

FCC Test Report

FCC ID : TTUBEOPLAYPL
Equipment : Wireless Gaming Headphones
Brand Name : Bang & Olufse
Model Name : Beoplay Portal
Applicant : Bang & Olufsen A/S
Bang og Olufsen Allé 1, 7600 Struer, Denmark
Manufacturer : Bang & Olufsen A/S
Bang og Olufsen Allé 1, 7600 Struer, Denmark
Standard : 47 CFR FCC Part 15.247

The product was received on Nov. 06, 2020, and testing was started from Nov. 18, 2020 and completed on Dec. 12, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.3 Testing Location Information	7
1.4 Measurement Uncertainty	7
2 TEST CONFIGURATION OF EUT.....	8
2.1 Test Condition	8
2.2 Test Channel Mode	8
2.3 The Worst Case Measurement Configuration.....	9
2.4 Accessories	10
2.5 Support Equipment.....	10
2.6 Test Setup Diagram	11
3 TRANSMITTER TEST RESULT	12
3.1 AC Power-line Conducted Emissions	12
3.2 DTS Bandwidth.....	14
3.3 Maximum Conducted Output Power	15
3.4 Power Spectral Density	17
3.5 Emissions in Non-restricted Frequency Bands	18
3.6 Emissions in Restricted Frequency Bands.....	19
4 TEST EQUIPMENT AND CALIBRATION DATA	23
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF DTS BANDWIDTH	
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY	
APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS	
APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS	
APPENDIX G. TEST PHOTOS	
PHOTOGRAPHS OF EUT V02	



History of this test report

Report No.	Version	Description	Issued Date
FR0N0708AC	01	Initial issue of report	Jan. 25, 2021
FR0N0708AC	02	Remove wireless adapter and update photographs of EUT. (This report is the latest version replacing for the report issued on Jan. 25, 2021.)	Feb. 26, 2021

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	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:

None

Reviewed by: Sam Tsai

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11n HT20	20	1TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g and HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	SAGE ELEPHANT	S306300001000-A	Couple Chip	N/A
2	SAGE ELEPHANT	S306300001000-A	Couple Chip	N/A

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
1	1	0.72	0.71	-
2	1	-	-	0.73

Note 1: The EUT has two antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (1TX/1RX)

Ant. 1 (port 1) could transmit/receive.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 2 (port 1) could transmit/receive.

For 5GHz function:

For IEEE 802.11 a/n mode (1TX/1RX)

Ant. 1 (port 1) could transmit/receive.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From host system / Adapter			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point
Beamforming Function	☐	With beamforming	☒	Without beamforming
Type of EUT				
☒	Stand-alone			
☐	Combined (EUT where the radio part is fully integrated within another device)			
	Combined Equipment - Brand Name / Model No.:		...	
☐	Plug-in radio (EUT intended for a variety of host systems)			
	Host System - Brand Name / Model No.:		...	
☐	Other:			

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_1TX	0.996	0.02	12.194m	10
802.11g_Nss1,(6Mbps)_1TX	0.973	0.12	2.027m	1k
802.11n HT20_Nss1,(MCS0)_1TX	0.972	0.12	1.891m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Sample	Description
Beoplay Portal	1	There are two samples of EUT, the only difference is the color of appearance.
	2	

Note: Sample 2 configuration was measured during the test.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- ♦ KDB 558074 D01 v05r02
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location				
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)		
		TEL : 886-3-327-3456	FAX : 886-3-327-0973	
Test site Designation No. TW1190 with FCC.				
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)		
		TEL : 886-3-656-9065	FAX : 886-3-656-9085	
Test site Designation No. TW0006 with FCC.				
☐	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)		
		TEL : 886-3-318-0787	FAX : 886-3-318-0287	
Test site Designation No. TW1097 with FCC.				

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward Wang	21.0~22.1°C/56~59%	12/Dec/2020
RF Conducted	TH01-HY	Vivi Jiang	20.1~26.9°C/50~60%	18/Nov/2020~19/Nov/2020
Radiated	03CH02-HY	Daniel Lin	20.4~26.3°C/51~64%	20/Nov/2020~25/Nov/2020

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	3.7V

2.2 Test Channel Mode

Test Software Version	art2-GUI 2.3
-----------------------	--------------

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	6.5
2417MHz	7
2437MHz	7
2457MHz	7
2462MHz	6.5
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	6.5
2437MHz	6.5
2462MHz	6.5
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	6
2417MHz	7
2437MHz	7
2457MHz	7
2462MHz	6

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	USB Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	USB Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT			V

2.4 Accessories

Accessories				
Battery	Brand Name	Synergy	Model Name	AHB723938PCT
	Power Rating	3.7Vdc,1110mAh	Type	Lithium-ion Polymer Battery Pack
USB Cable(1.8M)	Brand Name	Bang & Olufsen	Model Name	4021XW01907ZEU
	Signal Line	1.8 meter, D-shielded cable, w/o ferrite core		
USB Cable(1.2M)	Brand Name	Bang & Olufsen	Model Name	4021XW01907ZAU
	Signal Line	1.2 meter, D-shielded cable, w/o ferrite core		
Audio Cable	Brand Name	Bang & Olufsen	Model Name	4021XW01906ZAS
	Signal Line	1.2 meter, non-shielded cable, w/o ferrite core		

Reminder: Regarding to more detail and other information, please refer to user manual.

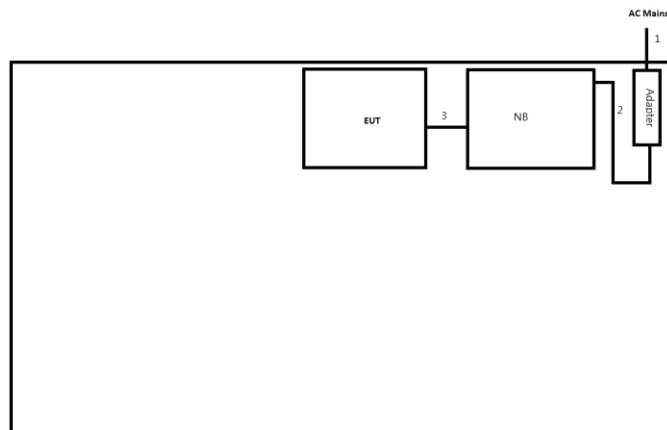
2.5 Support Equipment

Support Equipment – AC Conduction and Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	Dell	P06G	-	-
2	Adapter for NB	Dell	LA90PM111	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	Dell	E5410	-	-
2	Adapter for NB	Dell	HA65NM130	-	-

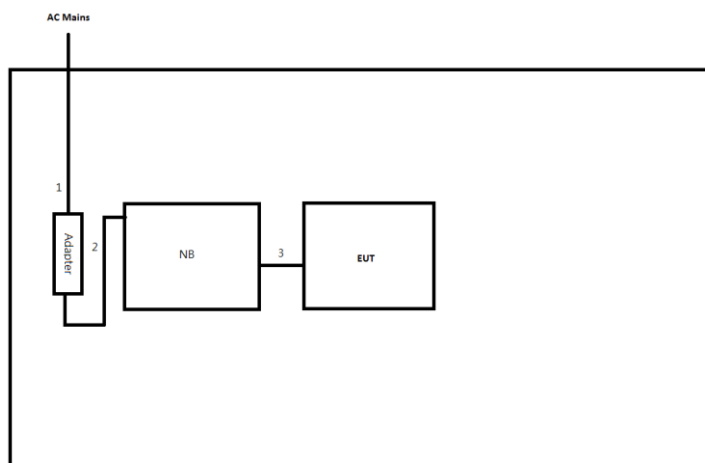
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.5	-
3	USB cable	No	0.1	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.5	-
3	USB cable	No	0.1	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line 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.

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

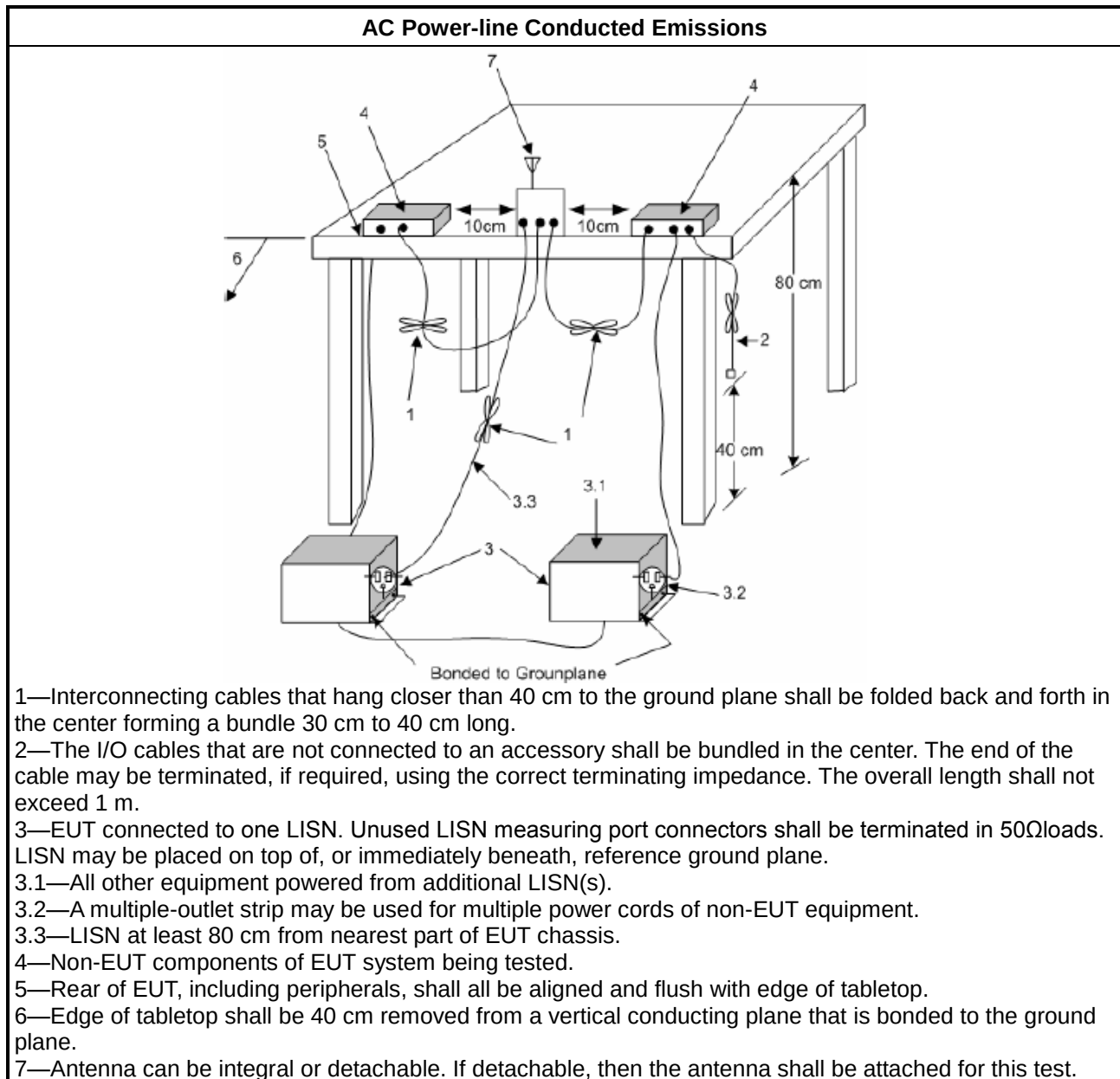
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

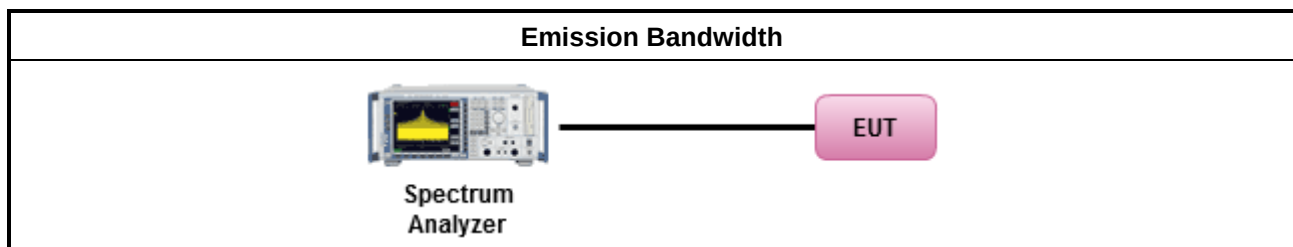
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit		
	▪	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪	Smart antenna system (SAS):
	-	Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	-	Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	-	Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:		
	▪	2400-2483.5 MHz Band
	▪	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	▪	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	▪	Smart antenna system (SAS)
	-	Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.		

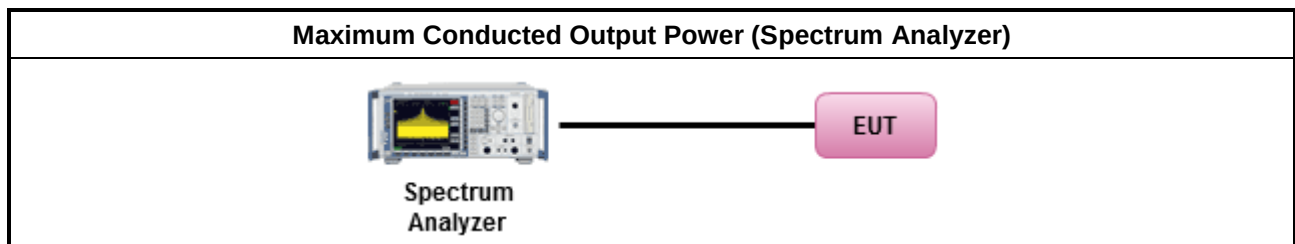
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit	
▪	Power Spectral Density (PSD) $\leq$ 8 dBm/3kHz

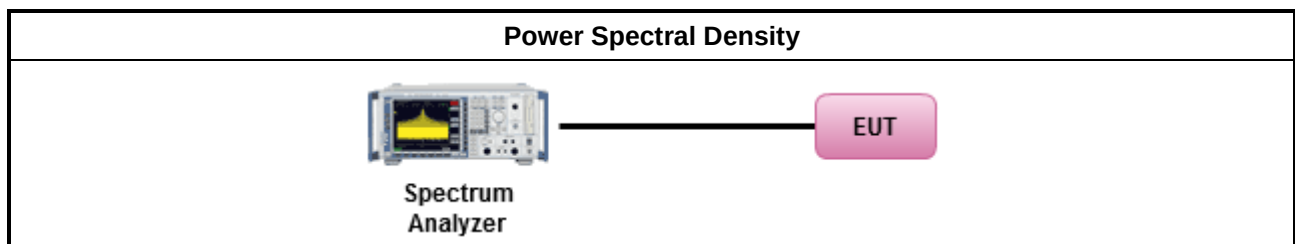
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
▪	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
▪	Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.	

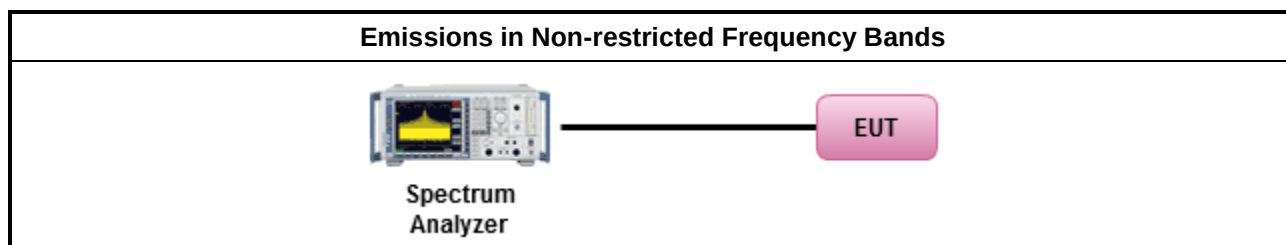
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

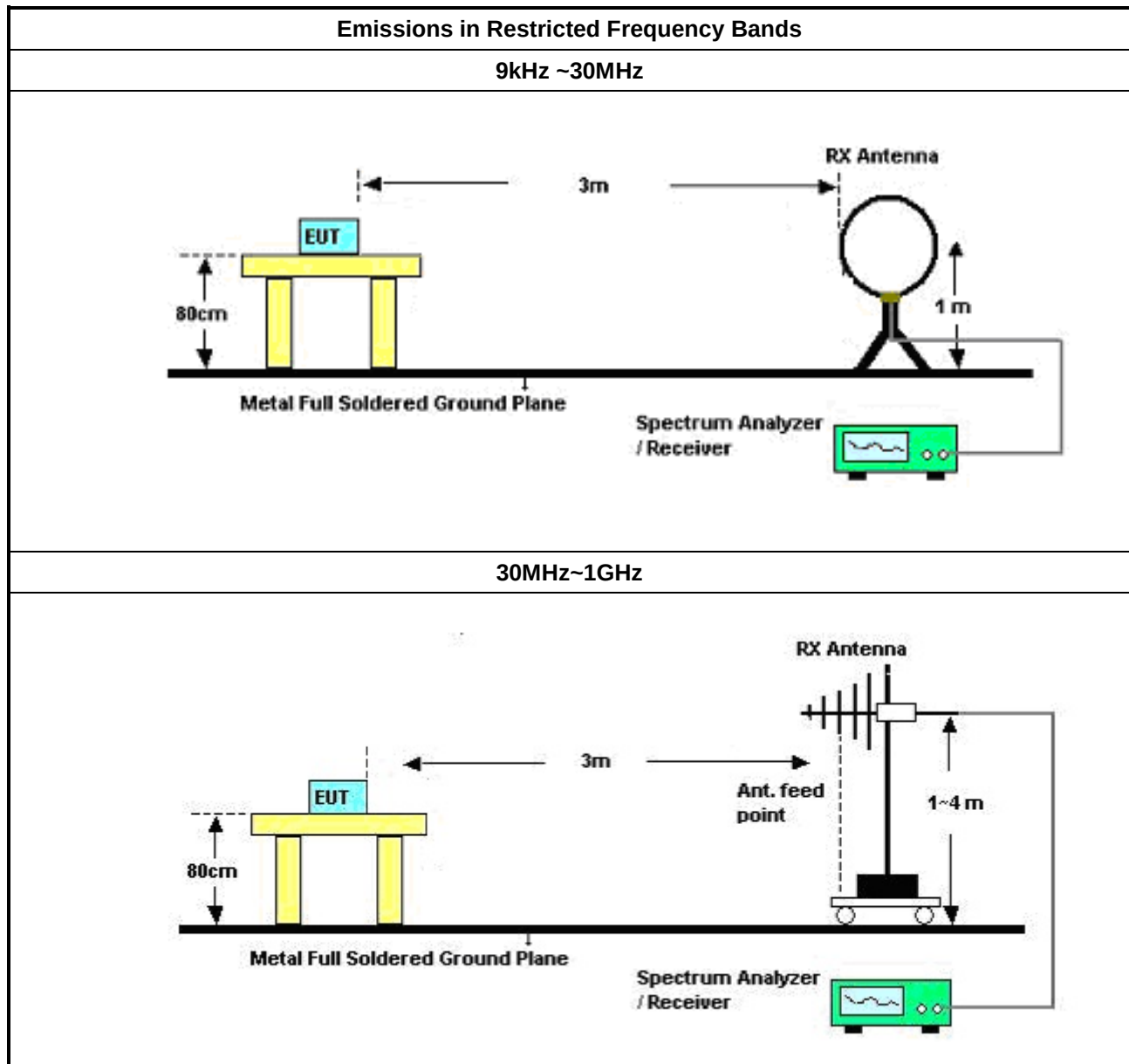
Test Method	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
Use the following spectrum analyzer settings:	
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.
For conducted and cabinet radiation measurement, refer as KDB 558074, clause 3 (12.7.4.2 of ANSI C63.10).	
	For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	For KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

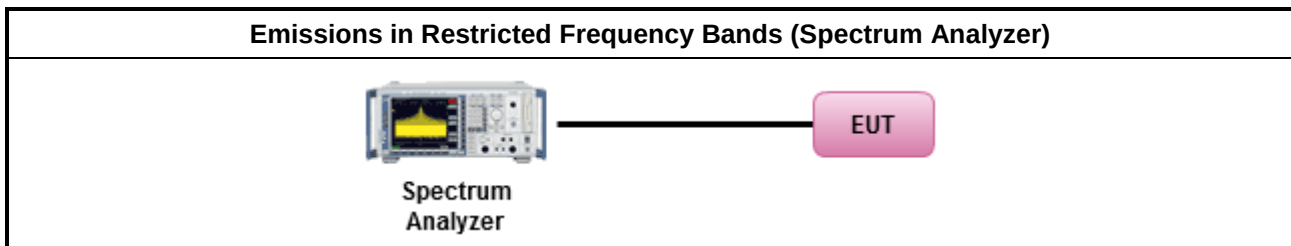
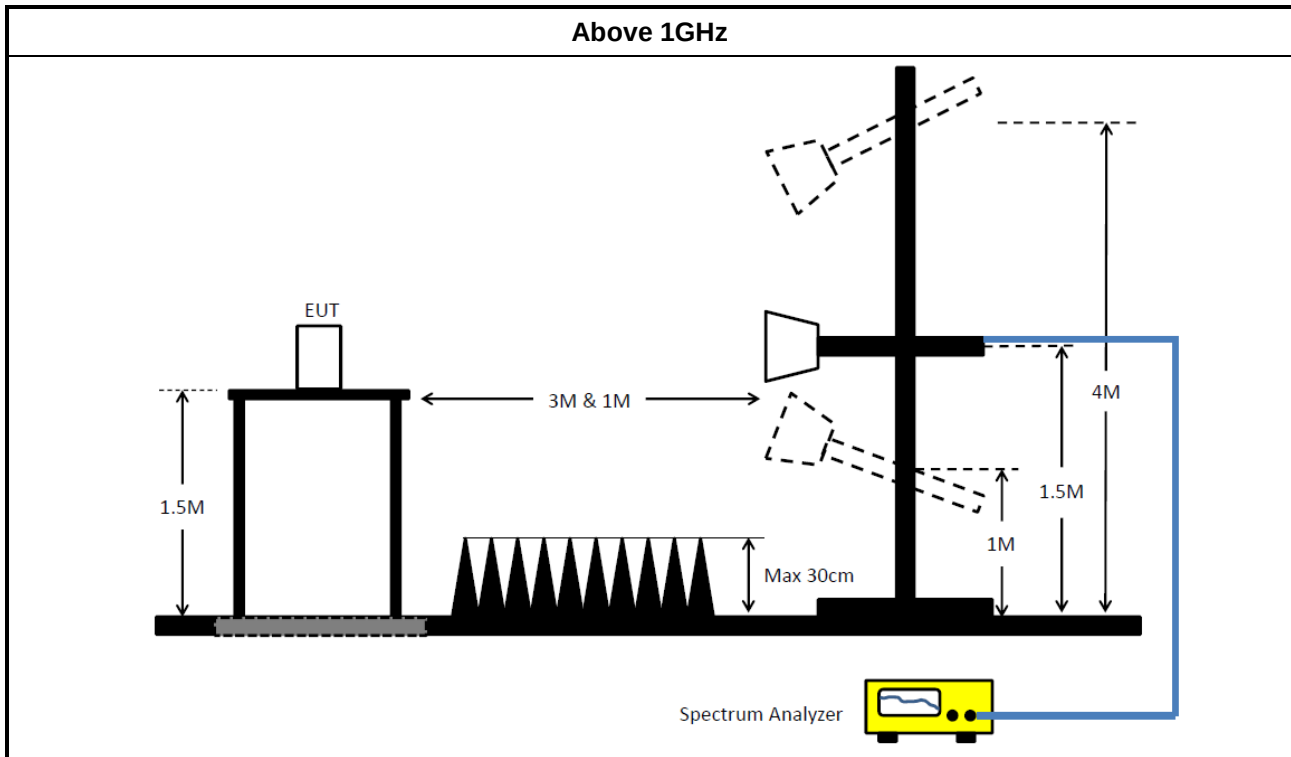
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer/ Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	29/May/2020	28/May/2021
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	11/Nov/2020	10/Nov/2021
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	31/Aug/2020	30/Aug/2021
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	21/Sep/2020	20/Sep/2021

Instrument for Radiated Test

Instrument	Manufacturer/ Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	04/Aug/2020	03/Aug/2021
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	02/Aug/2020	01/Aug/2021
Signal Analyzer	R&S	FSP40	100593	9kHz~40GHz	27/Feb/2020	26/Feb/2021
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	30/Jun/2020	29/Jun/2021
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~18GHz	23/Oct/2020	22/Oct/2021
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	06/Sep/2020	05/Sep/2021
Double Ridged Guide Horn Antenna	SCHWARZBEC	BBHA 9120 D	BBHA 9120 D 01543	1GHz~18GHz	09/Jun/2020	08/Jun/2021
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz~30MHz	20/Jun/2020	19/Jun/2021
RF Cable-R03m	Jye Bao	RG142	CB017	30MHz~1GHz	25/Mar/2020	24/Mar/2021
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	805193/4+805192/4	1GHz~40GHz	08/Apr/2020	07/Apr/2021
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	13/Mar/2020	12/Mar/2021
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz~40GHz	10/Mar/2020	09/Mar/2021
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2020	15/Mar/2021
EMI Test Receiver	R&S	ESR3	102051	9kHz~3.6GHz	29/May/2020	28/May/2021

Instrument for Conducted Test

Instrument	Manufacturer/ Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	19/Mar/2020	18/Mar/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2022
Pulse Sensor	Anritsu	MA2411B	917017	300MHz~40GHz	17/Feb/2020	16/Feb/2021
Power Meter	Anritsu	ML2495A	949003	300MHz~40GHz	17/Feb/2020	16/Feb/2021



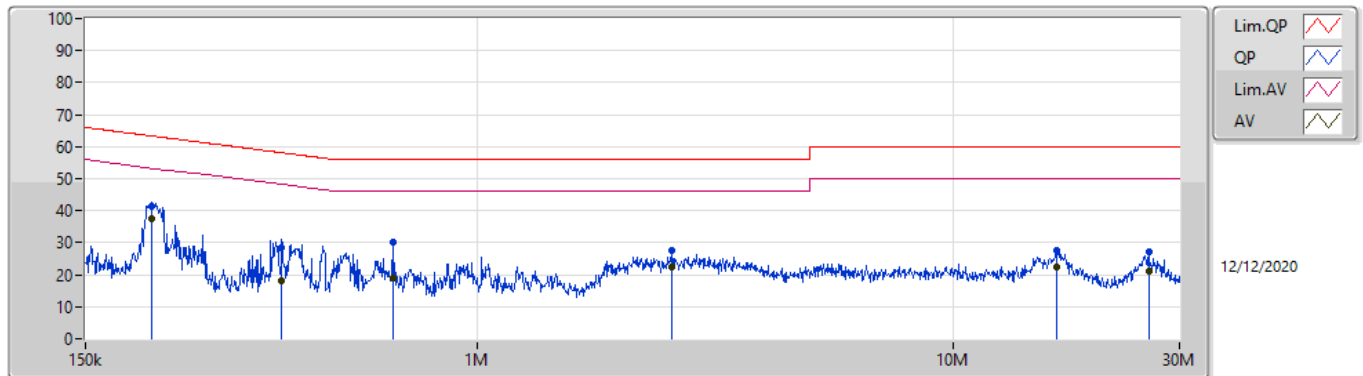
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	208.092k	39.43	53.28	-13.85	Neutral

Mode Configure

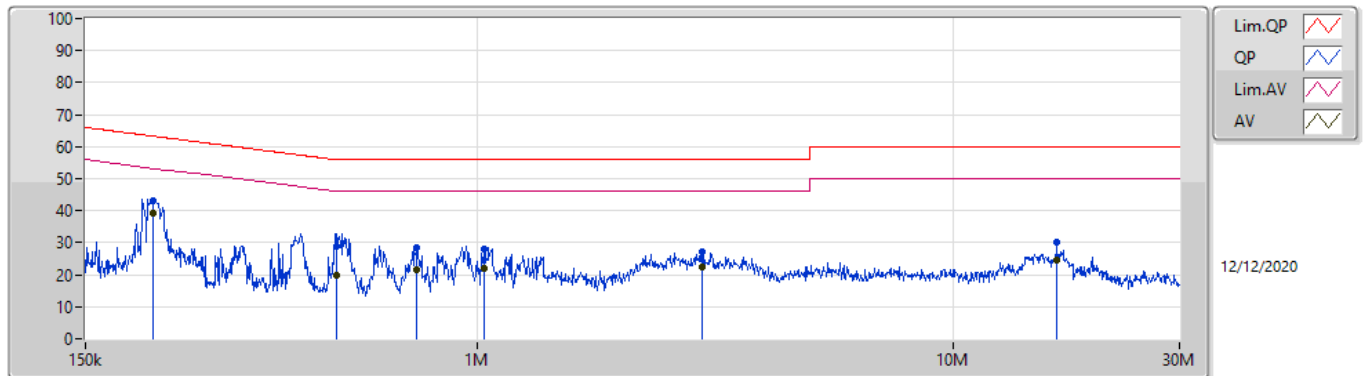
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	206.437k	41.42	63.34	-21.92	Line	-
Mode 1	Pass	AV	206.437k	37.58	53.34	-15.76	Line	"Worst"
Mode 1	Pass	QP	387.896k	28.36	58.10	-29.74	Line	-
Mode 1	Pass	AV	387.896k	18.23	48.10	-29.87	Line	-
Mode 1	Pass	QP	664.915k	30.08	56.00	-25.92	Line	-
Mode 1	Pass	AV	664.915k	19.04	46.00	-26.96	Line	-
Mode 1	Pass	QP	2.563M	27.52	56.00	-28.48	Line	-
Mode 1	Pass	AV	2.563M	22.62	46.00	-23.38	Line	-
Mode 1	Pass	QP	16.601M	27.45	60.00	-32.55	Line	-
Mode 1	Pass	AV	16.601M	22.59	50.00	-27.41	Line	-
Mode 1	Pass	QP	25.857M	27.01	60.00	-32.99	Line	-
Mode 1	Pass	AV	25.857M	21.00	50.00	-29.00	Line	-
Mode 1	Pass	QP	208.092k	43.04	63.28	-20.24	Neutral	-
Mode 1	Pass	AV	208.092k	39.43	53.28	-13.85	Neutral	"Worst"
Mode 1	Pass	QP	504.824k	28.67	56.00	-27.33	Neutral	-
Mode 1	Pass	AV	504.824k	19.91	46.00	-26.09	Neutral	-
Mode 1	Pass	QP	746.524k	28.59	56.00	-27.41	Neutral	-
Mode 1	Pass	AV	746.524k	21.47	46.00	-24.53	Neutral	-
Mode 1	Pass	QP	1.036M	28.08	56.00	-27.92	Neutral	-
Mode 1	Pass	AV	1.036M	22.03	46.00	-23.97	Neutral	-
Mode 1	Pass	QP	2.971M	27.34	56.00	-28.66	Neutral	-
Mode 1	Pass	AV	2.971M	22.56	46.00	-23.44	Neutral	-
Mode 1	Pass	QP	16.601M	30.01	60.00	-29.99	Neutral	-
Mode 1	Pass	AV	16.601M	24.69	50.00	-25.31	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	206.437k	41.42	63.34	-21.92	19.59	Line	-	21.83	9.68	0.01	9.90			
AV	206.437k	37.58	53.34	-15.76	19.59	Line	"Worst"	17.99	9.68	0.01	9.90			
QP	387.896k	28.36	58.10	-29.74	19.59	Line	-	8.77	9.67	0.02	9.90			
AV	387.896k	18.23	48.10	-29.87	19.59	Line	-	-1.36	9.67	0.02	9.90			
QP	664.915k	30.08	56.00	-25.92	19.55	Line	-	10.53	9.67	0.04	9.84			
AV	664.915k	19.04	46.00	-26.96	19.55	Line	-	-0.51	9.67	0.04	9.84			
QP	2.563M	27.52	56.00	-28.48	19.61	Line	-	7.91	9.68	0.09	9.84			
AV	2.563M	22.62	46.00	-23.38	19.61	Line	-	3.01	9.68	0.09	9.84			
QP	16.601M	27.45	60.00	-32.55	19.84	Line	-	7.61	9.68	0.26	9.90			
AV	16.601M	22.59	50.00	-27.41	19.84	Line	-	2.75	9.68	0.26	9.90			
QP	25.857M	27.01	60.00	-32.99	19.84	Line	-	7.17	9.58	0.36	9.90			
AV	25.857M	21.00	50.00	-29.00	19.84	Line	-	1.16	9.58	0.36	9.90			

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	208.092k	43.04	63.28	-20.24	19.59	Neutral	-	23.45	9.68	0.01	9.90			
AV	208.092k	39.43	53.28	-13.85	19.59	Neutral	"Worst"	19.84	9.68	0.01	9.90			
QP	504.824k	28.67	56.00	-27.33	19.57	Neutral	-	9.10	9.67	0.03	9.87			
AV	504.824k	19.91	46.00	-26.09	19.57	Neutral	-	0.34	9.67	0.03	9.87			
QP	746.524k	28.59	56.00	-27.41	19.54	Neutral	-	9.05	9.67	0.04	9.83			
AV	746.524k	21.47	46.00	-24.53	19.54	Neutral	-	1.93	9.67	0.04	9.83			
QP	1.036M	28.08	56.00	-27.92	19.52	Neutral	-	8.56	9.67	0.05	9.80			
AV	1.036M	22.03	46.00	-23.97	19.52	Neutral	-	2.51	9.67	0.05	9.80			
QP	2.971M	27.34	56.00	-28.66	19.65	Neutral	-	7.69	9.69	0.10	9.86			
AV	2.971M	22.56	46.00	-23.44	19.65	Neutral	-	2.91	9.69	0.10	9.86			
QP	16.601M	30.01	60.00	-29.99	19.90	Neutral	-	10.11	9.74	0.26	9.90			
AV	16.601M	24.69	50.00	-25.31	19.90	Neutral	-	4.79	9.74	0.26	9.90			

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	10.05M	13.933M	13M9G1D	10.05M	13.893M
802.11g_Nss1,(6Mbps)_1TX	16.325M	16.632M	16M6D1D	16.325M	16.592M
802.11n HT20_Nss1,(MCS0)_1TX	17.6M	17.751M	17M8D1D	17.55M	17.731M

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

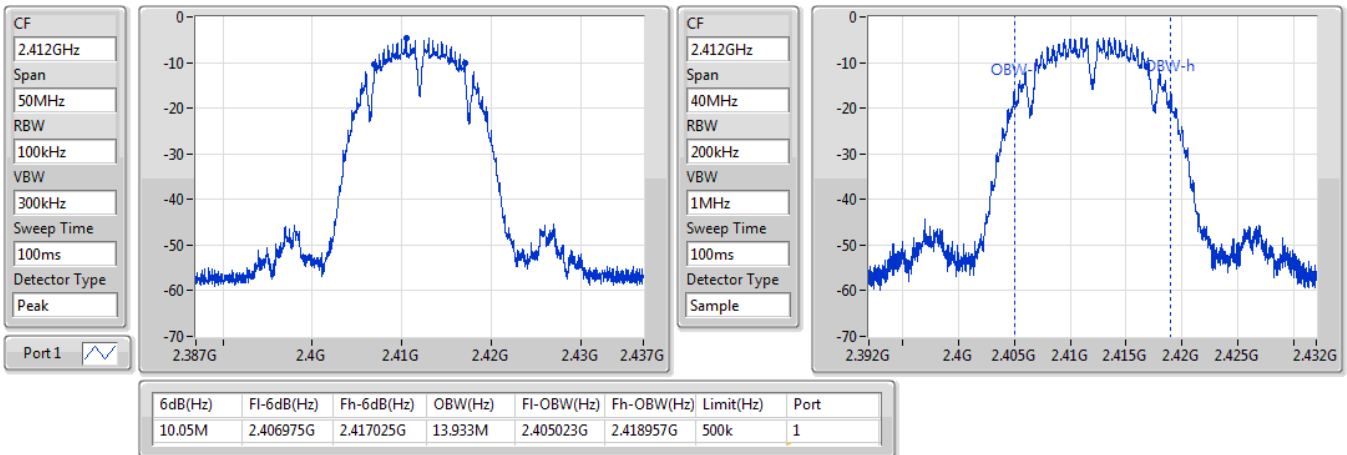
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	10.05M	13.933M
2437MHz	Pass	500k	10.05M	13.893M
2462MHz	Pass	500k	10.05M	13.913M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.325M	16.592M
2437MHz	Pass	500k	16.325M	16.632M
2462MHz	Pass	500k	16.325M	16.592M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.55M	17.751M
2437MHz	Pass	500k	17.55M	17.731M
2462MHz	Pass	500k	17.6M	17.751M

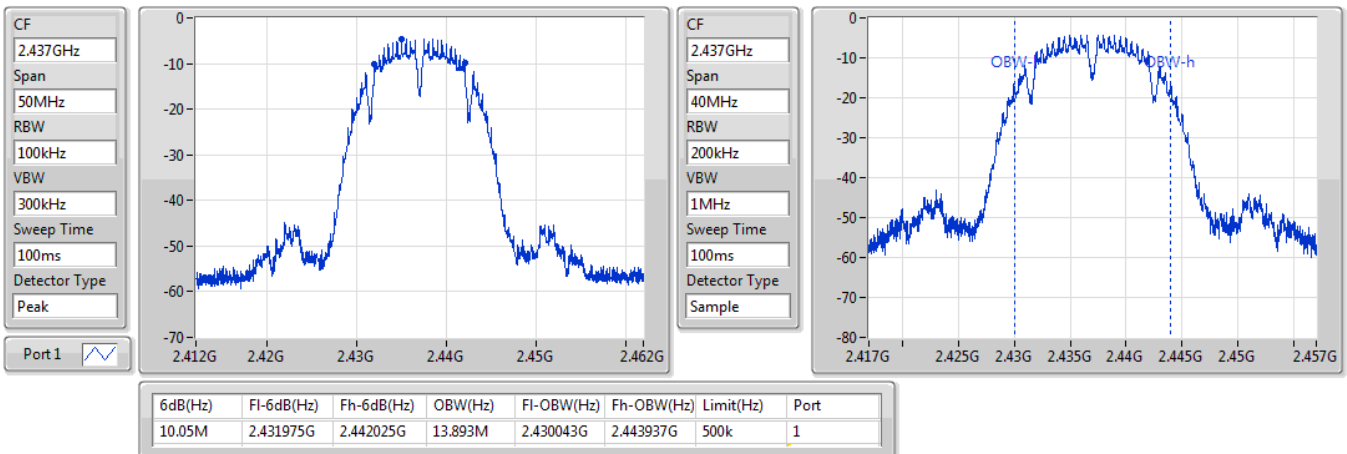
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_1TX
EBW
2412MHz

18/11/2020


802.11b_Nss1,(1Mbps)_1TX
EBW
2437MHz

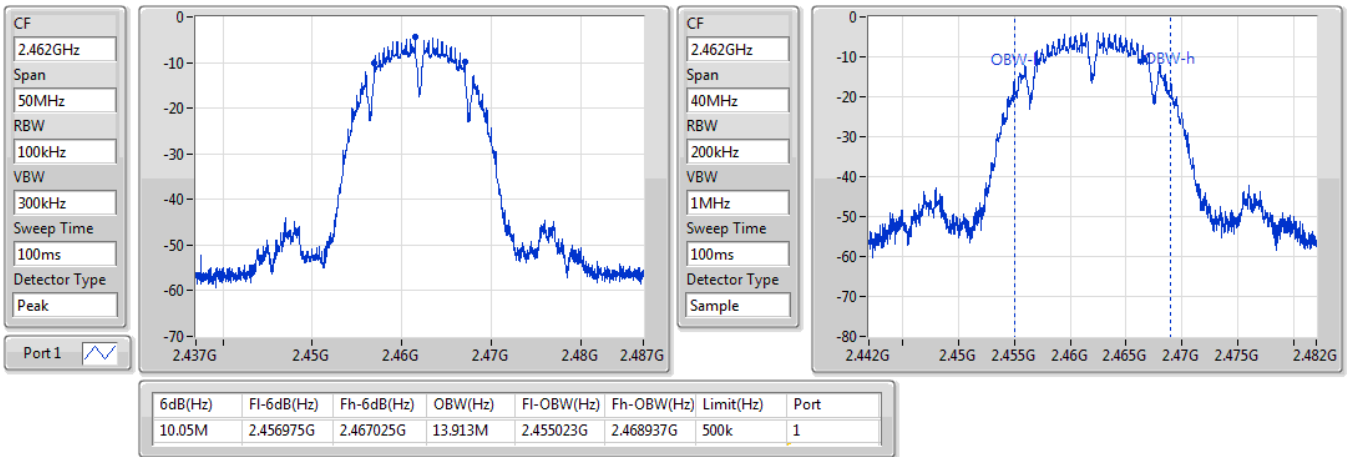
18/11/2020



802.11b_Nss1,(1Mbps)_1TX

EBW
2462MHz

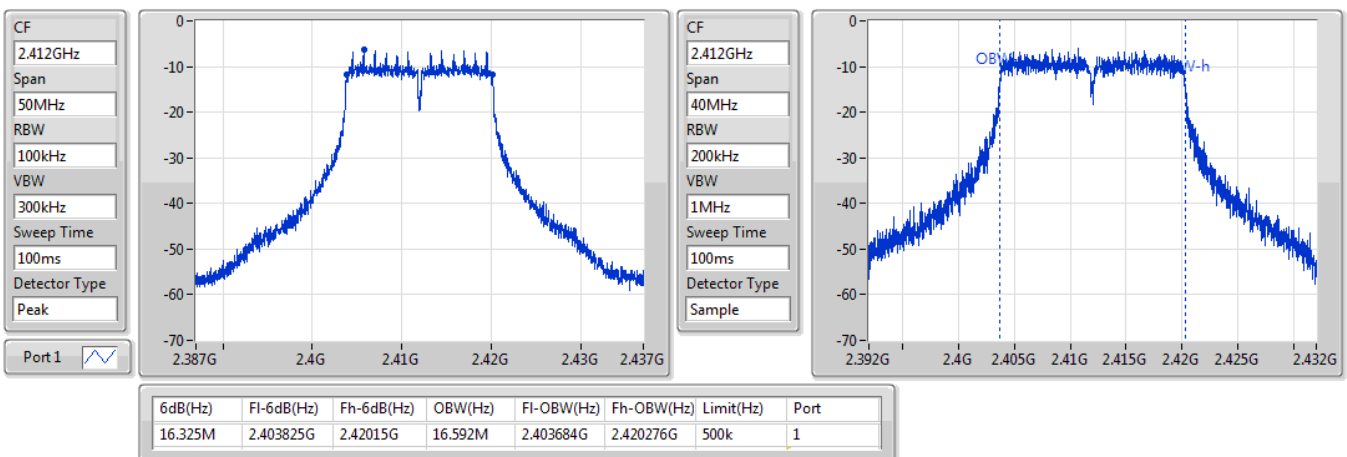
18/11/2020



802.11g_Nss1,(6Mbps)_1TX

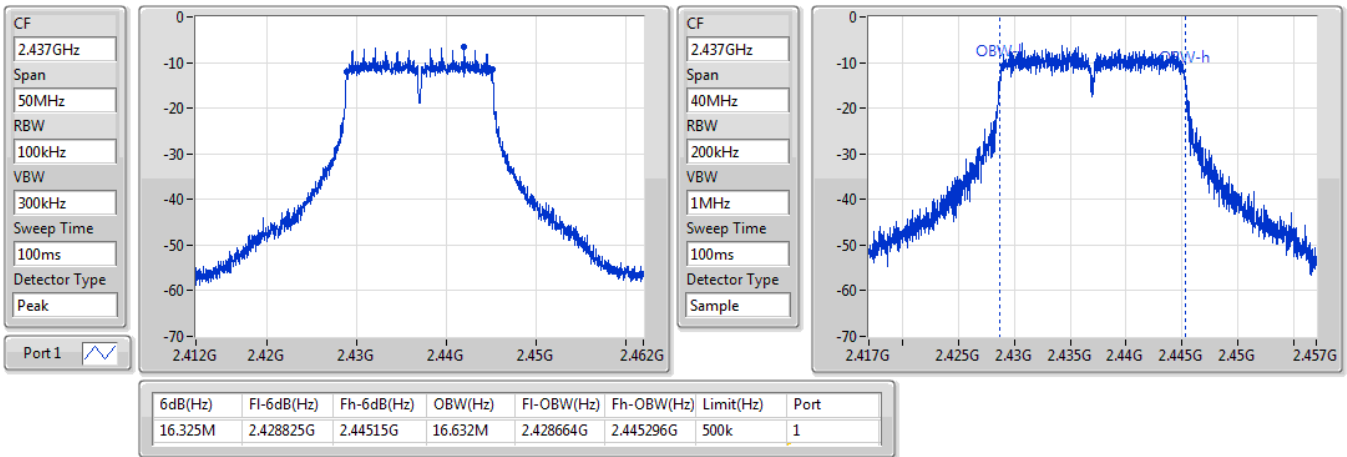
EBW
2412MHz

18/11/2020

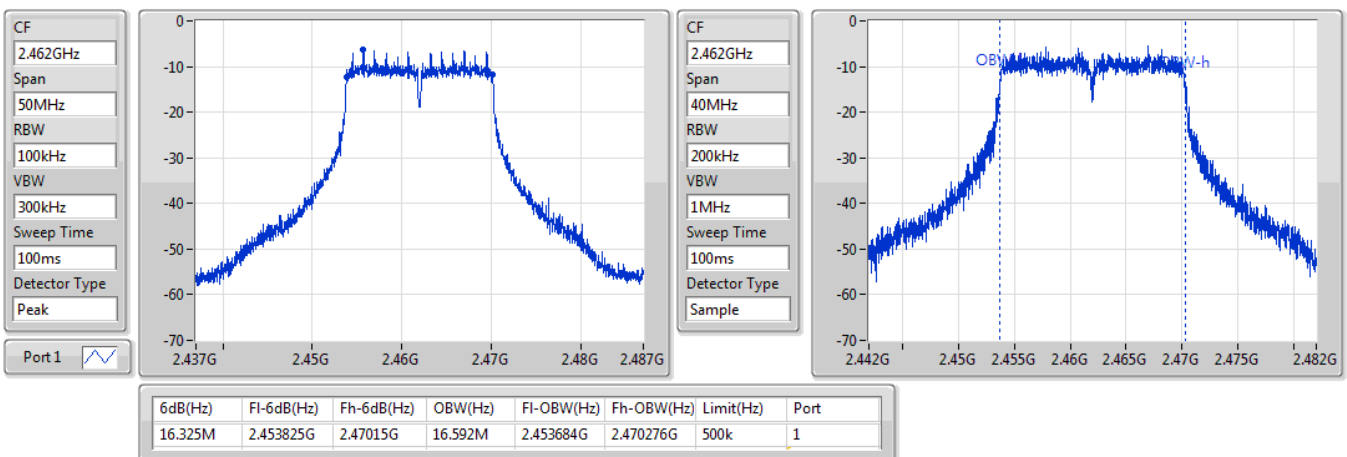


802.11g_Nss1,(6Mbps)_1TX
EBW
2437MHz

18/11/2020

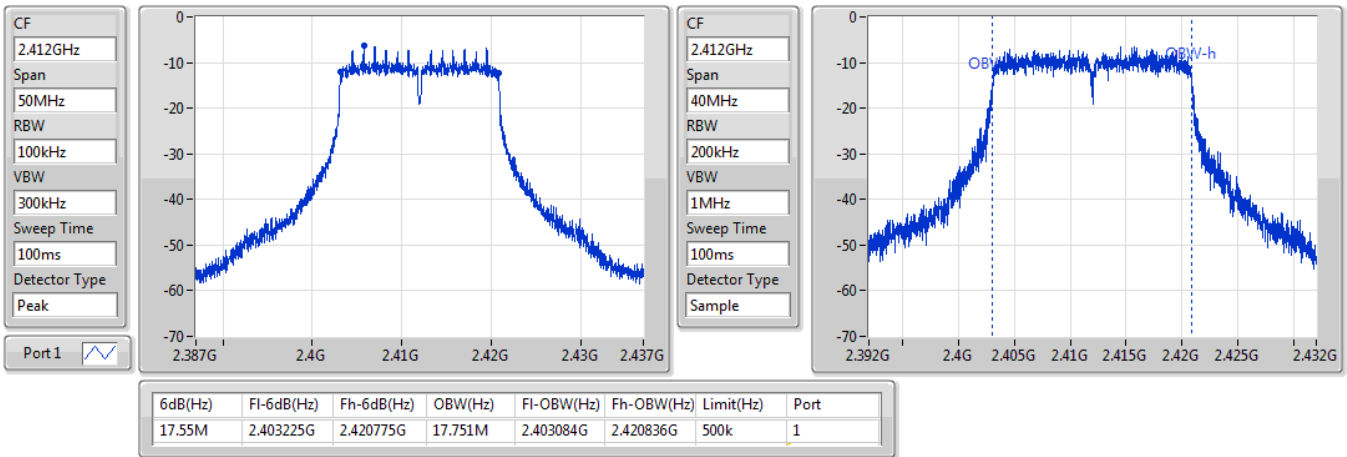

802.11g_Nss1,(6Mbps)_1TX
EBW
2462MHz

18/11/2020

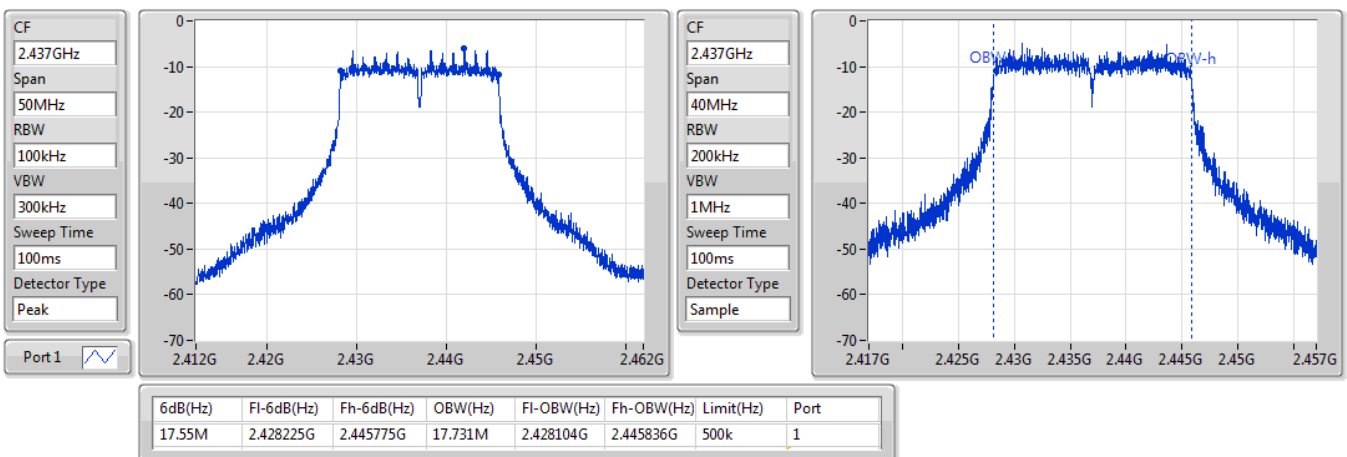


802.11n HT20_Nss1,(MCS0)_1TX
EBW
2412MHz

18/11/2020


802.11n HT20_Nss1,(MCS0)_1TX
EBW
2437MHz

18/11/2020

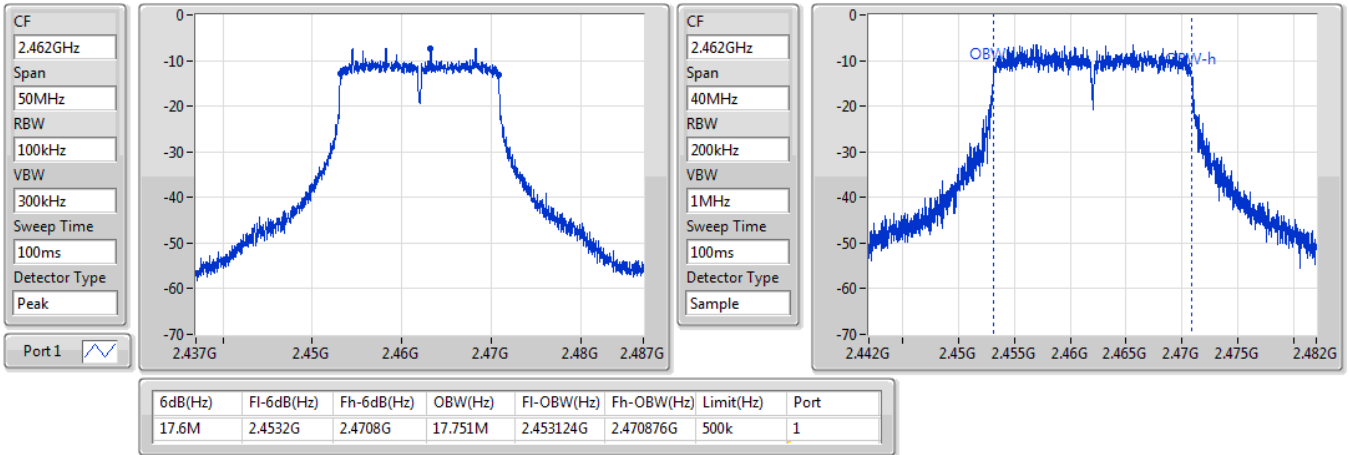


802.11n HT20_Nss1,(MCS0)_1TX

EBW

2462MHz

18/11/2020





Average Power

Appendix C

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	5.12	0.00325
802.11g_Nss1,(6Mbps)_1TX	5.20	0.00331
802.11n HT20_Nss1,(MCS0)_1TX	5.22	0.00333

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	0.72	4.81	4.81	30.00
2417MHz	Pass	0.72	4.80	4.80	30.00
2437MHz	Pass	0.72	5.10	5.10	30.00
2457MHz	Pass	0.72	5.12	5.12	30.00
2462MHz	Pass	0.72	4.92	4.92	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	0.72	5.20	5.20	30.00
2437MHz	Pass	0.72	4.90	4.90	30.00
2462MHz	Pass	0.72	5.15	5.15	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	0.72	4.70	4.70	30.00
2417MHz	Pass	0.72	5.22	5.22	30.00
2437MHz	Pass	0.72	5.17	5.17	30.00
2457MHz	Pass	0.72	5.20	5.20	30.00
2462MHz	Pass	0.72	4.94	4.94	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-19.43
802.11g_Nss1,(6Mbps)_1TX	-19.78
802.11n HT20_Nss1,(MCS0)_1TX	-20.46

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	0.72	-19.65	-19.65	8.00
2437MHz	Pass	0.72	-19.43	-19.43	8.00
2462MHz	Pass	0.72	-19.79	-19.79	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	0.72	-20.13	-20.13	8.00
2437MHz	Pass	0.72	-19.78	-19.78	8.00
2462MHz	Pass	0.72	-20.10	-20.10	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	0.72	-20.70	-20.70	8.00
2437MHz	Pass	0.72	-20.46	-20.46	8.00
2462MHz	Pass	0.72	-21.36	-21.36	8.00

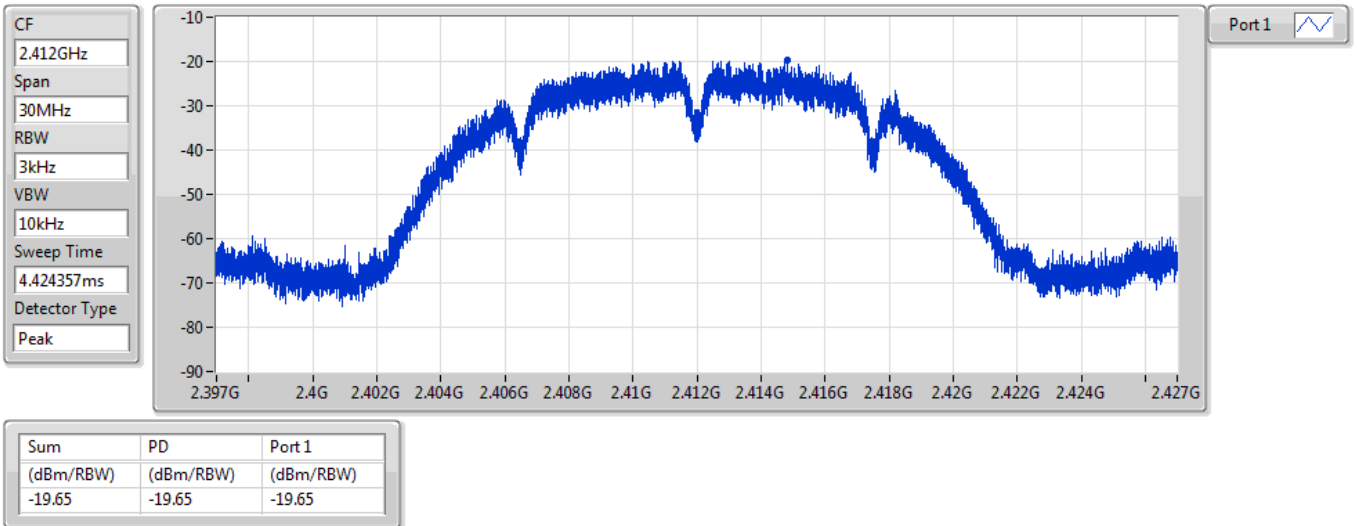
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_1TX

PSD

2412MHz

18/11/2020

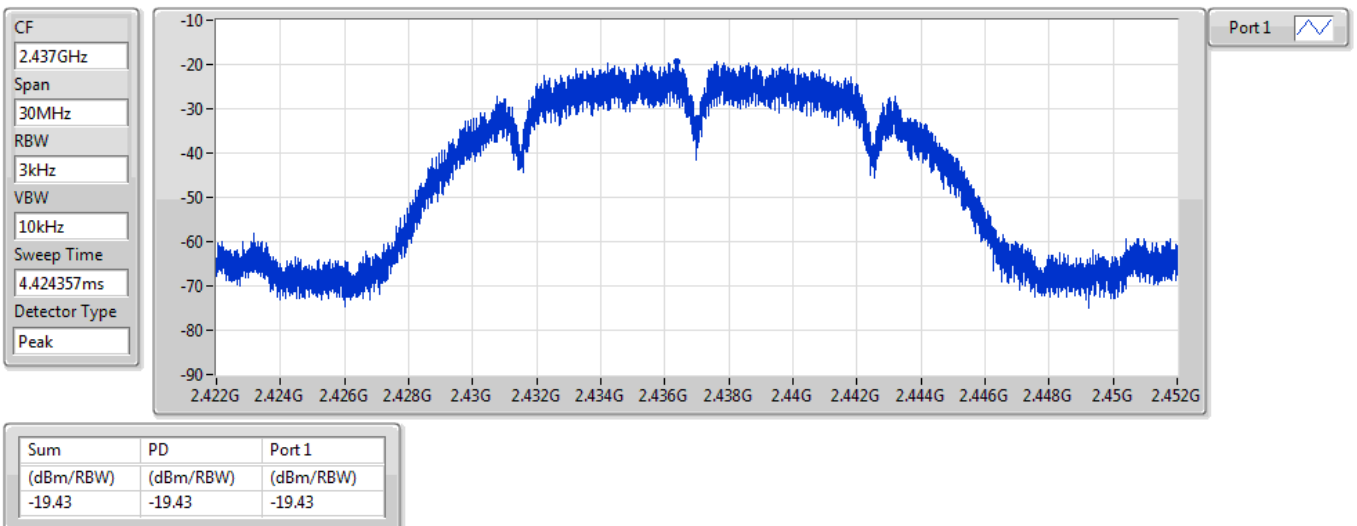


802.11b_Nss1,(1Mbps)_1TX

PSD

2437MHz

18/11/2020

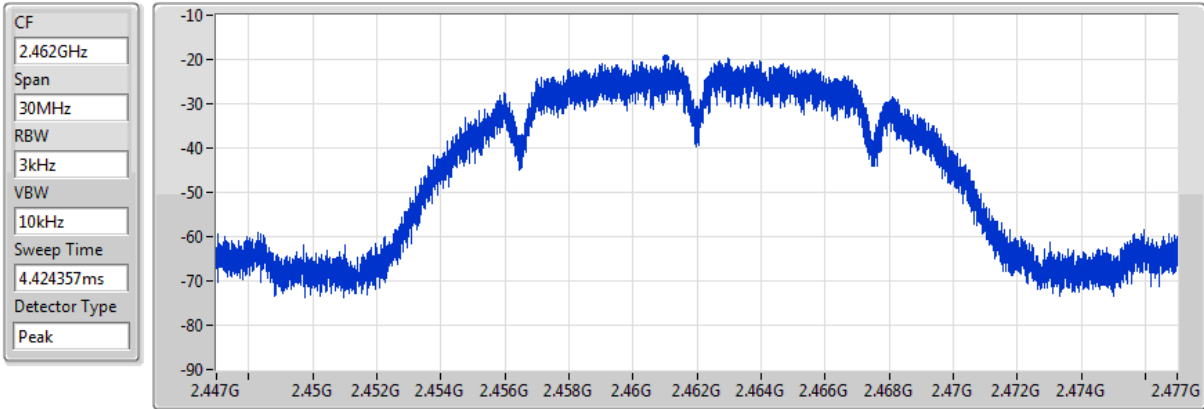


802.11b_Nss1,(1Mbps)_1TX

PSD

2462MHz

18/11/2020



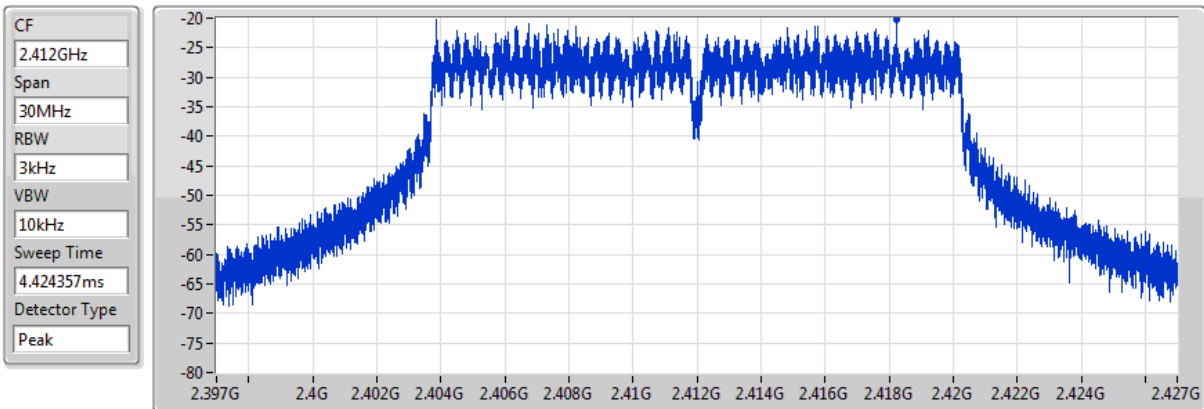
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-19.79	-19.79	-19.79

802.11g_Nss1,(6Mbps)_1TX

PSD

2412MHz

18/11/2020



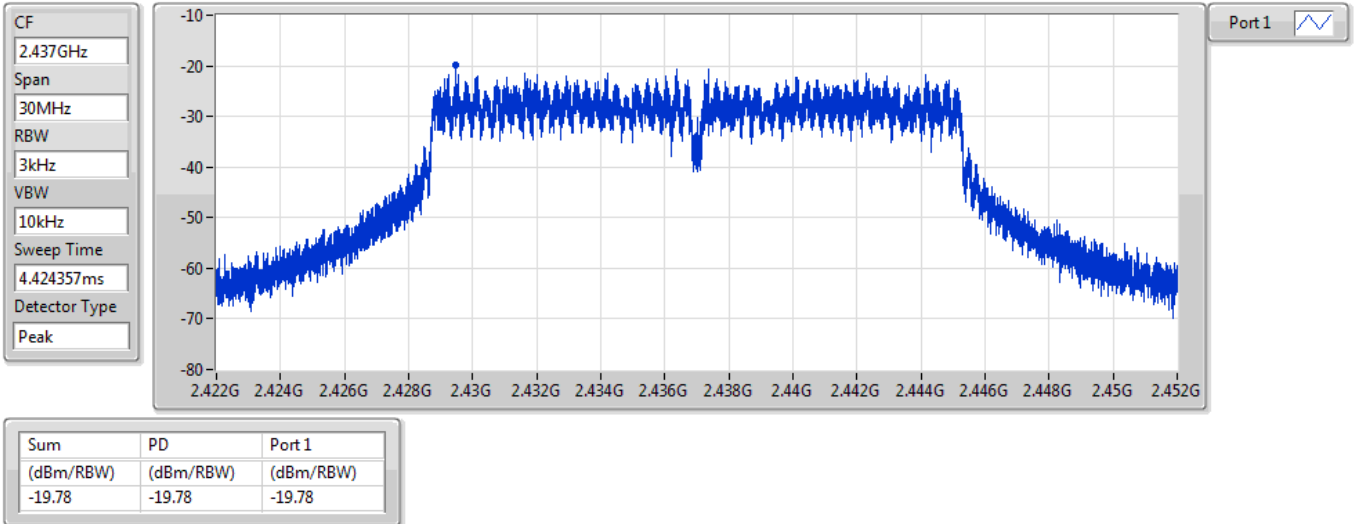
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-20.13	-20.13	-20.13

802.11g_Nss1,(6Mbps)_1TX

PSD

2437MHz

18/11/2020

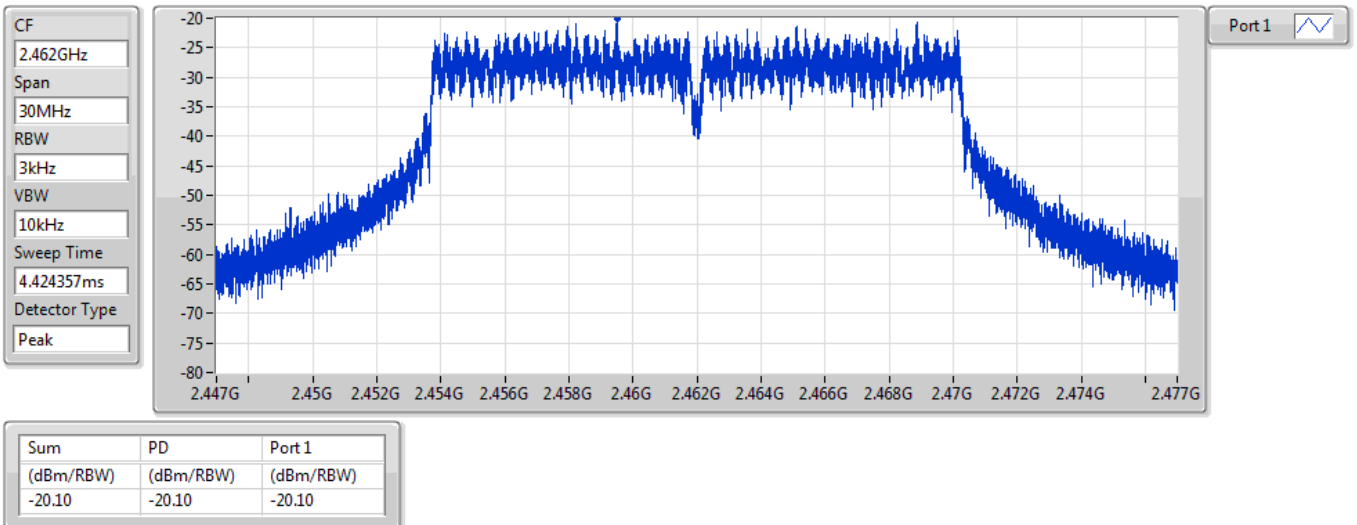


802.11g_Nss1,(6Mbps)_1TX

PSD

2462MHz

18/11/2020

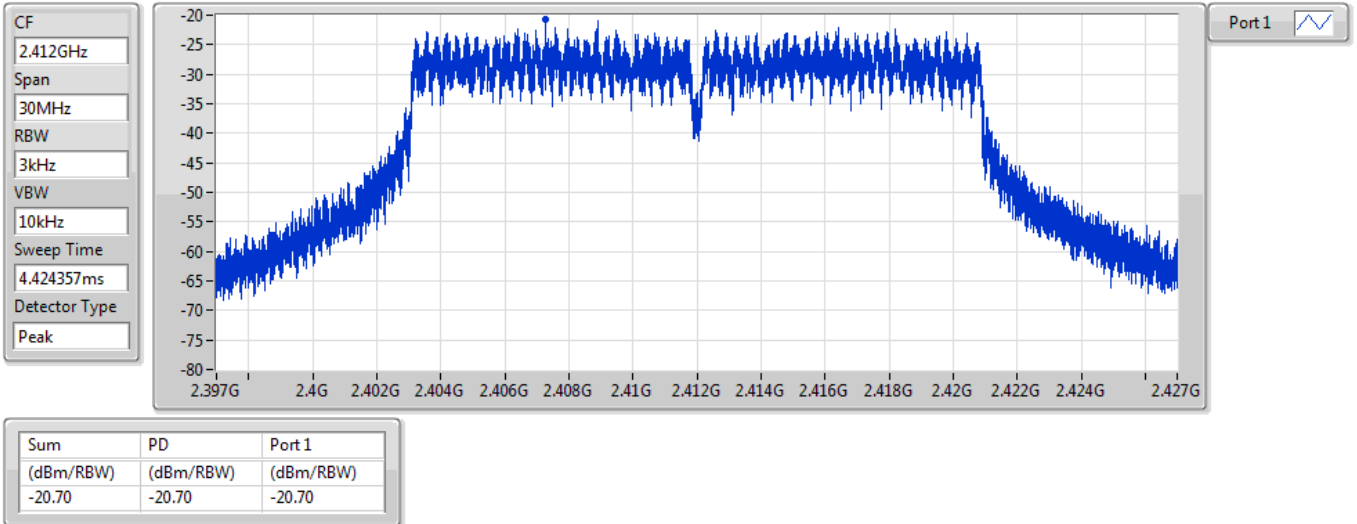


802.11n HT20_Nss1,(MCS0)_1TX

PSD

2412MHz

18/11/2020

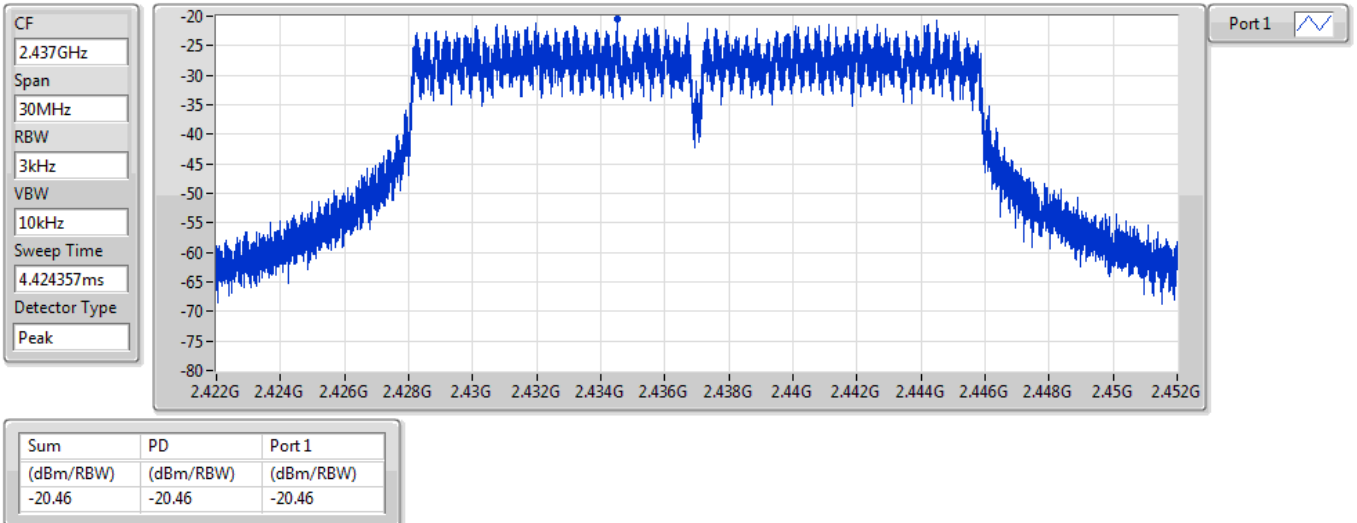


802.11n HT20_Nss1,(MCS0)_1TX

PSD

2437MHz

18/11/2020

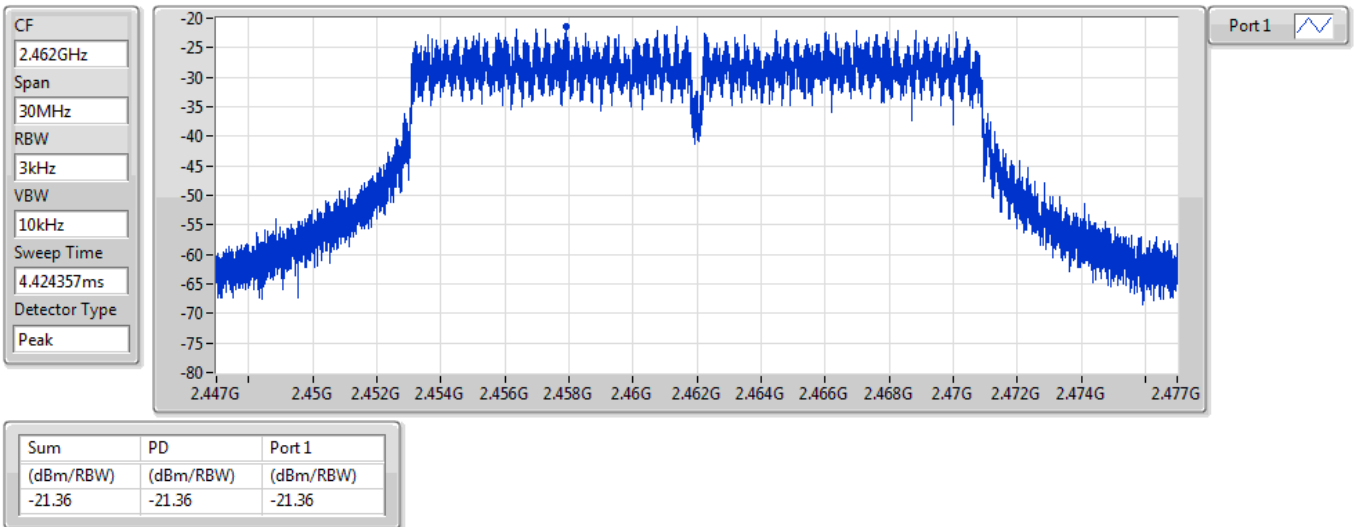


802.11n HT20_Nss1,(MCS0)_1TX

PSD

2462MHz

18/11/2020





Summary

Mode	Result	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
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41248G	-4.52	-24.52	1.96827G	-55.36	2.39798G	-45.37	2.4G	-54.33	2.50148G	-53.15	15.31263G	-41.50	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.4195G	-6.79	-26.79	2.30175G	-54.75	2.39986G	-37.96	2.4G	-38.48	2.49972G	-52.87	15.04291G	-41.23	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.41695G	-6.90	-26.90	1.97206G	-55.91	2.4G	-36.79	2.4G	-38.69	2.5014G	-53.45	16.76517G	-41.41	1

Result

Mode	Result	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
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41248G	-4.52	-24.52	1.96827G	-55.36	2.39798G	-45.37	2.4G	-54.33	2.50148G	-53.15	15.31263G	-41.50	1
2437MHz	Pass	2.41248G	-4.52	-24.52	1.80983G	-55.01	2.3945G	-54.25	2.4835G	-55.10	2.51366G	-52.94	23.36764G	-40.17	1
2462MHz	Pass	2.41248G	-4.52	-24.52	1.781G	-55.71	2.39608G	-54.02	2.4835G	-55.87	2.4886G	-53.55	24.56171G	-41.09	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4195G	-6.79	-26.79	2.30175G	-54.75	2.39986G	-37.96	2.4G	-38.48	2.49972G	-52.87	15.04291G	-41.23	1
2437MHz	Pass	2.4195G	-6.79	-26.79	2.15438G	-54.75	2.39152G	-54.37	2.4835G	-55.89	2.4944G	-53.60	23.46036G	-40.96	1
2462MHz	Pass	2.4195G	-6.79	-26.79	2.30932G	-55.68	2.39592G	-54.85	2.4835G	-54.07	2.48364G	-51.63	24.53361G	-41.39	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41695G	-6.90	-26.90	1.97206G	-55.91	2.4G	-36.79	2.4G	-38.69	2.5014G	-53.45	16.76517G	-41.41	1
2437MHz	Pass	2.41695G	-6.90	-26.90	2.11127G	-55.02	2.39114G	-54.71	2.4835G	-55.61	2.50316G	-53.67	14.9811G	-40.97	1
2462MHz	Pass	2.41695G	-6.90	-26.90	2.16836G	-55.23	2.39586G	-54.23	2.4835G	-53.72	2.48364G	-52.79	23.39574G	-40.05	1

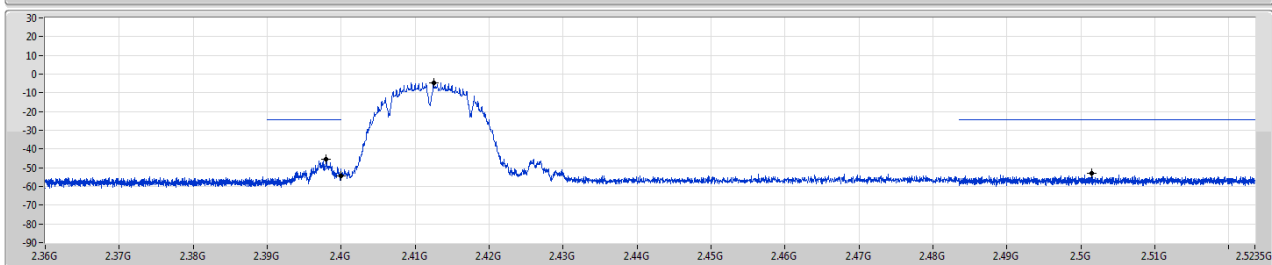
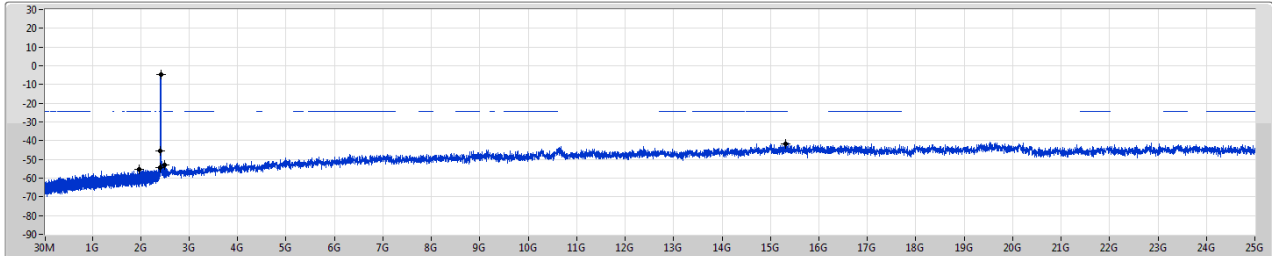
802.11b_Nss1,(1Mbps)_1TX

2412MHz

CSEndB

18/11/2020

Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.41248G	-4.52	-24.52	1.96827G	-55.36	2.39798G	-45.37	2.4G	-54.33	2.50148G	-53.15	15.31263G	-41.50	1

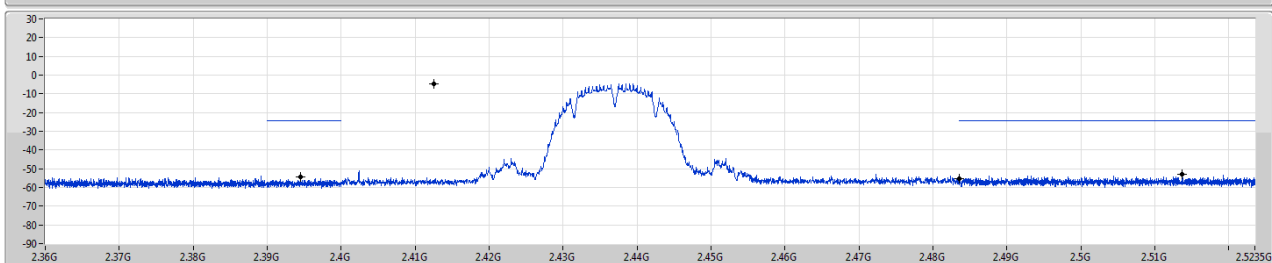
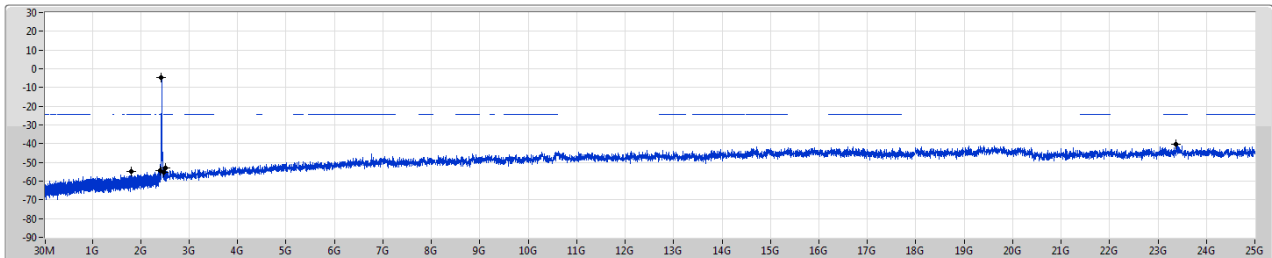
802.11b_Nss1,(1Mbps)_1TX

2437MHz

CSEndB

18/11/2020

Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.41248G	-4.52	-24.52	1.80963G	-55.01	2.3945G	-54.25	2.4835G	-55.10	2.51366G	-52.94	23.36764G	-40.17	1

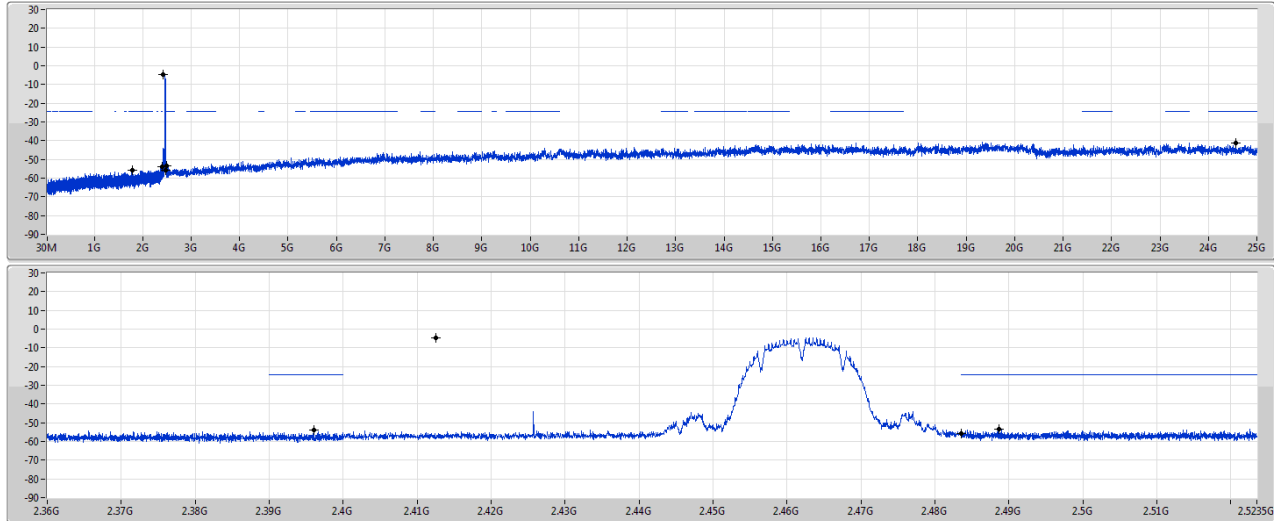
802.11b_Nss1,(1Mbps)_1TX

2462MHz

CSENdB

18/11/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.41248G	-4.52	-24.52	1.781G	-55.71	2.39608G	-54.02	2.4835G	-55.87	2.4886G	-53.55	24.56171G	-41.09	1

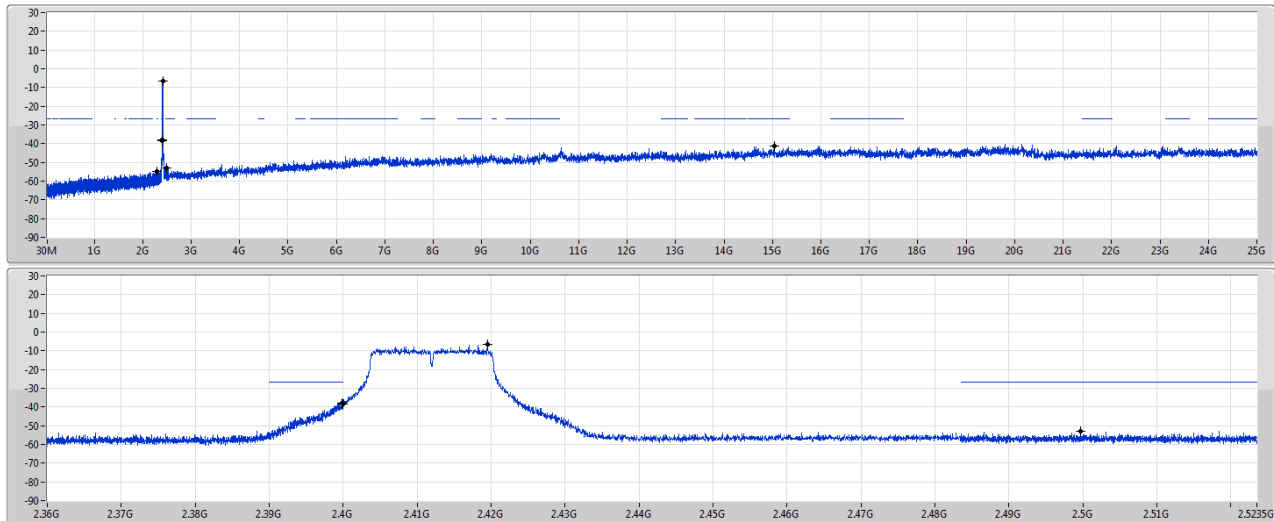
802.11g_Nss1,(6Mbps)_1TX

2412MHz

CSENdB

18/11/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.4125G	-6.79	-26.79	2.30175G	-54.75	2.39986G	-37.96	2.4G	-38.48	2.49972G	-52.87	15.04291G	-41.23	1

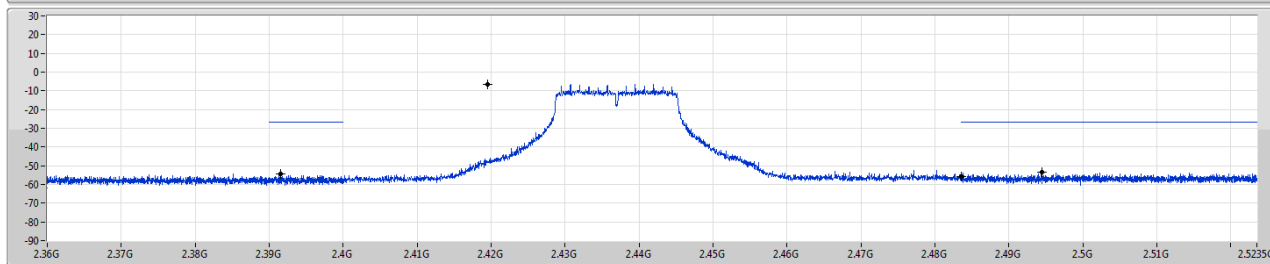
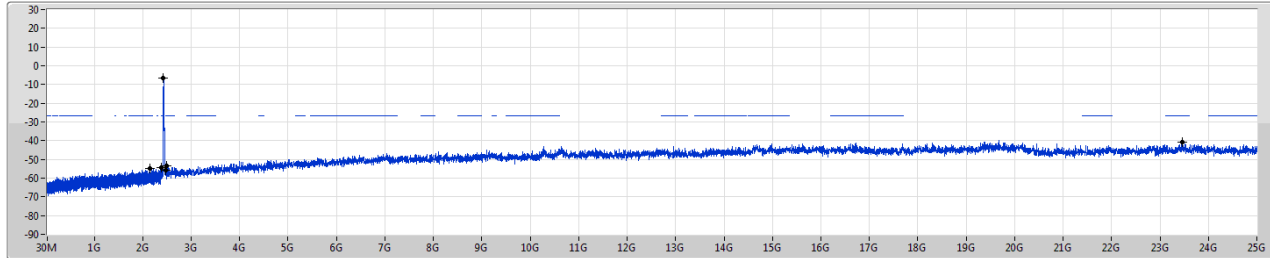
802.11g_Nss1,(6Mbps)_1TX

2437MHz

CSENdB

18/11/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.4195G	-6.79	-26.79	2.15438G	-54.75	2.39152G	-54.37	2.4835G	-55.89	2.4944G	-53.60	2.46036G	-40.96	1

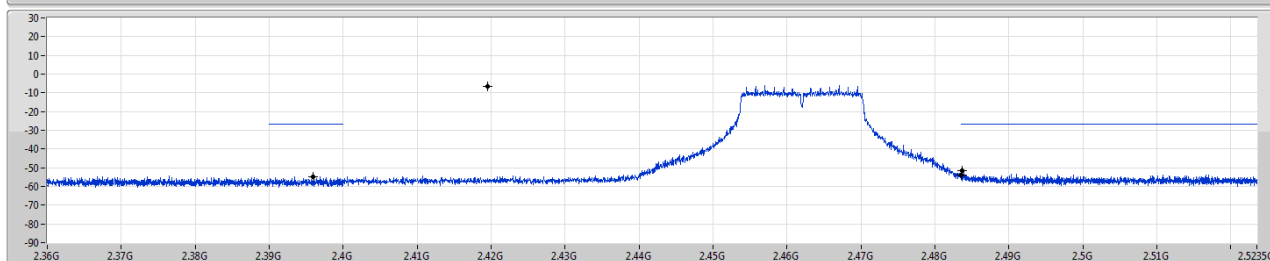
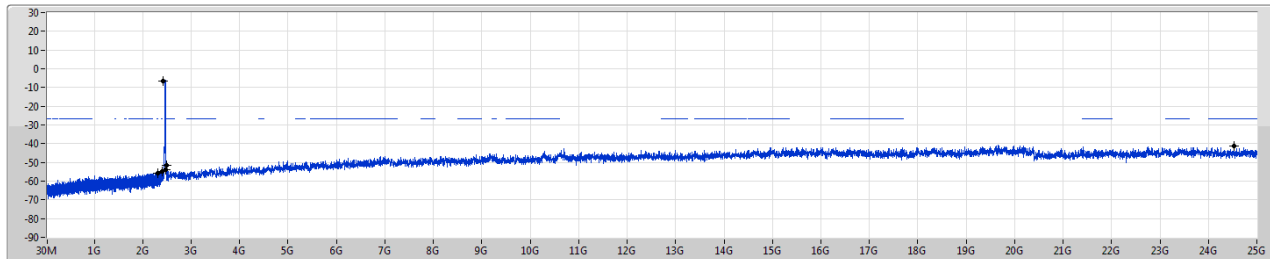
802.11g_Nss1,(6Mbps)_1TX

2462MHz

CSENdB

18/11/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.4195G	-6.79	-26.79	2.30932G	-55.68	2.39592G	-54.85	2.4835G	-54.07	2.48364G	-51.63	2.453361G	-41.39	1

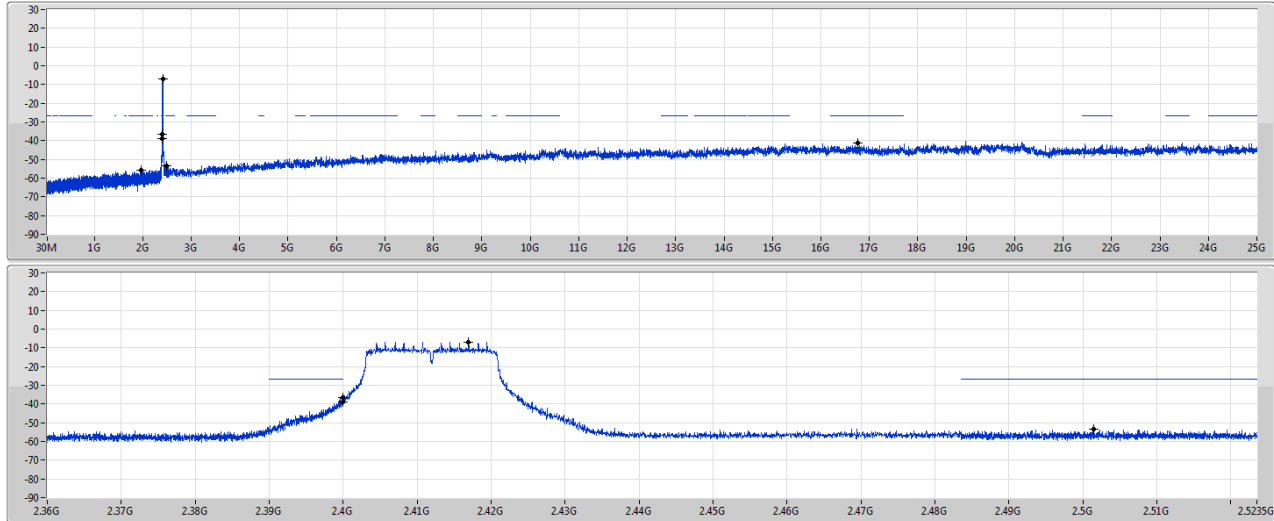
802.11n HT20_Nss1,(MCS0)_1TX

2412MHz

CSENdB

18/11/2020

Port 1



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
2.41695G	-6.90	-26.90	1.97206G	-55.91	2.4G	-36.79	2.4G	-38.69	2.5014G	-53.45	16.76517G	-41.41	1

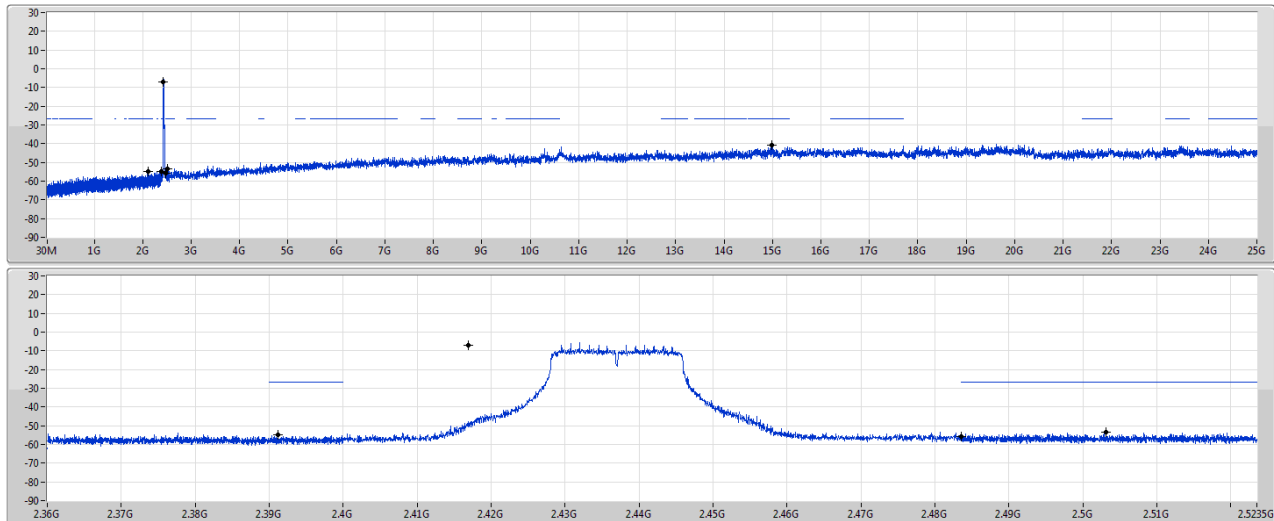
802.11n HT20_Nss1,(MCS0)_1TX

2437MHz

CSENdB

18/11/2020

Port 1



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
2.41695G	-6.90	-26.90	2.11127G	-55.02	2.39114G	-54.71	2.4835G	-55.61	2.50316G	-53.67	14.9811G	-40.97	1

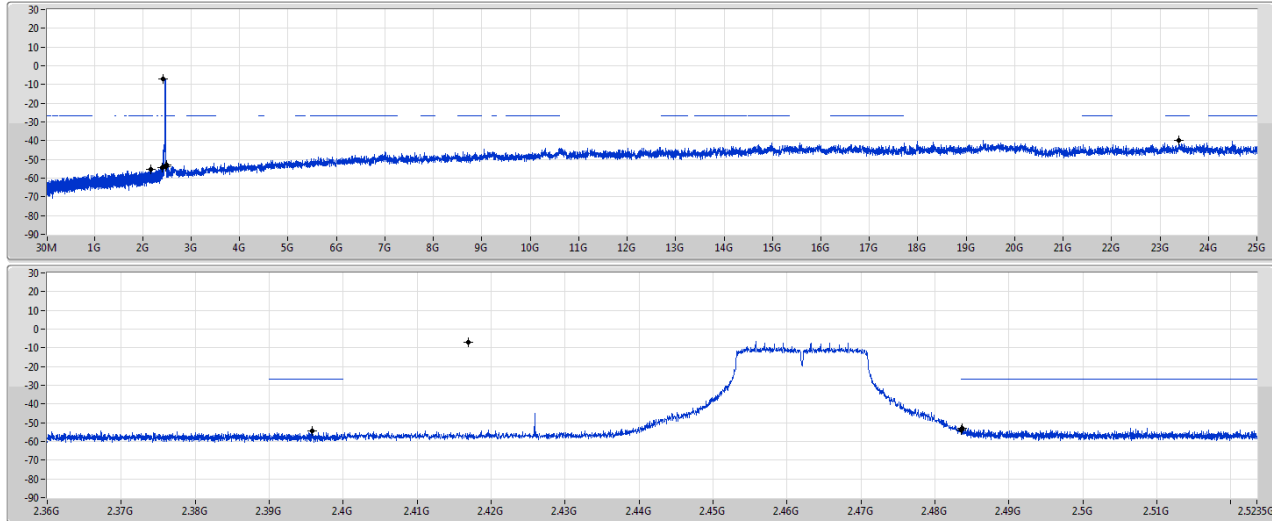
802.11n HT20_Nss1,(MCS0)_1TX

2462MHz

CSEndB

18/11/2020

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.41695G	-6.90	-26.90	2.16836G	-55.23	2.39586G	-54.23	2.4835G	-53.72	2.48364G	-52.79	23.39574G	-40.05	1



Summary

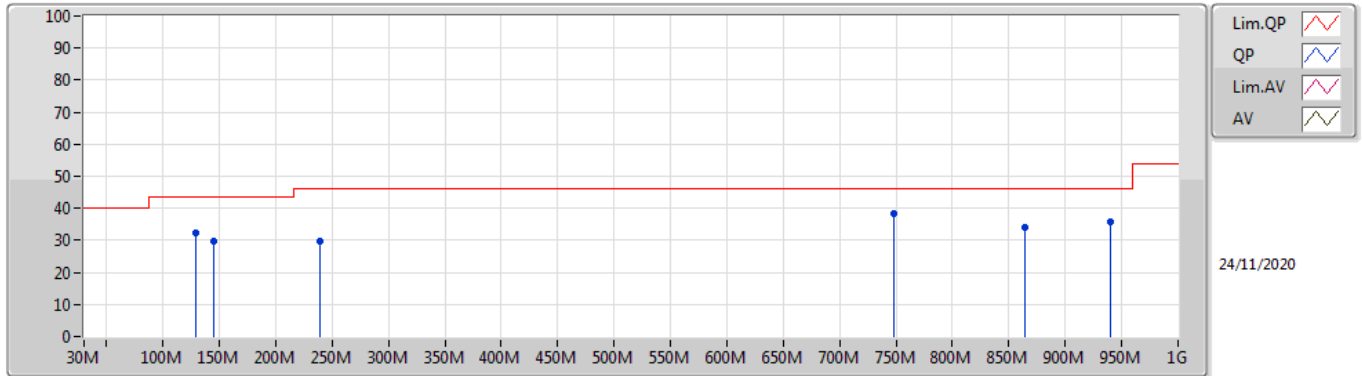
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	QP	235.64M	41.62	46.00	-4.38	3	Horizontal	216	1.25	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT20_Nss1.(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	128.94M	32.14	43.50	-11.36	3	Vertical	360	1.00	-
2437MHz	Pass	PK	144.46M	29.84	43.50	-13.66	3	Vertical	360	1.00	-
2437MHz	Pass	PK	239.52M	29.87	46.00	-16.13	3	Vertical	360	1.00	-
2437MHz	Pass	PK	747.8M	38.31	46.00	-7.69	3	Vertical	360	1.00	-
2437MHz	Pass	PK	864.2M	33.97	46.00	-12.03	3	Vertical	360	1.00	-
2437MHz	Pass	PK	939.86M	35.73	46.00	-10.27	3	Vertical	360	1.00	-
2437MHz	Pass	PK	216.24M	37.42	46.00	-8.58	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	264.74M	38.55	46.00	-7.45	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	480.08M	32.93	46.00	-13.07	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	800.18M	35.47	46.00	-10.53	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	957.32M	37.97	46.00	-8.03	3	Horizontal	0	1.00	-
2437MHz	Pass	QP	235.64M	41.62	46.00	-4.38	3	Horizontal	216	1.25	-

802.11n HT20_Nss1,(MCS0)_1TX

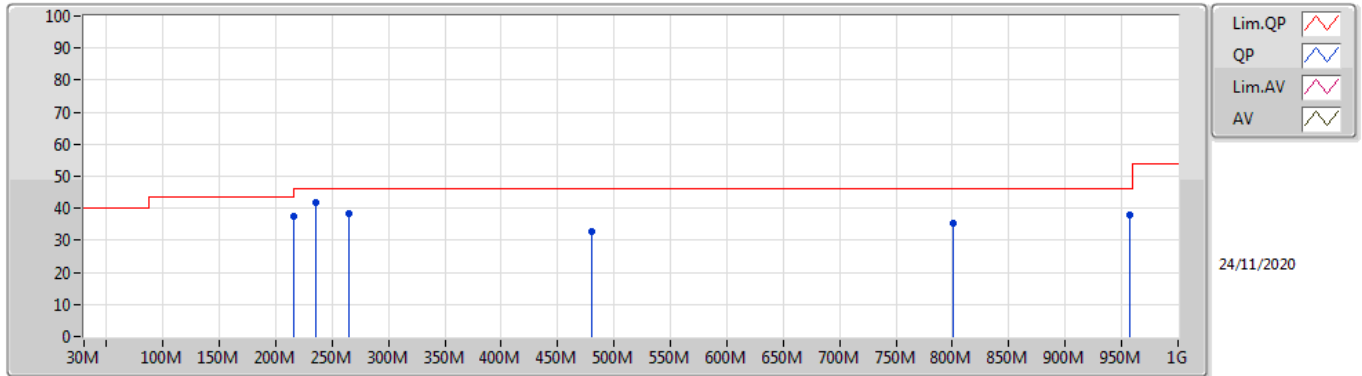
2437MHz_USB



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	128.94M	32.14	43.50	-11.36	-8.91	3	Vertical	360	1.00	-	41.05	17.12	1.64	27.67
PK	144.46M	29.84	43.50	-13.66	-9.93	3	Vertical	360	1.00	-	39.77	15.95	1.72	27.60
PK	239.52M	29.87	46.00	-16.13	-8.34	3	Vertical	360	1.00	-	38.21	16.42	2.34	27.10
PK	747.8M	38.31	46.00	-7.69	1.19	3	Vertical	360	1.00	-	37.12	24.89	4.30	28.00
PK	864.2M	33.97	46.00	-12.03	2.64	3	Vertical	360	1.00	-	31.33	25.53	4.66	27.55
PK	939.86M	35.73	46.00	-10.27	3.45	3	Vertical	360	1.00	-	32.28	25.85	4.88	27.28

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_USB



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	216.24M	37.42	46.00	-8.58	-10.88	3	Horizontal	0	1.00	-	48.30	14.13	2.20	27.21
PK	264.74M	38.55	46.00	-7.45	-6.00	3	Horizontal	0	1.00	-	44.55	18.59	2.46	27.05
PK	480.08M	32.93	46.00	-13.07	-2.02	3	Horizontal	0	1.00	-	34.95	22.80	3.38	28.20
PK	800.18M	35.47	46.00	-10.53	1.73	3	Horizontal	0	1.00	-	33.74	25.01	4.50	27.78
PK	957.32M	37.97	46.00	-8.03	3.79	3	Horizontal	0	1.00	-	34.18	26.10	4.91	27.22
QP	235.64M	41.62	46.00	-4.38	-8.85	3	Horizontal	216	1.25	-	50.47	15.96	2.31	27.12



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	2.3426G	45.91	54.00	-8.09	3	Vertical	1	1.45	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.3538G	46.34	54.00	-7.66	3	Vertical	1	1.22	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	AV	2.3434G	46.30	54.00	-7.70	3	Vertical	0	1.30	-

Result

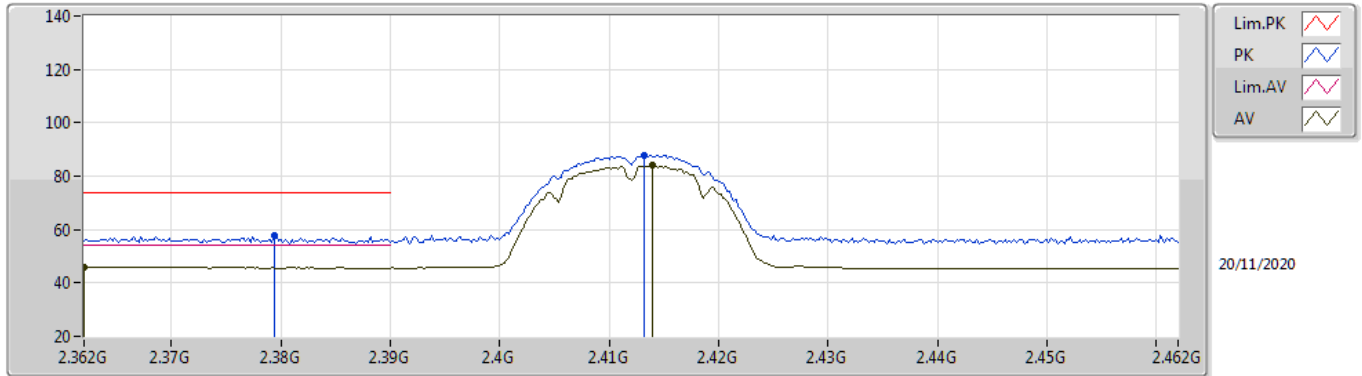
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.362G	45.87	54.00	-8.13	3	Vertical	5	1.20	-
2412MHz	Pass	AV	2.414G	83.99	Inf	-Inf	3	Vertical	5	1.20	-
2412MHz	Pass	PK	2.3794G	57.75	74.00	-16.25	3	Vertical	5	1.20	-
2412MHz	Pass	PK	2.4132G	88.00	Inf	-Inf	3	Vertical	5	1.20	-
2412MHz	Pass	AV	2.3646G	45.77	54.00	-8.23	3	Horizontal	322	1.14	-
2412MHz	Pass	AV	2.4112G	83.70	Inf	-Inf	3	Horizontal	322	1.14	-
2412MHz	Pass	PK	2.3704G	57.44	74.00	-16.56	3	Horizontal	322	1.14	-
2412MHz	Pass	PK	2.4132G	87.83	Inf	-Inf	3	Horizontal	322	1.14	-
2412MHz	Pass	PK	4.8241G	42.61	74.00	-31.39	3	Vertical	302	3.00	-
2412MHz	Pass	AV	4.8239G	29.05	54.00	-24.95	3	Vertical	302	3.00	-
2412MHz	Pass	AV	4.824G	29.74	54.00	-24.26	3	Horizontal	333	1.13	-
2412MHz	Pass	PK	4.82315G	42.24	74.00	-31.76	3	Horizontal	333	1.13	-
2417MHz	Pass	AV	2.3682G	45.75	54.00	-8.25	3	Vertical	3	1.50	-
2417MHz	Pass	AV	2.419G	85.05	Inf	-Inf	3	Vertical	3	1.50	-
2417MHz	Pass	PK	2.3842G	57.21	74.00	-16.79	3	Vertical	3	1.50	-
2417MHz	Pass	PK	2.4182G	89.13	Inf	-Inf	3	Vertical	3	1.50	-
2417MHz	Pass	AV	2.372G	45.78	54.00	-8.22	3	Horizontal	321	1.48	-
2417MHz	Pass	AV	2.419G	84.17	Inf	-Inf	3	Horizontal	321	1.48	-
2417MHz	Pass	PK	2.3766G	57.44	74.00	-16.56	3	Horizontal	321	1.48	-
2417MHz	Pass	PK	2.4182G	88.29	Inf	-Inf	3	Horizontal	321	1.48	-
2437MHz	Pass	AV	2.3426G	45.91	54.00	-8.09	3	Vertical	1	1.45	-
2437MHz	Pass	AV	2.4362G	84.98	Inf	-Inf	3	Vertical	1	1.45	-
2437MHz	Pass	AV	2.4922G	45.52	54.00	-8.48	3	Vertical	1	1.45	-
2437MHz	Pass	PK	2.3382G	57.97	74.00	-16.03	3	Vertical	1	1.45	-
2437MHz	Pass	PK	2.4382G	89.20	Inf	-Inf	3	Vertical	1	1.45	-
2437MHz	Pass	PK	2.4978G	56.86	74.00	-17.14	3	Vertical	1	1.45	-
2437MHz	Pass	AV	2.3378G	45.87	54.00	-8.13	3	Horizontal	322	1.31	-
2437MHz	Pass	AV	2.439G	84.76	Inf	-Inf	3	Horizontal	322	1.31	-
2437MHz	Pass	AV	2.4986G	45.50	54.00	-8.50	3	Horizontal	322	1.31	-
2437MHz	Pass	PK	2.3786G	57.39	74.00	-16.61	3	Horizontal	322	1.31	-
2437MHz	Pass	PK	2.4382G	88.99	Inf	-Inf	3	Horizontal	322	1.31	-
2437MHz	Pass	PK	2.4862G	56.81	74.00	-17.19	3	Horizontal	322	1.31	-
2437MHz	Pass	AV	4.87323G	29.35	54.00	-24.65	3	Vertical	298	1.42	-
2437MHz	Pass	PK	4.87531G	42.97	74.00	-31.03	3	Vertical	298	1.42	-
2437MHz	Pass	PK	4.87646G	43.31	74.00	-30.69	3	Horizontal	337	1.00	-
2437MHz	Pass	AV	4.87397G	29.89	54.00	-24.11	3	Horizontal	337	1.00	-
2457MHz	Pass	AV	2.4548G	85.30	Inf	-Inf	3	Vertical	0	1.23	-
2457MHz	Pass	AV	2.4976G	45.58	54.00	-8.42	3	Vertical	0	1.23	-
2457MHz	Pass	PK	2.4558G	89.34	Inf	-Inf	3	Vertical	0	1.23	-
2457MHz	Pass	PK	2.4896G	57.21	74.00	-16.79	3	Vertical	0	1.23	-
2457MHz	Pass	AV	2.456G	85.40	Inf	-Inf	3	Horizontal	320	1.01	-
2457MHz	Pass	AV	2.4964G	45.57	54.00	-8.43	3	Horizontal	320	1.01	-
2457MHz	Pass	PK	2.4558G	89.48	Inf	-Inf	3	Horizontal	320	1.01	-
2457MHz	Pass	PK	2.4964G	56.90	74.00	-17.10	3	Horizontal	320	1.01	-
2462MHz	Pass	AV	2.461G	84.31	Inf	-Inf	3	Vertical	0	1.18	-
2462MHz	Pass	AV	2.4976G	45.61	54.00	-8.39	3	Vertical	0	1.18	-
2462MHz	Pass	PK	2.4608G	88.40	Inf	-Inf	3	Vertical	0	1.18	-
2462MHz	Pass	PK	2.4892G	57.15	74.00	-16.85	3	Vertical	0	1.18	-
2462MHz	Pass	AV	2.461G	84.95	Inf	-Inf	3	Horizontal	323	1.01	-
2462MHz	Pass	AV	2.498G	45.54	54.00	-8.46	3	Horizontal	323	1.01	-
2462MHz	Pass	PK	2.4608G	89.04	Inf	-Inf	3	Horizontal	323	1.01	-
2462MHz	Pass	PK	2.5G	57.21	74.00	-16.79	3	Horizontal	323	1.01	-
2462MHz	Pass	AV	4.92443G	29.29	54.00	-24.71	3	Vertical	113	1.49	-
2462MHz	Pass	PK	4.92648G	43.47	74.00	-30.53	3	Vertical	113	1.49	-
2462MHz	Pass	AV	4.92421G	29.11	54.00	-24.89	3	Horizontal	68	1.47	-
2462MHz	Pass	PK	4.92584G	43.61	74.00	-30.39	3	Horizontal	68	1.47	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.373G	46.27	54.00	-7.73	3	Vertical	3	1.51	-
2412MHz	Pass	AV	2.4202G	79.16	Inf	-Inf	3	Vertical	3	1.51	-
2412MHz	Pass	PK	2.3646G	57.54	74.00	-16.46	3	Vertical	3	1.51	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2412MHz	Pass	PK	2.4154G	89.89	Inf	-Inf	3	Vertical	3	1.51	-
2412MHz	Pass	AV	2.366G	46.20	54.00	-7.80	3	Horizontal	321	1.50	-
2412MHz	Pass	AV	2.42G	78.76	Inf	-Inf	3	Horizontal	321	1.50	-
2412MHz	Pass	PK	2.3678G	58.01	74.00	-15.99	3	Horizontal	321	1.50	-
2412MHz	Pass	PK	2.4156G	89.24	Inf	-Inf	3	Horizontal	321	1.50	-
2412MHz	Pass	AV	4.8235G	29.57	54.00	-24.43	3	Vertical	86	1.55	-
2412MHz	Pass	PK	4.82584G	43.39	74.00	-30.61	3	Vertical	86	1.55	-
2412MHz	Pass	AV	4.82169G	29.57	54.00	-24.43	3	Horizontal	140	1.93	-
2412MHz	Pass	PK	4.82537G	42.78	74.00	-31.22	3	Horizontal	140	1.93	-
2437MHz	Pass	AV	2.3538G	46.34	54.00	-7.66	3	Vertical	1	1.22	-
2437MHz	Pass	AV	2.443G	80.66	Inf	-Inf	3	Vertical	1	1.22	-
2437MHz	Pass	AV	2.4886G	45.92	54.00	-8.08	3	Vertical	1	1.22	-
2437MHz	Pass	PK	2.3402G	57.69	74.00	-16.31	3	Vertical	1	1.22	-
2437MHz	Pass	PK	2.441G	90.59	Inf	-Inf	3	Vertical	1	1.22	-
2437MHz	Pass	PK	2.4922G	58.46	74.00	-15.54	3	Vertical	1	1.22	-
2437MHz	Pass	AV	2.3446G	46.25	54.00	-7.75	3	Horizontal	321	1.12	-
2437MHz	Pass	AV	2.4442G	80.69	Inf	-Inf	3	Horizontal	321	1.12	-
2437MHz	Pass	AV	2.4986G	45.96	54.00	-8.04	3	Horizontal	321	1.12	-
2437MHz	Pass	PK	2.363G	57.89	74.00	-16.11	3	Horizontal	321	1.12	-
2437MHz	Pass	PK	2.4414G	90.59	Inf	-Inf	3	Horizontal	321	1.12	-
2437MHz	Pass	PK	2.4962G	57.08	74.00	-16.92	3	Horizontal	321	1.12	-
2437MHz	Pass	AV	4.87324G	29.79	54.00	-24.21	3	Vertical	273	1.21	-
2437MHz	Pass	PK	4.87218G	42.91	74.00	-31.09	3	Vertical	273	1.21	-
2437MHz	Pass	AV	4.87467G	29.98	54.00	-24.02	3	Horizontal	346	2.25	-
2437MHz	Pass	PK	4.8744G	42.91	74.00	-31.09	3	Horizontal	346	2.25	-
2462MHz	Pass	AV	2.4562G	80.50	Inf	-Inf	3	Vertical	0	1.18	-
2462MHz	Pass	AV	2.484G	46.01	54.00	-7.99	3	Vertical	0	1.18	-
2462MHz	Pass	PK	2.4544G	90.40	Inf	-Inf	3	Vertical	0	1.18	-
2462MHz	Pass	PK	2.4892G	57.82	74.00	-16.18	3	Vertical	0	1.18	-
2462MHz	Pass	AV	2.4542G	81.72	Inf	-Inf	3	Horizontal	321	1.00	-
2462MHz	Pass	AV	2.484G	46.05	54.00	-7.95	3	Horizontal	321	1.00	-
2462MHz	Pass	PK	2.4656G	91.80	Inf	-Inf	3	Horizontal	321	1.00	-
2462MHz	Pass	PK	2.4972G	57.34	74.00	-16.66	3	Horizontal	321	1.00	-
2462MHz	Pass	AV	4.9265G	30.00	54.00	-24.00	3	Vertical	73	2.48	-
2462MHz	Pass	PK	4.92171G	42.96	74.00	-31.04	3	Vertical	73	2.48	-
2462MHz	Pass	AV	4.92457G	29.94	54.00	-24.06	3	Horizontal	86	1.43	-
2462MHz	Pass	PK	4.92178G	43.25	74.00	-30.75	3	Horizontal	86	1.43	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3648G	46.16	54.00	-7.84	3	Vertical	3	1.50	-
2412MHz	Pass	AV	2.4196G	78.05	Inf	-Inf	3	Vertical	3	1.50	-
2412MHz	Pass	PK	2.3698G	58.27	74.00	-15.73	3	Vertical	3	1.50	-
2412MHz	Pass	PK	2.418G	88.12	Inf	-Inf	3	Vertical	3	1.50	-
2412MHz	Pass	AV	2.3662G	46.10	54.00	-7.90	3	Horizontal	324	1.00	-
2412MHz	Pass	AV	2.4166G	77.79	Inf	-Inf	3	Horizontal	324	1.00	-
2412MHz	Pass	PK	2.3624G	57.25	74.00	-16.75	3	Horizontal	324	1.00	-
2412MHz	Pass	PK	2.4176G	87.94	Inf	-Inf	3	Horizontal	324	1.00	-
2412MHz	Pass	AV	4.82498G	29.56	54.00	-24.44	3	Vertical	257	1.03	-
2412MHz	Pass	PK	4.8227G	42.65	74.00	-31.35	3	Vertical	257	1.03	-
2412MHz	Pass	AV	4.82174G	29.51	54.00	-24.49	3	Horizontal	33	2.17	-
2412MHz	Pass	PK	4.82588G	42.51	74.00	-31.49	3	Horizontal	33	2.17	-
2417MHz	Pass	AV	2.3696G	46.06	54.00	-7.94	3	Vertical	3	1.53	-
2417MHz	Pass	AV	2.424G	81.46	Inf	-Inf	3	Vertical	3	1.53	-
2417MHz	Pass	PK	2.3728G	57.69	74.00	-16.31	3	Vertical	3	1.53	-
2417MHz	Pass	PK	2.424G	91.30	Inf	-Inf	3	Vertical	3	1.53	-
2417MHz	Pass	AV	2.3716G	46.12	54.00	-7.88	3	Horizontal	321	1.35	-
2417MHz	Pass	AV	2.4234G	80.88	Inf	-Inf	3	Horizontal	321	1.35	-
2417MHz	Pass	PK	2.3836G	57.76	74.00	-16.24	3	Horizontal	321	1.35	-
2417MHz	Pass	PK	2.4238G	91.39	Inf	-Inf	3	Horizontal	321	1.35	-
2437MHz	Pass	AV	2.3434G	46.30	54.00	-7.70	3	Vertical	0	1.30	-
2437MHz	Pass	AV	2.4434G	81.21	Inf	-Inf	3	Vertical	0	1.30	-
2437MHz	Pass	AV	2.487G	45.93	54.00	-8.07	3	Vertical	0	1.30	-
2437MHz	Pass	PK	2.3566G	57.20	74.00	-16.80	3	Vertical	0	1.30	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	PK	2.4394G	90.62	Inf	-Inf	3	Vertical	0	1.30	-
2437MHz	Pass	PK	2.487G	56.94	74.00	-17.06	3	Vertical	0	1.30	-
2437MHz	Pass	AV	2.343G	46.22	54.00	-7.78	3	Horizontal	321	1.29	-
2437MHz	Pass	AV	2.4386G	81.21	Inf	-Inf	3	Horizontal	321	1.29	-
2437MHz	Pass	AV	2.4878G	45.86	54.00	-8.14	3	Horizontal	321	1.29	-
2437MHz	Pass	PK	2.3518G	57.82	74.00	-16.18	3	Horizontal	321	1.29	-
2437MHz	Pass	PK	2.4322G	91.32	Inf	-Inf	3	Horizontal	321	1.29	-
2437MHz	Pass	PK	2.4902G	57.14	74.00	-16.86	3	Horizontal	321	1.29	-
2437MHz	Pass	AV	4.8765G	29.82	54.00	-24.18	3	Vertical	50	2.31	-
2437MHz	Pass	PK	4.87295G	43.28	74.00	-30.72	3	Vertical	50	2.31	-
2437MHz	Pass	AV	4.87373G	29.67	54.00	-24.33	3	Horizontal	164	1.33	-
2437MHz	Pass	PK	4.87593G	43.25	74.00	-30.75	3	Horizontal	164	1.33	-
2457MHz	Pass	AV	2.451G	81.41	Inf	-Inf	3	Vertical	0	1.30	-
2457MHz	Pass	AV	2.4844G	45.99	54.00	-8.01	3	Vertical	0	1.30	-
2457MHz	Pass	PK	2.4506G	90.97	Inf	-Inf	3	Vertical	0	1.30	-
2457MHz	Pass	PK	2.493G	57.45	74.00	-16.55	3	Vertical	0	1.30	-
2457MHz	Pass	AV	2.4502G	81.68	Inf	-Inf	3	Horizontal	323	1.18	-
2457MHz	Pass	AV	2.4932G	46.09	54.00	-7.91	3	Horizontal	323	1.18	-
2457MHz	Pass	PK	2.4526G	91.37	Inf	-Inf	3	Horizontal	323	1.18	-
2457MHz	Pass	PK	2.4922G	58.18	74.00	-15.82	3	Horizontal	323	1.18	-
2462MHz	Pass	AV	2.455G	79.79	Inf	-Inf	3	Vertical	360	1.30	-
2462MHz	Pass	AV	2.484G	45.95	54.00	-8.05	3	Vertical	360	1.30	-
2462MHz	Pass	PK	2.4534G	90.13	Inf	-Inf	3	Vertical	360	1.30	-
2462MHz	Pass	PK	2.4938G	57.56	74.00	-16.44	3	Vertical	360	1.30	-
2462MHz	Pass	AV	2.4548G	80.36	Inf	-Inf	3	Horizontal	321	1.00	-
2462MHz	Pass	AV	2.4846G	46.13	54.00	-7.87	3	Horizontal	321	1.00	-
2462MHz	Pass	PK	2.4582G	90.11	Inf	-Inf	3	Horizontal	321	1.00	-
2462MHz	Pass	PK	2.4886G	57.63	74.00	-16.37	3	Horizontal	321	1.00	-
2462MHz	Pass	AV	4.92529G	30.04	54.00	-23.96	3	Vertical	138	2.30	-
2462MHz	Pass	PK	4.92329G	44.08	74.00	-29.92	3	Vertical	138	2.30	-
2462MHz	Pass	AV	4.92609G	29.79	54.00	-24.21	3	Horizontal	352	1.82	-
2462MHz	Pass	PK	4.92225G	43.18	74.00	-30.82	3	Horizontal	352	1.82	-

802.11b_Nss1,(1Mbps)_1TX

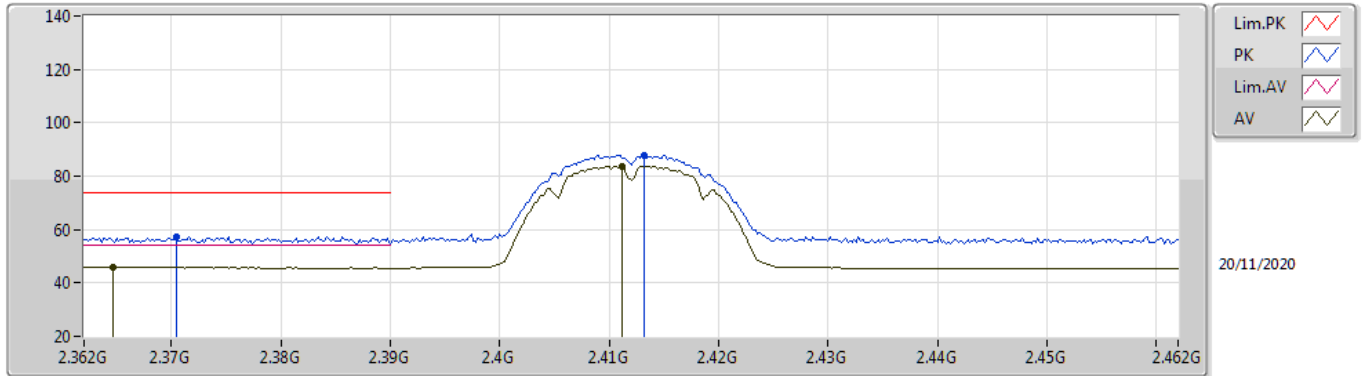
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.362G	45.87	54.00	-8.13	33.61	3	Vertical	5	1.20	-	12.26	27.68	5.93	-
AV	2.414G	83.99	Inf	-Inf	33.52	3	Vertical	5	1.20	-	50.47	27.54	5.98	-
PK	2.3794G	57.75	74.00	-16.25	33.58	3	Vertical	5	1.20	-	24.17	27.64	5.94	-
PK	2.4132G	88.00	Inf	-Inf	33.53	3	Vertical	5	1.20	-	54.47	27.55	5.98	-

802.11b_Nss1,(1Mbps)_1TX

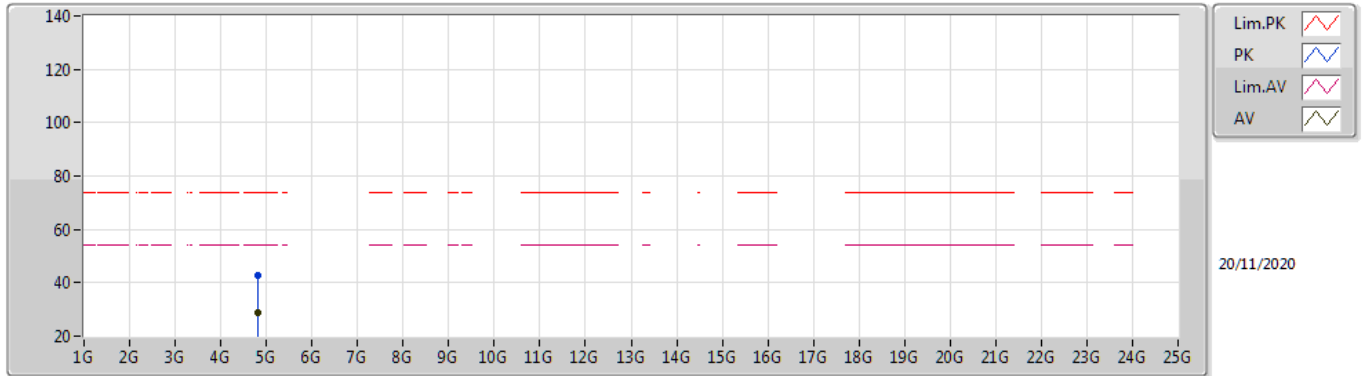
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3646G	45.77	54.00	-8.23	33.60	3	Horizontal	322	1.14	-	12.17	27.67	5.93	-
AV	2.4112G	83.70	Inf	-Inf	33.53	3	Horizontal	322	1.14	-	50.17	27.56	5.97	-
PK	2.3704G	57.44	74.00	-16.56	33.60	3	Horizontal	322	1.14	-	23.84	27.66	5.94	-
PK	2.4132G	87.83	Inf	-Inf	33.53	3	Horizontal	322	1.14	-	54.30	27.55	5.98	-

802.11b_Nss1,(1Mbps)_1TX

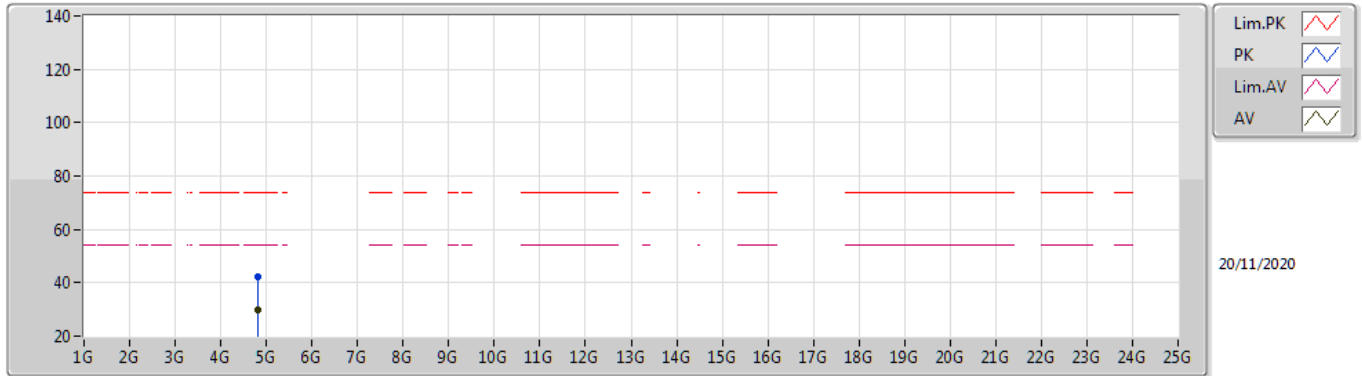
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	4.8241G	42.61	74.00	-31.39	4.99	3	Vertical	302	3.00	-	37.62	31.00	8.27	34.28
AV	4.8239G	29.05	54.00	-24.95	4.99	3	Vertical	302	3.00	-	24.06	31.00	8.27	34.28

802.11b_Nss1,(1Mbps)_1TX

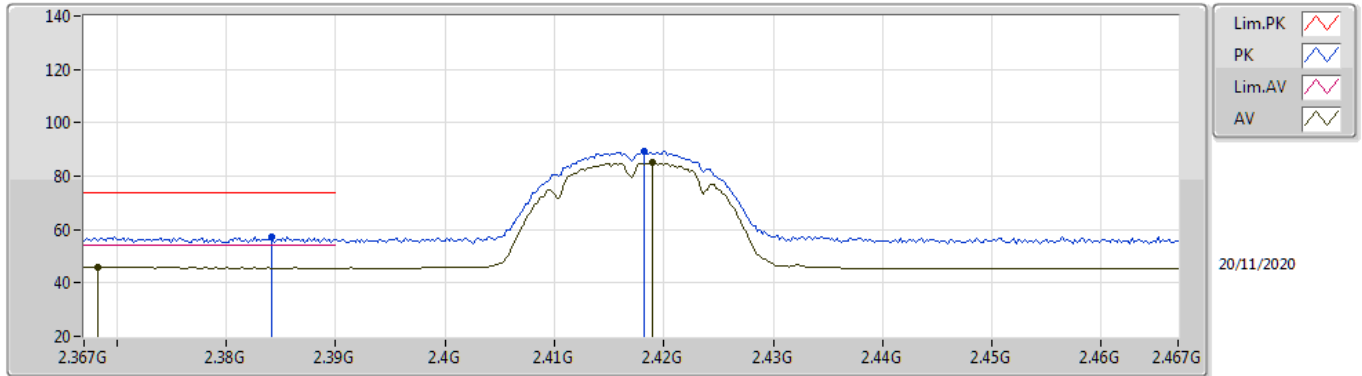
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.824G	29.74	54.00	-24.26	4.99	3	Horizontal	333	1.13	-	24.75	31.00	8.27	34.28
PK	4.82315G	42.24	74.00	-31.76	4.98	3	Horizontal	333	1.13	-	37.26	30.99	8.27	34.28

802.11b_Nss1,(1Mbps)_1TX

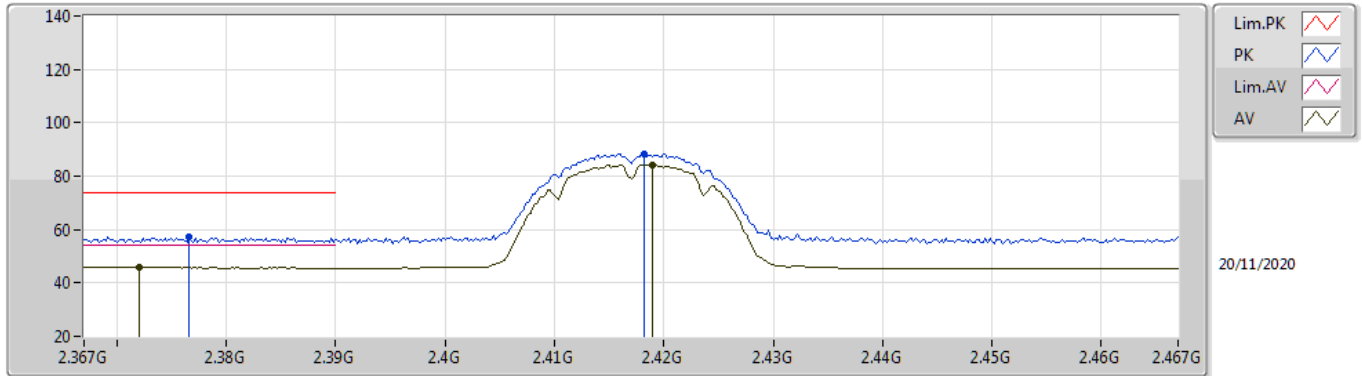
2417MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3682G	45.75	54.00	-8.25	33.60	3	Vertical	3	1.50	-	12.15	27.66	5.94	-
AV	2.419G	85.05	Inf	-Inf	33.50	3	Vertical	3	1.50	-	51.55	27.52	5.98	-
PK	2.3842G	57.21	74.00	-16.79	33.58	3	Vertical	3	1.50	-	23.63	27.63	5.95	-
PK	2.4182G	89.13	Inf	-Inf	33.51	3	Vertical	3	1.50	-	55.62	27.53	5.98	-

802.11b_Nss1,(1Mbps)_1TX

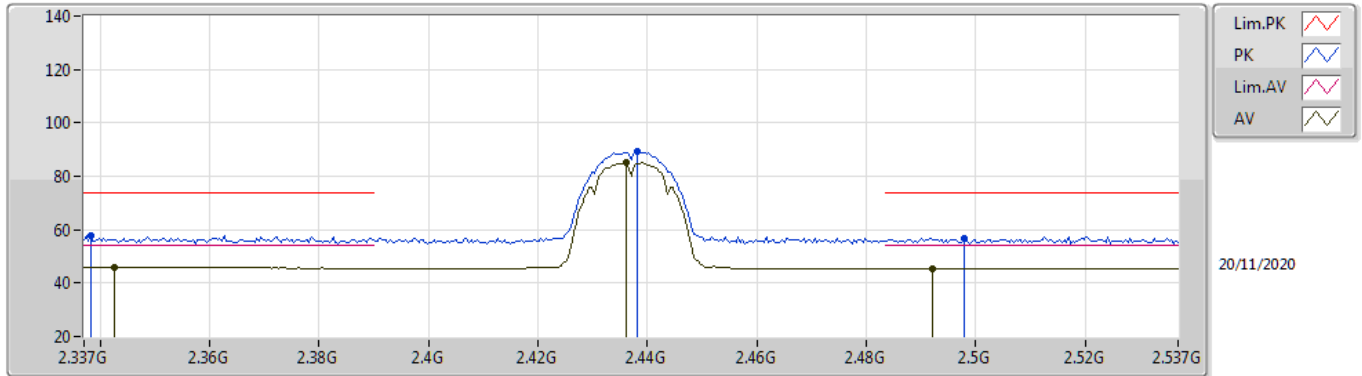
2417MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.372G	45.78	54.00	-8.22	33.60	3	Horizontal	321	1.48	-	12.18	27.66	5.94	-
AV	2.419G	84.17	Inf	-Inf	33.50	3	Horizontal	321	1.48	-	50.67	27.52	5.98	-
PK	2.3766G	57.44	74.00	-16.56	33.59	3	Horizontal	321	1.48	-	23.85	27.65	5.94	-
PK	2.4182G	88.29	Inf	-Inf	33.51	3	Horizontal	321	1.48	-	54.78	27.53	5.98	-

802.11b_Nss1,(1Mbps)_1TX

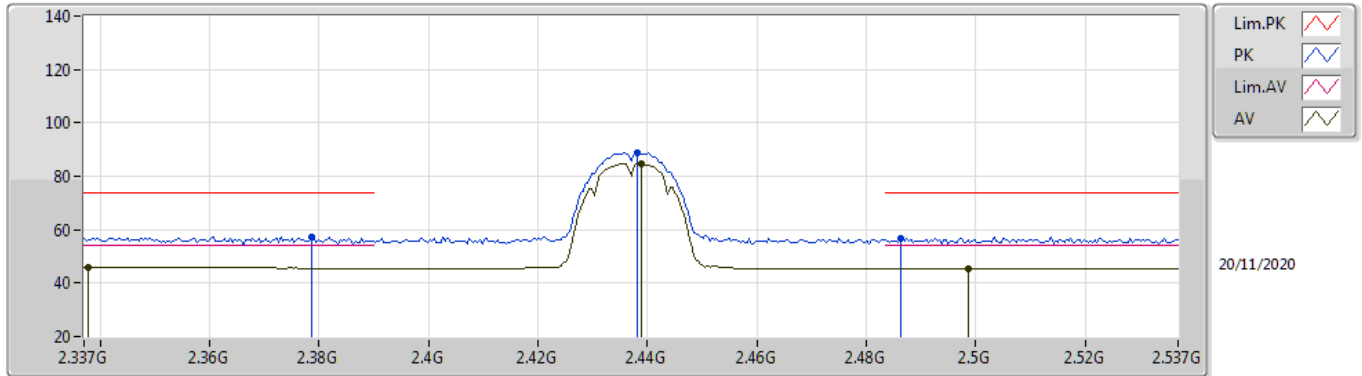
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3426G	45.91	54.00	-8.09	33.65	3	Vertical	1	1.45	-	12.26	27.73	5.92	-
AV	2.4362G	84.98	Inf	-Inf	33.46	3	Vertical	1	1.45	-	51.52	27.46	6.00	-
AV	2.4922G	45.52	54.00	-8.48	33.47	3	Vertical	1	1.45	-	12.05	27.40	6.07	-
PK	2.3382G	57.97	74.00	-16.03	33.66	3	Vertical	1	1.45	-	24.31	27.75	5.91	-
PK	2.4382G	89.20	Inf	-Inf	33.46	3	Vertical	1	1.45	-	55.74	27.45	6.01	-
PK	2.4978G	56.86	74.00	-17.14	33.48	3	Vertical	1	1.45	-	23.38	27.40	6.08	-

802.11b_Nss1,(1Mbps)_1TX

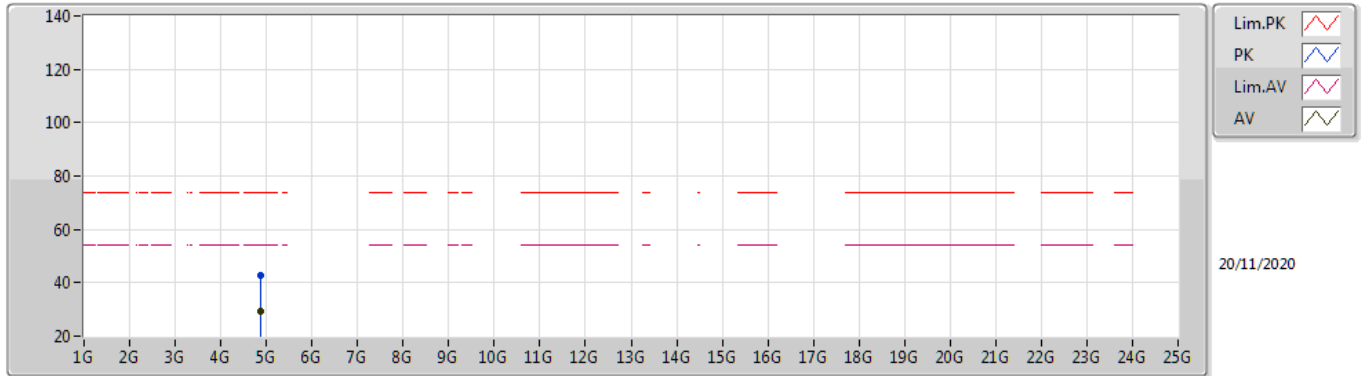
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3378G	45.87	54.00	-8.13	33.66	3	Horizontal	322	1.31	-	12.21	27.75	5.91	-
AV	2.439G	84.76	Inf	-Inf	33.45	3	Horizontal	322	1.31	-	51.31	27.44	6.01	-
AV	2.4986G	45.50	54.00	-8.50	33.48	3	Horizontal	322	1.31	-	12.02	27.40	6.08	-
PK	2.3786G	57.39	74.00	-16.61	33.58	3	Horizontal	322	1.31	-	23.81	27.64	5.94	-
PK	2.4382G	88.99	Inf	-Inf	33.46	3	Horizontal	322	1.31	-	55.53	27.45	6.01	-
PK	2.4862G	56.81	74.00	-17.19	33.46	3	Horizontal	322	1.31	-	23.35	27.40	6.06	-

802.11b_Nss1,(1Mbps)_1TX

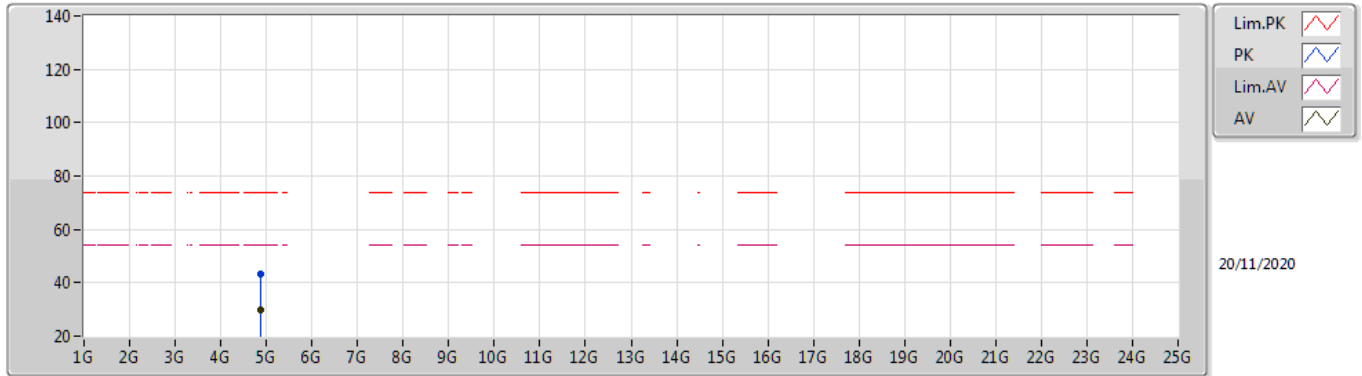
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87323G	29.35	54.00	-24.65	5.09	3	Vertical	298	1.42	-	24.26	31.05	8.30	34.26
PK	4.87531G	42.97	74.00	-31.03	5.09	3	Vertical	298	1.42	-	37.88	31.05	8.30	34.26

802.11b_Nss1,(1Mbps)_1TX

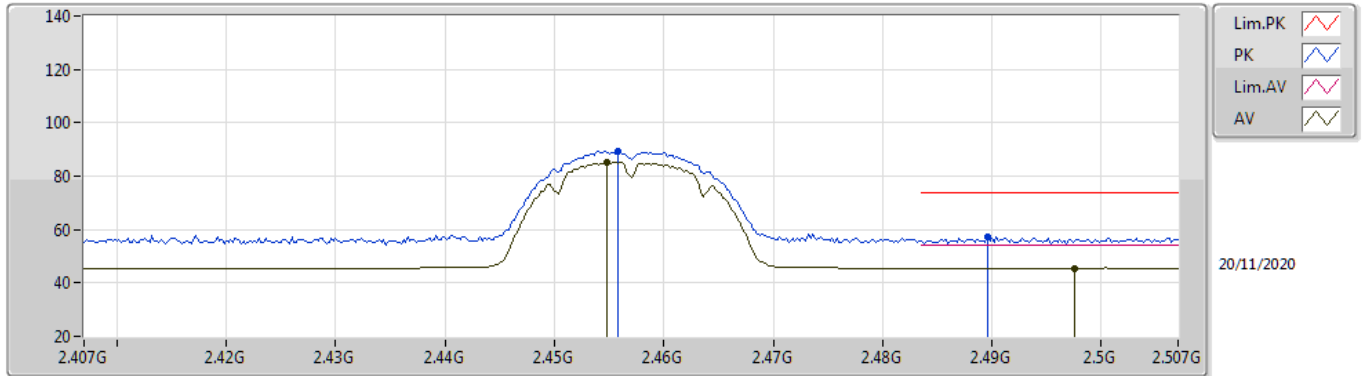
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	4.87646G	43.31	74.00	-30.69	5.09	3	Horizontal	337	1.00	-	38.22	31.05	8.30	34.26
AV	4.87397G	29.89	54.00	-24.11	5.09	3	Horizontal	337	1.00	-	24.80	31.05	8.30	34.26

802.11b_Nss1,(1Mbps)_1TX

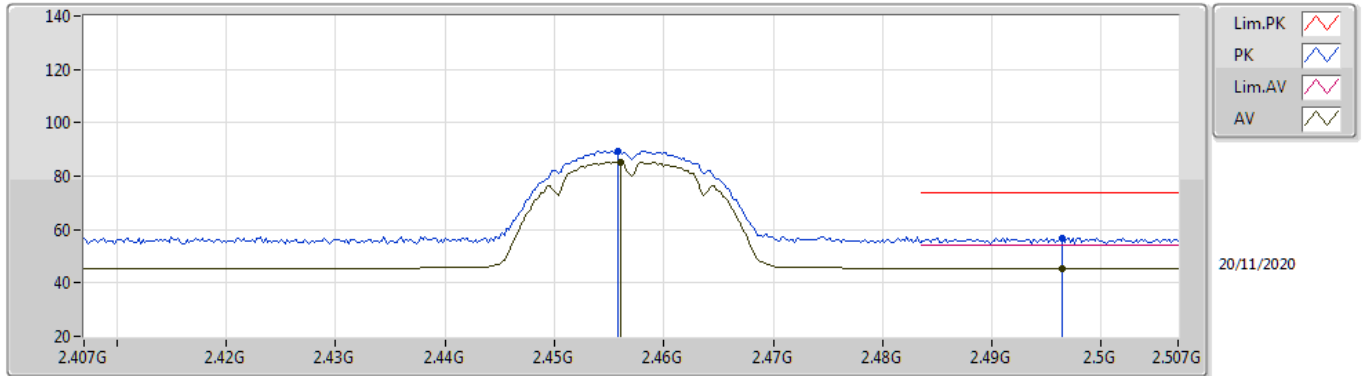
2457MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4548G	85.30	Inf	-Inf	33.43	3	Vertical	0	1.23	-	51.87	27.40	6.03	-
AV	2.4976G	45.58	54.00	-8.42	33.48	3	Vertical	0	1.23	-	12.10	27.40	6.08	-
PK	2.4558G	89.34	Inf	-Inf	33.43	3	Vertical	0	1.23	-	55.91	27.40	6.03	-
PK	2.4896G	57.21	74.00	-16.79	33.47	3	Vertical	0	1.23	-	23.74	27.40	6.07	-

802.11b_Nss1,(1Mbps)_1TX

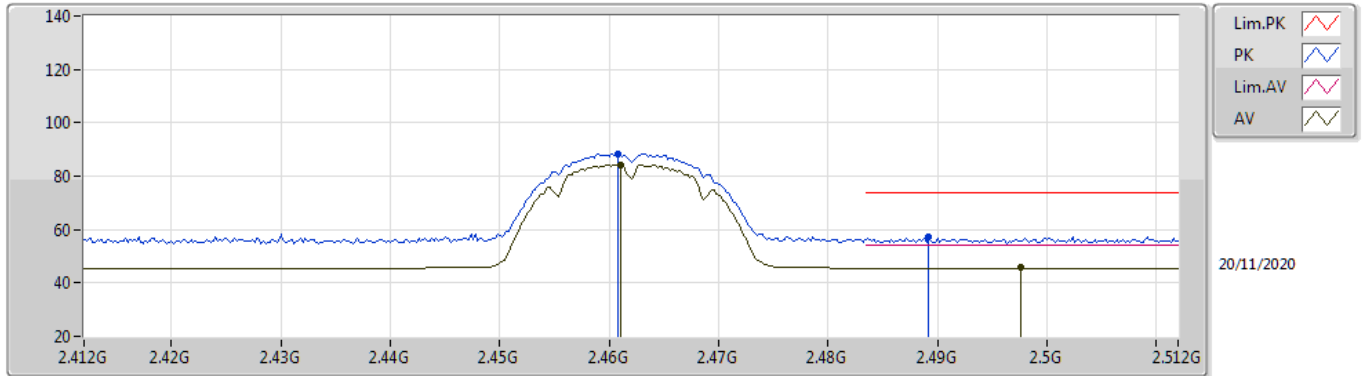
2457MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.456G	85.40	Inf	-Inf	33.43	3	Horizontal	320	1.01	-	51.97	27.40	6.03	-
AV	2.4964G	45.57	54.00	-8.43	33.48	3	Horizontal	320	1.01	-	12.09	27.40	6.08	-
PK	2.4558G	89.48	Inf	-Inf	33.43	3	Horizontal	320	1.01	-	56.05	27.40	6.03	-
PK	2.4964G	56.90	74.00	-17.10	33.48	3	Horizontal	320	1.01	-	23.42	27.40	6.08	-

802.11b_Nss1,(1Mbps)_1TX

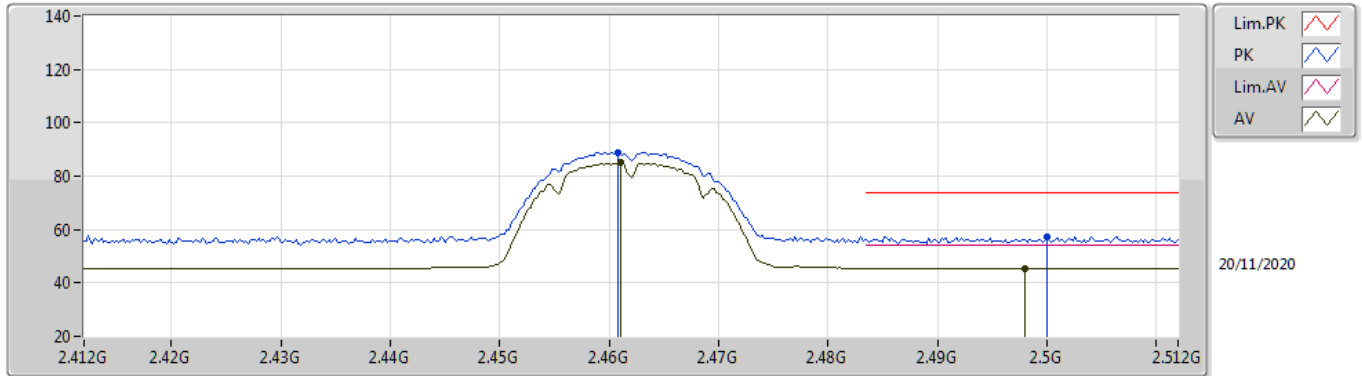
2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.461G	84.31	Inf	-Inf	33.43	3	Vertical	0	1.18	-	50.88	27.40	6.03	-
AV	2.4976G	45.61	54.00	-8.39	33.48	3	Vertical	0	1.18	-	12.13	27.40	6.08	-
PK	2.4608G	88.40	Inf	-Inf	33.43	3	Vertical	0	1.18	-	54.97	27.40	6.03	-
PK	2.4892G	57.15	74.00	-16.85	33.47	3	Vertical	0	1.18	-	23.68	27.40	6.07	-

802.11b_Nss1,(1Mbps)_1TX

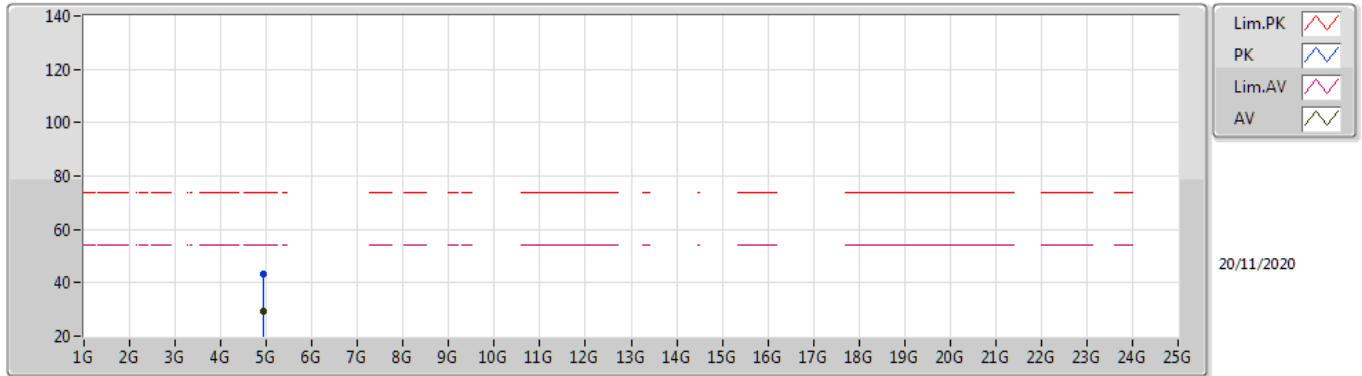
2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.461G	84.95	Inf	-Inf	33.43	3	Horizontal	323	1.01	-	51.52	27.40	6.03	-
AV	2.498G	45.54	54.00	-8.46	33.48	3	Horizontal	323	1.01	-	12.06	27.40	6.08	-
PK	2.4608G	89.04	Inf	-Inf	33.43	3	Horizontal	323	1.01	-	55.61	27.40	6.03	-
PK	2.5G	57.21	74.00	-16.79	33.48	3	Horizontal	323	1.01	-	23.73	27.40	6.08	-

802.11b_Nss1,(1Mbps)_1TX

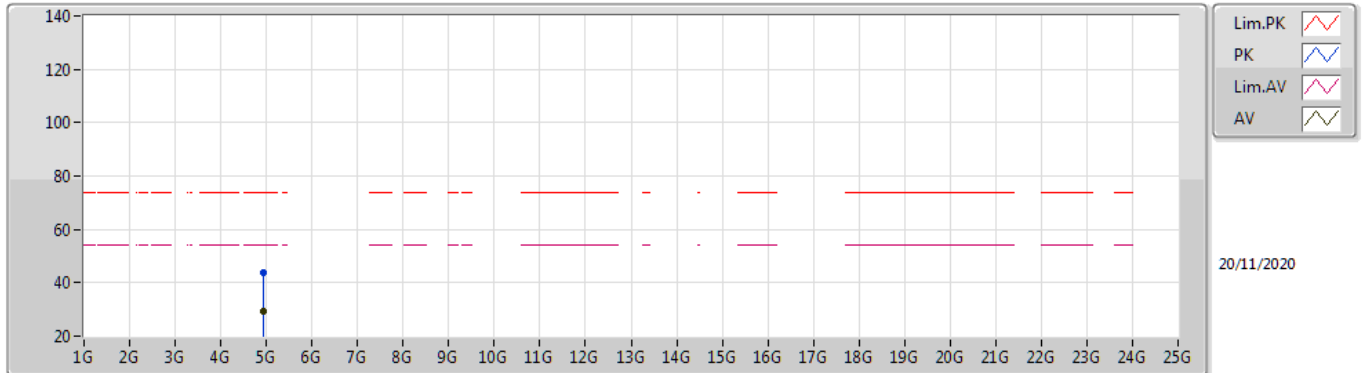
2462MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.92443G	29.29	54.00	-24.71	5.18	3	Vertical	113	1.49	-	24.11	31.10	8.33	34.25
PK	4.92648G	43.47	74.00	-30.53	5.20	3	Vertical	113	1.49	-	38.27	31.11	8.33	34.24

802.11b_Nss1,(1Mbps)_1TX

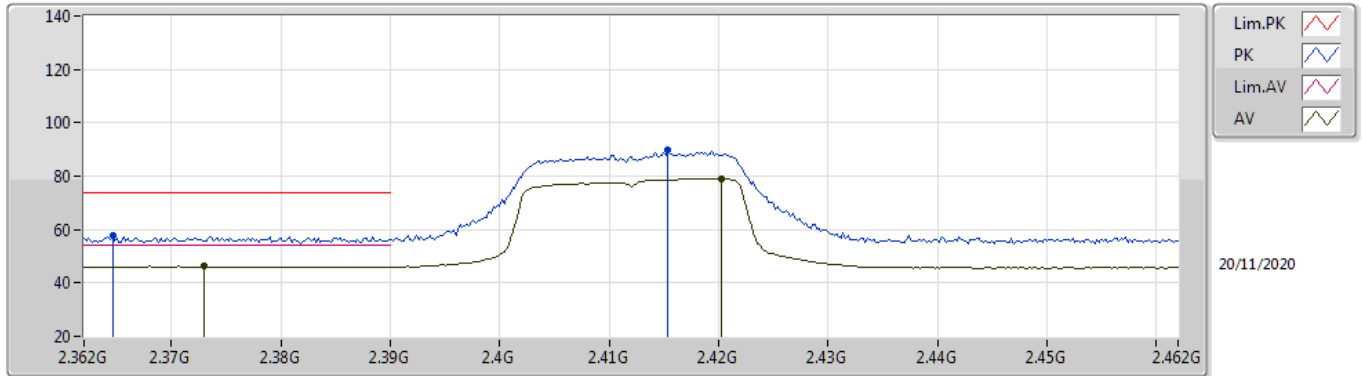
2462MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.92421G	29.11	54.00	-24.89	5.18	3	Horizontal	68	1.47	-	23.93	31.10	8.33	34.25
PK	4.92584G	43.61	74.00	-30.39	5.18	3	Horizontal	68	1.47	-	38.43	31.10	8.33	34.25

802.11g_Nss1,(6Mbps)_1TX

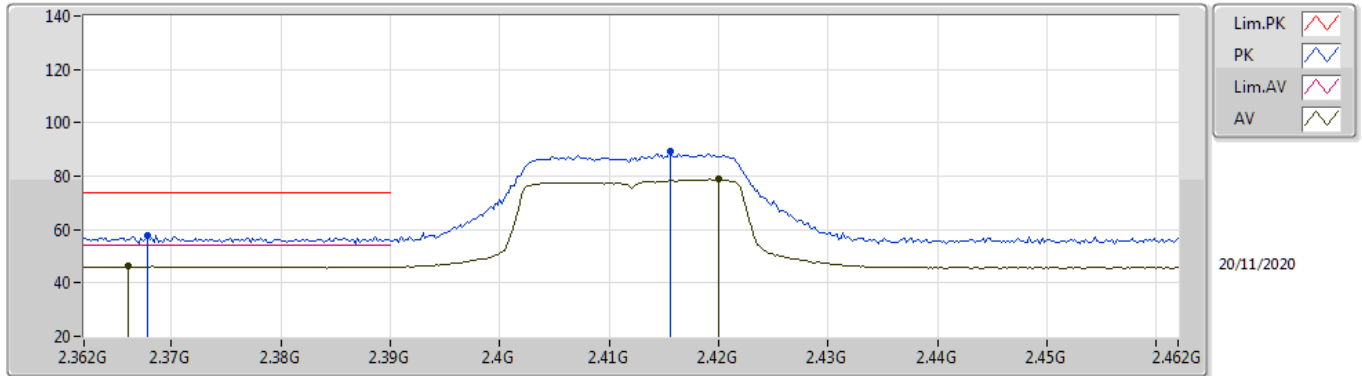
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.373G	46.27	54.00	-7.73	33.59	3	Vertical	3	1.51	-	12.68	27.65	5.94	-
AV	2.4202G	79.16	Inf	-Inf	33.50	3	Vertical	3	1.51	-	45.66	27.52	5.98	-
PK	2.3646G	57.54	74.00	-16.46	33.60	3	Vertical	3	1.51	-	23.94	27.67	5.93	-
PK	2.4154G	89.89	Inf	-Inf	33.52	3	Vertical	3	1.51	-	56.37	27.54	5.98	-

802.11g_Nss1,(6Mbps)_1TX

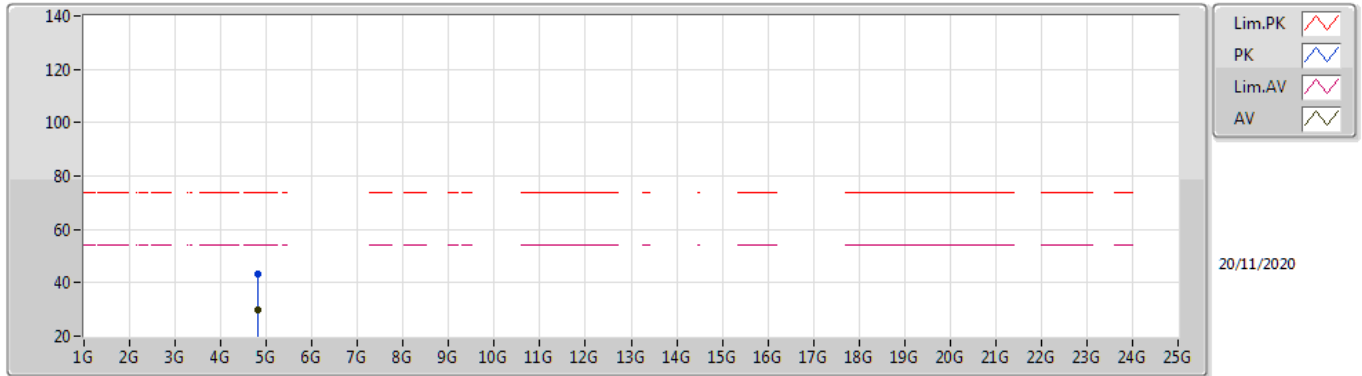
2412MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.366G	46.20	54.00	-7.80	33.60	3	Horizontal	321	1.50	-	12.60	27.67	5.93	-
AV	2.42G	78.76	Inf	-Inf	33.50	3	Horizontal	321	1.50	-	45.26	27.52	5.98	-
PK	2.3678G	58.01	74.00	-15.99	33.60	3	Horizontal	321	1.50	-	24.41	27.66	5.94	-
PK	2.4156G	89.24	Inf	-Inf	33.52	3	Horizontal	321	1.50	-	55.72	27.54	5.98	-

802.11g_Nss1,(6Mbps)_1TX

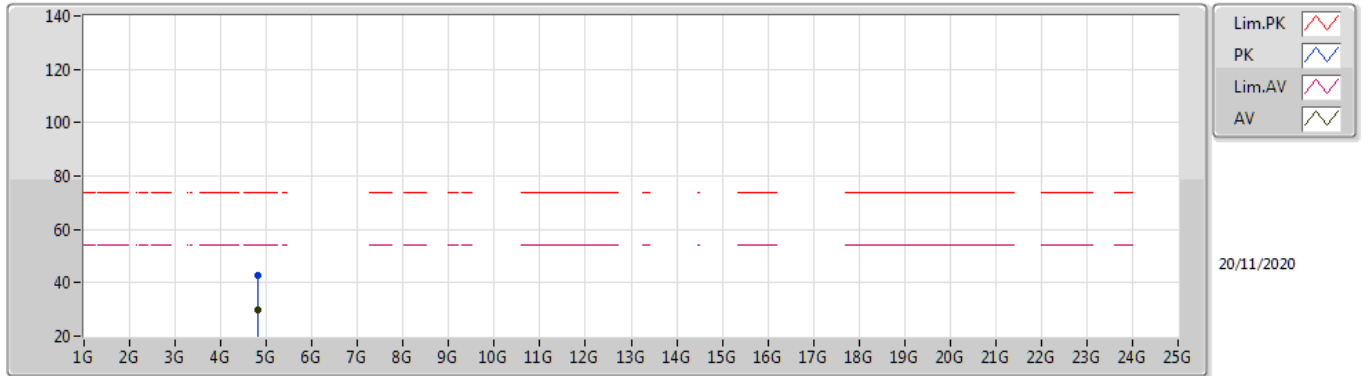
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8235G	29.57	54.00	-24.43	4.98	3	Vertical	86	1.55	-	24.59	30.99	8.27	34.28
PK	4.82584G	43.39	74.00	-30.61	4.99	3	Vertical	86	1.55	-	38.40	31.00	8.27	34.28

802.11g_Nss1,(6Mbps)_1TX

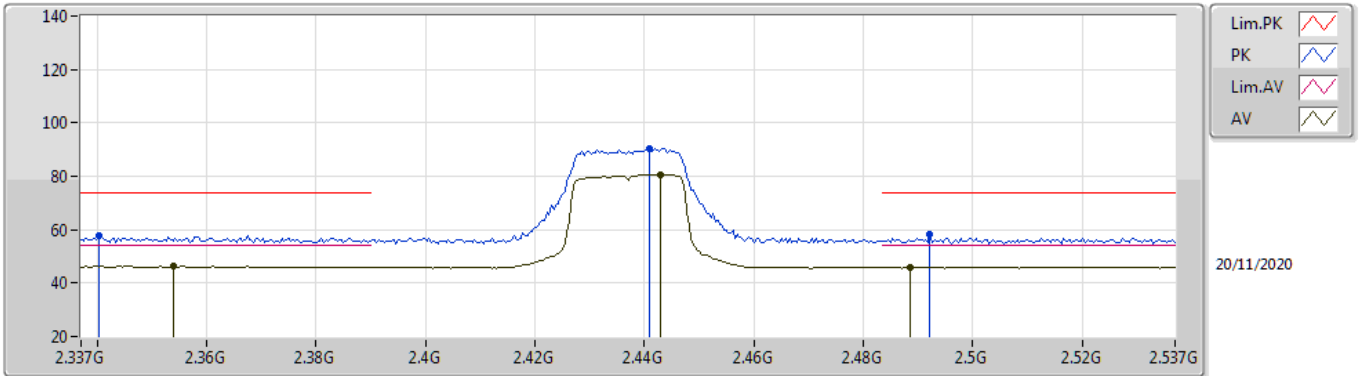
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82169G	29.57	54.00	-24.43	4.97	3	Horizontal	140	1.93	-	24.60	30.99	8.26	34.28
PK	4.82537G	42.78	74.00	-31.22	4.99	3	Horizontal	140	1.93	-	37.79	31.00	8.27	34.28

802.11g_Nss1,(6Mbps)_1TX

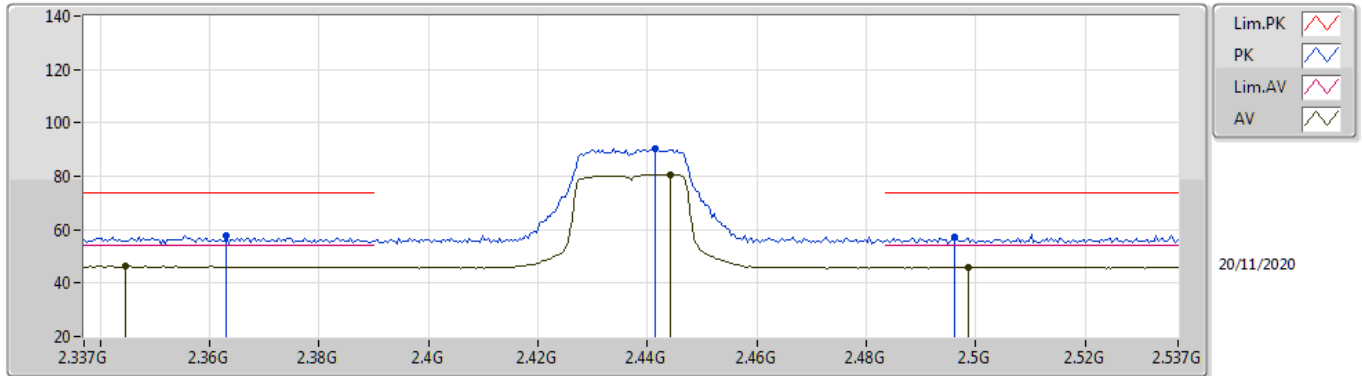
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3538G	46.34	54.00	-7.66	33.62	3	Vertical	1	1.22	-	12.72	27.69	5.93	-
AV	2.443G	80.66	Inf	-Inf	33.44	3	Vertical	1	1.22	-	47.22	27.43	6.01	-
AV	2.4886G	45.92	54.00	-8.08	33.47	3	Vertical	1	1.22	-	12.45	27.40	6.07	-
PK	2.3402G	57.69	74.00	-16.31	33.66	3	Vertical	1	1.22	-	24.03	27.74	5.92	-
PK	2.441G	90.59	Inf	-Inf	33.45	3	Vertical	1	1.22	-	57.14	27.44	6.01	-
PK	2.4922G	58.46	74.00	-15.54	33.47	3	Vertical	1	1.22	-	24.99	27.40	6.07	-

802.11g_Nss1,(6Mbps)_1TX

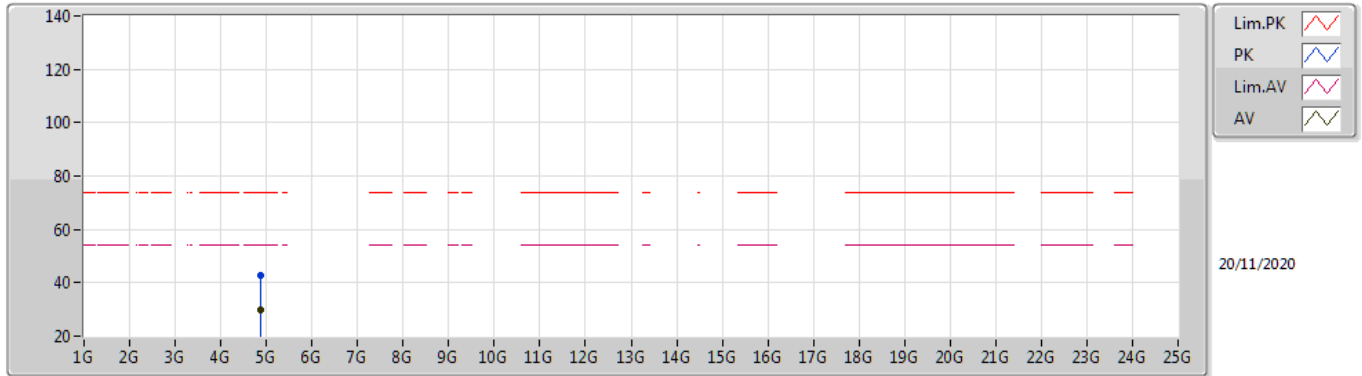
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3446G	46.25	54.00	-7.75	33.64	3	Horizontal	321	1.12	-	12.61	27.72	5.92	-
AV	2.4442G	80.69	Inf	-Inf	33.43	3	Horizontal	321	1.12	-	47.26	27.42	6.01	-
AV	2.4986G	45.96	54.00	-8.04	33.48	3	Horizontal	321	1.12	-	12.48	27.40	6.08	-
PK	2.363G	57.89	74.00	-16.11	33.60	3	Horizontal	321	1.12	-	24.29	27.67	5.93	-
PK	2.4414G	90.59	Inf	-Inf	33.44	3	Horizontal	321	1.12	-	57.15	27.43	6.01	-
PK	2.4962G	57.08	74.00	-16.92	33.48	3	Horizontal	321	1.12	-	23.60	27.40	6.08	-

802.11g_Nss1,(6Mbps)_1TX

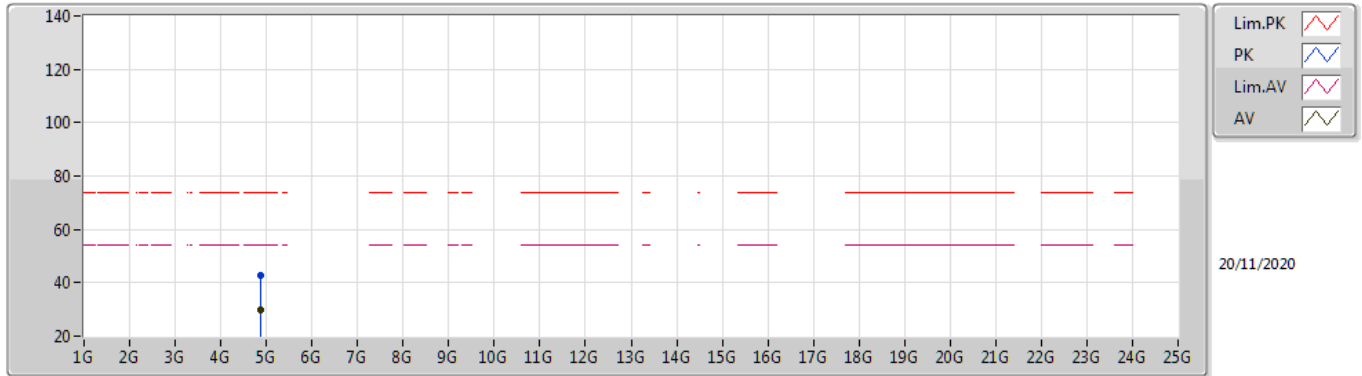
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87324G	29.79	54.00	-24.21	5.09	3	Vertical	273	1.21	-	24.70	31.05	8.30	34.26
PK	4.87218G	42.91	74.00	-31.09	5.10	3	Vertical	273	1.21	-	37.81	31.06	8.30	34.26

802.11g_Nss1,(6Mbps)_1TX

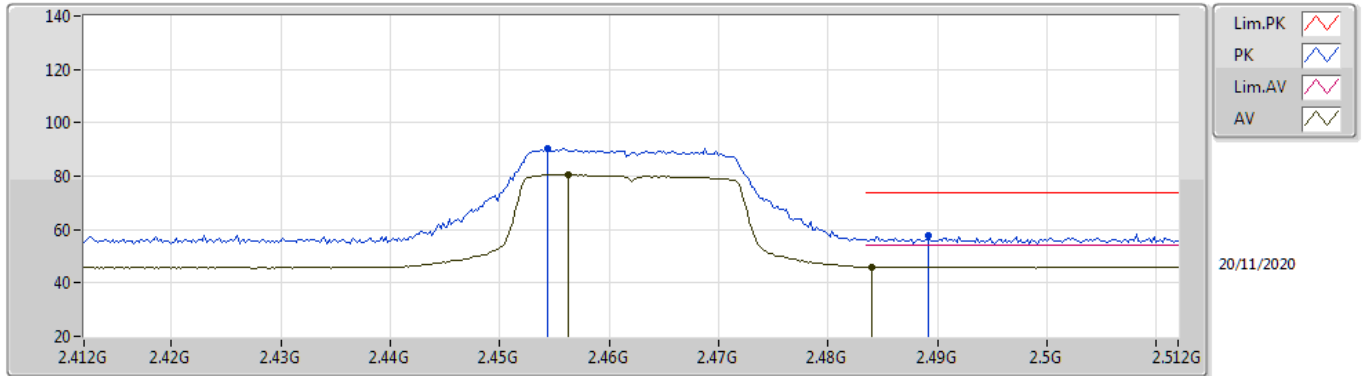
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87467G	29.98	54.00	-24.02	5.09	3	Horizontal	346	2.25	-	24.89	31.05	8.30	34.26
PK	4.8744G	42.91	74.00	-31.09	5.09	3	Horizontal	346	2.25	-	37.82	31.05	8.30	34.26

802.11g_Nss1,(6Mbps)_1TX

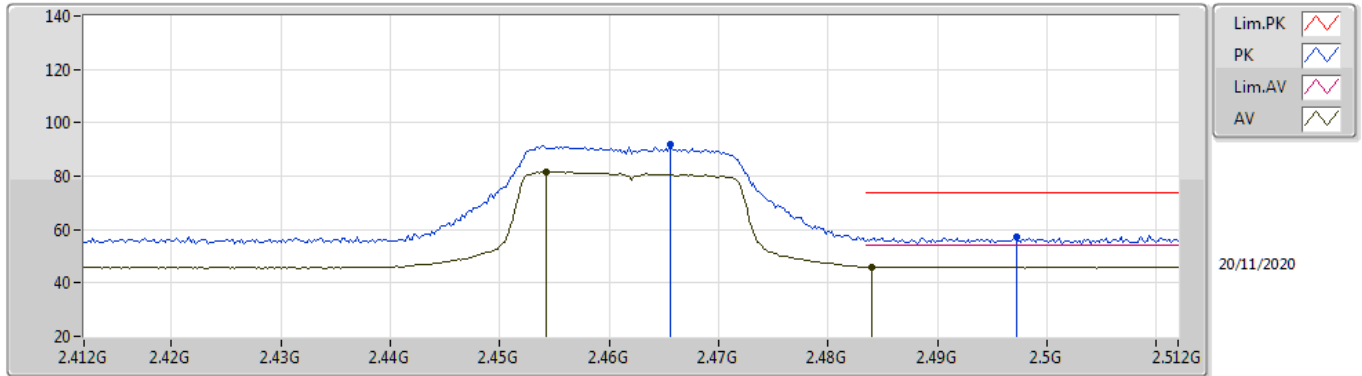
2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4562G	80.50	Inf	-Inf	33.43	3	Vertical	0	1.18	-	47.07	27.40	6.03	-
AV	2.484G	46.01	54.00	-7.99	33.46	3	Vertical	0	1.18	-	12.55	27.40	6.06	-
PK	2.4544G	90.40	Inf	-Inf	33.43	3	Vertical	0	1.18	-	56.97	27.40	6.03	-
PK	2.4892G	57.82	74.00	-16.18	33.47	3	Vertical	0	1.18	-	24.35	27.40	6.07	-

802.11g_Nss1,(6Mbps)_1TX

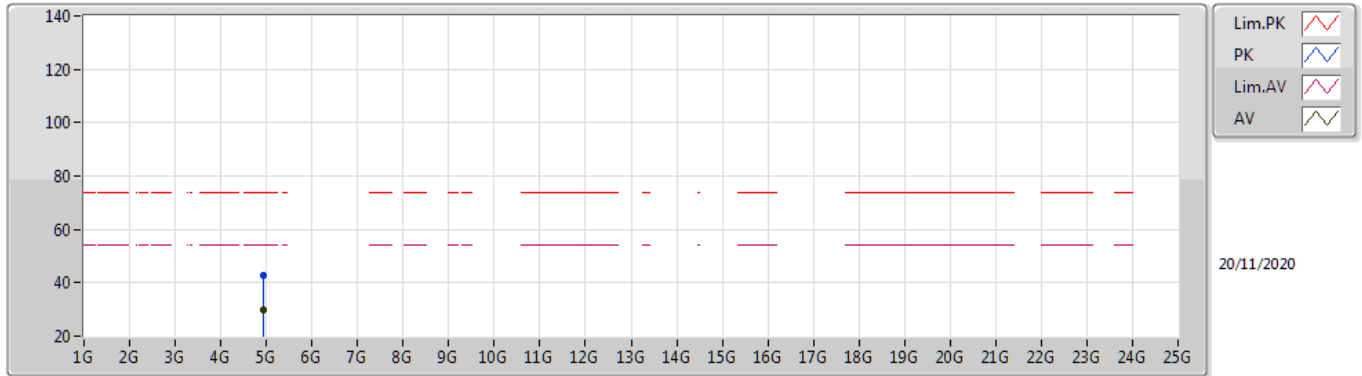
2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4542G	81.72	Inf	-Inf	33.43	3	Horizontal	321	1.00	-	48.29	27.40	6.03	-
AV	2.484G	46.05	54.00	-7.95	33.46	3	Horizontal	321	1.00	-	12.59	27.40	6.06	-
PK	2.4656G	91.80	Inf	-Inf	33.44	3	Horizontal	321	1.00	-	58.36	27.40	6.04	-
PK	2.4972G	57.34	74.00	-16.66	33.48	3	Horizontal	321	1.00	-	23.86	27.40	6.08	-

802.11g_Nss1,(6Mbps)_1TX

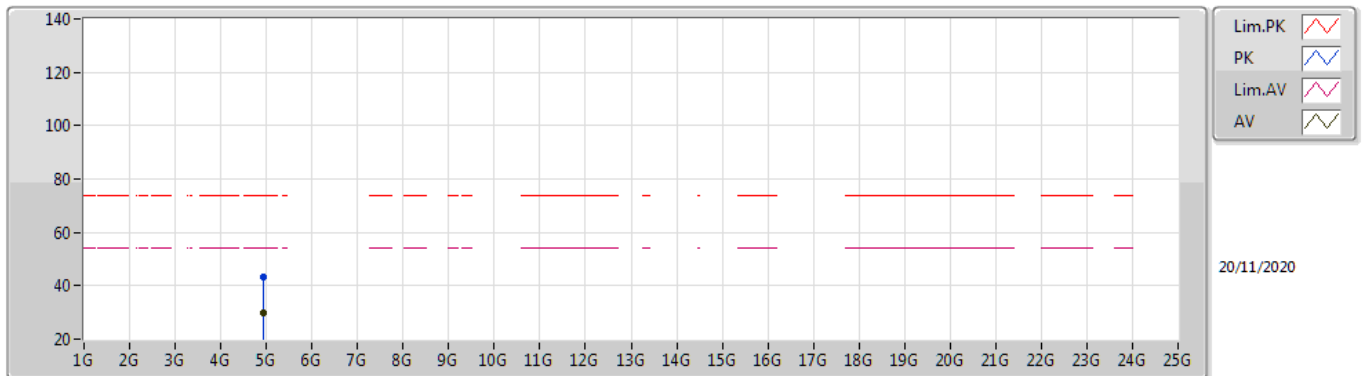
2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9265G	30.00	54.00	-24.00	5.20	3	Vertical	73	2.48	-	24.80	31.11	8.33	34.24
PK	4.92171G	42.96	74.00	-31.04	5.17	3	Vertical	73	2.48	-	37.79	31.09	8.33	34.25

802.11g_Nss1,(6Mbps)_1TX

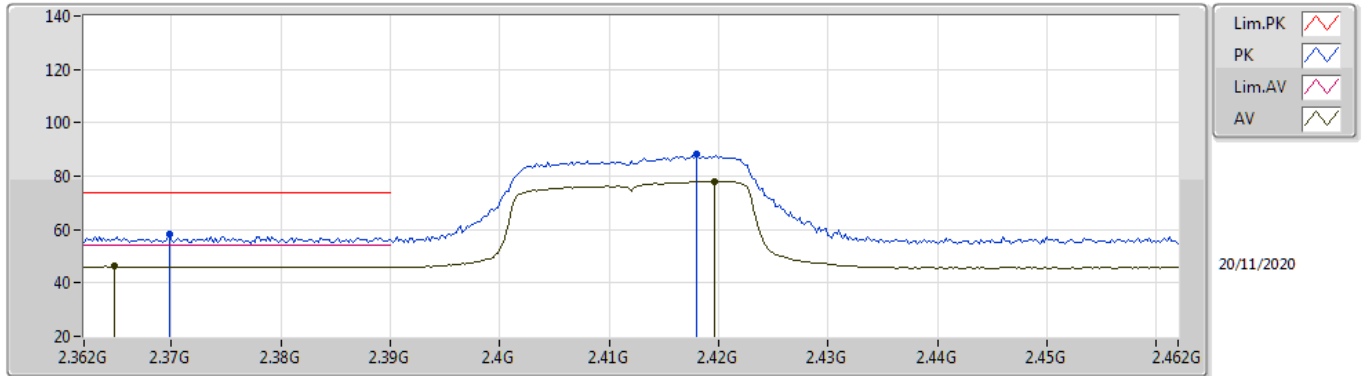
2462MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.92457G	29.94	54.00	-24.06	5.18	3	Horizontal	86	1.43	-	24.76	31.10	8.33	34.25
PK	4.92178G	43.25	74.00	-30.75	5.17	3	Horizontal	86	1.43	-	38.08	31.09	8.33	34.25

802.11n HT20_Nss1,(MCS0)_1TX

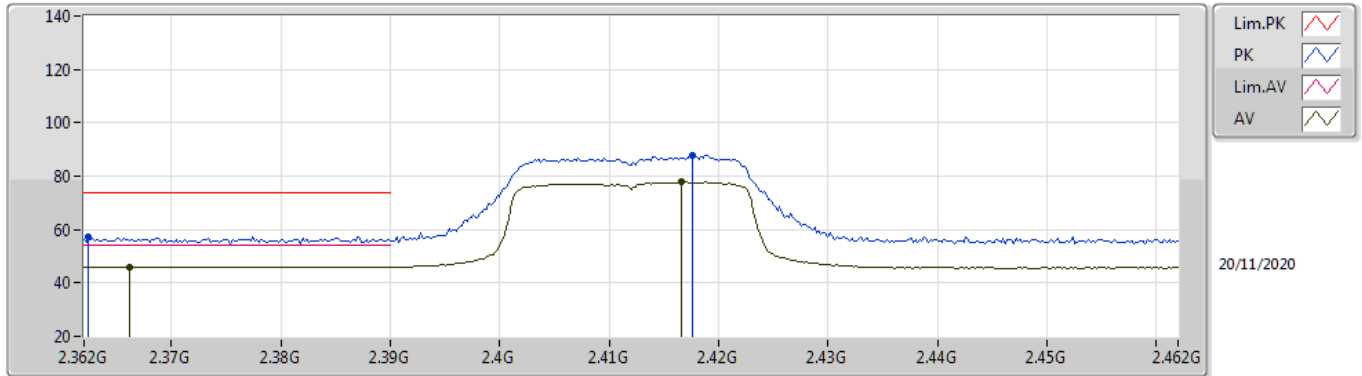
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3648G	46.16	54.00	-7.84	33.60	3	Vertical	3	1.50	-	12.56	27.67	5.93	-
AV	2.4196G	78.05	Inf	-Inf	33.50	3	Vertical	3	1.50	-	44.55	27.52	5.98	-
PK	2.3698G	58.27	74.00	-15.73	33.60	3	Vertical	3	1.50	-	24.67	27.66	5.94	-
PK	2.418G	88.12	Inf	-Inf	33.51	3	Vertical	3	1.50	-	54.61	27.53	5.98	-

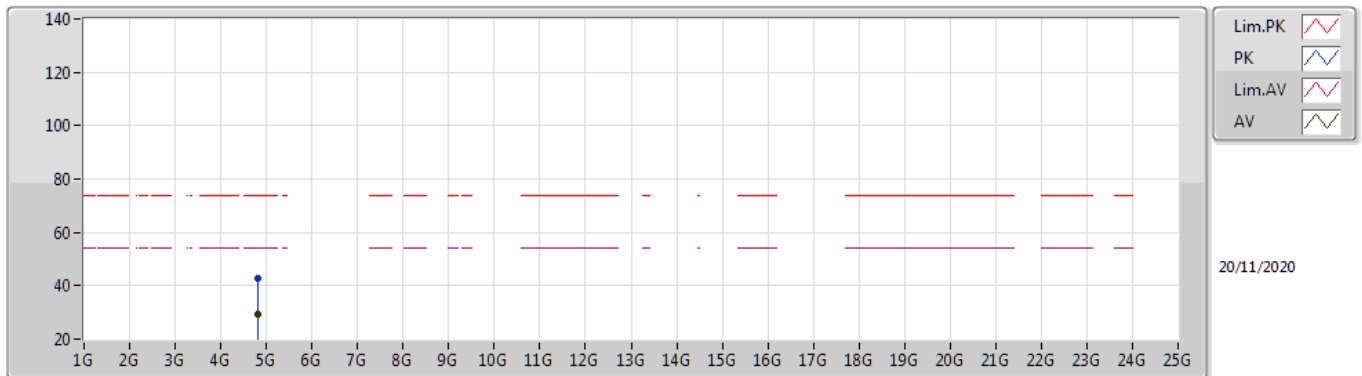
802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX



802.11n HT20_Nss1,(MCS0)_1TX

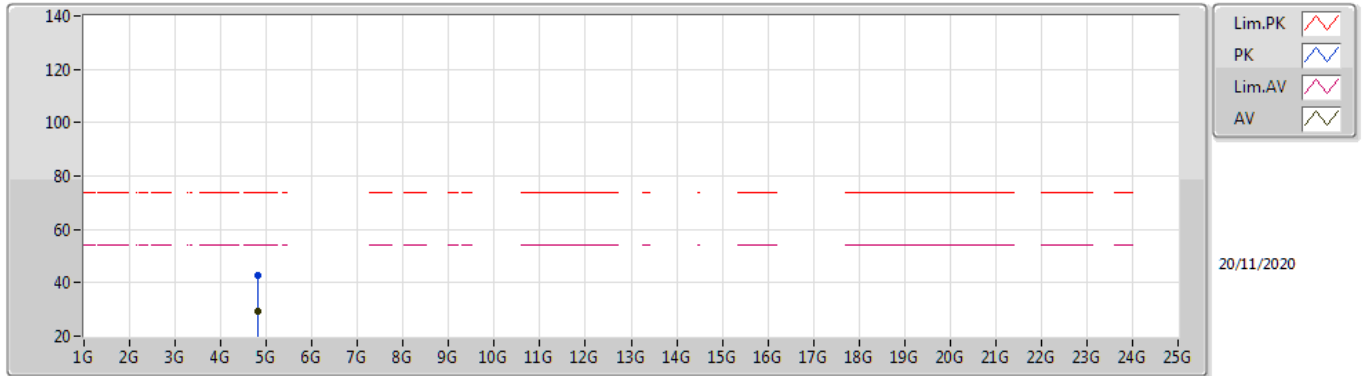
2412MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.82498G	29.56	54.00	-24.44	4.99	3	Vertical	257	1.03	-	24.57	31.00	8.27	34.28
PK	4.8227G	42.65	74.00	-31.35	4.97	3	Vertical	257	1.03	-	37.68	30.99	8.26	34.28

802.11n HT20_Nss1,(MCS0)_1TX

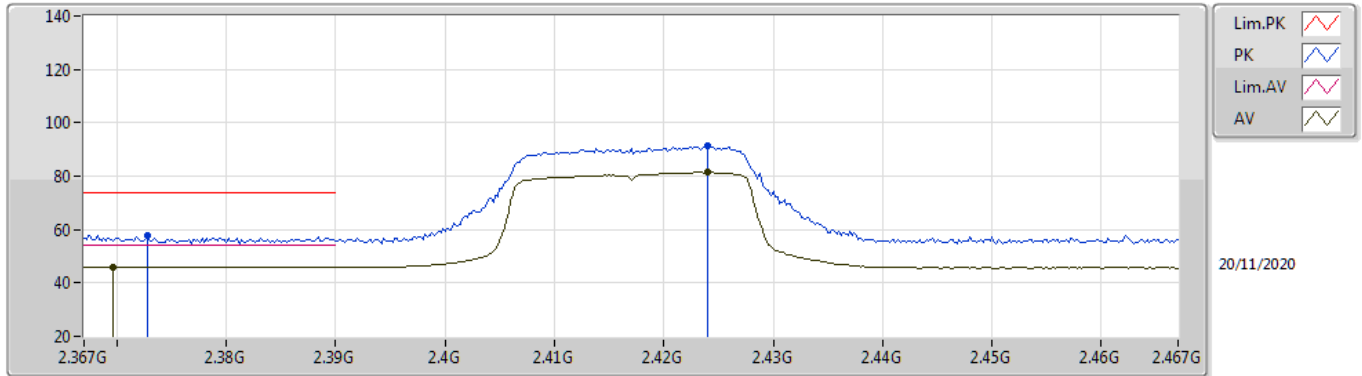
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82174G	29.51	54.00	-24.49	4.97	3	Horizontal	33	2.17	-	24.54	30.99	8.26	34.28
PK	4.82588G	42.51	74.00	-31.49	4.99	3	Horizontal	33	2.17	-	37.52	31.00	8.27	34.28

802.11n HT20_Nss1,(MCS0)_1TX

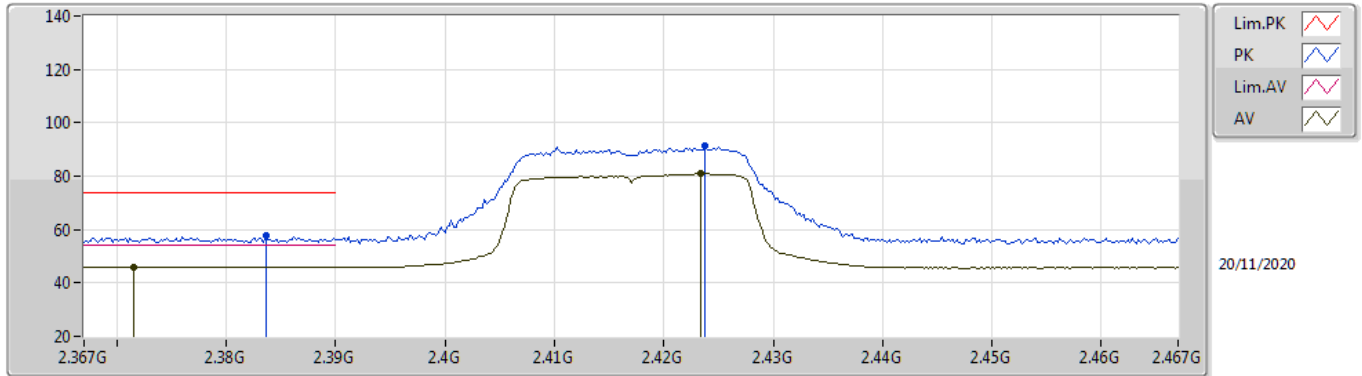
2417MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3696G	46.06	54.00	-7.94	33.60	3	Vertical	3	1.53	-	12.46	27.66	5.94	-
AV	2.424G	81.46	Inf	-Inf	33.49	3	Vertical	3	1.53	-	47.97	27.50	5.99	-
PK	2.3728G	57.69	74.00	-16.31	33.59	3	Vertical	3	1.53	-	24.10	27.65	5.94	-
PK	2.424G	91.30	Inf	-Inf	33.49	3	Vertical	3	1.53	-	57.81	27.50	5.99	-

802.11n HT20_Nss1,(MCS0)_1TX

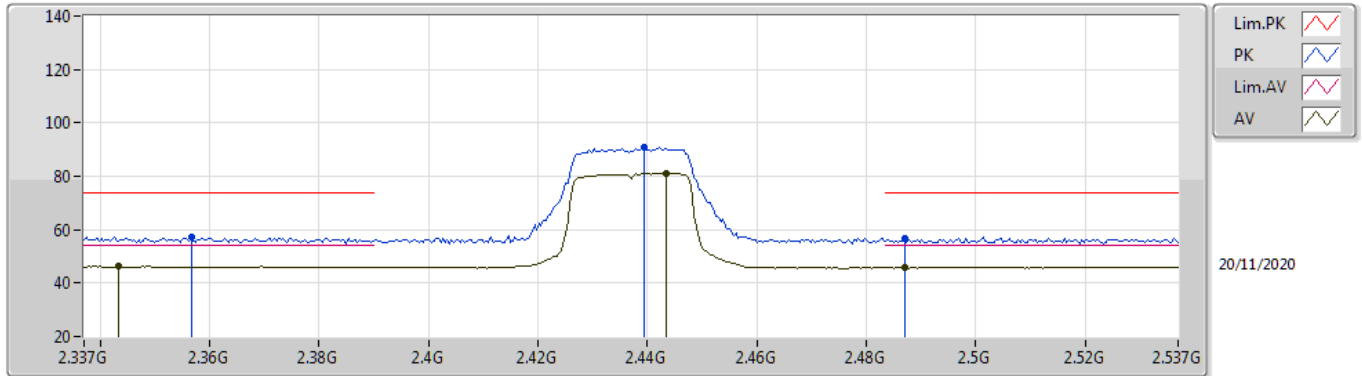
2417MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3716G	46.12	54.00	-7.88	33.60	3	Horizontal	321	1.35	-	12.52	27.66	5.94	-
AV	2.4234G	80.88	Inf	-Inf	33.50	3	Horizontal	321	1.35	-	47.38	27.51	5.99	-
PK	2.3836G	57.76	74.00	-16.24	33.58	3	Horizontal	321	1.35	-	24.18	27.63	5.95	-
PK	2.4238G	91.39	Inf	-Inf	33.49	3	Horizontal	321	1.35	-	57.90	27.50	5.99	-

802.11n HT20_Nss1,(MCS0)_1TX

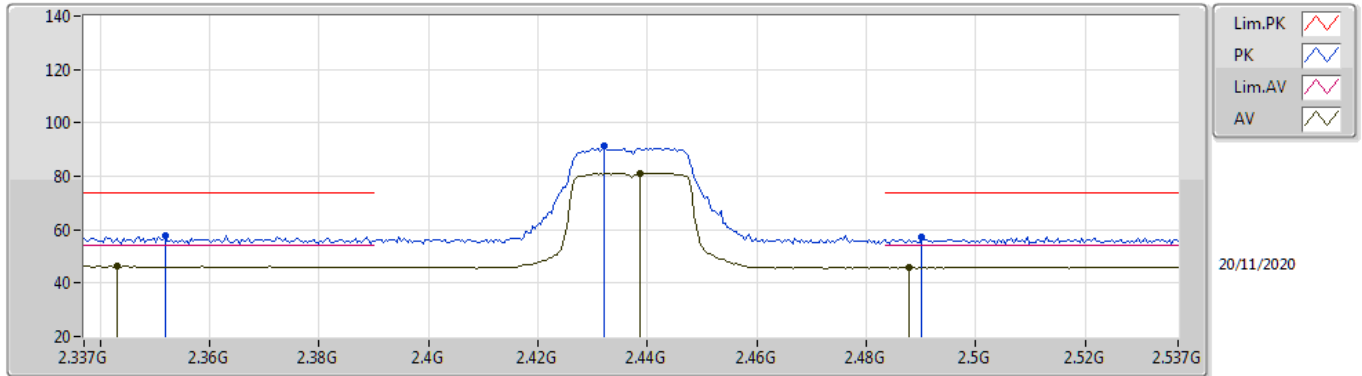
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3434G	46.30	54.00	-7.70	33.65	3	Vertical	0	1.30	-	12.65	27.73	5.92	-
AV	2.4434G	81.21	Inf	-Inf	33.44	3	Vertical	0	1.30	-	47.77	27.43	6.01	-
AV	2.487G	45.93	54.00	-8.07	33.46	3	Vertical	0	1.30	-	12.47	27.40	6.06	-
PK	2.3566G	57.20	74.00	-16.80	33.62	3	Vertical	0	1.30	-	23.58	27.69	5.93	-
PK	2.4394G	90.62	Inf	-Inf	33.45	3	Vertical	0	1.30	-	57.17	27.44	6.01	-
PK	2.487G	56.94	74.00	-17.06	33.46	3	Vertical	0	1.30	-	23.48	27.40	6.06	-

802.11n HT20_Nss1,(MCS0)_1TX

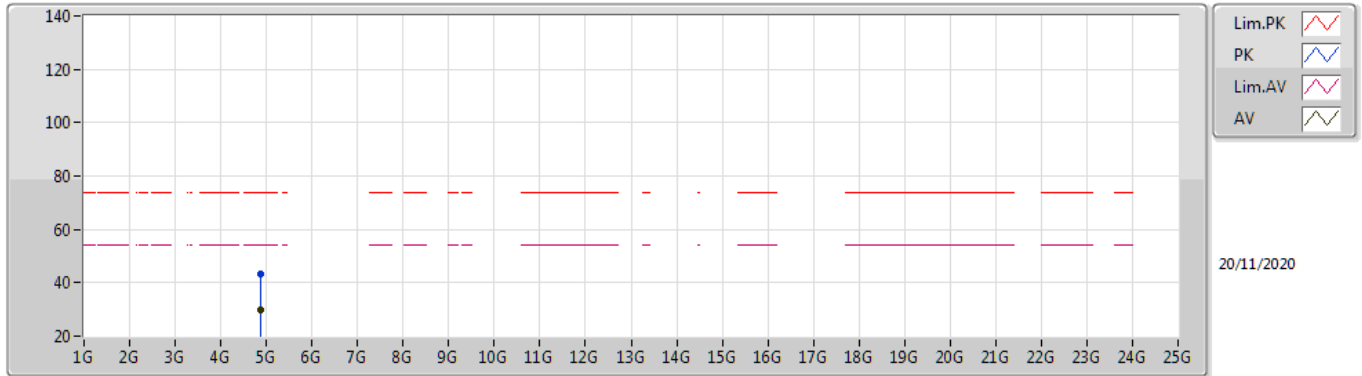
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.343G	46.22	54.00	-7.78	33.65	3	Horizontal	321	1.29	-	12.57	27.73	5.92	-
AV	2.4386G	81.21	Inf	-Inf	33.46	3	Horizontal	321	1.29	-	47.75	27.45	6.01	-
AV	2.4878G	45.86	54.00	-8.14	33.47	3	Horizontal	321	1.29	-	12.39	27.40	6.07	-
PK	2.3518G	57.82	74.00	-16.18	33.62	3	Horizontal	321	1.29	-	24.20	27.70	5.92	-
PK	2.4322G	91.32	Inf	-Inf	33.47	3	Horizontal	321	1.29	-	57.85	27.47	6.00	-
PK	2.4902G	57.14	74.00	-16.86	33.47	3	Horizontal	321	1.29	-	23.67	27.40	6.07	-

802.11n HT20_Nss1,(MCS0)_1TX

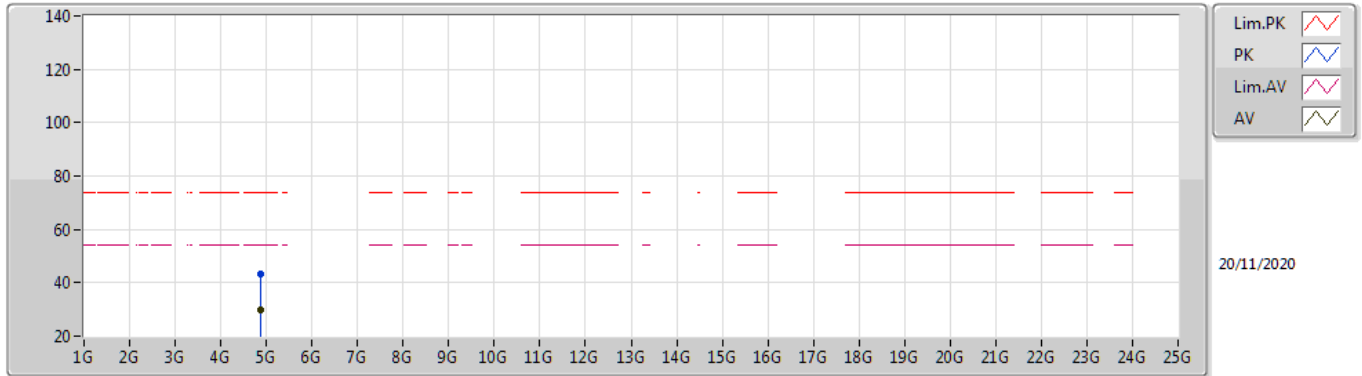
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8765G	29.82	54.00	-24.18	5.09	3	Vertical	50	2.31	-	24.73	31.05	8.30	34.26
PK	4.87295G	43.28	74.00	-30.72	5.09	3	Vertical	50	2.31	-	38.19	31.05	8.30	34.26

802.11n HT20_Nss1,(MCS0)_1TX

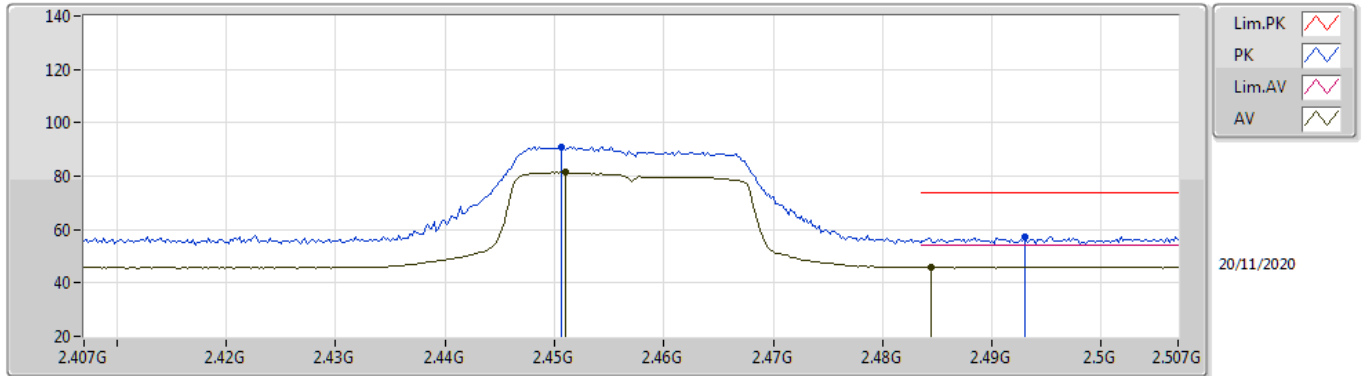
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87373G	29.67	54.00	-24.33	5.09	3	Horizontal	164	1.33	-	24.58	31.05	8.30	34.26
PK	4.87593G	43.25	74.00	-30.75	5.09	3	Horizontal	164	1.33	-	38.16	31.05	8.30	34.26

802.11n HT20_Nss1,(MCS0)_1TX

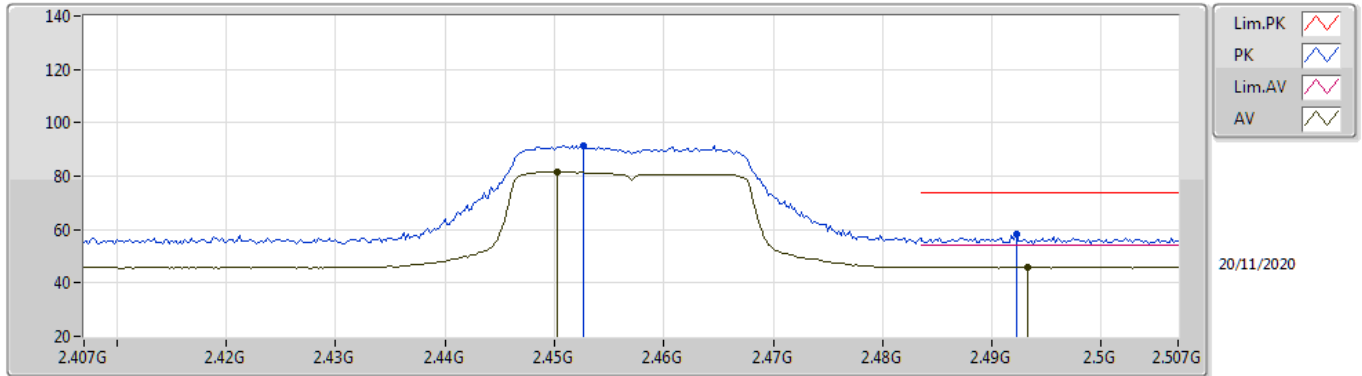
2457MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.451G	81.41	Inf	-Inf	33.42	3	Vertical	0	1.30	-	47.99	27.40	6.02	-
AV	2.4844G	45.99	54.00	-8.01	33.46	3	Vertical	0	1.30	-	12.53	27.40	6.06	-
PK	2.4506G	90.97	Inf	-Inf	33.42	3	Vertical	0	1.30	-	57.55	27.40	6.02	-
PK	2.493G	57.45	74.00	-16.55	33.47	3	Vertical	0	1.30	-	23.98	27.40	6.07	-

802.11n HT20_Nss1,(MCS0)_1TX

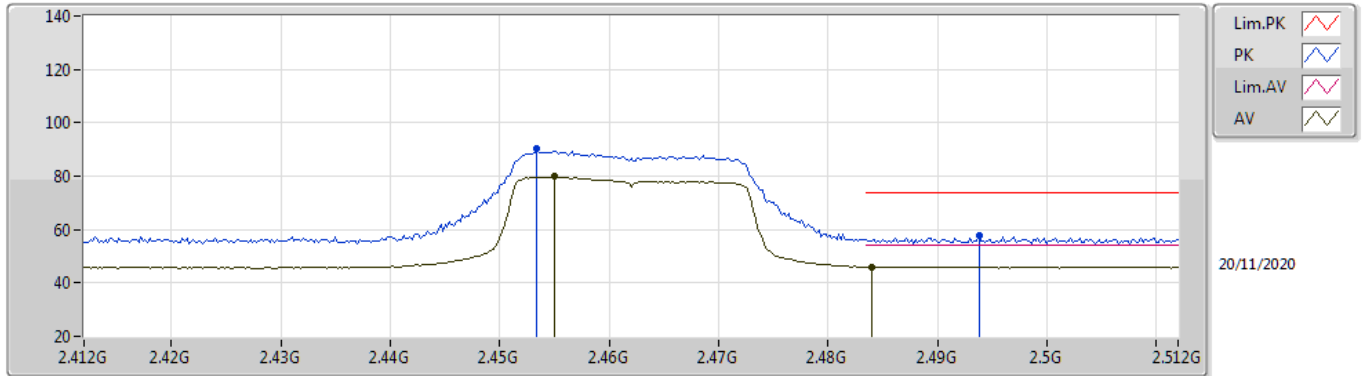
2457MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4502G	81.68	Inf	-Inf	33.42	3	Horizontal	323	1.18	-	48.26	27.40	6.02	-
AV	2.4932G	46.09	54.00	-7.91	33.47	3	Horizontal	323	1.18	-	12.62	27.40	6.07	-
PK	2.4526G	91.37	Inf	-Inf	33.42	3	Horizontal	323	1.18	-	57.95	27.40	6.02	-
PK	2.4922G	58.18	74.00	-15.82	33.47	3	Horizontal	323	1.18	-	24.71	27.40	6.07	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.455G	79.79	Inf	-Inf	33.43	3	Vertical	360	1.30	-	46.36	27.40	6.03	-
AV	2.484G	45.95	54.00	-8.05	33.46	3	Vertical	360	1.30	-	12.49	27.40	6.06	-
PK	2.4534G	90.13	Inf	-Inf	33.42	3	Vertical	360	1.30	-	56.71	27.40	6.02	-
PK	2.4938G	57.56	74.00	-16.44	33.47	3	Vertical	360	1.30	-	24.09	27.40	6.07	-

802.11n HT20_Nss1,(MCS0)_1TX

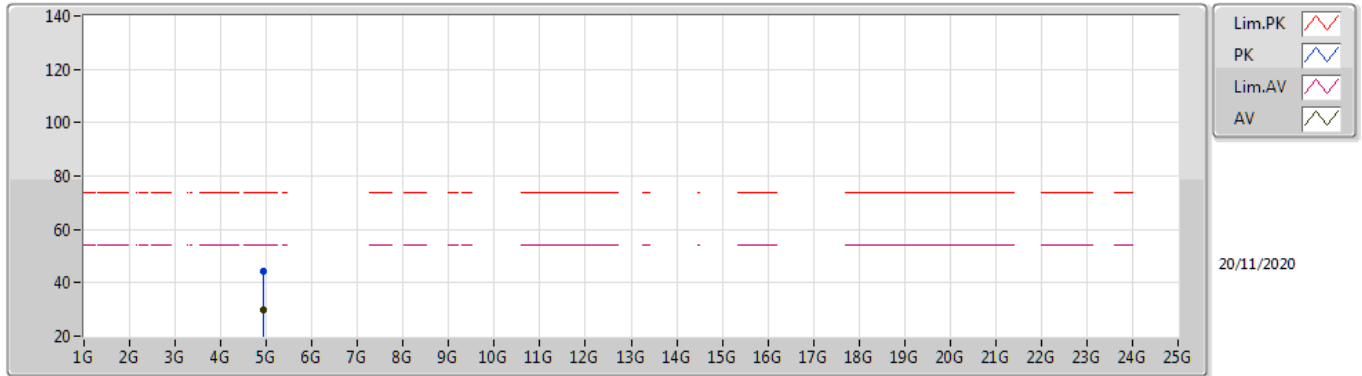
2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4548G	80.36	Inf	-Inf	33.43	3	Horizontal	321	1.00	-	46.93	27.40	6.03	-
AV	2.4846G	46.13	54.00	-7.87	33.46	3	Horizontal	321	1.00	-	12.67	27.40	6.06	-
PK	2.4582G	90.11	Inf	-Inf	33.43	3	Horizontal	321	1.00	-	56.68	27.40	6.03	-
PK	2.4886G	57.63	74.00	-16.37	33.47	3	Horizontal	321	1.00	-	24.16	27.40	6.07	-

802.11n HT20_Nss1,(MCS0)_1TX

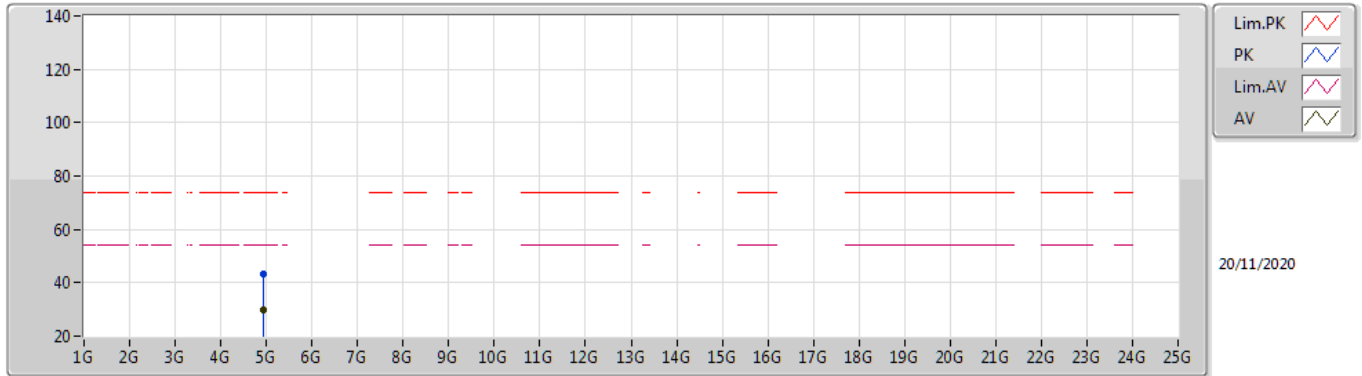
2462MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.92529G	30.04	54.00	-23.96	5.18	3	Vertical	138	2.30	-	24.86	31.10	8.33	34.25
PK	4.92329G	44.08	74.00	-29.92	5.17	3	Vertical	138	2.30	-	38.91	31.09	8.33	34.25

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92609G	29.79	54.00	-24.21	5.18	3	Horizontal	352	1.82	-	24.61	31.10	8.33	34.25
PK	4.92225G	43.18	74.00	-30.82	5.17	3	Horizontal	352	1.82	-	38.01	31.09	8.33	34.25