FCC Test Report

FCC ID	:	**NUK-DAUK-W8812**
Equipment	:	**802.11 a/b/g/n/ac Module**
Brand Name	:	**Unex Technology Corp.**
Model Name	:	**DAUK-W8812**
Applicant/ Manufacturer	:	**Unex Technology Corporation 11F-3, No. 100, Sec. 1, Jiafeng 11th Rd., Zhubei City, Hsinchu County, Taiwan**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Nov. 02, 2018, and testing was started from Nov. 14, 2018 and completed on Nov. 19, 2018. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant 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: Phoenix Chen

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

Report No.	Version	Description	Issued Date
FR8O2920AC	01	Initial issue of report	Jan. 11, 2019
FR8O2920AC	02	Revised typo This report is the latest version replacing for the report issued on Jan. 11, 2019.	Jan. 14, 2019

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	FCC 15.203
3.1	15.247(a)	DTS Bandwidth	PASS	≥500kHz
3.2	15.247(b)	Maximum Conducted Output Power	PASS	Power [dBm]: 30
3.3	15.247(e)	Power Spectral Density	PASS	PSD [dBm/3kHz]: 8
3.4	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	Non-Restricted Bands: > 30 dBc
3.5	15.247(d)	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: FCC 15.209

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: Amber Chiu

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]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

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	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Type	Ant.	Brand	Model Name	Antenna Type	Connector
1	1	Aristotle	RFA-25-T118-M32	Dipole antenna	Reverse SMA
	2	Aristotle	RFA-25-T118-M32	Dipole antenna	Reverse SMA
2	3	Aristotle	RFA-25-T118-U-M70	Dipole antenna	Reverse SMA
	4	Aristotle	RFA-25-T118-U-M70	Dipole antenna	Reverse SMA
3	5	Master Wave	98619PRSX000	Dipole antenna	Reverse SMA
	6	Master Wave	98619PRSX000	Dipole antenna	Reverse SMA

Ant.	Gain (dBi)	
	2.4G	5G
1	3.5	6.0
2	3.5	6.0
3	3.5	6.0
4	3.5	6.0
5	3.19	4.18
6	3.19	4.18

Note 1: EUT can match with above antennas for using. Type 1 was used to perform the worst configuration and result of that was recorded as the final test result. The difference refer as 1.1.5.

For 2.4GHz function:
For IEEE 802.11 b/g mode (1TX/1RX)
Ant. 1 could transmit/receive simultaneously.
For IEEE 802.11 n mode (2TX/2RX)
Ant. 1 and Ant. 2 could transmit/receive simultaneously.
For 5GHz function:
For IEEE 802.11 a mode (1TX/1RX)
Ant. 1 could transmit/receive simultaneously.
For IEEE 802.11 n/ac mode (2TX/2RX)
Ant. 1 and Ant. 2 could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From Host System			
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	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT20	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT40	0.998	0.009	n/a (DC>=0.98)	n/a (DC>=0.98)

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

1.1.5 Table for Multiple Listing

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

Brand Name	Antenna Model Name	Enclosure Color	Description
Aristotle	RFA-25-T118-U-M70	Black	All the models are identical, the difference model for difference color and enclosure served as marketing strategy.
	RFA-25-T118-M32	White	
Master Wave	98619PRSX000	Black	

1.1.6 Table for Permissive Change

This product is an extension of original one reported, Please refer original report
Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Add antennas	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands Emissions in Restricted Frequency Bands

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
- KDB 558074 D01 v05
- KDB 662911 D01 v02r01

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.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Gary	23.1°C / 61%	19/Nov/2018
Radiated	03CH09-HY	Kevin	25.7°C / 61%	16/Nov/2018

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)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 ℃	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	110V

2.2 Test Channel Mode

Test Software Version	MP_Kit_RTL11ac_8812AU_USB_v62.10_20151208

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	46
2417MHz	51
2422MHz	53
2437MHz	53
2457MHz	53
2462MHz	48
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	49
2417MHz	58
2422MHz	62
2427MHz	63
2437MHz	63
2447MHz	63
2452MHz	61
2457MHz	59
2462MHz	50
802.11n HT20_Nss2,(MCS8)_2TX	-
2412MHz	50,50
2417MHz	61,61
2422MHz	63,63
2437MHz	63,63
2452MHz	63,63
2457MHz	59,58
2462MHz	52,50
802.11n HT40_Nss2,(MCS8)_2TX	-

Mode	PowerSetting
2422MHz	48,47
2427MHz	55,54
2437MHz	55,54
2447MHz	55,54
2452MHz	51,50

2.3 The Worst Case Measurement Configuration

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	**Y Plane**
	
Worst Planes of EUT	V

2.4 Support Equipment

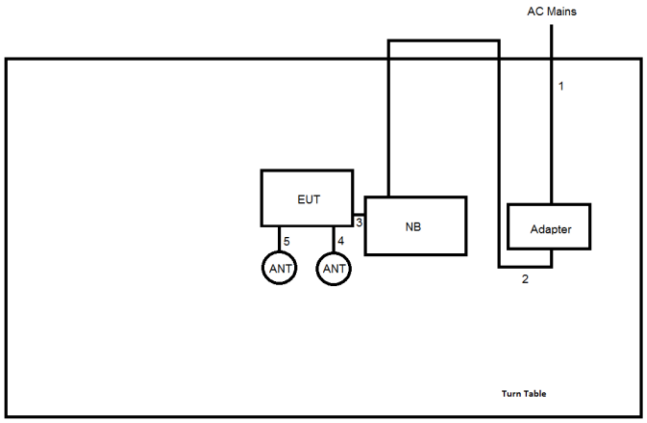
Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	R33002 / DOC
2	Adapter for NB	DELL	HA65NM130	R35737 / DOC
3	Fixture	-	-	-

Note: Support equipment No.3 was provided by customer.

Support Equipment – Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5520	-
2	Adapter	DELL	LA90PS0-00	-

2.5 Test Setup Diagram

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	2.0	-
3	USB Cable	No	0.05	-
4	Ipex Cable	No	0.12	-
5	Ipex Cable	No	0.12	-

3 Transmitter Test Result

3.1 DTS Bandwidth

3.1.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

3.1.2 Measuring Instruments

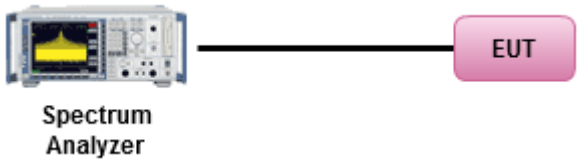
Refer a test equipment and calibration data table in this test report.

3.1.3 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.

3.1.4 Test Setup

Emission Bandwidth



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 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): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ dBm		
	▪ Smart antenna system (SAS)		
		- Single beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Overlap beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Aggregate power on all beams: $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX} + 8])$ 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.			

3.2.2 Measuring Instruments

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

3.2.3 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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

Test Setup

Maximum Conducted Output Power (Power Meter)


3.2.4 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Power Spectral Density

3.3.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

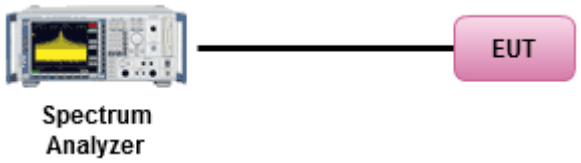
3.3.2 Measuring Instruments

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

3.3.3 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) Method PKPSD.	
▪ 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.

3.3.4 Test Setup

Power Spectral Density


3.3.5 Test Result of Power Spectral Density

Refer as Appendix C

3.4 Emissions in Non-restricted Frequency Bands

3.4.1 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 PSD 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 PSD level.

3.4.2 Measuring Instruments

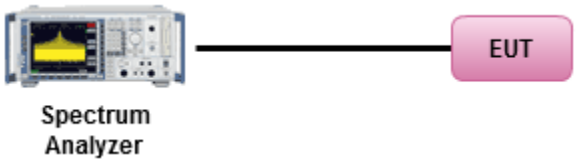
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

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

3.4.4 Test Setup

Emissions in Non-restricted Frequency Bands



3.4.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix D

3.5 Emissions in Restricted Frequency Bands

3.5.1 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.

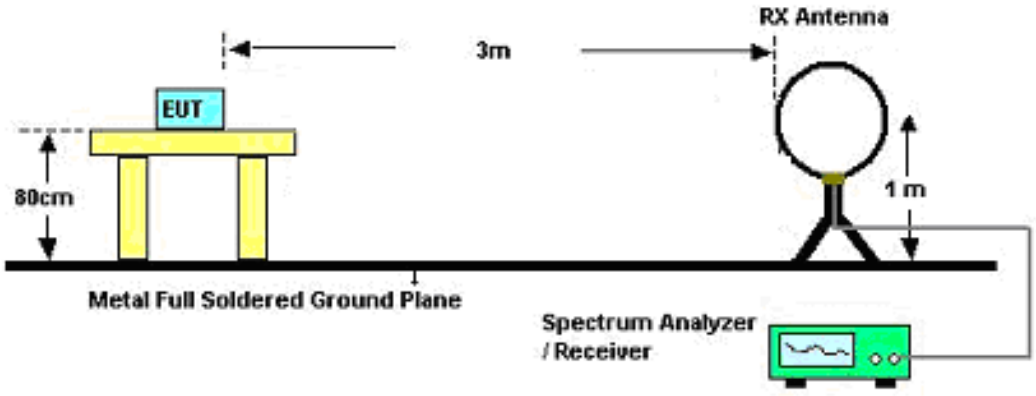
3.5.2 Measuring Instruments

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

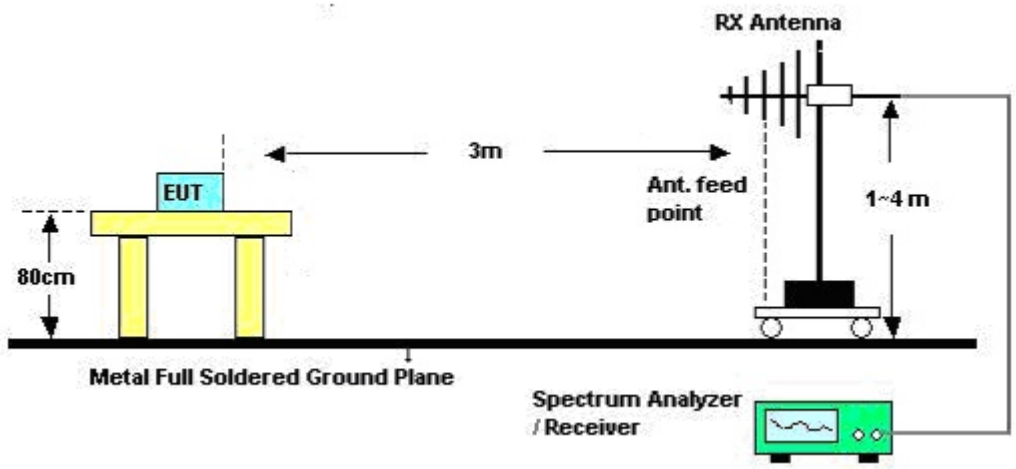
3.5.3 Test Procedures

Test Method
▪ The average emission levels shall be measured in [duty cycle ≥ 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 (i.e., 1 MHz).
▪ 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 ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.

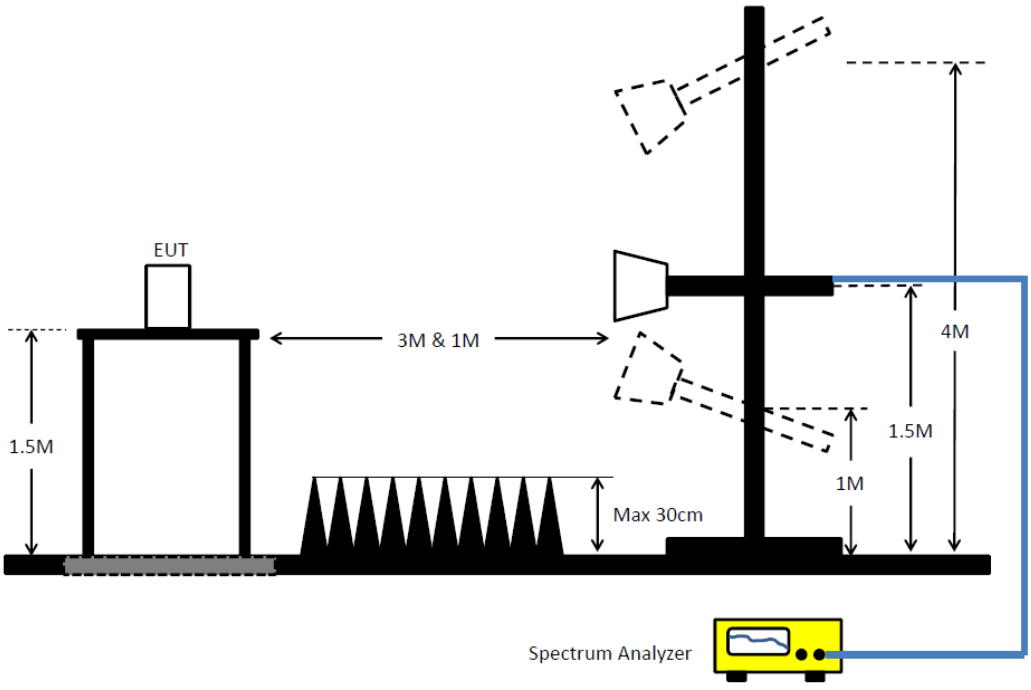
3.5.4 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz


30MHz~1GHz



Above 1GHz



3.5.5 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.

3.5.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix E

4 Test Equipment and Calibration Data

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	23/Apr/2018	22/Apr/2019
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	14/Jun/2018	13/Jun/2019
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	10/May/2018	09/May/2019
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	27/Apr/2018	26/Apr/2019
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	31/Jul/2018	30/Jul/2019
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	30/Apr/2018	29/Apr/2019
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170614	18GHz~40GHz	09/Feb/2018	08/Feb/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019
RF Cable-R03m	Jye Bao	RG142	CB031	9kHz ~ 1GHz	1/Feb/2018	31/Jan/2019
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	14/Mar/2018	13/Mar/2019
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	02/Feb/2018	01/Feb/2019
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	10/Apr/2018	09/Apr/2019

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	29/Dec/2017	28/Dec/2018
Signal Generator	Anritsu	MG3694C	163401	10MHz~40GHz	15/Jan/2018	14/Jan/2019
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz~1G	11/Jan/2018	10/Jan/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	1G~18G	11/Jan/2018	10/Jan/2019
Cable 0.5m	HUBER	MY10715/4	RF Cable - 06	30MHz~1G	11/Jan/2018	10/Jan/2019

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	10.075M	15.467M	15M5G1D	10.075M	14.793M
802.11g_Nss1,(6Mbps)_1TX	16.55M	18.691M	18M7D1D	16.5M	16.542M
802.11n HT20_Nss2,(MCS8)_2TX	17.75M	17.841M	17M8D1D	17.7M	17.641M
802.11n HT40_Nss2,(MCS8)_2TX	36.5M	36.382M	36M4D1D	36.4M	36.182M

Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k	10.075M	14.793M		
2437MHz	Pass	500k	10.075M	15.467M		
2462MHz	Pass	500k	10.075M	14.868M		
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.55M	16.542M		
2437MHz	Pass	500k	16.5M	18.691M		
2462MHz	Pass	500k	16.525M	16.592M		
802.11n HT20_Nss2,(MCS8)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.7M	17.666M	17.75M	17.691M
2437MHz	Pass	500k	17.7M	17.841M	17.75M	17.841M
2462MHz	Pass	500k	17.7M	17.641M	17.75M	17.641M
802.11n HT40_Nss2,(MCS8)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.5M	36.282M	36.4M	36.282M
2437MHz	Pass	500k	36.5M	36.282M	36.45M	36.332M
2452MHz	Pass	500k	36.5M	36.182M	36.45M	36.382M

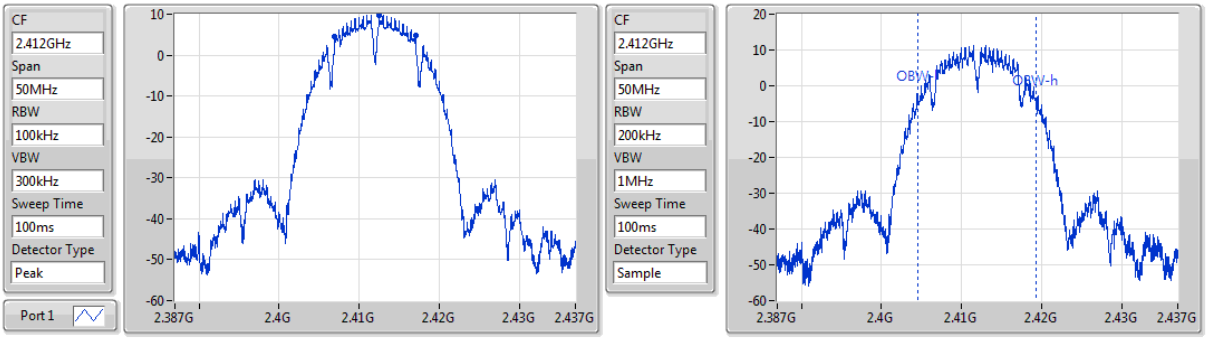
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

19/11/2018



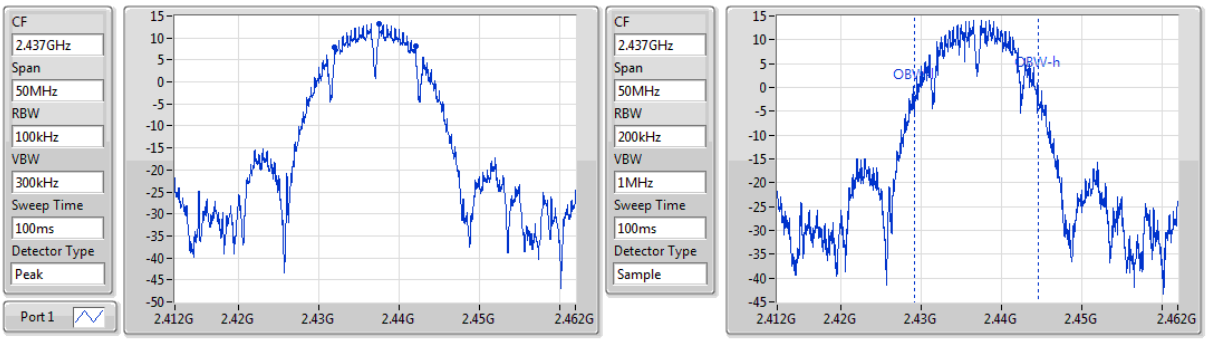
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.075M	2.40695G	2.417025G	14.793M	2.404554G	2.419346G	500k	1

802.11b_Nss1,(1Mbps)_1TX

EBW

2437MHz

19/11/2018



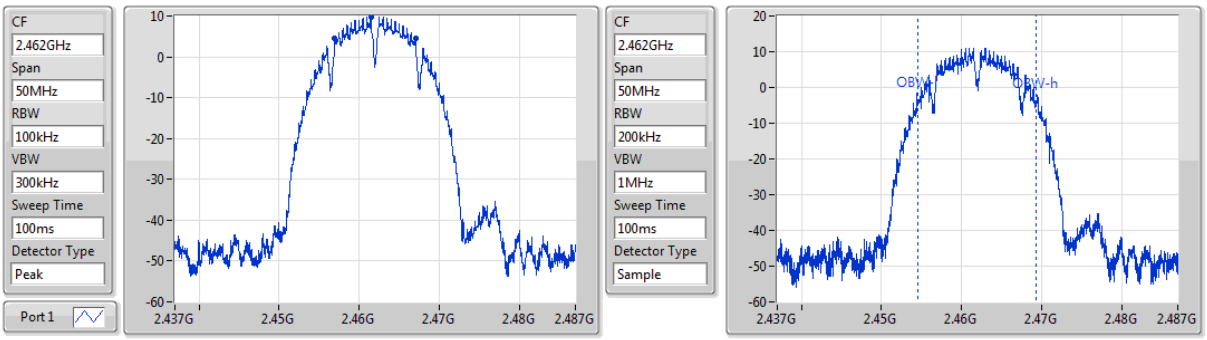
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.075M	2.43195G	2.442025G	15.467M	2.429079G	2.444546G	500k	1

802.11b_Nss1,(1Mbps)_1TX

EBW

2462MHz

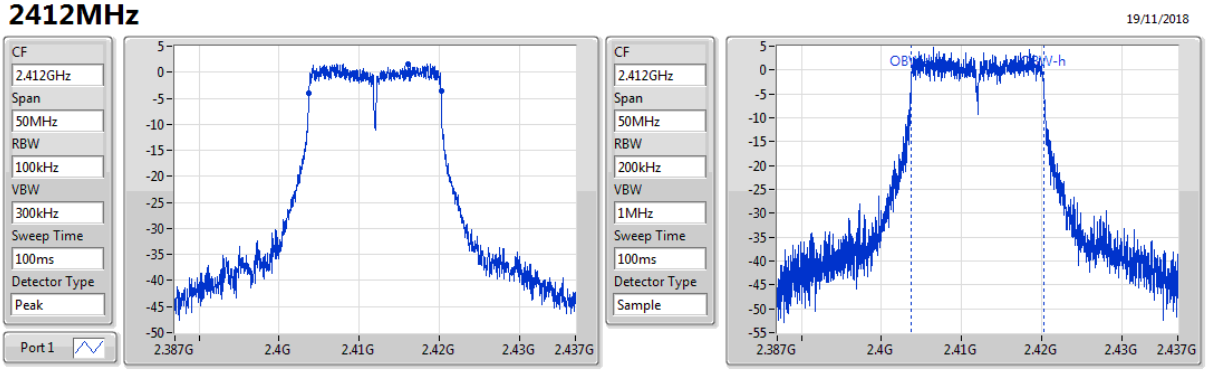
19/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.075M	2.45695G	2.467025G	14.868M	2.454504G	2.469371G	500k	1

802.11g_Nss1,(6Mbps)_1TX **EBW**

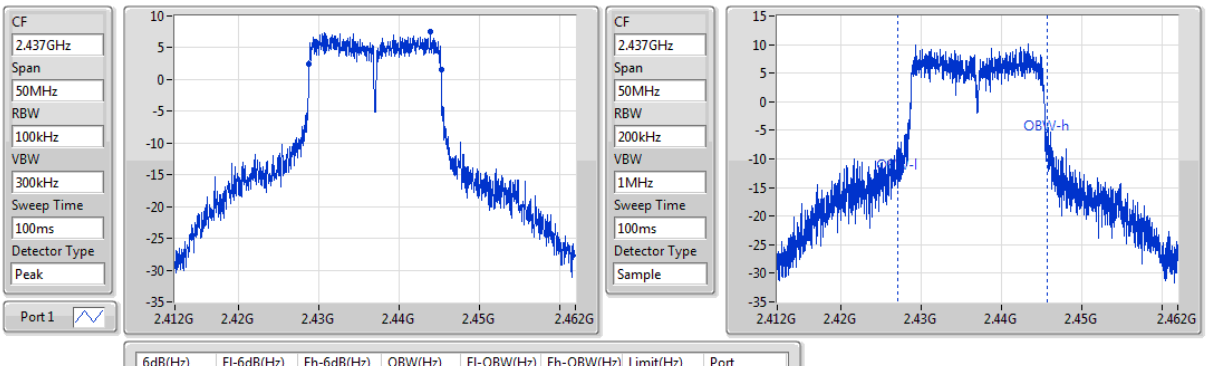
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.55M	2.4037G	2.42025G	16.542M	2.403704G	2.420246G	500k	1

802.11g_Nss1,(6Mbps)_1TX **EBW**

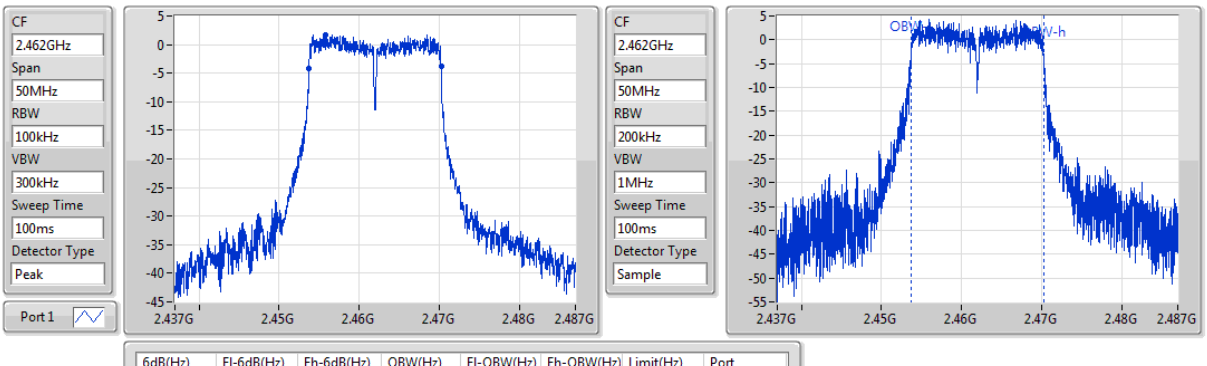
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.5M	2.428725G	2.445225G	18.691M	2.42708G	2.445771G	500k	1

802.11g_Nss1,(6Mbps)_1TX **EBW**

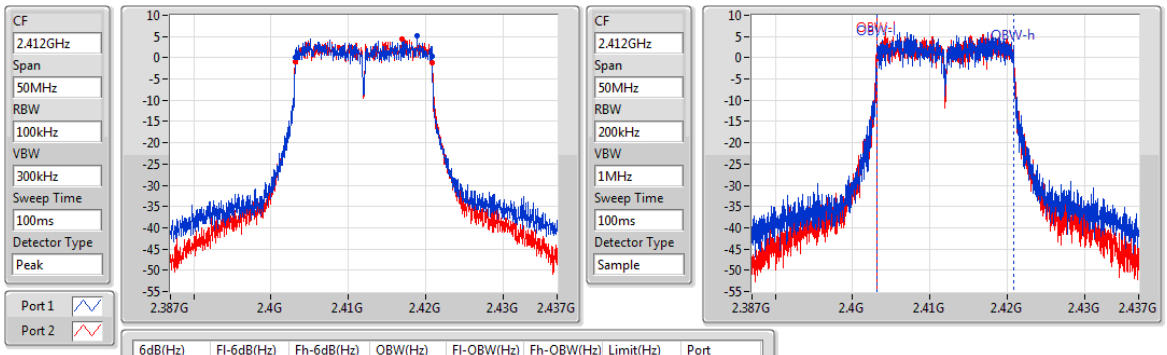
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.525M	2.453725G	2.47025G	16.592M	2.453654G	2.470246G	500k	1

802.11n HT20_Nss2,(MCS8)_2TX
EBW
2412MHz

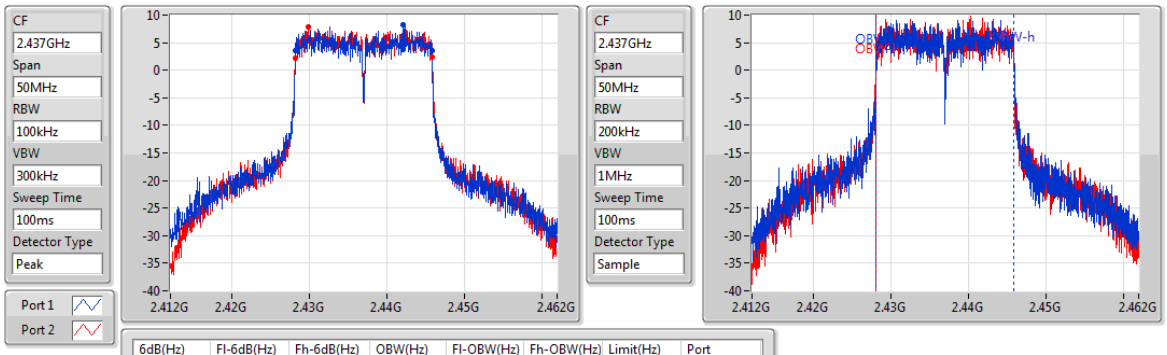
19/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.7M	2.403125G	2.420825G	17.666M	2.403129G	2.420796G	500k	1
17.75M	2.403125G	2.420875G	17.691M	2.403129G	2.420821G	500k	2

802.11n HT20_Nss2,(MCS8)_2TX
EBW
2437MHz

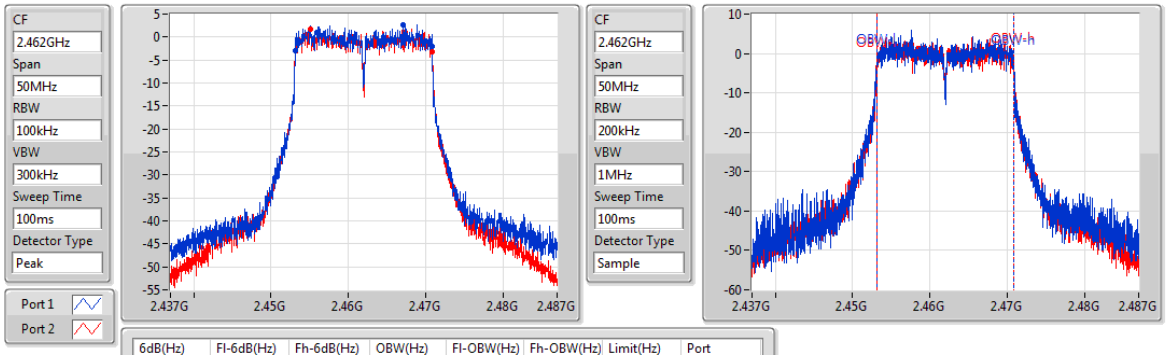
19/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.7M	2.42815G	2.44585G	17.841M	2.428054G	2.445896G	500k	1
17.75M	2.428125G	2.445875G	17.841M	2.428054G	2.445896G	500k	2

802.11n HT20_Nss2,(MCS8)_2TX
EBW
2462MHz

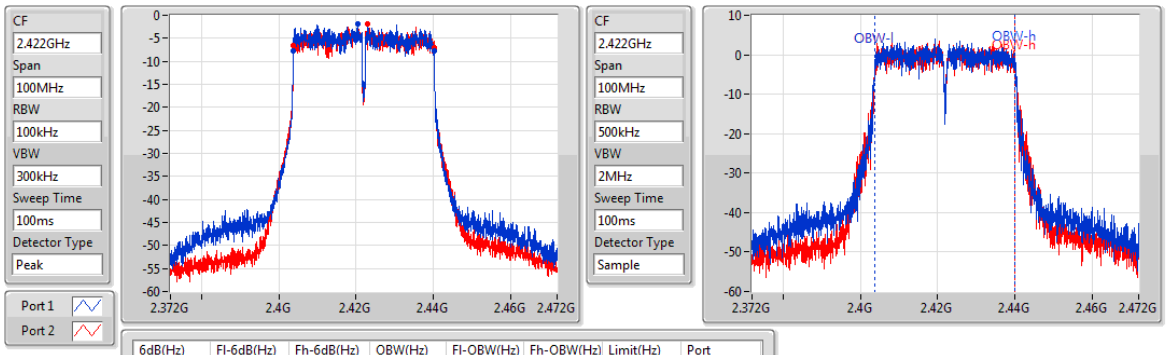
19/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.7M	2.45315G	2.47085G	17.641M	2.453154G	2.470796G	500k	1
17.75M	2.453125G	2.470875G	17.641M	2.453154G	2.470796G	500k	2

802.11n HT40_Nss2,(MCS8)_2TX
EBW
2422MHz

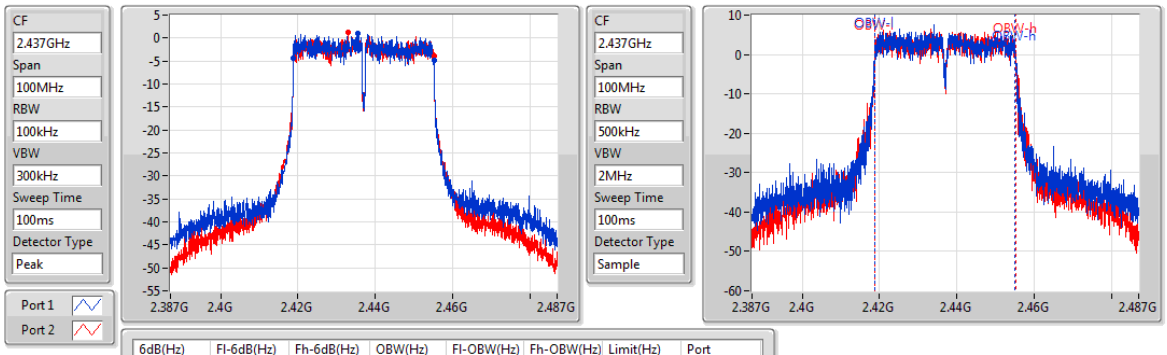
19/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.5M	2.40375G	2.44025G	36.282M	2.403809G	2.440091G	500k	1
36.4M	2.4038G	2.4402G	36.282M	2.403809G	2.440091G	500k	2

802.11n HT40_Nss2,(MCS8)_2TX
EBW
2437MHz

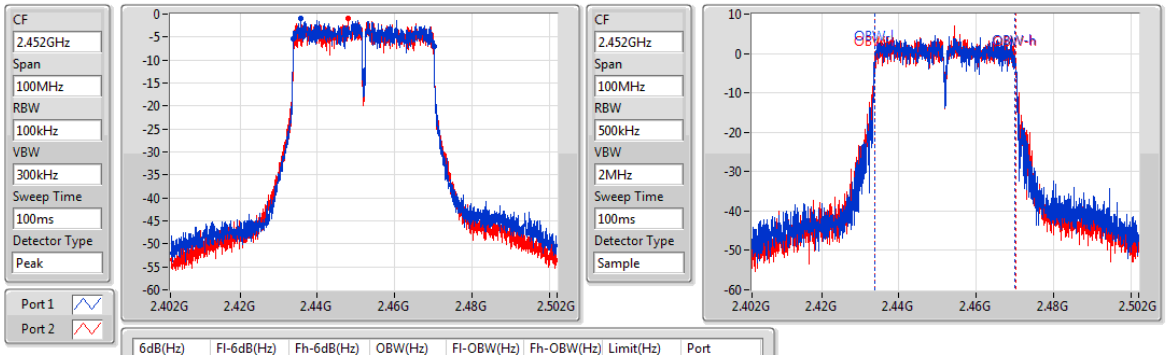
19/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.5M	2.41875G	2.45525G	36.282M	2.418809G	2.455091G	500k	1
36.45M	2.41875G	2.4552G	36.332M	2.418809G	2.455141G	500k	2

802.11n HT40_Nss2,(MCS8)_2TX
EBW
2452MHz

19/11/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.5M	2.43375G	2.47025G	36.182M	2.433859G	2.470041G	500k	1
36.45M	2.4338G	2.47025G	36.382M	2.433759G	2.470141G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	23.72	0.23550
802.11g_Nss1,(6Mbps)_1TX	21.91	0.15524
802.11n HT20_Nss2,(MCS8)_2TX	23.93	0.24717
802.11n HT40_Nss2,(MCS8)_2TX	19.92	0.09817

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	3.50	20.34		20.34	30.00
2422MHz	Pass	3.50	23.42		23.42	30.00
2417MHz	Pass	3.50	22.69		22.69	30.00
2437MHz	Pass	3.50	23.72		23.72	30.00
2457MHz	Pass	3.50	23.08		23.08	30.00
2462MHz	Pass	3.50	20.39		20.39	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	3.50	16.23		16.23	30.00
2417MHz	Pass	3.50	20.15		20.15	30.00
2422MHz	Pass	3.50	21.58		21.58	30.00
2427MHz	Pass	3.50	21.91		21.91	30.00
2437MHz	Pass	3.50	21.71		21.71	30.00
2447MHz	Pass	3.50	21.42		21.42	30.00
2452MHz	Pass	3.50	20.63		20.63	30.00
2457MHz	Pass	3.50	19.83		19.83	30.00
2462MHz	Pass	3.50	16.40		16.40	30.00
802.11n HT20_Nss2,(MCS8)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.50	16.97	17.25	20.12	30.00
2417MHz	Pass	3.50	20.13	20.39	23.27	30.00
2422MHz	Pass	3.50	20.77	21.07	23.93	30.00
2437MHz	Pass	3.50	20.48	20.85	23.68	30.00
2452MHz	Pass	3.50	19.94	20.40	23.19	30.00
2457MHz	Pass	3.50	18.36	18.52	21.45	30.00
2462MHz	Pass	3.50	15.51	15.23	18.38	30.00
802.11n HT40_Nss2,(MCS8)_2TX	-	-	-	-	-	-
2422MHz	Pass	3.50	13.64	13.60	16.63	30.00
2427MHz	Pass	3.50	16.92	16.90	19.92	30.00
2437MHz	Pass	3.50	16.80	16.85	19.84	30.00
2447MHz	Pass	3.50	16.62	16.70	19.67	30.00
2452MHz	Pass	3.50	14.69	14.85	17.78	30.00

DG = Directional Gain; **Port X** = Port X output power
Note : Conducted average output power is for reference only

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-7.16
802.11g_Nss1,(6Mbps)_1TX	-7.60
802.11n HT20_Nss2,(MCS8)_2TX	-3.77
802.11n HT40_Nss2,(MCS8)_2TX	-9.65

RBW=3kHz.

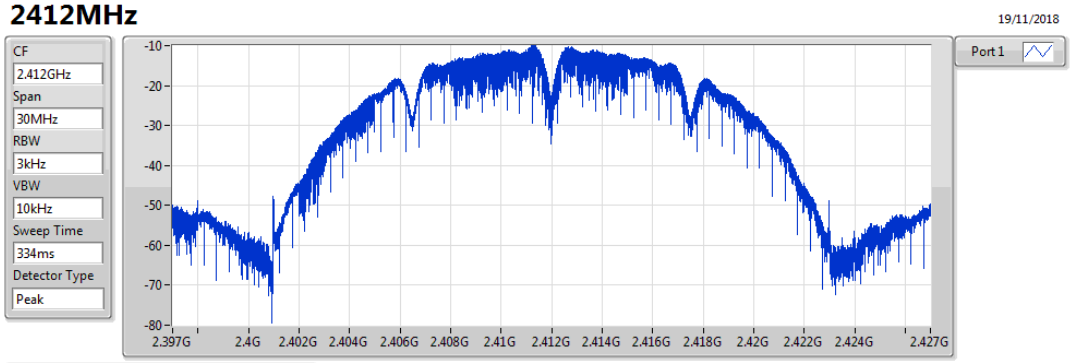
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	3.50	-10.29		-10.29	8.00
2437MHz	Pass	3.50	-7.16		-7.16	8.00
2462MHz	Pass	3.50	-10.48		-10.48	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	3.50	-13.29		-13.29	8.00
2437MHz	Pass	3.50	-7.60		-7.60	8.00
2462MHz	Pass	3.50	-13.03		-13.03	8.00
802.11n HT20_Nss2,(MCS8)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.50	-9.97	-10.56	-8.07	8.00
2437MHz	Pass	3.50	-6.17	-6.47	-3.77	8.00
2462MHz	Pass	3.50	-11.40	-12.39	-9.47	8.00
802.11n HT40_Nss2,(MCS8)_2TX	-	-	-	-	-	-
2422MHz	Pass	3.50	-15.25	-15.67	-13.17	8.00
2437MHz	Pass	3.50	-11.84	-12.44	-9.65	8.00
2452MHz	Pass	3.50	-13.93	-14.58	-11.44	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 Xpower density;

802.11b_Nss1,(1Mbps)_1TX **PSD**

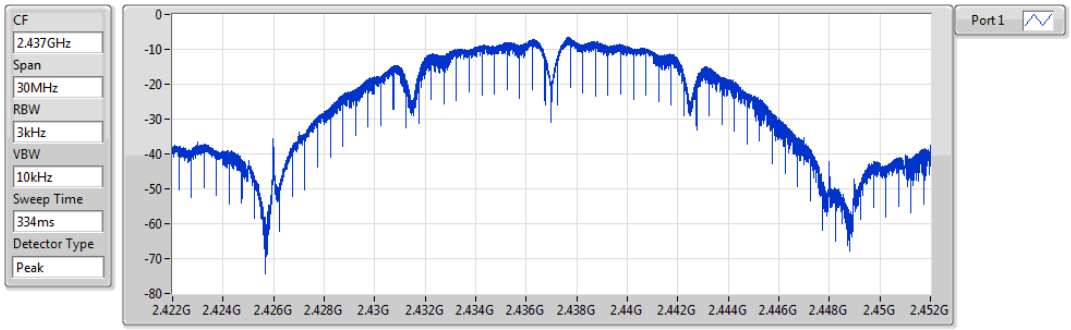
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.29	-10.29	-10.29

802.11b_Nss1,(1Mbps)_1TX **PSD**

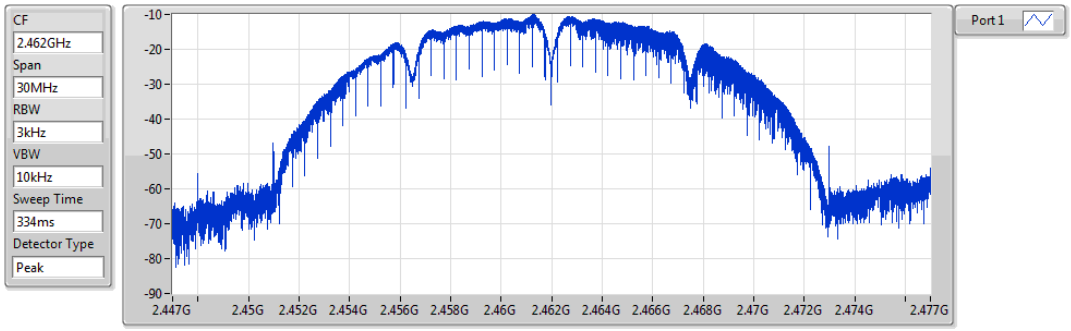
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.16	-7.16	-7.16

802.11b_Nss1,(1Mbps)_1TX **PSD**

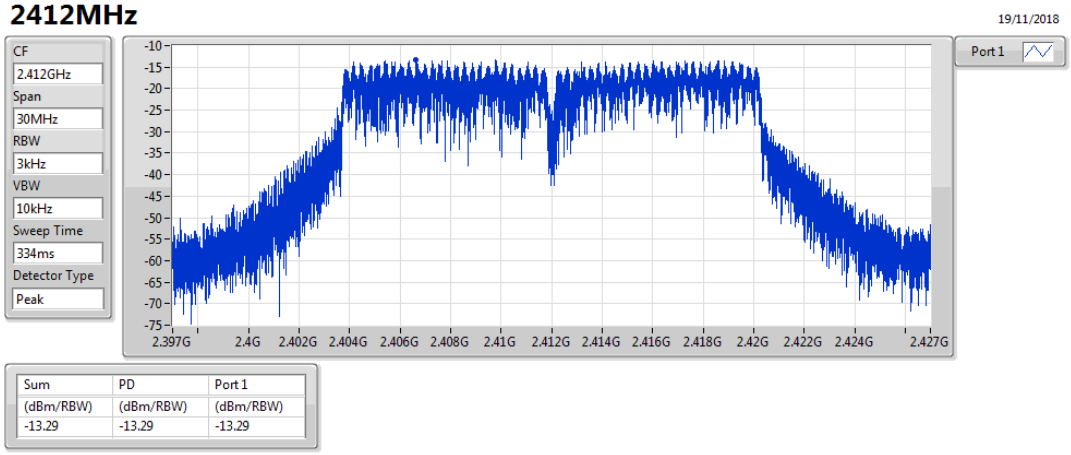
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.48	-10.48	-10.48

802.11g_Nss1,(6Mbps)_1TX **PSD**

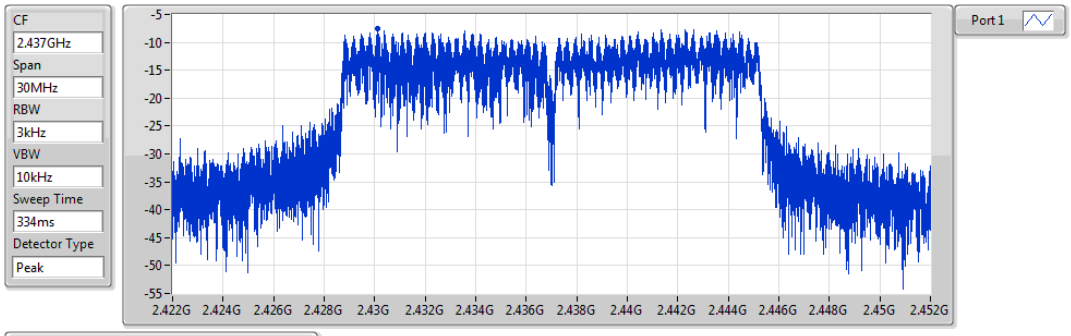
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.29	-13.29	-13.29

802.11g_Nss1,(6Mbps)_1TX **PSD**

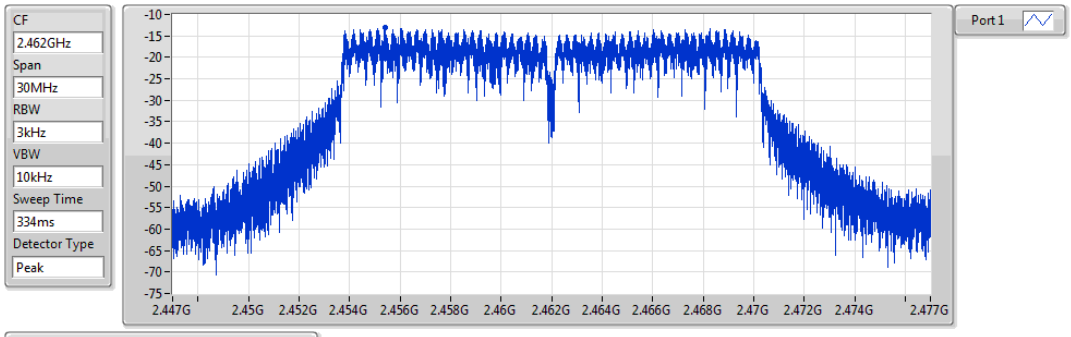
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.60	-7.60	-7.60

802.11g_Nss1,(6Mbps)_1TX **PSD**

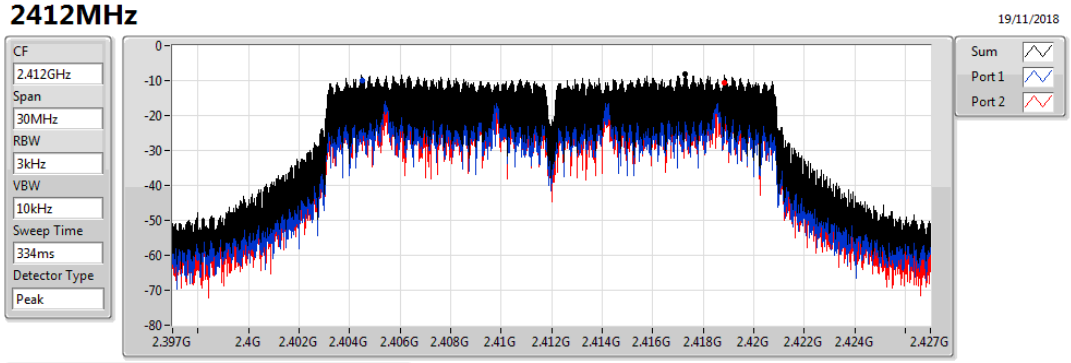
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.03	-13.03	-13.03

802.11n HT20_Nss2,(MCS8)_2TX PSD

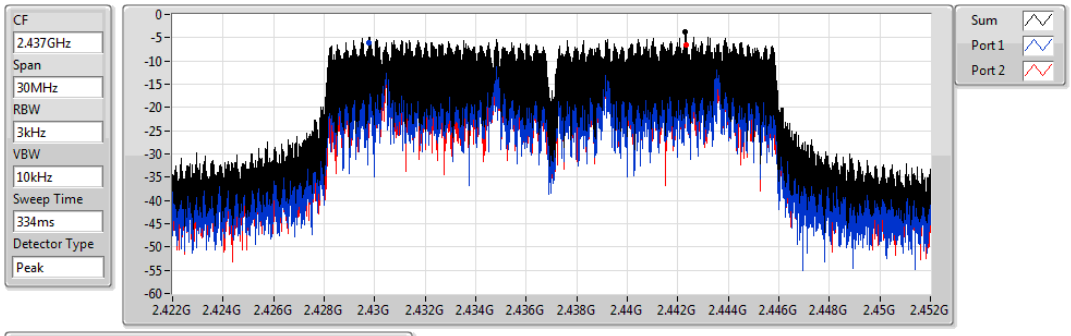
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.07	-8.07	-9.97	-10.56

802.11n HT20_Nss2,(MCS8)_2TX PSD

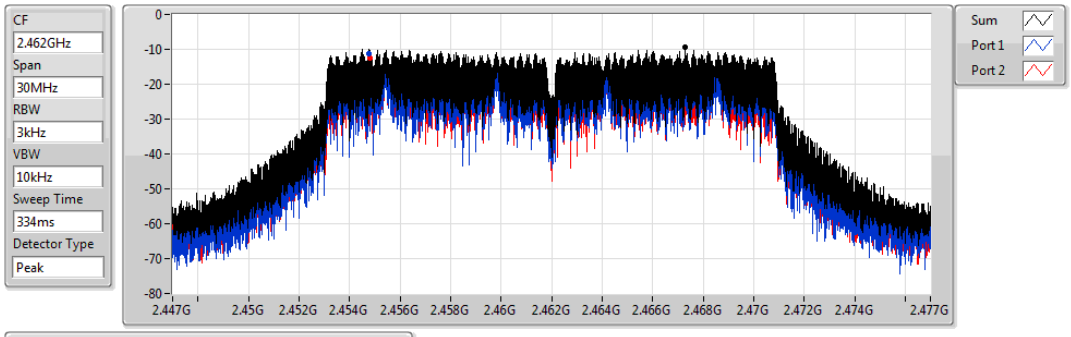
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.77	-3.77	-6.17	-6.47

802.11n HT20_Nss2,(MCS8)_2TX PSD

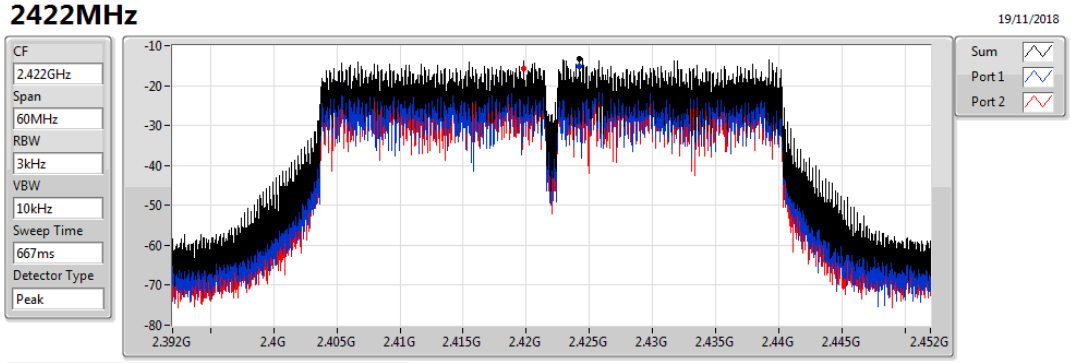
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.47	-9.47	-11.40	-12.39

802.11n HT40_Nss2,(MCS8)_2TX **PSD**

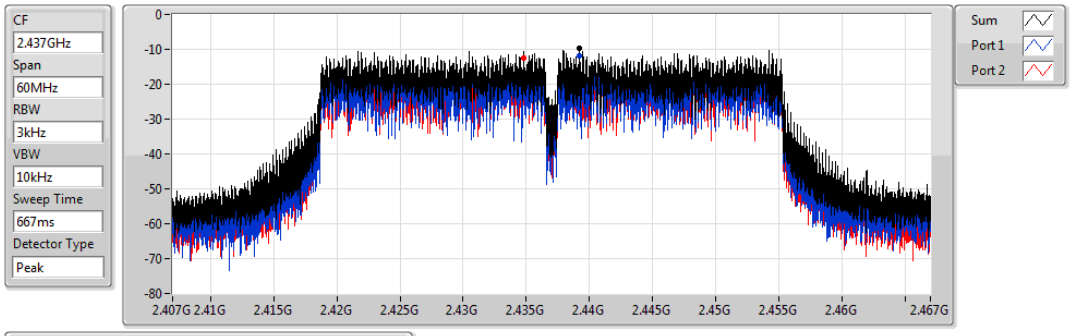
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.17	-13.17	-15.25	-15.67

802.11n HT40_Nss2,(MCS8)_2TX **PSD**

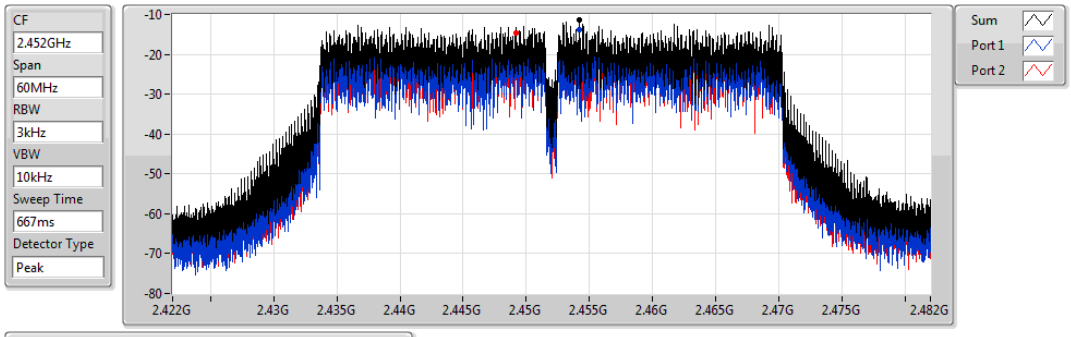
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.65	-9.65	-11.84	-12.44

802.11n HT40_Nss2,(MCS8)_2TX **PSD**

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.44	-11.44	-13.93	-14.58

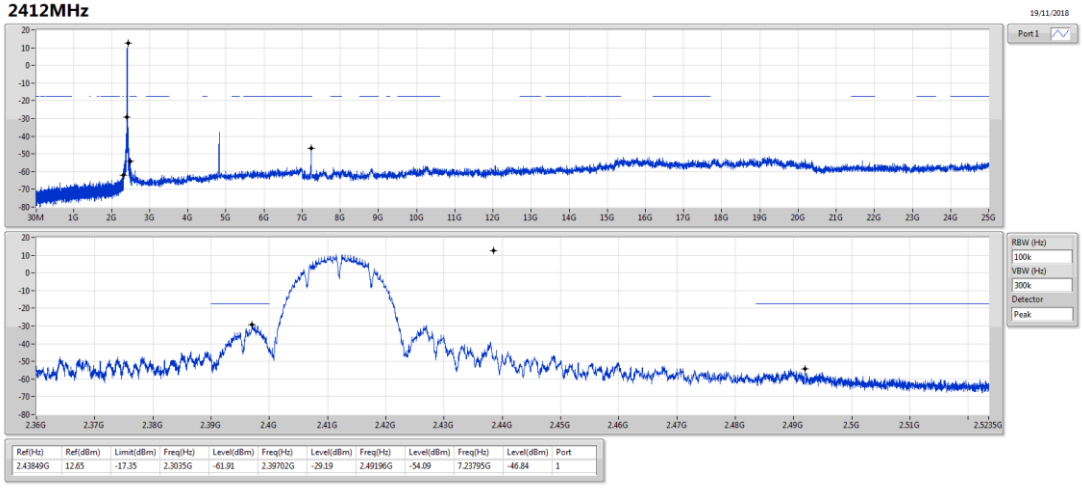
Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port (Hz)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.43849G	12.65	-17.35	2.3035G	-61.91	2.39702G	-29.19	2.49196G	-54.09	7.23795G	-46.84	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43073G	6.67	-23.33	2.30437G	-62.43	2.39958G	-27.57	2.49196G	-54.66	16.3606G	-51.88	1
802.11n HT20_Nss2,(MCS8)_2TX	Pass	2.44392G	7.92	-22.08	639.88M	-62.08	2.39988G	-33.39	2.4861G	-54.43	17.59118G	-52.87	2
802.11n HT40_Nss2,(MCS8)_2TX	Pass	2.4248G	1.09	-28.91	640M	-61.82	2.39996G	-36.37	2.48506G	-57.51	17.23136G	-52.80	2

Result

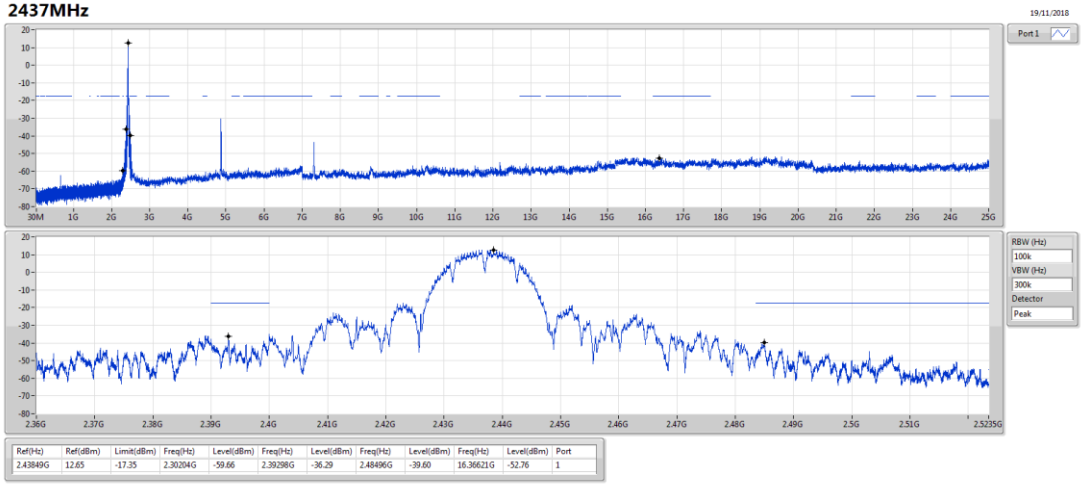
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.43849G	12.65	-17.35	2.3035G	-61.91	2.39702G	-29.19	2.49196G	-54.09	7.23795G	-46.84	1
2437MHz_TnomVnom	Pass	2.43849G	12.65	-17.35	2.30204G	-59.66	2.39298G	-36.29	2.48496G	-39.60	16.36621G	-52.76	1
2462MHz_TnomVnom	Pass	2.43849G	12.65	-17.35	2.30117G	-63.66	2.39992G	-53.59	2.48798G	-44.90	16.31002G	-52.65	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.43073G	6.67	-23.33	2.30437G	-62.43	2.39958G	-27.57	2.49196G	-54.66	16.3606G	-51.88	1
2437MHz_TnomVnom	Pass	2.43073G	6.67	-23.33	2.30583G	-60.22	2.39984G	-32.61	2.48518G	-38.01	16.33812G	-52.56	1
2462MHz_TnomVnom	Pass	2.43073G	6.67	-23.33	2.30495G	-62.27	2.39998G	-54.28	2.48388G	-35.64	15.21429G	-51.49	1
802.11n HT20_Nss2,(MCS8)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.44392G	7.92	-22.08	2.30029G	-63.66	2.39986G	-34.38	2.49198G	-53.73	16.32126G	-52.50	1
2412MHz_TnomVnom	Pass	2.44392G	7.92	-22.08	639.88M	-62.08	2.39988G	-33.39	2.4861G	-54.43	17.59118G	-52.87	2
2437MHz_TnomVnom	Pass	2.44392G	7.92	-22.08	2.30758G	-62.91	2.39986G	-36.68	2.48358G	-39.47	15.34353G	-52.05	1
2437MHz_TnomVnom	Pass	2.44392G	7.92	-22.08	2.30758G	-62.12	2.39948G	-45.13	2.48386G	-42.81	15.23115G	-52.04	2
2462MHz_TnomVnom	Pass	2.44392G	7.92	-22.08	2.30204G	-63.38	2.39046G	-56.24	2.48352G	-39.96	16.3325G	-52.43	1
2462MHz_TnomVnom	Pass	2.44392G	7.92	-22.08	639.88M	-62.01	2.39006G	-55.82	2.48384G	-47.86	16.45331G	-52.36	2
802.11n HT40_Nss2,(MCS8)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	2.4248G	1.09	-28.91	2.30683G	-63.85	2.39996G	-38.25	2.4861G	-57.12	15.25695G	-52.11	1
2422MHz_TnomVnom	Pass	2.4248G	1.09	-28.91	640M	-61.82	2.39996G	-36.37	2.48506G	-57.51	17.23136G	-52.80	2
2437MHz_TnomVnom	Pass	2.4248G	1.09	-28.91	2.3097G	-62.41	2.39812G	-37.17	2.48446G	-41.82	16.43767G	-52.76	1
2437MHz_TnomVnom	Pass	2.4248G	1.09	-28.91	640M	-62.12	2.39604G	-41.85	2.48574G	-46.69	15.34389G	-52.58	2
2452MHz_TnomVnom	Pass	2.4248G	1.09	-28.91	2.30941G	-63.84	2.39016G	-51.15	2.48514G	-42.75	16.34232G	-51.29	1
2452MHz_TnomVnom	Pass	2.4248G	1.09	-28.91	640M	-62.96	2.39856G	-56.45	2.4879G	-44.89	15.29902G	-52.08	2

802.11b_Nss1,(1Mbps)_1TX
2412MHz
CSE NdB



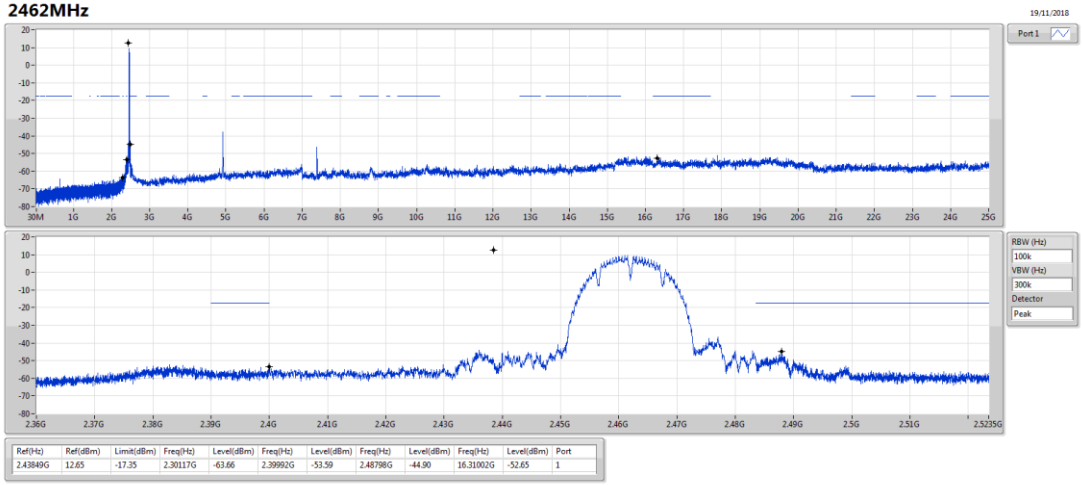
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)
2.43849G	12.65	-17.35	2.3035G	-61.91	2.39702G	-29.19	2.49196G	-54.09	7.23795G	-46.84

802.11b_Nss1,(1Mbps)_1TX
2437MHz
CSE NdB



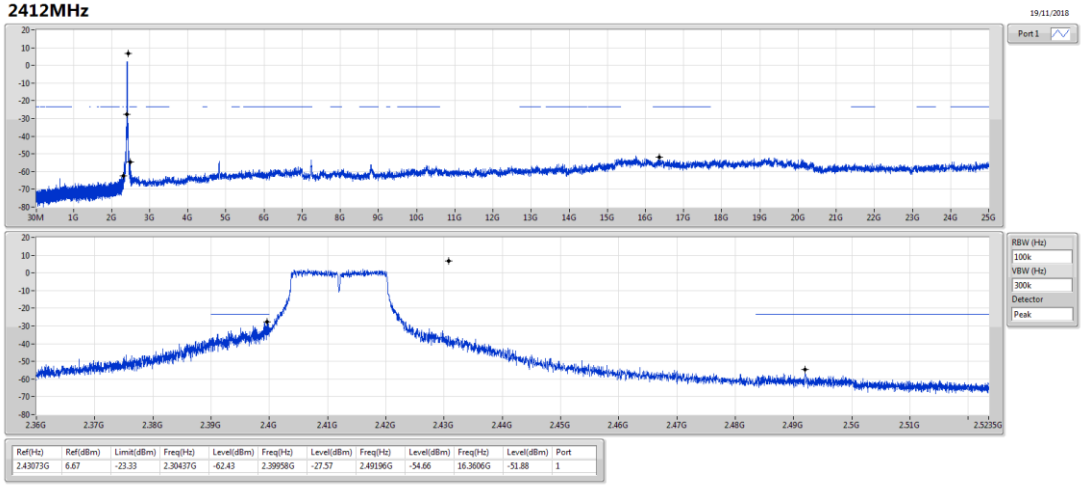
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43849G	12.65	-17.35	2.30204G	-59.66	2.39298G	-36.29	2.48496G	-39.60	16.36621G	-52.76	1

802.11b_Nss1,(1Mbps)_1TX
2462MHz
CSE NdB



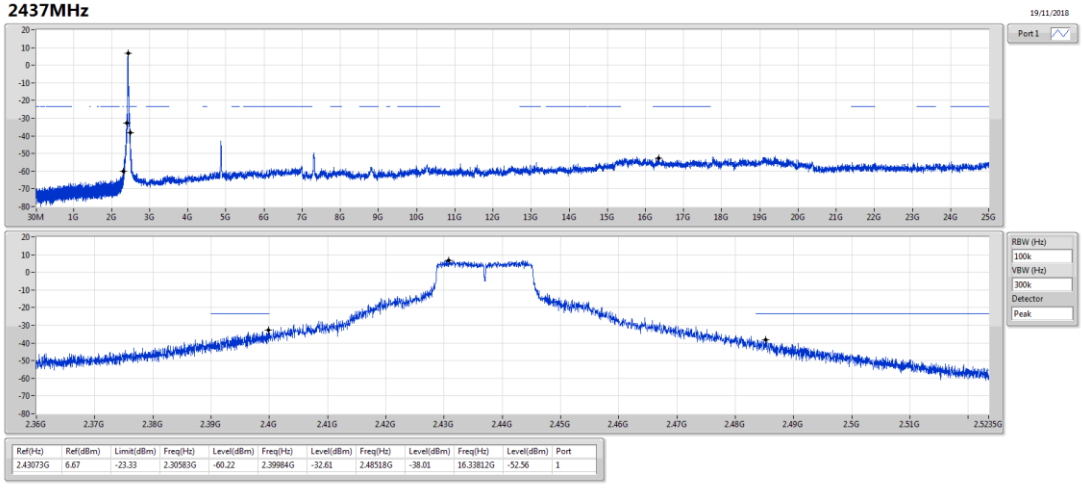
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43849G	12.65	-17.35	2.30117G	-63.66	2.39992G	-53.59	2.48798G	-44.90	16.31002G	-52.65	1

802.11g_Nss1,(6Mbps)_1TX
2412MHz
CSE NdB



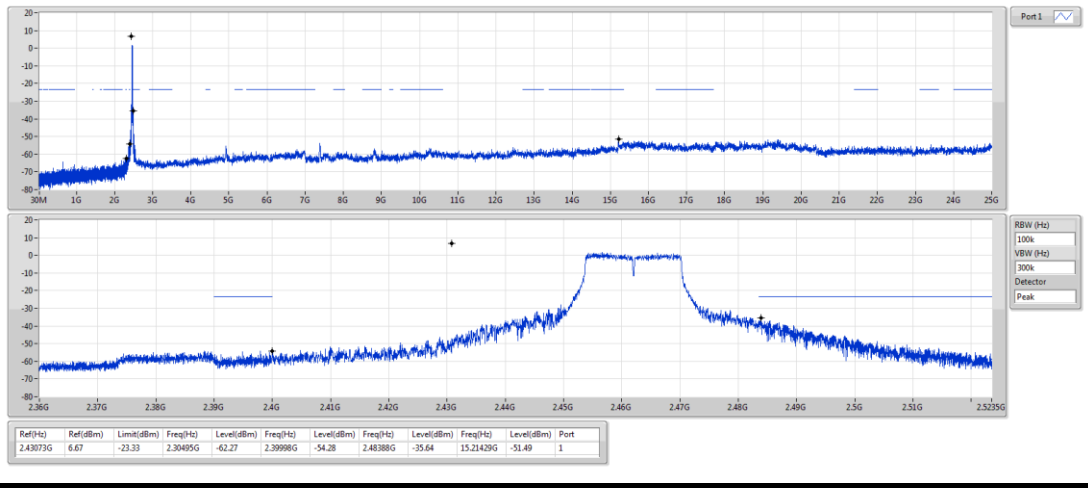
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43073G	6.67	-23.33	2.30437G	-62.43	2.39958G	-27.57	2.49196G	-54.66	16.3606G	-51.88	1

802.11g_Nss1,(6Mbps)_1TX
2437MHz
CSE NdB



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43073G	6.67	-23.33	2.30583G	-60.22	2.39984G	-32.61	2.48518G	-38.01	16.33812G	-52.56	1

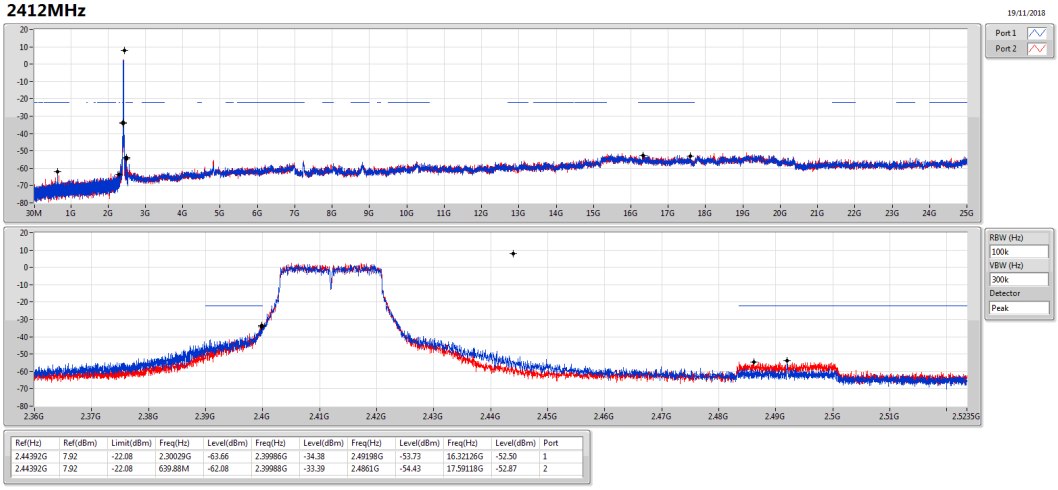
802.11g_Nss1,(6Mbps)_1TX
2462MHz
CSE NdB



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43073G	6.67	-23.33	2.30495G	-62.27	2.39998G	-54.28	2.48388G	-35.64	15.21429G	-51.49	1

802.11n HT20_Nss2,(MCS8)_2TX **CSE NdB**

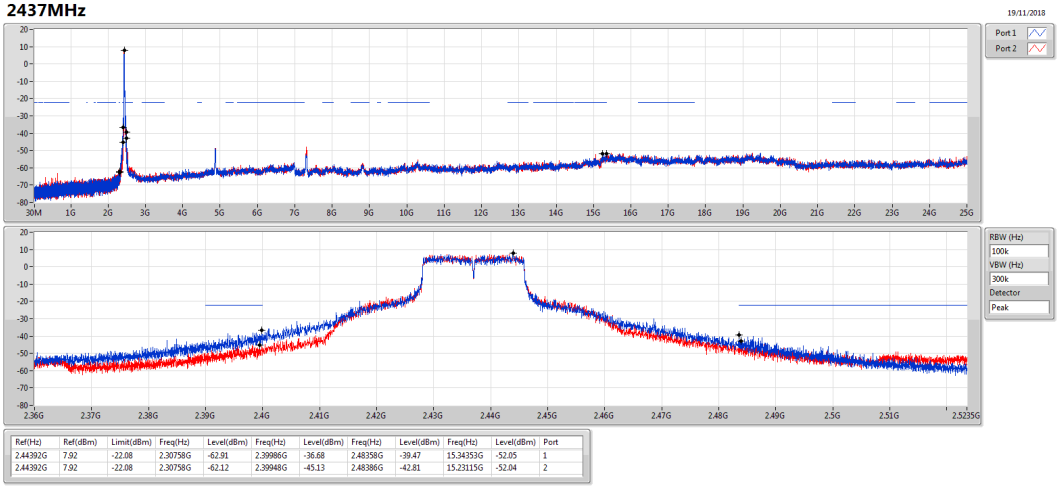
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44392G	7.92	-22.08	2.30029G	-63.66	2.39986G	-34.38	2.49198G	-53.73	16.32126G	-52.50	1
2.44392G	7.92	-22.08	639.88M	-62.08	2.39988G	-33.39	2.4861G	-54.43	17.59118G	-52.87	2

802.11n HT20_Nss2,(MCS8)_2TX **CSE NdB**

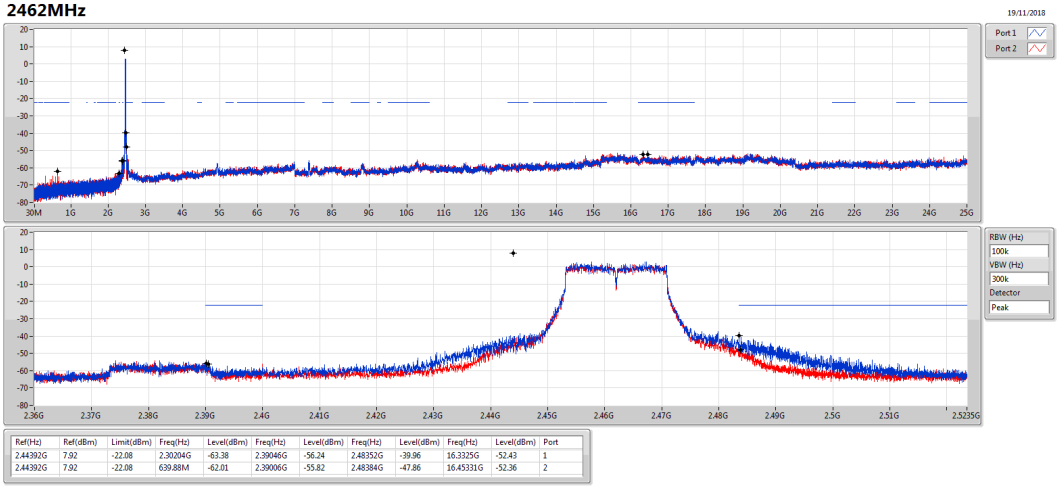
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44392G	7.92	-22.08	2.30758G	-62.91	2.39986G	-36.68	2.48358G	-39.47	15.34353G	-52.05	1
2.44392G	7.92	-22.08	2.30758G	-62.12	2.39948G	-45.13	2.48386G	-42.81	15.23115G	-52.04	2

802.11n HT20_Nss2,(MCS8)_2TX **CSE NdB**

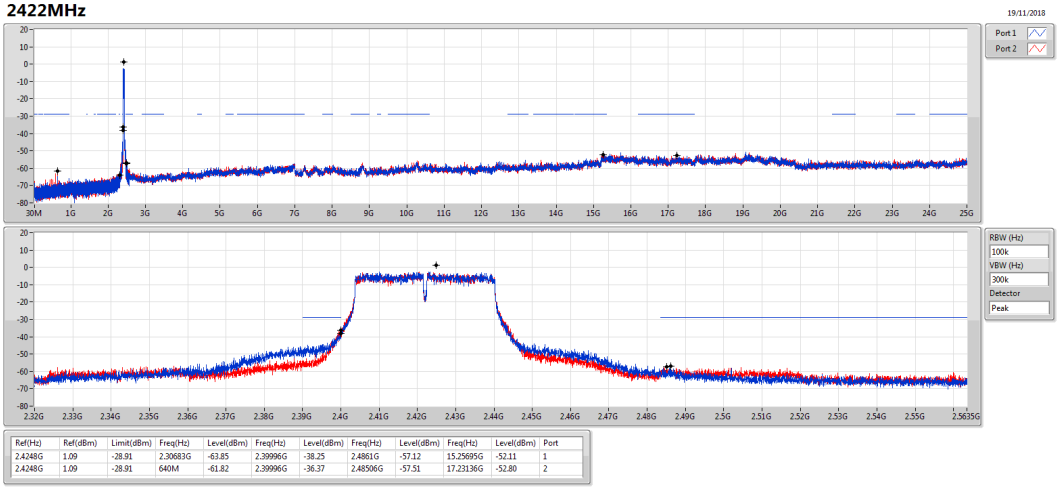
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44392G	7.92	-22.08	2.30204G	-63.38	2.39046G	-56.24	2.48352G	-39.96	16.3325G	-52.43	1
2.44392G	7.92	-22.08	639.88M	-62.01	2.39006G	-55.82	2.48384G	-47.86	16.45331G	-52.36	2

802.11n HT40_Nss2,(MCS8)_2TX **CSE NdB**

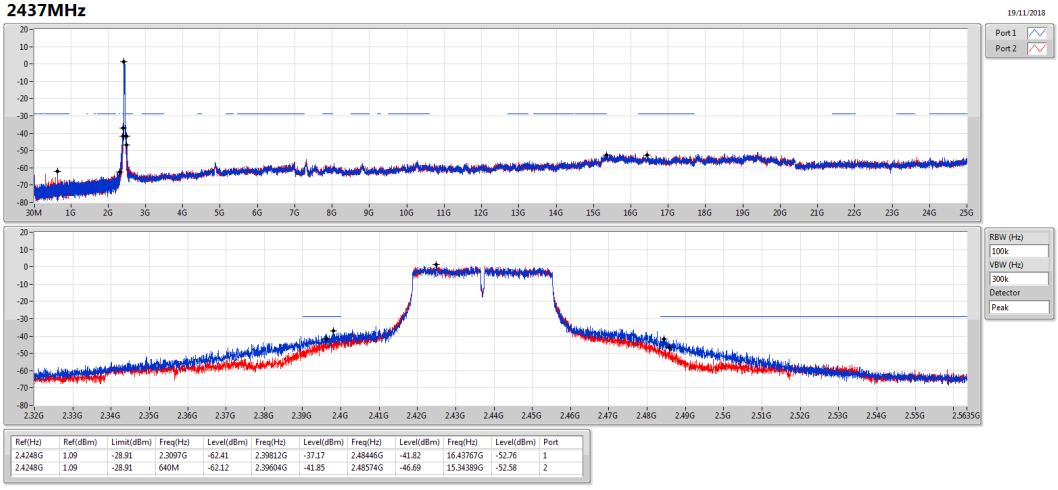
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4248G	1.09	-28.91	2.30683G	-63.85	2.39996G	-38.25	2.4861G	-57.12	15.25695G	-52.11	1
2.4248G	1.09	-28.91	640M	-61.82	2.39996G	-36.37	2.48506G	-57.51	17.23136G	-52.80	2

802.11n HT40_Nss2,(MCS8)_2TX **CSE NdB**

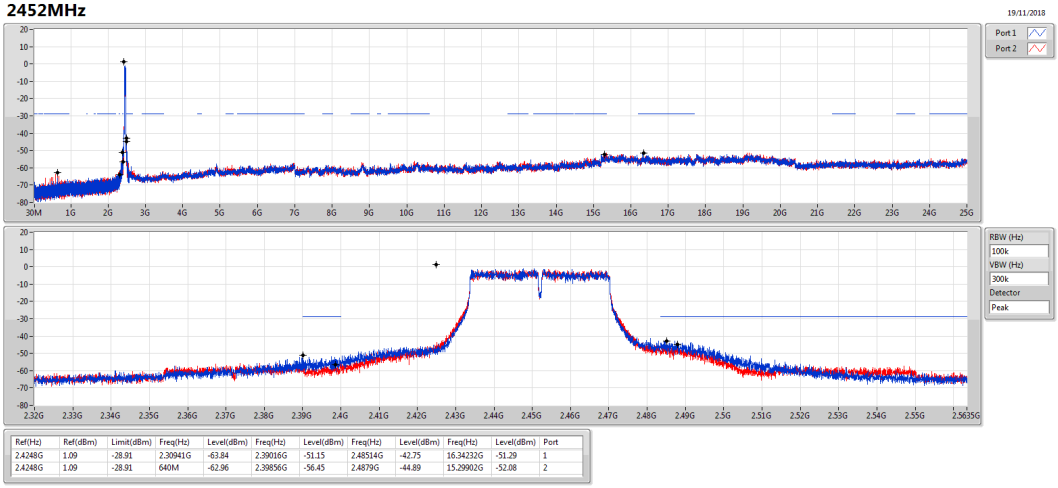
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4248G	1.09	-28.91	2.3097G	-62.41	2.39812G	-37.17	2.48446G	-41.82	16.43767G	-52.76	1
2.4248G	1.09	-28.91	640M	-62.12	2.39604G	-41.85	2.48574G	-46.69	15.34389G	-52.58	2

802.11n HT40_Nss2,(MCS8)_2TX **CSE NdB**

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4248G	1.09	-28.91	2.30941G	-63.84	2.39016G	-51.15	2.48514G	-42.75	16.34232G	-51.29	1
2.4248G	1.09	-28.91	640M	-62.96	2.39856G	-56.45	2.4879G	-44.89	15.29902G	-52.08	2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11n HT40_Nss2,(MCS8)_2TX	Pass	PK	125.06M	40.18	43.50	-3.32	-19.21	3	Horizontal	0	1.00	-

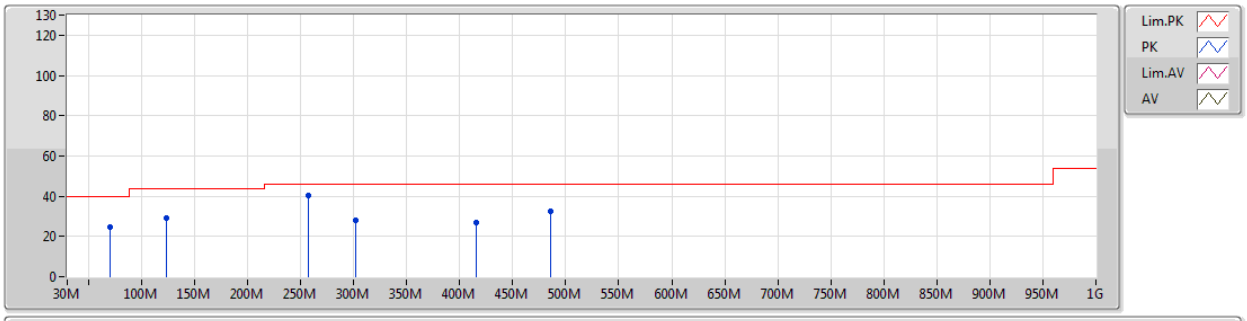
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT40_Nss2,(MCS8)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	70.74M	24.93	40.00	-15.07	-25.07	3	Vertical	360	3.00	-
2437MHz	Pass	PK	123.12M	29.38	43.50	-14.12	-19.24	3	Vertical	360	3.00	-
2437MHz	Pass	PK	256.98M	40.19	46.00	-5.81	-16.11	3	Vertical	360	3.00	-
2437MHz	Pass	PK	301.6M	27.83	46.00	-18.17	-16.63	3	Vertical	360	3.00	-
2437MHz	Pass	PK	416.06M	26.88	46.00	-19.12	-13.38	3	Vertical	360	3.00	-
2437MHz	Pass	PK	485.9M	32.45	46.00	-13.55	-12.30	3	Vertical	360	3.00	-
2437MHz	Pass	PK	62.98M	24.45	40.00	-15.55	-25.58	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	125.06M	40.18	43.50	-3.32	-19.21	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	214.3M	29.65	43.50	-13.85	-20.93	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	375.32M	30.53	46.00	-15.47	-14.85	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	416.06M	30.02	46.00	-15.98	-13.38	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	474.26M	30.64	46.00	-15.36	-12.47	3	Horizontal	0	1.00	-

802.11n HT40_Nss2,(MCS8)_2TX

2437MHz_USB

16/11/2018

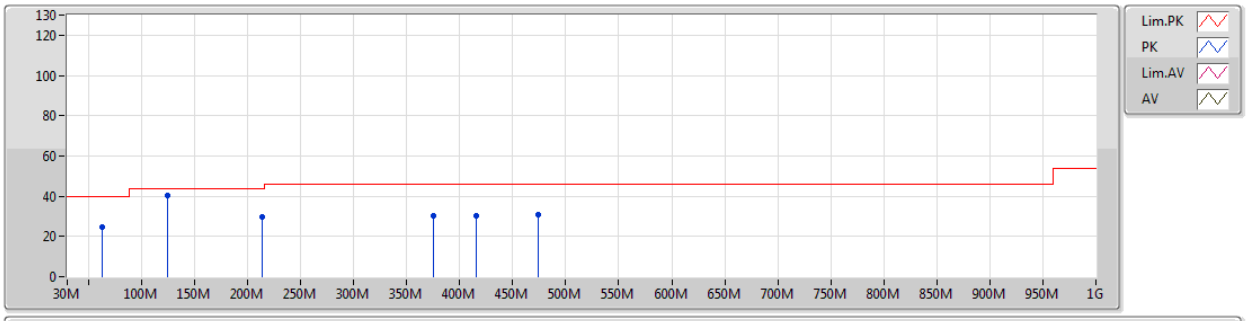


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	70.74M	24.93	40.00	-15.07	-25.07	3	Vertical	360	3.00	-
PK	123.12M	29.38	43.50	-14.12	-19.24	3	Vertical	360	3.00	-
PK	256.98M	40.19	46.00	-5.81	-16.11	3	Vertical	360	3.00	-
PK	301.6M	27.83	46.00	-18.17	-16.63	3	Vertical	360	3.00	-
PK	416.06M	26.88	46.00	-19.12	-13.38	3	Vertical	360	3.00	-
PK	485.9M	32.45	46.00	-13.55	-12.30	3	Vertical	360	3.00	-

802.11n HT40_Nss2,(MCS8)_2TX

2437MHz_USB

16/11/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	62.98M	24.45	40.00	-15.55	-25.58	3	Horizontal	0	1.00	-
PK	125.06M	40.18	43.50	-3.32	-19.21	3	Horizontal	0	1.00	-
PK	214.3M	29.65	43.50	-13.85	-20.93	3	Horizontal	0	1.00	-
PK	375.32M	30.53	46.00	-15.47	-14.85	3	Horizontal	0	1.00	-
PK	416.06M	30.02	46.00	-15.98	-13.38	3	Horizontal	0	1.00	-
PK	474.26M	30.64	46.00	-15.36	-12.47	3	Horizontal	0	1.00	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	AV	2.4835G	53.73	54.00	-0.27	31.11	3	Vertical	256	1.50	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.3896G	53.70	54.00	-0.30	30.77	3	Vertical	283	1.50	-
802.11n HT20_Nss2,(MCS8)_2TX	Pass	AV	2.39G	53.79	54.00	-0.21	30.77	3	Vertical	0	1.28	-
802.11n HT40_Nss2,(MCS8)_2TX	Pass	AV	2.4835G	52.34	54.00	-1.66	31.11	3	Vertical	360	1.29	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3752G	48.22	54.00	-5.78	30.64	3	Vertical	319	1.37	-
2412MHz	Pass	AV	2.4112G	106.60	Inf	-Inf	30.76	3	Vertical	319	1.37	-
2412MHz	Pass	PK	2.3862G	58.63	74.00	-15.37	30.68	3	Vertical	319	1.37	-
2412MHz	Pass	PK	2.411G	110.45	Inf	-Inf	30.76	3	Vertical	319	1.37	-
2412MHz	Pass	AV	4.82398G	46.41	54.00	-7.59	6.53	3	Vertical	213	1.62	-
2412MHz	Pass	PK	4.82396G	51.42	74.00	-22.58	6.53	3	Vertical	213	1.62	-
2412MHz	Pass	AV	4.824G	38.43	54.00	-15.57	6.53	3	Horizontal	215	1.33	-
2412MHz	Pass	PK	4.82417G	47.68	74.00	-26.32	6.53	3	Horizontal	215	1.33	-
2417MHz	Pass	AV	2.3802G	53.03	54.00	-0.97	30.74	3	Vertical	288	1.50	-
2417MHz	Pass	AV	2.4162G	105.29	Inf	-Inf	30.87	3	Vertical	288	1.50	-
2417MHz	Pass	PK	2.3802G	59.88	74.00	-14.12	30.74	3	Vertical	288	1.50	-
2417MHz	Pass	PK	2.4178G	107.32	Inf	-Inf	30.87	3	Vertical	288	1.50	-
2422MHz	Pass	AV	2.3854G	47.61	54.00	-6.39	30.76	3	Vertical	232	1.15	-
2422MHz	Pass	AV	2.421G	98.81	Inf	-Inf	30.89	3	Vertical	232	1.15	-
2422MHz	Pass	PK	2.3842G	57.02	74.00	-16.98	30.76	3	Vertical	232	1.15	-
2422MHz	Pass	PK	2.4212G	100.62	Inf	-Inf	30.89	3	Vertical	232	1.15	-
2437MHz	Pass	AV	2.3782G	49.07	54.00	-4.93	30.65	3	Vertical	30	1.56	-
2437MHz	Pass	AV	2.4362G	108.97	Inf	-Inf	30.83	3	Vertical	30	1.56	-
2437MHz	Pass	AV	2.4846G	50.91	54.00	-3.09	30.97	3	Vertical	30	1.56	-
2437MHz	Pass	PK	2.3786G	58.33	74.00	-15.67	30.66	3	Vertical	30	1.56	-
2437MHz	Pass	PK	2.4362G	112.82	Inf	-Inf	30.83	3	Vertical	30	1.56	-
2437MHz	Pass	PK	2.4846G	59.44	74.00	-14.56	30.97	3	Vertical	30	1.56	-
2437MHz	Pass	AV	4.87398G	50.13	54.00	-3.87	6.65	3	Vertical	244	1.50	-
2437MHz	Pass	PK	4.87402G	53.33	74.00	-20.67	6.65	3	Vertical	244	1.50	-
2437MHz	Pass	AV	4.87397G	47.26	54.00	-6.74	6.65	3	Horizontal	232	1.17	-
2437MHz	Pass	PK	4.87397G	51.46	74.00	-22.54	6.65	3	Horizontal	232	1.17	-
2457MHz	Pass	AV	2.4578G	99.36	Inf	-Inf	31.02	3	Vertical	256	1.50	-
2457MHz	Pass	AV	2.4835G	53.73	54.00	-0.27	31.11	3	Vertical	256	1.50	-
2457MHz	Pass	PK	2.458G	101.31	Inf	-Inf	31.02	3	Vertical	256	1.50	-
2457MHz	Pass	PK	2.4835G	60.22	74.00	-13.78	31.11	3	Vertical	256	1.50	-
2462MHz	Pass	AV	2.4628G	107.53	Inf	-Inf	31.04	3	Vertical	264	1.50	-
2462MHz	Pass	AV	2.488G	50.06	54.00	-3.94	31.13	3	Vertical	264	1.50	-
2462MHz	Pass	PK	2.4628G	109.36	Inf	-Inf	31.04	3	Vertical	264	1.50	-
2462MHz	Pass	PK	2.4878G	59.03	74.00	-14.97	31.13	3	Vertical	264	1.50	-
2462MHz	Pass	AV	4.924G	48.06	54.00	-5.94	2.38	3	Vertical	109	1.41	-
2462MHz	Pass	PK	4.92412G	50.82	74.00	-23.18	2.38	3	Vertical	109	1.41	-
2462MHz	Pass	AV	4.924G	43.87	54.00	-10.13	2.38	3	Horizontal	120	1.33	-
2462MHz	Pass	PK	4.92394G	47.71	74.00	-26.29	2.38	3	Horizontal	120	1.33	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	52.49	54.00	-1.51	30.77	3	Vertical	292	1.04	-
2412MHz	Pass	AV	2.4058G	100.76	Inf	-Inf	30.83	3	Vertical	292	1.04	-
2412MHz	Pass	PK	2.389G	69.33	74.00	-4.67	30.77	3	Vertical	292	1.04	-
2412MHz	Pass	PK	2.4056G	107.60	Inf	-Inf	30.83	3	Vertical	292	1.04	-
2412MHz	Pass	AV	4.824G	34.04	54.00	-19.96	2.13	3	Vertical	112	1.18	-
2412MHz	Pass	PK	4.82658G	44.64	74.00	-29.36	2.14	3	Vertical	112	1.18	-
2412MHz	Pass	AV	4.83012G	32.18	54.00	-21.82	2.15	3	Horizontal	143	2.21	-
2412MHz	Pass	PK	4.82538G	43.09	74.00	-30.91	2.14	3	Horizontal	143	2.21	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2417MHz	Pass	AV	2.39G	53.38	54.00	-0.62	30.77	3	Vertical	245	2.10	-
2417MHz	Pass	AV	2.4104G	92.42	Inf	-Inf	30.85	3	Vertical	245	2.10	-
2417MHz	Pass	PK	2.3876G	65.70	74.00	-8.30	30.77	3	Vertical	245	2.10	-
2417MHz	Pass	PK	2.4106G	99.55	Inf	-Inf	30.85	3	Vertical	245	2.10	-
2422MHz	Pass	AV	2.3896G	53.70	54.00	-0.30	30.77	3	Vertical	283	1.50	-
2422MHz	Pass	AV	2.4152G	94.28	Inf	-Inf	30.86	3	Vertical	283	1.50	-
2422MHz	Pass	PK	2.3898G	66.44	74.00	-7.56	30.77	3	Vertical	283	1.50	-
2422MHz	Pass	PK	2.4156G	101.39	Inf	-Inf	30.86	3	Vertical	283	1.50	-
2427MHz	Pass	AV	2.39G	52.40	54.00	-1.60	30.77	3	Vertical	268	1.42	-
2427MHz	Pass	AV	2.4202G	95.33	Inf	-Inf	30.89	3	Vertical	268	1.42	-
2427MHz	Pass	PK	2.3872G	64.68	74.00	-9.32	30.76	3	Vertical	268	1.42	-
2427MHz	Pass	PK	2.4206G	102.39	Inf	-Inf	30.89	3	Vertical	268	1.42	-
2437MHz	Pass	AV	2.3898G	47.30	54.00	-6.70	30.77	3	Vertical	226	1.50	-
2437MHz	Pass	AV	2.4306G	94.67	Inf	-Inf	30.92	3	Vertical	226	1.50	-
2437MHz	Pass	AV	2.4835G	47.25	54.00	-6.75	31.11	3	Vertical	226	1.50	-
2437MHz	Pass	PK	2.389G	59.39	74.00	-14.61	30.77	3	Vertical	226	1.50	-
2437MHz	Pass	PK	2.4306G	101.74	Inf	-Inf	30.92	3	Vertical	226	1.50	-
2437MHz	Pass	PK	2.4842G	58.80	74.00	-15.20	31.12	3	Vertical	226	1.50	-
2437MHz	Pass	AV	4.87406G	33.00	54.00	-21.00	2.25	3	Vertical	0	1.80	-
2437MHz	Pass	PK	4.86854G	43.91	74.00	-30.09	2.24	3	Vertical	0	1.80	-
2437MHz	Pass	AV	4.87412G	35.25	54.00	-18.75	2.25	3	Horizontal	136	2.60	-
2437MHz	Pass	PK	4.87172G	46.04	74.00	-27.96	2.24	3	Horizontal	136	2.60	-
2447MHz	Pass	AV	2.4418G	93.11	Inf	-Inf	30.96	3	Vertical	109	1.24	-
2447MHz	Pass	AV	2.4835G	51.17	54.00	-2.83	31.11	3	Vertical	109	1.24	-
2447MHz	Pass	PK	2.4406G	101.06	Inf	-Inf	30.95	3	Vertical	109	1.24	-
2447MHz	Pass	PK	2.4836G	63.72	74.00	-10.28	31.11	3	Vertical	109	1.24	-
2452MHz	Pass	AV	2.4452G	94.65	Inf	-Inf	30.98	3	Vertical	284	1.20	-
2452MHz	Pass	AV	2.4835G	53.61	54.00	-0.39	31.11	3	Vertical	284	1.20	-
2452MHz	Pass	PK	2.4456G	101.71	Inf	-Inf	30.98	3	Vertical	284	1.20	-
2452MHz	Pass	PK	2.485G	67.06	74.00	-6.94	31.12	3	Vertical	284	1.20	-
2457MHz	Pass	AV	2.45G	90.58	Inf	-Inf	30.99	3	Vertical	254	2.40	-
2457MHz	Pass	AV	2.4835G	53.35	54.00	-0.65	31.11	3	Vertical	254	2.40	-
2457MHz	Pass	PK	2.4506G	97.48	Inf	-Inf	30.99	3	Vertical	254	2.40	-
2457MHz	Pass	PK	2.4844G	65.46	74.00	-8.54	31.12	3	Vertical	254	2.40	-
2462MHz	Pass	AV	2.4682G	100.74	Inf	-Inf	31.05	3	Vertical	260	1.54	-
2462MHz	Pass	AV	2.4835G	52.78	54.00	-1.22	31.11	3	Vertical	260	1.54	-
2462MHz	Pass	PK	2.4684G	107.27	Inf	-Inf	31.05	3	Vertical	260	1.54	-
2462MHz	Pass	PK	2.4836G	72.23	74.00	-1.77	31.11	3	Vertical	260	1.54	-
2462MHz	Pass	AV	4.92394G	33.61	54.00	-20.39	2.38	3	Vertical	107	1.54	-
2462MHz	Pass	PK	4.92436G	44.00	74.00	-30.00	2.38	3	Vertical	107	1.54	-
2462MHz	Pass	AV	4.92898G	31.78	54.00	-22.22	2.40	3	Horizontal	102	1.50	-
2462MHz	Pass	PK	4.92916G	43.32	74.00	-30.68	2.40	3	Horizontal	102	1.50	-
802.11n HT20_Nss2,(MCS8)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	51.96	54.00	-2.04	30.77	3	Vertical	355	1.17	-
2412MHz	Pass	AV	2.4178G	100.84	Inf	-Inf	30.87	3	Vertical	355	1.17	-
2412MHz	Pass	PK	2.39G	63.72	74.00	-10.28	30.77	3	Vertical	355	1.17	-
2412MHz	Pass	PK	2.419G	109.50	Inf	-Inf	30.88	3	Vertical	355	1.17	-
2412MHz	Pass	AV	4.82472G	32.56	54.00	-21.44	2.13	3	Vertical	113	1.22	-
2412MHz	Pass	PK	4.81788G	43.74	74.00	-30.26	2.12	3	Vertical	113	1.22	-

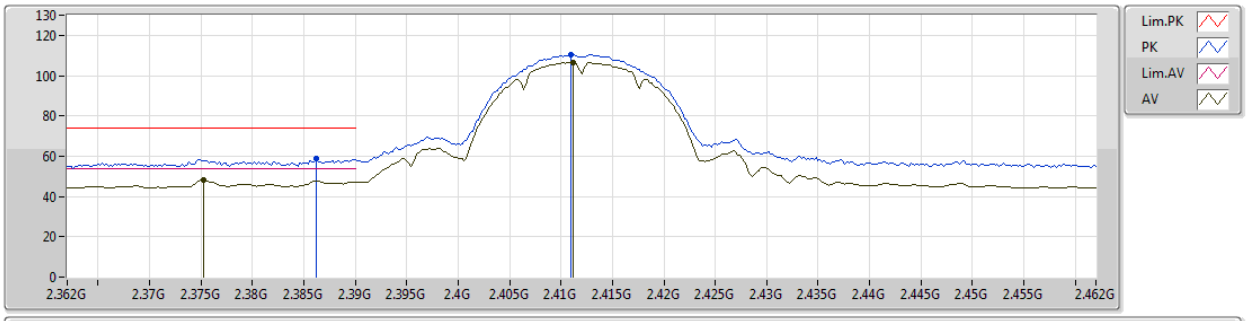
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2412MHz	Pass	AV	4.8093G	32.10	54.00	-21.90	2.09	3	Horizontal	171	1.50	-
2412MHz	Pass	PK	4.83468G	42.82	74.00	-31.18	2.16	3	Horizontal	171	1.50	-
2417MHz	Pass	AV	2.39G	53.79	54.00	-0.21	30.77	3	Vertical	0	1.28	-
2417MHz	Pass	AV	2.4226G	103.49	Inf	-Inf	30.89	3	Vertical	0	1.28	-
2417MHz	Pass	PK	2.3886G	65.79	74.00	-8.21	30.77	3	Vertical	0	1.28	-
2417MHz	Pass	PK	2.424G	111.90	Inf	-Inf	30.90	3	Vertical	0	1.28	-
2422MHz	Pass	AV	2.39G	52.13	54.00	-1.87	30.77	3	Vertical	0	1.15	-
2422MHz	Pass	AV	2.4276G	104.58	Inf	-Inf	30.91	3	Vertical	0	1.15	-
2422MHz	Pass	PK	2.3898G	66.07	74.00	-7.93	30.77	3	Vertical	0	1.15	-
2422MHz	Pass	PK	2.4244G	113.53	Inf	-Inf	30.90	3	Vertical	0	1.15	-
2437MHz	Pass	AV	2.3898G	49.37	54.00	-4.63	30.77	3	Vertical	360	1.25	-
2437MHz	Pass	AV	2.443G	106.51	Inf	-Inf	30.96	3	Vertical	360	1.25	-
2437MHz	Pass	AV	2.4835G	51.29	54.00	-2.71	31.11	3	Vertical	360	1.25	-
2437MHz	Pass	PK	2.3898G	62.54	74.00	-11.46	30.77	3	Vertical	360	1.25	-
2437MHz	Pass	PK	2.4438G	115.23	Inf	-Inf	30.97	3	Vertical	360	1.25	-
2437MHz	Pass	PK	2.4835G	63.63	74.00	-10.37	31.11	3	Vertical	360	1.25	-
2437MHz	Pass	AV	4.87502G	33.25	54.00	-20.75	2.26	3	Vertical	287	2.10	-
2437MHz	Pass	PK	4.8725G	44.66	74.00	-29.34	2.25	3	Vertical	287	2.10	-
2437MHz	Pass	AV	4.87484G	33.51	54.00	-20.49	2.25	3	Horizontal	123	3.19	-
2437MHz	Pass	PK	4.87382G	44.60	74.00	-29.40	2.25	3	Horizontal	123	3.19	-
2452MHz	Pass	AV	2.4466G	101.63	Inf	-Inf	30.98	3	Vertical	341	1.02	-
2452MHz	Pass	AV	2.4835G	51.99	54.00	-2.01	31.11	3	Vertical	341	1.02	-
2452MHz	Pass	PK	2.4578G	112.85	Inf	-Inf	31.02	3	Vertical	341	1.02	-
2452MHz	Pass	PK	2.4835G	68.97	74.00	-5.03	31.11	3	Vertical	341	1.02	-
2457MHz	Pass	AV	2.4504G	102.94	Inf	-Inf	30.99	3	Vertical	360	1.15	-
2457MHz	Pass	AV	2.4835G	53.61	54.00	-0.39	31.11	3	Vertical	360	1.15	-
2457MHz	Pass	PK	2.4502G	111.87	Inf	-Inf	30.99	3	Vertical	360	1.15	-
2457MHz	Pass	PK	2.484G	68.00	74.00	-6.00	31.12	3	Vertical	360	1.15	-
2462MHz	Pass	AV	2.4554G	101.92	Inf	-Inf	31.01	3	Vertical	360	1.01	-
2462MHz	Pass	AV	2.4835G	51.64	54.00	-2.36	31.11	3	Vertical	360	1.01	-
2462MHz	Pass	PK	2.4552G	111.15	Inf	-Inf	31.00	3	Vertical	360	1.01	-
2462MHz	Pass	PK	2.485G	68.10	74.00	-5.90	31.12	3	Vertical	360	1.01	-
2462MHz	Pass	AV	4.92526G	32.09	54.00	-21.91	2.39	3	Vertical	88	1.50	-
2462MHz	Pass	PK	4.9249G	42.68	74.00	-31.32	2.38	3	Vertical	88	1.50	-
2462MHz	Pass	AV	4.92502G	32.18	54.00	-21.82	2.39	3	Horizontal	137	2.60	-
2462MHz	Pass	PK	4.9249G	42.99	74.00	-31.01	2.38	3	Horizontal	137	2.60	-
802.11n HT40_Nss2,(MCS8)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.39G	49.15	54.00	-4.85	30.77	3	Vertical	360	1.12	-
2422MHz	Pass	AV	2.4236G	96.39	Inf	-Inf	30.90	3	Vertical	360	1.12	-
2422MHz	Pass	AV	2.5G	46.22	54.00	-7.78	31.17	3	Vertical	360	1.12	-
2422MHz	Pass	PK	2.3884G	60.19	74.00	-13.81	30.77	3	Vertical	360	1.12	-
2422MHz	Pass	PK	2.4236G	104.71	Inf	-Inf	30.90	3	Vertical	360	1.12	-
2422MHz	Pass	PK	2.4848G	56.99	74.00	-17.01	31.12	3	Vertical	360	1.12	-
2422MHz	Pass	AV	4.84232G	31.93	54.00	-22.07	2.18	3	Vertical	129	1.50	-
2422MHz	Pass	PK	4.82918G	43.09	74.00	-30.91	2.15	3	Vertical	129	1.50	-
2422MHz	Pass	AV	4.83038G	31.72	54.00	-22.28	2.15	3	Horizontal	30	1.50	-
2422MHz	Pass	PK	4.84286G	42.52	74.00	-31.48	2.18	3	Horizontal	30	1.50	-
2437MHz	Pass	AV	2.3898G	50.80	54.00	-3.20	30.77	3	Vertical	360	1.29	-
2437MHz	Pass	AV	2.4386G	98.73	Inf	-Inf	30.95	3	Vertical	360	1.29	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.4835G	52.34	54.00	-1.66	31.11	3	Vertical	360	1.29	-
2437MHz	Pass	PK	2.3878G	61.86	74.00	-12.14	30.77	3	Vertical	360	1.29	-
2437MHz	Pass	PK	2.4382G	107.12	Inf	-Inf	30.95	3	Vertical	360	1.29	-
2437MHz	Pass	PK	2.4835G	63.77	74.00	-10.23	31.11	3	Vertical	360	1.29	-
2437MHz	Pass	AV	4.88582G	31.36	54.00	-22.64	2.29	3	Vertical	235	1.50	-
2437MHz	Pass	PK	4.88624G	41.99	74.00	-32.01	2.29	3	Vertical	235	1.50	-
2437MHz	Pass	AV	4.88732G	31.49	54.00	-22.51	2.29	3	Horizontal	137	2.99	-
2437MHz	Pass	PK	4.86116G	42.79	74.00	-31.21	2.23	3	Horizontal	137	2.99	-
2452MHz	Pass	AV	2.3876G	45.48	54.00	-8.52	30.77	3	Vertical	360	1.01	-
2452MHz	Pass	AV	2.4504G	96.40	Inf	-Inf	30.99	3	Vertical	360	1.01	-
2452MHz	Pass	AV	2.4835G	51.31	54.00	-2.69	31.11	3	Vertical	360	1.01	-
2452MHz	Pass	PK	2.3836G	56.16	74.00	-17.84	30.75	3	Vertical	360	1.01	-
2452MHz	Pass	PK	2.4568G	104.91	Inf	-Inf	31.02	3	Vertical	360	1.01	-
2452MHz	Pass	PK	2.4852G	63.43	74.00	-10.57	31.12	3	Vertical	360	1.01	-
2452MHz	Pass	AV	4.88972G	29.44	54.00	-24.56	2.29	3	Vertical	67	3.19	-
2452MHz	Pass	PK	4.89008G	40.12	74.00	-33.88	2.29	3	Vertical	67	3.19	-
2452MHz	Pass	AV	4.88948G	30.93	54.00	-23.07	2.29	3	Horizontal	174	2.16	-
2452MHz	Pass	PK	4.91564G	42.81	74.00	-31.19	2.36	3	Horizontal	174	2.16	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

14/11/2018

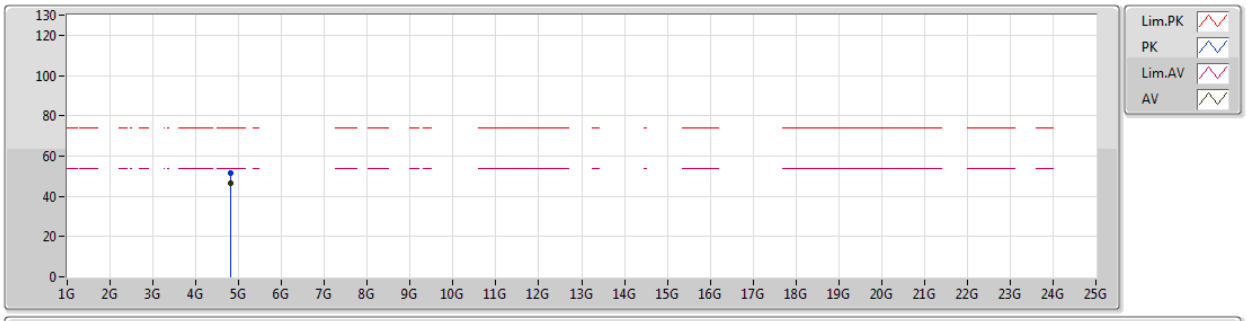


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3752G	48.22	54.00	-5.78	30.64	3	Vertical	319	1.37	-
AV	2.4112G	106.60	Inf	-Inf	30.76	3	Vertical	319	1.37	-
PK	2.3862G	58.63	74.00	-15.37	30.68	3	Vertical	319	1.37	-
PK	2.411G	110.45	Inf	-Inf	30.76	3	Vertical	319	1.37	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

14/11/2018

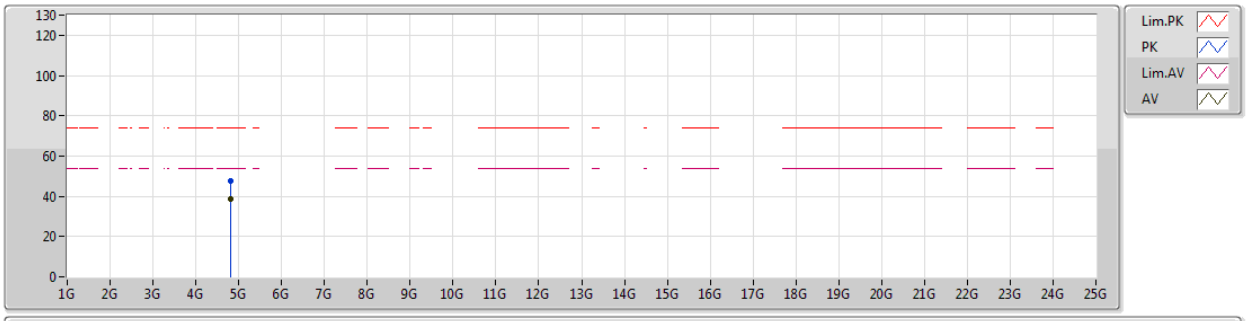


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.82398G	46.41	54.00	-7.59	6.53	3	Vertical	213	1.62	-
PK	4.82396G	51.42	74.00	-22.58	6.53	3	Vertical	213	1.62	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

14/11/2018

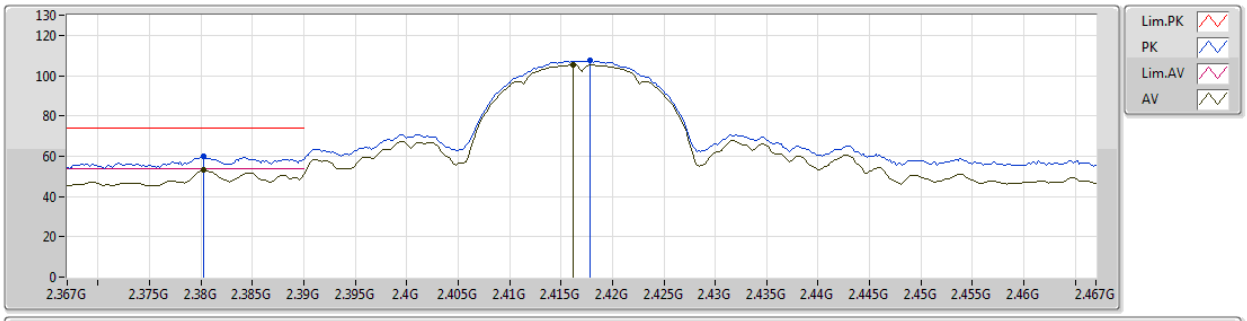


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.824G	38.43	54.00	-15.57	6.53	3	Horizontal	215	1.33	-
PK	4.82417G	47.68	74.00	-26.32	6.53	3	Horizontal	215	1.33	-

802.11b_Nss1,(1Mbps)_1TX

2417MHz_TX

14/11/2018

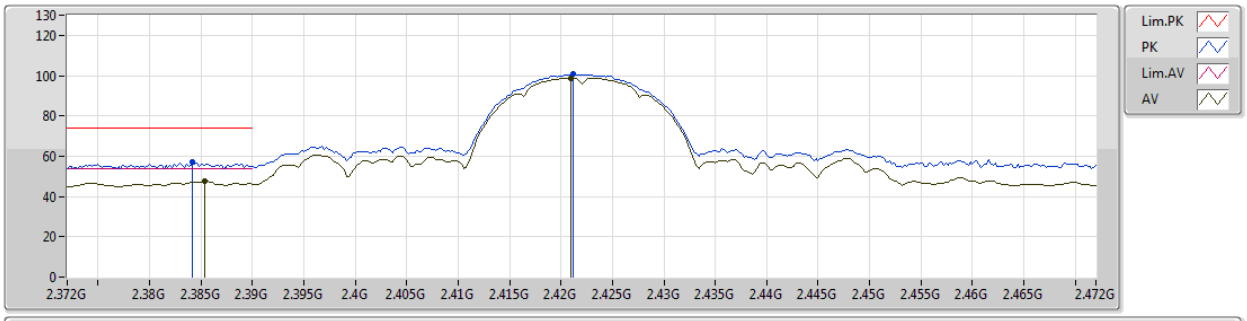


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3802G	53.03	54.00	-0.97	30.74	3	Vertical	288	1.50	-
AV	2.4162G	105.29	Inf	-Inf	30.87	3	Vertical	288	1.50	-
PK	2.3802G	59.88	74.00	-14.12	30.74	3	Vertical	288	1.50	-
PK	2.4178G	107.32	Inf	-Inf	30.87	3	Vertical	288	1.50	-

802.11b_Nss1,(1Mbps)_1TX

2422MHz_TX

14/11/2018

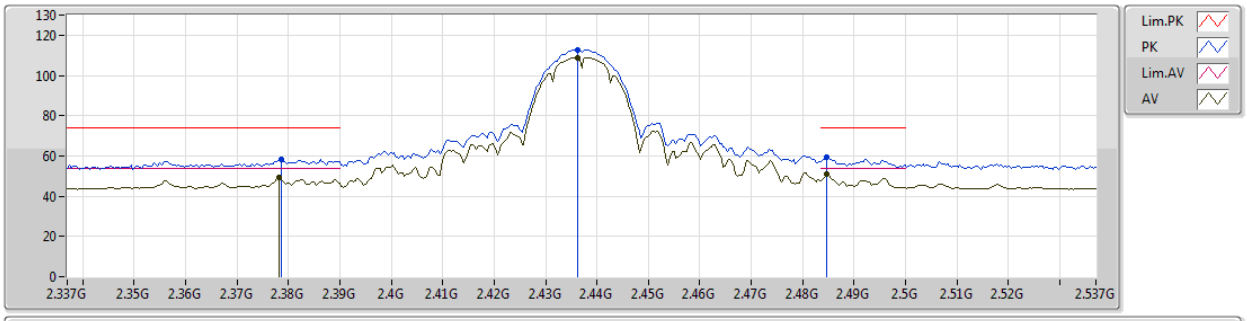


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3854G	47.61	54.00	-6.39	30.76	3	Vertical	232	1.15	-
AV	2.421G	98.81	Inf	-Inf	30.89	3	Vertical	232	1.15	-
PK	2.3842G	57.02	74.00	-16.98	30.76	3	Vertical	232	1.15	-
PK	2.4212G	100.62	Inf	-Inf	30.89	3	Vertical	232	1.15	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

14/11/2018

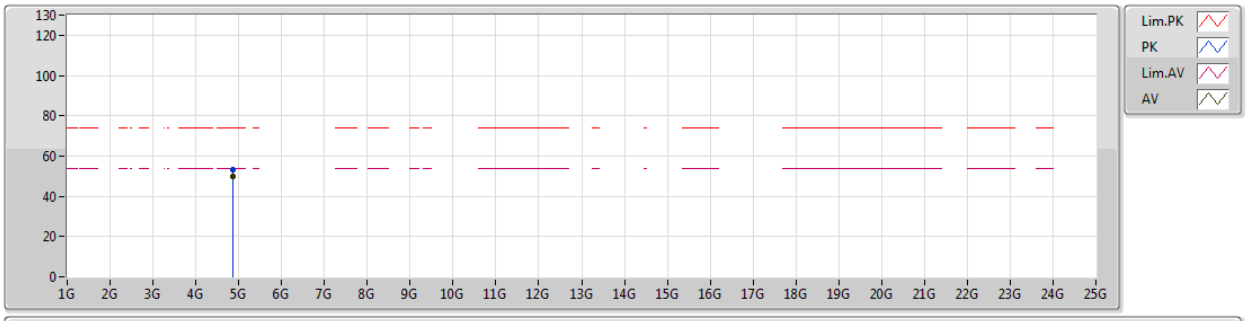


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3782G	49.07	54.00	-4.93	30.65	3	Vertical	30	1.56	-
AV	2.4362G	108.97	Inf	-Inf	30.83	3	Vertical	30	1.56	-
AV	2.4846G	50.91	54.00	-3.09	30.97	3	Vertical	30	1.56	-
PK	2.3786G	58.33	74.00	-15.67	30.66	3	Vertical	30	1.56	-
PK	2.4362G	112.82	Inf	-Inf	30.83	3	Vertical	30	1.56	-
PK	2.4846G	59.44	74.00	-14.56	30.97	3	Vertical	30	1.56	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

14/11/2018

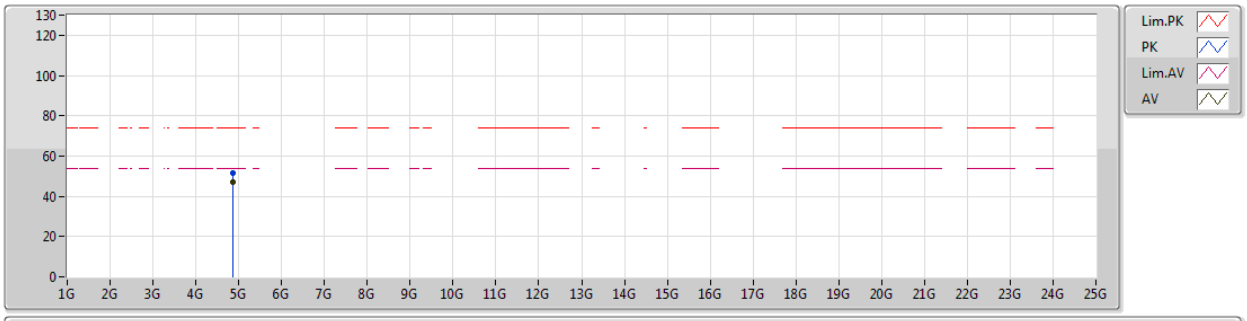


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87398G	50.13	54.00	-3.87	6.65	3	Vertical	244	1.50	-
PK	4.87402G	53.33	74.00	-20.67	6.65	3	Vertical	244	1.50	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

14/11/2018

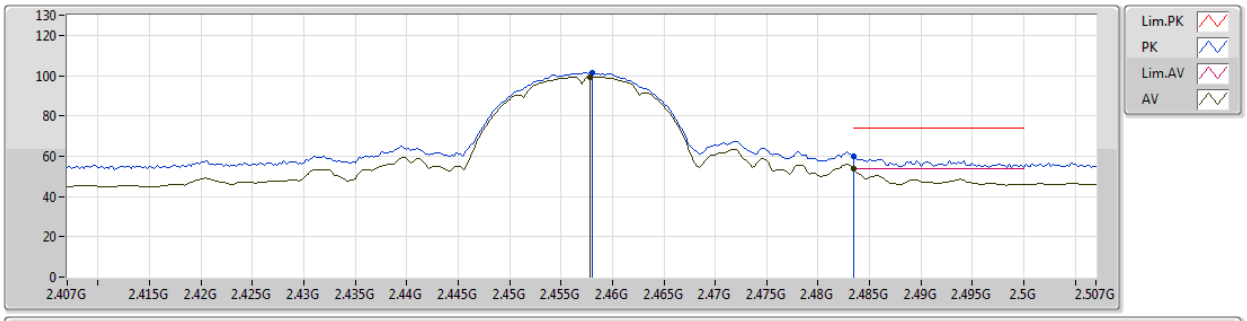


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87397G	47.26	54.00	-6.74	6.65	3	Horizontal	232	1.17	-
PK	4.87397G	51.46	74.00	-22.54	6.65	3	Horizontal	232	1.17	-

802.11b_Nss1,(1Mbps)_1TX

2457MHz_TX

14/11/2018

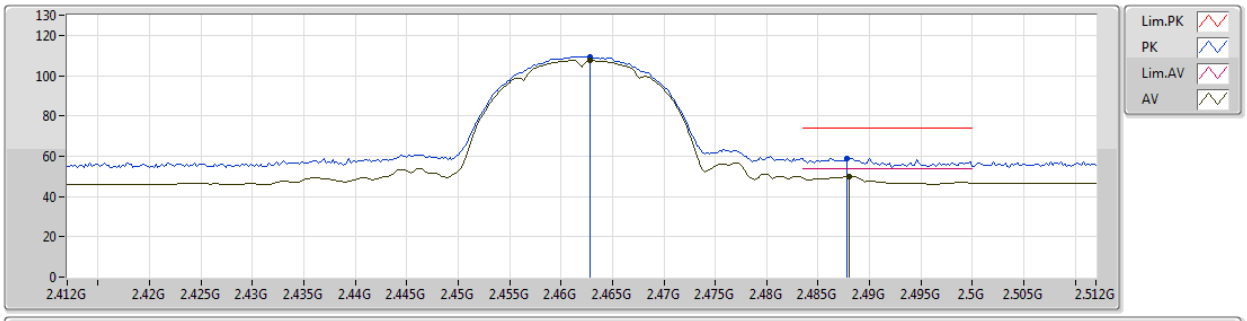


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4578G	99.36	Inf	-Inf	31.02	3	Vertical	256	1.50	-
AV	2.4835G	53.73	54.00	-0.27	31.11	3	Vertical	256	1.50	-
PK	2.458G	101.31	Inf	-Inf	31.02	3	Vertical	256	1.50	-
PK	2.4835G	60.22	74.00	-13.78	31.11	3	Vertical	256	1.50	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

14/11/2018

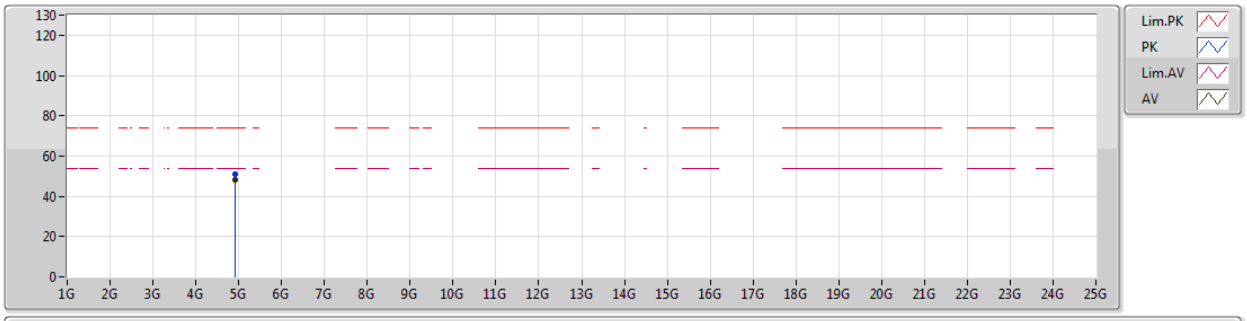


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4628G	107.53	Inf	-Inf	31.04	3	Vertical	264	1.50	-
AV	2.488G	50.06	54.00	-3.94	31.13	3	Vertical	264	1.50	-
PK	2.4628G	109.36	Inf	-Inf	31.04	3	Vertical	264	1.50	-
PK	2.4878G	59.03	74.00	-14.97	31.13	3	Vertical	264	1.50	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

14/11/2018

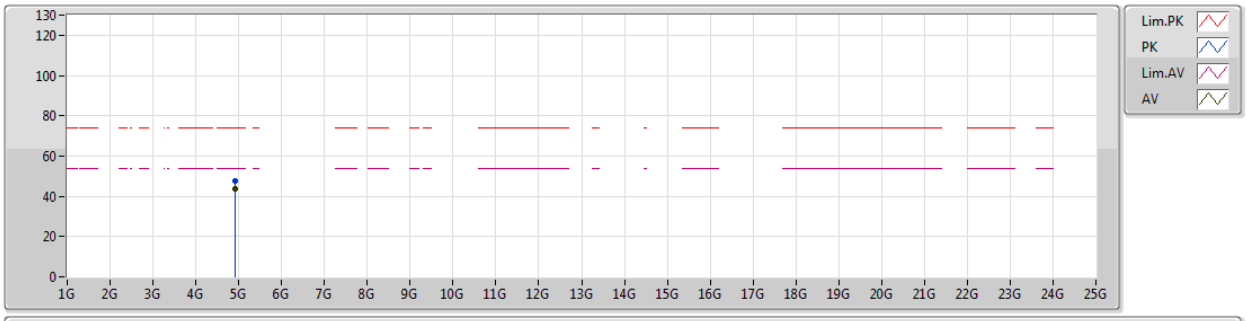


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.924G	48.06	54.00	-5.94	2.38	3	Vertical	109	1.41	-
PK	4.92412G	50.82	74.00	-23.18	2.38	3	Vertical	109	1.41	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

14/11/2018

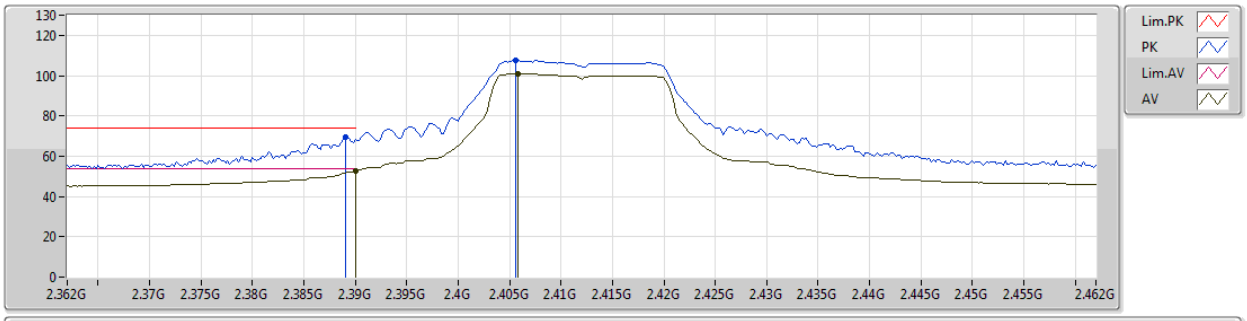


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.924G	43.87	54.00	-10.13	2.38	3	Horizontal	120	1.33	-
PK	4.92394G	47.71	74.00	-26.29	2.38	3	Horizontal	120	1.33	-

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

14/11/2018

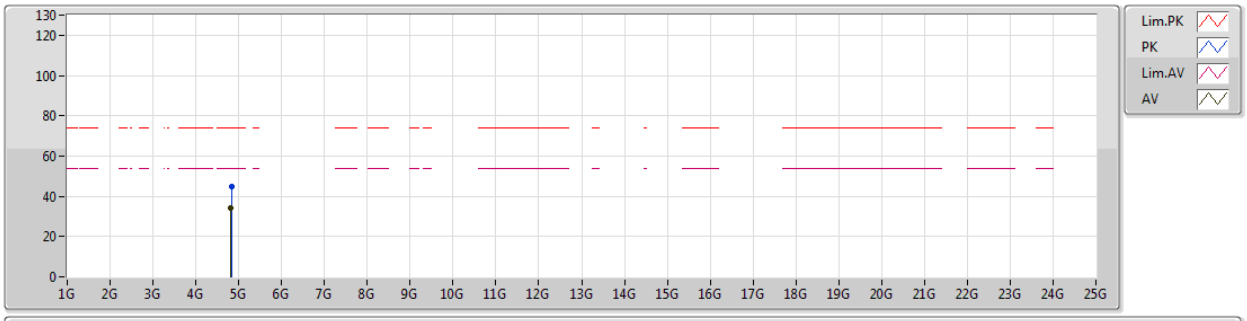


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	52.49	54.00	-1.51	30.77	3	Vertical	292	1.04	-
AV	2.4058G	100.76	Inf	-Inf	30.83	3	Vertical	292	1.04	-
PK	2.389G	69.33	74.00	-4.67	30.77	3	Vertical	292	1.04	-
PK	2.4056G	107.60	Inf	-Inf	30.83	3	Vertical	292	1.04	-

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

14/11/2018

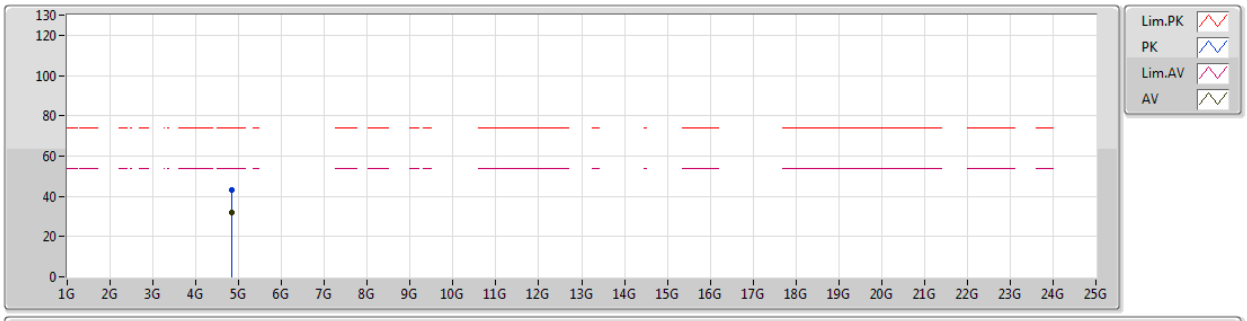


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.824G	34.04	54.00	-19.96	2.13	3	Vertical	112	1.18	-
PK	4.82658G	44.64	74.00	-29.36	2.14	3	Vertical	112	1.18	-

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

14/11/2018

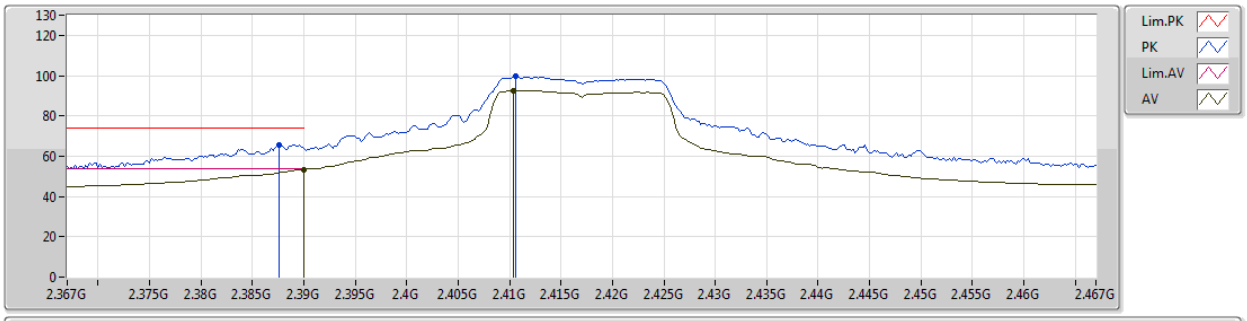


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.83012G	32.18	54.00	-21.82	2.15	3	Horizontal	143	2.21	-
PK	4.82538G	43.09	74.00	-30.91	2.14	3	Horizontal	143	2.21	-

802.11g_Nss1,(6Mbps)_1TX

2417MHz_TX

14/11/2018

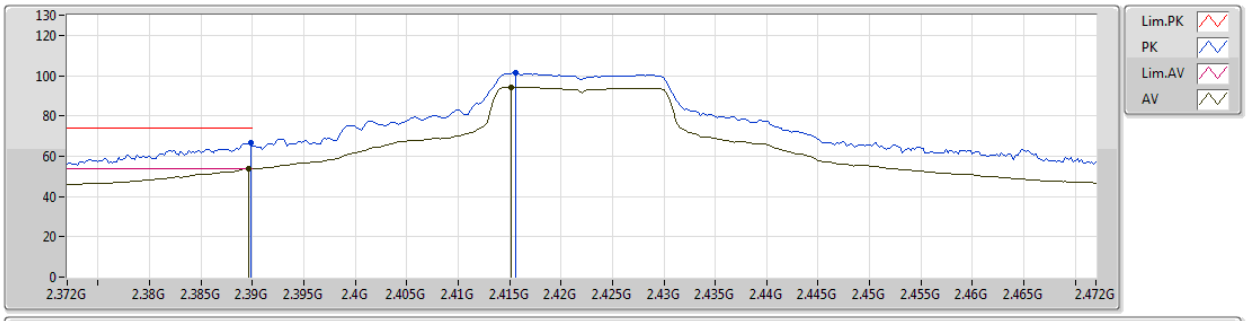


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	53.38	54.00	-0.62	30.77	3	Vertical	245	2.10	-
AV	2.4104G	92.42	Inf	-Inf	30.85	3	Vertical	245	2.10	-
PK	2.3876G	65.70	74.00	-8.30	30.77	3	Vertical	245	2.10	-
PK	2.4106G	99.55	Inf	-Inf	30.85	3	Vertical	245	2.10	-

802.11g_Nss1,(6Mbps)_1TX

2422MHz_TX

14/11/2018

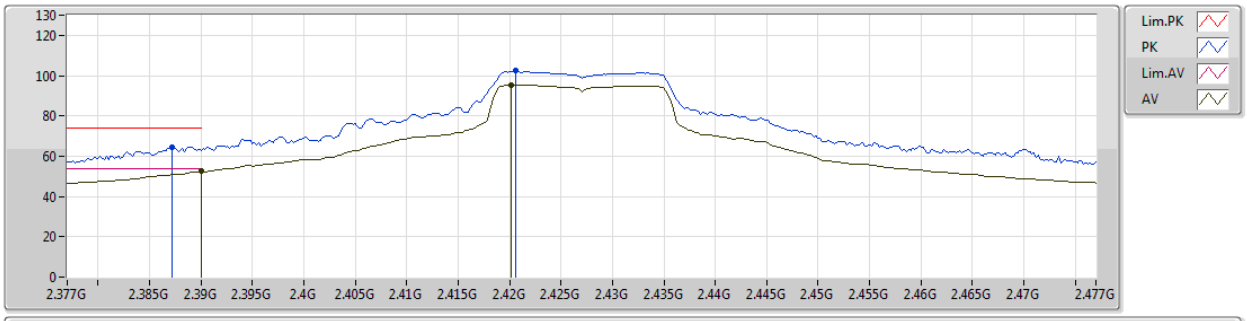


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3896G	53.70	54.00	-0.30	30.77	3	Vertical	283	1.50	-
AV	2.4152G	94.28	Inf	-Inf	30.86	3	Vertical	283	1.50	-
PK	2.3898G	66.44	74.00	-7.56	30.77	3	Vertical	283	1.50	-
PK	2.4156G	101.39	Inf	-Inf	30.86	3	Vertical	283	1.50	-

802.11g_Nss1,(6Mbps)_1TX

2427MHz_TX

14/11/2018

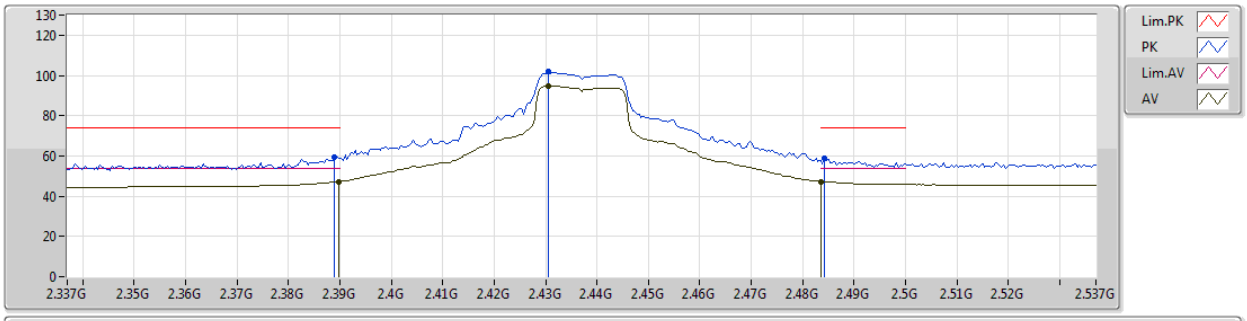


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	52.40	54.00	-1.60	30.77	3	Vertical	268	1.42	-
AV	2.4202G	95.33	Inf	-Inf	30.89	3	Vertical	268	1.42	-
PK	2.3872G	64.68	74.00	-9.32	30.76	3	Vertical	268	1.42	-
PK	2.4206G	102.39	Inf	-Inf	30.89	3	Vertical	268	1.42	-

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

14/11/2018

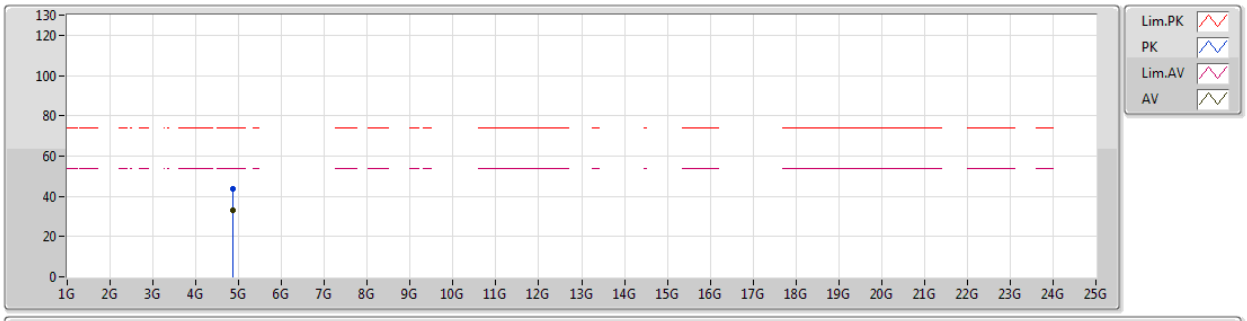


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	47.30	54.00	-6.70	30.77	3	Vertical	226	1.50	-
AV	2.4306G	94.67	Inf	-Inf	30.92	3	Vertical	226	1.50	-
AV	2.4835G	47.25	54.00	-6.75	31.11	3	Vertical	226	1.50	-
PK	2.389G	59.39	74.00	-14.61	30.77	3	Vertical	226	1.50	-
PK	2.4306G	101.74	Inf	-Inf	30.92	3	Vertical	226	1.50	-
PK	2.4842G	58.80	74.00	-15.20	31.12	3	Vertical	226	1.50	-

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

14/11/2018

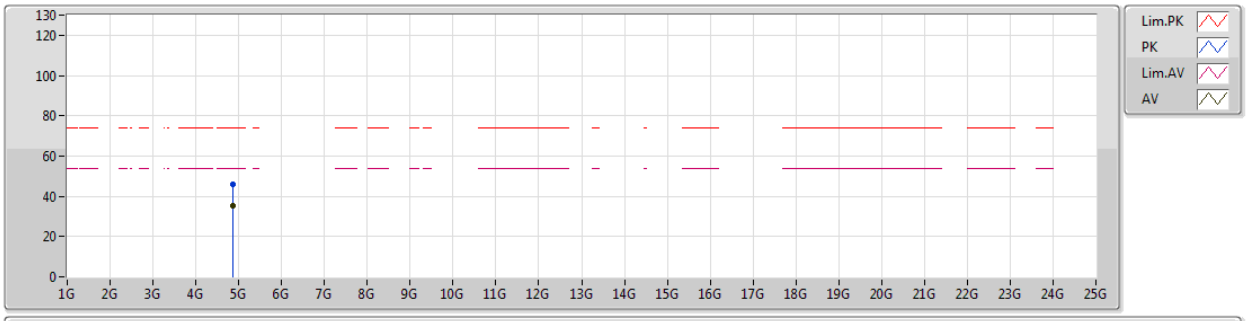


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87406G	33.00	54.00	-21.00	2.25	3	Vertical	0	1.80	-
PK	4.86854G	43.91	74.00	-30.09	2.24	3	Vertical	0	1.80	-

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

14/11/2018

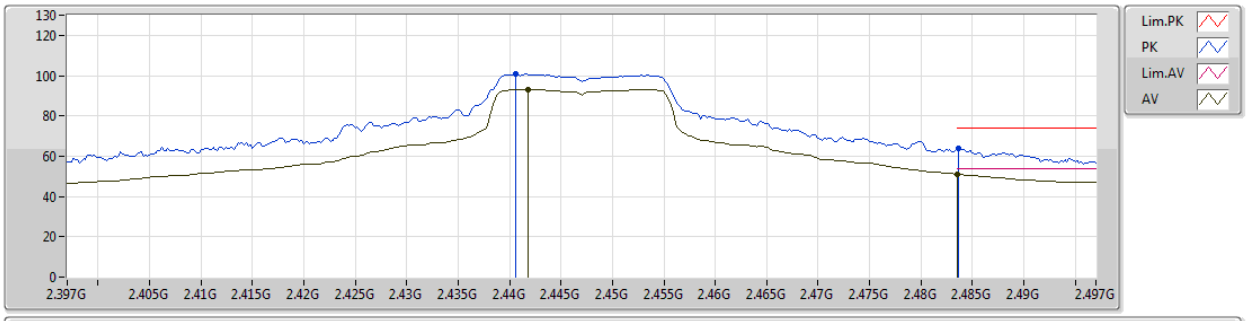


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87412G	35.25	54.00	-18.75	2.25	3	Horizontal	136	2.60	-
PK	4.87172G	46.04	74.00	-27.96	2.24	3	Horizontal	136	2.60	-

802.11g_Nss1,(6Mbps)_1TX

2447MHz_TX

14/11/2018

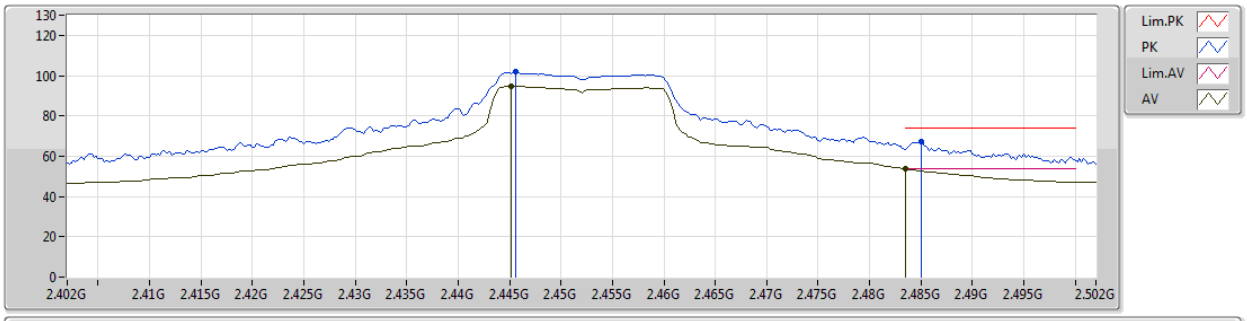


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4418G	93.11	Inf	-Inf	30.96	3	Vertical	109	1.24	-
AV	2.4835G	51.17	54.00	-2.83	31.11	3	Vertical	109	1.24	-
PK	2.4406G	101.06	Inf	-Inf	30.95	3	Vertical	109	1.24	-
PK	2.4836G	63.72	74.00	-10.28	31.11	3	Vertical	109	1.24	-

802.11g_Nss1,(6Mbps)_1TX

2452MHz_TX

14/11/2018

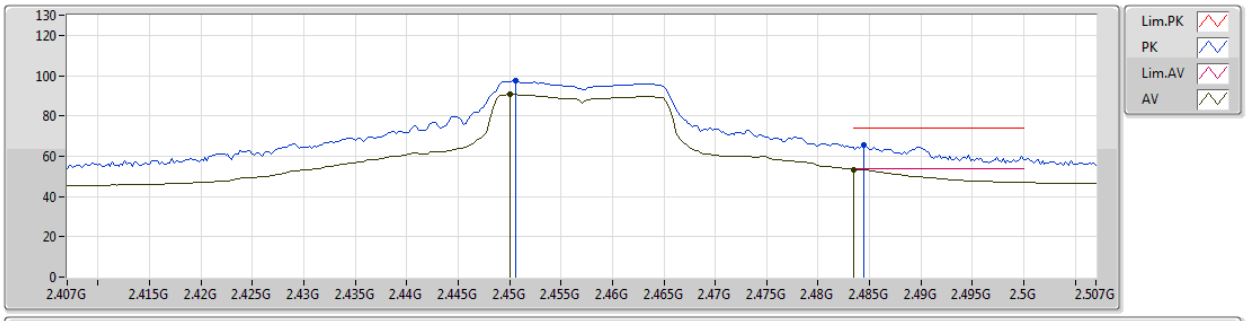


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4452G	94.65	Inf	-Inf	30.98	3	Vertical	284	1.20	-
AV	2.4835G	53.61	54.00	-0.39	31.11	3	Vertical	284	1.20	-
PK	2.4456G	101.71	Inf	-Inf	30.98	3	Vertical	284	1.20	-
PK	2.485G	67.06	74.00	-6.94	31.12	3	Vertical	284	1.20	-

802.11g_Nss1,(6Mbps)_1TX

2457MHz_TX

14/11/2018

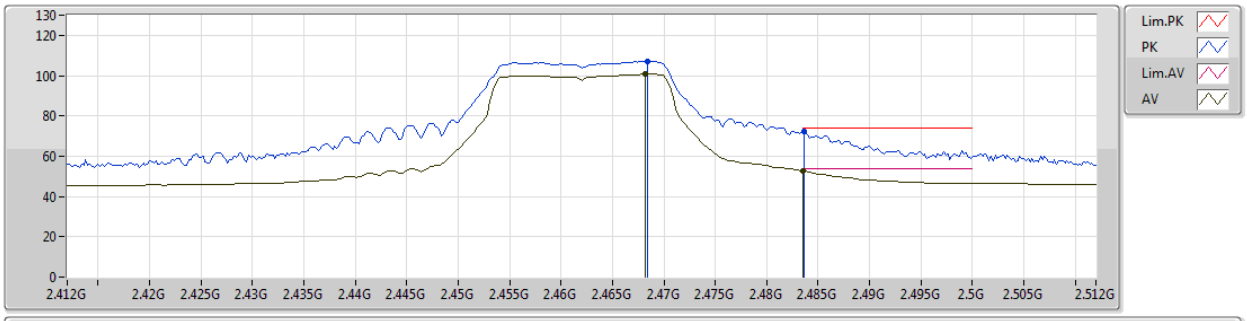


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.45G	90.58	Inf	-Inf	30.99	3	Vertical	254	2.40	-
AV	2.4835G	53.35	54.00	-0.65	31.11	3	Vertical	254	2.40	-
PK	2.4506G	97.48	Inf	-Inf	30.99	3	Vertical	254	2.40	-
PK	2.4844G	65.46	74.00	-8.54	31.12	3	Vertical	254	2.40	-

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

14/11/2018

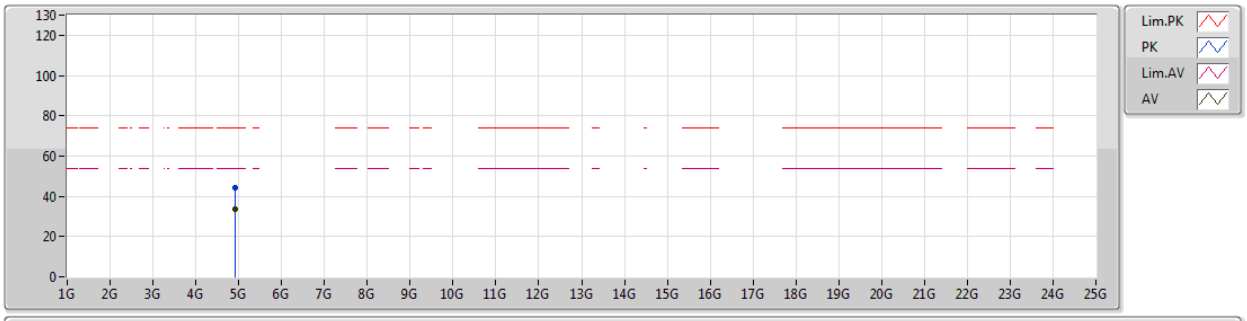


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4682G	100.74	Inf	-Inf	31.05	3	Vertical	260	1.54	-
AV	2.4835G	52.78	54.00	-1.22	31.11	3	Vertical	260	1.54	-
PK	2.4684G	107.27	Inf	-Inf	31.05	3	Vertical	260	1.54	-
PK	2.4836G	72.23	74.00	-1.77	31.11	3	Vertical	260	1.54	-

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

14/11/2018

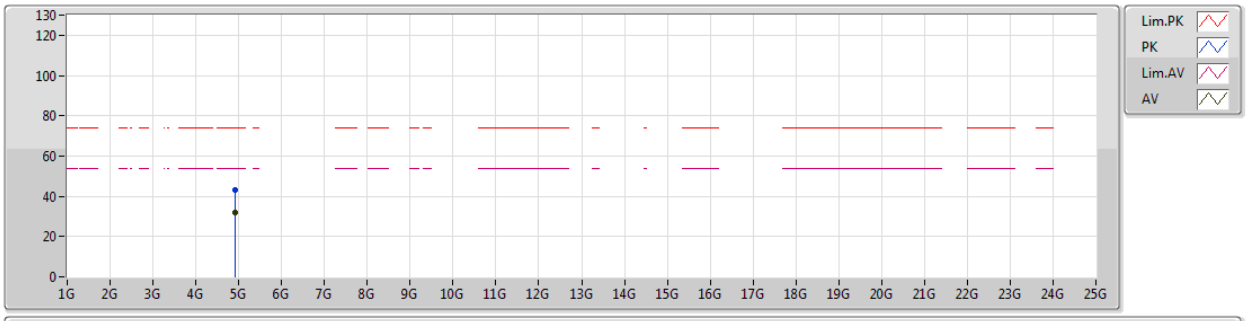


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.92394G	33.61	54.00	-20.39	2.38	3	Vertical	107	1.54	-
PK	4.92436G	44.00	74.00	-30.00	2.38	3	Vertical	107	1.54	-

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

14/11/2018

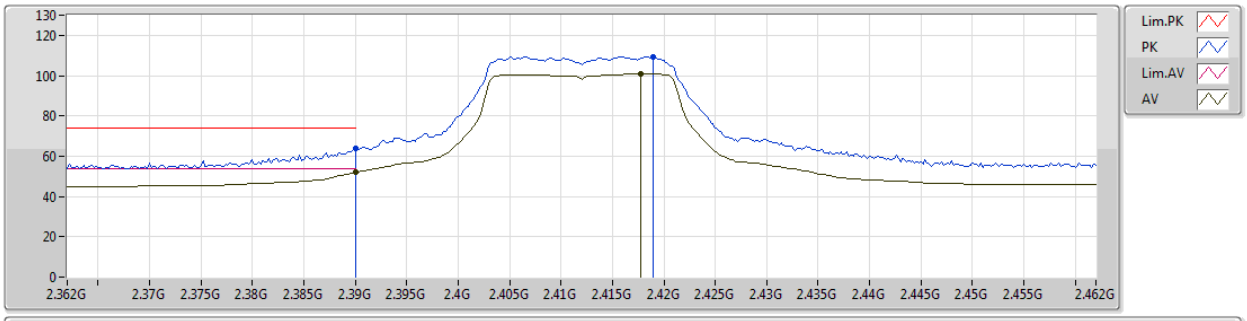


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.92898G	31.78	54.00	-22.22	2.40	3	Horizontal	102	1.50	-
PK	4.92916G	43.32	74.00	-30.68	2.40	3	Horizontal	102	1.50	-

802.11n HT20_Nss2,(MCS8)_2TX

2412MHz_TX

14/11/2018

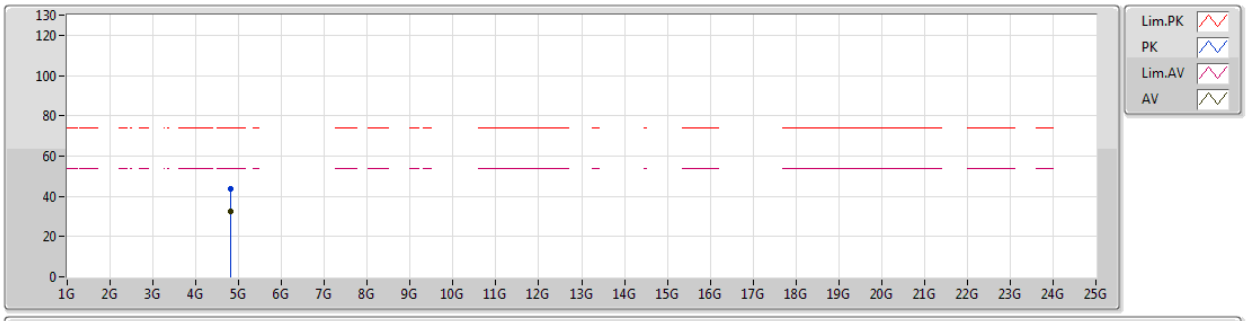


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	51.96	54.00	-2.04	30.77	3	Vertical	355	1.17	-
AV	2.4178G	100.84	Inf	-Inf	30.87	3	Vertical	355	1.17	-
PK	2.39G	63.72	74.00	-10.28	30.77	3	Vertical	355	1.17	-
PK	2.419G	109.50	Inf	-Inf	30.88	3	Vertical	355	1.17	-

802.11n HT20_Nss2,(MCS8)_2TX

14/11/2018

2412MHz_TX

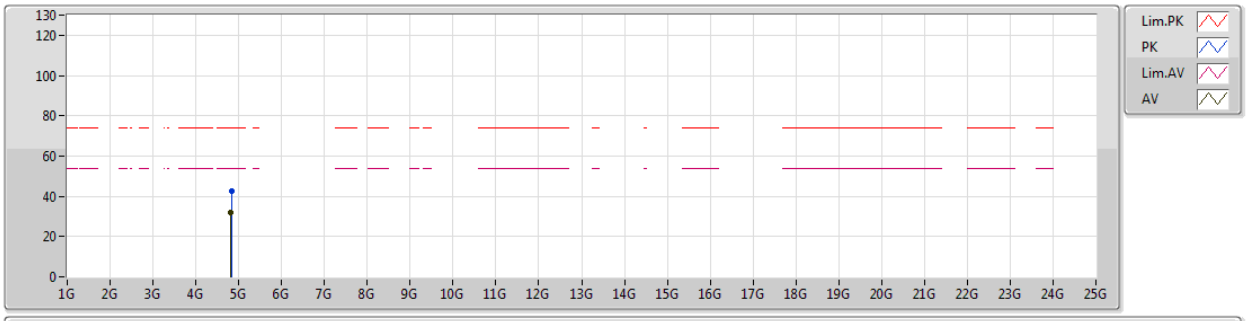


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.82472G	32.56	54.00	-21.44	2.13	3	Vertical	113	1.22	-
PK	4.81788G	43.74	74.00	-30.26	2.12	3	Vertical	113	1.22	-

802.11n HT20_Nss2,(MCS8)_2TX

2412MHz_TX

14/11/2018

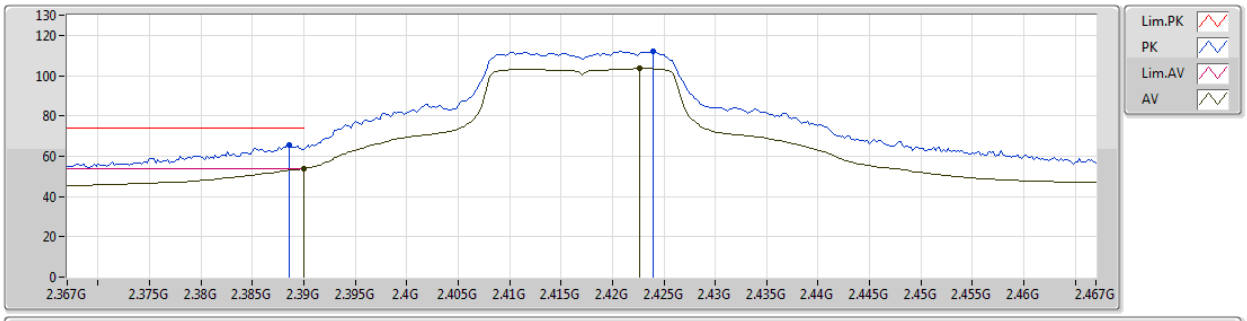


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8093G	32.10	54.00	-21.90	2.09	3	Horizontal	171	1.50	-
PK	4.83468G	42.82	74.00	-31.18	2.16	3	Horizontal	171	1.50	-

802.11n HT20_Nss2,(MCS8)_2TX

14/11/2018

2417MHz_TX

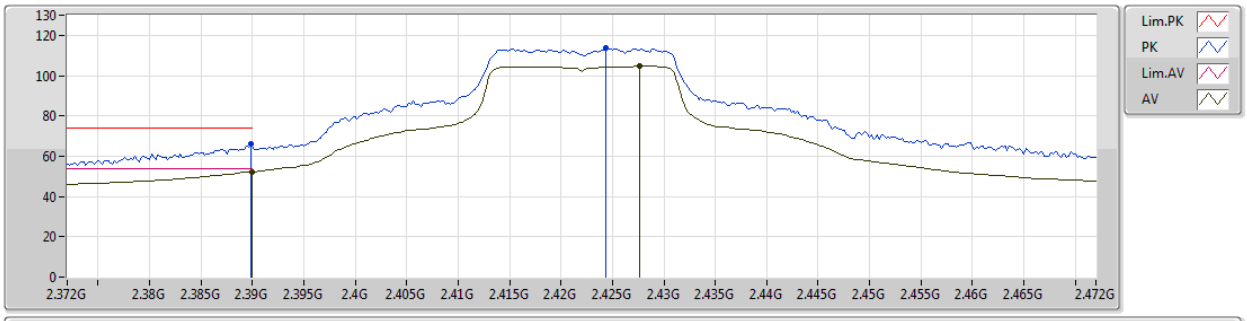


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	53.79	54.00	-0.21	30.77	3	Vertical	0	1.28	-
AV	2.4226G	103.49	Inf	-Inf	30.89	3	Vertical	0	1.28	-
PK	2.3886G	65.79	74.00	-8.21	30.77	3	Vertical	0	1.28	-
PK	2.424G	111.90	Inf	-Inf	30.90	3	Vertical	0	1.28	-

802.11n HT20_Nss2,(MCS8)_2TX

2422MHz_TX

14/11/2018

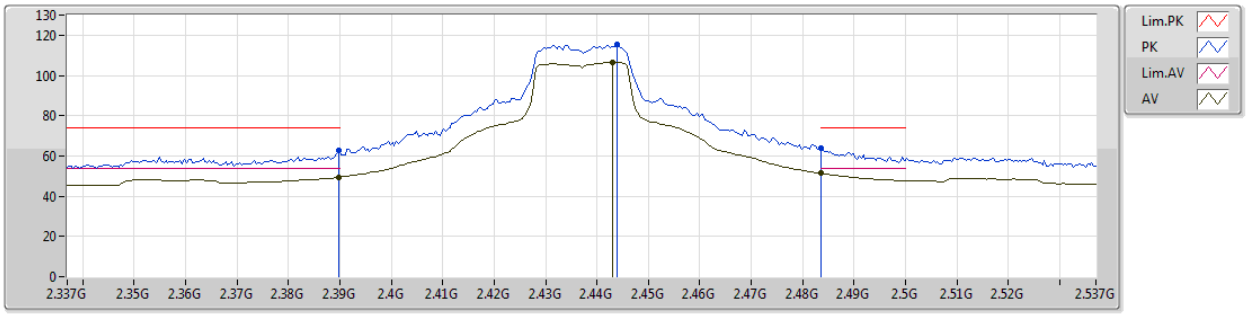


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	52.13	54.00	-1.87	30.77	3	Vertical	0	1.15	-
AV	2.4276G	104.58	Inf	-Inf	30.91	3	Vertical	0	1.15	-
PK	2.3898G	66.07	74.00	-7.93	30.77	3	Vertical	0	1.15	-
PK	2.4244G	113.53	Inf	-Inf	30.90	3	Vertical	0	1.15	-

802.11n HT20_Nss2,(MCS8)_2TX

2437MHz_TX

14/11/2018

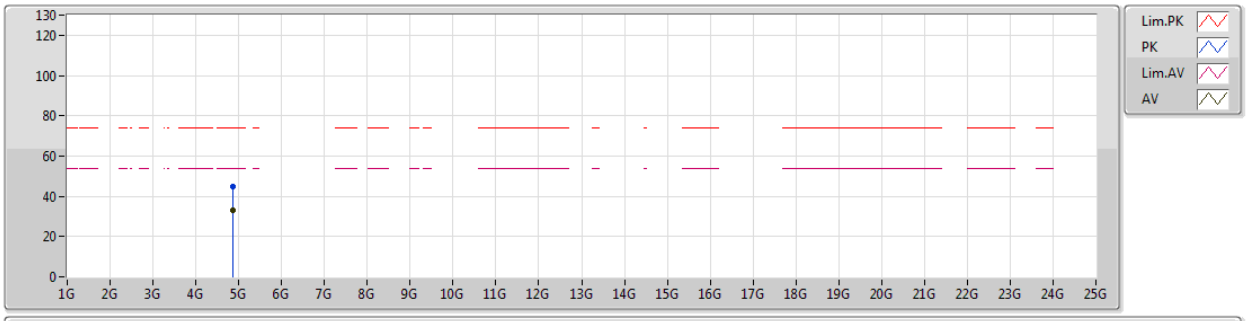


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	49.37	54.00	-4.63	30.77	3	Vertical	360	1.25	-
AV	2.443G	106.51	Inf	-Inf	30.96	3	Vertical	360	1.25	-
AV	2.4835G	51.29	54.00	-2.71	31.11	3	Vertical	360	1.25	-
PK	2.3898G	62.54	74.00	-11.46	30.77	3	Vertical	360	1.25	-
PK	2.4438G	115.23	Inf	-Inf	30.97	3	Vertical	360	1.25	-
PK	2.4835G	63.63	74.00	-10.37	31.11	3	Vertical	360	1.25	-

802.11n HT20_Nss2,(MCS8)_2TX

2437MHz_TX

14/11/2018

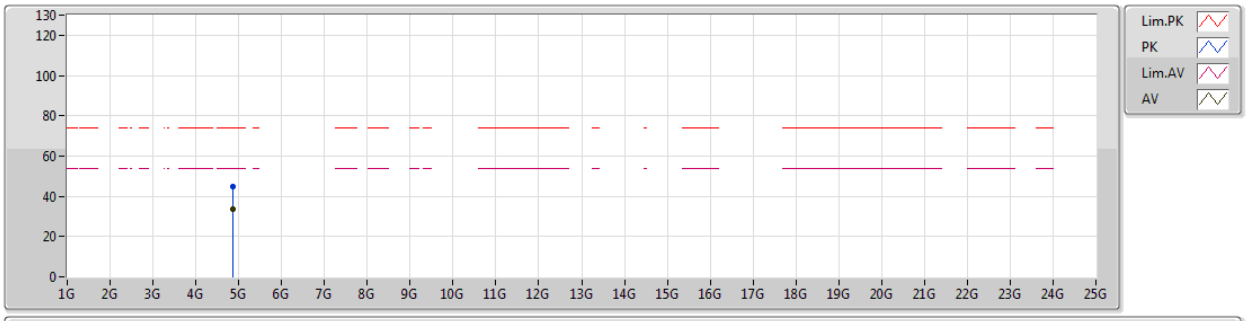


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87502G	33.25	54.00	-20.75	2.26	3	Vertical	287	2.10	-
PK	4.8725G	44.66	74.00	-29.34	2.25	3	Vertical	287	2.10	-

802.11n HT20_Nss2,(MCS8)_2TX

2437MHz_TX

14/11/2018

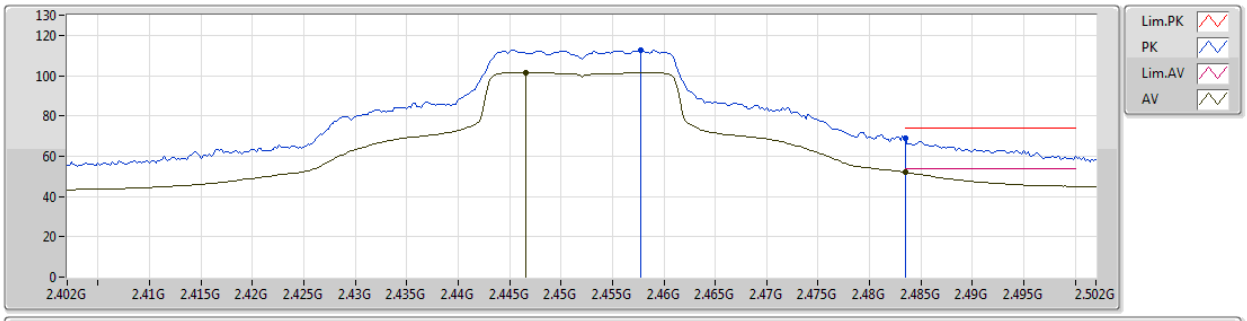


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87484G	33.51	54.00	-20.49	2.25	3	Horizontal	123	3.19	-
PK	4.87382G	44.60	74.00	-29.40	2.25	3	Horizontal	123	3.19	-

802.11n HT20_Nss2,(MCS8)_2TX

2452MHz_TX

15/11/2018

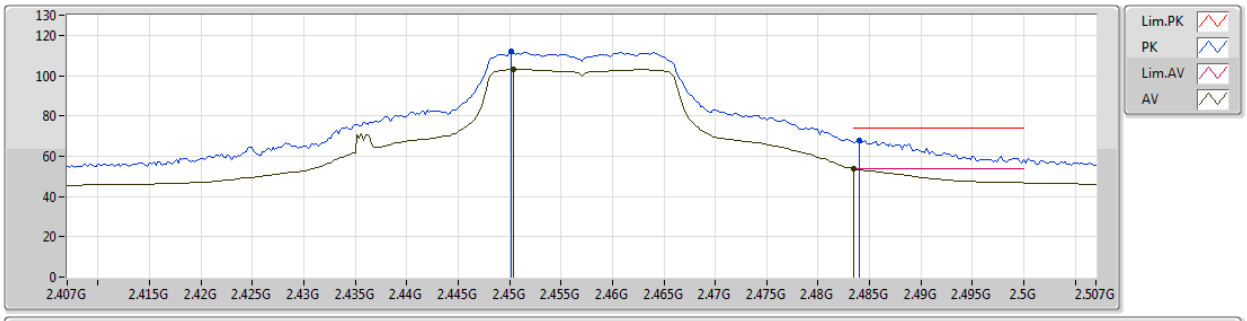


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4466G	101.63	Inf	-Inf	30.98	3	Vertical	341	1.02	-
AV	2.4835G	51.99	54.00	-2.01	31.11	3	Vertical	341	1.02	-
PK	2.4578G	112.85	Inf	-Inf	31.02	3	Vertical	341	1.02	-
PK	2.4835G	68.97	74.00	-5.03	31.11	3	Vertical	341	1.02	-

802.11n HT20_Nss2,(MCS8)_2TX

14/11/2018

2457MHz_TX

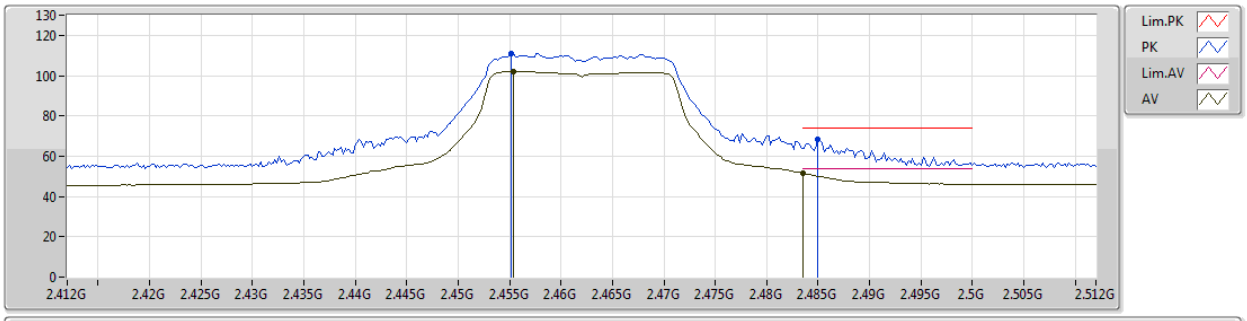


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4504G	102.94	Inf	-Inf	30.99	3	Vertical	360	1.15	-
AV	2.4835G	53.61	54.00	-0.39	31.11	3	Vertical	360	1.15	-
PK	2.4502G	111.87	Inf	-Inf	30.99	3	Vertical	360	1.15	-
PK	2.484G	68.00	74.00	-6.00	31.12	3	Vertical	360	1.15	-

802.11n HT20_Nss2,(MCS8)_2TX

2462MHz_TX

14/11/2018

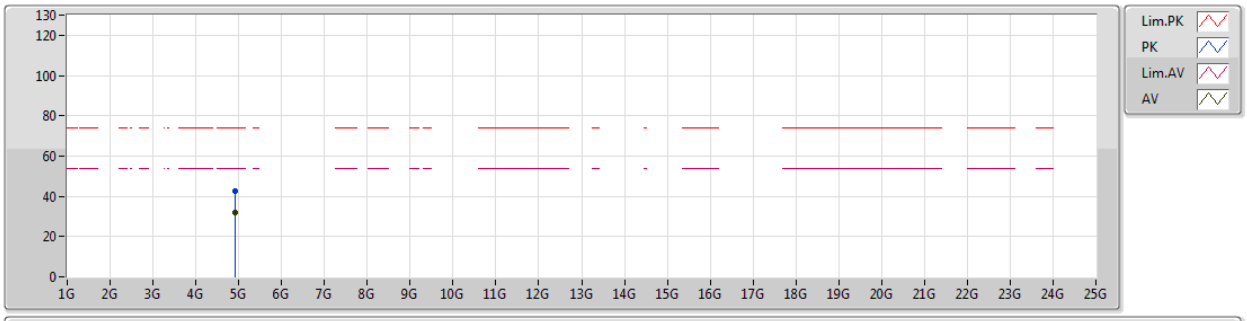


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.4554G	101.92	Inf	-Inf	31.01	3	Vertical	360	1.01	-
AV	2.4835G	51.64	54.00	-2.36	31.11	3	Vertical	360	1.01	-
PK	2.4552G	111.15	Inf	-Inf	31.00	3	Vertical	360	1.01	-
PK	2.485G	68.10	74.00	-5.90	31.12	3	Vertical	360	1.01	-

802.11n HT20_Nss2,(MCS8)_2TX

2462MHz_TX

14/11/2018

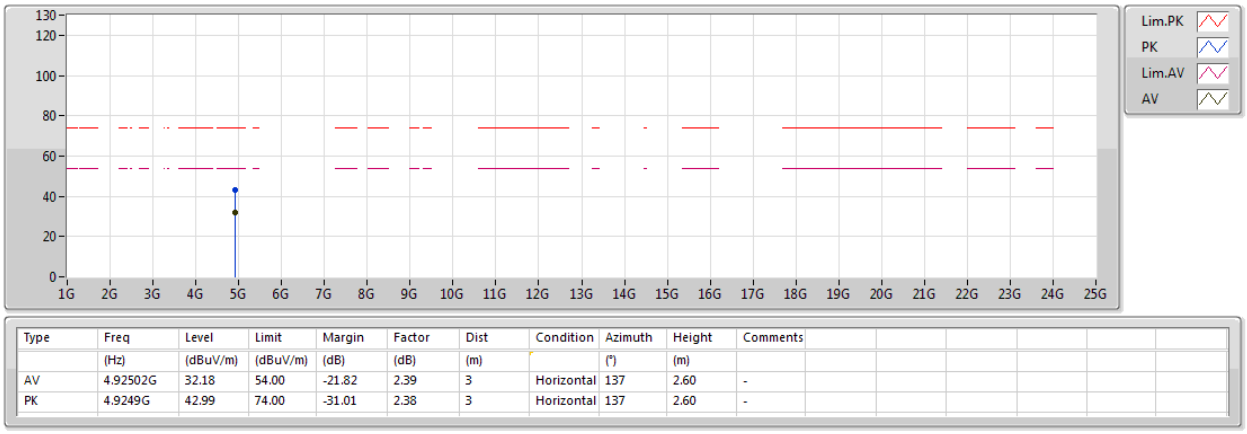


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.92526G	32.09	54.00	-21.91	2.39	3	Vertical	88	1.50	-
PK	4.9249G	42.68	74.00	-31.32	2.38	3	Vertical	88	1.50	-

802.11n HT20_Nss2,(MCS8)_2TX

2462MHz_TX

14/11/2018

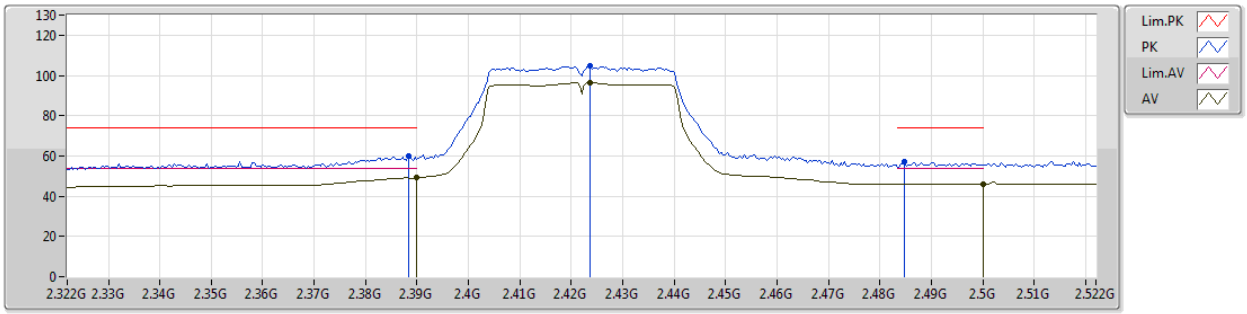


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.92502G	32.18	54.00	-21.82	2.39	3	Horizontal	137	2.60	-
PK	4.9249G	42.99	74.00	-31.01	2.38	3	Horizontal	137	2.60	-

802.11n HT40_Nss2,(MCS8)_2TX

2422MHz_TX

14/11/2018

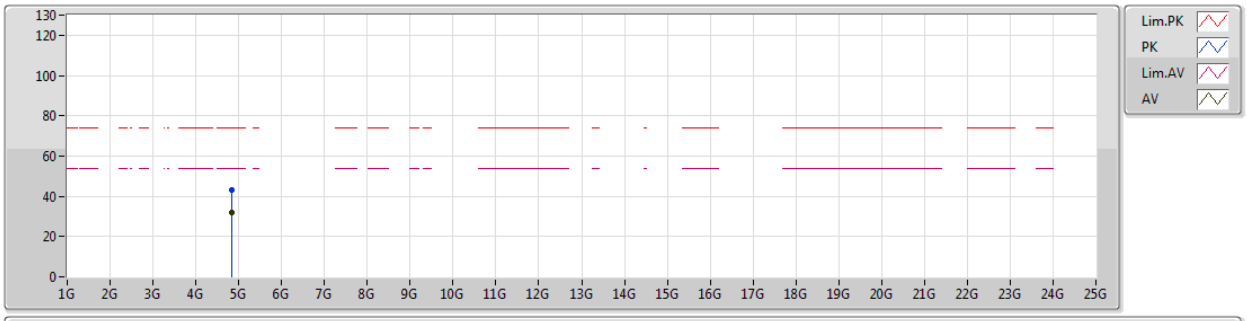


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	49.15	54.00	-4.85	30.77	3	Vertical	360	1.12	-
AV	2.4236G	96.39	Inf	-Inf	30.90	3	Vertical	360	1.12	-
AV	2.5G	46.22	54.00	-7.78	31.17	3	Vertical	360	1.12	-
PK	2.3884G	60.19	74.00	-13.81	30.77	3	Vertical	360	1.12	-
PK	2.4236G	104.71	Inf	-Inf	30.90	3	Vertical	360	1.12	-
PK	2.4848G	56.99	74.00	-17.01	31.12	3	Vertical	360	1.12	-

802.11n HT40_Nss2,(MCS8)_2TX

2422MHz_TX

14/11/2018

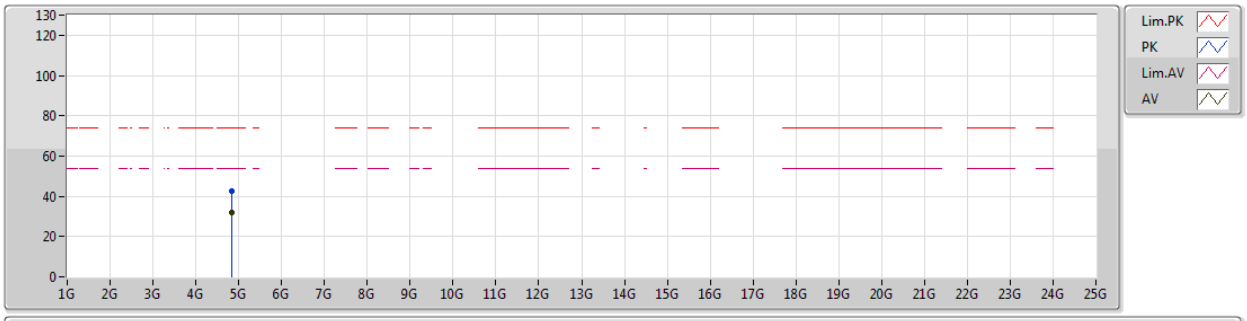


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.84232G	31.93	54.00	-22.07	2.18	3	Vertical	129	1.50	-
PK	4.82918G	43.09	74.00	-30.91	2.15	3	Vertical	129	1.50	-

802.11n HT40_Nss2,(MCS8)_2TX

2422MHz_TX

14/11/2018

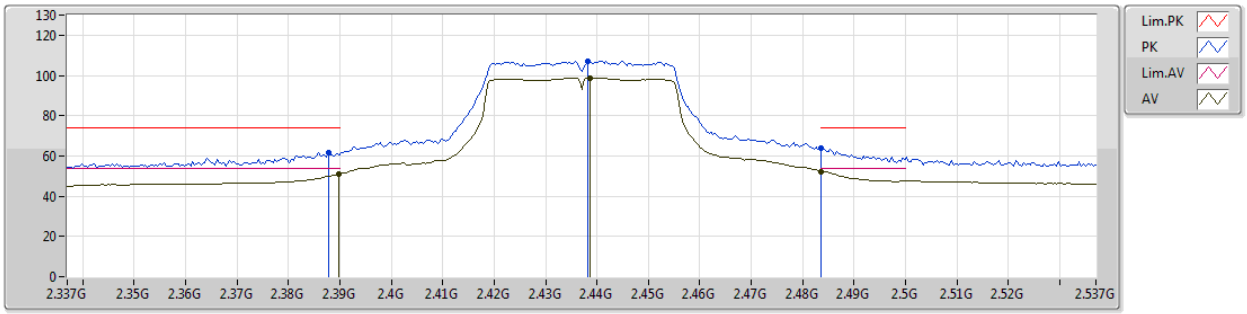


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.83038G	31.72	54.00	-22.28	2.15	3	Horizontal	30	1.50	-
PK	4.84286G	42.52	74.00	-31.48	2.18	3	Horizontal	30	1.50	-

802.11n HT40_Nss2,(MCS8)_2TX

2437MHz_TX

14/11/2018

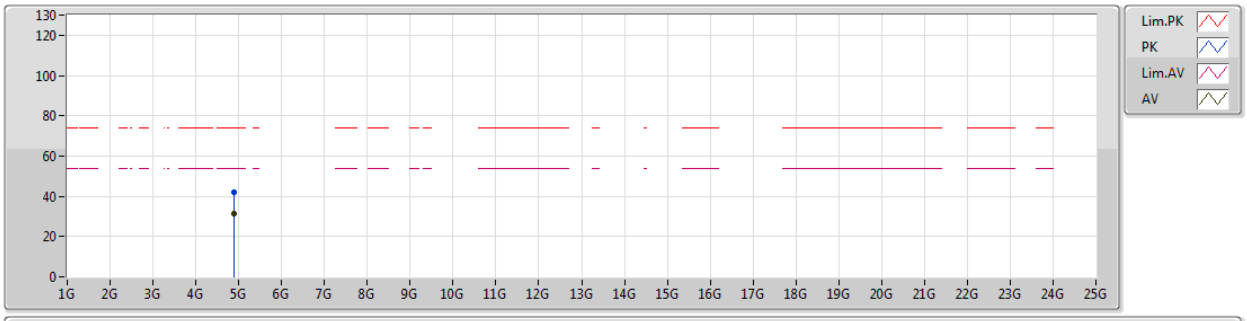


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	50.80	54.00	-3.20	30.77	3	Vertical	360	1.29	-
AV	2.4386G	98.73	Inf	-Inf	30.95	3	Vertical	360	1.29	-
AV	2.4835G	52.34	54.00	-1.66	31.11	3	Vertical	360	1.29	-
PK	2.3878G	61.86	74.00	-12.14	30.77	3	Vertical	360	1.29	-
PK	2.4382G	107.12	Inf	-Inf	30.95	3	Vertical	360	1.29	-
PK	2.4835G	63.77	74.00	-10.23	31.11	3	Vertical	360	1.29	-

802.11n HT40_Nss2,(MCS8)_2TX

14/11/2018

2437MHz_TX

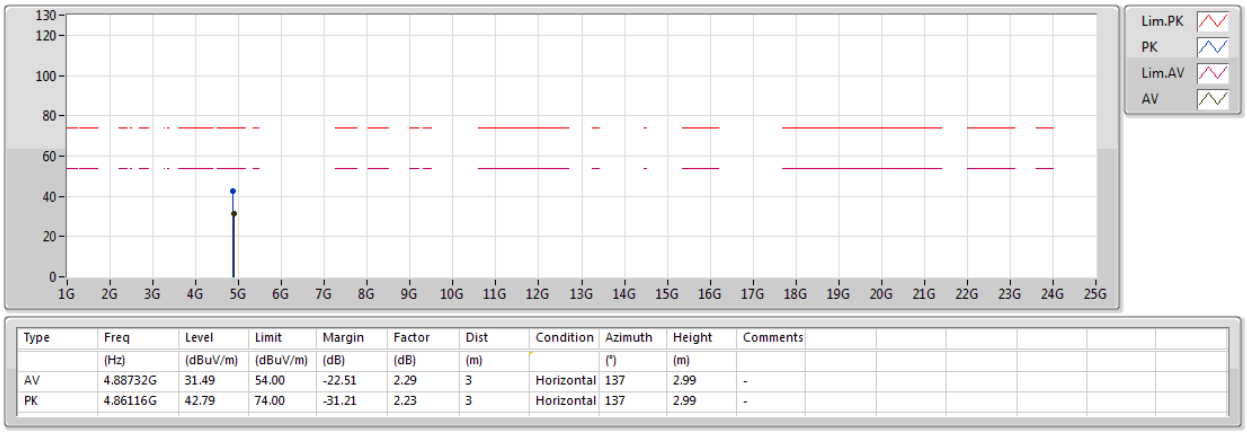


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88582G	31.36	54.00	-22.64	2.29	3	Vertical	235	1.50	-
PK	4.88624G	41.99	74.00	-32.01	2.29	3	Vertical	235	1.50	-

802.11n HT40_Nss2,(MCS8)_2TX

14/11/2018

2437MHz_TX

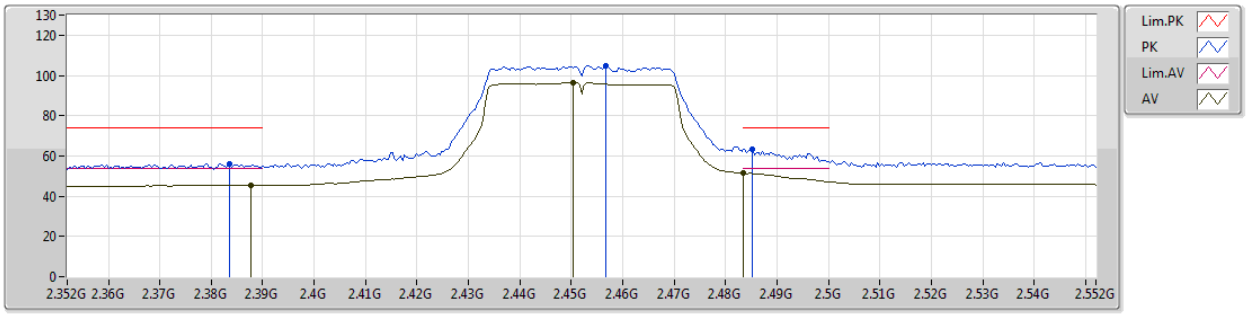


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88732G	31.49	54.00	-22.51	2.29	3	Horizontal	137	2.99	-
PK	4.86116G	42.79	74.00	-31.21	2.23	3	Horizontal	137	2.99	-

802.11n HT40_Nss2,(MCS8)_2TX

2452MHz_TX

14/11/2018

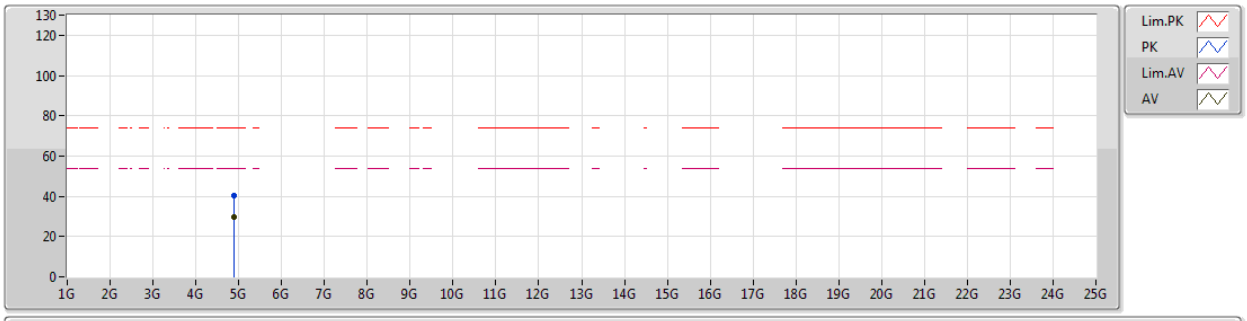


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3876G	45.48	54.00	-8.52	30.77	3	Vertical	360	1.01	-
AV	2.4504G	96.40	Inf	-Inf	30.99	3	Vertical	360	1.01	-
AV	2.4835G	51.31	54.00	-2.69	31.11	3	Vertical	360	1.01	-
PK	2.3836G	56.16	74.00	-17.84	30.75	3	Vertical	360	1.01	-
PK	2.4568G	104.91	Inf	-Inf	31.02	3	Vertical	360	1.01	-
PK	2.4852G	63.43	74.00	-10.57	31.12	3	Vertical	360	1.01	-

802.11n HT40_Nss2,(MCS8)_2TX

2452MHz_TX

14/11/2018

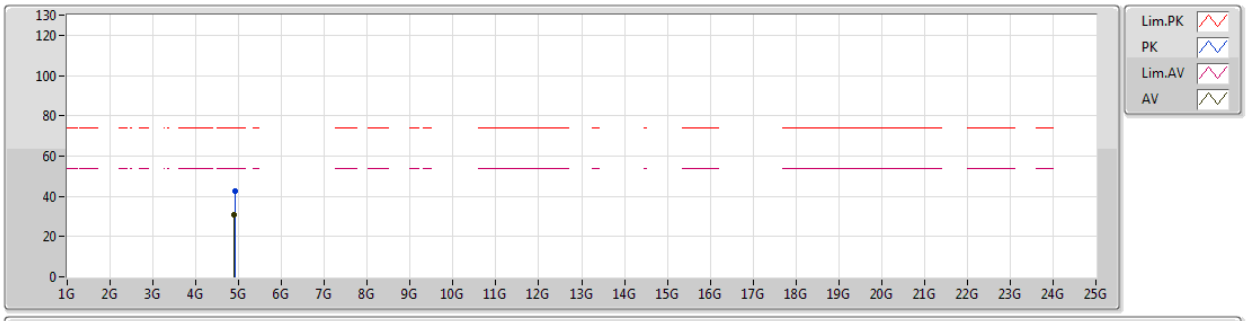


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88972G	29.44	54.00	-24.56	2.29	3	Vertical	67	3.19	-
PK	4.89008G	40.12	74.00	-33.88	2.29	3	Vertical	67	3.19	-

802.11n HT40_Nss2,(MCS8)_2TX

2452MHz_TX

14/11/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88948G	30.93	54.00	-23.07	2.29	3	Horizontal	174	2.16	-
PK	4.91564G	42.81	74.00	-31.19	2.36	3	Horizontal	174	2.16	-