

Test Report No:
2650243R-RFUSV01S-A

TEST REPORT

FCC Rules&Regulations

Product Name	BLE Padlock
Brand Name	iTracxing
Model No.	SAIL 009
FCC ID	2BGGJ-SAIL009
Applicant's Name / Address	iTracXing Technology Co., Ltd. No. 20-B1, Aly. 1, Ln. 768, Sec. 4, Bade Rd., Nangang Dist., Taipei City 11577 , Taiwan (R.O.C.)
Manufacturer's Name / Address	iTracXing Technology Co., Ltd. No. 20-B1, Aly. 1, Ln. 768, Sec. 4, Bade Rd., Nangang Dist., Taipei City 11577 , Taiwan (R.O.C.)
Test Method Requested, Standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024
Verdict Summary	IN COMPLIANCE
Documented By	 Hailey Peng
Approved By	 Rueyyan Lin
Date of Receipt	May 12, 2026
Date of Issue	Aug. 31, 2026
Report Version	V1.0

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Appendix A. Test Result of AC Power Line Conducted Emission

Appendix B. Test Result of Occupied Bandwidth & DTS Bandwidth

Appendix C. Test Result of Maximum Conducted Output Power

Appendix D. Test Result of Maximum Power Spectral Density

Appendix E. Test Result of Antenna Port Conducted Emission

Appendix F. Test Result of Transmitter Radiated Spurious Emission

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. 31, 2026

Summary of Test Result

Report Clause	Test Items	Result (PASS/FAIL)	Remark
3	AC Power Line Conducted Emission	PASS	-
4	Occupied Bandwidth & DTS Bandwidth	PASS	-
5	Maximum Conducted Output Power	PASS	-
6	Maximum Power Spectral Density	PASS	-
7	Antenna Port Conducted Emission	PASS	-
8	Transmitter Radiated Spurious Emission	PASS	-

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	2402 ~ 2480 MHz
Channel Number	40 Channels
Mode	Bluetooth LE
Type of Modulation	GFSK (1 Mbps)

Antenna Information				
Ant.	Brand Name	Model No.	Type	Gain (dBi)
1	iTracxing	Metal Plate Antenna	Monopole	1.58

1.2. EUT Information

EUT Power Type	From Host system / Adapter
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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 C63.10-2020 + Cor.1-2023 + C63.10a-2024 + Errata to C63.10a-2024

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 (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-CB04, HC-SR10 and HC-SR12.		

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
AC Conduction Emission	HC-SR02	Cyril Chen	23.5 / 58	2026/05/19
RF Conducted Emission	HC-SR12	Clemens Fang	22.4~24 / 52.4~54.2	2026/05/15~2026/05/20
Radiated Emission	HC-CB04	Brook Cheng	22.2 / 56	2026/05/19

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
AC Power Line Conducted Emission	± 2.39 dB
Occupied Bandwidth & DTS Bandwidth	± 636.54 Hz
Maximum Conducted Output Power	± 1.11 dB
Maximum Power Spectral Density	± 1.74 dB
Antenna Port Conducted Emission	± 1.74 dB
Transmitter Radiated Spurious Emission	± 3.72 dB below 1 GHz ± 3.18 dB above 1 GHz

1.6. List of Test Equipment

HC-SR02

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI7	100879	9 kHz - 3.6 GHz	2025/08/20	2026/08/19
Artificial Mains Network	R&S	ENV 4200	848411/010	9kHz-30MHz, 4line/100A	2025/12/10	2026/12/09
Two-Line V-Network	R&S	ENV216	100096	9kHz-30MHz	2025/06/26	2026/06/25
Coaxial Cable(9 m)	Harbour	RG-400	HC-SR02	9 kHz-2500 MHz	2025/08/15	2026/08/14
EMI Testing System	AUDIX	e3 210616 dekra V9	HC-SR02	N/A	N/A	N/A

HC-SR12

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101869	10Hz-40GHz	2025/06/17	2026/06/16
USB Peak Power Sensor	Anritsu	MA24408A	11840	50 MHz to 8 GHz, High VBW(165 MHz / 350 kHz)	2025/07/18	2026/07/17

HC-CB04

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
Magnetic Loop Antenna	Teseq	HLA 6121	44287	9kHz-30 MHz	2025/10/20	2026/10/19
Signal Analyzer	R&S	FSVA40	101455	10 Hz-40 GHz	2026/03/27	2027/03/26
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	1209	30 MHz-2 GHz	2025/06/17	2026/06/16
Double Ridged Horn Antenna	RF SPIN	DRH18-E	211212A18EN	1G-18GHz	2025/11/03	2026/11/02
Horn Antenna	Schwarzbeck	BBHA 9170	203	18G-40GHz	2025/12/04	2026/12/03
Pre-Amplifier	DEKRA	AP-400C	201801231	18G-40 GHz,48 dB	2025/10/16	2026/10/15
Coaxial Cable	Huber+Suhner	SF104	HC-CB04	30 MHz-18 GHz, 11m	2025/08/07	2026/08/06
Coaxial Cable	Huber+SGH	SF104	HC-CB04-1	1 GHz-18 GHz, 12m	2026/03/12	2027/03/11
Coaxial Cable	Huber+Suhner ,Rosnol	SF102_UP0264	HC-CB04-1	18-40 GHz, 3m	2025/08/13	2026/08/12
Pre-Amplifier	EMEC	EM01G18GA	060835	1-18 GHz,50 dB	2025/07/09	2026/07/08
Pre-Amplifier	EMCI	EMC003240	980324	0.3-2500 MHz, 40 dB	2024/10/28	2026/10/27
Preamplifier	SGH	PRAMP0510	20200703	1G-8GHz	2026/01/10	2027/01/09
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	AC 120V/60Hz

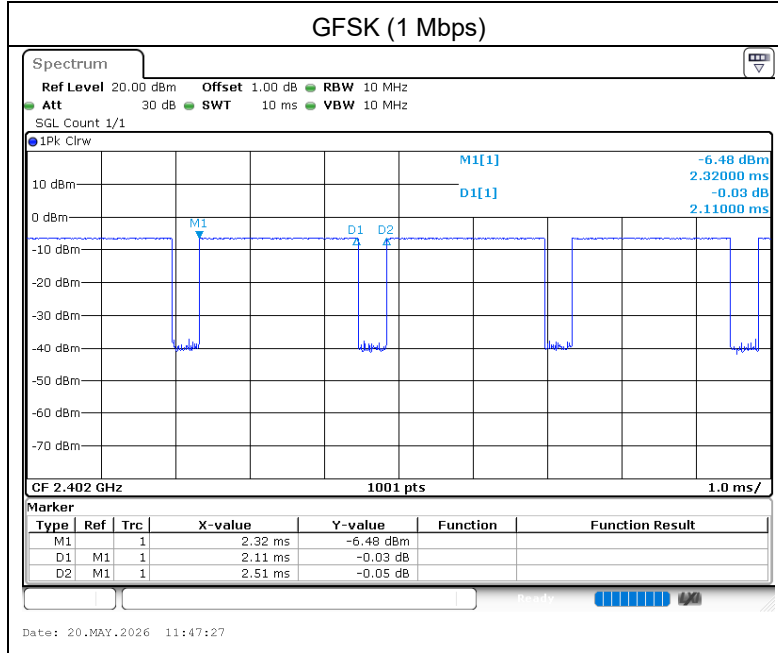
2.2. Test Frequency Mode

Test Software Version	Atmosic RF Tool_Version:1.5.3
-----------------------	-------------------------------

Modulation	Frequency (MHz)	Power Setting
GFSK (1 Mbps)	2402	3(-4dBm)
	2440	3(-4dBm)
	2480	3(-4dBm)

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)	2.110	2.510	84.06	0.75	0.474



2.4. The Worst Case Measurement Configuration

Tests Item	AC Power Line Conducted Emission
Test Condition	AC power line conducted measurement for line and neutral
Operating Mode	Transmit
1	Powered by notebook
2	Powered by Adapter

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
1	Powered by notebook
2	Powered by Adapter
Operating Mode > 1GHz	Transmit
1	Powered by notebook
The EUT was performed at X axis, Y axis and Z axis position for radiated spurious emission test. The worst case was found at X axis, so the measurement will follow this same test configuration.	

Note:

1. Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. For radiated spurious emission below 1 GHz and AC power line conducted emission have performed all modes of operation were investigated and the worst-case emissions are reported.

2.5. Tested System Details

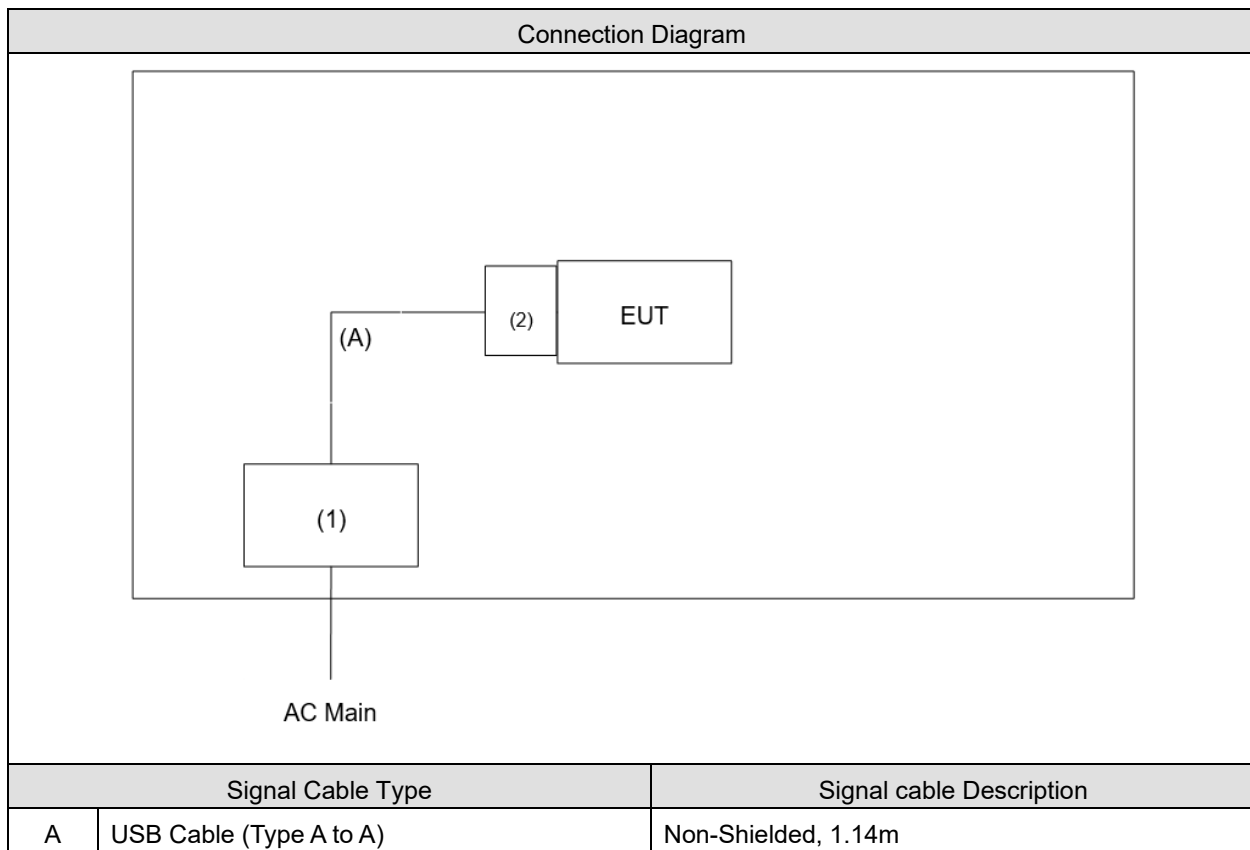
Test Mode: Mode 1

No.	Equipment	Brand Name	Model No.	Serial No.
1	Notebook	DELL	Latitude E7440	N/A
2	USB Type A to Type C	DEKRA	Z14	N/A

Test Mode: Mode 2

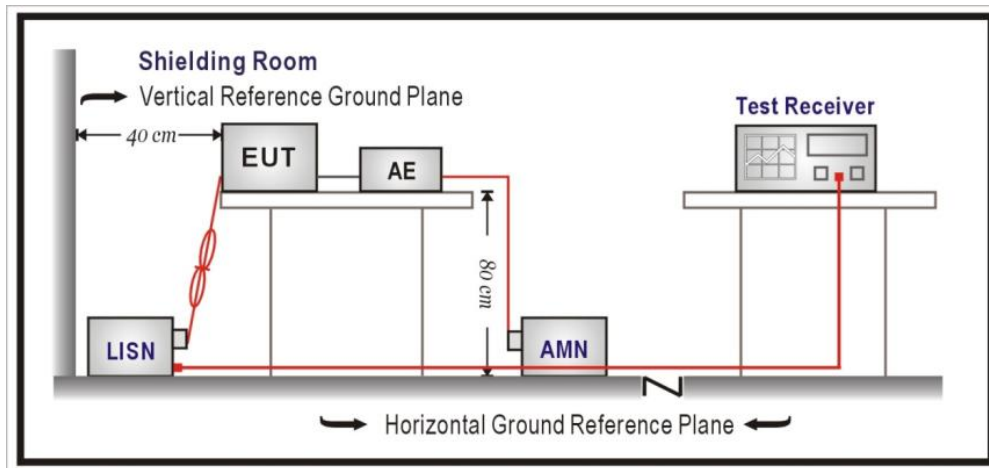
No.	Equipment	Brand Name	Model No.	Serial No.
1	Adapter	STAR	TC-20W	N/A
2	USB Type A to Type C	DEKRA	Z14	N/A

2.6. Configuration of Tested System



3. AC Power Line Conducted Emission

3.1. Test Setup



3.2. Test Limit

Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

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

3.3. Test Procedure

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

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

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

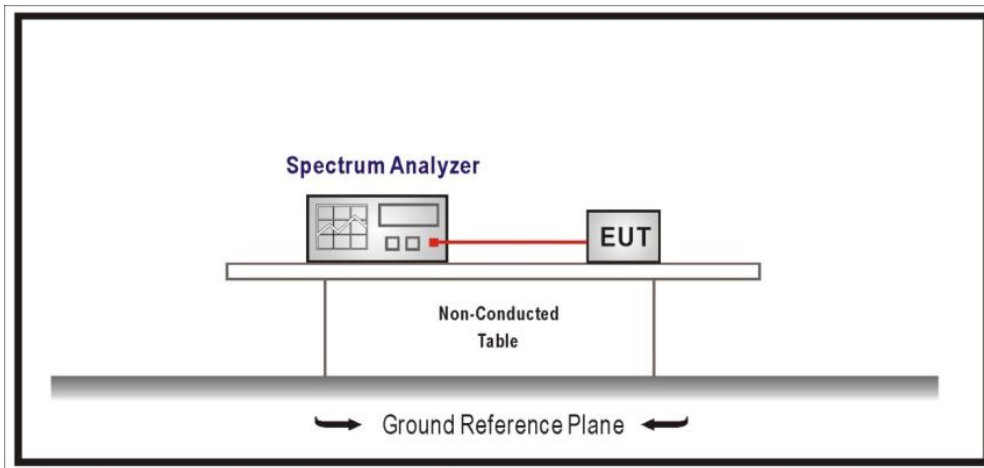
Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a receiver bandwidth of 9 kHz.

3.4. Test Result of AC Power Line Conducted Emission

Refer as Appendix A

4. Occupied Bandwidth & DTS Bandwidth

4.1. Test Setup



4.2. Test Limit

The 6 dB bandwidth: ≥ 500 kHz.

Occupied Bandwidth: N/A

4.3. Test Procedures

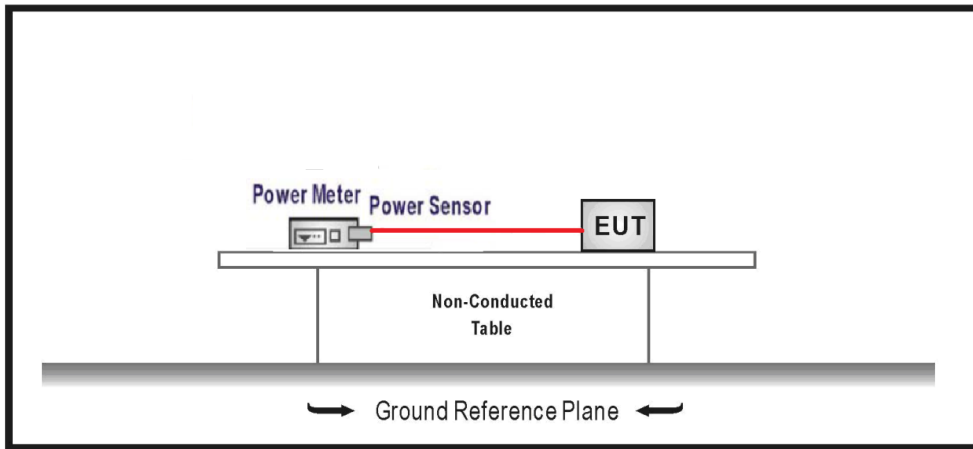
The EUT was setup according to ANSI C63.10; tested according to DTS test procedure of KDB 558074.

4.4. Test Result of Occupied Bandwidth & DTS Bandwidth

Refer as Appendix B

5. Maximum Conducted Output Power

5.1. Test Setup



5.2. Test Limit

The Maximum Conducted Output Power shall be less 1 Watt.

5.3. Test Procedures

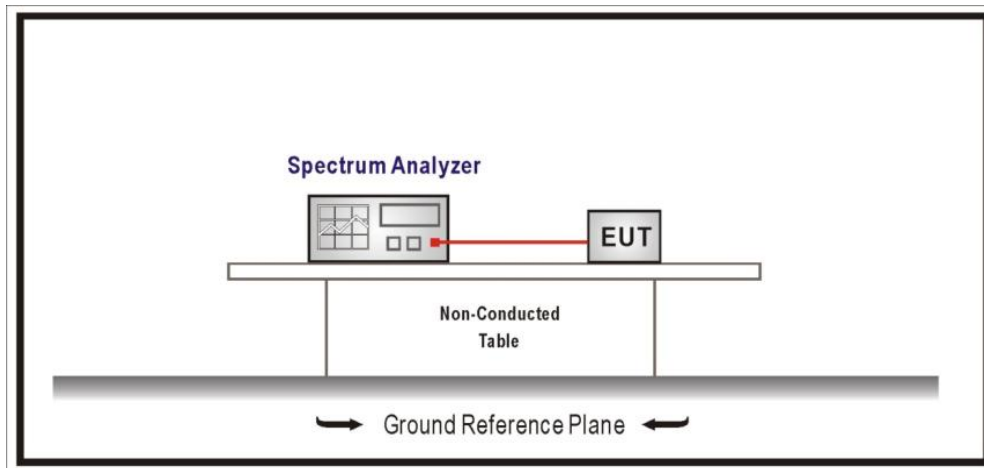
The EUT was setup according to ANSI C63.10; tested according to DTS test procedure of KDB 558074.

5.4. Test Result of Maximum Conducted Output Power

Refer as Appendix C

6. Maximum Power Spectral Density

6.1. Test Setup



6.2. 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.

6.3. Test Procedures

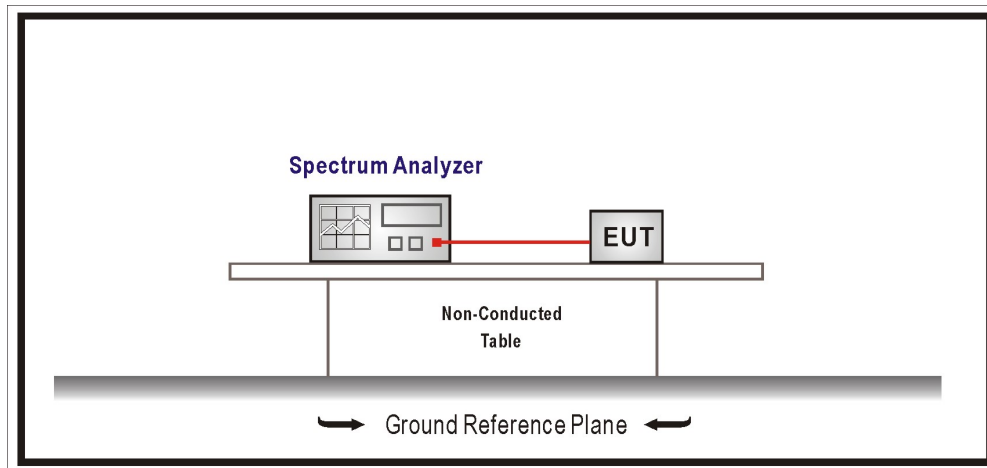
The EUT was setup according to ANSI C63.10; tested according to DTS test procedure of KDB 558074.

6.4. Test Result of Maximum Power Spectral Density

Refer as Appendix D

7. Antenna Port Conducted Emission

7.1. Test Setup



7.2. 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.

7.3. Test Procedure

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

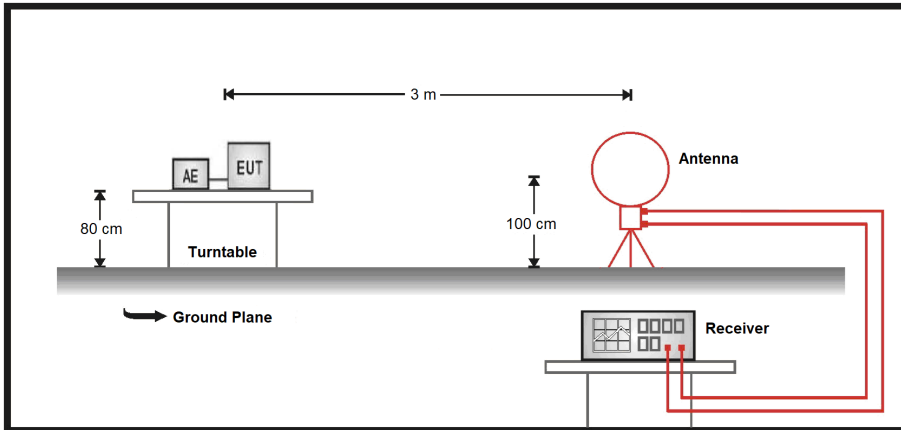
7.4. Test Result of Antenna Port Conducted Emission

Refer as Appendix E

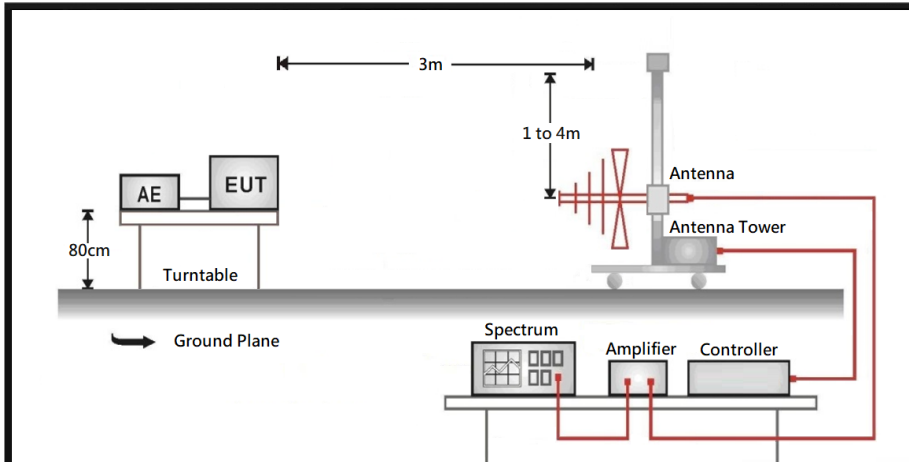
8. Transmitter Radiated Spurious Emission

8.1. Test Setup

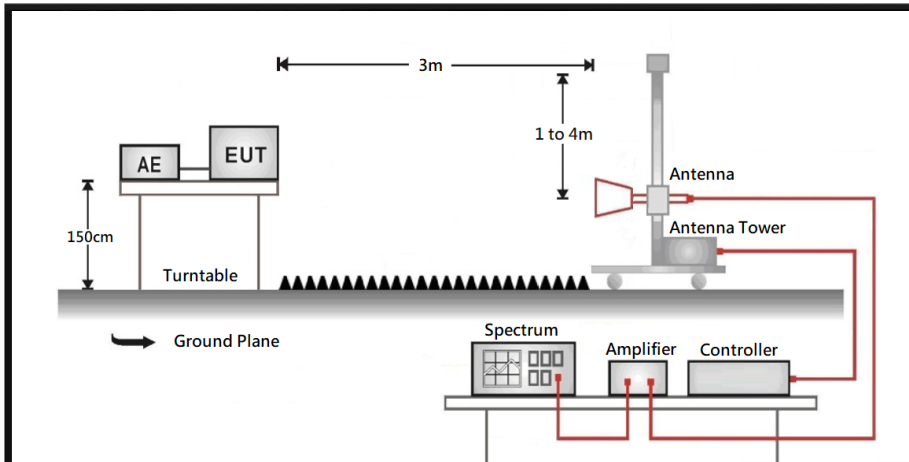
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



8.2. 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.

8.3. Test Procedure

The EUT was setup according to ANSI C63.10 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 on radiated measurement.

On any frequency or frequencies from 9 kHz (include 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.

8.4. Test Result of Transmitter Radiated Spurious Emission (Below 30 MHz)

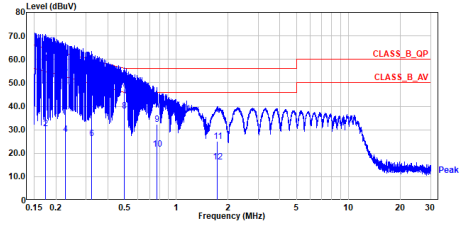
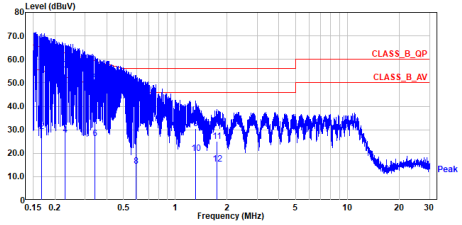
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

8.5. Test Result of Transmitter Radiated Spurious Emission

Refer as Appendix F

Appendix A. Test Result of AC Power Line Conducted Emission

Test Mode: Mode 1

TX_BLE1M_2480MHz_Line								TX_BLE1M_2480MHz_Neutral							
Site :HC-SR02 Condition :.....,Line Model No :TX_BLE1M_2480MHz Test By :Cyril Chen								Site :HC-SR02 Condition :.....,Neutral Model No :TX_BLE1M_2480MHz Test By :Cyril Chen							
															
No.	Frequency	Level	Limit	Over	Read	Factor	Remark	No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB			MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	0.174	58.29	64.78	-6.58	48.58	9.62	QP	1	0.167	59.88	65.09	-5.21	50.26	9.62	QP
2	0.174	30.41	54.78	-24.37	20.79	9.62	Average	2	0.167	29.18	55.09	-25.91	19.56	9.62	Average
3	0.227	53.60	62.56	-8.96	43.97	9.63	QP	3	0.230	55.61	62.46	-6.85	45.98	9.63	QP
4	0.227	28.00	52.56	-24.48	18.45	9.63	Average	4	0.230	27.92	52.46	-24.54	18.29	9.63	Average
5	0.324	48.26	59.61	-11.35	38.63	9.63	QP	5	0.343	50.26	59.14	-8.88	40.62	9.64	QP
6	0.324	26.12	49.61	-23.49	16.49	9.63	Average	6	0.343	26.31	49.14	-22.83	16.67	9.64	Average
7	0.501	47.49	56.00	-8.51	37.84	9.65	QP	7	0.594	48.62	56.00	-15.38	30.96	9.66	QP
8	0.501	37.99	46.00	-8.01	28.34	9.65	Average	8	0.594	14.44	46.00	-31.56	4.78	9.66	Average
9	0.772	32.27	56.00	-23.73	22.59	9.68	QP	9	1.319	30.40	56.00	-25.60	20.68	9.72	QP
10	0.772	21.81	46.00	-24.19	12.13	9.68	Average	10	1.319	19.94	46.00	-26.06	10.22	9.72	Average
11	1.738	25.19	56.00	-30.81	15.44	9.75	QP	11	1.740	25.19	56.00	-30.81	15.44	9.75	QP
12	1.738	16.17	46.00	-29.83	6.42	9.75	Average	12	1.740	15.40	46.00	-30.60	5.65	9.75	Average

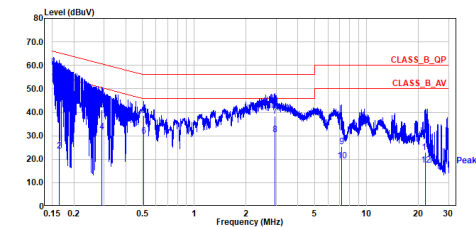
Note:
 1. "" means this data is the worst emission level.
 2. Emission Level = Reading Level + Correct Factor
 (Correct Factor = LISN Insertion Loss + Cable Loss).
 3. Margin = Emission Level - Limit.

Note:
 1. "" means this data is the worst emission level.
 2. Emission Level = Reading Level + Correct Factor
 (Correct Factor = LISN Insertion Loss + Cable Loss).
 3. Margin = Emission Level - Limit.

Test Mode: Mode 2

TX_BLE1M_2480MHz_Line

Site :HC-SR02
 Condition :.....,Line
 Model No :TX_BLE1M_2480MHz
 Test By :Cyril Chen



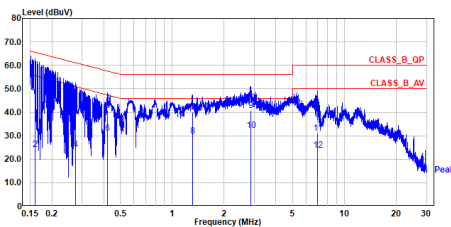
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	0.165	51.78	65.20	-13.42	42.16	9.62	QP
2	0.165	23.53	55.20	-31.67	13.91	9.62	Average
3	0.291	40.92	60.51	-19.59	31.29	9.63	QP
4	0.291	31.57	50.51	-18.94	21.94	9.63	Average
5	0.509	38.70	56.00	-17.30	29.05	9.65	QP
6	0.509	29.89	46.00	-16.11	20.24	9.65	Average
7	2.950	38.39	56.00	-17.61	28.59	9.80	QP
8	2.950	30.43	46.00	-15.57	20.63	9.80	Average
9	7.170	25.34	60.00	-34.66	15.36	9.98	QP
10	7.170	19.31	50.00	-30.69	9.33	9.98	Average
11	22.018	23.00	60.00	-37.00	12.70	10.30	QP
12	22.018	17.60	50.00	-32.40	7.30	10.30	Average

Note:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor
(Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

TX_BLE1M_2480MHz_Neutral

Site :HC-SR02
 Condition :.....,Neutral
 Model No :TX_BLE1M_2480MHz
 Test By :Cyril Chen



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	0.160	52.51	65.44	-12.93	42.89	9.62	QP
2	0.160	24.30	55.44	-31.14	14.68	9.62	Average
3	0.275	40.84	60.95	-20.11	31.21	9.63	QP
4	0.275	24.21	50.95	-26.74	14.58	9.63	Average
5	0.420	40.75	57.45	-16.70	31.11	9.64	QP
6	0.420	31.04	47.45	-16.41	21.40	9.64	Average
7	1.310	40.29	56.00	-15.71	30.57	9.72	QP
8	1.310	29.06	46.00	-16.14	20.14	9.72	Average
9	2.873	40.73	56.00	-15.27	30.93	9.80	QP
10	2.873	32.25	46.00	-13.75	22.45	9.80	Average
11	6.951	31.08	60.00	-28.92	21.10	9.98	QP
12	6.951	23.85	50.00	-26.15	13.87	9.98	Average

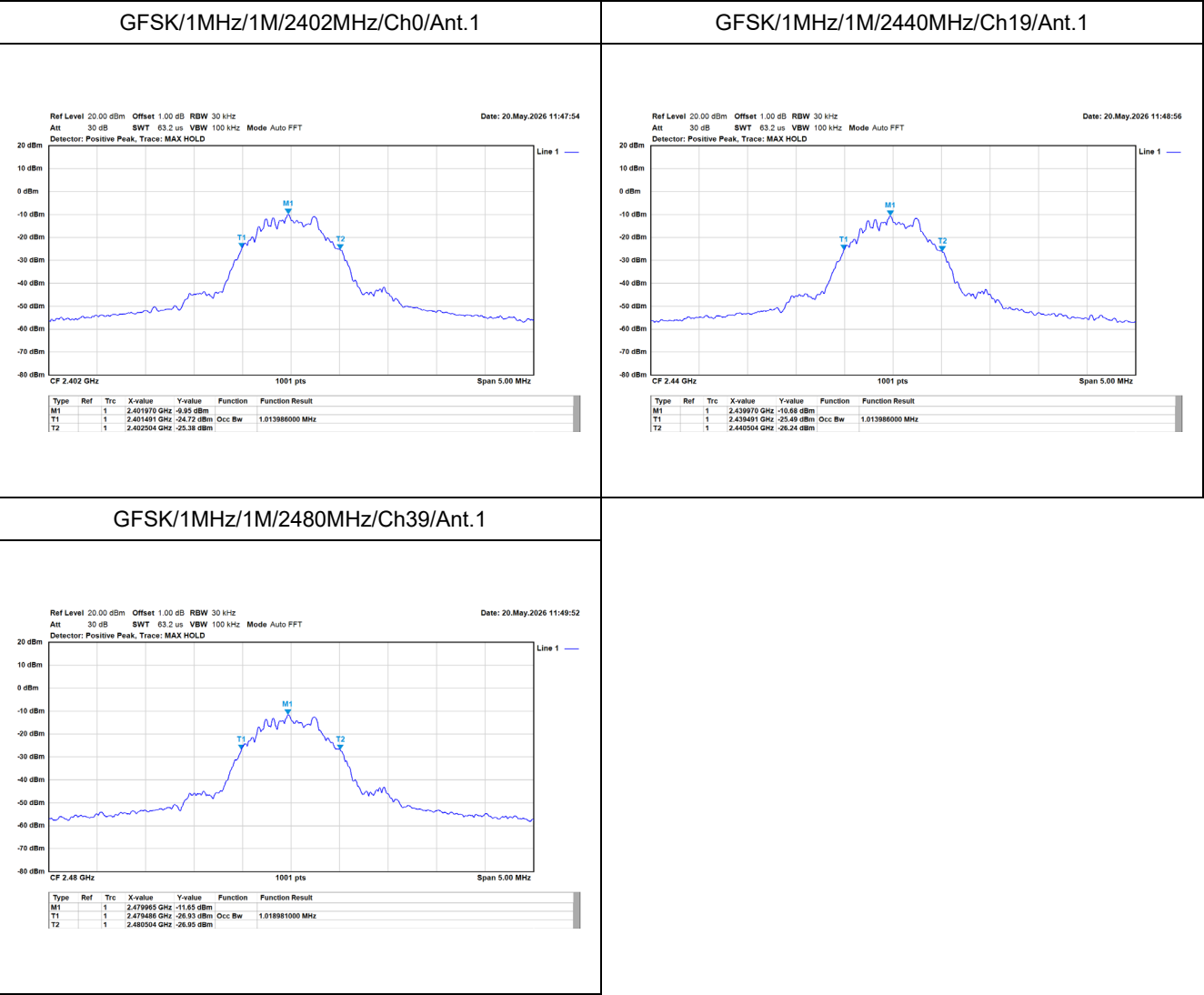
Note:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor
(Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

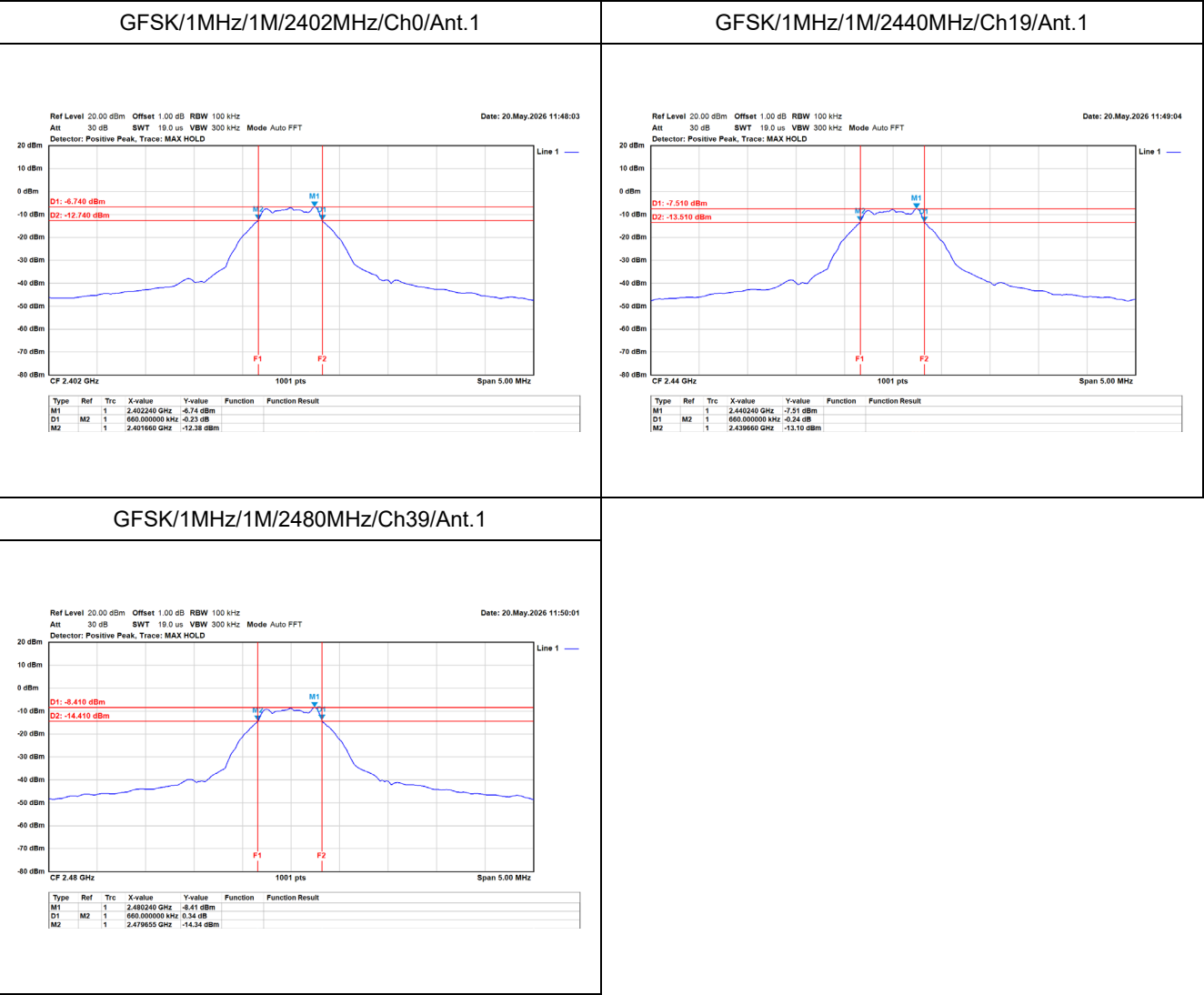
Appendix B. Test Result of Occupied Bandwidth & DTS Bandwidth

Modulation	Frequency (MHz)	99% Occupied Bandwidth (MHz)	DTS Bandwidth (MHz)	Limit (MHz)	
				99% Occupied Bandwidth	DTS Bandwidth
GFSK (1Mbps)	2402	1.01	0.66	-	≥ 0.5
	2440	1.01	0.66	-	≥ 0.5
	2480	1.02	0.66	-	≥ 0.5

For 99% Occupied Bandwidth:



For DTS Bandwidth:

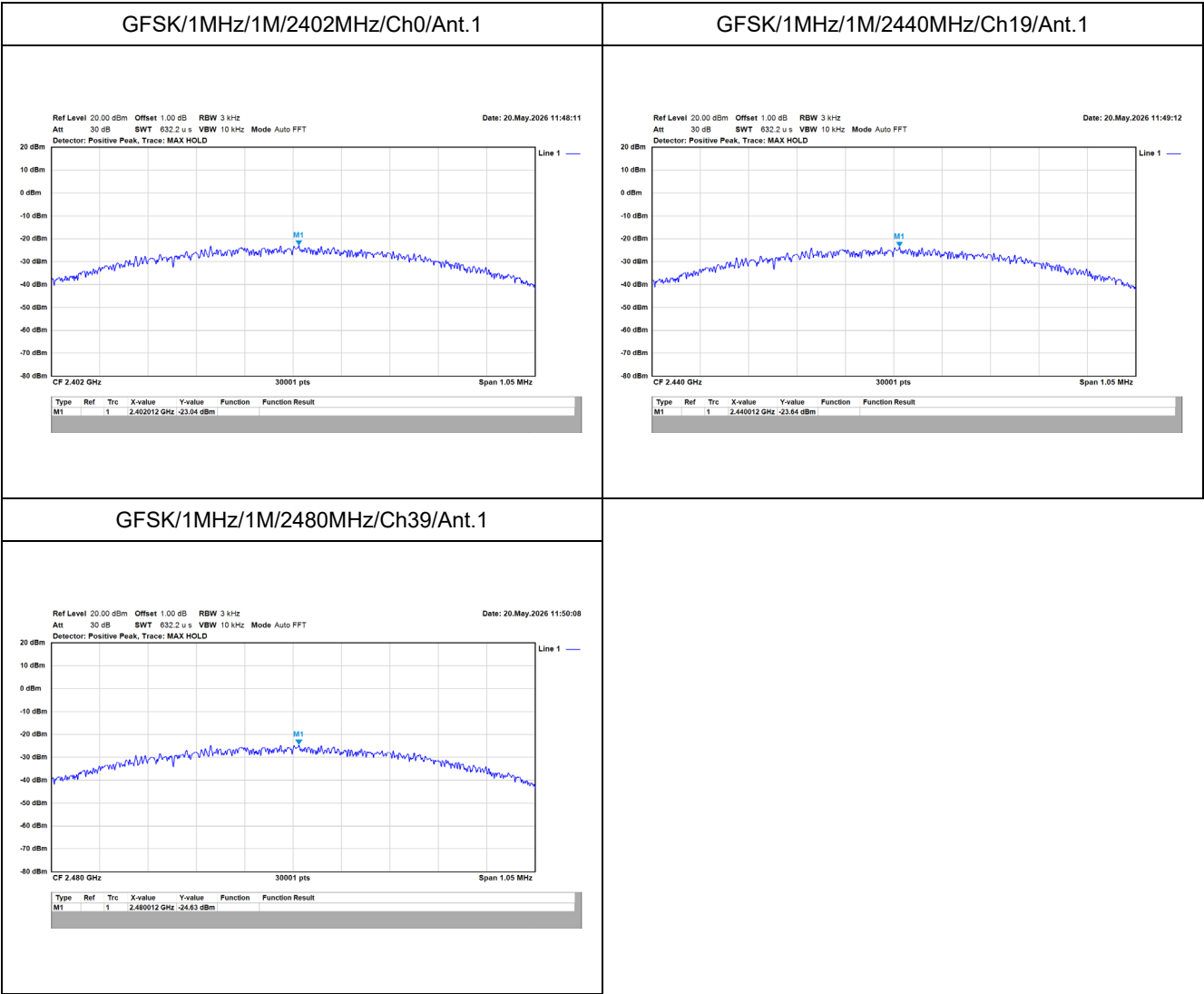


Appendix C. Test Result of Maximum Conducted Output Power

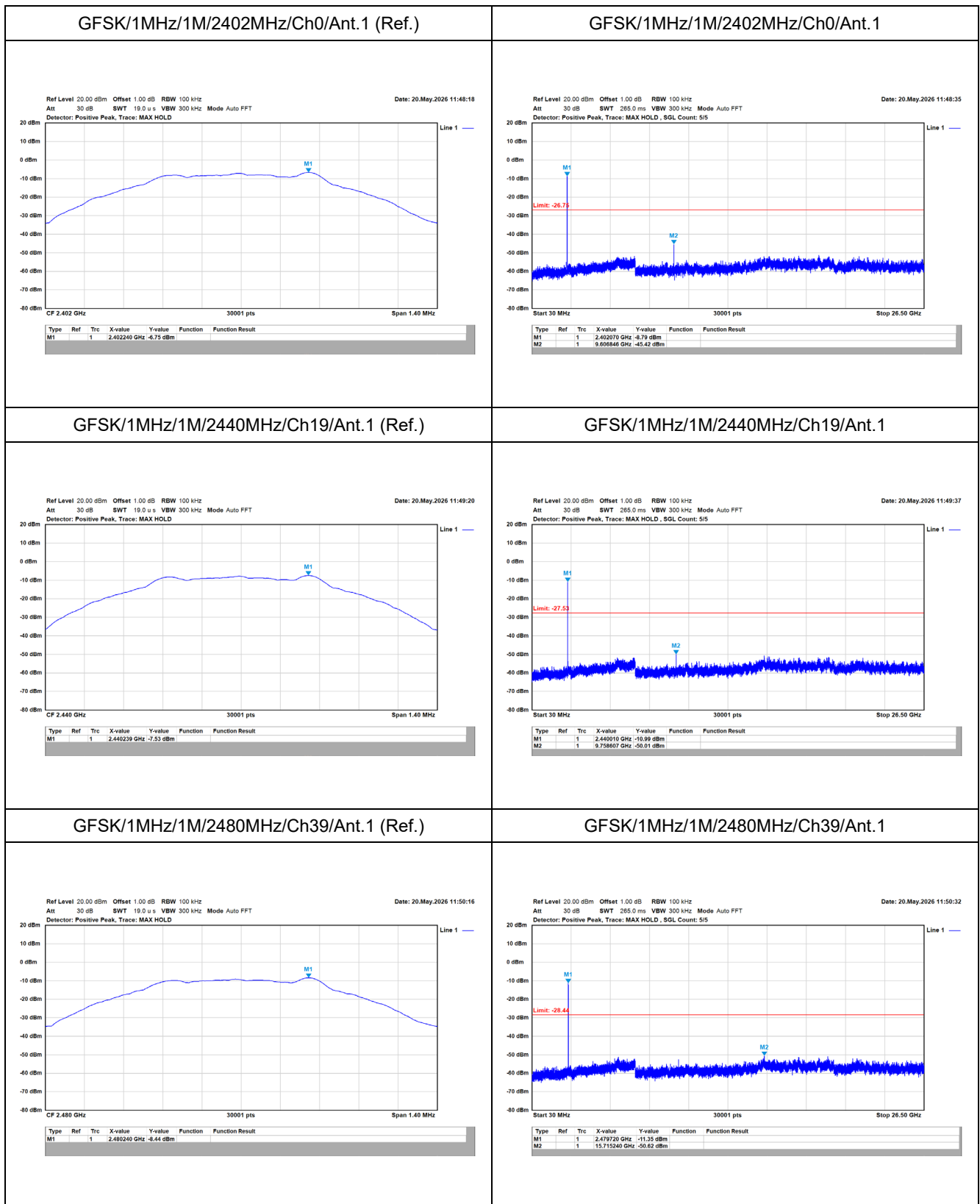
Modulation	Frequency (MHz)	Maximum Conducted Peak Output Power (dBm)	Limit (dBm)	Result
GFSK (1 Mbps)	2402	-6.750	30.00	Pass
	2440	-7.400	30.00	Pass
	2480	-8.210	30.00	Pass

Appendix D. Test Result of Maximum Power Spectral Density

Modulation	Frequency (MHz)	Maximum Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
GFSK (1Mbps)	2402	-23.04	8.00	Pass
	2440	-23.64	8.00	Pass
	2480	-24.63	8.00	Pass



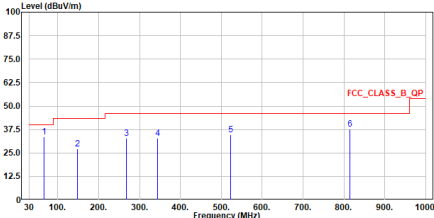
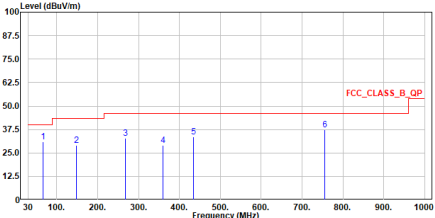
Appendix E. Test Result of Antenna Port Conducted Emission

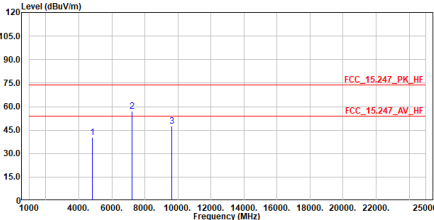
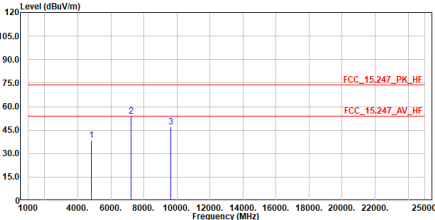




Appendix F. Test Result of Transmitter Radiated Spurious Emission

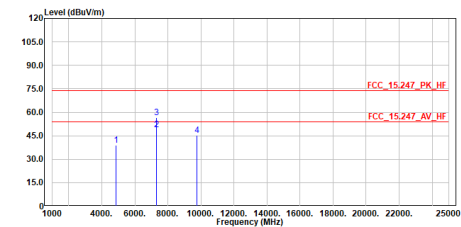
Test Mode: Mode 1

TX_BLE1M_2440MHz_H_QP								TX_BLE1M_2440MHz_V_QP							
Site :HC-CB04 Condition :3m Horizontal Mode :TX_BLE1M_2440MHz Test By :Brook Cheng								Site :HC-CB04 Condition :3m Vertical Mode :TX_BLE1M_2440MHz Test By :Brook Cheng							
															
No.	Frequency	Level	Limit	Over	Read	Factor	Remark	No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB			MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	65.793	33.77	40.00	-6.23	57.79	-24.02	QP	1	65.793	31.02	40.00	-8.98	55.04	-24.02	QP
2	148.243	27.26	43.50	-16.24	49.88	-22.62	QP	2	148.340	29.02	43.50	-14.48	51.63	-22.61	QP
3	268.232	32.95	46.00	-13.05	56.05	-23.10	QP	3	268.232	32.66	46.00	-13.34	55.76	-23.10	QP
4	343.795	32.75	46.00	-13.25	53.71	-20.96	QP	4	359.994	29.13	46.00	-16.87	49.94	-20.81	QP
5	522.954	34.69	46.00	-11.31	51.39	-16.70	QP	5	434.393	33.72	46.00	-12.28	52.15	-18.43	QP
6	813.857	37.77	46.00	-8.23	49.44	-11.67	QP	6	754.881	37.30	46.00	-8.70	49.48	-12.18	QP
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.								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.							

TX_BLE1M_2402MHz_H								TX_BLE1M_2402MHz_V							
Site :HC-CB04 Condition :3m Horizontal Mode :TX_BLE1M_2402MHz Test By :Brook Cheng								Site :HC-CB04 Condition :3m Vertical Mode :TX_BLE1M_2402MHz Test By :Brook Cheng							
															
No.	Frequency	Level	Limit	Over	Read	Factor	Remark	No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB			MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	4804.000	40.40	74.00	-33.60	58.52	-18.12	Peak	1	4804.000	38.33	74.00	-35.67	56.45	-18.12	Peak
2	7206.000	56.06	74.00	-17.14	70.26	-13.40	Peak	2	7206.000	53.75	74.00	-20.25	67.15	-13.40	Peak
3	9608.000	47.63	74.00	-26.37	58.04	-10.41	Peak	3	9608.000	46.90	74.00	-27.10	57.31	-10.41	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.								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.							

TX_BLE1M_2440MHz_H

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng



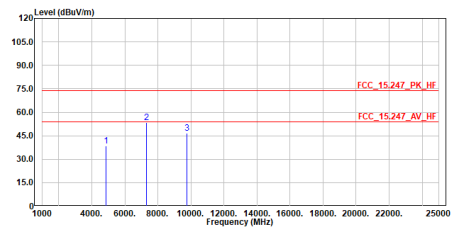
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4880.000	38.77	74.00	-35.23	56.70	-17.93	Peak
2	7320.000	48.71	54.00	-5.29	61.95	-13.24	Average
3	7320.000	56.74	74.00	-17.26	69.98	-13.24	Peak
4	9760.000	45.41	74.00	-28.59	55.68	-10.27	Peak

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.

TX_BLE1M_2440MHz_V

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng



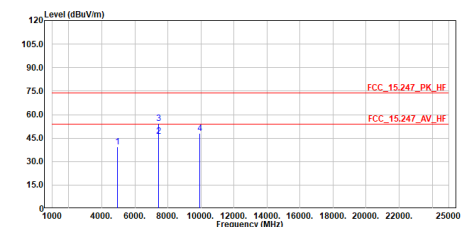
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4880.000	38.27	74.00	-35.73	56.20	-17.93	Peak
2	7320.000	53.55	74.00	-20.45	66.79	-13.24	Peak
3	9760.000	46.78	74.00	-27.22	57.05	-10.27	Peak

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.

TX_BLE1M_2480MHz_H

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2480MHz
Test By :Brook Cheng



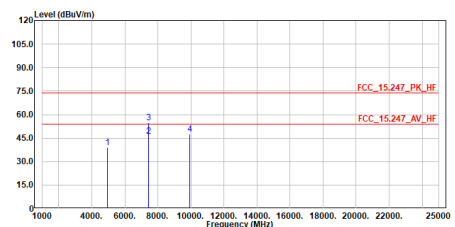
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4960.000	39.46	74.00	-34.54	57.20	-17.74	Peak
2	7440.000	46.01	54.00	-7.99	59.10	-13.09	Average
3	7440.000	54.53	74.00	-19.47	67.62	-13.09	Peak
4	9920.000	47.84	74.00	-26.16	57.98	-10.14	Peak

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.

TX_BLE1M_2480MHz_V

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2480MHz
Test By :Brook Cheng



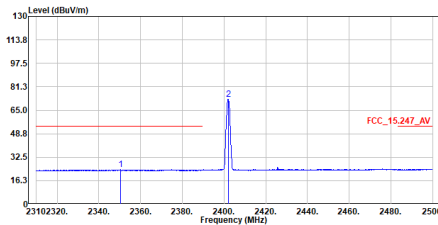
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	4960.000	39.14	74.00	-34.86	56.88	-17.74	Peak
2	7440.000	46.33	54.00	-7.67	59.42	-13.09	Average
3	7440.000	54.59	74.00	-19.41	67.68	-13.09	Peak
4	9920.000	47.47	74.00	-26.53	57.61	-10.14	Peak

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.

TX_BLE1M_2402MHz_H_AV

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2402MHz
Test By :Brook Cheng



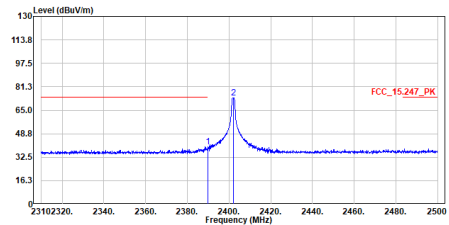
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2350.375	23.85	54.00	-30.15	17.98	5.87	Average
2	2402.055	72.83	-----	-----	66.88	5.95	Average

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.

TX_BLE1M_2402MHz_H_PK

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2402MHz
Test By :Brook Cheng



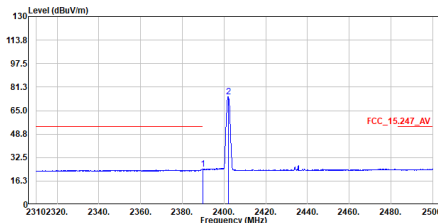
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.800	39.54	74.00	-34.46	33.60	5.94	Peak
2	2402.055	73.75	-----	-----	67.80	5.95	Peak

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.

TX_BLE1M_2402MHz_V_AV

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2402MHz
Test By :Brook Cheng



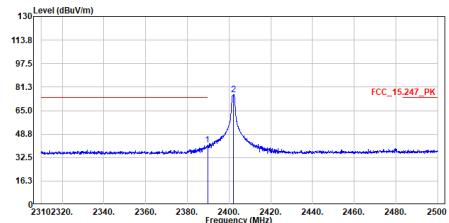
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.800	24.57	54.00	-29.43	18.63	5.94	Average
2	2402.055	74.77	-----	-----	68.82	5.95	Average

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.

TX_BLE1M_2402MHz_V_PK

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2402MHz
Test By :Brook Cheng



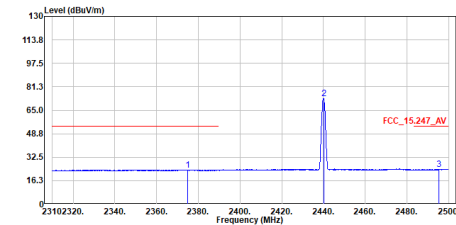
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.705	41.06	74.00	-32.94	35.12	5.94	Peak
2	2402.150	75.81	-----	-----	69.86	5.95	Peak

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.

TX_BLE1M_2440MHz_H_AV

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng



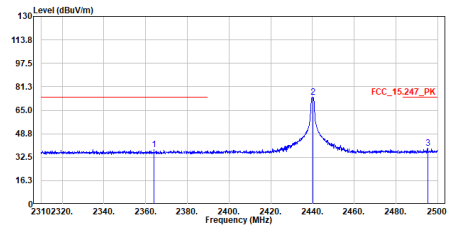
No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2374.980	23.79	54.00	-30.21	17.89	5.90	Average
2	2440.055	72.89	-----	-----	66.88	6.01	Average
3	2495.440	24.18	54.00	-29.82	18.08	6.10	Average

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.

TX_BLE1M_2440MHz_H_PK

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng



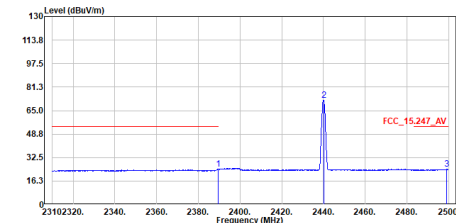
No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2364.055	37.74	74.00	-36.26	31.85	5.89	Peak
2	2440.055	73.85	-----	-----	67.84	6.01	Peak
3	2495.155	38.66	74.00	-35.34	32.56	6.10	Peak

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.

TX_BLE1M_2440MHz_V_AV

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng



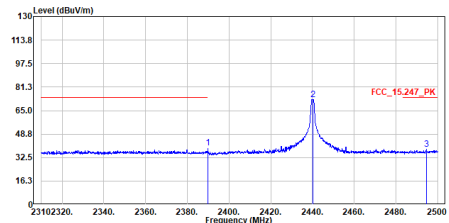
No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.610	24.74	54.00	-29.26	18.80	5.94	Average
2	2440.055	71.89	-----	-----	65.88	6.01	Average
3	2499.145	24.31	54.00	-29.69	18.20	6.11	Average

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.

TX_BLE1M_2440MHz_V_PK

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng



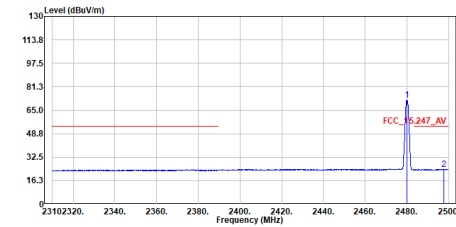
No.	Frequency MHz	Level dBuV/m	Limit dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	2389.990	39.09	74.00	-34.91	33.15	5.94	Peak
2	2440.055	72.84	-----	-----	66.83	6.01	Peak
3	2494.585	38.37	74.00	-35.63	32.27	6.10	Peak

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.

TX_BLE1M_2480MHz_H_AV

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2480MHz
Test By :Brook Cheng



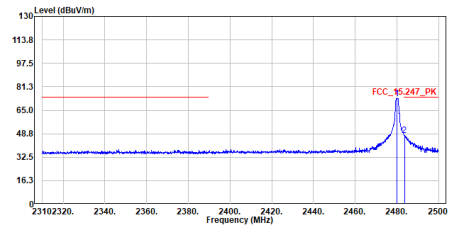
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2480.050	72.32	-----	-----	66.25	6.07	Average
2	2497.815	24.17	54.00	-29.83	18.06	6.11	Average

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.

TX_BLE1M_2480MHz_H_PK

Site :HC-CB04
Condition :3m ,Horizontal
Mode :TX_BLE1M_2480MHz
Test By :Brook Cheng



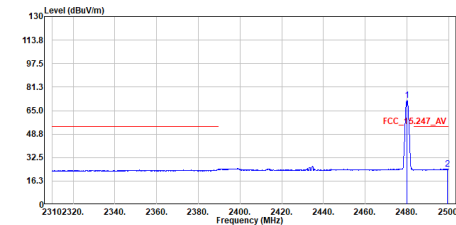
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2479.860	73.27	-----	-----	67.20	6.07	Peak
2	2483.565	47.70	74.00	-26.30	41.62	6.08	Peak

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.

TX_BLE1M_2480MHz_V_AV

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2480MHz
Test By :Brook Cheng



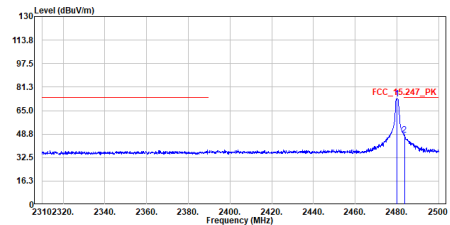
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2480.050	72.18	-----	-----	66.11	6.07	Average
2	2499.335	24.54	54.00	-29.46	18.43	6.11	Average

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.

TX_BLE1M_2480MHz_V_PK

Site :HC-CB04
Condition :3m ,Vertical
Mode :TX_BLE1M_2480MHz
Test By :Brook Cheng



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	2479.860	73.13	-----	-----	67.06	6.07	Peak
2	2483.565	48.02	74.00	-25.98	41.94	6.08	Peak

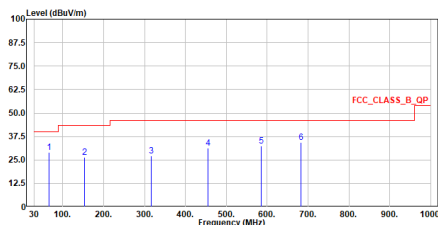
Note:

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.

Test Mode: Mode 2

TX_BLE1M_2440MHz_H_QP

Site :HC-CB04
Condition :3m Horizontal
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng

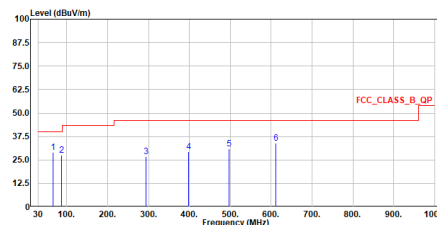


No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	65.793	28.93	40.00	-11.07	52.95	-24.02	Peak
2	153.578	26.58	43.50	-16.92	49.07	-22.49	Peak
3	316.829	27.20	46.00	-18.80	48.71	-21.51	Peak
4	454.860	31.33	46.00	-14.67	49.16	-17.83	Peak
5	584.549	32.32	46.00	-13.68	47.78	-15.46	Peak
6	682.713	34.46	46.00	-11.54	48.22	-13.76	Peak

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.

TX_BLE1M_2440MHz_V_QP

Site :HC-CB04
Condition :3m Vertical
Mode :TX_BLE1M_2440MHz
Test By :Brook Cheng



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	65.793	29.13	40.00	-10.87	53.15	-24.02	Peak
2	87.521	27.58	40.00	-12.42	55.90	-28.32	Peak
3	293.452	26.90	46.00	-19.10	49.05	-22.15	Peak
4	398.600	29.36	46.00	-16.64	48.83	-19.47	Peak
5	496.473	31.01	46.00	-14.99	48.31	-17.30	Peak
6	612.194	33.97	46.00	-12.03	48.71	-14.74	Peak

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.