FCC Test Report

FCC ID	:	**2AU6R04011**
Equipment	:	**802.11be (WiFi 7) Triple-Radio PoE Access Point (Please refer to section 1.1.1 for more details)**
Model No.	:	**NWA130BE (Please refer to section 1.1.1 for more details)**
Brand Name	:	**ZYXEL**
Applicant	:	**Zyxel Networks Corporation**
Address	:	**No.2 Industry East RD. IX, Hsinchu Science Park, Hsinchu 30075, Taiwan, R.O.C**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**Sep. 11, 2023**
Tested Date	:	**Nov. 24 ~ Dec. 26, 2023**

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:	**Approved by:**
Along Chen / Assistant Manager	**Gary Chang / Manager**

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR391101AC	Rev. 01	Initial issue	Feb. 07, 2024

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 11.525MHz 45.24 (Margin -4.76dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 2390.00MHz 53.90 (Margin -0.10dB) - AV	Pass
15.247(b)(3)	Conducted Output Power	Max Power [dBm]: ***Non-beamforming mode*** 27.39 ***Beamforming mode*** 23.79	Pass
15.247(a)(2)	6dB Bandwidth	Meet the requirement of limit	Pass
15.247(e)	Power Spectral Density	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
ZYXEL	NWA130BE	802.11be (WiFi 7) Triple-Radio PoE Access Point	The difference between the two models is marketing purpose.
ZYXEL	WBE530	802.11be (WiFi 7) Triple-Radio unified Access Point	
Note: The above models, model **NWA130BE** was selected as a representative one for the final test and only its data was recorded in this report.			

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**Data Rate / MCS**
2400-2483.5	b	2412-2462	1-11 [11]	2	1-11 Mbps
2400-2483.5	g	2412-2462	1-11 [11]	2	6-54 Mbps
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	2	MCS 0-15
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	2	MCS 0-15
2400-2483.5	ax (HE20)	2412-2462	1-11 [11]	2	MCS 0-11
2400-2483.5	ax (HE40)	2422-2452	3-9 [7]	2	MCS 0-11
2400-2483.5	be (EHT20)	2412-2462	1-11 [11]	2	MCS 0-13
2400-2483.5	be (EHT40)	2422-2452	3-9 [7]	2	MCS 0-13
Note 1: RF output power specifies that Maximum Conducted (Average) Output Power. Note 2: DSSS-DBPSK, DQPSK, CCK modulation OFDM- BPSK, QPSK, 16QAM, 64QAM, 1024QAM and 4096QAM modulation. Note 3: 802.11 be supports beamforming function.					

1.1.3 Antenna Details

Ant. No.	Brand	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)
					2400~2483.5
1	Aristotle	RFA-12123-V2	PIFA	UFL	1.77
2					1.27

1.1.4 Configuration of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter 56Vdc from POE	
RU Configuration	☒ Full RU	☐ Partial RU

Note: The above power supplies are not bundled in market.

1.1.5 Accessories

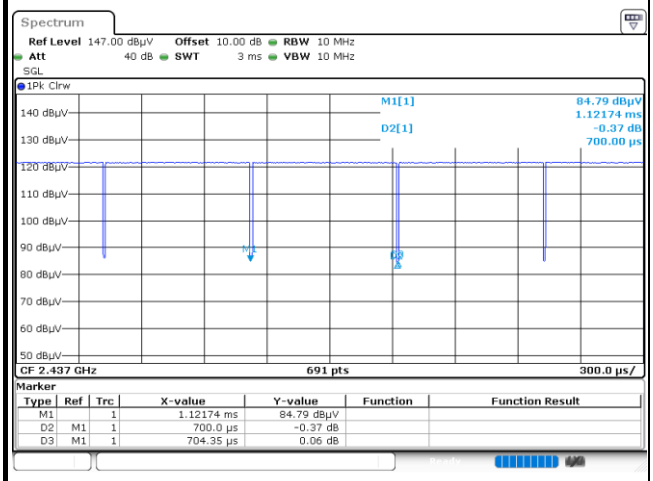
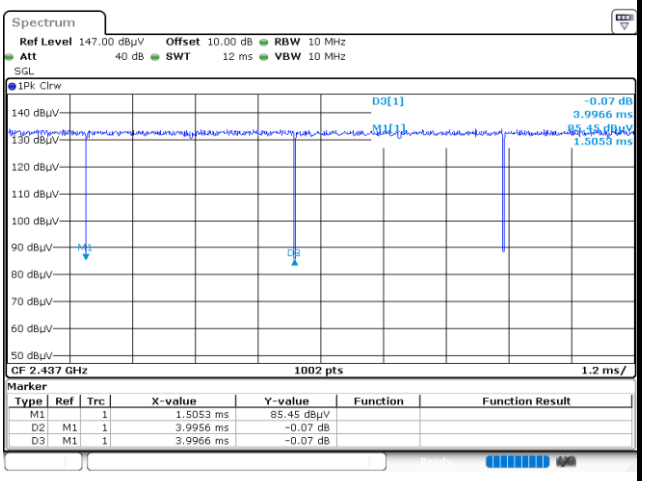
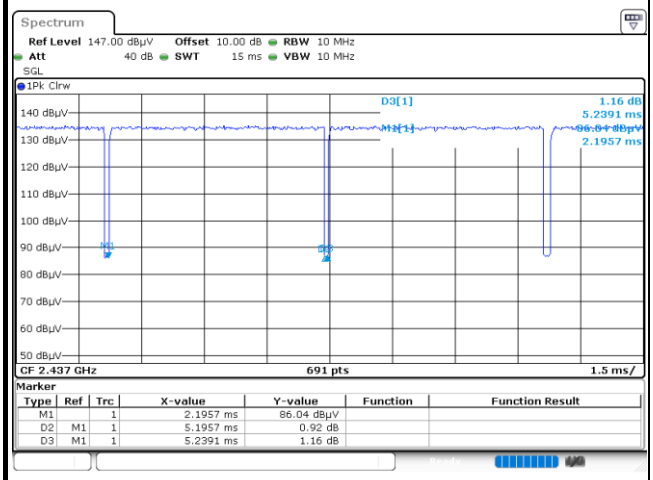
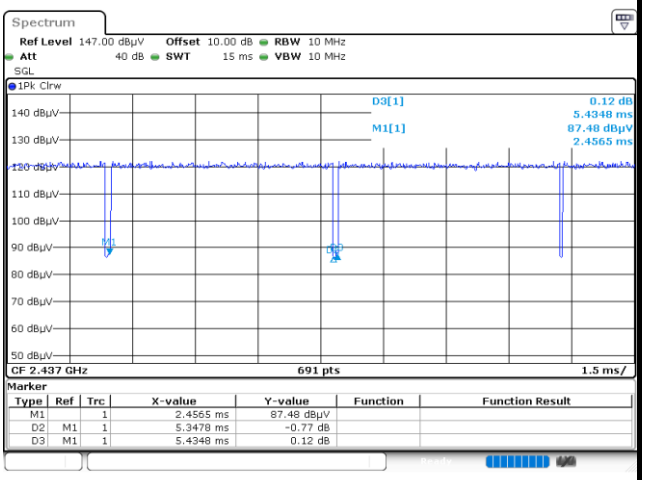
N/A

1.1.6 Channel List

Frequency band (MHz)		2400~2483.5	
802.11 b / g / n HT20 / ax HE20 / be EHT20		802.11n HT40 / ax HE40 / be EHT40	
Channel	Frequency(MHz)	Channel	Frequency(MHz)
1	2412	3	2422
2	2417	4	2427
3	2422	5	2432
4	2427	6	2437
5	2432	7	2442
6	2437	8	2447
7	2442	9	2452
8	2447	---	---
9	2452	---	---
10	2457	---	---
11	2462	---	---

1.1.7 Test Tool and Duty Cycle

Test Tool	QSPR, Version: V5.14.00227.1		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11b	99.38%	0.03
	11g	99.97%	0.00
	be EHT20	99.17%	0.04
	be EHT40	98.40%	0.07

11b	11g
	
be EHT20	**be EHT40**
	

1.1.8 Power Index of Test Tool

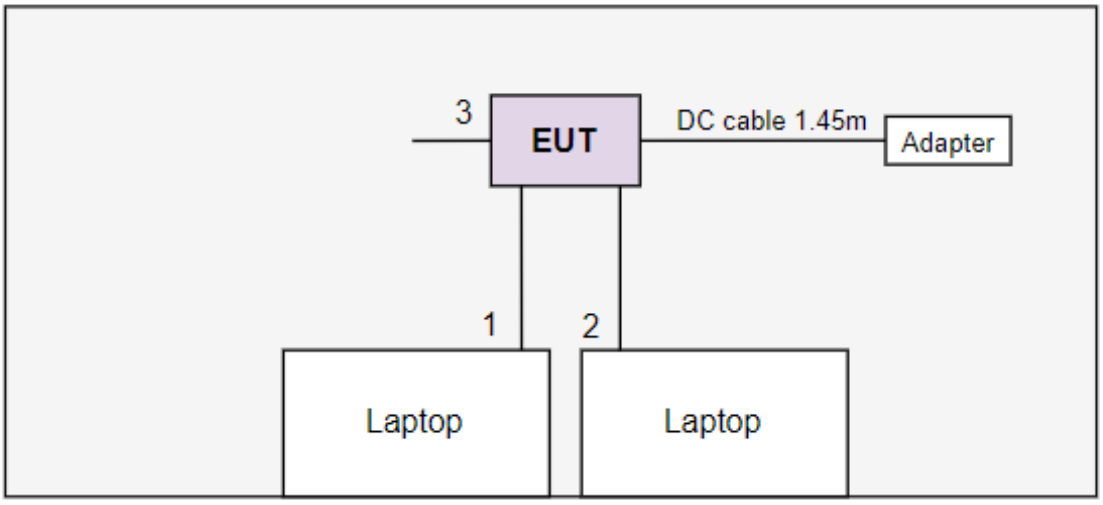
Modulation Mode	Test Frequency (MHz)	Power Index
11b	2412	24
11b	2437	24
11b	2462	23
11g	2412	23
11g	2437	24
11g	2462	21
be EHT20	2412	22.5
be EHT20	2437	24
be EHT20	2462	20
be EHT40	2422	19
be EHT40	2437	21
be EHT40	2452	20

1.2 Local Support Equipment List

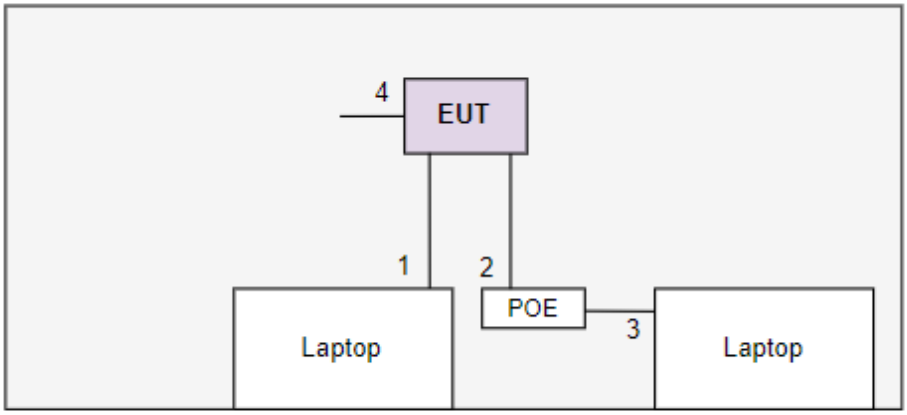
Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Laptop	DELL	Vostro 5410	DoC	---
2	Laptop	DELL	Latitude 5400	DoC	---
3	POE	Zyxel	PoE12-60W	---	For POE mode only. (Provided by applicant.)
4	Adapter	DVE	DSA-24PFS-12 FCA 120200	---	For Adapter mode only. (Provided by applicant.)

1.3 Test Setup Chart

Test Setup Diagram (Adapter mode)



No.	Signal cable / Length (m)
1-2	RJ45, 10m non-shielded.
3	Console cable, 0.3m non-shielded.

Test Setup Diagram (POE mode)


No.	Signal cable / Length (m)
1-2	RJ45, 10m non-shielded.
3	RJ45, 1.3m non-shielded.
4	Console cable, 0.3m non-shielded.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Dec. 20, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 17, 2023	Feb. 16, 2024
LISN	R&S	ENV216	101579	May 09, 2023	May 08, 2024
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 11, 2023	Oct. 10, 2024
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan. 03, 2023	Jan. 02, 2024
50 ohm terminal (Support Unit)	NA	50	01	Jun. 14, 2023	Jun. 13, 2024
Measurement Software	Sporton	SENSE-EMI	V5.11.6	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Nov. 24 ~ Dec. 18, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Spectrum Analyzer	R&S	FSV40	101499	Mar. 16, 2023	Mar. 15, 2024
Loop Antenna	R&S	HFH2-Z2	100330	Oct. 31, 2023	Oct. 30, 2024
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Jul. 04, 2023	Jul. 03, 2024
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1095	Sep. 01, 2023	Aug. 31, 2024
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 30, 2023	Oct. 29, 2024
Preamplifier	EMC	EMC02325	980187	Jul. 10, 2023	Jul. 09, 2024
Preamplifier	EMC	EMC118A45SE	980897	Aug. 01, 2023	Jul. 31, 2024
Preamplifier	EMC	EMC184045SE	980903	Jul. 17, 2023	Jul. 16, 2024
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 03, 2023	Oct. 02, 2024
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800 -001	Sep. 22, 2023	Sep. 21, 2024
LF cable-3M	EMC	EMC8D-NM-NM-300 0	131103	Sep. 22, 2023	Sep. 21, 2024
LF cable-13M	EMC	EMC8D-NM-NM-130 00	131104	Sep. 22, 2023	Sep. 21, 2024
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 22, 2023	Sep. 21, 2024
RF cable-8M	EMC	EMC104-SM-SM-80 00	181107	Sep. 22, 2023	Sep. 21, 2024
HIGHPASS FILTER	WI	WHK3.1-18G-10SS	43	Sep. 27, 2023	Sep. 26, 2024
Attenuator	Pasternack	PE7005-10	10-3	Sep. 27, 2023	Sep. 26, 2024
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Dec. 16 ~ Dec. 26, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101910	Apr. 14, 2023	Apr. 13, 2024
Power Meter	Anritsu	ML2495A	1241002	Nov. 21, 2023	Nov. 20, 2024
Power Sensor	Anritsu	MA2411B	1207366	Nov. 21, 2023	Nov. 20, 2024
Attenuator	Pasternack	PE7005-10	10-2	Oct. 05, 2023	Oct. 04, 2024
Measurement Software	Sporton	SENSE-15247_DTS	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.247
ANSI C63.10-2013

1.6 Reference Guidance

FCC KDB 558074 D01 15.247 Meas Guidance v05r02
FCC KDB 662911 D01 Multiple Transmitter Output v02r01

1.7 Deviation from Test Standard and Measurement Procedure

None

1.8 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	**Uncertainty**
Bandwidth	±34.130 Hz
Conducted power	±0.808 dB
Power density	±0.583 dB
Conducted emission	±2.715 dB
AC conducted emission	±2.92 dB
Unwanted Emission ≤ 1GHz	±3.96 dB
Unwanted Emission > 1GHz	±4.51 dB

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, TH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)
Test Site	03CH03-WS
Address of Test Site	No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- ISED#: 10807C
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Non-beamforming mode				
AC Power Line Conducted Emission	11b	2412	1 Mbps	1, 2
Unwanted Emissions ≤ 1GHz	11b	2412	1 Mbps	1, 2
Unwanted Emissions >1GHz Conducted Output Power 6dB bandwidth Power spectral density	11b 11g be EHT20 be EHT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	2
Beamforming mode				
Conducted Output Power	be EHT20 be EHT40	2412 / 2437 / 2462 2422 / 2437 / 2452	MCS 0 MCS 0	1, 2

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.
2. Beamforming mode is calculated not measured. The calculation method is conducted power of non-beamforming – 3.01 dB.
3. The EUT had been tested by following test configurations.
   1) Configuration 1: Adapter mode
   2) Configuration 2: POE mode

3 Transmitter Test Results

3.1 6dB and Occupied Bandwidth

3.1.1 Limit of 6dB Bandwidth

The minimum 6dB bandwidth shall be at least 500 kHz.

3.1.2 Test Procedures

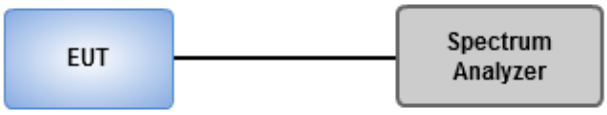
6dB Bandwidth

1. Set resolution bandwidth (RBW) = 100 kHz, Video bandwidth = 300 kHz.
2. Detector = Peak, Trace mode = max hold.
3. Sweep = auto couple, Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.

Occupied Bandwidth

1. Set resolution bandwidth (RBW) = 1% ~ 5 % of OBW, Video bandwidth = 3 x RBW
2. Detector = Sample, Trace mode = max hold.
3 Sweep = auto couple, Allow the trace to stabilize.
4. Use the OBW measurement function of spectrum analyzer to measure the occupied bandwidth.

3.1.3 Test Setup



3.1.4 Test Results

Ambient Condition	21~22°C / 65~66%	**Tested By**	Akun Chung

Refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Limit of Conducted Output Power

Conducted power shall not exceed 1Watt.

Antenna gain <= 6dBi, no any corresponding reduction is in output power limit.

Antenna gain > 6dBi

Non Fixed, point to point operations.
The conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dB

Fixed, point to point operations
Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point Operations, maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Test Procedures

A broadband RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.

3.2.3 Test Setup

3.2.4 Test Results

Ambient Condition	21~22°C / 65~66%	**Tested By**	Akun Chung

Refer to Appendix B.

3.3 Power Spectral Density

3.3.1 Limit of Power Spectral Density

Power spectral density shall not be greater than 8 dBm in any 3 kHz band.

3.3.2 Test Procedures

Peak PSD

1. Set the RBW = 3 kHz, VBW = 10 kHz.
2. Detector = Peak, Sweep time = auto couple.
3. Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

Average PSD, duty cycle ≥ 98%

1. Set the RBW = 3 kHz, VBW = 10 kHz.
2. Detector = RMS, Sweep time = auto couple.
3. Sweep time = auto couple.
4. Employ trace averaging (RMS) mode over a minimum of 100 traces.
5. Use the peak marker function to determine the maximum amplitude level.

Average PSD, duty cycle < 98%

1 Set the RBW = 3 kHz, VBW = 10 kHz

2 Detector = RMS, Sweep time = auto couple.

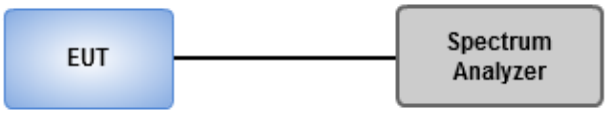
3 Sweep time = auto couple.

4 Employ trace averaging (RMS) mode over a minimum of 100 traces.

5 Use the peak marker function to determine the maximum amplitude level.

6 Add 10 log (1/x), where x is the duty cycle.

3.3.3 Test Setup



3.3.4 Test Results

Ambient Condition	21~22°C / 65~66%	**Tested By**	Akun Chung

Refer to Appendix C.

3.4 Unwanted Emissions into Restricted Frequency Bands

3.4.1 Limit of Unwanted Emissions into Restricted Frequency Bands

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit
Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.4.2 Test Procedures

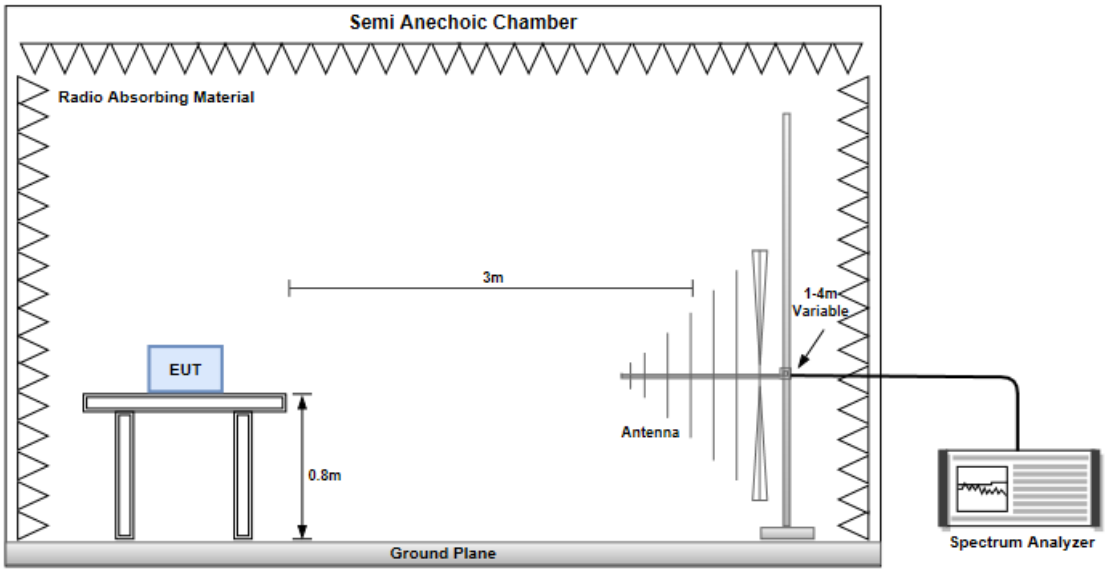
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

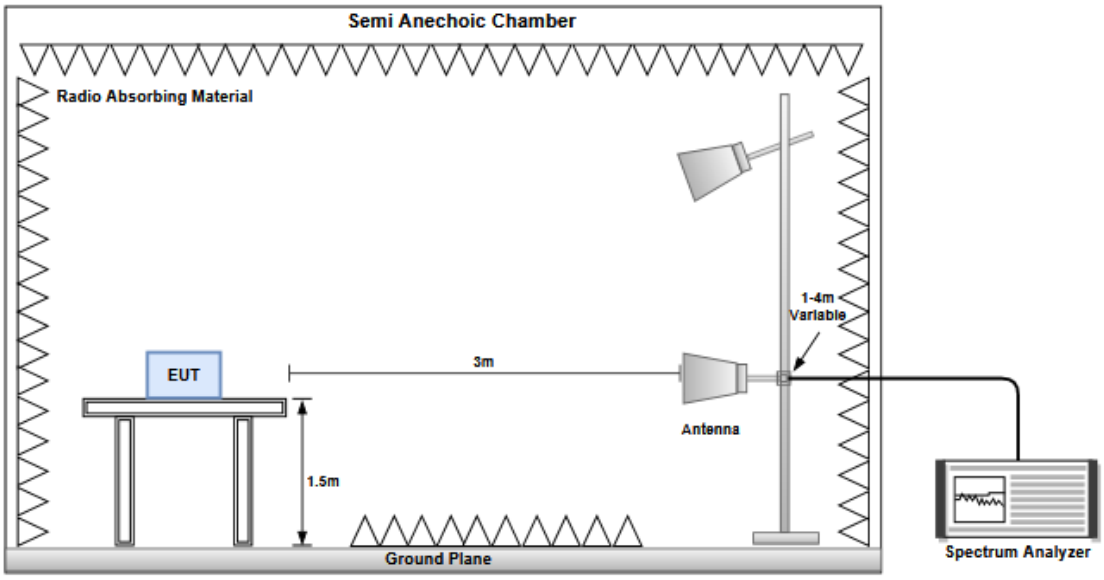
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.4.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.4.4 Test Results

Refer to Appendix D.

3.5 Emissions in Non-Restricted Frequency Bands

3.5.1 Emissions in Non-Restricted Frequency Bands Limit

Peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz.

3.5.2 Test Procedures

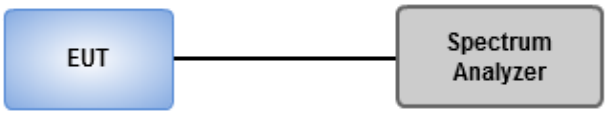
Reference level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Use the peak marker function to determine the maximum PSD level

Emission level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Scan Frequency range is up to 25GHz
4. Use the peak marker function to determine the maximum amplitude level

3.5.3 Test Setup



3.5.4 Test Results

Ambient Condition	21~22°C / 65~66%	Tested By	Akun Chung

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

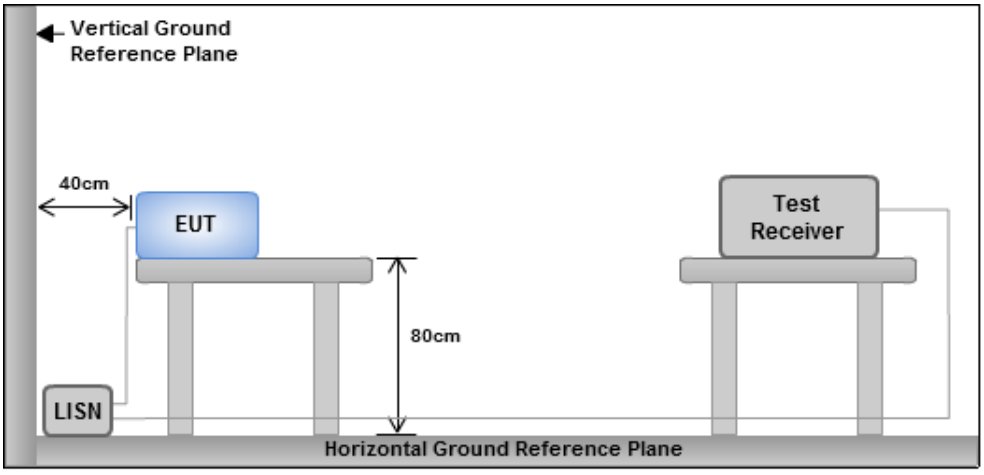
3.6.1 Limit of AC Power Line Conducted Emissions

Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.6.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

3.6.3 Test Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.6.4 Test Results

Refer to Appendix F.

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

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If you have any suggestion, please feel free to contact us as below information.

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Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.025M	13.133M	13M1G1D	7.55M	12.954M
802.11g_Nss1,(6Mbps)_2TX	15.05M	16.8M	16M8D1D	14.975M	16.558M
802.11be EHT20_Nss1,(MCS0)_2TX	17.4M	18.991M	19M0D1D	13.675M	18.791M
802.11be EHT40_Nss1,(MCS0)_2TX	37.8M	37.931M	37M9D1D	28.85M	37.581M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

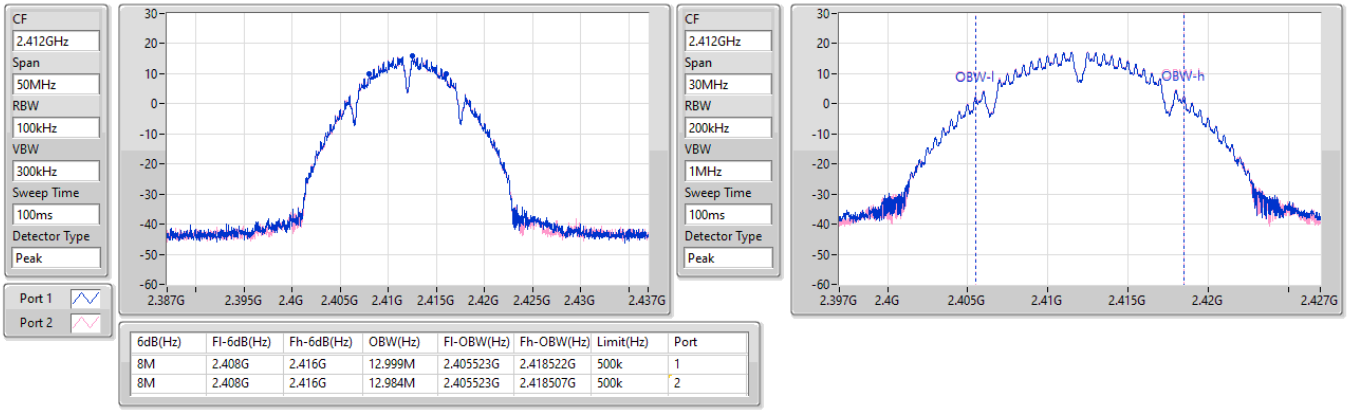
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8M	12.999M	8M	12.984M
2437MHz	Pass	500k	8.025M	13.133M	8.025M	13.088M
2462MHz	Pass	500k	7.55M	12.954M	7.55M	12.984M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.025M	16.58M	15.025M	16.558M
2437MHz	Pass	500k	15.025M	16.734M	15.05M	16.8M
2462MHz	Pass	500k	15M	16.602M	14.975M	16.58M
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.35M	18.791M	13.725M	18.891M
2437MHz	Pass	500k	14.95M	18.991M	17.4M	18.941M
2462MHz	Pass	500k	13.675M	18.791M	15.025M	18.866M
802.11be EHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	33.8M	37.631M	31.25M	37.631M
2437MHz	Pass	500k	36.4M	37.931M	37.8M	37.881M
2452MHz	Pass	500k	34.2M	37.581M	28.85M	37.631M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **EBW**

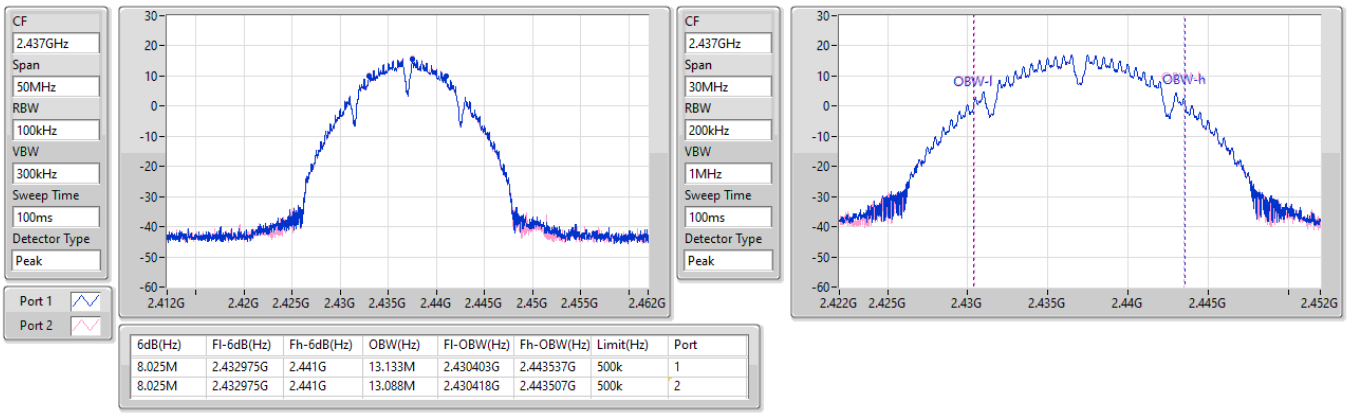
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8M	2.408G	2.416G	12.999M	2.405523G	2.418522G	500k	1
8M	2.408G	2.416G	12.984M	2.405523G	2.418507G	500k	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **EBW**

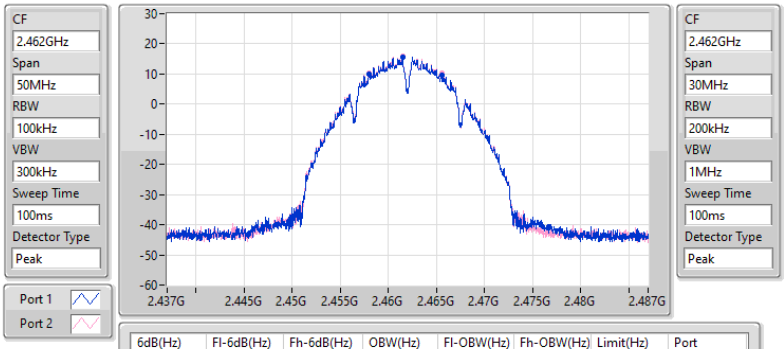
2437MHz

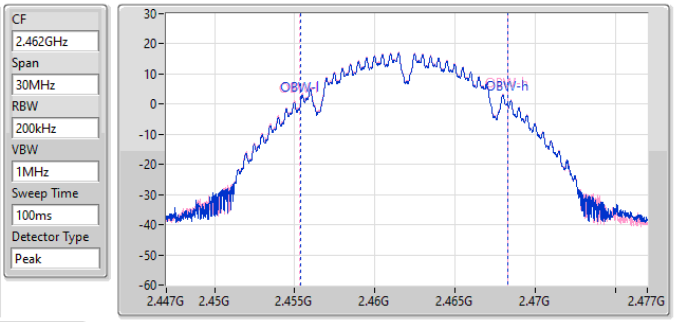


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.025M	2.432975G	2.441G	13.133M	2.430403G	2.443537G	500k	1
8.025M	2.432975G	2.441G	13.088M	2.430418G	2.443507G	500k	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **EBW**

2462MHz

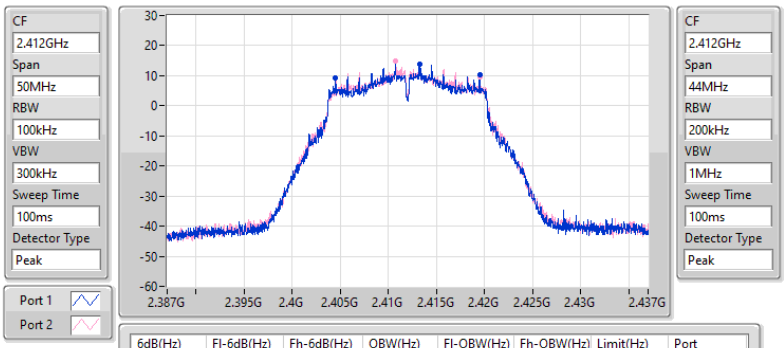


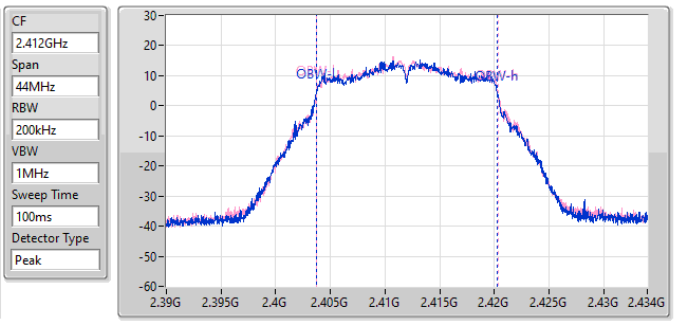


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.55M	2.457975G	2.465525G	12.954M	2.455343G	2.468297G	500k	1
7.55M	2.457975G	2.465525G	12.984M	2.455283G	2.468267G	500k	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **EBW**

2412MHz

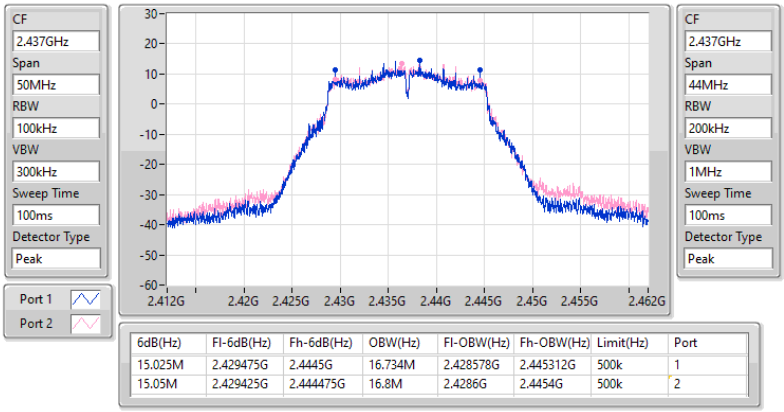


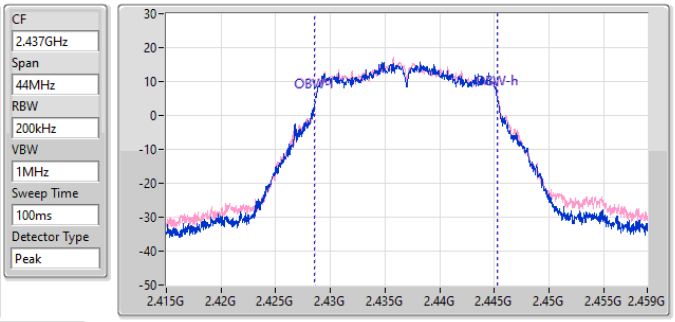


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.404475G	2.4195G	16.58M	2.40371G	2.42029G	500k	1
15.025M	2.4045G	2.419525G	16.558M	2.403776G	2.420334G	500k	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **EBW**

2437MHz

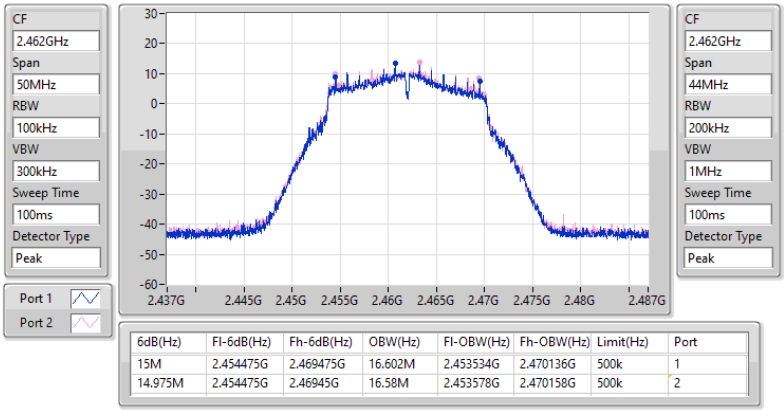


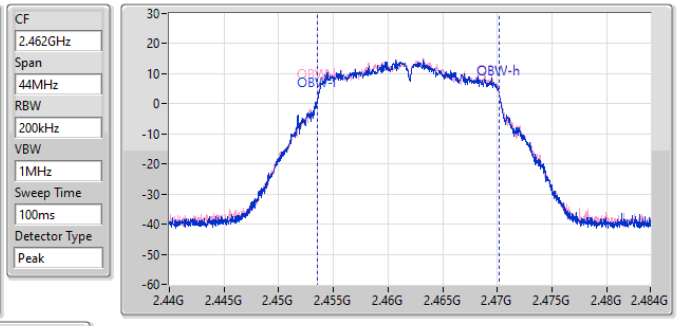


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.429475G	2.4445G	16.734M	2.428578G	2.445312G	500k	1
15.05M	2.429425G	2.444475G	16.8M	2.4286G	2.4454G	500k	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **EBW**

2462MHz

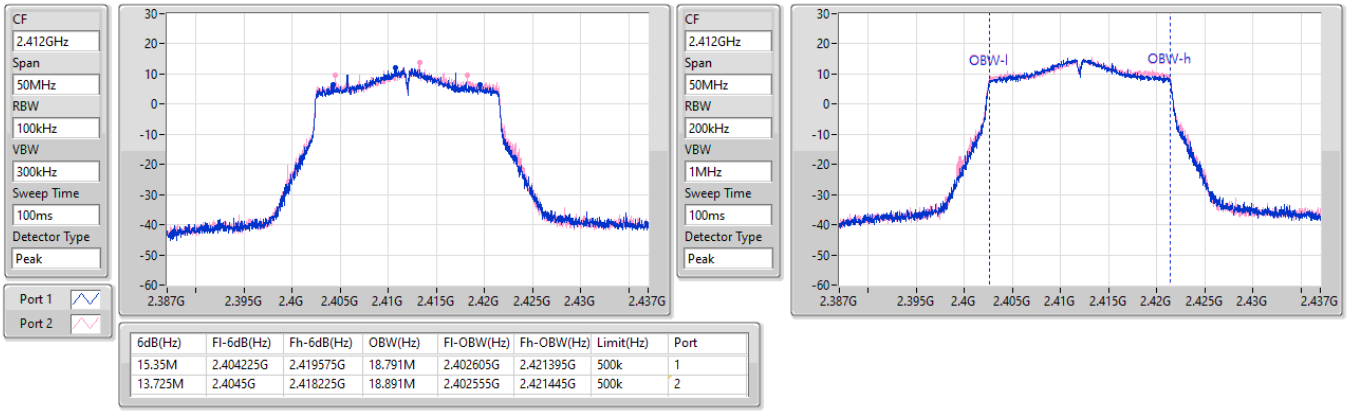




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	2.454475G	2.469475G	16.602M	2.453534G	2.470136G	500k	1
14.975M	2.454475G	2.46945G	16.58M	2.453578G	2.470158G	500k	2

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **EBW**

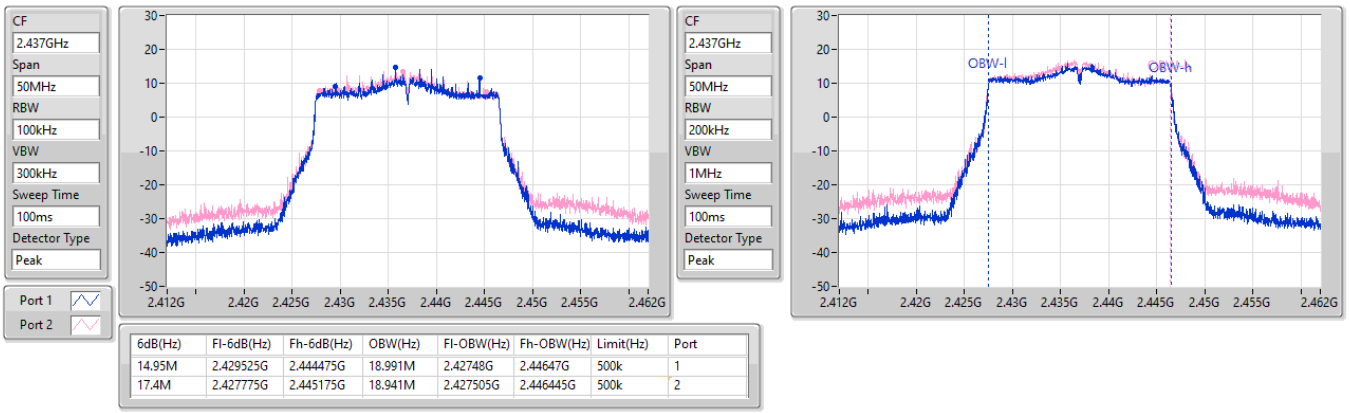
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.35M	2.404225G	2.419575G	18.791M	2.402605G	2.421395G	500k	1
13.725M	2.4045G	2.418225G	18.891M	2.402555G	2.421445G	500k	2

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **EBW**

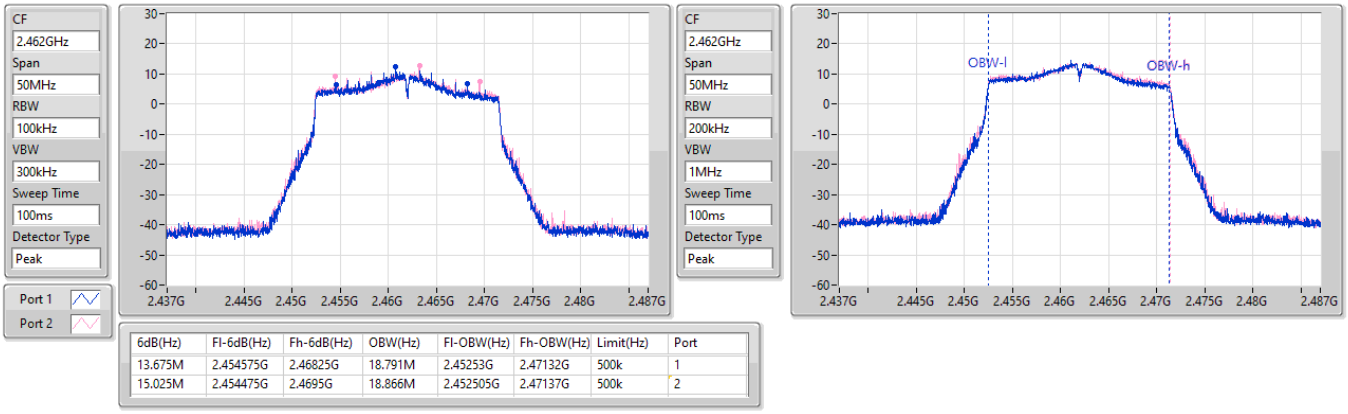
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.95M	2.429525G	2.444475G	18.991M	2.42748G	2.44647G	500k	1
17.4M	2.427775G	2.445175G	18.941M	2.427505G	2.446445G	500k	2

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **EBW**

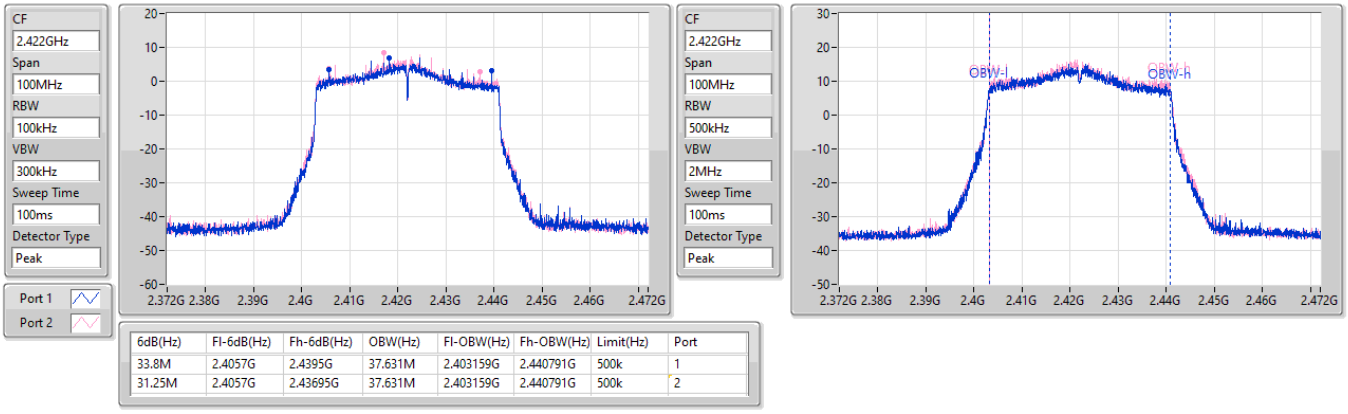
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.675M	2.454575G	2.46825G	18.791M	2.45253G	2.47132G	500k	1
15.025M	2.454475G	2.4695G	18.866M	2.452505G	2.47137G	500k	2

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **EBW**

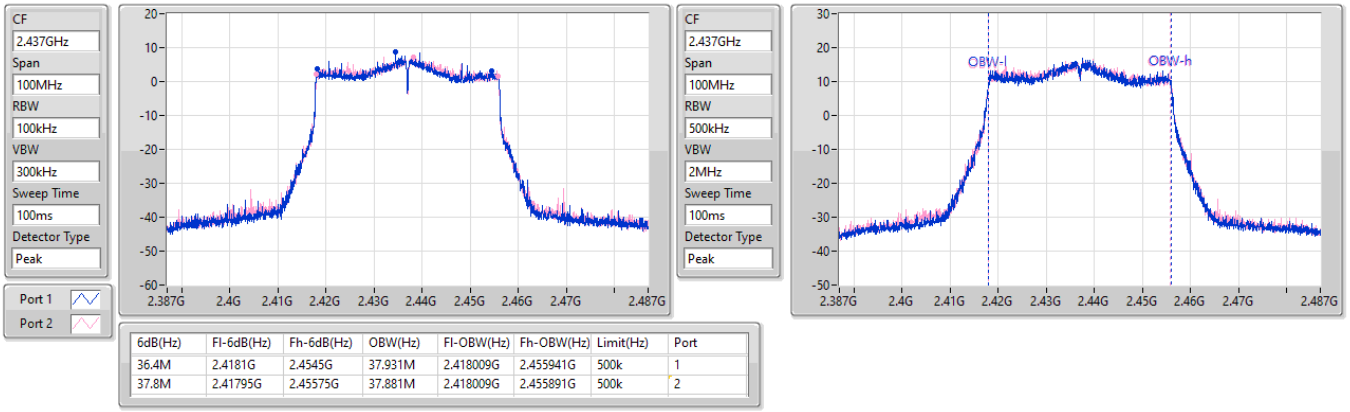
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.8M	2.4057G	2.4395G	37.631M	2.403159G	2.440791G	500k	1
31.25M	2.4057G	2.43695G	37.631M	2.403159G	2.440791G	500k	2

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **EBW**

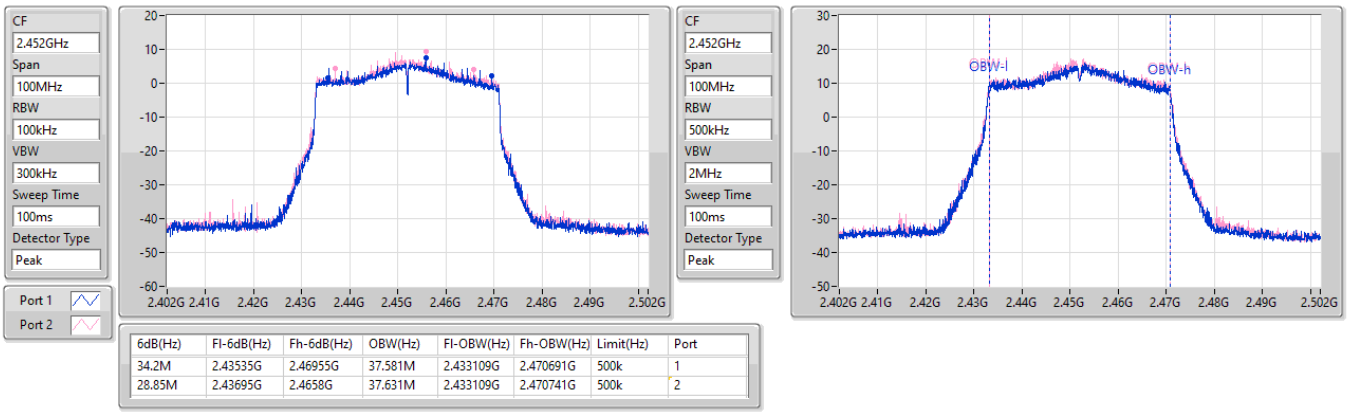
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.4M	2.4181G	2.4545G	37.931M	2.418009G	2.455941G	500k	1
37.8M	2.41795G	2.45575G	37.881M	2.418009G	2.455891G	500k	2

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.2M	2.43535G	2.46955G	37.581M	2.433109G	2.470691G	500k	1
28.85M	2.43695G	2.4658G	37.631M	2.433109G	2.470741G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	27.39	0.54828
802.11g_Nss1,(6Mbps)_2TX	26.72	0.46989
802.11be EHT20_Nss1,(MCS0)_2TX	26.80	0.47863
802.11be EHT40_Nss1,(MCS0)_2TX	24.49	0.28119

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.77	23.75	24.93	27.39	30.00	29.16	36.00
2437MHz	Pass	1.77	24.11	24.31	27.22	30.00	28.99	36.00
2462MHz	Pass	1.77	24.12	24.57	27.36	30.00	29.13	36.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.77	22.78	23.38	26.10	30.00	27.87	36.00
2437MHz	Pass	1.77	23.35	24.04	26.72	30.00	28.49	36.00
2462MHz	Pass	1.77	22.07	22.53	25.32	30.00	27.09	36.00
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.77	22.6	22.85	25.74	30.00	27.51	36.00
2437MHz	Pass	1.77	23.63	23.94	26.80	30.00	28.57	36.00
2462MHz	Pass	1.77	21.09	21.38	24.25	30.00	26.02	36.00
802.11be EHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	1.77	19.61	20.26	22.96	30.00	24.73	36.00
2437MHz	Pass	1.77	21.32	21.63	24.49	30.00	26.26	36.00
2452MHz	Pass	1.77	20.62	21.03	23.84	30.00	25.61	36.00

DG = Directional Gain; Port X = Port X output power

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20-BF_Nss1,(MCS0)_2TX	23.79	0.23933
802.11be EHT40-BF_Nss1,(MCS0)_2TX	21.48	0.14060

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11be EHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.53	19.59	19.84	22.73	30.00	27.26	36.00
2437MHz	Pass	4.53	20.62	20.93	23.79	30.00	28.32	36.00
2462MHz	Pass	4.53	18.08	18.37	21.24	30.00	25.77	36.00
802.11be EHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	4.53	16.6	17.25	19.95	30.00	24.48	36.00
2437MHz	Pass	4.53	18.31	18.62	21.48	30.00	26.01	36.00
2452MHz	Pass	4.53	17.61	18.02	20.83	30.00	25.36	36.00

DG = Directional Gain; Port X = Port X output power

Directional gain = $10 * \log((10^{1.77/20}+10^{1.27/20})^2/2) = 4.53$

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	1.48
802.11g_Nss1,(6Mbps)_2TX	-3.10
802.11be EHT20_Nss1,(MCS0)_2TX	-4.21
802.11be EHT40_Nss1,(MCS0)_2TX	-8.94

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.53	-2.31	-2.18	0.27	8.00
2437MHz	Pass	4.53	-2.73	-3.26	-0.15	8.00
2462MHz	Pass	4.53	-1.48	-0.99	1.48	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.53	-6.67	-5.81	-3.57	8.00
2437MHz	Pass	4.53	-6.05	-5.17	-3.10	8.00
2462MHz	Pass	4.53	-6.62	-6.84	-4.16	8.00
802.11be EHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.53	-7.18	-7.23	-4.54	8.00
2437MHz	Pass	4.53	-7.15	-6.23	-4.21	8.00
2462MHz	Pass	4.53	-8.56	-8.93	-6.57	8.00
802.11be EHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.53	-13.91	-12.49	-10.99	8.00
2437MHz	Pass	4.53	-12.33	-12.22	-9.82	8.00
2452MHz	Pass	4.53	-12.71	-11.30	-8.94	8.00

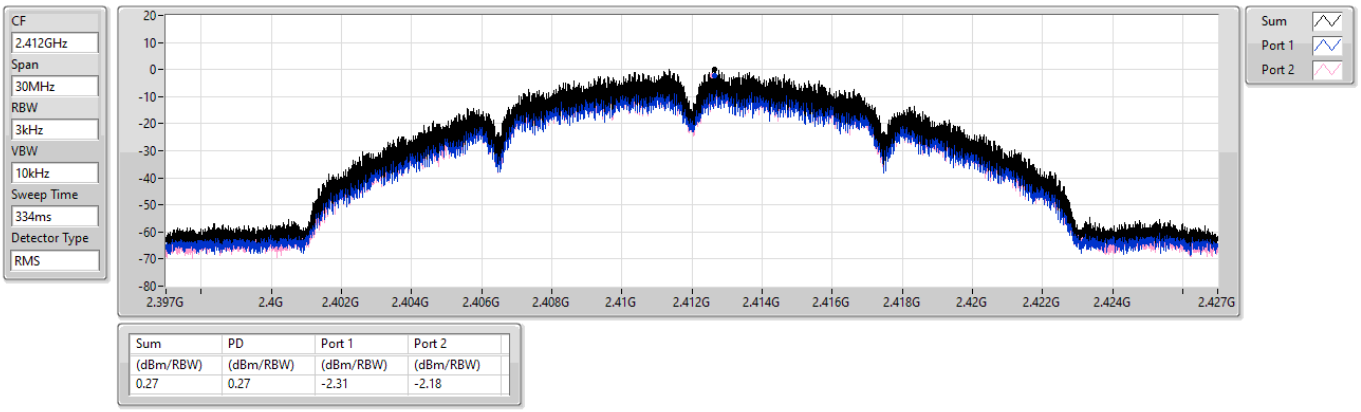
DG = Directional Gain; RBW = 3kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

Directional gain = $10 * \log((10^{1.77/20}+10^{1.27/20})^2/2) = 4.53$

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **PSD**

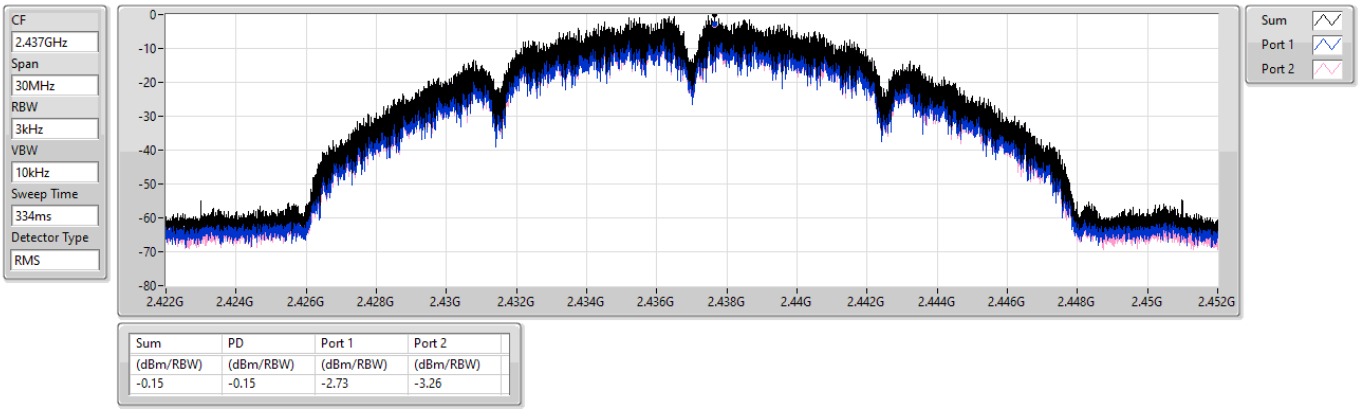
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.27	0.27	-2.31	-2.18

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **PSD**

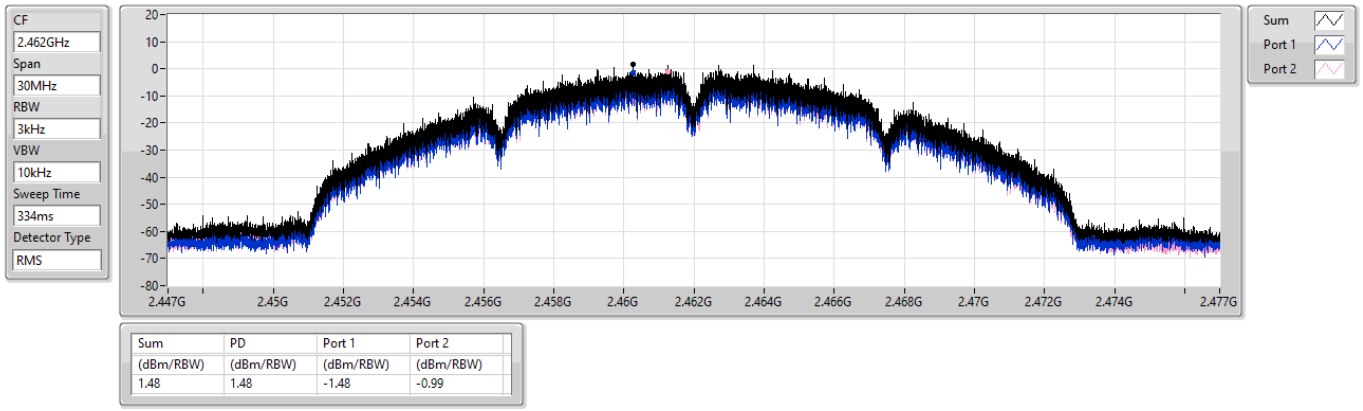
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.15	-0.15	-2.73	-3.26

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **PSD**

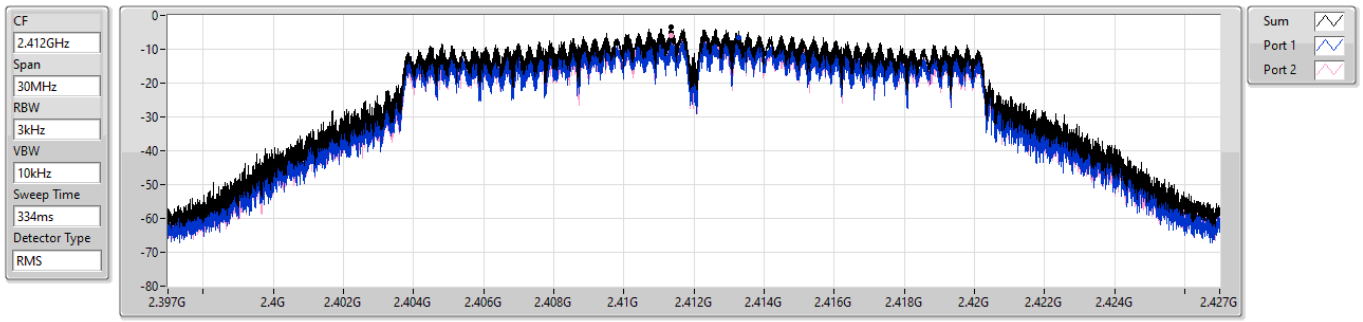
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.48	1.48	-1.48	-0.99

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **PSD**

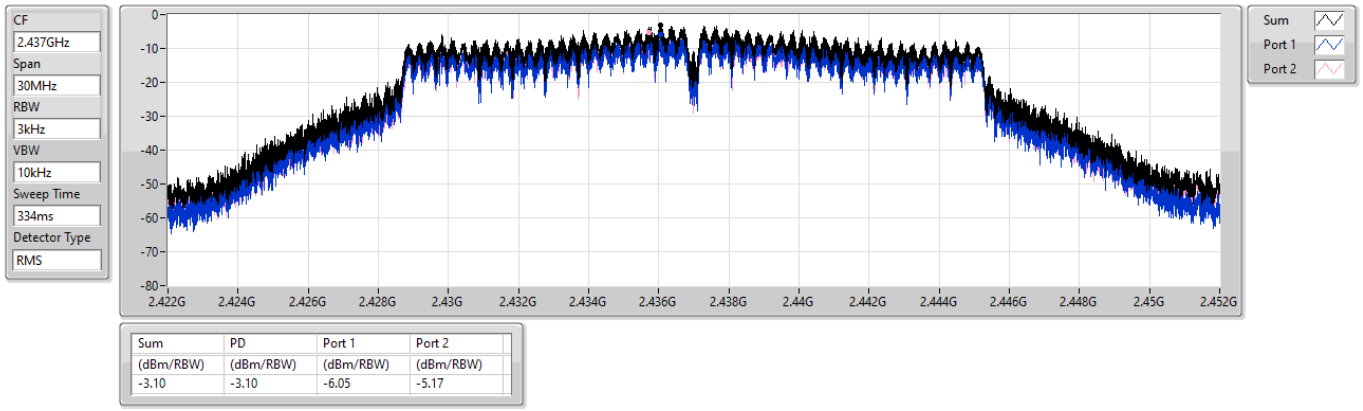
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.57	-3.57	-6.67	-5.81

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **PSD**

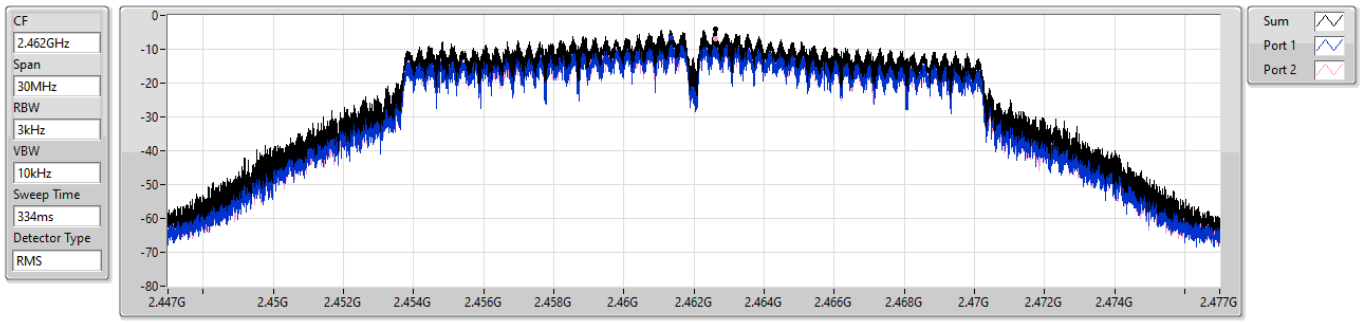
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.10	-3.10	-6.05	-5.17

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **PSD**

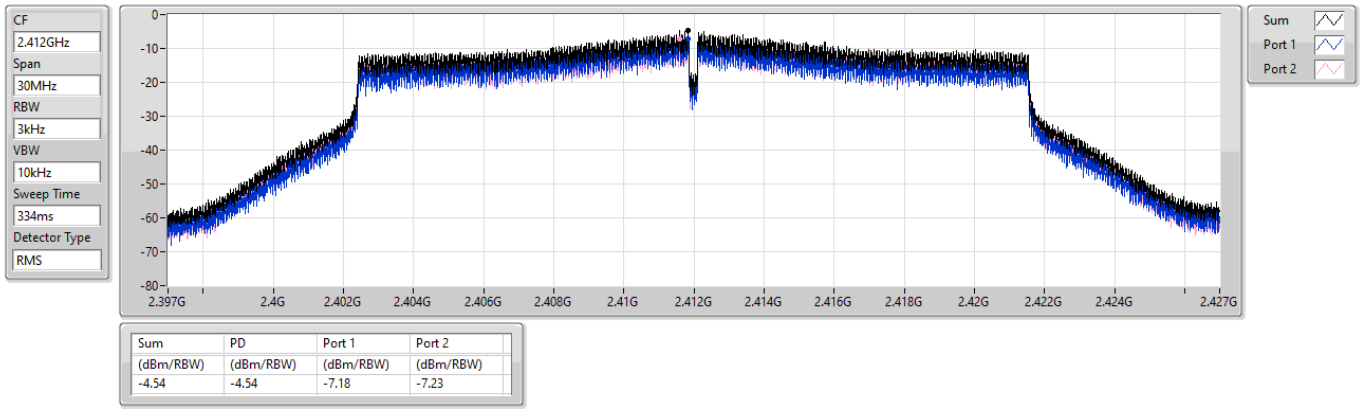
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.16	-4.16	-6.62	-6.84

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **PSD**

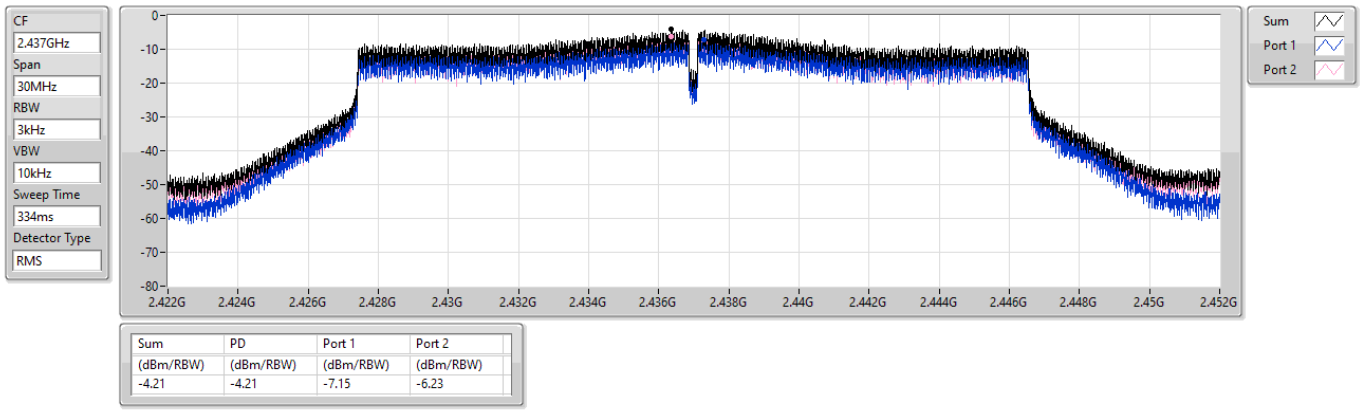
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.54	-4.54	-7.18	-7.23

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **PSD**

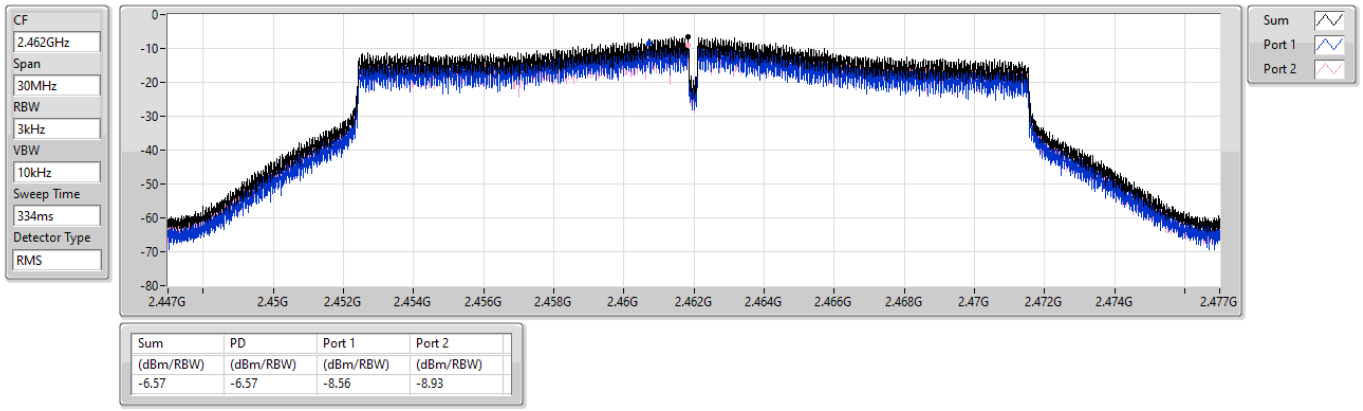
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.21	-4.21	-7.15	-6.23

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **PSD**

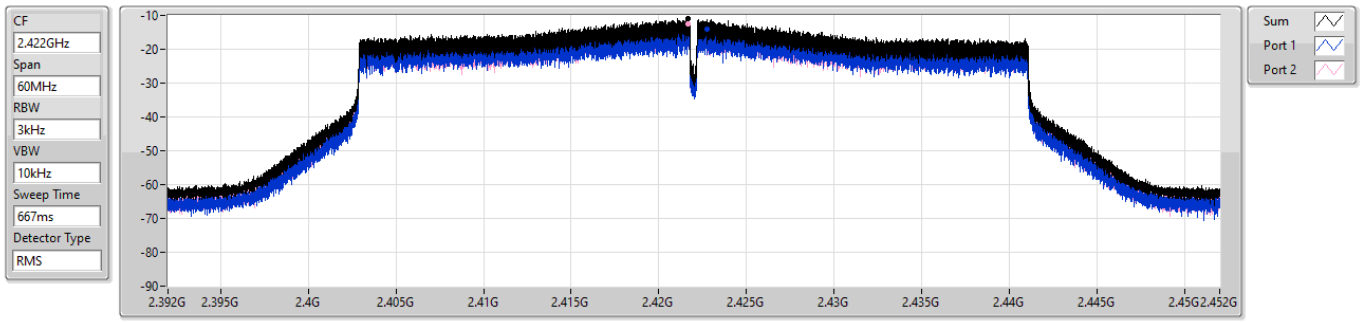
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.57	-6.57	-8.56	-8.93

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **PSD**

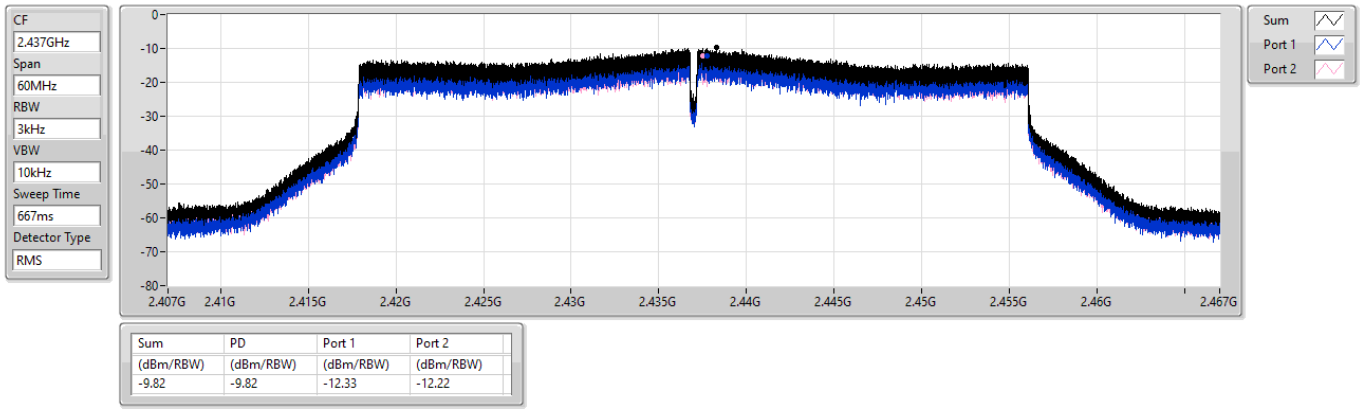
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.99	-10.99	-13.91	-12.49

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **PSD**

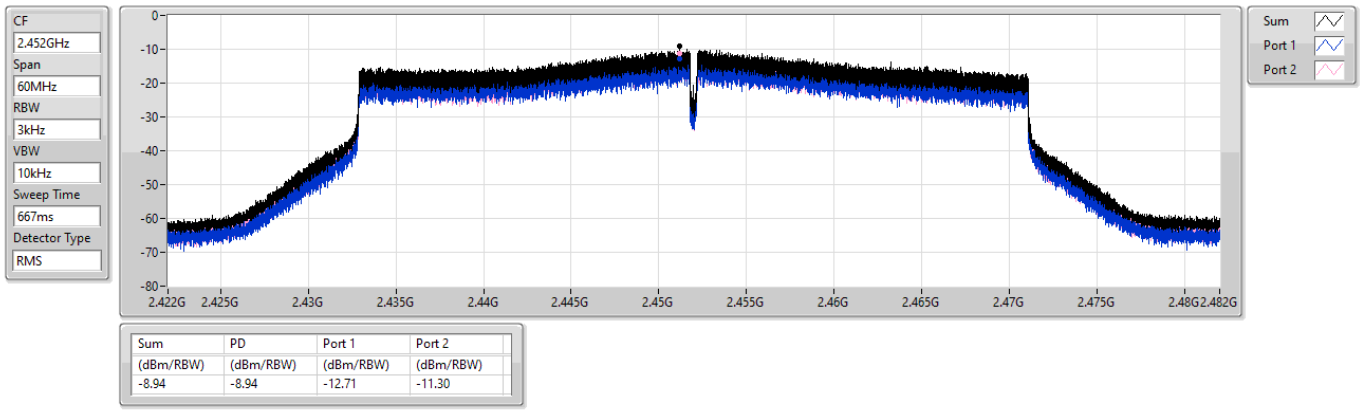
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.82	-9.82	-12.33	-12.22

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **PSD**

2452MHz



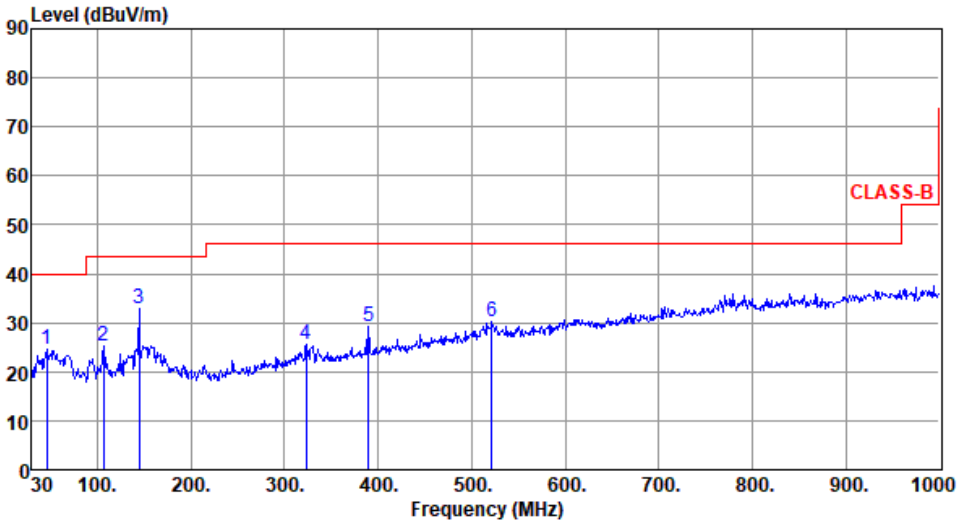
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.94	-8.94	-12.71	-11.30

Unwanted Emissions (Below 1GHz)

Adapter mode

Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):25 Humidity(%):61

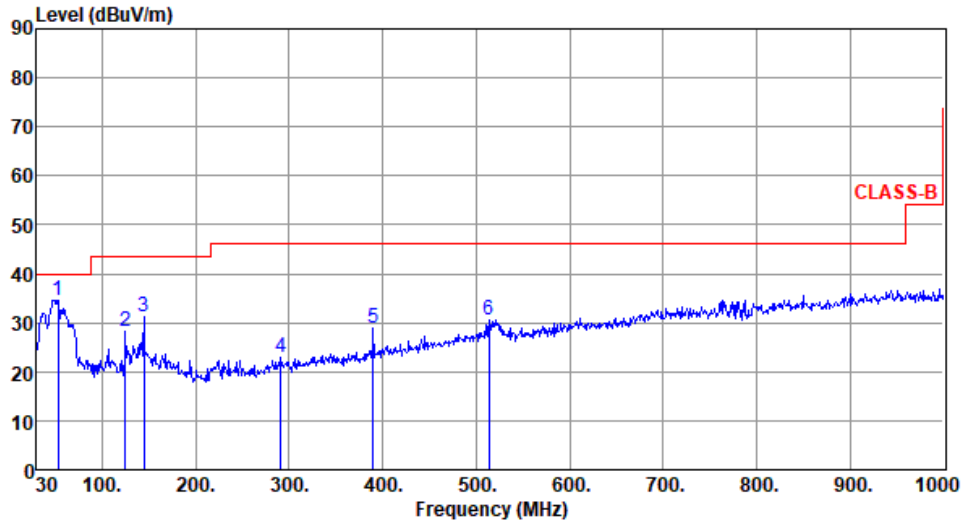


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	45.52	24.52	40.00	-15.48	32.50	-7.98	Peak	---	---
2	106.63	25.20	43.50	-18.30	36.99	-11.79	Peak	---	---
3	144.46	32.86	43.50	-10.64	41.51	-8.65	Peak	---	---
4	322.94	25.49	46.00	-20.51	32.51	-7.02	Peak	---	---
5	389.87	29.18	46.00	-16.82	34.36	-5.18	Peak	---	---
6	521.79	30.06	46.00	-15.94	32.00	-1.94	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):25 Humidity(%):61



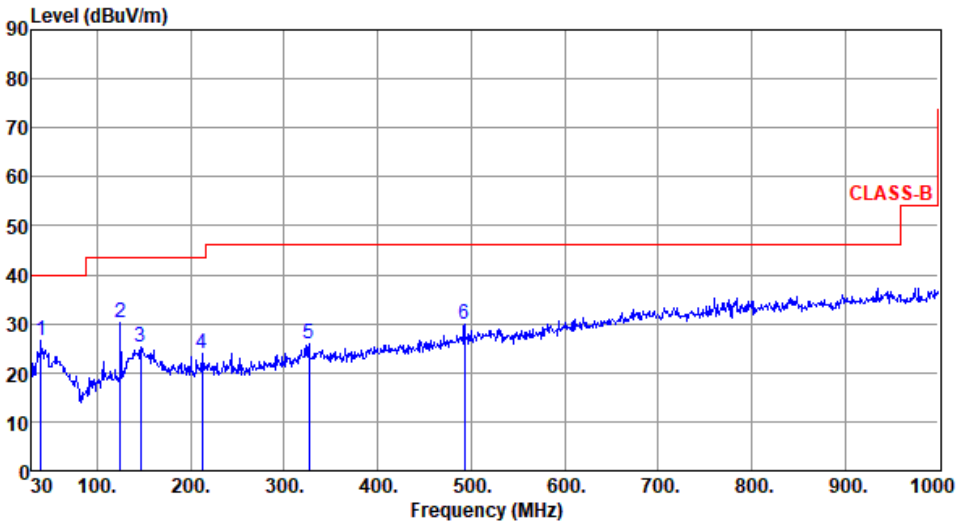
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	53.28	34.48	40.00	-5.52	42.57	-8.09	Peak	---	---
2	125.06	28.31	43.50	-15.19	38.83	-10.52	Peak	---	---
3	144.46	31.15	43.50	-12.35	39.80	-8.65	Peak	---	---
4	290.93	22.99	46.00	-23.01	31.09	-8.10	Peak	---	---
5	389.87	28.81	46.00	-17.19	33.99	-5.18	Peak	---	---
6	514.03	30.68	46.00	-15.32	32.81	-2.13	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

POE mode

Modulation	11b	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):25 Humidity(%):61

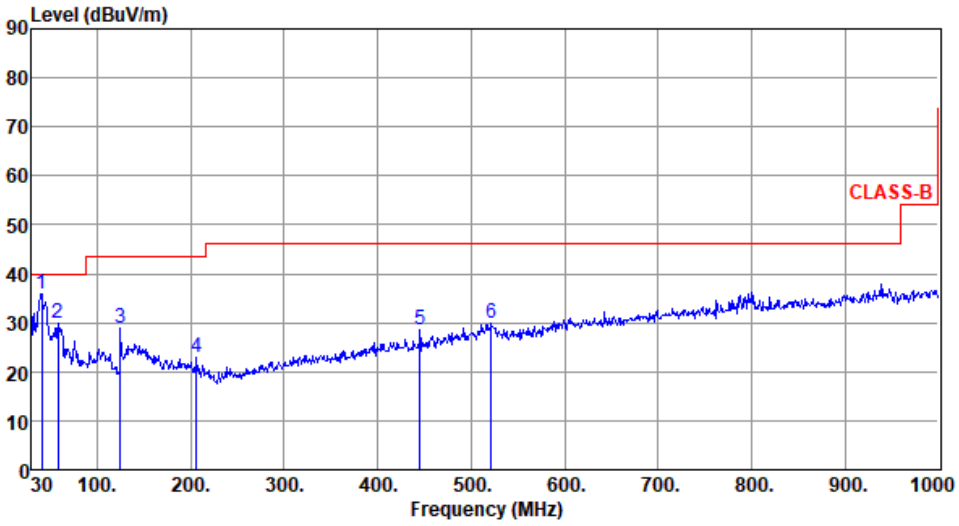


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	39.70	26.43	40.00	-13.57	35.21	-8.78	Peak	---	---
2	125.06	30.24	43.50	-13.26	40.76	-10.52	Peak	---	---
3	146.40	25.28	43.50	-18.22	33.75	-8.47	Peak	---	---
4	212.36	23.89	43.50	-19.61	35.74	-11.85	Peak	---	---
5	326.82	25.82	46.00	-20.18	32.71	-6.89	Peak	---	---
6	492.69	30.03	46.00	-15.97	32.64	-2.61	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):25 Humidity(%):61



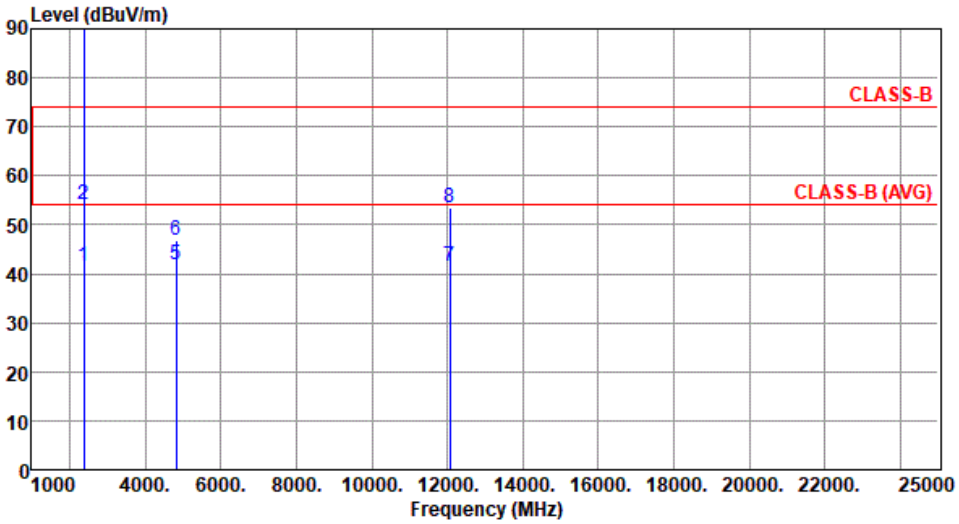
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	40.67	35.89	40.00	-4.11	44.59	-8.70	Peak	---	---
2	58.13	29.81	40.00	-10.19	38.26	-8.45	Peak	---	---
3	125.06	28.76	43.50	-14.74	39.28	-10.52	Peak	---	---
4	206.54	22.92	43.50	-20.58	34.74	-11.82	Peak	---	---
5	445.16	28.47	46.00	-17.53	32.10	-3.63	Peak	---	---
6	521.79	29.98	46.00	-16.02	31.92	-1.94	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Unwanted Emissions (Above 1GHz) for 11b

Modulation	11b	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

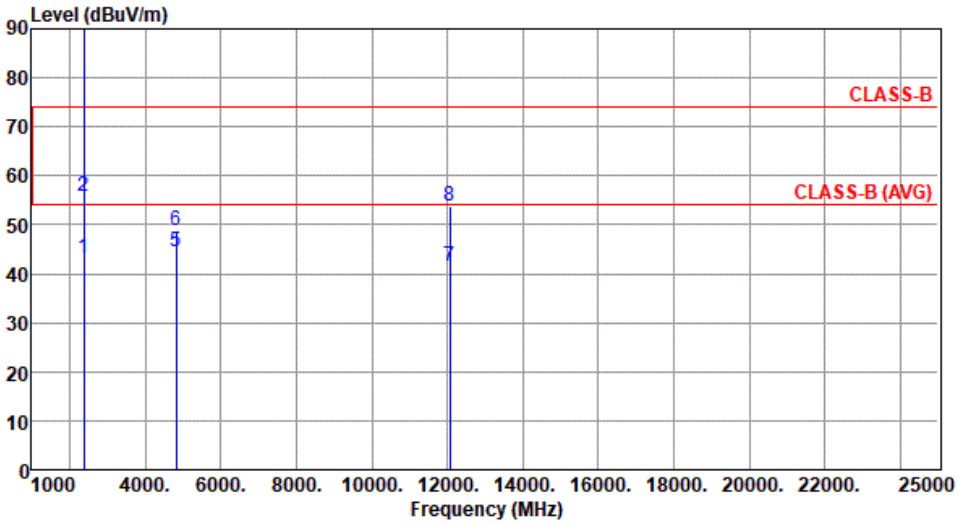


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	41.47	54.00	-12.53	45.14	-3.67	Average	331	207
2		2390.00	54.28	74.00	-19.72	57.95	-3.67	Peak	331	207
3	*	2412.00	108.78			112.52	-3.74	Average	331	207
4	*	2412.00	112.27			116.01	-3.74	Peak	331	207
5		4824.00	41.71	54.00	-12.29	41.95	-0.24	Average	125	293
6		4824.00	46.91	74.00	-27.09	47.15	-0.24	Peak	125	293
7		12060.00	41.46	54.00	-12.54	33.82	7.64	Average	100	60
8		12060.00	53.61	74.00	-20.39	45.97	7.64	Peak	100	60

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

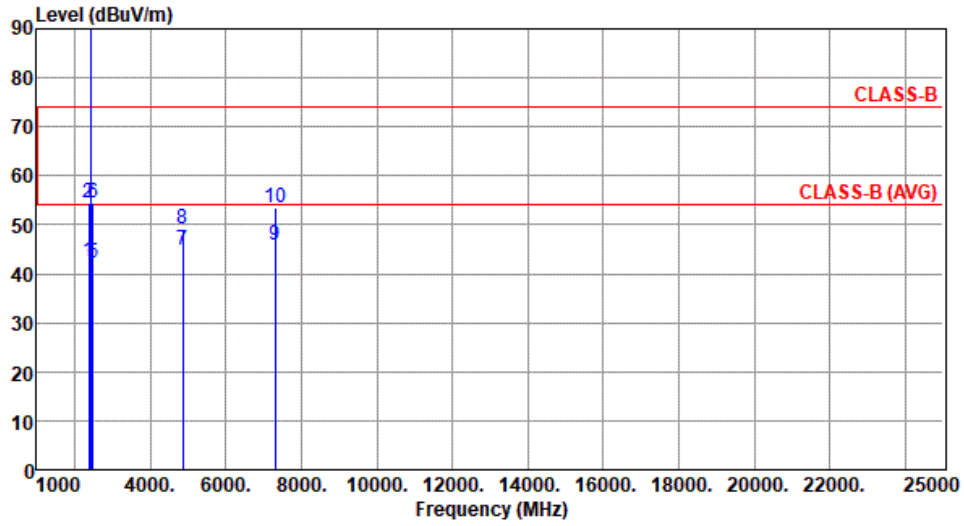


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	43.17	54.00	-10.83	46.84	-3.67	Average	325	339
2		2390.00	55.65	74.00	-18.35	59.32	-3.67	Peak	325	339
3	*	2412.00	115.27			119.01	-3.74	Average	325	339
4	*	2412.00	118.77			122.51	-3.74	Peak	325	339
5		4824.00	44.45	54.00	-9.55	44.69	-0.24	Average	136	182
6		4824.00	48.98	74.00	-25.02	49.22	-0.24	Peak	136	182
7		12060.00	41.63	54.00	-12.37	33.99	7.64	Average	100	45
8		12060.00	53.69	74.00	-20.31	46.05	7.64	Peak	100	45

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11b	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

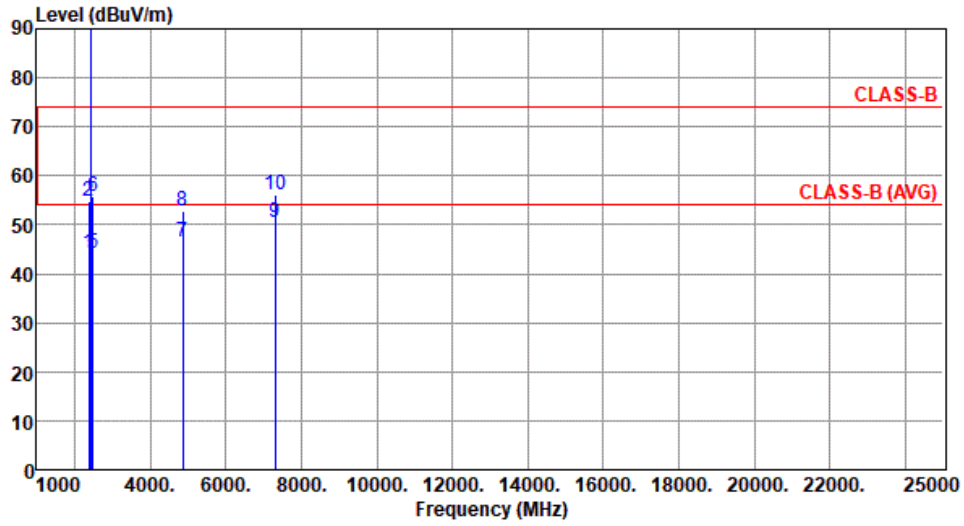


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	42.60	54.00	-11.40	46.27	-3.67	Average	277	307
2		2390.00	54.41	74.00	-19.59	58.08	-3.67	Peak	277	307
3	*	2437.00	110.28			114.04	-3.76	Average	277	307
4	*	2437.00	113.75			117.51	-3.76	Peak	277	307
5		2483.50	42.24	54.00	-11.76	46.10	-3.86	Average	277	307
6		2483.50	54.42	74.00	-19.58	58.28	-3.86	Peak	277	307
7		4874.00	44.84	54.00	-9.16	45.09	-0.25	Average	121	296
8		4874.00	49.03	74.00	-24.97	49.28	-0.25	Peak	121	296
9		7311.00	45.99	54.00	-8.01	40.83	5.16	Average	102	94
10		7311.00	53.60	74.00	-20.40	48.44	5.16	Peak	102	94

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

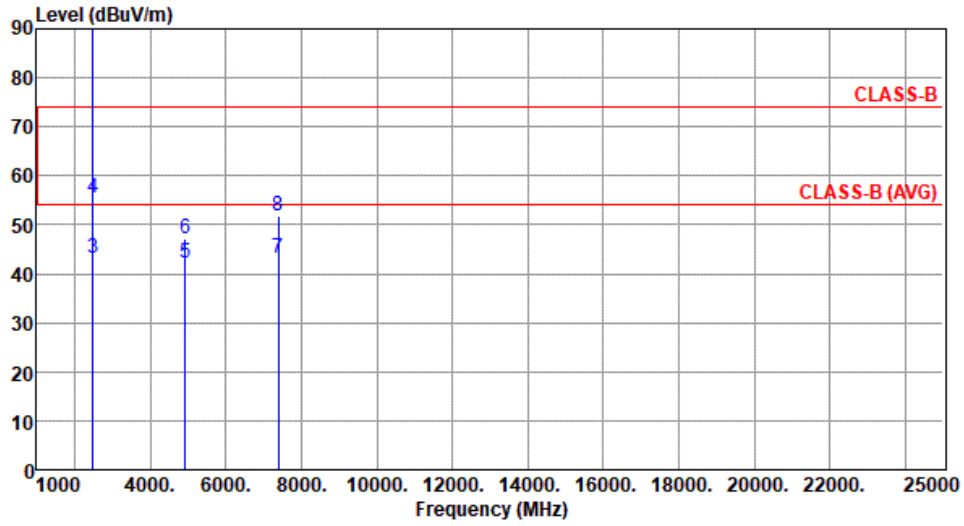


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	44.14	54.00	-9.86	47.81	-3.67	Average	311	315
2		2390.00	54.94	74.00	-19.06	58.61	-3.67	Peak	311	315
3	*	2437.00	115.46			119.22	-3.76	Average	311	315
4	*	2437.00	119.00			122.76	-3.76	Peak	311	315
5		2483.50	44.06	54.00	-9.94	47.92	-3.86	Average	311	315
6		2483.50	55.71	74.00	-18.29	59.57	-3.86	Peak	311	315
7		4874.00	46.39	54.00	-7.61	46.64	-0.25	Average	100	211
8		4874.00	52.70	74.00	-21.30	52.95	-0.25	Peak	100	211
9		7311.00	50.36	54.00	-3.64	45.20	5.16	Average	236	340
10		7311.00	56.20	74.00	-17.80	51.04	5.16	Peak	236	340

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11b	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

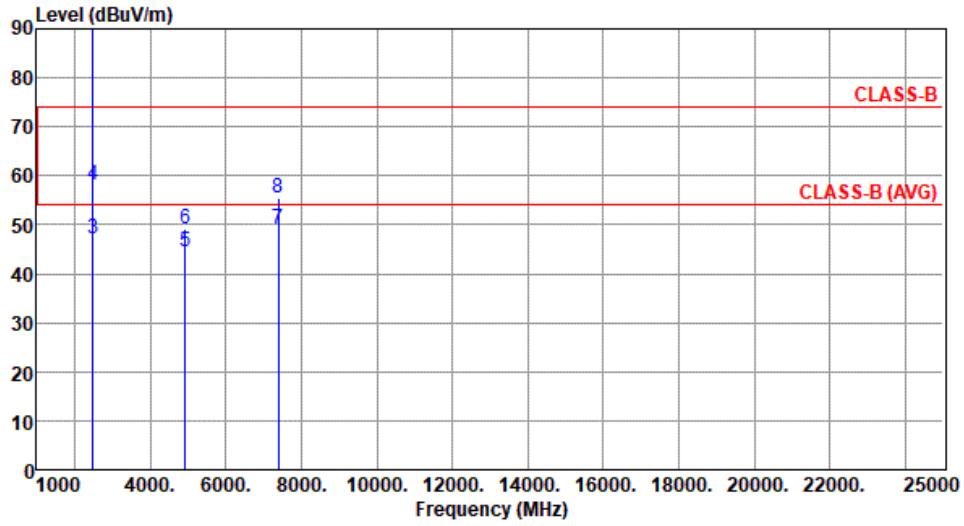


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2462.00	109.73			113.52	-3.79	Average	272	308
2	*	2462.00	113.23			117.02	-3.79	Peak	272	308
3		2483.50	43.10	54.00	-10.90	46.96	-3.86	Average	272	308
4		2483.50	55.33	74.00	-18.67	59.19	-3.86	Peak	272	308
5		4924.00	42.09	54.00	-11.91	42.34	-0.25	Average	119	297
6		4924.00	47.29	74.00	-26.71	47.54	-0.25	Peak	119	297
7		7386.00	43.32	54.00	-10.68	38.29	5.03	Average	102	91
8		7386.00	51.74	74.00	-22.26	46.71	5.03	Peak	102	91

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11b	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65



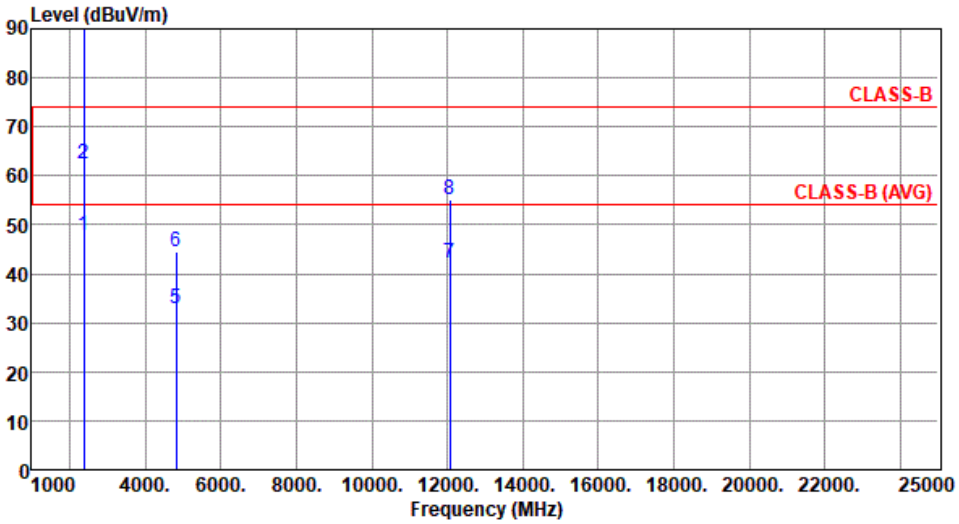
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2462.00	115.92			119.71	-3.79	Average	316	313
2	*	2462.00	119.52			123.31	-3.79	Peak	316	313
3		2483.50	47.04	54.00	-6.96	50.90	-3.86	Average	316	313
4		2483.50	58.26	74.00	-15.74	62.12	-3.86	Peak	316	313
5		4924.00	44.35	54.00	-9.65	44.60	-0.25	Average	100	208
6		4924.00	49.06	74.00	-24.94	49.31	-0.25	Peak	100	208
7		7386.00	49.00	54.00	-5.00	43.97	5.03	Average	244	345
8		7386.00	55.41	74.00	-18.59	50.38	5.03	Peak	244	345

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Unwanted Emissions (Above 1GHz) for 11g

Modulation	11g	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

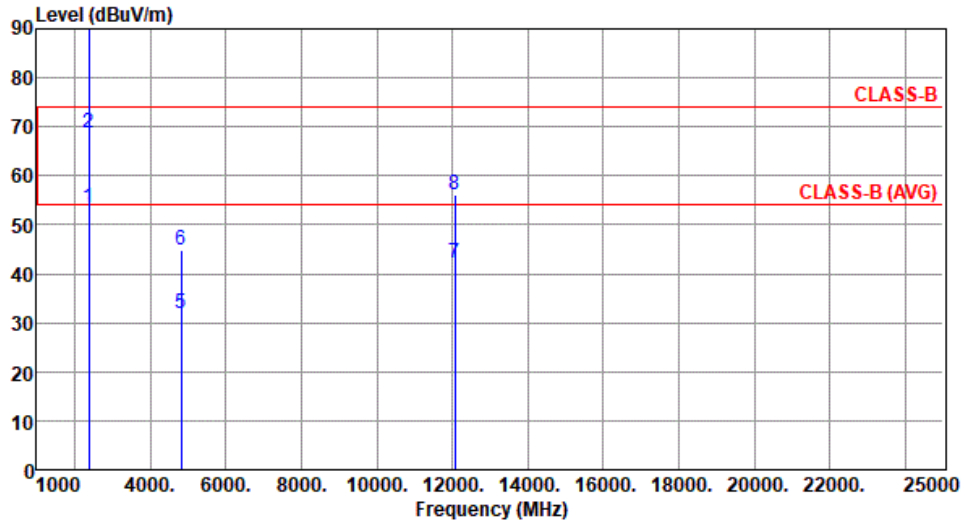


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	47.83	54.00	-6.17	51.50	-3.67	Average	267	321
2		2390.00	62.42	74.00	-11.58	66.09	-3.67	Peak	267	321
3	*	2412.00	106.27			110.01	-3.74	Average	267	321
4	*	2412.00	116.33			120.07	-3.74	Peak	267	321
5		4824.00	32.81	54.00	-21.19	33.05	-0.24	Average	128	296
6		4824.00	44.51	74.00	-29.49	44.75	-0.24	Peak	128	296
7		12060.00	42.12	54.00	-11.88	34.48	7.64	Average	100	105
8		12060.00	55.03	74.00	-18.97	47.39	7.64	Peak	100	105

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11g	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

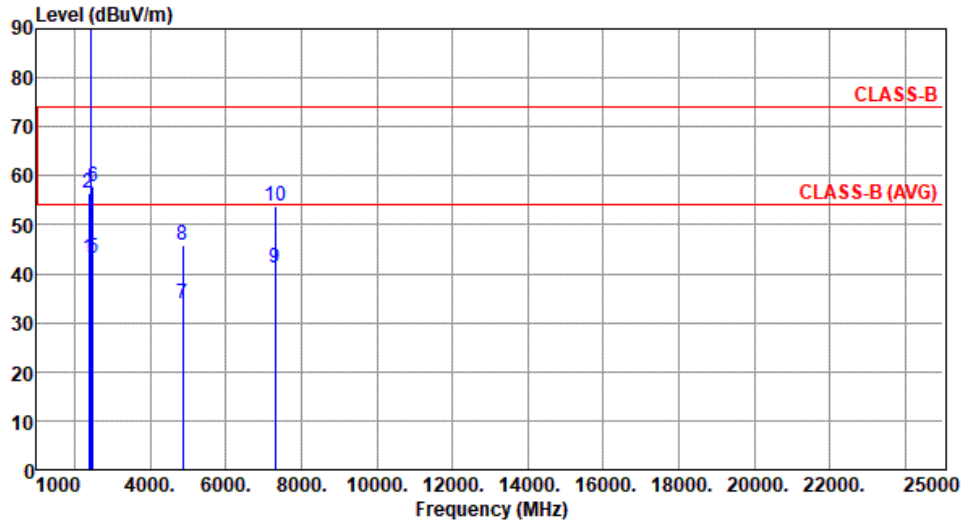


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	53.31	54.00	-0.69	56.98	-3.67	Average	317	322
2		2390.00	68.87	74.00	-5.13	72.54	-3.67	Peak	317	322
3	*	2412.00	110.98			114.72	-3.74	Average	317	322
4	*	2412.00	120.69			124.43	-3.74	Peak	317	322
5		4824.00	32.03	54.00	-21.97	32.27	-0.24	Average	102	13
6		4824.00	44.89	74.00	-29.11	45.13	-0.24	Peak	102	13
7		12060.00	42.01	54.00	-11.99	34.37	7.64	Average	100	48
8		12060.00	56.01	74.00	-17.99	48.37	7.64	Peak	100	48

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11g	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

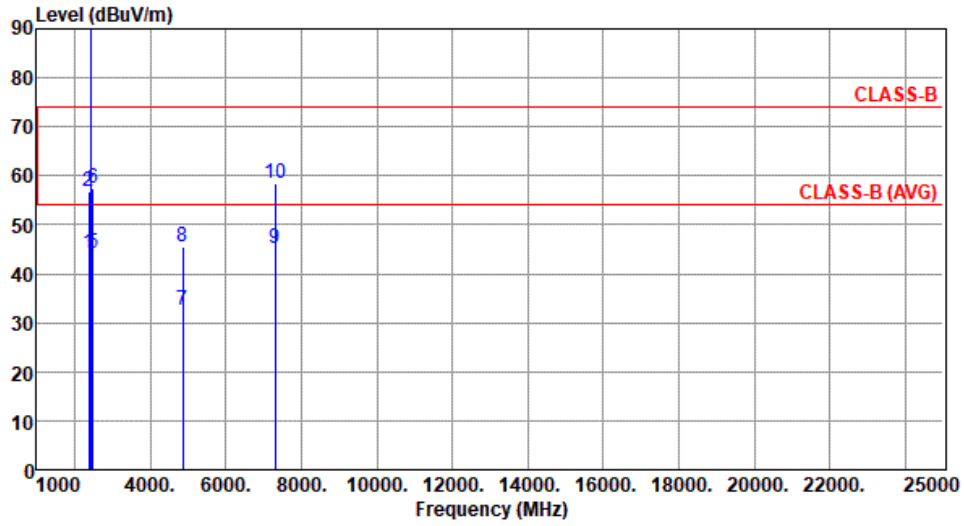


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	43.07	54.00	-10.93	46.74	-3.67	Average	324	320
2		2390.00	56.35	74.00	-17.65	60.02	-3.67	Peak	324	320
3	*	2437.00	105.79			109.55	-3.76	Average	324	320
4	*	2437.00	115.46			119.22	-3.76	Peak	324	320
5		2483.50	43.32	54.00	-10.68	47.18	-3.86	Average	324	320
6		2483.50	57.74	74.00	-16.26	61.60	-3.86	Peak	324	320
7		4874.00	33.73	54.00	-20.27	33.98	-0.25	Average	126	294
8		4874.00	45.71	74.00	-28.29	45.96	-0.25	Peak	126	294
9		7311.00	41.09	54.00	-12.91	35.93	5.16	Average	102	358
10		7311.00	53.92	74.00	-20.08	48.76	5.16	Peak	102	358

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11g	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

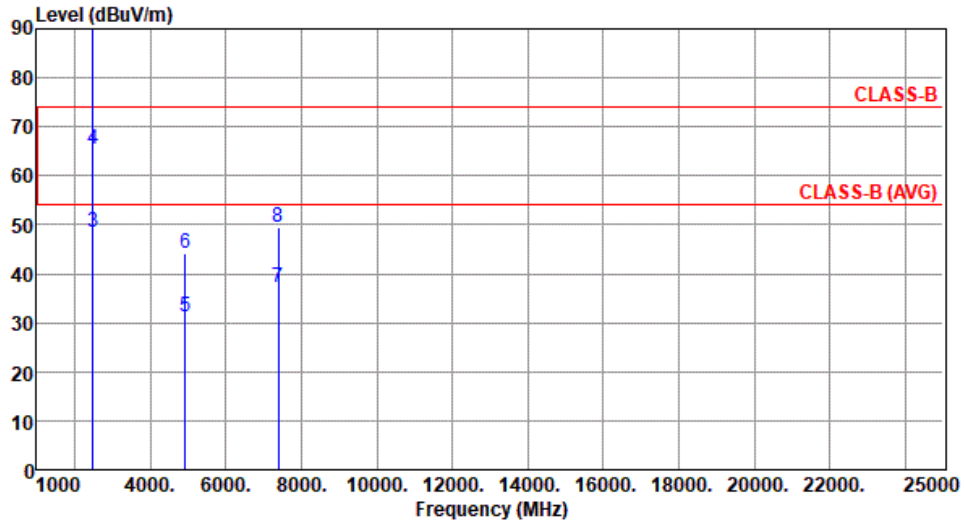


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	44.10	54.00	-9.90	47.77	-3.67	Average	295	331
2		2390.00	56.79	74.00	-17.21	60.46	-3.67	Peak	295	331
3	*	2437.00	111.26			115.02	-3.76	Average	295	331
4	*	2437.00	121.01			124.77	-3.76	Peak	295	331
5		2483.50	44.15	54.00	-9.85	48.01	-3.86	Average	295	331
6		2483.50	57.60	74.00	-16.40	61.46	-3.86	Peak	295	331
7		4874.00	32.68	54.00	-21.32	32.93	-0.25	Average	102	9
8		4874.00	45.52	74.00	-28.48	45.77	-0.25	Peak	102	9
9		7311.00	45.22	54.00	-8.78	40.06	5.16	Average	237	115
10		7311.00	58.47	74.00	-15.53	53.31	5.16	Peak	237	115

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11g	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65

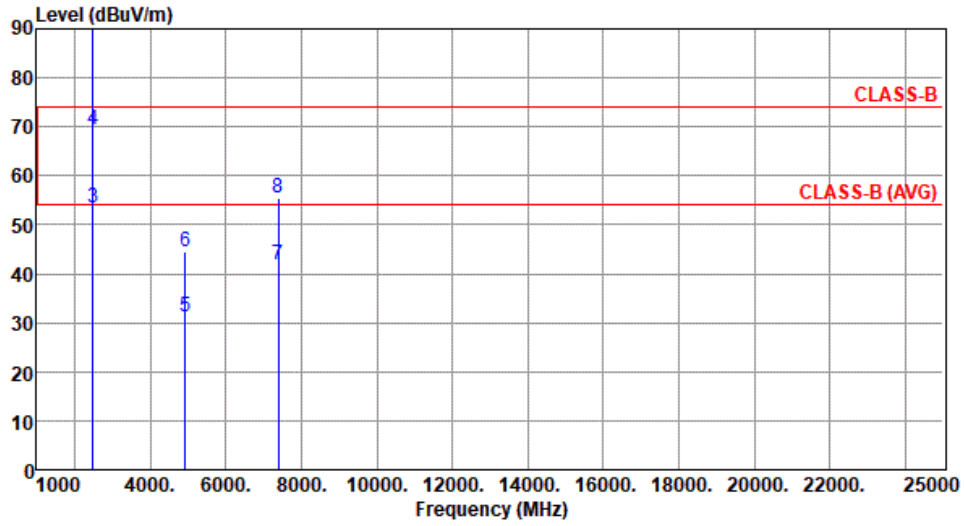


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2462.00	104.88			108.67	-3.79	Average	310	316
2	*	2462.00	115.48			119.27	-3.79	Peak	310	316
3		2483.50	48.45	54.00	-5.55	52.31	-3.86	Average	310	316
4		2483.50	65.37	74.00	-8.63	69.23	-3.86	Peak	310	316
5		4924.00	31.30	54.00	-22.70	31.55	-0.25	Average	100	297
6		4924.00	44.33	74.00	-29.67	44.58	-0.25	Peak	100	297
7		7386.00	37.28	54.00	-16.72	32.25	5.03	Average	102	355
8		7386.00	49.41	74.00	-24.59	44.38	5.03	Peak	102	355

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	11g	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):65



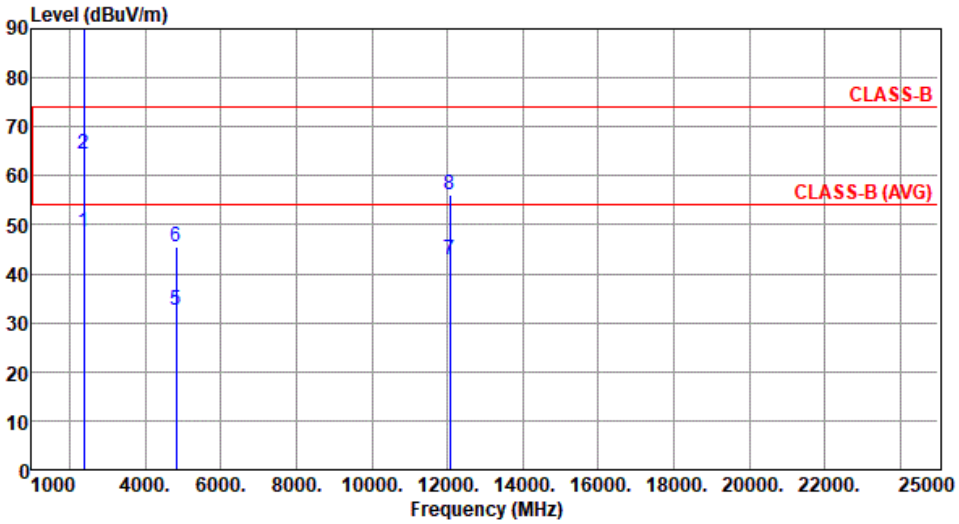
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2462.00	110.41			114.20	-3.79	Average	276	310
2	*	2462.00	119.79			123.58	-3.79	Peak	276	310
3		2483.50	53.57	54.00	-0.43	57.43	-3.86	Average	276	310
4		2483.50	69.28	74.00	-4.72	73.14	-3.86	Peak	276	310
5		4924.00	31.34	54.00	-22.66	31.59	-0.25	Average	102	13
6		4924.00	44.34	74.00	-29.66	44.59	-0.25	Peak	102	13
7		7386.00	41.98	54.00	-12.02	36.95	5.03	Average	236	112
8		7386.00	55.30	74.00	-18.70	50.27	5.03	Peak	236	112

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Unwanted Emissions (Above 1GHz) for be EHT20

Modulation	be EHT20	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

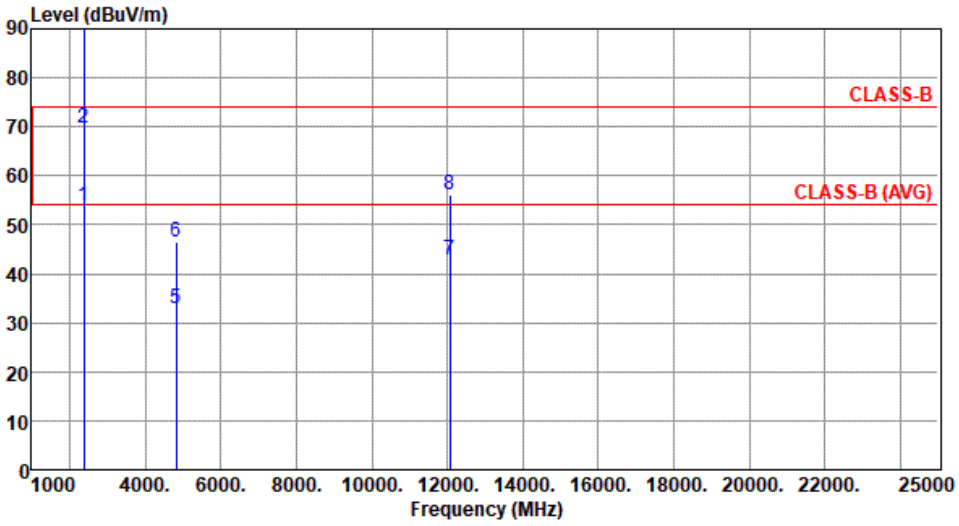


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	48.57	54.00	-5.43	52.24	-3.67	Average	215	310
2		2390.00	64.37	74.00	-9.63	68.04	-3.67	Peak	215	310
3	*	2412.00	104.29			108.03	-3.74	Average	215	310
4	*	2412.00	116.37			120.11	-3.74	Peak	215	310
5		4824.00	32.40	54.00	-21.60	32.64	-0.24	Average	100	148
6		4824.00	45.52	74.00	-28.48	45.76	-0.24	Peak	100	148
7		12060.00	42.87	54.00	-11.13	35.23	7.64	Average	100	203
8		12060.00	56.28	74.00	-17.72	48.64	7.64	Peak	100	203

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT20	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

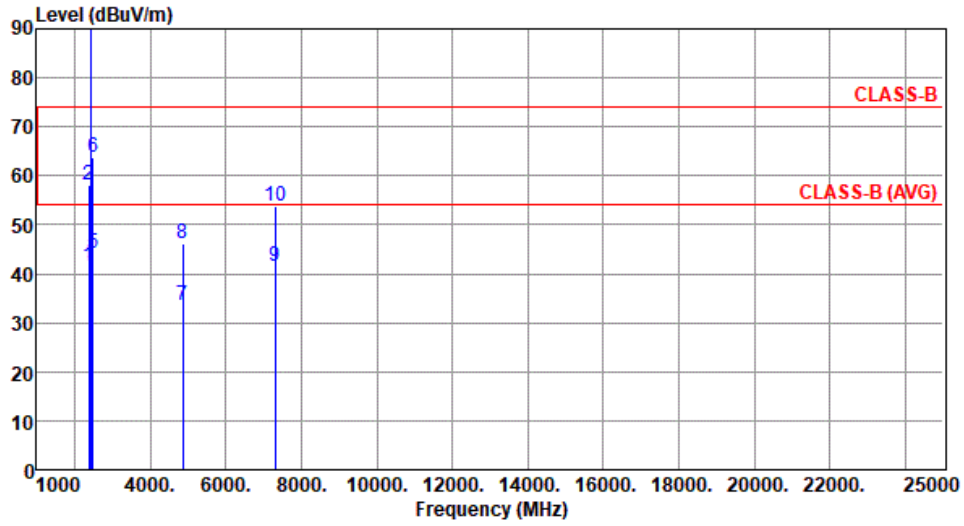


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	53.90	54.00	-0.10	57.57	-3.67	Average	309	312
2		2390.00	69.62	74.00	-4.38	73.29	-3.67	Peak	309	312
3	*	2412.00	111.33			115.07	-3.74	Average	344	344
4	*	2412.00	123.50			127.24	-3.74	Peak	344	344
5		4824.00	33.00	54.00	-21.00	33.24	-0.24	Average	100	339
6		4824.00	46.60	74.00	-27.40	46.84	-0.24	Peak	100	339
7		12060.00	42.77	54.00	-11.23	35.13	7.64	Average	100	208
8		12060.00	56.20	74.00	-17.80	48.56	7.64	Peak	100	208

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT20	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Sean Yu Temperature(℃):24 Humidity(%):65

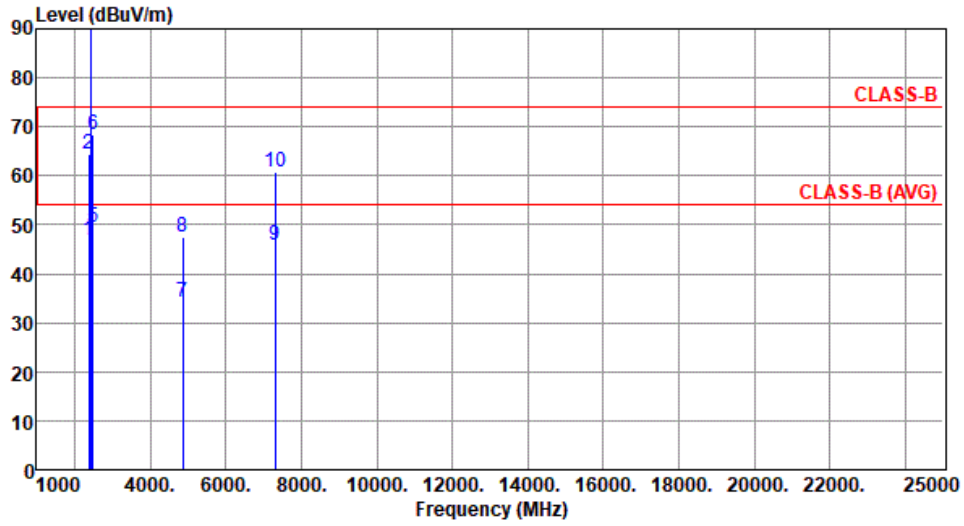


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	41.67	54.00	-12.33	45.34	-3.67	Average	208	331
2		2390.00	58.21	74.00	-15.79	61.88	-3.67	Peak	208	331
3	*	2437.00	105.12			108.88	-3.76	Average	211	308
4	*	2437.00	116.28			120.04	-3.76	Peak	211	308
5		2483.50	44.12	54.00	-9.88	47.98	-3.86	Average	208	331
6		2483.50	63.63	74.00	-10.37	67.49	-3.86	Peak	208	331
7		4874.00	33.54	54.00	-20.46	33.79	-0.25	Average	100	248
8		4874.00	46.08	74.00	-27.92	46.33	-0.25	Peak	100	248
9		7311.00	41.49	54.00	-12.51	36.33	5.16	Average	100	359
10		7311.00	53.73	74.00	-20.27	48.57	5.16	Peak	100	359

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT20	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):24 Humidity(%):65

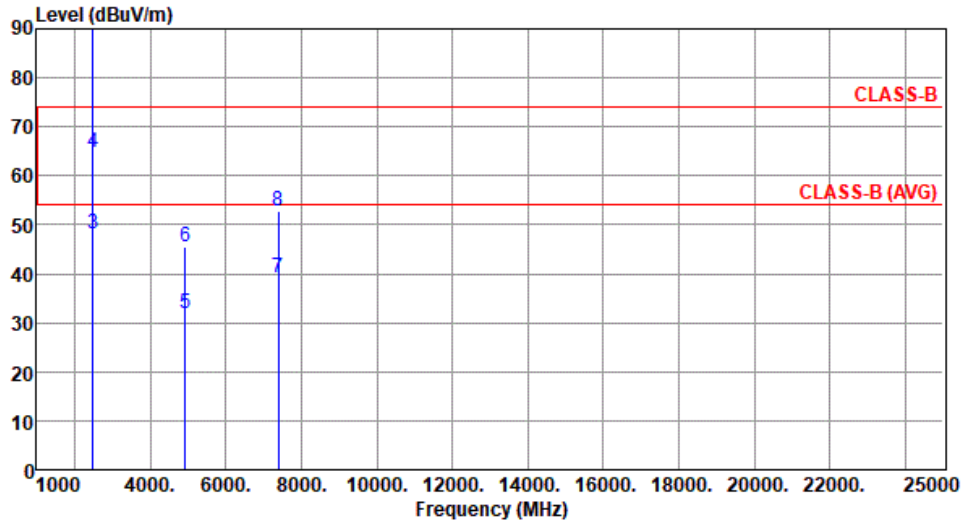


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	46.68	54.00	-7.32	50.35	-3.67	Average	312	314
2		2390.00	64.45	74.00	-9.55	68.12	-3.67	Peak	312	314
3	*	2437.00	112.19			115.95	-3.76	Average	312	314
4	*	2437.00	123.88			127.64	-3.76	Peak	312	314
5		2483.50	49.47	54.00	-4.53	53.33	-3.86	Average	312	314
6		2483.50	68.51	74.00	-5.49	72.37	-3.86	Peak	312	314
7		4874.00	34.32	54.00	-19.68	34.57	-0.25	Average	100	346
8		4874.00	47.48	74.00	-26.52	47.73	-0.25	Peak	100	346
9		7311.00	45.90	54.00	-8.10	40.74	5.16	Average	255	121
10		7311.00	60.73	74.00	-13.27	55.57	5.16	Peak	255	121

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT20	Test Freq. (MHz)	2462
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

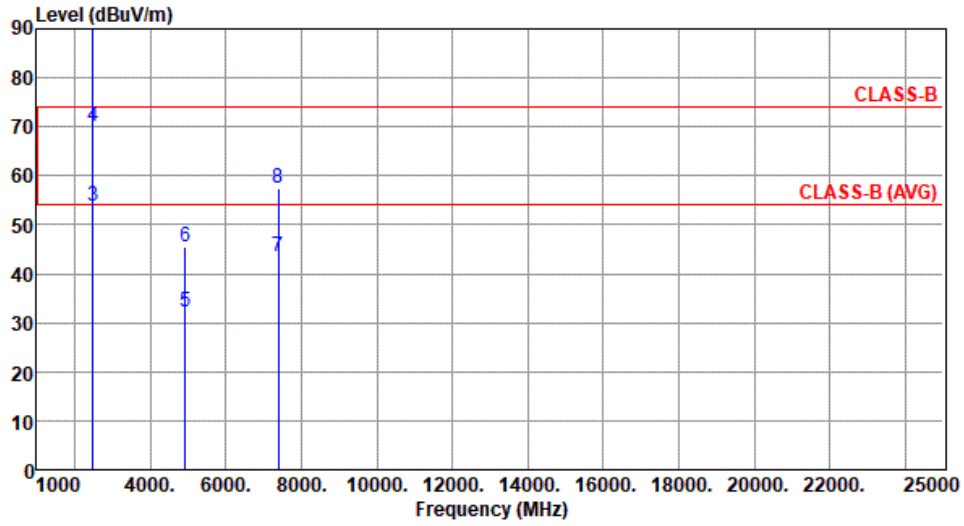


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2462.00	102.38			106.17	-3.79	Average	207	334
2	*	2462.00	114.32			118.11	-3.79	Peak	207	334
3		2483.50	48.27	54.00	-5.73	52.13	-3.86	Average	207	334
4		2483.50	64.61	74.00	-9.39	68.47	-3.86	Peak	207	334
5		4924.00	32.01	54.00	-21.99	32.26	-0.25	Average	100	179
6		4924.00	45.51	74.00	-28.49	45.76	-0.25	Peak	100	179
7		7386.00	39.29	54.00	-14.71	34.26	5.03	Average	100	358
8		7386.00	52.69	74.00	-21.31	47.66	5.03	Peak	100	358

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT20	Test Freq. (MHz)	2462
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):64



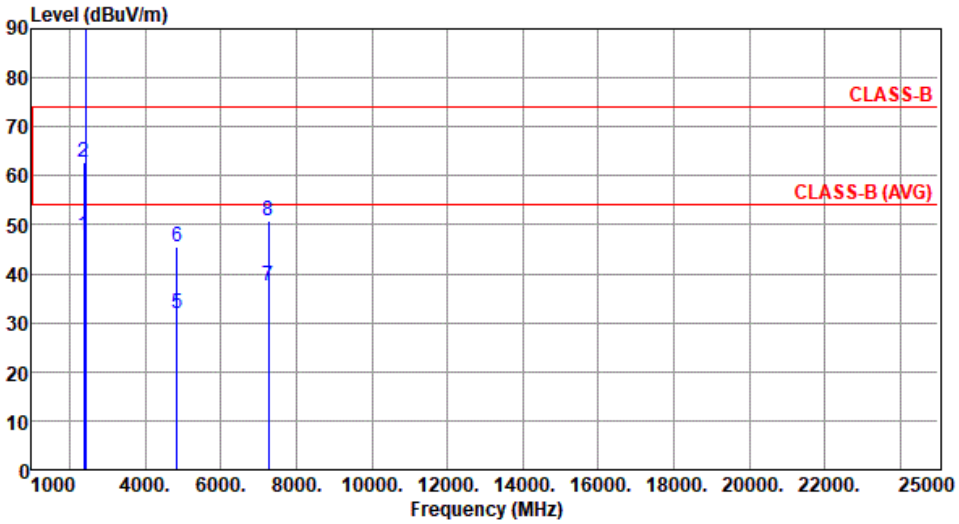
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2462.00	109.61			113.40	-3.79	Average	321	313
2	*	2462.00	121.56			125.35	-3.79	Peak	321	313
3		2483.50	53.88	54.00	-0.12	57.74	-3.86	Average	321	313
4		2483.50	69.99	74.00	-4.01	73.85	-3.86	Peak	321	313
5		4924.00	32.20	54.00	-21.80	32.45	-0.25	Average	100	155
6		4924.00	45.47	74.00	-28.53	45.72	-0.25	Peak	100	155
7		7386.00	43.45	54.00	-10.55	38.42	5.03	Average	253	120
8		7386.00	57.49	74.00	-16.51	52.46	5.03	Peak	253	120

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Unwanted Emissions (Above 1GHz) for be EHT40

Modulation	be EHT40	Test Freq. (MHz)	2422
Polarization	Horizontal		

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

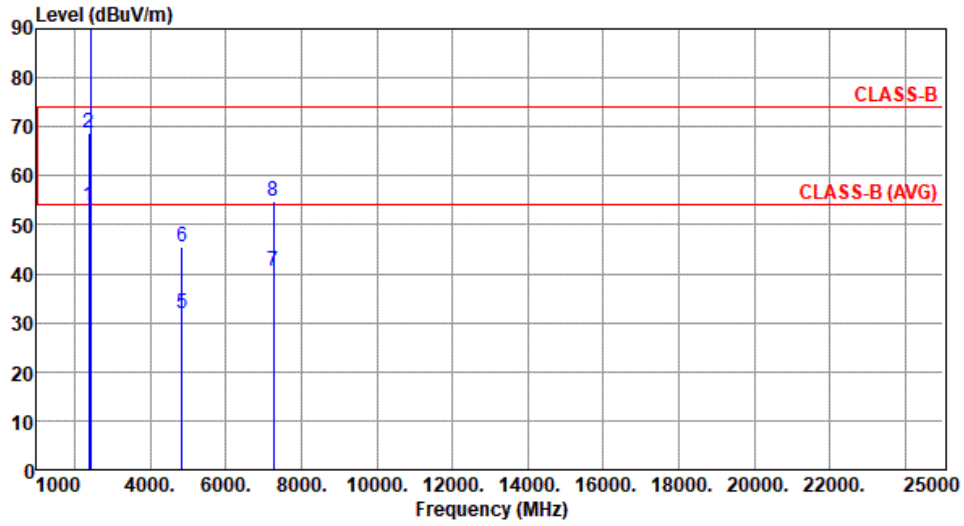


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	47.77	54.00	-6.23	51.44	-3.67	Average	234	331
2		2390.00	62.68	74.00	-11.32	66.35	-3.67	Peak	234	331
3	*	2422.00	98.05			101.79	-3.74	Average	234	331
4	*	2422.00	105.69			109.43	-3.74	Peak	234	331
5		4844.00	31.92	54.00	-22.08	32.17	-0.25	Average	100	158
6		4844.00	45.44	74.00	-28.56	45.69	-0.25	Peak	100	158
7		7266.00	37.68	54.00	-16.32	32.48	5.20	Average	100	166
8		7266.00	50.96	74.00	-23.04	45.76	5.20	Peak	100	166

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT40	Test Freq. (MHz)	2422
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):64

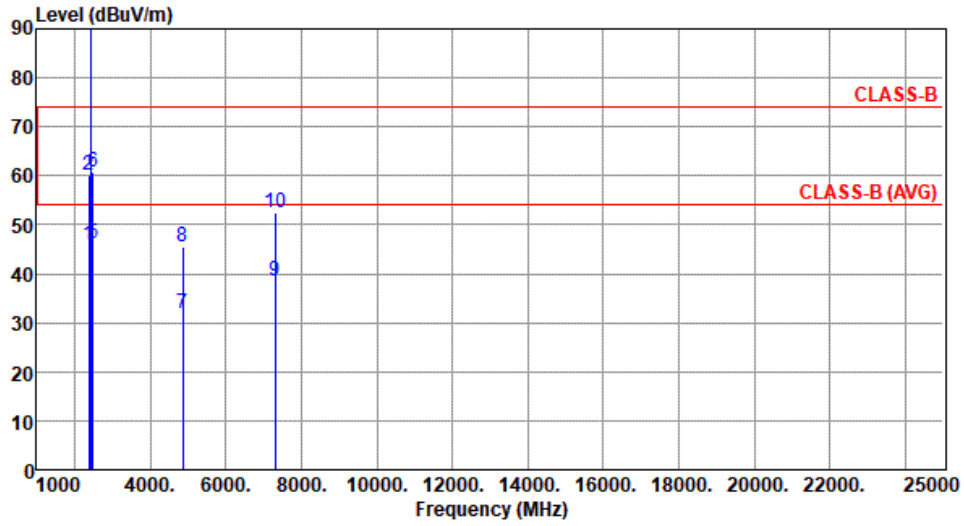


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	53.89	54.00	-0.11	57.56	-3.67	Average	300	319
2		2390.00	68.62	74.00	-5.38	72.29	-3.67	Peak	300	319
3	*	2422.00	104.34			108.08	-3.74	Average	327	345
4	*	2422.00	116.18			119.92	-3.74	Peak	327	345
5		4844.00	32.03	54.00	-21.97	32.28	-0.25	Average	100	147
6		4844.00	45.48	74.00	-28.52	45.73	-0.25	Peak	100	147
7		7266.00	40.62	54.00	-13.38	35.42	5.20	Average	220	123
8		7266.00	54.67	74.00	-19.33	49.47	5.20	Peak	220	123

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT40	Test Freq. (MHz)	2437
Polarization	Horizontal		

Test By :Sean Yu Temperature(℃):24 Humidity(%):65

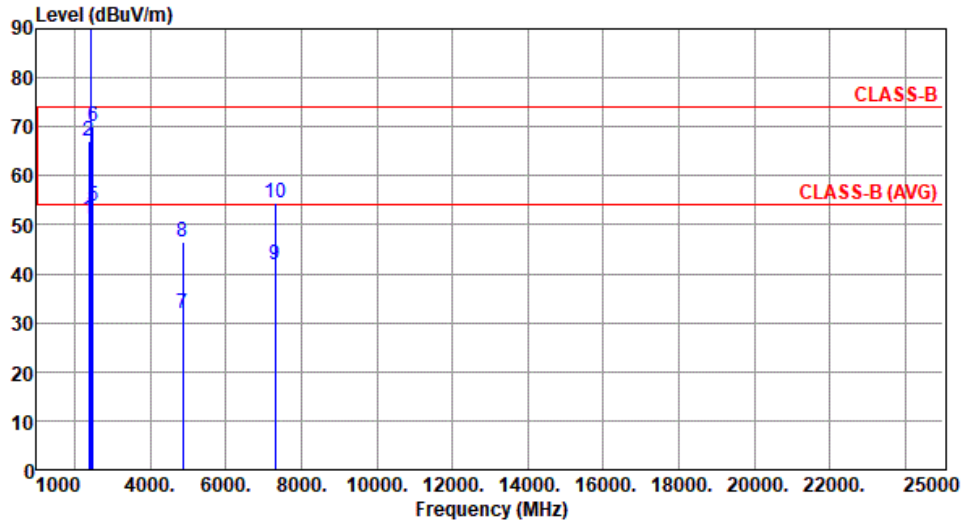


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	45.70	54.00	-8.30	49.37	-3.67	Average	234	321
2		2390.00	60.17	74.00	-13.83	63.84	-3.67	Peak	234	321
3	*	2437.00	99.12			102.88	-3.76	Average	234	321
4	*	2437.00	110.91			114.67	-3.76	Peak	234	321
5		2483.50	46.05	54.00	-7.95	49.91	-3.86	Average	234	321
6		2483.50	60.89	74.00	-13.11	64.75	-3.86	Peak	234	321
7		4874.00	31.98	54.00	-22.02	32.23	-0.25	Average	100	179
8		4874.00	45.41	74.00	-28.59	45.66	-0.25	Peak	100	179
9		7311.00	38.61	54.00	-15.39	33.45	5.16	Average	100	358
10		7311.00	52.58	74.00	-21.42	47.42	5.16	Peak	100	358

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT40	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):24 Humidity(%):65

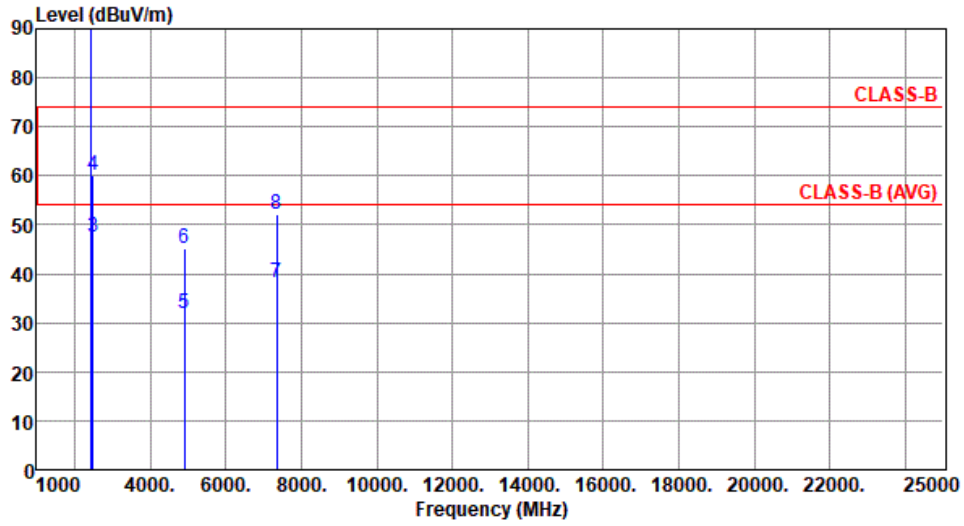


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1		2390.00	51.16	54.00	-2.84	54.83	-3.67	Average	294	307
2		2390.00	67.17	74.00	-6.83	70.84	-3.67	Peak	294	307
3	*	2437.00	105.92			109.68	-3.76	Average	294	334
4	*	2437.00	117.77			121.53	-3.76	Peak	294	334
5		2483.50	53.70	54.00	-0.30	57.56	-3.86	Average	318	327
6		2483.50	69.94	74.00	-4.06	73.80	-3.86	Peak	318	327
7		4874.00	32.01	54.00	-21.99	32.26	-0.25	Average	100	188
8		4874.00	46.49	74.00	-27.51	46.74	-0.25	Peak	100	188
9		7311.00	41.73	54.00	-12.27	36.57	5.16	Average	253	129
10		7311.00	54.41	74.00	-19.59	49.25	5.16	Peak	253	129

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT40	Test Freq. (MHz)	2452
Polarization	Horizontal		

Test By :Sean Yu Temperature(℃):24 Humidity(%):65

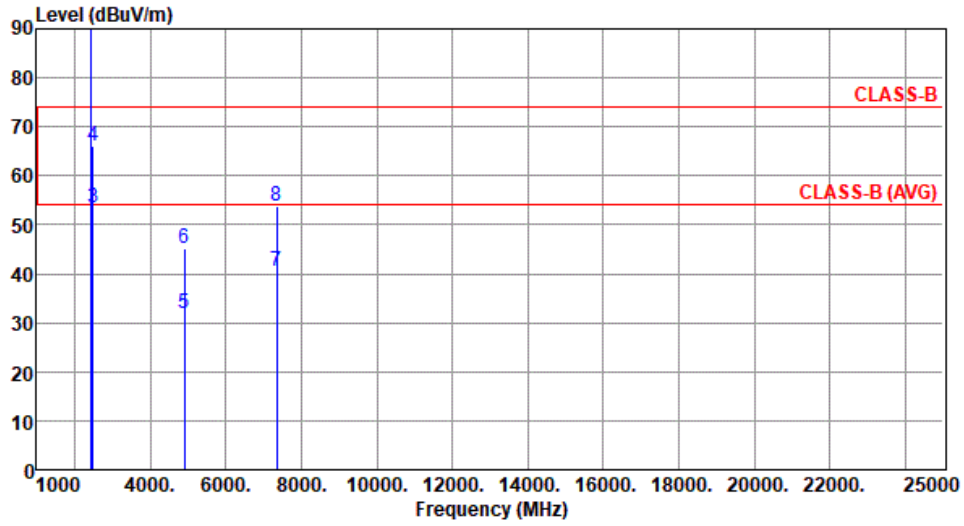


		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2452.00	98.53			102.30	-3.77	Average	312	312
2	*	2452.00	110.80			114.57	-3.77	Peak	312	312
3		2483.50	47.62	54.00	-6.38	51.48	-3.86	Average	333	336
4		2483.50	60.12	74.00	-13.88	63.98	-3.86	Peak	333	336
5		4904.00	31.91	54.00	-22.09	32.16	-0.25	Average	100	176
6		4904.00	45.18	74.00	-28.82	45.43	-0.25	Peak	100	176
7		7356.00	38.32	54.00	-15.68	33.27	5.05	Average	100	176
8		7356.00	52.08	74.00	-21.92	47.03	5.05	Peak	100	176

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Modulation	be EHT40	Test Freq. (MHz)	2452
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):24 Humidity(%):65



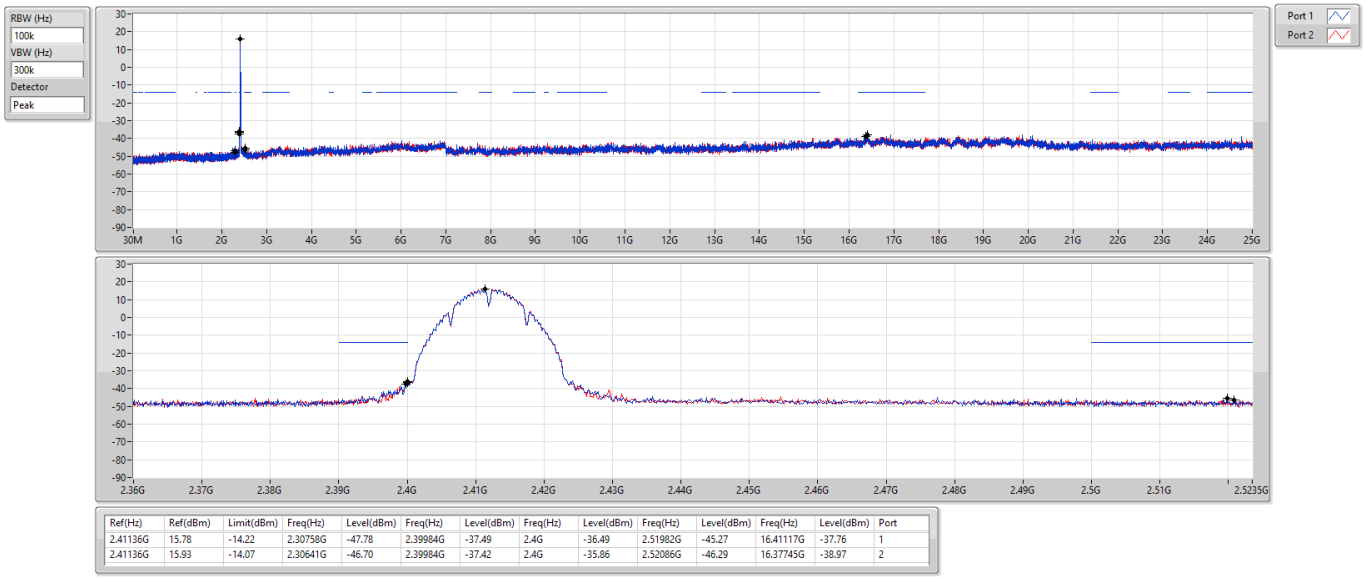
		Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	*	2452.00	105.53			109.30	-3.77	Average	312	312
2	*	2452.00	117.80			121.57	-3.77	Peak	312	312
3		2483.50	53.62	54.00	-0.38	57.48	-3.86	Average	333	336
4		2483.50	66.12	74.00	-7.88	69.98	-3.86	Peak	333	336
5		4904.00	31.86	54.00	-22.14	32.11	-0.25	Average	100	206
6		4904.00	45.13	74.00	-28.87	45.38	-0.25	Peak	100	206
7		7356.00	40.52	54.00	-13.48	35.47	5.05	Average	251	131
8		7356.00	53.81	74.00	-20.19	48.76	5.05	Peak	251	131

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3:"*" is Peak / Average value of fundamental frequency

Summary

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **CSENdB**

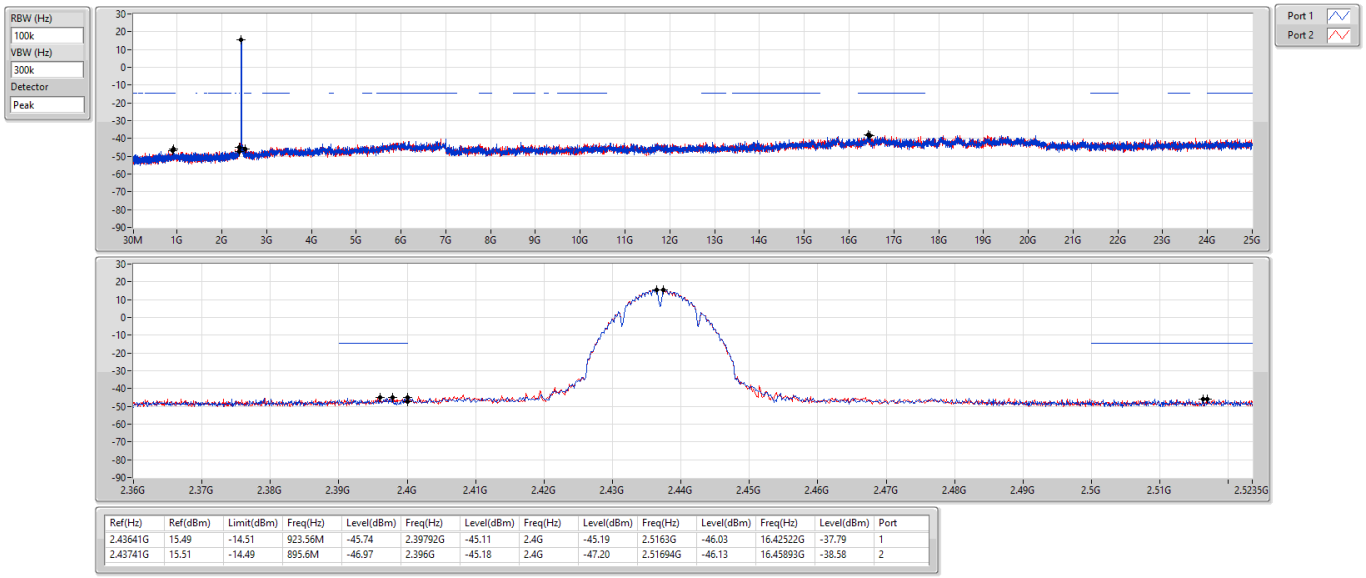
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41136G	15.78	-14.22	2.30758G	-47.78	2.39984G	-37.49	2.4G	-36.49	2.51982G	-45.27	16.41117G	-37.76	1
2.41136G	15.93	-14.07	2.30641G	-46.70	2.39984G	-37.42	2.4G	-35.86	2.52086G	-46.29	16.37745G	-38.97	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **CSENdB**

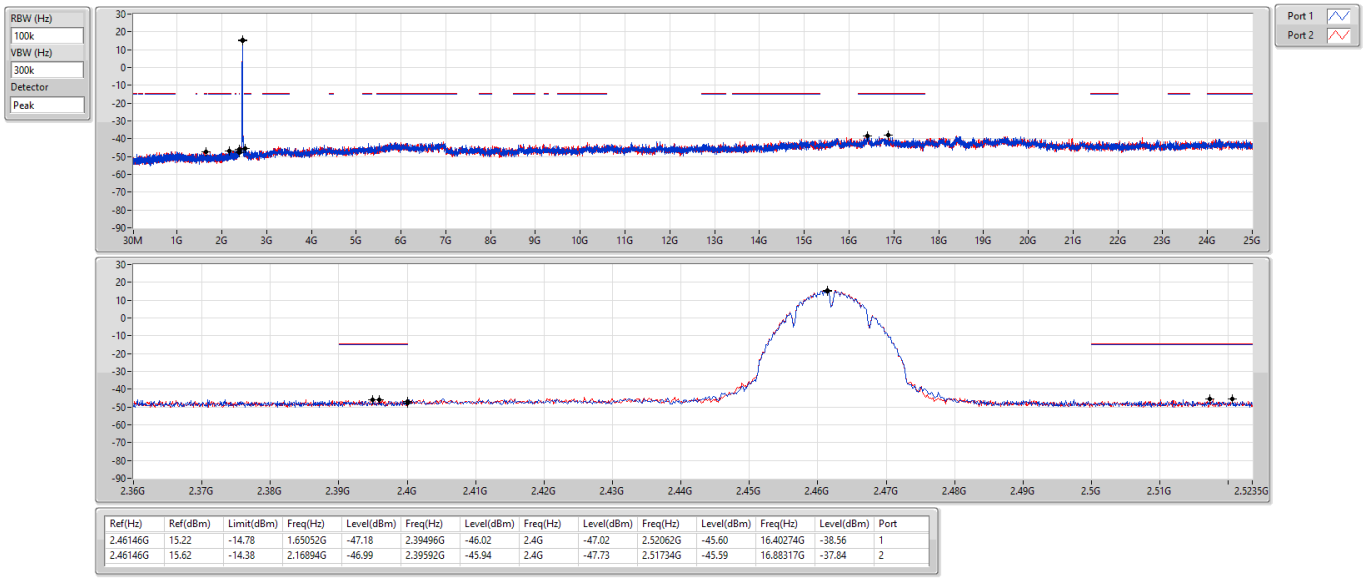
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43641G	15.49	-14.51	923.56M	-45.74	2.39792G	-45.11	2.4G	-45.19	2.5163G	-46.03	16.42522G	-37.79	1
2.43741G	15.51	-14.49	895.6M	-46.97	2.396G	-45.18	2.4G	-47.20	2.51694G	-46.13	16.45893G	-38.58	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **CSENdB**

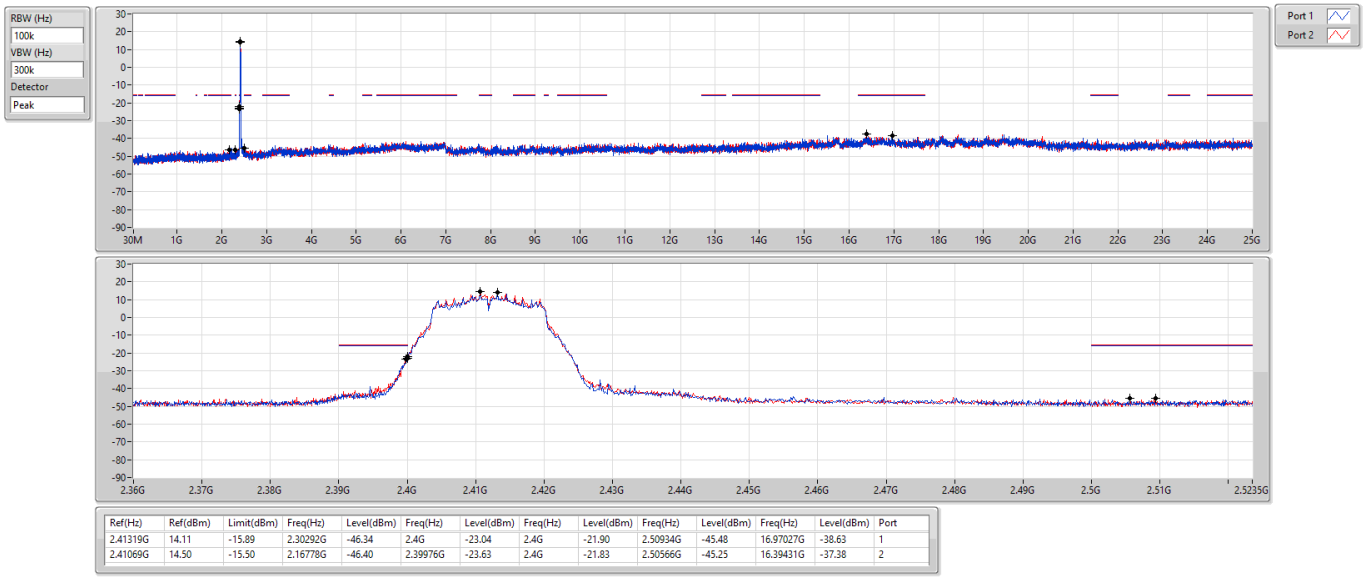
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46146G	15.22	-14.78	1.65052G	-47.18	2.39496G	-46.02	2.4G	-47.02	2.52062G	-45.60	16.40274G	-38.56	1
2.46146G	15.62	-14.38	2.16894G	-46.99	2.39592G	-45.94	2.4G	-47.73	2.51734G	-45.59	16.88317G	-37.84	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **CSENdB**

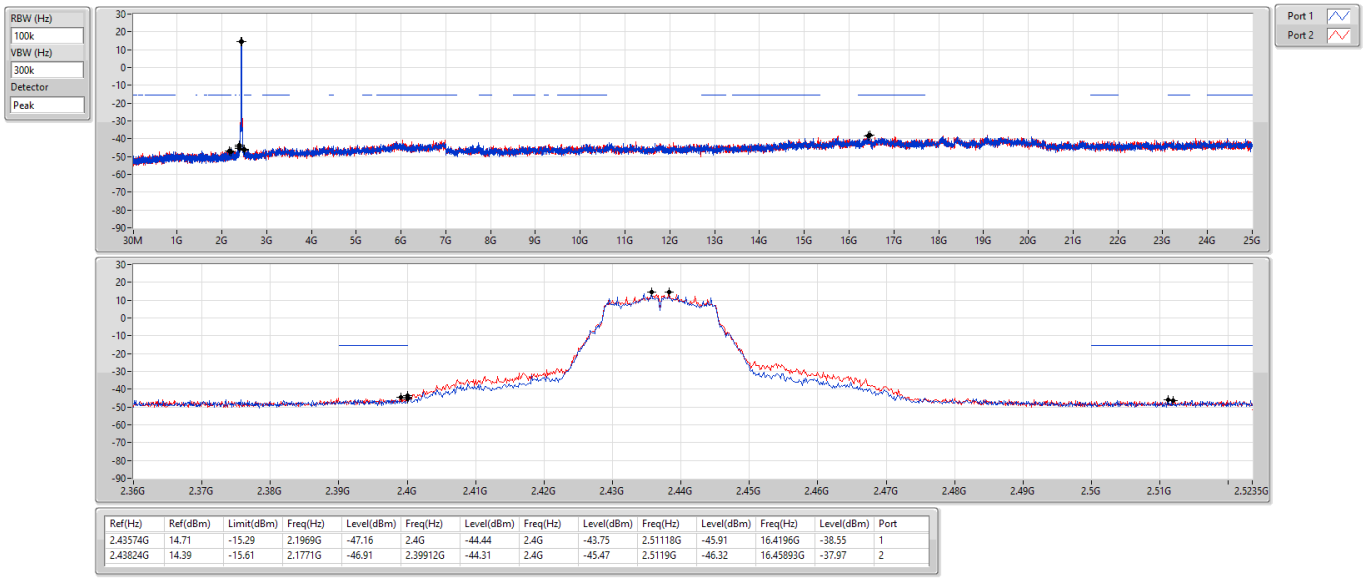
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41319G	14.11	-15.89	2.30292G	-46.34	2.4G	-23.04	2.4G	-21.90	2.50934G	-45.48	16.97027G	-38.63	1
2.41069G	14.50	-15.50	2.16778G	-46.40	2.39976G	-23.63	2.4G	-21.83	2.50566G	-45.25	16.39431G	-37.38	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **CSENdB**

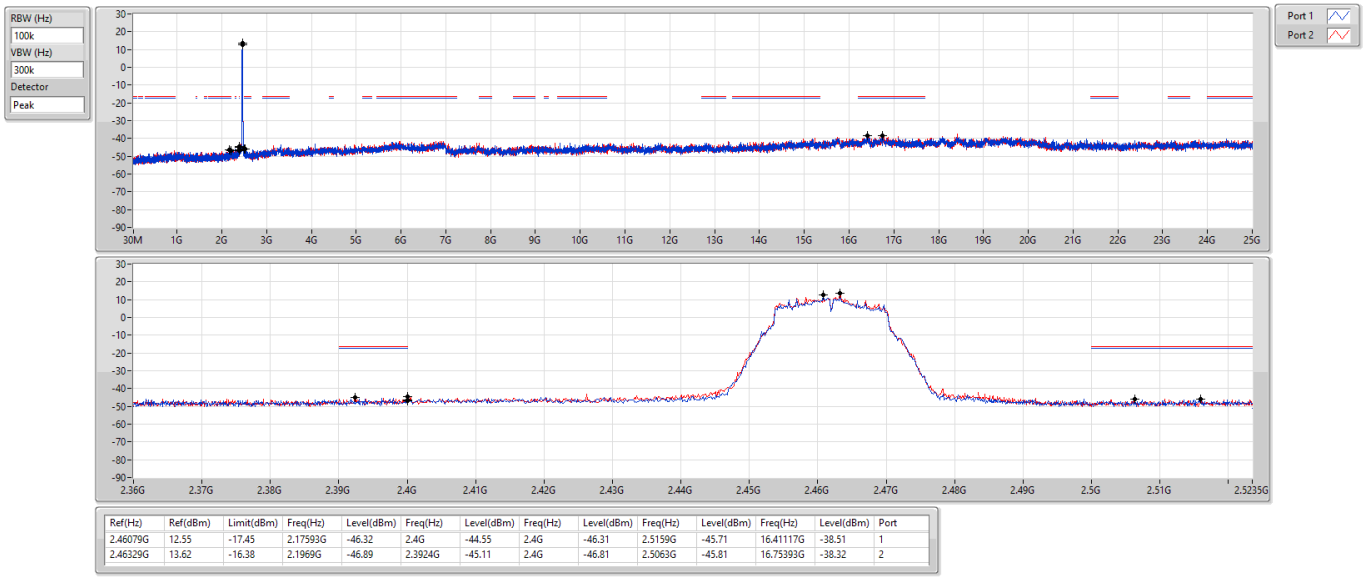
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43574G	14.71	-15.29	2.1969G	-47.16	2.4G	-44.44	2.4G	-43.75	2.51118G	-45.91	16.4196G	-38.55	1
2.43824G	14.39	-15.61	2.1771G	-46.91	2.39912G	-44.31	2.4G	-45.47	2.5119G	-46.32	16.45893G	-37.97	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **CSENdB**

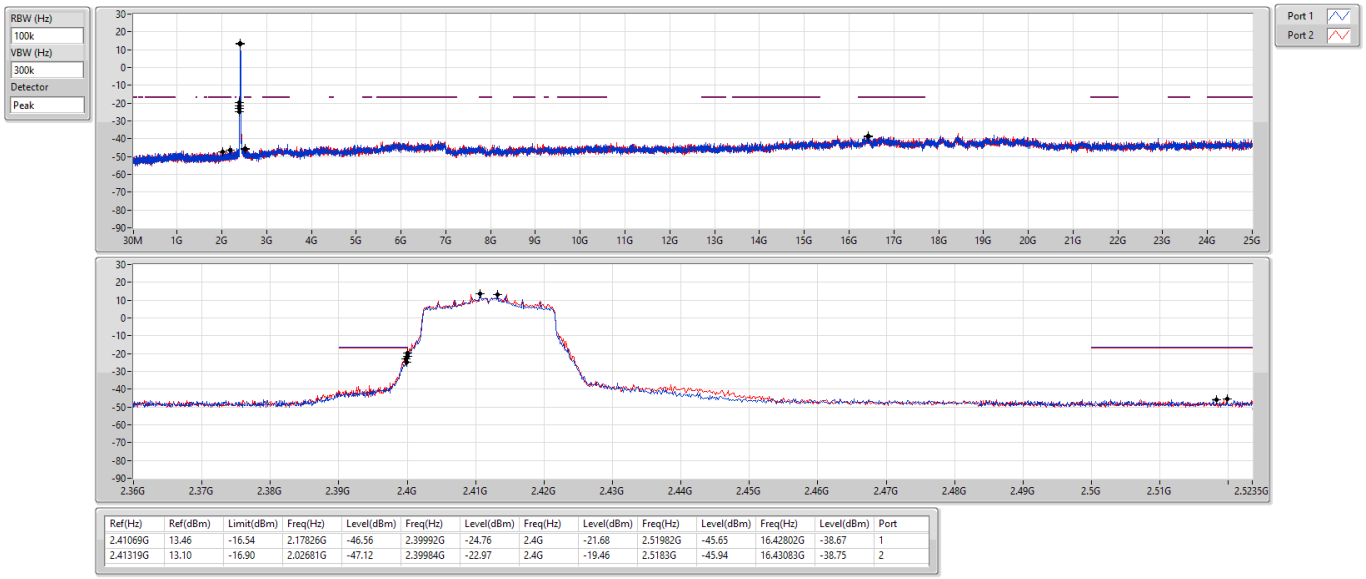
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46079G	12.55	-17.45	2.17593G	-46.32	2.4G	-44.55	2.4G	-46.31	2.5159G	-45.71	16.41117G	-38.51	1
2.46329G	13.62	-16.38	2.1969G	-46.89	2.3924G	-45.11	2.4G	-46.81	2.5063G	-45.81	16.75393G	-38.32	2

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **CSENdB**

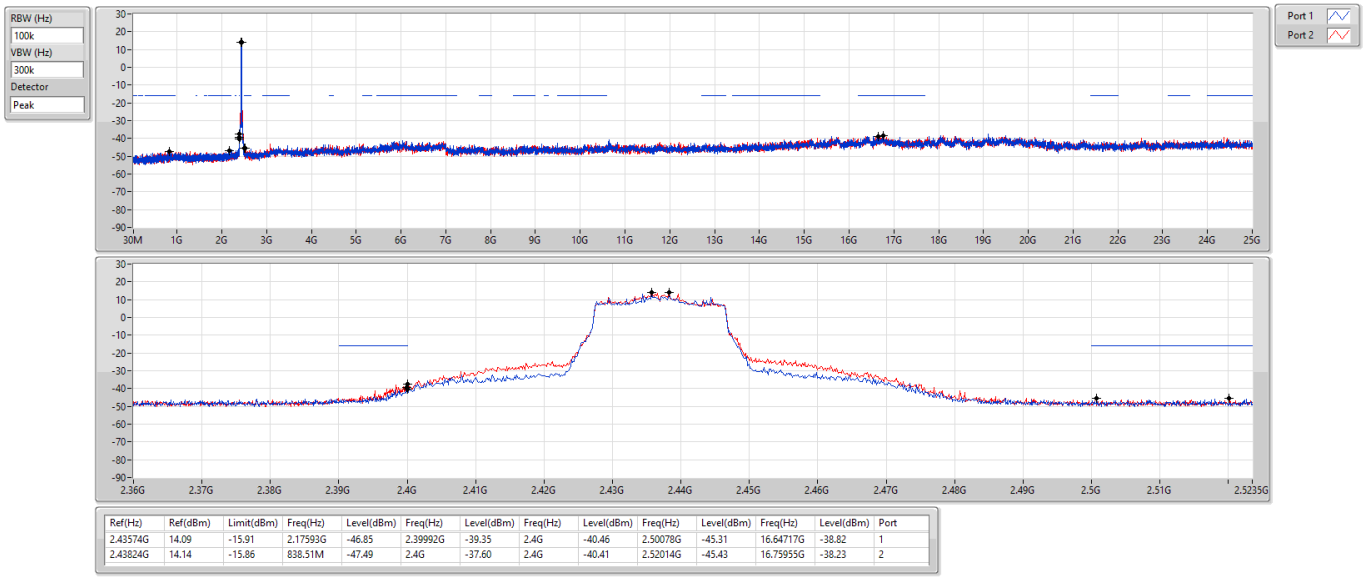
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41069G	13.46	-16.54	2.17826G	-46.56	2.39992G	-24.76	2.4G	-21.68	2.51982G	-45.65	16.42802G	-38.67	1
2.41319G	13.10	-16.90	2.02681G	-47.12	2.39984G	-22.97	2.4G	-19.46	2.5183G	-45.94	16.43083G	-38.75	2

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **CSENdB**

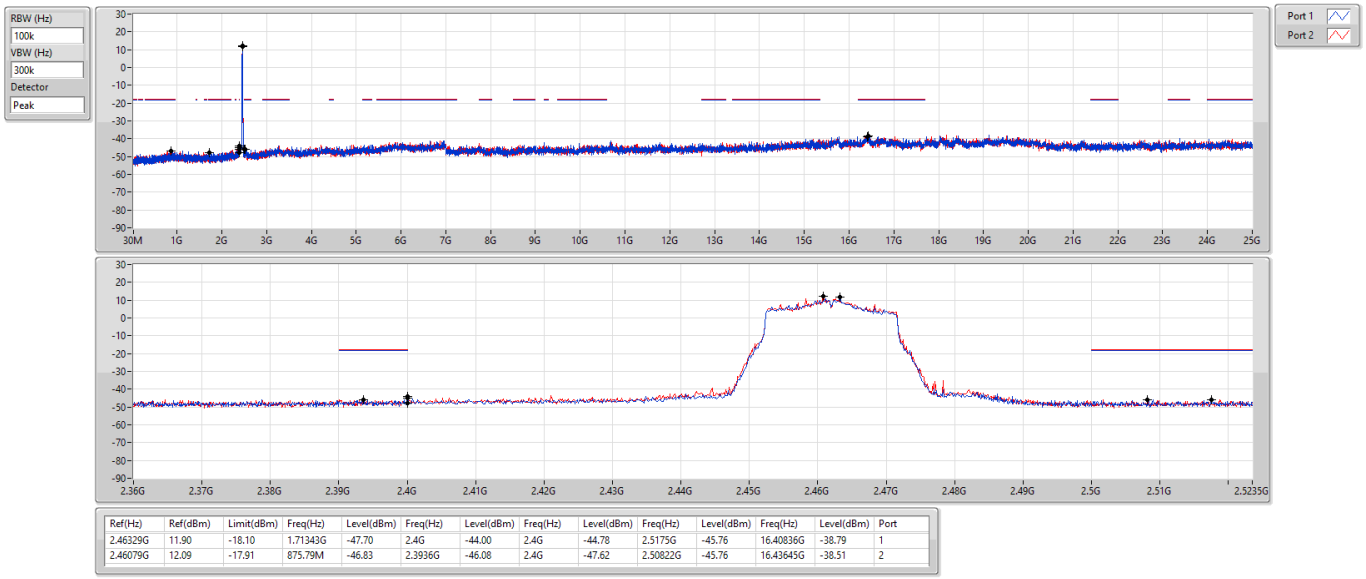
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43574G	14.09	-15.91	2.17593G	-46.85	2.39992G	-39.35	2.4G	-40.46	2.50078G	-45.31	16.64717G	-38.82	1
2.43824G	14.14	-15.86	838.51M	-47.49	2.4G	-37.60	2.4G	-40.41	2.52014G	-45.43	16.75955G	-38.23	2

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_2TX **CSENdB**

2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46329G	11.90	-18.10	1.71343G	-47.70	2.4G	-44.00	2.4G	-44.78	2.5175G	-45.76	16.40836G	-38.79	1
2.46079G	12.09	-17.91	875.79M	-46.83	2.3936G	-46.08	2.4G	-47.62	2.50822G	-45.76	16.43645G	-38.51	2

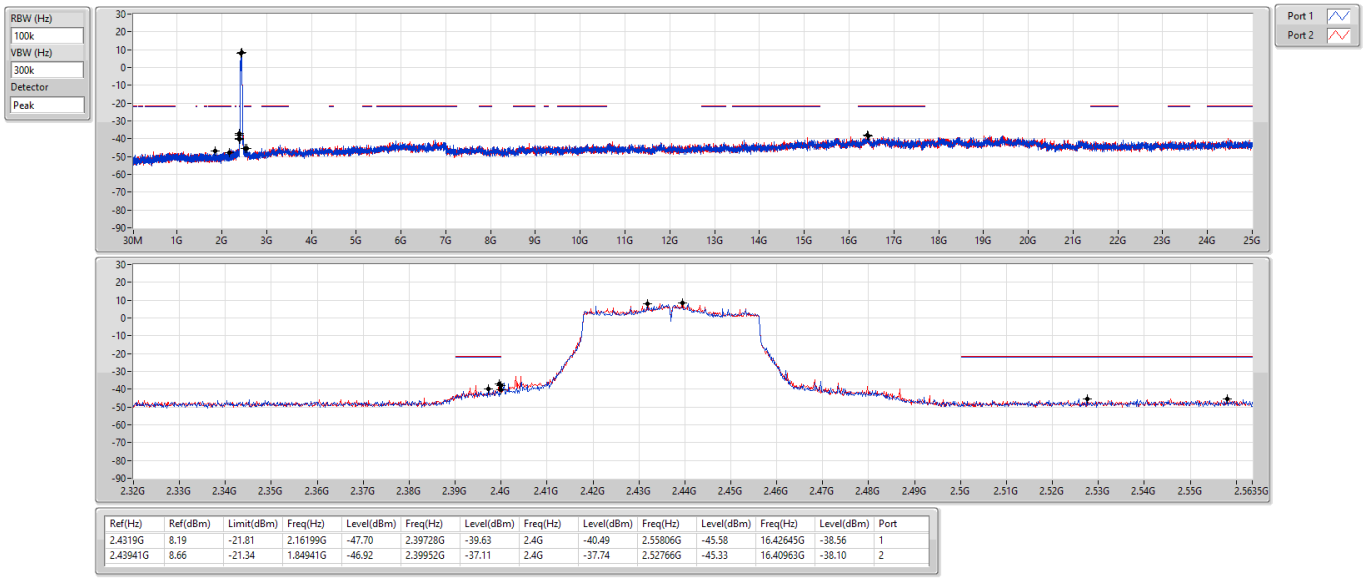
2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **CSENdB**

2422MHz

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41937G	8.30	-21.70	2.10245G	-47.50	2.39984G	-26.78	2.4G	-25.85	2.54238G	-45.76	16.38438G	-38.46	1
2.41703G	7.42	-22.58	1.90895G	-47.14	2.39984G	-25.57	2.4G	-24.24	2.54558G	-45.70	16.42365G	-36.93	2

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **CSENdB**

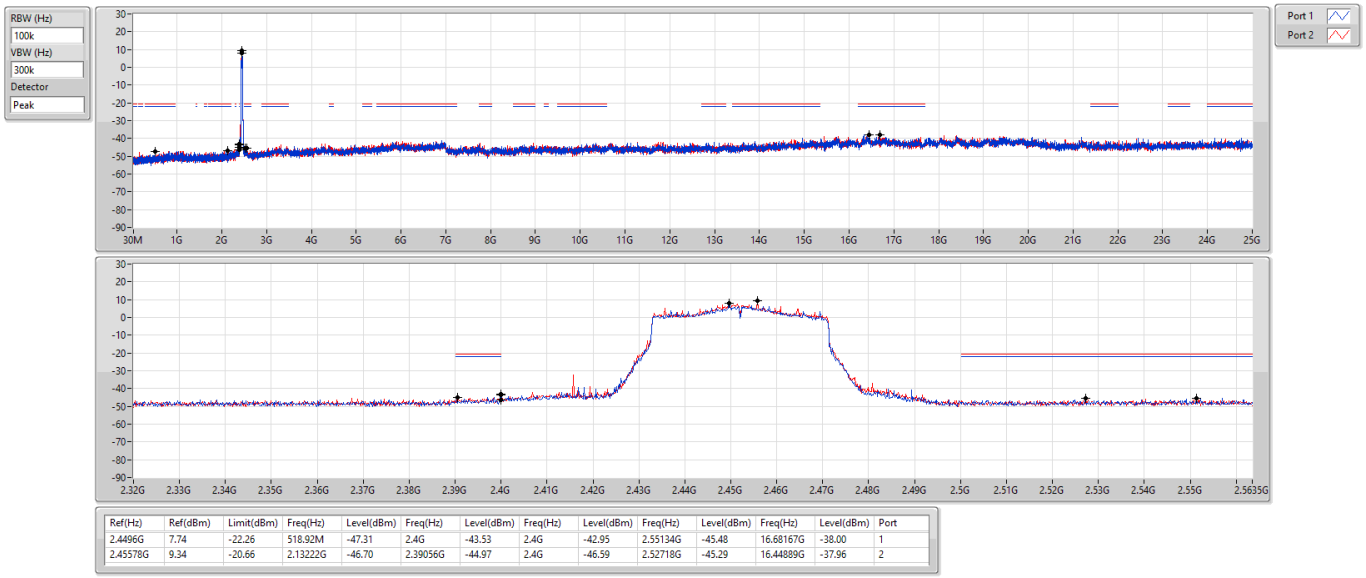
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4319G	8.19	-21.81	2.16199G	-47.70	2.39728G	-39.63	2.4G	-40.49	2.55806G	-45.58	16.42645G	-38.56	1
2.43941G	8.66	-21.34	1.84941G	-46.92	2.39952G	-37.11	2.4G	-37.74	2.52766G	-45.33	16.40963G	-38.10	2

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_2TX **CSENdB**

2452MHz

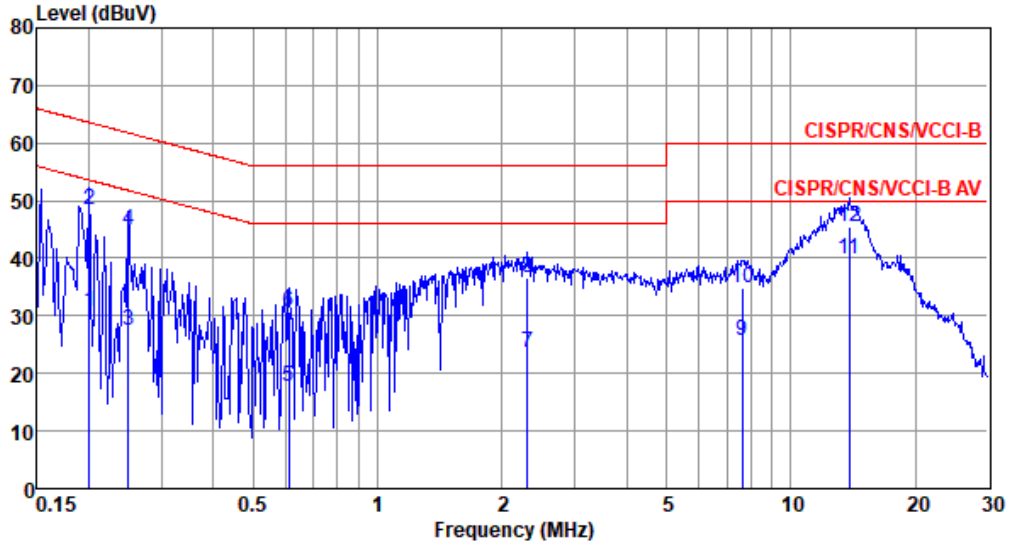


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4496G	7.74	-22.26	518.92M	-47.31	2.4G	-43.53	2.4G	-42.95	2.55134G	-45.48	16.68167G	-38.00	1
2.45578G	9.34	-20.66	2.13222G	-46.70	2.39056G	-44.97	2.4G	-46.59	2.52718G	-45.29	16.44889G	-37.96	2

Adapter mode

Modulation Mode	11b	Test Freq. (MHz)	2412
Power Phase	Line		

Test by : Joe Liao Temperature: 23°C Humidity: 63%

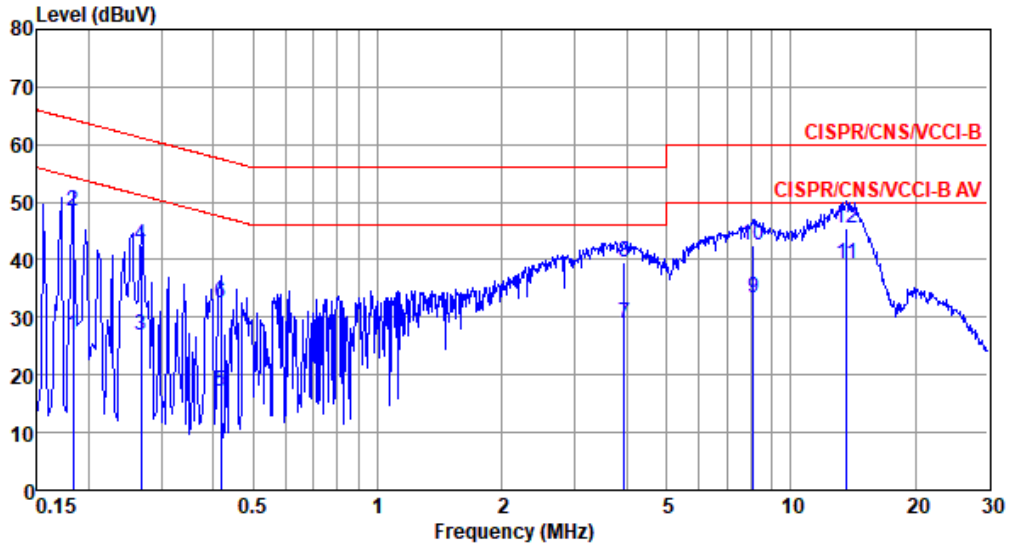


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.201	30.82	53.58	-22.76	20.89	9.62	0.06	0.25	Average
2	0.201	48.55	63.58	-15.03	38.62	9.62	0.06	0.25	QP
3	0.249	27.46	51.78	-24.32	17.49	9.62	0.07	0.28	Average
4	0.249	44.77	61.78	-17.01	34.80	9.62	0.07	0.28	QP
5	0.611	17.71	46.00	-28.29	7.67	9.62	0.08	0.34	Average
6	0.611	30.74	56.00	-25.26	20.70	9.62	0.08	0.34	QP
7	2.309	23.70	46.00	-22.30	13.56	9.63	0.12	0.39	Average
8	2.309	36.52	56.00	-19.48	26.38	9.63	0.12	0.39	QP
9	7.646	25.58	50.00	-24.42	15.16	9.68	0.30	0.44	Average
10	7.646	34.89	60.00	-25.11	24.47	9.68	0.30	0.44	QP
11*	13.841	39.72	50.00	-10.28	29.13	9.69	0.42	0.48	Average
12	13.841	45.49	60.00	-14.51	34.90	9.69	0.42	0.48	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	11b	**Test Freq. (MHz)**	2412
Power Phase	Neutral		

Test by : Joe Liao Temperature: 23°C Humidity: 63%



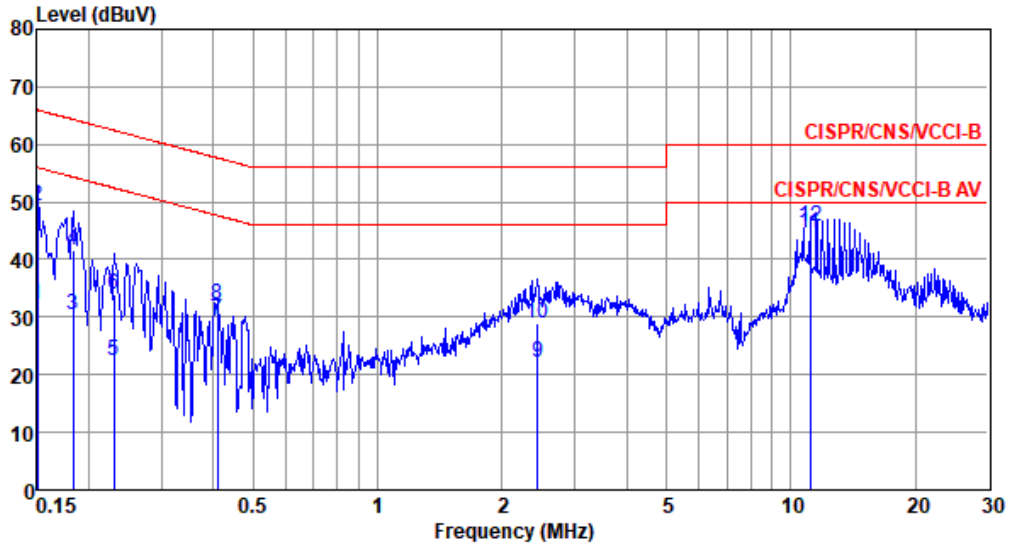
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.183	26.92	54.33	-27.41	17.06	9.63	0.07	0.16	Average
2	0.183	48.43	64.33	-15.90	38.57	9.63	0.07	0.16	QP
3	0.267	26.75	51.20	-24.45	16.85	9.63	0.07	0.20	Average
4	0.267	42.48	61.20	-18.72	32.58	9.63	0.07	0.20	QP
5	0.417	17.08	47.51	-30.43	7.13	9.62	0.08	0.25	Average
6	0.417	32.56	57.51	-24.95	22.61	9.62	0.08	0.25	QP
7	3.943	28.97	46.00	-17.03	18.74	9.65	0.18	0.40	Average
8	3.943	39.69	56.00	-16.31	29.46	9.65	0.18	0.40	QP
9	8.105	33.26	50.00	-16.74	22.83	9.70	0.31	0.42	Average
10	8.105	42.56	60.00	-17.44	32.13	9.70	0.31	0.42	QP
11*	13.623	39.13	50.00	-10.87	28.49	9.75	0.42	0.47	Average
12	13.623	45.43	60.00	-14.57	34.79	9.75	0.42	0.47	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

POE mode

Modulation Mode	11b	Test Freq. (MHz)	2412
Power Phase	Line		

Test by : Joe Liao Temperature: 23°C Humidity: 63%

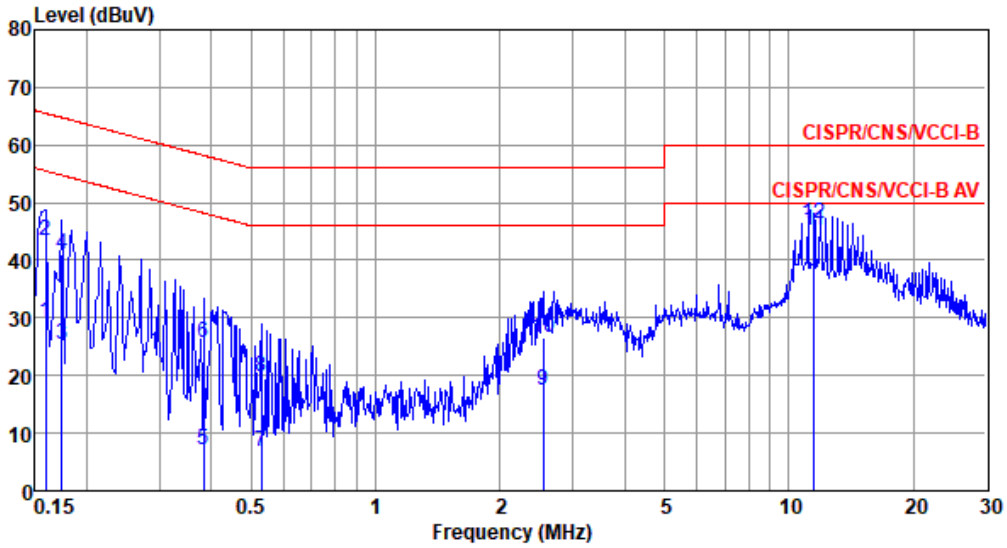


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.150	32.27	56.00	-23.73	22.36	9.63	0.08	0.20	Average
2	0.150	49.15	66.00	-16.85	39.24	9.63	0.08	0.20	QP
3	0.183	30.33	54.33	-24.00	20.40	9.62	0.07	0.24	Average
4	0.183	41.51	64.33	-22.82	31.58	9.62	0.07	0.24	QP
5	0.230	22.55	52.44	-29.89	12.60	9.62	0.06	0.27	Average
6	0.230	34.01	62.44	-28.43	24.06	9.62	0.06	0.27	QP
7	0.410	29.61	47.64	-18.03	19.58	9.62	0.08	0.33	Average
8	0.410	32.15	57.64	-25.49	22.12	9.62	0.08	0.33	QP
9	2.435	22.16	46.00	-23.84	12.00	9.64	0.13	0.39	Average
10	2.435	28.98	56.00	-27.02	18.82	9.64	0.13	0.39	QP
11*	11.132	44.43	50.00	-5.57	33.91	9.69	0.37	0.46	Average
12	11.132	45.67	60.00	-14.33	35.15	9.69	0.37	0.46	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	11b	**Test Freq. (MHz)**	2412
Power Phase	Neutral		

Test by : Joe Liao Temperature: 23°C Humidity: 63%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.159	29.33	55.52	-26.19	19.49	9.63	0.08	0.13	Average
2	0.159	43.27	65.52	-22.25	33.43	9.63	0.08	0.13	QP
3	0.174	25.51	54.77	-29.26	15.66	9.63	0.07	0.15	Average
4	0.174	41.04	64.77	-23.73	31.19	9.63	0.07	0.15	QP
5	0.383	7.16	48.21	-41.05	-2.78	9.62	0.08	0.24	Average
6	0.383	25.57	58.21	-32.64	15.63	9.62	0.08	0.24	QP
7	0.529	6.67	46.00	-39.33	-3.30	9.62	0.08	0.27	Average
8	0.529	19.92	56.00	-36.08	9.95	9.62	0.08	0.27	QP
9	2.540	17.45	46.00	-28.55	7.32	9.64	0.13	0.36	Average
10	2.540	26.60	56.00	-29.40	16.47	9.64	0.13	0.36	QP
11*	11.525	45.24	50.00	-4.76	34.69	9.73	0.38	0.44	Average
12	11.525	46.46	60.00	-13.54	35.91	9.73	0.38	0.44	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).
2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).