



FCC Test Report

Equipment : 802.11a/ac/b/g/n Wireless Access Point
Brand Name : Edge-corE
Model No. : ECW7212-L/ECW7212-O
FCC ID : YZKECW7212L
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : Edgecore networks Corporation
No. 1 Creation Rd., III, Hsinchu Science Park,
Hsinchu 30077, Taiwan
Manufacturer : Accton Technology Corp
No. 1 Creation Rd., III, Hsinchu Science Park,
Hsinchu 30077, Taiwan

The product sample received on Jan. 03, 2017 and completely tested on Apr. 21, 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

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX

Note:

- 2.4G is the 2.4GHz Band (2.4-2.4835GHz).
- 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.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	Accton	120G00000157A	PIFA Antenna	I-PEX	4.88	5.09
2	Accton	120G00000157A	PIFA Antenna	I-PEX	4.73	5.86

Note: The EUT has two antennas.

For 2.4GHz WLAN function

For IEEE 802.11b mode (1TX, 2RX):

Only Ant. 1 (Port 1) can be use as transmitting antenna

Ant. 1 (Port 1) and Ant. 2 (Port 2) can be used as receiving antennas.

Ant. 1 (Port 1) and Ant. 2 (Port 2) could receive simultaneously.

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

Ant. 1 (Port 1) and Ant. 2 (Port 2) could transmit/receive simultaneously.

For 5GHz WLAN function

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

Ant. 1 (Port 1) and Ant. 2 (Port 2) could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11b	0.998	0.009
802.11g	0.984	0.070
802.11n HT20	0.983	0.074
802.11n HT40	0.965	0.155

1.1.4 EUT Operational Condition

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

1.1.5 Table for Multiple Listing

The EUT has two model names which are identical to each other in all aspects except for the following table:

Brand Name	Model Name	Description
Edge-corE	ECW7212-L	All the models are identical, the different model names served as marketing strategy.
	ECW7212-O	

From the above models, model: ECW7212-L was selected as representative model for the test and its data was recorded in this report.

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 v03r05
- ♦ 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	Eddie Weng	22°C / 56%	Feb. 20, 2017~ Apr. 21, 2017
Radiated	03CH01-CB	Jay Luo & Justin Lin	22°C / 54%	Jan. 09, 2017~ Mar. 08, 2017
AC Conduction	CO01-CB	GN Hou	21C / 56	Jan. 04, 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

Mode	Power Setting
802.11b_(1Mbps)_1TX	-
2412MHz	88
2437MHz	93
2462MHz	93
802.11g_(6Mbps)_2TX	-
2412MHz	63
2437MHz	90
2462MHz	67
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	57
2437MHz	85
2462MHz	65
802.11n HT40_Nss1,(MCS0)_2TX	-
2422MHz	48
2437MHz	65
2452MHz	61

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 + Adapter

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	EUT in Y axis + Adapter
2	EUT in Z axis + Adapter
Mode 2 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT in Z axis + PoE
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.	
1	EUT in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	EUT in Y axis - WLAN 2.4GHz + WLAN 5GHz
2	EUT in Z axis - WLAN 2.4GHz + WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA660306-01 for Co-location RF Exposure Evaluation.	

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

The PoE information as below:

Power	Brand	Model
PoE	MOTOROLA	PD-7001G

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter	APD	WA-12M12FU	INPUT: 100-240V~50/60Hz 0.5A Max OUTPUT: 12V-1A

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

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

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*4	DELL	E4300	DoC

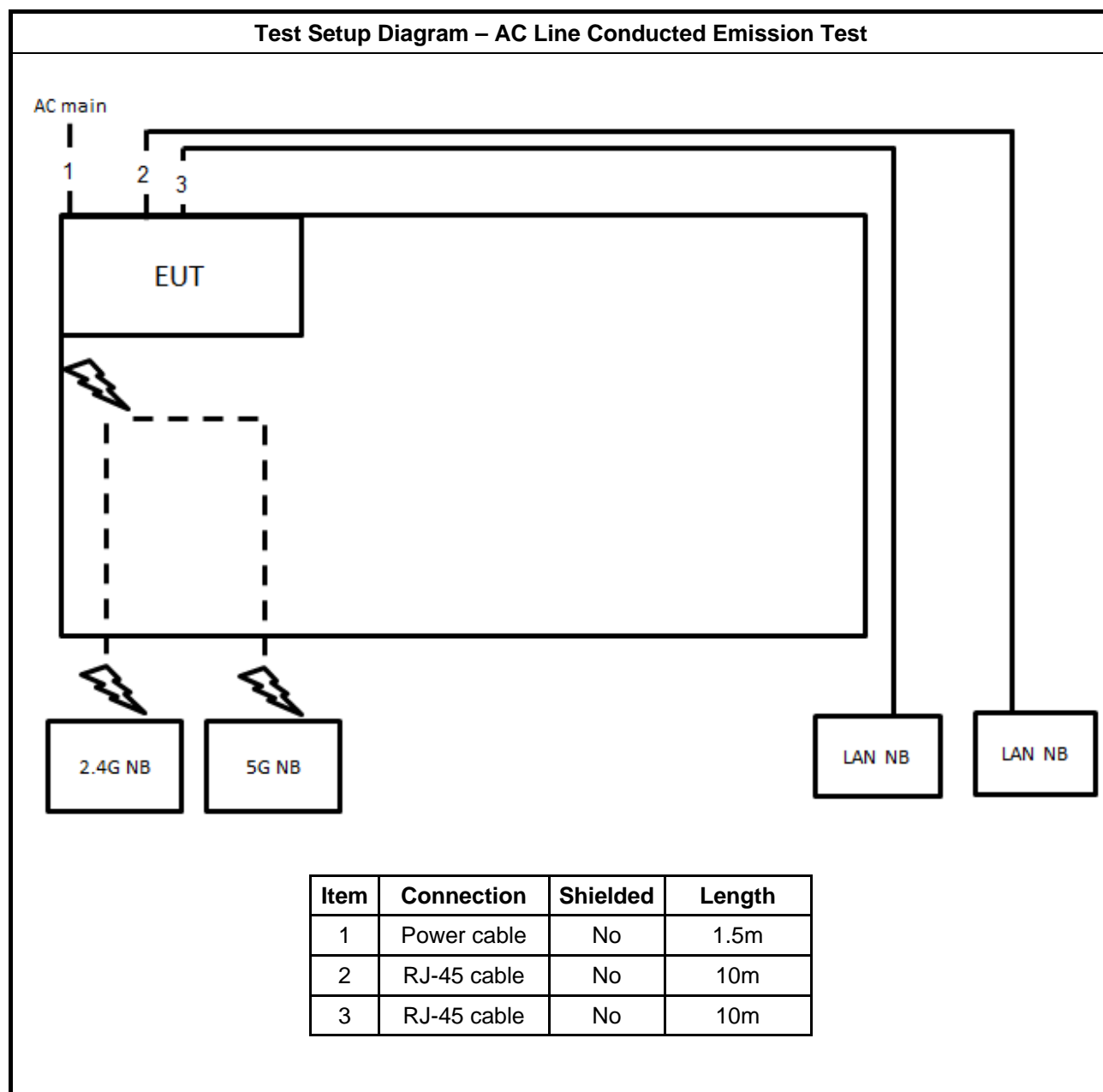
**For Test Site No: 03CH01-CB (above 1GHz)**

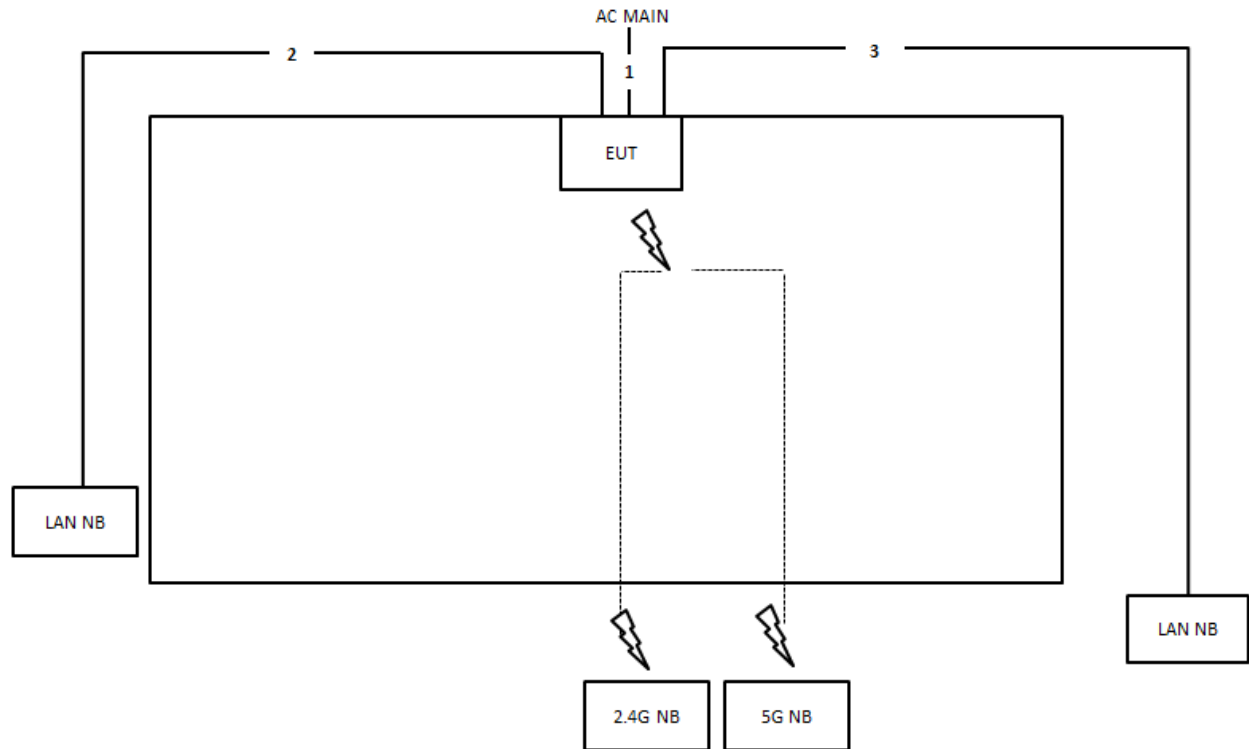
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

For Test Site No: TH01-CB

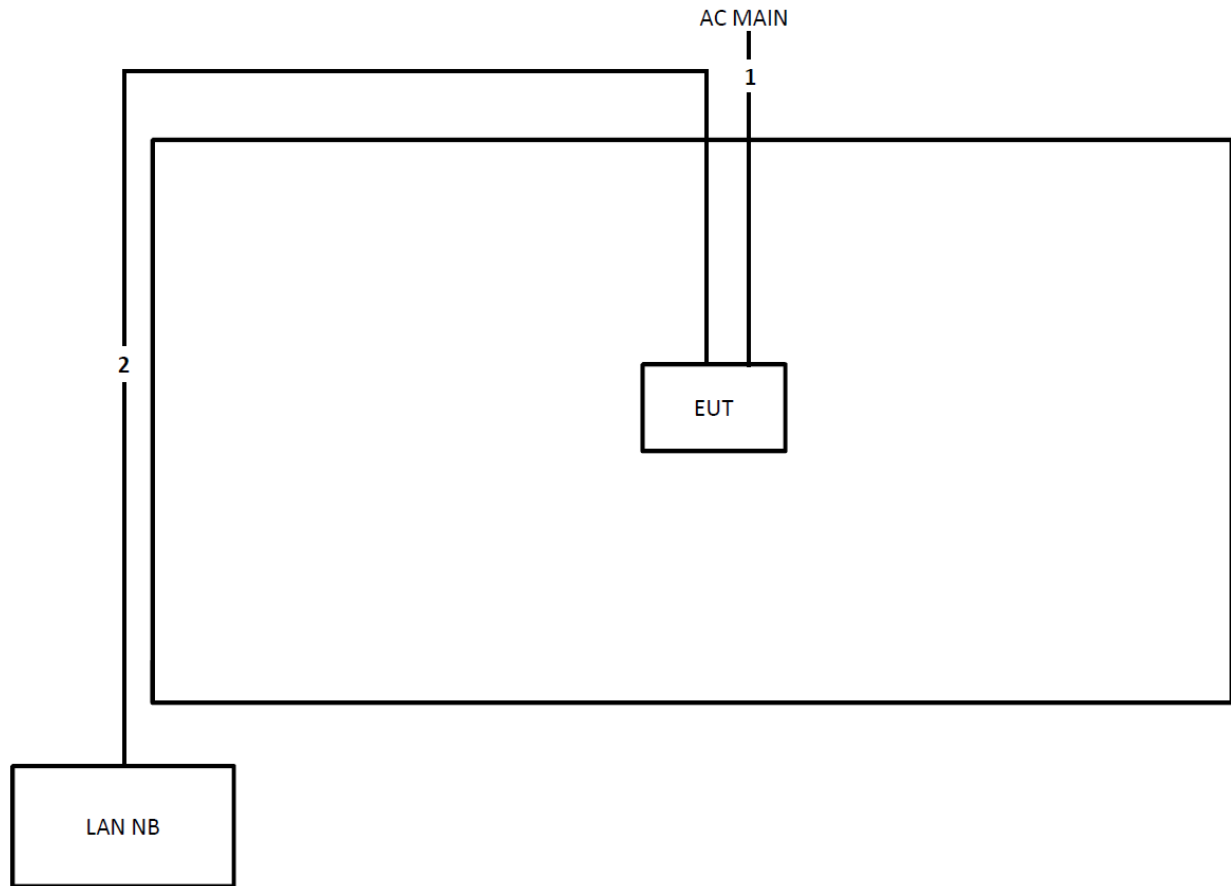
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

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

Test Setup Diagram - Radiated Test > 1GHz


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

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

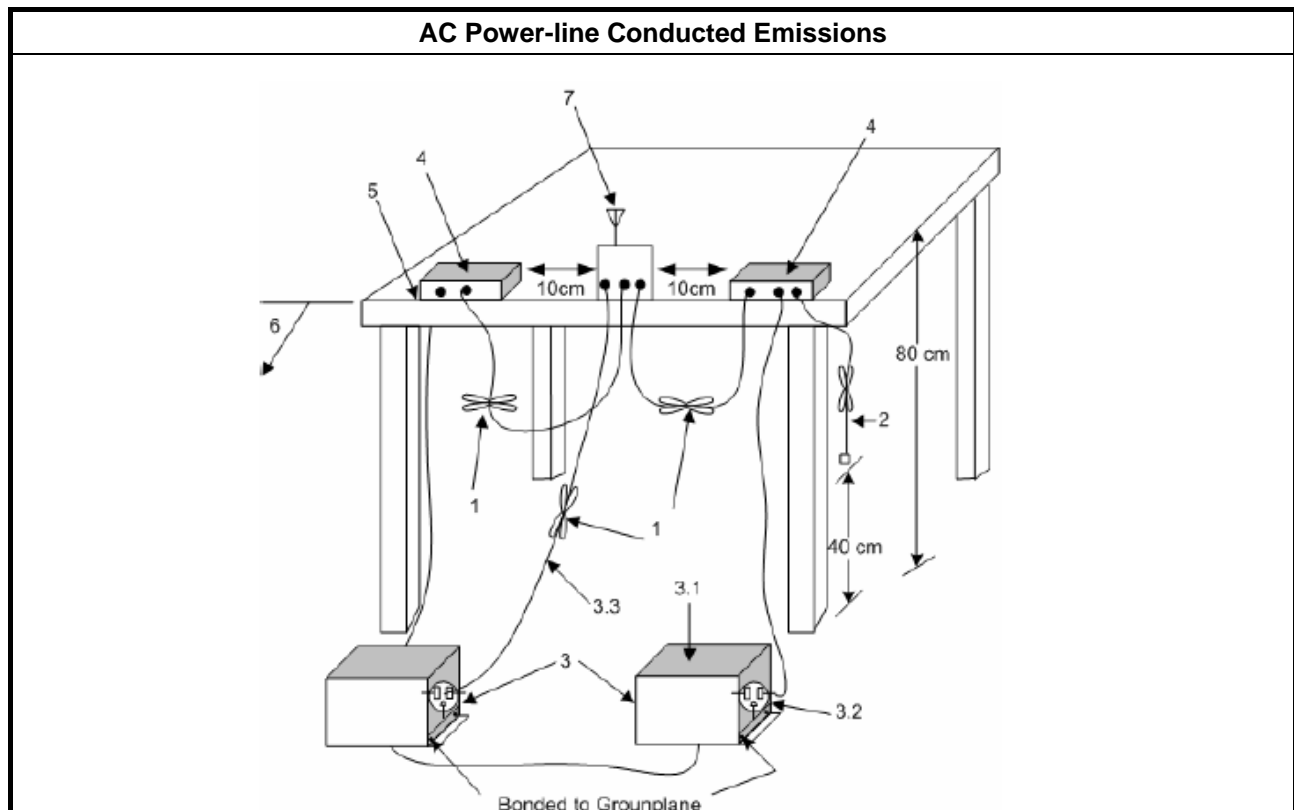
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<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.

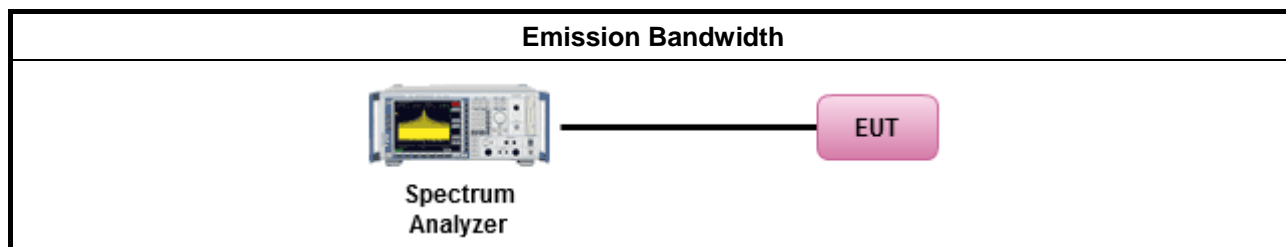
3.2.2 Measuring Instruments

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.	

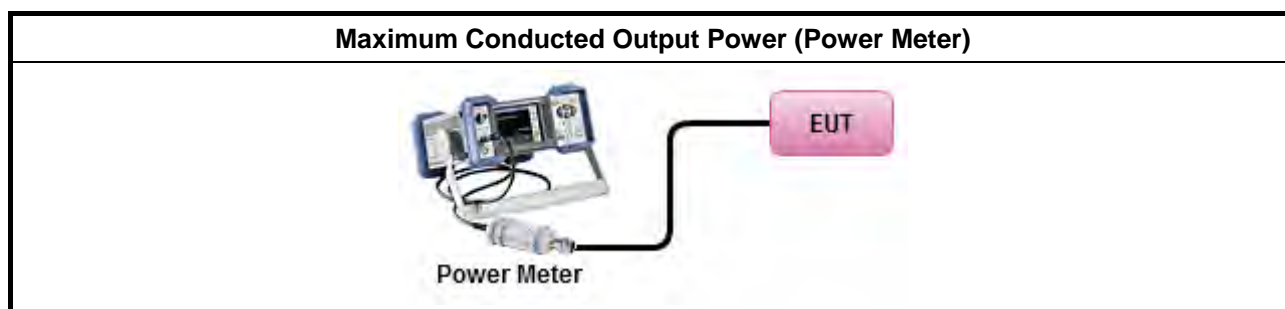
3.3.2 Measuring Instruments

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

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

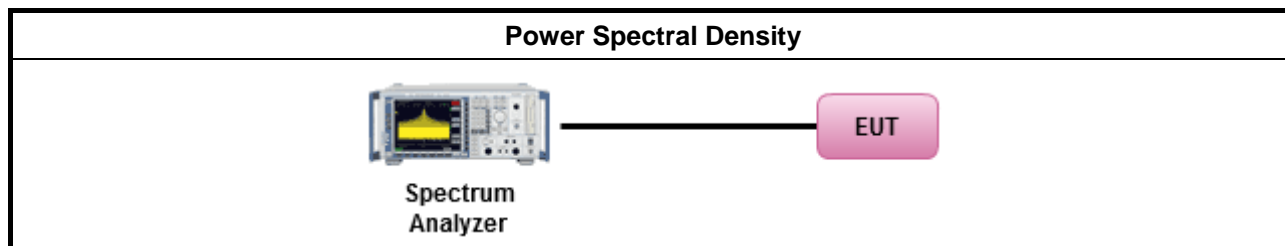
3.4.2 Measuring Instruments

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>	

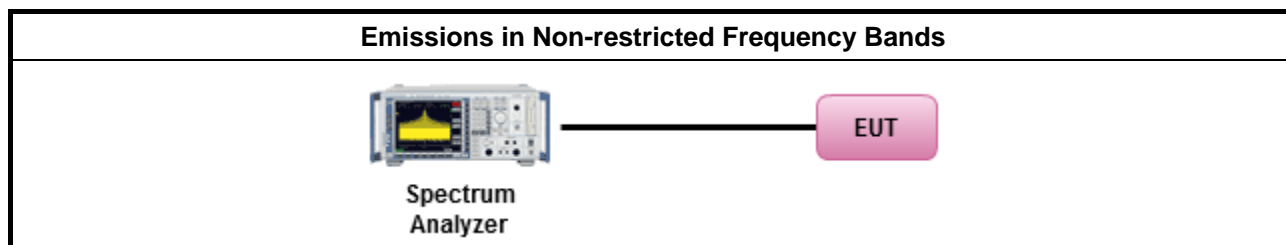
3.5.2 Measuring Instruments

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.

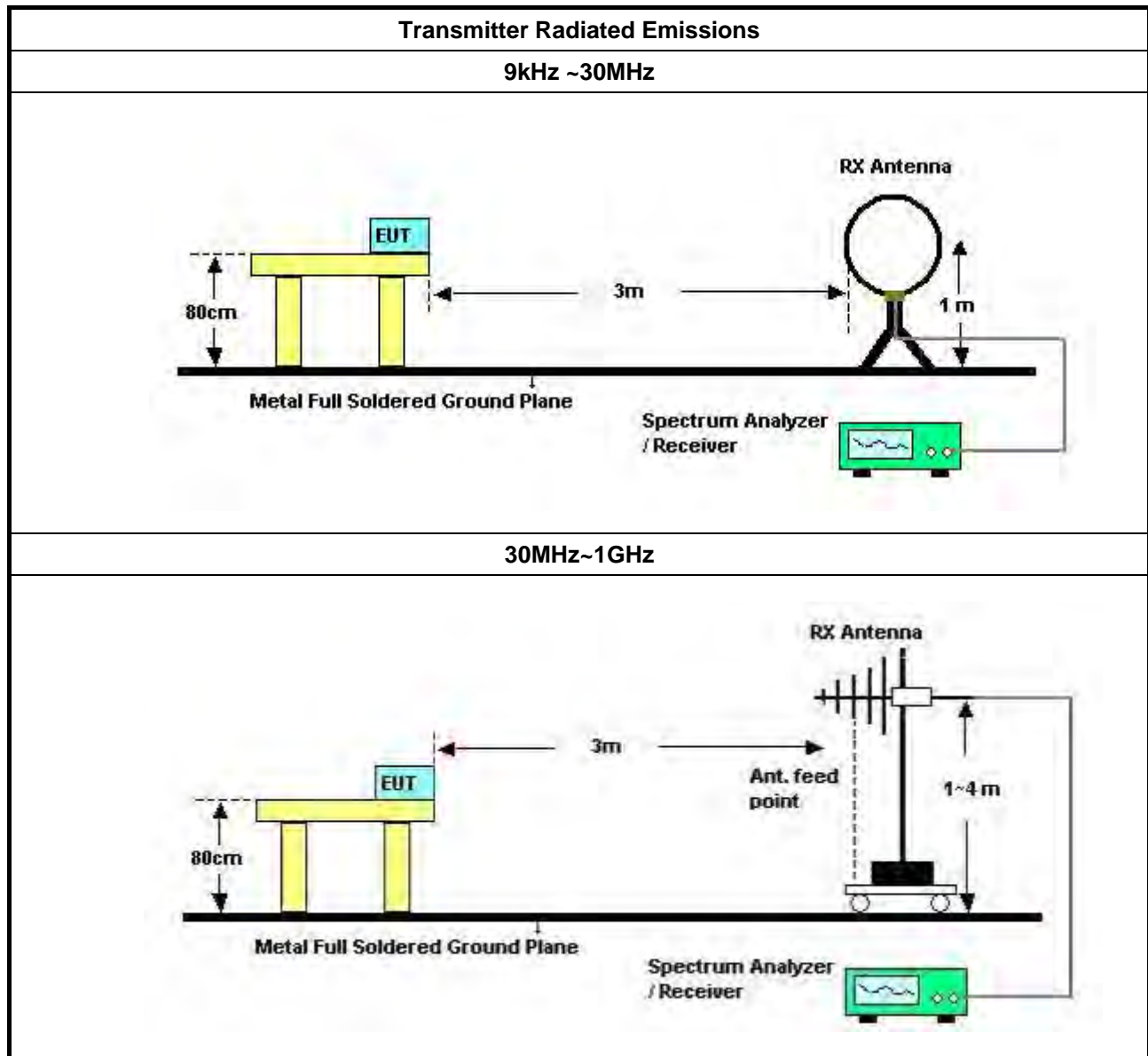
3.6.2 Measuring Instruments

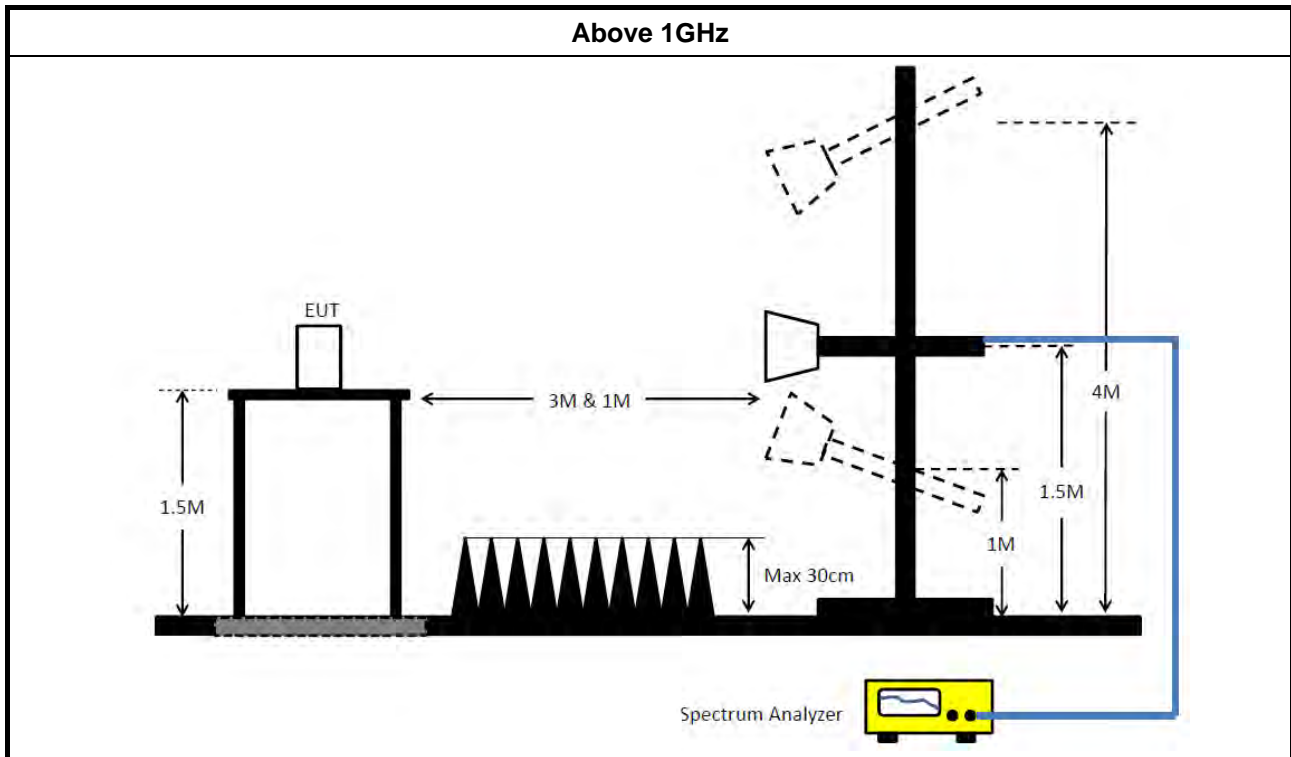
Refer a test equipment and calibration data table in this test report.

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)

All amplitude of 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. 27, 2016	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 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-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. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	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. 21, 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)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Test Software	Audix	E3	6.2009-I0-7	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)
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)
Cable	Marvelous Microwave	n/a	Cable-REF-1	9k-1GHz	Oct. 21, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

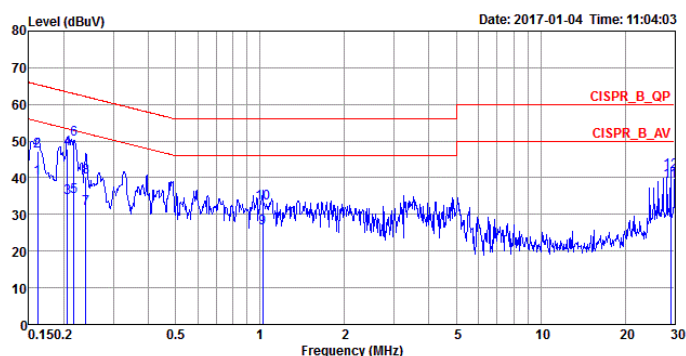
Note: Calibration Interval of instruments listed above is one year.

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

NCR means Non-Calibration required.

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Normal Link		



	Freq	Level	Over	Limit	Read	LISN	Cable	Remark	Pol/Phase
	MHz	dBuV	Limit	Line	Level	Factor	Loss		
			dB	dBuV	dBuV	dB	dB		
1	0.1616	39.83	-15.55	55.38	29.84	9.95	0.04	Average	NEUTRAL
2	0.1616	47.20	-18.18	65.38	37.21	9.95	0.04	QP	NEUTRAL
3	0.2061	34.49	-18.87	53.36	24.46	9.98	0.05	Average	NEUTRAL
4	0.2061	47.70	-15.66	63.36	37.67	9.98	0.05	QP	NEUTRAL
5	0.2173	34.80	-18.12	52.92	24.77	9.98	0.05	Average	NEUTRAL
6	0.2173	50.41	-12.51	62.92	40.38	9.98	0.05	QP	NEUTRAL
7	0.2391	31.65	-20.48	52.13	21.63	9.97	0.05	Average	NEUTRAL
8	0.2391	40.14	-21.99	62.13	30.12	9.97	0.05	QP	NEUTRAL
9	1.0211	26.13	-19.87	46.00	16.08	9.99	0.06	Average	NEUTRAL
10	1.0211	33.07	-22.93	56.00	23.02	9.99	0.06	QP	NEUTRAL
11	29.0613	39.03	-10.97	50.00	28.40	10.34	0.29	Average	NEUTRAL
12	29.0613	41.69	-18.31	60.00	31.06	10.34	0.29	QP	NEUTRAL

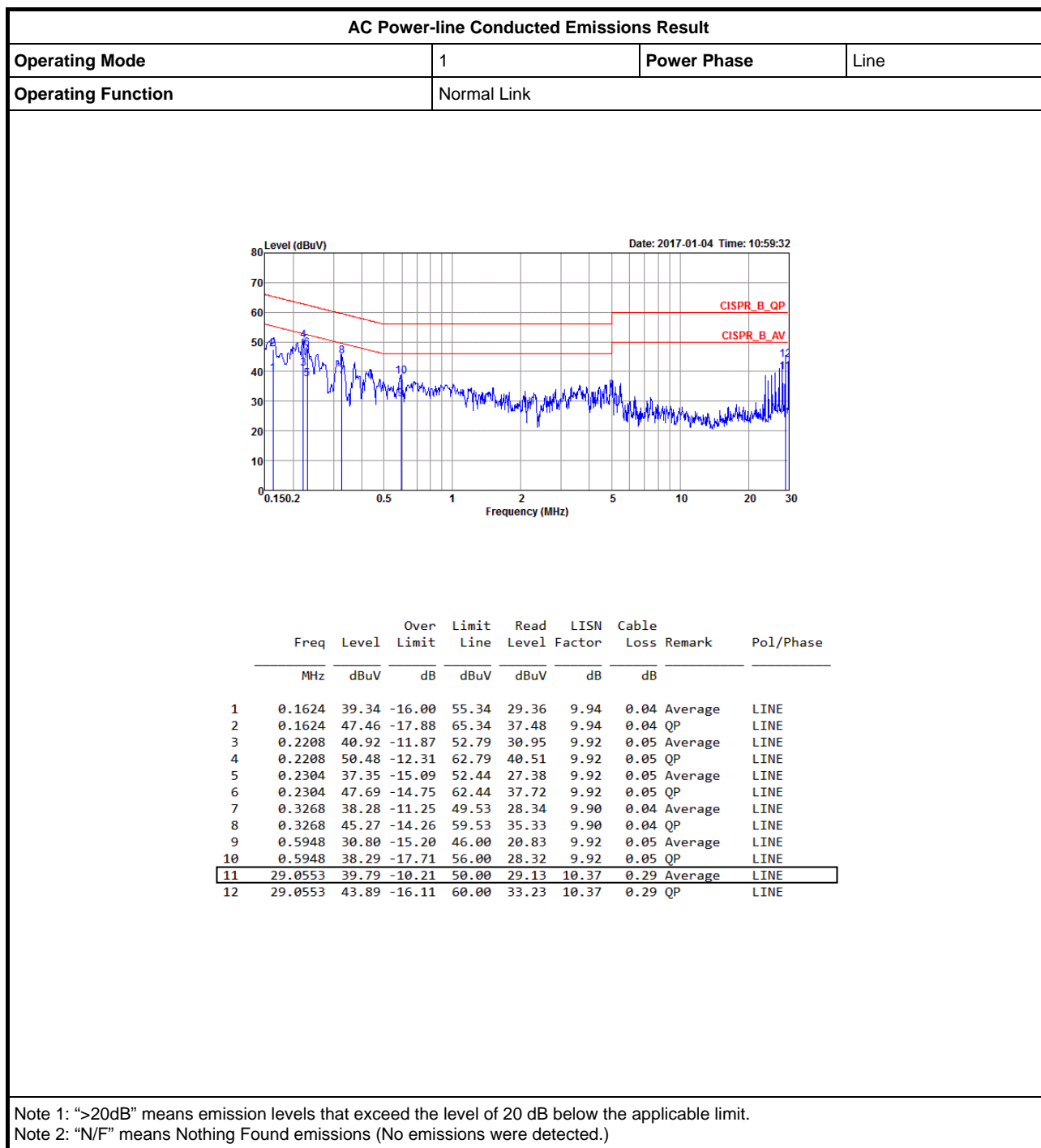
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

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



AC Power-line Conducted Emissions Result

Appendix A



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	8.55M	12.019M	12M0G1D	8M	10.12M
802.11g_(6Mbps)_2TX	-	-	-	-	-
2.4-2.4835GHz	16.45M	20.19M	20M2D1D	16.35M	16.492M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	17.6M	18.066M	18M1D1D	16.025M	17.641M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-
2.4-2.4835GHz	35.9M	36.082M	36M1D1D	35.25M	36.032M

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)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k	8M	10.12M		
2437MHz	Pass	500k	8.55M	12.019M		
2462MHz	Pass	500k	8.025M	11.669M		
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.517M	16.35M	16.492M
2437MHz	Pass	500k	16.35M	20.19M	16.45M	17.066M
2462MHz	Pass	500k	16.375M	16.592M	16.375M	16.592M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.575M	17.691M	17.525M	17.641M
2437MHz	Pass	500k	17.575M	18.066M	17.6M	17.791M
2462MHz	Pass	500k	17.575M	17.691M	16.025M	17.641M
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.65M	36.082M	35.65M	36.082M
2437MHz	Pass	500k	35.9M	36.082M	35.25M	36.082M
2452MHz	Pass	500k	35.65M	36.032M	35.8M	36.032M

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

802.11b_(1Mbps)_1TX
EBW
2412MHz

Ch Freq
2.412GHz


Span
50MHz

RBW
100kHz

VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 



Ch Freq
2.412GHz

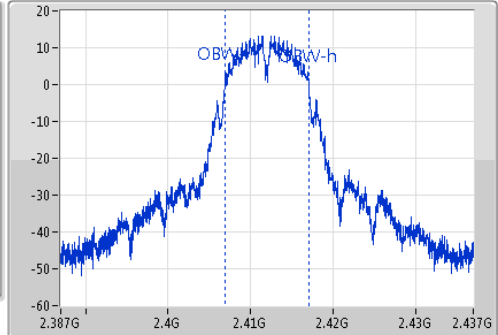
Span
50MHz

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
8M	2.40795G	2.41595G	10.12M	2.406903G	2.417022G	500k	1

802.11b_(1Mbps)_1TX
EBW
2437MHz

Ch Freq
2.437GHz

Span
50MHz

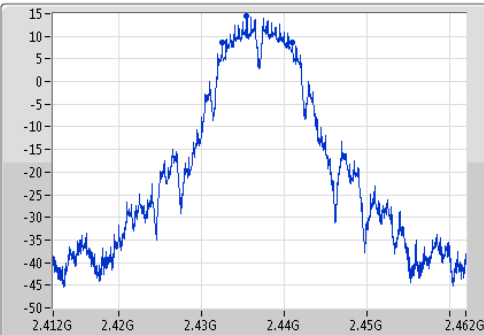
RBW
100kHz

VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 



Ch Freq
2.437GHz

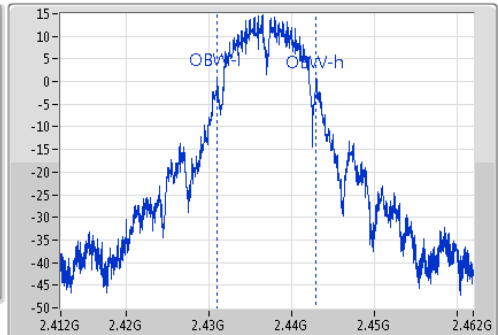
Span
50MHz

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
8.55M	2.43245G	2.441G	12.019M	2.430953G	2.442972G	500k	1

802.11b_(1Mbps)_1TX
EBW
2462MHz

Ch Freq
2.462GHz

Span
50MHz

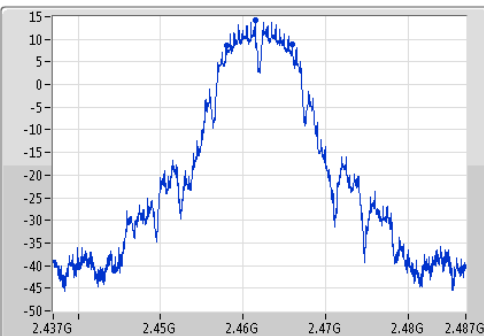
RBW
100kHz

VBW
300kHz

Sweep Time
100ms

Detector Type
Peak

Port 1 



Ch Freq
2.462GHz

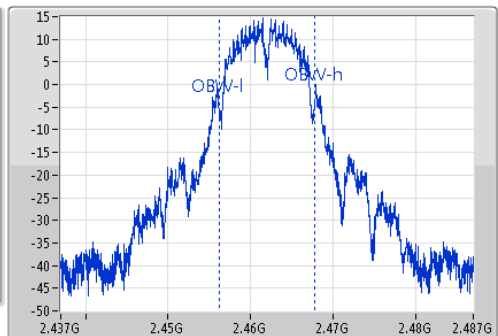
Span
50MHz

RBW
200kHz

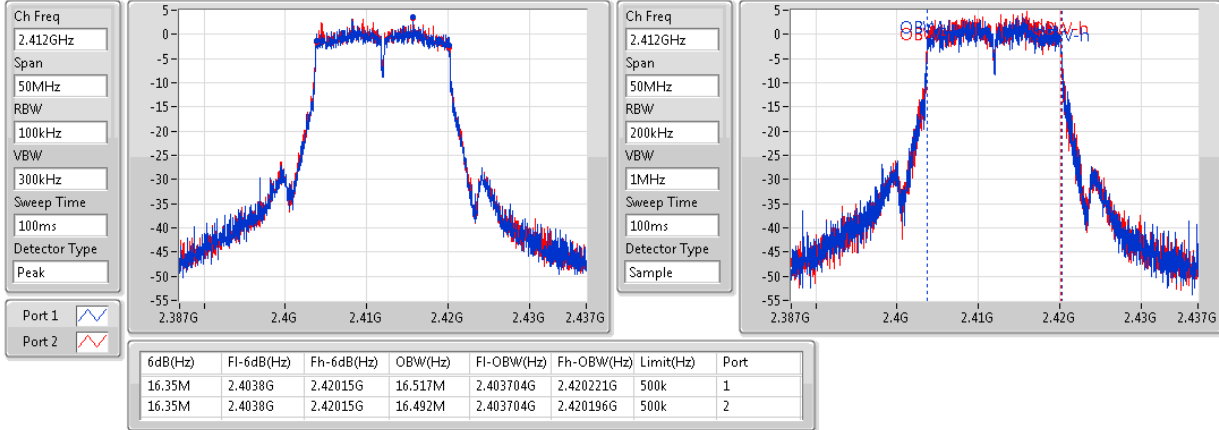
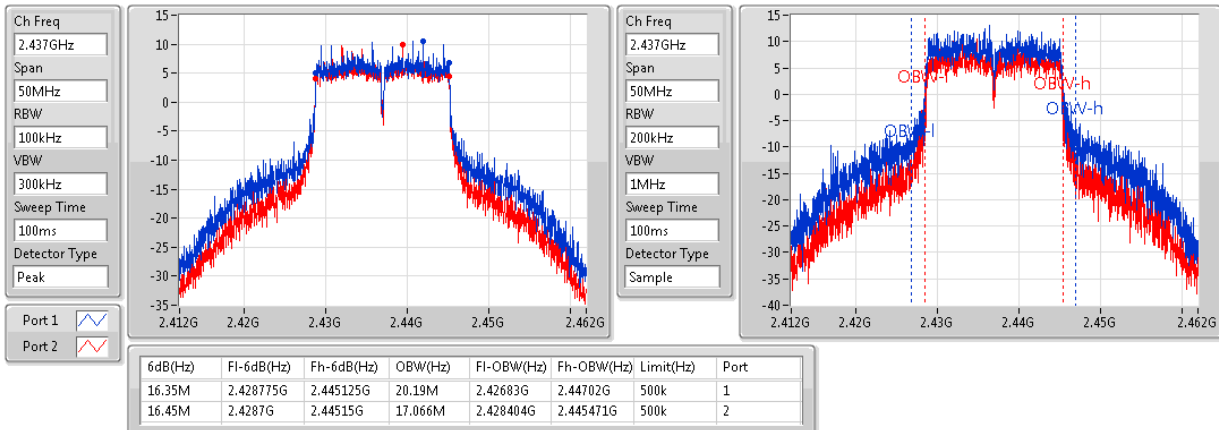
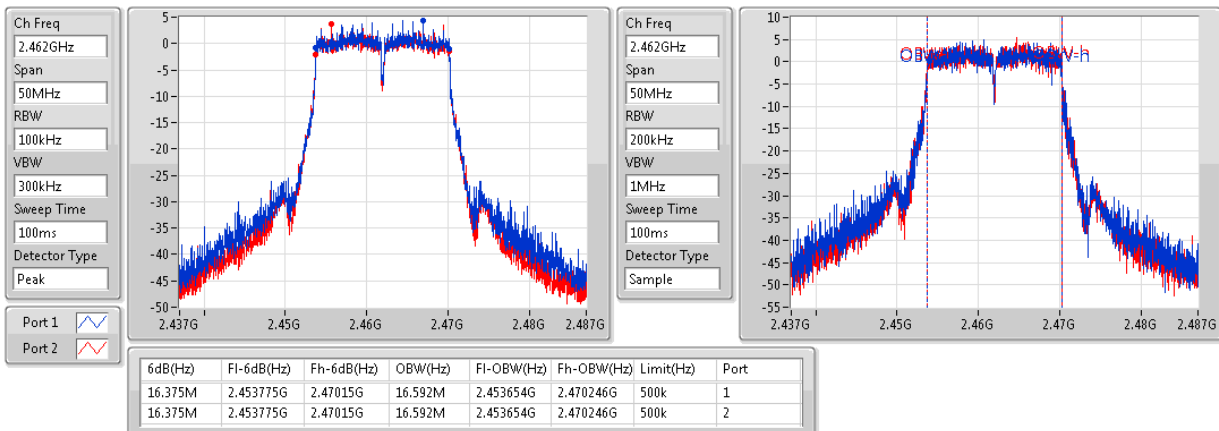
VBW
1MHz

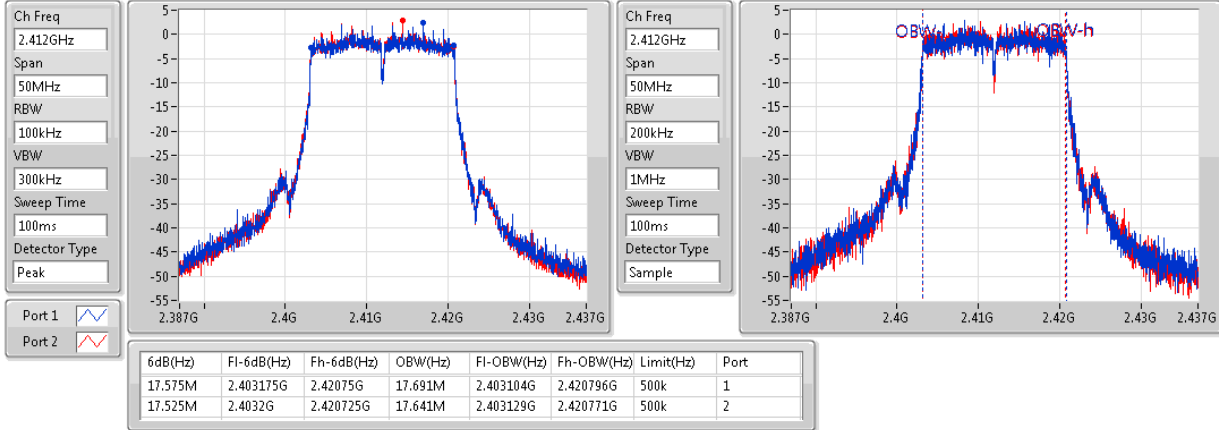
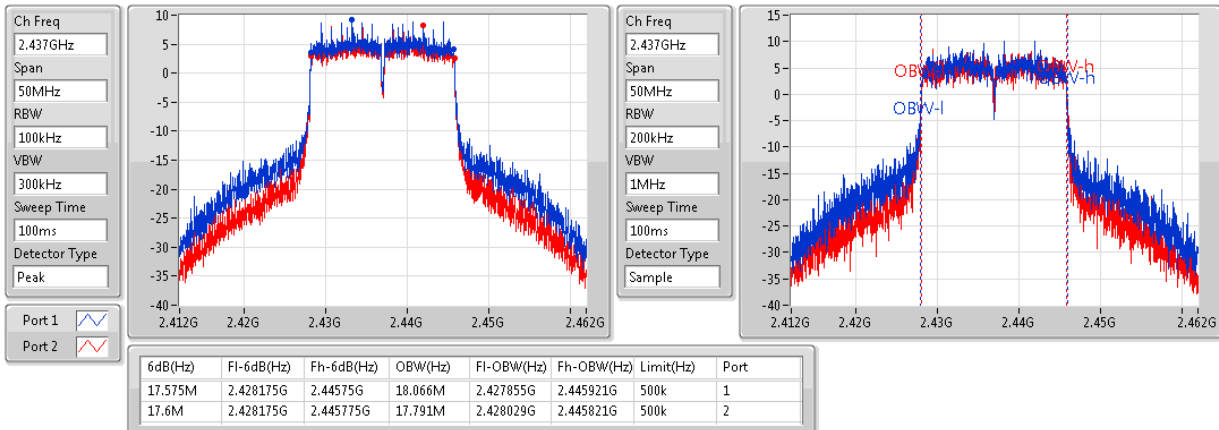
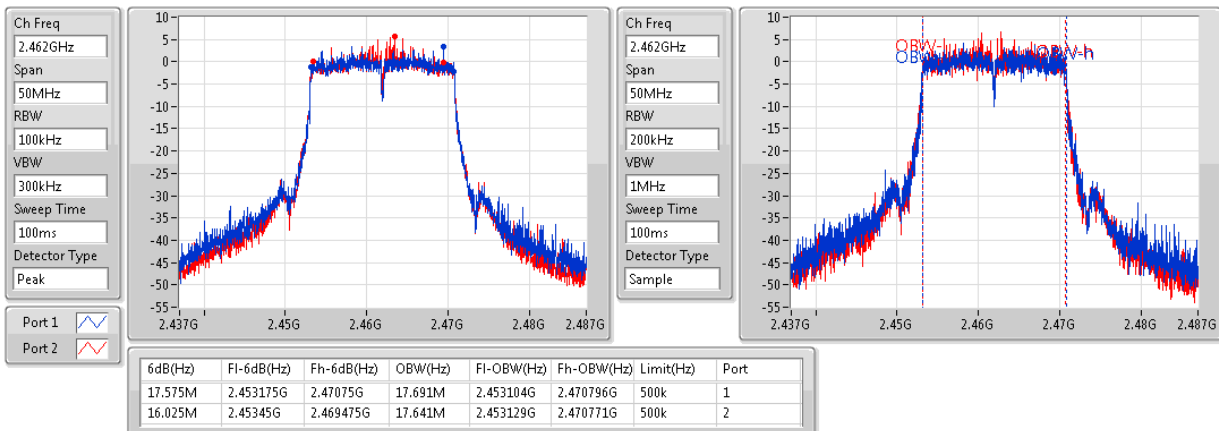
Sweep Time
100ms

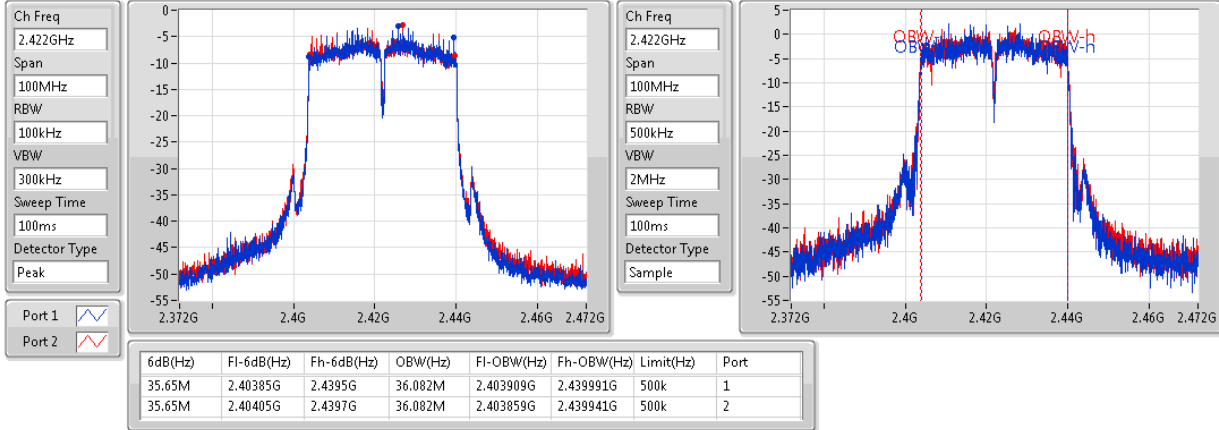
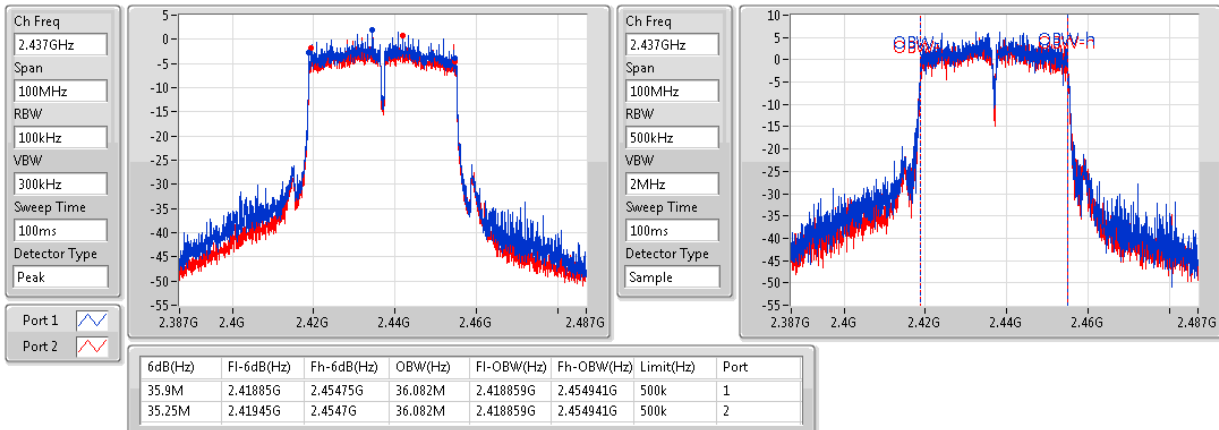
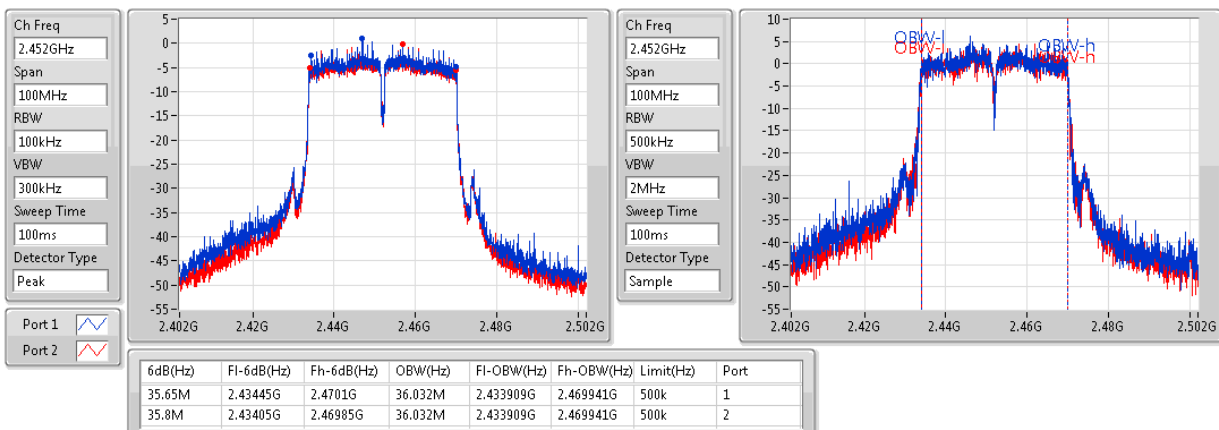
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.025M	2.457975G	2.466G	11.669M	2.456178G	2.467847G	500k	1

802.11g_(6Mbps)_2TX
EBW
2412MHz

802.11g_(6Mbps)_2TX
EBW
2437MHz

802.11g_(6Mbps)_2TX
EBW
2462MHz


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


Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_1TX	-	-
2.4-2.4835GHz	23.93	0.24717
802.11g_(6Mbps)_2TX	-	-
2.4-2.4835GHz	25.02	0.31769
802.11n HT20_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	23.76	0.23768
802.11n HT40_Nss1,(MCS0)_2TX	-	-
2.4-2.4835GHz	19.22	0.08356

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.88	22.38		22.38	30.00
2437MHz	Pass	4.88	23.68		23.68	30.00
2462MHz	Pass	4.88	23.93		23.93	30.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.88	16.63	15.52	19.12	30.00
2437MHz	Pass	4.88	21.97	22.04	25.02	30.00
2462MHz	Pass	4.88	16.92	16.45	19.70	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.88	15.31	14.42	17.90	30.00
2437MHz	Pass	4.88	20.88	20.62	23.76	30.00
2462MHz	Pass	4.88	16.42	15.68	19.08	30.00
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.88	12.71	11.91	15.34	30.00
2437MHz	Pass	4.88	16.10	16.31	19.22	30.00
2452MHz	Pass	4.88	15.37	15.19	18.29	30.00

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

Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_1TX	-
2.4-2.4835GHz	-0.27
802.11g_(6Mbps)_2TX	-
2.4-2.4835GHz	-2.61
802.11n HT20_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-4.36
802.11n HT40_Nss1,(MCS0)_2TX	-
2.4-2.4835GHz	-11.74

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)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.88	-1.24		-1.24	8.00
2437MHz	Pass	4.88	-0.27		-0.27	8.00
2462MHz	Pass	4.88	-0.77		-0.77	8.00
802.11g_(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.82	-9.91	-10.60	-9.02	6.11
2437MHz	Pass	7.82	-3.20	-5.03	-2.61	6.11
2462MHz	Pass	7.82	-10.23	-10.13	-8.26	6.11
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.82	-12.26	-12.11	-10.88	6.11
2437MHz	Pass	7.82	-5.08	-6.56	-4.36	6.11
2462MHz	Pass	7.82	-9.64	-10.42	-9.18	6.11
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.82	-17.28	-17.25	-14.66	6.11
2437MHz	Pass	7.82	-12.27	-13.75	-11.74	6.11
2452MHz	Pass	7.82	-12.97	-13.90	-11.86	6.11

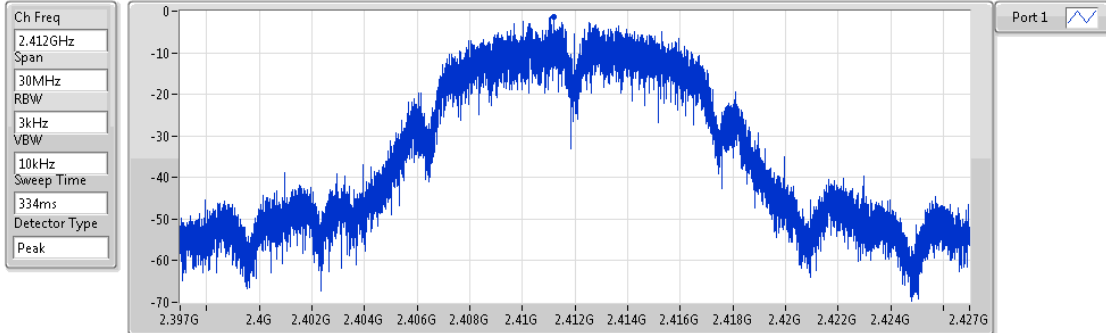
DG = Directional Gain; RBW=3kHz;

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)_1TX

PSD

2412MHz

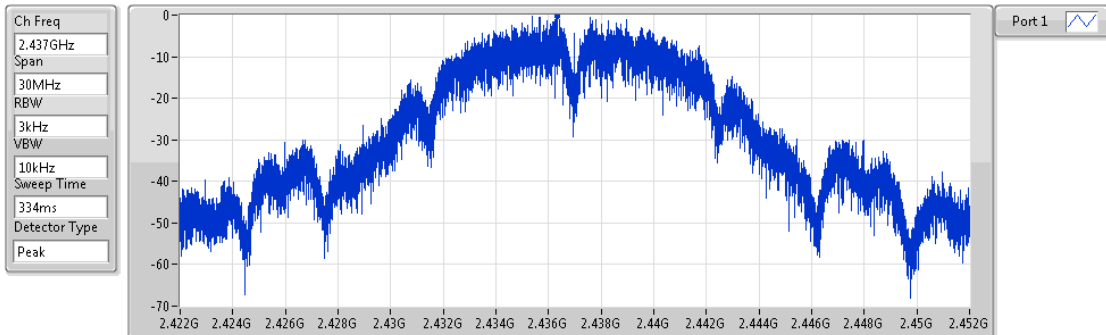


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-1.24	-1.24	-1.24

802.11b_(1Mbps)_1TX

PSD

2437MHz

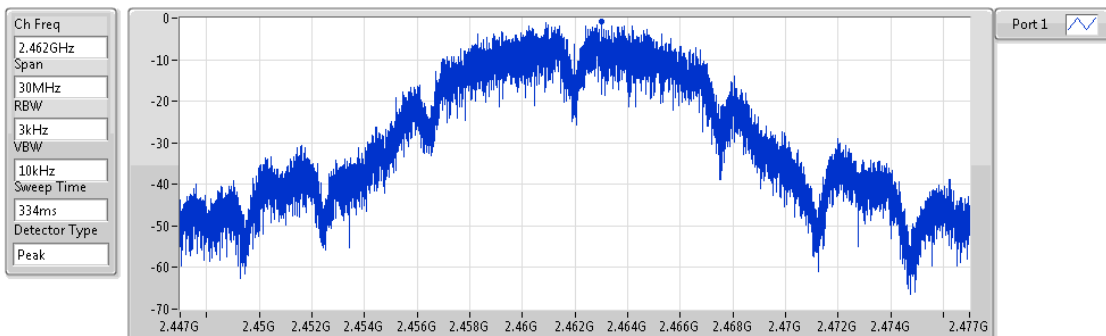


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-0.27	-0.27	-0.27

802.11b_(1Mbps)_1TX

PSD

2462MHz

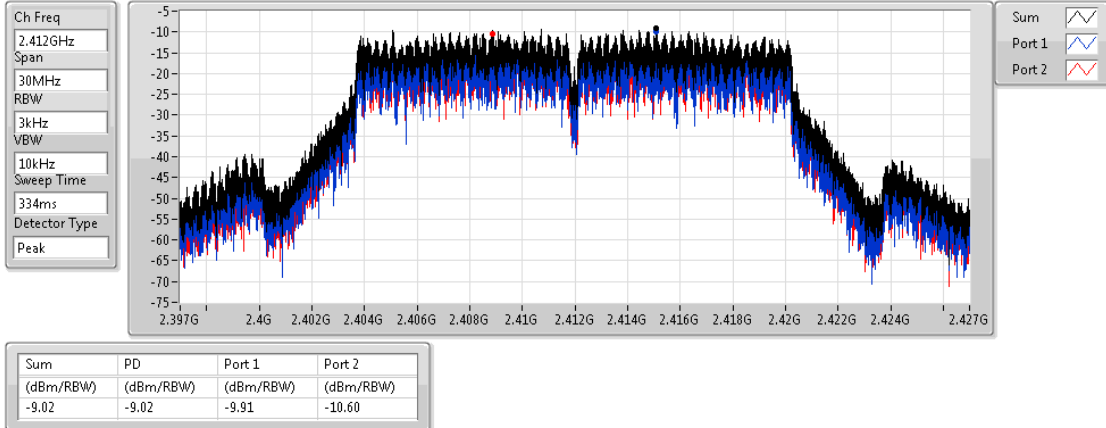


Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-0.77	-0.77	-0.77

802.11g_(6Mbps)_2TX

PSD

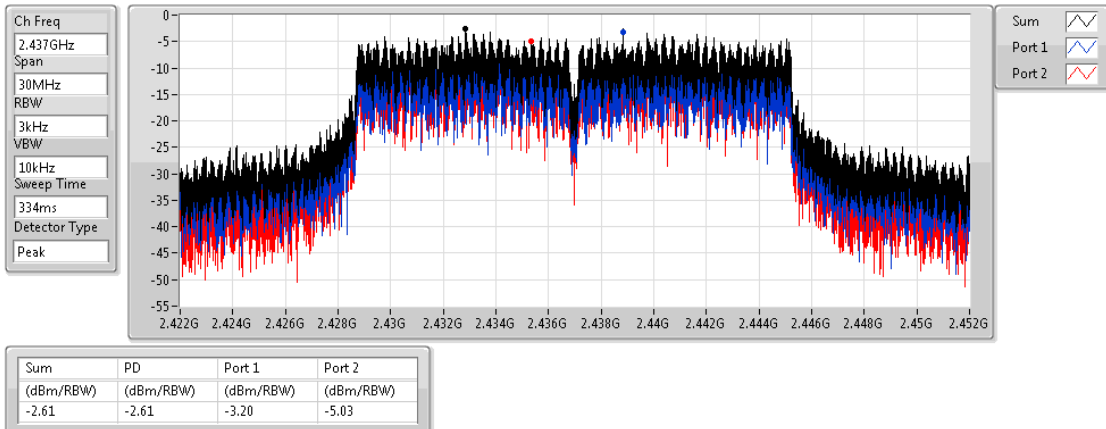
2412MHz



802.11g_(6Mbps)_2TX

PSD

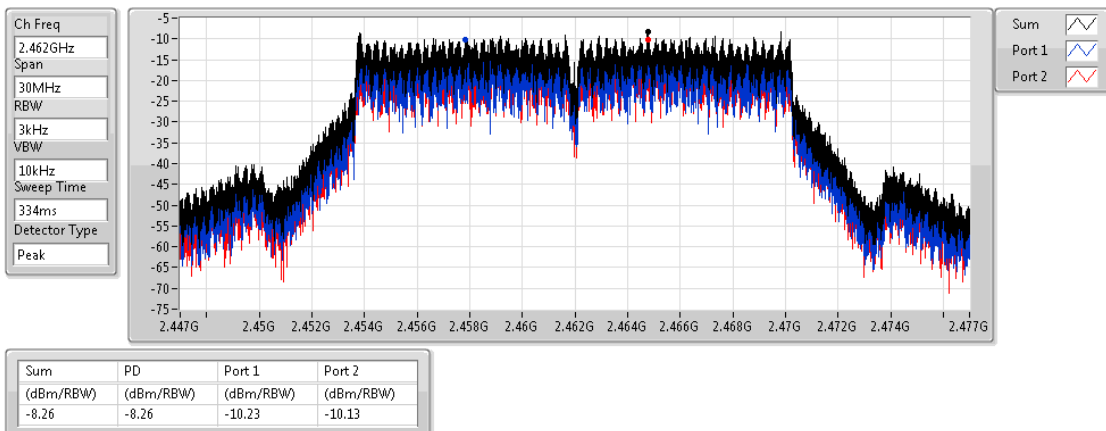
2437MHz



802.11g_(6Mbps)_2TX

PSD

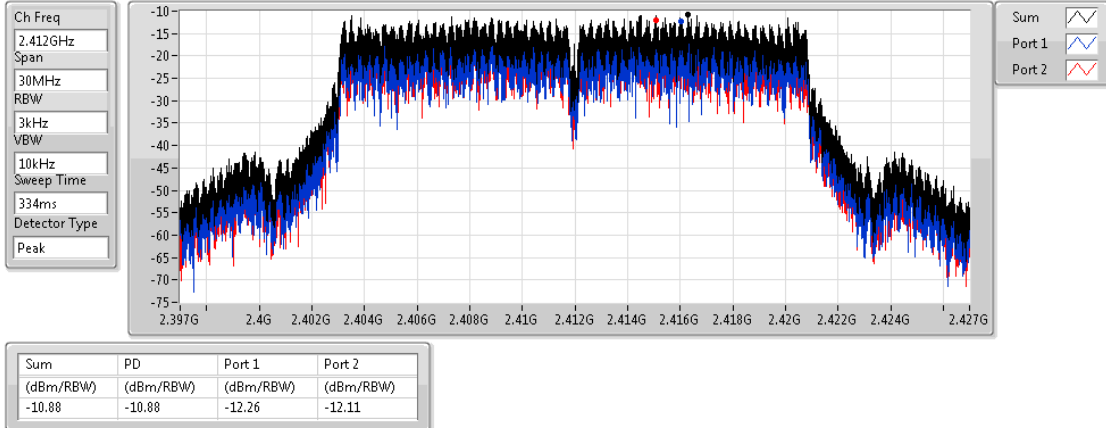
2462MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

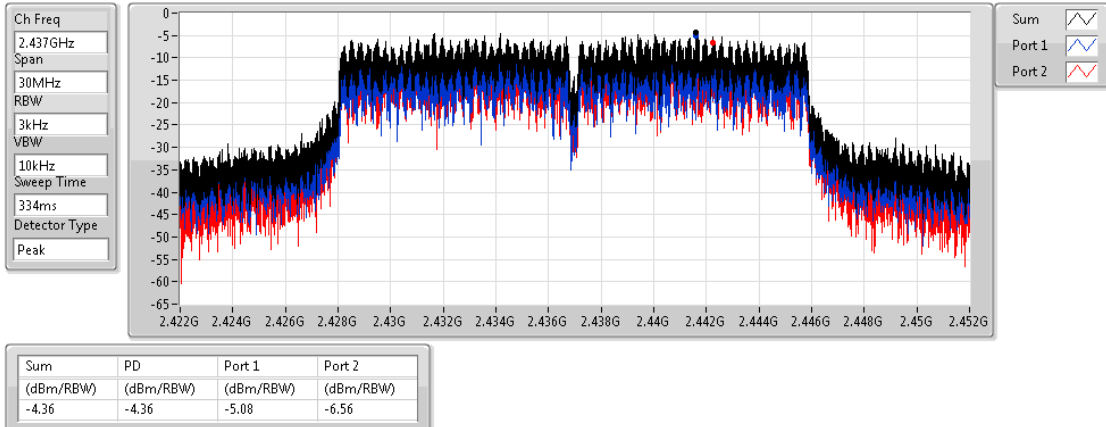
2412MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

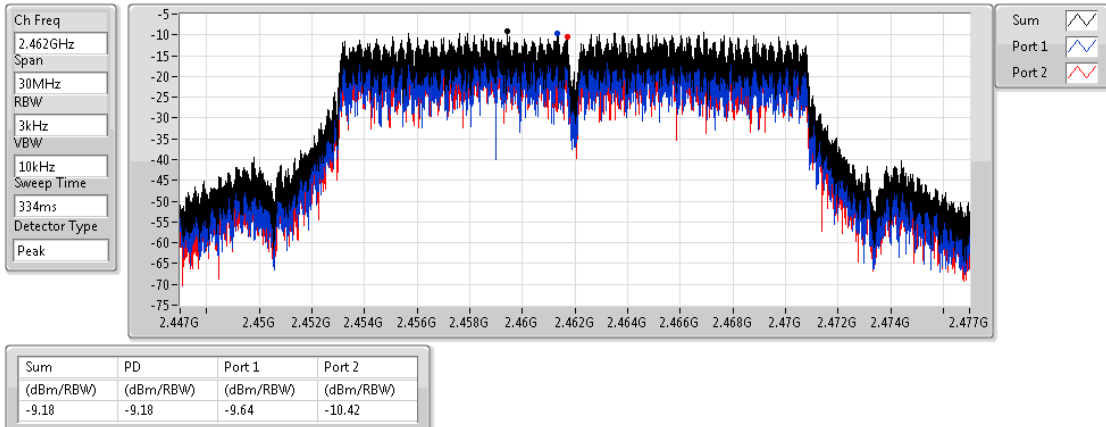
2437MHz



802.11n HT20_Nss1,(MCS0)_2TX

PSD

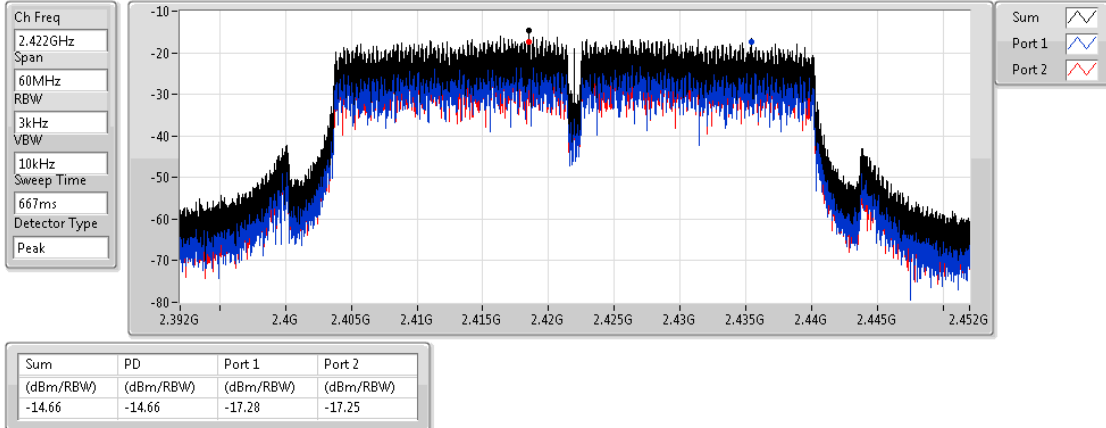
2462MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

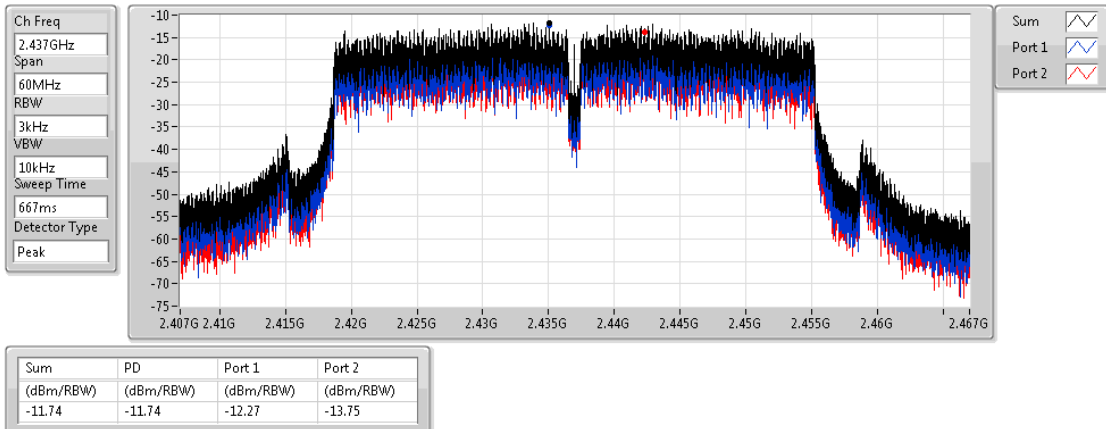
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

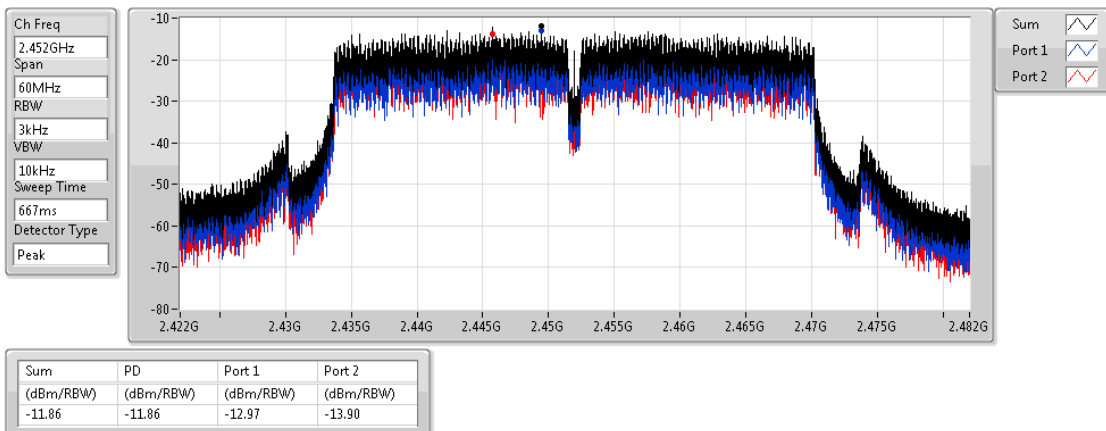
2437MHz



802.11n HT40_Nss1,(MCS0)_2TX

PSD

2452MHz





CSE 20dB/30dB Down Result

Appendix E

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 HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.443253G	0.69	-29.31	2.080695G	-44.44	2.39056G	-39.37	2.48494G	-44.06	2.577523G	-53.38	1

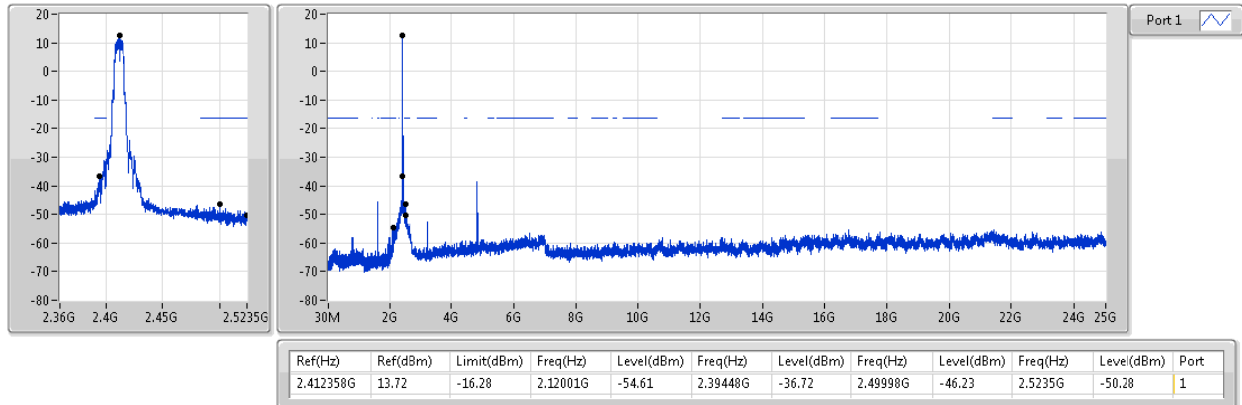
Result

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)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.461456G	13.72	-16.28	2.12001G	-54.61	2.39448G	-36.72	2.49998G	-46.23	2.5235G	-50.28	1
2437MHz	Pass	2.461456G	13.72	-16.28	1.624885G	-44.29	2.39648G	-42.88	2.4983G	-43.59	2.545977G	-46.56	1
2462MHz	Pass	2.461456G	13.72	-16.28	1.641195G	-48.86	2.3932G	-46.63	2.48398G	-36.26	2.52631G	-48.49	1
802.11g_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.433233G	9.94	-20.06	2.160785G	-49.04	2.39824G	-30.44	2.49998G	-44.40	2.531929G	-51.53	1
2412MHz	Pass	2.433233G	9.94	-20.06	2.0804G	-54.35	2.39824G	-32.65	2.49998G	-45.43	3.214652G	-52.02	2
2437MHz	Pass	2.433233G	9.94	-20.06	2.307575G	-48.70	2.39696G	-33.90	2.48478G	-38.78	2.5235G	-46.19	1
2437MHz	Pass	2.433233G	9.94	-20.06	2.30874G	-49.23	2.39672G	-39.34	2.49998G	-43.40	2.531929G	-49.77	2
2462MHz	Pass	2.433233G	9.94	-20.06	2.000015G	-49.50	2.39456G	-49.44	2.49046G	-41.45	2.5235G	-50.43	1
2462MHz	Pass	2.433233G	9.94	-20.06	2.305245G	-52.66	2.3932G	-47.92	2.4863G	-42.62	2.543167G	-50.25	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.444422G	9.11	-20.89	2.000015G	-48.94	2.39768G	-33.88	2.49998G	-44.58	2.568453G	-53.62	1
2412MHz	Pass	2.444422G	9.11	-20.89	2.30641G	-52.04	2.39832G	-34.20	2.49998G	-47.12	3.214652G	-52.53	2
2437MHz	Pass	2.444422G	9.11	-20.89	2.307575G	-47.84	2.39728G	-37.64	2.49478G	-41.83	2.52631G	-48.77	1
2437MHz	Pass	2.444422G	9.11	-20.89	2.307575G	-50.30	2.396G	-42.35	2.48366G	-43.56	2.540357G	-50.31	2
2462MHz	Pass	2.444422G	9.11	-20.89	2.160785G	-49.64	2.39464G	-49.07	2.48382G	-36.77	2.540357G	-49.48	1
2462MHz	Pass	2.444422G	9.11	-20.89	2.302915G	-54.42	2.39112G	-50.14	2.48454G	-45.18	2.5235G	-52.39	2
802.11n HT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.443253G	0.69	-29.31	2.080695G	-45.35	2.39136G	-42.23	2.49998G	-44.50	2.1488688G	-55.09	1
2422MHz	Pass	2.443253G	0.69	-29.31	2.160845G	-55.24	2.39136G	-43.13	2.49998G	-46.50	3.228181G	-53.38	2
2437MHz	Pass	2.443253G	0.69	-29.31	2.080695G	-44.44	2.39056G	-39.37	2.48494G	-44.06	2.577523G	-53.38	1
2437MHz	Pass	2.443253G	0.69	-29.31	2.160845G	-55.65	2.39392G	-42.42	2.49998G	-45.97	2.577523G	-54.26	2
2452MHz	Pass	2.443253G	0.69	-29.31	2.080695G	-44.40	2.39488G	-47.33	2.48638G	-43.40	2.588741G	-52.92	1
2452MHz	Pass	2.443253G	0.69	-29.31	2.160845G	-58.41	2.39664G	-48.90	2.49998G	-45.20	2.569109G	-55.56	2

802.11b_(1Mbps)_1TX

CSE NdB

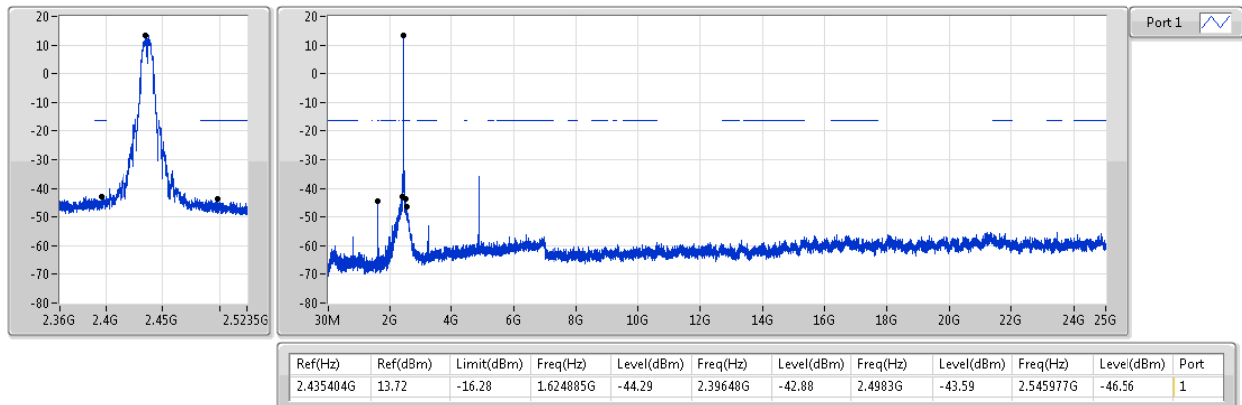
2412MHz



802.11b_(1Mbps)_1TX

CSE NdB

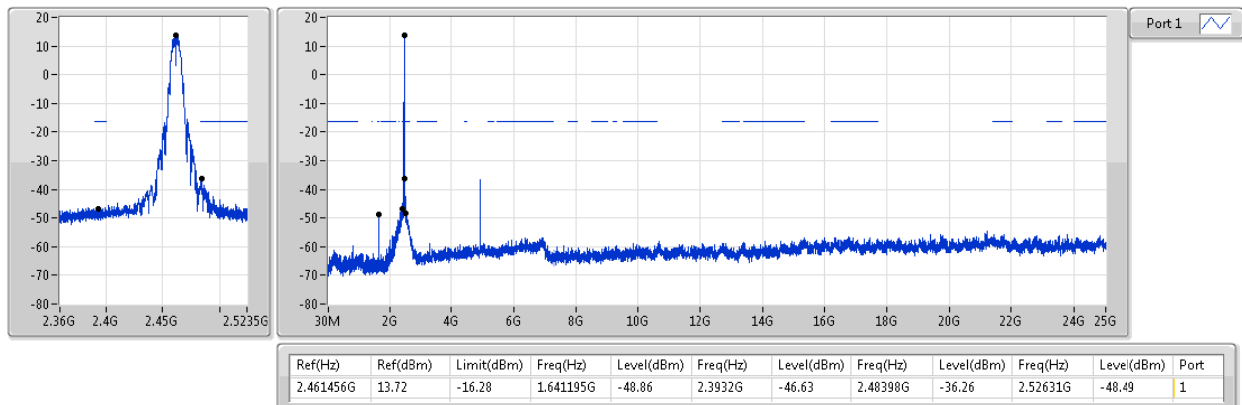
2437MHz



802.11b_(1Mbps)_1TX

CSE NdB

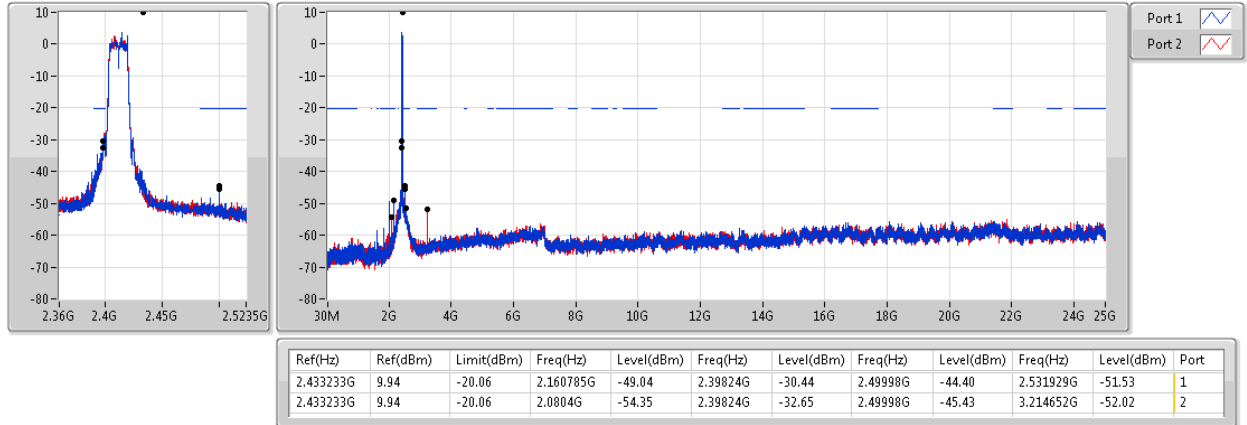
2462MHz



802.11g_(6Mbps)_2TX

CSE NdB

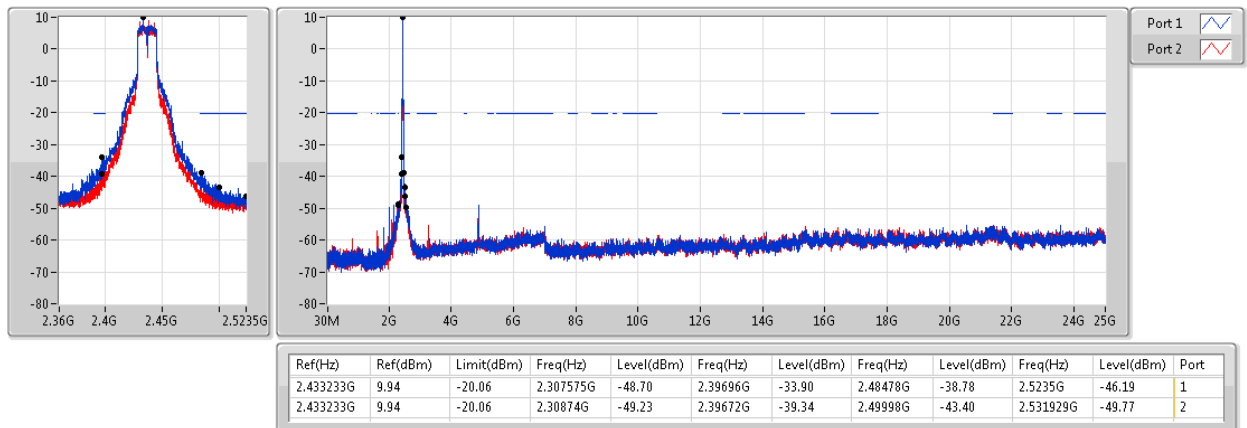
2412MHz



802.11g_(6Mbps)_2TX

CSE NdB

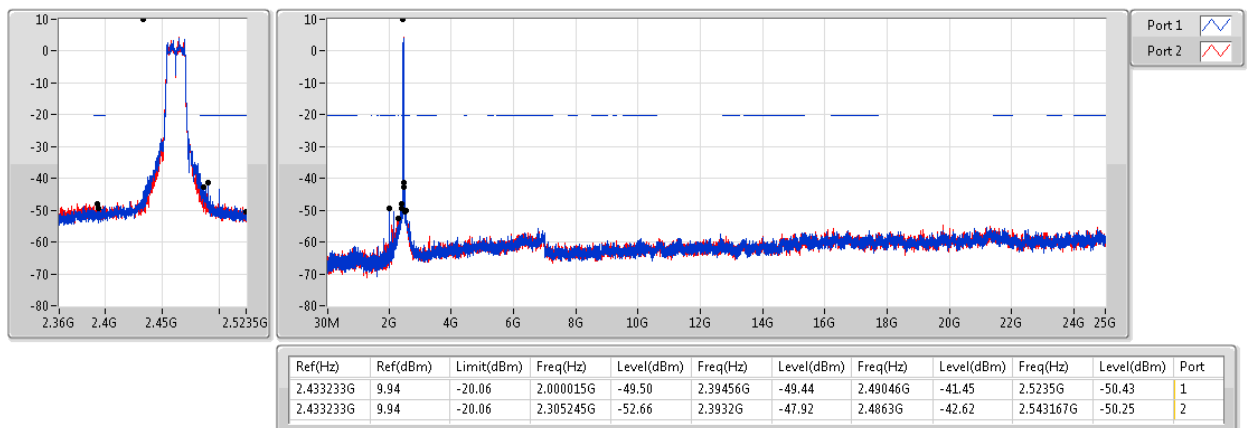
2437MHz



802.11g_(6Mbps)_2TX

CSE NdB

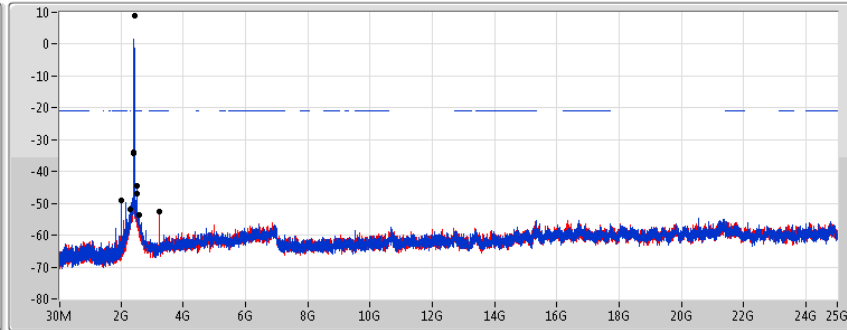
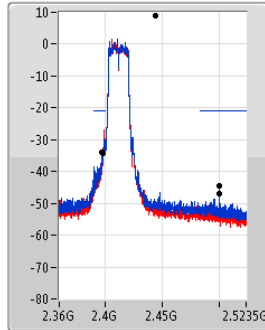
2462MHz





802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

2412MHz



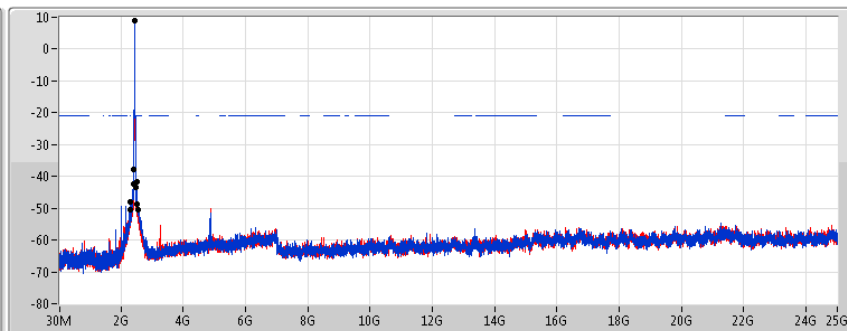
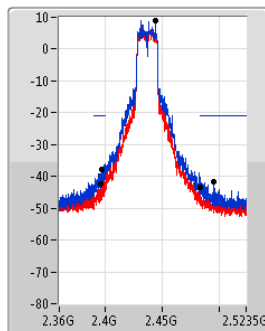
Port 1 
Port 2 



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.444422G	9.11	-20.89	2.000015G	-48.94	2.39768G	-33.88	2.49998G	-44.58	2.568453G	-53.62	1
2.444422G	9.11	-20.89	2.30641G	-52.04	2.39832G	-34.20	2.49998G	-47.12	3.214652G	-52.53	2

802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

2437MHz



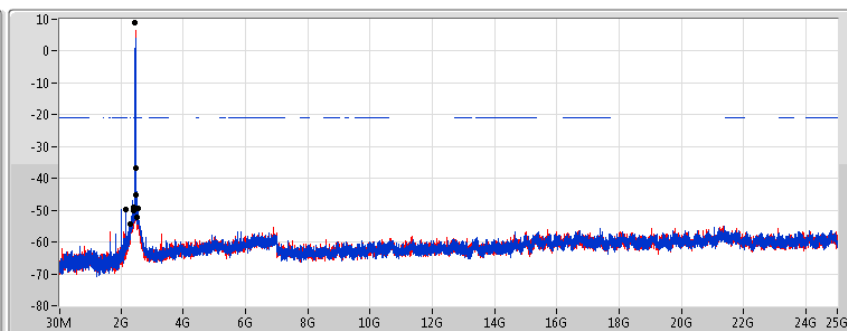
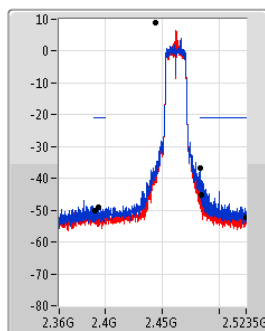
Port 1 
Port 2 



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.444422G	9.11	-20.89	2.307575G	-47.84	2.39728G	-37.64	2.49478G	-41.83	2.52631G	-48.77	1
2.444422G	9.11	-20.89	2.307575G	-50.30	2.396G	-42.35	2.48366G	-43.56	2.540357G	-50.31	2

802.11n HT20_Nss1,(MCS0)_2TX

CSE NdB

2462MHz



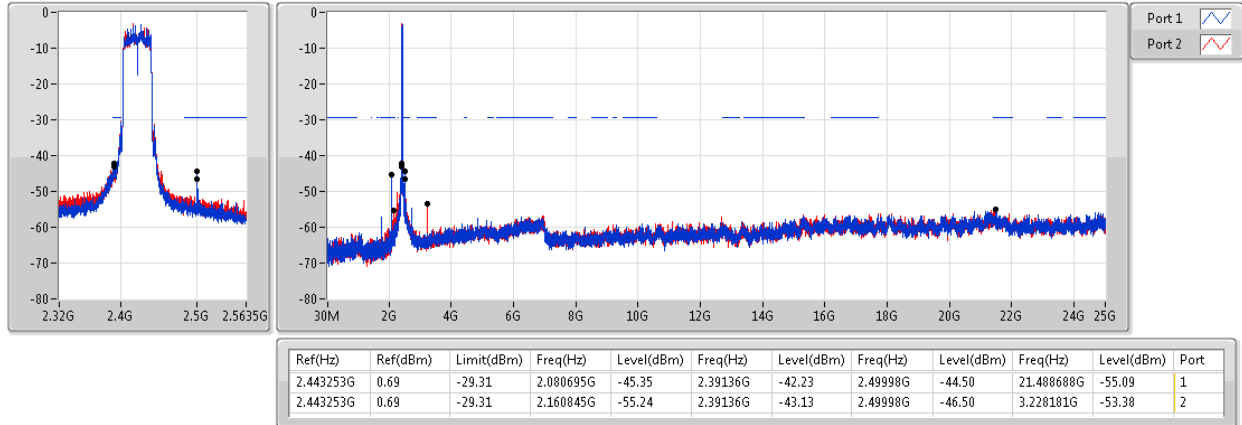
Port 1 
Port 2 

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.444422G	9.11	-20.89	2.160785G	-49.64	2.39464G	-49.07	2.48382G	-36.77	2.540357G	-49.48	1
2.444422G	9.11	-20.89	2.302915G	-54.42	2.39112G	-50.14	2.48454G	-45.18	2.5235G	-52.39	2

802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

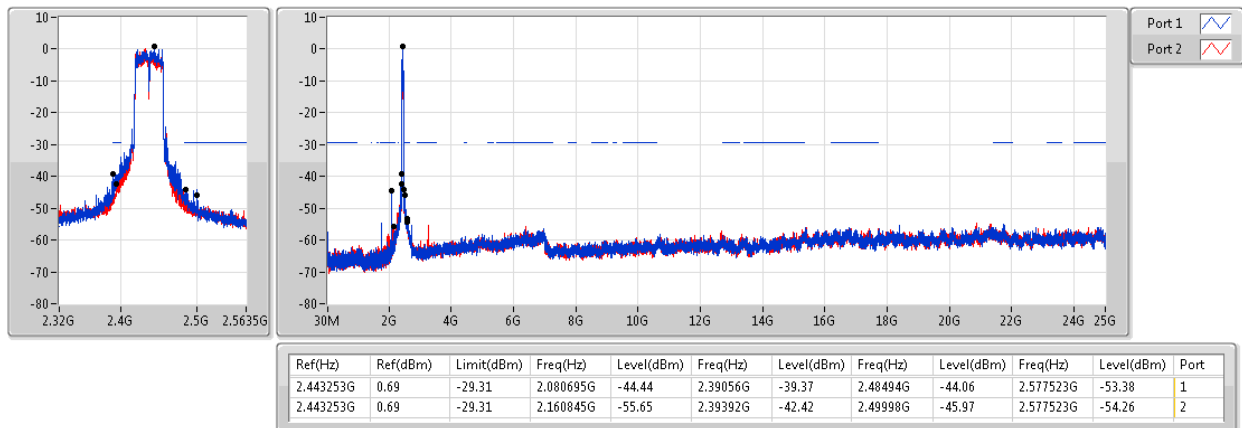
2422MHz



802.11n HT40_Nss1,(MCS0)_2TX

CSE NdB

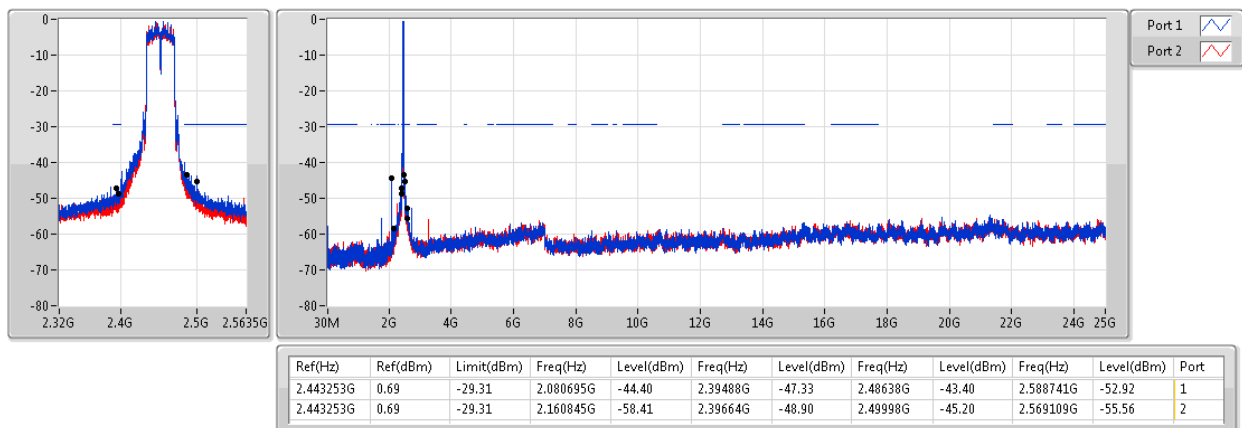
2437MHz

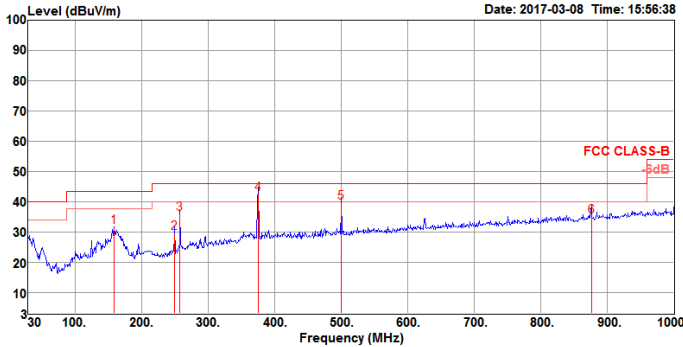


802.11n HT40_Nss1,(MCS0)_2TX

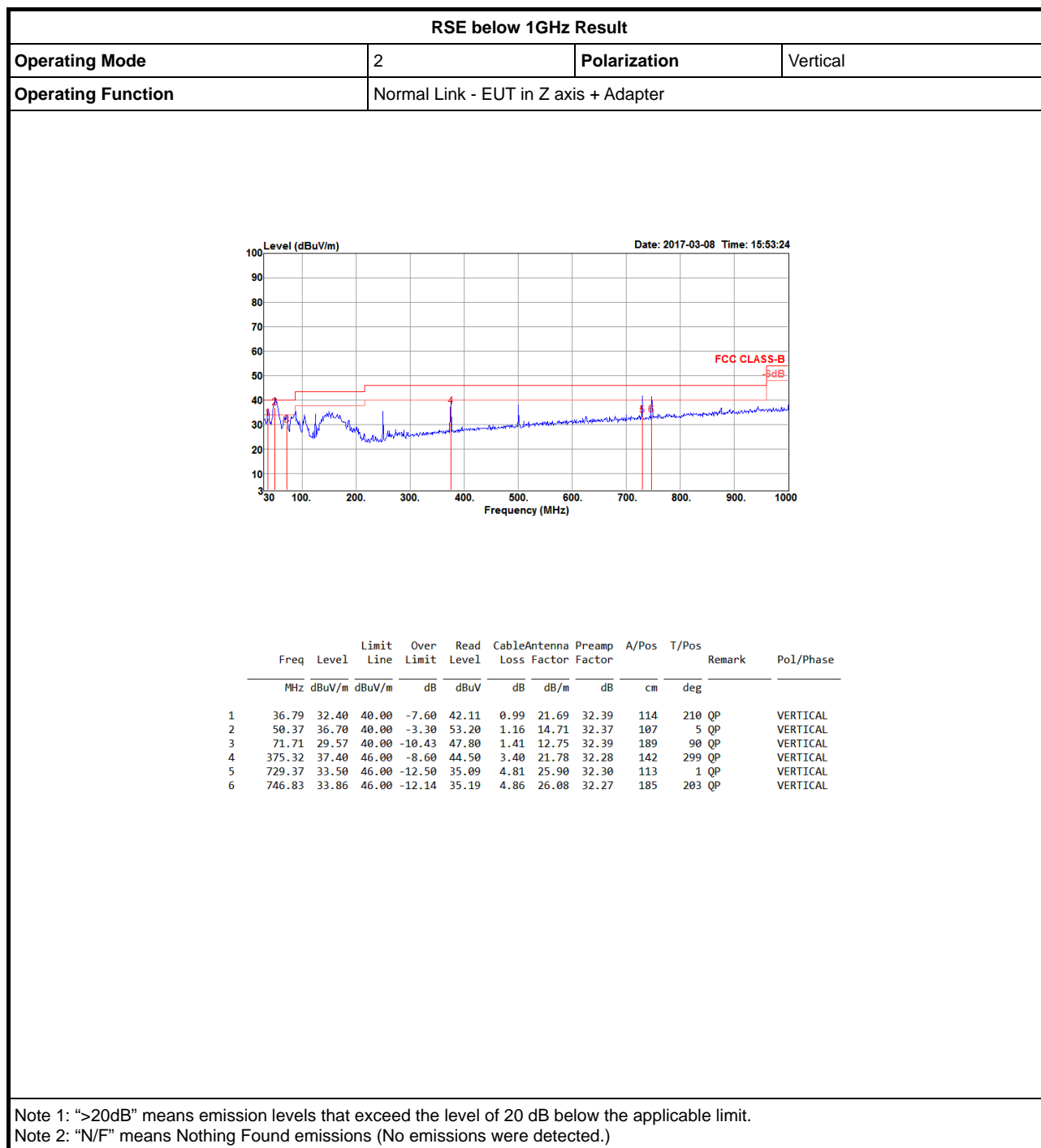
CSE NdB

2452MHz



RSE below 1GHz Result												
Operating Mode			2				Polarization			Horizontal		
Operating Function			Normal Link - EUT in Z axis + Adapter									
<div><div><div><div><div>Level (dBuV/m)</div><div><div>100</div><div>90</div><div>80</div><div>70</div><div>60</div><div>50</div><div>40</div><div>30</div><div>20</div><div>10</div><div>0</div></div></div><div><div>Date: 2017-03-08 Time: 15:56:38</div><div><div>FCC CLASS-B</div><div>5dB</div></div></div><div><div>Frequency (MHz)</div><div>30 100 200 300 400 500 600 700 800 900 1000</div></div></div></div></div>												
	Freq	Level	Limit	Over	Read	CableAntenna		Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	159.01	31.61	43.50	-11.89	45.17	2.16	16.63	32.35	200	194	QP	HORIZONTAL
2	250.19	29.54	46.00	-16.46	40.30	2.74	18.80	32.30	134	161	QP	HORIZONTAL
3	257.95	36.04	46.00	-9.96	46.10	2.79	19.45	32.30	114	308	QP	HORIZONTAL
4	375.32	42.40	46.00	-3.60	49.50	3.40	21.78	32.28	161	4	QP	HORIZONTAL
5	500.45	39.54	46.00	-6.46	44.10	3.96	23.82	32.34	126	13	QP	HORIZONTAL
6	875.84	35.00	46.00	-11.00	34.30	5.30	27.20	31.80	156	123	QP	HORIZONTAL

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

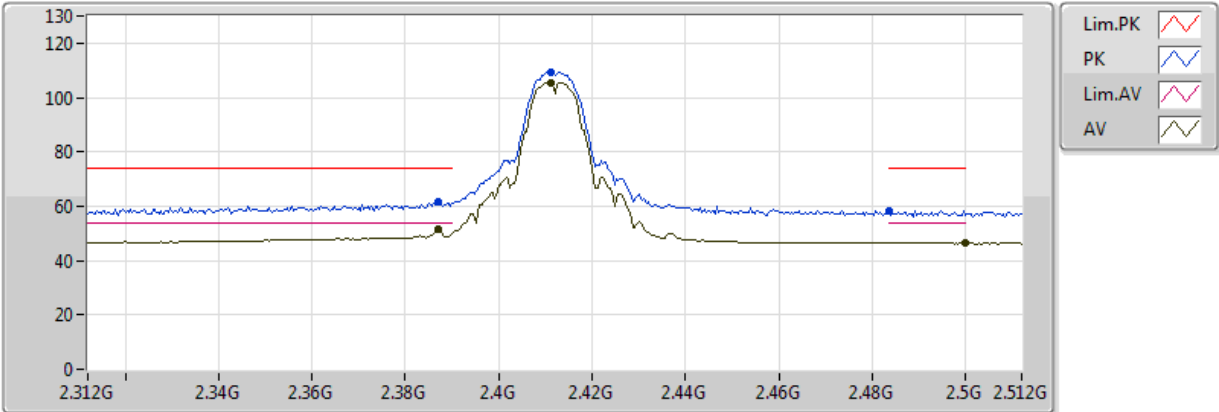


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.39G	53.96	54.00	-0.04	33.16	3	V	334	2.91	-

802.11b_(1Mbps)_1TX

2412MHz_TX

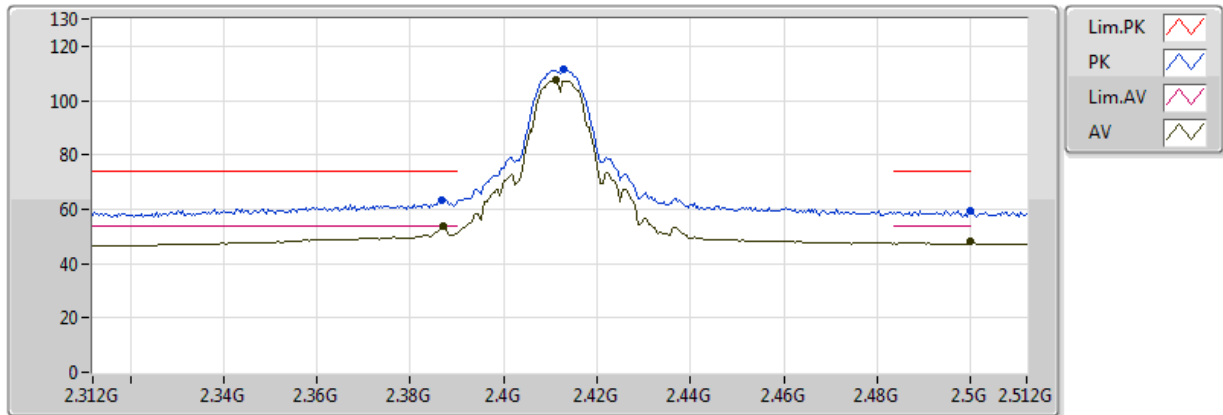


20170112
EUT Y_1TX
Setting:88
06-S-6
FSP

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	51.35	54.00	-2.65	33.15	3	V	299	2.30	-
AV	2.4112G	105.61	Inf	-Inf	33.23	3	V	299	2.30	-
AV	2.5G	46.53	54.00	-7.47	33.54	3	V	299	2.30	-
PK	2.3872G	61.36	74.00	-12.64	33.15	3	V	299	2.30	-
PK	2.4112G	109.45	Inf	-Inf	33.23	3	V	299	2.30	-
PK	2.4836G	58.29	74.00	-15.71	33.48	3	V	299	2.30	-

802.11b_(1Mbps)_1TX

2412MHz_TX

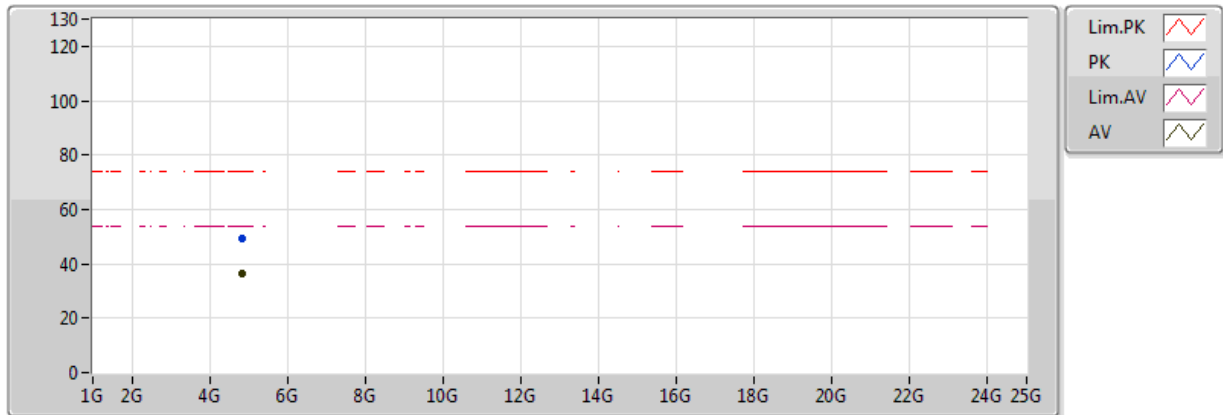


20170112
EUT Y_1TX
Setting:88
06-S-6
FSP

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	53.82	54.00	-0.18	33.15	3	H	8	2.00	-
AV	2.4112G	107.36	Inf	-Inf	33.23	3	H	8	2.00	-
AV	2.5G	48.17	54.00	-5.83	33.54	3	H	8	2.00	-
PK	2.3868G	63.36	74.00	-10.64	33.14	3	H	8	2.00	-
PK	2.4128G	111.30	Inf	-Inf	33.23	3	H	8	2.00	-
PK	2.5G	59.48	74.00	-14.52	33.54	3	H	8	2.00	-

802.11b_(1Mbps)_1TX

2412MHz_TX

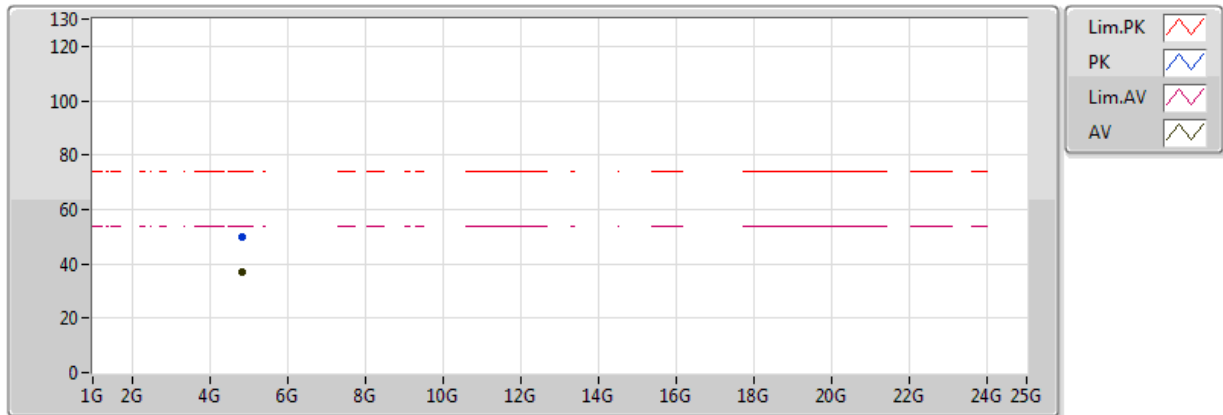


20170112
EUT Y_1TX
Setting:88
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824G	36.59	54.00	-17.41	9.13	3	V	49	1.22	-
PK	4.824G	49.52	74.00	-24.48	9.13	3	V	49	1.22	-

802.11b_(1Mbps)_1TX

2412MHz_TX

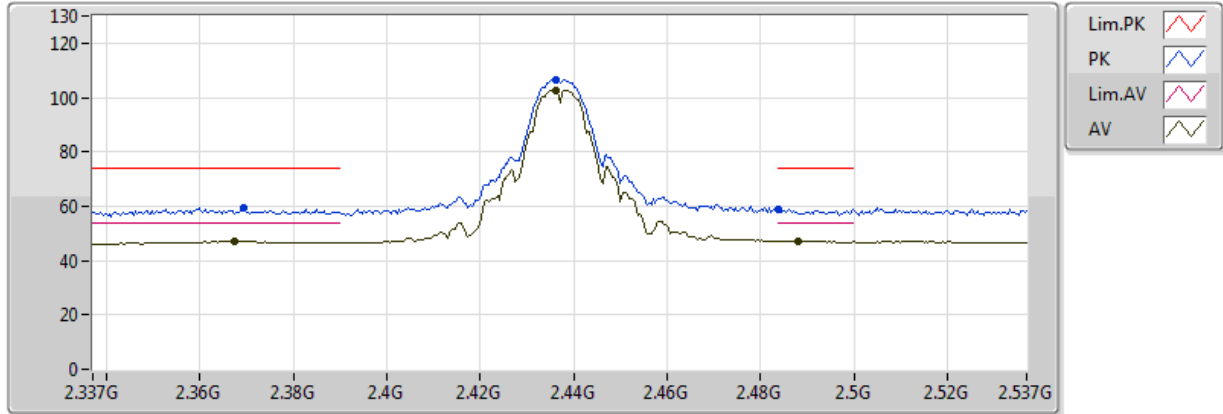


20170112
EUT_Y_1TX
Setting:88
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82388G	36.82	54.00	-17.18	9.13	3	H	45	1.59	-
PK	4.82172G	49.76	74.00	-24.24	9.12	3	H	45	1.59	-

802.11b_(1Mbps)_1TX

2437MHz_TX

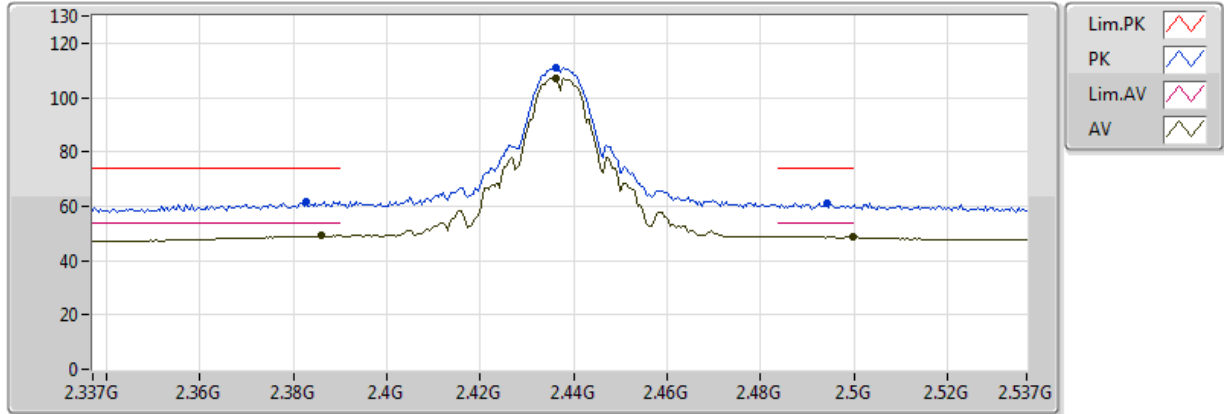


20170112
EUT Y_1TX
Setting:93
06-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3674G	47.02	54.00	-6.98	33.08	3	V	308	2.68	-
AV	2.4362G	102.75	Inf	-Inf	33.32	3	V	308	2.68	-
AV	2.4882G	47.10	54.00	-6.90	33.50	3	V	308	2.68	-
PK	2.3694G	59.37	74.00	-14.63	33.08	3	V	308	2.68	-
PK	2.4362G	106.63	Inf	-Inf	33.32	3	V	308	2.68	-
PK	2.4838G	59.08	74.00	-14.92	33.48	3	V	308	2.68	-

802.11b_(1Mbps)_1TX

2437MHz_TX

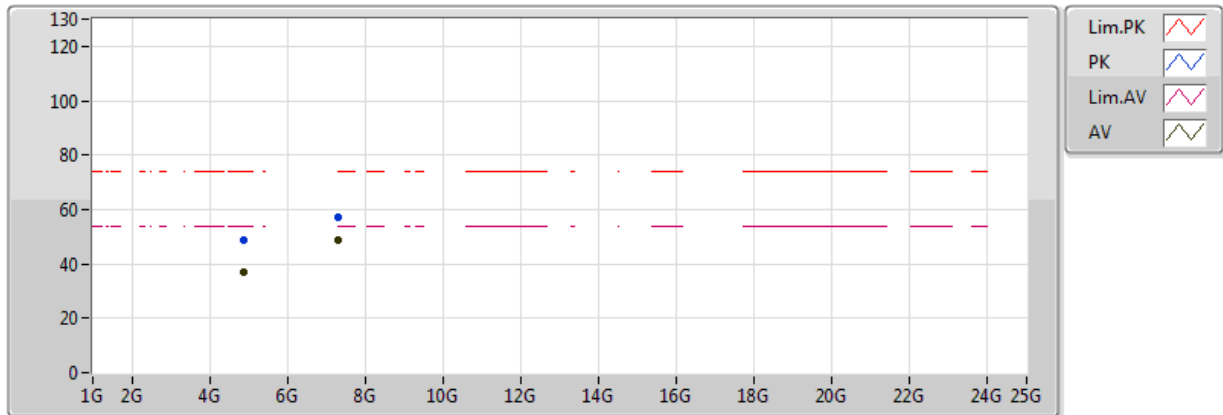


20170112
EUT Y_1TX
Setting:93
06-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3858G	49.21	54.00	-4.79	33.14	3	H	8	1.78	-
AV	2.4362G	107.08	Inf	-Inf	33.32	3	H	8	1.78	-
AV	2.4998G	48.80	54.00	-5.20	33.54	3	H	8	1.78	-
PK	2.3826G	61.62	74.00	-12.38	33.13	3	H	8	1.78	-
PK	2.4362G	110.96	Inf	-Inf	33.32	3	H	8	1.78	-
PK	2.4942G	61.22	74.00	-12.78	33.52	3	H	8	1.78	-

802.11b_(1Mbps)_1TX

2437MHz_TX

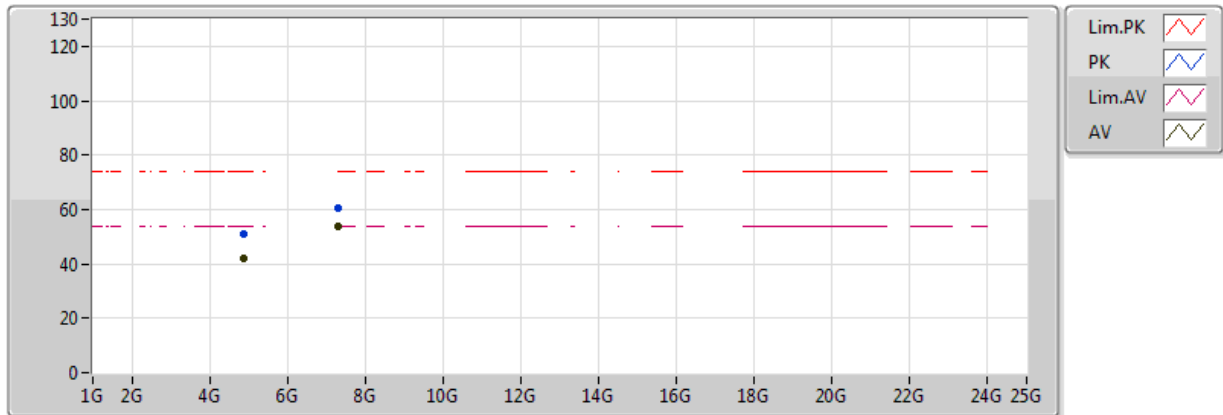


20170112
EUT Y_1TX
Setting:93
06-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	7.3101G	48.72	54.00	-5.28	14.51	3	V	200	1.52	-
PK	7.30986G	57.03	74.00	-16.97	14.51	3	V	200	1.52	-
AV	4.87398G	37.05	54.00	-16.95	9.25	3	V	41	1.65	-
PK	4.8753G	48.50	74.00	-25.50	9.26	3	V	41	1.65	-

802.11b_(1Mbps)_1TX

2437MHz_TX

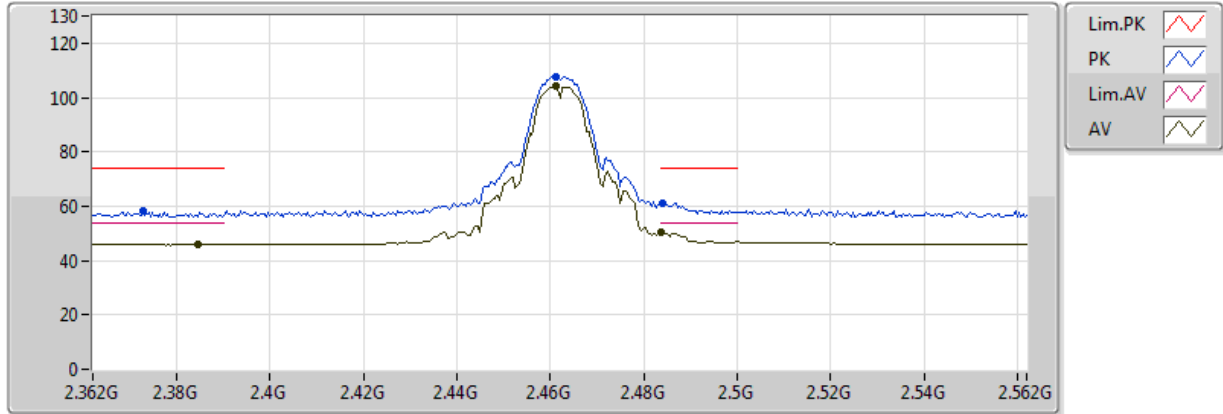


20170112
EUT_Y_1TX
Setting:93
06-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87392G	41.84	54.00	-12.16	9.25	3	H	172	1.72	-
PK	4.874G	51.07	74.00	-22.93	9.25	3	H	172	1.72	-
AV	7.31016G	53.69	54.00	-0.31	14.51	3	H	140	1.54	-
PK	7.31154G	60.44	74.00	-13.56	14.51	3	H	140	1.54	-

802.11b_(1Mbps)_1TX

2462MHz_TX

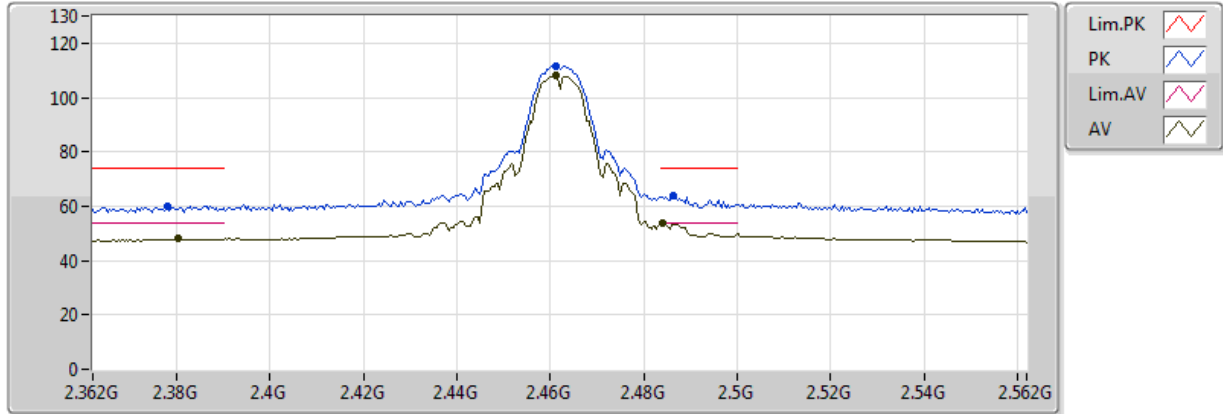


20170112
EUT Y_1TX
Setting:93
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3844G	45.93	54.00	-8.07	33.14	3	V	359	2.61	-
AV	2.4612G	104.01	Inf	-Inf	33.40	3	V	359	2.61	-
AV	2.4836G	50.50	54.00	-3.50	33.48	3	V	359	2.61	-
PK	2.3728G	58.12	74.00	-15.88	33.09	3	V	359	2.61	-
PK	2.4612G	107.86	Inf	-Inf	33.40	3	V	359	2.61	-
PK	2.484G	60.89	74.00	-13.11	33.48	3	V	359	2.61	-

802.11b_(1Mbps)_1TX

2462MHz_TX

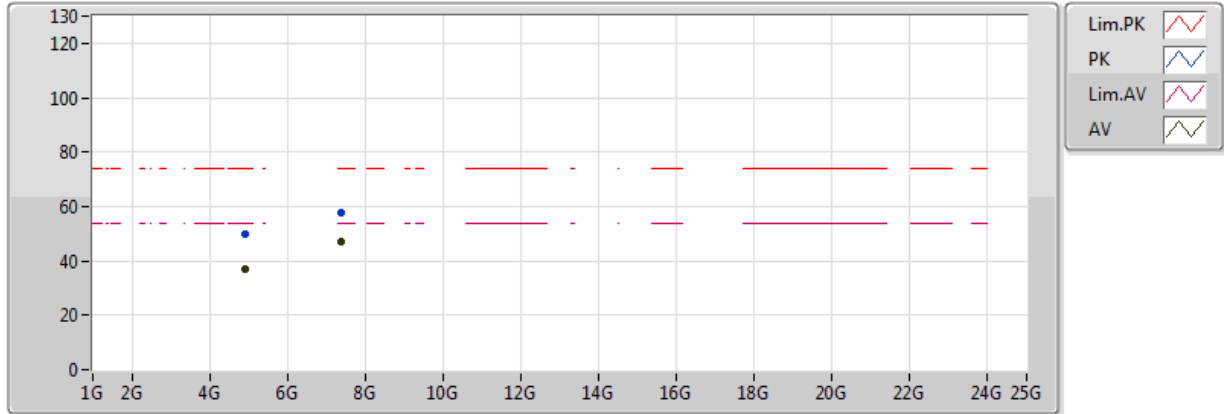


20170112
EUT Y_1TX
Setting:93
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3804G	47.92	54.00	-6.08	33.12	3	H	6	1.94	-
AV	2.4612G	107.88	Inf	-Inf	33.40	3	H	6	1.94	-
AV	2.484G	53.85	54.00	-0.15	33.48	3	H	6	1.94	-
PK	2.378G	60.04	74.00	-13.96	33.11	3	H	6	1.94	-
PK	2.4612G	111.68	Inf	-Inf	33.40	3	H	6	1.94	-
PK	2.4864G	63.62	74.00	-10.38	33.49	3	H	6	1.94	-

802.11b_(1Mbps)_1TX

2462MHz_TX

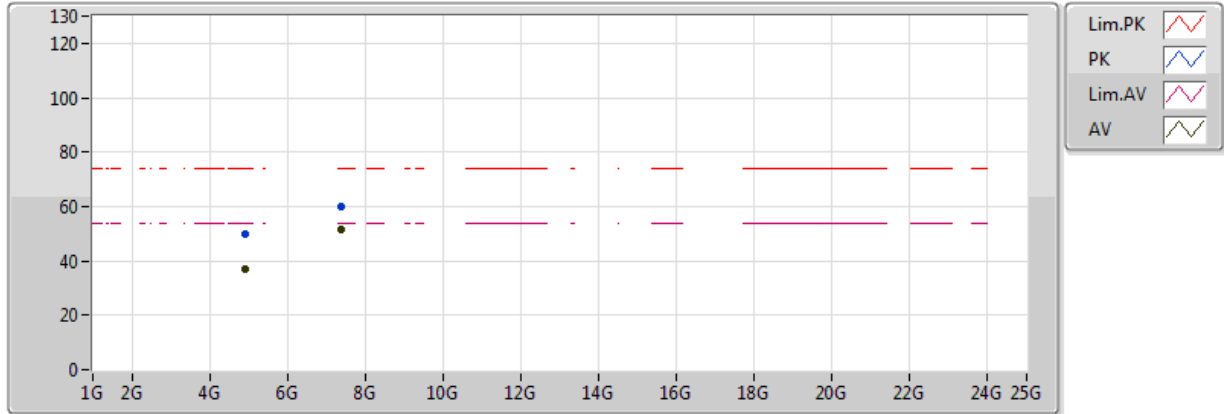


20170112
EUT_Y_1TX
Setting:93
06-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92386G	37.04	54.00	-16.96	9.38	3	V	307	2.02	-
PK	4.92381G	49.87	74.00	-24.13	9.38	3	V	307	2.02	-
AV	7.38666G	46.91	54.00	-7.09	14.66	3	V	195	1.40	-
PK	7.3845G	57.51	74.00	-16.49	14.66	3	V	195	1.40	-

802.11b_(1Mbps)_1TX

2462MHz_TX

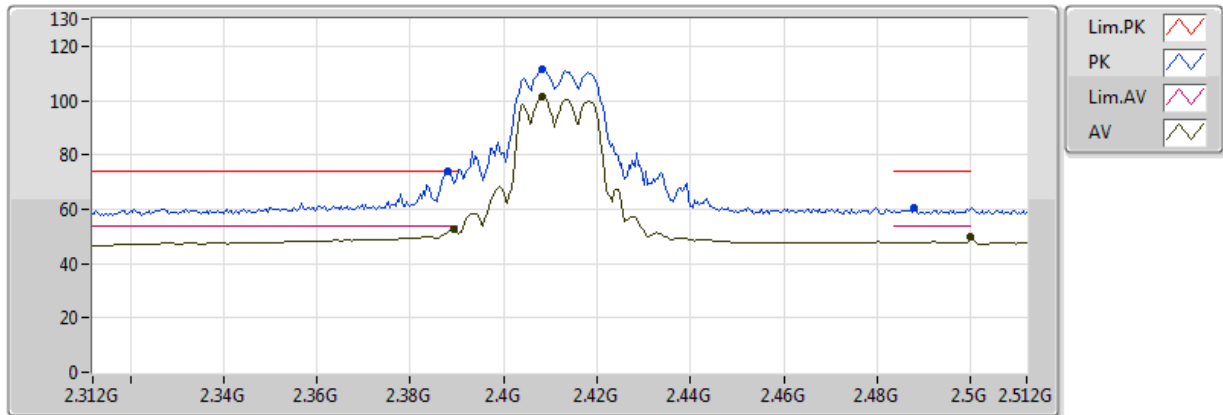


20170112
EUT_Y_1TX
Setting:93
06-P-2
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92386G	36.97	54.00	-17.03	9.38	3	H	175	1.50	-
PK	4.92365G	49.87	74.00	-24.13	9.38	3	H	175	1.50	-
AV	7.38514G	51.35	54.00	-2.65	14.66	3	H	143	1.50	-
PK	7.3869G	59.92	74.00	-14.08	14.66	3	H	143	1.50	-

802.11g_(6Mbps)_2TX

2412MHz_TX

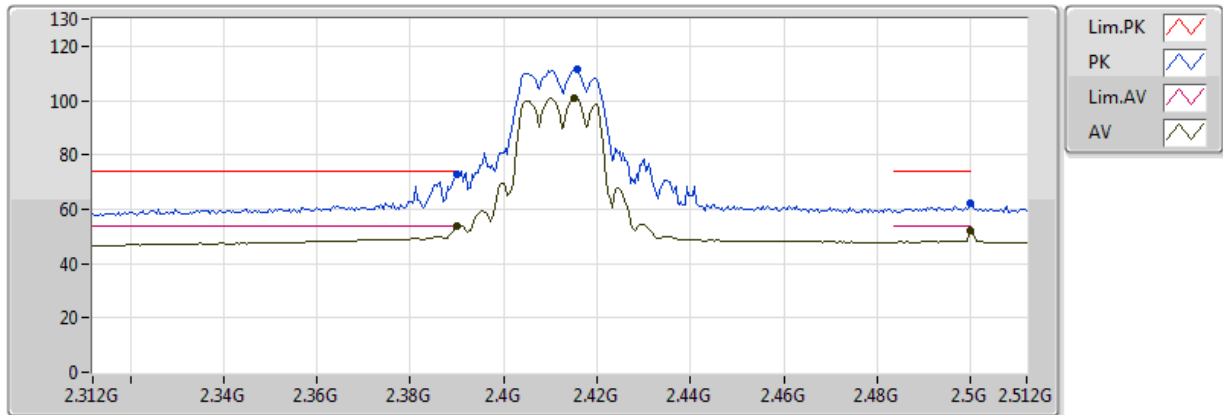


20170109
EUT Y_2TX
Setting:63
06-J-4
FSP

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	52.52	54.00	-1.48	33.15	3	V	334	2.90	-
AV	2.4084G	101.28	Inf	-Inf	33.22	3	V	334	2.90	-
AV	2.5G	49.81	54.00	-4.19	33.54	3	V	334	2.90	-
PK	2.388G	73.72	74.00	-0.28	33.15	3	V	334	2.90	-
PK	2.4084G	111.66	Inf	-Inf	33.22	3	V	334	2.90	-
PK	2.488G	60.35	74.00	-13.65	33.50	3	V	334	2.90	-

802.11g_(6Mbps)_2TX

2412MHz_TX

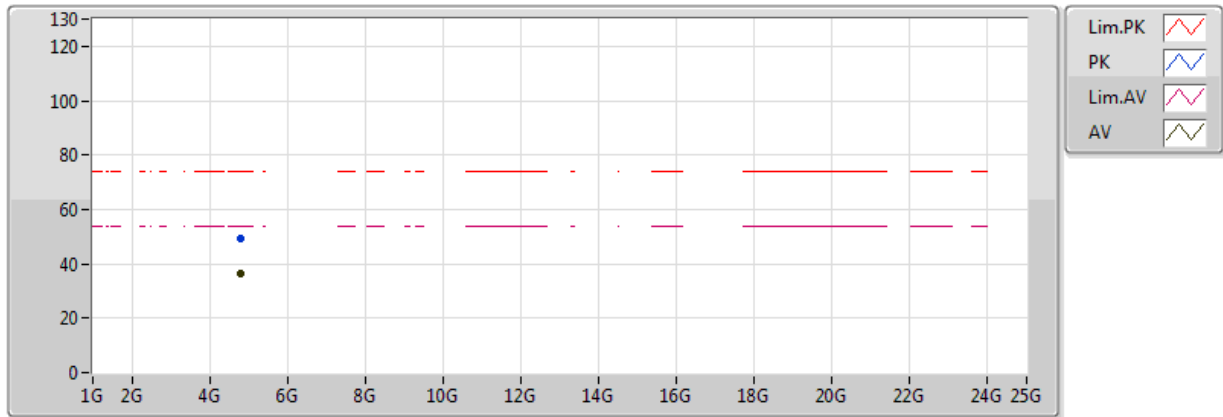


20170109
EUT Y_2TX
Setting:63
06-J-4
FSP

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	53.67	54.00	-0.33	33.16	3	H	16	2.10	-
AV	2.4152G	100.87	Inf	-Inf	33.24	3	H	16	2.10	-
AV	2.5G	52.21	54.00	-1.79	33.54	3	H	16	2.10	-
PK	2.39G	72.82	74.00	-1.18	33.16	3	H	16	2.10	-
PK	2.4156G	111.46	Inf	-Inf	33.24	3	H	16	2.10	-
PK	2.5G	62.06	74.00	-11.94	33.54	3	H	16	2.10	-

802.11g_(6Mbps)_2TX

2412MHz_TX

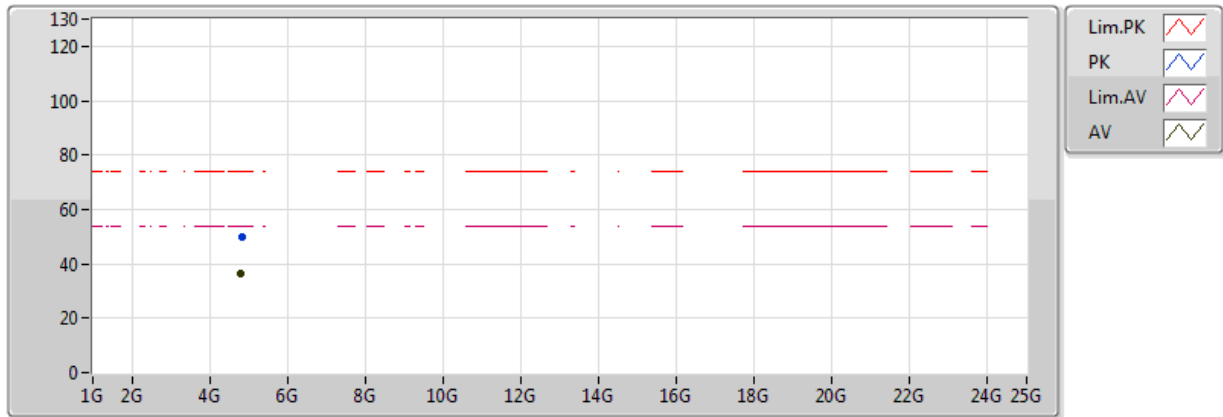


20170109
EUT Y_2TX
Setting:63
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.81122G	36.47	54.00	-17.53	9.10	3	V	95	1.46	-
PK	4.81188G	49.54	74.00	-24.46	9.10	3	V	95	1.46	-

802.11g_(6Mbps)_2TX

2412MHz_TX

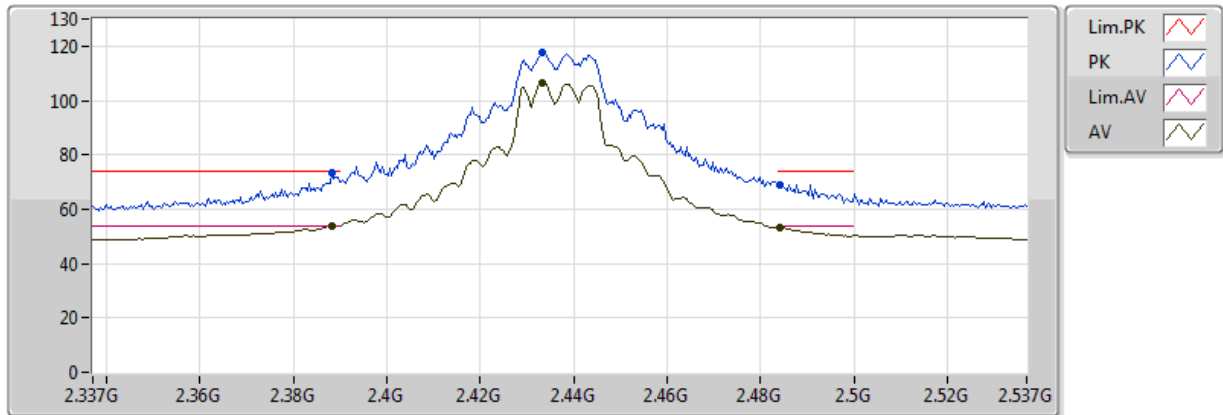


20170109
EUT Y_2TX
Setting:63
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.81494G	36.44	54.00	-17.56	9.11	3	H	234	2.19	-
PK	4.82352G	49.80	74.00	-24.20	9.13	3	H	234	2.19	-

802.11g_(6Mbps)_2TX

2437MHz_TX

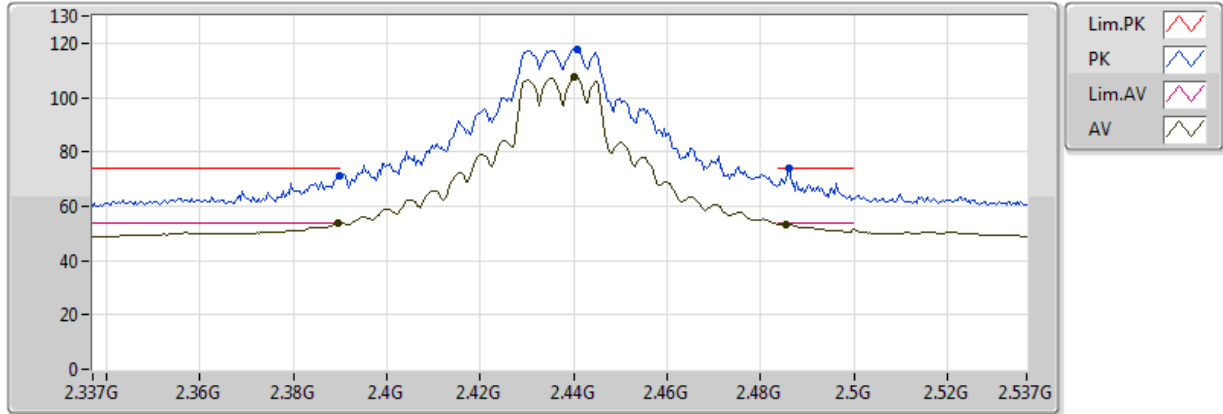


20170109
EUT_Y_2TX
Setting:90
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3882G	53.95	54.00	-0.05	33.15	3	V	345	2.88	-
AV	2.4334G	106.51	Inf	-Inf	33.31	3	V	345	2.88	-
AV	2.4842G	53.28	54.00	-0.72	33.48	3	V	345	2.88	-
PK	2.3882G	73.15	74.00	-0.85	33.15	3	V	345	2.88	-
PK	2.4334G	117.50	Inf	-Inf	33.31	3	V	345	2.88	-
PK	2.4842G	69.03	74.00	-4.97	33.48	3	V	345	2.88	-

802.11g_(6Mbps)_2TX

2437MHz_TX

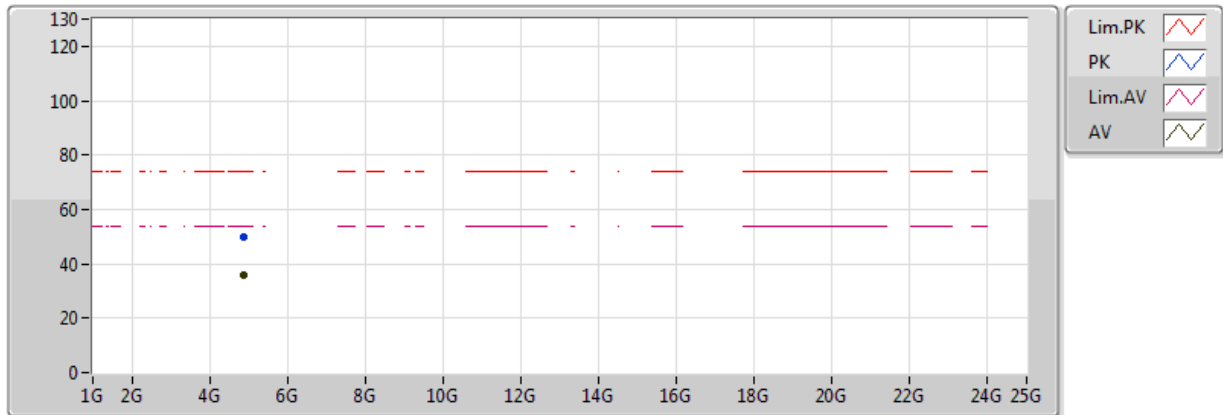


20170109
EUT Y_2TX
Setting:90
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	53.68	54.00	-0.32	33.15	3	H	12	2.30	-
AV	2.4402G	107.53	Inf	-Inf	33.33	3	H	12	2.30	-
AV	2.4854G	53.50	54.00	-0.50	33.49	3	H	12	2.30	-
PK	2.3898G	71.31	74.00	-2.69	33.15	3	H	12	2.30	-
PK	2.4406G	117.87	Inf	-Inf	33.33	3	H	12	2.30	-
PK	2.4862G	73.73	74.00	-0.27	33.49	3	H	12	2.30	-

802.11g_(6Mbps)_2TX

2437MHz_TX

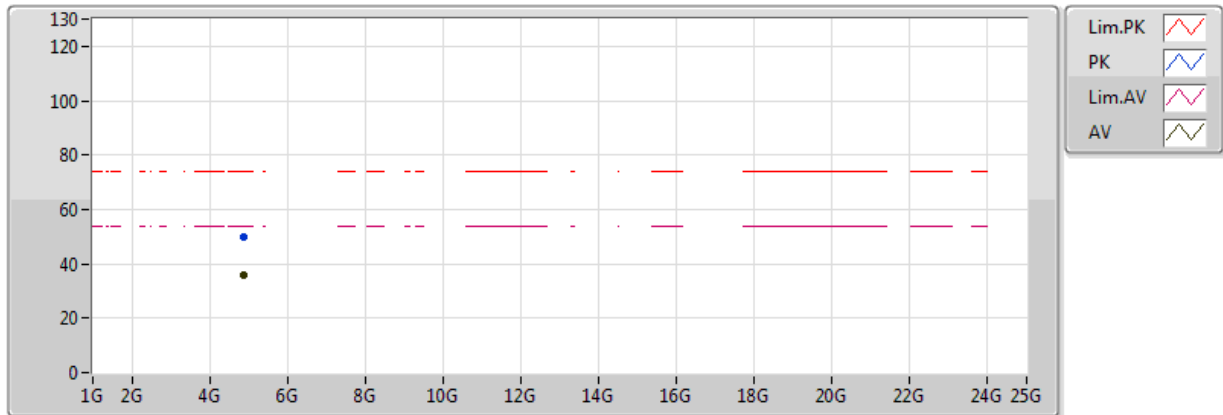


201701113
EUT Y_2TX
Setting:90
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87028G	35.68	54.00	-18.32	9.25	3	V	345	2.08	-
PK	4.87442G	50.00	74.00	-24.00	9.26	3	V	345	2.08	-

802.11g_(6Mbps)_2TX

2437MHz_TX

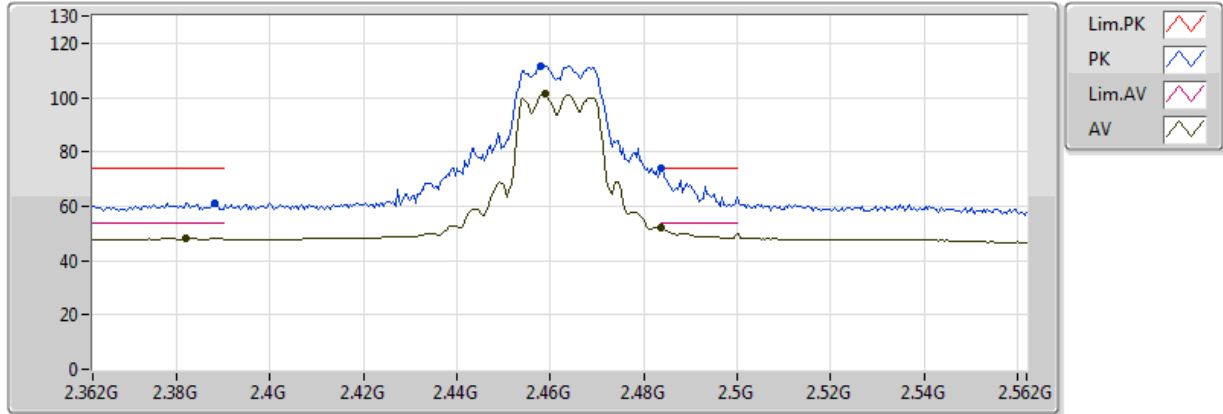


201701113
EUT_Y_2TX
Setting:90
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87394G	35.74	54.00	-18.26	9.25	3	H	95	1.99	-
PK	4.88486G	49.79	74.00	-24.21	9.28	3	H	95	1.99	-

802.11g_(6Mbps)_2TX

2462MHz_TX

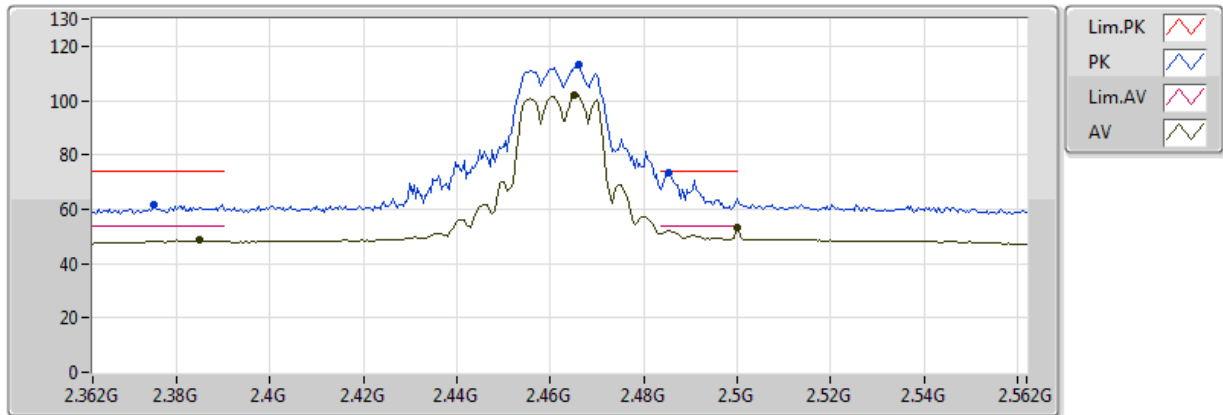


20170109
EUT Y_2TX
Setting:67
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.382G	48.41	54.00	-5.59	33.13	3	V	345	2.80	-
AV	2.4588G	101.18	Inf	-Inf	33.40	3	V	345	2.80	-
AV	2.4836G	52.10	54.00	-1.90	33.48	3	V	345	2.80	-
PK	2.388G	60.93	74.00	-13.07	33.15	3	V	345	2.80	-
PK	2.458G	111.67	Inf	-Inf	33.39	3	V	345	2.80	-
PK	2.4836G	73.95	74.00	-0.05	33.48	3	V	345	2.80	-

802.11g_(6Mbps)_2TX

2462MHz_TX

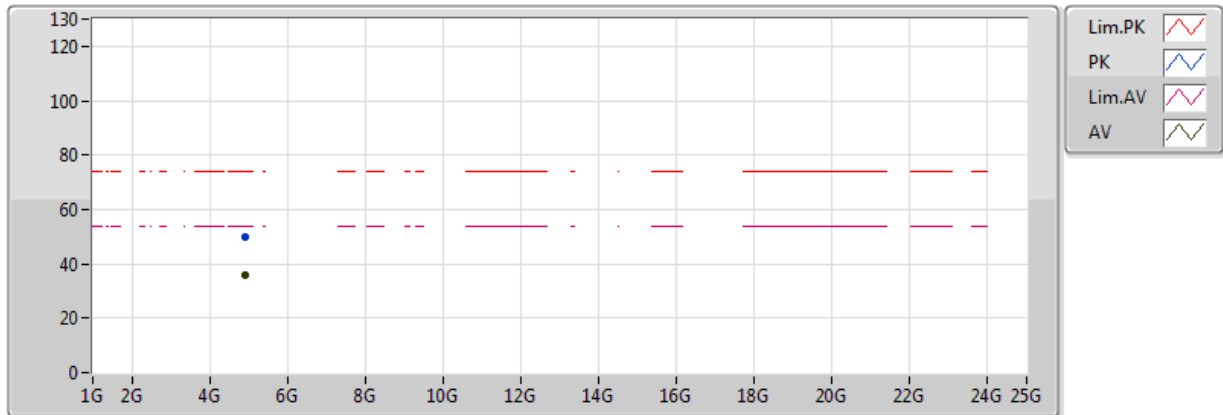


20170109
EUT Y_2TX
Setting:67
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3848G	48.57	54.00	-5.43	33.14	3	H	22	2.24	-
AV	2.4652G	101.96	Inf	-Inf	33.42	3	H	22	2.24	-
AV	2.5G	52.97	54.00	-1.03	33.54	3	H	22	2.24	-
PK	2.3752G	61.63	74.00	-12.37	33.10	3	H	22	2.24	-
PK	2.466G	113.19	Inf	-Inf	33.42	3	H	22	2.24	-
PK	2.4852G	73.49	74.00	-0.51	33.49	3	H	22	2.24	-

802.11g_(6Mbps)_2TX

2462MHz_TX

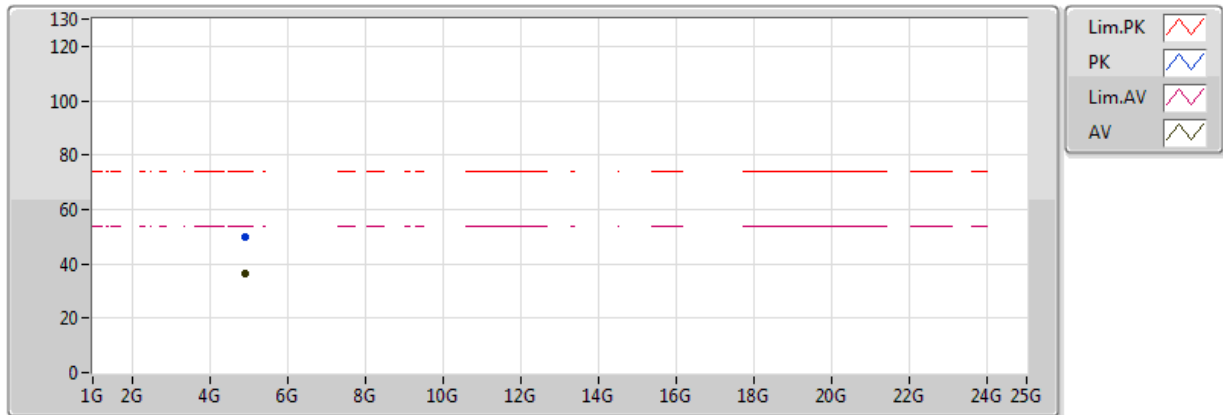


201701113
EUT Y_2TX
Setting:67
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92862G	36.05	54.00	-17.95	9.39	3	V	230	2.36	-
PK	4.92766G	50.03	74.00	-23.97	9.39	3	V	230	2.36	-

802.11g_(6Mbps)_2TX

2462MHz_TX

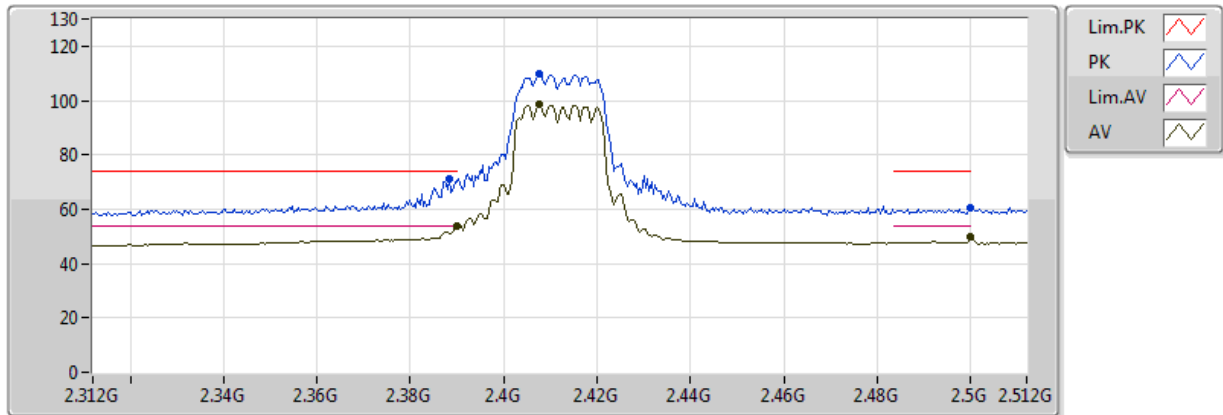


201701113
EUT Y_2TX
Setting:67
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.93G	36.52	54.00	-17.48	9.39	3	H	157	2.42	-
PK	4.9291G	49.76	74.00	-24.24	9.39	3	H	157	2.42	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

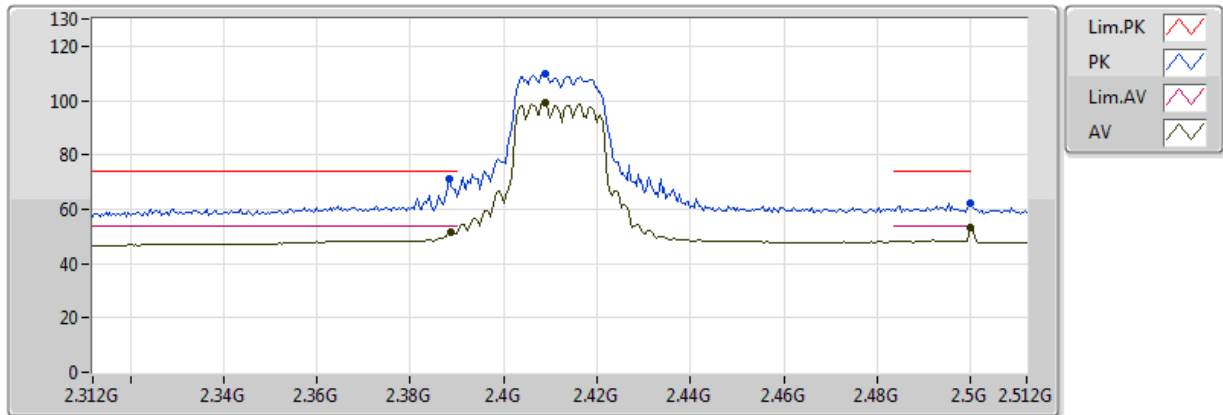


20170109
EUT Y_2TX
Setting:57
06-J-4
FSP

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	53.96	54.00	-0.04	33.16	3	V	334	2.91	-
AV	2.4076G	98.81	Inf	-Inf	33.22	3	V	334	2.91	-
AV	2.5G	49.65	54.00	-4.35	33.54	3	V	334	2.91	-
PK	2.3884G	71.09	74.00	-2.91	33.15	3	V	334	2.91	-
PK	2.4076G	109.96	Inf	-Inf	33.22	3	V	334	2.91	-
PK	2.5G	60.31	74.00	-13.69	33.54	3	V	334	2.91	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

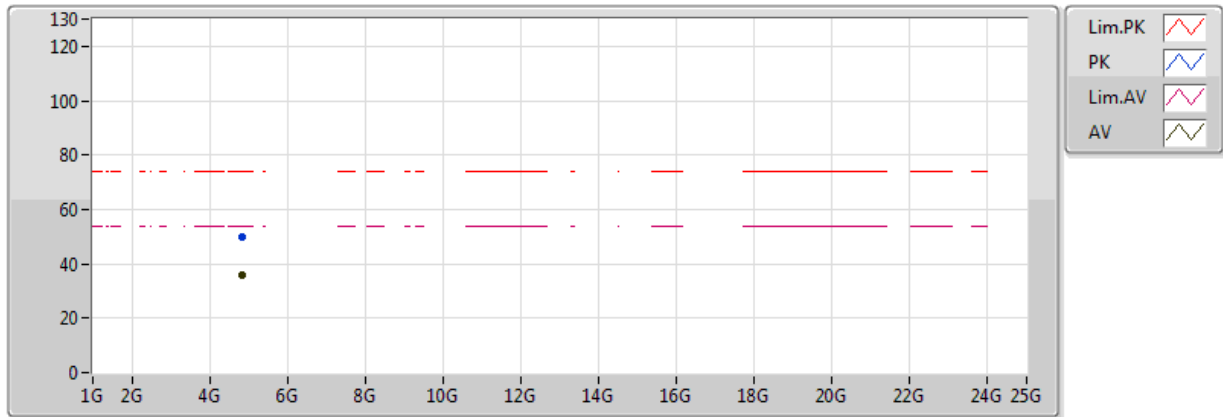


20170109
EUT Y_2TX
Setting:57
06-J-4
FSP

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	51.81	54.00	-2.19	33.15	3	H	26	2.07	-
AV	2.4088G	99.24	Inf	-Inf	33.22	3	H	26	2.07	-
AV	2.5G	53.11	54.00	-0.89	33.54	3	H	26	2.07	-
PK	2.3884G	71.03	74.00	-2.97	33.15	3	H	26	2.07	-
PK	2.4088G	109.59	Inf	-Inf	33.22	3	H	26	2.07	-
PK	2.5G	62.36	74.00	-11.64	33.54	3	H	26	2.07	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

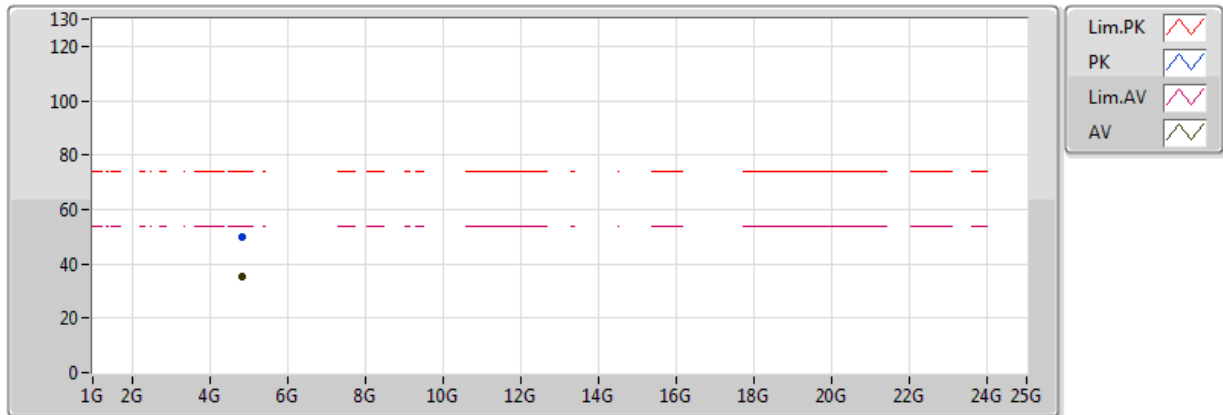


201701113
EUT Y_2TX
Setting:57
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.83576G	35.99	54.00	-18.01	9.16	3	V	76	1.62	-
PK	4.82022G	49.97	74.00	-24.03	9.12	3	V	76	1.62	-

802.11n HT20_Nss1,(MCS0)_2TX

2412MHz_TX

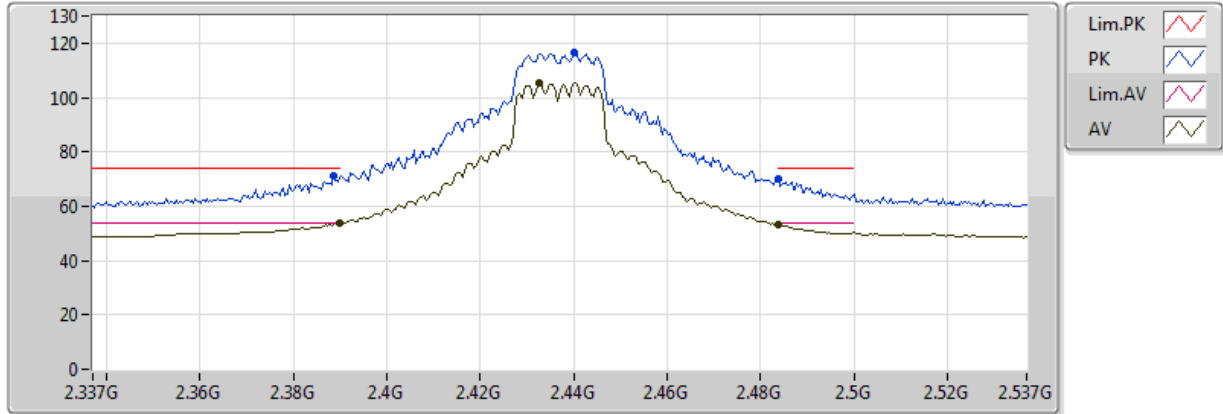


201701113
EUT Y_2TX
Setting:57
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.83336G	35.42	54.00	-18.58	9.15	3	H	340	1.56	-
PK	4.83846G	49.83	74.00	-24.17	9.17	3	H	340	1.56	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

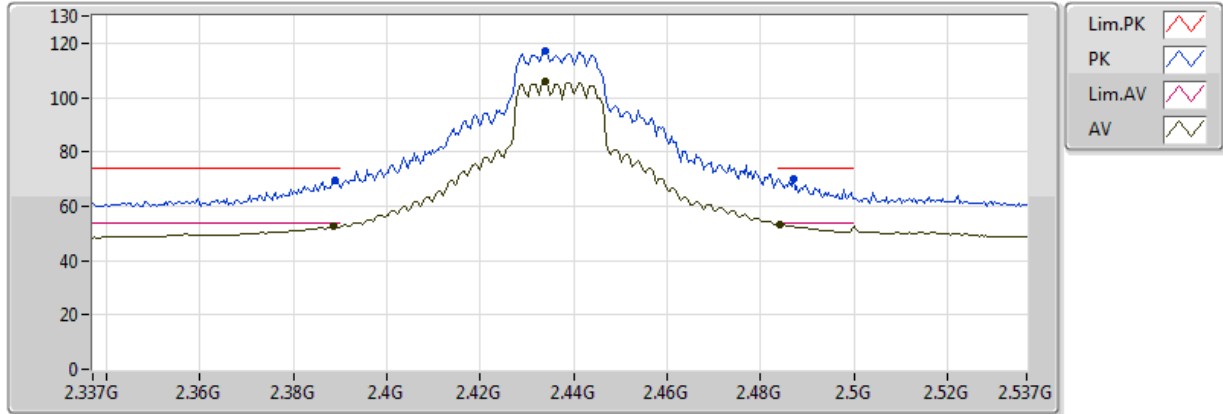


20170109
EUT Y_2TX
Setting:85
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	53.91	54.00	-0.09	33.15	3	V	346	2.84	-
AV	2.4326G	105.22	Inf	-Inf	33.30	3	V	346	2.84	-
AV	2.4838G	53.03	54.00	-0.97	33.48	3	V	346	2.84	-
PK	2.3886G	70.89	74.00	-3.11	33.15	3	V	346	2.84	-
PK	2.4402G	116.39	Inf	-Inf	33.33	3	V	346	2.84	-
PK	2.4838G	70.26	74.00	-3.74	33.48	3	V	346	2.84	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

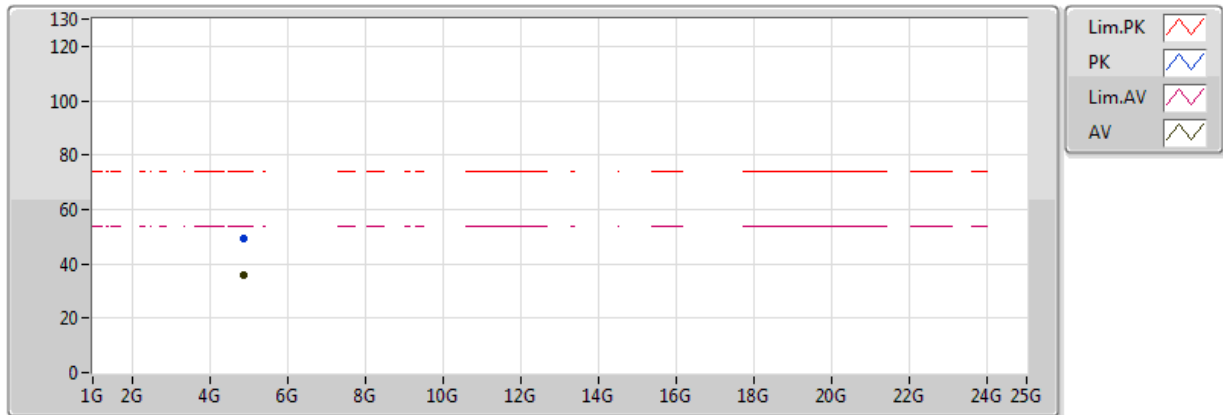


20170109
EUT Y_2TX
Setting:85
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3886G	52.50	54.00	-1.50	33.15	3	H	35	2.26	-
AV	2.4338G	105.94	Inf	-Inf	33.31	3	H	35	2.26	-
AV	2.4842G	53.47	54.00	-0.53	33.48	3	H	35	2.26	-
PK	2.389G	69.46	74.00	-4.54	33.15	3	H	35	2.26	-
PK	2.4338G	117.23	Inf	-Inf	33.31	3	H	35	2.26	-
PK	2.487G	69.95	74.00	-4.05	33.49	3	H	35	2.26	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

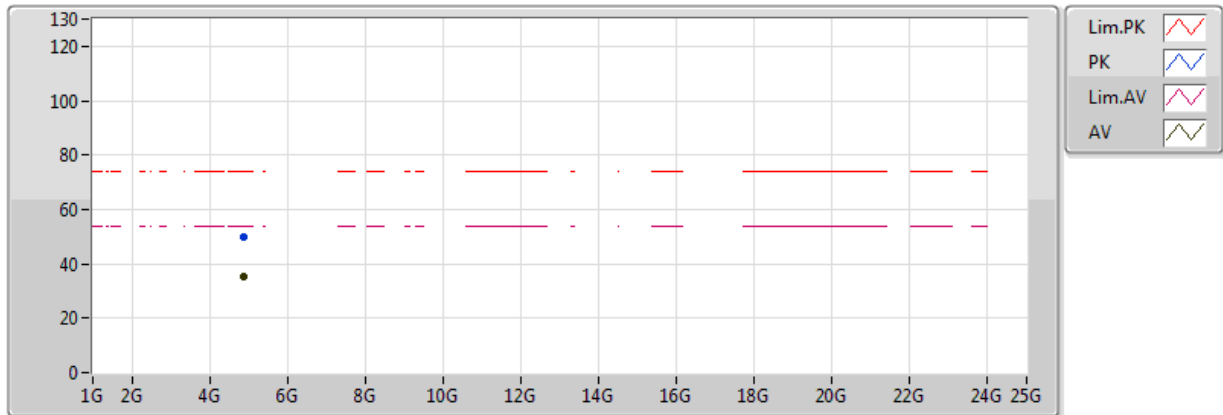


201701113
EUT Y_2TX
Setting:85
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87016G	35.86	54.00	-18.14	9.25	3	V	236	1.20	-
PK	4.87172G	49.25	74.00	-24.75	9.25	3	V	236	1.20	-

802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX

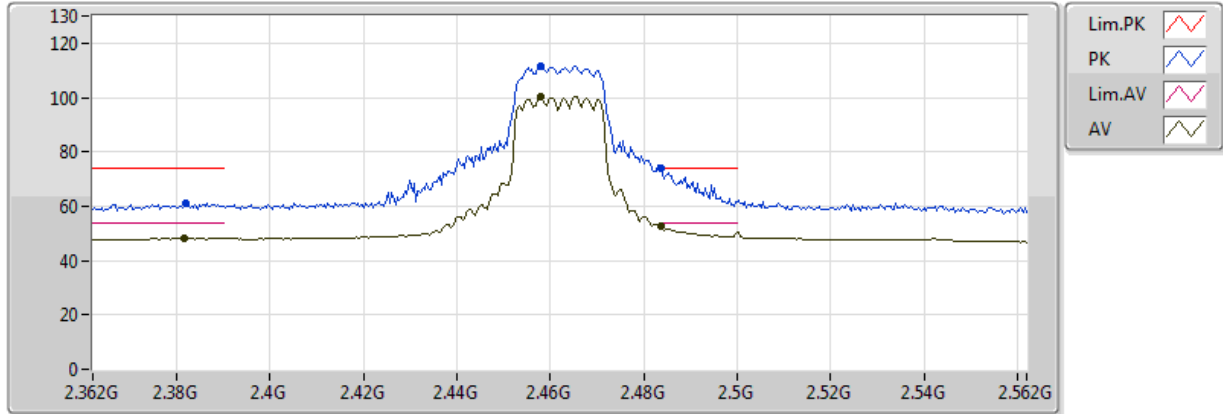


201701113
EUT Y_2TX
Setting:85
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87128G	35.47	54.00	-18.53	9.25	3	H	145	1.81	-
PK	4.87298G	50.00	74.00	-24.00	9.25	3	H	145	1.81	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

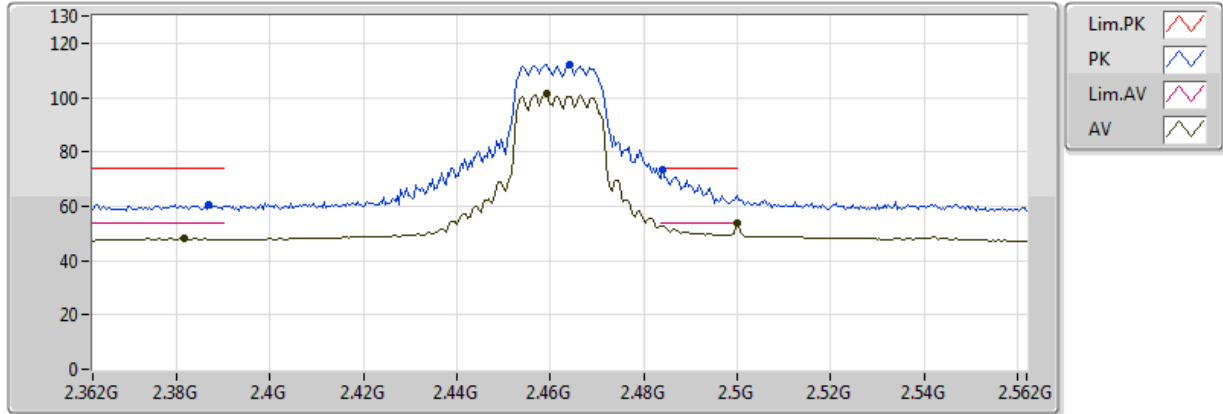


20170109
EUT Y_2TX
Setting:65
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3816G	48.37	54.00	-5.63	33.13	3	V	349	2.80	-
AV	2.458G	100.36	Inf	-Inf	33.39	3	V	349	2.80	-
AV	2.4836G	52.47	54.00	-1.53	33.48	3	V	349	2.80	-
PK	2.382G	61.34	74.00	-12.66	33.13	3	V	349	2.80	-
PK	2.458G	111.40	Inf	-Inf	33.39	3	V	349	2.80	-
PK	2.4836G	73.86	74.00	-0.14	33.48	3	V	349	2.80	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

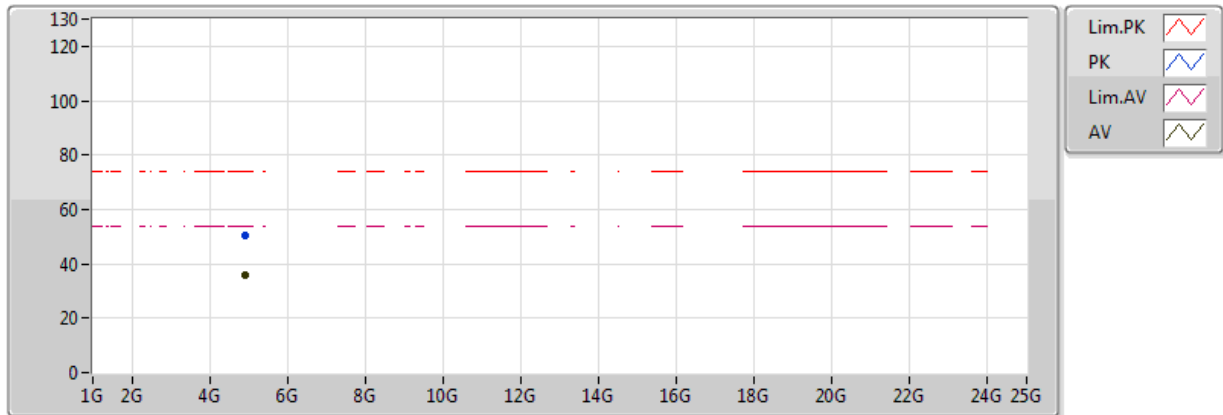


20170109
EUT Y_2TX
Setting:65
06-J-4
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3816G	48.08	54.00	-5.92	33.13	3	H	40	2.46	-
AV	2.4592G	101.17	Inf	-Inf	33.40	3	H	40	2.46	-
AV	2.5G	53.94	54.00	-0.06	33.54	3	H	40	2.46	-
PK	2.3868G	60.46	74.00	-13.54	33.14	3	H	40	2.46	-
PK	2.464G	112.04	Inf	-Inf	33.41	3	H	40	2.46	-
PK	2.484G	73.60	74.00	-0.40	33.48	3	H	40	2.46	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

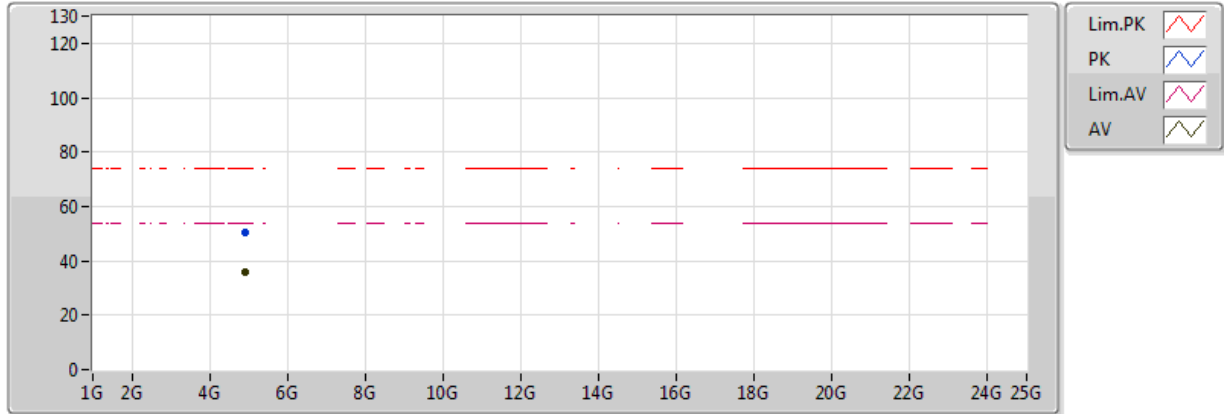


201701113
EUT Y_2TX
Setting:65
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92854G	35.92	54.00	-18.08	9.39	3	V	137	1.03	-
PK	4.92586G	50.20	74.00	-23.80	9.38	3	V	137	1.03	-

802.11n HT20_Nss1,(MCS0)_2TX

2462MHz_TX

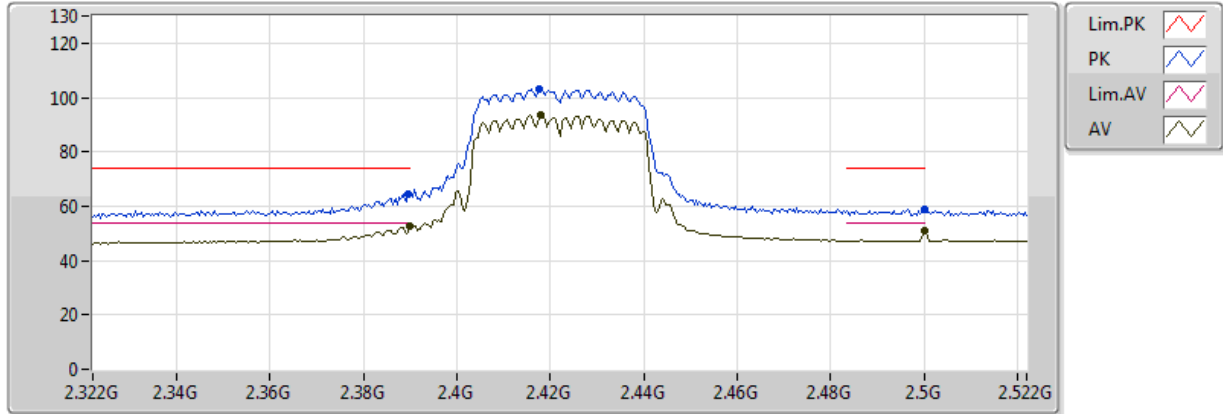


201701113
EUT Y_2TX
Setting:65
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92854G	35.89	54.00	-18.11	9.39	3	H	10	2.29	-
PK	4.92618G	50.58	74.00	-23.42	9.39	3	H	10	2.29	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

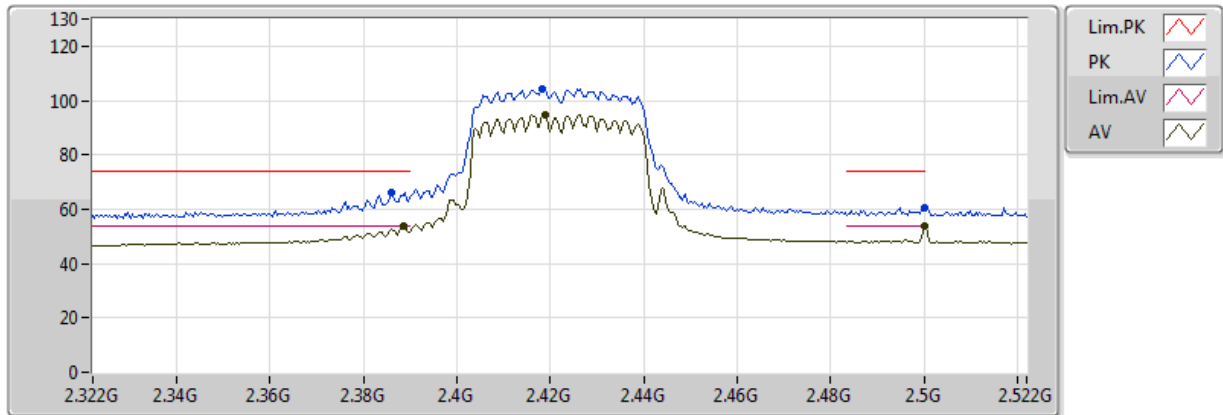


20170112
EUT Y_2TX
Setting:48
06-S-6
FSP

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	52.50	54.00	-1.50	33.16	3	V	0	2.99	-
AV	2.418G	93.56	Inf	-Inf	33.25	3	V	0	2.99	-
AV	2.5G	50.88	54.00	-3.12	33.54	3	V	0	2.99	-
PK	2.3896G	64.62	74.00	-9.38	33.15	3	V	0	2.99	-
PK	2.4176G	103.18	Inf	-Inf	33.25	3	V	0	2.99	-
PK	2.5G	58.92	74.00	-15.08	33.54	3	V	0	2.99	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

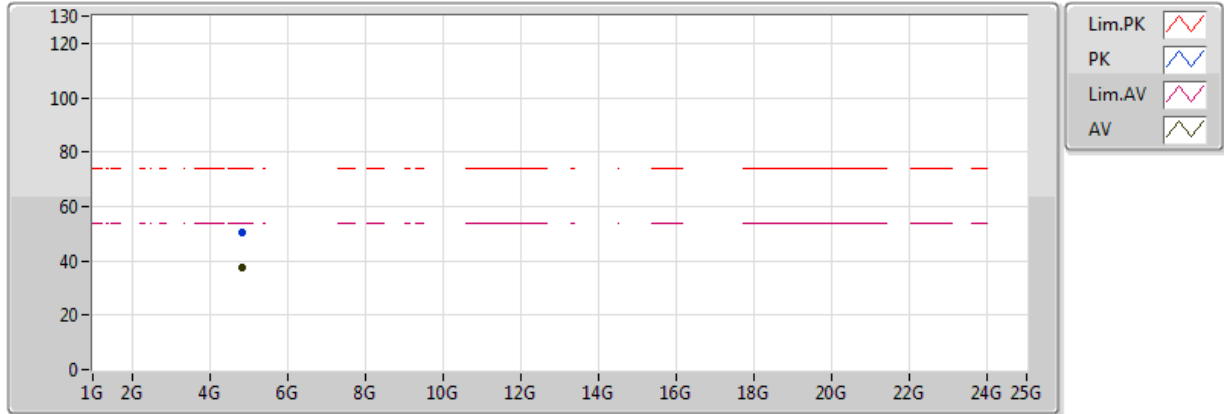


20170112
EUT Y_2TX
Setting:48
06-S-6
FSP

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	53.59	54.00	-0.41	33.15	3	H	26	2.07	-
AV	2.4188G	94.93	Inf	-Inf	33.26	3	H	26	2.07	-
AV	2.5G	53.73	54.00	-0.27	33.54	3	H	26	2.07	-
PK	2.386G	66.12	74.00	-7.88	33.14	3	H	26	2.07	-
PK	2.4184G	104.36	Inf	-Inf	33.25	3	H	26	2.07	-
PK	2.5G	60.67	74.00	-13.33	33.54	3	H	26	2.07	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

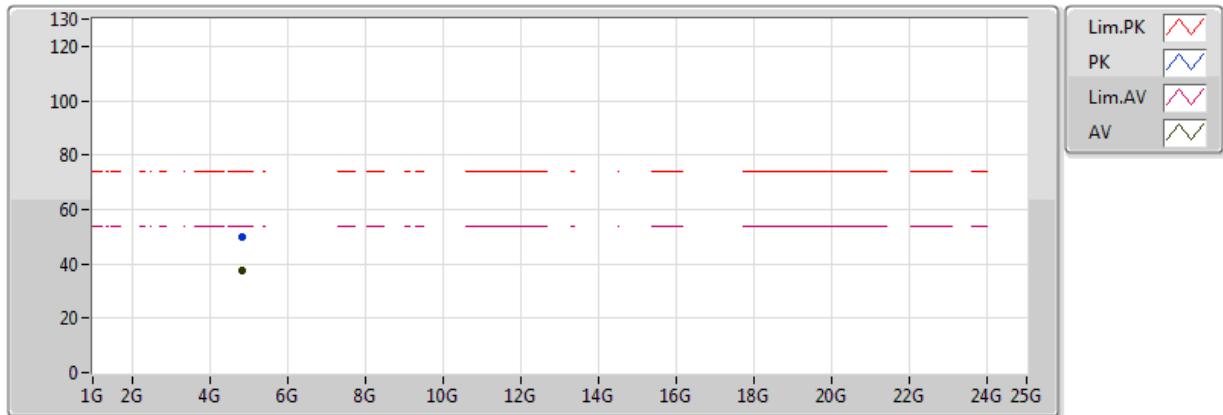


201701113
EUT Y_2TX
Setting:48
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84014G	37.50	54.00	-16.50	9.17	3	V	68	2.28	-
PK	4.84578G	50.50	74.00	-23.50	9.18	3	V	68	2.28	-

802.11n HT40_Nss1,(MCS0)_2TX

2422MHz_TX

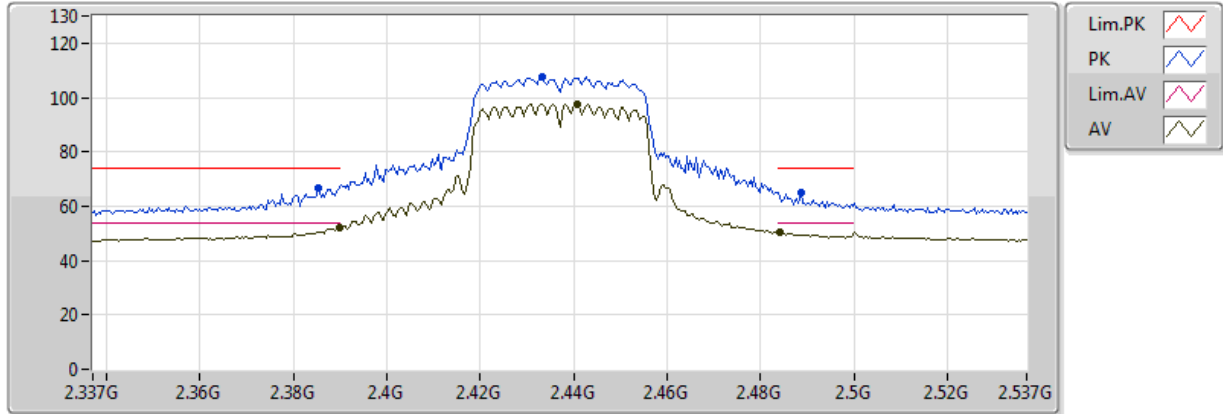


201701113
EUT Y_2TX
Setting:48
06-M-1
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.84456G	37.29	54.00	-16.71	9.18	3	H	297	2.46	-
PK	4.84152G	50.06	74.00	-23.94	9.17	3	H	297	2.46	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

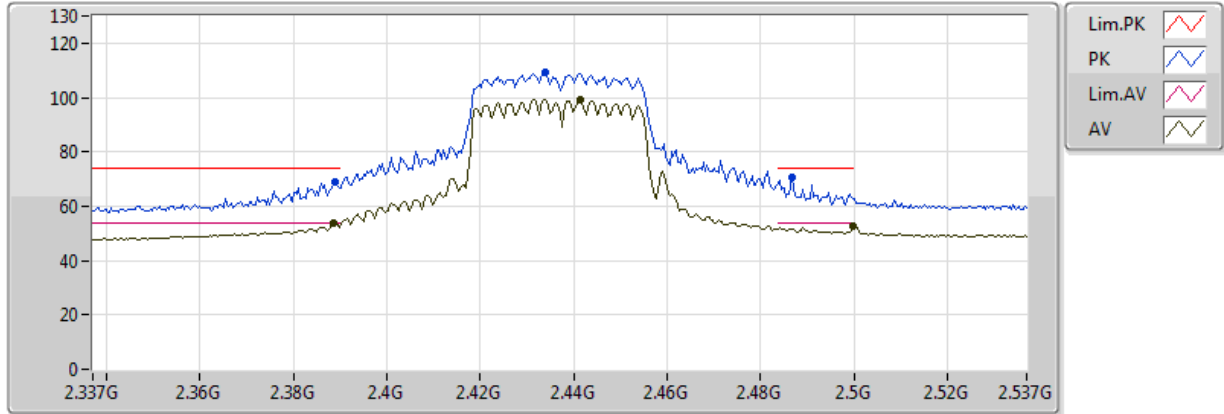


20170112
EUT Y_2TX
Setting:65
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	52.07	54.00	-1.93	33.15	3	V	357	2.99	-
AV	2.4406G	97.55	Inf	-Inf	33.33	3	V	357	2.99	-
AV	2.4842G	50.28	54.00	-3.72	33.48	3	V	357	2.99	-
PK	2.3854G	66.92	74.00	-7.08	33.14	3	V	357	2.99	-
PK	2.4334G	107.48	Inf	-Inf	33.31	3	V	357	2.99	-
PK	2.4886G	64.89	74.00	-9.11	33.50	3	V	357	2.99	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

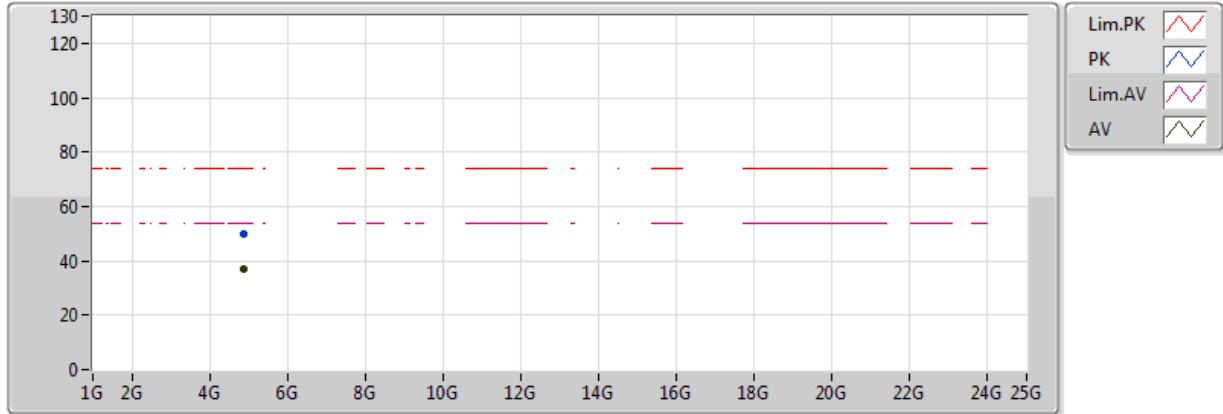


20170112
EUT Y_2TX
Setting:65
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3886G	53.90	54.00	-0.10	33.15	3	H	32	2.17	-
AV	2.4414G	99.21	Inf	-Inf	33.33	3	H	32	2.17	-
AV	2.4998G	52.67	54.00	-1.33	33.54	3	H	32	2.17	-
PK	2.389G	68.77	74.00	-5.23	33.15	3	H	32	2.17	-
PK	2.4338G	109.12	Inf	-Inf	33.31	3	H	32	2.17	-
PK	2.4866G	70.69	74.00	-3.31	33.49	3	H	32	2.17	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

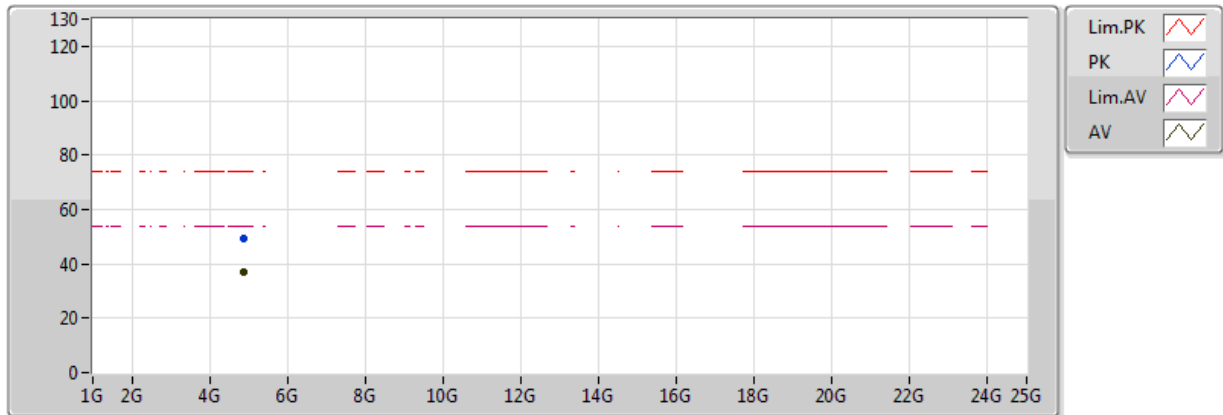


20170112
EUT Y_2TX
Setting:65
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87462G	36.93	54.00	-17.07	9.26	3	V	319	1.48	-
PK	4.8759G	49.84	74.00	-24.16	9.26	3	V	319	1.48	-

802.11n HT40_Nss1,(MCS0)_2TX

2437MHz_TX

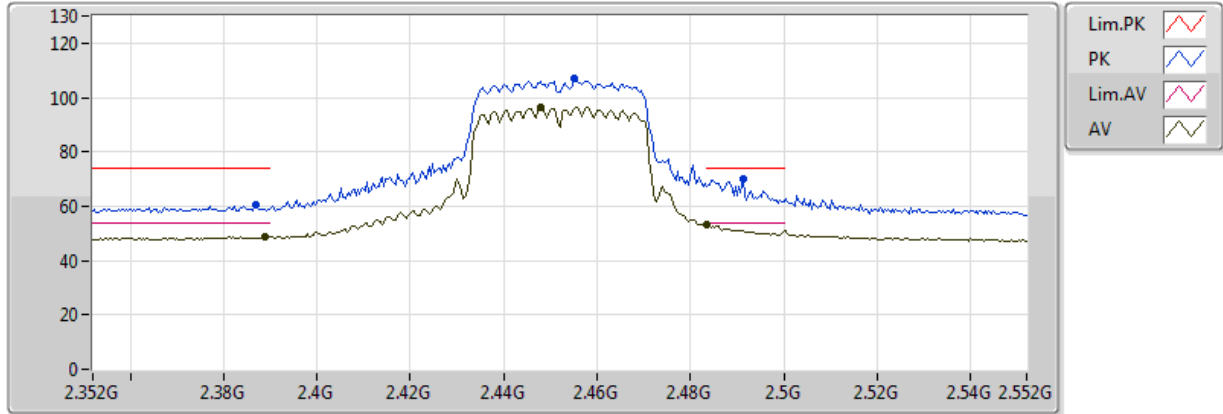


20170112
EUT Y_2TX
Setting:65
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8723G	36.96	54.00	-17.04	9.25	3	H	320	1.60	-
PK	4.8759G	49.45	74.00	-24.55	9.26	3	H	320	1.60	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

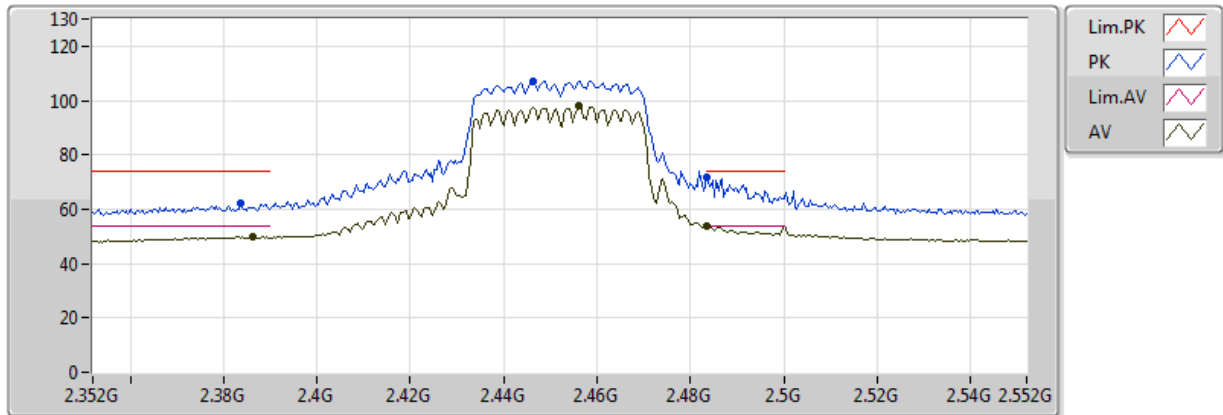


20170112
EUT Y_2TX
Setting:61
06-S-6
FSP

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	48.67	54.00	-5.33	33.15	3	V	353	2.94	-
AV	2.448G	96.30	Inf	-Inf	33.36	3	V	353	2.94	-
AV	2.4836G	52.98	54.00	-1.02	33.48	3	V	353	2.94	-
PK	2.3868G	60.30	74.00	-13.70	33.14	3	V	353	2.94	-
PK	2.4552G	107.12	Inf	-Inf	33.38	3	V	353	2.94	-
PK	2.4912G	70.28	74.00	-3.72	33.51	3	V	353	2.94	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

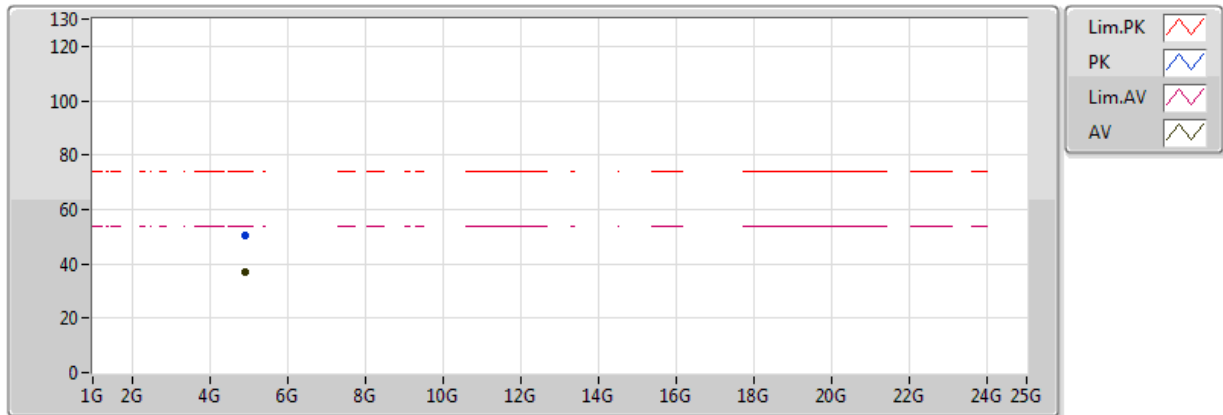


20170112
EUT Y_2TX
Setting:61
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3864G	50.03	54.00	-3.97	33.14	3	H	23	1.94	-
AV	2.456G	98.02	Inf	-Inf	33.39	3	H	23	1.94	-
AV	2.4836G	53.83	54.00	-0.17	33.48	3	H	23	1.94	-
PK	2.3836G	61.96	74.00	-12.04	33.13	3	H	23	1.94	-
PK	2.4464G	107.30	Inf	-Inf	33.35	3	H	23	1.94	-
PK	2.4836G	71.74	74.00	-2.26	33.48	3	H	23	1.94	-

802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX

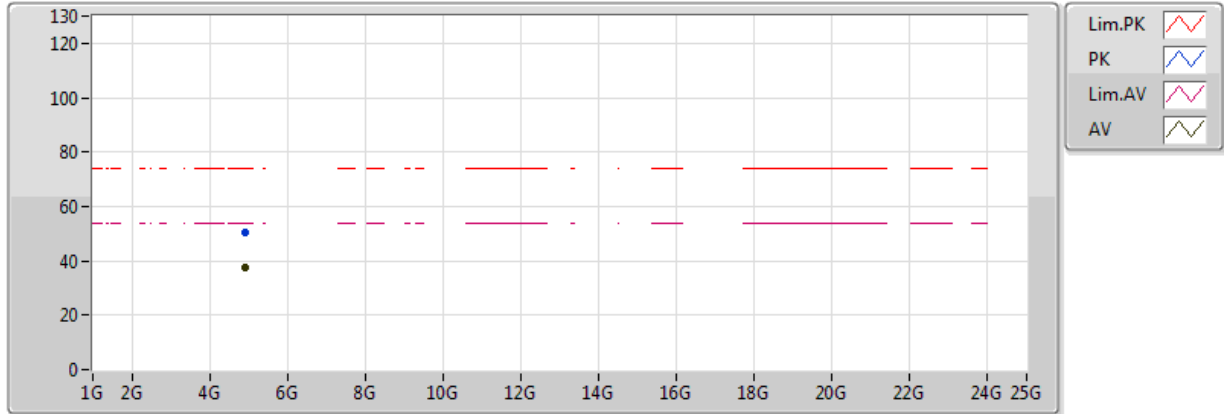


20170112
EUT Y_2TX
Setting:61
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90872G	37.06	54.00	-16.94	9.34	3	V	300	1.59	-
PK	4.90512G	50.53	74.00	-23.47	9.33	3	V	300	1.59	-

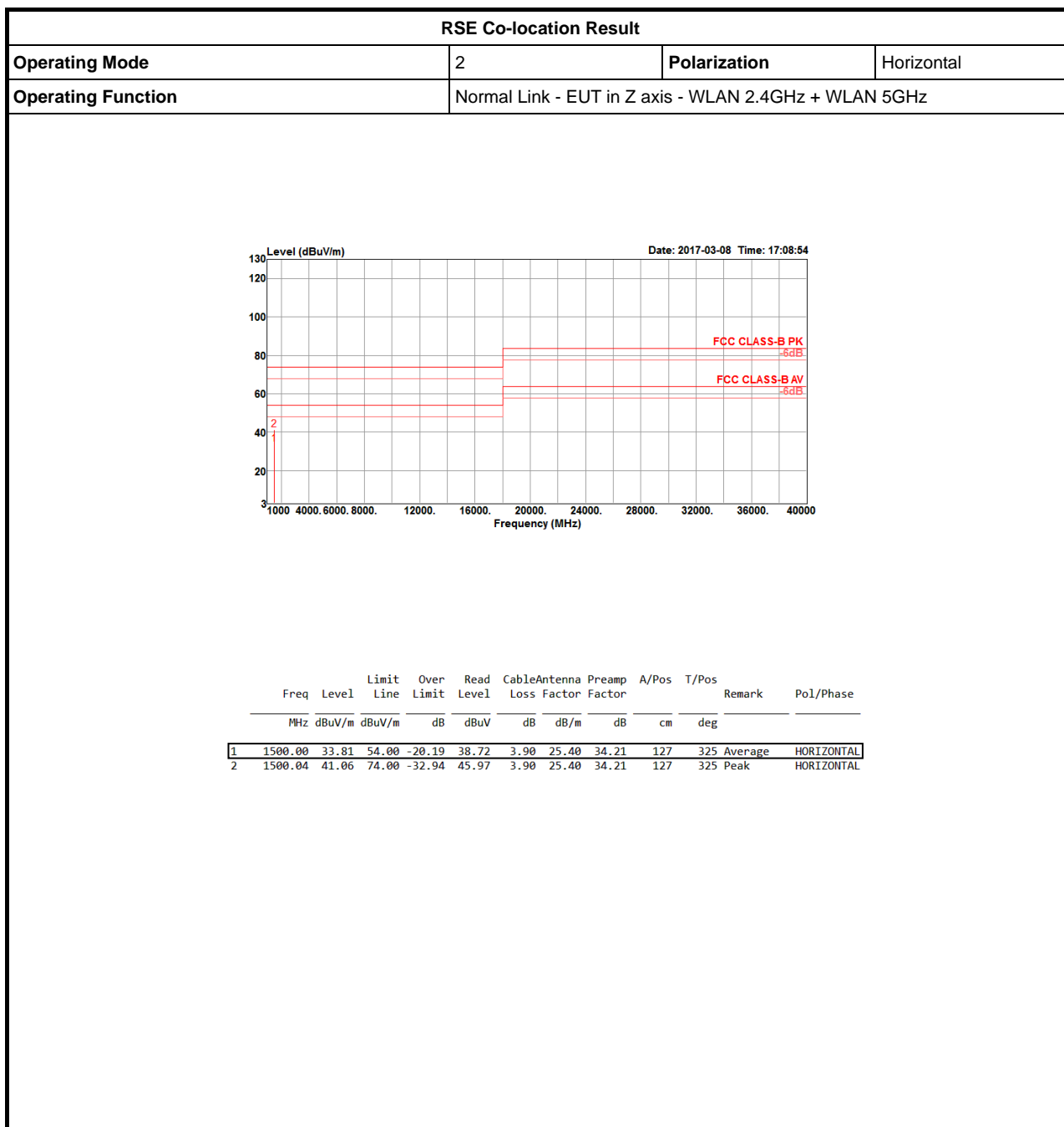
802.11n HT40_Nss1,(MCS0)_2TX

2452MHz_TX



20170112
EUT_Y_2TX
Setting:61
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9057G	37.28	54.00	-16.72	9.33	3	H	99	1.09	-
PK	4.90196G	50.27	74.00	-23.73	9.32	3	H	99	1.09	-





RSE Co-location Result

Appendix G

