



# FCC Test Report

Equipment : D3 WiFi Gateway  
Brand Name : Linksys  
Model No. : CG7500  
FCC ID : Q87-CG7500  
Standard : 47 CFR FCC Part 15.247  
Operating Band : 2400 MHz – 2483.5 MHz  
Function :  Point-to-multipoint;  Point-to-point  
Applicant : Linksys LLC  
121 Theory Drive, Irvine, CA 92617, USA  
Manufacturer : Hitron Technologies  
No.1-8, Lising 1st Rd. Hsinchu Science Park,  
Hsinchu 300, Taiwan

The product sample received on Oct. 12, 2016 and completely tested on Mar. 07, 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.





# Table of Contents

- 1 GENERAL DESCRIPTION .....5**
- 1.1 Information.....5
- 1.2 Testing Applied Standards .....6
- 1.3 Testing Location Information .....7
- 1.4 Measurement Uncertainty .....7
- 2 TEST CONFIGURATION OF EUT .....8**
- 2.1 Test Channel Mode .....8
- 2.2 The Worst Case Measurement Configuration.....9
- 2.3 EUT Operation during Test .....9
- 2.4 Accessories .....10
- 2.5 Support Equipment.....10
- 2.6 Test Setup Diagram .....11
- 3 TRANSMITTER TEST RESULT .....13**
- 3.1 AC Power-line Conducted Emissions .....13
- 3.2 DTS Bandwidth .....15
- 3.3 Maximum Conducted Output Power .....16
- 3.4 Power Spectral Density .....18
- 3.5 Emissions in Non-restricted Frequency Bands .....20
- 3.6 Emissions in Restricted Frequency Bands.....21
- 4 TEST EQUIPMENT AND CALIBRATION DATA .....25**

**APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS**

**APPENDIX B. TEST RESULTS OF DTS BANDWIDTH**

**APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER**

**APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY**

**APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS**

**APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS**

**APPENDIX G. TEST PHOTOS**

**PHOTOGRAPHS OF EUT V01**



### 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), ac (VHT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), ac (VHT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	3TX
2.4-2.4835GHz	802.11g	20	3TX
2.4-2.4835GHz	802.11n HT20	20	3TX
2.4-2.4835GHz	802.11ac VHT20	20	3TX
2.4-2.4835GHz	802.11n HT40	40	3TX
2.4-2.4835GHz	802.11ac VHT40	40	3TX

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.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM 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	Airgain	N2420GS-T6-PK1-B1XST65BU	PCB Antenna	I-PEX	1.6	-
2	2	Airgain	N2420SLOL-T6-PK1-B1XST280BU	PCB Antenna	I-PEX	3.2	-
3	3	Airgain	N2420GS-T6-PK1-B1XST190BU	PCB Antenna	I-PEX	1.6	-
4	4	Airgain	N5X20SD-PK1-G1X100BU	PCB Antenna	I-PEX	-	3.48
5	5	Airgain	N5X20SD-PK1-G1XST65BU	PCB Antenna	I-PEX	-	3.48
6	6	Airgain	N5X20SD-T6-PK1-G1XST60BU	PCB Antenna	I-PEX	-	3.48

Note: The EUT has six antennas.

**<For 2.4GHz Band>**

**For IEEE 802.11b/g/n/ac mode (3TX/3RX)**

Port 1, Port 2 and Port 3 can be used as transmitting/receiving antenna.

Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

**<For 5GHz Band>**

**For IEEE 802.11a/n/ac mode (3TX/3RX)**

Port 4, Port 5 and Port 6 can be used as transmitting/receiving antenna.

Port 4, Port 5 and Port 6 could transmit/receive simultaneously.

### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11b	0.993	0.031
802.11g	0.963	0.164
802.11ac VHT20	0.948	0.232
802.11ac VHT40	0.9	0.458

### 1.1.4 EUT Operational Condition

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

## 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 644545 D01 v01r02
- ◆ 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	Serway Li	20°C / 60%	Feb. 03, 2017
Radiated	03CH01-CB	Nyle Chang / Mars Lin	22°C / 54%	Jan. 25, 2017~ Feb. 09, 2017
AC Conduction	CO01-CB	Hank Yang	25°C / 59%	Feb. 10, 2017~ Mar. 07, 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 <sup>-8</sup>	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

Mode	Power Setting
802.11b_(1Mbps)_3TX	-
2412MHz	23
2437MHz	24.5
2462MHz	24
802.11g_(6Mbps)_3TX	-
2412MHz	25
2437MHz	25
2462MHz	25.5
802.11ac VHT20_Nss1,(MCS0)_3TX	-
2412MHz	25
2437MHz	25
2462MHz	25.5
802.11ac VHT40_Nss1,(MCS0)_3TX	-
2422MHz	25
2437MHz	25.5
2452MHz	24

**Note:**

- ♦ Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch.) and C (Straddle Band Ch.).
- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.





## 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	CTX
1	2.4GHz
2	5GHz
For operating mode 1 is the worst case and it was record in this test 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
Test Condition	Conducted measurement at transmit chains

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
Refer to Sporton Test Report No.: FA6O1236 for Co-location RF Exposure Evaluation.	

Note 1: The EUT can only be used at Y axis position

## 2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.



## 2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	AC Adapter	AtechOEM	ADS036T-W120300	Input: 100-240V~50-60Hz 1.0A Output: 12V, 3.0A
Other				
RJ-45 Cable*1: Non-Shielded 1.5m				

## 2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Flash disk3.0	Transcend	JetFlash-700	DoC

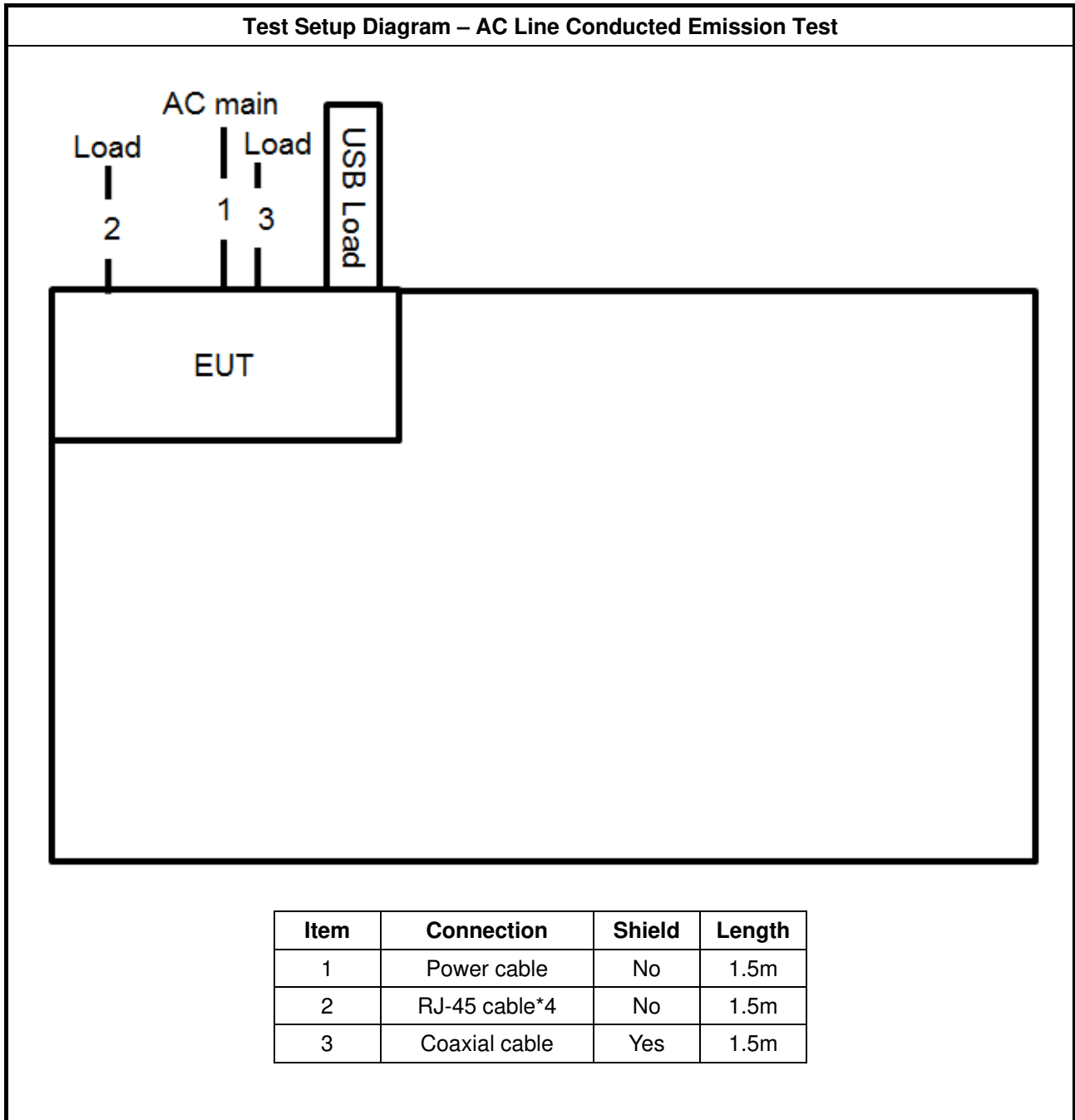
For Test Site No: 03CH01-CB

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

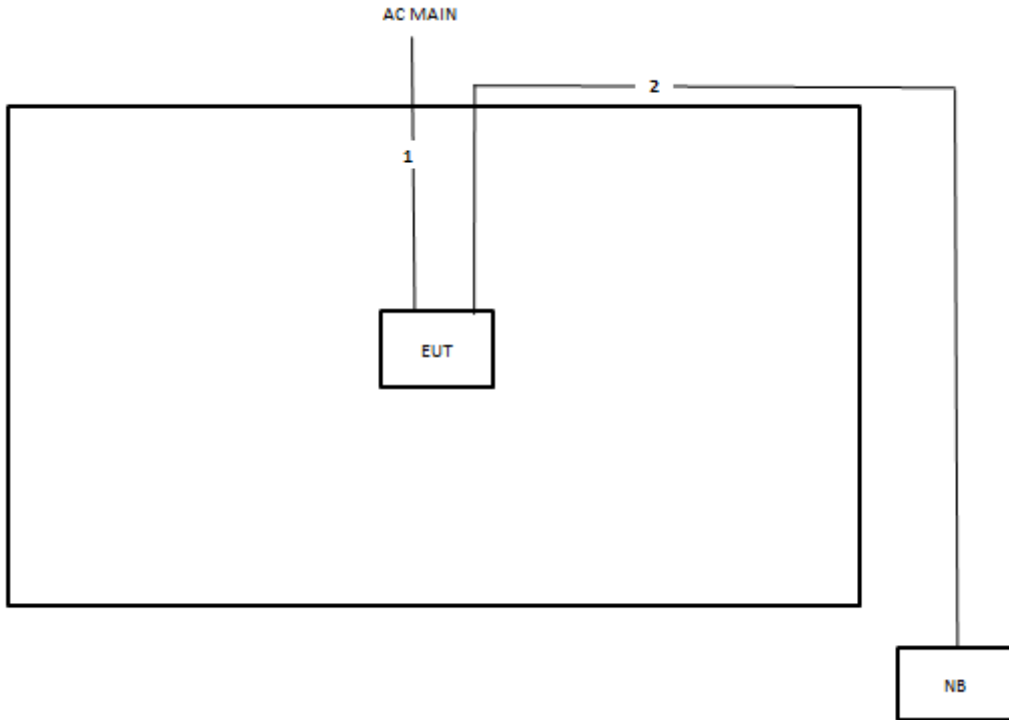
For Test Site No: TH01-CB

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

## 2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	Power cable	No	1.65m
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.

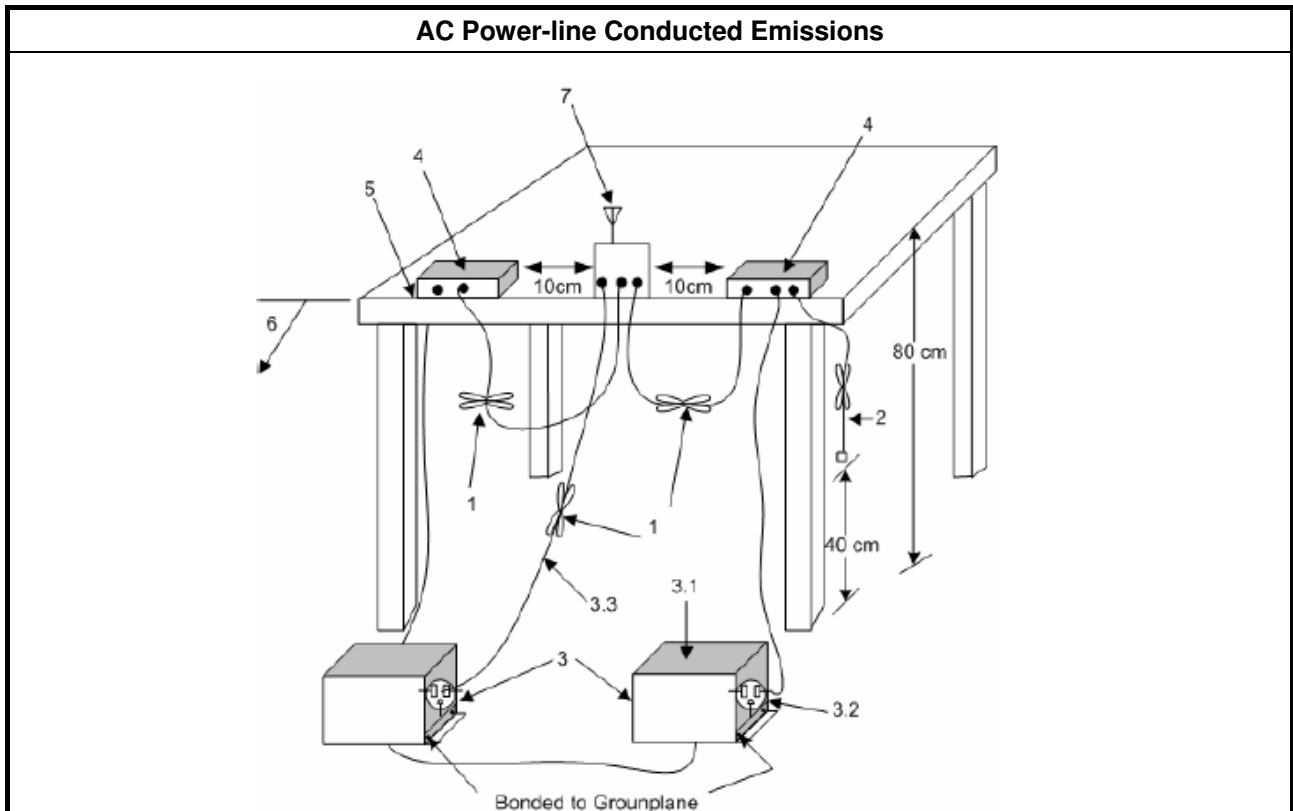
##### 3.1.2 Measuring Instruments

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
<b>Systems using digital modulation techniques:</b>
<ul style="list-style-type: none"> <li>▪ 6 dB bandwidth <math>\geq</math> 500 kHz.</li> </ul>

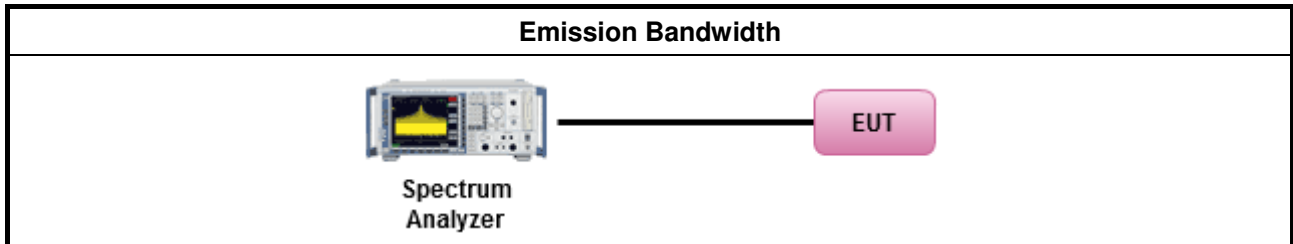
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>▪ For the emission bandwidth shall be measured using one of the options below:</li> </ul>
<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

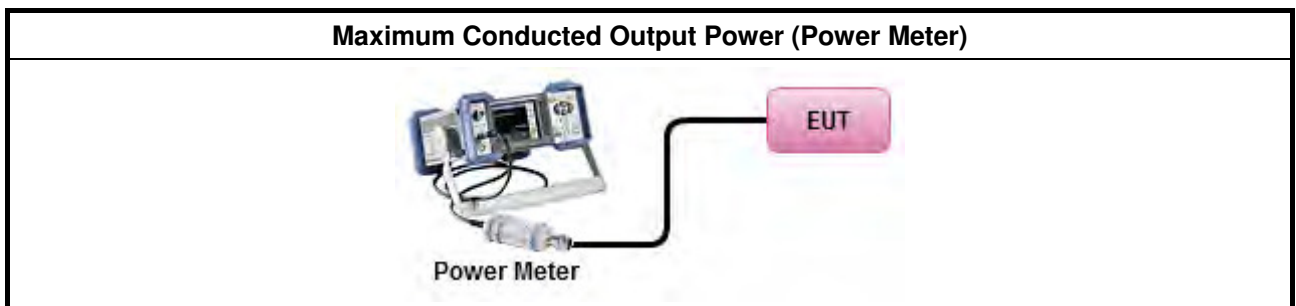
Refer a test equipment and calibration data table in this test report.



### 3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>Maximum Peak Conducted Output Power</li> </ul>	
<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"> <li>Maximum Conducted Output Power</li> </ul>	
[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"> <li>For conducted measurement.</li> </ul>	
<ul style="list-style-type: none"> <li>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.</li> </ul>	
<ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:  <math>P_{total} = P_1 + P_2 + \dots + P_n</math>                      (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>	

### 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
<ul style="list-style-type: none"> <li>▪ Power Spectral Density (PSD) <math>\leq</math> 8 dBm/3kHz</li> </ul>

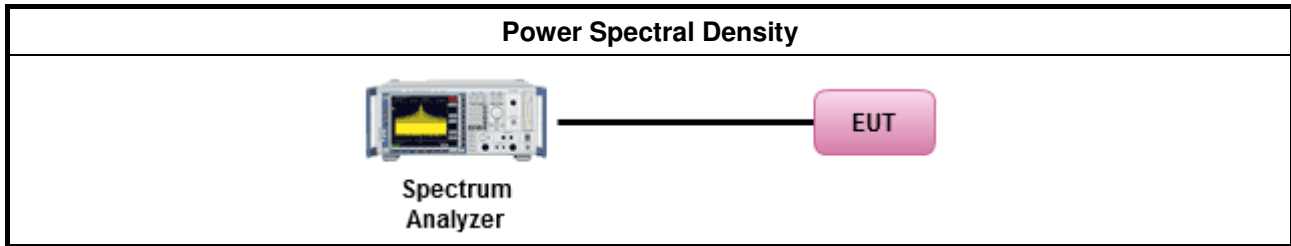
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>▪ 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).</li> </ul>
<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)
<ul style="list-style-type: none"> <li>▪ For conducted measurement.</li> </ul>
<ul style="list-style-type: none"> <li>▪ If The EUT supports multiple transmit chains using options given below:           <ul style="list-style-type: none"> <li> <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.               </li> <li> <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,               </li> <li> <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.               </li> </ul> </li> </ul>

### 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

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

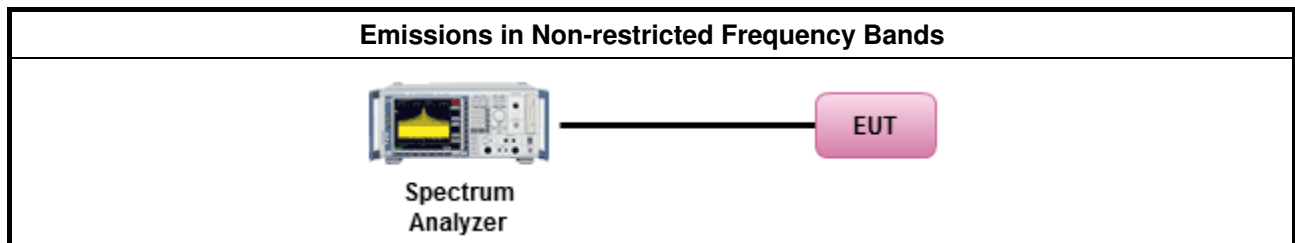
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.</li> </ul>

#### 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.

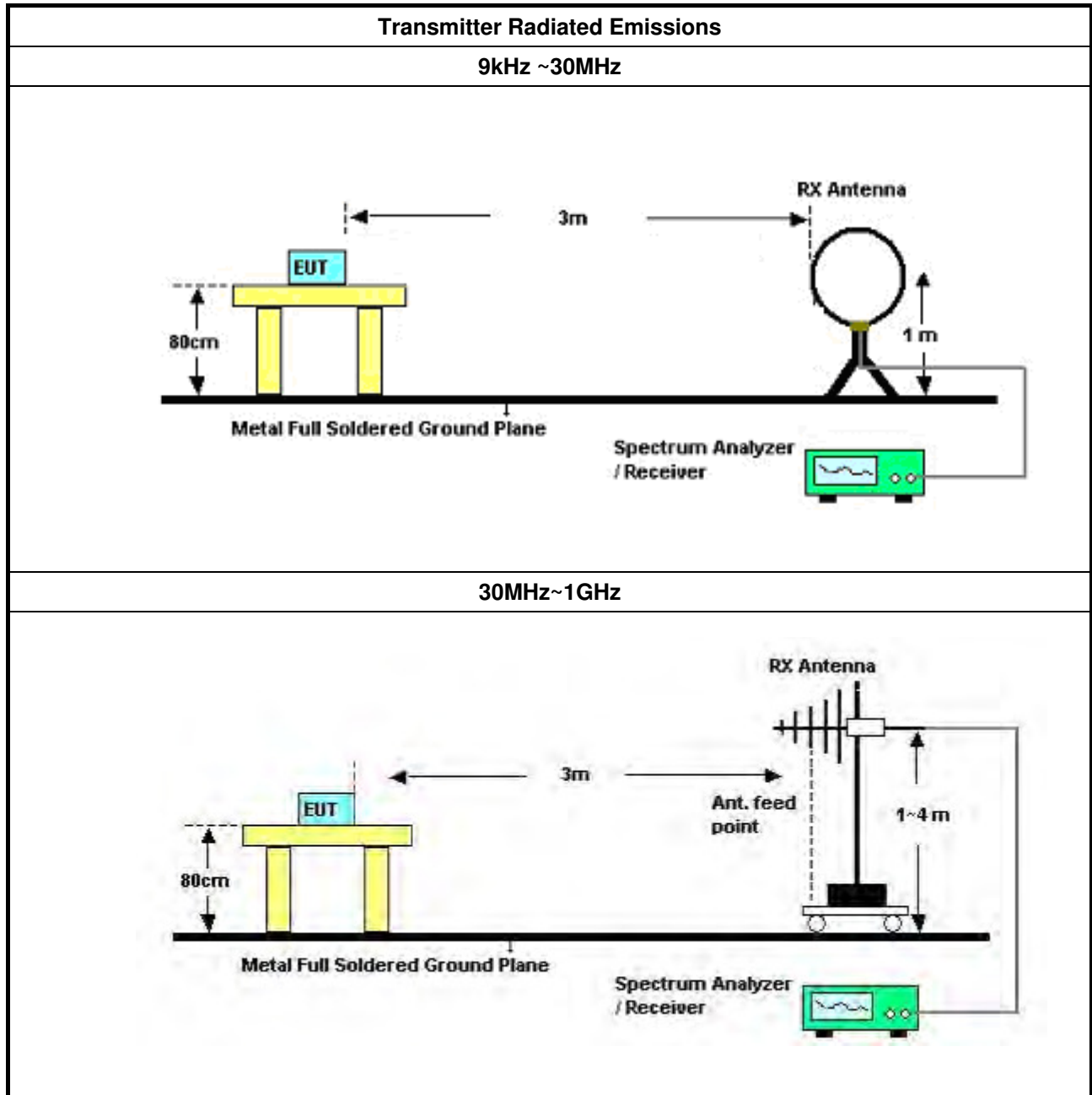
#### 3.6.2 Measuring Instruments

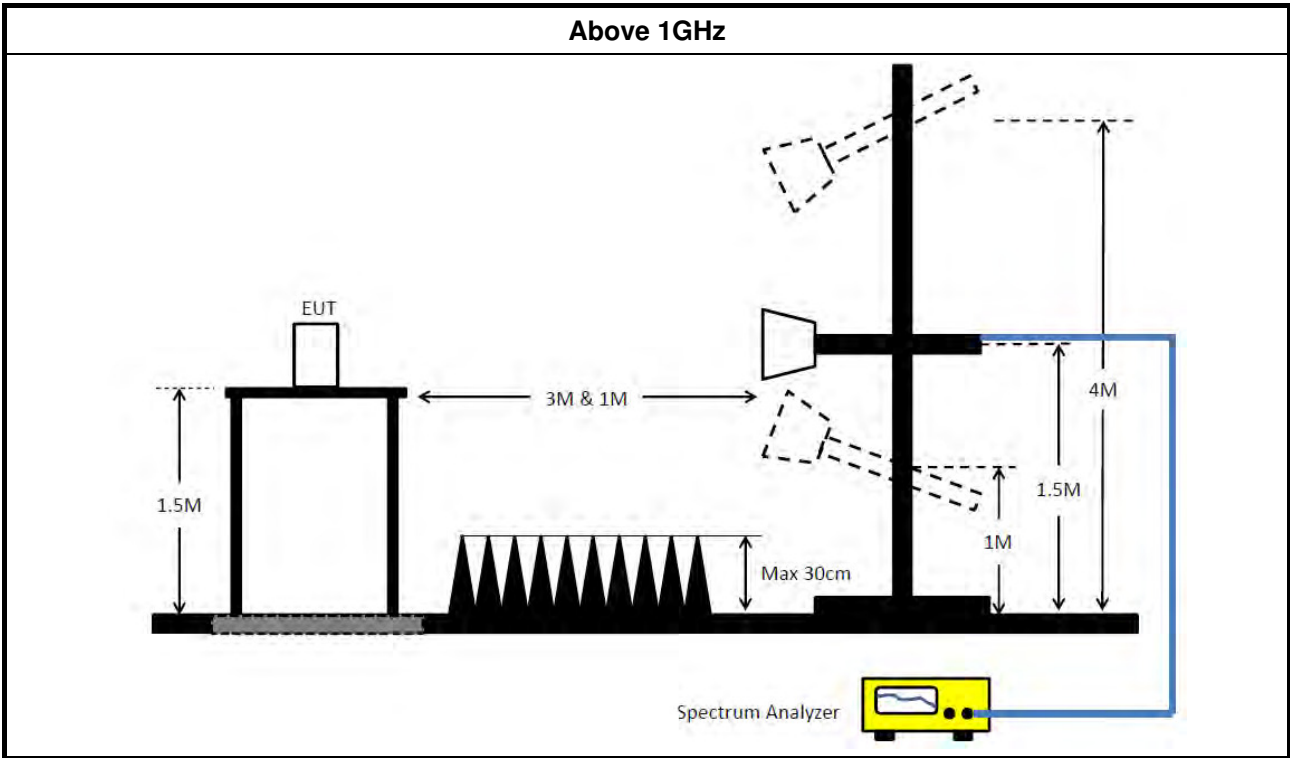
Refer a test equipment and calibration data table in this test report.

### 3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.</li> </ul>
	<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"> <li>▪ For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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).</li> </ul>
<ul style="list-style-type: none"> <li>▪ For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2.</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ 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</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>

### 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. 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 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMC1	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. 15, 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)
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)



<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Characteristics</b>	<b>Calibration Date</b>	<b>Remark</b>
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.

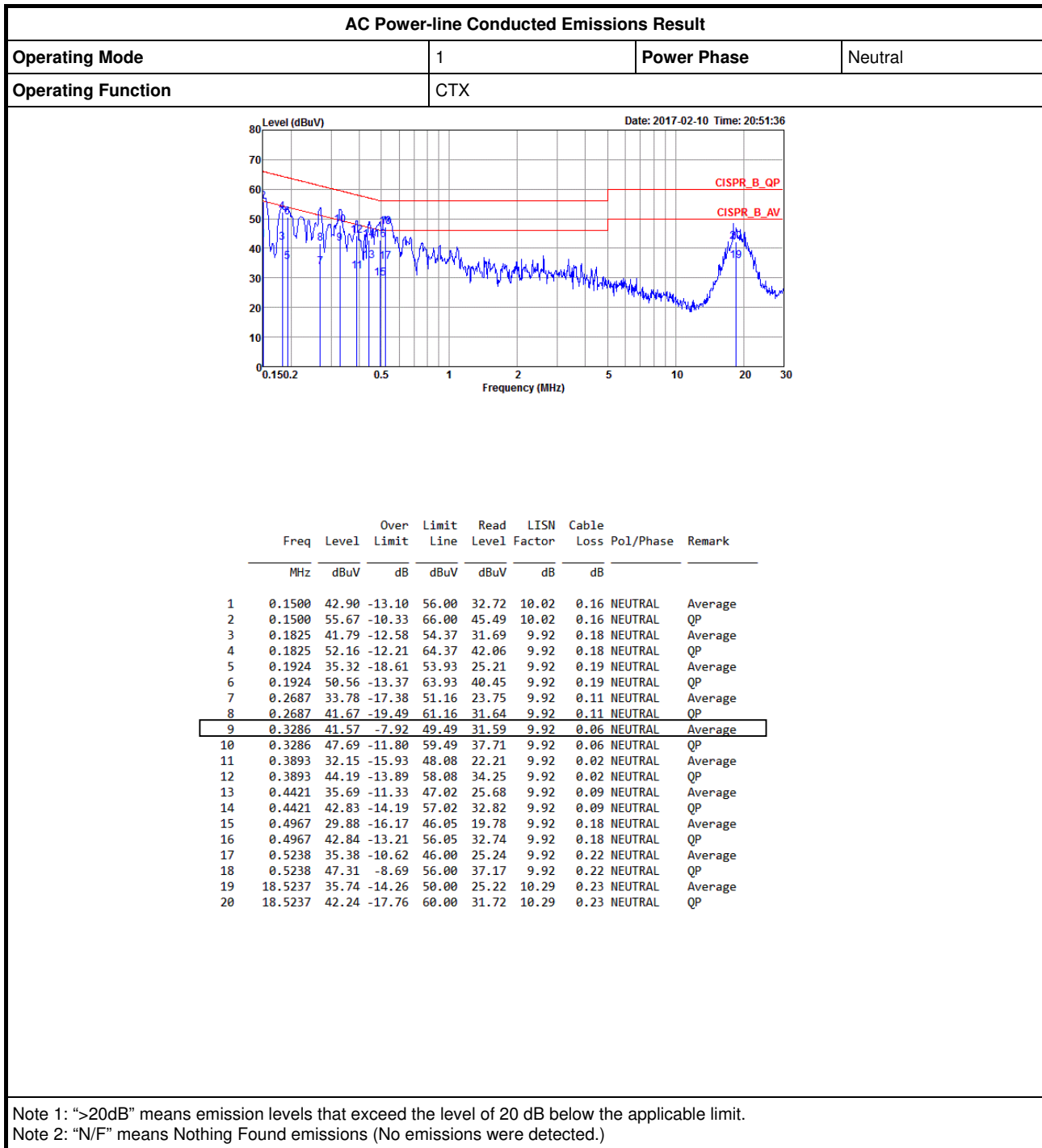
“\*\*” Calibration Interval of instruments listed above is two years.

NCR means Non-Calibration required.



# AC Power-line Conducted Emissions Result

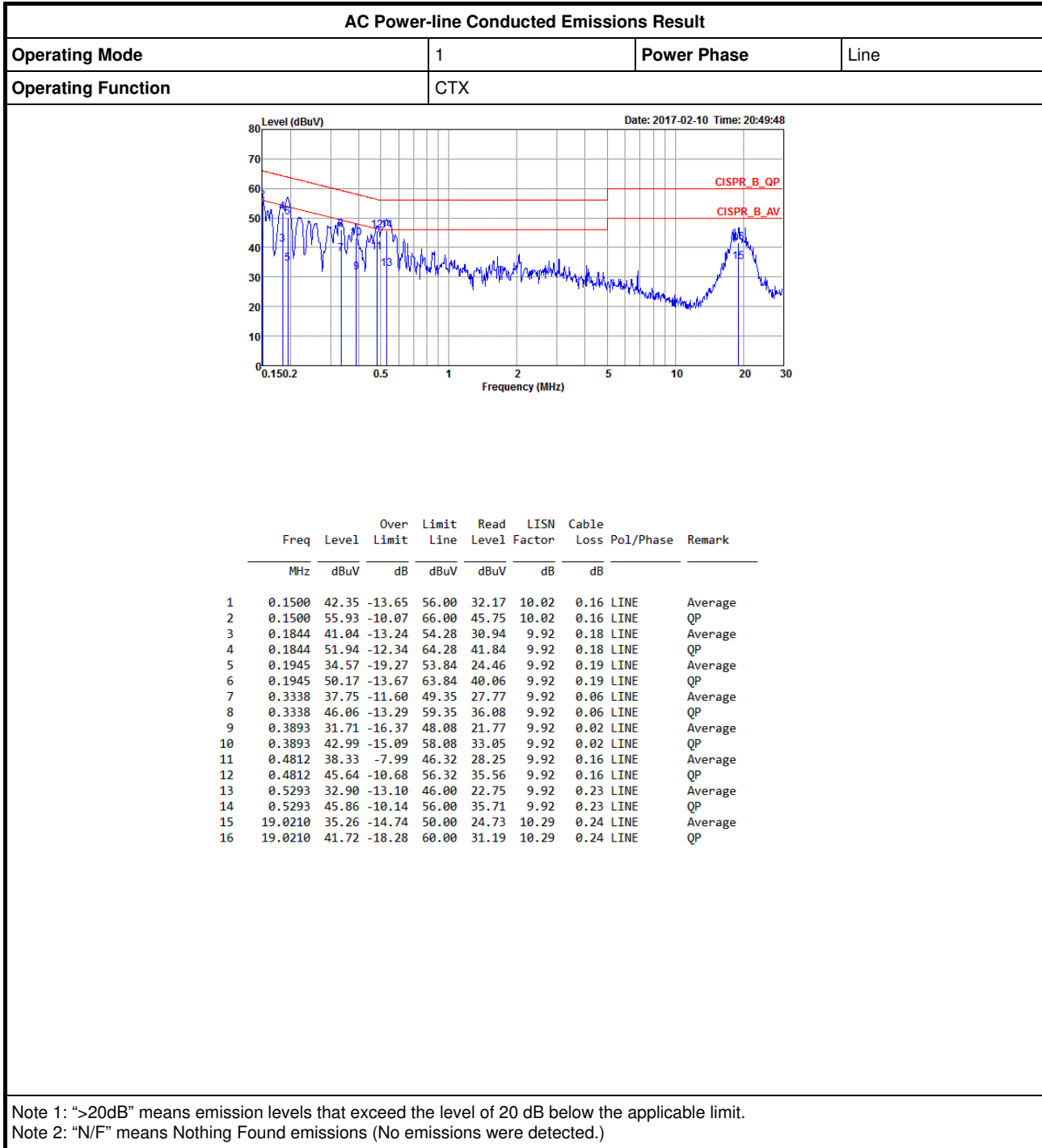
Appendix A





# AC Power-line Conducted Emissions Result

Appendix A





**Summary**

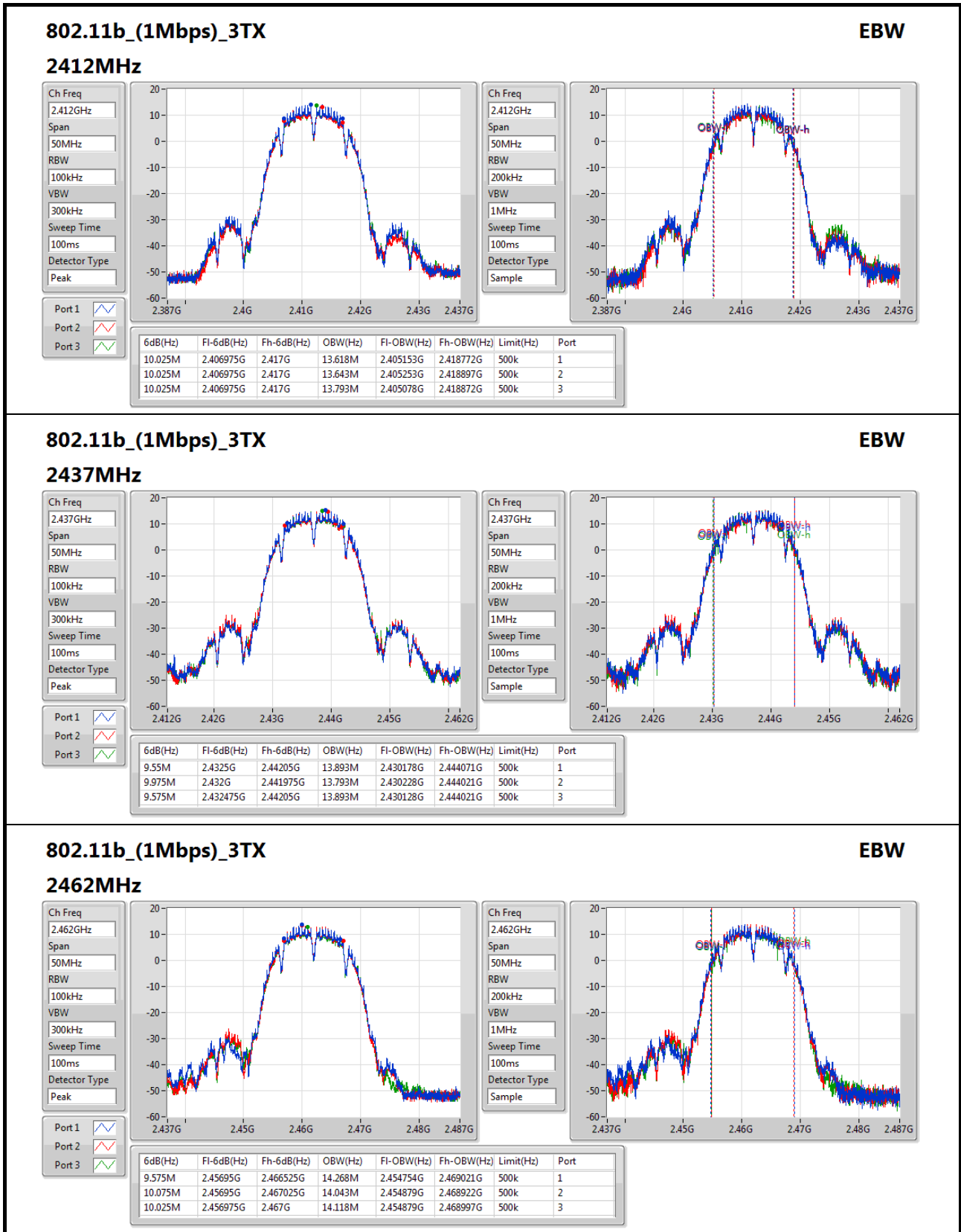
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-
2.4-2.4835GHz	10.075M	14.268M	14M3G1D	9.55M	13.618M
802.11g_(6Mbps)_3TX	-	-	-	-	-
2.4-2.4835GHz	16.325M	17.891M	17M9D1D	15.65M	16.442M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	17.525M	18.766M	18M8D1D	15.9M	17.616M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	35.25M	36.232M	36M2D1D	27.6M	35.982M

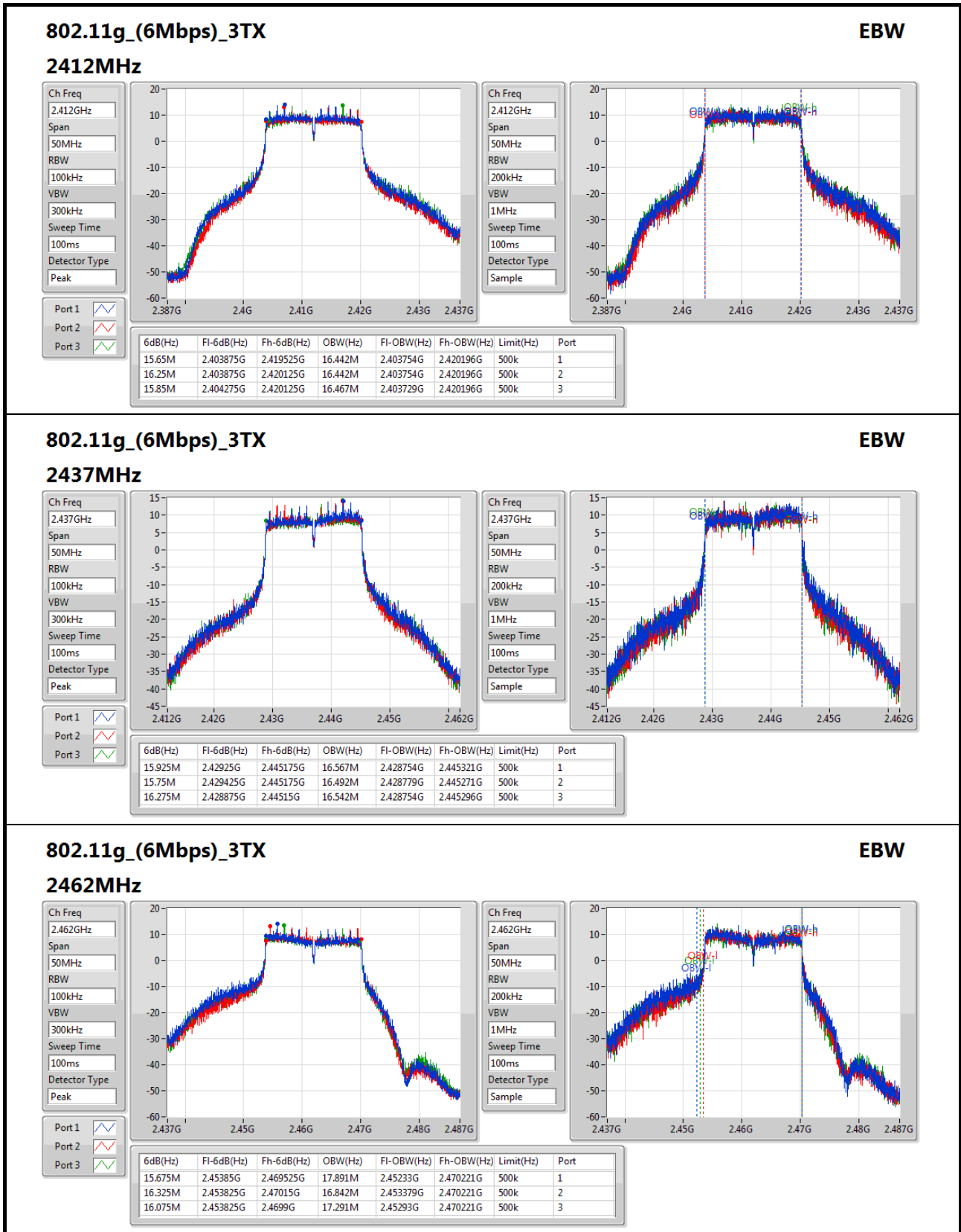
**Max-N dB** = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;  
**Min-N dB** = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	10.025M	13.618M	10.025M	13.643M	10.025M	13.793M
2437MHz	Pass	500k	9.55M	13.893M	9.975M	13.793M	9.575M	13.893M
2462MHz	Pass	500k	9.575M	14.268M	10.075M	14.043M	10.025M	14.118M
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.65M	16.442M	16.25M	16.442M	15.85M	16.467M
2437MHz	Pass	500k	15.925M	16.567M	15.75M	16.492M	16.275M	16.542M
2462MHz	Pass	500k	15.675M	17.891M	16.325M	16.842M	16.075M	17.291M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.9M	17.616M	16.275M	17.616M	17.525M	17.666M
2437MHz	Pass	500k	17.175M	17.791M	16.925M	17.741M	16.275M	17.716M
2462MHz	Pass	500k	17.175M	18.766M	16.5M	17.866M	17.125M	18.016M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	35.05M	36.182M	35.05M	36.232M	35.25M	36.232M
2437MHz	Pass	500k	35.1M	36.132M	35.05M	36.132M	35.1M	36.182M
2452MHz	Pass	500k	27.6M	36.032M	33.7M	35.982M	32.55M	35.982M

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

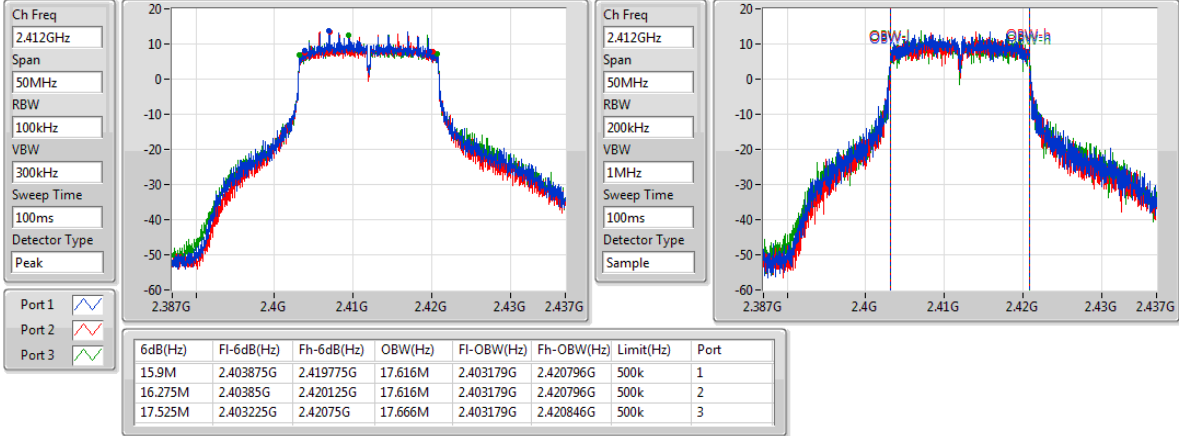




802.11ac VHT20\_Nss1,(MCS0)\_3TX

EBW

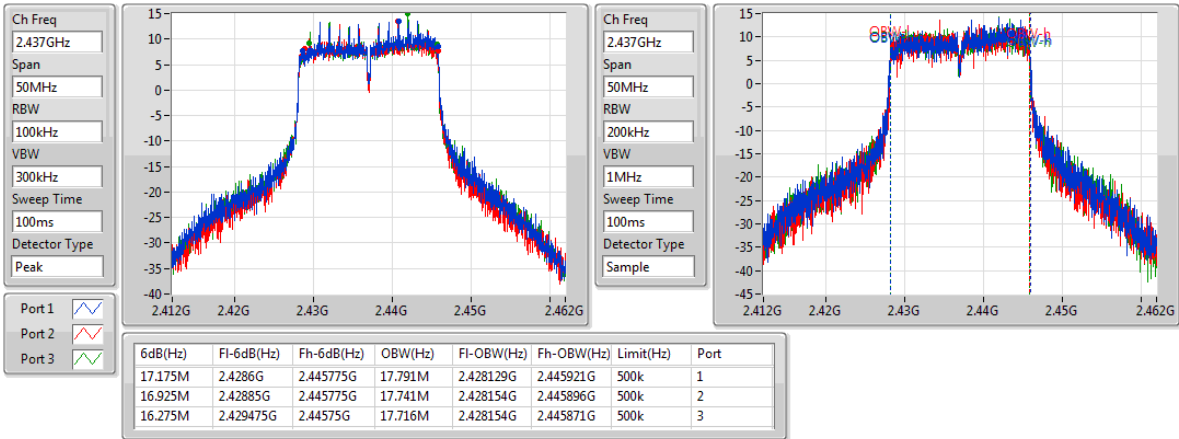
2412MHz



802.11ac VHT20\_Nss1,(MCS0)\_3TX

EBW

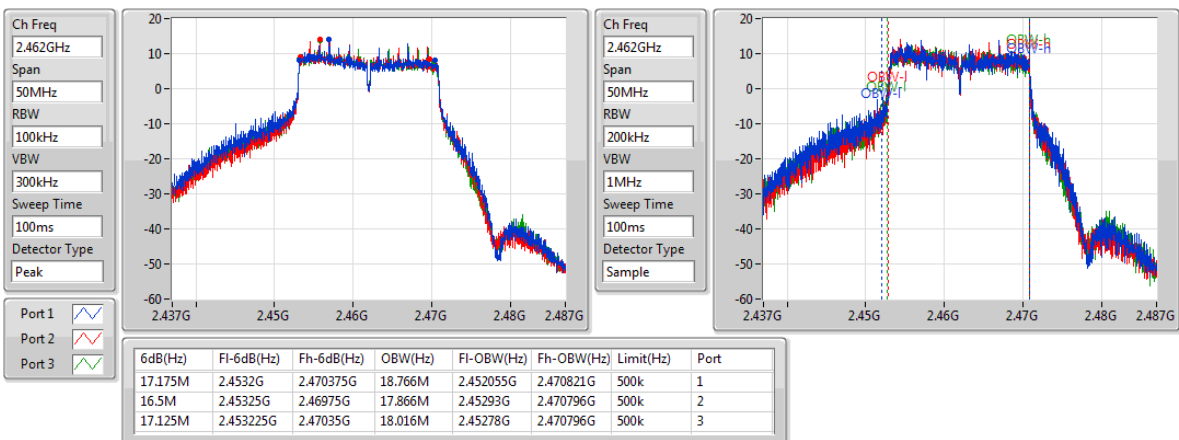
2437MHz



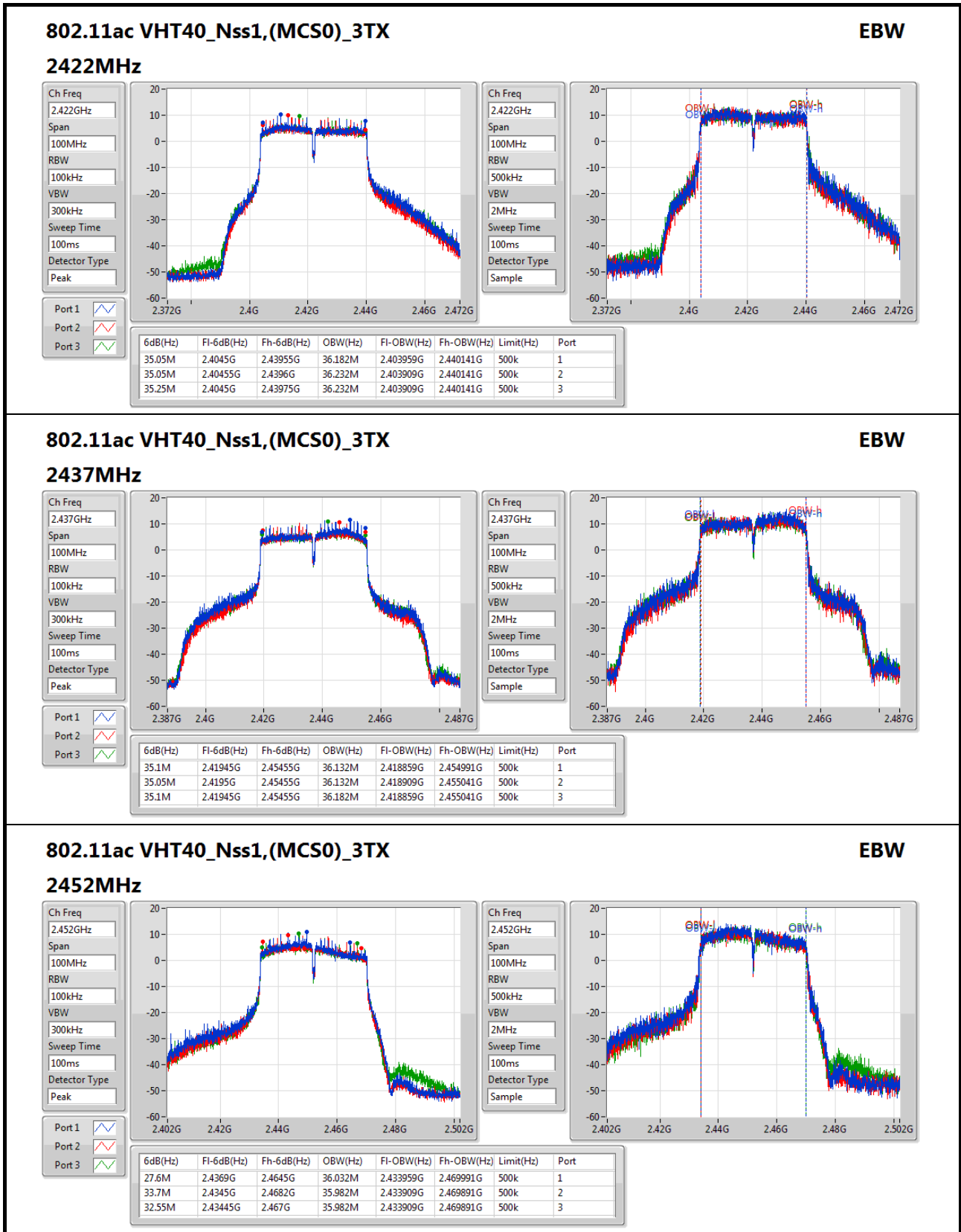
802.11ac VHT20\_Nss1,(MCS0)\_3TX

EBW

2462MHz









Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_3TX	-	-
2.4-2.4835GHz	29.56	0.90365
802.11g_(6Mbps)_3TX	-	-
2.4-2.4835GHz	29.95	0.98855
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	29.96	0.99083
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	29.97	0.99312

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.20	23.55	23.09	23.77	28.25	30.00
2437MHz	Pass	3.20	24.98	24.62	24.76	29.56	30.00
2462MHz	Pass	3.20	23.65	23.03	23.60	28.21	30.00
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.20	25.12	24.37	25.27	29.71	30.00
2437MHz	Pass	3.20	25.24	24.91	25.38	29.95	30.00
2462MHz	Pass	3.20	24.41	24.21	24.31	29.08	30.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.20	25.08	24.44	25.27	29.72	30.00
2437MHz	Pass	3.20	25.21	24.91	25.44	29.96	30.00
2462MHz	Pass	3.20	24.38	24.18	24.26	29.05	30.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	3.20	25.01	24.49	24.78	29.54	30.00
2437MHz	Pass	3.20	25.21	24.86	25.49	29.97	30.00
2452MHz	Pass	3.20	23.76	23.51	24.32	28.65	30.00

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



Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_3TX 2.4-2.4835GHz	- 2.60
802.11g_(6Mbps)_3TX 2.4-2.4835GHz	- 1.94
802.11ac VHT20_Nss1,(MCS0)_3TX 2.4-2.4835GHz	- 1.75
802.11ac VHT40_Nss1,(MCS0)_3TX 2.4-2.4835GHz	- -0.20

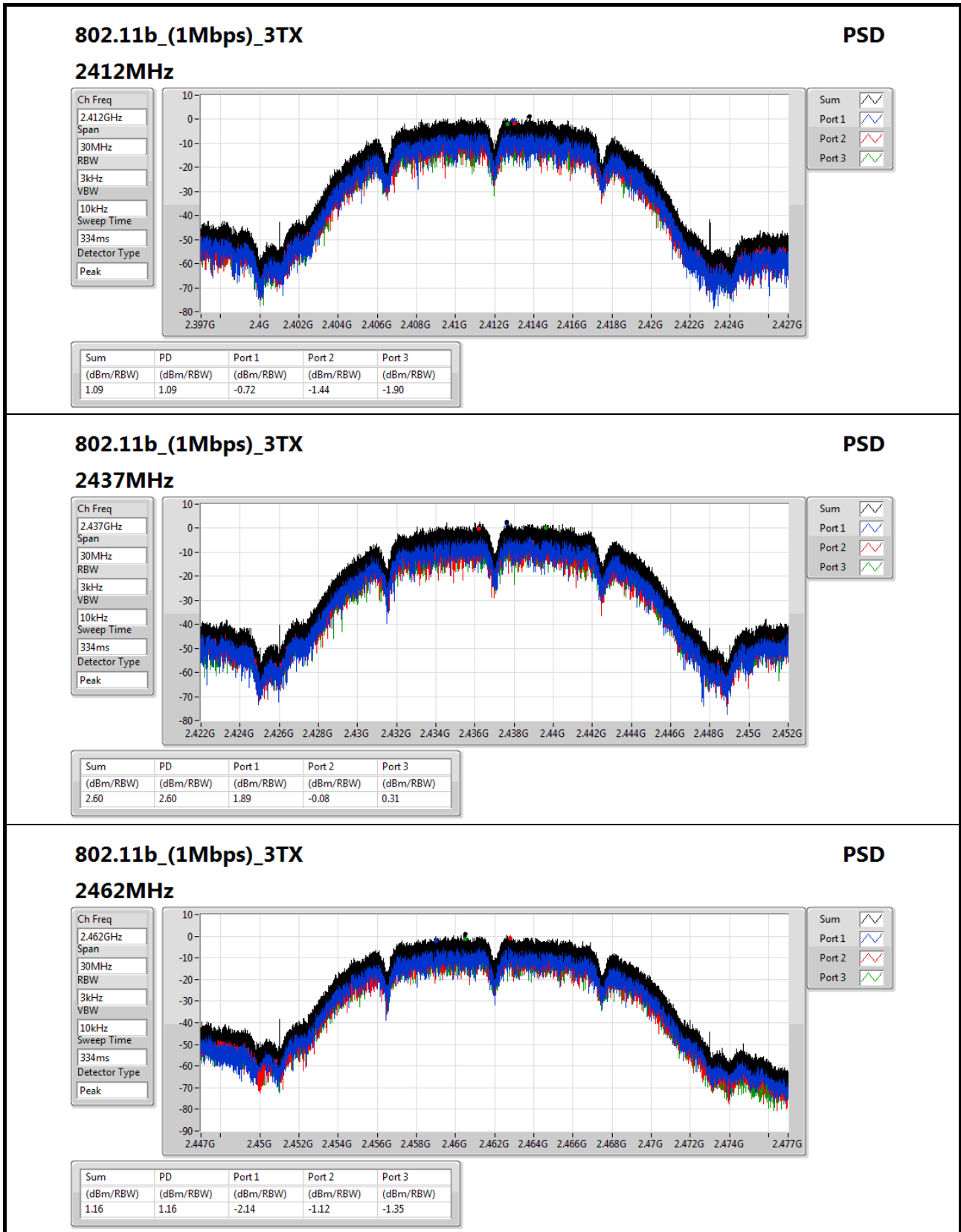
RBW=3kHz.

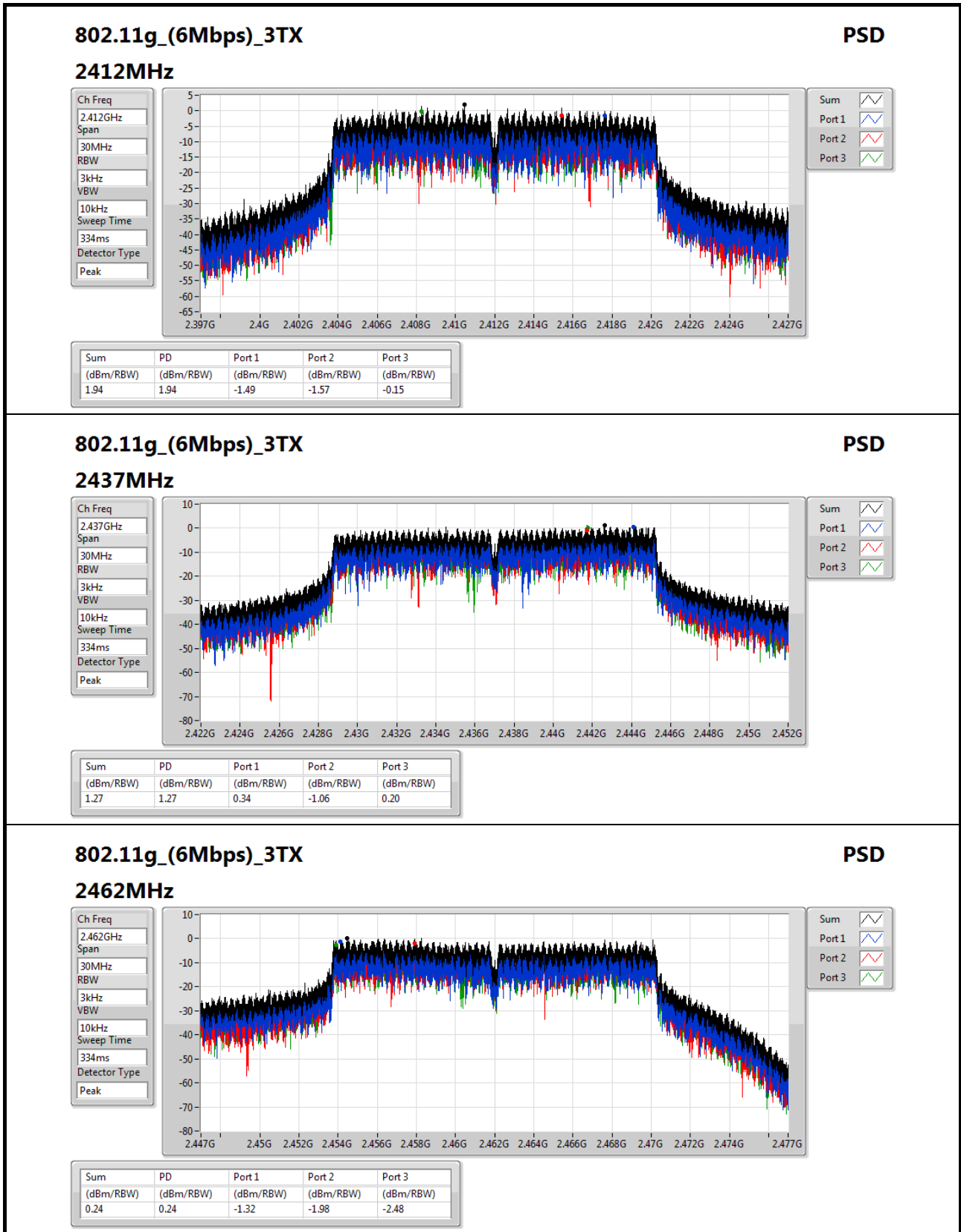
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.94	-0.72	-1.44	-1.90	1.09	7.06
2437MHz	Pass	6.94	1.89	-0.08	0.31	2.60	7.06
2462MHz	Pass	6.94	-2.14	-1.12	-1.35	1.16	7.06
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.94	-1.49	-1.57	-0.15	1.94	7.06
2437MHz	Pass	6.94	0.34	-1.06	0.20	1.27	7.06
2462MHz	Pass	6.94	-1.32	-1.98	-2.48	0.24	7.06
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.94	-1.86	-2.17	-2.46	0.38	7.06
2437MHz	Pass	6.94	-0.78	-1.57	-1.57	1.75	7.06
2462MHz	Pass	6.94	-0.61	-1.34	-2.11	0.63	7.06
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.94	-5.26	-4.25	-4.63	-2.14	7.06
2437MHz	Pass	6.94	-3.78	-3.70	-4.54	-0.20	7.06
2452MHz	Pass	6.94	-3.93	-4.83	-6.23	-2.24	7.06

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;




**802.11g\_(6Mbps)\_3TX**
**PSD**

**2462MHz**

Ch Freq: 2.462GHz

Span: 30MHz

RBW: 3kHz

VBW: 10kHz

Sweep Time: 334ms

Detector Type: Peak

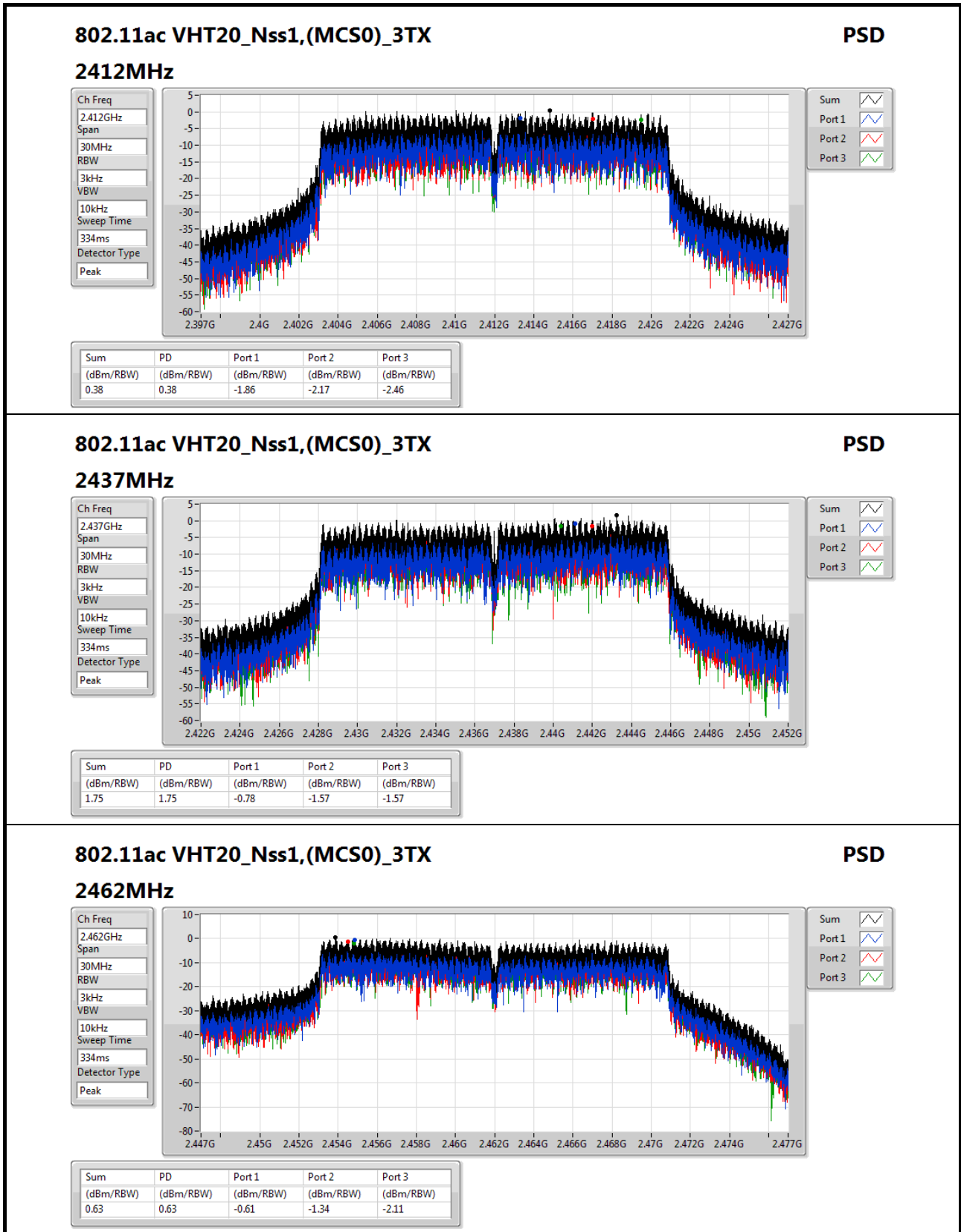
Sum

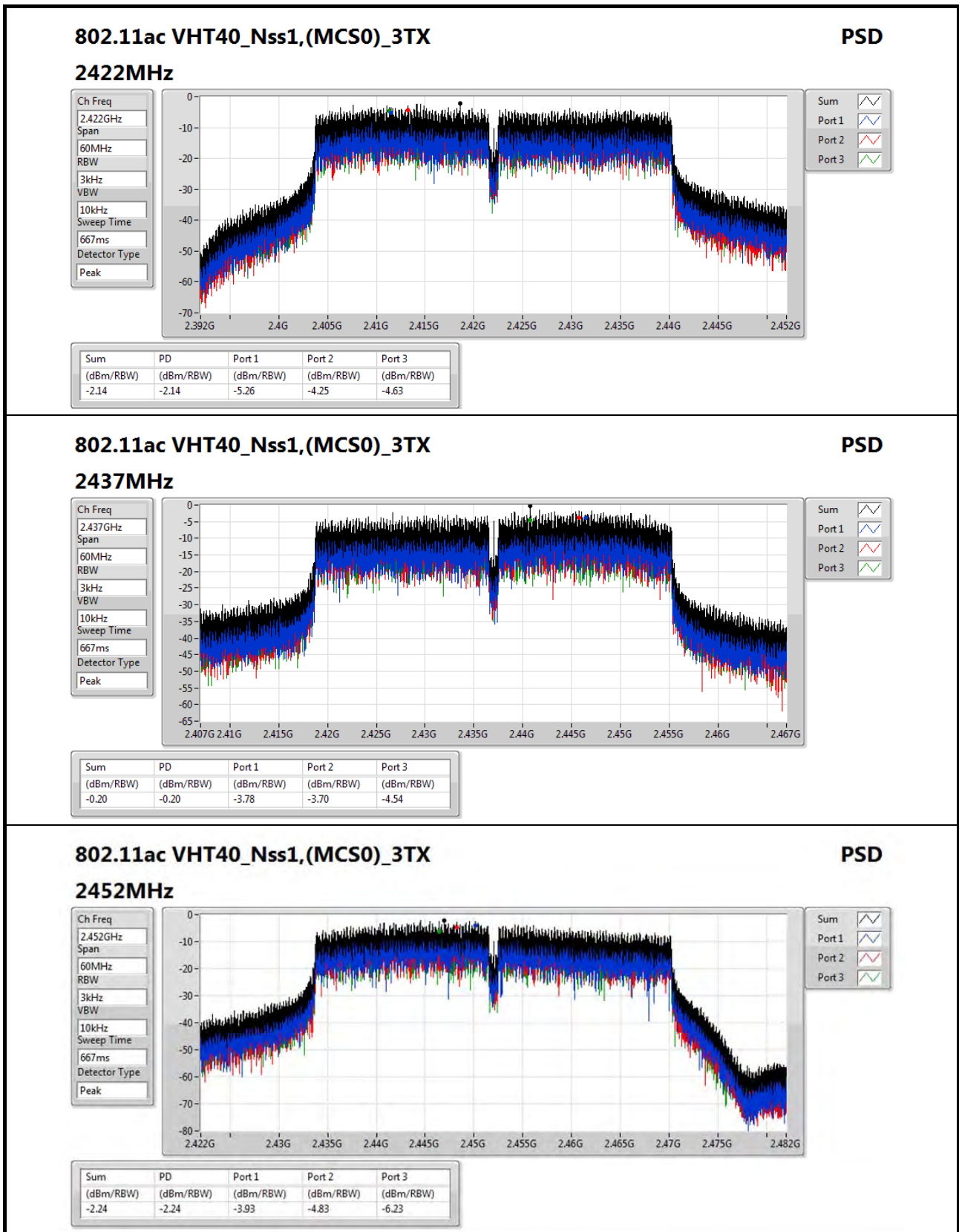
Port 1

Port 2

Port 3

Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.24	0.24	-1.32	-1.98	-2.48







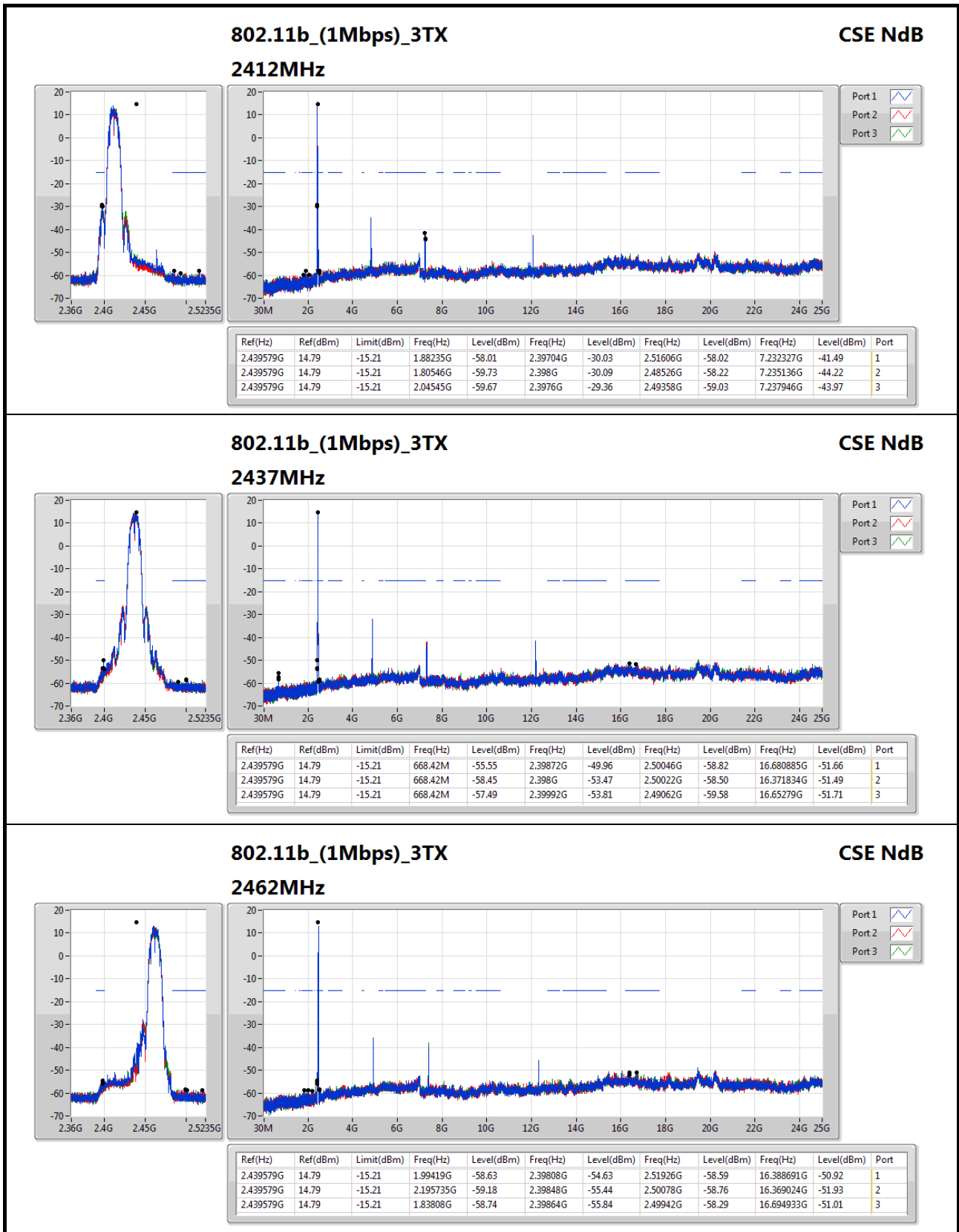
Summary

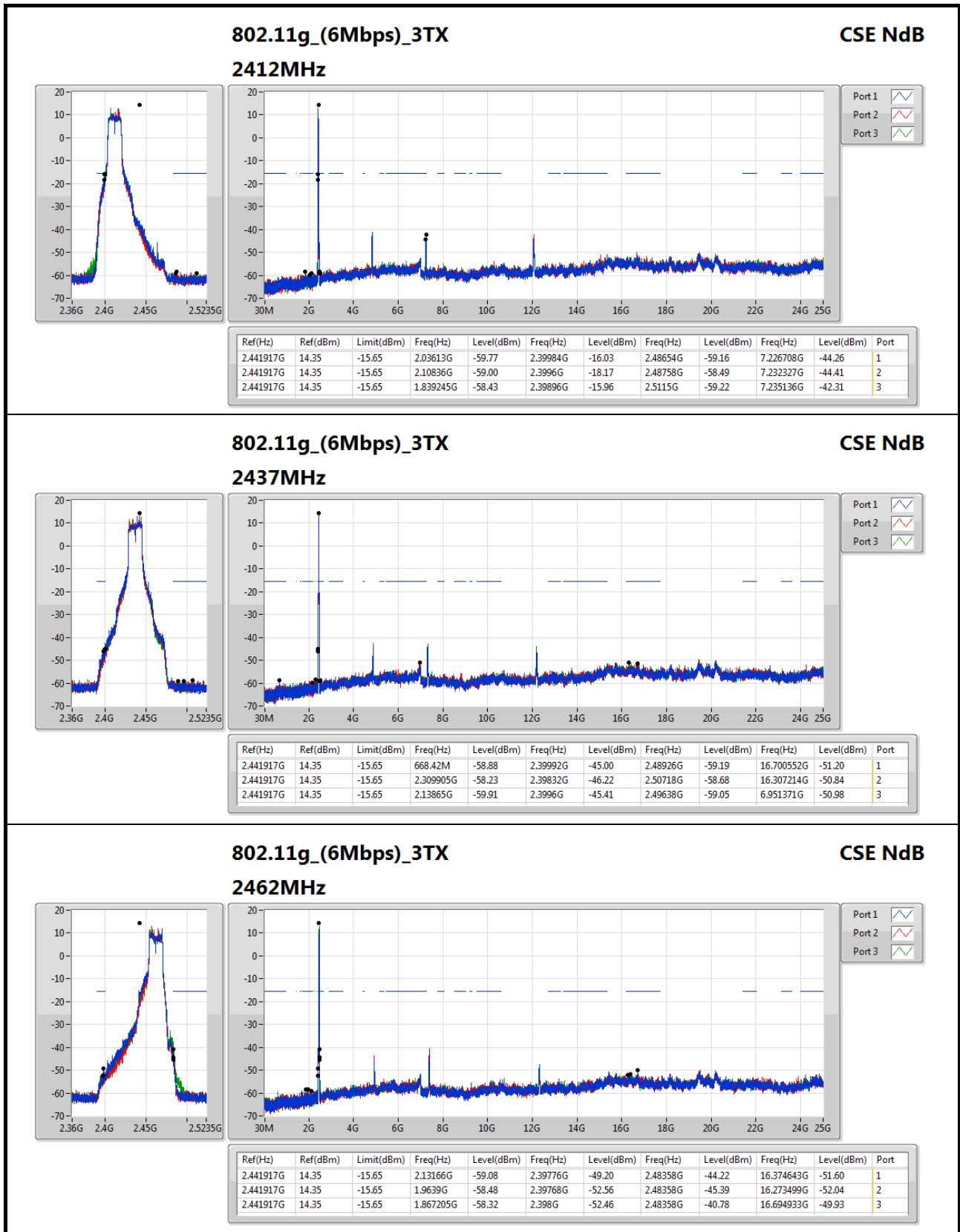
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.441917G	14.35	-15.65	1.839245G	-58.43	2.39896G	-15.96	2.5115G	-59.22	7.235136G	-42.31	3

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.439579G	14.79	-15.21	1.88235G	-58.01	2.39704G	-30.03	2.51606G	-58.02	7.232327G	-41.49	1
2412MHz	Pass	2.439579G	14.79	-15.21	1.80546G	-59.73	2.398G	-30.09	2.48526G	-58.22	7.235136G	-44.22	2
2412MHz	Pass	2.439579G	14.79	-15.21	2.04545G	-59.67	2.3976G	-29.36	2.49358G	-59.03	7.237946G	-43.97	3
2437MHz	Pass	2.439579G	14.79	-15.21	668.42M	-55.55	2.39872G	-49.96	2.50046G	-58.82	16.680885G	-51.66	1
2437MHz	Pass	2.439579G	14.79	-15.21	668.42M	-58.45	2.398G	-53.47	2.50022G	-58.50	16.371834G	-51.49	2
2437MHz	Pass	2.439579G	14.79	-15.21	668.42M	-57.49	2.39992G	-53.81	2.49062G	-59.58	16.65279G	-51.71	3
2462MHz	Pass	2.439579G	14.79	-15.21	1.99419G	-58.63	2.39808G	-54.63	2.51926G	-58.59	16.388691G	-50.92	1
2462MHz	Pass	2.439579G	14.79	-15.21	2.195735G	-59.18	2.39848G	-55.44	2.50078G	-58.76	16.369024G	-51.93	2
2462MHz	Pass	2.439579G	14.79	-15.21	1.83808G	-58.74	2.39864G	-55.84	2.49942G	-58.29	16.694933G	-51.01	3
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.441917G	14.35	-15.65	2.03613G	-59.77	2.39984G	-16.03	2.48654G	-59.16	7.226708G	-44.26	1
2412MHz	Pass	2.441917G	14.35	-15.65	2.10836G	-59.00	2.3996G	-18.17	2.48758G	-58.49	7.232327G	-44.41	2
2412MHz	Pass	2.441917G	14.35	-15.65	1.839245G	-58.43	2.39896G	-15.96	2.5115G	-59.22	7.235136G	-42.31	3
2437MHz	Pass	2.441917G	14.35	-15.65	668.42M	-58.88	2.39992G	-45.00	2.48926G	-59.19	16.700552G	-51.20	1
2437MHz	Pass	2.441917G	14.35	-15.65	2.309905G	-58.23	2.39832G	-46.22	2.50718G	-58.68	16.307214G	-50.84	2
2437MHz	Pass	2.441917G	14.35	-15.65	2.13865G	-59.91	2.3996G	-45.41	2.49638G	-59.05	6.951371G	-50.98	3
2462MHz	Pass	2.441917G	14.35	-15.65	2.13166G	-59.08	2.39776G	-49.20	2.48358G	-44.22	16.374643G	-51.60	1
2462MHz	Pass	2.441917G	14.35	-15.65	1.9639G	-58.48	2.39768G	-52.56	2.48358G	-45.39	16.273499G	-52.04	2
2462MHz	Pass	2.441917G	14.35	-15.65	1.867205G	-58.32	2.398G	-52.46	2.48358G	-40.78	16.694933G	-49.93	3
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.441917G	14.65	-15.35	1.97322G	-59.87	2.39976G	-16.23	2.5103G	-59.13	7.223898G	-45.65	1
2412MHz	Pass	2.441917G	14.65	-15.35	1.97322G	-59.85	2.39976G	-18.96	2.52086G	-59.15	7.235136G	-44.69	2
2412MHz	Pass	2.441917G	14.65	-15.35	1.976715G	-59.24	2.39984G	-16.86	2.49414G	-57.67	7.229517G	-45.71	3
2437MHz	Pass	2.441917G	14.65	-15.35	669.585M	-59.40	2.39808G	-39.27	2.48494G	-58.42	16.546026G	-51.39	1
2437MHz	Pass	2.441917G	14.65	-15.35	2.309905G	-59.56	2.39992G	-43.68	2.5087G	-58.38	16.700552G	-50.87	2
2437MHz	Pass	2.441917G	14.65	-15.35	1.93827G	-58.33	2.39672G	-45.54	2.51158G	-57.75	16.405548G	-50.87	3
2462MHz	Pass	2.441917G	14.65	-15.35	2.13399G	-58.03	2.39944G	-44.26	2.48446G	-41.57	16.383072G	-50.89	1
2462MHz	Pass	2.441917G	14.65	-15.35	2.307575G	-58.95	2.39848G	-50.89	2.48422G	-44.12	16.7146G	-51.29	2
2462MHz	Pass	2.441917G	14.65	-15.35	2.137485G	-59.98	2.39784G	-51.61	2.48382G	-42.20	16.422406G	-51.33	3
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.442084G	11.63	-18.37	2.195195G	-59.61	2.39984G	-21.84	2.54622G	-57.95	7.24151G	-48.23	1
2422MHz	Pass	2.442084G	11.63	-18.37	1.84139G	-58.99	2.39984G	-22.20	2.4867G	-58.25	7.247119G	-50.62	2
2422MHz	Pass	2.442084G	11.63	-18.37	1.952455G	-59.12	2.39952G	-19.64	2.54702G	-57.82	7.247119G	-48.45	3
2437MHz	Pass	2.442084G	11.63	-18.37	1.90093G	-58.38	2.39952G	-20.10	2.48382G	-50.96	16.687277G	-49.95	1
2437MHz	Pass	2.442084G	11.63	-18.37	2.30168G	-58.50	2.3992G	-25.50	2.48414G	-53.39	16.7013G	-51.66	2
2437MHz	Pass	2.442084G	11.63	-18.37	2.13909G	-58.37	2.39776G	-24.40	2.48606G	-51.14	16.987365G	-51.11	3
2452MHz	Pass	2.442084G	11.63	-18.37	2.18489G	-59.07	2.39952G	-37.22	2.48446G	-44.59	16.720932G	-51.04	1
2452MHz	Pass	2.442084G	11.63	-18.37	1.97879G	-59.65	2.39952G	-38.77	2.48446G	-44.93	16.420843G	-51.50	2
2452MHz	Pass	2.442084G	11.63	-18.37	1.941005G	-58.81	2.39952G	-36.32	2.48942G	-38.75	16.720932G	-51.15	3





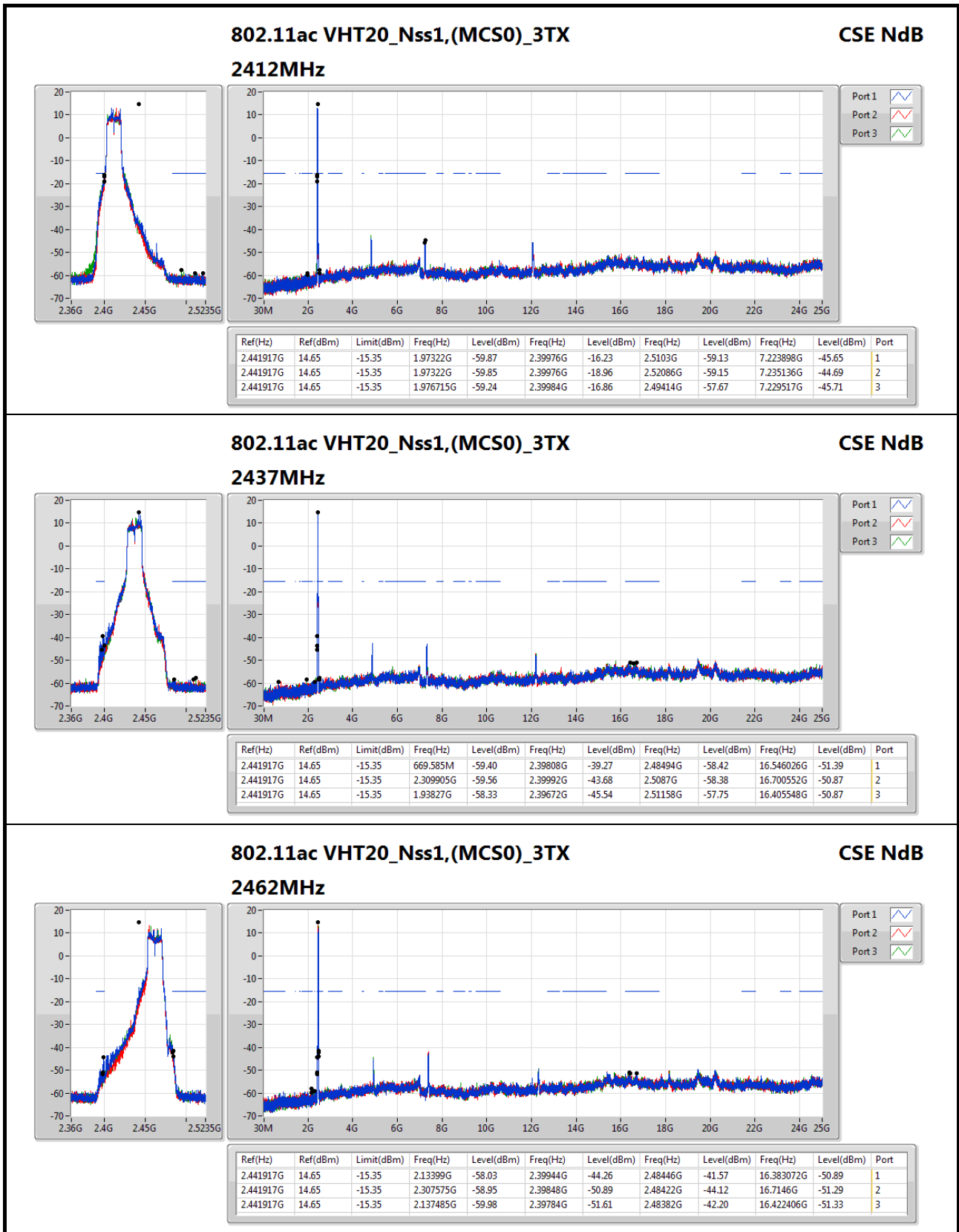


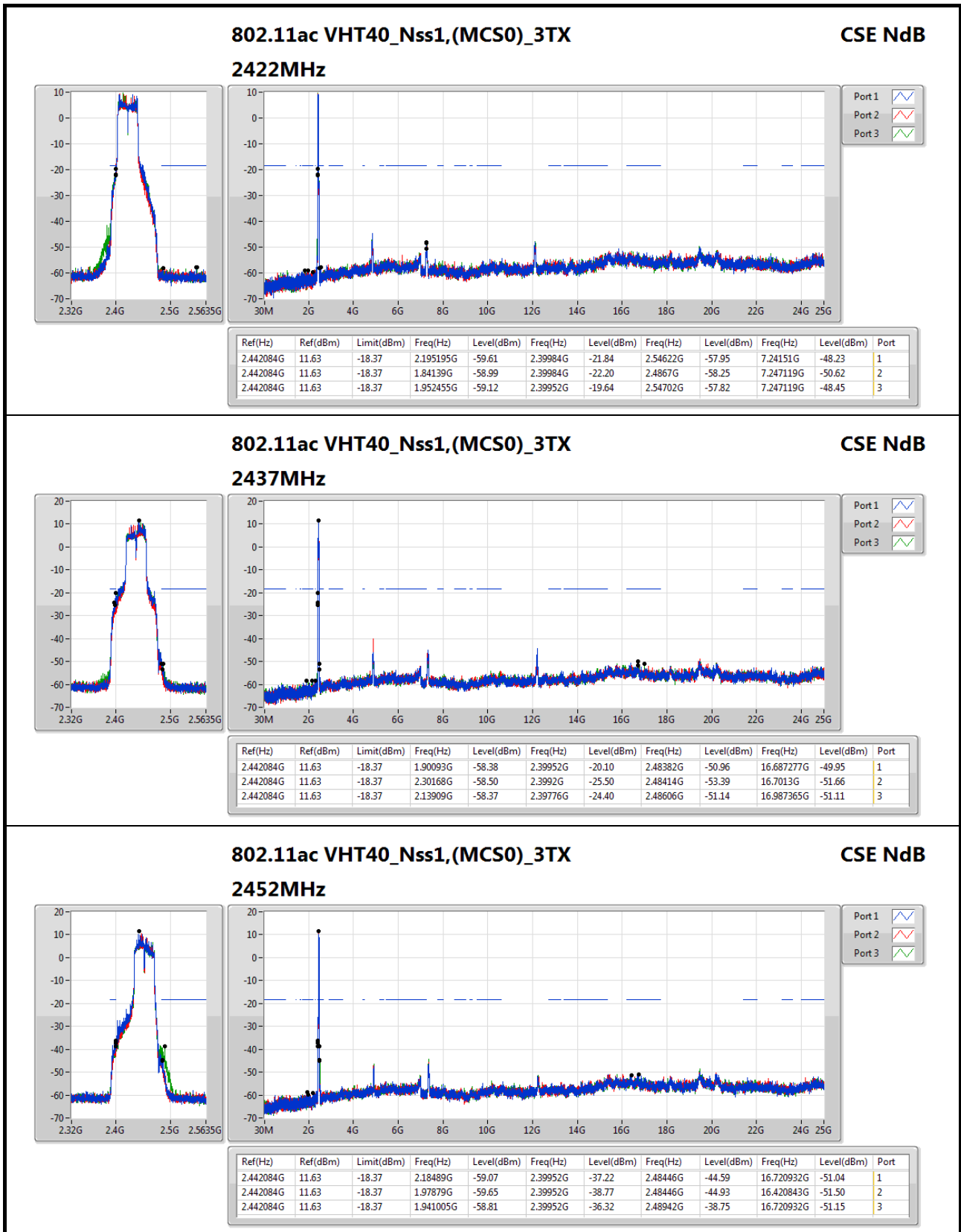
### 802.11g\_(6Mbps)\_3TX

#### 2462MHz

**CSE NdB**

Port 1   
 Port 2   
 Port 3







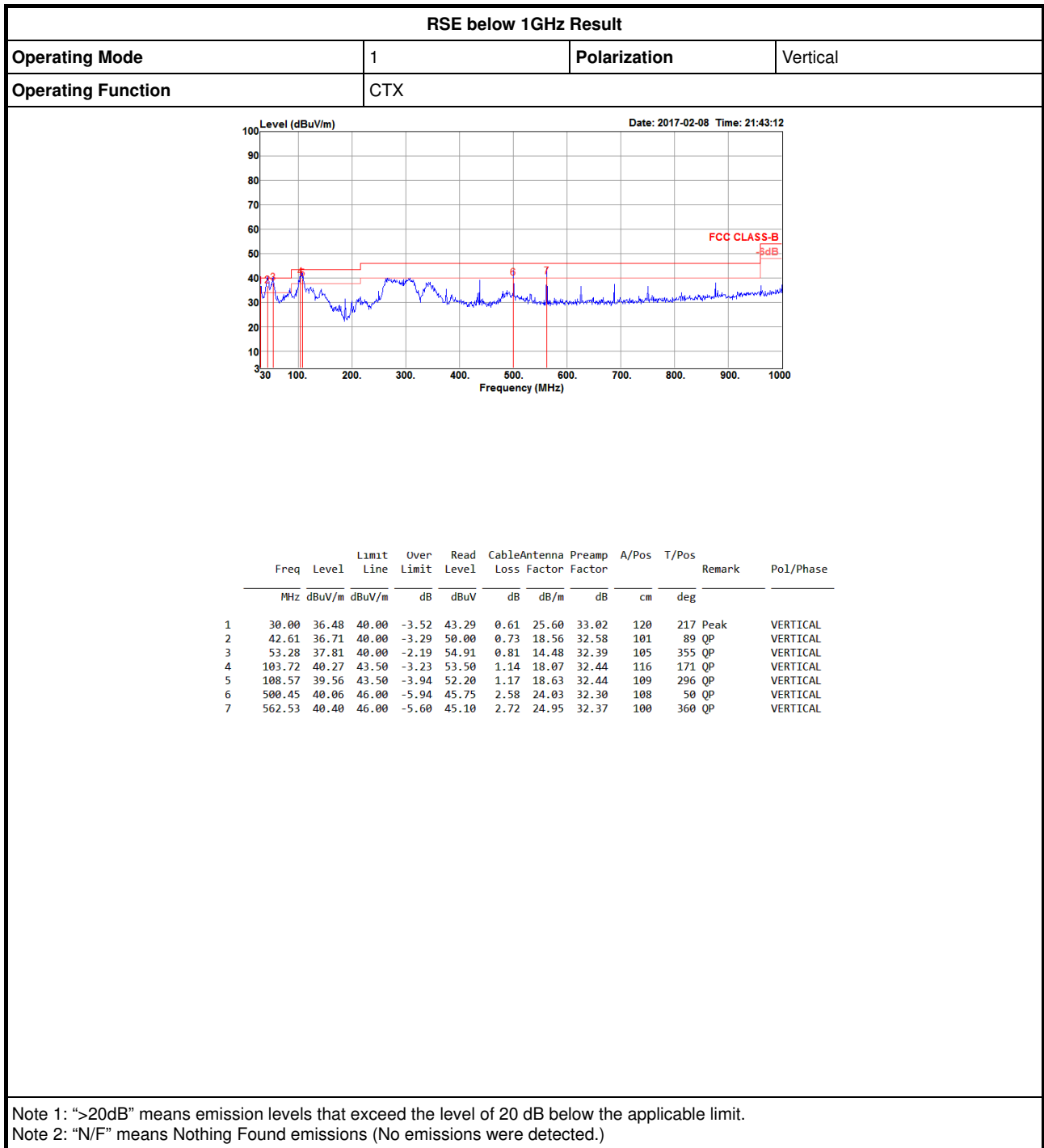
# RSE below 1GHz Result

RSE below 1GHz Result																																																																																																																																																																																																																														
Operating Mode	1	Polarization	Horizontal																																																																																																																																																																																																																											
Operating Function	CTX																																																																																																																																																																																																																													
<div style="display: flex; justify-content: space-between;"> <span>Level (dBuV/m)</span> <span>Date: 2017-02-09 Time: 19:45:27</span> </div>																																																																																																																																																																																																																														
<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Limit</th> <th>Over</th> <th>Read</th> <th>CableAntenna</th> <th>Preamp</th> <th>A/Pos</th> <th>T/Pos</th> <th>Remark</th> <th>Pol/Phase</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th>dB/m</th> <th>dB</th> <th>cm</th> <th>deg</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>76.56</td><td>35.27</td><td>40.00</td><td>-4.73</td><td>53.36</td><td>0.97</td><td>13.36</td><td>32.42</td><td>102</td><td>141</td><td>Peak</td><td>HORIZONTAL</td></tr> <tr><td>2</td><td>111.48</td><td>38.74</td><td>43.50</td><td>-4.76</td><td>51.14</td><td>1.19</td><td>18.84</td><td>32.43</td><td>100</td><td>231</td><td>Peak</td><td>HORIZONTAL</td></tr> <tr><td>3</td><td>141.55</td><td>40.04</td><td>43.50</td><td>-3.46</td><td>53.02</td><td>1.34</td><td>18.07</td><td>32.39</td><td>108</td><td>122</td><td>Peak</td><td>HORIZONTAL</td></tr> <tr><td>4</td><td>144.46</td><td>38.32</td><td>43.50</td><td>-5.18</td><td>51.56</td><td>1.35</td><td>17.80</td><td>32.39</td><td>102</td><td>321</td><td>Peak</td><td>HORIZONTAL</td></tr> <tr><td>5</td><td>250.19</td><td>38.56</td><td>46.00</td><td>-7.44</td><td>50.00</td><td>1.79</td><td>19.10</td><td>32.33</td><td>100</td><td>162</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>6</td><td>256.98</td><td>41.17</td><td>46.00</td><td>-4.83</td><td>52.00</td><td>1.82</td><td>19.68</td><td>32.33</td><td>100</td><td>125</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>7</td><td>264.74</td><td>44.28</td><td>46.00</td><td>-1.72</td><td>55.00</td><td>1.85</td><td>19.76</td><td>32.33</td><td>100</td><td>105</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>8</td><td>268.62</td><td>43.99</td><td>46.00</td><td>-2.01</td><td>54.81</td><td>1.86</td><td>19.65</td><td>32.33</td><td>100</td><td>112</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>9</td><td>281.23</td><td>40.49</td><td>46.00</td><td>-5.51</td><td>51.21</td><td>1.90</td><td>19.71</td><td>32.33</td><td>100</td><td>125</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>10</td><td>284.14</td><td>40.51</td><td>46.00</td><td>-5.49</td><td>51.19</td><td>1.91</td><td>19.74</td><td>32.33</td><td>100</td><td>112</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>11</td><td>294.81</td><td>40.71</td><td>46.00</td><td>-5.29</td><td>51.19</td><td>1.95</td><td>19.90</td><td>32.33</td><td>100</td><td>136</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>12</td><td>297.72</td><td>41.34</td><td>46.00</td><td>-4.66</td><td>51.77</td><td>1.96</td><td>19.94</td><td>32.33</td><td>150</td><td>215</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>13</td><td>305.48</td><td>41.63</td><td>46.00</td><td>-4.37</td><td>51.81</td><td>1.99</td><td>20.16</td><td>32.33</td><td>200</td><td>124</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>14</td><td>312.27</td><td>41.80</td><td>46.00</td><td>-4.20</td><td>51.77</td><td>2.01</td><td>20.35</td><td>32.33</td><td>125</td><td>124</td><td>QP</td><td>HORIZONTAL</td></tr> <tr><td>15</td><td>750.71</td><td>38.97</td><td>46.00</td><td>-7.03</td><td>41.68</td><td>3.17</td><td>26.40</td><td>32.28</td><td>102</td><td>296</td><td>Peak</td><td>HORIZONTAL</td></tr> </tbody> </table>					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	76.56	35.27	40.00	-4.73	53.36	0.97	13.36	32.42	102	141	Peak	HORIZONTAL	2	111.48	38.74	43.50	-4.76	51.14	1.19	18.84	32.43	100	231	Peak	HORIZONTAL	3	141.55	40.04	43.50	-3.46	53.02	1.34	18.07	32.39	108	122	Peak	HORIZONTAL	4	144.46	38.32	43.50	-5.18	51.56	1.35	17.80	32.39	102	321	Peak	HORIZONTAL	5	250.19	38.56	46.00	-7.44	50.00	1.79	19.10	32.33	100	162	QP	HORIZONTAL	6	256.98	41.17	46.00	-4.83	52.00	1.82	19.68	32.33	100	125	QP	HORIZONTAL	7	264.74	44.28	46.00	-1.72	55.00	1.85	19.76	32.33	100	105	QP	HORIZONTAL	8	268.62	43.99	46.00	-2.01	54.81	1.86	19.65	32.33	100	112	QP	HORIZONTAL	9	281.23	40.49	46.00	-5.51	51.21	1.90	19.71	32.33	100	125	QP	HORIZONTAL	10	284.14	40.51	46.00	-5.49	51.19	1.91	19.74	32.33	100	112	QP	HORIZONTAL	11	294.81	40.71	46.00	-5.29	51.19	1.95	19.90	32.33	100	136	QP	HORIZONTAL	12	297.72	41.34	46.00	-4.66	51.77	1.96	19.94	32.33	150	215	QP	HORIZONTAL	13	305.48	41.63	46.00	-4.37	51.81	1.99	20.16	32.33	200	124	QP	HORIZONTAL	14	312.27	41.80	46.00	-4.20	51.77	2.01	20.35	32.33	125	124	QP	HORIZONTAL	15	750.71	38.97	46.00	-7.03	41.68	3.17	26.40	32.28	102	296	Peak	HORIZONTAL
	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	76.56	35.27	40.00	-4.73	53.36	0.97	13.36	32.42	102	141	Peak	HORIZONTAL																																																																																																																																																																																																																		
2	111.48	38.74	43.50	-4.76	51.14	1.19	18.84	32.43	100	231	Peak	HORIZONTAL																																																																																																																																																																																																																		
3	141.55	40.04	43.50	-3.46	53.02	1.34	18.07	32.39	108	122	Peak	HORIZONTAL																																																																																																																																																																																																																		
4	144.46	38.32	43.50	-5.18	51.56	1.35	17.80	32.39	102	321	Peak	HORIZONTAL																																																																																																																																																																																																																		
5	250.19	38.56	46.00	-7.44	50.00	1.79	19.10	32.33	100	162	QP	HORIZONTAL																																																																																																																																																																																																																		
6	256.98	41.17	46.00	-4.83	52.00	1.82	19.68	32.33	100	125	QP	HORIZONTAL																																																																																																																																																																																																																		
7	264.74	44.28	46.00	-1.72	55.00	1.85	19.76	32.33	100	105	QP	HORIZONTAL																																																																																																																																																																																																																		
8	268.62	43.99	46.00	-2.01	54.81	1.86	19.65	32.33	100	112	QP	HORIZONTAL																																																																																																																																																																																																																		
9	281.23	40.49	46.00	-5.51	51.21	1.90	19.71	32.33	100	125	QP	HORIZONTAL																																																																																																																																																																																																																		
10	284.14	40.51	46.00	-5.49	51.19	1.91	19.74	32.33	100	112	QP	HORIZONTAL																																																																																																																																																																																																																		
11	294.81	40.71	46.00	-5.29	51.19	1.95	19.90	32.33	100	136	QP	HORIZONTAL																																																																																																																																																																																																																		
12	297.72	41.34	46.00	-4.66	51.77	1.96	19.94	32.33	150	215	QP	HORIZONTAL																																																																																																																																																																																																																		
13	305.48	41.63	46.00	-4.37	51.81	1.99	20.16	32.33	200	124	QP	HORIZONTAL																																																																																																																																																																																																																		
14	312.27	41.80	46.00	-4.20	51.77	2.01	20.35	32.33	125	124	QP	HORIZONTAL																																																																																																																																																																																																																		
15	750.71	38.97	46.00	-7.03	41.68	3.17	26.40	32.28	102	296	Peak	HORIZONTAL																																																																																																																																																																																																																		
<p>Note 1: "&gt;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.)</p>																																																																																																																																																																																																																														



# RSE below 1GHz Result

Appendix F.1

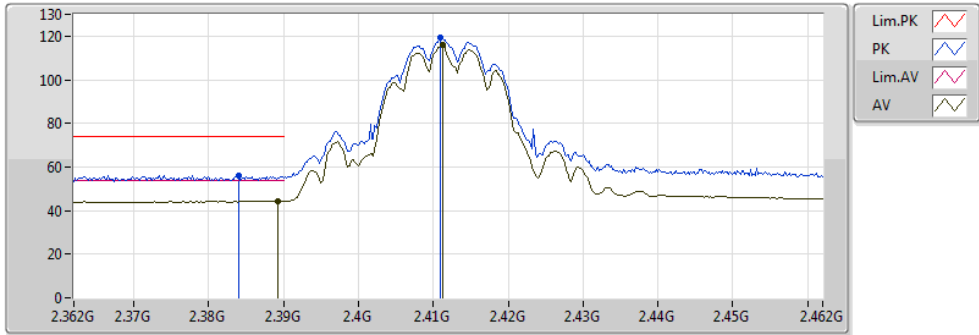




Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	4.824016G	53.99	54.00	-0.01	6.11	3	V	281	2.83	-

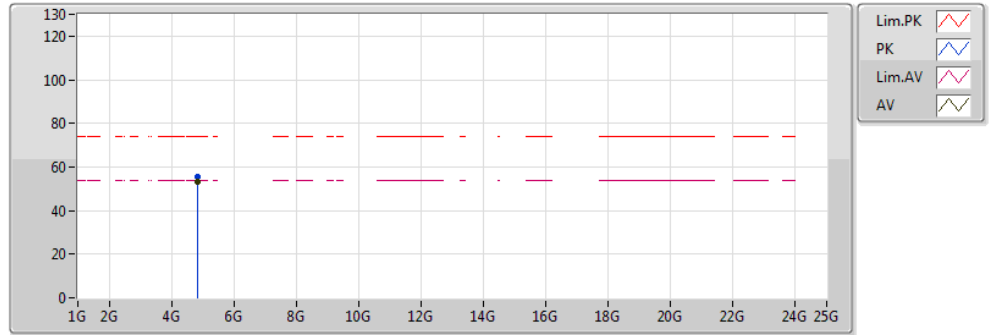
802.11b\_(1Mbps)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 23  
02-W-3  
FSP(100019)

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	44.27	54.00	-9.73	31.87	3	V	8	2.04	-
AV	2.4112G	115.93	Inf	-Inf	31.93	3	V	8	2.04	-
PK	2.384G	56.10	74.00	-17.90	31.86	3	V	8	2.04	-
PK	2.411G	119.32	Inf	-Inf	31.93	3	V	8	2.04	-

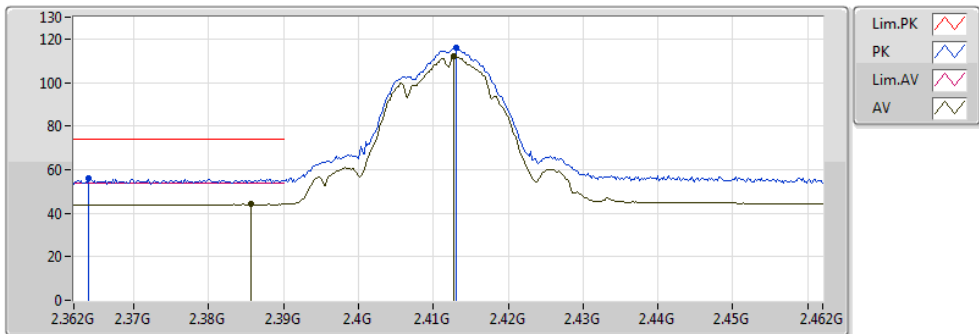
802.11b\_(1Mbps)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 23  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824028G	53.03	54.00	-0.97	6.11	3	H	304	2.69	-
PK	4.824048G	55.54	74.00	-18.46	6.11	3	H	304	2.69	-

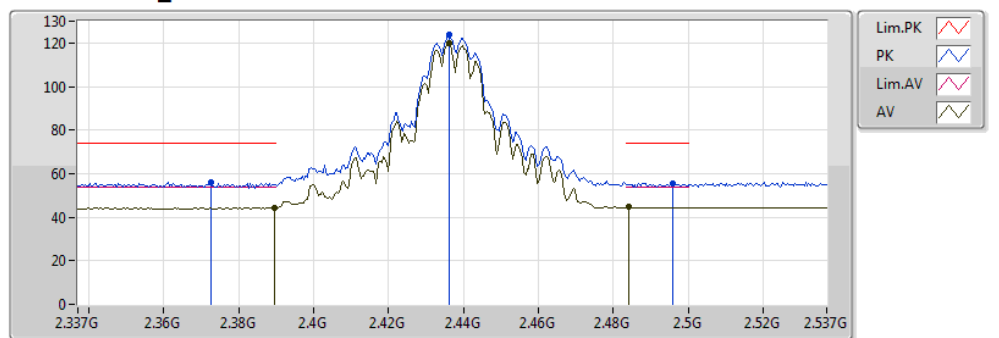
802.11b\_(1Mbps)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 23  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3856G	44.07	54.00	-9.93	31.86	3	H	287	2.57	-
AV	2.4128G	112.01	Inf	-Inf	31.93	3	H	287	2.57	-
PK	2.364G	56.03	74.00	-17.97	31.81	3	H	287	2.57	-
PK	2.413G	116.02	Inf	-Inf	31.94	3	H	287	2.57	-

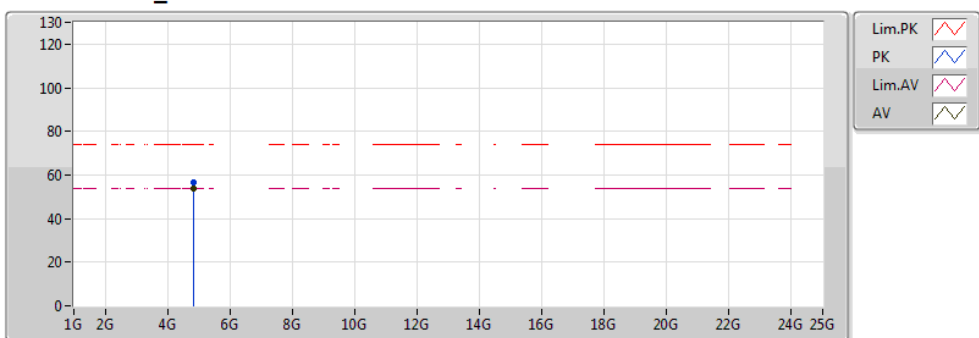
802.11b\_(1Mbps)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 27  
02-W-3  
FSP(100019)

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	44.38	54.00	-9.62	31.87	3	V	309	1.81	-
AV	2.4362G	119.92	Inf	-Inf	32.00	3	V	309	1.81	-
AV	2.4842G	44.55	54.00	-9.45	32.13	3	V	309	1.81	-
PK	2.3726G	55.83	74.00	-18.17	31.83	3	V	309	1.81	-
PK	2.4362G	123.70	Inf	-Inf	32.00	3	V	309	1.81	-
PK	2.4958G	55.50	74.00	-18.50	32.16	3	V	309	1.81	-

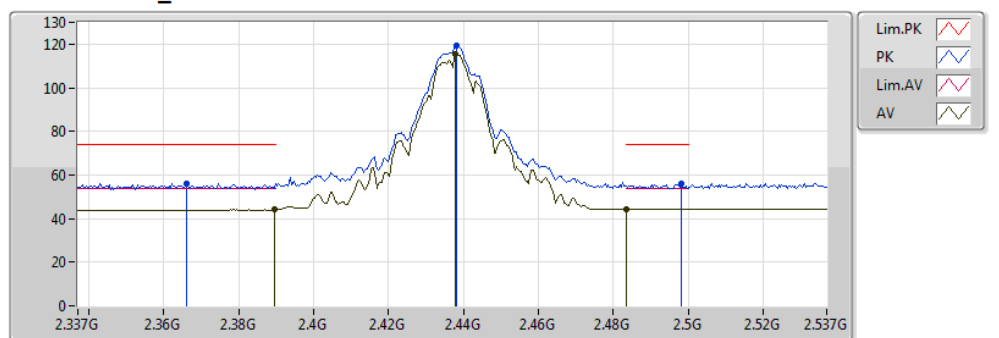
802.11b\_(1Mbps)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 23  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.824016G	53.99	54.00	-0.01	6.11	3	V	281	2.83	-
PK	4.824084G	56.69	74.00	-17.31	6.12	3	V	281	2.83	-

802.11b\_(1Mbps)\_3TX  
2437MHz\_TX

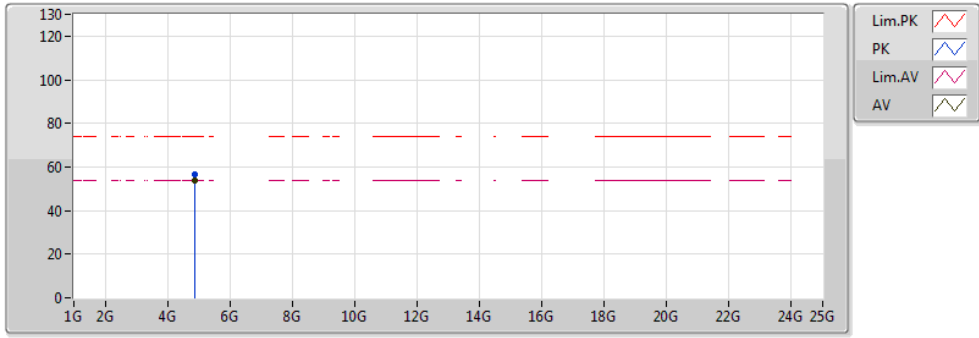


20170125  
EUT\_Y\_3TX  
Setting 27  
02-W-3  
FSP(100019)

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	44.09	54.00	-9.91	31.87	3	H	268	1.45	-
AV	2.4378G	115.29	Inf	-Inf	32.00	3	H	268	1.45	-
AV	2.483502G	44.29	54.00	-9.71	32.13	3	H	268	1.45	-
PK	2.3662G	56.12	74.00	-17.88	31.81	3	H	268	1.45	-
PK	2.4382G	119.39	Inf	-Inf	32.00	3	H	268	1.45	-
PK	2.4982G	55.78	74.00	-18.22	32.17	3	H	268	1.45	-



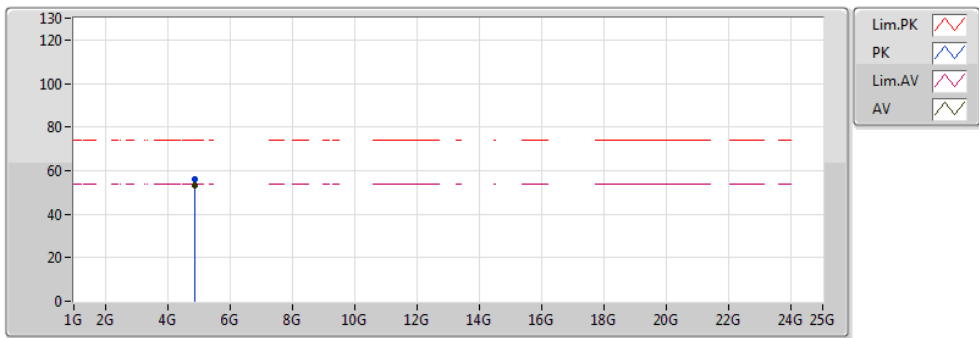
802.11b\_(1Mbps)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 27  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87412G	53.62	54.00	-0.38	6.25	3	V	259	2.89	-
PK	4.874236G	56.79	74.00	-17.21	6.25	3	V	259	2.89	-

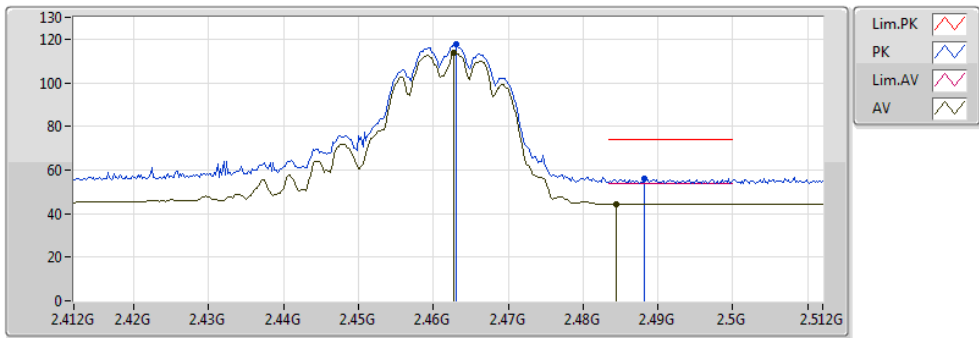
802.11b\_(1Mbps)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 27  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.874084G	53.34	54.00	-0.66	6.25	3	H	315	2.54	-
PK	4.87412G	56.15	74.00	-17.85	6.25	3	H	315	2.54	-

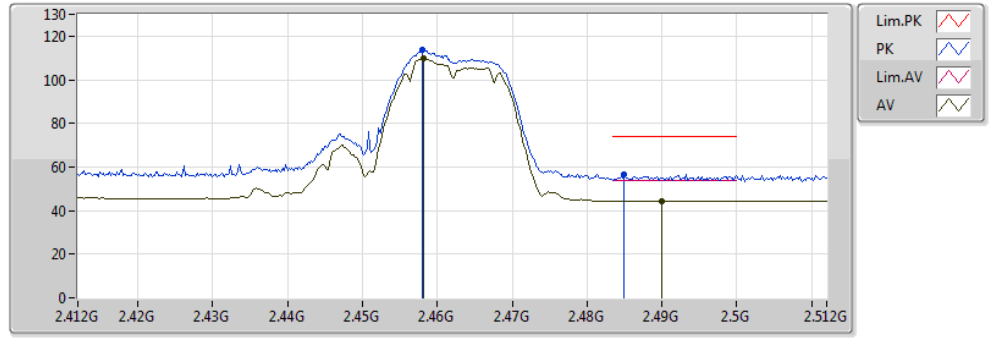
802.11b\_(1Mbps)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 24  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4628G	113.99	Inf	-Inf	32.07	3	V	76	1.54	-
AV	2.4844G	44.40	54.00	-9.60	32.13	3	V	76	1.54	-
PK	2.463G	117.80	Inf	-Inf	32.07	3	V	76	1.54	-
PK	2.4882G	56.09	74.00	-17.91	32.14	3	V	76	1.54	-

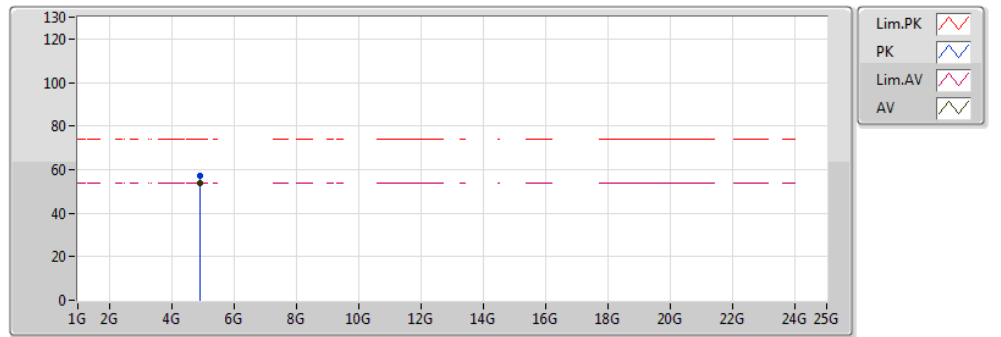
802.11b\_(1Mbps)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 24  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4582G	109.97	Inf	-Inf	32.06	3	H	276	1.85	-
AV	2.49G	44.29	54.00	-9.71	32.14	3	H	276	1.85	-
PK	2.458G	113.48	Inf	-Inf	32.06	3	H	276	1.85	-
PK	2.485G	56.86	74.00	-17.14	32.13	3	H	276	1.85	-

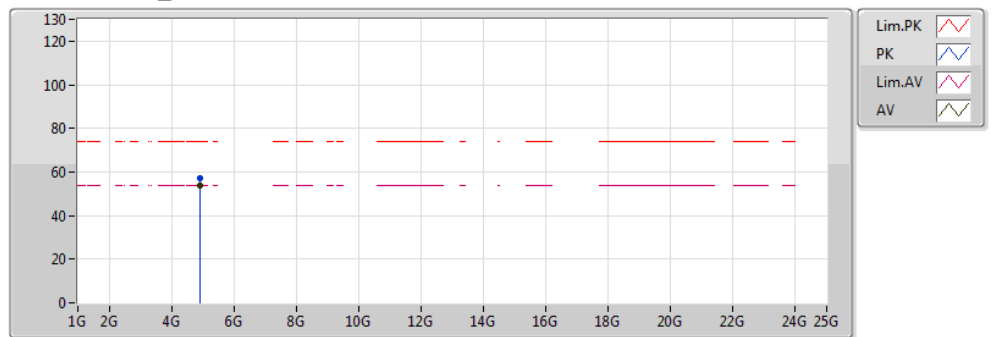
802.11b\_(1Mbps)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 24  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.924028G	53.98	54.00	-0.02	6.39	3	V	279	2.88	-
PK	4.92406G	57.12	74.00	-16.88	6.39	3	V	279	2.88	-

802.11b\_(1Mbps)\_3TX  
2462MHz\_TX

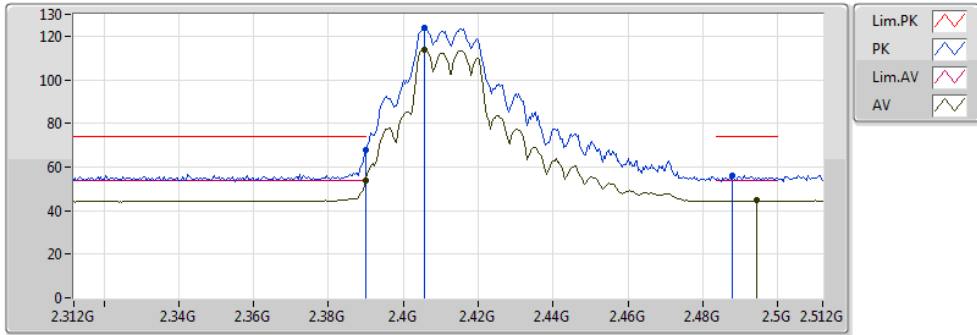


20170125  
EUT\_Y\_3TX  
Setting 24  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.924G	53.91	54.00	-0.09	6.39	3	H	315	2.62	-
PK	4.924072G	57.10	74.00	-16.90	6.39	3	H	315	2.62	-

802.11g\_(6Mbps)\_3TX

2412MHz\_TX

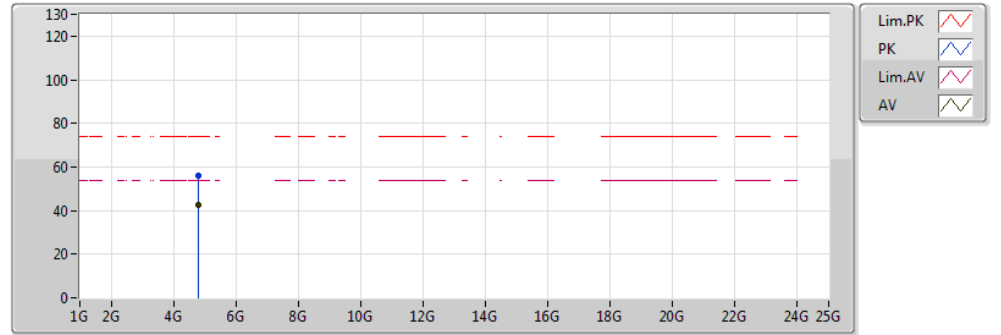


20170125  
EUT\_Y\_3TX  
Setting 26  
02-W-3  
FSP(100019)

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	53.97	54.00	-0.03	31.87	3	V	359	2.14	-
AV	2.4056G	113.72	Inf	-Inf	31.92	3	V	359	2.14	-
AV	2.4944G	44.64	54.00	-9.36	32.15	3	V	359	2.14	-
PK	2.39G	67.62	74.00	-6.38	31.87	3	V	359	2.14	-
PK	2.4056G	123.69	Inf	-Inf	31.92	3	V	359	2.14	-
PK	2.488G	56.04	74.00	-17.96	32.14	3	V	359	2.14	-

802.11g\_(6Mbps)\_3TX

2412MHz\_TX

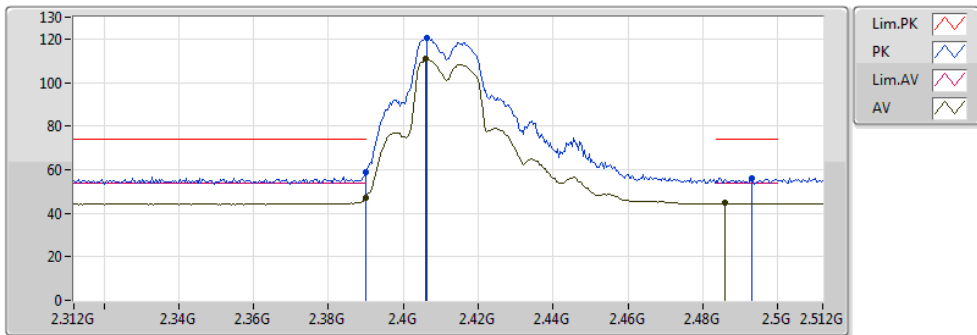


20170125  
EUT\_Y\_3TX  
Setting 26  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.81452G	42.44	54.00	-11.56	6.09	3	H	322	2.58	-
PK	4.81482G	56.04	74.00	-17.96	6.09	3	H	322	2.58	-

802.11g\_(6Mbps)\_3TX

2412MHz\_TX

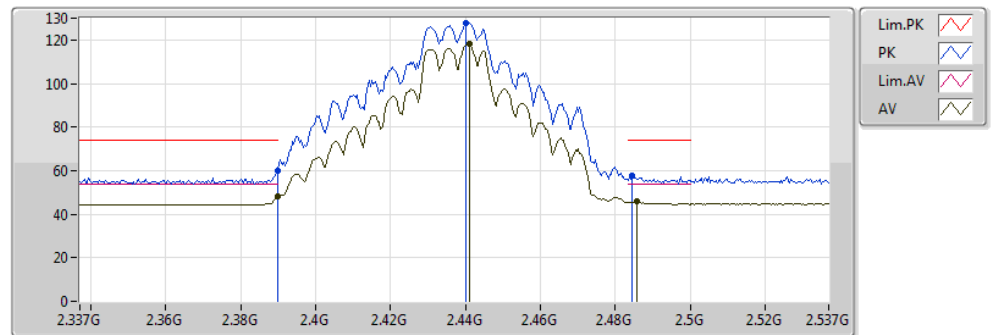


20170125  
EUT\_Y\_3TX  
Setting 26  
02-W-3  
FSP(100019)

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	47.23	54.00	-6.77	31.87	3	H	273	2.83	-
AV	2.406G	110.82	Inf	-Inf	31.92	3	H	273	2.83	-
AV	2.486G	44.59	54.00	-9.41	32.13	3	H	273	2.83	-
PK	2.39G	58.74	74.00	-15.26	31.87	3	H	273	2.83	-
PK	2.4064G	120.44	Inf	-Inf	31.92	3	H	273	2.83	-
PK	2.4932G	55.96	74.00	-18.04	32.15	3	H	273	2.83	-

802.11g\_(6Mbps)\_3TX

2437MHz\_TX

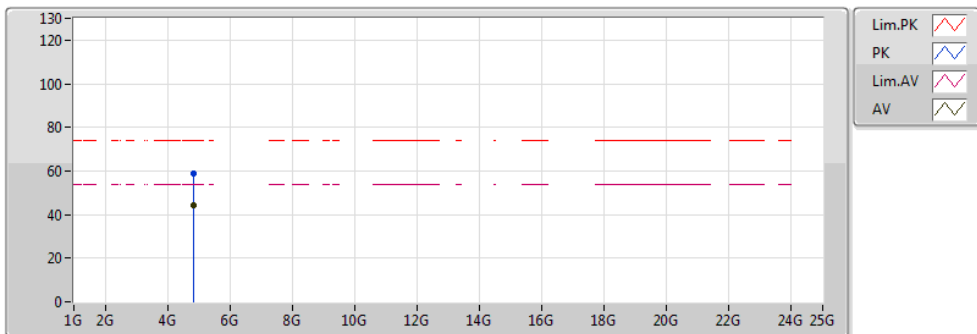


20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

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	48.02	54.00	-5.98	31.87	3	V	332	2.22	-
AV	2.441G	118.12	Inf	-Inf	32.01	3	V	332	2.22	-
AV	2.4858G	45.68	54.00	-8.32	32.13	3	V	332	2.22	-
PK	2.389998G	59.98	74.00	-14.02	31.87	3	V	332	2.22	-
PK	2.4402G	127.87	Inf	-Inf	32.01	3	V	332	2.22	-
PK	2.4846G	57.47	74.00	-16.53	32.13	3	V	332	2.22	-

802.11g\_(6Mbps)\_3TX

2412MHz\_TX

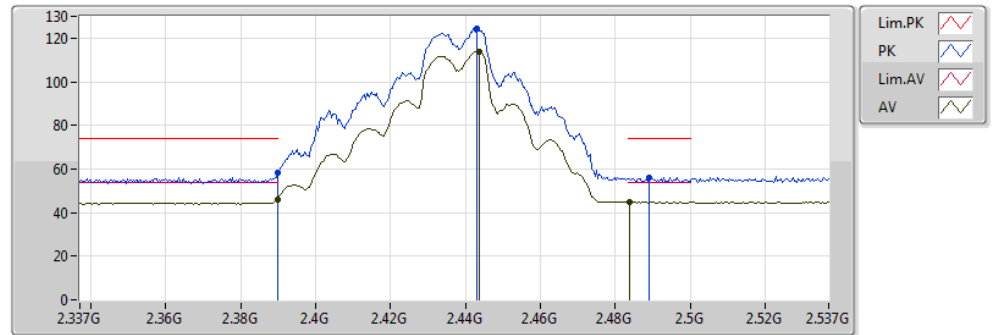


20170125  
EUT\_Y\_3TX  
Setting 26  
02-W-3  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82418G	44.15	54.00	-9.85	6.12	3	V	271	2.83	-
PK	4.82466G	58.67	74.00	-15.33	6.12	3	V	271	2.83	-

802.11g\_(6Mbps)\_3TX

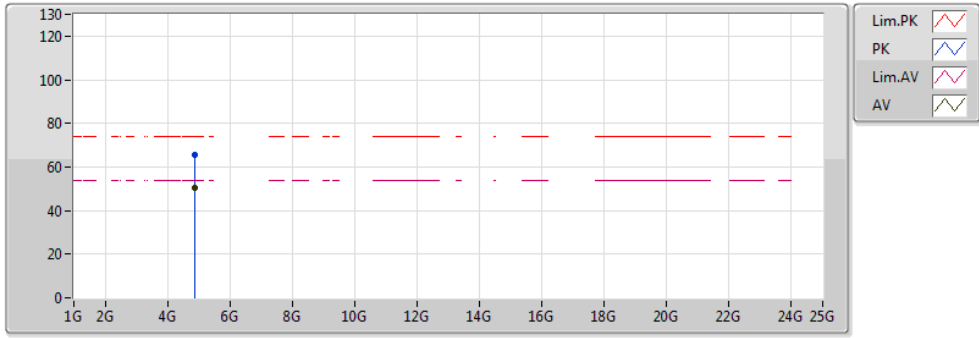
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

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	46.09	54.00	-7.91	31.87	3	H	254	1.82	-
AV	2.4438G	113.98	Inf	-Inf	32.02	3	H	254	1.82	-
AV	2.4838G	44.93	54.00	-9.07	32.13	3	H	254	1.82	-
PK	2.389998G	58.11	74.00	-15.89	31.87	3	H	254	1.82	-
PK	2.443G	124.23	Inf	-Inf	32.02	3	H	254	1.82	-
PK	2.489G	56.29	74.00	-17.71	32.14	3	H	254	1.82	-

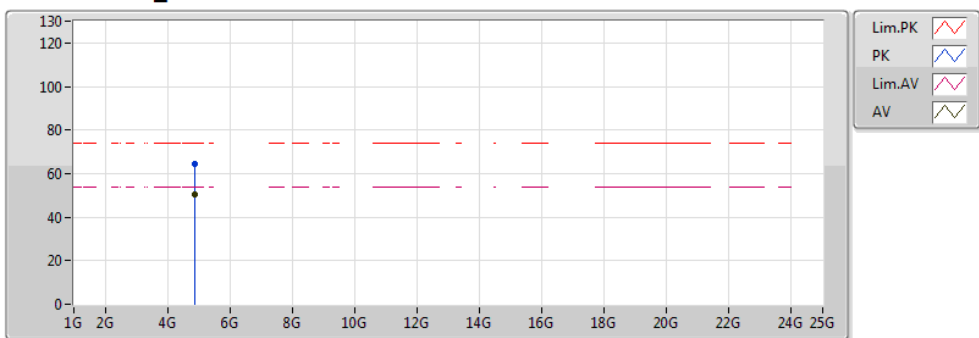
802.11g\_(6Mbps)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8854G	50.35	54.00	-3.65	6.28	3	V	287	2.91	-
PK	4.88498G	65.67	74.00	-8.33	6.28	3	V	287	2.91	-

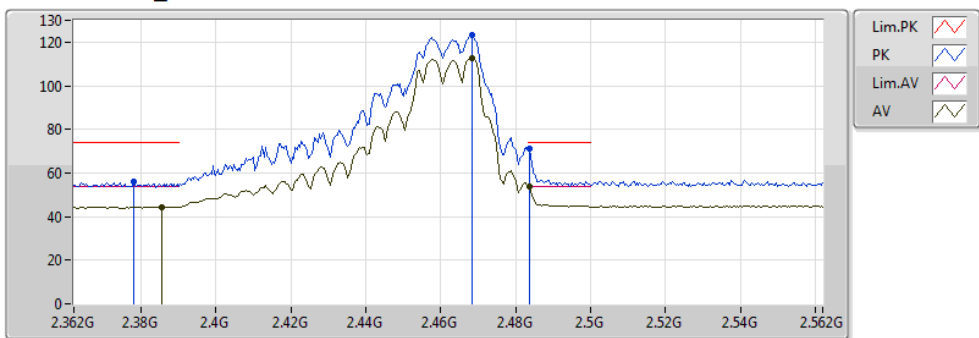
802.11g\_(6Mbps)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87584G	50.31	54.00	-3.69	6.25	3	H	313	2.94	-
PK	4.88552G	64.24	74.00	-9.76	6.28	3	H	313	2.94	-

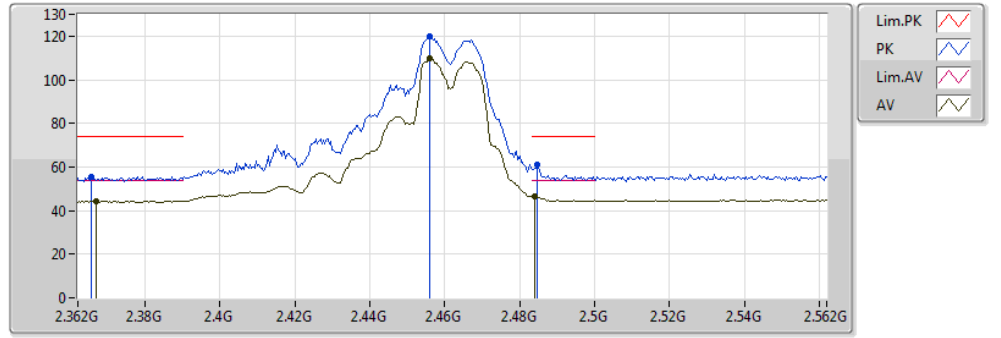
802.11g\_(6Mbps)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3856G	44.30	54.00	-9.70	31.86	3	V	29	2.17	-
AV	2.4684G	112.74	Inf	-Inf	32.08	3	V	29	2.17	-
AV	2.4836G	53.70	54.00	-0.30	32.13	3	V	29	2.17	-
PK	2.378G	56.23	74.00	-17.77	31.84	3	V	29	2.17	-
PK	2.4684G	123.05	Inf	-Inf	32.08	3	V	29	2.17	-
PK	2.4836G	71.02	74.00	-2.98	32.13	3	V	29	2.17	-

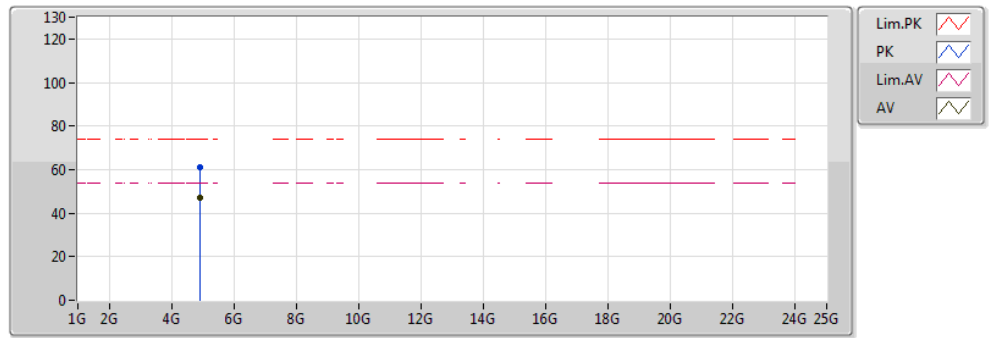
802.11g\_(6Mbps)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3668G	44.20	54.00	-9.80	31.81	3	H	273	1.86	-
AV	2.456G	109.61	Inf	-Inf	32.05	3	H	273	1.86	-
AV	2.484G	46.74	54.00	-7.26	32.13	3	H	273	1.86	-
PK	2.3656G	55.73	74.00	-18.27	31.81	3	H	273	1.86	-
PK	2.456G	120.07	Inf	-Inf	32.05	3	H	273	1.86	-
PK	2.4848G	60.88	74.00	-13.12	32.13	3	H	273	1.86	-

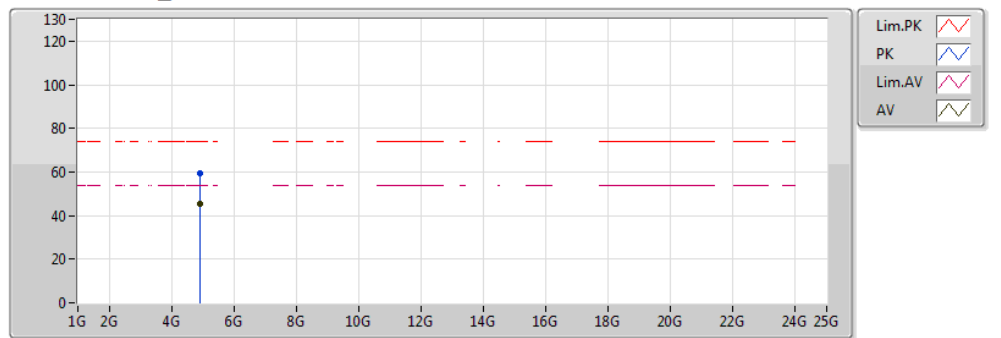
802.11g\_(6Mbps)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92418G	46.99	54.00	-7.01	6.39	3	V	279	2.89	-
PK	4.92412G	61.34	74.00	-12.66	6.39	3	V	279	2.89	-

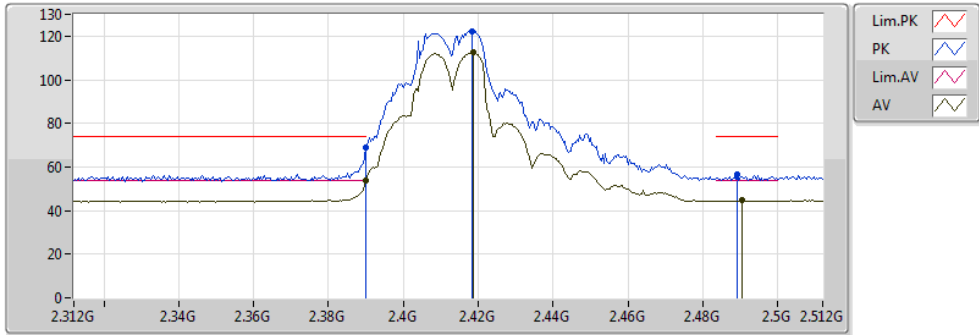
802.11g\_(6Mbps)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92436G	45.59	54.00	-8.41	6.40	3	H	309	2.63	-
PK	4.92388G	59.42	74.00	-14.58	6.39	3	H	309	2.63	-

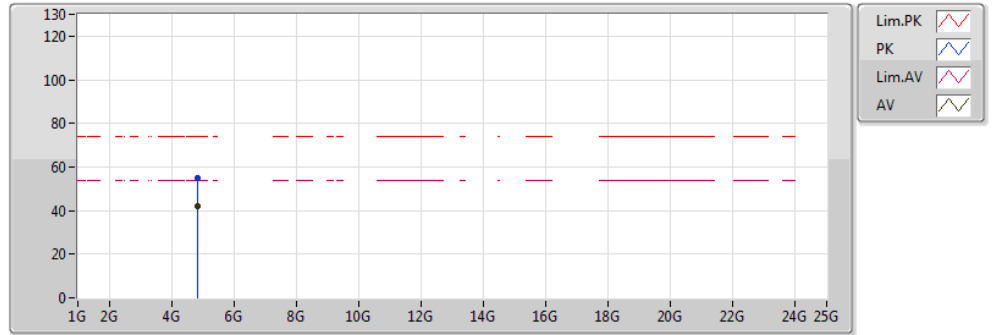
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

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	53.62	54.00	-0.38	31.87	3	V	1	2.21	-
AV	2.4188G	112.46	Inf	-Inf	31.95	3	V	1	2.21	-
AV	2.4904G	44.55	54.00	-9.45	32.14	3	V	1	2.21	-
PK	2.39G	68.90	74.00	-5.10	31.87	3	V	1	2.21	-
PK	2.4184G	122.38	Inf	-Inf	31.95	3	V	1	2.21	-
PK	2.4892G	56.50	74.00	-17.50	32.14	3	V	1	2.21	-

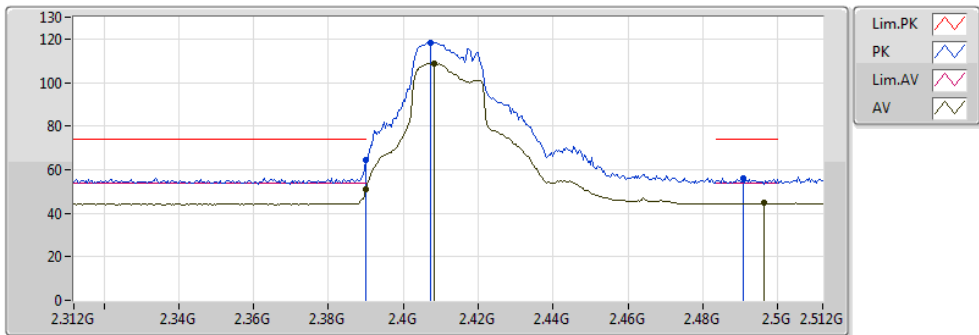
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82394G	41.85	54.00	-12.15	6.11	3	H	206	2.28	-
PK	4.82298G	55.11	74.00	-18.89	6.11	3	H	206	2.28	-

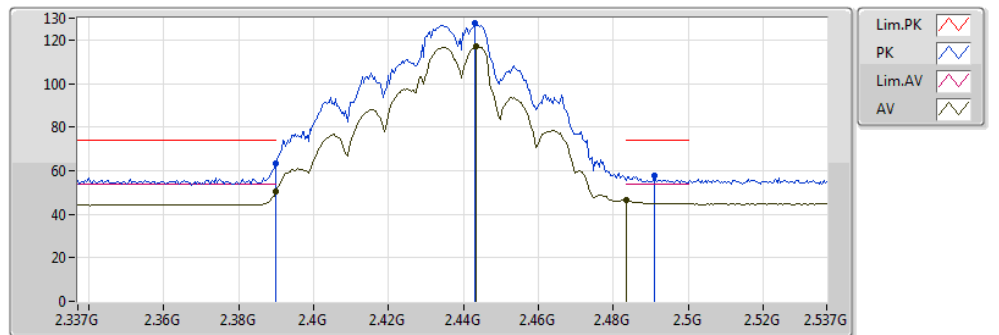
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

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	50.86	54.00	-3.14	31.87	3	H	253	2.56	-
AV	2.4084G	108.61	Inf	-Inf	31.92	3	H	253	2.56	-
AV	2.4964G	44.62	54.00	-9.38	32.16	3	H	253	2.56	-
PK	2.39G	64.29	74.00	-9.71	31.87	3	H	253	2.56	-
PK	2.4072G	118.43	Inf	-Inf	31.92	3	H	253	2.56	-
PK	2.4908G	56.17	74.00	-17.83	32.15	3	H	253	2.56	-

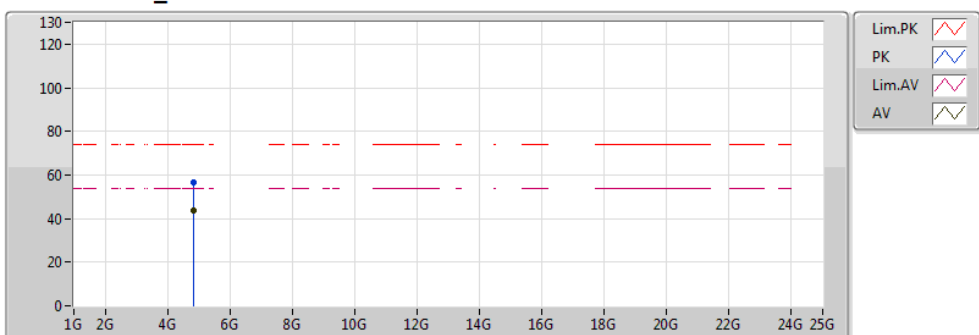
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

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	50.20	54.00	-3.80	31.87	3	V	318	1.82	-
AV	2.4434G	117.13	Inf	-Inf	32.02	3	V	318	1.82	-
AV	2.483502G	46.28	54.00	-7.72	32.13	3	V	318	1.82	-
PK	2.389998G	63.22	74.00	-10.78	31.87	3	V	318	1.82	-
PK	2.443G	127.60	Inf	-Inf	32.02	3	V	318	1.82	-
PK	2.491G	57.65	74.00	-16.35	32.15	3	V	318	1.82	-

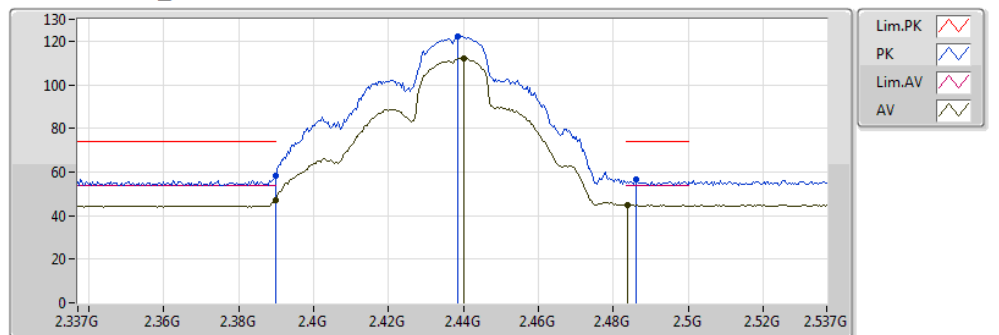
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2412MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82424G	43.46	54.00	-10.54	6.12	3	V	278	2.65	-
PK	4.82466G	56.57	74.00	-17.43	6.12	3	V	278	2.65	-

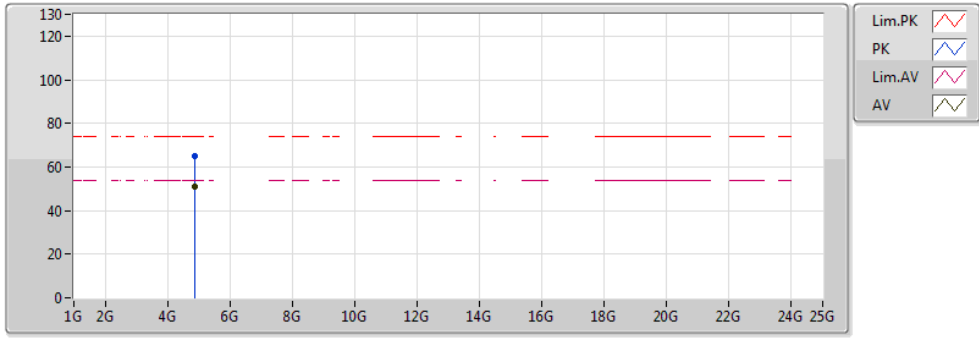
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

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	47.13	54.00	-6.87	31.87	3	H	228	2.00	-
AV	2.4402G	111.93	Inf	-Inf	32.01	3	H	228	2.00	-
AV	2.4838G	44.73	54.00	-9.27	32.13	3	H	228	2.00	-
PK	2.389998G	58.55	74.00	-15.45	31.87	3	H	228	2.00	-
PK	2.4386G	122.28	Inf	-Inf	32.00	3	H	228	2.00	-
PK	2.4862G	56.83	74.00	-17.17	32.13	3	H	228	2.00	-

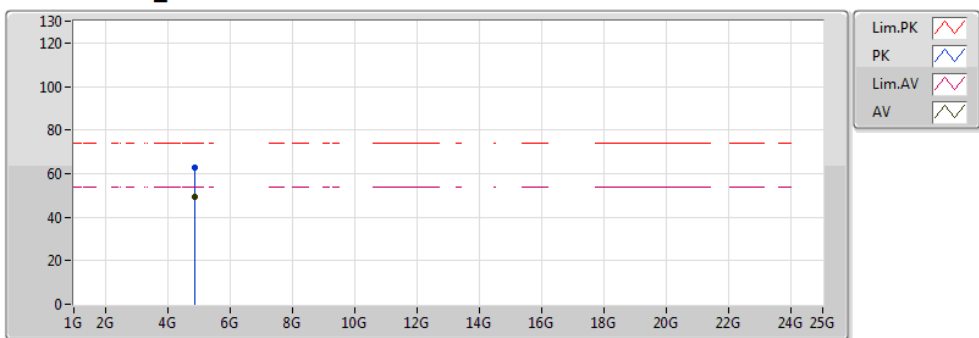
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(*)	Height(m)	Comments
AV	4.87826G	51.22	54.00	-2.78	6.26	3	V	277	2.62	-
PK	4.8773G	64.93	74.00	-9.07	6.26	3	V	277	2.62	-

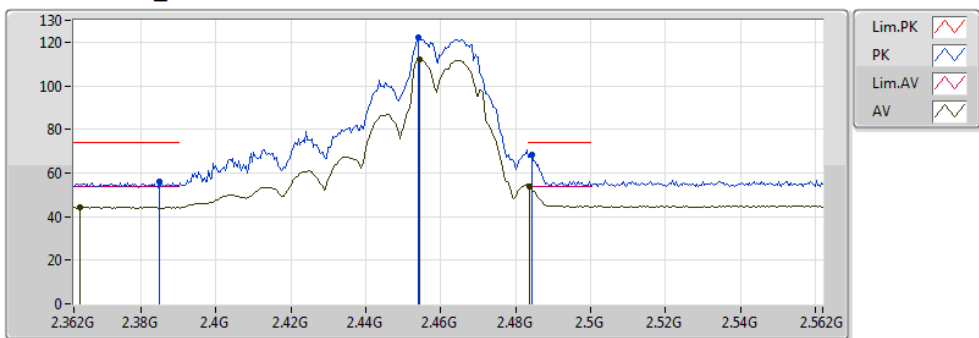
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 31.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(*)	Height(m)	Comments
AV	4.87778G	49.48	54.00	-4.52	6.26	3	H	320	2.96	-
PK	4.8773G	62.57	74.00	-11.43	6.26	3	H	320	2.96	-

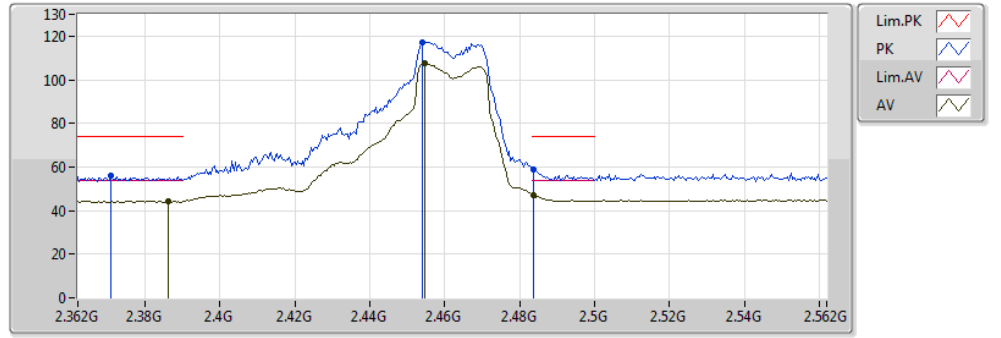
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(*)	Height(m)	Comments
AV	2.3636G	44.28	54.00	-9.72	31.81	3	V	295	1.87	-
AV	2.4544G	111.99	Inf	-Inf	32.05	3	V	295	1.87	-
AV	2.4836G	53.94	54.00	-0.06	32.13	3	V	295	1.87	-
PK	2.3848G	56.04	74.00	-17.96	31.86	3	V	295	1.87	-
PK	2.454G	122.03	Inf	-Inf	32.05	3	V	295	1.87	-
PK	2.4844G	68.38	74.00	-5.62	32.13	3	V	295	1.87	-

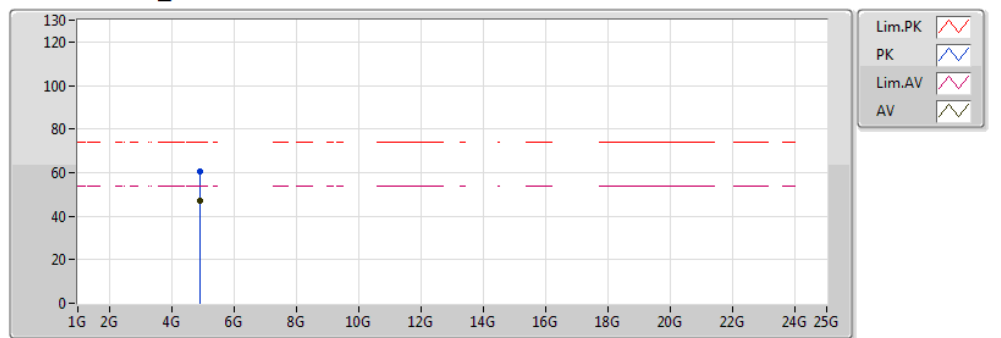
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(*)	Height(m)	Comments
AV	2.386G	44.28	54.00	-9.72	31.86	3	H	271	2.23	-
AV	2.4548G	107.48	Inf	-Inf	32.05	3	H	271	2.23	-
AV	2.4836G	47.04	54.00	-6.96	32.13	3	H	271	2.23	-
PK	2.3708G	56.06	74.00	-17.94	31.82	3	H	271	2.23	-
PK	2.454G	117.13	Inf	-Inf	32.05	3	H	271	2.23	-
PK	2.4836G	58.63	74.00	-15.37	32.13	3	H	271	2.23	-

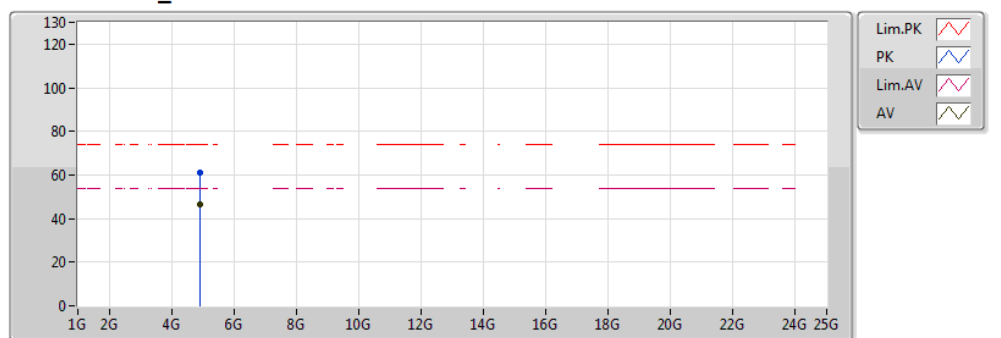
802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2462MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(*)	Height(m)	Comments
AV	4.92448G	47.28	54.00	-6.72	6.40	3	V	272	2.60	-
PK	4.9258G	60.67	74.00	-13.33	6.40	3	V	272	2.60	-

802.11ac VHT20\_Nss1,(MCS0)\_3TX  
2462MHz\_TX

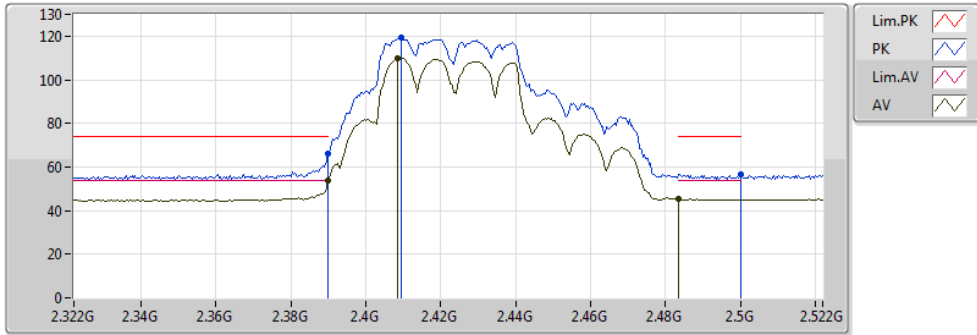


20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(*)	Height(m)	Comments
AV	4.92418G	46.52	54.00	-7.48	6.39	3	H	203	2.33	-
PK	4.92448G	61.00	74.00	-13.00	6.40	3	H	203	2.33	-



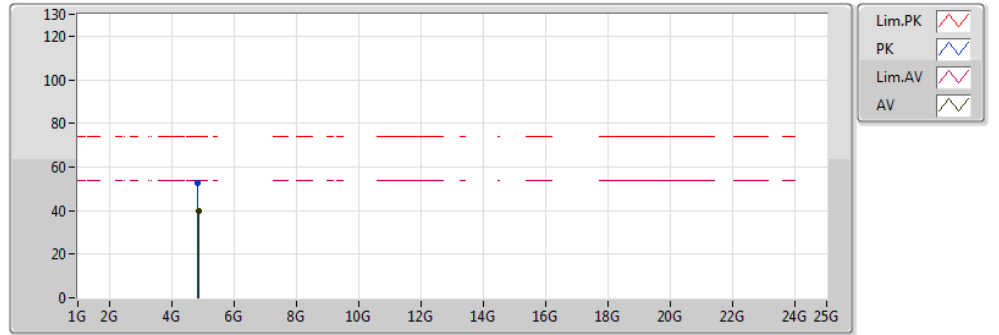
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2422MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

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	53.64	54.00	-0.36	31.87	3	V	34	2.04	-
AV	2.4084G	109.88	Inf	-Inf	31.92	3	V	34	2.04	-
AV	2.4836G	45.26	54.00	-8.74	32.13	3	V	34	2.04	-
PK	2.39G	66.22	74.00	-7.78	31.87	3	V	34	2.04	-
PK	2.4096G	119.15	Inf	-Inf	31.93	3	V	34	2.04	-
PK	2.5G	56.40	74.00	-17.60	32.17	3	V	34	2.04	-

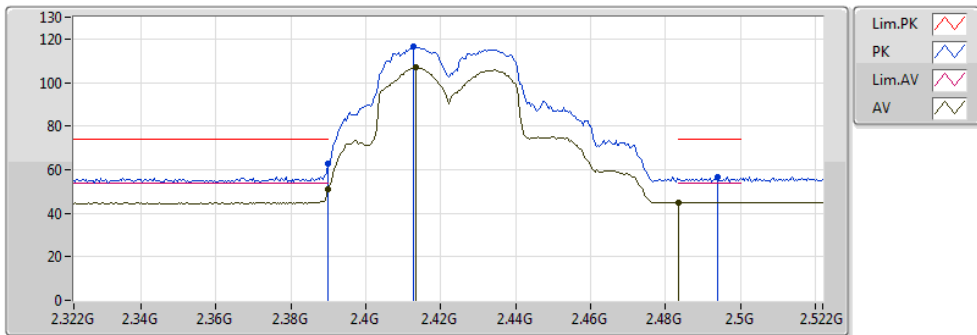
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2422MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8591G	39.59	54.00	-14.41	6.21	3	H	204	2.24	-
PK	4.8439G	52.50	74.00	-21.50	6.17	3	H	204	2.24	-

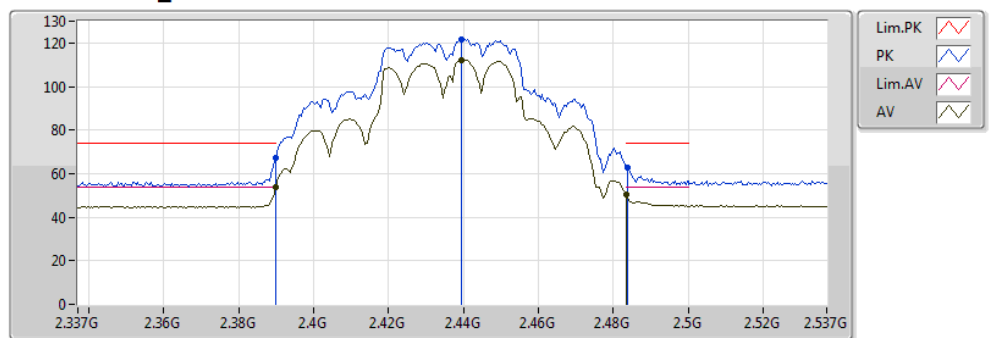
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2422MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

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	50.74	54.00	-3.26	31.87	3	H	268	1.68	-
AV	2.4132G	106.78	Inf	-Inf	31.94	3	H	268	1.68	-
AV	2.4836G	45.02	54.00	-8.98	32.13	3	H	268	1.68	-
PK	2.39G	62.70	74.00	-11.30	31.87	3	H	268	1.68	-
PK	2.4128G	116.41	Inf	-Inf	31.93	3	H	268	1.68	-
PK	2.494G	56.54	74.00	-17.46	32.15	3	H	268	1.68	-

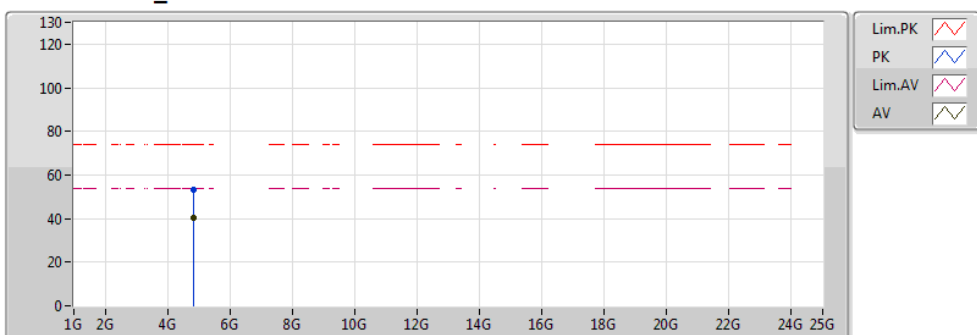
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 26.5  
02-J-4  
FSP(100019)

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	53.54	54.00	-0.46	31.87	3	V	305	1.83	-
AV	2.4394G	112.29	Inf	-Inf	32.01	3	V	305	1.83	-
AV	2.483502G	50.34	54.00	-3.66	32.13	3	V	305	1.83	-
PK	2.389998G	67.21	74.00	-6.79	31.87	3	V	305	1.83	-
PK	2.4394G	121.67	Inf	-Inf	32.01	3	V	305	1.83	-
PK	2.4838G	62.96	74.00	-11.04	32.13	3	V	305	1.83	-

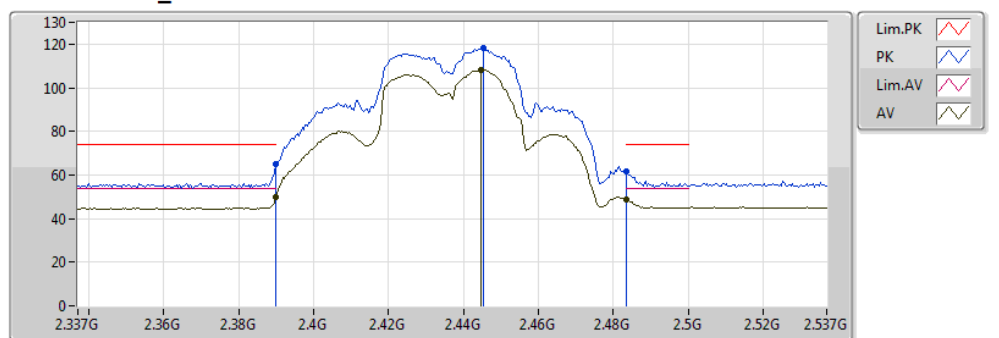
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2422MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 25.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.825G	40.29	54.00	-13.71	6.12	3	V	277	2.43	-
PK	4.8247G	53.39	74.00	-20.61	6.12	3	V	277	2.43	-

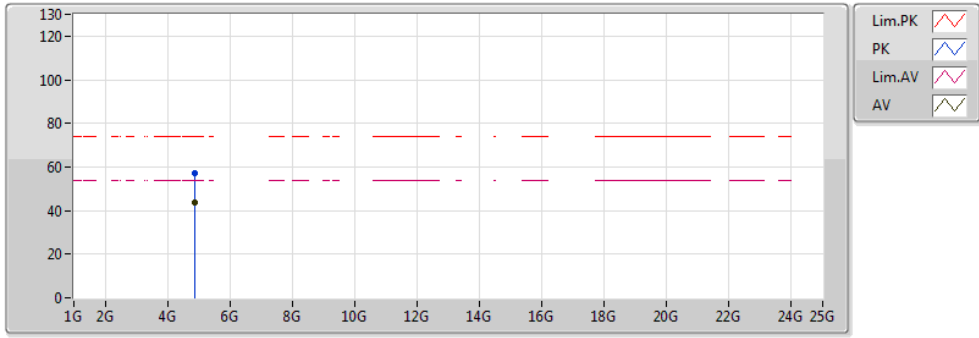
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 26.5  
02-J-4  
FSP(100019)

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	49.72	54.00	-4.28	31.87	3	H	242	1.84	-
AV	2.4446G	108.13	Inf	-Inf	32.02	3	H	242	1.84	-
AV	2.483502G	48.99	54.00	-5.01	32.13	3	H	242	1.84	-
PK	2.389998G	64.79	74.00	-9.21	31.87	3	H	242	1.84	-
PK	2.4454G	118.32	Inf	-Inf	32.02	3	H	242	1.84	-
PK	2.483502G	61.38	74.00	-12.62	32.13	3	H	242	1.84	-

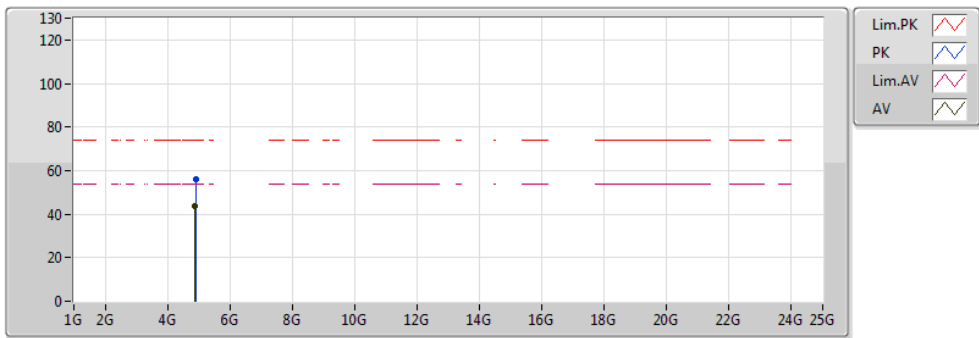
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 26.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8954G	43.64	54.00	-10.36	6.31	3	V	290	2.35	-
PK	4.8947G	57.16	74.00	-16.84	6.31	3	V	290	2.35	-

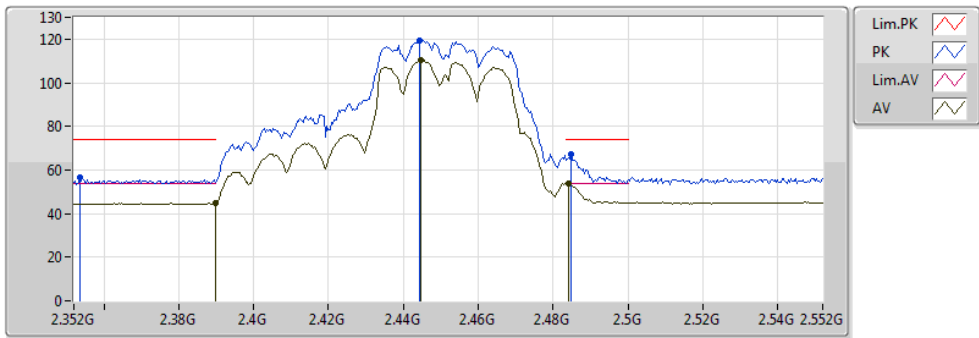
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2437MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 26.5  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8949G	43.48	54.00	-10.52	6.31	3	H	206	2.34	-
PK	4.8962G	55.89	74.00	-18.11	6.31	3	H	206	2.34	-

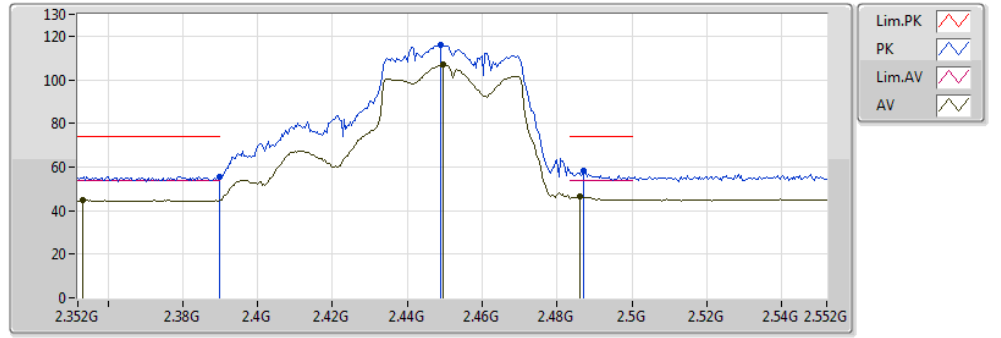
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2452MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 24  
02-J-4  
FSP(100019)

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	44.98	54.00	-9.02	31.87	3	V	16	1.88	-
AV	2.4448G	110.35	Inf	-Inf	32.02	3	V	16	1.88	-
AV	2.484G	53.88	54.00	-0.12	32.13	3	V	16	1.88	-
PK	2.3536G	56.61	74.00	-17.39	31.78	3	V	16	1.88	-
PK	2.4444G	119.45	Inf	-Inf	32.02	3	V	16	1.88	-
PK	2.4848G	67.02	74.00	-6.98	32.13	3	V	16	1.88	-

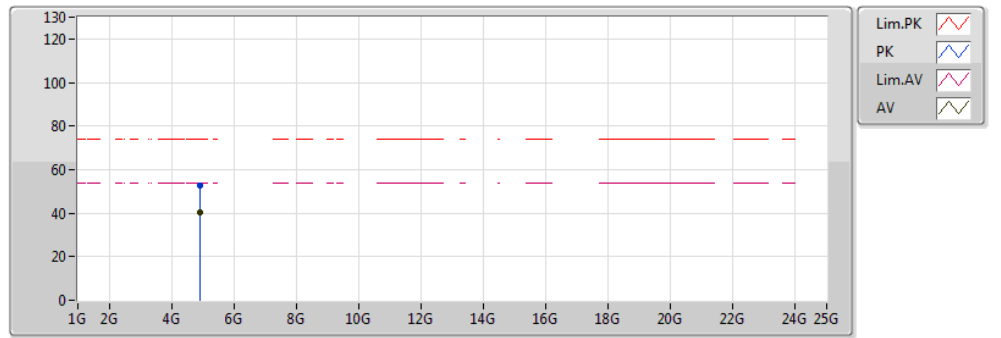
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2452MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 24  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3532G	44.89	54.00	-9.11	31.78	3	H	274	1.84	-
AV	2.4496G	106.81	Inf	-Inf	32.03	3	H	274	1.84	-
AV	2.486G	46.41	54.00	-7.59	32.13	3	H	274	1.84	-
PK	2.39G	55.65	74.00	-18.35	31.87	3	H	274	1.84	-
PK	2.4488G	116.22	Inf	-Inf	32.03	3	H	274	1.84	-
PK	2.4872G	58.28	74.00	-15.72	32.14	3	H	274	1.84	-

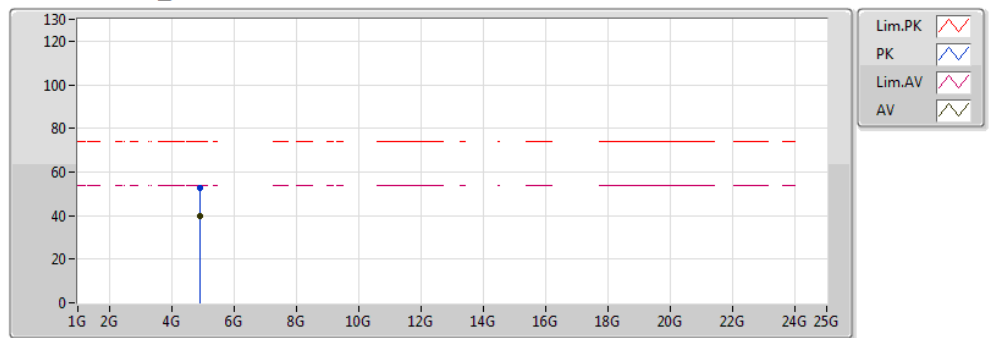
802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2452MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 24  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9045G	40.34	54.00	-13.66	6.33	3	V	292	2.44	-
PK	4.8959G	52.49	74.00	-21.51	6.31	3	V	292	2.44	-

802.11ac VHT40\_Nss1,(MCS0)\_3TX  
2452MHz\_TX



20170125  
EUT\_Y\_3TX  
Setting 24  
02-J-4  
FSP(100019)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9044G	39.98	54.00	-14.02	6.33	3	H	207	2.35	-
PK	4.9055G	52.42	74.00	-21.58	6.34	3	H	207	2.35	-