

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
Report No.: RFBBUI-WTW-P22031043-3
FCC ID: TX2-RTL8852B
Model No.: RTL8852B
Received Date: 2022/3/24
Test Date: 2022/5/28 ~ 2022/6/21
Issued Date: 2022/8/23

Applicant: Realtek Semiconductor Corp.
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory
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Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / 723255 / TW2022
Designation Number:

Approved by: _____, **Date:** 2022/8/23
May Chen / Manager

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Prepared by : Vivian Huang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBBUI-WTW-P22031043-3	Original release.	2022/8/23

1 Certificate

Product: 11ax RTL8852B M.2 1216 Combo module

Brand: REALTEK

Test Model: RTL8852B

Sample Status: Engineering sample

Applicant: Realtek Semiconductor Corp.

Test Date: 2022/5/28 ~ 2022/6/21

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)

Measurement ANSI C63.10-2013

procedure: KDB 558074 D01 15.247 Meas Guidance v05r02

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Standard / Clause	Test Item	Result	Remark
15.247(b)	RF Output Power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.247(a)(2)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.247(d)	Conducted Out of Band Emissions	Pass	Meet the requirement of limit.
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -13.36 dB at 25.87500 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.7 dB at 236.27 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -7.8 dB at 2483.50 MHz
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

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

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.5 dB
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.1 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description

Product	11ax RTL8852B M.2 1216 Combo module
Brand	REALTEK
Test Model	RTL8852B
Status of EUT	Engineering sample
Power Supply Rating	3.3Vdc from host equipment
Modulation Type	GFSK
Modulation Technology	DTS
Transfer Rate	Up to 2 Mbps
Operating Frequency	2402 ~ 2480 MHz
Number of Channel	40
Output Power	BT-LE 1M: 17.947 mW (12.54 dBm) BT-LE 2M: 17.989 mW (12.55 dBm)

Note:

1. The EUT has below HW SKU configuration, as below table:

SKU No.	Interface	Description
1	WLAN use PCIe, BT use USB	Dual antenna port
2	WLAN use PCIe, BT use UART	Dual antenna port

2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN 5GHz	Bluetooth

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Ant. Set	RF Chain No.	Brand	Model	Ant. Net Gain (dBi)	Frequency Range (GHz)	Ant. Type	Connector Type	Cable Length (mm)
1	Chain 0	ARISTOTLE	RFA-27-JP326-MHF4300	3.5	2.4~2.4835	PIFA	i-pex(MHF)	300
				5	5.15~5.85			
				5	5.875~7.125			
	Chain 1	ARISTOTLE	RFA-27-JP326-MHF4300	3.5	2.4~2.4835	PIFA	i-pex(MHF)	300
				5	5.15~5.85			
				5	5.875~7.125			
2	Chain 0	ARISTOTLE	RFA-27-C38H1-MHF4300	3	2.4~2.4835	Dipole	i-pex(MHF)	300
				5	5.15~5.85			
				5	5.875~7.125			
	Chain 1	ARISTOTLE	RFA-27-C38H1-MHF4300	3	2.4~2.4835	Dipole	i-pex(MHF)	300
				5	5.15~5.85			
				5	5.875~7.125			

Note:

1. The Bluetooth technology will fix transmission on Chain 1.
2. Max. gain was selected for the final test, except for the unwanted emissions test.

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

3.3 Channel List

40 channels are provided for BT-LE:

RF Channel	RF Center Frequency	Channel Index	Channels Type for BT 5.x		Channels Type for BT 4.x
			Maximum Data Rate 2Mbps	Maximum Data Rate 1Mbps	Maximum Data Rate 1Mbps
0	2402 MHz	37		●	●
1	2404 MHz	0	●		●
2	2406 MHz	1	●		●
3	2408 MHz	2	●		●
4	2410 MHz	3	●		●
5	2412 MHz	4	●		●
6	2414 MHz	5	●		●
7	2416 MHz	6	●		●
8	2418 MHz	7	●		●
9	2420 MHz	8	●		●
10	2422 MHz	9	●		●
11	2424 MHz	10	●		●
12	2426 MHz	38		●	●
13	2428 MHz	11	●		●
14	2430 MHz	12	●		●
15	2432 MHz	13	●		●
16	2434 MHz	14	●		●
17	2436 MHz	15	●		●
18	2438 MHz	16	●		●
19	2440 MHz	17	●		●
20	2442 MHz	18	●		●
21	2444 MHz	19	●		●
22	2446 MHz	20	●		●
23	2448 MHz	21	●		●
24	2450 MHz	22	●		●
25	2452 MHz	23	●		●
26	2454 MHz	24	●		●
27	2456 MHz	25	●		●
28	2458 MHz	26	●		●
29	2460 MHz	27	●		●
30	2462 MHz	28	●		●
31	2464 MHz	29	●		●
32	2466 MHz	30	●		●
33	2468 MHz	31	●		●
34	2470 MHz	32	●		●
35	2472 MHz	33	●		●
36	2474 MHz	34	●		●
37	2476 MHz	35	●		●
38	2478 MHz	36	●		●
39	2480 MHz	39		●	●

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	<p>1. EUT has the following interfaces: PCIe+USB interface/PCIe+UART interface. These interfaces are pre-scanned for worst-case scenarios as representative test conditions.</p> <p>2. PIFA ANT can be used in the following ways: X / Y / Z axis. Pre-scan in these ways and find the worst case as a representative test condition.</p>
Worst Case:	<p>1. EUT interfaces Worst Condition: Unwanted Emissions below 1 GHz PCIe+UART interface worst ; Unwanted Emissions above 1 GHz PCIe+USB interface worst ; AC Power Conducted Emissions PCIe+UART interface worst.</p> <p>2. PIFA ANT the worst case was found when positioned on (X / Y / Z axis): X</p> <p>3. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).</p>

Following channel(s) was (were) selected for the final test as listed below:

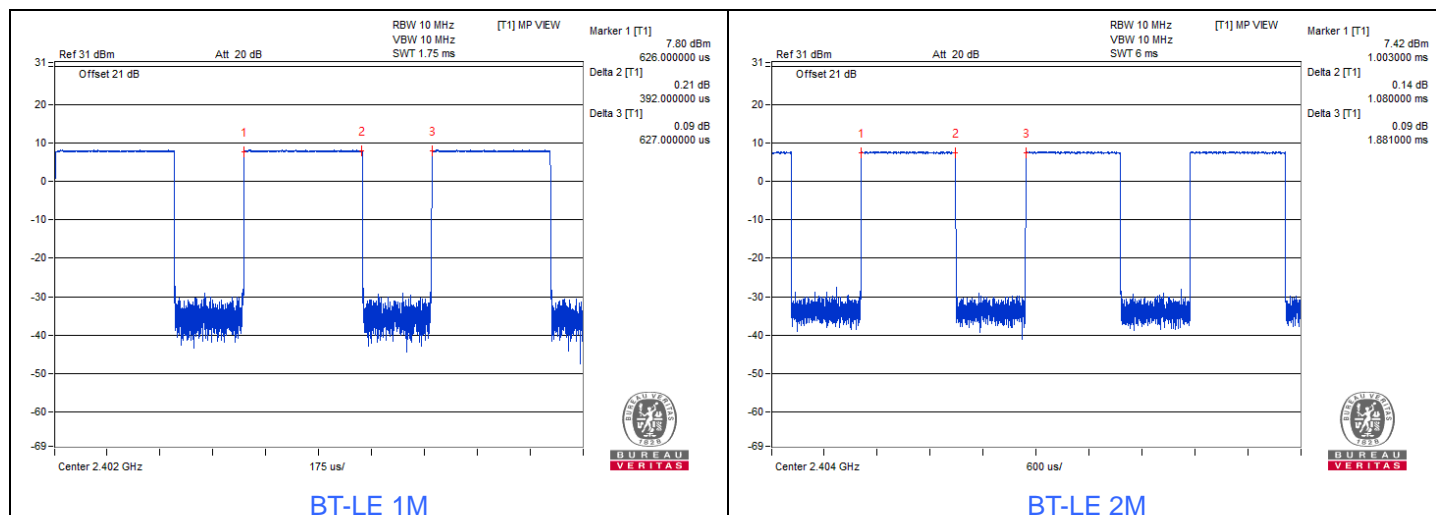
Test Item	EUT Configure Mode	Mode	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	C	BT-LE 2M	38	GFSK	2Mb/s
	D	BT-LE 2M	1	GFSK	2Mb/s
Unwanted Emissions below 1 GHz	A, C	BT-LE 2M	38	GFSK	2Mb/s
	B, D	BT-LE 2M	1	GFSK	2Mb/s
Unwanted Emissions above 1 GHz	A, B, C, D	BT-LE 1M	0, 19, 39	GFSK	1Mb/s
		BT-LE 2M	1, 19, 38	GFSK	2Mb/s
RF Output Power / 6 dB Bandwidth / Power Spectral Density / Conducted Out of Band Emissions	E, F	BT-LE 1M	0, 19, 39	GFSK	1Mb/s
		BT-LE 2M	1, 19, 38	GFSK	2Mb/s
EUT Configure Mode:	A	Low Power with Dipole Antenna			
	B	High Power with Dipole Antenna			
	C	Low Power with PIFA Antenna			
	D	High Power with PIFA Antenna			
	E	Low Power (Antenna Port)			
	F	High Power (Antenna Port)			
Note: Bluetooth output power is divided into Low Power(6dBm) and High Power(12dBm), both need to be tested.					

3.5 Duty Cycle of Test Signal

Duty cycle of test signal is $\geq 98\%$, duty factor is not required.
 Duty cycle of test signal is $< 98\%$, duty factor shall be considered.

BT-LE 1M: Duty cycle = $0.392 \text{ ms} / 0.627 \text{ ms} \times 100\% = 62.5\%$, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.04 \text{ dB}$

BT-LE 2M: Duty cycle = $1.08 \text{ ms} / 1.881 \text{ ms} \times 100\% = 57.4\%$, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.41 \text{ dB}$



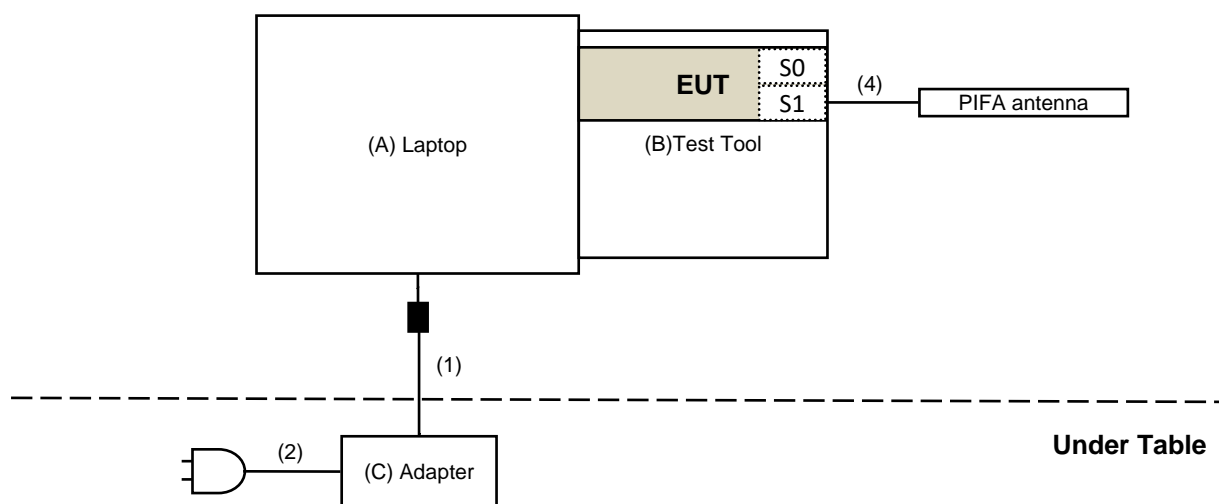
3.6 Test Program Used and Operation Descriptions

Controlling software (Bluetooth RF test tool (5.3.2.25)) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

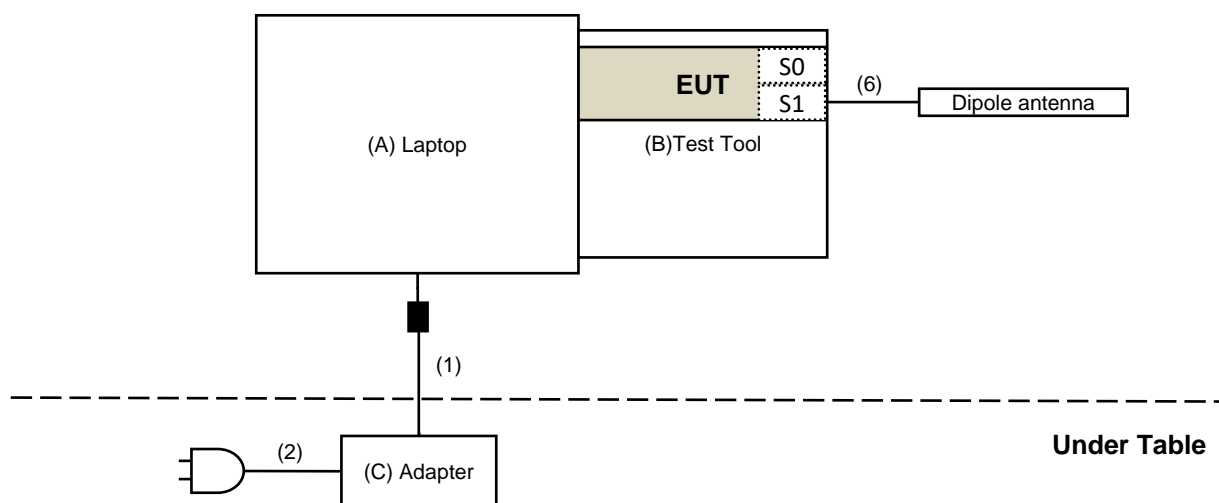
3.7 Connection Diagram of EUT and Peripheral Devices

For Unwanted Emission above 1 GHz test

(PIFA antenna BT PCIe + USB interface + dual antenna port)

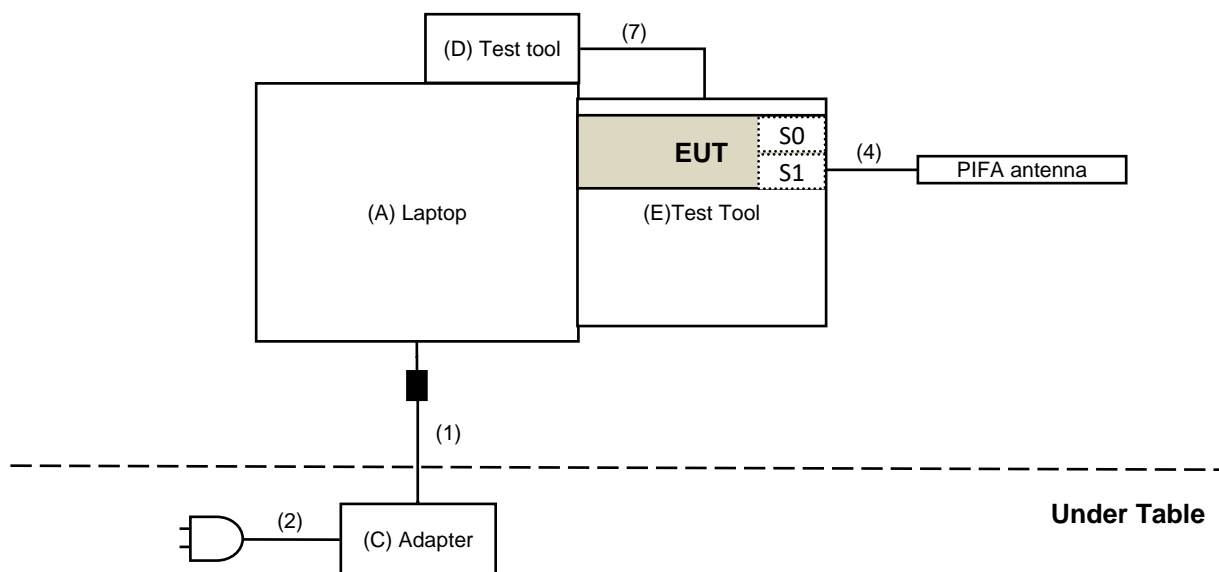


(Dipole antenna BT PCIe + USB interface + dual antenna port)

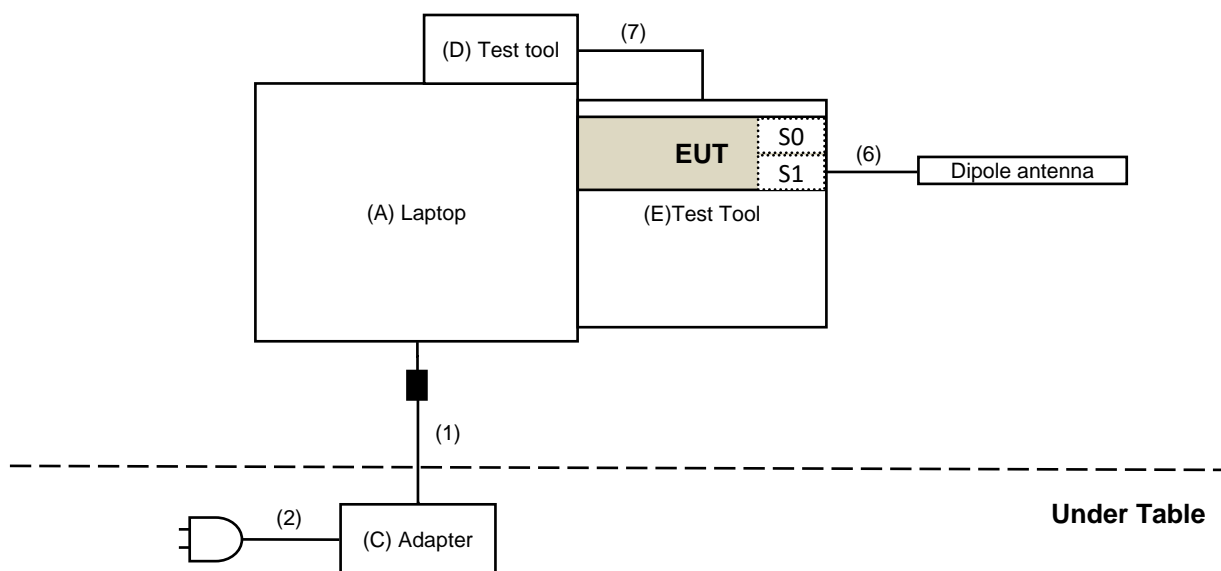


For Unwanted Emission below 1 GHz test

(PIFA antenna BT PCIe + UART interface + dual antenna port)

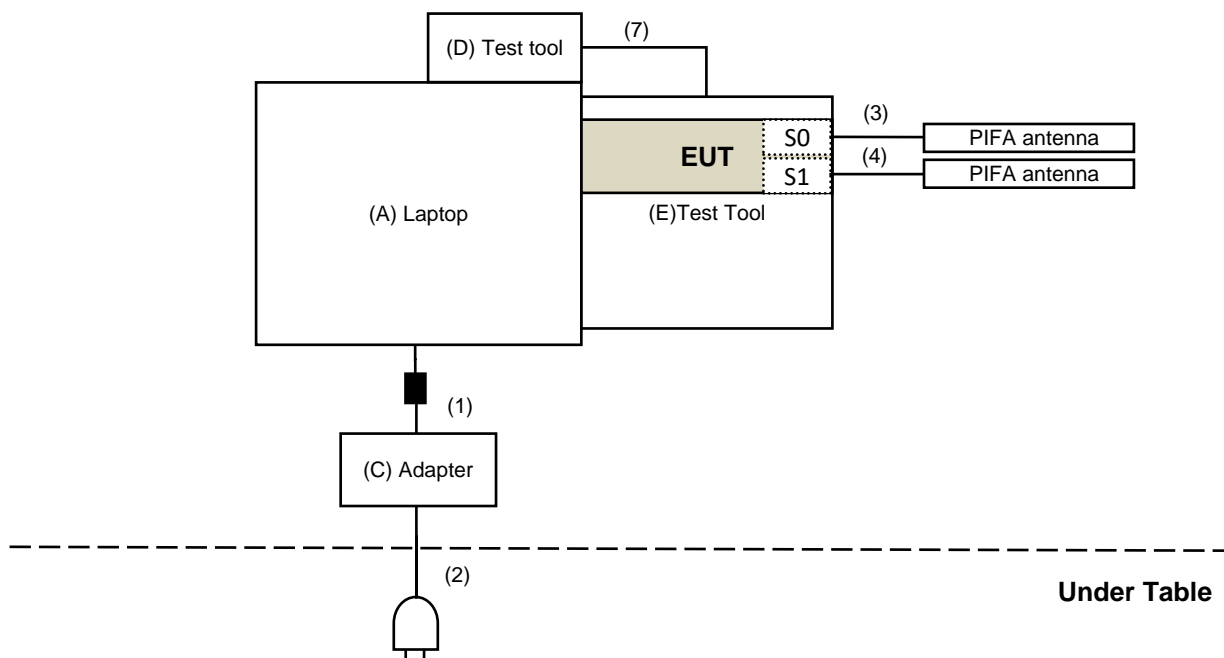


(Dipole antenna BT PCIe + UART interface + dual antenna port)



For AC Power Conducted Emission test

(PIFA antenna 2Tx PCIe + UART interface + dual antenna port)



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab
B	Test Tool	Realtek	N/A	N/A	N/A	Supplied by applicant
C	Adapter	DELL	LA65NS2-01	N/A	N/A	Provided by Lab
D	Test Tool	Realtek	N/A	N/A	N/A	Supplied by applicant
E	Test Tool	Realtek	N/A	N/A	N/A	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.8	No	1	Provided by Lab
2	AC Cable	1	1	No	0	Provided by Lab
3	RF Cable	1	0.3	No	0	Supplied by applicant
4	RF Cable	1	0.3	No	0	Supplied by applicant
5	RF Cable	1	0.3	No	0	Supplied by applicant
6	RF Cable	1	0.3	No	0	Supplied by applicant
7	Data Cable	1	0.2	No	0	Supplied by applicant

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Power Meter Anritsu	ML2495A	1529002	2021/6/21	2022/6/20
Pulse Power Sensor Anritsu	MA2411B	1726434	2021/6/21	2022/6/20
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/5/31 ~ 2022/6/1

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101516	2022/3/7	2023/3/6

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/5/31

4.3 6 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	2022/4/5	2023/4/4
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Spectrum Analyzer R&S	FSV40	101516	2022/3/7	2023/3/6

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2022/5/31 ~ 2022/6/1

4.4 Conducted Out of Band Emissions

Refer to section 4.3 to get information of the instruments.

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohms Terminator	50	3	2021/10/27	2022/10/26
Fixed attenuator STI	STI02-2200-10	005	2021/8/27	2022/8/26
LISN R&S	ESH3-Z5	848773/004	2021/10/29	2022/10/28
RF Coaxial Cable JYEBO	5D-FB	COCCAB-001	2021/9/25	2022/9/24
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A
TEST RECEIVER R&S	ESCS 30	847124/029	2021/10/13	2022/10/12

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2022/6/11

4.6 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bilog Antenna Schwarzbeck	VULB 9168	9168-0842	2021/10/26	2022/10/25
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-02	2022/1/10	2023/1/9
LOOP ANTENNA Electro-Metrics	EM-6879	264	2022/3/18	2023/3/17
Pre_Amplifier Agilent	8447D	2944A10636	2022/3/19	2023/3/18
Pre_Amplifier EMCI	EMC330N	980538	2022/4/25	2023/4/24
RF Coaxial Cable JYEBO	5D-FB	LOOPCAB-001	2022/1/6	2023/1/5
		LOOPCAB-002	2022/1/6	2023/1/5
RF Coaxial Cable COMMATE/PEWC	8D	966-5-1	2022/4/25	2023/4/24
		966-5-2	2022/4/25	2023/4/24
		966-5-3	2022/4/25	2023/4/24
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112410	2022/3/13	2023/3/12
Test Receiver R&S	ESR3	102528	2022/2/25	2023/2/24

Notes:

1. The test was performed in 966 Chamber No. 5.
2. Tested Date: 2022/6/13

4.7 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-1819	2021/11/14	2022/11/13
	BBHA 9170	9170-739	2021/11/14	2022/11/13
Pre_Amplifier EMCI	EMC12630SE	980509	2022/4/25	2023/4/24
	EMC184045SE	980387	2022/1/10	2023/1/9
RF Cable-Frequency range: 1- 40GHz EMCI	EMC102-KM-KM-1200	160924	2022/1/10	2023/1/9
RF Coaxial Cable EMCI	EMC104-SM-SM-1500	180503	2022/4/25	2023/4/24
	EMC104-SM-SM-2000	180501	2022/4/25	2023/4/24
	EMC104-SM-SM-6000	180506	2022/4/25	2023/4/24
	EMC-KM-KM-4000	200214	2022/3/8	2023/3/7
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A
Spectrum Analyzer Keysight	N9020B	MY60112410	2022/3/13	2023/3/12
Test Receiver R&S	ESR3	102528	2022/2/25	2023/2/24

Notes:

1. The test was performed in 966 Chamber No. 5.
2. Tested Date: 2022/5/28 ~ 2022/6/21

5 Limits of Test Items

5.1 RF Output Power

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30 dBm)

5.2 Power Spectral Density

The Maximum of Power Spectral Density Measurement is 8 dBm in any 3 kHz.

5.3 6 dB Bandwidth

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

5.4 Conducted Out of Band Emissions

Below 20 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

5.5 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.6 Unwanted Emissions below 1 GHz

Radiated emissions up to 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20 dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.7 Unwanted Emissions above 1 GHz

Radiated emissions above 1 GHz which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20 dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

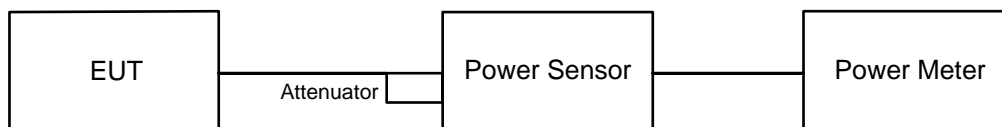
Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



6.1.2 Test Procedure

Peak Power:

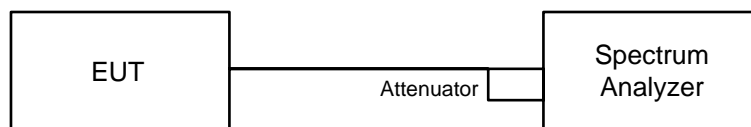
A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average Power:

Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

6.2 Power Spectral Density

6.2.1 Test Setup

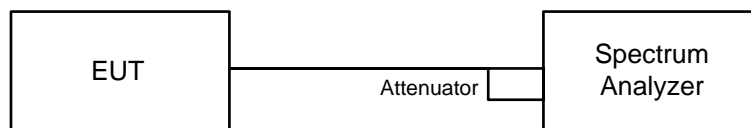


6.2.2 Test Procedure

- a. Set analyzer center frequency to DTS channel center frequency.
- b. Set the span to 1.5 times the DTS bandwidth.
- c. Set the RBW to: 3 kHz.
- d. Set the VBW $\geq 3 \times$ RBW.
- e. Detector = peak.
- f. Sweep time = auto couple.
- g. Trace mode = max hold.
- h. Allow trace to fully stabilize.
- i. Use the peak marker function to determine the maximum amplitude level within the RBW.

6.3 6 dB Bandwidth

6.3.1 Test Setup

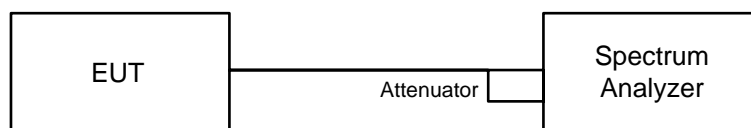


6.3.2 Test Procedure

- Set resolution bandwidth (RBW) = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.4 Conducted Out of Band Emissions

6.4.1 Test Setup



6.4.2 Test Procedure

MEASUREMENT PROCEDURE REF

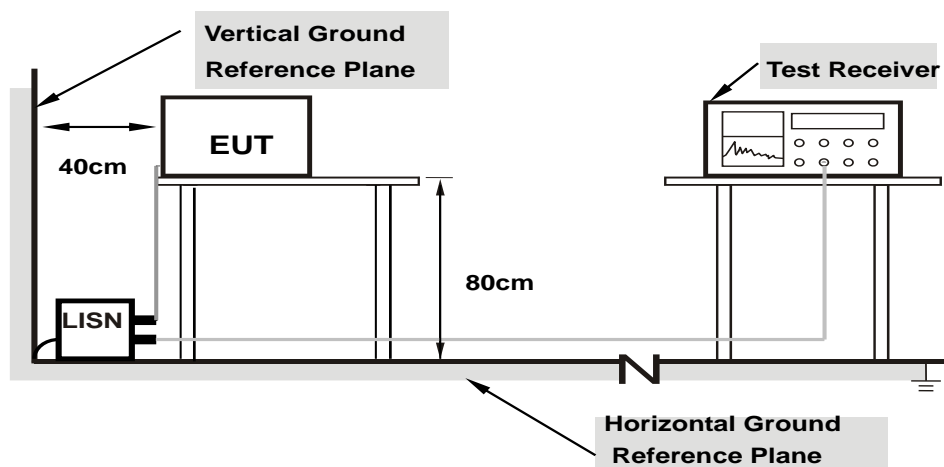
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

- Set RBW = 100 kHz.
- Set VBW ≥ 300 kHz.
- Detector = peak.
- Sweep = auto couple.
- Trace Mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level.

6.5 AC Power Conducted Emissions

6.5.1 Test Setup



Note: 1. Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.5.2 Test Procedure

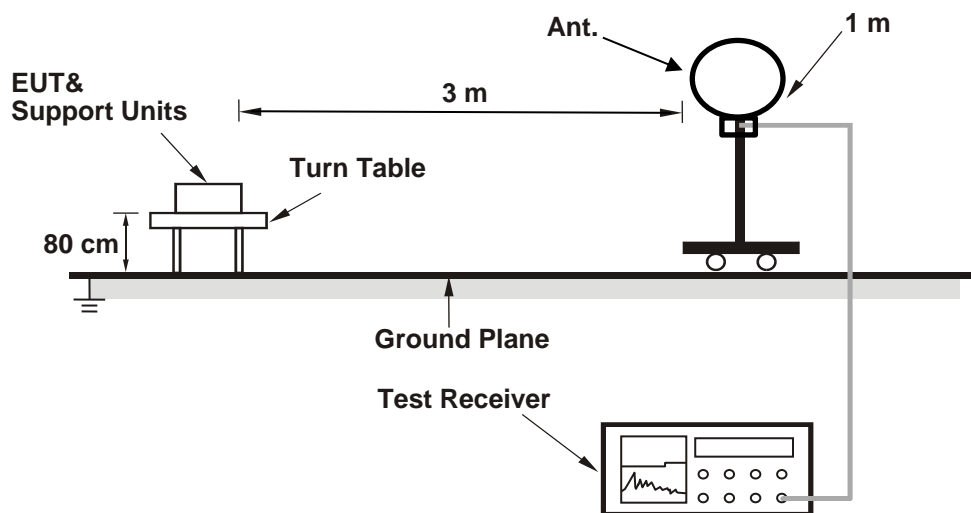
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

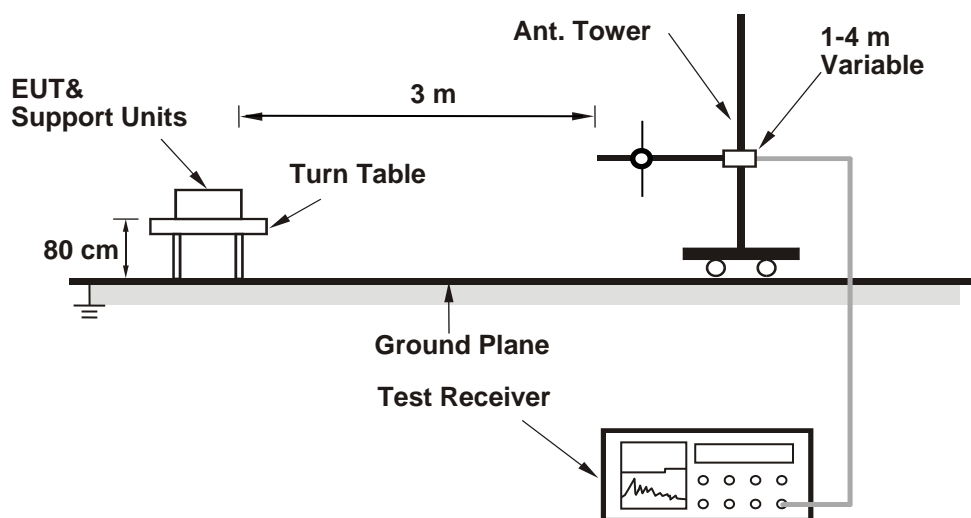
6.6 Unwanted Emissions below 1 GHz

6.6.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.6.2 Test Procedure

For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

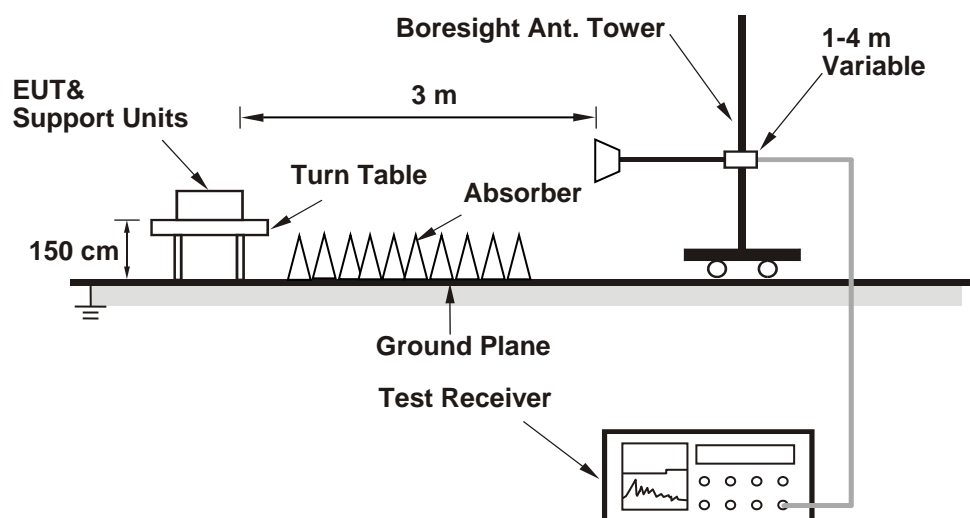
Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

6.7 Unwanted Emissions above 1 GHz

6.7.1 Test Setup

For Radiated emission above 1 GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.7.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
- All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 RF Output Power

Mode E

Input Power:	3.3 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	John Peng
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For Peak Power

BT-LE 1M

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
0	2402	3.954	5.97	30	Pass
19	2440	4.027	6.05	30	Pass
39	2480	3.846	5.85	30	Pass

Note: The antenna gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

BT-LE 2M

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2404	3.945	5.96	30	Pass
19	2440	3.837	5.84	30	Pass
38	2478	4.064	6.09	30	Pass

Note: The antenna gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

BT-LE 1M

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	3.707	5.69
19	2440	3.75	5.74
39	2480	3.622	5.59

BT-LE 2M

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2404	3.715	5.70
19	2440	3.639	5.61
38	2478	3.846	5.85

Mode F

Input Power:	3.3 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	John Peng
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For Peak Power

BT-LE 1M

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
0	2402	17.947	12.54	30	Pass
19	2440	17.179	12.35	30	Pass
39	2480	17.061	12.32	30	Pass

Note: The antenna gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

BT-LE 2M

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
1	2404	17.989	12.55	30	Pass
19	2440	17.14	12.34	30	Pass
38	2478	17.258	12.37	30	Pass

Note: The antenna gain is 3.5 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

BT-LE 1M

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	17.061	12.32
19	2440	16.52	12.18
39	2480	16.293	12.12

BT-LE 2M

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2404	17.258	12.37
19	2440	16.255	12.11
38	2478	16.444	12.16

7.2 Power Spectral Density

Mode E

Input Power:	3.3 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	John Peng
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BT-LE 1M

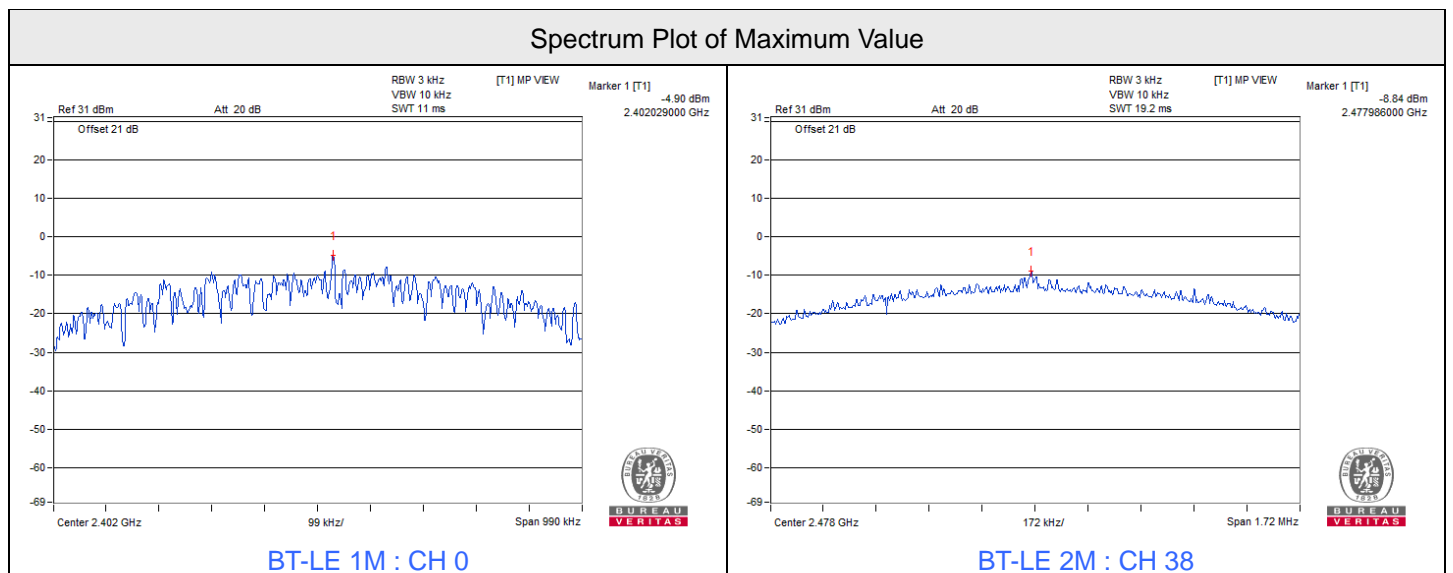
Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
0	2402	-4.90	8.00	Pass
19	2440	-8.29	8.00	Pass
39	2480	-10.84	8.00	Pass

Note: The antenna gain is 3.5 dBi < 6 dBi, so the power density limit shall not be reduced.

BT-LE 2M

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2404	-10.08	8.00	Pass
19	2440	-10.54	8.00	Pass
38	2478	-8.84	8.00	Pass

Note: The antenna gain is 3.5 dBi < 6 dBi, so the power density limit shall not be reduced.



7.3 6 dB Bandwidth

Mode E

Input Power:	3.3 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	John Peng
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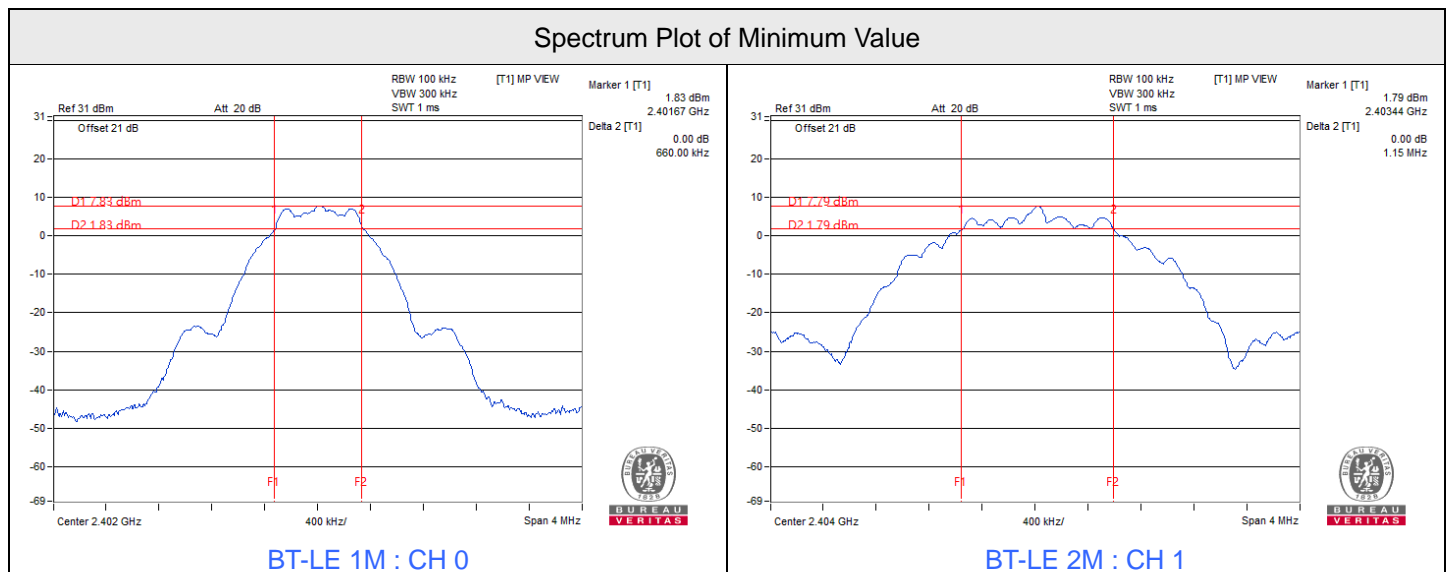
BT-LE 1M

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
0	2402	0.66	0.5	Pass
19	2440	0.68	0.5	Pass
39	2480	0.68	0.5	Pass

BT-LE 2M

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2404	1.15	0.5	Pass
19	2440	1.15	0.5	Pass
38	2478	1.15	0.5	Pass

Spectrum Plot of Minimum Value





Mode F

Input Power:	3.3 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	John Peng
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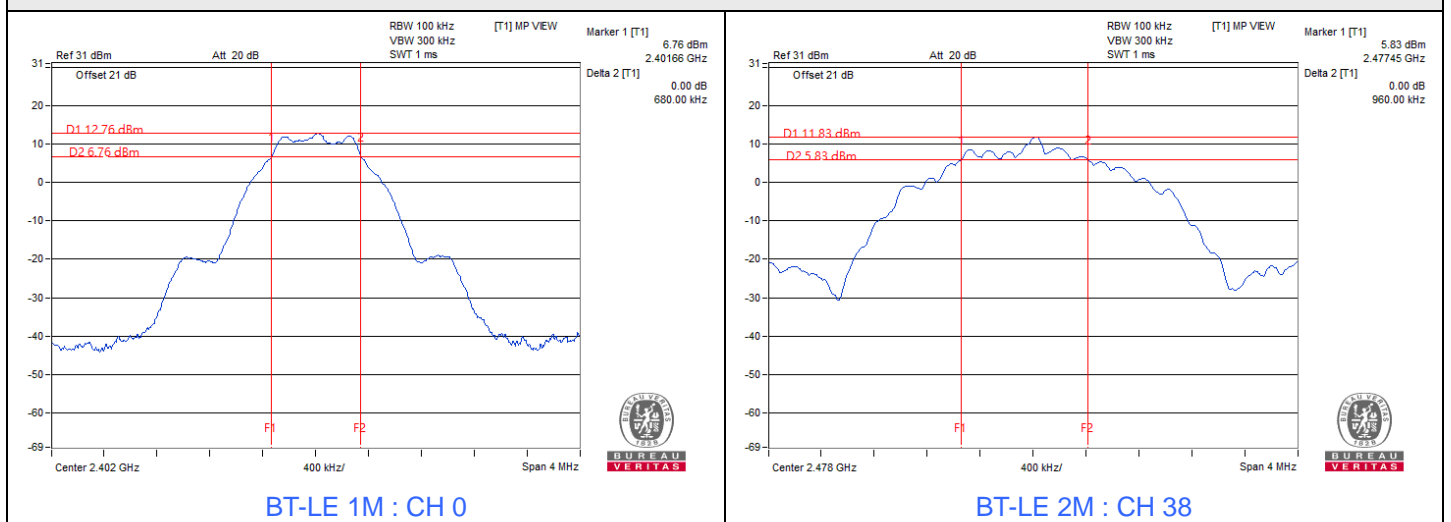
BT-LE 1M

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
0	2402	0.68	0.5	Pass
19	2440	0.68	0.5	Pass
39	2480	0.68	0.5	Pass

BT-LE 2M

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2404	1.16	0.5	Pass
19	2440	1.1	0.5	Pass
38	2478	0.96	0.5	Pass

Spectrum Plot of Minimum Value



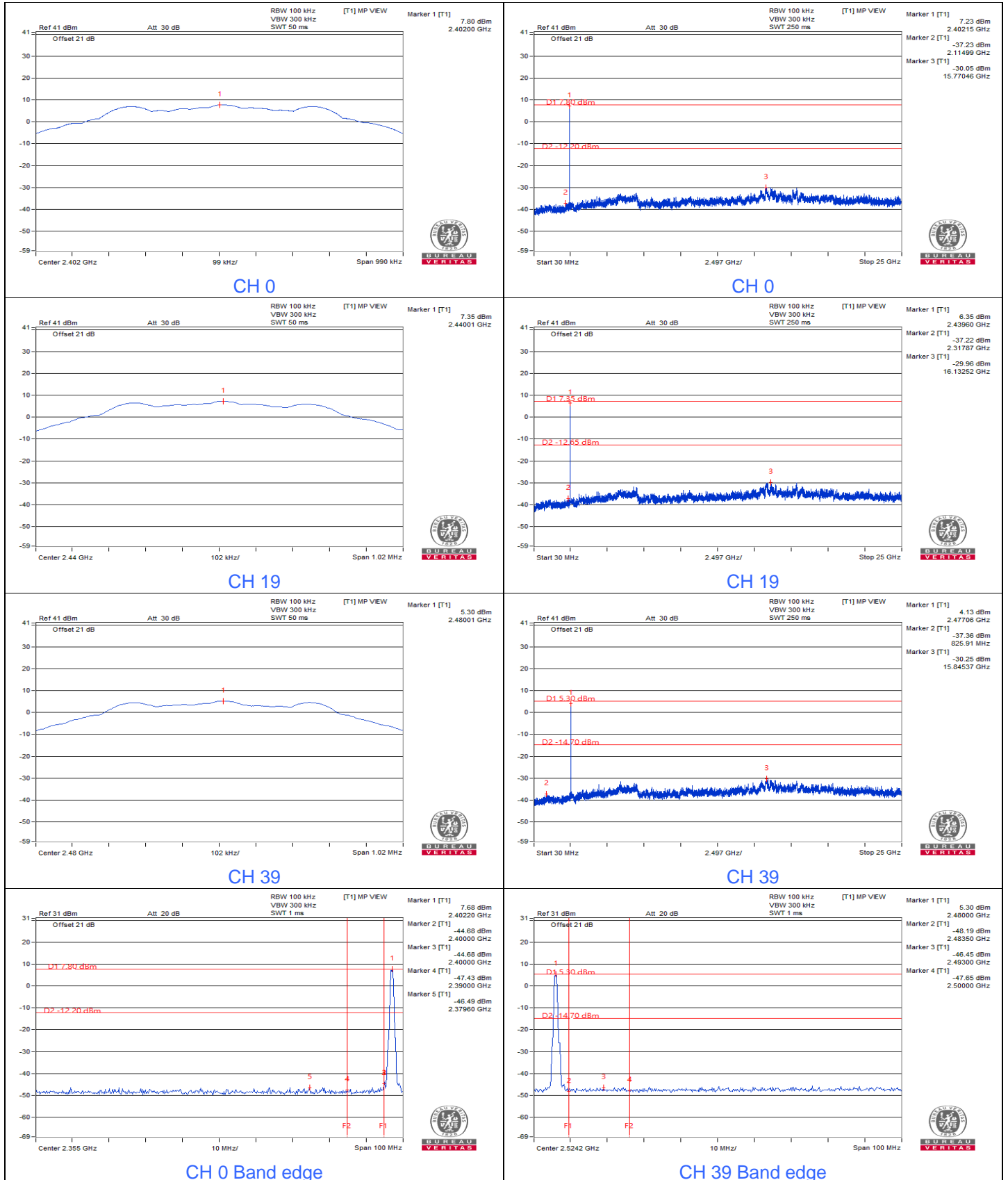


7.4 Conducted Out of Band Emissions

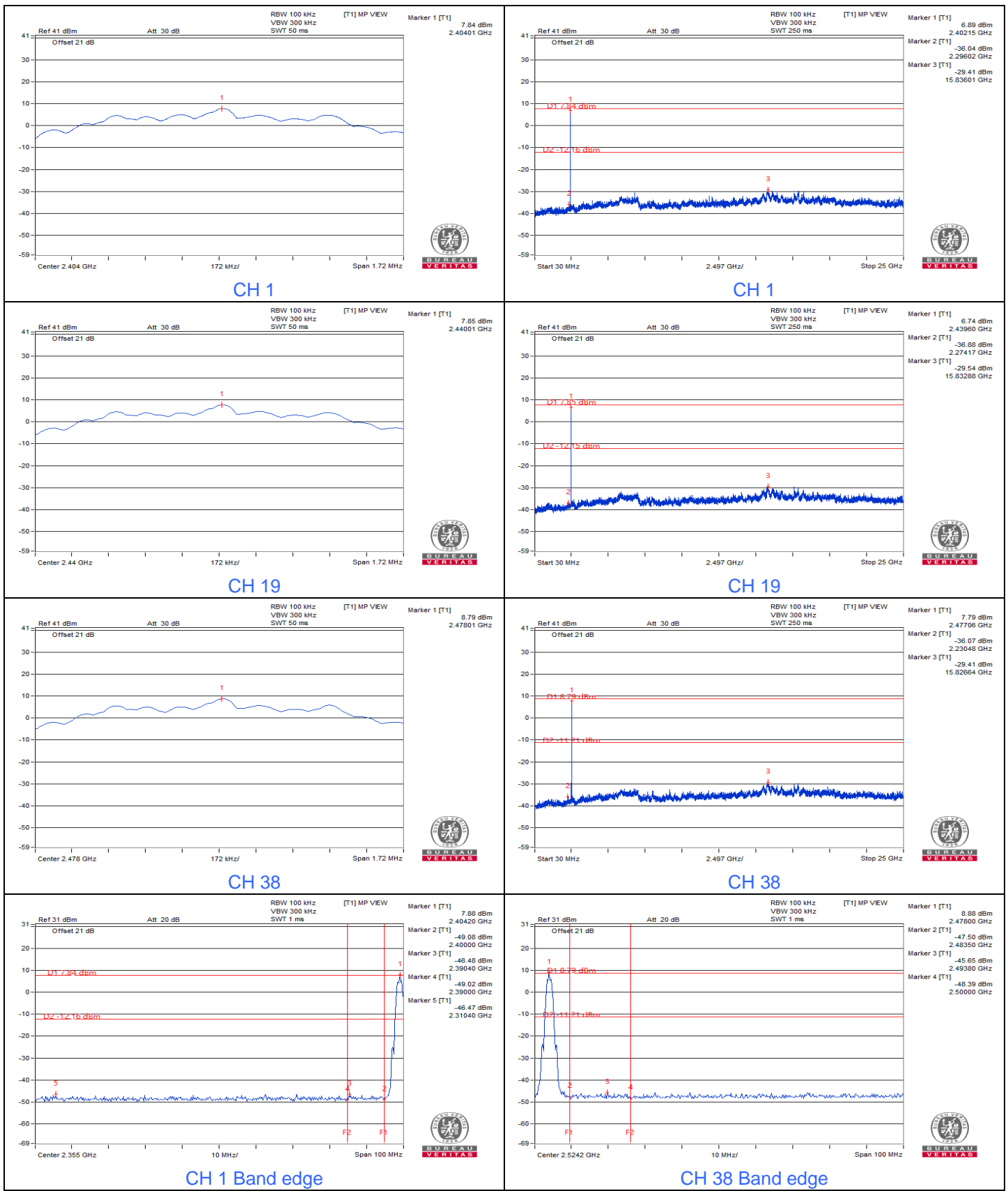
Mode E

Input Power:	3.3 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	John Peng
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BT-LE 1M



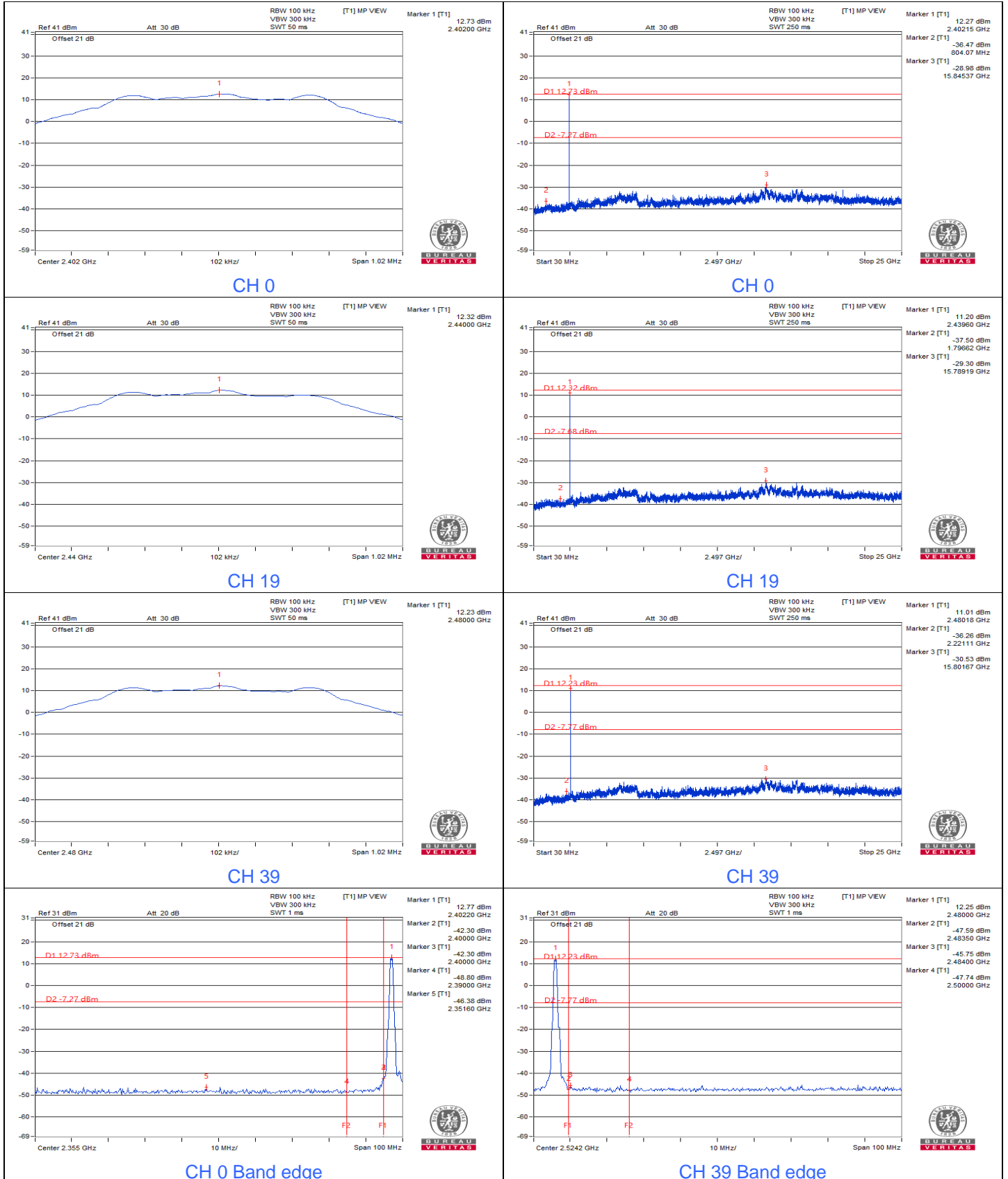
BT-LE 2M



Mode F

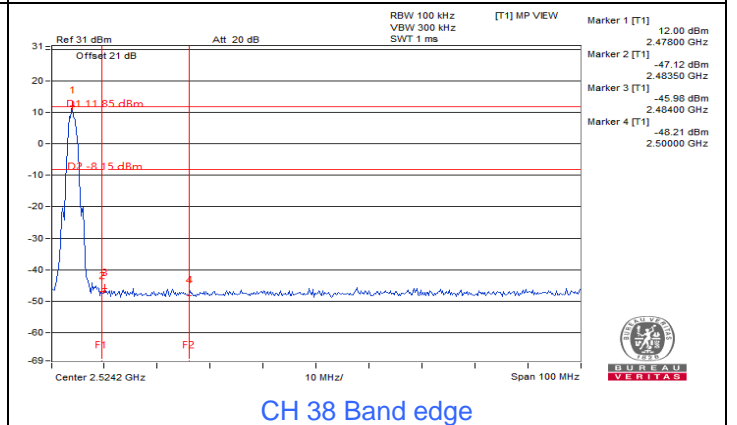
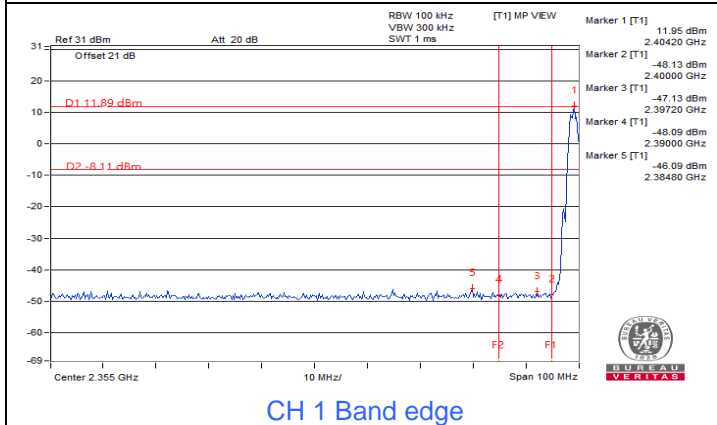
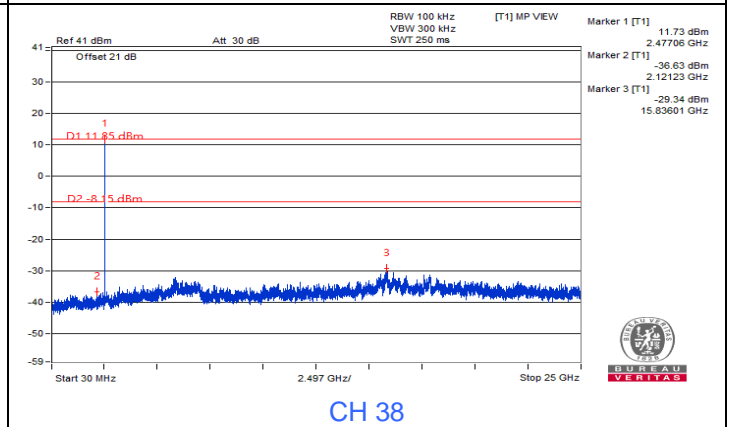
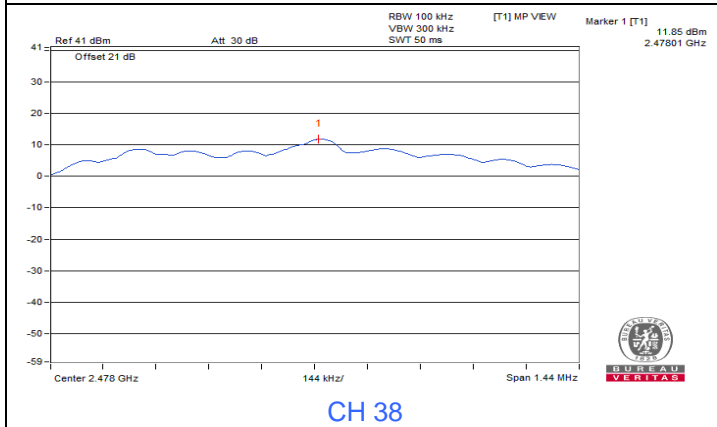
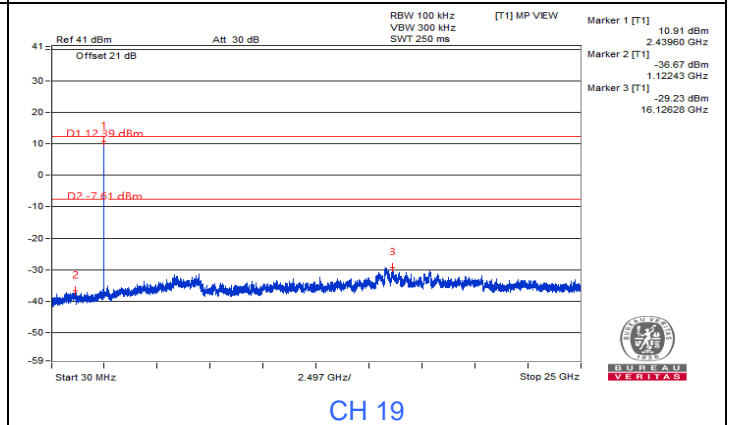
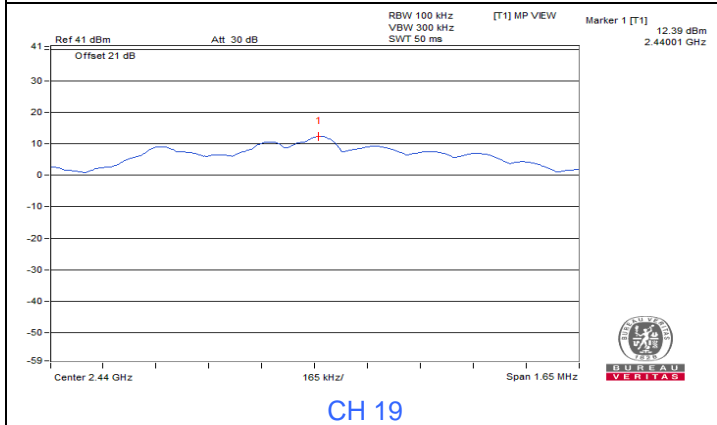
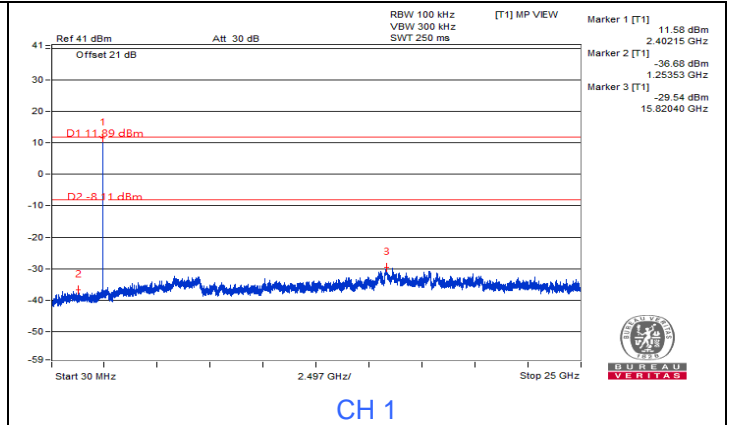
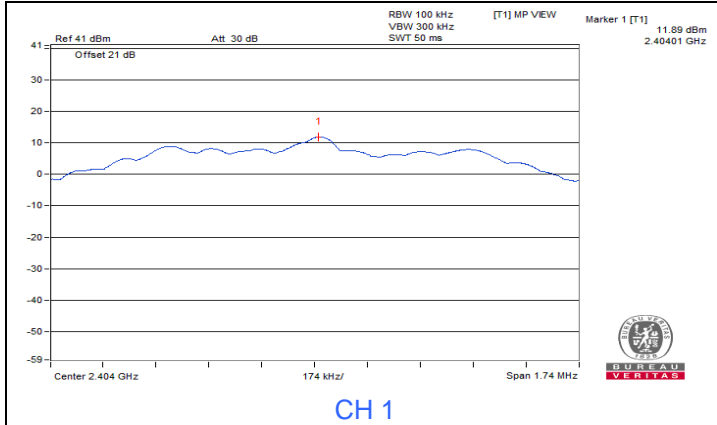
Input Power:	3.3 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	John Peng
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BT-LE 1M





BT-LE 2M



7.5 AC Power Conducted Emissions

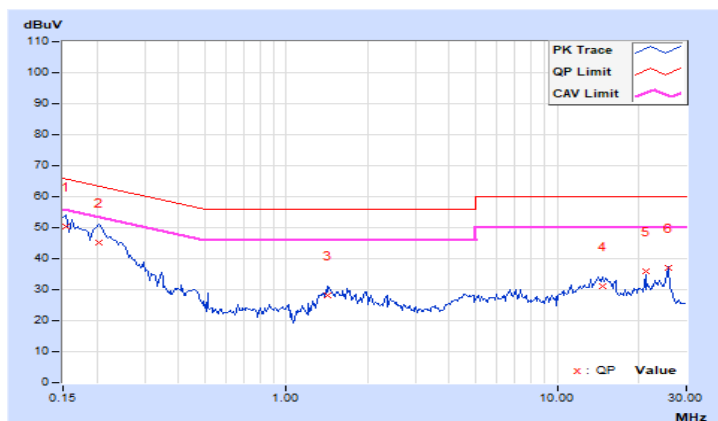
Mode C

RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	22°C, 64% RH
Tested By	Samposn Chen		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	10.05	40.30	23.88	50.35	33.93	65.79	55.79	-15.44	-21.86
2	0.20469	10.05	35.28	20.68	45.33	30.73	63.42	53.42	-18.09	-22.69
3	1.42188	10.13	17.92	11.17	28.05	21.30	56.00	46.00	-27.95	-24.70
4	14.68359	10.90	20.39	13.46	31.29	24.36	60.00	50.00	-28.71	-25.64
5	21.16797	11.24	24.71	23.40	35.95	34.64	60.00	50.00	-24.05	-15.36
6	25.87109	11.31	25.90	24.66	37.21	35.97	60.00	50.00	-22.79	-14.03

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

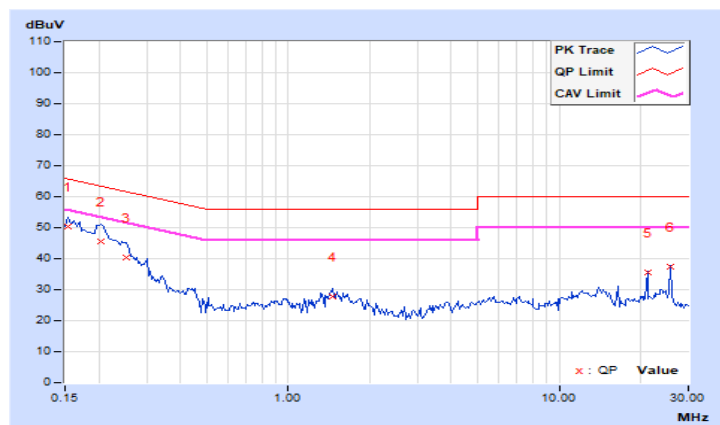


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	22°C, 64% RH
Tested By	Samposn Chen		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	10.02	40.48	24.29	50.50	34.31	65.79	55.79	-15.29	-21.48
2	0.20469	10.03	35.38	20.56	45.41	30.59	63.42	53.42	-18.01	-22.83
3	0.25156	10.03	30.22	15.65	40.25	25.68	61.71	51.71	-21.46	-26.03
4	1.46094	10.10	17.52	10.75	27.62	20.85	56.00	46.00	-28.38	-25.15
5	21.16797	10.96	24.72	24.10	35.68	35.06	60.00	50.00	-24.32	-14.94
6	25.87500	10.98	26.32	25.66	37.30	36.64	60.00	50.00	-22.70	-13.36

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



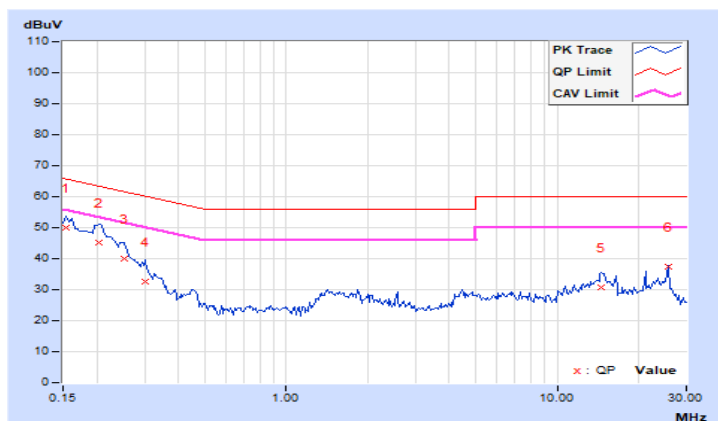
Mode D

RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	22°C, 64% RH
Tested By	Samposn Chen		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBUV)		Emission Level (dBUV)		Limit (dBUV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	10.05	39.95	23.44	50.00	33.49	65.79	55.79	-15.79	-22.30
2	0.20469	10.05	35.32	20.70	45.37	30.75	63.42	53.42	-18.05	-22.67
3	0.25156	10.06	30.00	14.86	40.06	24.92	61.71	51.71	-21.65	-26.79
4	0.30234	10.06	22.56	8.98	32.62	19.04	60.18	50.18	-27.56	-31.14
5	14.53906	10.89	19.88	13.29	30.77	24.18	60.00	50.00	-29.23	-25.82
6	25.87109	11.31	25.94	24.68	37.25	35.99	60.00	50.00	-22.75	-14.01

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

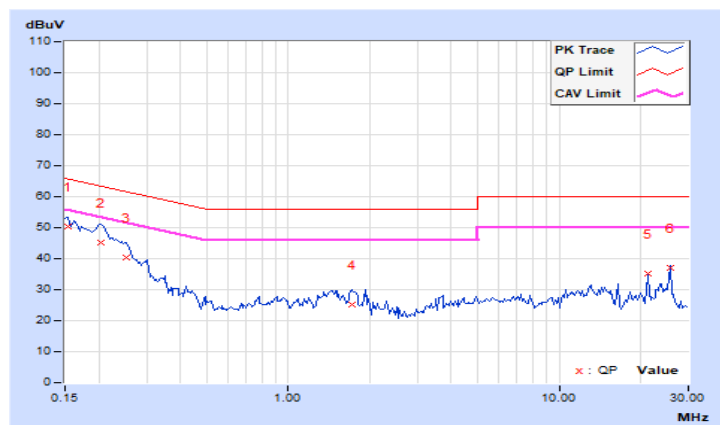


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	22°C, 64% RH
Tested By	Samposn Chen		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	10.02	40.48	23.76	50.50	33.78	65.79	55.79	-15.29	-22.01
2	0.20469	10.03	35.34	20.54	45.37	30.57	63.42	53.42	-18.05	-22.85
3	0.25156	10.03	30.18	15.16	40.21	25.19	61.71	51.71	-21.50	-26.52
4	1.72266	10.12	15.18	8.09	25.30	18.21	56.00	46.00	-30.70	-27.79
5	21.16797	10.96	24.27	23.70	35.23	34.66	60.00	50.00	-24.77	-15.34
6	25.87500	10.98	26.17	25.27	37.15	36.25	60.00	50.00	-22.85	-13.75

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



7.6 Unwanted Emissions below 1 GHz

Mode A

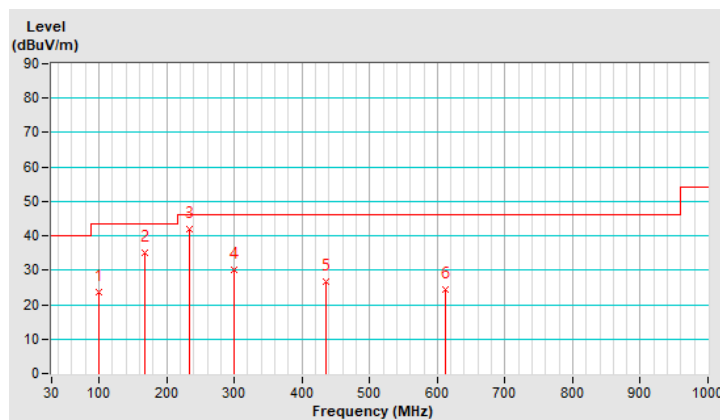
RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	99.77	23.7 QP	43.5	-19.8	3.00 H	117	41.0	-17.3
2	168.15	35.0 QP	43.5	-8.5	2.00 H	311	48.1	-13.1
3	234.49	41.8 QP	46.0	-4.2	1.50 H	123	56.7	-14.9
4	299.80	30.0 QP	46.0	-16.0	1.00 H	142	42.3	-12.3
5	434.69	26.8 QP	46.0	-19.2	3.00 H	96	35.4	-8.6
6	612.85	24.5 QP	46.0	-21.5	3.00 H	138	29.4	-4.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

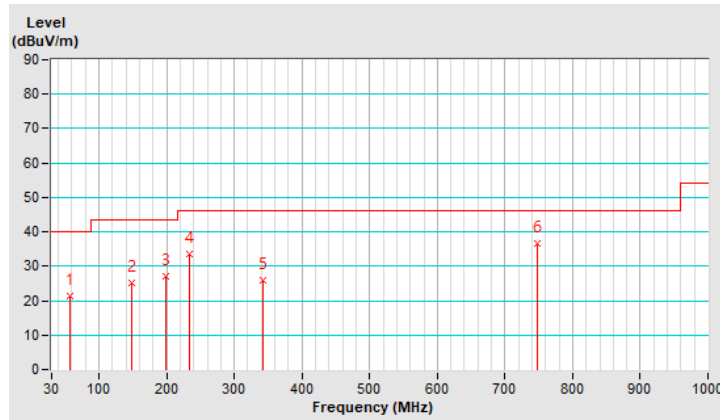


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	56.73	21.4 QP	40.0	-18.6	1.50 V	303	34.5	-13.1
2	148.01	25.1 QP	43.5	-18.4	1.00 V	108	37.8	-12.7
3	198.25	27.0 QP	43.5	-16.5	1.50 V	228	43.1	-16.1
4	233.40	33.4 QP	46.0	-12.6	2.00 V	43	48.4	-15.0
5	341.45	25.8 QP	46.0	-20.2	1.50 V	177	37.0	-11.2
6	747.57	36.6 QP	46.0	-9.4	3.00 V	288	39.4	-2.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



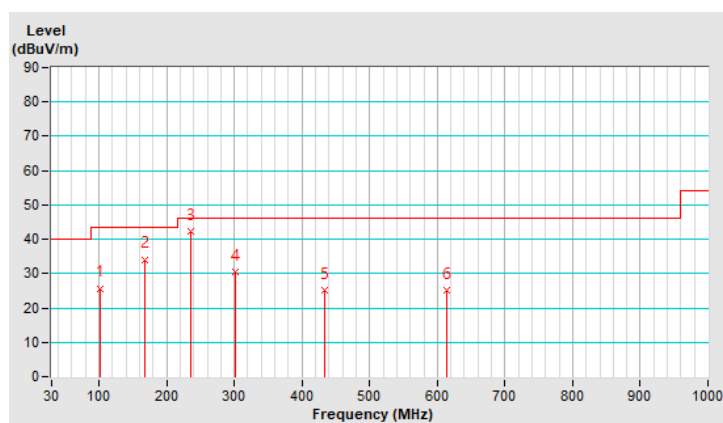
Mode B

RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	102.59	25.7 QP	43.5	-17.8	2.00 H	141	42.7	-17.0
2	167.64	34.1 QP	43.5	-9.4	2.00 H	272	47.2	-13.1
3	236.27	42.3 QP	46.0	-3.7	2.00 H	127	57.0	-14.7
4	301.15	30.5 QP	46.0	-15.5	1.50 H	141	42.7	-12.2
5	433.00	25.1 QP	46.0	-20.9	3.00 H	123	33.8	-8.7
6	613.83	25.0 QP	46.0	-21.0	1.50 H	146	29.8	-4.8

Remarks:

1. Emission Level(dBUV/m) = Raw Value(dBUV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

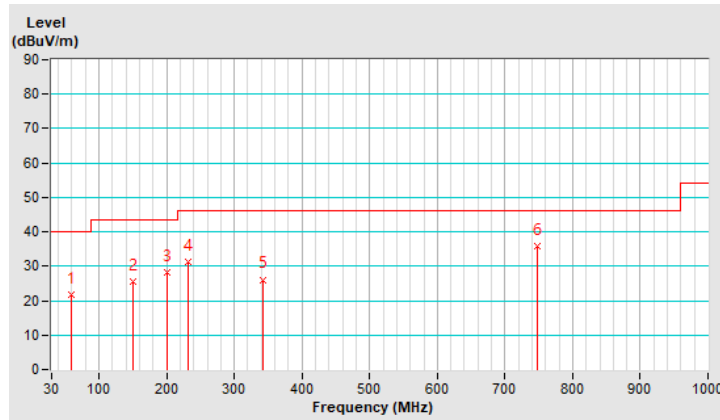


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	58.52	21.6 QP	40.0	-18.4	2.00 V	303	34.8	-13.2
2	149.95	25.6 QP	43.5	-17.9	1.00 V	127	38.2	-12.6
3	200.02	28.2 QP	43.5	-15.3	1.50 V	236	44.3	-16.1
4	232.30	31.2 QP	46.0	-14.8	2.00 V	67	46.4	-15.2
5	342.88	26.1 QP	46.0	-19.9	2.00 V	181	37.4	-11.3
6	748.66	35.8 QP	46.0	-10.2	1.50 V	325	38.6	-2.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



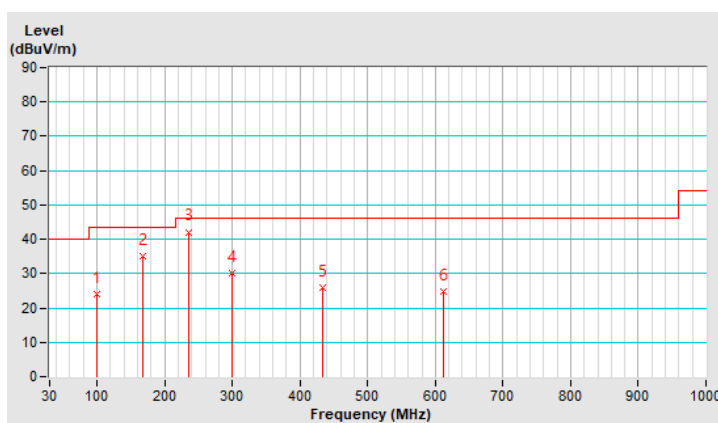
Mode C

RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	99.97	24.1 QP	43.5	-19.4	3.00 H	92	41.4	-17.3
2	167.80	35.1 QP	43.5	-8.4	2.00 H	304	48.2	-13.1
3	234.80	42.1 QP	46.0	-3.9	1.50 H	94	56.9	-14.8
4	299.68	30.2 QP	46.0	-15.8	1.00 H	140	42.5	-12.3
5	434.45	26.0 QP	46.0	-20.0	3.00 H	95	34.6	-8.6
6	612.45	24.6 QP	46.0	-21.4	3.00 H	152	29.5	-4.9

Remarks:

1. Emission Level(dBUV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

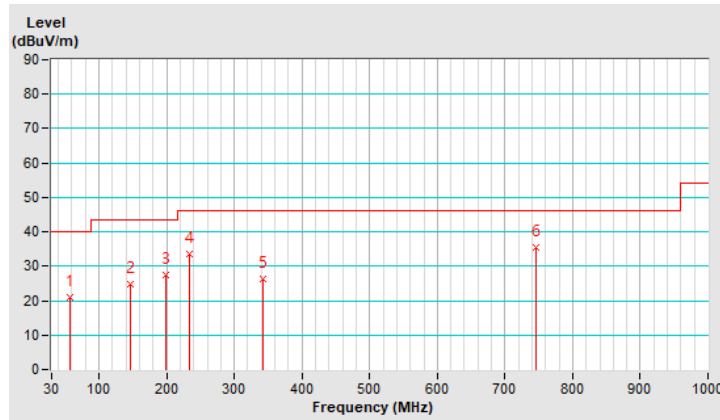


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	56.57	21.0 QP	40.0	-19.0	1.50 V	329	34.1	-13.1
2	147.25	24.7 QP	43.5	-18.8	1.00 V	127	37.3	-12.6
3	198.40	27.4 QP	43.5	-16.1	1.50 V	226	43.5	-16.1
4	233.32	33.7 QP	46.0	-12.3	2.00 V	52	48.7	-15.0
5	342.57	26.4 QP	46.0	-19.6	1.50 V	174	37.7	-11.3
6	746.79	35.5 QP	46.0	-10.5	3.00 V	282	38.3	-2.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



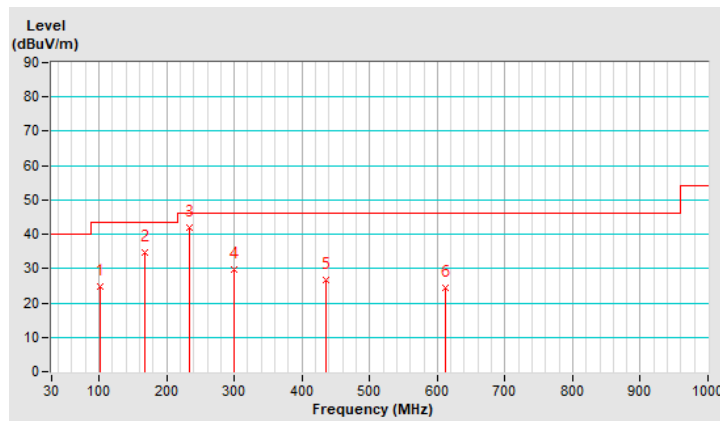
Mode D

RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	100.85	24.6 QP	43.5	-18.9	3.00 H	91	41.8	-17.2
2	167.73	34.8 QP	43.5	-8.7	2.00 H	319	47.9	-13.1
3	233.96	41.9 QP	46.0	-4.1	1.50 H	96	56.8	-14.9
4	299.34	29.7 QP	46.0	-16.3	1.00 H	147	42.0	-12.3
5	434.59	26.7 QP	46.0	-19.3	3.00 H	71	35.3	-8.6
6	612.92	24.4 QP	46.0	-21.6	3.00 H	153	29.3	-4.9

Remarks:

1. Emission Level(dBUV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

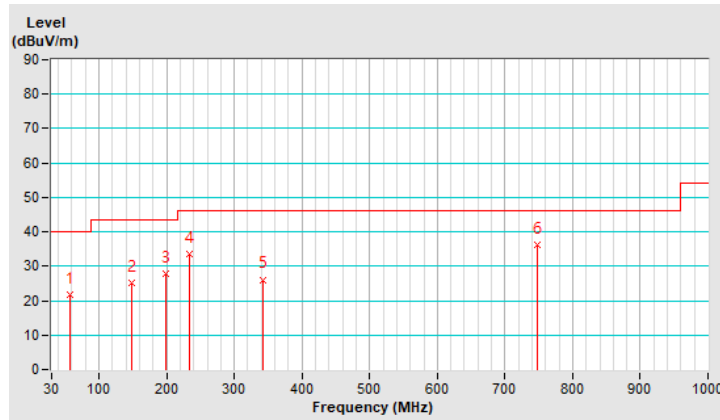


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	9 kHz ~ 1 GHz	Detector Function & Bandwidth	(QP) RB = 120kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	19°C, 64% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	57.57	21.7 QP	40.0	-18.3	1.50 V	316	34.9	-13.2
2	147.74	25.0 QP	43.5	-18.5	1.00 V	110	37.7	-12.7
3	199.00	27.7 QP	43.5	-15.8	1.50 V	226	43.8	-16.1
4	233.68	33.7 QP	46.0	-12.3	2.00 V	56	48.7	-15.0
5	341.72	26.1 QP	46.0	-19.9	1.50 V	184	37.3	-11.2
6	747.41	36.3 QP	46.0	-9.7	3.00 V	284	39.1	-2.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The emission levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



7.7 Unwanted Emissions above 1 GHz

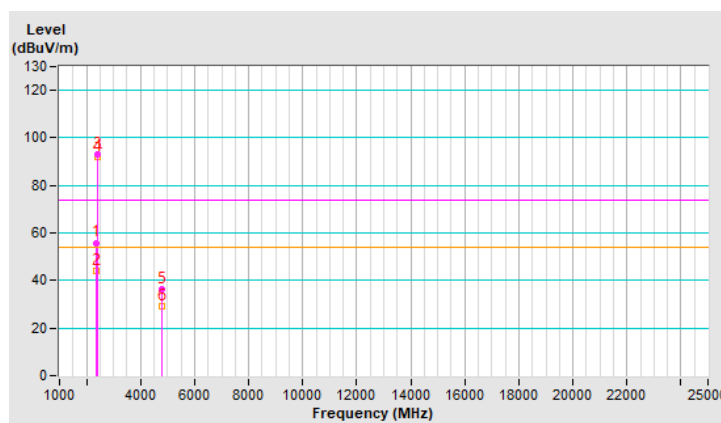
Mode A

RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2378.33	55.9 PK	74.0	-18.1	1.04 H	158	58.6	-2.7
2	2378.33	44.2 AV	54.0	-9.8	1.04 H	158	46.9	-2.7
3	*2402.00	93.0 PK			1.04 H	158	95.7	-2.7
4	*2402.00	91.9 AV			1.04 H	158	94.6	-2.7
5	4804.00	36.3 PK	74.0	-37.7	1.50 H	169	34.8	1.5
6	4804.00	29.3 AV	54.0	-24.7	1.50 H	169	27.8	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

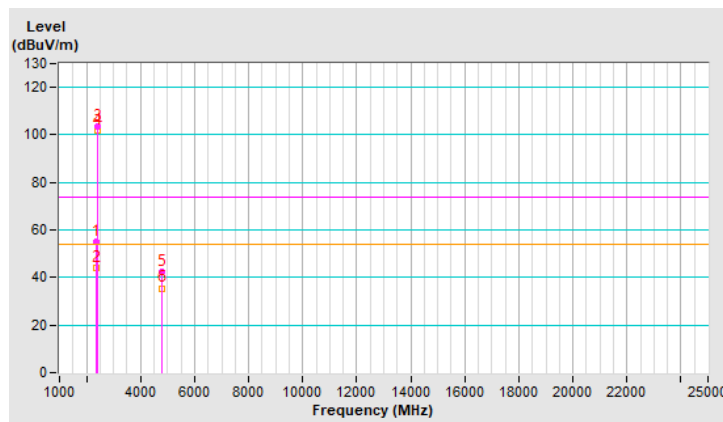


RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2369.78	55.2 PK	74.0	-18.8	1.62 V	253	57.9	-2.7
2	2369.78	44.3 AV	54.0	-9.7	1.62 V	253	47.0	-2.7
3	*2402.00	103.3 PK			1.62 V	253	106.0	-2.7
4	*2402.00	102.1 AV			1.62 V	253	104.8	-2.7
5	4804.00	42.5 PK	74.0	-31.5	1.16 V	276	41.0	1.5
6	4804.00	35.5 AV	54.0	-18.5	1.16 V	276	34.0	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

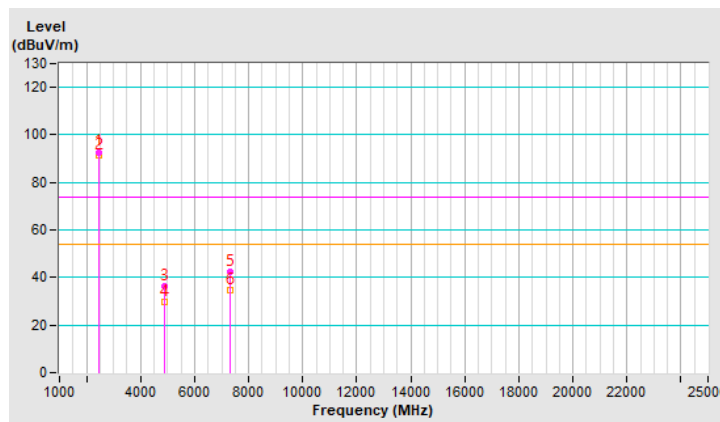


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	92.8 PK			1.09 H	147	95.6	-2.8
2	*2440.00	91.5 AV			1.09 H	147	94.3	-2.8
3	4880.00	36.3 PK	74.0	-37.7	1.61 H	161	34.8	1.5
4	4880.00	29.5 AV	54.0	-24.5	1.61 H	161	28.0	1.5
5	7320.00	42.6 PK	74.0	-31.4	1.80 H	209	35.4	7.2
6	7320.00	34.5 AV	54.0	-19.5	1.80 H	209	27.3	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

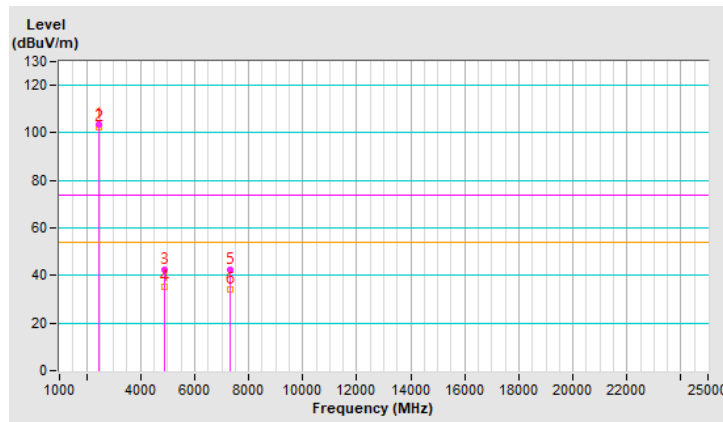


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	103.6 PK			1.69 V	239	106.4	-2.8
2	*2440.00	102.4 AV			1.69 V	239	105.2	-2.8
3	4880.00	42.3 PK	74.0	-31.7	1.21 V	286	40.8	1.5
4	4880.00	35.0 AV	54.0	-19.0	1.21 V	286	33.5	1.5
5	7320.00	42.3 PK	74.0	-31.7	1.42 V	280	35.1	7.2
6	7320.00	34.3 AV	54.0	-19.7	1.42 V	280	27.1	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

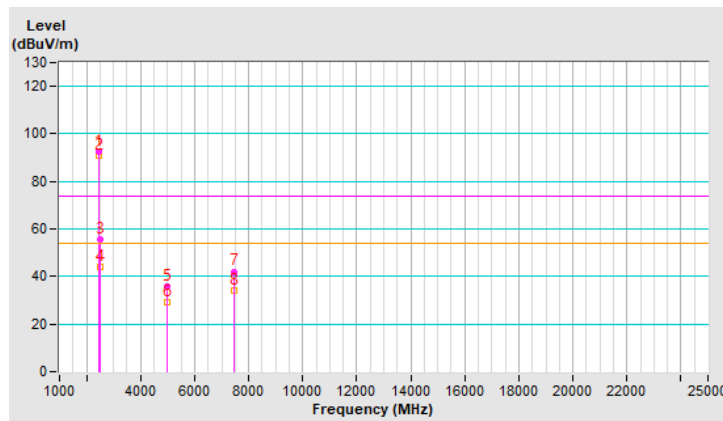


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	92.4 PK			1.06 H	129	95.3	-2.9
2	*2480.00	91.1 AV			1.06 H	129	94.0	-2.9
3	2489.24	55.5 PK	74.0	-18.5	1.06 H	129	58.4	-2.9
4	2489.24	44.3 AV	54.0	-9.7	1.06 H	129	47.2	-2.9
5	4960.00	35.8 PK	74.0	-38.2	1.53 H	157	34.1	1.7
6	4960.00	29.2 AV	54.0	-24.8	1.53 H	157	27.5	1.7
7	7440.00	42.1 PK	74.0	-31.9	1.75 H	213	34.5	7.6
8	7440.00	34.3 AV	54.0	-19.7	1.75 H	213	26.7	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

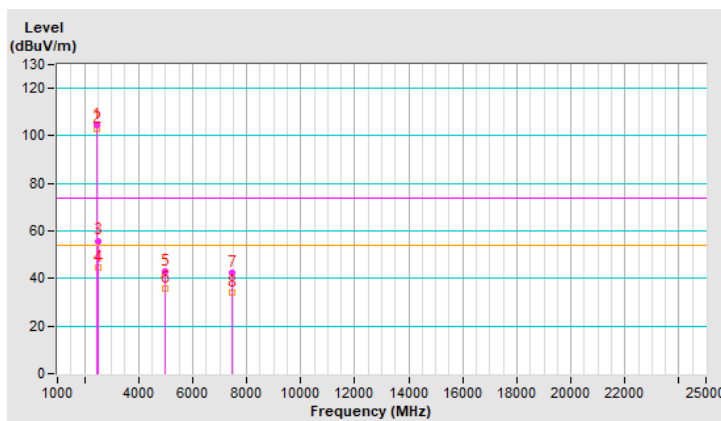


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	104.5 PK			1.60 V	245	107.4	-2.9
2	*2480.00	103.2 AV			1.60 V	245	106.1	-2.9
3	2483.50	55.9 PK	74.0	-18.1	1.60 V	245	58.8	-2.9
4	2483.50	44.7 AV	54.0	-9.3	1.60 V	245	47.6	-2.9
5	4960.00	43.0 PK	74.0	-31.0	1.27 V	295	41.3	1.7
6	4960.00	35.6 AV	54.0	-18.4	1.27 V	295	33.9	1.7
7	7440.00	42.3 PK	74.0	-31.7	1.59 V	272	34.7	7.6
8	7440.00	34.2 AV	54.0	-19.8	1.59 V	272	26.6	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.



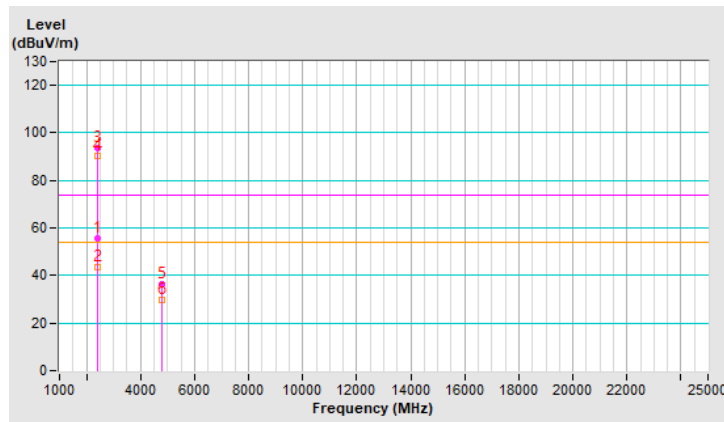
RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2384.68	55.7 PK	74.0	-18.3	1.12 H	120	58.4	-2.7
2	2384.68	43.6 AV	54.0	-10.4	1.12 H	120	46.3	-2.7
3	*2404.00	93.4 PK			1.12 H	120	96.1	-2.7
4	*2404.00	90.3 AV			1.12 H	120	93.0	-2.7
5	4808.00	36.5 PK	74.0	-37.5	1.48 H	142	35.0	1.5
6	4808.00	29.8 AV	54.0	-24.2	1.48 H	142	28.3	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

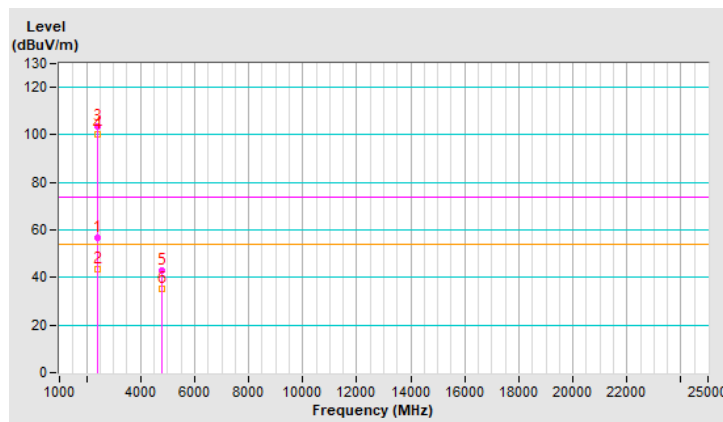


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2388.82	56.5 PK	74.0	-17.5	1.50 V	251	59.2	-2.7
2	2388.82	43.4 AV	54.0	-10.6	1.50 V	251	46.1	-2.7
3	*2404.00	103.3 PK			1.50 V	251	106.0	-2.7
4	*2404.00	100.2 AV			1.50 V	251	102.9	-2.7
5	4808.00	42.9 PK	74.0	-31.1	1.20 V	316	41.4	1.5
6	4808.00	35.3 AV	54.0	-18.7	1.20 V	316	33.8	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

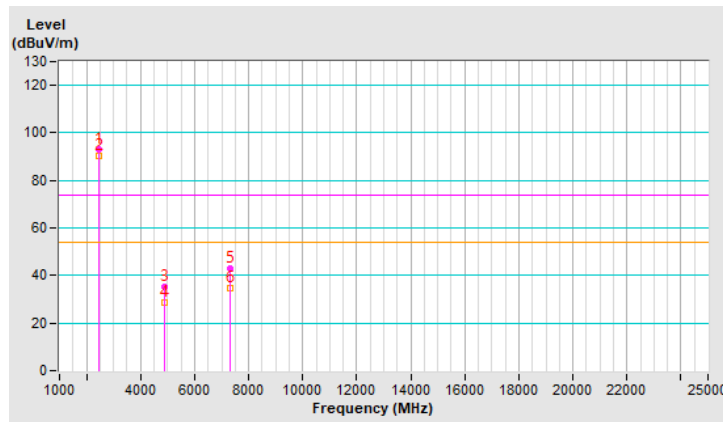


RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	93.1 PK			1.14 H	126	95.9	-2.8
2	*2440.00	90.1 AV			1.14 H	126	92.9	-2.8
3	4880.00	35.4 PK	74.0	-38.6	1.50 H	157	33.9	1.5
4	4880.00	28.7 AV	54.0	-25.3	1.50 H	157	27.2	1.5
5	7320.00	42.9 PK	74.0	-31.1	1.78 H	204	35.7	7.2
6	7320.00	34.9 AV	54.0	-19.1	1.78 H	204	27.7	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

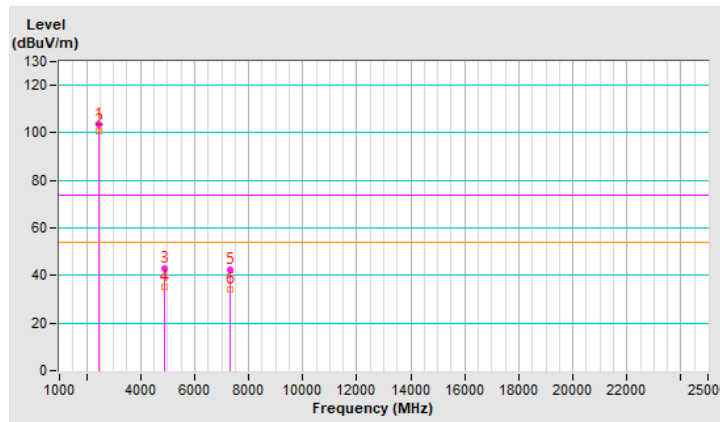


RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	103.7 PK			1.50 V	242	106.5	-2.8
2	*2440.00	100.8 AV			1.50 V	242	103.6	-2.8
3	4880.00	42.9 PK	74.0	-31.1	1.28 V	292	41.4	1.5
4	4880.00	35.4 AV	54.0	-18.6	1.28 V	292	33.9	1.5
5	7320.00	42.2 PK	74.0	-31.8	1.56 V	287	35.0	7.2
6	7320.00	34.1 AV	54.0	-19.9	1.56 V	287	26.9	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

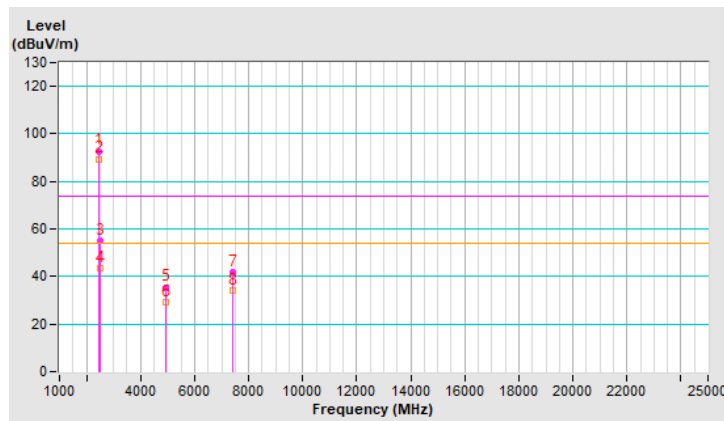


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	92.8 PK			1.13 H	130	95.7	-2.9
2	*2478.00	89.5 AV			1.13 H	130	92.4	-2.9
3	2487.11	55.3 PK	74.0	-18.7	1.13 H	130	58.2	-2.9
4	2487.11	43.5 AV	54.0	-10.5	1.13 H	130	46.4	-2.9
5	4956.00	35.5 PK	74.0	-38.5	1.49 H	179	33.8	1.7
6	4956.00	29.0 AV	54.0	-25.0	1.49 H	179	27.3	1.7
7	7434.00	41.9 PK	74.0	-32.1	1.80 H	187	34.4	7.5
8	7434.00	34.2 AV	54.0	-19.8	1.80 H	187	26.7	7.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

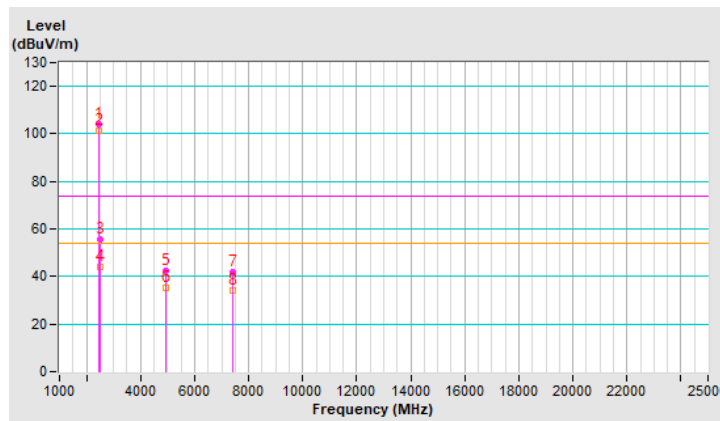


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

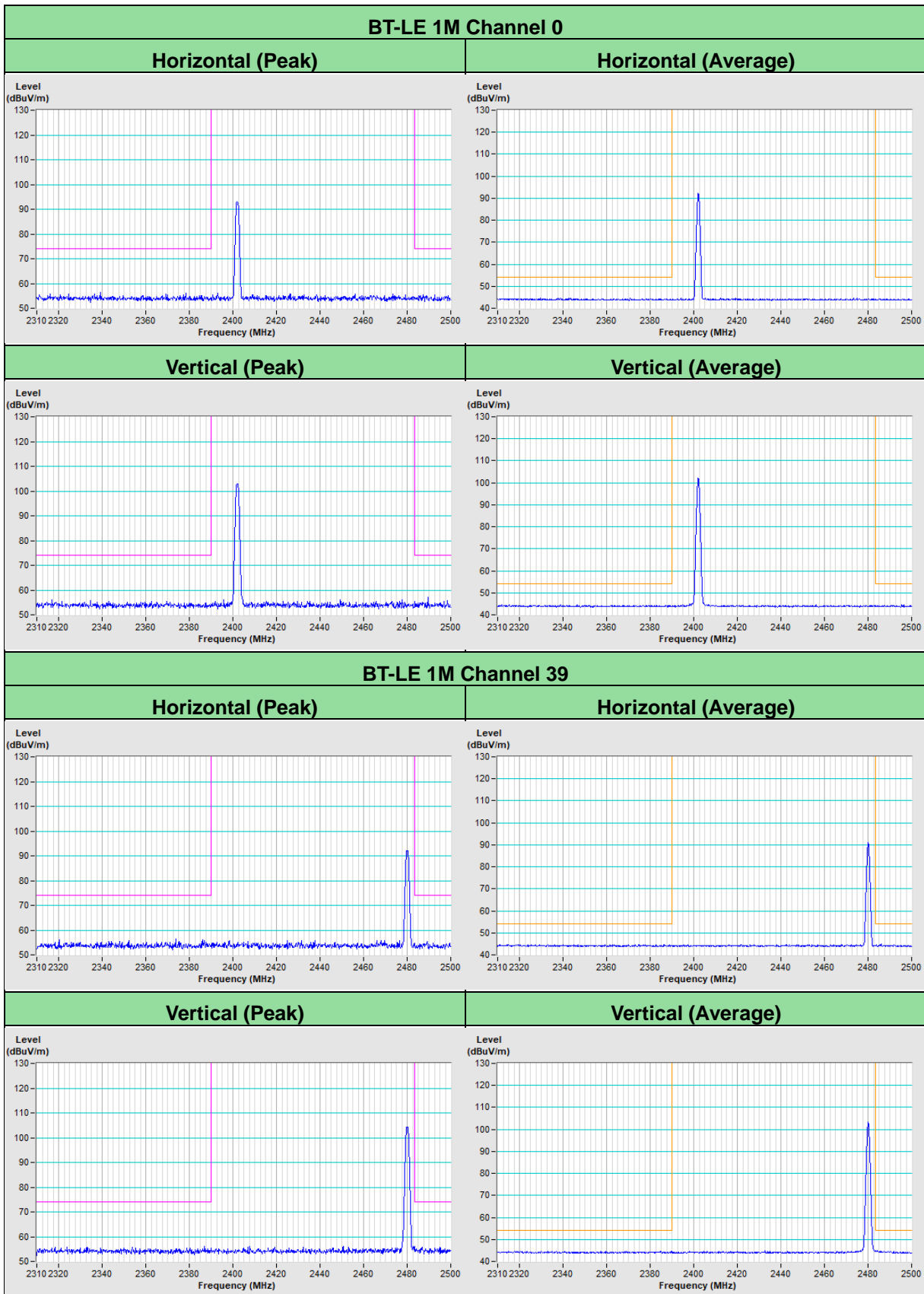
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	104.3 PK			1.52 V	225	107.2	-2.9
2	*2478.00	101.2 AV			1.52 V	225	104.1	-2.9
3	2484.13	55.5 PK	74.0	-18.5	1.52 V	225	58.4	-2.9
4	2484.13	44.1 AV	54.0	-9.9	1.52 V	225	47.0	-2.9
5	4956.00	42.5 PK	74.0	-31.5	1.28 V	301	40.8	1.7
6	4956.00	35.1 AV	54.0	-18.9	1.28 V	301	33.4	1.7
7	7434.00	42.0 PK	74.0	-32.0	1.56 V	277	34.5	7.5
8	7434.00	34.2 AV	54.0	-19.8	1.56 V	277	26.7	7.5

Remarks:

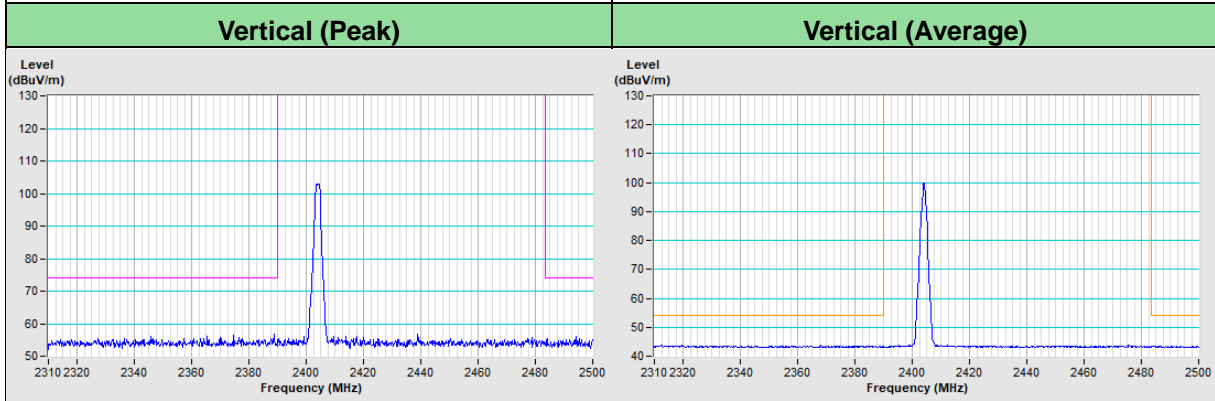
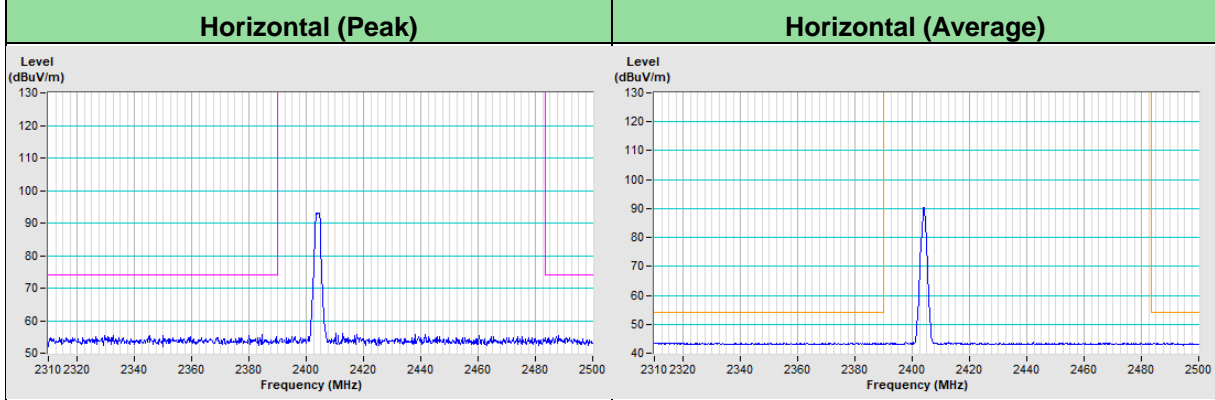
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.



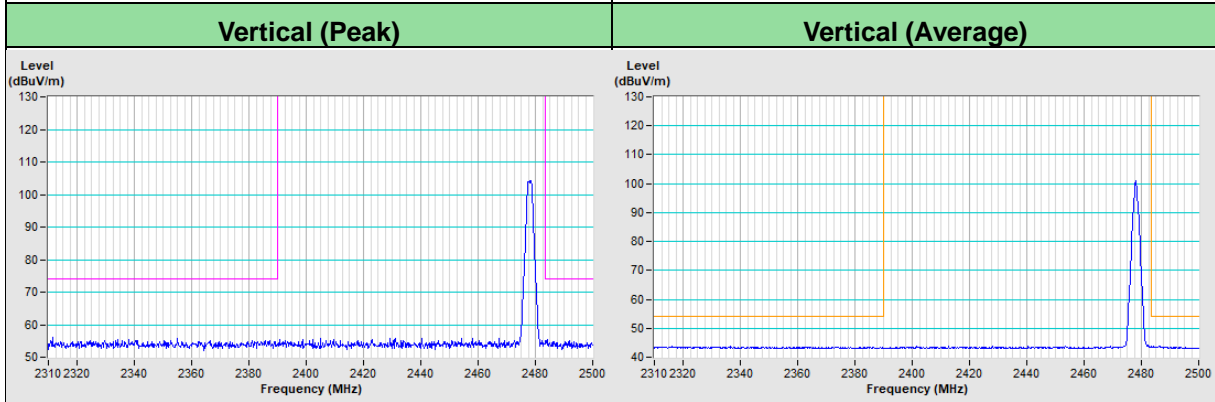
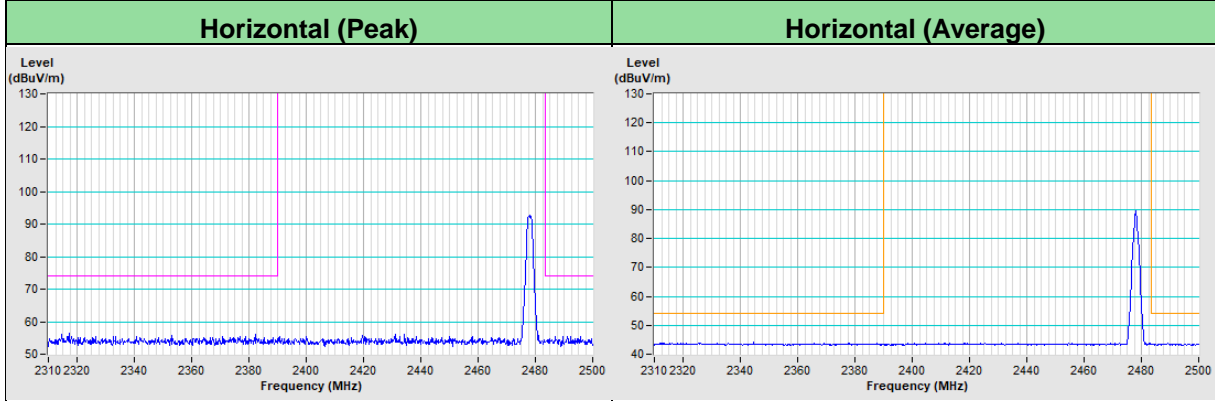
Mode A_Plot of Band Edge



BT-LE 2M Channel 1



BT-LE 2M Channel 38



Mode B

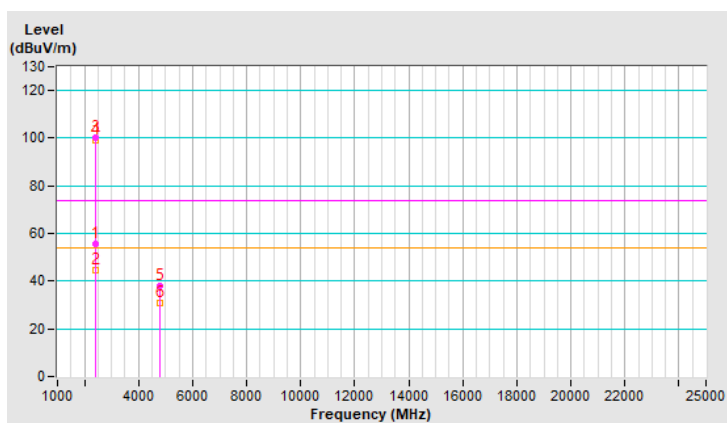
RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2385.91	55.5 PK	74.0	-18.5	1.08 H	135	58.2	-2.7
2	2385.91	44.4 AV	54.0	-9.6	1.08 H	135	47.1	-2.7
3	*2402.00	100.1 PK			1.08 H	135	102.8	-2.7
4	*2402.00	99.0 AV			1.08 H	135	101.7	-2.7
5	4804.00	37.9 PK	74.0	-36.1	1.52 H	149	36.4	1.5
6	4804.00	30.9 AV	54.0	-23.1	1.52 H	149	29.4	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

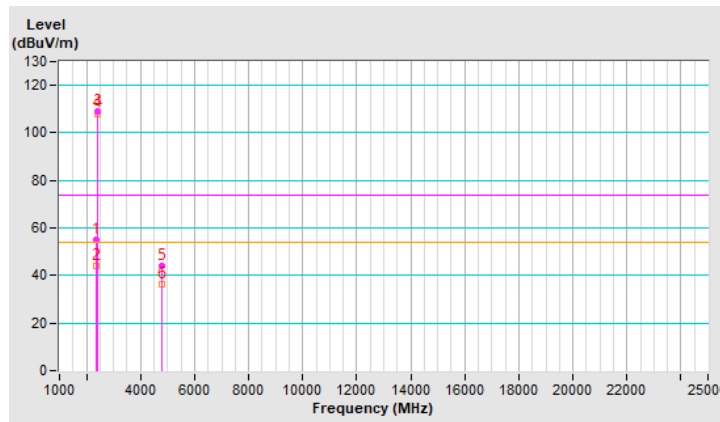


RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2372.45	55.3 PK	74.0	-18.7	1.58 V	255	57.9	-2.6
2	2372.45	44.3 AV	54.0	-9.7	1.58 V	255	46.9	-2.6
3	*2402.00	109.3 PK			1.58 V	255	112.0	-2.7
4	*2402.00	108.2 AV			1.58 V	255	110.9	-2.7
5	4804.00	43.8 PK	74.0	-30.2	1.29 V	298	42.3	1.5
6	4804.00	36.2 AV	54.0	-17.8	1.29 V	298	34.7	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

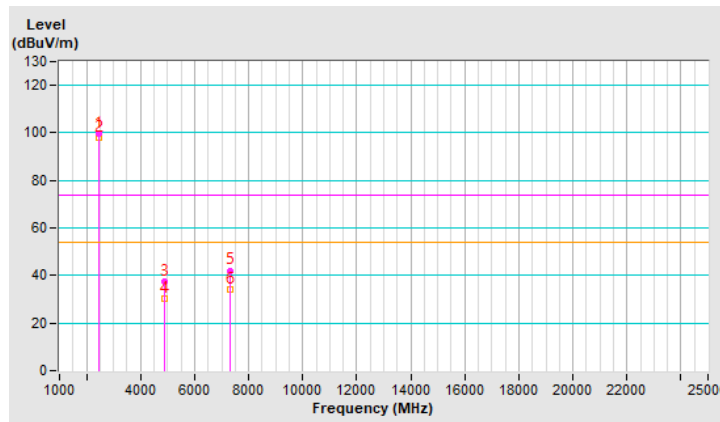


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	*2440.00	99.7 PK			1.08 H	151	102.5	-2.8
2	*2440.00	98.2 AV			1.08 H	151	101.0	-2.8
3	4880.00	37.3 PK	74.0	-36.7	1.55 H	127	35.8	1.5
4	4880.00	30.3 AV	54.0	-23.7	1.55 H	127	28.8	1.5
5	7320.00	42.1 PK	74.0	-31.9	1.85 H	180	34.9	7.2
6	7320.00	34.3 AV	54.0	-19.7	1.85 H	180	27.1	7.2

Remarks:

1. Emission Level(dBUV/m) = Raw Value(dBUV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

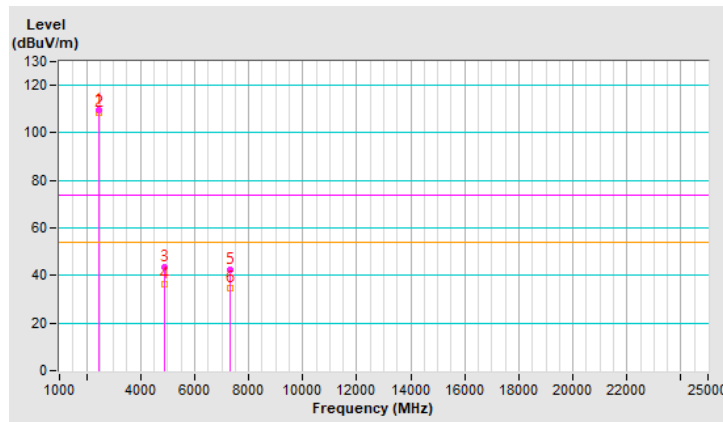


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	109.4 PK			1.59 V	241	112.2	-2.8
2	*2440.00	108.3 AV			1.59 V	241	111.1	-2.8
3	4880.00	43.3 PK	74.0	-30.7	1.27 V	289	41.8	1.5
4	4880.00	36.4 AV	54.0	-17.6	1.27 V	289	34.9	1.5
5	7320.00	42.2 PK	74.0	-31.8	1.63 V	274	35.0	7.2
6	7320.00	34.5 AV	54.0	-19.5	1.63 V	274	27.3	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

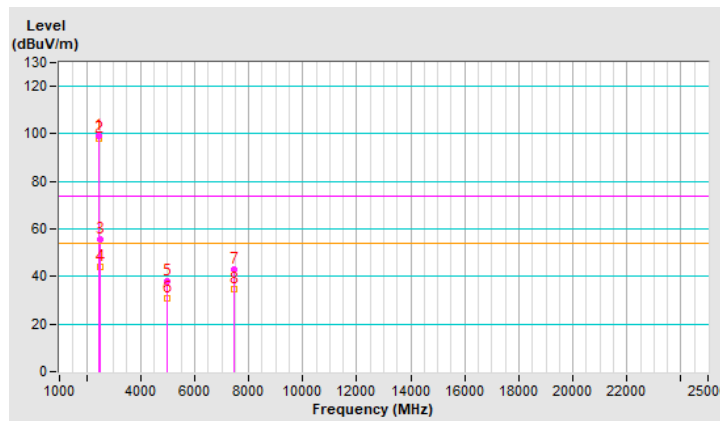


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	99.3 PK			1.10 H	137	102.2	-2.9
2	*2480.00	98.0 AV			1.10 H	137	100.9	-2.9
3	2484.63	55.5 PK	74.0	-18.5	1.10 H	137	58.4	-2.9
4	2484.63	44.3 AV	54.0	-9.7	1.10 H	137	47.2	-2.9
5	4960.00	38.2 PK	74.0	-35.8	1.57 H	153	36.5	1.7
6	4960.00	30.7 AV	54.0	-23.3	1.57 H	153	29.0	1.7
7	7440.00	42.7 PK	74.0	-31.3	1.71 H	215	35.1	7.6
8	7440.00	34.8 AV	54.0	-19.2	1.71 H	215	27.2	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

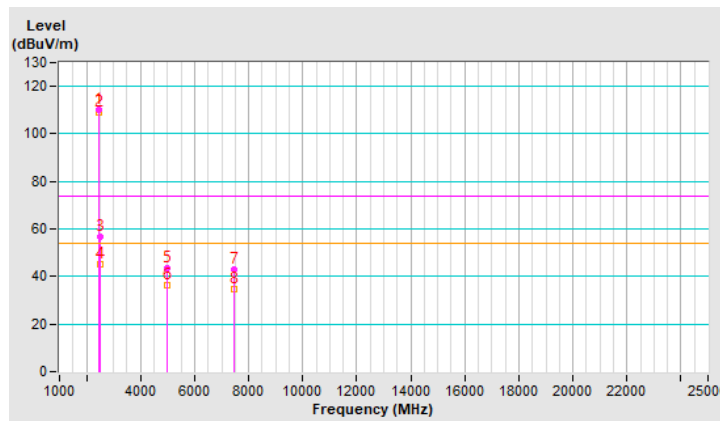


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	110.3 PK			1.57 V	254	113.2	-2.9
2	*2480.00	109.2 AV			1.57 V	254	112.1	-2.9
3	2484.59	56.5 PK	74.0	-17.5	1.57 V	254	59.4	-2.9
4	2484.59	45.3 AV	54.0	-8.7	1.57 V	254	48.2	-2.9
5	4960.00	43.6 PK	74.0	-30.4	1.32 V	305	41.9	1.7
6	4960.00	36.3 AV	54.0	-17.7	1.32 V	305	34.6	1.7
7	7440.00	42.7 PK	74.0	-31.3	1.69 V	263	35.1	7.6
8	7440.00	34.7 AV	54.0	-19.3	1.69 V	263	27.1	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

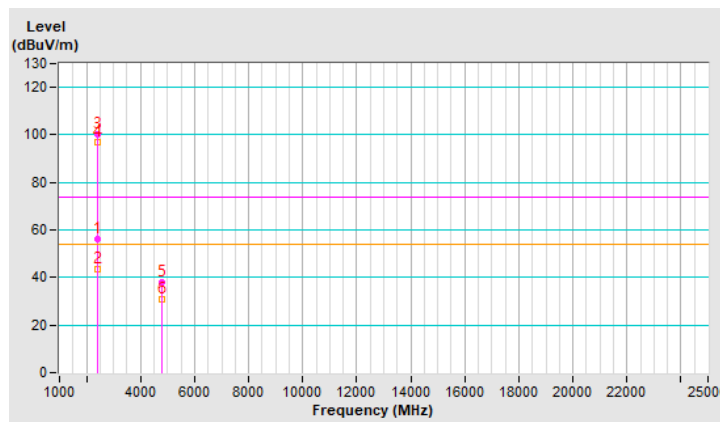


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	56.2 PK	74.0	-17.8	1.42 H	149	58.9	-2.7
2	2390.00	43.6 AV	54.0	-10.4	1.42 H	149	46.3	-2.7
3	*2404.00	100.2 PK			1.42 H	149	102.9	-2.7
4	*2404.00	97.0 AV			1.42 H	149	99.7	-2.7
5	4808.00	37.8 PK	74.0	-36.2	1.48 H	145	36.3	1.5
6	4808.00	30.6 AV	54.0	-23.4	1.48 H	145	29.1	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

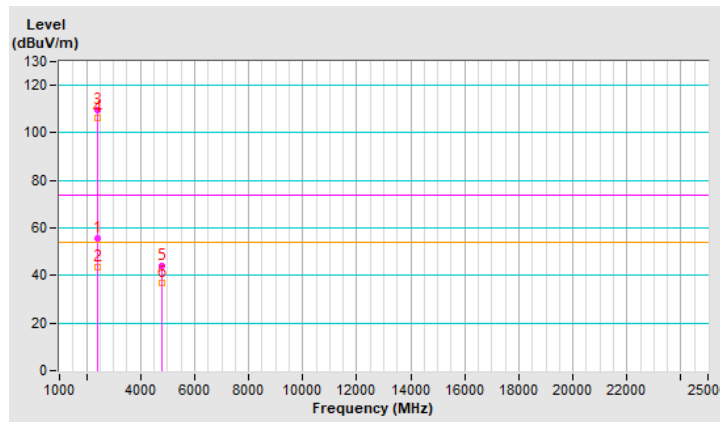


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2387.08	55.8 PK	74.0	-18.2	1.61 V	242	58.5	-2.7
2	2387.08	43.6 AV	54.0	-10.4	1.61 V	242	46.3	-2.7
3	*2404.00	109.4 PK			1.61 V	242	112.1	-2.7
4	*2404.00	106.3 AV			1.61 V	242	109.0	-2.7
5	4808.00	44.0 PK	74.0	-30.0	1.30 V	316	42.5	1.5
6	4808.00	36.8 AV	54.0	-17.2	1.30 V	316	35.3	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.



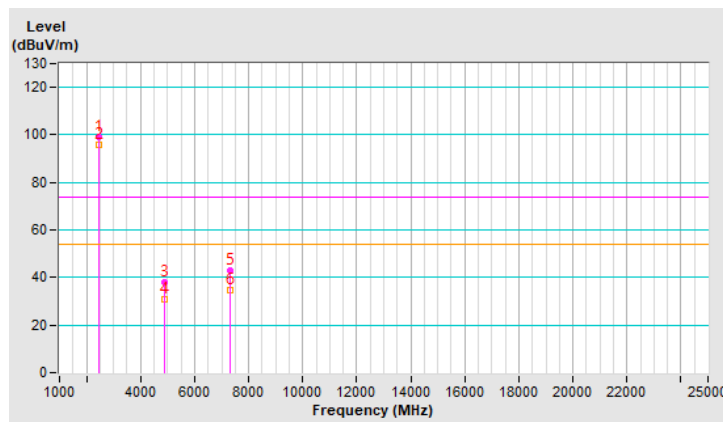
RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	99.3 PK			1.43 H	143	102.1	-2.8
2	*2440.00	96.0 AV			1.43 H	143	98.8	-2.8
3	4880.00	38.2 PK	74.0	-35.8	1.56 H	139	36.7	1.5
4	4880.00	30.8 AV	54.0	-23.2	1.56 H	139	29.3	1.5
5	7320.00	42.9 PK	74.0	-31.1	1.65 H	201	35.7	7.2
6	7320.00	34.9 AV	54.0	-19.1	1.65 H	201	27.7	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

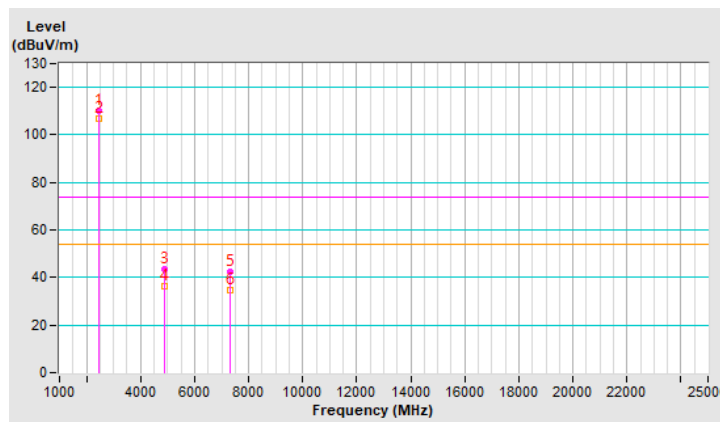


RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	109.9 PK			1.59 V	246	112.7	-2.8
2	*2440.00	106.6 AV			1.59 V	246	109.4	-2.8
3	4880.00	43.4 PK	74.0	-30.6	1.24 V	316	41.9	1.5
4	4880.00	36.1 AV	54.0	-17.9	1.24 V	316	34.6	1.5
5	7320.00	42.3 PK	74.0	-31.7	1.55 V	263	35.1	7.2
6	7320.00	34.6 AV	54.0	-19.4	1.55 V	263	27.4	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

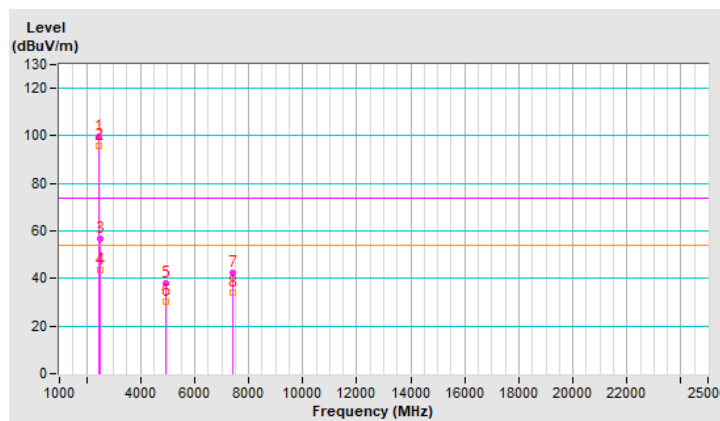


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	99.5 PK			1.45 H	140	102.4	-2.9
2	*2478.00	96.0 AV			1.45 H	140	98.9	-2.9
3	2486.51	56.9 PK	74.0	-17.1	1.45 H	140	59.8	-2.9
4	2486.51	43.5 AV	54.0	-10.5	1.45 H	140	46.4	-2.9
5	4956.00	37.8 PK	74.0	-36.2	1.48 H	152	36.1	1.7
6	4956.00	30.4 AV	54.0	-23.6	1.48 H	152	28.7	1.7
7	7434.00	42.3 PK	74.0	-31.7	1.71 H	188	34.8	7.5
8	7434.00	34.2 AV	54.0	-19.8	1.71 H	188	26.7	7.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

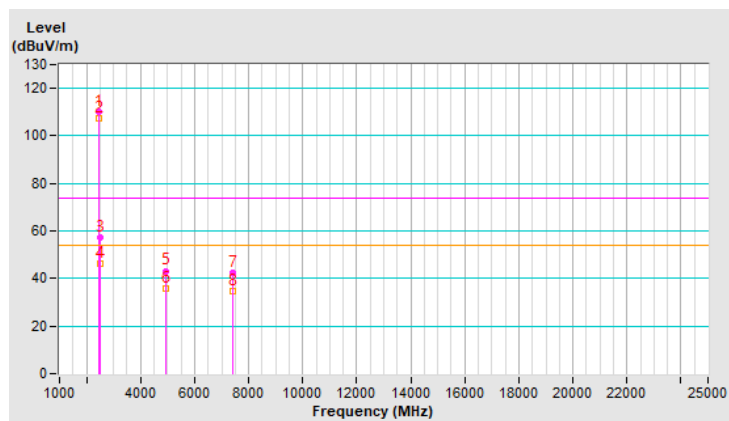


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

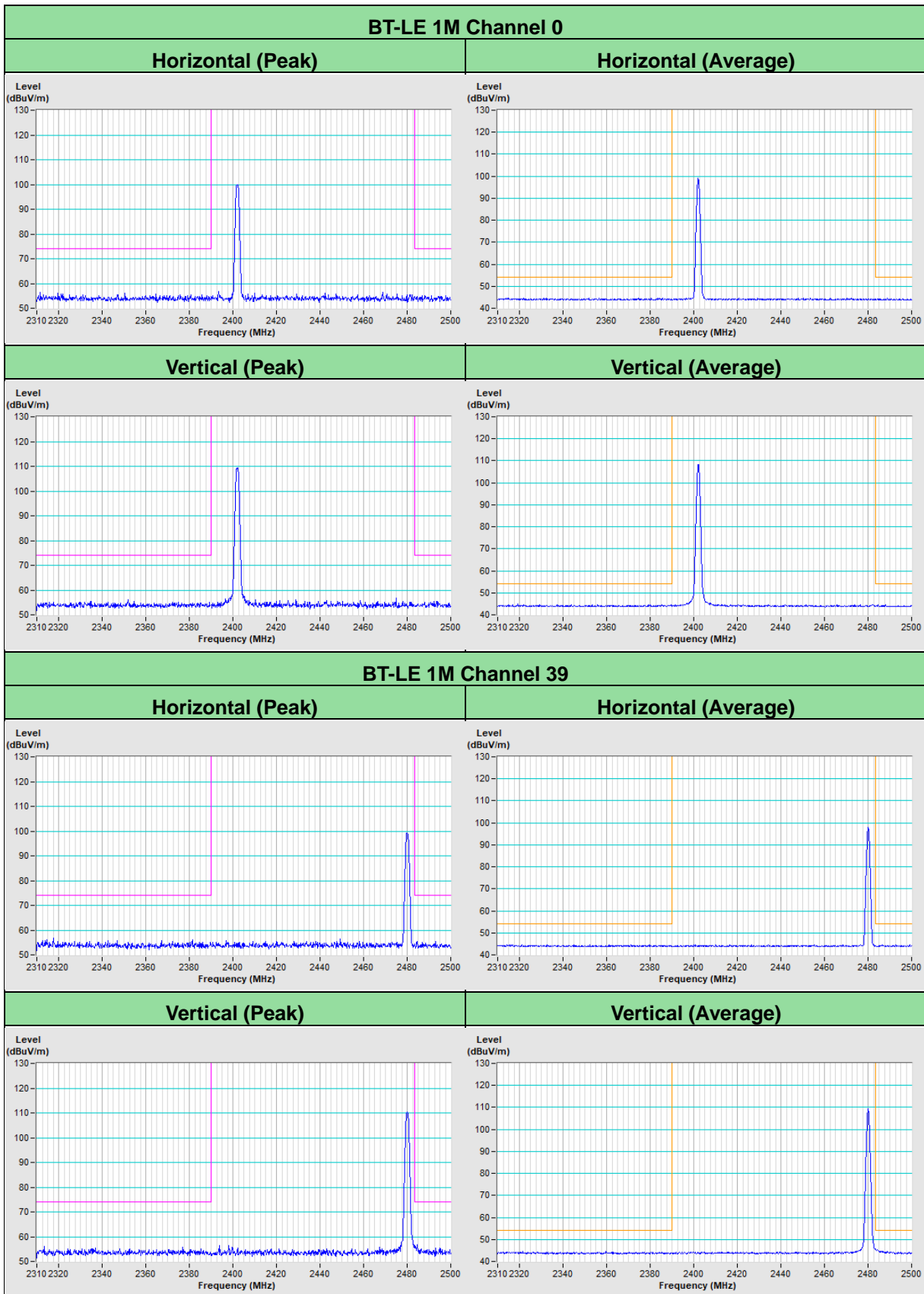
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	110.1 PK			1.51 V	234	113.0	-2.9
2	*2478.00	107.2 AV			1.51 V	234	110.1	-2.9
3	2483.50	57.2 PK	74.0	-16.8	1.51 V	234	60.1	-2.9
4	2483.50	46.2 AV	54.0	-7.8	1.51 V	234	49.1	-2.9
5	4956.00	43.2 PK	74.0	-30.8	1.22 V	306	41.5	1.7
6	4956.00	36.0 AV	54.0	-18.0	1.22 V	306	34.3	1.7
7	7434.00	42.6 PK	74.0	-31.4	1.48 V	290	35.1	7.5
8	7434.00	34.8 AV	54.0	-19.2	1.48 V	290	27.3	7.5

Remarks:

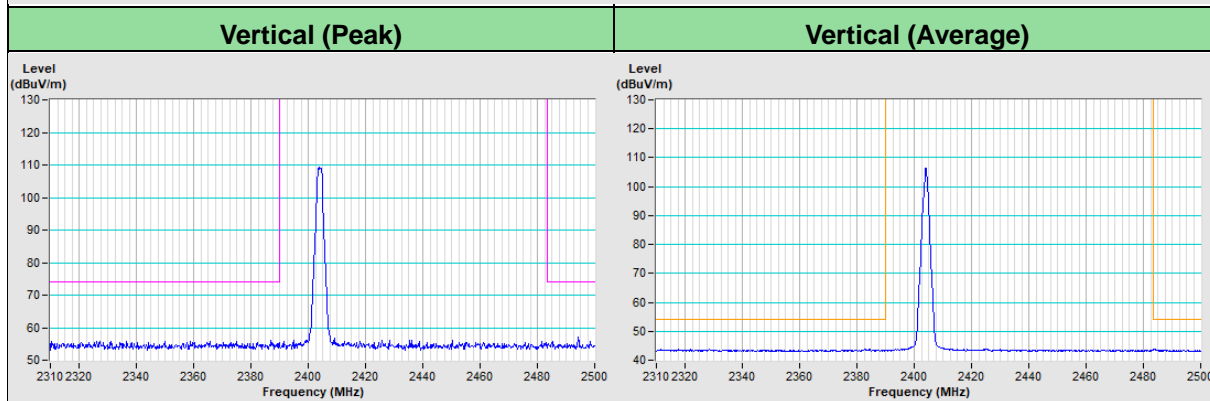
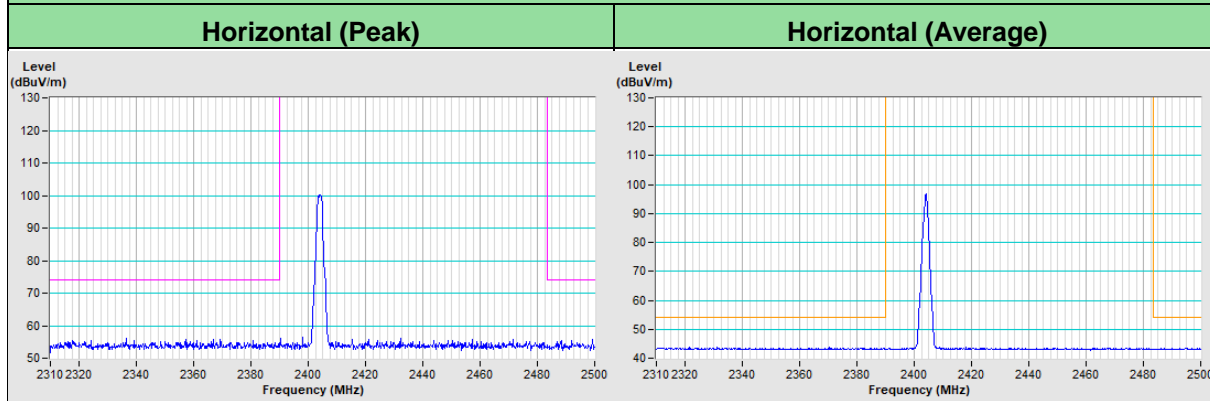
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.



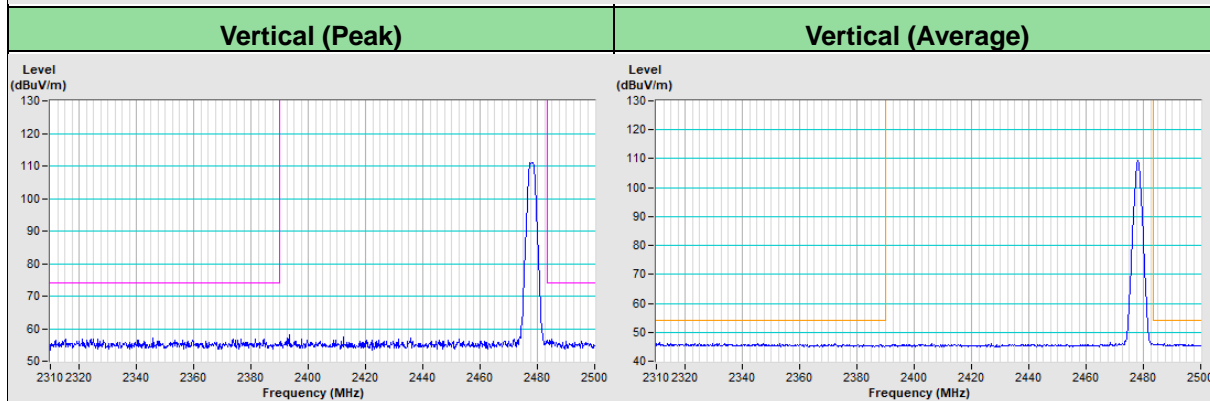
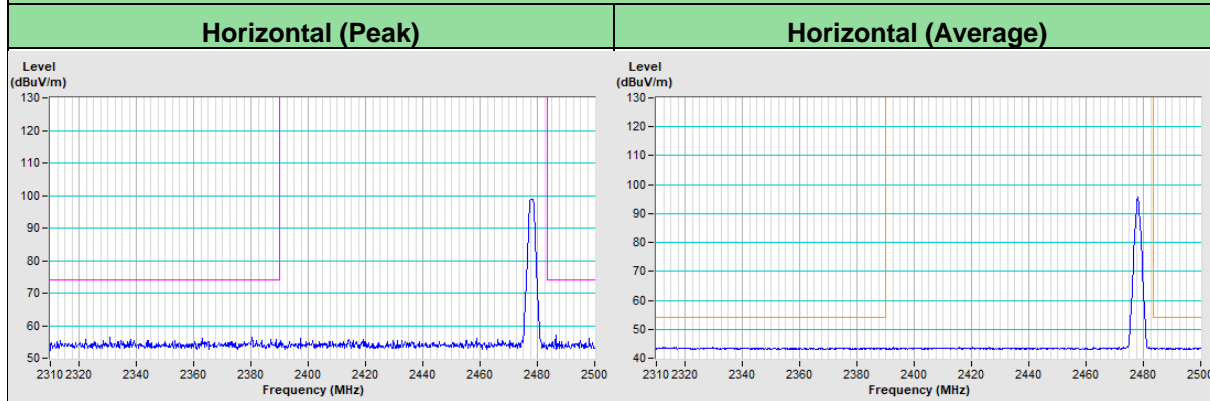
Mode B_Plot of Band Edge



BT-LE 2M Channel 1



BT-LE 2M Channel 38



Mode C

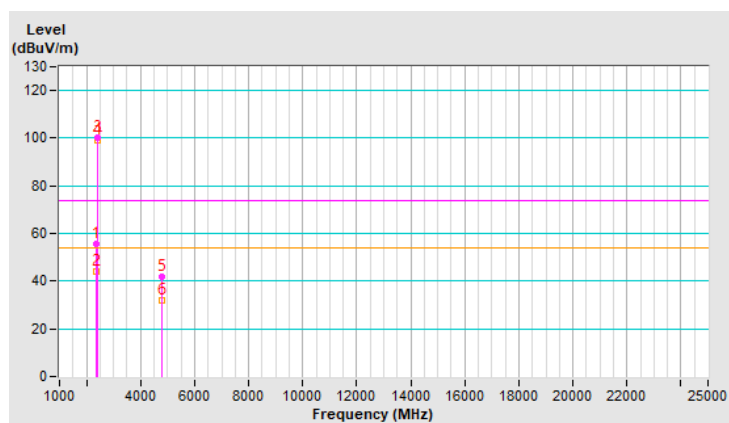
RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2380.89	55.7 PK	74.0	-18.3	1.19 H	336	58.4	-2.7
2	2380.89	44.0 AV	54.0	-10.0	1.19 H	336	46.7	-2.7
3	*2402.00	100.2 PK			1.19 H	336	102.9	-2.7
4	*2402.00	99.0 AV			1.19 H	336	101.7	-2.7
5	4804.00	41.8 PK	74.0	-32.2	1.35 H	166	40.3	1.5
6	4804.00	32.0 AV	54.0	-22.0	1.35 H	166	30.5	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

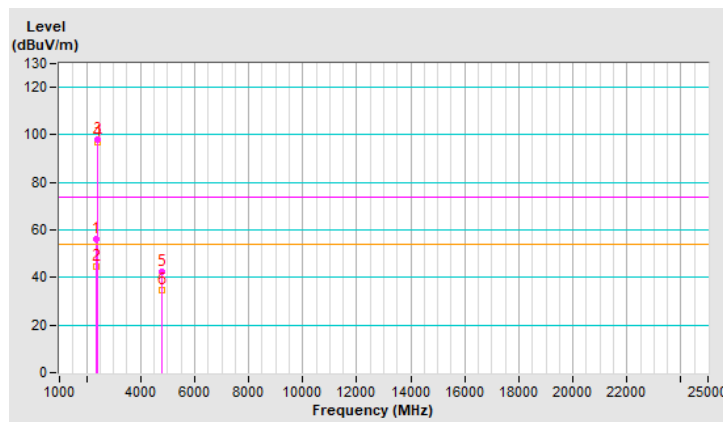


RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2374.26	56.1 PK	74.0	-17.9	2.24 V	101	58.7	-2.6
2	2374.26	44.4 AV	54.0	-9.6	2.24 V	101	47.0	-2.6
3	*2402.00	98.0 PK			2.24 V	101	100.7	-2.7
4	*2402.00	96.8 AV			2.24 V	101	99.5	-2.7
5	4804.00	42.4 PK	74.0	-31.6	1.10 V	127	40.9	1.5
6	4804.00	34.6 AV	54.0	-19.4	1.10 V	127	33.1	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

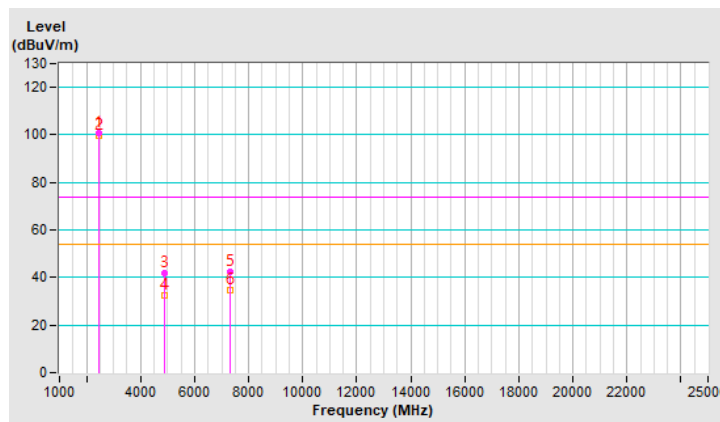


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	100.7 PK			1.12 H	328	103.5	-2.8
2	*2440.00	99.5 AV			1.12 H	328	102.3	-2.8
3	4880.00	42.0 PK	74.0	-32.0	1.30 H	132	40.5	1.5
4	4880.00	32.3 AV	54.0	-21.7	1.30 H	132	30.8	1.5
5	7320.00	42.6 PK	74.0	-31.4	1.44 H	9	35.4	7.2
6	7320.00	34.7 AV	54.0	-19.3	1.44 H	9	27.5	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

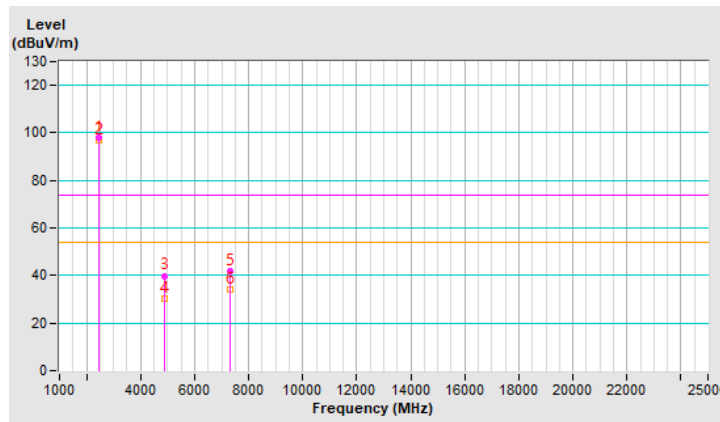


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	98.0 PK			2.23 V	90	100.8	-2.8
2	*2440.00	96.8 AV			2.23 V	90	99.6	-2.8
3	4880.00	39.9 PK	74.0	-34.1	1.09 V	74	38.4	1.5
4	4880.00	30.2 AV	54.0	-23.8	1.09 V	74	28.7	1.5
5	7320.00	41.8 PK	74.0	-32.2	3.82 V	343	34.6	7.2
6	7320.00	34.0 AV	54.0	-20.0	3.82 V	343	26.8	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

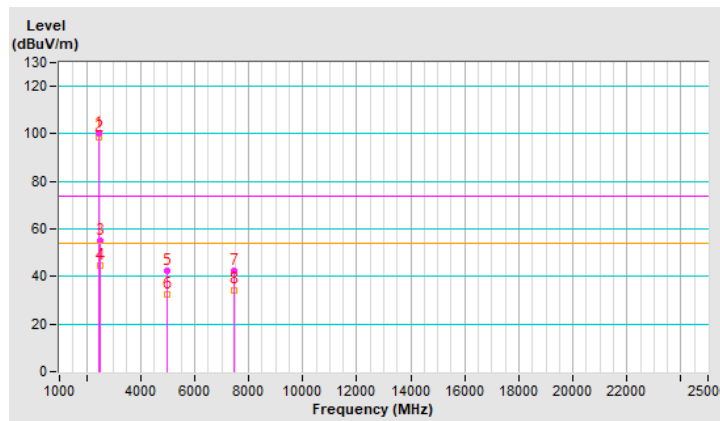


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	100.1 PK			1.17 H	328	103.0	-2.9
2	*2480.00	98.7 AV			1.17 H	328	101.6	-2.9
3	2483.76	55.3 PK	74.0	-18.7	1.17 H	328	58.2	-2.9
4	2483.76	44.6 AV	54.0	-9.4	1.17 H	328	47.5	-2.9
5	4960.00	42.2 PK	74.0	-31.8	1.29 H	154	40.5	1.7
6	4960.00	32.6 AV	54.0	-21.4	1.29 H	154	30.9	1.7
7	7440.00	42.3 PK	74.0	-31.7	1.49 H	6	34.7	7.6
8	7440.00	34.4 AV	54.0	-19.6	1.49 H	6	26.8	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

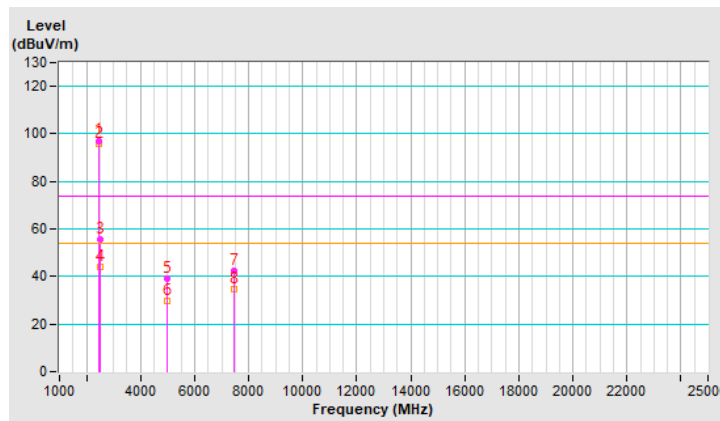


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	97.2 PK			2.22 V	101	100.1	-2.9
2	*2480.00	96.0 AV			2.22 V	101	98.9	-2.9
3	2491.43	55.5 PK	74.0	-18.5	2.22 V	101	58.4	-2.9
4	2491.43	44.3 AV	54.0	-9.7	2.22 V	101	47.2	-2.9
5	4960.00	39.2 PK	74.0	-34.8	1.01 V	100	37.5	1.7
6	4960.00	29.5 AV	54.0	-24.5	1.01 V	100	27.8	1.7
7	7440.00	42.3 PK	74.0	-31.7	3.80 V	351	34.7	7.6
8	7440.00	34.5 AV	54.0	-19.5	3.80 V	351	26.9	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

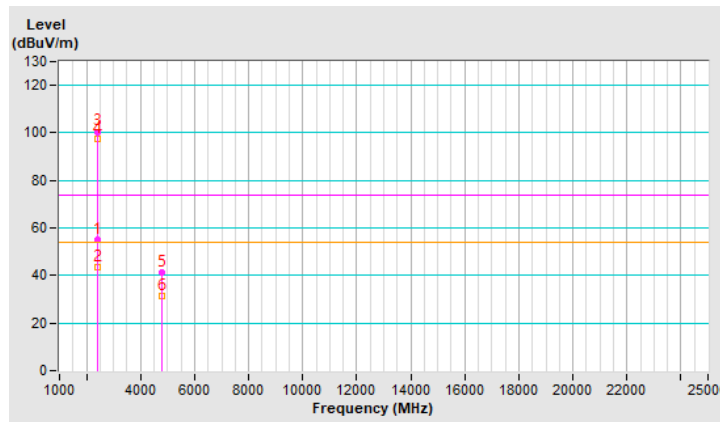


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2386.18	55.0 PK	74.0	-19.0	1.13 H	348	57.7	-2.7
2	2386.18	43.4 AV	54.0	-10.6	1.13 H	348	46.1	-2.7
3	*2404.00	100.5 PK			1.13 H	334	103.2	-2.7
4	*2404.00	97.3 AV			1.13 H	334	100.0	-2.7
5	4808.00	41.5 PK	74.0	-32.5	1.40 H	166	40.0	1.5
6	4808.00	31.5 AV	54.0	-22.5	1.40 H	166	30.0	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

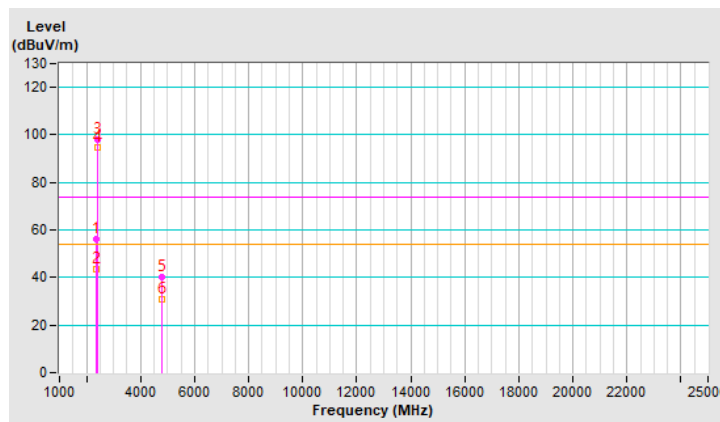


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2377.86	56.0 PK	74.0	-18.0	2.23 V	86	58.6	-2.6
2	2377.86	43.5 AV	54.0	-10.5	2.23 V	86	46.1	-2.6
3	*2404.00	98.2 PK			2.23 V	86	100.9	-2.7
4	*2404.00	94.9 AV			2.23 V	86	97.6	-2.7
5	4808.00	40.3 PK	74.0	-33.7	1.10 V	112	38.8	1.5
6	4808.00	30.6 AV	54.0	-23.4	1.10 V	112	29.1	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

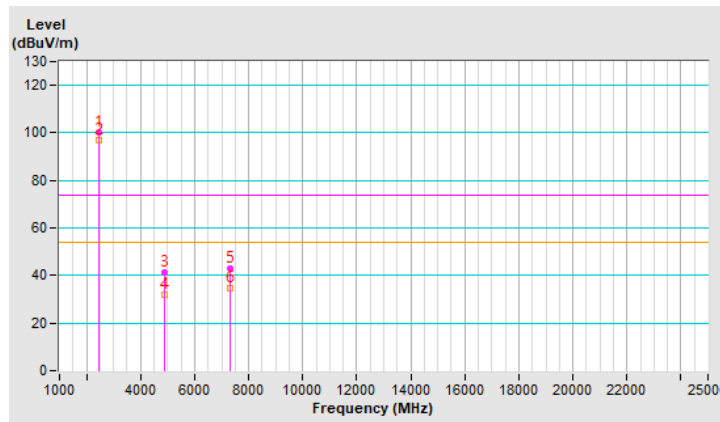


RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	100.1 PK			1.13 H	335	102.9	-2.8
2	*2440.00	96.9 AV			1.13 H	335	99.7	-2.8
3	4880.00	41.4 PK	74.0	-32.6	1.24 H	145	39.9	1.5
4	4880.00	31.9 AV	54.0	-22.1	1.24 H	145	30.4	1.5
5	7320.00	42.7 PK	74.0	-31.3	1.42 H	10	35.5	7.2
6	7320.00	34.6 AV	54.0	-19.4	1.42 H	10	27.4	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

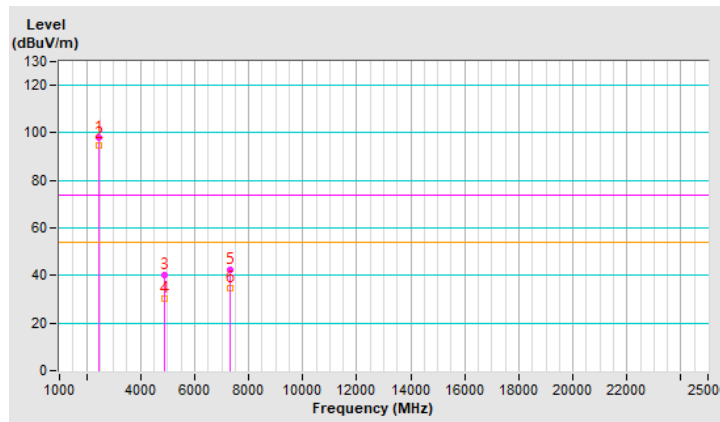


RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	98.2 PK			2.17 V	85	101.0	-2.8
2	*2440.00	95.0 AV			2.17 V	85	97.8	-2.8
3	4880.00	40.4 PK	74.0	-33.6	1.04 V	75	38.9	1.5
4	4880.00	30.5 AV	54.0	-23.5	1.04 V	75	29.0	1.5
5	7320.00	42.5 PK	74.0	-31.5	3.86 V	356	35.3	7.2
6	7320.00	34.8 AV	54.0	-19.2	3.86 V	356	27.6	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

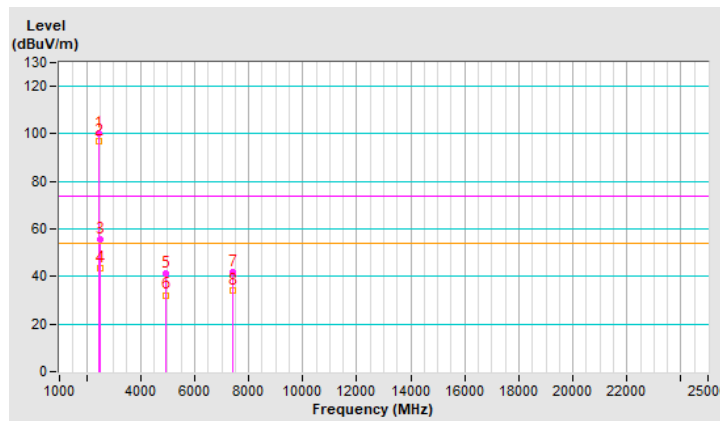


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	100.3 PK			1.07 H	337	103.2	-2.9
2	*2478.00	96.8 AV			1.07 H	337	99.7	-2.9
3	2486.99	55.5 PK	74.0	-18.5	1.07 H	337	58.4	-2.9
4	2486.99	43.6 AV	54.0	-10.4	1.07 H	337	46.5	-2.9
5	4956.00	41.5 PK	74.0	-32.5	1.20 H	160	39.8	1.7
6	4956.00	32.2 AV	54.0	-21.8	1.20 H	160	30.5	1.7
7	7434.00	42.0 PK	74.0	-32.0	1.45 H	17	34.5	7.5
8	7434.00	34.2 AV	54.0	-19.8	1.45 H	17	26.7	7.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

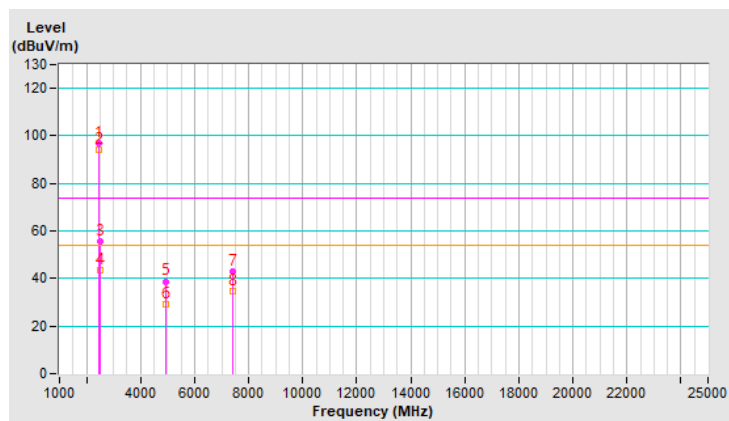


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

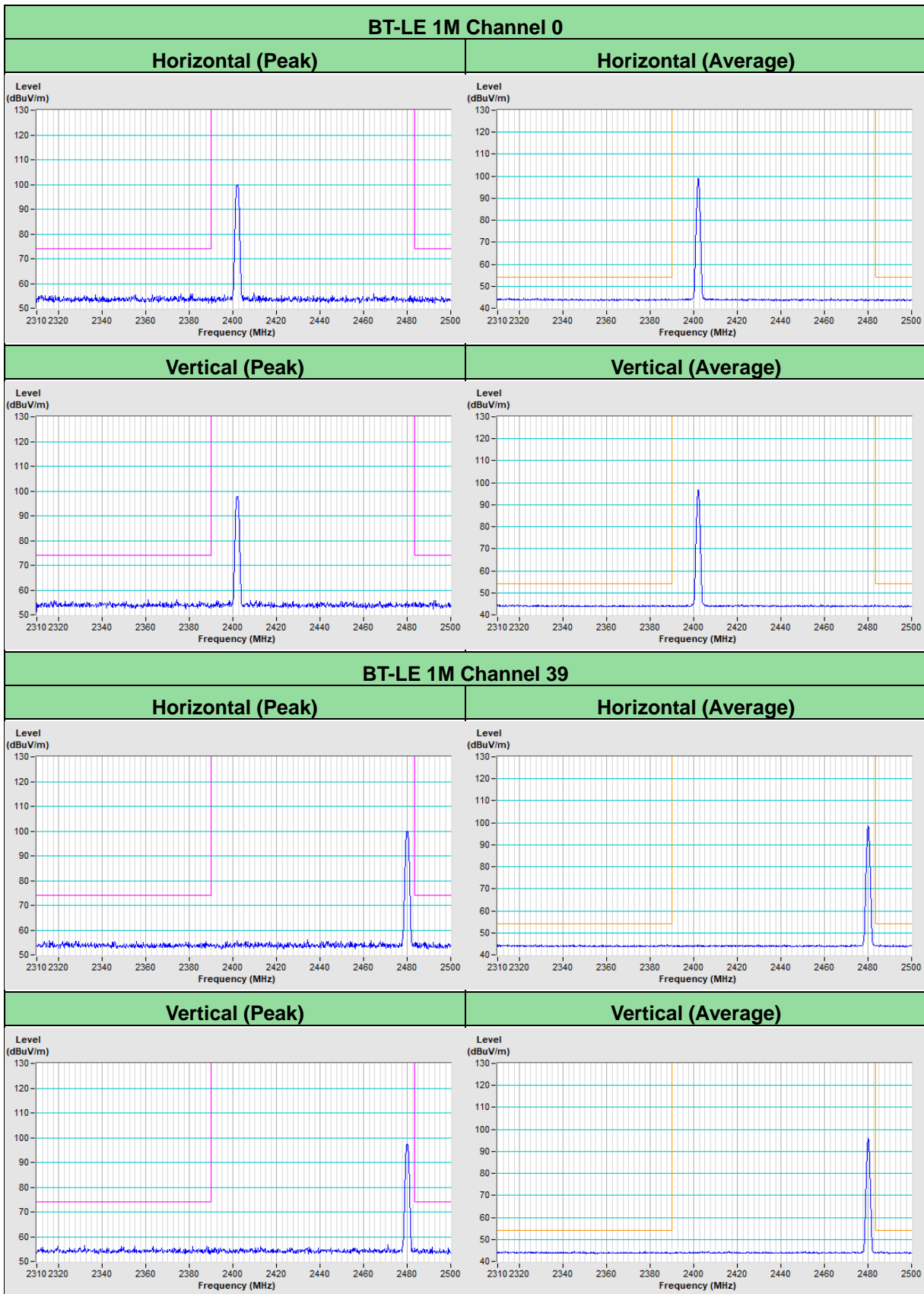
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	96.7 PK			2.28 V	110	99.6	-2.9
2	*2478.00	94.3 AV			2.28 V	110	97.2	-2.9
3	2492.47	55.5 PK	74.0	-18.5	2.28 V	110	58.4	-2.9
4	2492.47	43.4 AV	54.0	-10.6	2.28 V	110	46.3	-2.9
5	4956.00	38.8 PK	74.0	-35.2	1.03 V	93	37.1	1.7
6	4956.00	29.3 AV	54.0	-24.7	1.03 V	93	27.6	1.7
7	7434.00	42.9 PK	74.0	-31.1	3.83 V	360	35.4	7.5
8	7434.00	34.8 AV	54.0	-19.2	3.83 V	360	27.3	7.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

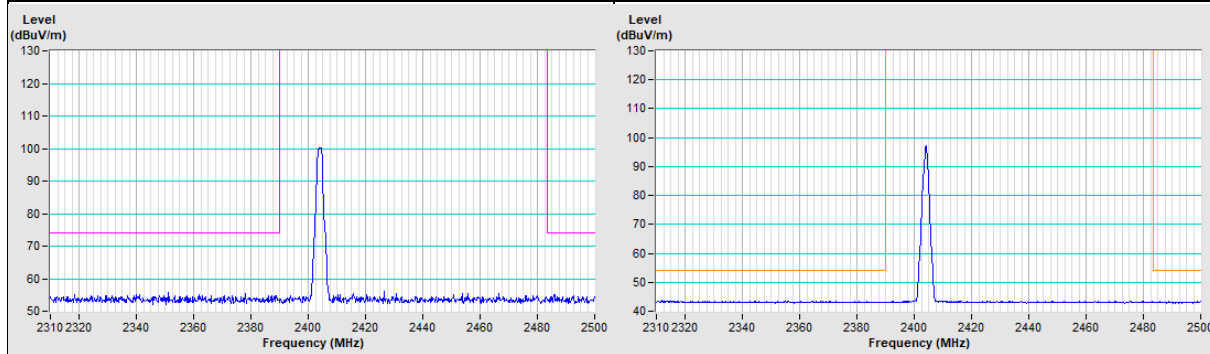


Mode C_Plot of Band Edge

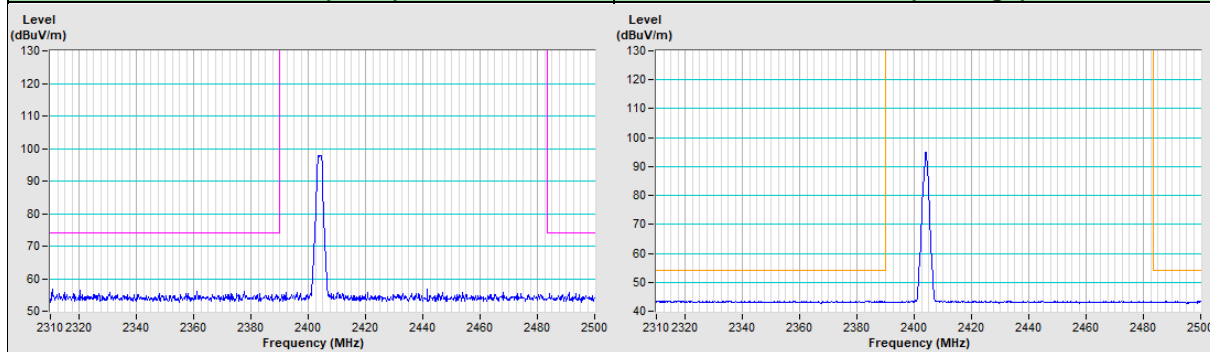


BT-LE 2M Channel 1

Horizontal (Peak)	Horizontal (Average)
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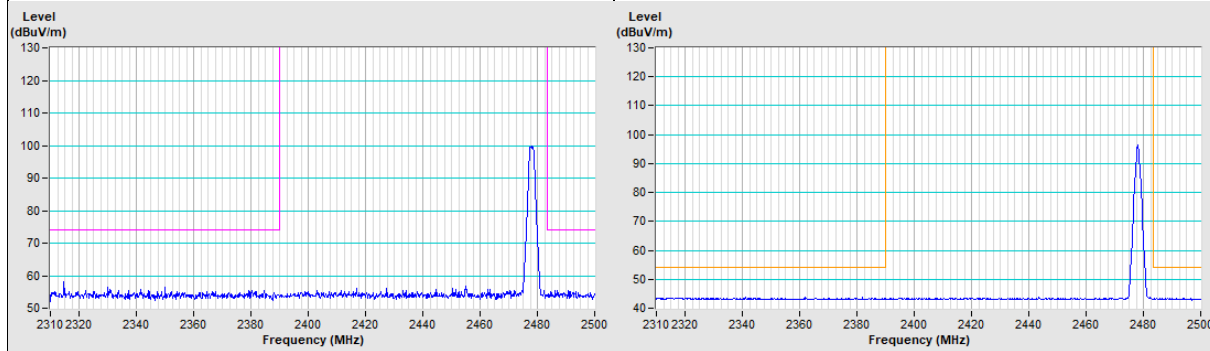


Vertical (Peak)	Vertical (Average)
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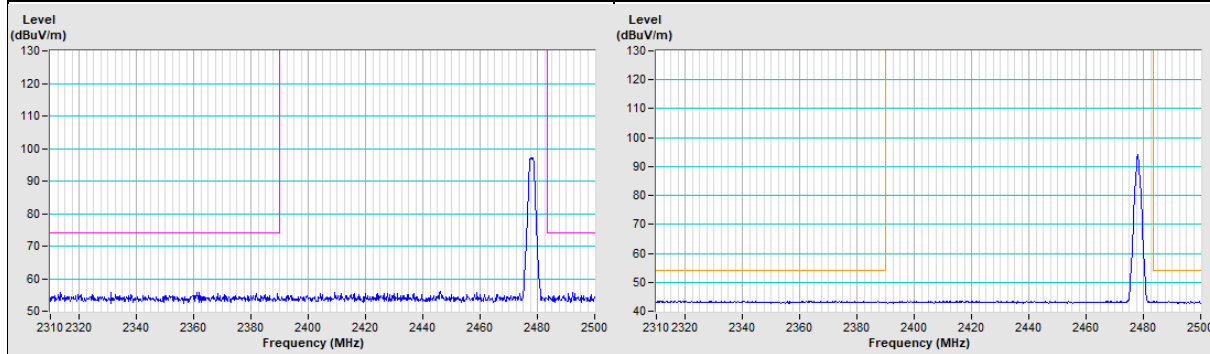


BT-LE 2M Channel 38

Horizontal (Peak)	Horizontal (Average)
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Vertical (Peak)	Vertical (Average)
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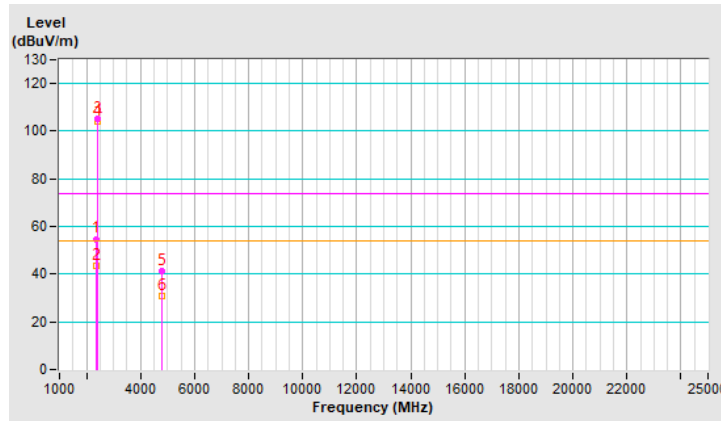
Mode D

RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2364.23	54.8 PK	74.0	-19.2	1.32 H	327	57.5	-2.7
2	2364.23	43.3 AV	54.0	-10.7	1.32 H	327	46.0	-2.7
3	*2402.00	105.4 PK			1.32 H	327	108.1	-2.7
4	*2402.00	104.3 AV			1.32 H	327	107.0	-2.7
5	4804.00	41.3 PK	74.0	-32.7	1.28 H	156	39.8	1.5
6	4804.00	31.0 AV	54.0	-23.0	1.28 H	156	29.5	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

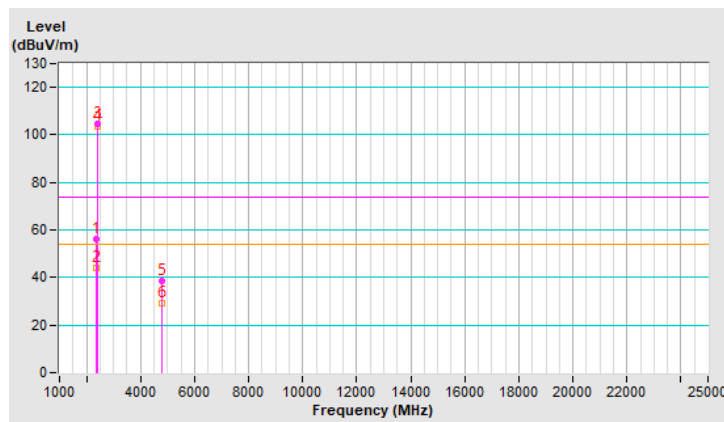


RF Mode	TX BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2359.08	56.0 PK	74.0	-18.0	1.00 V	0	58.7	-2.7
2	2359.08	44.3 AV	54.0	-9.7	1.00 V	0	47.0	-2.7
3	*2402.00	104.5 PK			2.09 V	125	107.2	-2.7
4	*2402.00	103.3 AV			2.09 V	125	106.0	-2.7
5	4804.00	38.7 PK	74.0	-35.3	3.22 V	351	37.2	1.5
6	4804.00	29.0 AV	54.0	-25.0	3.22 V	351	27.5	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

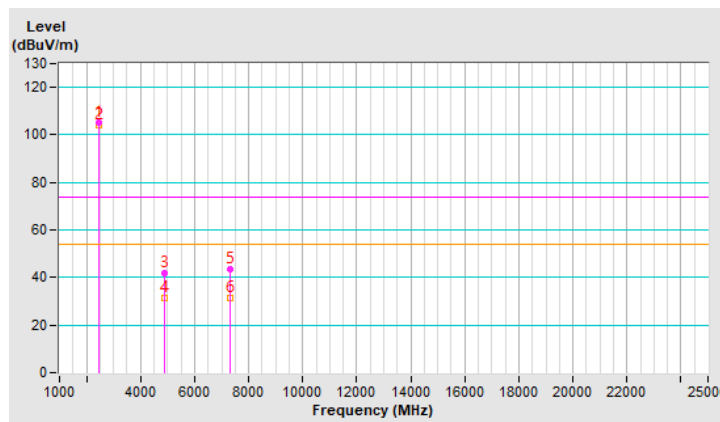


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	105.3 PK			1.36 H	321	108.1	-2.8
2	*2440.00	104.2 AV			1.36 H	321	107.0	-2.8
3	4880.00	41.6 PK	74.0	-32.4	1.36 H	153	40.1	1.5
4	4880.00	31.3 AV	54.0	-22.7	1.36 H	153	29.8	1.5
5	7320.00	43.4 PK	74.0	-30.6	1.37 H	27	36.2	7.2
6	7320.00	31.4 AV	54.0	-22.6	1.37 H	27	24.2	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

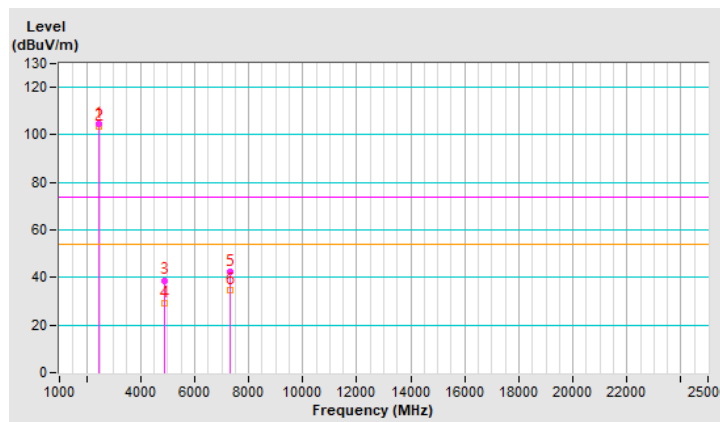


RF Mode	TX BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	104.5 PK			2.17 V	118	107.3	-2.8
2	*2440.00	103.3 AV			2.17 V	118	106.1	-2.8
3	4880.00	38.8 PK	74.0	-35.2	3.19 V	336	37.3	1.5
4	4880.00	29.2 AV	54.0	-24.8	3.19 V	336	27.7	1.5
5	7320.00	42.3 PK	74.0	-31.7	1.53 V	177	35.1	7.2
6	7320.00	34.7 AV	54.0	-19.3	1.53 V	177	27.5	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

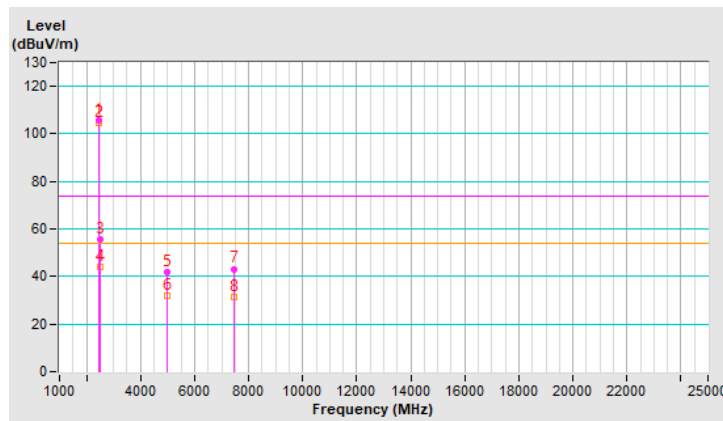


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	105.9 PK			1.30 H	311	108.8	-2.9
2	*2480.00	104.5 AV			1.30 H	311	107.4	-2.9
3	2487.07	55.4 PK	74.0	-18.6	1.30 H	311	58.3	-2.9
4	2487.07	44.3 AV	54.0	-9.7	1.30 H	311	47.2	-2.9
5	4960.00	42.0 PK	74.0	-32.0	1.36 H	154	40.3	1.7
6	4960.00	31.7 AV	54.0	-22.3	1.36 H	154	30.0	1.7
7	7440.00	43.2 PK	74.0	-30.8	1.39 H	18	35.6	7.6
8	7440.00	31.2 AV	54.0	-22.8	1.39 H	18	23.6	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

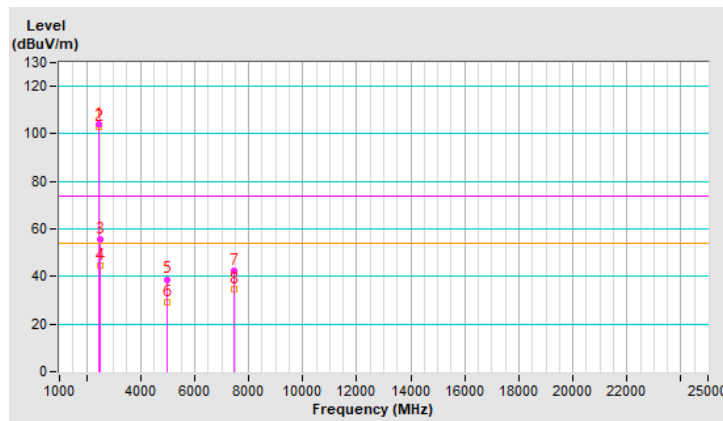


RF Mode	TX BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 3 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2480.00	104.0 PK			2.11 V	106	106.9	-2.9
2	*2480.00	102.8 AV			2.11 V	106	105.7	-2.9
3	2483.50	55.5 PK	74.0	-18.5	2.11 V	106	58.4	-2.9
4	2483.50	44.4 AV	54.0	-9.6	2.11 V	106	47.3	-2.9
5	4960.00	38.8 PK	74.0	-35.2	3.21 V	346	37.1	1.7
6	4960.00	29.0 AV	54.0	-25.0	3.21 V	346	27.3	1.7
7	7440.00	42.4 PK	74.0	-31.6	1.59 V	198	34.8	7.6
8	7440.00	34.6 AV	54.0	-19.4	1.59 V	198	27.0	7.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

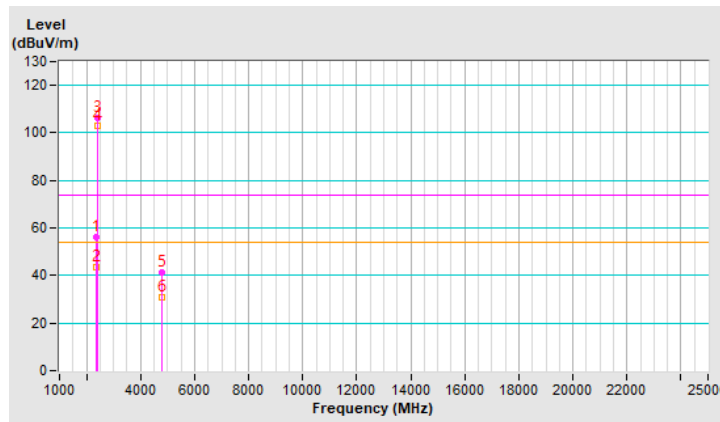


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2382.24	56.1 PK	74.0	-17.9	1.39 H	324	58.8	-2.7
2	2382.24	43.4 AV	54.0	-10.6	1.39 H	324	46.1	-2.7
3	*2404.00	106.3 PK			1.39 H	324	109.0	-2.7
4	*2404.00	103.2 AV			1.39 H	324	105.9	-2.7
5	4808.00	41.4 PK	74.0	-32.6	1.29 H	152	39.9	1.5
6	4808.00	30.9 AV	54.0	-23.1	1.29 H	152	29.4	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

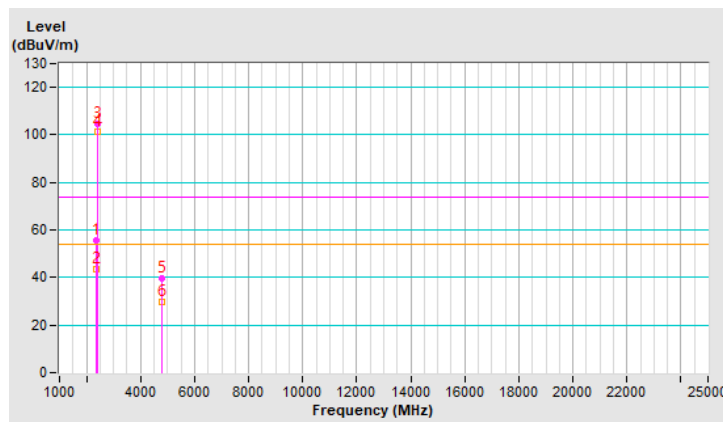


RF Mode	TX BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2356.15	55.4 PK	74.0	-18.6	2.14 V	114	58.1	-2.7
2	2356.15	43.4 AV	54.0	-10.6	2.14 V	114	46.1	-2.7
3	*2404.00	104.5 PK			2.14 V	114	107.2	-2.7
4	*2404.00	101.4 AV			2.14 V	114	104.1	-2.7
5	4808.00	39.4 PK	74.0	-34.6	3.26 V	350	37.9	1.5
6	4808.00	29.5 AV	54.0	-24.5	3.26 V	350	28.0	1.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

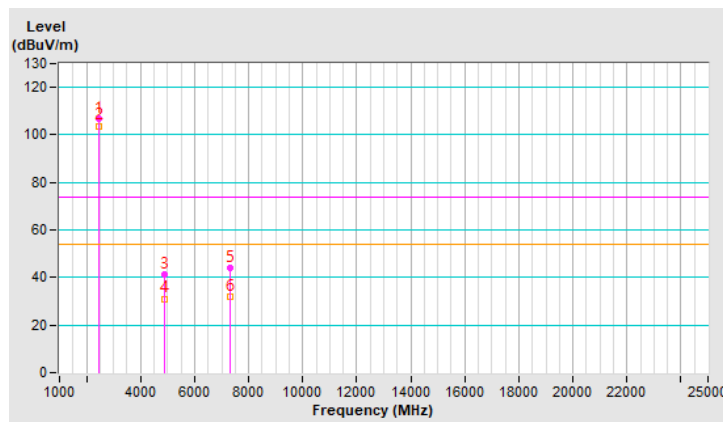


RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	107.0 PK			1.36 H	301	109.8	-2.8
2	*2440.00	103.8 AV			1.36 H	301	106.6	-2.8
3	4880.00	41.4 PK	74.0	-32.6	1.30 H	174	39.9	1.5
4	4880.00	31.1 AV	54.0	-22.9	1.30 H	174	29.6	1.5
5	7320.00	44.1 PK	74.0	-29.9	1.39 H	11	36.9	7.2
6	7320.00	31.9 AV	54.0	-22.1	1.39 H	11	24.7	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

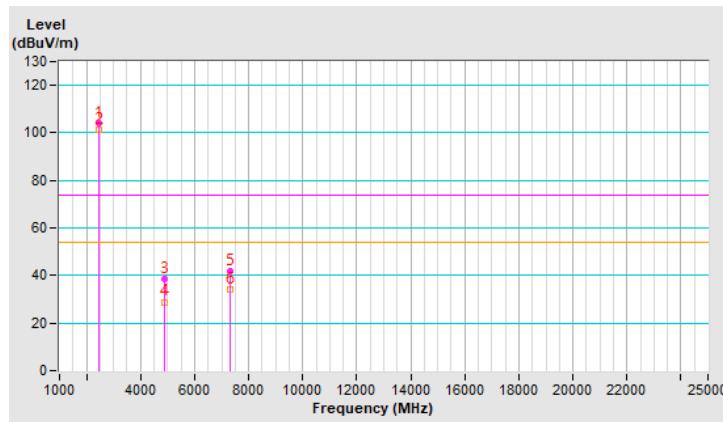


RF Mode	TX BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2440.00	104.3 PK			2.11 V	104	107.1	-2.8
2	*2440.00	101.2 AV			2.11 V	104	104.0	-2.8
3	4880.00	38.5 PK	74.0	-35.5	3.27 V	344	37.0	1.5
4	4880.00	28.9 AV	54.0	-25.1	3.27 V	344	27.4	1.5
5	7320.00	42.0 PK	74.0	-32.0	1.60 V	178	34.8	7.2
6	7320.00	34.1 AV	54.0	-19.9	1.60 V	178	26.9	7.2

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

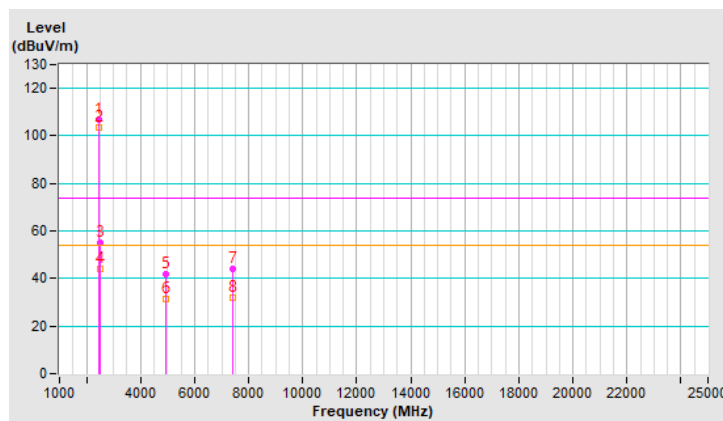


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	106.7 PK			1.31 H	316	109.6	-2.9
2	*2478.00	103.6 AV			1.31 H	316	106.5	-2.9
3	2483.50	55.3 PK	74.0	-18.7	1.31 H	316	58.2	-2.9
4	2483.50	44.1 AV	54.0	-9.9	1.31 H	316	47.0	-2.9
5	4956.00	41.7 PK	74.0	-32.3	1.39 H	157	40.0	1.7
6	4956.00	31.2 AV	54.0	-22.8	1.39 H	157	29.5	1.7
7	7434.00	43.8 PK	74.0	-30.2	1.42 H	23	36.3	7.5
8	7434.00	31.7 AV	54.0	-22.3	1.42 H	23	24.2	7.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

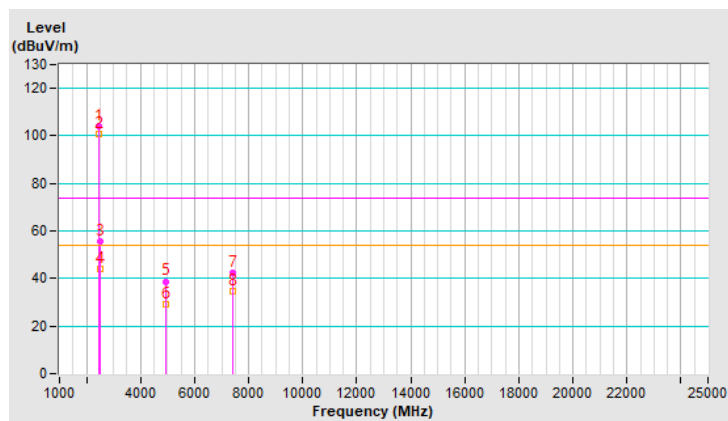


RF Mode	TX BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	(PK) RB = 1 MHz, VB = 3 MHz (AV) RB = 1 MHz, VB = 1 kHz
Input Power (System)	120 Vac, 60Hz	Environmental Conditions	25°C, 67% RH
Tested By	Sampson Chen		

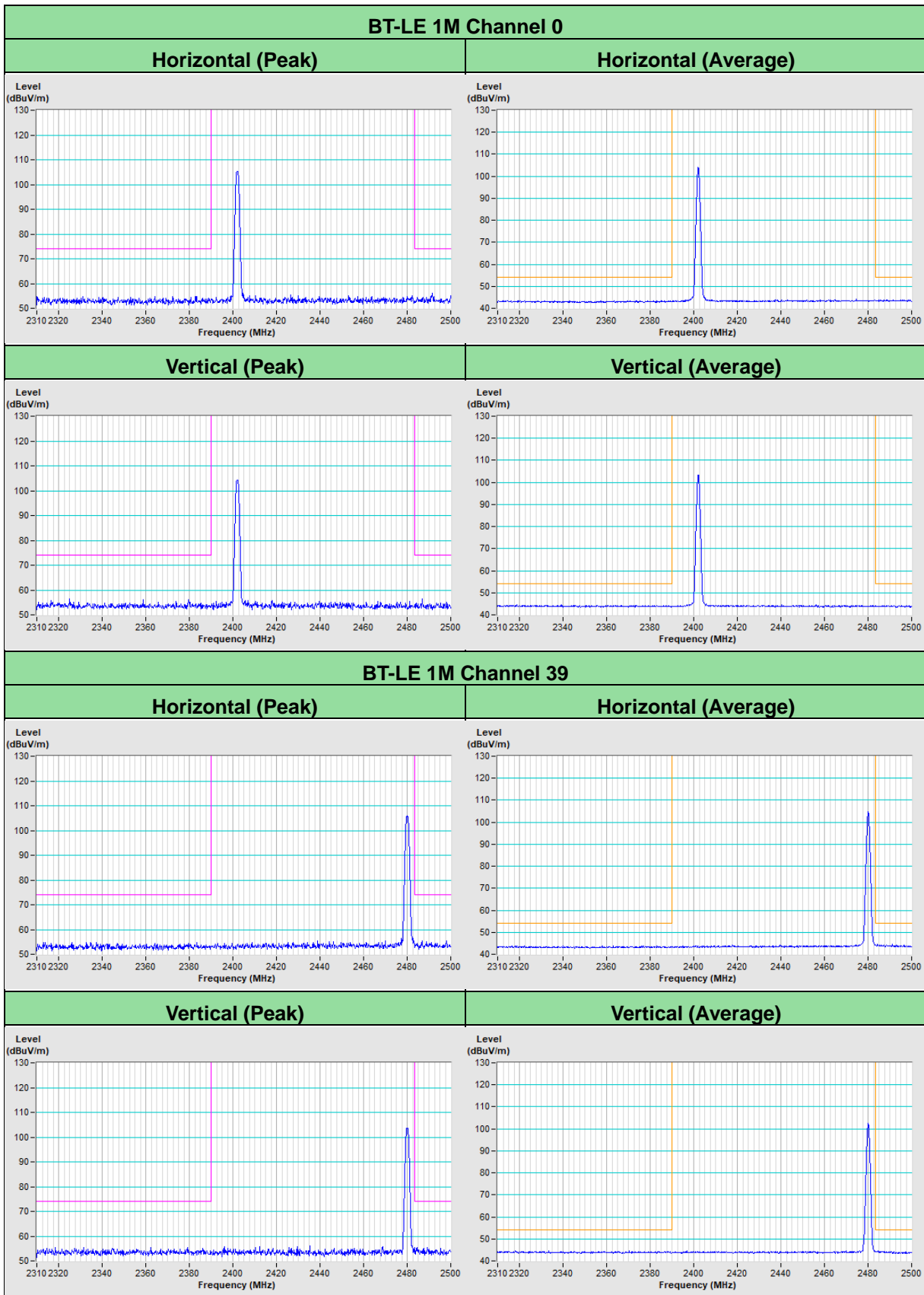
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2478.00	104.0 PK			2.14 V	115	106.9	-2.9
2	*2478.00	100.9 AV			2.14 V	115	103.8	-2.9
3	2491.23	55.5 PK	74.0	-18.5	2.14 V	115	58.4	-2.9
4	2491.23	43.8 AV	54.0	-10.2	2.14 V	115	46.7	-2.9
5	4956.00	38.8 PK	74.0	-35.2	3.15 V	333	37.1	1.7
6	4956.00	29.1 AV	54.0	-24.9	3.15 V	333	27.4	1.7
7	7434.00	42.6 PK	74.0	-31.4	1.52 V	198	35.1	7.5
8	7434.00	34.5 AV	54.0	-19.5	1.52 V	198	27.0	7.5

Remarks:

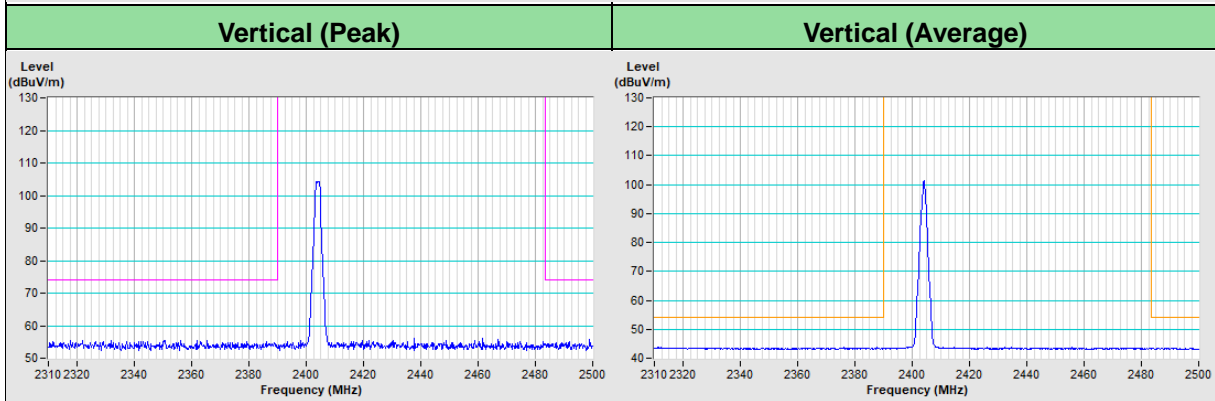
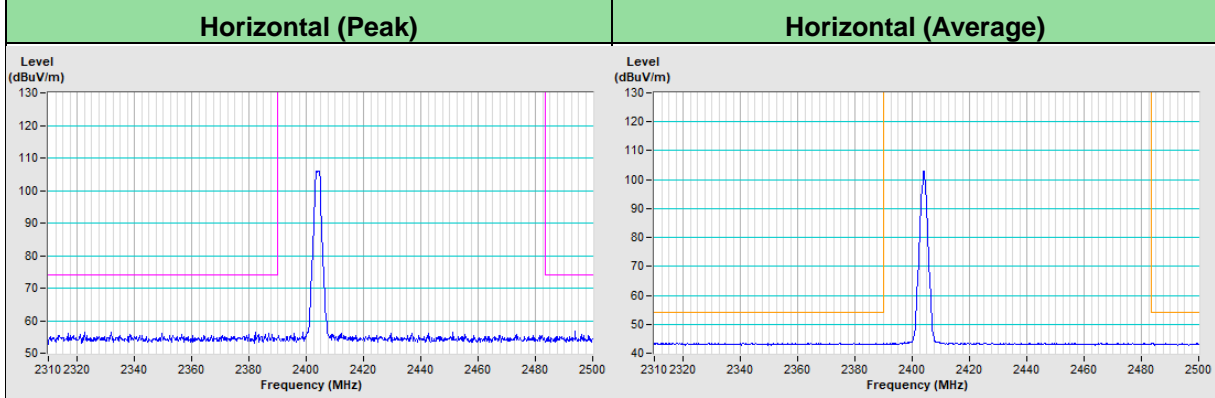
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
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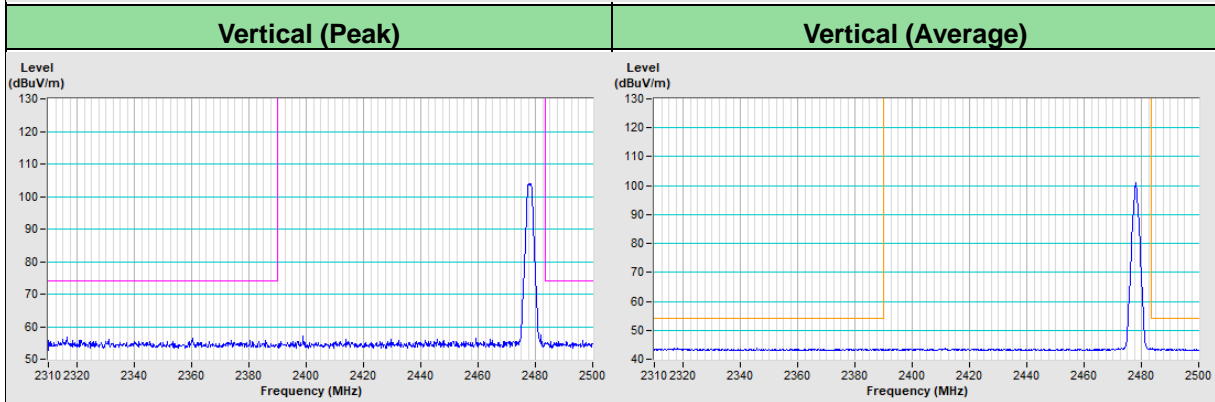
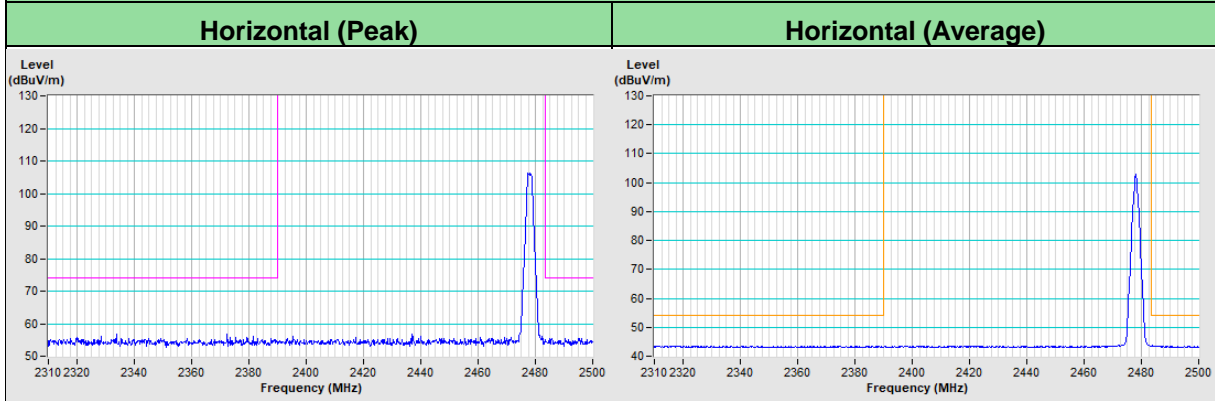
Mode D_Plot of Band Edge



BT-LE 2M Channel 1



BT-LE 2M Channel 38



8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Email: service.adt@bureauveritas.com

Web Site: <http://ee.bureauveritas.com.tw>

The address and road map of all our labs can be found in our web site also.

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