

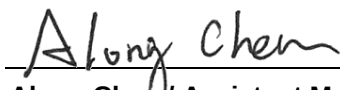
FCC Test Report

FCC ID : IPH-04225
Equipment : Outdoor Product
Model No. : A04225
Brand Name : GARMIN
Applicant : Garmin International, Inc.
Address : 1200 E. 151st Street Olathe, KS 66062 United States
Standard : 47 CFR FCC Part 15.247
Received Date : Jun. 25, 2024
Tested Date : Aug. 21 ~ Sep. 05, 2024

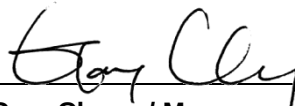
We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the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

Reviewed by:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager

Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Local Support Equipment List	7
1.3	Test Setup Chart	7
1.4	The Equipment List	8
1.5	Test Standards	9
1.6	Reference Guidance	9
1.7	Deviation from Test Standard and Measurement Procedure.....	9
1.8	Measurement Uncertainty	9
2	TEST CONFIGURATION.....	10
2.1	Testing Facility	10
2.2	The Worst Test Modes and Channel Details	10
3	TRANSMITTER TEST RESULTS	11
3.1	6dB and Occupied Bandwidth.....	11
3.2	Conducted Output Power	12
3.3	Power Spectral Density	13
3.4	Unwanted Emissions into Restricted Frequency Bands	14
3.5	Emissions in Non-Restricted Frequency Bands.....	16
3.6	AC Power Line Conducted Emissions	17
4	TEST LABORATORY INFORMATION	18
Appendix A. 6dB and Occupied Bandwidth		
Appendix B. Conducted Output Power		
Appendix C. Power Spectral Density		
Appendix D. Unwanted Emissions into Restricted Frequency Bands		
Appendix E. Emissions in Non-Restricted Frequency Bands		
Appendix F. AC Power Line Conducted Emissions		

Release Record

Report No.	Version	Description	Issued Date
FR462501AC	Rev. 01	Initial issue	Sep. 10, 2024

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emission	[dBuV]: 0.156MHz 49.66 (Margin -16.03dB) - QP	Pass
15.247(d) 15.209	Unwanted Emissions	[dBuV/m at 3m]: 148.5MHz 42.48 (Margin -1.02dB) - QP [dBuV/m at 3m]: 2483.5MHz 52.98 (Margin -1.02dB) - AV	Pass
15.247(b)(3)	Conducted Output Power	Max Power [dBm]: 22.78	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]	1	1-11 Mbps
2400-2483.5	g	2412-2462	1-11 [11]	1	6-54 Mbps
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	1	MCS 0-7
Note 1: RF output power specifies that Maximum Peak Conducted Output Power.					
Note 2: DSSS-DBPSK, DQPSK, CCK modulation OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.					

1.1.2 Antenna Details

Brand	Model	Type	Connector	Gain (dBi)
Unictron Technologies Corporation	H2U84W1H1S0300	Chip	No	4.36

1.1.3 Configuration of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter 7.2Vdc from battery
-------------------	--

1.1.4 Accessories

Accessories		
No.	Equipment	Description
1	AC adapter	Brand: DELTA ELECTRONICS, INC. Model: ADT-060A12AA I/P: 100-240V~1.4A MAX, 50-60Hz O/P: 12V= 5.0A Power Line: AC 1.18m non-shielded without core DC 1.22m non-shielded with one core
2	Battery	Brand: Garmin Model: 361-00149-00 Rating: 7.2V, 12225mAh

1.1.5 Channel List

Channel	Frequency(MHz)
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

1.1.6 Test Tool and Duty Cycle

Test Tool	WIFI Test, version: Rev6 Ver2.13		
Duty Cycle and Duty Factor	Mode	Duty Cycle (%)	Duty Factor (dB)
	11b	98.63%	0.06
	11g	80.30%	0.95
	HT20	78.60%	1.05

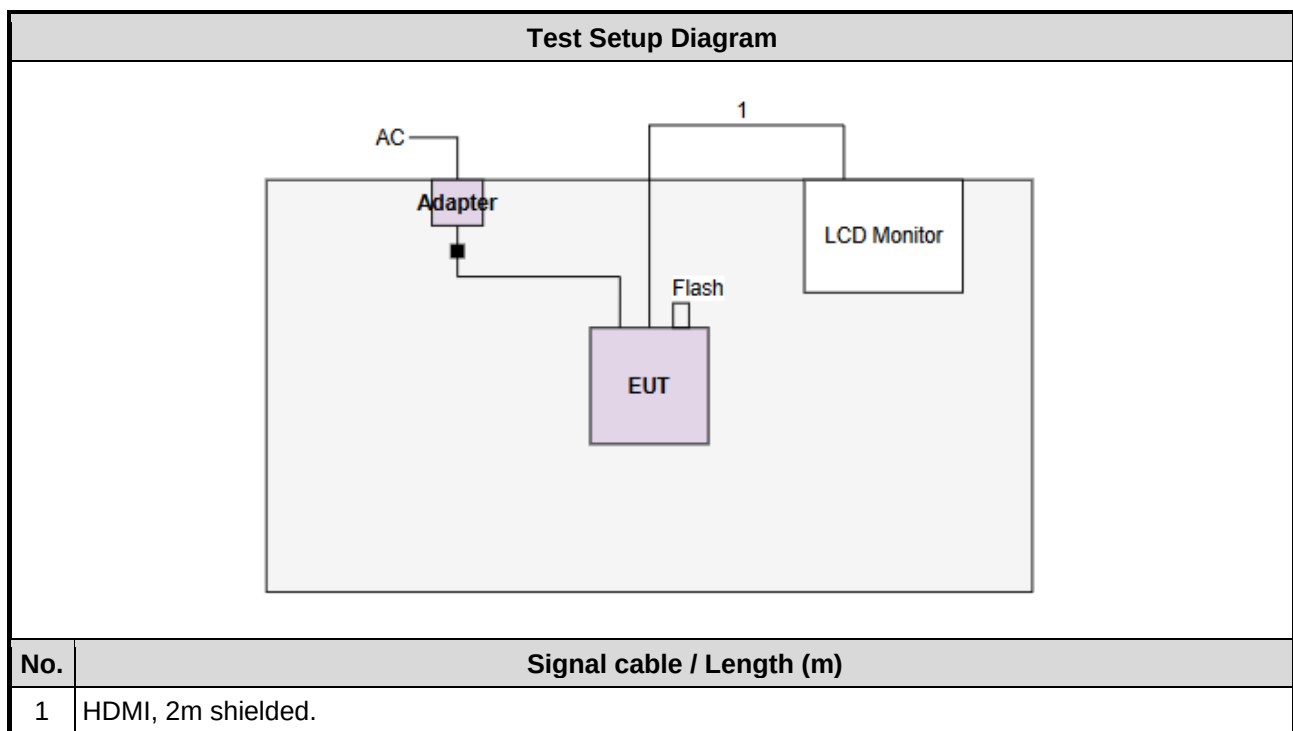
1.1.7 Power Index of Test Tool

Modulation Mode	Test Frequency (MHz)	Power Index
11b	2412	17
11b	2437	18
11b	2462	19
11g	2412	19
11g	2437	20
11g	2462	20
HT20	2412	19
HT20	2437	20
HT20	2462	20

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	USB 3.1 Type-C OTG Flash	pqi	Connect 313	---	---
2	LCD Monitor	HP	M24fw	---	---

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Aug. 23, 2024				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101658	Feb. 23, 2024	Feb. 22, 2025
LISN	R&S	ENV216	101579	May 09, 2024	May 08, 2025
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127667	Jan. 10, 2024	Jan. 09, 2025
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Oct. 11, 2023	Oct. 10, 2024
50 ohm terminal	NA	50	01	Jun. 19, 2024	Jun. 18, 2025
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Aug. 21 ~ Aug. 23, 2024				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 05, 2024	Mar. 04, 2025
Spectrum Analyzer	R&S	FSV40	101499	Apr. 02, 2024	Apr. 01, 2025
Loop Antenna	R&S	HFH2-Z2	100330	Oct. 31, 2023	Oct. 30, 2024
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Jul. 02, 2024	Jul. 01, 2025
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Dec. 14, 2023	Dec. 13, 2024
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Oct. 30, 2023	Oct. 29, 2024
Preamplifier	EMC	EMC02325	980187	Jun. 27, 2024	Jun. 26, 2025
Preamplifier	EMC	EMC118A45SE	980897	Aug. 05, 2024	Aug. 04, 2025
Preamplifier	EMC	EMC184045SE	980903	Jul. 30, 2024	Jul. 29, 2025
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 03, 2023	Oct. 02, 2024
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-001	Sep. 22, 2023	Sep. 21, 2024
LF cable-3M	EMC	EMC8D-NM-NM-3000	131103	Sep. 22, 2023	Sep. 21, 2024
LF cable-13M	EMC	EMC8D-NM-NM-13000	131104	Sep. 22, 2023	Sep. 21, 2024
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22620/4	Sep. 22, 2023	Sep. 21, 2024
RF cable-8M	EMC	EMC104-SM-SM-8000	181107	Sep. 22, 2023	Sep. 21, 2024
Attenuator	Pasternack	PE7005-10	10-3	Sep. 27, 2023	Sep. 26, 2024
HIGHPASS FILTER	WI	WHK3.1-18G-10SS	43	Sep. 27, 2023	Sep. 26, 2024
Measurement Software	Sporton	SENSE-15247_FS	V5.11	NA	NA
Measurement Software	Sporton	SENSE-EMI	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Sep. 05, 2024				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101910	Apr. 18, 2024	Apr. 17, 2025
Power Meter	Anritsu	ML2495A	1241002	Nov. 21, 2023	Nov. 20, 2024
Power Sensor	Anritsu	MA2411B	1207366	Nov. 21, 2023	Nov. 20, 2024
Attenuator	Pasternack	PE7005-10	10-2	Oct. 05, 2023	Oct. 04, 2024
Measurement Software	Sporton	SENSE-15247_DTS	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

47 CFR FCC Part 15.247
ANSI C63.10-2013

1.6 Reference Guidance

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

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 ≤ 1 GHz	± 3.96 dB
Unwanted Emission > 1 GHz	± 4.51 dB

2 Test Configuration

2.1 Testing Facility

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

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

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data Rate	Test Configuration
AC Power Line Conducted Emission	11g	2462	6 Mbps	---
Unwanted Emissions ≤ 1GHz	11g	2462	6 Mbps	---
Unwanted Emissions >1GHz				
Conducted Output Power	11b	2412 / 2437 / 2462	1 Mbps	---
6dB bandwidth	11g	2412 / 2437 / 2462	6 Mbps	
Power spectral density	HT20	2412 / 2437 / 2462	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

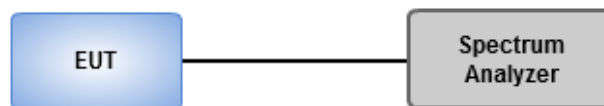
6dB Bandwidth

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°C / 66%	Tested By	Akun Chung
-------------------	------------	-----------	------------

Refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Limit of Conducted Output Power

Conducted power shall not exceed 1Watt.

Antenna gain $\leq 6\text{dBi}$, no any corresponding reduction is in output power limit.

Antenna gain $> 6\text{dBi}$

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°C / 66%	Tested By	Akun Chung
-------------------	------------	-----------	------------

Refer to Appendix B.

3.3 Power Spectral Density

3.3.1 Limit of Power Spectral Density

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

3.3.2 Test Procedures

Peak PSD

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

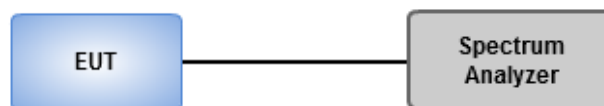
Average PSD, duty cycle $\geq 98\%$

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

Average PSD, duty cycle $< 98\%$

1. Set the RBW = 3 kHz, VBW = 10 kHz
2. Detector = RMS, Sweep time = auto couple.
3. Sweep time = auto couple.
4. Employ trace averaging (RMS) mode over a minimum of 100 traces.
5. Use the peak marker function to determine the maximum amplitude level.
6. Add $10 \log (1/x)$, where x is the duty cycle.

3.3.3 Test Setup



3.3.4 Test Results

Ambient Condition	24°C / 66%	Tested By	Akun Chung
-------------------	------------	-----------	------------

Refer to Appendix C.

3.4 Unwanted Emissions into Restricted Frequency Bands

3.4.1 Limit of Unwanted Emissions into Restricted Frequency Bands

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

Note 1:
Quasi-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

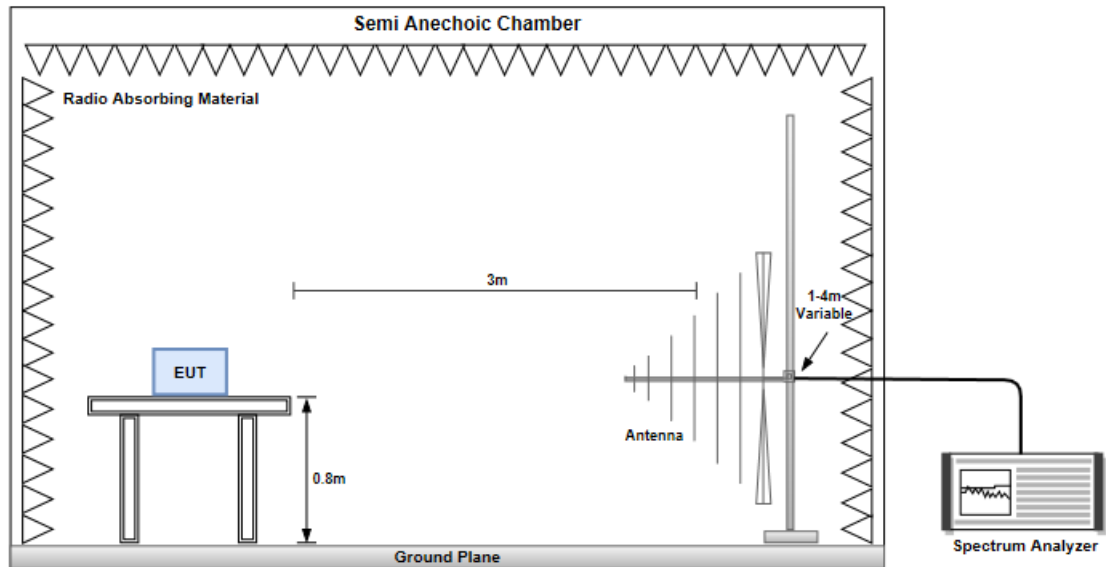
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission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

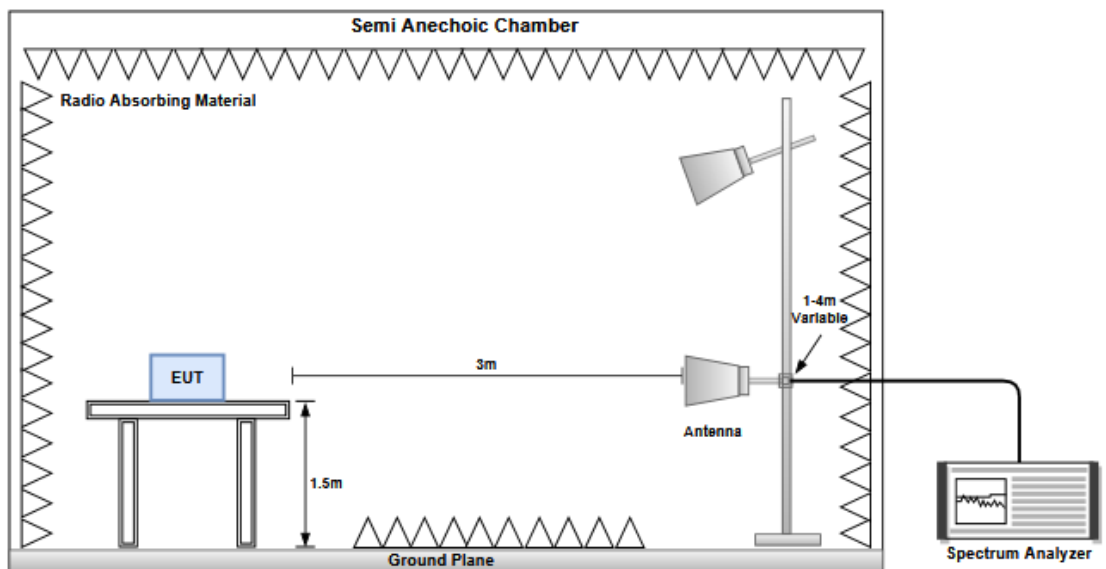
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above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

3.4.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



3.4.4 Test Results

Ambient Condition	25-26°C / 62-64%	Tested By	Sean Yu / Akun Chung
-------------------	------------------	-----------	----------------------

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

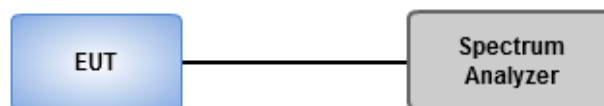
Reference level measurement

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°C / 66%	Tested By	Akun Chung
-------------------	------------	-----------	------------

Refer to Appendix E.

3.6 AC Power Line Conducted Emissions

3.6.1 Limit of AC Power Line Conducted Emissions

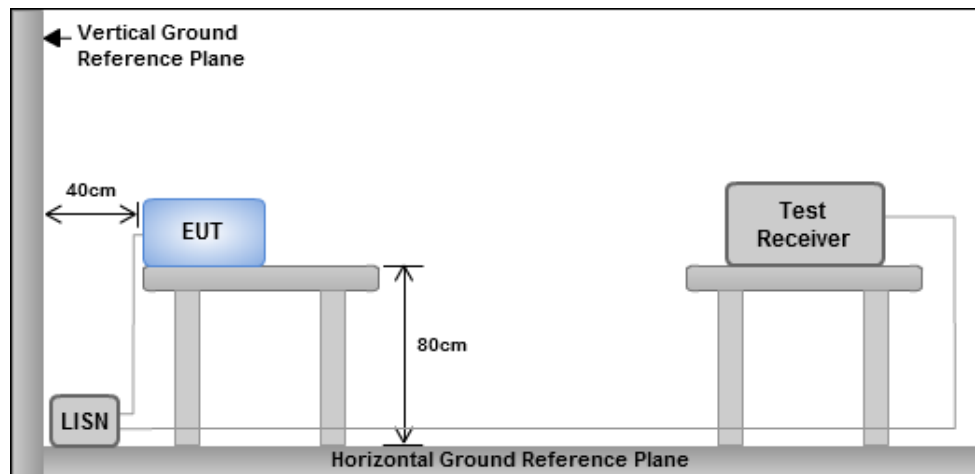
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.6.2 Test Procedures

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

3.6.3 Test Setup



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

3.6.4 Test Results

Refer to Appendix F.

4 Test laboratory information

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

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

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

Linkou

Tel: 886-2-2601-1640

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

Kwei Shan

Tel: 886-3-271-8666

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==

**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)_1TX	9.55M	14.018M	14M0G1D	7.575M	13.943M
802.11g_Nss1,(6Mbps)_1TX	15.75M	24.892M	24M9D1D	15.325M	22.143M
802.11n HT20_Nss1,(MCS0)_1TX	16.525M	25.312M	25M3D1D	16.3M	22.264M

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)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	9.55M	13.943M
2437MHz	Pass	500k	8.075M	14.003M
2462MHz	Pass	500k	7.575M	14.018M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	15.75M	22.803M
2437MHz	Pass	500k	15.65M	24.892M
2462MHz	Pass	500k	15.325M	22.143M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	16.525M	22.589M
2437MHz	Pass	500k	16.3M	25.312M
2462MHz	Pass	500k	16.5M	22.264M

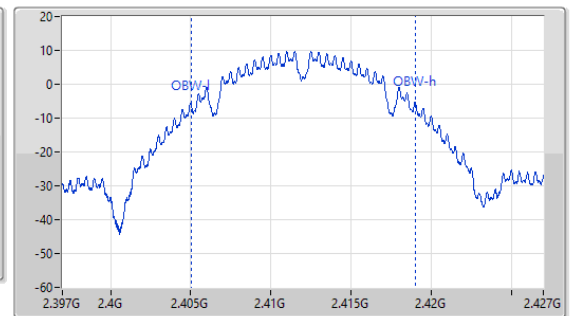
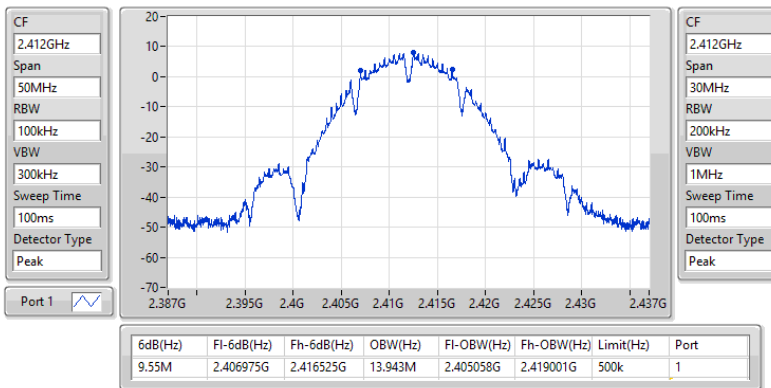
Port X-N dB = Port X 6dB down bandwidth;

Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

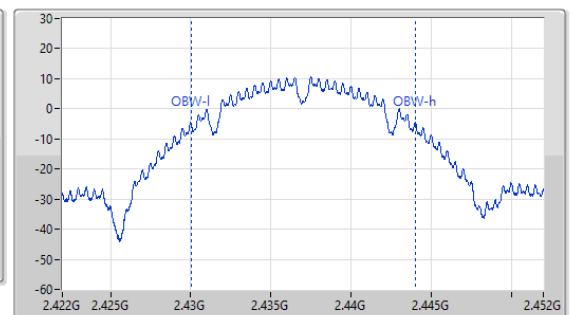
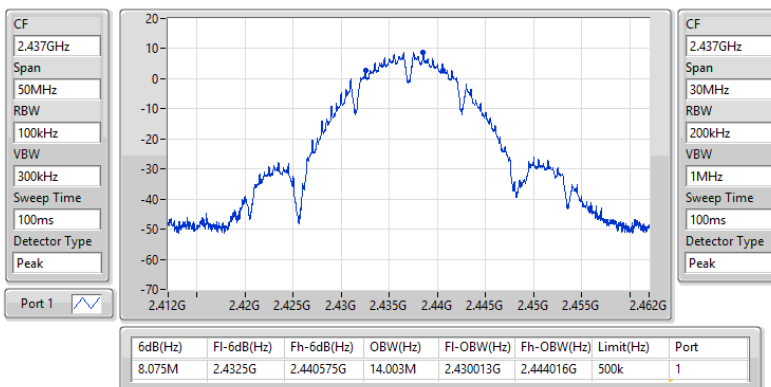
2412MHz



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

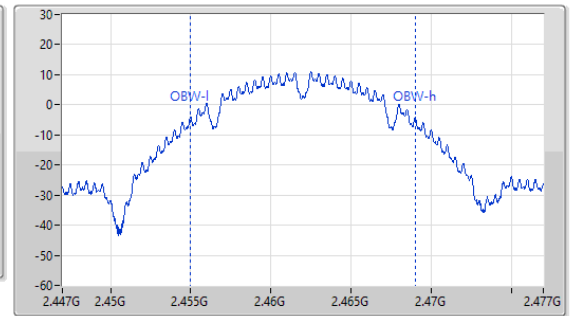
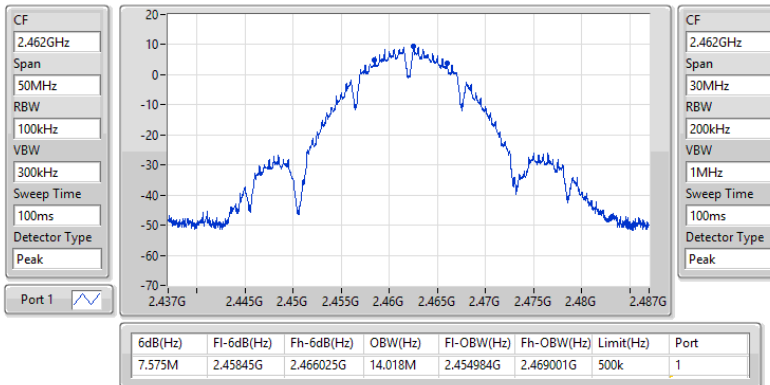
2437MHz



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

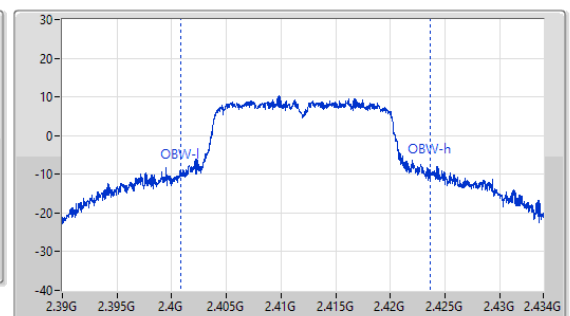
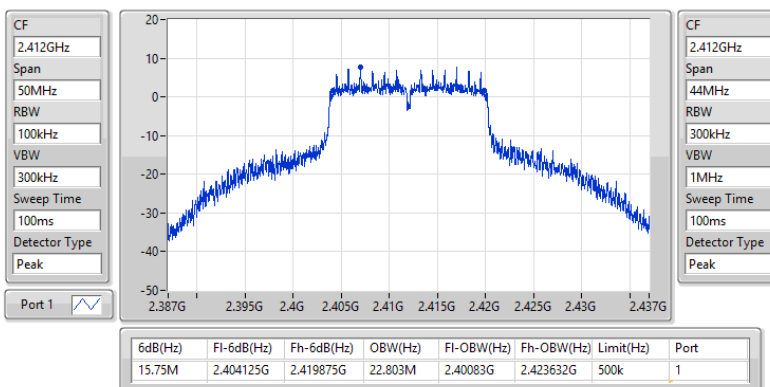
2462MHz



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

EBW

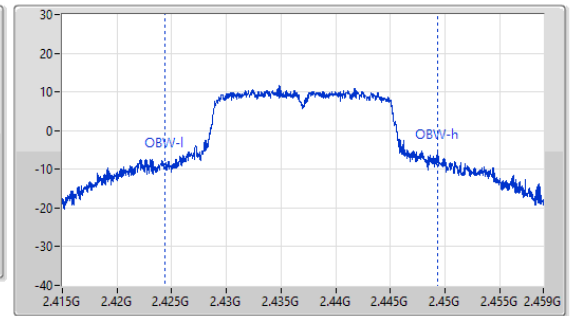
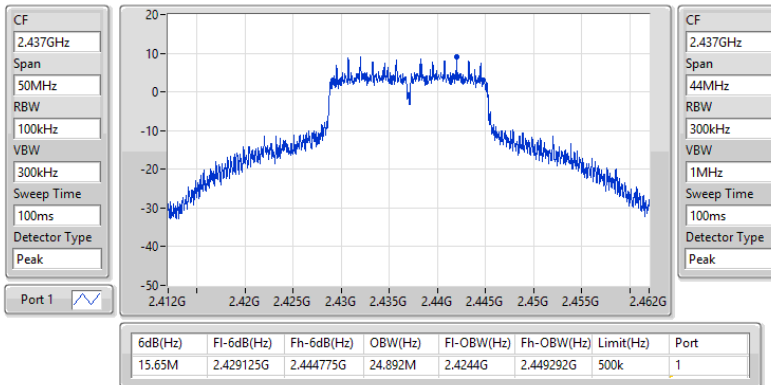
2412MHz



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

EBW

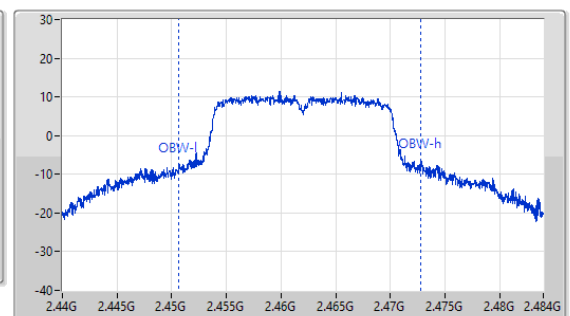
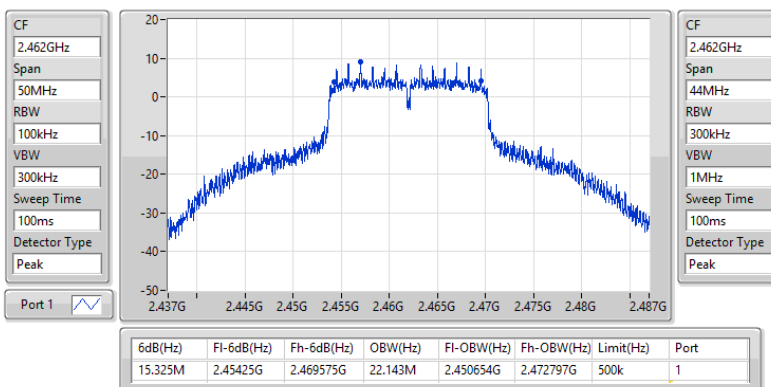
2437MHz



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

EBW

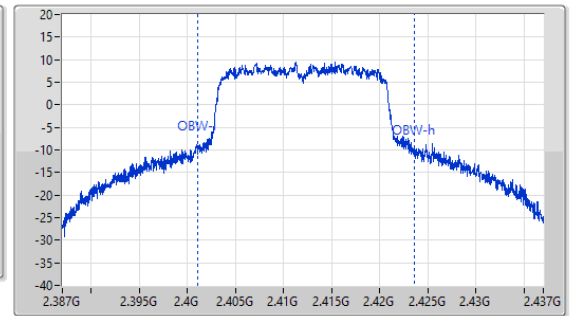
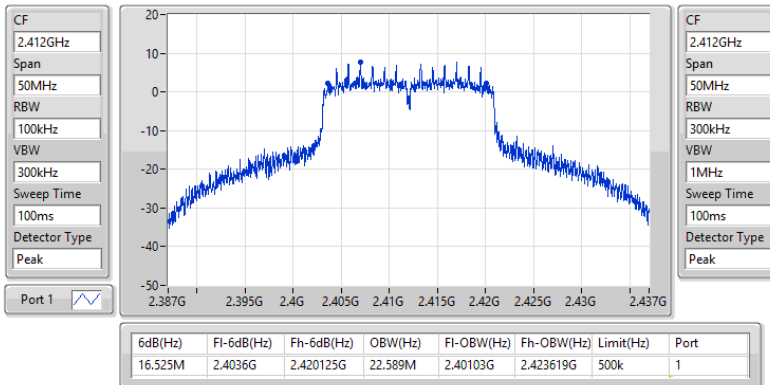
2462MHz



2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

EBW

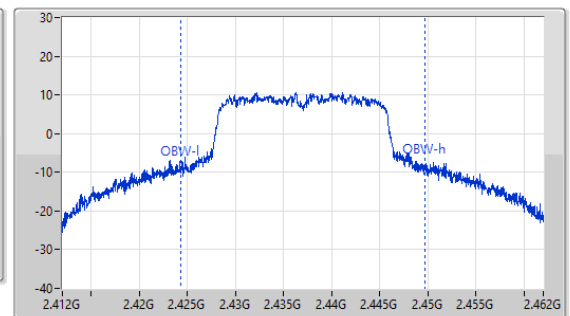
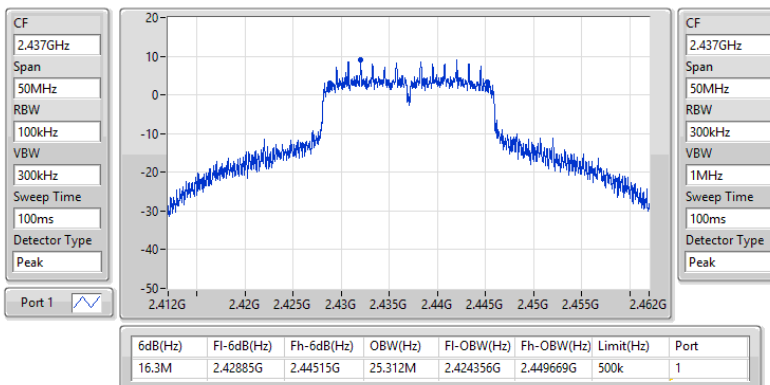
2412MHz



2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

EBW

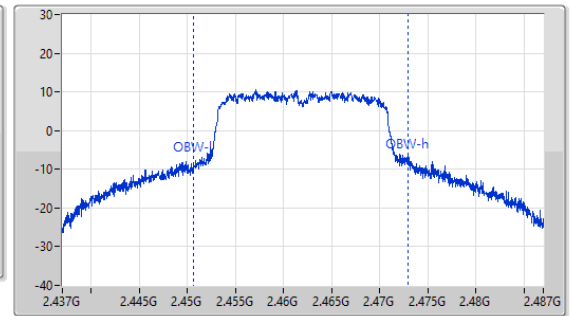
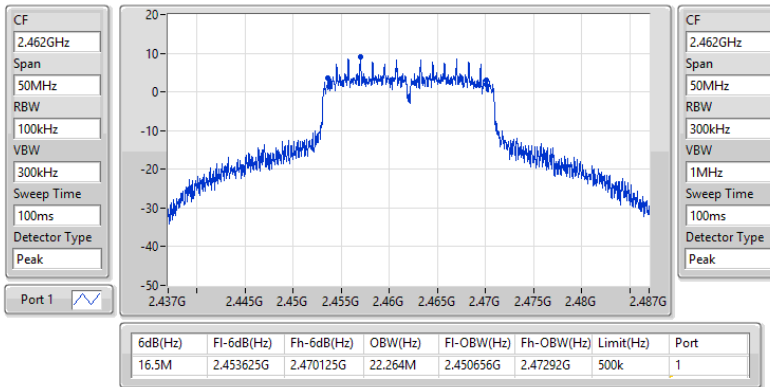
2437MHz



2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

EBW

2462MHz





Conducted Output Power(Peak)

Appendix B.1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	20.22	0.10520
802.11g_Nss1,(6Mbps)_1TX	22.78	0.18967
802.11n HT20_Nss1,(MCS0)_1TX	21.86	0.15346

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	4.36	19.48	19.48	30.00	23.84	36.00
2437MHz	Pass	4.36	19.92	19.92	30.00	24.28	36.00
2462MHz	Pass	4.36	20.22	20.22	30.00	24.58	36.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	4.36	21.36	21.36	30.00	25.72	36.00
2437MHz	Pass	4.36	21.88	21.88	30.00	26.24	36.00
2462MHz	Pass	4.36	22.78	22.78	30.00	27.14	36.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	4.36	21.55	21.55	30.00	25.91	36.00
2437MHz	Pass	4.36	21.86	21.86	30.00	26.22	36.00
2462MHz	Pass	4.36	21.85	21.85	30.00	26.21	36.00

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

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	17.96	0.06252
802.11g_Nss1,(6Mbps)_1TX	18.72	0.07447
802.11n HT20_Nss1,(MCS0)_1TX	18.59	0.07228

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	4.36	17.12	17.12	-	21.48	-
2437MHz	Pass	4.36	17.59	17.59	-	21.95	-
2462MHz	Pass	4.36	17.96	17.96	-	22.32	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	4.36	18.15	18.15	-	22.51	-
2437MHz	Pass	4.36	18.72	18.72	-	23.08	-
2462MHz	Pass	4.36	18.37	18.37	-	22.73	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	4.36	17.95	17.95	-	22.31	-
2437MHz	Pass	4.36	18.59	18.59	-	22.95	-
2462MHz	Pass	4.36	18.36	18.36	-	22.72	-

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

Note : Conducted average output power is for reference

**Summary**

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-5.51
802.11g_Nss1,(6Mbps)_1TX	-6.81
802.11n HT20_Nss1,(MCS0)_1TX	-7.45

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.36	-7.47	-7.47	8.00
2437MHz	Pass	4.36	-6.50	-6.50	8.00
2462MHz	Pass	4.36	-5.51	-5.51	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.36	-7.75	-7.75	8.00
2437MHz	Pass	4.36	-6.81	-6.81	8.00
2462MHz	Pass	4.36	-7.98	-7.98	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	4.36	-8.38	-8.38	8.00
2437MHz	Pass	4.36	-7.48	-7.48	8.00
2462MHz	Pass	4.36	-7.45	-7.45	8.00

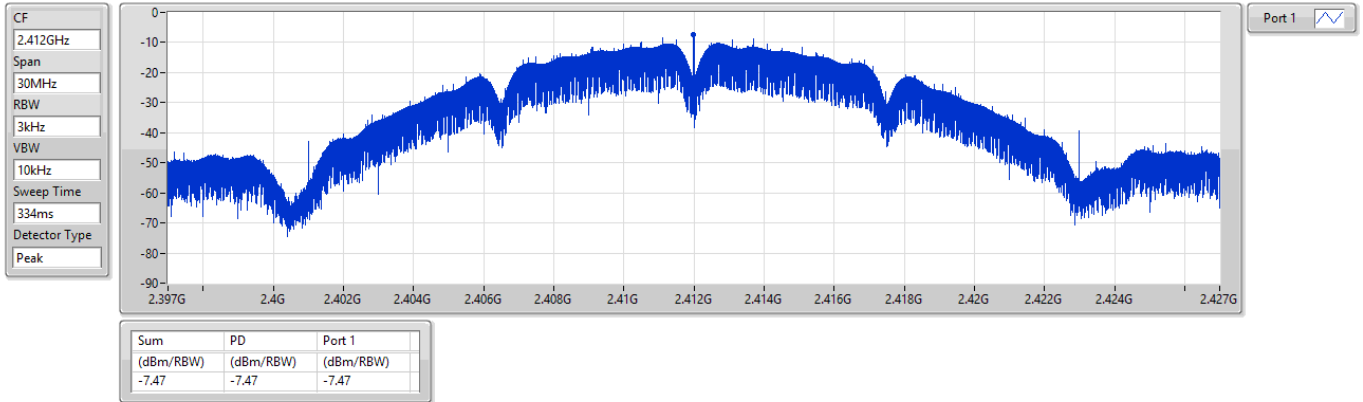
DG = Directional Gain; RBW = 3kHz;

PD =Power density; Port X = Port X Power Density;

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

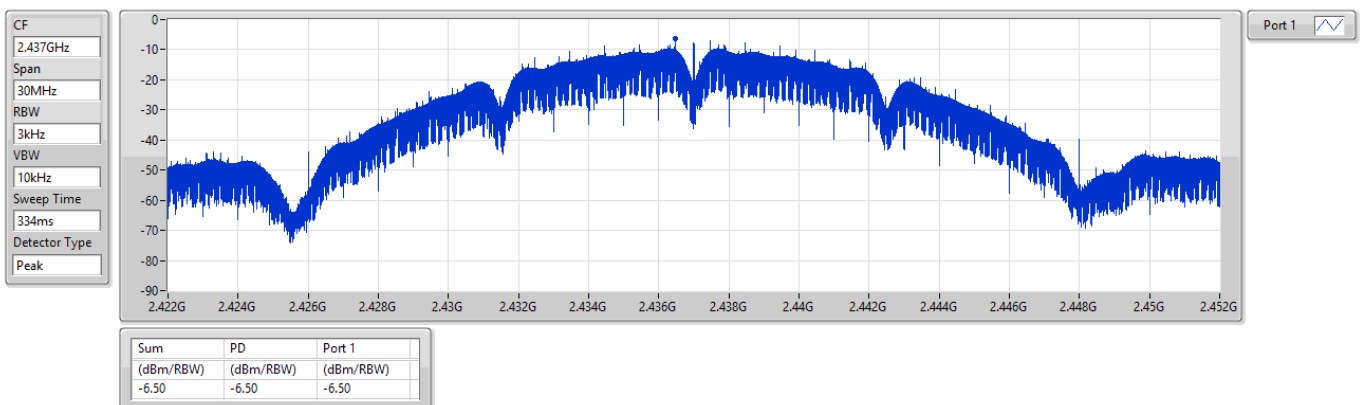
2412MHz



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

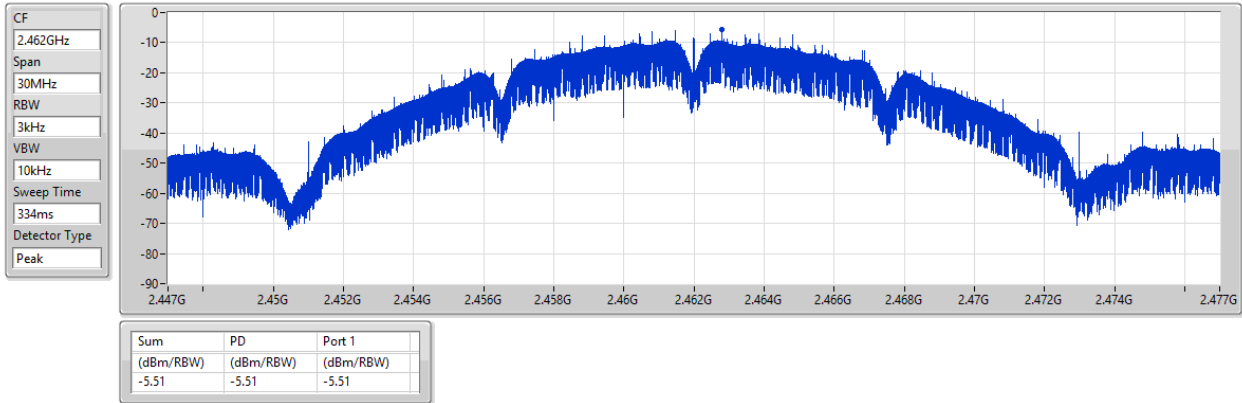
2437MHz



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

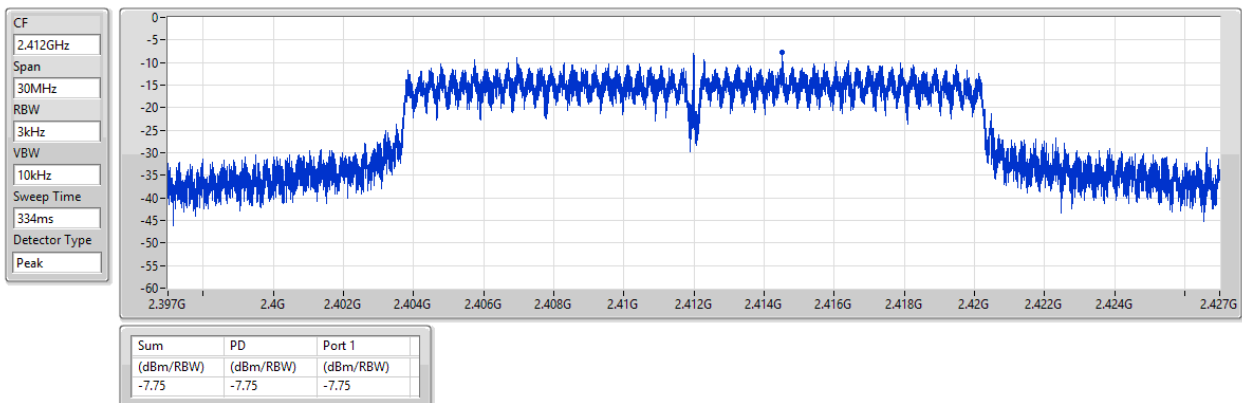
2462MHz



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2412MHz



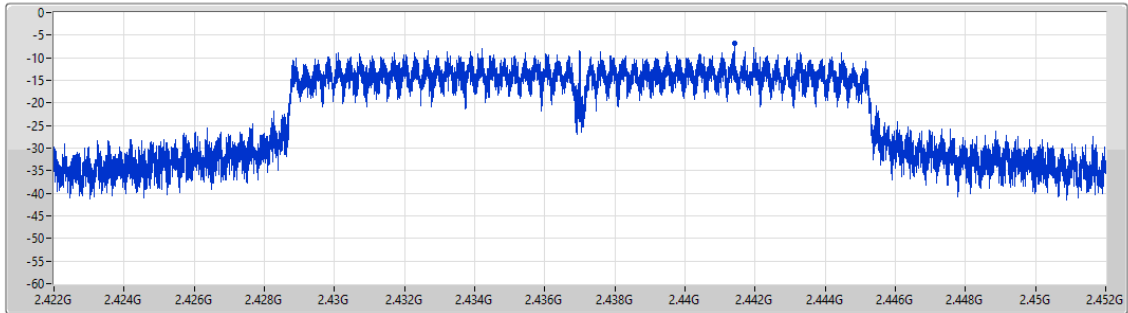


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2437MHz

CF
2.437GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
334ms
Detector Type
Peak



Port 1

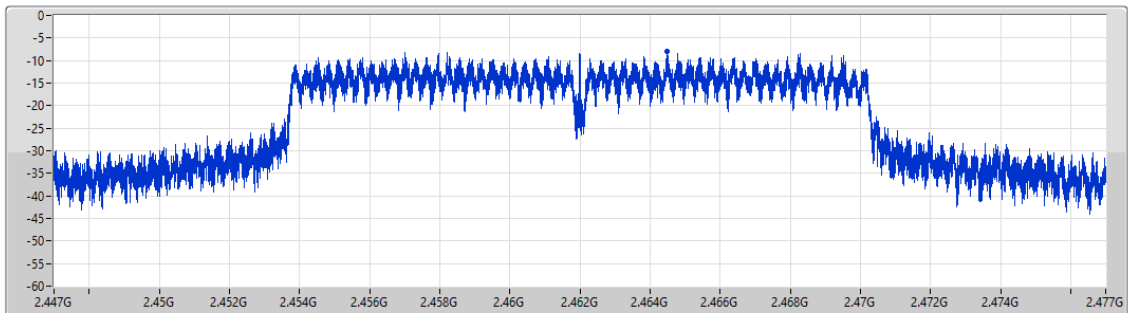
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.81	-6.81	-6.81

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2462MHz

CF
2.462GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
334ms
Detector Type
Peak



Port 1

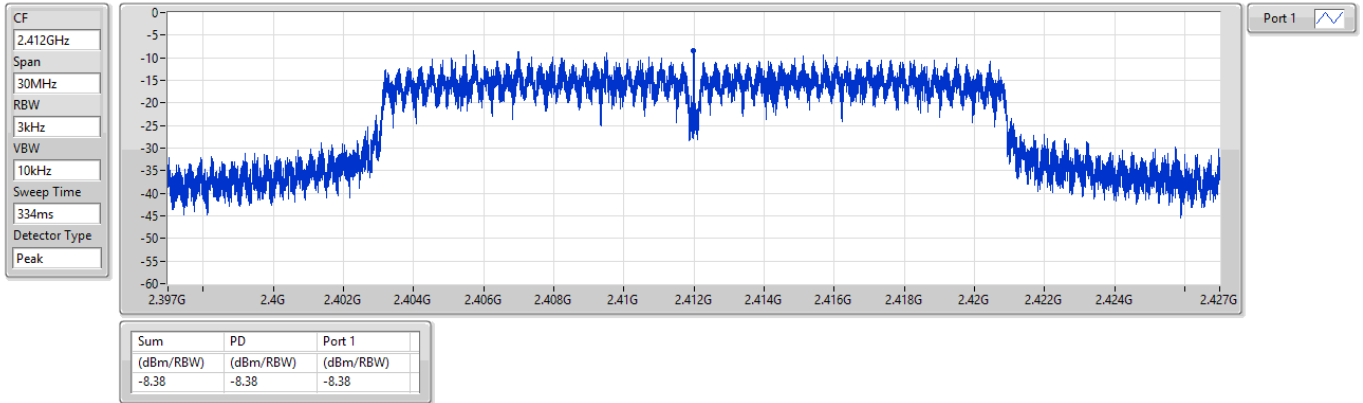
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.98	-7.98	-7.98



2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

PSD

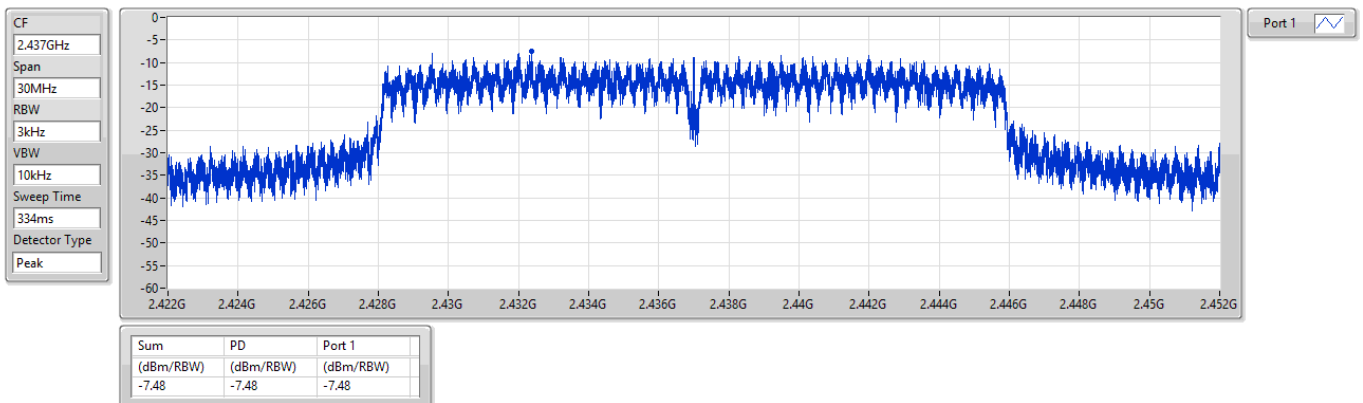
2412MHz



2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

PSD

2437MHz

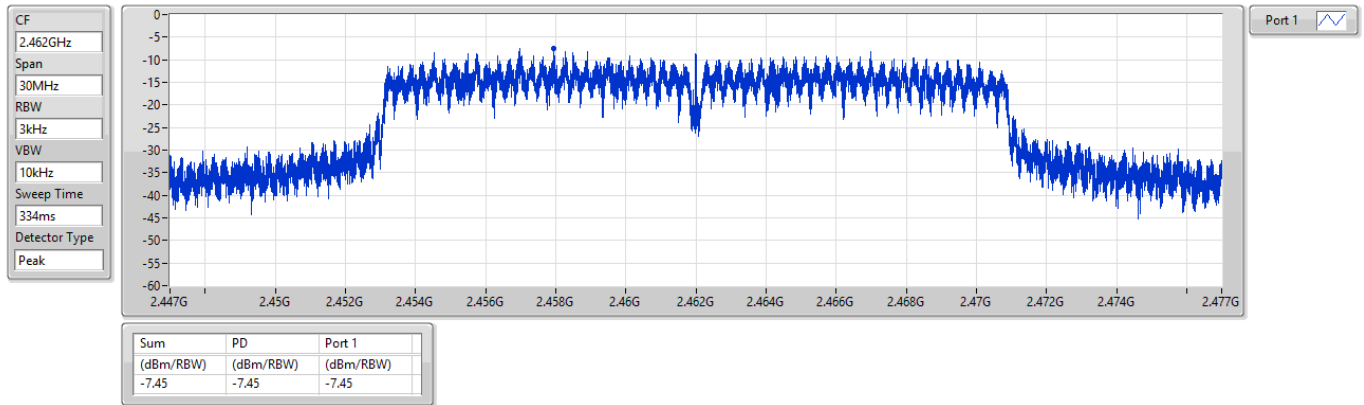




2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

PSD

2462MHz





Summary

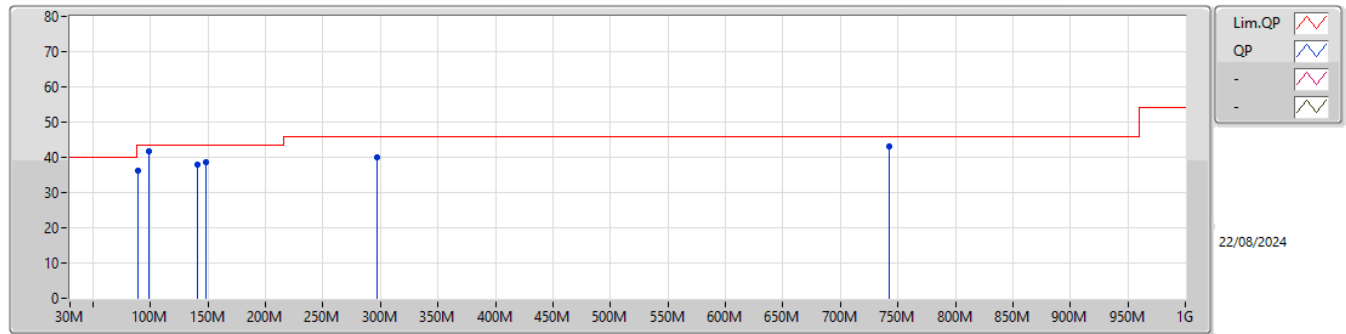
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	148.5M	42.48	43.50	-1.02	Vertical



Unwanted Emissions into Restricted Frequency Bands Below 1GHz

Appendix D.1

Mode 1



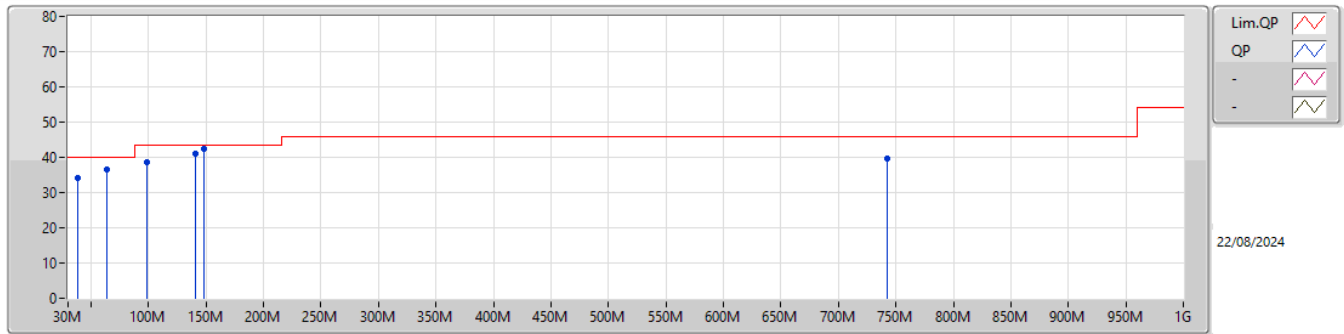
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB/m)	CL (dB)	PA (dB)		
PK	89.1M	36.11	43.50	-7.39	-14.60	3	Horizontal	-	-	-	50.71	12.51	0.94	28.05		
QP	99M	41.63	43.50	-1.87	-13.42	3	Horizontal	102	2.05	-	55.05	13.60	1.03	28.05		
PK	141.1M	37.86	43.50	-5.64	-8.95	3	Horizontal	-	-	-	46.81	17.92	1.21	28.08		
PK	148.5M	38.58	43.50	-4.92	-8.60	3	Horizontal	-	-	-	47.18	18.25	1.24	28.09		
PK	297M	39.94	46.00	-6.06	-8.17	3	Horizontal	-	-	-	48.11	18.14	1.89	28.20		
PK	742.5M	42.96	46.00	-3.04	2.70	3	Horizontal	-	-	-	40.26	26.45	3.87	27.62		



Unwanted Emissions into Restricted Frequency Bands Below 1GHz

Appendix D.1

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB/m)	CL (dB)	PA (dB)		
PK	38.8M	34.13	40.00	-5.87	-9.49	3	Vertical	-	-	-	43.62	17.98	0.55	28.02		
QP	63.6M	36.47	40.00	-3.53	-9.78	3	Vertical	133	1.00	-	46.25	17.50	0.77	28.05		
PK	99M	38.76	43.50	-4.74	-13.42	3	Vertical	-	-	-	52.18	13.60	1.03	28.05		
QP	141.2M	41.01	43.50	-2.49	-8.93	3	Vertical	89	1.00	-	49.94	17.94	1.21	28.08		
QP	148.5M	42.48	43.50	-1.02	-8.60	3	Vertical	212	1.00	-	51.08	18.25	1.24	28.09		
PK	742.6M	39.70	46.00	-6.30	2.70	3	Vertical	-	-	-	37.00	26.45	3.87	27.62		



Unwanted Emissions into Restricted Frequency Bands Above 1GHz

Appendix D.2

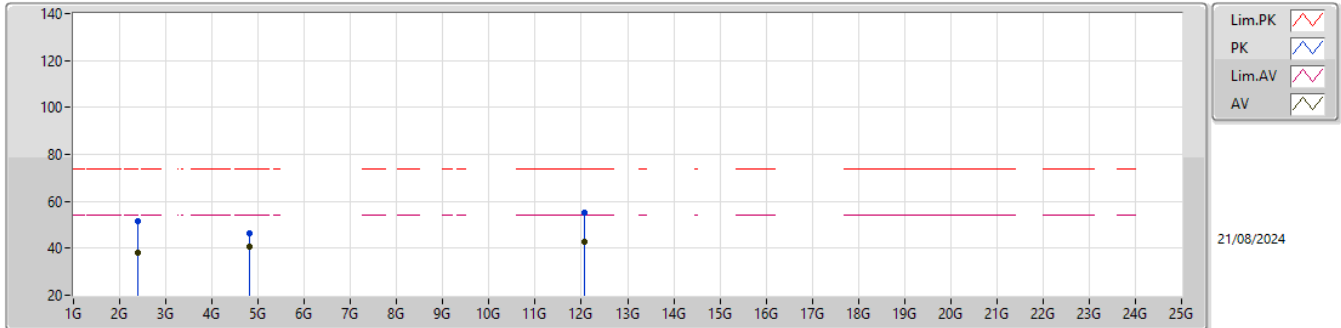
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	AV	7.386G	45.65	54.00	-8.35	3	Horizontal	316	1.52	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.4835G	51.55	54.00	-2.45	3	Vertical	183	1.93	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	AV	2.4835G	52.98	54.00	-1.02	3	Horizontal	58	2.63	-



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

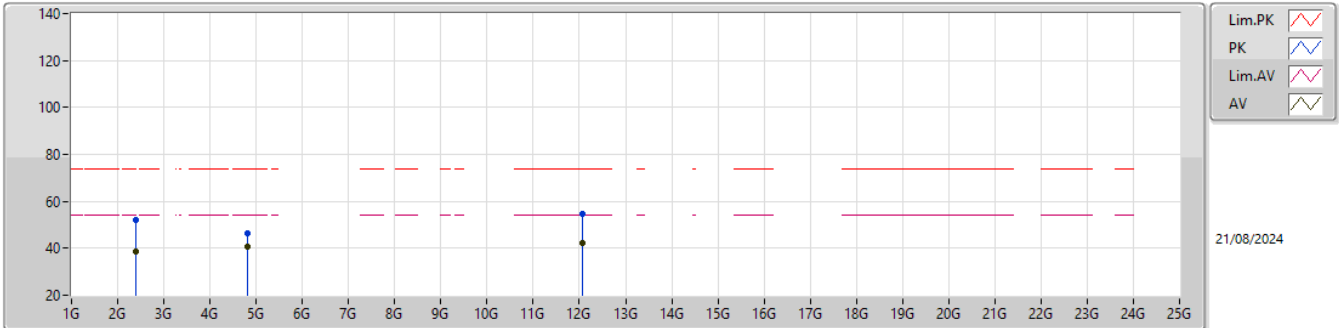


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	2.39G	38.19	54.00	-15.81	41.76	3	Horizontal	296	1.28	-	27.70	5.15	36.42				
PK	2.39G	51.56	74.00	-22.44	55.13	3	Horizontal	296	1.28	-	27.70	5.15	36.42				
AV	4.824G	40.46	54.00	-13.54	40.28	3	Horizontal	285	1.00	-	31.55	6.84	38.21				
PK	4.824G	46.21	74.00	-27.79	46.03	3	Horizontal	285	1.00	-	31.55	6.84	38.21				
AV	12.06G	42.58	54.00	-11.42	34.73	3	Horizontal	131	1.00	-	39.28	10.75	42.18				
PK	12.06G	55.09	74.00	-18.91	47.24	3	Horizontal	131	1.00	-	39.28	10.75	42.18				



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

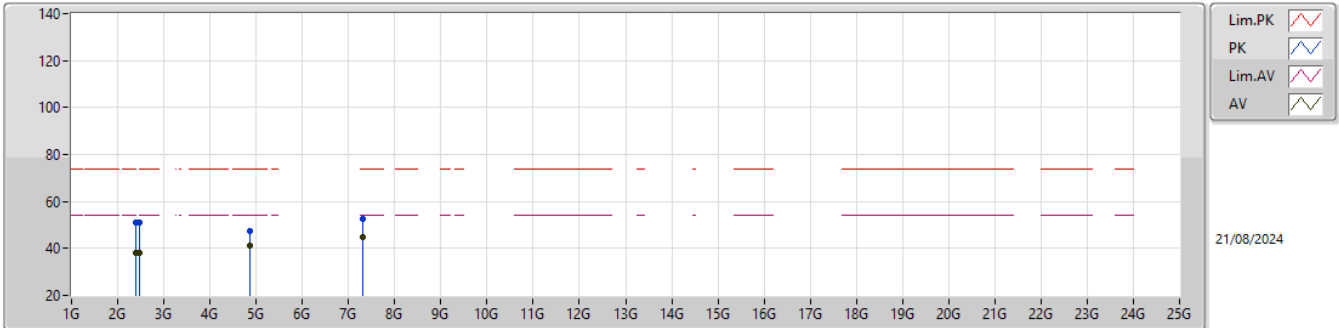


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	2.39G	38.45	54.00	-15.55	42.02	3	Vertical	182	2.11	-	27.70	5.15	36.42				
PK	2.39G	52.14	74.00	-21.86	55.71	3	Vertical	182	2.11	-	27.70	5.15	36.42				
AV	4.824G	40.72	54.00	-13.28	40.54	3	Vertical	24	1.33	-	31.55	6.84	38.21				
PK	4.824G	46.35	74.00	-27.65	46.17	3	Vertical	24	1.33	-	31.55	6.84	38.21				
AV	12.06G	42.49	54.00	-11.51	34.64	3	Vertical	149	1.00	-	39.28	10.75	42.18				
PK	12.06G	54.91	74.00	-19.09	47.06	3	Vertical	149	1.00	-	39.28	10.75	42.18				



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

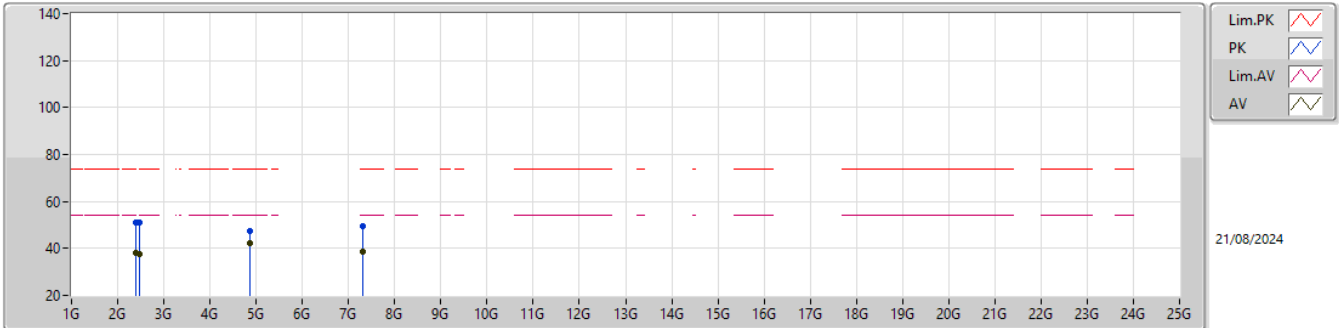


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	38.16	54.00	-15.84	41.73	3	Horizontal	294	1.00	-	27.70	5.15	36.42			
PK	2.39G	51.22	74.00	-22.78	54.79	3	Horizontal	294	1.00	-	27.70	5.15	36.42			
AV	2.4835G	37.96	54.00	-16.04	41.83	3	Horizontal	294	1.00	-	27.46	5.18	36.51			
PK	2.4835G	51.04	74.00	-22.96	54.91	3	Horizontal	294	1.00	-	27.46	5.18	36.51			
AV	4.874G	41.45	54.00	-12.55	41.32	3	Horizontal	288	1.00	-	31.50	6.87	38.24			
PK	4.874G	47.26	74.00	-26.74	47.13	3	Horizontal	288	1.00	-	31.50	6.87	38.24			
AV	7.311G	44.79	54.00	-9.21	39.34	3	Horizontal	316	1.59	-	36.40	8.20	39.15			
PK	7.311G	52.46	74.00	-21.54	47.01	3	Horizontal	316	1.59	-	36.40	8.20	39.15			



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

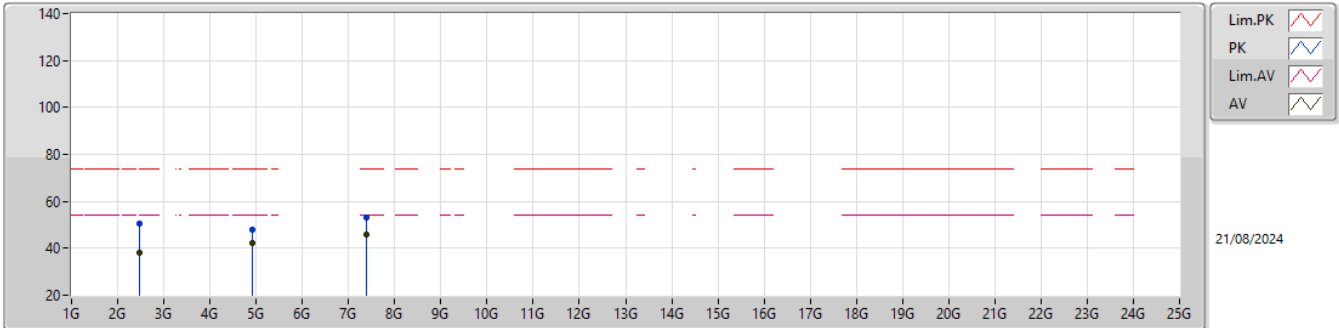
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	38.06	54.00	-15.94	41.63	3	Vertical	188	2.31	-	27.70	5.15	36.42			
PK	2.39G	51.09	74.00	-22.91	54.66	3	Vertical	188	2.31	-	27.70	5.15	36.42			
AV	2.4835G	37.82	54.00	-16.18	41.69	3	Vertical	188	2.31	-	27.46	5.18	36.51			
PK	2.4835G	50.86	74.00	-23.14	54.73	3	Vertical	188	2.31	-	27.46	5.18	36.51			
AV	4.874G	42.41	54.00	-11.59	42.28	3	Vertical	29	1.36	-	31.50	6.87	38.24			
PK	4.874G	47.56	74.00	-26.44	47.43	3	Vertical	29	1.36	-	31.50	6.87	38.24			
AV	7.311G	38.52	54.00	-15.48	33.07	3	Vertical	321	1.00	-	36.40	8.20	39.15			
PK	7.311G	49.41	74.00	-24.59	43.96	3	Vertical	321	1.00	-	36.40	8.20	39.15			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

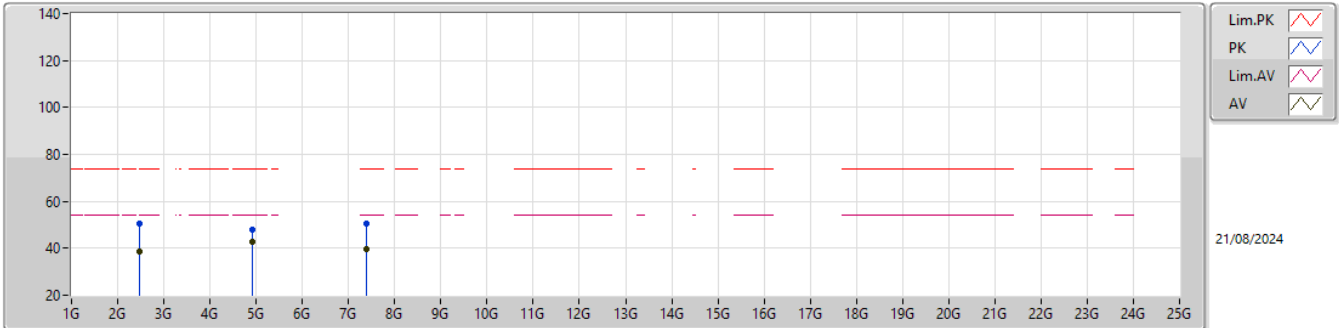


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.4835G	38.02	54.00	-15.98	41.89	3	Horizontal	62	1.44	-	27.46	5.18	36.51			
PK	2.4835G	50.76	74.00	-23.24	54.63	3	Horizontal	62	1.44	-	27.46	5.18	36.51			
AV	4.924G	42.15	54.00	-11.85	42.08	3	Horizontal	275	1.00	-	31.45	6.90	38.28			
PK	4.924G	48.04	74.00	-25.96	47.97	3	Horizontal	275	1.00	-	31.45	6.90	38.28			
AV	7.386G	45.65	54.00	-8.35	40.26	3	Horizontal	316	1.52	-	36.40	8.23	39.24			
PK	7.386G	53.28	74.00	-20.72	47.89	3	Horizontal	316	1.52	-	36.40	8.23	39.24			



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

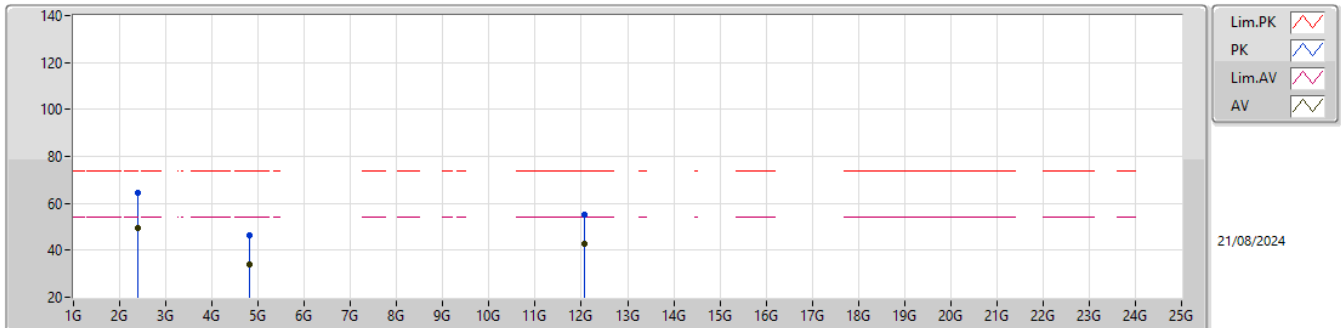


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.4835G	38.52	54.00	-15.48	42.39	3	Vertical	179	2.02	-	27.46	5.18	36.51			
PK	2.4835G	50.64	74.00	-23.36	54.51	3	Vertical	179	2.02	-	27.46	5.18	36.51			
AV	4.924G	42.58	54.00	-11.42	42.51	3	Vertical	36	1.51	-	31.45	6.90	38.28			
PK	4.924G	47.76	74.00	-26.24	47.69	3	Vertical	36	1.51	-	31.45	6.90	38.28			
AV	7.386G	39.65	54.00	-14.35	34.26	3	Vertical	321	1.00	-	36.40	8.23	39.24			
PK	7.386G	50.48	74.00	-23.52	45.09	3	Vertical	321	1.00	-	36.40	8.23	39.24			



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

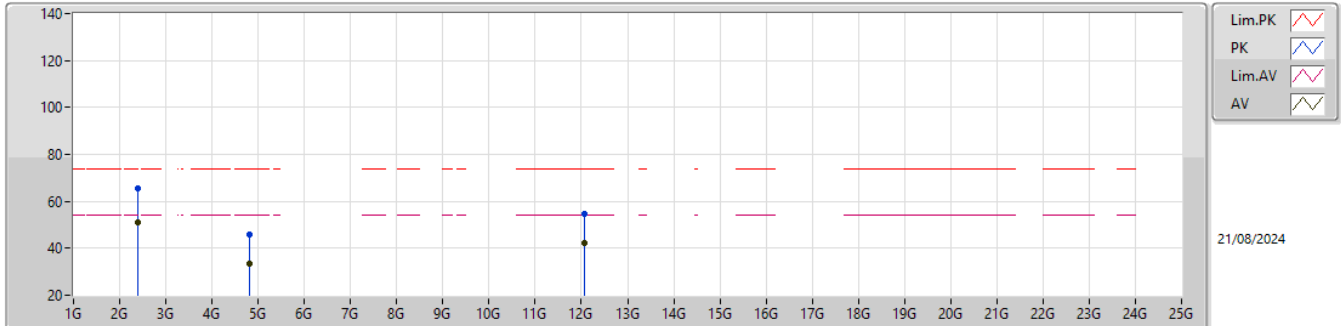


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	2.39G	49.65	54.00	-4.35	53.22	3	Horizontal	291	1.13	-	27.70	5.15	36.42				
PK	2.39G	64.51	74.00	-9.49	68.08	3	Horizontal	291	1.13	-	27.70	5.15	36.42				
AV	4.824G	34.20	54.00	-19.80	34.02	3	Horizontal	296	1.00	-	31.55	6.84	38.21				
PK	4.824G	46.46	74.00	-27.54	46.28	3	Horizontal	296	1.00	-	31.55	6.84	38.21				
AV	12.06G	42.51	54.00	-11.49	34.66	3	Horizontal	158	1.00	-	39.28	10.75	42.18				
PK	12.06G	54.93	74.00	-19.07	47.08	3	Horizontal	158	1.00	-	39.28	10.75	42.18				



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

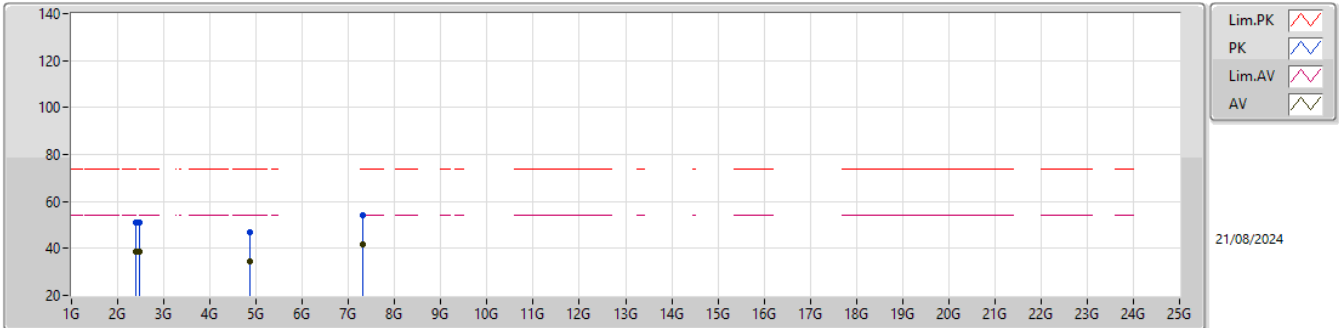


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	50.81	54.00	-3.19	54.38	3	Vertical	184	1.96	-	27.70	5.15	36.42			
PK	2.39G	65.49	74.00	-8.51	69.06	3	Vertical	184	1.96	-	27.70	5.15	36.42			
AV	4.824G	33.66	54.00	-20.34	33.48	3	Vertical	28	1.00	-	31.55	6.84	38.21			
PK	4.824G	45.64	74.00	-28.36	45.46	3	Vertical	28	1.00	-	31.55	6.84	38.21			
AV	12.06G	42.43	54.00	-11.57	34.58	3	Vertical	241	1.00	-	39.28	10.75	42.18			
PK	12.06G	54.71	74.00	-19.29	46.86	3	Vertical	241	1.00	-	39.28	10.75	42.18			



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	38.80	54.00	-15.20	42.37	3	Horizontal	292	1.00	-	27.70	5.15	36.42			
PK	2.39G	51.07	74.00	-22.93	54.64	3	Horizontal	292	1.00	-	27.70	5.15	36.42			
AV	2.4835G	38.55	54.00	-15.45	42.42	3	Horizontal	292	1.00	-	27.46	5.18	36.51			
PK	2.4835G	50.90	74.00	-23.10	54.77	3	Horizontal	292	1.00	-	27.46	5.18	36.51			
AV	4.874G	34.52	54.00	-19.48	34.39	3	Horizontal	293	1.00	-	31.50	6.87	38.24			
PK	4.874G	46.67	74.00	-27.33	46.54	3	Horizontal	293	1.00	-	31.50	6.87	38.24			
AV	7.311G	41.82	54.00	-12.18	36.37	3	Horizontal	318	1.57	-	36.40	8.20	39.15			
PK	7.311G	54.05	74.00	-19.95	48.60	3	Horizontal	318	1.57	-	36.40	8.20	39.15			

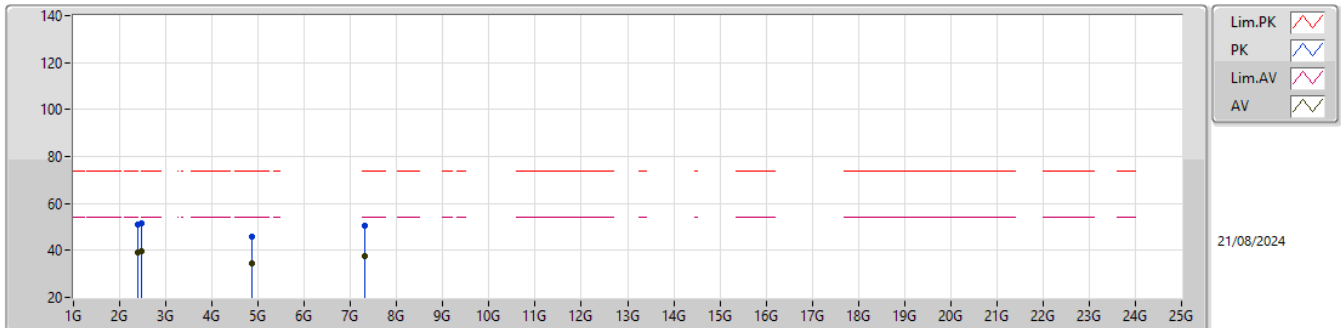


Unwanted Emissions into Restricted Frequency Bands Above 1GHz

Appendix D.2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

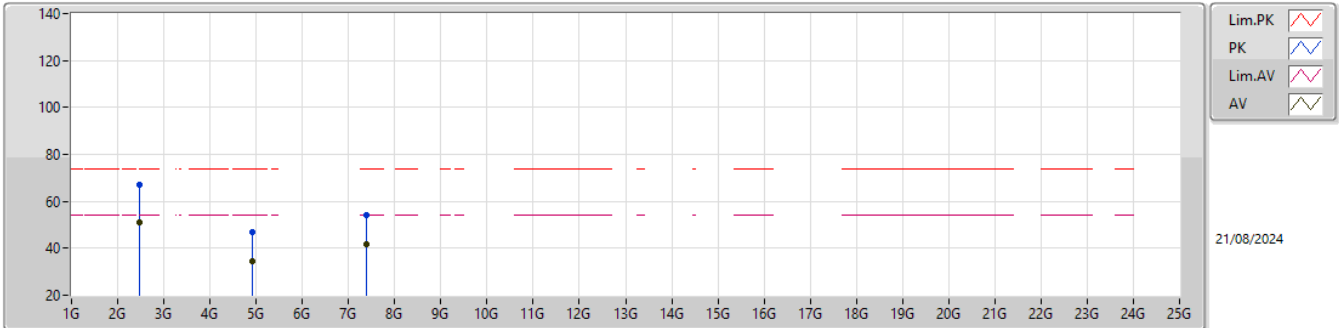


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	39.03	54.00	-14.97	42.60	3	Vertical	182	2.00	-	27.70	5.15	36.42			
PK	2.39G	51.27	74.00	-22.73	54.84	3	Vertical	182	2.00	-	27.70	5.15	36.42			
AV	2.4835G	39.72	54.00	-14.28	43.59	3	Vertical	182	2.00	-	27.46	5.18	36.51			
PK	2.4835G	51.44	74.00	-22.56	55.31	3	Vertical	182	2.00	-	27.46	5.18	36.51			
AV	4.874G	34.40	54.00	-19.60	34.27	3	Vertical	31	1.00	-	31.50	6.87	38.24			
PK	4.874G	45.80	74.00	-28.20	45.67	3	Vertical	31	1.00	-	31.50	6.87	38.24			
AV	7.311G	37.56	54.00	-16.44	32.11	3	Vertical	126	1.00	-	36.40	8.20	39.15			
PK	7.311G	50.66	74.00	-23.34	45.21	3	Vertical	126	1.00	-	36.40	8.20	39.15			



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

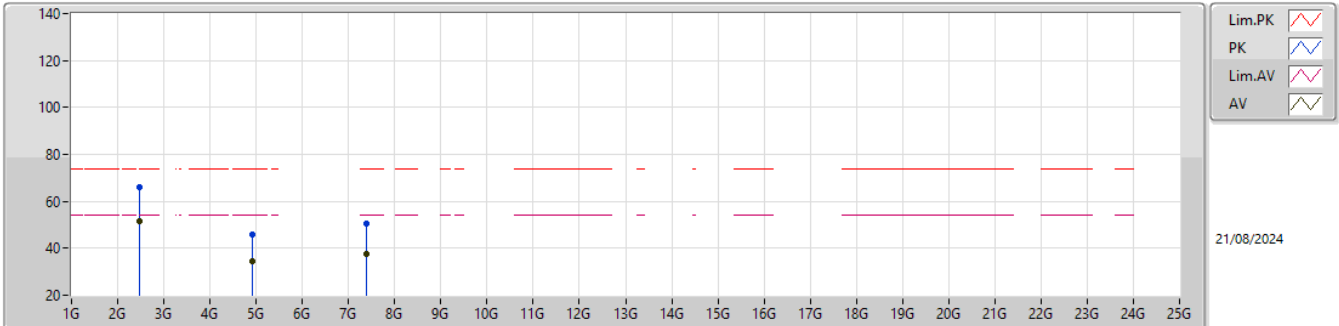


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.4835G	51.08	54.00	-2.92	54.95	3	Horizontal	67	1.44	-	27.46	5.18	36.51			
PK	2.4835G	66.99	74.00	-7.01	70.86	3	Horizontal	67	1.44	-	27.46	5.18	36.51			
AV	4.924G	34.55	54.00	-19.45	34.48	3	Horizontal	299	1.00	-	31.45	6.90	38.28			
PK	4.924G	46.79	74.00	-27.21	46.72	3	Horizontal	299	1.00	-	31.45	6.90	38.28			
AV	7.386G	41.94	54.00	-12.06	36.55	3	Horizontal	322	1.60	-	36.40	8.23	39.24			
PK	7.386G	54.33	74.00	-19.67	48.94	3	Horizontal	322	1.60	-	36.40	8.23	39.24			



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

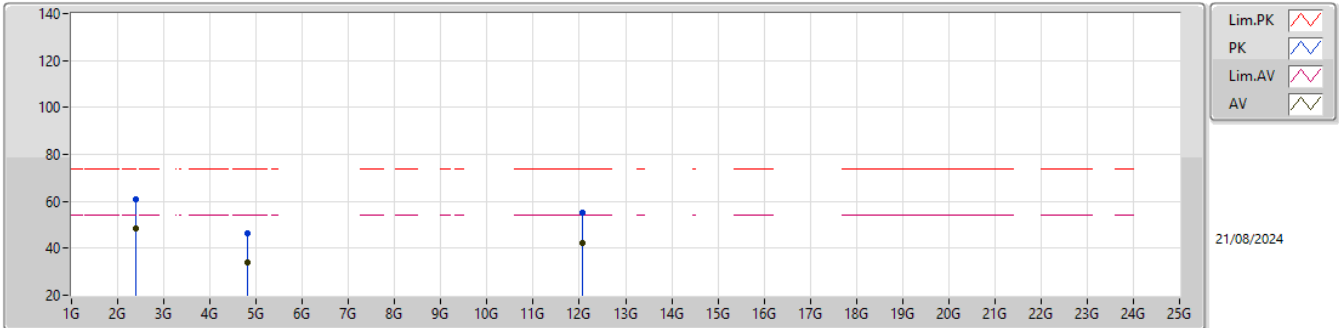


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.4835G	51.55	54.00	-2.45	55.42	3	Vertical	183	1.93	-	27.46	5.18	36.51			
PK	2.4835G	66.22	74.00	-7.78	70.09	3	Vertical	183	1.93	-	27.46	5.18	36.51			
AV	4.924G	34.63	54.00	-19.37	34.56	3	Vertical	28	1.00	-	31.45	6.90	38.28			
PK	4.924G	45.95	74.00	-28.05	45.88	3	Vertical	28	1.00	-	31.45	6.90	38.28			
AV	7.386G	37.64	54.00	-16.36	32.25	3	Vertical	131	1.00	-	36.40	8.23	39.24			
PK	7.386G	50.76	74.00	-23.24	45.37	3	Vertical	131	1.00	-	36.40	8.23	39.24			



2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2412MHz_TX

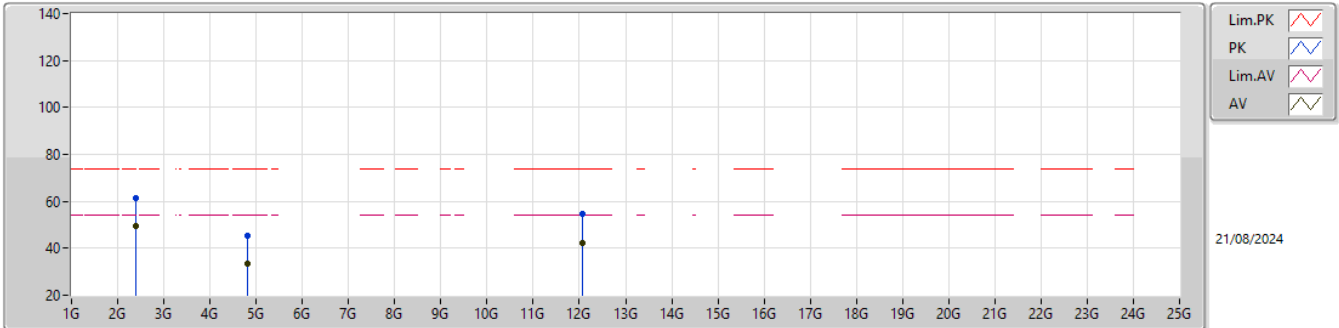


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	2.39G	48.46	54.00	-5.54	52.03	3	Horizontal	295	1.27	-	27.70	5.15	36.42				
PK	2.39G	61.04	74.00	-12.96	64.61	3	Horizontal	295	1.27	-	27.70	5.15	36.42				
AV	4.824G	34.04	54.00	-19.96	33.86	3	Horizontal	286	1.00	-	31.55	6.84	38.21				
PK	4.824G	46.29	74.00	-27.71	46.11	3	Horizontal	286	1.00	-	31.55	6.84	38.21				
AV	12.06G	42.40	54.00	-11.60	34.55	3	Horizontal	161	1.00	-	39.28	10.75	42.18				
PK	12.06G	55.06	74.00	-18.94	47.21	3	Horizontal	161	1.00	-	39.28	10.75	42.18				



2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2412MHz_TX

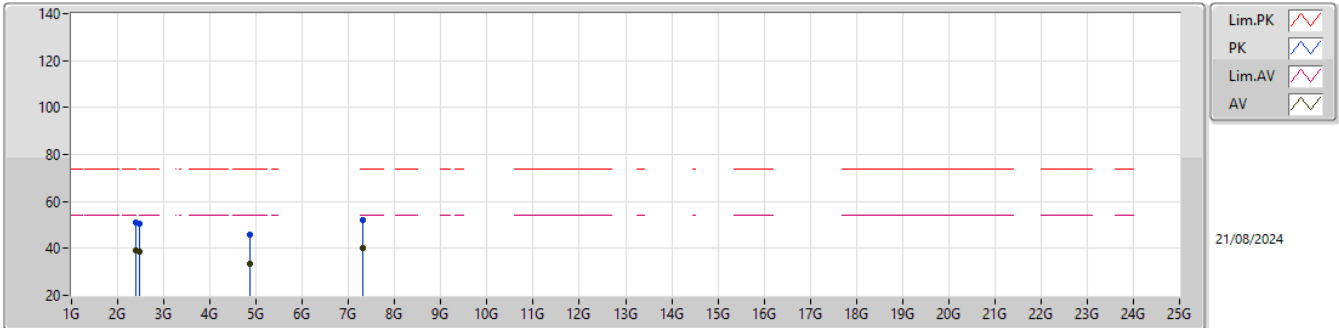


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	49.45	54.00	-4.55	53.02	3	Vertical	187	1.96	-	27.70	5.15	36.42			
PK	2.39G	61.56	74.00	-12.44	65.13	3	Vertical	187	1.96	-	27.70	5.15	36.42			
AV	4.824G	33.34	54.00	-20.66	33.16	3	Vertical	33	1.00	-	31.55	6.84	38.21			
PK	4.824G	45.56	74.00	-28.44	45.38	3	Vertical	33	1.00	-	31.55	6.84	38.21			
AV	12.06G	42.36	54.00	-11.64	34.51	3	Vertical	251	1.00	-	39.28	10.75	42.18			
PK	12.06G	54.57	74.00	-19.43	46.72	3	Vertical	251	1.00	-	39.28	10.75	42.18			



2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2437MHz_TX

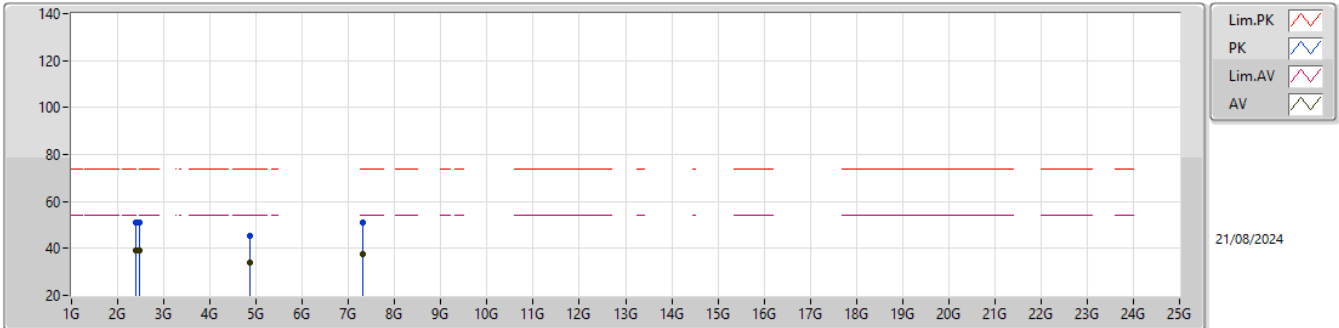


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB/m)	(dB)	(dB)			
AV	2.39G	39.19	54.00	-14.81	42.76	3	Horizontal	293	1.00	-	27.70	5.15	36.42			
PK	2.39G	51.09	74.00	-22.91	54.66	3	Horizontal	293	1.00	-	27.70	5.15	36.42			
AV	2.4835G	38.76	54.00	-15.24	42.63	3	Horizontal	293	1.00	-	27.46	5.18	36.51			
PK	2.4835G	50.71	74.00	-23.29	54.58	3	Horizontal	293	1.00	-	27.46	5.18	36.51			
AV	4.874G	33.29	54.00	-20.71	33.16	3	Horizontal	297	1.00	-	31.50	6.87	38.24			
PK	4.874G	45.88	74.00	-28.12	45.75	3	Horizontal	297	1.00	-	31.50	6.87	38.24			
AV	7.311G	40.33	54.00	-13.67	34.88	3	Horizontal	321	1.61	-	36.40	8.20	39.15			
PK	7.311G	52.21	74.00	-21.79	46.76	3	Horizontal	321	1.61	-	36.40	8.20	39.15			



2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	39.22	54.00	-14.78	42.79	3	Vertical	186	1.87	-	27.70	5.15	36.42			
PK	2.39G	51.27	74.00	-22.73	54.84	3	Vertical	186	1.87	-	27.70	5.15	36.42			
AV	2.4835G	39.07	54.00	-14.93	42.94	3	Vertical	186	1.87	-	27.46	5.18	36.51			
PK	2.4835G	51.08	74.00	-22.92	54.95	3	Vertical	186	1.87	-	27.46	5.18	36.51			
AV	4.874G	33.98	54.00	-20.02	33.85	3	Vertical	26	1.00	-	31.50	6.87	38.24			
PK	4.874G	45.46	74.00	-28.54	45.33	3	Vertical	26	1.00	-	31.50	6.87	38.24			
AV	7.311G	37.66	54.00	-16.34	32.21	3	Vertical	182	1.00	-	36.40	8.20	39.15			
PK	7.311G	50.78	74.00	-23.22	45.33	3	Vertical	182	1.00	-	36.40	8.20	39.15			

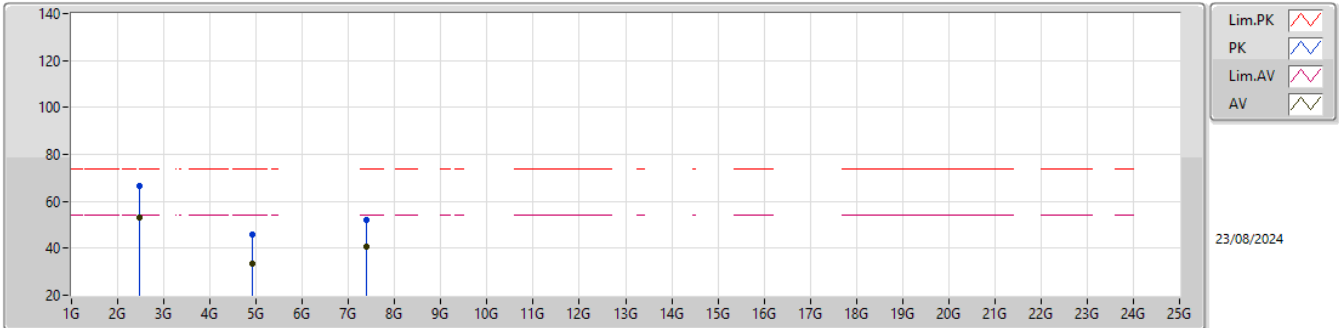


Unwanted Emissions into Restricted Frequency Bands Above 1GHz

Appendix D.2

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2462MHz_TX

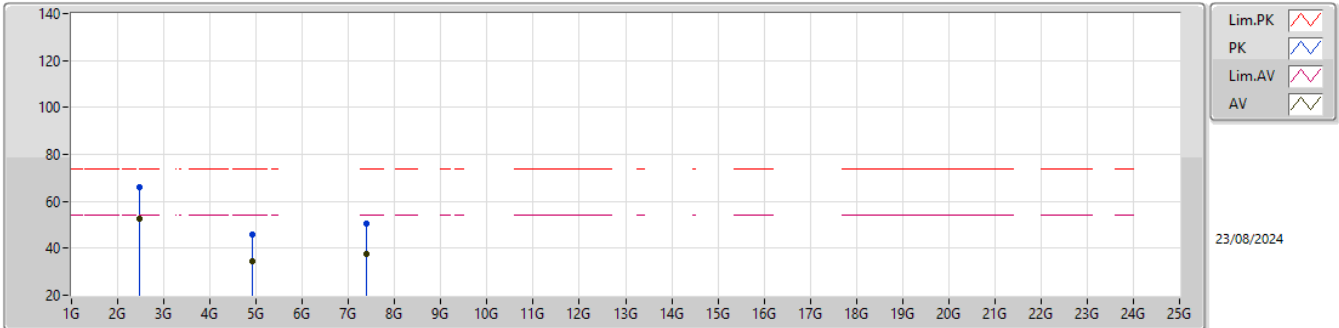


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.4835G	52.98	54.00	-1.02	56.85	3	Horizontal	58	2.63	-	27.46	5.18	36.51			
PK	2.4835G	66.66	74.00	-7.34	70.53	3	Horizontal	58	2.63	-	27.46	5.18	36.51			
AV	4.924G	33.35	54.00	-20.65	33.28	3	Horizontal	299	1.00	-	31.45	6.90	38.28			
PK	4.924G	45.93	74.00	-28.07	45.86	3	Horizontal	299	1.00	-	31.45	6.90	38.28			
AV	7.386G	40.60	54.00	-13.40	35.21	3	Horizontal	318	1.58	-	36.40	8.23	39.24			
PK	7.386G	52.31	74.00	-21.69	46.92	3	Horizontal	318	1.58	-	36.40	8.23	39.24			



2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2462MHz_TX

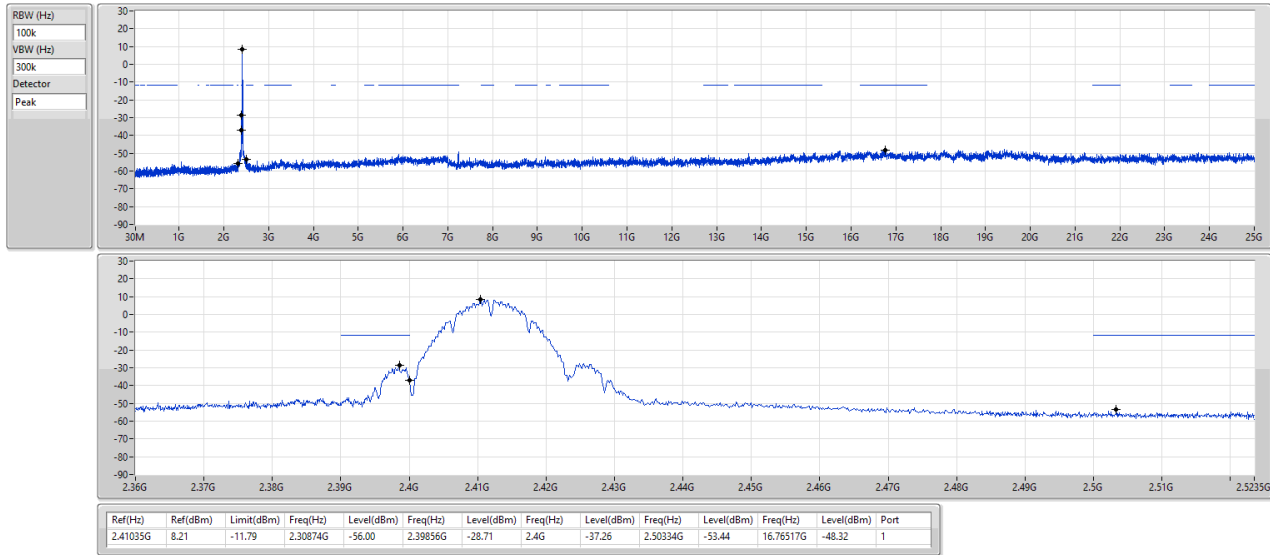


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.4835G	52.84	54.00	-1.16	56.71	3	Vertical	185	2.05	-	27.46	5.18	36.51			
PK	2.4835G	65.99	74.00	-8.01	69.86	3	Vertical	185	2.05	-	27.46	5.18	36.51			
AV	4.924G	34.40	54.00	-19.60	34.33	3	Vertical	31	1.00	-	31.45	6.90	38.28			
PK	4.924G	45.71	74.00	-28.29	45.64	3	Vertical	31	1.00	-	31.45	6.90	38.28			
AV	7.386G	37.47	54.00	-16.53	32.08	3	Vertical	135	1.00	-	36.40	8.23	39.24			
PK	7.386G	50.50	74.00	-23.50	45.11	3	Vertical	135	1.00	-	36.40	8.23	39.24			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

CSEndB

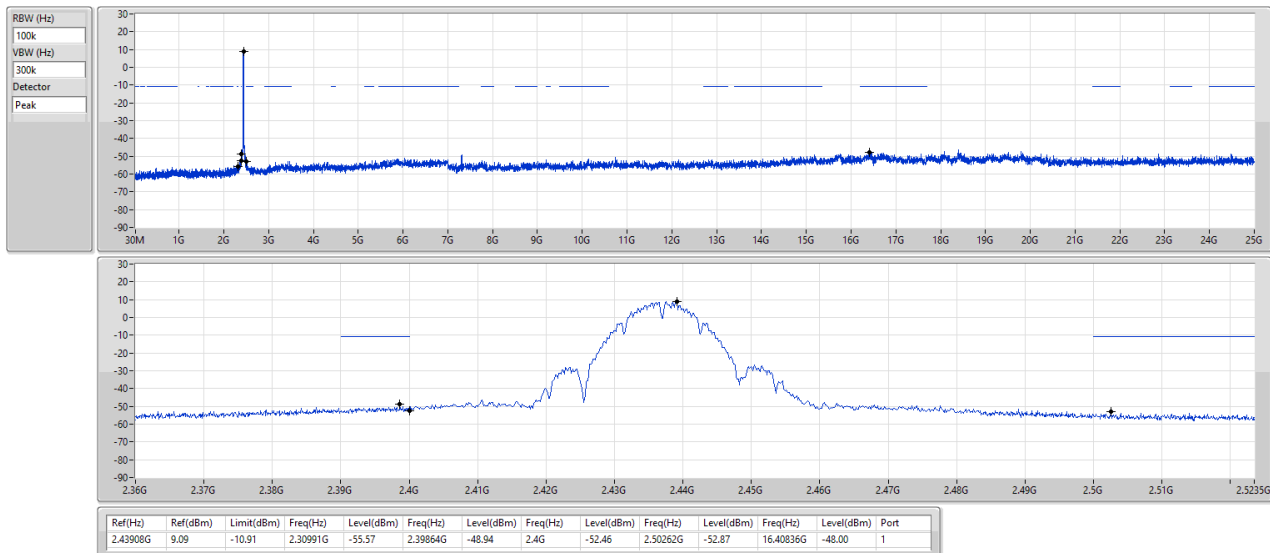
2412MHz



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

CSEndB

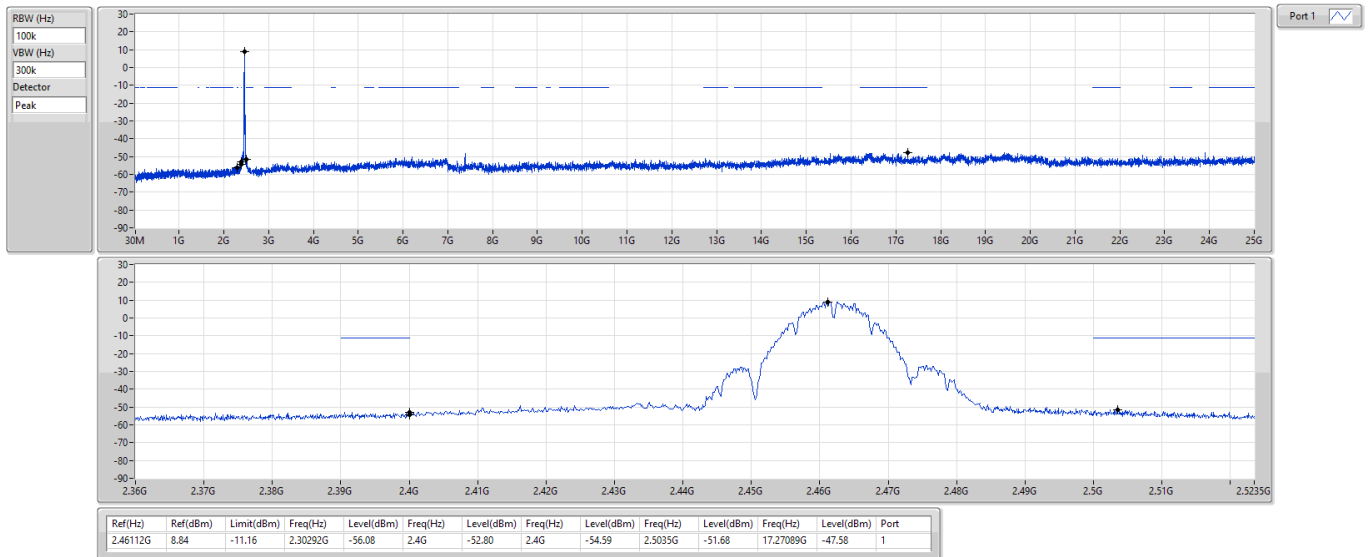
2437MHz



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

CSEndB

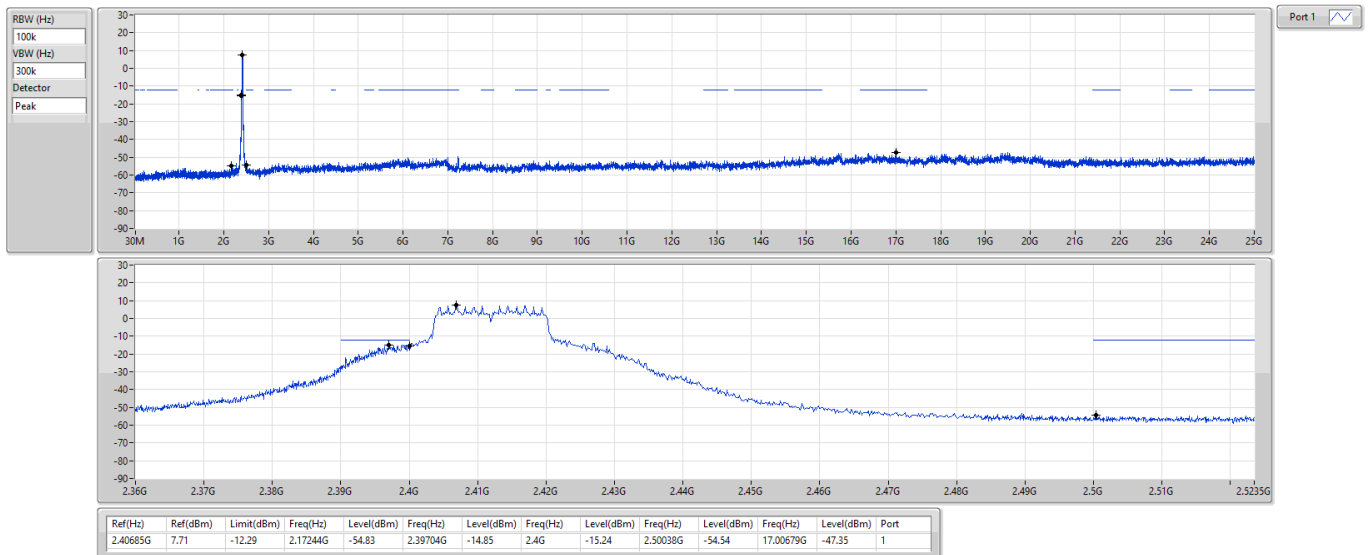
2462MHz



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

2412MHz

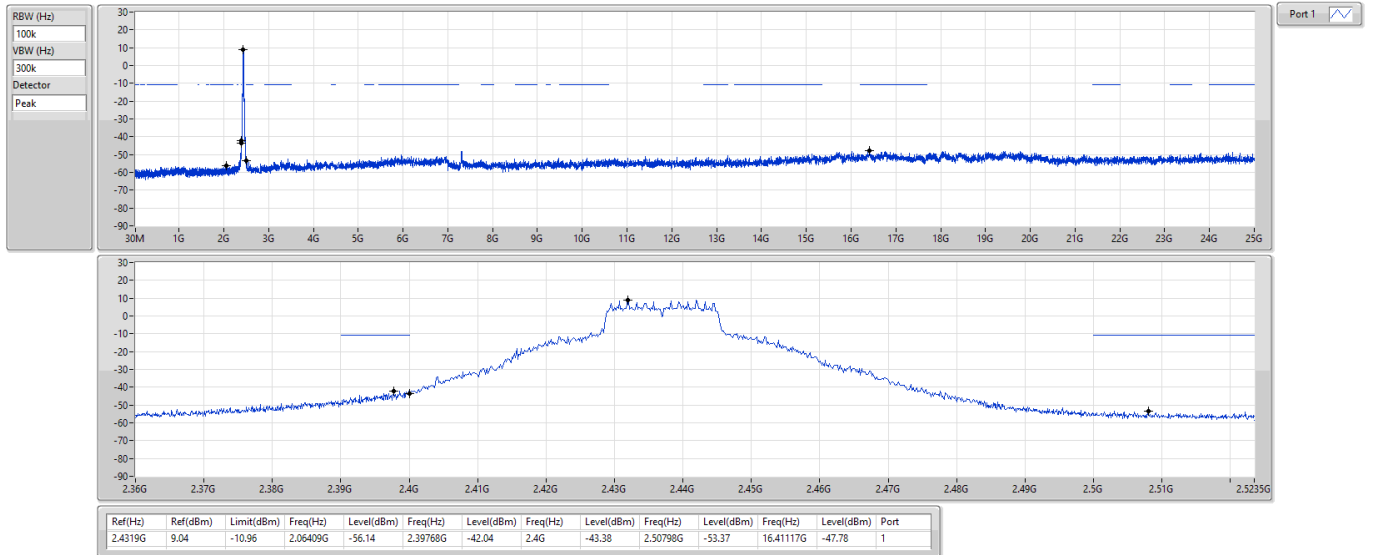




2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

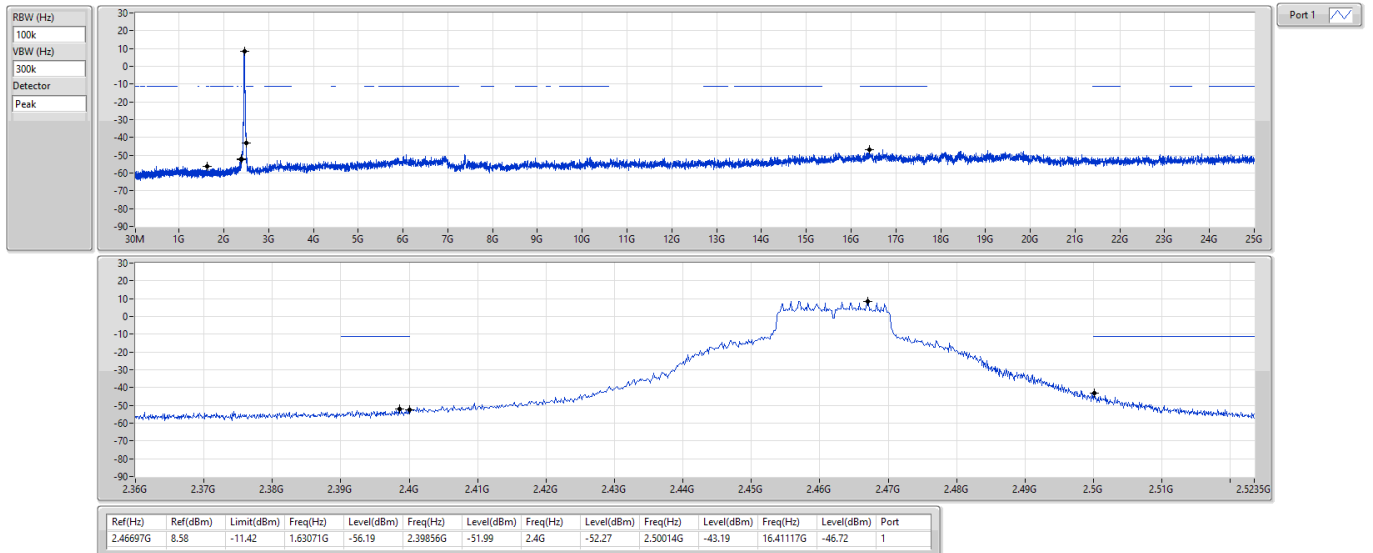
2437MHz



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

2462MHz

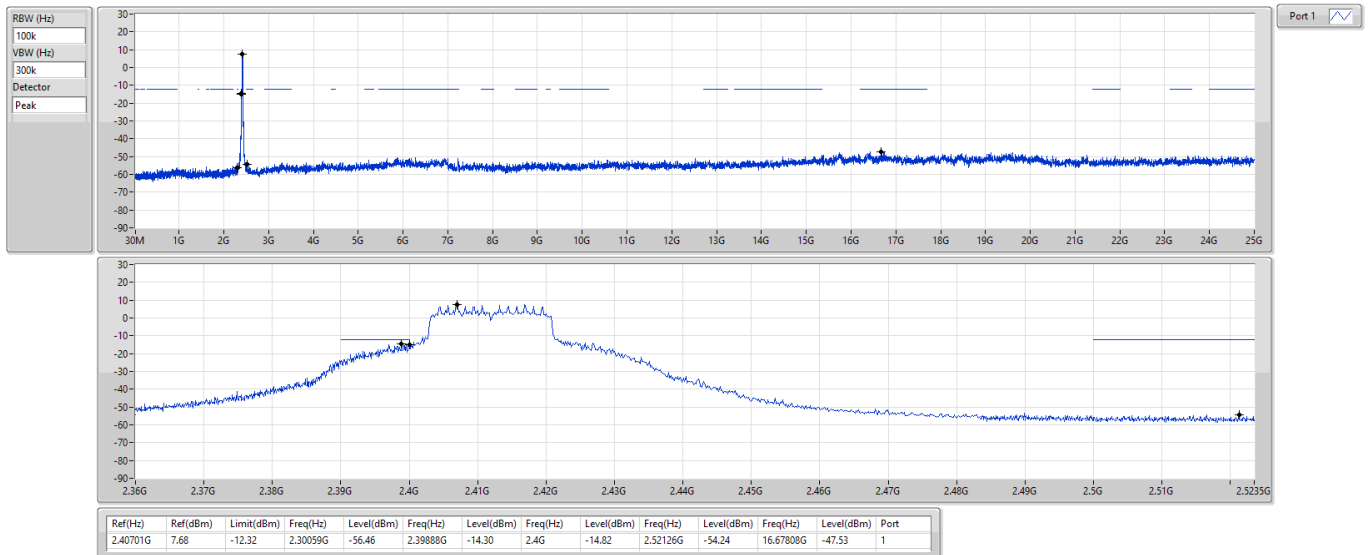




2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

CSEndB

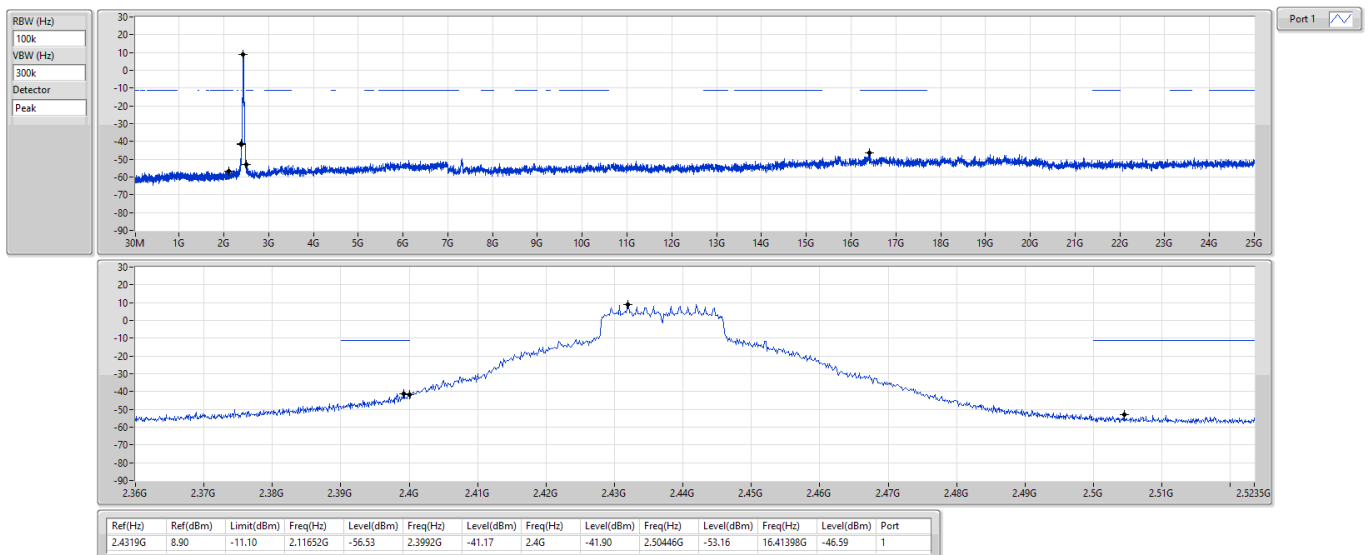
2412MHz



2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

CSEndB

2437MHz

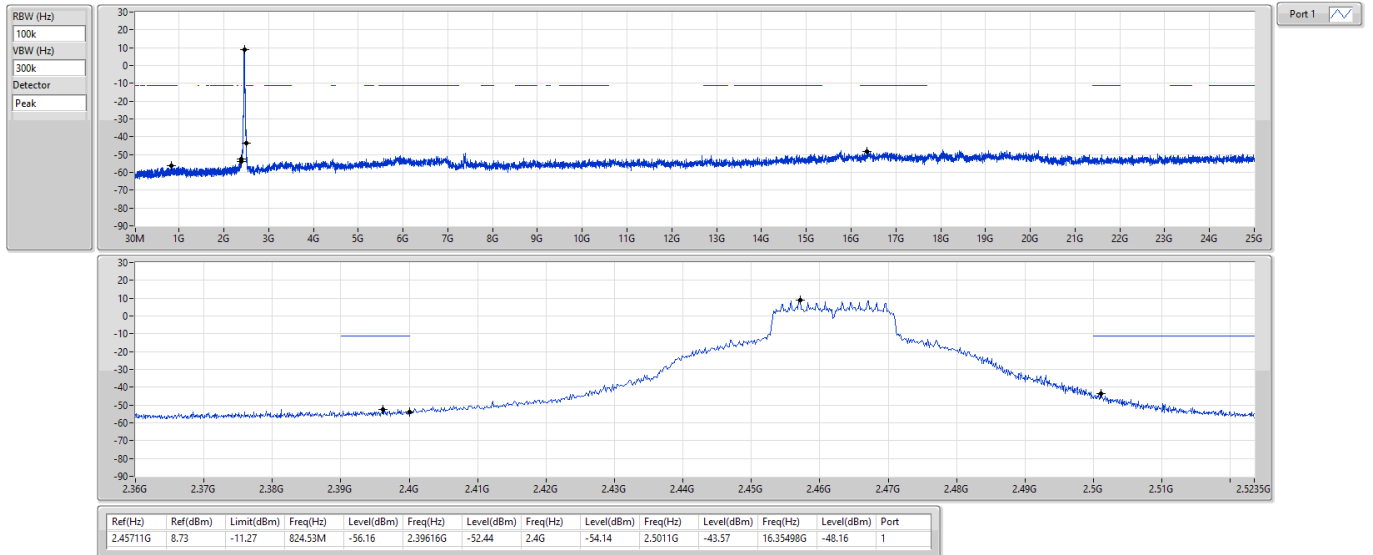




2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

CSEndB

2462MHz



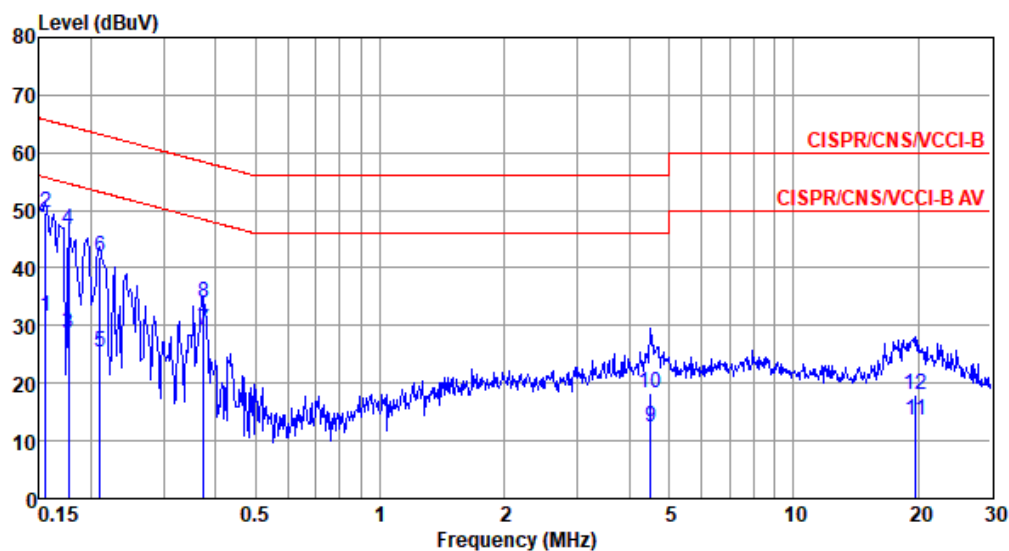


Modulation Mode	11g	Test Freq. (MHz)	2462
Power Phase	Line		

Test by : Joe Liao_RG

Temperature: 24°C

Humidity: 64%



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.156	31.51	55.69	-24.18	21.78	9.65	0.08	0.00	Average
2*	0.156	49.66	65.69	-16.03	39.93	9.65	0.08	0.00	QP
3	0.177	28.56	54.64	-26.08	18.84	9.65	0.07	0.00	Average
4	0.177	46.54	64.64	-18.10	36.82	9.65	0.07	0.00	QP
5	0.211	25.34	53.18	-27.84	15.63	9.65	0.06	0.00	Average
6	0.211	41.96	63.18	-21.22	32.25	9.65	0.06	0.00	QP
7	0.375	29.15	48.39	-19.24	19.43	9.64	0.08	0.00	Average
8	0.375	33.97	58.39	-24.42	24.25	9.64	0.08	0.00	QP
9	4.501	12.50	46.00	-33.50	2.63	9.67	0.20	0.00	Average
10	4.501	18.30	56.00	-37.70	8.43	9.67	0.20	0.00	QP
11	19.740	13.57	50.00	-36.43	3.38	9.68	0.51	0.00	Average
12	19.740	18.05	60.00	-41.95	7.86	9.68	0.51	0.00	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB) + Aux (dB).

2: Over Limit (dB) = Level (dBUV) - Limit Line (dBUV).

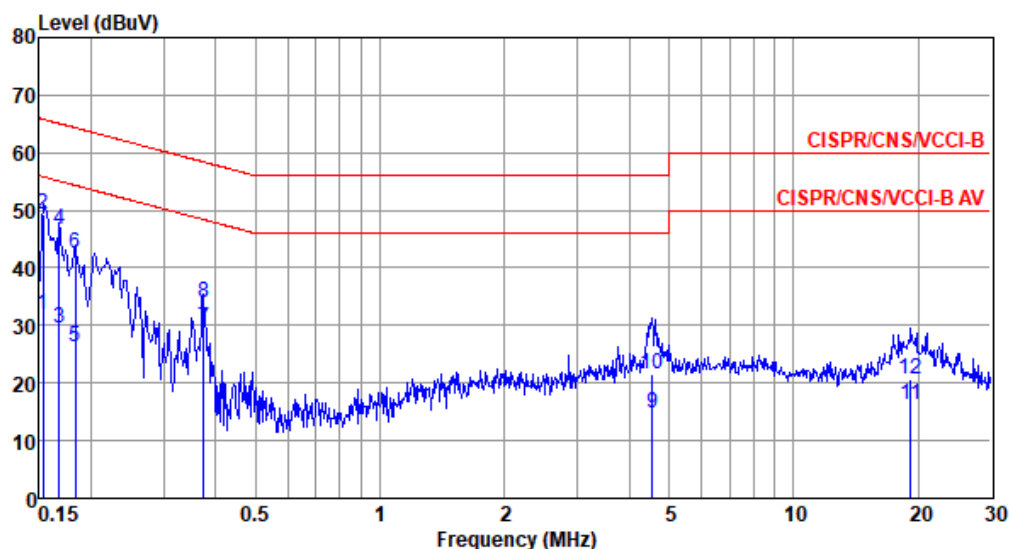


Modulation Mode	11g	Test Freq. (MHz)	2462
Power Phase	Neutral		

Test by : Joe Liao_RG

Temperature: 24°C

Humidity: 64%



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	Factor dB	Cable loss dB	Aux dB	Remark
1	0.153	31.83	55.82	-23.99	22.09	9.66	0.08	0.00	Average
2*	0.153	49.26	65.82	-16.56	39.52	9.66	0.08	0.00	QP
3	0.168	29.43	55.08	-25.65	19.70	9.66	0.07	0.00	Average
4	0.168	46.66	65.08	-18.42	36.93	9.66	0.07	0.00	QP
5	0.183	26.16	54.33	-28.17	16.44	9.65	0.07	0.00	Average
6	0.183	42.59	64.33	-21.74	32.87	9.65	0.07	0.00	QP
7	0.375	29.47	48.39	-18.92	19.75	9.64	0.08	0.00	Average
8	0.375	34.08	58.39	-24.31	24.36	9.64	0.08	0.00	QP
9	4.549	14.76	46.00	-31.24	4.87	9.69	0.20	0.00	Average
10	4.549	21.44	56.00	-34.56	11.55	9.69	0.20	0.00	QP
11	19.224	16.25	50.00	-33.75	5.93	9.82	0.50	0.00	Average
12	19.224	20.57	60.00	-39.43	10.25	9.82	0.50	0.00	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).