FCC Test Report

FCC ID	:	**2A8MT-AP6W**
Equipment	:	**802.11ax 2x2 2-Streams Dual Concurrent Dual radios Wall Plate Access Point**
Model No.	:	**AP6W**
Brand Name	:	ALTA LABS
Applicant	:	**Alta Networks, LLC**
Address	:	**192 N Old Hwy 91, Unit 1 Hurricane, Utah, United States 84737**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**Mar. 11, 2025**
Tested Date	:	**Mar. 11 ~ Mar. 26, 2025**

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	Gary Chang
Along Chen / Assistant Manager	**Gary Chang / Manager**

Table of Contents

1 GENERAL DESCRIPTION 5

1.1 Information 5
1.2 Local Support Equipment List 8
1.3 Test Setup Chart 9
1.4 The Equipment List 10
1.5 Test Standards 11
1.6 Reference Guidance 11
1.7 Deviation from Test Standard and Measurement Procedure 11
1.8 Measurement Uncertainty 11

2 TEST CONFIGURATION 12

2.1 Testing Facility 12
2.2 The Worst Test Modes and Channel Details 12

3 TRANSMITTER TEST RESULTS 13

3.1 6dB and Occupied Bandwidth 13
3.2 Conducted Output Power 14
3.3 Power Spectral Density 15
3.4 Unwanted Emissions into Restricted Frequency Bands 16
3.5 Emissions in Non-Restricted Frequency Bands 18
3.6 AC Power Line Conducted Emissions 19

4 TEST LABORATORY INFORMATION 20

Appendix A. 6dB and Occupied Bandwidth

Appendix B. Conducted Output Power

Appendix C. Power Spectral Density

Appendix D. Unwanted Emissions into Restricted Frequency Bands

Appendix E. Emissions in Non-Restricted Frequency Bands

Appendix F. AC Power Line Conducted Emissions

Release Record

Report No.	Version	Description	Issued Date
FR1D0803-01AC	Rev. 01	Initial issue	Apr. 25, 2025

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 0.46MHz 38.06 (Margin -8.61dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 7311.00MHz 53.75 (Margin -0.25dB) - AV	Pass
15.247(b)(3)	Conducted Output Power	***Non-beamforming mode*** Max Power [dBm]: 26.88 ***Beamforming mode*** Max Power [dBm]: 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 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
Note 1: RF output power specifies that Maximum Peak Conducted Output Power. Note 2: DSSS-DBPSK, DQPSK, CCK modulation OFDM/OFDMA- BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.					

1.1.2 Antenna Details

Ant. No.	Brand	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
					2400~2483.5	5150~5250	5250~5350	5470~5725	5725~5850
1	Emplus	2.4G-1 7102A0503000	Dipole	UFL	5.4	-	-	-	-
2	Emplus	2.4G-2 7102A0504000	Dipole	UFL	4.0	-	-	-	-
3	Emplus	5G-1 7102A0505000	Dipole	UFL	-	5	6.4	7.2	7.2
4	Emplus	5G-2 7102A0506000	Dipole	UFL	-	5.1	5.3	6.3	6.2

1.1.3 Configuration of Equipment under Test (EUT)

Power Supply Type	12V⎓ from AC adapter 54V⎓ from POE	
Beamforming	☒ Support	☐ Not support
RU Configuration	☒ Full RU	☐ Partial RU

Note: The above power supply is not bundled in market.

1.1.4 Accessories

N/A

1.1.5 Channel List

Frequency band (MHz)		2400~2483.5	
802.11 b / g / n HT20 / ac VHT20 / ax HE20		802.11n HT40 / ac VHT40 / ax HE40	
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	QSPR, version: 5.0-00201		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11b	86.23%	0.64
	11g	99.33%	0.03
	ax HE20-OFDMA	85.75%	0.67
	ax HE40-OFDMA	67.75%	1.69

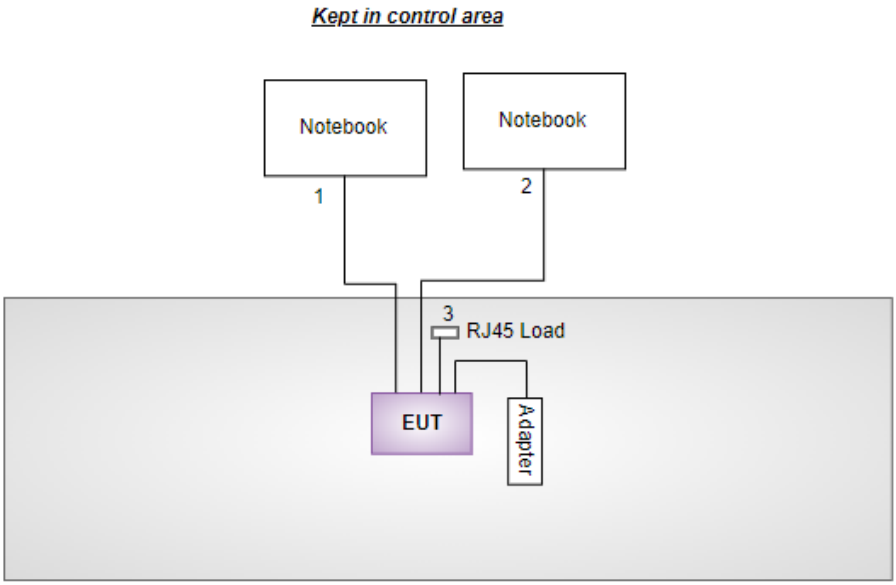
1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11b	2412	17
11b	2437	16.5
11b	2462	17
11g	2412	16
11g	2437	18.5
11g	2462	16.5
ax HE20-OFDMA	2412	15
ax HE20-OFDMA	2437	18.5
ax HE20-OFDMA	2462	15
ax HE40-OFDMA	2422	13.5
ax HE40-OFDMA	2437	16
ax HE40-OFDMA	2452	14

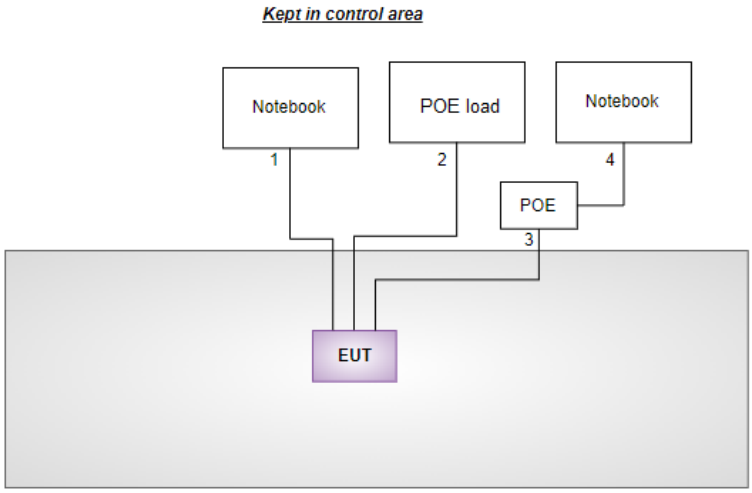
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Laptop	DELL	Latitude E5470	DoC	---
2	Laptop	DELL	Latitude E5470	DoC	---
3	RJ45 Load	ICC	DTSE9	---	---
4	Power Adapter	LEADER	MU18D1120150 -A1	---	Remarks: I/P: 100-240V~, 50/60Hz, 0.6A Max. O/P: 12V⎓1.5A (Provided by applicant.)
5	POE	Engenius	EPA5006GP	---	Remarks: I/P: 100-240V~, 50-60Hz, 0.8A O/P: 54V⎓0.6A (Provided by applicant.)
6	POE load	[Λ] ALTA LABS	AP6W	---	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	RJ45, 1.3m non-shielded with load.

Test Setup Diagram (POE Mode)


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

1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Mar. 11 ~ Mar. 25, 2025				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 11, 2025	Mar. 10, 2026
Spectrum Analyzer	R&S	FSV40	101498	Nov. 12, 2024	Nov. 11, 2025
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 05, 2024	Nov. 04, 2025
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 09, 2024	Aug. 08, 2025
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Nov. 28, 2024	Nov. 27, 2025
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 18, 2024	Nov. 17, 2025
Preamplifier	EMC	EMC02325	980225	Jun. 17, 2024	Jun. 16, 2025
Preamplifier	EMC	EMC118A45SE	980898	Jul. 05, 2024	Jul. 04, 2025
Preamplifier	EMC	EMC184045SE	980903	Jul. 30, 2024	Jul. 29, 2025
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 02, 2024	Oct. 01, 2025
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 02, 2024	Oct. 01, 2025
LF cable 11M	EMC	EMCCFD400-NW-NW-11000	200801	Oct. 02, 2024	Oct. 01, 2025
LF cable 1M	EMC	EMCCFD400-NM-NM-1000	160502	Oct. 02, 2024	Oct. 01, 2025
RF Cable	EMC	EMC104-35M-35M-8000	210920	Oct. 02, 2024	Oct. 01, 2025
RF Cable	EMC	EMC104-35M-35M-3000	210922	Oct. 02, 2024	Oct. 01, 2025
Attenuator	Pasternack	PE7005-10	10-1	Oct. 02, 2024	Oct. 01, 2025
HIGHPASS FILTER 3.1-18G	WHK	WHK3.1/18G-10SS	39	Oct. 02, 2024	Oct. 01, 2025
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	Mar. 26, 2025				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101910	Apr. 18, 2024	Apr. 17, 2025
Power Meter	Anritsu	ML2495A	1241002	Nov. 26, 2024	Nov. 25, 2025
Power Sensor	Anritsu	MA2411B	1207366	Nov. 26, 2024	Nov. 25, 2025
Attenuator	Pasternack	PE7005-10	10-2	Oct. 04, 2024	Oct. 03, 2025
Measurement Software	Sporton	SENSE-15247_DTS	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Mar. 25, 2025				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101658	Feb. 25, 2025	Feb. 24, 2026
LISN	R&S	ENV216	101579	May 09, 2024	May 08, 2025
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Mar. 21, 2025	Mar. 20, 2026
RF Cable-CON	EMC	EMCCFD300-BM-BM-6000	50821	Oct. 09, 2024	Oct. 08, 2025
50 ohm terminal	NA	50	01	Jun. 19, 2024	Jun. 18, 2025
Measurement Software	AUDIX	e3	6.120210g	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	11g	2437	6 Mbps	1, 2
Unwanted Emissions ≤ 1GHz	11g	2437	6 Mbps	1, 2
Unwanted Emissions >1GHz Conducted Output Power 6dB bandwidth Power spectral density	11b 11g ax HE20-OFDMA ax HE40-OFDMA	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	1
Beamforming mode				
Conducted Output Power	ax HE20-OFDMA ax HE40-OFDMA	2412 / 2437 / 2462 2422 / 2437 / 2452	MCS 0 MCS 0	1

NOTE:
1. Test configurations are listed as below:
   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

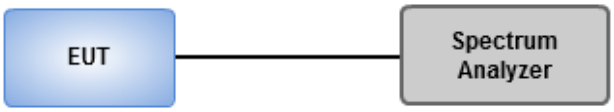
6dB Bandwidth

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	23°C / 65%	**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	23°C / 65%	**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.

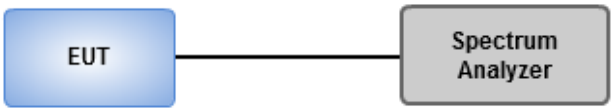
3 Sweep time = auto couple.

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	23°C / 65%	**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

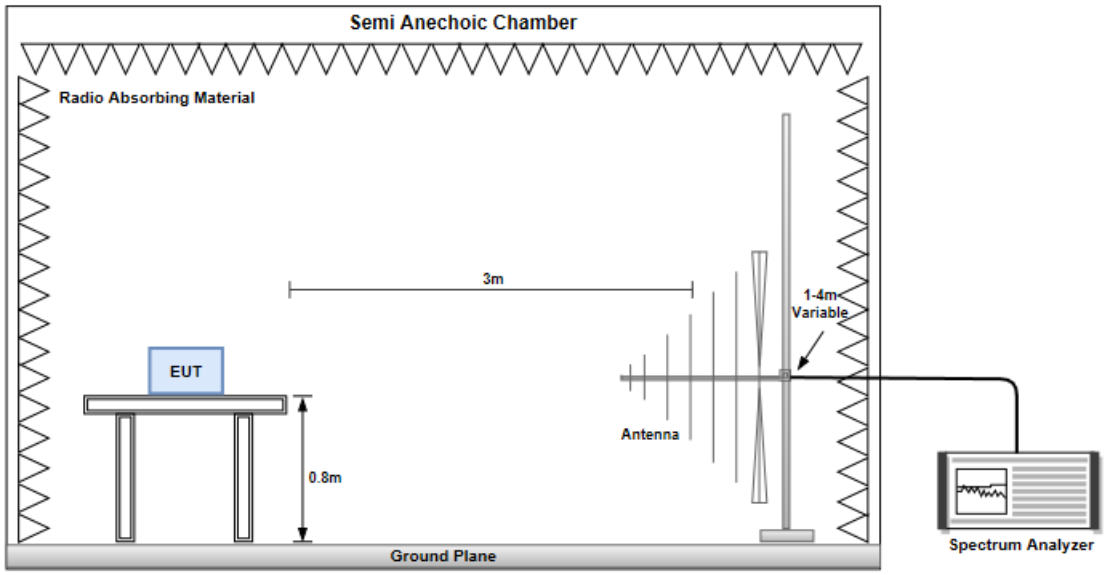
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

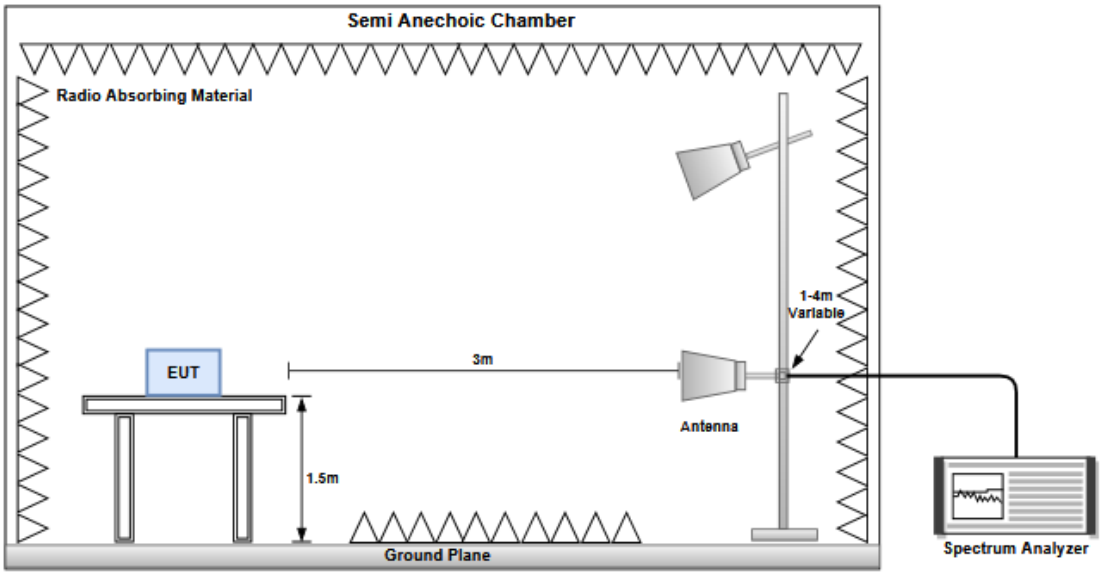
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 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 20 dB relative to the maximum in-band peak PSD level in 100 kHz.

3.5.2 Test Procedures

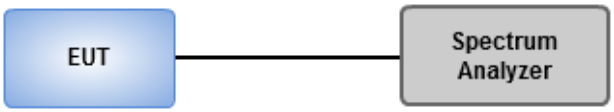
Reference level measurement

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°C / 65%	**Tested By**	Akun Chung

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

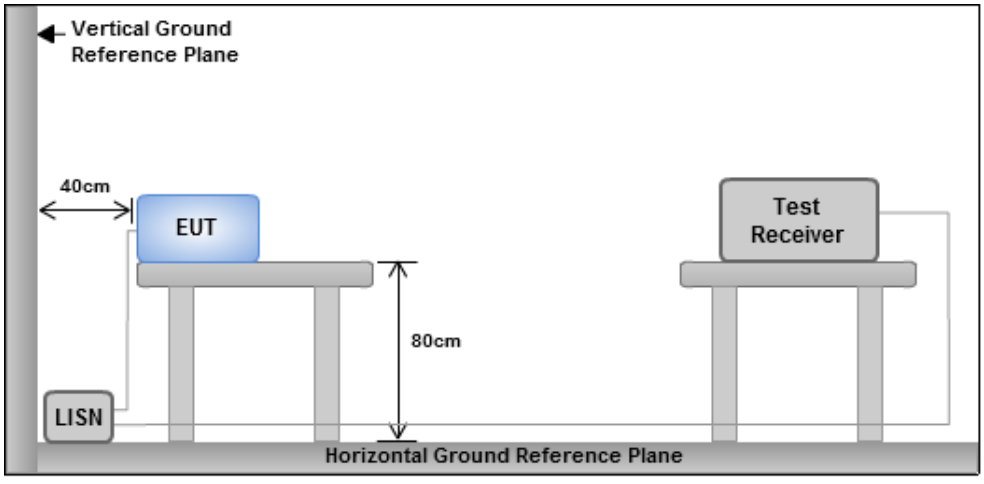
3.6.1 Limit of AC Power Line Conducted Emissions

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	**Kwei Shan**	**Kwei Shan Site II**
Tel: 886-2-2601-1640	Tel: 886-3-271-8666	Tel: 886-3-271-8640
No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)	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.)	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

==END==

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	8.05M	13.126M	13M1G1D	7.075M	13.001M
802.11g_Nss1,(6Mbps)_2TX	15.1M	16.27M	16M3D1D	14.975M	16.216M
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	15.05M	18.844M	18M8D1D	13.85M	18.775M
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	35.05M	37.54M	37M5D1D	33.75M	37.452M

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

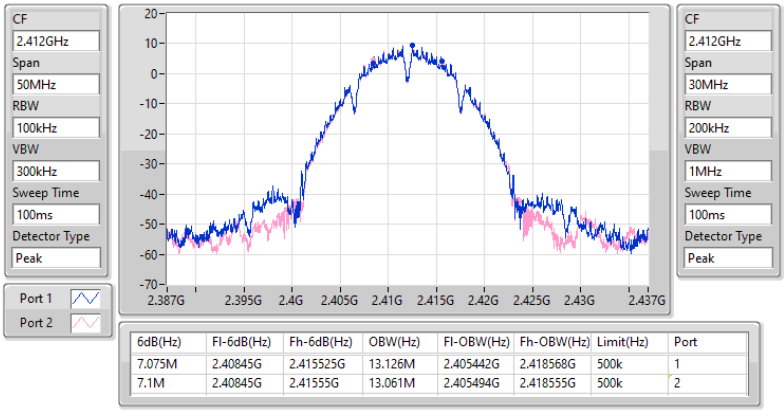
Result

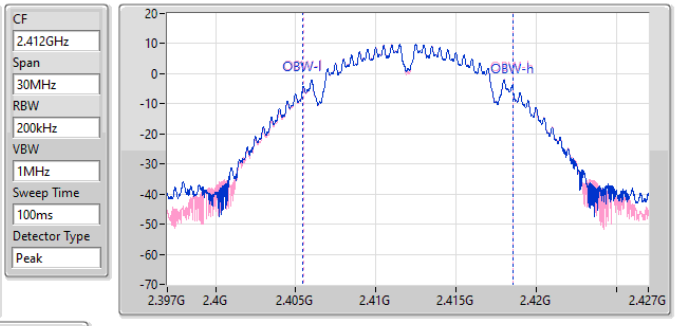
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.075M	13.126M	7.1M	13.061M
2437MHz	Pass	500k	7.975M	13.053M	8.025M	13.054M
2462MHz	Pass	500k	8.05M	13.001M	8.05M	13.057M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.025M	16.236M	14.975M	16.247M
2437MHz	Pass	500k	15.075M	16.267M	15.1M	16.27M
2462MHz	Pass	500k	15M	16.216M	15.025M	16.248M
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-
2412MHz	Pass	500k	13.85M	18.791M	15.05M	18.788M
2437MHz	Pass	500k	14.975M	18.844M	15M	18.842M
2462MHz	Pass	500k	15.025M	18.782M	15.05M	18.775M
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-
2422MHz	Pass	500k	33.75M	37.47M	33.85M	37.503M
2437MHz	Pass	500k	35.05M	37.54M	33.75M	37.495M
2452MHz	Pass	500k	35.05M	37.488M	33.75M	37.452M

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

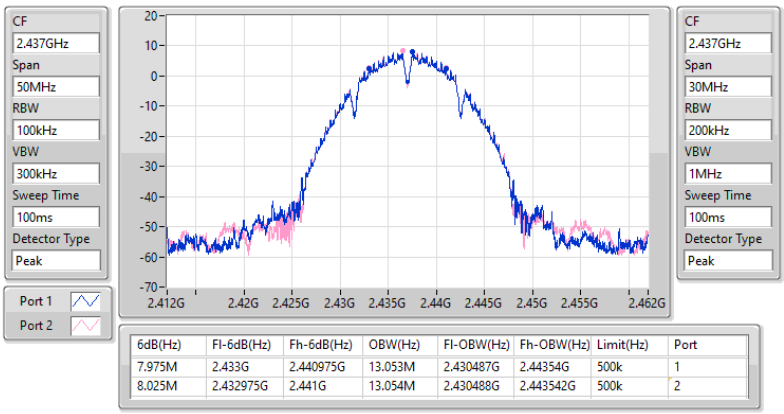


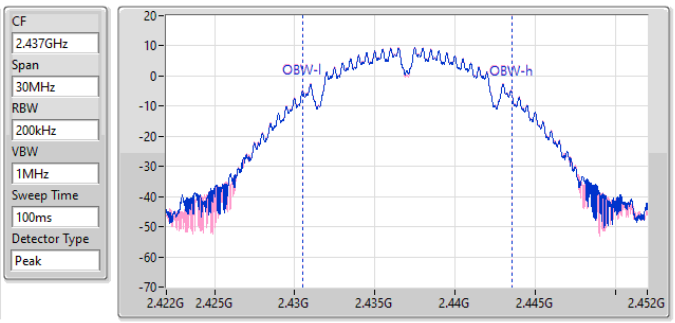


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.075M	2.40845G	2.415525G	13.126M	2.405442G	2.418568G	500k	1
7.1M	2.40845G	2.41555G	13.061M	2.405494G	2.418555G	500k	2

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

2437MHz

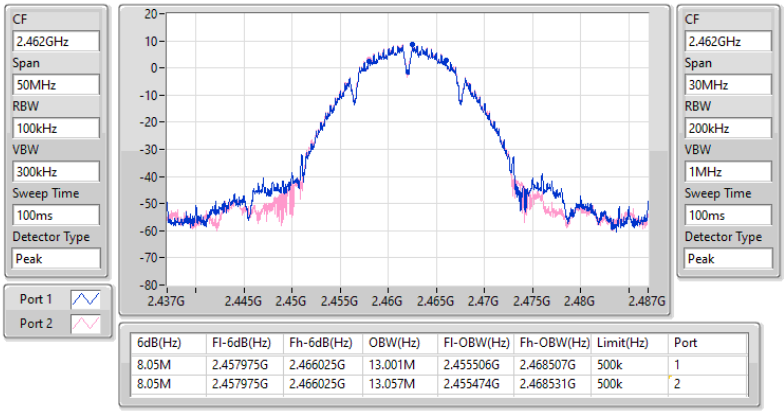


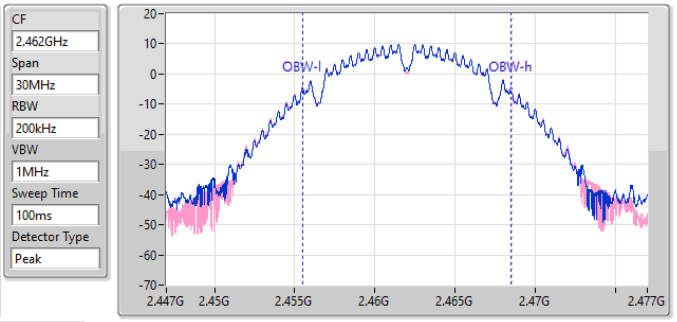


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.975M	2.433G	2.440975G	13.053M	2.430487G	2.44354G	500k	1
8.025M	2.432975G	2.441G	13.054M	2.430488G	2.443542G	500k	2

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

2462MHz

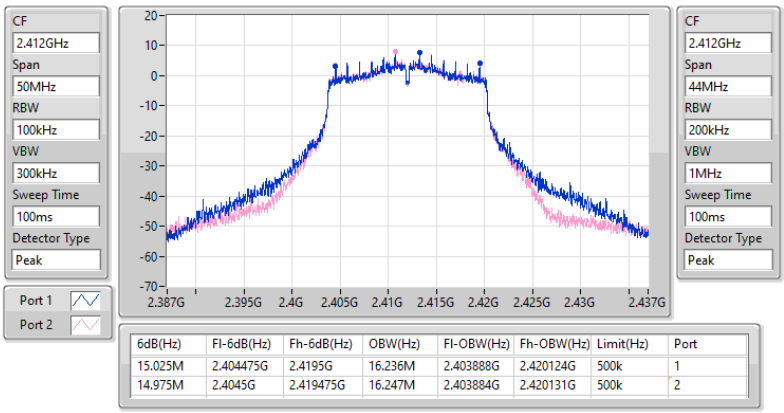


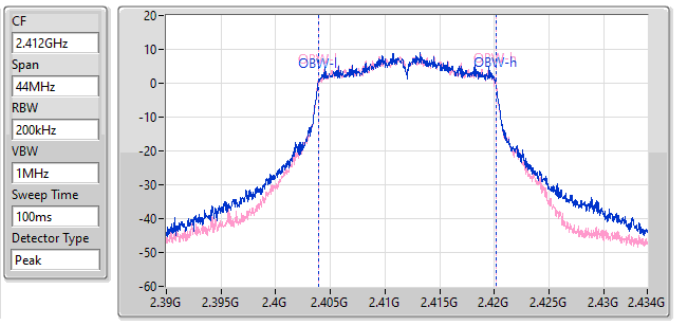


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.457975G	2.466025G	13.001M	2.455506G	2.468507G	500k	1
8.05M	2.457975G	2.466025G	13.057M	2.455474G	2.468531G	500k	2

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

2412MHz

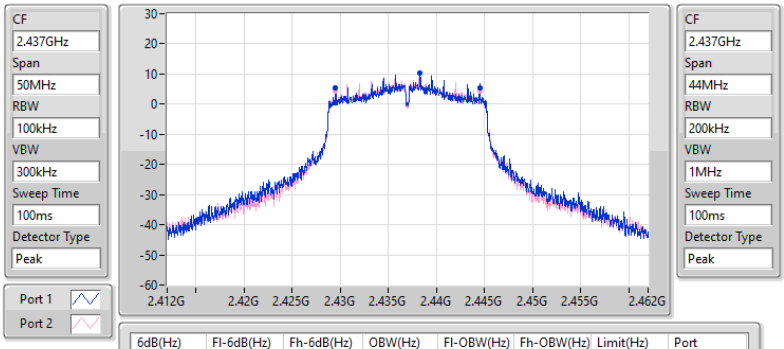


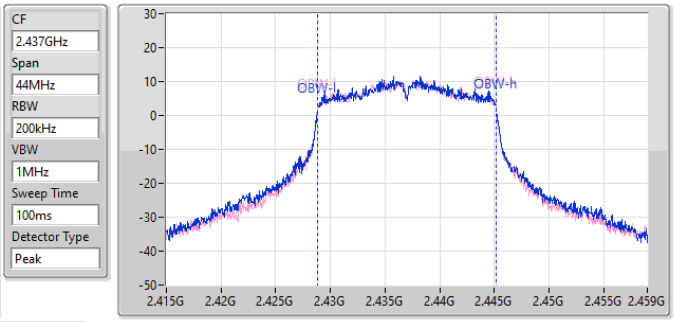


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.404475G	2.4195G	16.236M	2.403888G	2.420124G	500k	1
14.975M	2.4045G	2.419475G	16.247M	2.403884G	2.420131G	500k	2

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

2437MHz

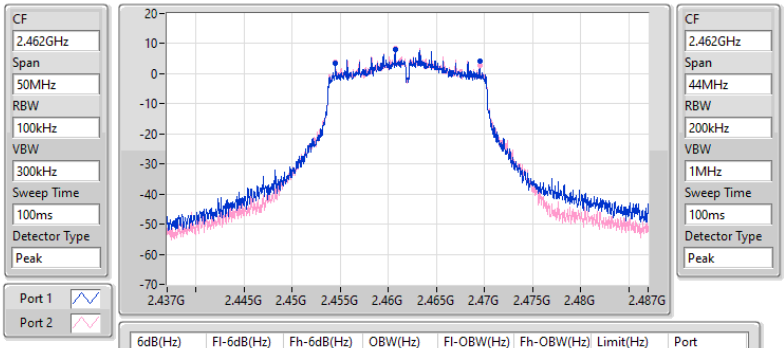


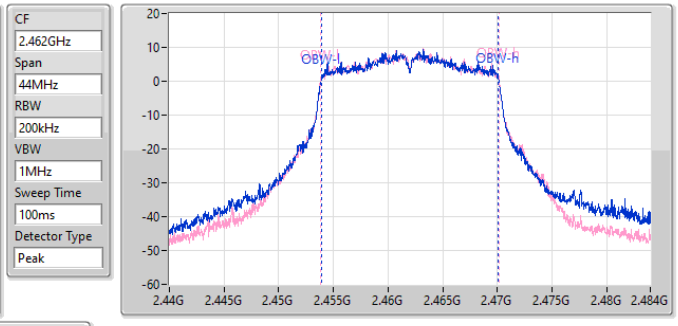


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.075M	2.429475G	2.44455G	16.267M	2.428874G	2.445141G	500k	1
15.1M	2.42945G	2.44455G	16.27M	2.428865G	2.445135G	500k	2

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

2462MHz

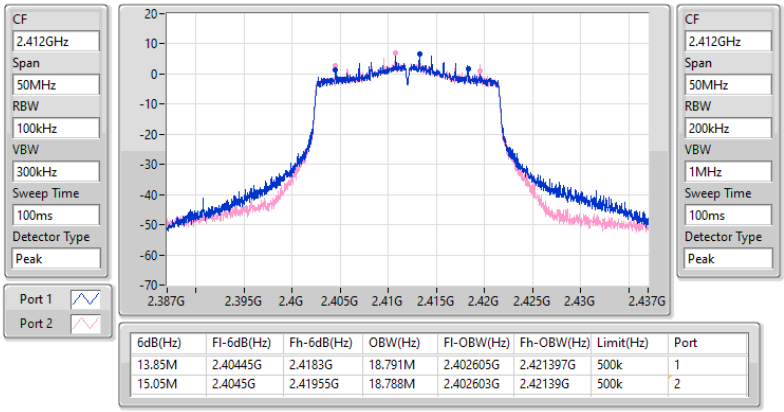




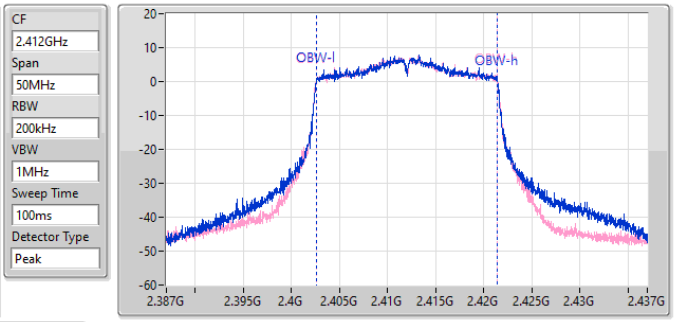
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	2.454475G	2.469475G	16.216M	2.453891G	2.470107G	500k	1
15.025M	2.454525G	2.46955G	16.248M	2.453875G	2.470123G	500k	2

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

2412MHz

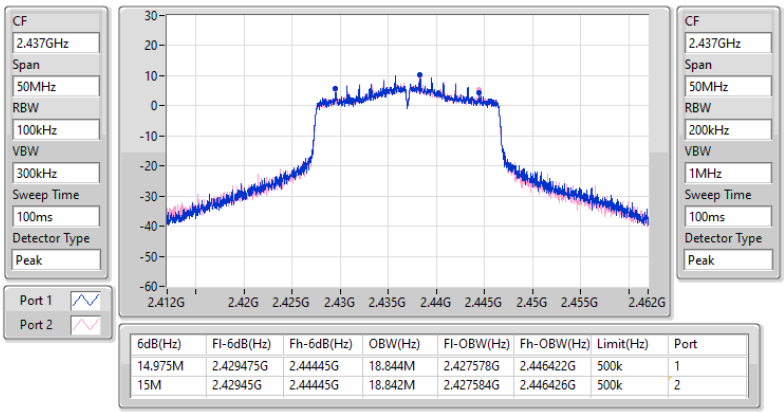


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
13.85M	2.40445G	2.4183G	18.791M	2.402605G	2.421397G	500k	1
15.05M	2.4045G	2.41955G	18.788M	2.402603G	2.42139G	500k	2

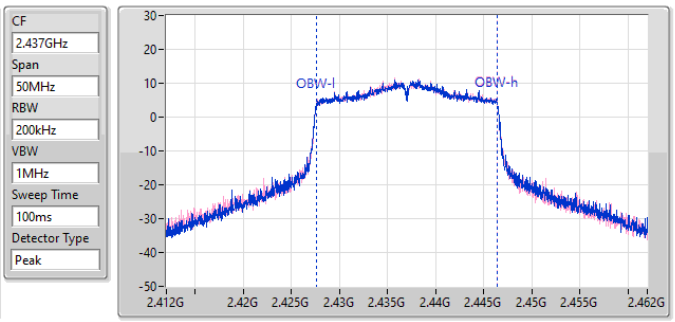


2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

2437MHz

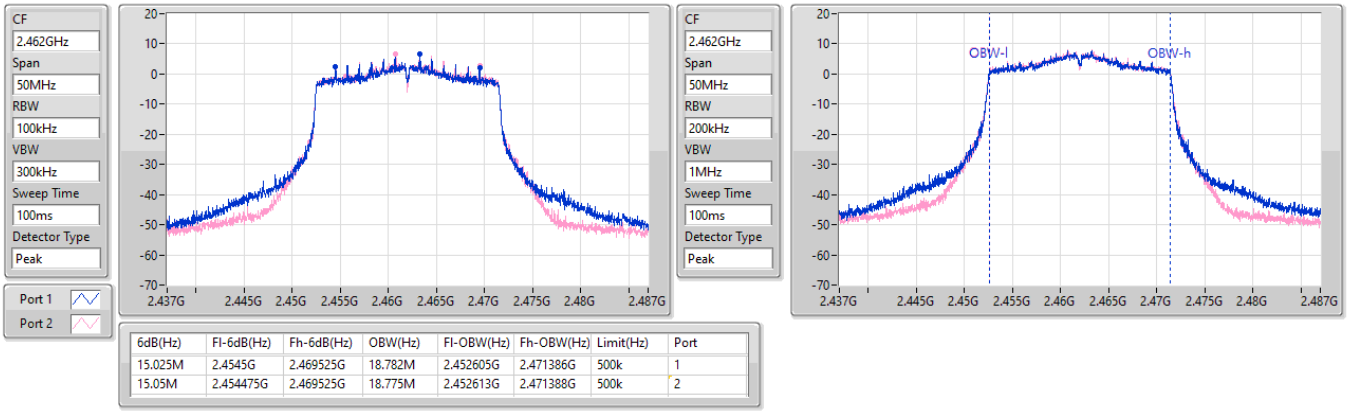


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
14.975M	2.429475G	2.44445G	18.844M	2.427578G	2.446422G	500k	1
15M	2.42945G	2.44445G	18.842M	2.427584G	2.446426G	500k	2



2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **EBW**

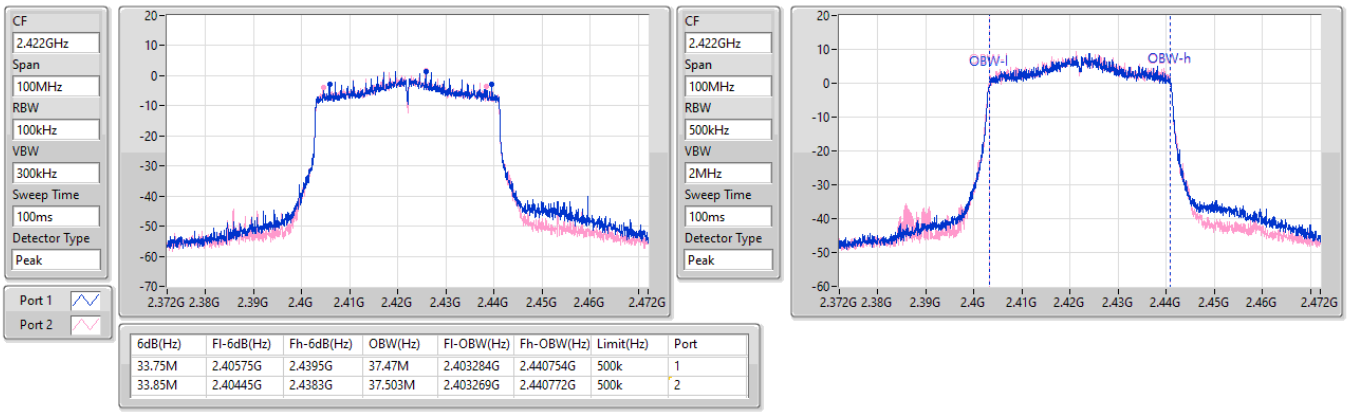
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.4545G	2.469525G	18.782M	2.452605G	2.471386G	500k	1
15.05M	2.454475G	2.469525G	18.775M	2.452613G	2.471388G	500k	2

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

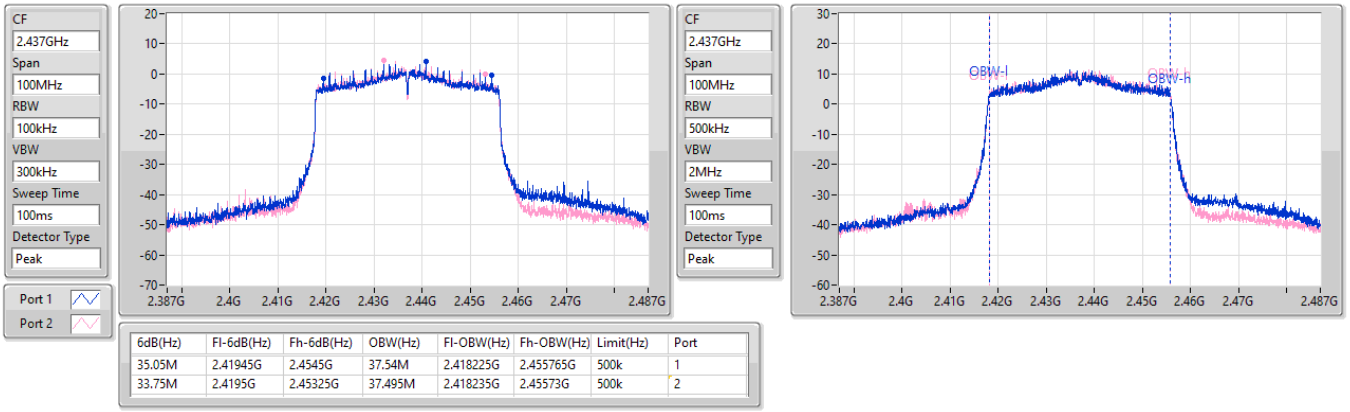
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.75M	2.40575G	2.4395G	37.47M	2.403284G	2.440754G	500k	1
33.85M	2.40445G	2.4383G	37.503M	2.403269G	2.440772G	500k	2

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

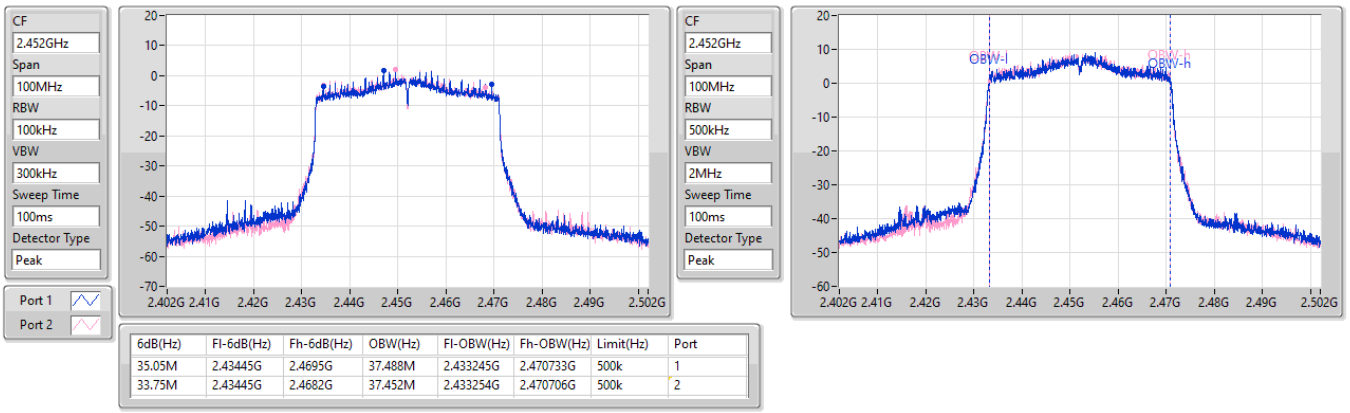
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	2.41945G	2.4545G	37.54M	2.418225G	2.455765G	500k	1
33.75M	2.4195G	2.45325G	37.495M	2.418235G	2.45573G	500k	2

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	2.43445G	2.4695G	37.488M	2.433245G	2.470733G	500k	1
33.75M	2.43445G	2.4682G	37.452M	2.433254G	2.470706G	500k	2

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	23.13	0.20559
802.11g_Nss1,(6Mbps)_2TX	**26.88**	0.48753
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	26.80	0.47863
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	25.72	0.37325

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	5.40	20.11	20.12	23.13	30.00	28.53	36.00
2437MHz	Pass	5.40	19.79	19.97	22.89	30.00	28.29	36.00
2462MHz	Pass	5.40	20.01	20.18	23.11	30.00	28.51	36.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.40	21.87	22.25	25.07	30.00	30.47	36.00
2437MHz	Pass	5.40	23.81	23.93	26.88	30.00	32.28	36.00
2462MHz	Pass	5.40	22.45	22.86	25.67	30.00	31.07	36.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.40	21.57	21.75	24.67	30.00	30.07	36.00
2437MHz	Pass	5.40	23.65	23.92	26.80	30.00	32.20	36.00
2462MHz	Pass	5.40	21.91	22.02	24.98	30.00	30.38	36.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.40	20.2	20.46	23.34	30.00	28.74	36.00
2437MHz	Pass	5.40	22.56	22.85	25.72	30.00	31.12	36.00
2452MHz	Pass	5.40	20.71	20.93	23.83	30.00	29.23	36.00

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

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	20.72	0.11803
802.11g_Nss1,(6Mbps)_2TX	22.29	0.16943
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	22.11	0.16255
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	19.57	0.09057

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	5.40	17.63	17.78	20.72	-	26.12	-
2437MHz	Pass	5.40	17.25	17.46	20.37	-	25.77	-
2462MHz	Pass	5.40	17.51	17.66	20.60	-	26.00	-
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.40	16.62	16.82	19.73	-	25.13	-
2437MHz	Pass	5.40	19.23	19.32	22.29	-	27.69	-
2462MHz	Pass	5.40	17.21	17.32	20.28	-	25.68	-
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-
2412MHz	Pass	5.40	15.71	15.82	18.78	-	24.18	-
2437MHz	Pass	5.40	19.05	19.15	22.11	-	27.51	-
2462MHz	Pass	5.40	15.46	15.67	18.58	-	23.98	-
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-
2422MHz	Pass	5.40	14.08	14.32	17.21	-	22.61	-
2437MHz	Pass	5.40	16.42	16.7	19.57	-	24.97	-
2452MHz	Pass	5.40	14.55	14.83	17.70	-	23.10	-

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

Note : Conducted average output power is for reference

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX-OFDMA	**23.79**	0.23933
802.11ax HEW40-BF_Nss1,(MCS0)_2TX-OFDMA	22.71	0.18664

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-
2412MHz	Pass	7.74	18.56	18.74	21.66	28.26	29.40	36.00
2437MHz	Pass	7.74	20.64	20.91	23.79	28.26	31.53	36.00
2462MHz	Pass	7.74	18.9	19.01	21.97	28.26	29.71	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-
2422MHz	Pass	7.74	17.19	17.45	20.33	28.26	28.07	36.00
2437MHz	Pass	7.74	19.55	19.84	22.71	28.26	30.45	36.00
2452MHz	Pass	7.74	17.7	17.92	20.82	28.26	28.56	36.00

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

Directional gain = 10 * log $[(10^{5.4/20}+10^{4/20})^2/2]$ = 7.74 > 6, limit shall be reduced to 30 – (7.74 – 6) = 28.26

Beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX-OFDMA	19.10	0.08128
802.11ax HEW40-BF_Nss1,(MCS0)_2TX-OFDMA	16.56	0.04529

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-
2412MHz	Pass	7.74	12.7	12.81	15.77	-	23.51	-
2437MHz	Pass	7.74	16.04	16.14	19.10	-	26.84	-
2462MHz	Pass	7.74	12.45	12.66	15.57	-	23.31	-
802.11ax HEW40-BF_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-	-	-
2422MHz	Pass	7.74	11.07	11.31	14.20	-	21.94	-
2437MHz	Pass	7.74	13.41	13.69	16.56	-	24.30	-
2452MHz	Pass	7.74	11.54	11.82	14.69	-	22.43	-

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

Directional gain = 10 * log $[(10^{5.4/20}+10^{4/20})^2/2]$ = 7.74

Note : Conducted average output power is for reference

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-2.40
802.11g_Nss1,(6Mbps)_2TX	-3.29
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	-3.22
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	-7.84

RBW = 3kHz;

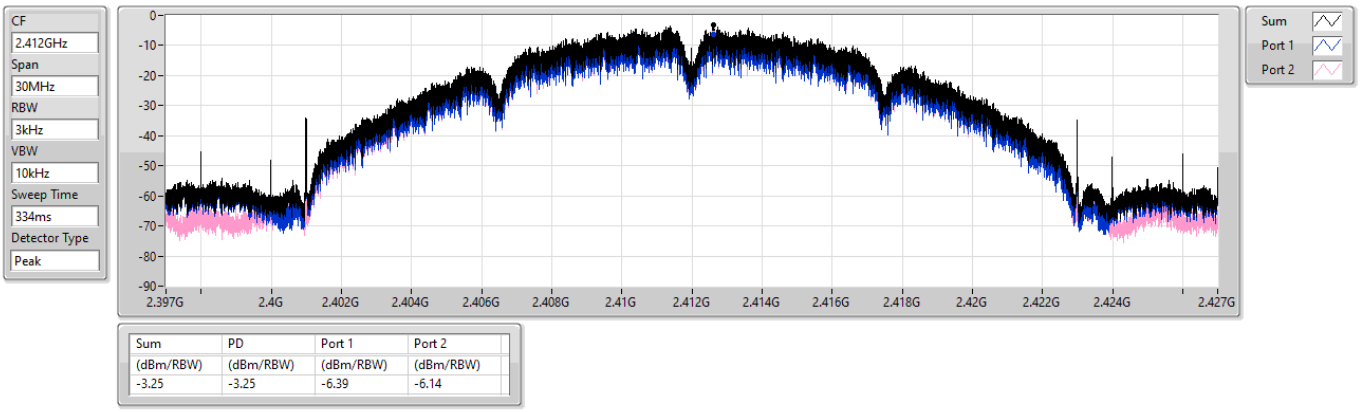
Result

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	7.74	-6.39	-6.14	-3.25	6.26
2437MHz	Pass	7.74	-6.73	-6.55	-3.63	6.26
2462MHz	Pass	7.74	-5.53	-5.30	-2.40	6.26
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.74	-7.62	-8.16	-6.27	6.26
2437MHz	Pass	7.74	-5.64	-4.71	-3.29	6.26
2462MHz	Pass	7.74	-6.84	-5.78	-4.83	6.26
802.11ax HEW20_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-
2412MHz	Pass	7.74	-8.11	-8.11	-5.10	6.26
2437MHz	Pass	7.74	-5.83	-5.44	-3.22	6.26
2462MHz	Pass	7.74	-8.06	-8.36	-6.42	6.26
802.11ax HEW40_Nss1,(MCS0)_2TX-OFDMA	-	-	-	-	-	-
2422MHz	Pass	7.74	-13.07	-13.36	-11.17	6.26
2437MHz	Pass	7.74	-9.19	-9.61	-7.84	6.26
2452MHz	Pass	7.74	-12.53	-11.34	-10.16	6.26

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 $[(10^{5.4/20}+10^{4/20})^2/2]$ = 7.74> 6, limit shall be reduced to 8 – (7.74 – 6) = 6.26

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

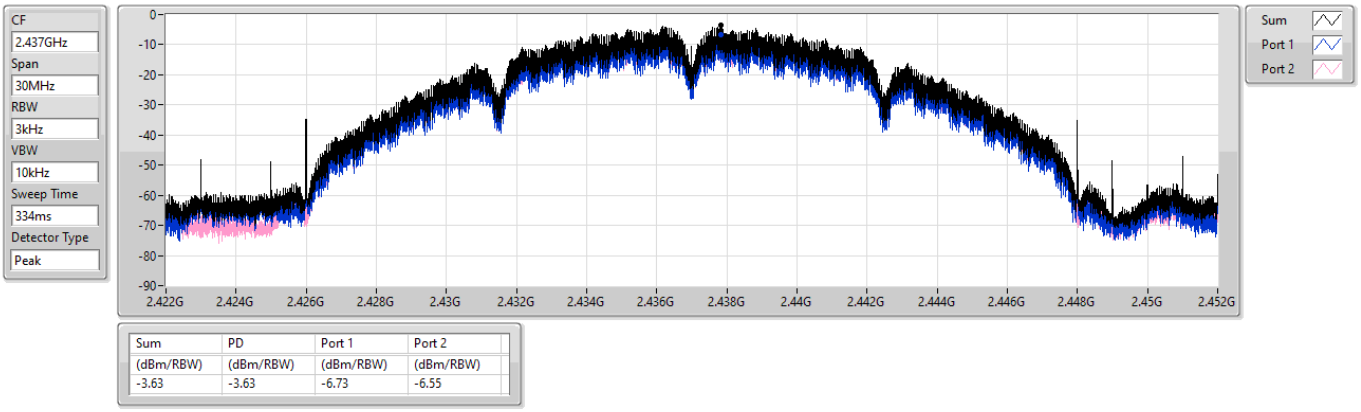
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.25	-3.25	-6.39	-6.14

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

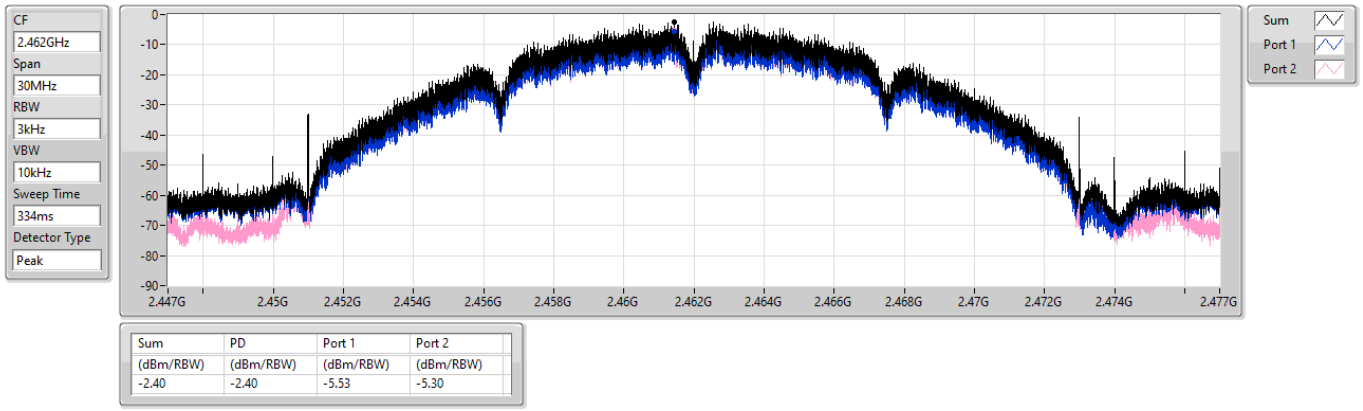
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.63	-3.63	-6.73	-6.55

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

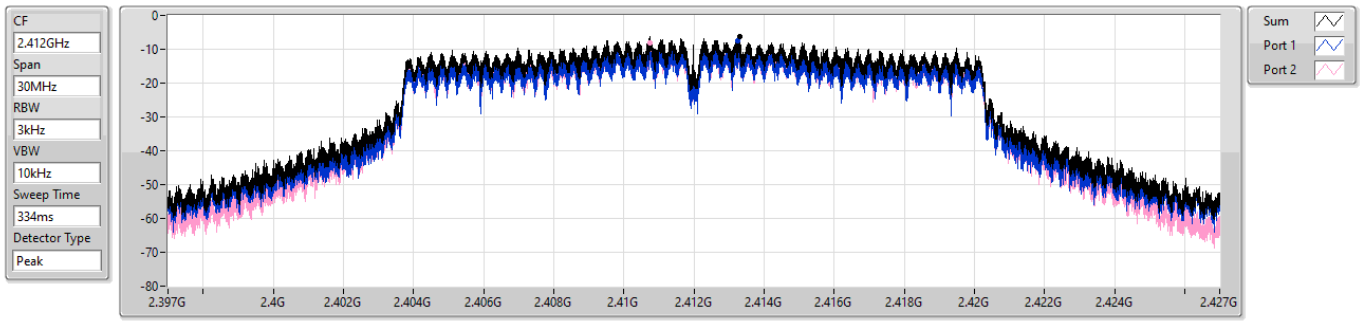
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.40	-2.40	-5.53	-5.30

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

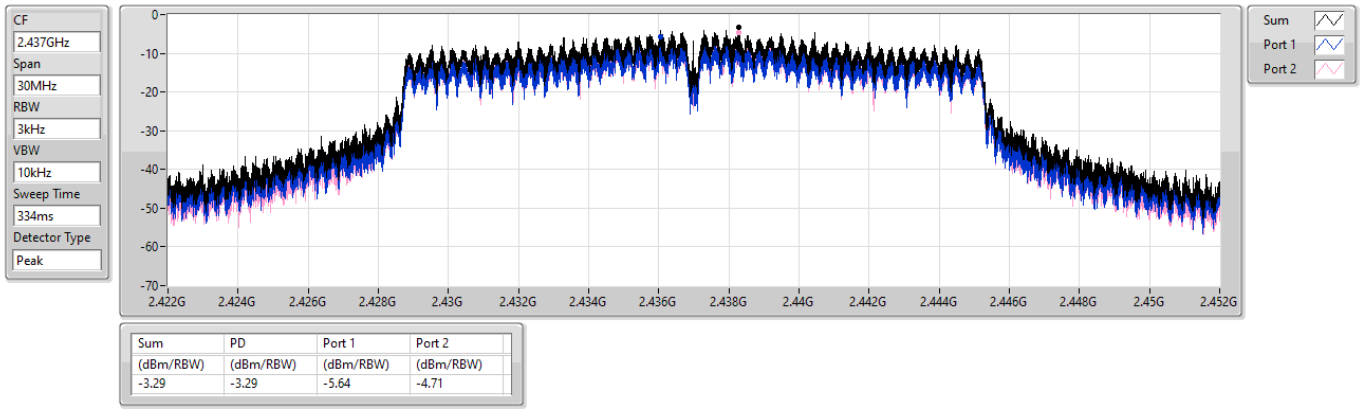
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.27	-6.27	-7.62	-8.16

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

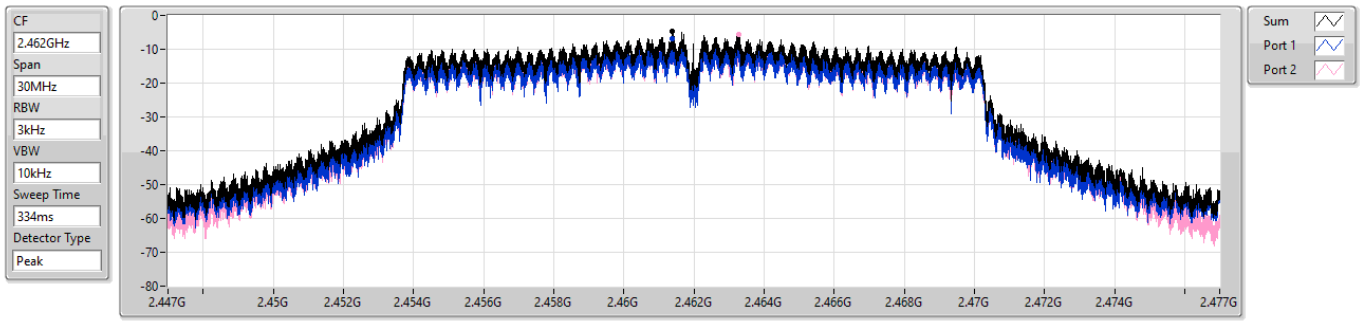
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.29	-3.29	-5.64	-4.71

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

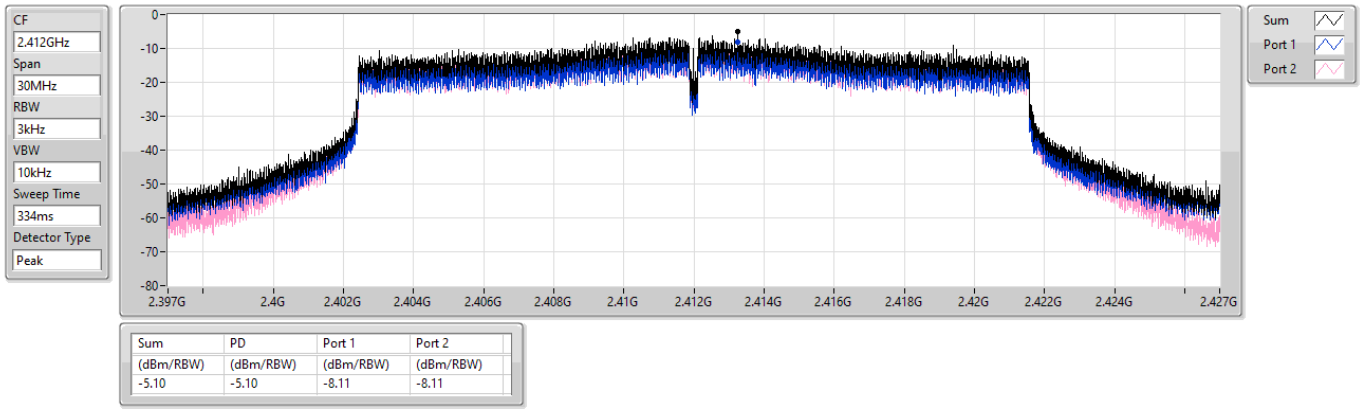
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.83	-4.83	-6.84	-5.78

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

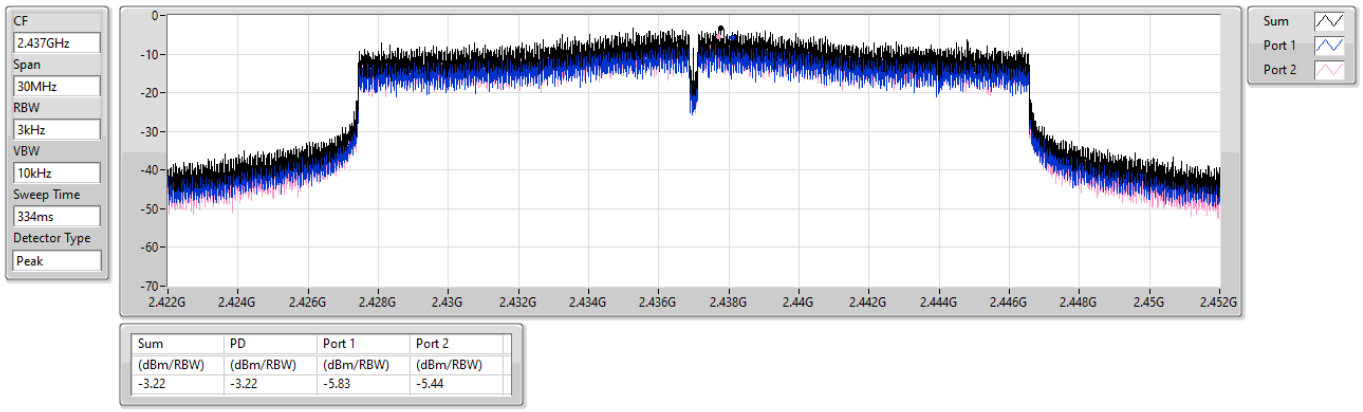
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.10	-5.10	-8.11	-8.11

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

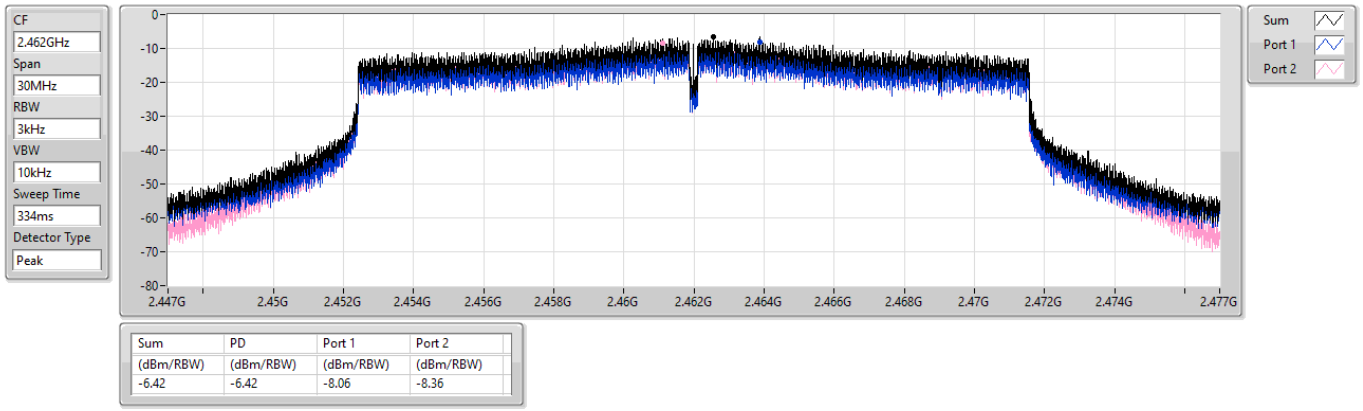
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.22	-3.22	-5.83	-5.44

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **PSD**

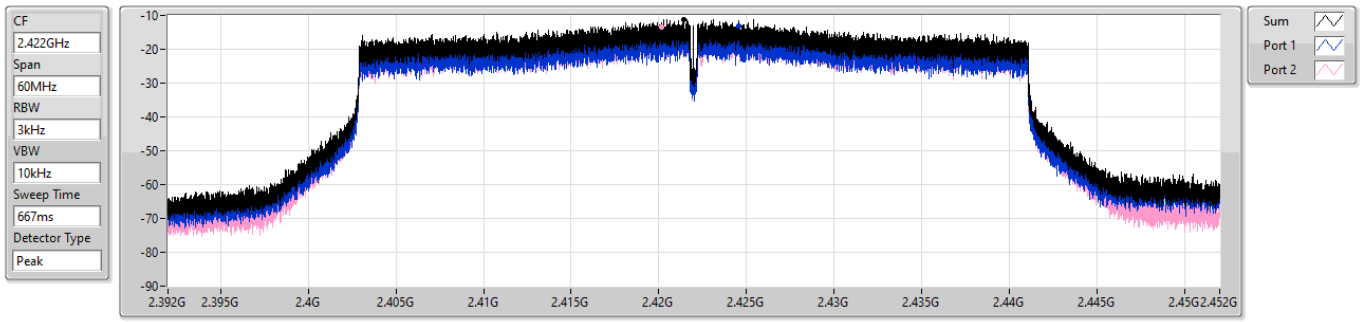
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.42	-6.42	-8.06	-8.36

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **PSD**

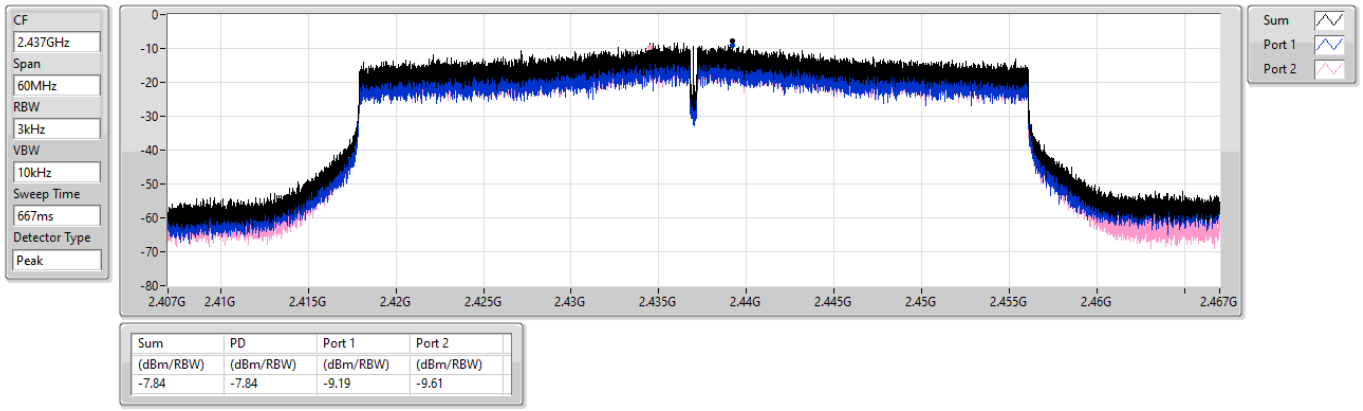
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.17	-11.17	-13.07	-13.36

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **PSD**

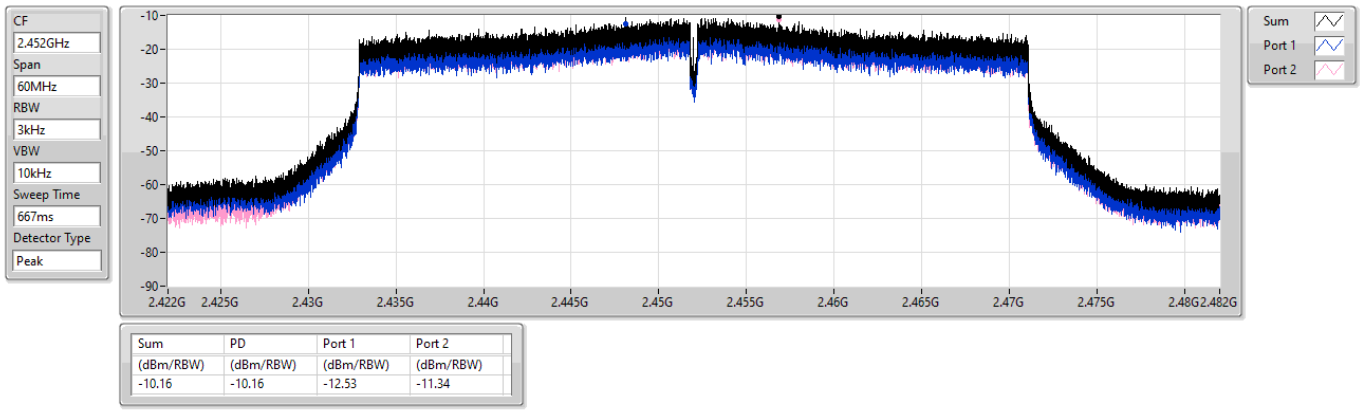
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.84	-7.84	-9.19	-9.61

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **PSD**

2452MHz



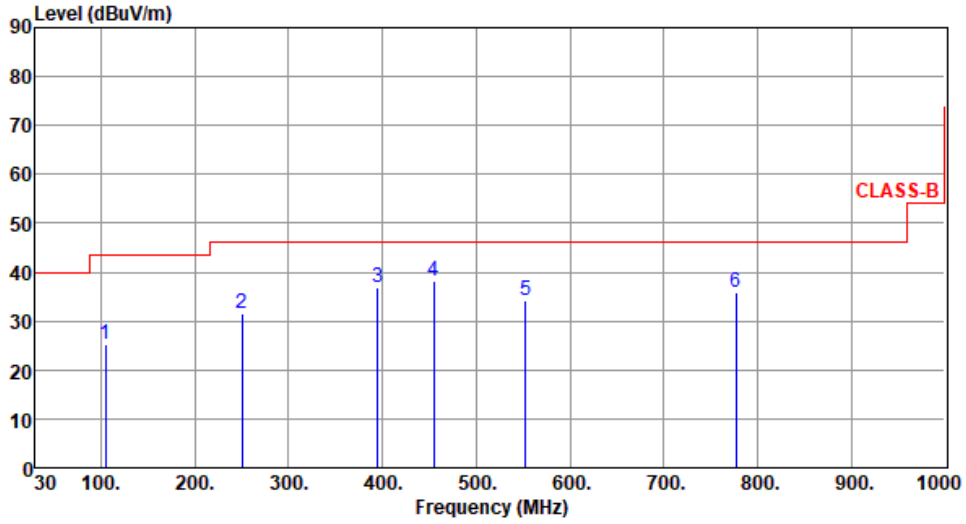
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.16	-10.16	-12.53	-11.34

Adapter mode

Unwanted Emissions (Below 1GHz)

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

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

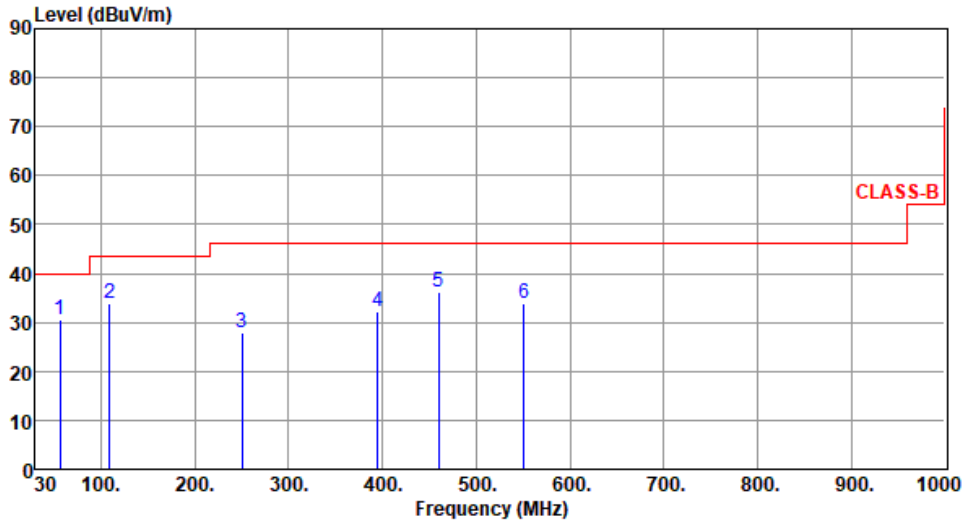


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	104.69	25.30	43.50	-18.20	37.65	-12.35	Peak	---	---
2	250.19	31.40	46.00	-14.60	41.17	-9.77	Peak	---	---
3	394.72	36.96	46.00	-9.04	42.55	-5.59	Peak	---	---
4	454.86	38.31	46.00	-7.69	42.41	-4.10	Peak	---	---
5	553.10	34.10	46.00	-11.90	36.48	-2.38	Peak	---	---
6	776.90	35.99	46.00	-10.01	33.78	2.21	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	11g	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63



	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	56.55	30.69	40.00	-9.31	39.18	-8.49	Peak	---	---
2	108.91	33.76	43.50	-9.74	45.65	-11.89	Peak	---	---
3	250.05	28.06	46.00	-17.94	37.84	-9.78	Peak	---	---
4	395.20	32.08	46.00	-13.92	37.66	-5.58	Peak	---	---
5	460.40	36.34	46.00	-9.66	40.33	-3.99	Peak	---	---
6	550.70	33.85	46.00	-12.15	36.29	-2.44	Peak	---	---

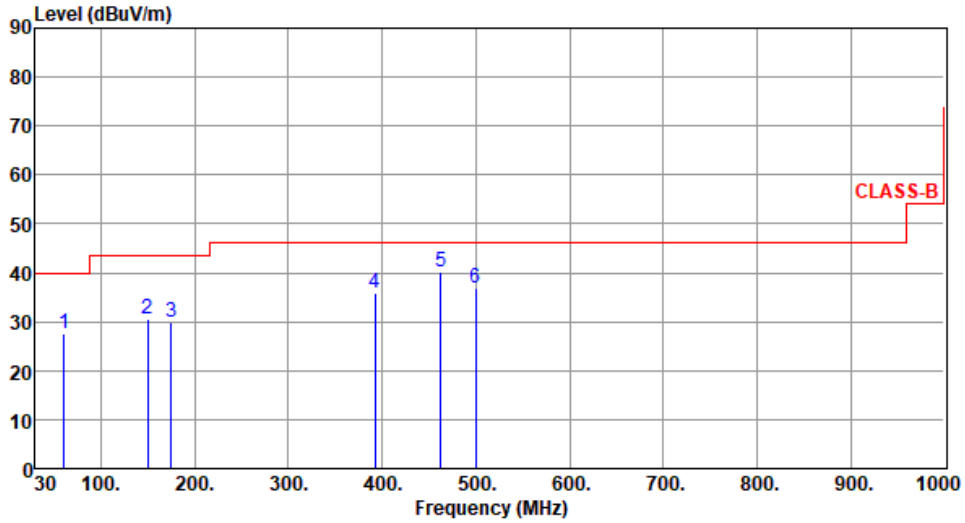
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor, cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

POE mode

Unwanted Emissions (Below 1GHz)

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

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

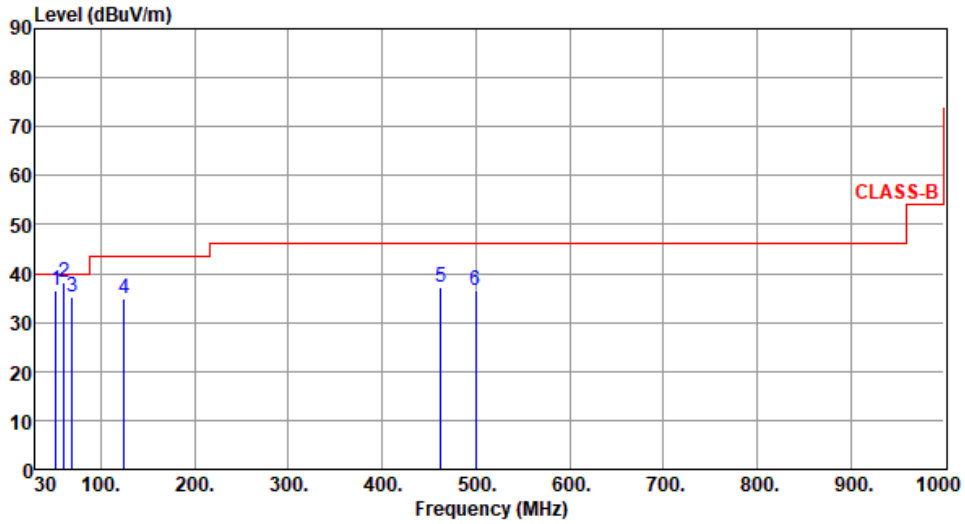


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	60.50	27.41	40.00	-12.59	36.43	-9.02	Peak	---	---
2	150.22	30.49	43.50	-13.01	39.14	-8.65	Peak	---	---
3	175.20	29.79	43.50	-13.71	39.35	-9.56	Peak	---	---
4	392.43	36.00	46.00	-10.00	41.63	-5.63	Peak	---	---
5	462.33	40.24	46.00	-5.76	44.19	-3.95	Peak	---	---
6	500.10	36.93	46.00	-9.07	40.29	-3.36	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	11g	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63



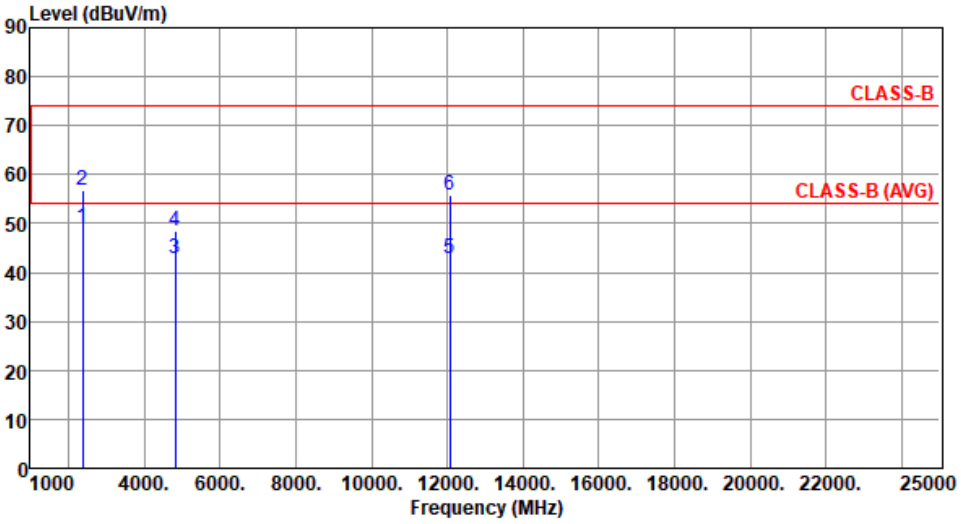
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	52.10	36.47	40.00	-3.53	44.77	-8.30	Peak	---	---
2	60.30	38.04	40.00	-1.96	47.00	-8.96	QP	100	22
3	69.60	35.10	40.00	-4.90	46.05	-10.95	Peak	---	---
4	125.10	35.02	43.50	-8.48	45.63	-10.61	Peak	---	---
5	462.77	37.16	46.00	-8.84	41.09	-3.93	Peak	---	---
6	500.03	36.69	46.00	-9.31	40.05	-3.36	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 :Sean Yu Temperature(℃):26 Humidity(%):61

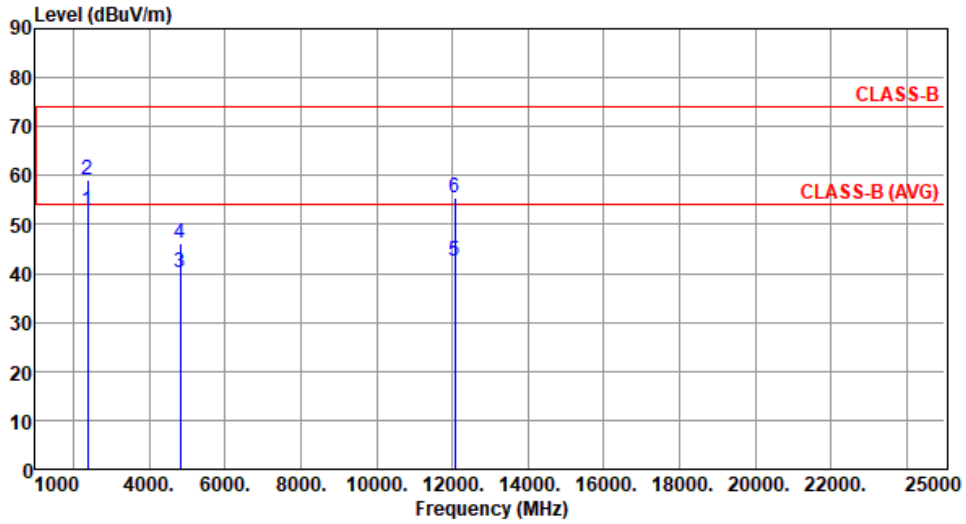


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.01	54.00	-4.99	53.40	-4.39	Average	211	9
2	2390.00	56.67	74.00	-17.33	61.06	-4.39	Peak	211	9
3	4824.00	42.97	54.00	-11.03	43.39	-0.42	Average	227	329
4	4824.00	48.52	74.00	-25.48	48.94	-0.42	Peak	227	329
5	12060.00	42.71	54.00	-11.29	35.77	6.94	Average	100	123
6	12060.00	55.69	74.00	-18.31	48.75	6.94	Peak	100	123

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

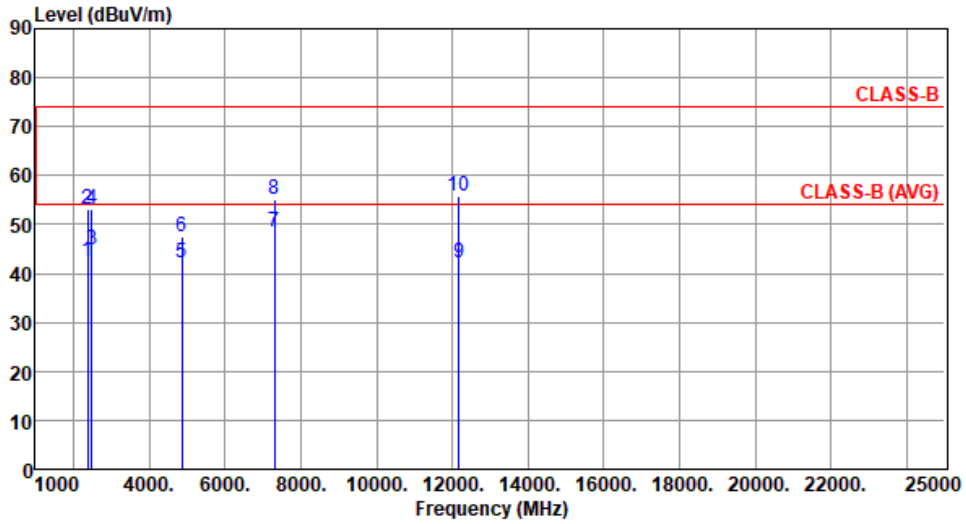


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.75	54.00	-1.25	57.14	-4.39	Average	100	3
2	2390.00	59.17	74.00	-14.83	63.56	-4.39	Peak	100	3
3	4824.00	40.26	54.00	-13.74	40.68	-0.42	Average	233	36
4	4824.00	46.25	74.00	-27.75	46.67	-0.42	Peak	233	36
5	12060.00	42.49	54.00	-11.51	35.55	6.94	Average	100	175
6	12060.00	55.45	74.00	-18.55	48.51	6.94	Peak	100	175

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

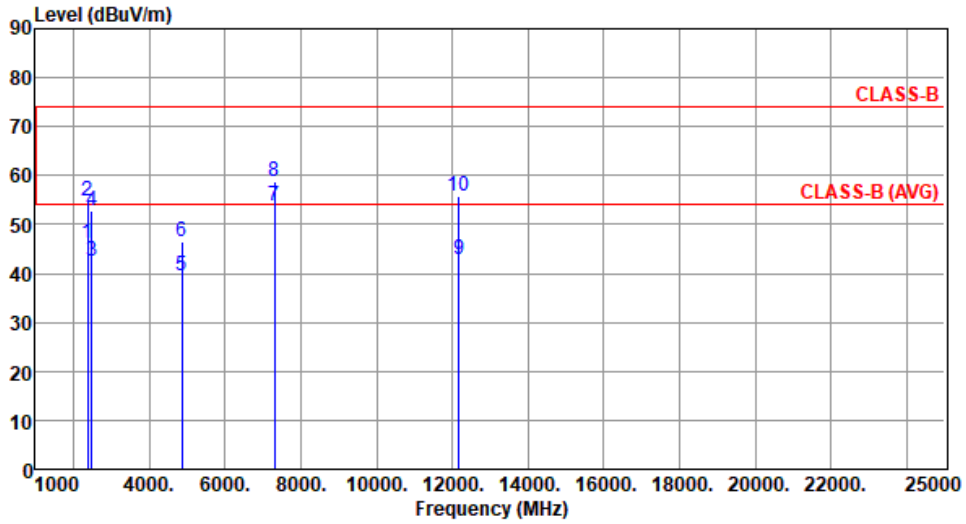


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	42.38	54.00	-11.62	46.77	-4.39	Average	129	8
2	2390.00	53.11	74.00	-20.89	57.50	-4.39	Peak	129	8
3	2483.50	44.75	54.00	-9.25	49.52	-4.77	Average	129	8
4	2483.50	53.30	74.00	-20.70	58.07	-4.77	Peak	129	8
5	4874.00	42.06	54.00	-11.94	42.45	-0.39	Average	100	309
6	4874.00	47.33	74.00	-26.67	47.72	-0.39	Peak	100	309
7	7311.00	48.33	54.00	-5.67	42.80	5.53	Average	108	66
8	7311.00	55.07	74.00	-18.93	49.54	5.53	Peak	108	66
9	12185.00	42.26	54.00	-11.74	35.19	7.07	Average	100	243
10	12185.00	55.91	74.00	-18.09	48.84	7.07	Peak	100	243

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

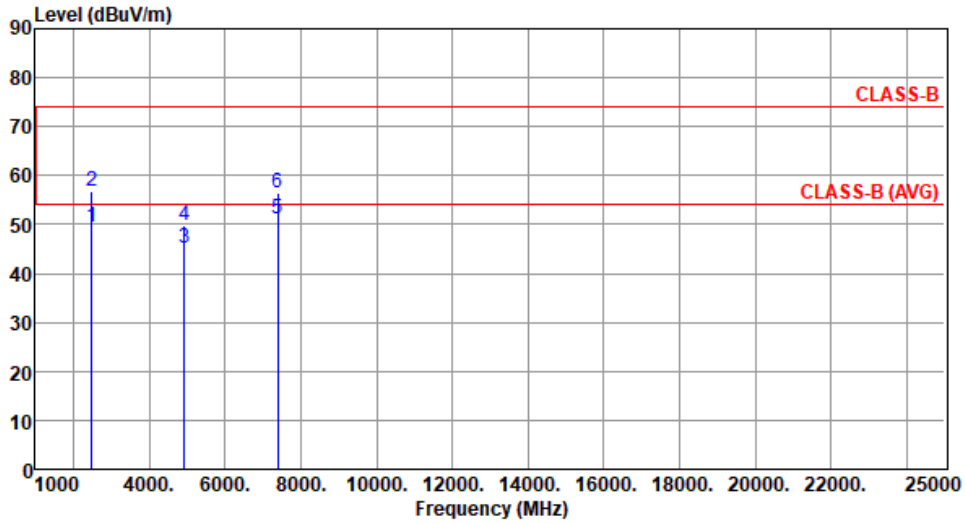


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	46.28	54.00	-7.72	50.67	-4.39	Average	100	34
2	2390.00	54.64	74.00	-19.36	59.03	-4.39	Peak	100	34
3	2483.50	42.55	54.00	-11.45	47.32	-4.77	Average	100	34
4	2483.50	52.82	74.00	-21.18	57.59	-4.77	Peak	100	34
5	4874.00	39.45	54.00	-14.55	39.84	-0.39	Average	282	39
6	4874.00	46.33	74.00	-27.67	46.72	-0.39	Peak	282	39
7	7311.00	53.75	54.00	-0.25	48.22	5.53	Average	197	323
8	7311.00	58.90	74.00	-15.10	53.37	5.53	Peak	197	323
9	12185.00	43.00	54.00	-11.00	35.93	7.07	Average	100	126
10	12185.00	55.90	74.00	-18.10	48.83	7.07	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	Horizontal		

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

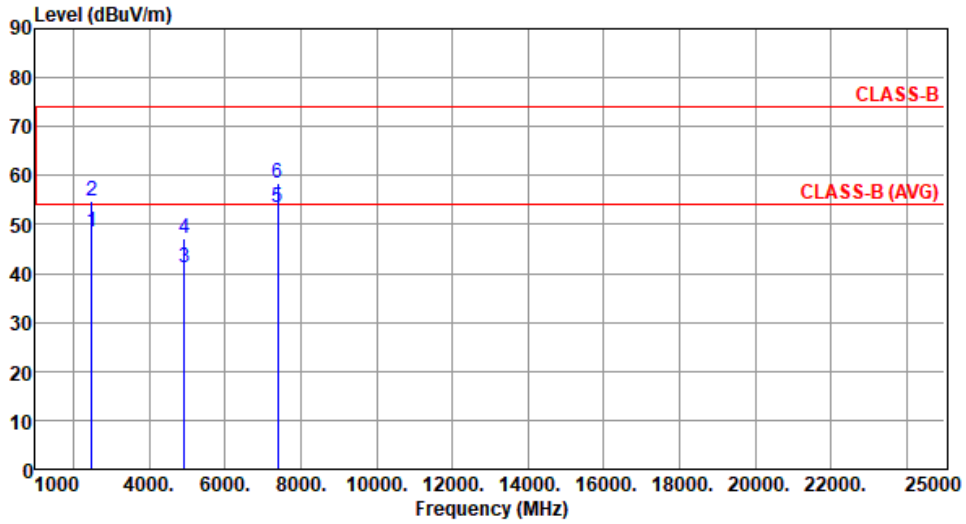


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.55	54.00	-4.45	54.32	-4.77	Average	109	4
2	2483.50	56.88	74.00	-17.12	61.65	-4.77	Peak	109	4
3	4924.00	45.07	54.00	-8.93	45.45	-0.38	Average	100	301
4	4924.00	49.73	74.00	-24.27	50.11	-0.38	Peak	100	301
5	7386.00	51.15	54.00	-2.85	45.78	5.37	Average	100	48
6	7386.00	56.54	74.00	-17.46	51.17	5.37	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).

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

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



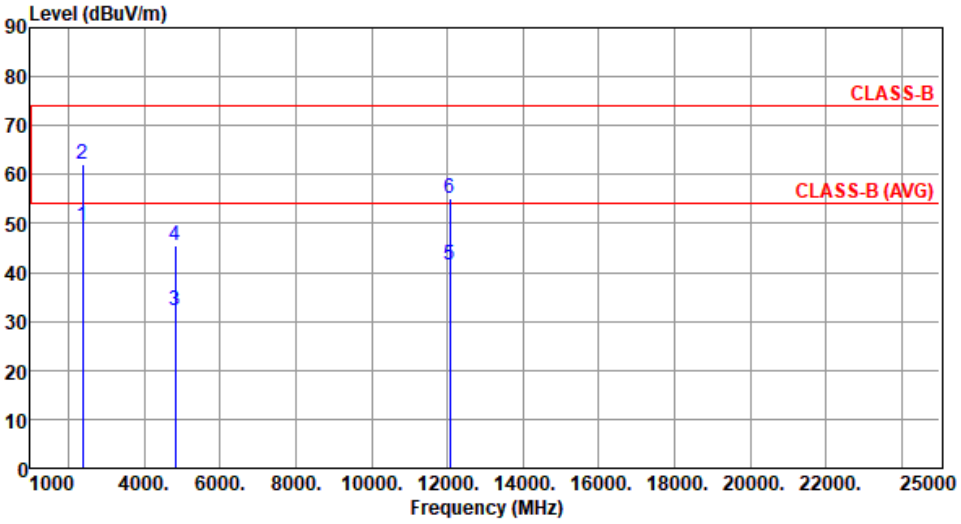
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	48.61	54.00	-5.39	53.38	-4.77	Average	100	30
2	2483.50	54.65	74.00	-19.35	59.42	-4.77	Peak	100	30
3	4924.00	41.10	54.00	-12.90	41.48	-0.38	Average	256	43
4	4924.00	47.00	74.00	-27.00	47.38	-0.38	Peak	256	43
5	7386.00	53.32	54.00	-0.68	47.95	5.37	Average	149	19
6	7386.00	58.41	74.00	-15.59	53.04	5.37	Peak	149	19

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 :Allen Lee Temperature(℃):24 Humidity(%):63

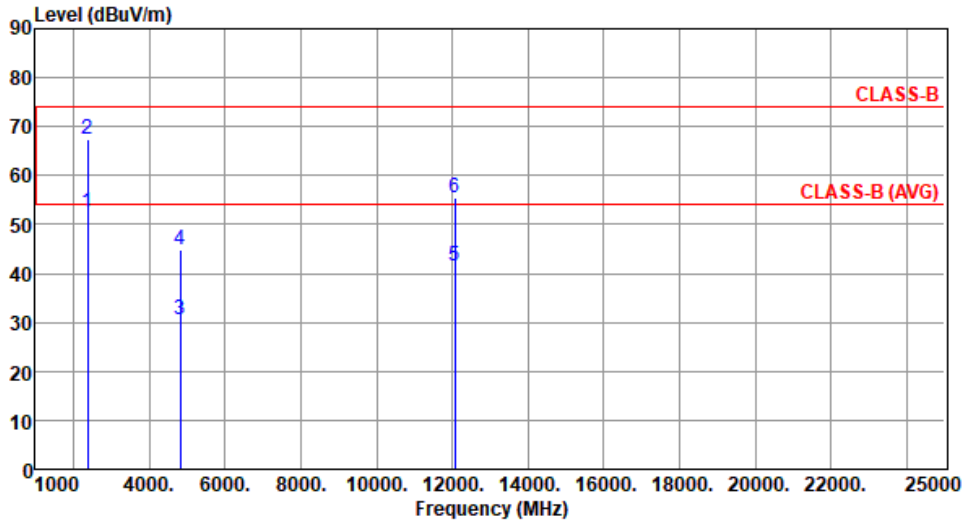


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.57	54.00	-4.43	53.96	-4.39	Average	112	8
2	2390.00	62.21	74.00	-11.79	66.60	-4.39	Peak	112	8
3	4824.00	32.10	54.00	-21.90	32.52	-0.42	Average	174	31
4	4824.00	45.61	74.00	-28.39	46.03	-0.42	Peak	174	31
5	12060.00	41.49	54.00	-12.51	34.55	6.94	Average	100	342
6	12060.00	55.27	74.00	-18.73	48.33	6.94	Peak	100	342

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 :Allen Lee Temperature(℃):24 Humidity(%):63

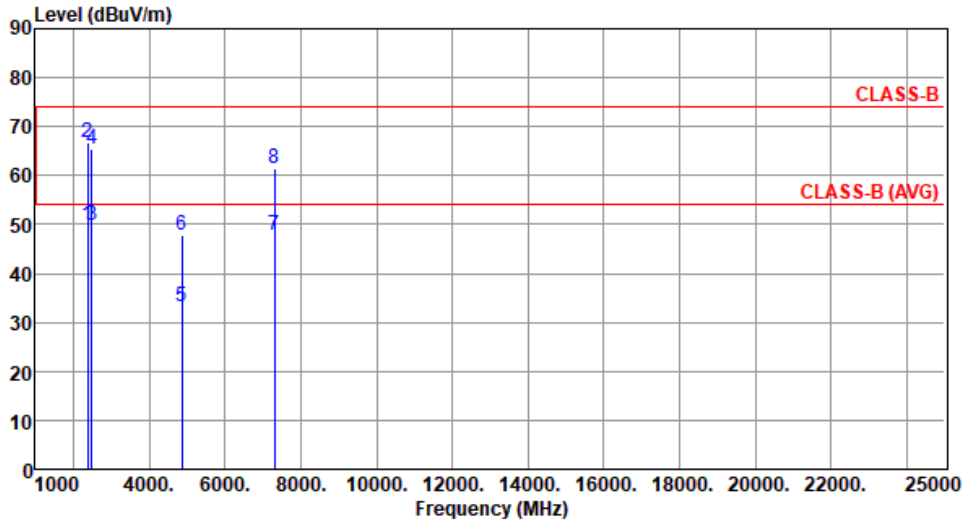


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.61	54.00	-1.39	57.00	-4.39	Average	123	18
2	2390.00	67.33	74.00	-6.67	71.72	-4.39	Peak	123	18
3	4824.00	30.68	54.00	-23.32	31.10	-0.42	Average	137	41
4	4824.00	44.93	74.00	-29.07	45.35	-0.42	Peak	137	41
5	12060.00	41.49	54.00	-12.51	34.55	6.94	Average	100	169
6	12060.00	55.36	74.00	-18.64	48.42	6.94	Peak	100	169

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 :Allen Lee Temperature(℃):24 Humidity(%):63

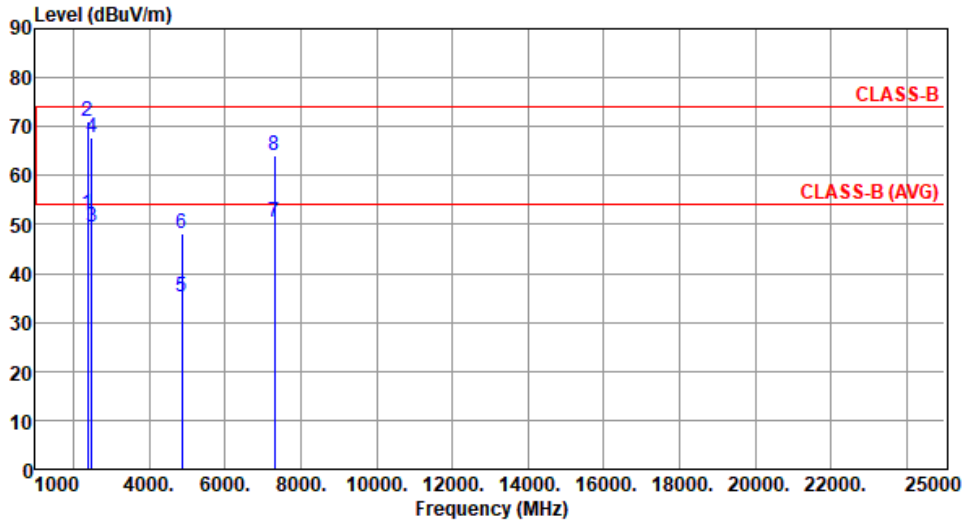


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.77	54.00	-4.23	54.16	-4.39	Average	113	356
2	2390.00	66.85	74.00	-7.15	71.24	-4.39	Peak	113	356
3	2483.50	49.66	54.00	-4.34	54.43	-4.77	Average	113	356
4	2483.50	65.47	74.00	-8.53	70.24	-4.77	Peak	113	356
5	4874.00	33.08	54.00	-20.92	33.47	-0.39	Average	225	14
6	4874.00	47.68	74.00	-26.32	48.07	-0.39	Peak	225	14
7	7311.00	47.87	54.00	-6.13	42.34	5.53	Average	242	320
8	7311.00	61.57	74.00	-12.43	56.04	5.53	Peak	242	320

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 :Allen Lee Temperature(℃):24 Humidity(%):63

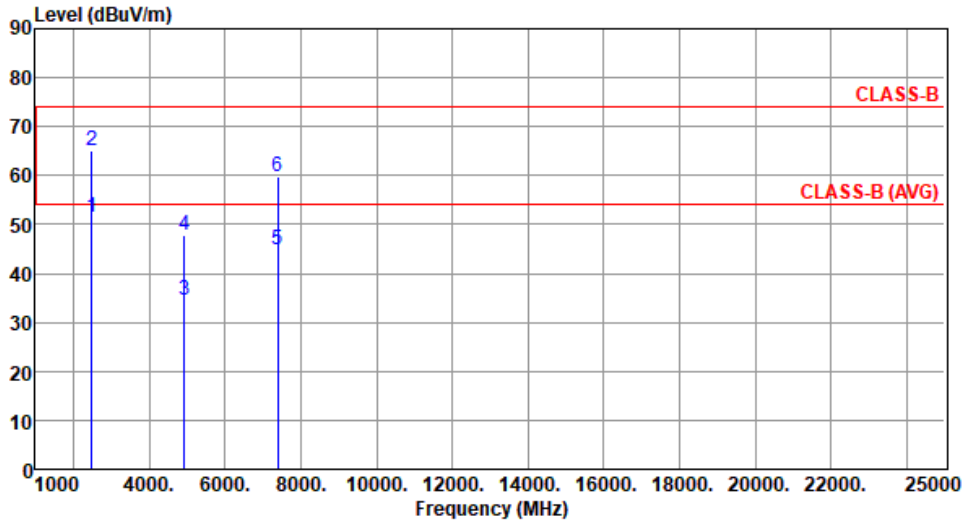


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.18	54.00	-1.82	56.57	-4.39	Average	128	20
2	2390.00	71.20	74.00	-2.80	75.59	-4.39	Peak	128	20
3	2483.50	49.39	54.00	-4.61	54.16	-4.77	Average	128	20
4	2483.50	67.65	74.00	-6.35	72.42	-4.77	Peak	128	20
5	4874.00	35.33	54.00	-18.67	35.72	-0.39	Average	188	36
6	4874.00	48.15	74.00	-25.85	48.54	-0.39	Peak	188	36
7	7311.00	50.61	54.00	-3.39	45.08	5.53	Average	200	321
8	7311.00	63.95	74.00	-10.05	58.42	5.53	Peak	200	321

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 :Allen Lee Temperature(℃):24 Humidity(%):63

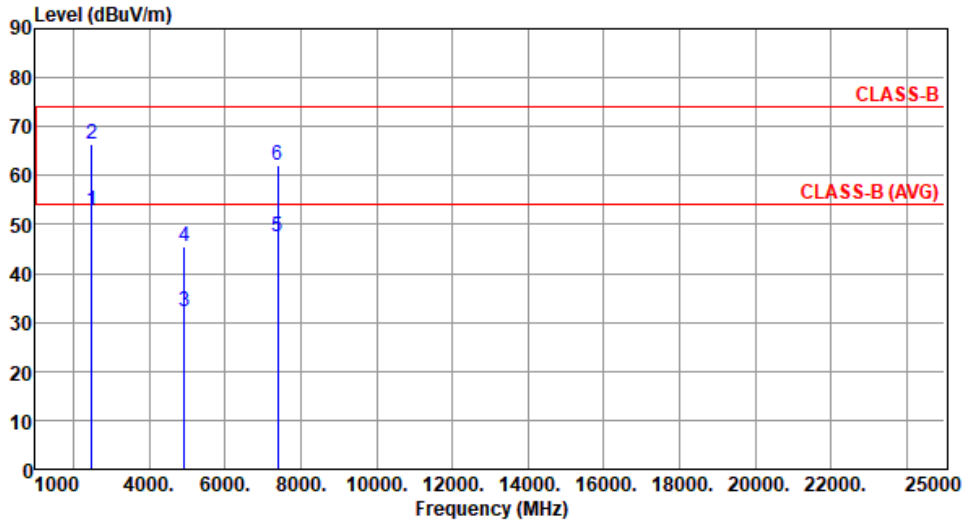


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	51.64	54.00	-2.36	56.41	-4.77	Average	111	356
2	2483.50	65.16	74.00	-8.84	69.93	-4.77	Peak	111	356
3	4924.00	34.46	54.00	-19.54	34.84	-0.38	Average	194	34
4	4924.00	47.74	74.00	-26.26	48.12	-0.38	Peak	194	34
5	7386.00	44.87	54.00	-9.13	39.50	5.37	Average	208	12
6	7386.00	59.73	74.00	-14.27	54.36	5.37	Peak	208	12

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 :Allen Lee Temperature(℃):24 Humidity(%):63



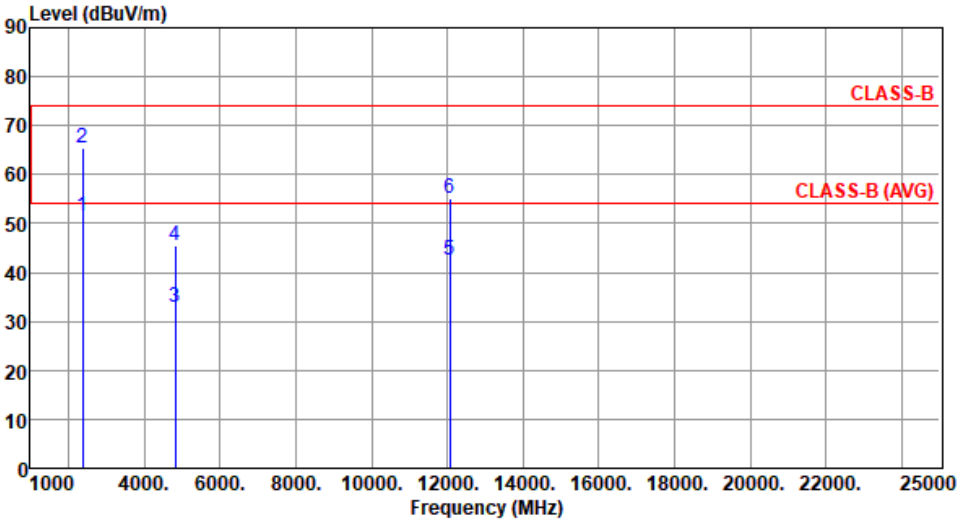
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.78	54.00	-1.22	57.55	-4.77	Average	142	24
2	2483.50	66.44	74.00	-7.56	71.21	-4.77	Peak	142	24
3	4924.00	32.10	54.00	-21.90	32.48	-0.38	Average	191	16
4	4924.00	45.58	74.00	-28.42	45.96	-0.38	Peak	191	16
5	7386.00	47.62	54.00	-6.38	42.25	5.37	Average	198	21
6	7386.00	62.26	74.00	-11.74	56.89	5.37	Peak	198	21

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 ax HE20-OFDMA

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

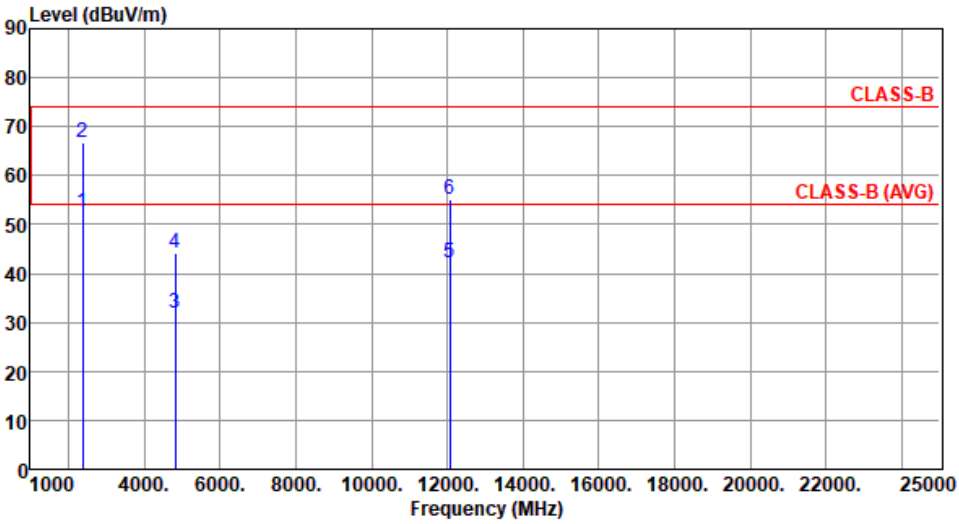


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.54	54.00	-2.46	55.93	-4.39	Average	143	357
2	2390.00	65.38	74.00	-8.62	69.77	-4.39	Peak	143	357
3	4824.00	32.82	54.00	-21.18	33.24	-0.42	Average	174	328
4	4824.00	45.55	74.00	-28.45	45.97	-0.42	Peak	174	328
5	12060.00	42.44	54.00	-11.56	35.50	6.94	Average	100	342
6	12060.00	55.00	74.00	-19.00	48.06	6.94	Peak	100	342

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	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

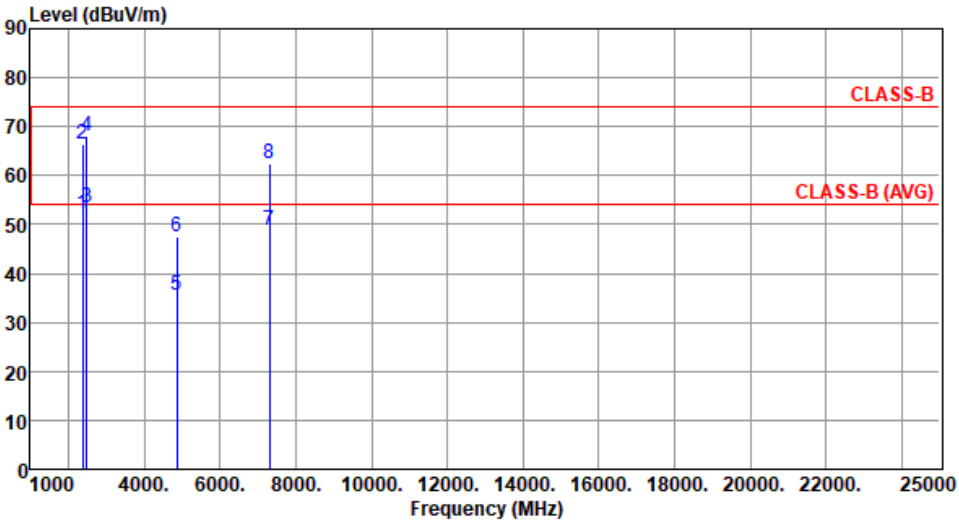


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.60	54.00	-1.40	56.99	-4.39	Average	109	21
2	2390.00	66.82	74.00	-7.18	71.21	-4.39	Peak	109	21
3	4824.00	31.80	54.00	-22.20	32.22	-0.42	Average	243	22
4	4824.00	44.19	74.00	-29.81	44.61	-0.42	Peak	243	22
5	12060.00	42.21	54.00	-11.79	35.27	6.94	Average	100	76
6	12060.00	55.13	74.00	-18.87	48.19	6.94	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	ax HE20-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

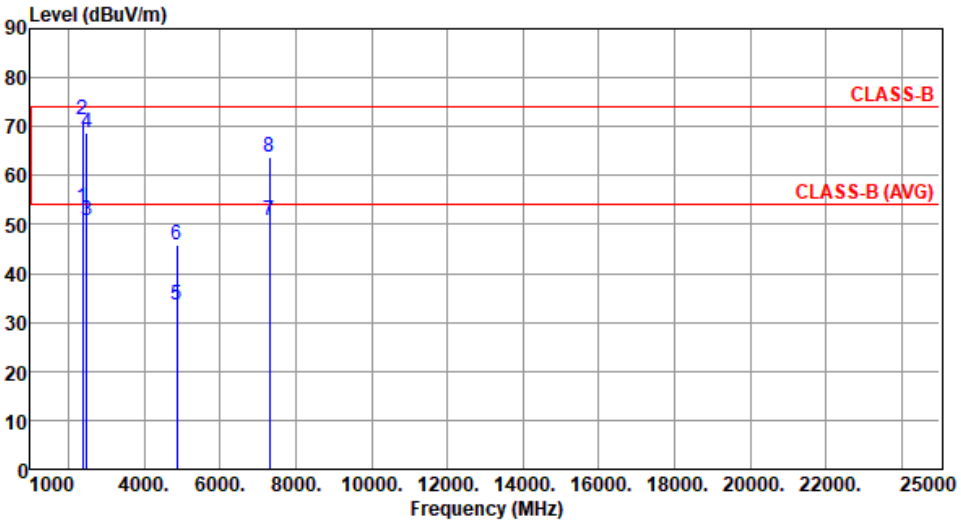


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.15	54.00	-1.85	56.54	-4.39	Average	122	7
2	2390.00	66.28	74.00	-7.72	70.67	-4.39	Peak	122	7
3	2483.50	53.59	54.00	-0.41	58.36	-4.77	Average	122	7
4	2483.50	68.03	74.00	-5.97	72.80	-4.77	Peak	122	7
5	4874.00	35.41	54.00	-18.59	35.80	-0.39	Average	216	352
6	4874.00	47.37	74.00	-26.63	47.76	-0.39	Peak	216	352
7	7311.00	48.89	54.00	-5.11	43.36	5.53	Average	244	317
8	7311.00	62.54	74.00	-11.46	57.01	5.53	Peak	244	317

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	ax HE20-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

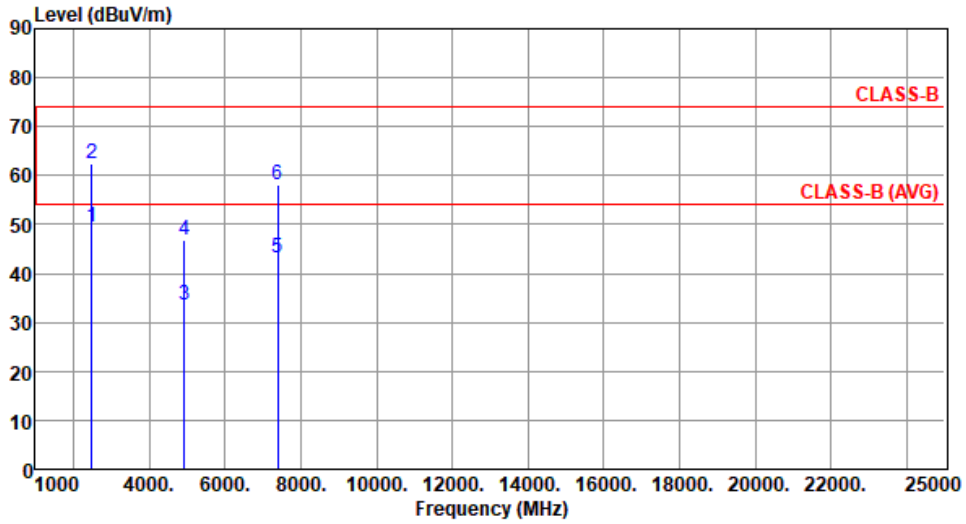


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.48	54.00	-0.52	57.87	-4.39	Average	226	41
2	2390.00	71.34	74.00	-2.66	75.73	-4.39	Peak	226	41
3	2483.50	50.92	54.00	-3.08	55.69	-4.77	Average	226	41
4	2483.50	68.58	74.00	-5.42	73.35	-4.77	Peak	226	41
5	4874.00	33.53	54.00	-20.47	33.92	-0.39	Average	190	24
6	4874.00	45.87	74.00	-28.13	46.26	-0.39	Peak	190	24
7	7311.00	50.80	54.00	-3.20	45.27	5.53	Average	176	333
8	7311.00	63.65	74.00	-10.35	58.12	5.53	Peak	176	333

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	ax HE20-OFDMA	**Test Freq. (MHz)**	2462
Polarization	Horizontal		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

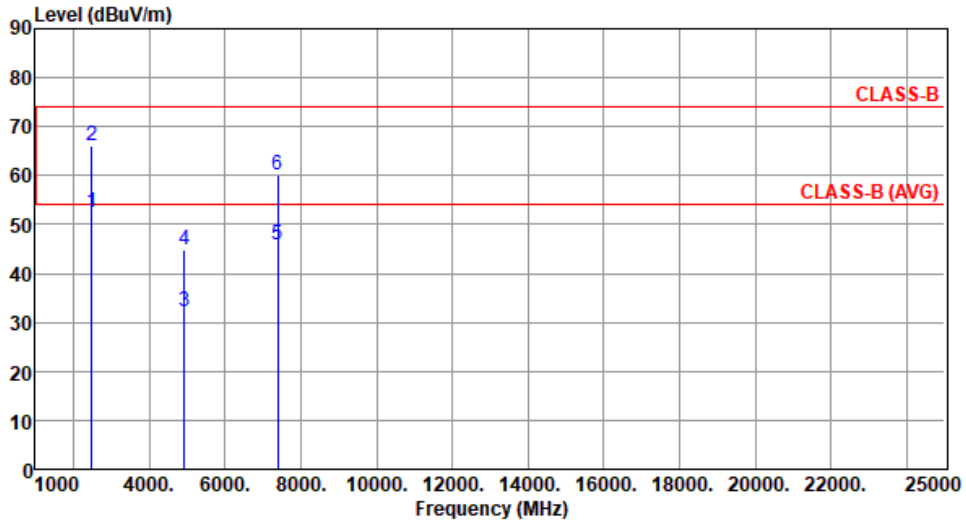


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.63	54.00	-4.37	54.40	-4.77	Average	100	6
2	2483.50	62.49	74.00	-11.51	67.26	-4.77	Peak	100	6
3	4924.00	33.47	54.00	-20.53	33.85	-0.38	Average	179	359
4	4924.00	46.70	74.00	-27.30	47.08	-0.38	Peak	179	359
5	7386.00	43.11	54.00	-10.89	37.74	5.37	Average	247	330
6	7386.00	58.02	74.00	-15.98	52.65	5.37	Peak	247	330

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	ax HE20-OFDMA	**Test Freq. (MHz)**	2462
Polarization	Vertical		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63



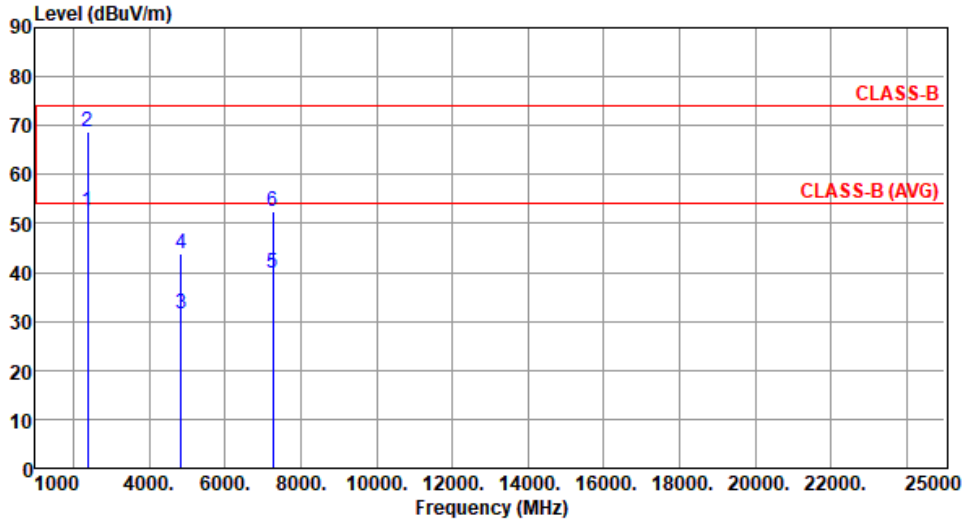
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.51	54.00	-1.49	57.28	-4.77	Average	104	41
2	2483.50	65.93	74.00	-8.07	70.70	-4.77	Peak	104	41
3	4924.00	32.33	54.00	-21.67	32.71	-0.38	Average	328	48
4	4924.00	44.72	74.00	-29.28	45.10	-0.38	Peak	328	48
5	7386.00	45.88	54.00	-8.12	40.51	5.37	Average	193	326
6	7386.00	60.15	74.00	-13.85	54.78	5.37	Peak	193	326

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 ax HE40-OFDMA

Modulation	ax HE40-OFDMA	**Test Freq. (MHz)**	2422
Polarization	Horizontal		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

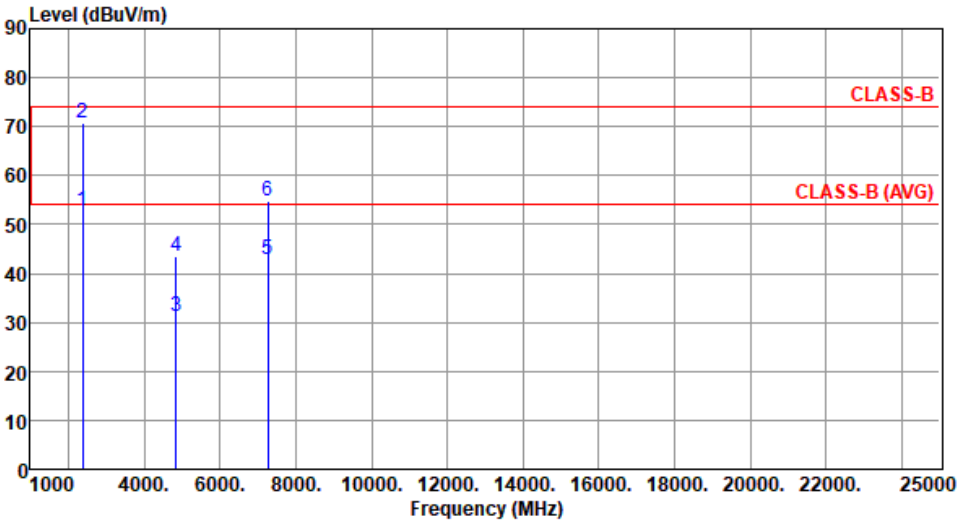


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.45	54.00	-1.55	56.84	-4.39	Average	110	358
2	2390.00	68.65	74.00	-5.35	73.04	-4.39	Peak	110	358
3	4844.00	31.71	54.00	-22.29	32.12	-0.41	Average	127	318
4	4844.00	43.98	74.00	-30.02	44.39	-0.41	Peak	127	318
5	7266.00	39.89	54.00	-14.11	34.30	5.59	Average	242	329
6	7266.00	52.62	74.00	-21.38	47.03	5.59	Peak	242	329

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	ax HE40-OFDMA	**Test Freq. (MHz)**	2422
Polarization	Vertical		

Test By :Allen Lee Temperature(℃):24 Humidity(%):63

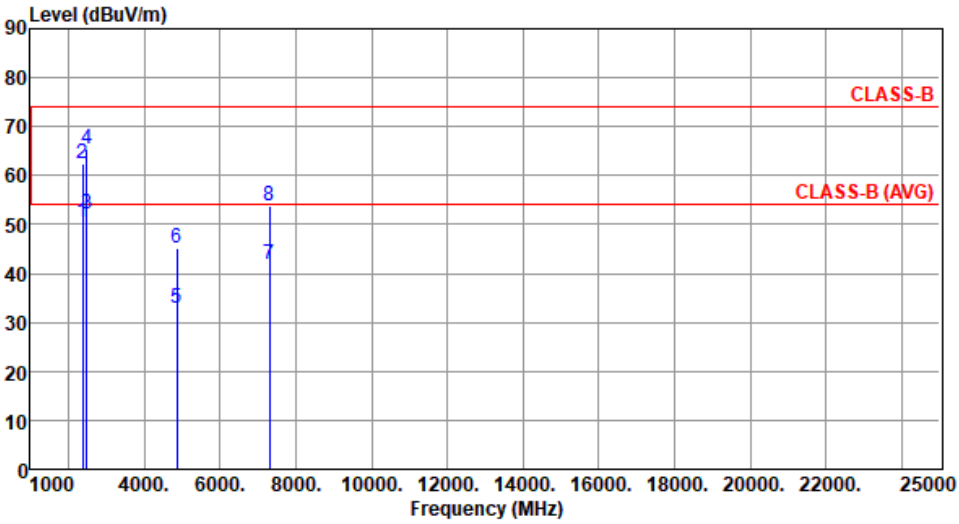


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.95	54.00	-1.05	57.34	-4.39	Average	139	15
2	2390.00	70.67	74.00	-3.33	75.06	-4.39	Peak	139	15
3	4844.00	31.14	54.00	-22.86	31.55	-0.41	Average	100	83
4	4844.00	43.35	74.00	-30.65	43.76	-0.41	Peak	100	83
5	7266.00	42.74	54.00	-11.26	37.15	5.59	Average	192	314
6	7266.00	54.84	74.00	-19.16	49.25	5.59	Peak	192	314

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	ax HE40-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):63

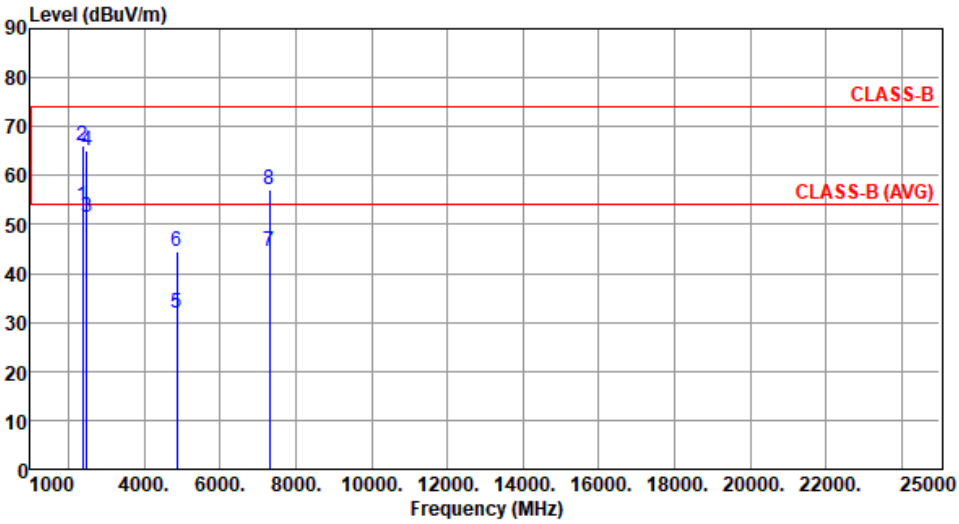


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.64	54.00	-3.36	55.03	-4.39	Average	112	352
2	2390.00	62.50	74.00	-11.50	66.89	-4.39	Peak	112	352
3	2483.50	52.04	54.00	-1.96	56.81	-4.77	Average	112	352
4	2483.50	65.34	74.00	-8.66	70.11	-4.77	Peak	112	352
5	4874.00	32.87	54.00	-21.13	33.26	-0.39	Average	214	353
6	4874.00	45.13	74.00	-28.87	45.52	-0.39	Peak	214	353
7	7311.00	41.74	54.00	-12.26	36.21	5.53	Average	242	325
8	7311.00	53.95	74.00	-20.05	48.42	5.53	Peak	242	325

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	ax HE40-OFDMA	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):63

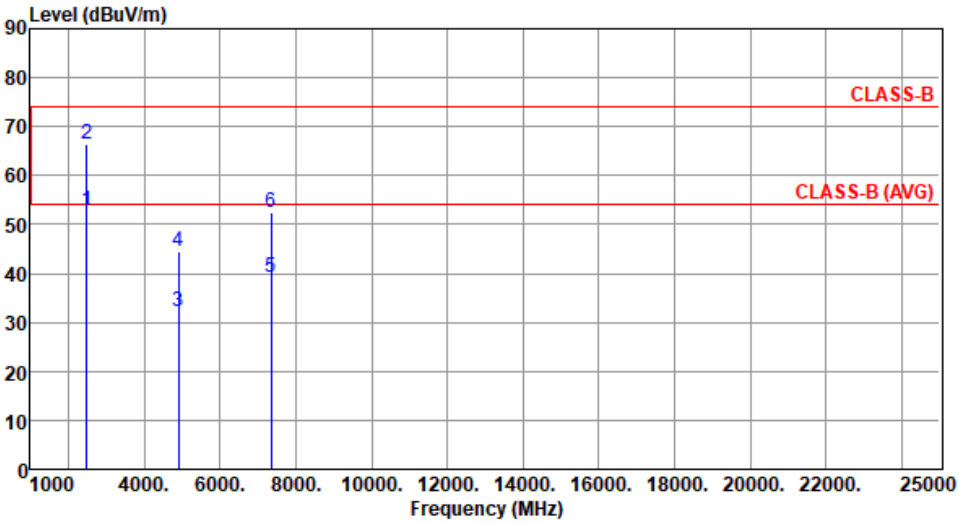


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.72	54.00	-0.28	58.11	-4.39	Average	119	23
2	2390.00	66.04	74.00	-7.96	70.43	-4.39	Peak	119	23
3	2483.50	51.55	54.00	-2.45	56.32	-4.77	Average	119	4
4	2483.50	65.01	74.00	-8.99	69.78	-4.77	Peak	119	4
5	4874.00	31.72	54.00	-22.28	32.11	-0.39	Average	195	26
6	4874.00	44.47	74.00	-29.53	44.86	-0.39	Peak	195	26
7	7311.00	44.60	54.00	-9.40	39.07	5.53	Average	202	312
8	7311.00	57.06	74.00	-16.94	51.53	5.53	Peak	202	312

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	ax HE40-OFDMA	**Test Freq. (MHz)**	2452
Polarization	Horizontal		

Test By :Roger Lu Temperature(℃):24 Humidity(%):63

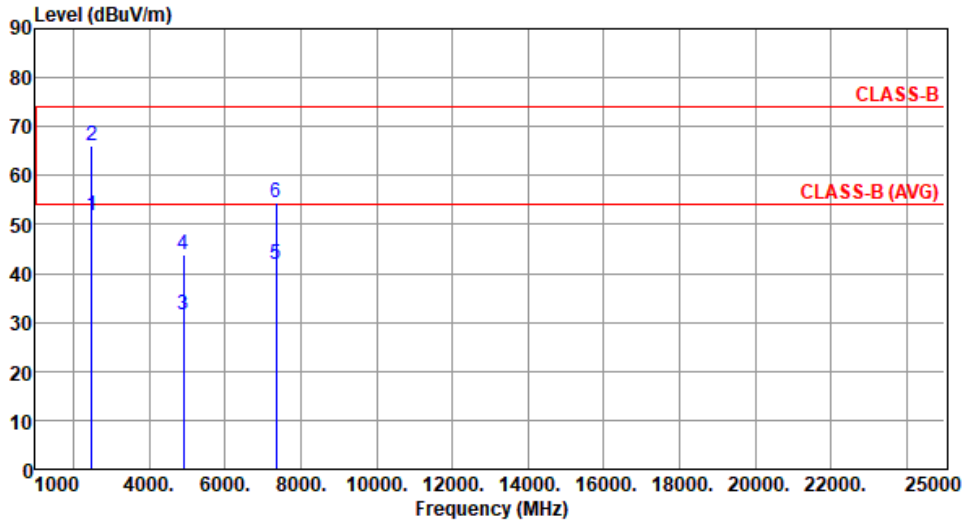


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.94	54.00	-1.06	57.71	-4.77	Average	112	348
2	2483.50	66.40	74.00	-7.60	71.17	-4.77	Peak	112	348
3	4904.00	32.07	54.00	-21.93	32.45	-0.38	Average	215	355
4	4904.00	44.42	74.00	-29.58	44.80	-0.38	Peak	215	355
5	7356.00	39.08	54.00	-14.92	33.68	5.40	Average	243	323
6	7356.00	52.42	74.00	-21.58	47.02	5.40	Peak	243	323

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	ax HE40-OFDMA	**Test Freq. (MHz)**	2452
Polarization	Vertical		

Test By :Roger Lu Temperature(℃):24 Humidity(%):63

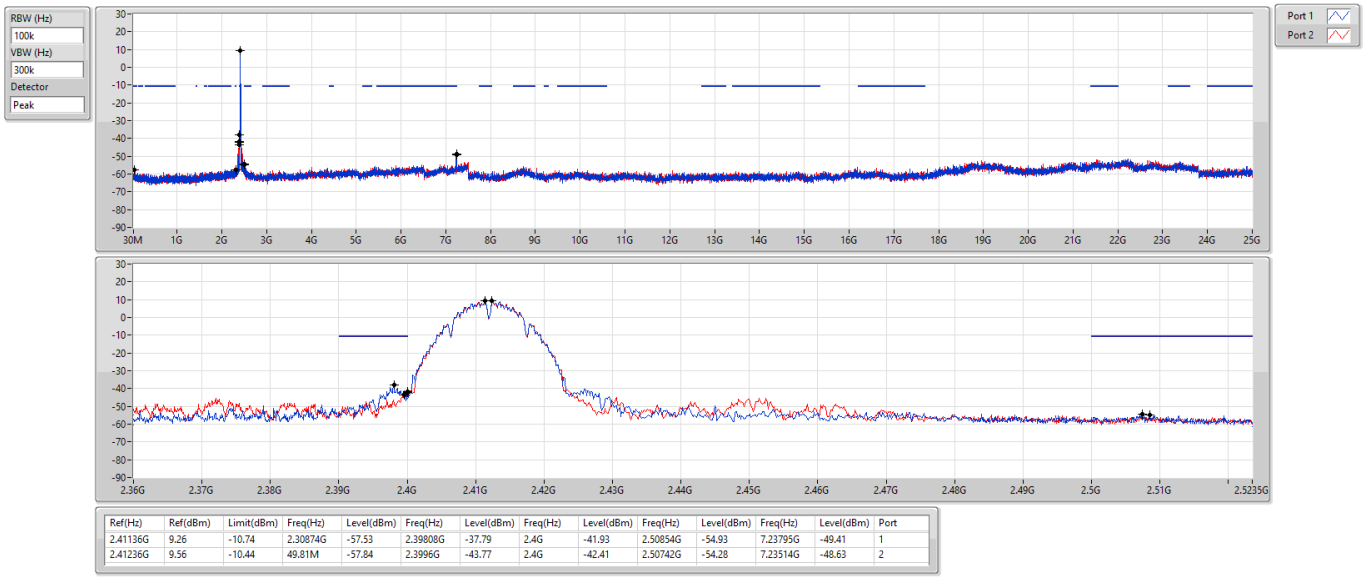


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	51.86	54.00	-2.14	56.63	-4.77	Average	153	8
2	2483.50	66.00	74.00	-8.00	70.77	-4.77	Peak	153	8
3	4904.00	31.50	54.00	-22.50	31.88	-0.38	Average	189	26
4	4904.00	43.73	74.00	-30.27	44.11	-0.38	Peak	189	26
5	7356.00	41.97	54.00	-12.03	36.57	5.40	Average	198	308
6	7356.00	54.57	74.00	-19.43	49.17	5.40	Peak	198	308

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)_2TX CSENdB

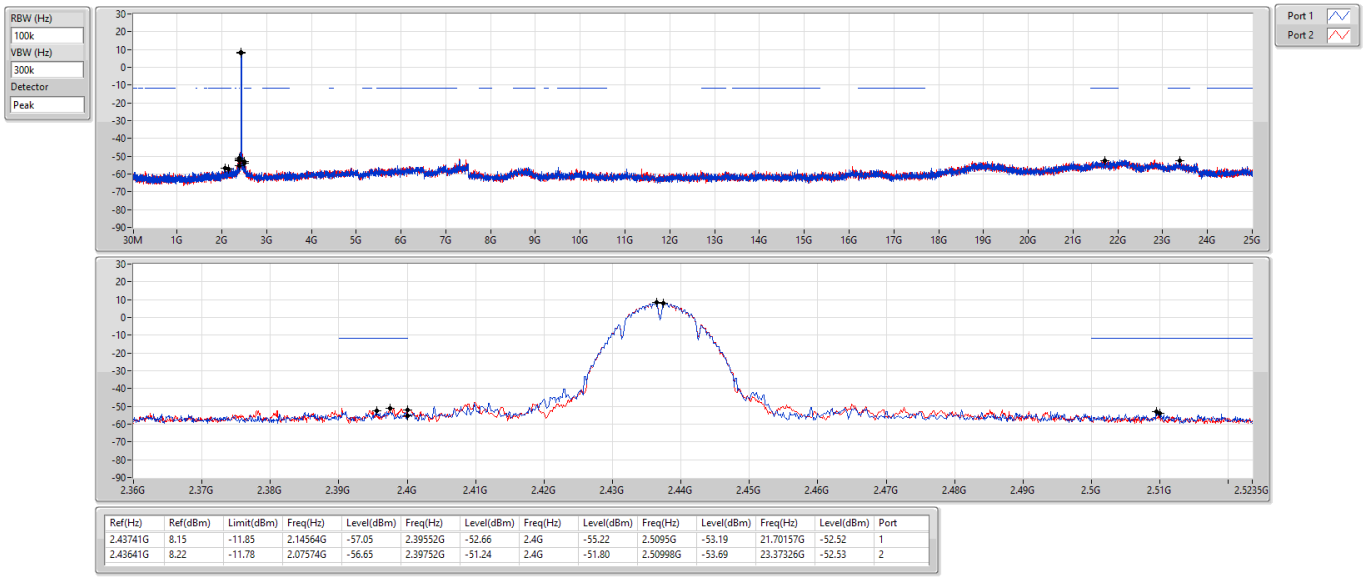
2412MHz



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	9.26	-10.74	2.30874G	-57.53	2.39808G	-37.79	2.4G	-41.93	2.50854G	-54.93	7.23795G	-49.41	1
2.41236G	9.56	-10.44	49.81M	-57.84	2.3996G	-43.77	2.4G	-42.41	2.50742G	-54.28	7.23514G	-48.63	2

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

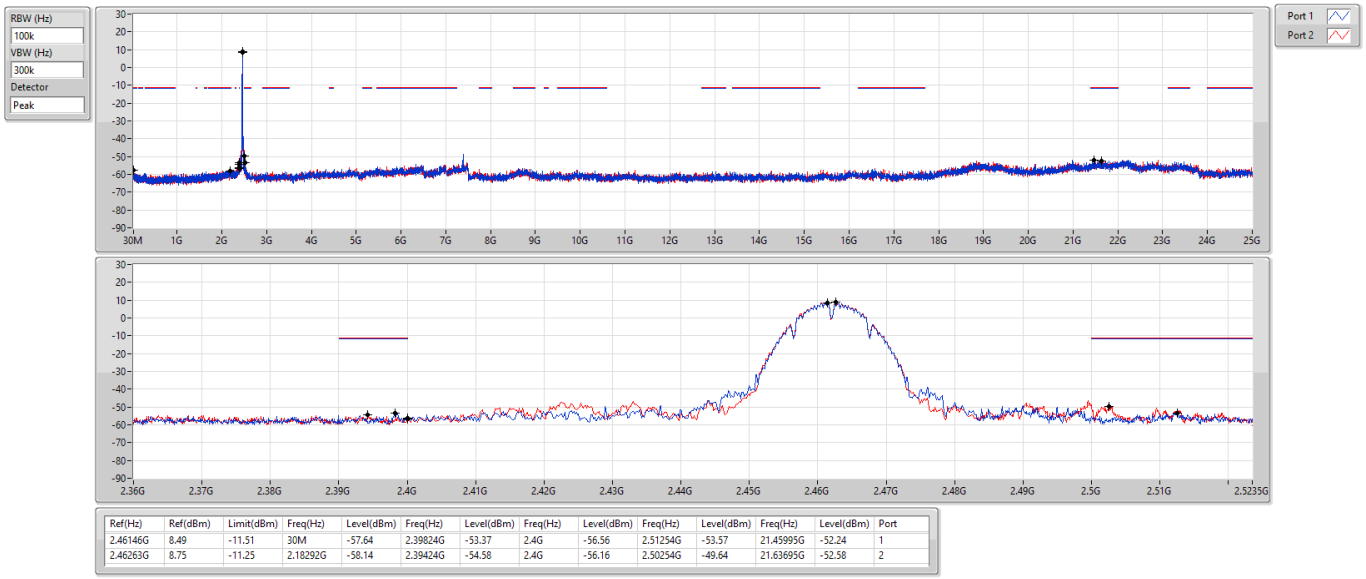
2437MHz



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
2.43741G	8.15	-11.85	2.14564G	-57.05	2.39552G	-52.66	2.4G	-55.22	2.5095G	-53.19	21.70157G	-52.52	1
2.43641G	8.22	-11.78	2.07574G	-56.65	2.39752G	-51.24	2.4G	-51.80	2.50998G	-53.69	23.37326G	-52.53	2

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

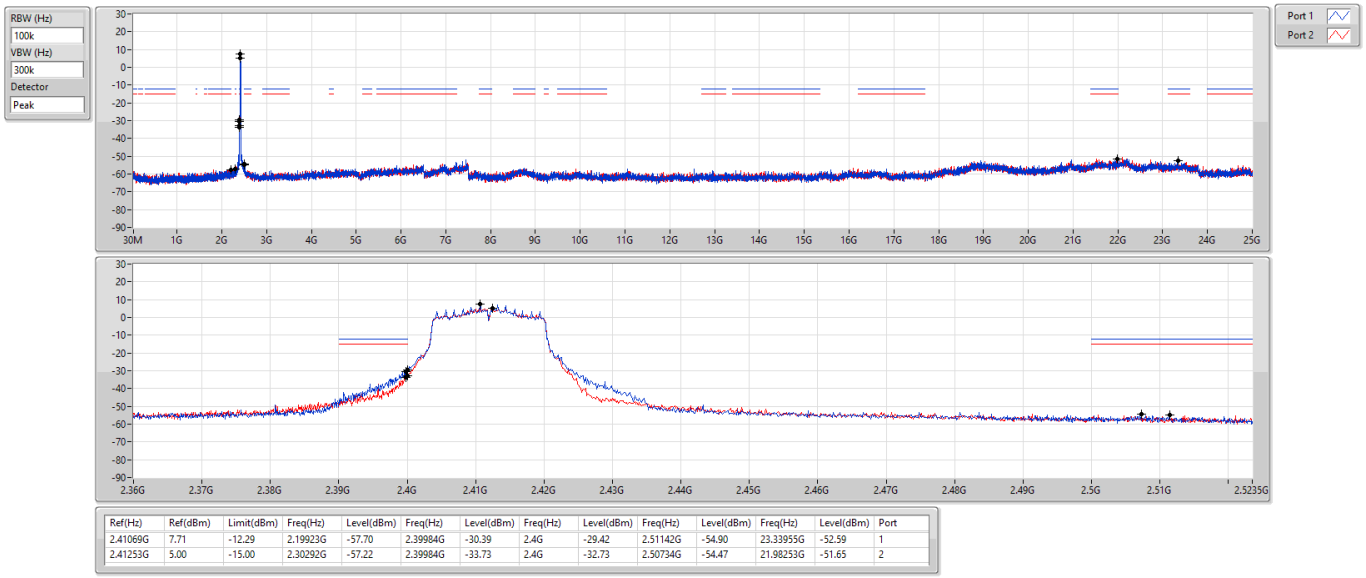
2462MHz



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	8.49	-11.51	30M	-57.64	2.39824G	-53.37	2.4G	-56.56	2.51254G	-53.57	21.45995G	-52.24	1
2.46263G	8.75	-11.25	2.18292G	-58.14	2.39424G	-54.58	2.4G	-56.16	2.50254G	-49.64	21.63695G	-52.58	2

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

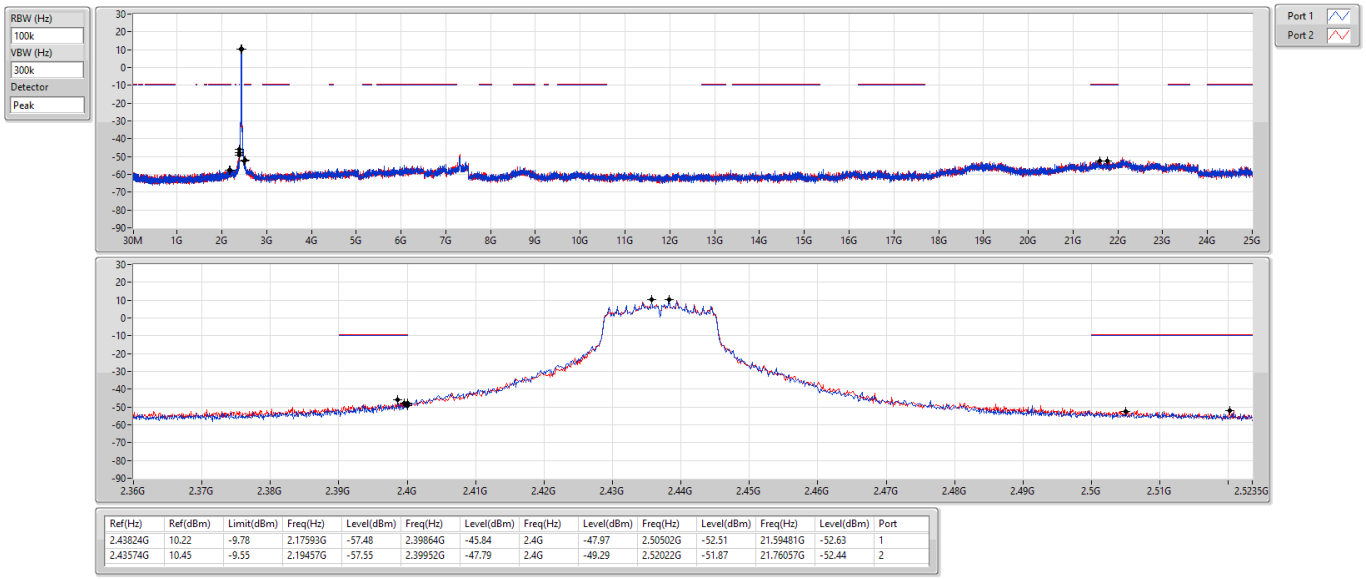
2412MHz



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
2.41069G	7.71	-12.29	2.19923G	-57.70	2.39984G	-30.39	2.4G	-29.42	2.51142G	-54.90	23.33955G	-52.59	1
2.41253G	5.00	-15.00	2.30292G	-57.22	2.39984G	-33.73	2.4G	-32.73	2.50734G	-54.47	21.98253G	-51.65	2

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

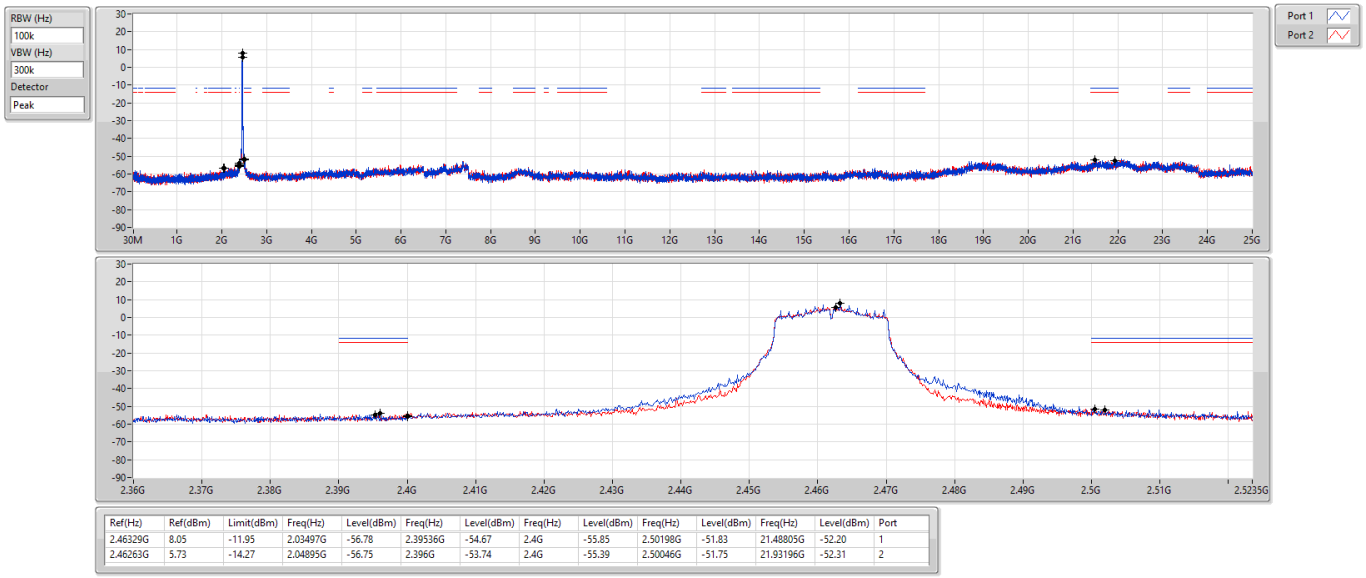
2437MHz



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
2.43824G	10.22	-9.78	2.17593G	-57.48	2.39864G	-45.84	2.4G	-47.97	2.50502G	-52.51	21.59481G	-52.63	1
2.43574G	10.45	-9.55	2.19457G	-57.55	2.39952G	-47.79	2.4G	-49.29	2.52022G	-51.87	21.76057G	-52.44	2

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

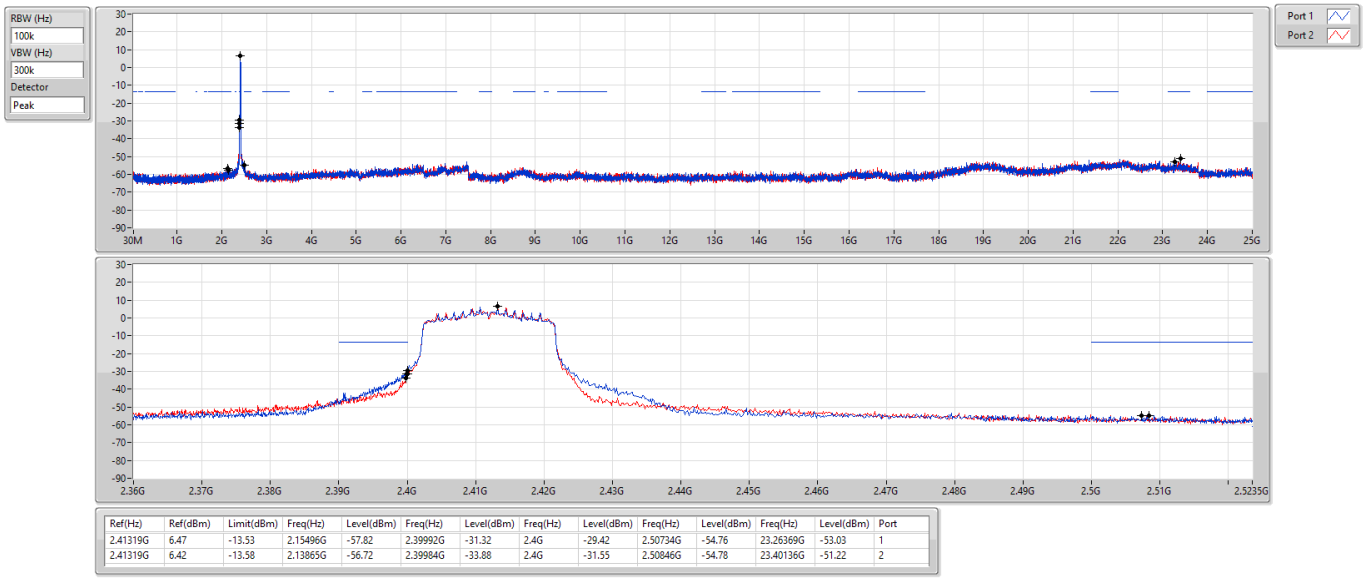
2462MHz



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
2.46329G	8.05	-11.95	2.03497G	-56.78	2.39536G	-54.67	2.4G	-55.85	2.50198G	-51.83	21.48805G	-52.20	1
2.46263G	5.73	-14.27	2.04895G	-56.75	2.396G	-53.74	2.4G	-55.39	2.50046G	-51.75	21.93196G	-52.31	2

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **CSENdB**

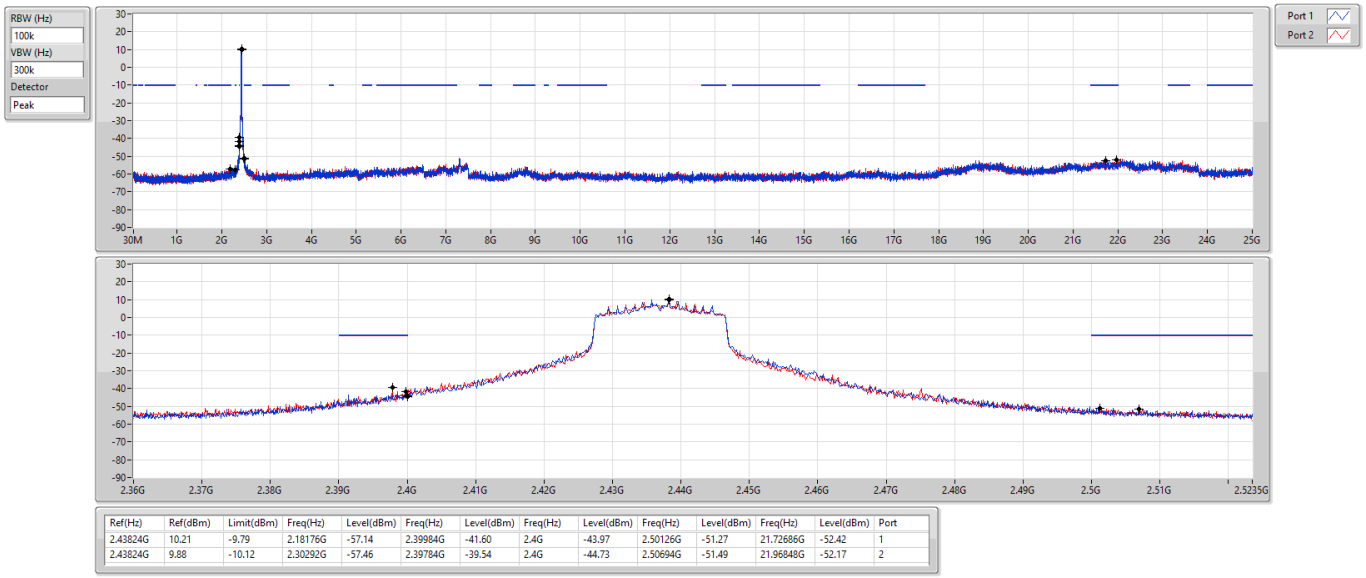
2412MHz



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
2.41319G	6.47	-13.53	2.15496G	-57.82	2.39992G	-31.32	2.4G	-29.42	2.50734G	-54.76	23.26369G	-53.03	1
2.41319G	6.42	-13.58	2.13865G	-56.72	2.39984G	-33.88	2.4G	-31.55	2.50846G	-54.78	23.40136G	-51.22	2

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **CSENdB**

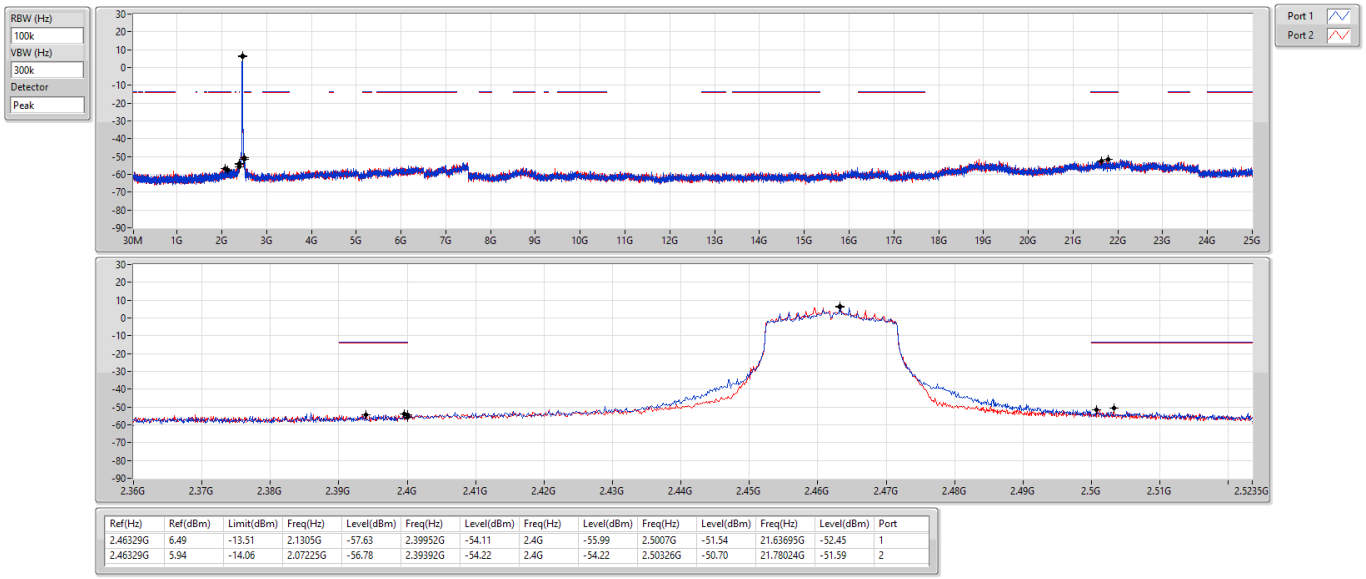
2437MHz



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
2.43824G	10.21	-9.79	2.18176G	-57.14	2.39984G	-41.60	2.4G	-43.97	2.50126G	-51.27	21.72686G	-52.42	1
2.43824G	9.88	-10.12	2.30292G	-57.46	2.39784G	-39.54	2.4G	-44.73	2.50694G	-51.49	21.96848G	-52.17	2

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX **CSENdB**

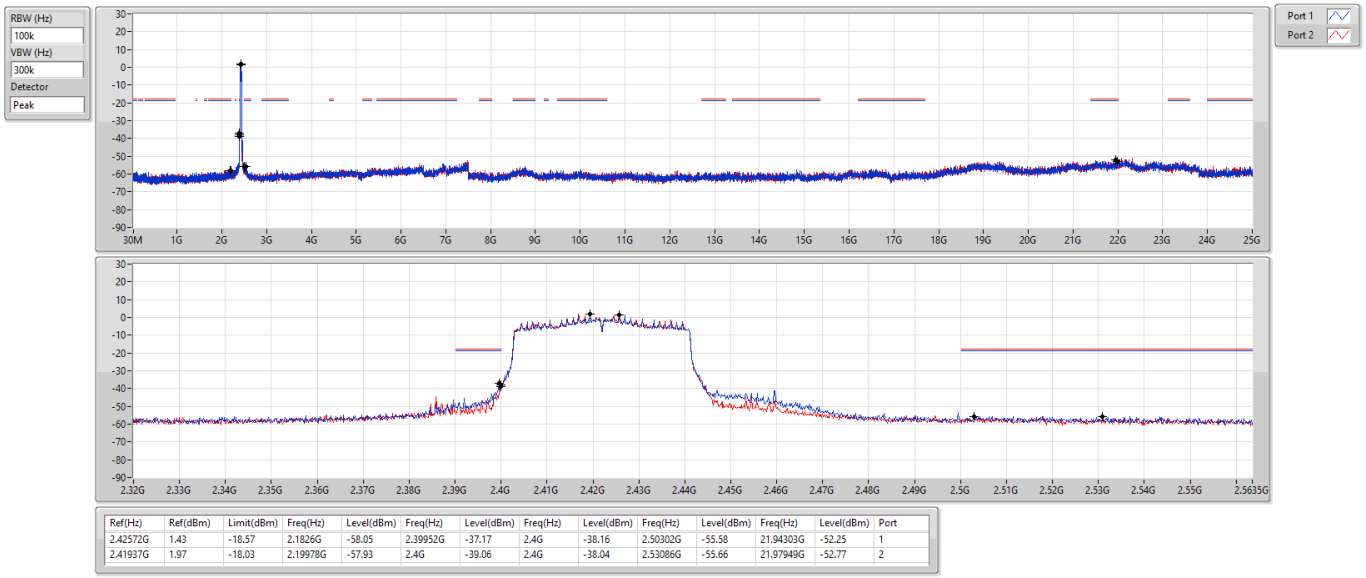
2462MHz



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	6.49	-13.51	2.1305G	-57.63	2.39952G	-54.11	2.4G	-55.99	2.5007G	-51.54	21.63695G	-52.45	1
2.46329G	5.94	-14.06	2.07225G	-56.78	2.39392G	-54.22	2.4G	-54.22	2.50326G	-50.70	21.78024G	-51.59	2

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **CSENdB**

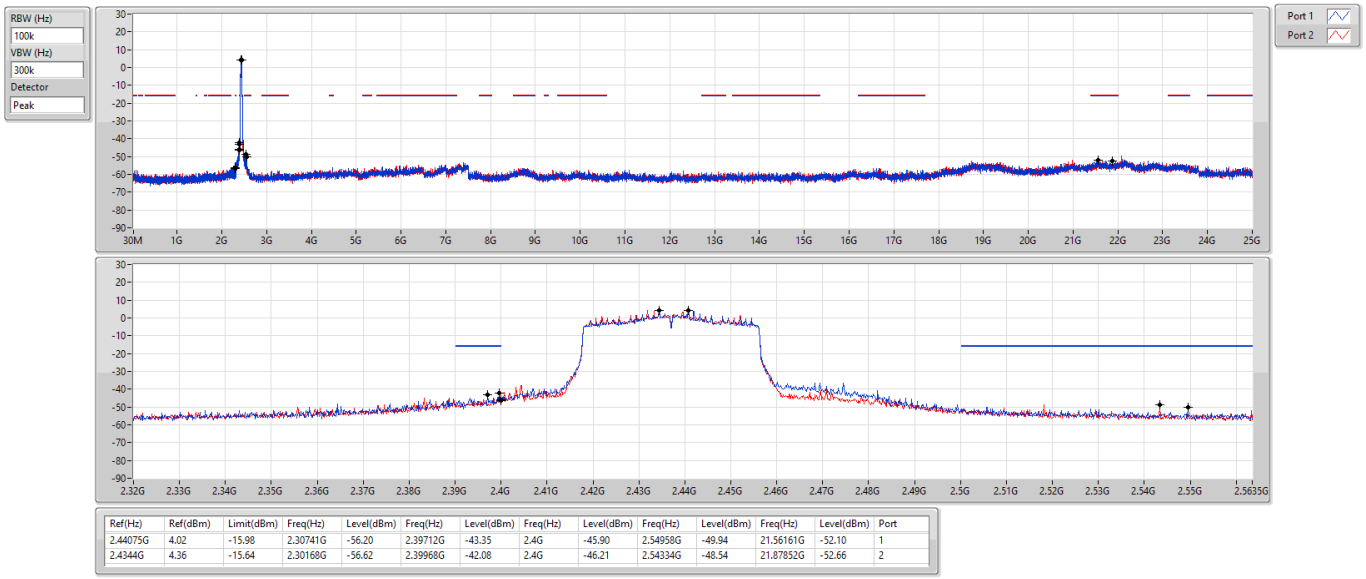
2422MHz



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
2.42572G	1.43	-18.57	2.1826G	-58.05	2.39952G	-37.17	2.4G	-38.16	2.50302G	-55.58	21.94303G	-52.25	1
2.41937G	1.97	-18.03	2.19978G	-57.93	2.4G	-39.06	2.4G	-38.04	2.53086G	-55.66	21.97949G	-52.77	2

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **CSENdB**

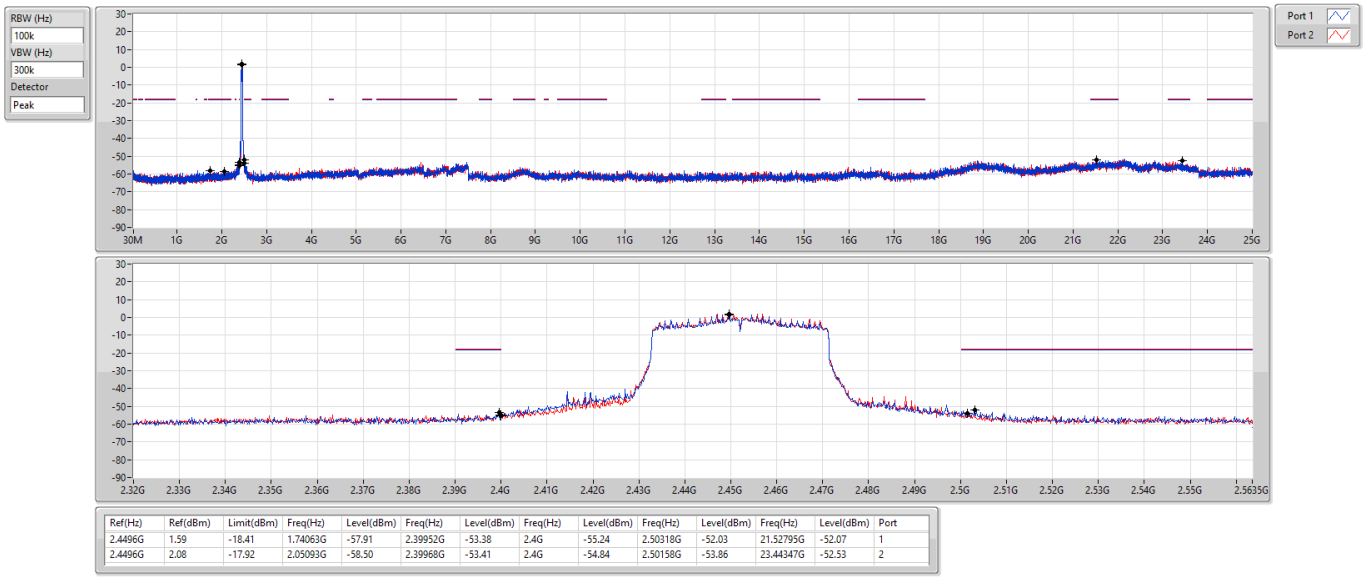
2437MHz



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
2.44075G	4.02	-15.98	2.30741G	-56.20	2.39712G	-43.35	2.4G	-45.90	2.54958G	-49.94	21.56161G	-52.10	1
2.4344G	4.36	-15.64	2.30168G	-56.62	2.39968G	-42.08	2.4G	-46.21	2.54334G	-48.54	21.87852G	-52.66	2

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX **CSENdB**

2452MHz

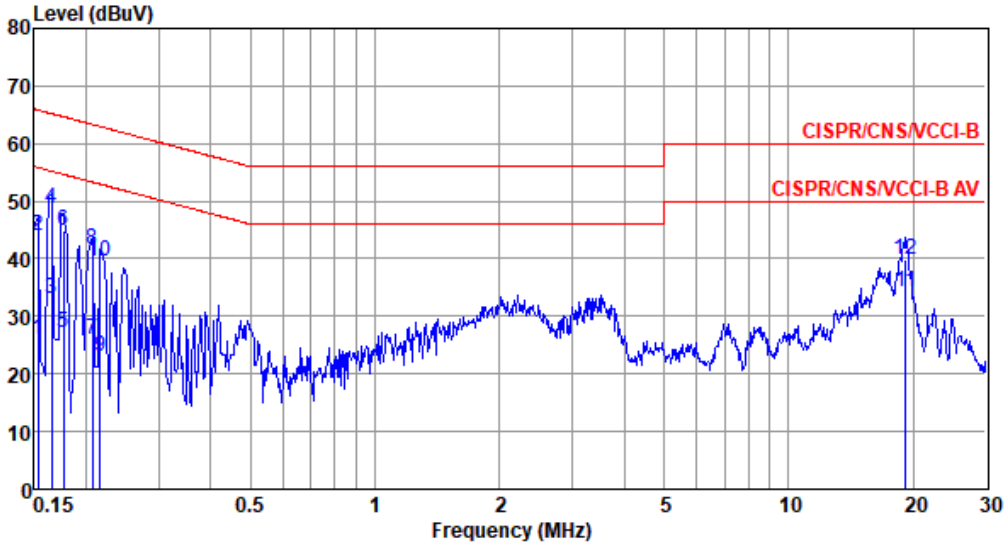


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4496G	1.59	-18.41	1.74063G	-57.91	2.39952G	-53.38	2.4G	-55.24	2.50318G	-52.03	21.52795G	-52.07	1
2.4496G	2.08	-17.92	2.05093G	-58.50	2.39968G	-53.41	2.4G	-54.84	2.50158G	-53.86	23.44347G	-52.53	2

Adapter mode

Modulation Mode	11g	Test Freq. (MHz)	2437
Power Phase	Line		

Test by : Sean Yu Temperature: 26°C Humidity: 61%

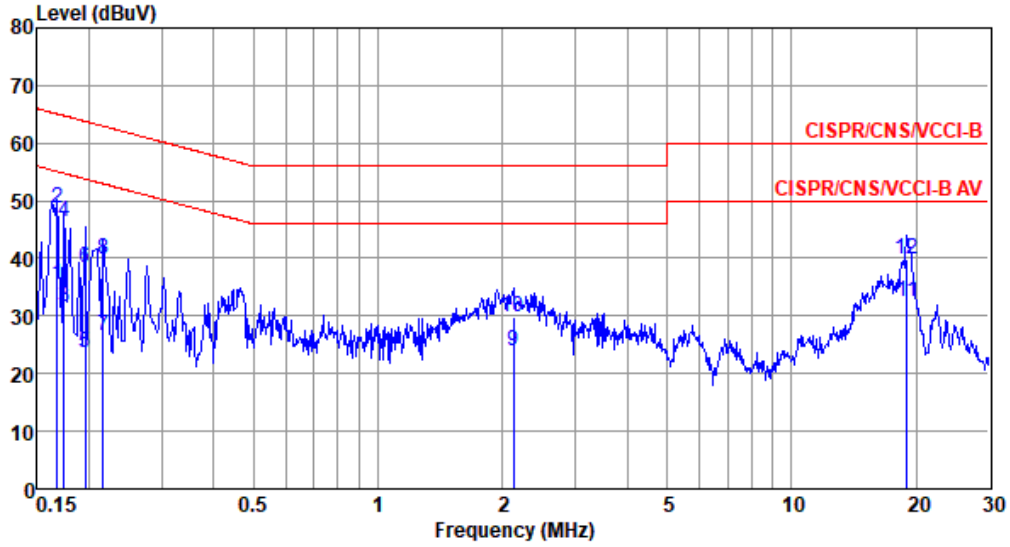


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	dB	
1	0.15	25.89	55.82	-29.93	15.95	9.65	0.08	0.21	Average
2	0.15	44.10	65.82	-21.72	34.16	9.65	0.08	0.21	QP
3	0.17	32.95	55.21	-22.26	22.99	9.65	0.08	0.23	Average
4	0.17	48.70	65.21	-16.51	38.74	9.65	0.08	0.23	QP
5	0.18	27.18	54.64	-27.46	17.21	9.65	0.08	0.24	Average
6	0.18	44.83	64.64	-19.81	34.86	9.65	0.08	0.24	QP
7	0.21	25.97	53.32	-27.35	15.98	9.65	0.08	0.26	Average
8	0.21	41.56	63.32	-21.76	31.57	9.65	0.08	0.26	QP
9	0.22	23.10	52.96	-29.86	13.10	9.65	0.08	0.27	Average
10	0.22	39.70	62.96	-23.26	29.70	9.65	0.08	0.27	QP
11	19.22	34.10	50.00	-15.90	23.24	9.68	0.55	0.63	Average
12	19.22	39.96	60.00	-20.04	29.10	9.68	0.55	0.63	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	11g	**Test Freq. (MHz)**	2437
Power Phase	Neutral		

Test by : Sean Yu Temperature: 26°C Humidity: 61%



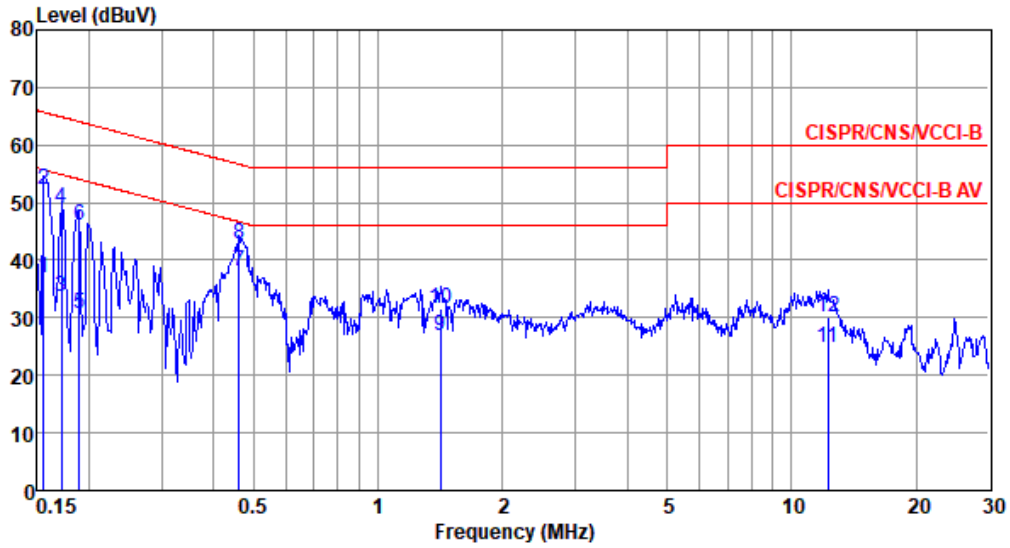
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	dB	
1	0.17	35.28	55.08	-19.80	25.38	9.66	0.08	0.16	Average
2	0.17	48.79	65.08	-16.29	38.89	9.66	0.08	0.16	QP
3	0.17	31.64	54.77	-23.13	21.74	9.65	0.08	0.17	Average
4	0.17	46.38	64.77	-18.39	36.48	9.65	0.08	0.17	QP
5	0.20	23.71	53.80	-30.09	13.79	9.65	0.08	0.19	Average
6	0.20	38.34	63.80	-25.46	28.42	9.65	0.08	0.19	QP
7	0.22	26.56	52.96	-26.40	16.62	9.65	0.08	0.21	Average
8	0.22	39.74	62.96	-23.22	29.80	9.65	0.08	0.21	QP
9	2.12	24.02	46.00	-21.98	13.77	9.66	0.17	0.42	Average
10	2.12	29.74	56.00	-26.26	19.49	9.66	0.17	0.42	QP
11	19.02	32.35	50.00	-17.65	21.35	9.82	0.55	0.63	Average
12	19.02	39.77	60.00	-20.23	28.77	9.82	0.55	0.63	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	11g	Test Freq. (MHz)	2437
Power Phase	Line		

Test by : Sean Yu Temperature: 26°C Humidity: 61%

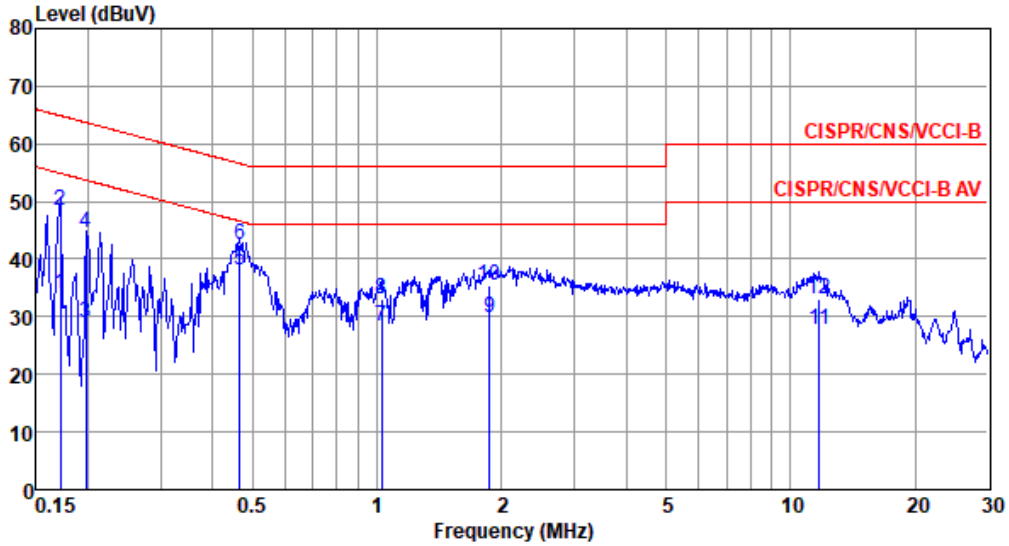


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	dB	
1	0.16	36.89	55.69	-18.80	26.94	9.65	0.08	0.22	Average
2	0.16	52.34	65.69	-13.35	42.39	9.65	0.08	0.22	QP
3	0.17	33.78	54.90	-21.12	23.82	9.65	0.08	0.23	Average
4	0.17	48.86	64.90	-16.04	38.90	9.65	0.08	0.23	QP
5	0.19	30.69	54.06	-23.37	20.71	9.65	0.08	0.25	Average
6	0.19	46.12	64.06	-17.94	36.14	9.65	0.08	0.25	QP
7	0.46	38.06	46.67	-8.61	28.00	9.64	0.09	0.33	Average
8	0.46	42.82	56.67	-13.85	32.76	9.64	0.09	0.33	QP
9	1.42	26.79	46.00	-19.21	16.57	9.66	0.14	0.42	Average
10	1.42	31.49	56.00	-24.51	21.27	9.66	0.14	0.42	QP
11	12.25	24.83	50.00	-25.17	14.25	9.70	0.37	0.51	Average
12	12.25	30.07	60.00	-29.93	19.49	9.70	0.37	0.51	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	11g	Test Freq. (MHz)	2437
Power Phase	Neutral		

Test by : Sean Yu Temperature: 26°C Humidity: 61%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuA	dBuA	dB	dBuA	dB	dB	dB	
1	0.17	33.81	54.90	-21.09	23.84	9.66	0.08	0.23	Average
2	0.17	48.49	64.90	-16.41	38.52	9.66	0.08	0.23	QP
3	0.20	28.81	53.71	-24.90	18.82	9.65	0.08	0.26	Average
4	0.20	44.56	63.71	-19.15	34.57	9.65	0.08	0.26	QP
5	0.47	37.95	46.58	-8.63	27.89	9.64	0.09	0.33	Average
6	0.47	42.63	56.58	-13.95	32.57	9.64	0.09	0.33	QP
7	1.03	28.29	46.00	-17.71	18.14	9.65	0.10	0.40	Average
8	1.03	33.10	56.00	-22.90	22.95	9.65	0.10	0.40	QP
9	1.87	29.92	46.00	-16.08	19.67	9.66	0.16	0.43	Average
10	1.87	35.43	56.00	-20.57	25.18	9.66	0.16	0.43	QP
11	11.74	27.84	50.00	-22.16	17.22	9.76	0.35	0.51	Average
12	11.74	32.99	60.00	-27.01	22.37	9.76	0.35	0.51	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).