FCC Test Report

FCC ID	:	**HDC-17600072**
Equipment	:	**WiFi 6 Mesh AP**
Model No.	:	**SDG-8622**
Brand Name	:	**Adtran**
Applicant	:	**Adtran**
Address	:	**901 Explorer Boulevard, Huntsville, Alabama, United States, 35806-2807**
Standard	:	**47 CFR FCC Part 15.247**
Received Date	:	**May 31, 2023**
Tested Date	:	**Jun. 02 ~ Jul. 05, 2023**

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

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

Table of Contents

Release Record

Report No.	Version	Description	Issued Date
FR353101AC	Rev. 01	Initial issue	Sep. 01, 2023

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 0.207MHz 48.85 (Margin -4.47dB) - AV	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 2390.00MHz 53.86 (Margin -0.14dB) - AV	Pass
15.247(b)(3)	Conducted Output Power	Max Power [dBm]: ***Non-beamforming mode*** 27.02 ***Beamforming mode*** 26.04	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
Note 1: RF output power specifies that Maximum Conducted (Average) Output Power. Note 2: DBPSK, DQPSK, CCK modulation BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation. Note 3: 802.11ax supports beamforming function.					

1.1.2 Antenna Details

Ant. No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)				
				2400~2483.5	**5150~5250**	**5250~5350**	**5470~5725**	**5725~5850**
1	DB1	Dipole	UFL	3.618	--	--	4.341	4.341
2	DB2	Dipole	UFL	3.414	--	--	4.289	4.174
3	DB3	Dipole	UFL	3.099	--	--	4.634	4.634
4	DB4	Dipole	UFL	4.574	--	--	4.188	4.223
5	5G1	Dipole	UFL	--	3.983	3.544	--	--
6	5G2	Dipole	UFL	--	3.713	4.354	--	--
7	5G3	Dipole	UFL	--	3.385	4.633	--	--
8	5G4	Dipole	UFL	--	4.338	4.69	--	--
9	zero wait DFS	PIFA	NA			5.756	5.013	

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	15Vdc from AC adapter

1.1.4 Accessories

Accessories		
No.	**Equipment**	**Description**
1	AC adapter	Brand: LUCENT TRANS Model: 1A78 I/P: 100-240Vac, 50/60Hz, 1.2A O/P: 15V⎓3.0A, 45.0W Power Line: USB 1.8m non-shielded without core
2	RJ45 cable	2m non-shielded without core

1.1.5 Channel List

Frequency band (MHz)		2400~2483.5	
802.11 b / g / n HT20 / ax HE20		802.11n HT40 / 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	Non-beamforming: QATool, Version: UIv2.88_DLLv6.93_ap_2022.01.04(V14)c Beamforming: Putty, Version: 0.6				
Duty Cycle and Duty Factor	Mode	Non-beamforming		Beamforming	
		Duty cycle (%)	Duty factor (dB)	Duty cycle (%)	Duty factor (dB)
	11b	99.74%	0.01	---	---
	11g	97.01%	0.13	---	---
	ax HE20	97.86%	0.09	95.39%	0.20
	ax HE40	95.97%	0.18	90.36%	0.44

1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index	
		Non-beamforming	Beamforming
11b	2412	17.5	---
11b	2437	18	---
11b	2462	17	---
11g	2412	16	---
11g	2437	18.5	---
11g	2462	16	---
ax HE20	2412	15.5	31
ax HE20	2437	19	37
ax HE20	2462	15.5	31
ax HE40	2422	14	28
ax HE40	2437	16.5	32
ax HE40	2452	14	27

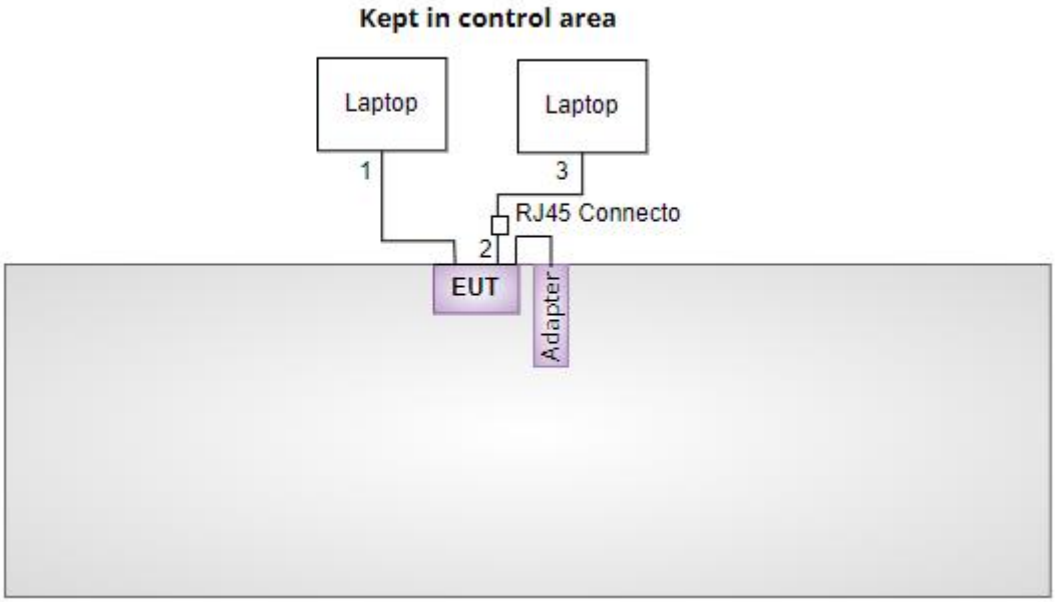
1.2 Local Support Equipment List

Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**FCC ID**	**Remarks**
1	Laptop	DELL	Latitude 5400	DoC	---
2	Laptop	DELL	Latitude E5470	DoC	---
3	USB 3.0 Flash	Transcend	JetFlash 700	---	---
4	Laptop	DELL	Latitude E5470	DoC	For Beamforming mode only.
5	BF Client	Gemtek	SDG-8622	---	For Beamforming mode only.

1.3 Test Setup Chart

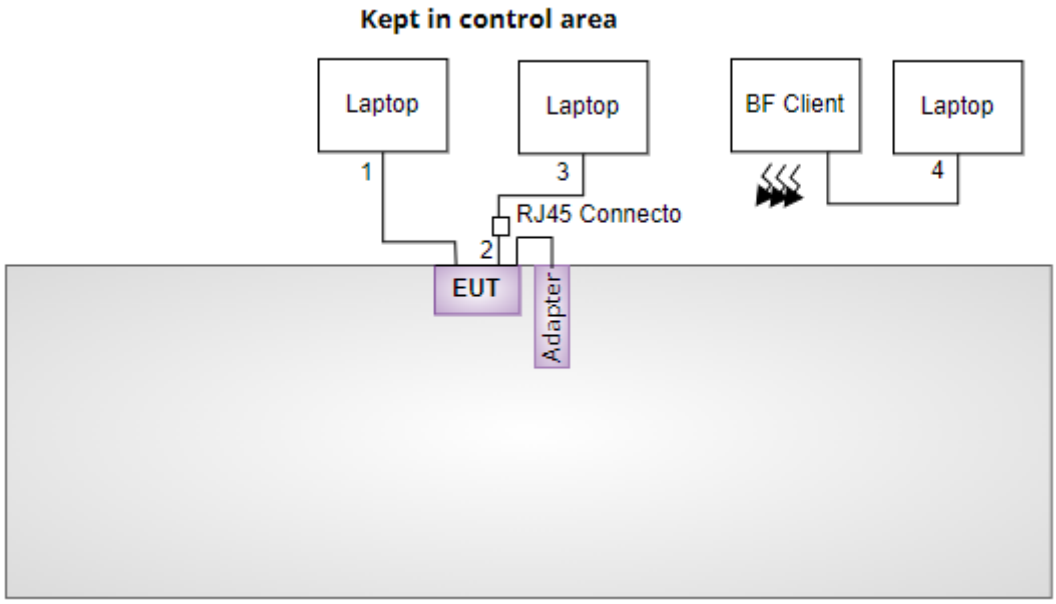
Non-beamforming mode

Test Setup Diagram



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

Beamforming mode

Test Setup Diagram


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

1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Jun. 30, 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	101295	Jan. 31, 2023	Jan. 30, 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	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Jun. 29 ~ Jul. 05, 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.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Jun. 02 ~ Jun. 26, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Receiver	R&S	ESR3	101657	Mar. 03, 2023	Mar. 02, 2024
Spectrum Analyzer	R&S	FSV40	101498	Nov. 21, 2022	Nov. 20, 2023
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 01, 2022	Oct. 31, 2023
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 03, 2022	Aug. 02, 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	EMC02325	980225	Jun. 28, 2022	Jun. 27, 2023
Preamplifier	EMC	EMC118A45SE	980898	Jul. 16, 2022	Jul. 15, 2023
Preamplifier	EMC	EMC184045SE	980903	Jul. 16, 2022	Jul. 15, 2023
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
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
Attenuator	Pasternack	PE7005-10	10-1	Oct. 06, 2022	Oct. 05, 2023
HIGHPASS FILTER 3.1-18G	WHK	WHK3.1/18G-10SS	39	Oct. 06, 2022	Oct. 05, 2023
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	11b	2437	1 Mbps	---
Unwanted Emissions ≤ 1GHz	11b	2437	1 Mbps	---
Unwanted Emissions >1GHz Conducted Output Power 6dB bandwidth Power spectral density	11b 11g ax HE20 ax HE40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	---
Beamforming mode				
AC Power Line Conducted Emission	ax HE20	2437	MCS 0	---
Unwanted Emissions ≤1GHz	ax HE20	2437	MCS 0	---
Unwanted Emissions >1GHz Conducted Output Power 6dB bandwidth Power spectral density	ax HE20 ax HE40	2412 / 2437 / 2462 2422 / 2437 / 2452	MCS 0 MCS 0	---

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

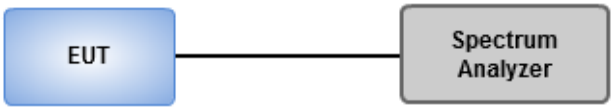
6dB Bandwidth

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	24-25°C / 64-65%	**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	24-25°C / 64-65%	**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 = 30 kHz, VBW = 100 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 = 30 kHz, VBW = 100 kHz. Detector = RMS.

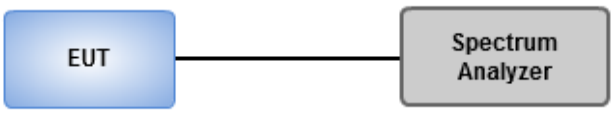
2 Set the sweep time to: ≥ 10 (number of measurement points in sweep) x (total on/off period of the transmitted signal).

3 Perform the measurement over a single sweep.

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

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

3.3.3 Test Setup



3.3.4 Test Results

Ambient Condition	24-25°C / 64-65%	**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

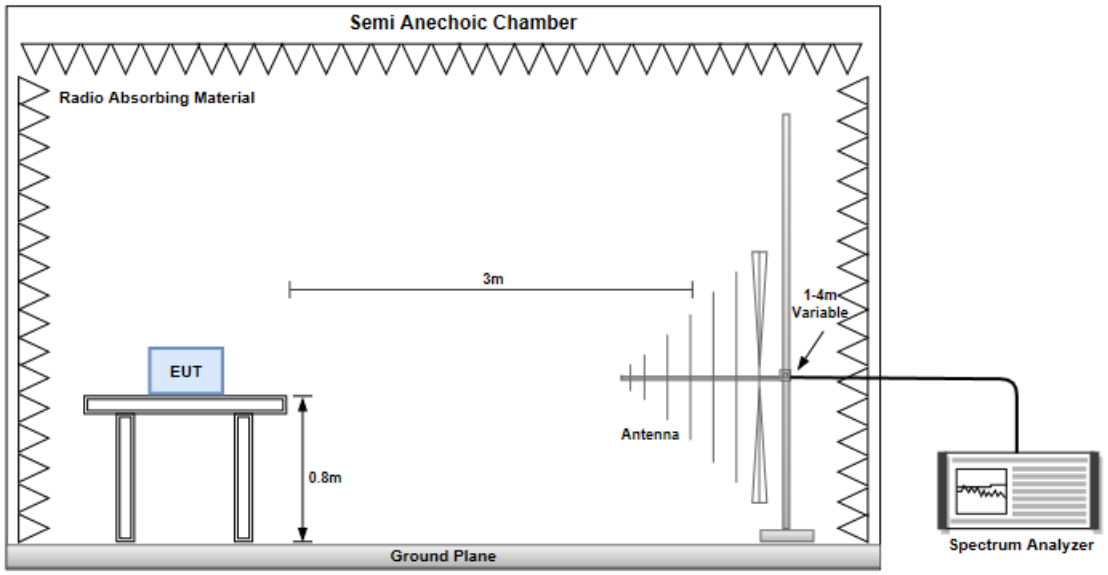
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

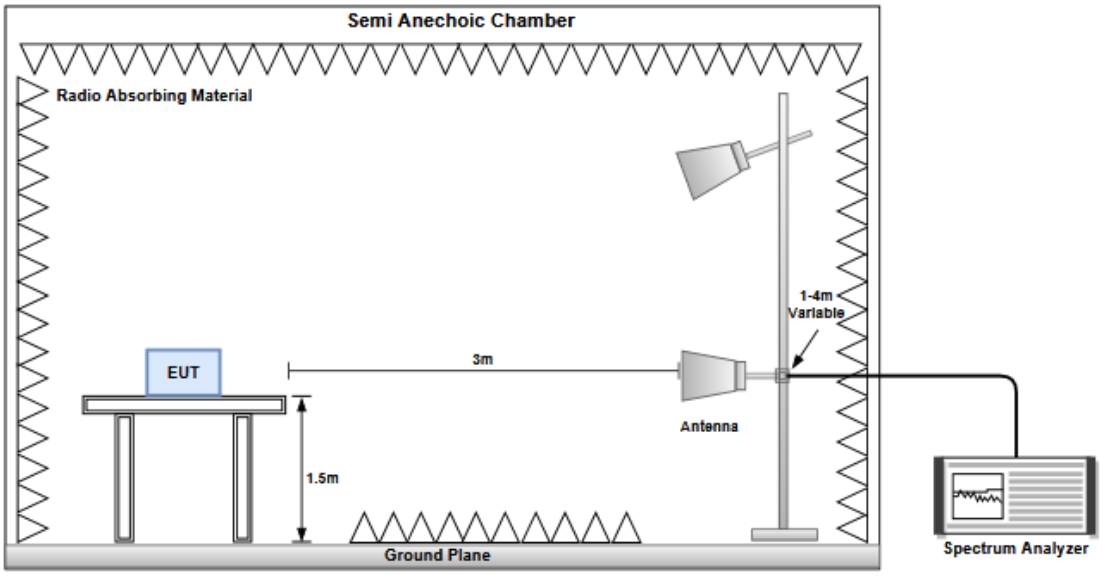
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

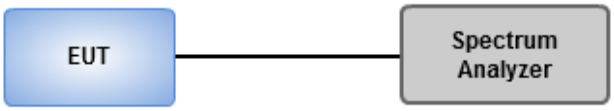
Reference level measurement

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	24-25°C / 64-65%	Tested By	Akun Chung

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

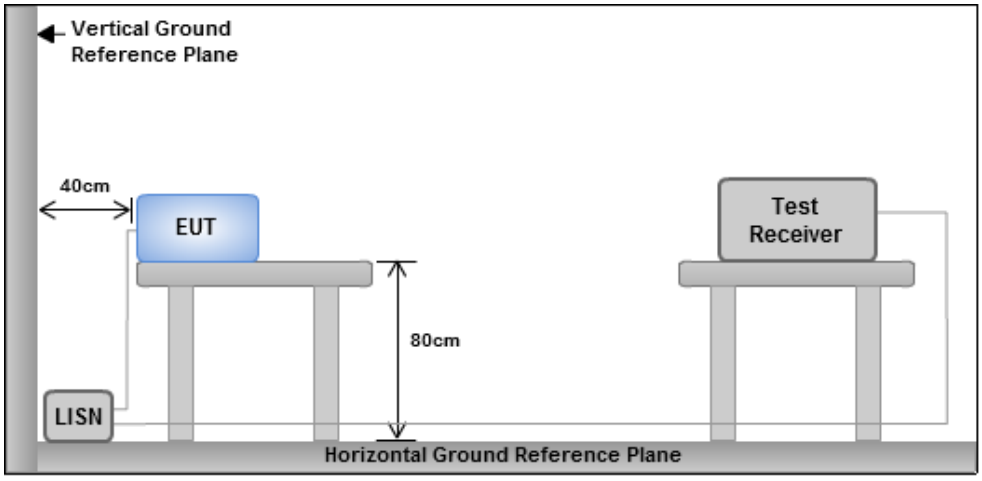
3.6.1 Limit of AC Power Line Conducted Emissions

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

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

==END==

Non-beamforming mode

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	8.5M	12.789M	12M8G1D	7.55M	12.489M
802.11g_Nss1,(6Mbps)_4TX	16.325M	16.998M	17M0D1D	15.675M	16.58M
802.11ax HEW20_Nss1,(MCS0)_4TX	18.675M	19.165M	19M2D1D	16.45M	18.866M
802.11ax HEW40_Nss1,(MCS0)_4TX	37M	37.731M	37M7D1D	33.75M	37.531M

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

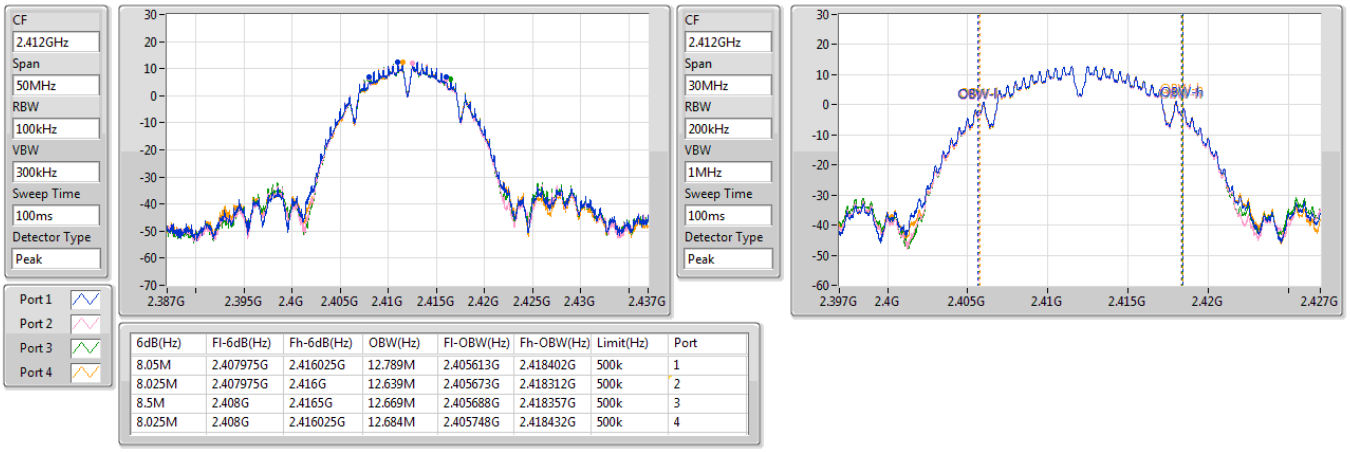
Result

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	8.05M	12.789M	8.025M	12.639M	8.5M	12.669M	8.025M	12.684M
2437MHz	Pass	500k	8.05M	12.744M	7.55M	12.639M	8.05M	12.729M	8.025M	12.669M
2462MHz	Pass	500k	8.05M	12.624M	8.05M	12.654M	8.025M	12.519M	7.55M	12.489M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16M	16.756M	16.275M	16.646M	16.3M	16.646M	16.275M	16.58M
2437MHz	Pass	500k	16.275M	16.866M	16.325M	16.8M	15.675M	16.998M	16.275M	16.888M
2462MHz	Pass	500k	15.775M	16.646M	16.3M	16.646M	16.275M	16.646M	16.275M	16.624M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.5M	18.891M	18.275M	18.866M	18.675M	18.866M	18.25M	18.866M
2437MHz	Pass	500k	18.325M	19.09M	17.9M	19.09M	17.4M	19.165M	18.575M	19.115M
2462MHz	Pass	500k	17.325M	18.991M	18.625M	19.015M	18.55M	18.991M	16.45M	18.941M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	34.05M	37.581M	33.75M	37.581M	35.05M	37.581M	35.05M	37.581M
2437MHz	Pass	500k	35.4M	37.731M	35.1M	37.731M	33.85M	37.731M	36.35M	37.731M
2452MHz	Pass	500k	35.65M	37.731M	37M	37.631M	36.35M	37.681M	35.1M	37.531M

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**

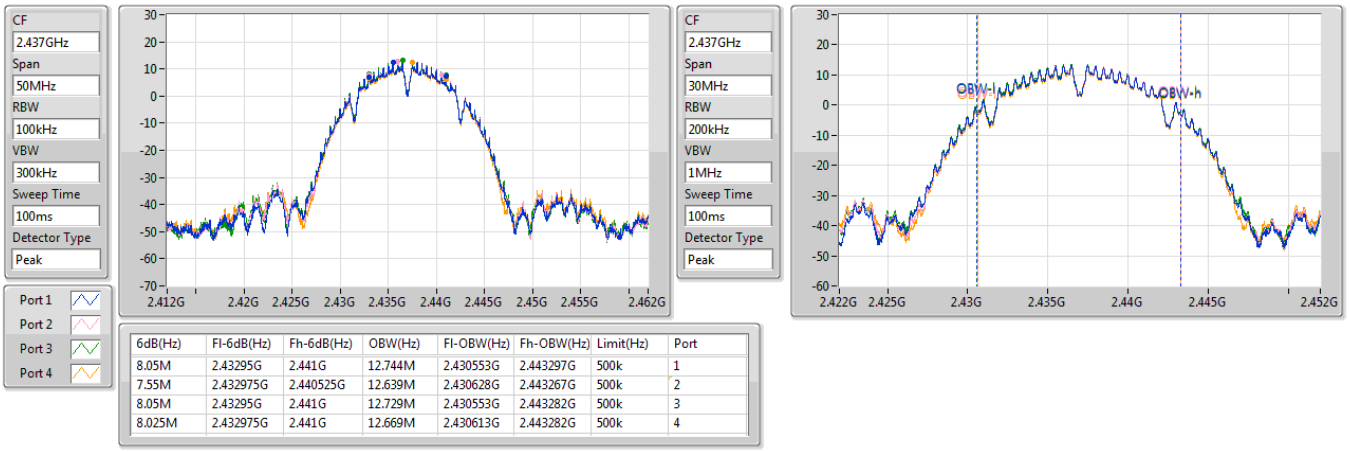
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.407975G	2.416025G	12.789M	2.405613G	2.418402G	500k	1
8.025M	2.407975G	2.416G	12.639M	2.405673G	2.418312G	500k	2
8.5M	2.408G	2.4165G	12.669M	2.405688G	2.418357G	500k	3
8.025M	2.408G	2.416025G	12.684M	2.405748G	2.418432G	500k	4

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

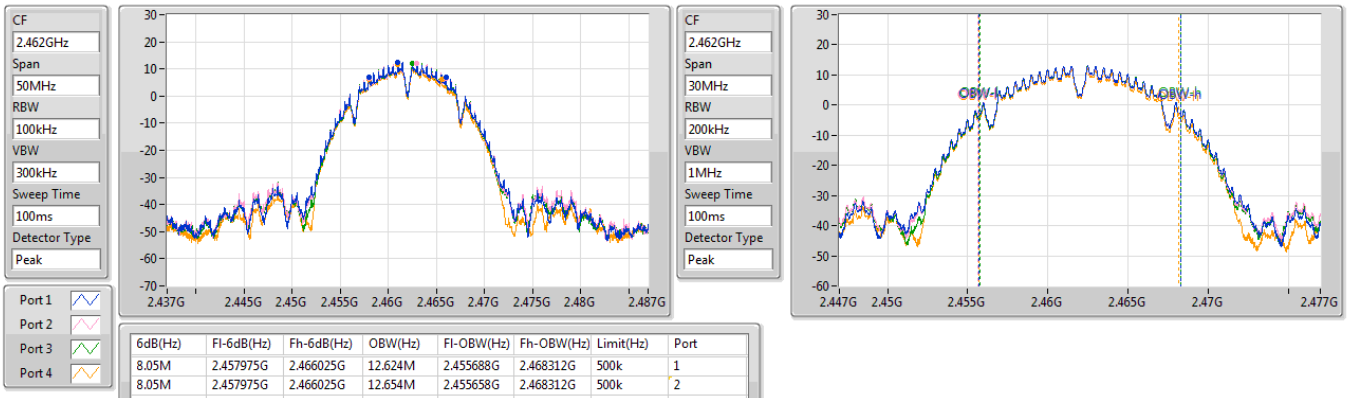
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.43295G	2.441G	12.744M	2.430553G	2.443297G	500k	1
7.55M	2.432975G	2.440525G	12.639M	2.430628G	2.443267G	500k	2
8.05M	2.43295G	2.441G	12.729M	2.430553G	2.443282G	500k	3
8.025M	2.432975G	2.441G	12.669M	2.430613G	2.443282G	500k	4

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

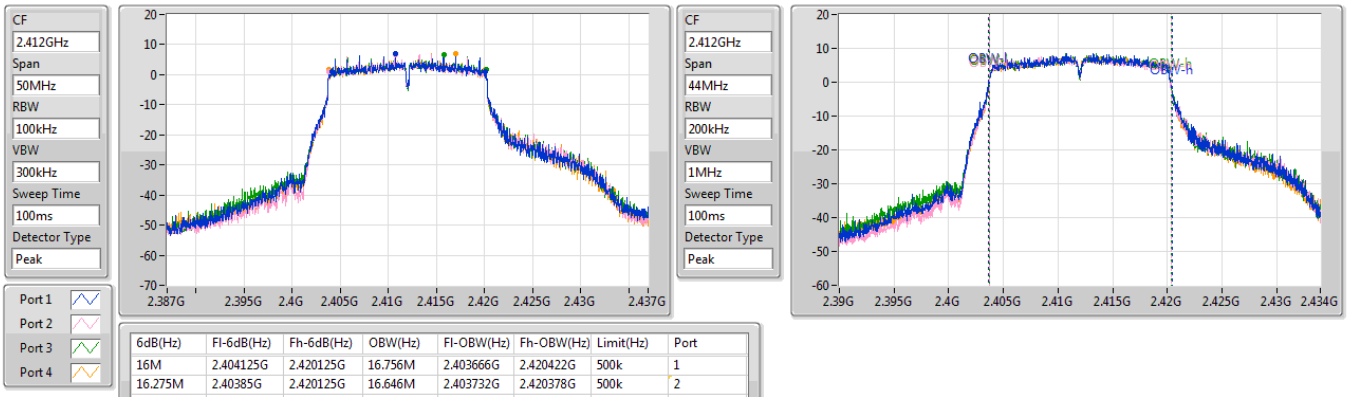
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.457975G	2.466025G	12.624M	2.455688G	2.468312G	500k	1
8.05M	2.457975G	2.466025G	12.654M	2.455658G	2.468312G	500k	2
8.025M	2.457975G	2.466G	12.519M	2.455748G	2.468267G	500k	3
7.55M	2.457975G	2.465525G	12.489M	2.455688G	2.468177G	500k	4

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

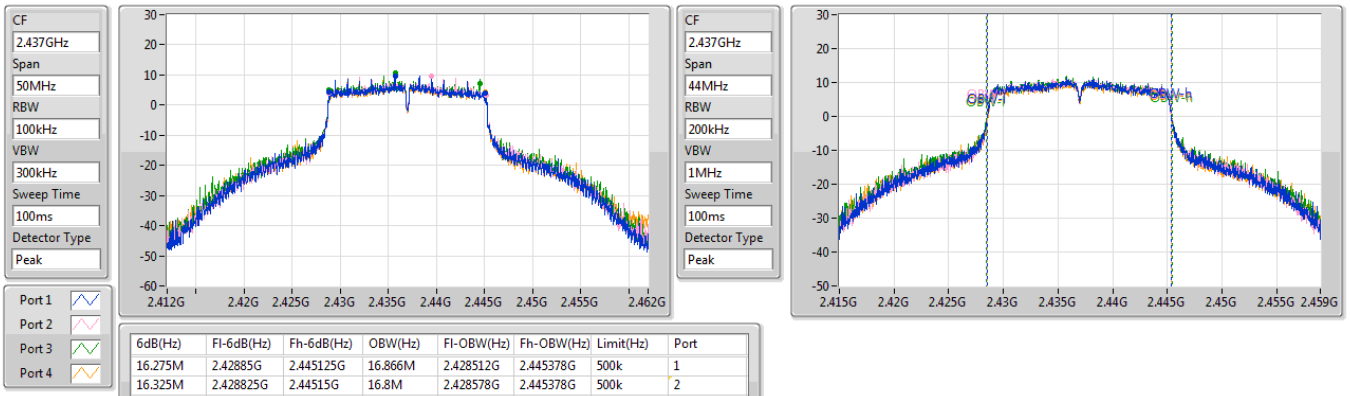
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16M	2.404125G	2.420125G	16.756M	2.403666G	2.420422G	500k	1
16.275M	2.40385G	2.420125G	16.646M	2.403732G	2.420378G	500k	2
16.3M	2.40385G	2.42015G	16.646M	2.403732G	2.420378G	500k	3
16.275M	2.40385G	2.420125G	16.58M	2.403754G	2.420334G	500k	4

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

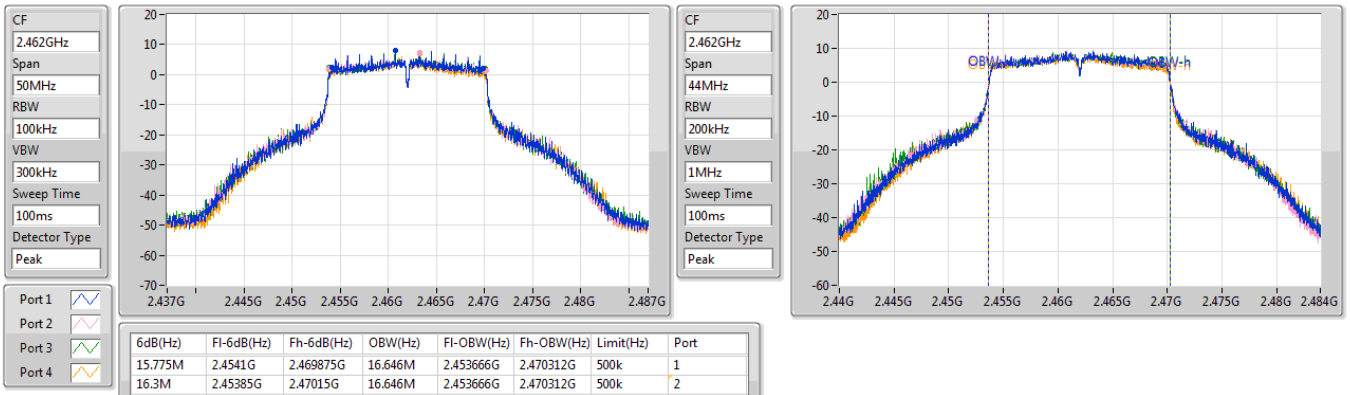
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.42885G	2.445125G	16.866M	2.428512G	2.445378G	500k	1
16.325M	2.428825G	2.44515G	16.8M	2.428578G	2.445378G	500k	2
15.675M	2.42885G	2.444525G	16.998M	2.428424G	2.445422G	500k	3
16.275M	2.42885G	2.445125G	16.888M	2.428512G	2.4454G	500k	4

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

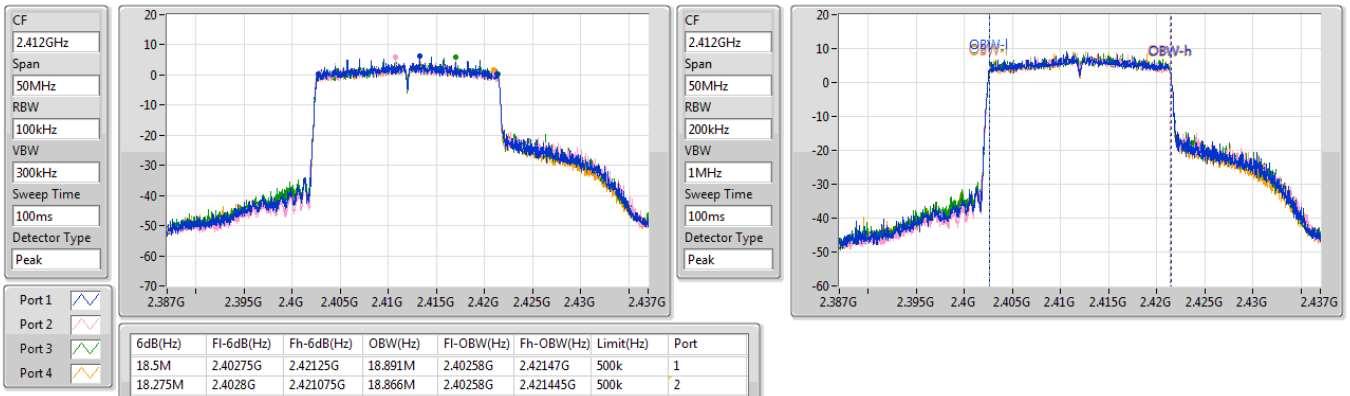
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.775M	2.4541G	2.469875G	16.646M	2.453666G	2.470312G	500k	1
16.3M	2.45385G	2.47015G	16.646M	2.453666G	2.470312G	500k	2
16.275M	2.45385G	2.470125G	16.646M	2.453644G	2.47029G	500k	3
16.275M	2.45385G	2.470125G	16.624M	2.453644G	2.470268G	500k	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

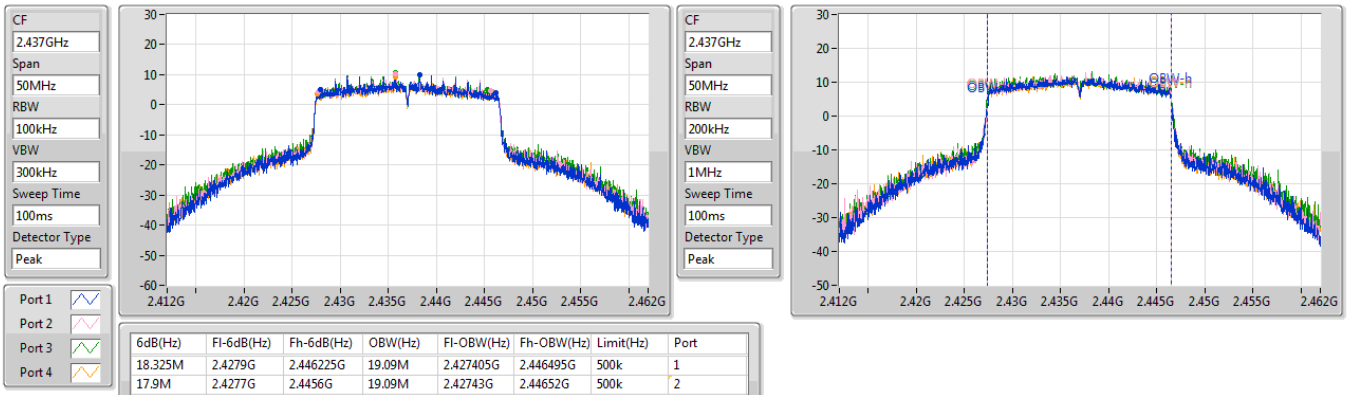
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.5M	2.40275G	2.42125G	18.891M	2.40258G	2.42147G	500k	1
18.275M	2.4028G	2.421075G	18.866M	2.40258G	2.421445G	500k	2
18.675M	2.4027G	2.421375G	18.866M	2.40258G	2.421445G	500k	3
18.25M	2.4027G	2.42095G	18.866M	2.40258G	2.421445G	500k	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

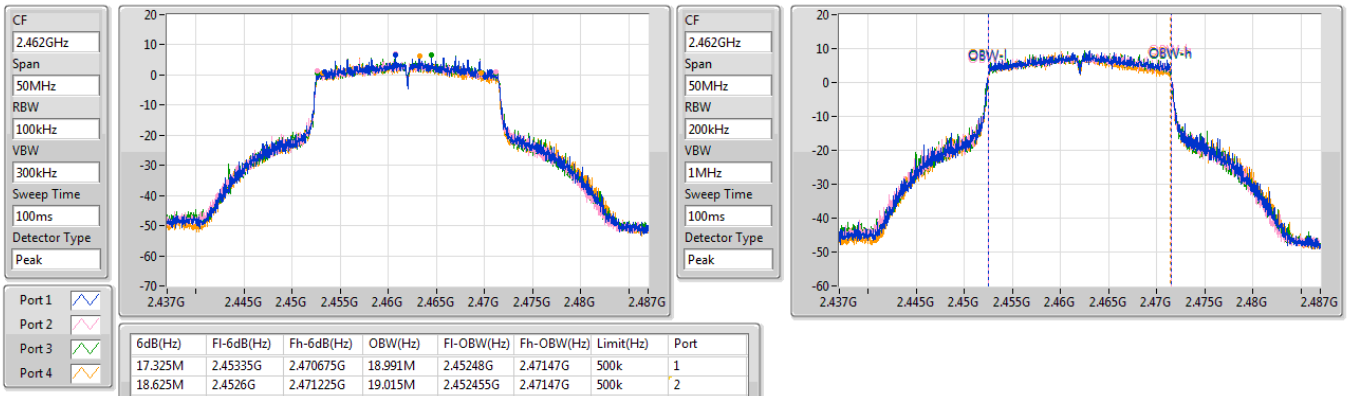
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.325M	2.4279G	2.446225G	19.09M	2.427405G	2.446495G	500k	1
17.9M	2.4277G	2.4456G	19.09M	2.42743G	2.44652G	500k	2
17.4M	2.42795G	2.44535G	19.165M	2.42738G	2.446545G	500k	3
18.575M	2.42765G	2.446225G	19.115M	2.427405G	2.44652G	500k	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **EBW**

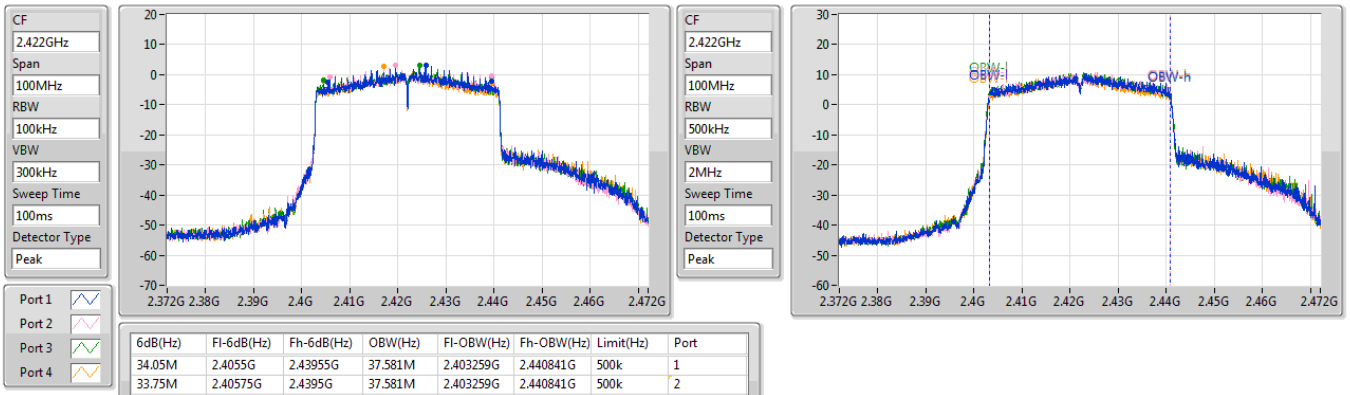
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.325M	2.45335G	2.470675G	18.991M	2.45248G	2.47147G	500k	1
18.625M	2.4526G	2.471225G	19.015M	2.452455G	2.47147G	500k	2
18.55M	2.45265G	2.4712G	18.991M	2.45248G	2.47147G	500k	3
16.45M	2.453175G	2.469625G	18.941M	2.452505G	2.471445G	500k	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

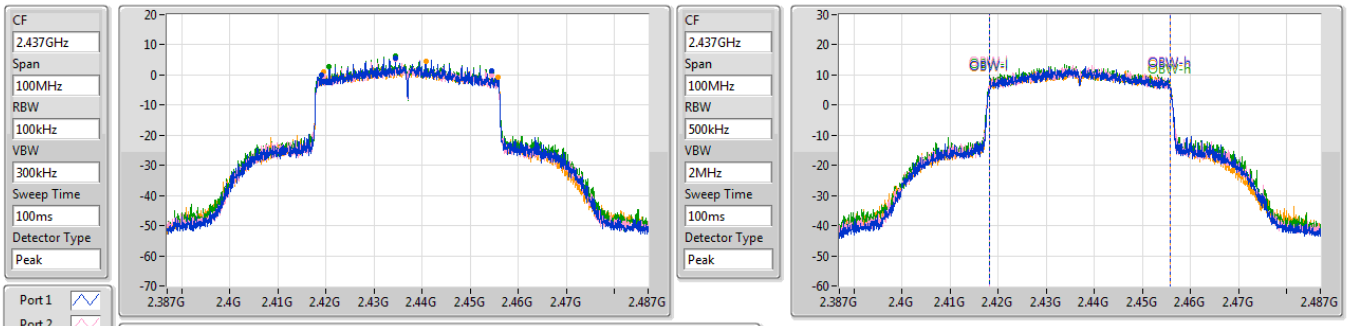
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34.05M	2.4055G	2.43955G	37.581M	2.403259G	2.440841G	500k	1
33.75M	2.40575G	2.4395G	37.581M	2.403259G	2.440841G	500k	2
35.05M	2.40445G	2.4395G	37.581M	2.403259G	2.440841G	500k	3
35.05M	2.4045G	2.43955G	37.581M	2.403259G	2.440841G	500k	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

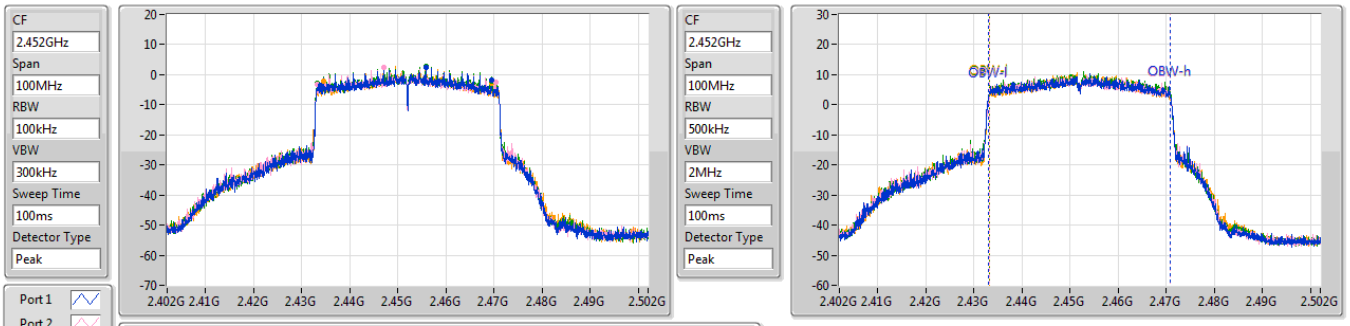
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.4M	2.4191G	2.4545G	37.731M	2.418109G	2.455841G	500k	1
35.1M	2.41945G	2.45455G	37.731M	2.418109G	2.455841G	500k	2
33.85M	2.4207G	2.45455G	37.731M	2.418109G	2.455841G	500k	3
36.35M	2.41945G	2.4558G	37.731M	2.418109G	2.455841G	500k	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.65M	2.43385G	2.4695G	37.731M	2.433059G	2.470791G	500k	1
37M	2.43325G	2.47025G	37.631M	2.433159G	2.470791G	500k	2
36.35M	2.4332G	2.46955G	37.681M	2.433109G	2.470791G	500k	3
35.1M	2.43445G	2.46955G	37.531M	2.433159G	2.470691G	500k	4

Beamforming mode

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19M	19.29M	19M3D1D	18.6M	18.891M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.95M	37.931M	37M9D1D	33.8M	37.331M

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

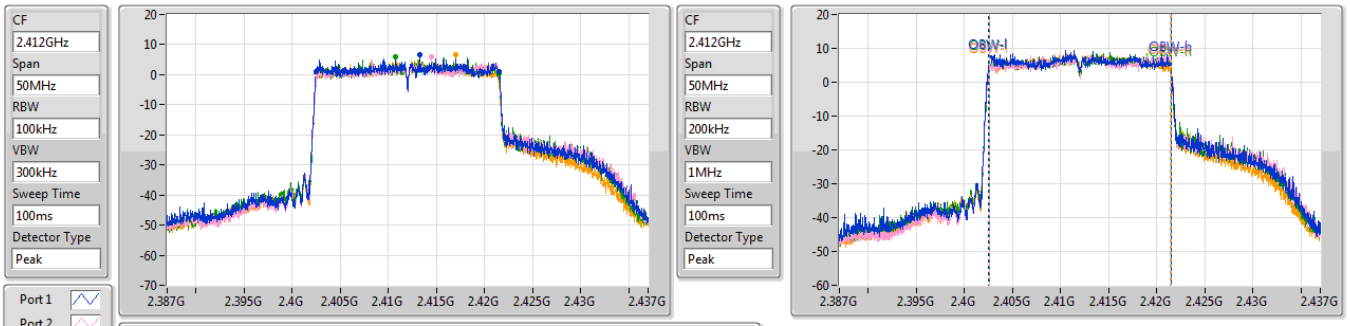
Result

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)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	19M	18.991M	18.85M	18.941M	18.95M	18.941M	18.8M	18.891M
2437MHz	Pass	500k	18.775M	19.29M	18.6M	19.19M	18.825M	19.215M	18.825M	19.165M
2462MHz	Pass	500k	18.9M	19.015M	18.675M	18.966M	18.8M	19.04M	18.875M	19.09M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.5M	37.831M	37.95M	37.931M	33.8M	37.331M	36.25M	37.631M
2437MHz	Pass	500k	37.9M	37.881M	37.05M	37.731M	36.6M	37.781M	37.9M	37.881M
2452MHz	Pass	500k	37.9M	37.931M	37.9M	37.881M	37.9M	37.931M	37.65M	37.731M

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

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

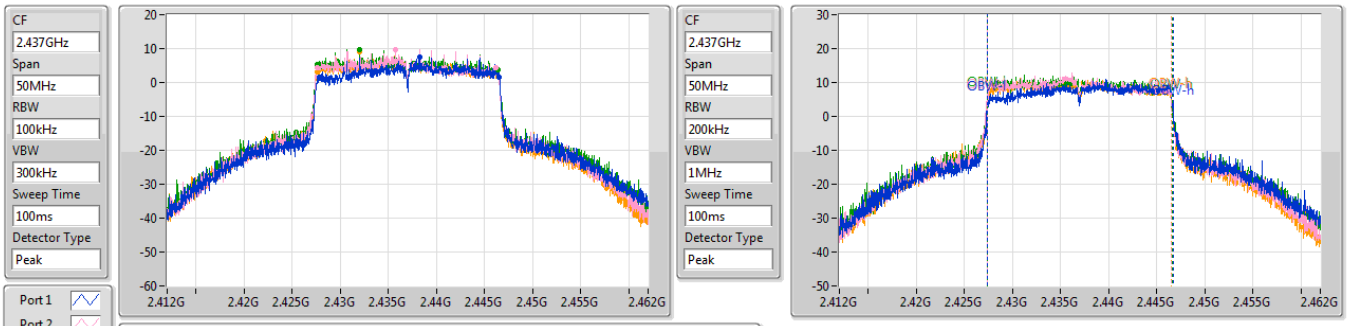
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19M	2.4025G	2.4215G	18.991M	2.402505G	2.421495G	500k	1
18.85M	2.40265G	2.4215G	18.941M	2.40258G	2.42152G	500k	2
18.95M	2.402525G	2.421475G	18.941M	2.402555G	2.421495G	500k	3
18.8M	2.402575G	2.421375G	18.891M	2.402555G	2.421445G	500k	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

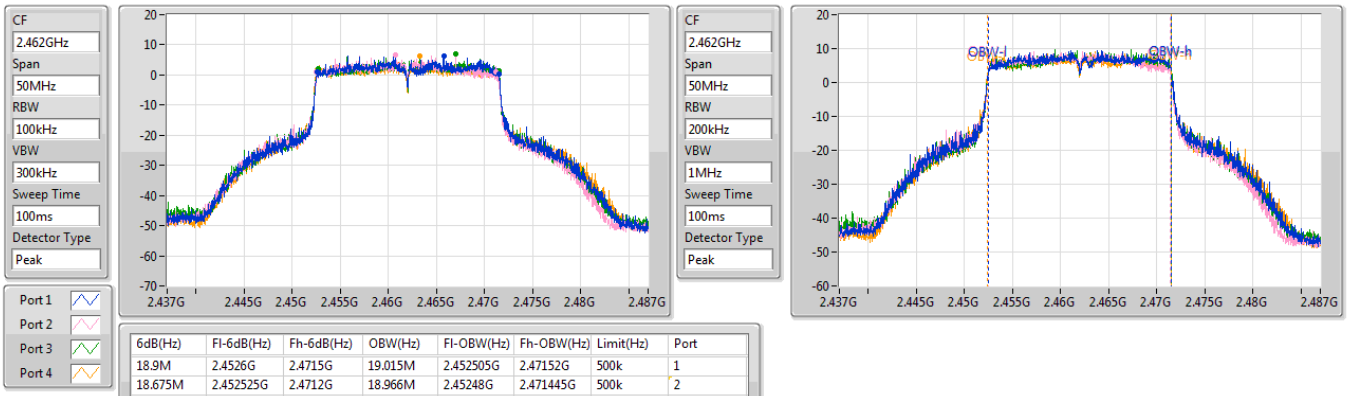
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.775M	2.427775G	2.44655G	19.29M	2.42743G	2.44672G	500k	1
18.6M	2.42755G	2.44615G	19.19M	2.427355G	2.446545G	500k	2
18.825M	2.42755G	2.446375G	19.215M	2.427355G	2.44657G	500k	3
18.825M	2.42755G	2.446375G	19.165M	2.42738G	2.446545G	500k	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **EBW**

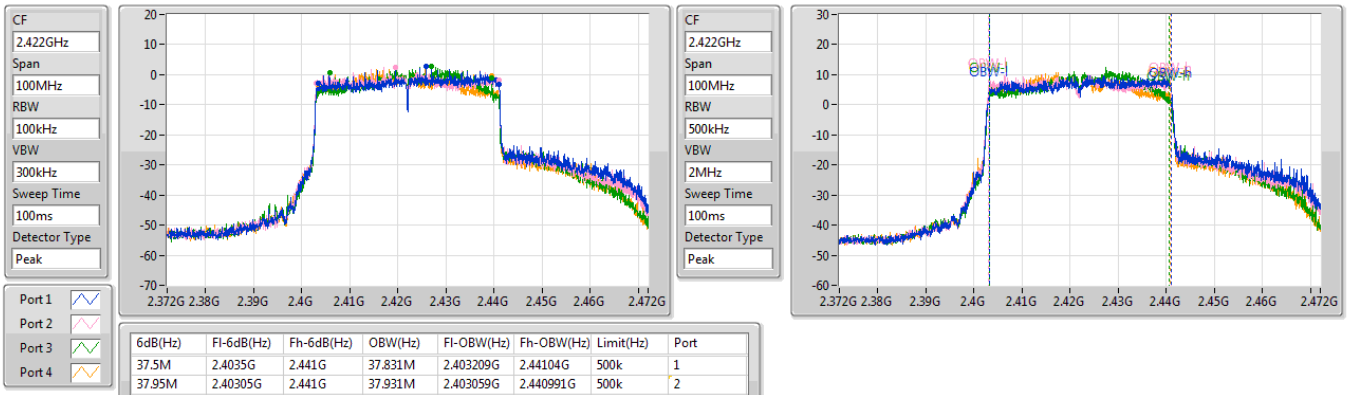
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	2.4526G	2.4715G	19.015M	2.452505G	2.47152G	500k	1
18.675M	2.452525G	2.4712G	18.966M	2.45248G	2.471445G	500k	2
18.8M	2.452675G	2.471475G	19.04M	2.45248G	2.47152G	500k	3
18.875M	2.45255G	2.471425G	19.09M	2.45243G	2.47152G	500k	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

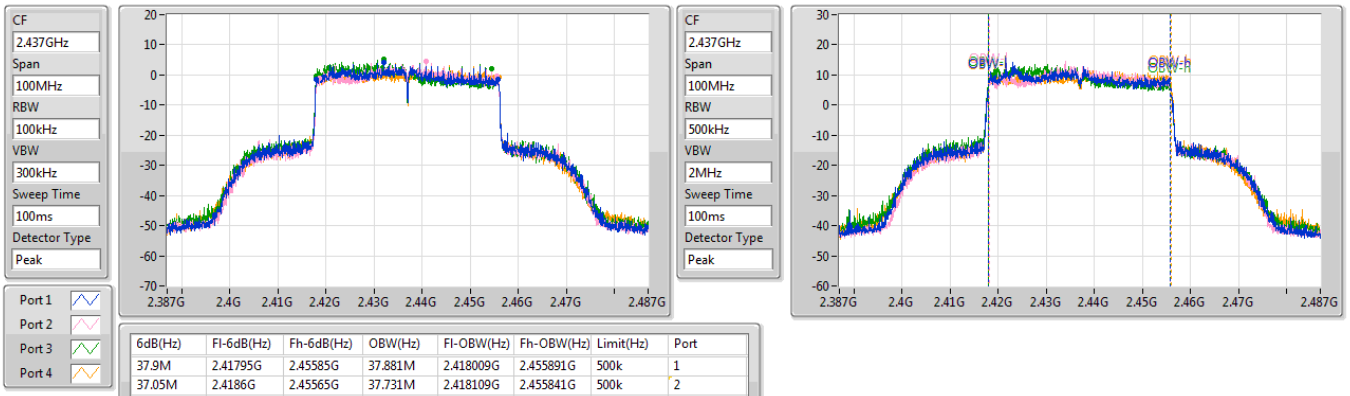
2422MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.5M	2.4035G	2.441G	37.831M	2.403209G	2.44104G	500k	1
37.95M	2.40305G	2.441G	37.931M	2.403059G	2.440991G	500k	2
33.8M	2.40575G	2.43955G	37.331M	2.403309G	2.440641G	500k	3
36.25M	2.40325G	2.4395G	37.631M	2.403109G	2.440741G	500k	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

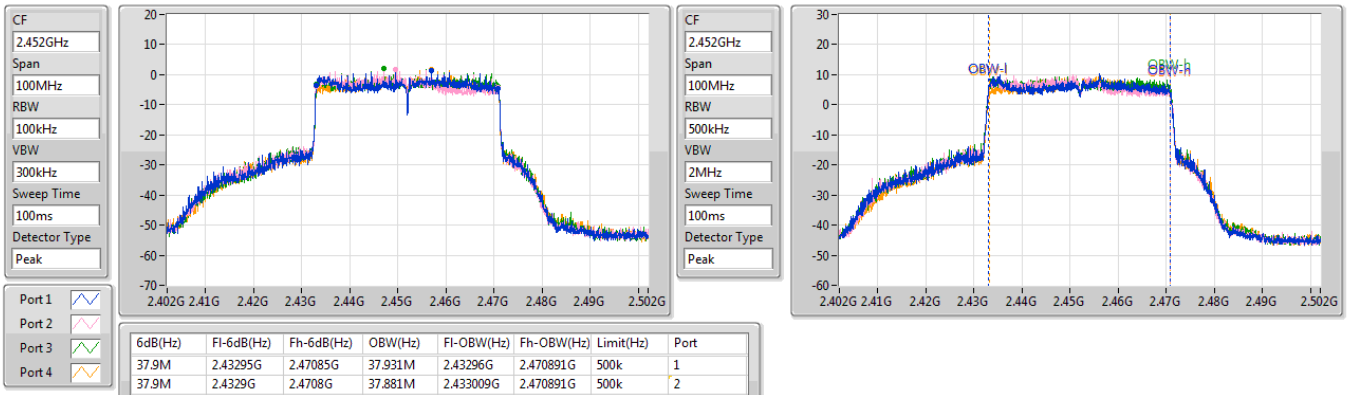
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.9M	2.41795G	2.45585G	37.881M	2.418009G	2.455891G	500k	1
37.05M	2.4186G	2.45565G	37.731M	2.418109G	2.455841G	500k	2
36.6M	2.41795G	2.45455G	37.781M	2.41796G	2.455741G	500k	3
37.9M	2.41805G	2.45595G	37.881M	2.418059G	2.455941G	500k	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **EBW**

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.9M	2.43295G	2.47085G	37.931M	2.43296G	2.470891G	500k	1
37.9M	2.4329G	2.4708G	37.881M	2.433009G	2.470891G	500k	2
37.9M	2.43295G	2.47085G	37.931M	2.43296G	2.470891G	500k	3
37.65M	2.43305G	2.4707G	37.731M	2.433109G	2.470841G	500k	4

Non-beamforming mode

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	27.02	0.50350
802.11g_Nss1,(6Mbps)_4TX	26.53	0.44978
802.11ax HEW20_Nss1,(MCS0)_4TX	26.63	0.46026
802.11ax HEW40_Nss1,(MCS0)_4TX	24.42	0.27669

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	4.574	20.15	21.03	20.17	20.38	26.47	30.00	31.04	36.00
2437MHz	Pass	4.574	21.12	21.13	21.26	20.46	27.02	30.00	31.59	36.00
2462MHz	Pass	4.574	20.94	20.63	20.46	19.79	26.50	30.00	31.07	36.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.574	17.73	18.38	17.72	17.85	23.95	30.00	28.52	36.00
2437MHz	Pass	4.574	20.62	20.56	20.81	20.02	26.53	30.00	31.10	36.00
2462MHz	Pass	4.574	18.46	18.03	18.06	17.73	24.10	30.00	28.67	36.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	4.574	16.78	17.46	16.84	16.89	23.02	30.00	27.59	36.00
2437MHz	Pass	4.574	20.72	20.71	20.83	20.15	26.63	30.00	31.20	36.00
2462MHz	Pass	4.574	17.58	17.13	17.18	16.77	23.20	30.00	27.77	36.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	4.574	15.78	16.33	15.68	15.42	21.84	30.00	26.41	36.00
2437MHz	Pass	4.574	18.18	18.76	18.48	18.14	24.42	30.00	28.99	36.00
2452MHz	Pass	4.574	15.38	15.82	15.52	15.61	21.61	30.00	26.18	36.00

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)_4TX	26.04	0.40179
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	23.95	0.24831

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)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	9.715	16.75	17.22	16.85	16.91	22.96	26.29	32.67	36.00
2437MHz	Pass	9.715	19.66	20.54	20.05	19.76	26.04	26.29	35.75	36.00
2462MHz	Pass	9.715	17.39	16.71	16.65	16.77	22.91	26.29	32.62	36.00
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	9.715	15.63	16.02	15.72	15.42	21.72	26.29	31.43	36.00
2437MHz	Pass	9.715	17.76	17.85	18.35	17.72	23.95	26.29	33.66	36.00
2452MHz	Pass	9.715	14.74	15.51	15.12	15.55	21.26	26.29	30.98	36.00

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

Note : Conducted average output power is for reference

Remark:

Directional gain = 10 x log($(10^{3.618/20}+10^{3.414/20}+10^{3.099/20}+10^{4.574/20})^2/4$) = 9.71 dBi > 6dBi, so the limit shall be reduced to 30 dBm – (9.715dBi – 6dBi) = 26.29 dBm

Non-beamforming mode

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	-3.71
802.11g_Nss1,(6Mbps)_4TX	-6.23
802.11ax HEW20_Nss1,(MCS0)_4TX	-6.29
802.11ax HEW40_Nss1,(MCS0)_4TX	-10.65

RBW = 3kHz;

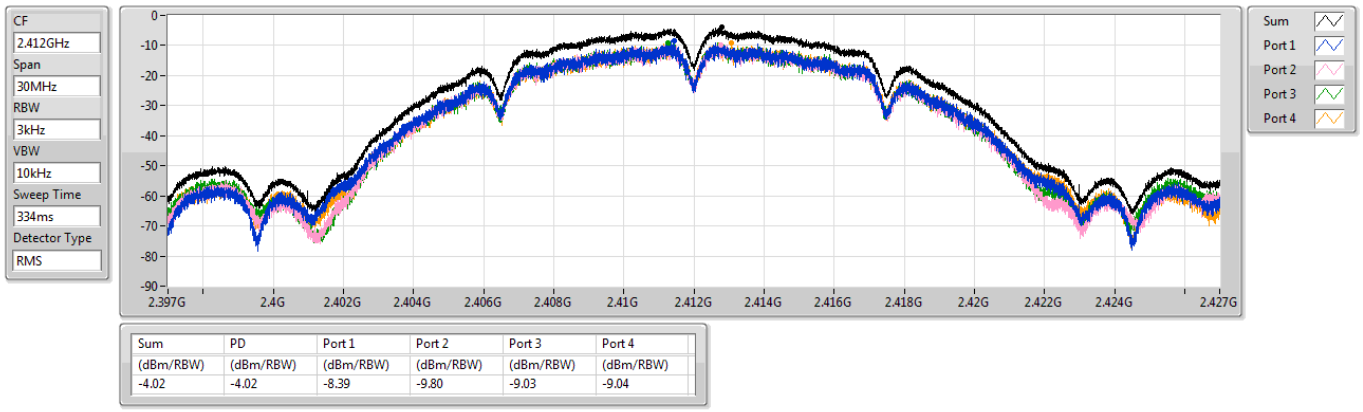
Result

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	9.715	-8.39	-9.80	-9.03	-9.04	-4.02	4.29
2437MHz	Pass	9.715	-8.74	-8.07	-8.40	-9.21	-3.71	4.29
2462MHz	Pass	9.715	-9.22	-9.11	-8.93	-9.45	-4.25	4.29
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.715	-14.25	-13.50	-13.58	-13.34	-8.85	4.29
2437MHz	Pass	9.715	-11.38	-10.62	-10.47	-11.06	-6.23	4.29
2462MHz	Pass	9.715	-12.07	-13.44	-12.98	-13.71	-7.98	4.29
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.715	-16.18	-14.68	-15.67	-15.90	-10.36	4.29
2437MHz	Pass	9.715	-11.37	-12.14	-11.78	-11.45	-6.29	4.29
2462MHz	Pass	9.715	-15.37	-14.14	-15.52	-14.23	-9.18	4.29
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	9.715	-19.41	-18.10	-18.13	-19.05	-13.51	4.29
2437MHz	Pass	9.715	-16.73	-16.53	-16.15	-15.71	-10.65	4.29
2452MHz	Pass	9.715	-18.13	-18.87	-18.62	-18.49	-13.12	4.29

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($(10^{3.618/20}+10^{3.414/20}+10^{3.099/20}+10^{4.574/20})^2/4$) = 9.71 dBi >6 dBi, limit shall be reduced to 8 dBm – (9.71 dBi – 6 dBi) = 4.29 dBm

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

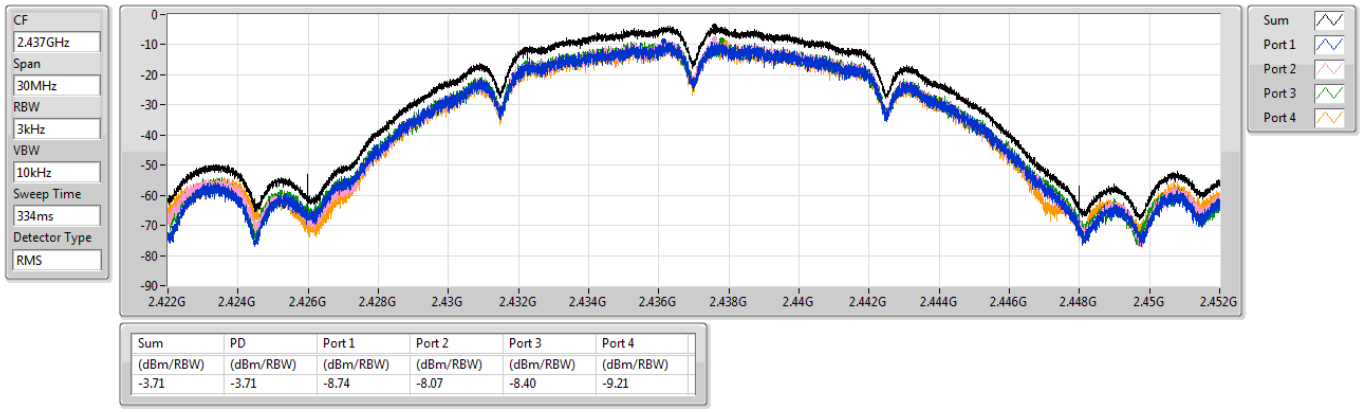
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.02	-4.02	-8.39	-9.80	-9.03	-9.04

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

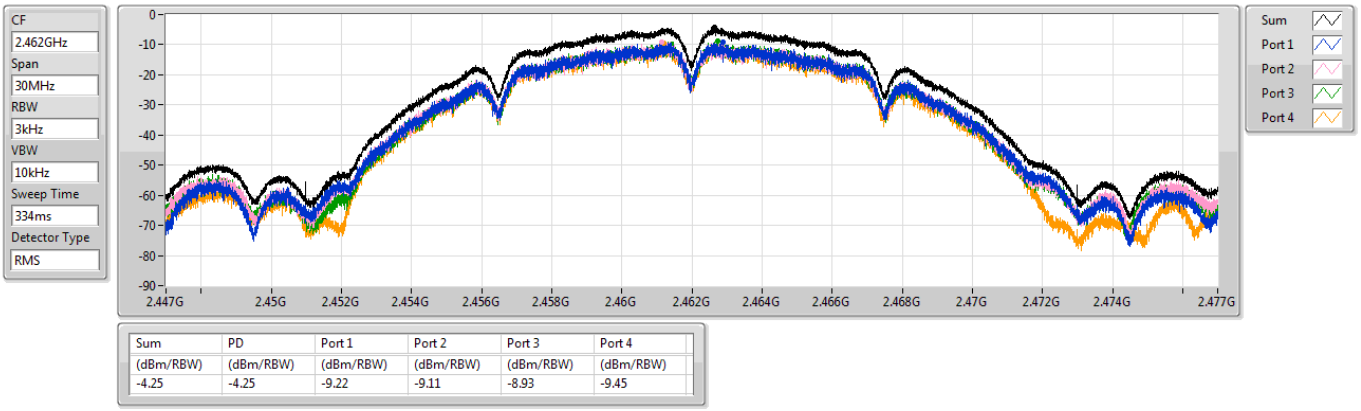
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.71	-3.71	-8.74	-8.07	-8.40	-9.21

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

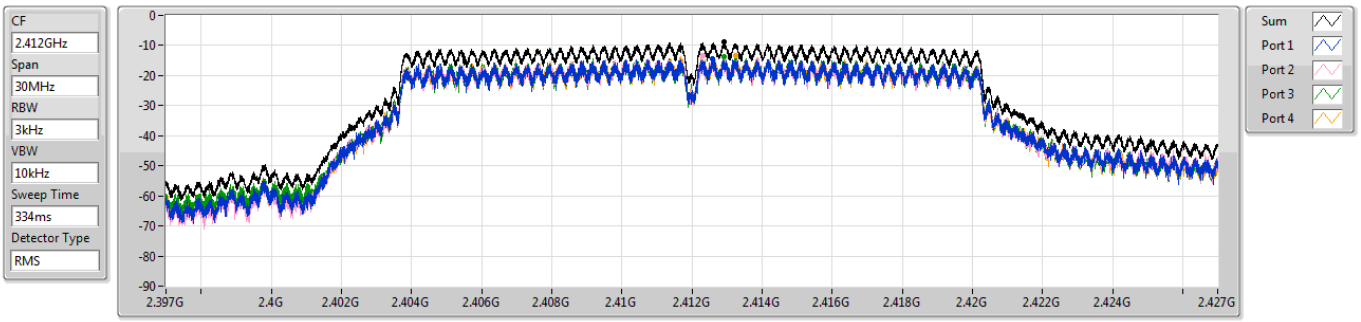
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.25	-4.25	-9.22	-9.11	-8.93	-9.45

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

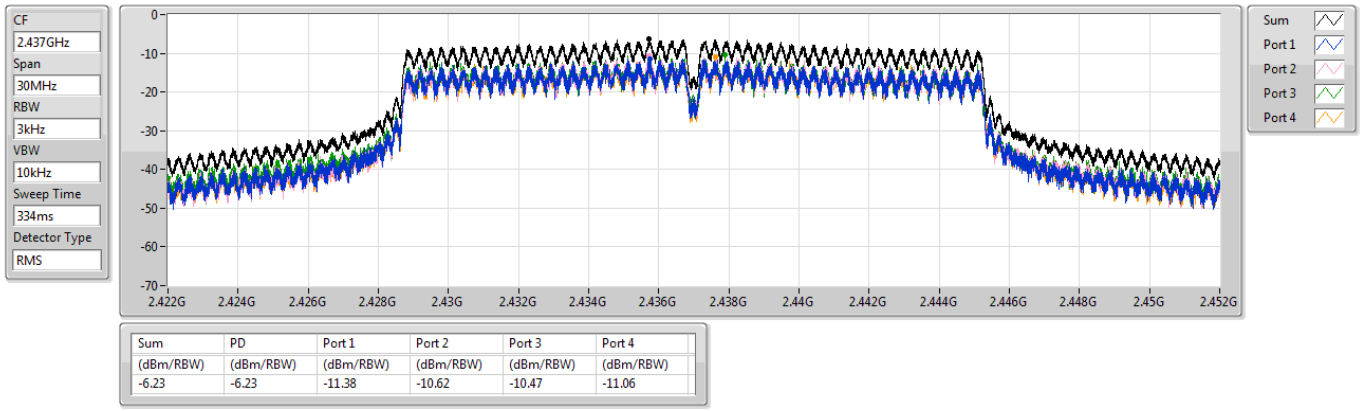
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.85	-8.85	-14.25	-13.50	-13.58	-13.34

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

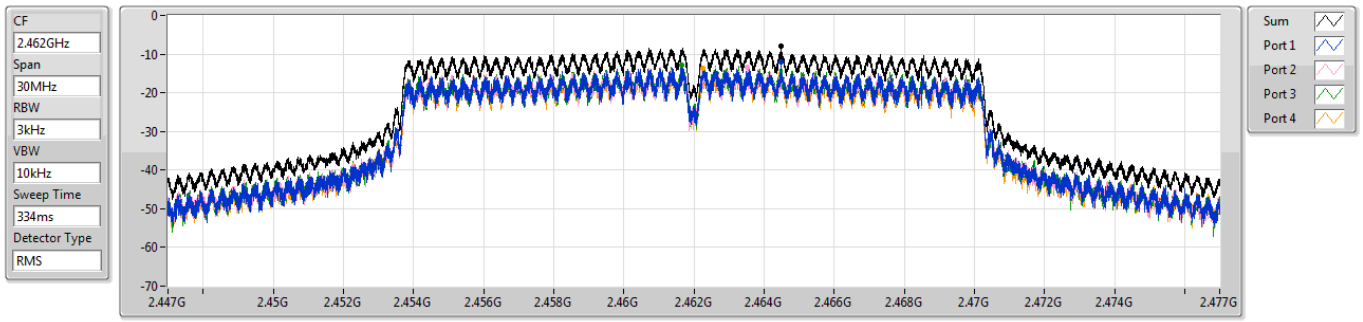
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.23	-6.23	-11.38	-10.62	-10.47	-11.06

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

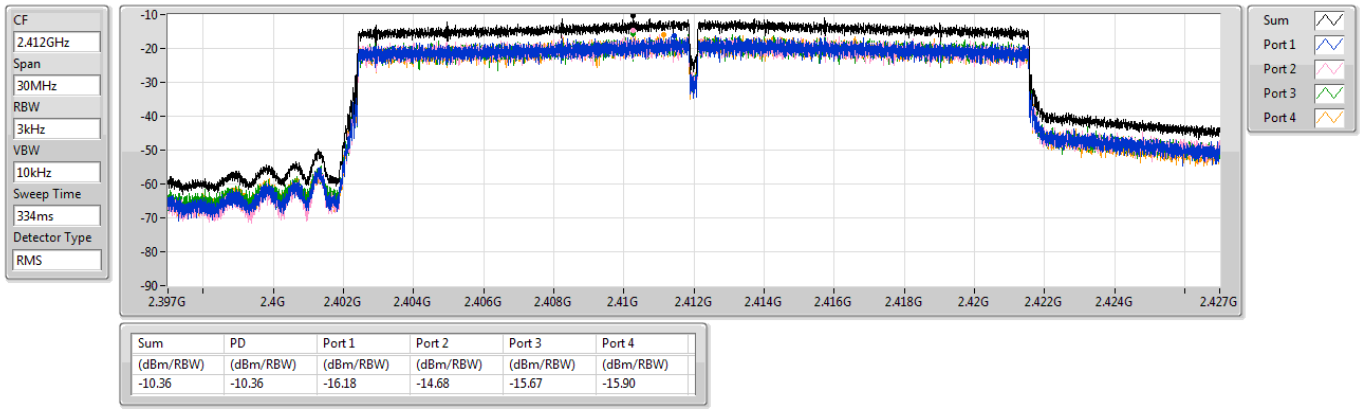
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.98	-7.98	-12.07	-13.44	-12.98	-13.71

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

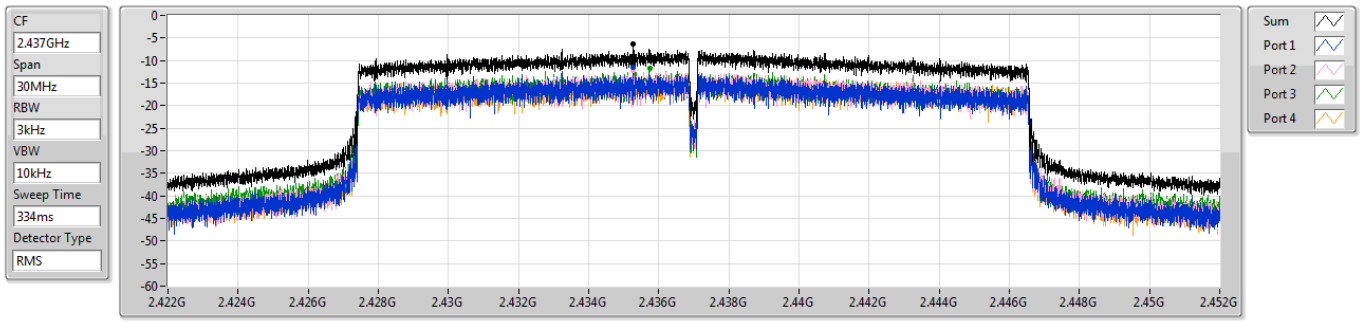
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.36	-10.36	-16.18	-14.68	-15.67	-15.90

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

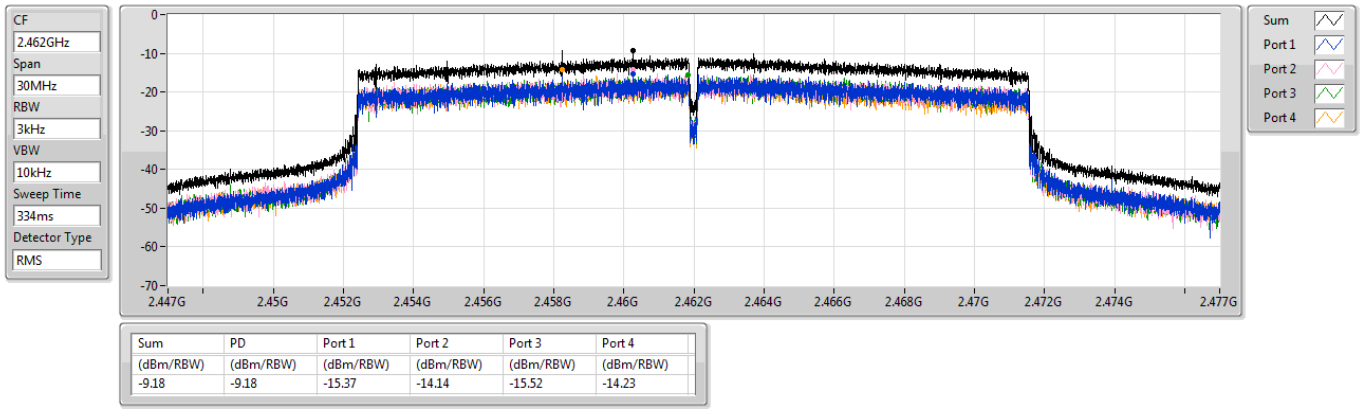
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.29	-6.29	-11.37	-12.14	-11.78	-11.45

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **PSD**

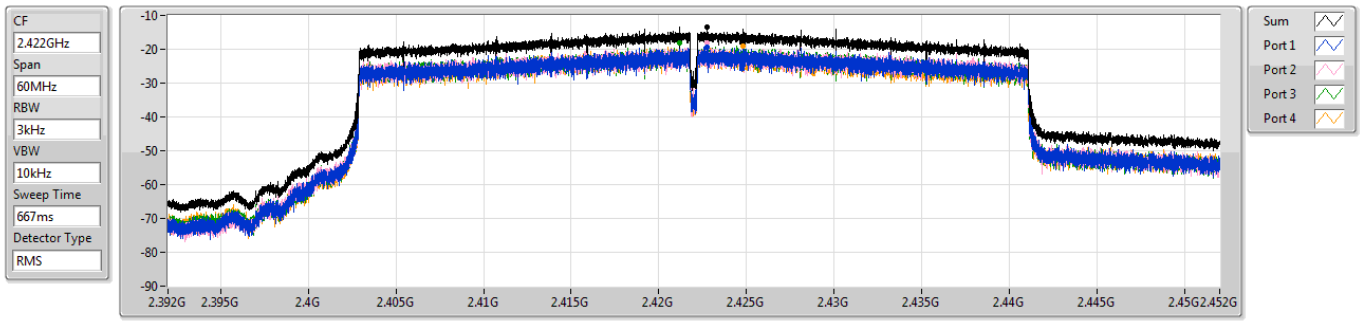
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.18	-9.18	-15.37	-14.14	-15.52	-14.23

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

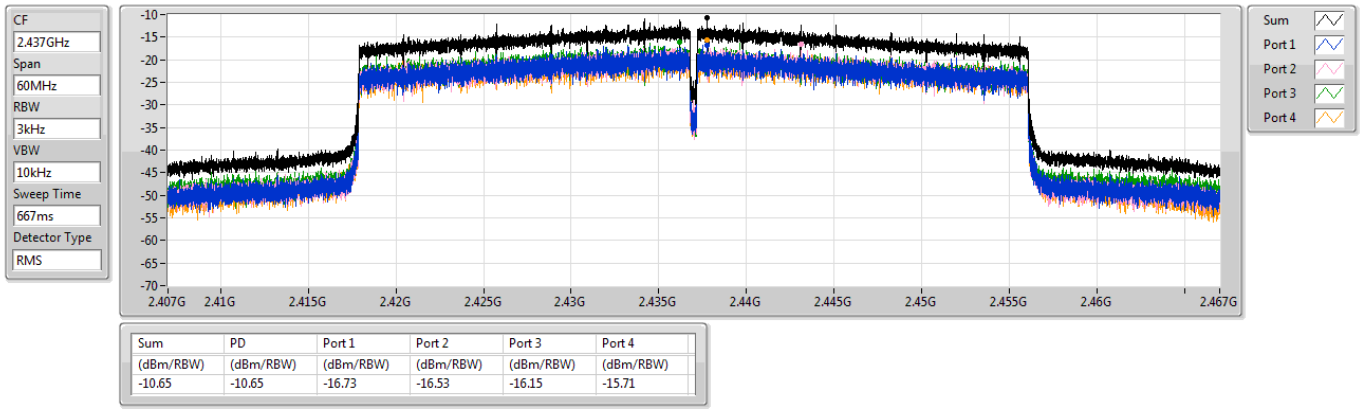
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.51	-13.51	-19.41	-18.10	-18.13	-19.05

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **PSD**

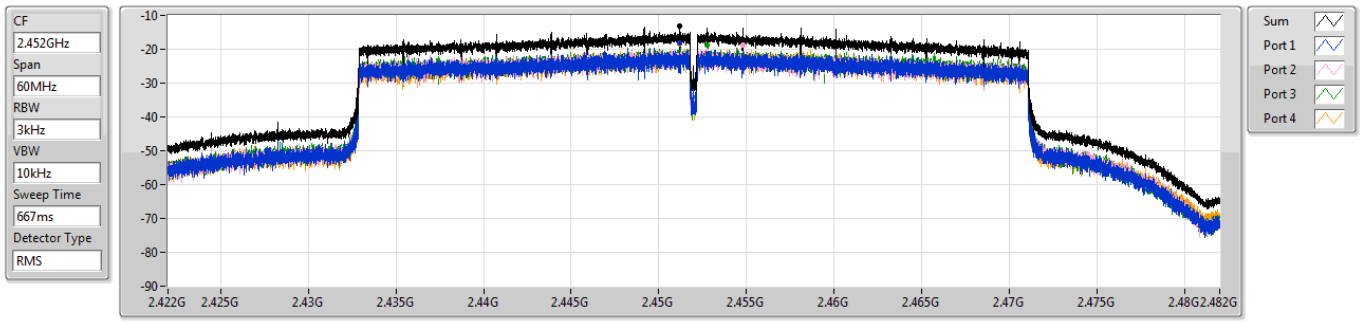
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.65	-10.65	-16.73	-16.53	-16.15	-15.71

2.4-2.4835GHz_802.11ax HEW40_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)
-13.12	-13.12	-18.13	-18.87	-18.62	-18.49

Beamforming mode

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-8.11
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-12.00

RBW = 3kHz;

Result

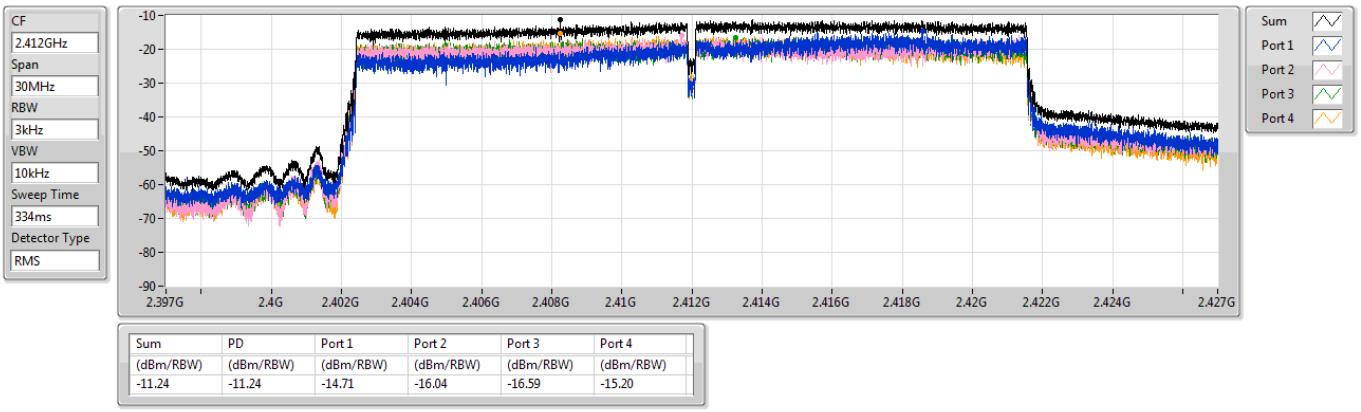
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	9.715	-14.71	-16.04	-16.59	-15.20	-11.24	4.29
2437MHz	Pass	9.715	-13.14	-12.07	-12.46	-14.03	-8.11	4.29
2462MHz	Pass	9.715	-14.81	-15.32	-14.73	-16.18	-10.37	4.29
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	9.715	-19.93	-19.57	-17.69	-19.43	-13.97	4.29
2437MHz	Pass	9.715	-17.02	-16.53	-15.23	-18.54	-12.00	4.29
2452MHz	Pass	9.715	-17.95	-17.57	-20.48	-19.95	-15.17	4.29

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;

Remark:
Directional gain = 10 x log(($10^{3.618/20}$+$10^{3.414/20}$+$10^{3.099/20}$+$10^{4.574/20}$)^2/4) = 9.71 dBi > 6dBi, so the limit shall be reduced to 8 dBm – (9.715dBi – 6dBi) = 4.29 dBm

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **PSD**

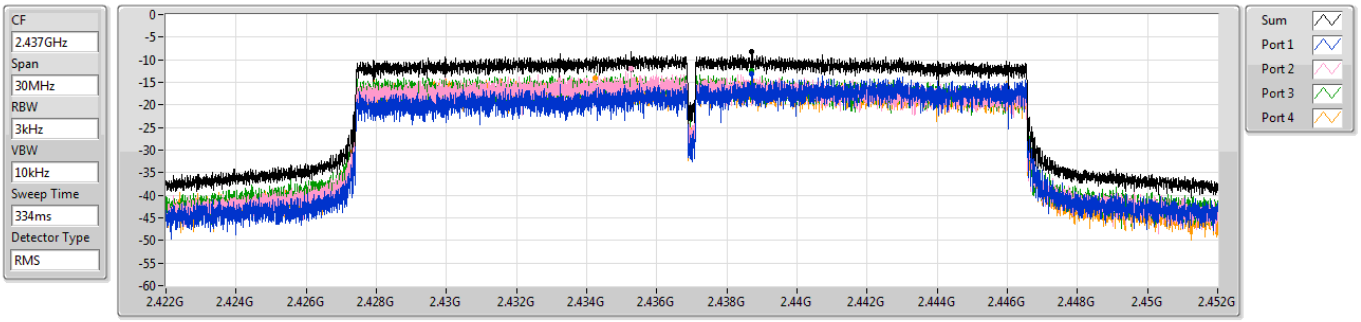
2412MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.24	-11.24	-14.71	-16.04	-16.59	-15.20

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **PSD**

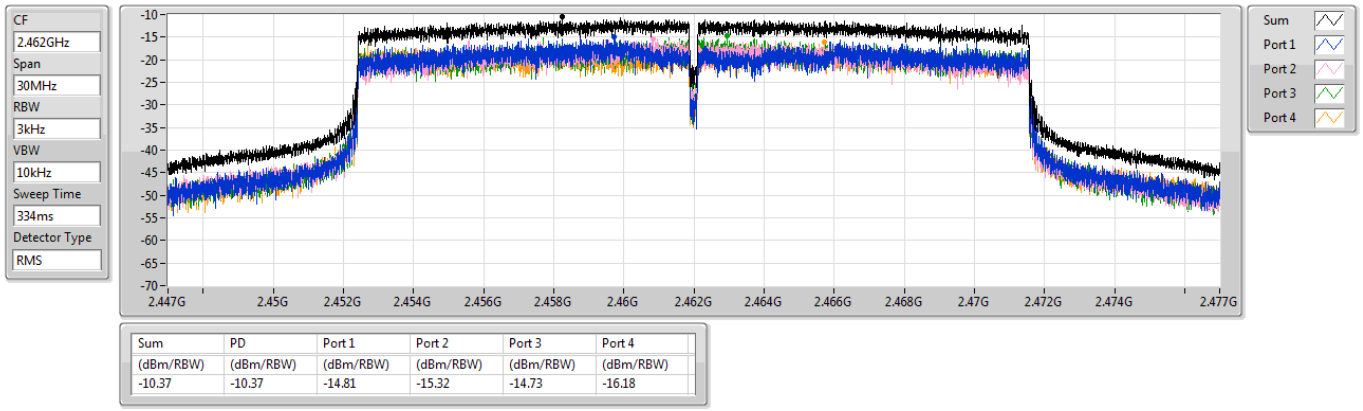
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.11	-8.11	-13.14	-12.07	-12.46	-14.03

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **PSD**

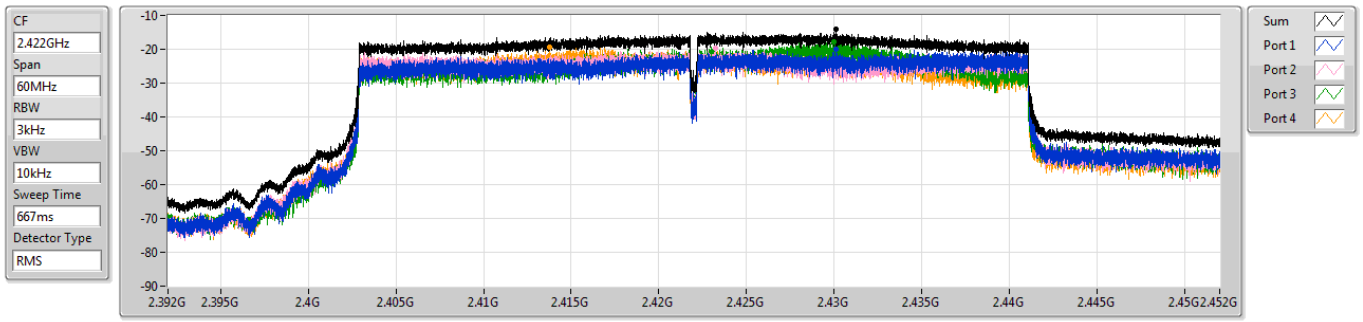
2462MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.37	-10.37	-14.81	-15.32	-14.73	-16.18

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **PSD**

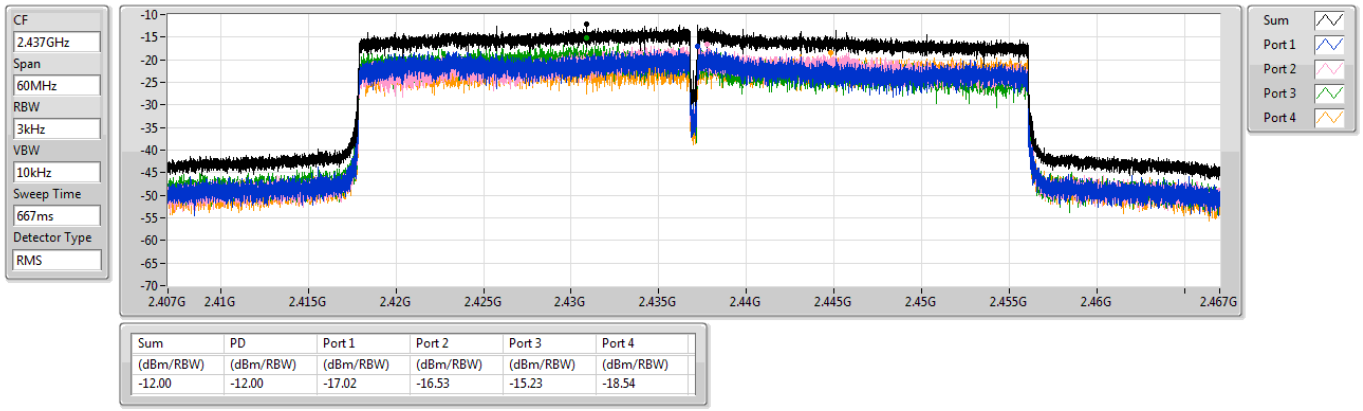
2422MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.97	-13.97	-19.93	-19.57	-17.69	-19.43

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **PSD**

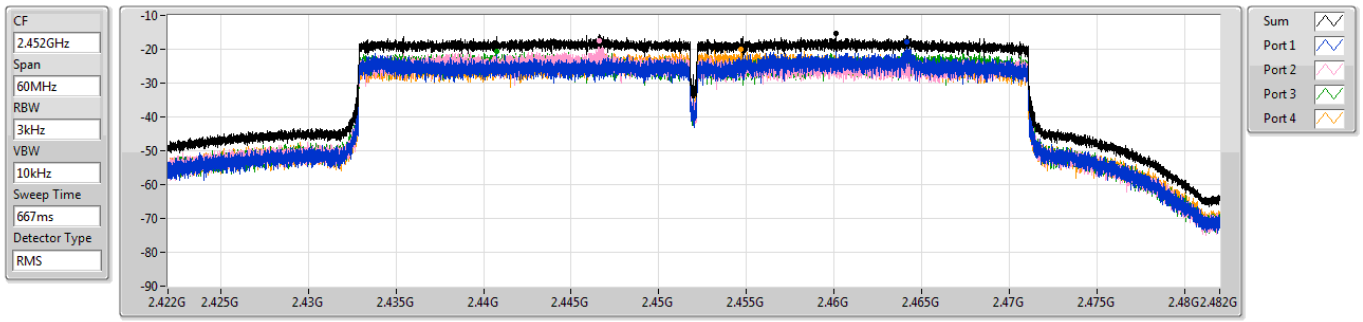
2437MHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.00	-12.00	-17.02	-16.53	-15.23	-18.54

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **PSD**

2452MHz



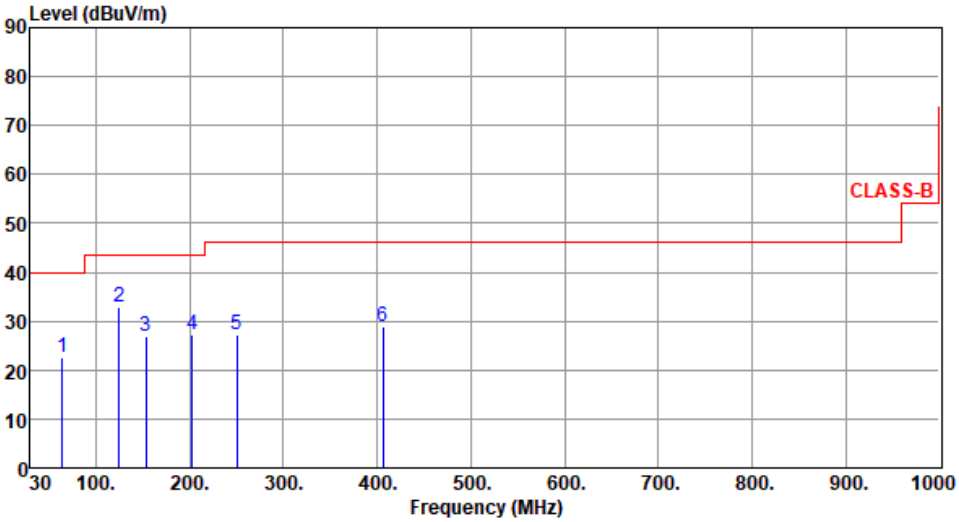
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.17	-15.17	-17.95	-17.57	-20.48	-19.95

Non-beamforming mode

Unwanted Emissions (Below 1GHz)

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

Test By :Brad Wu Temperature(℃):24 Humidity(%):63

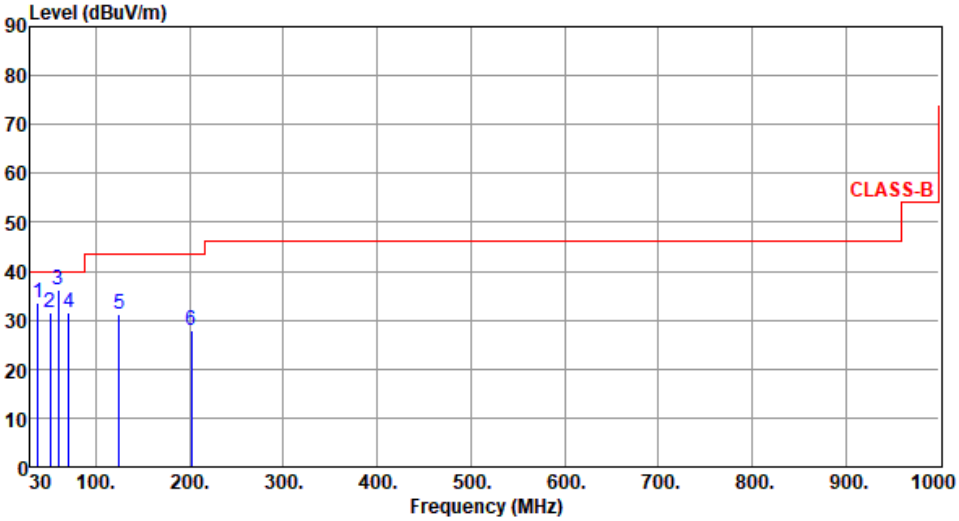


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	63.95	22.75	40.00	-17.25	32.57	-9.82	Peak	---	---
2	125.06	33.00	43.50	-10.50	43.80	-10.80	Peak	---	---
3	153.19	26.89	43.50	-16.61	35.92	-9.03	Peak	---	---
4	202.66	27.17	43.50	-16.33	39.08	-11.91	Peak	---	---
5	250.19	27.14	46.00	-18.86	37.19	-10.05	Peak	---	---
6	406.36	28.84	46.00	-17.16	34.32	-5.48	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	11b	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):24 Humidity(%):63



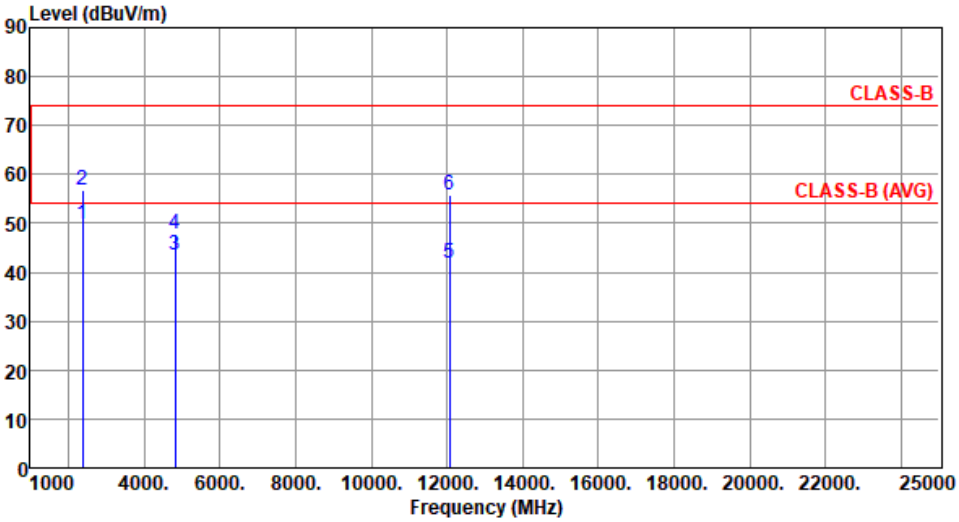
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	37.76	33.49	40.00	-6.51	42.45	-8.96	Peak	---	---
2	51.34	31.60	40.00	-8.40	39.80	-8.20	QP	100	20
3	60.07	36.10	40.00	-3.90	45.04	-8.94	Peak	---	---
4	70.74	31.50	40.00	-8.50	42.82	-11.32	Peak	---	---
5	125.06	31.09	43.50	-12.41	41.89	-10.80	Peak	---	---
6	201.69	27.76	43.50	-15.74	39.65	-11.89	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(℃):24 Humidity(%):62

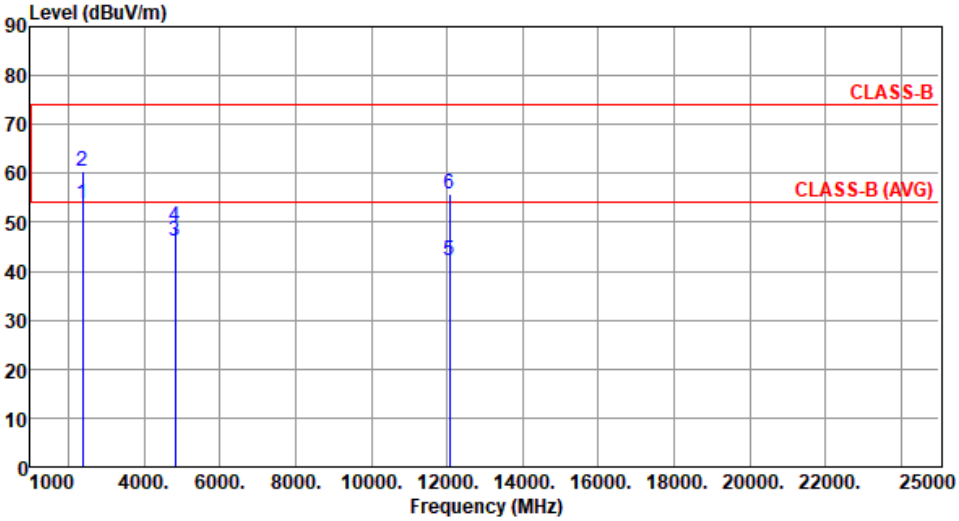


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.97	54.00	-4.03	54.62	-4.65	Average	151	21
2	2390.00	56.83	74.00	-17.17	61.48	-4.65	Peak	151	21
3	4824.00	43.53	54.00	-10.47	44.06	-0.53	Average	302	341
4	4824.00	47.68	74.00	-26.32	48.21	-0.53	Peak	302	341
5	12060.00	41.85	54.00	-12.15	35.48	6.37	Average	100	241
6	12060.00	55.63	74.00	-18.37	49.26	6.37	Peak	100	241

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(℃):24 Humidity(%):62

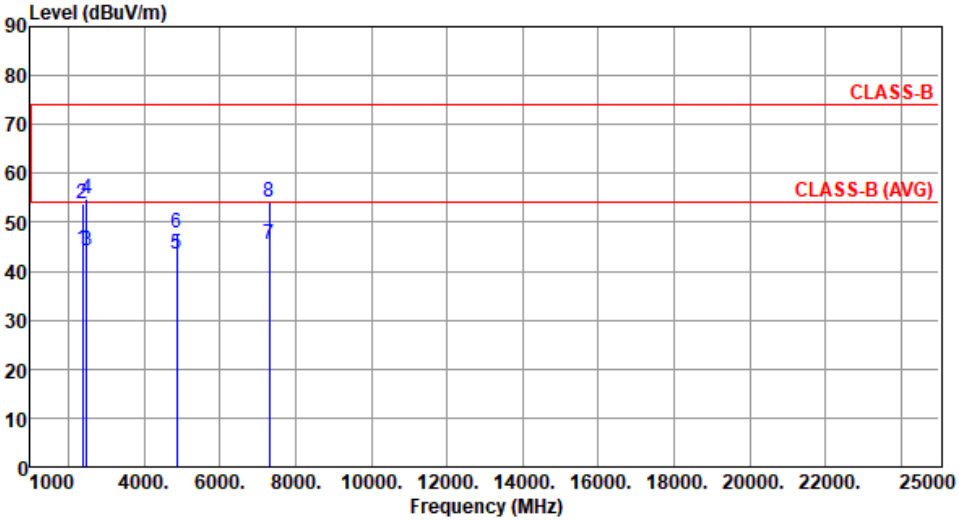


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.86	54.00	-0.14	58.51	-4.65	Average	197	118
2	2390.00	60.46	74.00	-13.54	65.11	-4.65	Peak	197	118
3	4824.00	46.00	54.00	-8.00	46.53	-0.53	Average	258	109
4	4824.00	49.14	74.00	-24.86	49.67	-0.53	Peak	258	109
5	12060.00	42.05	54.00	-11.95	35.68	6.37	Average	100	159
6	12060.00	55.68	74.00	-18.32	49.31	6.37	Peak	100	159

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(℃):24 Humidity(%):63

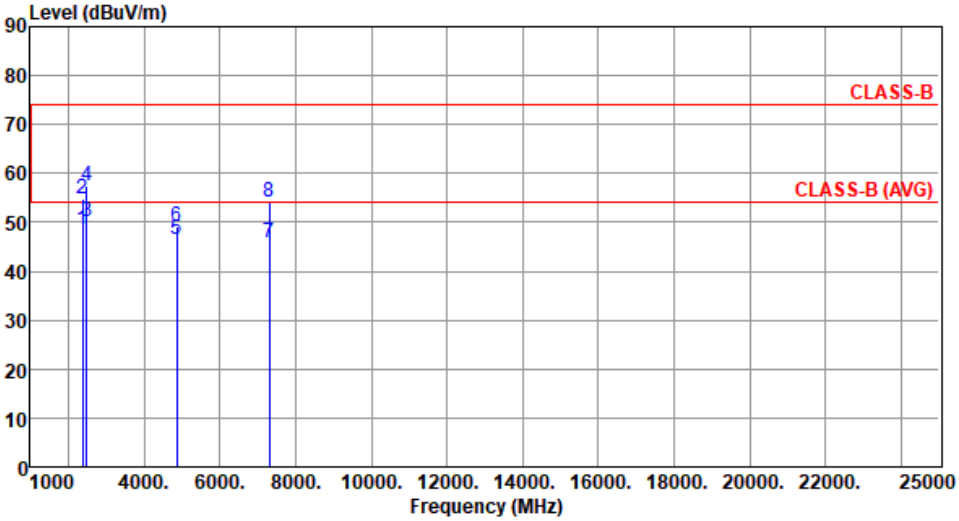


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	44.38	54.00	-9.62	49.03	-4.65	Average	100	228
2	2390.00	53.94	74.00	-20.06	58.59	-4.65	Peak	100	228
3	2483.50	44.19	54.00	-9.81	49.08	-4.89	Average	100	228
4	2483.50	54.82	74.00	-19.18	59.71	-4.89	Peak	100	228
5	4874.00	43.65	54.00	-10.35	44.19	-0.54	Average	303	339
6	4874.00	47.78	74.00	-26.22	48.32	-0.54	Peak	303	339
7	7311.00	45.60	54.00	-8.40	40.38	5.22	Average	171	323
8	7311.00	54.10	74.00	-19.90	48.88	5.22	Peak	171	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	11b	Test Freq. (MHz)	2437
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):24 Humidity(%):63

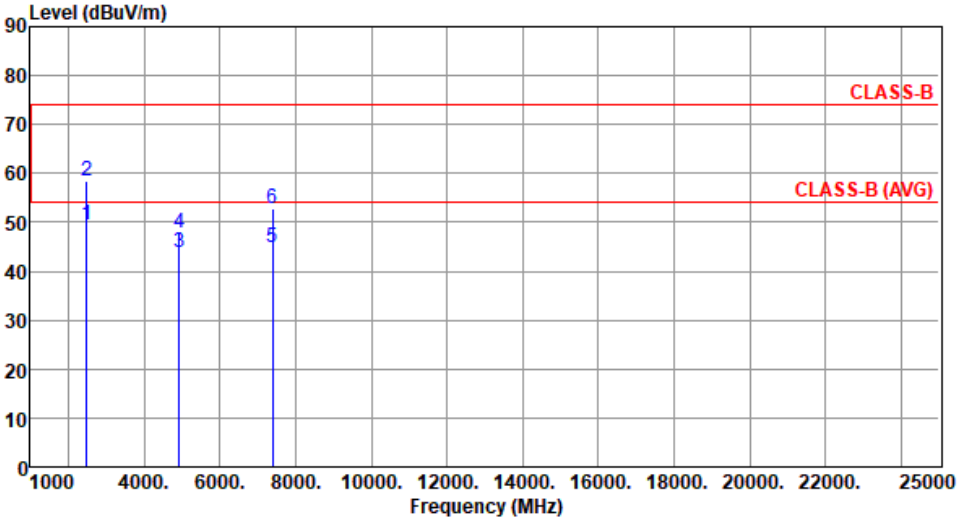


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.59	54.00	-5.41	53.24	-4.65	Average	195	274
2	2390.00	54.77	74.00	-19.23	59.42	-4.65	Peak	195	274
3	2483.50	50.01	54.00	-3.99	54.90	-4.89	Average	194	111
4	2483.50	57.61	74.00	-16.39	62.50	-4.89	Peak	194	111
5	4874.00	46.43	54.00	-7.57	46.97	-0.54	Average	259	114
6	4874.00	49.29	74.00	-24.71	49.83	-0.54	Peak	259	114
7	7311.00	45.68	54.00	-8.32	40.46	5.22	Average	195	274
8	7311.00	54.15	74.00	-19.85	48.93	5.22	Peak	195	274

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(℃):24 Humidity(%):62

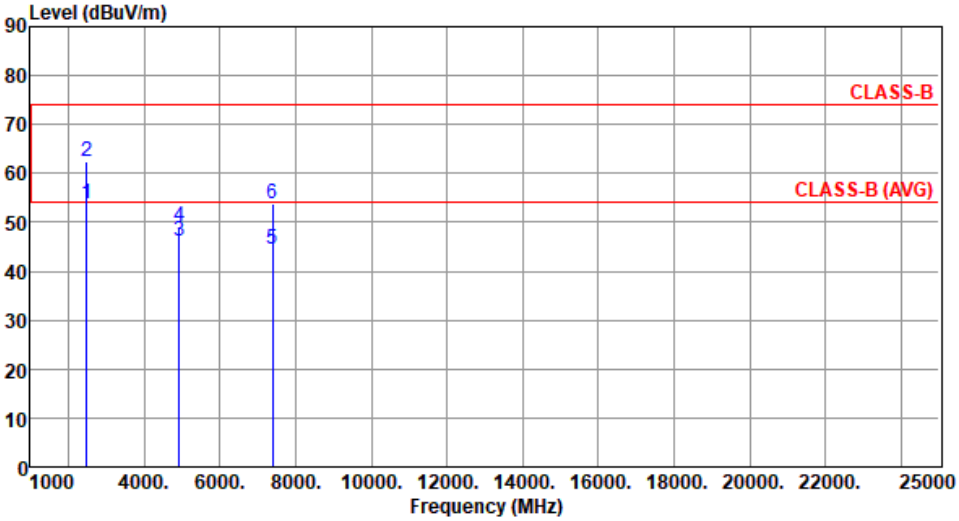


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.62	54.00	-4.38	54.51	-4.89	Average	146	18
2	2483.50	58.33	74.00	-15.67	63.22	-4.89	Peak	146	18
3	4924.00	43.76	54.00	-10.24	44.27	-0.51	Average	298	332
4	4924.00	47.97	74.00	-26.03	48.48	-0.51	Peak	298	332
5	7386.00	44.73	54.00	-9.27	39.66	5.07	Average	100	173
6	7386.00	52.74	74.00	-21.26	47.67	5.07	Peak	100	173

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(℃):24 Humidity(%):62



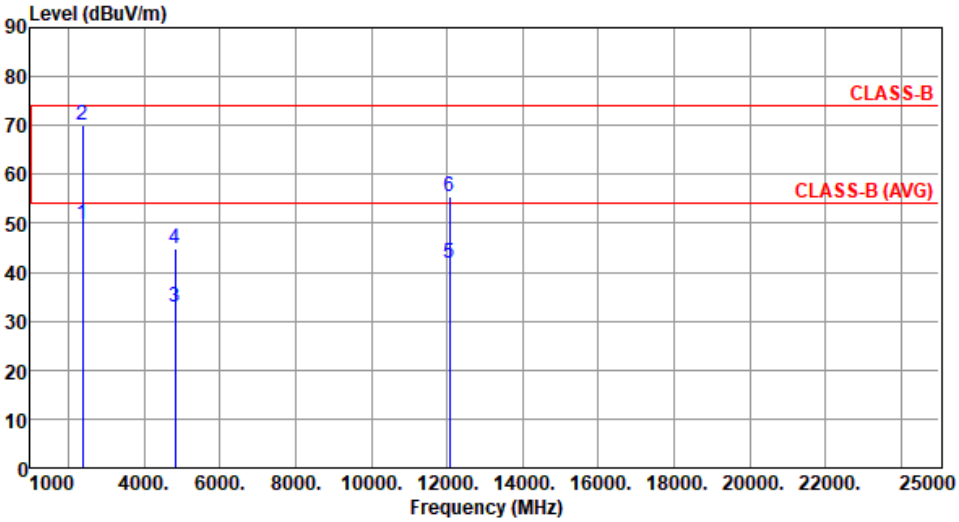
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	53.66	54.00	-0.34	58.55	-4.89	Average	195	119
2	2483.50	62.47	74.00	-11.53	67.36	-4.89	Peak	195	119
3	4924.00	46.32	54.00	-7.68	46.83	-0.51	Average	261	108
4	4924.00	49.21	74.00	-24.79	49.72	-0.51	Peak	261	108
5	7386.00	44.47	54.00	-9.53	39.40	5.07	Average	100	173
6	7386.00	53.68	74.00	-20.32	48.61	5.07	Peak	100	173

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 :Sean Yu Temperature(℃):24 Humidity(%):62

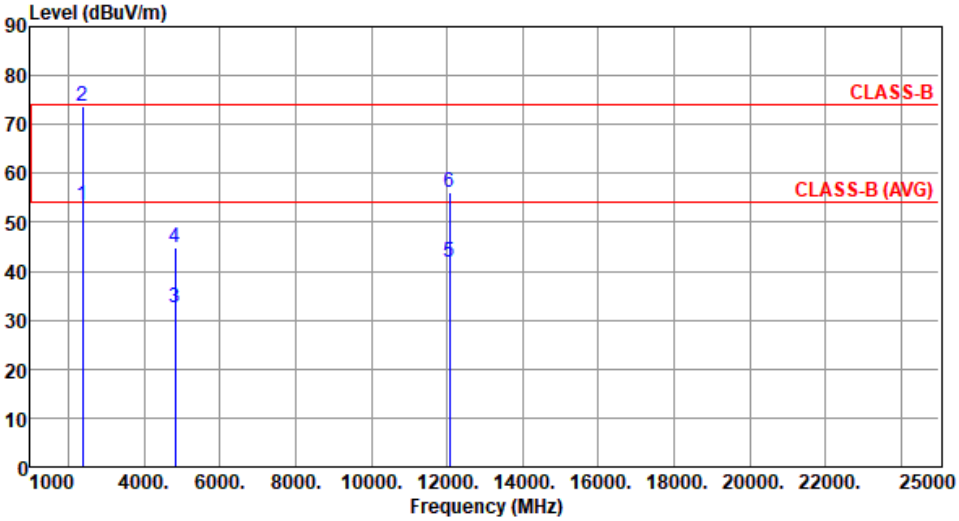


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.68	54.00	-4.32	54.33	-4.65	Average	152	23
2	2390.00	69.91	74.00	-4.09	74.56	-4.65	Peak	152	23
3	4824.00	32.74	54.00	-21.26	33.27	-0.53	Average	100	176
4	4824.00	44.90	74.00	-29.10	45.43	-0.53	Peak	100	176
5	12060.00	41.84	54.00	-12.16	35.47	6.37	Average	100	208
6	12060.00	55.50	74.00	-18.50	49.13	6.37	Peak	100	208

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 :Sean Yu Temperature(℃):24 Humidity(%):62

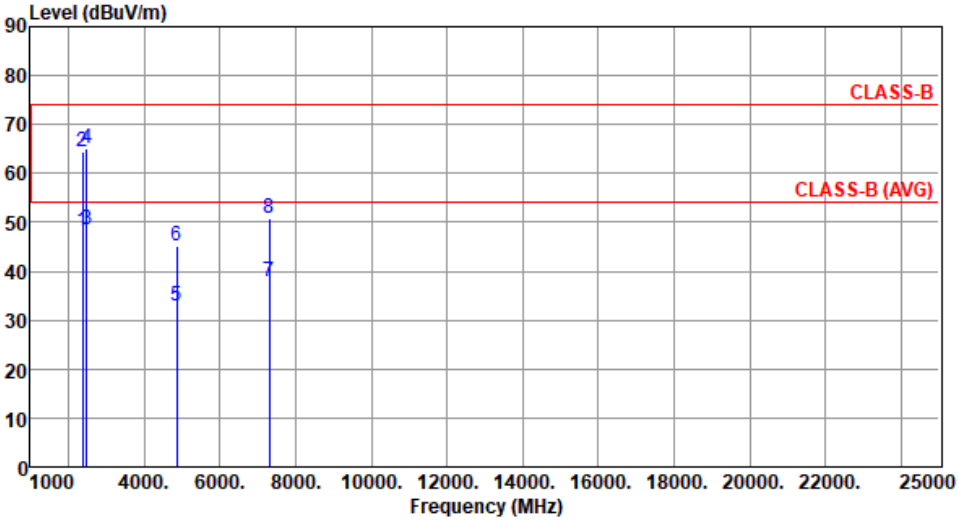


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.47	54.00	-0.53	58.12	-4.65	Average	197	130
2	2390.00	73.81	74.00	-0.19	78.46	-4.65	Peak	197	130
3	4824.00	32.60	54.00	-21.40	33.13	-0.53	Average	100	186
4	4824.00	44.99	74.00	-29.01	45.52	-0.53	Peak	100	186
5	12060.00	41.89	54.00	-12.11	35.52	6.37	Average	100	114
6	12060.00	56.05	74.00	-17.95	49.68	6.37	Peak	100	114

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 :Sean Yu Temperature(℃):24 Humidity(%):63

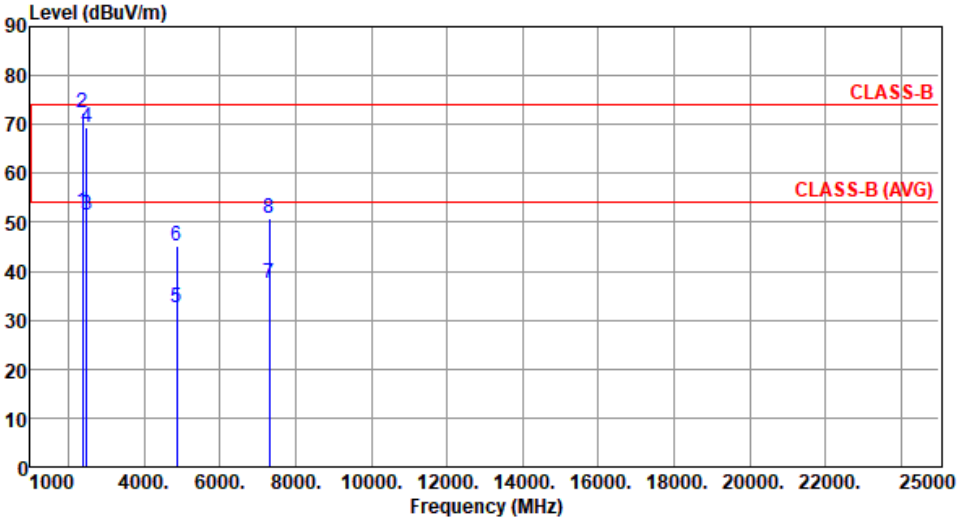


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.13	54.00	-5.87	52.78	-4.65	Average	100	137
2	2390.00	64.43	74.00	-9.57	69.08	-4.65	Peak	100	137
3	2483.50	48.43	54.00	-5.57	53.32	-4.89	Average	100	209
4	2483.50	64.98	74.00	-9.02	69.87	-4.89	Peak	100	209
5	4874.00	32.74	54.00	-21.26	33.28	-0.54	Average	100	176
6	4874.00	45.24	74.00	-28.76	45.78	-0.54	Peak	100	176
7	7311.00	37.74	54.00	-16.26	32.52	5.22	Average	100	283
8	7311.00	50.90	74.00	-23.10	45.68	5.22	Peak	100	283

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 :Sean Yu Temperature(℃):24 Humidity(%):63

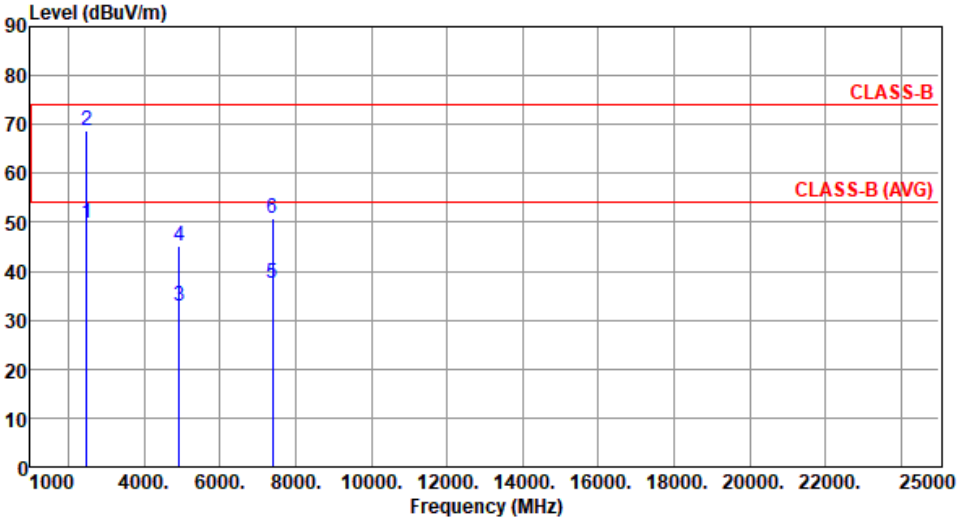


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.04	54.00	-1.96	56.69	-4.65	Average	216	37
2	2390.00	72.30	74.00	-1.70	76.95	-4.65	Peak	216	37
3	2483.50	51.58	54.00	-2.42	56.47	-4.89	Average	219	327
4	2483.50	69.44	74.00	-4.56	74.33	-4.89	Peak	219	327
5	4874.00	32.71	54.00	-21.29	33.25	-0.54	Average	100	189
6	4874.00	45.25	74.00	-28.75	45.79	-0.54	Peak	100	189
7	7311.00	37.64	54.00	-16.36	32.42	5.22	Average	100	227
8	7311.00	50.88	74.00	-23.12	45.66	5.22	Peak	100	227

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 :Sean Yu Temperature(℃):24 Humidity(%):62

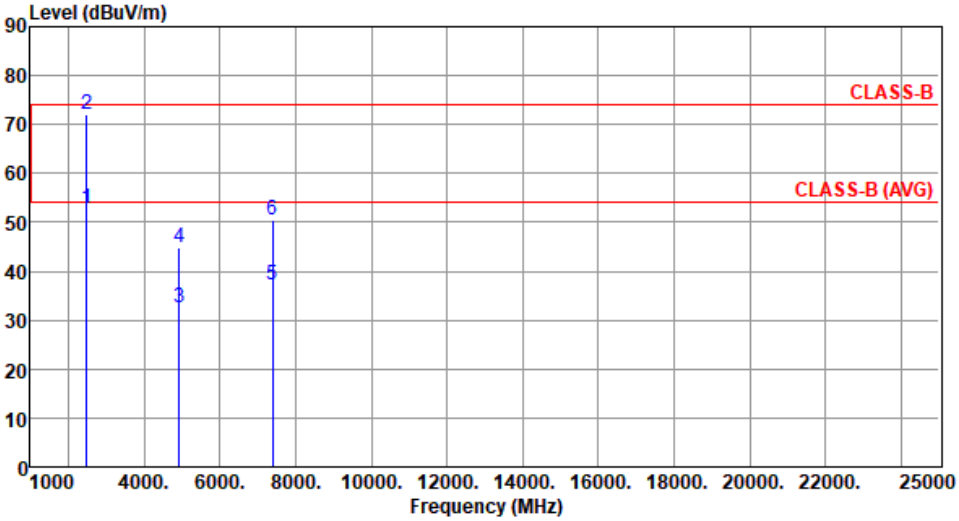


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.76	54.00	-4.24	54.65	-4.89	Average	150	21
2	2483.50	68.82	74.00	-5.18	73.71	-4.89	Peak	150	21
3	4924.00	32.80	54.00	-21.20	33.31	-0.51	Average	100	177
4	4924.00	45.10	74.00	-28.90	45.61	-0.51	Peak	100	177
5	7386.00	37.43	54.00	-16.57	32.36	5.07	Average	100	228
6	7386.00	50.72	74.00	-23.28	45.65	5.07	Peak	100	228

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 :Sean Yu Temperature(℃):24 Humidity(%):62



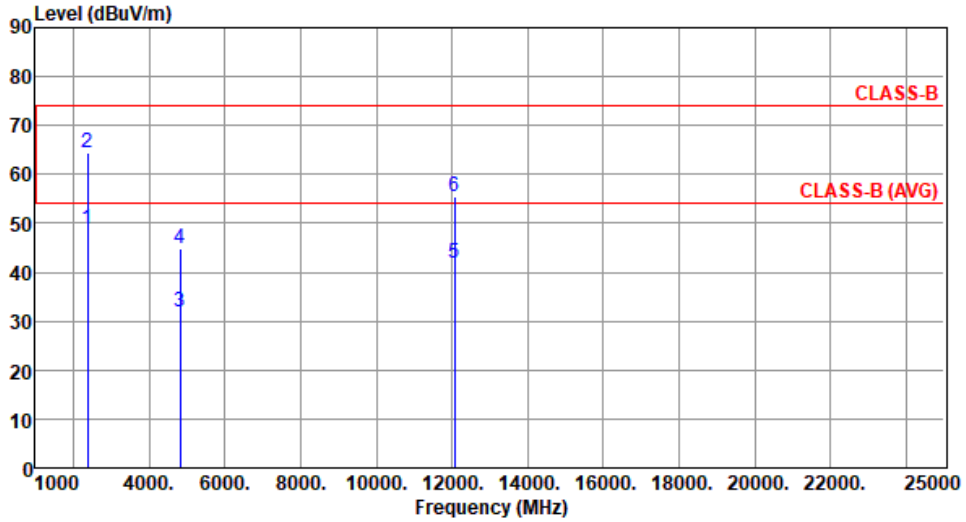
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.94	54.00	-1.06	57.83	-4.89	Average	138	260
2	2483.50	71.99	74.00	-2.01	76.88	-4.89	Peak	138	260
3	4924.00	32.69	54.00	-21.31	33.20	-0.51	Average	100	179
4	4924.00	44.94	74.00	-29.06	45.45	-0.51	Peak	100	179
5	7386.00	37.32	54.00	-16.68	32.25	5.07	Average	100	176
6	7386.00	50.53	74.00	-23.47	45.46	5.07	Peak	100	176

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

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

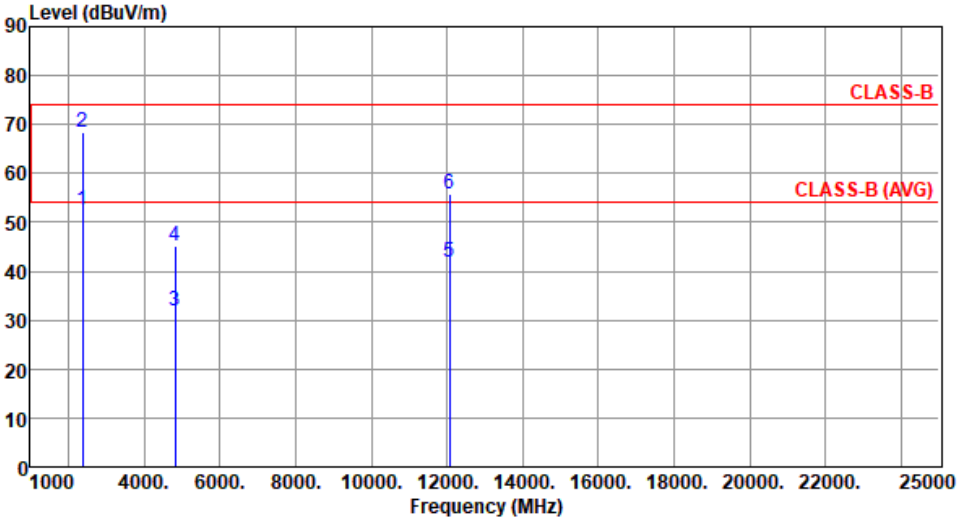


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.67	54.00	-5.33	53.32	-4.65	Average	330	48
2	2390.00	64.58	74.00	-9.42	69.23	-4.65	Peak	330	48
3	4824.00	31.78	54.00	-22.22	32.31	-0.53	Average	100	176
4	4824.00	44.91	74.00	-29.09	45.44	-0.53	Peak	100	176
5	12060.00	41.83	54.00	-12.17	35.46	6.37	Average	100	228
6	12060.00	55.60	74.00	-18.40	49.23	6.37	Peak	100	228

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	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

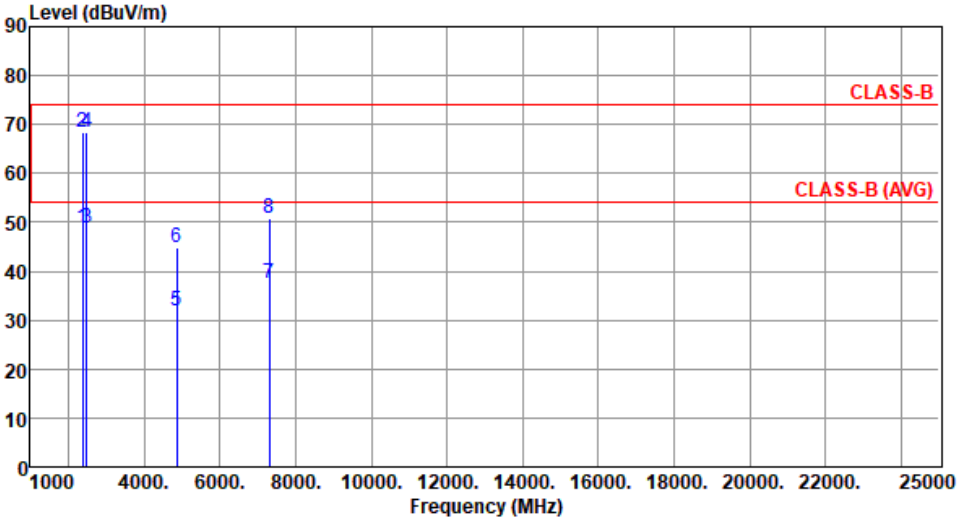


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.56	54.00	-1.44	57.21	-4.65	Average	256	310
2	2390.00	68.36	74.00	-5.64	73.01	-4.65	Peak	256	310
3	4824.00	31.89	54.00	-22.11	32.42	-0.53	Average	100	177
4	4824.00	45.08	74.00	-28.92	45.61	-0.53	Peak	100	177
5	12060.00	41.83	54.00	-12.17	35.46	6.37	Average	100	310
6	12060.00	55.64	74.00	-18.36	49.27	6.37	Peak	100	310

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	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Sean Yu Temperature(℃):24 Humidity(%):63

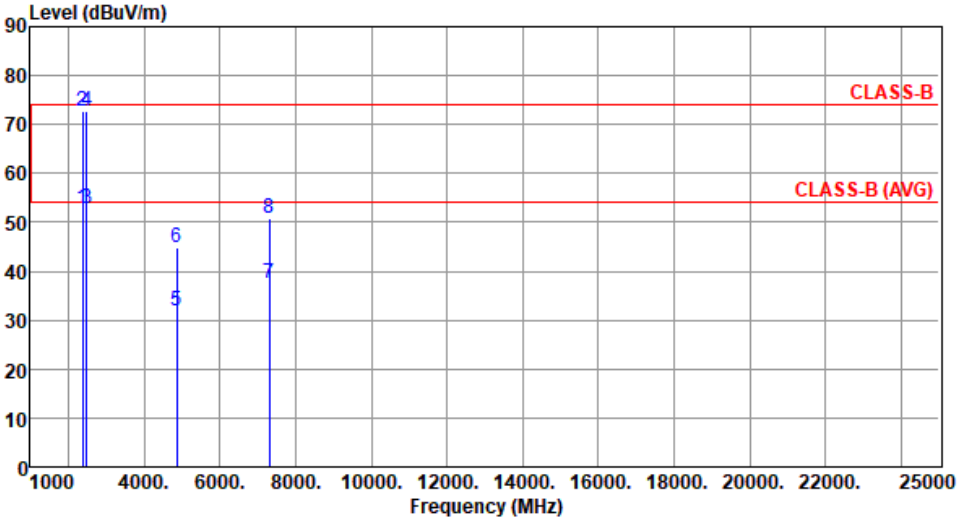


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.97	54.00	-5.03	53.62	-4.65	Average	329	109
2	2390.00	68.34	74.00	-5.66	72.99	-4.65	Peak	329	109
3	2483.50	48.69	54.00	-5.31	53.58	-4.89	Average	332	111
4	2483.50	68.33	74.00	-5.67	73.22	-4.89	Peak	332	111
5	4874.00	31.77	54.00	-22.23	32.31	-0.54	Average	100	177
6	4874.00	44.92	74.00	-29.08	45.46	-0.54	Peak	100	177
7	7311.00	37.62	54.00	-16.38	32.40	5.22	Average	100	156
8	7311.00	50.65	74.00	-23.35	45.43	5.22	Peak	100	156

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	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Sean Yu Temperature(℃):24 Humidity(%):63

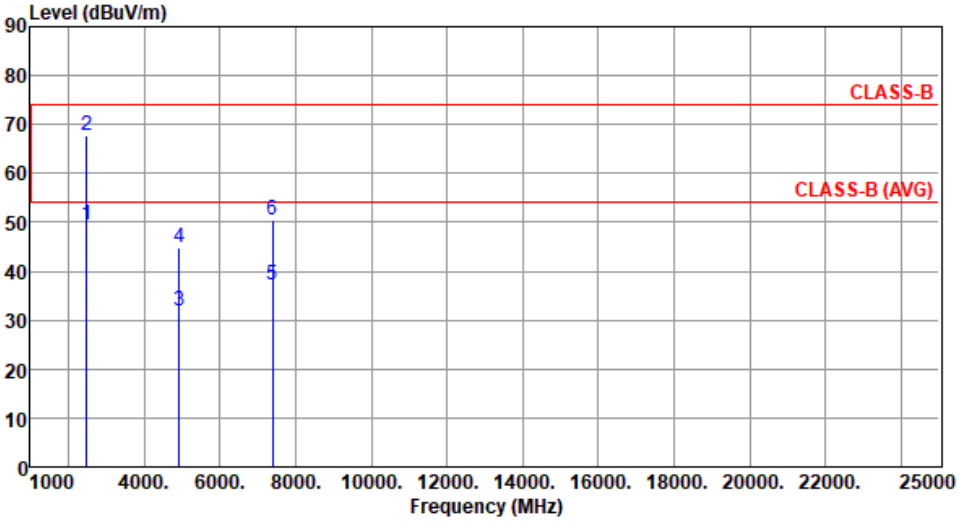


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.96	54.00	-1.04	57.61	-4.65	Average	240	306
2	2390.00	72.67	74.00	-1.33	77.32	-4.65	Peak	240	306
3	2483.50	52.85	54.00	-1.15	57.74	-4.89	Average	238	145
4	2483.50	72.58	74.00	-1.42	77.47	-4.89	Peak	238	145
5	4874.00	31.83	54.00	-22.17	32.37	-0.54	Average	100	186
6	4874.00	44.83	74.00	-29.17	45.37	-0.54	Peak	100	186
7	7311.00	37.51	54.00	-16.49	32.29	5.22	Average	100	298
8	7311.00	50.71	74.00	-23.29	45.49	5.22	Peak	100	298

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	**Test Freq. (MHz)**	2462
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

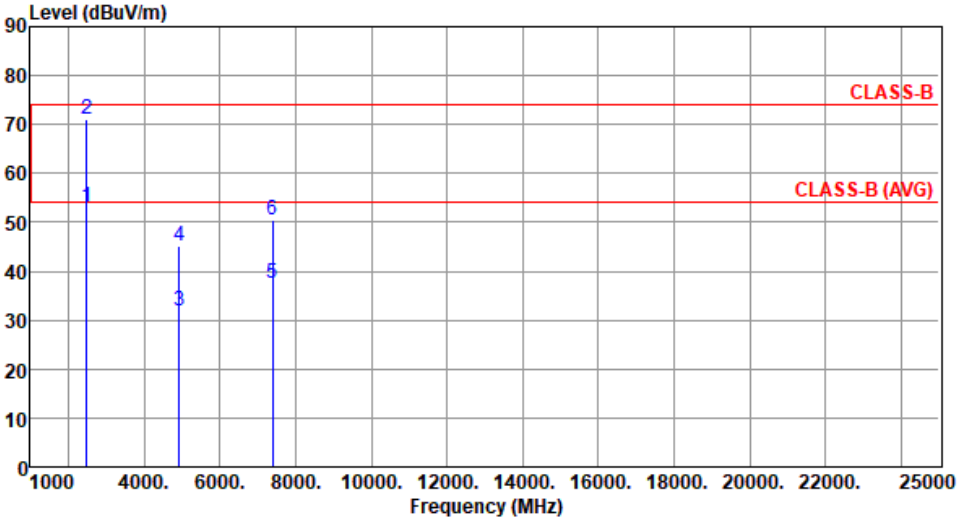


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.42	54.00	-4.58	54.31	-4.89	Average	328	51
2	2483.50	67.66	74.00	-6.34	72.55	-4.89	Peak	328	51
3	4924.00	31.95	54.00	-22.05	32.46	-0.51	Average	100	183
4	4924.00	44.85	74.00	-29.15	45.36	-0.51	Peak	100	183
5	7386.00	37.34	54.00	-16.66	32.27	5.07	Average	100	145
6	7386.00	50.43	74.00	-23.57	45.36	5.07	Peak	100	145

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	**Test Freq. (MHz)**	2462
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):24 Humidity(%):62



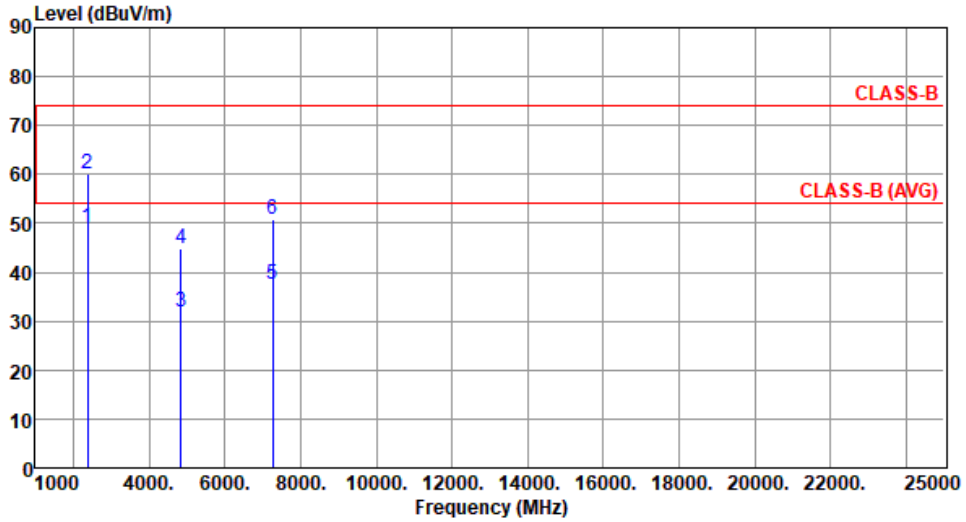
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	53.26	54.00	-0.74	58.15	-4.89	Average	190	130
2	2483.50	71.13	74.00	-2.87	76.02	-4.89	Peak	190	130
3	4924.00	31.88	54.00	-22.12	32.39	-0.51	Average	100	188
4	4924.00	45.12	74.00	-28.88	45.63	-0.51	Peak	100	188
5	7386.00	37.46	54.00	-16.54	32.39	5.07	Average	100	156
6	7386.00	50.55	74.00	-23.45	45.48	5.07	Peak	100	156

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

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

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

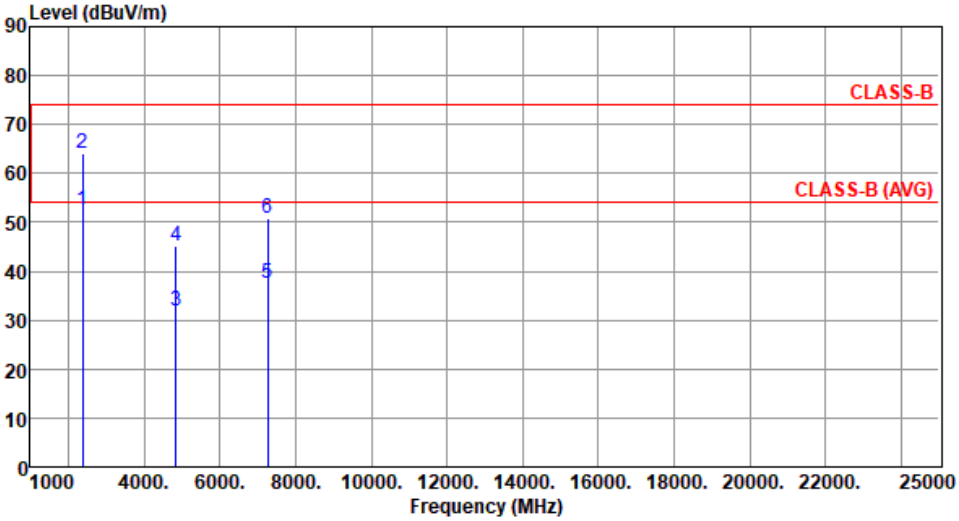


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	49.27	54.00	-4.73	53.92	-4.65	Average	331	57
2	2390.00	60.26	74.00	-13.74	64.91	-4.65	Peak	331	57
3	4844.00	31.84	54.00	-22.16	32.37	-0.53	Average	100	176
4	4844.00	44.85	74.00	-29.15	45.38	-0.53	Peak	100	176
5	7266.00	37.62	54.00	-16.38	32.47	5.15	Average	100	258
6	7266.00	50.83	74.00	-23.17	45.68	5.15	Peak	100	258

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	**Test Freq. (MHz)**	2422
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

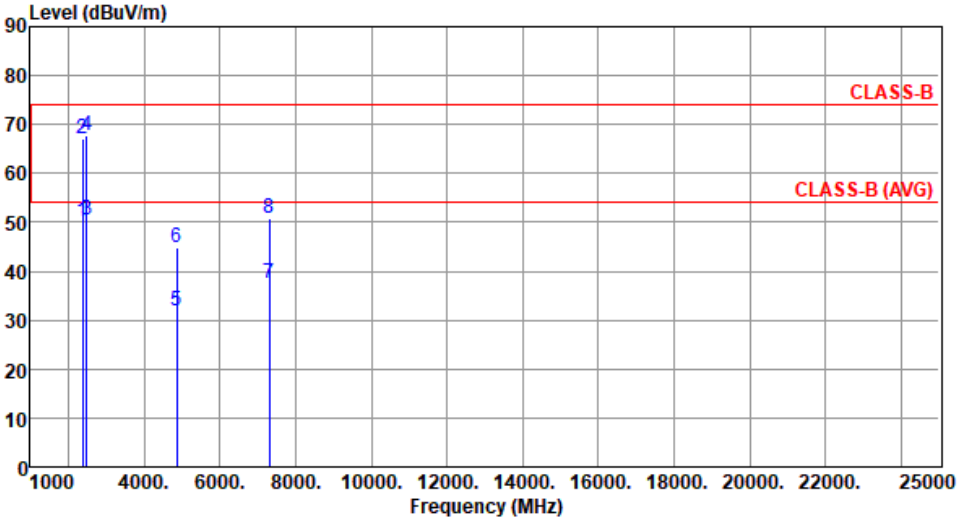


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.53	54.00	-1.47	57.18	-4.65	Average	218	296
2	2390.00	64.13	74.00	-9.87	68.78	-4.65	Peak	218	296
3	4844.00	31.86	54.00	-22.14	32.39	-0.53	Average	100	172
4	4844.00	45.05	74.00	-28.95	45.58	-0.53	Peak	100	172
5	7266.00	37.56	54.00	-16.44	32.41	5.15	Average	100	351
6	7266.00	50.87	74.00	-23.13	45.72	5.15	Peak	100	351

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	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

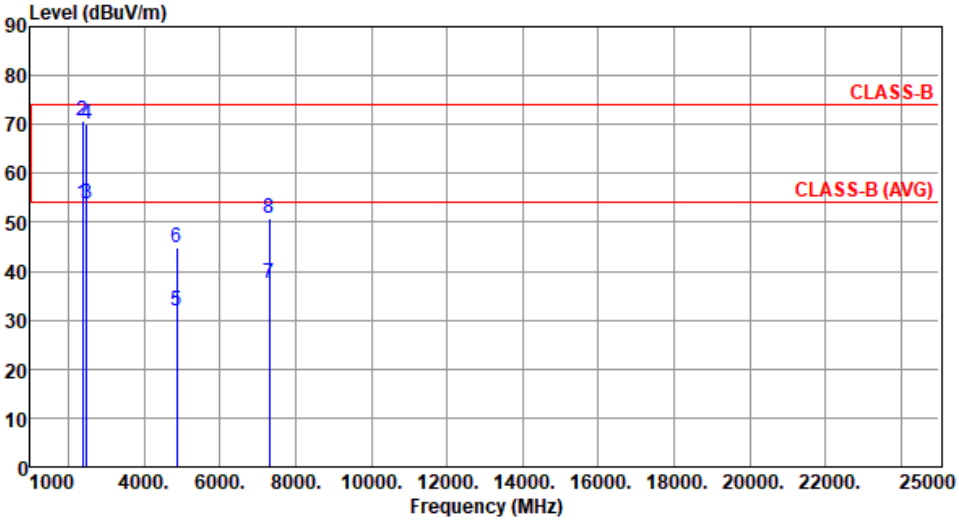


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	50.13	54.00	-3.87	54.78	-4.65	Average	337	52
2	2390.00	67.12	74.00	-6.88	71.77	-4.65	Peak	337	52
3	2483.50	50.60	54.00	-3.40	55.49	-4.89	Average	337	52
4	2483.50	67.83	74.00	-6.17	72.72	-4.89	Peak	337	52
5	4874.00	31.83	54.00	-22.17	32.37	-0.54	Average	100	176
6	4874.00	44.88	74.00	-29.12	45.42	-0.54	Peak	100	176
7	7311.00	37.58	54.00	-16.42	32.36	5.22	Average	100	221
8	7311.00	50.74	74.00	-23.26	45.52	5.22	Peak	100	221

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	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

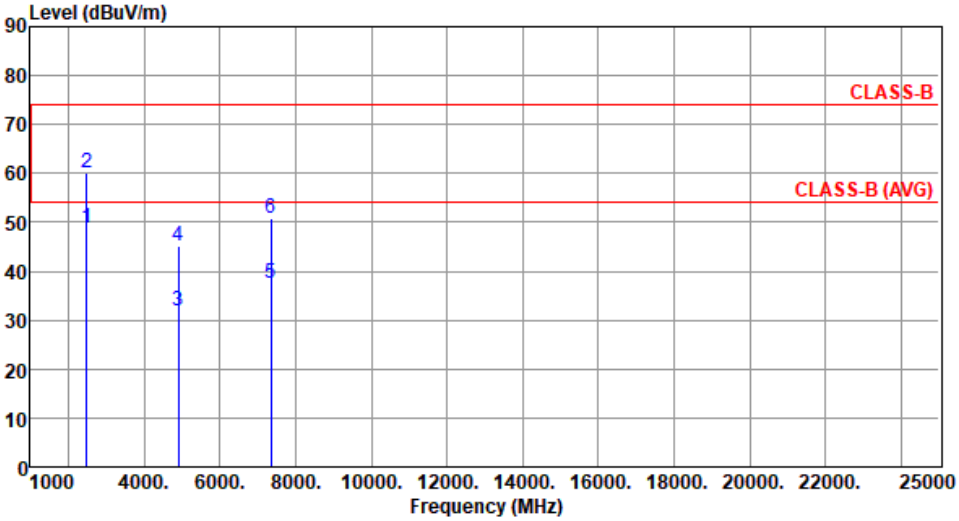


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	53.85	54.00	-0.15	58.50	-4.65	Average	191	123
2	2390.00	70.78	74.00	-3.22	75.43	-4.65	Peak	191	123
3	2483.50	53.76	54.00	-0.24	58.65	-4.89	Average	191	123
4	2483.50	70.22	74.00	-3.78	75.11	-4.89	Peak	191	123
5	4874.00	31.73	54.00	-22.27	32.27	-0.54	Average	100	176
6	4874.00	44.82	74.00	-29.18	45.36	-0.54	Peak	100	176
7	7311.00	37.53	54.00	-16.47	32.31	5.22	Average	100	208
8	7311.00	50.73	74.00	-23.27	45.51	5.22	Peak	100	208

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	**Test Freq. (MHz)**	2452
Polarization	Horizontal		

Test By :Akun Chung Temperature(℃):24 Humidity(%):62

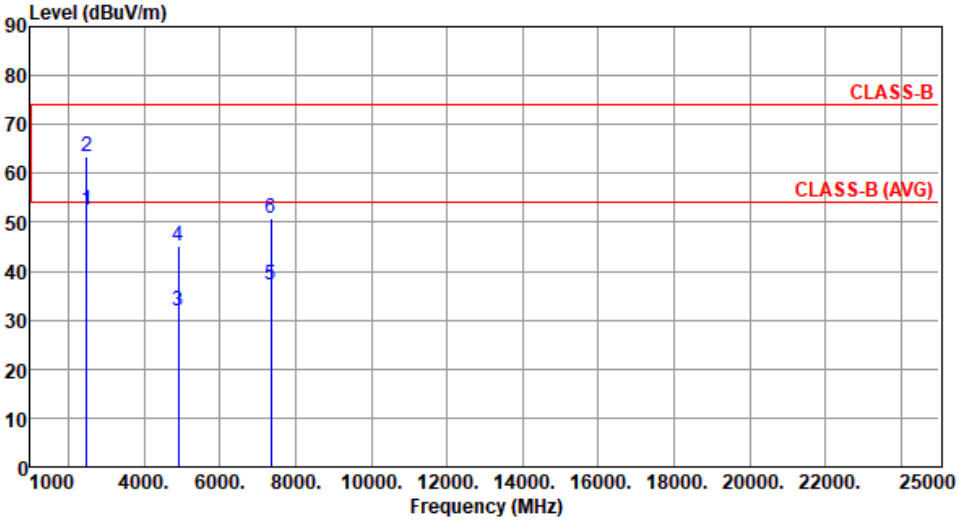


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	48.92	54.00	-5.08	53.81	-4.89	Average	338	47
2	2483.50	60.12	74.00	-13.88	65.01	-4.89	Peak	338	47
3	4904.00	31.86	54.00	-22.14	32.40	-0.54	Average	100	119
4	4904.00	45.16	74.00	-28.84	45.70	-0.54	Peak	100	119
5	7356.00	37.55	54.00	-16.45	32.46	5.09	Average	100	251
6	7356.00	50.86	74.00	-23.14	45.77	5.09	Peak	100	251

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	**Test Freq. (MHz)**	2452
Polarization	Vertical		

Test By :Akun Chung 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	2483.50	52.51	54.00	-1.49	57.40	-4.89	Average	205	225
2	2483.50	63.33	74.00	-10.67	68.22	-4.89	Peak	205	225
3	4904.00	31.72	54.00	-22.28	32.26	-0.54	Average	100	117
4	4904.00	45.12	74.00	-28.88	45.66	-0.54	Peak	100	117
5	7356.00	37.33	54.00	-16.67	32.24	5.09	Average	100	206
6	7356.00	50.94	74.00	-23.06	45.85	5.09	Peak	100	206

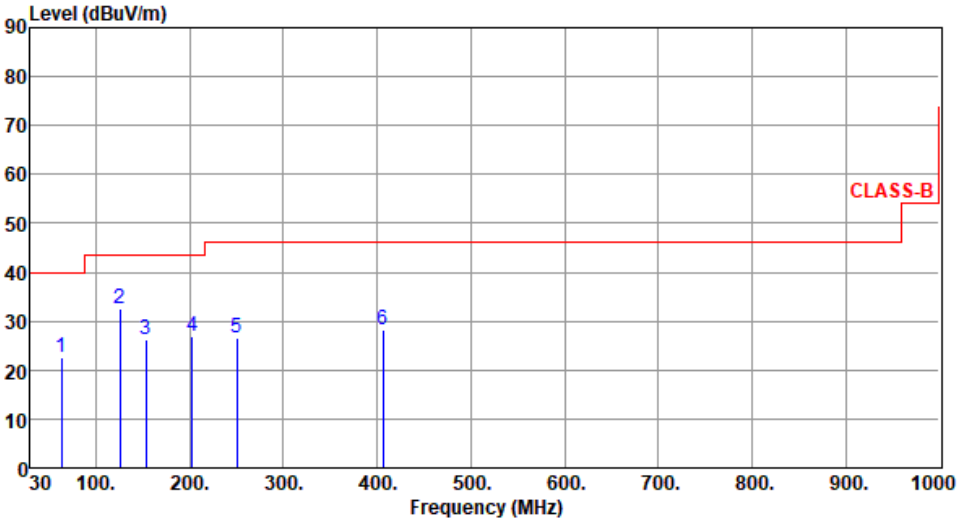
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Beamforming mode

Unwanted Emissions (Below 1GHz)

Modulation	ax HE20	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Brad Wu Temperature(℃):24 Humidity(%):63

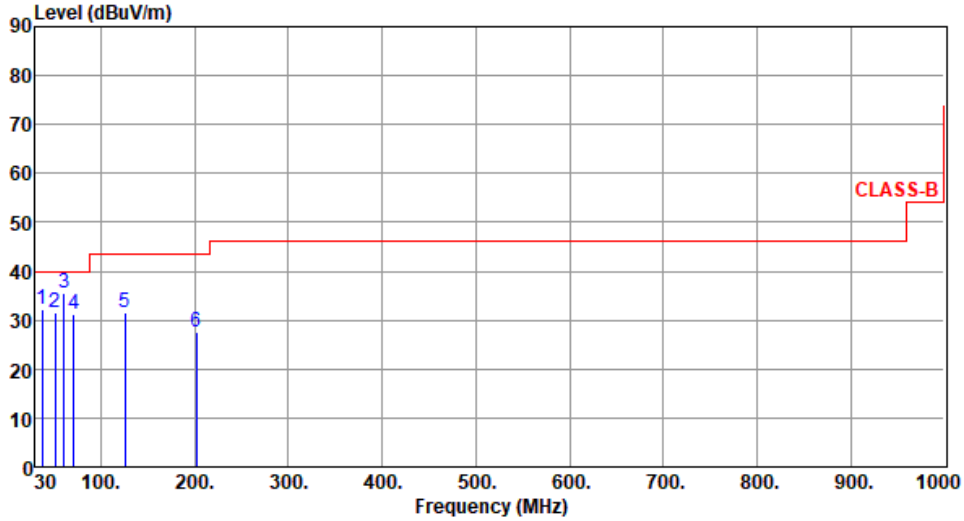


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	63.68	22.45	40.00	-17.55	32.24	-9.79	Peak	---	---
2	125.38	32.47	43.50	-11.03	43.20	-10.73	Peak	---	---
3	153.56	26.13	43.50	-17.37	35.12	-8.99	Peak	---	---
4	202.55	27.03	43.50	-16.47	38.94	-11.91	Peak	---	---
5	250.26	26.58	46.00	-19.42	36.63	-10.05	Peak	---	---
6	406.58	28.11	46.00	-17.89	33.58	-5.47	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	ax HE20	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Brad Wu Temperature(℃):24 Humidity(%):63



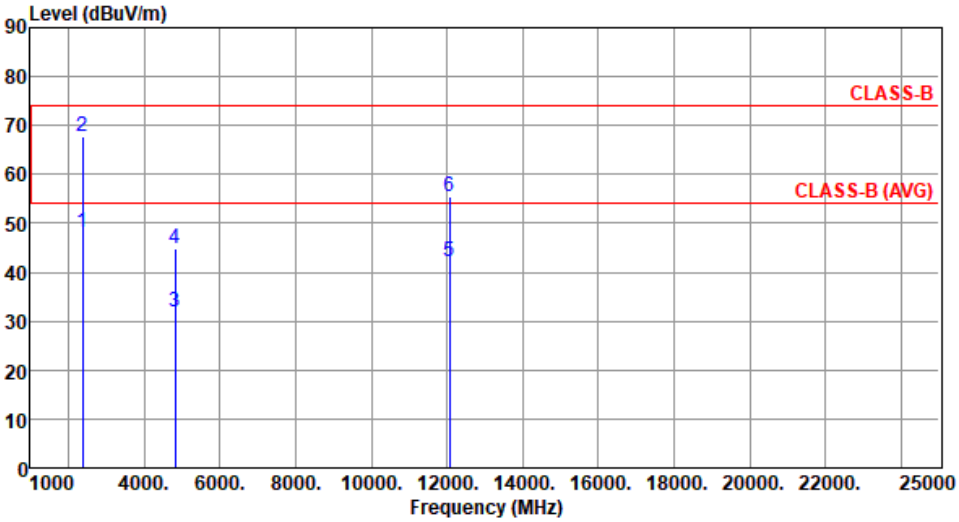
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	37.68	32.16	40.00	-7.84	41.13	-8.97	Peak	---	---
2	51.34	31.42	40.00	-8.58	39.62	-8.20	QP	100	19
3	60.28	35.47	40.00	-4.53	44.49	-9.02	Peak	---	---
4	70.64	31.22	40.00	-8.78	42.54	-11.32	Peak	---	---
5	125.48	31.47	43.50	-12.03	42.18	-10.71	Peak	---	---
6	201.55	27.43	43.50	-16.07	39.32	-11.89	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 Emissions (Above 1GHz) for ax HE20

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

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

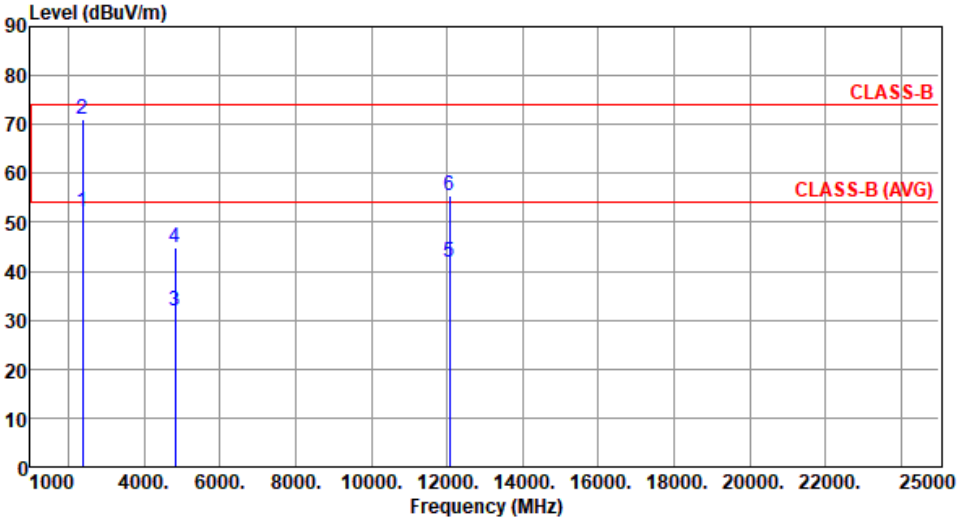


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.26	54.00	-5.74	52.91	-4.65	Average	320	58
2	2390.00	67.61	74.00	-6.39	72.26	-4.65	Peak	320	58
3	4824.00	31.84	54.00	-22.16	32.37	-0.53	Average	100	128
4	4824.00	44.80	74.00	-29.20	45.33	-0.53	Peak	100	128
5	12060.00	42.05	54.00	-11.95	35.68	6.37	Average	100	206
6	12060.00	55.58	74.00	-18.42	49.21	6.37	Peak	100	206

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	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

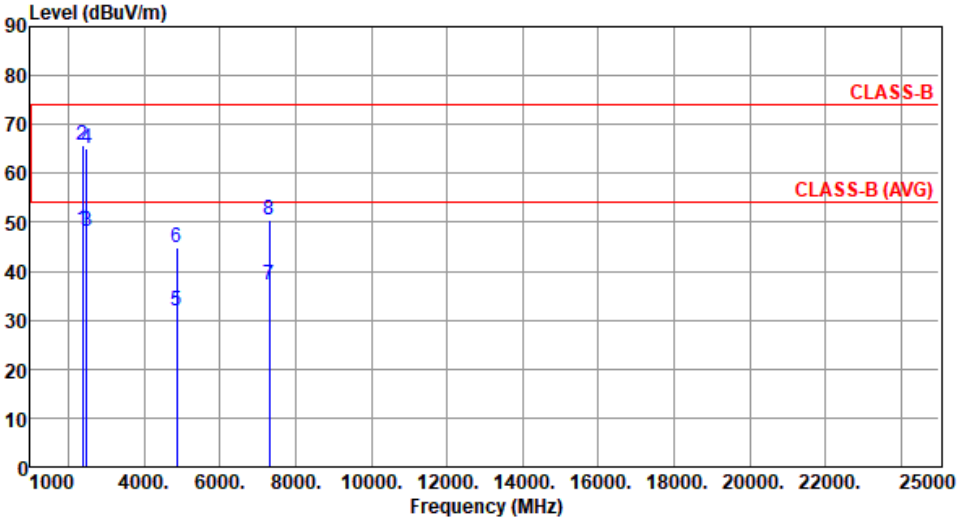


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.01	54.00	-1.99	56.66	-4.65	Average	180	136
2	2390.00	71.20	74.00	-2.80	75.85	-4.65	Peak	180	136
3	4824.00	31.76	54.00	-22.24	32.29	-0.53	Average	100	178
4	4824.00	44.82	74.00	-29.18	45.35	-0.53	Peak	100	178
5	12060.00	41.94	54.00	-12.06	35.57	6.37	Average	100	205
6	12060.00	55.50	74.00	-18.50	49.13	6.37	Peak	100	205

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	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

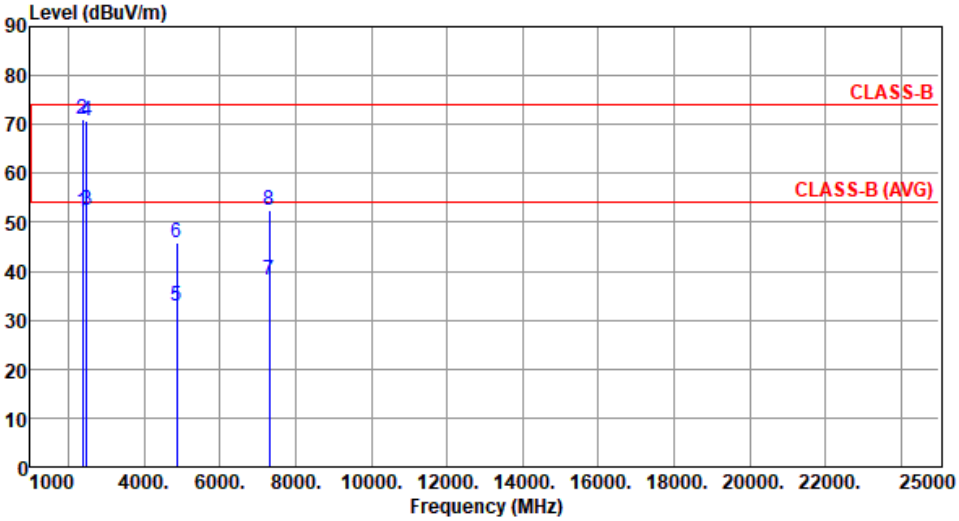


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.59	54.00	-5.41	53.24	-4.65	Average	312	66
2	2390.00	65.69	74.00	-8.31	70.34	-4.65	Peak	312	66
3	2483.50	48.13	54.00	-5.87	53.02	-4.89	Average	312	66
4	2483.50	65.24	74.00	-8.76	70.13	-4.89	Peak	312	66
5	4874.00	31.87	54.00	-22.13	32.41	-0.54	Average	100	247
6	4874.00	44.68	74.00	-29.32	45.22	-0.54	Peak	100	247
7	7311.00	37.33	54.00	-16.67	32.11	5.22	Average	100	126
8	7311.00	50.63	74.00	-23.37	45.41	5.22	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	ax HE20	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

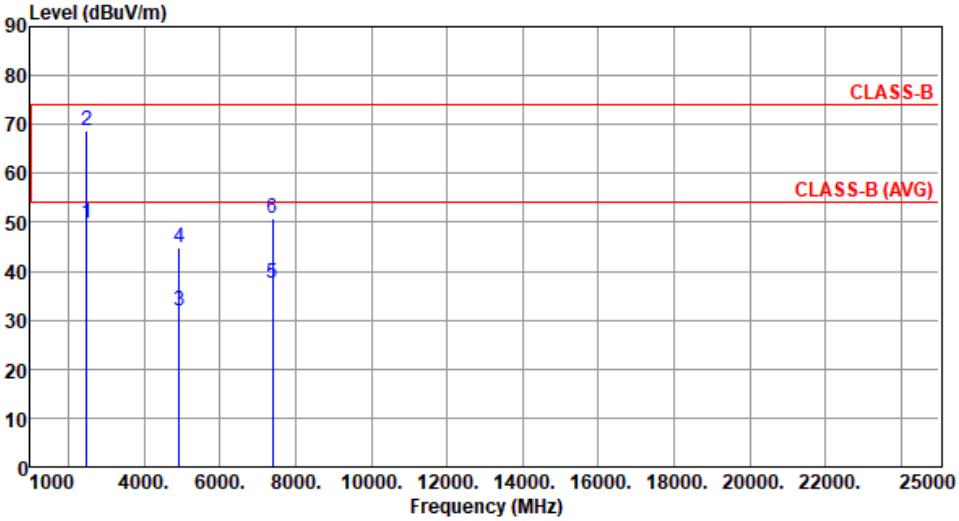


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.03	54.00	-1.97	56.68	-4.65	Average	189	132
2	2390.00	71.06	74.00	-2.94	75.71	-4.65	Peak	189	132
3	2483.50	52.31	54.00	-1.69	57.20	-4.89	Average	189	132
4	2483.50	70.73	74.00	-3.27	75.62	-4.89	Peak	189	132
5	4874.00	32.72	54.00	-21.28	33.26	-0.54	Average	100	26
6	4874.00	45.93	74.00	-28.07	46.47	-0.54	Peak	100	26
7	7311.00	38.10	54.00	-15.90	32.88	5.22	Average	100	272
8	7311.00	52.45	74.00	-21.55	47.23	5.22	Peak	100	272

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	**Test Freq. (MHz)**	2462
Polarization	Horizontal		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

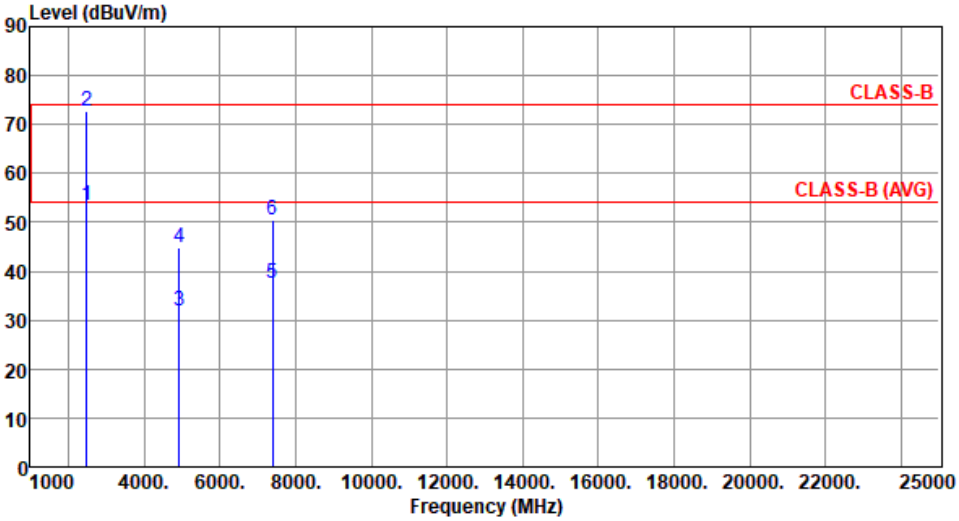


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.83	54.00	-4.17	54.72	-4.89	Average	318	62
2	2483.50	68.58	74.00	-5.42	73.47	-4.89	Peak	318	62
3	4924.00	31.80	54.00	-22.20	32.31	-0.51	Average	100	182
4	4924.00	44.75	74.00	-29.25	45.26	-0.51	Peak	100	182
5	7386.00	37.48	54.00	-16.52	32.41	5.07	Average	100	105
6	7386.00	50.70	74.00	-23.30	45.63	5.07	Peak	100	105

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	**Test Freq. (MHz)**	2462
Polarization	Vertical		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63



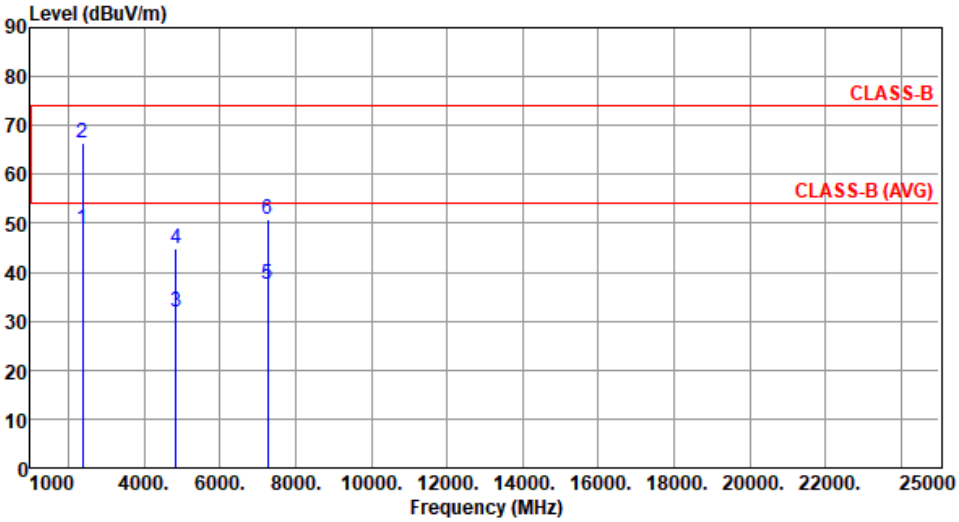
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	53.41	54.00	-0.59	58.30	-4.89	Average	174	136
2	2483.50	72.65	74.00	-1.35	77.54	-4.89	Peak	174	136
3	4924.00	31.75	54.00	-22.25	32.26	-0.51	Average	100	177
4	4924.00	44.86	74.00	-29.14	45.37	-0.51	Peak	100	177
5	7386.00	37.36	54.00	-16.64	32.29	5.07	Average	100	186
6	7386.00	50.53	74.00	-23.47	45.46	5.07	Peak	100	186

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

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

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

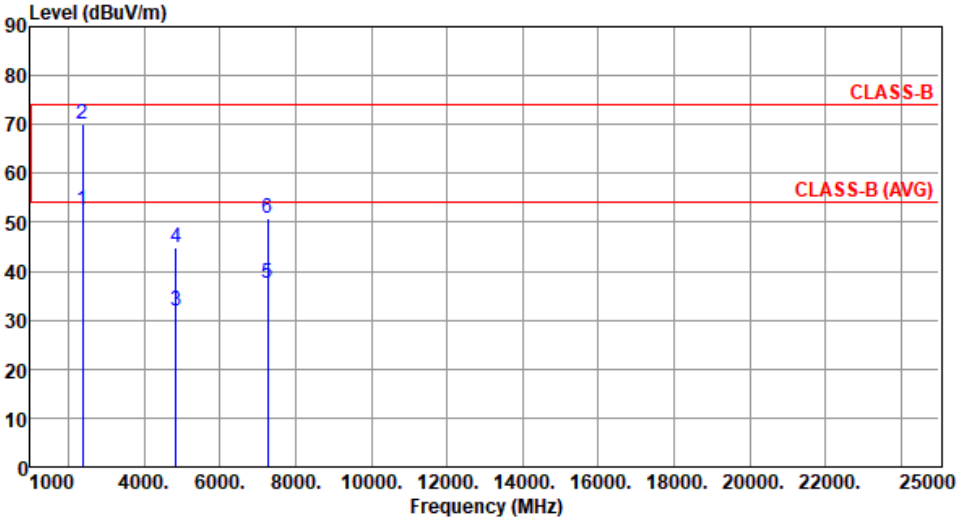


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	48.66	54.00	-5.34	53.31	-4.65	Average	308	65
2	2390.00	66.42	74.00	-7.58	71.07	-4.65	Peak	308	65
3	4844.00	31.73	54.00	-22.27	32.26	-0.53	Average	100	178
4	4844.00	44.84	74.00	-29.16	45.37	-0.53	Peak	100	178
5	7266.00	37.53	54.00	-16.47	32.38	5.15	Average	100	251
6	7266.00	50.71	74.00	-23.29	45.56	5.15	Peak	100	251

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	**Test Freq. (MHz)**	2422
Polarization	Vertical		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

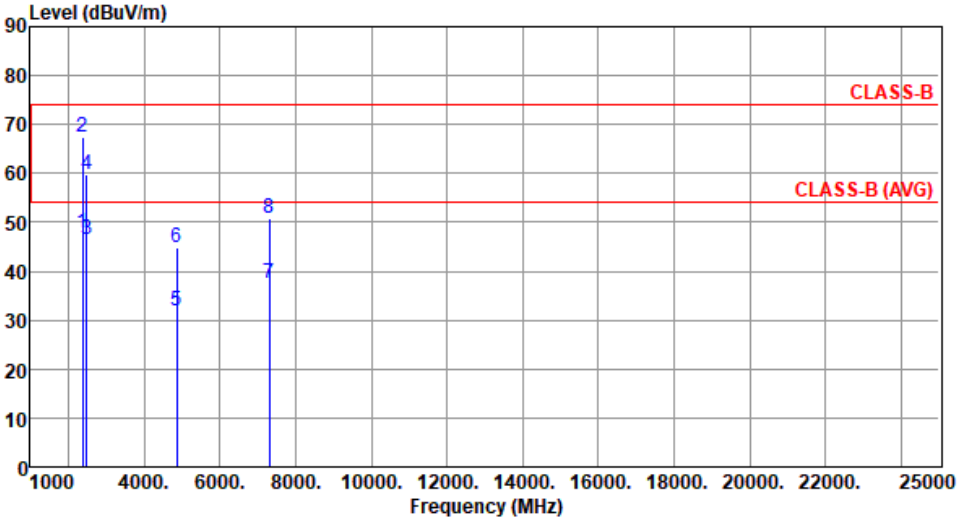


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	52.38	54.00	-1.62	57.03	-4.65	Average	200	135
2	2390.00	70.17	74.00	-3.83	74.82	-4.65	Peak	200	135
3	4844.00	31.84	54.00	-22.16	32.37	-0.53	Average	100	178
4	4844.00	44.83	74.00	-29.17	45.36	-0.53	Peak	100	178
5	7266.00	37.57	54.00	-16.43	32.42	5.15	Average	100	116
6	7266.00	50.72	74.00	-23.28	45.57	5.15	Peak	100	116

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	**Test Freq. (MHz)**	2437
Polarization	Horizontal		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

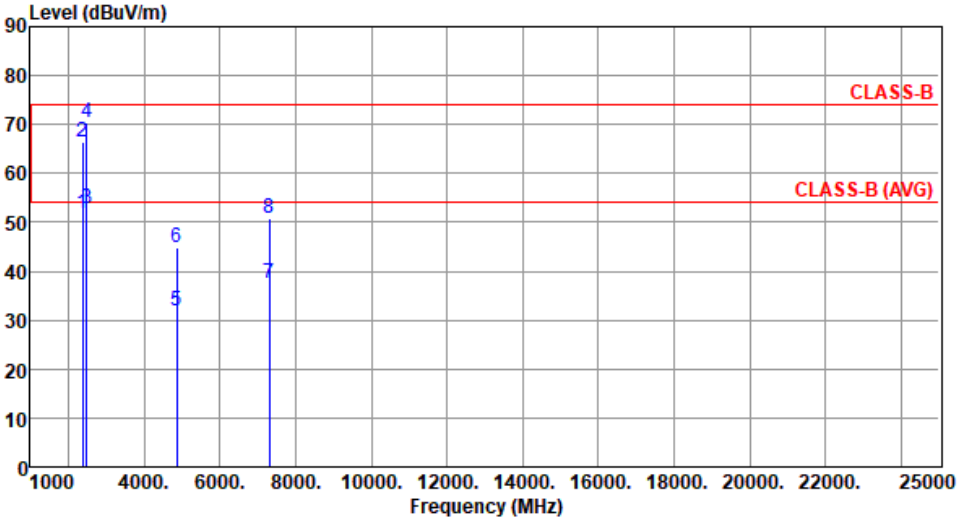


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	47.75	54.00	-6.25	52.40	-4.65	Average	316	102
2	2390.00	67.34	74.00	-6.66	71.99	-4.65	Peak	316	102
3	2483.50	46.57	54.00	-7.43	51.46	-4.89	Average	316	113
4	2483.50	59.66	74.00	-14.34	64.55	-4.89	Peak	316	113
5	4874.00	31.84	54.00	-22.16	32.38	-0.54	Average	100	182
6	4874.00	44.88	74.00	-29.12	45.42	-0.54	Peak	100	182
7	7311.00	37.52	54.00	-16.48	32.30	5.22	Average	100	222
8	7311.00	50.69	74.00	-23.31	45.47	5.22	Peak	100	222

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	**Test Freq. (MHz)**	2437
Polarization	Vertical		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

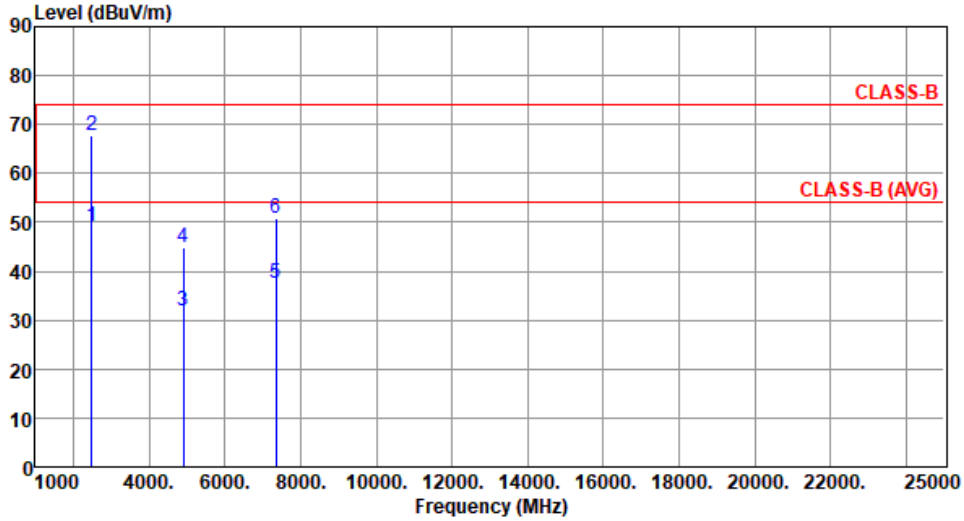


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2390.00	51.69	54.00	-2.31	56.34	-4.65	Average	200	137
2	2390.00	66.48	74.00	-7.52	71.13	-4.65	Peak	200	137
3	2483.50	52.73	54.00	-1.27	57.62	-4.89	Average	200	137
4	2483.50	70.49	74.00	-3.51	75.38	-4.89	Peak	200	137
5	4874.00	31.80	54.00	-22.20	32.34	-0.54	Average	100	177
6	4874.00	44.72	74.00	-29.28	45.26	-0.54	Peak	100	177
7	7311.00	37.58	54.00	-16.42	32.36	5.22	Average	100	265
8	7311.00	50.89	74.00	-23.11	45.67	5.22	Peak	100	265

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	**Test Freq. (MHz)**	2452
Polarization	Horizontal		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63

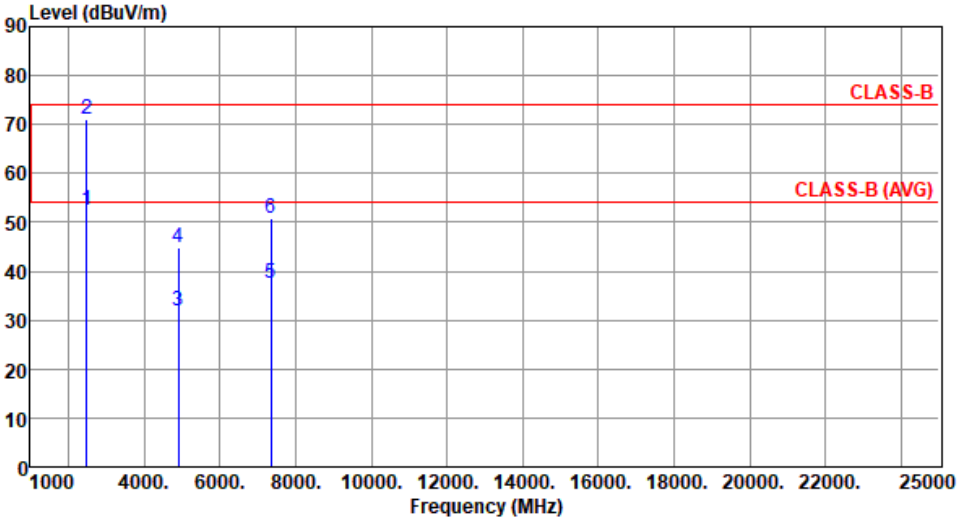


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	49.26	54.00	-4.74	54.15	-4.89	Average	311	67
2	2483.50	67.83	74.00	-6.17	72.72	-4.89	Peak	311	67
3	4904.00	31.83	54.00	-22.17	32.37	-0.54	Average	100	173
4	4904.00	44.72	74.00	-29.28	45.26	-0.54	Peak	100	173
5	7356.00	37.47	54.00	-16.53	32.38	5.09	Average	100	248
6	7356.00	50.67	74.00	-23.33	45.58	5.09	Peak	100	248

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	**Test Freq. (MHz)**	2452
Polarization	Vertical		

Test By :Sena Yu Temperature(℃):25 Humidity(%):63



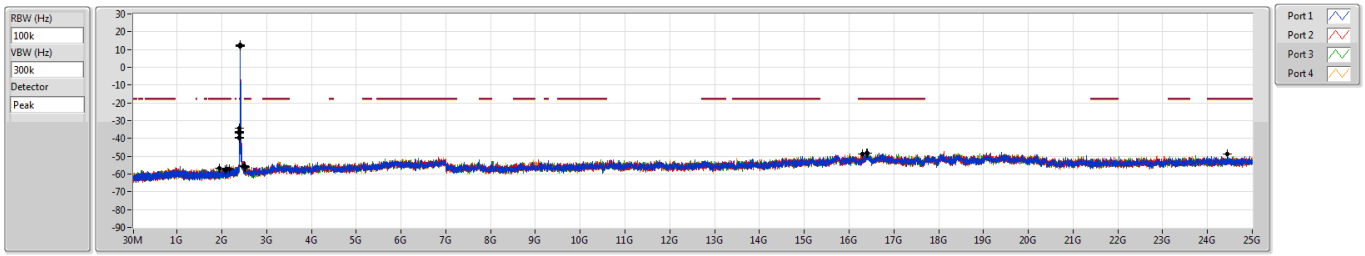
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB/m	Remark	ANT High cm	Turn Table deg
1	2483.50	52.56	54.00	-1.44	57.45	-4.89	Average	198	128
2	2483.50	71.00	74.00	-3.00	75.89	-4.89	Peak	198	128
3	4904.00	31.77	54.00	-22.23	32.31	-0.54	Average	100	188
4	4904.00	44.82	74.00	-29.18	45.36	-0.54	Peak	100	188
5	7356.00	37.40	54.00	-16.60	32.31	5.09	Average	100	256
6	7356.00	50.75	74.00	-23.25	45.66	5.09	Peak	100	256

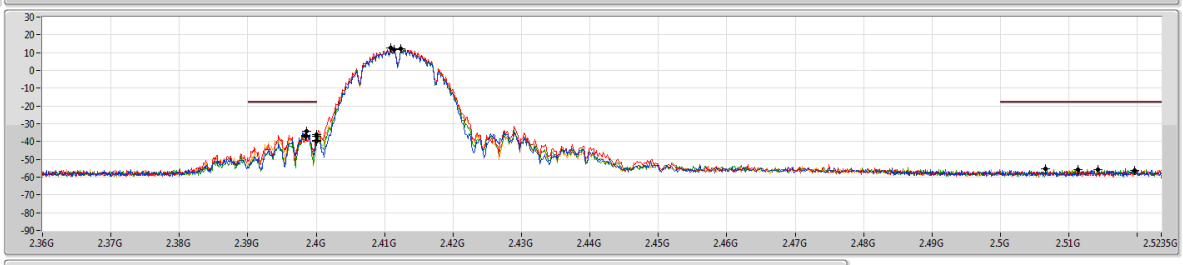
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Non-beamforming mode

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

2412MHz

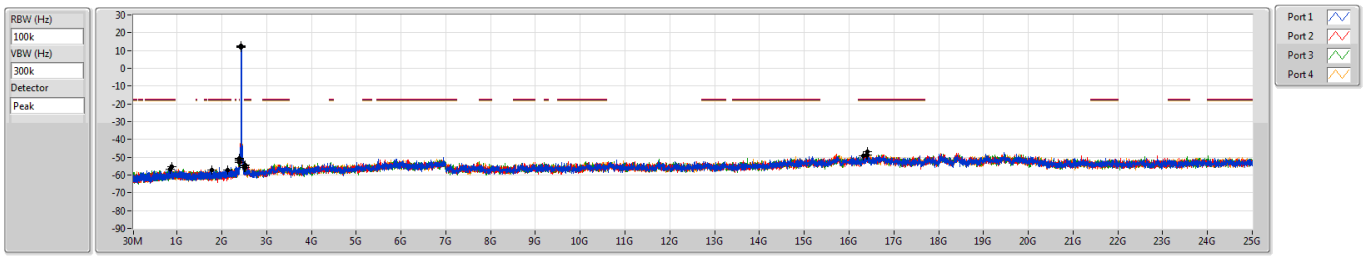


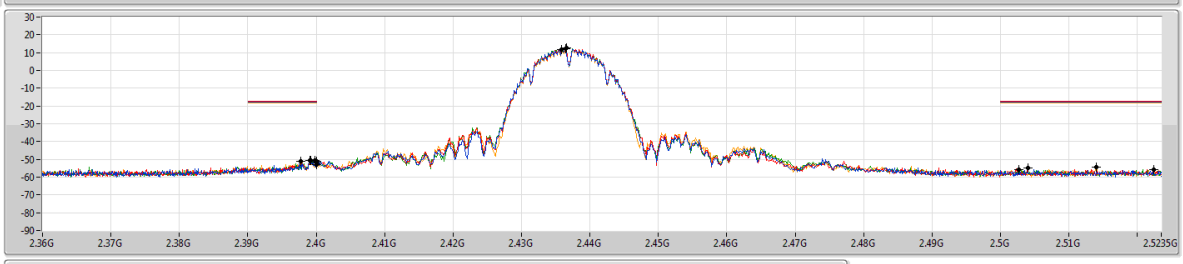


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41236G	12.10	-17.90	2.06642G	-57.51	2.39856G	-34.13	2.4G	-39.85	2.50662G	-55.33	16.3915G	-48.30	1
2.41086G	12.69	-17.31	2.10603G	-57.02	2.4G	-35.90	2.4G	-36.86	2.51966G	-56.12	16.41398G	-48.47	2
2.41236G	12.06	-17.94	2.16428G	-57.06	2.39848G	-36.54	2.4G	-39.20	2.51422G	-55.62	24.4409G	-48.61	3
2.41136G	11.85	-18.15	1.95225G	-56.77	2.39848G	-37.10	2.4G	-39.34	2.51134G	-55.69	16.30721G	-48.75	4

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

2437MHz

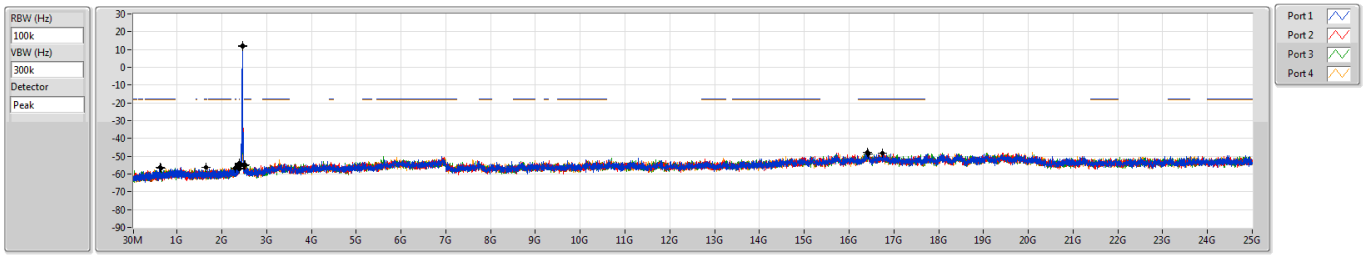


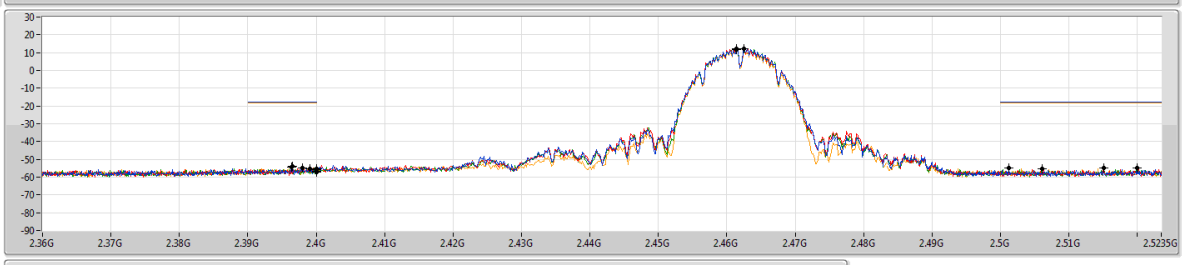


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43641G	11.96	-18.04	893.27M	-55.12	2.39904G	-50.62	2.4G	-52.11	2.52238G	-55.64	16.31283G	-49.01	1
2.43657G	12.61	-17.39	2.12817G	-57.27	2.39976G	-50.77	2.4G	-51.25	2.50398G	-55.01	16.40836G	-46.87	2
2.43657G	12.81	-17.19	1.78333G	-57.01	2.3992G	-50.56	2.4G	-53.00	2.5027G	-55.60	16.41117G	-48.68	3
2.43591G	11.61	-18.39	843.17M	-56.58	2.39768G	-51.18	2.4G	-53.01	2.51406G	-54.53	16.39993G	-48.56	4

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

2462MHz

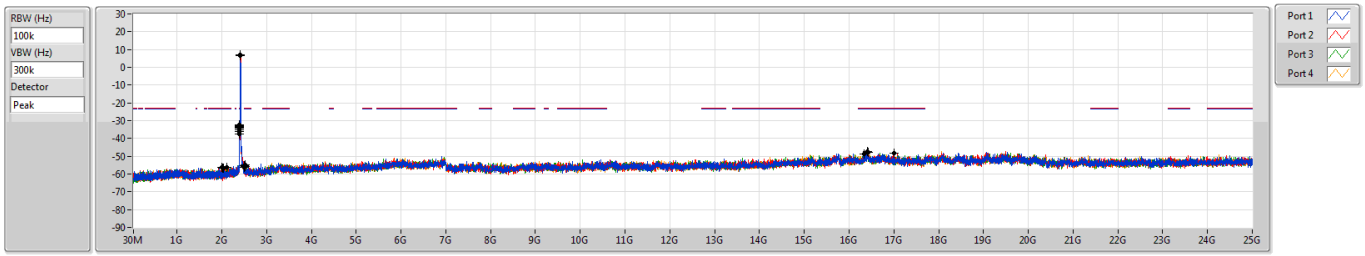


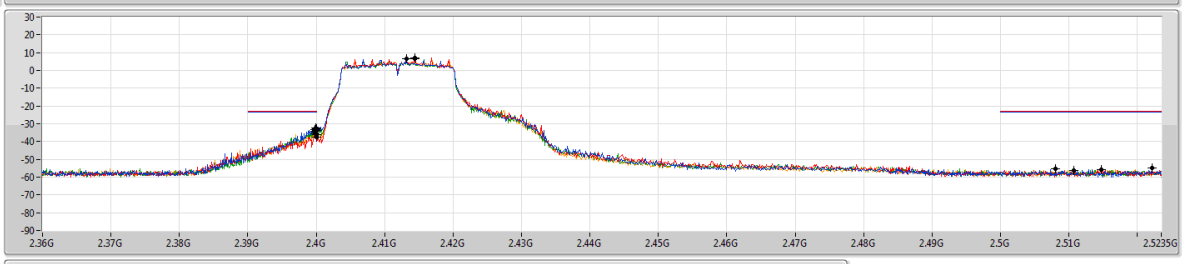


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46246G	12.19	-17.81	639.3M	-56.64	2.3964G	-54.20	2.4G	-57.09	2.50118G	-55.02	16.41117G	-47.73	1
2.46146G	11.97	-18.03	2.30175G	-56.77	2.398G	-54.99	2.4G	-55.38	2.5151G	-54.77	16.73708G	-48.12	2
2.46146G	12.06	-17.94	627.65M	-56.33	2.39656G	-54.01	2.4G	-55.79	2.50606G	-55.43	16.42241G	-48.76	3
2.46146G	11.64	-18.36	1.64353G	-56.40	2.39912G	-55.18	2.4G	-56.84	2.51998G	-54.62	16.40836G	-47.73	4

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

2412MHz

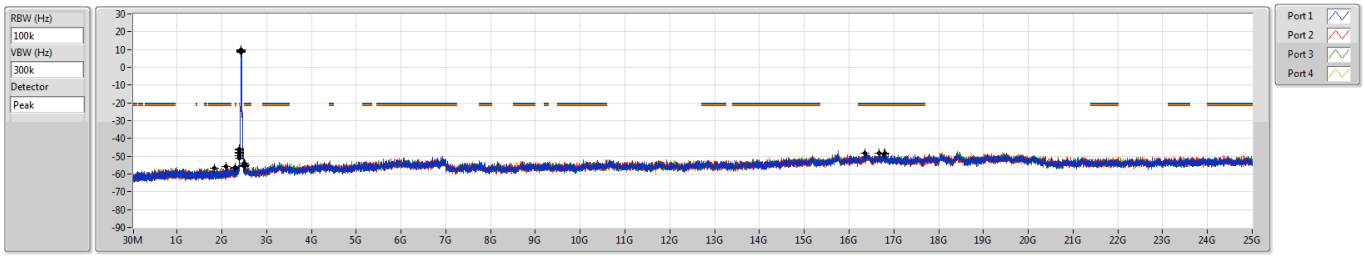


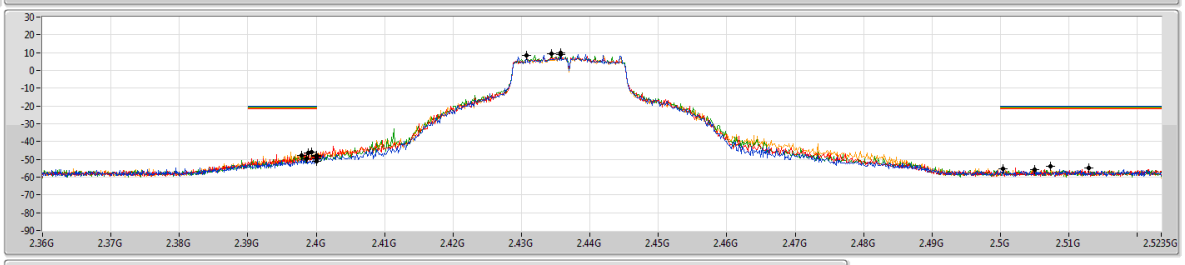


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41319G	6.43	-23.57	2.014G	-56.49	2.39992G	-32.14	2.4G	-32.81	2.52214G	-55.03	16.32969G	-48.55	1
2.41436G	7.22	-22.78	2.04545G	-56.54	2.39976G	-34.96	2.4G	-37.46	2.51478G	-55.84	16.42241G	-47.91	2
2.41319G	6.70	-23.30	2.00817G	-56.23	2.39984G	-33.19	2.4G	-33.66	2.5107G	-56.09	16.40836G	-47.47	3
2.41436G	6.70	-23.30	2.10603G	-56.41	2.39976G	-34.41	2.4G	-35.94	2.50798G	-55.48	16.99837G	-48.24	4

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

2437MHz

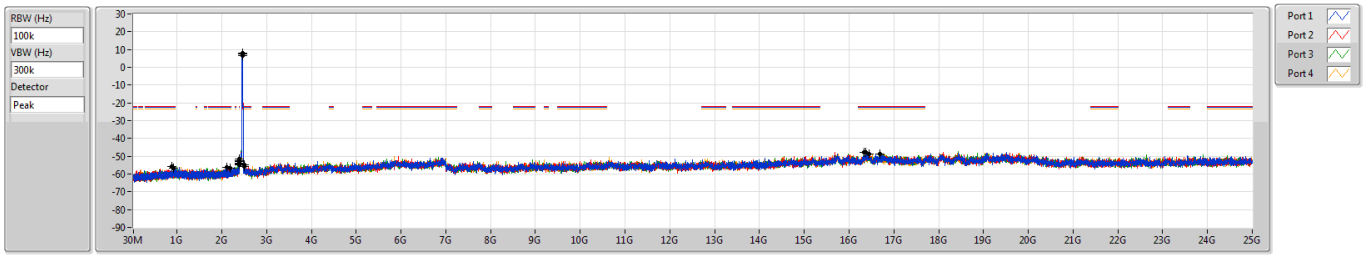


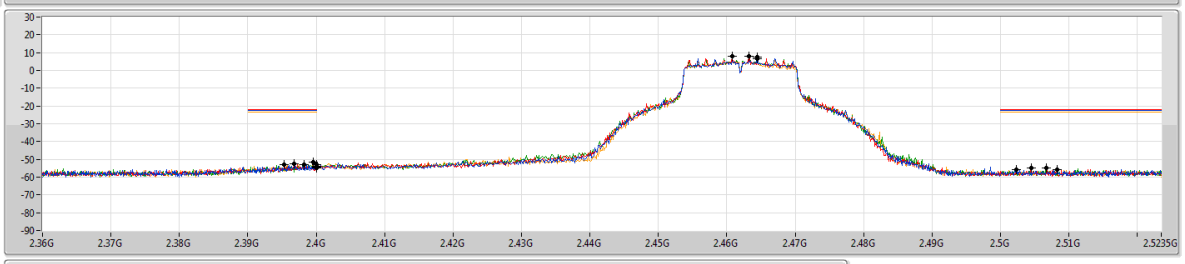


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43574G	10.00	-20.00	1.83808G	-56.54	2.39864G	-49.53	2.4G	-50.86	2.50038G	-55.48	16.66684G	-48.07	1
2.43073G	8.66	-21.34	2.30292G	-56.59	2.3988G	-46.27	2.4G	-47.87	2.51286G	-54.82	16.3634G	-48.47	2
2.4344G	9.22	-20.78	2.09555G	-55.91	2.39792G	-47.69	2.4G	-49.57	2.50494G	-55.72	16.79327G	-48.17	3
2.43574G	8.91	-21.09	2.30641G	-56.20	2.39928G	-45.97	2.4G	-48.07	2.50734G	-54.10	16.7736G	-48.93	4

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

2462MHz

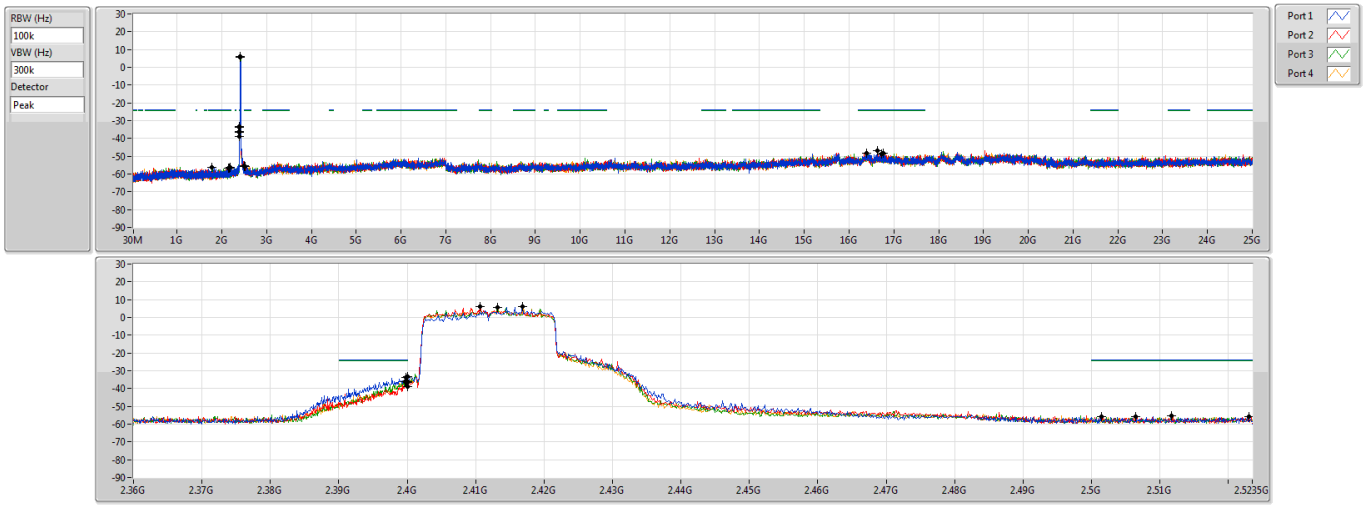




Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.46446G	7.39	-22.61	892.1M	-55.95	2.3968G	-52.73	2.4G	-53.93	2.5023G	-55.83	16.3325G	-47.98	1
2.46079G	7.85	-22.15	2.10953G	-56.30	2.39536G	-53.13	2.4G	-54.75	2.50446G	-54.82	16.36621G	-47.97	2
2.46329G	7.92	-22.08	922.39M	-56.57	2.39824G	-53.18	2.4G	-52.90	2.5067G	-54.63	16.69212G	-48.77	3
2.46446G	6.62	-23.38	2.18292G	-56.79	2.39952G	-51.36	2.4G	-54.20	2.5083G	-55.91	16.45612G	-48.83	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **CSENdB**

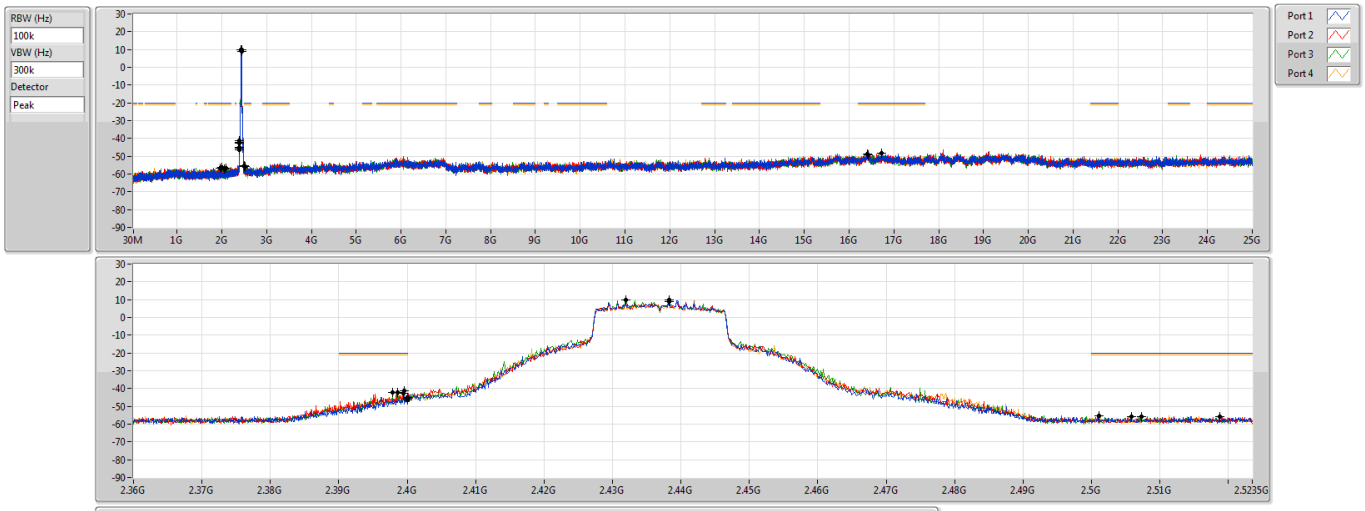
2412MHz



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
2.41687G	6.11	-23.89	2.18758G	-56.40	2.39984G	-33.85	2.4G	-33.36	2.50142G	-55.70	16.63312G	-46.93	1
2.41069G	6.08	-23.92	2.14215G	-56.70	2.39976G	-36.23	2.4G	-39.07	2.50646G	-55.58	16.3915G	-48.48	2
2.41319G	5.55	-24.45	1.77517G	-56.46	2.4G	-36.53	2.4G	-36.29	2.52302G	-55.75	16.75955G	-48.44	3
2.41069G	5.87	-24.13	2.1771G	-56.85	2.39968G	-36.00	2.4G	-35.94	2.51174G	-55.52	16.72584G	-48.59	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX **CSENdB**

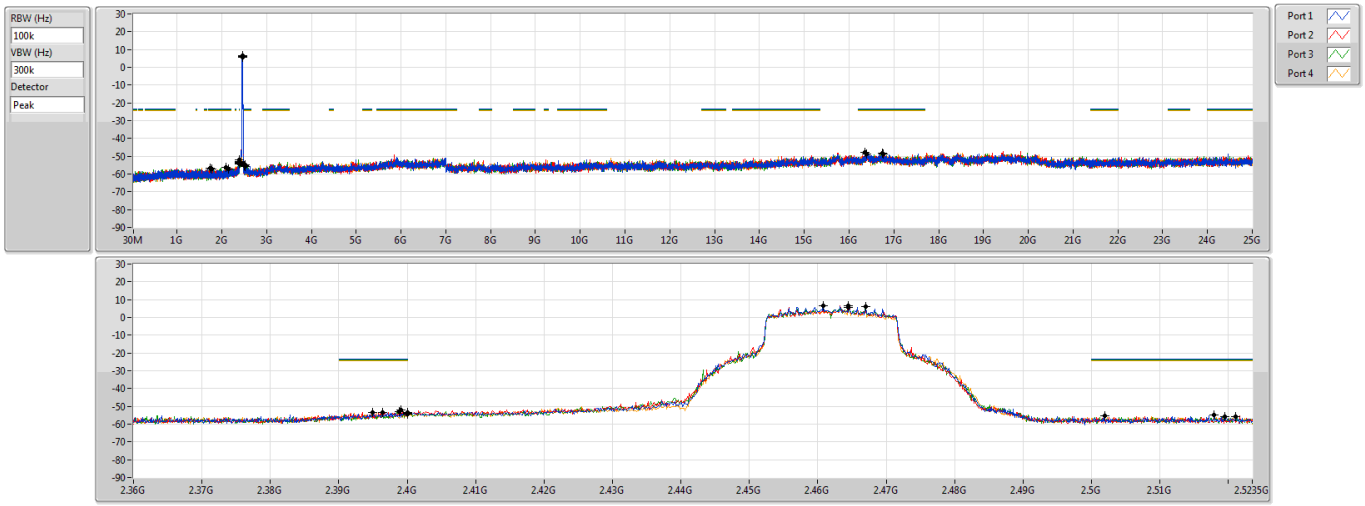
2437MHz



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
2.43824G	9.66	-20.34	2.10021G	-56.62	2.39952G	-41.04	2.4G	-44.77	2.50582G	-55.67	16.72584G	-48.30	1
2.43824G	9.88	-20.12	2.05594G	-56.97	2.39856G	-41.99	2.4G	-45.64	2.5187G	-55.76	16.73427G	-48.42	2
2.4319G	9.87	-20.13	1.99885G	-56.14	2.39784G	-42.39	2.4G	-45.32	2.50726G	-55.68	16.40555G	-48.63	3
2.43824G	9.13	-20.87	1.96507G	-56.71	2.39944G	-42.53	2.4G	-46.22	2.5011G	-55.48	16.42802G	-49.16	4

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX CSENdB

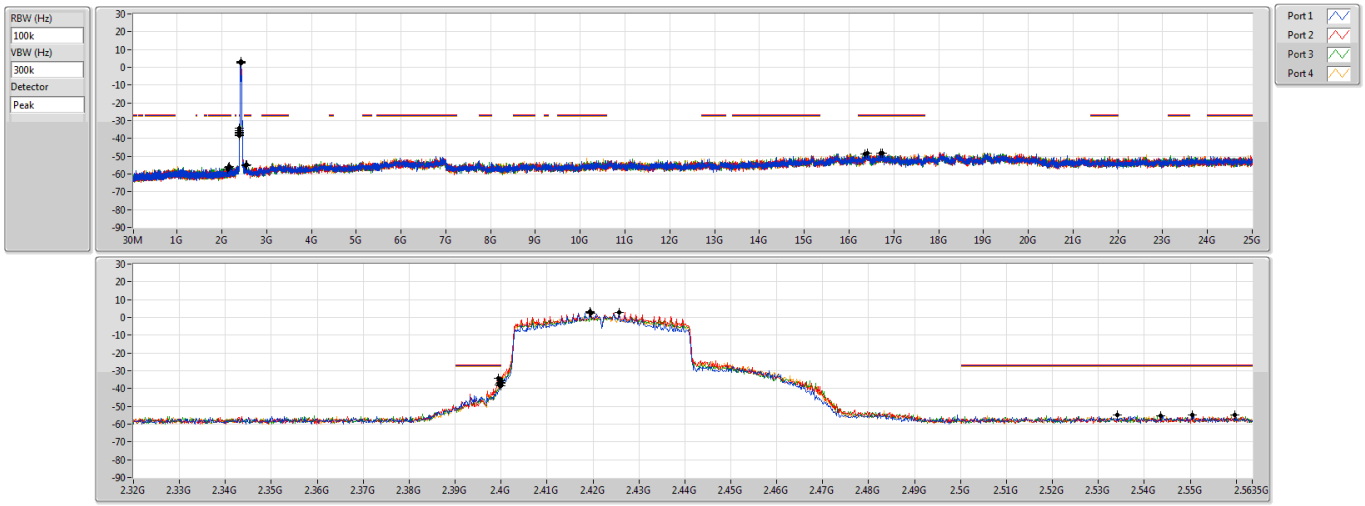
2462MHz



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
2.46079G	6.56	-23.44	2.15147G	-56.98	2.39496G	-53.23	2.4G	-53.86	2.5019G	-55.23	16.38869G	-48.56	1
2.46446G	6.40	-23.60	1.73207G	-56.86	2.39912G	-51.96	2.4G	-53.59	2.5179G	-55.03	16.76517G	-48.84	2
2.46697G	6.21	-23.79	2.10254G	-56.29	2.3988G	-53.17	2.4G	-54.08	2.5195G	-55.90	16.74831G	-48.11	3
2.46446G	5.79	-24.21	1.77168G	-57.03	2.3964G	-53.28	2.4G	-54.26	2.52102G	-55.82	16.35217G	-47.60	4

2.4-2.4835GHz_802.11ax HEW40_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	2.91	-27.09	2.17344G	-55.93	2.39968G	-38.12	2.4G	-38.40	2.55038G	-54.83	16.74898G	-48.12	1
2.41937G	3.14	-26.86	2.15741G	-56.40	2.39936G	-34.18	2.4G	-35.53	2.53406G	-54.98	16.35353G	-48.60	2
2.42572G	2.62	-27.38	2.1368G	-57.14	2.4G	-36.53	2.4G	-38.40	2.5435G	-55.18	16.70971G	-48.32	3
2.41954G	2.30	-27.70	2.17459G	-55.65	2.39984G	-37.02	2.4G	-36.93	2.55966G	-54.98	16.41523G	-48.12	4

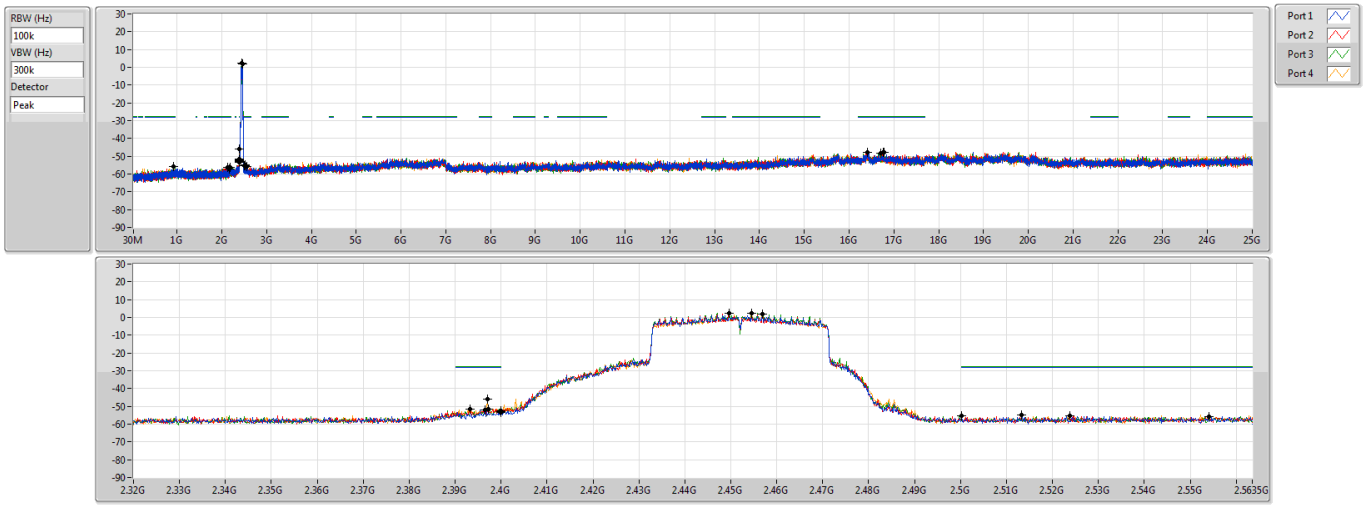
2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **CSENdB**

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
2.4344G	5.32	-24.68	2.18031G	-56.08	2.39936G	-34.74	2.4G	-35.75	2.50206G	-55.30	16.38999G	-48.02	1
2.4319G	5.25	-24.75	2.19291G	-55.78	2.39936G	-34.77	2.4G	-36.10	2.54702G	-54.40	16.42084G	-48.13	2
2.4319G	6.02	-23.98	708.99M	-56.71	2.39936G	-33.58	2.4G	-33.65	2.55742G	-55.61	17.01261G	-47.80	3
2.4344G	4.87	-25.13	1.95246G	-56.80	2.4G	-33.58	2.4G	-34.53	2.54878G	-54.43	16.2722G	-48.50	4

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX **CSENdB**

2452MHz

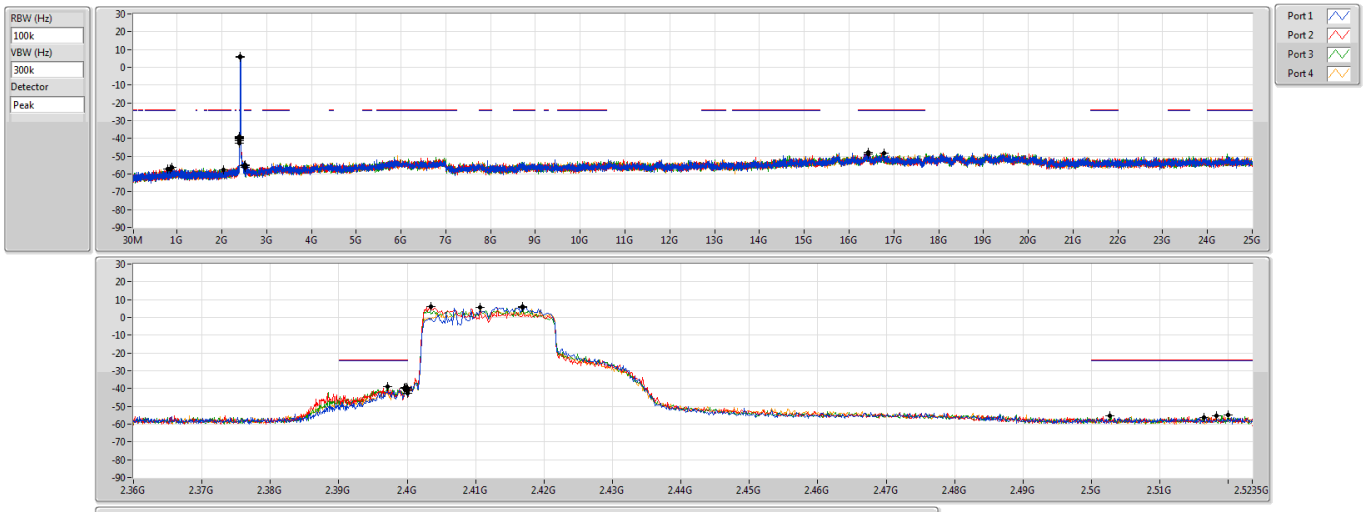


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.45695G	1.71	-28.29	2.18375G	-56.32	2.39648G	-51.88	2.4G	-52.96	2.5003G	-55.32	16.40121G	-47.65	1
2.45695G	1.81	-28.19	928.83M	-55.60	2.39328G	-51.53	2.4G	-53.53	2.52382G	-55.14	16.77983G	-47.96	2
2.4496G	2.42	-27.58	2.12421G	-56.40	2.39728G	-51.41	2.4G	-53.31	2.55406G	-55.74	16.70971G	-48.41	3
2.45444G	2.31	-27.69	2.16886G	-56.98	2.39712G	-46.08	2.4G	-52.73	2.51326G	-54.72	16.7602G	-48.04	4

Beamforming mode

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX CSENdB

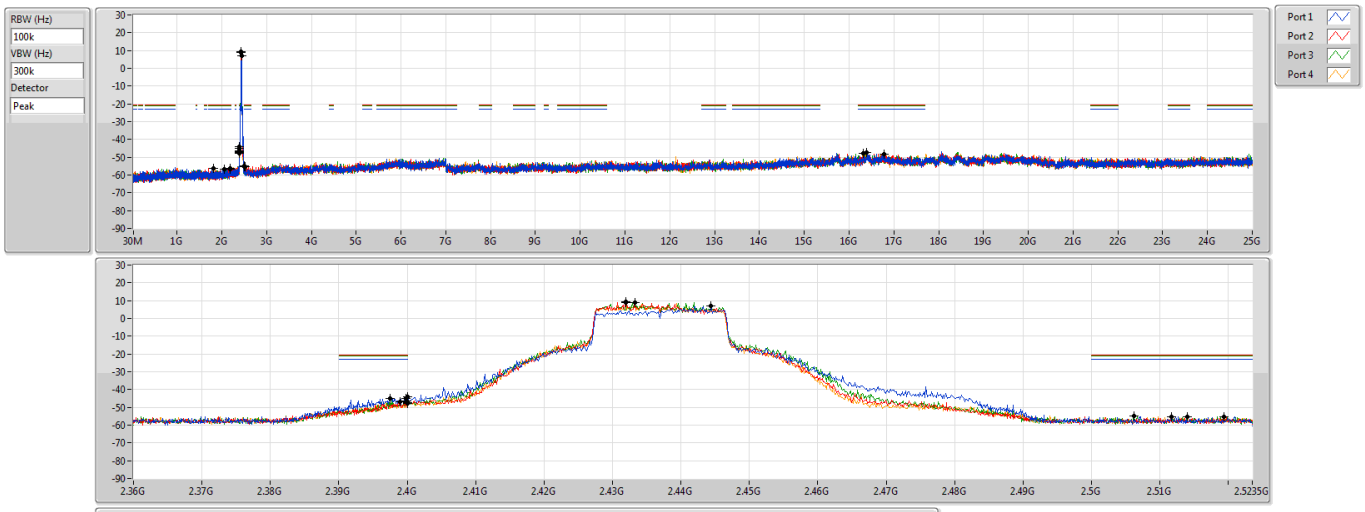
2412MHz



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
2.41687G	5.55	-24.45	2.03147G	-57.51	2.3996G	-39.96	2.4G	-40.26	2.51646G	-56.04	16.77922G	-48.23	1
2.40351G	6.10	-23.90	844.34M	-57.33	2.39968G	-39.56	2.4G	-42.66	2.51822G	-55.17	16.4196G	-48.61	2
2.41687G	5.92	-24.08	795.41M	-57.16	2.39712G	-38.72	2.4G	-41.42	2.51998G	-55.03	16.43364G	-47.65	3
2.41069G	5.41	-24.59	893.27M	-56.37	2.39992G	-39.49	2.4G	-41.20	2.5027G	-55.30	16.4196G	-47.85	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX CSENdB

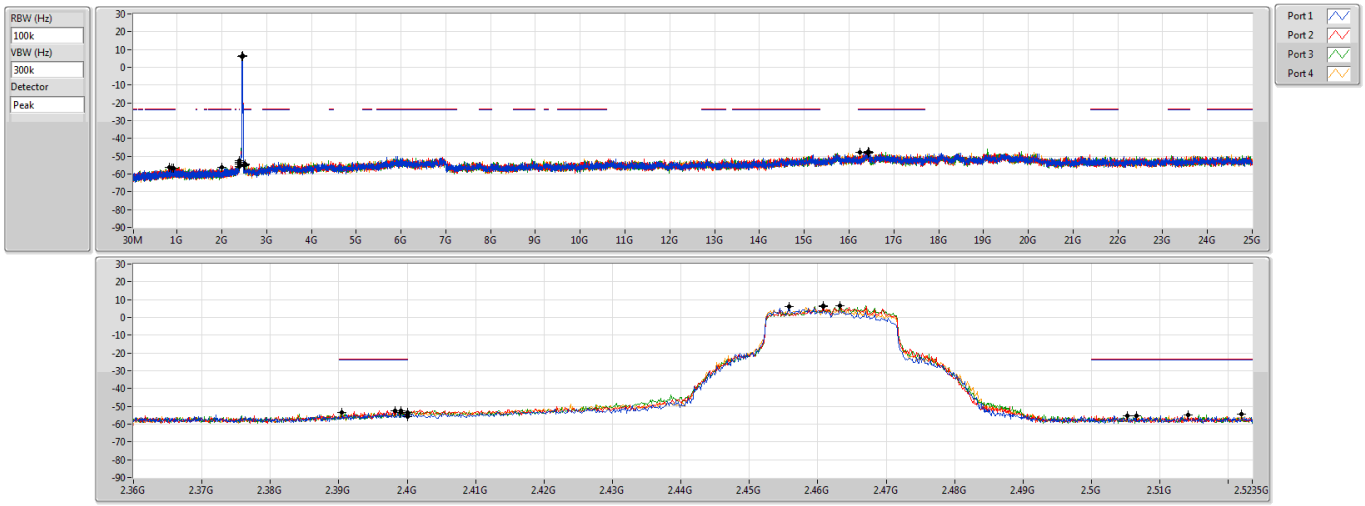
2437MHz



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
2.44442G	6.84	-23.16	2.18292G	-56.43	2.39752G	-44.83	2.4G	-44.17	2.51398G	-55.11	16.79046G	-48.19	1
2.4319G	9.16	-20.84	2.18875G	-56.60	2.39992G	-46.59	2.4G	-47.63	2.51166G	-55.46	16.77641G	-48.11	2
2.43323G	9.05	-20.95	2.05943G	-56.51	2.39976G	-44.83	2.4G	-47.47	2.50622G	-54.73	16.39993G	-47.41	3
2.4319G	8.87	-21.13	1.81828G	-56.38	2.39896G	-46.97	2.4G	-47.79	2.51934G	-55.22	16.32407G	-47.64	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX **CSENdB**

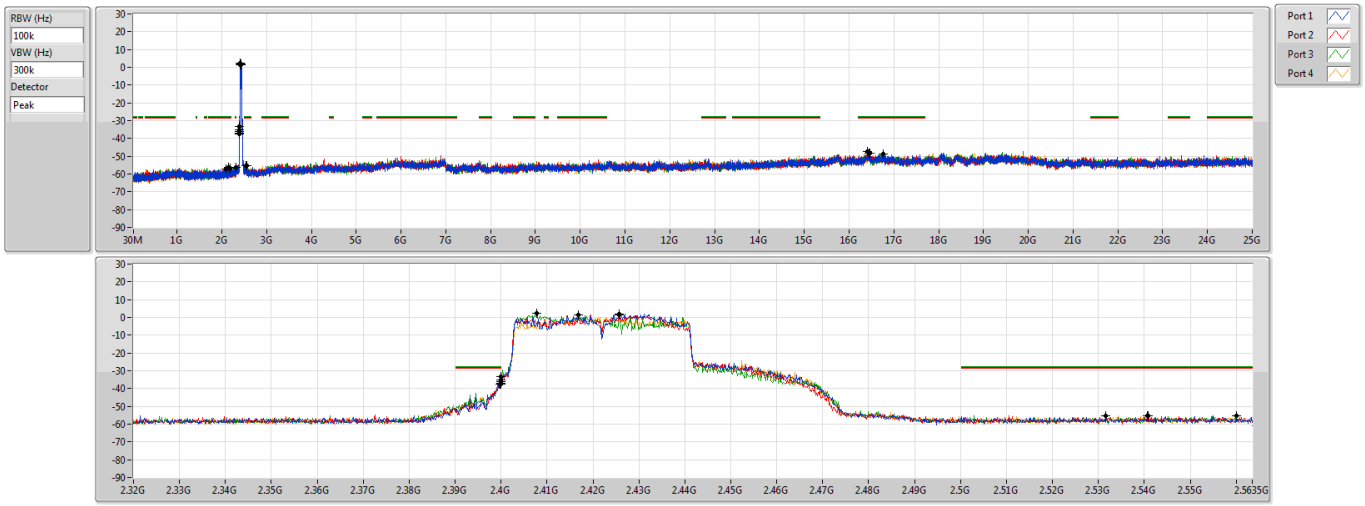
2462MHz



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
2.45578G	6.01	-23.99	924.72M	-56.70	2.39048G	-53.56	2.4G	-54.56	2.50654G	-55.25	16.43083G	-48.14	1
2.46079G	6.71	-23.29	821.04M	-56.46	2.39824G	-52.32	2.4G	-53.51	2.50518G	-55.21	16.44488G	-47.88	2
2.46329G	6.69	-23.31	892.1M	-56.73	2.39904G	-52.67	2.4G	-54.24	2.51414G	-54.89	16.25102G	-47.84	3
2.46079G	5.95	-24.05	2.00701G	-56.05	2.39912G	-53.30	2.4G	-55.98	2.5219G	-54.60	16.43083G	-47.56	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **CSENdB**

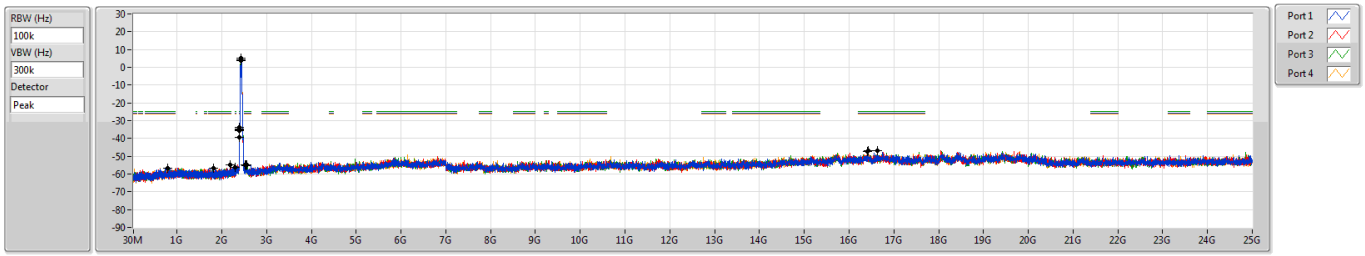
2422MHz

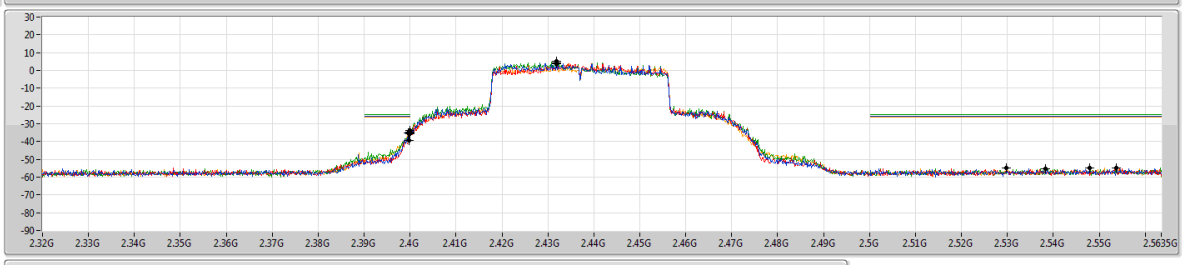


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42572G	1.98	-28.02	2.19405G	-56.66	2.4G	-35.91	2.4G	-36.14	2.5315G	-55.11	16.46291G	-48.16	1
2.42572G	1.60	-28.40	2.08528G	-57.09	2.4G	-35.93	2.4G	-37.09	2.54062G	-55.46	16.40682G	-47.48	2
2.40768G	2.15	-27.85	2.14711G	-56.30	2.4G	-33.49	2.4G	-35.39	2.55998G	-55.25	16.45169G	-48.20	3
2.41687G	1.53	-28.47	2.30855G	-56.44	2.39984G	-37.43	2.4G	-37.39	2.54078G	-55.41	16.75739G	-48.67	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **CSENdB**

2437MHz

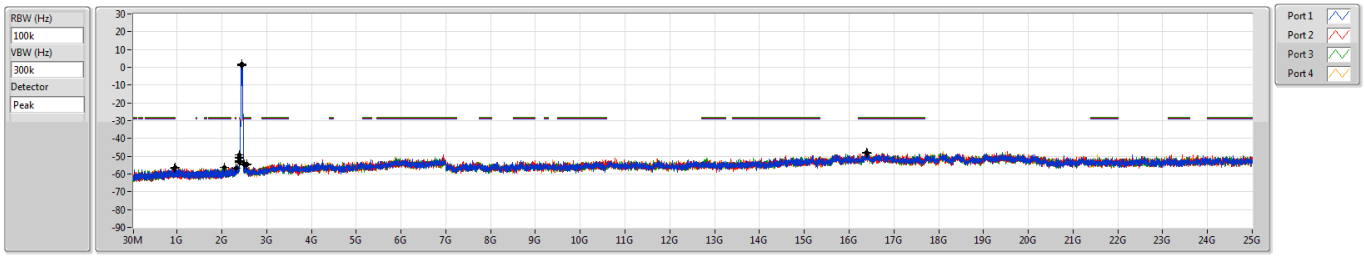


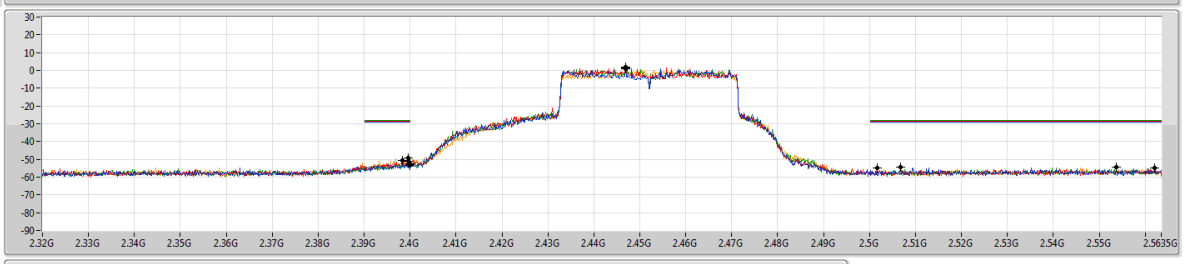


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4319G	4.18	-25.82	1.8162G	-56.53	2.39984G	-35.00	2.4G	-35.58	2.54782G	-54.88	16.6424G	-47.00	1
2.4319G	4.00	-26.00	2.30626G	-56.30	2.39984G	-39.20	2.4G	-35.30	2.53838G	-55.22	16.40121G	-47.37	2
2.4319G	5.30	-24.70	2.19291G	-54.90	2.4G	-35.24	2.4G	-34.86	2.55374G	-54.82	16.42365G	-46.98	3
2.4319G	3.98	-26.02	784.56M	-56.66	2.39952G	-35.14	2.4G	-33.85	2.52974G	-54.92	16.41523G	-47.14	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX **CSENdB**

2452MHz



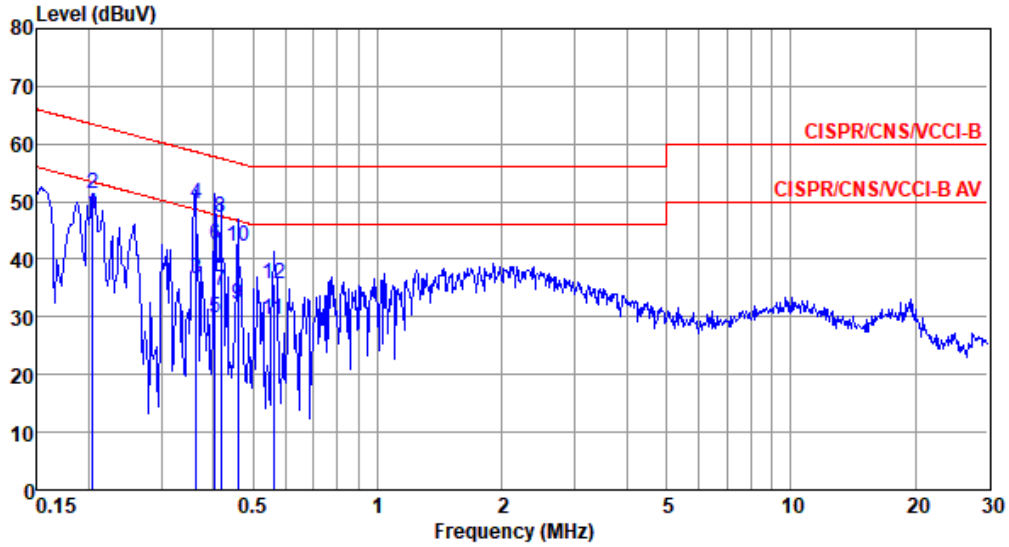


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44693G	0.86	-29.14	2.30855G	-56.80	2.4G	-52.51	2.4G	-52.88	2.55374G	-54.24	16.3956G	-47.64	1
2.44693G	1.55	-28.45	950.58M	-56.21	2.3984G	-50.71	2.4G	-52.77	2.50174G	-55.00	16.40121G	-48.15	2
2.44693G	1.71	-28.29	2.06238G	-56.15	2.39952G	-50.96	2.4G	-53.52	2.5067G	-54.47	16.3928G	-48.15	3
2.44693G	1.56	-28.44	933.41M	-56.56	2.39968G	-49.11	2.4G	-52.74	2.56206G	-54.87	16.41243G	-48.49	4

Non-beamforming mode

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

Test by : Joe Liao Temperature: 22°C Humidity: 63%

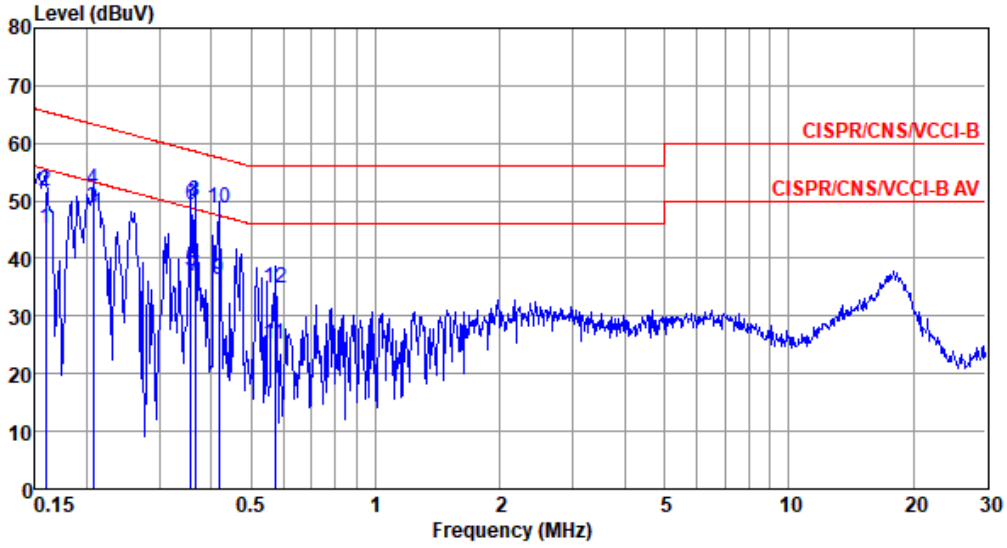


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1*	0.204	47.85	53.45	-5.60	37.98	9.62	0.06	0.19	Average
2	0.204	51.44	63.45	-12.01	41.57	9.62	0.06	0.19	QP
3	0.363	36.60	48.65	-12.05	26.64	9.62	0.06	0.28	Average
4	0.363	49.55	58.65	-9.10	39.59	9.62	0.06	0.28	QP
5	0.404	29.87	47.77	-17.90	19.89	9.62	0.06	0.30	Average
6	0.404	42.64	57.77	-15.13	32.66	9.62	0.06	0.30	QP
7	0.417	34.39	47.51	-13.12	24.41	9.62	0.06	0.30	Average
8	0.417	47.33	57.51	-10.18	37.35	9.62	0.06	0.30	QP
9	0.459	32.11	46.71	-14.60	22.12	9.62	0.07	0.30	Average
10	0.459	42.18	56.71	-14.53	32.19	9.62	0.07	0.30	QP
11	0.561	29.65	46.00	-16.35	19.64	9.62	0.08	0.31	Average
12	0.561	35.65	56.00	-20.35	25.64	9.62	0.08	0.31	QP

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

Modulation Mode	11b	Test Freq. (MHz)	2437
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 63%



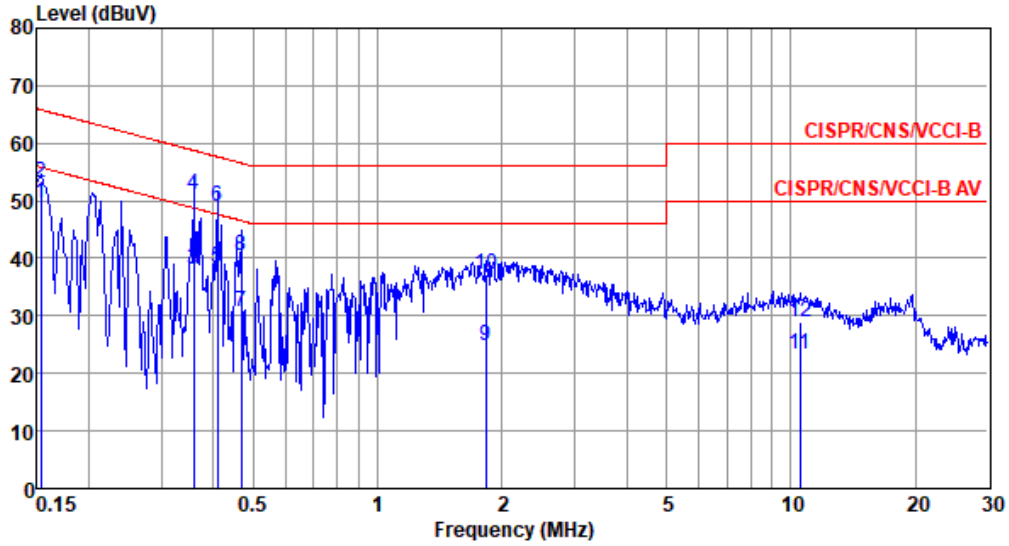
	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1	0.159	45.29	55.52	-10.23	35.42	9.63	0.06	0.18	Average
2	0.159	51.79	65.52	-13.73	41.92	9.63	0.06	0.18	QP
3*	0.207	48.85	53.32	-4.47	38.96	9.63	0.06	0.20	Average
4	0.207	52.03	63.32	-11.29	42.14	9.63	0.06	0.20	QP
5	0.358	37.82	48.78	-10.96	27.86	9.62	0.06	0.28	Average
6	0.358	49.16	58.78	-9.62	39.20	9.62	0.06	0.28	QP
7	0.365	36.79	48.61	-11.82	26.82	9.62	0.06	0.29	Average
8	0.365	49.77	58.61	-8.84	39.80	9.62	0.06	0.29	QP
9	0.417	36.41	47.51	-11.10	26.43	9.62	0.06	0.30	Average
10	0.417	48.82	57.51	-8.69	38.84	9.62	0.06	0.30	QP
11	0.570	25.14	46.00	-20.86	15.13	9.62	0.08	0.31	Average
12	0.570	34.80	56.00	-21.20	24.79	9.62	0.08	0.31	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).

Beamforming mode

Modulation Mode	ax HE20	Test Freq. (MHz)	2437
Power Phase	Line		

Test by : Joe Liao Temperature: 22°C Humidity: 63%

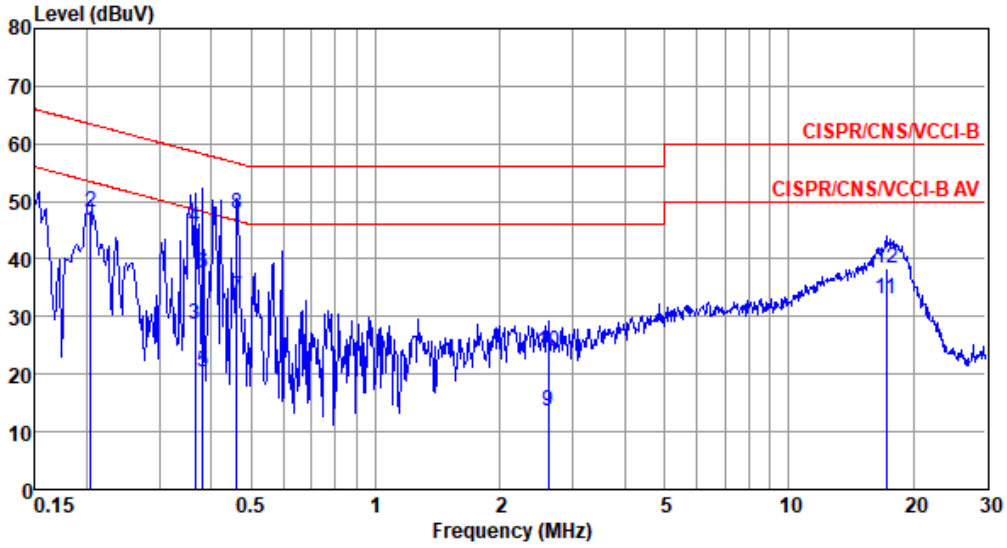


	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1*	0.153	49.55	55.82	-6.27	39.68	9.63	0.06	0.18	Average
2	0.153	53.15	65.82	-12.67	43.28	9.63	0.06	0.18	QP
3	0.360	38.05	48.74	-10.69	28.09	9.62	0.06	0.28	Average
4	0.360	50.99	58.74	-7.75	41.03	9.62	0.06	0.28	QP
5	0.410	38.45	47.64	-9.19	28.47	9.62	0.06	0.30	Average
6	0.410	48.91	57.64	-8.73	38.93	9.62	0.06	0.30	QP
7	0.469	30.62	46.54	-15.92	20.62	9.62	0.07	0.31	Average
8	0.469	40.53	56.54	-16.01	30.53	9.62	0.07	0.31	QP
9	1.829	24.84	46.00	-21.16	14.72	9.63	0.13	0.36	Average
10	1.829	37.13	56.00	-18.87	27.01	9.63	0.13	0.36	QP
11	10.508	23.23	50.00	-26.77	12.72	9.69	0.37	0.45	Average
12	10.508	28.85	60.00	-31.15	18.34	9.69	0.37	0.45	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	ax HE20	Test Freq. (MHz)	2437
Power Phase	Neutral		

Test by : Joe Liao Temperature: 22°C Humidity: 63%



	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Cable loss	Aux	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	dB	dB	
1*	0.204	44.77	53.45	-8.68	34.89	9.63	0.06	0.19	Average
2	0.204	48.00	63.45	-15.45	38.12	9.63	0.06	0.19	QP
3	0.365	28.56	48.61	-20.05	18.59	9.62	0.06	0.29	Average
4	0.365	45.43	58.61	-13.18	35.46	9.62	0.06	0.29	QP
5	0.381	20.23	48.25	-28.02	10.26	9.62	0.06	0.29	Average
6	0.381	37.51	58.25	-20.74	27.54	9.62	0.06	0.29	QP
7	0.461	33.34	46.67	-13.33	23.35	9.62	0.07	0.30	Average
8	0.461	47.79	56.67	-8.88	37.80	9.62	0.07	0.30	QP
9	2.622	13.50	46.00	-32.50	3.33	9.64	0.15	0.38	Average
10	2.622	24.04	56.00	-31.96	13.87	9.64	0.15	0.38	QP
11	17.199	33.18	50.00	-16.82	22.43	9.78	0.47	0.50	Average
12	17.199	38.40	60.00	-21.60	27.65	9.78	0.47	0.50	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).