

Radio Test Report

Report No.: RJBDS-WTW-P22031091-2

Test Model: APL68-108

Received Date: Mar. 28, 2022

Test Date: Jun. 22, 2022

Issued Date: Aug. 24, 2022

Applicant: SonicWall Inc.

Address: 1033 McCarthy Blvd., Milpitas, CA 95035, USA

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, Taiwan



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Release Control Record

Issue No.	Description	Date Issued
RJBDYS-WTW-P22031091-2	Original release.	Aug. 24, 2022

1 Certificate of Conformity

Product: Wireless Access Point

Brand: SONICWALL

Test Model: APL68-108

Sample Status: Engineering sample

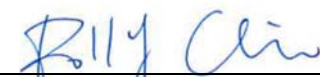
Applicant: SonicWall Inc.

Test Date: Jun. 22, 2022

Standards: ARIB STD-T66 (V3.7), MIC notice 88 Appendix 43
Certification Ordinance Article 2-1-19

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.


Prepared by :


Polly Chien / Specialist

Date:

Aug. 24, 2022

Approved by :


Jeremy Lin / Project Engineer

Date:

Aug. 24, 2022

2 Summary of Test Results

The EUT has been tested according to the following specifications:

Notice 88 Appendix 43 Reference	ARIB STD-T66 Ref.	Report Reference	Parameter	Test Results (Note)
General Provisions				
C	3.2 (4)	4.1	Frequency tolerance	C
D	3.2 (7)	4.2	Occupied bandwidth	C
E	3.2 (6)	4.3	Spurious emissions	C
Transmitting Equipment				
F	3.2 (2)	4.4	Antenna power	C
--	--	--	SAR	NA
Transmitting Antenna				
--	--	3.5	Type, configuration, etc. of transmitting antenna	C
--	--	3.5	Direction pattern of transmitting antenna	C
Receiving Equipment				
G	3.3 (1)	4.5	Spurious emissions of receiver	C
--	--	--	Refer to all articles for transmitting antenna	C
Operating Frequency 2400 to 2483.5MHz				
--	3.7 (1)	3.4	Radio Frequency / modulation section cannot be opened easily	C
--	3.1 (1)	3.1	Communication method	C
--	3.2 (1)a	3.1	Modulation method	C
--	3.2 (1)a	3.1	Spread spectrum method	C
--	3.2 (2)	4.4	Antenna power	C
--	3.6 (2)	4.4	Absolute gain of transmitting antenna	C
--	3.6 (2)	--	Angular width of principal radiation (AWPR)	NA
--	3.2 (10)	--	Number of carriers within 1 MHz bandwidth in OFDM	NA
--	3.2 (8)	--	Spreading bandwidth	NA
--	3.2 (9)	--	Spreading factor	NA
--	3.2 (11)	--	Frequency retention time (FH employed)	NA
--	3.4.1(1)	4.6	Interference Prevention Function	C

Note:

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

C = Conform NC = Not Conform NT = Not Tested NA = Not Applicable

2.1 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration	Calibration Authority	Cal. Method
Spectrum Analyzer / Rohde & Schwarz	FSV40	100980	Apr. 20, 2022	Apr. 19, 2023	Electronics Testing Center, Taiwan	c)
Spectrum Analyzer / Rohde & Schwarz	FSU43	100115	Jan. 27, 2022	Jan. 26, 2023	Electronics Testing Center, Taiwan	c)
Signal Generator / Anritsu	E4438C	MY49071692	Nov. 09, 2021	Nov. 08, 2022	Electronics Testing Center, Taiwan	c)
Power Meter / Anritsu	ML2495A	1232003	Jan. 09, 2022	Jan. 08, 2023	Electronics Testing Center, Taiwan	c)
Power Sensor / Anritsu	MA2411B	1207333	Jan. 09, 2022	Jan. 08, 2023	Electronics Testing Center, Taiwan	c)
Power Splitter / Marvelous Microwave Inc.	MVE8546	20161123081	Jan. 12, 2022	Jan. 11, 2023	BV CPS E&E	d)
AC Power Supply / Extech	6905S	1991553	Note 3	Note 3	BV CPS E&E	d)
True RMS Clamp Meter / Fluke	325	31130711WS	Jun. 09, 2022	Jun. 08, 2023	Electronics Testing Center, Taiwan	c)

Note:

1. Calibration Method

- Calibration conducted by the National Institute of Information and Communications Technology (NICT) or a designated calibration agency under Article 102-18 paragraph (1) of the Radio Law.
- Calibration conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Law (Law No. 51 of 1992) Japan Calibration Service System.
- Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- Calibration conducted by using other equipment that listed above from a) to c).

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

3. The power supply and power splitter no evaluation calibrated, which used the digital multimeter to verify before each testing.

2.2 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in TR 100 028-1.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Parameter	Uncertainty
Occupied Bandwidth	491.896Hz
Spurious emissions	2.208dB
Output power density	2.889dB
Out of band radiated power	3.93dB
Frequency Tolerance	6805.18Hz

2.3 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Wireless Access Point
Brand	SONICWALL
Model	APL68-108
Status of EUT	Engineering sample
Power Supply Rating	12Vdc from adapter 48-56Vdc from POE
Modulation Type	GFSK
Transfer Rate	Bluetooth LE 4.0: 1Mbps Bluetooth LE 5.0: 2Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	40
Rated RF Output Power	Refer to note
Conducted RF Output Power	Refer to note
Radiated RF Output Power	Refer to note
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	BRACKET T-BAR LFP (Brand: Senao, model: 6301A4133020)
Data Cable Supplied	NA

Note:

1. The power table as below:

	Rated power (mW)	Conducted RF output power (mW)	Radiated RF output power (mW)
Bluetooth LE 4.0: 1Mbps	2	1.845	4.325
Bluetooth LE 5.0: 2Mbps	2	1.837	4.306

2. The EUT consumes power from the following adapter and POE.

Adapter (Option)	
Brand	Sunny
Model	SYS1546-3612-T3
Input Power	100-240Vac, 50-60Hz, 1.5A Max
Output Power	12Vdc, 3.0A
Power cord	Non-shielded AC (1.77m) Non-shielded DC (1.86m) with one core

POE (Support unit only)	
Brand	EnGenius
Model	EPA5006GAT
Input Power	100-240Vac, 50-60Hz, 0.8A
Output Power	48-56Vdc, 0.6A
Power cord	Non-shielded AC (0.5m)

3. The antenna information is listed as below.

No.	Type	Connector	Gain (dBi)				
			2400MHz	2450MHz	2500MHz	5150MHz	5500MHz
2G1	PIFA	IPEX I	3.05	3.14	3.21	-	-
2G2	PIFA	IPEX I	3.52	3.43	3.64	-	-
5G1	PIFA	IPEX I	-	-	-	4.52	4.63
5G2	PIFA	IPEX I	-	-	-	4.13	4.98
Scan	PIFA	IPEX I	3.83	3.93	3.81	3.81	4.23
BLE	PIFA	IPEX I	3.09	3.70	3.58	-	-

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

3.2 Description of Test Modes

40 channels are provided to this EUT:

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

Note: The channels which were indicated in bold type of the above channel list were selected as representative test channel. Therefore only the data of the test channels were recorded in this report.

By means of test software (Tera Term Version 4.83) provided by manufacture, the power levels during the tests were set according to the following codes:

Modulation Type: GFSK		
Channel	Bluetooth LE 4.0: 1Mbps	Bluetooth LE 5.0: 2Mbps
	Power Setting	Power Setting
0	0x9	0x9
19	0x9	0x9
39	0x9	0x9

3.3 Test Conditions

Test Conditions	Voltage (Vac)
Vnormal	100

Note: When the input voltage to receiver RF circuit varies below $\pm 1\%$ as the input voltage from the external power supply to the receiver varies $\pm 10\%$

Test Item	Environmental Conditions	Test Engineer
Frequency Tolerance	25 deg.C, 60 % RH	Wayne Lin
Occupied Bandwidth (99% power bandwidth)	25 deg.C, 60 % RH	Wayne Lin
Spreading Bandwidth (90% power bandwidth)	25 deg.C, 60 % RH	Wayne Lin
Spurious Emissions for Transmitter	25 deg.C, 60 % RH	Wayne Lin
Antenna Power	25 deg.C, 60 % RH	Wayne Lin
Spurious Emissions for Receiver	25 deg.C, 60 % RH	Wayne Lin

3.4 Assembly

The RF areas of EUT are covered by shielding frames, and is not capable of being open easily.

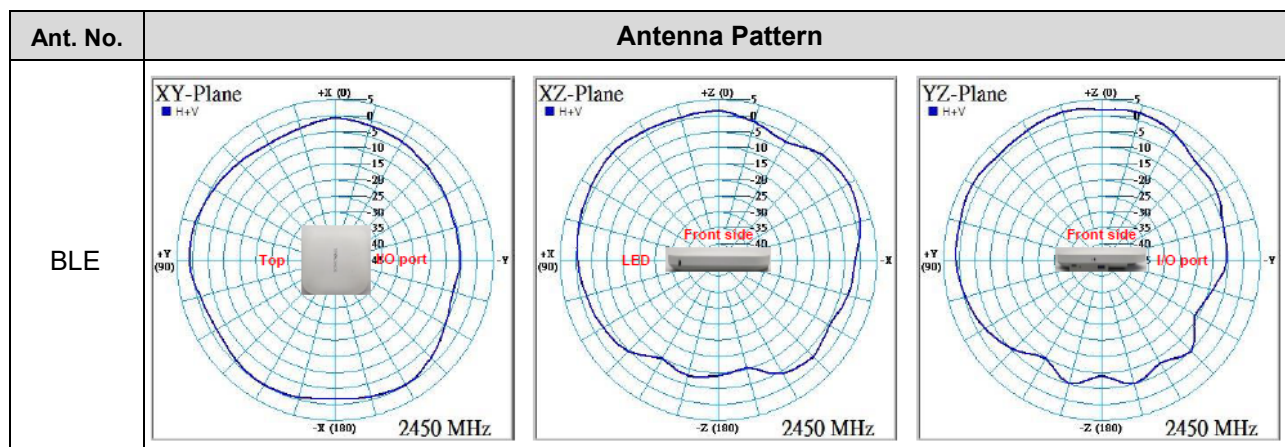
3.5 Antenna Specifications

3.5.1 Antenna Gain

No.	Type	Connector	Gain (dBi)				
			2400MHz	2450MHz	2500MHz	5150MHz	5500MHz
2G1	PIFA	IPEX I	3.05	3.14	3.21	-	-
2G2	PIFA	IPEX I	3.52	3.43	3.64	-	-
5G1	PIFA	IPEX I	-	-	-	4.52	4.63
5G2	PIFA	IPEX I	-	-	-	4.13	4.98
Scan	PIFA	IPEX I	3.83	3.93	3.81	3.81	4.23
BLE	PIFA	IPEX I	3.09	3.70	3.58	-	-

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

3.5.2 Antenna Pattern



4 Test Results

4.1 Frequency Tolerance Measurement

4.1.1 Limits of Frequency Tolerance Measurement

Tolerance of frequency shall be +/- 50ppm

4.1.2 Test Setup



4.1.3 Test Results

Bluetooth LE 4.0: 1Mbps

Channel	Frequency (MHz)	V_{normal}	
		Carrier Frequency (MHz)	Frequency Tolerance (ppm)
0	2402	2402.002885	1.201
19	2440	2440.003686	1.510
39	2480	2480.002404	0.969

Bluetooth LE 5.0: 2Mbps

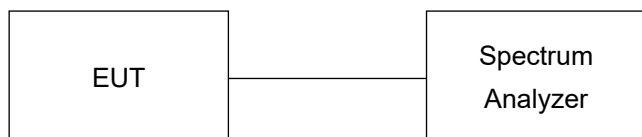
Channel	Frequency (MHz)	V_{normal}	
		Carrier Frequency (MHz)	Frequency Tolerance (ppm)
0	2402	2402.003800	1.582
19	2440	2440.004000	1.639
39	2480	2480.003600	1.451

4.2 Occupied Bandwidth Measurement (99% power bandwidth)

4.2.1 Limits of Occupied Bandwidth Measurement

Item	Limit
Occupied bandwidth	<26MHz

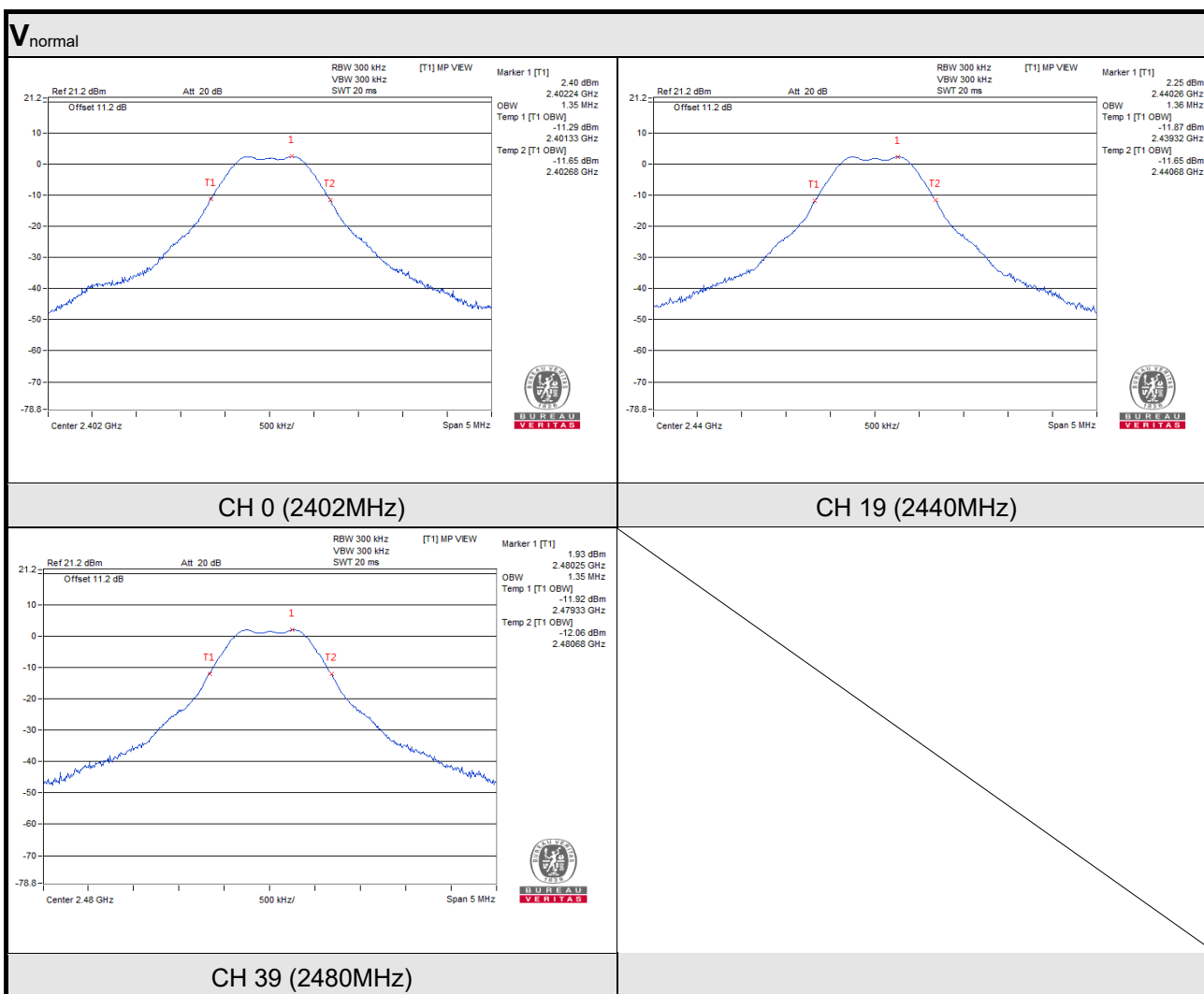
4.2.2 Test Setup



4.2.3 Test Results

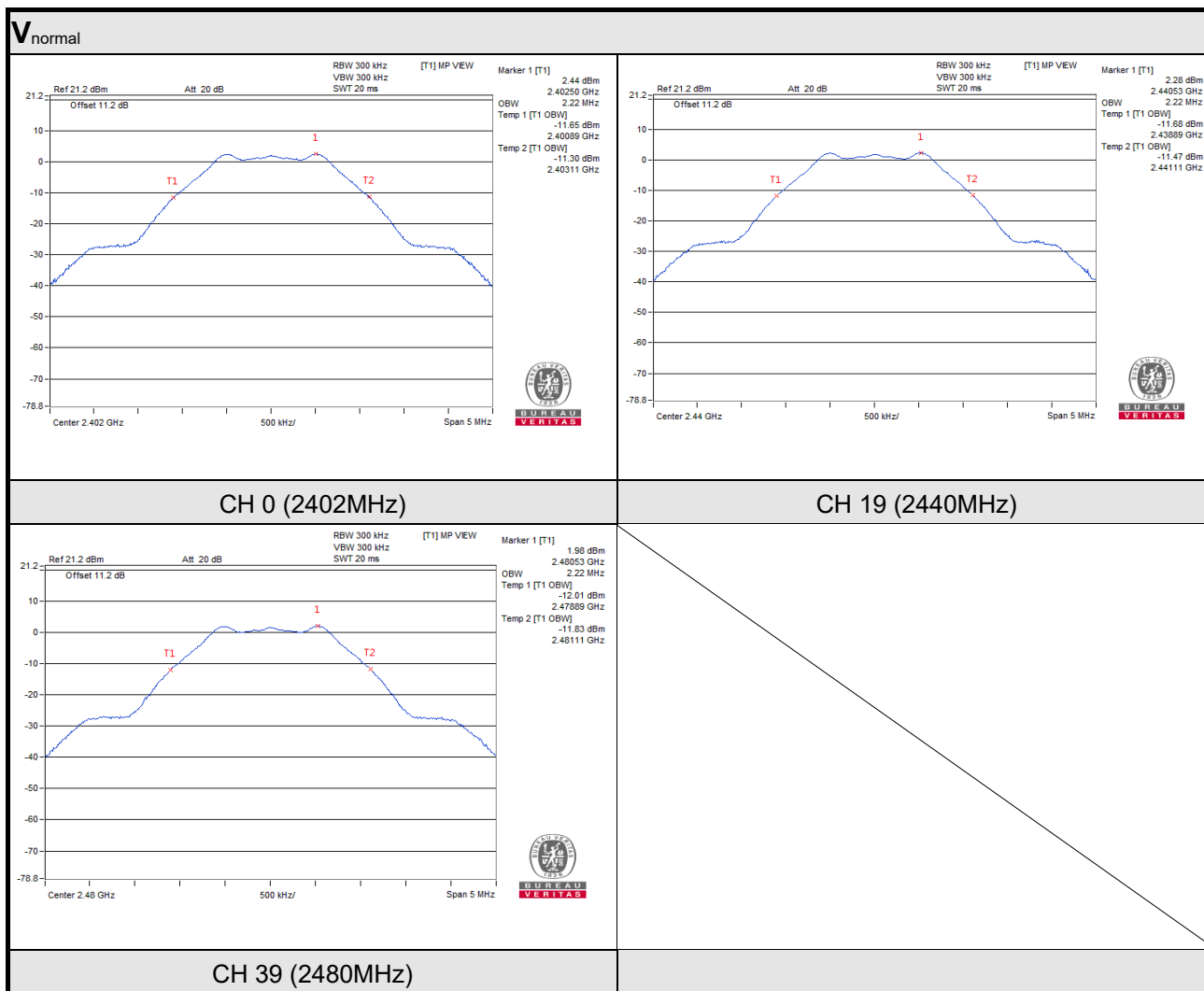
Bluetooth LE 4.0: 1Mbps

Channel	Frequency (MHz)	V _{normal}
		Occupied Bandwidth (MHz)
0	2402	1.35
19	2440	1.36
39	2480	1.35



Bluetooth LE 5.0: 2Mbps

Channel	Frequency (MHz)	V _{normal}
		Occupied Bandwidth (MHz)
0	2402	2.22
19	2440	2.22
39	2480	2.22



4.3 Spurious Emissions for Transmitter Measurement

4.3.1 Limits of Spurious Emissions

Frequencies (MHz)	Limit
Operating frequency 2400 to 2483.5MHz	
30.0MHz to 1000.0MHz	$\leq 0.25 \text{ uW/100kHz}$
1000.0MHz to 2387MHz	$\leq 2.5 \text{ uW/MHz}$
2387.0MHz to 2400.0MHz	$\leq 25 \text{ uW/MHz}$
2483.5MHz to 2496.5MHz	$\leq 25 \text{ uW/MHz}$
2496.5MHz to 12500.0MHz	$\leq 2.5 \text{ uW/MHz}$

4.3.2 Test Setup



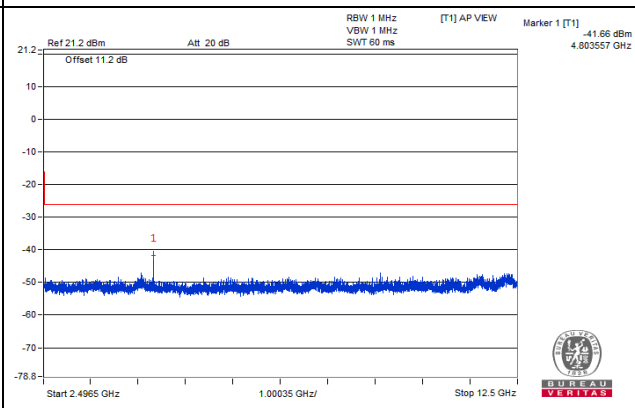
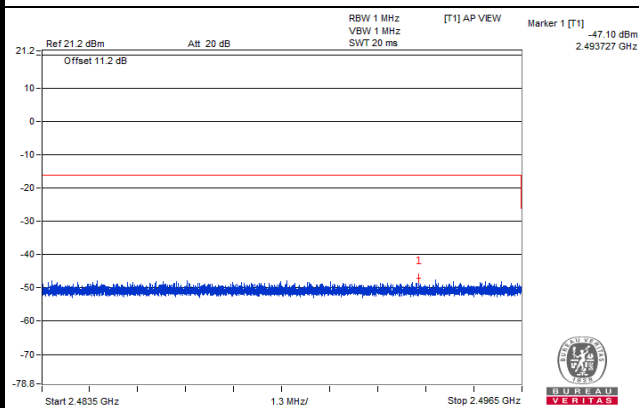
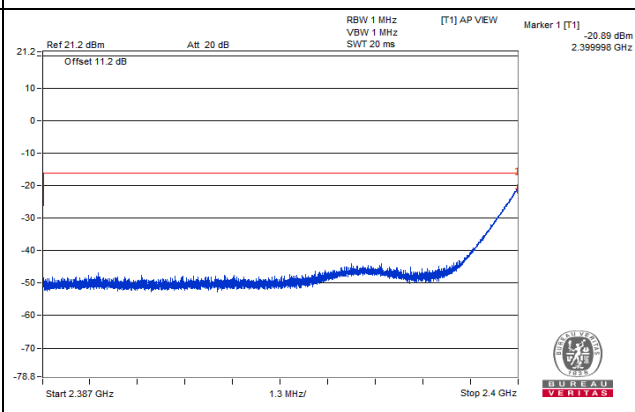
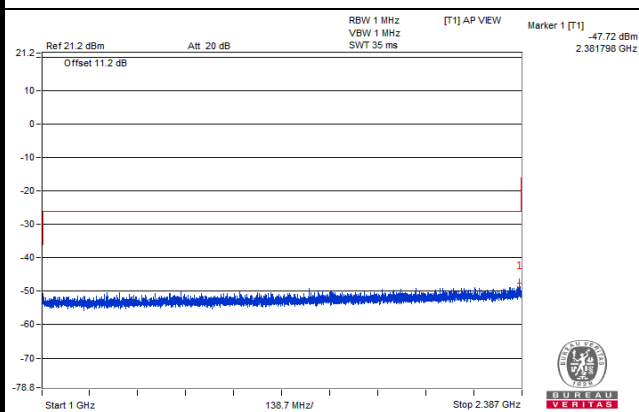
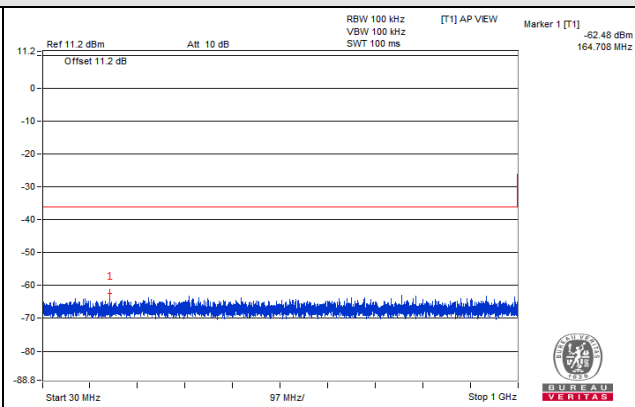
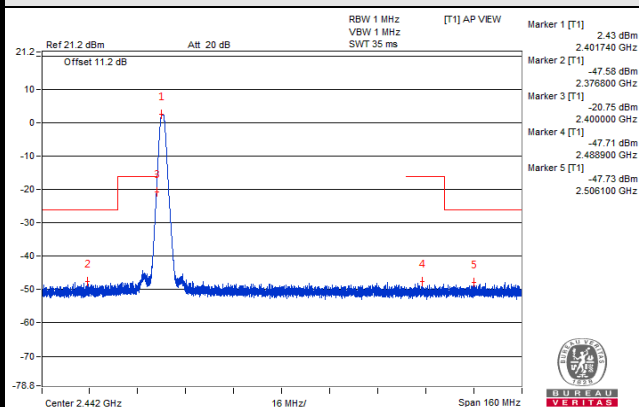
4.3.3 Test Results

Bluetooth LE 4.0: 1Mbps

TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASURE. VALUE(uW)	LIMIT	RESULT
TEST CHANNEL		CH 0 (2402MHz)			
V _{normal}	30MHz to 1000MHz	164.708	0.000565	0.25 uW/100kHz	PASS
	1000MHz to 2387MHz	2381.798	0.016904	2.5 uW/MHz	PASS
	2387MHz to 2400MHz	2399.998	8.147043	25 uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2493.727	0.019498	25 uW/MHz	PASS
	2496.5MHz to 12500MHz	4803.557	0.068234	2.5 uW/MHz	PASS
TEST CHANNEL		CH 19 (2440MHz)			
V _{normal}	30MHz to 1000MHz	422.365	0.000498	0.25 uW/100kHz	PASS
	1000MHz to 2387MHz	2169.067	0.013274	2.5 uW/MHz	PASS
	2387MHz to 2400MHz	2398.804	0.015959	25 uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2490.910	0.020797	25 uW/MHz	PASS
	2496.5MHz to 12500MHz	4879.833	0.046559	2.5 uW/MHz	PASS
TEST CHANNEL		CH 39 (2480MHz)			
V _{normal}	30MHz to 1000MHz	558.650	0.000536	0.25 uW/100kHz	PASS
	1000MHz to 2387MHz	2231.829	0.015311	2.5 uW/MHz	PASS
	2387MHz to 2400MHz	2399.398	0.018197	25 uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2483.503	0.099312	25 uW/MHz	PASS
	2496.5MHz to 12500MHz	9919.097	0.043752	2.5 uW/MHz	PASS

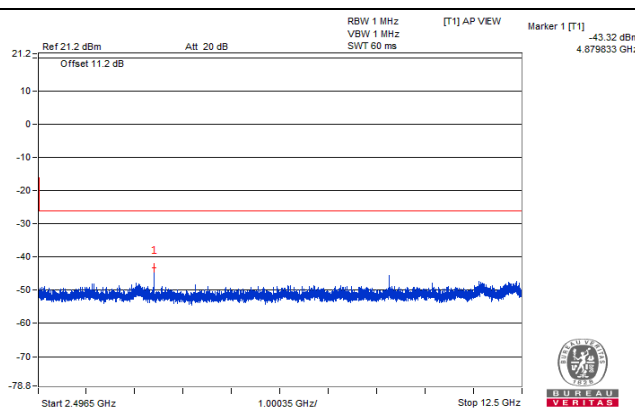
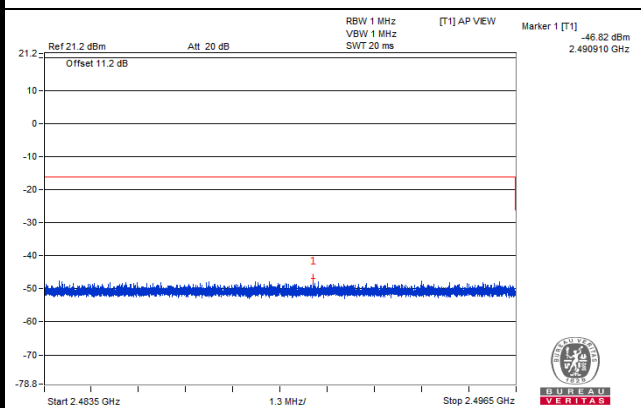
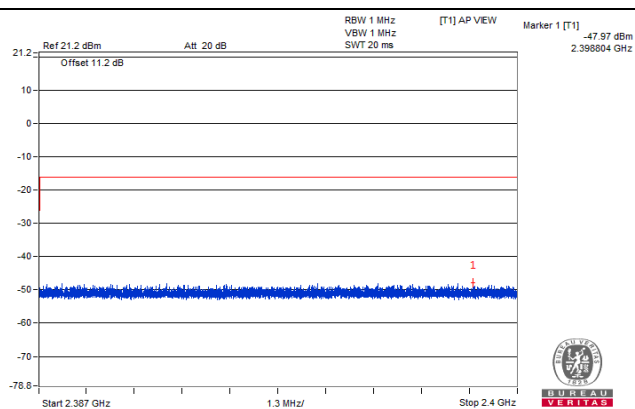
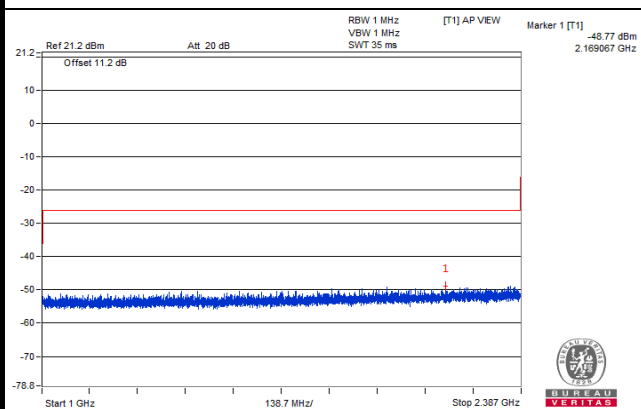
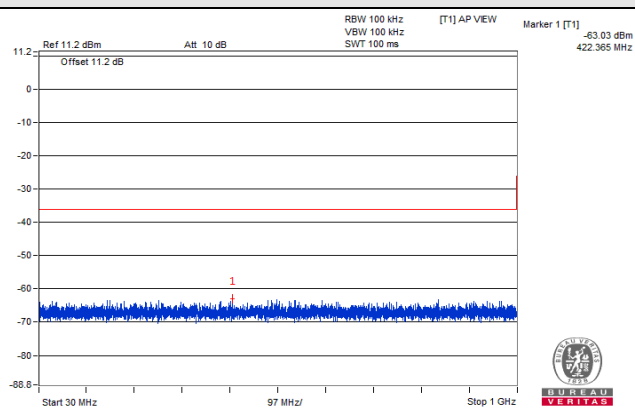
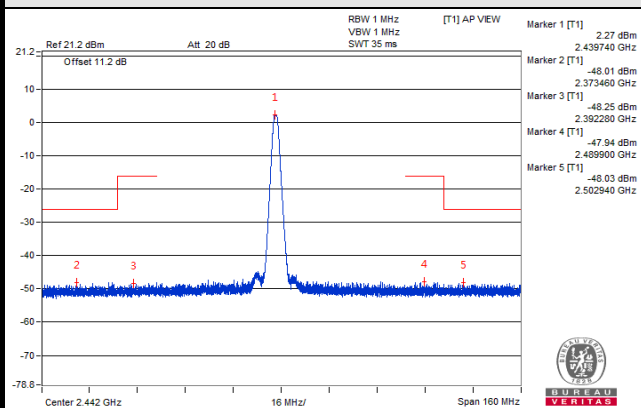
NOTE: 1. The spectrum plots are attached on the following pages.

Vnormal



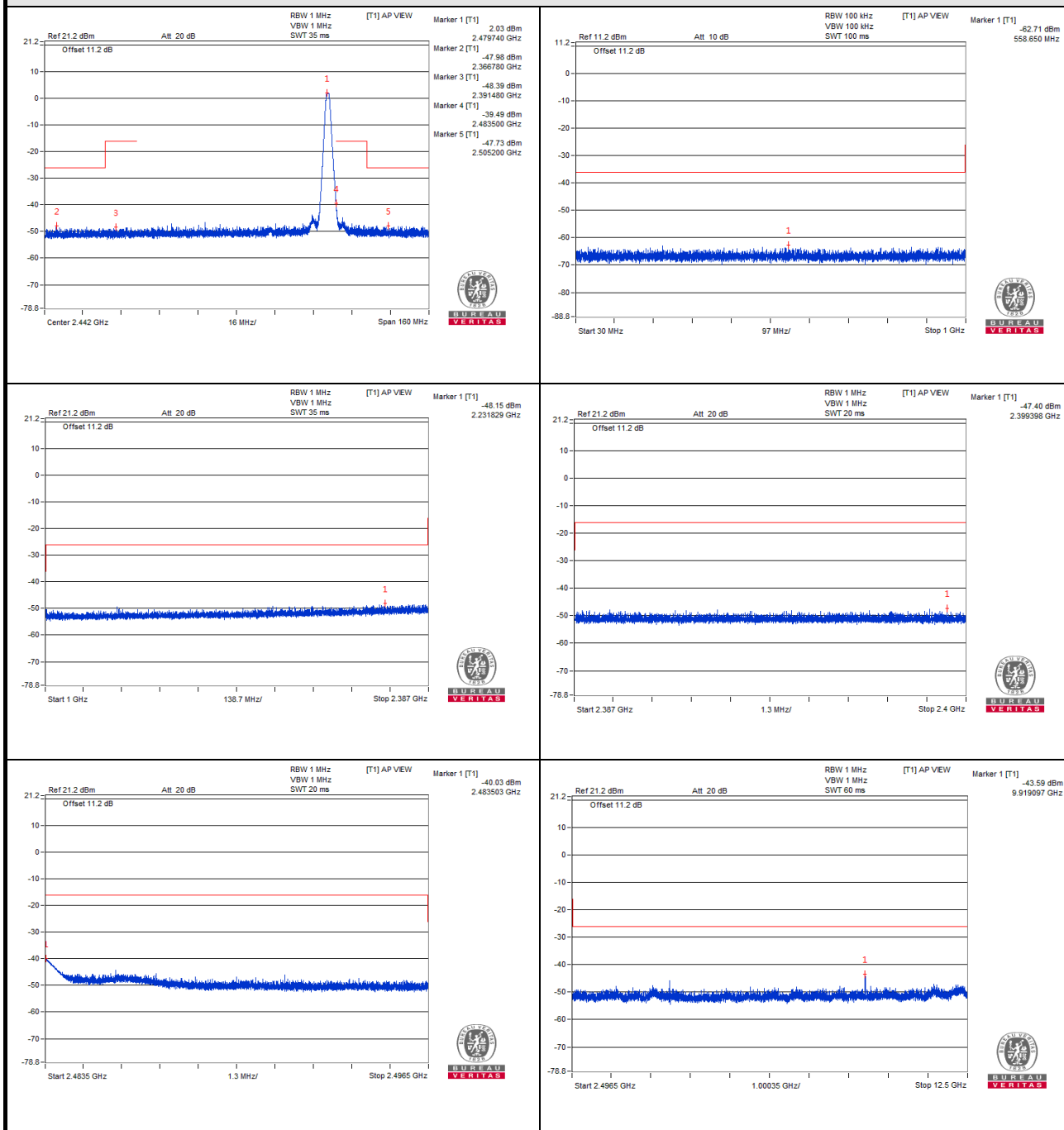
CH 0 (2402MHz)

Vnormal



CH 19 (2440MHz)

Vnormal



CH 39 (2480MHz)

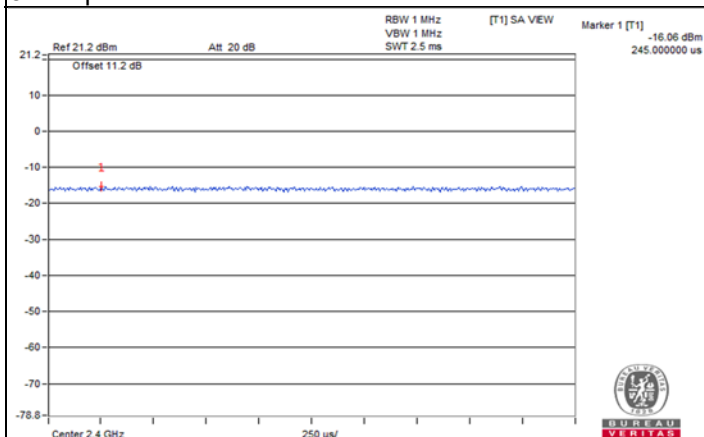
Bluetooth LE 5.0: 2Mbps

TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASURE. VALUE(uW)	LIMIT	RESULT
TEST CHANNEL		CH 0 (2402MHz)			
V _{normal}	30MHz to 1000MHz	683.052	0.000499	0.25 uW/100kHz	PASS
	1000MHz to 2387MHz	2207.730	0.014962	2.5 uW/MHz	PASS
	2387MHz to 2400MHz	2400.000	24.771678	25 uW/MHz	PASS(1)
	2483.5MHz to 2496.5MHz	2495.736	0.019634	25 uW/MHz	PASS
	2496.5MHz to 12500MHz	4802.306	0.063096	2.5 uW/MHz	PASS
TEST CHANNEL		CH 19 (2440MHz)			
V _{normal}	30MHz to 1000MHz	191.990	0.000480	0.25 uW/100kHz	PASS
	1000MHz to 2387MHz	2324.758	0.013677	2.5 uW/MHz	PASS
	2387MHz to 2400MHz	2392.135	0.017620	25 uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2483.527	0.018281	25 uW/MHz	PASS
	2496.5MHz to 12500MHz	4881.084	0.048753	2.5 uW/MHz	PASS
TEST CHANNEL		CH 39 (2480MHz)			
V _{normal}	30MHz to 1000MHz	998.666	0.000615	0.25 uW/100kHz	PASS
	1000MHz to 2387MHz	2384.919	0.018535	2.5 uW/MHz	PASS
	2387MHz to 2400MHz	2389.177	0.016444	25 uW/MHz	PASS
	2483.5MHz to 2496.5MHz	2483.506	0.210863	25 uW/MHz	PASS
	2496.5MHz to 12500MHz	4961.112	0.036392	2.5 uW/MHz	PASS

- NOTE:** 1. The spectrum plots are attached on the following pages.
2. (No.): The value was tested under Measuring Mode *Zero Span.

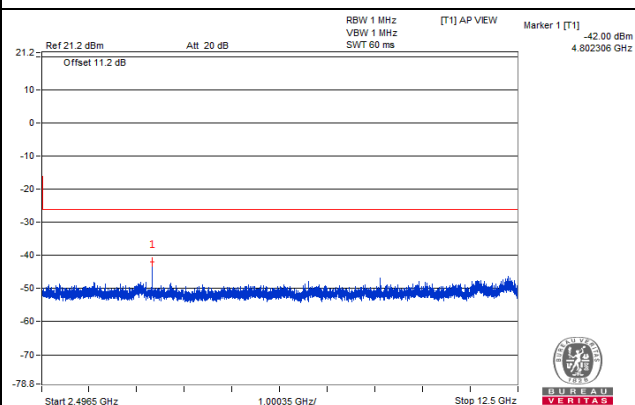
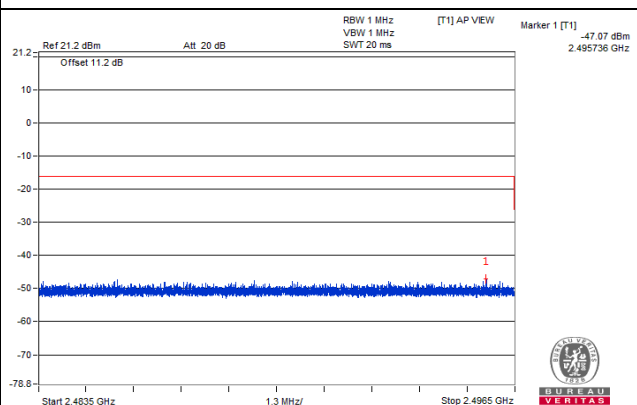
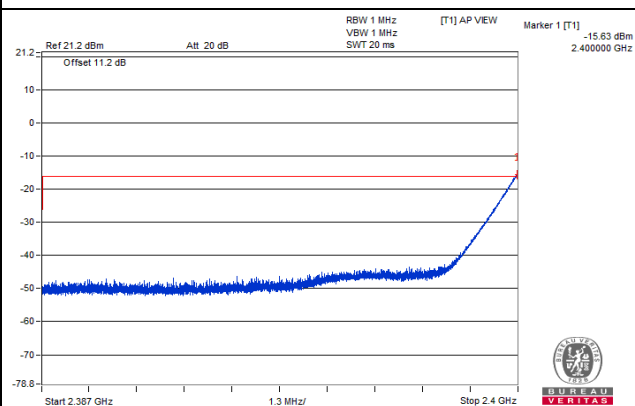
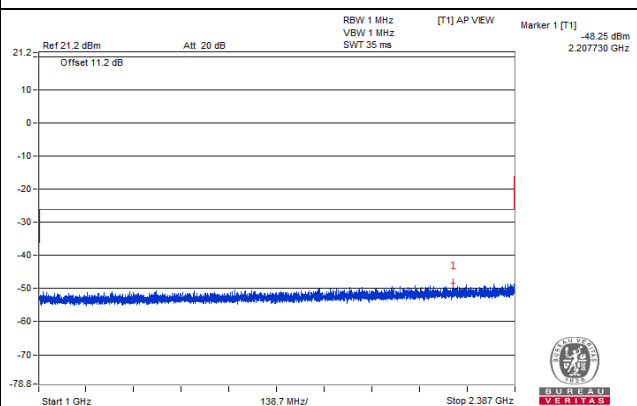
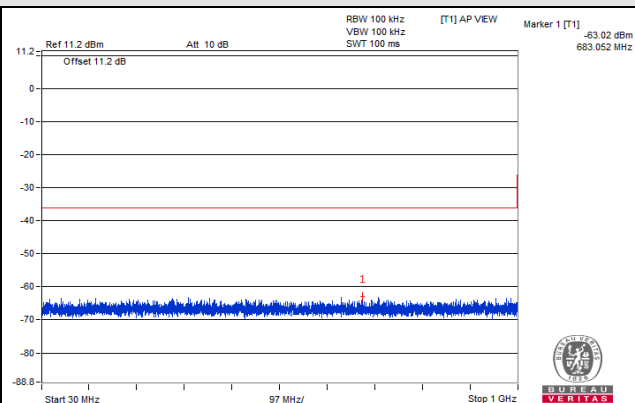
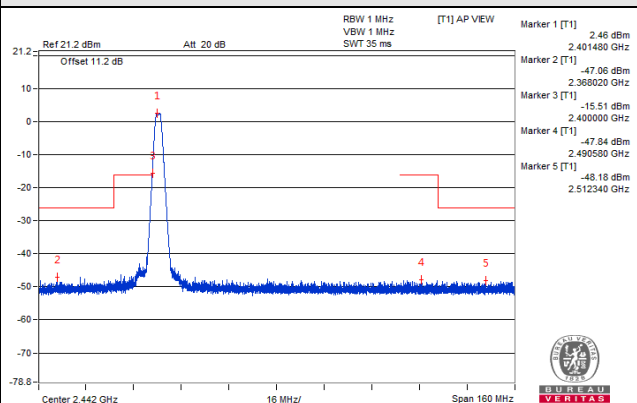
Measuring Mode *Zero Span

1. Set the spectrum analyzer as below and it takes in a value of all data point.
2. Regarding the all data value, it transforms the "dBm" value into "uW" value.
3. It adds the all values and calculates a grand total. Define a grand total as "P".
4. It divides "P" by sample data point (ex.501) and calculates the mean value.
5. It reports the mean value.



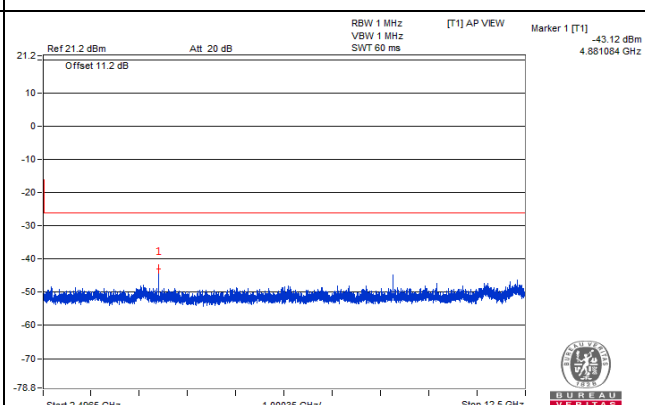
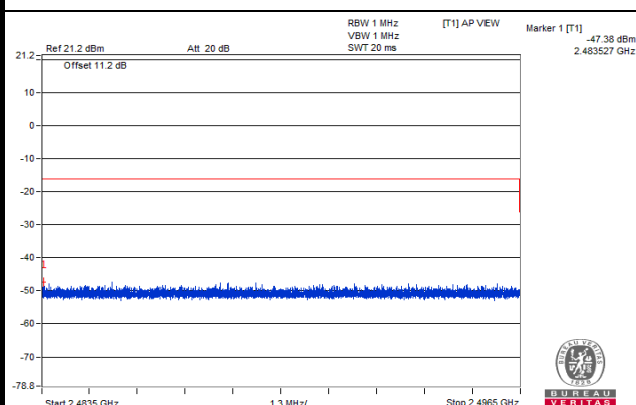
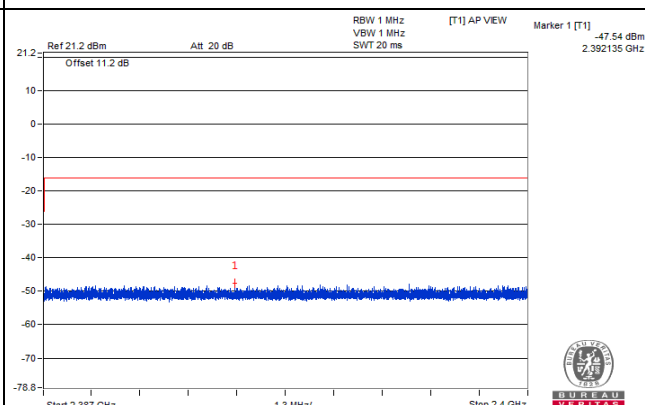
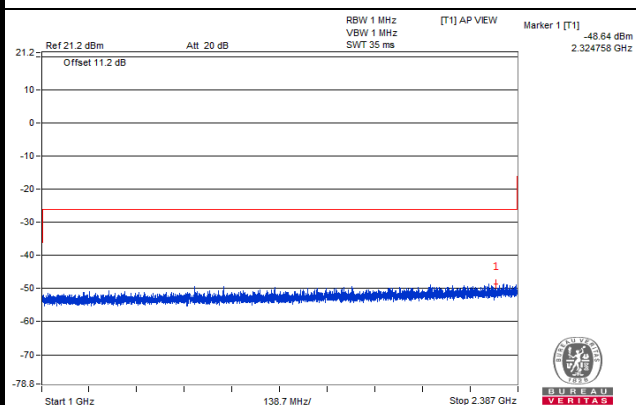
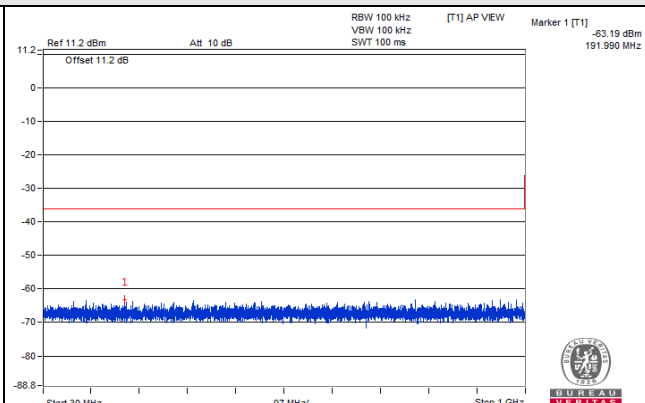
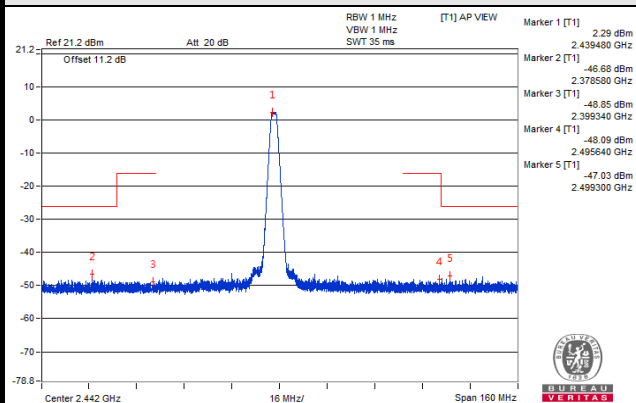
1 2400.000MHz P = 24.771678uW

Vnormal



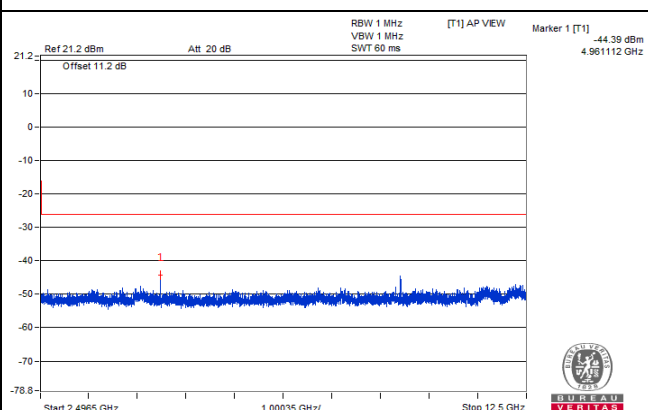
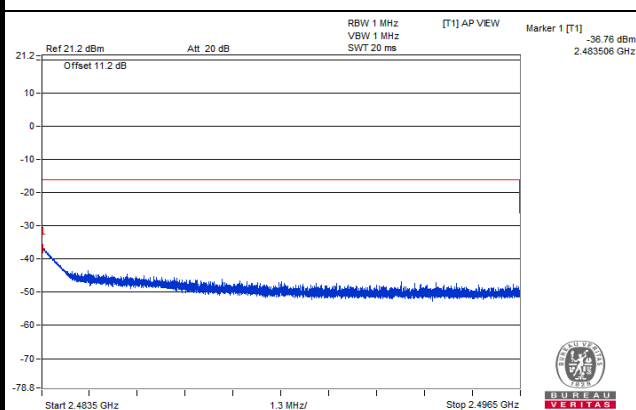
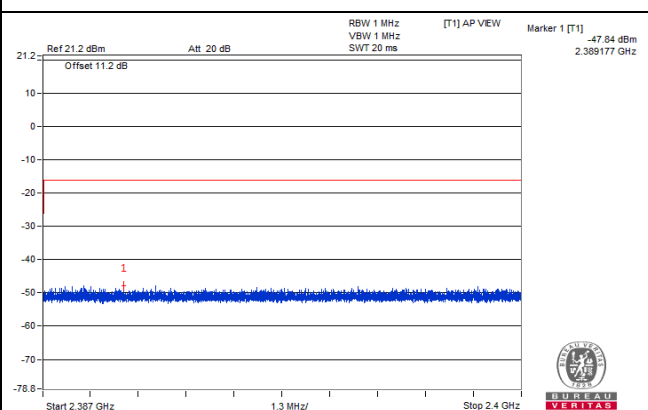
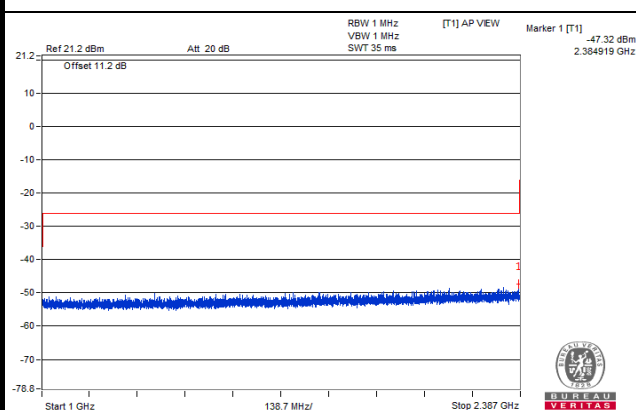
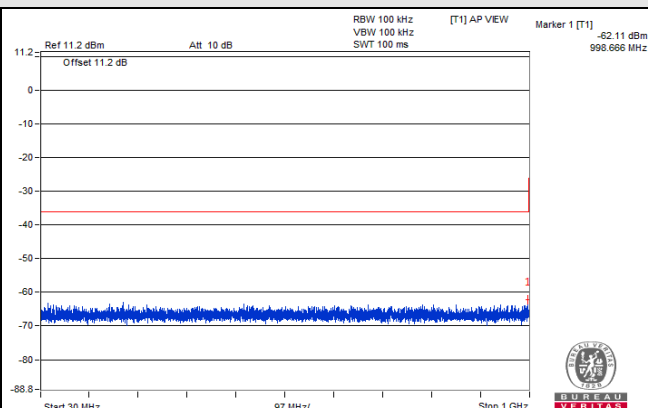
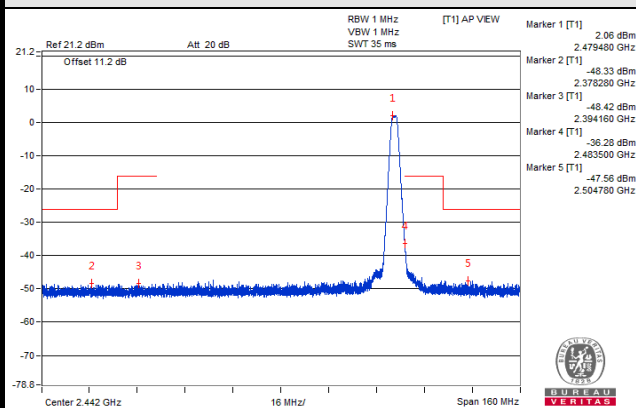
CH 0 (2402MHz)

Vnormal



CH 19 (2440MHz)

Vnormal



CH 39 (2480MHz)

4.4 Antenna Power Measurement

4.4.1 Limits of Antenna Power

Modulation Method	Frequency Band Used	Antenna Power (Max.)	EIRP Limit (Note 3)
DSSS	2400 – 2483.5 MHz	10mW/MHz	12.14 dBm/MHz ~ 22.14 dBm/MHz (16.368 mW/MHz ~ 163.68 mW/MHz)
OFDM (Note 1)	2400 – 2483.5 MHz	10mW/MHz	12.14 dBm/MHz ~ 22.14 dBm/MHz (16.368 mW/MHz ~ 163.68 mW/MHz)
OFDM (Note 2)	2400 – 2483.5 MHz	5mW/MHz	9.13 dBm/MHz ~ 19.13 dBm/MHz (8.185 mW/MHz ~ 81.846 mW/MHz)
Other than the above	2400 – 2483.5 MHz	10mW	12.14 dBm ~ 22.14 dBm (16.368 mW ~ 163.68 mW)

Note:

1. Occupied bandwidth is less than 26MHz
2. Occupied bandwidth is more than 26MHz and less than 38MHz
3. EIRP limit is variable by the HPBA, the HPBA (half-power beam width) of the antenna shall be 360/A degrees or less, where A = EIRP/(2.14 dBi + "Antenna Power (limit)).
4. Tolerance of antenna power shall be +20% (upper value) and -80% (lower value).

4.4.2 Test Setup



4.4.3 Test Results

Bluetooth LE 4.0: 1Mbps

Voltage (Vac)	Channel Number	Frequency (MHz)	Conducted RF Output Power (mW)	Radiated RF Output Power (mW)
100	0	2402	1.845	4.325
	19	2440	1.742	4.084
	39	2480	1.675	3.927
Max. Limit (mW)			10	-
Rated Power (mW)			2	-
Tolerance of Antenna Power (mW)			0.4 ~ 2.4	-
Max. EIRP Limit (mW)			-	16.368

Note: 1. Antenna gain is 3.7dBi.

2. The radiated RF output power density is a “calculated” value derived from the conducted value.

3. Formula: Radiated RF output power = Conducted RF output power + Antenna gain

Bluetooth LE 5.0: 2Mbps

Voltage (Vac)	Channel Number	Frequency (MHz)	Conducted RF Output Power (mW)	Radiated RF Output Power (mW)
100	0	2402	1.837	4.306
	19	2440	1.762	4.131
	39	2480	1.671	3.917
Max. Limit (mW)			10	-
Rated Power (mW)			2	-
Tolerance of Antenna Power (mW)			0.4 ~ 2.4	-
Max. EIRP Limit (mW)			-	16.368

Note: 1. Antenna gain is 3.7dBi.

2. The radiated RF output power density is a “calculated” value derived from the conducted value.

3. Formula: Radiated RF output power = Conducted RF output power + Antenna gain

4.5 Spurious Emissions for Receiver

4.5.1 Limits of Spurious Emissions for Receiver

Frequencies (MHz)	Limit
Below 1GHz	$\leq 4\text{nW}$ (-54dBm)
Above 1GHz	$\leq 20\text{nW}$ (-47dBm)

4.5.2 Test Setup



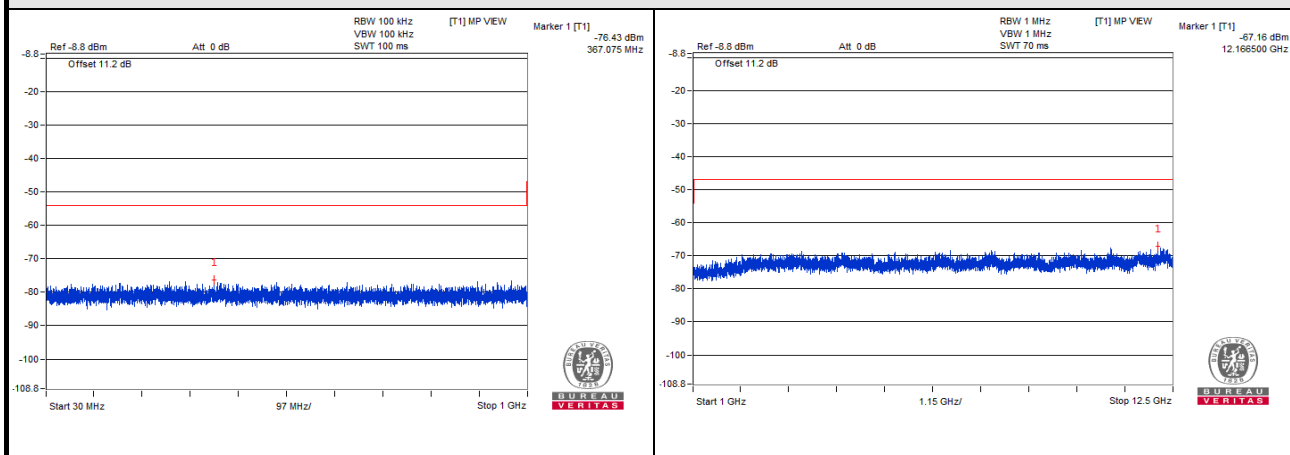
4.5.3 Test Result

Bluetooth LE 4.0: 1Mbps

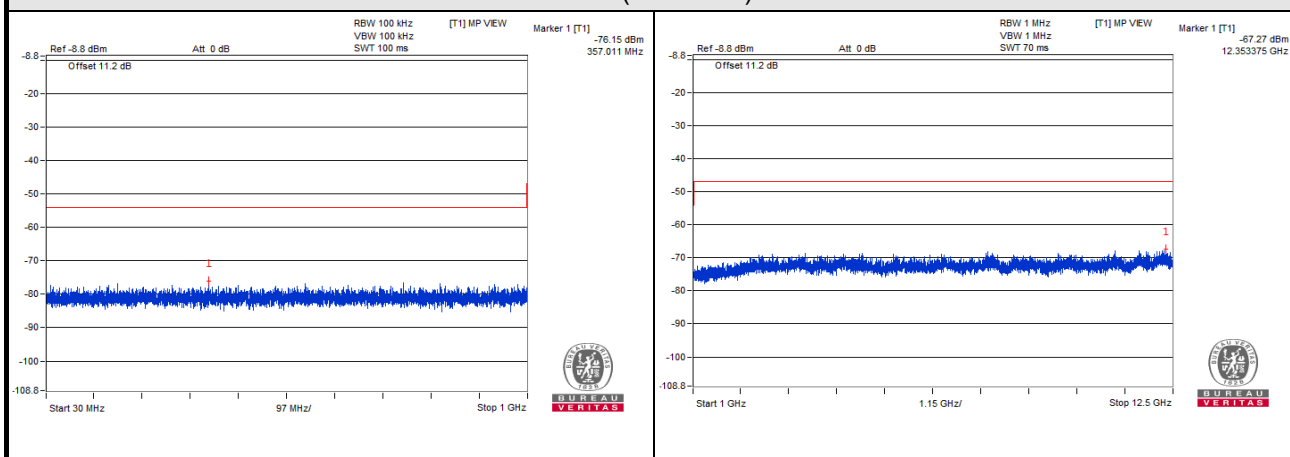
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASURE. VALUE(nW)	LIMIT (nW)	RESULT
TEST CHANNEL		CH 0 (2402MHz)			
V _{normal}	30MHz to 1000MHz	367.075	0.022751	4.0	PASS
	1000MHz to 12500MHz	12166.500	0.192309	20.0	PASS
TEST CHANNEL		CH 19 (2440MHz)			
V _{normal}	30MHz to 1000MHz	357.011	0.024266	4.0	PASS
	1000MHz to 12500MHz	12353.375	0.187499	20.0	PASS
TEST CHANNEL		CH 39 (2480MHz)			
V _{normal}	30MHz to 1000MHz	681.355	0.025410	4.0	PASS
	1000MHz to 12500MHz	12236.937	0.196336	20.0	PASS

Note: The spectrum plots are attached on the following pages.

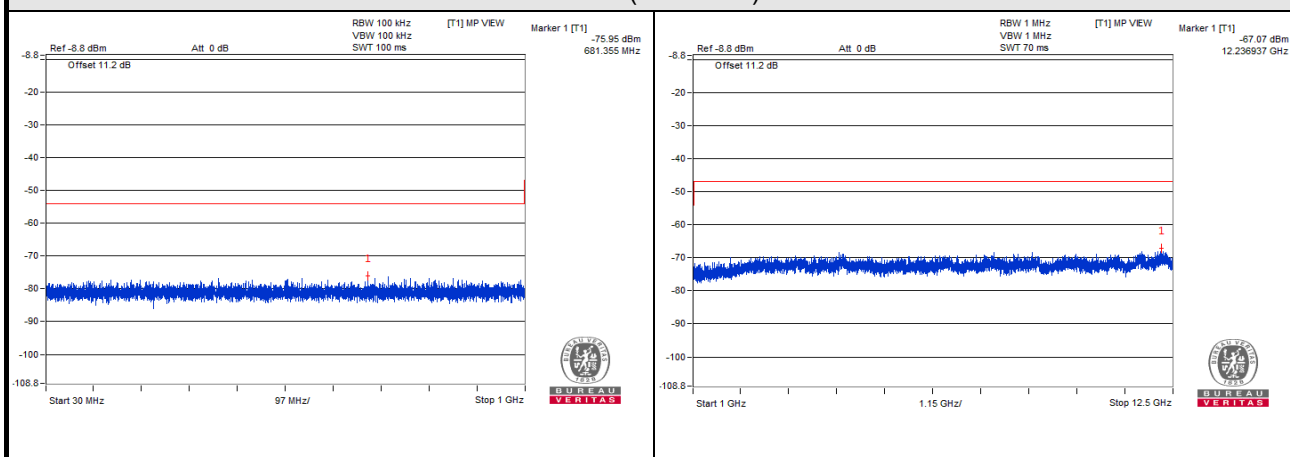
V normal



CH 0 (2402MHz)



CH 19 (2440MHz)



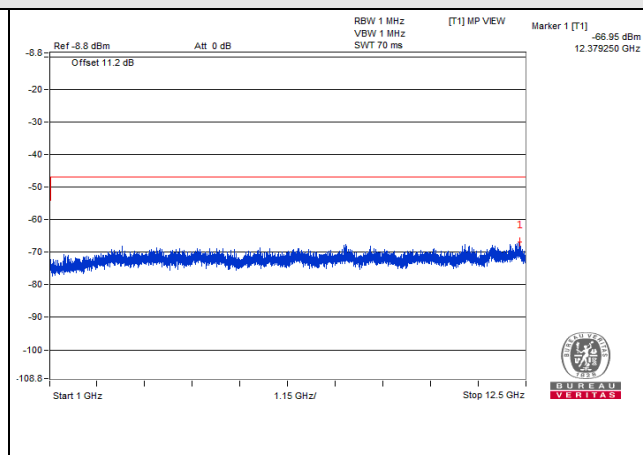
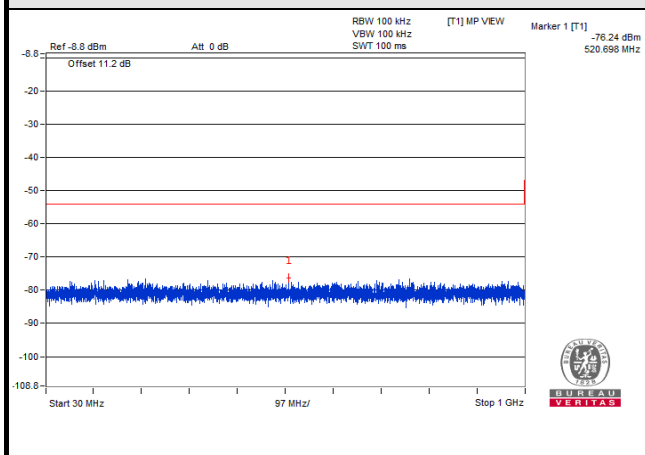
CH 39 (2480MHz)

Bluetooth LE 5.0: 2Mbps

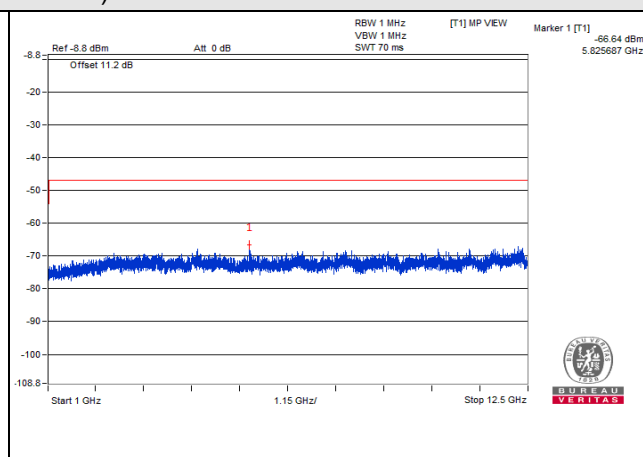
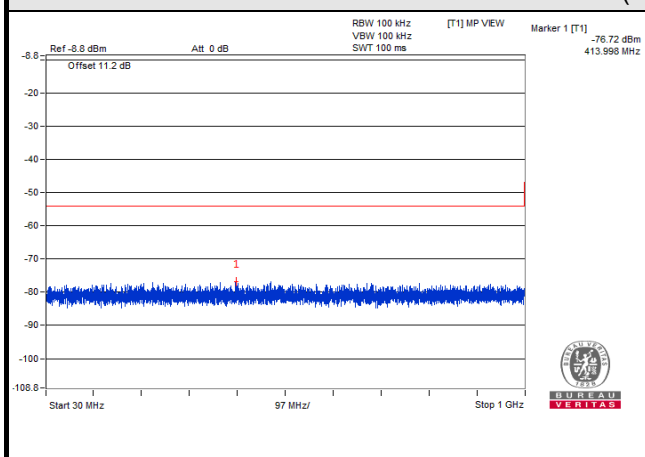
TEST CONDITION	FREQUENCY RANGE(MHz)	FREQUENCY (MHz)	MEASURE. VALUE(nW)	LIMIT (nW)	RESULT
TEST CHANNEL		CH 0 (2402MHz)			
V _{normal}	30MHz to 1000MHz	520.698	0.023768	4.0	PASS
	1000MHz to 12500MHz	12379.250	0.201837	20.0	PASS
TEST CHANNEL		CH 19 (2440MHz)			
V _{normal}	30MHz to 1000MHz	413.998	0.021281	4.0	PASS
	1000MHz to 12500MHz	5825.687	0.216770	20.0	PASS
TEST CHANNEL		CH 39 (2480MHz)			
V _{normal}	30MHz to 1000MHz	719.185	0.021979	4.0	PASS
	1000MHz to 12500MHz	12324.625	0.168267	20.0	PASS

Note: The spectrum plots are attached on the following pages.

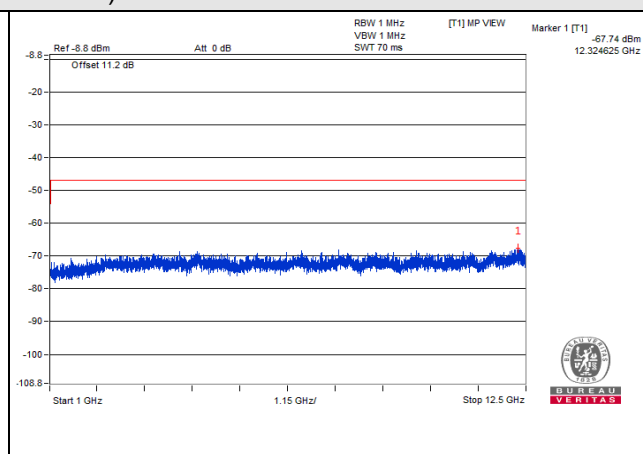
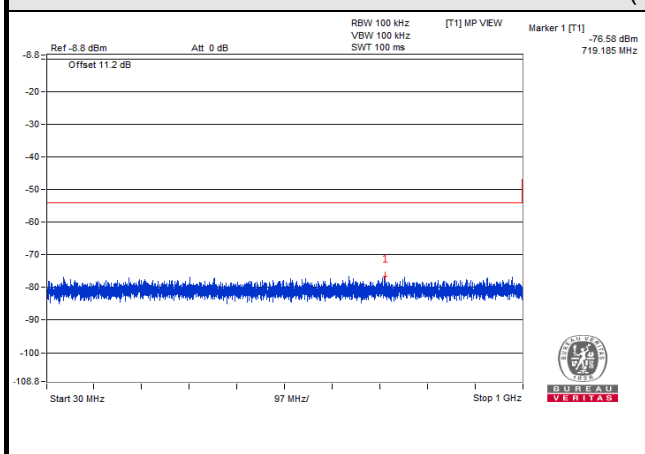
V normal



CH 0 (2402MHz)



CH 19 (2440MHz)



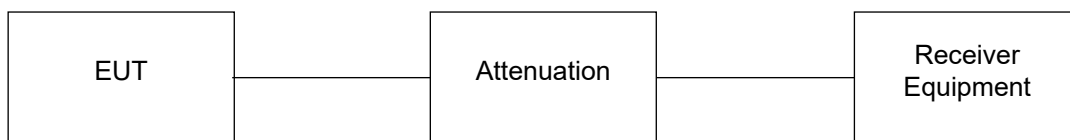
CH 39 (2480MHz)

4.6 Interference Prevention Function

4.6.1 Limits of Interference Prevention Function

NA

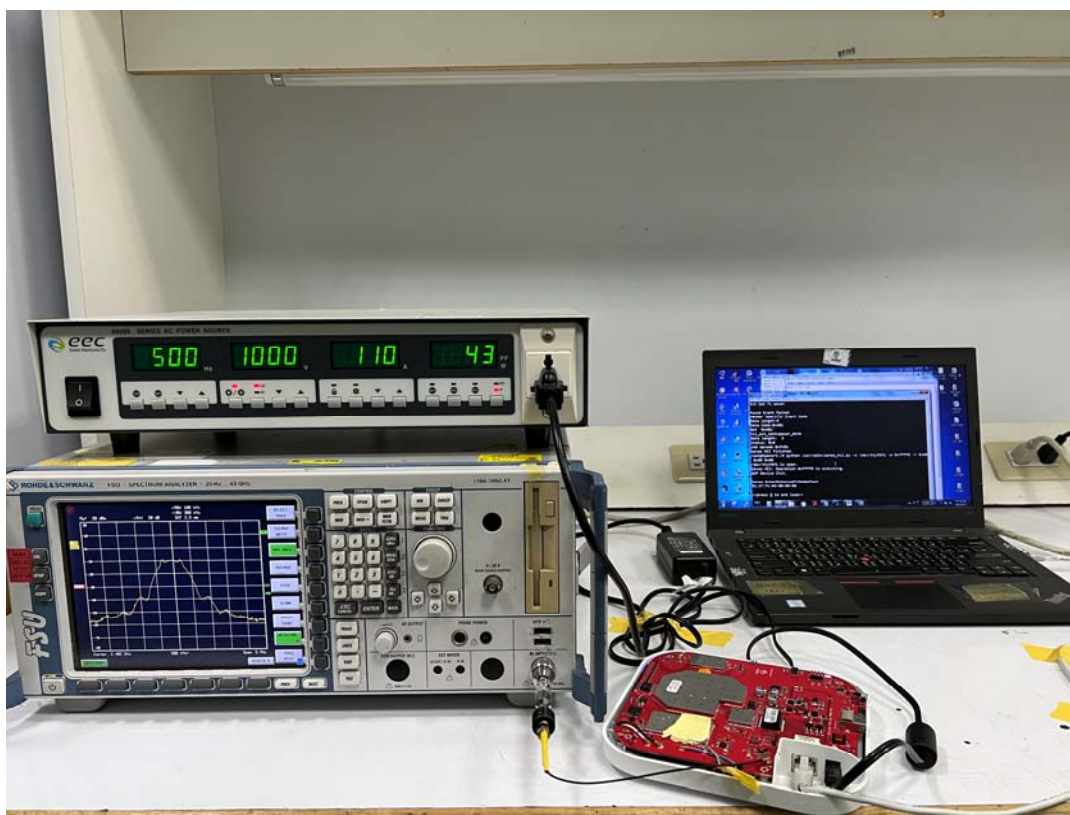
4.6.2 Test Setup



4.6.3 Test Results

Environmental Conditions	25 deg.C, 60% RH
Link Mode	Test Result
Bluetooth LE 4.0	Pass
Bluetooth LE 5.0	Pass

5 Photographs of the Test Configuration



Appendix - 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 and approved according to ISO/IEC 17025.

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

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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