FCC RADIO TEST REPORT

FCC ID	:	O2U-CH7368
Equipment	:	Wireless Gateway
Brand Name	:	cbn
Model Name	:	CH7368, CH7368XXXXXX (The "X" in the model name can be 0 to 9 , A to Z , dash ok blank , for marketing purpose)
Applicant	:	COMPAL BROADBAND NETWORKS,INC. 13F-1, No.1, Taiyuan 1st St., Zhubei City, Hsinchu County 30288, Taiwan, R.O.C.
Manufacturer	:	COMPAL BROADBAND NETWORKS,INC. 13F-1, No.1, Taiyuan 1st St., Zhubei City, Hsinchu County 30288, Taiwan, R.O.C.
Standard	:	47 CFR FCC Part 15.247

The product was received on Apr. 09, 2019, and testing was started from Apr. 24, 2019 and completed on May 27, 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: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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Photographs of EUT v02

History of this test report

Report No.	Version	Description	Issued Date
FR932923AA	01	Initial issue of report	Jun. 14, 2019
FR932923AA	02	Revise the equipment name and add a model name.	Jun. 19, 2019

Summary of Test Result

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

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen
Report Producer: Cindy Peng

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	3TX
2.4-2.4835GHz	802.11n HT20	20	3TX
2.4-2.4835GHz	802.11n HT40	40	3TX

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.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Remark
1	3	CBN	CH7368	Diople Antenna	I-PEX	5.2	2.4GHz
2	2	CBN	CH7368	Diople Antenna	I-PEX	3.6	2.4GHz
3	1	CBN	CH7368	Diople Antenna	I-PEX	5.5	2.4GHz
4	4	CBN	CH7368	Diople Antenna	I-PEX	7.1	5GHz
5	3	CBN	CH7368	Diople Antenna	I-PEX	6.8	5GHz
6	2	CBN	CH7368	Diople Antenna	I-PEX	7.0	5GHz
7	1	CBN	CH7368	Diople Antenna	I-PEX	5.9	5GHz

Note 1: The above information was declared by manufacturer.
Note 2: The EUT has seven antennas (Ant. 1~Ant. 3 for WLAN 2.4GHz use, and the other antennas for WLAN 5GHz use) .
Note 3: For WLAN 2.4GHz:
802.11b (1TX/1RX): Only Port 1 could transmit/receive simultaneously.
802.11g/n (3TX/3RX): Port 1, Port 2 and Port 3 could transmit/receive simultaneously.
Note 4: For WLAN 5GHz:
802.11a/n/ac (4TX/4RX): Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.998	0.009	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.984	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT20	0.982	0.079	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT40	0.966	0.15	650.625u	3k

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	Lantq DUT Generation Wave500			
Test Sample Serial Number	Normal Link and CTX - 5GHz:		1417368200002	
	CTX - 2.4GHz:		1417368200000	

Note: The above information was declared by manufacturer.

1.2 Table for Multiple Listing

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

Brand Name	Model Name	Description
cbn	CH7368	All the models are identical, and the difference model served as marketing strategy.
	CH7368XXXXXX (The "X" in the model name can be 0 to 9 , A to Z , dash ok blank , for maketing purpose)	

From the above models, model: CH7368 was selected as representative model for the test and its data was recorded in this report.

1.3 Applicable 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
- FCC KDB 558074 D01 v05r02
- FCC KDB 662911 D01 v02r01

1.4 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
☒	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.			
		TEL	:	886-3-656-9065	FAX	:	886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Welson Chen	22~24°C / 54~56%	Apr. 26, 2019~May 10, 2019
Radiated (Below 1GHz)	03CH01-CB	Paul Chen	22~24°C / 50~60%	May 24, 2019
Radiated (Above 1GHz)	03CH01-CB	Welson Chen	22~24°C / 53~55%	Apr. 24, 2019~May 07, 2019
AC Conduction	CO01-CB	Deven Huang	22~23°C / 55~58%	May 27, 2019

Test site Designation No. TW0006 with FCC.
Test site registered number IC 4086B with Industry Canada.

1.5 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)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	20.5
2437MHz	20.5
2462MHz	20
802.11g_Nss1,(6Mbps)_3TX	-
2412MHz	17.5
2417MHz	20
2437MHz	22
2457MHz	19.5
2462MHz	17
802.11n HT20_Nss1,(MCS0)_3TX	-
2412MHz	16
2417MHz	20
2437MHz	22
2457MHz	18.5
2462MHz	16
802.11n HT40_Nss1,(MCS0)_3TX	-
2422MHz	14
2427MHz	15.5
2437MHz	17.5
2452MHz	15.5

2.2 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	
1	Normal Link

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	
1	Normal Link
Operating Mode > 1GHz	
1	CTX

Note: The EUT can only be used at Y axis position.

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
No.	**Equipment Name**	**Brand Name**	**Model Name**	**Rating**
1	Adapter	Frecom	F30L2-120250SPAU	INPUT: 100-240Vac, 50/60Hz, 0.8A OUTPUT: 12Vdc, 2.5A

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Flash disk3.0	Transcend	JetFlash-700	N/A
B	LAN NB	DELL	E6430	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A
E	Terminal system	MOTOROLA	BSR2000	N/A
F	Terminal system NB	ACER	MS2308	N/A
G	Phone 1	SAMPO	HT-B 907WL	N/A
H	Phone 2	SAMPO	HT-B 907WL	N/A
I	Splitter	N/A	N/A	N/A

For Radiated (below 1GHz):

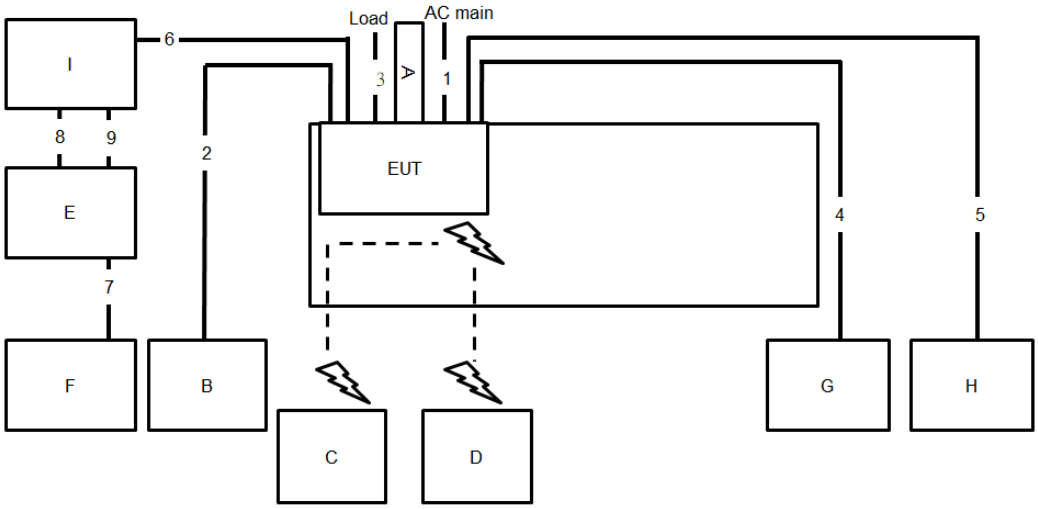
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.4G NB	Apple	Mac Book	N/A
B	5G NB	Apple	Mac Book	N/A
C	LAN NB	DELL	E4300	N/A
D	Terminal system NB	acer	N/A	N/A
E	Phone 1	SAMPO	HT-B 907WL	N/A
F	Phone 2	SAMPO	HT-B 907WL	N/A
G	Terminal system	MOTOROLA	BSR2000	N/A
H	Splitter	N/A	N/A	N/A
I	Flash disk3.0	Silicon Power	B06	N/A

For Radiated (above 1GHz) and RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A

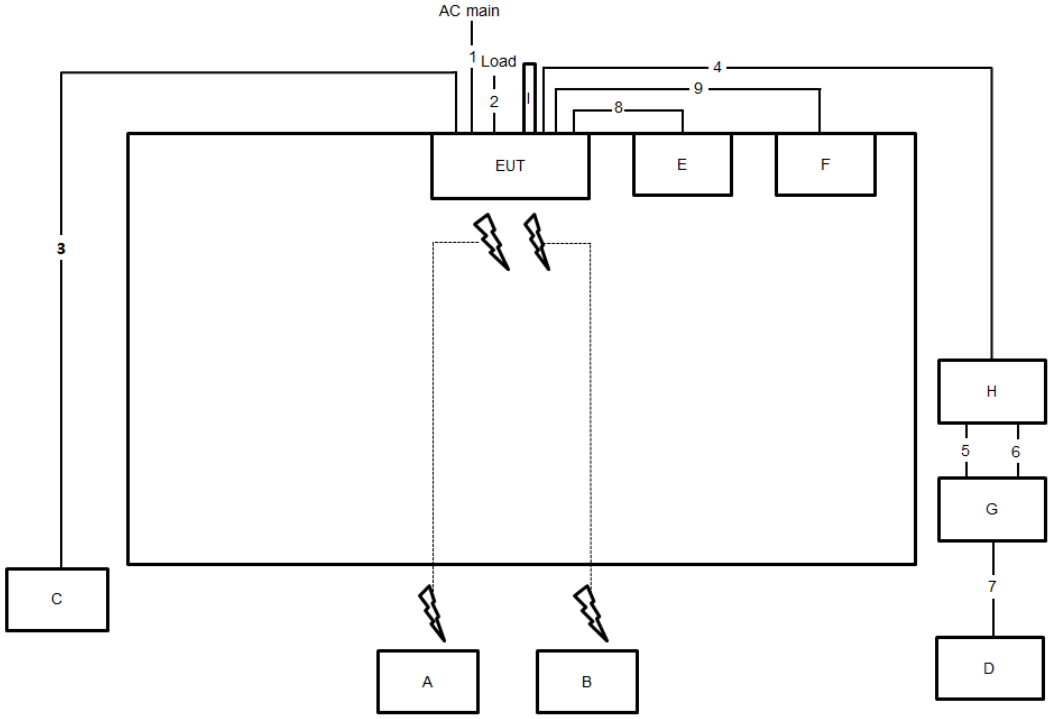
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



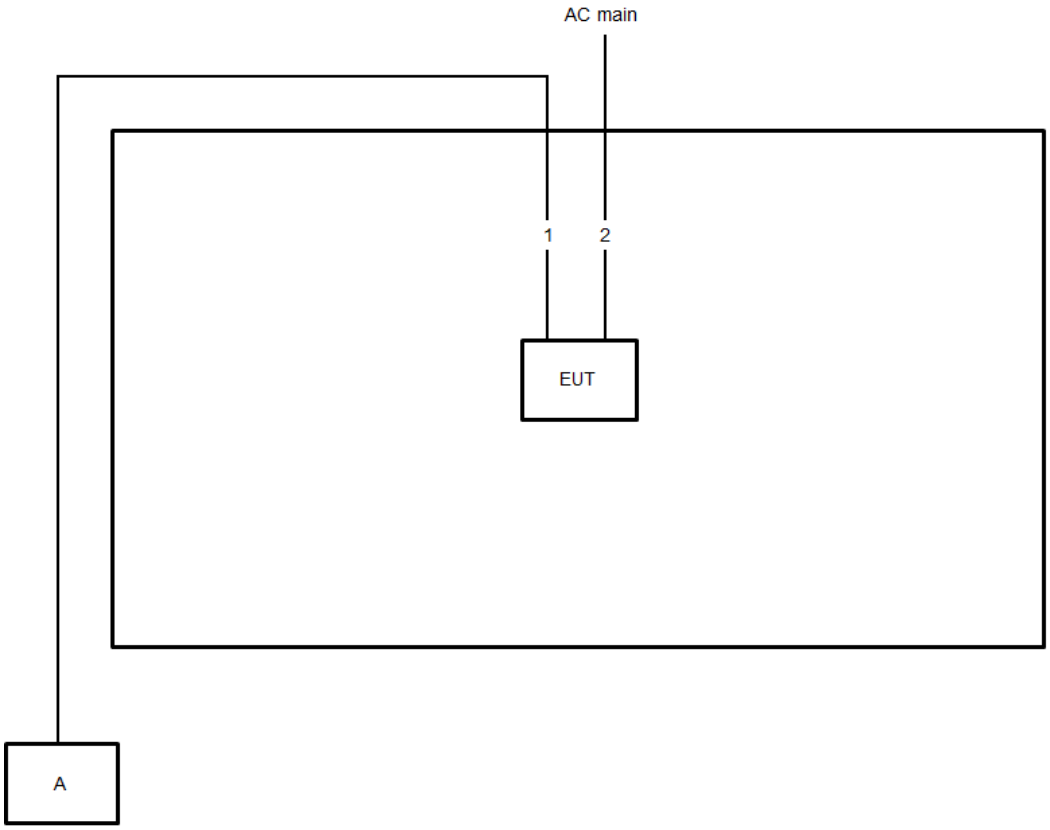
Item	Connection	Shielded	Length
1	Power cable	No	2m
2	RJ-45 cable	No	10m
3	RJ-45 cable*3	No	1.5m
4	RJ-11 cable	No	10m
5	RJ-11 cable	No	10m
6	Coaxial cable	Yes	10m
7	RJ-45 cable	No	1.5m
8	Coaxial cable	Yes	2m
9	Coaxial cable	Yes	2m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	2m
2	RJ-45 cable*3	No	1.5m
3	RJ-45 cable	No	10m
4	Coaxial cable	Yes	10m
5	Coaxial cable	Yes	2m
6	Coaxial cable	Yes	2m
7	RJ-45 cable	No	3m
8	RJ-11 cable	No	1.5m
9	RJ-11 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2m

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

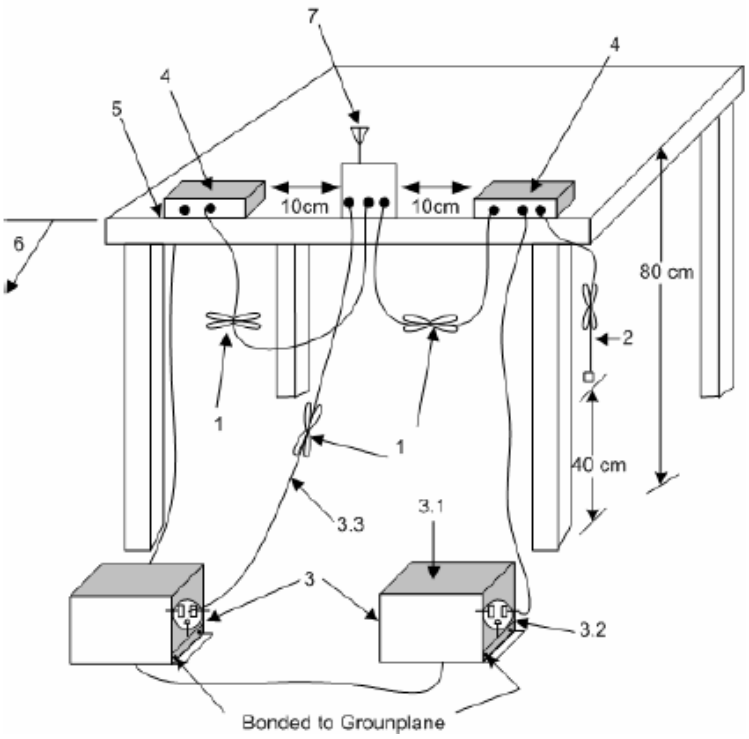
Refer a test equipment and calibration data table in this test report.

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



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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.

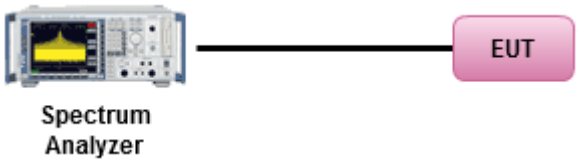
3.2.2 Measuring Instruments

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 FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.1 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
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 FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
▪ Maximum Conducted Output Power		
	[duty cycle ≥ 98% or external video / power trigger]	
	☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
	duty cycle < 98% and average over on/off periods with duty factor	
	☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
	Measurement using a power meter (PM)	
	☒	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
	☐	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).

▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC 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.

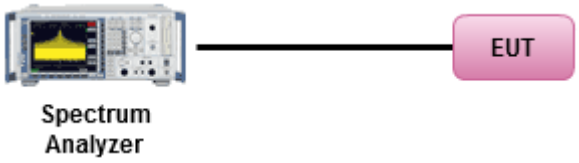
3.4.3 Test Procedures

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 FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.2 Method PKPSD.
	[duty cycle ≥ 98% or external video / power trigger]	
	☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.3 Method AVGPSD-1.
	☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.5 Method AVGPSD-2.
	☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.7 Method AVGPSD-3.
	duty cycle < 98% and average over on/off periods with duty factor	
	☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.4 Method AVGPSD-1A. (alternative).
	☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.6 Method AVGPSD-2A. (alternative)
	☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.8 Method AVGPSD-3A. (alternative)
▪ For conducted measurement.		
	▪ If The EUT supports multiple transmit chains using options given below:	
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC 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.
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,

		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

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 (dBc)**
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.

3.5.2 Measuring Instruments

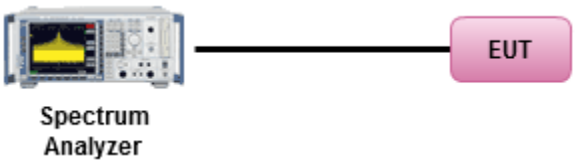
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted 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.

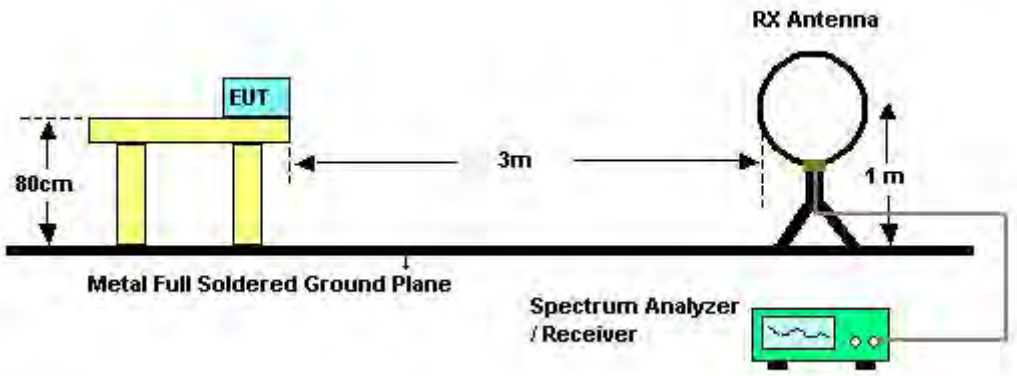
3.6.3 Test Procedures

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 FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.		
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle ≥98%).
		☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, 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 FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.		
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).		
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB		
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.		

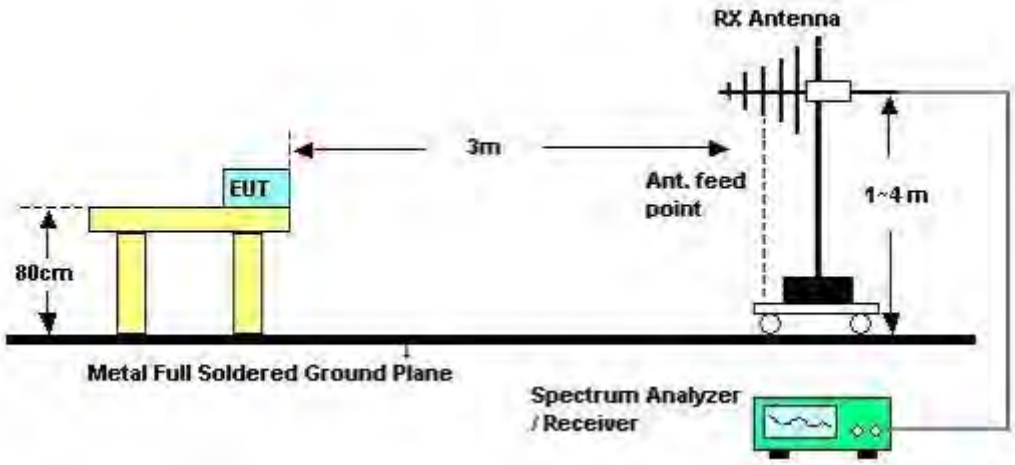
3.6.4 Test Setup

Radiated - Emissions in Restricted Frequency Bands

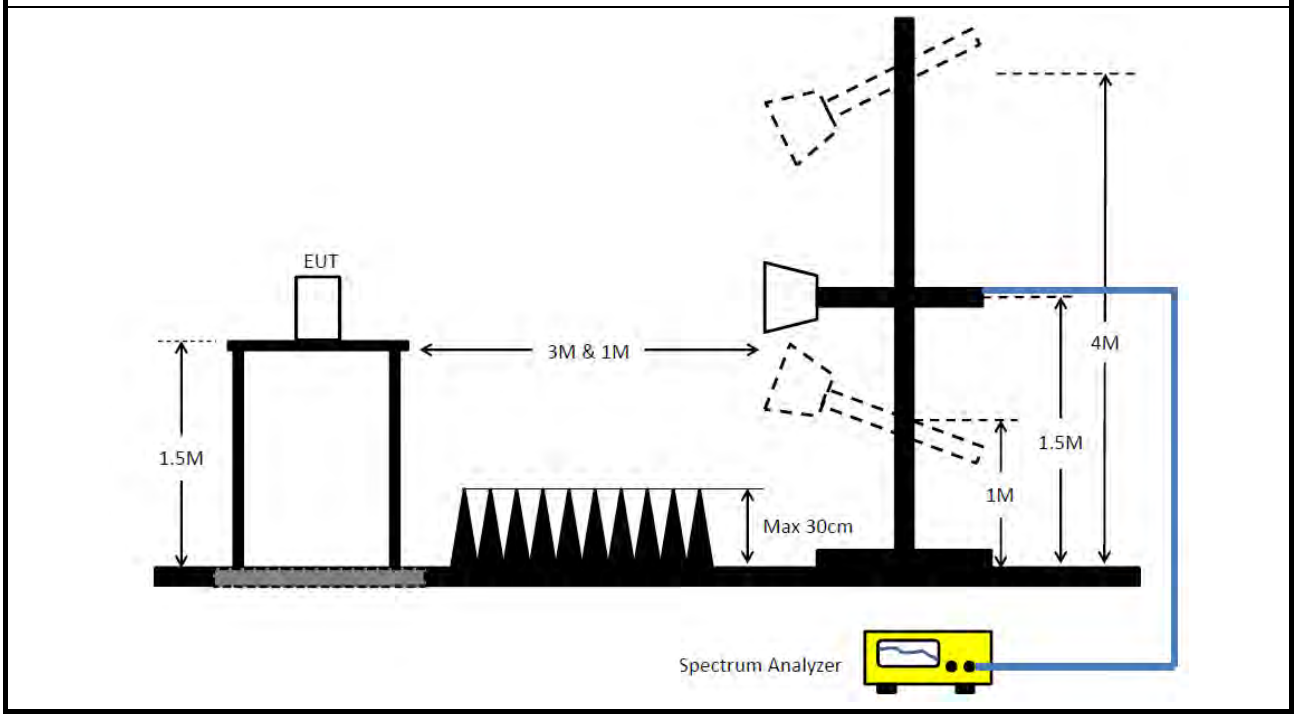
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 Emissions in Restricted Frequency Bands (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

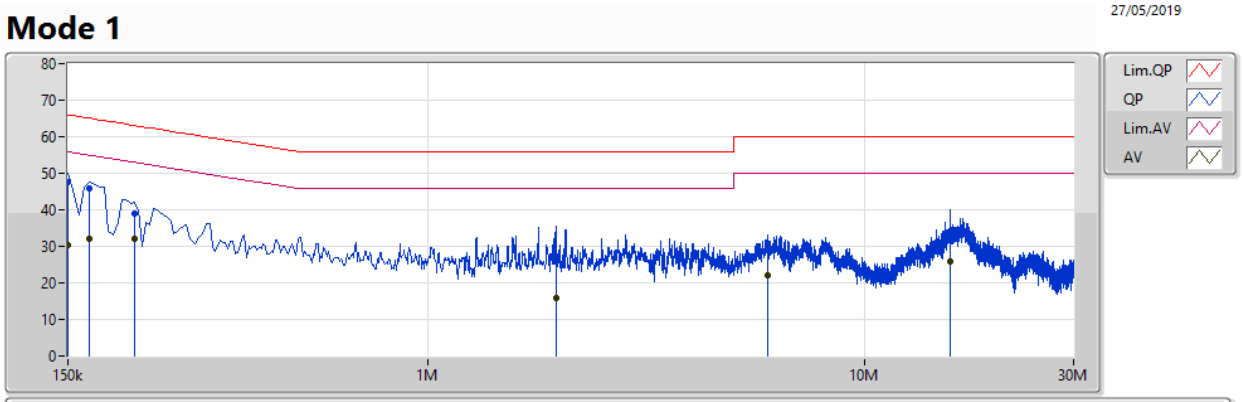
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 28, 2019	Jan. 29, 2020	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 24, 2018	Dec. 23, 2019	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Jan. 11, 2019	Jan. 10, 2020	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 27, 2018	Aug. 26, 2019	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 13, 2018	Nov. 12, 2019	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	Jun. 13, 2018	Jun. 12, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2019	Jan. 07, 2020	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Jan. 31, 2019	Jan. 30, 2020	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	100359	9kHz ~ 2.75GHz	Jul. 03, 2018	Jul. 02, 2019	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 05, 2018	Nov. 04, 2019	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

N.C.R. means Non-Calibration required.

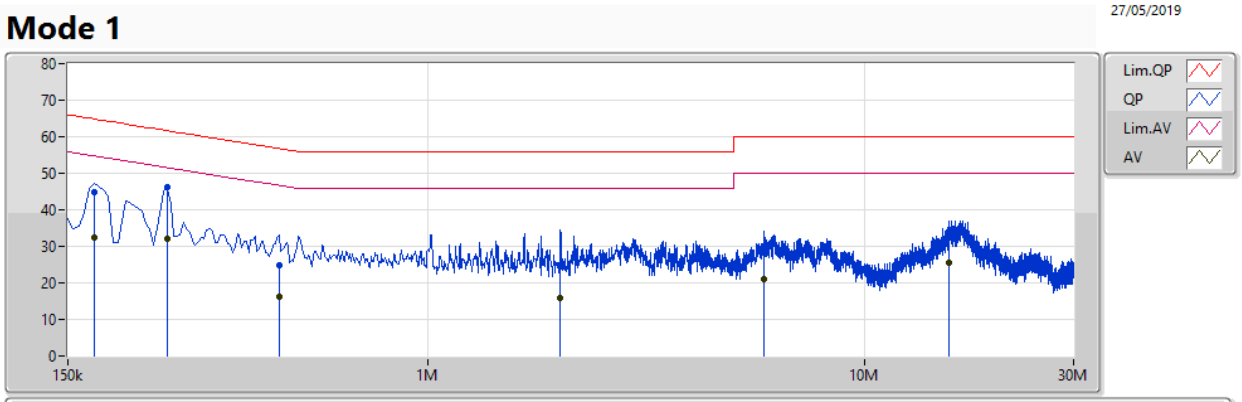
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Normal Link		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	47.42	66.00	-18.58	10.00	Line	"Worst"	37.42	0.05	0.16	9.79
AV	150k	30.35	56.00	-25.65	10.00	Line	-	20.35	0.05	0.16	9.79
QP	168k	45.77	65.06	-19.29	9.99	Line	-	35.78	0.05	0.15	9.79
AV	168k	32.20	55.06	-22.86	9.99	Line	-	22.21	0.05	0.15	9.79
QP	213k	38.88	63.09	-24.21	9.99	Line	-	28.89	0.06	0.14	9.79
AV	213k	32.24	53.09	-20.85	9.99	Line	-	22.25	0.06	0.14	9.79
QP	1.964M	26.06	56.00	-29.94	10.15	Line	-	15.91	0.09	0.23	9.83
AV	1.964M	15.85	46.00	-30.15	10.15	Line	-	5.70	0.09	0.23	9.83
QP	5.996M	29.08	60.00	-30.92	10.16	Line	-	18.92	0.16	0.14	9.86
AV	5.996M	22.14	50.00	-27.86	10.16	Line	-	11.98	0.16	0.14	9.86
QP	15.707M	32.61	60.00	-27.39	10.41	Line	-	22.20	0.26	0.22	9.93
AV	15.707M	25.99	50.00	-24.01	10.41	Line	-	15.58	0.26	0.22	9.93

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	172.5k	44.95	64.83	-19.88	9.98	Neutral	-	34.97	0.04	0.15	9.79
AV	172.5k	32.25	54.83	-22.58	9.98	Neutral	-	22.27	0.04	0.15	9.79
QP	253.5k	46.10	61.64	-15.54	9.97	Neutral	"Worst"	36.13	0.04	0.13	9.80
AV	253.5k	31.94	51.64	-19.70	9.97	Neutral	-	21.97	0.04	0.13	9.80
QP	456k	24.72	56.76	-32.04	9.98	Neutral	-	14.74	0.04	0.13	9.81
AV	456k	16.30	46.76	-30.46	9.98	Neutral	-	6.32	0.04	0.13	9.81
QP	2.009M	25.00	56.00	-31.00	10.13	Neutral	-	14.87	0.07	0.23	9.83
AV	2.009M	15.81	46.00	-30.19	10.13	Neutral	-	5.68	0.07	0.23	9.83
QP	5.856M	28.29	60.00	-31.71	10.14	Neutral	-	18.15	0.14	0.14	9.86
AV	5.856M	21.11	50.00	-28.89	10.14	Neutral	-	10.97	0.14	0.14	9.86
QP	15.549M	32.54	60.00	-27.46	10.38	Neutral	-	22.16	0.23	0.22	9.93
AV	15.549M	25.59	50.00	-24.41	10.38	Neutral	-	15.21	0.23	0.22	9.93

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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	8.05M	10.645M	10M6G1D	7.525M	10.595M
802.11g_Nss1,(6Mbps)_3TX	16.325M	18.616M	18M6D1D	16.025M	16.467M
802.11n HT20_Nss1,(MCS0)_3TX	17.55M	19.665M	19M7D1D	16.325M	17.666M
802.11n HT40_Nss1,(MCS0)_3TX	35.9M	36.282M	36M3D1D	35.05M	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

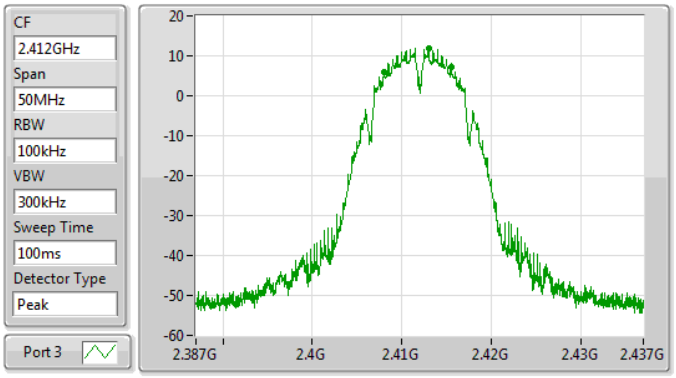
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.525M	10.595M	-	-	-	-
2437MHz	Pass	500k	8.05M	10.645M	-	-	-	-
2462MHz	Pass	500k	7.55M	10.645M	-	-	-	-
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.467M	16.325M	16.492M	16.25M	16.467M
2437MHz	Pass	500k	16.3M	18.491M	16.3M	17.941M	16.025M	18.616M
2462MHz	Pass	500k	16.3M	16.517M	16.325M	16.592M	16.3M	16.467M
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	17.55M	17.666M	17.55M	17.741M	17.15M	17.691M
2437MHz	Pass	500k	16.325M	19.665M	16.9M	19.565M	17.15M	19.665M
2462MHz	Pass	500k	17.525M	17.716M	17.55M	17.691M	17.25M	17.716M
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	35.9M	36.182M	35.45M	36.232M	35.35M	36.182M
2437MHz	Pass	500k	35.05M	36.282M	35.7M	36.232M	35.3M	36.182M
2452MHz	Pass	500k	35.45M	36.282M	35.25M	36.232M	35.45M	36.282M

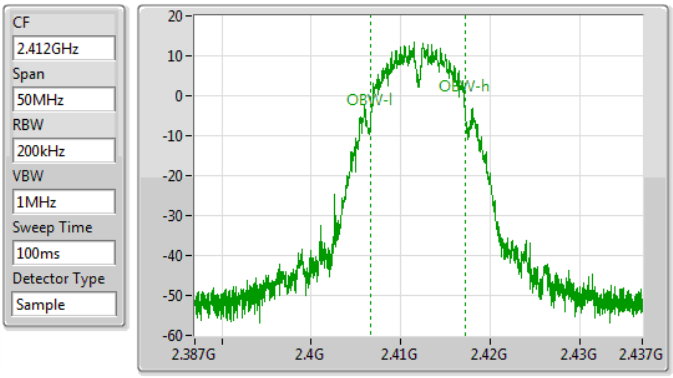
Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_1TX EBW

2412MHz

26/04/2019



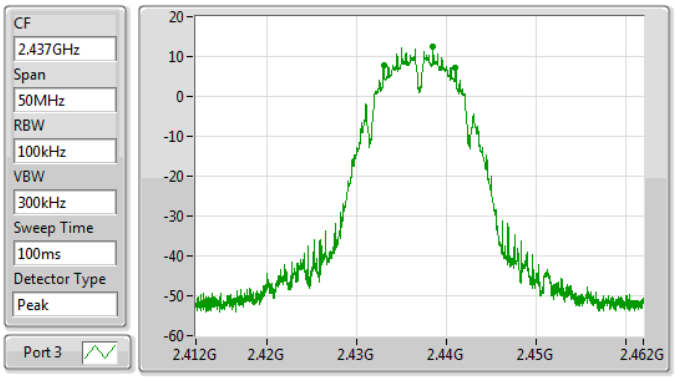


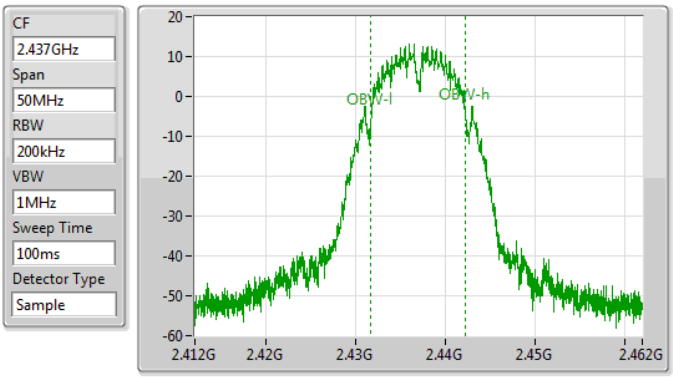
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.525M	2.408025G	2.41555G	10.595M	2.406628G	2.417222G	500k	3

802.11b_Nss1,(1Mbps)_1TX EBW

2437MHz

26/04/2019



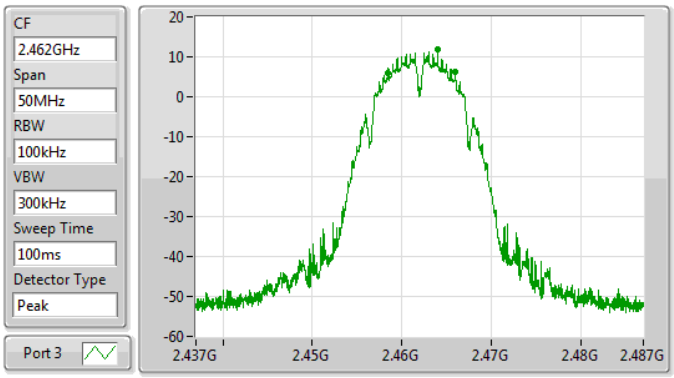


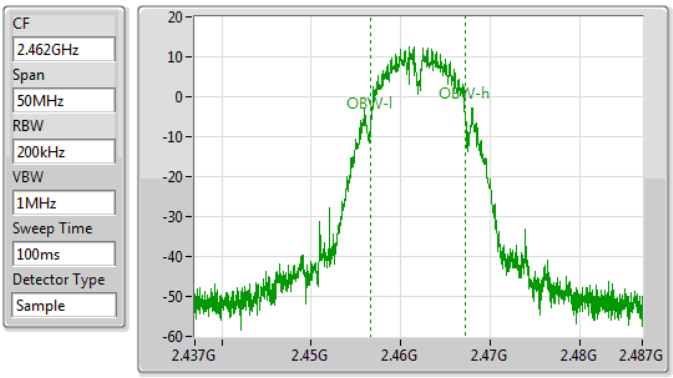
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.432975G	2.441025G	10.645M	2.431628G	2.442272G	500k	3

802.11b_Nss1,(1Mbps)_1TX EBW

2462MHz

26/04/2019



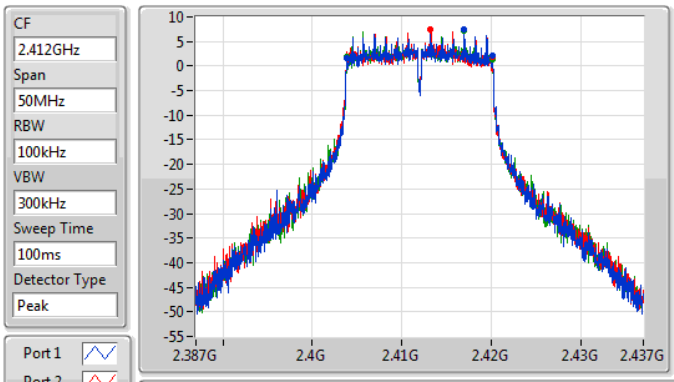


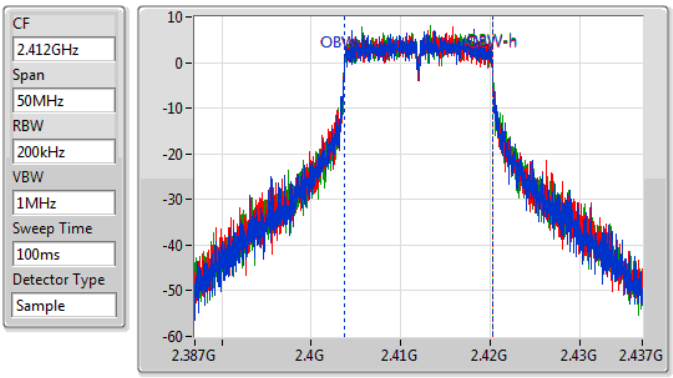
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.55M	2.45845G	2.466G	10.645M	2.456628G	2.467272G	500k	3

802.11g_Nss1,(6Mbps)_3TX EBW

2412MHz

26/04/2019



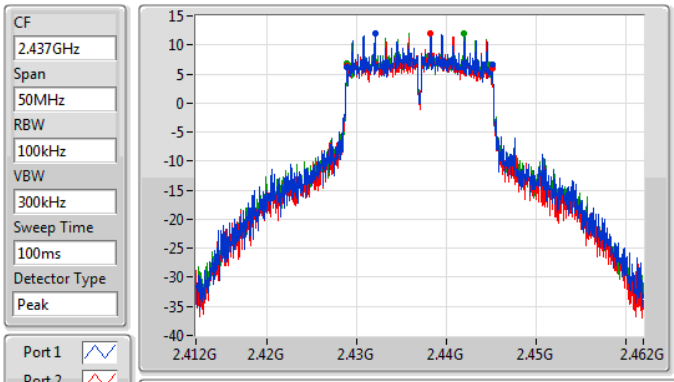


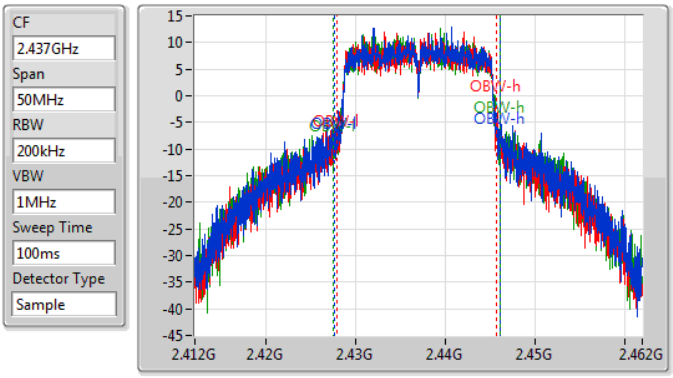
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.40385G	2.42015G	16.467M	2.403754G	2.420221G	500k	1
16.325M	2.403825G	2.42015G	16.492M	2.403729G	2.420221G	500k	2
16.25M	2.403875G	2.420125G	16.467M	2.403754G	2.420221G	500k	3

802.11g_Nss1,(6Mbps)_3TX EBW

2437MHz

26/04/2019



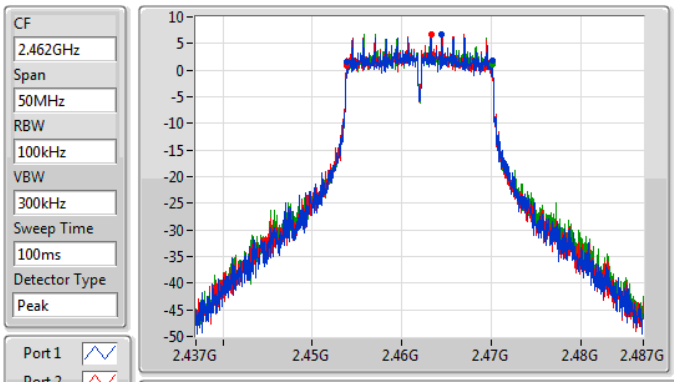


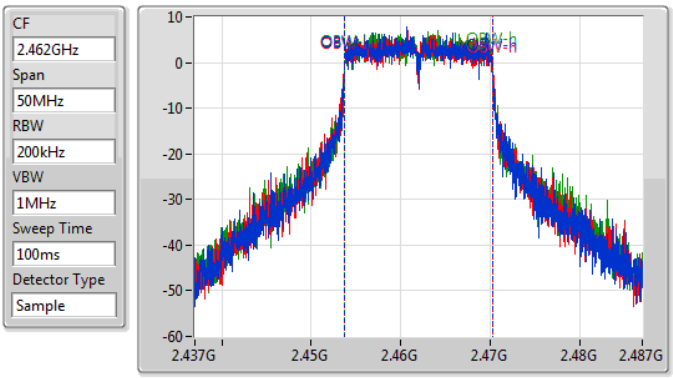
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.42885G	2.44515G	18.491M	2.42758G	2.44607G	500k	1
16.3M	2.42885G	2.44515G	17.941M	2.42783G	2.445771G	500k	2
16.025M	2.42885G	2.444875G	18.616M	2.42748G	2.446095G	500k	3

802.11g_Nss1,(6Mbps)_3TX EBW

2462MHz

26/04/2019



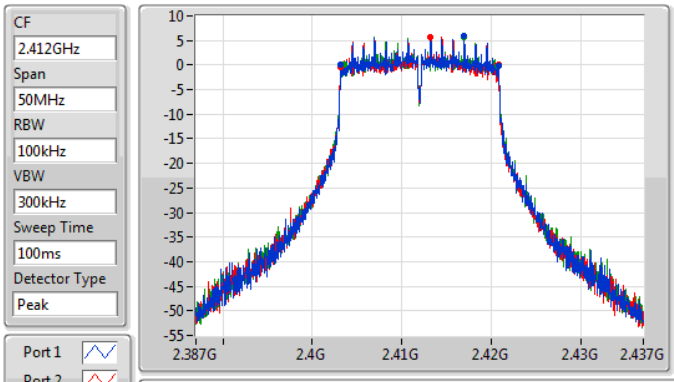


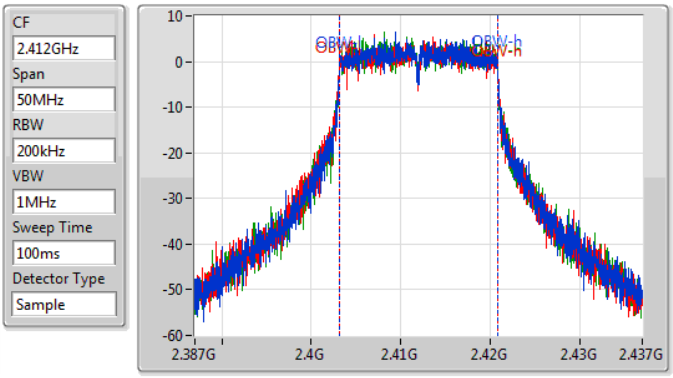
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.517M	2.453729G	2.470246G	500k	1
16.325M	2.453825G	2.47015G	16.592M	2.453679G	2.470271G	500k	2
16.3M	2.45385G	2.47015G	16.467M	2.453754G	2.470221G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX EBW

2412MHz

26/04/2019



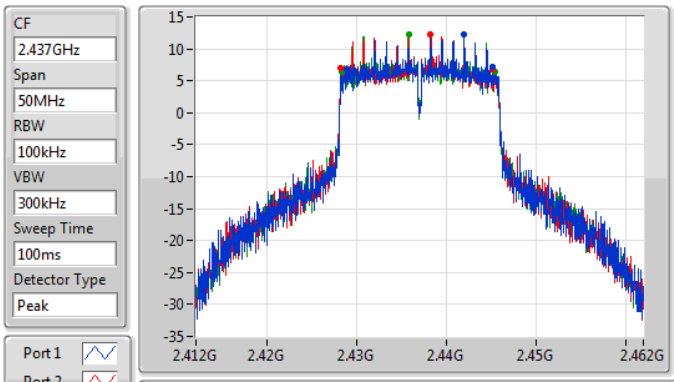


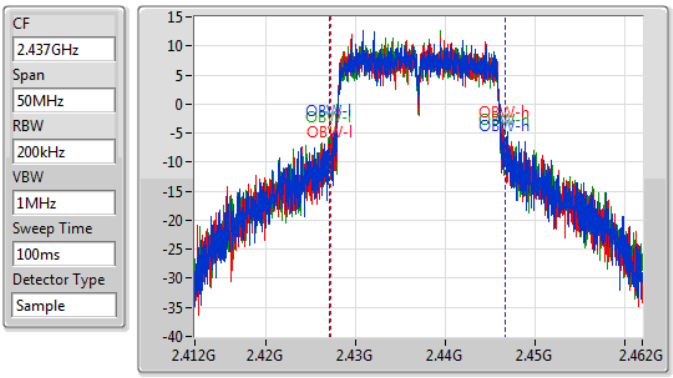
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	2.403225G	2.420775G	17.666M	2.403154G	2.420821G	500k	1
17.55M	2.403225G	2.420775G	17.741M	2.403104G	2.420846G	500k	2
17.15M	2.4036G	2.42075G	17.691M	2.403154G	2.420846G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX EBW

2437MHz

26/04/2019



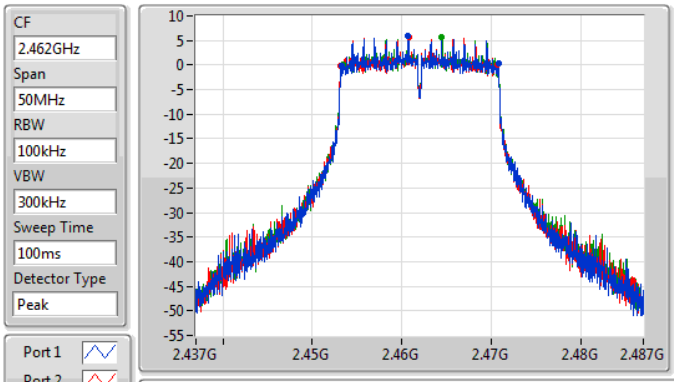


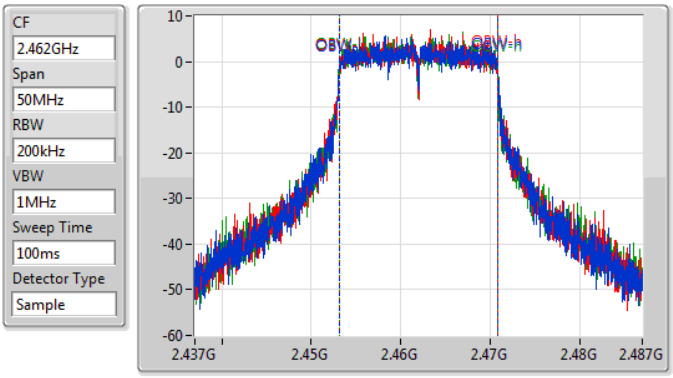
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.428825G	2.44515G	19.665M	2.427055G	2.44672G	500k	1
16.9M	2.428225G	2.445125G	19.565M	2.427155G	2.44672G	500k	2
17.15M	2.42825G	2.4454G	19.665M	2.427055G	2.44672G	500k	3

802.11n HT20_Nss1,(MCS0)_3TX EBW

2462MHz

26/04/2019



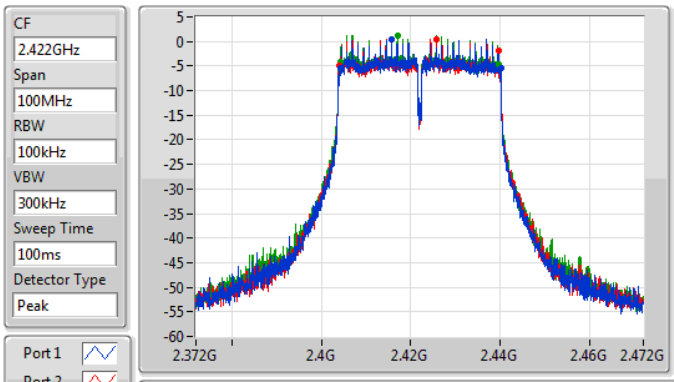


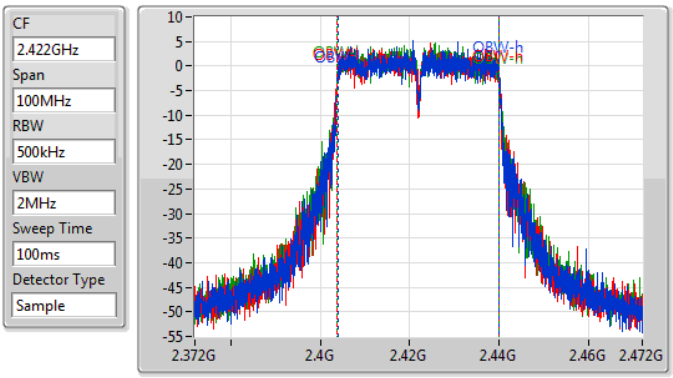
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	2.45325G	2.470775G	17.716M	2.453129G	2.470846G	500k	1
17.55M	2.4532G	2.47075G	17.691M	2.453129G	2.470821G	500k	2
17.25M	2.453475G	2.470725G	17.716M	2.453129G	2.470846G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX EBW

2422MHz

26/04/2019



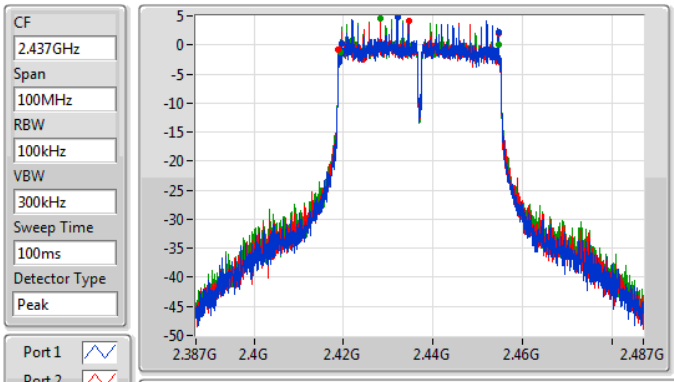


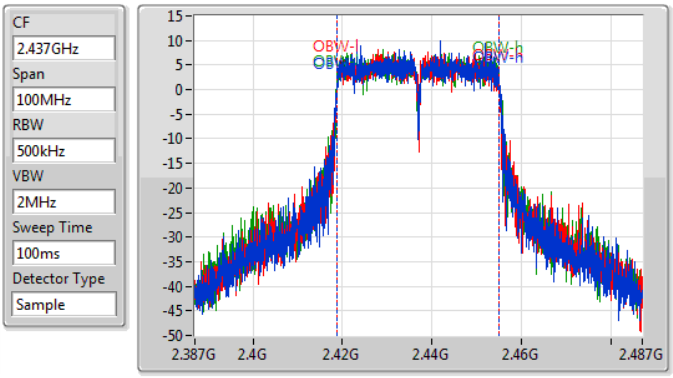
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.9M	2.40425G	2.44015G	36.182M	2.403909G	2.440091G	500k	1
35.45M	2.4041G	2.43955G	36.232M	2.403809G	2.440041G	500k	2
35.35M	2.40425G	2.4396G	36.182M	2.403859G	2.440041G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX EBW

2437MHz

26/04/2019



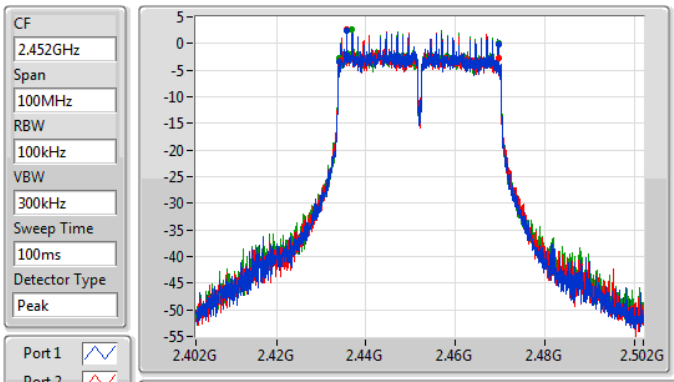


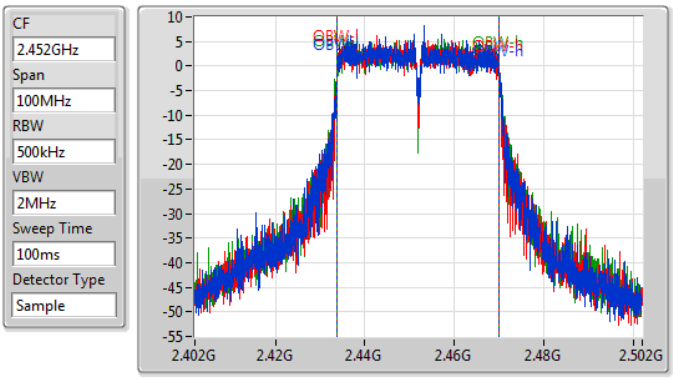
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.05M	2.4195G	2.45455G	36.282M	2.418809G	2.455091G	500k	1
35.7M	2.41885G	2.45455G	36.232M	2.418809G	2.455041G	500k	2
35.3M	2.41925G	2.45455G	36.182M	2.418859G	2.455041G	500k	3

802.11n HT40_Nss1,(MCS0)_3TX EBW

2452MHz

26/04/2019





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.45M	2.4341G	2.46955G	36.282M	2.433809G	2.470091G	500k	1
35.25M	2.4343G	2.46955G	36.232M	2.433809G	2.470041G	500k	2
35.45M	2.4341G	2.46955G	36.282M	2.433809G	2.470091G	500k	3

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	21.04	0.12706
802.11g_Nss1,(6Mbps)_3TX	27.13	0.51642
802.11n HT20_Nss1,(MCS0)_3TX	27.14	0.51761
802.11n HT40_Nss1,(MCS0)_3TX	23.01	0.19999

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	5.50	21.04	-	-	21.04	30.00
2437MHz	Pass	5.50	20.58	-	-	20.58	30.00
2462MHz	Pass	5.50	20.14	-	-	20.14	30.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	5.50	18.07	18.22	18.20	22.94	30.00
2417MHz	Pass	5.50	20.53	20.13	20.55	25.18	30.00
2437MHz	Pass	5.50	22.40	22.21	22.47	27.13	30.00
2457MHz	Pass	5.50	20.13	20.16	20.28	24.96	30.00
2462MHz	Pass	5.50	17.64	17.69	17.90	22.52	30.00
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	5.50	16.59	16.47	16.65	21.34	30.00
2417MHz	Pass	5.50	20.28	20.32	20.47	25.13	30.00
2437MHz	Pass	5.50	22.42	22.32	22.37	27.14	30.00
2457MHz	Pass	5.50	19.19	18.99	19.13	23.88	30.00
2462MHz	Pass	5.50	16.69	16.72	16.81	21.51	30.00
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	5.50	14.34	14.19	14.85	19.24	30.00
2427MHz	Pass	5.50	16.02	16.08	16.25	20.89	30.00
2437MHz	Pass	5.50	18.10	18.17	18.43	23.01	30.00
2452MHz	Pass	5.50	16.06	15.75	16.03	20.72	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	-7.79
802.11g_Nss1,(6Mbps)_3TX	1.50
802.11n HT20_Nss1,(MCS0)_3TX	-0.24
802.11n HT40_Nss1,(MCS0)_3TX	-6.87

RBW=3 kHz.

Result

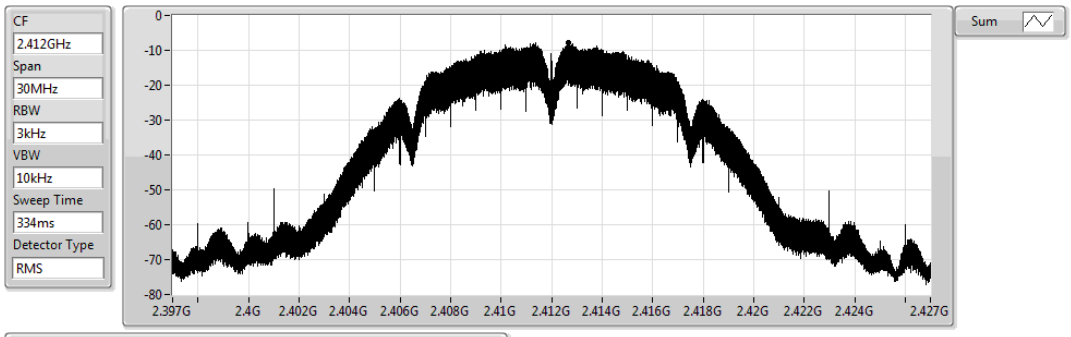
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz	Pass	5.50	-7.79	-	-	-7.79	8.00
2437MHz	Pass	5.50	-8.22	-	-	-8.22	8.00
2462MHz	Pass	5.50	-8.42	-	-	-8.42	8.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	9.58	-8.22	-7.24	-7.18	-3.51	4.42
2437MHz	Pass	9.58	-3.30	-2.92	-3.62	1.50	4.42
2462MHz	Pass	9.58	-8.83	-7.43	-8.51	-4.24	4.42
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	9.58	-9.84	-9.14	-9.52	-6.23	4.42
2437MHz	Pass	9.58	-2.59	-3.41	-2.53	-0.24	4.42
2462MHz	Pass	9.58	-9.09	-9.19	-8.35	-5.22	4.42
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	9.58	-14.68	-14.63	-12.95	-10.70	4.42
2437MHz	Pass	9.58	-10.52	-10.67	-10.37	-6.87	4.42
2452MHz	Pass	9.58	-12.91	-11.64	-12.18	-8.69	4.42

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

26/04/2019

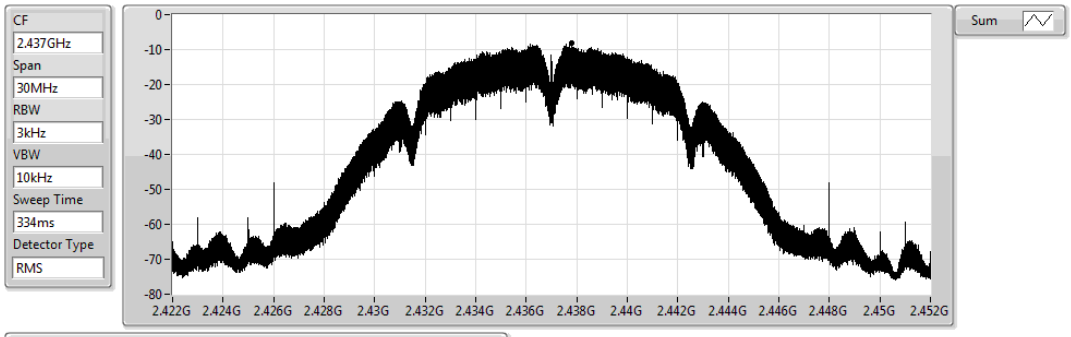


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.79	-7.79			-7.79

802.11b_Nss1,(1Mbps)_1TX PSD

2437MHz

26/04/2019

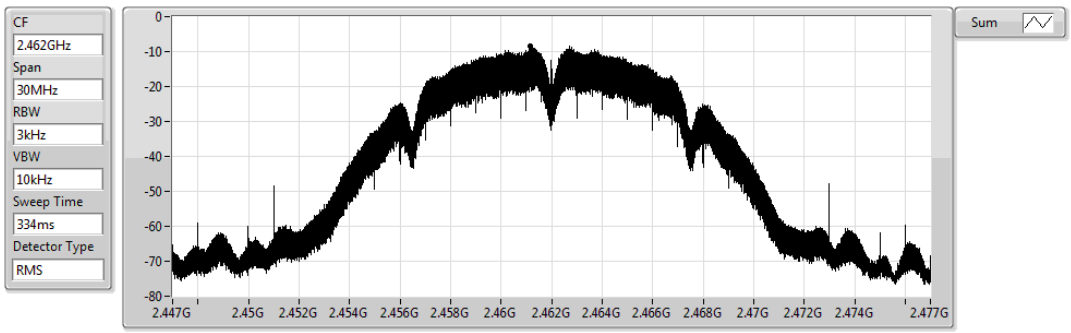


Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.22	-8.22			-8.22

802.11b_Nss1,(1Mbps)_1TX PSD

2462MHz

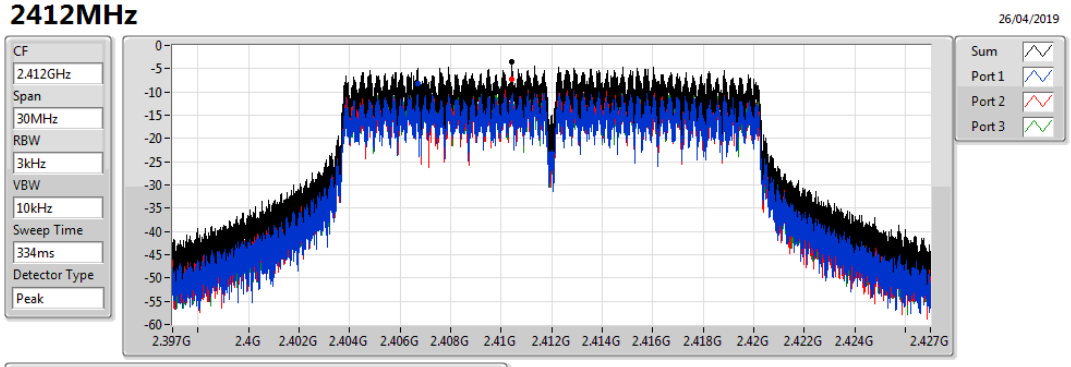
26/04/2019



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.42	-8.42			-8.42

802.11g_Nss1,(6Mbps)_3TX PSD

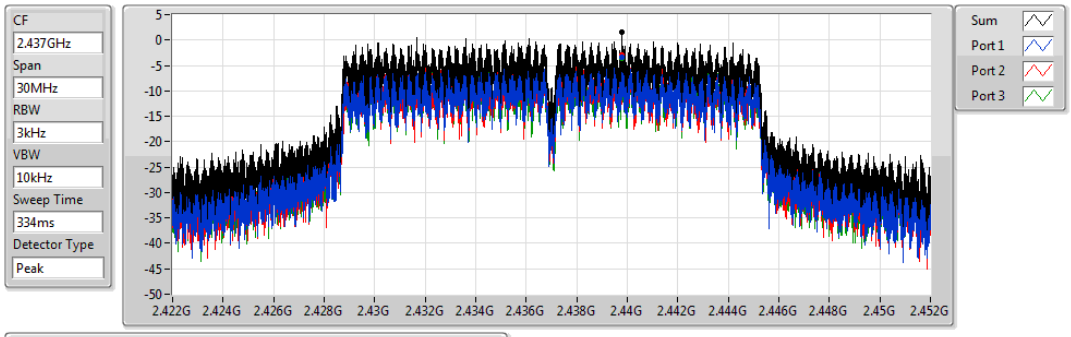
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.51	-3.51	-8.22	-7.24	-7.18

802.11g_Nss1,(6Mbps)_3TX PSD

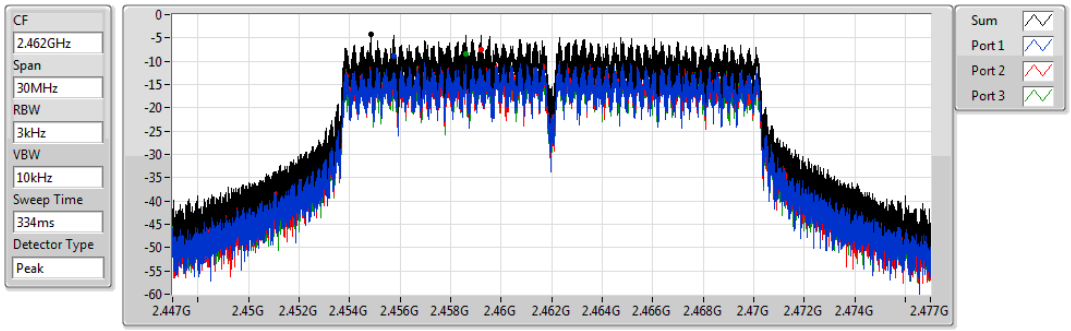
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.50	1.50	-3.30	-2.92	-3.62

802.11g_Nss1,(6Mbps)_3TX PSD

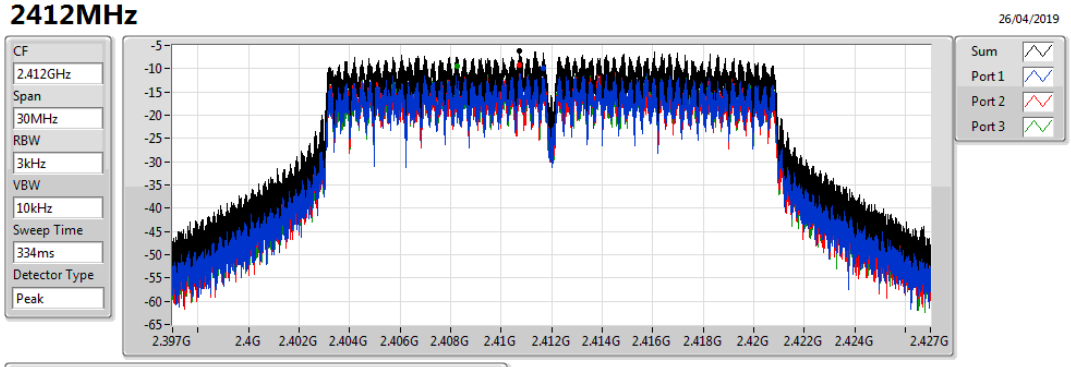
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.24	-4.24	-8.83	-7.43	-8.51

802.11n HT20_Nss1,(MCS0)_3TX PSD

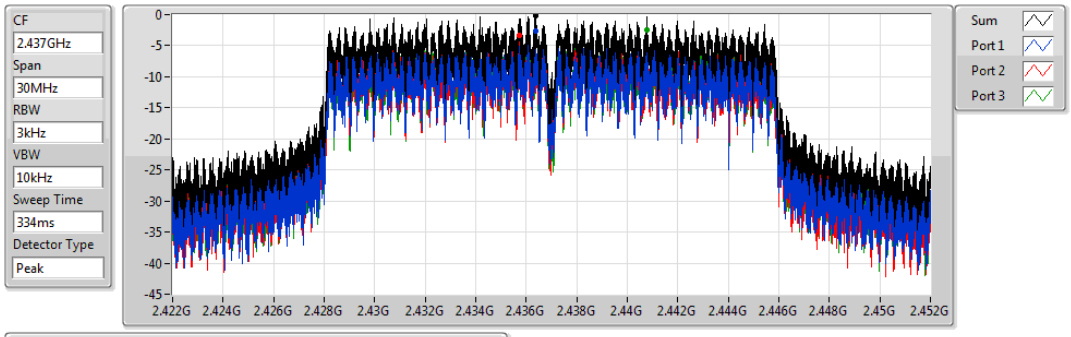
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.23	-6.23	-9.84	-9.14	-9.52

802.11n HT20_Nss1,(MCS0)_3TX PSD

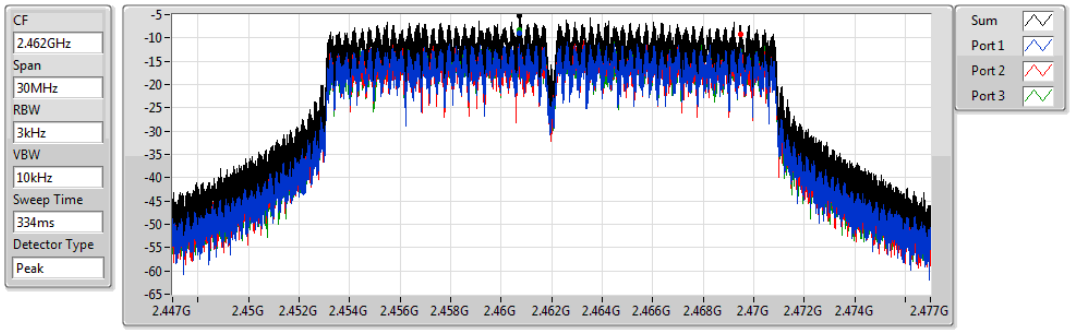
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.24	-0.24	-2.59	-3.41	-2.53

802.11n HT20_Nss1,(MCS0)_3TX PSD

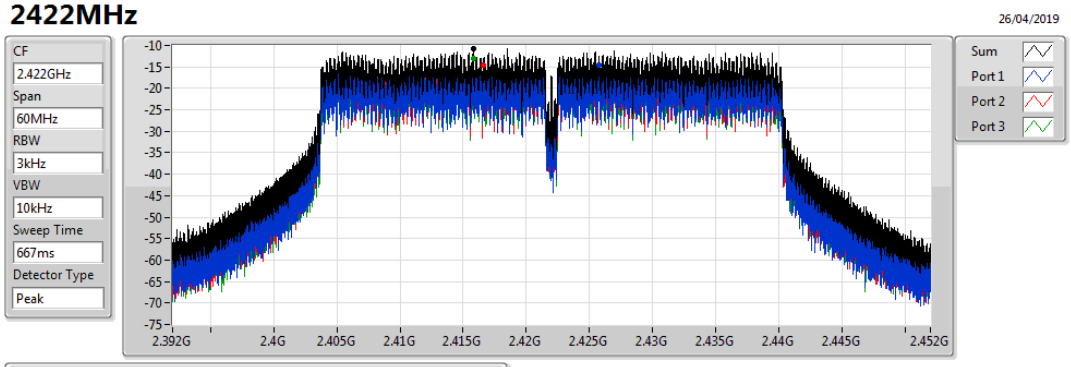
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.22	-5.22	-9.09	-9.19	-8.35

802.11n HT40_Nss1,(MCS0)_3TX PSD

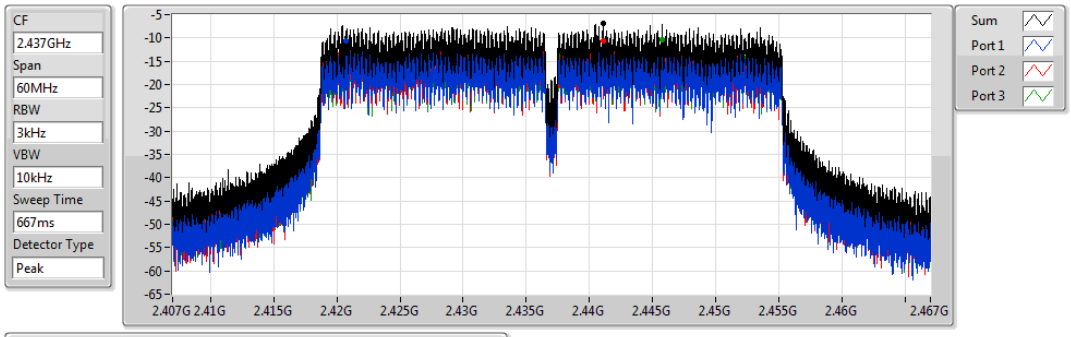
2422MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.70	-10.70	-14.68	-14.63	-12.95

802.11n HT40_Nss1,(MCS0)_3TX PSD

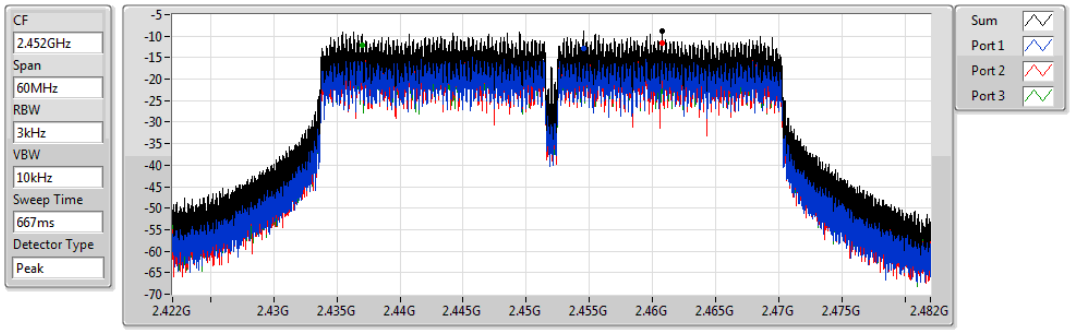
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.87	-6.87	-10.52	-10.67	-10.37

802.11n HT40_Nss1,(MCS0)_3TX PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.69	-8.69	-12.91	-11.64	-12.18

Summary

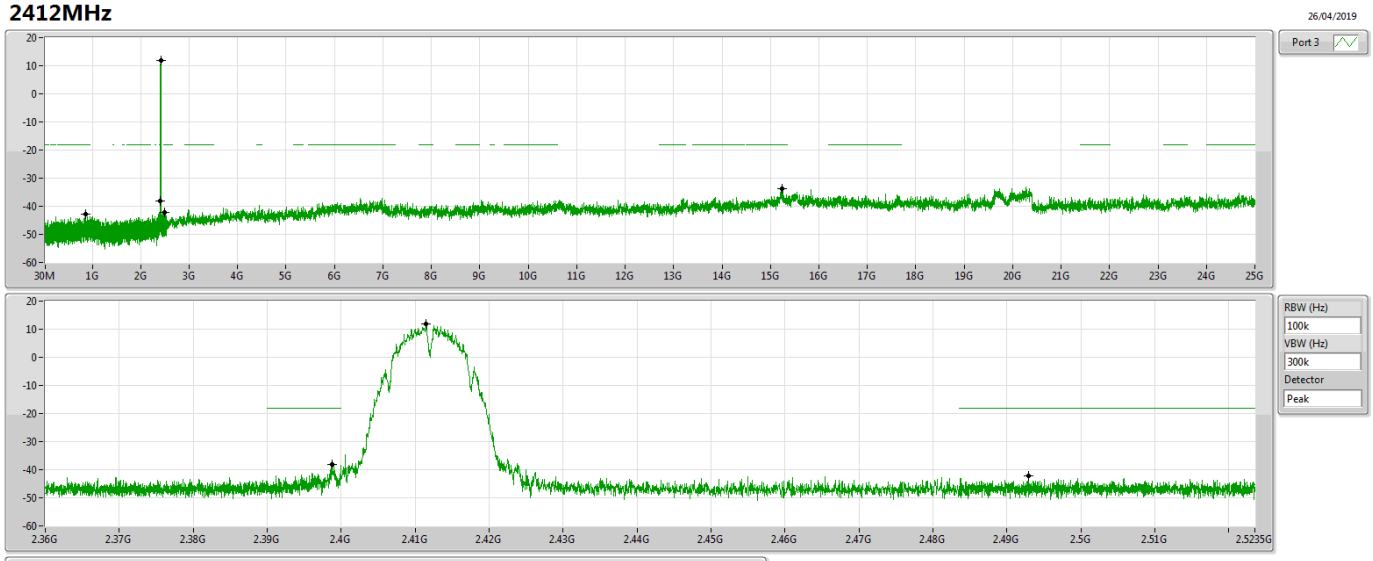
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41148G	11.98	-18.02	867.05M	-42.96	2.39872G	-38.21	2.49296G	-42.14	15.24801G	-33.71	3
802.11g_Nss1,(6Mbps)_3TX	Pass	2.43824G	12.03	-17.97	899.09M	-43.33	2.3995G	-21.72	2.49558G	-42.87	15.2761G	-33.95	3
802.11n HT20_Nss1,(MCS0)_3TX	Pass	2.43828G	11.97	-18.03	931.42M	-42.30	2.39994G	-26.23	2.50634G	-42.40	15.25644G	-33.67	2
802.11n HT40_Nss1,(MCS0)_3TX	Pass	2.442G	4.56	-25.44	1.82565G	-42.50	2.39988G	-29.97	2.53498G	-42.30	15.2261G	-34.44	3

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	2.41148G	11.98	-18.02	867.05M	-42.96	2.39872G	-38.21	2.49296G	-42.14	15.24801G	-33.71	3
2437MHz	Pass	2.41148G	11.98	-18.02	1.73061G	-43.22	2.3948G	-42.57	2.52058G	-42.55	15.30701G	-34.68	3
2462MHz	Pass	2.41148G	11.98	-18.02	2.13253G	-43.89	2.39184G	-42.95	2.51874G	-41.82	15.23115G	-34.14	3
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	12.03	-17.97	838.22M	-41.85	2.39968G	-24.05	2.50292G	-42.47	15.20587G	-34.19	1
2412MHz	Pass	2.43824G	12.03	-17.97	2.17651G	-43.14	2.39942G	-23.54	2.5108G	-42.45	15.2171G	-33.83	2
2412MHz	Pass	2.43824G	12.03	-17.97	899.09M	-43.33	2.3995G	-21.72	2.49558G	-42.87	15.2761G	-33.95	3
2437MHz	Pass	2.43824G	12.03	-17.97	953.55M	-43.28	2.3979G	-38.30	2.49016G	-42.18	15.06258G	-34.21	1
2437MHz	Pass	2.43824G	12.03	-17.97	1.79905G	-42.87	2.39826G	-38.06	2.48482G	-40.61	15.21148G	-33.45	2
2437MHz	Pass	2.43824G	12.03	-17.97	954.14M	-43.24	2.39822G	-38.49	2.48358G	-42.03	24.23861G	-35.13	3
2462MHz	Pass	2.43824G	12.03	-17.97	2.13603G	-43.15	2.39356G	-42.44	2.48448G	-38.84	15.24239G	-33.95	1
2462MHz	Pass	2.43824G	12.03	-17.97	1.95778G	-43.27	2.39356G	-42.64	2.48372G	-37.57	15.26768G	-34.38	2
2462MHz	Pass	2.43824G	12.03	-17.97	867.05M	-43.46	2.39226G	-42.18	2.48388G	-37.79	15.22553G	-34.87	3
802.11n HT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43828G	11.97	-18.03	761.91M	-42.91	2.39992G	-26.37	2.49122G	-42.50	15.22272G	-34.29	1
2412MHz	Pass	2.43828G	11.97	-18.03	931.42M	-42.30	2.39994G	-26.23	2.50634G	-42.40	15.25644G	-33.67	2
2412MHz	Pass	2.43828G	11.97	-18.03	2.15642G	-42.54	2.39948G	-26.32	2.50922G	-42.87	15.21991G	-34.39	3
2437MHz	Pass	2.43828G	11.97	-18.03	2.04953G	-42.11	2.39954G	-36.13	2.4845G	-40.92	24.66847G	-34.27	1
2437MHz	Pass	2.43828G	11.97	-18.03	951.81M	-42.95	2.39604G	-37.77	2.48616G	-41.62	16.39993G	-34.45	2
2437MHz	Pass	2.43828G	11.97	-18.03	2.10749G	-43.08	2.39766G	-37.35	2.485G	-41.04	15.23958G	-34.21	3
2462MHz	Pass	2.43828G	11.97	-18.03	1.98458G	-43.39	2.39646G	-42.54	2.48386G	-40.33	15.20867G	-34.57	1
2462MHz	Pass	2.43828G	11.97	-18.03	694.34M	-43.21	2.39902G	-43.18	2.48394G	-40.18	15.26206G	-34.15	2
2462MHz	Pass	2.43828G	11.97	-18.03	1.93594G	-43.17	2.39416G	-43.24	2.48358G	-37.35	15.27891G	-34.10	3
802.11n HT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.442G	4.56	-25.44	886.17M	-43.18	2.3986G	-32.14	2.53622G	-42.44	15.23732G	-34.72	1
2422MHz	Pass	2.442G	4.56	-25.44	2.13709G	-42.98	2.39988G	-30.51	2.55294G	-42.20	15.21208G	-34.02	2
2422MHz	Pass	2.442G	4.56	-25.44	1.82565G	-42.50	2.39988G	-29.97	2.53498G	-42.30	15.2261G	-34.44	3
2437MHz	Pass	2.442G	4.56	-25.44	2.14167G	-43.06	2.39952G	-34.56	2.4845G	-39.58	15.2233G	-34.56	1
2437MHz	Pass	2.442G	4.56	-25.44	765.95M	-42.95	2.39892G	-33.35	2.48382G	-40.69	15.24293G	-34.84	2
2437MHz	Pass	2.442G	4.56	-25.44	1.93957G	-43.77	2.39976G	-32.21	2.48478G	-38.99	16.44328G	-34.80	3
2452MHz	Pass	2.442G	4.56	-25.44	936.84M	-41.94	2.39832G	-43.81	2.4875G	-39.26	17.60717G	-35.00	1
2452MHz	Pass	2.442G	4.56	-25.44	1.78758G	-42.88	2.39252G	-43.81	2.4853G	-39.79	15.24573G	-34.12	2
2452MHz	Pass	2.442G	4.56	-25.44	2.07783G	-43.32	2.39268G	-43.64	2.48802G	-38.04	14.94845G	-34.22	3

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

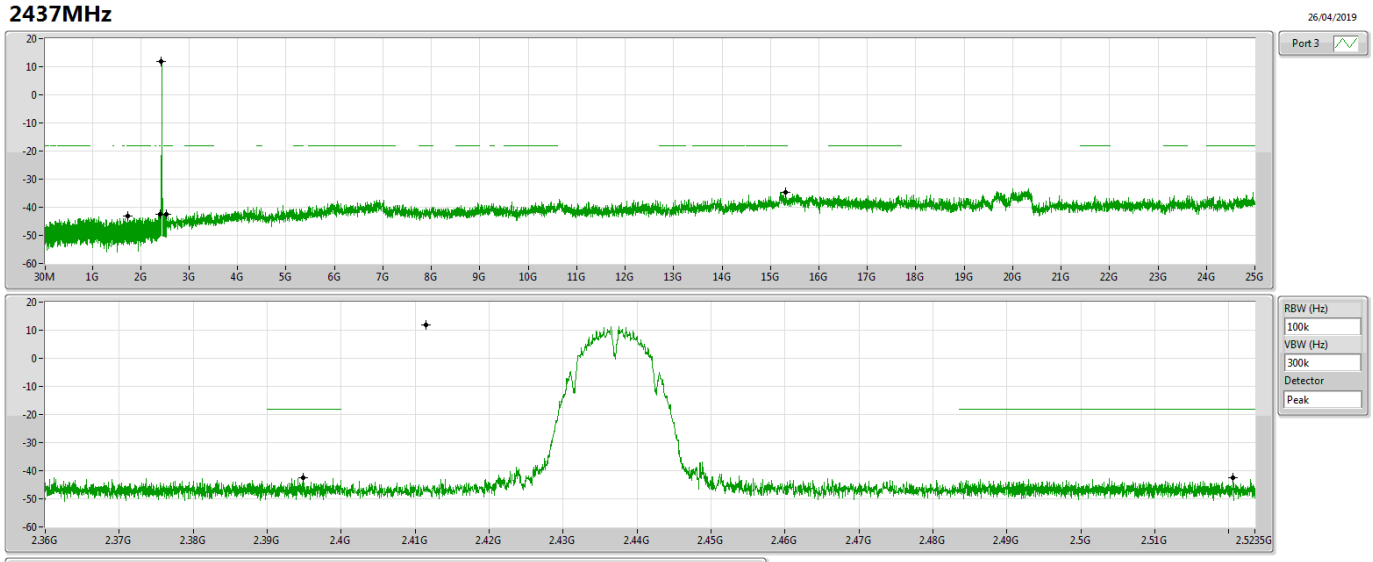
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41148G	11.98	-18.02	867.05M	-42.96	2.39872G	-38.21	2.49296G	-42.14	15.24801G	-33.71	3

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

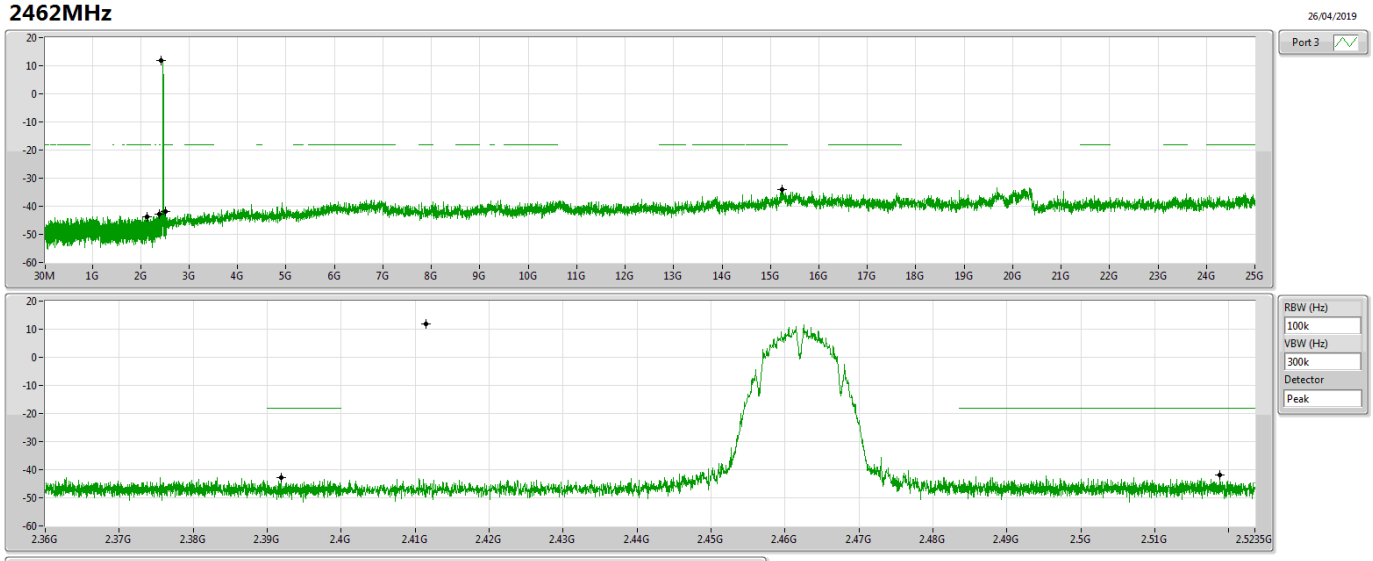
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41148G	11.98	-18.02	1.73061G	-43.22	2.3948G	-42.57	2.52058G	-42.55	15.30701G	-34.68	3

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

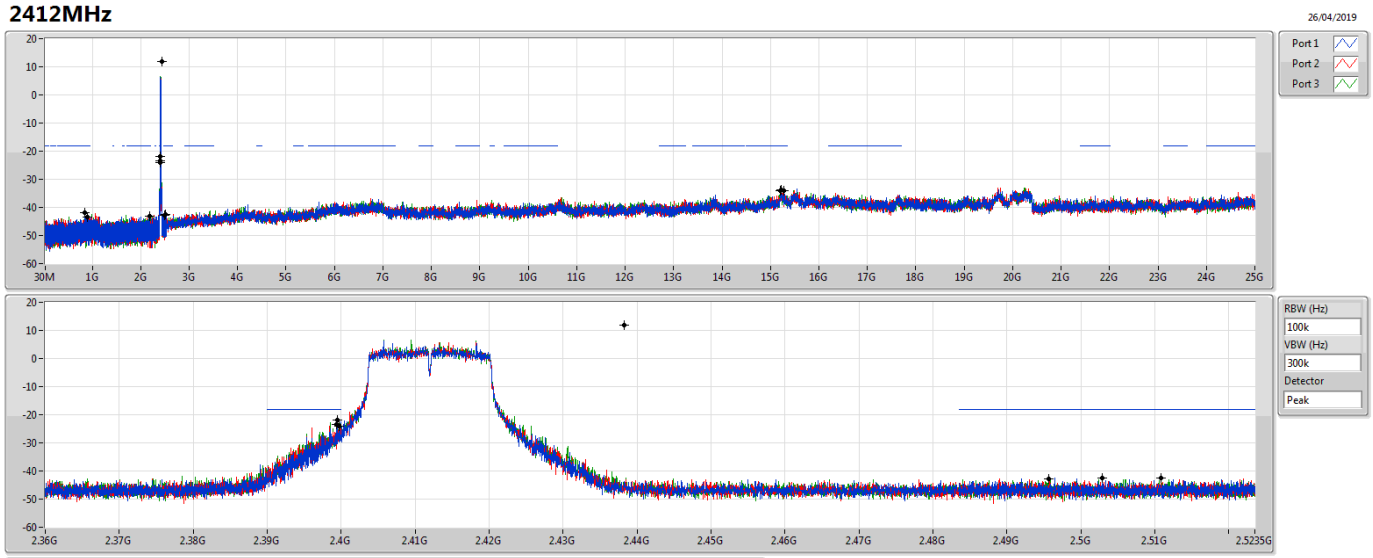
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41148G	11.98	-18.02	2.13253G	-43.89	2.39184G	-42.95	2.51874G	-41.82	15.23115G	-34.14	3

802.11g_Nss1,(6Mbps)_3TX **CSE NdB**

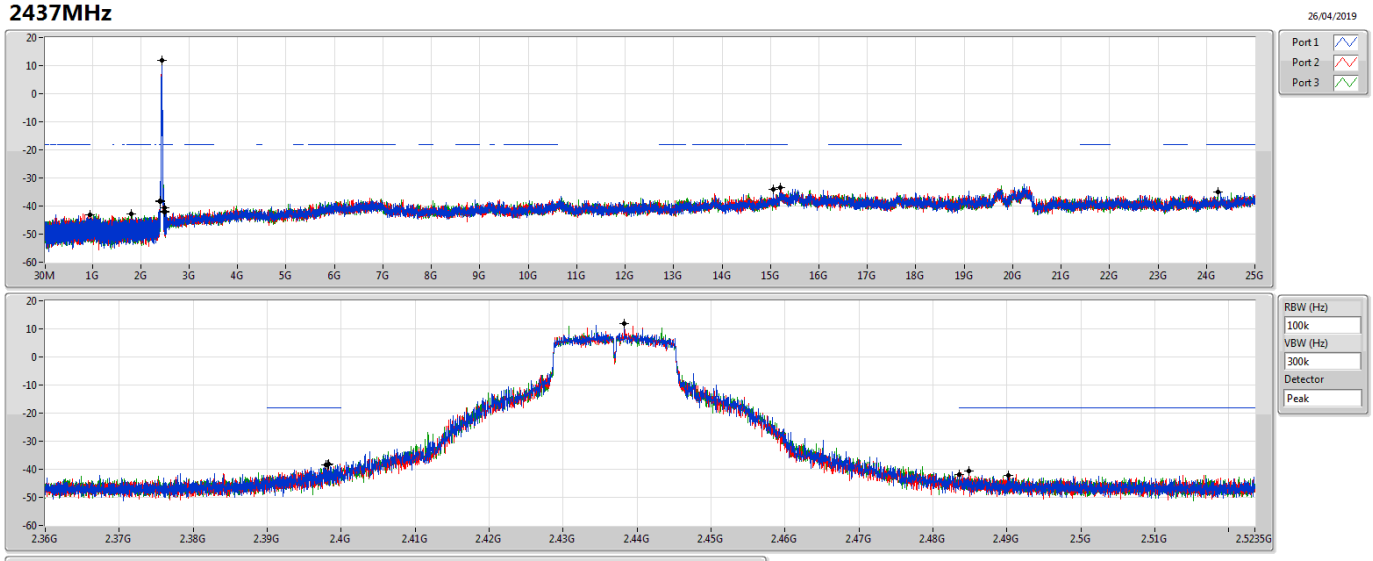
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	12.03	-17.97	838.22M	-41.85	2.39968G	-24.05	2.50292G	-42.47	15.20587G	-34.19	1
2.43824G	12.03	-17.97	2.17651G	-43.14	2.39942G	-23.54	2.5108G	-42.45	15.2171G	-33.83	2
2.43824G	12.03	-17.97	899.09M	-43.33	2.3995G	-21.72	2.49558G	-42.87	15.2761G	-33.95	3

802.11g_Nss1,(6Mbps)_3TX **CSE NdB**

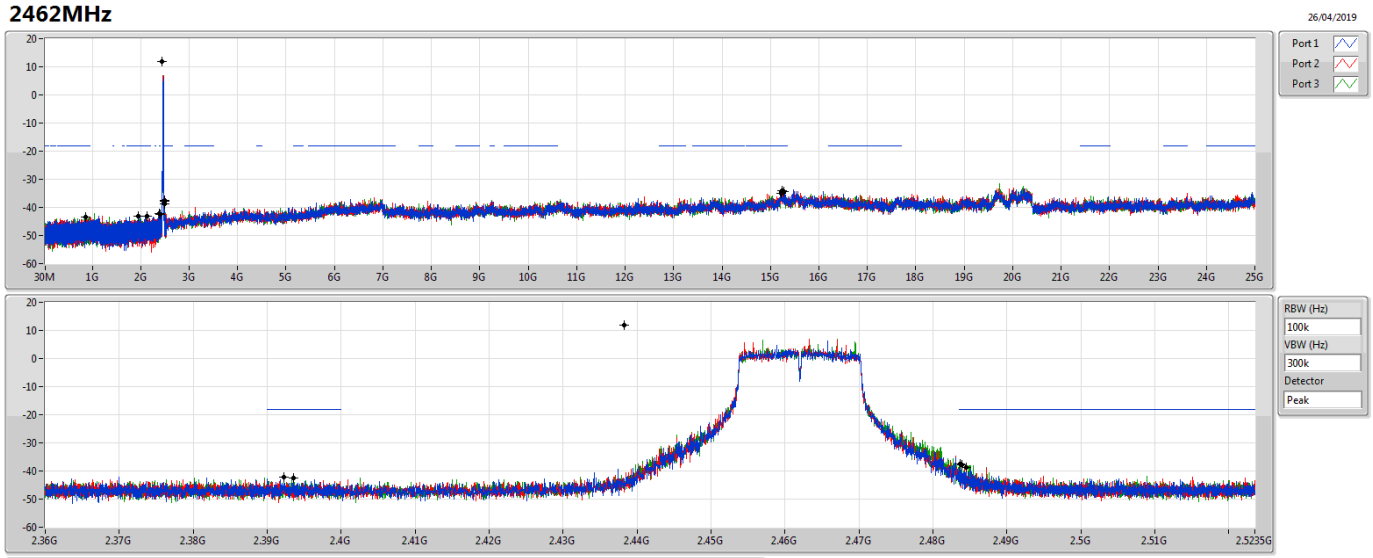
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	12.03	-17.97	953.55M	-43.28	2.3979G	-38.30	2.49016G	-42.18	15.06258G	-34.21	1
2.43824G	12.03	-17.97	1.79905G	-42.87	2.39826G	-38.06	2.48482G	-40.61	15.21148G	-33.45	2
2.43824G	12.03	-17.97	954.14M	-43.24	2.39822G	-38.49	2.48358G	-42.03	24.23861G	-35.13	3

802.11g_Nss1,(6Mbps)_3TX **CSE NdB**

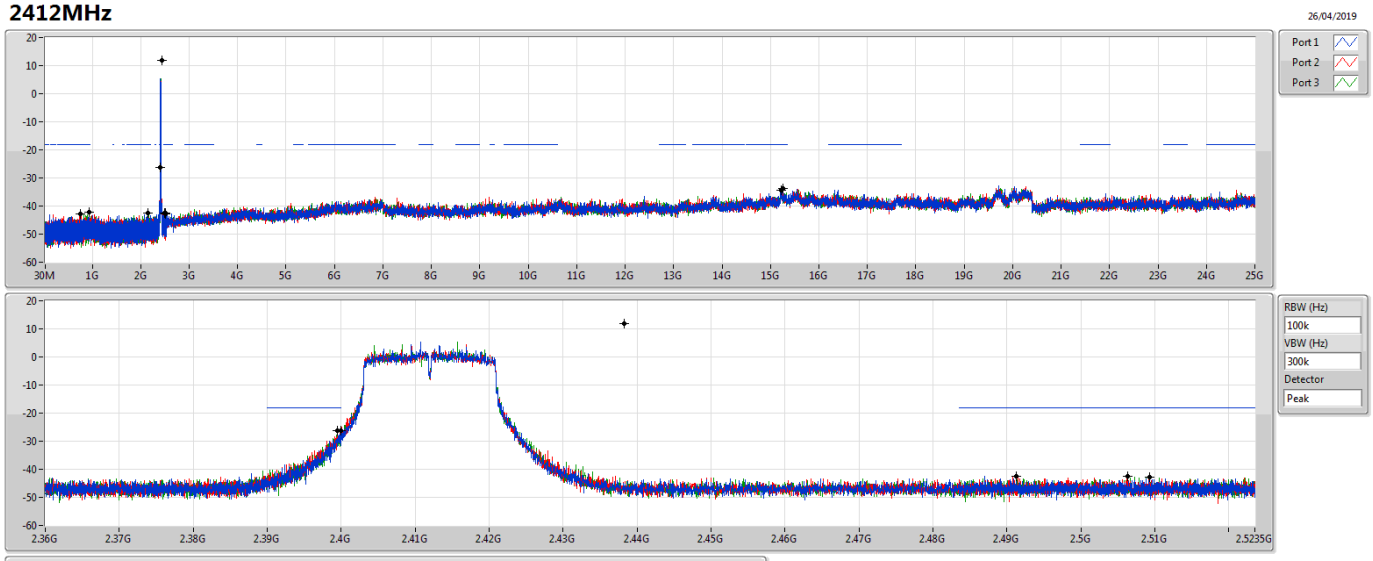
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	12.03	-17.97	2.13603G	-43.15	2.39356G	-42.44	2.48448G	-38.84	15.24239G	-33.95	1
2.43824G	12.03	-17.97	1.95778G	-43.27	2.39356G	-42.64	2.48372G	-37.57	15.26768G	-34.38	2
2.43824G	12.03	-17.97	867.05M	-43.46	2.39226G	-42.18	2.48388G	-37.79	15.22553G	-34.87	3

802.11n HT20_Nss1,(MCS0)_3TX **CSE NdB**

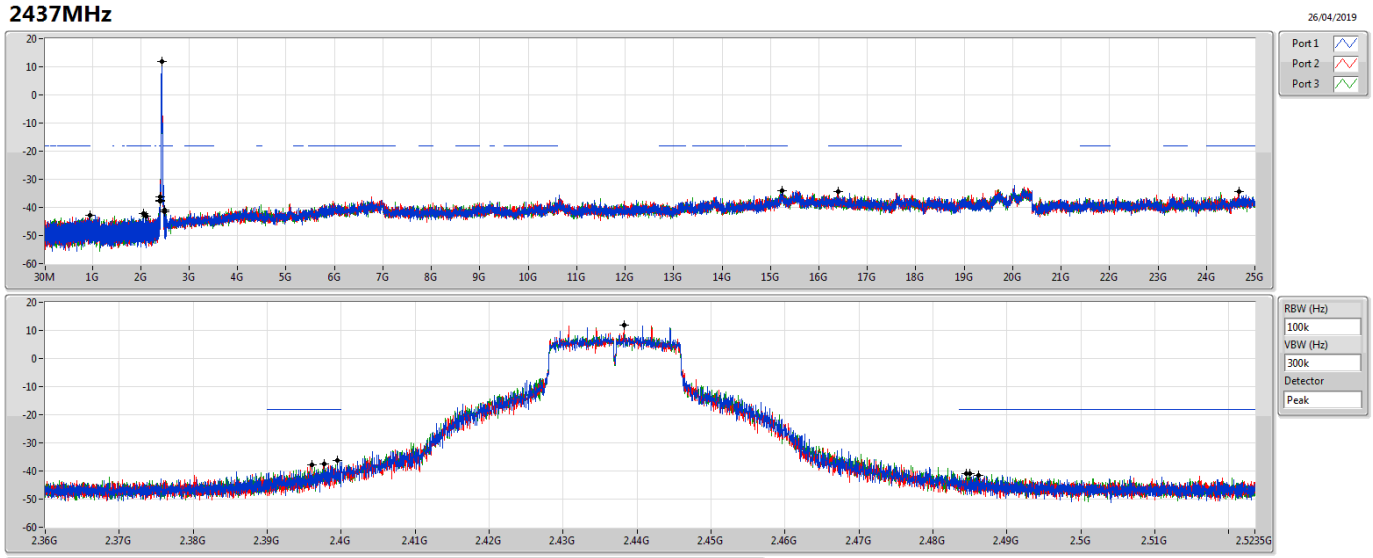
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43828G	11.97	-18.03	761.91M	-42.91	2.39992G	-26.37	2.49122G	-42.50	15.22272G	-34.29	1
2.43828G	11.97	-18.03	931.42M	-42.30	2.39994G	-26.23	2.50634G	-42.40	15.25644G	-33.67	2
2.43828G	11.97	-18.03	2.15642G	-42.54	2.39948G	-26.32	2.50922G	-42.87	15.21991G	-34.39	3

802.11n HT20_Nss1,(MCS0)_3TX **CSE NdB**

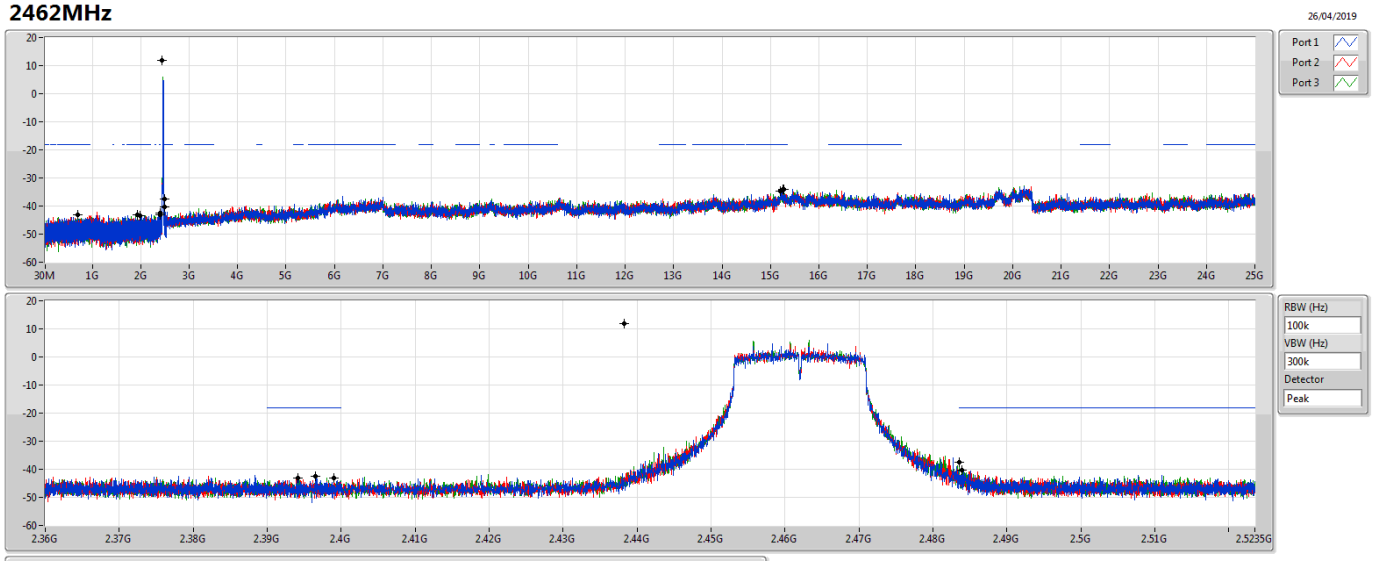
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43828G	11.97	-18.03	2.04953G	-42.11	2.39954G	-36.13	2.4845G	-40.92	24.66847G	-34.27	1
2.43828G	11.97	-18.03	951.81M	-42.95	2.39604G	-37.77	2.48616G	-41.62	16.39993G	-34.45	2
2.43828G	11.97	-18.03	2.10749G	-43.08	2.39766G	-37.35	2.485G	-41.04	15.23958G	-34.21	3

802.11n HT20_Nss1,(MCS0)_3TX **CSE NdB**

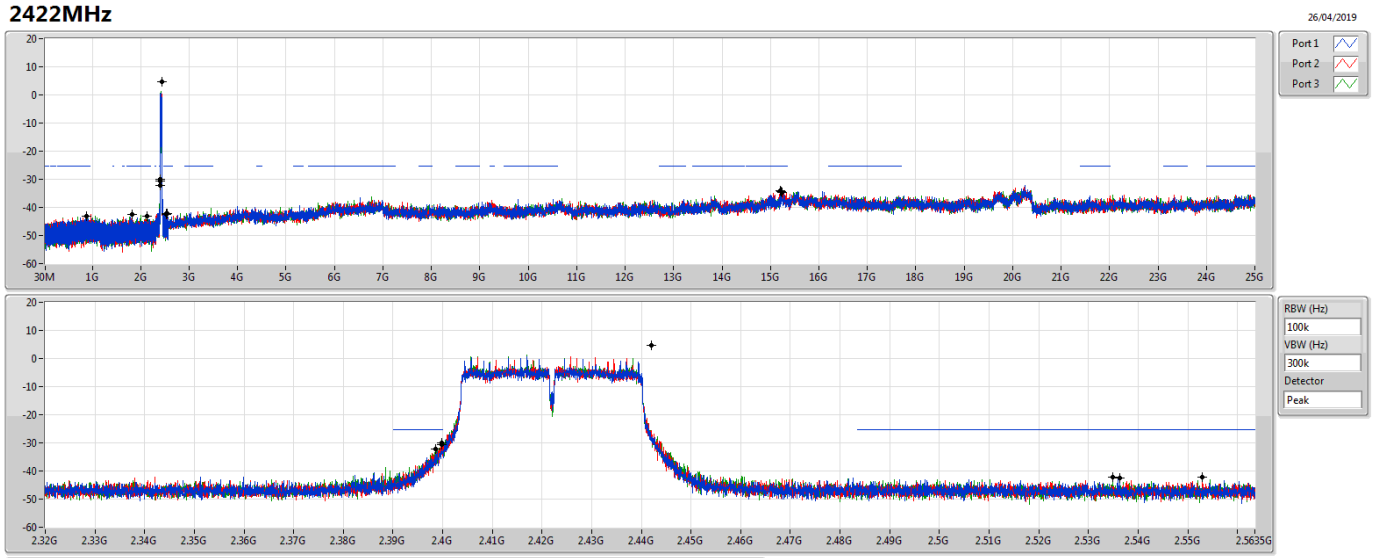
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43828G	11.97	-18.03	1.98458G	-43.39	2.39646G	-42.54	2.48386G	-40.33	15.20867G	-34.57	1
2.43828G	11.97	-18.03	694.34M	-43.21	2.39902G	-43.18	2.48394G	-40.18	15.26206G	-34.15	2
2.43828G	11.97	-18.03	1.93594G	-43.17	2.39416G	-43.24	2.48358G	-37.35	15.27891G	-34.10	3

802.11n HT40_Nss1,(MCS0)_3TX **CSE NdB**

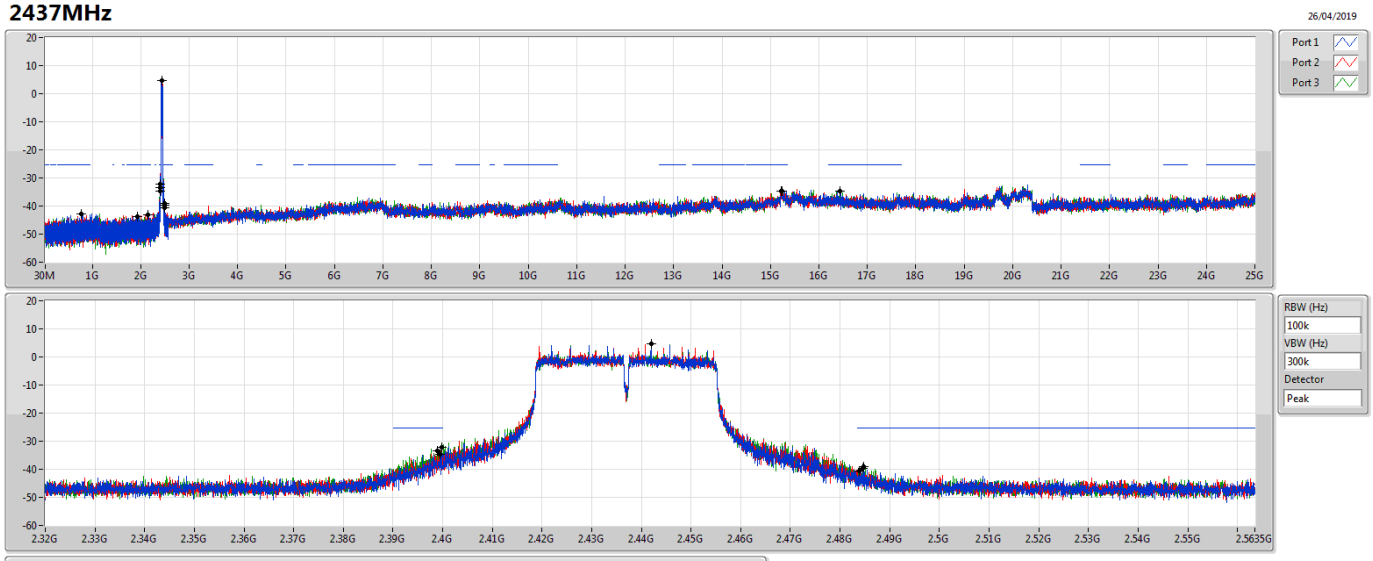
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	4.56	-25.44	886.17M	-43.18	2.3986G	-32.14	2.53622G	-42.44	15.23732G	-34.72	1
2.442G	4.56	-25.44	2.13709G	-42.98	2.39988G	-30.51	2.55294G	-42.20	15.21208G	-34.02	2
2.442G	4.56	-25.44	1.82565G	-42.50	2.39988G	-29.97	2.53498G	-42.30	15.2261G	-34.44	3

802.11n HT40_Nss1,(MCS0)_3TX **CSE NdB**

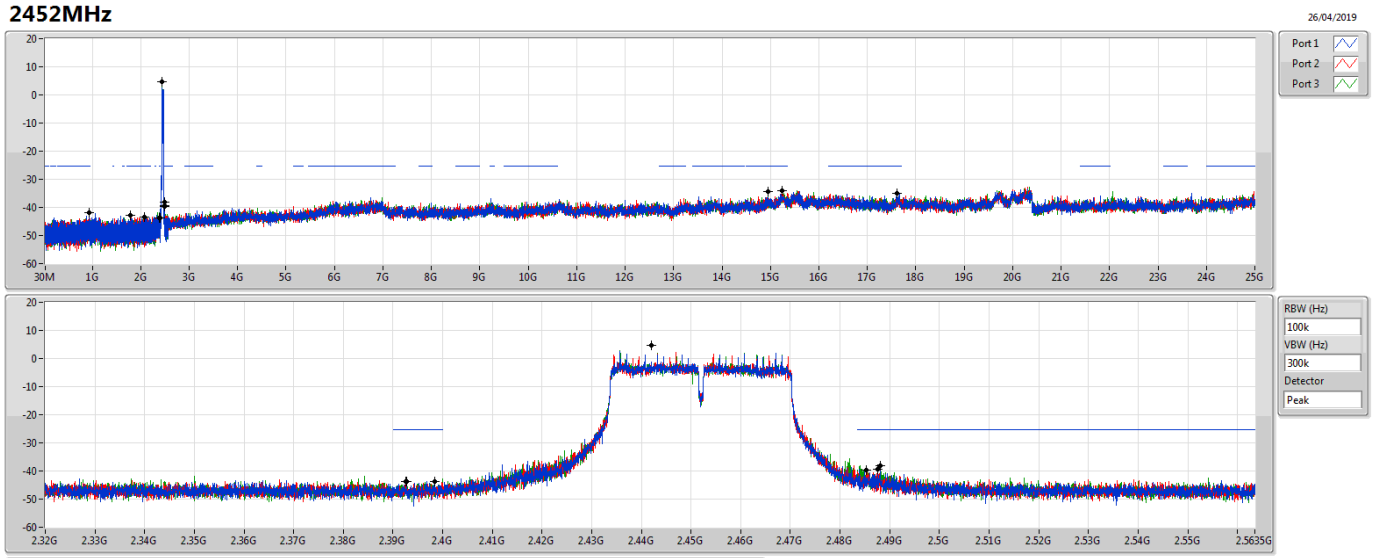
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	4.56	-25.44	2.14167G	-43.06	2.39952G	-34.56	2.4845G	-39.58	15.2233G	-34.56	1
2.442G	4.56	-25.44	765.95M	-42.95	2.39892G	-33.35	2.48382G	-40.69	15.24293G	-34.84	2
2.442G	4.56	-25.44	1.93957G	-43.77	2.39976G	-32.21	2.48478G	-38.99	16.44328G	-34.80	3

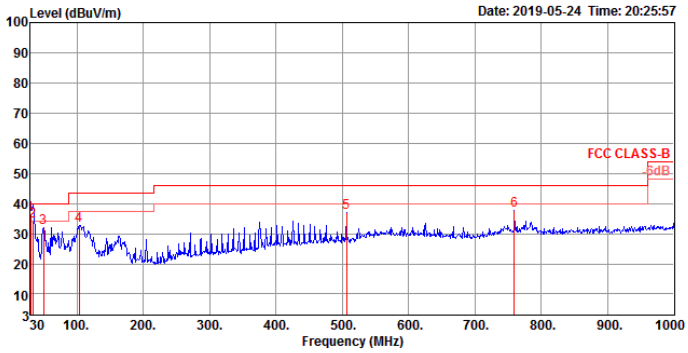
802.11n HT40_Nss1,(MCS0)_3TX **CSE NdB**

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	4.56	-25.44	936.84M	-41.94	2.39832G	-43.81	2.4875G	-39.26	17.60717G	-35.00	1
2.442G	4.56	-25.44	1.78758G	-42.88	2.39252G	-43.81	2.4853G	-39.79	15.24573G	-34.12	2
2.442G	4.56	-25.44	2.07783G	-43.32	2.39268G	-43.64	2.48802G	-38.04	14.94845G	-34.22	3

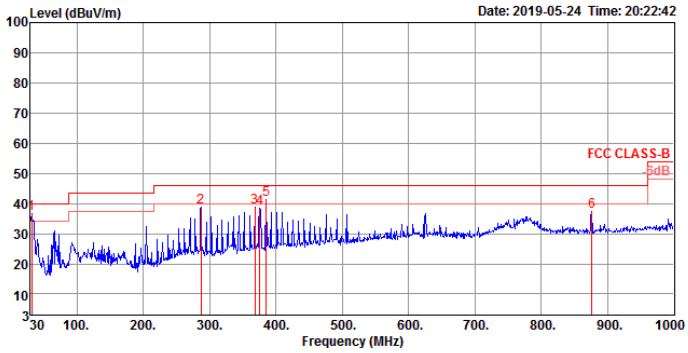
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.00	36.13	40.00	-3.87	39.50	0.80	24.40	28.57	125	129	QP	VERTICAL
2	33.88	33.99	40.00	-6.01	39.30	0.72	22.54	28.57	100	227	QP	VERTICAL
3	49.40	32.12	40.00	-7.88	45.23	0.93	14.52	28.56	100	53	Peak	VERTICAL
4	103.72	32.78	43.50	-10.72	42.72	1.25	17.24	28.43	100	288	Peak	VERTICAL
5	506.27	37.13	46.00	-8.87	40.58	2.39	23.55	29.39	100	251	Peak	VERTICAL
6	759.44	37.59	46.00	-8.41	38.01	3.00	25.97	29.39	100	221	Peak	VERTICAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	31.94	36.68	40.00	-3.32	41.37	0.76	23.12	28.57	300	215	Peak	HORIZONTAL
2	287.05	38.94	46.00	-7.06	46.12	1.90	18.87	27.95	125	76	Peak	HORIZONTAL
3	368.53	38.74	46.00	-7.26	44.56	2.05	20.65	28.52	100	61	Peak	HORIZONTAL
4	375.32	38.40	46.00	-7.60	44.16	2.09	20.73	28.58	100	202	Peak	HORIZONTAL
5	385.02	41.28	46.00	-4.72	46.81	2.13	21.00	28.66	100	84	Peak	HORIZONTAL
6	875.84	37.47	46.00	-8.53	36.72	3.31	26.57	29.13	100	199	Peak	HORIZONTAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

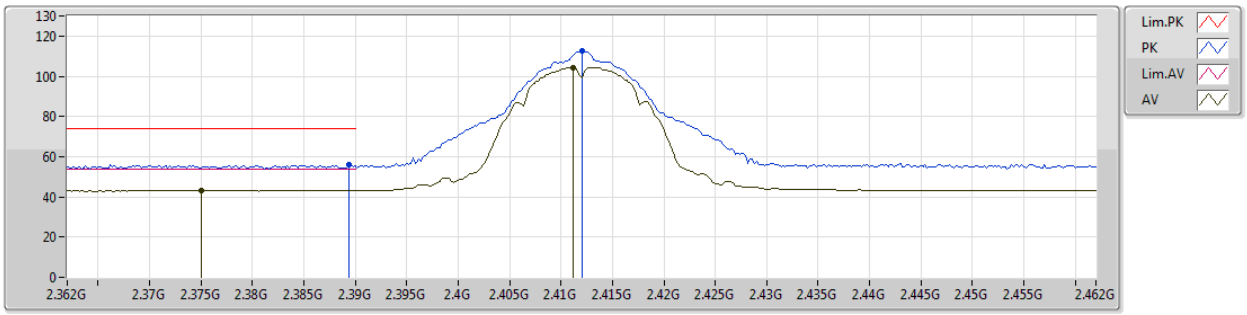
Summary

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	-	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1,(6Mbps)_3TX	Pass	PK	2.4854G	73.97	74.00	-0.03	30.97	3	Horizontal	37	1.98	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

24/04/2019



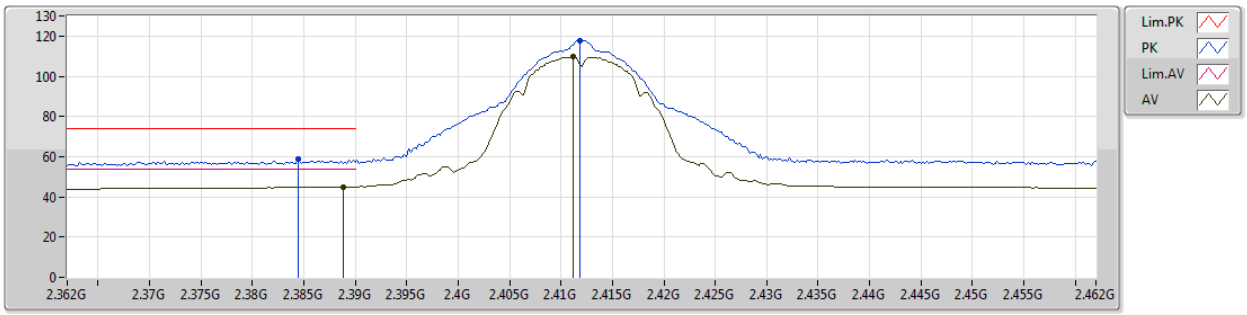
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3894G	56.00	74.00	-18.00	30.80	3	Vertical	194	2.71	-
AV	2.375G	43.05	54.00	-10.95	30.74	3	Vertical	194	2.71	-
PK	2.412G	112.42	Inf	-Inf	30.86	3	Vertical	194	2.71	-
AV	2.4112G	104.37	Inf	-Inf	30.86	3	Vertical	194	2.71	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

24/04/2019



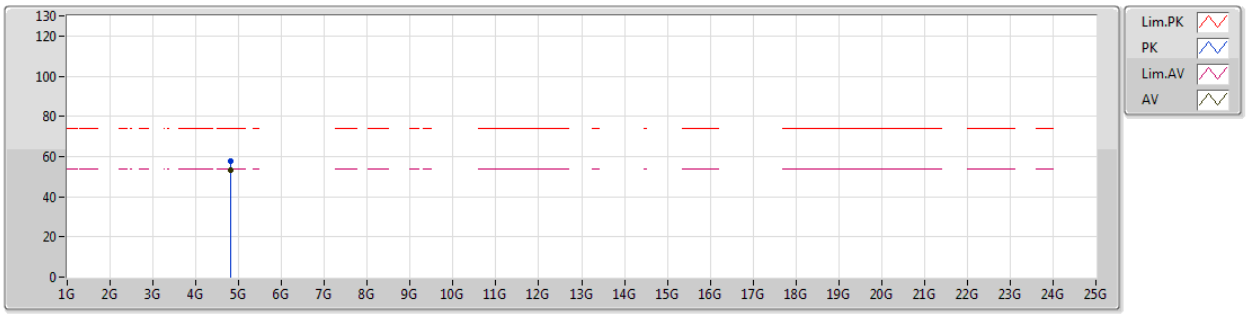
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3844G	58.72	74.00	-15.28	30.78	3	Horizontal	102	1.97	-
AV	2.3888G	44.99	54.00	-9.01	30.80	3	Horizontal	102	1.97	-
PK	2.4118G	117.69	Inf	-Inf	30.86	3	Horizontal	102	1.97	-
AV	2.4112G	109.75	Inf	-Inf	30.86	3	Horizontal	102	1.97	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

24/04/2019



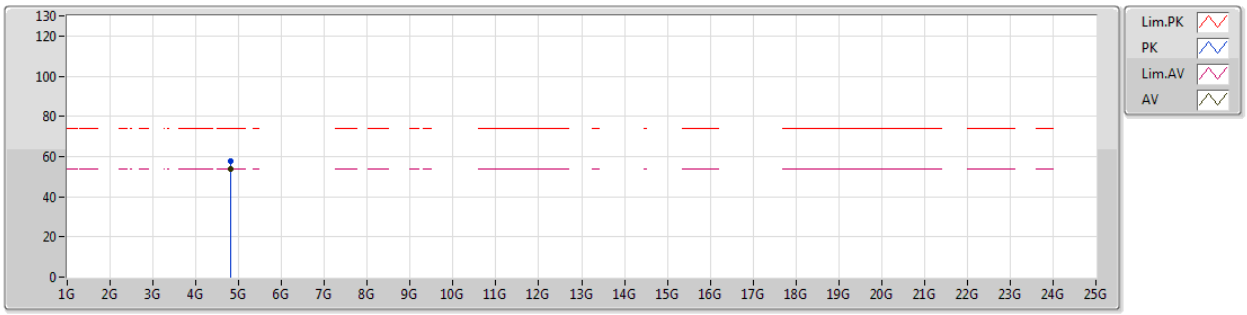
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.82396G	57.72	74.00	-16.28	3.59	3	Vertical	64	1.60	-
AV	4.82398G	53.08	54.00	-0.92	3.59	3	Vertical	64	1.60	-

802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

24/04/2019



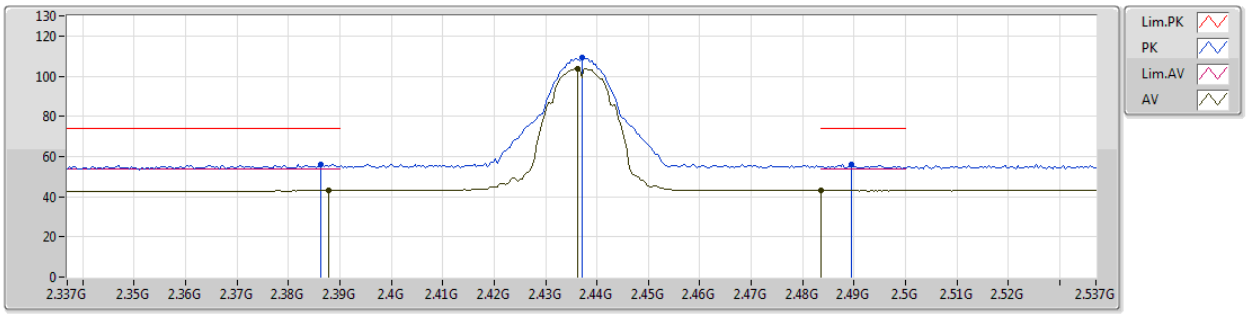
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.82412G	57.45	74.00	-16.55	3.59	3	Horizontal	30	1.64	-
AV	4.82398G	53.62	54.00	-0.38	3.59	3	Horizontal	30	1.64	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

24/04/2019



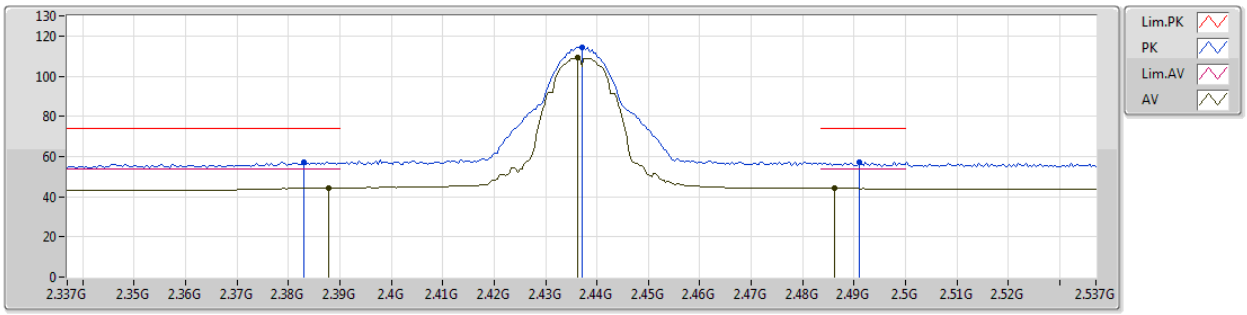
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3862G	56.09	74.00	-17.91	30.79	3	Vertical	209	2.04	-
AV	2.3878G	43.13	54.00	-10.87	30.79	3	Vertical	209	2.04	-
PK	2.437G	109.25	Inf	-Inf	30.90	3	Vertical	209	2.04	-
AV	2.4362G	103.89	Inf	-Inf	30.90	3	Vertical	209	2.04	-
PK	2.4894G	55.89	74.00	-18.11	30.97	3	Vertical	209	2.04	-
AV	2.4835G	42.97	54.00	-11.03	30.96	3	Vertical	209	2.04	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

24/04/2019



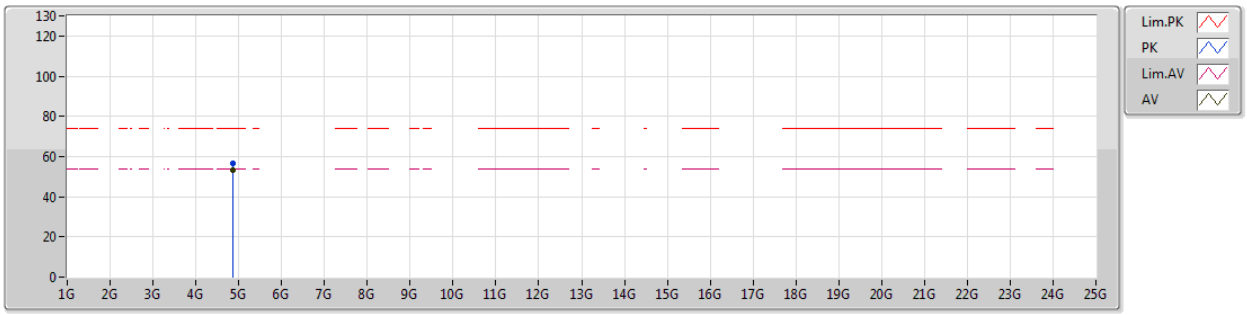
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.383G	57.38	74.00	-16.62	30.78	3	Horizontal	100	2.19	-
AV	2.3878G	44.47	54.00	-9.53	30.79	3	Horizontal	100	2.19	-
PK	2.437G	114.55	Inf	-Inf	30.90	3	Horizontal	100	2.19	-
AV	2.4362G	109.16	Inf	-Inf	30.90	3	Horizontal	100	2.19	-
PK	2.491G	57.11	74.00	-16.89	30.98	3	Horizontal	100	2.19	-
AV	2.4862G	44.21	54.00	-9.79	30.97	3	Horizontal	100	2.19	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

24/04/2019



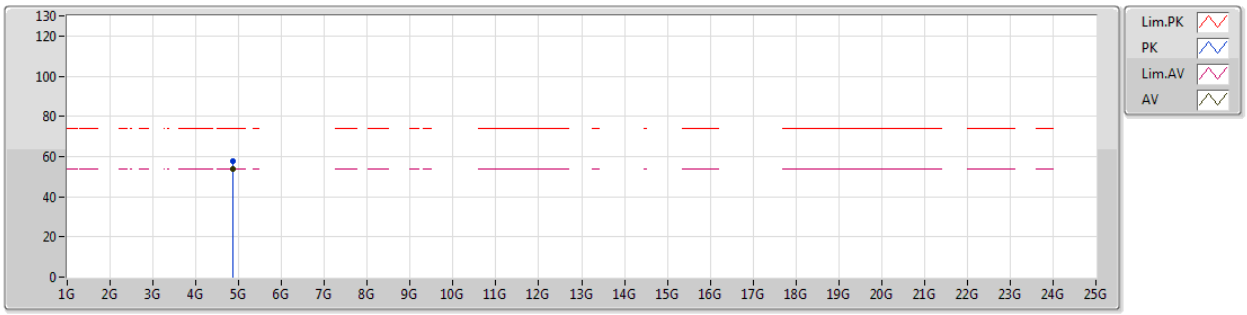
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.874G	56.54	74.00	-17.46	3.81	3	Vertical	66	1.70	-
AV	4.87397G	53.01	54.00	-0.99	3.81	3	Vertical	66	1.70	-

802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

24/04/2019



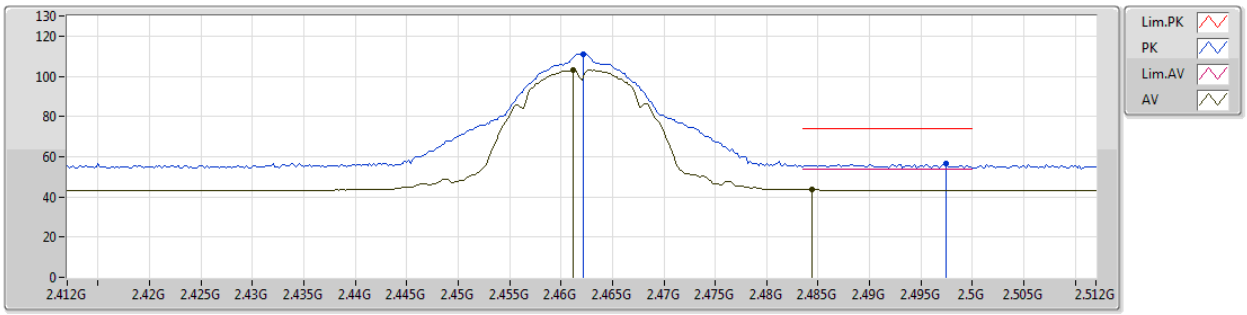
EUT Y_1TX
Setting 20.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.87397G	57.65	74.00	-16.35	3.81	3	Horizontal	31	1.58	-
AV	4.874G	53.56	54.00	-0.44	3.81	3	Horizontal	31	1.58	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

24/04/2019



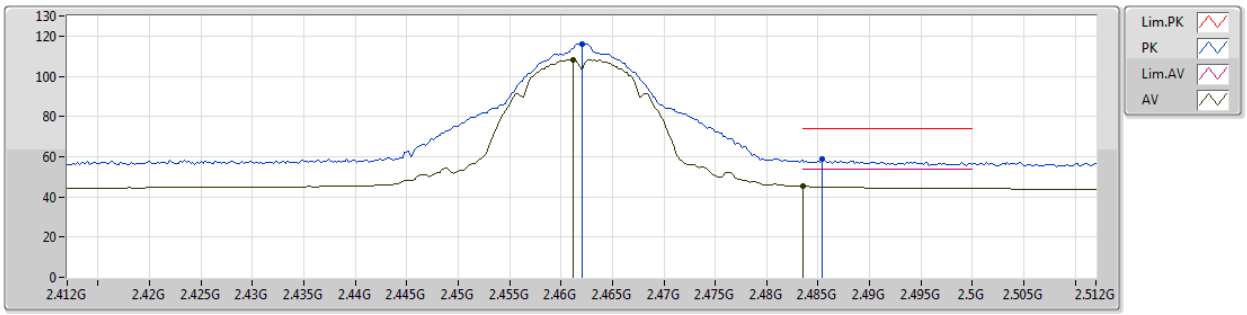
EUT Y_1TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.4622G	111.13	Inf	-Inf	30.93	3	Vertical	159	2.94	-
AV	2.4612G	103.18	Inf	-Inf	30.93	3	Vertical	159	2.94	-
PK	2.4974G	56.81	74.00	-17.19	30.99	3	Vertical	159	2.94	-
AV	2.4844G	43.49	54.00	-10.51	30.96	3	Vertical	159	2.94	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

24/04/2019



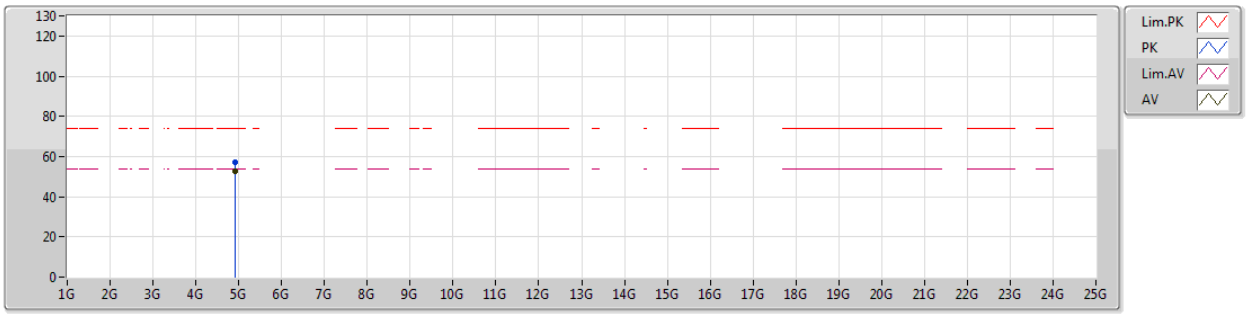
EUT Y_1TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.462G	116.26	Inf	-Inf	30.93	3	Horizontal	98	1.71	-
AV	2.4612G	108.34	Inf	-Inf	30.93	3	Horizontal	98	1.71	-
PK	2.4854G	59.04	74.00	-14.96	30.97	3	Horizontal	98	1.71	-
AV	2.4835G	45.14	54.00	-8.86	30.96	3	Horizontal	98	1.71	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

24/04/2019



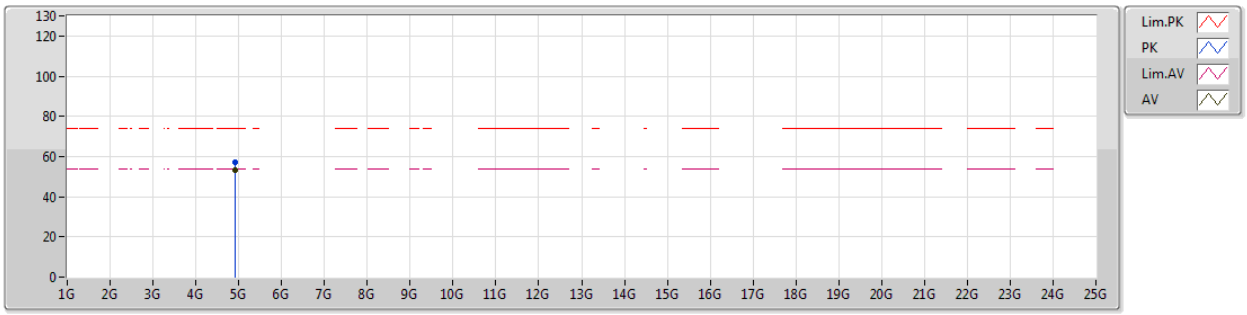
EUT Y_1TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.92392G	57.12	74.00	-16.88	4.04	3	Vertical	64	1.54	-
AV	4.92398G	52.83	54.00	-1.17	4.04	3	Vertical	64	1.54	-

802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

24/04/2019



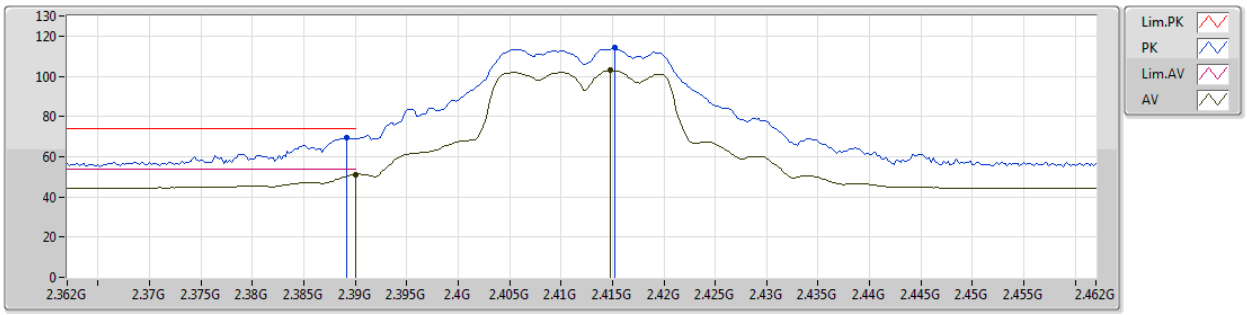
EUT Y_1TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.92396G	57.09	74.00	-16.91	4.04	3	Horizontal	36	1.51	-
AV	4.924G	53.50	54.00	-0.50	4.04	3	Horizontal	36	1.51	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

25/04/2019



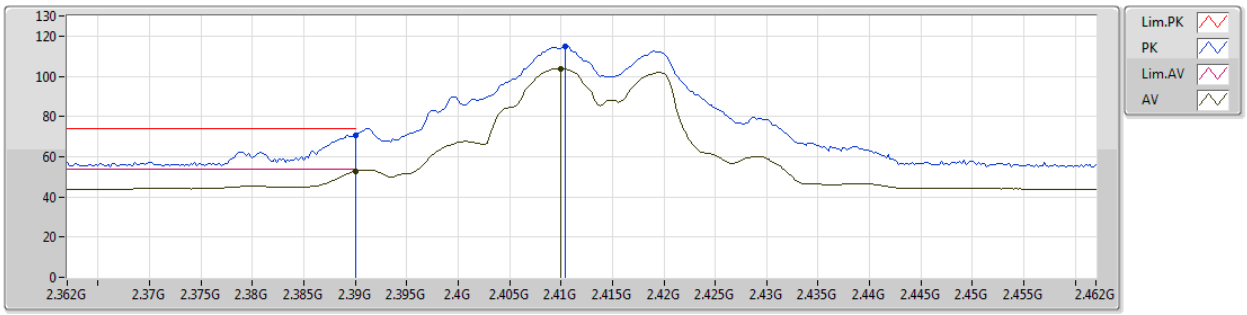
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3892G	69.30	74.00	-4.70	30.80	3	Vertical	60	1.46	-
AV	2.39G	51.24	54.00	-2.76	30.80	3	Vertical	60	1.46	-
PK	2.4152G	114.11	Inf	-Inf	30.87	3	Vertical	60	1.46	-
AV	2.4148G	102.83	Inf	-Inf	30.86	3	Vertical	60	1.46	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

25/04/2019



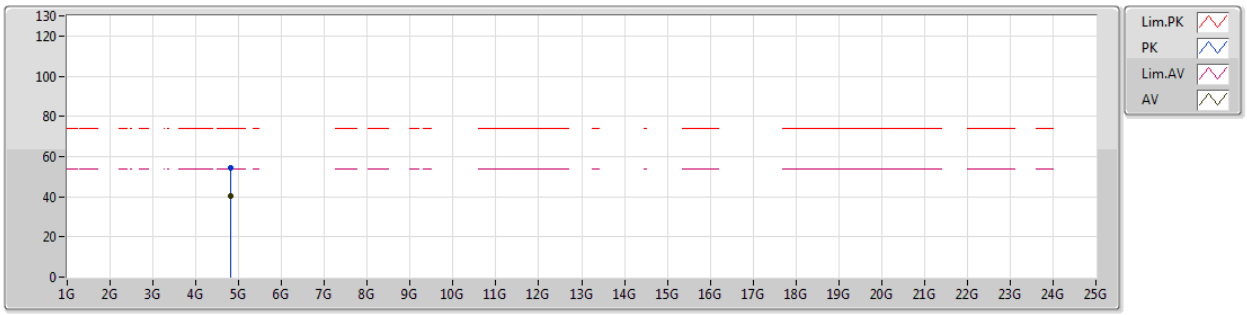
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.39G	70.77	74.00	-3.23	30.80	3	Horizontal	27	2.01	-
AV	2.39G	52.88	54.00	-1.12	30.80	3	Horizontal	27	2.01	-
PK	2.4104G	114.82	Inf	-Inf	30.86	3	Horizontal	27	2.01	-
AV	2.41G	103.83	Inf	-Inf	30.86	3	Horizontal	27	2.01	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

25/04/2019



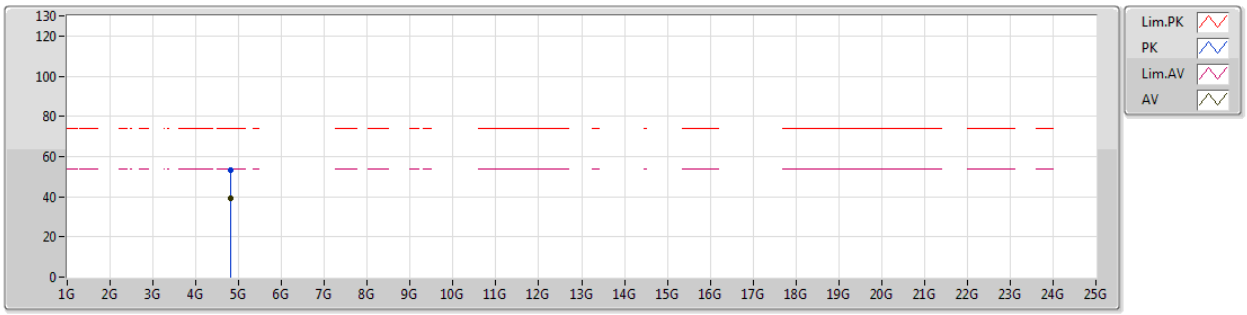
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8239G	54.40	74.00	-19.60	3.59	3	Vertical	98	1.87	-
AV	4.824G	40.51	54.00	-13.49	3.59	3	Vertical	98	1.87	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

25/04/2019



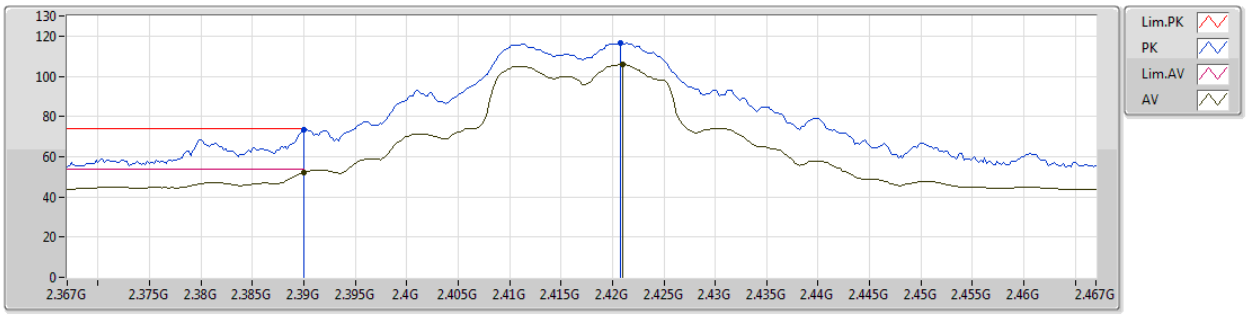
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8239G	53.32	74.00	-20.68	3.59	3	Horizontal	119	1.82	-
AV	4.8239G	39.24	54.00	-14.76	3.59	3	Horizontal	119	1.82	-

802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

25/04/2019



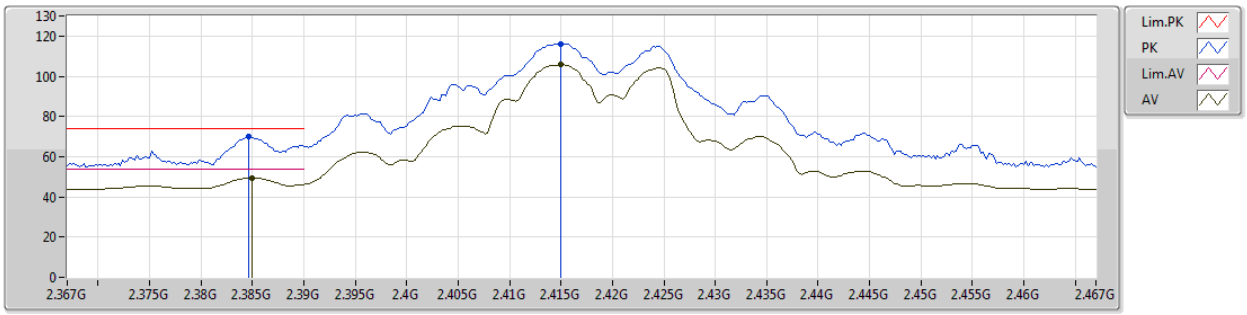
EUT Y_3TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.39G	73.21	74.00	-0.79	30.80	3	Vertical	67	2.82	-
AV	2.39G	52.20	54.00	-1.80	30.80	3	Vertical	67	2.82	-
PK	2.4208G	116.36	Inf	-Inf	30.87	3	Vertical	67	2.82	-
AV	2.421G	105.72	Inf	-Inf	30.87	3	Vertical	67	2.82	-

802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

25/04/2019



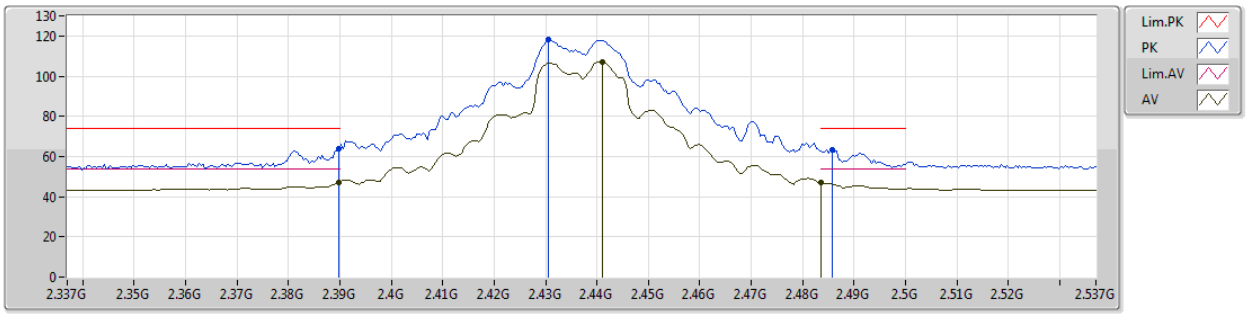
EUT Y_3TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3846G	69.87	74.00	-4.13	30.78	3	Horizontal	28	2.00	-
AV	2.385G	49.47	54.00	-4.53	30.79	3	Horizontal	28	2.00	-
PK	2.415G	116.19	Inf	-Inf	30.86	3	Horizontal	28	2.00	-
AV	2.415G	105.77	Inf	-Inf	30.86	3	Horizontal	28	2.00	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

25/04/2019



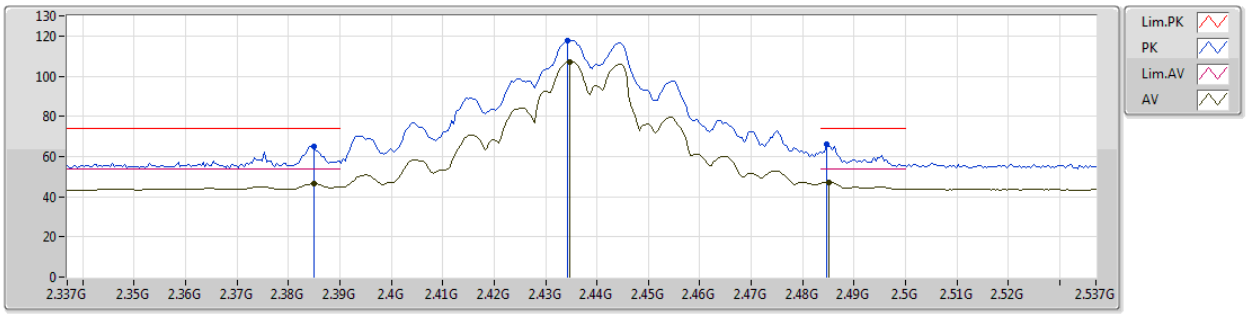
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3898G	64.11	74.00	-9.89	30.80	3	Vertical	67	2.75	-
AV	2.3898G	47.22	54.00	-6.78	30.80	3	Vertical	67	2.75	-
PK	2.4306G	118.09	Inf	-Inf	30.89	3	Vertical	67	2.75	-
AV	2.441G	106.96	Inf	-Inf	30.90	3	Vertical	67	2.75	-
PK	2.4858G	63.45	74.00	-10.55	30.97	3	Vertical	67	2.75	-
AV	2.4835G	46.93	54.00	-7.07	30.96	3	Vertical	67	2.75	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

25/04/2019



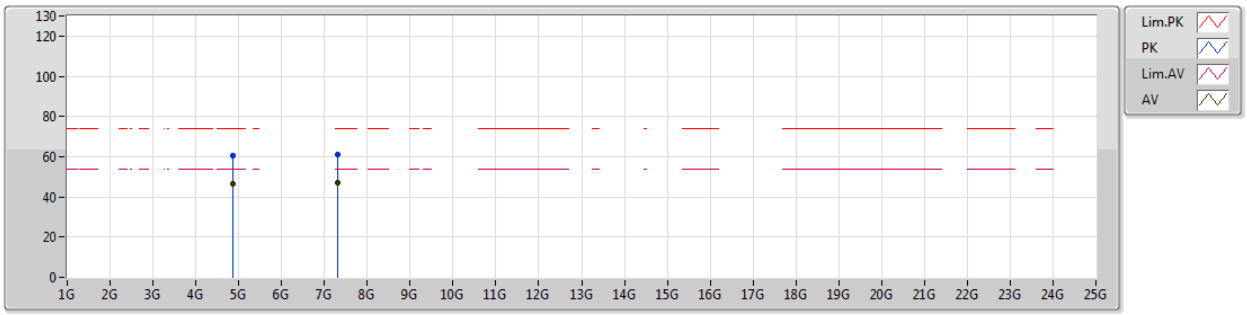
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.385G	65.23	74.00	-8.77	30.79	3	Horizontal	29	1.98	-
AV	2.385G	46.39	54.00	-7.61	30.79	3	Horizontal	29	1.98	-
PK	2.4342G	117.67	Inf	-Inf	30.89	3	Horizontal	29	1.98	-
AV	2.4346G	107.20	Inf	-Inf	30.89	3	Horizontal	29	1.98	-
PK	2.4846G	66.05	74.00	-7.95	30.96	3	Horizontal	29	1.98	-
AV	2.485G	47.31	54.00	-6.69	30.97	3	Horizontal	29	1.98	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

25/04/2019



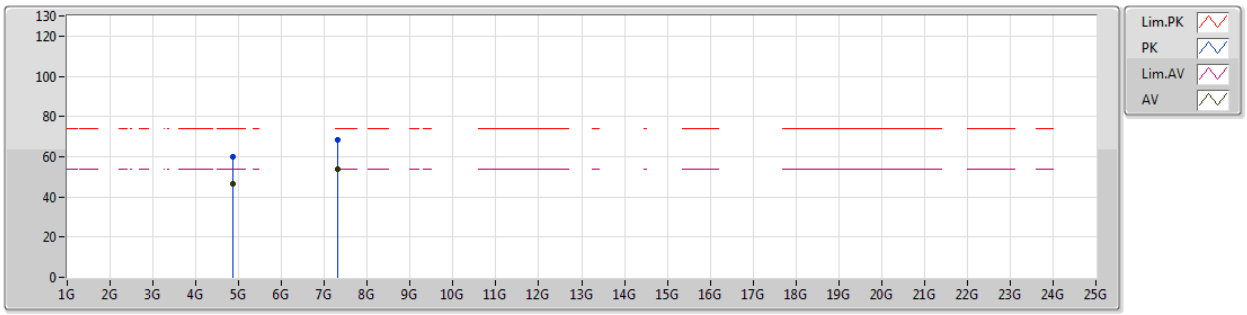
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8724G	60.66	74.00	-13.34	3.81	3	Vertical	60	1.86	-
AV	4.87208G	46.71	54.00	-7.29	3.81	3	Vertical	60	1.86	-
PK	7.30404G	61.03	74.00	-12.97	9.25	3	Vertical	67	1.22	-
AV	7.315G	46.99	54.00	-7.01	9.25	3	Vertical	67	1.22	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

25/04/2019



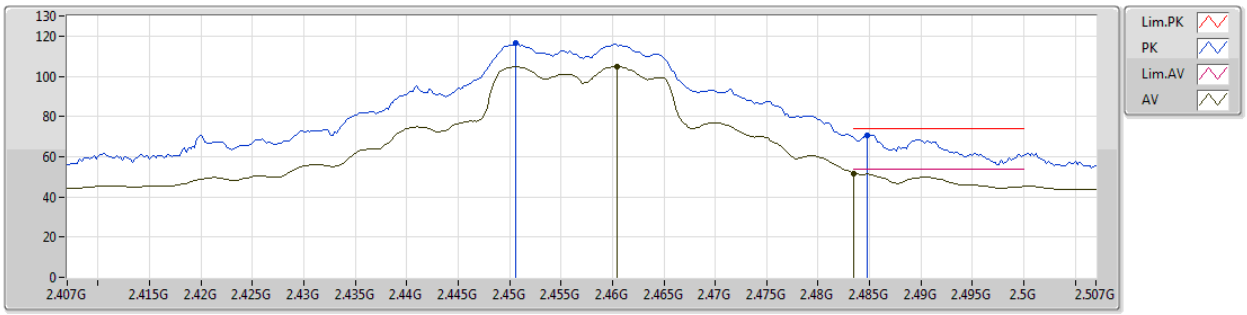
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.87464G	59.89	74.00	-14.11	3.81	3	Horizontal	120	1.64	-
AV	4.87408G	46.50	54.00	-7.50	3.81	3	Horizontal	120	1.64	-
PK	7.31324G	68.23	74.00	-5.77	9.25	3	Horizontal	152	1.38	-
AV	7.31364G	53.96	54.00	-0.04	9.25	3	Horizontal	152	1.38	-

802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

25/04/2019



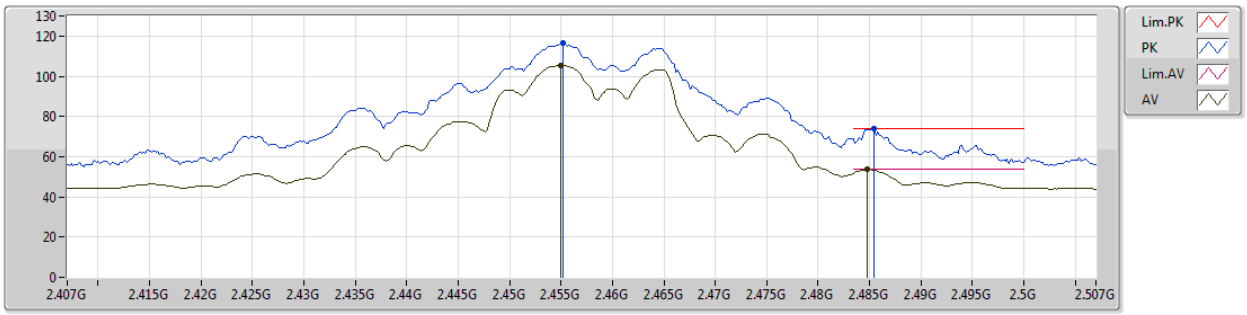
EUT Y_3TX
Setting 19.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.4506G	116.31	Inf	-Inf	30.92	3	Vertical	61	2.99	-
AV	2.4604G	104.84	Inf	-Inf	30.93	3	Vertical	61	2.99	-
PK	2.4848G	70.75	74.00	-3.25	30.96	3	Vertical	61	2.99	-
AV	2.4835G	51.78	54.00	-2.22	30.96	3	Vertical	61	2.99	-

802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

25/04/2019



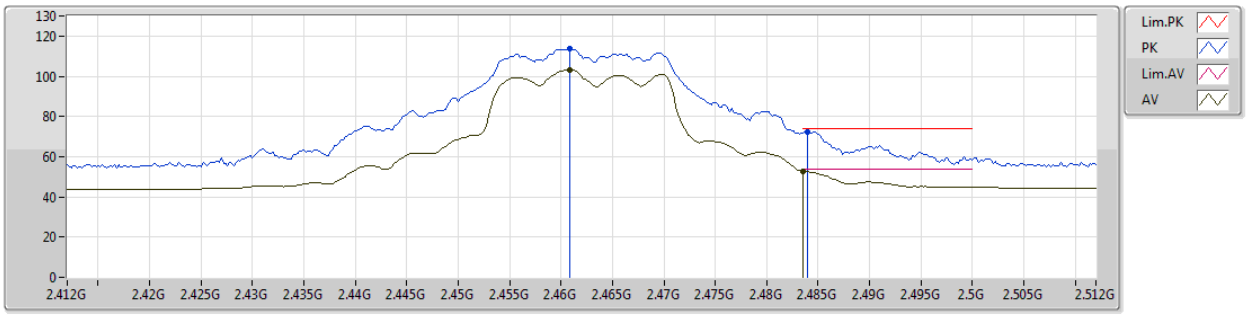
EUT Y_3TX
Setting 19.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.4552G	116.38	Inf	-Inf	30.93	3	Horizontal	37	1.98	-
AV	2.455G	105.42	Inf	-Inf	30.92	3	Horizontal	37	1.98	-
PK	2.4854G	73.97	74.00	-0.03	30.97	3	Horizontal	37	1.98	-
AV	2.4848G	53.65	54.00	-0.35	30.96	3	Horizontal	37	1.98	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

25/04/2019



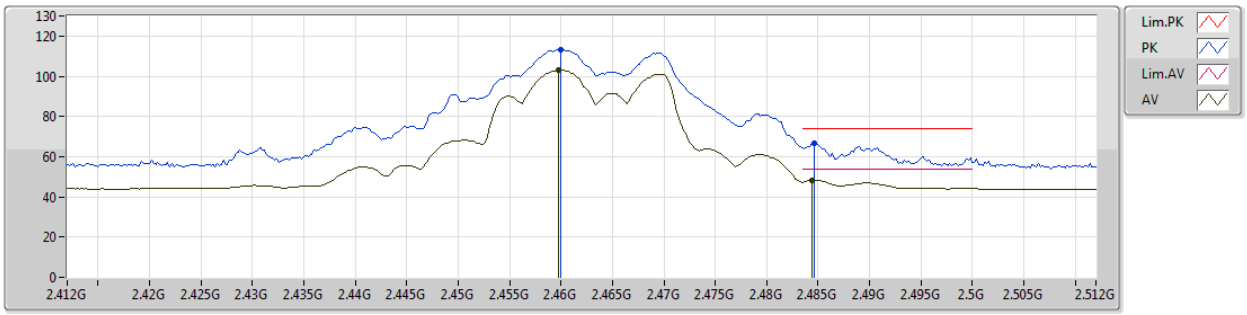
EUT Y_3TX
Setting 17
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.4608G	113.59	Inf	-Inf	30.93	3	Vertical	347	1.92	-
AV	2.4608G	103.10	Inf	-Inf	30.93	3	Vertical	347	1.92	-
PK	2.484G	72.44	74.00	-1.56	30.96	3	Vertical	347	1.92	-
AV	2.4835G	52.72	54.00	-1.28	30.96	3	Vertical	347	1.92	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

25/04/2019



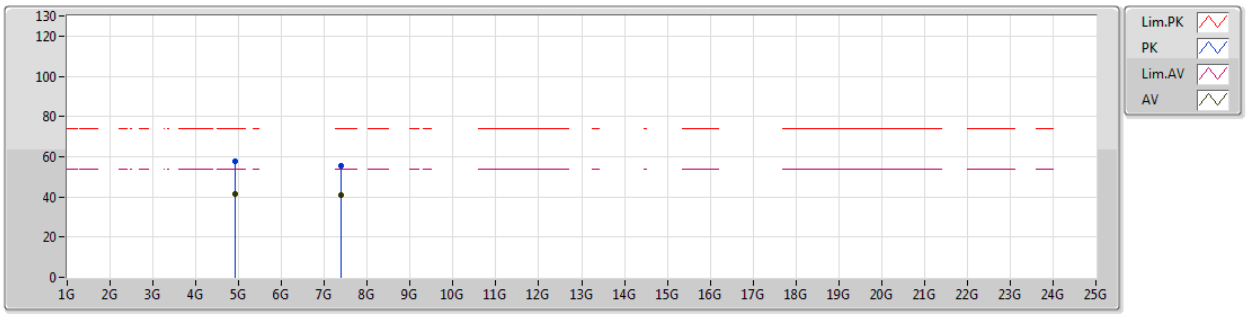
EUT Y_3TX
Setting 17
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.46G	113.30	Inf	-Inf	30.93	3	Horizontal	35	1.96	-
AV	2.4598G	102.95	Inf	-Inf	30.93	3	Horizontal	35	1.96	-
PK	2.4846G	66.77	74.00	-7.23	30.96	3	Horizontal	35	1.96	-
AV	2.4844G	48.25	54.00	-5.75	30.96	3	Horizontal	35	1.96	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

25/04/2019



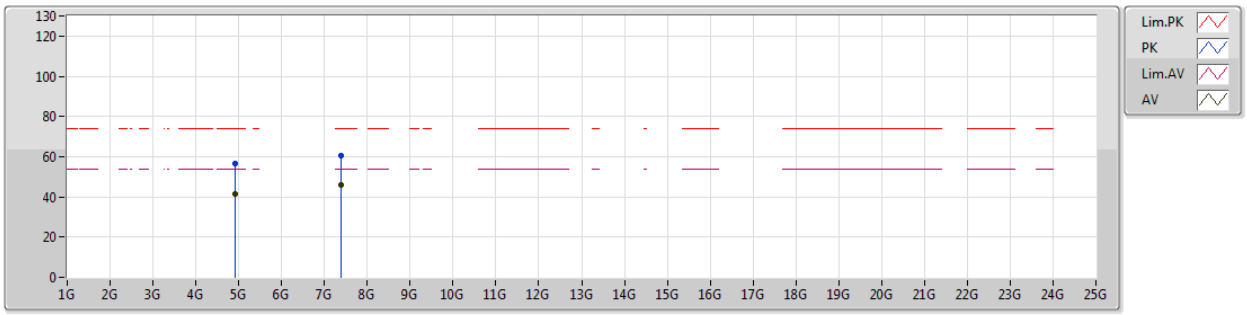
EUT Y_3TX
Setting 17
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.9225G	57.78	74.00	-16.22	4.04	3	Vertical	56	1.77	-
AV	4.9225G	41.41	54.00	-12.59	4.04	3	Vertical	56	1.77	-
PK	7.3883G	55.73	74.00	-18.27	9.24	3	Vertical	72	1.39	-
AV	7.3885G	40.65	54.00	-13.35	9.24	3	Vertical	72	1.39	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

25/04/2019



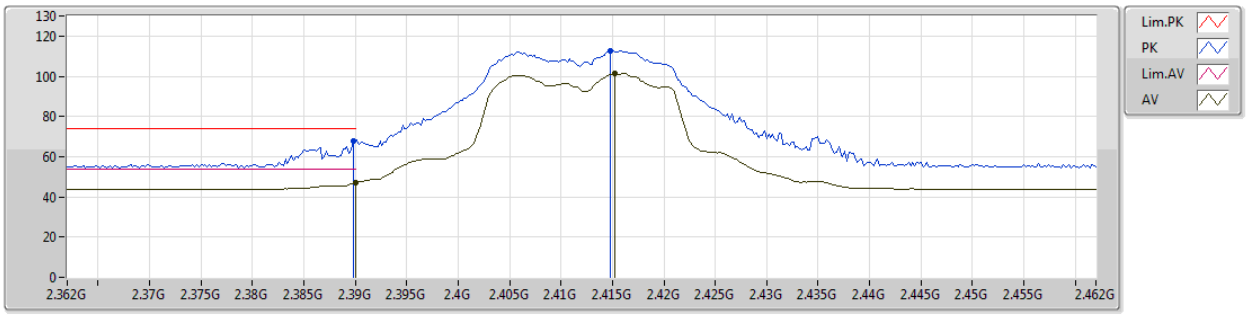
EUT Y_3TX
Setting 17
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.9225G	56.53	74.00	-17.47	4.04	3	Horizontal	123	1.63	-
AV	4.924G	41.60	54.00	-12.40	4.04	3	Horizontal	123	1.63	-
PK	7.3778G	60.70	74.00	-13.30	9.24	3	Horizontal	152	1.37	-
AV	7.3882G	45.82	54.00	-8.18	9.24	3	Horizontal	152	1.37	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

25/04/2019



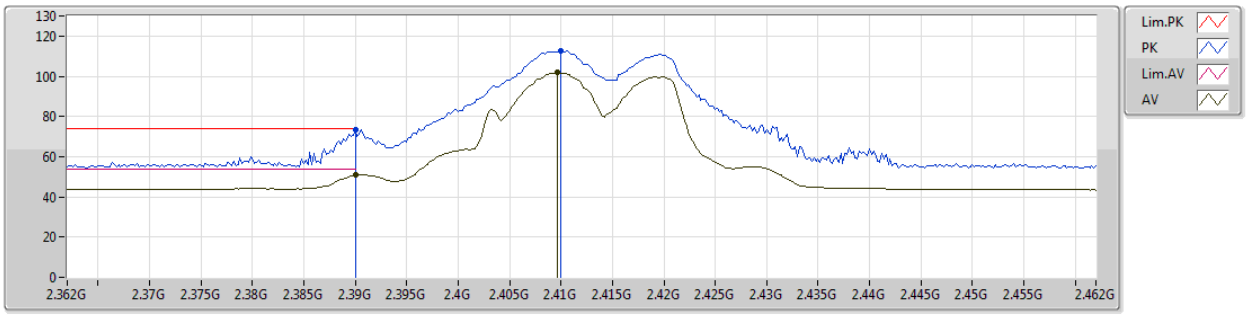
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3898G	67.73	74.00	-6.27	30.80	3	Vertical	65	2.82	-
AV	2.39G	46.95	54.00	-7.05	30.80	3	Vertical	65	2.82	-
PK	2.4148G	112.49	Inf	-Inf	30.86	3	Vertical	65	2.82	-
AV	2.4152G	101.30	Inf	-Inf	30.87	3	Vertical	65	2.82	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

25/04/2019



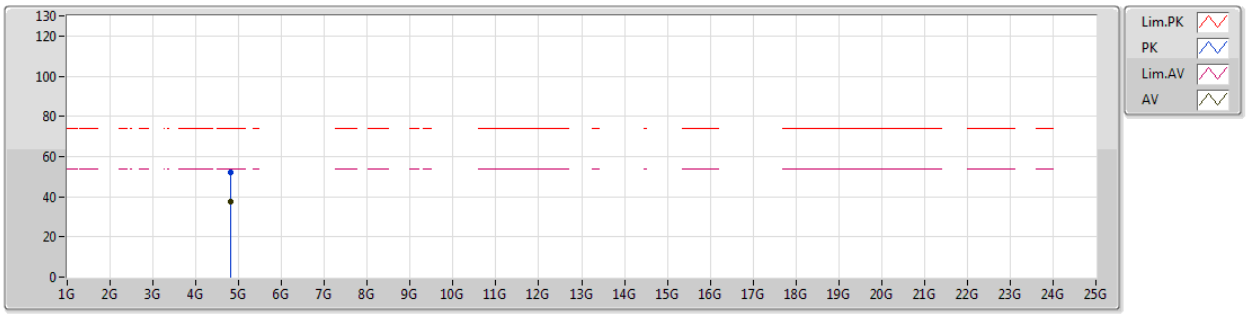
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.39G	73.54	74.00	-0.46	30.80	3	Horizontal	26	1.99	-
AV	2.39G	50.79	54.00	-3.21	30.80	3	Horizontal	26	1.99	-
PK	2.41G	112.58	Inf	-Inf	30.86	3	Horizontal	26	1.99	-
AV	2.4096G	101.72	Inf	-Inf	30.85	3	Horizontal	26	1.99	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

25/04/2019



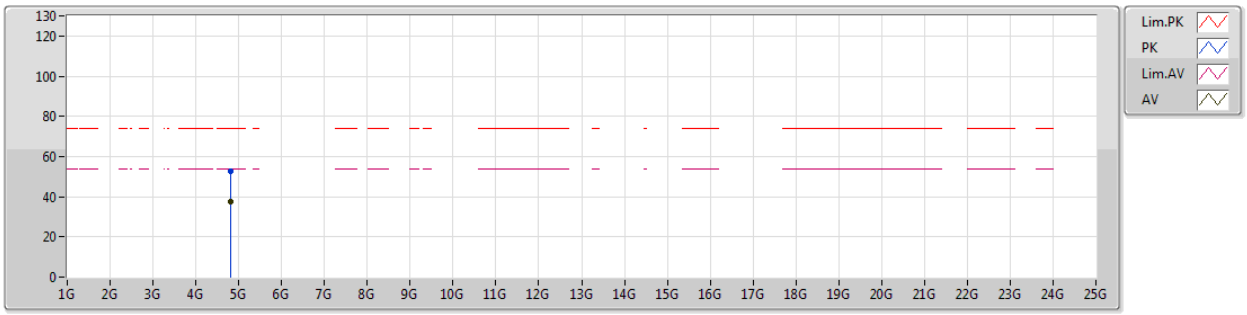
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8231G	52.38	74.00	-21.62	3.59	3	Vertical	99	1.73	-
AV	4.8237G	37.73	54.00	-16.27	3.59	3	Vertical	99	1.73	-

802.11n HT20_Nss1,(MCS0)_3TX

2412MHz_TX

25/04/2019



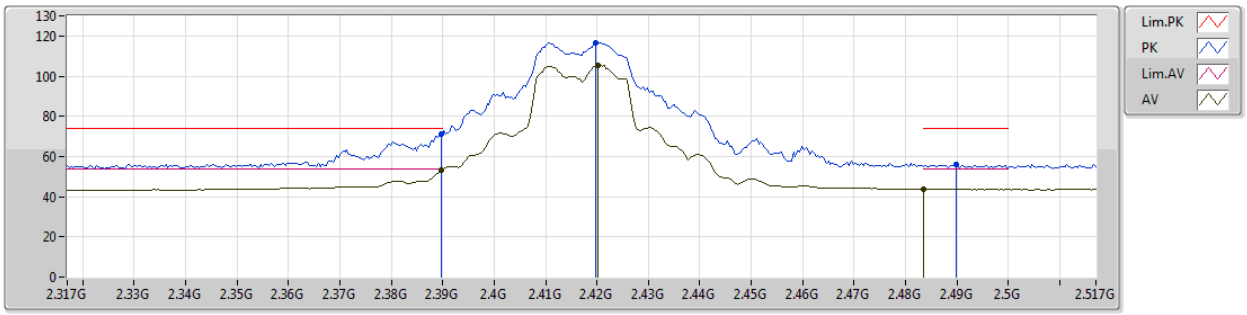
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8242G	52.41	74.00	-21.59	3.59	3	Horizontal	121	1.67	-
AV	4.8238G	37.67	54.00	-16.33	3.59	3	Horizontal	121	1.67	-

802.11n HT20_Nss1,(MCS0)_3TX

2417MHz_TX

25/04/2019



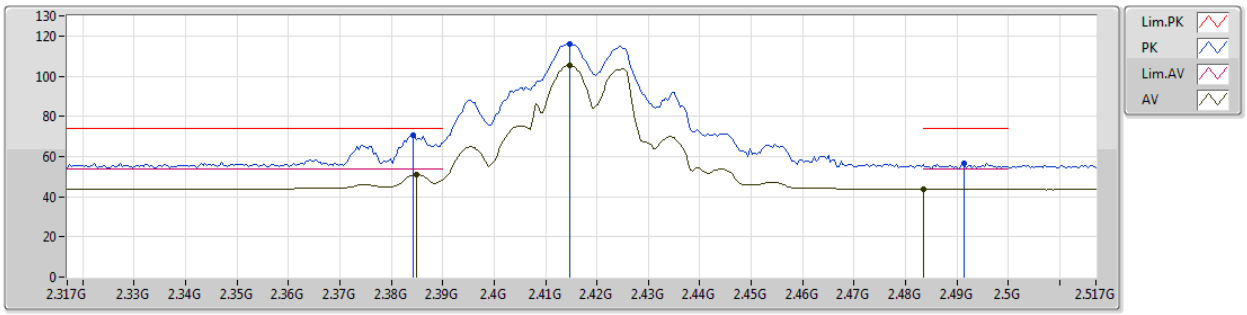
EUT Y_3TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3898G	71.24	74.00	-2.76	30.80	3	Vertical	63	2.82	-
AV	2.3898G	53.21	54.00	-0.79	30.80	3	Vertical	63	2.82	-
PK	2.4198G	116.71	Inf	-Inf	30.87	3	Vertical	63	2.82	-
AV	2.4202G	105.40	Inf	-Inf	30.87	3	Vertical	63	2.82	-
PK	2.4898G	56.17	74.00	-17.83	30.97	3	Vertical	63	2.82	-
AV	2.4835G	43.72	54.00	-10.28	30.96	3	Vertical	63	2.82	-

802.11n HT20_Nss1,(MCS0)_3TX

2417MHz_TX

25/04/2019



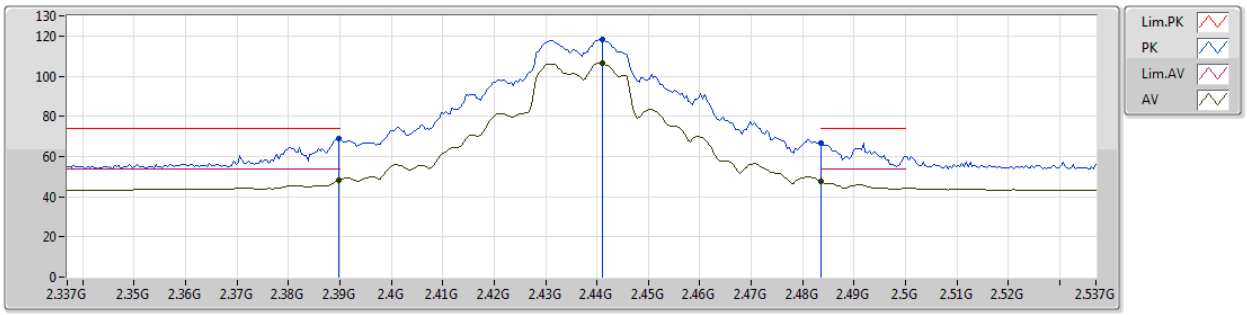
EUT Y_3TX
Setting 20
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3842G	70.39	74.00	-3.61	30.78	3	Horizontal	27	2.00	-
AV	2.385G	51.04	54.00	-2.96	30.79	3	Horizontal	27	2.00	-
PK	2.4146G	115.99	Inf	-Inf	30.86	3	Horizontal	27	2.00	-
AV	2.4146G	105.23	Inf	-Inf	30.86	3	Horizontal	27	2.00	-
PK	2.4914G	56.82	74.00	-17.18	30.98	3	Horizontal	27	2.00	-
AV	2.4835G	43.69	54.00	-10.31	30.96	3	Horizontal	27	2.00	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



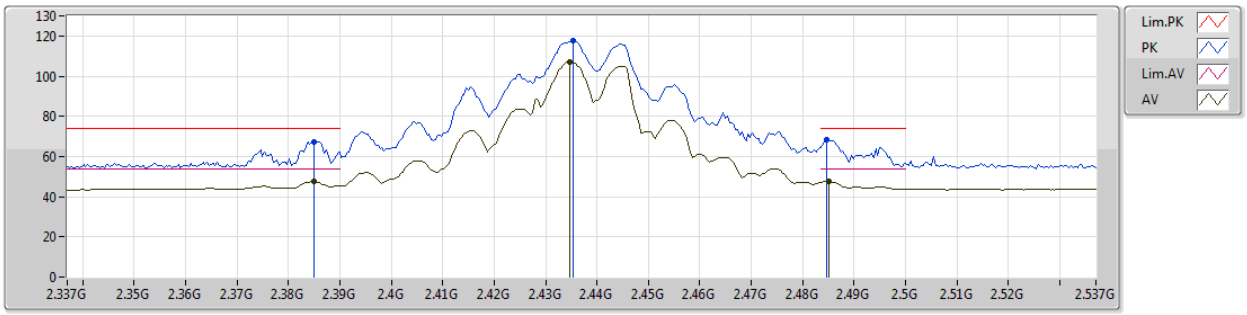
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3898G	68.85	74.00	-5.15	30.80	3	Vertical	67	2.77	-
AV	2.3898G	48.20	54.00	-5.80	30.80	3	Vertical	67	2.77	-
PK	2.441G	117.99	Inf	-Inf	30.90	3	Vertical	67	2.77	-
AV	2.441G	106.70	Inf	-Inf	30.90	3	Vertical	67	2.77	-
PK	2.4835G	66.73	74.00	-7.27	30.96	3	Vertical	67	2.77	-
AV	2.4835G	47.52	54.00	-6.48	30.96	3	Vertical	67	2.77	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



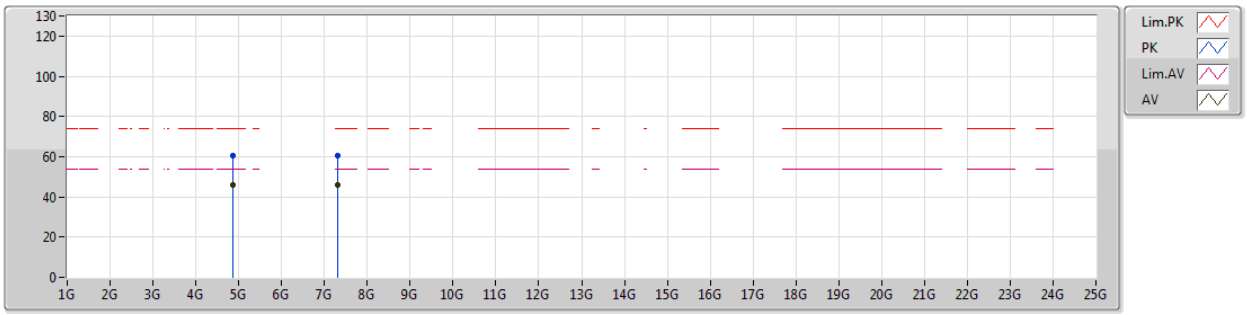
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.385G	67.47	74.00	-6.53	30.79	3	Horizontal	29	2.19	-
AV	2.385G	47.49	54.00	-6.51	30.79	3	Horizontal	29	2.19	-
PK	2.4354G	117.50	Inf	-Inf	30.90	3	Horizontal	29	2.19	-
AV	2.4346G	106.88	Inf	-Inf	30.89	3	Horizontal	29	2.19	-
PK	2.4846G	68.24	74.00	-5.76	30.96	3	Horizontal	29	2.19	-
AV	2.485G	47.73	54.00	-6.27	30.97	3	Horizontal	29	2.19	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



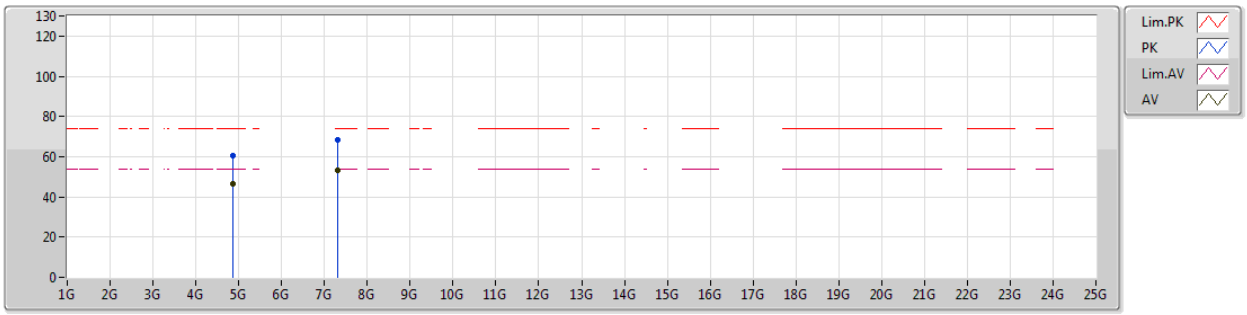
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8722G	60.79	74.00	-13.21	3.81	3	Vertical	67	2.19	-
AV	4.8731G	45.87	54.00	-8.13	3.81	3	Vertical	67	2.19	-
PK	7.3146G	60.31	74.00	-13.69	9.25	3	Vertical	73	1.50	-
AV	7.3139G	46.03	54.00	-7.97	9.25	3	Vertical	73	1.50	-

802.11n HT20_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



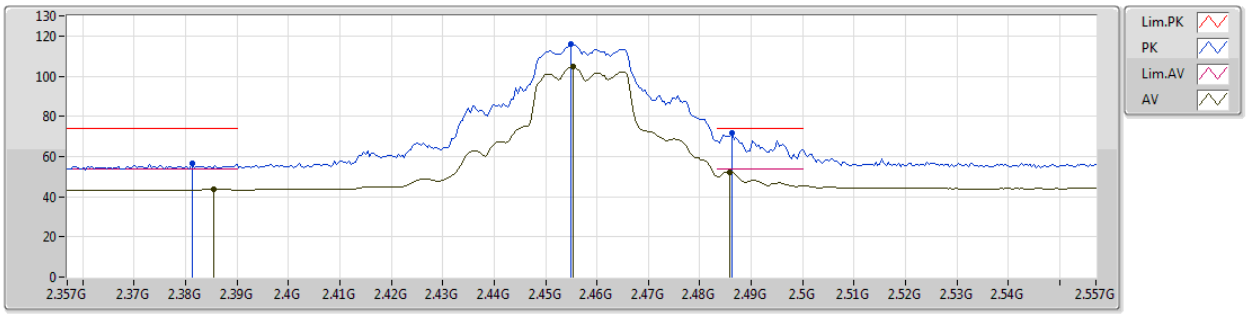
EUT Y_3TX
Setting 22
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8743G	60.57	74.00	-13.43	3.81	3	Horizontal	124	1.75	-
AV	4.8744G	46.25	54.00	-7.75	3.81	3	Horizontal	124	1.75	-
PK	7.3132G	68.36	74.00	-5.64	9.25	3	Horizontal	153	1.44	-
AV	7.3142G	53.50	54.00	-0.50	9.25	3	Horizontal	153	1.44	-

802.11n HT20_Nss1,(MCS0)_3TX

2457MHz_TX

25/04/2019



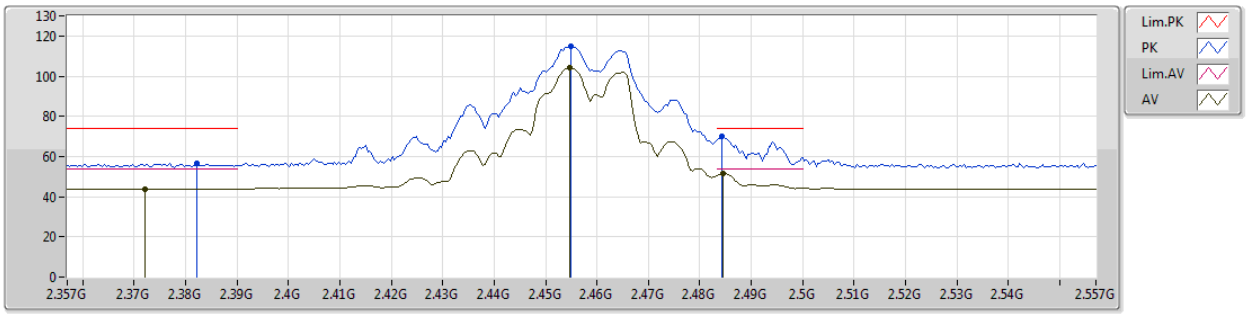
EUT Y_3TX
Setting 18.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3814G	56.39	74.00	-17.61	30.77	3	Vertical	347	1.70	-
AV	2.3854G	43.53	54.00	-10.47	30.79	3	Vertical	347	1.70	-
PK	2.455G	115.77	Inf	-Inf	30.92	3	Vertical	347	1.70	-
AV	2.4554G	104.56	Inf	-Inf	30.93	3	Vertical	347	1.70	-
PK	2.4862G	71.86	74.00	-2.14	30.97	3	Vertical	347	1.70	-
AV	2.4858G	52.37	54.00	-1.63	30.97	3	Vertical	347	1.70	-

802.11n HT20_Nss1,(MCS0)_3TX

2457MHz_TX

25/04/2019



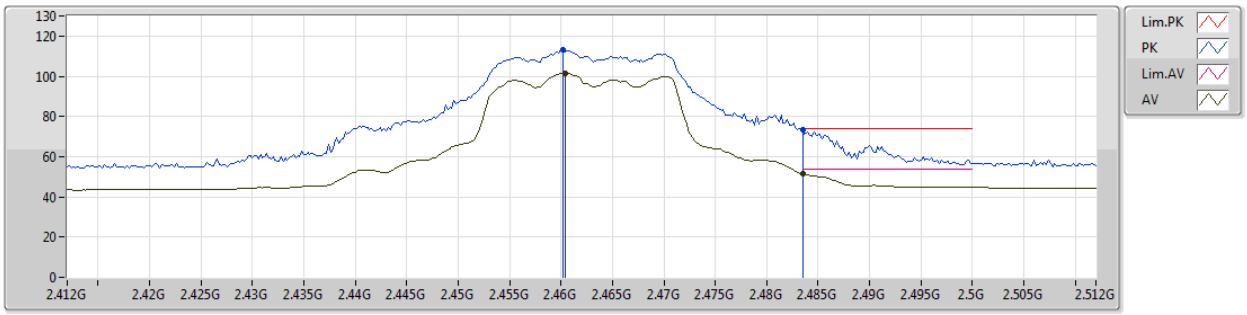
EUT Y_3TX
Setting 18.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3822G	56.54	74.00	-17.46	30.78	3	Horizontal	31	1.98	-
AV	2.3722G	43.95	54.00	-10.05	30.74	3	Horizontal	31	1.98	-
PK	2.455G	114.93	Inf	-Inf	30.92	3	Horizontal	31	1.98	-
AV	2.4546G	104.15	Inf	-Inf	30.92	3	Horizontal	31	1.98	-
PK	2.4842G	70.12	74.00	-3.88	30.96	3	Horizontal	31	1.98	-
AV	2.4846G	51.42	54.00	-2.58	30.96	3	Horizontal	31	1.98	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

25/04/2019



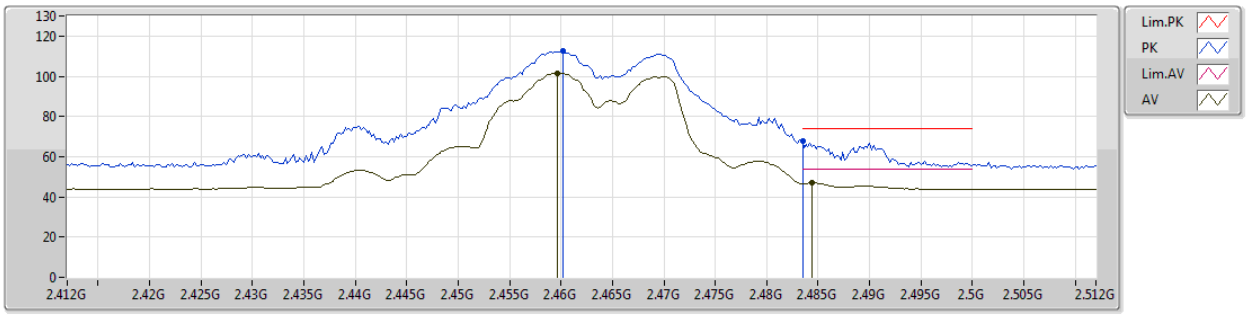
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.4602G	112.99	Inf	-Inf	30.93	3	Vertical	355	1.76	-
AV	2.4604G	101.65	Inf	-Inf	30.93	3	Vertical	355	1.76	-
PK	2.4835G	73.51	74.00	-0.49	30.96	3	Vertical	355	1.76	-
AV	2.4835G	51.45	54.00	-2.55	30.96	3	Vertical	355	1.76	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

25/04/2019



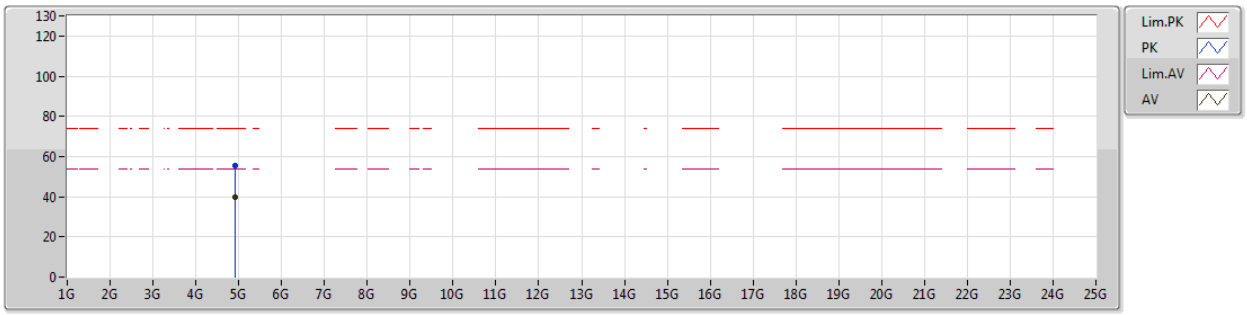
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.4602G	112.69	Inf	-Inf	30.93	3	Horizontal	31	1.93	-
AV	2.4596G	101.49	Inf	-Inf	30.93	3	Horizontal	31	1.93	-
PK	2.4835G	67.65	74.00	-6.35	30.96	3	Horizontal	31	1.93	-
AV	2.4844G	46.91	54.00	-7.09	30.96	3	Horizontal	31	1.93	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

25/04/2019



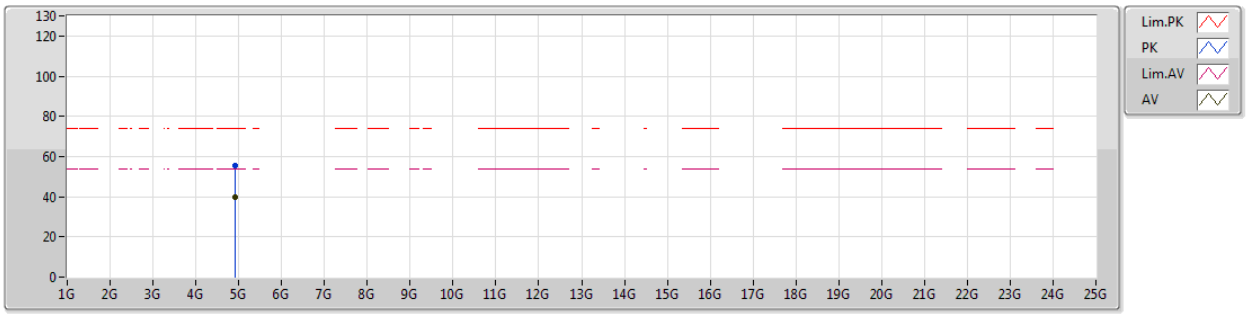
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.9231G	55.43	74.00	-18.57	4.04	3	Vertical	64	1.88	-
AV	4.9229G	39.97	54.00	-14.03	4.04	3	Vertical	64	1.88	-

802.11n HT20_Nss1,(MCS0)_3TX

2462MHz_TX

25/04/2019



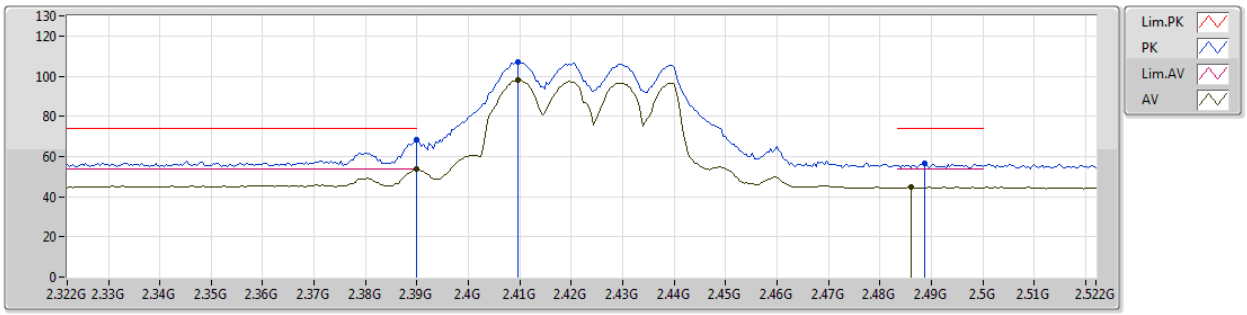
EUT Y_3TX
Setting 16
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.9232G	55.33	74.00	-18.67	4.04	3	Horizontal	75	1.28	-
AV	4.9238G	39.97	54.00	-14.03	4.04	3	Horizontal	75	1.28	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

25/04/2019



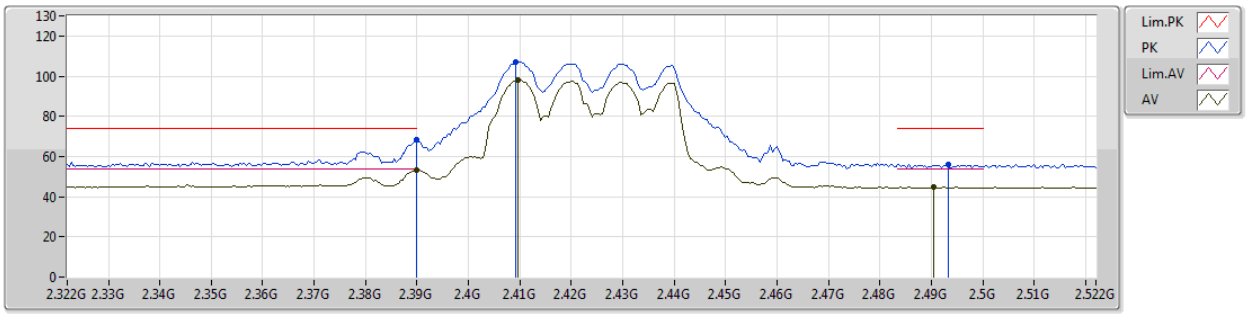
EUT Y_3TX
Setting 14
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.39G	68.22	74.00	-5.78	30.80	3	Vertical	24	1.96	-
AV	2.39G	53.55	54.00	-0.45	30.80	3	Vertical	24	1.96	-
PK	2.4096G	106.78	Inf	-Inf	30.85	3	Vertical	24	1.96	-
AV	2.4096G	97.82	Inf	-Inf	30.85	3	Vertical	24	1.96	-
PK	2.4888G	56.35	74.00	-17.65	30.97	3	Vertical	24	1.96	-
AV	2.486G	44.78	54.00	-9.22	30.97	3	Vertical	24	1.96	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

25/04/2019



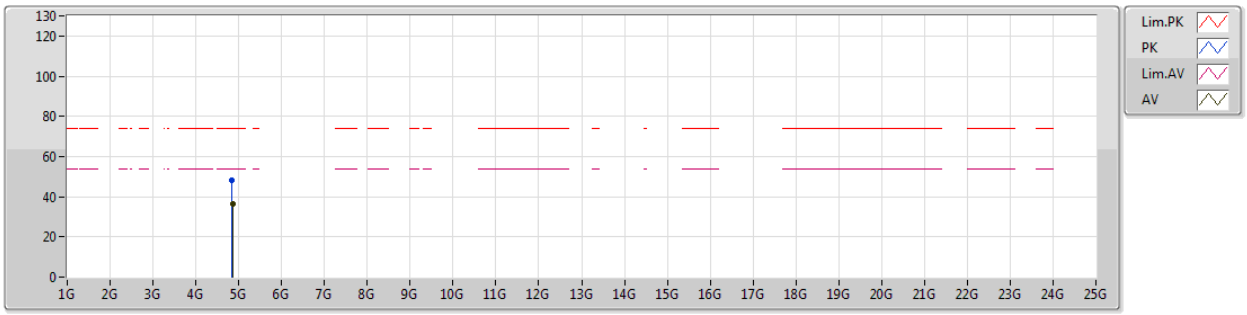
EUT Y_3TX
Setting 14
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.39G	68.31	74.00	-5.69	30.80	3	Horizontal	31	1.98	-
AV	2.39G	53.23	54.00	-0.77	30.80	3	Horizontal	31	1.98	-
PK	2.4092G	106.98	Inf	-Inf	30.85	3	Horizontal	31	1.98	-
AV	2.4096G	97.82	Inf	-Inf	30.85	3	Horizontal	31	1.98	-
PK	2.4932G	56.28	74.00	-17.72	30.98	3	Horizontal	31	1.98	-
AV	2.4904G	44.94	54.00	-9.06	30.98	3	Horizontal	31	1.98	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

25/04/2019



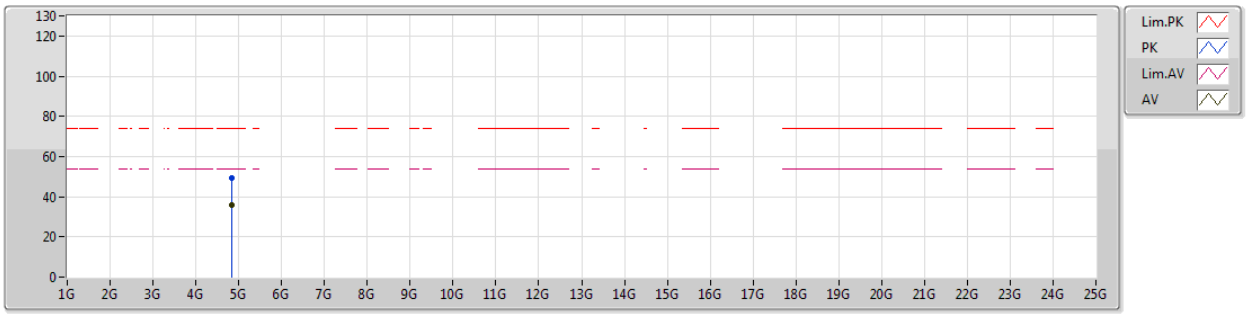
EUT Y_3TX
Setting 14
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.843G	48.28	74.00	-25.72	3.67	3	Vertical	119	2.44	-
AV	4.8534G	36.26	54.00	-17.74	3.72	3	Vertical	119	2.44	-

802.11n HT40_Nss1,(MCS0)_3TX

2422MHz_TX

25/04/2019



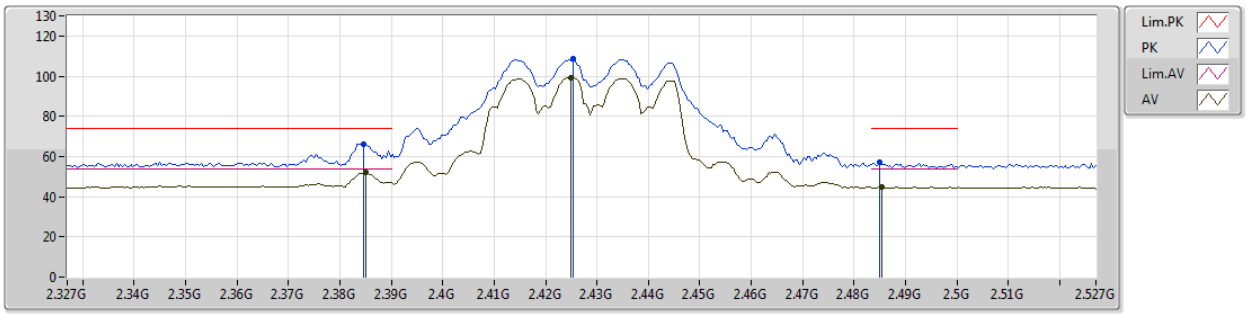
EUT Y_3TX
Setting 14
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	4.8431G	49.41	74.00	-24.59	3.67	3	Horizontal	119	1.62	-
AV	4.8436G	36.05	54.00	-17.95	3.67	3	Horizontal	119	1.62	-

802.11n HT40_Nss1,(MCS0)_3TX

2427MHz_TX

25/04/2019



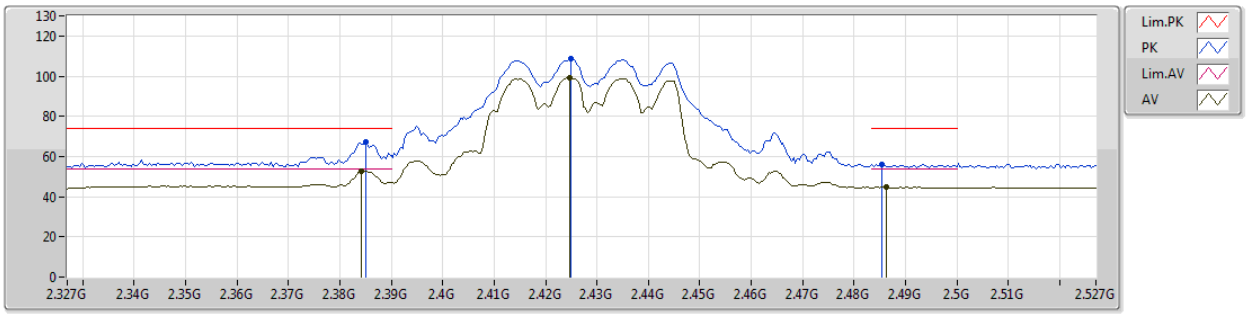
EUT Y_3TX
Setting 15.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3846G	66.25	74.00	-7.75	30.78	3	Vertical	32	1.58	-
AV	2.385G	52.03	54.00	-1.97	30.79	3	Vertical	32	1.58	-
PK	2.4254G	108.93	Inf	-Inf	30.88	3	Vertical	32	1.58	-
AV	2.425G	99.25	Inf	-Inf	30.88	3	Vertical	32	1.58	-
PK	2.485G	56.95	74.00	-17.05	30.97	3	Vertical	32	1.58	-
AV	2.4854G	45.00	54.00	-9.00	30.97	3	Vertical	32	1.58	-

802.11n HT40_Nss1,(MCS0)_3TX

2427MHz_TX

25/04/2019



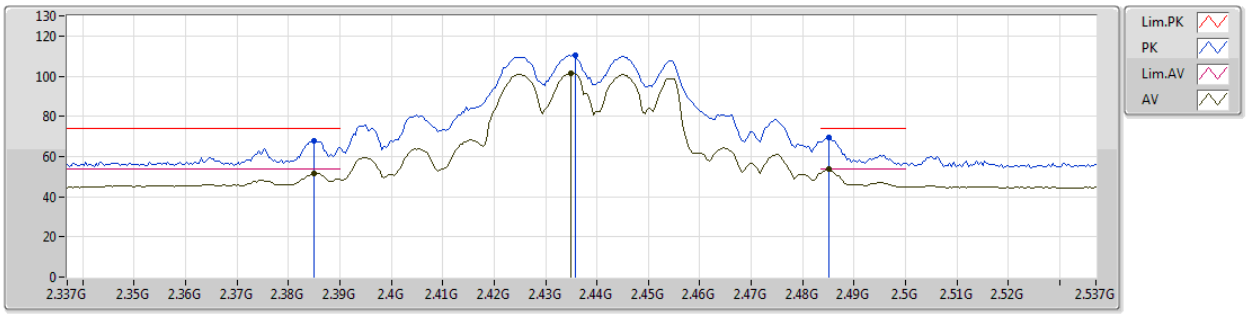
EUT Y_3TX
Setting 15.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.385G	67.31	74.00	-6.69	30.79	3	Horizontal	32	1.76	-
AV	2.3842G	52.90	54.00	-1.10	30.78	3	Horizontal	32	1.76	-
PK	2.425G	108.83	Inf	-Inf	30.88	3	Horizontal	32	1.76	-
AV	2.4246G	99.36	Inf	-Inf	30.87	3	Horizontal	32	1.76	-
PK	2.4854G	56.25	74.00	-17.75	30.97	3	Horizontal	32	1.76	-
AV	2.4862G	44.85	54.00	-9.15	30.97	3	Horizontal	32	1.76	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



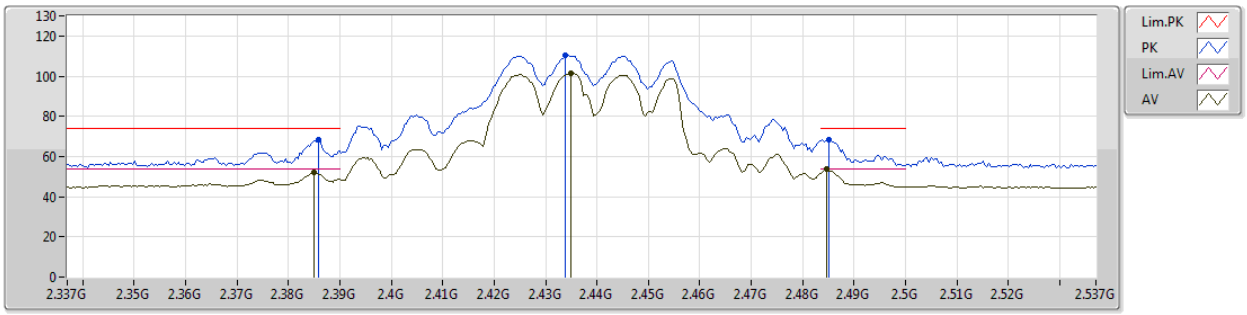
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.385G	67.64	74.00	-6.36	30.79	3	Vertical	32	2.18	-
AV	2.385G	51.74	54.00	-2.26	30.79	3	Vertical	32	2.18	-
PK	2.4358G	110.29	Inf	-Inf	30.90	3	Vertical	32	2.18	-
AV	2.435G	101.48	Inf	-Inf	30.89	3	Vertical	32	2.18	-
PK	2.485G	69.39	74.00	-4.61	30.97	3	Vertical	32	2.18	-
AV	2.485G	53.52	54.00	-0.48	30.97	3	Vertical	32	2.18	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



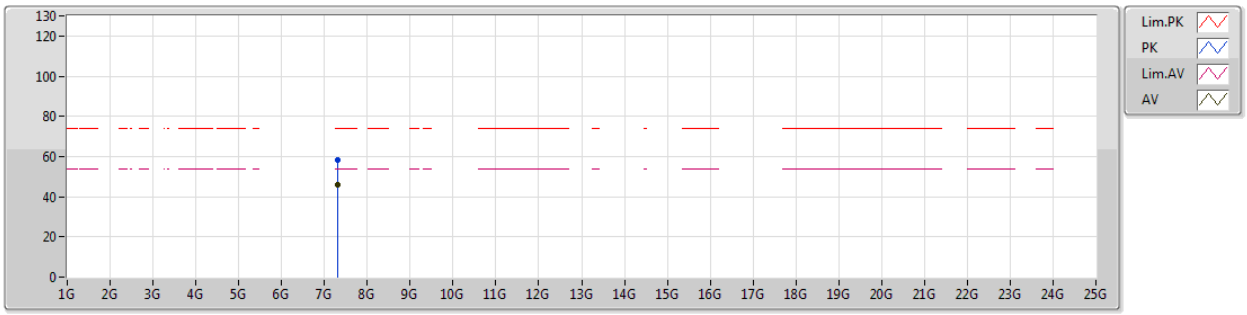
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3858G	68.37	74.00	-5.63	30.79	3	Horizontal	29	2.19	-
AV	2.385G	51.85	54.00	-2.15	30.79	3	Horizontal	29	2.19	-
PK	2.4338G	110.29	Inf	-Inf	30.89	3	Horizontal	29	2.19	-
AV	2.435G	101.37	Inf	-Inf	30.89	3	Horizontal	29	2.19	-
PK	2.485G	68.55	74.00	-5.45	30.97	3	Horizontal	29	2.19	-
AV	2.4846G	53.53	54.00	-0.47	30.96	3	Horizontal	29	2.19	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



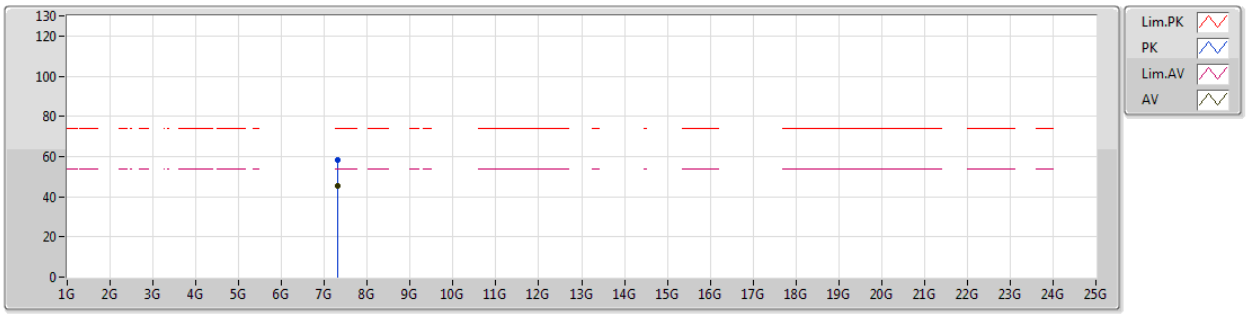
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.3048G	58.33	74.00	-15.67	9.25	3	Vertical	155	1.46	-
AV	7.3147G	45.77	54.00	-8.23	9.25	3	Vertical	155	1.46	-

802.11n HT40_Nss1,(MCS0)_3TX

2437MHz_TX

25/04/2019



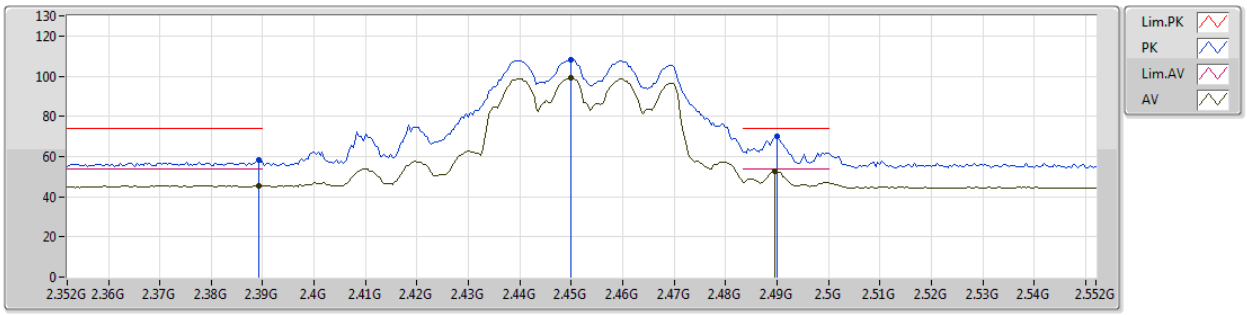
EUT Y_3TX
Setting 17.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.315G	58.35	74.00	-15.65	9.25	3	Horizontal	154	1.45	-
AV	7.3146G	45.52	54.00	-8.48	9.25	3	Horizontal	154	1.45	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

25/04/2019



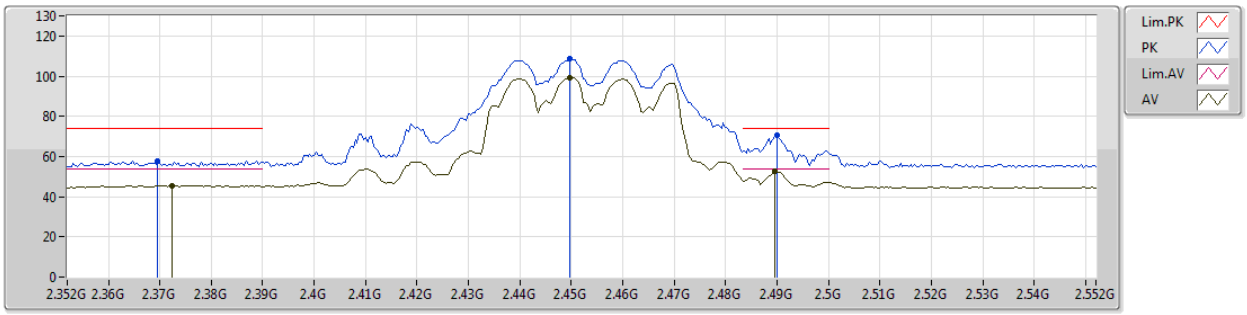
EUT Y_3TX
Setting 15.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3892G	58.09	74.00	-15.91	30.80	3	Vertical	30	1.99	-
AV	2.3892G	45.54	54.00	-8.46	30.80	3	Vertical	30	1.99	-
PK	2.45G	107.92	Inf	-Inf	30.92	3	Vertical	30	1.99	-
AV	2.45G	99.17	Inf	-Inf	30.92	3	Vertical	30	1.99	-
PK	2.49G	70.00	74.00	-4.00	30.98	3	Vertical	30	1.99	-
AV	2.4896G	52.51	54.00	-1.49	30.97	3	Vertical	30	1.99	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

25/04/2019



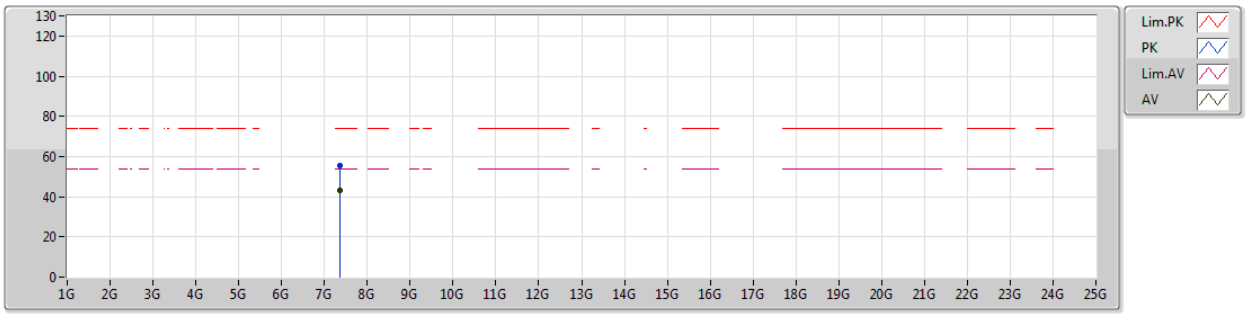
EUT Y_3TX
Setting 15.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	2.3696G	57.70	74.00	-16.30	30.73	3	Horizontal	32	1.98	-
AV	2.3724G	45.59	54.00	-8.41	30.74	3	Horizontal	32	1.98	-
PK	2.4496G	108.50	Inf	-Inf	30.91	3	Horizontal	32	1.98	-
AV	2.4496G	99.36	Inf	-Inf	30.91	3	Horizontal	32	1.98	-
PK	2.49G	70.48	74.00	-3.52	30.98	3	Horizontal	32	1.98	-
AV	2.4896G	52.52	54.00	-1.48	30.97	3	Horizontal	32	1.98	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

25/04/2019



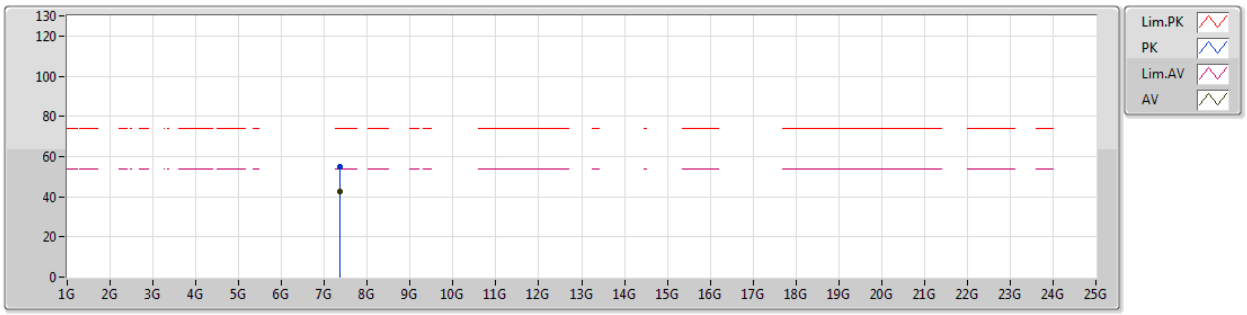
EUT Y_3TX
Setting 15.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.357G	55.72	74.00	-18.28	9.25	3	Vertical	152	1.39	-
AV	7.3581G	42.92	54.00	-11.08	9.25	3	Vertical	152	1.39	-

802.11n HT40_Nss1,(MCS0)_3TX

2452MHz_TX

25/04/2019



EUT Y_3TX
Setting 15.5
01-C-5
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	7.3587G	55.16	74.00	-18.84	9.25	3	Horizontal	153	1.46	-
AV	7.3591G	42.37	54.00	-11.63	9.25	3	Horizontal	153	1.46	-