FCC Test Report

FCC ID	:	**MXF-W1700K**
Equipment	:	**Wi-Fi 7 Router**
Model No.	:	**W1700K**
Brand Name	:	**Q Fiber**
Applicant	:	**Gemtek Technology Co., Ltd.**
Address	:	**No. 15-1 Zhonghua Road, Hsinchu Industrial Park, Hukou, Hsinchu, Taiwan, 30352.**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**Jun. 27, 2023**
Tested Date	:	**Jul. 18 ~ Aug. 11, 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**

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Release Record

Report No.	Version	Description	Issued Date
FR362704AC	Rev. 01	Initial issue	Sep. 19, 2023

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 0.262MHz 42.34 (Margin -9.04dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 2483.50MHz 53.84 (Margin -0.16dB) - AV	Pass
15.247(b)(3)	Conducted Output Power	Max Power [dBm]: ***Non-beamforming mode*** 29.50 ***Beamforming mode*** 29.10	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 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]	4	1-11 Mbps
2400-2483.5	g	2412-2462	1-11 [11]	4	6-54 Mbps
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	4	MCS 0-31
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	4	MCS 0-31
2400-2483.5	ax (HE20)	2412-2462	1-11 [11]	4	MCS 0-11
2400-2483.5	ax (HE40)	2422-2452	3-9 [7]	4	MCS 0-11
2400-2483.5	be (EHT20)	2412-2462	1-11 [11]	4	MCS 0-13
2400-2483.5	be (EHT40)	2422-2452	3-9 [7]	4	MCS 0-13
Note 1: RF output power specifies that Maximum Conducted (Average) Output Power. Note 2: DSSS-DBPSK, DQPSK, CCK modulation OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM and 4096QAM modulation. Note 3: 802.11be supports beamforming function.					

1.1.2 Antenna Details

Ant. No.	Brand	Model	Type	Connector	Gain (dBi)
1	Gemtek	WAPE-269BE_Dual_Ant1	PIFA	UFL	1.13
2	Gemtek	WAPE-269BE_Dual_Ant2	PIFA	UFL	1.49
3	Gemtek	WAPE-269BE_Dual_Ant3	PIFA	UFL	1.67
4	Gemtek	WAPE-269BE_Dual_Ant4	PIFA	UFL	1.69

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: LUCENT TRANS ELECTRONICS CO., LTD. Model: 1A98-LJHL I/P: 100-120V~1.6A, 50-60Hz O/P: 12V⎓5.0A, 60.0W Power Line: 1.8m non-shielded without core
2	AC adapter	Brand: LEI Model: ML60-4120500-A1 I/P: 120V~60Hz, 1.5A O/P: 12V⎓5.0A Power Line: 1.8m non-shielded without core
3	RJ45	Brand: Tung Li Line: 1.8m non-shielded without core
4	RJ45	Brand: RAPID CONN Line: 1.8m non-shielded without core
5	Fan	Brand: SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO LTD Model: MF70151V1-1C010-S99
6	Fan	Brand: Yingfan Model: DB701512HMS4B01F25

1.1.5 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	---	---

1.1.6 Test Tool and Duty Cycle

Test Tool	QATool, Version: 0.0.2.99		
Duty Cycle and Duty Factor	**Mode**	**Duty Cycle (%)**	**Duty Factor (dB)**
	11b	99.43%	0.02
	11g	99.31%	0.03
	be EHT20-OFDMA	99.21%	0.03
	be EHT40-OFDMA	96.84%	0.14

1.1.7 Power Index of Test Tool

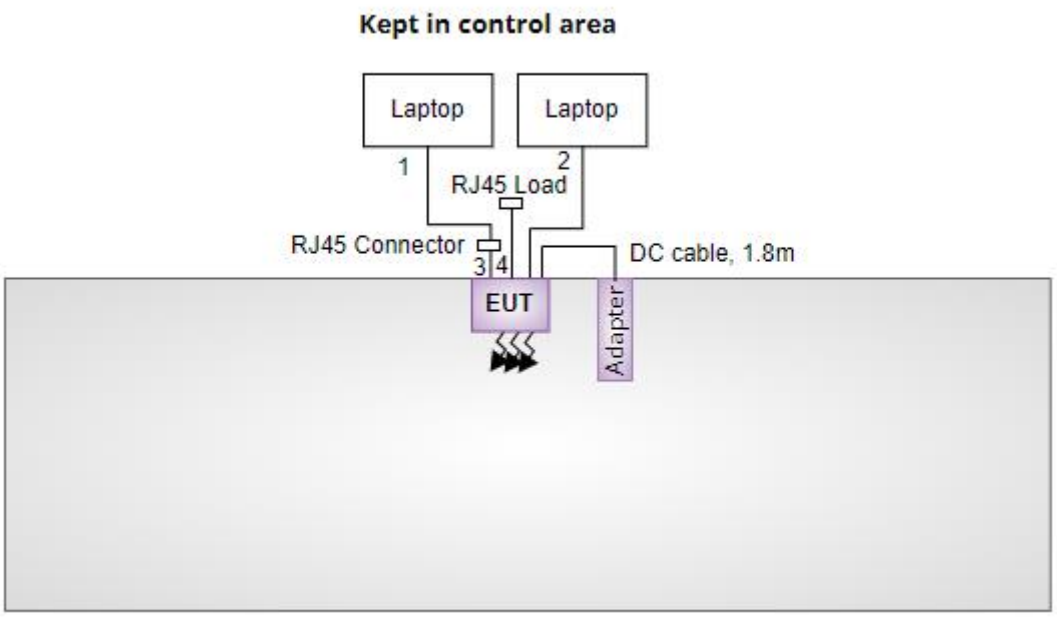
Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-beamforming	Beamforming
11b	2412	23.5	---
11b	2437	23.5	---
11b	2462	23.5	---
11g	2412	20.5	---
11g	2437	23.5	---
11g	2462	20	---
be EHT20-OFDMA	2412	19.5	39
be EHT20-OFDMA	2437	23.5	47
be EHT20-OFDMA	2462	19.5	39
be EHT40-OFDMA	2422	18	36
be EHT40-OFDMA	2437	21	43
be EHT40-OFDMA	2452	18.5	37

1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	RJ45 Load	ICC	--	--	---
2	RJ45 Connector	ICC	RJ45 Connector	--	---
3	Laptop	DELL	Latitude 5400	DoC	---
4	Laptop	DELL	Latitude E5470	DoC	---

1.3 Test Setup Chart

Test Setup Diagram



No.	Signal cable / Length (m)
1-2	RJ45, 10m non-shielded.
3	RJ45, 1.8m non-shielded.
4	RJ45, 1.3m(x2) non-shielded with load.

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Aug. 10, 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
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan .03, 2023	Jan .02, 2024
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 17, 2022	Oct. 16, 2023
50 ohm terminal (Support Unit)	NA	50	01	Jun. 14, 2023	Jun. 13, 2024
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission below 1GHz				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Aug. 02, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 31, 2023	Jul. 30, 2024
Preamplifier	EMC	EMC02325	980225	Jun. 28, 2023	Jun. 27, 2024
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 04, 2022	Oct. 03, 2023
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 04, 2022	Oct. 03, 2023
LF cable 11M	EMC	EMCCFD400-NW-NW-11000	200801	Oct. 04, 2022	Oct. 03, 2023
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 04, 2022	Oct. 03, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission above 1GHz				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Jul. 18 ~ Jul. 22, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Nov. 21, 2022	Nov. 20, 2023
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Nov. 25, 2022	Nov. 24, 2023
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 27, 2022	Oct. 26, 2023
Preamplifier	EMC	EMC118A45SE	980898	Jul. 14, 2023	Jul. 13, 2024
Preamplifier	EMC	EMC184045SE	980903	Jul. 17, 2023	Jul. 16, 2024
RF Cable	EMC	EMC104-35M-35M-8000	210920	Oct. 04, 2022	Oct. 03, 2023
RF Cable	EMC	EMC104-35M-35M-3000	210922	Oct. 04, 2022	Oct. 03, 2023
HIGHPASS FILTER 3.1-18G	WHK	WHK3.1/18G-10SS	39	Oct. 06, 2022	Oct. 05, 2023
Attenuator	Pasternack	PE7005-10	10-1	Oct. 06, 2022	Oct. 05, 2023
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	Aug. 01 ~ Aug. 11, 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. 23, 2022	Nov. 22, 2023
Power Sensor	Anritsu	MA2411B	1207366	Nov. 23, 2022	Nov. 22, 2023
Attenuator	Pasternack	PE7005-10	10-2	Oct. 06, 2022	Oct. 05, 2023
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	±3.41 dB
Unwanted Emission > 1GHz	±4.59 dB

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	CO01-WS, 03CH01-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.)

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- 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	be EHT20-OFDMA	2437	MCS 0	---
Unwanted Emissions ≤ 1GHz	be EHT20-OFDMA	2437	MCS 0	---
Unwanted Emissions >1GHz Conducted Output Power 6dB bandwidth Power spectral density	11b 11g be EHT20-OFDMA be EHT40-OFDMA	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	---
Beamforming mode				
Conducted Output Power	be EHT20-OFDMA be EHT40-OFDMA	2412 / 2437 / 2462 2422 / 2437 / 2452	MCS 0 MCS 0	---

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** results were found as the worst case and were shown in this report.
2. Two adapters (LUCENT TRANS ELECTRONICS CO., LTD and LEI) had been covered during the pretest, and found that **LEI adapter** was the worst case of AC Power line conducted emission test item and **LUCENT TRANS ELECTRONICS CO., LTD adapter** was the worst case of Unwanted Emission test item.
3. Two RJ45 cable (Tung Li and RAPID CONN) had been covered during the pretest, and found that **Tung Li adapter** was the worst case and was selected for final test.
4. Two Fan (SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO LTD and Yingfan) had been covered during the pretest, and found that **Yingfan** was the worst case and was selected for final test.
5. Non-beamforming and beamforming mode had been covered during the pretest. The worst mode is Non-beamforming thus Non-beamforming is tested for all test items.

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

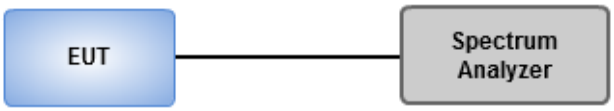
6dB Bandwidth

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	23-24°C / 66-67%	**Tested By**	Roger Lu

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	23-24°C / 66-67%	**Tested By**	Roger Lu

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.

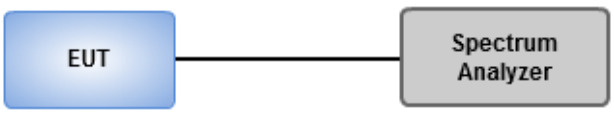
Average PSD, duty cycle ≥ 98%

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	23-24°C / 66-67%	**Tested By**	Roger Lu

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

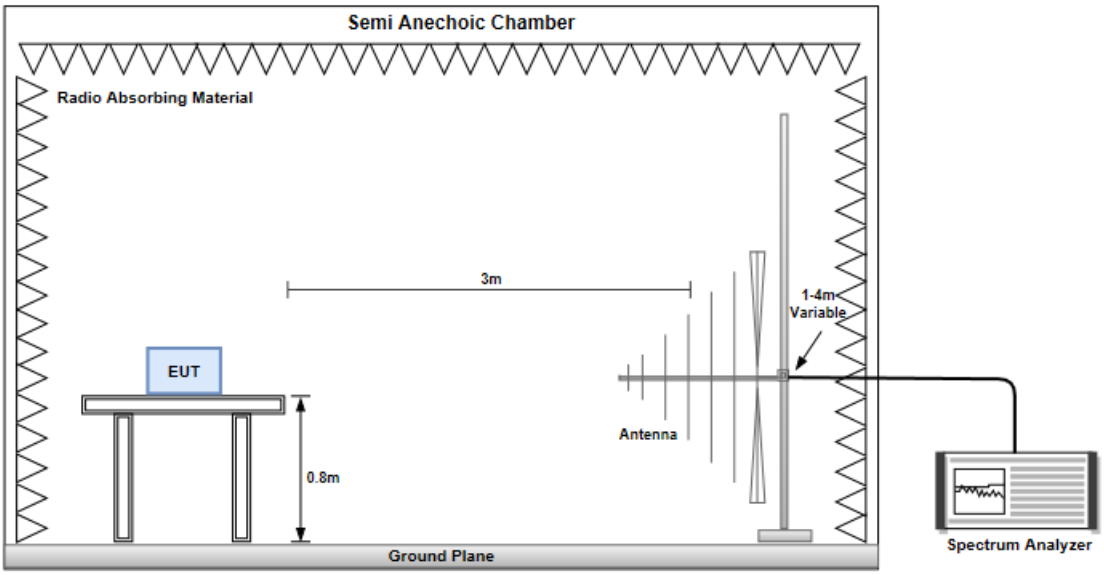
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission 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:

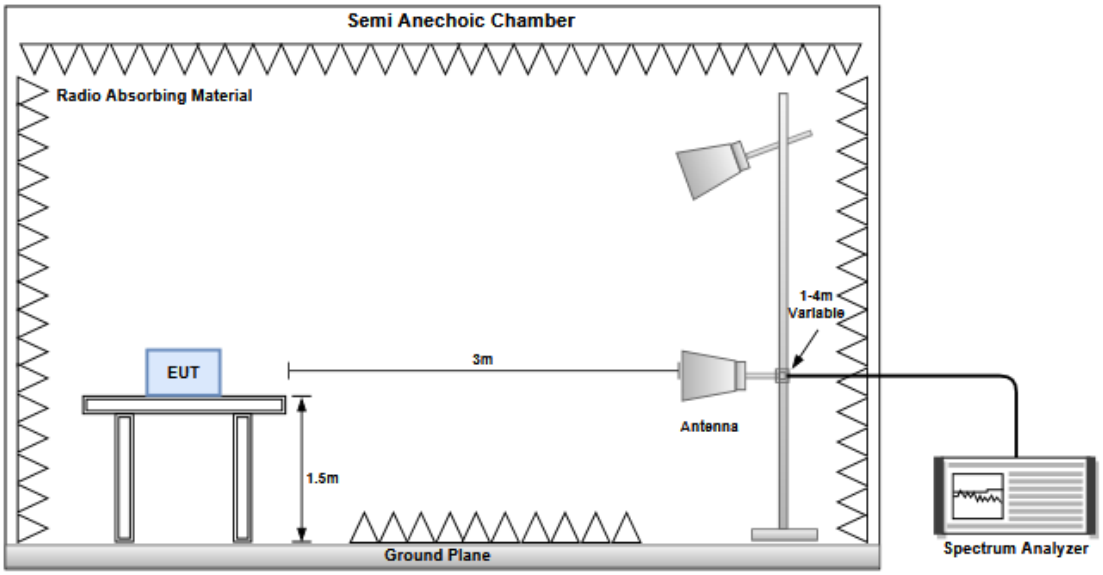
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

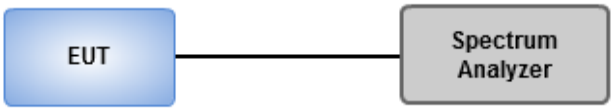
Reference level measurement

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	23-24°C / 66-67%	**Tested By**	Roger Lu

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

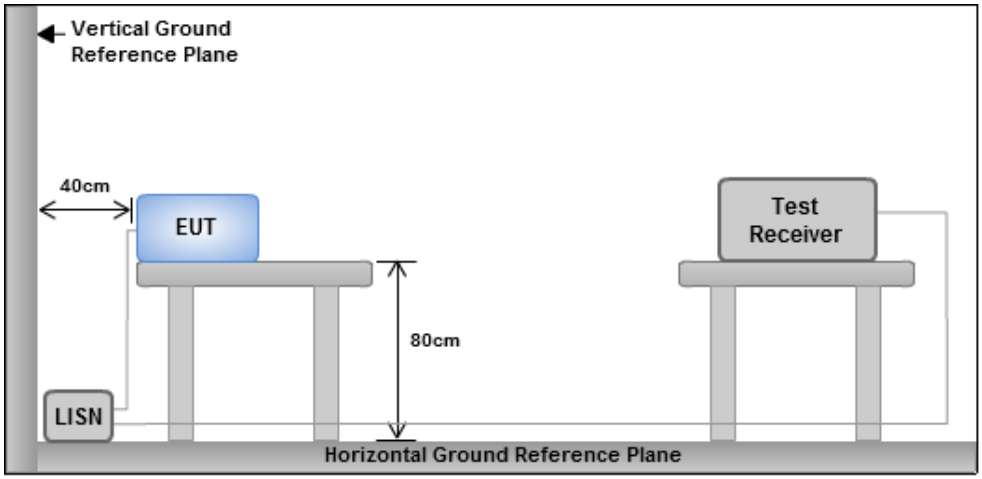
3.6.1 Limit of AC Power Line Conducted Emissions

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

No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

No.2-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

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

Tel: 886-3-271-8666
Fax: 886-3-318-0345
Email: ICC_Service@icertifi.com.tw

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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)_4TX	8.05M	12.369M	12M4G1D	7.05M	12.129M
802.11g_Nss1,(6Mbps)_4TX	15.45M	16.382M	16M4D1D	15.025M	16.184M
802.11be EHT20_Nss1,(MCS0)_4TX-OFDMA	17.575M	18.741M	18M7D1D	15M	18.666M
802.11be EHT40_Nss1,(MCS0)_4TX-OFDMA	35M	37.381M	37M4D1D	30.05M	37.131M

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

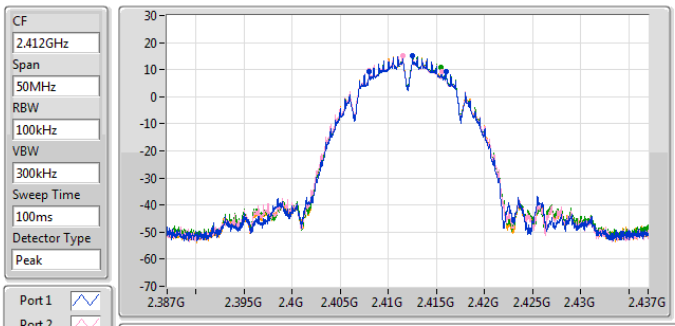
Result

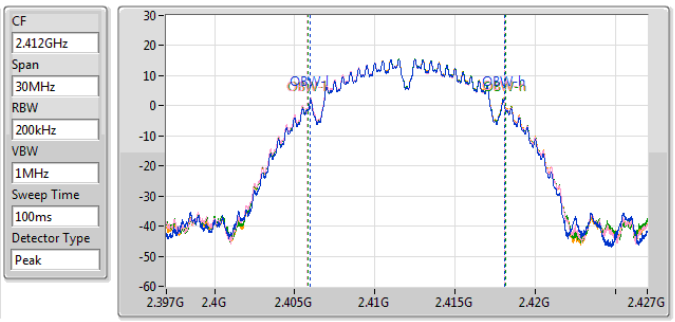
Mode	Result	Limit (Hz)	Port 1 -N dB (Hz)	Port 1 -OBW (Hz)	Port 2 -N dB (Hz)	Port 2 -OBW (Hz)	Port 3 -N dB (Hz)	Port 3 -OBW (Hz)	Port 4 -N dB (Hz)	Port 4 -OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	8M	12.129M	7.55M	12.339M	7.5M	12.264M	8M	12.279M
2437MHz	Pass	500k	7.525M	12.144M	7.575M	12.309M	8.05M	12.354M	8.05M	12.294M
2462MHz	Pass	500k	7.55M	12.159M	7.525M	12.309M	8M	12.369M	7.05M	12.309M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.05M	16.184M	15.075M	16.25M	15.275M	16.25M	15.05M	16.228M
2437MHz	Pass	500k	15.05M	16.25M	15.25M	16.294M	15.075M	16.294M	15.45M	16.382M
2462MHz	Pass	500k	15.45M	16.228M	15.225M	16.206M	15.025M	16.25M	15.075M	16.228M
802.11be EHT20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	18.716M	15M	18.666M	16.225M	18.691M	16.6M	18.666M
2437MHz	Pass	500k	15.025M	18.691M	15M	18.716M	16.375M	18.716M	15M	18.741M
2462MHz	Pass	500k	15.6M	18.666M	16.025M	18.666M	17.5M	18.691M	17.025M	18.666M
802.11be EHT40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	33.8M	37.131M	33.8M	37.181M	33.75M	37.231M	31.25M	37.131M
2437MHz	Pass	500k	33.95M	37.231M	31.25M	37.231M	35M	37.231M	33.7M	37.231M
2452MHz	Pass	500k	32.6M	37.381M	30.05M	37.381M	33.75M	37.381M	35M	37.281M

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)_4TX **EBW**

2412MHz

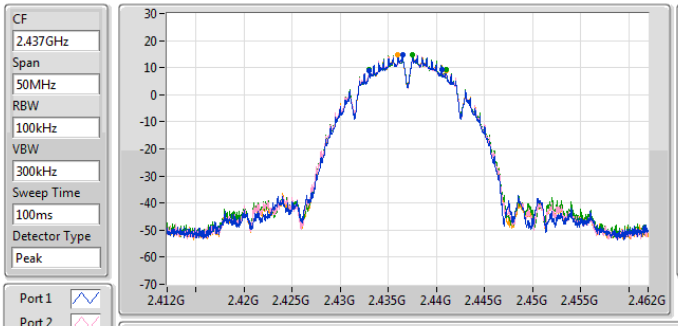


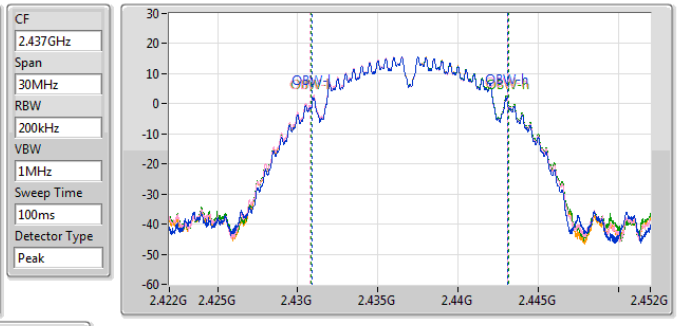


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8M	2.408G	2.416G	12.129M	2.405943G	2.418072G	500k	1
7.55M	2.408G	2.41555G	12.339M	2.405778G	2.418117G	500k	2
7.5M	2.408G	2.4155G	12.264M	2.405868G	2.418132G	500k	3
8M	2.408G	2.416G	12.279M	2.405868G	2.418147G	500k	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **EBW**

2437MHz

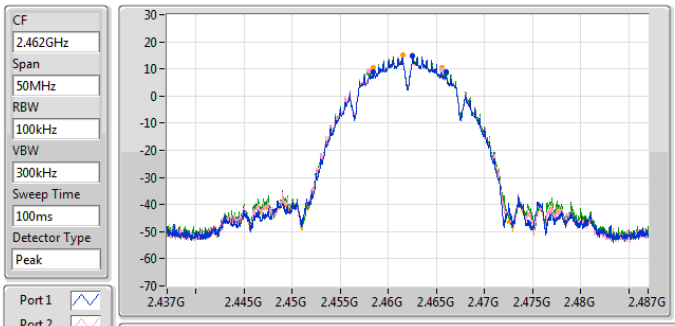


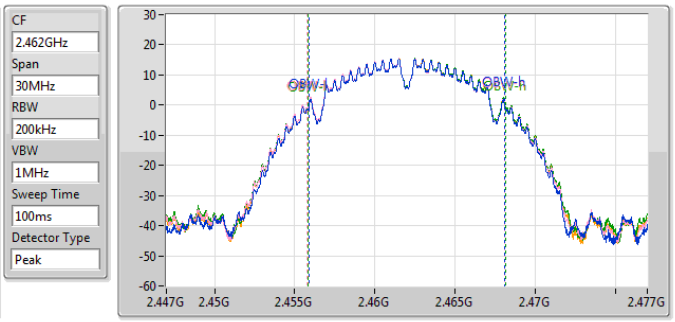


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.525M	2.433025G	2.44055G	12.144M	2.430928G	2.443072G	500k	1
7.575M	2.432975G	2.44055G	12.309M	2.430793G	2.443102G	500k	2
8.05M	2.432975G	2.441025G	12.354M	2.430823G	2.443177G	500k	3
8.05M	2.432975G	2.441025G	12.294M	2.430853G	2.443147G	500k	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **EBW**

2462MHz

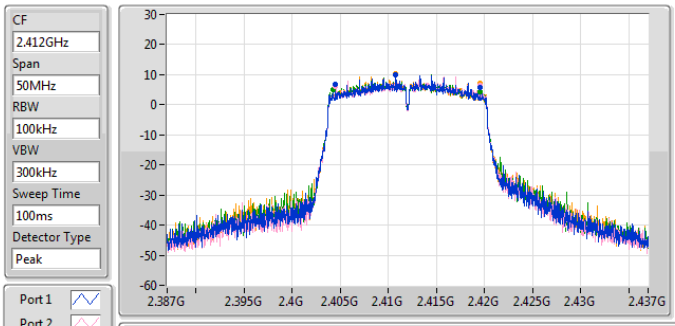


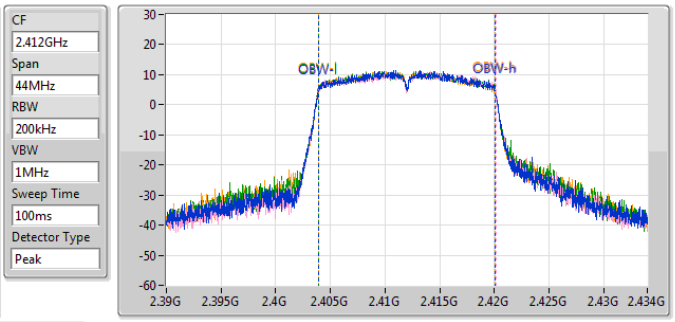


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.55M	2.45845G	2.466G	12.159M	2.455913G	2.468072G	500k	1
7.525M	2.458G	2.465525G	12.309M	2.455778G	2.468087G	500k	2
8M	2.458G	2.466G	12.369M	2.455808G	2.468177G	500k	3
7.05M	2.458475G	2.465525G	12.309M	2.455838G	2.468147G	500k	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **EBW**

2412MHz

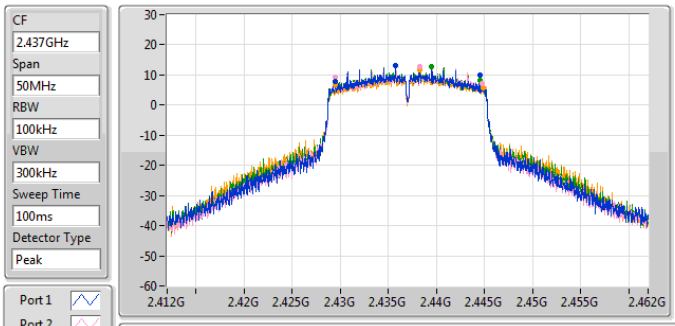


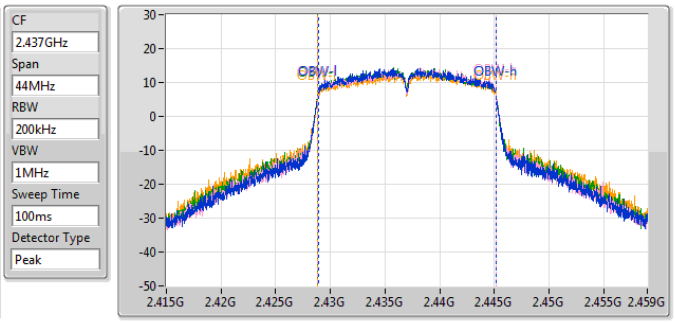


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.05M	2.4045G	2.41955G	16.184M	2.403908G	2.420092G	500k	1
15.075M	2.404475G	2.41955G	16.25M	2.403886G	2.420136G	500k	2
15.275M	2.40425G	2.419525G	16.25M	2.403886G	2.420136G	500k	3
15.05M	2.404475G	2.419525G	16.228M	2.403886G	2.420114G	500k	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **EBW**

2437MHz

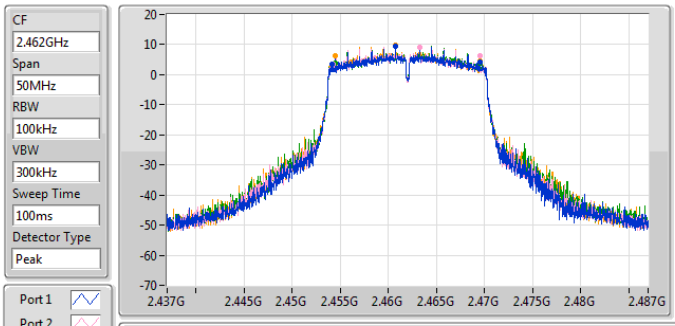


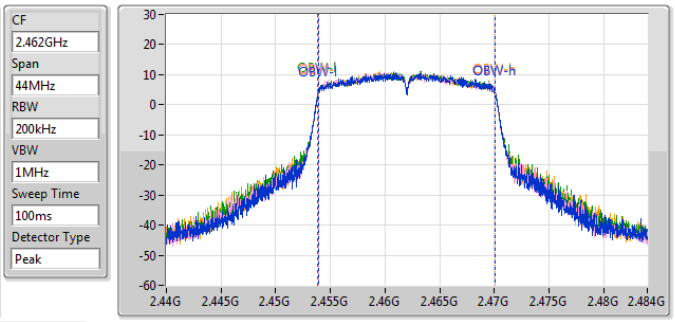


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.05M	2.42945G	2.4445G	16.25M	2.428886G	2.445136G	500k	1
15.25M	2.4295G	2.44475G	16.294M	2.428864G	2.445158G	500k	2
15.075M	2.429475G	2.44455G	16.294M	2.428864G	2.445158G	500k	3
15.45M	2.42945G	2.4449G	16.382M	2.42882G	2.445202G	500k	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **EBW**

2462MHz

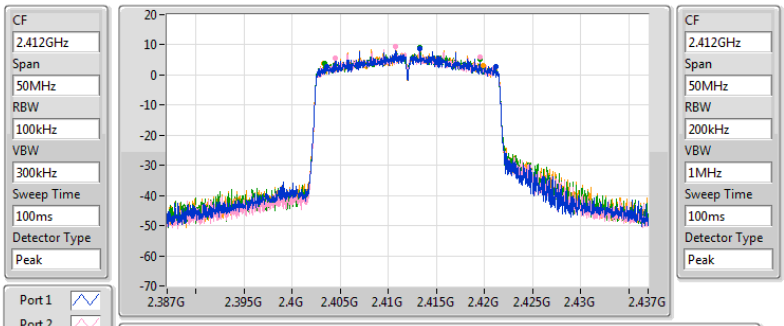


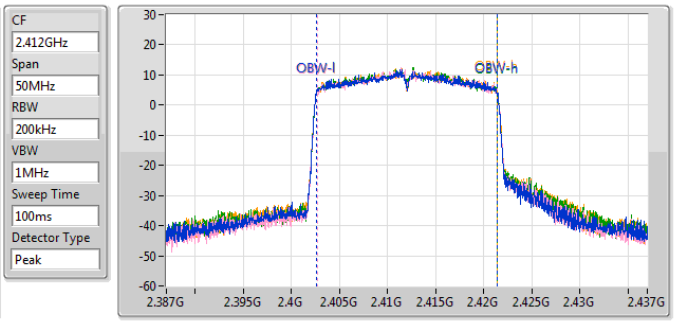


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.45M	2.4541G	2.46955G	16.228M	2.453886G	2.470114G	500k	1
15.225M	2.45425G	2.469475G	16.206M	2.453886G	2.470092G	500k	2
15.025M	2.454475G	2.4695G	16.25M	2.453864G	2.470114G	500k	3
15.075M	2.454475G	2.46955G	16.228M	2.453886G	2.470114G	500k	4

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **EBW**

2412MHz

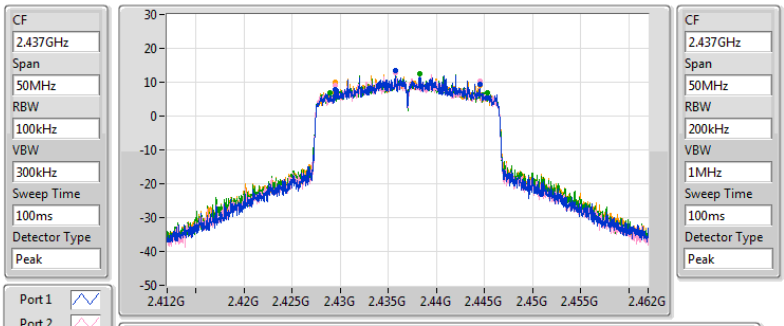


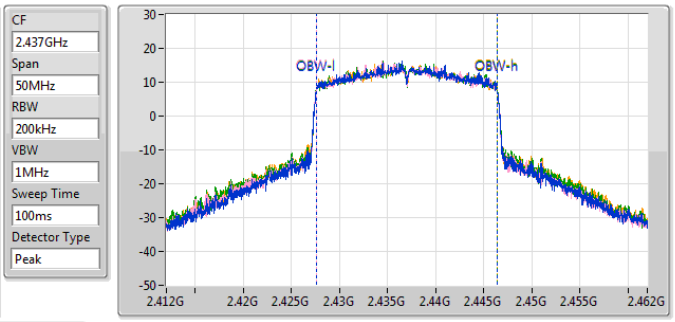


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	2.40355G	2.421125G	18.716M	2.402655G	2.42137G	500k	1
15M	2.404525G	2.419525G	18.666M	2.40268G	2.421345G	500k	2
16.225M	2.403325G	2.41955G	18.691M	2.402655G	2.421345G	500k	3
16.6M	2.403275G	2.419875G	18.666M	2.40268G	2.421345G	500k	4

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **EBW**

2437MHz

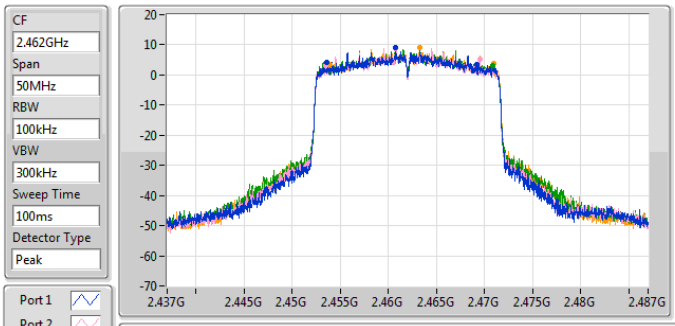


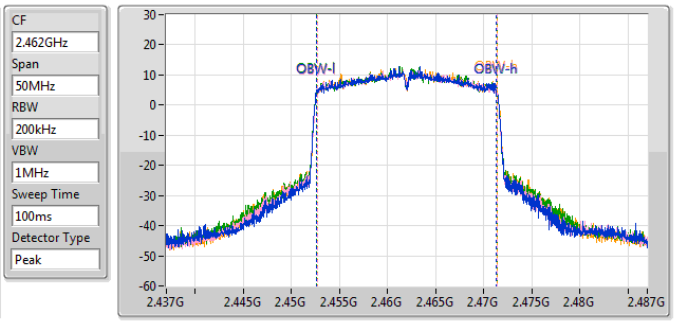


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.42945G	2.444475G	18.691M	2.427655G	2.446345G	500k	1
15M	2.429525G	2.444525G	18.716M	2.42763G	2.446345G	500k	2
16.375M	2.42895G	2.445325G	18.716M	2.42763G	2.446345G	500k	3
15M	2.429525G	2.444525G	18.741M	2.42763G	2.44637G	500k	4

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **EBW**

2462MHz

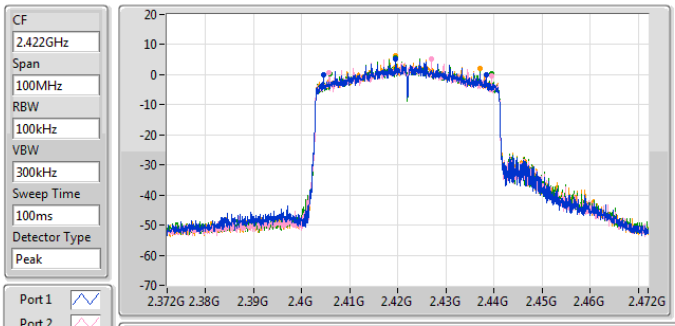


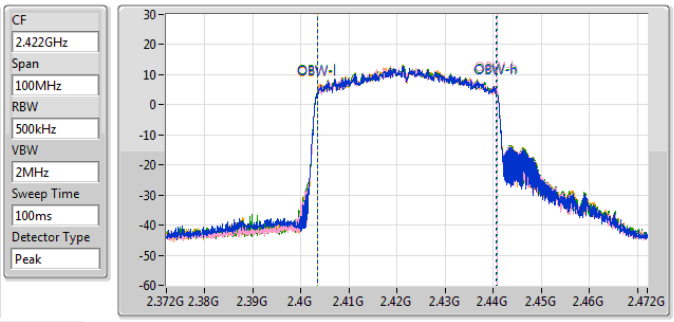


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.6M	2.453625G	2.469225G	18.666M	2.452655G	2.47132G	500k	1
16.025M	2.4535G	2.469525G	18.666M	2.45268G	2.471345G	500k	2
17.5M	2.453325G	2.470825G	18.691M	2.452655G	2.471345G	500k	3
17.025M	2.453975G	2.471G	18.666M	2.45268G	2.471345G	500k	4

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **EBW**

2422MHz

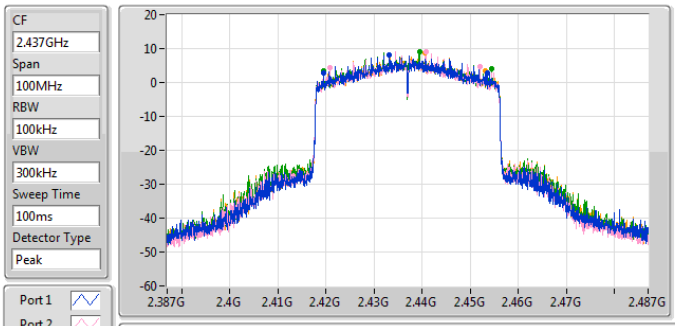


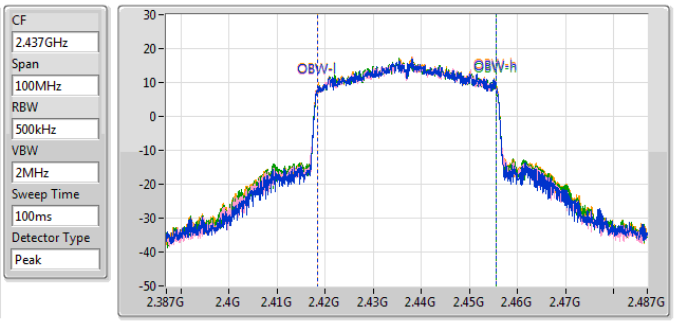


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.8M	2.4045G	2.4383G	37.131M	2.403509G	2.440641G	500k	1
33.8M	2.4057G	2.4395G	37.181M	2.403509G	2.440691G	500k	2
33.75M	2.40575G	2.4395G	37.231M	2.403459G	2.440691G	500k	3
31.25M	2.40575G	2.437G	37.131M	2.403509G	2.440641G	500k	4

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **EBW**

2437MHz

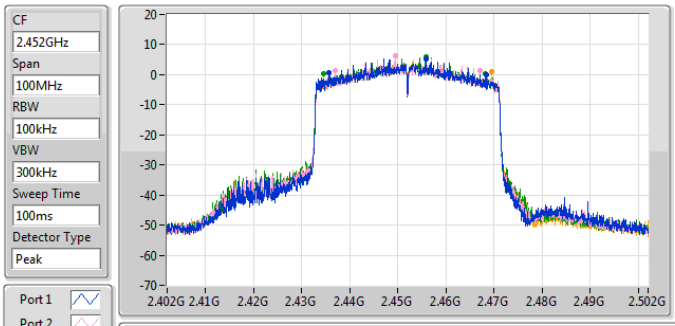


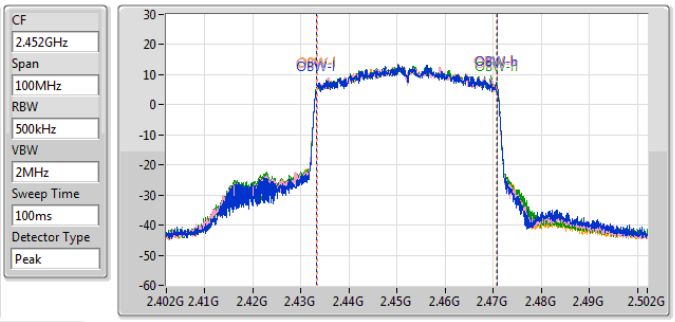


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.95M	2.41955G	2.4535G	37.231M	2.418409G	2.455641G	500k	1
31.25M	2.42075G	2.452G	37.231M	2.418409G	2.455641G	500k	2
35M	2.4195G	2.4545G	37.231M	2.418409G	2.455641G	500k	3
33.7M	2.41955G	2.45325G	37.231M	2.418409G	2.455641G	500k	4

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **EBW**

2452MHz





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.6M	2.4357G	2.4683G	37.381M	2.433309G	2.470691G	500k	1
30.05M	2.437G	2.46705G	37.381M	2.433309G	2.470691G	500k	2
33.75M	2.4345G	2.46825G	37.381M	2.433309G	2.470691G	500k	3
35M	2.4345G	2.4695G	37.281M	2.433359G	2.470641G	500k	4

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.01	0.79616
802.11g_Nss1,(6Mbps)_4TX	29.38	0.86696
802.11be EHT20_Nss1,(MCS0)_4TX-OFDMA	29.50	0.89125
802.11be EHT40_Nss1,(MCS0)_4TX-OFDMA	27.36	0.54450

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1.69	22.92	22.82	23.04	23.15	29.00	30.00	30.69	36.00
2437MHz	Pass	1.69	23.01	22.85	23.05	23.03	29.01	30.00	30.70	36.00
2462MHz	Pass	1.69	22.93	22.98	23.03	23.01	29.01	30.00	30.70	36.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1.69	20.85	20.46	20.81	20.76	26.74	30.00	28.43	36.00
2437MHz	Pass	1.69	23.42	23.25	23.38	23.37	29.38	30.00	31.07	36.00
2462MHz	Pass	1.69	20.13	19.92	20.24	20.16	26.13	30.00	27.82	36.00
802.11be EHT20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	1.69	19.91	19.82	20.03	20.01	25.96	30.00	27.65	36.00
2437MHz	Pass	1.69	23.43	23.38	23.56	23.53	29.50	30.00	31.19	36.00
2462MHz	Pass	1.69	19.82	19.56	19.83	19.82	25.78	30.00	27.47	36.00
802.11be EHT40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	1.69	18.25	18.22	18.51	18.46	24.38	30.00	26.07	36.00
2437MHz	Pass	1.69	21.39	21.13	21.49	21.33	27.36	30.00	29.05	36.00
2452MHz	Pass	1.69	18.71	18.55	18.92	18.87	24.79	30.00	26.48	36.00

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

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11be EHT20-BF_Nss1,(MCS0)_4TX-OFDMA	29.10	0.81283
802.11be EHT40-BF_Nss1,(MCS0)_4TX-OFDMA	27.19	0.52360

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11be EHT20-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.31	19.55	19.53	19.37	19.95	25.63	30.00	29.94	36.00
2437MHz	Pass	4.31	23.06	22.86	22.97	23.42	29.10	30.00	33.41	36.00
2462MHz	Pass	4.31	19.13	19.02	19.25	19.73	25.31	30.00	29.62	36.00
802.11be EHT40-BF_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	4.31	18.34	18.27	18.14	18.03	24.22	30.00	28.53	36.00
2437MHz	Pass	4.31	21.07	21.12	21.11	21.39	27.19	30.00	31.50	36.00
2452MHz	Pass	4.31	18.26	18.17	18.42	18.65	24.40	30.00	28.71	36.00

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

DG Gain is measured. Please refer to antenna test report.

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	0.17
802.11g_Nss1,(6Mbps)_4TX	-3.09
802.11be EHT20_Nss1,(MCS0)_4TX-OFDMA	-2.63
802.11be EHT40_Nss1,(MCS0)_4TX-OFDMA	-5.55

RBW = 3kHz;

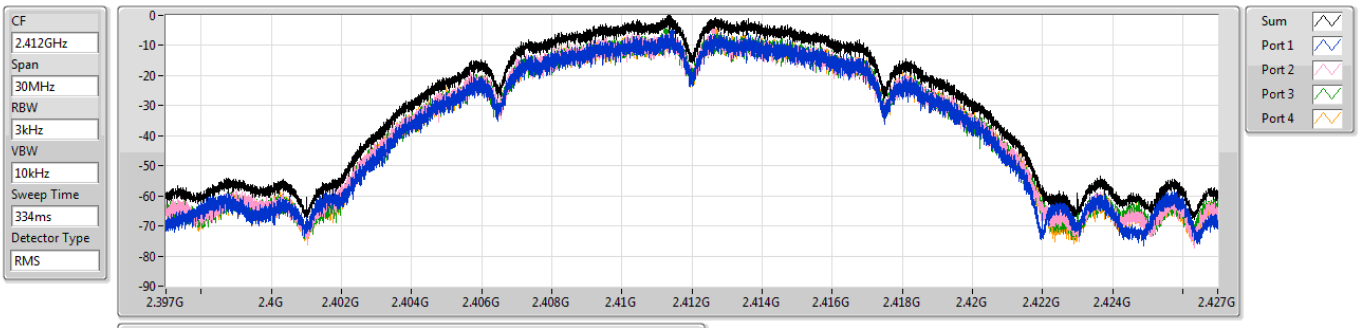
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.31	-5.75	-5.17	-5.29	-5.42	-0.80	8.00
2437MHz	Pass	4.31	-4.43	-5.02	-5.04	-5.31	-0.43	8.00
2462MHz	Pass	4.31	-4.29	-5.59	-4.79	-5.14	0.17	8.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.31	-10.41	-11.09	-11.19	-10.47	-6.16	8.00
2437MHz	Pass	4.31	-8.22	-7.78	-7.38	-8.35	-3.09	8.00
2462MHz	Pass	4.31	-12.12	-10.91	-11.90	-11.45	-6.67	8.00
802.11be EHT20_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-
2412MHz	Pass	4.31	-12.34	-12.01	-11.92	-11.91	-6.58	8.00
2437MHz	Pass	4.31	-7.95	-8.37	-8.13	-7.65	-2.63	8.00
2462MHz	Pass	4.31	-11.34	-11.33	-11.81	-11.18	-6.17	8.00
802.11be EHT40_Nss1,(MCS0)_4TX-OFDMA	-	-	-	-	-	-	-	-
2422MHz	Pass	4.31	-15.22	-14.71	-14.69	-14.23	-9.12	8.00
2437MHz	Pass	4.31	-11.78	-11.14	-11.25	-11.34	-5.55	8.00
2452MHz	Pass	4.31	-14.90	-14.45	-14.33	-14.04	-8.74	8.00

RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
DG gain is measured. Please refer to antenna test report.

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **PSD**

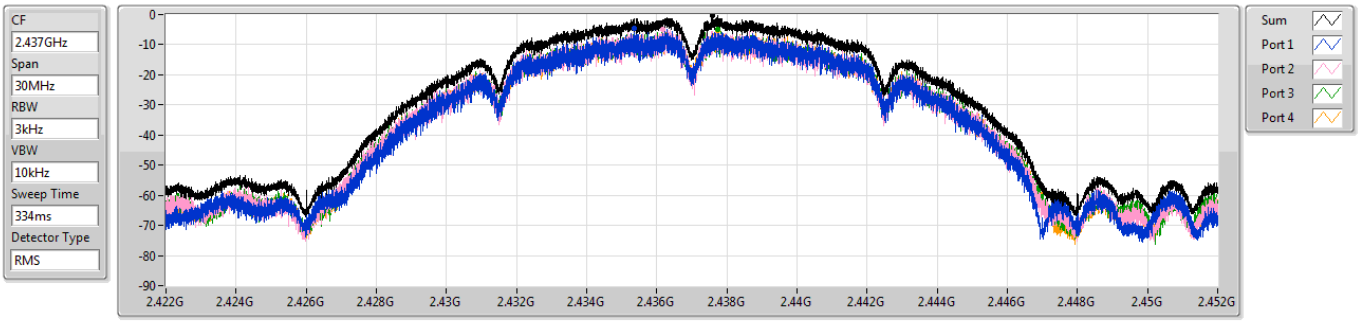
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.80	-0.80	-5.75	-5.17	-5.29	-5.42

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **PSD**

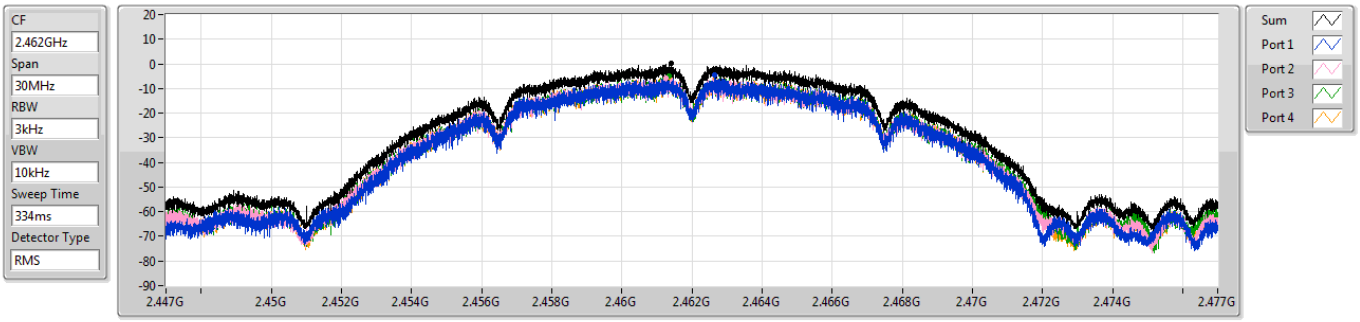
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.43	-0.43	-4.43	-5.02	-5.04	-5.31

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **PSD**

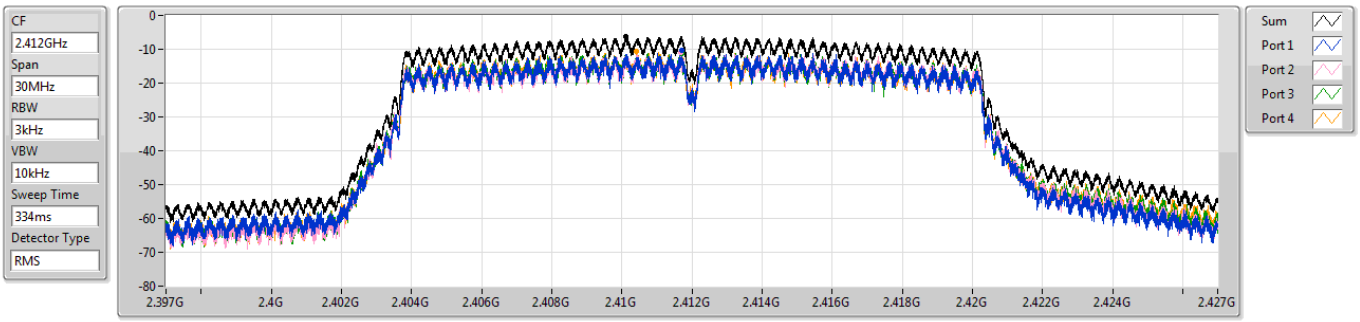
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.17	0.17	-4.29	-5.59	-4.79	-5.14

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **PSD**

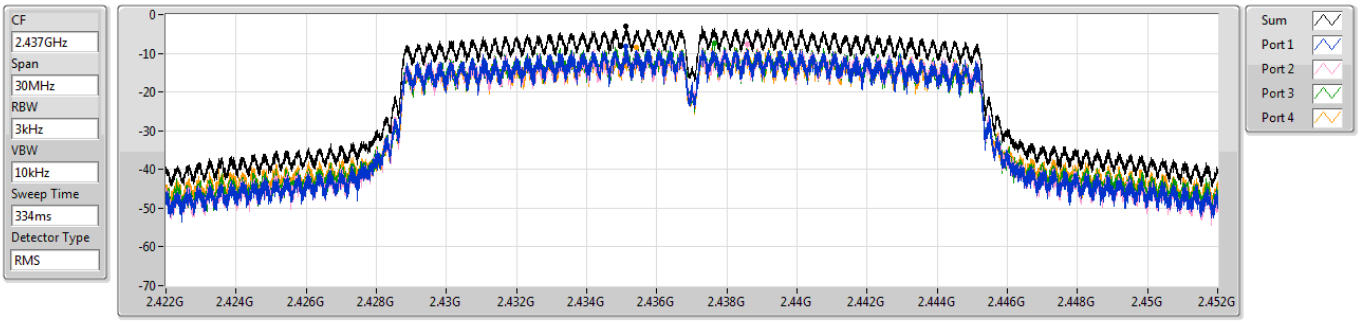
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.16	-6.16	-10.41	-11.09	-11.19	-10.47

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **PSD**

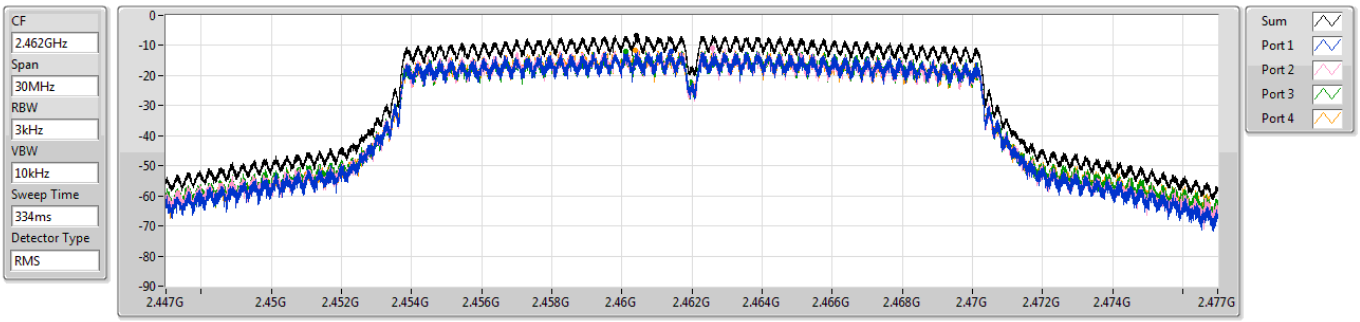
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.09	-3.09	-8.22	-7.78	-7.38	-8.35

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **PSD**

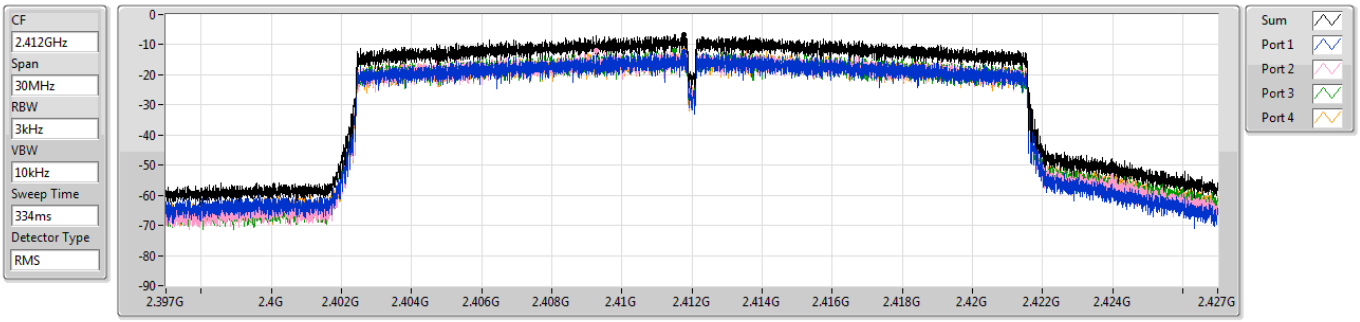
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.67	-6.67	-12.12	-10.91	-11.90	-11.45

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **PSD**

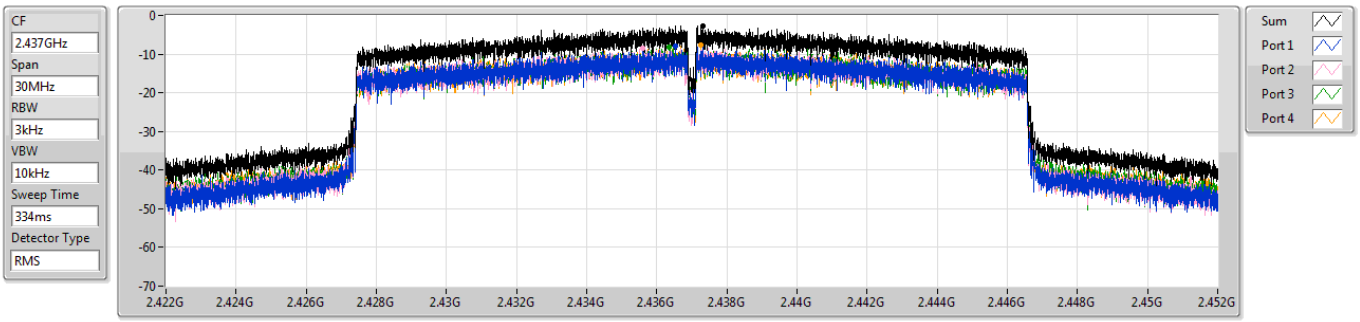
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.58	-6.58	-12.34	-12.01	-11.92	-11.91

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **PSD**

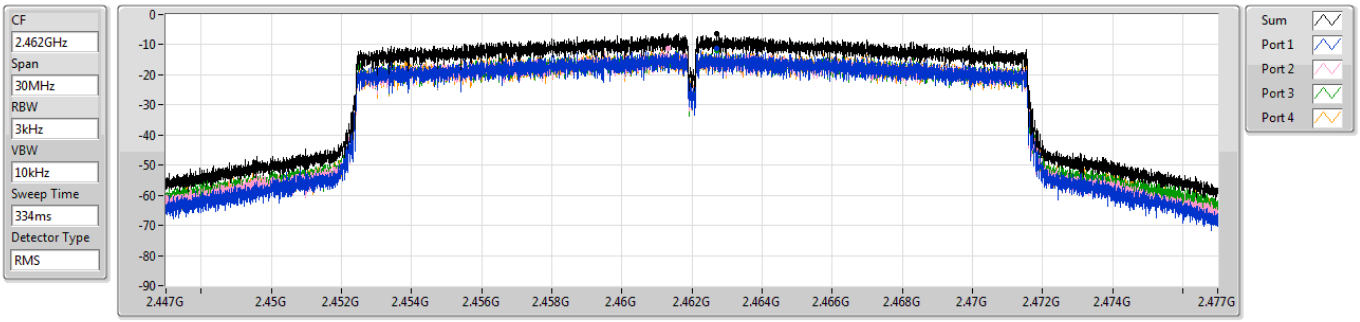
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.63	-2.63	-7.95	-8.37	-8.13	-7.65

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **PSD**

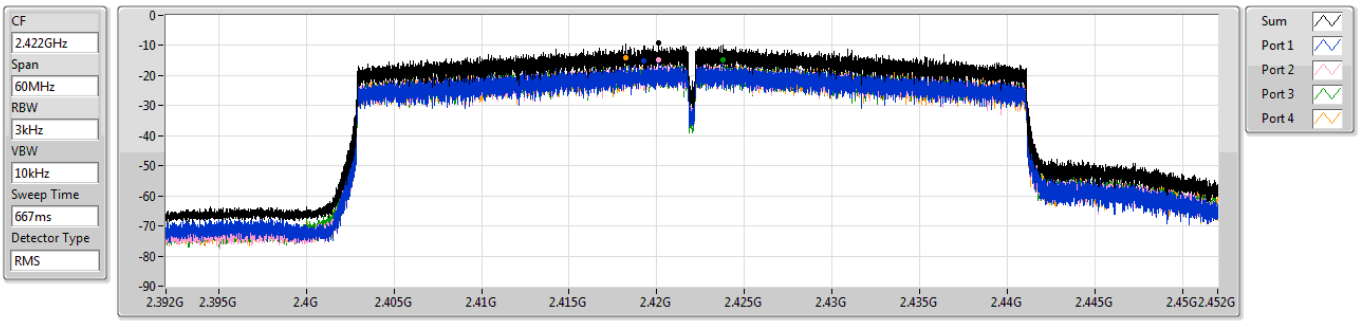
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.17	-6.17	-11.34	-11.33	-11.81	-11.18

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **PSD**

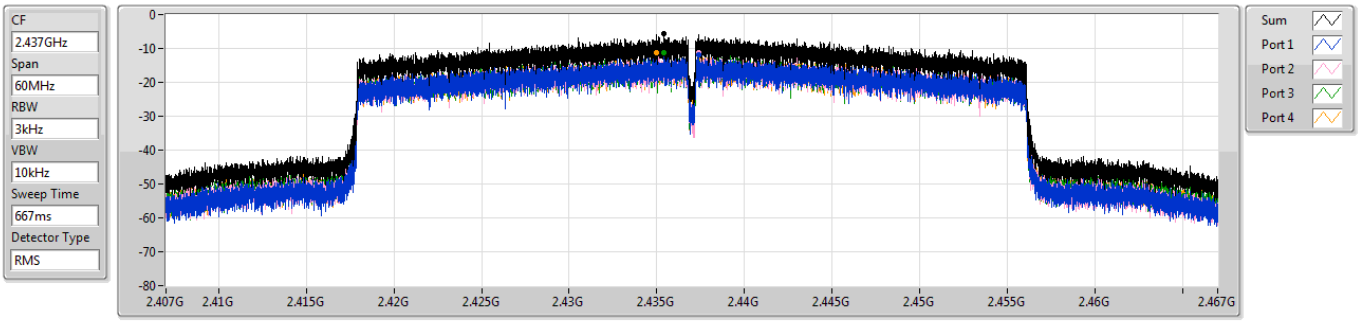
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.12	-9.12	-15.22	-14.71	-14.69	-14.23

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **PSD**

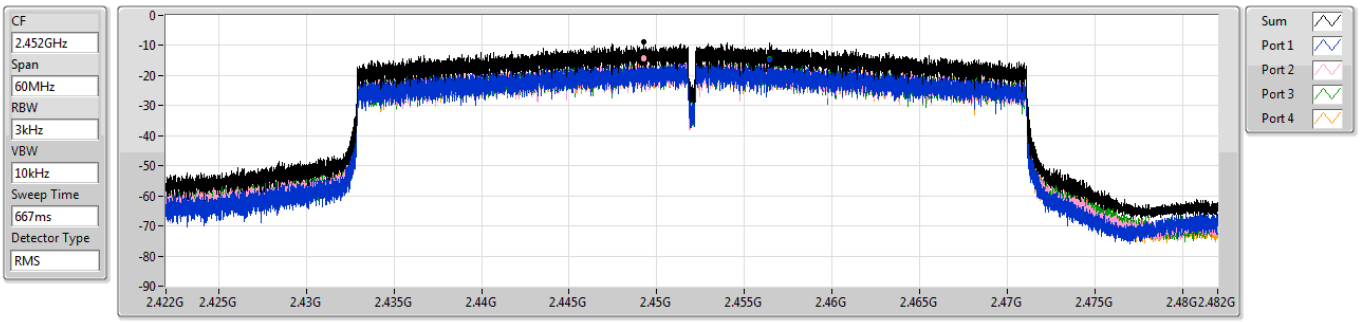
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.55	-5.55	-11.78	-11.14	-11.25	-11.34

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **PSD**

2452MHz

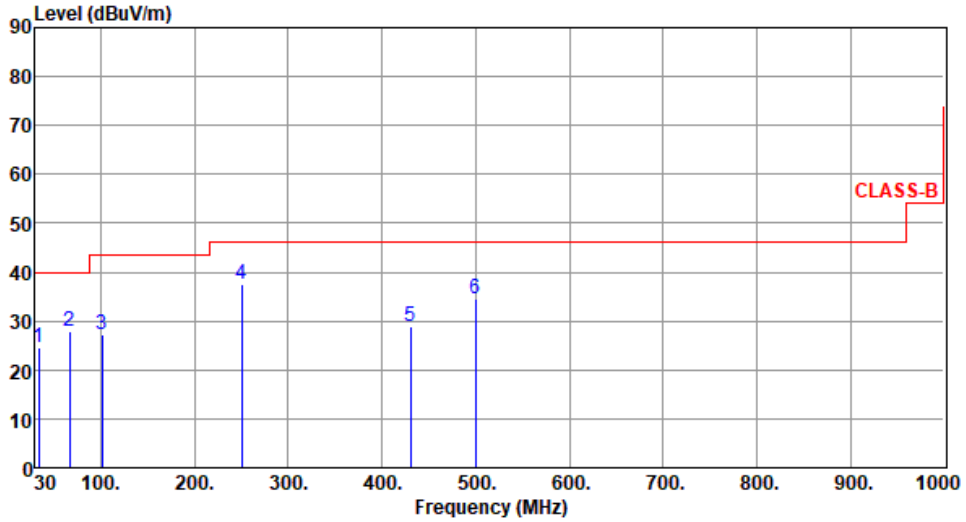


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.74	-8.74	-14.90	-14.45	-14.33	-14.04

Unwanted Emissions (Below 1GHz)

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

Test By :Paul Lin Temperature(℃):24 Humidity(%):62

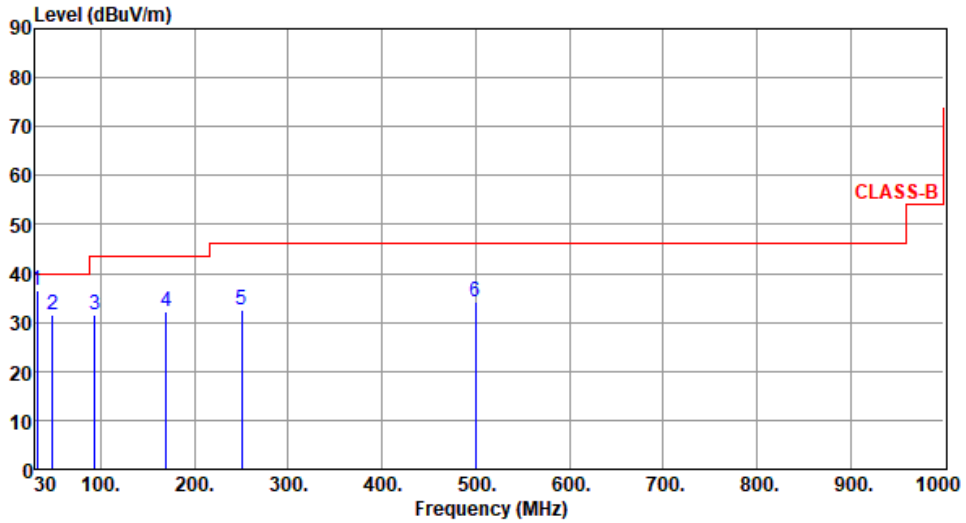


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	33.48	24.51	40.00	-15.49	34.03	-9.52	Peak	---	---
2	66.97	27.96	40.00	-12.04	38.55	-10.59	Peak	---	---
3	101.52	27.13	43.50	-16.37	40.13	-13.00	Peak	---	---
4	250.22	37.44	46.00	-8.56	47.44	-10.00	Peak	---	---
5	430.12	28.79	46.00	-17.21	33.54	-4.75	Peak	---	---
6	499.52	34.48	46.00	-11.52	37.70	-3.22	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*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	be EHT20-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Paul Lin Temperature(℃):24 Humidity(%):62



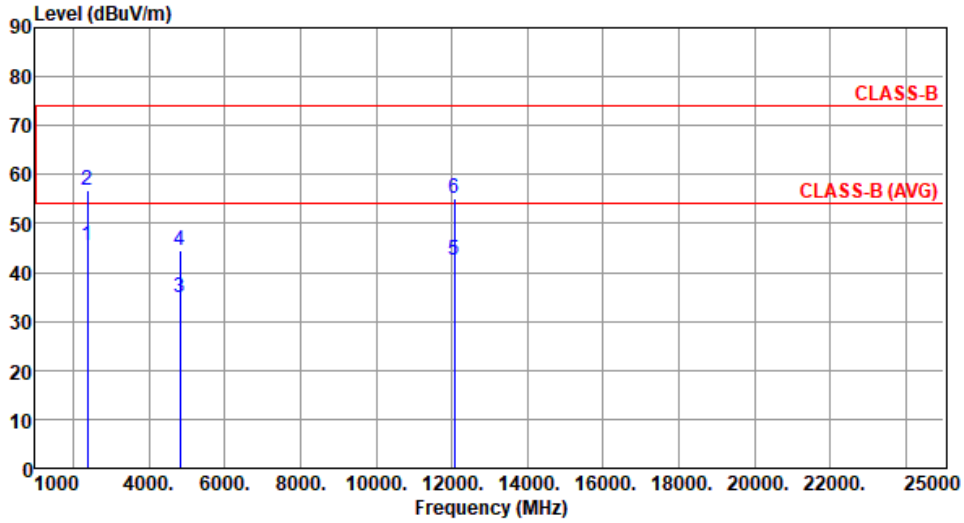
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	31.96	36.44	40.00	-3.56	45.87	-9.43	Peak	---	---
2	48.68	31.52	40.00	-8.48	39.66	-8.14	QP	100	176
3	93.44	31.59	43.50	-11.91	45.72	-14.13	Peak	---	---
4	170.15	32.29	43.50	-11.21	41.74	-9.45	Peak	---	---
5	250.19	32.66	46.00	-13.34	42.66	-10.00	Peak	---	---
6	499.48	34.17	46.00	-11.83	37.39	-3.22	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*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 Emission (Above 1GHz) for 11b

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

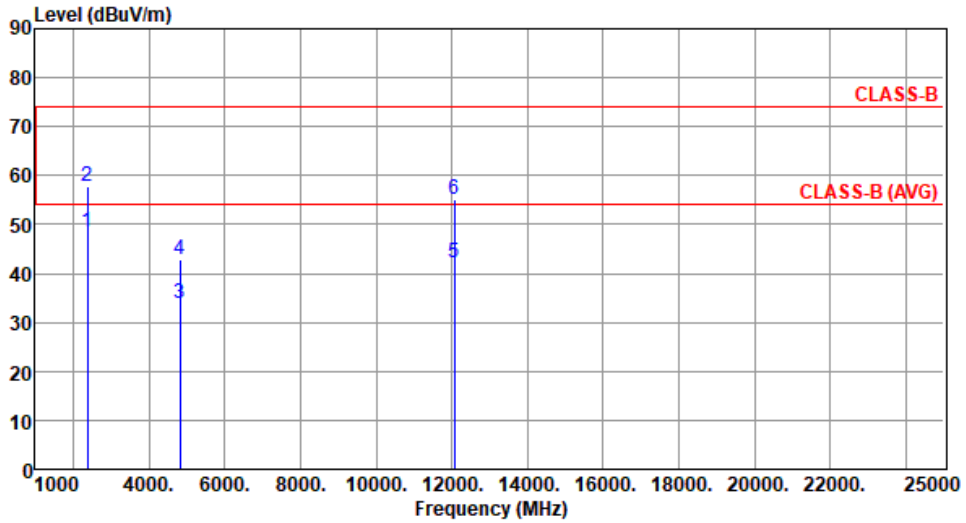


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	45.47	54.00	-8.53	50.01	-4.54	Average	159	289
2	2390.00	56.63	74.00	-17.37	61.17	-4.54	Peak	159	289
3	4824.00	34.92	54.00	-19.08	35.33	-0.41	Average	163	62
4	4824.00	44.37	74.00	-29.63	44.78	-0.41	Peak	163	62
5	12060.00	42.44	54.00	-11.56	35.99	6.45	Average	100	75
6	12060.00	55.26	74.00	-18.74	48.81	6.45	Peak	100	75

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

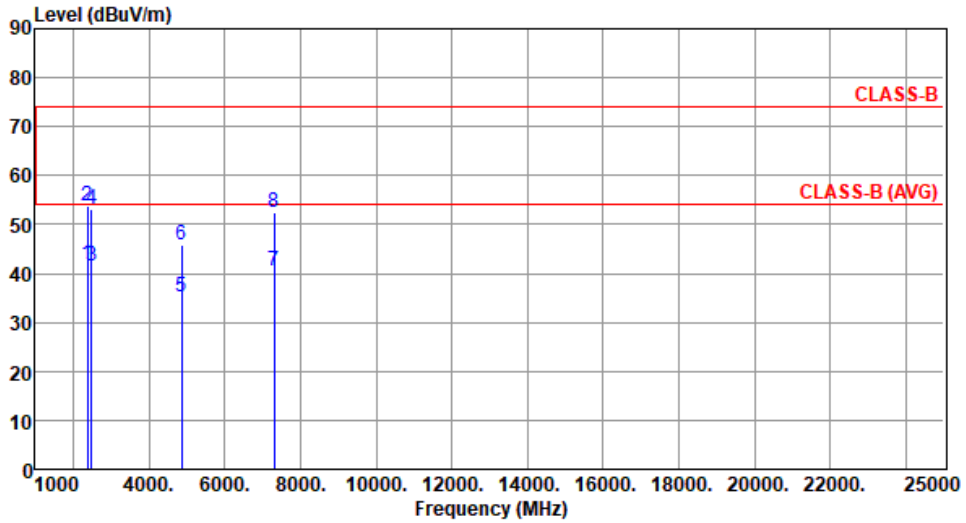


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.63	54.00	-5.37	53.17	-4.54	Average	142	12
2	2390.00	57.95	74.00	-16.05	62.49	-4.54	Peak	142	12
3	4824.00	33.76	54.00	-20.24	34.17	-0.41	Average	100	46
4	4824.00	42.75	74.00	-31.25	43.16	-0.41	Peak	100	46
5	12060.00	42.30	54.00	-11.70	35.85	6.45	Average	100	113
6	12060.00	55.17	74.00	-18.83	48.72	6.45	Peak	100	113

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

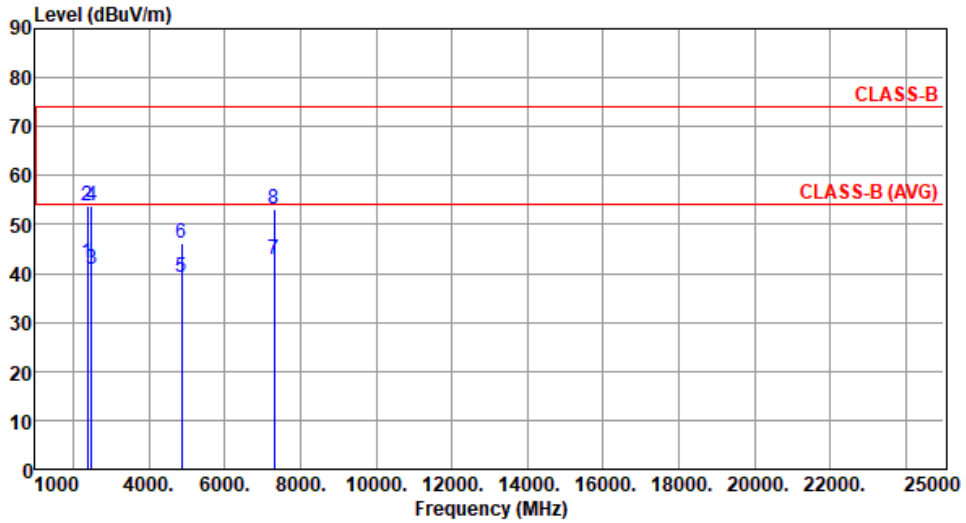


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	41.69	54.00	-12.31	46.23	-4.54	Average	159	1
2	2390.00	53.76	74.00	-20.24	58.30	-4.54	Peak	159	1
3	2483.50	41.53	54.00	-12.47	46.31	-4.78	Average	159	1
4	2483.50	53.26	74.00	-20.74	58.04	-4.78	Peak	159	1
5	4874.00	35.30	54.00	-18.70	35.73	-0.43	Average	100	355
6	4874.00	45.85	74.00	-28.15	46.28	-0.43	Peak	100	355
7	7311.00	40.57	54.00	-13.43	35.31	5.26	Average	100	125
8	7311.00	52.51	74.00	-21.49	47.25	5.26	Peak	100	125

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

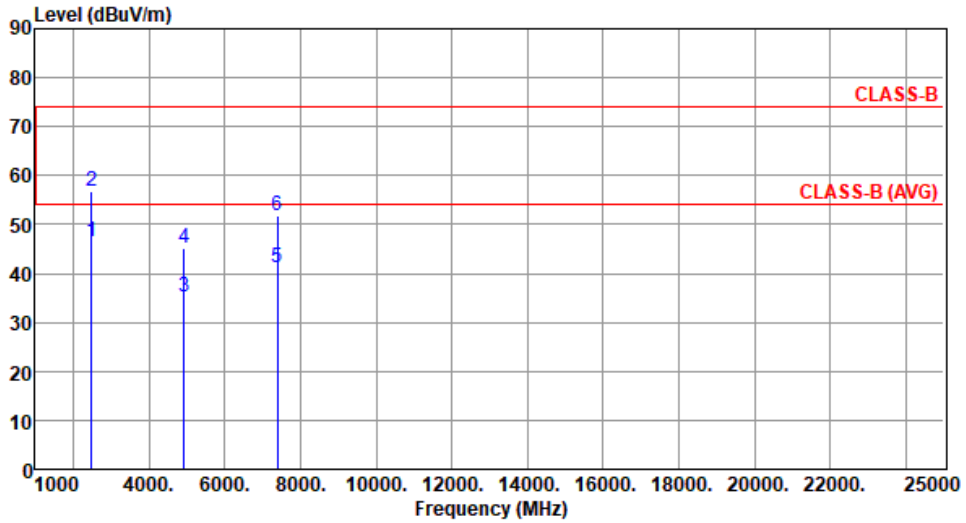


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	42.09	54.00	-11.91	46.63	-4.54	Average	142	12
2	2390.00	53.83	74.00	-20.17	58.37	-4.54	Peak	142	12
3	2483.50	40.78	54.00	-13.22	45.56	-4.78	Average	142	12
4	2483.50	53.81	74.00	-20.19	58.59	-4.78	Peak	142	12
5	4874.00	39.28	54.00	-14.72	39.71	-0.43	Average	100	16
6	4874.00	46.18	74.00	-27.82	46.61	-0.43	Peak	100	16
7	7311.00	42.97	54.00	-11.03	37.71	5.26	Average	309	30
8	7311.00	53.02	74.00	-20.98	47.76	5.26	Peak	309	30

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

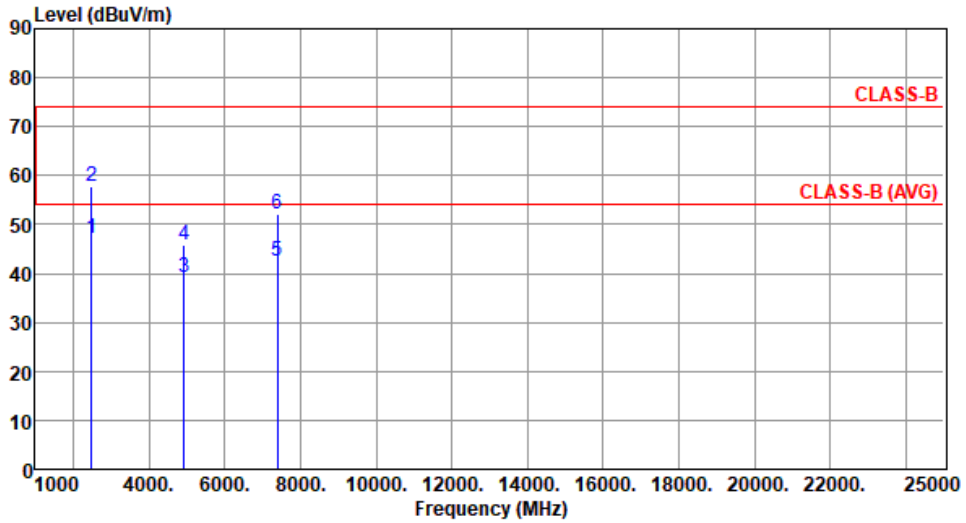


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	46.52	54.00	-7.48	51.30	-4.78	Average	159	6
2	2483.50	56.91	74.00	-17.09	61.69	-4.78	Peak	159	6
3	4924.00	35.26	54.00	-18.74	35.66	-0.40	Average	100	352
4	4924.00	45.18	74.00	-28.82	45.58	-0.40	Peak	100	352
5	7386.00	41.22	54.00	-12.78	36.11	5.11	Average	100	126
6	7386.00	51.74	74.00	-22.26	46.63	5.11	Peak	100	126

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64



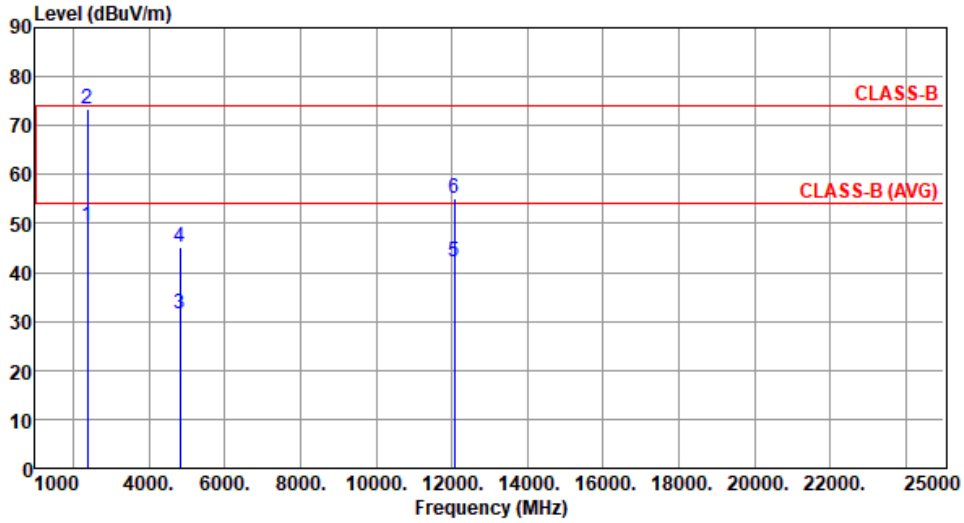
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	47.11	54.00	-6.89	51.89	-4.78	Average	170	15
2	2483.50	57.62	74.00	-16.38	62.40	-4.78	Peak	170	15
3	4924.00	39.15	54.00	-14.85	39.55	-0.40	Average	100	27
4	4924.00	45.89	74.00	-28.11	46.29	-0.40	Peak	100	27
5	7386.00	42.39	54.00	-11.61	37.28	5.11	Average	302	27
6	7386.00	52.09	74.00	-21.91	46.98	5.11	Peak	302	27

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Unwanted Emissions (Above 1GHz) for 11g

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

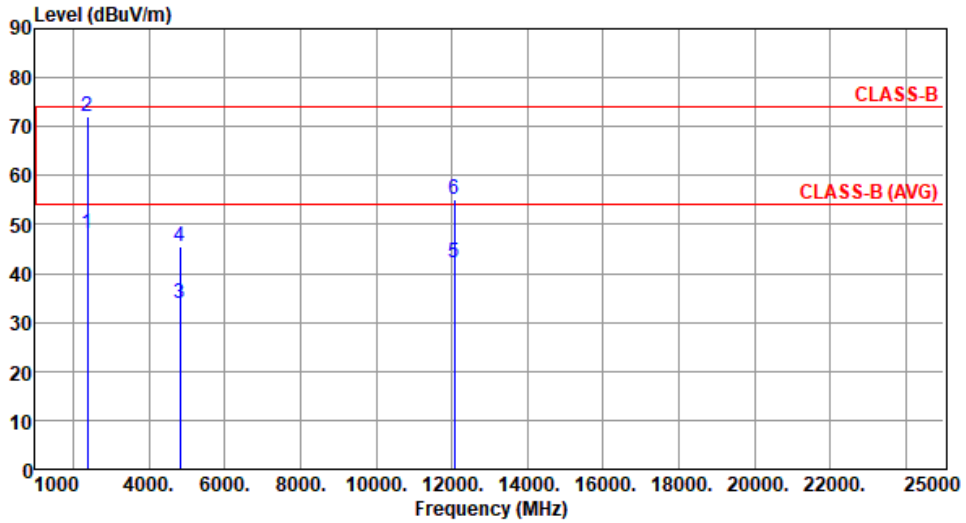


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.42	54.00	-4.58	53.96	-4.54	Average	286	345
2	2390.00	73.30	74.00	-0.70	77.84	-4.54	Peak	286	345
3	4824.00	31.69	54.00	-22.31	32.10	-0.41	Average	100	36
4	4824.00	45.09	74.00	-28.91	45.50	-0.41	Peak	100	36
5	12060.00	42.11	54.00	-11.89	35.66	6.45	Average	100	71
6	12060.00	55.12	74.00	-18.88	48.67	6.45	Peak	100	71

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

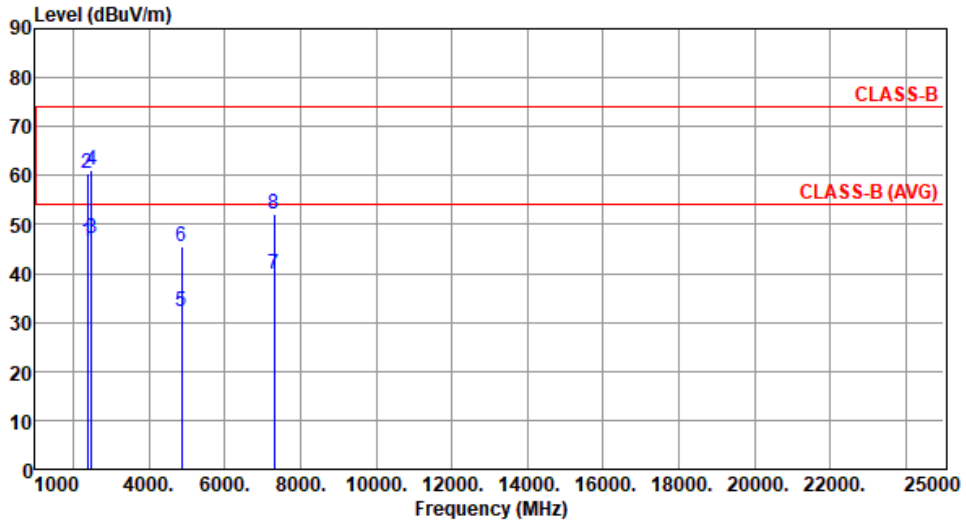


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.23	54.00	-5.77	52.77	-4.54	Average	218	340
2	2390.00	72.11	74.00	-1.89	76.65	-4.54	Peak	218	340
3	4824.00	33.86	54.00	-20.14	34.27	-0.41	Average	100	167
4	4824.00	45.34	74.00	-28.66	45.75	-0.41	Peak	100	167
5	12060.00	42.21	54.00	-11.79	35.76	6.45	Average	100	102
6	12060.00	55.07	74.00	-18.93	48.62	6.45	Peak	100	102

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

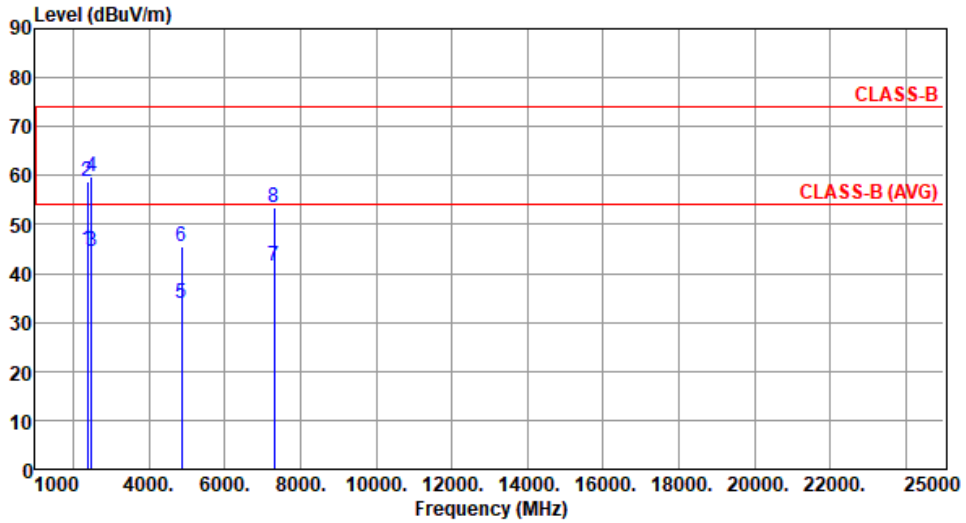


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	46.55	54.00	-7.45	51.09	-4.54	Average	286	358
2	2390.00	60.42	74.00	-13.58	64.96	-4.54	Peak	286	358
3	2483.50	47.26	54.00	-6.74	52.04	-4.78	Average	286	358
4	2483.50	60.97	74.00	-13.03	65.75	-4.78	Peak	286	358
5	4874.00	32.22	54.00	-21.78	32.65	-0.43	Average	100	162
6	4874.00	45.48	74.00	-28.52	45.91	-0.43	Peak	100	162
7	7311.00	39.71	54.00	-14.29	34.45	5.26	Average	100	27
8	7311.00	52.28	74.00	-21.72	47.02	5.26	Peak	100	27

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

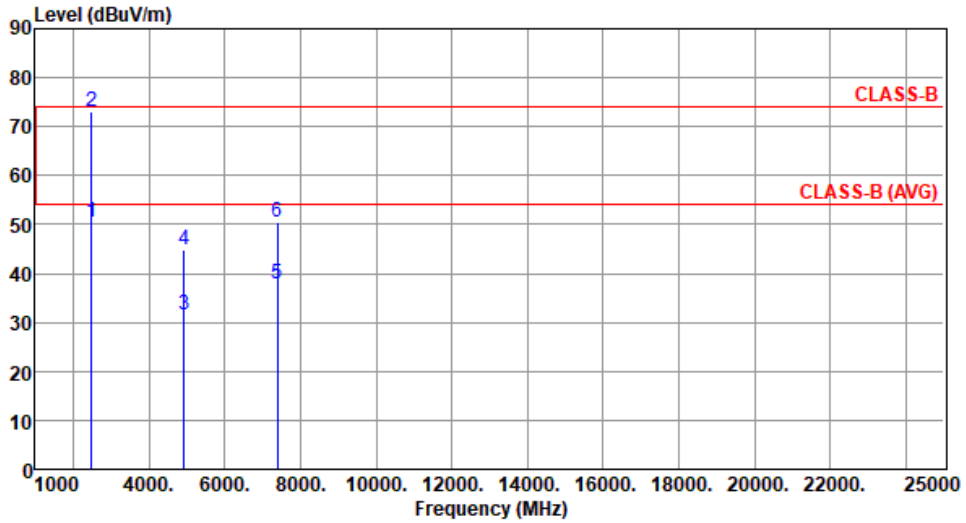


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	44.77	54.00	-9.23	49.31	-4.54	Average	186	8
2	2390.00	58.84	74.00	-15.16	63.38	-4.54	Peak	186	8
3	2483.50	44.52	54.00	-9.48	49.30	-4.78	Average	186	8
4	2483.50	59.79	74.00	-14.21	64.57	-4.78	Peak	186	8
5	4874.00	33.71	54.00	-20.29	34.14	-0.43	Average	100	177
6	4874.00	45.64	74.00	-28.36	46.07	-0.43	Peak	100	177
7	7311.00	41.59	54.00	-12.41	36.33	5.26	Average	100	20
8	7311.00	53.52	74.00	-20.48	48.26	5.26	Peak	100	20

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

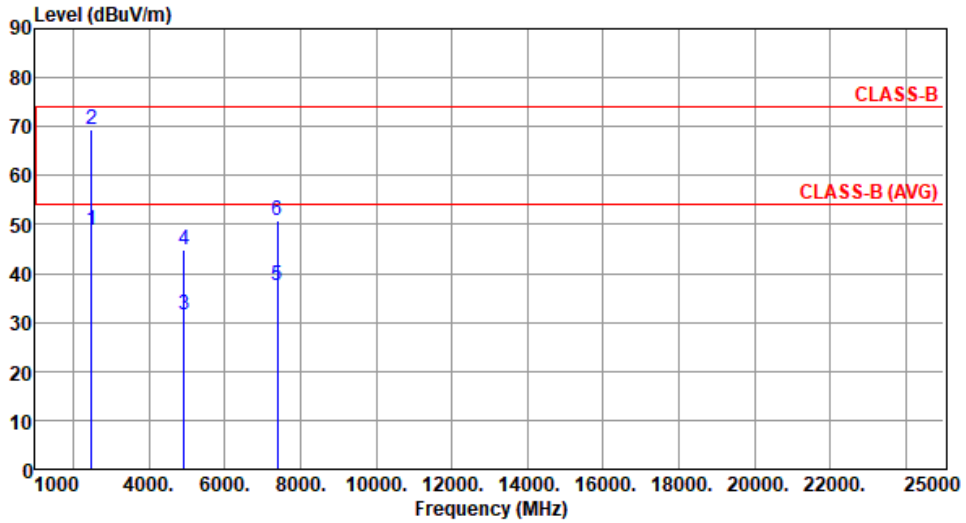


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	50.60	54.00	-3.40	55.38	-4.78	Average	277	355
2	2483.50	73.10	74.00	-0.90	77.88	-4.78	Peak	277	355
3	4924.00	31.49	54.00	-22.51	31.89	-0.40	Average	100	101
4	4924.00	44.96	74.00	-29.04	45.36	-0.40	Peak	100	101
5	7386.00	37.82	54.00	-16.18	32.71	5.11	Average	100	76
6	7386.00	50.63	74.00	-23.37	45.52	5.11	Peak	100	76

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64



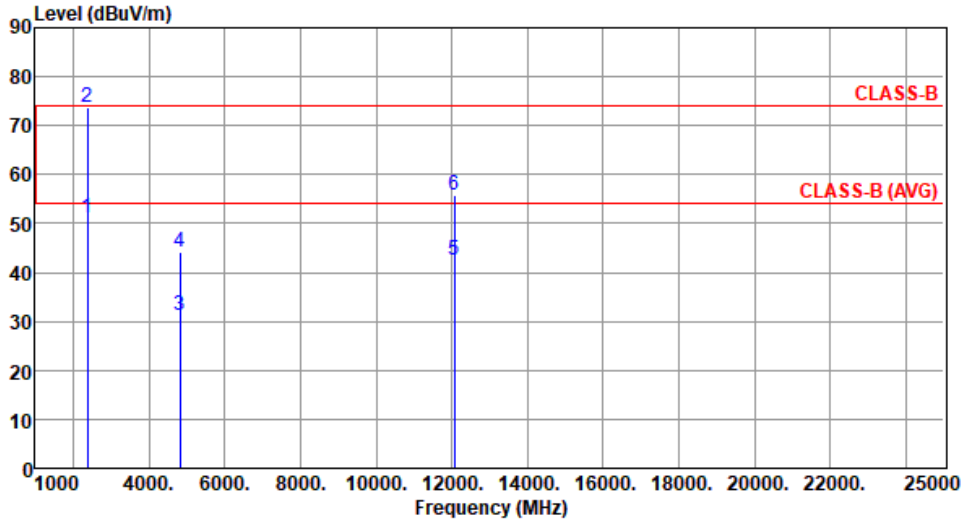
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	48.97	54.00	-5.03	53.75	-4.78	Average	207	3
2	2483.50	69.40	74.00	-4.60	74.18	-4.78	Peak	207	3
3	4924.00	31.55	54.00	-22.45	31.95	-0.40	Average	100	94
4	4924.00	44.89	74.00	-29.11	45.29	-0.40	Peak	100	94
5	7386.00	37.46	54.00	-16.54	32.35	5.11	Average	100	48
6	7386.00	50.95	74.00	-23.05	45.84	5.11	Peak	100	48

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Unwanted Emissions (Above 1GHz) for be EHT20-OFDMA

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

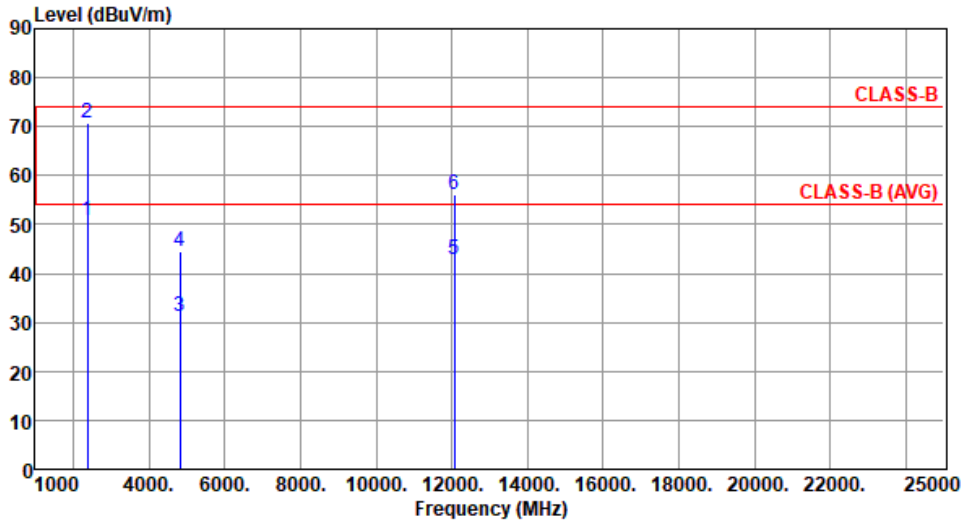


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.17	54.00	-2.83	55.71	-4.54	Average	258	4
2	2390.00	73.59	74.00	-0.41	78.13	-4.54	Peak	258	4
3	4824.00	31.31	54.00	-22.69	31.72	-0.41	Average	100	121
4	4824.00	44.33	74.00	-29.67	44.74	-0.41	Peak	100	121
5	12060.00	42.46	54.00	-11.54	36.01	6.45	Average	100	59
6	12060.00	55.80	74.00	-18.20	49.35	6.45	Peak	100	59

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

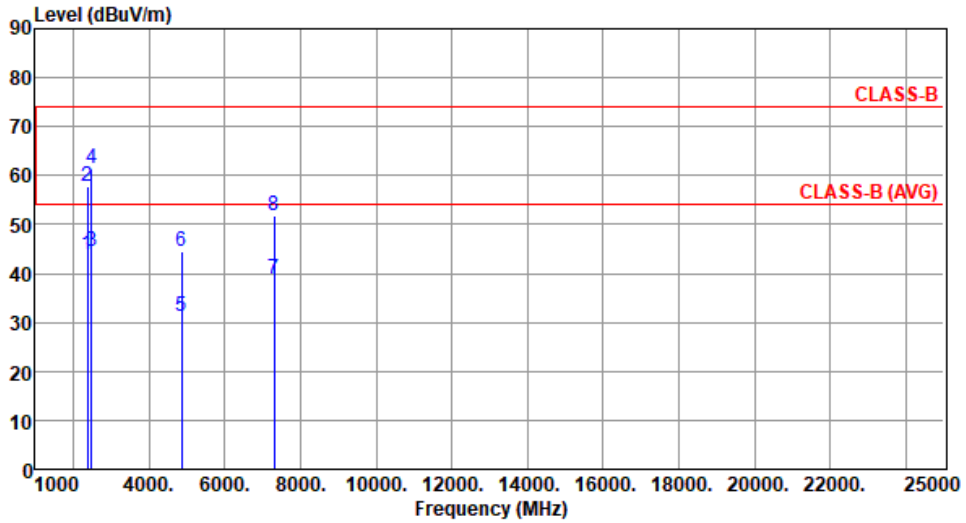


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.74	54.00	-3.26	55.28	-4.54	Average	124	22
2	2390.00	70.67	74.00	-3.33	75.21	-4.54	Peak	124	22
3	4824.00	31.36	54.00	-22.64	31.77	-0.41	Average	100	126
4	4824.00	44.56	74.00	-29.44	44.97	-0.41	Peak	100	126
5	12060.00	42.80	54.00	-11.20	36.35	6.45	Average	100	86
6	12060.00	56.12	74.00	-17.88	49.67	6.45	Peak	100	86

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

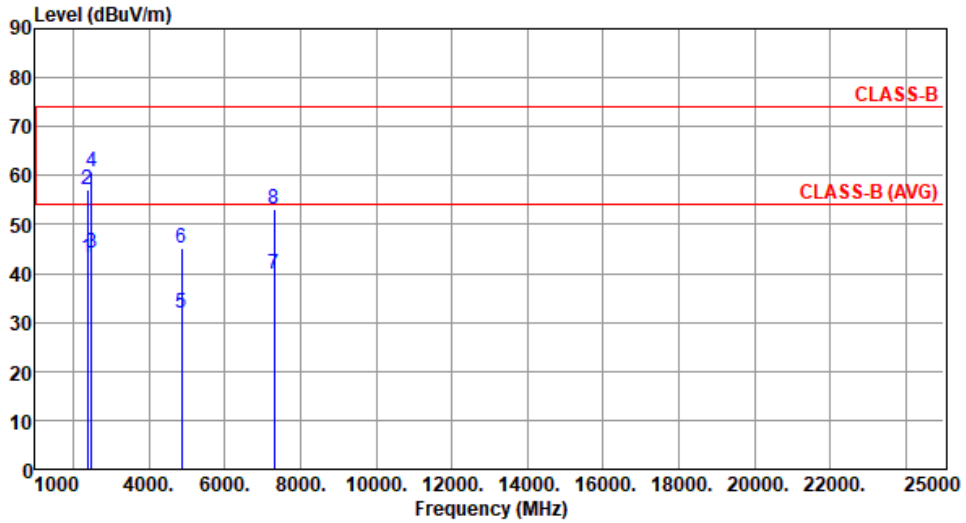


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	43.80	54.00	-10.20	48.34	-4.54	Average	252	5
2	2390.00	57.69	74.00	-16.31	62.23	-4.54	Peak	252	5
3	2483.50	44.42	54.00	-9.58	49.20	-4.78	Average	252	5
4	2483.50	61.54	74.00	-12.46	66.32	-4.78	Peak	252	5
5	4874.00	31.35	54.00	-22.65	31.78	-0.43	Average	100	54
6	4874.00	44.46	74.00	-29.54	44.89	-0.43	Peak	100	54
7	7311.00	38.90	54.00	-15.10	33.64	5.26	Average	156	322
8	7311.00	51.97	74.00	-22.03	46.71	5.26	Peak	156	322

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

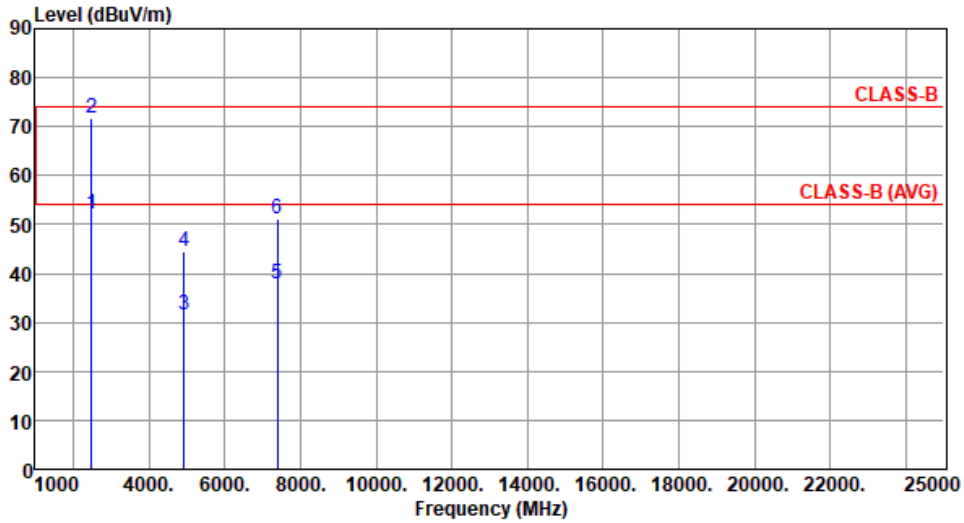


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	43.12	54.00	-10.88	47.66	-4.54	Average	140	25
2	2390.00	57.28	74.00	-16.72	61.82	-4.54	Peak	140	25
3	2483.50	44.20	54.00	-9.80	48.98	-4.78	Average	140	25
4	2483.50	60.67	74.00	-13.33	65.45	-4.78	Peak	140	25
5	4874.00	31.75	54.00	-22.25	32.18	-0.43	Average	100	36
6	4874.00	45.10	74.00	-28.90	45.53	-0.43	Peak	100	36
7	7311.00	39.76	54.00	-14.24	34.50	5.26	Average	100	8
8	7311.00	53.06	74.00	-20.94	47.80	5.26	Peak	100	8

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64

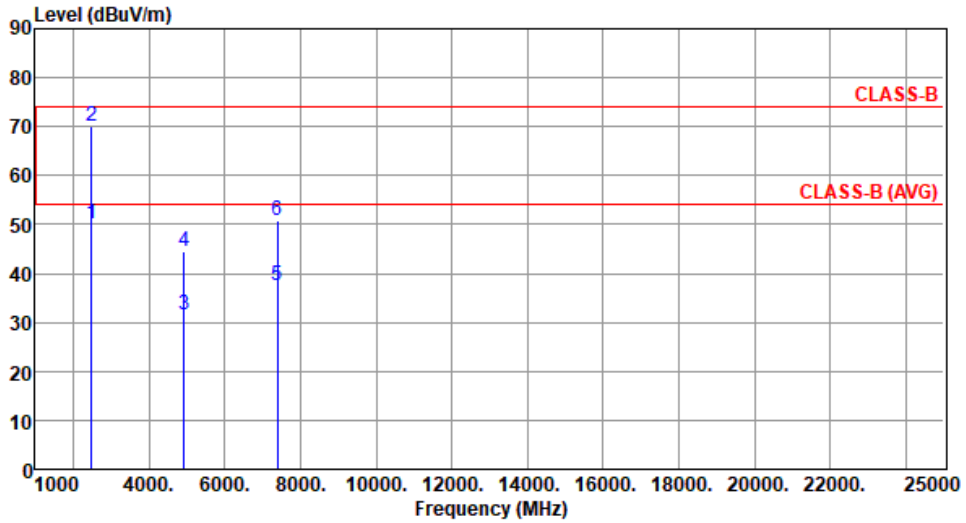


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.10	54.00	-1.90	56.88	-4.78	Average	273	9
2	2483.50	71.60	74.00	-2.40	76.38	-4.78	Peak	273	9
3	4924.00	31.52	54.00	-22.48	31.92	-0.40	Average	100	118
4	4924.00	44.46	74.00	-29.54	44.86	-0.40	Peak	100	118
5	7386.00	37.77	54.00	-16.23	32.66	5.11	Average	100	54
6	7386.00	51.13	74.00	-22.87	46.02	5.11	Peak	100	54

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Paul Lin Temperature(℃):25 Humidity(%):64



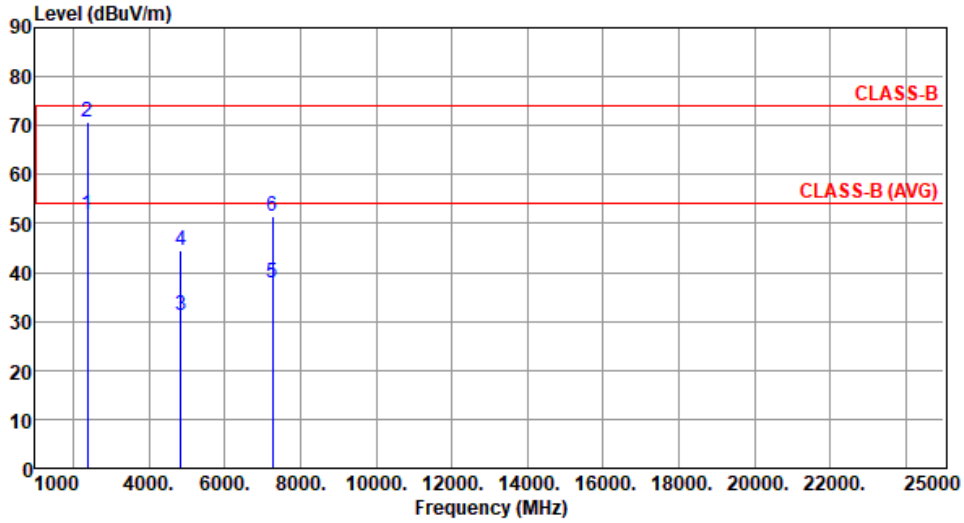
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	50.26	54.00	-3.74	55.04	-4.78	Average	134	24
2	2483.50	70.07	74.00	-3.93	74.85	-4.78	Peak	134	24
3	4924.00	31.49	54.00	-22.51	31.89	-0.40	Average	100	122
4	4924.00	44.55	74.00	-29.45	44.95	-0.40	Peak	100	122
5	7386.00	37.59	54.00	-16.41	32.48	5.11	Average	100	151
6	7386.00	50.92	74.00	-23.08	45.81	5.11	Peak	100	151

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Unwanted Emissions (Above 1GHz) for be EHT40-OFDMA

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

Test By :Sean Yu Temperature(℃):26 Humidity(%):62

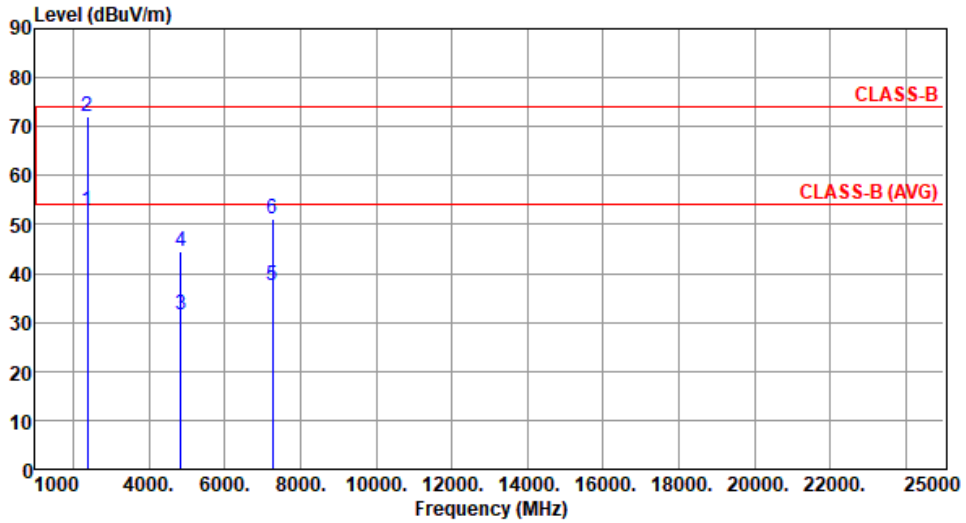


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.85	54.00	-2.15	56.39	-4.54	Average	110	7
2	2390.00	70.70	74.00	-3.30	75.24	-4.54	Peak	110	7
3	4844.00	31.27	54.00	-22.73	31.69	-0.42	Average	100	19
4	4844.00	44.37	74.00	-29.63	44.79	-0.42	Peak	100	19
5	7266.00	37.71	54.00	-16.29	32.52	5.19	Average	100	125
6	7266.00	51.56	74.00	-22.44	46.37	5.19	Peak	100	125

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Sean Yu Temperature(℃):26 Humidity(%):62

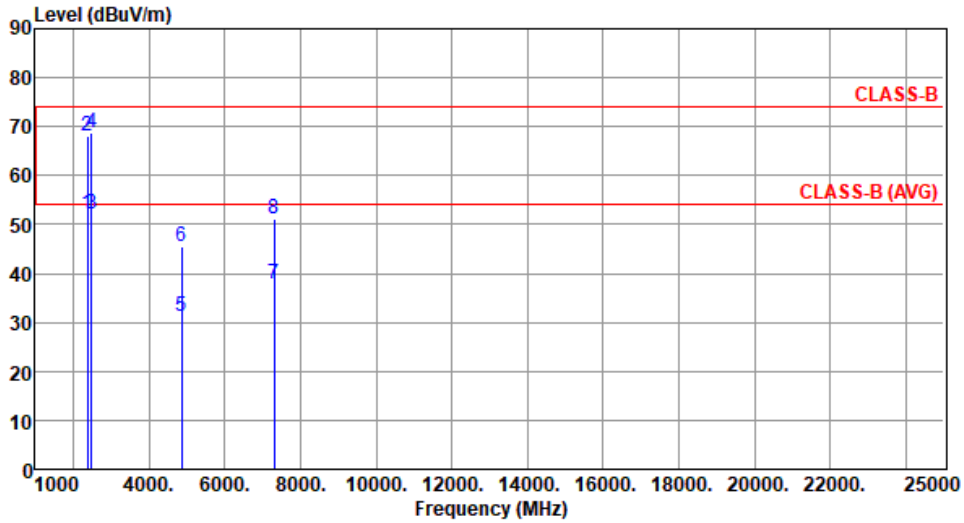


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.85	54.00	-1.15	57.39	-4.54	Average	125	36
2	2390.00	72.12	74.00	-1.88	76.66	-4.54	Peak	125	36
3	4844.00	31.41	54.00	-22.59	31.83	-0.42	Average	100	114
4	4844.00	44.63	74.00	-29.37	45.05	-0.42	Peak	100	114
5	7266.00	37.67	54.00	-16.33	32.48	5.19	Average	100	75
6	7266.00	51.07	74.00	-22.93	45.88	5.19	Peak	100	75

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Sean Yu Temperature(℃):26 Humidity(%):61

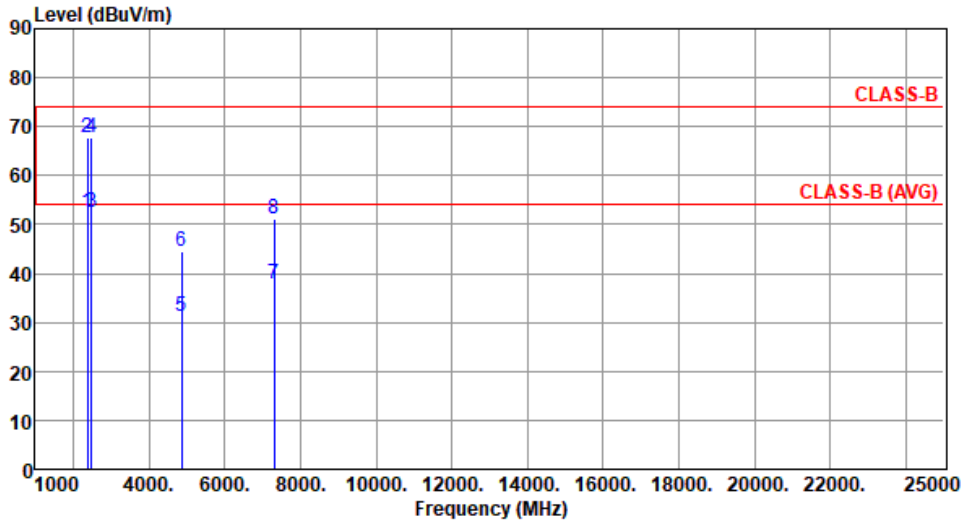


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.11	54.00	-1.89	56.65	-4.54	Average	114	1
2	2390.00	68.18	74.00	-5.82	72.72	-4.54	Peak	114	1
3	2483.50	52.04	54.00	-1.96	56.82	-4.78	Average	114	1
4	2483.50	68.79	74.00	-5.21	73.57	-4.78	Peak	114	1
5	4874.00	31.14	54.00	-22.86	31.57	-0.43	Average	100	118
6	4874.00	45.36	74.00	-28.64	45.79	-0.43	Peak	100	118
7	7311.00	37.75	54.00	-16.25	32.49	5.26	Average	100	86
8	7311.00	51.19	74.00	-22.81	45.93	5.26	Peak	100	86

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Sean Yu Temperature(℃):26 Humidity(%):61

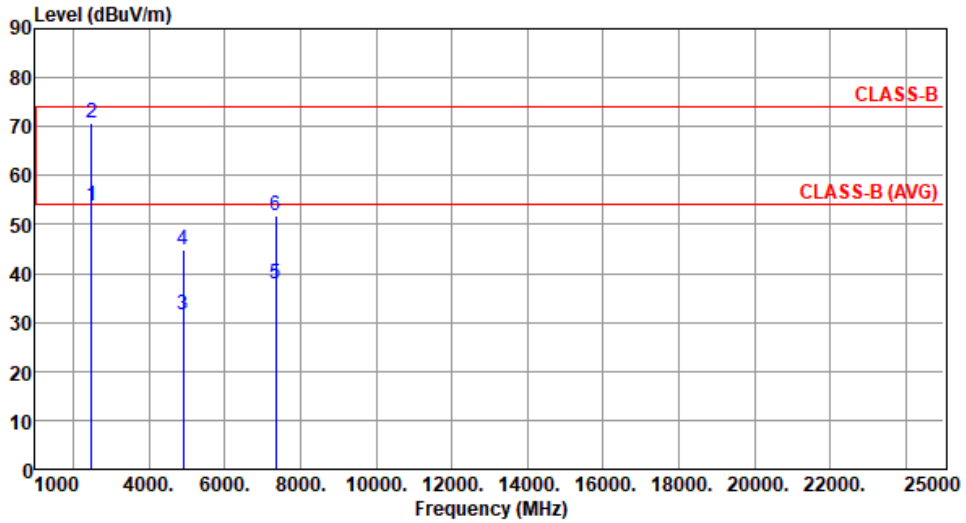


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.57	54.00	-1.43	57.11	-4.54	Average	100	23
2	2390.00	67.78	74.00	-6.22	72.32	-4.54	Peak	100	23
3	2483.50	52.35	54.00	-1.65	57.13	-4.78	Average	100	23
4	2483.50	67.78	74.00	-6.22	72.56	-4.78	Peak	100	23
5	4874.00	31.28	54.00	-22.72	31.71	-0.43	Average	100	69
6	4874.00	44.41	74.00	-29.59	44.84	-0.43	Peak	100	69
7	7311.00	37.70	54.00	-16.30	32.44	5.26	Average	100	133
8	7311.00	51.11	74.00	-22.89	45.85	5.26	Peak	100	133

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Sean Yu Temperature(℃):26 Humidity(%):62

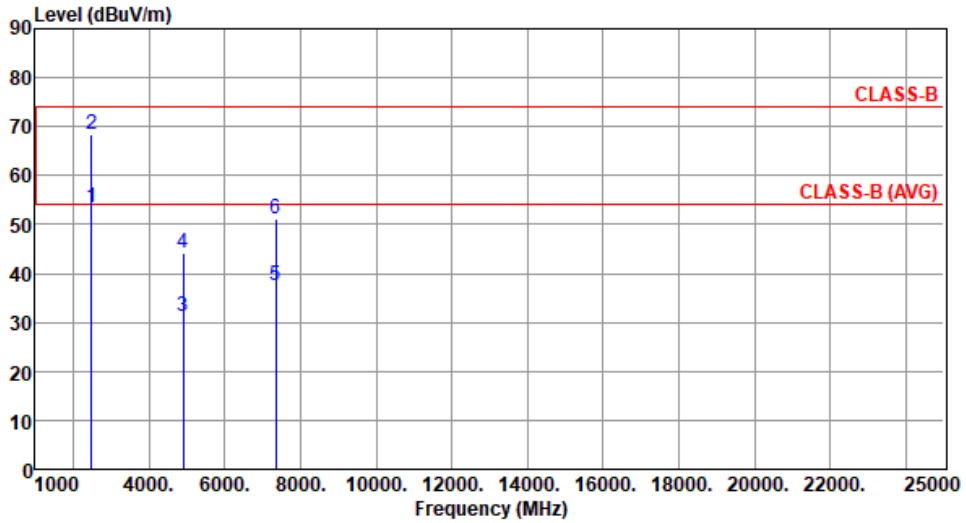


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	53.84	54.00	-0.16	58.62	-4.78	Average	111	352
2	2483.50	70.75	74.00	-3.25	75.53	-4.78	Peak	111	352
3	4904.00	31.45	54.00	-22.55	31.88	-0.43	Average	100	149
4	4904.00	44.94	74.00	-29.06	45.37	-0.43	Peak	100	149
5	7356.00	37.72	54.00	-16.28	32.58	5.14	Average	100	95
6	7356.00	51.75	74.00	-22.25	46.61	5.14	Peak	100	95

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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

Test By :Sean Yu Temperature(℃):26 Humidity(%):62

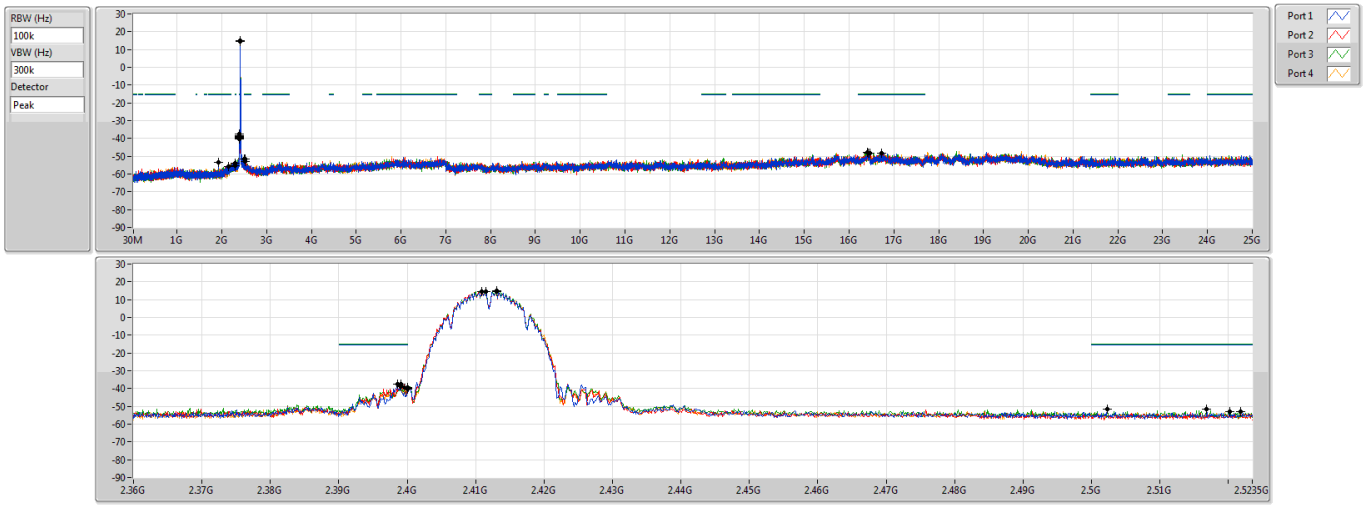


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	53.57	54.00	-0.43	58.35	-4.78	Average	158	355
2	2483.50	68.48	74.00	-5.52	73.26	-4.78	Peak	158	355
3	4904.00	31.36	54.00	-22.64	31.79	-0.43	Average	100	32
4	4904.00	44.33	74.00	-29.67	44.76	-0.43	Peak	100	32
5	7356.00	37.68	54.00	-16.32	32.54	5.14	Average	100	77
6	7356.00	51.02	74.00	-22.98	45.88	5.14	Peak	100	77

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **CSENdB**

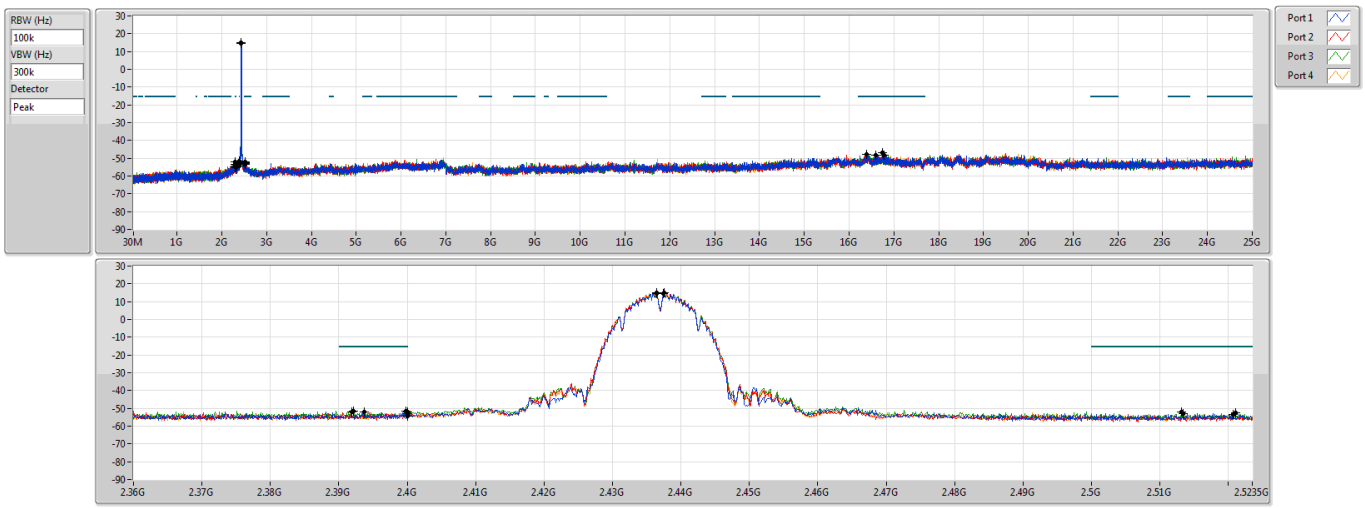
2412MHz



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
2.41303G	14.63	-15.37	1.93012G	-53.63	2.39856G	-37.29	2.4G	-40.51	2.51686G	-51.70	16.40274G	-47.85	1
2.41086G	14.63	-15.37	2.30641G	-53.90	2.39904G	-37.59	2.4G	-39.31	2.52182G	-53.00	16.47017G	-48.32	2
2.41303G	15.04	-14.96	2.30525G	-55.15	2.39904G	-38.24	2.4G	-39.83	2.5023G	-51.55	16.43083G	-48.27	3
2.41152G	14.71	-15.29	2.14215G	-55.82	2.39904G	-39.03	2.4G	-39.99	2.52022G	-53.16	16.73427G	-48.40	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **CSENdB**

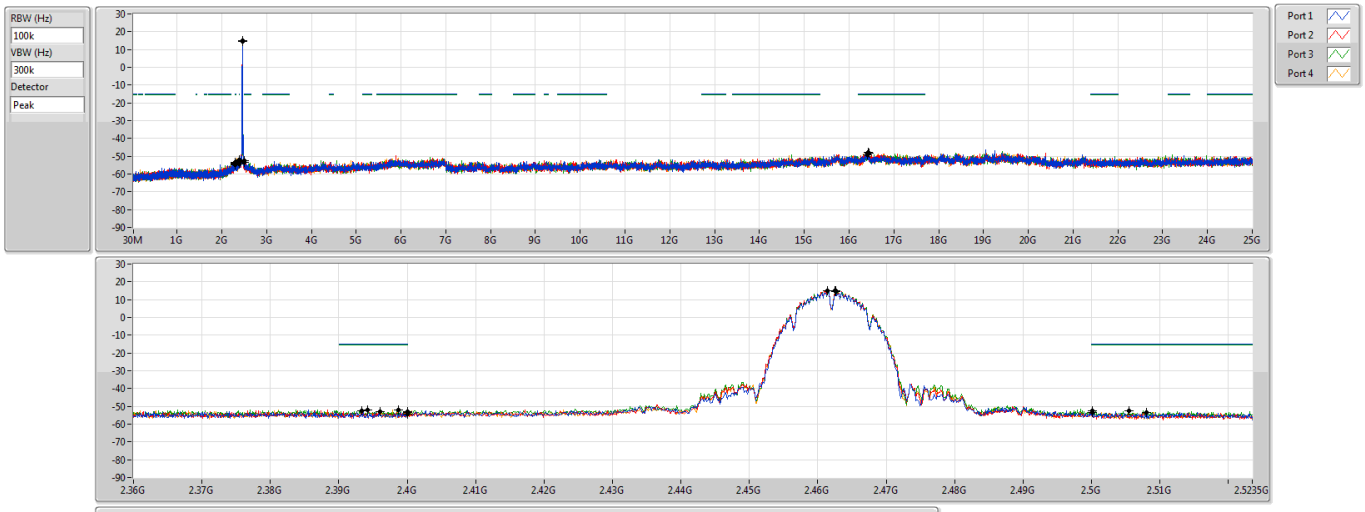
2437MHz



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
2.43741G	14.55	-15.45	2.30525G	-54.76	2.39376G	-51.92	2.4G	-53.18	2.51342G	-53.06	16.73989G	-46.90	1
2.43641G	14.61	-15.39	2.30641G	-52.23	2.39184G	-52.07	2.4G	-54.28	2.5207G	-53.25	16.39431G	-47.62	2
2.43641G	14.91	-15.09	2.30758G	-53.49	2.39984G	-51.69	2.4G	-51.81	2.52102G	-52.60	16.7736G	-48.37	3
2.43758G	14.93	-15.07	2.30991G	-55.43	2.39216G	-51.77	2.4G	-54.43	2.5131G	-52.18	16.60222G	-48.24	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX **CSENdB**

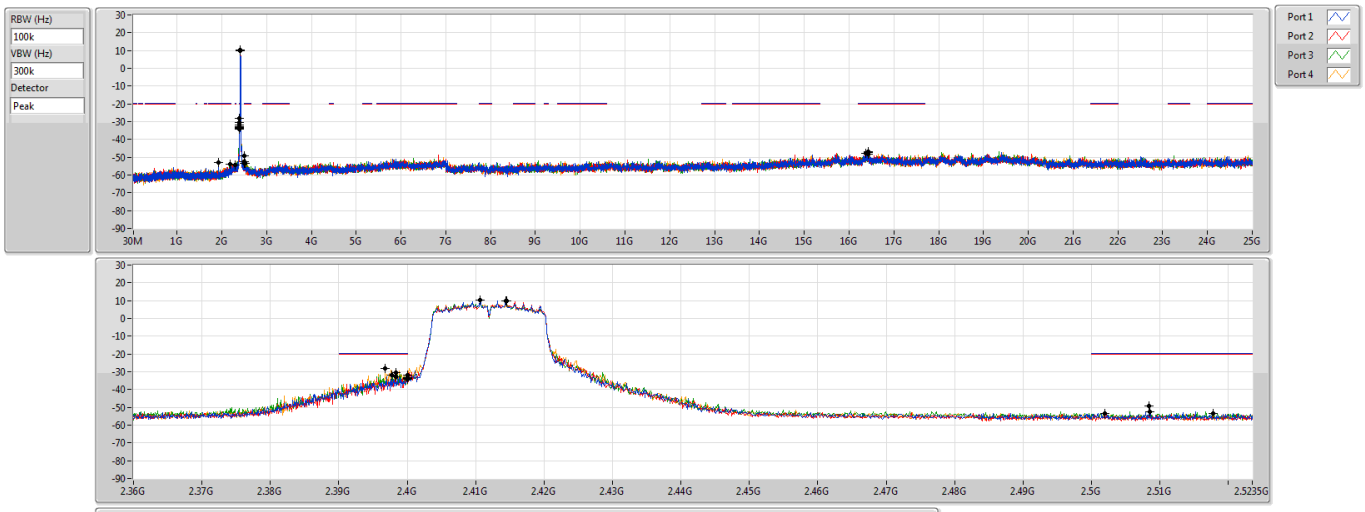
2462MHz



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
2.46263G	15.08	-14.92	2.30758G	-54.09	2.396G	-53.20	2.4G	-52.91	2.50014G	-52.29	16.40274G	-49.18	1
2.46146G	15.20	-14.80	2.30175G	-54.82	2.39336G	-52.62	2.4G	-54.19	2.50014G	-53.63	16.43926G	-48.18	2
2.46263G	14.67	-15.33	2.30758G	-54.51	2.39424G	-51.99	2.4G	-53.36	2.5055G	-52.46	16.43364G	-47.97	3
2.46246G	15.23	-14.77	2.30758G	-53.37	2.39872G	-51.88	2.4G	-54.18	2.50798G	-53.29	16.42802G	-47.89	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **CSENdB**

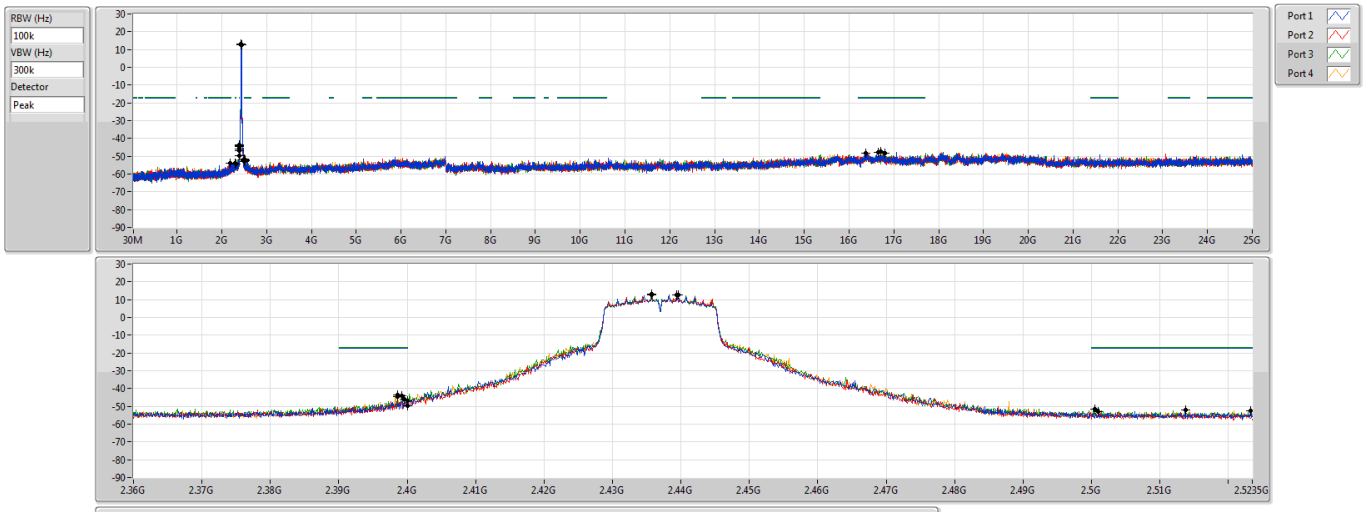
2412MHz



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	10.12	-19.88	1.93012G	-53.04	2.39768G	-32.09	2.4G	-34.29	2.50846G	-49.25	16.36621G	-47.99	1
2.41436G	9.80	-20.20	2.30641G	-54.18	2.39832G	-32.82	2.4G	-33.74	2.50198G	-53.27	16.4196G	-47.53	2
2.41436G	9.65	-20.35	2.30292G	-54.38	2.39832G	-30.65	2.4G	-33.36	2.50854G	-52.29	16.43364G	-48.26	3
2.41453G	9.74	-20.26	2.17826G	-53.89	2.3968G	-28.27	2.4G	-31.69	2.51774G	-53.30	16.4196G	-46.92	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **CSENdB**

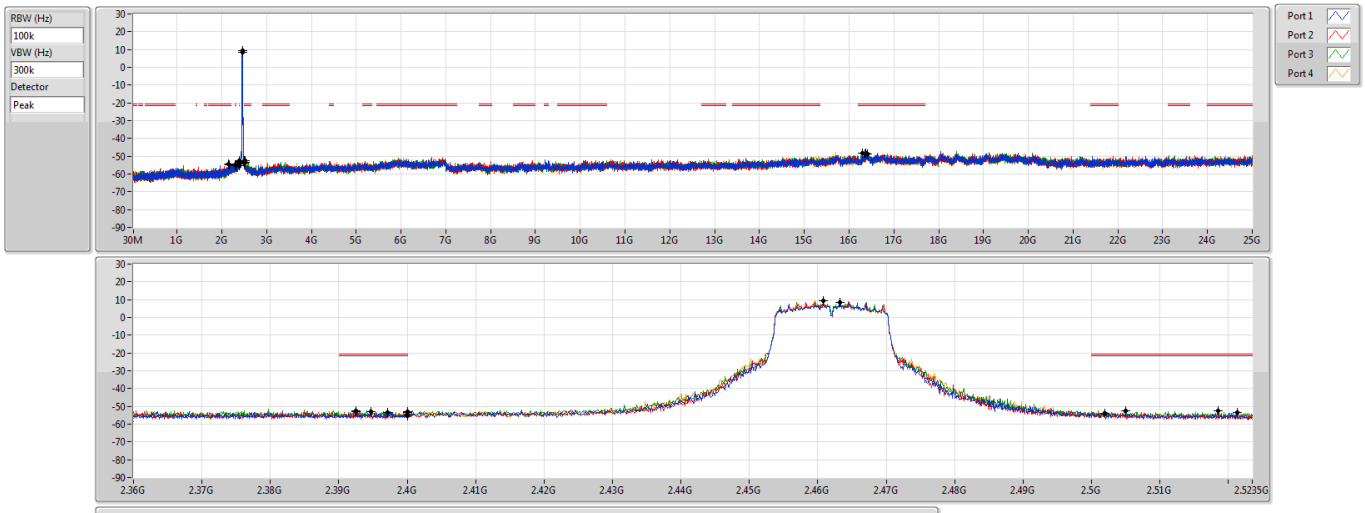
2437MHz



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
2.43958G	12.72	-17.28	2.30525G	-53.68	2.3992G	-43.88	2.4G	-46.74	2.51374G	-52.11	16.71179G	-47.33	1
2.43941G	12.47	-17.53	2.30991G	-54.41	2.39952G	-45.84	2.4G	-49.57	2.50102G	-52.88	16.64717G	-47.66	2
2.43574G	13.03	-16.97	2.19341G	-53.93	2.39856G	-44.43	2.4G	-47.04	2.50054G	-51.72	16.36621G	-48.30	3
2.43574G	12.76	-17.24	2.30408G	-54.00	2.39864G	-43.81	2.4G	-46.78	2.52326G	-52.40	16.80732G	-48.15	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX **CSENdB**

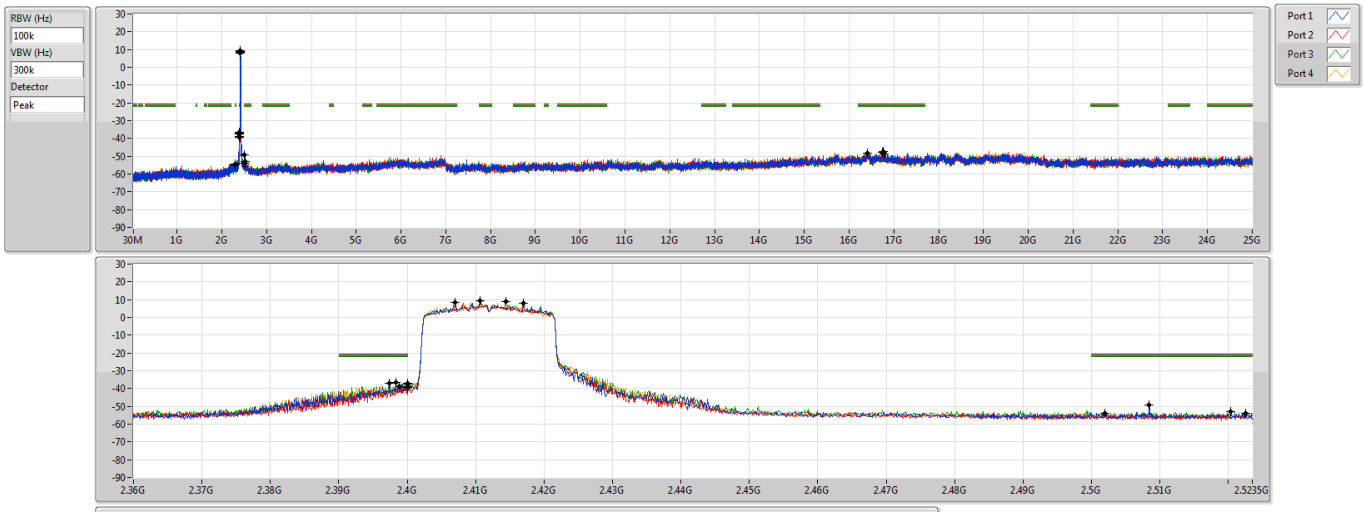
2462MHz



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	8.51	-21.49	2.16661G	-54.62	2.39248G	-53.01	2.4G	-53.46	2.52134G	-53.62	16.37183G	-48.35	1
2.46079G	9.45	-20.55	2.15147G	-54.47	2.39464G	-52.81	2.4G	-55.52	2.5019G	-53.76	16.35779G	-48.57	2
2.46079G	9.56	-20.44	2.30991G	-55.45	2.39248G	-52.54	2.4G	-52.89	2.50502G	-52.37	16.30721G	-48.45	3
2.46079G	9.46	-20.54	2.30059G	-54.68	2.39712G	-53.26	2.4G	-54.48	2.51854G	-52.63	16.41679G	-48.54	4

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **CSENdB**

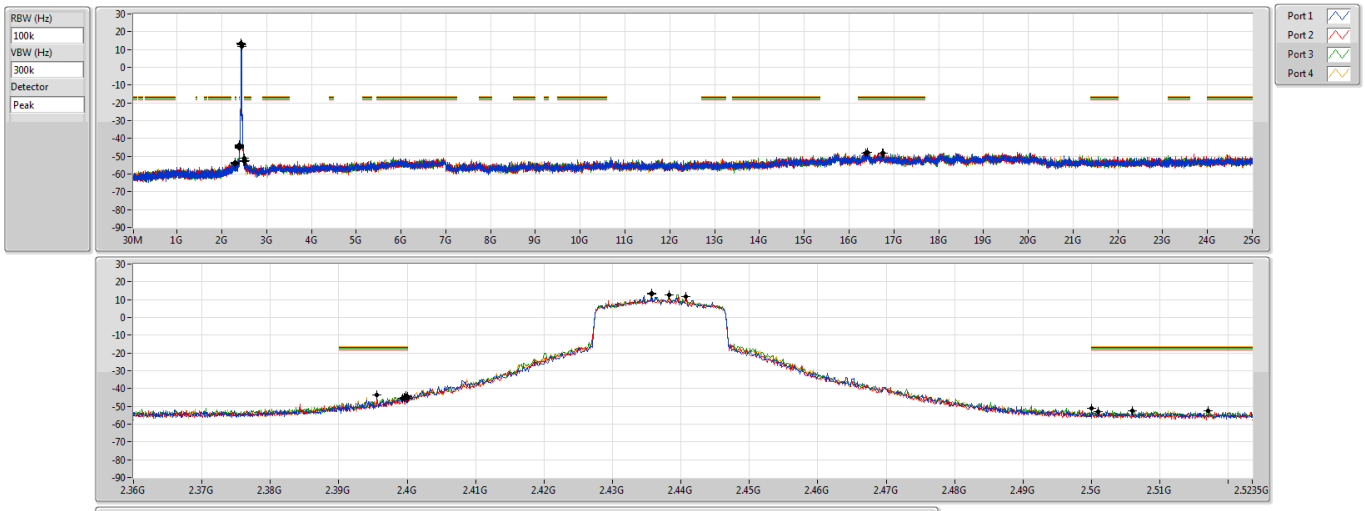
2412MHz



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	9.17	-20.83	2.30408G	-54.48	2.4G	-37.02	2.4G	-37.57	2.50846G	-49.41	16.76798G	-47.13	1
2.40701G	8.27	-21.73	2.30408G	-54.68	2.39888G	-38.73	2.4G	-39.11	2.50198G	-53.68	16.78484G	-48.79	2
2.41703G	8.11	-21.89	2.30408G	-54.70	2.39736G	-37.13	2.4G	-39.27	2.52038G	-53.13	16.7427G	-48.01	3
2.41436G	8.78	-21.22	2.30292G	-54.51	2.39832G	-36.45	2.4G	-39.42	2.52254G	-53.71	16.40836G	-48.31	4

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **CSENdB**

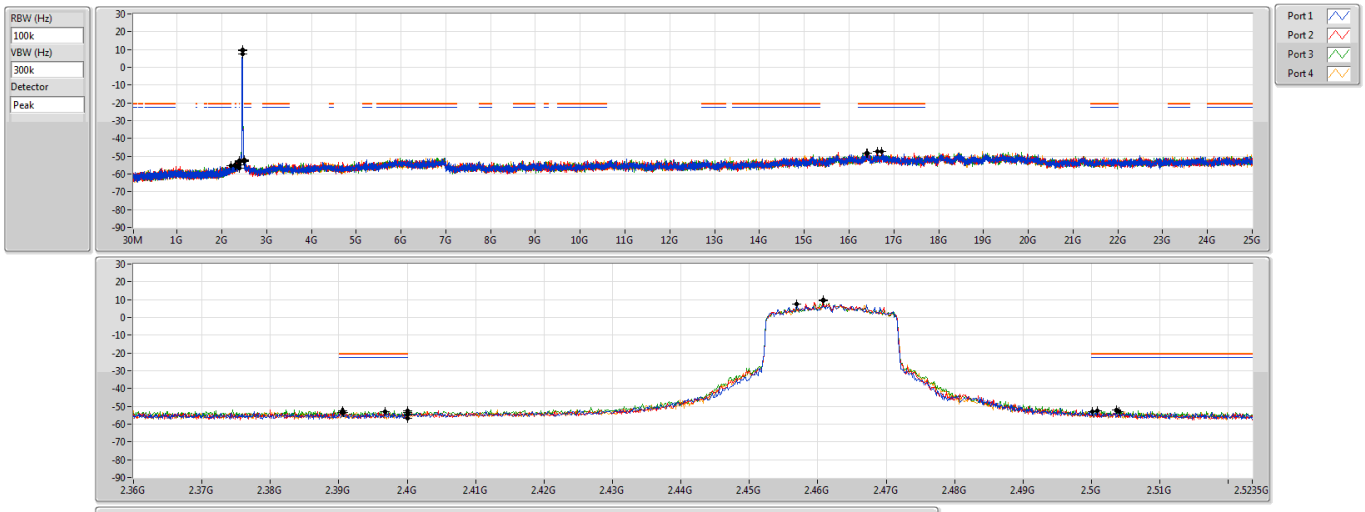
2437MHz



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	13.27	-16.73	2.30292G	-53.96	2.39928G	-45.61	2.4G	-45.26	2.50598G	-52.54	16.36621G	-48.43	1
2.44075G	11.92	-18.08	2.30175G	-53.56	2.39952G	-45.02	2.4G	-44.57	2.50094G	-53.13	16.40555G	-47.59	2
2.43824G	12.75	-17.25	2.30525G	-53.99	2.3956G	-43.59	2.4G	-44.73	2.50006G	-51.16	16.76517G	-48.37	3
2.43574G	13.43	-16.57	2.30292G	-54.37	2.39976G	-44.16	2.4G	-44.33	2.5171G	-52.39	16.7427G	-48.33	4

2.4-2.4835GHz_802.11be EHT20_Nss1,(MCS0)_4TX **CSENdB**

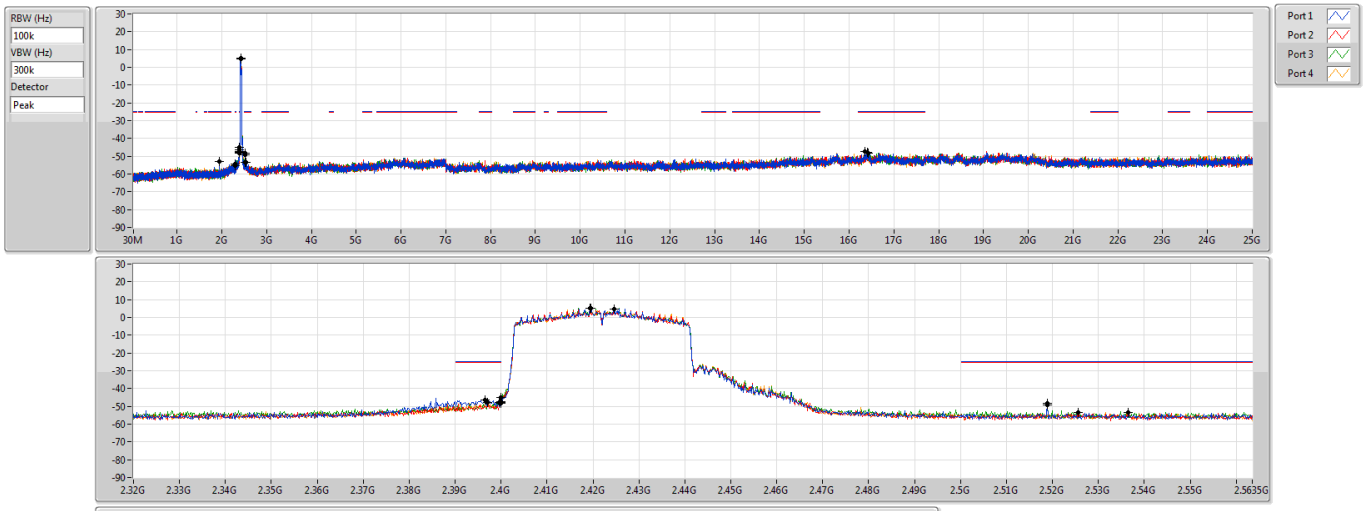
2462MHz



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
2.45695G	7.69	-22.31	2.19923G	-55.17	2.39672G	-53.08	2.4G	-53.47	2.50086G	-52.58	16.63593G	-47.44	1
2.46079G	9.46	-20.54	2.30408G	-55.24	2.39064G	-53.33	2.4G	-56.51	2.50398G	-52.92	16.39993G	-48.19	2
2.46079G	9.37	-20.63	2.30059G	-54.80	2.39056G	-52.57	2.4G	-52.73	2.50366G	-52.09	16.72303G	-47.15	3
2.46079G	9.61	-20.39	2.30991G	-55.54	2.3904G	-53.54	2.4G	-54.99	2.50014G	-52.79	16.41117G	-48.44	4

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **CSENdB**

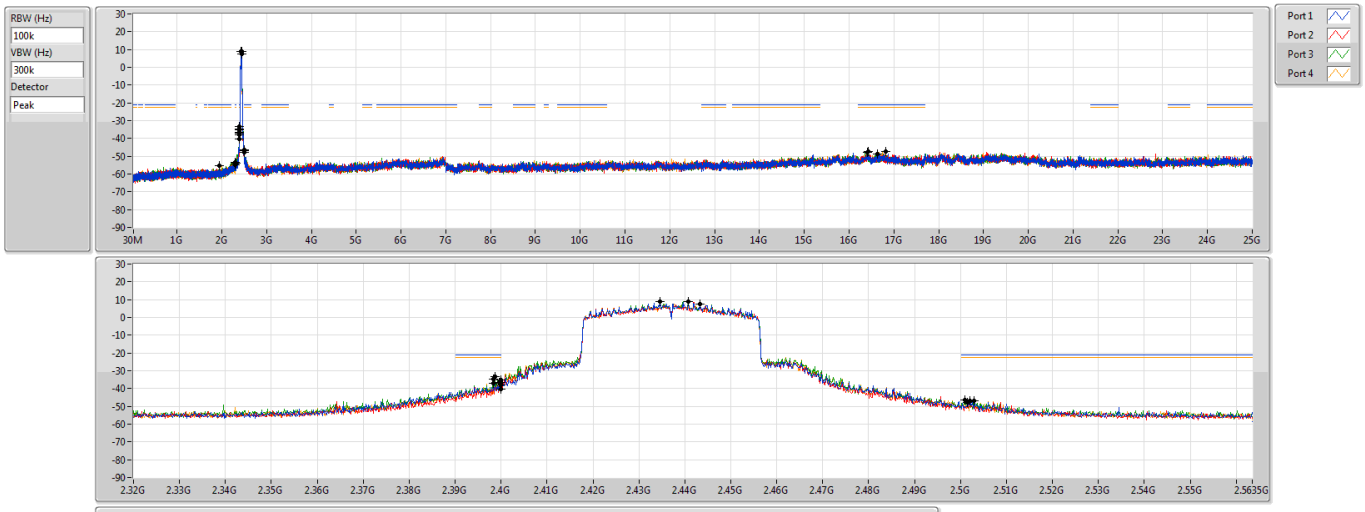
2422MHz



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	5.18	-24.82	1.93757G	-53.11	2.39648G	-46.28	2.4G	-48.36	2.51886G	-48.47	16.34792G	-47.24	1
2.42455G	4.66	-25.34	2.30168G	-55.43	2.39712G	-47.77	2.4G	-48.20	2.52558G	-53.65	16.41804G	-47.72	2
2.41954G	5.33	-24.67	2.30512G	-54.43	2.39968G	-47.95	2.4G	-44.80	2.51886G	-49.38	16.43767G	-48.13	3
2.42455G	4.91	-25.09	2.30283G	-55.47	2.4G	-47.42	2.4G	-48.01	2.53646G	-53.44	16.42365G	-48.42	4

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **CSENdB**

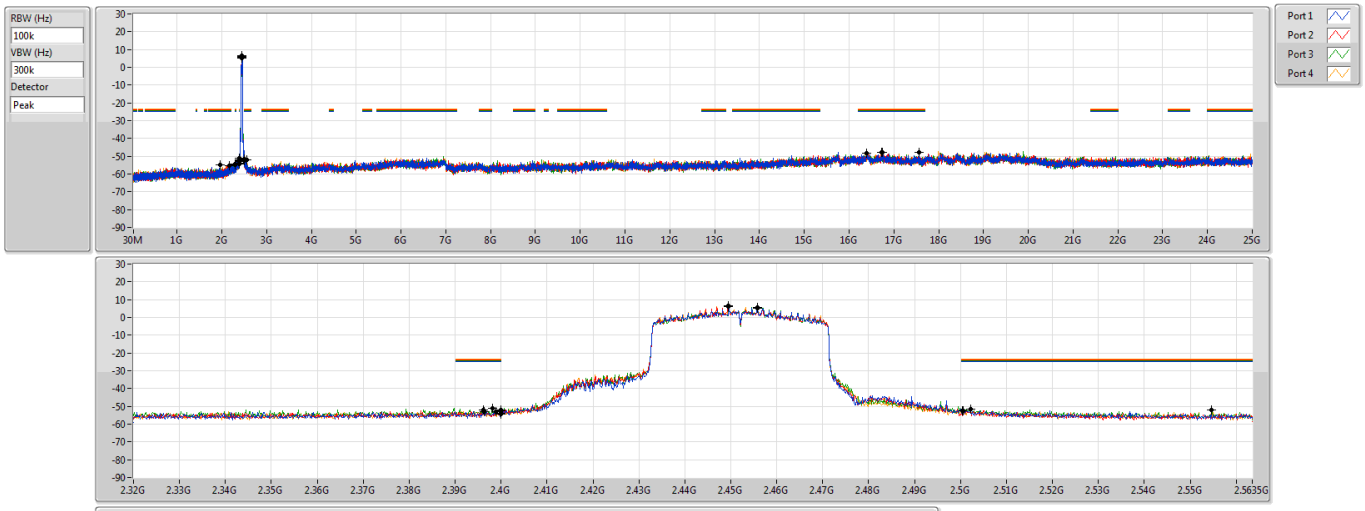
2437MHz



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
2.43457G	9.09	-20.91	1.95017G	-55.14	2.39952G	-36.43	2.4G	-40.43	2.50206G	-46.89	16.43206G	-47.45	1
2.44075G	8.84	-21.16	2.3097G	-53.70	2.3984G	-37.10	2.4G	-38.11	2.50158G	-47.61	16.63119G	-48.68	2
2.43457G	9.10	-20.90	2.30741G	-53.65	2.39872G	-33.21	2.4G	-35.15	2.50286G	-46.82	16.8275G	-47.49	3
2.44325G	7.42	-22.58	2.30741G	-55.06	2.3984G	-34.67	2.4G	-36.62	2.50094G	-46.46	16.41243G	-47.64	4

2.4-2.4835GHz_802.11be EHT40_Nss1,(MCS0)_4TX **CSENdB**

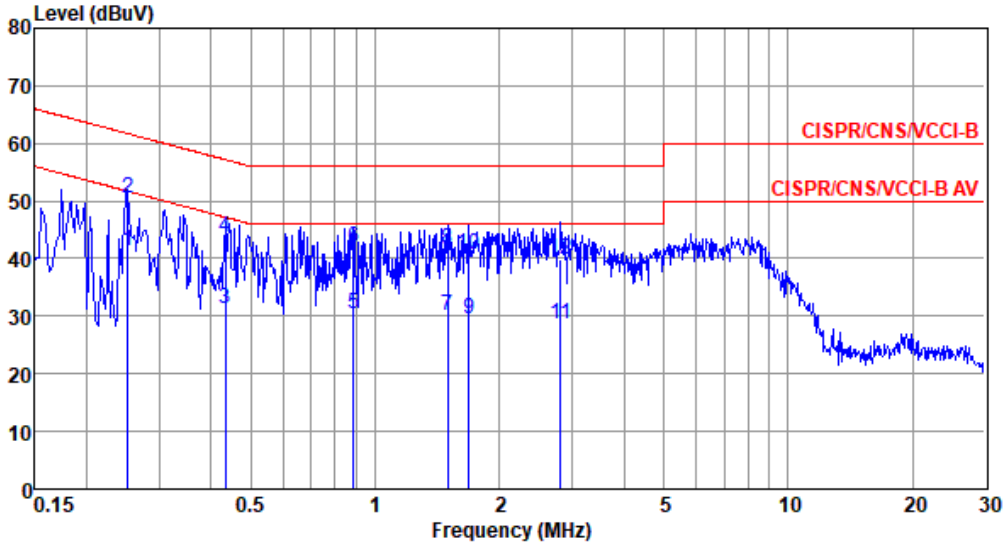
2452MHz



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
2.45578G	5.22	-24.78	1.96162G	-54.86	2.39888G	-53.05	2.4G	-53.81	2.55454G	-51.94	16.3928G	-48.06	1
2.44943G	6.18	-23.82	2.17459G	-55.25	2.39616G	-51.88	2.4G	-54.18	2.50062G	-52.28	16.71813G	-47.98	2
2.45578G	5.66	-24.34	2.30168G	-54.91	2.39808G	-51.17	2.4G	-52.68	2.50222G	-51.54	17.55669G	-47.86	3
2.44943G	6.67	-23.33	2.30054G	-54.40	2.39632G	-52.89	2.4G	-52.11	2.50046G	-52.42	16.74056G	-47.99	4

Modulation Mode	be EHT20-OFDMA	**Test Freq. (MHz)**	2437
Power Phase	Line		

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

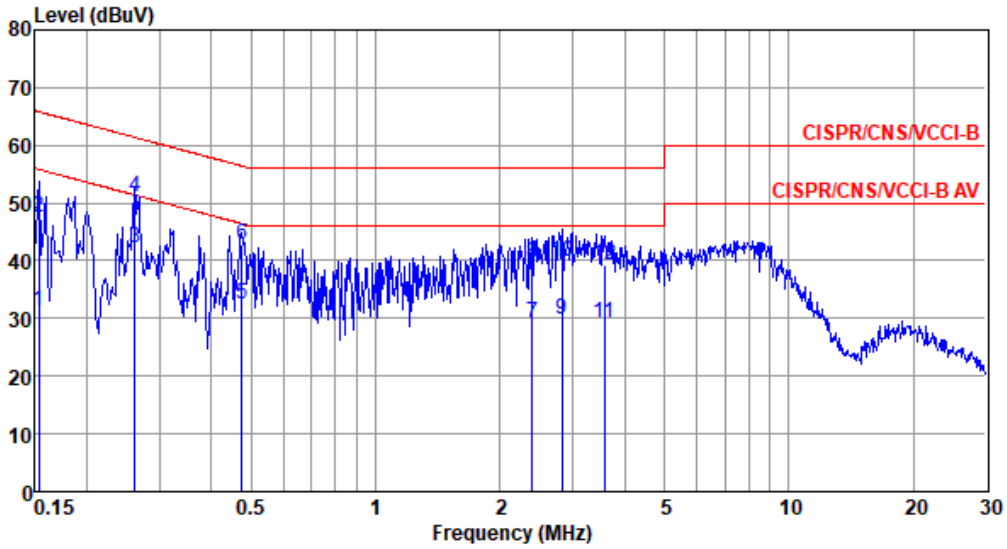


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1*	0.252	41.20	51.69	-10.49	31.29	9.62	0.06	0.23	Average
2	0.252	50.52	61.69	-11.17	40.61	9.62	0.06	0.23	QP
3	0.433	31.22	47.20	-15.98	21.24	9.62	0.06	0.30	Average
4	0.433	43.67	57.20	-13.53	33.69	9.62	0.06	0.30	QP
5	0.885	30.51	46.00	-15.49	20.45	9.63	0.10	0.33	Average
6	0.885	41.96	56.00	-14.04	31.90	9.63	0.10	0.33	QP
7	1.495	30.01	46.00	-15.99	19.91	9.63	0.12	0.35	Average
8	1.495	41.67	56.00	-14.33	31.57	9.63	0.12	0.35	QP
9	1.689	29.46	46.00	-16.54	19.35	9.63	0.13	0.35	Average
10	1.689	40.73	56.00	-15.27	30.62	9.63	0.13	0.35	QP
11	2.809	28.65	46.00	-17.35	18.47	9.64	0.15	0.39	Average
12	2.809	39.92	56.00	-16.08	29.74	9.64	0.15	0.39	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	be EHT20-OFDMA	**Test Freq. (MHz)**	2437
Power Phase	Neutral		

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



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.153	31.23	55.82	-24.59	21.36	9.63	0.06	0.18	Average
2	0.153	47.42	65.82	-18.40	37.55	9.63	0.06	0.18	QP
3*	0.262	42.34	51.38	-9.04	32.42	9.63	0.06	0.23	Average
4	0.262	50.99	61.38	-10.39	41.07	9.63	0.06	0.23	QP
5	0.474	32.54	46.45	-13.91	22.54	9.62	0.07	0.31	Average
6	0.474	42.73	56.45	-13.72	32.73	9.62	0.07	0.31	QP
7	2.396	29.33	46.00	-16.67	19.17	9.64	0.14	0.38	Average
8	2.396	39.54	56.00	-16.46	29.38	9.64	0.14	0.38	QP
9	2.824	29.92	46.00	-16.08	19.74	9.64	0.15	0.39	Average
10	2.824	39.95	56.00	-16.05	29.77	9.64	0.15	0.39	QP
11	3.584	29.17	46.00	-16.83	18.94	9.65	0.17	0.41	Average
12	3.584	39.17	56.00	-16.83	28.94	9.65	0.17	0.41	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).