

FCC Test Report

Equipment : UniCAP
Brand Name : CAPWAVE TECHNOLOGIES
Model No. : UC-12-EXP
FCC ID : 2AFGY-UC12EXP
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☒ Point-to-point
Applicant : Capwave Technologies Inc.
1501 Ocean Ave, Unit 2601, Asbury Park, NJ 07712,
USA
Manufacturer : SmartAnt Telecom Co., Ltd
3F, No.58, Park Avenue II, Science-based Industrial
Park, Hsinchu 30075, Taiwan, R.O.C.

The product sample received on Feb. 23, 2016 and completely tested on Jul. 26, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Cliff Chang
SPORTON INTERNATIONAL INC.





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Summary of Test Result

Conformance Test Specifications				
Report Clause	Ref. Std. Clause	Description	Limit	Result
1.1.2	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	FCC 15.207	Complied
3.2	15.247(a)	DTS Bandwidth	≥500kHz	Complied
3.3	15.247(b)	Maximum Conducted Output Power	Power [dBm]:30	Complied
3.4	15.247(e)	Power Spectral Density	PSD [dBm/3kHz]:8	Complied
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	Non-Restricted Bands: > 30 dBc	Complied
3.6	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied

Revision History

[illegible]

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
1	1	SmartAnt	CAP15-220290	Dual Polarization Directional Antenna	MMCX R/A plug	11	12.5
2	2	SmartAnt	CAP15-220290	Dual Polarization Directional Antenna	MMCX R/A plug	11	12.5

Note: The EUT has two antennas.

<For 2.4GHz Function>

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

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 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.996	0.017	n/a (DC≥0.98)	n/a (DC≥0.98)
802.11g	0.965	0.155	1.363m	1k
802.11n HT20	0.964	0.159	1.275m	1k
802.11n HT40	0.947	0.237	635u	3k

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Beamforming Function	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming

1.1.5 Table for radio type

Radio type	Support function
Radio 1	2.4GHz and 5GHz
Radio 2	2.4GHz and 5GHz

Note: Radio 1 and Radio 2 are the same radio type , so 2.4GHz test for Radio 2 and 5GHz test for Radio 1.

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 558074 D01 v04
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location				
<input type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.	TEL : 886-3-327-3456	FAX : 886-3-318-0055
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Gino Huang	23°C / 54%	Mar. 29, 2017~ Jul. 26, 2017
Radiated	03CH01-CB	Justin Lin / Joy Tseng	22°C / 54%	Mar. 22, 2017~ Apr. 26, 2017
AC Conduction	CO01-CB	Rick Yeh	23°C / 57%	Jun. 28, 2017

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D 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)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74 x10 ⁻⁸	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

<Point to Point>

Mode	Power Setting
802.11b_(1Mbps)_2TX	-
2412MHz	27
2437MHz	27
2462MHz	27
802.11g_(6Mbps)_2TX	-
2412MHz	26
2437MHz	27
2462MHz	24
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	26
2437MHz	27
2462MHz	23
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	25
2437MHz	26
2452MHz	22

<Point to Multi-point >

Mode	Power Setting
802.11b_(1Mbps)_2TX	-
2412MHz	23
2437MHz	22.5
2462MHz	22
802.11g_(6Mbps)_2TX	-
2412MHz	23
2437MHz	22.5
2462MHz	22
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	23.5
2437MHz	23
2462MHz	22.5
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	23.5
2437MHz	23
2452MHz	22

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 - Bridge mode (Radio 1: 5GHz + Radio 2: 5GHz)
2	EUT - Bridge mode (Radio 1: 2.4GHz + Radio 2: 2.4GHz)
3	EUT - AP mode (Radio 1: 2.4GHz)
4	EUT - Station mode (Radio 2: 2.4GHz)
5	EUT - AP mode (Radio 1: 5GHz)
6	EUT - Station mode (Radio 2: 5GHz)
Mode 2 generated the worst test result, so it was recorded in this report.	

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
Operating Mode	CTX - Radio 2
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	Normal Link
1	EUT in Y axis - Bridge mode (Radio 1: 5GHz + Radio 2: 5GHz)
2	EUT in Y axis - Bridge mode (Radio 1: 2.4GHz + Radio 2: 2.4GHz)
3	EUT in Y axis - AP mode (Radio 1: 2.4GHz)
4	EUT in Y axis - Station mode (Radio 2: 2.4GHz)
5	EUT in Y axis - AP mode (Radio 1: 5GHz)
6	EUT in Y axis - Station mode (Radio 2: 5GHz)
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode	CTX - Radio 2
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	2.4GHz(Radio 1) + 5GHz(Radio 1) + 2.4GHz(Radio 2) + 5GHz(Radio 2)
Refer to Sporton Test Report No.: FA622328 for Co-location RF Exposure Evaluation.	

Note 1: The EUT can only use Y axis position.

Note 2: The Conducted measurement will perform point-to-point and Point to Multi-point operation.

Note 3: The PoE was for measurement only, would not be marketed.

The PoE information as below:

Support Unit	Brand	Model Number
PoE	MOTOROLA	AP-PSBIAS-2P3-ATR
PoE	CISCO	MA-INJ-4

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

N/A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*4	DELL	E6430	DoC
2	Device	UniCAP	UC-12-EXP	2AFGY-UC12EXP
3	PoE*2	MOTOROLA	AP-PSBIAS-2P3-ATR	DoC
4	PoE*2	CISCO	MA-INJ-4	DoC

For Test Site No: 03CH01-CB (below 1GHz)

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*4	DELL	E4300	DoC
2	Device	UniCAP	UC-12-EXP	2AFGY-UC12EXP
3	PoE*2	MOTOROLA	AP-PSBIAS-2P3-ATR	DoC
4	PoE*2	CISCO	MA-INJ-4	DoC

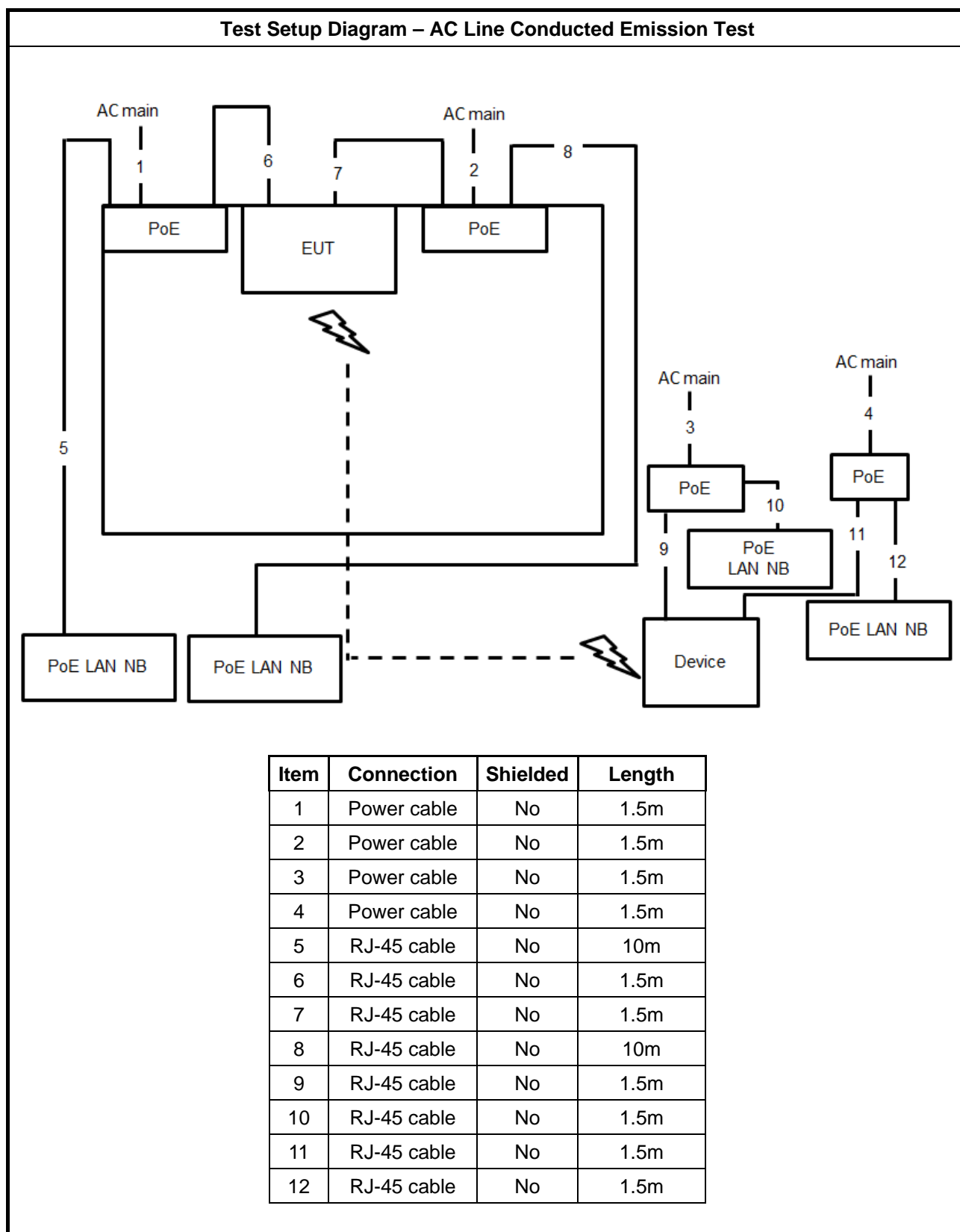
For Test Site No: 03CH01-CB (above 1GHz)

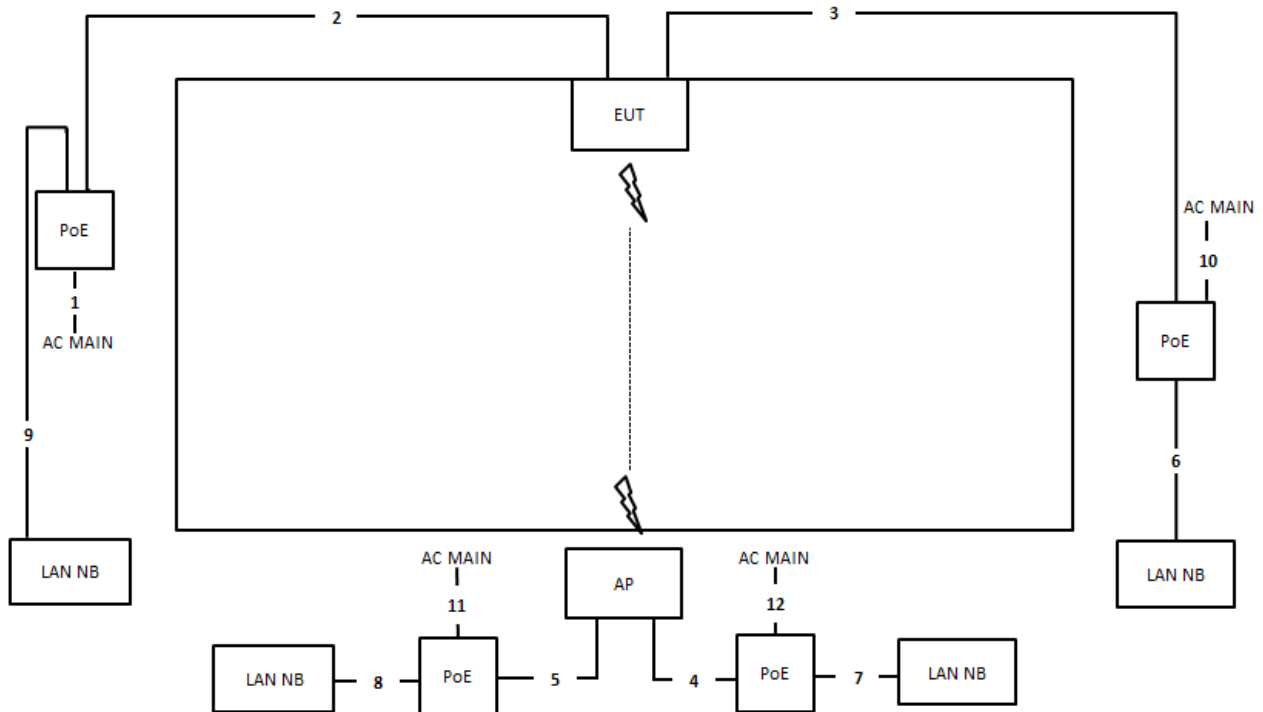
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC
2	PoE	MOTOROLA	AP-PSBIAS-2P3-ATR	DoC

For Test Site No: TH01-CB

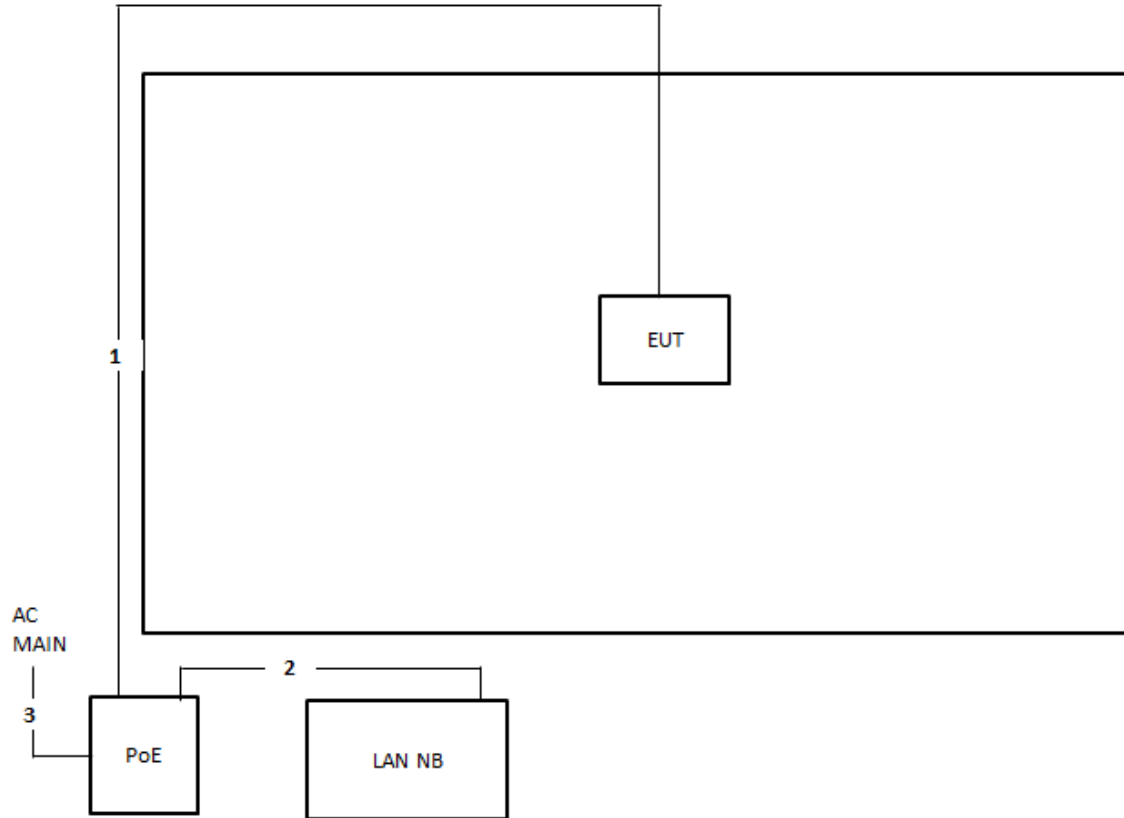
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC
2	PoE	MOTOROLA	AP-PSBIAS-2P3-ATR	DoC

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


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

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	1m
3	Power cable	No	1.8m

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.

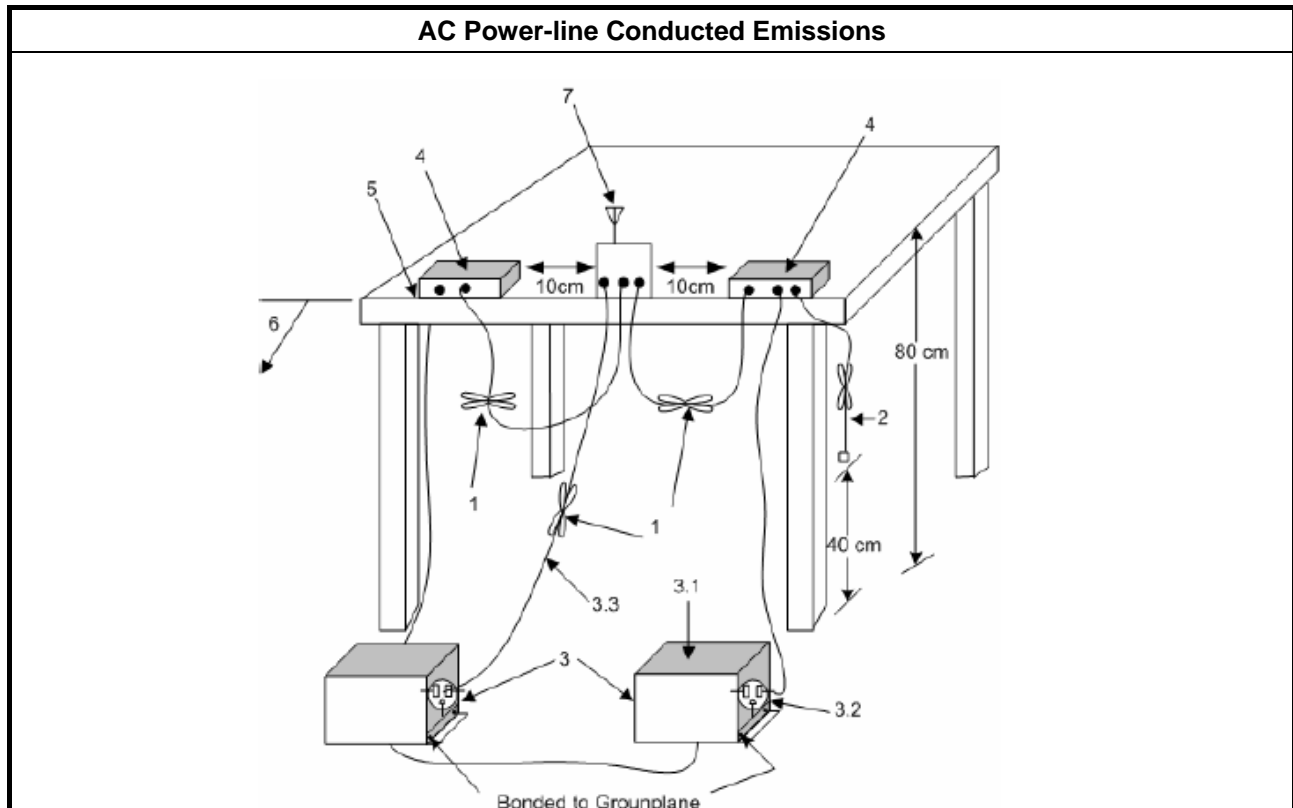
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> 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.

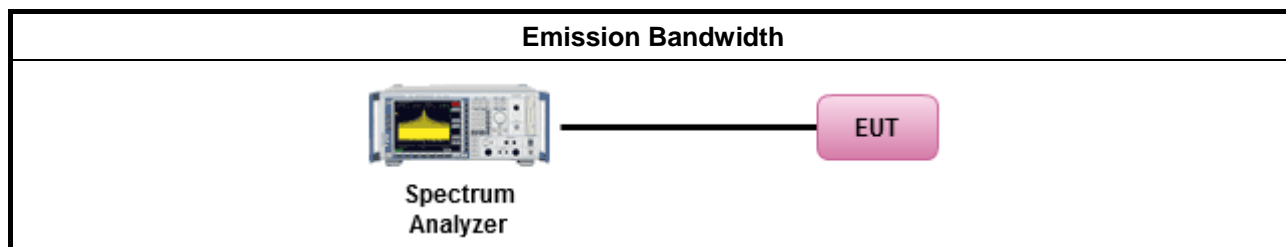
3.2.2 Measuring Instruments

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:
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/>	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.	

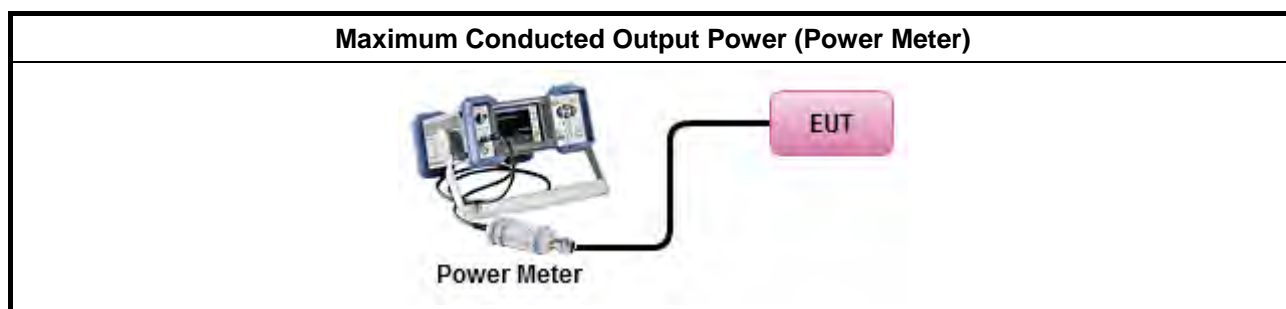
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 PKPM1 Peak power meter method.
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

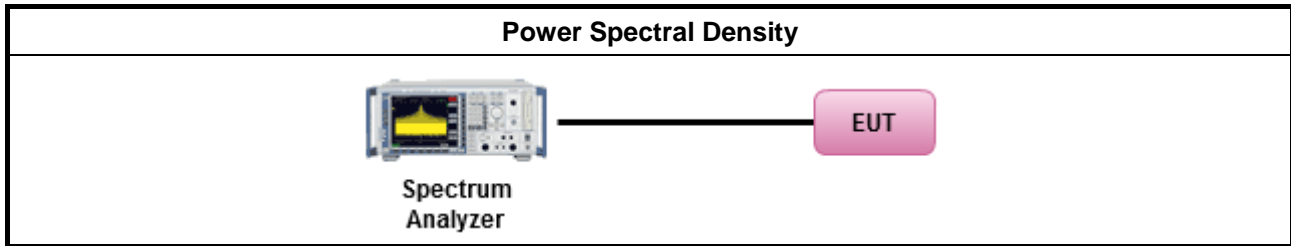
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
▪	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak). [duty cycle \geq 98% or external video / power trigger]
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.3 Method AVGPSD-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.4 Method AVGPSD-2 (slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.5 Method AVGPSD-1 Alt (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	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,
<input type="checkbox"/>	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 (dB)
Peak output power procedure	20
Average output power procedure	30
<p>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.</p> <p>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.</p>	

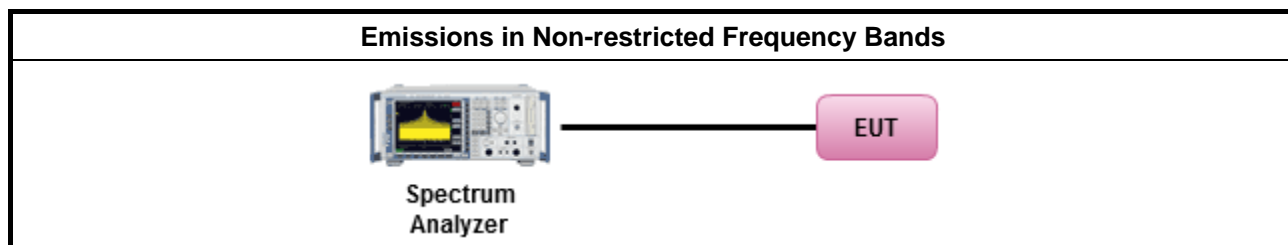
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 11 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.

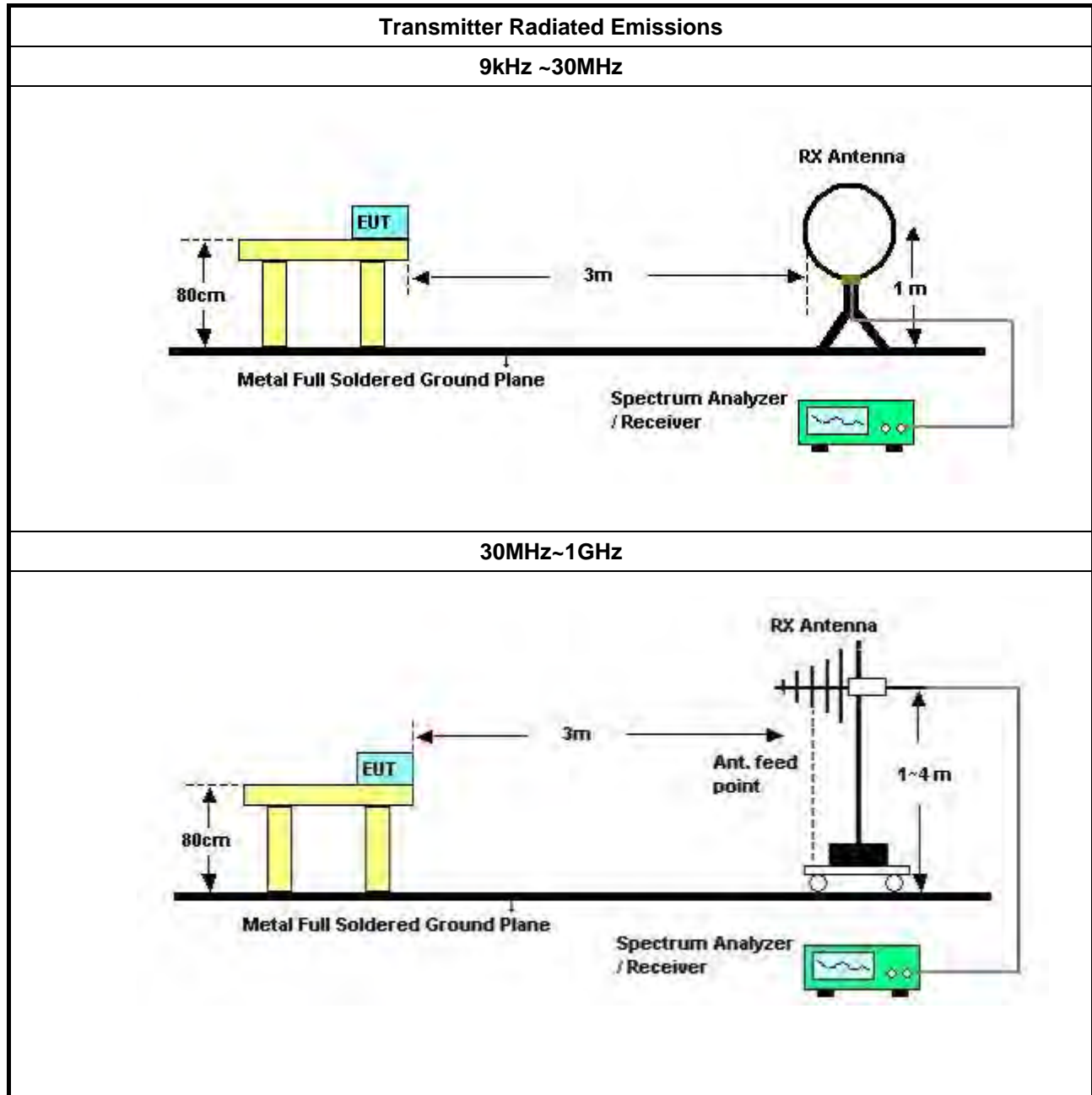
3.6.2 Measuring Instruments

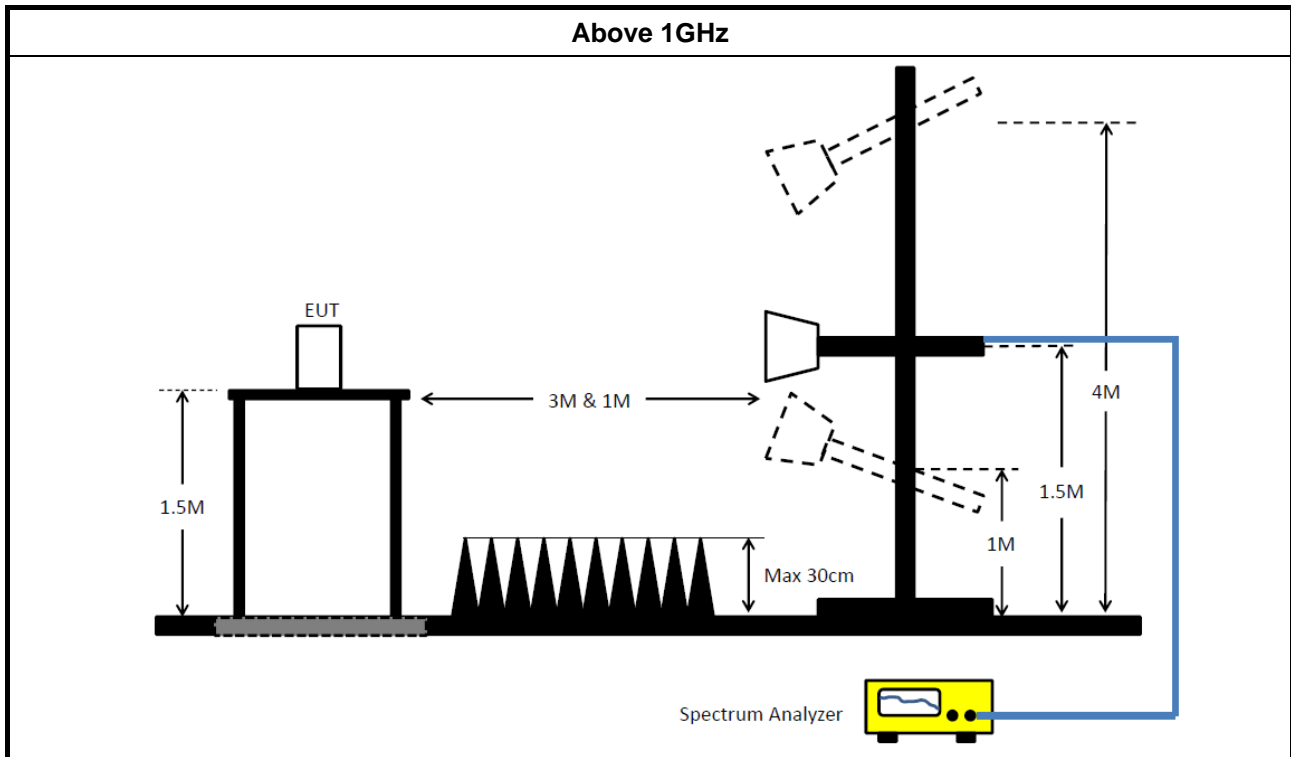
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 	
<ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. 	
<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle $\geq 98\%$)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW $\geq 1/T$).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> For the transmitter band-edge emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> Refer as FCC KDB 558074 clause 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.
	<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
<ul style="list-style-type: none"> For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2. 	
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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 Transmitter Radiated Unwanted Emissions (Below 30MHz)

The definitive verification that the radio spectrum below 30 MHz was investigated down to at least 25 MHz. Due to spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMC	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (10CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 13, 2017	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-10-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)



FCC Test Report

Report No. : FR622328AA

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

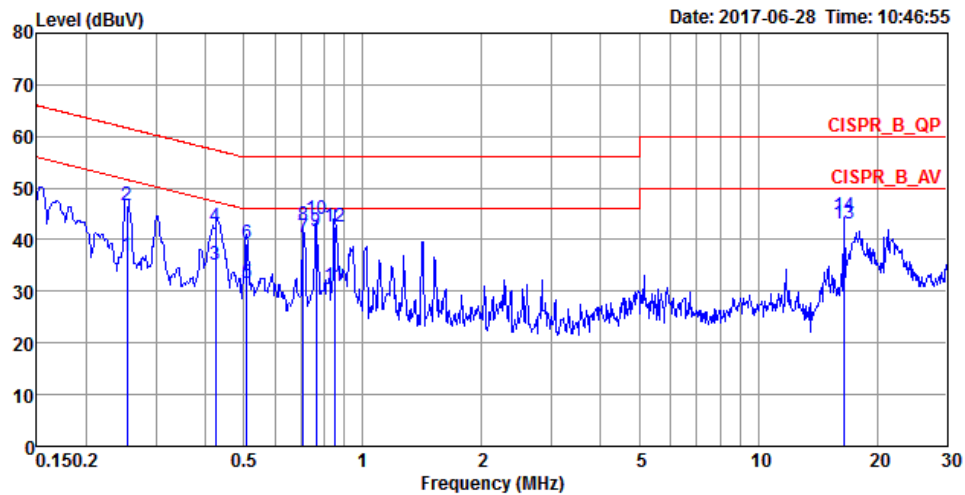
Note: Calibration Interval of instruments listed above is one year.

“*” Calibration Interval of instruments listed above is two years.

NCR means Non-Calibration required.

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Neutral
Operating Function	Normal Link		



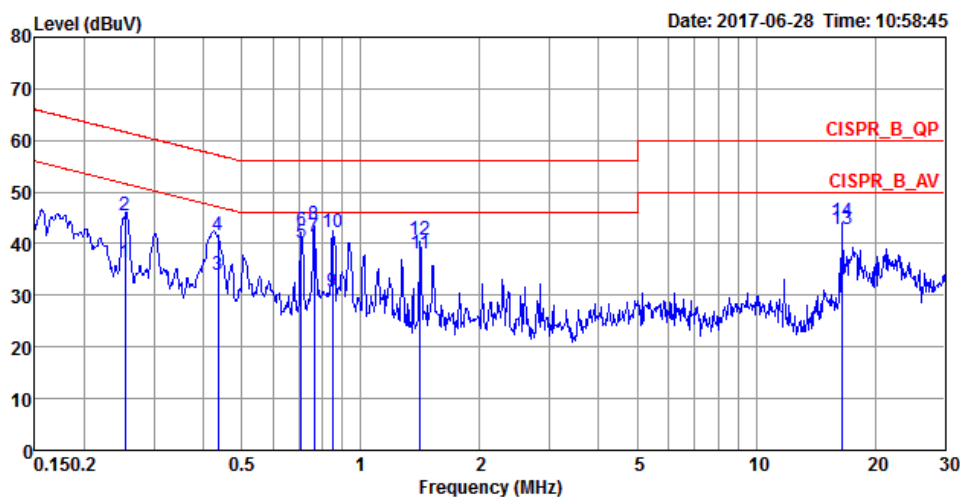
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.2539	36.97	-14.66	51.63	26.80	10.08	0.09	Average	NEUTRAL
2	0.2539	46.55	-15.08	61.63	36.38	10.08	0.09	QP	NEUTRAL
3	0.4244	35.13	-12.23	47.36	24.86	10.25	0.02	Average	NEUTRAL
4	0.4244	42.41	-14.95	57.36	32.14	10.25	0.02	QP	NEUTRAL
5	0.5099	31.65	-14.35	46.00	21.37	10.22	0.06	Average	NEUTRAL
6	0.5099	39.36	-16.64	56.00	29.08	10.22	0.06	QP	NEUTRAL
7	0.7080	40.39	-5.61	46.00	30.11	10.16	0.12	Average	NEUTRAL
8	0.7080	42.69	-13.31	56.00	32.41	10.16	0.12	QP	NEUTRAL
9	0.7612	41.76	-4.24	46.00	31.49	10.13	0.14	Average	NEUTRAL
10	0.7612	44.11	-11.89	56.00	33.84	10.13	0.14	QP	NEUTRAL
11	0.8488	30.97	-15.03	46.00	20.71	10.10	0.16	Average	NEUTRAL
12	0.8488	42.38	-13.62	56.00	32.12	10.10	0.16	QP	NEUTRAL
13	16.4654	43.18	-6.82	50.00	32.70	10.29	0.19	Average	NEUTRAL
14	16.4654	44.67	-15.33	60.00	34.19	10.29	0.19	QP	NEUTRAL

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Line
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.2536	36.21	-15.43	51.64	26.20	9.92	0.09	Average	LINE
2	0.2536	45.51	-16.13	61.64	35.50	9.92	0.09	QP	LINE
3	0.4354	33.98	-13.17	47.15	24.00	9.95	0.03	Average	LINE
4	0.4354	41.68	-15.47	57.15	31.70	9.95	0.03	QP	LINE
5	0.7074	40.25	-5.75	46.00	30.18	9.95	0.12	Average	LINE
6	0.7074	42.54	-13.46	56.00	32.47	9.95	0.12	QP	LINE
7	0.7609	41.40	-4.60	46.00	31.30	9.96	0.14	Average	LINE
8	0.7609	43.71	-12.29	56.00	33.61	9.96	0.14	QP	LINE
9	0.8483	30.64	-15.36	46.00	20.52	9.96	0.16	Average	LINE
10	0.8483	42.31	-13.69	56.00	32.19	9.96	0.16	QP	LINE
11	1.4157	38.09	-7.91	46.00	27.93	9.96	0.20	Average	LINE
12	1.4157	40.61	-15.39	56.00	30.45	9.96	0.20	QP	LINE
13	16.4650	42.74	-7.26	50.00	32.28	10.27	0.19	Average	LINE
14	16.4650	44.19	-15.81	60.00	33.73	10.27	0.19	QP	LINE

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

<Point to Point>

Summary

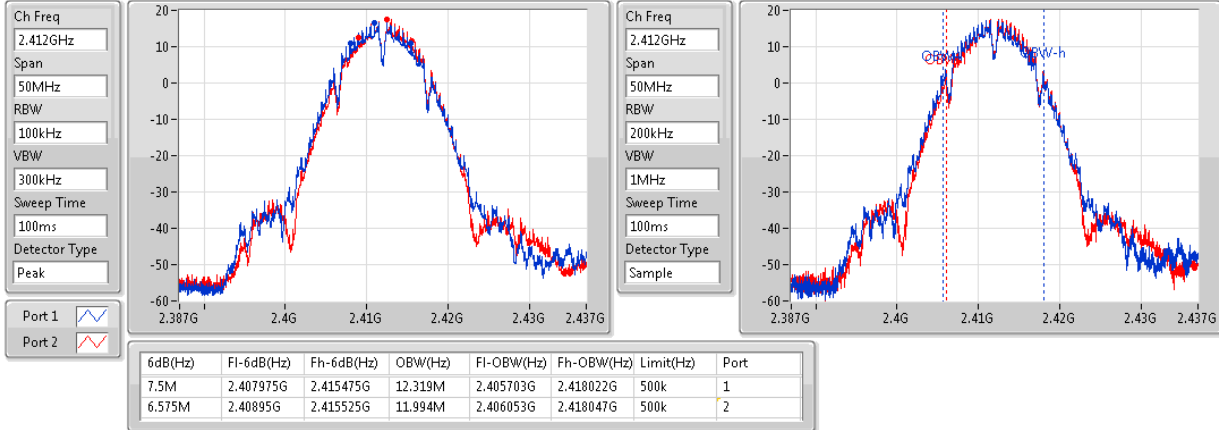
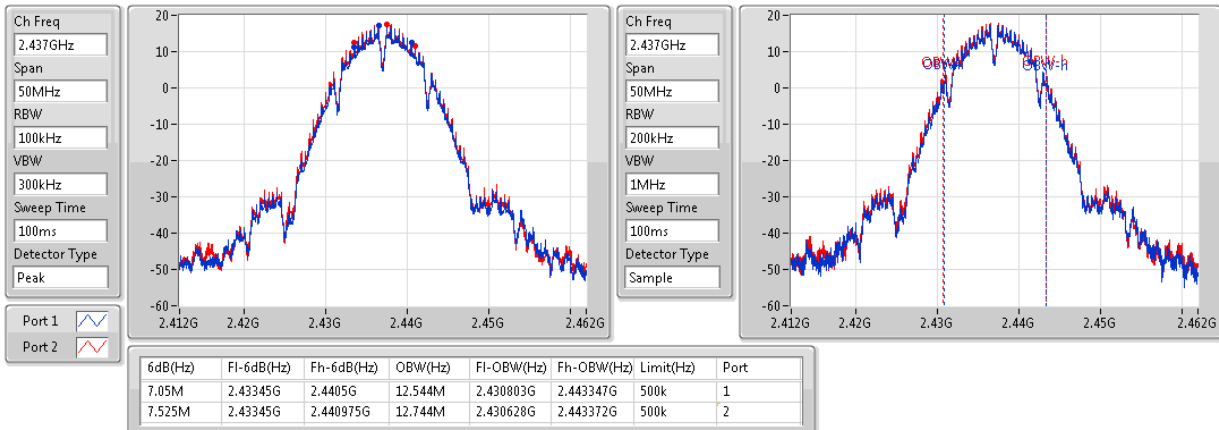
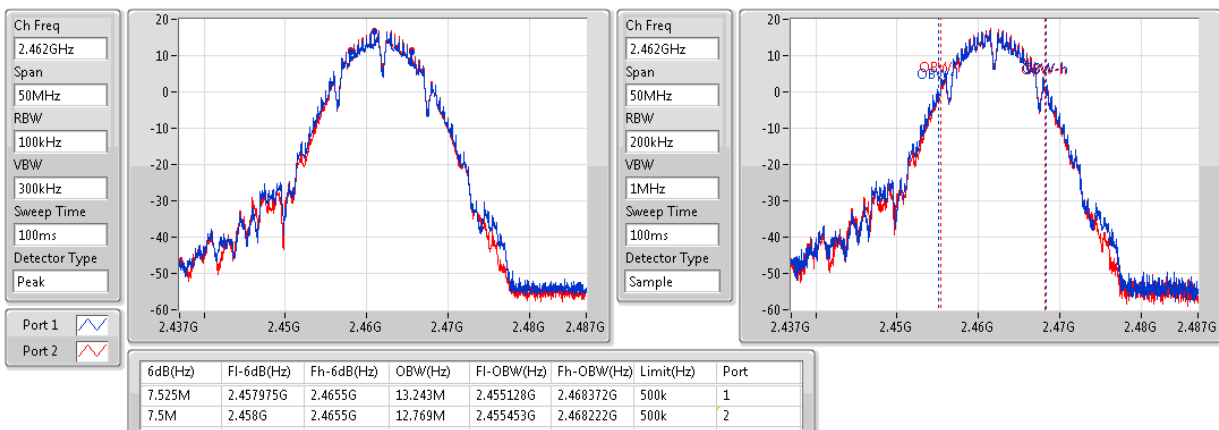
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	7.525M	13.243M	13M2G1D	6.575M	11.994M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	16.325M	17.216M	17M2D1D	15.65M	16.517M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	17.525M	18.266M	18M3D1D	16.3M	17.691M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	36.05M	36.632M	36M6D1D	35.1M	36.132M

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_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.5M	12.319M	6.575M	11.994M
2437MHz	Pass	500k	7.05M	12.544M	7.525M	12.744M
2462MHz	Pass	500k	7.525M	13.243M	7.5M	12.769M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.65M	16.617M	16.3M	16.517M
2437MHz	Pass	500k	16.275M	17.216M	16.325M	17.091M
2462MHz	Pass	500k	15.75M	16.967M	16.3M	16.692M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.5M	17.741M	17.3M	17.691M
2437MHz	Pass	500k	16.925M	18.266M	17.525M	18.141M
2462MHz	Pass	500k	16.3M	17.891M	16.35M	17.766M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.65M	36.382M	35.1M	36.282M
2437MHz	Pass	500k	35.3M	36.632M	36.05M	36.632M
2452MHz	Pass	500k	35.35M	36.132M	35.15M	36.182M

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

802.11b_(1Mbps)_2TX
EBW
2412MHz

802.11b_(1Mbps)_2TX
EBW
2437MHz

802.11b_(1Mbps)_2TX
EBW
2462MHz


802.11g_(6Mbps)_2TX
EBW
2412MHz

Ch Freq
2.412GHz


Span
50MHz


RBW
100kHz

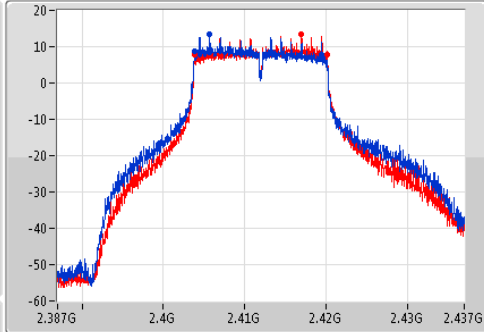
VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 

Port 2 



Ch Freq
2.412GHz

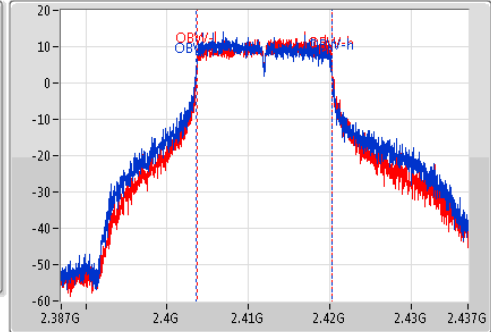
Span
50MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.65M	2.40385G	2.4195G	16.617M	2.403604G	2.420221G	500k	1
16.3M	2.40385G	2.42015G	16.517M	2.403754G	2.420271G	500k	2

802.11g_(6Mbps)_2TX
EBW
2437MHz

Ch Freq
2.437GHz


Span
50MHz


RBW
100kHz

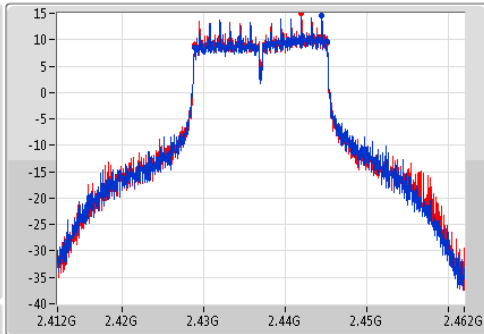
VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 

Port 2 



Ch Freq
2.437GHz

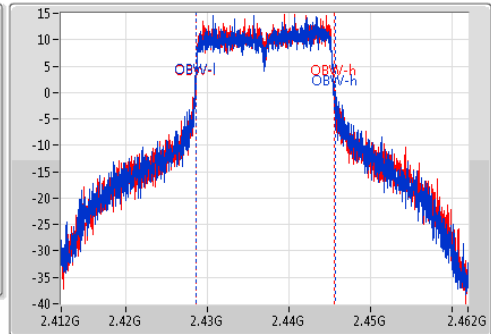
Span
50MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.42885G	2.445125G	17.216M	2.428504G	2.445721G	500k	1
16.325M	2.428825G	2.44515G	17.091M	2.428529G	2.445621G	500k	2

802.11g_(6Mbps)_2TX
EBW
2462MHz

Ch Freq
2.462GHz


Span
50MHz


RBW
100kHz

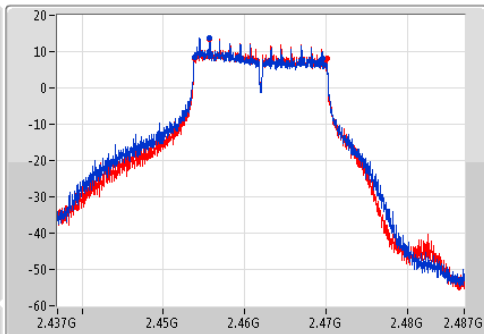
VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 

Port 2 



Ch Freq
2.462GHz

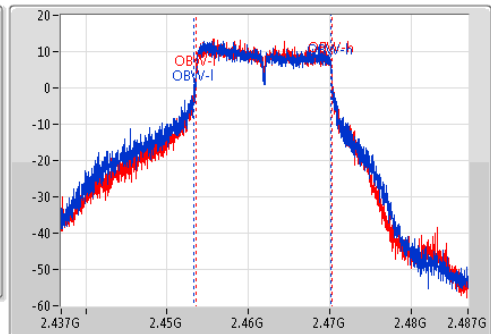
Span
50MHz

RBW
200kHz

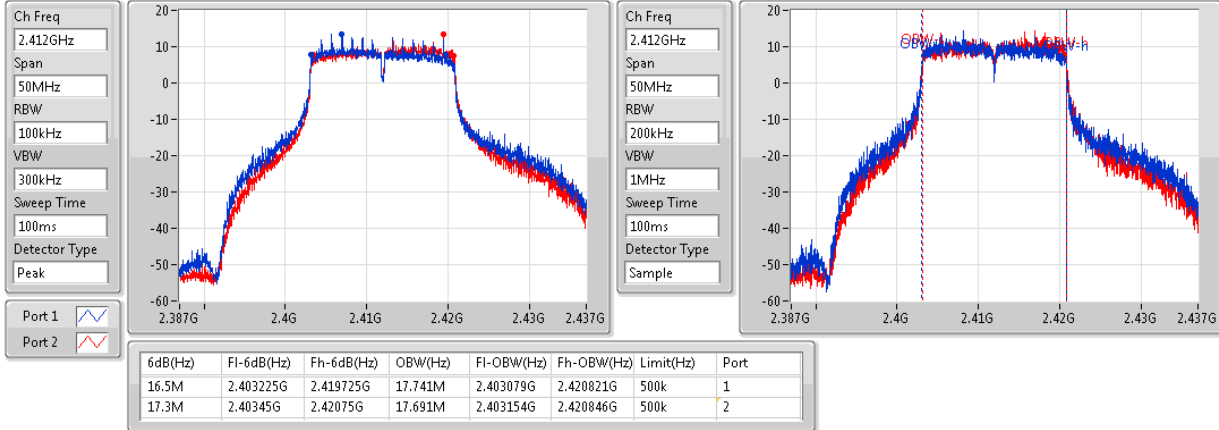
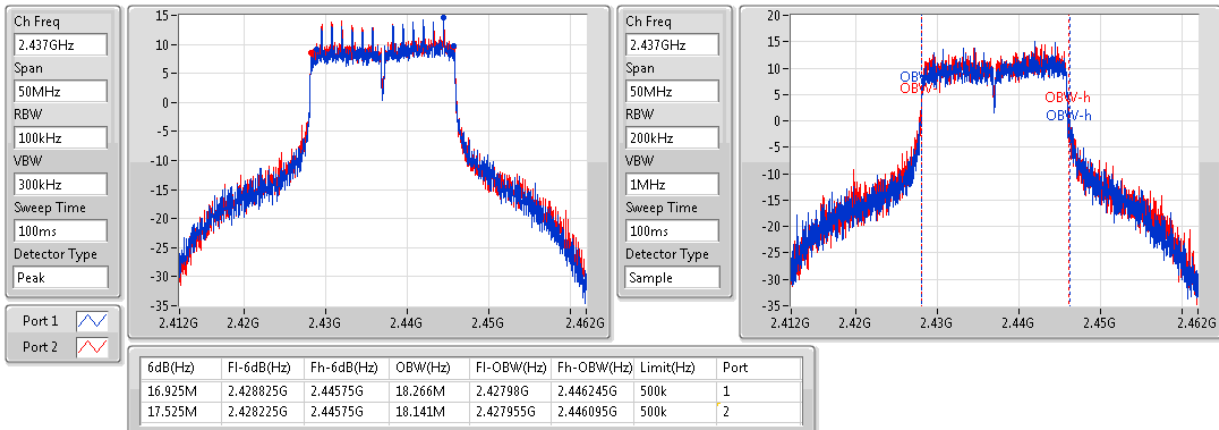
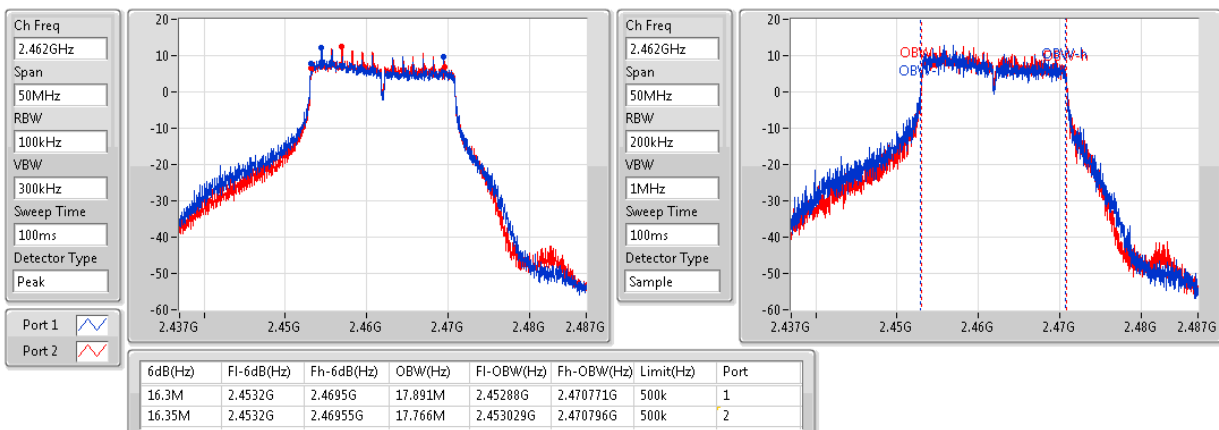
VBW
1MHz

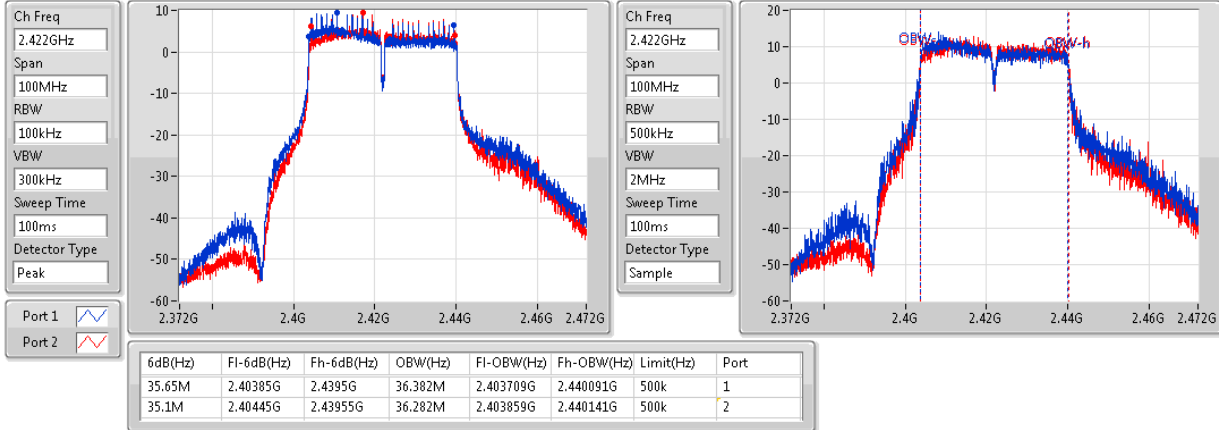
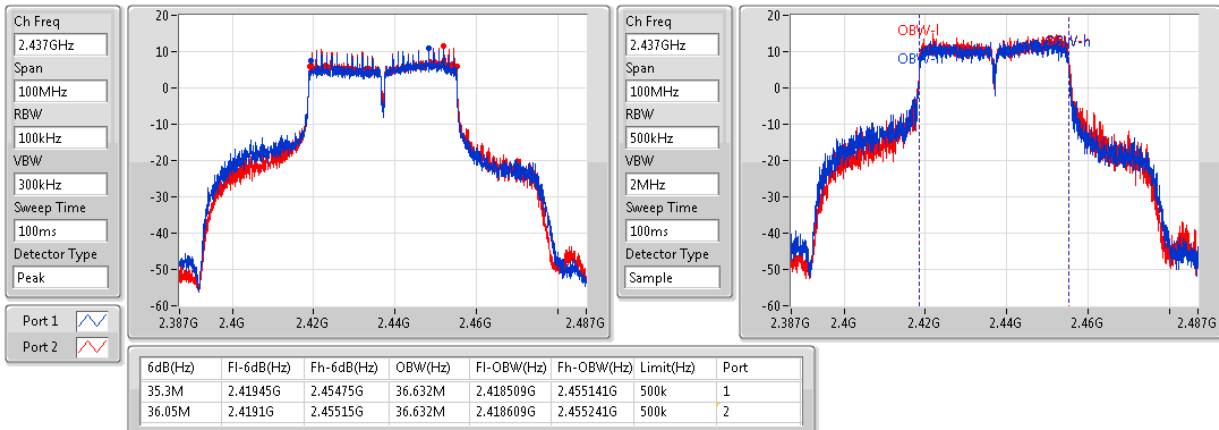
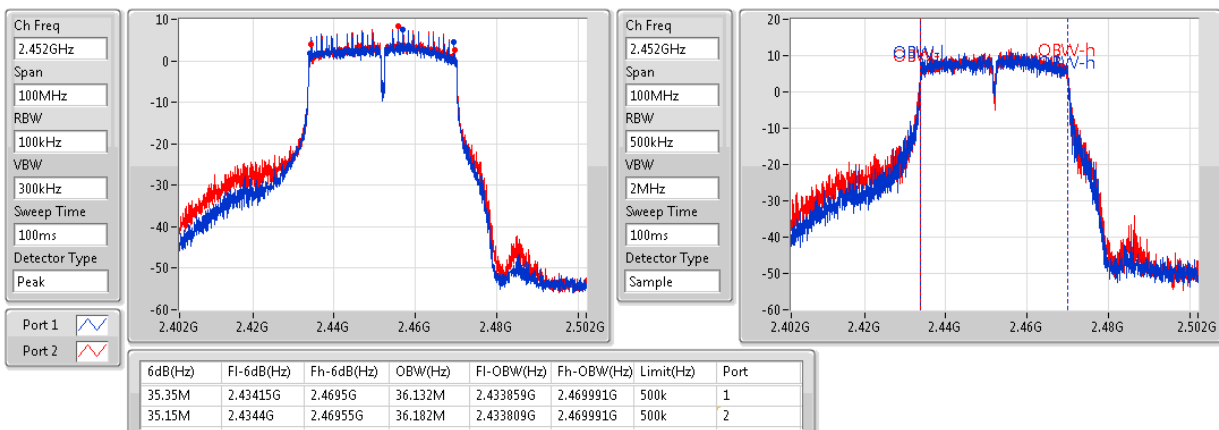
Sweep Time
100ms

Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.75M	2.4538G	2.46955G	16.967M	2.453229G	2.470196G	500k	1
16.3M	2.453825G	2.470125G	16.692M	2.453529G	2.470221G	500k	2

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2412MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2462MHz


802.11n HT40_Nss1,(MCS0)_2TX
EBW
2422MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2452MHz


<Point to Multi-point>

Summary

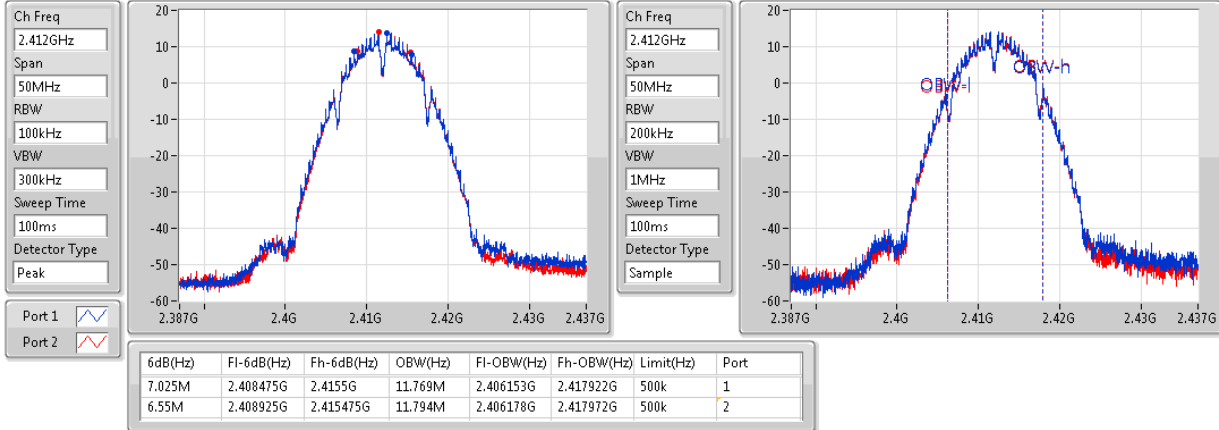
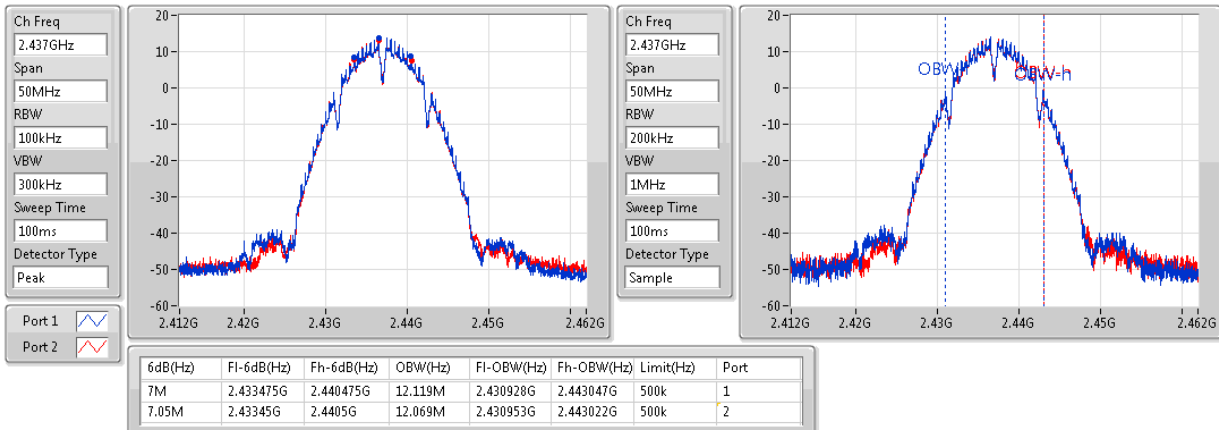
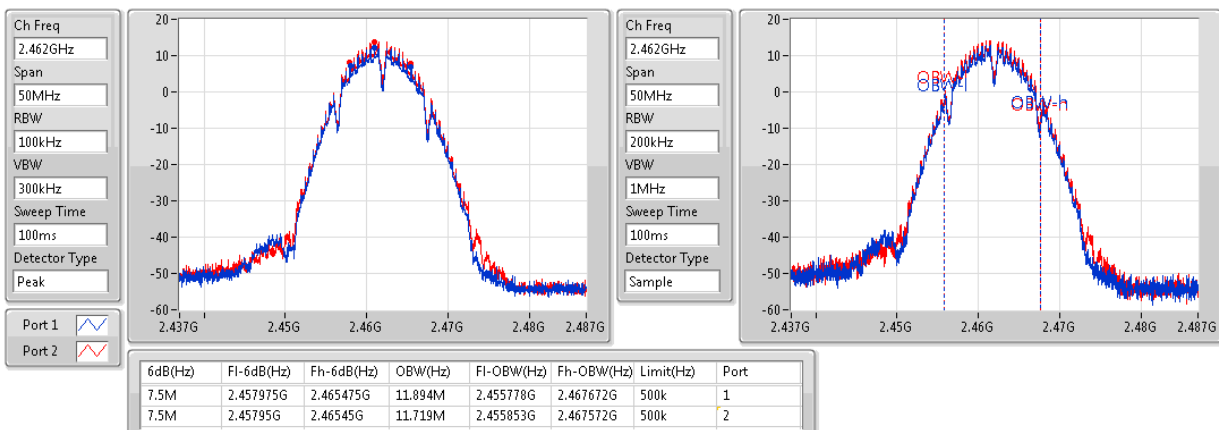
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	7.5M	12.119M	12M1G1D	6.55M	11.719M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	16.35M	16.692M	16M7D1D	15.725M	16.492M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	17.575M	17.841M	17M8D1D	16.275M	17.691M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	36.3M	36.532M	36M5D1D	35.05M	36.132M

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_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.025M	11.769M	6.55M	11.794M
2437MHz	Pass	500k	7M	12.119M	7.05M	12.069M
2462MHz	Pass	500k	7.5M	11.894M	7.5M	11.719M
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.275M	16.517M	16.275M	16.492M
2437MHz	Pass	500k	16.35M	16.617M	16.3M	16.692M
2462MHz	Pass	500k	15.725M	16.542M	16.05M	16.592M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.9M	17.691M	17.175M	17.691M
2437MHz	Pass	500k	17.575M	17.841M	17.575M	17.791M
2462MHz	Pass	500k	16.325M	17.741M	16.275M	17.791M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.15M	36.182M	35.05M	36.232M
2437MHz	Pass	500k	36.3M	36.532M	36M	36.482M
2452MHz	Pass	500k	35.35M	36.132M	35.15M	36.182M

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

802.11b_(1Mbps)_2TX
EBW
2412MHz

802.11b_(1Mbps)_2TX
EBW
2437MHz

802.11b_(1Mbps)_2TX
EBW
2462MHz


802.11g_(6Mbps)_2TX
EBW
2412MHz

Ch Freq
2.412GHz


Span
50MHz

RBW
100kHz

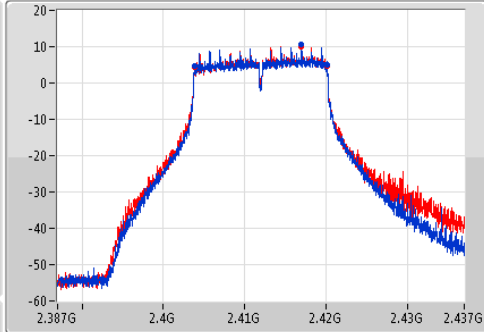
VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 

Port 2 



Ch Freq
2.412GHz

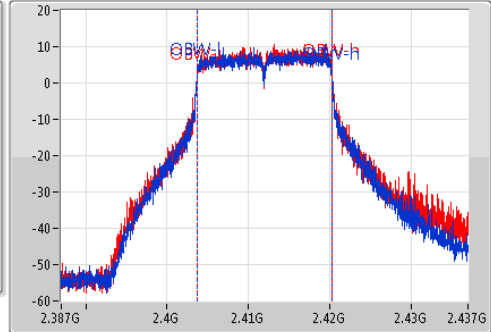
Span
50MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.40385G	2.420125G	16.517M	2.403729G	2.420246G	500k	1
16.275M	2.40385G	2.420125G	16.492M	2.403729G	2.420221G	500k	2

802.11g_(6Mbps)_2TX
EBW
2437MHz

Ch Freq
2.437GHz


Span
50MHz


RBW
100kHz

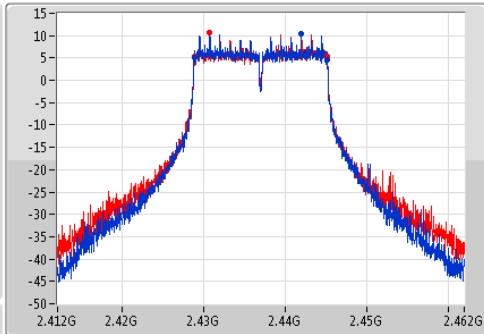
VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 

Port 2 



Ch Freq
2.437GHz

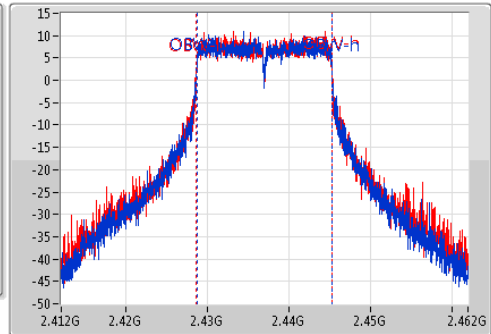
Span
50MHz

RBW
200kHz

VBW
1MHz

Sweep Time
100ms

Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.4288G	2.44515G	16.617M	2.428654G	2.445271G	500k	1
16.3M	2.428825G	2.445125G	16.692M	2.428604G	2.445296G	500k	2

802.11g_(6Mbps)_2TX
EBW
2462MHz

Ch Freq
2.462GHz


Span
50MHz


RBW
100kHz

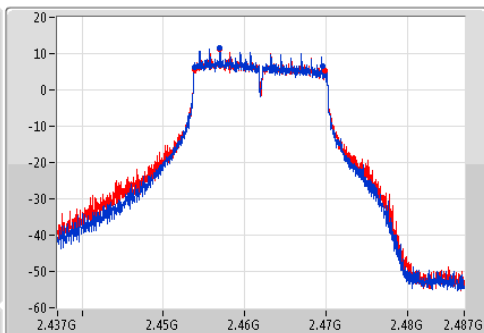
VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 

Port 2 



Ch Freq
2.462GHz

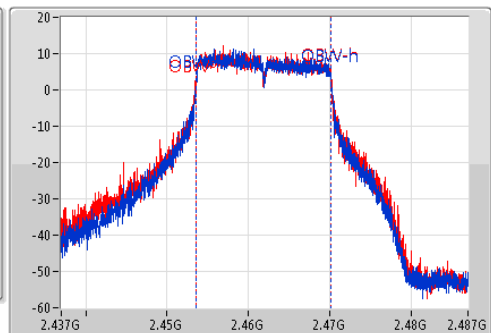
Span
50MHz

RBW
200kHz

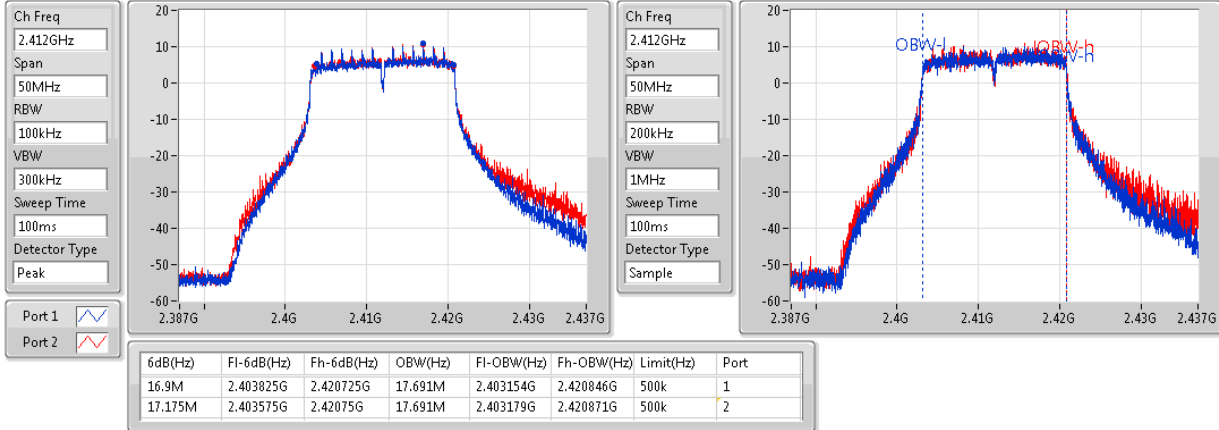
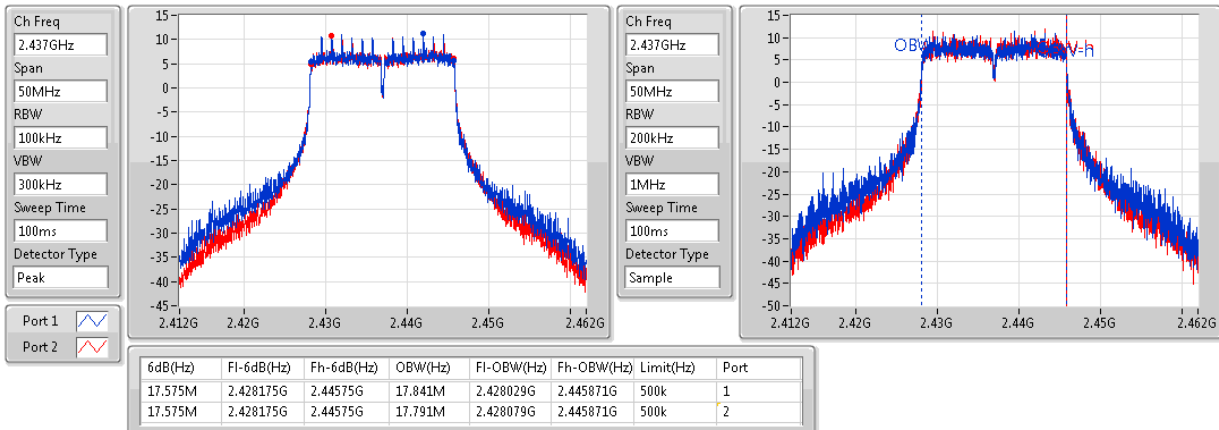
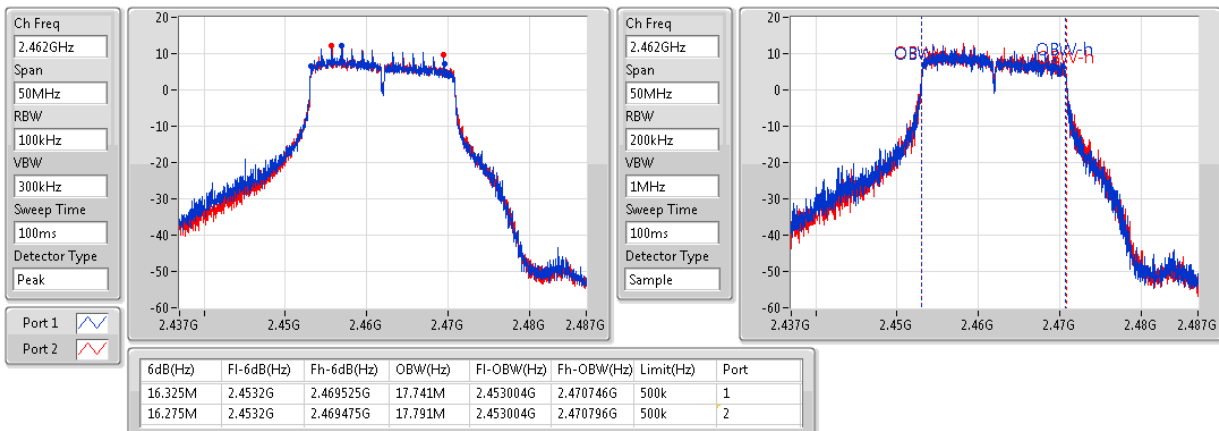
VBW
1MHz

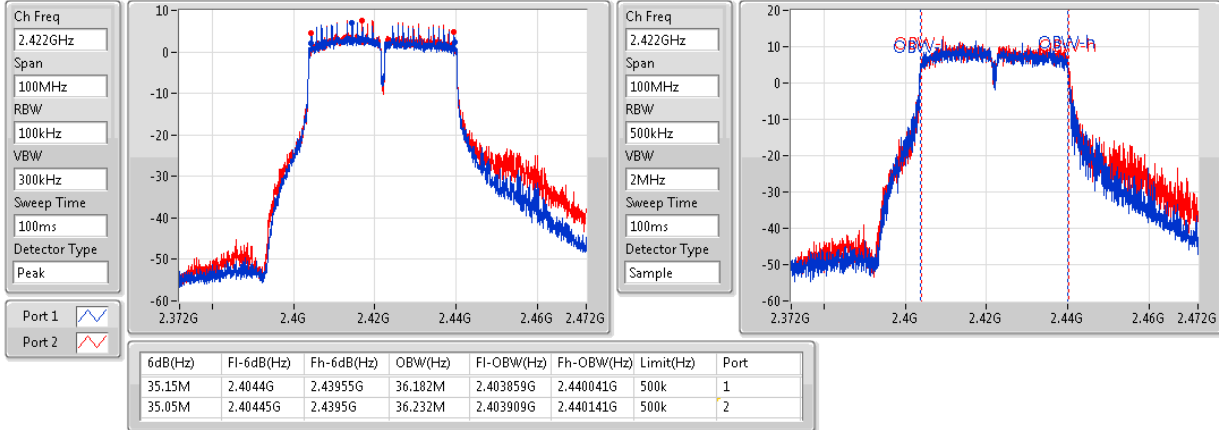
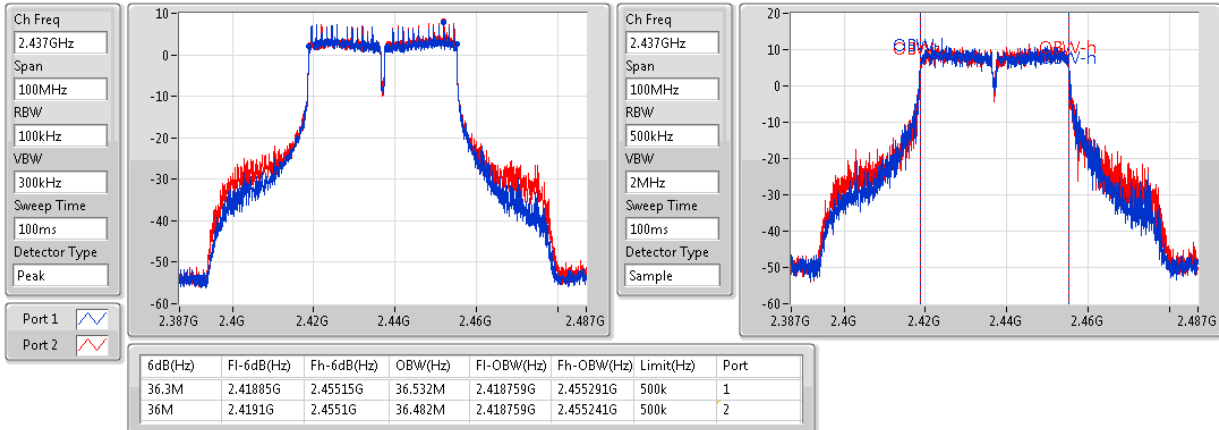
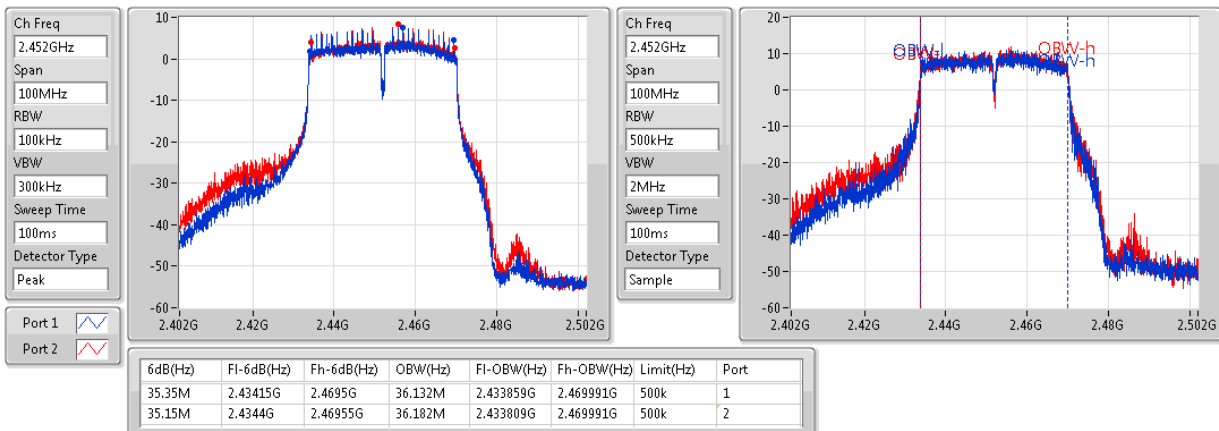
Sweep Time
100ms

Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.725M	2.4538G	2.469525G	16.542M	2.453604G	2.470146G	500k	1
16.05M	2.4538G	2.46985G	16.592M	2.453579G	2.470171G	500k	2

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2412MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT20_Nss1,(MCS0)_2TX
EBW
2462MHz


802.11n HT40_Nss1,(MCS0)_2TX
EBW
2422MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2437MHz

802.11n HT40_Nss1,(MCS0)_2TX
EBW
2452MHz


<Point to Point>

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	28.14	0.65163
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	28.14	0.65163
802.11n HT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	27.91	0.61802
802.11n HT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	27.25	0.53088

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.00	24.78	25.10	27.95	29.00
2437MHz	Pass	11.00	24.81	25.43	28.14	29.00
2462MHz	Pass	11.00	24.71	25.14	27.94	29.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.00	23.95	24.10	27.03	29.00
2437MHz	Pass	11.00	24.86	25.39	28.14	29.00
2462MHz	Pass	11.00	23.78	23.94	26.87	29.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.00	23.99	24.31	27.16	29.00
2437MHz	Pass	11.00	24.64	25.14	27.91	29.00
2462MHz	Pass	11.00	22.15	22.57	25.38	29.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	11.00	22.65	22.82	25.75	29.00
2437MHz	Pass	11.00	23.88	24.57	27.25	29.00
2452MHz	Pass	11.00	21.65	21.97	24.82	25.00

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

<Point to Multi-point>

Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_2TX	-	-
2.4-2.4835GHz	24.93	0.31117
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	24.90	0.30903
802.11n HT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	24.94	0.31189
802.11n HT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	24.95	0.31261

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.00	21.43	22.15	24.82	25.00
2437MHz	Pass	11.00	21.58	21.85	24.73	25.00
2462MHz	Pass	11.00	21.69	22.14	24.93	25.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.00	21.52	22.05	24.80	25.00
2437MHz	Pass	11.00	21.75	21.89	24.83	25.00
2462MHz	Pass	11.00	21.78	22.00	24.90	25.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	11.00	21.55	22.12	24.85	25.00
2437MHz	Pass	11.00	21.81	22.04	24.94	25.00
2462MHz	Pass	11.00	21.62	22.08	24.87	25.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	11.00	21.31	21.97	24.66	25.00
2437MHz	Pass	11.00	21.65	22.21	24.95	25.00
2452MHz	Pass	11.00	21.65	21.97	24.82	25.00

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

<Point to Point>

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_2TX	-
2.4-2.4835GHz	4.89
802.11g_(6Mbps)_2TX	-
2.4-2.4835GHz	2.53
802.11n HT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	0.95
802.11n HT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-0.46

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.01	2.28	2.72	4.89	6.00
2437MHz	Pass	14.01	2.13	2.06	4.60	6.00
2462MHz	Pass	14.01	1.71	2.97	3.91	6.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.01	-0.70	-1.77	0.50	6.00
2437MHz	Pass	14.01	0.32	0.29	2.53	6.00
2462MHz	Pass	14.01	-0.13	-1.26	1.24	6.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.01	-1.30	-0.33	0.23	6.00
2437MHz	Pass	14.01	-0.89	-0.63	0.95	6.00
2462MHz	Pass	14.01	-3.81	-2.85	-1.01	6.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	14.01	-5.59	-5.36	-4.22	6.00
2437MHz	Pass	14.01	-3.52	-2.05	-0.46	6.00
2452MHz	Pass	14.01	-5.47	-5.07	-2.26	6.00

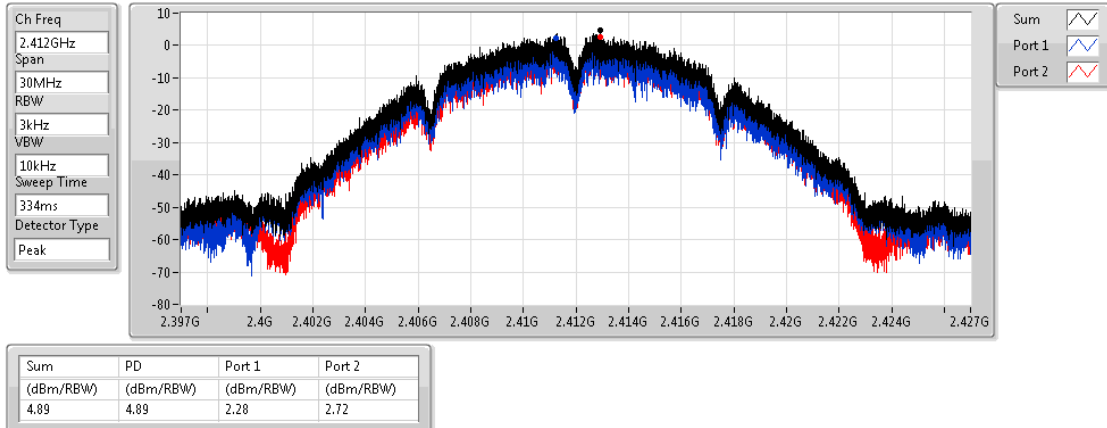
DG = Directional Gain; RBW=3kHz;

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

802.11b_(1Mbps)_2TX

PSD

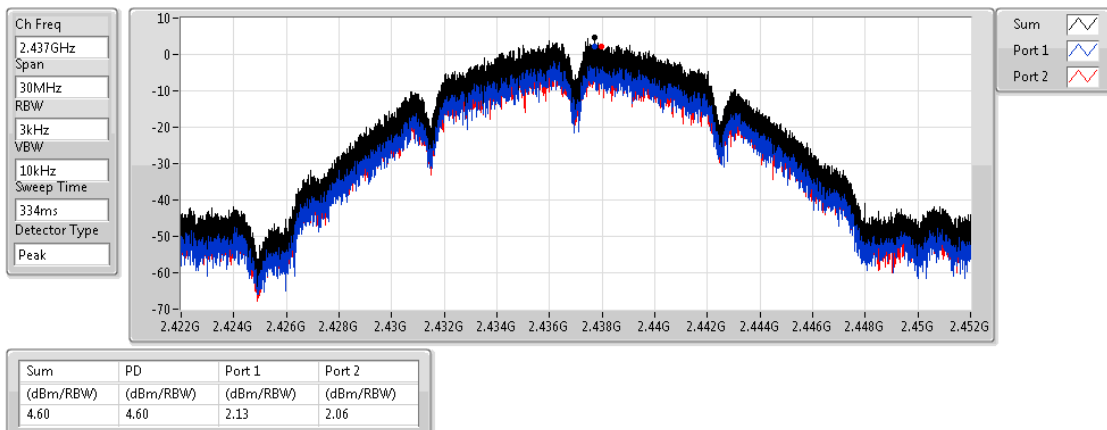
2412MHz



802.11b_(1Mbps)_2TX

PSD

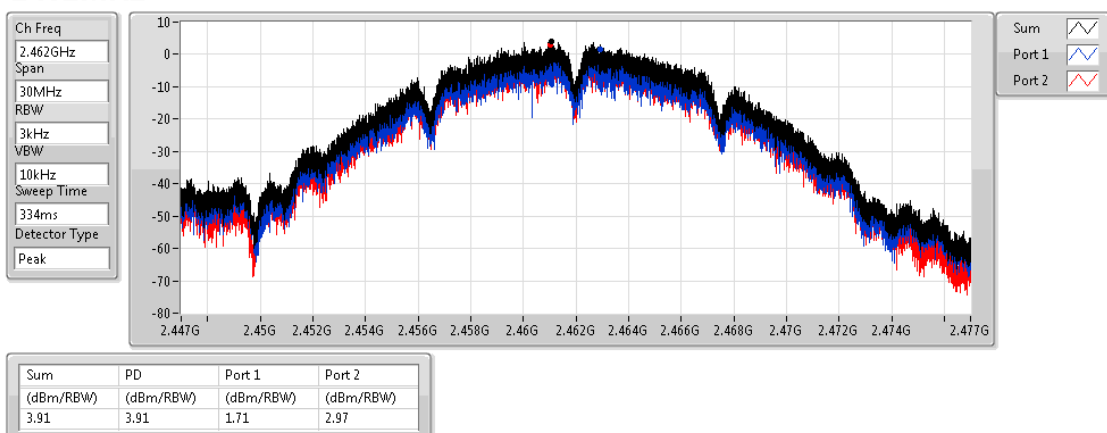
2437MHz



802.11b_(1Mbps)_2TX

PSD

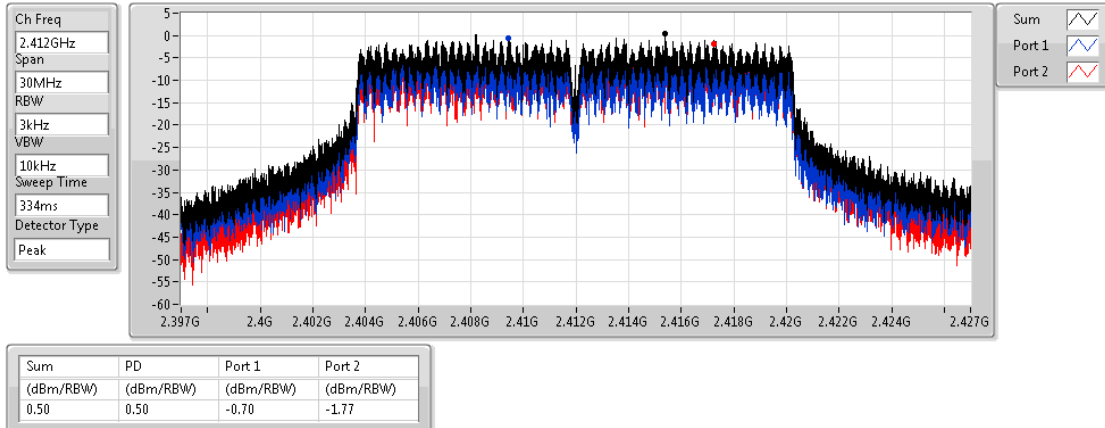
2462MHz



802.11g_(6Mbps)_2TX

PSD

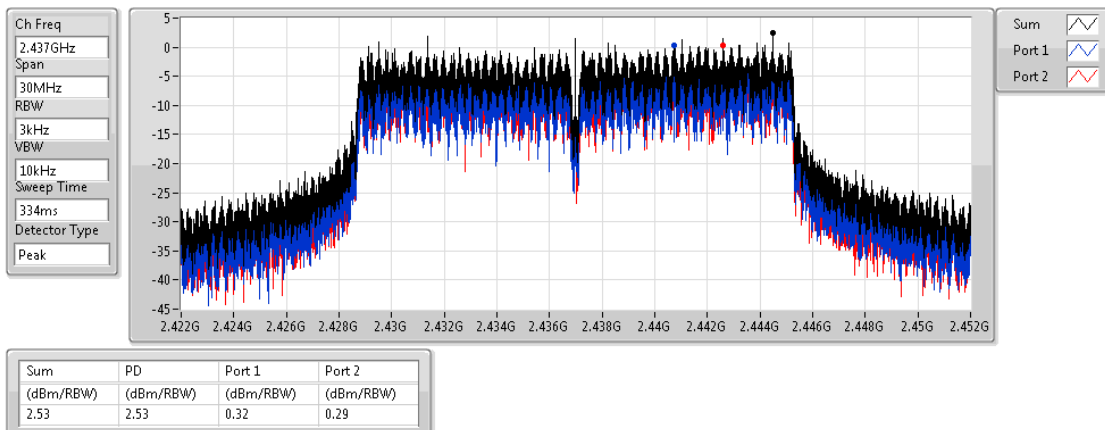
2412MHz



802.11g_(6Mbps)_2TX

PSD

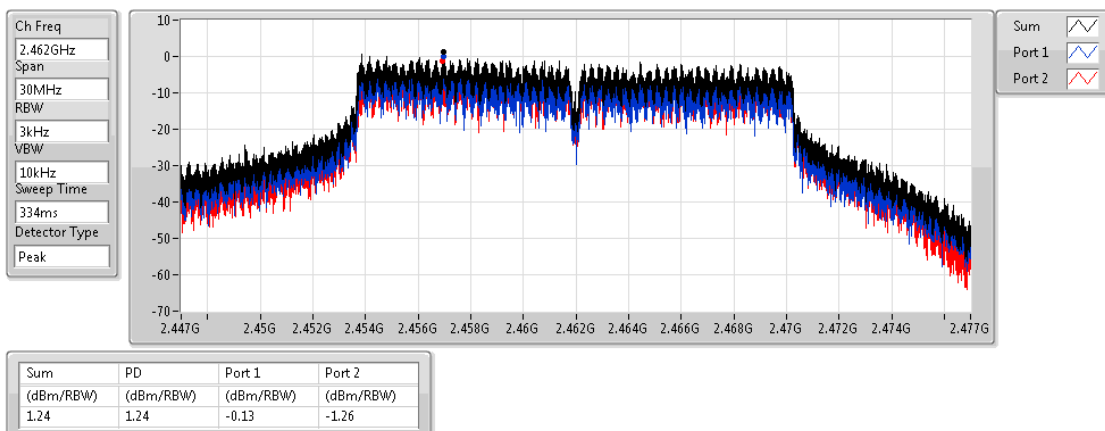
2437MHz



802.11g_(6Mbps)_2TX

PSD

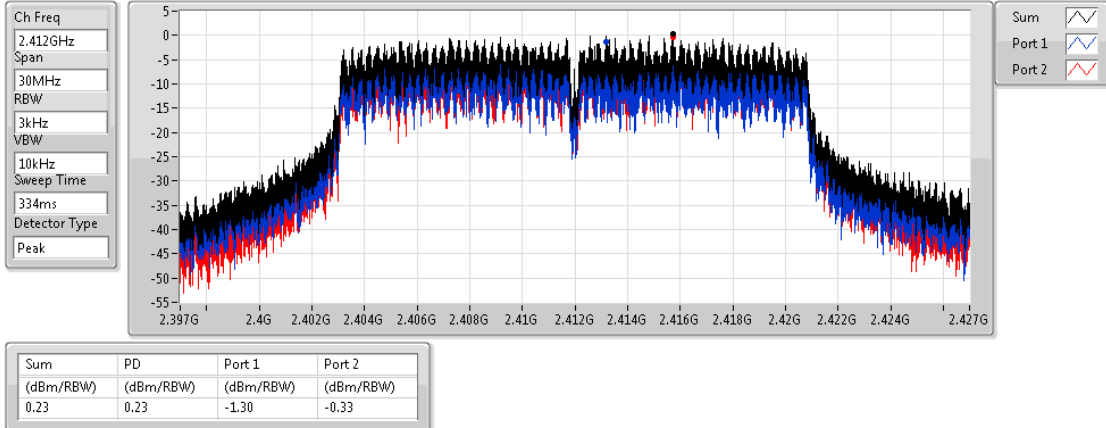
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

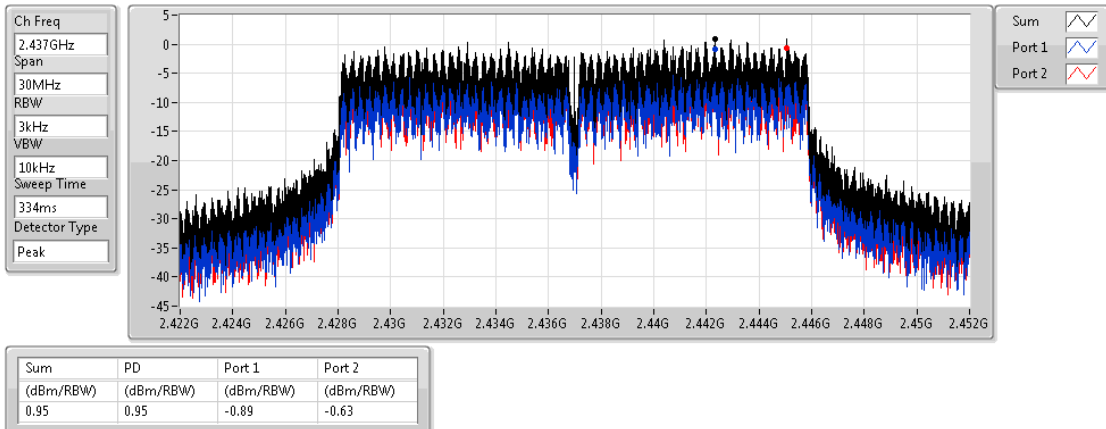
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

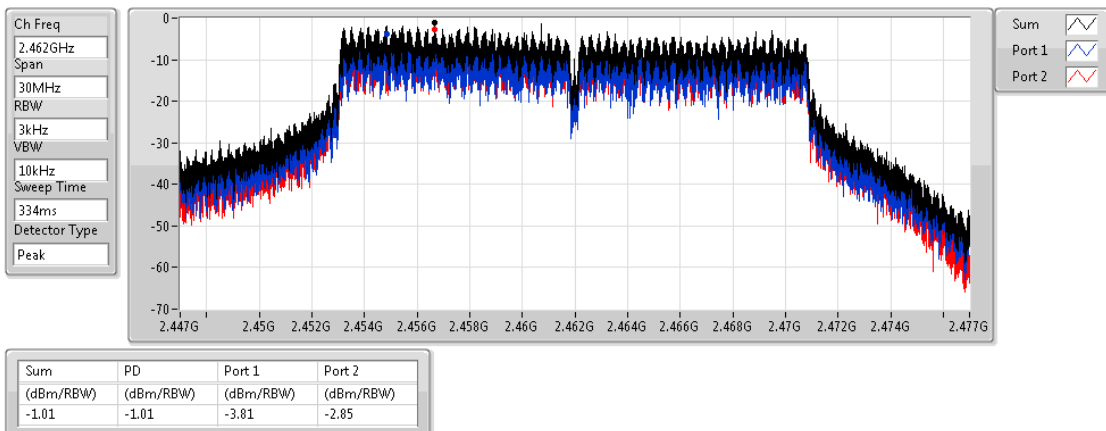
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

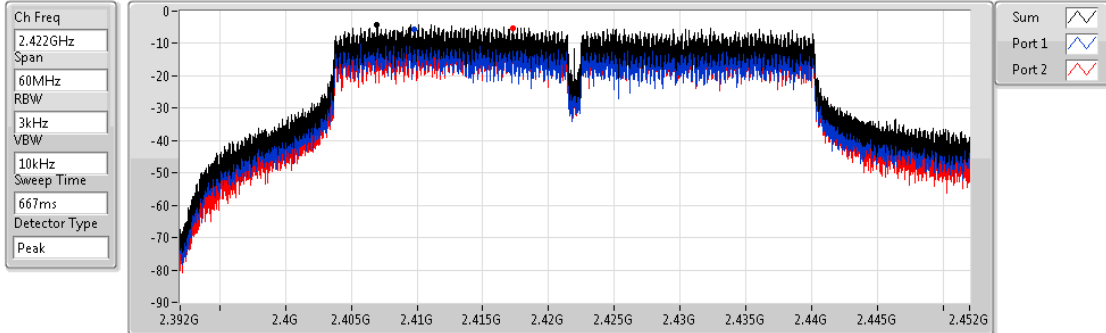
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

2422MHz

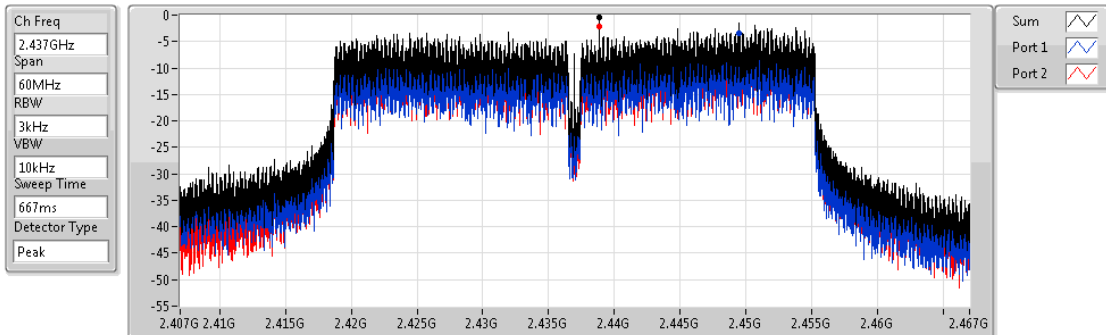


Sum	PD	Port 1	Port 2
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-4.22	-4.22	-5.59	-5.36

802.11n HT40_Nss1,(MCS0)_2TX

PSD

2437MHz

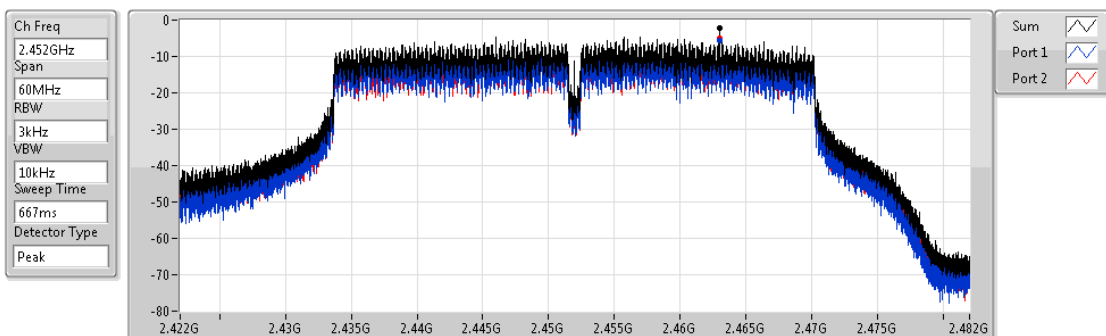


Sum	PD	Port 1	Port 2
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-0.46	-0.46	-3.52	-2.05

802.11n HT40_Nss1,(MCS0)_2TX

PSD

2452MHz



Sum	PD	Port 1	Port 2
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-2.26	-2.26	-5.47	-5.07

<Point to Multi-point>

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_2TX	-
2.4-2.4835GHz	-6.63
802.11g_(6Mbps)_2TX	-
2.4-2.4835GHz	-1.18
802.11n HT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-1.39
802.11n HT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-2.26

RBW=3kHz.

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.01	-7.87	-9.83	-6.63	-0.01
2437MHz	Pass	14.01	-10.35	-10.10	-7.42	-0.01
2462MHz	Pass	14.01	-10.74	-8.97	-7.07	-0.01
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.01	-5.51	-3.07	-2.32	-0.01
2437MHz	Pass	14.01	-3.81	-2.91	-1.18	-0.01
2462MHz	Pass	14.01	-3.41	-3.32	-1.68	-0.01
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	14.01	-4.15	-4.35	-2.12	-0.01
2437MHz	Pass	14.01	-3.26	-3.33	-1.62	-0.01
2462MHz	Pass	14.01	-3.01	-2.94	-1.39	-0.01
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	14.01	-7.08	-6.34	-4.67	-0.01
2437MHz	Pass	14.01	-6.16	-5.46	-4.28	-0.01
2452MHz	Pass	14.01	-5.47	-5.07	-2.26	-0.01

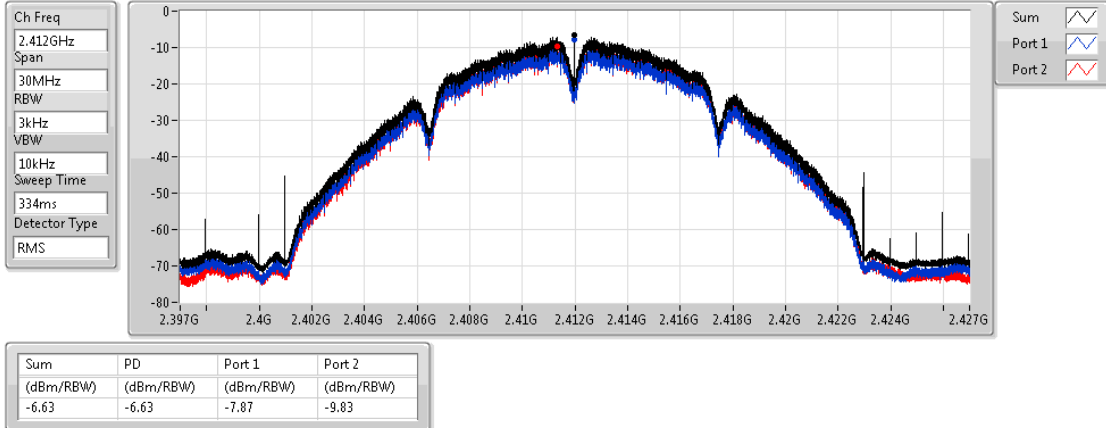
DG = Directional Gain; RBW=3kHz;

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

802.11b_(1Mbps)_2TX

PSD

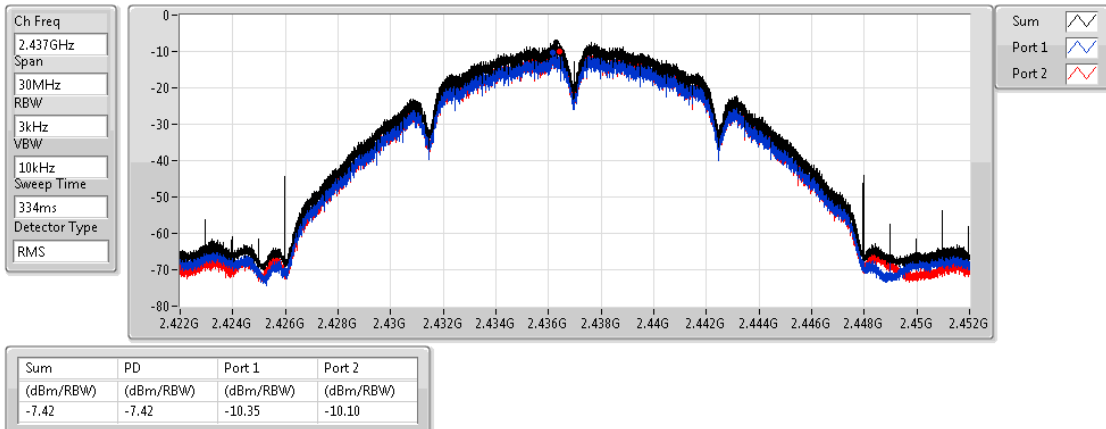
2412MHz



802.11b_(1Mbps)_2TX

PSD

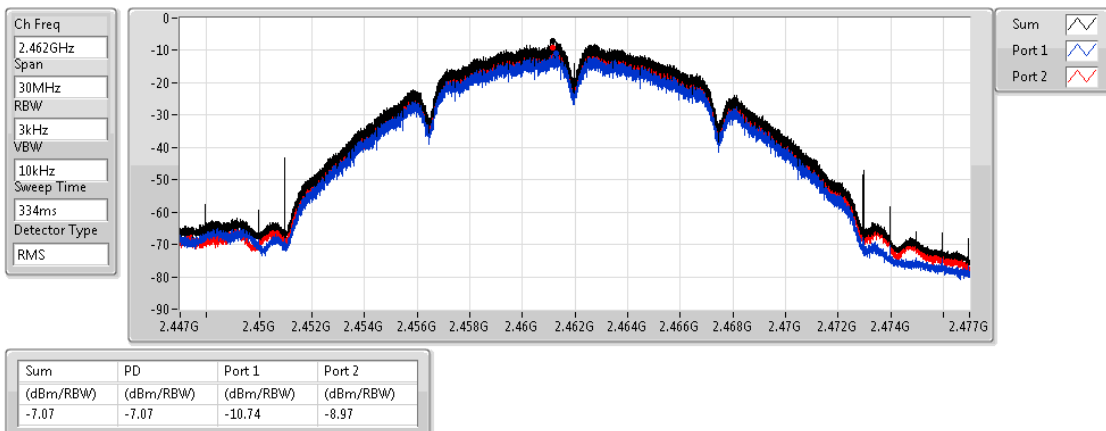
2437MHz



802.11b_(1Mbps)_2TX

PSD

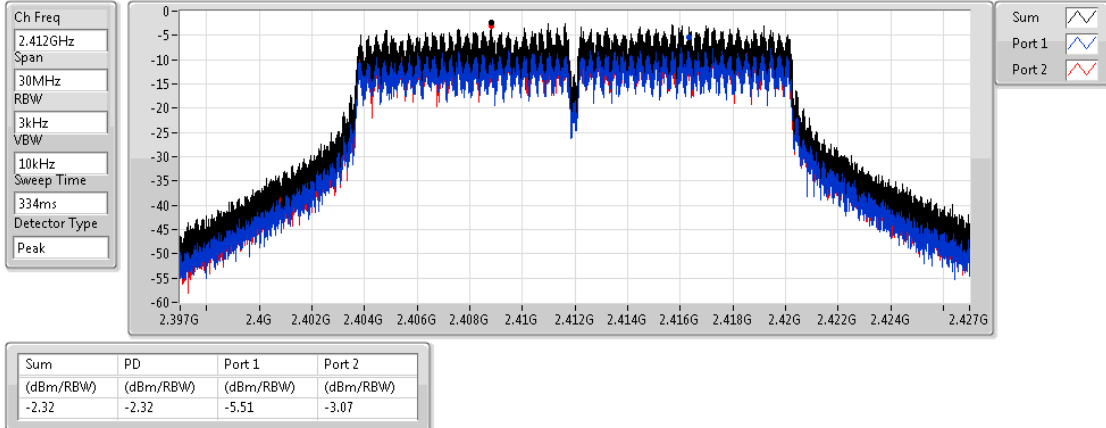
2462MHz



802.11g_(6Mbps)_2TX

PSD

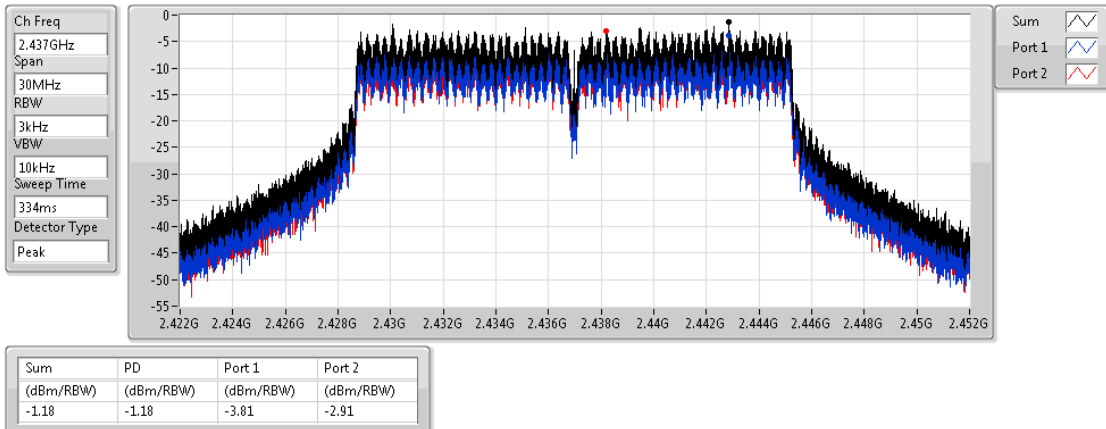
2412MHz



802.11g_(6Mbps)_2TX

PSD

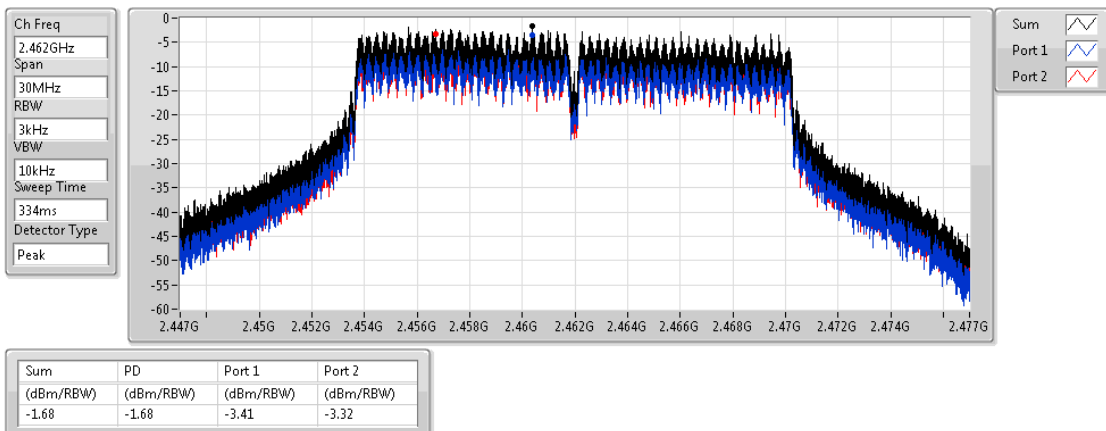
2437MHz



802.11g_(6Mbps)_2TX

PSD

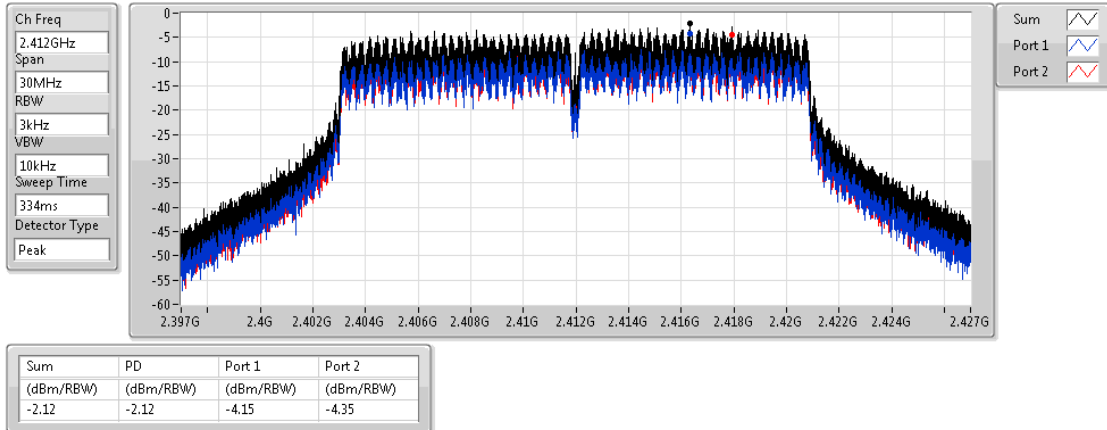
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

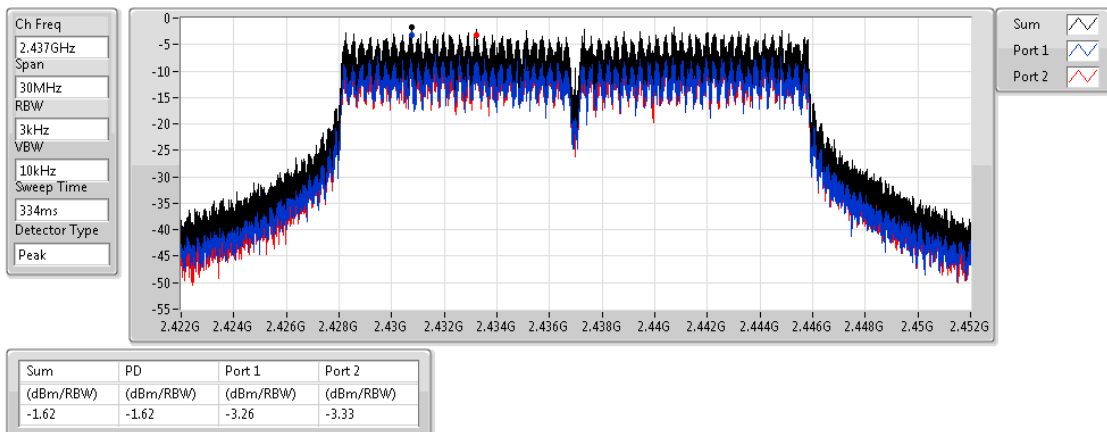
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

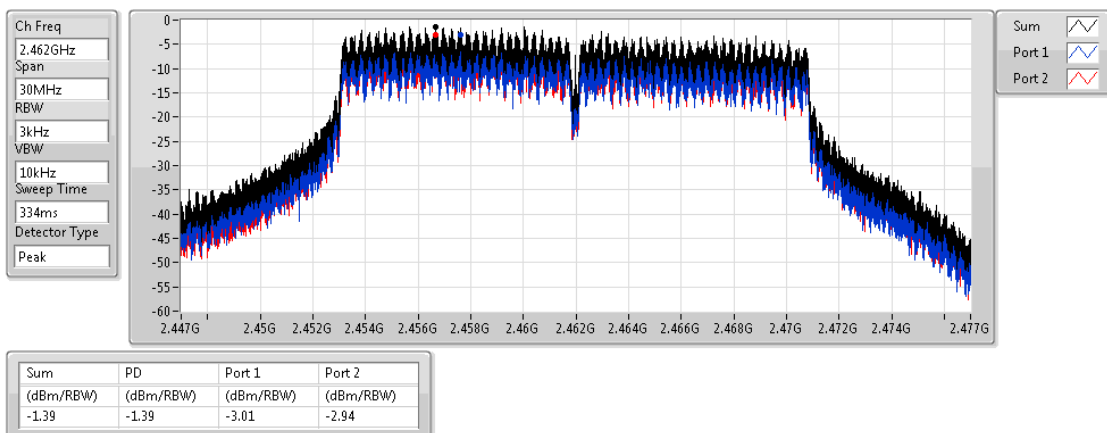
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

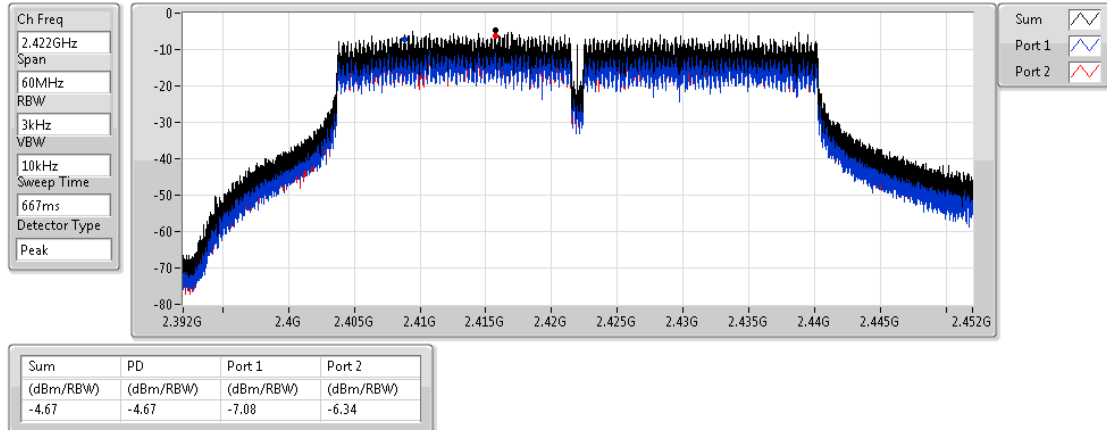
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

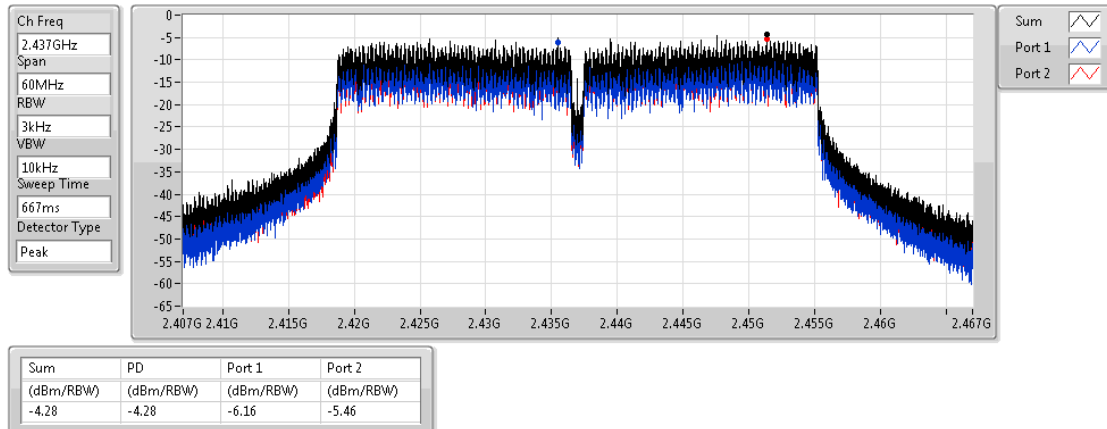
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

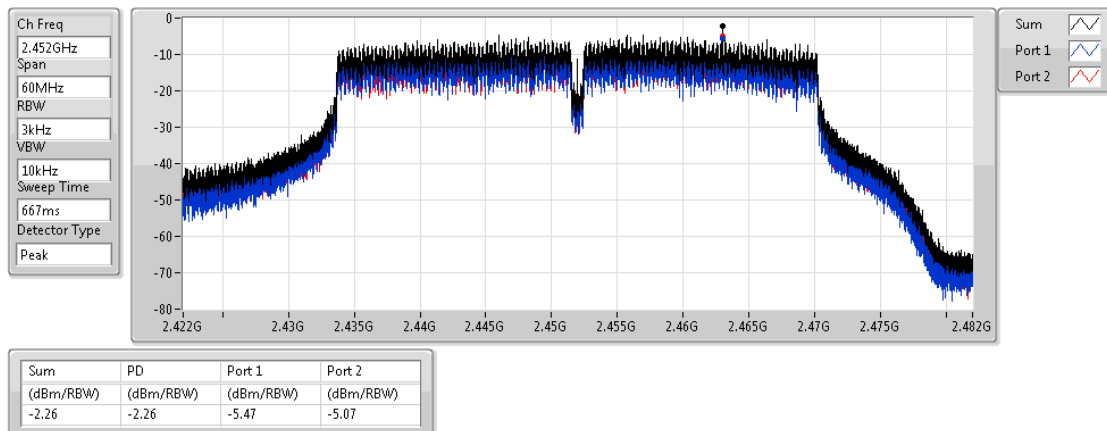
2437MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

2452MHz



**<Point to Point>****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
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.435738G	14.27	-15.73	925.885M	-58.26	2.39952G	-15.85	2.49742G	-57.85	7.235136G	-51.69	1

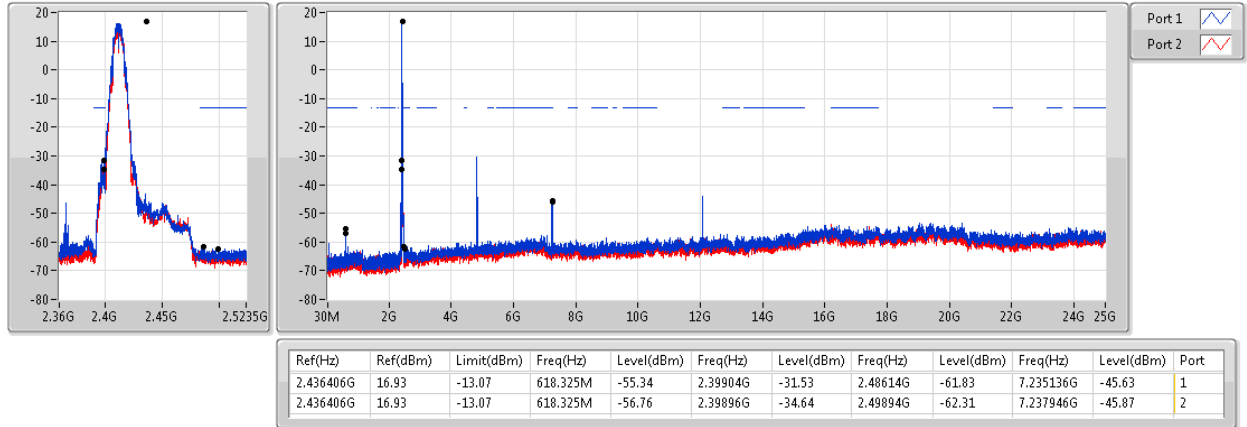
Result

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_(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.436406G	16.93	-13.07	618.325M	-55.34	2.39904G	-31.53	2.48614G	-61.83	7.235136G	-45.63	1
2412MHz	Pass	2.436406G	16.93	-13.07	618.325M	-56.76	2.39896G	-34.64	2.49894G	-62.31	7.237946G	-45.87	2
2437MHz	Pass	2.436406G	16.93	-13.07	668.42M	-58.09	2.3988G	-44.83	2.52238G	-61.63	17.057367G	-53.93	1
2437MHz	Pass	2.436406G	16.93	-13.07	668.42M	-57.25	2.398G	-47.17	2.52166G	-62.45	16.613456G	-54.85	2
2462MHz	Pass	2.436406G	16.93	-13.07	808.22M	-62.33	2.39992G	-48.81	2.48414G	-61.54	17.695138G	-53.87	1
2462MHz	Pass	2.436406G	16.93	-13.07	718.515M	-59.82	2.39936G	-50.70	2.48366G	-60.07	16.26788G	-55.84	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.443253G	16.06	-13.94	49.805M	-63.36	2.39864G	-14.30	2.5051G	-62.96	7.240755G	-51.74	1
2412MHz	Pass	2.443253G	16.06	-13.94	748.805M	-62.44	2.39952G	-18.45	2.48446G	-62.19	7.237946G	-51.12	2
2437MHz	Pass	2.443253G	16.06	-13.94	49.805M	-58.27	2.39896G	-42.28	2.51494G	-60.41	17.68109G	-53.05	1
2437MHz	Pass	2.443253G	16.06	-13.94	49.805M	-62.00	2.39944G	-43.74	2.48446G	-58.71	16.242594G	-54.38	2
2462MHz	Pass	2.443253G	16.06	-13.94	49.805M	-61.04	2.39864G	-50.71	2.48414G	-51.12	17.338323G	-54.84	1
2462MHz	Pass	2.443253G	16.06	-13.94	49.805M	-61.70	2.398G	-50.75	2.48382G	-44.20	17.627708G	-53.69	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	14.27	-15.73	925.885M	-58.26	2.39952G	-15.85	2.49742G	-57.85	7.235136G	-51.69	1
2412MHz	Pass	2.435738G	14.27	-15.73	756.96M	-59.23	2.39976G	-21.89	2.49158G	-57.73	7.235136G	-51.12	2
2437MHz	Pass	2.435738G	14.27	-15.73	49.805M	-61.38	2.39984G	-37.14	2.48374G	-59.89	17.377657G	-53.40	1
2437MHz	Pass	2.435738G	14.27	-15.73	49.805M	-62.85	2.3996G	-44.28	2.48366G	-60.65	17.408562G	-55.05	2
2462MHz	Pass	2.435738G	14.27	-15.73	2.12234G	-58.43	2.39936G	-50.62	2.48358G	-51.79	6.285504G	-53.03	1
2462MHz	Pass	2.435738G	14.27	-15.73	2.307575G	-57.59	2.39712G	-52.62	2.48358G	-48.80	6.858655G	-52.14	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.449432G	11.14	-18.86	31.145M	-60.50	2.39968G	-19.78	2.48382G	-62.51	17.680092G	-54.98	1
2422MHz	Pass	2.449432G	11.14	-18.86	30M	-60.08	2.39984G	-22.69	2.48398G	-59.18	17.663265G	-54.11	2
2437MHz	Pass	2.449432G	11.14	-18.86	31.145M	-57.69	2.39936G	-20.60	2.48382G	-44.74	24.371778G	-54.76	1
2437MHz	Pass	2.449432G	11.14	-18.86	31.145M	-58.61	2.39904G	-22.52	2.48446G	-42.23	17.66046G	-53.75	2
2452MHz	Pass	2.449432G	11.14	-18.86	49.465M	-61.17	2.39888G	-41.62	2.4851G	-47.26	16.437671G	-54.92	1
2452MHz	Pass	2.449432G	11.14	-18.86	49.465M	-60.53	2.39872G	-42.36	2.48526G	-41.29	17.419268G	-54.07	2

802.11b_(1Mbps)_2TX

CSE NdB

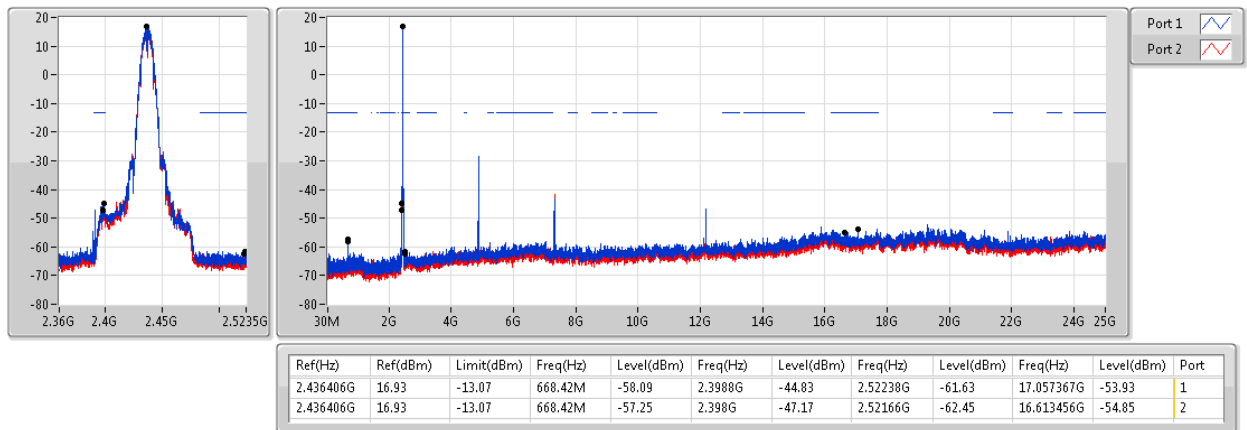
2412MHz



802.11b_(1Mbps)_2TX

CSE NdB

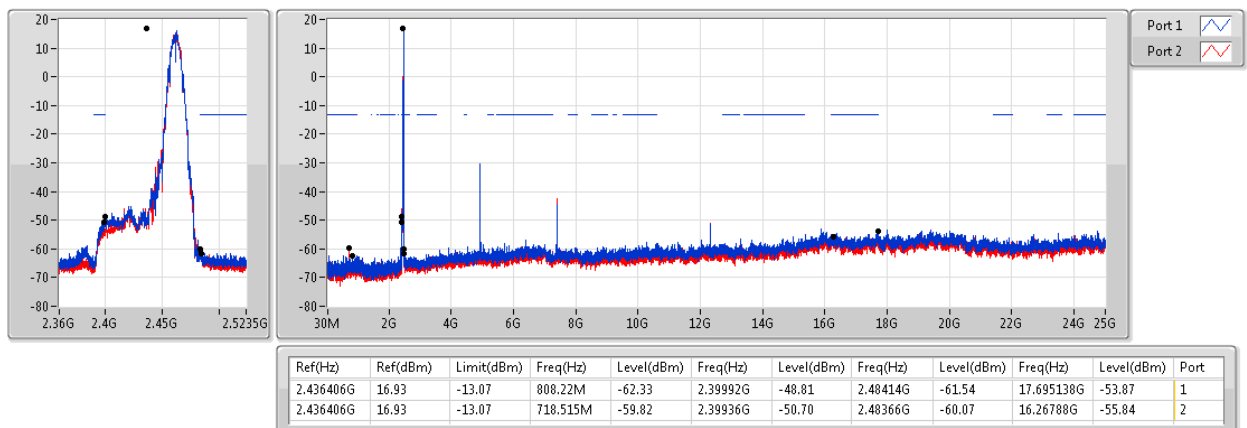
2437MHz



802.11b_(1Mbps)_2TX

CSE NdB

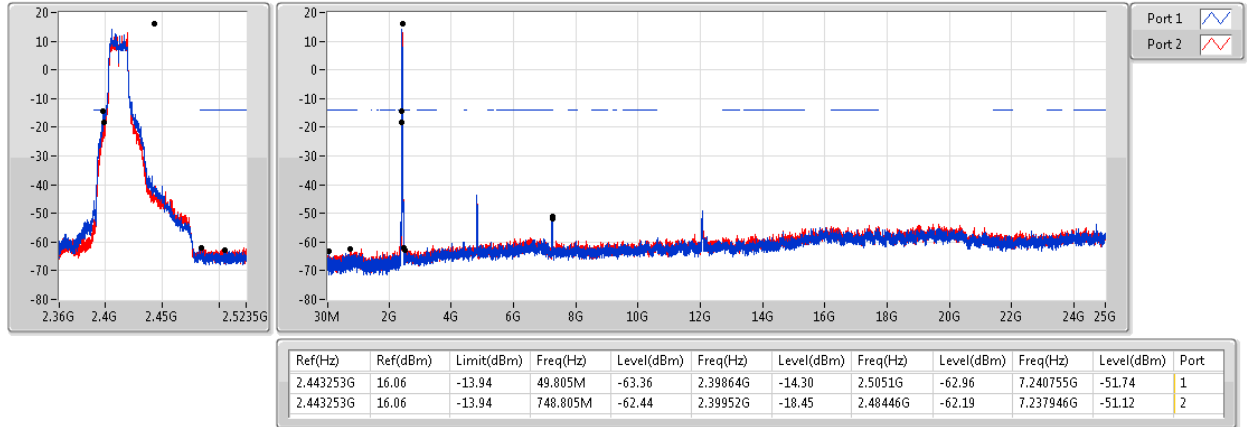
2462MHz



802.11g_(6Mbps)_2TX

CSE NdB

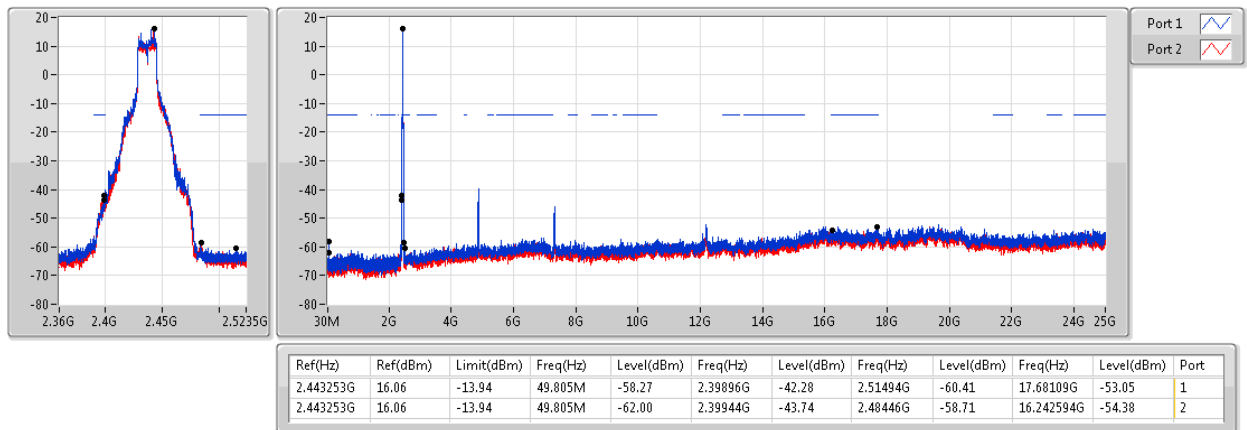
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802.11g_(6Mbps)_2TX

CSE NdB

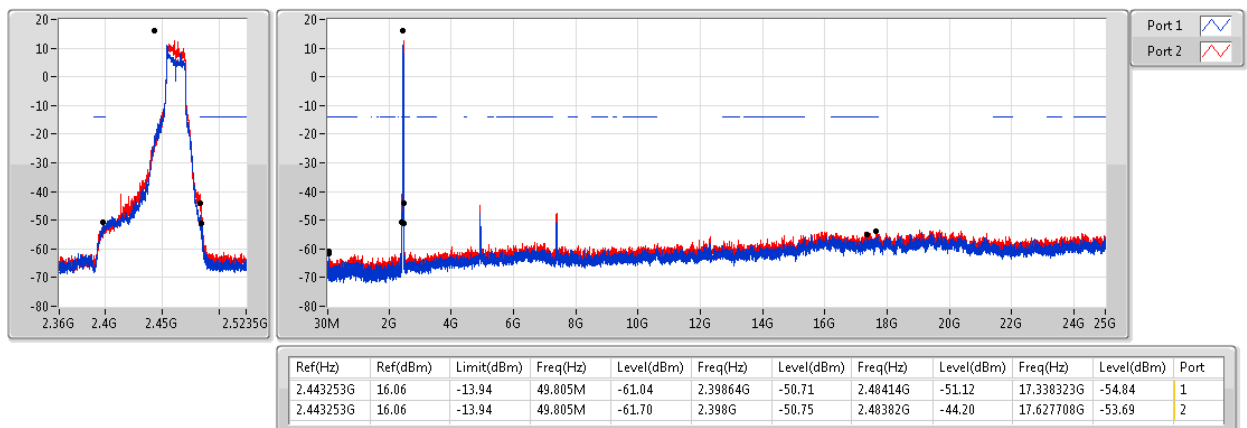
2437MHz



802.11g_(6Mbps)_2TX

CSE NdB

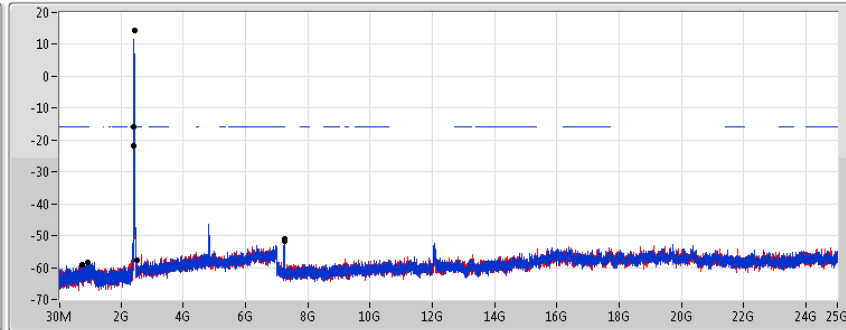
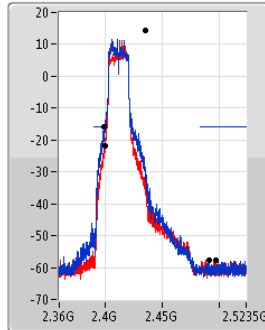
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

2412MHz

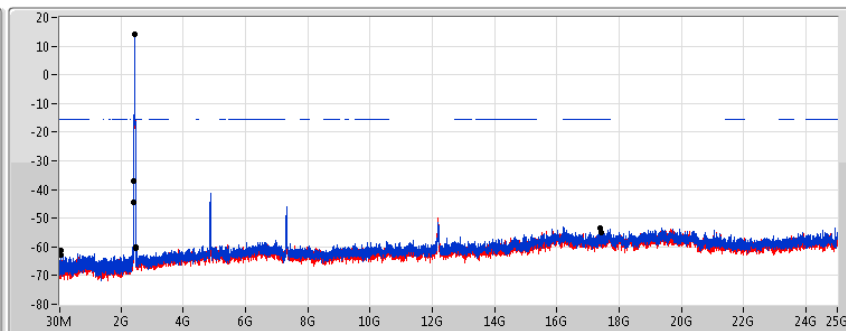
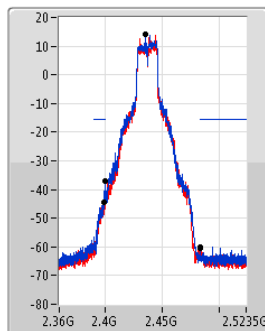

Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	14.27	-15.73	925.885M	-58.26	2.39952G	-15.85	2.49742G	-57.85	7.235136G	-51.69	1
2.435738G	14.27	-15.73	756.96M	-59.23	2.39976G	-21.89	2.49158G	-57.73	7.235136G	-51.12	2

802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

2437MHz

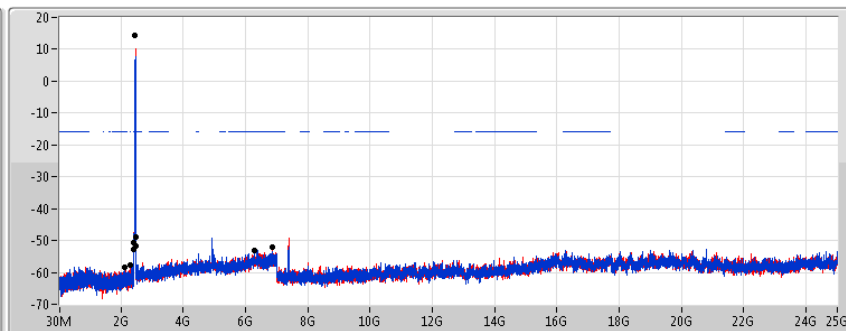
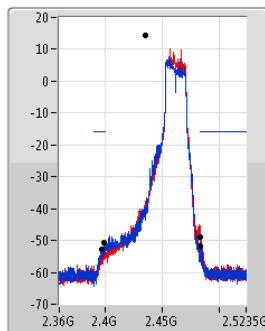

Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	14.27	-15.73	49.805M	-61.38	2.39984G	-37.14	2.48374G	-59.89	17.377657G	-53.40	1
2.435738G	14.27	-15.73	49.805M	-62.85	2.3996G	-44.28	2.48366G	-60.65	17.408562G	-55.05	2

802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

2462MHz

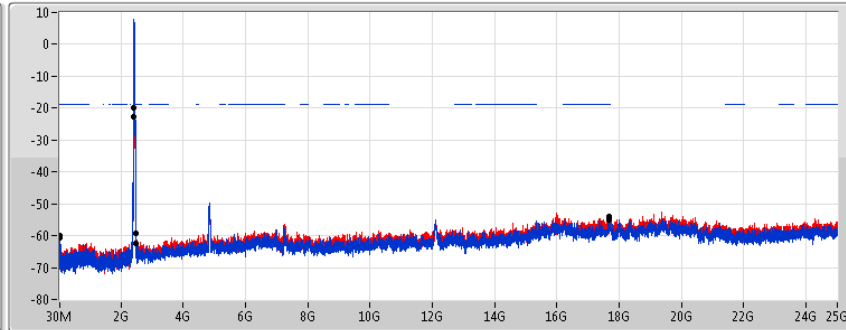
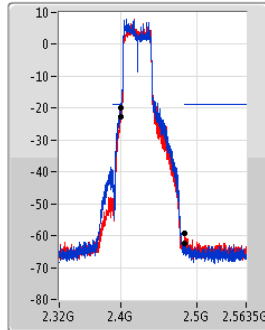

Port 1
Port 2



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.435738G	14.27	-15.73	2.12234G	-58.43	2.39936G	-50.62	2.48358G	-51.79	6.285504G	-53.03	1
2.435738G	14.27	-15.73	2.307575G	-57.59	2.39712G	-52.62	2.48358G	-48.80	6.858655G	-52.14	2

802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2422MHz



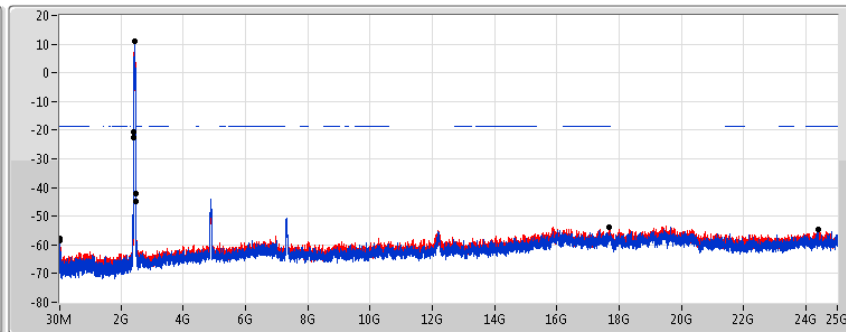
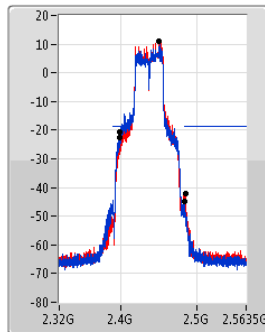
Port 1 
Port 2 



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.449432G	11.14	-18.86	31.145M	-60.50	2.39968G	-19.78	2.48382G	-62.51	17.680092G	-54.98	1
2.449432G	11.14	-18.86	30M	-60.08	2.39984G	-22.69	2.48398G	-59.18	17.663265G	-54.11	2

802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2437MHz



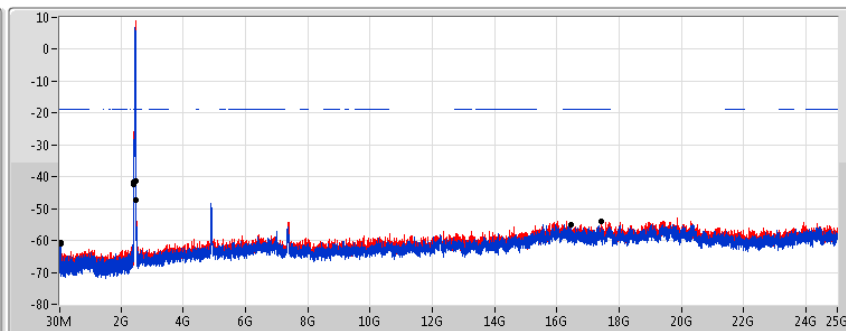
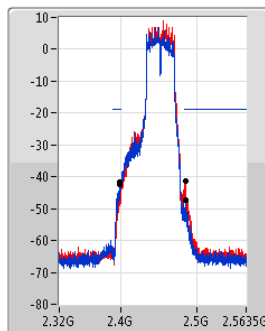
Port 1 
Port 2 



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.449432G	11.14	-18.86	31.145M	-57.69	2.39936G	-20.60	2.48382G	-44.74	24.371778G	-54.76	1
2.449432G	11.14	-18.86	31.145M	-58.61	2.39904G	-22.52	2.48446G	-42.23	17.66046G	-53.75	2

802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2452MHz



Port 1 
Port 2 

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.449432G	11.14	-18.86	49.465M	-61.17	2.39888G	-41.62	2.4851G	-47.26	16.437671G	-54.92	1
2.449432G	11.14	-18.86	49.465M	-60.53	2.39872G	-42.36	2.48526G	-41.29	17.419268G	-54.07	2

<Point to Multi-point>

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
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.444422G	10.72	-19.28	49.805M	-57.65	2.39992G	-21.52	2.48494G	-61.13	7.232327G	-53.02	1

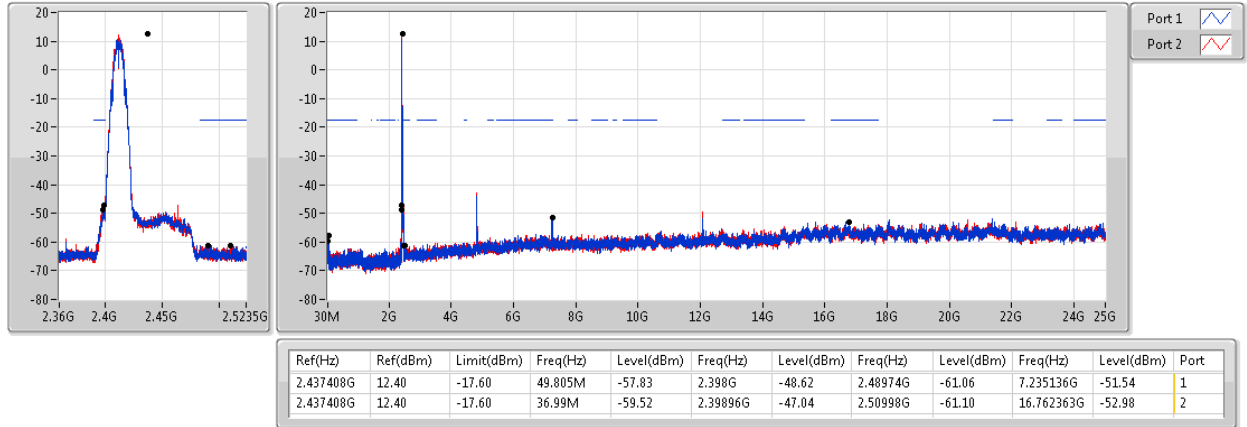
Result

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_(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.437408G	12.40	-17.60	49.805M	-57.83	2.398G	-48.62	2.48974G	-61.06	7.235136G	-51.54	1
2412MHz	Pass	2.437408G	12.40	-17.60	36.99M	-59.52	2.39896G	-47.04	2.50998G	-61.10	16.762363G	-52.98	2
2437MHz	Pass	2.437408G	12.40	-17.60	49.805M	-58.63	2.39888G	-49.52	2.50438G	-61.02	24.426849G	-53.37	1
2437MHz	Pass	2.437408G	12.40	-17.60	49.805M	-55.58	2.39808G	-51.15	2.48534G	-61.79	16.64998G	-53.62	2
2462MHz	Pass	2.437408G	12.40	-17.60	36.99M	-58.61	2.39992G	-50.98	2.51302G	-60.97	17.447896G	-52.48	1
2462MHz	Pass	2.437408G	12.40	-17.60	49.805M	-57.30	2.39976G	-55.64	2.49518G	-61.11	17.428229G	-52.75	2
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.419372G	8.98	-21.02	2.08972G	-62.90	2.39992G	-24.83	2.48654G	-61.47	7.235136G	-50.80	1
2412MHz	Pass	2.413193G	8.98	-21.02	796.57M	-62.43	2.39984G	-23.53	2.48862G	-61.81	7.237946G	-51.91	2
2437MHz	Pass	2.418203G	8.98	-21.02	787.25M	-63.14	2.39968G	-23.37	2.48406G	-62.01	7.240755G	-50.05	1
2437MHz	Pass	2.409352G	8.98	-21.02	1.979045G	-63.01	2.39984G	-23.51	2.4911G	-61.90	7.243565G	-51.04	2
2462MHz	Pass	2.454442G	8.98	-21.02	772.105M	-62.23	2.39896G	-53.20	2.48446G	-53.42	16.374643G	-54.24	1
2462MHz	Pass	2.454442G	8.98	-21.02	337.56M	-62.73	2.39912G	-51.28	2.48382G	-53.30	16.251022G	-53.73	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.444422G	10.72	-19.28	49.805M	-57.65	2.39992G	-21.52	2.48494G	-61.13	7.232327G	-53.02	1
2412MHz	Pass	2.444422G	10.72	-19.28	49.805M	-56.66	2.39992G	-22.52	2.48454G	-60.55	24.901665G	-53.24	2
2437MHz	Pass	2.444422G	10.72	-19.28	49.805M	-58.06	2.3988G	-48.40	2.4855G	-60.26	21.777432G	-52.16	1
2437MHz	Pass	2.444422G	10.72	-19.28	49.805M	-58.73	2.3996G	-46.35	2.48446G	-60.65	21.79148G	-53.17	2
2462MHz	Pass	2.444422G	10.72	-19.28	49.805M	-58.26	2.39872G	-50.23	2.48438G	-48.45	16.366214G	-52.52	1
2462MHz	Pass	2.444422G	10.72	-19.28	49.805M	-58.80	2.39992G	-52.02	2.48382G	-47.87	21.687526G	-52.43	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.454442G	7.37	-22.63	49.465M	-57.85	2.39952G	-25.86	2.5027G	-61.07	16.272202G	-53.44	1
2422MHz	Pass	2.454442G	7.37	-22.63	30M	-59.47	2.39936G	-25.27	2.48398G	-60.89	15.315846G	-53.50	2
2437MHz	Pass	2.454442G	7.37	-22.63	49.465M	-59.47	2.39936G	-33.68	2.48462G	-56.81	16.381579G	-53.36	1
2437MHz	Pass	2.454442G	7.37	-22.63	49.465M	-57.95	2.39952G	-29.32	2.48718G	-50.70	17.506209G	-53.09	2
2452MHz	Pass	2.454442G	7.37	-22.63	49.465M	-58.43	2.3992G	-44.25	2.48526G	-44.33	16.740563G	-53.13	1
2452MHz	Pass	2.454442G	7.37	-22.63	49.465M	-56.78	2.3992G	-41.36	2.48574G	-42.37	21.421378G	-51.89	2

802.11b_(1Mbps)_2TX

CSE NdB

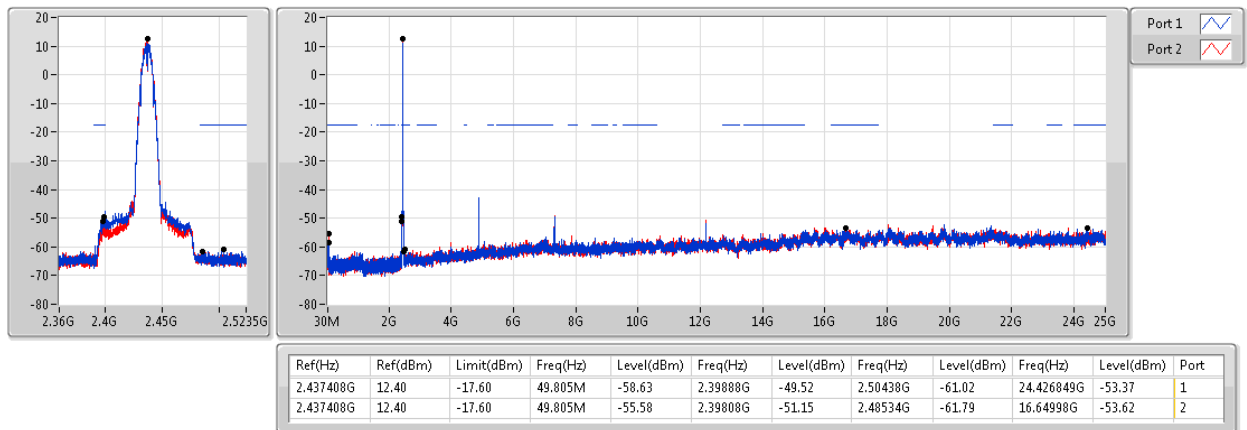
2412MHz



802.11b_(1Mbps)_2TX

CSE NdB

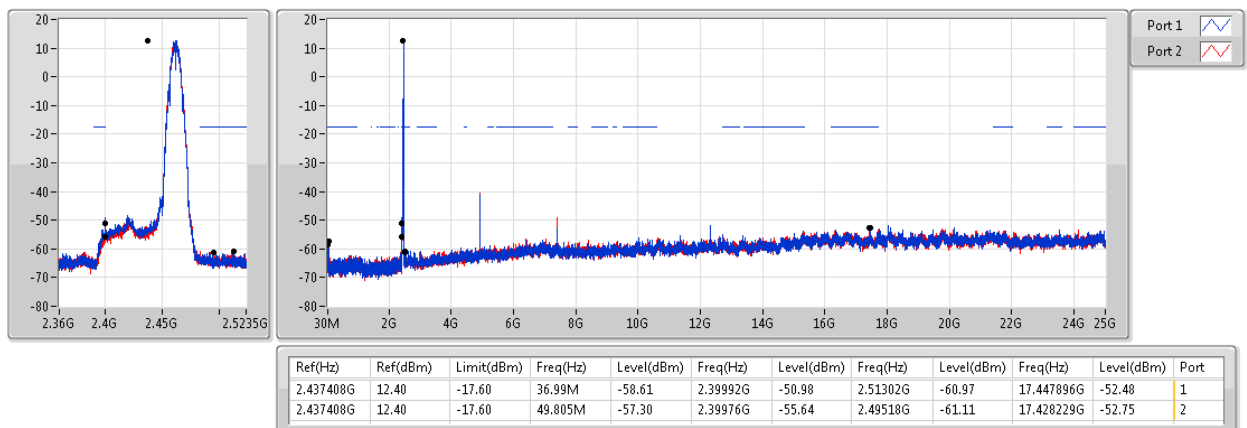
2437MHz



802.11b_(1Mbps)_2TX

CSE NdB

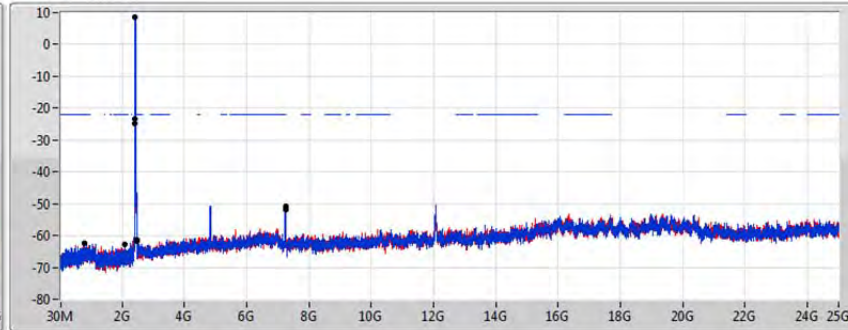
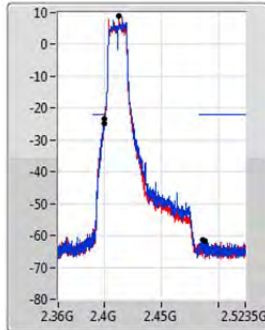
2462MHz



802.11g_(6Mbps)_2TX

CSE NdB

2412MHz



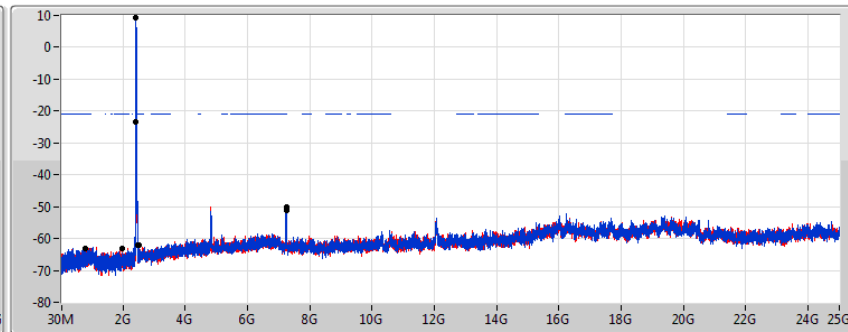
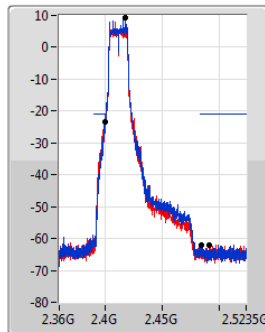
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.419372G	8.98	-21.02	2.08972G	-62.90	2.39992G	-24.83	2.48654G	-61.47	7.235136G	-50.80	1
2.413193G	8.98	-21.02	796.57M	-62.43	2.39984G	-23.53	2.48862G	-61.81	7.237946G	-51.91	2

802.11g_(6Mbps)_2TX

CSE NdB

2437MHz



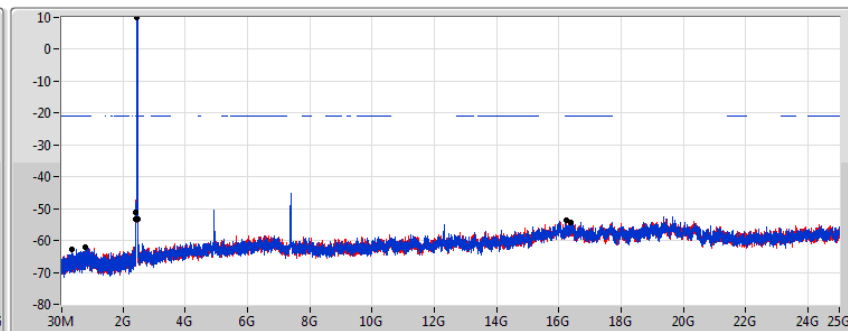
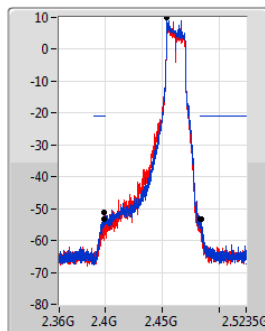
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.418203G	8.98	-21.02	787.25M	-63.14	2.39968G	-23.37	2.48406G	-62.01	7.240755G	-50.05	1
2.409352G	8.98	-21.02	1.979045G	-63.01	2.39984G	-23.51	2.4911G	-61.90	7.243565G	-51.04	2

802.11g_(6Mbps)_2TX

CSE NdB

2462MHz



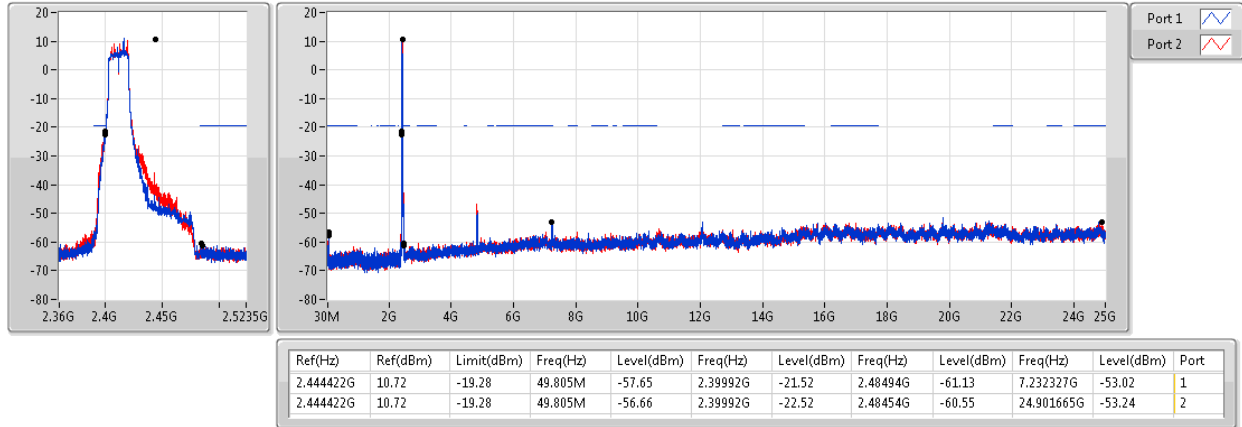
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.454442G	8.98	-21.02	772.105M	-62.23	2.39896G	-53.20	2.48446G	-53.42	16.374643G	-54.24	1
2.454442G	8.98	-21.02	337.56M	-62.73	2.39912G	-51.28	2.48382G	-53.30	16.251022G	-53.73	2

802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

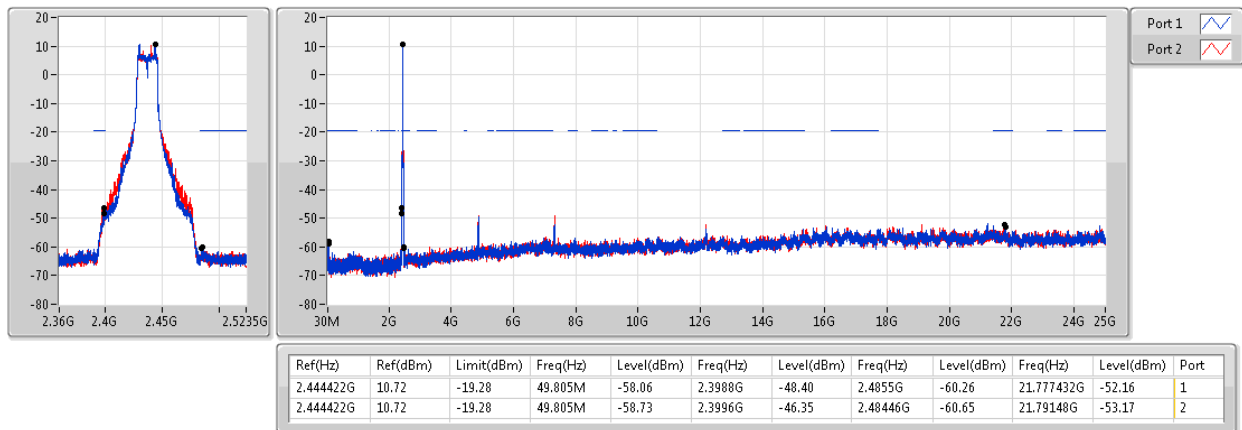
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

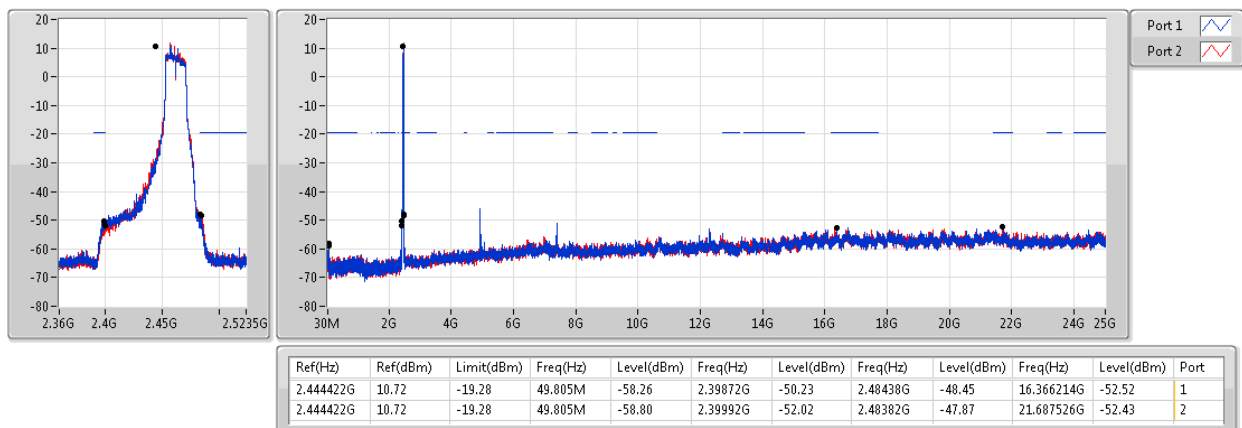
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

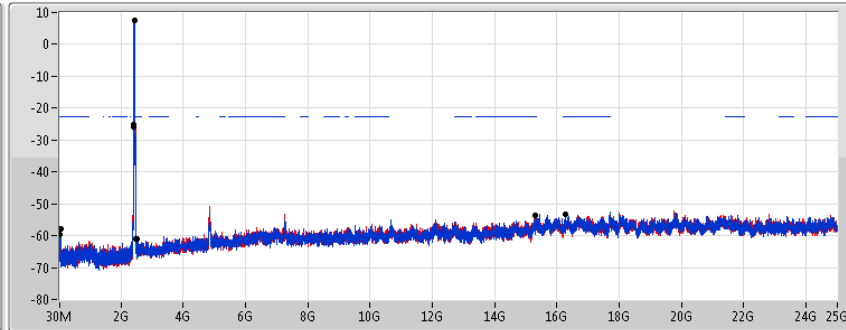
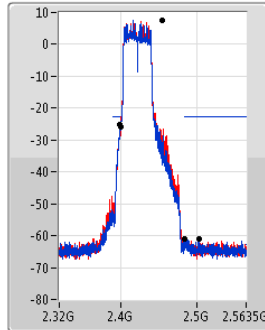
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2422MHz



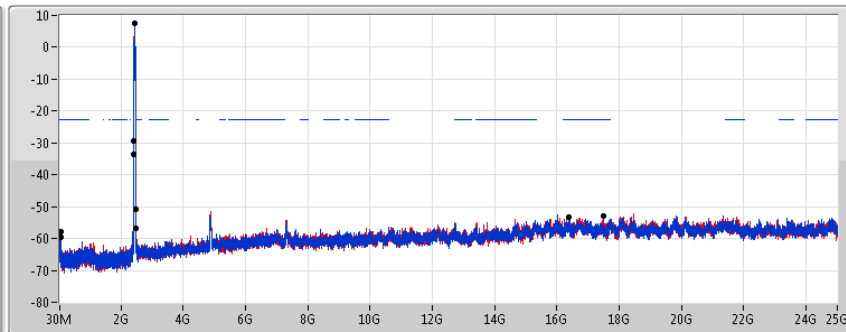
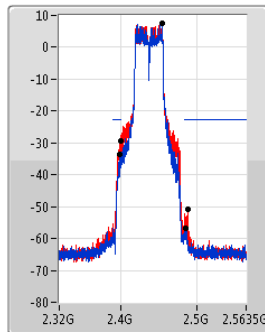
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.454442G	7.37	-22.63	49.465M	-57.85	2.39952G	-25.86	2.5027G	-61.07	16.272202G	-53.44	1
2.454442G	7.37	-22.63	30M	-59.47	2.39936G	-25.27	2.48398G	-60.89	15.315846G	-53.50	2

802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

2437MHz



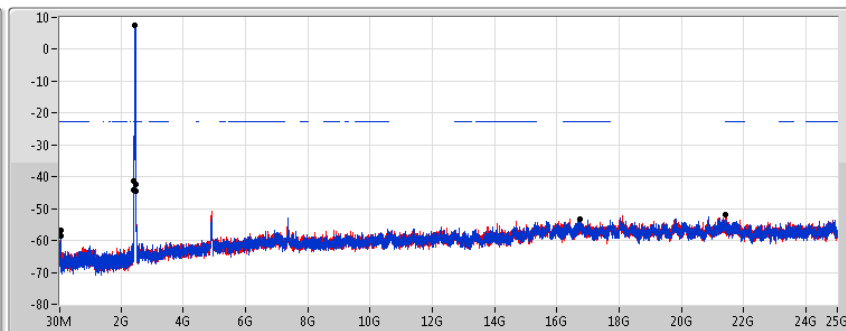
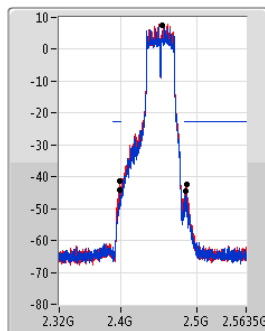
Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.454442G	7.37	-22.63	49.465M	-59.47	2.39936G	-33.68	2.48462G	-56.81	16.381579G	-53.36	1
2.454442G	7.37	-22.63	49.465M	-57.95	2.39952G	-29.32	2.48718G	-50.70	17.506209G	-53.09	2

802.11n HT40_Nss1,(MCS0)_2TX

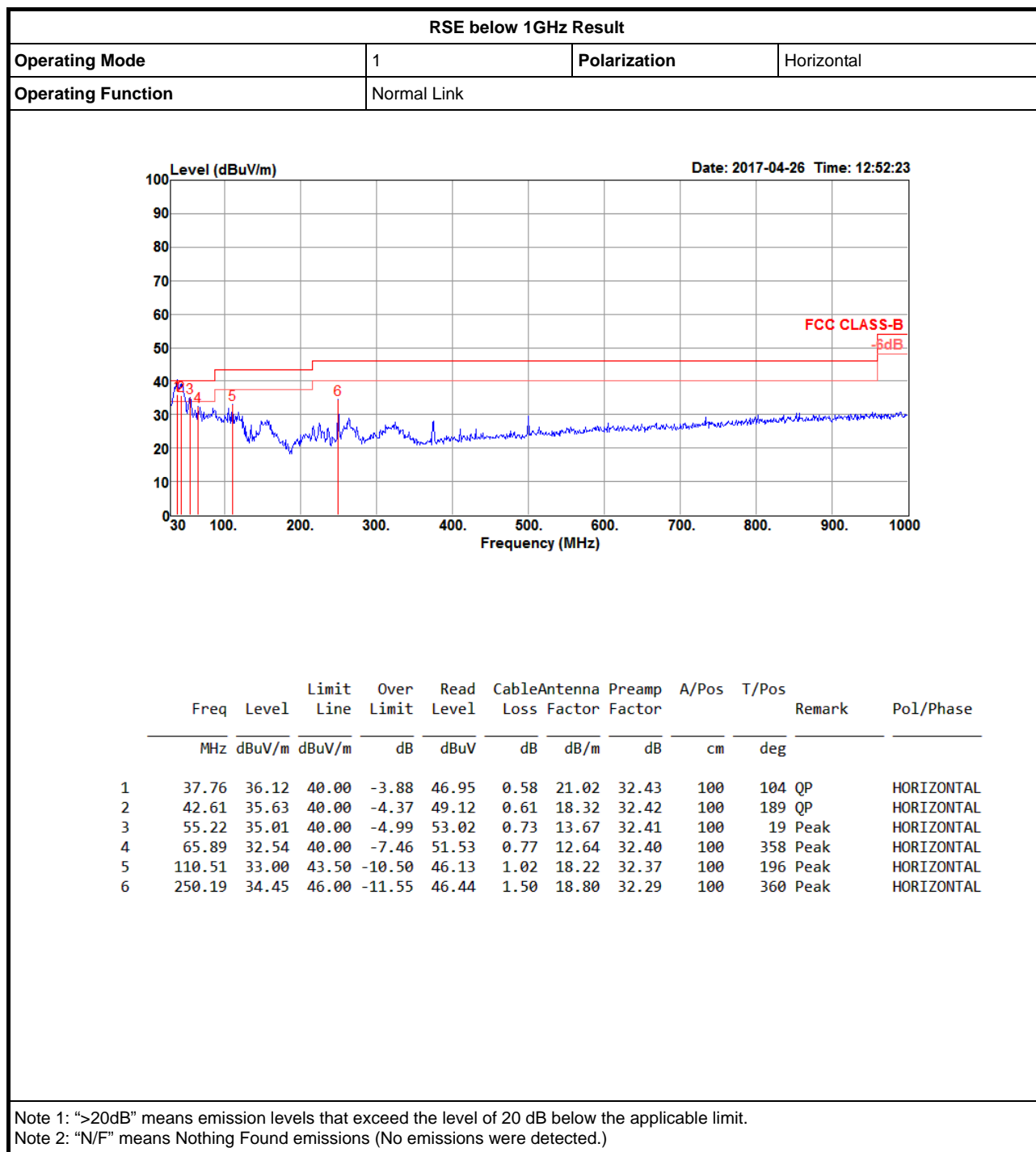
CSE NdB

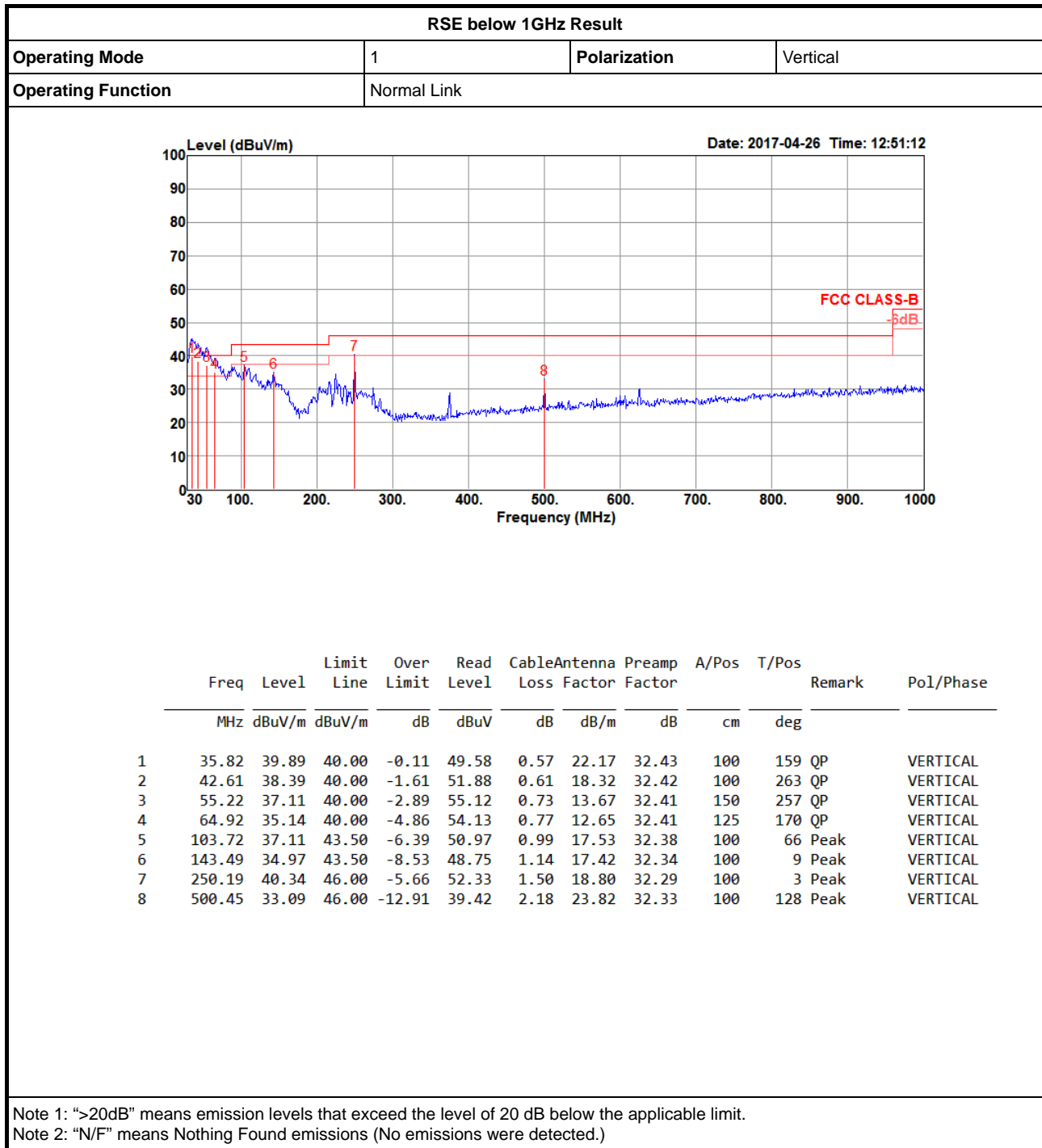
2452MHz



Port 1
Port 2

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.454442G	7.37	-22.63	49.465M	-58.43	2.3992G	-44.25	2.48526G	-44.33	16.740563G	-53.13	1
2.454442G	7.37	-22.63	49.465M	-56.78	2.3992G	-41.36	2.48574G	-42.37	21.421378G	-51.89	2







RSE TX above 1GHz Result

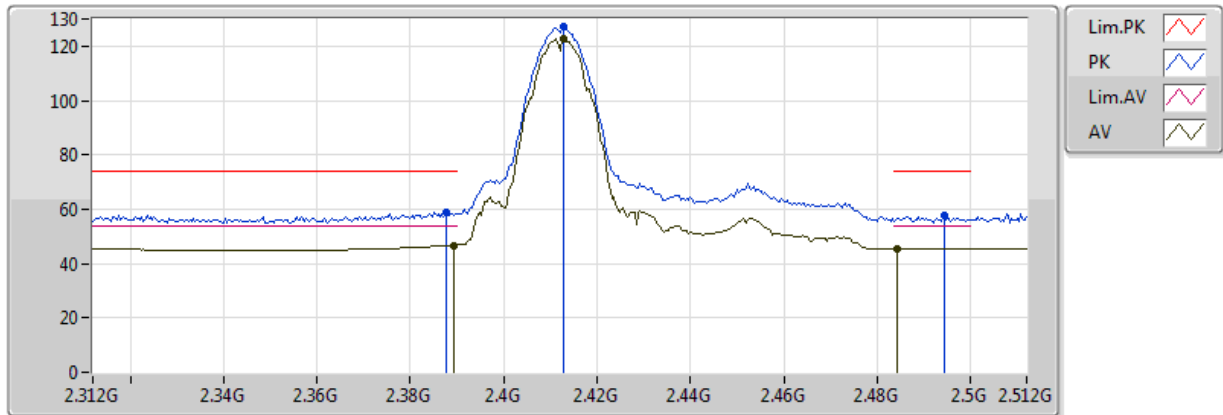
Appendix F.2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.483502G	53.98	54.00	-0.02	30.92	3	V	43	1.50	-

802.11b_(1Mbps)_2TX

2412MHz_TX

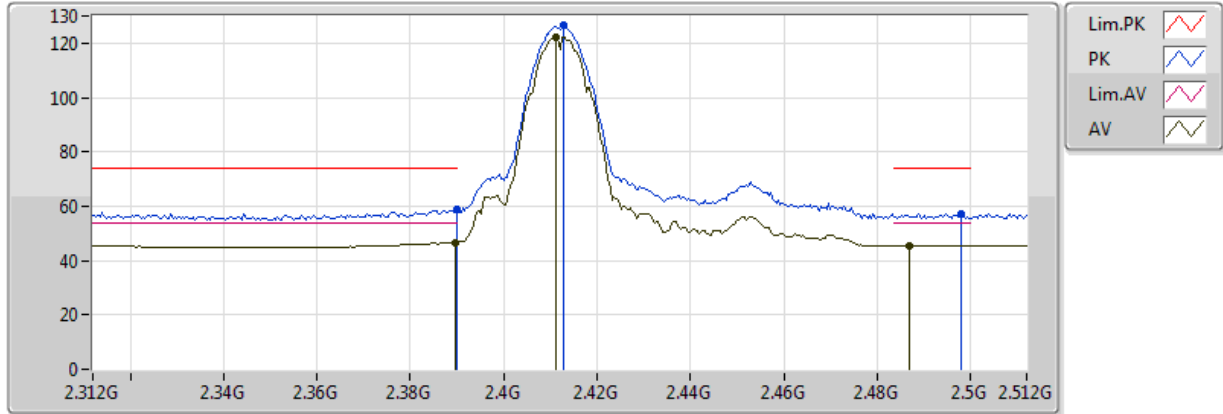


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3892G	46.76	54.00	-7.24	32.67	3	V	322	1.39	-
AV	2.4128G	122.76	Inf	-Inf	32.69	3	V	322	1.39	-
AV	2.4844G	45.28	54.00	-8.72	32.78	3	V	322	1.39	-
PK	2.3876G	58.95	74.00	-15.05	32.67	3	V	322	1.39	-
PK	2.4128G	126.94	Inf	-Inf	32.69	3	V	322	1.39	-
PK	2.4944G	57.58	74.00	-16.42	32.79	3	V	322	1.39	-

802.11b_(1Mbps)_2TX

2412MHz_TX

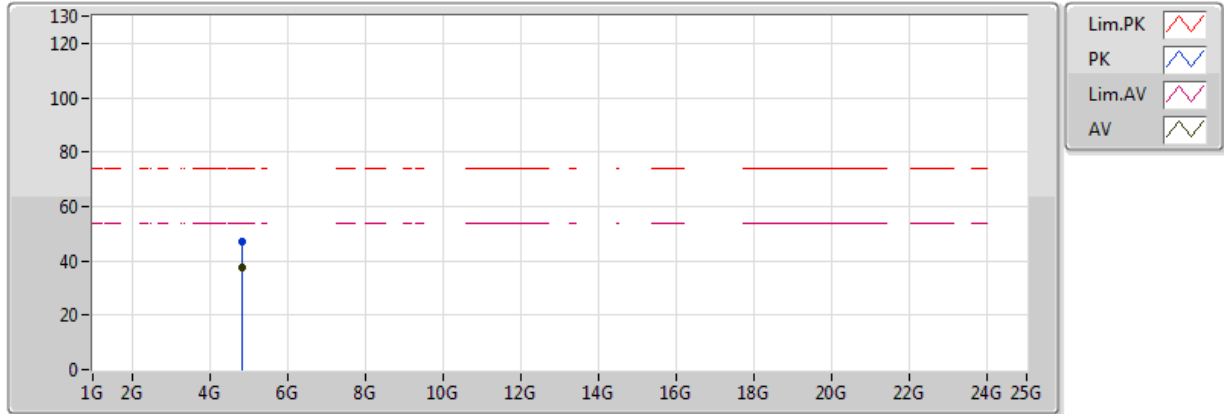


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	46.72	54.00	-7.28	32.67	3	H	309	1.50	-
AV	2.4112G	122.35	Inf	-Inf	32.68	3	H	309	1.50	-
AV	2.4868G	45.25	54.00	-8.75	32.78	3	H	309	1.50	-
PK	2.39G	58.70	74.00	-15.30	32.67	3	H	309	1.50	-
PK	2.4128G	126.52	Inf	-Inf	32.69	3	H	309	1.50	-
PK	2.498G	57.42	74.00	-16.58	32.80	3	H	309	1.50	-

802.11b_(1Mbps)_2TX

2412MHz_TX

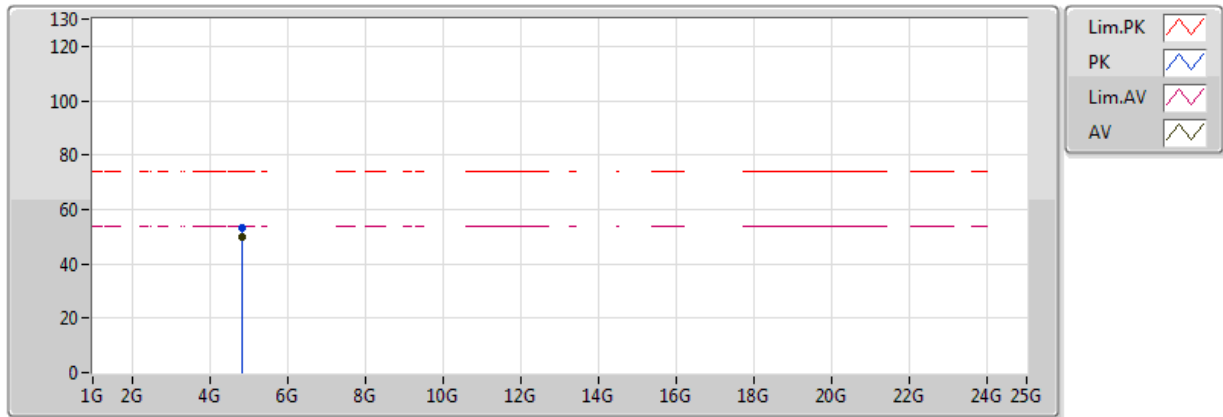


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8239G	37.72	54.00	-16.28	3.70	3	V	346	1.00	-
PK	4.82392G	47.05	74.00	-26.95	3.70	3	V	346	1.00	-

802.11b_(1Mbps)_2TX

2412MHz_TX

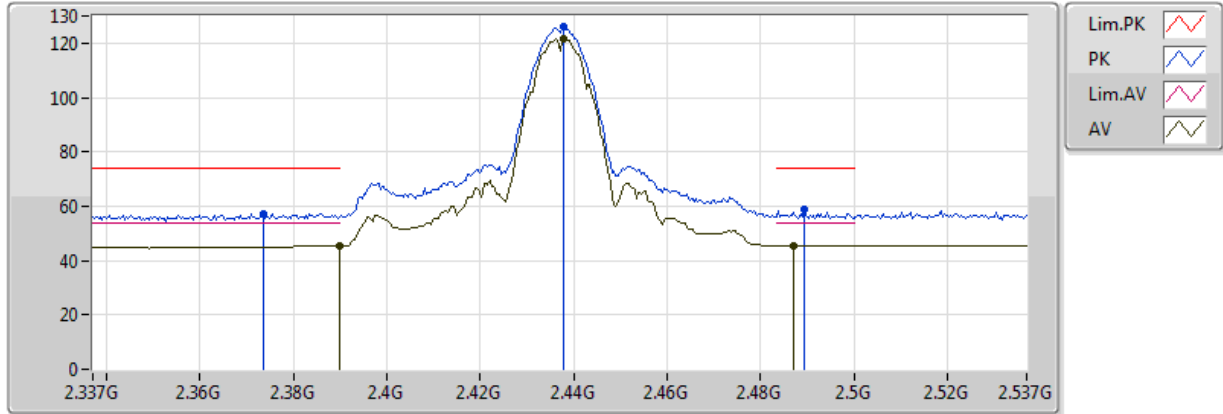


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82396G	49.77	54.00	-4.23	3.70	3	H	308	1.50	-
PK	4.82412G	53.06	74.00	-20.94	3.70	3	H	308	1.50	-

802.11b_(1Mbps)_2TX

2437MHz_TX

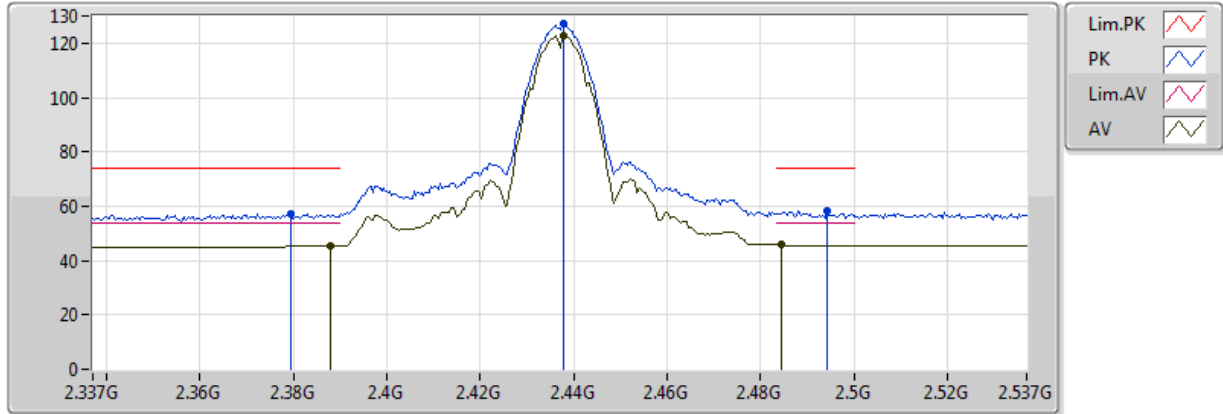


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	45.41	54.00	-8.59	32.67	3	V	322	1.48	-
AV	2.4378G	121.69	Inf	-Inf	32.72	3	V	322	1.48	-
AV	2.487G	45.57	54.00	-8.43	32.78	3	V	322	1.48	-
PK	2.3734G	57.11	74.00	-16.89	32.66	3	V	322	1.48	-
PK	2.4378G	125.91	Inf	-Inf	32.72	3	V	322	1.48	-
PK	2.4894G	58.76	74.00	-15.24	32.79	3	V	322	1.48	-

802.11b_(1Mbps)_2TX

2437MHz_TX

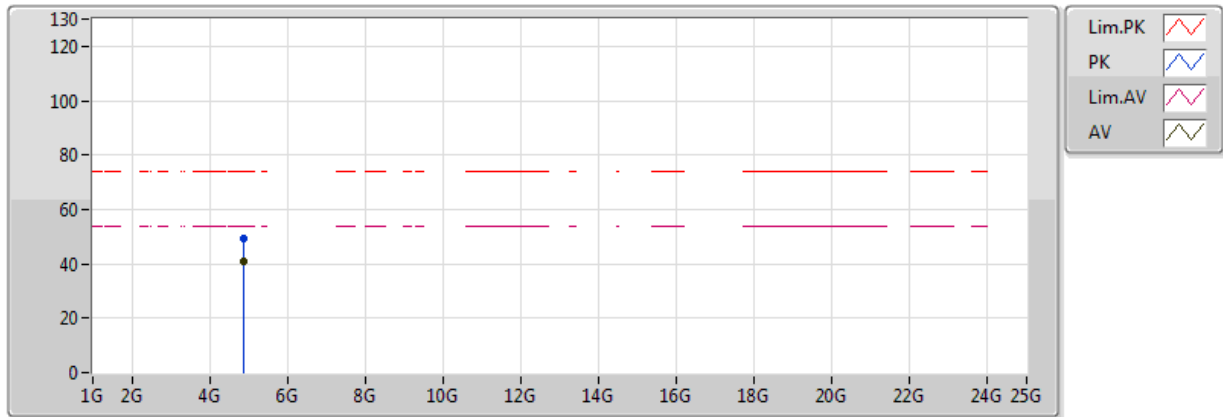


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3878G	45.40	54.00	-8.60	32.67	3	H	317	1.50	-
AV	2.4378G	122.76	Inf	-Inf	32.72	3	H	317	1.50	-
AV	2.4846G	45.70	54.00	-8.30	32.78	3	H	317	1.50	-
PK	2.3794G	57.40	74.00	-16.60	32.66	3	H	317	1.50	-
PK	2.4378G	127.08	Inf	-Inf	32.72	3	H	317	1.50	-
PK	2.4942G	58.38	74.00	-15.62	32.79	3	H	317	1.50	-

802.11b_(1Mbps)_2TX

2437MHz_TX

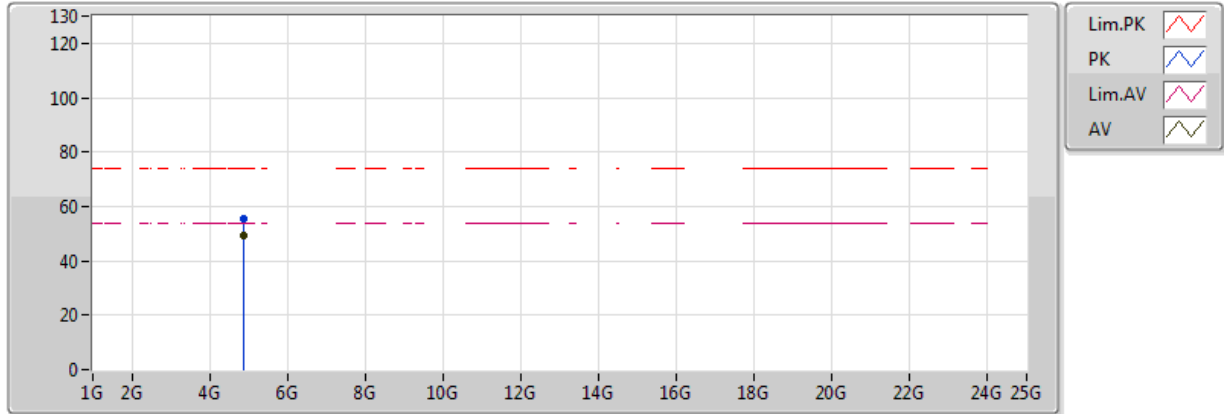


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8739G	40.96	54.00	-13.04	3.84	3	V	264	2.21	-
PK	4.87402G	49.28	74.00	-24.72	3.84	3	V	264	2.21	-

802.11b_(1Mbps)_2TX

2437MHz_TX

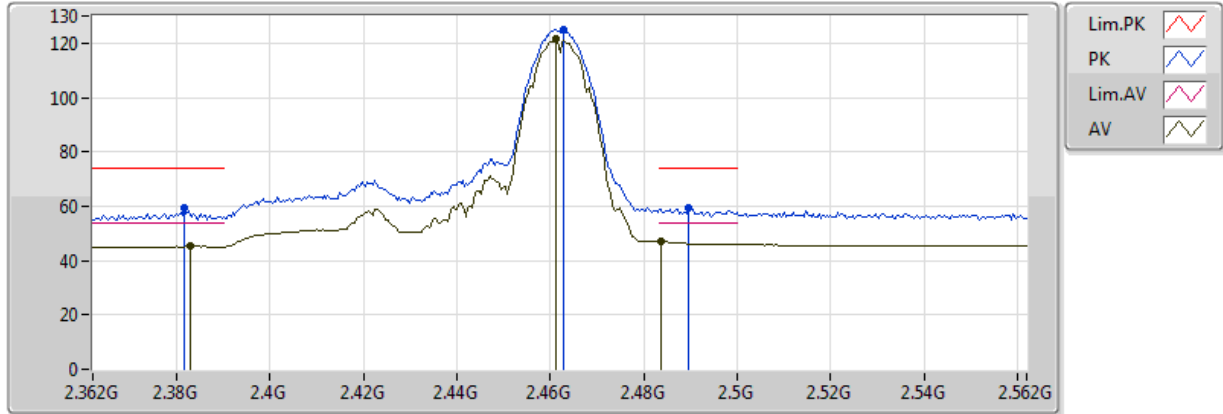


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87404G	49.59	54.00	-4.41	3.84	3	H	333	1.52	-
PK	4.87382G	55.62	74.00	-18.38	3.84	3	H	333	1.52	-

802.11b_(1Mbps)_2TX

2462MHz_TX

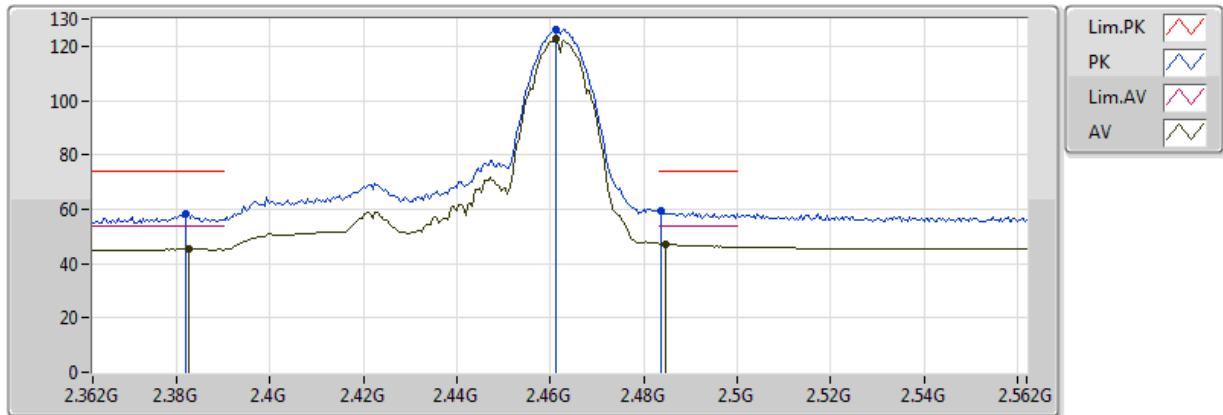


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3828G	45.23	54.00	-8.77	32.66	3	V	323	1.50	-
AV	2.4612G	121.41	Inf	-Inf	32.75	3	V	323	1.50	-
AV	2.4836G	46.91	54.00	-7.09	32.78	3	V	323	1.50	-
PK	2.3816G	59.58	74.00	-14.42	32.66	3	V	323	1.50	-
PK	2.4628G	125.18	Inf	-Inf	32.75	3	V	323	1.50	-
PK	2.4896G	59.21	74.00	-14.79	32.79	3	V	323	1.50	-

802.11b_(1Mbps)_2TX

2462MHz_TX

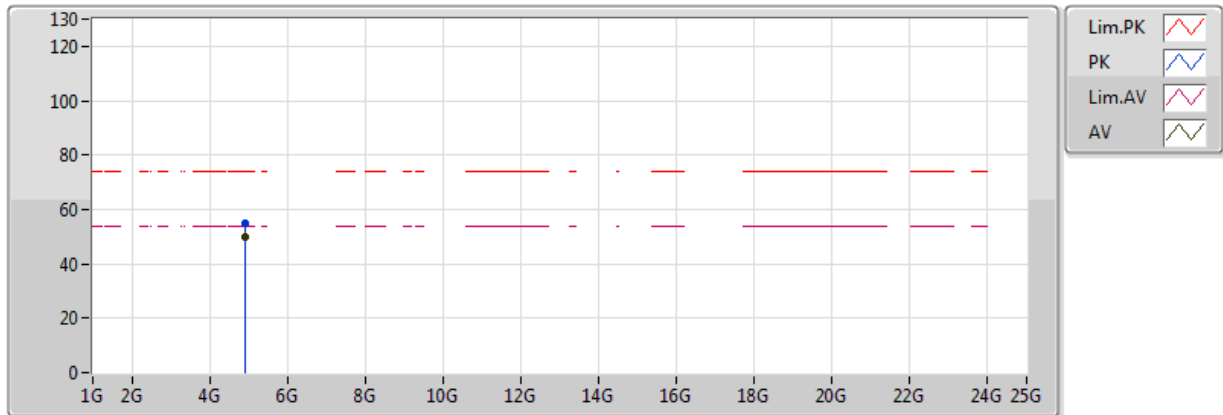


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3824G	45.34	54.00	-8.66	32.66	3	H	312	1.17	-
AV	2.4612G	122.57	Inf	-Inf	32.75	3	H	312	1.17	-
AV	2.4848G	47.32	54.00	-6.68	32.78	3	H	312	1.17	-
PK	2.382G	58.43	74.00	-15.57	32.66	3	H	312	1.17	-
PK	2.4612G	126.33	Inf	-Inf	32.75	3	H	312	1.17	-
PK	2.4836G	59.66	74.00	-14.34	32.78	3	H	312	1.17	-

802.11b_(1Mbps)_2TX

2462MHz_TX

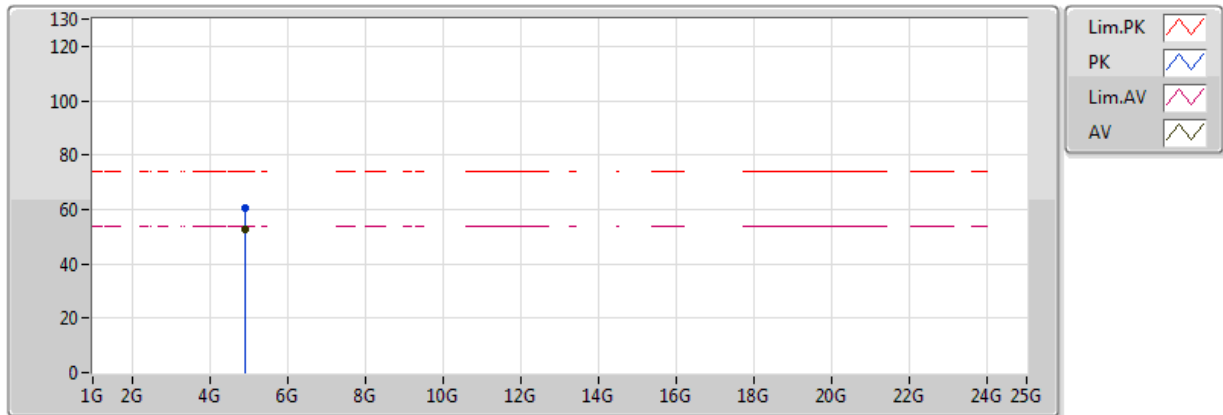


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92394G	49.61	54.00	-4.39	3.98	3	V	273	1.01	-
PK	4.92396G	54.97	74.00	-19.03	3.98	3	V	273	1.01	-

802.11b_(1Mbps)_2TX

2462MHz_TX

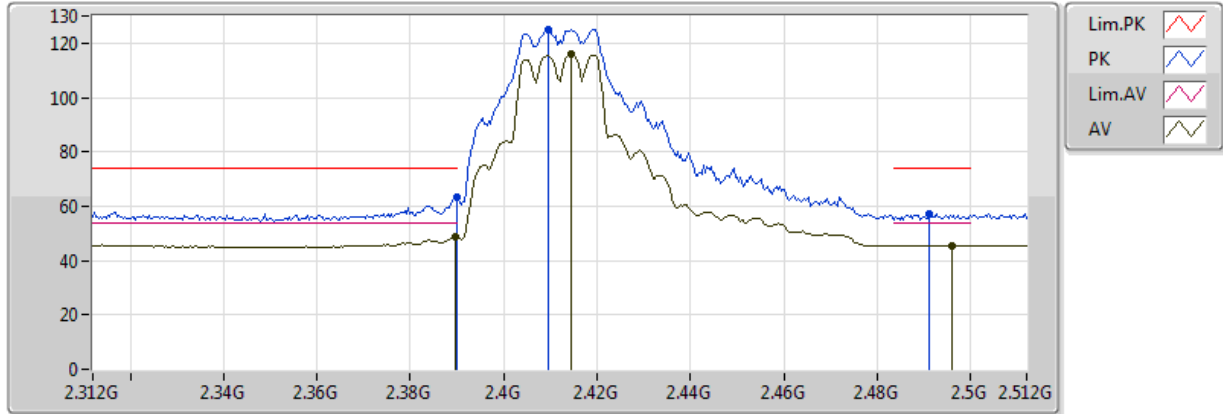


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92398G	52.45	54.00	-1.55	3.98	3	H	330	1.50	-
PK	4.924G	60.75	74.00	-13.25	3.98	3	H	330	1.50	-

802.11g_(6Mbps)_2TX

2412MHz_TX

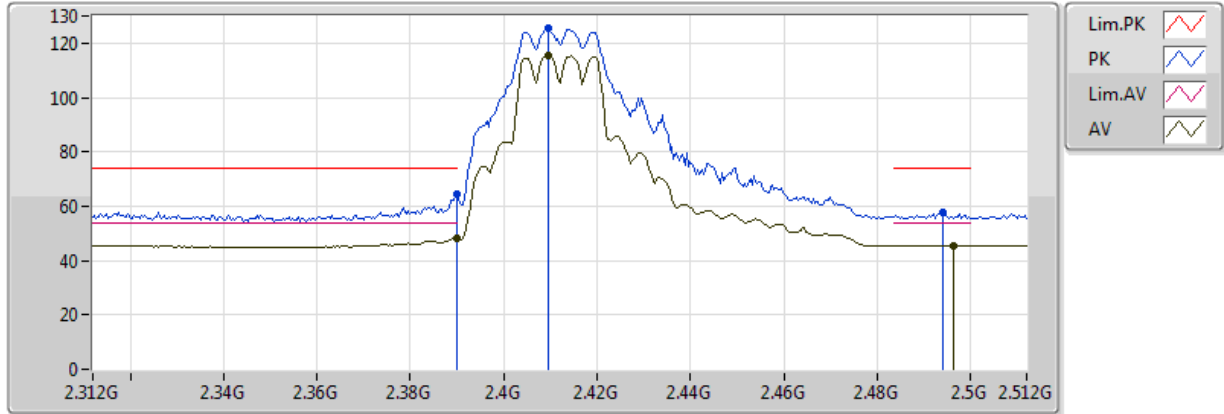


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	48.95	54.00	-5.05	32.67	3	V	320	1.50	-
AV	2.4144G	115.79	Inf	-Inf	32.69	3	V	320	1.50	-
AV	2.496G	45.52	54.00	-8.48	32.79	3	V	320	1.50	-
PK	2.39G	63.49	74.00	-10.51	32.67	3	V	320	1.50	-
PK	2.4096G	125.15	Inf	-Inf	32.68	3	V	320	1.50	-
PK	2.4912G	56.99	74.00	-17.01	32.79	3	V	320	1.50	-

802.11g_(6Mbps)_2TX

2412MHz_TX

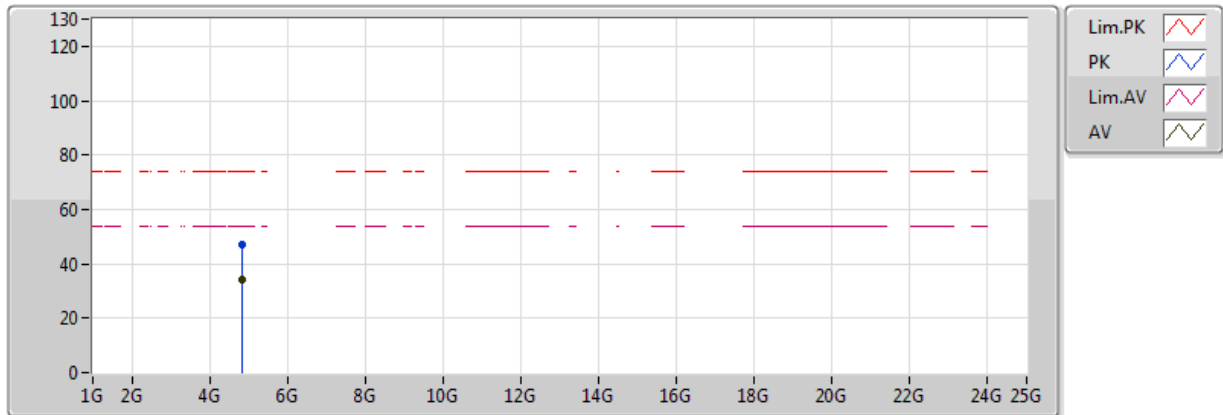


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	48.41	54.00	-5.59	32.67	3	H	302	1.50	-
AV	2.4096G	115.70	Inf	-Inf	32.68	3	H	302	1.50	-
AV	2.4964G	45.50	54.00	-8.50	32.80	3	H	302	1.50	-
PK	2.39G	64.16	74.00	-9.84	32.67	3	H	302	1.50	-
PK	2.4096G	125.66	Inf	-Inf	32.68	3	H	302	1.50	-
PK	2.494G	57.46	74.00	-16.54	32.79	3	H	302	1.50	-

802.11g_(6Mbps)_2TX

2412MHz_TX

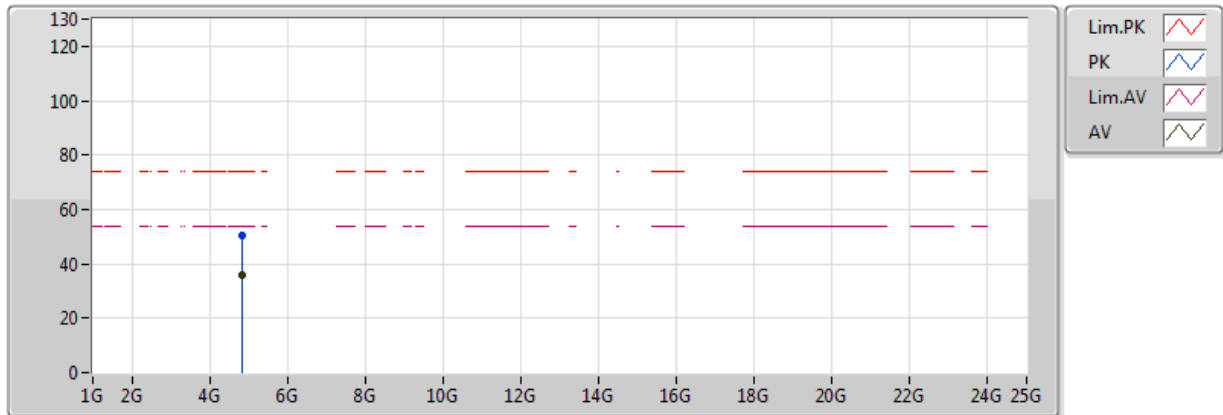


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82672G	34.14	54.00	-19.86	3.70	3	V	345	1.09	-
PK	4.82092G	47.07	74.00	-26.93	3.69	3	V	345	1.09	-

802.11g_(6Mbps)_2TX

2412MHz_TX

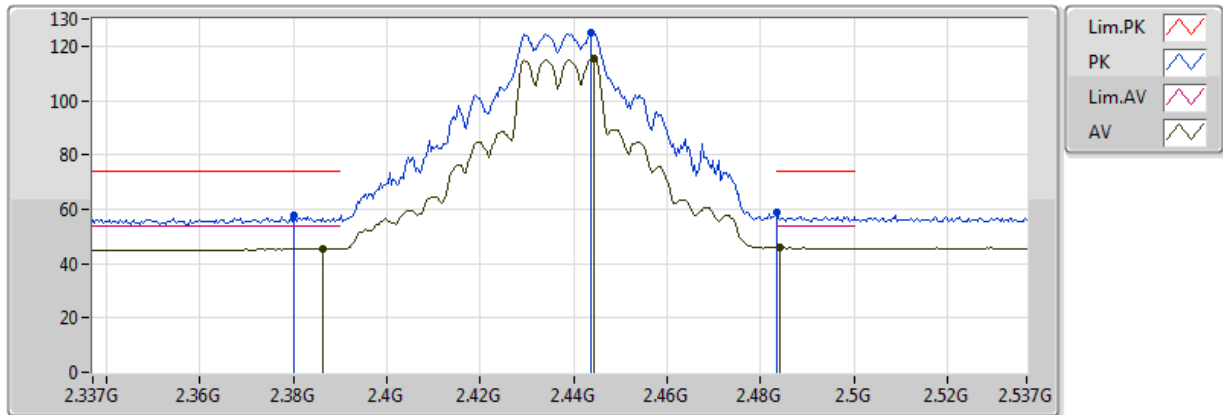


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82368G	35.60	54.00	-18.40	3.70	3	H	332	1.50	-
PK	4.83316G	50.35	74.00	-23.65	3.72	3	H	332	1.50	-

802.11g_(6Mbps)_2TX

2437MHz_TX

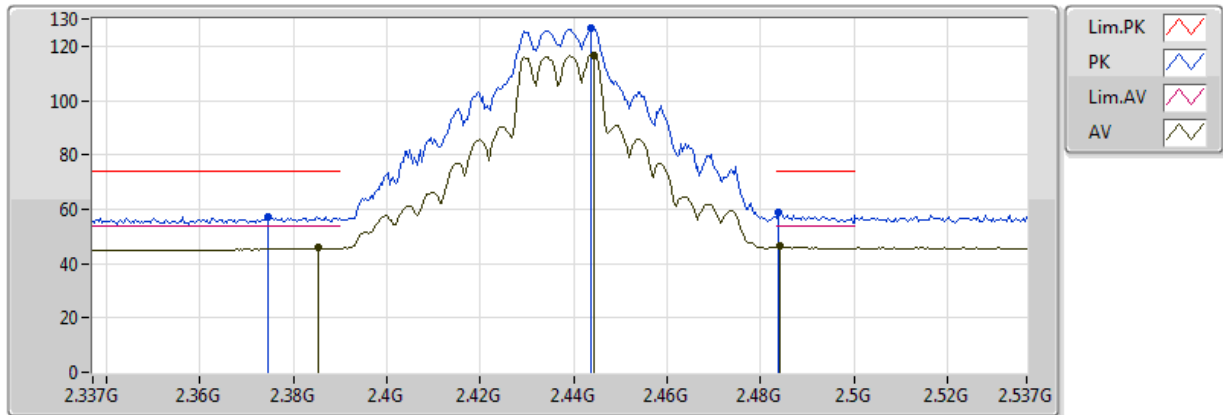


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3862G	45.51	54.00	-8.49	32.67	3	V	325	1.50	-
AV	2.4442G	115.33	Inf	-Inf	32.73	3	V	325	1.50	-
AV	2.4842G	45.94	54.00	-8.06	32.78	3	V	325	1.50	-
PK	2.3802G	57.58	74.00	-16.42	32.66	3	V	325	1.50	-
PK	2.4438G	124.84	Inf	-Inf	32.73	3	V	325	1.50	-
PK	2.483502G	58.96	74.00	-15.04	32.78	3	V	325	1.50	-

802.11g_(6Mbps)_2TX

2437MHz_TX

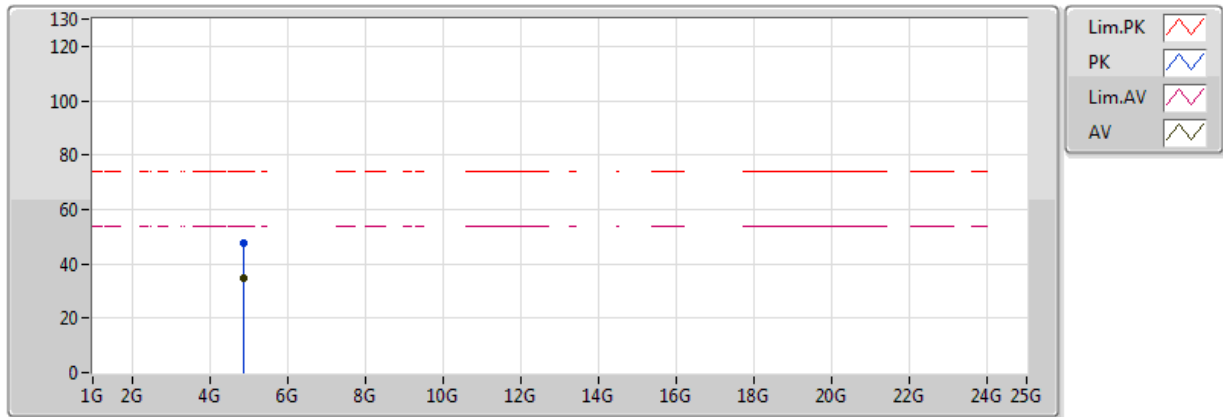


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3854G	45.76	54.00	-8.24	32.67	3	H	311	1.50	-
AV	2.4442G	116.66	Inf	-Inf	32.73	3	H	311	1.50	-
AV	2.4842G	46.39	54.00	-7.61	32.78	3	H	311	1.50	-
PK	2.3746G	57.32	74.00	-16.68	32.66	3	H	311	1.50	-
PK	2.4438G	126.53	Inf	-Inf	32.73	3	H	311	1.50	-
PK	2.4838G	58.57	74.00	-15.43	32.78	3	H	311	1.50	-

802.11g_(6Mbps)_2TX

2437MHz_TX

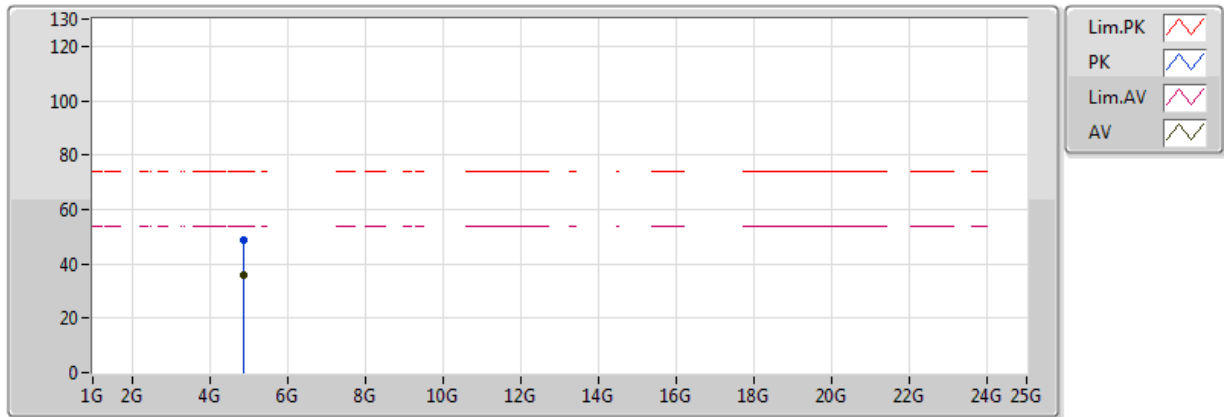


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87328G	34.92	54.00	-19.08	3.84	3	V	276	1.84	-
PK	4.87436G	47.86	74.00	-26.14	3.84	3	V	276	1.84	-

802.11g_(6Mbps)_2TX

2437MHz_TX

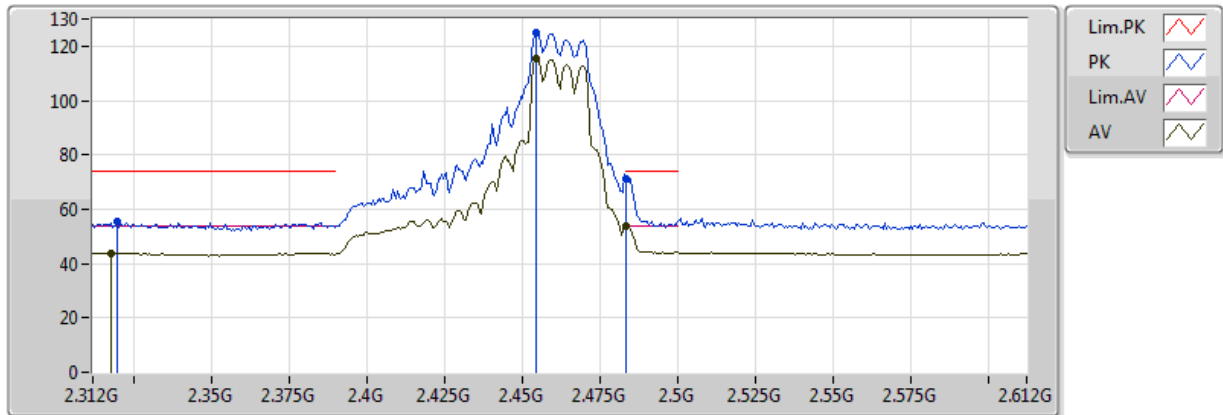


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8746G	35.73	54.00	-18.27	3.84	3	H	356	2.42	-
PK	4.875G	49.03	74.00	-24.97	3.84	3	H	356	2.42	-

802.11g_(6Mbps)_2TX

2462MHz_TX

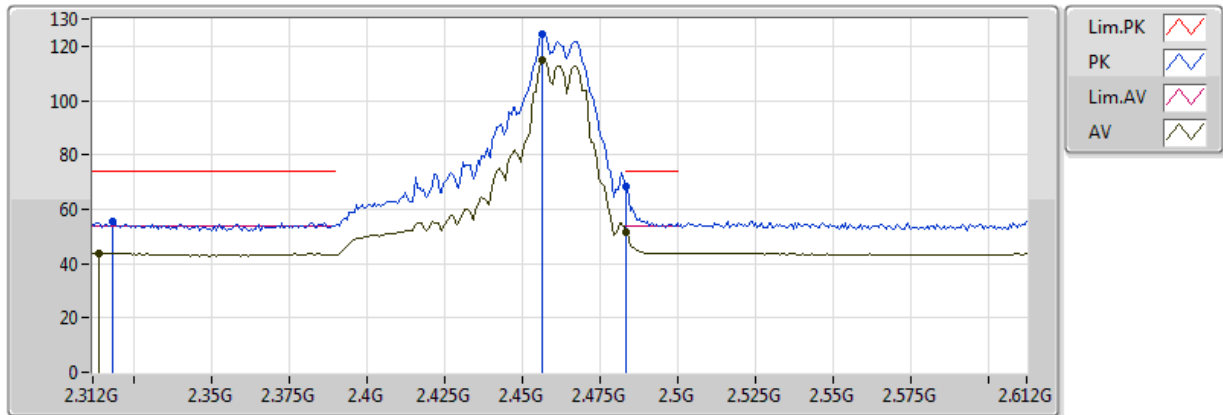


20170327
EUT Y 2TX
Setting 24
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.318G	43.86	54.00	-10.14	31.14	3	V	43	1.50	-
AV	2.4542G	115.69	Inf	-Inf	30.95	3	V	43	1.50	-
AV	2.483502G	53.98	54.00	-0.02	30.92	3	V	43	1.50	-
PK	2.3198G	55.24	74.00	-18.76	31.14	3	V	43	1.50	-
PK	2.4542G	125.17	Inf	-Inf	30.95	3	V	43	1.50	-
PK	2.483502G	71.17	74.00	-2.83	30.92	3	V	43	1.50	-

802.11g_(6Mbps)_2TX

2462MHz_TX

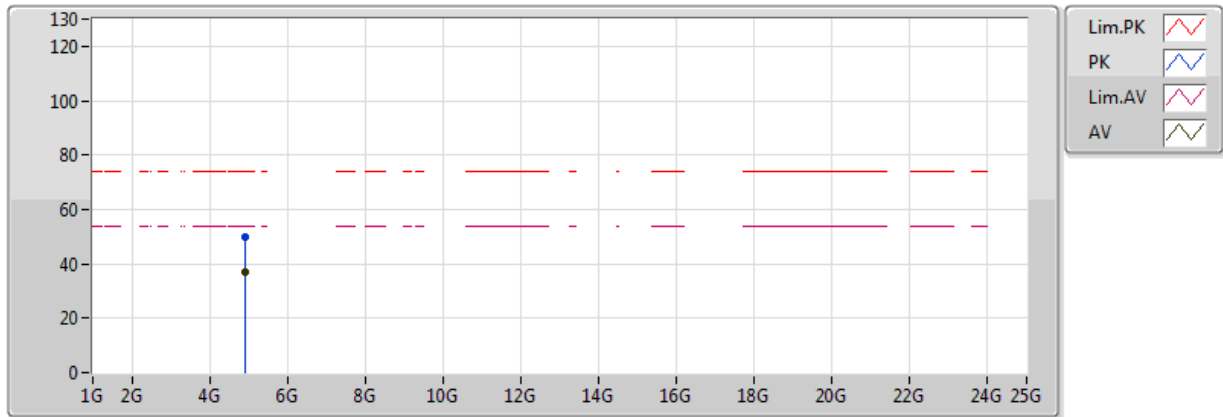


20170327
EUT Y 2TX
Setting 24
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3138G	43.85	54.00	-10.15	31.15	3	H	46	1.26	-
AV	2.4566G	114.96	Inf	-Inf	30.95	3	H	46	1.26	-
AV	2.483502G	51.35	54.00	-2.65	30.92	3	H	46	1.26	-
PK	2.3186G	55.27	74.00	-18.73	31.14	3	H	46	1.26	-
PK	2.4566G	124.20	Inf	-Inf	30.95	3	H	46	1.26	-
PK	2.483502G	68.33	74.00	-5.67	30.92	3	H	46	1.26	-

802.11g_(6Mbps)_2TX

2462MHz_TX

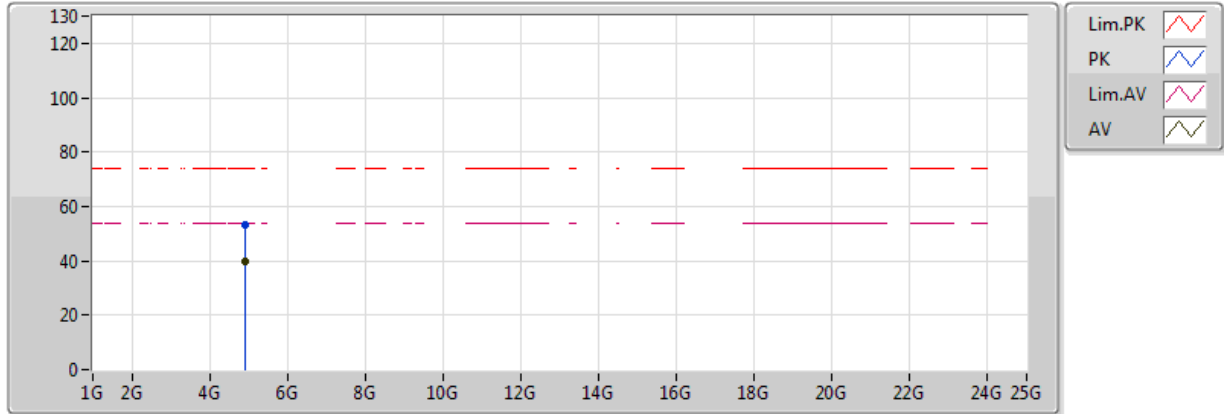


20170327
EUT Y 2TX
Setting 24
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92372G	36.95	54.00	-17.05	3.98	3	V	276	1.85	-
PK	4.92412G	50.04	74.00	-23.96	3.98	3	V	276	1.85	-

802.11g_(6Mbps)_2TX

2462MHz_TX

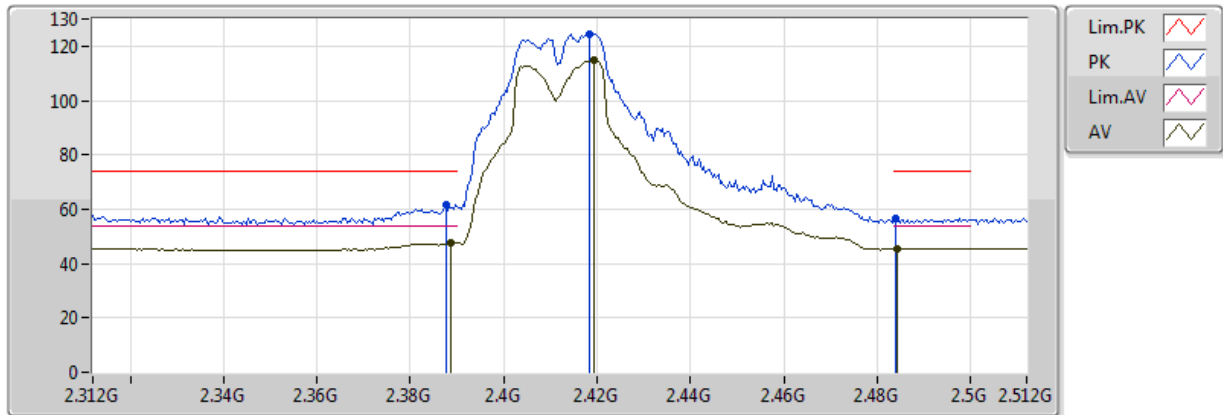


20170327
EUT Y 2TX
Setting 24
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92395G	39.51	54.00	-14.49	3.70	3	H	214	1.29	-
PK	4.92409G	53.44	74.00	-20.56	3.70	3	H	214	1.29	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

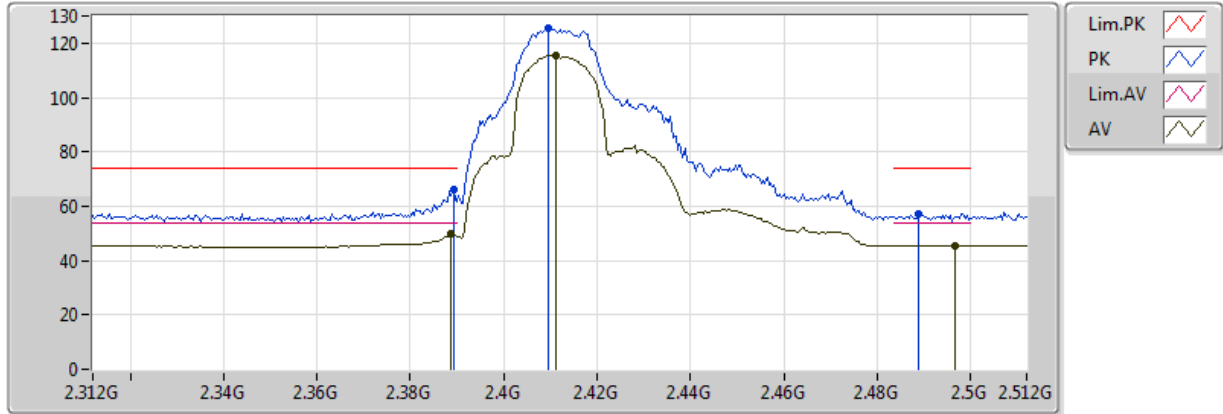


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3888G	47.71	54.00	-6.29	32.67	3	V	316	1.50	-
AV	2.4192G	114.93	Inf	-Inf	32.69	3	V	316	1.50	-
AV	2.4844G	45.54	54.00	-8.46	32.78	3	V	316	1.50	-
PK	2.3876G	61.71	74.00	-12.29	32.67	3	V	316	1.50	-
PK	2.4184G	124.43	Inf	-Inf	32.69	3	V	316	1.50	-
PK	2.484G	56.74	74.00	-17.26	32.78	3	V	316	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

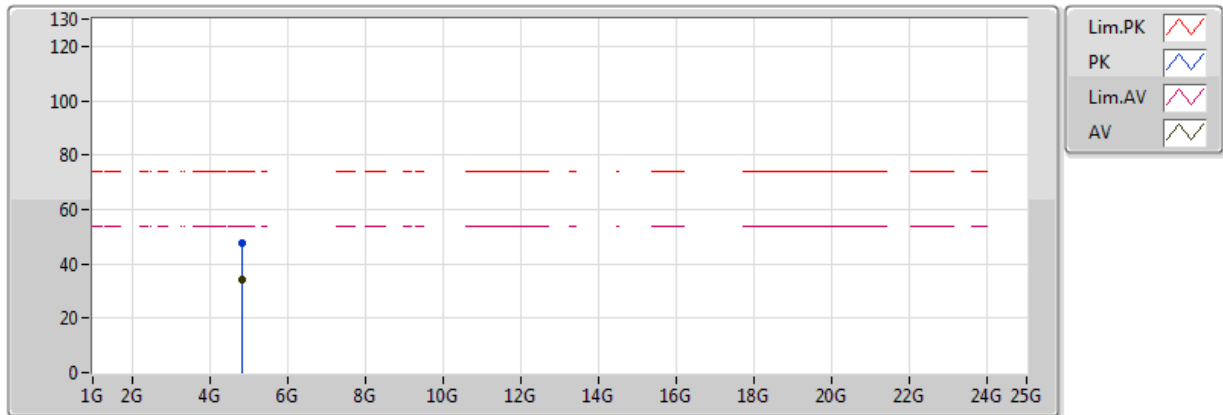


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3888G	49.63	54.00	-4.37	32.67	3	H	307	1.50	-
AV	2.4112G	115.61	Inf	-Inf	32.68	3	H	307	1.50	-
AV	2.4968G	45.55	54.00	-8.45	32.80	3	H	307	1.50	-
PK	2.3892G	65.98	74.00	-8.02	32.67	3	H	307	1.50	-
PK	2.4096G	125.62	Inf	-Inf	32.68	3	H	307	1.50	-
PK	2.4888G	57.04	74.00	-16.96	32.79	3	H	307	1.50	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

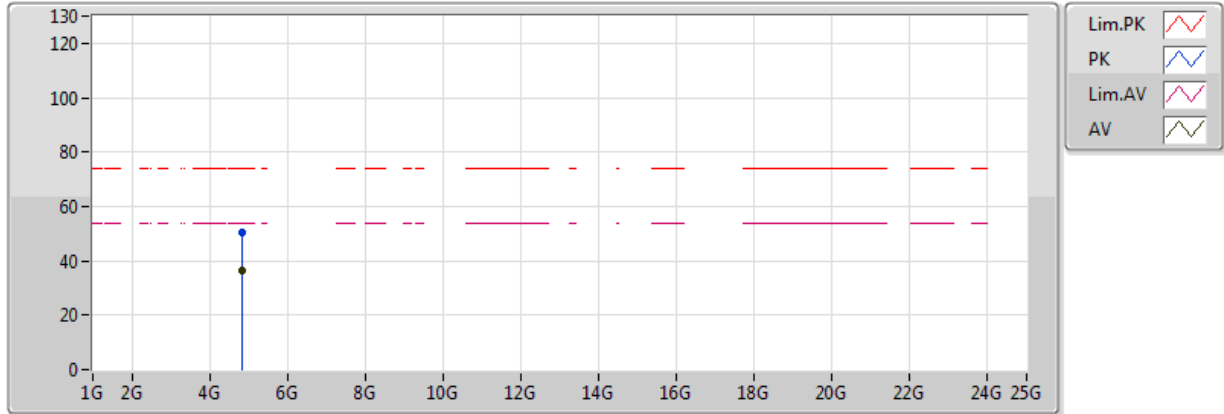


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82184G	34.37	54.00	-19.63	3.69	3	V	324	2.99	-
PK	4.82136G	47.87	74.00	-26.13	3.69	3	V	324	2.99	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

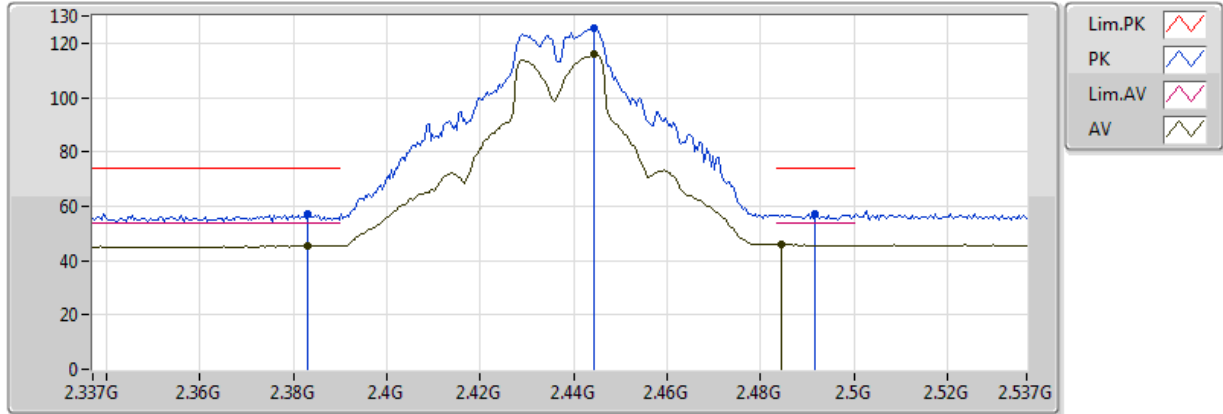


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82592G	36.67	54.00	-17.33	3.70	3	H	337	1.93	-
PK	4.82448G	50.68	74.00	-23.32	3.70	3	H	337	1.93	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

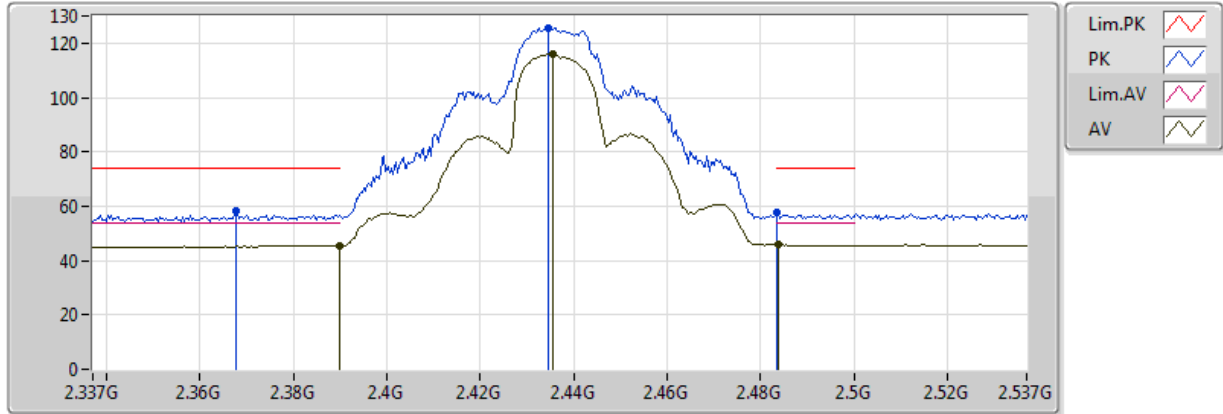


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.383G	45.51	54.00	-8.49	32.66	3	V	321	1.40	-
AV	2.4442G	115.82	Inf	-Inf	32.73	3	V	321	1.40	-
AV	2.4846G	46.09	54.00	-7.91	32.78	3	V	321	1.40	-
PK	2.383G	56.96	74.00	-17.04	32.66	3	V	321	1.40	-
PK	2.4442G	125.32	Inf	-Inf	32.73	3	V	321	1.40	-
PK	2.4918G	57.40	74.00	-16.60	32.79	3	V	321	1.40	-

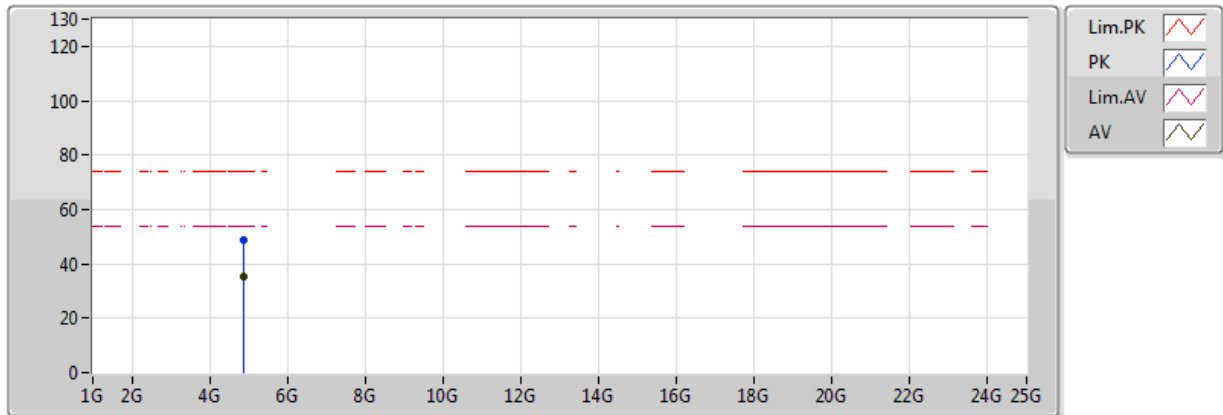
802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX



802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

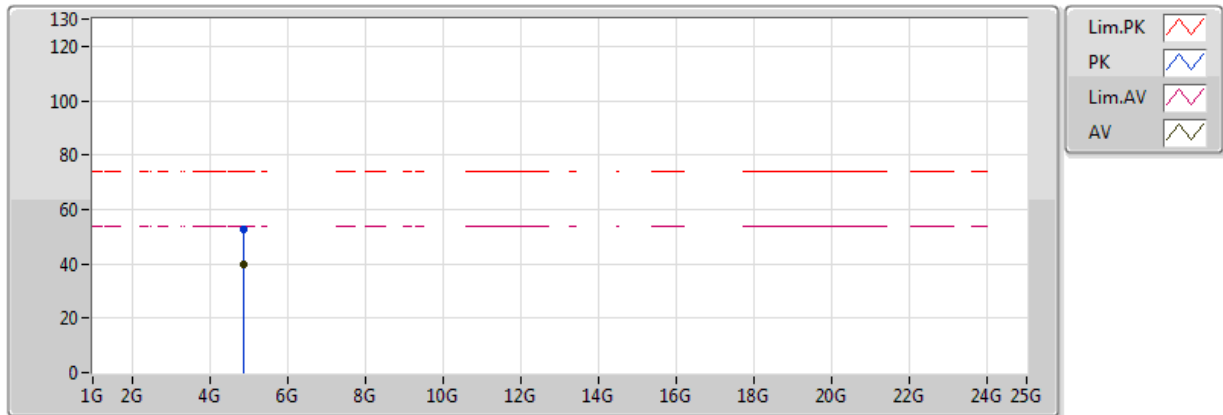


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87372G	35.29	54.00	-18.71	3.84	3	V	277	1.80	-
PK	4.87284G	48.80	74.00	-25.20	3.83	3	V	277	1.80	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

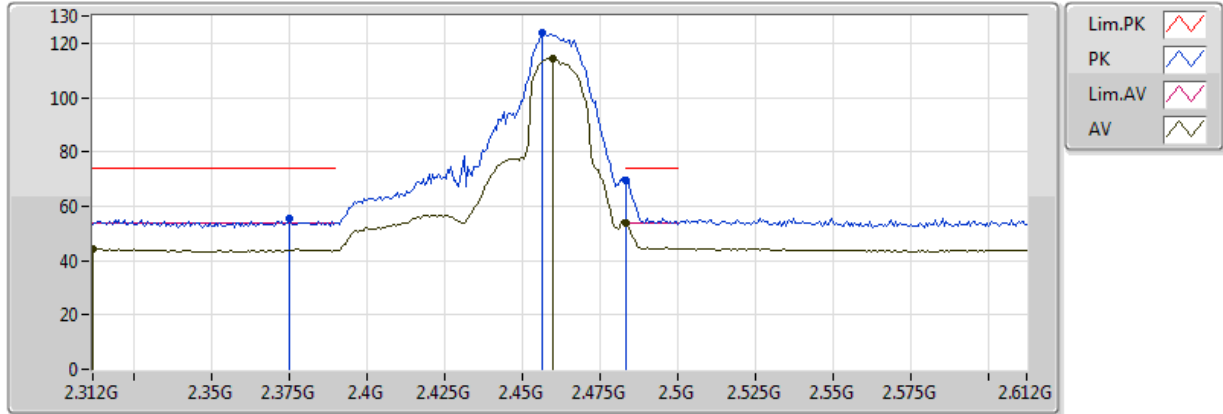


20170322
EUT Y 2TX
Setting 27
04-J-5
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8719G	39.87	54.00	-14.13	3.83	3	H	333	1.49	-
PK	4.87154G	52.81	74.00	-21.19	3.83	3	H	333	1.49	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

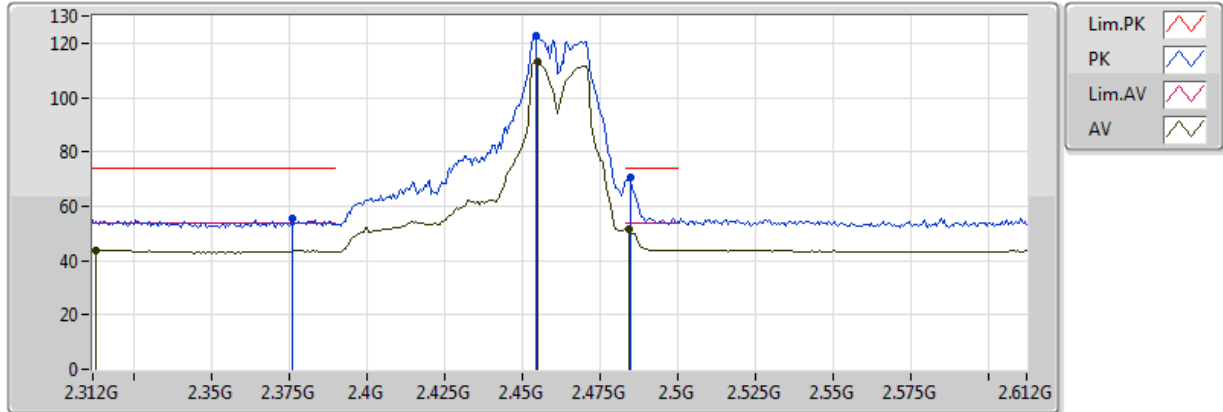


20170327
EUT Y 2TX
Setting 23
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.312G	44.45	54.00	-9.55	31.15	3	V	50	1.44	-
AV	2.4596G	114.41	Inf	-Inf	30.95	3	V	50	1.44	-
AV	2.483502G	53.56	54.00	-0.44	30.92	3	V	50	1.44	-
PK	2.375G	55.43	74.00	-18.57	31.06	3	V	50	1.44	-
PK	2.4566G	123.57	Inf	-Inf	30.95	3	V	50	1.44	-
PK	2.483502G	69.40	74.00	-4.60	30.92	3	V	50	1.44	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

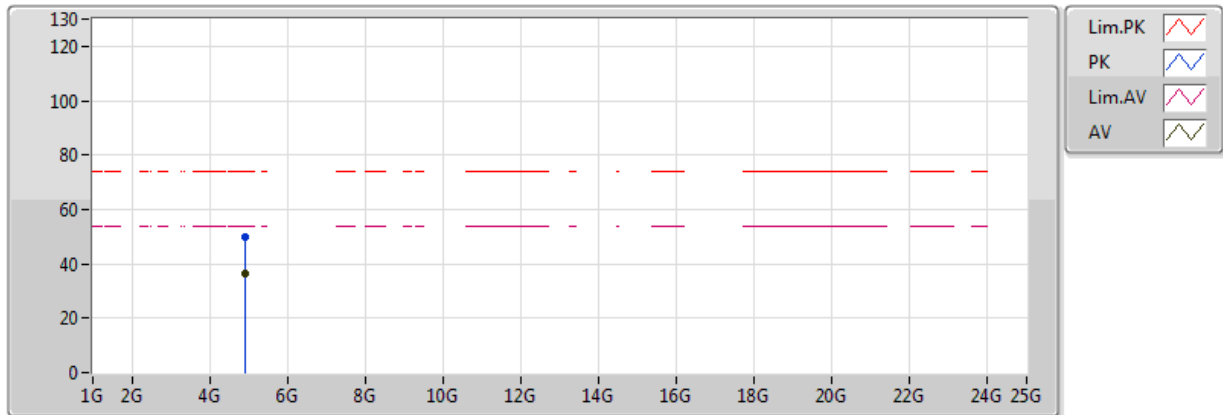


20170327
EUT Y 2TX
Setting 23
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3132G	43.74	54.00	-10.26	31.15	3	H	39	1.29	-
AV	2.4548G	113.20	Inf	-Inf	30.95	3	H	39	1.29	-
AV	2.4842G	51.30	54.00	-2.70	30.92	3	H	39	1.29	-
PK	2.3762G	55.58	74.00	-18.42	31.06	3	H	39	1.29	-
PK	2.4542G	122.65	Inf	-Inf	30.95	3	H	39	1.29	-
PK	2.4848G	70.84	74.00	-3.16	30.92	3	H	39	1.29	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

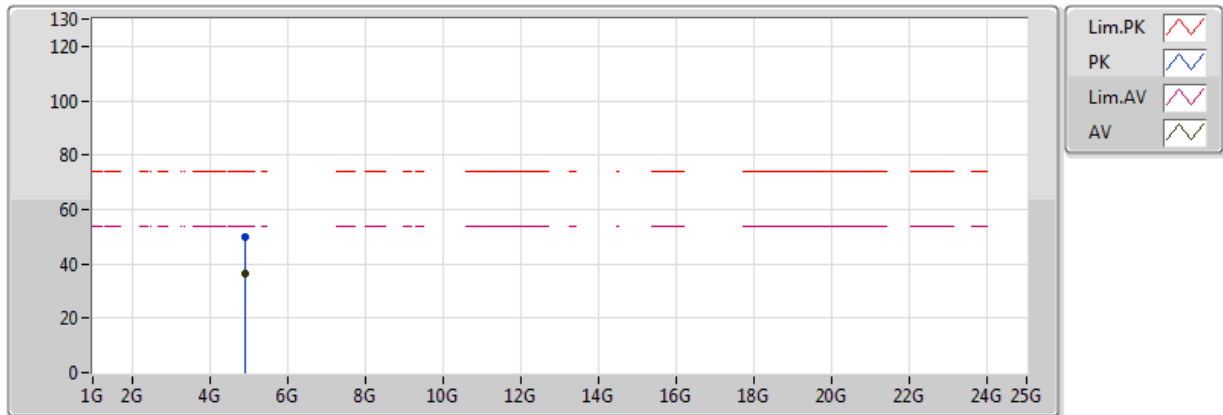


20170327
EUT Y 2TX
Setting 23
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92304G	36.59	54.00	-17.41	3.98	3	V	251	1.32	-
PK	4.92312G	49.88	74.00	-24.12	3.98	3	V	251	1.32	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

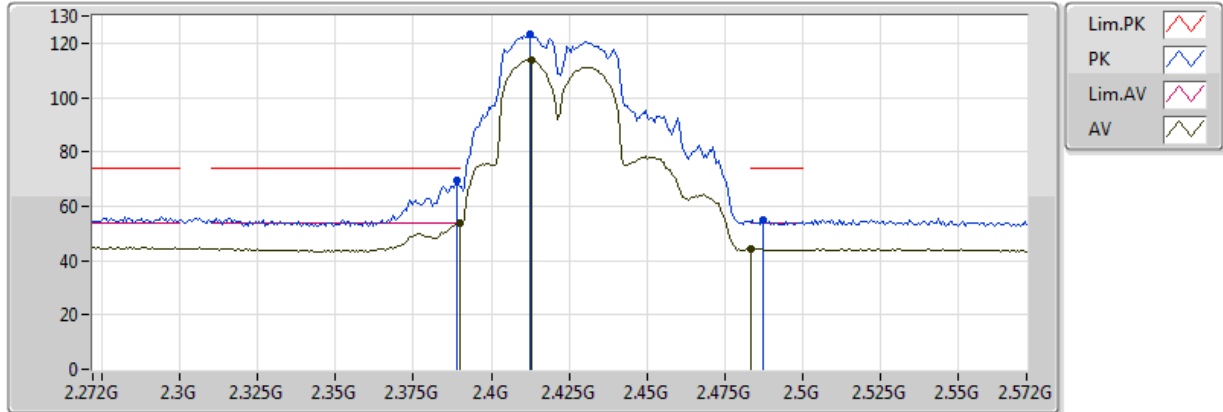


20170327
EUT Y 2TX
Setting 23
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92681G	36.69	54.00	-17.31	3.71	3	H	258	1.71	-
PK	4.92508G	49.76	74.00	-24.24	3.70	3	H	258	1.71	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

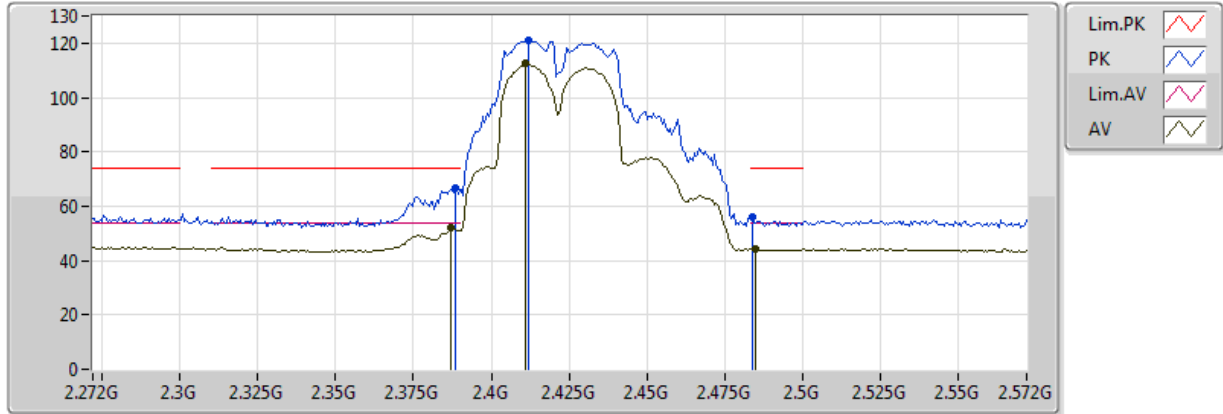


20170327
EUT Y 2TX
Setting 25
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.389998G	53.83	54.00	-0.17	31.04	3	V	42	1.41	-
AV	2.413G	113.78	Inf	-Inf	31.00	3	V	42	1.41	-
AV	2.483502G	44.22	54.00	-9.78	30.92	3	V	42	1.41	-
PK	2.389G	69.48	74.00	-4.52	31.04	3	V	42	1.41	-
PK	2.4124G	123.53	Inf	-Inf	31.01	3	V	42	1.41	-
PK	2.4874G	55.19	74.00	-18.81	30.92	3	V	42	1.41	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

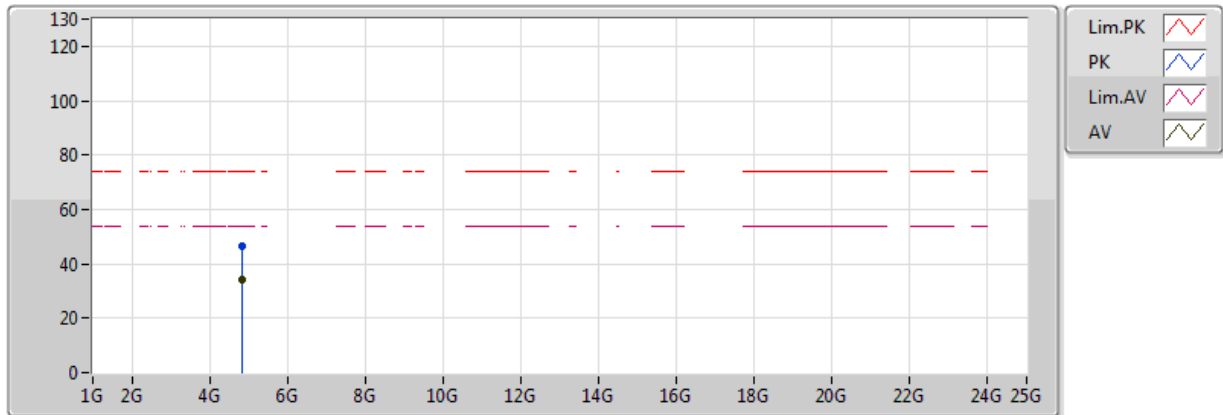


20170327
EUT Y 2TX
Setting 25
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3872G	51.89	54.00	-2.11	31.04	3	H	41	1.29	-
AV	2.4112G	112.35	Inf	-Inf	31.01	3	H	41	1.29	-
AV	2.485G	44.15	54.00	-9.85	30.92	3	H	41	1.29	-
PK	2.3884G	66.75	74.00	-7.25	31.04	3	H	41	1.29	-
PK	2.4118G	120.98	Inf	-Inf	31.01	3	H	41	1.29	-
PK	2.4838G	55.83	74.00	-18.17	30.92	3	H	41	1.29	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

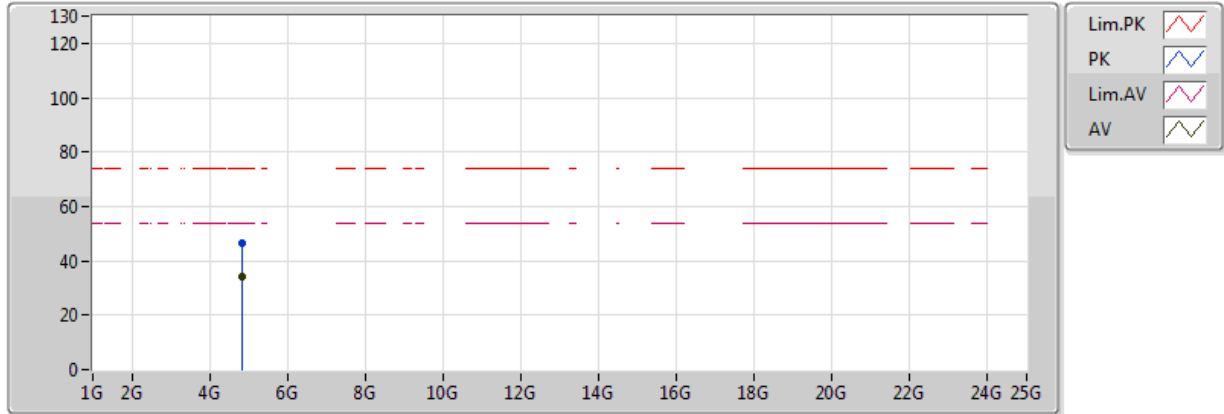


20170327
EUT Y 2TX
Setting 25
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84627G	34.44	54.00	-19.56	3.47	3	V	175	1.22	-
PK	4.84938G	46.56	74.00	-27.44	3.48	3	V	175	1.22	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

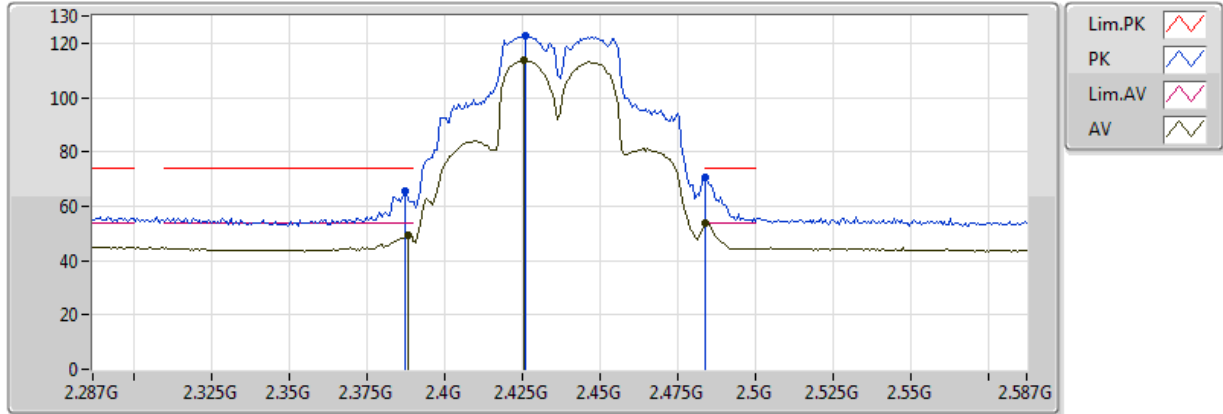


20170327
EUT Y 2TX
Setting 25
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.85416G	34.39	54.00	-19.61	3.49	3	H	351	2.02	-
PK	4.8496G	46.65	74.00	-27.35	3.48	3	H	351	2.02	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

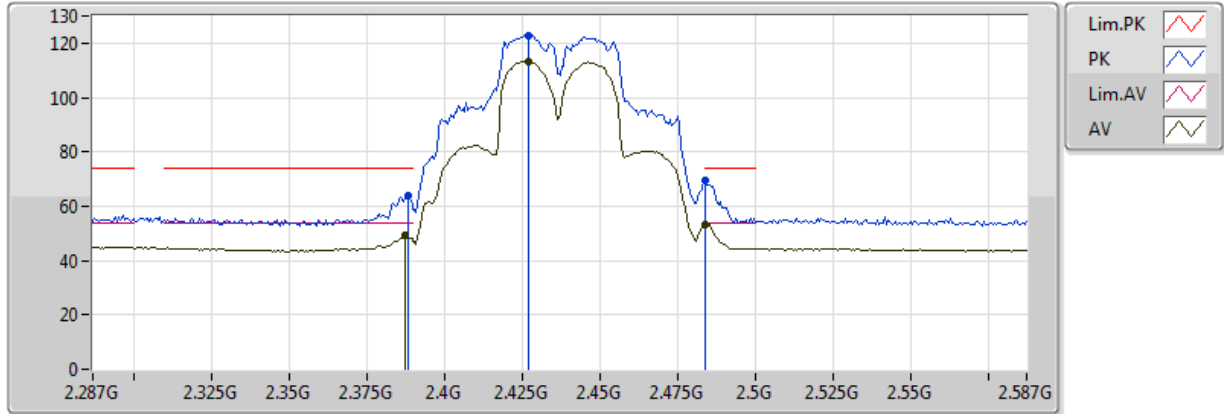


20170327
EUT Y 2TX
Setting 26
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3884G	49.29	54.00	-4.71	31.04	3	V	50	1.50	-
AV	2.4256G	113.65	Inf	-Inf	30.99	3	V	50	1.50	-
AV	2.4838G	53.69	54.00	-0.31	30.92	3	V	50	1.50	-
PK	2.3872G	65.64	74.00	-8.36	31.04	3	V	50	1.50	-
PK	2.4262G	122.58	Inf	-Inf	30.99	3	V	50	1.50	-
PK	2.483502G	70.42	74.00	-3.58	30.92	3	V	50	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

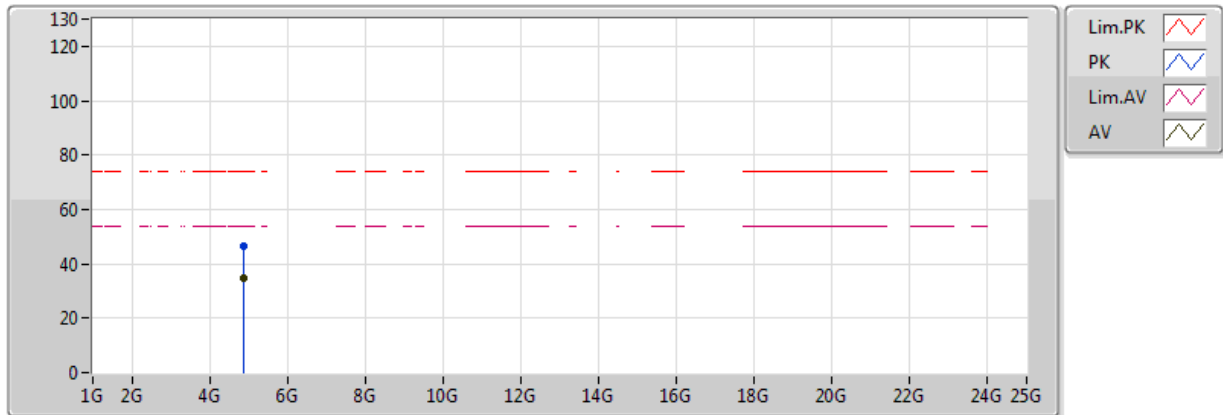


20170327
EUT Y 2TX
Setting 26
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3872G	49.34	54.00	-4.66	31.04	3	H	42	1.50	-
AV	2.4268G	113.30	Inf	-Inf	30.99	3	H	42	1.50	-
AV	2.4838G	53.47	54.00	-0.53	30.92	3	H	42	1.50	-
PK	2.3884G	63.99	74.00	-10.01	31.04	3	H	42	1.50	-
PK	2.4268G	122.99	Inf	-Inf	30.99	3	H	42	1.50	-
PK	2.483502G	69.27	74.00	-4.73	30.92	3	H	42	1.50	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

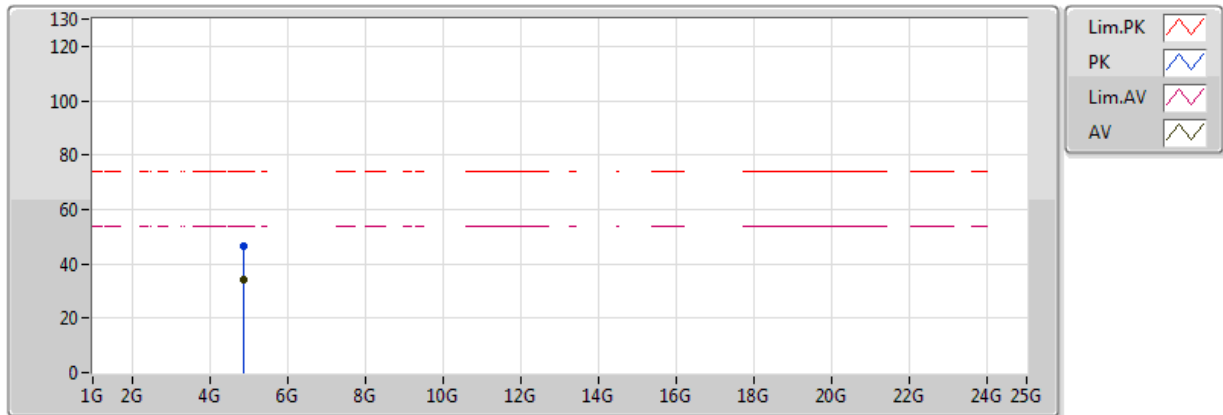


20170327
EUT Y 2TX
Setting 26
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87024G	34.74	54.00	-19.26	3.54	3	V	312	1.74	-
PK	4.86821G	46.68	74.00	-27.32	3.53	3	V	312	1.74	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

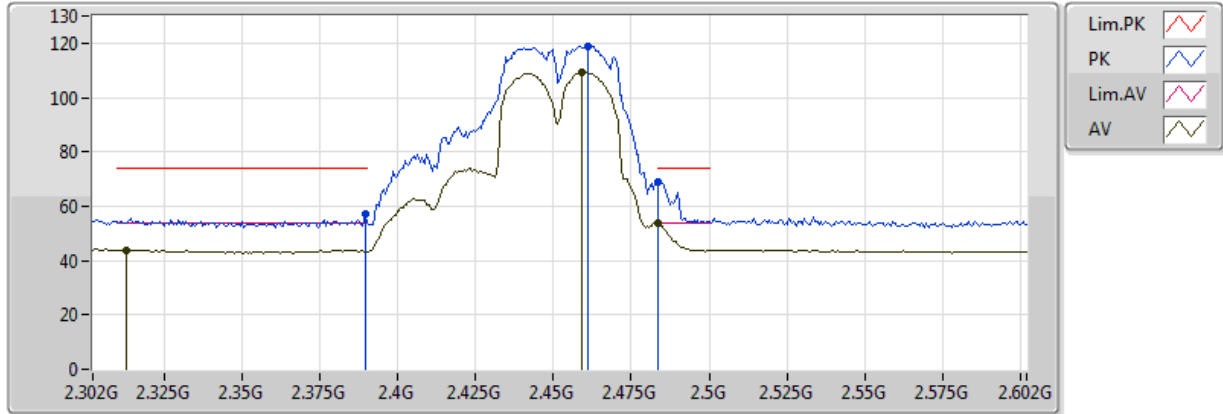


20170327
EUT Y 2TX
Setting 26
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.85856G	34.31	54.00	-19.69	3.79	3	H	353	2.46	-
PK	4.85944G	46.56	74.00	-27.44	3.80	3	H	353	2.46	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

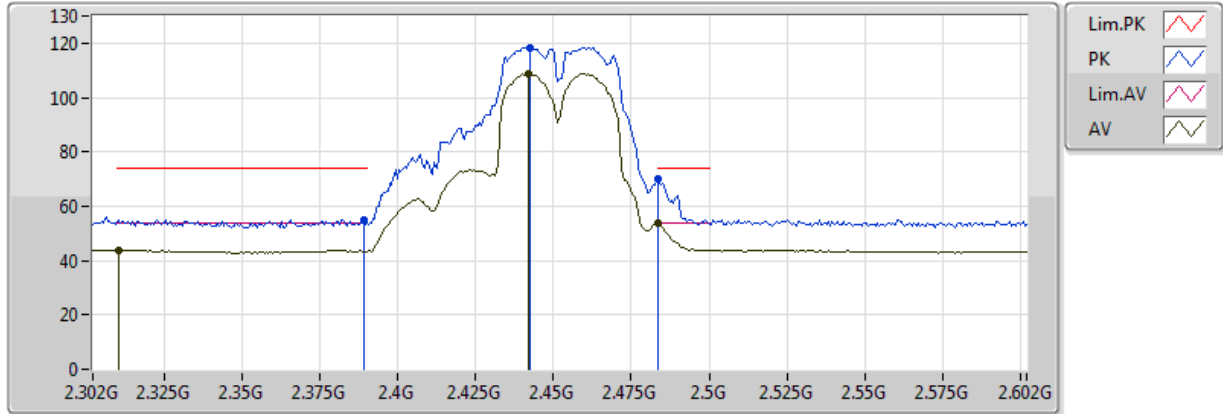


20170327
EUT Y 2TX
Setting 22
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3128G	43.89	54.00	-10.11	31.15	3	V	53	1.43	-
AV	2.4592G	109.47	Inf	-Inf	30.95	3	V	53	1.43	-
AV	2.483502G	53.96	54.00	-0.04	30.92	3	V	53	1.43	-
PK	2.3896G	57.06	74.00	-16.94	31.04	3	V	53	1.43	-
PK	2.461G	118.99	Inf	-Inf	30.95	3	V	53	1.43	-
PK	2.4838G	68.91	74.00	-5.09	30.92	3	V	53	1.43	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

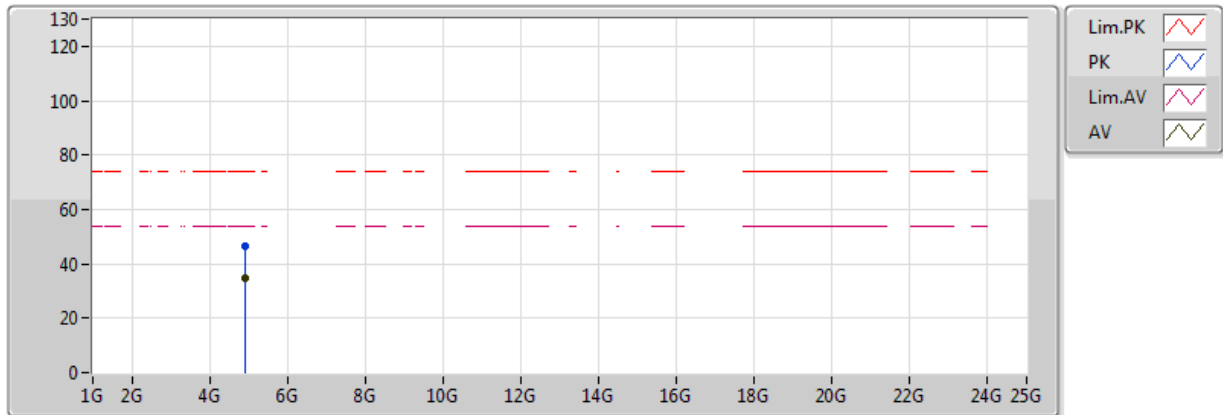


20170327
EUT Y 2TX
Setting 22
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3104G	43.91	54.00	-10.09	31.15	3	H	38	1.29	-
AV	2.4418G	108.55	Inf	-Inf	30.97	3	H	38	1.29	-
AV	2.483502G	53.65	54.00	-0.35	30.92	3	H	38	1.29	-
PK	2.389G	54.92	74.00	-19.08	31.04	3	H	38	1.29	-
PK	2.4424G	118.48	Inf	-Inf	30.97	3	H	38	1.29	-
PK	2.4838G	69.85	74.00	-4.15	30.92	3	H	38	1.29	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

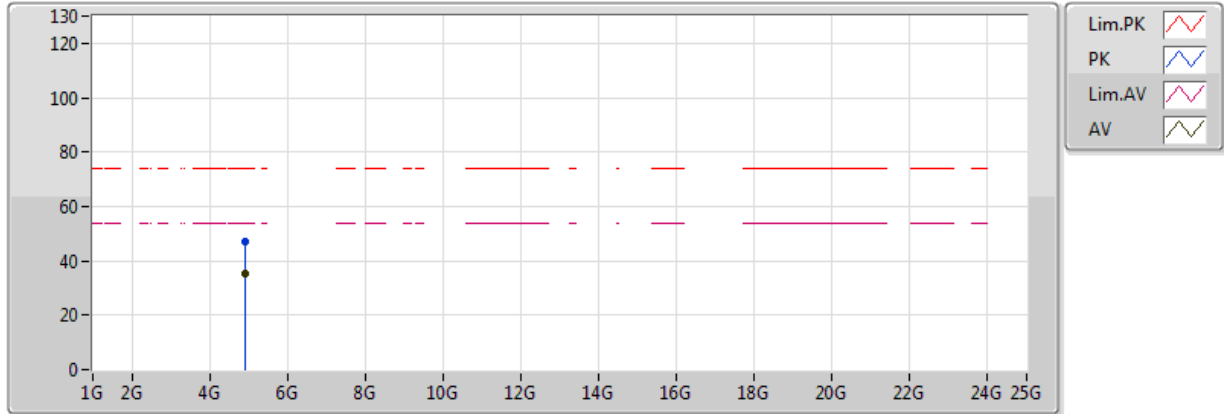


20170327
EUT Y 2TX
Setting 22
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90705G	34.71	54.00	-19.29	3.65	3	V	231	1.44	-
PK	4.9092G	46.45	74.00	-27.55	3.66	3	V	231	1.44	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX



20170327
EUT Y 2TX
Setting 22
01-W-3
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90828G	35.19	54.00	-18.81	3.65	3	H	180	1.98	-
PK	4.90498G	47.24	74.00	-26.76	3.64	3	H	180	1.98	-