



FCC RADIO TEST REPORT

FCC ID : TE7P9
Equipment : AC1200 + AV1000 Whole Home Powerline Mesh Wi-Fi System
Brand Name : tp-link
Model Name : Deco P9
Applicant : TP-Link Technologies Co., Ltd.
Building 24 (floors 1,3,4,5) and 28 (floors1-4)
Central Science and Technology Park,Nanshan,
Shenzhen,China,518057
Manufacturer : TP-Link Technologies Co., Ltd.
Building 24 (floors 1,3,4,5) and 28 (floors1-4)
Central Science and Technology Park,Nanshan,
Shenzhen,China,518057
Standard : 47 CFR FCC Part 15.247

The product was received on Jun. 17, 2019, and testing was started from Jul. 19, 2019 and completed on Aug. 23, 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: Cliff Chang

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



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History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB Ver1.0

Page Number : 3 of 27
Issued Date : Sep. 09, 2019
Report Version : 01



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: Wendy Pan



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	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ 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)	
	2.4GHz	5GHz					2.4GHz	5GHz
1	2	1	tp-link	P9	Monopole	N/A	1.5	1
2	1	2	tp-link	P9	Monopole	N/A	1.5	1

Note: The above information was declared by manufacturer.

For 2.4GHz function:

For IEEE 802.11b/g/n mode (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11a/n/ac mode (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.997	0.01	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11g	0.978	0.1	2.031m	1k
802.11n HT20	0.976	0.11	1.894m	1k
802.11n HT40	0.963	0.16	932.5u	3k

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	Internal Power Supply			
Beamforming Function	☒	With beamforming for 802.11n/ac in 5GHz.	☐	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	cart.exe			

Note: The above information was declared by manufacturer.



1.2 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
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location				
☐	HWA YA	ADD	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL	886-3-327-3456	FAX : 886-3-327-0973
☒	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	TH02-CB	Owen Hsu	24.4~26.9°C / 63~65%	Jul. 20, 2019 ~ Aug. 16, 2019
Radiated<1GHz	03CH05-CB	Stim Sung	25.4~27.3°C / 62~66%	Jul. 19, 2019 ~ Aug. 19, 2019
Radiated>1GHz	03CH06-CB	Stim Sung	24.7~26.5°C / 64~68%	Jul. 19, 2019 ~ Aug. 19, 2019
AC Conduction	CO02-CB	Peter Wu	23.5~24.7°C / 48~57%	Jul. 19, 2019 ~ Aug. 23, 2019

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086B with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	23
2417MHz	25
2437MHz	28
2457MHz	22
2462MHz	21
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	19.5
2417MHz	21
2437MHz	26.5
2457MHz	20.5
2462MHz	18.5
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	19
2417MHz	20.5
2437MHz	26.5
2457MHz	21
2462MHz	18.5
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	16
2427MHz	18
2437MHz	20
2447MHz	18
2452MHz	17



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	Normal Link
1	EUT the PLC function with Idle mode (without data transmit)

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	EUT CTX – WLAN 2.4GHz
2	EUT CTX – WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA961308 for Co-location RF Exposure Evaluation.	

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



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			
Equipment Name	Brand Name	Model Name	Remark
Power cable*1	I-SHENG	SP-12N+IS-033C	Non-shielded,1.5m

2.5 Support Equipment

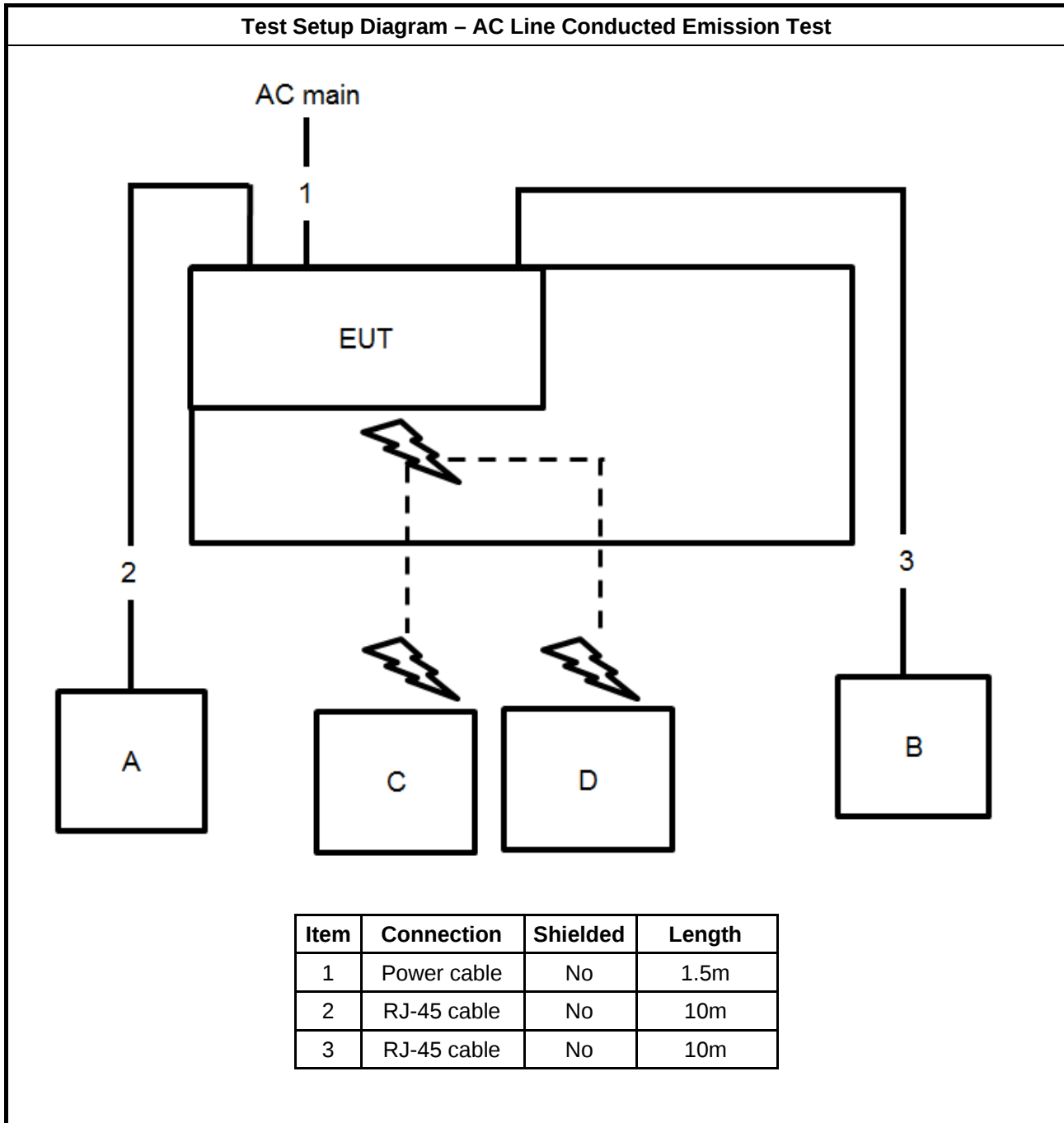
For AC Conduction:

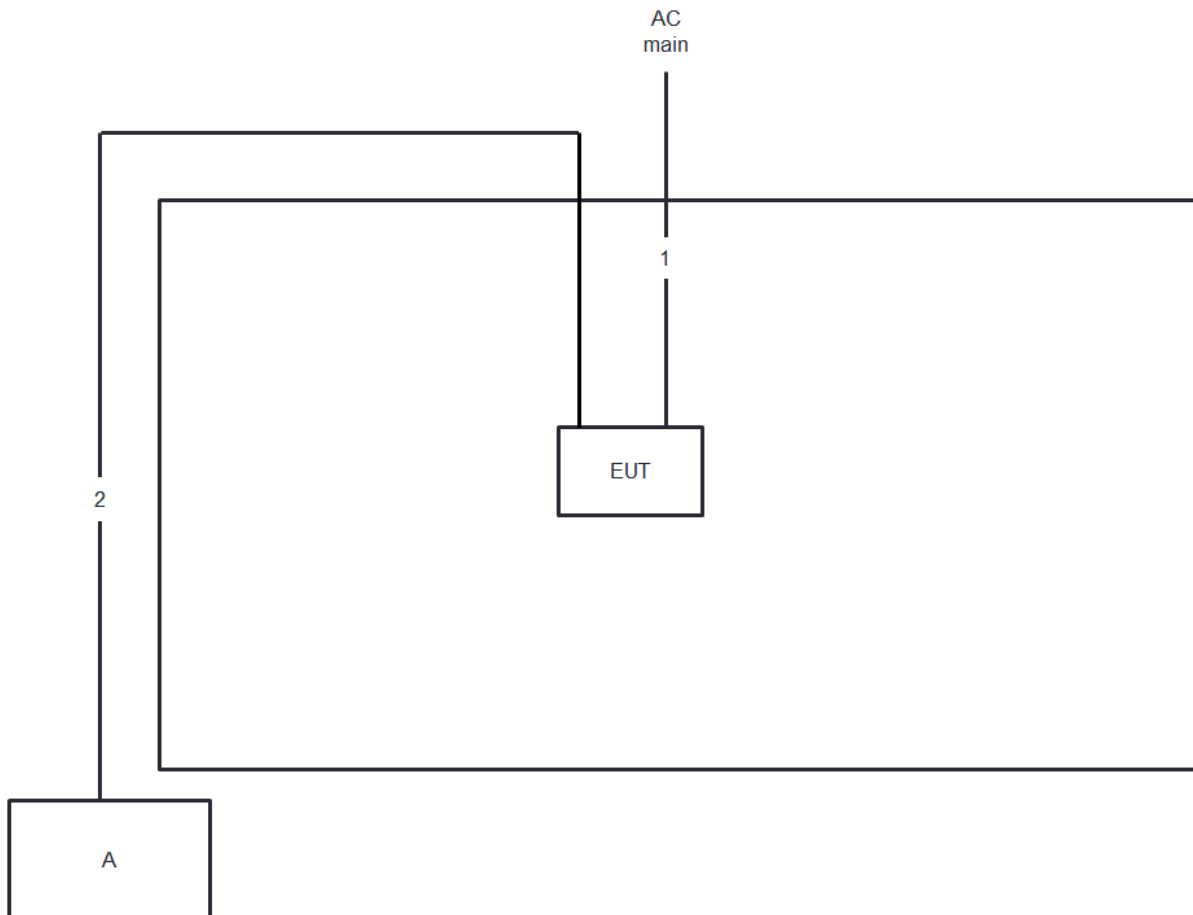
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E6430	N/A
B	AP Router	ASUS	RP-N53	MSQ-RPN53
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A

For Radiated and RF Conducted::

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

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m



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.

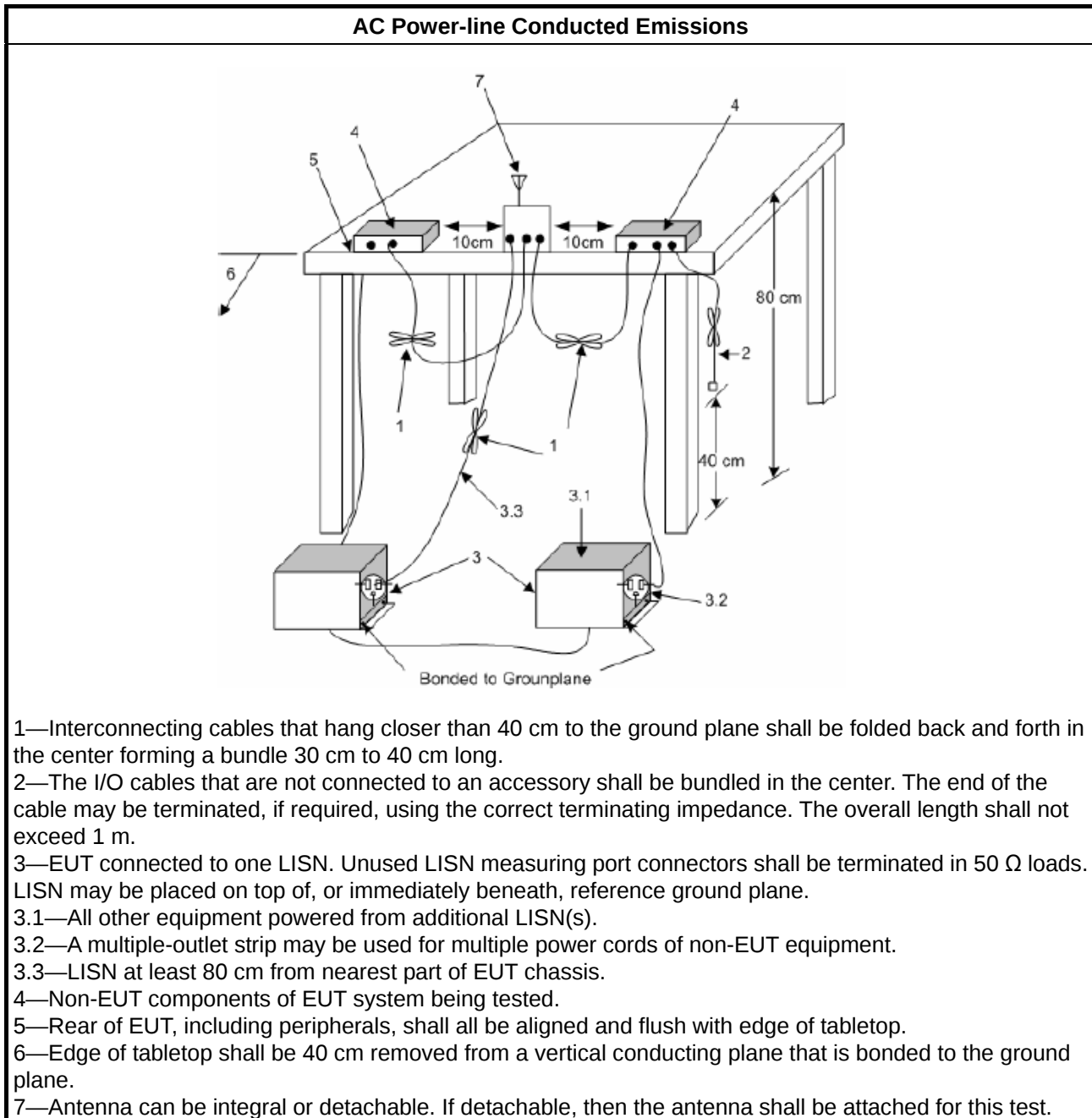
3.1.2 Measuring Instruments

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



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 $\geq$ 500 kHz.

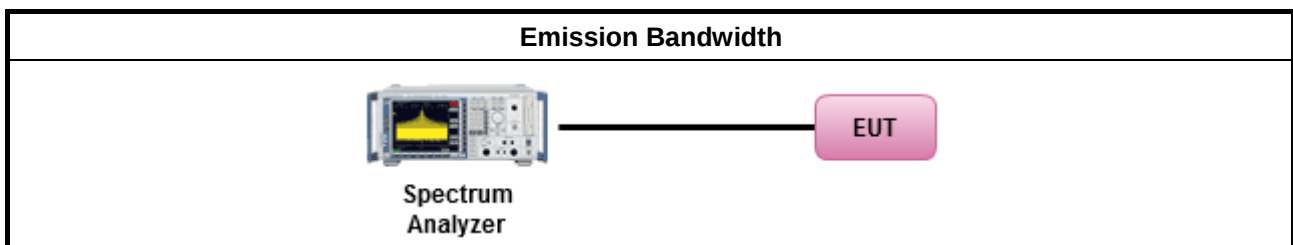
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as 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



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.	

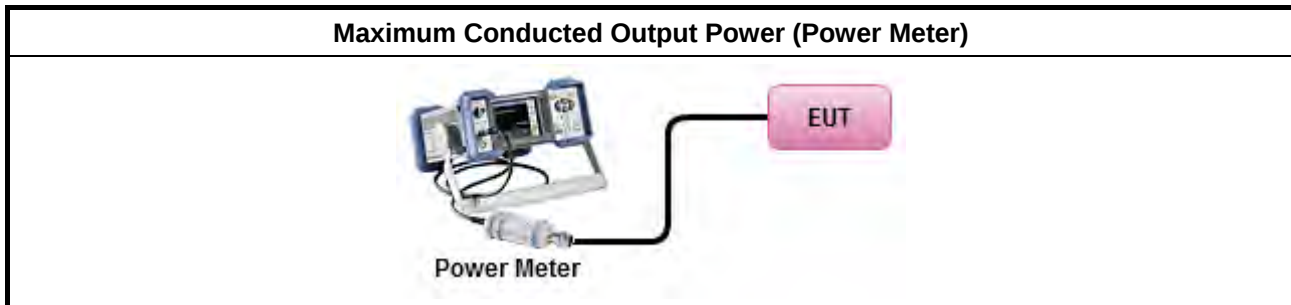
3.3.2 Measuring Instruments

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

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

3.4.2 Measuring Instruments

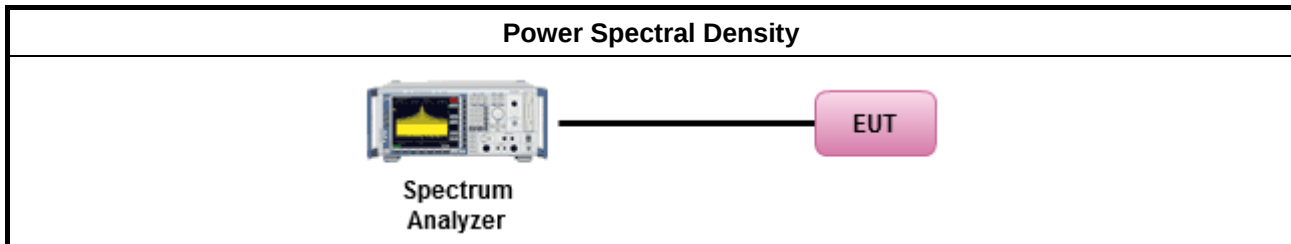
Refer a test equipment and calibration data table in this test report.

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 $\geq 98\%$ or external video / power trigger]
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.3 Method AVGPS-1.
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.5 Method AVGPS-2.
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.7 Method AVGPS-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 AVGPS-1A. (alternative).
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.6 Method AVGPS-2A. (alternative)
☐	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.8 Method AVGPS-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



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.	

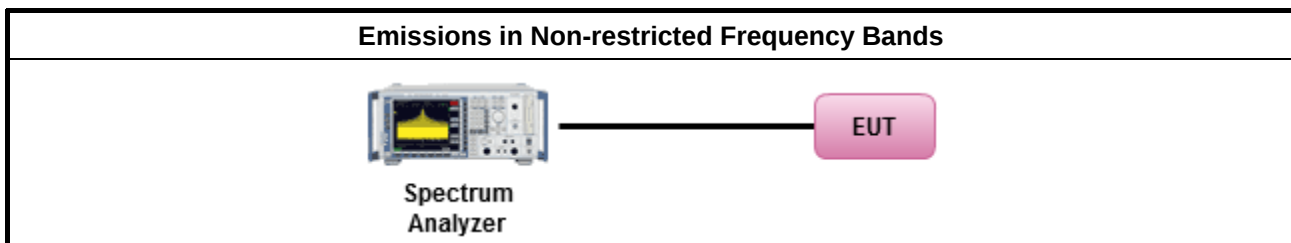
3.5.2 Measuring Instruments

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



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

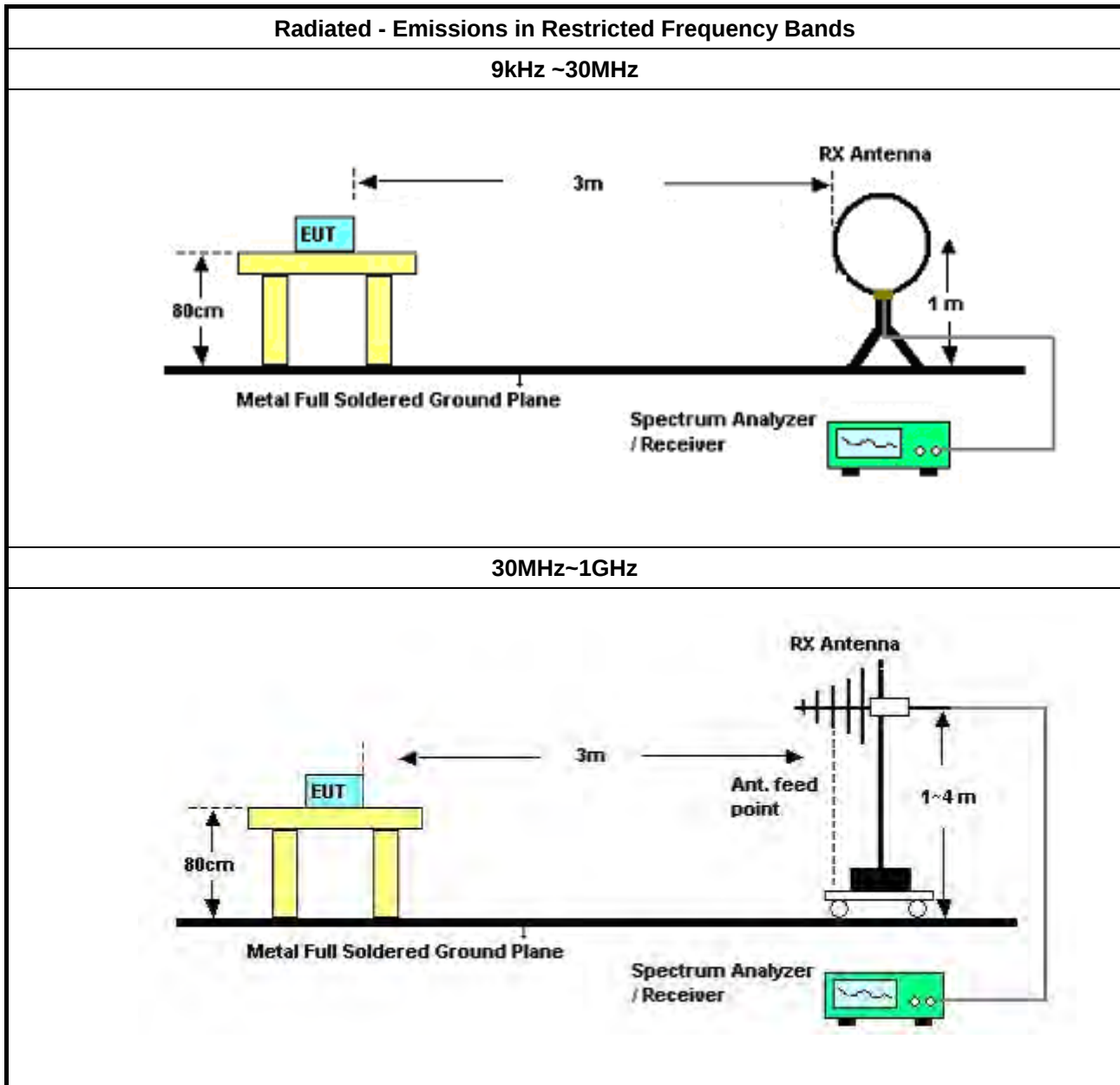
Refer a test equipment and calibration data table in this test report.

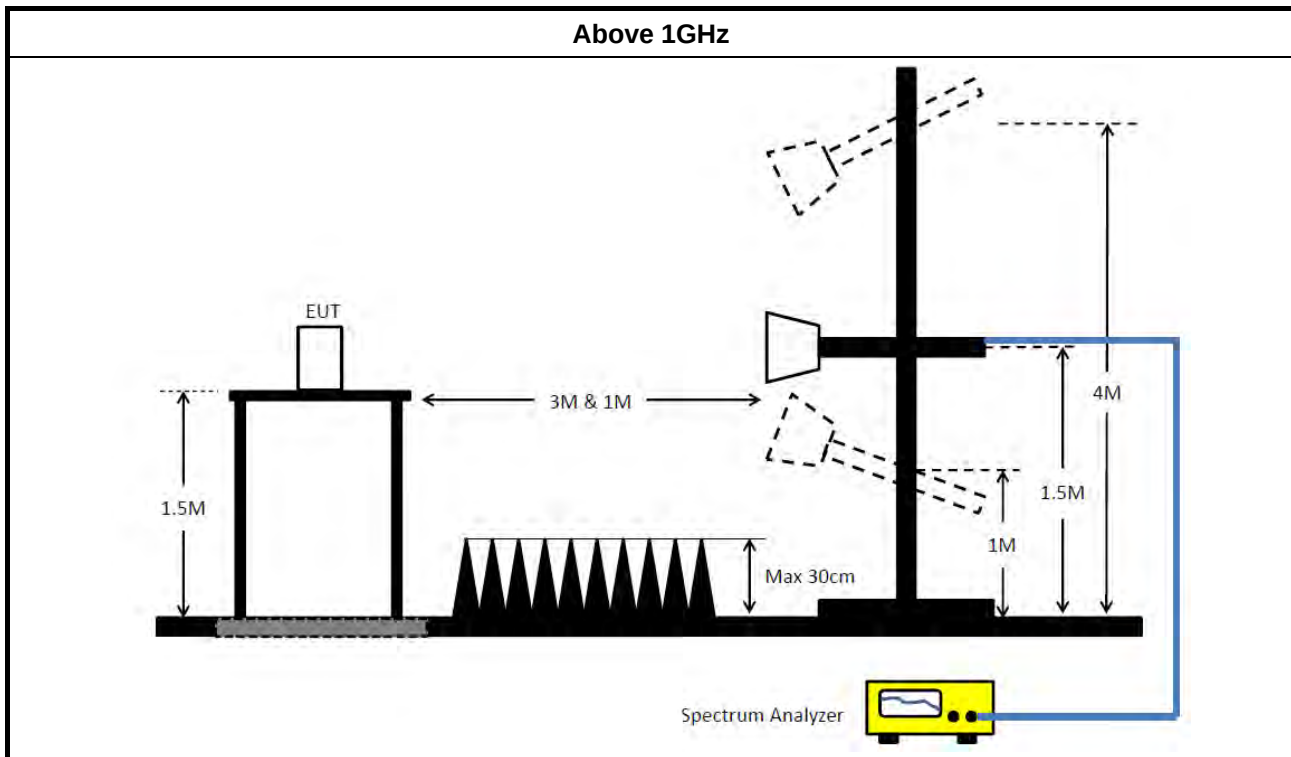


3.6.3 Test Procedures

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 $\geq 98\%$).
	☐ 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 $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, 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





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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.

3.6.7 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
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2018	Nov. 20, 2019	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 05, 2018	Nov. 04, 2019	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Jan. 16, 2019	Jan. 15, 2020	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Nov. 06, 2018	Nov. 05, 2019	Conduction (CO02-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Bilog Antenna with 6dB Attenuator	TESE & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 28, 2019	Mar. 27, 2020	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 02, 2019	May 01, 2020	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Jan. 31, 2019	Jan. 30, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 08, 2019	May 07, 2020	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)



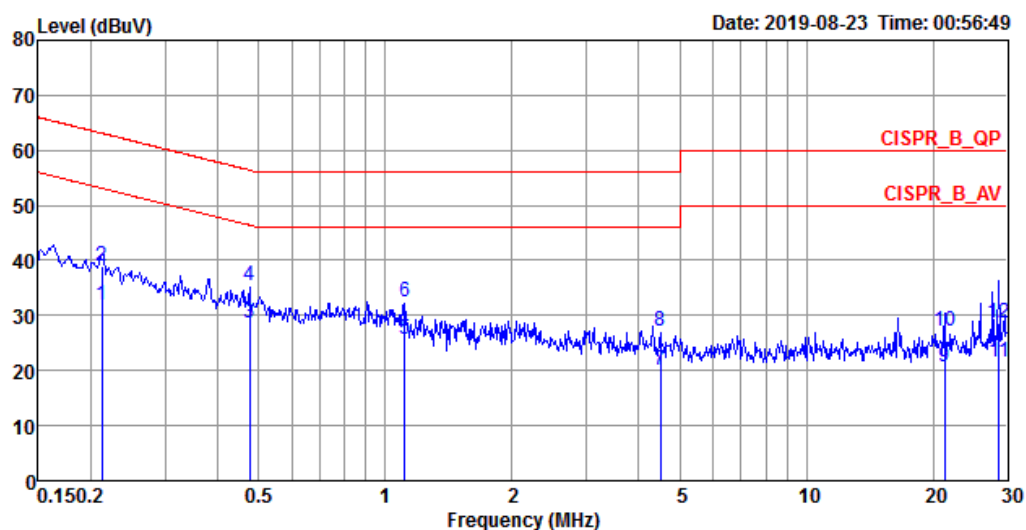
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 02, 2019	Jul. 01, 2020	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 03, 2018	Sep. 02, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 24, 2018	Oct. 23, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH02-CB)

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

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

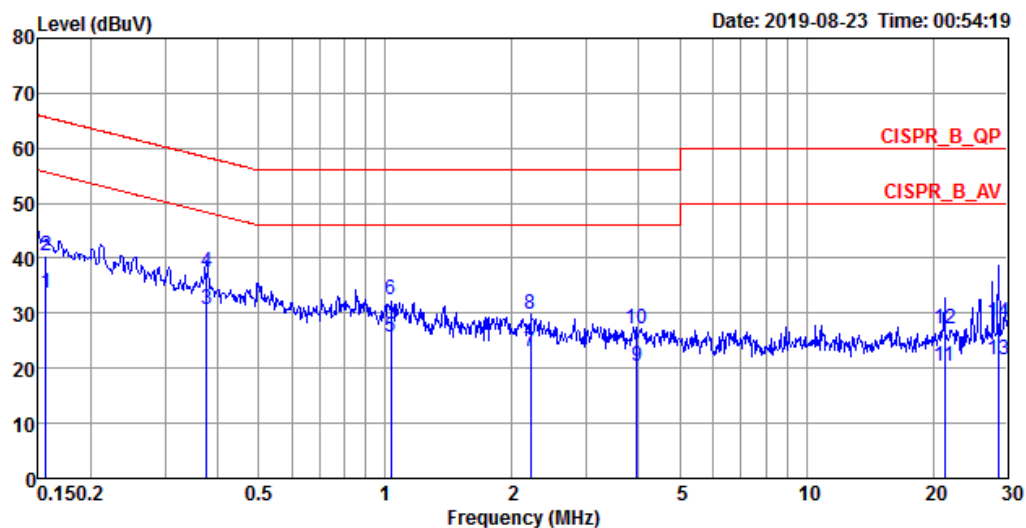
Test Mode	Mode 1	Frequency Range	0.15 MHz to 30 MHz
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Line



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.2128	32.03	-21.07	53.10	21.86	10.15	0.02	Average	LINE
2	0.2128	38.89	-24.21	63.10	28.72	10.15	0.02	QP	LINE
3	0.4761	28.61	-17.80	46.41	18.43	10.16	0.02	Average	LINE
4	0.4761	35.36	-21.05	56.41	25.18	10.16	0.02	QP	LINE
5	1.1114	25.63	-20.37	46.00	15.44	10.17	0.02	Average	LINE
6	1.1114	32.43	-23.57	56.00	22.24	10.17	0.02	QP	LINE
7	4.5015	20.20	-25.80	46.00	9.90	10.23	0.07	Average	LINE
8	4.5015	27.07	-28.93	56.00	16.77	10.23	0.07	QP	LINE
9	21.2596	20.53	-29.47	50.00	9.98	10.41	0.14	Average	LINE
10	21.2596	27.15	-32.85	60.00	16.60	10.41	0.14	QP	LINE
11	28.6030	21.65	-28.35	50.00	10.92	10.50	0.23	Average	LINE
12	28.6030	28.51	-31.49	60.00	17.78	10.50	0.23	QP	LINE

Neutral



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1565	33.59	-22.06	55.65	23.44	10.13	0.02	Average	NEUTRAL
2	0.1565	40.32	-25.33	65.65	30.17	10.13	0.02	QP	NEUTRAL
3	0.3771	30.60	-17.74	48.34	20.44	10.14	0.02	Average	NEUTRAL
4	0.3771	37.44	-20.90	58.34	27.28	10.14	0.02	QP	NEUTRAL
5	1.0320	25.63	-20.37	46.00	15.47	10.14	0.02	Average	NEUTRAL
6	1.0320	32.41	-23.59	56.00	22.25	10.14	0.02	QP	NEUTRAL
7	2.2132	23.16	-22.84	46.00	12.95	10.16	0.05	Average	NEUTRAL
8	2.2132	29.78	-26.22	56.00	19.57	10.16	0.05	QP	NEUTRAL
9	3.9639	20.31	-25.69	46.00	10.06	10.18	0.07	Average	NEUTRAL
10	3.9639	27.10	-28.90	56.00	16.85	10.18	0.07	QP	NEUTRAL
11	21.2596	20.45	-29.55	50.00	9.95	10.36	0.14	Average	NEUTRAL
12	21.2596	27.21	-32.79	60.00	16.71	10.36	0.14	QP	NEUTRAL
13	28.6030	21.67	-28.33	50.00	11.00	10.44	0.23	Average	NEUTRAL
14	28.6030	28.30	-31.70	60.00	17.63	10.44	0.23	QP	NEUTRAL

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)_2TX	10.075M	15.217M	15M2G1D	9.55M	13.843M
802.11g_Nss1,(6Mbps)_2TX	15.025M	17.916M	17M9D1D	13.825M	16.192M
802.11n HT20_Nss1,(MCS0)_2TX	15.075M	18.316M	18M3D1D	11.975M	17.341M
802.11n HT40_Nss1,(MCS0)_2TX	31.3M	35.832M	35M8D1D	26.25M	35.732M

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

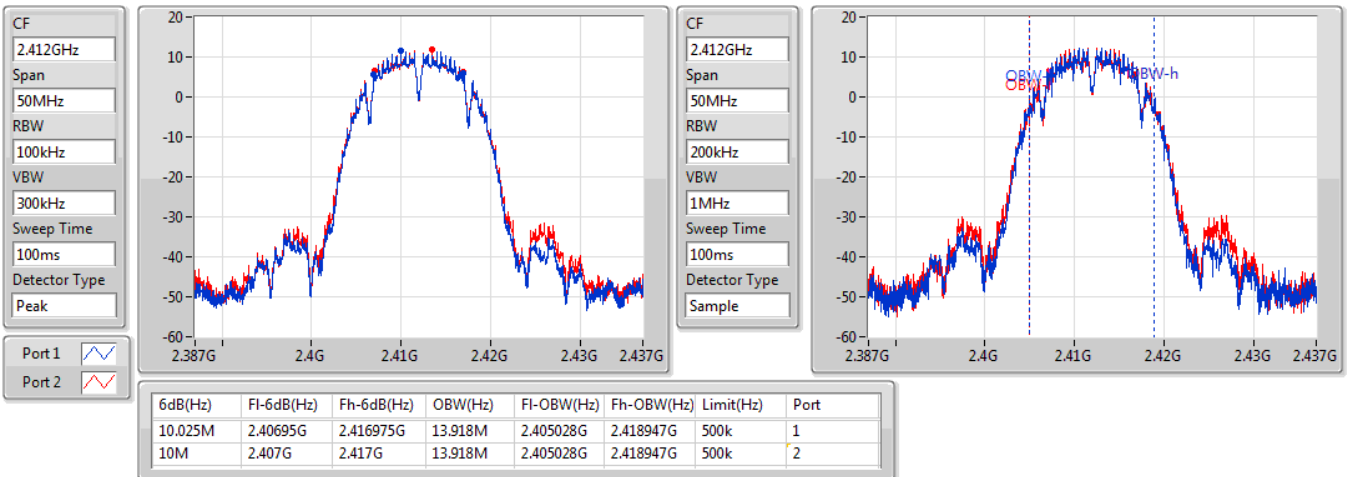
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	10.025M	13.918M	10M	13.918M
2437MHz	Pass	500k	10.075M	14.943M	10.075M	15.217M
2462MHz	Pass	500k	9.55M	13.843M	9.975M	13.918M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	14.95M	16.217M	14.975M	16.192M
2437MHz	Pass	500k	14.275M	17.391M	15.025M	17.916M
2462MHz	Pass	500k	15.025M	16.192M	13.825M	16.192M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.075M	17.341M	13.8M	17.341M
2437MHz	Pass	500k	11.975M	17.891M	13.85M	18.316M
2462MHz	Pass	500k	13.7M	17.366M	15M	17.341M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	27.6M	35.732M	31.25M	35.832M
2437MHz	Pass	500k	26.25M	35.732M	31.25M	35.832M
2452MHz	Pass	500k	31.25M	35.832M	31.3M	35.782M

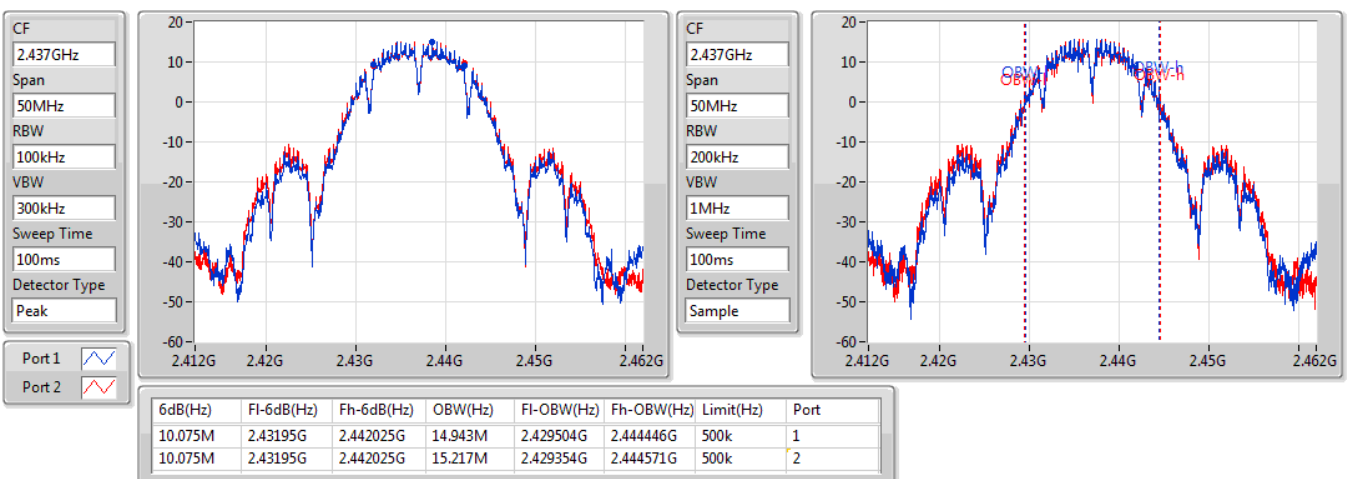
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

15/08/2019


802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

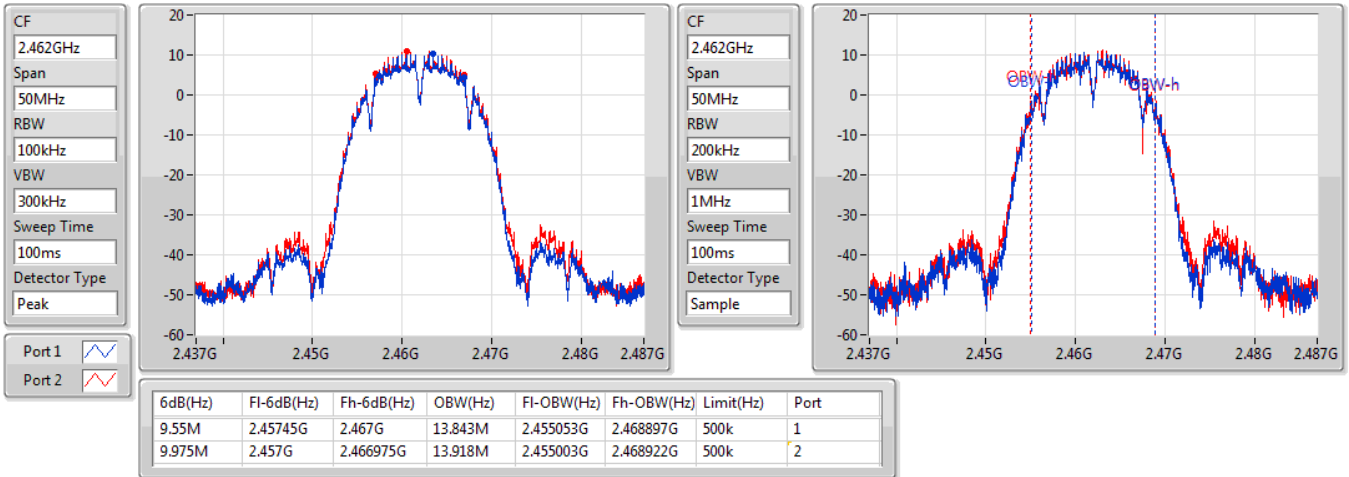
15/08/2019



802.11b_Nss1,(1Mbps)_2TX

EBW
2462MHz

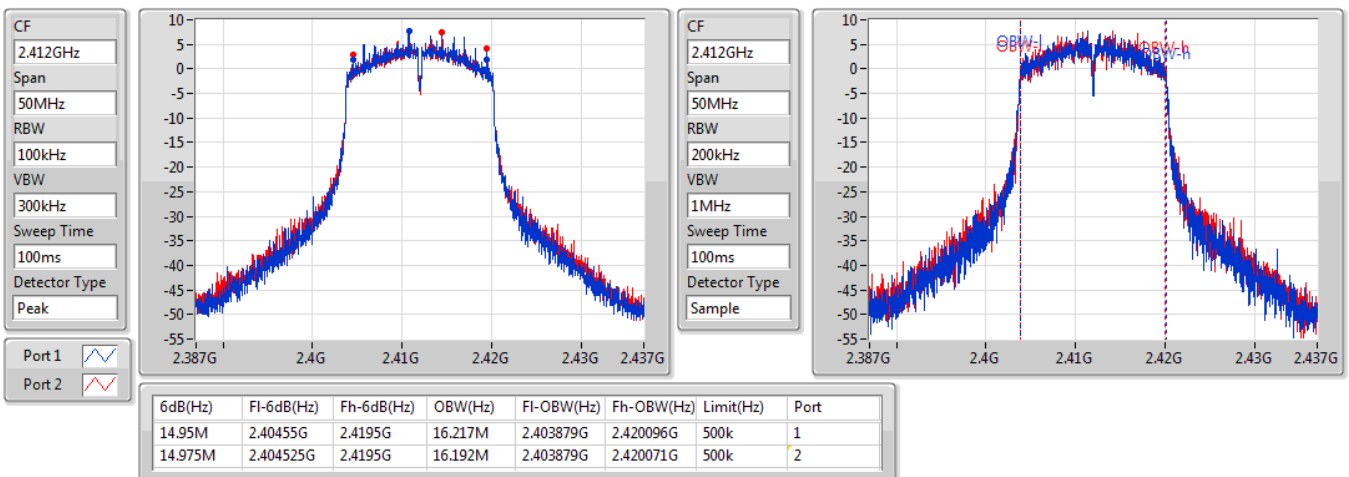
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802.11g_Nss1,(6Mbps)_2TX

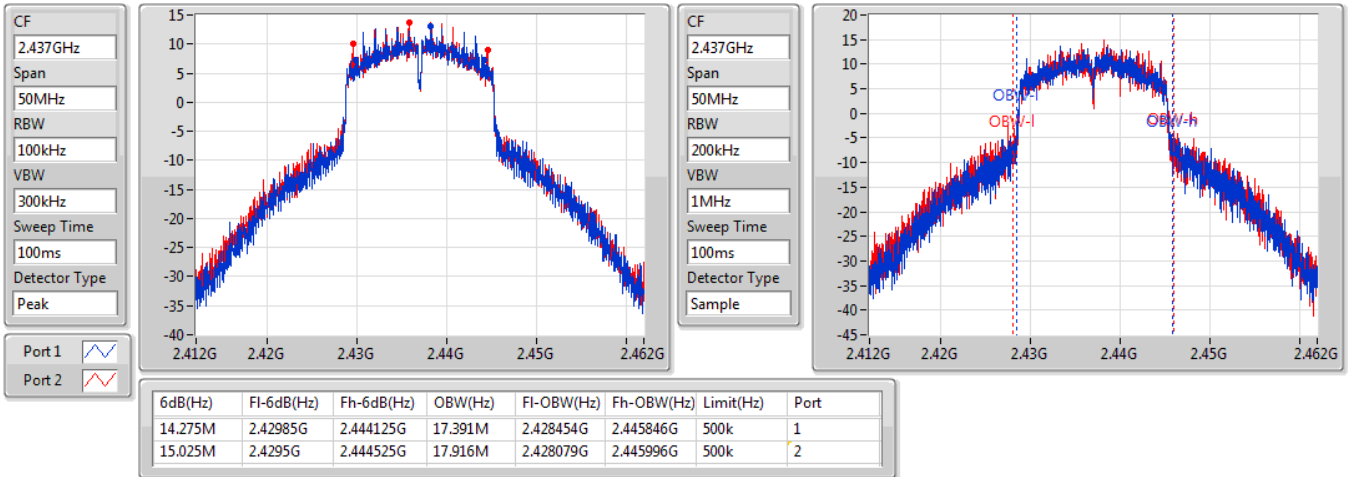
EBW
2412MHz

15/08/2019

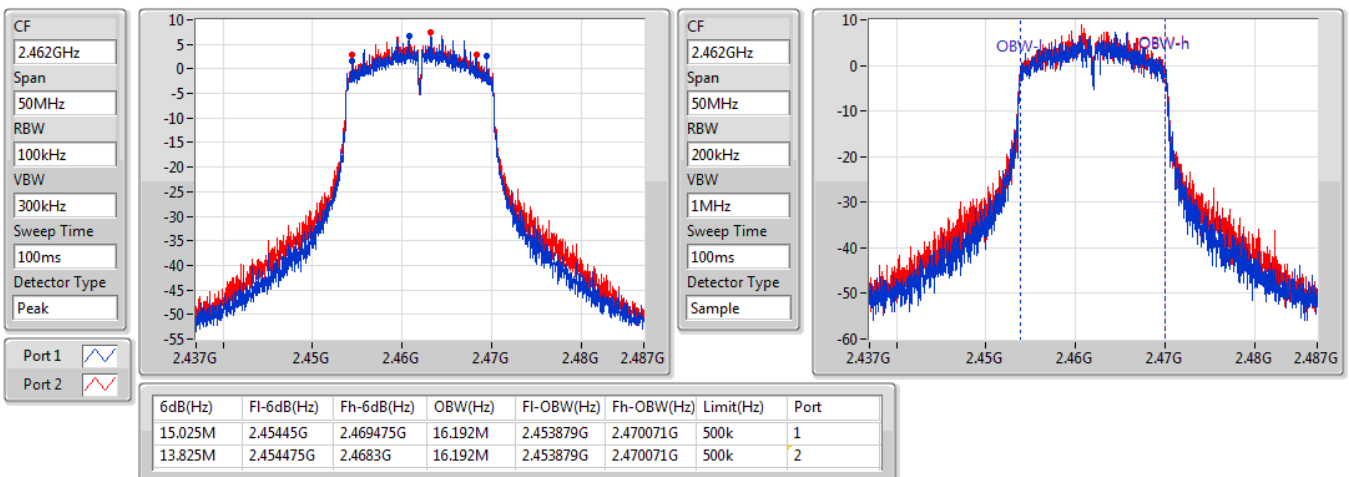


802.11g_Nss1,(6Mbps)_2TX
EBW
2437MHz

15/08/2019


802.11g_Nss1,(6Mbps)_2TX
EBW
2462MHz

15/08/2019

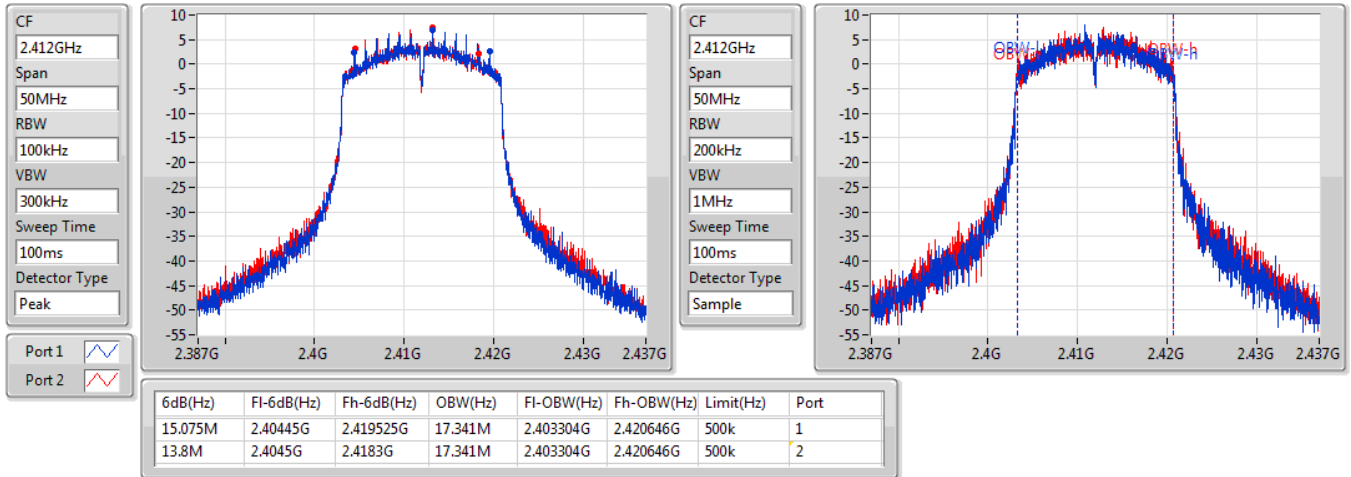


802.11n HT20_Nss1,(MCS0)_2TX

EBW

2412MHz

15/08/2019

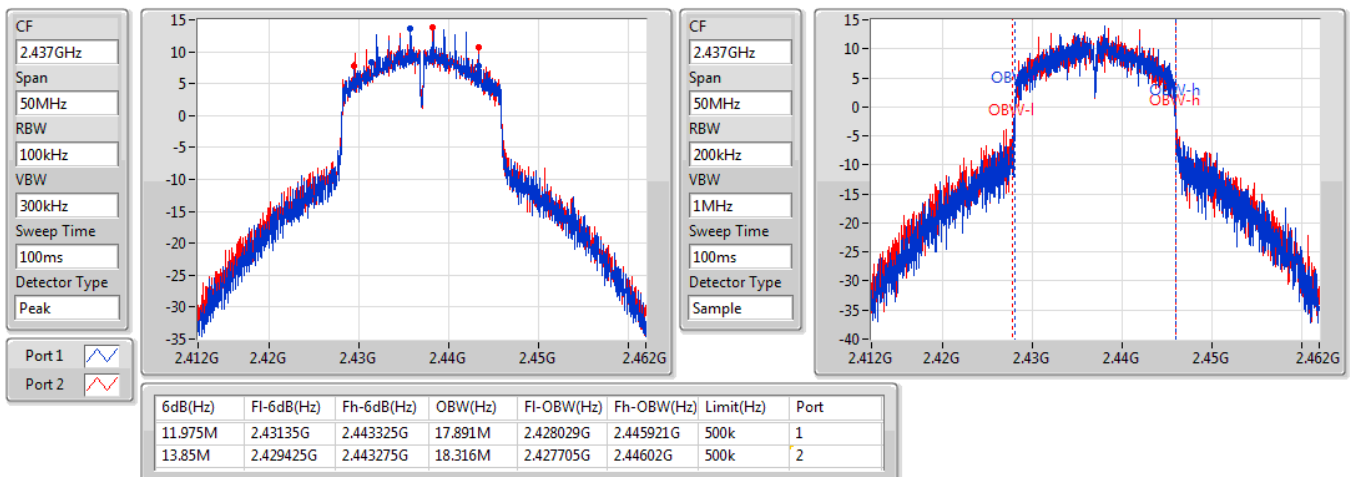


802.11n HT20_Nss1,(MCS0)_2TX

EBW

2437MHz

15/08/2019

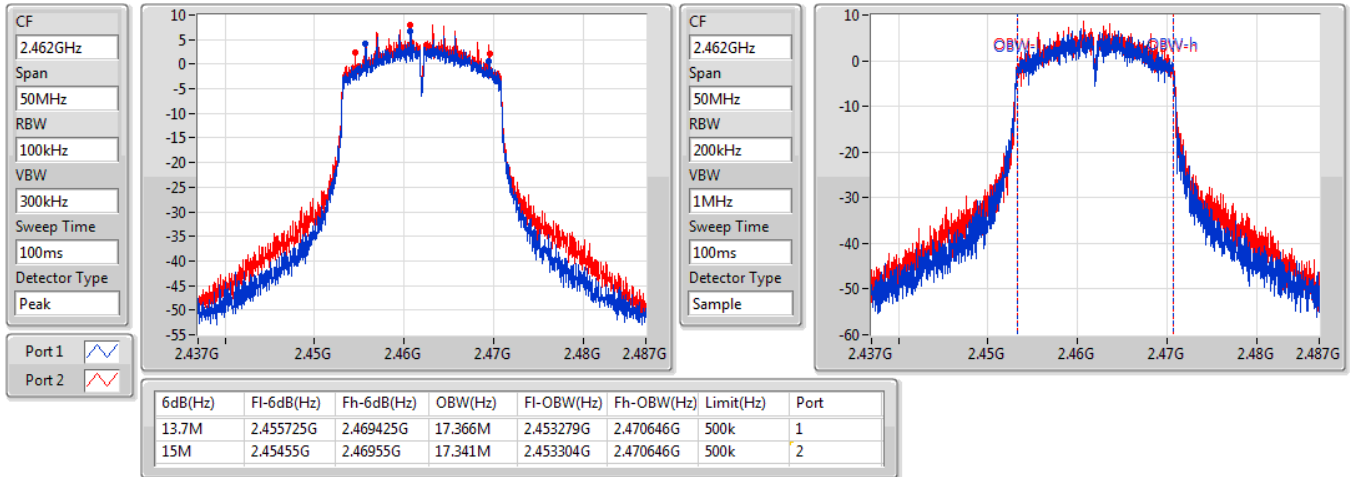


802.11n HT20_Nss1,(MCS0)_2TX

EBW

2462MHz

15/08/2019

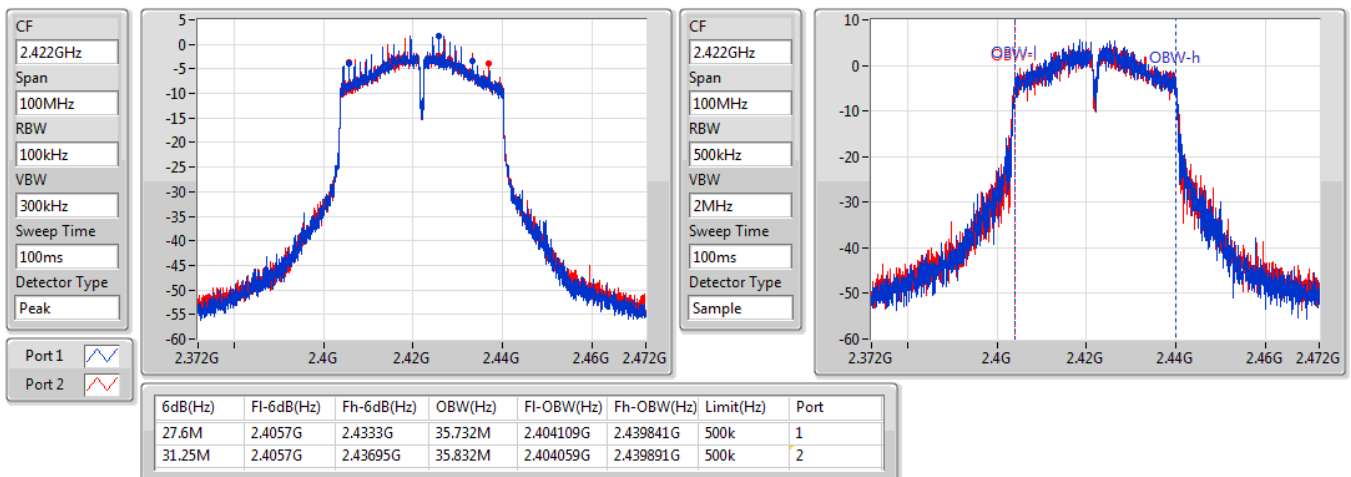


802.11n HT40_Nss1,(MCS0)_2TX

EBW

2422MHz

15/08/2019

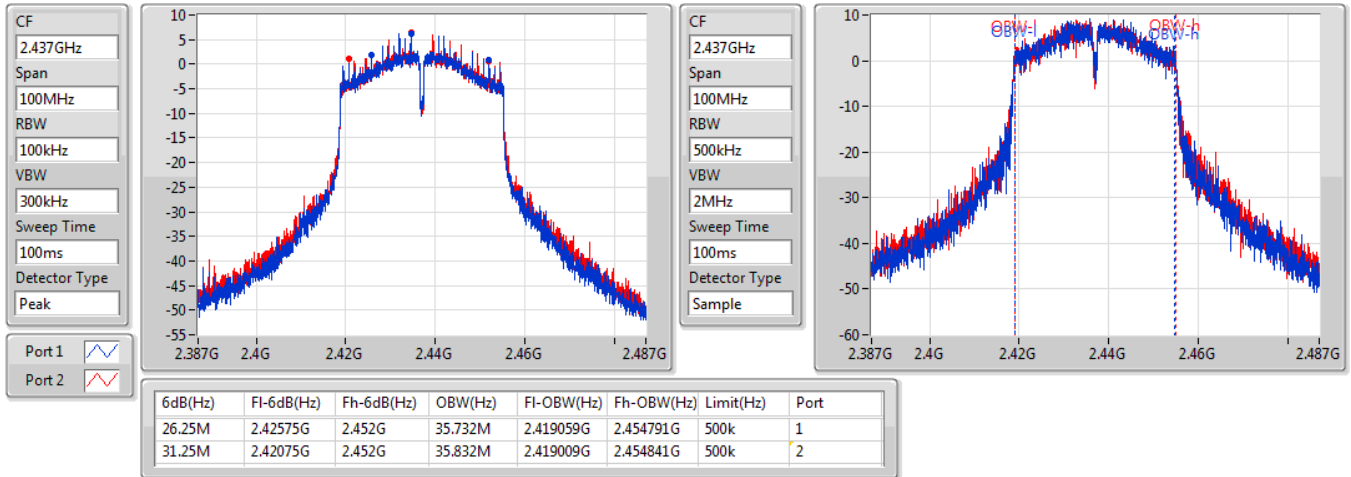


802.11n HT40_Nss1,(MCS0)_2TX

EBW

2437MHz

15/08/2019

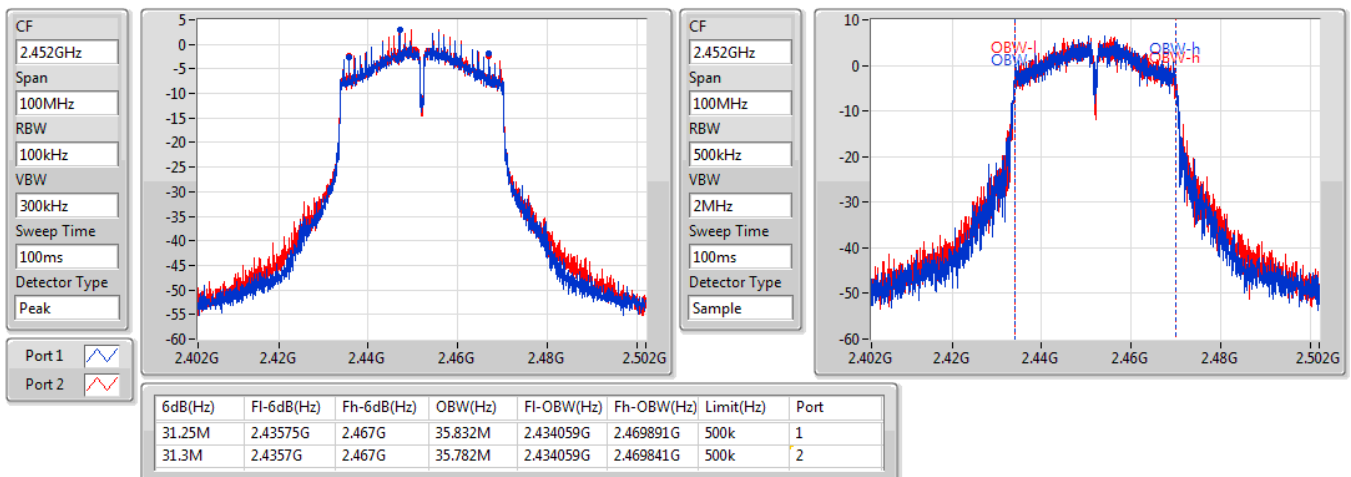


802.11n HT40_Nss1,(MCS0)_2TX

EBW

2452MHz

15/08/2019





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	28.77	0.75336
802.11g_Nss1,(6Mbps)_2TX	27.70	0.58884
802.11n HT20_Nss1,(MCS0)_2TX	27.42	0.55208
802.11n HT40_Nss1,(MCS0)_2TX	22.26	0.16827

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.50	22.46	22.31	25.40	30.00
2417MHz	Pass	1.50	23.77	23.82	26.81	30.00
2437MHz	Pass	1.50	25.73	25.78	28.77	30.00
2457MHz	Pass	1.50	21.25	21.81	24.55	30.00
2462MHz	Pass	1.50	20.38	20.96	23.69	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.50	18.87	19.13	22.01	30.00
2417MHz	Pass	1.50	20.21	20.29	23.26	30.00
2437MHz	Pass	1.50	24.67	24.71	27.70	30.00
2457MHz	Pass	1.50	20.46	20.57	23.53	30.00
2462MHz	Pass	1.50	18.08	18.69	21.41	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.50	18.43	18.36	21.41	30.00
2417MHz	Pass	1.50	19.54	19.99	22.78	30.00
2437MHz	Pass	1.50	24.36	24.45	27.42	30.00
2457MHz	Pass	1.50	20.14	20.61	23.39	30.00
2462MHz	Pass	1.50	18.18	18.83	21.53	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	1.50	14.92	15.05	18.00	30.00
2427MHz	Pass	1.50	16.81	17.20	20.02	30.00
2437MHz	Pass	1.50	19.15	19.34	22.26	30.00
2447MHz	Pass	1.50	17.18	17.37	20.29	30.00
2452MHz	Pass	1.50	16.43	16.40	19.43	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	3.34
802.11g_Nss1,(6Mbps)_2TX	1.47
802.11n HT20_Nss1,(MCS0)_2TX	1.42
802.11n HT40_Nss1,(MCS0)_2TX	-6.96

RBW=3 kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.51	-2.48	-2.54	0.50	8.00
2437MHz	Pass	4.51	1.04	0.84	3.34	8.00
2462MHz	Pass	4.51	-4.28	-3.62	-0.93	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.51	-5.04	-5.57	-3.26	8.00
2437MHz	Pass	4.51	0.43	0.24	1.47	8.00
2462MHz	Pass	4.51	-5.81	-6.63	-4.27	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.51	-6.78	-7.81	-5.57	8.00
2437MHz	Pass	4.51	-0.40	0.04	1.42	8.00
2462MHz	Pass	4.51	-6.39	-6.28	-3.68	8.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.51	-13.07	-11.87	-10.75	8.00
2437MHz	Pass	4.51	-8.25	-8.05	-6.96	8.00
2452MHz	Pass	4.51	-11.48	-10.15	-8.58	8.00

DG = Directional Gain; RBW=3 kHz;

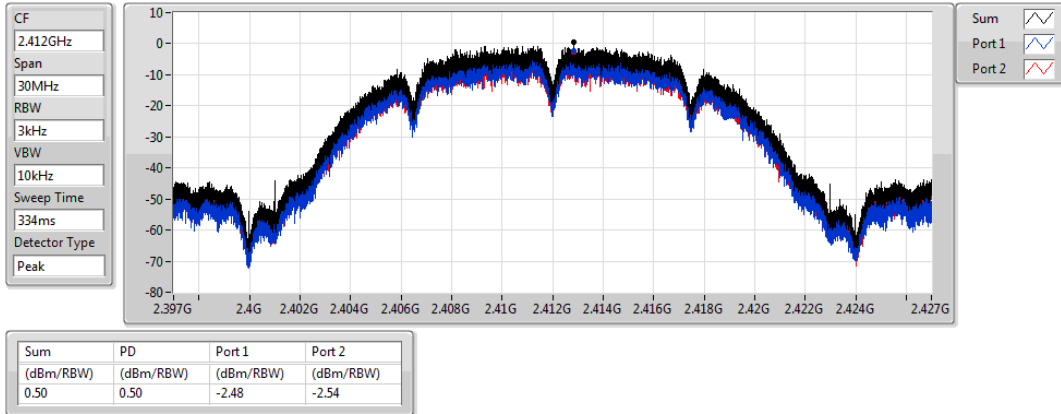
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

15/08/2019

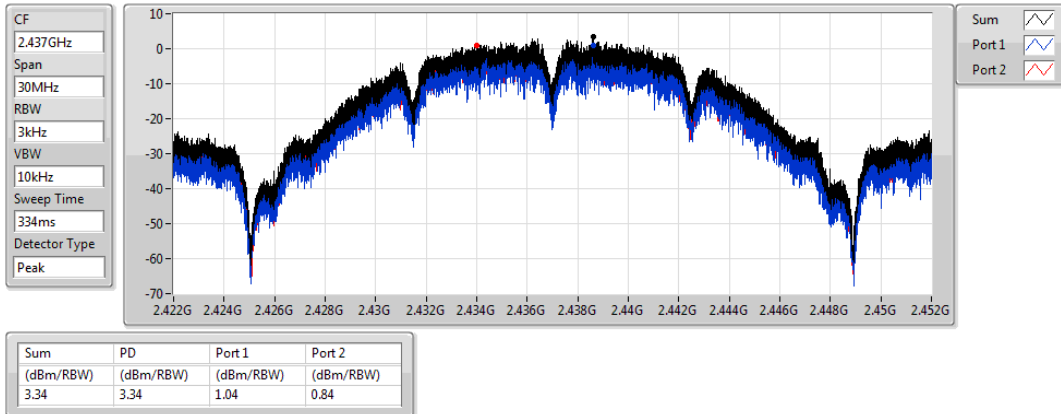


802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

15/08/2019

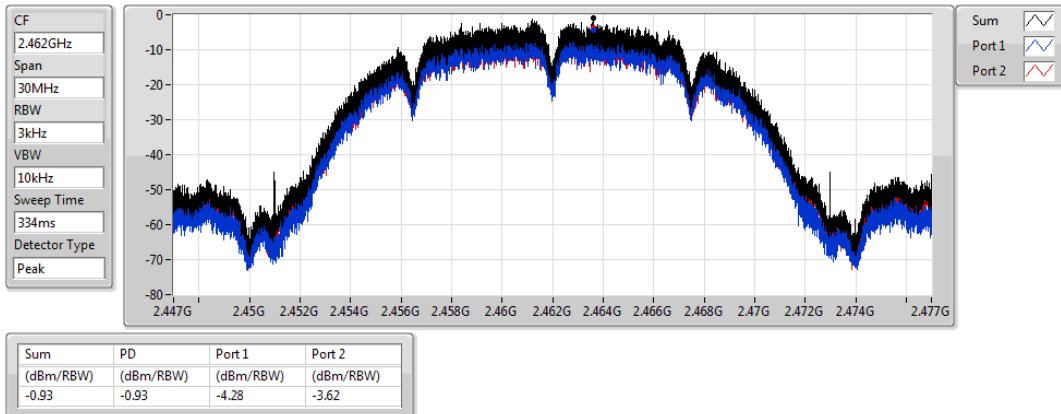


802.11b_Nss1,(1Mbps)_2TX

PSD

2462MHz

15/08/2019

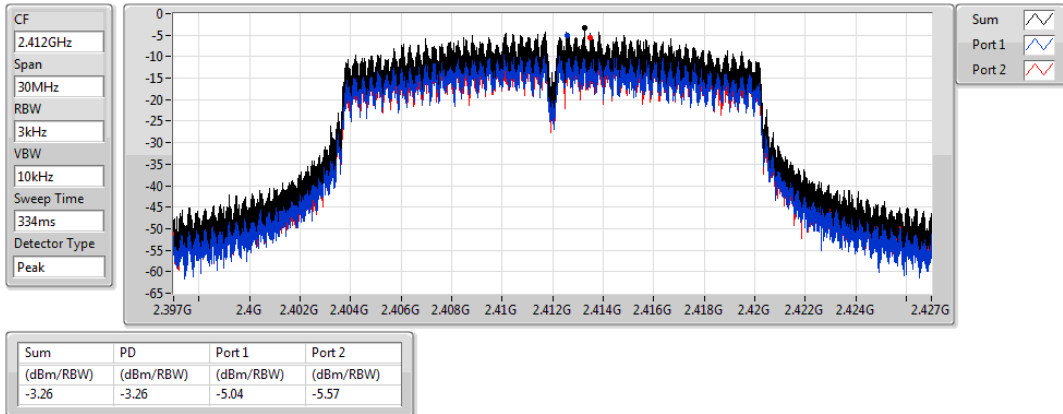


802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

15/08/2019

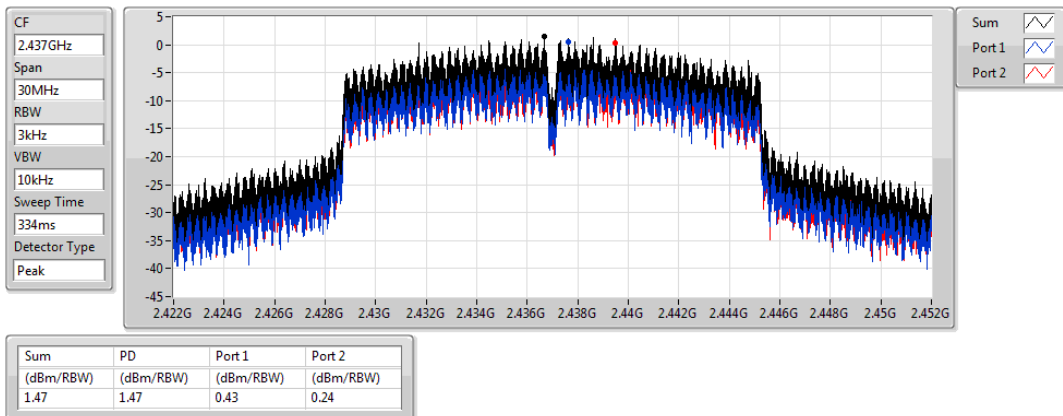


802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

15/08/2019

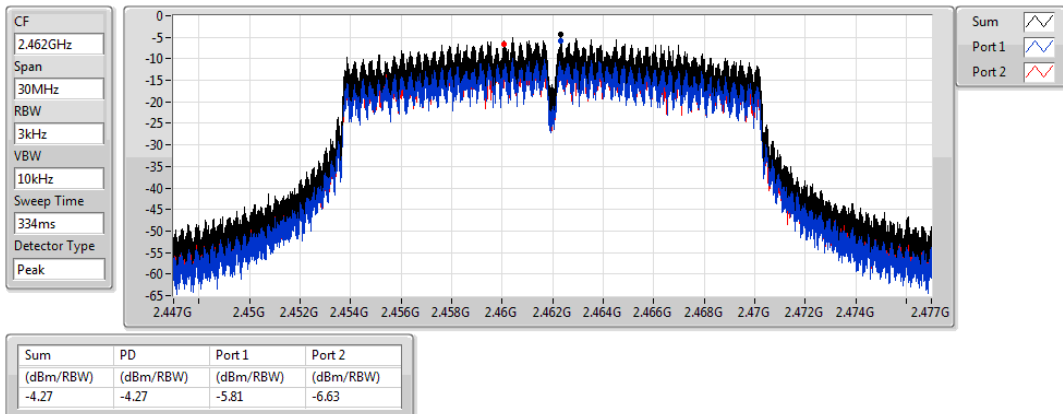


802.11g_Nss1,(6Mbps)_2TX

PSD

2462MHz

15/08/2019

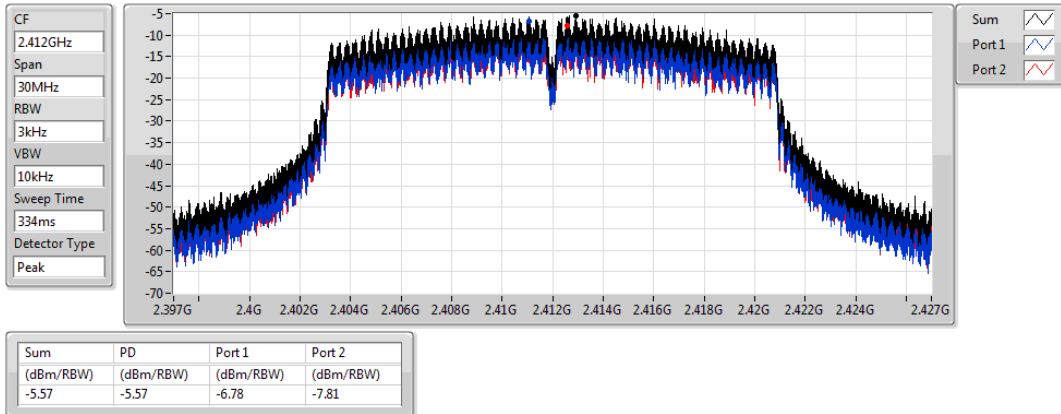


802.11n HT20_Nss1,(MCS0)_2TX

PSD

2412MHz

15/08/2019

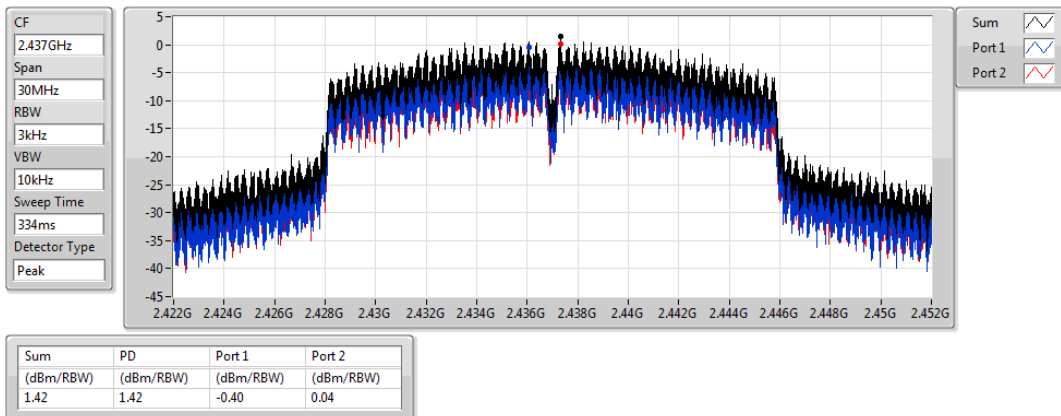


802.11n HT20_Nss1,(MCS0)_2TX

PSD

2437MHz

15/08/2019

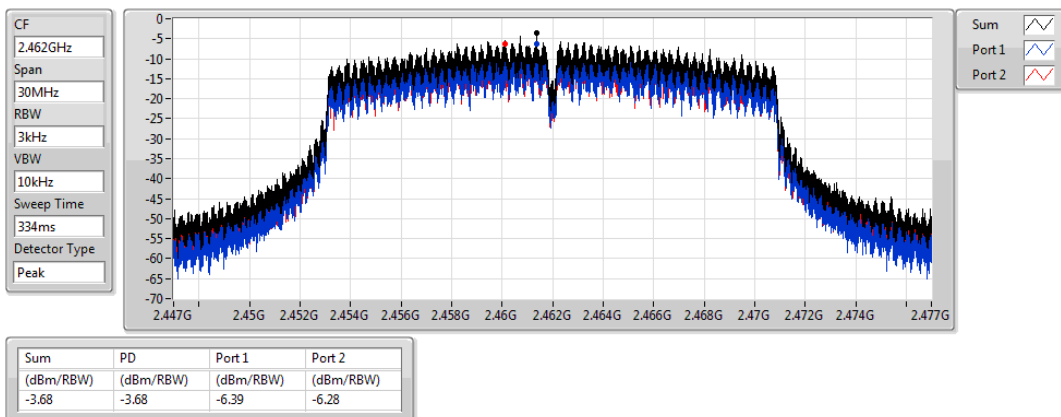


802.11n HT20_Nss1,(MCS0)_2TX

PSD

2462MHz

15/08/2019

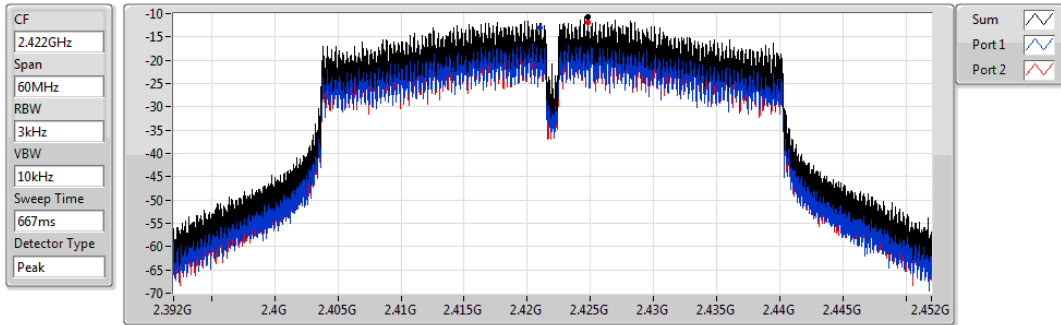


802.11n HT40_Nss1,(MCS0)_2TX

PSD

2422MHz

15/08/2019

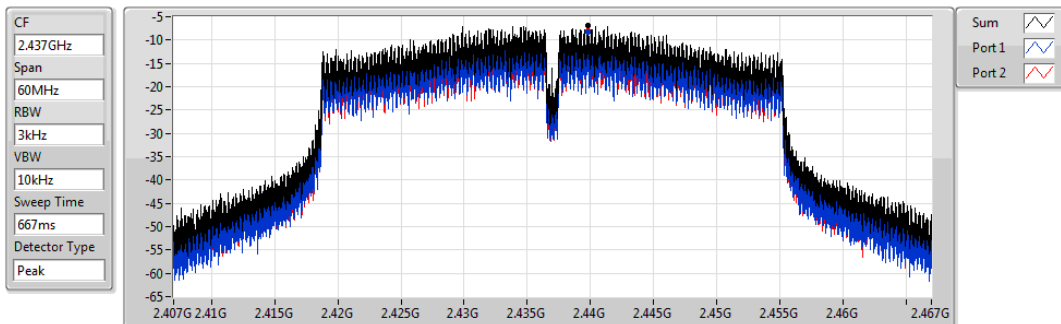


802.11n HT40_Nss1,(MCS0)_2TX

PSD

2437MHz

15/08/2019

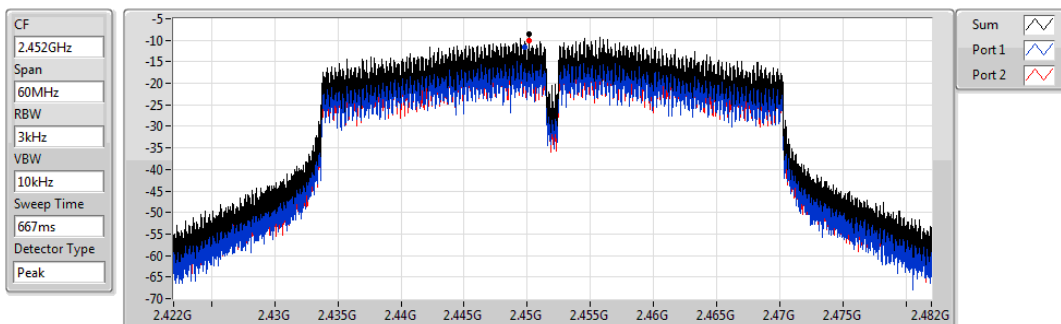


802.11n HT40_Nss1,(MCS0)_2TX

PSD

2452MHz

15/08/2019



**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)_2TX	Pass	2.43845G	15.18	-14.82	2.08593G	-50.22	2.3985G	-31.15	2.51306G	-50.09	15.0092G	-44.78	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.4357G	13.73	-16.27	2.08506G	-51.50	2.39886G	-25.20	2.48962G	-50.25	24.84828G	-44.91	2
802.11n HT20_Nss1,(MCS0)_2TX	Pass	2.4395G	13.62	-16.38	2.30029G	-52.96	2.39922G	-28.71	2.49448G	-50.43	15.04572G	-45.41	2
802.11n HT40_Nss1,(MCS0)_2TX	Pass	2.43449G	6.34	-23.66	2.11533G	-53.22	2.39952G	-31.04	2.51534G	-52.28	15.29621G	-45.77	1

Result

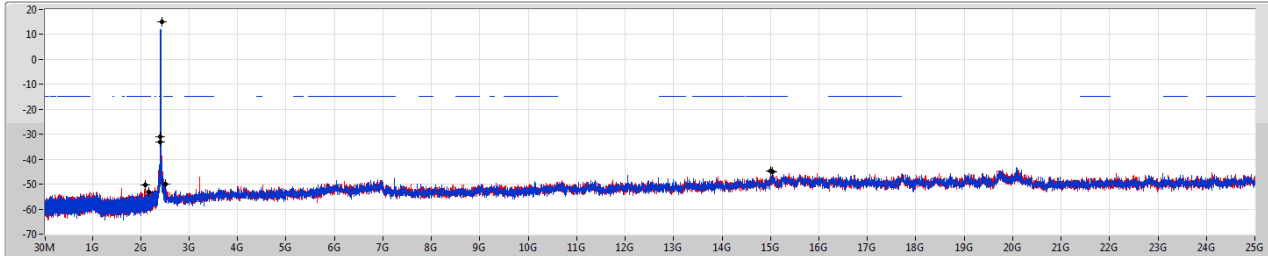
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1.(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43845G	15.18	-14.82	2.17156G	-53.25	2.39852G	-33.06	2.5036G	-50.13	15.04291G	-44.89	1
2412MHz	Pass	2.43845G	15.18	-14.82	2.08593G	-50.22	2.3985G	-31.15	2.51306G	-50.09	15.0092G	-44.78	2
2437MHz	Pass	2.43845G	15.18	-14.82	1.62459G	-49.15	2.39996G	-38.95	2.48396G	-44.93	3.24837G	-42.56	1
2437MHz	Pass	2.43845G	15.18	-14.82	1.62459G	-44.50	2.39998G	-33.98	2.49108G	-45.24	3.24837G	-39.31	2
2462MHz	Pass	2.43845G	15.18	-14.82	693.18M	-52.80	2.39146G	-50.54	2.484G	-45.35	24.59542G	-45.15	1
2462MHz	Pass	2.43845G	15.18	-14.82	2.13341G	-50.11	2.39876G	-49.76	2.48796G	-43.45	17.69795G	-45.53	2
802.11g_Nss1.(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4357G	13.73	-16.27	2.30758G	-53.62	2.39948G	-28.62	2.50756G	-51.37	23.43226G	-45.75	1
2412MHz	Pass	2.4357G	13.73	-16.27	2.08506G	-51.50	2.39886G	-25.20	2.48962G	-50.25	24.84828G	-44.91	2
2437MHz	Pass	2.4357G	13.73	-16.27	2.30059G	-50.55	2.39702G	-38.69	2.4866G	-43.80	14.95581G	-45.05	1
2437MHz	Pass	2.4357G	13.73	-16.27	2.30554G	-49.78	2.39824G	-37.93	2.48378G	-44.30	3.24837G	-39.74	2
2462MHz	Pass	2.4357G	13.73	-16.27	878.7M	-53.82	2.39446G	-50.44	2.48538G	-44.41	15.02886G	-45.50	1
2462MHz	Pass	2.4357G	13.73	-16.27	2.13108G	-51.97	2.3996G	-50.43	2.48408G	-45.19	17.69514G	-44.33	2
802.11n HT20_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4395G	13.62	-16.38	2.30961G	-52.08	2.3989G	-30.77	2.49546G	-51.03	17.6839G	-45.19	1
2412MHz	Pass	2.4395G	13.62	-16.38	2.30029G	-52.96	2.39922G	-28.71	2.49448G	-50.43	15.04572G	-45.41	2
2437MHz	Pass	2.4395G	13.62	-16.38	2.30088G	-50.57	2.39924G	-37.44	2.48408G	-44.18	3.24837G	-45.01	1
2437MHz	Pass	2.4395G	13.62	-16.38	2.11535G	-49.66	2.39914G	-36.59	2.48544G	-43.29	3.24837G	-40.96	2
2462MHz	Pass	2.4395G	13.62	-16.38	939.87M	-52.90	2.39098G	-50.94	2.48352G	-46.08	15.32949G	-45.34	1
2462MHz	Pass	2.4395G	13.62	-16.38	2.1369G	-51.72	2.39512G	-50.01	2.48446G	-42.52	24.84828G	-45.27	2
802.11n HT40_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43449G	6.34	-23.66	2.11533G	-53.22	2.39952G	-31.04	2.51534G	-52.28	15.29621G	-45.77	1
2422MHz	Pass	2.43449G	6.34	-23.66	705.84M	-53.23	2.3986G	-32.38	2.50806G	-51.74	24.89062G	-45.57	2
2437MHz	Pass	2.43449G	6.34	-23.66	2.30311G	-53.47	2.39956G	-40.65	2.48574G	-47.44	24.83173G	-45.79	1
2437MHz	Pass	2.43449G	6.34	-23.66	2.08585G	-52.25	2.39948G	-38.78	2.48418G	-45.54	17.67168G	-45.04	2
2452MHz	Pass	2.43449G	6.34	-23.66	2.16457G	-53.11	2.39332G	-51.11	2.48422G	-44.64	24.99439G	-45.23	1
2452MHz	Pass	2.43449G	6.34	-23.66	2.17602G	-53.36	2.39572G	-49.11	2.48422G	-41.96	16.44328G	-45.64	2

802.11b_Nss1,(1Mbps)_2TX

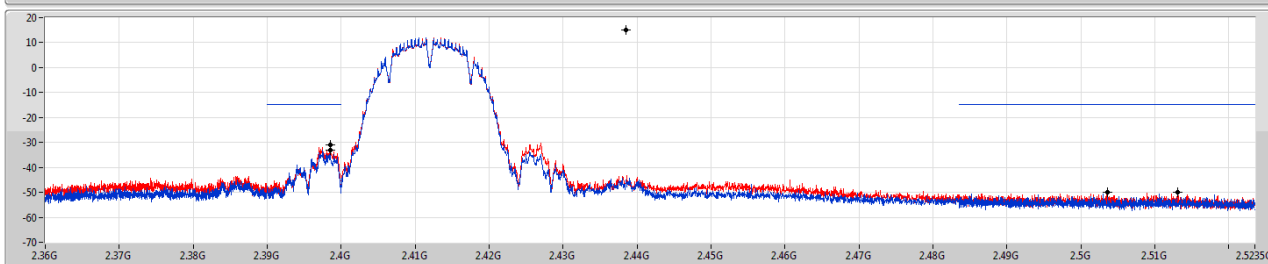
2412MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

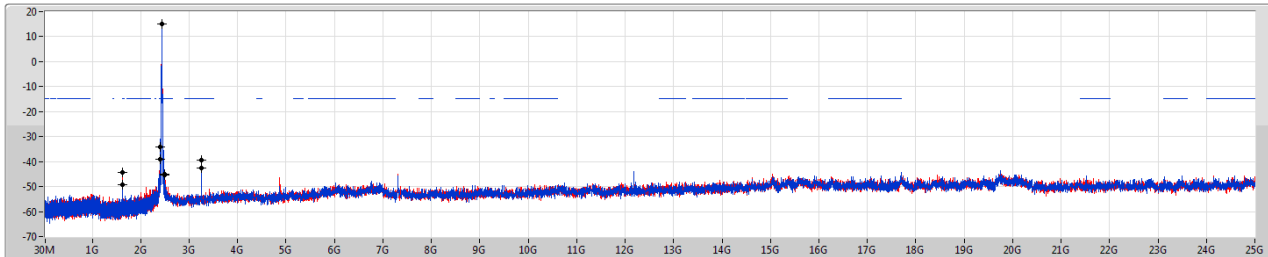
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43845G	15.18	-14.82	2.17156G	-53.25	2.39852G	-33.06	2.5036G	-50.13	15.04291G	-44.89	1
2.43845G	15.18	-14.82	2.08593G	-50.22	2.3985G	-31.15	2.51306G	-50.09	15.0092G	-44.78	2

802.11b_Nss1,(1Mbps)_2TX

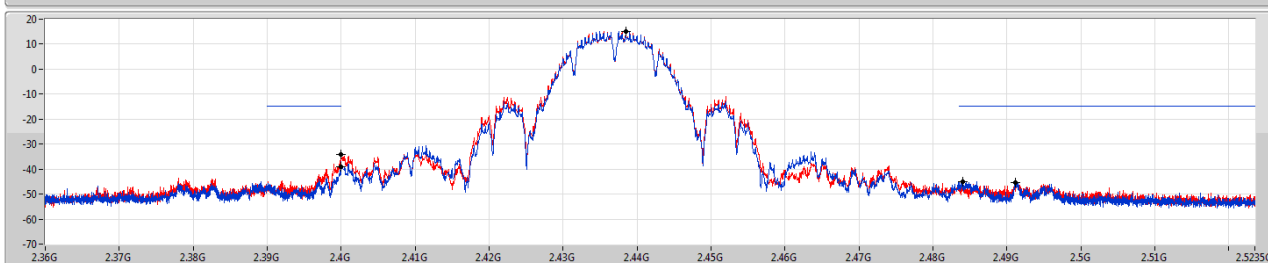
2437MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

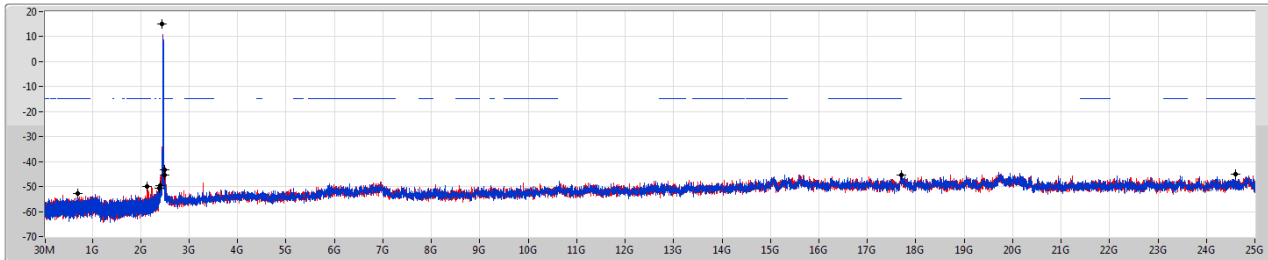
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43845G	15.18	-14.82	1.62459G	-49.15	2.39996G	-38.95	2.48396G	-44.93	3.24837G	-42.56	1
2.43845G	15.18	-14.82	1.62459G	-44.50	2.39998G	-33.98	2.49108G	-45.24	3.24837G	-39.31	2

802.11b_Nss1,(1Mbps)_2TX

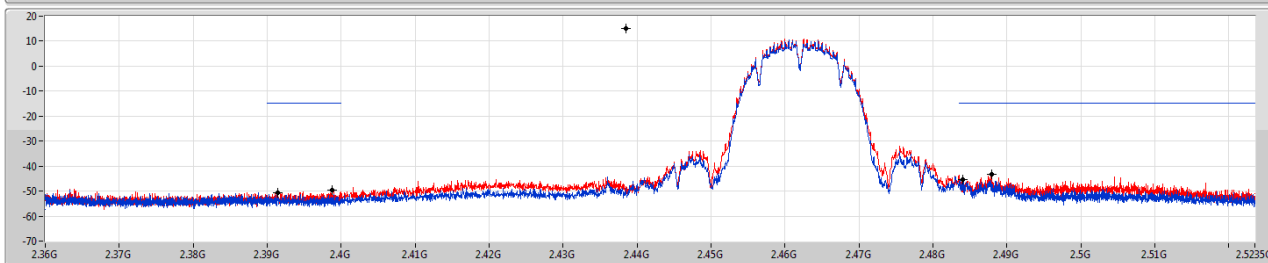
2462MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

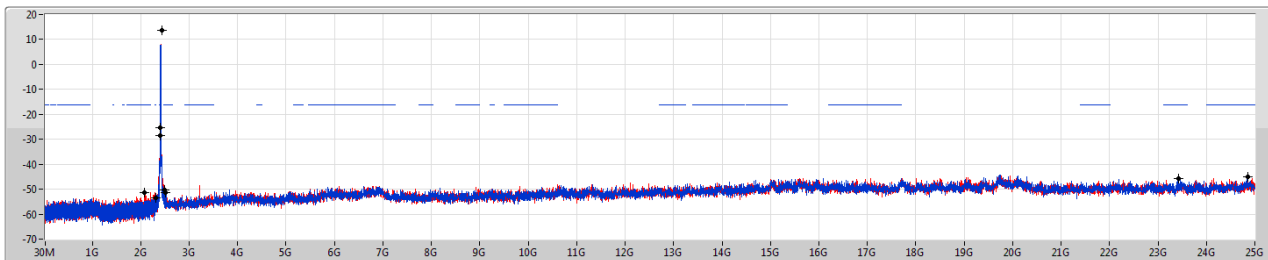
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43845G	15.18	-14.82	693.18M	-52.80	2.39146G	-50.54	2.484G	-45.35	24.59542G	-45.15	1
2.43845G	15.18	-14.82	2.13341G	-50.11	2.39876G	-49.76	2.48796G	-43.45	17.69795G	-45.53	2

802.11g_Nss1,(6Mbps)_2TX

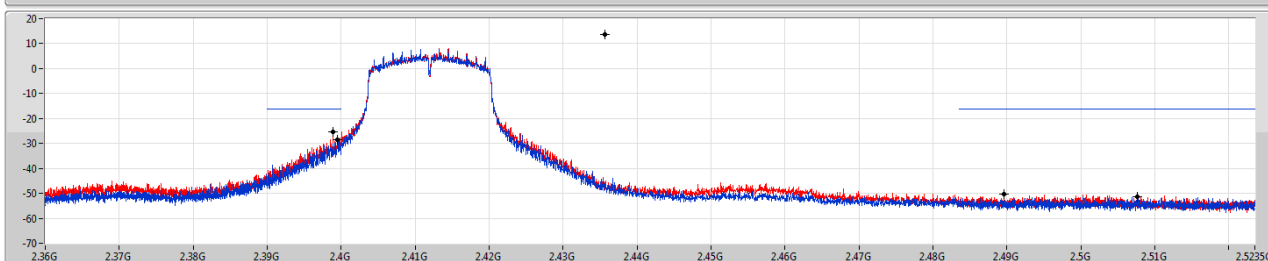
2412MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

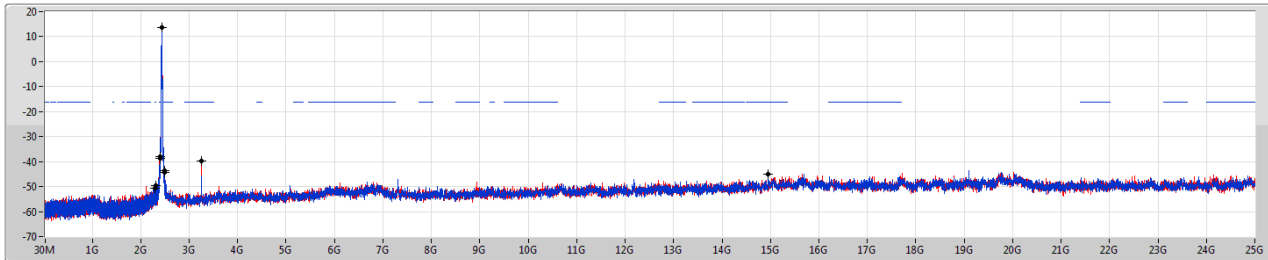
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4357G	13.73	-16.27	2.30758G	-53.62	2.39948G	-28.62	2.50756G	-51.37	23.43226G	-45.75	1
2.4357G	13.73	-16.27	2.08596G	-51.50	2.39886G	-25.20	2.48962G	-50.25	24.84828G	-44.91	2

802.11g_Nss1,(6Mbps)_2TX

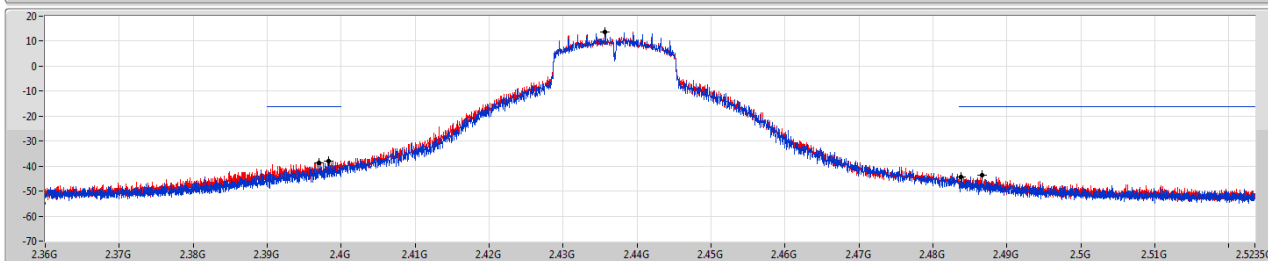
2437MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

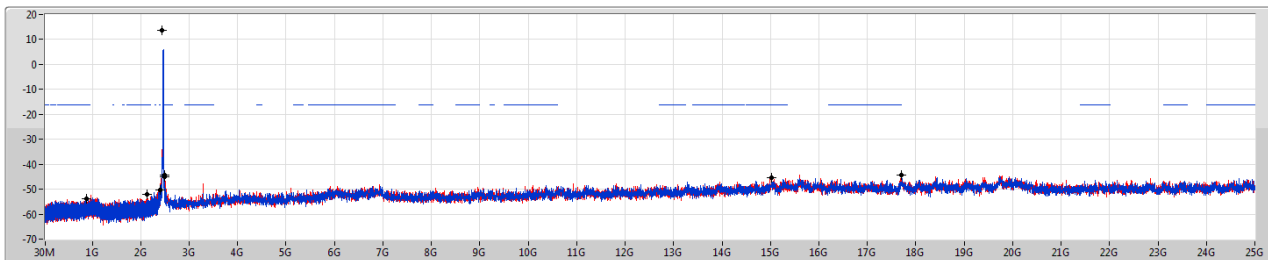
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4357G	13.73	-16.27	2.30059G	-50.55	2.39702G	-38.69	2.4866G	-43.80	14.95581G	-45.05	1
2.4357G	13.73	-16.27	2.30554G	-49.78	2.39824G	-37.93	2.48378G	-44.30	3.24837G	-39.74	2

802.11g_Nss1,(6Mbps)_2TX

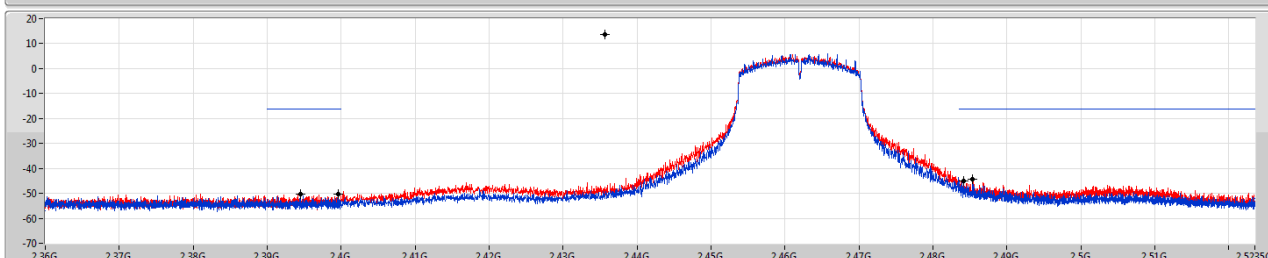
2462MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

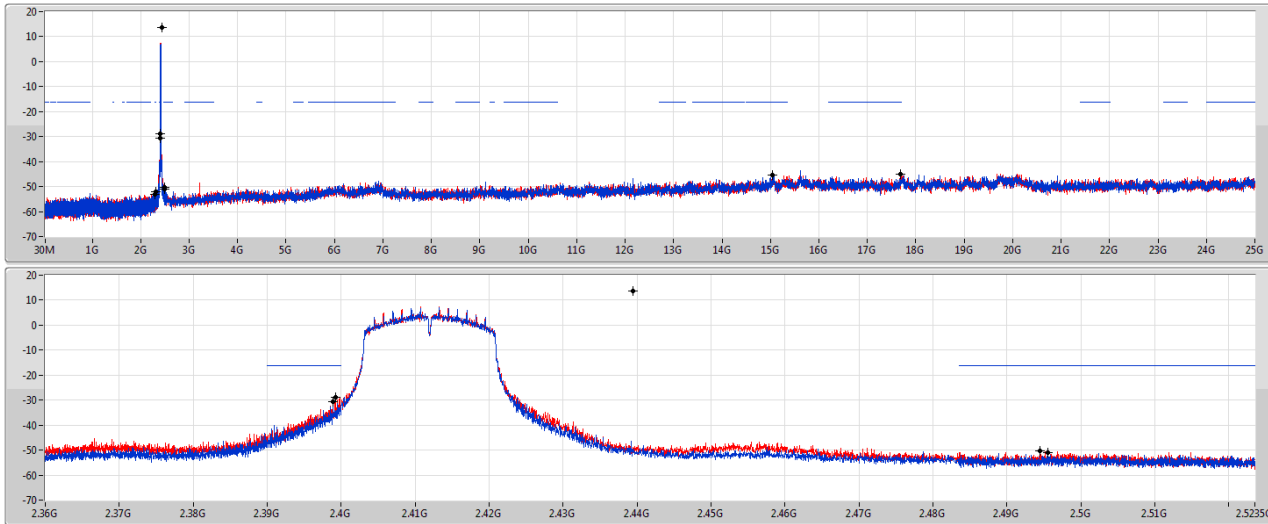
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4357G	13.73	-16.27	878.7M	-53.82	2.39446G	-50.44	2.48538G	-44.41	15.02886G	-45.50	1
2.4357G	13.73	-16.27	2.13108G	-51.97	2.3996G	-50.43	2.48408G	-45.19	17.69514G	-44.33	2

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz

CSE NdB

15/08/2019



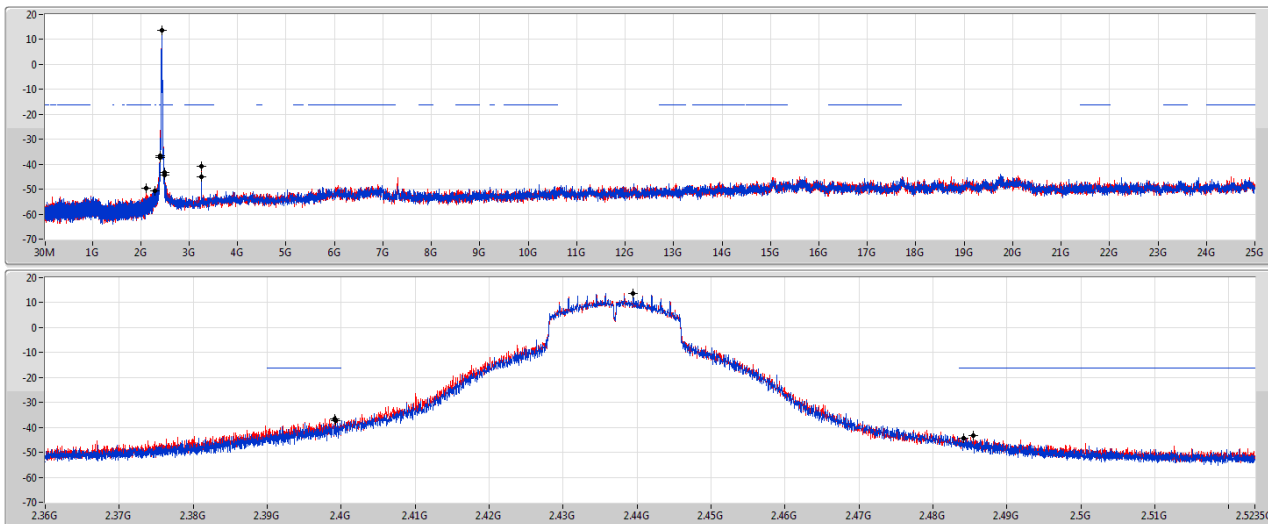
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	13.62	-16.38	2.30961G	-52.08	2.3989G	-30.77	2.49546G	-51.03	17.6839G	-45.19	1
2.4395G	13.62	-16.38	2.30029G	-52.96	2.39922G	-28.71	2.49448G	-50.43	15.04572G	-45.41	2

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz

CSE NdB

15/08/2019

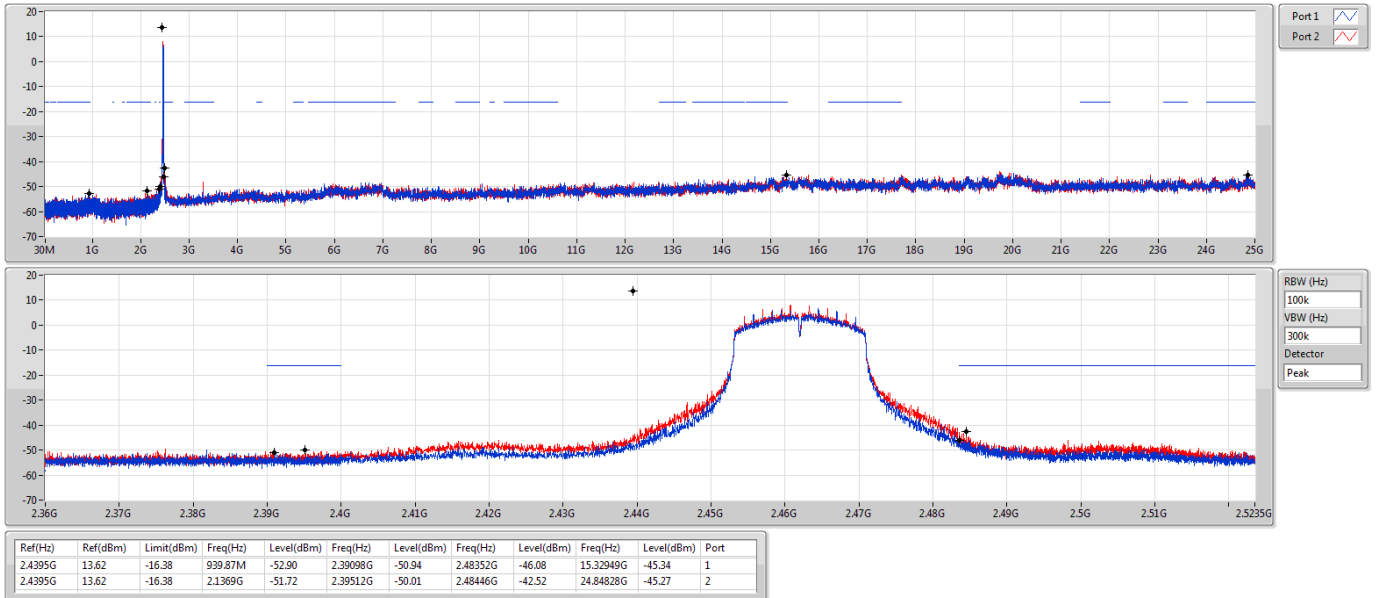


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	13.62	-16.38	2.30088G	-50.57	2.39924G	-37.44	2.48408G	-44.18	3.24837G	-45.01	1
2.4395G	13.62	-16.38	2.11535G	-49.66	2.39914G	-36.59	2.48544G	-43.29	3.24837G	-40.96	2

802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

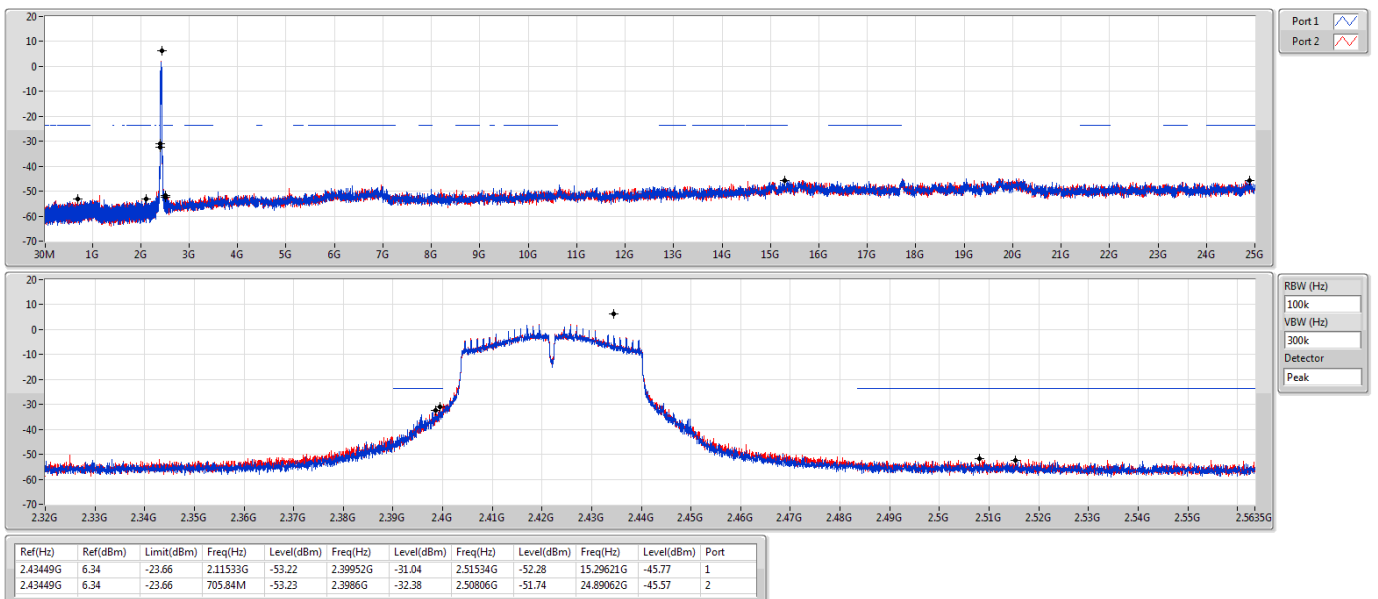
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2422MHz

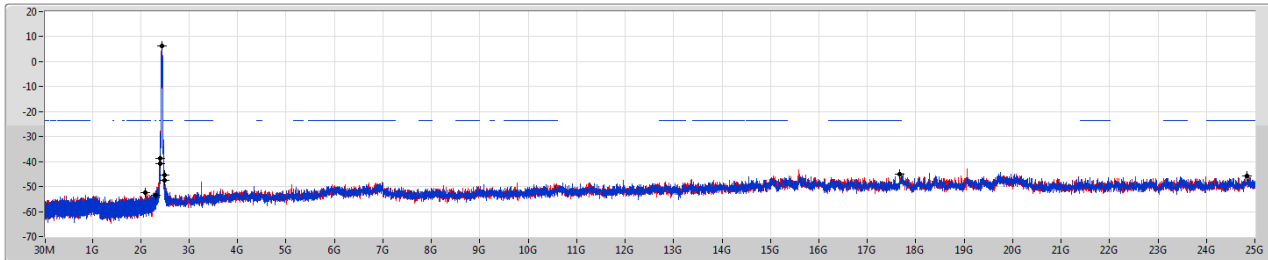


802.11n HT40_Nss1,(MCS0)_2TX

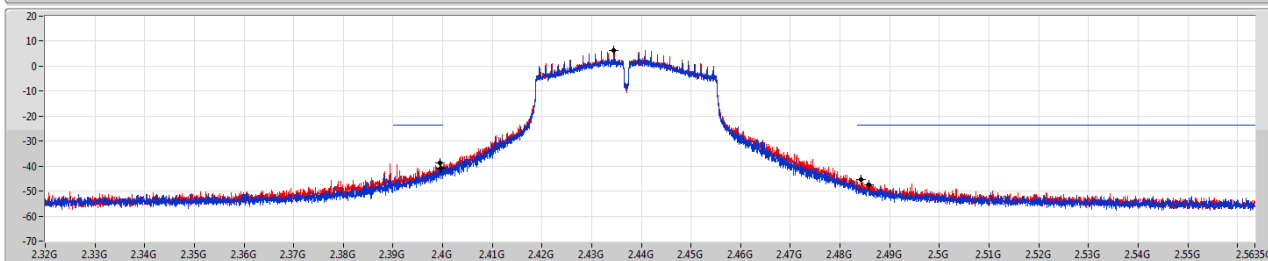
2437MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

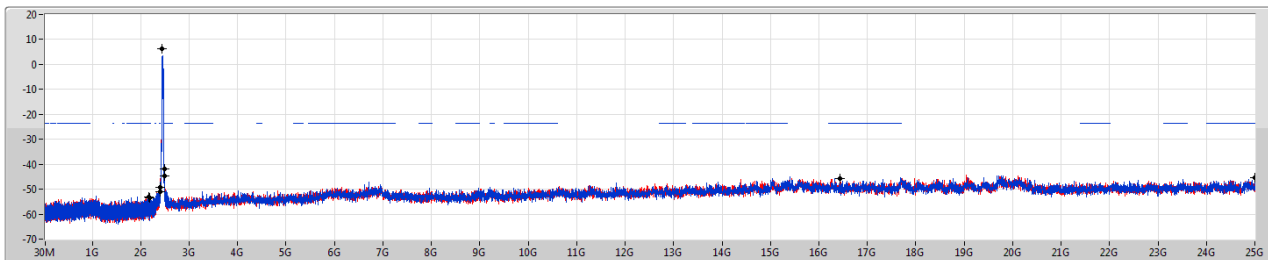
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
243449G	6.34	-23.66	2.30311G	-53.47	2.39956G	-40.65	2.48574G	-47.44	24.83173G	-45.79	1
243449G	6.34	-23.66	2.08585G	-52.25	2.39948G	-38.78	2.48418G	-45.54	17.67168G	-45.04	2

802.11n HT40_Nss1,(MCS0)_2TX

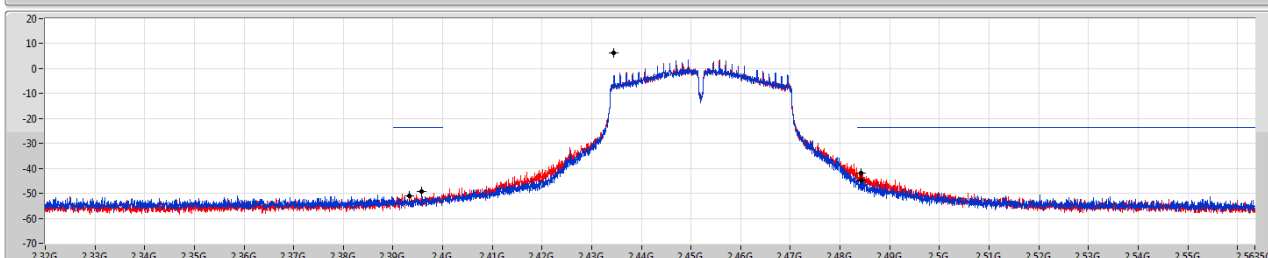
2452MHz

CSE NdB

15/08/2019



Port 1
Port 2



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

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
243449G	6.34	-23.66	2.16457G	-53.11	2.39332G	-51.11	2.48422G	-44.64	24.99439G	-45.23	1
243449G	6.34	-23.66	2.17602G	-53.36	2.39572G	-49.11	2.48422G	-41.96	16.44328G	-45.64	2

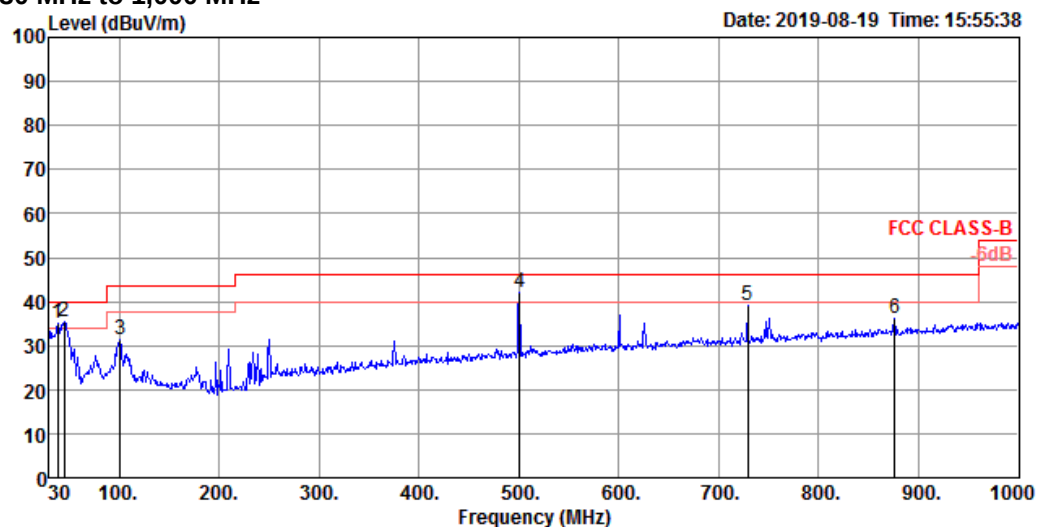


Radiated Emission below 1GHz Result

Appendix F.1

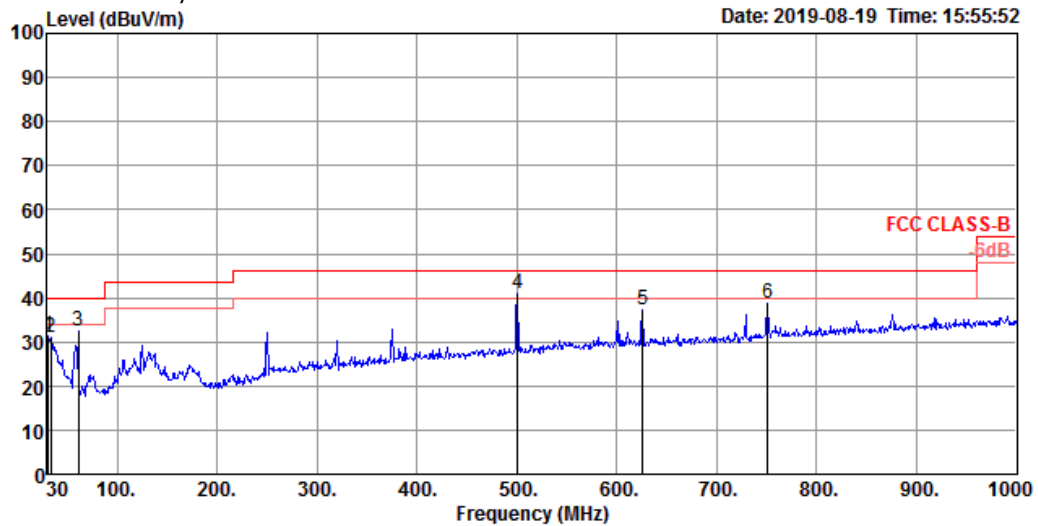
Test Mode	Mode 2	Frequency Range	30 MHz to 1,000 MHz
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Vertical 30 MHz to 1,000 MHz



	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	38.73	35.19	40.00	-4.81	45.37	0.81	20.51	31.50	100	243	Peak	VERTICAL
2	44.55	35.33	40.00	-4.67	48.78	0.89	17.25	31.59	100	123	Peak	VERTICAL
3	100.81	31.22	43.50	-12.28	44.68	1.31	17.22	31.99	125	329	Peak	VERTICAL
4	500.45	42.04	46.00	-3.96	47.75	2.94	23.83	32.48	100	253	Peak	VERTICAL
5	729.37	39.03	46.00	-6.97	41.89	3.57	25.96	32.39	100	120	Peak	VERTICAL
6	875.84	36.12	46.00	-9.88	37.10	3.92	27.50	32.40	100	197	Peak	VERTICAL

Horizontal 30 MHz to 1,000 MHz



	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	30.97	31.45	40.00	-8.55	37.21	0.69	25.11	31.56	300	357 Peak	HORIZONTAL
2	33.88	30.82	40.00	-9.18	38.19	0.74	23.39	31.50	100	86 Peak	HORIZONTAL
3	61.04	32.30	40.00	-7.70	50.55	1.00	12.60	31.85	200	267 Peak	HORIZONTAL
4	500.45	41.11	46.00	-4.89	46.82	2.94	23.83	32.48	150	102 Peak	HORIZONTAL
5	625.58	37.18	46.00	-8.82	41.12	3.28	25.21	32.43	125	125 Peak	HORIZONTAL
6	750.71	38.77	46.00	-7.23	41.26	3.64	26.20	32.33	100	196 Peak	HORIZONTAL



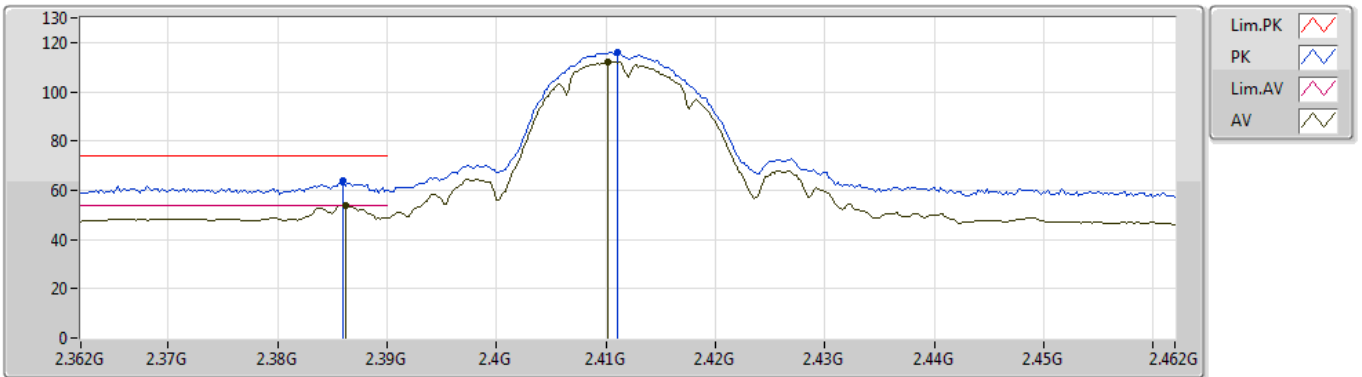
Summary

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)_2TX	Pass	AV	2.3886G	53.95	54.00	-0.05	30.99	3	Vertical	128	2.20	-

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2412MHz_TX



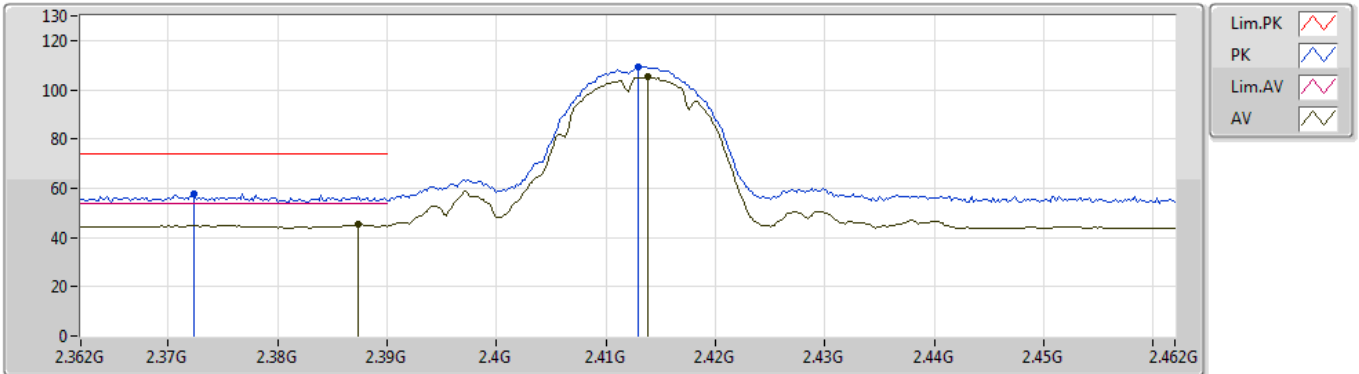
EUT Y_2TX
Setting 23
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.386G	63.80	74.00	-10.20	31.00	3	Vertical	139	2.06	-	32.80			
AV	2.3862G	53.89	54.00	-0.11	31.00	3	Vertical	139	2.06	-	22.89			
PK	2.411G	115.86	Inf	-Inf	30.95	3	Vertical	139	2.06	-	84.91			
AV	2.4102G	112.16	Inf	-Inf	30.95	3	Vertical	139	2.06	-	81.21			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2412MHz_TX



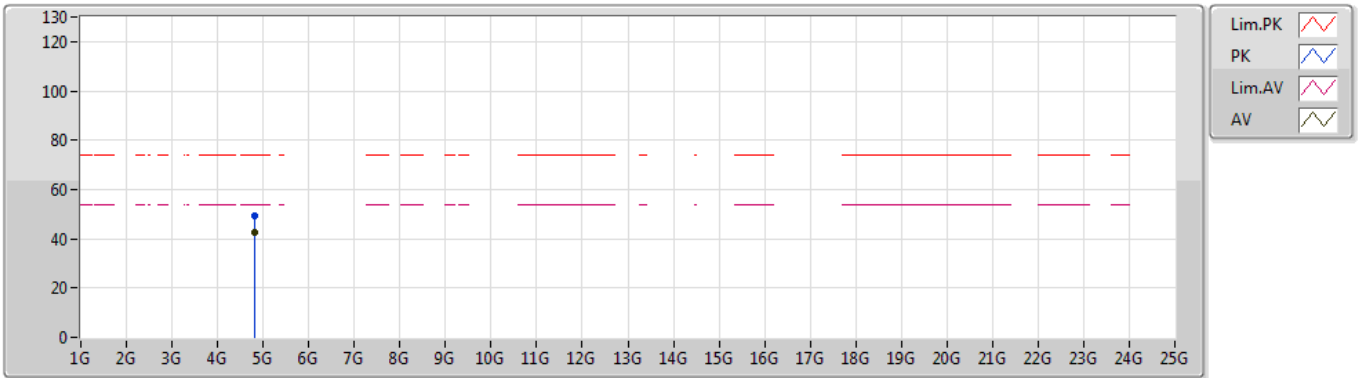
EUT V_2TX
Setting 23
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3724G	57.95	74.00	-16.05	31.03	3	Horizontal	110	2.09	-	26.92			
AV	2.3874G	45.19	54.00	-8.81	31.00	3	Horizontal	110	2.09	-	14.19			
PK	2.413G	109.25	Inf	-Inf	30.94	3	Horizontal	110	2.09	-	78.31			
AV	2.4138G	105.22	Inf	-Inf	30.94	3	Horizontal	110	2.09	-	74.28			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2412MHz_TX



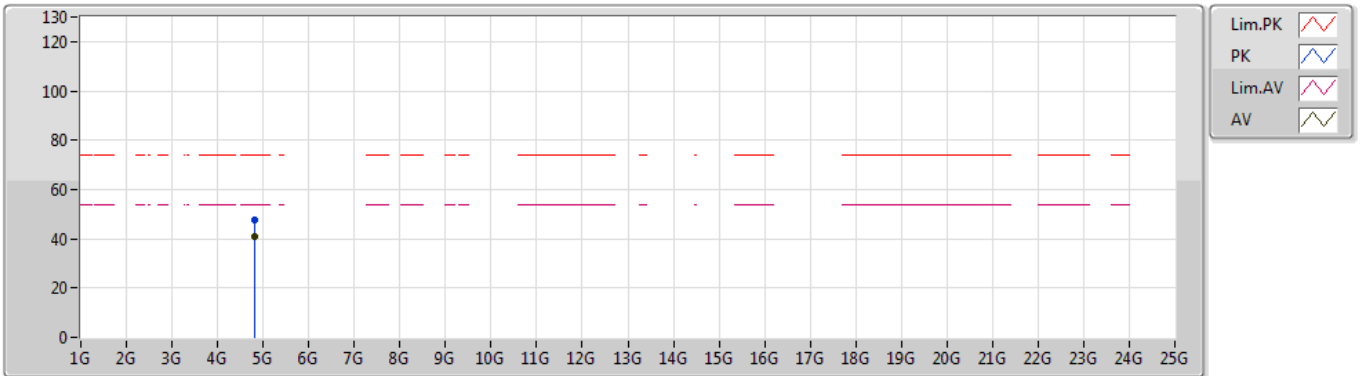
EUT Y_2TX
Setting 23
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82398G	49.11	74.00	-24.89	4.14	3	Vertical	359	1.88	-	44.97			
AV	4.824G	42.76	54.00	-11.24	4.14	3	Vertical	359	1.88	-	38.62			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2412MHz_TX



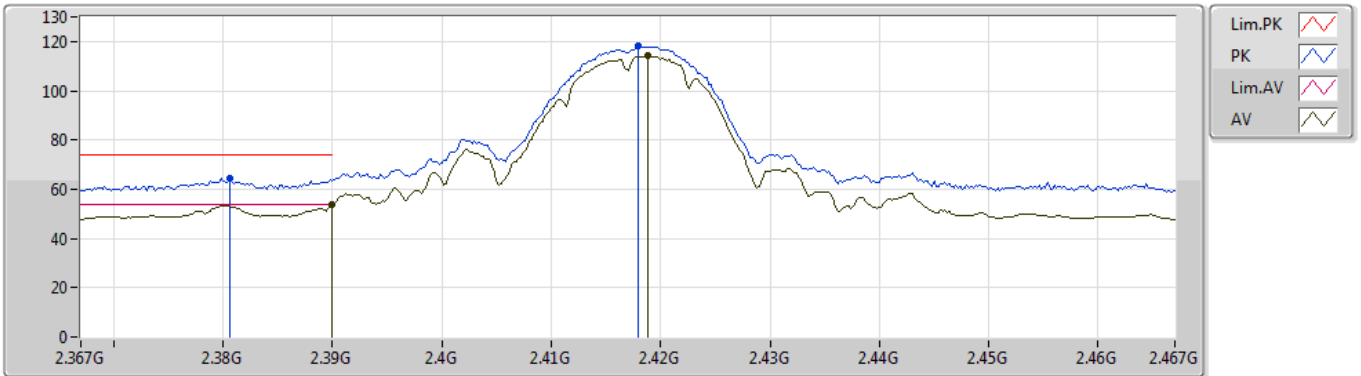
EUT Y_2TX
Setting 23
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8239G	47.88	74.00	-26.12	4.14	3	Horizontal	85	1.50	-	43.74			
AV	4.82398G	40.86	54.00	-13.14	4.14	3	Horizontal	85	1.50	-	36.72			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2417MHz_TX



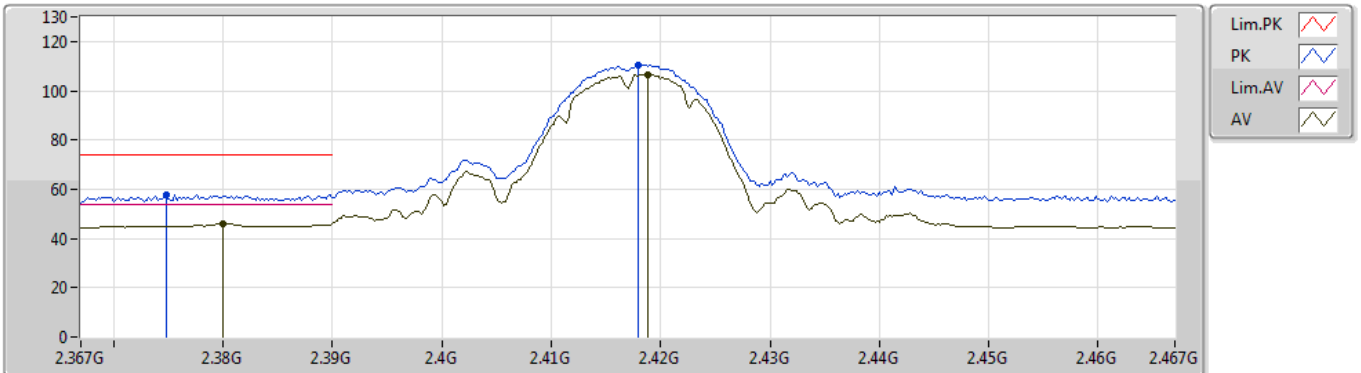
EUT Y_2TX
Setting 25
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3806G	64.50	74.00	-9.50	31.02	3	Vertical	114	1.82	-	33.48			
AV	2.39G	53.82	54.00	-0.18	30.99	3	Vertical	114	1.82	-	22.83			
PK	2.418G	117.96	Inf	-Inf	30.93	3	Vertical	114	1.82	-	87.03			
AV	2.4188G	114.12	Inf	-Inf	30.92	3	Vertical	114	1.82	-	83.20			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2417MHz_TX



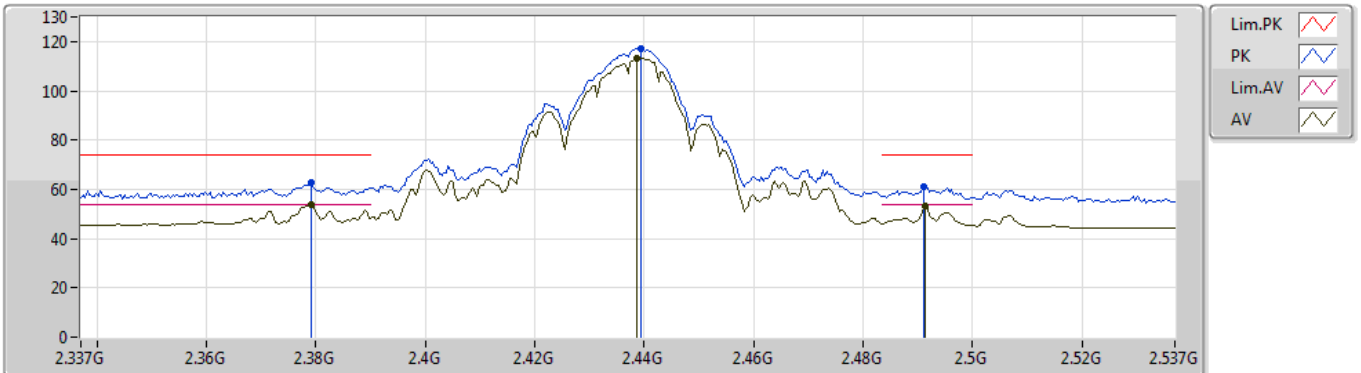
EUT Y_2TX
Setting 25
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3748G	57.68	74.00	-16.32	31.03	3	Horizontal	62	2.08	-	26.65			
AV	2.38G	46.04	54.00	-7.96	31.02	3	Horizontal	62	2.08	-	15.02			
PK	2.418G	110.59	Inf	-Inf	30.93	3	Horizontal	62	2.08	-	79.66			
AV	2.4188G	106.65	Inf	-Inf	30.92	3	Horizontal	62	2.08	-	75.73			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2437MHz_TX



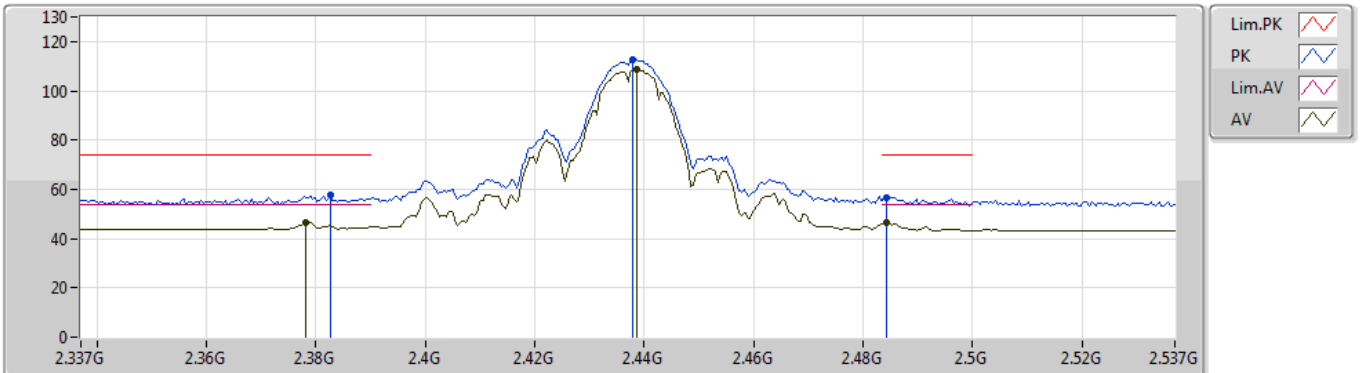
EUT Y_2TX
Setting 28
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.379G	62.89	74.00	-11.11	31.02	3	Vertical	135	1.90	-	31.87			
AV	2.379G	53.92	54.00	-0.08	31.02	3	Vertical	135	1.90	-	22.90			
PK	2.4394G	117.23	Inf	-Inf	30.88	3	Vertical	135	1.90	-	86.35			
AV	2.4386G	113.36	Inf	-Inf	30.88	3	Vertical	135	1.90	-	82.48			
PK	2.491G	61.24	74.00	-12.76	30.76	3	Vertical	135	1.90	-	30.48			
AV	2.4914G	53.19	54.00	-0.81	30.76	3	Vertical	135	1.90	-	22.43			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2437MHz_TX



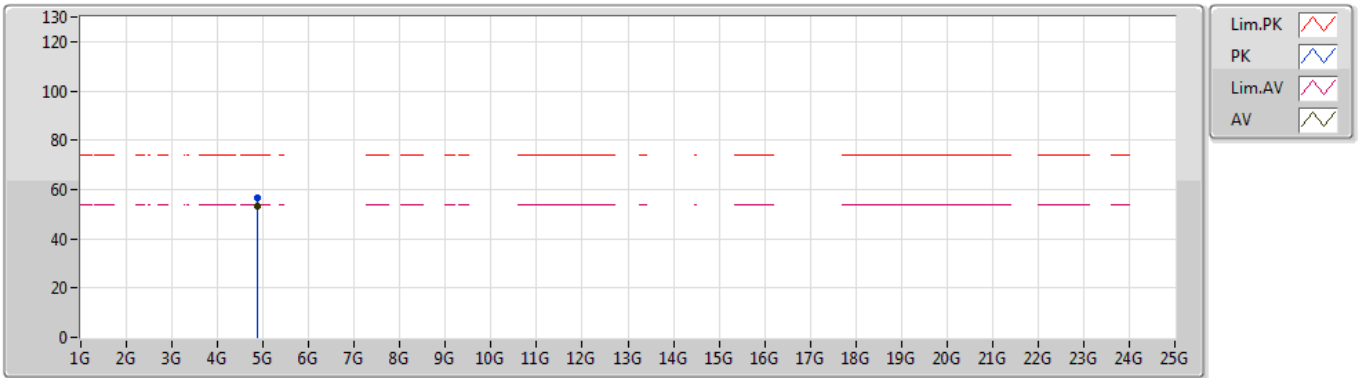
EUT Y_2TX
Setting 28
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3826G	57.58	74.00	-16.42	31.01	3	Horizontal	248	2.21	-	26.57			
AV	2.3782G	46.68	54.00	-7.32	31.02	3	Horizontal	248	2.21	-	15.66			
PK	2.4378G	112.47	Inf	-Inf	30.89	3	Horizontal	248	2.21	-	81.58			
AV	2.4386G	108.78	Inf	-Inf	30.88	3	Horizontal	248	2.21	-	77.90			
PK	2.4842G	56.65	74.00	-17.35	30.78	3	Horizontal	248	2.21	-	25.87			
AV	2.4842G	46.45	54.00	-7.55	30.78	3	Horizontal	248	2.21	-	15.67			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2437MHz_TX



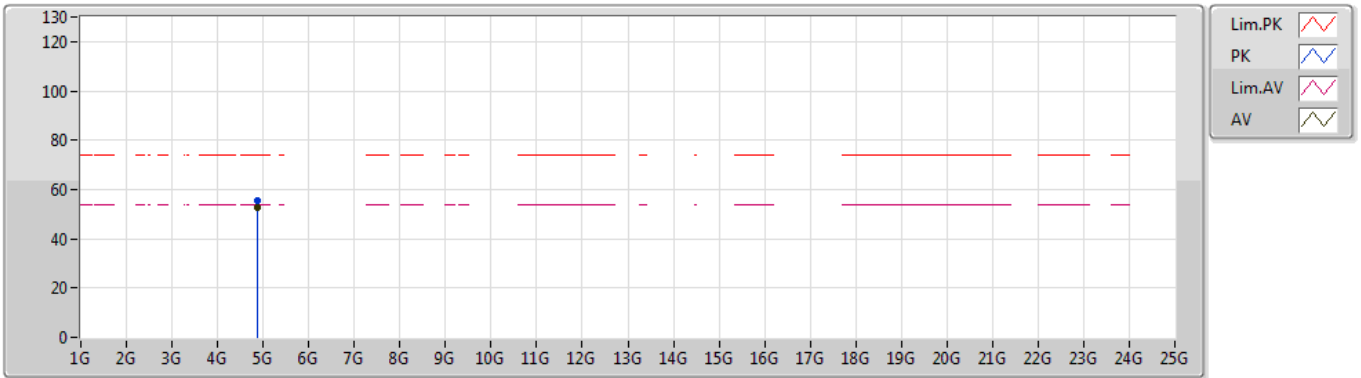
EUT Y_2TX
Setting 28
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87404G	56.32	74.00	-17.68	4.23	3	Vertical	2	1.51	-	52.09			
AV	4.874G	53.47	54.00	-0.53	4.23	3	Vertical	2	1.51	-	49.24			

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

13/08/2019



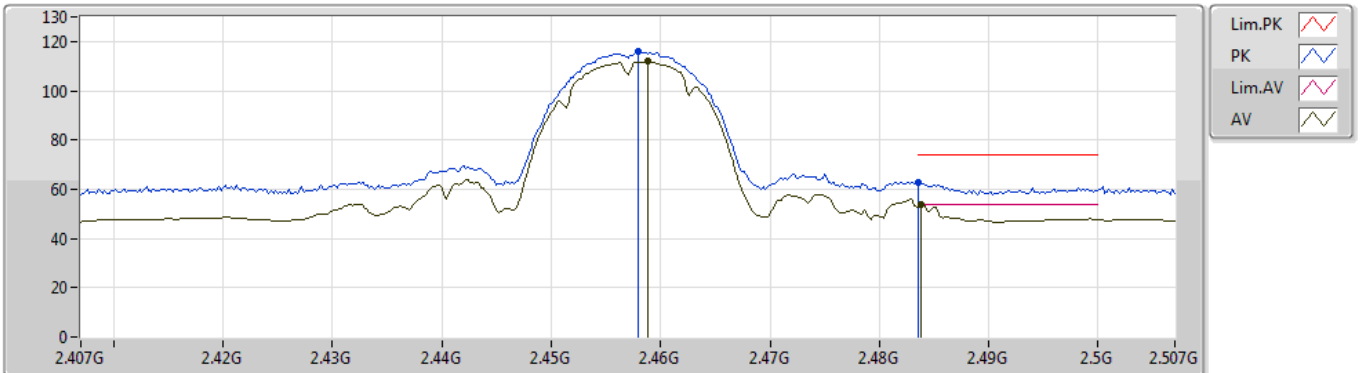
EUT Y_2TX
Setting 28
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.874G	55.61	74.00	-18.39	4.23	3	Horizontal	224	1.72	-	51.38			
AV	4.87396G	52.59	54.00	-1.41	4.23	3	Horizontal	224	1.72	-	48.36			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2457MHz_TX



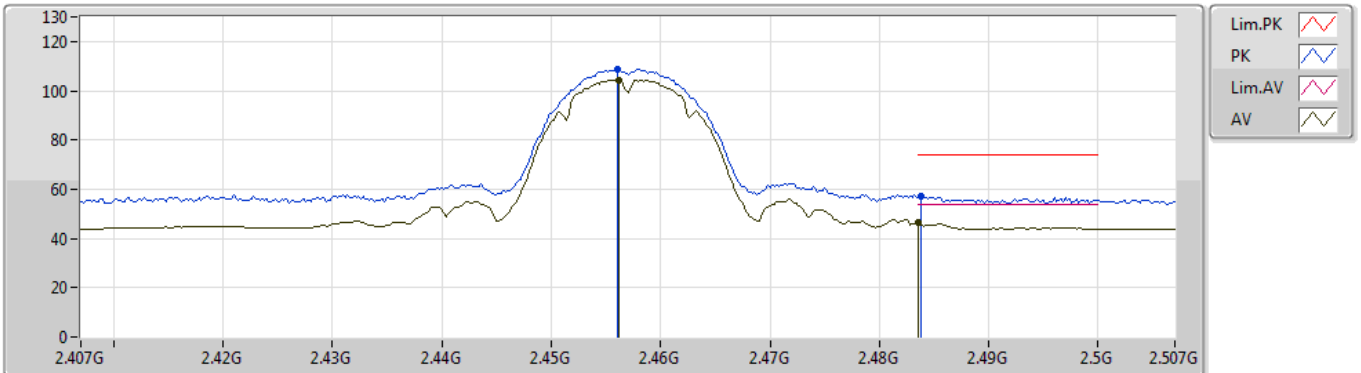
EUT Y_2TX
Setting 22
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.458G	115.86	Inf	-Inf	30.84	3	Vertical	106	1.89	-	85.02			
AV	2.4588G	111.90	Inf	-Inf	30.83	3	Vertical	106	1.89	-	81.07			
PK	2.4836G	62.82	74.00	-11.18	30.78	3	Vertical	106	1.89	-	32.04			
AV	2.4838G	53.82	54.00	-0.18	30.78	3	Vertical	106	1.89	-	23.04			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2457MHz_TX



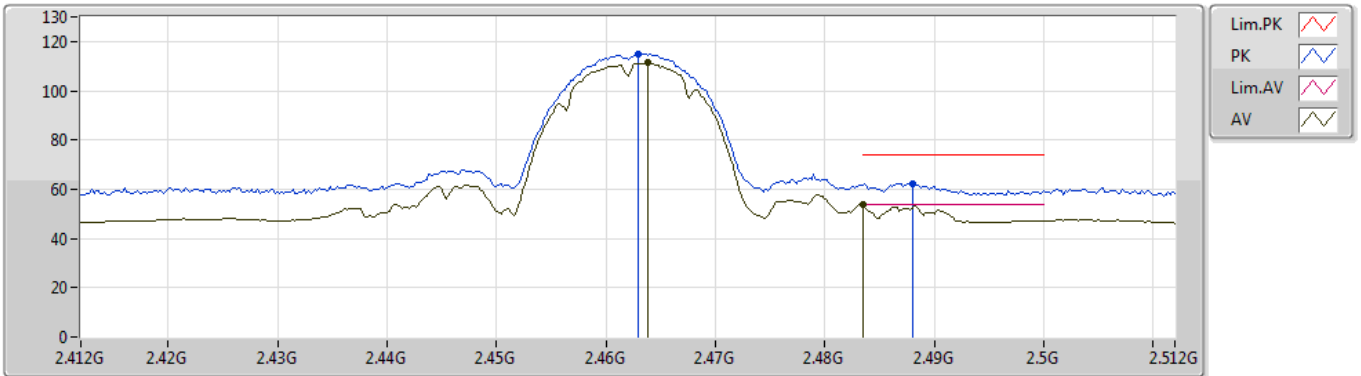
EUT Y_2TX
Setting 22
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.456G	108.66	Inf	-Inf	30.84	3	Horizontal	61	2.25	-	77.82			
AV	2.4562G	104.39	Inf	-Inf	30.84	3	Horizontal	61	2.25	-	73.55			
PK	2.4838G	57.23	74.00	-16.77	30.78	3	Horizontal	61	2.25	-	26.45			
AV	2.4835G	46.73	54.00	-7.27	30.78	3	Horizontal	61	2.25	-	15.95			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2462MHz_TX



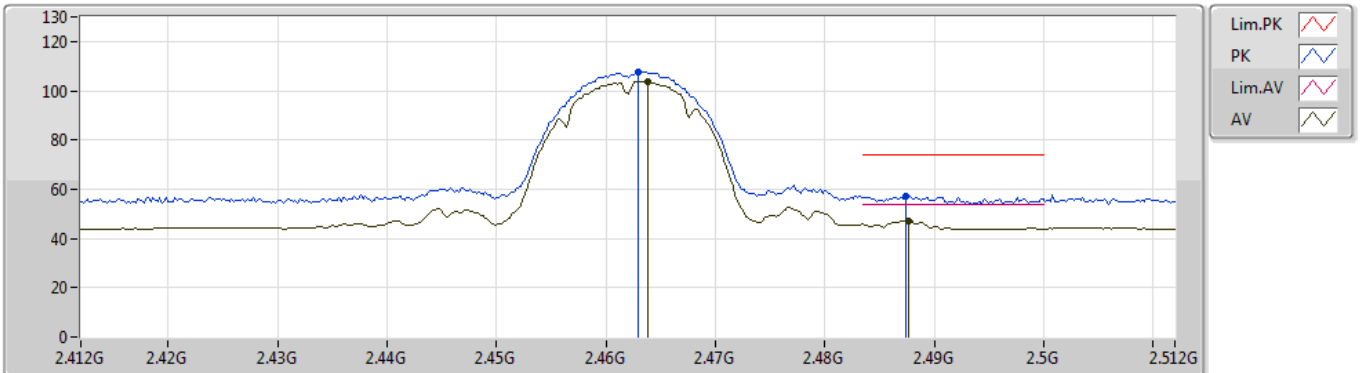
EUT Y_2TX
Setting 21
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.463G	115.14	Inf	-Inf	30.82	3	Vertical	107	1.89	-	84.32			
AV	2.4638G	111.25	Inf	-Inf	30.82	3	Vertical	107	1.89	-	80.43			
PK	2.488G	62.25	74.00	-11.75	30.77	3	Vertical	107	1.89	-	31.48			
AV	2.4835G	53.85	54.00	-0.15	30.78	3	Vertical	107	1.89	-	23.07			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2462MHz_TX



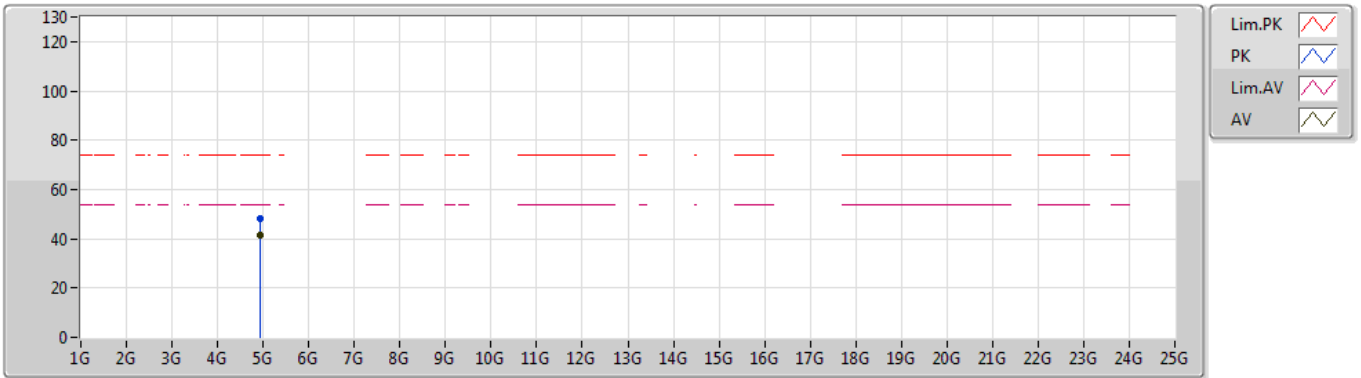
EUT Y_2TX
Setting 21
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.463G	107.71	Inf	-Inf	30.82	3	Horizontal	60	1.75	-	76.89			
AV	2.4638G	103.80	Inf	-Inf	30.82	3	Horizontal	60	1.75	-	72.98			
PK	2.4874G	56.94	74.00	-17.06	30.77	3	Horizontal	60	1.75	-	26.17			
AV	2.4876G	47.29	54.00	-6.71	30.77	3	Horizontal	60	1.75	-	16.52			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2462MHz_TX



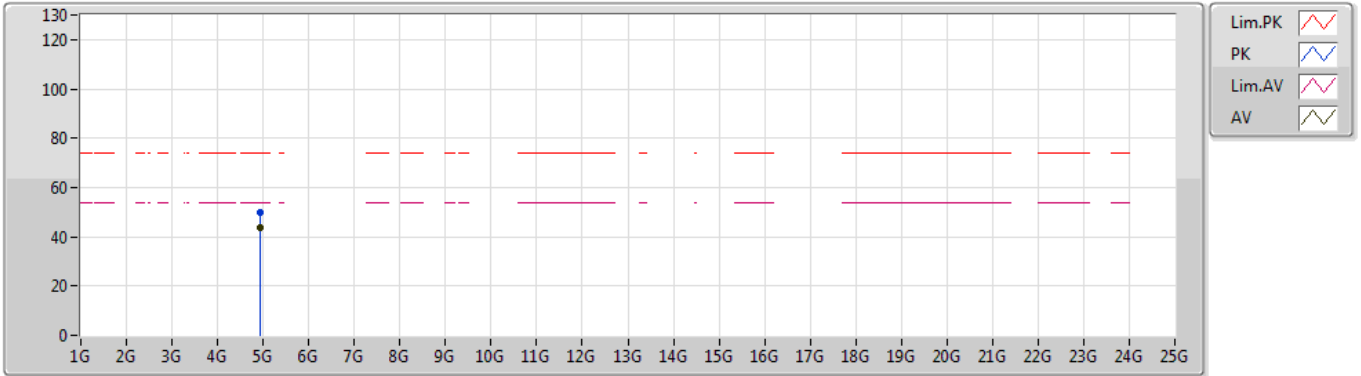
EUT Y_2TX
Setting 21
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92392G	48.33	74.00	-25.67	4.41	3	Vertical	327	1.74	-	43.92			
AV	4.924G	41.27	54.00	-12.73	4.41	3	Vertical	327	1.74	-	36.86			

802.11b_Nss1,(1Mbps)_2TX

13/08/2019

2462MHz_TX



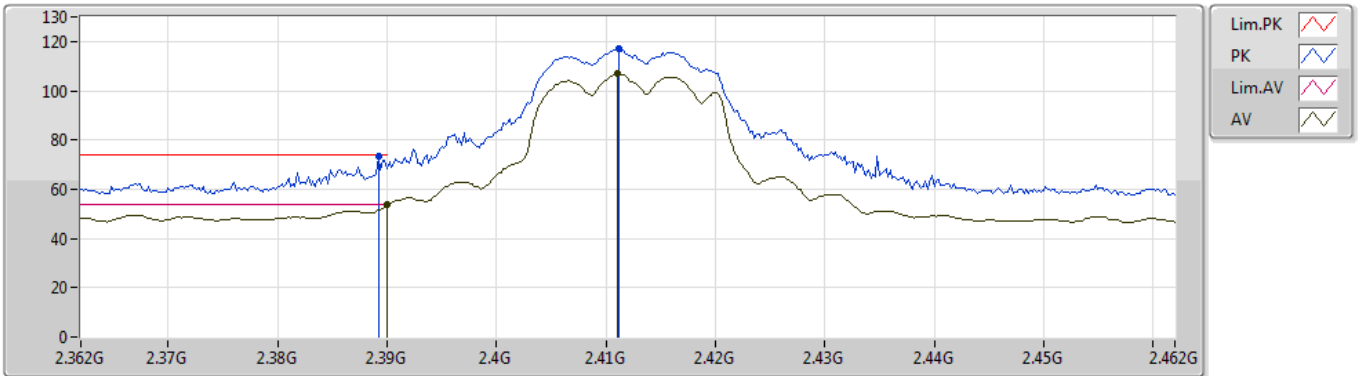
EUT Y_2TX
Setting 21
06-C-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92406G	49.65	74.00	-24.35	4.41	3	Horizontal	89	1.71	-	45.24			
AV	4.924G	43.70	54.00	-10.30	4.41	3	Horizontal	89	1.71	-	39.29			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2412MHz_TX



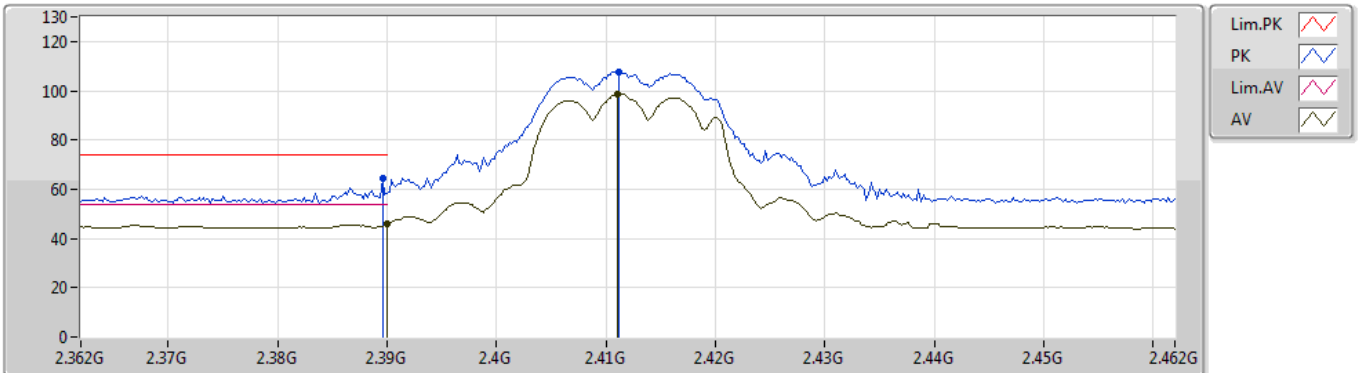
EUT Y_2TX
Setting 19.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3892G	73.26	74.00	-0.74	30.99	3	Vertical	119	1.99	-	42.27			
AV	2.39G	53.74	54.00	-0.26	30.99	3	Vertical	119	1.99	-	22.75			
PK	2.4112G	116.90	Inf	-Inf	30.95	3	Vertical	119	1.99	-	85.95			
AV	2.411G	106.80	Inf	-Inf	30.95	3	Vertical	119	1.99	-	75.85			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2412MHz_TX



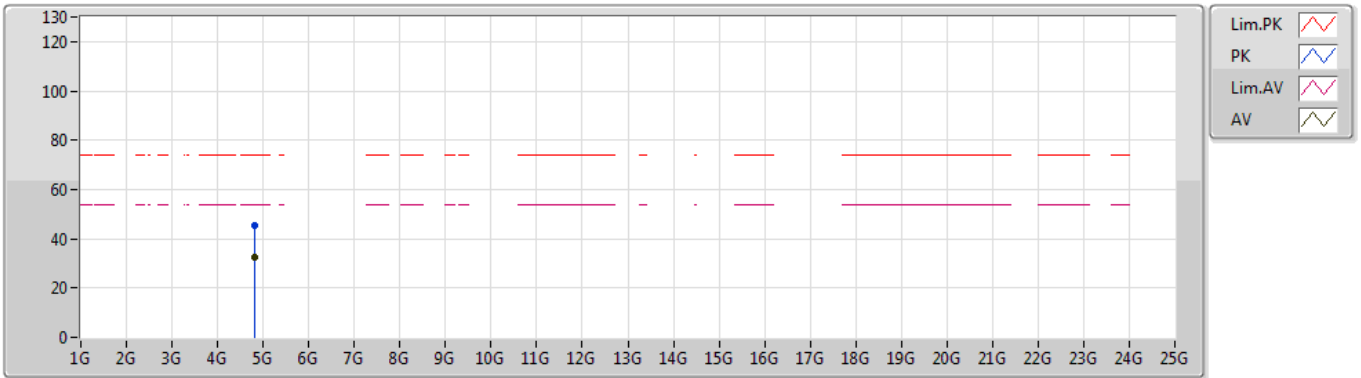
EUT Y_2TX
Setting 19.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3896G	64.17	74.00	-9.83	30.99	3	Horizontal	64	2.06	-	33.18			
AV	2.39G	45.82	54.00	-8.18	30.99	3	Horizontal	64	2.06	-	14.83			
PK	2.4112G	107.77	Inf	-Inf	30.95	3	Horizontal	64	2.06	-	76.82			
AV	2.411G	98.57	Inf	-Inf	30.95	3	Horizontal	64	2.06	-	67.62			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2412MHz_TX



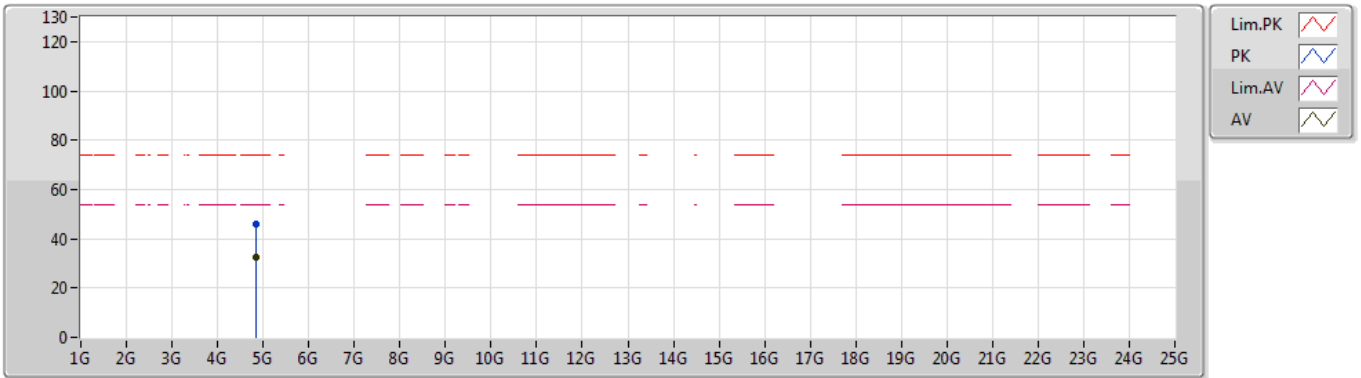
EUT Y_2TX
Setting 19.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82414G	45.64	74.00	-28.36	4.14	3	Vertical	151	1.46	-	41.50			
AV	4.82464G	32.47	54.00	-21.53	4.14	3	Vertical	151	1.46	-	28.33			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2412MHz_TX



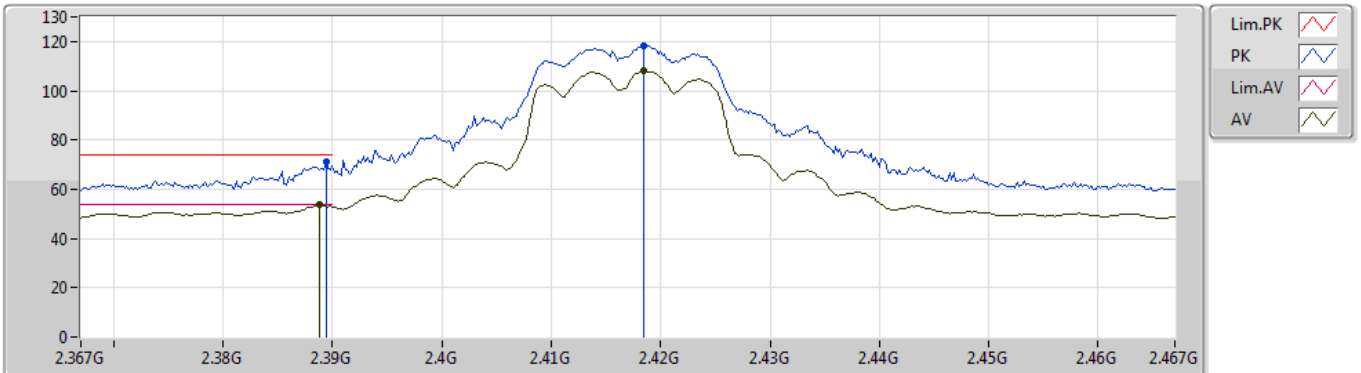
EUT Y_2TX
Setting 19.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.83402G	45.68	74.00	-28.32	4.16	3	Horizontal	238	2.43	-	41.52			
AV	4.82958G	32.59	54.00	-21.41	4.16	3	Horizontal	238	2.43	-	28.43			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2417MHz_TX



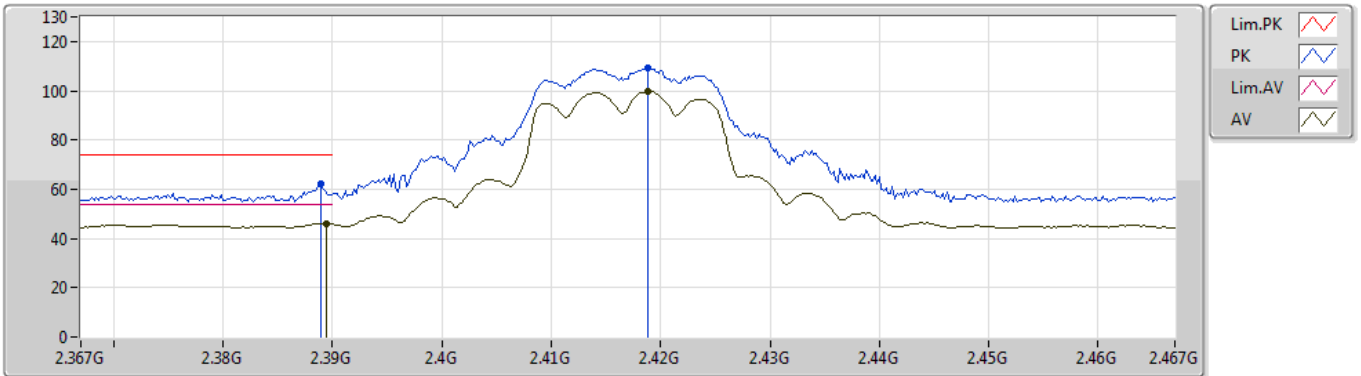
EUT Y_2TX
Setting 21
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3894G	71.35	74.00	-2.65	30.99	3	Vertical	117	1.84	-	40.36			
AV	2.3888G	53.78	54.00	-0.22	30.99	3	Vertical	117	1.84	-	22.79			
PK	2.4184G	118.21	Inf	-Inf	30.92	3	Vertical	117	1.84	-	87.29			
AV	2.4184G	107.96	Inf	-Inf	30.92	3	Vertical	117	1.84	-	77.04			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2417MHz_TX



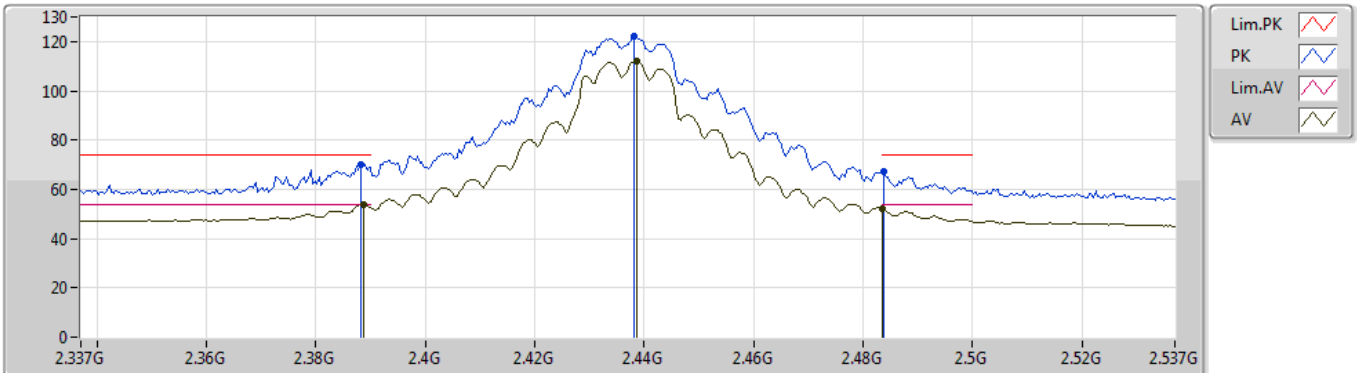
EUT Y_2TX
Setting 21
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.389G	62.32	74.00	-11.68	30.99	3	Horizontal	65	2.11	-	31.33			
AV	2.3894G	46.22	54.00	-7.78	30.99	3	Horizontal	65	2.11	-	15.23			
PK	2.4188G	109.14	Inf	-Inf	30.92	3	Horizontal	65	2.11	-	78.22			
AV	2.4188G	99.81	Inf	-Inf	30.92	3	Horizontal	65	2.11	-	68.89			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2437MHz_TX



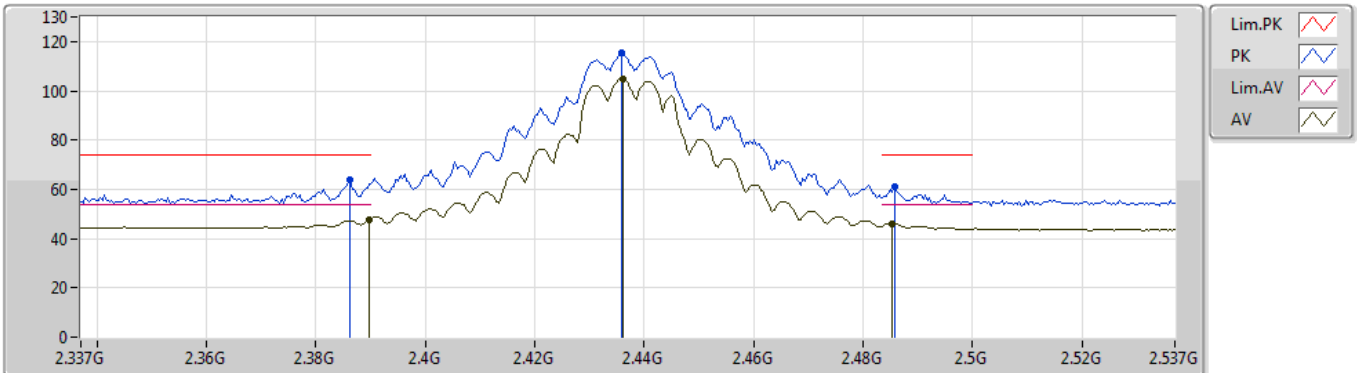
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Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3882G	70.31	74.00	-3.69	31.00	3	Vertical	128	2.20	-	39.31			
AV	2.3886G	53.95	54.00	-0.05	30.99	3	Vertical	128	2.20	-	22.96			
PK	2.4382G	121.95	Inf	-Inf	30.89	3	Vertical	128	2.20	-	91.06			
AV	2.4386G	111.97	Inf	-Inf	30.88	3	Vertical	128	2.20	-	81.09			
PK	2.4838G	67.41	74.00	-6.59	30.78	3	Vertical	128	2.20	-	36.63			
AV	2.4835G	52.20	54.00	-1.80	30.78	3	Vertical	128	2.20	-	21.42			

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

13/08/2019



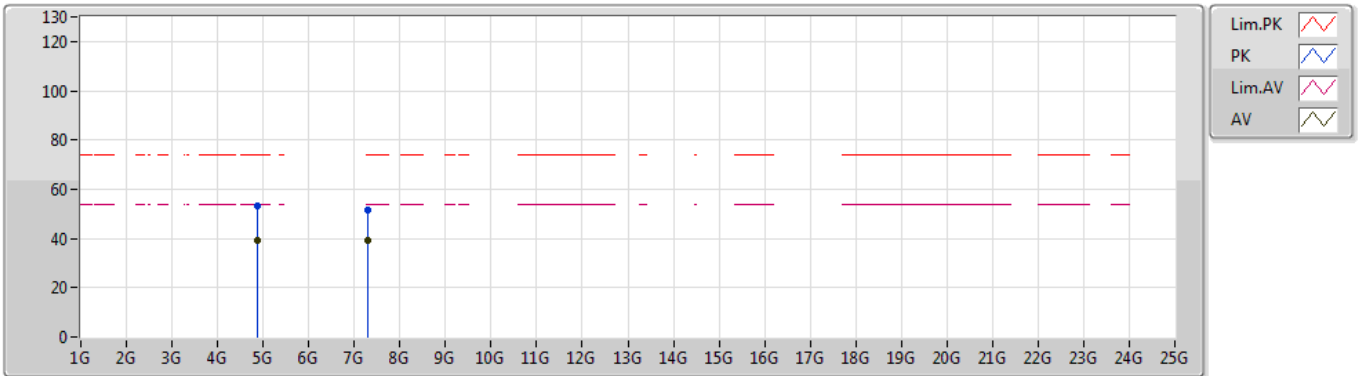
EUT Y_2TX
Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3862G	63.69	74.00	-10.31	31.00	3	Horizontal	237	2.21	-	32.69			
AV	2.3898G	47.75	54.00	-6.25	30.99	3	Horizontal	237	2.21	-	16.76			
PK	2.4358G	115.19	Inf	-Inf	30.89	3	Horizontal	237	2.21	-	84.30			
AV	2.4362G	104.95	Inf	-Inf	30.89	3	Horizontal	237	2.21	-	74.06			
PK	2.4858G	61.32	74.00	-12.68	30.77	3	Horizontal	237	2.21	-	30.55			
AV	2.4854G	46.14	54.00	-7.86	30.77	3	Horizontal	237	2.21	-	15.37			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2437MHz_TX



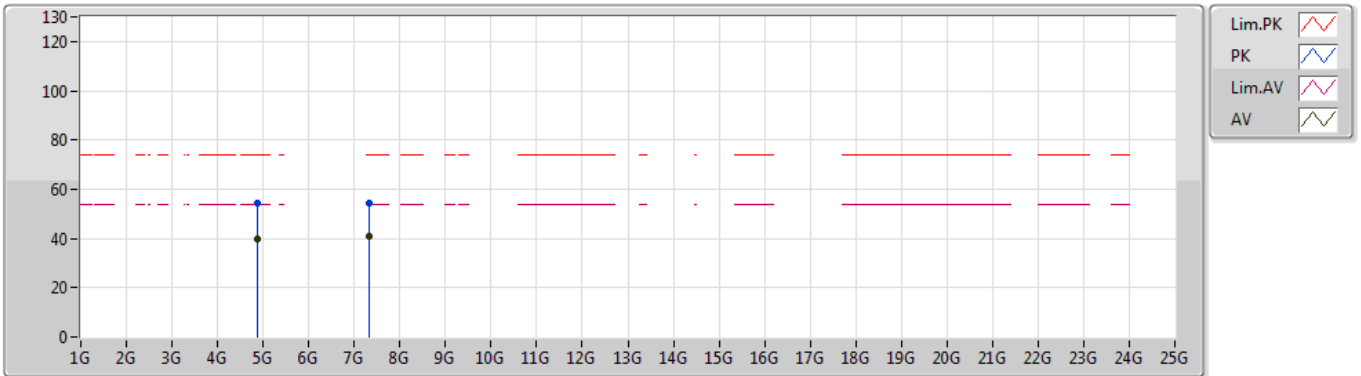
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Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87336G	53.18	74.00	-20.82	4.23	3	Vertical	359	1.50	-	48.95			
AV	4.87344G	39.27	54.00	-14.73	4.23	3	Vertical	359	1.50	-	35.04			
PK	7.3098G	51.83	74.00	-22.17	9.56	3	Vertical	263	1.62	-	42.27			
AV	7.3094G	39.18	54.00	-14.82	9.56	3	Vertical	263	1.62	-	29.62			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2437MHz_TX



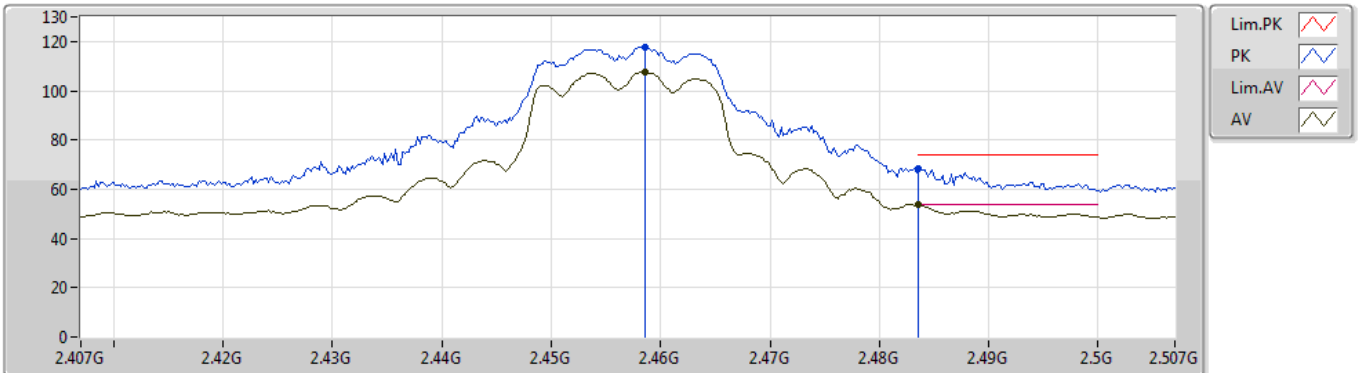
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Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8776G	54.18	74.00	-19.82	4.25	3	Horizontal	88	1.77	-	49.93			
AV	4.87232G	39.83	54.00	-14.17	4.23	3	Horizontal	88	1.77	-	35.60			
PK	7.31796G	54.62	74.00	-19.38	9.56	3	Horizontal	283	1.69	-	45.06			
AV	7.31328G	41.00	54.00	-13.00	9.56	3	Horizontal	283	1.69	-	31.44			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2457MHz_TX



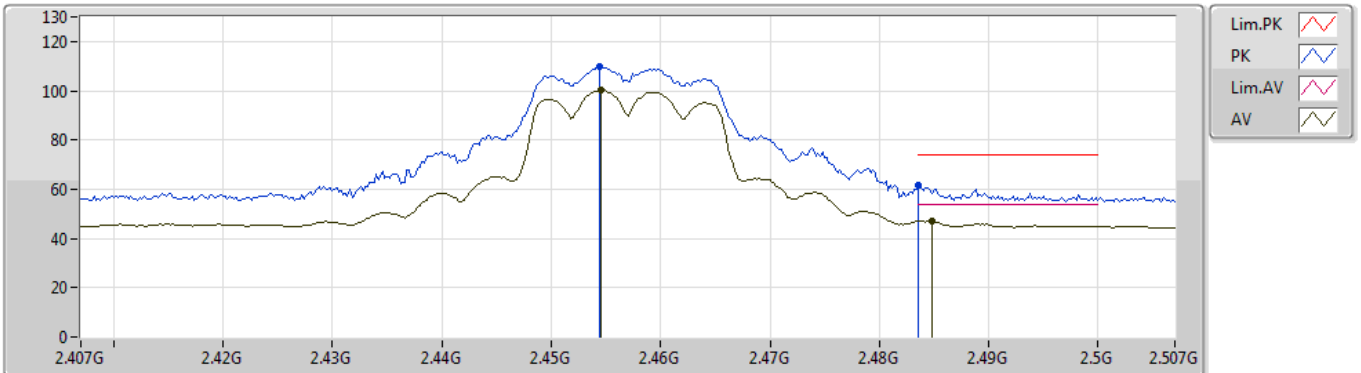
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Setting 20.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4586G	117.74	Inf	-Inf	30.83	3	Vertical	122	1.93	-	86.91			
AV	2.4586G	107.68	Inf	-Inf	30.83	3	Vertical	122	1.93	-	76.85			
PK	2.4836G	68.28	74.00	-5.72	30.78	3	Vertical	122	1.93	-	37.50			
AV	2.4835G	53.81	54.00	-0.19	30.78	3	Vertical	122	1.93	-	23.03			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2457MHz_TX



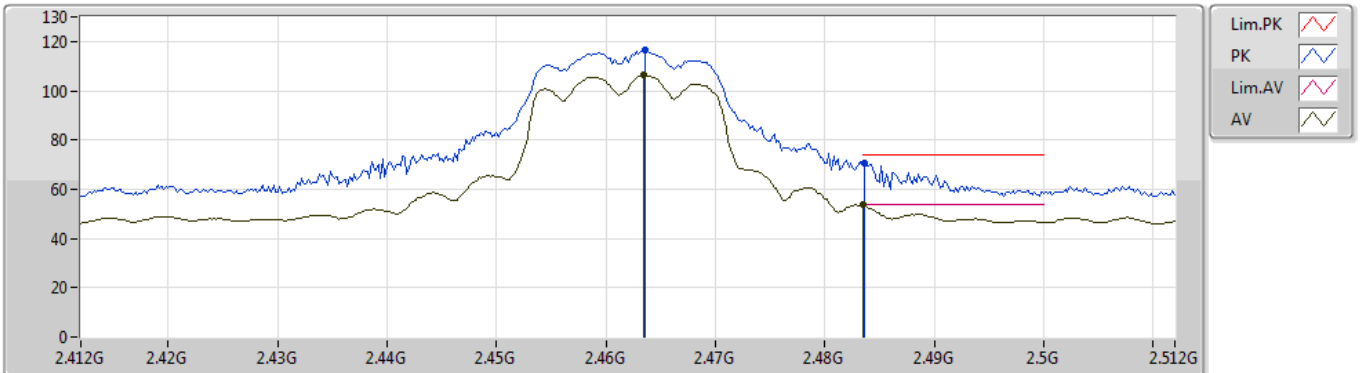
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Setting 20.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4544G	109.82	Inf	-Inf	30.85	3	Horizontal	60	2.23	-	78.97			
AV	2.4546G	100.36	Inf	-Inf	30.85	3	Horizontal	60	2.23	-	69.51			
PK	2.4836G	61.47	74.00	-12.53	30.78	3	Horizontal	60	2.23	-	30.69			
AV	2.4848G	47.07	54.00	-6.93	30.78	3	Horizontal	60	2.23	-	16.29			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2462MHz_TX



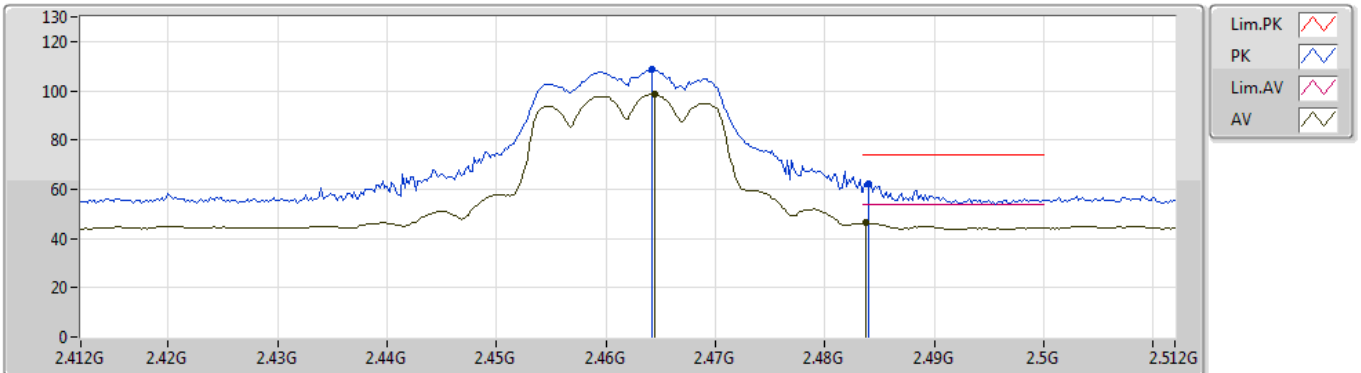
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Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4636G	116.55	Inf	-Inf	30.82	3	Vertical	119	1.87	-	85.73			
AV	2.4634G	106.19	Inf	-Inf	30.82	3	Vertical	119	1.87	-	75.37			
PK	2.4836G	70.70	74.00	-3.30	30.78	3	Vertical	119	1.87	-	39.92			
AV	2.4835001G	53.73	54.00	-0.27	30.78	3	Vertical	119	1.87	-	22.95			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2462MHz_TX



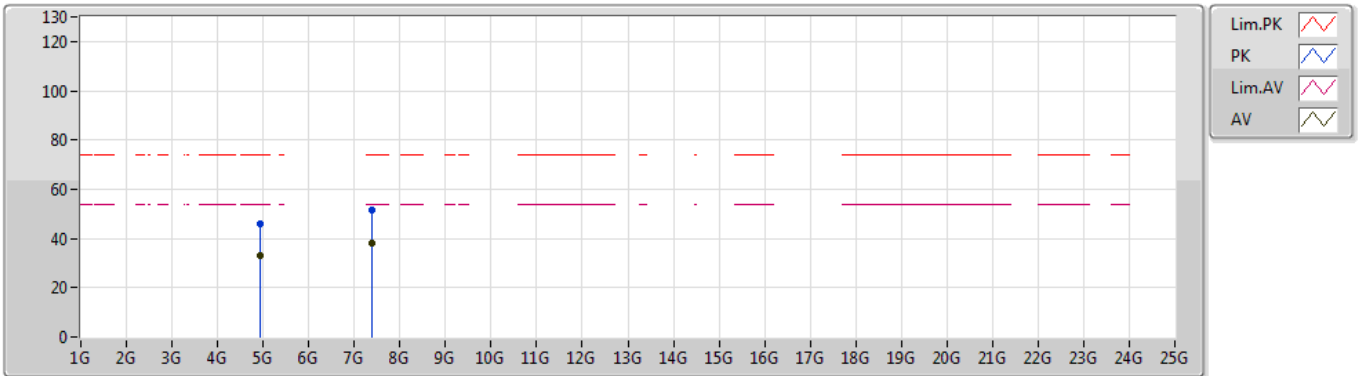
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Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4642G	108.68	Inf	-Inf	30.82	3	Horizontal	59	1.75	-	77.86			
AV	2.4644G	98.81	Inf	-Inf	30.83	3	Horizontal	59	1.75	-	67.98			
PK	2.484G	62.37	74.00	-11.63	30.78	3	Horizontal	59	1.75	-	31.59			
AV	2.4838G	46.43	54.00	-7.57	30.78	3	Horizontal	59	1.75	-	15.65			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2462MHz_TX



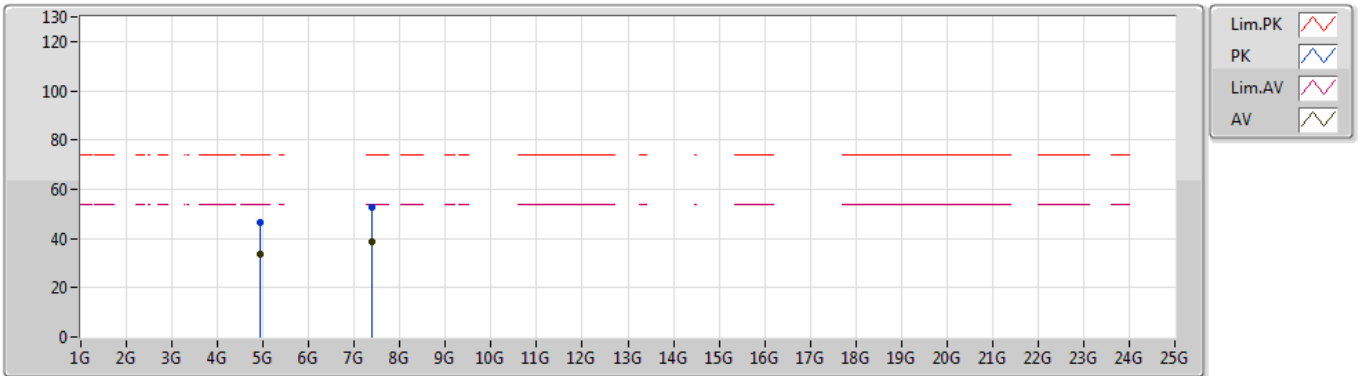
EUT Y_2TX
Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92196G	45.97	74.00	-28.03	4.40	3	Vertical	149	1.37	-	41.57			
AV	4.92166G	32.80	54.00	-21.20	4.40	3	Vertical	149	1.37	-	28.40			
PK	7.39338G	51.76	74.00	-22.24	9.53	3	Vertical	141	1.98	-	42.23			
AV	7.39314G	38.36	54.00	-15.64	9.53	3	Vertical	141	1.98	-	28.83			

802.11g_Nss1,(6Mbps)_2TX

13/08/2019

2462MHz_TX



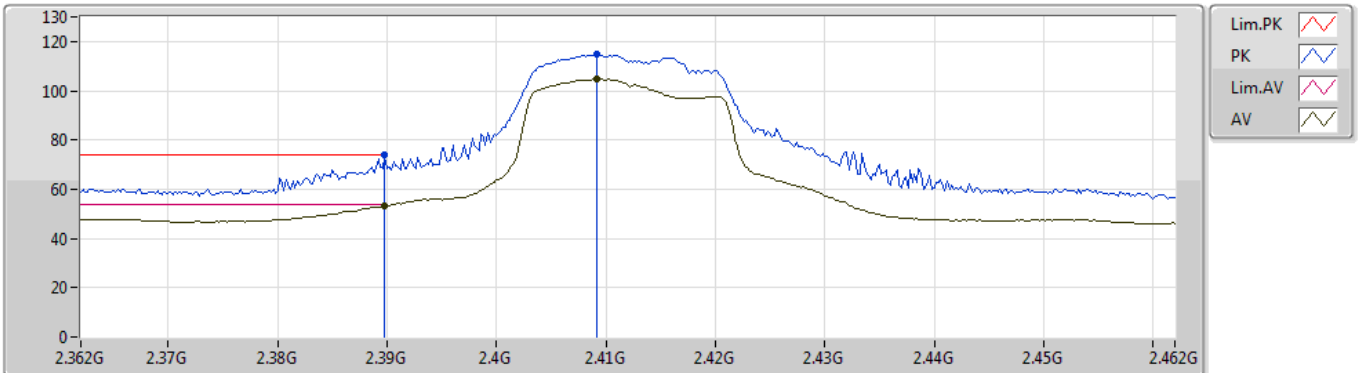
EUT Y_2TX
Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92608G	46.30	74.00	-27.70	4.42	3	Horizontal	79	1.66	-	41.88			
AV	4.92922G	33.36	54.00	-20.64	4.44	3	Horizontal	79	1.66	-	28.92			
PK	7.38636G	52.53	74.00	-21.47	9.54	3	Horizontal	126	1.76	-	42.99			
AV	7.38648G	38.42	54.00	-15.58	9.54	3	Horizontal	126	1.76	-	28.88			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2412MHz_TX



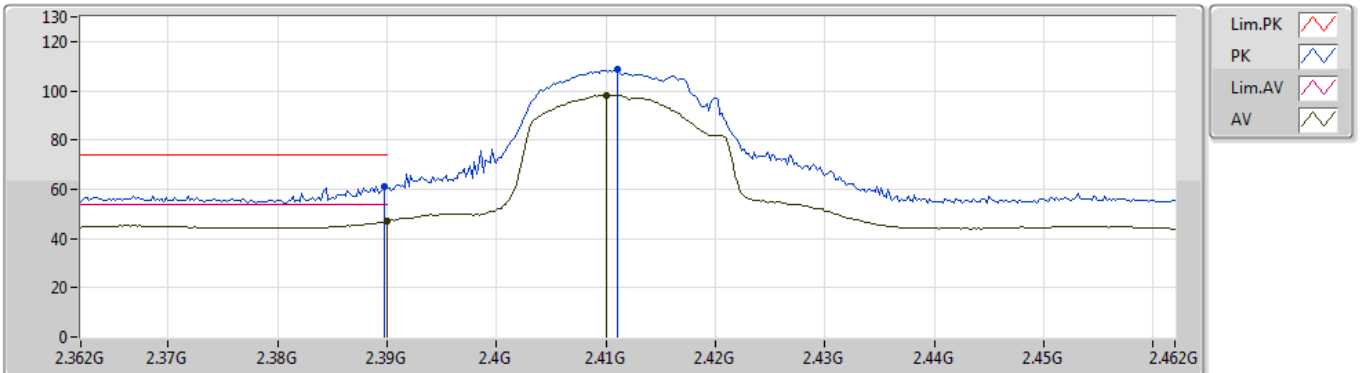
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Setting 19
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3898G	73.76	74.00	-0.24	30.99	3	Vertical	134	1.82	-	42.77			
AV	2.3898G	53.44	54.00	-0.56	30.99	3	Vertical	134	1.82	-	22.45			
PK	2.4092G	114.73	Inf	-Inf	30.95	3	Vertical	134	1.82	-	83.78			
AV	2.4092G	104.71	Inf	-Inf	30.95	3	Vertical	134	1.82	-	73.76			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2412MHz_TX



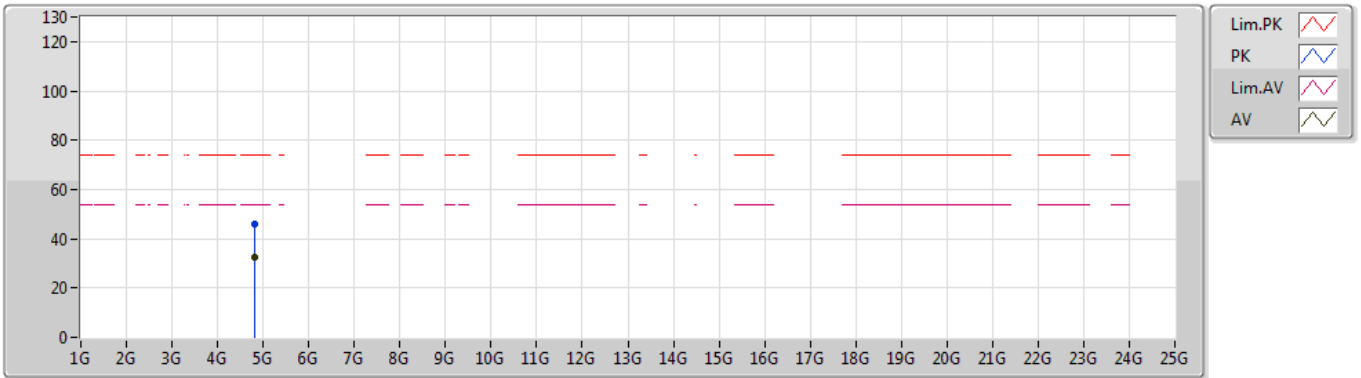
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Setting 19
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3898G	61.07	74.00	-12.93	30.99	3	Horizontal	64	2.10	-	30.08			
AV	2.39G	46.83	54.00	-7.17	30.99	3	Horizontal	64	2.10	-	15.84			
PK	2.411G	108.46	Inf	-Inf	30.95	3	Horizontal	64	2.10	-	77.51			
AV	2.41G	98.23	Inf	-Inf	30.95	3	Horizontal	64	2.10	-	67.28			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2412MHz_TX



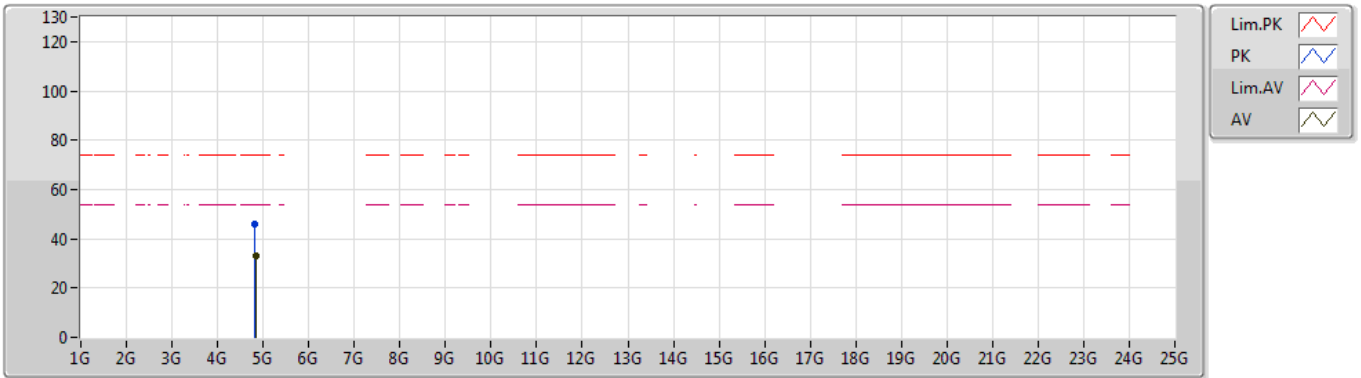
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Setting 19
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82476G	45.85	74.00	-28.15	4.14	3	Vertical	340	2.15	-	41.71			
AV	4.82468G	32.49	54.00	-21.51	4.14	3	Vertical	340	2.15	-	28.35			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2412MHz_TX



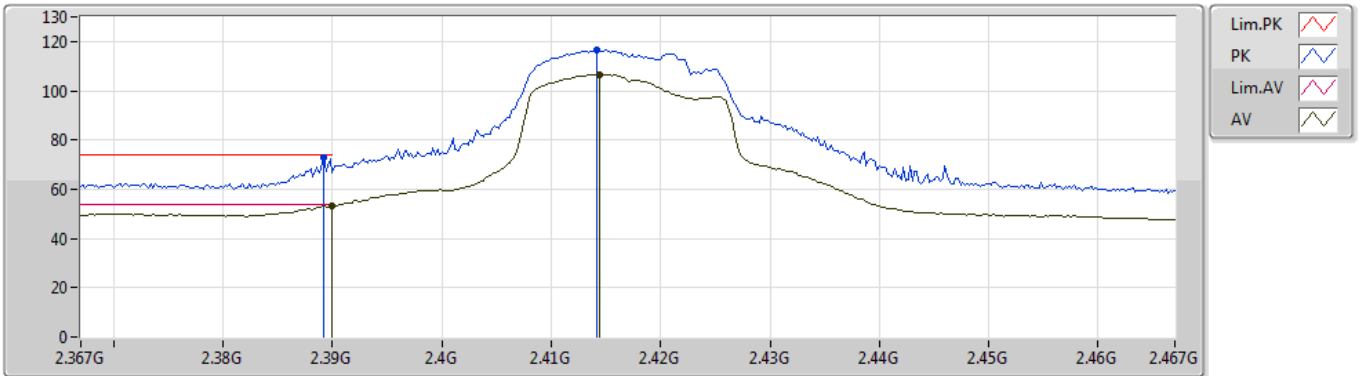
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Setting 19
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82838G	46.01	74.00	-27.99	4.16	3	Horizontal	231	1.85	-	41.85			
AV	4.82856G	32.85	54.00	-21.15	4.16	3	Horizontal	231	1.85	-	28.69			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2417MHz_TX



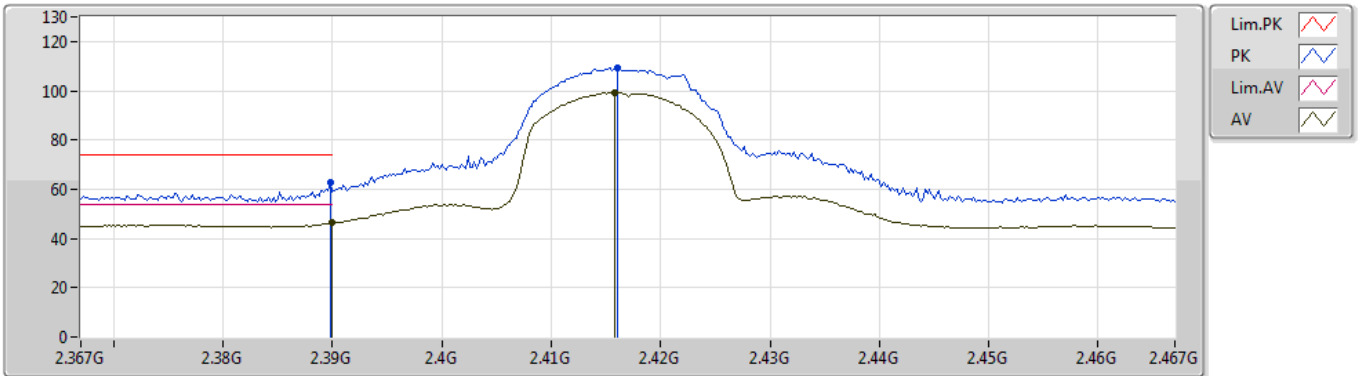
EUT Y_2TX
Setting 20.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3892G	72.79	74.00	-1.21	30.99	3	Vertical	130	1.59	-	41.80			
AV	2.39G	53.18	54.00	-0.82	30.99	3	Vertical	130	1.59	-	22.19			
PK	2.4142G	116.63	Inf	-Inf	30.94	3	Vertical	130	1.59	-	85.69			
AV	2.4144G	106.43	Inf	-Inf	30.94	3	Vertical	130	1.59	-	75.49			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2417MHz_TX



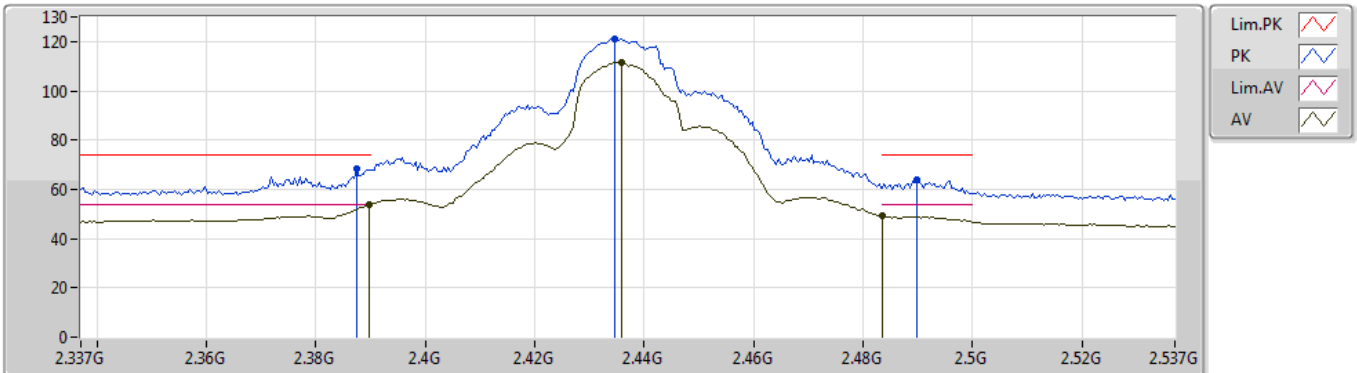
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Setting 20.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3898G	62.50	74.00	-11.50	30.99	3	Horizontal	56	1.21	-	31.51			
AV	2.39G	46.30	54.00	-7.70	30.99	3	Horizontal	56	1.21	-	15.31			
PK	2.416G	109.31	Inf	-Inf	30.93	3	Horizontal	56	1.21	-	78.38			
AV	2.4158G	99.30	Inf	-Inf	30.93	3	Horizontal	56	1.21	-	68.37			

802.11n HT20_Nss1,(MCS0)_2TX

15/08/2019

2437MHz_TX



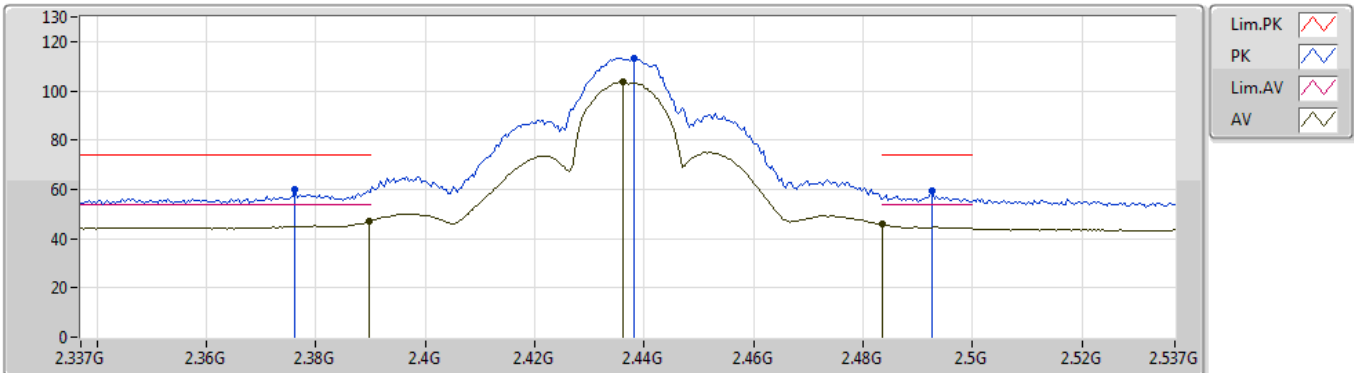
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Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3874G	68.29	74.00	-5.71	31.00	3	Vertical	111	2.25	-	37.29
AV	2.3898G	53.80	54.00	-0.20	30.99	3	Vertical	111	2.25	-	22.81
PK	2.4346G	121.14	Inf	-Inf	30.89	3	Vertical	111	2.25	-	90.25
AV	2.4358G	111.43	Inf	-Inf	30.89	3	Vertical	111	2.25	-	80.54
PK	2.4898G	63.70	74.00	-10.30	30.76	3	Vertical	111	2.25	-	32.94
AV	2.48351G	49.11	54.00	-4.89	30.78	3	Vertical	111	2.25	-	18.33

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2437MHz_TX



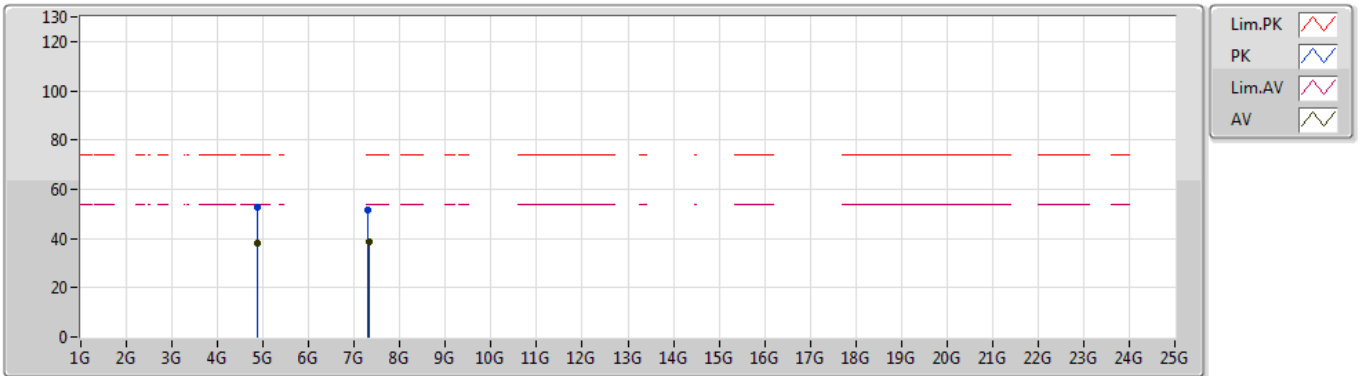
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Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3762G	59.90	74.00	-14.10	31.02	3	Horizontal	58	1.61	-	28.88			
AV	2.3898G	46.80	54.00	-7.20	30.99	3	Horizontal	58	1.61	-	15.81			
PK	2.4382G	113.13	Inf	-Inf	30.89	3	Horizontal	58	1.61	-	82.24			
AV	2.4362G	103.78	Inf	-Inf	30.89	3	Horizontal	58	1.61	-	72.89			
PK	2.4926G	59.49	74.00	-14.51	30.75	3	Horizontal	58	1.61	-	28.74			
AV	2.4835G	45.67	54.00	-8.33	30.78	3	Horizontal	58	1.61	-	14.89			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2437MHz_TX



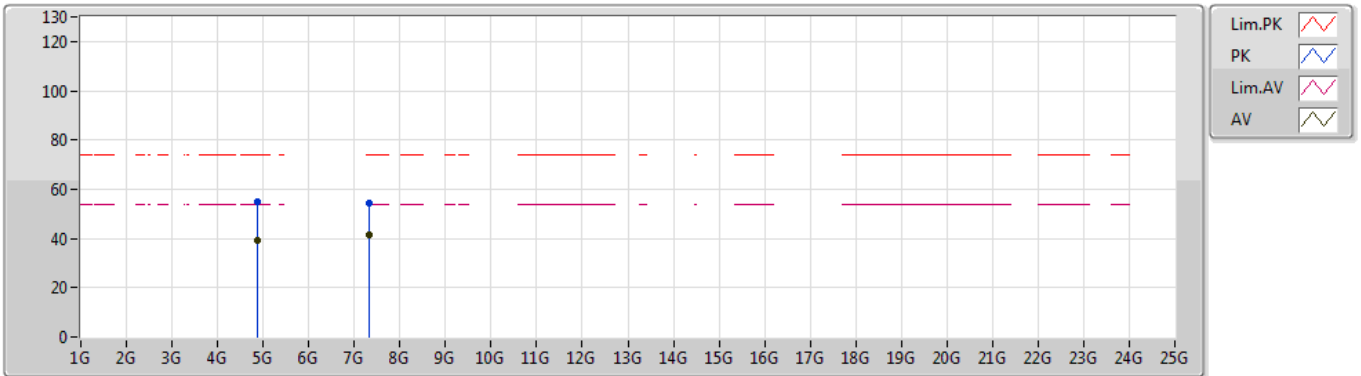
EUT Y_2TX
Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87646G	52.58	74.00	-21.42	4.25	3	Vertical	343	1.50	-	48.33			
AV	4.87166G	38.07	54.00	-15.93	4.23	3	Vertical	343	1.50	-	33.84			
PK	7.30284G	51.80	74.00	-22.20	9.57	3	Vertical	281	1.82	-	42.23			
AV	7.32156G	38.78	54.00	-15.22	9.56	3	Vertical	281	1.82	-	29.22			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2437MHz_TX



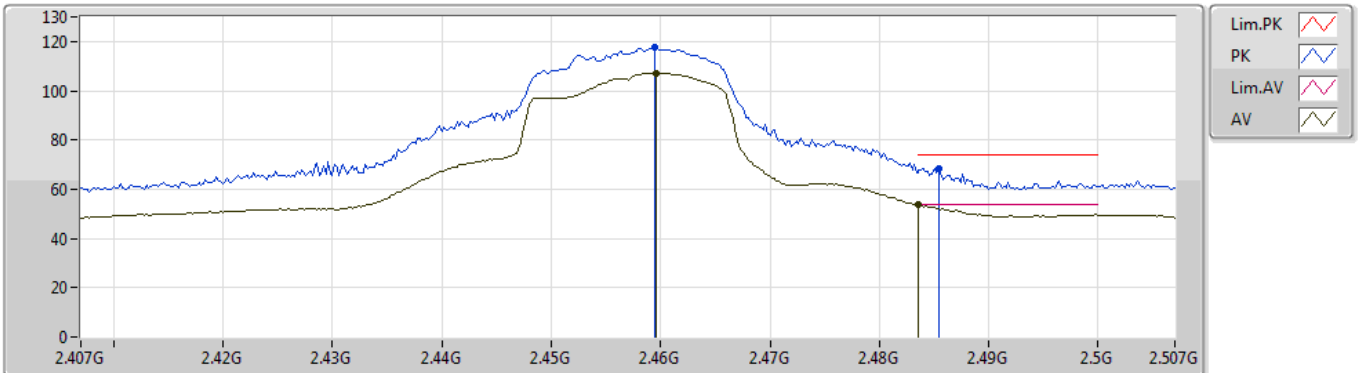
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Setting 26.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87142G	55.13	74.00	-18.87	4.23	3	Horizontal	87	1.74	-	50.90			
AV	4.8731G	39.30	54.00	-14.70	4.23	3	Horizontal	87	1.74	-	35.07			
PK	7.311G	54.55	74.00	-19.45	9.56	3	Horizontal	277	1.74	-	44.99			
AV	7.31196G	41.43	54.00	-12.57	9.56	3	Horizontal	277	1.74	-	31.87			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2457MHz_TX



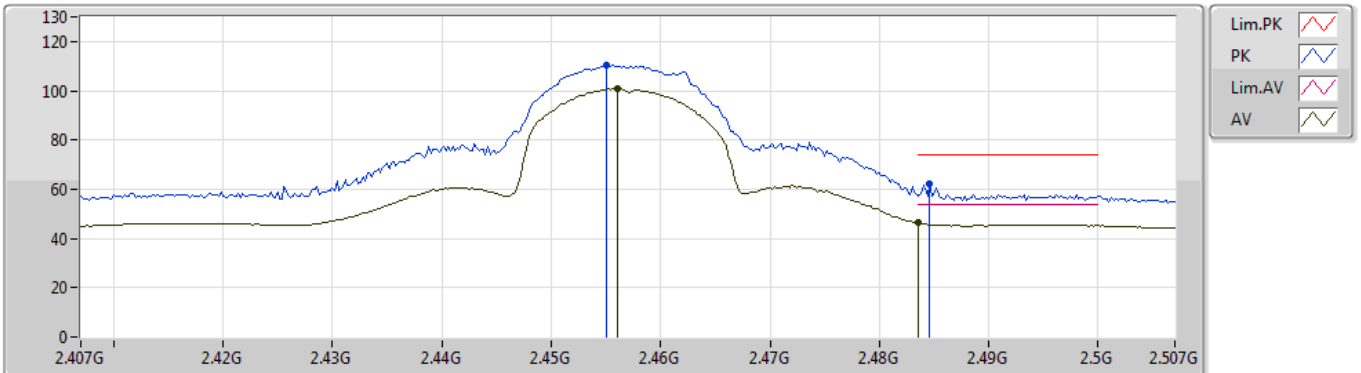
EUT Y_2TX
Setting 21
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4594G	117.45	Inf	-Inf	30.83	3	Vertical	134	1.72	-	86.62			
AV	2.4596G	107.16	Inf	-Inf	30.83	3	Vertical	134	1.72	-	76.33			
PK	2.4854G	68.29	74.00	-5.71	30.77	3	Vertical	134	1.72	-	37.52			
AV	2.483509G	53.78	54.00	-0.22	30.78	3	Vertical	134	1.72	-	23.00			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2457MHz_TX



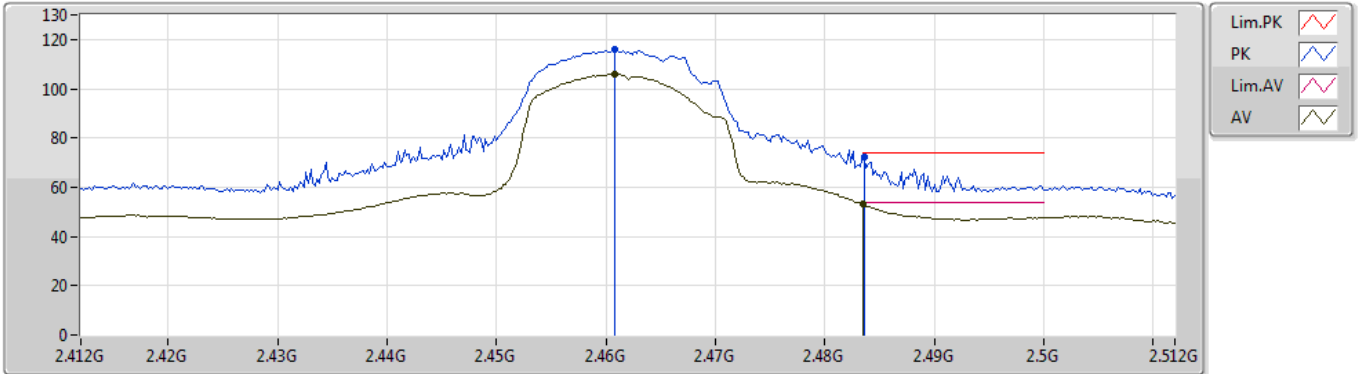
EUT Y_2TX
Setting 21
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.455G	110.35	Inf	-Inf	30.85	3	Horizontal	255	2.64	-	79.50			
AV	2.456G	100.78	Inf	-Inf	30.84	3	Horizontal	255	2.64	-	69.94			
PK	2.4846G	61.94	74.00	-12.06	30.78	3	Horizontal	255	2.64	-	31.16			
AV	2.4835G	46.31	54.00	-7.69	30.78	3	Horizontal	255	2.64	-	15.53			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2462MHz_TX



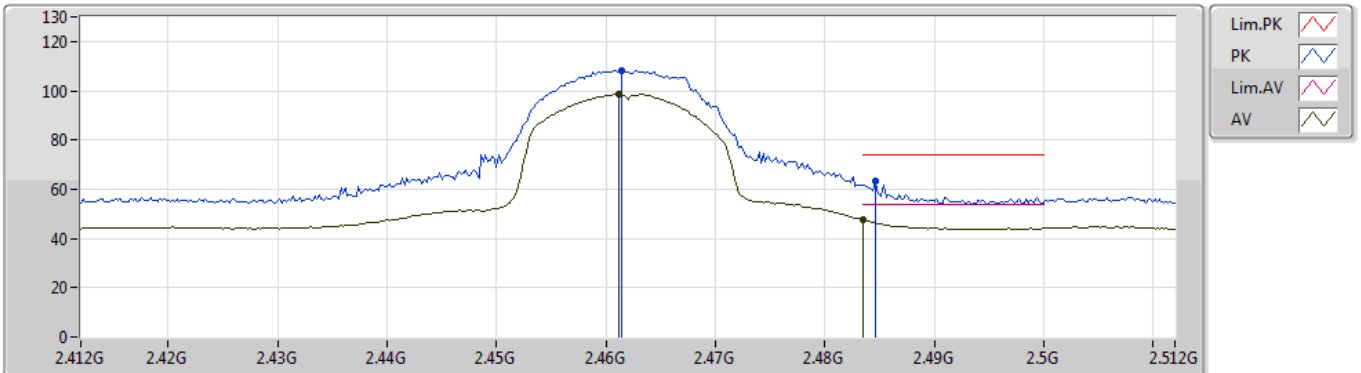
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Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4608G	115.73	Inf	-Inf	30.83	3	Vertical	110	1.74	-	84.90			
AV	2.4608G	105.84	Inf	-Inf	30.83	3	Vertical	110	1.74	-	75.01			
PK	2.4836G	72.14	74.00	-1.86	30.78	3	Vertical	110	1.74	-	41.36			
AV	2.4835G	53.11	54.00	-0.89	30.78	3	Vertical	110	1.74	-	22.33			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2462MHz_TX



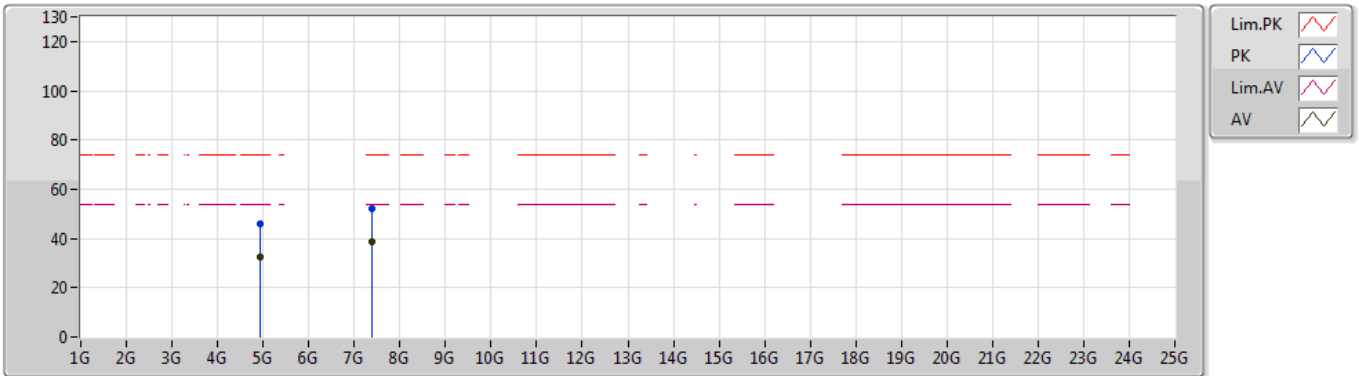
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Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4614G	108.30	Inf	-Inf	30.83	3	Horizontal	60	1.75	-	77.47			
AV	2.4612G	98.50	Inf	-Inf	30.83	3	Horizontal	60	1.75	-	67.67			
PK	2.4846G	63.41	74.00	-10.59	30.78	3	Horizontal	60	1.75	-	32.63			
AV	2.4835G	47.52	54.00	-6.48	30.78	3	Horizontal	60	1.75	-	16.74			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2462MHz_TX



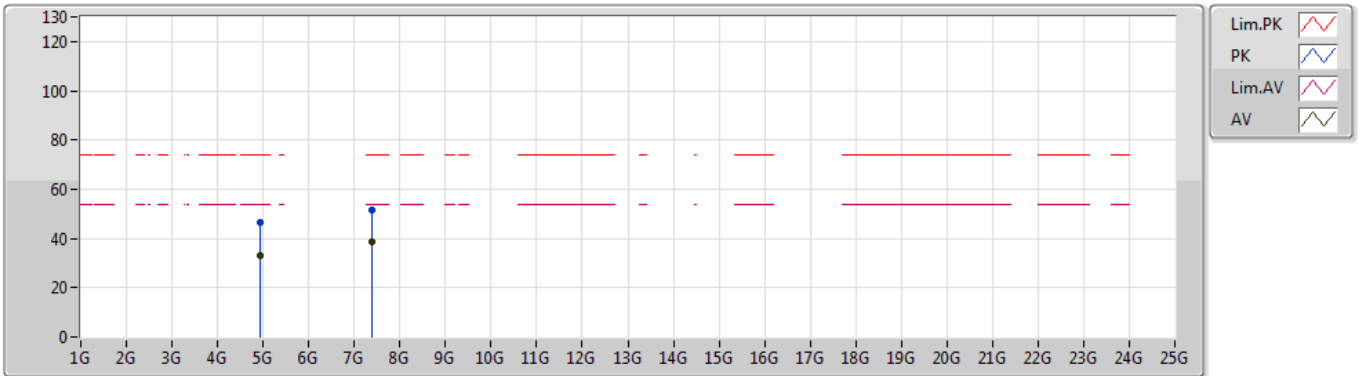
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Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92456G	45.79	74.00	-28.21	4.41	3	Vertical	279	1.70	-	41.38			
AV	4.92418G	32.58	54.00	-21.42	4.41	3	Vertical	279	1.70	-	28.17			
PK	7.38608G	52.16	74.00	-21.84	9.54	3	Vertical	77	1.53	-	42.62			
AV	7.38602G	38.51	54.00	-15.49	9.54	3	Vertical	77	1.53	-	28.97			

802.11n HT20_Nss1,(MCS0)_2TX

13/08/2019

2462MHz_TX



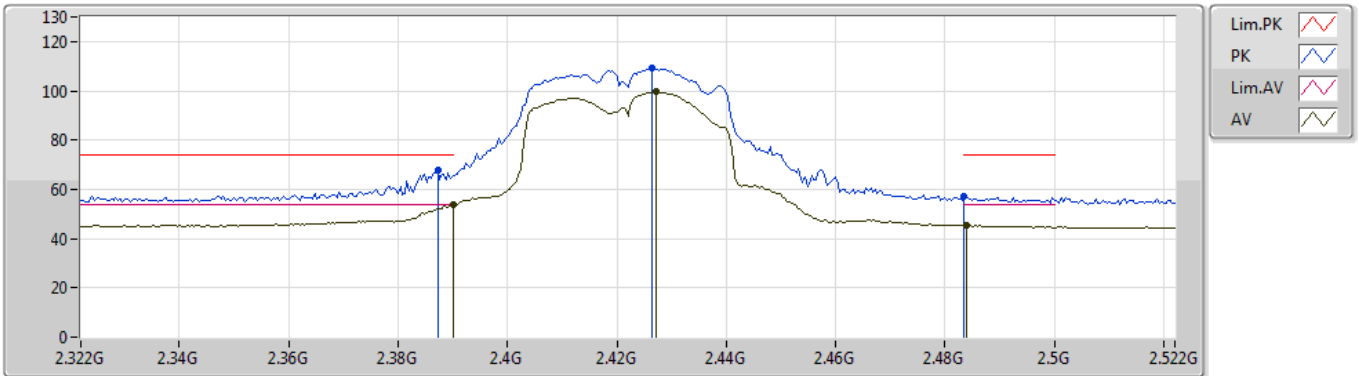
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Setting 18.5
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92322G	46.59	74.00	-27.41	4.40	3	Horizontal	101	1.78	-	42.19			
AV	4.92374G	33.21	54.00	-20.79	4.40	3	Horizontal	101	1.78	-	28.81			
PK	7.38304G	51.82	74.00	-22.18	9.54	3	Horizontal	131	1.44	-	42.28			
AV	7.3807G	38.50	54.00	-15.50	9.54	3	Horizontal	131	1.44	-	28.96			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2422MHz_TX



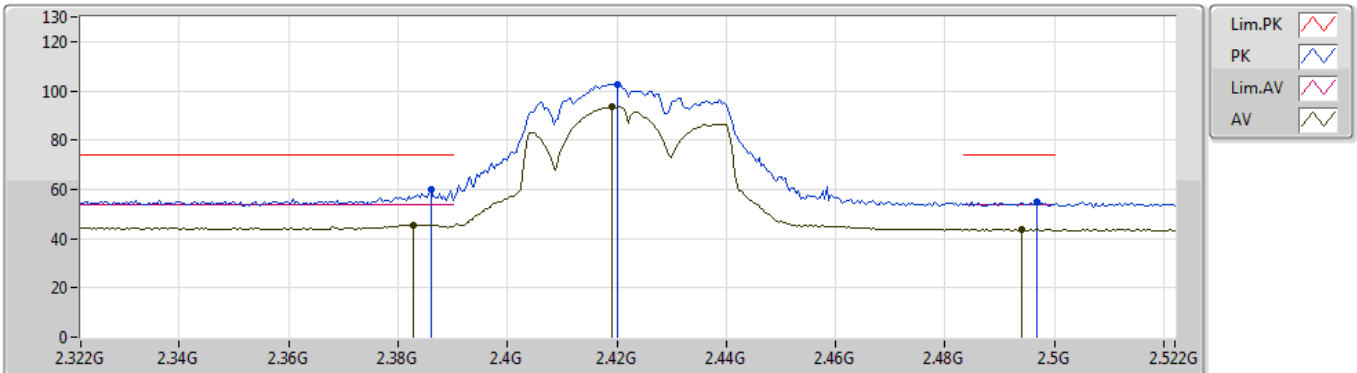
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Setting 16
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3872G	67.94	74.00	-6.06	31.00	3	Vertical	114	1.58	-	36.94
AV	2.39G	53.89	54.00	-0.11	30.99	3	Vertical	114	1.58	-	22.90
PK	2.4264G	109.31	Inf	-Inf	30.91	3	Vertical	114	1.58	-	78.40
AV	2.4272G	99.52	Inf	-Inf	30.91	3	Vertical	114	1.58	-	68.61
PK	2.4835G	56.99	74.00	-17.01	30.78	3	Vertical	114	1.58	-	26.21
AV	2.484G	45.53	54.00	-8.47	30.78	3	Vertical	114	1.58	-	14.75

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

13/08/2019



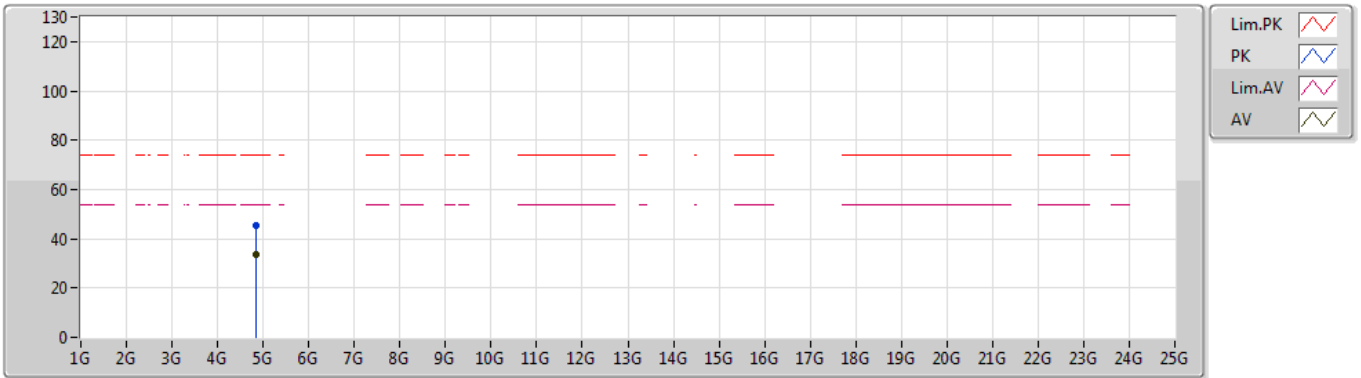
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Setting 16
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.386G	59.94	74.00	-14.06	31.00	3	Horizontal	112	2.11	-	28.94			
AV	2.3828G	45.60	54.00	-8.40	31.01	3	Horizontal	112	2.11	-	14.59			
PK	2.42G	102.78	Inf	-Inf	30.92	3	Horizontal	112	2.11	-	71.86			
AV	2.4192G	93.34	Inf	-Inf	30.92	3	Horizontal	112	2.11	-	62.42			
PK	2.4968G	55.05	74.00	-18.95	30.75	3	Horizontal	112	2.11	-	24.30			
AV	2.494G	43.64	54.00	-10.36	30.76	3	Horizontal	112	2.11	-	12.88			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2422MHz_TX



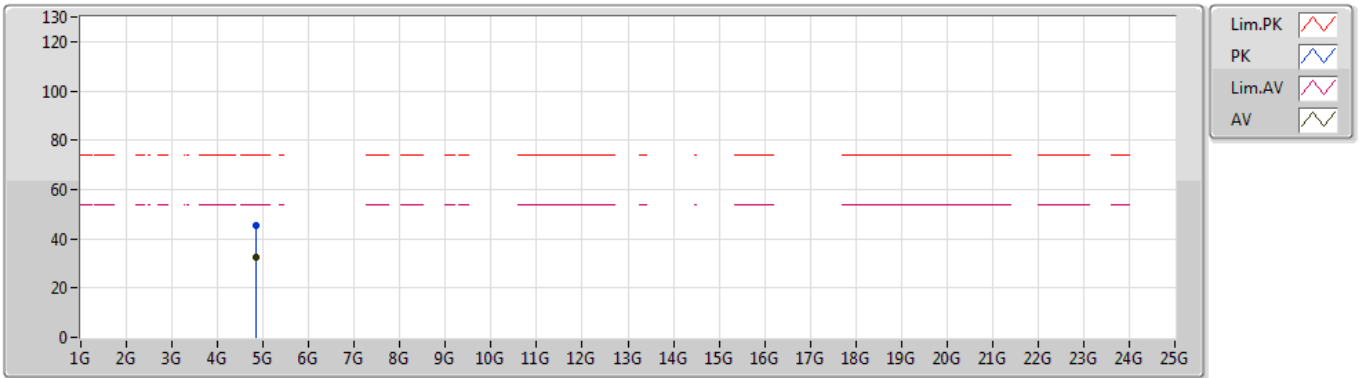
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Setting 16
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.84044G	45.58	74.00	-28.42	4.17	3	Vertical	278	1.87	-	41.41			
AV	4.84284G	33.44	54.00	-20.56	4.18	3	Vertical	278	1.87	-	29.26			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2422MHz_TX



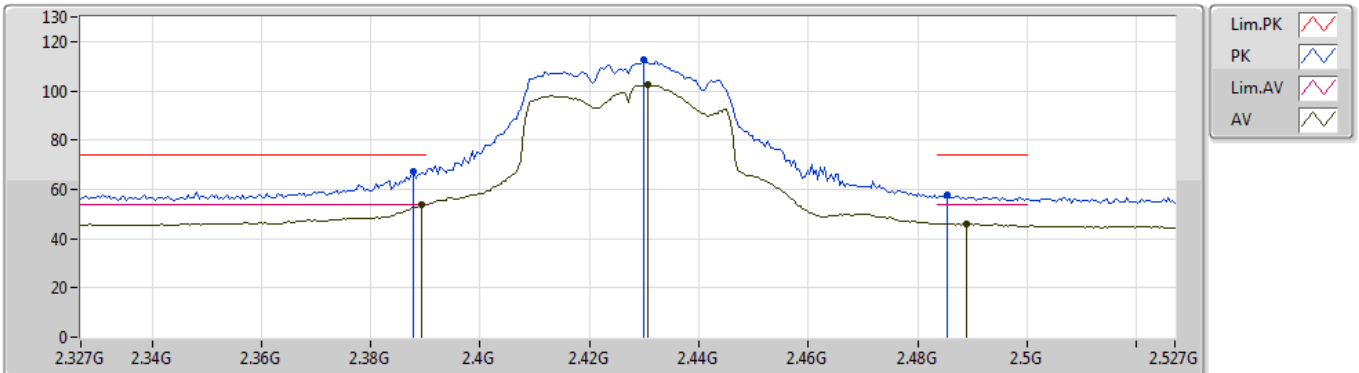
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Setting 16
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8442G	45.29	74.00	-28.71	4.18	3	Horizontal	311	1.69	-	41.11			
AV	4.84412G	32.75	54.00	-21.25	4.18	3	Horizontal	311	1.69	-	28.57			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2427MHz_TX



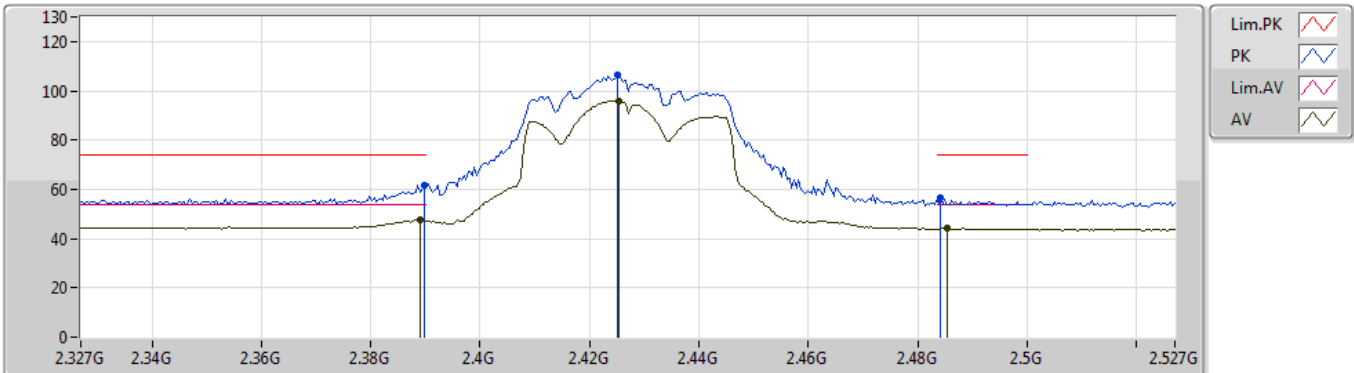
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Setting 18
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3878G	67.19	74.00	-6.81	31.00	3	Vertical	132	1.96	-	36.19			
AV	2.3894G	53.85	54.00	-0.15	30.99	3	Vertical	132	1.96	-	22.86			
PK	2.4298G	112.41	Inf	-Inf	30.90	3	Vertical	132	1.96	-	81.51			
AV	2.4306G	102.77	Inf	-Inf	30.90	3	Vertical	132	1.96	-	71.87			
PK	2.4854G	57.44	74.00	-16.56	30.77	3	Vertical	132	1.96	-	26.67			
AV	2.489G	46.21	54.00	-7.79	30.76	3	Vertical	132	1.96	-	15.45			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2427MHz_TX



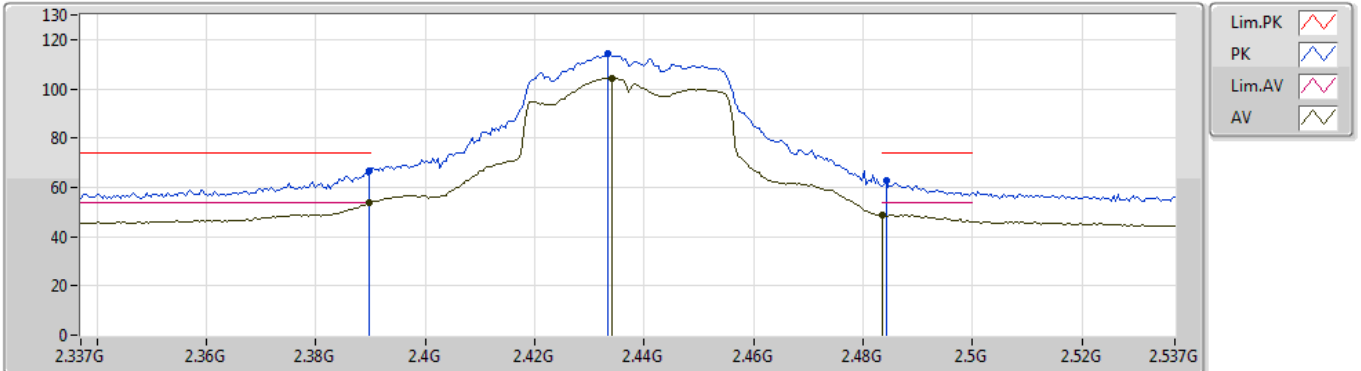
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Setting 18
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3898G	61.82	74.00	-12.18	30.99	3	Horizontal	248	2.43	-	30.83			
AV	2.389G	47.58	54.00	-6.42	30.99	3	Horizontal	248	2.43	-	16.59			
PK	2.425G	106.19	Inf	-Inf	30.92	3	Horizontal	248	2.43	-	75.27			
AV	2.4254G	96.01	Inf	-Inf	30.91	3	Horizontal	248	2.43	-	65.10			
PK	2.4842G	56.60	74.00	-17.40	30.78	3	Horizontal	248	2.43	-	25.82			
AV	2.4854G	44.07	54.00	-9.93	30.77	3	Horizontal	248	2.43	-	13.30			

802.11n HT40_Nss1,(MCS0)_2TX

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2437MHz_TX



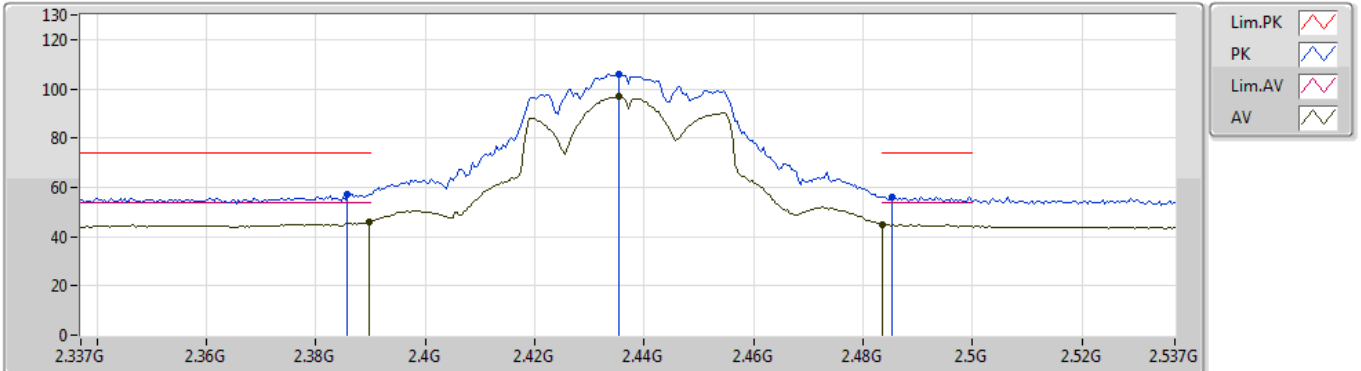
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Setting 20
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3898G	66.95	74.00	-7.05	30.99	3	Vertical	127	2.43	-	35.96			
AV	2.3898G	53.73	54.00	-0.27	30.99	3	Vertical	127	2.43	-	22.74			
PK	2.4334G	114.06	Inf	-Inf	30.89	3	Vertical	127	2.43	-	83.17			
AV	2.4342G	104.31	Inf	-Inf	30.89	3	Vertical	127	2.43	-	73.42			
PK	2.4842G	62.92	74.00	-11.08	30.78	3	Vertical	127	2.43	-	32.14			
AV	2.4835G	48.77	54.00	-5.23	30.78	3	Vertical	127	2.43	-	17.99			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2437MHz_TX



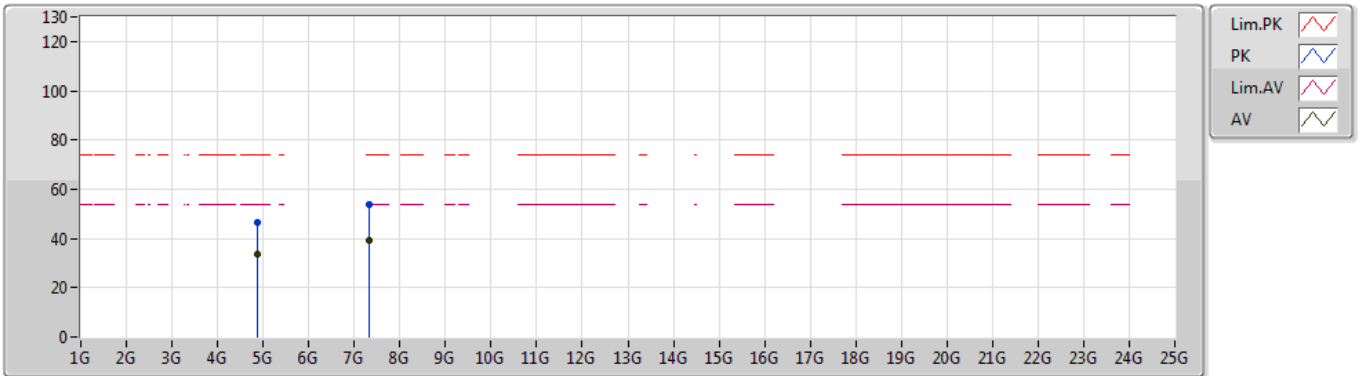
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Setting 20
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3858G	57.37	74.00	-16.63	31.00	3	Horizontal	60	1.79	-	26.37			
AV	2.3898G	45.97	54.00	-8.03	30.99	3	Horizontal	60	1.79	-	14.98			
PK	2.4354G	105.99	Inf	-Inf	30.88	3	Horizontal	60	1.79	-	75.11			
AV	2.4354G	96.79	Inf	-Inf	30.88	3	Horizontal	60	1.79	-	65.91			
PK	2.4854G	56.22	74.00	-17.78	30.77	3	Horizontal	60	1.79	-	25.45			
AV	2.4835G	45.00	54.00	-9.00	30.78	3	Horizontal	60	1.79	-	14.22			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2437MHz_TX



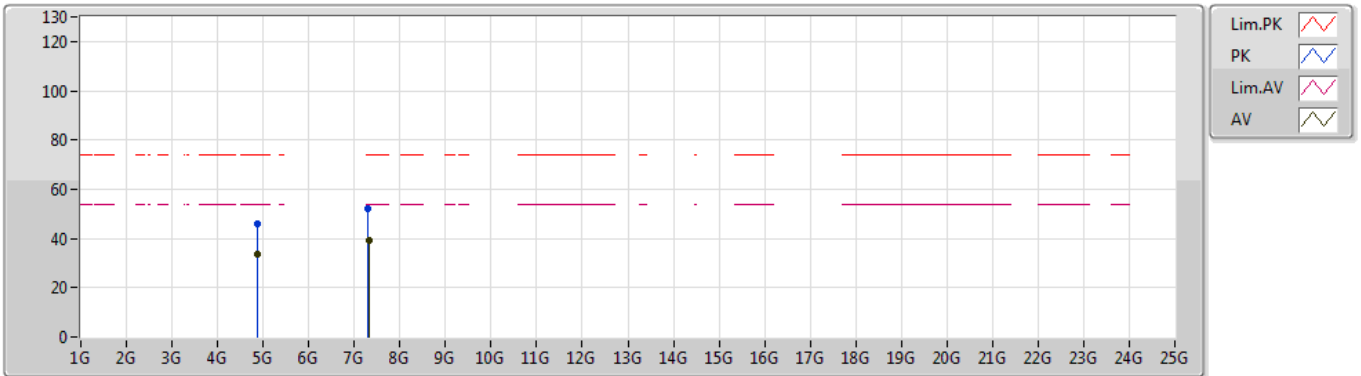
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Setting 20
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87372G	46.31	74.00	-27.69	4.23	3	Vertical	344	2.05	-	42.08			
AV	4.87708G	33.68	54.00	-20.32	4.25	3	Vertical	344	2.05	-	29.43			
PK	7.31532G	53.62	74.00	-20.38	9.56	3	Vertical	248	2.36	-	44.06			
AV	7.31524G	39.20	54.00	-14.80	9.56	3	Vertical	248	2.36	-	29.64			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2437MHz_TX



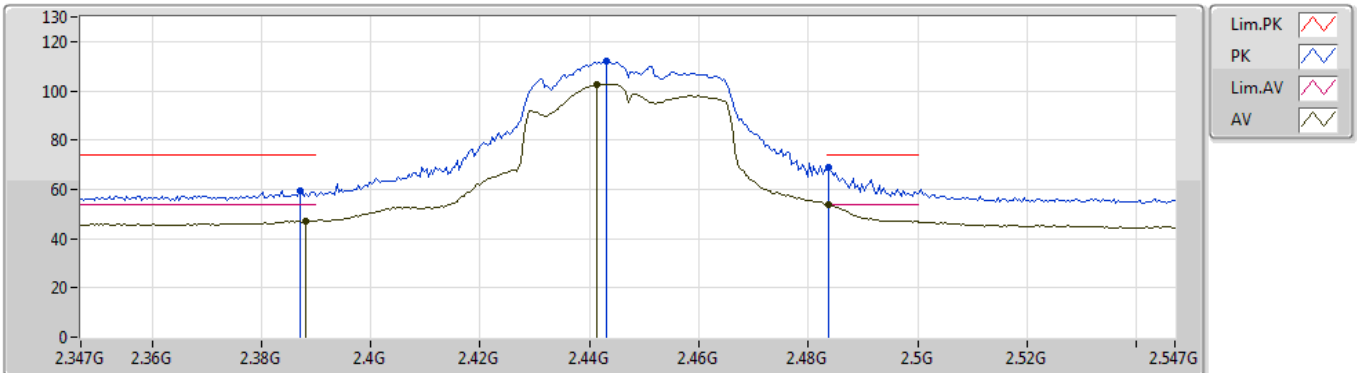
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Setting 20
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87472G	45.97	74.00	-28.03	4.23	3	Horizontal	250	1.60	-	41.74			
AV	4.87438G	33.48	54.00	-20.52	4.23	3	Horizontal	250	1.60	-	29.25			
PK	7.30038G	52.06	74.00	-21.94	9.57	3	Horizontal	301	2.48	-	42.49			
AV	7.32018G	39.38	54.00	-14.62	9.56	3	Horizontal	301	2.48	-	29.82			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2447MHz_TX



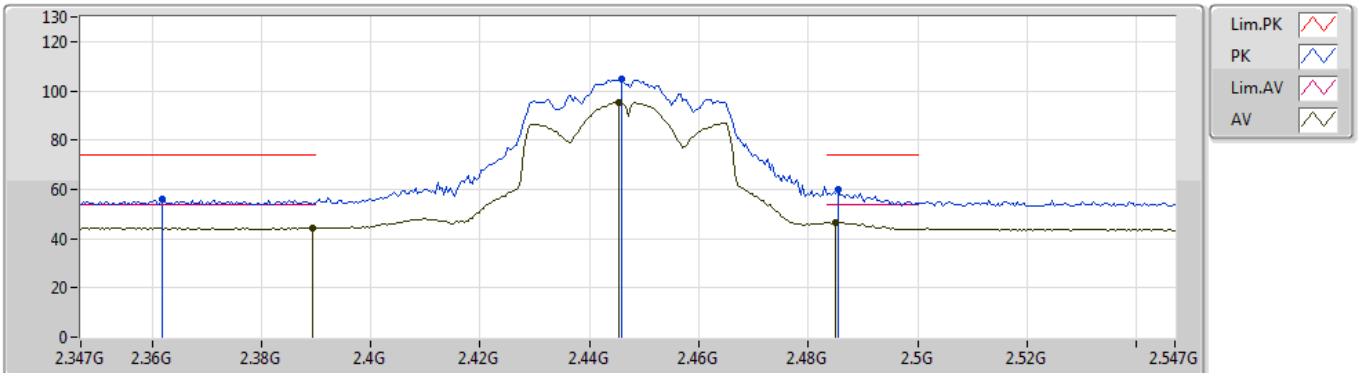
EUT Y_2TX
Setting 18
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.387G	59.25	74.00	-14.75	31.00	3	Vertical	130	2.18	-	28.25			
AV	2.3882G	47.23	54.00	-6.77	31.00	3	Vertical	130	2.18	-	16.23			
PK	2.443G	112.01	Inf	-Inf	30.87	3	Vertical	130	2.18	-	81.14			
AV	2.4414G	102.67	Inf	-Inf	30.88	3	Vertical	130	2.18	-	71.79			
PK	2.4838G	68.86	74.00	-5.14	30.78	3	Vertical	130	2.18	-	38.08			
AV	2.4838G	53.77	54.00	-0.23	30.78	3	Vertical	130	2.18	-	22.99			

802.11n HT40_Nss1,(MCS0)_2TX

2447MHz_TX

13/08/2019



EUT Y_2TX
Setting 18
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3618G	55.92	74.00	-18.08	31.05	3	Horizontal	46	2.22	-	24.87			
AV	2.3894G	44.45	54.00	-9.55	30.99	3	Horizontal	46	2.22	-	13.46			
PK	2.4458G	104.64	Inf	-Inf	30.86	3	Horizontal	46	2.22	-	73.78			
AV	2.4454G	95.49	Inf	-Inf	30.86	3	Horizontal	46	2.22	-	64.63			
PK	2.4854G	59.90	74.00	-14.10	30.77	3	Horizontal	46	2.22	-	29.13			
AV	2.485G	46.53	54.00	-7.47	30.78	3	Horizontal	46	2.22	-	15.75			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2452MHz_TX



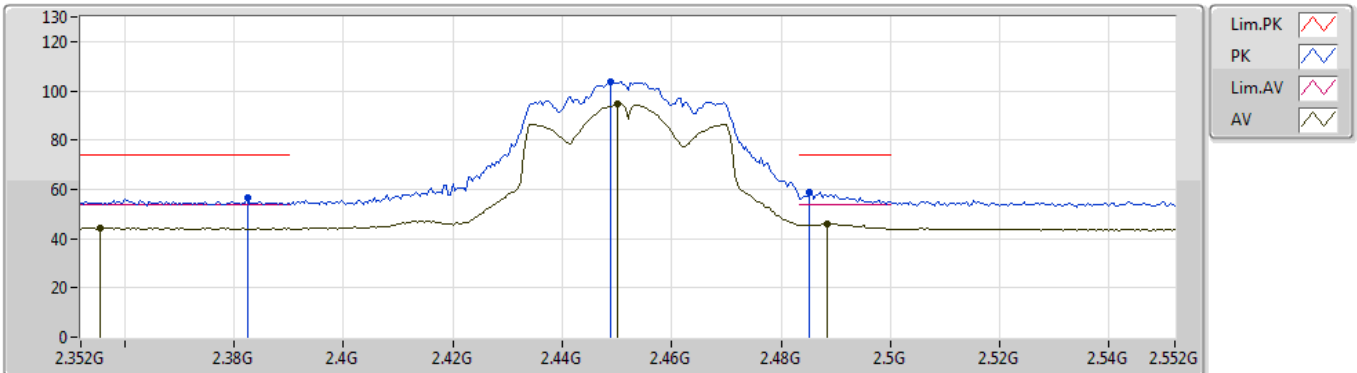
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Setting 17
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3892G	57.93	74.00	-16.07	30.99	3	Vertical	132	1.70	-	26.94			
AV	2.3888G	46.37	54.00	-7.63	30.99	3	Vertical	132	1.70	-	15.38			
PK	2.4464G	110.68	Inf	-Inf	30.86	3	Vertical	132	1.70	-	79.82			
AV	2.4472G	101.24	Inf	-Inf	30.86	3	Vertical	132	1.70	-	70.38			
PK	2.4835G	70.20	74.00	-3.80	30.78	3	Vertical	132	1.70	-	39.42			
AV	2.4835G	53.32	54.00	-0.68	30.78	3	Vertical	132	1.70	-	22.54			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2452MHz_TX



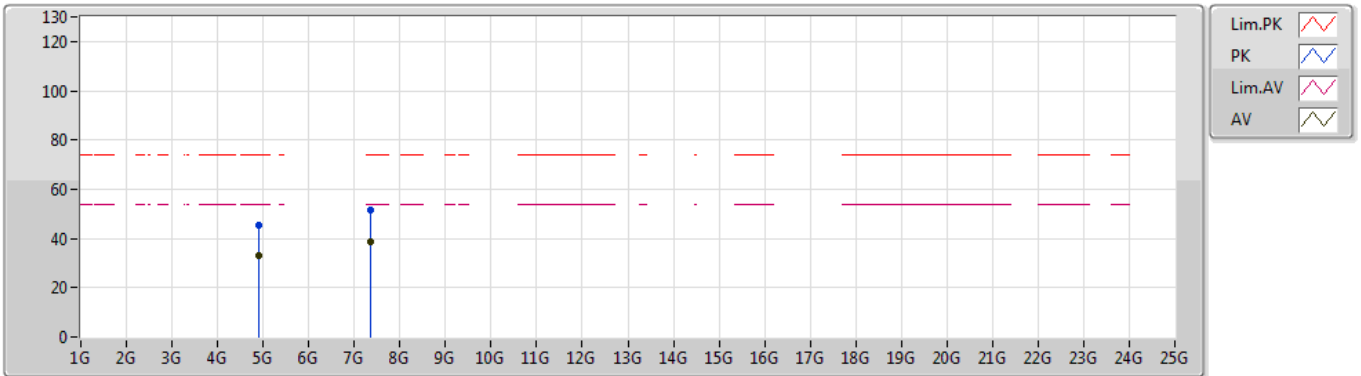
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Setting 17
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3824G	56.71	74.00	-17.29	31.01	3	Horizontal	47	2.24	-	25.70			
AV	2.3556G	44.31	54.00	-9.69	31.07	3	Horizontal	47	2.24	-	13.24			
PK	2.4488G	103.68	Inf	-Inf	30.85	3	Horizontal	47	2.24	-	72.83			
AV	2.45G	94.56	Inf	-Inf	30.86	3	Horizontal	47	2.24	-	63.70			
PK	2.4852G	58.85	74.00	-15.15	30.77	3	Horizontal	47	2.24	-	28.08			
AV	2.4884G	46.12	54.00	-7.88	30.76	3	Horizontal	47	2.24	-	15.36			

802.11n HT40_Nss1,(MCS0)_2TX

13/08/2019

2452MHz_TX



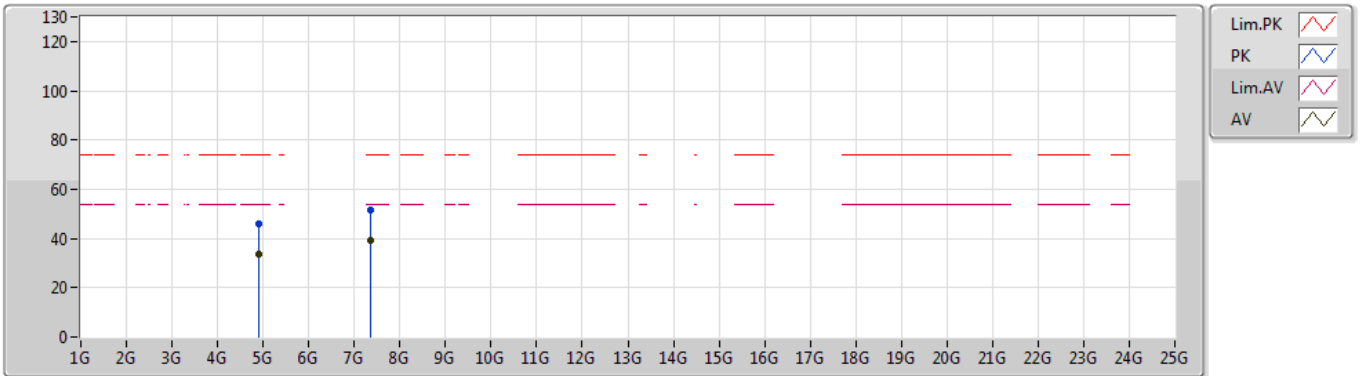
EUT Y_2TX
Setting 17
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.90334G	45.64	74.00	-28.36	4.30	3	Vertical	263	2.06	-	41.34			
AV	4.90626G	33.27	54.00	-20.73	4.32	3	Vertical	263	2.06	-	28.95			
PK	7.35606G	51.32	74.00	-22.68	9.55	3	Vertical	281	1.94	-	41.77			
AV	7.35614G	38.71	54.00	-15.29	9.55	3	Vertical	281	1.94	-	29.16			

802.11n HT40_Nss1,(MCS0)_2TX

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2452MHz_TX



EUT Y_2TX
Setting 17
06-B-4
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.90412G	45.88	74.00	-28.12	4.31	3	Horizontal	123	1.68	-	41.57			
AV	4.90382G	33.41	54.00	-20.59	4.31	3	Horizontal	123	1.68	-	29.10			
PK	7.35694G	51.64	74.00	-22.36	9.55	3	Horizontal	159	1.26	-	42.09			
AV	7.35623G	39.05	54.00	-14.95	9.55	3	Horizontal	159	1.26	-	29.50			



RSE Co-location Result

Appendix G

