FCC Test Report

FCC ID	:	**2AT6813002019**
Equipment	:	**CBRSYS1300-WTE-2S**
Brand Name	:	**CBRSYS1300-WTE-2S**
Model Name	:	**CBRSYS1300-WTE-2S**
Applicant/ Manufacturer	:	**Celliber Technologies Private Limited 2nd Floor VYSHAK CENTRE,1027, 24th Main 11th Cross, Sector 1 HSR Layout, Bangalore 560102 India**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Jul. 23, 2019, and testing was started from Jul. 23, 2019 and completed on Jul. 29, 2019. 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 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

Report No.	Version	Description	Issued Date
FR971005AC	01	Initial issue of report	Sep. 20, 2019
FR971005AC	02	Update Antenna Information This report is the latest version replacing for the report issued on Sep. 20, 2019	Sep. 27, 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	15.207	AC Power-line Conducted Emissions	PASS	FCC 15.207
3.2	15.247(a)	DTS Bandwidth	PASS	≥500kHz
3.3	15.247(b)	Maximum Conducted Output Power	PASS	Power [dBm]: 30
3.4	15.247(e)	Power Spectral Density	PASS	PSD [dBm/3kHz]: 8
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	Non-Restricted Bands: > 30 dBc
3.6	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: Jackson Tsai

Report Producer: Kate Lo

1 General Description

1.1 Information

There are three WiFi Modules in the CQ30 Series Vehicle PC in the EUT. The antenna signals Tx transmit by only one connector and other connectors are restricted to Rx only mode with switches controlled by software.

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	Function
1	Mobile Mark	RM-WHF-DN-BLK	Omni	N Type	TX/RX
2	Mobile Mark	MGRM-WHF-3C-BLK-120	Omni	Cable with SMA Male	TX/RX
3	Mobile Mark	LP-2400-6000	Directional	SMA Female	RX
4	Mobile Mark	LP-2400-6000	Directional	SMA Female	RX
5	Mobile Mark	LP-2400-6000	Directional	SMA Female	RX
6	Mobile Mark	LP-2400-6000	Directional	SMA Female	RX

Ant.	Port	Gain (dBi)	
		2.4G	5G
1	1	**5**	**5**
2	-	5	5
3	-	7.5	11
4	-	7.5	11
5	-	7.5	11
6	-	7.5	11

Note 1: The antenna 1 was used to test by transmit function .

For 2.4GHz function:

For IEEE 802.11 b/g/n mode

Ant. 1 or Ant. 2 could transmit/receive.

Ant. 3, Ant. 4, Ant. 5 and Ant. 6 could receive only.

For 5GHz function:

For IEEE 802.11 a/n mode

Ant. 1 or Ant. 2 could transmit/receive.

Ant. 3, Ant. 4, Ant. 5 and Ant. 6 could receive only.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From Switching Power Supply			
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	0.997	0.01	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.972	0.12	1.633m	1k
802.11n HT20	0.979	0.09	1.526m	1k

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

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 v05r02

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	TH01-HY	Barry	24.9~25.4°C / 49~54%	24/Jul/2019~ 29/Jul/2019
Radiated	03CH02-HY	Streak	21.1~23.2°C / 51.2~53.9%	23/Jul/2019~ 25/Jul/2019
AC Conduction	CO04-HY	Jeff	22.6~24.7°C / 62.3~65.9%	26/Jul/2019

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	120V

2.2 Test Channel Mode

Test Software Version	MobaXterm_Personal_11.1

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	14
2437MHz	14
2462MHz	13
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	14
2437MHz	14
2462MHz	14
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	15
2437MHz	14
2462MHz	14

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	For Switching Power Supply

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	For Switching Power Supply
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Z Plane**
	
Worst Planes of EUT	V

2.4 Accessories and Support Equipment

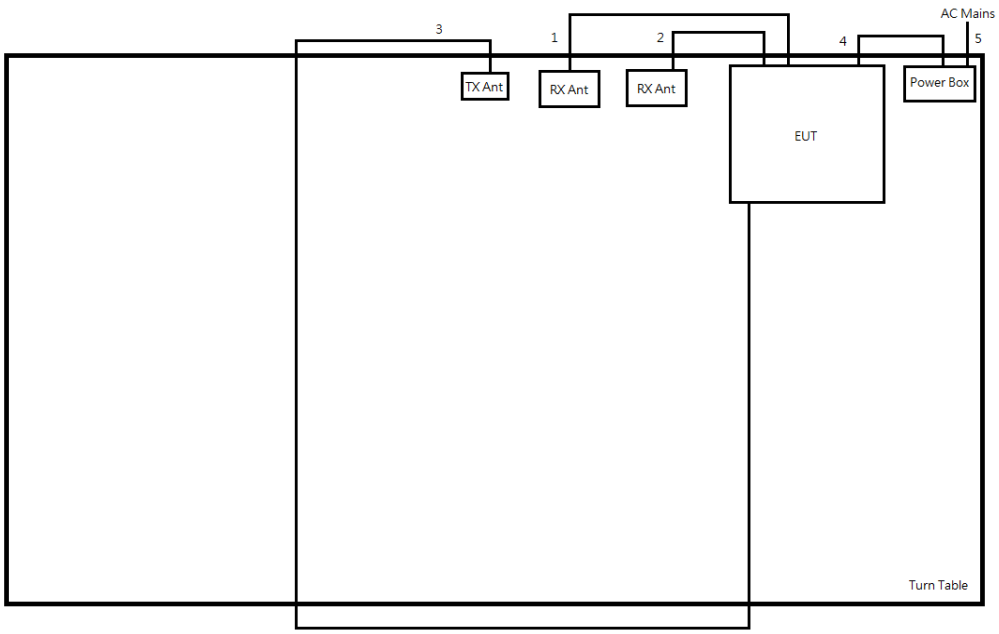
Accessories				
AC power Cord	Brand Name	AC Power cord	Model Name	11-00022
	Manufacturer	Tensility		
	Power Rating	I/P: 110 -250 Vac, 2.5 A		
	Power Cord	1 meter, non-shielded cable, w/o ferrite core		
Universal Adaptor	Brand Name	Universal Adapter	Model Name	APK01AP-52
	Manufacturer	Targus		
Additional power cable with Fischer connector for DC	Brand Name	Open ended cable with 2 pin Ficher	Model Name	600090256
	Manufacturer	Celliber		
	Power Cord	2 meter, non-shielded cable, w/o ferrite core		
M12 Ethernet cable	Brand Name	M12 08 pos Male to RJ45 cable	Model Name	1407415
	Manufacturer	Phoenix Contact		
	Power Cord	2 meter, shielded cable, w/o ferrite core		
M12 Ethernet cable	Brand Name	Circular M12 08 pos Male to M12 08 pos Male	Model Name	1408748
	Manufacturer	Phoenix Contact		
	Power Cord	0.5 meter, shielded cable, w/o ferrite core		
VGA Cable	Brand Name	VGA Cable	Model Name	P502-006
	Manufacturer	P502-006		
	Power Cord	1.83 meter, shielded cable, w/o ferrite core		
RX Antenna Assembly	Brand Name	RX Antenna Assembly	Model Name	800090085-01
	Manufacturer	Celliber	PN	LP-2400-6000
TX Antenna	Brand Name	TX Antenna	Model Name	MGRM-WHF-3C-BLK-120
	Manufacturer	Mobile Mark Antennas Solutions		
	Power Cord	3 meter, shielded cable, w/o ferrite core		
TX Antenna	Brand Name	TX Antenna	Model Name	RM-WHF-DN-BLK
	Manufacturer	Mobile Mark Antennas Solutions		
GPS antenna	Brand Name	GPS Antenna	Model Name	33-4721-00-3000
	Manufacturer	Tallysman Wireless Inc.		
	Power Cord	3 meter, shielded cable, w/o ferrite core		
N Type to SMA adapter	Brand Name	Adapter	Model Name	53S132-K00L5
	Manufacturer	Rosenberger		
RX Cable	Brand Name	Rx Cable	Model Name	ULC-10FT-SMSM+
	Manufacturer	Mini-Circuits		
	Power Cord	3 meter, shielded cable, w/o ferrite core		
TX Cable	Brand Name	TX Cable	Model Name	SPU400FR/11SMA/11SMA/004600
	Manufacturer	HUBER+SUHNER		
	Power Cord	4.6 meter, shielded cable, w/o ferrite core		

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

Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC

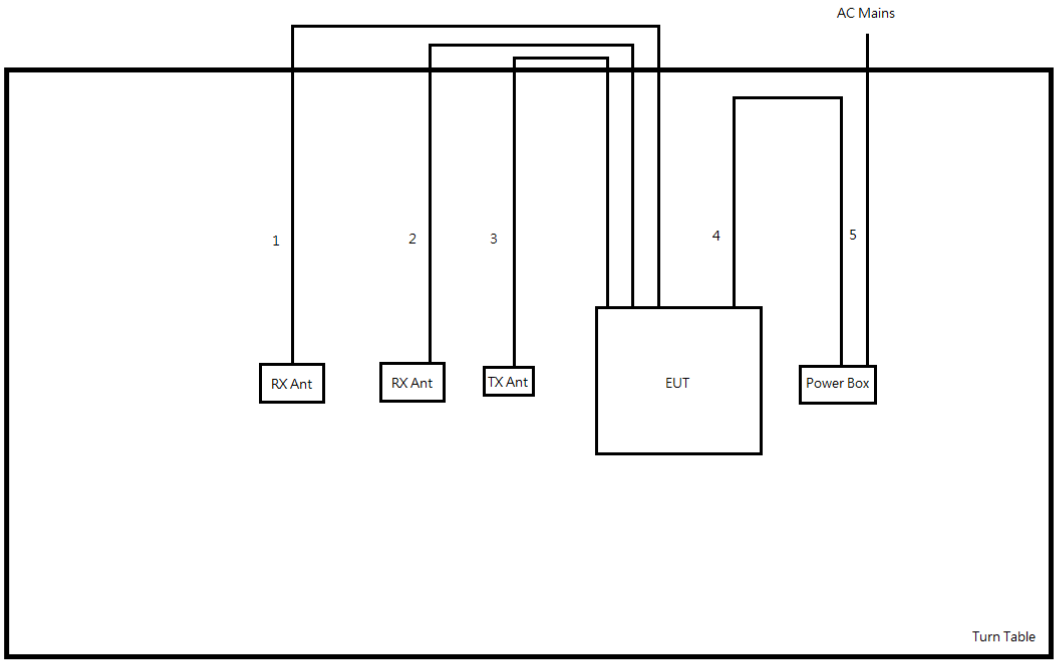
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	RX Cable	Yes	3	-
2	RX Cable	Yes	3	-
3	TX Cable	Yes	4.6	-
4	AC Power Cord	No	1.0	-
5	Power Cable	No	1.8	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	RX Cable	Yes	3	-
2	RX Cable	Yes	3	-
3	TX Cable	Yes	4.6	-
4	AC Power Cord	No	1.0	-
5	Power Cable	No	1.8	-

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

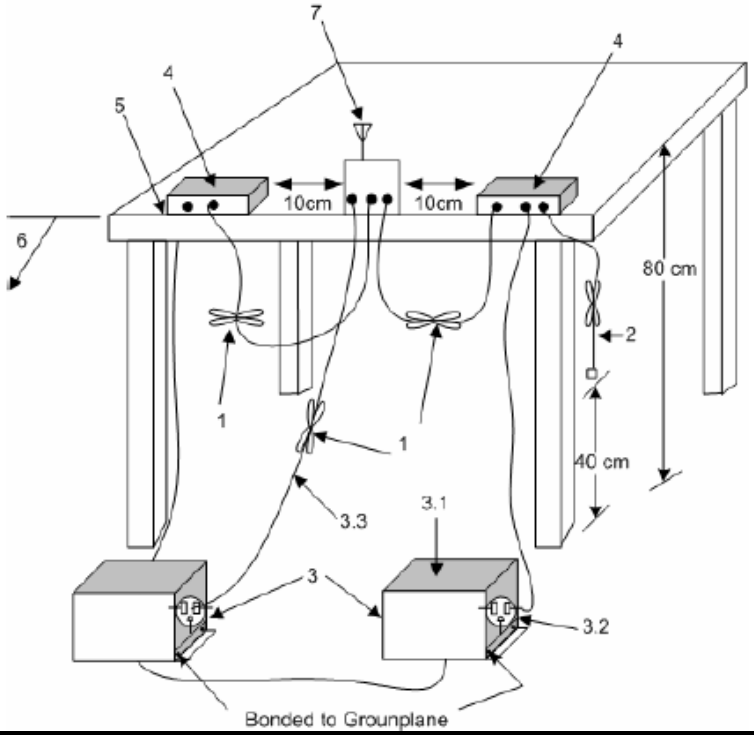
Refer a test equipment and calibration data table in this test report.

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 Test Setup

AC Power-line Conducted Emissions



3.1.5 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 ≥ 500 kHz.

3.2.2 Measuring Instruments

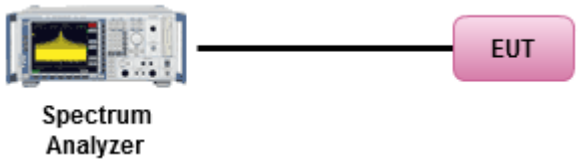
Refer a test equipment and calibration data table in this test report.

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

Emission Bandwidth



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): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ 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.			

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

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


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) ≤ 8 dBm/3kHz

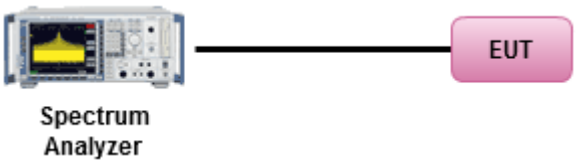
3.4.2 Measuring Instruments

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) 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.

3.4.4 Test Setup

Power Spectral Density


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.	

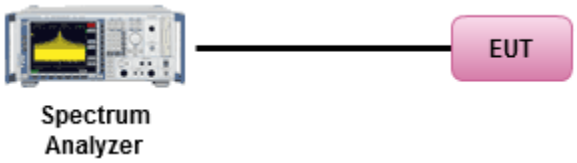
3.5.2 Measuring Instruments

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

Emissions in Non-restricted Frequency Bands


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.

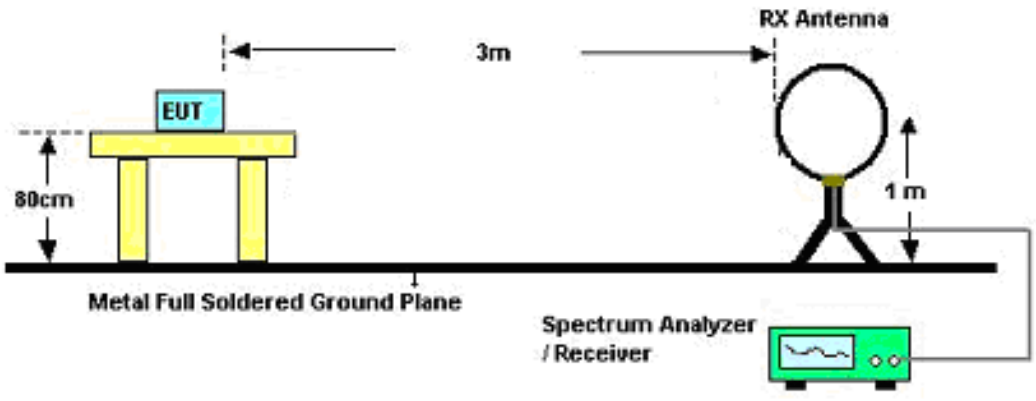
3.6.2 Measuring Instruments

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

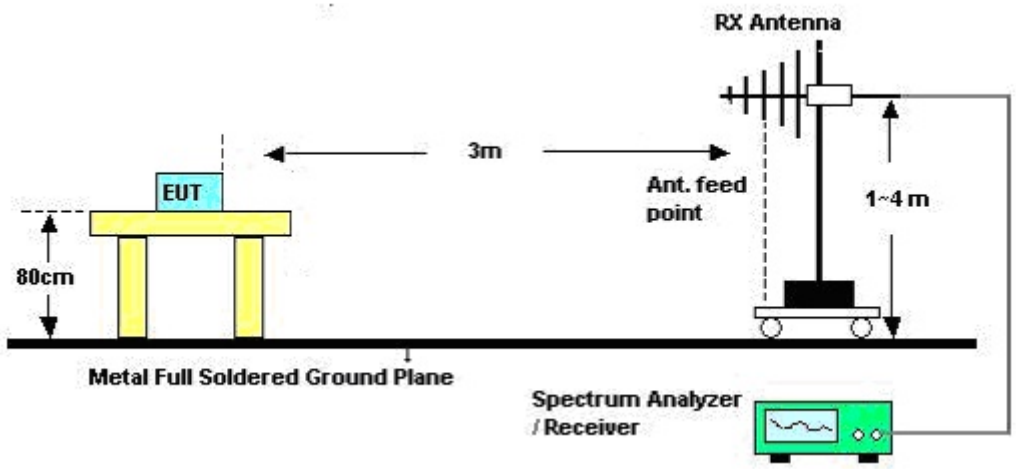
3.6.3 Test Procedures

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

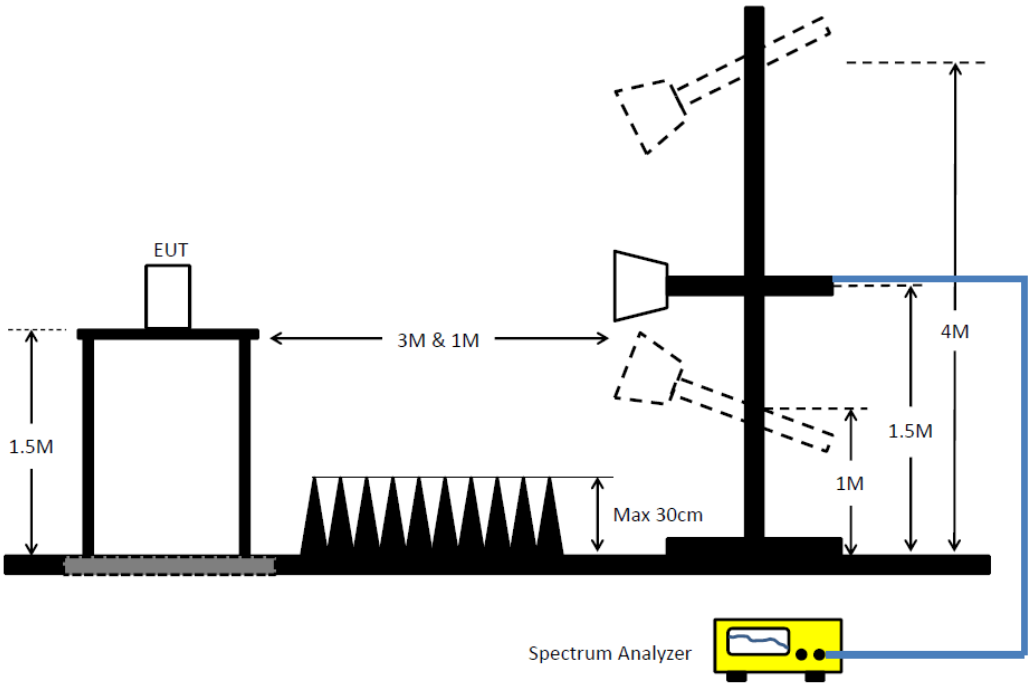
3.6.4 Test Setup

Emissions in Restricted Frequency Bands
9kHz~30MHz


30MHz~1GHz



Above 1GHz



3.6.5 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.

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9kHz~3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz~30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz~200MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz~30 MHz	12/Oct/2018	11/Oct/2019

NCR : Non-Calibration Require

Instrument for Radiated Test

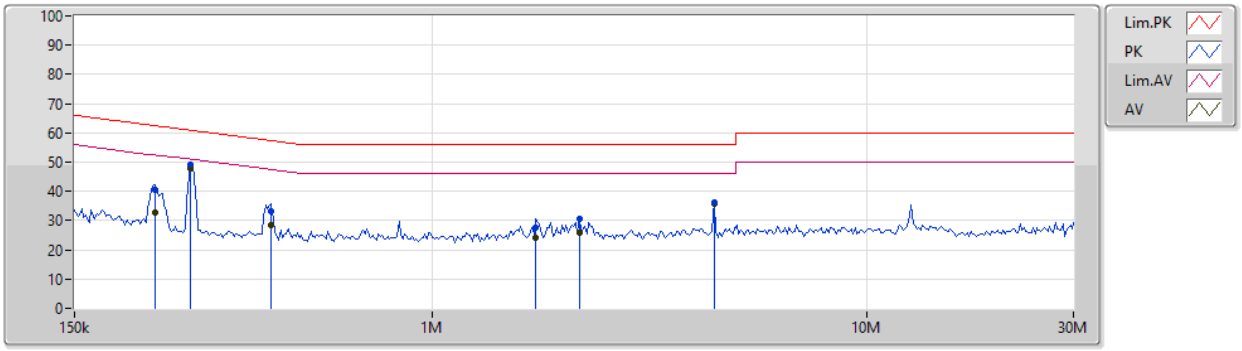
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	19/Oct/2018	18/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	17/Oct/2018	16/Oct/2019
Amplifier	Agilent	8447D	2944A11149	30~1000MHz	02/Jul/2019	01/Jul/2020
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	23/Oct/2018	22/Oct/2019
Signal Analyzer	R&S	FSP40	100593	9kHz~40GHz	27/Dec/2018	26/Dec/2019
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz~1GHz	18/Jan/2019	17/Jan/2020
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz~40GHz	18/Jan/2019	17/Jan/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	08/Sep/2018	07/Sep/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz~40GHz	24/Aug/2018	23/Aug/2019
EMI Test Receiver	R&S	ESR	102052	9kHz~3.6GHz	09/Apr/2019	08/Apr/2020
Loop Antenna	TESEQ	HLA 6120	31244	9k~30MHz	15/Mar/2019	14/Mar/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	22/Mar/2019	21/Mar/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz~18GHz	03/Jun/2019	02/Jun/2020

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz~18G	21/Mar/2019	20/Mar/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz~18G	21/Mar/2019	20/Mar/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz~18G	21/Mar/2019	20/Mar/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Switching Power Supply mode		

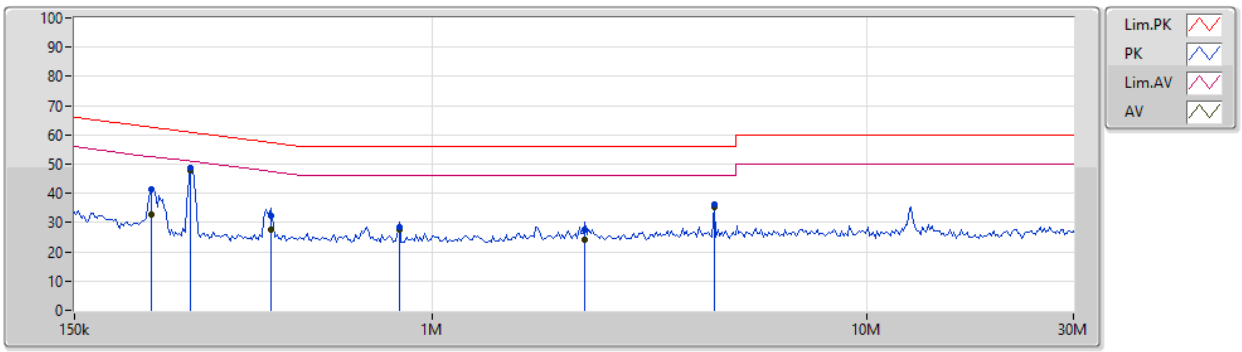
26/07/2019



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	230.097k	40.54	62.44	-21.90	19.47	Neutral	-	21.07	9.59	0.01	9.87
AV	230.097k	32.66	52.44	-19.78	19.47	Neutral	-	13.19	9.59	0.01	9.87
QP	277.982k	49.18	60.88	-11.70	19.47	Neutral	-	29.71	9.59	0.01	9.87
AV	277.982k	47.76	50.88	-3.12	19.47	Neutral	"Worst"	28.29	9.59	0.01	9.87
QP	426.418k	33.35	57.32	-23.97	19.48	Neutral	-	13.87	9.59	0.01	9.88
AV	426.418k	28.33	47.32	-18.99	19.48	Neutral	-	8.85	9.59	0.01	9.88
QP	1.734M	27.39	56.00	-28.61	19.53	Neutral	-	7.86	9.61	0.03	9.89
AV	1.734M	24.26	46.00	-21.74	19.53	Neutral	-	4.73	9.61	0.03	9.89
QP	2.18M	30.69	56.00	-25.31	19.53	Neutral	-	11.16	9.61	0.03	9.89
AV	2.18M	25.79	46.00	-20.21	19.53	Neutral	-	6.26	9.61	0.03	9.89
QP	4.464M	36.28	56.00	-19.72	19.56	Neutral	-	16.72	9.62	0.05	9.89
AV	4.464M	35.57	46.00	-10.43	19.56	Neutral	-	16.01	9.62	0.05	9.89

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Switching Power Supply mode		

26/07/2019



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	225.563k	41.54	62.62	-21.08	19.48	Line	-	22.06	9.60	0.01	9.87
AV	225.563k	32.81	52.62	-19.81	19.48	Line	-	13.33	9.60	0.01	9.87
QP	277.982k	48.52	60.88	-12.36	19.48	Line	-	29.04	9.60	0.01	9.87
AV	277.982k	47.84	50.88	-3.04	19.48	Line	"Worst"	28.36	9.60	0.01	9.87
QP	426.418k	32.23	57.32	-25.09	19.48	Line	-	12.75	9.59	0.01	9.88
AV	426.418k	27.41	47.32	-19.91	19.48	Line	-	7.93	9.59	0.01	9.88
QP	838.859k	28.62	56.00	-27.38	19.50	Line	-	9.12	9.60	0.02	9.88
AV	838.859k	27.53	46.00	-18.47	19.50	Line	-	8.03	9.60	0.02	9.88
QP	2.246M	27.54	56.00	-28.46	19.55	Line	-	7.99	9.62	0.04	9.89
AV	2.246M	24.32	46.00	-21.68	19.55	Line	-	4.77	9.62	0.04	9.89
QP	4.464M	36.21	56.00	-19.79	19.58	Line	-	16.63	9.64	0.05	9.89
AV	4.464M	35.52	46.00	-10.48	19.58	Line	-	15.94	9.64	0.05	9.89

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	10.025M	13.868M	13M9G1D	9.975M	13.868M
802.11g_Nss1,(6Mbps)_1TX	16.325M	16.567M	16M6D1D	16.3M	16.542M
802.11n HT20_Nss1,(MCS0)_1TX	17.55M	17.766M	17M8D1D	17.275M	17.741M

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	10M	13.868M
2437MHz	Pass	500k	9.975M	13.868M
2462MHz	Pass	500k	10.025M	13.868M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.3M	16.567M
2437MHz	Pass	500k	16.3M	16.567M
2462MHz	Pass	500k	16.325M	16.542M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.3M	17.766M
2437MHz	Pass	500k	17.55M	17.766M
2462MHz	Pass	500k	17.275M	17.741M

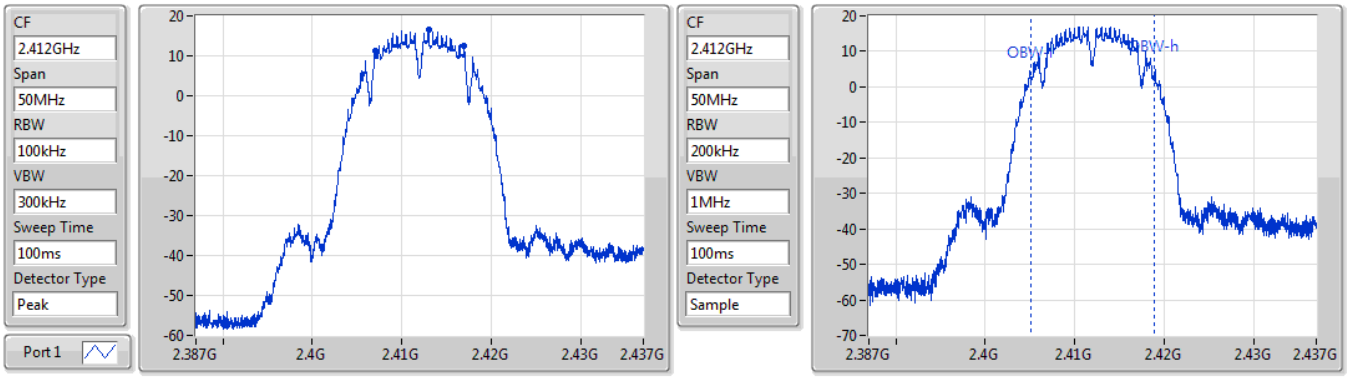
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

26/07/2019



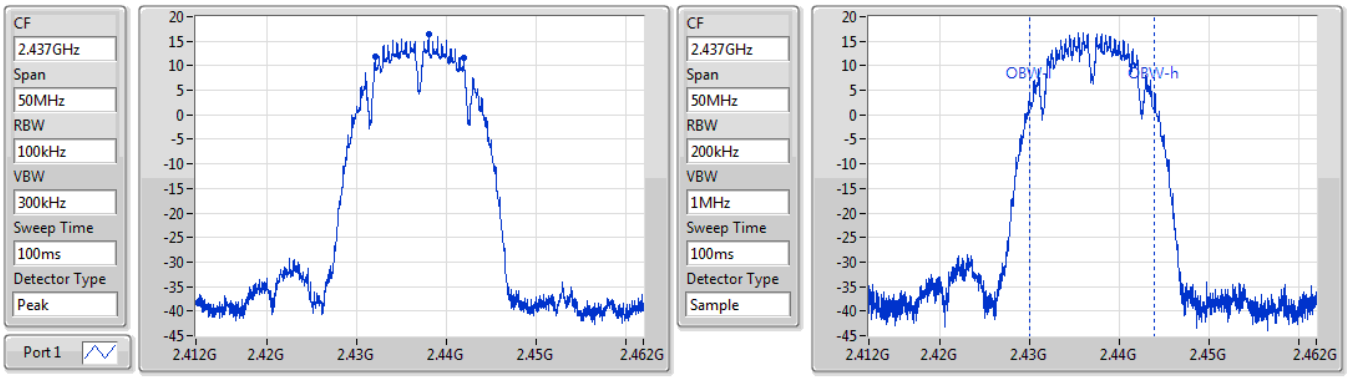
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10M	2.407G	2.417G	13.868M	2.405053G	2.418922G	500k	1

802.11b_Nss1,(1Mbps)_1TX

EBW

2437MHz

26/07/2019



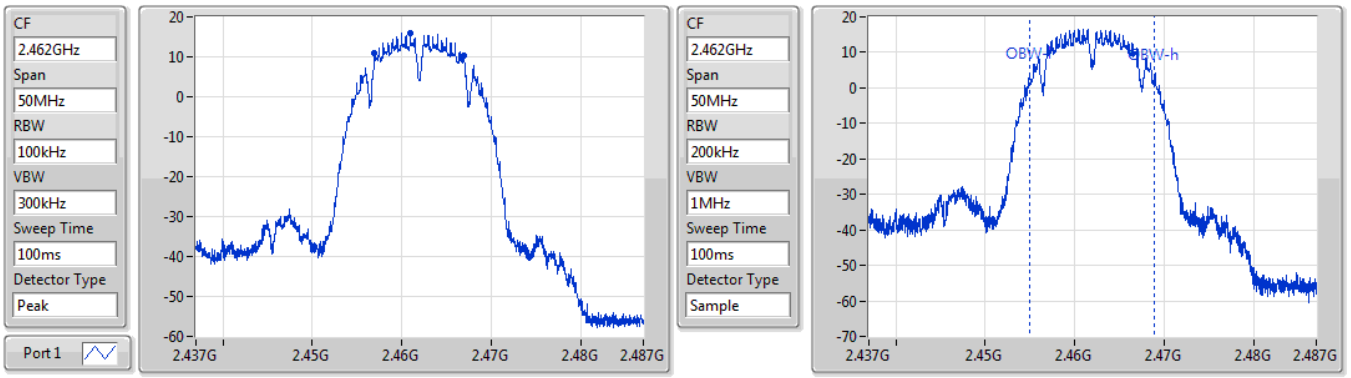
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.975M	2.432G	2.441975G	13.868M	2.430028G	2.443897G	500k	1

802.11b_Nss1,(1Mbps)_1TX

EBW

2462MHz

26/07/2019



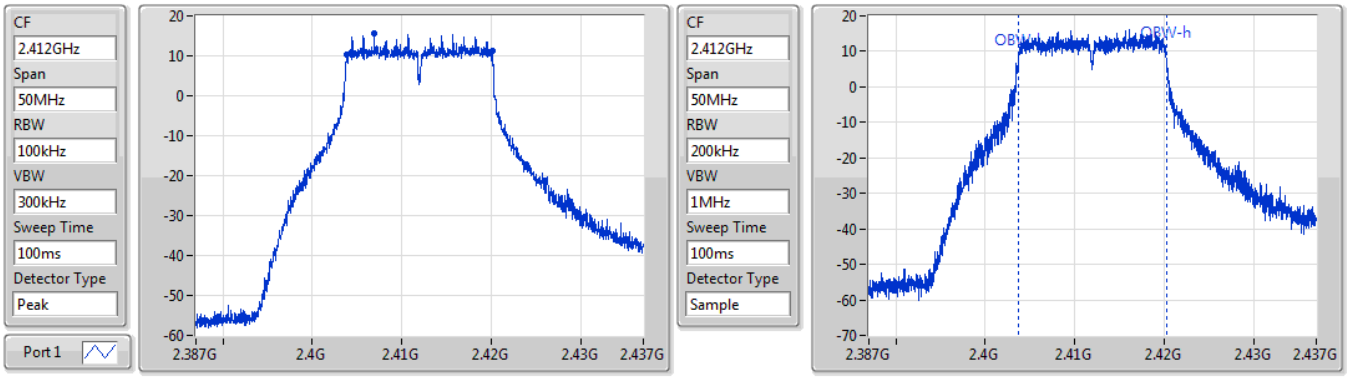
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.025M	2.45695G	2.466975G	13.868M	2.455003G	2.468872G	500k	1

802.11g_Nss1,(6Mbps)_1TX

EBW

2412MHz

26/07/2019



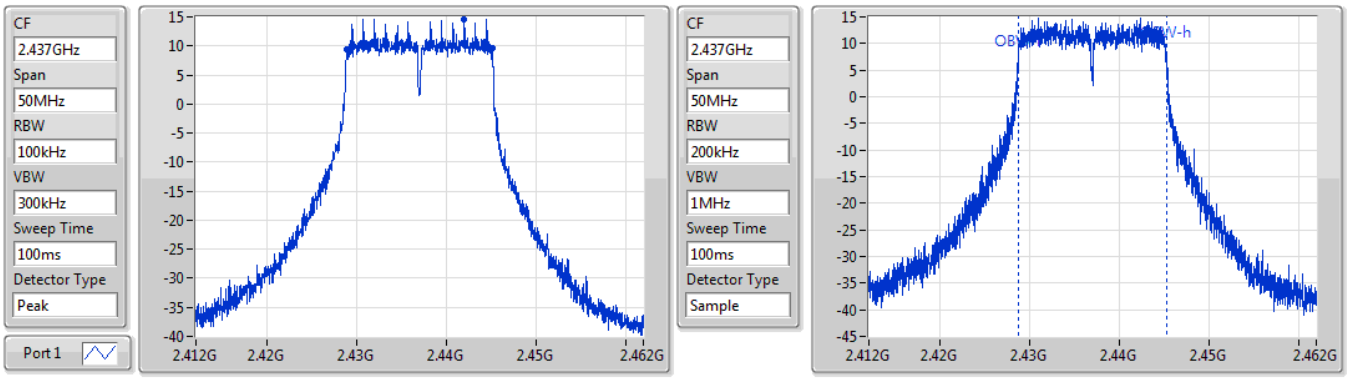
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.403825G	2.420125G	16.567M	2.403679G	2.420246G	500k	1

802.11g_Nss1,(6Mbps)_1TX

EBW

2437MHz

26/07/2019



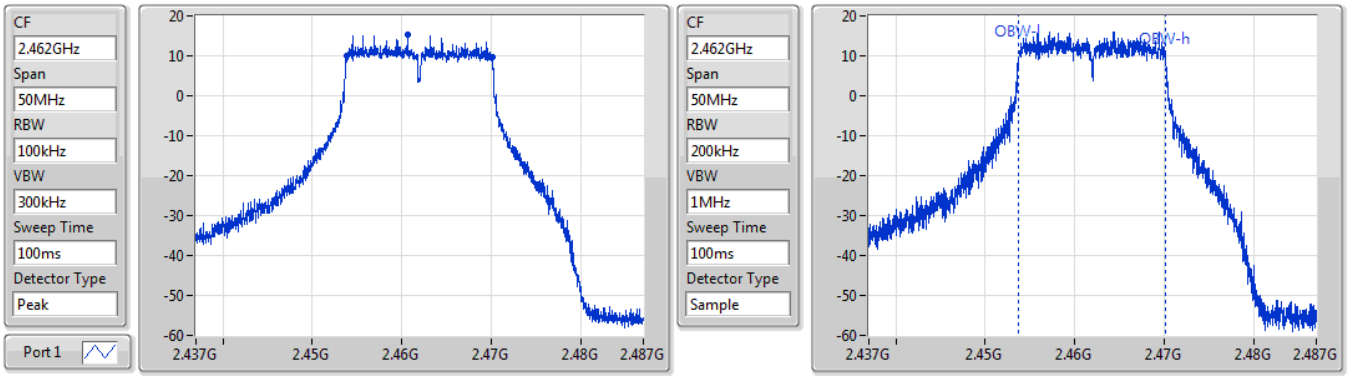
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.428825G	2.445125G	16.567M	2.428679G	2.445246G	500k	1

802.11g_Nss1,(6Mbps)_1TX

EBW

2462MHz

26/07/2019



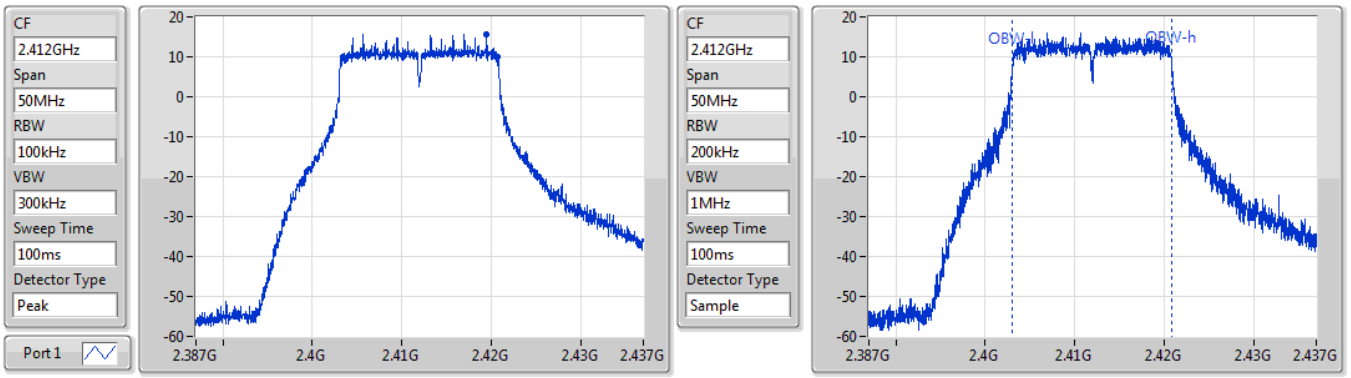
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.4538G	2.470125G	16.542M	2.453654G	2.470196G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX

EBW

2412MHz

24/07/2019



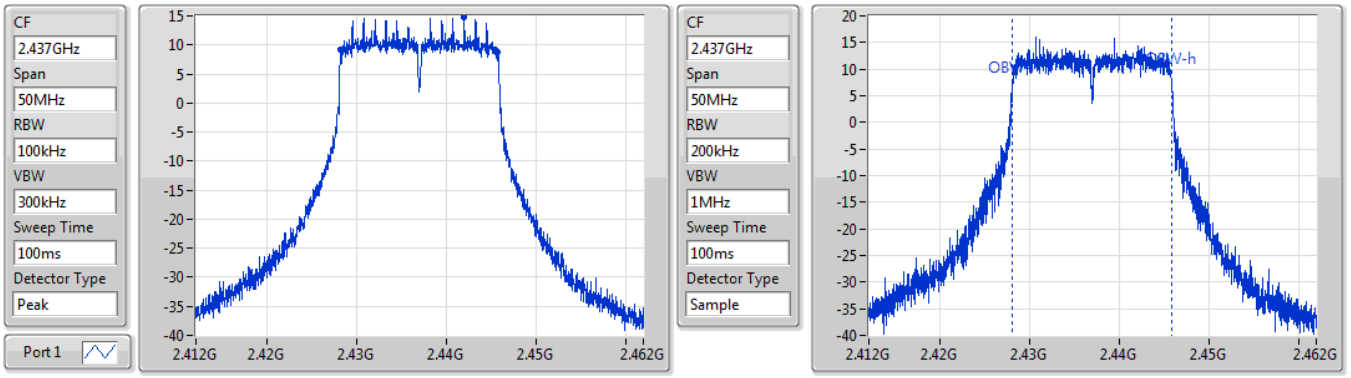
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.3M	2.40345G	2.42075G	17.766M	2.403079G	2.420846G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX

EBW

2437MHz

24/07/2019



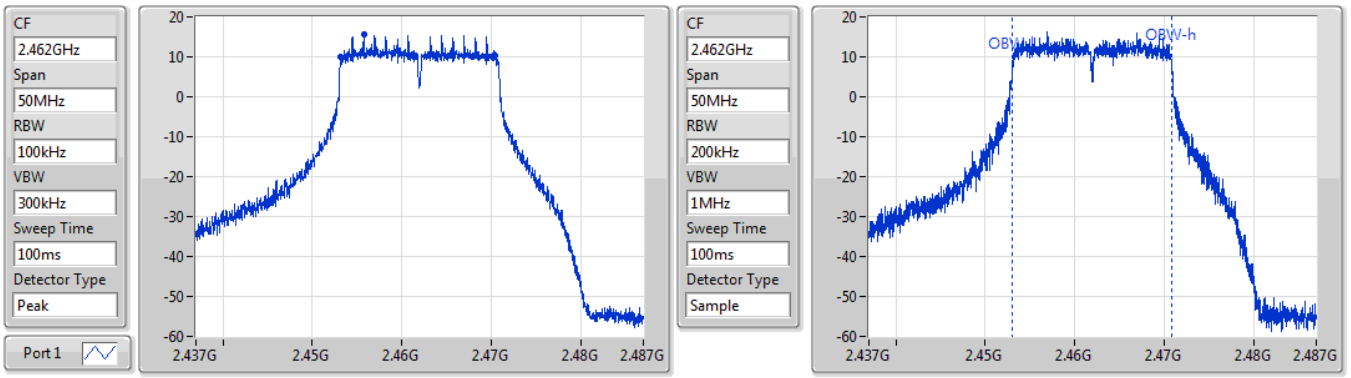
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	2.4282G	2.44575G	17.766M	2.428054G	2.445821G	500k	1

802.11n HT20_Nss1,(MCS0)_1TX

EBW

2462MHz

24/07/2019



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.275M	2.4532G	2.470475G	17.741M	2.453054G	2.470796G	500k	1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	26.59	0.45604
802.11g_Nss1,(6Mbps)_1TX	26.46	0.44259
802.11n HT20_Nss1,(MCS0)_1TX	26.80	0.47863

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	5.00	26.59	26.59	30.00
2437MHz	Pass	5.00	26.13	26.13	30.00
2462MHz	Pass	5.00	25.99	25.99	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	5.00	26.46	26.46	30.00
2437MHz	Pass	5.00	26.07	26.07	30.00
2462MHz	Pass	5.00	26.39	26.39	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	5.00	26.80	26.80	30.00
2437MHz	Pass	5.00	25.92	25.92	30.00
2462MHz	Pass	5.00	26.54	26.54	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	0.68
802.11g_Nss1,(6Mbps)_1TX	-0.72
802.11n HT20_Nss1,(MCS0)_1TX	-0.66

RBW=3 kHz.

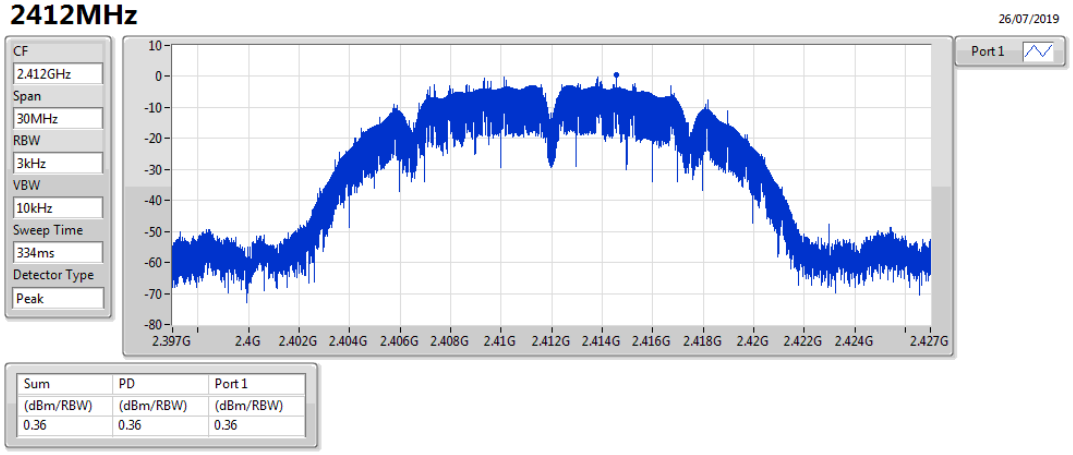
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	5.00	0.36	0.36	8.00
2437MHz	Pass	5.00	0.48	0.48	8.00
2462MHz	Pass	5.00	0.68	0.68	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	5.00	-1.08	-1.08	8.00
2437MHz	Pass	5.00	-0.72	-0.72	8.00
2462MHz	Pass	5.00	-1.00	-1.00	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	5.00	-0.66	-0.66	8.00
2437MHz	Pass	5.00	-1.35	-1.35	8.00
2462MHz	Pass	5.00	-0.97	-0.97	8.00

DG = Directional Gain; RBW=3 kHz;
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

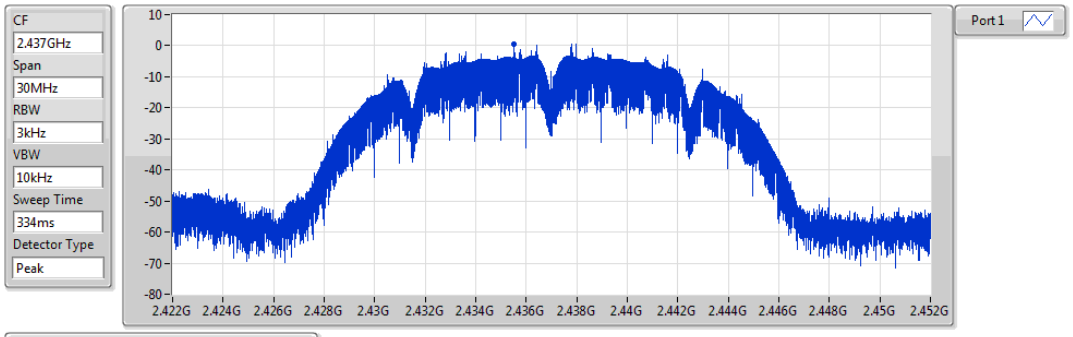
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.36	0.36	0.36

802.11b_Nss1,(1Mbps)_1TX PSD

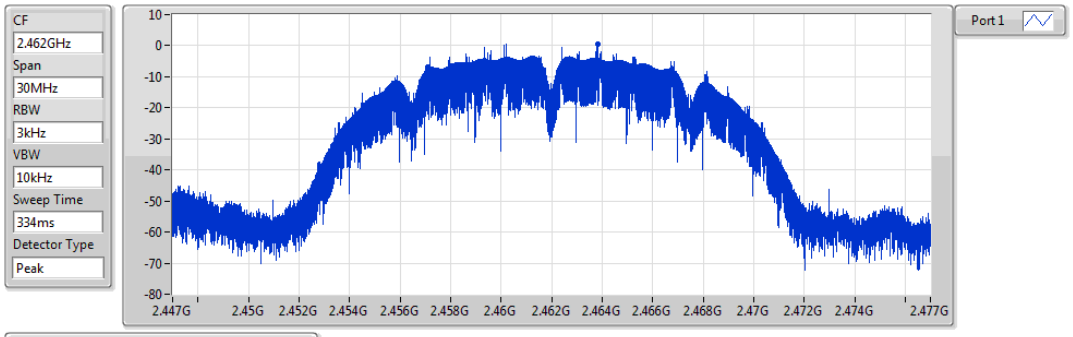
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.48	0.48	0.48

802.11b_Nss1,(1Mbps)_1TX PSD

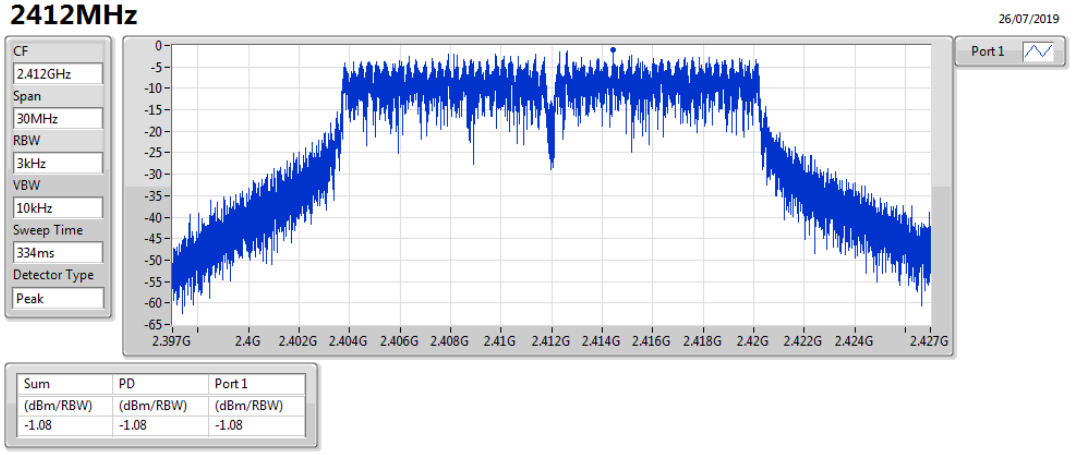
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.68	0.68	0.68

802.11g_Nss1,(6Mbps)_1TX PSD

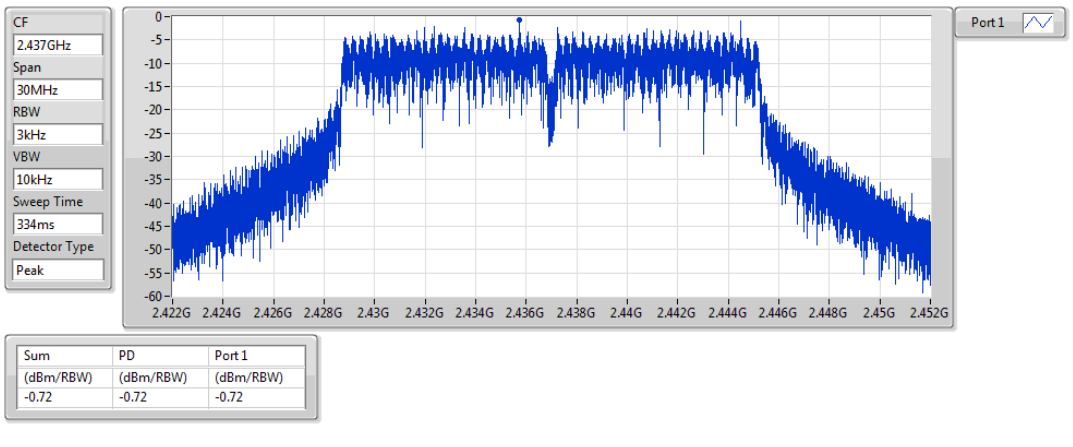
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.08	-1.08	-1.08

802.11g_Nss1,(6Mbps)_1TX PSD

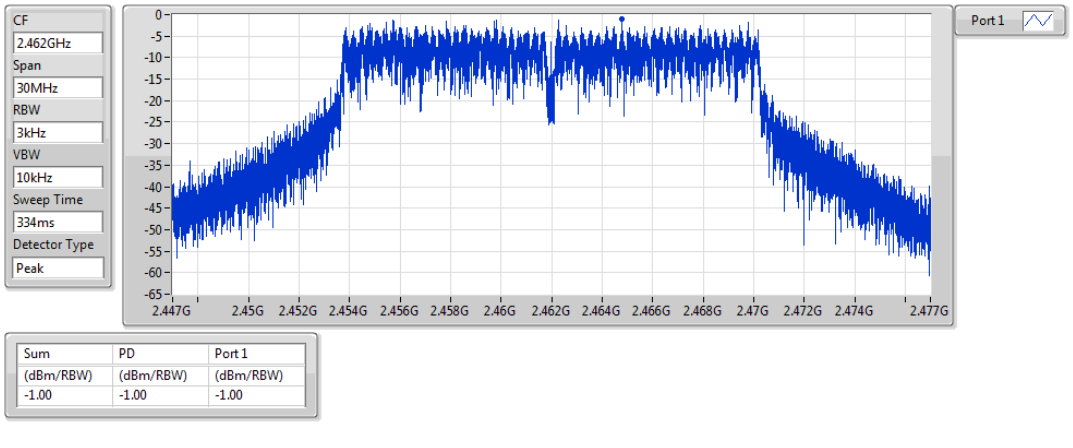
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.72	-0.72	-0.72

802.11g_Nss1,(6Mbps)_1TX PSD

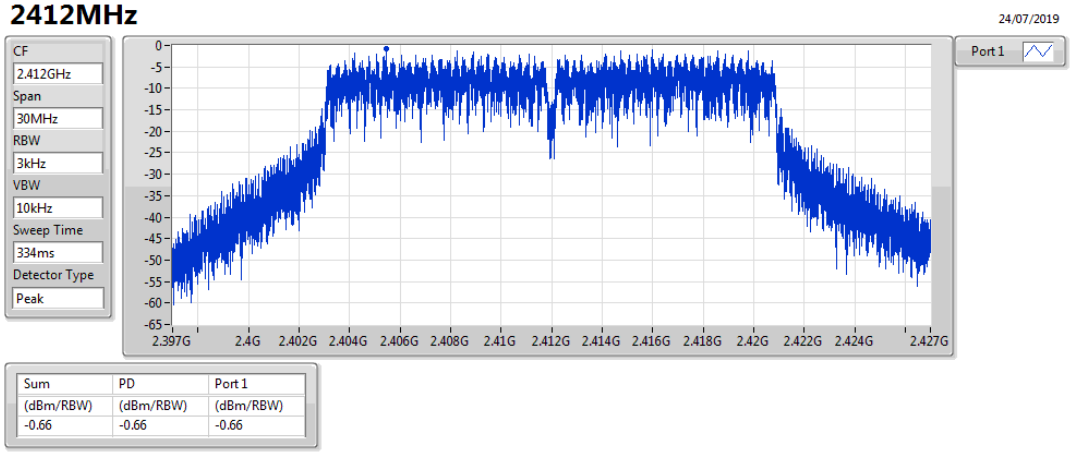
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.00	-1.00	-1.00

802.11n HT20_Nss1,(MCS0)_1TX PSD

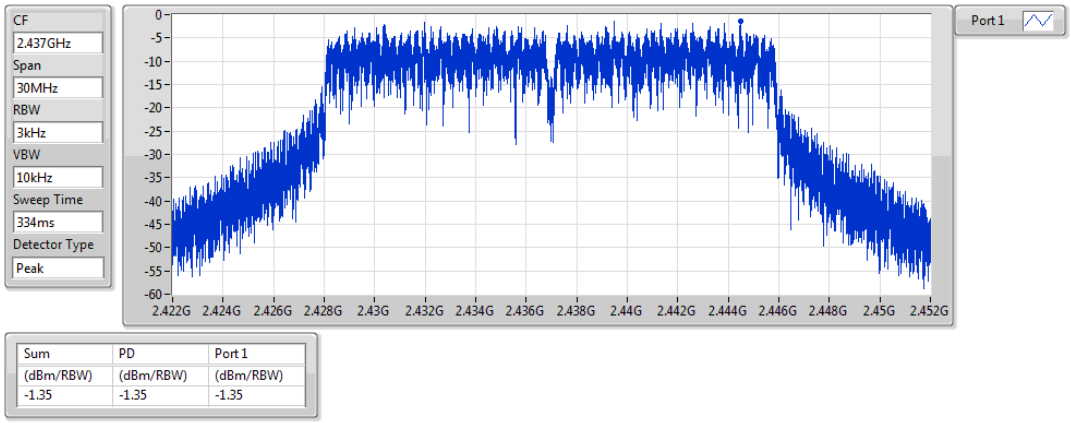
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.66	-0.66	-0.66

802.11n HT20_Nss1,(MCS0)_1TX PSD

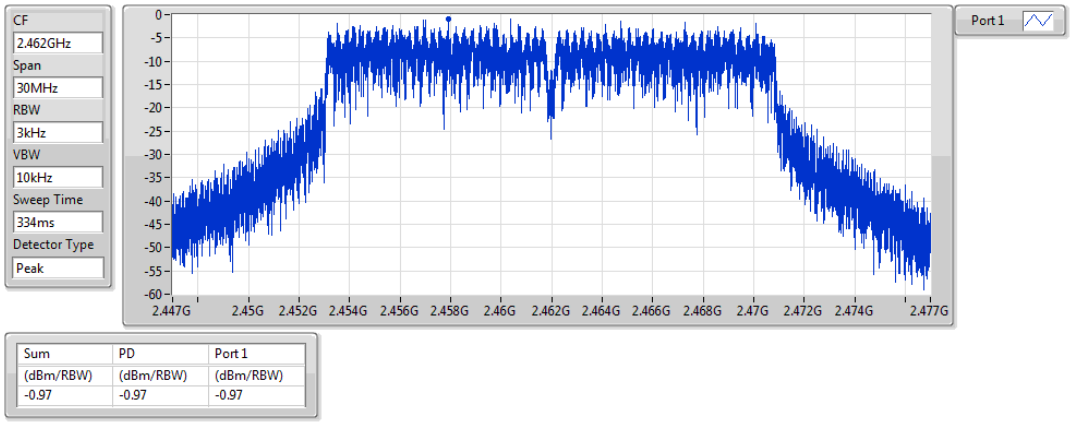
2437MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.35	-1.35	-1.35

802.11n HT20_Nss1,(MCS0)_1TX PSD

2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.97	-0.97	-0.97

Summary

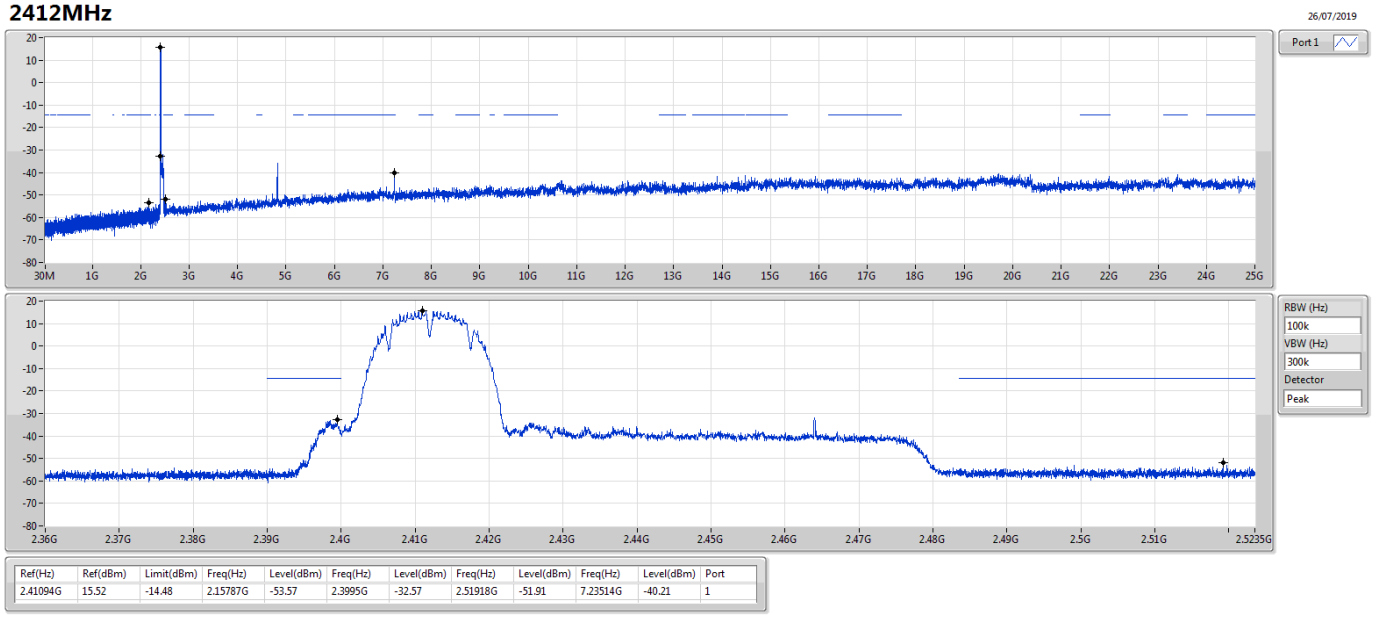
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41094G	15.52	-14.48	2.15787G	-53.57	2.3995G	-32.57	2.51918G	-51.91	7.23514G	-40.21	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.40697G	15.31	-14.69	2.10865G	-55.10	2.39996G	-17.89	2.50522G	-53.54	7.23233G	-41.16	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.41445G	15.75	-14.25	2.30961G	-55.26	2.39998G	-16.30	2.51444G	-52.37	16.27912G	-40.52	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)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41094G	15.52	-14.48	2.15787G	-53.57	2.3995G	-32.57	2.51918G	-51.91	7.23514G	-40.21	1
2437MHz	Pass	2.41094G	15.52	-14.48	2.30175G	-54.07	2.39998G	-37.56	2.50246G	-52.45	14.98391G	-41.28	1
2462MHz	Pass	2.41094G	15.52	-14.48	1.98866G	-54.83	2.39994G	-39.69	2.5085G	-53.32	16.3325G	-40.98	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.40697G	15.31	-14.69	2.10865G	-55.10	2.39996G	-17.89	2.50522G	-53.54	7.23233G	-41.16	1
2437MHz	Pass	2.40697G	15.31	-14.69	2.06642G	-56.24	2.39986G	-34.80	2.511G	-53.56	14.66643G	-41.67	1
2462MHz	Pass	2.40697G	15.31	-14.69	2.30641G	-55.17	2.3996G	-37.72	2.52G	-52.92	23.49126G	-41.28	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41445G	15.75	-14.25	2.30961G	-55.26	2.39998G	-16.30	2.51444G	-52.37	16.27912G	-40.52	1
2437MHz	Pass	2.41445G	15.75	-14.25	2.17447G	-54.73	2.39998G	-35.13	2.49G	-53.02	23.36764G	-40.11	1
2462MHz	Pass	2.41445G	15.75	-14.25	1.99477G	-55.56	2.39984G	-38.59	2.4969G	-51.90	23.42384G	-40.21	1

802.11b_Nss1,(1Mbps)_1TX **CSE NdB**

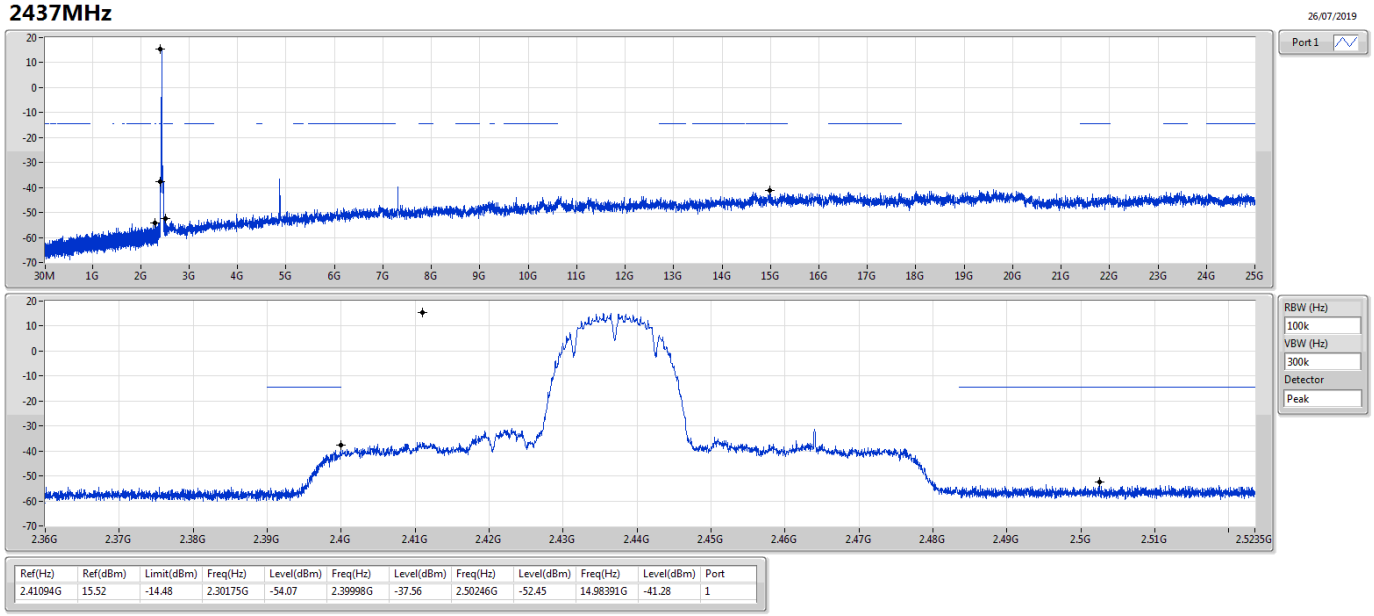
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41094G	15.52	-14.48	2.15787G	-53.57	2.3995G	-32.57	2.51918G	-51.91	7.23514G	-40.21	1

802.11b_Nss1,(1Mbps)_1TX **CSE NdB**

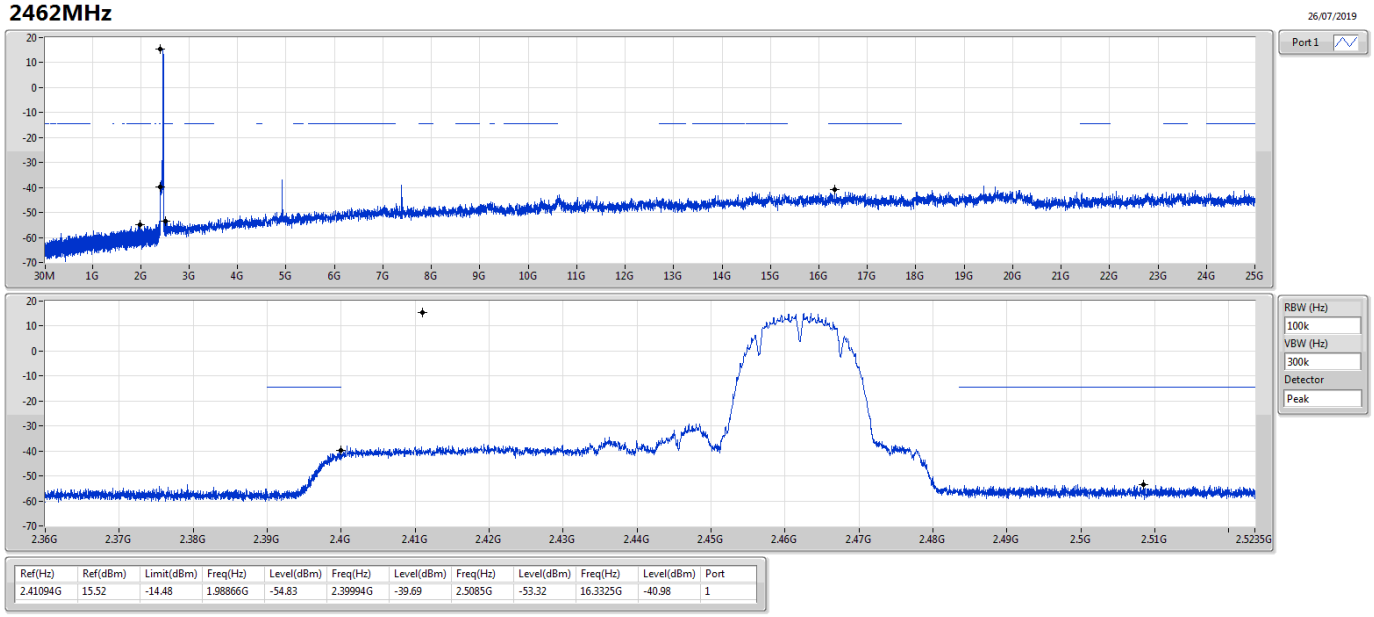
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41094G	15.52	-14.48	2.30175G	-54.07	2.39998G	-37.56	2.50246G	-52.45	14.98391G	-41.28	1

802.11b_Nss1,(1Mbps)_1TX **CSE NdB**

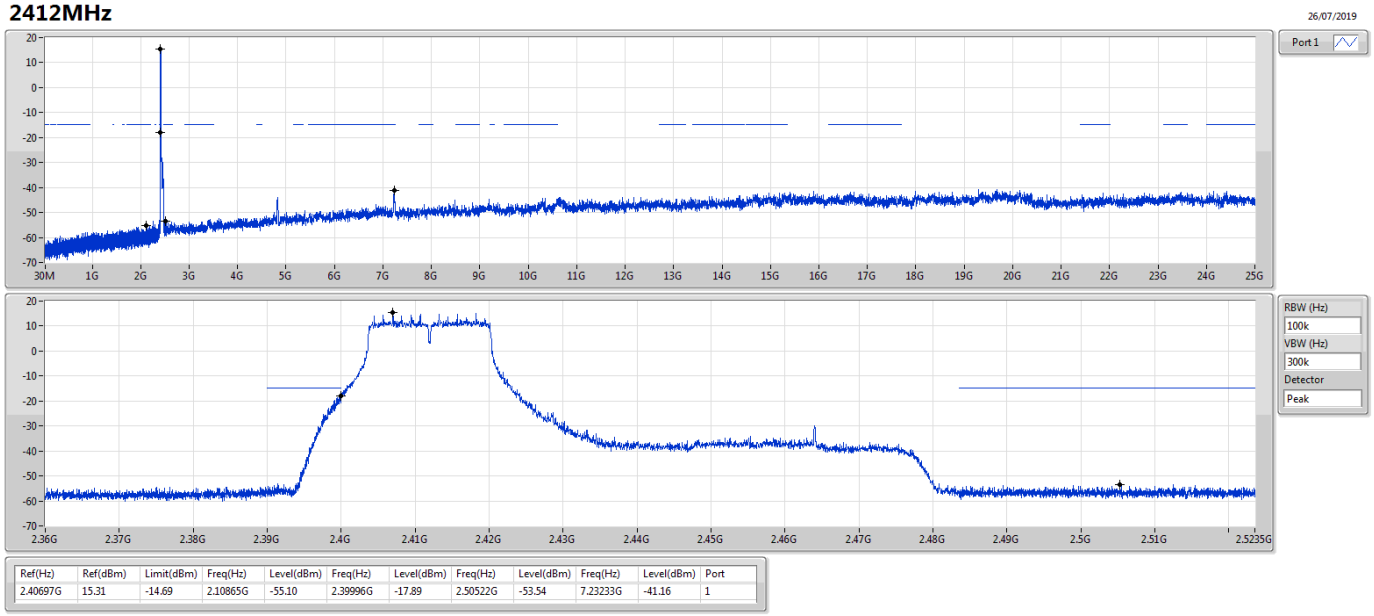
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41094G	15.52	-14.48	1.98866G	-54.83	2.39994G	-39.69	2.5085G	-53.32	16.3325G	-40.98	1

802.11g_Nss1,(6Mbps)_1TX **CSE NdB**

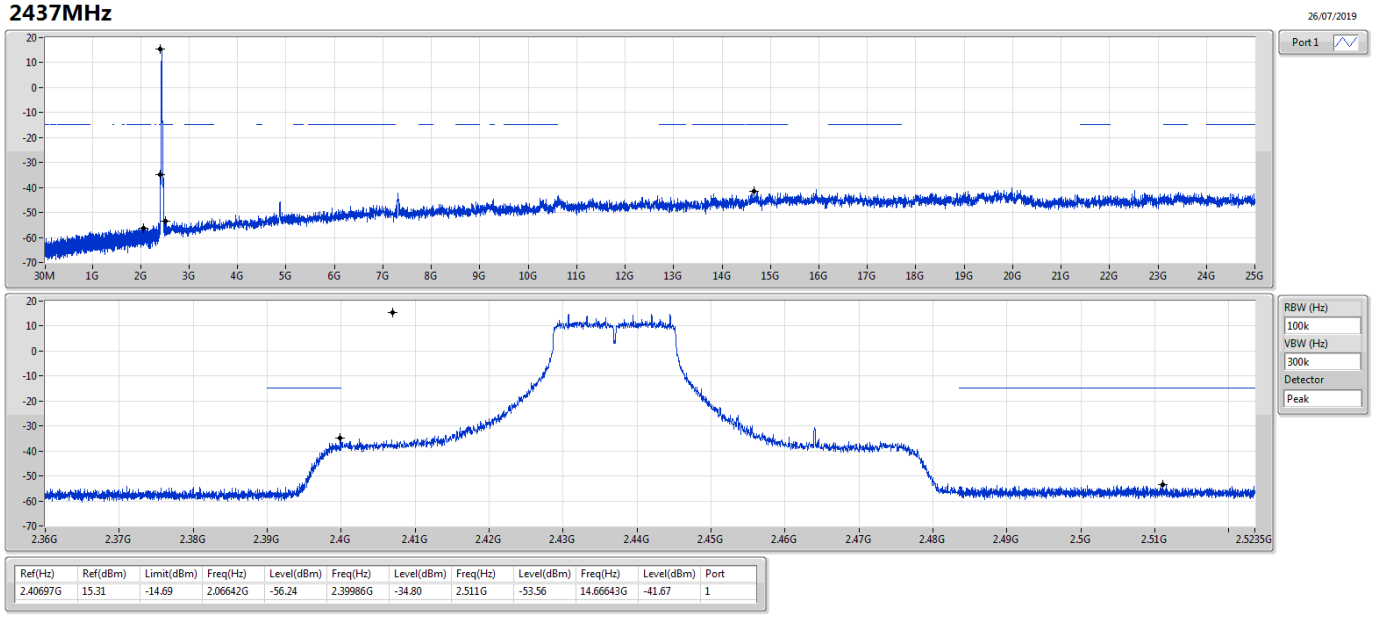
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40697G	15.31	-14.69	2.10865G	-55.10	2.39996G	-17.89	2.50522G	-53.54	7.23233G	-41.16	1

802.11g_Nss1,(6Mbps)_1TX **CSE NdB**

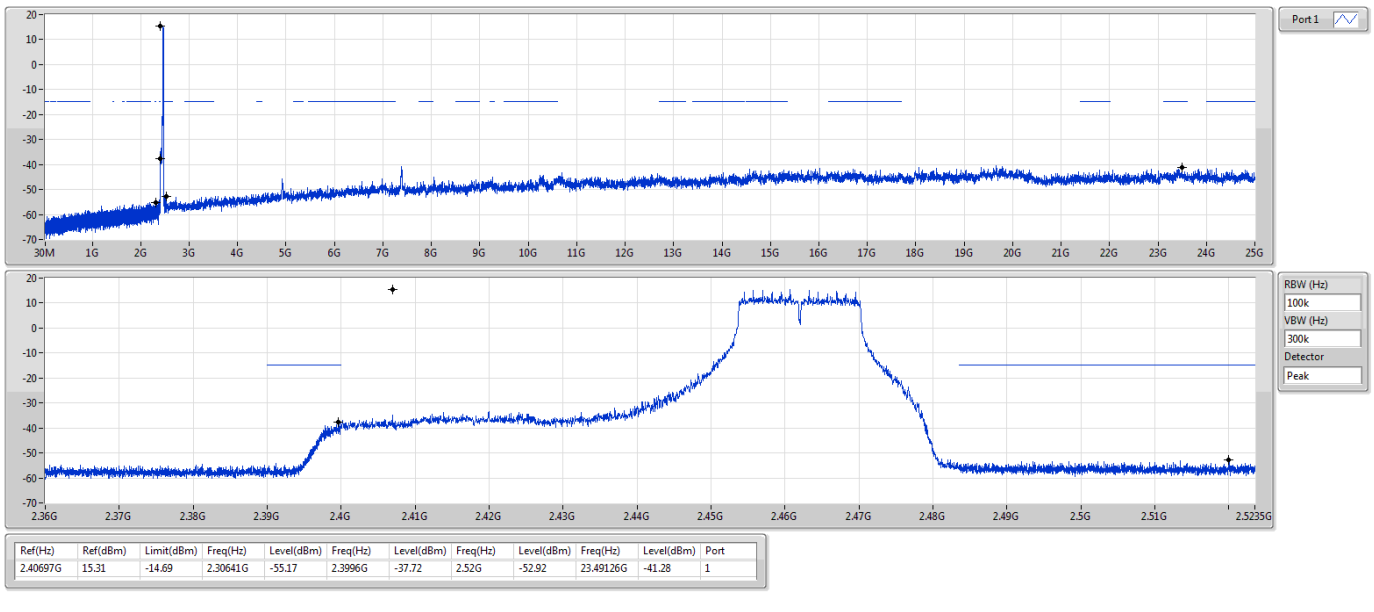
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40697G	15.31	-14.69	2.06642G	-56.24	2.39986G	-34.80	2.511G	-53.56	14.66643G	-41.67	1

802.11g_Nss1,(6Mbps)_1TX **CSE NdB**

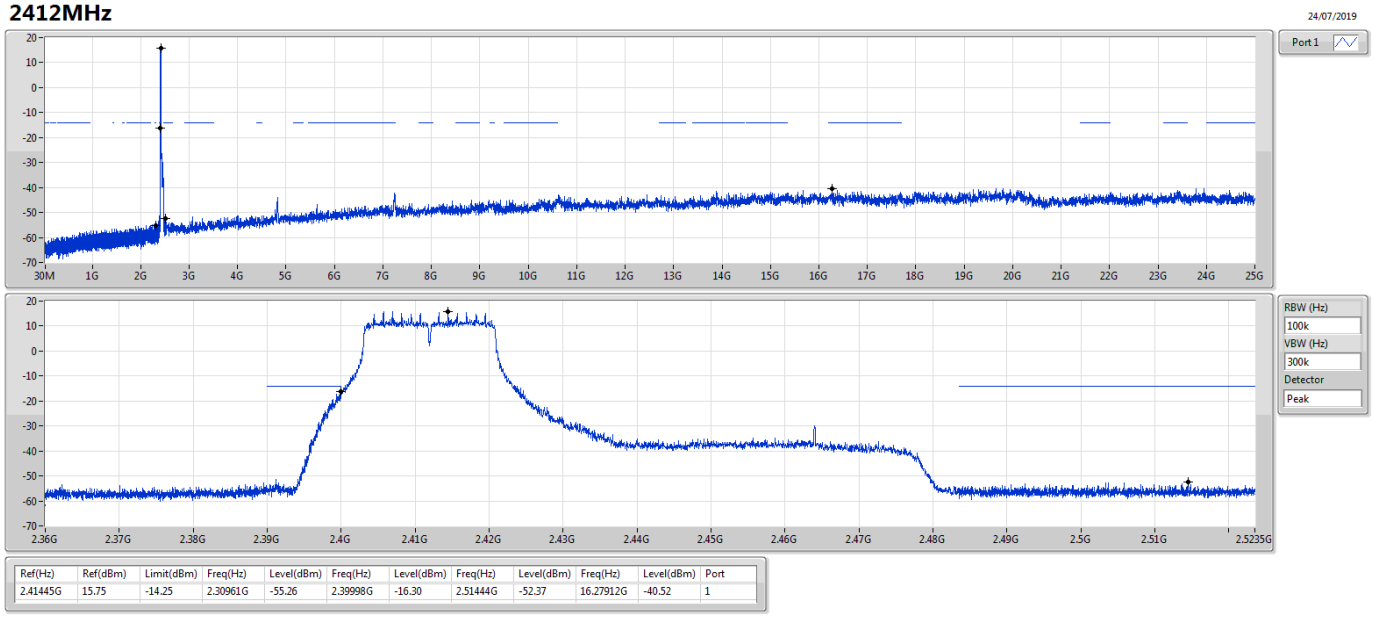
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40697G	15.31	-14.69	2.30641G	-55.17	2.3996G	-37.72	2.52G	-52.92	23.49126G	-41.28	1

802.11n HT20_Nss1,(MCS0)_1TX **CSE NdB**

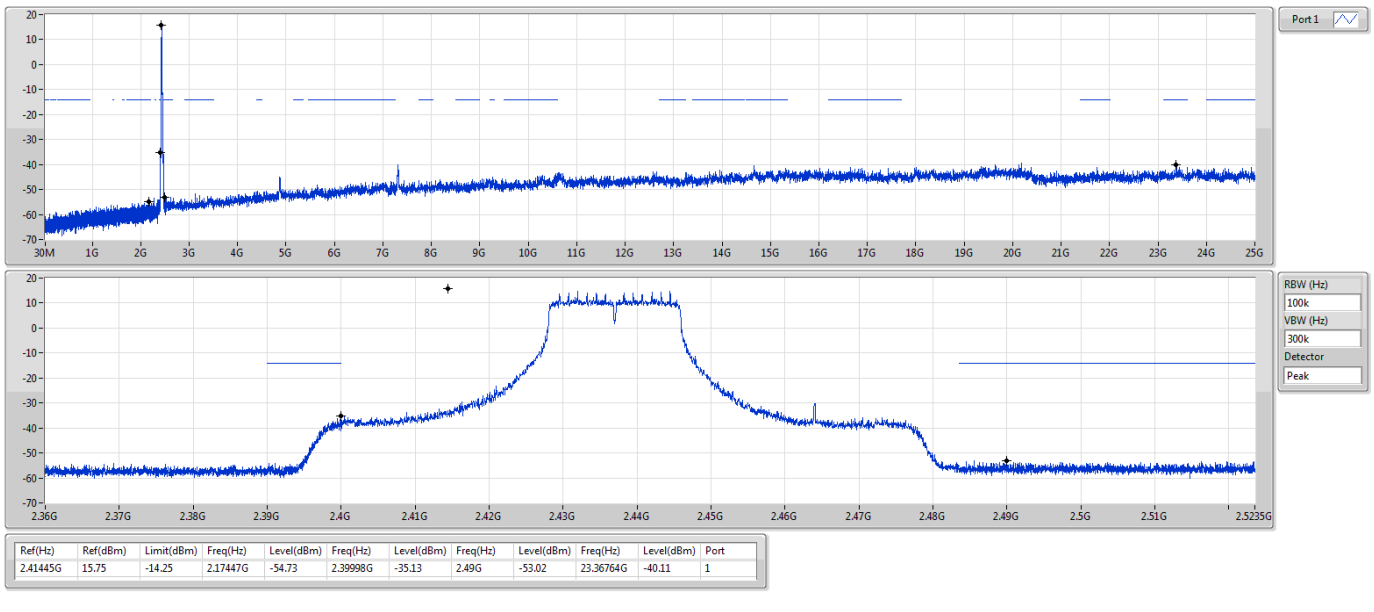
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41445G	15.75	-14.25	2.30961G	-55.26	2.39998G	-16.30	2.51444G	-52.37	16.27912G	-40.52	1

802.11n HT20_Nss1,(MCS0)_1TX **CSE NdB**

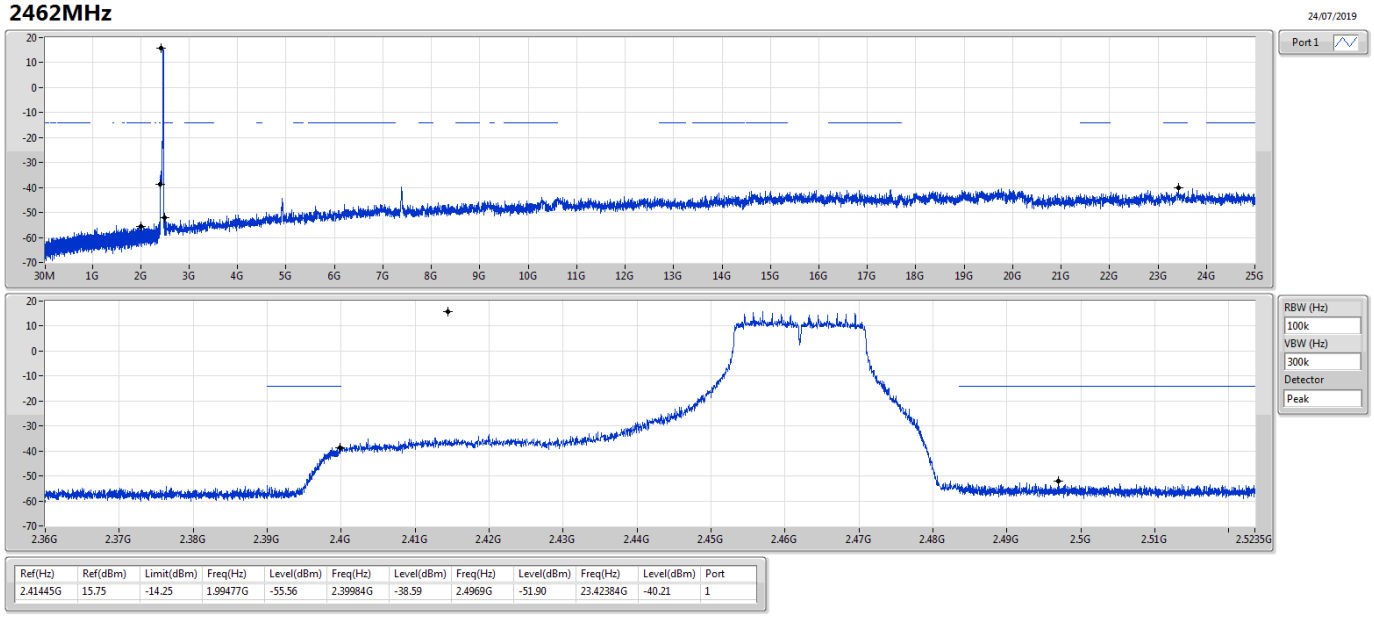
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41445G	15.75	-14.25	2.17447G	-54.73	2.39998G	-35.13	2.49G	-53.02	23.36764G	-40.11	1

802.11n HT20_Nss1,(MCS0)_1TX **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
2.41445G	15.75	-14.25	1.99477G	-55.56	2.39984G	-38.59	2.4969G	-51.90	23.42384G	-40.21	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	PK	30M	37.71	40.00	-2.29	3	Vertical	360	1.00	-

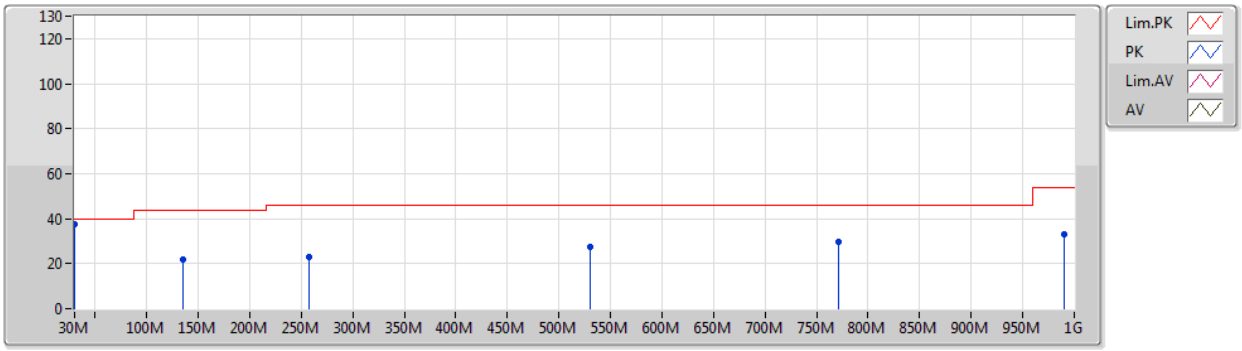
Result

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	30M	37.71	40.00	-2.29	3	Vertical	360	1.00	-
2437MHz	Pass	PK	134.76M	21.88	43.50	-21.62	3	Vertical	360	1.00	-
2437MHz	Pass	PK	256.98M	22.77	46.00	-23.23	3	Vertical	360	1.00	-
2437MHz	Pass	PK	530.52M	27.30	46.00	-18.70	3	Vertical	360	1.00	-
2437MHz	Pass	PK	771.08M	29.91	46.00	-16.09	3	Vertical	360	1.00	-
2437MHz	Pass	PK	990.3M	33.10	54.00	-20.90	3	Vertical	360	1.00	-
2437MHz	Pass	PK	30M	31.83	40.00	-8.17	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	268.62M	22.48	46.00	-23.52	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	291.9M	22.79	46.00	-23.21	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	806M	31.28	46.00	-14.72	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	885.54M	31.79	46.00	-14.21	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	960M	32.71	46.00	-13.29	3	Horizontal	0	1.00	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_Switching Power Supply

24/07/2019

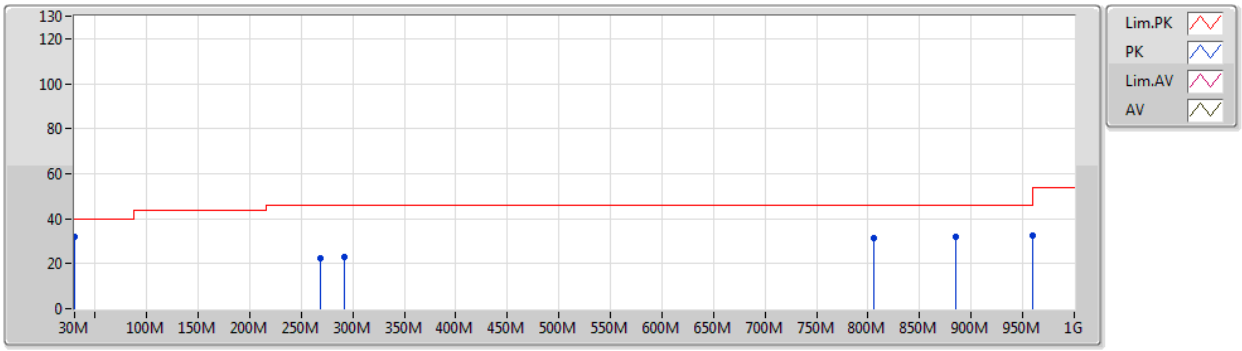


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	30M	37.71	40.00	-2.29	42.11	3	Vertical	360	1.00	-	23.01	0.29	27.70
PK	134.76M	21.88	43.50	-21.62	31.26	3	Vertical	360	1.00	-	16.57	1.74	27.69
PK	256.98M	22.77	46.00	-23.23	28.85	3	Vertical	360	1.00	-	18.35	2.75	27.18
PK	530.52M	27.30	46.00	-18.70	29.28	3	Vertical	360	1.00	-	23.09	3.48	28.55
PK	771.08M	29.91	46.00	-16.09	28.98	3	Vertical	360	1.00	-	25.05	4.14	28.26
PK	990.3M	33.10	54.00	-20.90	29.03	3	Vertical	360	1.00	-	26.27	5.01	27.21

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_Switching Power Supply

24/07/2019



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	30M	31.83	40.00	-8.17	36.23	3	Horizontal	0	1.00	-	23.01	0.29	27.70
PK	268.62M	22.48	46.00	-23.52	28.49	3	Horizontal	0	1.00	-	18.38	2.79	27.18
PK	291.9M	22.79	46.00	-23.21	28.84	3	Horizontal	0	1.00	-	18.15	2.97	27.17
PK	806M	31.28	46.00	-14.72	30.19	3	Horizontal	0	1.00	-	25.05	4.18	28.14
PK	885.54M	31.79	46.00	-14.21	29.72	3	Horizontal	0	1.00	-	25.56	4.31	27.80
PK	960M	32.71	46.00	-13.29	29.17	3	Horizontal	0	1.00	-	26.15	4.90	27.51

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	4.92393G	53.60	54.00	-0.40	3	Vertical	334	1.65	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.4835G	45.81	54.00	-8.19	3	Vertical	201	1.67	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	AV	2.39G	48.20	54.00	-5.80	3	Vertical	212	1.50	-

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	2.3896G	44.87	54.00	-9.13	3	Vertical	202	1.71	-
2412MHz	Pass	AV	2.4136G	114.53	Inf	-Inf	3	Vertical	202	1.71	-
2412MHz	Pass	AV	2.4984G	44.62	54.00	-9.38	3	Vertical	202	1.71	-
2412MHz	Pass	PK	2.372G	56.10	74.00	-17.90	3	Vertical	202	1.71	-
2412MHz	Pass	PK	2.4128G	118.21	Inf	-Inf	3	Vertical	202	1.71	-
2412MHz	Pass	PK	2.498G	56.64	74.00	-17.36	3	Vertical	202	1.71	-
2412MHz	Pass	AV	2.3692G	44.27	54.00	-9.73	3	Horizontal	211	1.50	-
2412MHz	Pass	AV	2.4112G	105.98	Inf	-Inf	3	Horizontal	211	1.50	-
2412MHz	Pass	AV	2.498G	44.63	54.00	-9.37	3	Horizontal	211	1.50	-
2412MHz	Pass	PK	2.3248G	56.31	74.00	-17.69	3	Horizontal	211	1.50	-
2412MHz	Pass	PK	2.4128G	109.92	Inf	-Inf	3	Horizontal	211	1.50	-
2412MHz	Pass	PK	2.4972G	55.70	74.00	-18.30	3	Horizontal	211	1.50	-
2412MHz	Pass	AV	4.82397G	40.68	54.00	-13.32	3	Vertical	337	1.06	-
2412MHz	Pass	PK	4.82399G	46.81	74.00	-27.19	3	Vertical	337	1.06	-
2412MHz	Pass	AV	4.82393G	33.81	54.00	-20.19	3	Horizontal	49	2.78	-
2412MHz	Pass	PK	4.82405G	44.44	74.00	-29.56	3	Horizontal	49	2.78	-
2437MHz	Pass	AV	2.3658G	44.31	54.00	-9.69	3	Vertical	203	2.08	-
2437MHz	Pass	AV	2.435G	114.41	Inf	-Inf	3	Vertical	203	2.08	-
2437MHz	Pass	AV	2.4894G	44.71	54.00	-9.29	3	Vertical	203	2.08	-
2437MHz	Pass	PK	2.3822G	55.94	74.00	-18.06	3	Vertical	203	2.08	-
2437MHz	Pass	PK	2.4346G	118.12	Inf	-Inf	3	Vertical	203	2.08	-
2437MHz	Pass	PK	2.493G	56.49	74.00	-17.51	3	Vertical	203	2.08	-
2437MHz	Pass	AV	2.3438G	44.20	54.00	-9.80	3	Horizontal	203	1.67	-
2437MHz	Pass	AV	2.4354G	106.57	Inf	-Inf	3	Horizontal	203	1.67	-
2437MHz	Pass	AV	2.4994G	44.58	54.00	-9.42	3	Horizontal	203	1.67	-
2437MHz	Pass	PK	2.3506G	56.07	74.00	-17.93	3	Horizontal	203	1.67	-
2437MHz	Pass	PK	2.4362G	110.33	Inf	-Inf	3	Horizontal	203	1.67	-
2437MHz	Pass	PK	2.4922G	57.12	74.00	-16.88	3	Horizontal	203	1.67	-
2437MHz	Pass	AV	4.87396G	43.87	54.00	-10.13	3	Vertical	338	1.50	-
2437MHz	Pass	PK	4.87391G	48.30	74.00	-25.70	3	Vertical	338	1.50	-
2437MHz	Pass	AV	4.87394G	39.17	54.00	-14.83	3	Horizontal	354	1.09	-
2437MHz	Pass	PK	4.87397G	46.06	74.00	-27.94	3	Horizontal	354	1.09	-
2462MHz	Pass	AV	2.366G	44.24	54.00	-9.76	3	Vertical	200	1.65	-
2462MHz	Pass	AV	2.46G	113.63	Inf	-Inf	3	Vertical	200	1.65	-
2462MHz	Pass	AV	2.4872G	45.06	54.00	-8.94	3	Vertical	200	1.65	-
2462MHz	Pass	PK	2.3812G	55.73	74.00	-18.27	3	Vertical	200	1.65	-
2462MHz	Pass	PK	2.4612G	117.43	Inf	-Inf	3	Vertical	200	1.65	-
2462MHz	Pass	PK	2.496G	56.84	74.00	-17.16	3	Vertical	200	1.65	-
2462MHz	Pass	AV	2.3776G	44.16	54.00	-9.84	3	Horizontal	182	1.78	-
2462MHz	Pass	AV	2.46G	106.53	Inf	-Inf	3	Horizontal	182	1.78	-
2462MHz	Pass	AV	2.4844G	44.69	54.00	-9.31	3	Horizontal	182	1.78	-
2462MHz	Pass	PK	2.3664G	56.24	74.00	-17.76	3	Horizontal	182	1.78	-
2462MHz	Pass	PK	2.4596G	110.31	Inf	-Inf	3	Horizontal	182	1.78	-
2462MHz	Pass	PK	2.4864G	56.18	74.00	-17.82	3	Horizontal	182	1.78	-
2462MHz	Pass	AV	4.92393G	53.60	54.00	-0.40	3	Vertical	334	1.65	-
2462MHz	Pass	PK	4.92392G	55.71	74.00	-18.29	3	Vertical	334	1.65	-
2462MHz	Pass	AV	4.92394G	47.66	54.00	-6.34	3	Horizontal	352	1.07	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2462MHz	Pass	PK	4.92398G	50.99	74.00	-23.01	3	Horizontal	352	1.07	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	45.26	54.00	-8.74	3	Vertical	201	1.66	-
2412MHz	Pass	AV	2.4192G	110.93	Inf	-Inf	3	Vertical	201	1.66	-
2412MHz	Pass	AV	2.4944G	45.01	54.00	-8.99	3	Vertical	201	1.66	-
2412MHz	Pass	PK	2.3852G	57.17	74.00	-16.83	3	Vertical	201	1.66	-
2412MHz	Pass	PK	2.4152G	120.27	Inf	-Inf	3	Vertical	201	1.66	-
2412MHz	Pass	PK	2.4892G	56.22	74.00	-17.78	3	Vertical	201	1.66	-
2412MHz	Pass	AV	2.3136G	44.63	54.00	-9.37	3	Horizontal	213	1.42	-
2412MHz	Pass	AV	2.4152G	102.69	Inf	-Inf	3	Horizontal	213	1.42	-
2412MHz	Pass	AV	2.4916G	44.89	54.00	-9.11	3	Horizontal	213	1.42	-
2412MHz	Pass	PK	2.346G	56.54	74.00	-17.46	3	Horizontal	213	1.42	-
2412MHz	Pass	PK	2.4152G	112.16	Inf	-Inf	3	Horizontal	213	1.42	-
2412MHz	Pass	PK	2.4948G	56.17	74.00	-17.83	3	Horizontal	213	1.42	-
2412MHz	Pass	AV	4.82652G	34.26	54.00	-19.74	3	Vertical	332	1.49	-
2412MHz	Pass	PK	4.827G	46.51	74.00	-27.49	3	Vertical	332	1.49	-
2412MHz	Pass	AV	4.82622G	32.31	54.00	-21.69	3	Horizontal	255	1.54	-
2412MHz	Pass	PK	4.82838G	44.64	74.00	-29.36	3	Horizontal	255	1.54	-
2437MHz	Pass	AV	2.3702G	44.70	54.00	-9.30	3	Vertical	201	1.88	-
2437MHz	Pass	AV	2.4338G	110.50	Inf	-Inf	3	Vertical	201	1.88	-
2437MHz	Pass	AV	2.4866G	45.09	54.00	-8.91	3	Vertical	201	1.88	-
2437MHz	Pass	PK	2.3762G	56.24	74.00	-17.76	3	Vertical	201	1.88	-
2437MHz	Pass	PK	2.433G	120.06	Inf	-Inf	3	Vertical	201	1.88	-
2437MHz	Pass	PK	2.4878G	56.28	74.00	-17.72	3	Vertical	201	1.88	-
2437MHz	Pass	AV	2.3426G	44.51	54.00	-9.49	3	Horizontal	182	1.76	-
2437MHz	Pass	AV	2.443G	103.00	Inf	-Inf	3	Horizontal	182	1.76	-
2437MHz	Pass	AV	2.4974G	44.84	54.00	-9.16	3	Horizontal	182	1.76	-
2437MHz	Pass	PK	2.3482G	57.35	74.00	-16.65	3	Horizontal	182	1.76	-
2437MHz	Pass	PK	2.4434G	111.97	Inf	-Inf	3	Horizontal	182	1.76	-
2437MHz	Pass	PK	2.4894G	56.20	74.00	-17.80	3	Horizontal	182	1.76	-
2437MHz	Pass	AV	4.87598G	34.61	54.00	-19.39	3	Vertical	336	1.50	-
2437MHz	Pass	PK	4.87628G	48.11	74.00	-25.89	3	Vertical	336	1.50	-
2437MHz	Pass	AV	4.87424G	32.15	54.00	-21.85	3	Horizontal	355	1.25	-
2437MHz	Pass	PK	4.87586G	44.52	74.00	-29.48	3	Horizontal	355	1.25	-
2462MHz	Pass	AV	2.38G	44.56	54.00	-9.44	3	Vertical	201	1.67	-
2462MHz	Pass	AV	2.4568G	110.93	Inf	-Inf	3	Vertical	201	1.67	-
2462MHz	Pass	AV	2.4835G	45.81	54.00	-8.19	3	Vertical	201	1.67	-
2462MHz	Pass	PK	2.3664G	55.78	74.00	-18.22	3	Vertical	201	1.67	-
2462MHz	Pass	PK	2.4552G	120.41	Inf	-Inf	3	Vertical	201	1.67	-
2462MHz	Pass	PK	2.4844G	57.30	74.00	-16.70	3	Vertical	201	1.67	-
2462MHz	Pass	AV	2.3676G	44.46	54.00	-9.54	3	Horizontal	181	1.50	-
2462MHz	Pass	AV	2.4552G	103.50	Inf	-Inf	3	Horizontal	181	1.50	-
2462MHz	Pass	AV	2.484G	44.92	54.00	-9.08	3	Horizontal	181	1.50	-
2462MHz	Pass	PK	2.3648G	56.14	74.00	-17.86	3	Horizontal	181	1.50	-
2462MHz	Pass	PK	2.4556G	113.26	Inf	-Inf	3	Horizontal	181	1.50	-
2462MHz	Pass	PK	2.4956G	56.04	74.00	-17.96	3	Horizontal	181	1.50	-
2462MHz	Pass	AV	4.92592G	45.24	54.00	-8.76	3	Vertical	335	1.49	-
2462MHz	Pass	PK	4.92624G	60.04	74.00	-13.96	3	Vertical	335	1.49	-
2462MHz	Pass	AV	4.9259G	41.41	54.00	-12.59	3	Horizontal	352	1.05	-

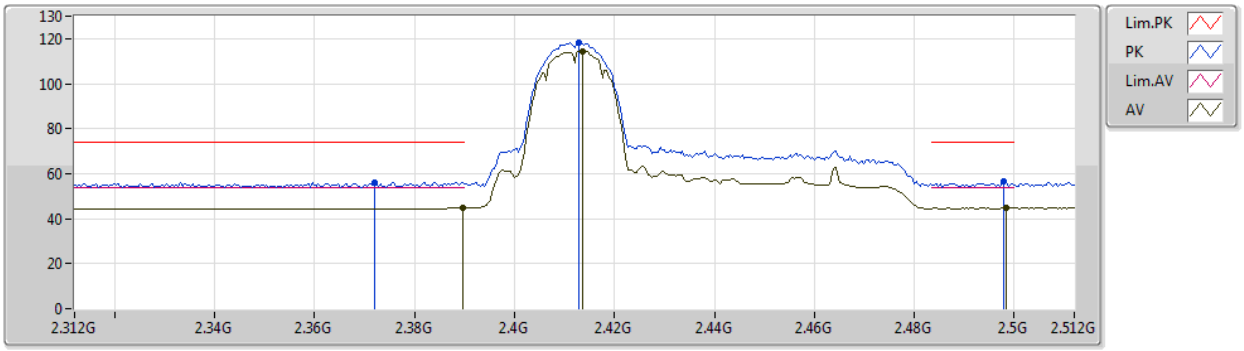
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2462MHz	Pass	PK	4.9264G	55.60	74.00	-18.40	3	Horizontal	352	1.05	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	48.20	54.00	-5.80	3	Vertical	212	1.50	-
2412MHz	Pass	AV	2.4088G	113.70	Inf	-Inf	3	Vertical	212	1.50	-
2412MHz	Pass	AV	2.4864G	47.07	54.00	-6.93	3	Vertical	212	1.50	-
2412MHz	Pass	PK	2.39G	62.44	74.00	-11.56	3	Vertical	212	1.50	-
2412MHz	Pass	PK	2.4088G	124.38	Inf	-Inf	3	Vertical	212	1.50	-
2412MHz	Pass	PK	2.4856G	58.48	74.00	-15.52	3	Vertical	212	1.50	-
2412MHz	Pass	PK	2.3476G	58.80	74.00	-15.20	3	Horizontal	203	1.96	-
2412MHz	Pass	AV	2.3892G	46.67	54.00	-7.33	3	Horizontal	203	1.96	-
2412MHz	Pass	PK	2.4176G	118.60	Inf	-Inf	3	Horizontal	203	1.96	-
2412MHz	Pass	AV	2.4176G	108.30	Inf	-Inf	3	Horizontal	203	1.96	-
2412MHz	Pass	PK	2.4952G	58.08	74.00	-15.92	3	Horizontal	203	1.96	-
2412MHz	Pass	AV	2.4872G	47.02	54.00	-6.98	3	Horizontal	203	1.96	-
2412MHz	Pass	AV	4.81932G	29.76	54.00	-24.24	3	Vertical	22	1.50	-
2412MHz	Pass	PK	4.81998G	43.18	74.00	-30.82	3	Vertical	22	1.50	-
2412MHz	Pass	AV	4.81014G	29.67	54.00	-24.33	3	Horizontal	59	1.50	-
2412MHz	Pass	PK	4.83756G	42.18	74.00	-31.82	3	Horizontal	59	1.50	-
2437MHz	Pass	AV	2.3654G	46.57	54.00	-7.43	3	Vertical	208	1.44	-
2437MHz	Pass	AV	2.4338G	112.46	Inf	-Inf	3	Vertical	208	1.44	-
2437MHz	Pass	AV	2.4846G	47.14	54.00	-6.86	3	Vertical	208	1.44	-
2437MHz	Pass	PK	2.3454G	58.30	74.00	-15.70	3	Vertical	208	1.44	-
2437MHz	Pass	PK	2.4338G	123.04	Inf	-Inf	3	Vertical	208	1.44	-
2437MHz	Pass	PK	2.4926G	58.66	74.00	-15.34	3	Vertical	208	1.44	-
2437MHz	Pass	AV	2.3802G	45.25	54.00	-8.75	3	Horizontal	203	1.87	-
2437MHz	Pass	AV	2.4338G	105.56	Inf	-Inf	3	Horizontal	203	1.87	-
2437MHz	Pass	AV	2.4938G	45.68	54.00	-8.32	3	Horizontal	203	1.87	-
2437MHz	Pass	PK	2.3386G	56.38	74.00	-17.62	3	Horizontal	203	1.87	-
2437MHz	Pass	PK	2.4342G	115.69	Inf	-Inf	3	Horizontal	203	1.87	-
2437MHz	Pass	PK	2.497G	56.47	74.00	-17.53	3	Horizontal	203	1.87	-
2437MHz	Pass	AV	4.8821G	30.40	54.00	-23.60	3	Vertical	334	1.50	-
2437MHz	Pass	PK	4.87922G	44.60	74.00	-29.40	3	Vertical	334	1.50	-
2437MHz	Pass	AV	4.88792G	29.58	54.00	-24.42	3	Horizontal	238	2.01	-
2437MHz	Pass	PK	4.8626G	42.45	74.00	-31.55	3	Horizontal	238	2.01	-
2462MHz	Pass	AV	2.3872G	45.29	54.00	-8.71	3	Vertical	209	1.52	-
2462MHz	Pass	AV	2.4564G	110.87	Inf	-Inf	3	Vertical	209	1.52	-
2462MHz	Pass	AV	2.4835G	46.65	54.00	-7.35	3	Vertical	209	1.52	-
2462MHz	Pass	PK	2.3884G	56.58	74.00	-17.42	3	Vertical	209	1.52	-
2462MHz	Pass	PK	2.456G	120.51	Inf	-Inf	3	Vertical	209	1.52	-
2462MHz	Pass	PK	2.4835G	58.35	74.00	-15.65	3	Vertical	209	1.52	-
2462MHz	Pass	AV	2.3832G	45.18	54.00	-8.82	3	Horizontal	204	1.78	-
2462MHz	Pass	AV	2.4564G	106.53	Inf	-Inf	3	Horizontal	204	1.78	-
2462MHz	Pass	AV	2.49G	45.81	54.00	-8.19	3	Horizontal	204	1.78	-
2462MHz	Pass	PK	2.378G	55.93	74.00	-18.07	3	Horizontal	204	1.78	-
2462MHz	Pass	PK	2.4572G	116.38	Inf	-Inf	3	Horizontal	204	1.78	-
2462MHz	Pass	PK	2.4864G	56.95	74.00	-17.05	3	Horizontal	204	1.78	-
2462MHz	Pass	AV	4.9237G	32.60	54.00	-21.40	3	Vertical	332	1.03	-
2462MHz	Pass	PK	4.92484G	46.52	74.00	-27.48	3	Vertical	332	1.03	-
2462MHz	Pass	AV	4.9093G	29.48	54.00	-24.52	3	Horizontal	0	1.07	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2462MHz	Pass	PK	4.91152G	42.39	74.00	-31.61	3	Horizontal	0	1.07	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

25/07/2019

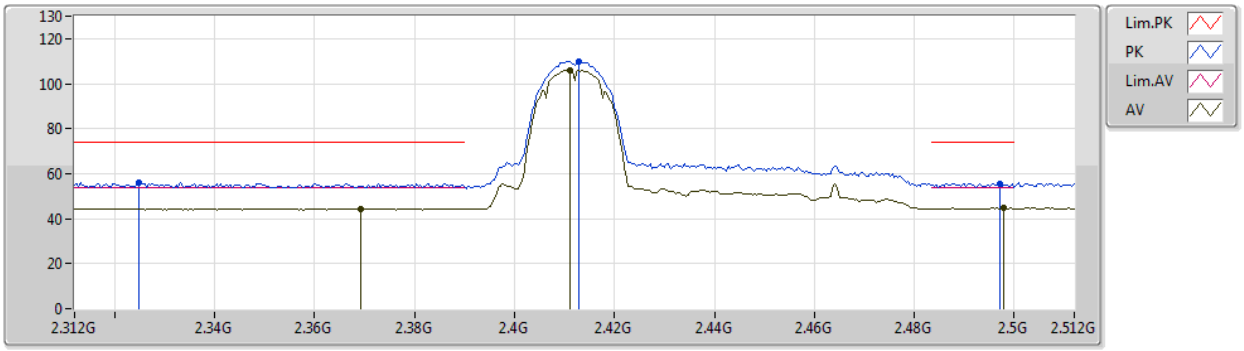


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3896G	44.87	54.00	-9.13	12.78	3	Vertical	202	1.71	-	27.37	4.72	-
AV	2.4136G	114.53	Inf	-Inf	82.34	3	Vertical	202	1.71	-	27.44	4.75	-
AV	2.4984G	44.62	54.00	-9.38	12.07	3	Vertical	202	1.71	-	27.70	4.85	-
PK	2.372G	56.10	74.00	-17.90	24.08	3	Vertical	202	1.71	-	27.32	4.70	-
PK	2.4128G	118.21	Inf	-Inf	86.03	3	Vertical	202	1.71	-	27.44	4.74	-
PK	2.498G	56.64	74.00	-17.36	24.11	3	Vertical	202	1.71	-	27.69	4.84	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

25/07/2019

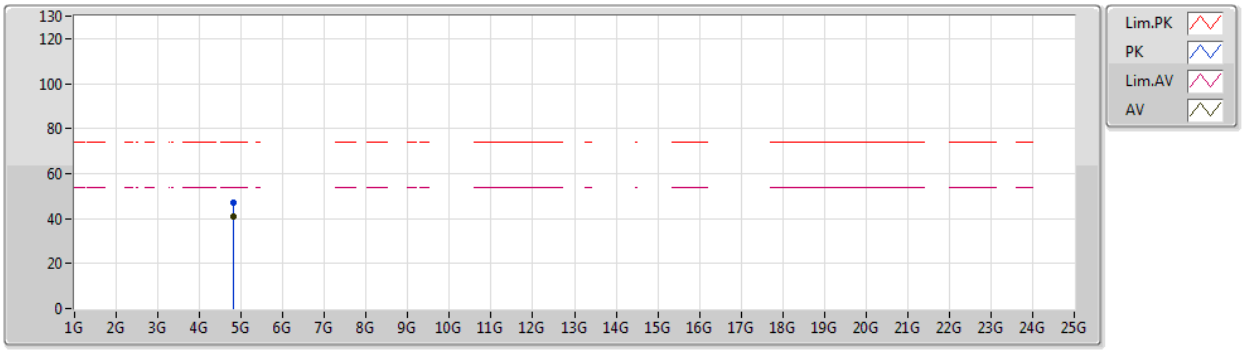


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3692G	44.27	54.00	-9.73	12.27	3	Horizontal	211	1.50	-	27.31	4.69	-
AV	2.4112G	105.98	Inf	-Inf	73.81	3	Horizontal	211	1.50	-	27.43	4.74	-
AV	2.498G	44.63	54.00	-9.37	12.10	3	Horizontal	211	1.50	-	27.69	4.84	-
PK	2.3248G	56.31	74.00	-17.69	24.50	3	Horizontal	211	1.50	-	27.17	4.64	-
PK	2.4128G	109.92	Inf	-Inf	77.74	3	Horizontal	211	1.50	-	27.44	4.74	-
PK	2.4972G	55.70	74.00	-18.30	23.17	3	Horizontal	211	1.50	-	27.69	4.84	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

25/07/2019

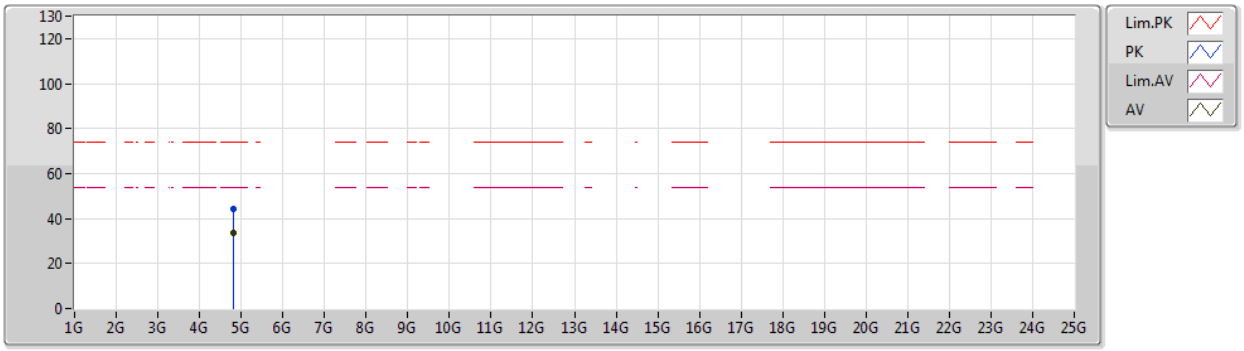


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.82397G	40.68	54.00	-13.32	36.99	3	Vertical	337	1.06	-	31.38	6.79	34.48
PK	4.82399G	46.81	74.00	-27.19	43.12	3	Vertical	337	1.06	-	31.38	6.79	34.48

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

25/07/2019

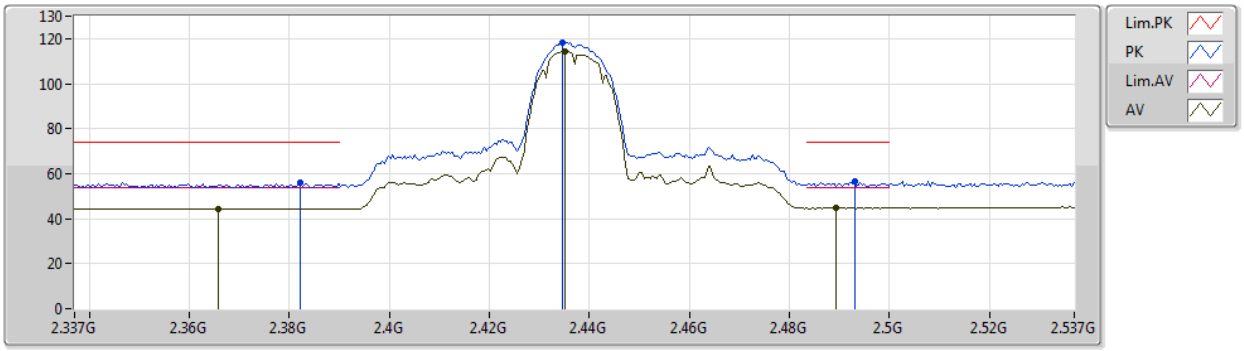


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.82393G	33.81	54.00	-20.19	30.12	3	Horizontal	49	2.78	-	31.38	6.79	34.48
PK	4.82405G	44.44	74.00	-29.56	40.75	3	Horizontal	49	2.78	-	31.38	6.79	34.48

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

25/07/2019

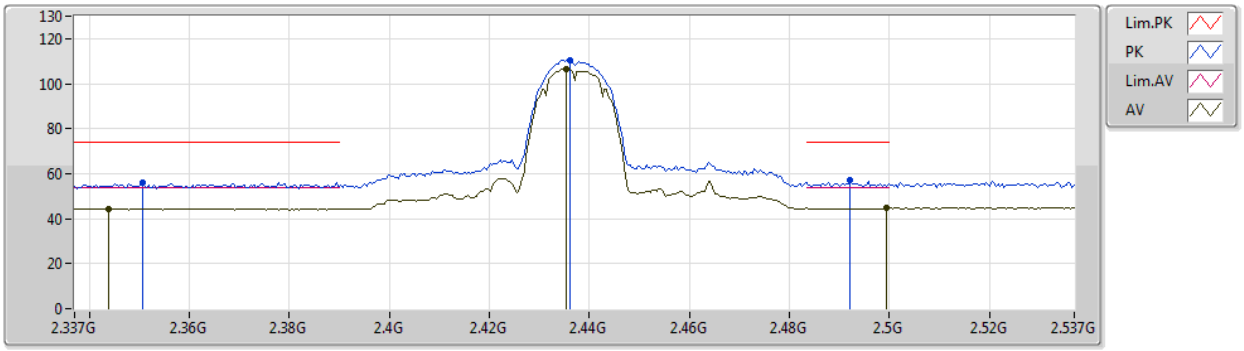


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3658G	44.31	54.00	-9.69	12.32	3	Vertical	203	2.08	-	27.30	4.69	-
AV	2.435G	114.41	Inf	-Inf	82.14	3	Vertical	203	2.08	-	27.50	4.77	-
AV	2.4894G	44.71	54.00	-9.29	12.21	3	Vertical	203	2.08	-	27.67	4.83	-
PK	2.3822G	55.94	74.00	-18.06	23.88	3	Vertical	203	2.08	-	27.35	4.71	-
PK	2.4346G	118.12	Inf	-Inf	85.85	3	Vertical	203	2.08	-	27.50	4.77	-
PK	2.493G	56.49	74.00	-17.51	23.97	3	Vertical	203	2.08	-	27.68	4.84	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

25/07/2019

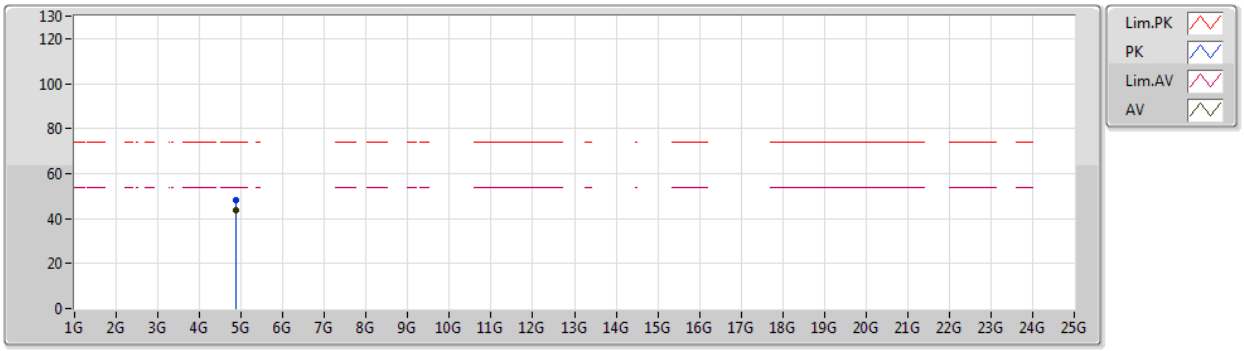


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3438G	44.20	54.00	-9.80	12.31	3	Horizontal	203	1.67	-	27.23	4.66	-
AV	2.4354G	106.57	Inf	-Inf	74.29	3	Horizontal	203	1.67	-	27.51	4.77	-
AV	2.4994G	44.58	54.00	-9.42	12.03	3	Horizontal	203	1.67	-	27.70	4.85	-
PK	2.3506G	56.07	74.00	-17.93	24.15	3	Horizontal	203	1.67	-	27.25	4.67	-
PK	2.4362G	110.33	Inf	-Inf	78.05	3	Horizontal	203	1.67	-	27.51	4.77	-
PK	2.4922G	57.12	74.00	-16.88	24.60	3	Horizontal	203	1.67	-	27.68	4.84	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

25/07/2019

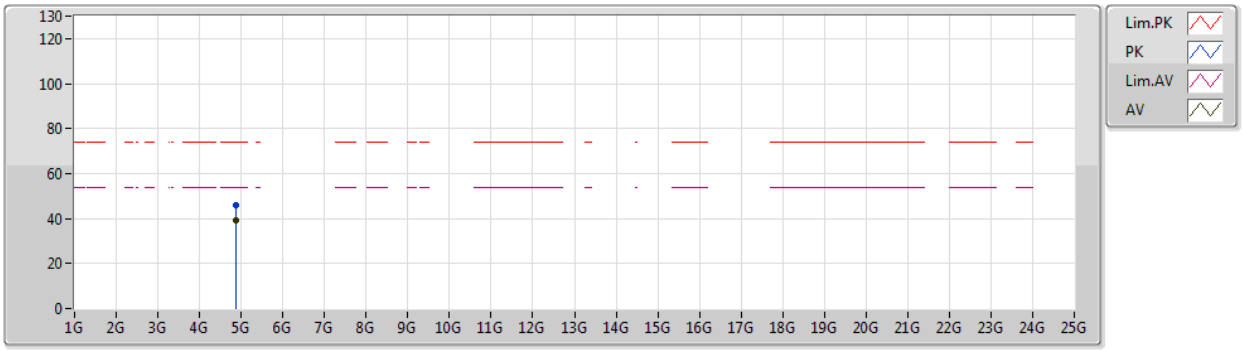


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.87396G	43.87	54.00	-10.13	40.06	3	Vertical	338	1.50	-	31.47	6.81	34.47
PK	4.87391G	48.30	74.00	-25.70	44.49	3	Vertical	338	1.50	-	31.47	6.81	34.47

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

25/07/2019

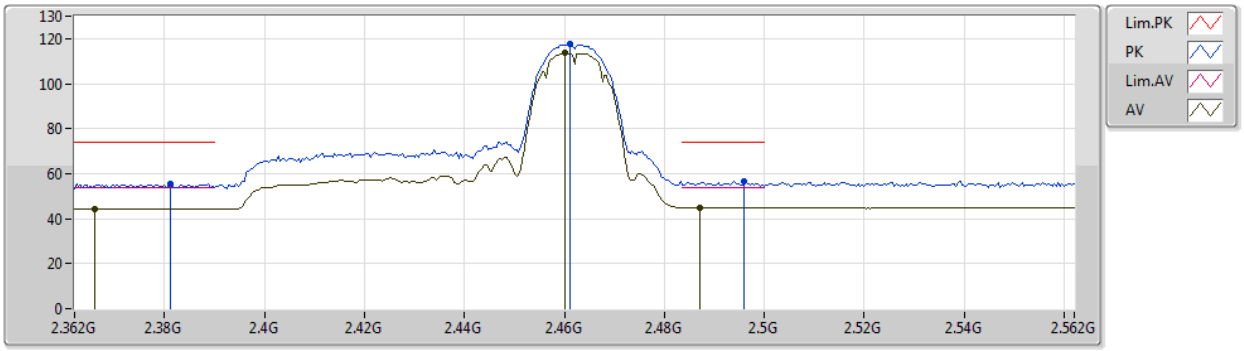


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.87394G	39.17	54.00	-14.83	35.36	3	Horizontal	354	1.09	-	31.47	6.81	34.47
PK	4.87397G	46.06	74.00	-27.94	42.25	3	Horizontal	354	1.09	-	31.47	6.81	34.47

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

25/07/2019

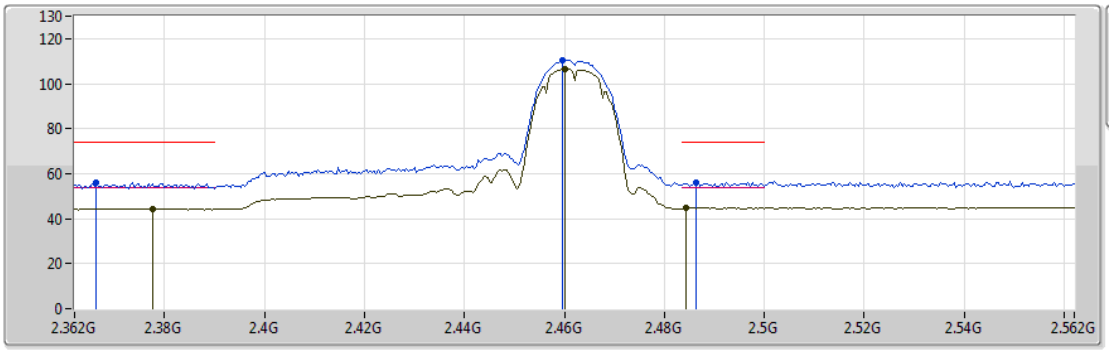


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.366G	44.24	54.00	-9.76	12.25	3	Vertical	200	1.65	-	27.30	4.69	-
AV	2.46G	113.63	Inf	-Inf	81.25	3	Vertical	200	1.65	-	27.58	4.80	-
AV	2.4872G	45.06	54.00	-8.94	12.57	3	Vertical	200	1.65	-	27.66	4.83	-
PK	2.3812G	55.73	74.00	-18.27	23.68	3	Vertical	200	1.65	-	27.34	4.71	-
PK	2.4612G	117.43	Inf	-Inf	85.05	3	Vertical	200	1.65	-	27.58	4.80	-
PK	2.496G	56.84	74.00	-17.16	24.31	3	Vertical	200	1.65	-	27.69	4.84	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

25/07/2019

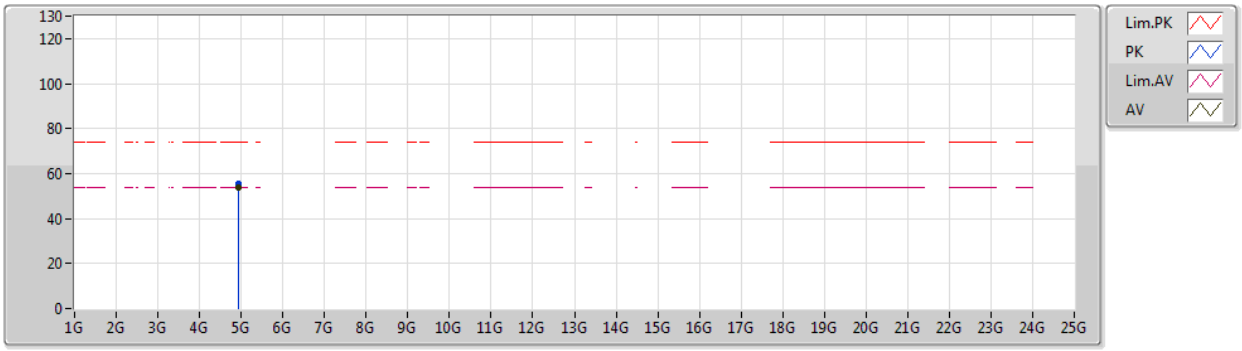


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3776G	44.16	54.00	-9.84	12.13	3	Horizontal	182	1.78	-	27.33	4.70	-
AV	2.46G	106.53	Inf	-Inf	74.15	3	Horizontal	182	1.78	-	27.58	4.80	-
AV	2.4844G	44.69	54.00	-9.31	12.21	3	Horizontal	182	1.78	-	27.65	4.83	-
PK	2.3664G	56.24	74.00	-17.76	24.25	3	Horizontal	182	1.78	-	27.30	4.69	-
PK	2.4596G	110.31	Inf	-Inf	77.93	3	Horizontal	182	1.78	-	27.58	4.80	-
PK	2.4864G	56.18	74.00	-17.82	23.69	3	Horizontal	182	1.78	-	27.66	4.83	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

25/07/2019

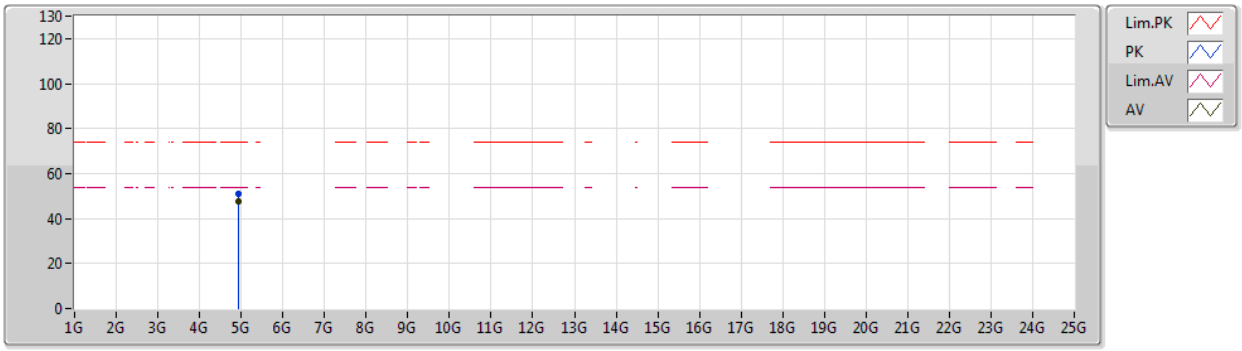


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.92393G	53.60	54.00	-0.40	49.67	3	Vertical	334	1.65	-	31.56	6.82	34.45
PK	4.92392G	55.71	74.00	-18.29	51.78	3	Vertical	334	1.65	-	31.56	6.82	34.45

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

25/07/2019

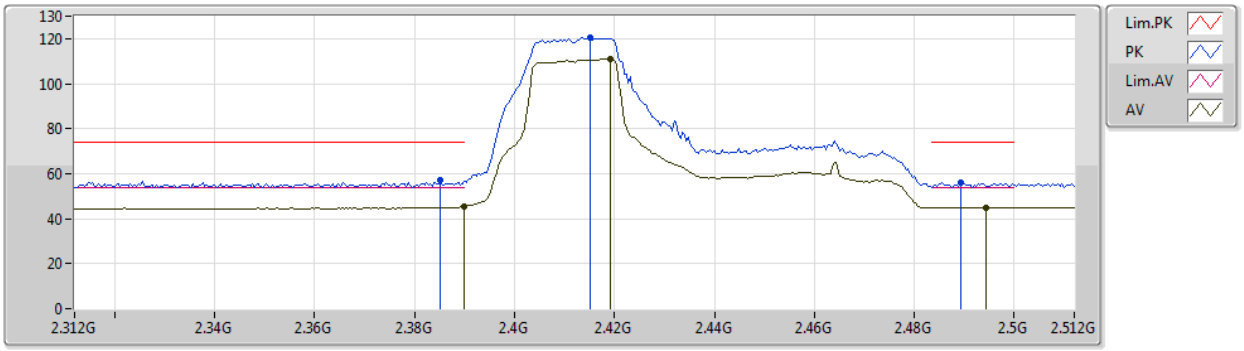


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.92394G	47.66	54.00	-6.34	43.73	3	Horizontal	352	1.07	-	31.56	6.82	34.45
PK	4.92398G	50.99	74.00	-23.01	47.06	3	Horizontal	352	1.07	-	31.56	6.82	34.45

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

25/07/2019

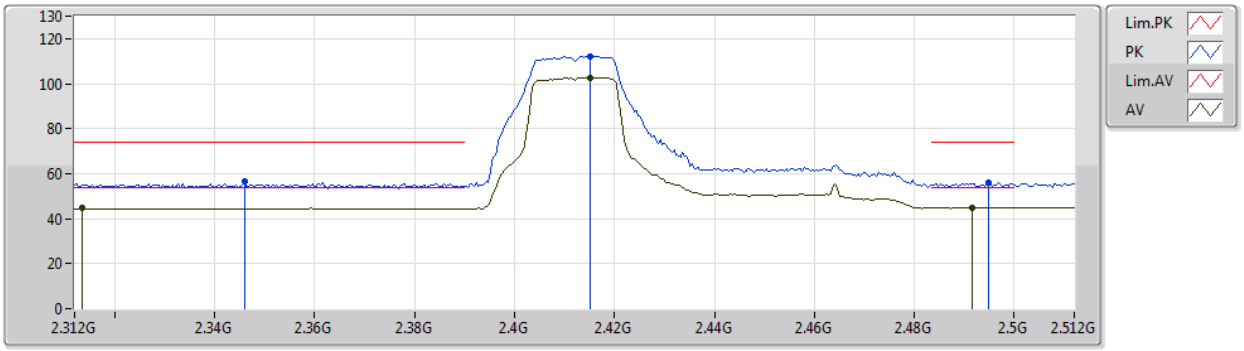


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.39G	45.26	54.00	-8.74	13.17	3	Vertical	201	1.66	-	27.37	4.72	-
AV	2.4192G	110.93	Inf	-Inf	78.72	3	Vertical	201	1.66	-	27.46	4.75	-
AV	2.4944G	45.01	54.00	-8.99	12.49	3	Vertical	201	1.66	-	27.68	4.84	-
PK	2.3852G	57.17	74.00	-16.83	25.10	3	Vertical	201	1.66	-	27.36	4.71	-
PK	2.4152G	120.27	Inf	-Inf	88.07	3	Vertical	201	1.66	-	27.45	4.75	-
PK	2.4892G	56.22	74.00	-17.78	23.72	3	Vertical	201	1.66	-	27.67	4.83	-

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

25/07/2019

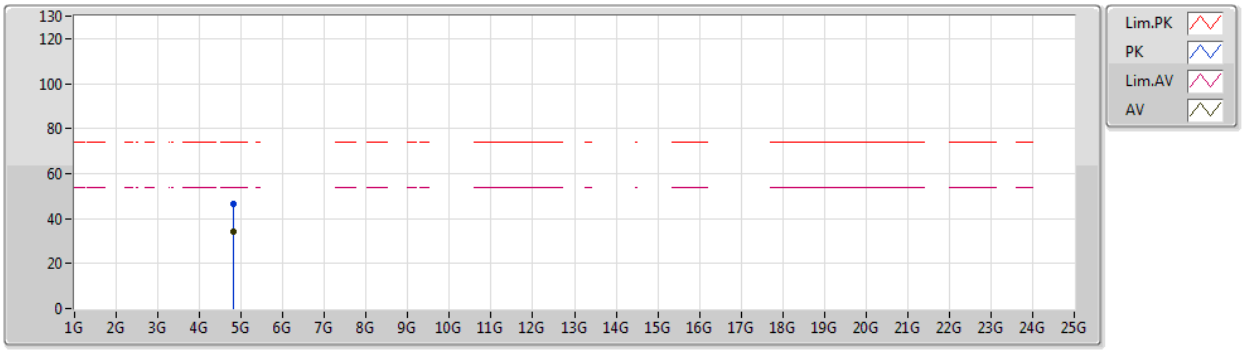


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3136G	44.63	54.00	-9.37	12.86	3	Horizontal	213	1.42	-	27.14	4.63	-
AV	2.4152G	102.69	Inf	-Inf	70.49	3	Horizontal	213	1.42	-	27.45	4.75	-
AV	2.4916G	44.89	54.00	-9.11	12.38	3	Horizontal	213	1.42	-	27.67	4.84	-
PK	2.346G	56.54	74.00	-17.46	24.63	3	Horizontal	213	1.42	-	27.24	4.67	-
PK	2.4152G	112.16	Inf	-Inf	79.96	3	Horizontal	213	1.42	-	27.45	4.75	-
PK	2.4948G	56.17	74.00	-17.83	23.65	3	Horizontal	213	1.42	-	27.68	4.84	-

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

25/07/2019

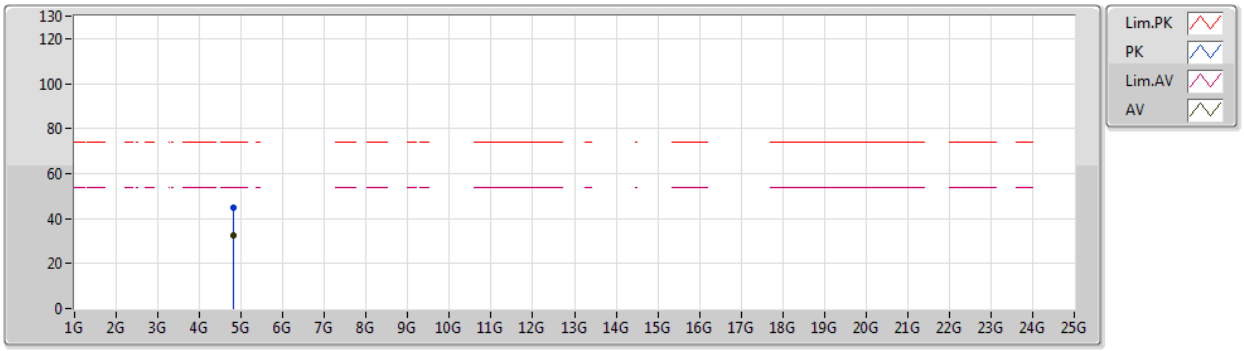


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.82652G	34.26	54.00	-19.74	30.56	3	Vertical	332	1.49	-	31.39	6.79	34.48
PK	4.827G	46.51	74.00	-27.49	42.81	3	Vertical	332	1.49	-	31.39	6.79	34.48

802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

25/07/2019

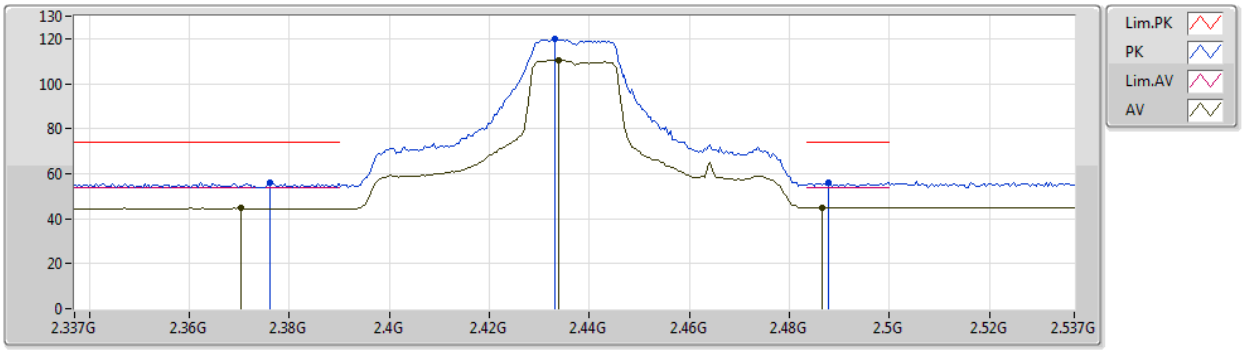


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.82622G	32.31	54.00	-21.69	28.61	3	Horizontal	255	1.54	-	31.39	6.79	34.48
PK	4.82838G	44.64	74.00	-29.36	40.94	3	Horizontal	255	1.54	-	31.39	6.79	34.48

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

25/07/2019

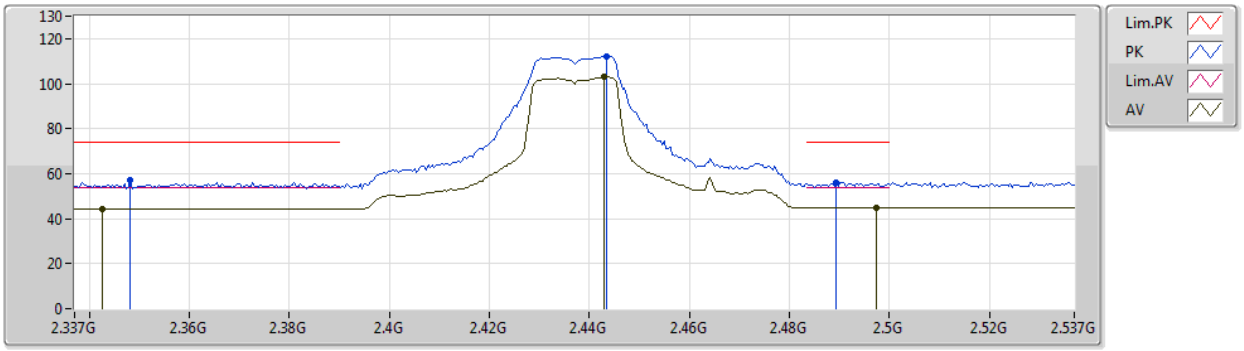


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3702G	44.70	54.00	-9.30	12.69	3	Vertical	201	1.88	-	27.31	4.70	-
AV	2.4338G	110.50	Inf	-Inf	78.23	3	Vertical	201	1.88	-	27.50	4.77	-
AV	2.4866G	45.09	54.00	-8.91	12.60	3	Vertical	201	1.88	-	27.66	4.83	-
PK	2.3762G	56.24	74.00	-17.76	24.21	3	Vertical	201	1.88	-	27.33	4.70	-
PK	2.433G	120.06	Inf	-Inf	87.79	3	Vertical	201	1.88	-	27.50	4.77	-
PK	2.4878G	56.28	74.00	-17.72	23.79	3	Vertical	201	1.88	-	27.66	4.83	-

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

25/07/2019

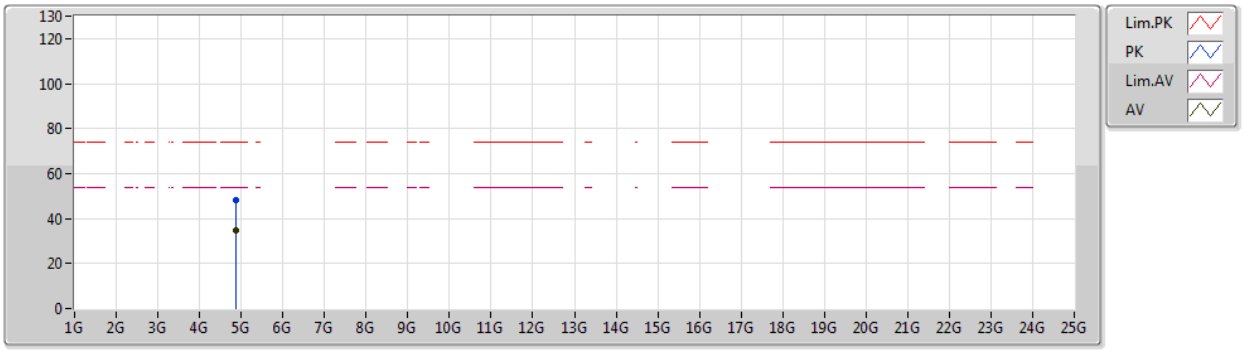


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3426G	44.51	54.00	-9.49	12.62	3	Horizontal	182	1.76	-	27.23	4.66	-
AV	2.443G	103.00	Inf	-Inf	70.69	3	Horizontal	182	1.76	-	27.53	4.78	-
AV	2.4974G	44.84	54.00	-9.16	12.31	3	Horizontal	182	1.76	-	27.69	4.84	-
PK	2.3482G	57.35	74.00	-16.65	25.44	3	Horizontal	182	1.76	-	27.24	4.67	-
PK	2.4434G	111.97	Inf	-Inf	79.66	3	Horizontal	182	1.76	-	27.53	4.78	-
PK	2.4894G	56.20	74.00	-17.80	23.70	3	Horizontal	182	1.76	-	27.67	4.83	-

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

25/07/2019

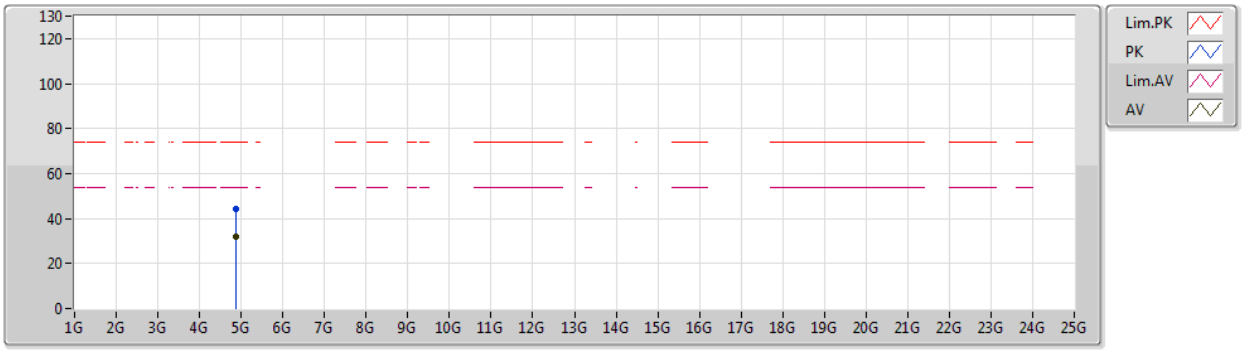


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.87598G	34.61	54.00	-19.39	30.79	3	Vertical	336	1.50	-	31.48	6.81	34.47
PK	4.87628G	48.11	74.00	-25.89	44.29	3	Vertical	336	1.50	-	31.48	6.81	34.47

802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

25/07/2019

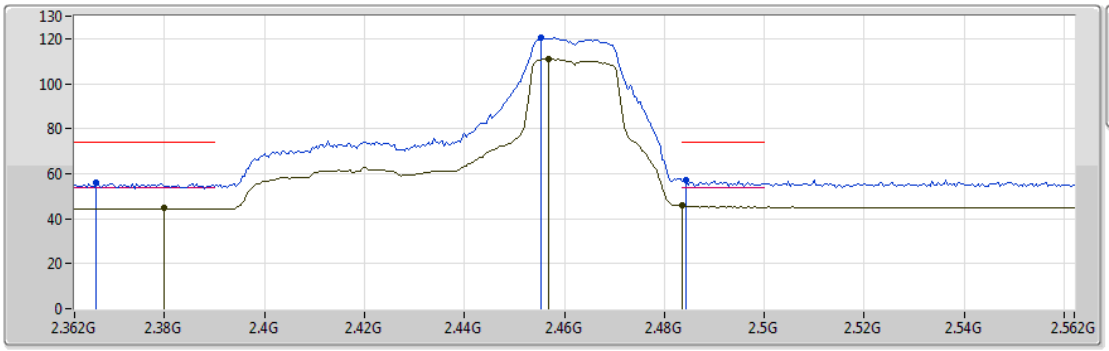


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.87424G	32.15	54.00	-21.85	28.34	3	Horizontal	355	1.25	-	31.47	6.81	34.47
PK	4.87586G	44.52	74.00	-29.48	40.70	3	Horizontal	355	1.25	-	31.48	6.81	34.47

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

25/07/2019

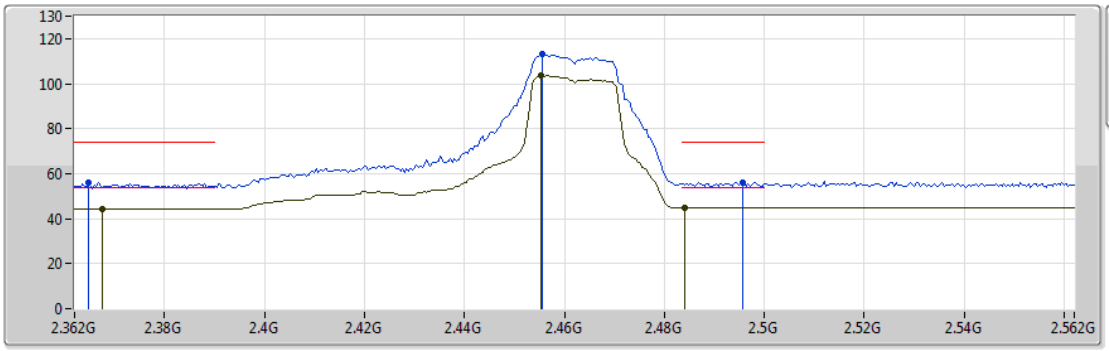


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.38G	44.56	54.00	-9.44	12.51	3	Vertical	201	1.67	-	27.34	4.71	-
AV	2.4568G	110.93	Inf	-Inf	78.56	3	Vertical	201	1.67	-	27.57	4.80	-
AV	2.4835G	45.81	54.00	-8.19	13.33	3	Vertical	201	1.67	-	27.65	4.83	-
PK	2.3664G	55.78	74.00	-18.22	23.79	3	Vertical	201	1.67	-	27.30	4.69	-
PK	2.4552G	120.41	Inf	-Inf	88.05	3	Vertical	201	1.67	-	27.57	4.79	-
PK	2.4844G	57.30	74.00	-16.70	24.82	3	Vertical	201	1.67	-	27.65	4.83	-

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

25/07/2019

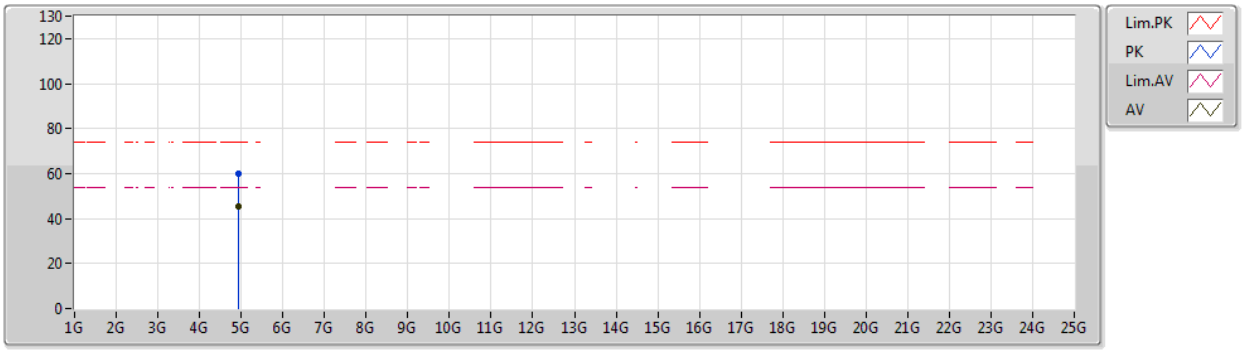


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3676G	44.46	54.00	-9.54	12.47	3	Horizontal	181	1.50	-	27.30	4.69	-
AV	2.4552G	103.50	Inf	-Inf	71.14	3	Horizontal	181	1.50	-	27.57	4.79	-
AV	2.484G	44.92	54.00	-9.08	12.44	3	Horizontal	181	1.50	-	27.65	4.83	-
PK	2.3648G	56.14	74.00	-17.86	24.16	3	Horizontal	181	1.50	-	27.29	4.69	-
PK	2.4556G	113.26	Inf	-Inf	80.89	3	Horizontal	181	1.50	-	27.57	4.80	-
PK	2.4956G	56.04	74.00	-17.96	23.51	3	Horizontal	181	1.50	-	27.69	4.84	-

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

25/07/2019

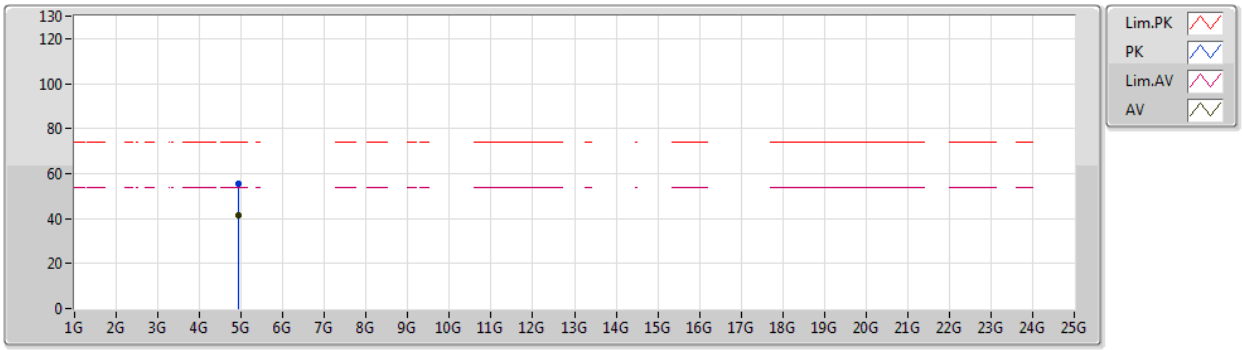


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.92592G	45.24	54.00	-8.76	41.30	3	Vertical	335	1.49	-	31.57	6.82	34.45
PK	4.92624G	60.04	74.00	-13.96	56.10	3	Vertical	335	1.49	-	31.57	6.82	34.45

802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

25/07/2019

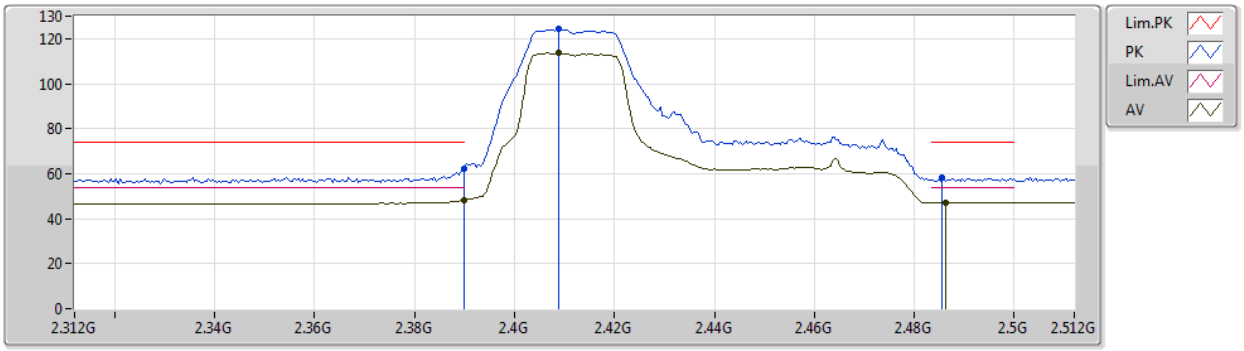


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.9259G	41.41	54.00	-12.59	37.47	3	Horizontal	352	1.05	-	31.57	6.82	34.45
PK	4.9264G	55.60	74.00	-18.40	51.66	3	Horizontal	352	1.05	-	31.57	6.82	34.45

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

23/07/2019

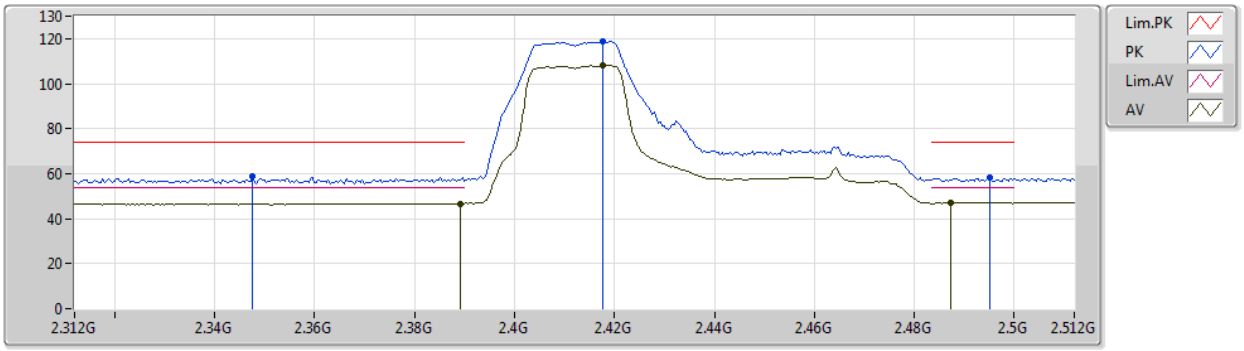


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.39G	48.20	54.00	-5.80	16.11	3	Vertical	212	1.50	-	27.37	4.72	-
AV	2.4088G	113.70	Inf	-Inf	81.53	3	Vertical	212	1.50	-	27.43	4.74	-
AV	2.4864G	47.07	54.00	-6.93	14.58	3	Vertical	212	1.50	-	27.66	4.83	-
PK	2.39G	62.44	74.00	-11.56	30.35	3	Vertical	212	1.50	-	27.37	4.72	-
PK	2.4088G	124.38	Inf	-Inf	92.21	3	Vertical	212	1.50	-	27.43	4.74	-
PK	2.4856G	58.48	74.00	-15.52	25.99	3	Vertical	212	1.50	-	27.66	4.83	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

23/07/2019

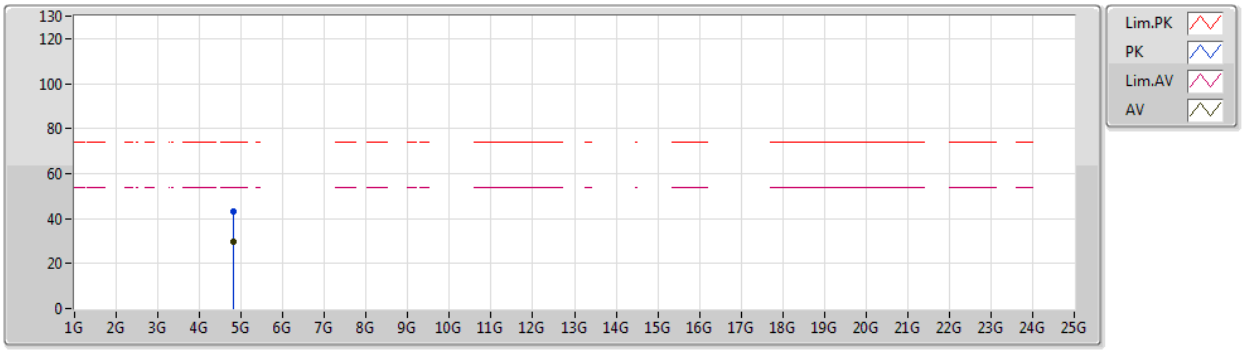


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3476G	58.80	74.00	-15.20	26.89	3	Horizontal	203	1.96	-	27.24	4.67	-
AV	2.3892G	46.67	54.00	-7.33	14.58	3	Horizontal	203	1.96	-	27.37	4.72	-
PK	2.4176G	118.60	Inf	-Inf	86.40	3	Horizontal	203	1.96	-	27.45	4.75	-
AV	2.4176G	108.30	Inf	-Inf	76.10	3	Horizontal	203	1.96	-	27.45	4.75	-
PK	2.4952G	58.08	74.00	-15.92	25.55	3	Horizontal	203	1.96	-	27.69	4.84	-
AV	2.4872G	47.02	54.00	-6.98	14.53	3	Horizontal	203	1.96	-	27.66	4.83	-

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

23/07/2019

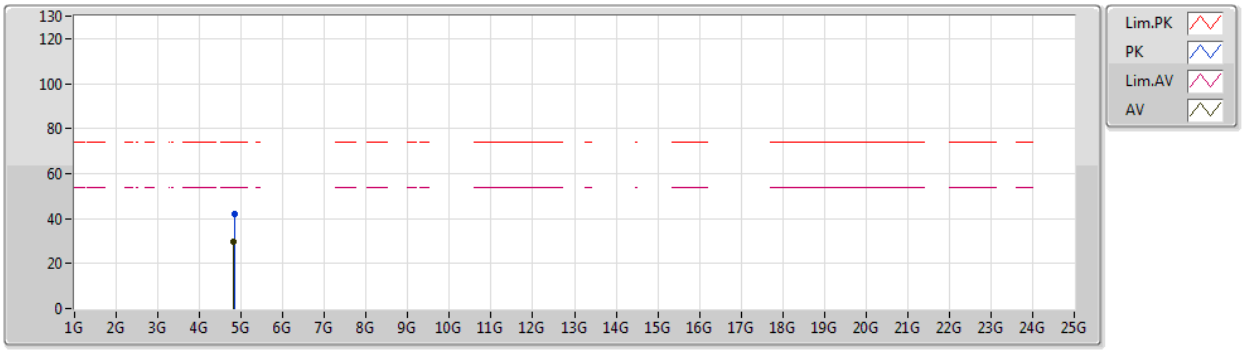


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.81932G	29.76	54.00	-24.24	26.08	3	Vertical	22	1.50	-	31.37	6.79	34.48
PK	4.81998G	43.18	74.00	-30.82	39.49	3	Vertical	22	1.50	-	31.38	6.79	34.48

802.11n HT20_Nss1,(MCS0)_1TX

2412MHz_TX

23/07/2019

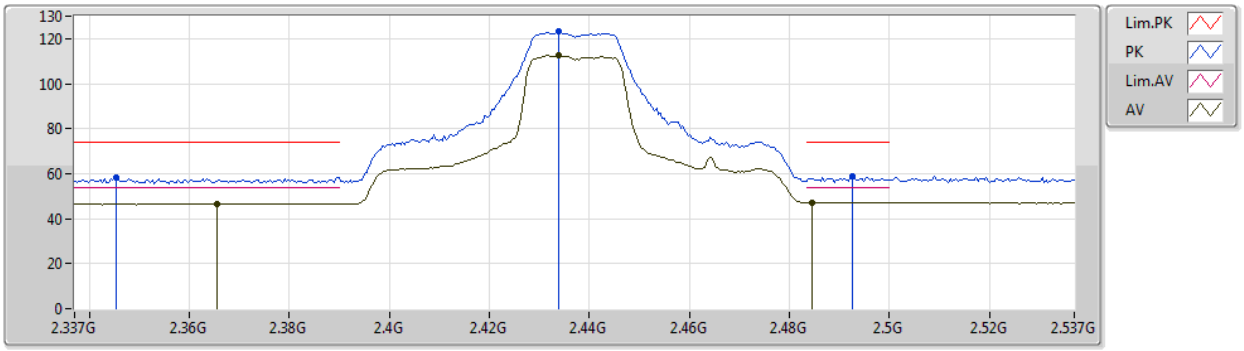


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.81014G	29.67	54.00	-24.33	26.01	3	Horizontal	59	1.50	-	31.36	6.79	34.49
PK	4.83756G	42.18	74.00	-31.82	38.46	3	Horizontal	59	1.50	-	31.41	6.79	34.48

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

23/07/2019

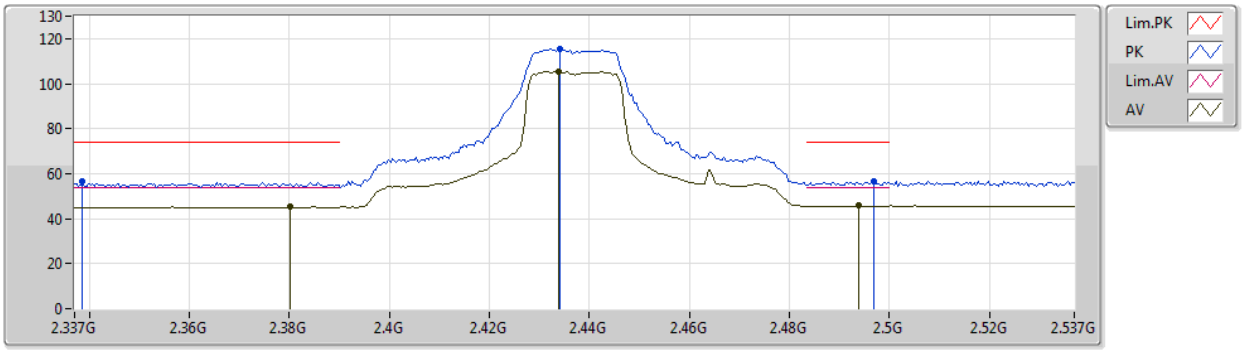


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3654G	46.57	54.00	-7.43	14.58	3	Vertical	208	1.44	-	27.30	4.69	-
AV	2.4338G	112.46	Inf	-Inf	80.19	3	Vertical	208	1.44	-	27.50	4.77	-
AV	2.4846G	47.14	54.00	-6.86	14.66	3	Vertical	208	1.44	-	27.65	4.83	-
PK	2.3454G	58.30	74.00	-15.70	26.39	3	Vertical	208	1.44	-	27.24	4.67	-
PK	2.4338G	123.04	Inf	-Inf	90.77	3	Vertical	208	1.44	-	27.50	4.77	-
PK	2.4926G	58.66	74.00	-15.34	26.14	3	Vertical	208	1.44	-	27.68	4.84	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

23/07/2019

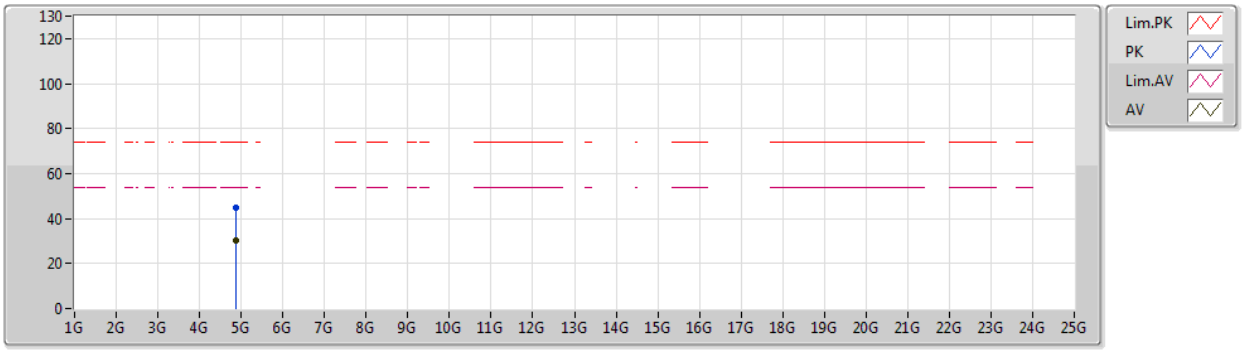


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3802G	45.25	54.00	-8.75	13.20	3	Horizontal	203	1.87	-	27.34	4.71	-
AV	2.4338G	105.56	Inf	-Inf	73.29	3	Horizontal	203	1.87	-	27.50	4.77	-
AV	2.4938G	45.68	54.00	-8.32	13.16	3	Horizontal	203	1.87	-	27.68	4.84	-
PK	2.3386G	56.38	74.00	-17.62	24.50	3	Horizontal	203	1.87	-	27.22	4.66	-
PK	2.4342G	115.69	Inf	-Inf	83.42	3	Horizontal	203	1.87	-	27.50	4.77	-
PK	2.497G	56.47	74.00	-17.53	23.94	3	Horizontal	203	1.87	-	27.69	4.84	-

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

23/07/2019

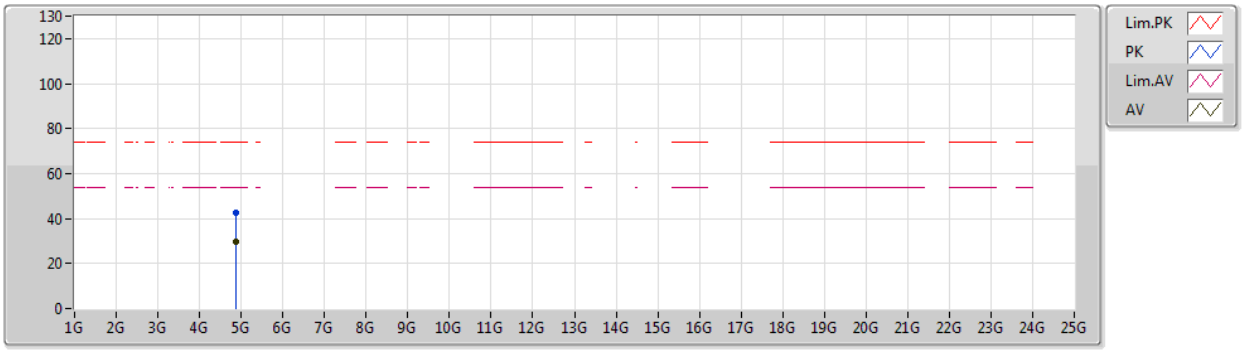


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.8821G	30.40	54.00	-23.60	26.57	3	Vertical	334	1.50	-	31.49	6.81	34.47
PK	4.87922G	44.60	74.00	-29.40	40.78	3	Vertical	334	1.50	-	31.48	6.81	34.47

802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

23/07/2019

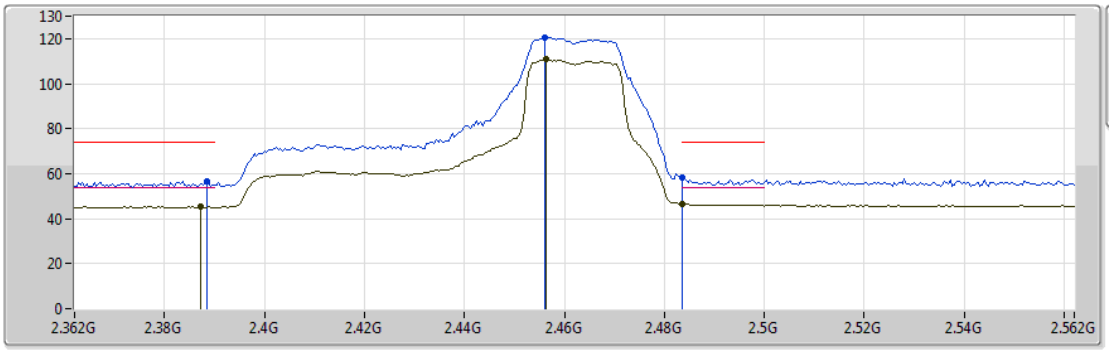


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.88792G	29.58	54.00	-24.42	25.73	3	Horizontal	238	2.01	-	31.50	6.81	34.46
PK	4.8626G	42.45	74.00	-31.55	38.67	3	Horizontal	238	2.01	-	31.45	6.80	34.47

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

23/07/2019

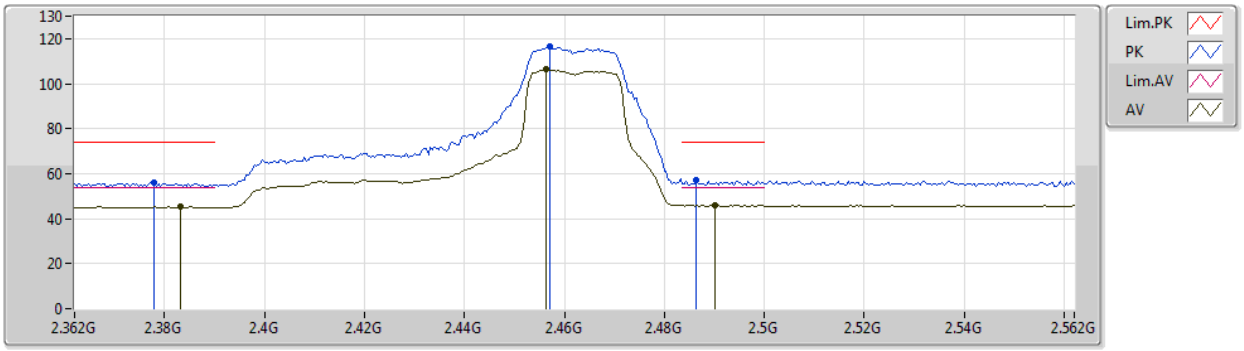


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3872G	45.29	54.00	-8.71	13.21	3	Vertical	209	1.52	-	27.36	4.72	-
AV	2.4564G	110.87	Inf	-Inf	78.50	3	Vertical	209	1.52	-	27.57	4.80	-
AV	2.4835G	46.65	54.00	-7.35	14.17	3	Vertical	209	1.52	-	27.65	4.83	-
PK	2.3884G	56.58	74.00	-17.42	24.49	3	Vertical	209	1.52	-	27.37	4.72	-
PK	2.456G	120.51	Inf	-Inf	88.14	3	Vertical	209	1.52	-	27.57	4.80	-
PK	2.4835G	58.35	74.00	-15.65	25.87	3	Vertical	209	1.52	-	27.65	4.83	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

23/07/2019

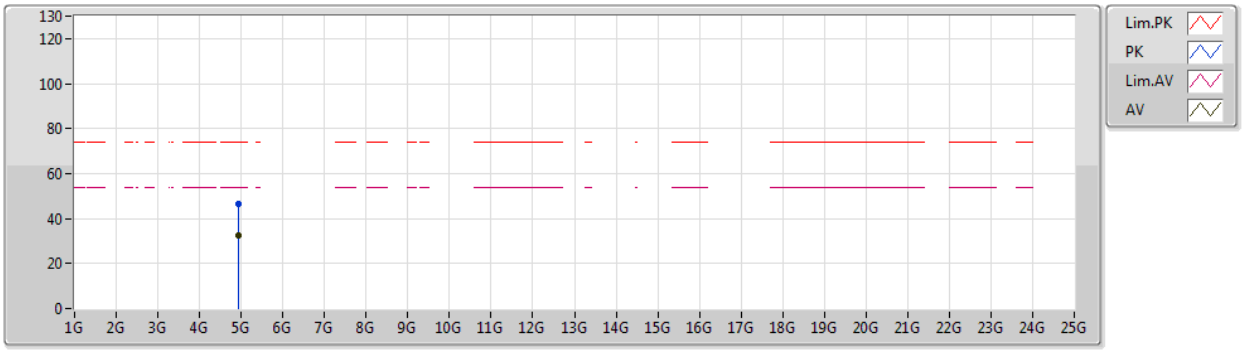


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	2.3832G	45.18	54.00	-8.82	13.12	3	Horizontal	204	1.78	-	27.35	4.71	-
AV	2.4564G	106.53	Inf	-Inf	74.16	3	Horizontal	204	1.78	-	27.57	4.80	-
AV	2.49G	45.81	54.00	-8.19	13.30	3	Horizontal	204	1.78	-	27.67	4.84	-
PK	2.378G	55.93	74.00	-18.07	23.90	3	Horizontal	204	1.78	-	27.33	4.70	-
PK	2.4572G	116.38	Inf	-Inf	84.01	3	Horizontal	204	1.78	-	27.57	4.80	-
PK	2.4864G	56.95	74.00	-17.05	24.46	3	Horizontal	204	1.78	-	27.66	4.83	-

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

23/07/2019

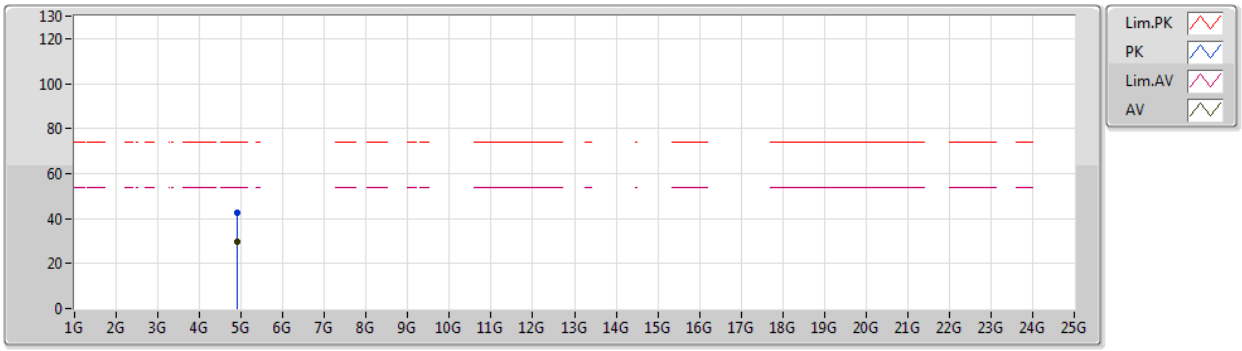


Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.9237G	32.60	54.00	-21.40	28.67	3	Vertical	332	1.03	-	31.56	6.82	34.45
PK	4.92484G	46.52	74.00	-27.48	42.59	3	Vertical	332	1.03	-	31.56	6.82	34.45

802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

23/07/2019



Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
AV	4.9093G	29.48	54.00	-24.52	25.58	3	Horizontal	0	1.07	-	31.54	6.82	34.46
PK	4.91152G	42.39	74.00	-31.61	38.49	3	Horizontal	0	1.07	-	31.54	6.82	34.46