

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
Report No.: RFBARR-WTW-P23110067-3
FCC ID: RAS-MT7925B14L
Product: 2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand: MediaTek
Model No.: MT7925B14L
Received Date: 2023/11/6
Test Date: 2023/11/8 ~ 2024/1/15
Issued Date: 2024/2/22

Applicant: MediaTek Inc.
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory
Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
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: _____

2024/2/22

Wen Yu / Assistant Manager

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Prepared by : Vito Lung / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBARR-WTW-P23110067-3	Original release.	2024/2/22

1 Certificate

Product: 2TX 11be (WiFi7) BW160 + BT/BLE Combo Card

Brand: MediaTek

Test Model: MT7925B14L

Sample Status: Engineering sample

Applicant: MediaTek Inc.

Test Date: 2023/11/8 ~ 2024/1/15

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 -11.24 dB at 0.15781 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -0.3 dB at 696.52 MHz
15.205 / 15.209 / 15.247(d)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -1.11 dB at 23803.2 MHz
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(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) (±)
RF Output Power	-	1.1 dB
Power Spectral Density	-	1.3 dB
6 dB Bandwidth	-	1050.00 Hz
Conducted Out of Band Emissions	9 kHz ~ 40 GHz	2.6 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	5.5 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	2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand	MediaTek
Test Model	MT7925B14L
Status of EUT	Engineering sample
Power Supply Rating	3.3 Vdc from host equipment
Modulation Type	GFSK
Modulation Technology	DTS
Transfer Rate	125 kbps / 500 kbps / 1 Mbps / 2 Mbps
Operating Frequency	2.402 GHz ~ 2.48 GHz
Number of Channel	40
Output Power	19.011 mW (12.79 dBm)

Note:

1. There are Bluetooth and WLAN (2.4 GHz & 5 GHz & 5.9 GHz & 6 GHz) technology used for the EUT.
2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (5 GHz) (2TX)	Bluetooth
2	WLAN (5.9 GHz) (2TX)	Bluetooth
3	WLAN (6 GHz) (2TX)	Bluetooth
4	WLAN (2.4 GHz) (1TX)	WLAN (5 GHz) (1TX)
5	WLAN (2.4 GHz) (1TX)	WLAN (5.9 GHz) (1TX)
6	WLAN (2.4 GHz) (1TX)	WLAN (6 GHz) (1TX)

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.

Antenna Set	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
1	Chain0	PSA	RFMTA340718EMLB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)	200
	Chain1	PSA	RFMTA340718EMLB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)	200
2	Chain0	PSA	RFMTA311020EMMB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	200
	Chain1	PSA	RFMTA311020EMMB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	200
3	Chain0	PSA	RFMTA421230IMMB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	300
	Chain1	PSA	RFMTA421230IMMB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	300

Note: Max. gain was selected for the final test.

2. * 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	
			2Msym/s with Data Rate 2Mbps	1Msym/s with Data Rate 1Mbps / 500kbps / 125kbps
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	*	●

* The channels 2402 MHz, 2426 MHz and 2480 MHz are used for primary advertising only, and these advertisement packets are never being sent over the 2Msym/s.

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. 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).
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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
RF Output Power / Power Spectral Density	A	BT LE-125k	0, 19, 39	GFSK	125k/s
		BT LE-500k	0, 19, 39	GFSK	500k/s
		BT LE-1M	0, 19, 39	GFSK	1Mb/s
		BT LE-2M	1, 19, 38	GFSK	2Mb/s
6 dB Bandwidth / Conducted Out of Band Emissions	A	BT LE-125k	0, 19, 39	GFSK	125k/s
		BT LE-500k	0, 19, 39	GFSK	500k/s
		BT LE-1M	0, 19, 39	GFSK	1Mb/s
		BT LE-2M	1, 19, 38	GFSK	2Mb/s
AC Power Conducted Emissions	C	BT-LE 125k	39	GFSK	125k/s
Unwanted Emissions below 1 GHz	A, B	BT-LE 125k	39	GFSK	125k/s
Unwanted Emissions above 1 GHz	A, B	BT LE-125k	0, 19, 39	GFSK	125k/s
		BT LE-500k	0, 19, 39	GFSK	500k/s
		BT LE-1M	0, 19, 39	GFSK	1Mb/s
		BT LE-2M	1, 19, 38	GFSK	2Mb/s
EUT Configure Mode:	A	EUT only (w/o antenna)			
	B	EUT with 50 ohm terminator			
	C	EUT with antenna			

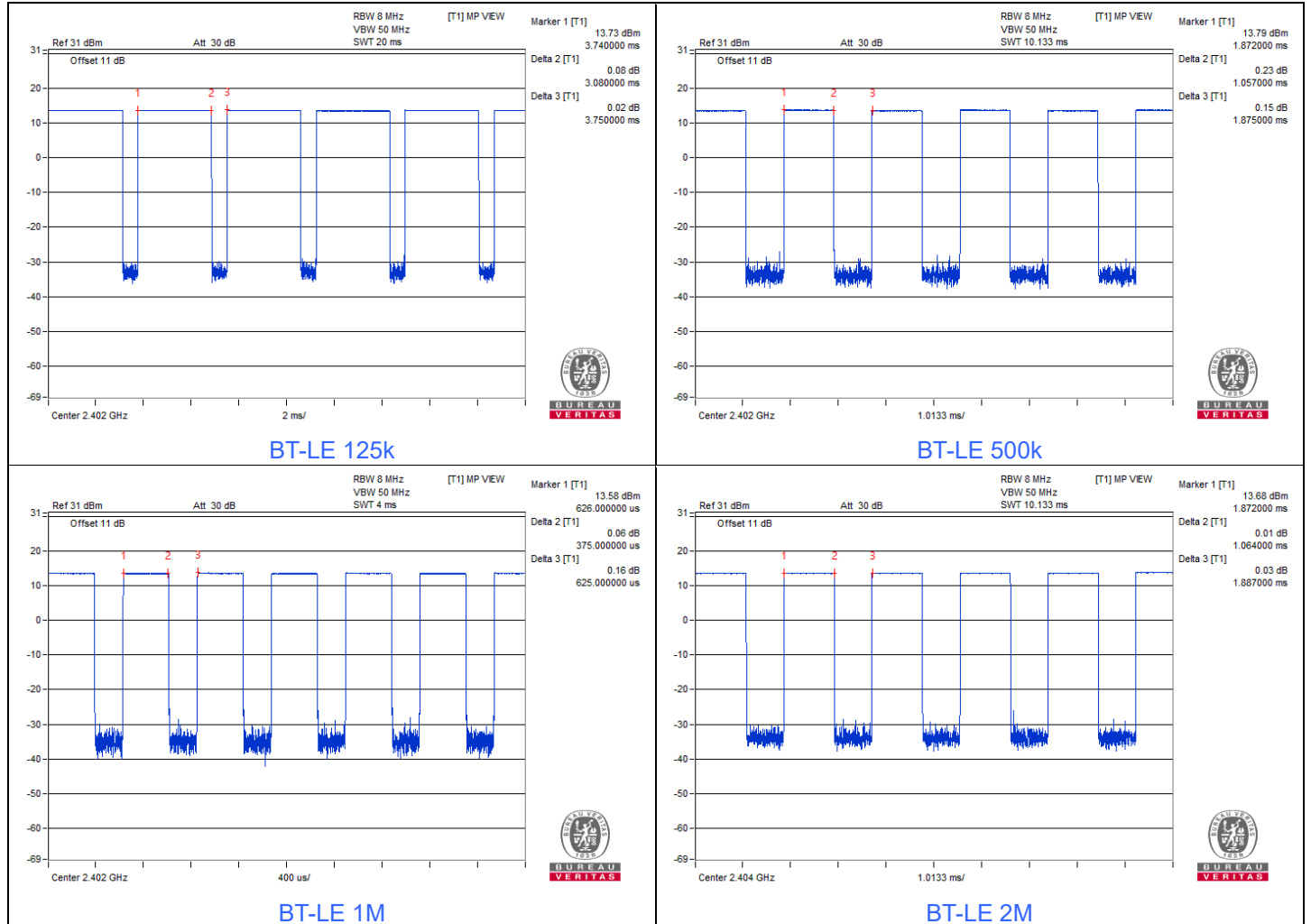
3.5 Duty Cycle of Test Signal

BT-LE 125k: Duty cycle = 3.08 ms / 3.75 ms x 100% = 82.1%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.85 \text{ dB}$

BT-LE 500k: Duty cycle = 1.057 ms / 1.875 ms x 100% = 56.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.49 \text{ dB}$

BT-LE 1M: Duty cycle = 0.375 ms / 0.625 ms x 100% = 60.0%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.22 \text{ dB}$

BT-LE 2M: Duty cycle = 1.064 ms / 1.887 ms x 100% = 56.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.49 \text{ dB}$

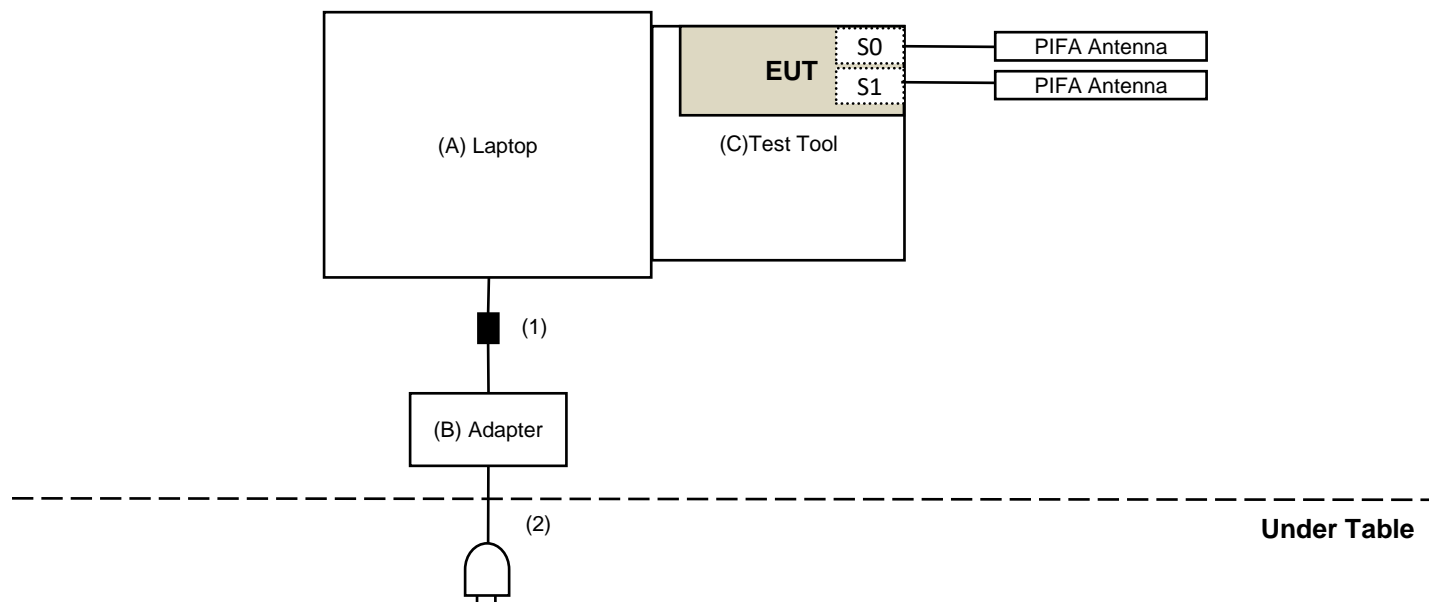


3.6 Test Program Used and Operation Descriptions

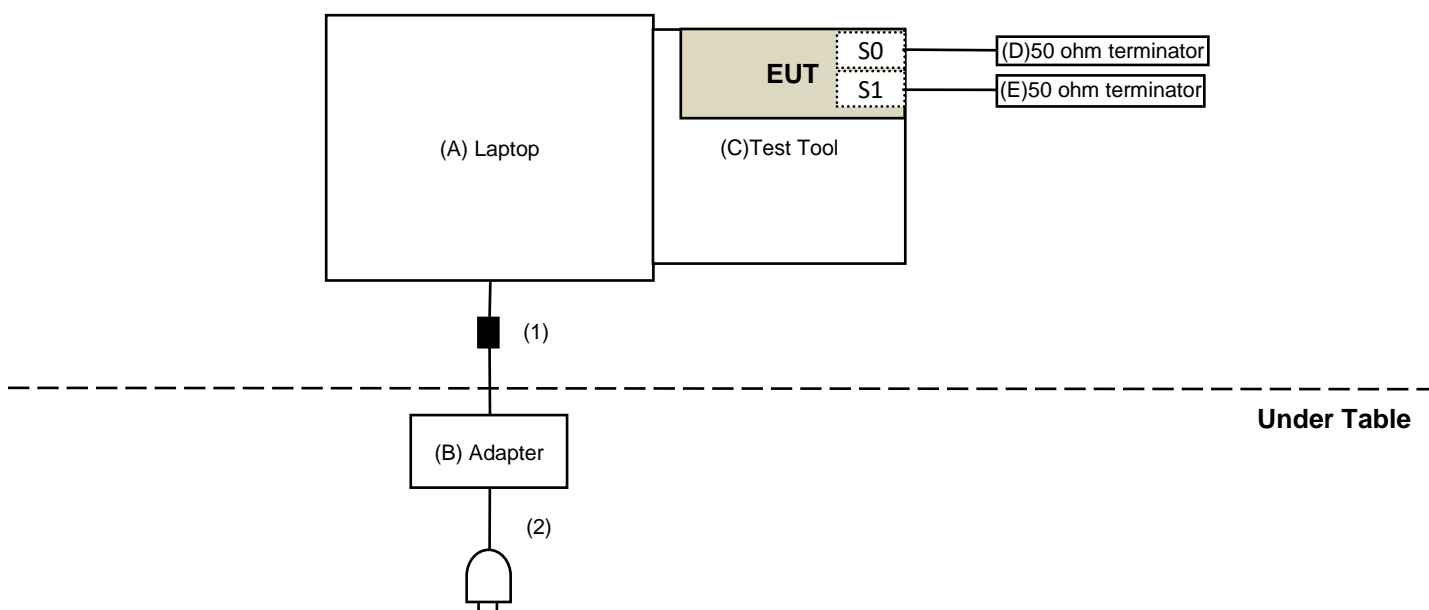
Controlling software (WCN_Combotool) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

For AC Power Conducted Emission test



For Unwanted Emission test



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	DELL	E5430	HYV4VY1	DoC	Provided by Lab
B	Adapter	DELL	LLA65NS2-01	N/A	N/A	Provided by Lab
C	Test Tool	Mediatek	MTK1849	N/A	N/A	Supplied by applicant
D	50 Ohm terminator	WOKEN	WTER-18S2	N/A	N/A	Provided by Lab
E	50 Ohm terminator	WOKEN	WTER-18S2	N/A	N/A	Provided by Lab

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

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
Power Meter Anritsu	ML2495A	1529002	2023/6/17	2024/6/16
Pulse Power Sensor Anritsu	MA2411B	1726434	2023/6/19	2024/6/18

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/11/13

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/11/13

4.3 6 dB Bandwidth

Refer to section 4.2 to get information of the instruments.

4.4 Conducted Out of Band Emissions

Refer to section 4.2 to get information of the instruments.

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2023/10/20	2024/10/19
EMI Test Receiver R&S	ESCS 30	847124/029	2023/10/18	2024/10/17
Fixed Attenuator STI	STI02-2200-10	005	2023/7/1	2024/6/30
LISN R&S	ESH3-Z5	835239/001	2023/4/6	2024/4/5
		848773/004	2023/10/13	2024/10/12
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2023/7/1	2024/6/30
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2024/1/15

4.6 Unwanted Emissions below 1 GHz

Mode A

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/11/30

Mode B

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-406	2023/10/13	2024/10/12
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2023/12/12	2024/12/11
Loop Antenna Electro-Metrics	EM-6879	264	2023/2/21	2024/2/20
MXA Signal Analyzer Keysight	N9020B	MY60112408	2023/3/6	2024/3/5
MXE EMI Receiver Keysight	N9038A	MY59050100	2023/6/13	2024/6/12
Preamplifier EMCI	EMC330N	980701	2023/2/18	2024/2/17
	EMC001340	980142	2023/5/8	2024/5/7
RF Coaxial Cable JYBAO	5D-FB	LOOPCAB-001	2023/12/12	2024/12/11
		LOOPCAB-002	2023/12/12	2024/12/11
RF Coaxial Cable PEWC	8D	966-4-1	2023/2/18	2024/2/17
		966-4-2	2023/2/18	2024/2/17
		966-4-3	2023/2/18	2024/2/17
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2024/1/15

4.7 Unwanted Emissions above 1 GHz

Mode A

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/11/8 ~ 2023/11/30

Mode B

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-783	2023/11/12	2024/11/11
	BBHA 9170	9170-739	2023/11/12	2024/11/11
MXA Signal Analyzer Keysight	N9020B	MY60112408	2023/3/6	2024/3/5
Preamplifier EMCI	EMC12630SE	980688	2023/10/3	2024/10/2
	EMC184045SE	980387	2023/8/9	2024/8/8
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2023/2/20	2024/2/19
	EMC102-KM-KM-1200	160924	2023/8/9	2024/8/8
	EMC104-SM-SM-1200	160922	2023/8/9	2024/8/8
	EMC104-SM-SM-2000	180502	2023/3/27	2024/3/26
	EMC104-SM-SM-6000	210704	2023/11/2	2024/11/1
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2023/12/19

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

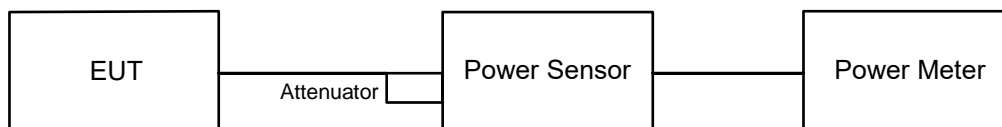
Notes:

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:

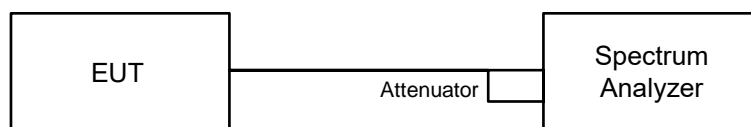
A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

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

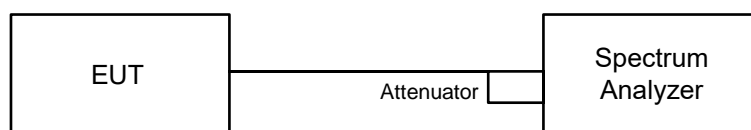


6.3.2 Test Procedure

- 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

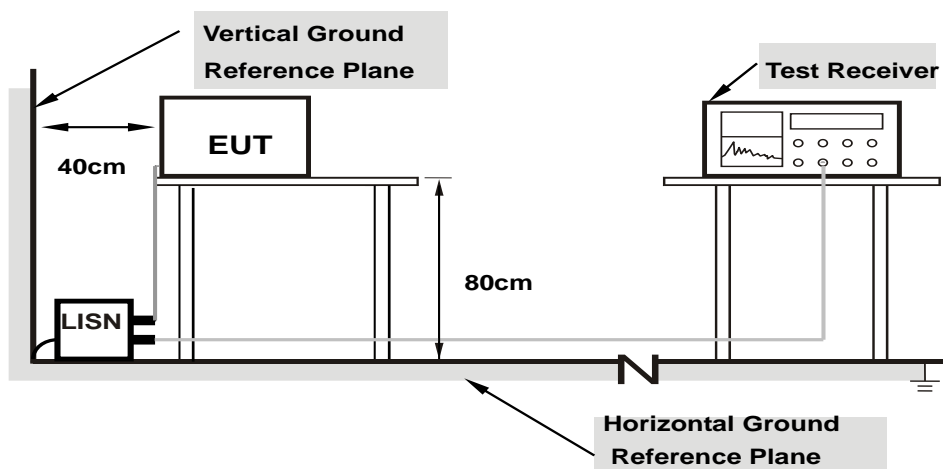
- Set the RBW = 100 kHz.
- Set the VBW ≥ 300 kHz.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

- 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.

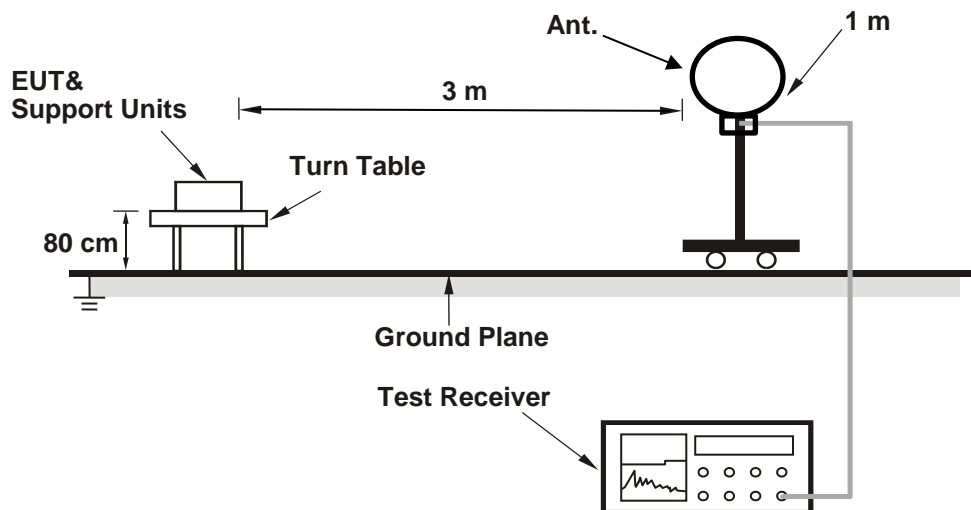
Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

6.6 Unwanted Emissions below 1 GHz

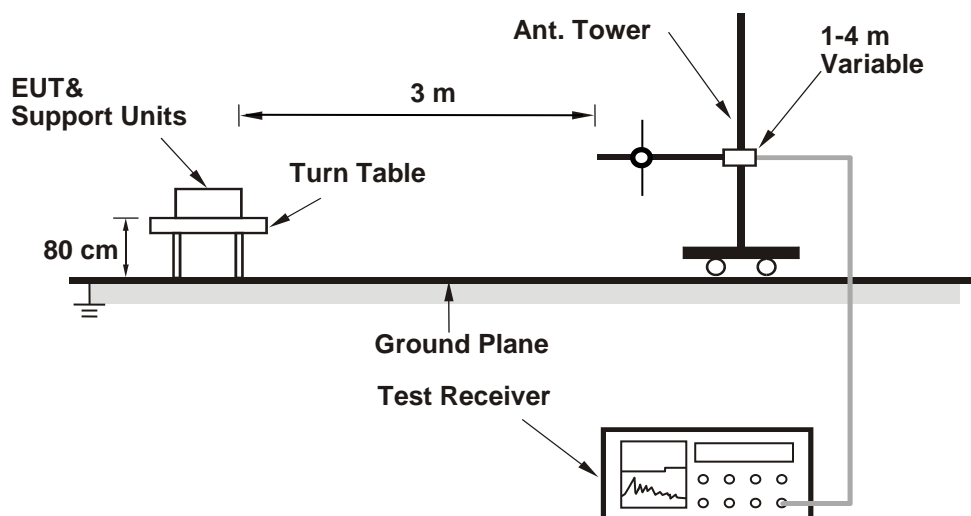
6.6.1 Test Setup

For Radiated Configuration:

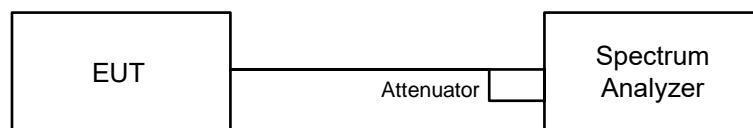
For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For Conducted Configuration:



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

6.6.2 Test Procedure

Radiated versus Conducted Measurement.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

- a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
- b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.
- c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.
- d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)
- e. For all of Radiation emission test

For Radiated emission below 30 MHz

- e-1.1. 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.
- e-1.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- e-1.3. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- e-1.4. 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-1.5. 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

- e-2.1. 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.
- e-2.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- e-2.3. 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.
- e-2.4. 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-2.5. 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.

Radiated versus Conducted Measurement

For Radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation).

For Conducted measurement:

The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).

Conducted Unwanted Emission Convert Formula

- a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
- b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB)
- c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal
For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.
For the band edge the gain for the specific band may have been used.

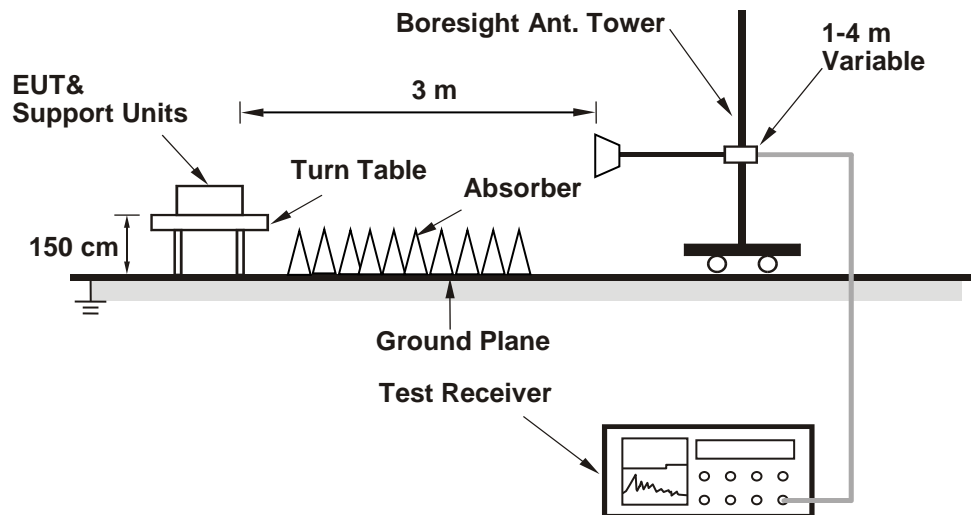
Notes:

1. In restricted bands below 1000 MHz, add upper bound on ground plane reflection:
For frequencies between 30 MHz and 1000 MHz, add 4.7 dB.
2. The conducted emission test was considered some factor to compute test result.

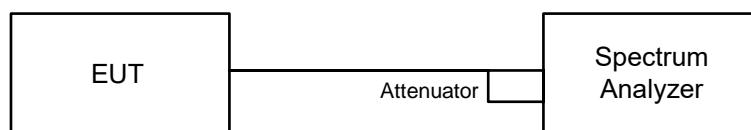
6.7 Unwanted Emissions above 1 GHz

6.7.1 Test Setup

For Radiated Configuration:



For Conducted Configuration:



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

6.7.2 Test Procedure

Radiated versus Conducted Measurement.

According to ANSI C63.10 section 11.11.1 and 11.12.2.7. The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

- a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
- b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.
- c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.
- d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)
- e. For all of Radiation emission test
 - e-1. 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.
 - e-2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
 - e-3. 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.
 - e-4. 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-5. The test-receiver/spectrum analyzer 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:

1. According to ANSI C63.10 section 6.6.4 and 4.1.4.2.2. For fundamental and harmonic signal measurement, 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.
2. For 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.
3. All modes of operation were investigated and the worst-case emissions are reported.

Radiated versus Conducted Measurement

For Radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation).

For Conducted measurement:

The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).

For Verified radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation).

Conducted Unwanted Emission Convert Formula

a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB).

c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal

For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.

For the band edge the gain for the specific band may have been used.

Note:

The conducted emission test was considered some factor to compute test result.

7 Test Results of Test Item

7.1 RF Output Power

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan
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Mode A

For Peak Power

BT-LE 125k

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	18.03	12.56	30	Pass
39	2480	19.011	12.79	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

BT-LE 500k

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
0	2402	18.03	12.56	30	Pass
19	2440	17.906	12.53	30	Pass
39	2480	18.88	12.76	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

BT-LE 1M

Chan.	Chan. Freq. (MHz)	Peak Power (mW)	Peak Power (dBm)	Power Limit (dBm)	Test Result
0	2402	17.906	12.53	30	Pass
19	2440	17.783	12.50	30	Pass
39	2480	18.707	12.72	30	Pass

Note: The antenna gain is 3.18 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	17.824	12.51	30	Pass
19	2440	18.072	12.57	30	Pass
38	2478	18.75	12.73	30	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the output power limit shall not be reduced.

For Average Power

BT-LE 125k

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	17.539	12.44
19	2440	17.701	12.48
39	2480	18.664	12.71

BT-LE 500k

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	17.66	12.47
19	2440	17.539	12.44
39	2480	18.578	12.69

BT-LE 1M

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	17.498	12.43
19	2440	17.418	12.41
39	2480	18.408	12.65

BT-LE 2M

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
1	2404	17.418	12.41
19	2440	17.701	12.48
38	2478	18.408	12.65

7.2 Power Spectral Density

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan
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Mode A

BT-LE 125k

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
0	2402	5.94	8	Pass
19	2440	6.02	8	Pass
39	2480	6.02	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

BT-LE 500k

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
0	2402	5.75	8	Pass
19	2440	5.89	8	Pass
39	2480	5.76	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

BT-LE 1M

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
0	2402	-2.95	8	Pass
19	2440	-2.86	8	Pass
39	2480	-2.87	8	Pass

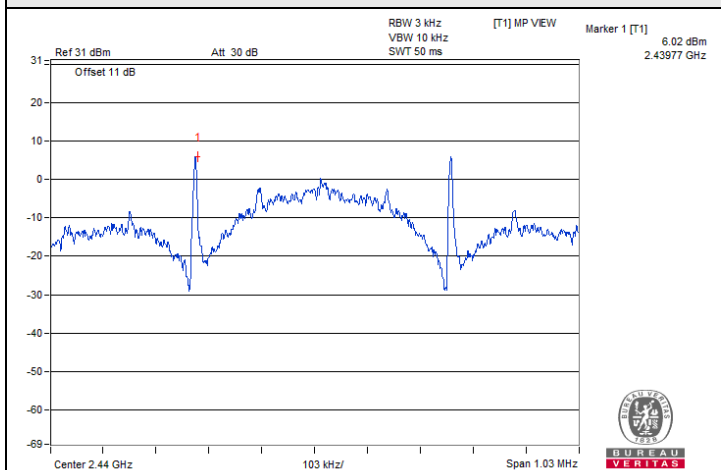
Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

BT-LE 2M

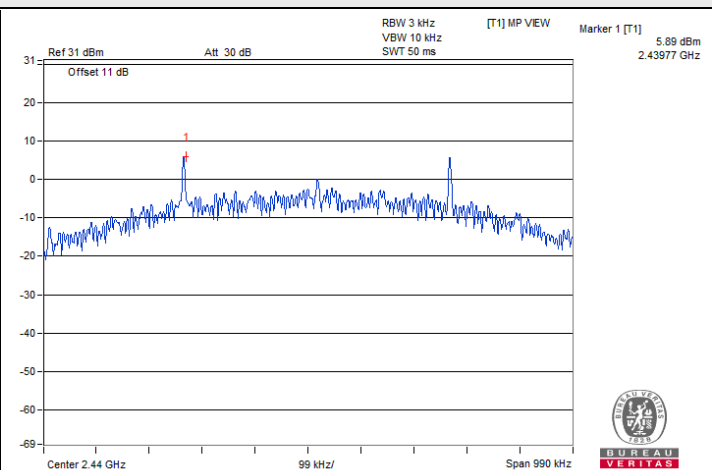
Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Test Result
1	2404	-6.75	8	Pass
19	2440	-6.44	8	Pass
38	2478	-6.41	8	Pass

Note: The antenna gain is 3.18 dBi < 6 dBi, so the power density limit shall not be reduced.

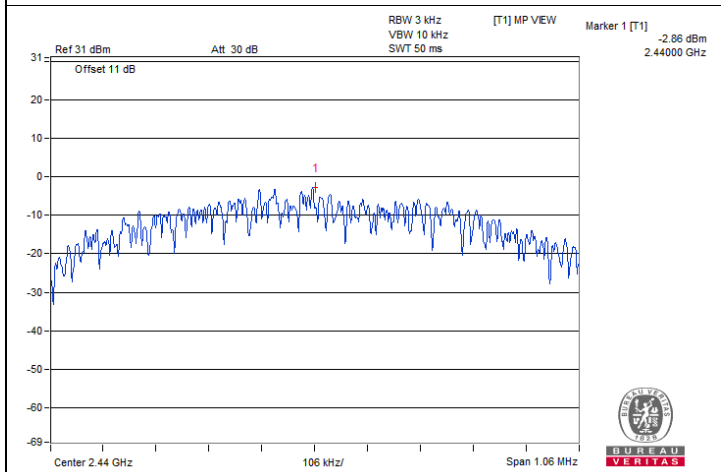
Spectrum Plot of Maximum Value



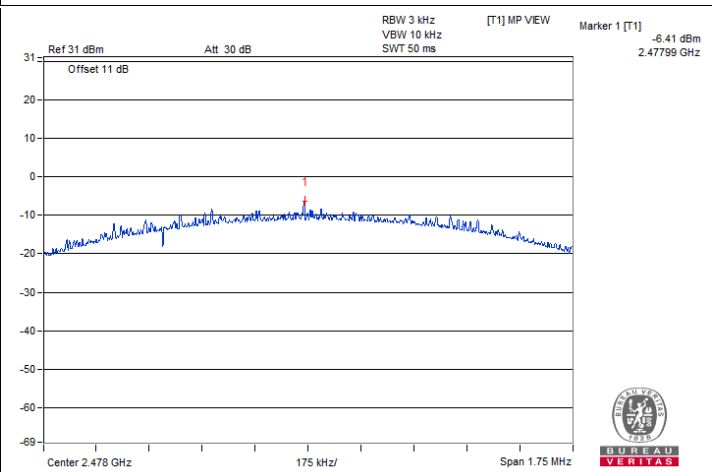
BT-LE 125k : CH 19



BT-LE 500k : CH 19



BT-LE 1M : CH 19



BT-LE 2M : CH 38

7.3 6 dB Bandwidth

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan
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Mode A

BT-LE 125k

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
0	2402	0.69	0.5	Pass
19	2440	0.69	0.5	Pass
39	2480	0.69	0.5	Pass

BT-LE 500k

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
0	2402	0.66	0.5	Pass
19	2440	0.66	0.5	Pass
39	2480	0.69	0.5	Pass

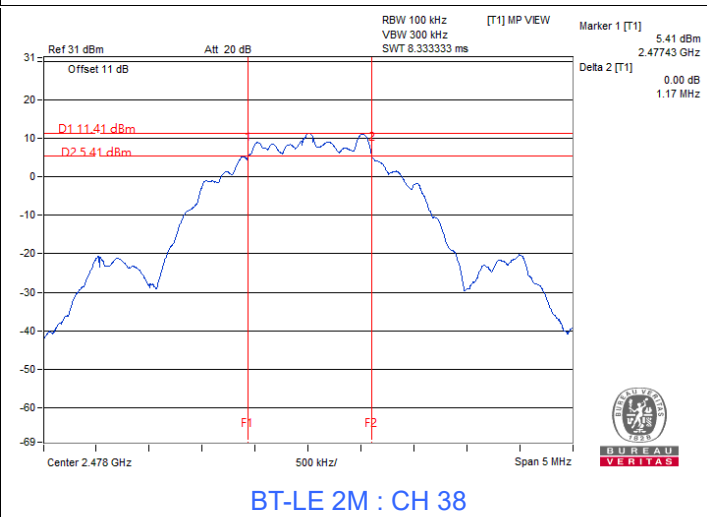
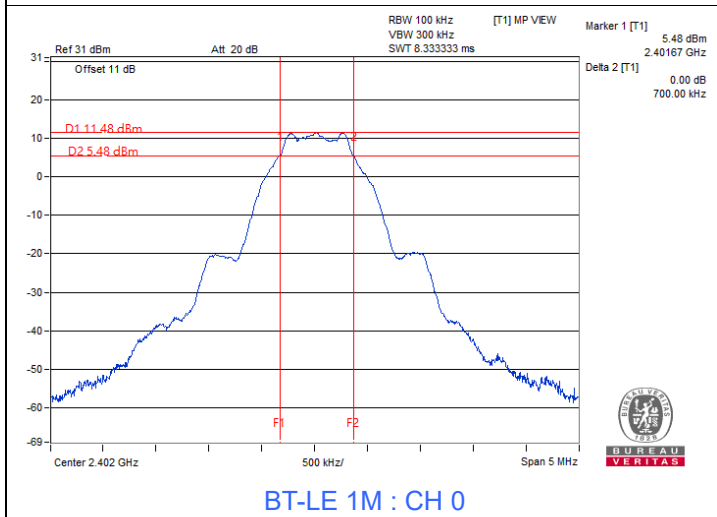
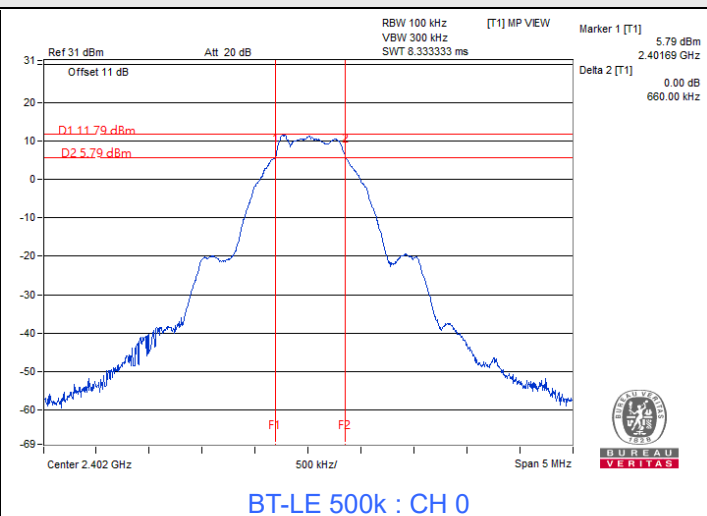
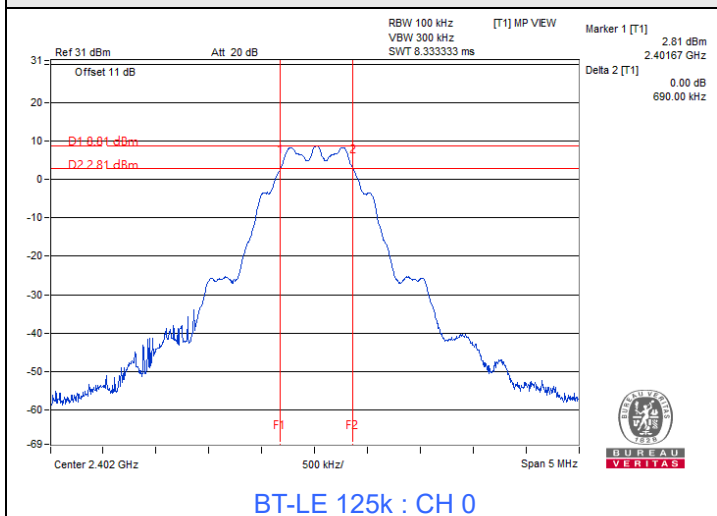
BT-LE 1M

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
0	2402	0.7	0.5	Pass
19	2440	0.71	0.5	Pass
39	2480	0.7	0.5	Pass

BT-LE 2M

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
1	2404	1.18	0.5	Pass
19	2440	1.18	0.5	Pass
38	2478	1.17	0.5	Pass

Spectrum Plot of Minimum Value

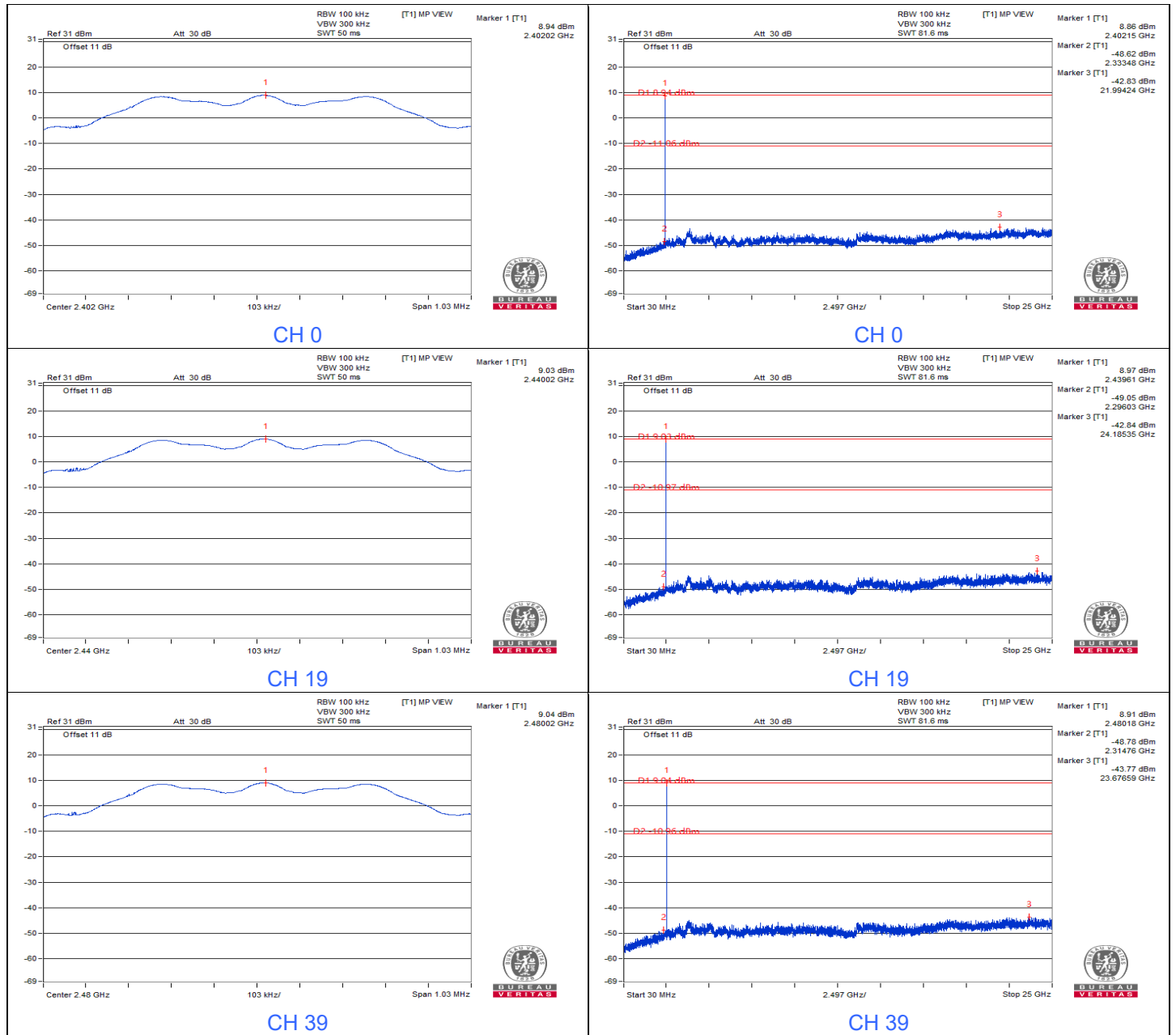


7.4 Conducted Out of Band Emissions

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Waydi Tuan
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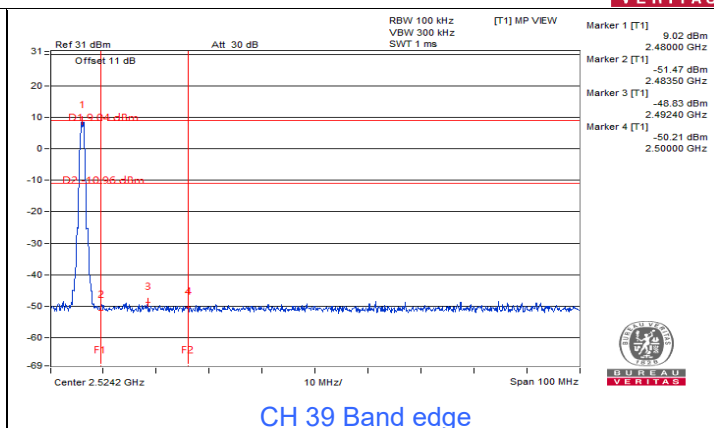
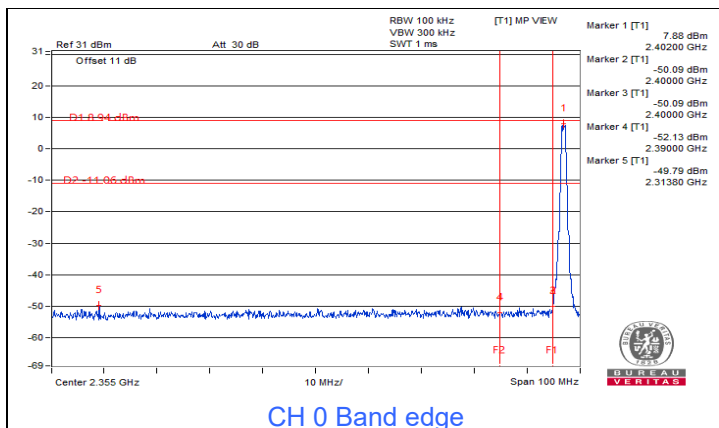
Mode A

BT-LE 125k



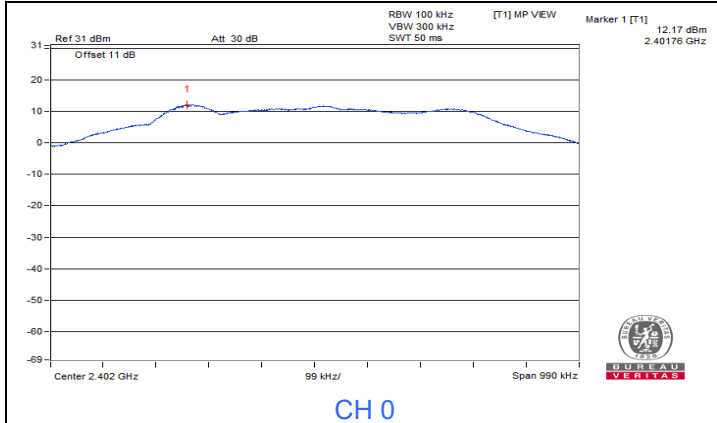


BUREAU VERITAS

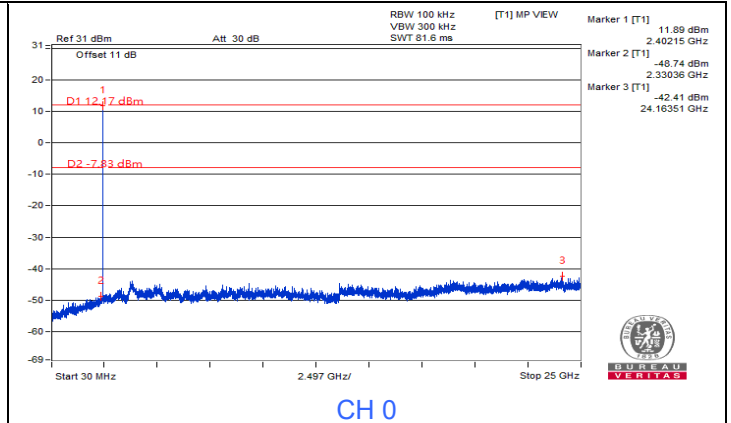




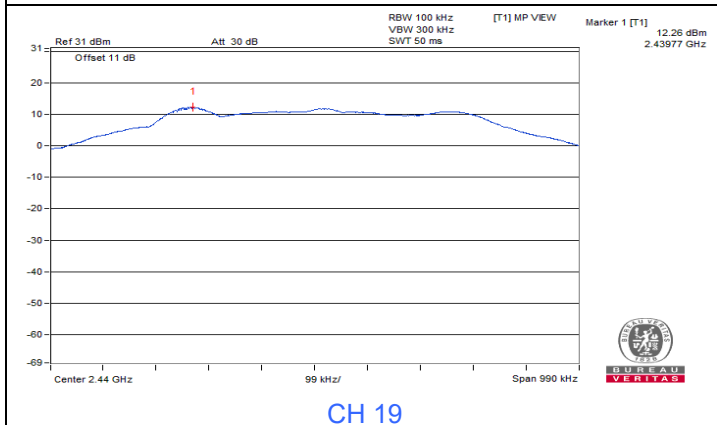
BT-LE 500k



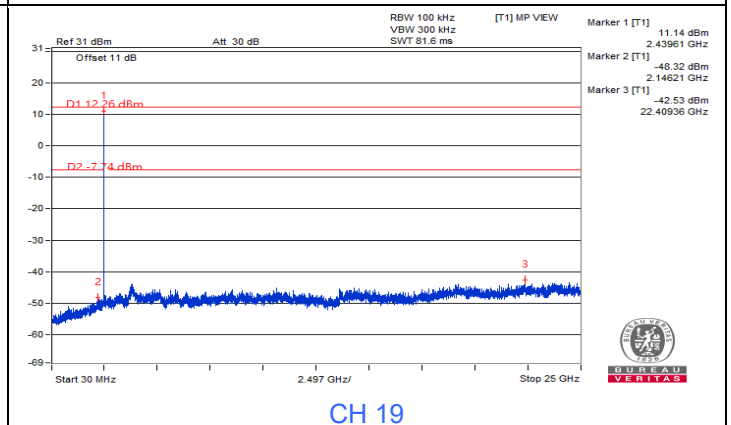
CH 0



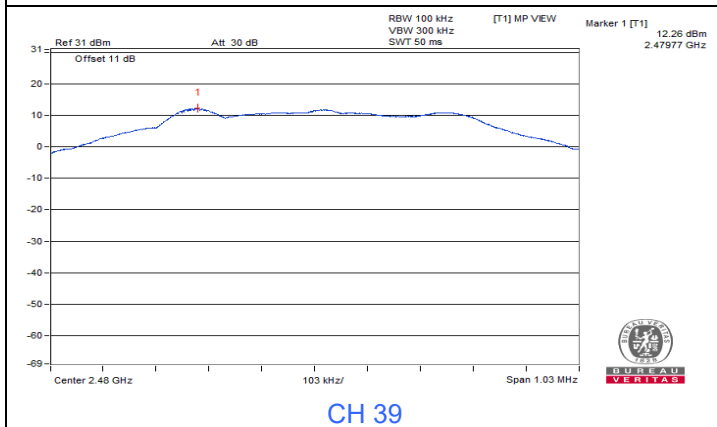
CH 0



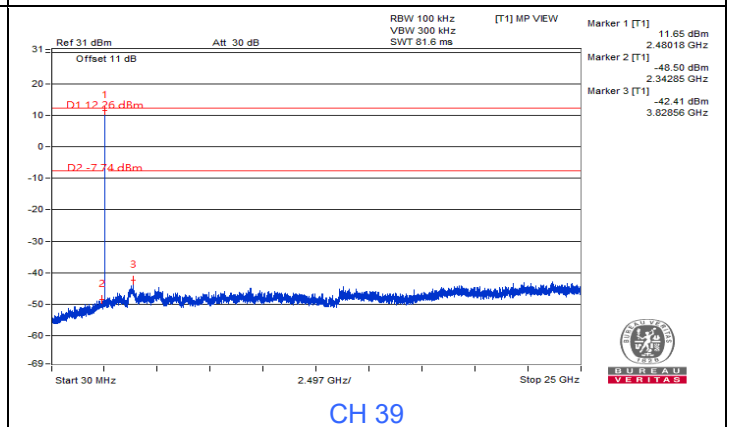
CH 19



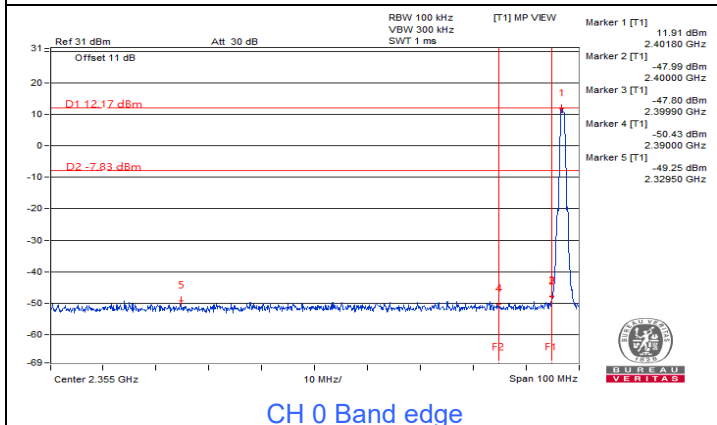
CH 19



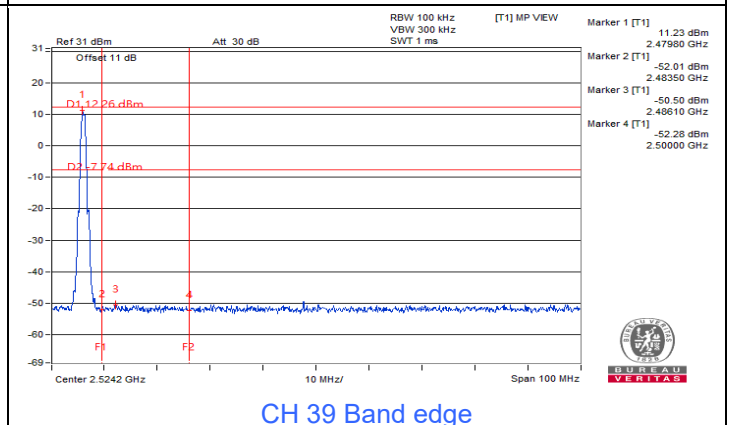
CH 39



CH 39



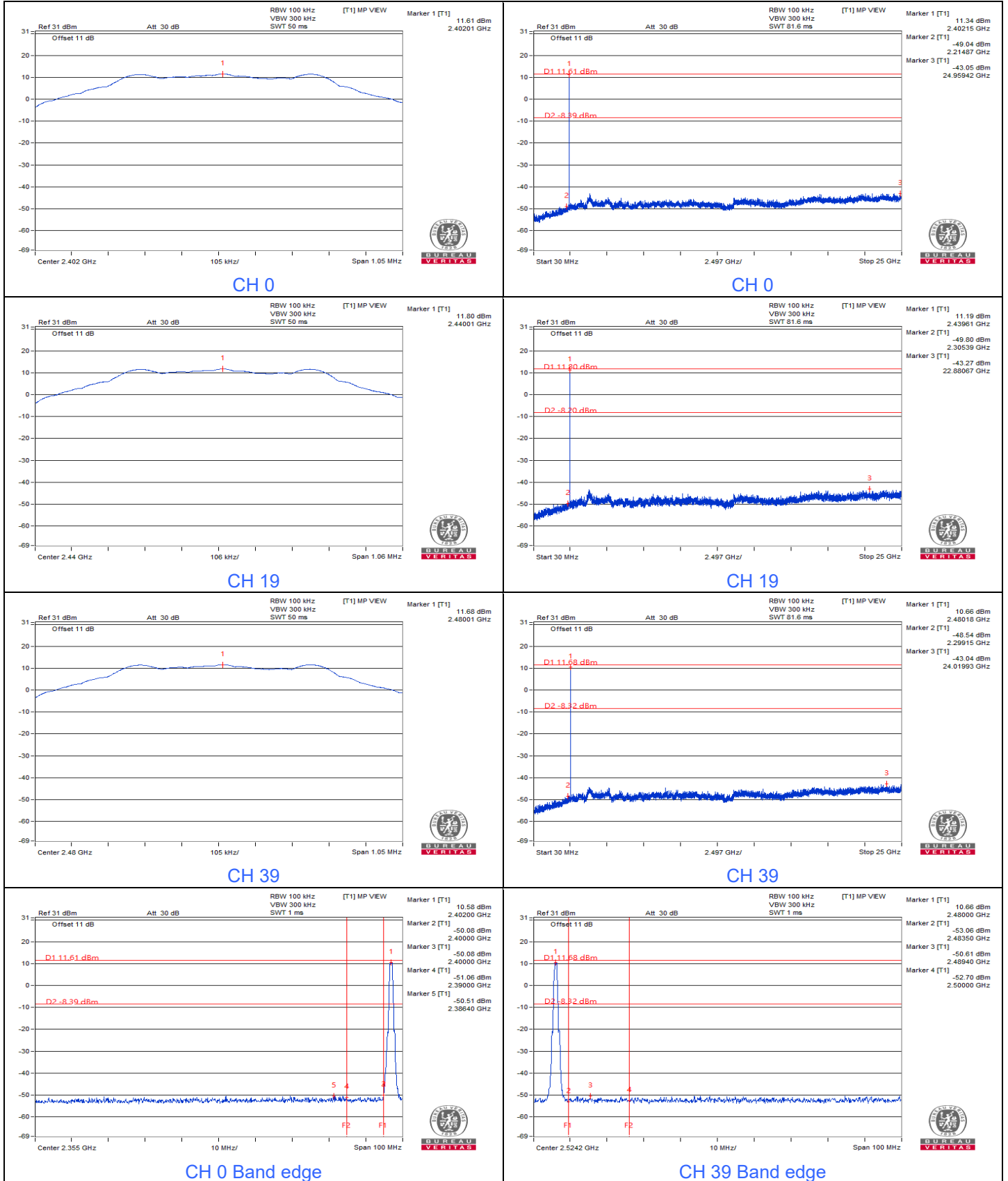
CH 0 Band edge



CH 39 Band edge

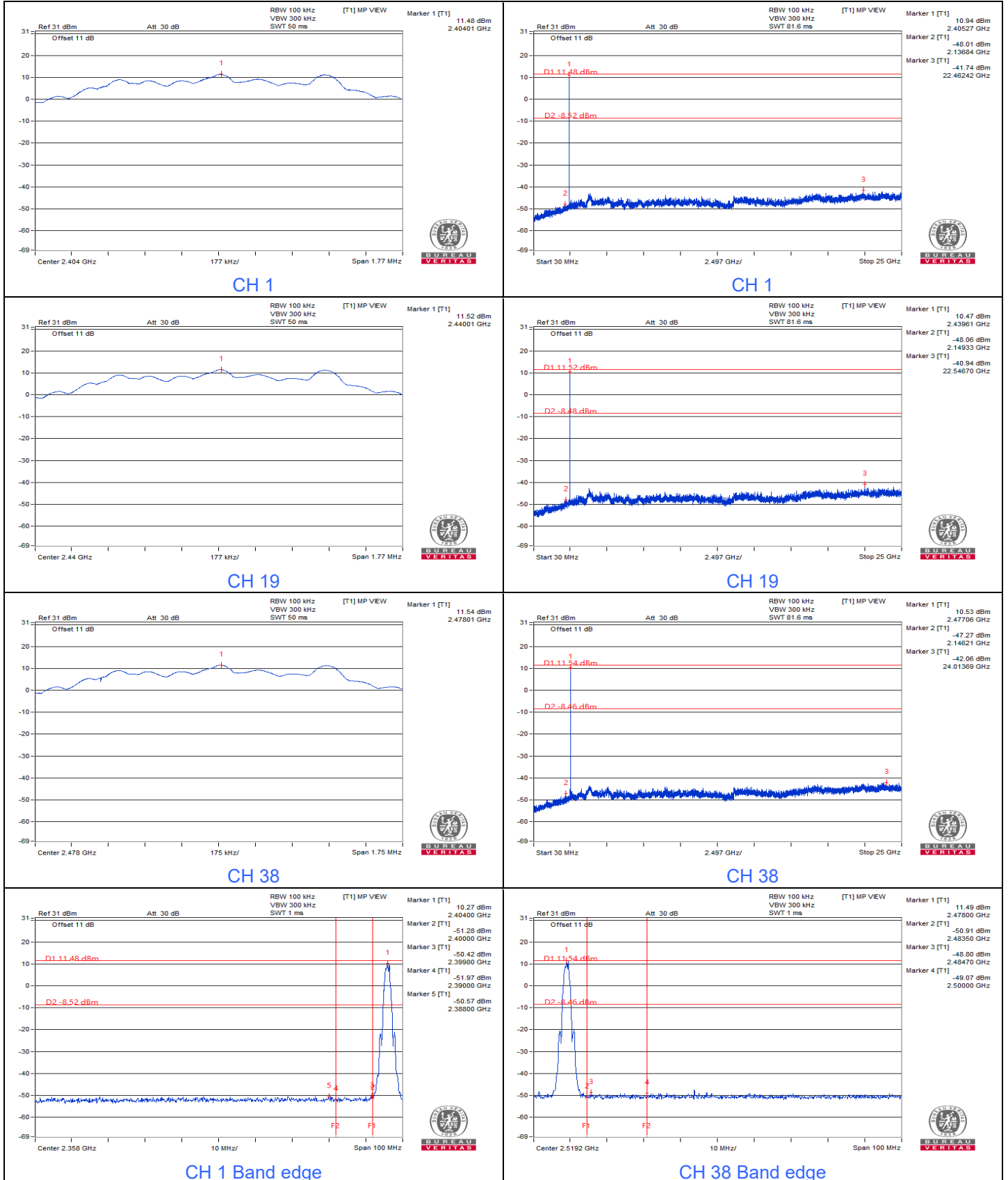


BT-LE 1M





BT-LE 2M



7.5 AC Power Conducted Emissions

Mode C

RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Willy Lin		

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	0.15781	9.93	44.41	23.06	54.34	32.99	65.58	55.58	-11.24	-22.59
2	0.20469	9.93	36.16	14.01	46.09	23.94	63.42	53.42	-17.33	-29.48
3	0.52891	9.95	19.04	7.61	28.99	17.56	56.00	46.00	-27.01	-28.44
4	3.46484	10.08	25.92	17.62	36.00	27.70	56.00	46.00	-20.00	-18.30
5	8.56250	10.37	15.16	9.20	25.53	19.57	60.00	50.00	-34.47	-30.43
6	22.64453	11.25	20.92	15.31	32.17	26.56	60.00	50.00	-27.83	-23.44

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

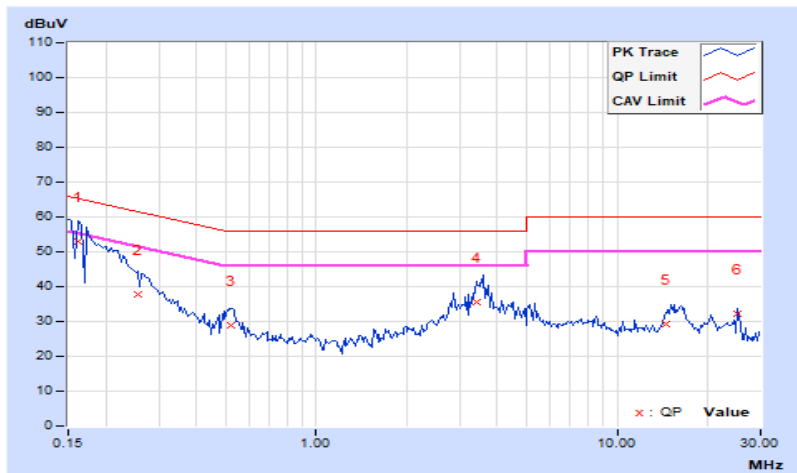


RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Willy Lin		

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	0.16172	9.99	43.07	21.80	53.06	31.79	65.38	55.38	-12.32	-23.59
2	0.25547	9.99	27.93	10.66	37.92	20.65	61.58	51.58	-23.66	-30.93
3	0.52109	10.00	18.79	6.32	28.79	16.32	56.00	46.00	-27.21	-29.68
4	3.41016	10.12	25.59	17.47	35.71	27.59	56.00	46.00	-20.29	-18.41
5	14.47656	10.62	18.69	9.86	29.31	20.48	60.00	50.00	-30.69	-29.52
6	25.12891	11.00	21.17	20.42	32.17	31.42	60.00	50.00	-27.83	-18.58

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

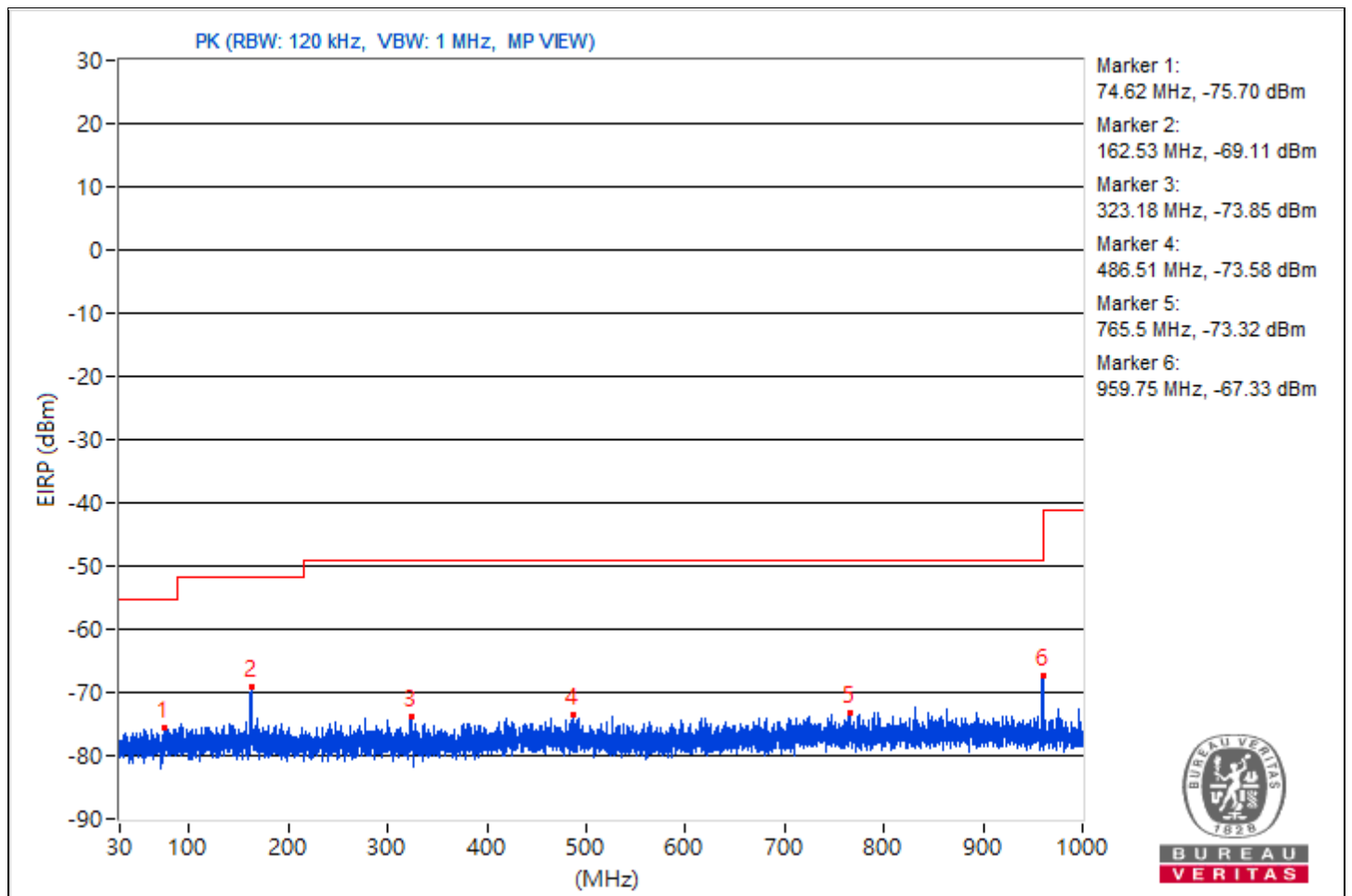
RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	30 MHz ~ 1 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions

No.	Frequency (MHz)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	74.62	19.56 PK	40	-20.44	-85.32	9.62	-75.7
2	162.53	26.15 PK	43.5	-17.35	-78.73	9.62	-69.11
3	323.18	21.41 PK	46	-24.59	-83.47	9.62	-73.85
4	486.51	21.68 PK	46	-24.32	-83.2	9.62	-73.58
5	765.5	21.94 PK	46	-24.06	-82.94	9.62	-73.32
6	959.75	27.93 PK	46	-18.07	-76.95	9.62	-67.33

Notes:

1. Margin value = Emission Level - Limit value
2. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



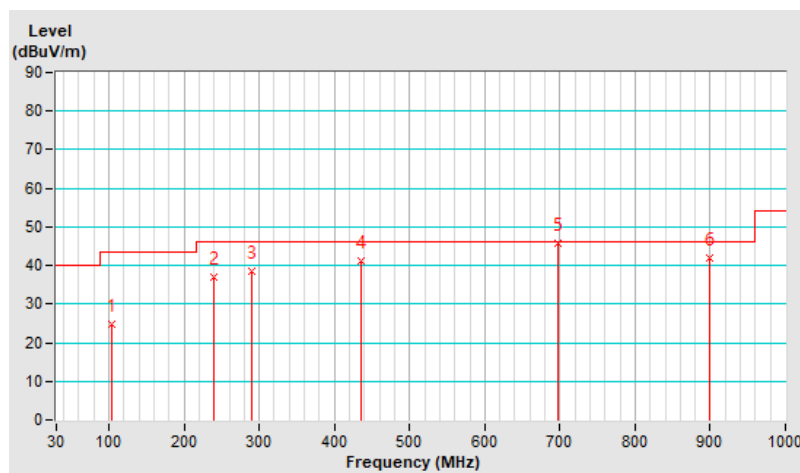
Mode B

RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Willy Lin		

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	104.59	24.6 QP	43.5	-18.9	1.00 H	331	41.2	-16.6
2	239.46	37.1 QP	46.0	-8.9	1.00 H	258	51.8	-14.7
3	289.58	38.6 QP	46.0	-7.4	1.00 H	272	51.4	-12.8
4	436.22	41.3 QP	46.0	-4.7	1.50 H	316	50.0	-8.7
5	696.52	45.7 QP	46.0	-0.3	1.50 H	236	49.7	-4.0
6	898.58	41.8 QP	46.0	-4.2	1.00 H	267	43.0	-1.2

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

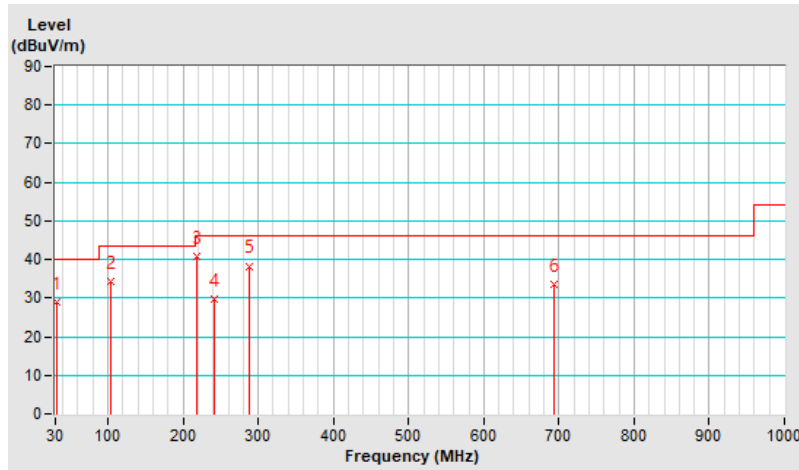


RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	20°C, 70% RH
Tested By	Willy Lin		

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	32.77	29.1 QP	40.0	-10.9	1.00 V	249	43.0	-13.9
2	104.29	34.3 QP	43.5	-9.2	2.00 V	320	50.9	-16.6
3	217.27	40.9 QP	46.0	-5.1	1.00 V	162	57.4	-16.5
4	241.60	29.7 QP	46.0	-16.3	1.50 V	46	44.3	-14.6
5	287.79	38.3 QP	46.0	-7.7	1.00 V	269	51.1	-12.8
6	693.61	33.6 QP	46.0	-12.4	2.00 V	44	37.6	-4.0

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 frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.7 Unwanted Emissions above 1 GHz

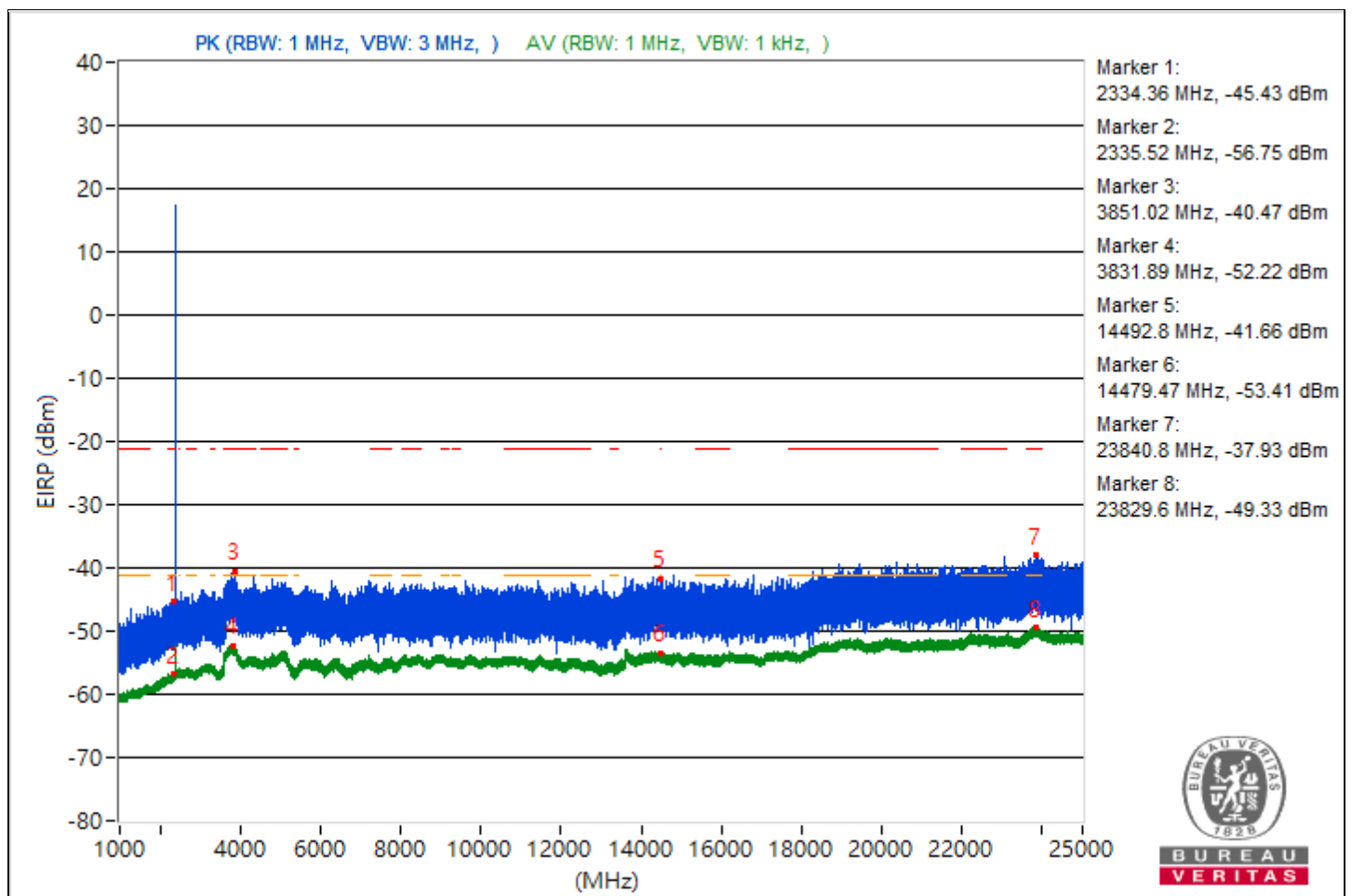
Mode A

Conducted Unwanted Emissions

RF Mode	BT-LE 125K	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2334.36	49.83 PK	74	-24.17	-50.35	4.92	-45.43
2	2335.52	38.51 AV	54	-15.49	-61.67	4.92	-56.75
3	3851.02	54.79 PK	74	-19.21	-45.39	4.92	-40.47
4	3831.89	43.04 AV	54	-10.96	-57.14	4.92	-52.22
5	14492.8	53.6 PK	74	-20.4	-46.58	4.92	-41.66
6	14479.47	41.85 AV	54	-12.15	-58.33	4.92	-53.41
7	23840.8	57.33 PK	74	-16.67	-42.85	4.92	-37.93
8	23829.6	45.93 AV	54	-8.07	-54.25	4.92	-49.33

Note: Margin value = Emission Level - Limit value

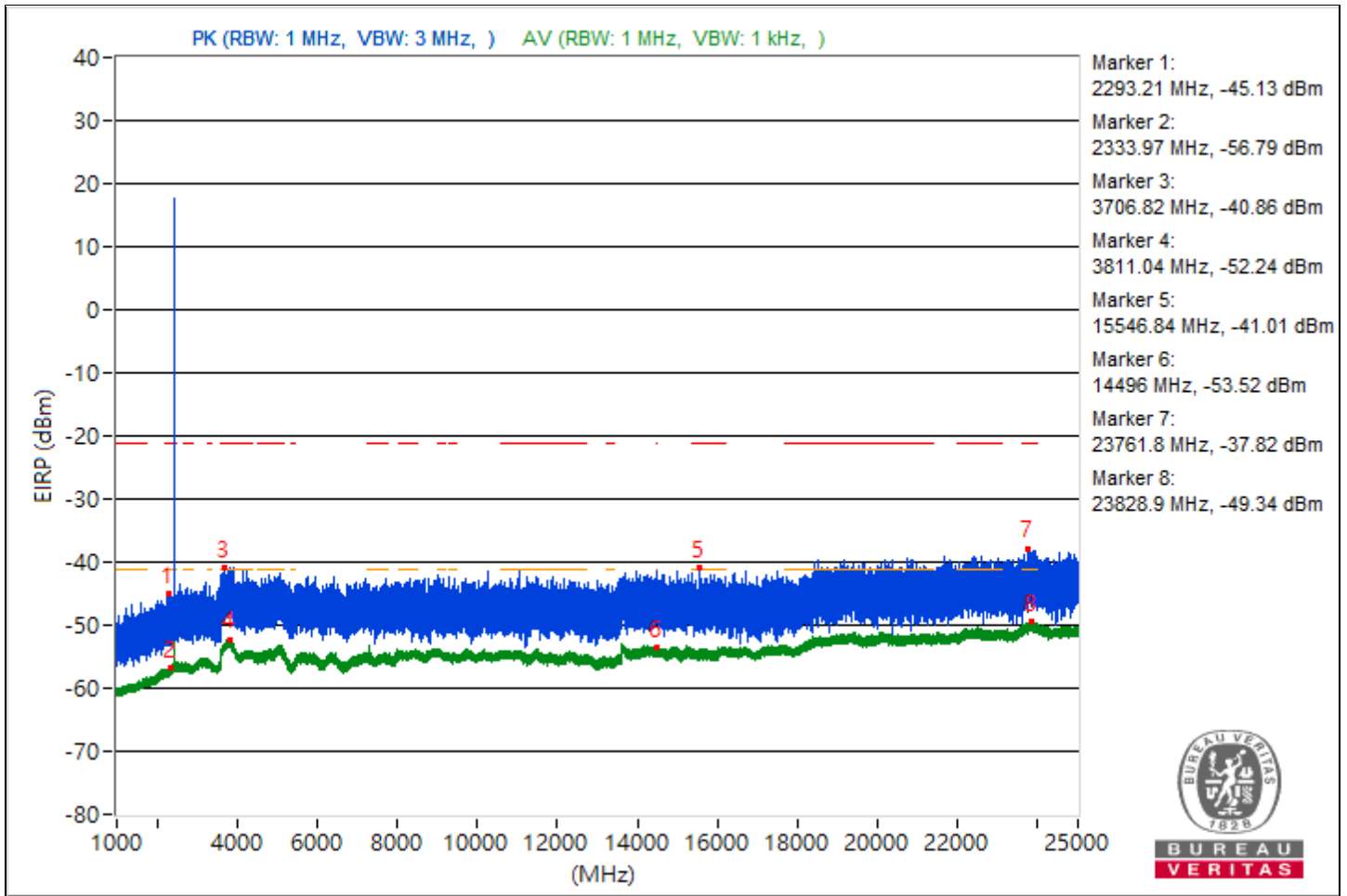




RF Mode	BT-LE 125K	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2293.21	50.13 PK	74	-23.87	-50.05	4.92	-45.13
2	2333.97	38.47 AV	54	-15.53	-61.71	4.92	-56.79
3	3706.82	54.4 PK	74	-19.6	-45.78	4.92	-40.86
4	3811.04	43.02 AV	54	-10.98	-57.16	4.92	-52.24
5	15546.84	54.25 PK	74	-19.75	-45.93	4.92	-41.01
6	14496	41.74 AV	54	-12.26	-58.44	4.92	-53.52
7	23761.8	57.44 PK	74	-16.56	-42.74	4.92	-37.82
8	23828.9	45.92 AV	54	-8.08	-54.26	4.92	-49.34

Note: Margin value = Emission Level - Limit value

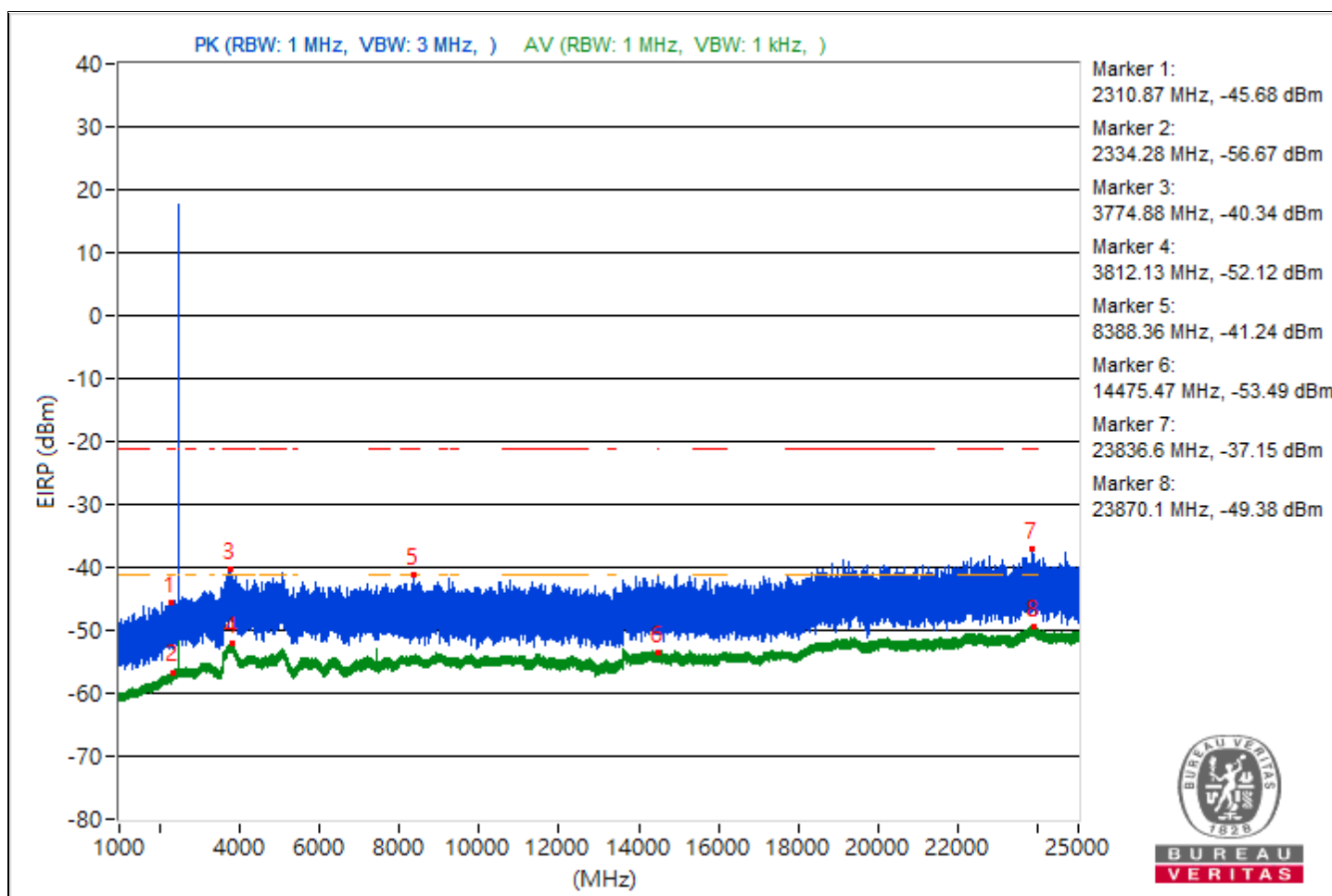


RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2310.87	49.58 PK	74	-24.42	-50.6	4.92	-45.68
2	2334.28	38.59 AV	54	-15.41	-61.59	4.92	-56.67
3	3774.88	54.92 PK	74	-19.08	-45.26	4.92	-40.34
4	3812.13	43.14 AV	54	-10.86	-57.04	4.92	-52.12
5	8388.36	54.02 PK	74	-19.98	-46.16	4.92	-41.24
6	14475.47	41.77 AV	54	-12.23	-58.41	4.92	-53.49
7	23836.6	58.11 PK	74	-15.89	-42.07	4.92	-37.15
8	23870.1	45.88 AV	54	-8.12	-54.3	4.92	-49.38

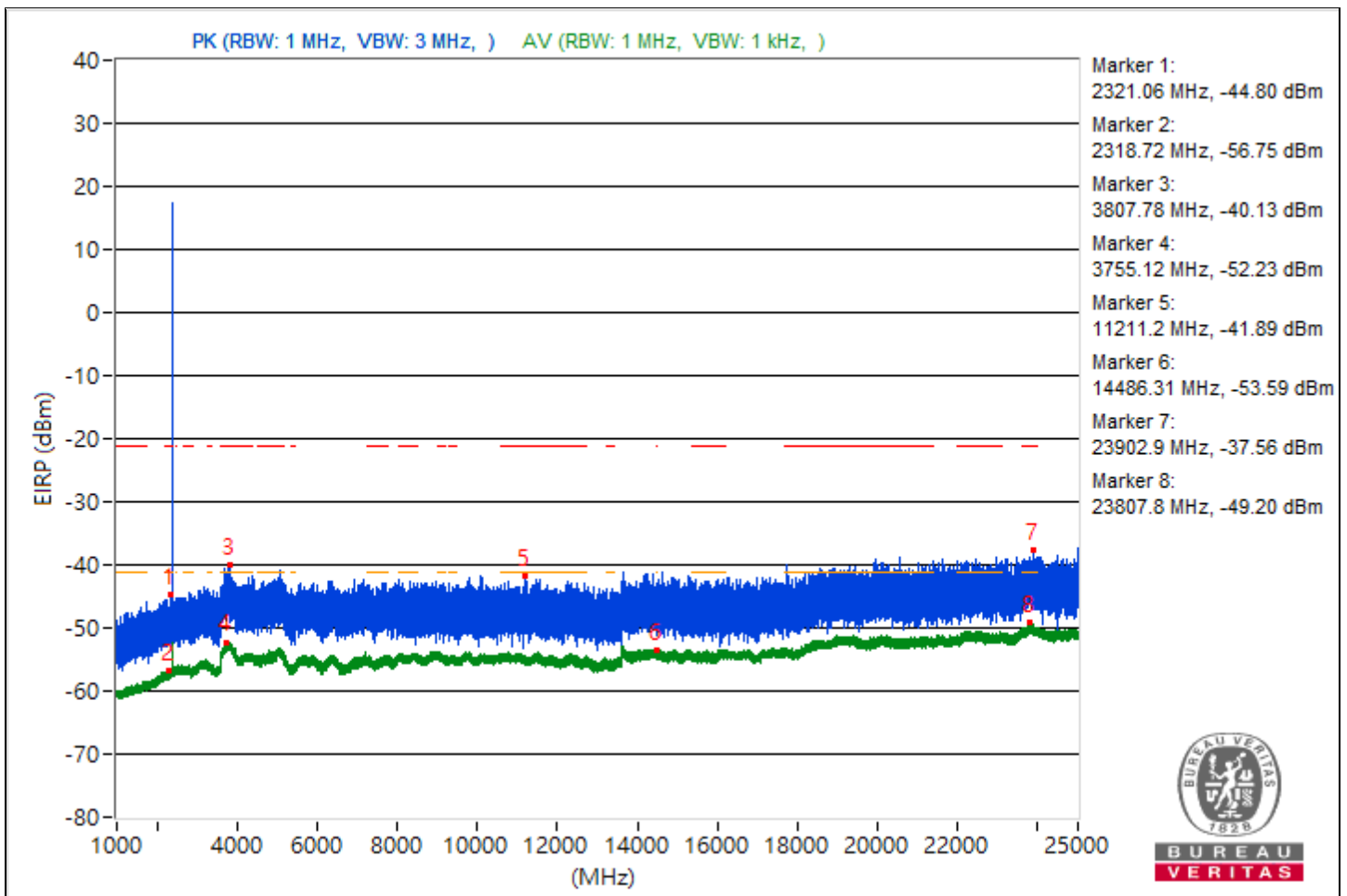
Note: Margin value = Emission Level - Limit value



RF Mode	BT-LE 500K	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2321.06	50.46 PK	74	-23.54	-49.72	4.92	-44.8
2	2318.72	38.51 AV	54	-15.49	-61.67	4.92	-56.75
3	3807.78	55.13 PK	74	-18.87	-45.05	4.92	-40.13
4	3755.12	43.03 AV	54	-10.97	-57.15	4.92	-52.23
5	11211.2	53.37 PK	74	-20.63	-46.81	4.92	-41.89
6	14486.31	41.67 AV	54	-12.33	-58.51	4.92	-53.59
7	23902.9	57.7 PK	74	-16.3	-42.48	4.92	-37.56
8	23807.8	46.06 AV	54	-7.94	-54.12	4.92	-49.2

Note: Margin value = Emission Level - Limit value

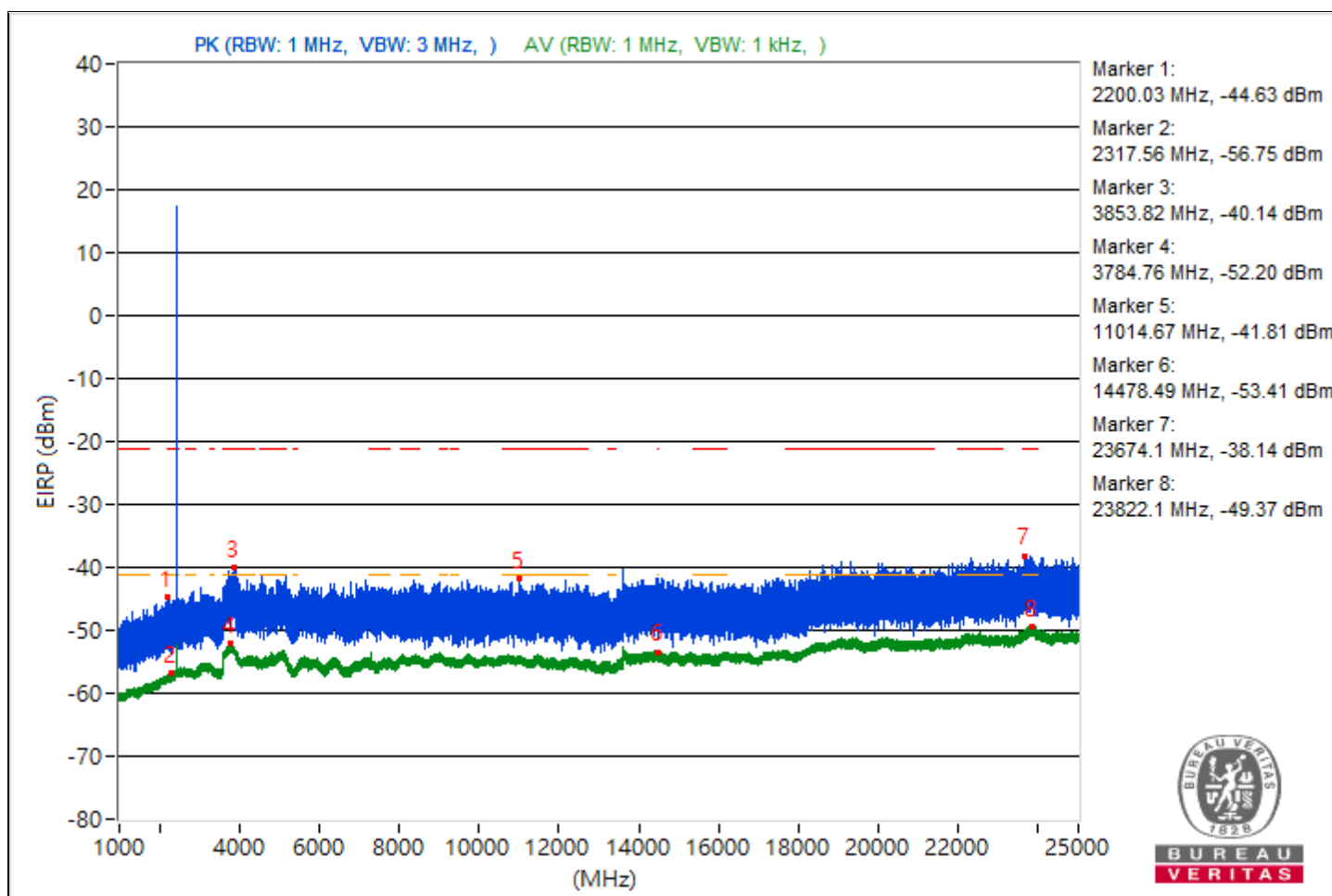


RF Mode	BT-LE 500K	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2200.03	50.63 PK	74	-23.37	-49.55	4.92	-44.63
2	2317.56	38.51 AV	54	-15.49	-61.67	4.92	-56.75
3	3853.82	55.12 PK	74	-18.88	-45.06	4.92	-40.14
4	3784.76	43.06 AV	54	-10.94	-57.12	4.92	-52.2
5	11014.67	53.45 PK	74	-20.55	-46.73	4.92	-41.81
6	14478.49	41.85 AV	54	-12.15	-58.33	4.92	-53.41
7	23674.1	57.12 PK	74	-16.88	-43.06	4.92	-38.14
8	23822.1	45.89 AV	54	-8.11	-54.29	4.92	-49.37

Note: Margin value = Emission Level - Limit value

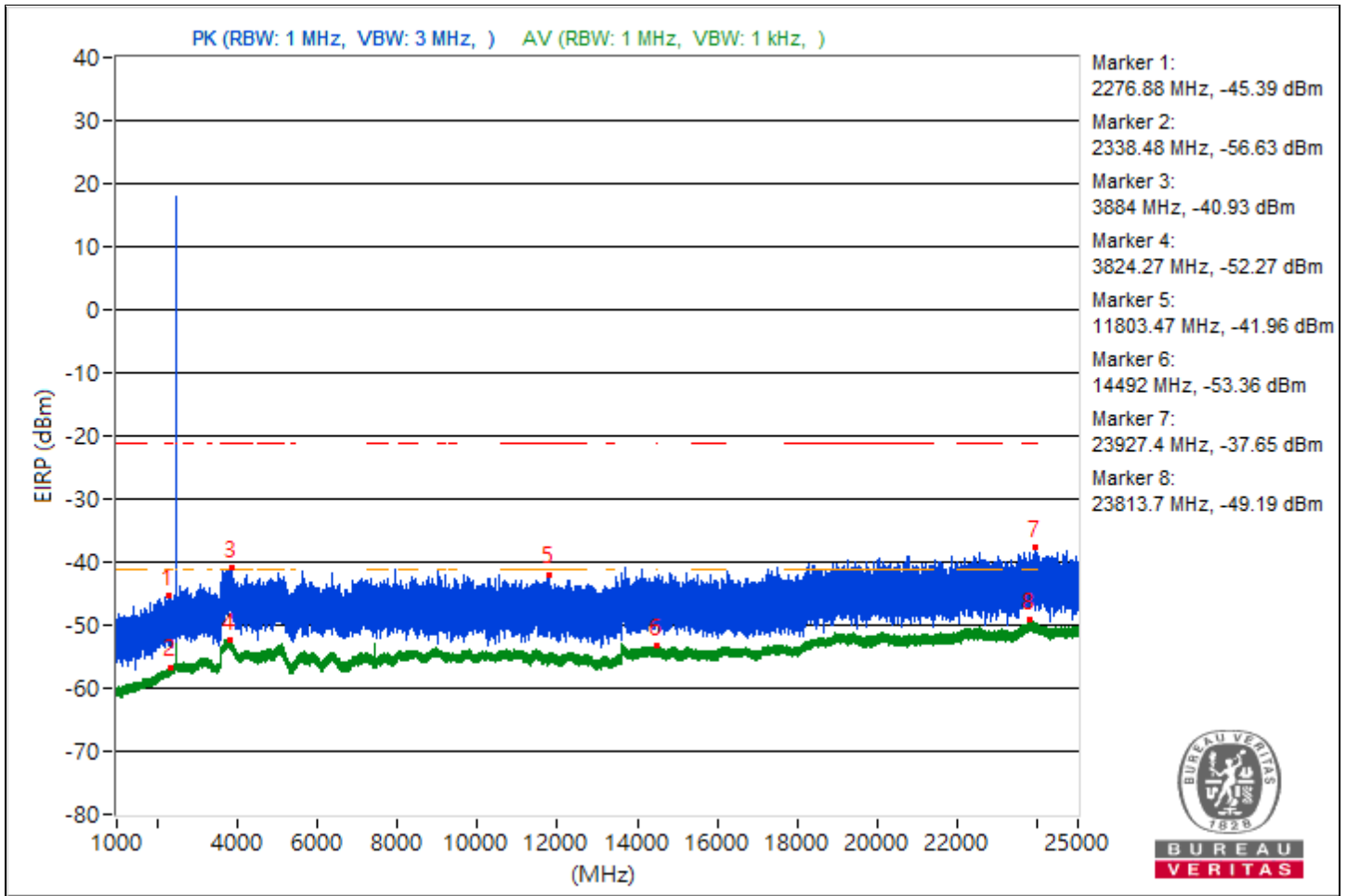




RF Mode	BT-LE 500K	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2276.88	49.87 PK	74	-24.13	-50.31	4.92	-45.39
2	2338.48	38.63 AV	54	-15.37	-61.55	4.92	-56.63
3	3884	54.33 PK	74	-19.67	-45.85	4.92	-40.93
4	3824.27	42.99 AV	54	-11.01	-57.19	4.92	-52.27
5	11803.47	53.3 PK	74	-20.7	-46.88	4.92	-41.96
6	14492	41.9 AV	54	-12.1	-58.28	4.92	-53.36
7	23927.4	57.61 PK	74	-16.39	-42.57	4.92	-37.65
8	23813.7	46.07 AV	54	-7.93	-54.11	4.92	-49.19

Note: Margin value = Emission Level - Limit value

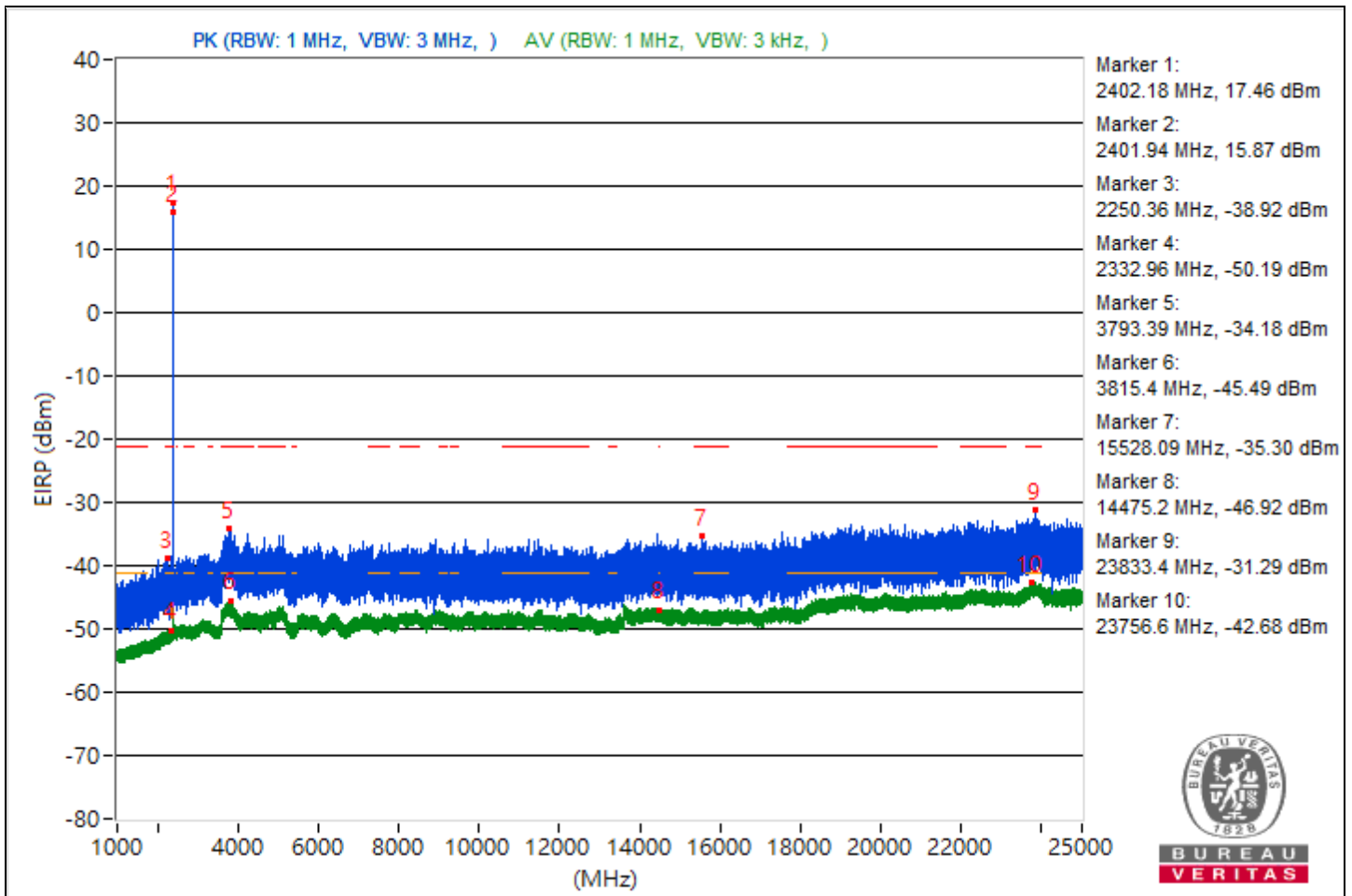


RF Mode	BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2402.18	112.72 PK			12.54	4.92	17.46
2	*2401.94	111.13 AV			10.95	4.92	15.87
3	2250.36	56.34 PK	74	-17.66	-43.84	4.92	-38.92
4	2332.96	45.07 AV	54	-8.93	-55.11	4.92	-50.19
5	3793.39	61.08 PK	74	-12.92	-39.1	4.92	-34.18
6	3815.4	49.77 AV	54	-4.23	-50.41	4.92	-45.49
7	15528.09	59.96 PK	74	-14.04	-40.22	4.92	-35.3
8	14475.2	48.34 AV	54	-5.66	-51.84	4.92	-46.92
9	23833.4	63.97 PK	74	-10.03	-36.21	4.92	-31.29
10	23756.6	52.58 AV	54	-1.42	-47.6	4.92	-42.68

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

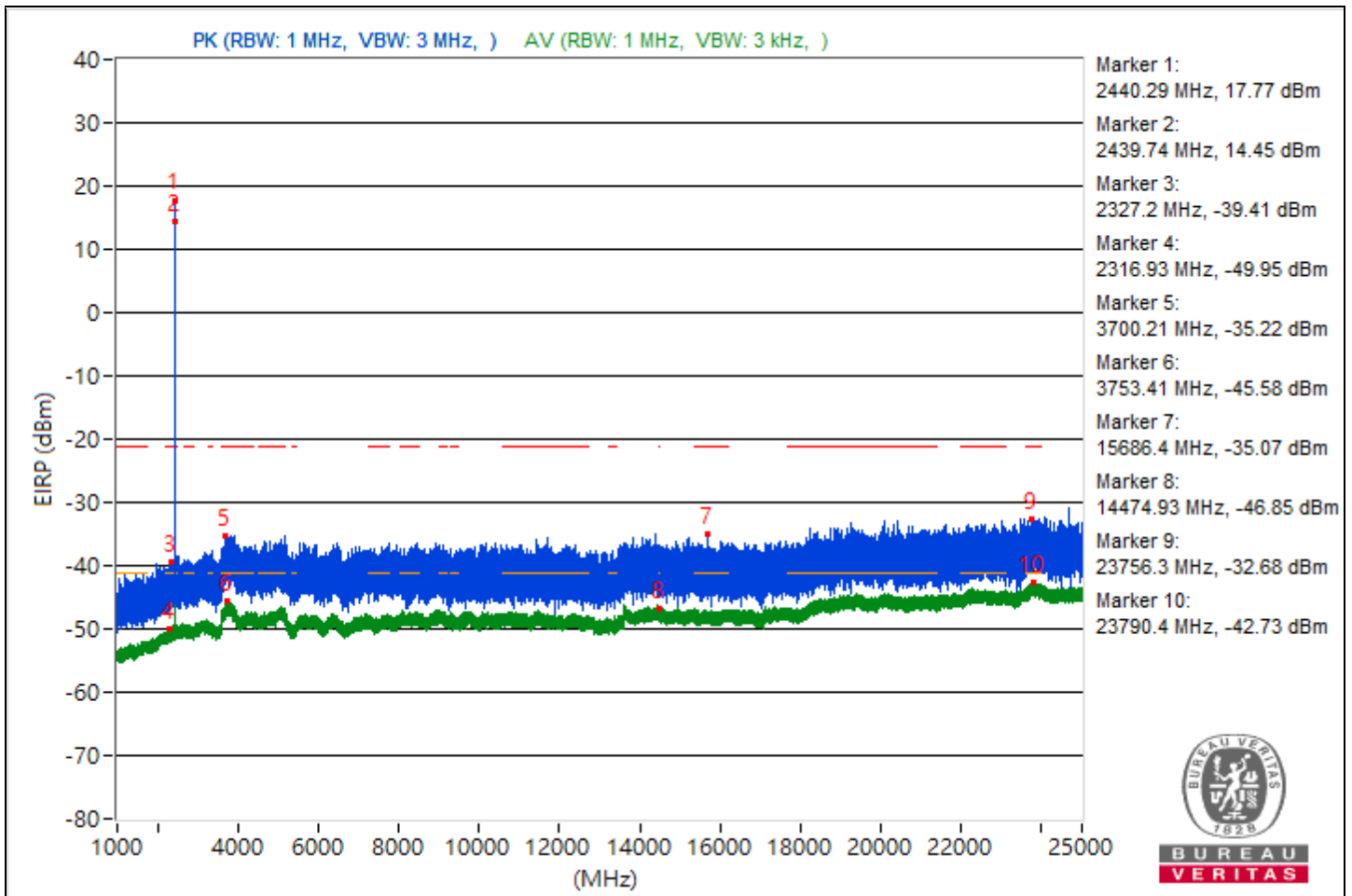


RF Mode	BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2440.29	113.03 PK			12.85	4.92	17.77
2	*2439.74	109.71 AV			9.53	4.92	14.45
3	2327.2	55.85 PK	74	-18.15	-44.33	4.92	-39.41
4	2316.93	45.31 AV	54	-8.69	-54.87	4.92	-49.95
5	3700.21	60.04 PK	74	-13.96	-40.14	4.92	-35.22
6	3753.41	49.68 AV	54	-4.32	-50.5	4.92	-45.58
7	15686.4	60.19 PK	74	-13.81	-39.99	4.92	-35.07
8	14474.93	48.41 AV	54	-5.59	-51.77	4.92	-46.85
9	23756.3	62.58 PK	74	-11.42	-37.6	4.92	-32.68
10	23790.4	52.53 AV	54	-1.47	-47.65	4.92	-42.73

Notes:

- Margin value = Emission Level - Limit value
- " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

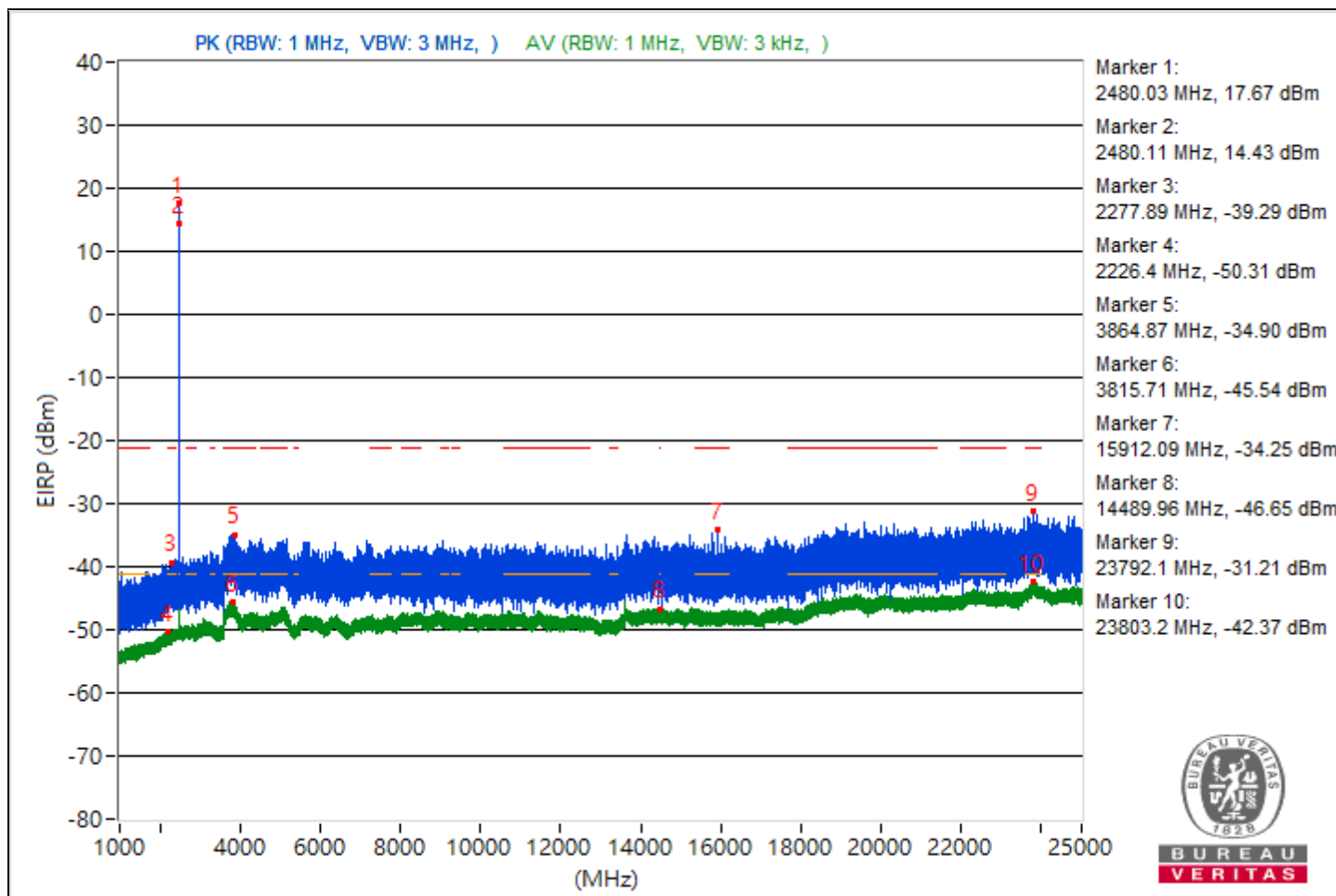


RF Mode	BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2480.03	112.93 PK			12.75	4.92	17.67
2	*2480.11	109.69 AV			9.51	4.92	14.43
3	2277.89	55.97 PK	74	-18.03	-44.21	4.92	-39.29
4	2226.4	44.95 AV	54	-9.05	-55.23	4.92	-50.31
5	3864.87	60.36 PK	74	-13.64	-39.82	4.92	-34.9
6	3815.71	49.72 AV	54	-4.28	-50.46	4.92	-45.54
7	15912.09	61.01 PK	74	-12.99	-39.17	4.92	-34.25
8	14489.96	48.61 AV	54	-5.39	-51.57	4.92	-46.65
9	23792.1	64.05 PK	74	-9.95	-36.13	4.92	-31.21
10	23803.2	52.89 AV	54	-1.11	-47.29	4.92	-42.37

Notes:

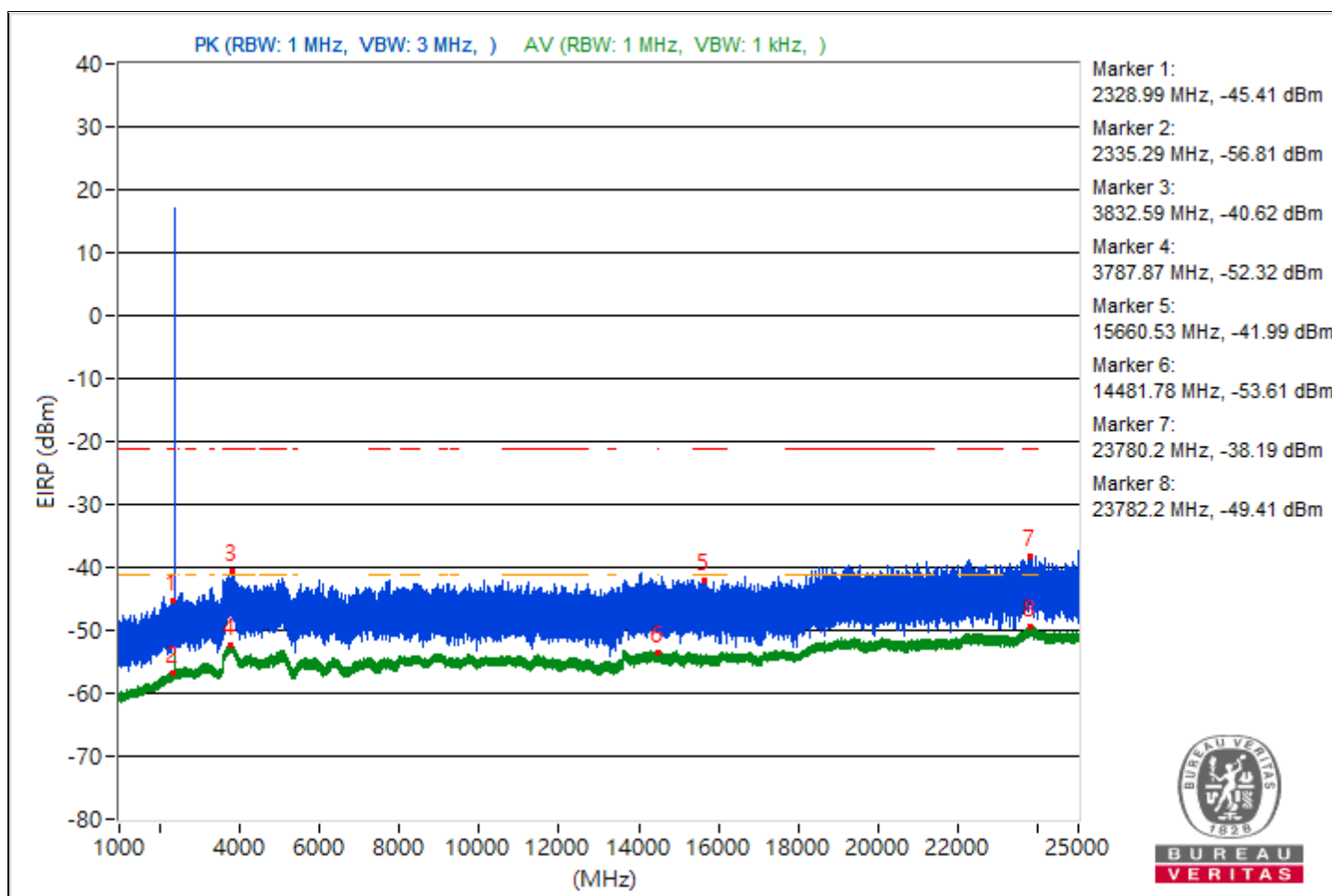
1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.



RF Mode	BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2328.99	49.85 PK	74	-24.15	-50.33	4.92	-45.41
2	2335.29	38.45 AV	54	-15.55	-61.73	4.92	-56.81
3	3832.59	54.64 PK	74	-19.36	-45.54	4.92	-40.62
4	3787.87	42.94 AV	54	-11.06	-57.24	4.92	-52.32
5	15660.53	53.27 PK	74	-20.73	-46.91	4.92	-41.99
6	14481.78	41.65 AV	54	-12.35	-58.53	4.92	-53.61
7	23780.2	57.07 PK	74	-16.93	-43.11	4.92	-38.19
8	23782.2	45.85 AV	54	-8.15	-54.33	4.92	-49.41

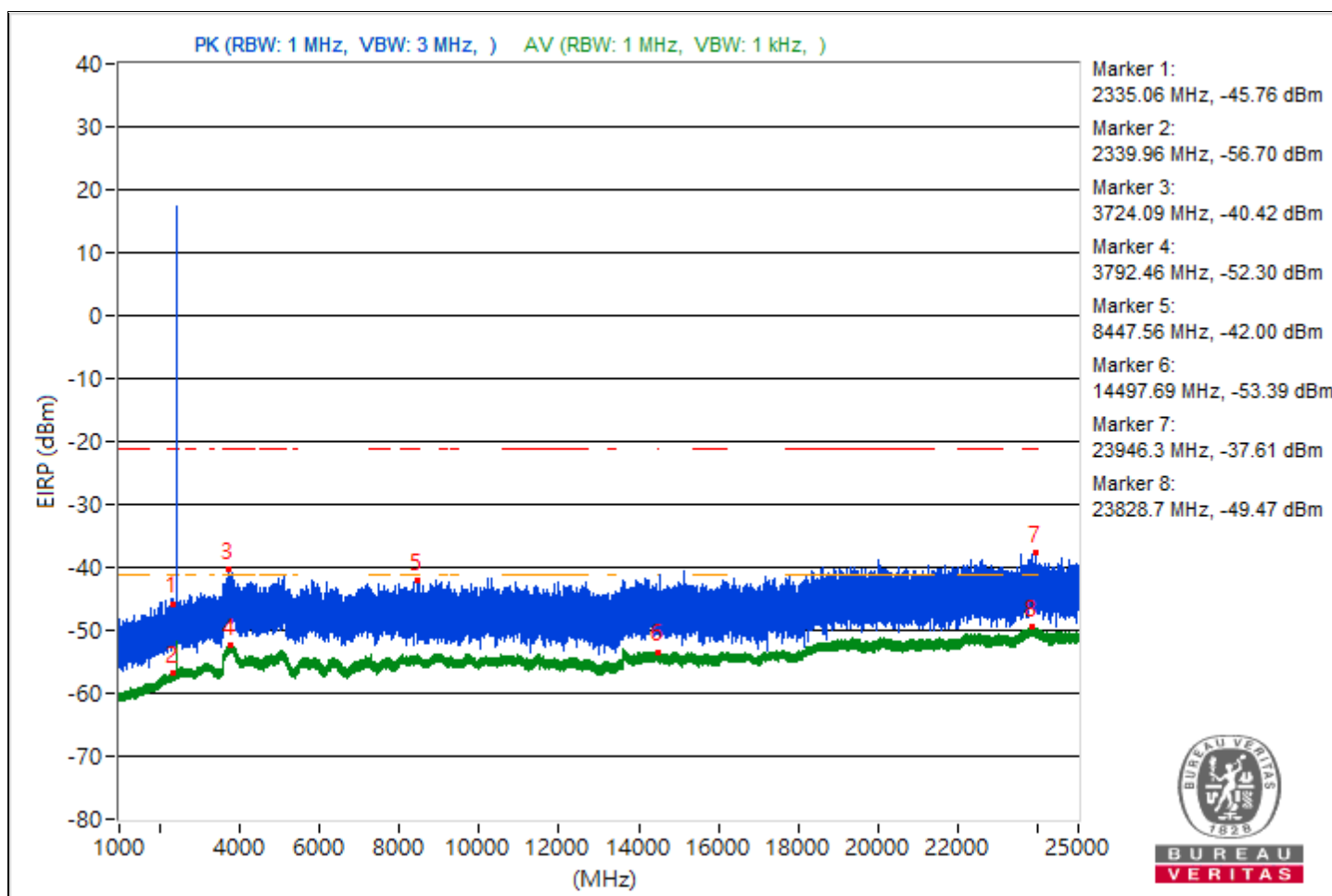
Note: Margin value = Emission Level - Limit value



RF Mode	BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2335.06	49.5 PK	74	-24.5	-50.68	4.92	-45.76
2	2339.96	38.56 AV	54	-15.44	-61.62	4.92	-56.7
3	3724.09	54.84 PK	74	-19.16	-45.34	4.92	-40.42
4	3792.46	42.96 AV	54	-11.04	-57.22	4.92	-52.3
5	8447.56	53.26 PK	74	-20.74	-46.92	4.92	-42
6	14497.69	41.87 AV	54	-12.13	-58.31	4.92	-53.39
7	23946.3	57.65 PK	74	-16.35	-42.53	4.92	-37.61
8	23828.7	45.79 AV	54	-8.21	-54.39	4.92	-49.47

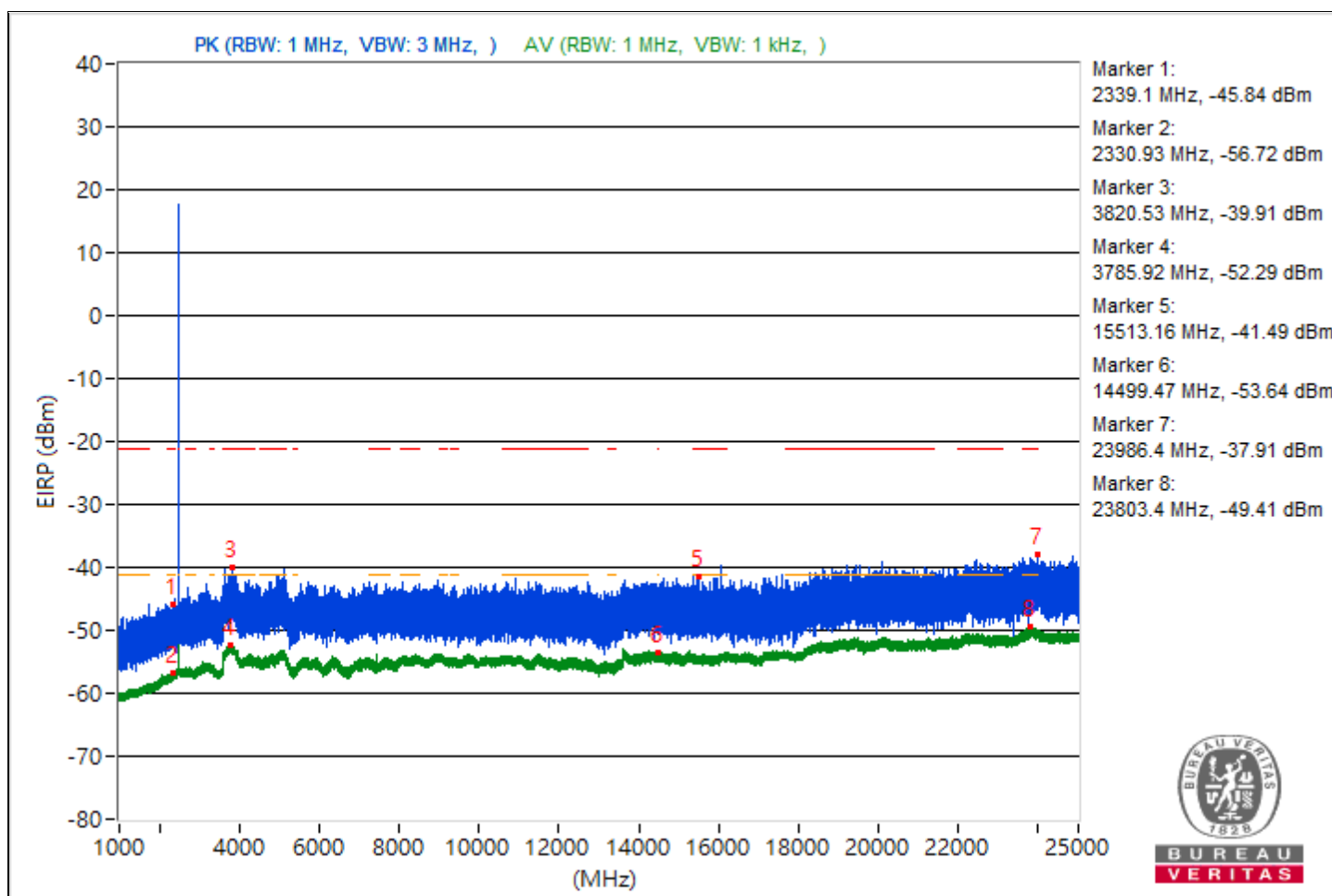
Note: Margin value = Emission Level - Limit value



RF Mode	BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Unwanted Emissions							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	2339.1	49.42 PK	74	-24.58	-50.76	4.92	-45.84
2	2330.93	38.54 AV	54	-15.46	-61.64	4.92	-56.72
3	3820.53	55.35 PK	74	-18.65	-44.83	4.92	-39.91
4	3785.92	42.97 AV	54	-11.03	-57.21	4.92	-52.29
5	15513.16	53.77 PK	74	-20.23	-46.41	4.92	-41.49
6	14499.47	41.62 AV	54	-12.38	-58.56	4.92	-53.64
7	23986.4	57.35 PK	74	-16.65	-42.83	4.92	-37.91
8	23803.4	45.85 AV	54	-8.15	-54.33	4.92	-49.41

Note: Margin value = Emission Level - Limit value



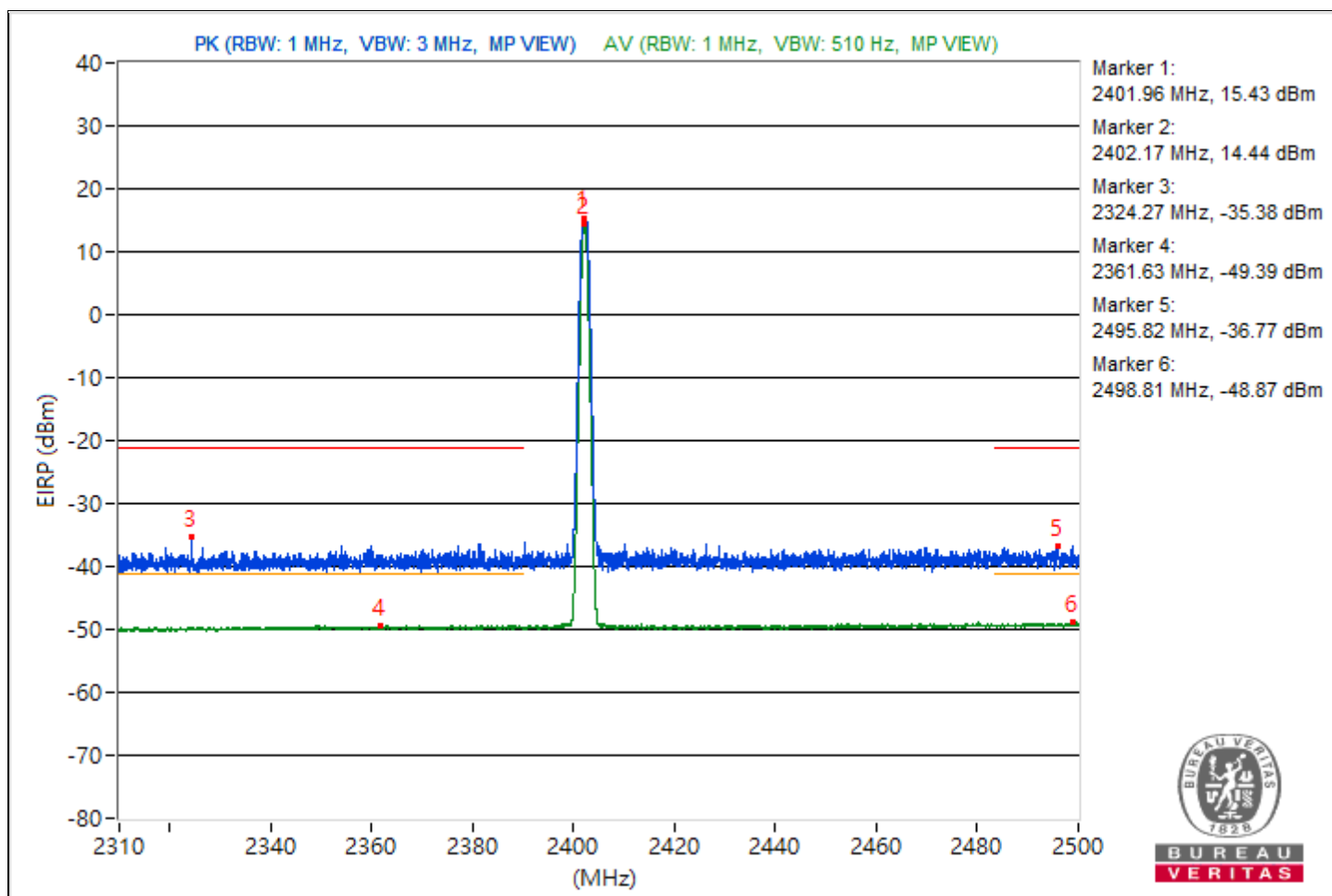
Conducted Band Edges

RF Mode	BT-LE 125K	Channel	CH 0 : 2402 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2401.96	110.69 PK			12.25	3.18	15.43
2	*2402.17	109.7 AV			11.26	3.18	14.44
3	2324.27	59.88 PK	74	-14.12	-38.56	3.18	-35.38
4	2361.63	45.87 AV	54	-8.13	-52.57	3.18	-49.39
5	2495.82	58.49 PK	74	-15.51	-39.95	3.18	-36.77
6	2498.81	46.39 AV	54	-7.61	-52.05	3.18	-48.87

Notes:

1. Margin value = Emission Level - Limit value
2. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

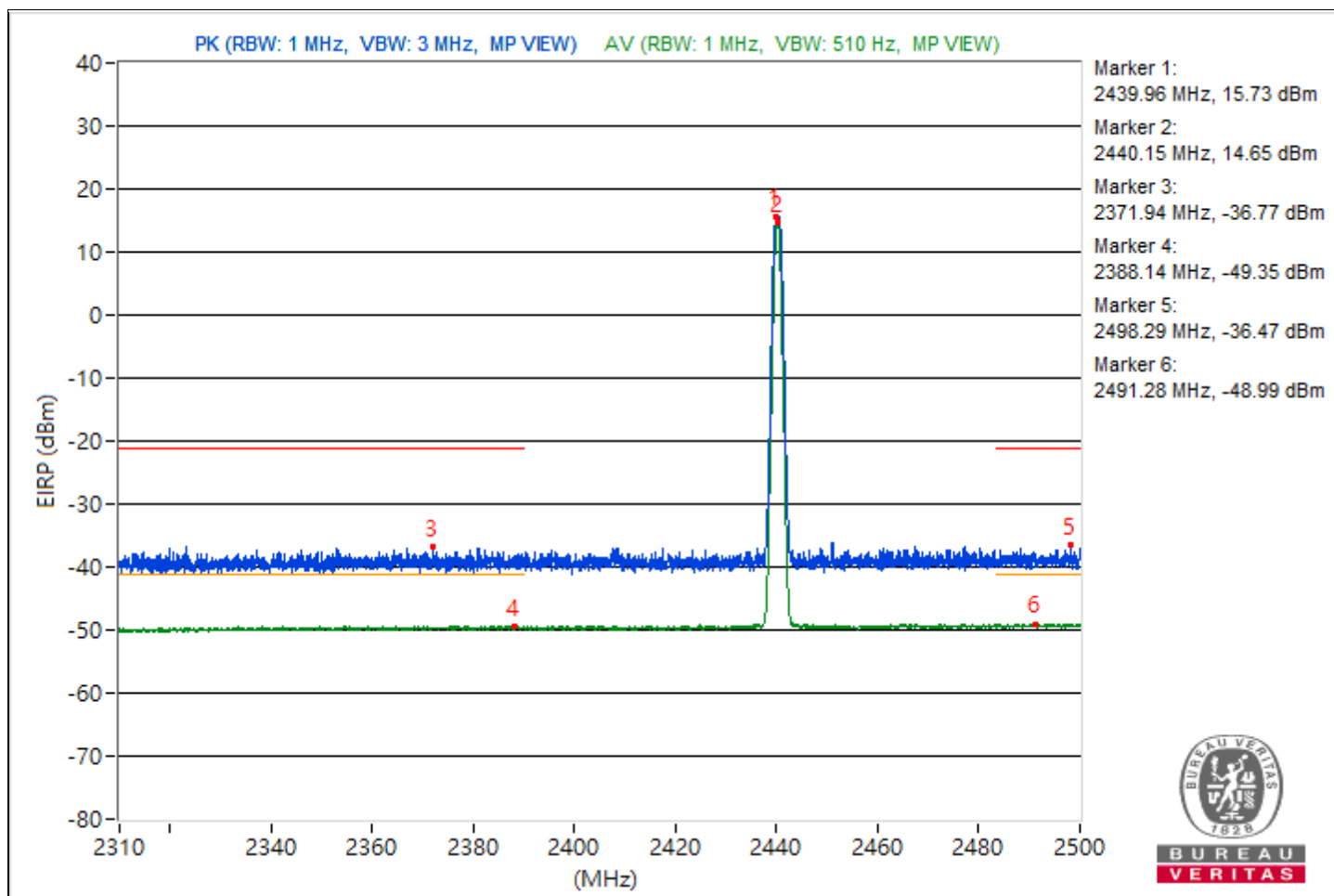


RF Mode	BT-LE 125K	Channel	CH 19 : 2440 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2439.96	110.99 PK			12.55	3.18	15.73
2	*2440.15	109.91 AV			11.47	3.18	14.65
3	2371.94	58.49 PK	74	-15.51	-39.95	3.18	-36.77
4	2388.14	45.91 AV	54	-8.09	-52.53	3.18	-49.35
5	2498.29	58.79 PK	74	-15.21	-39.65	3.18	-36.47
6	2491.28	46.27 AV	54	-7.73	-52.17	3.18	-48.99

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

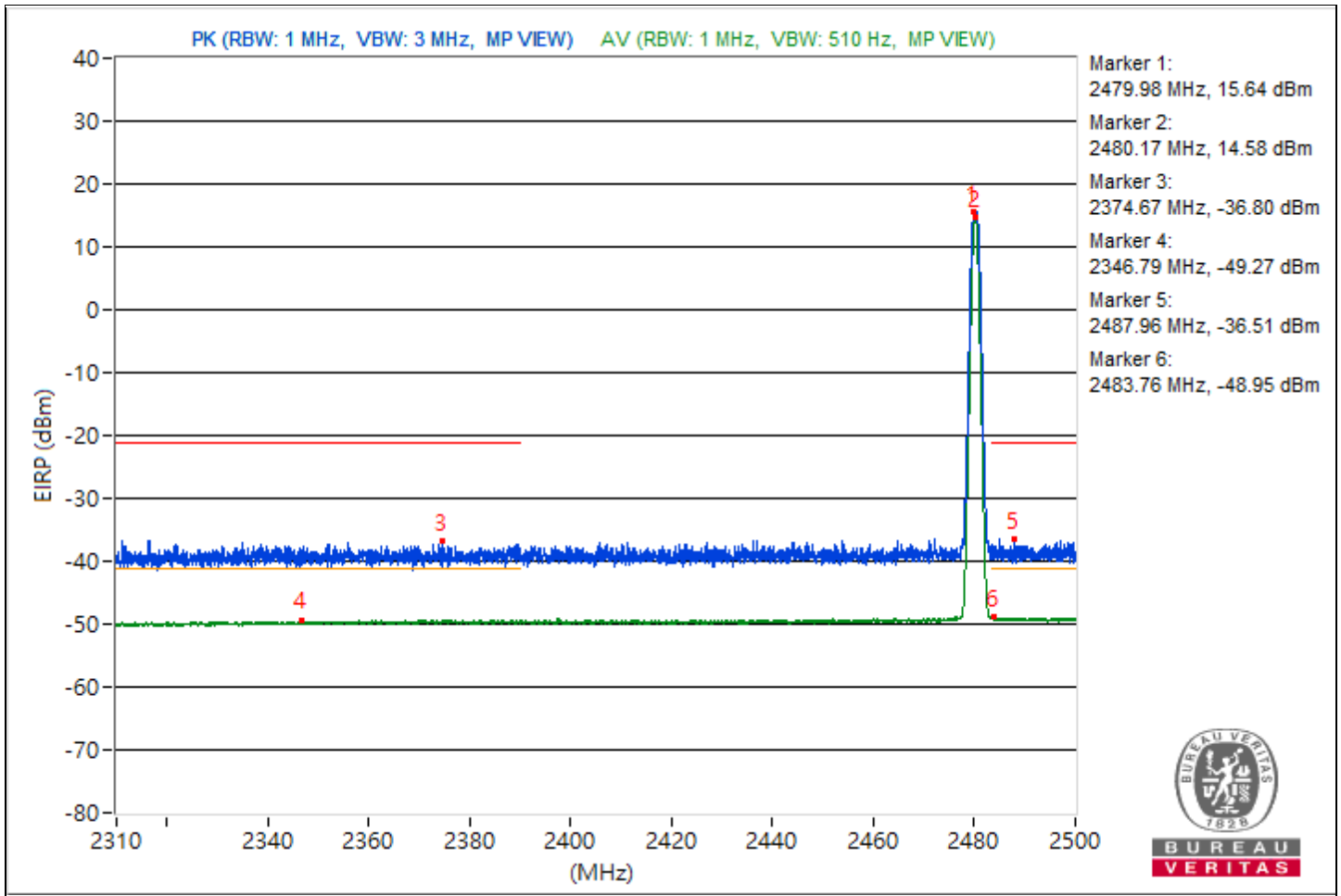


RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2479.98	110.9 PK			12.46	3.18	15.64
2	*2480.17	109.84 AV			11.4	3.18	14.58
3	2374.67	58.46 PK	74	-15.54	-39.98	3.18	-36.8
4	2346.79	45.99 AV	54	-8.01	-52.45	3.18	-49.27
5	2487.96	58.75 PK	74	-15.25	-39.69	3.18	-36.51
6	2483.76	46.31 AV	54	-7.69	-52.13	3.18	-48.95

Notes:

- Margin value = Emission Level - Limit value
- " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

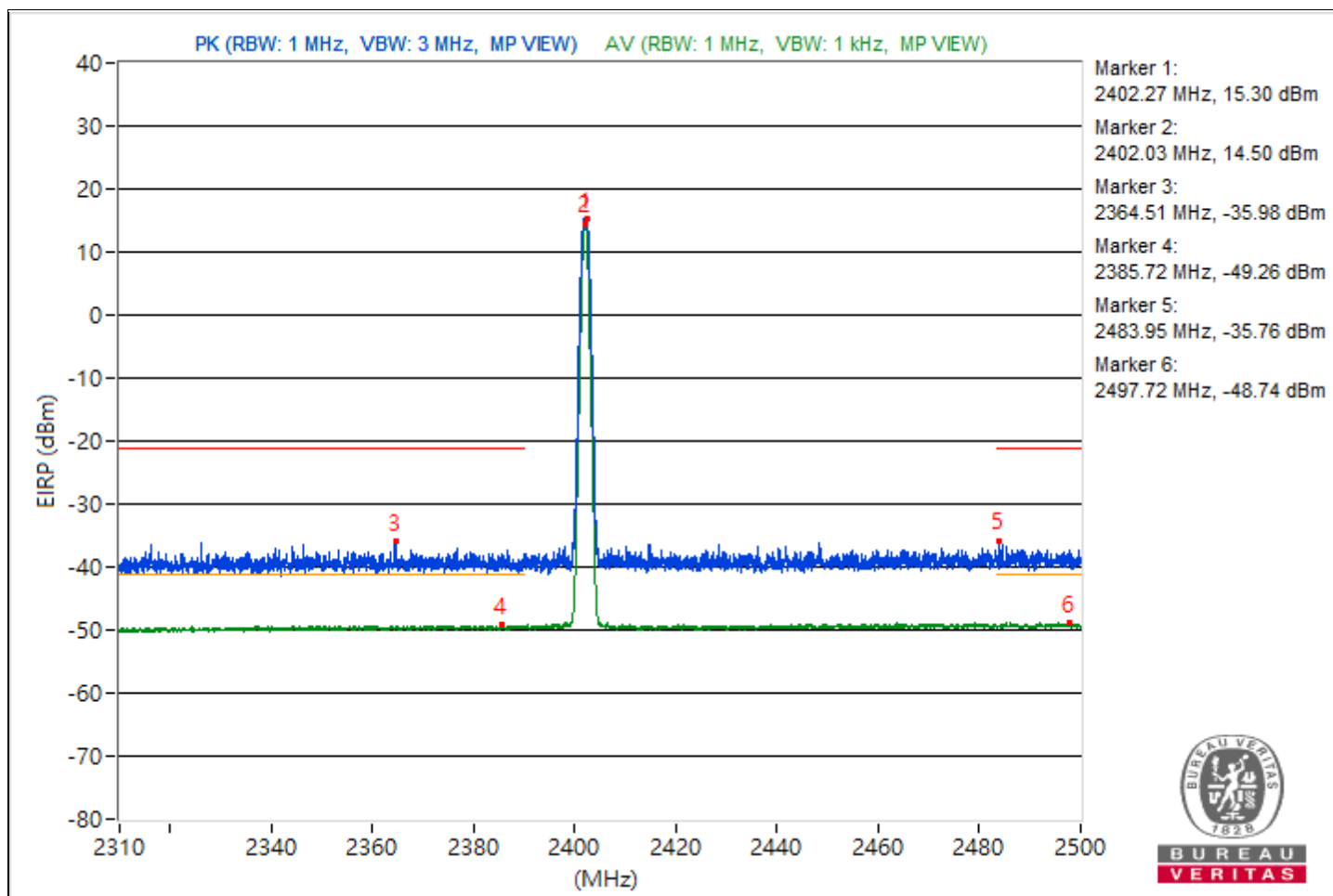


RF Mode	BT-LE 500K	Channel	CH 0 : 2402 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2402.27	110.56 PK			12.12	3.18	15.3
2	*2402.03	109.76 AV			11.32	3.18	14.5
3	2364.51	59.28 PK	74	-14.72	-39.16	3.18	-35.98
4	2385.72	46 AV	54	-8	-52.44	3.18	-49.26
5	2483.95	59.5 PK	74	-14.5	-38.94	3.18	-35.76
6	2497.72	46.52 AV	54	-7.48	-51.92	3.18	-48.74

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

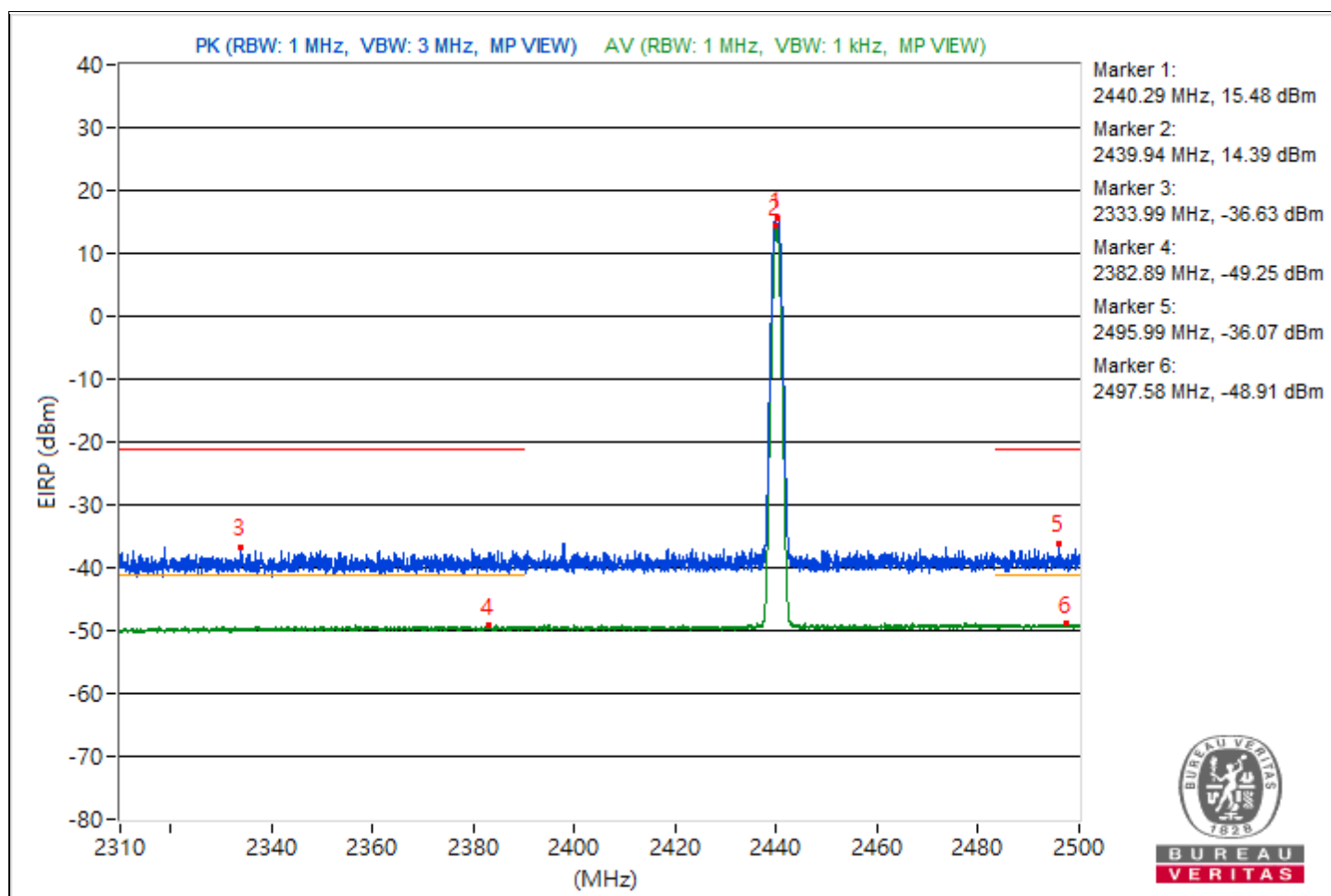


RF Mode	BT-LE 500K	Channel	CH 19 : 2440 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2440.29	110.74 PK			12.3	3.18	15.48
2	*2439.94	109.65 AV			11.21	3.18	14.39
3	2333.99	58.63 PK	74	-15.37	-39.81	3.18	-36.63
4	2382.89	46.01 AV	54	-7.99	-52.43	3.18	-49.25
5	2495.99	59.19 PK	74	-14.81	-39.25	3.18	-36.07
6	2497.58	46.35 AV	54	-7.65	-52.09	3.18	-48.91

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

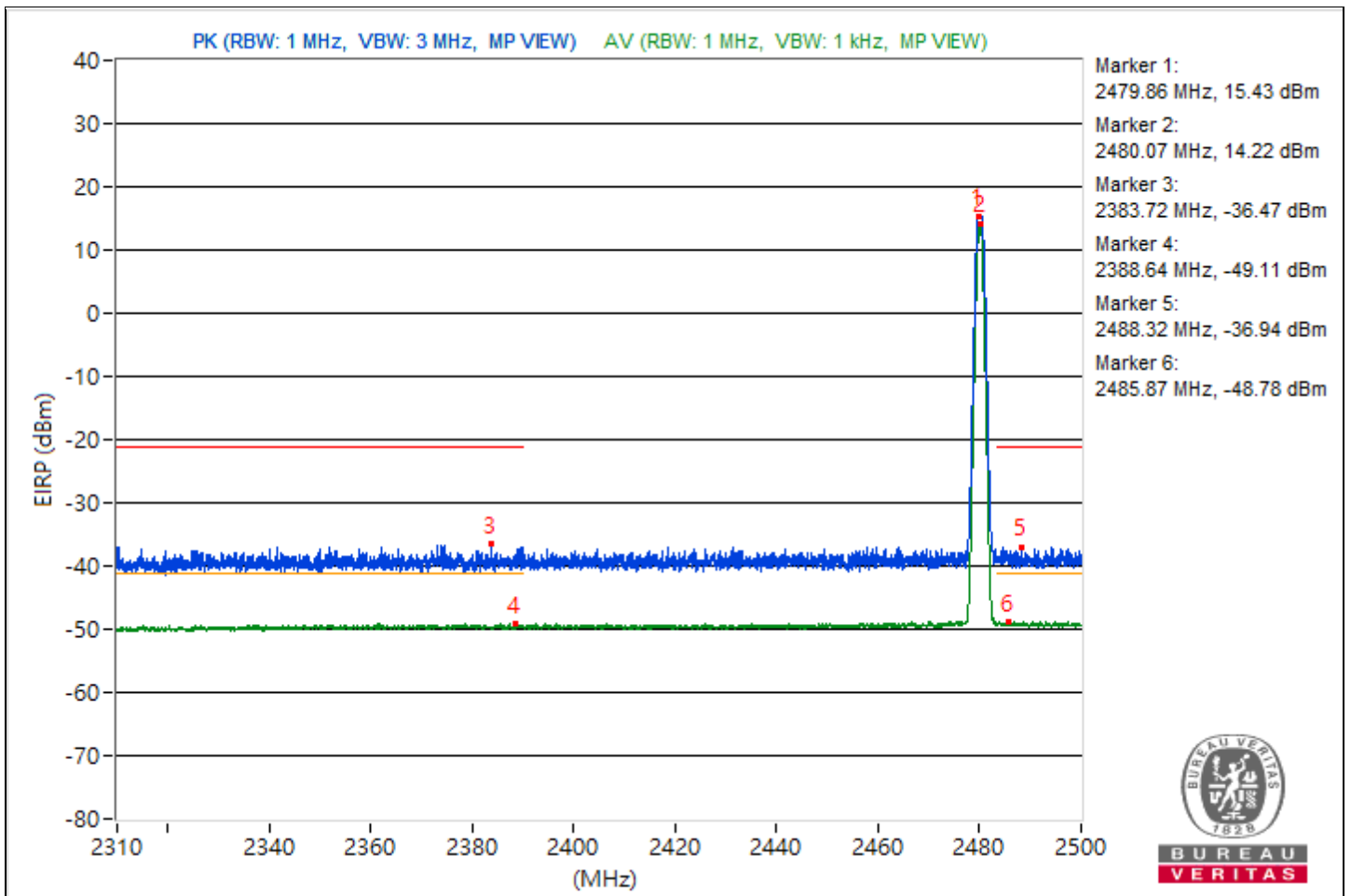


RF Mode	BT-LE 500K	Channel	CH 39 : 2480 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2479.86	110.69 PK			12.25	3.18	15.43
2	*2480.07	109.48 AV			11.04	3.18	14.22
3	2383.72	58.79 PK	74	-15.21	-39.65	3.18	-36.47
4	2388.64	46.15 AV	54	-7.85	-52.29	3.18	-49.11
5	2488.32	58.32 PK	74	-15.68	-40.12	3.18	-36.94
6	2485.87	46.48 AV	54	-7.52	-51.96	3.18	-48.78

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

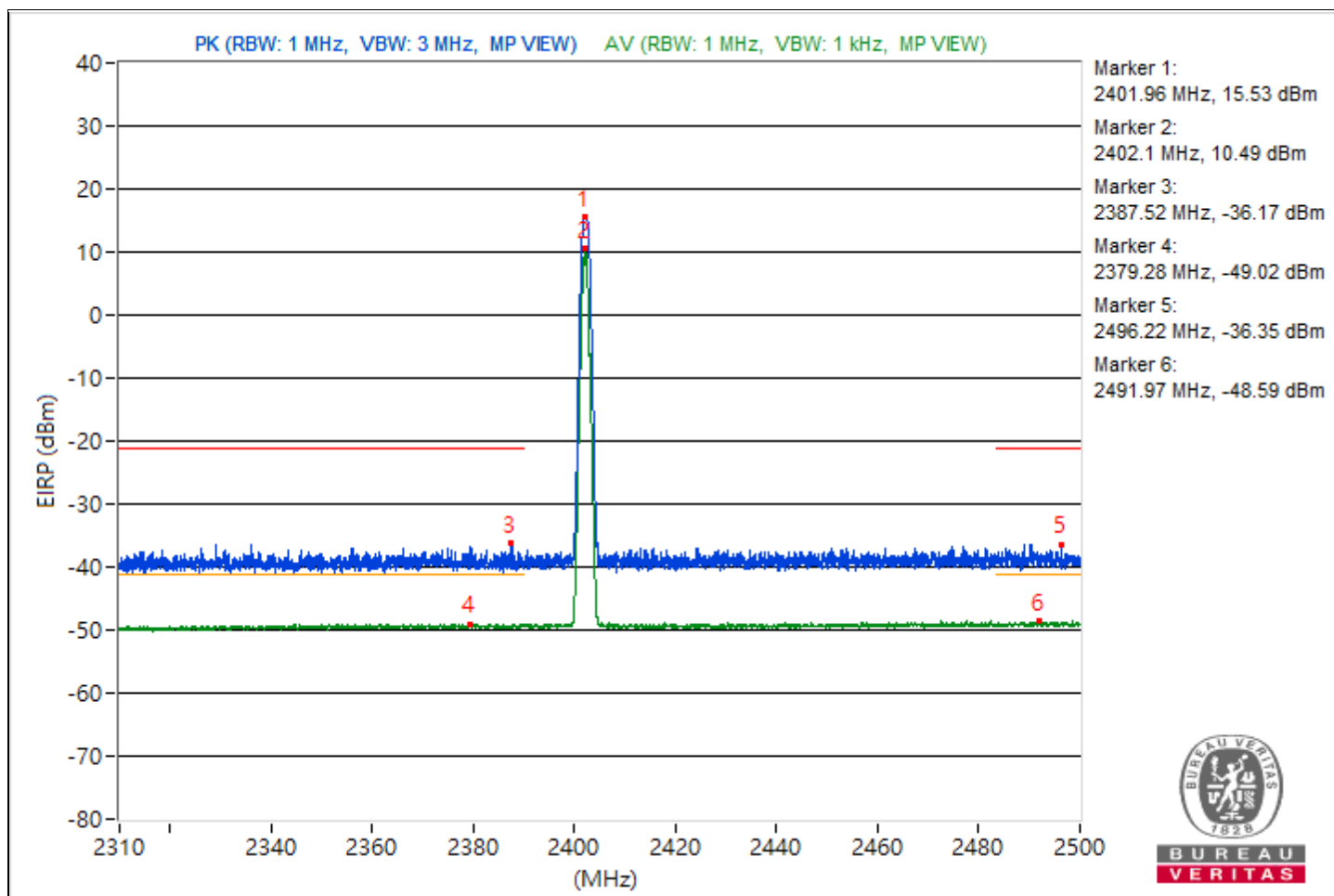


RF Mode	BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2401.96	110.79 PK			12.35	3.18	15.53
2	*2402.1	105.75 AV			7.31	3.18	10.49
3	2387.52	59.09 PK	74	-14.91	-39.35	3.18	-36.17
4	2379.28	46.24 AV	54	-7.76	-52.2	3.18	-49.02
5	2496.22	58.91 PK	74	-15.09	-39.53	3.18	-36.35
6	2491.97	46.67 AV	54	-7.33	-51.77	3.18	-48.59

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

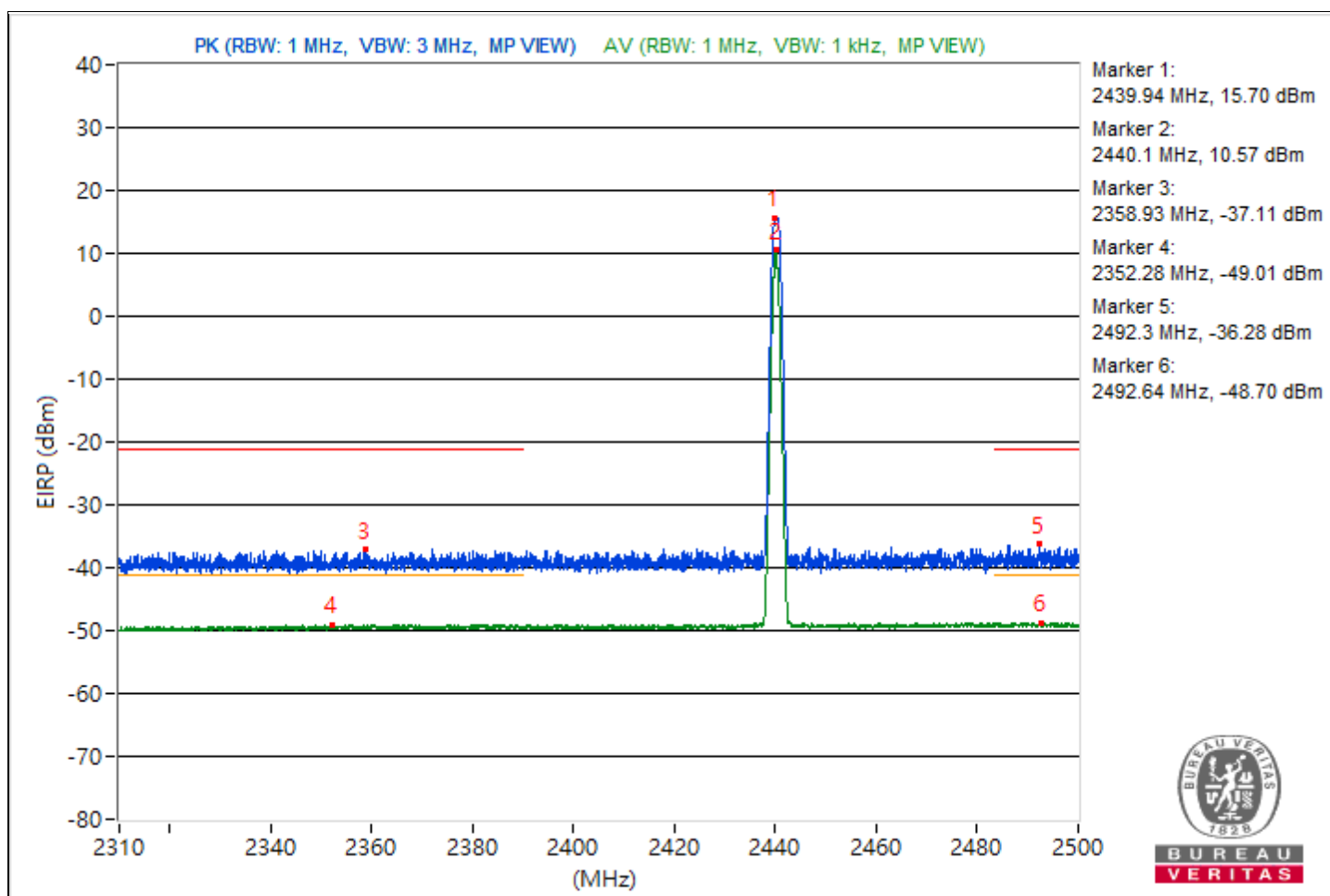


RF Mode	BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2439.94	110.96 PK			12.52	3.18	15.7
2	*2440.1	105.83 AV			7.39	3.18	10.57
3	2358.93	58.15 PK	74	-15.85	-40.29	3.18	-37.11
4	2352.28	46.25 AV	54	-7.75	-52.19	3.18	-49.01
5	2492.3	58.98 PK	74	-15.02	-39.46	3.18	-36.28
6	2492.64	46.56 AV	54	-7.44	-51.88	3.18	-48.7

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

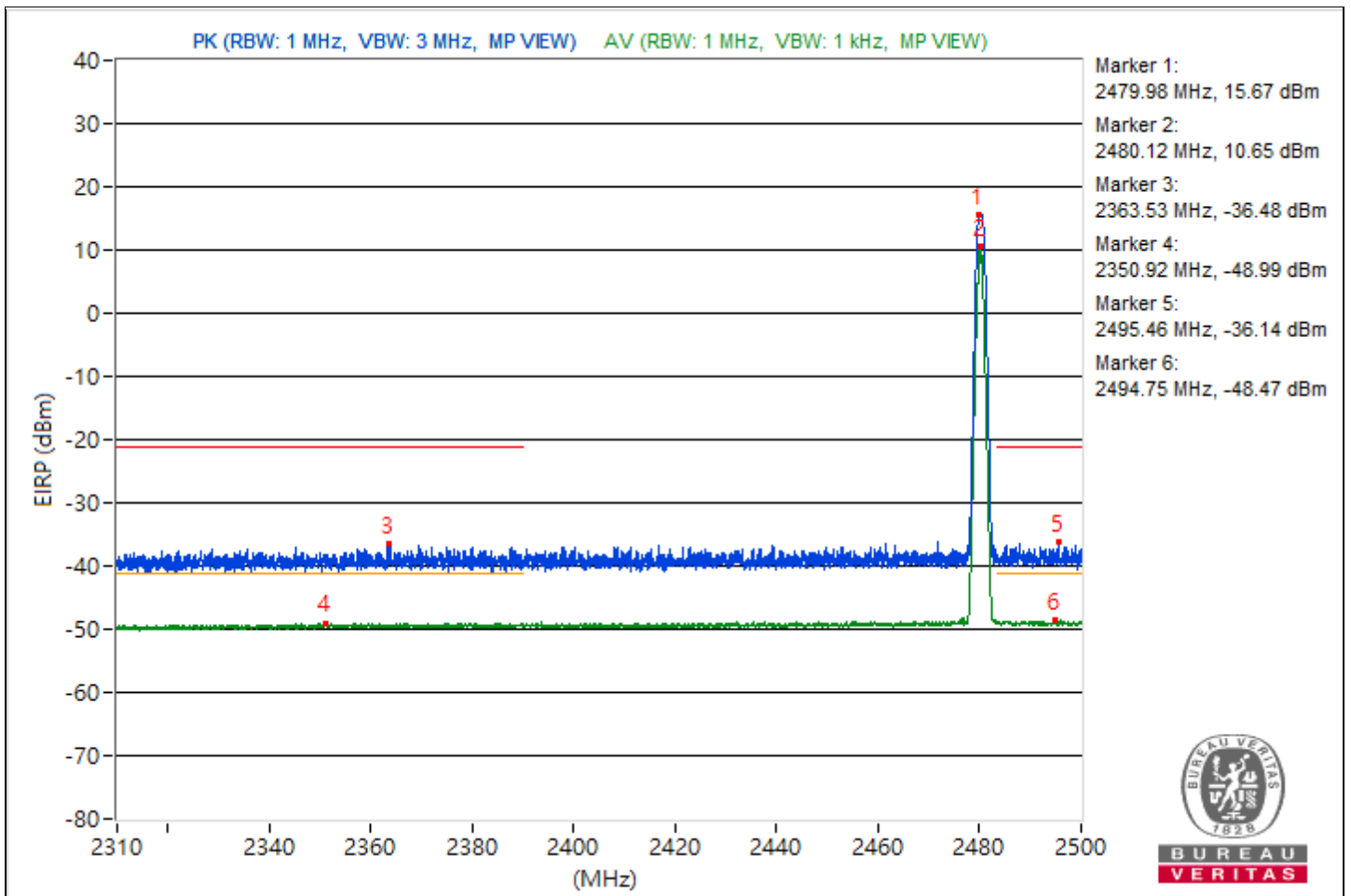


RF Mode	BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2479.98	110.93 PK			12.49	3.18	15.67
2	*2480.12	105.91 AV			7.47	3.18	10.65
3	2363.53	58.78 PK	74	-15.22	-39.66	3.18	-36.48
4	2350.92	46.27 AV	54	-7.73	-52.17	3.18	-48.99
5	2495.46	59.12 PK	74	-14.88	-39.32	3.18	-36.14
6	2494.75	46.79 AV	54	-7.21	-51.65	3.18	-48.47

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

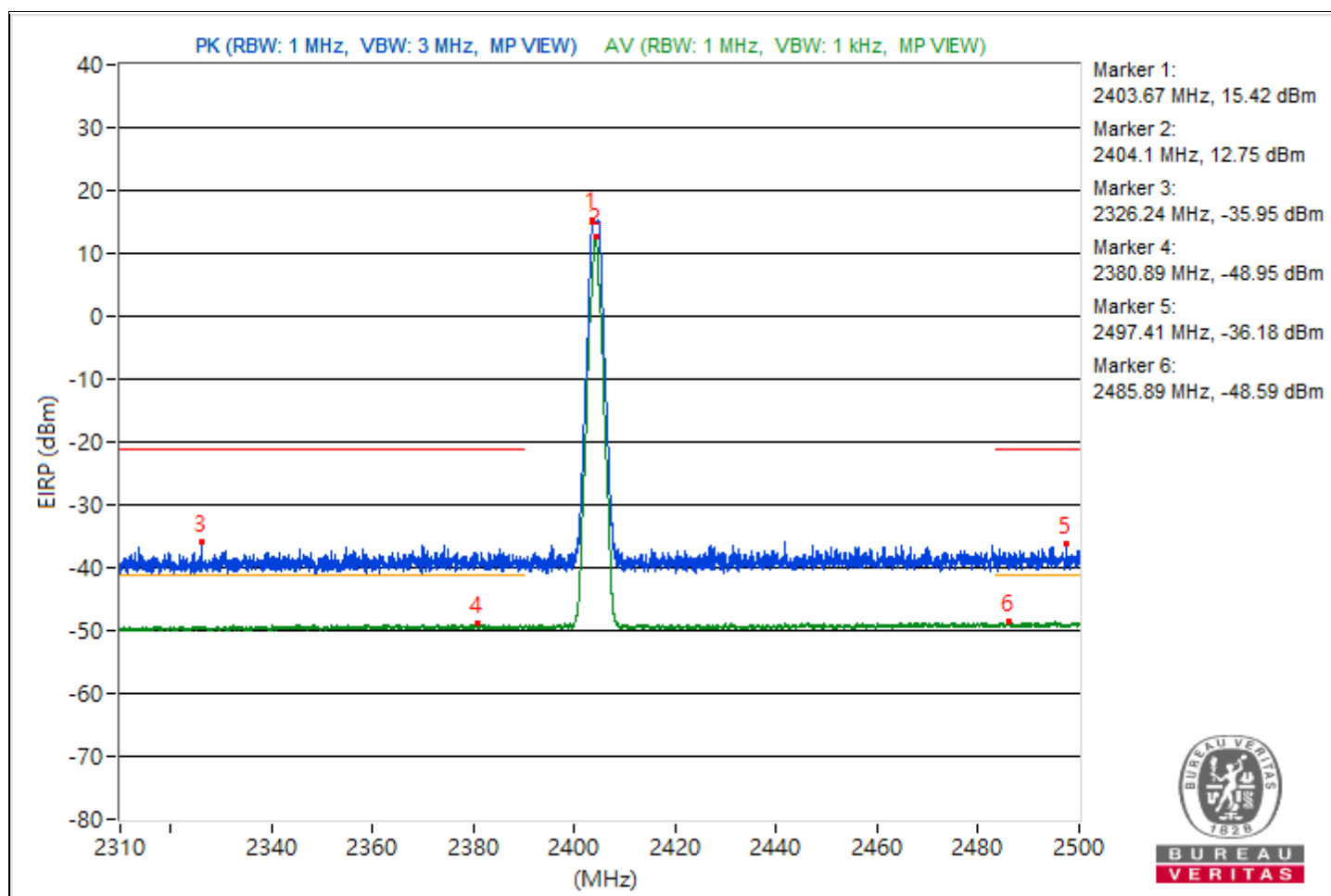


RF Mode	BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2403.67	110.68 PK			12.24	3.18	15.42
2	*2404.1	108.01 AV			9.57	3.18	12.75
3	2326.24	59.31 PK	74	-14.69	-39.13	3.18	-35.95
4	2380.89	46.31 AV	54	-7.69	-52.13	3.18	-48.95
5	2497.41	59.08 PK	74	-14.92	-39.36	3.18	-36.18
6	2485.89	46.67 AV	54	-7.33	-51.77	3.18	-48.59

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

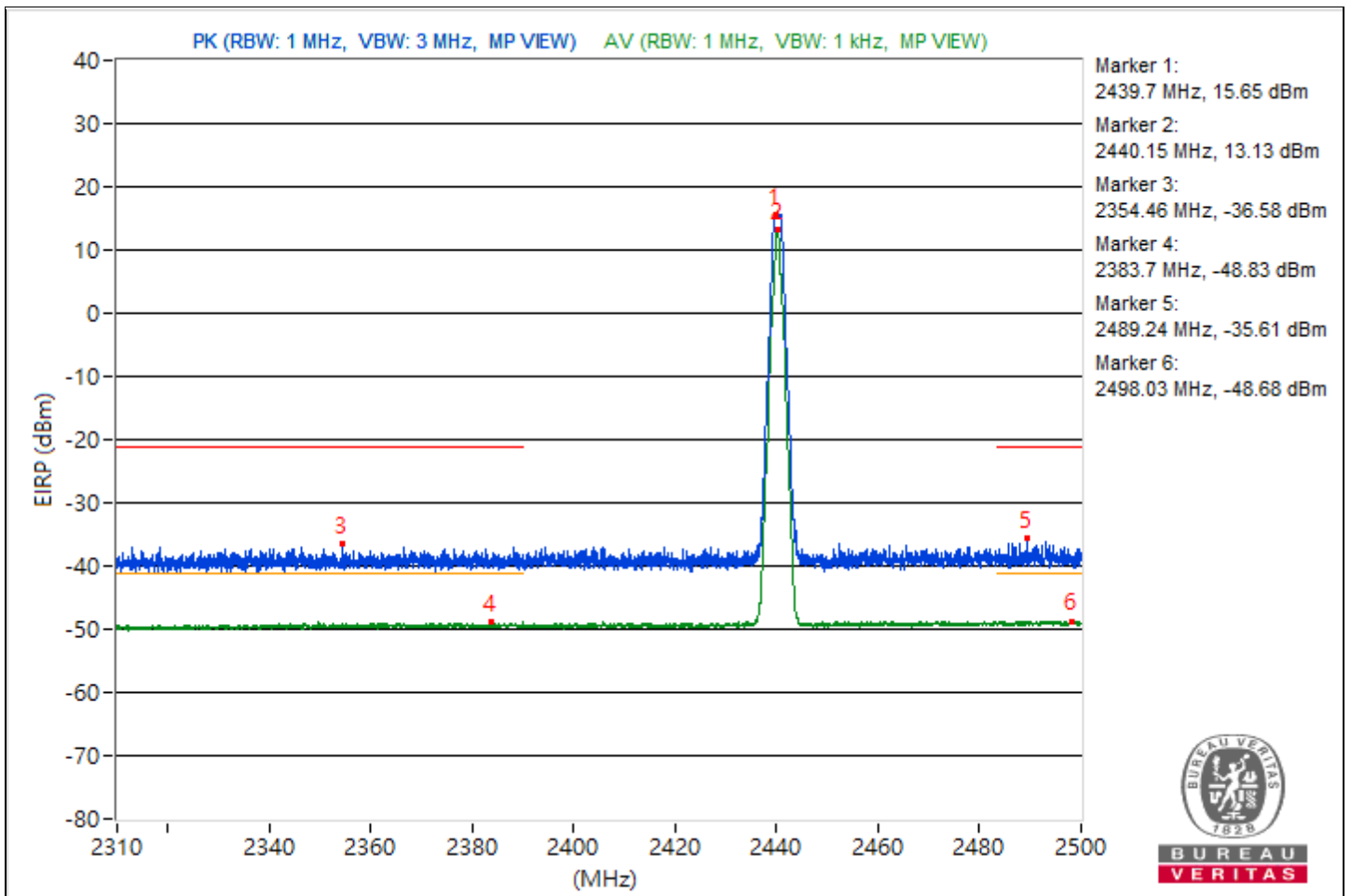


RF Mode	BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	*2439.7	110.91 PK			12.47	3.18	15.65
2	*2440.15	108.39 AV			9.95	3.18	13.13
3	2354.46	58.68 PK	74	-15.32	-39.76	3.18	-36.58
4	2383.7	46.43 AV	54	-7.57	-52.01	3.18	-48.83
5	2489.24	59.65 PK	74	-14.35	-38.79	3.18	-35.61
6	2498.03	46.58 AV	54	-7.42	-51.86	3.18	-48.68

Notes:

1. Margin value = Emission Level - Limit value
2. " * " : Fundamental frequency, the limit was restricted at the RF Output Power.

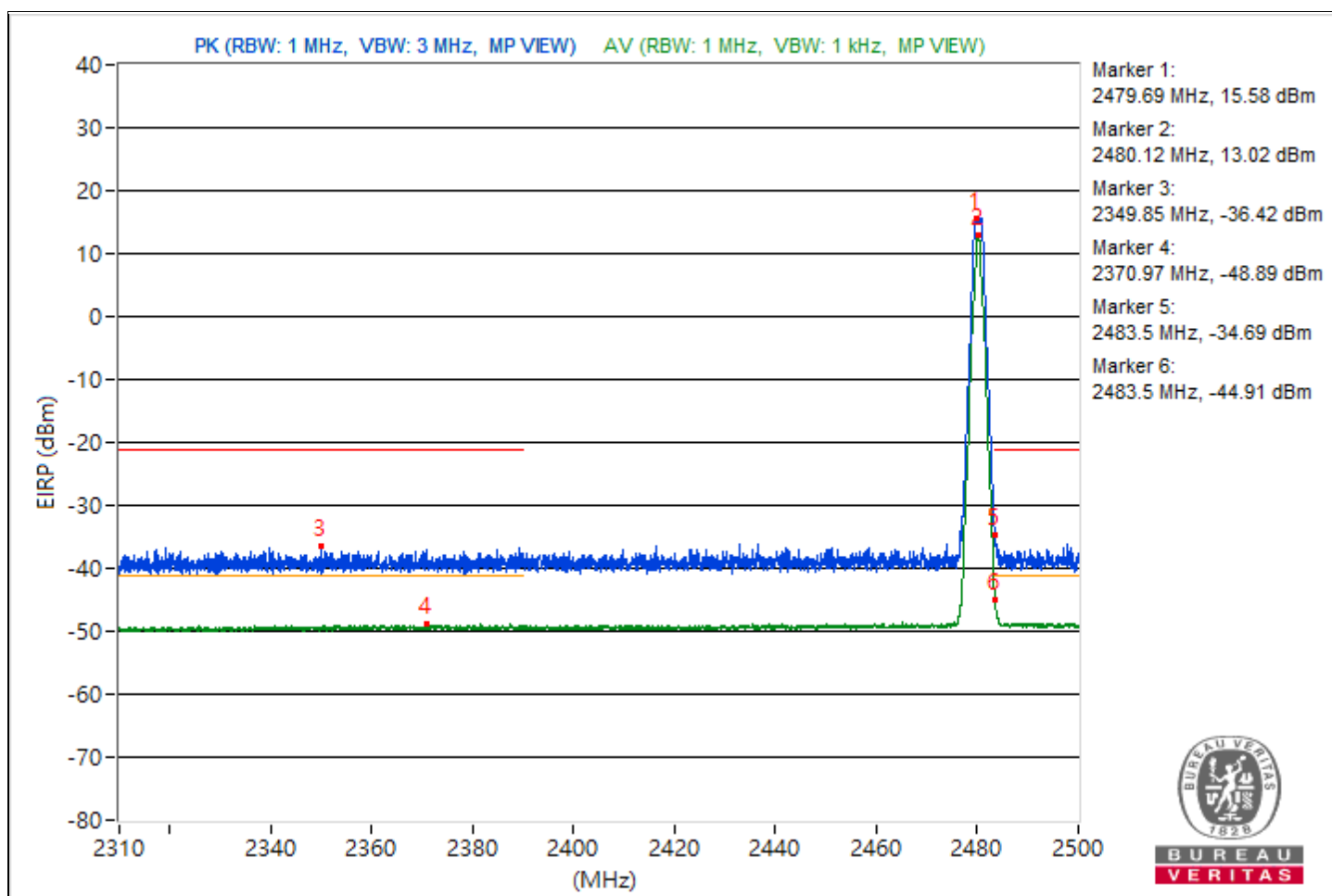


RF Mode	BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	2.31 GHz ~ 2.5 GHz	Environmental Conditions	25°C, 76% RH
Tested By	Waydi Tuan		

Conducted Band Edge							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value Chain 0 (dBm)	Correction Factor (dB)	EIRP Level (dBm)
1	#2479.69	110.84 PK			12.4	3.18	15.58
2	#2480.12	108.28 AV			9.84	3.18	13.02
3	2349.85	58.84 PK	74	-15.16	-39.6	3.18	-36.42
4	2370.97	46.37 AV	54	-7.63	-52.07	3.18	-48.89
5	2483.5	60.57 PK	74	-13.43	-37.87	3.18	-34.69
6	2483.5	50.35 AV	54	-3.65	-48.09	3.18	-44.91

Notes:

1. Margin value = Emission Level - Limit value
2. "#": The radiated frequency is out of the restricted band, the limit was restricted at the Conducted Out of Band Emissions.



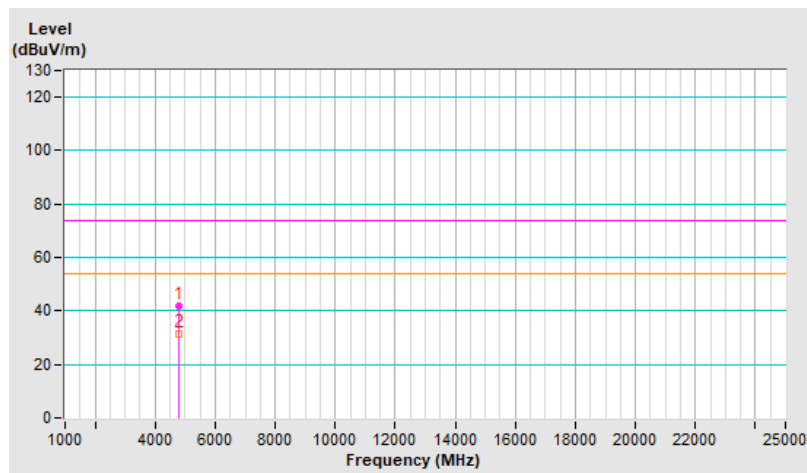
Mode B

RF Mode	BT-LE 125K	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4804.00	41.9 PK	74.0	-32.1	1.47 H	284	37.4	4.5
2	4804.00	31.2 AV	54.0	-22.8	1.47 H	284	26.7	4.5

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.

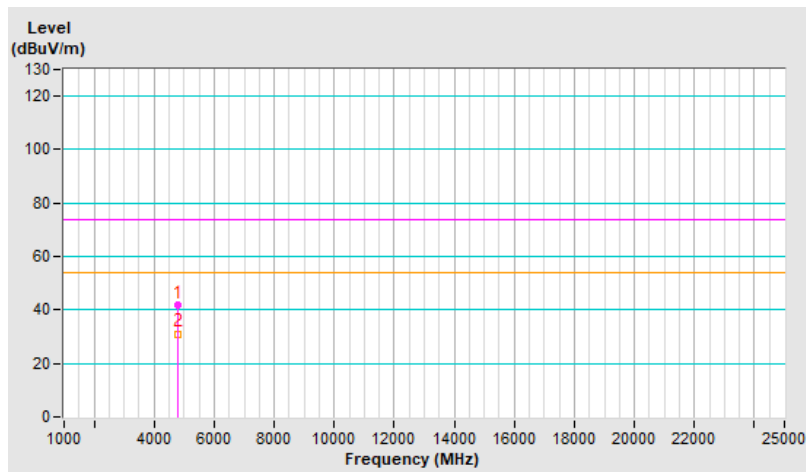


RF Mode	BT-LE 125K	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4804.00	41.9 PK	74.0	-32.1	2.22 V	17	37.4	4.5
2	4804.00	31.1 AV	54.0	-22.9	2.22 V	17	26.6	4.5

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.

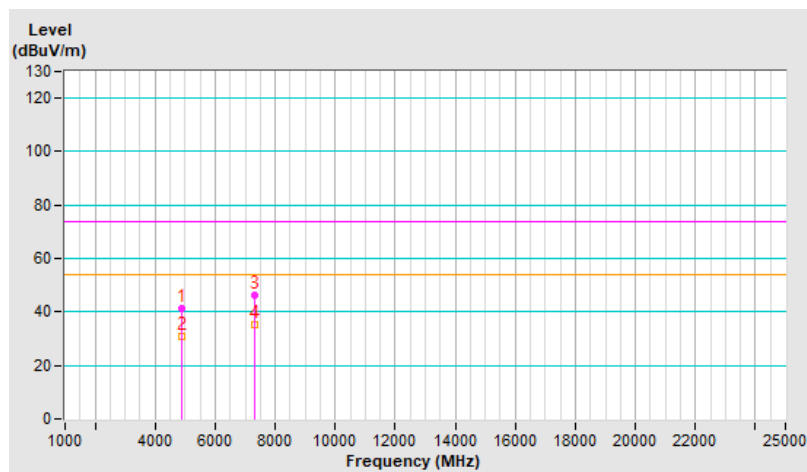


RF Mode	BT-LE 125K	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	41.1 PK	74.0	-32.9	1.37 H	252	36.6	4.5
2	4880.00	30.8 AV	54.0	-23.2	1.37 H	252	26.3	4.5
3	7320.00	46.2 PK	74.0	-27.8	1.26 H	132	34.6	11.6
4	7320.00	35.2 AV	54.0	-18.8	1.26 H	132	23.6	11.6

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.

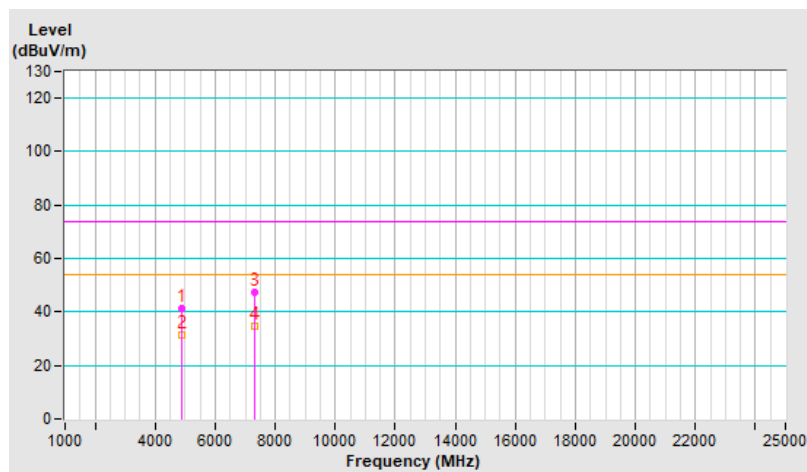


RF Mode	BT-LE 125K	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	41.5 PK	74.0	-32.5	2.16 V	37	37.0	4.5
2	4880.00	31.2 AV	54.0	-22.8	2.16 V	37	26.7	4.5
3	7320.00	47.1 PK	74.0	-26.9	3.40 V	31	35.5	11.6
4	7320.00	34.8 AV	54.0	-19.2	3.40 V	31	23.2	11.6

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.

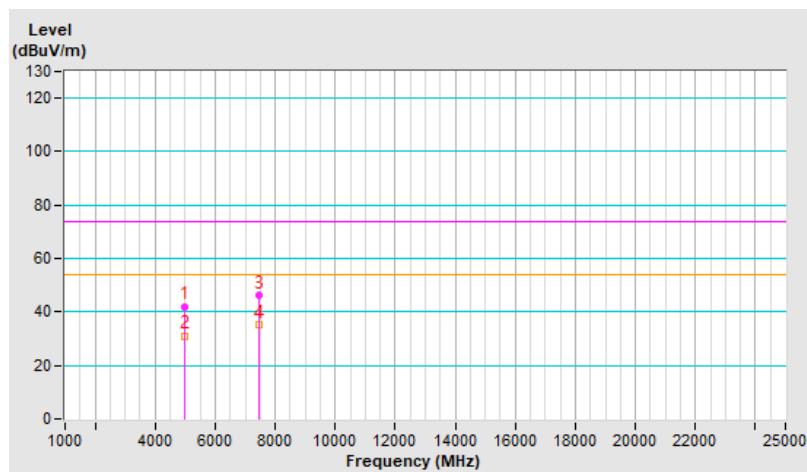


RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4960.00	42.1 PK	74.0	-31.9	1.39 H	266	37.3	4.8
2	4960.00	31.1 AV	54.0	-22.9	1.39 H	266	26.3	4.8
3	7440.00	46.0 PK	74.0	-28.0	1.23 H	117	34.1	11.9
4	7440.00	35.1 AV	54.0	-18.9	1.23 H	117	23.2	11.9

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.

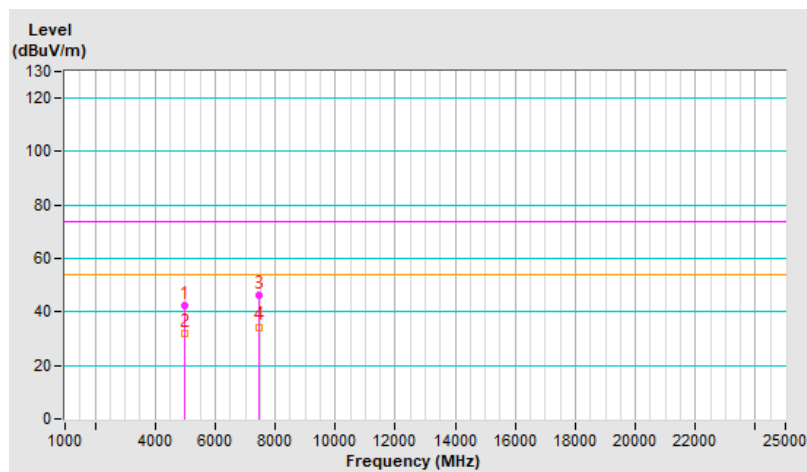


RF Mode	BT-LE 125K	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=510 Hz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4960.00	42.5 PK	74.0	-31.5	2.20 V	36	37.7	4.8
2	4960.00	31.9 AV	54.0	-22.1	2.20 V	36	27.1	4.8
3	7440.00	46.5 PK	74.0	-27.5	3.53 V	26	34.6	11.9
4	7440.00	34.4 AV	54.0	-19.6	3.53 V	26	22.5	11.9

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.

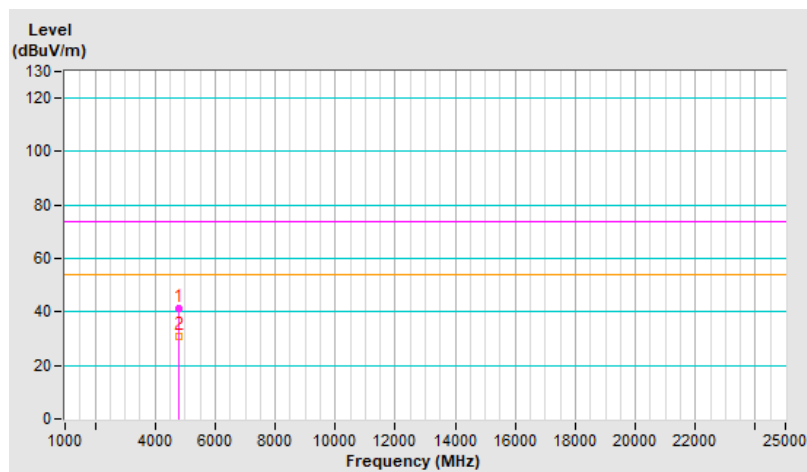


RF Mode	BT-LE 500K	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4804.00	41.4 PK	74.0	-32.6	1.41 H	250	36.9	4.5
2	4804.00	30.7 AV	54.0	-23.3	1.41 H	250	26.2	4.5

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.

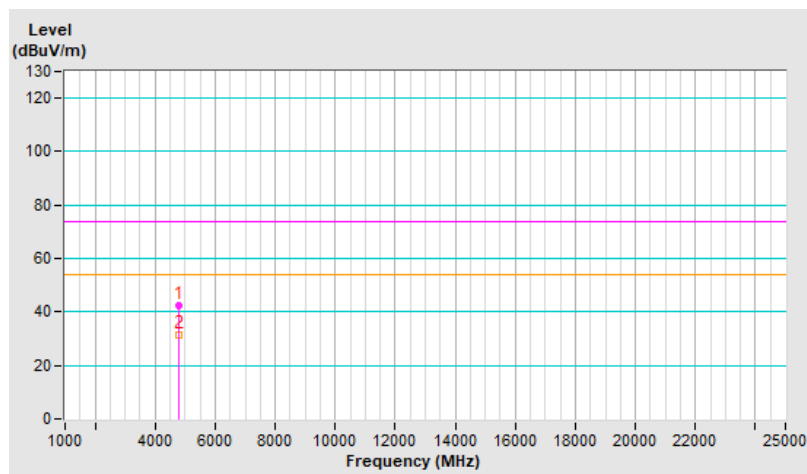


RF Mode	BT-LE 500K	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4804.00	42.3 PK	74.0	-31.7	2.29 V	31	37.8	4.5
2	4804.00	31.4 AV	54.0	-22.6	2.29 V	31	26.9	4.5

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.

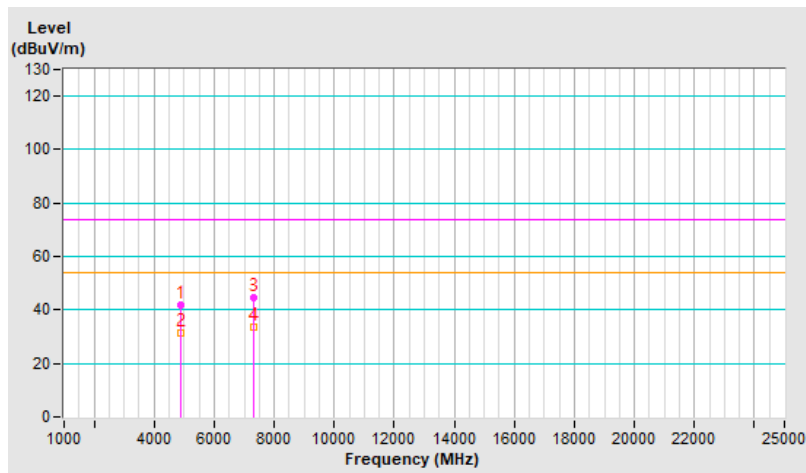


RF Mode	BT-LE 500K	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	41.9 PK	74.0	-32.1	1.35 H	285	37.4	4.5
2	4880.00	31.4 AV	54.0	-22.6	1.35 H	285	26.9	4.5
3	7320.00	44.5 PK	74.0	-29.5	1.33 H	149	32.9	11.6
4	7320.00	33.8 AV	54.0	-20.2	1.33 H	149	22.2	11.6

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.

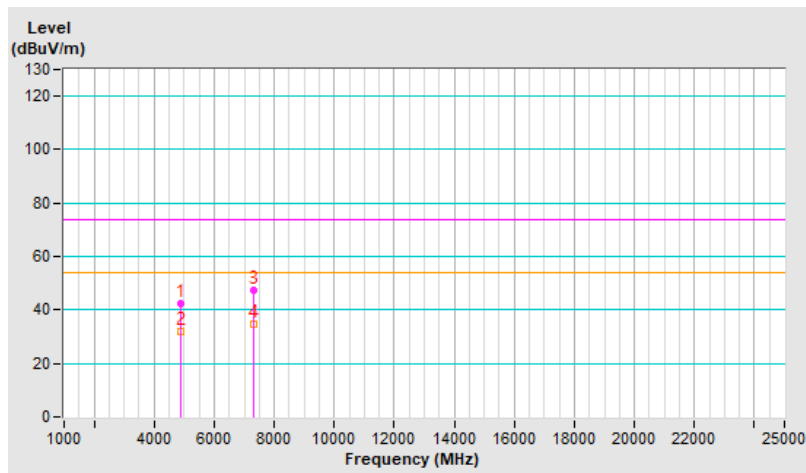


RF Mode	BT-LE 500K	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	42.5 PK	74.0	-31.5	2.18 V	47	38.0	4.5
2	4880.00	31.8 AV	54.0	-22.2	2.18 V	47	27.3	4.5
3	7320.00	47.1 PK	74.0	-26.9	3.45 V	50	35.5	11.6
4	7320.00	34.9 AV	54.0	-19.1	3.45 V	50	23.3	11.6

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.

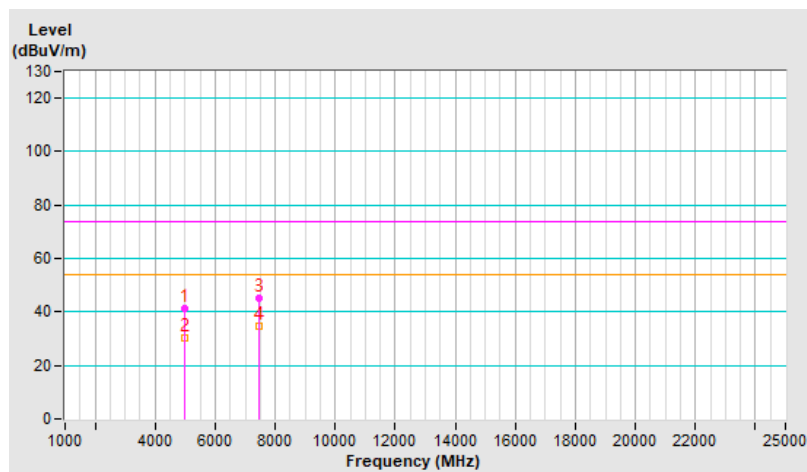


RF Mode	BT-LE 500K	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4960.00	41.2 PK	74.0	-32.8	1.49 H	231	36.4	4.8
2	4960.00	30.4 AV	54.0	-23.6	1.49 H	231	25.6	4.8
3	7440.00	45.4 PK	74.0	-28.6	1.25 H	144	33.5	11.9
4	7440.00	34.7 AV	54.0	-19.3	1.25 H	144	22.8	11.9

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.

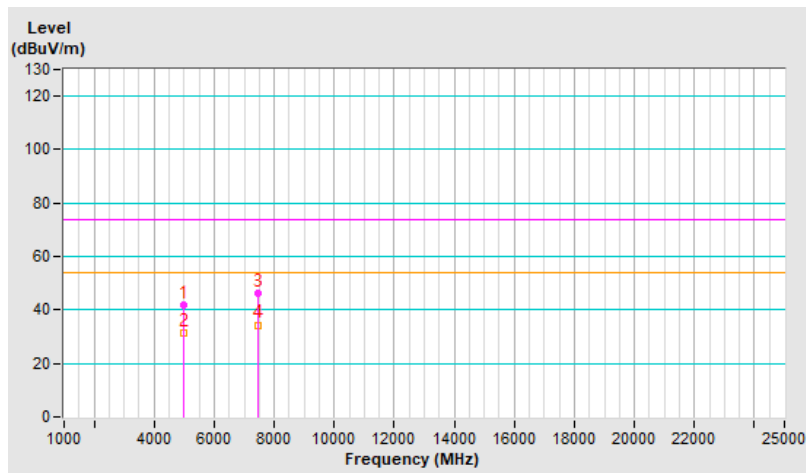


RF Mode	BT-LE 500K	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4960.00	42.0 PK	74.0	-32.0	2.18 V	29	37.2	4.8
2	4960.00	31.5 AV	54.0	-22.5	2.18 V	29	26.7	4.8
3	7440.00	46.3 PK	74.0	-27.7	3.42 V	43	34.4	11.9
4	7440.00	34.4 AV	54.0	-19.6	3.42 V	43	22.5	11.9

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.

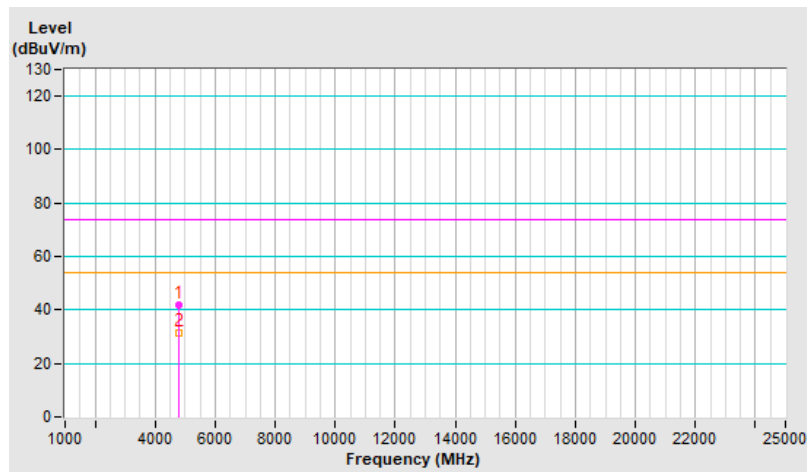


RF Mode	BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4804.00	41.9 PK	74.0	-32.1	1.53 H	260	37.4	4.5
2	4804.00	31.2 AV	54.0	-22.8	1.53 H	260	26.7	4.5

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.

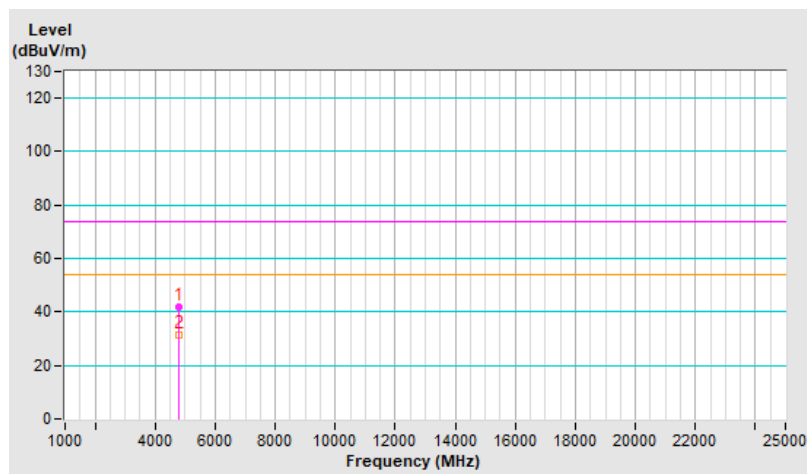


RF Mode	BT-LE 1M	Channel	CH 0 : 2402 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4804.00	41.9 PK	74.0	-32.1	2.24 V	42	37.4	4.5
2	4804.00	31.3 AV	54.0	-22.7	2.24 V	42	26.8	4.5

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.

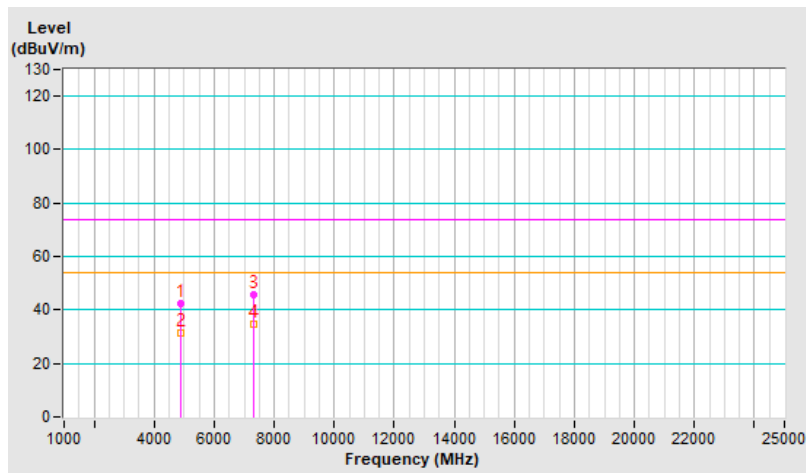


RF Mode	BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	42.4 PK	74.0	-31.6	1.46 H	250	37.9	4.5
2	4880.00	31.6 AV	54.0	-22.4	1.46 H	250	27.1	4.5
3	7320.00	45.7 PK	74.0	-28.3	1.22 H	145	34.1	11.6
4	7320.00	34.7 AV	54.0	-19.3	1.22 H	145	23.1	11.6

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.

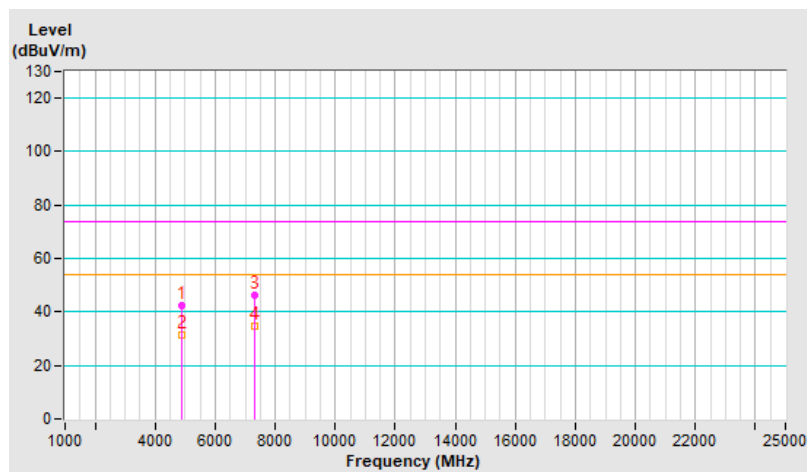


RF Mode	BT-LE 1M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	42.2 PK	74.0	-31.8	2.22 V	5	37.7	4.5
2	4880.00	31.2 AV	54.0	-22.8	2.22 V	5	26.7	4.5
3	7320.00	46.3 PK	74.0	-27.7	3.51 V	42	34.7	11.6
4	7320.00	34.5 AV	54.0	-19.5	3.51 V	42	22.9	11.6

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.

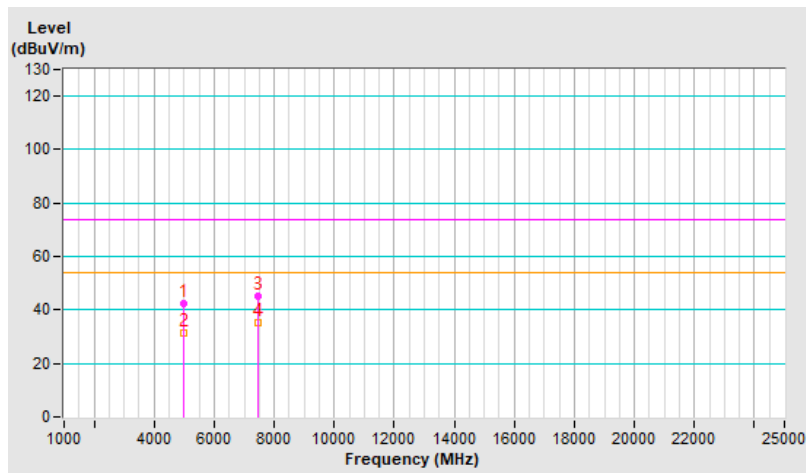


RF Mode	BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4960.00	42.3 PK	74.0	-31.7	1.31 H	256	37.5	4.8
2	4960.00	31.2 AV	54.0	-22.8	1.31 H	256	26.4	4.8
3	7440.00	45.4 PK	74.0	-28.6	1.24 H	148	33.5	11.9
4	7440.00	35.2 AV	54.0	-18.8	1.24 H	148	23.3	11.9

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.

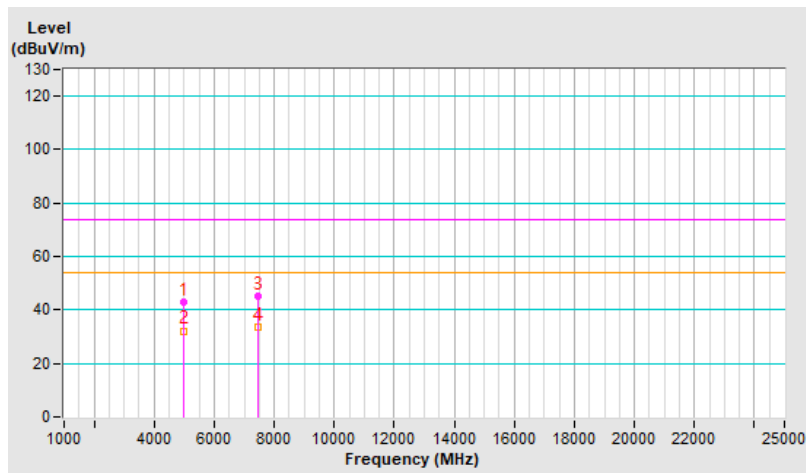


RF Mode	BT-LE 1M	Channel	CH 39 : 2480 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=3 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4960.00	43.1 PK	74.0	-30.9	2.25 V	51	38.3	4.8
2	4960.00	32.2 AV	54.0	-21.8	2.25 V	51	27.4	4.8
3	7440.00	45.0 PK	74.0	-29.0	3.43 V	34	33.1	11.9
4	7440.00	33.4 AV	54.0	-20.6	3.43 V	34	21.5	11.9

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.

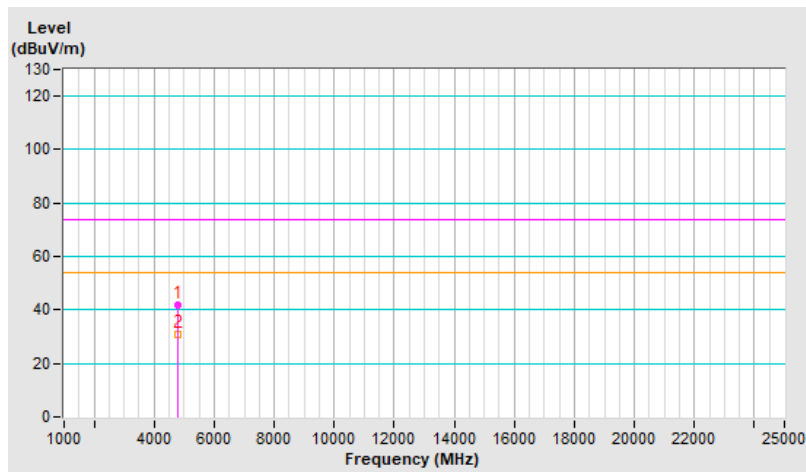


RF Mode	BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4808.00	41.8 PK	74.0	-32.2	1.45 H	258	37.3	4.5
2	4808.00	30.7 AV	54.0	-23.3	1.45 H	258	26.2	4.5

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.

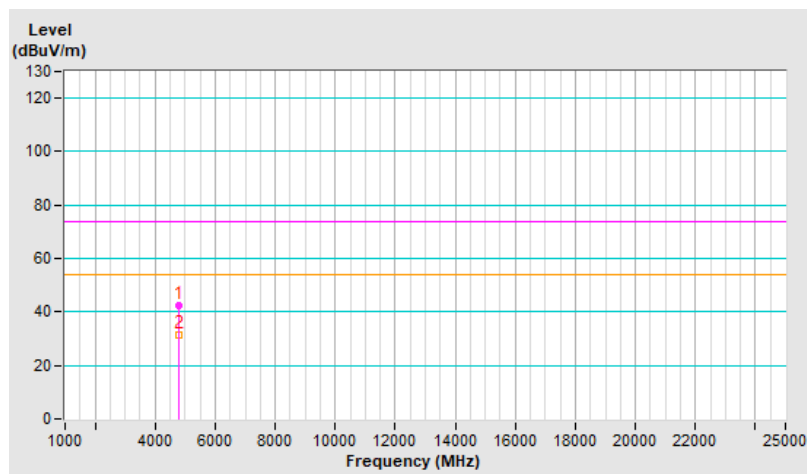


RF Mode	BT-LE 2M	Channel	CH 1 : 2404 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4808.00	42.6 PK	74.0	-31.4	2.29 V	31	38.1	4.5
2	4808.00	31.5 AV	54.0	-22.5	2.29 V	31	27.0	4.5

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.

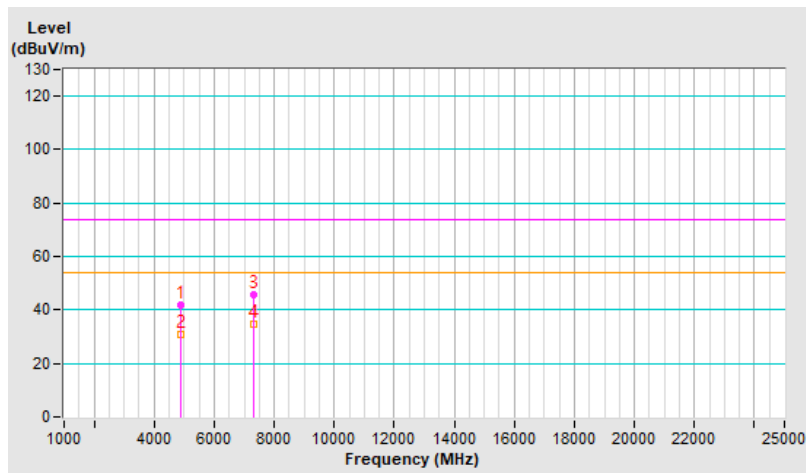


RF Mode	BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	41.7 PK	74.0	-32.3	1.42 H	232	37.2	4.5
2	4880.00	30.9 AV	54.0	-23.1	1.42 H	232	26.4	4.5
3	7320.00	45.9 PK	74.0	-28.1	1.19 H	145	34.3	11.6
4	7320.00	34.7 AV	54.0	-19.3	1.19 H	145	23.1	11.6

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.

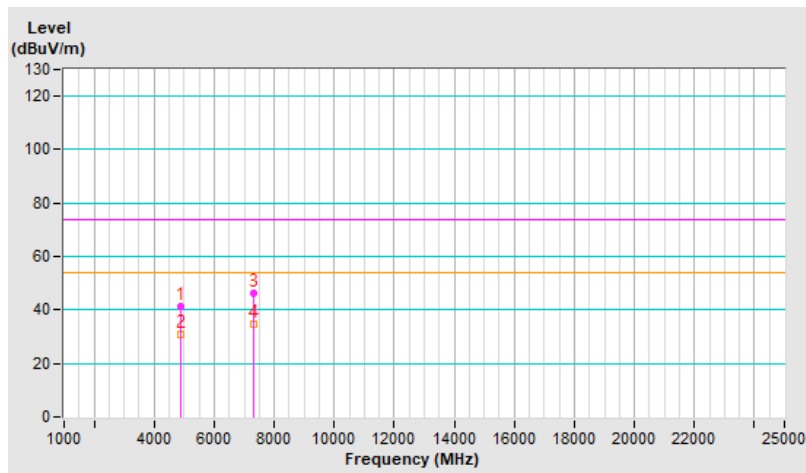


RF Mode	BT-LE 2M	Channel	CH 19 : 2440 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4880.00	41.4 PK	74.0	-32.6	2.27 V	38	36.9	4.5
2	4880.00	30.7 AV	54.0	-23.3	2.27 V	38	26.2	4.5
3	7320.00	46.5 PK	74.0	-27.5	3.40 V	37	34.9	11.6
4	7320.00	34.8 AV	54.0	-19.2	3.40 V	37	23.2	11.6

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.

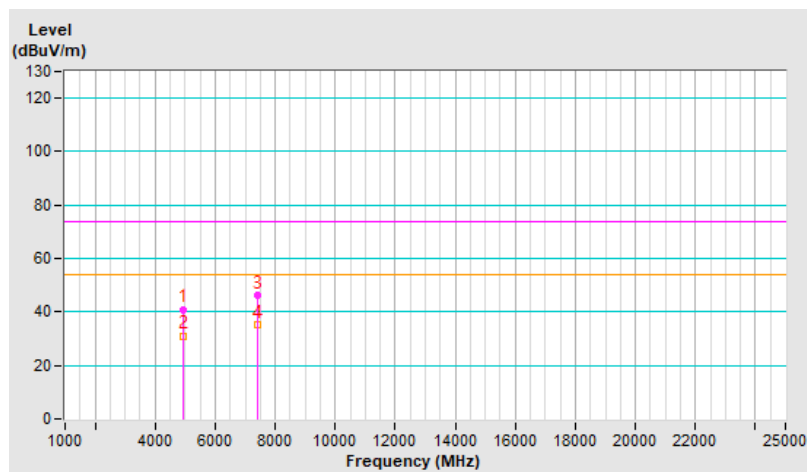


RF Mode	BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4956.00	41.0 PK	74.0	-33.0	1.55 H	279	36.3	4.7
2	4956.00	31.1 AV	54.0	-22.9	1.55 H	279	26.4	4.7
3	7434.00	46.1 PK	74.0	-27.9	1.14 H	139	34.2	11.9
4	7434.00	35.3 AV	54.0	-18.7	1.14 H	139	23.4	11.9

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.

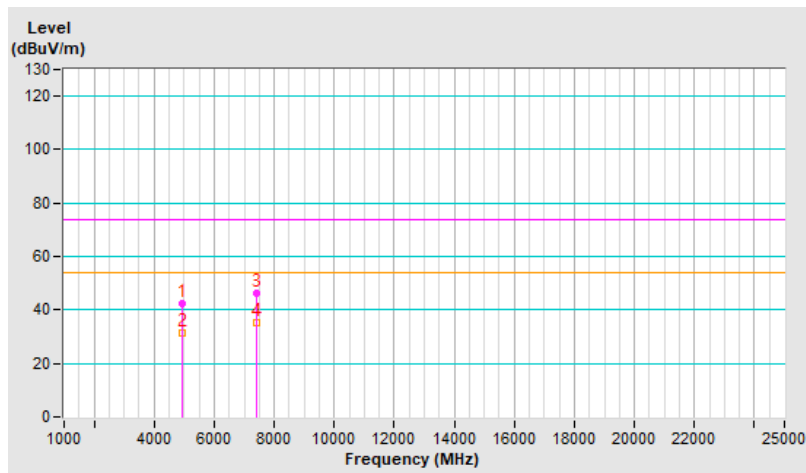


RF Mode	BT-LE 2M	Channel	CH 38 : 2478 MHz
Frequency Range	1 GHz ~ 25 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=1 kHz, DET=Peak
Input Power (System)	120 Vac, 60 Hz	Environmental Conditions	25°C, 75% RH
Tested By	Willy Lin		

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	4956.00	42.5 PK	74.0	-31.5	2.26 V	35	37.8	4.7
2	4956.00	31.3 AV	54.0	-22.7	2.26 V	35	26.6	4.7
3	7434.00	46.5 PK	74.0	-27.5	3.42 V	58	34.6	11.9
4	7434.00	35.2 AV	54.0	-18.8	3.42 V	58	23.3	11.9

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.



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.

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

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