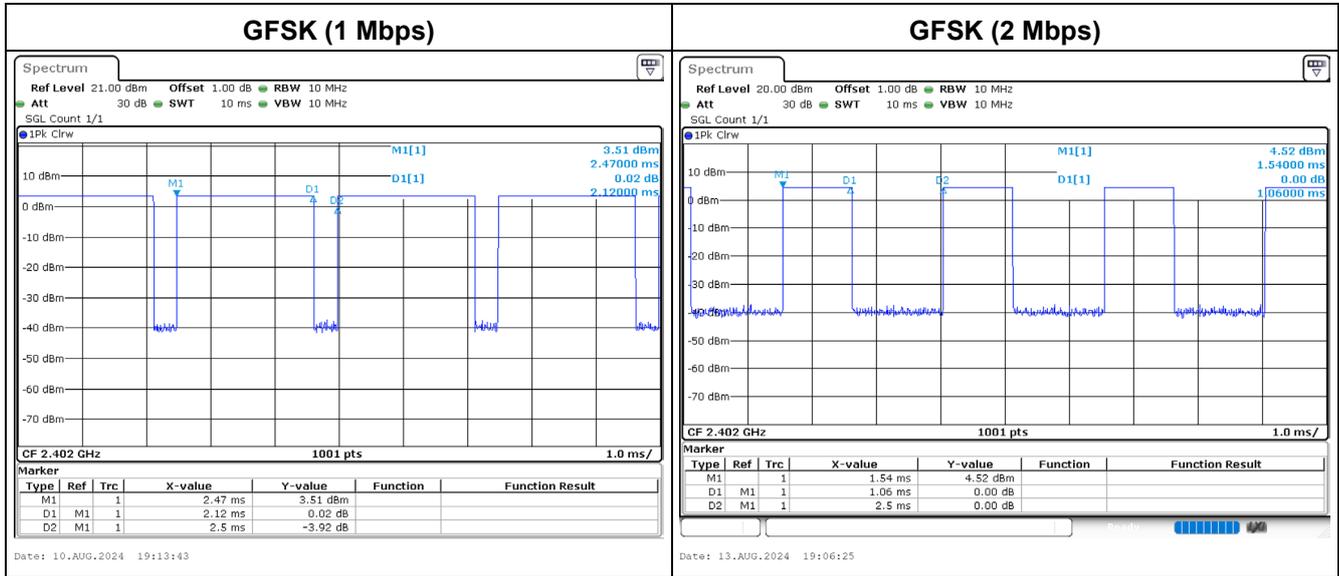
2.2. Test Frequency Mode

Test Software	DutApiSisoACDualf
---------------	-------------------

Modulation	Frequency (MHz)	Power Setting
GFSK (1 Mbps)	2402	Default
	2440	Default
	2480	Default
GFSK (2 Mbps)	2402	Default
	2440	Default
	2480	Default

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)	2.120	2.500	84.80	0.72	0.472
GFSK (2 Mbps)	1.060	2.500	42.40	3.73	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 radiated spurious emission test. The worst case was found at Z 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	WWAN LTE + WiFi 2.4 GHz
2	WWAN LTE + WiFi 5 GHz
3	WWAN LTE + Bluetooth
Refer to Appendix F for Radiated Emission Co-location.	

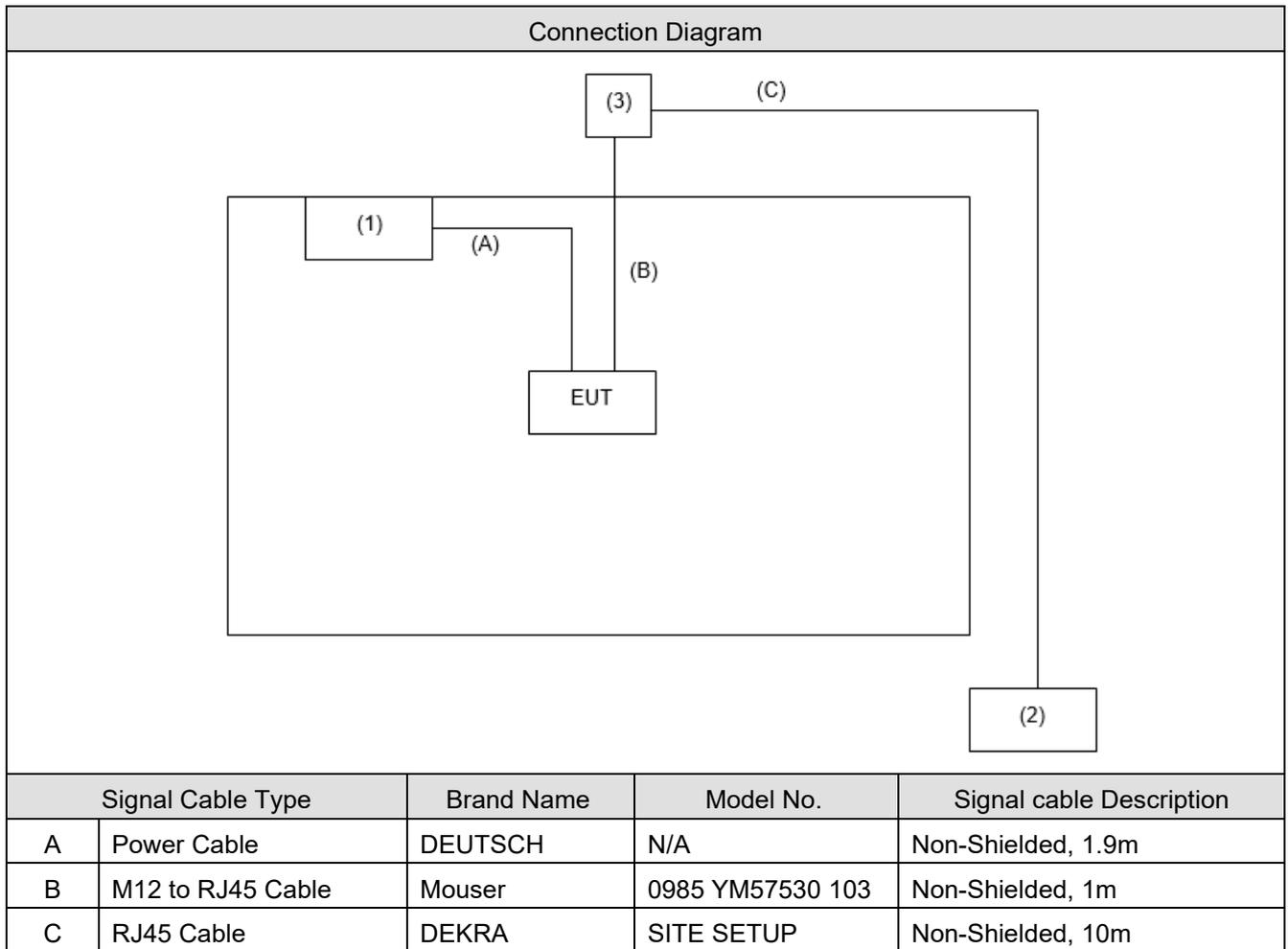
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	Transmit
1	WWAN LTE + WiFi 2.4 GHz
2	WWAN LTE + WiFi 5 GHz
3	WWAN LTE + Bluetooth
Refer to DEKRA Test Report No.: 2570523R-RFNAV02S-M for Co-location RF Exposure Evaluation.	

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

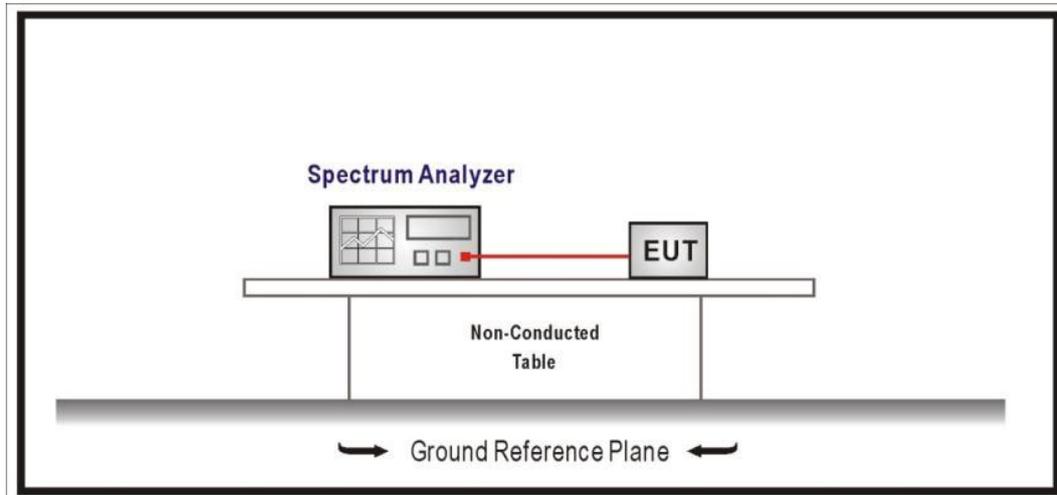
No.	Equipment	Brand Name	Model No.	Serial No.
1	DC Power supply	Topward	6303D	809497
2	Notebook	Lenovo	80T7	PF0MEEB0
3	Network cable connector	DEKRA	Z7	N/A

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

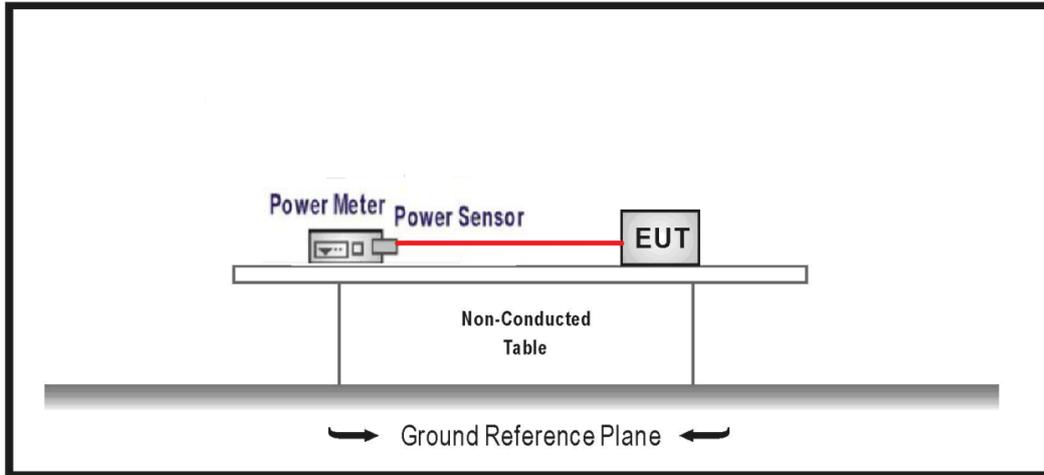
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

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

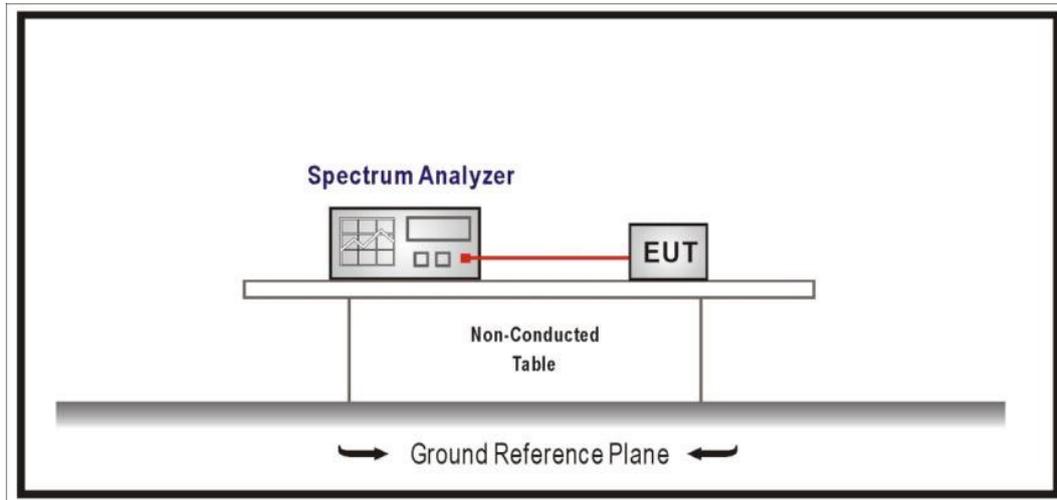
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

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

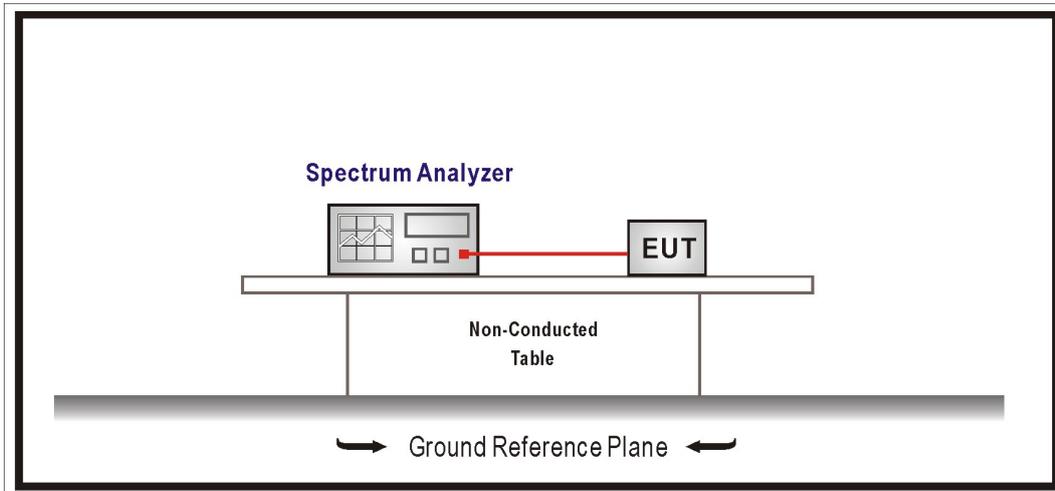
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

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.

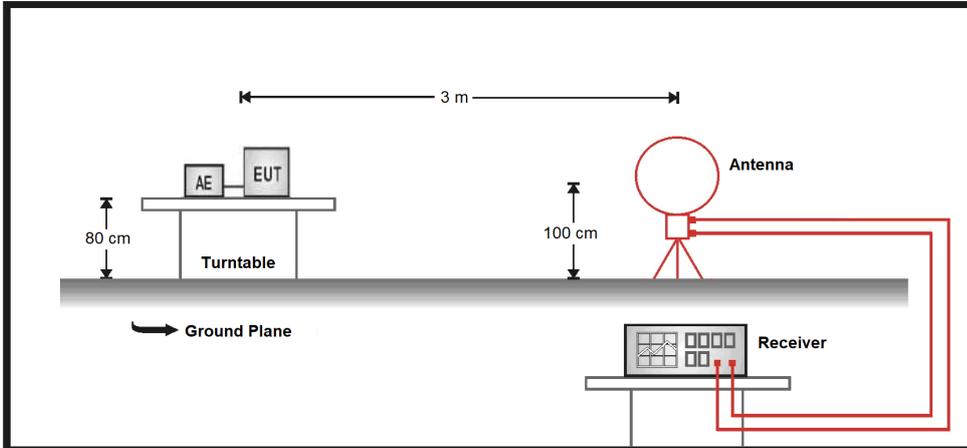
6.4. Test Result of Antenna Port Conducted Emission

Refer as Appendix D

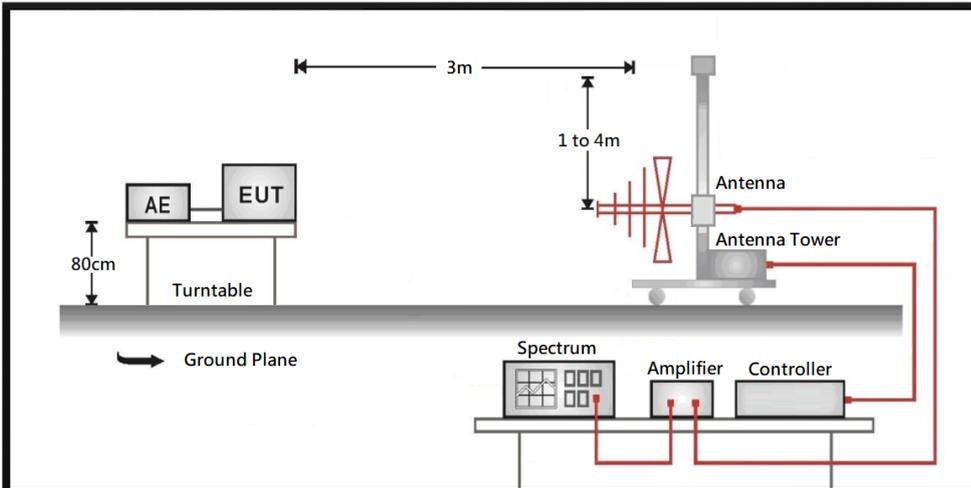
7. Transmitter Radiated Spurious Emission

7.1. Test Setup

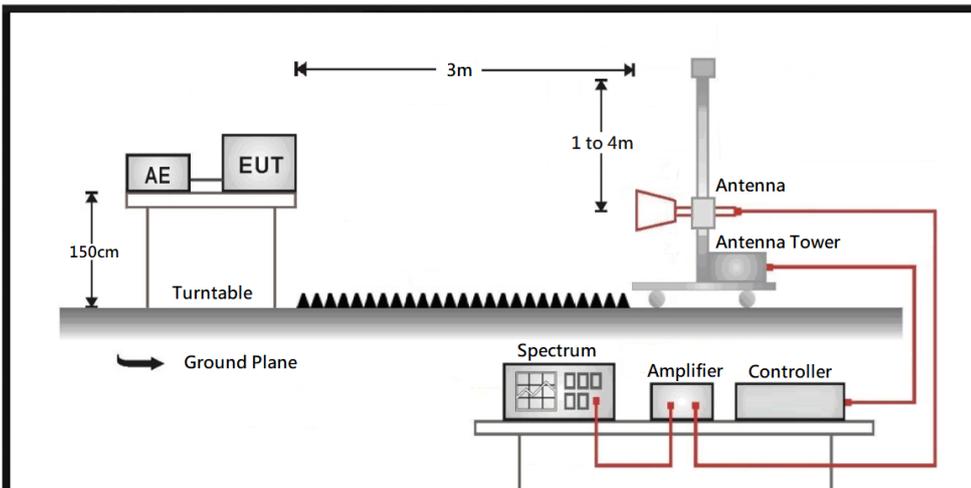
9 kHz ~ 30 MHz



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.

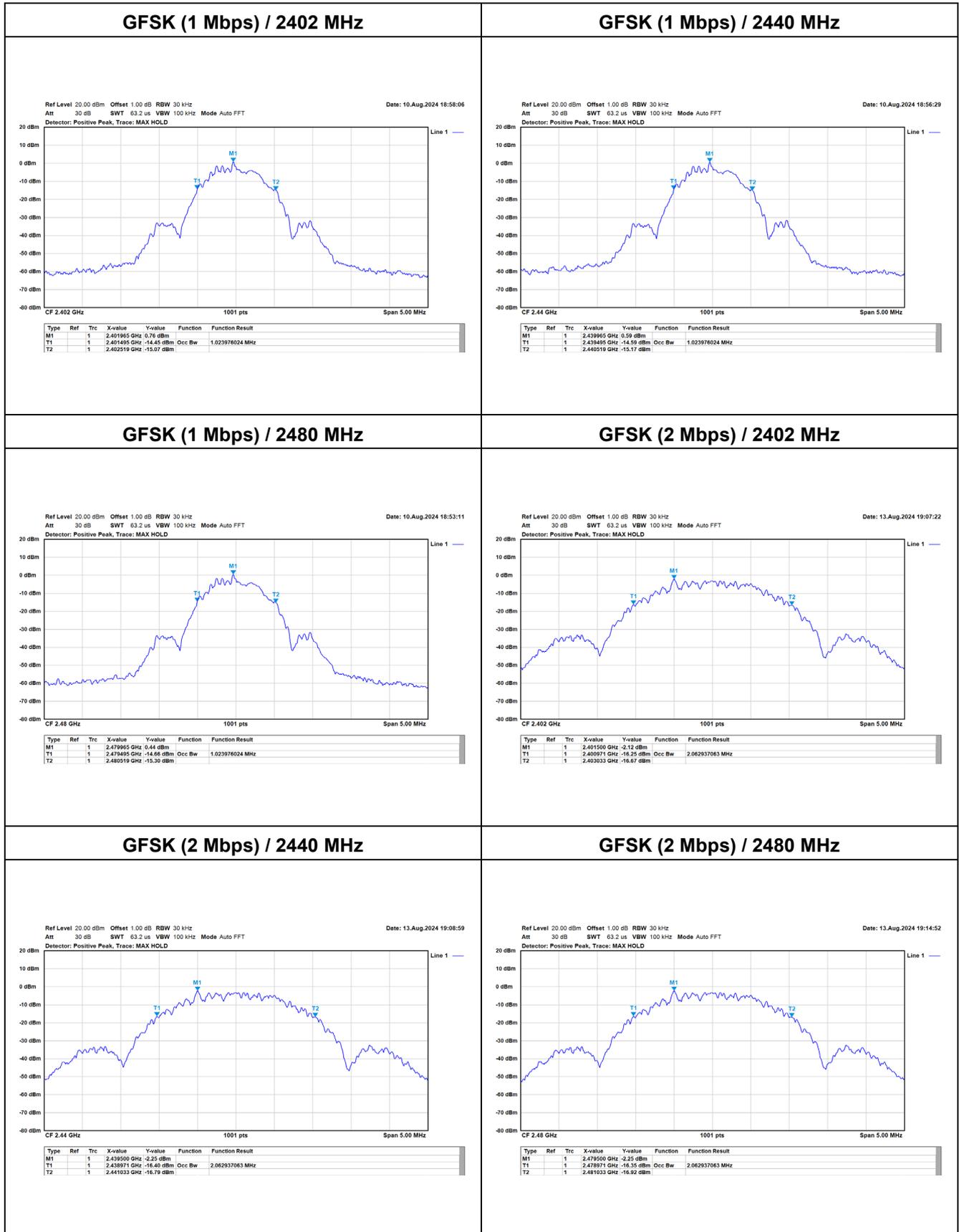
The bandwidth below 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1 MHz.

7.4. Test Result of Transmitter Radiated Spurious Emission

Refer as Appendix E

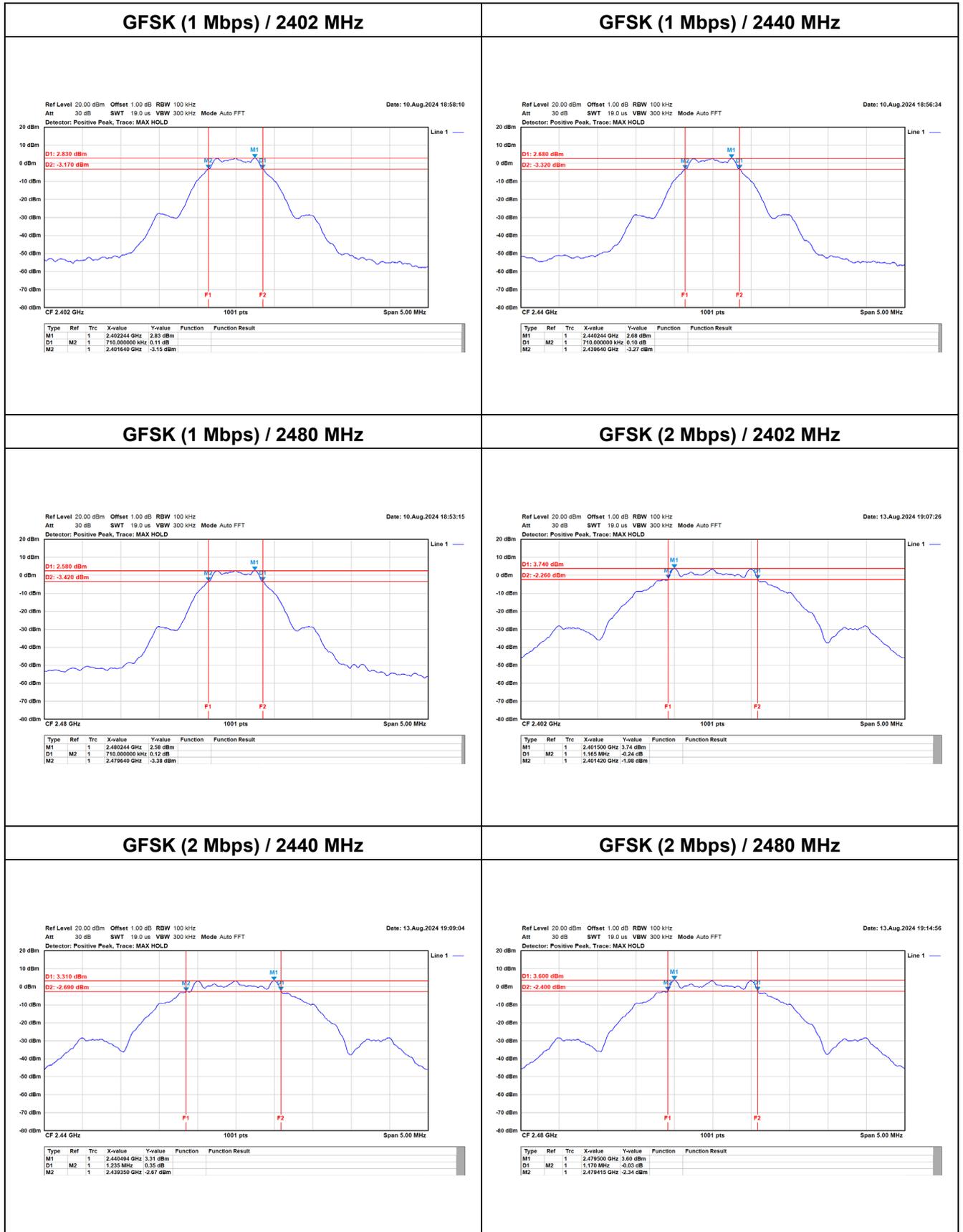
Appendix A.1 Test Result of Occupied Bandwidth

Modulation	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
GFSK (1 Mbps)	2402	1.02	-
	2440	1.02	-
	2480	1.02	-
GFSK (2 Mbps)	2402	2.06	-
	2440	2.06	-
	2480	2.06	-



Appendix A.2 Test Result of DTS Bandwidth

Modulation	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
GFSK (1 Mbps)	2402	0.71	0.50	Pass
	2440	0.71	0.50	Pass
	2480	0.71	0.50	Pass
GFSK (2 Mbps)	2402	1.17	0.50	Pass
	2440	1.24	0.50	Pass
	2480	1.17	0.50	Pass

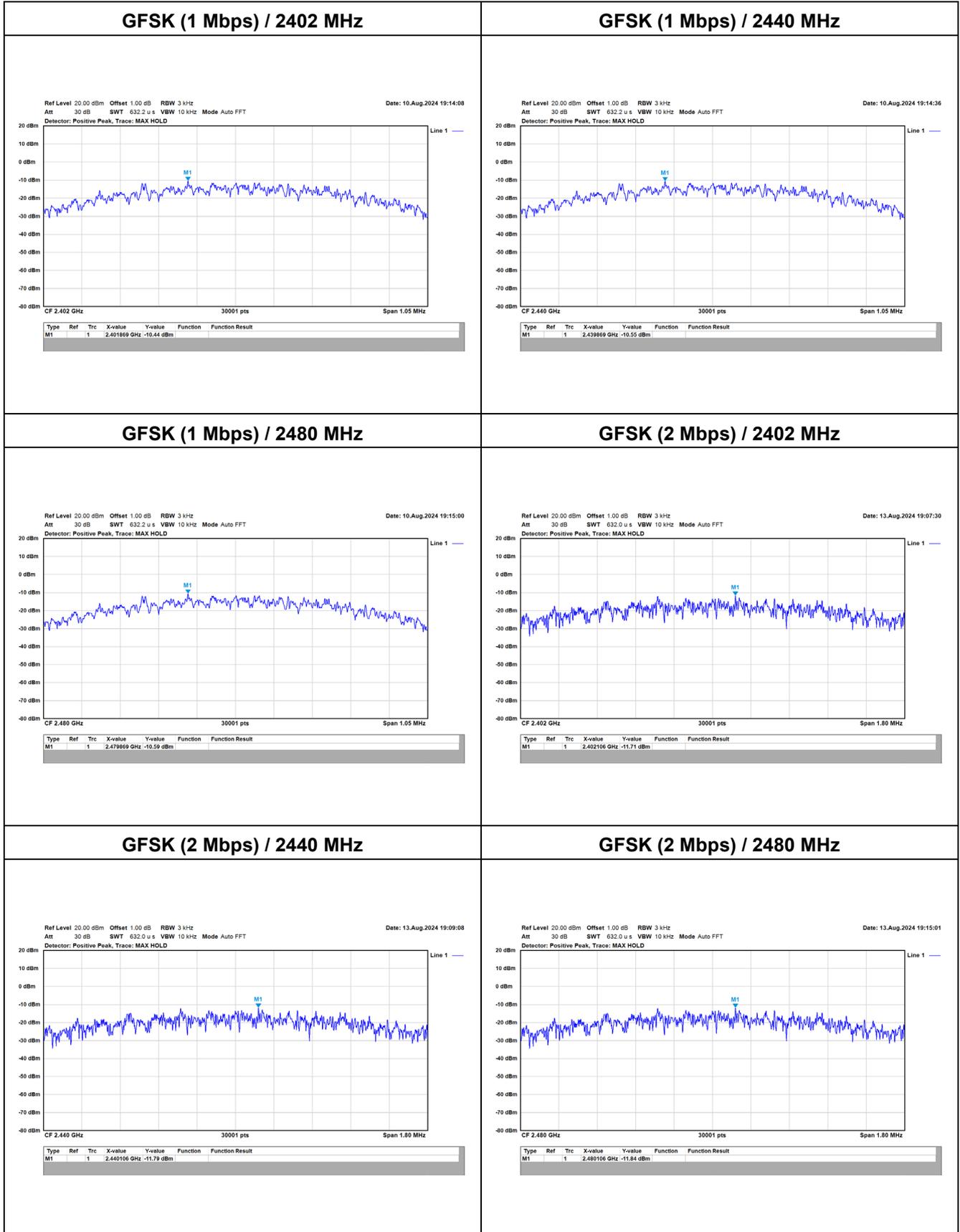


Appendix B. Test Result of Maximum Conducted Output Power

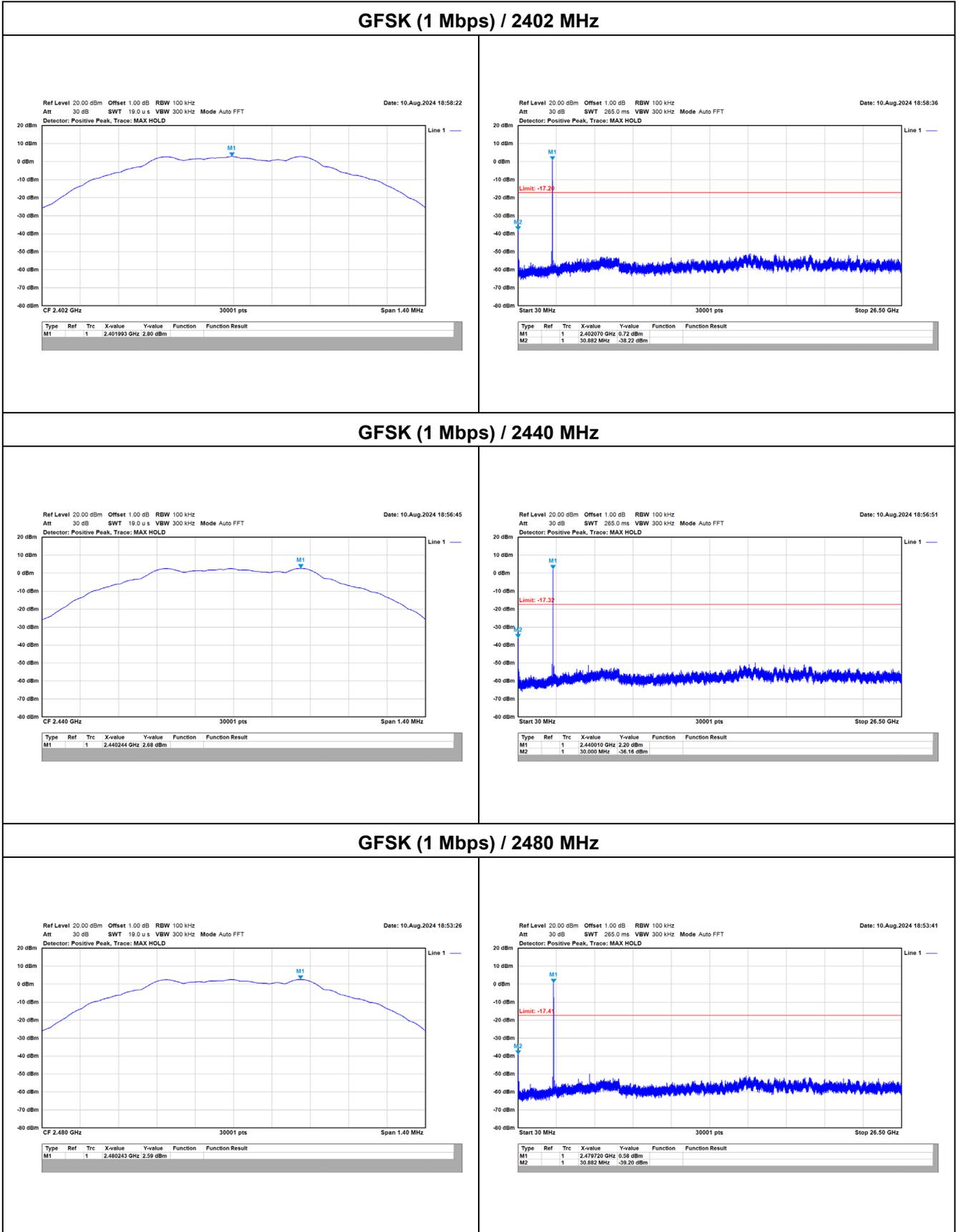
Modulation	Frequency (MHz)	Maximum Conducted Peak Output Power (dBm)	Limit (dBm)	Result
GFSK (1 Mbps)	2402	3.39	30.00	Pass
	2440	3.34	30.00	Pass
	2480	3.41	30.00	Pass
GFSK (2 Mbps)	2402	3.36	30.00	Pass
	2440	3.42	30.00	Pass
	2480	3.44	30.00	Pass

Appendix C. Test Result of Maximum Power Spectral Density

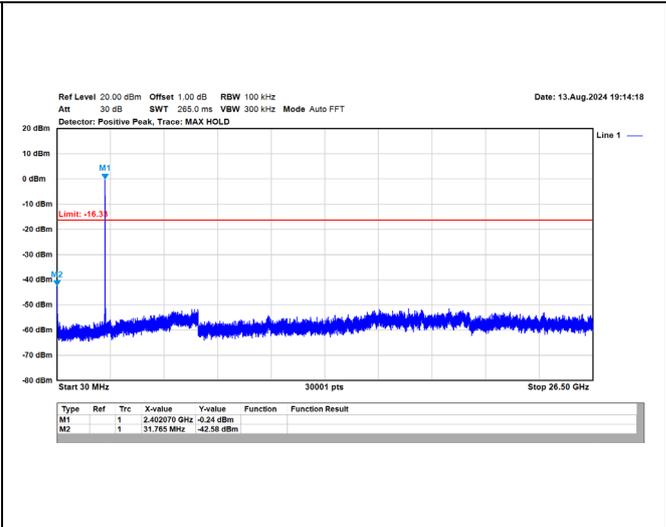
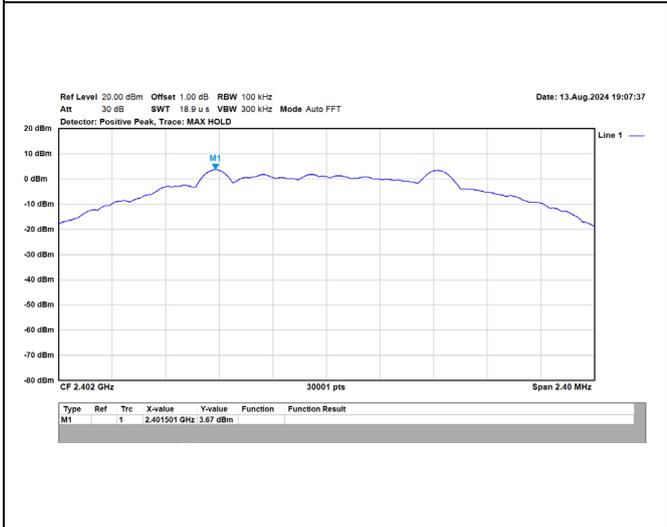
Modulation	Frequency (MHz)	Measure Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
GFSK (1 Mbps)	2402	-10.44	8.00	Pass
	2440	-10.55	8.00	Pass
	2480	-10.59	8.00	Pass
GFSK (2 Mbps)	2402	-11.71	8.00	Pass
	2440	-11.79	8.00	Pass
	2480	-11.84	8.00	Pass



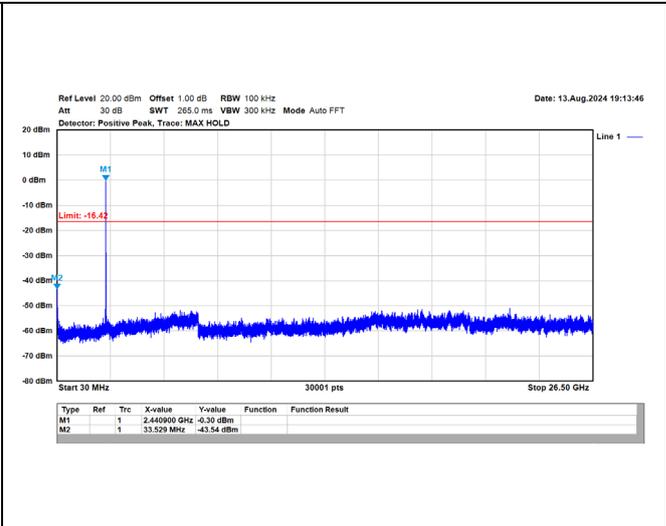
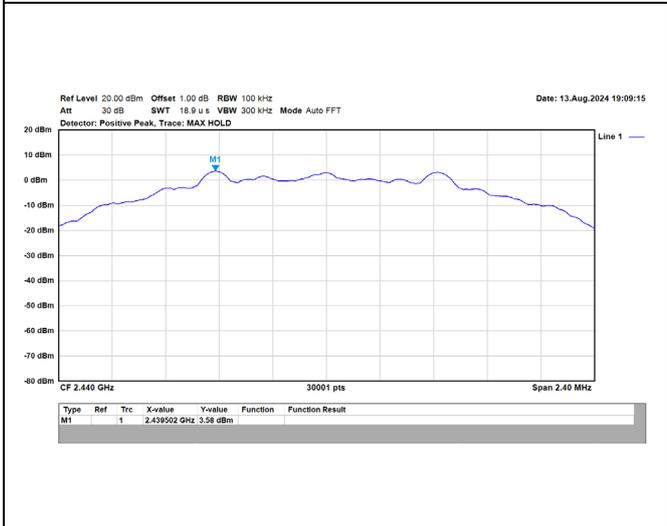
Appendix D. Test Result of Antenna Port Conducted Emission



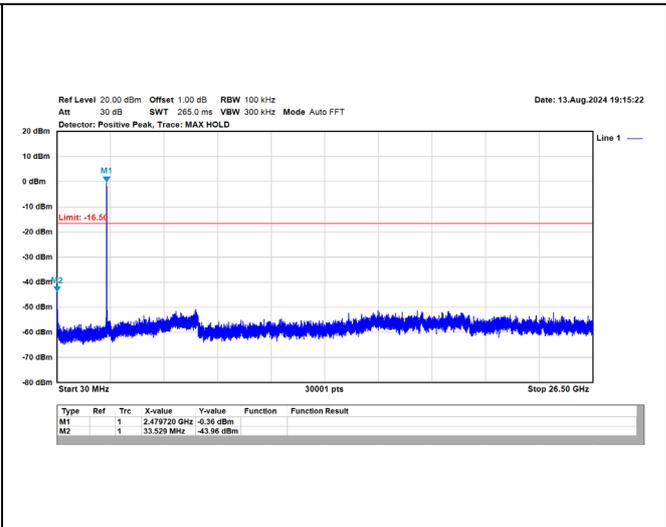
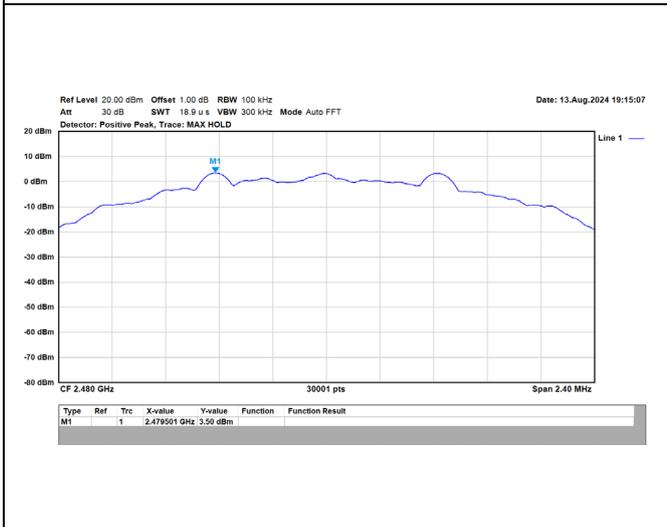
GFSK (2 Mbps) / 2402 MHz

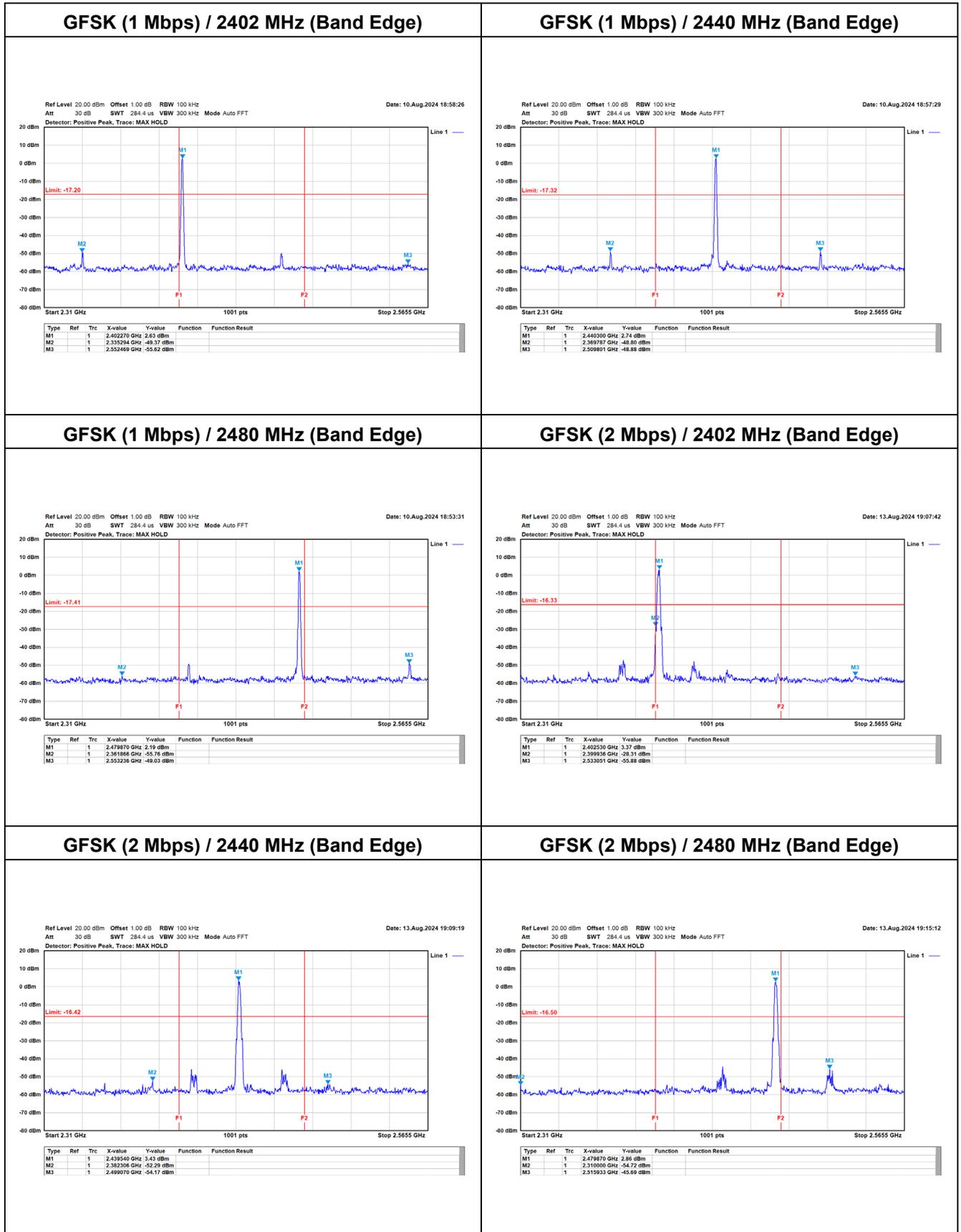


GFSK (2 Mbps) / 2440 MHz



GFSK (2 Mbps) / 2480 MHz





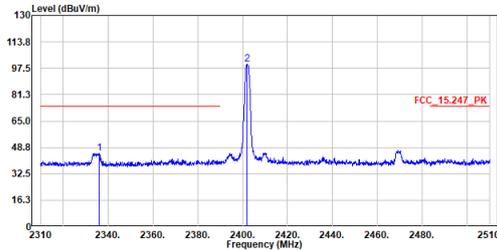
Appendix E. Test Result of Transmitter Radiated Spurious Emission

30 MHz ~ 1 GHz



Above 1 GHz

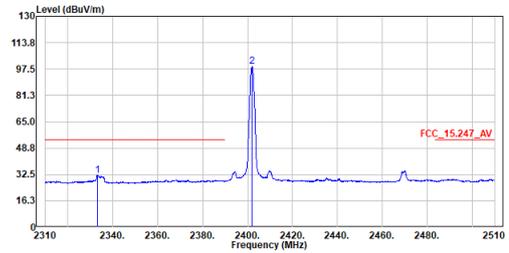
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :BLE_1M_TX_2402MHz
 Test By :Cyril Chen



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2336.000	45.28	74.00	-28.72	35.00	10.28	Peak
2	2401.800	99.86	-----	-----	89.42	10.44	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.

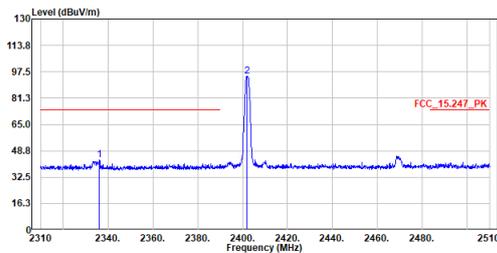
Site :HC-CB04
 Condition :3m ,Horizontal
 Mode :BLE_1M_TX_2402MHz
 Test By :Cyril Chen



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2333.300	31.79	54.00	-22.21	21.51	10.28	Average
2	2402.000	99.08	-----	-----	88.64	10.44	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.

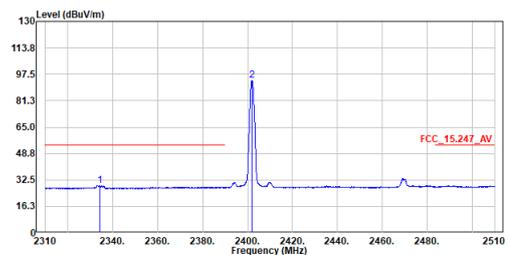
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :BLE_1M_TX_2402MHz
 Test By :Cyril Chen



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2336.200	43.07	74.00	-30.93	32.79	10.28	Peak
2	2401.800	94.64	-----	-----	84.20	10.44	Peak

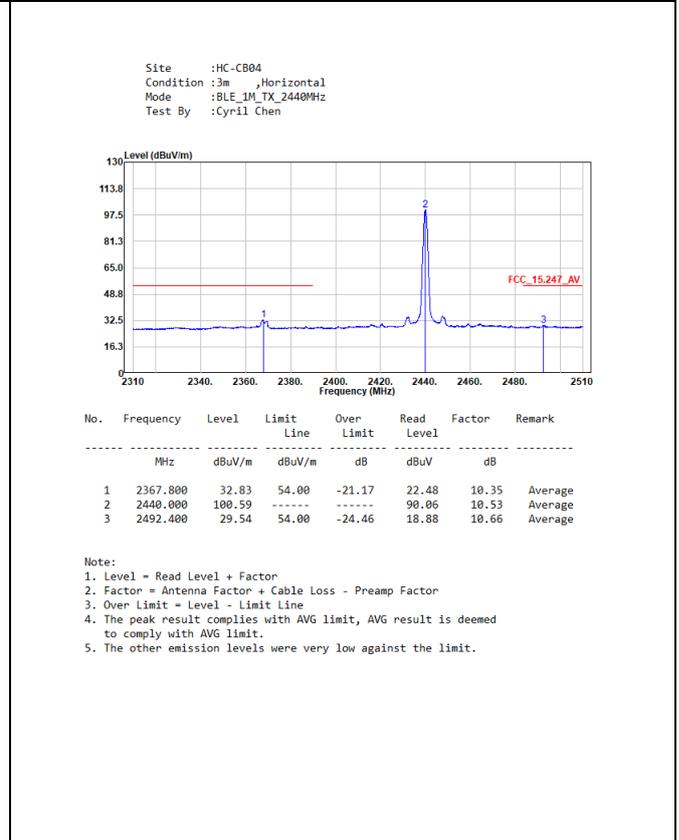
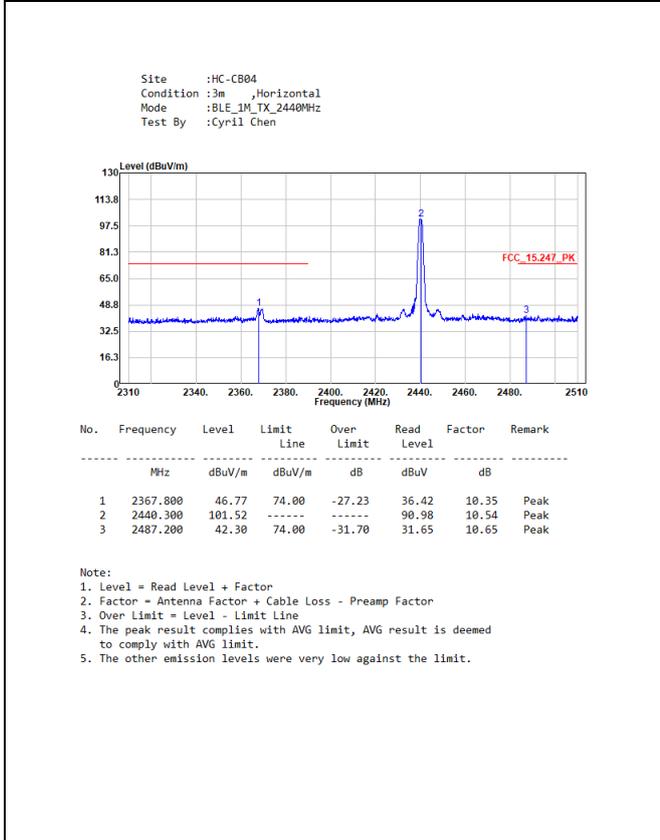
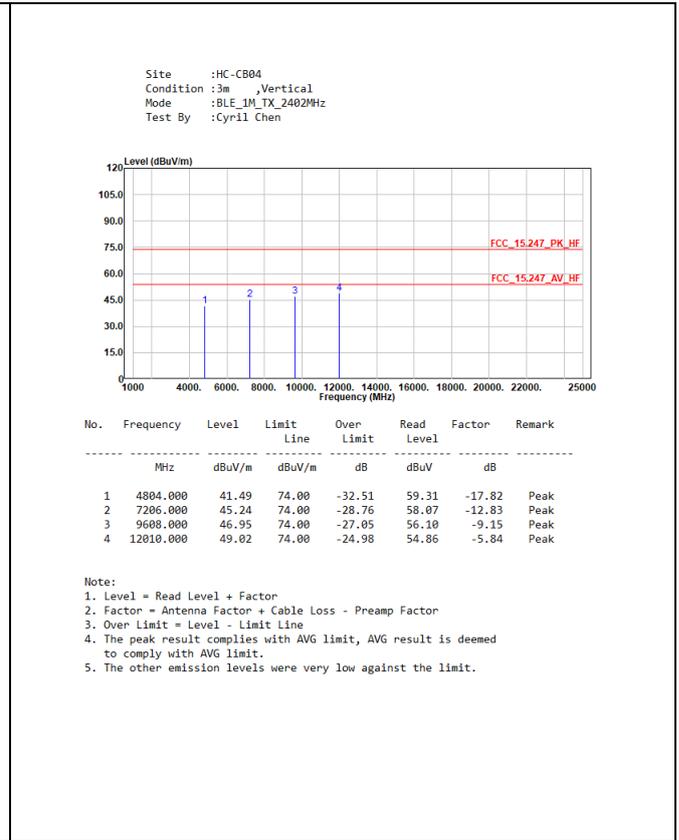
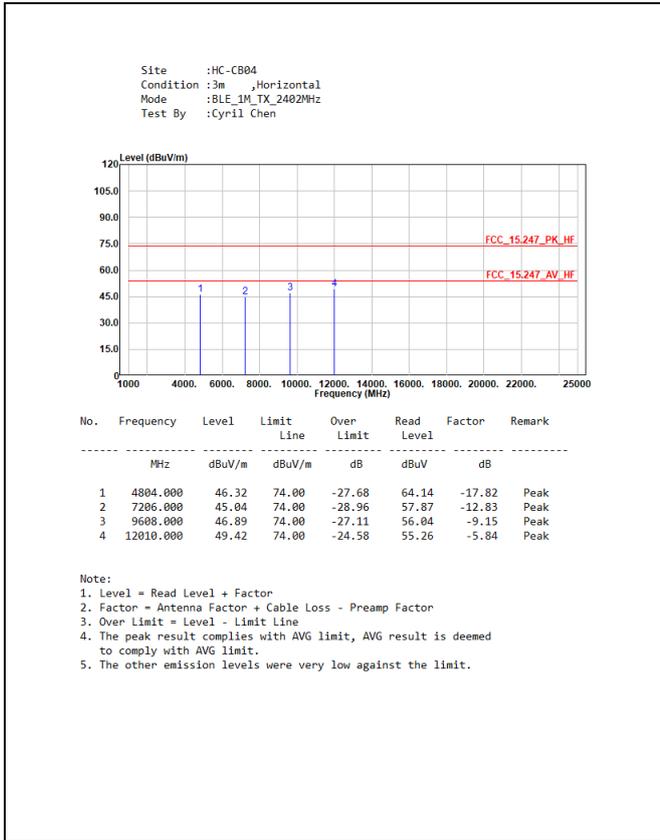
Note:
 1. Level = Read Level + Factor
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor
 3. Over Limit = Level - Limit Line
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
 5. The other emission levels were very low against the limit.

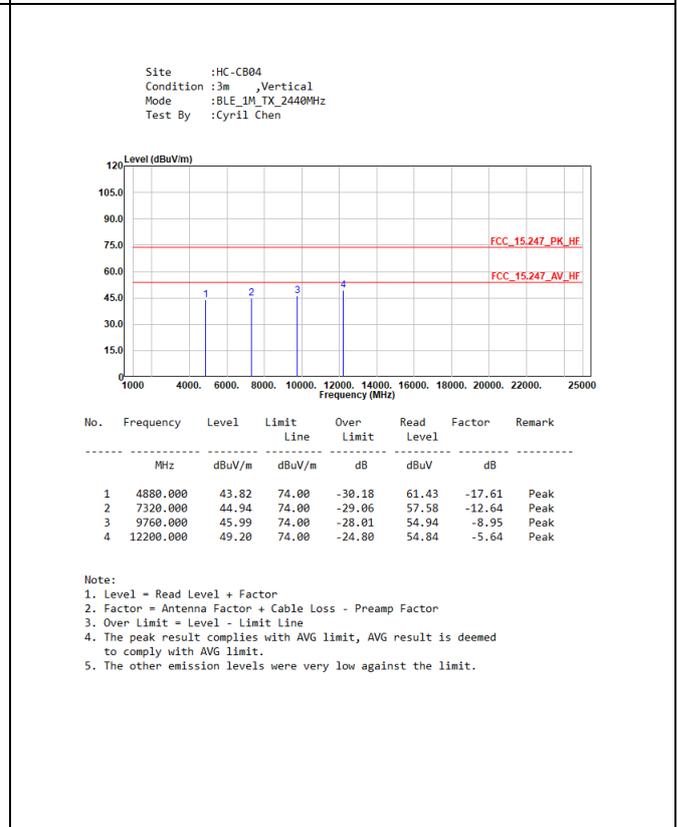
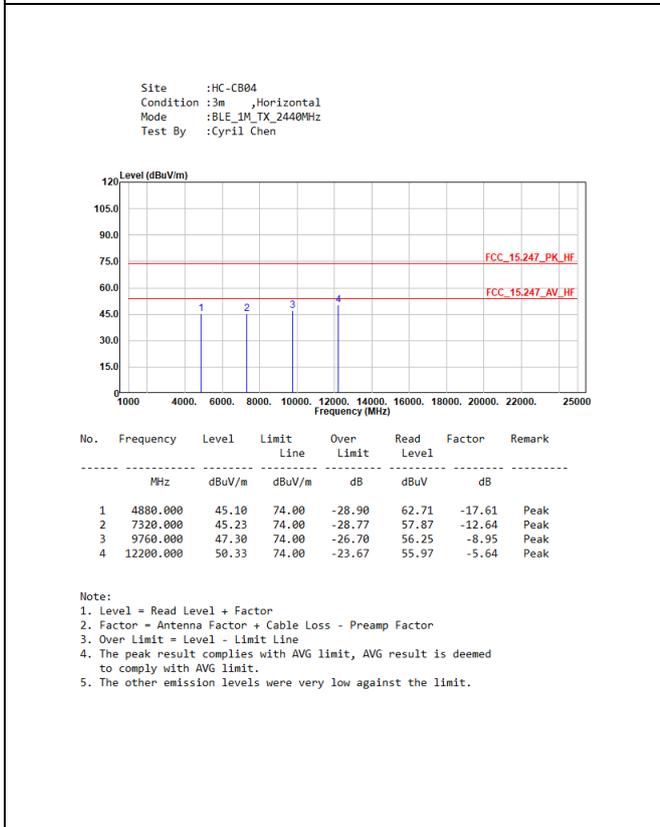
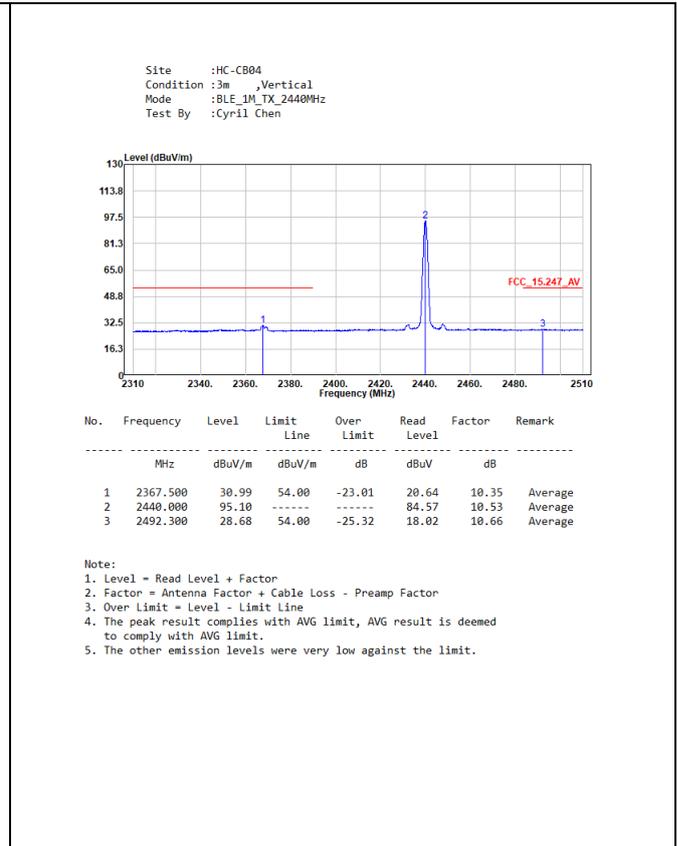
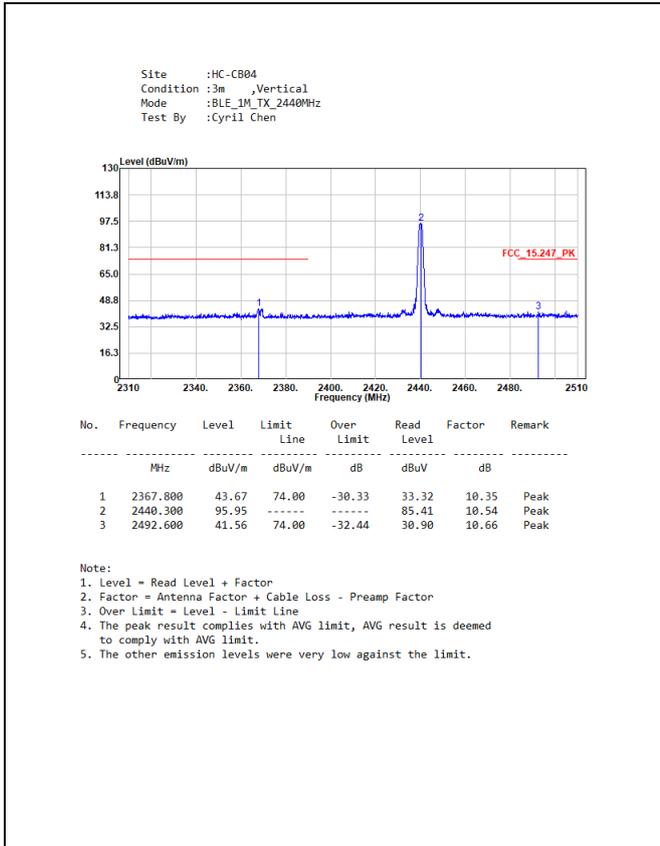
Site :HC-CB04
 Condition :3m ,Vertical
 Mode :BLE_1M_TX_2402MHz
 Test By :Cyril Chen

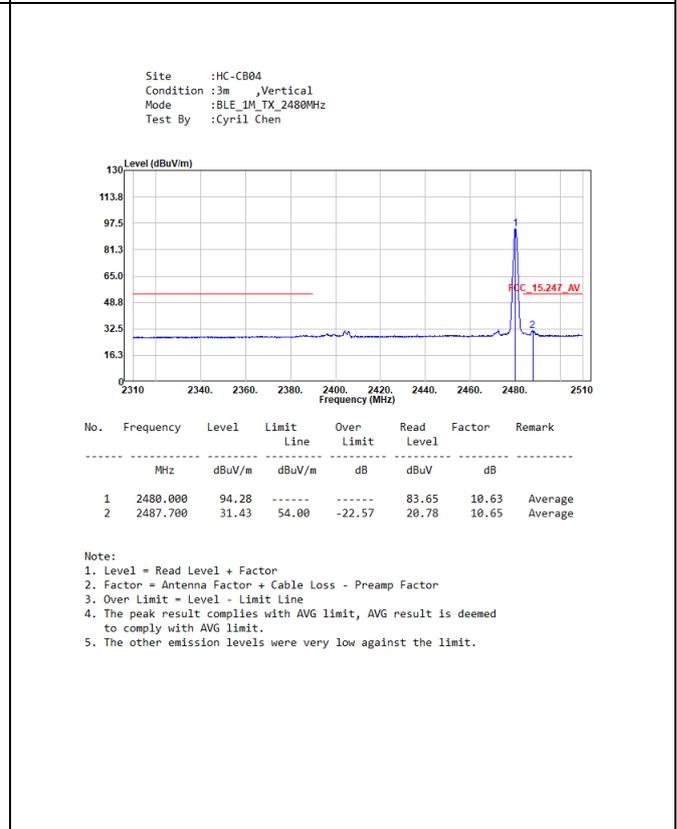
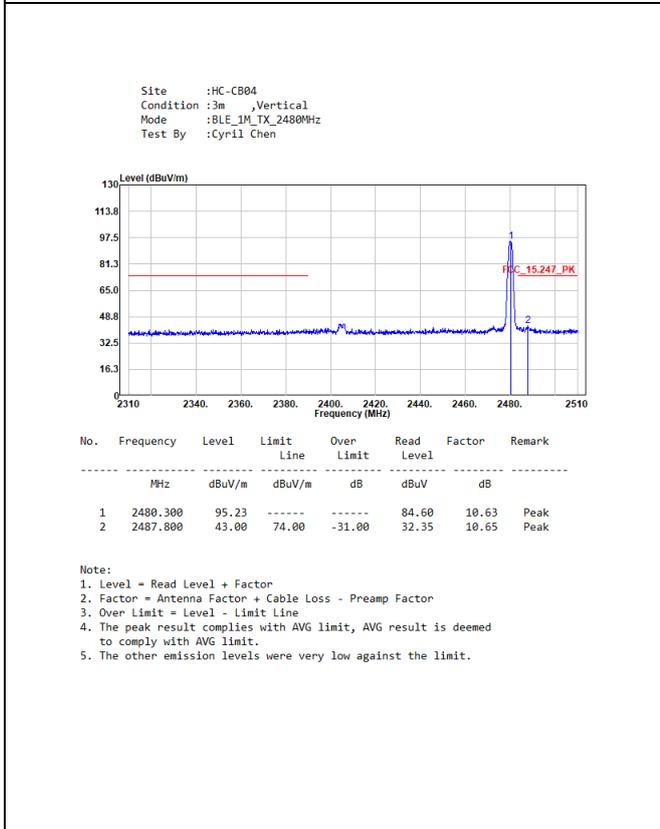
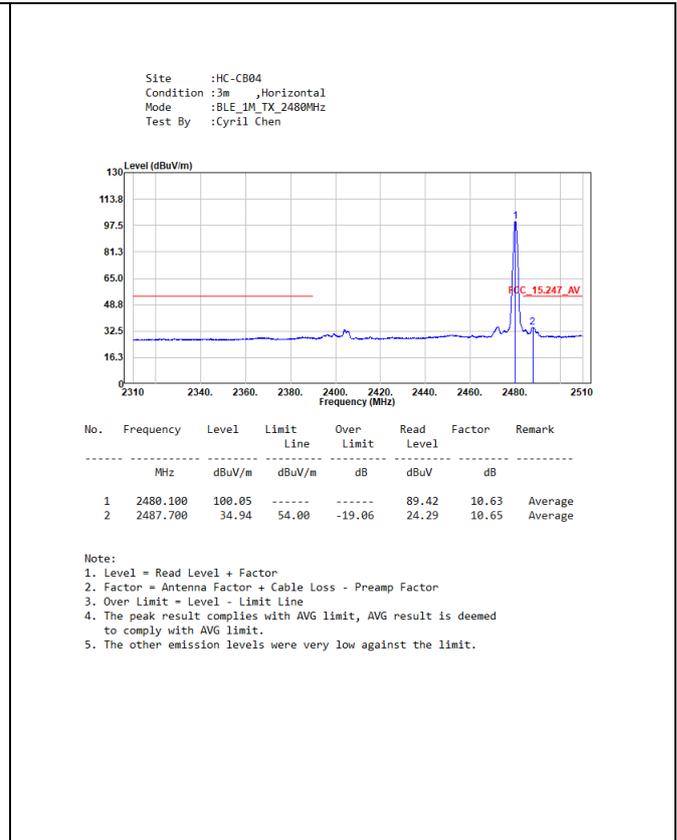
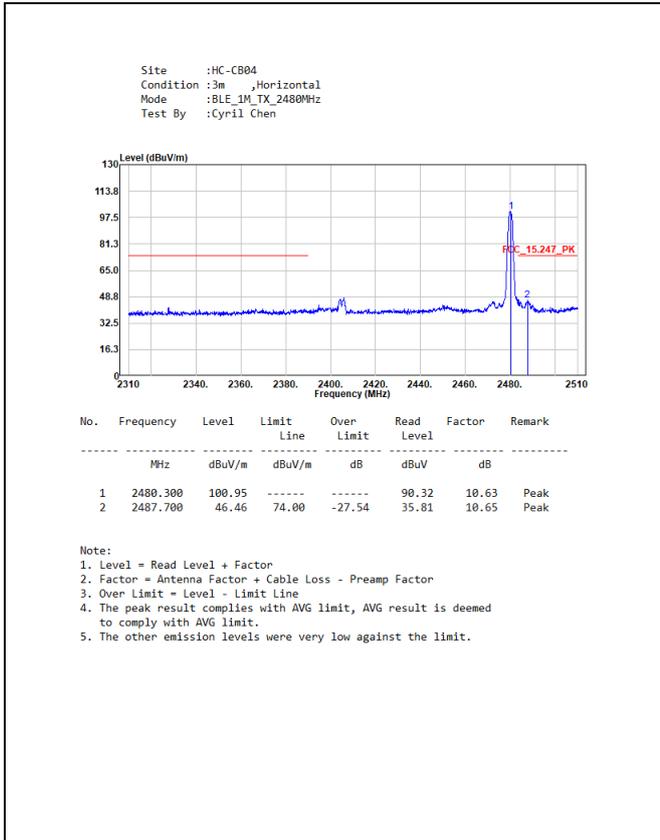


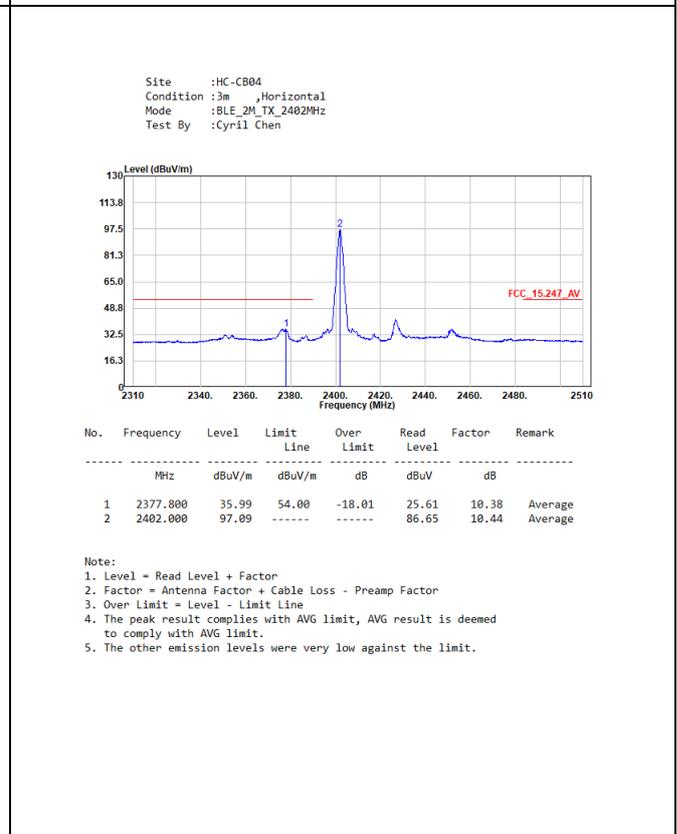
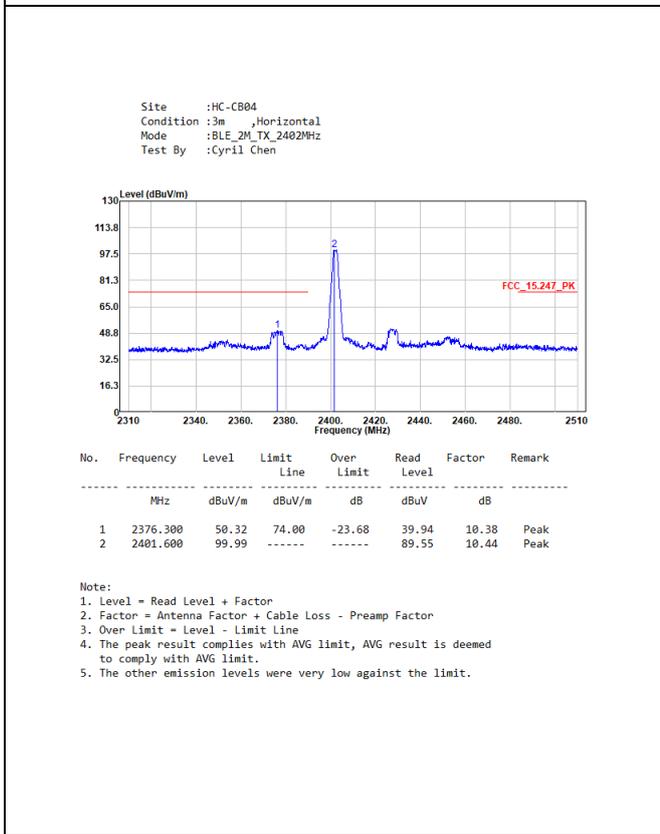
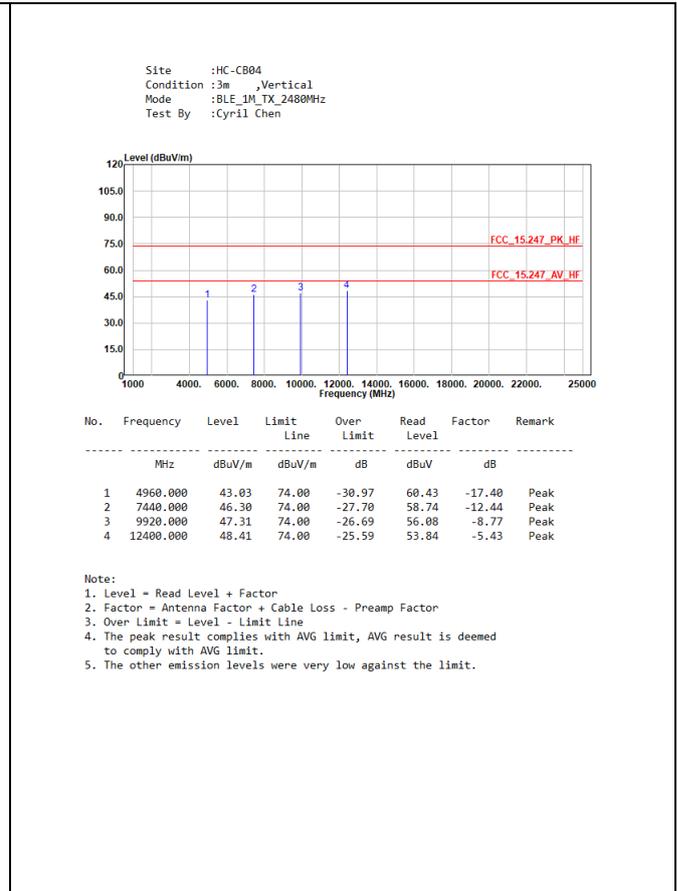
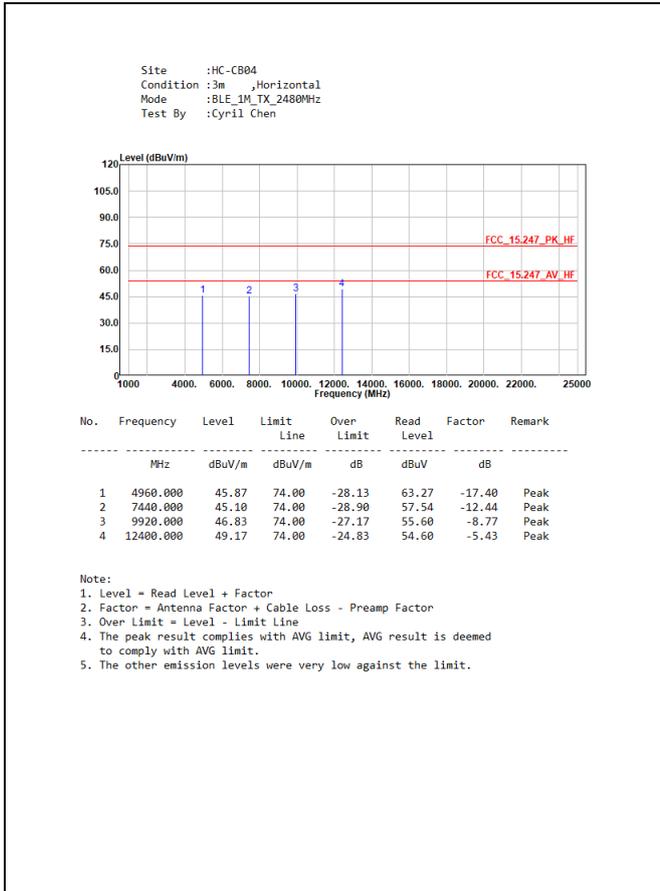
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2334.200	28.94	54.00	-25.06	18.66	10.28	Average
2	2401.900	93.82	-----	-----	83.38	10.44	Average

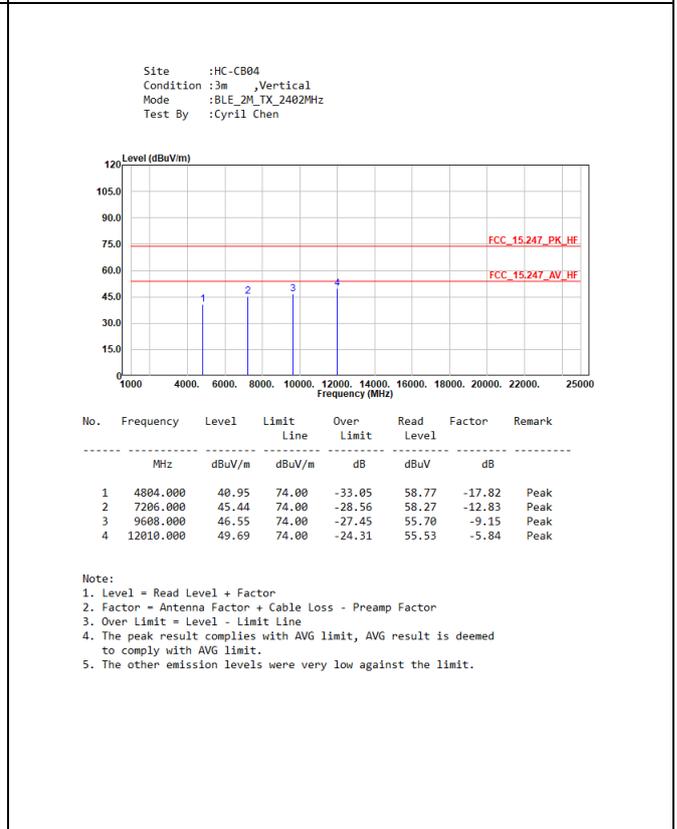
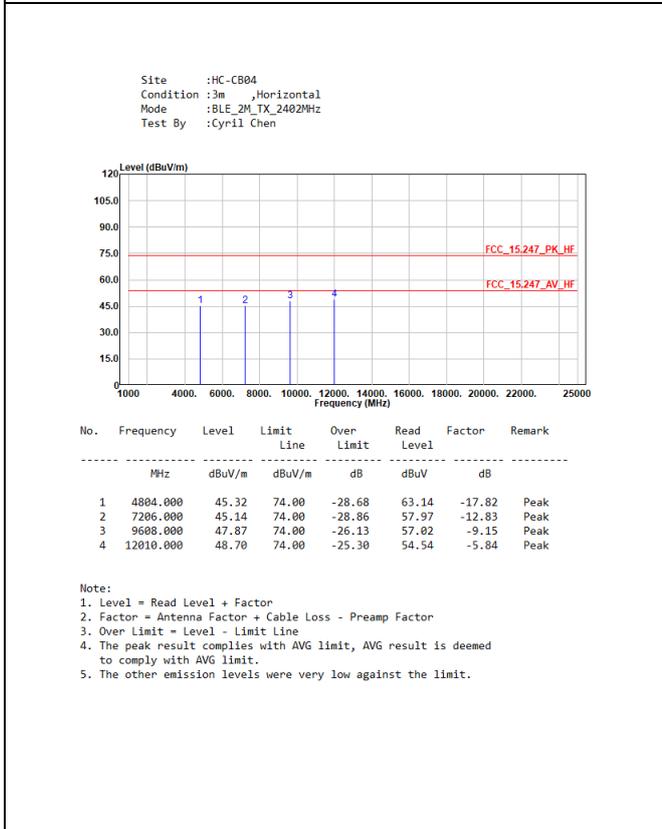
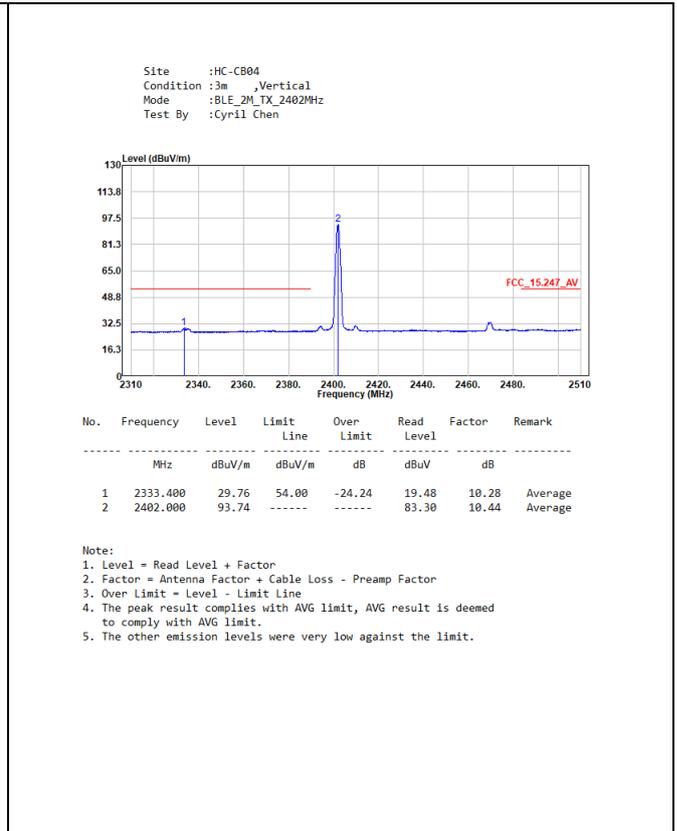
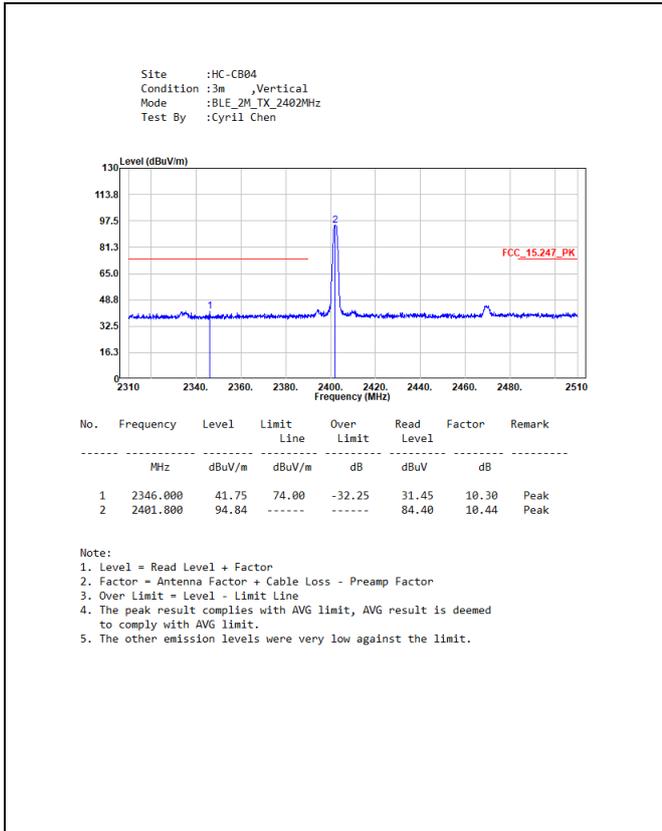
Note:
 1. Level = Read Level + Factor
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor
 3. Over Limit = Level - Limit Line
 4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
 5. The other emission levels were very low against the limit.

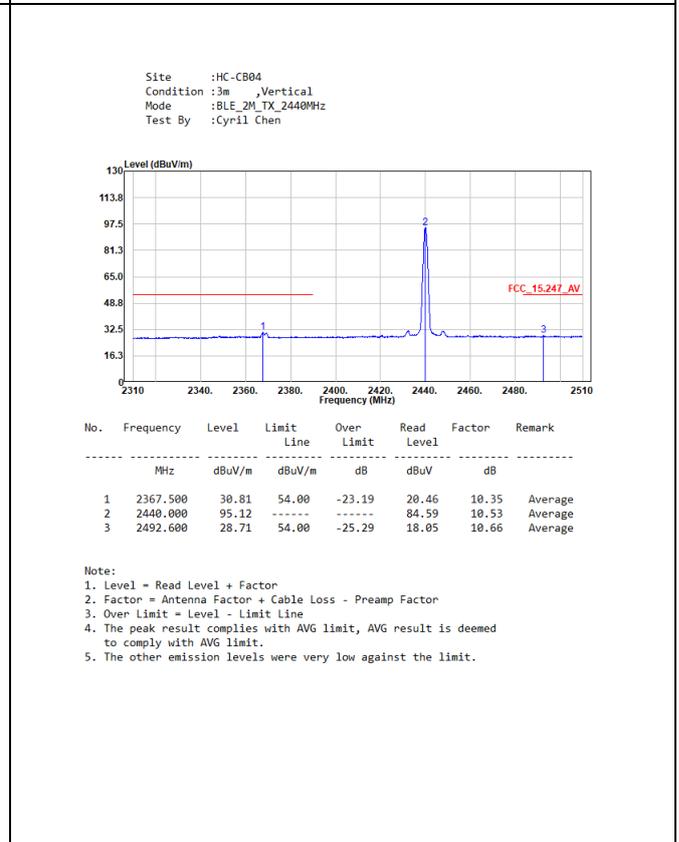
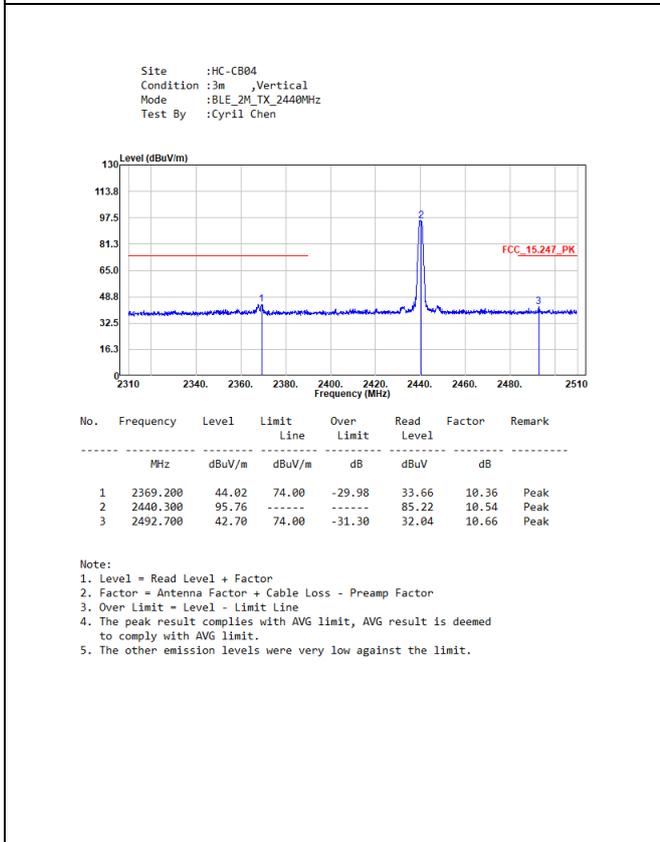
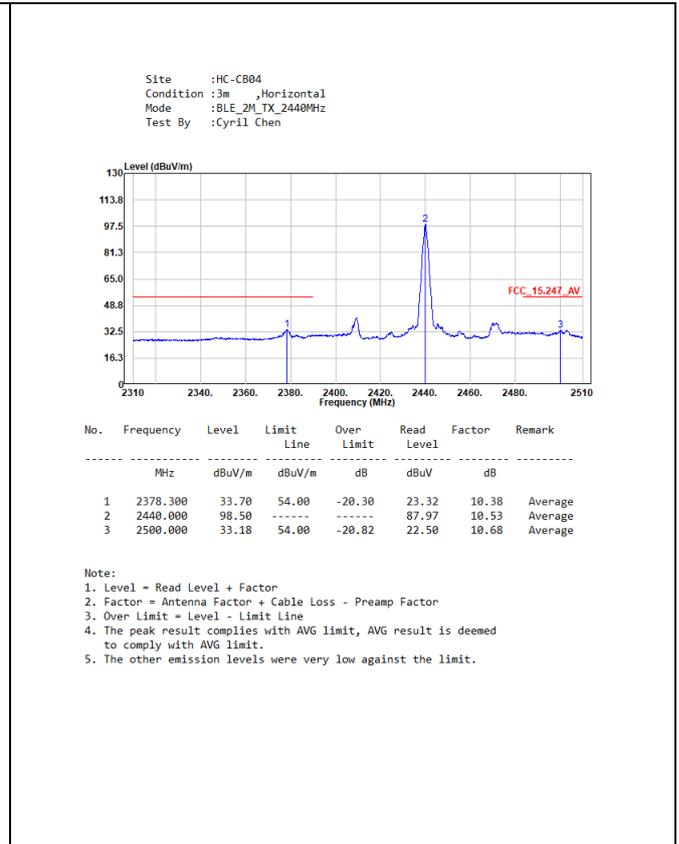
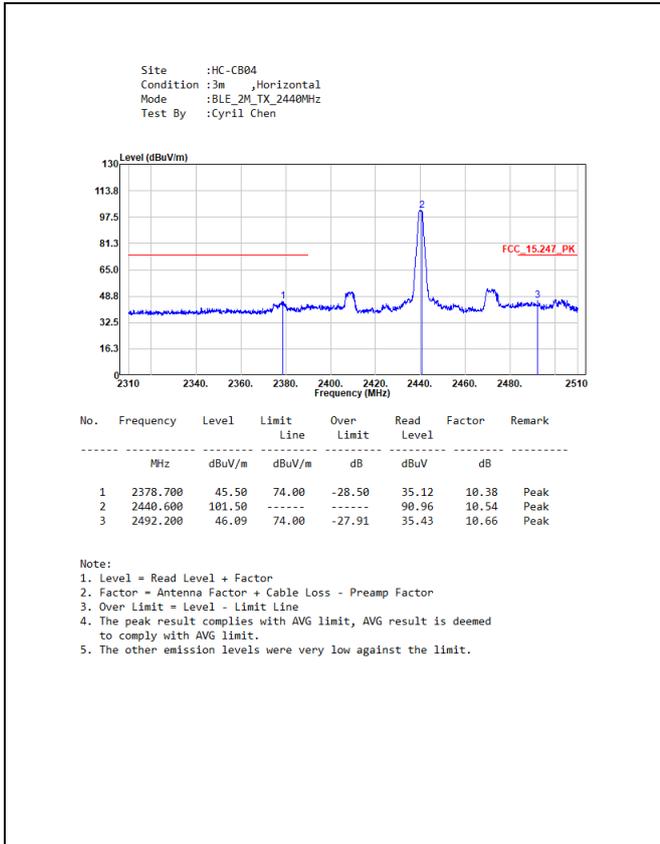


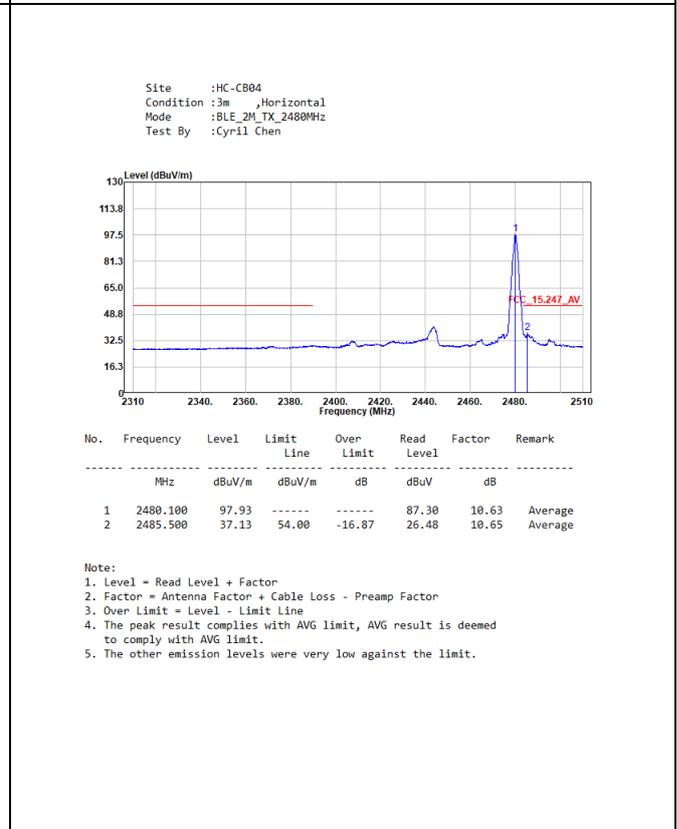
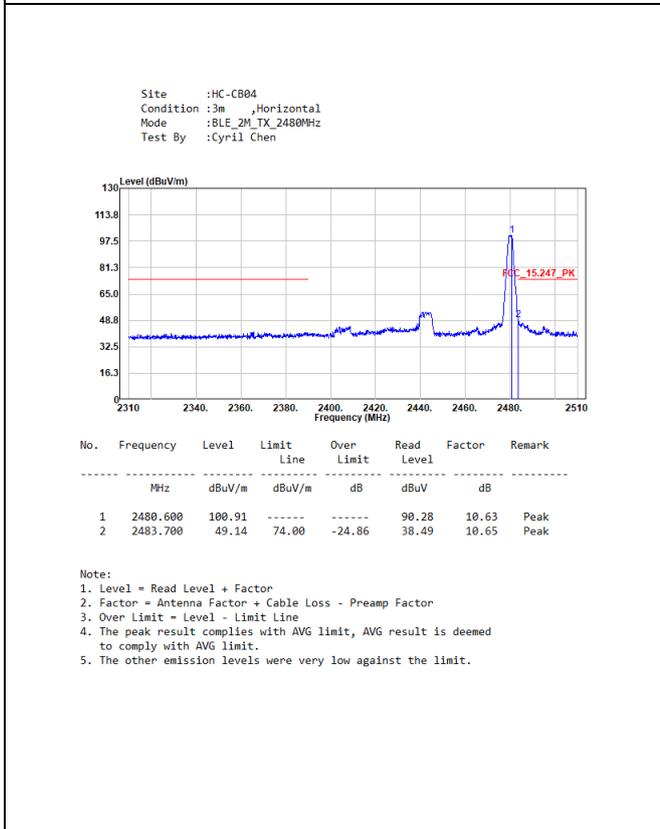
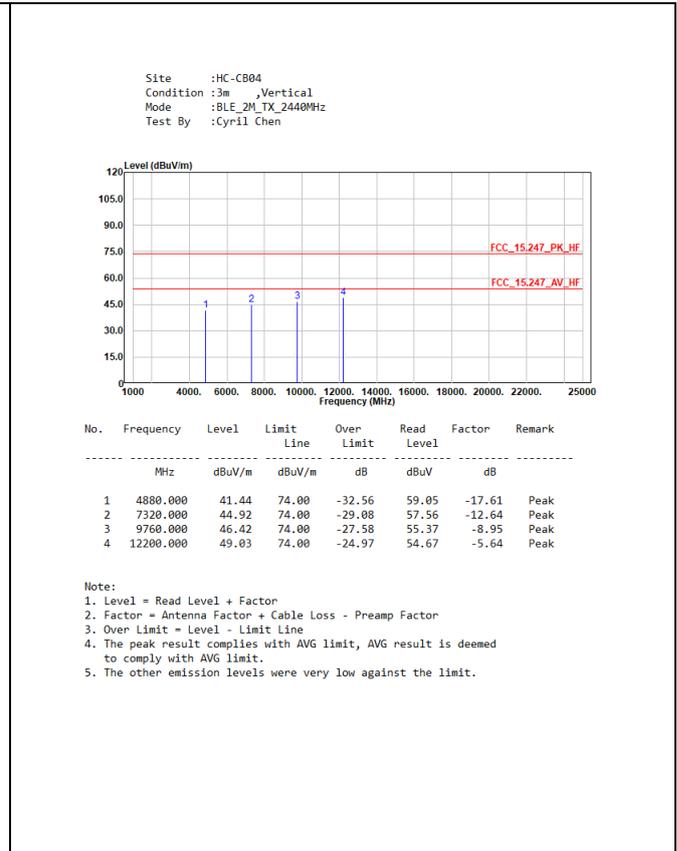
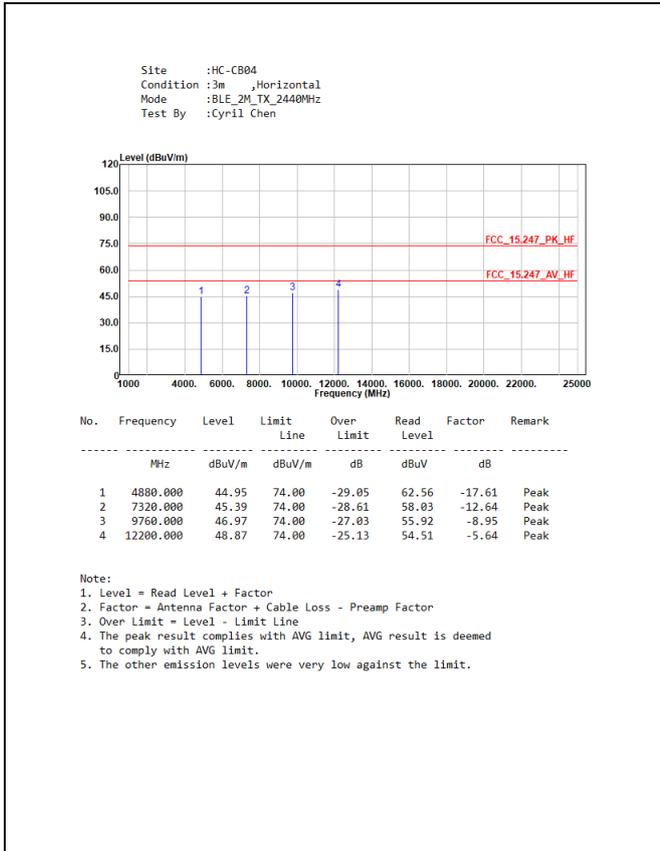


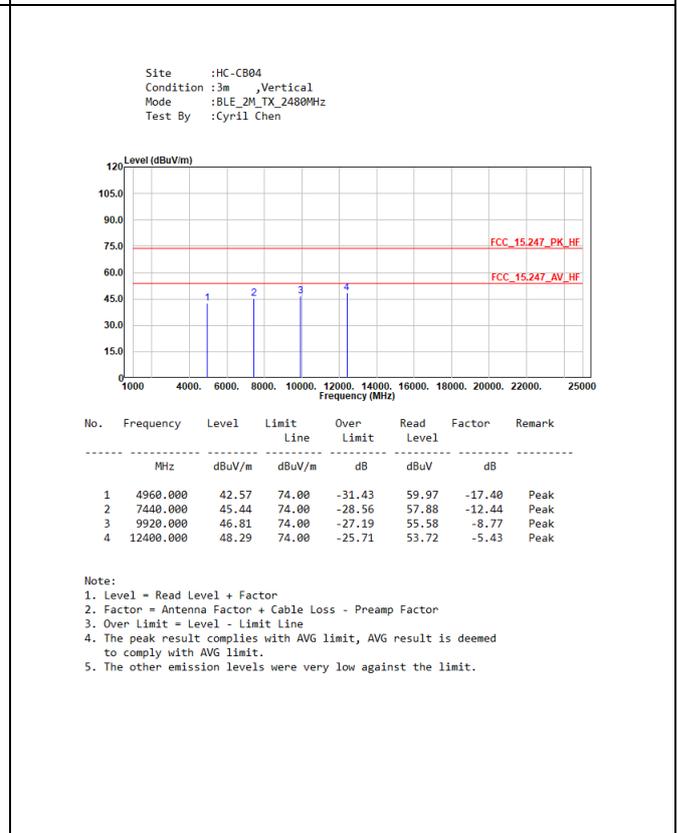
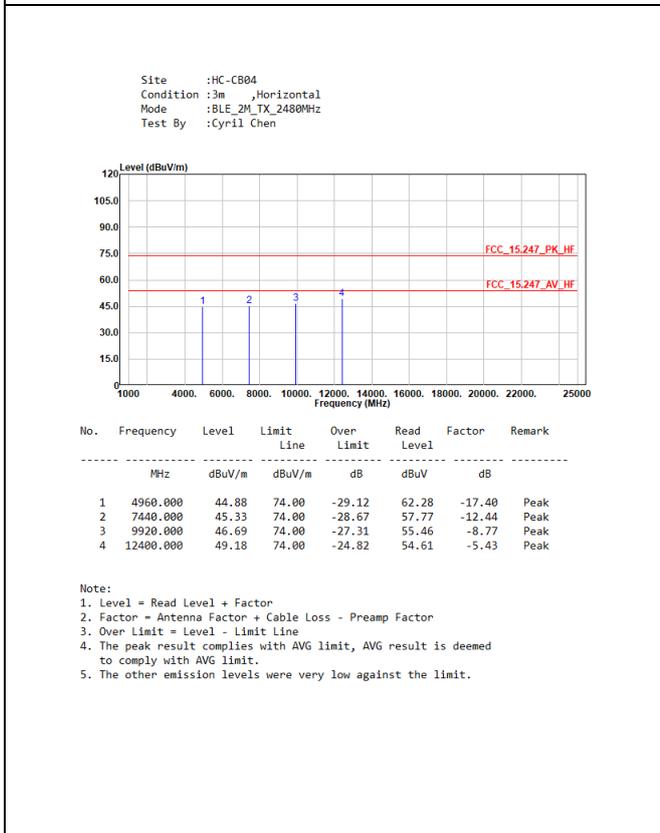
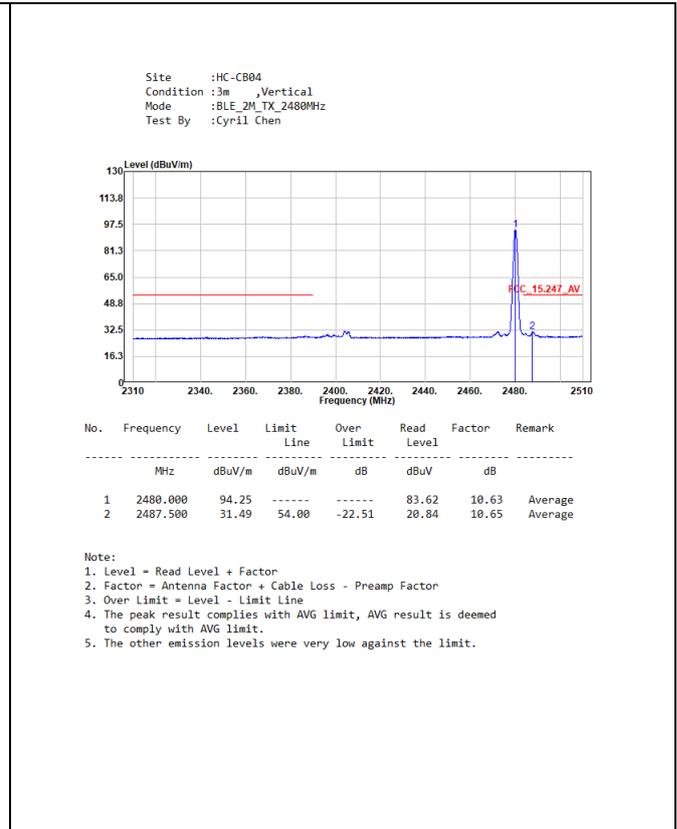
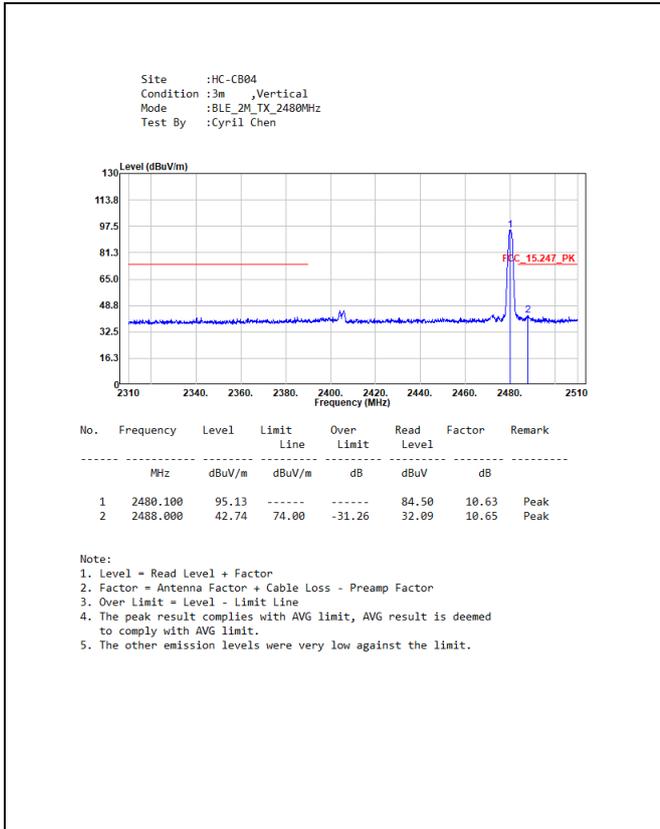








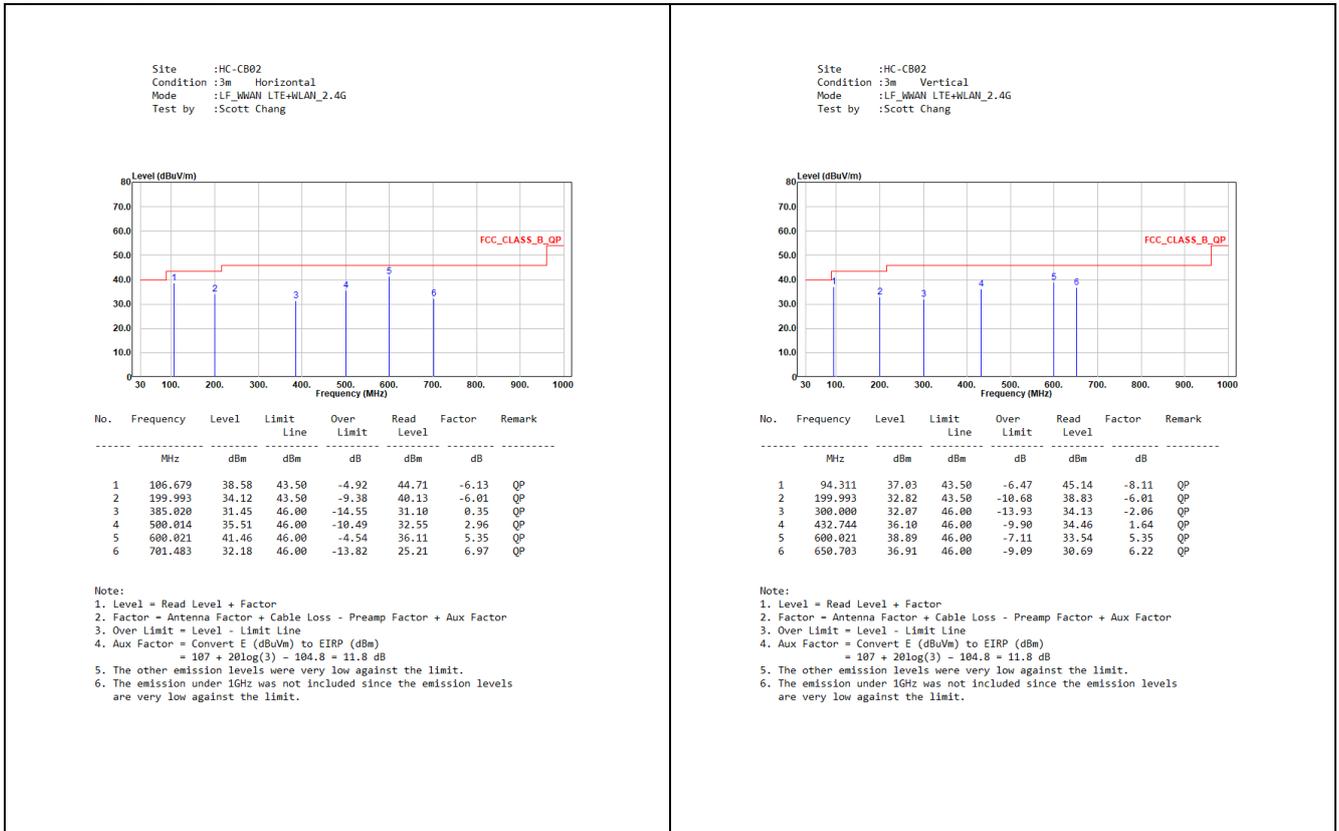




Appendix F. Test Result of Radiated Emissions Co-location

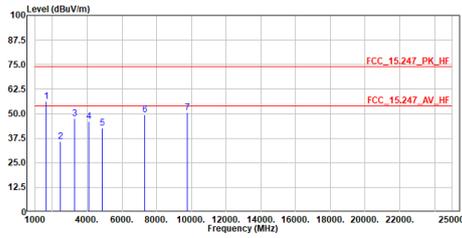
WWAN LTE + WiFi 2.4 GHz

30 MHz ~ 1 GHz:



Above 1 GHz:

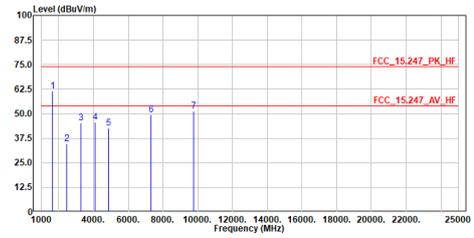
Site :HC-CB02
 Condition :3m ,Horizontal
 :RBW:1000 kHz VSH:3000 kHz
 Mode :WLAN_2.4G+WLAN LTE
 Test by :Gary Liao



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1638.000	56.07	-----	-----	82.55	-26.48	Peak
2	2457.000	35.73	-----	-----	59.15	-23.42	Peak
3	3276.000	47.57	-----	-----	68.20	-20.63	Peak
4	4095.000	46.01	-----	-----	63.31	-17.30	Peak
5	4874.000	42.62	74.00	-31.38	57.10	-14.48	Peak
6	7311.000	49.44	74.00	-24.56	57.32	-7.88	Peak
7	9748.000	50.56	74.00	-23.44	54.84	-4.28	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.
 6. "-----" is WWAN signal, and the test result complies with limit -13dBm.
 Please refer to report number 2570523R-RFNAV025-N & 2570523R-RFNAV025-O for more detailed information.

Site :HC-CB02
 Condition :3m ,Vertical
 :RBW:1000 kHz VSH:3000 kHz
 Mode :WLAN_2.4G+WLAN LTE
 Test by :Gary Liao



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1638.000	61.43	-----	-----	87.91	-26.48	Peak
2	2457.000	34.82	-----	-----	58.24	-23.42	Peak
3	3276.000	45.33	-----	-----	65.96	-20.63	Peak
4	4095.000	45.62	-----	-----	62.92	-17.30	Peak
5	4874.000	42.64	74.00	-31.36	57.12	-14.48	Peak
6	7311.000	49.56	74.00	-24.44	57.44	-7.88	Peak
7	9748.000	51.30	74.00	-22.70	55.58	-4.28	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.
 6. "-----" is WWAN signal, and the test result complies with limit -13dBm.
 Please refer to report number 2570523R-RFNAV025-N & 2570523R-RFNAV025-O for more detailed information.

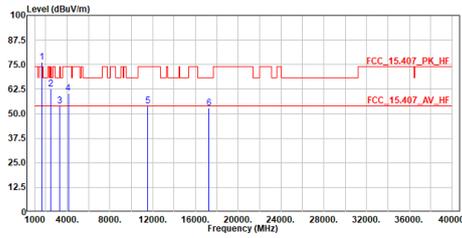
WWAN LTE + WiFi 5 GHz

30 MHz ~ 1 GHz:



Above 1 GHz:

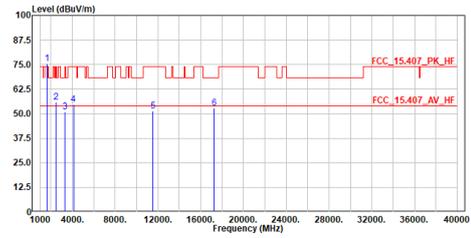
Site :HC-CB02
 Condition :3m ,Horizontal
 RBW:1000 kHz VBW:3000 kHz
 Mode :WLAN_5G-HUMAN LTE
 Test by :Gary Liao



No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	1638.000	76.26	-----	-----	102.74	-26.48	Peak
2	2457.000	62.56	-----	-----	85.98	-23.42	Peak
3	3276.000	53.92	-----	-----	74.55	-20.63	Peak
4	4095.000	60.20	-----	-----	77.50	-17.30	Peak
5	11510.000	53.93	74.00	-20.07	55.67	-1.74	Peak
6	17265.000	52.73	68.20	-15.47	51.17	1.56	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.
 6. "-----" is WWAN signal, and the test result complies with limit -13dBm.
 Please refer to report number 2570523R-RFNAV025-N & 2570523R-RFNAV025-O for more detailed information.

Site :HC-CB02
 Condition :3m ,Vertical
 RBW:1000 kHz VBW:3000 kHz
 Mode :WLAN_5G-HUMAN LTE
 Test by :Gary Liao



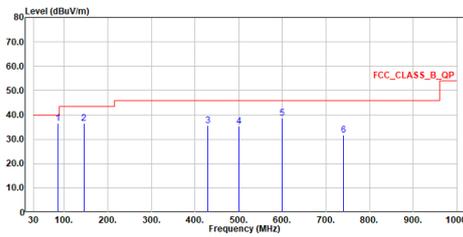
No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	1638.000	75.62	-----	-----	102.10	-26.48	Peak
2	2457.000	55.90	-----	-----	79.32	-23.42	Peak
3	3276.000	50.91	-----	-----	71.54	-20.63	Peak
4	4095.000	54.82	-----	-----	72.12	-17.30	Peak
5	11510.000	51.50	74.00	-22.50	53.24	-1.74	Peak
6	17265.000	52.75	68.20	-15.45	51.19	1.56	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.
 6. "-----" is WWAN signal, and the test result complies with limit -13dBm.
 Please refer to report number 2570523R-RFNAV025-N & 2570523R-RFNAV025-O for more detailed information.

WWAN LTE + Bluetooth

30 MHz ~ 1 GHz:

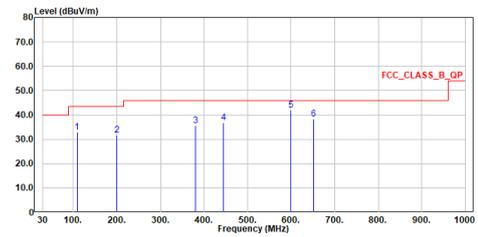
Site :HC-CB02
 Condition :3m Horizontal
 Mode :LF_WWAN LTE+HLAN_BT
 Test by :Scott Chang



No.	Frequency MHz	Level dBm	Limit Line dBm	Over Limit dB	Read Level dBm	Factor dB	Remark
1	84.951	36.65	40.00	-3.35	44.53	-7.88	QP
2	145.236	36.40	43.50	-7.10	39.36	-2.96	QP
3	428.379	35.74	46.00	-10.26	34.26	1.48	QP
4	500.014	35.26	46.00	-10.74	32.30	2.96	QP
5	600.021	38.51	46.00	-7.49	33.16	5.35	QP
6	739.555	31.82	46.00	-14.18	24.03	7.79	QP

Note:
 1. Level = Read Level + Factor
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
 3. Over Limit = Level - Limit Line
 4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
 $= 107 + 20\log(3) - 104.8 = 11.8 \text{ dB}$
 5. The other emission levels were very low against the limit.
 6. The emission under 1GHz was not included since the emission levels are very low against the limit.

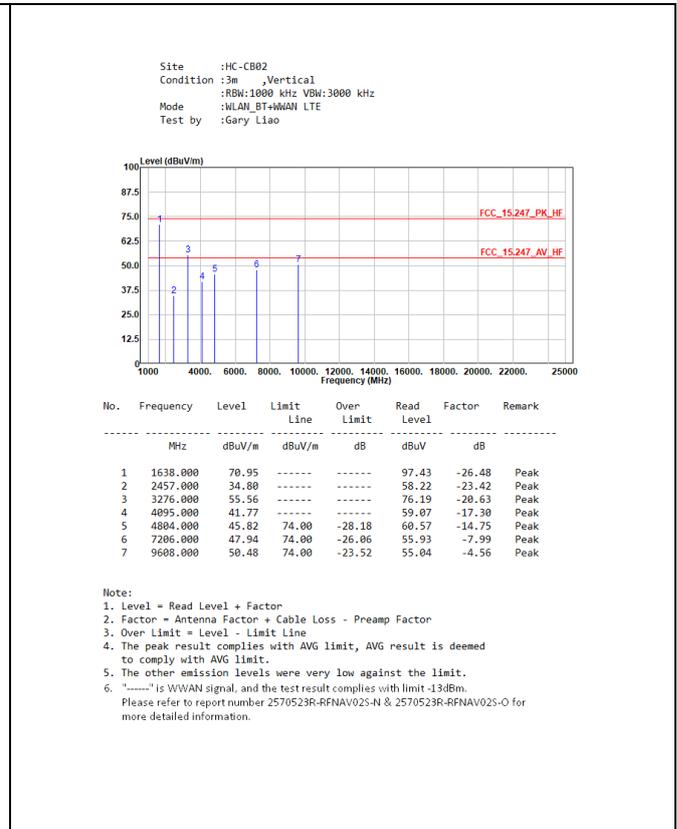
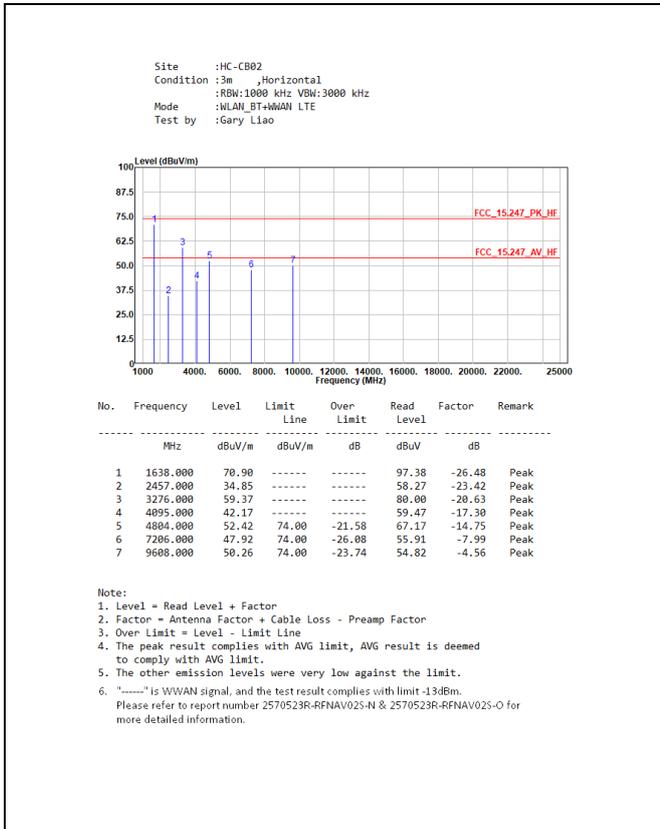
Site :HC-CB02
 Condition :3m Vertical
 Mode :LF_WWAN LTE+HLAN_BT
 Test by :Scott Chang



No.	Frequency MHz	Level dBm	Limit Line dBm	Over Limit dB	Read Level dBm	Factor dB	Remark
1	108.764	33.00	43.50	-10.50	38.76	-5.76	QP
2	199.993	31.83	43.50	-11.67	37.84	-6.01	QP
3	309.601	35.65	46.00	-10.35	35.39	0.26	QP
4	443.948	36.93	46.00	-9.07	34.91	2.02	QP
5	600.021	41.91	46.00	-4.09	36.56	5.35	QP
6	650.703	38.20	46.00	-7.80	31.98	6.22	QP

Note:
 1. Level = Read Level + Factor
 2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
 3. Over Limit = Level - Limit Line
 4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
 $= 107 + 20\log(3) - 104.8 = 11.8 \text{ dB}$
 5. The other emission levels were very low against the limit.
 6. The emission under 1GHz was not included since the emission levels are very low against the limit.

Above 1 GHz:



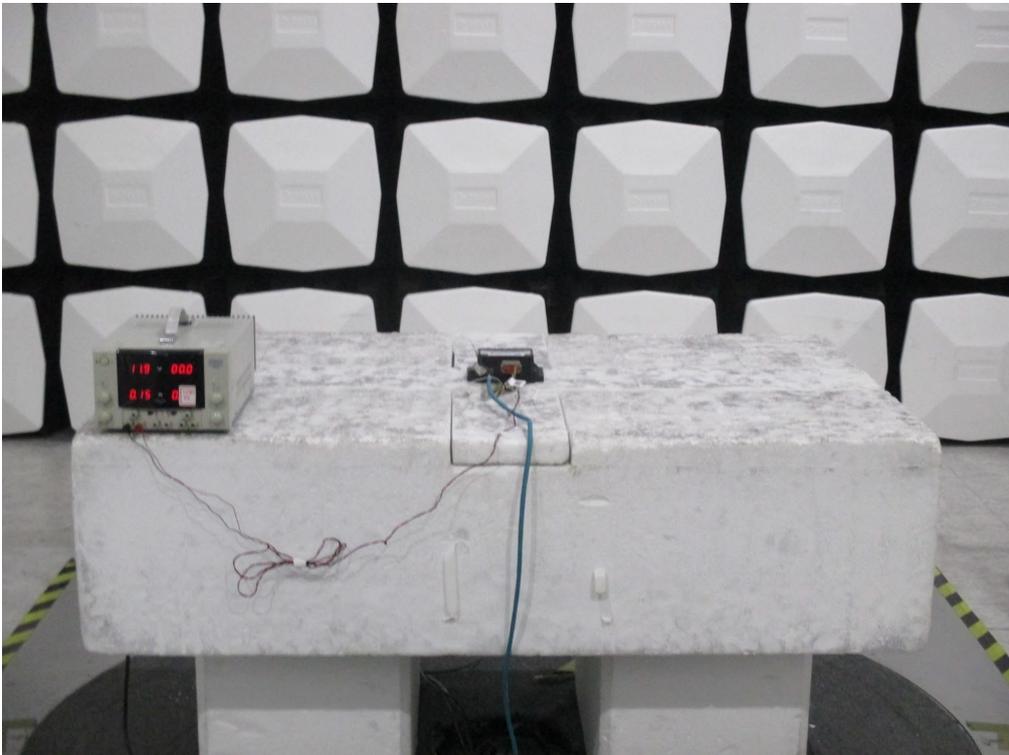
Appendix G. Test Setup Photograph

<Radiated Emission>

Description : Front View of Radiated Emission Test Setup (30 MHz ~ 1 GHz)



Description : Rear View of Radiated Emission Test Setup (30 MHz ~ 1 GHz)



Description : Front View of Radiated Emission Test Setup (Above 1 GHz)



Description : Rear View of Radiated Emission Test Setup (Above 1 GHz)

