



FCC Test Report

Equipment : MAX-STREAM AC4000 MU-MIMO TRI-BAND ROUTER
Brand Name : LINKSYS
Model No. : EA9300, EA9250
FCC ID : Q87-EA9300
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

The product sample received on Dec. 27, 2016 and completely tested on Mar. 13, 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 DESCRIPTION5**
- 1.1 Information.....5
- 1.2 Testing Applied Standards8
- 1.3 Testing Location Information8
- 1.4 Measurement Uncertainty8
- 2 TEST CONFIGURATION OF EUT9**
- 2.1 Test Channel Mode9
- 2.2 The Worst Case Measurement Configuration.....10
- 2.3 EUT Operation during Test 11
- 2.4 Accessories12
- 2.5 Support Equipment.....13
- 2.6 Test Setup Diagram 14
- 3 TRANSMITTER TEST RESULT19**
- 3.1 AC Power-line Conducted Emissions19
- 3.2 DTS Bandwidth21
- 3.3 Maximum Conducted Output Power22
- 3.4 Power Spectral Density24
- 3.5 Emissions in Non-restricted Frequency Bands26
- 3.6 Emissions in Restricted Frequency Bands.....27
- 4 TEST EQUIPMENT AND CALIBRATION DATA31**

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 RESULTS OF RADIATED EMISSION CO-LOCATION

APPENDIX H. 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



Revision History

Report No.	Version	Description	Issued Date
FR6D1310AA	Rev. 01	Initial issue of report	Mar. 23, 2017

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	802.11n HT20-BF	20	3TX
2.4-2.4835GHz	802.11ac VHT20	20	3TX
2.4-2.4835GHz	802.11ac VHT20-BF	20	3TX
2.4-2.4835GHz	802.11n HT40	40	3TX
2.4-2.4835GHz	802.11n HT40-BF	40	3TX
2.4-2.4835GHz	802.11ac VHT40	40	3TX
2.4-2.4835GHz	802.11ac VHT40-BF	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.	Brand	P/N	Antenna Type	Connector	Gain (dBi)		
					2.4GHz (Radio2)	5GHz	
						B1 (Radio3)	B4 (Radio1)
1	ARiSTOTLE	RFA-52-F90-1-9537	Dipole Antenna	I-PEX	1.30	2.51	-
2	ARiSTOTLE	RFA-52-F90-2-9537	Dipole Antenna	I-PEX	1.71	2.19	-
3	ARiSTOTLE	RFA-52-F90-3-9537	Dipole Antenna	I-PEX	1.72	2.52	-
4	ARiSTOTLE	RFA-05-F90-1-9537	Dipole Antenna	I-PEX	-	-	1.98
5	ARiSTOTLE	RFA-05-F90-2-9537	Dipole Antenna	I-PEX	-	-	1.14
6	ARiSTOTLE	RFA-05-F90-3-9537	Dipole Antenna	I-PEX	-	-	2.37

Note: The EUT has six antennas.

<For 2.4GHz Band>

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

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

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

<For 5GHz Band 1>

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

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

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

<For 5GHz Band 4>

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

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

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



1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)
802.11b	0.998	0.009
802.11g	0.987	0.057
802.11ac VHT20	0.985	0.066
802.11ac VHT20-BF	0.911	0.405
802.11ac VHT40	0.946	0.241
802.11ac VHT40-BF	0.883	0.54

1.1.4 EUT Operational Condition

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

Note: The product has beamforming function for 802.11n / 802.11ac in 2.4GHz band and 5GHz band.

1.1.5 Table for Multiple Model Name

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

Model Name	Description
EA9300	All the models are identical, the different model names served as marketing strategy.
EA9250	

Note: From the above models, model: EA9300 was selected as representative model for the test and its data was recorded in this report.

1.1.6 Table for Multiple Source

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

Source	Brand Name	VENDORNO	PARTDESC
First source	SK HYNIX	H5TC2G63GFR-PBA	MEMORY,SDRAM DDR3,128MX16,FBGA,96PIN,H5TC2G63GFR-PBA,0~+95,CLASS 2
Second source	WINBOND	W632GU6KB-12	MEMORY,SDRAM DDR3,128MX16,WBGA,96PIN,W632GU6KB,0~+85,CLASS 2

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 v01

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	Andy Tsai/ Eddie Weng/ Ron Huang/ Peter Wu	22°C / 54%	Dec. 28, 2016~Jan. 04, 2017
Radiated	03CH01-CB	Stim Sung/ Steven Liang	22°C / 54%	Dec. 28, 2016~Mar. 08, 2017
AC Conduction	CO01-CB	Da Deng	24°C / 55%	Mar. 13, 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)_3TX	-
2412MHz	101
2437MHz	101
2462MHz	101
802.11g_(6Mbps)_3TX	-
2412MHz	88
2437MHz	101
2462MHz	84
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
2412MHz	77
2437MHz	100
2462MHz	77
802.11ac VHT20_Nss1,(MCS0)_3TX	-
2412MHz	82
2437MHz	101
2462MHz	82
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
2422MHz	61
2437MHz	77
2452MHz	66
802.11ac VHT40_Nss1,(MCS0)_3TX	-
2422MHz	59
2437MHz	74
2452MHz	64

Note:

- ♦ 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.
- ♦ There are two modes of EUT, one is beamforming mode, and the other is non-beamforming mode for 802.11ac. All test results were recorded in the report.

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	Main source + Adapter 1
2	Main source + Adapter 2
Mode 2 generated the worst test result, so it was recorded in this report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
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	Main source + EUT in Z axis + Adapter 1
2	Main source + EUT in Y axis + Adapter 1
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	Main source + EUT in Z axis + Adapter 2
4	Second source + EUT in Z axis + Adapter 1
5	Second source + EUT in Y axis + Adapter 1
Mode 4 has been evaluated to be the worst case between Mode 4~5, thus measurement for Mode 6 will follow this same test mode.	
6	Second source + EUT in Z axis + Adapter 2
Mode 3 and Mode 4 generated the worst test result, so it was recorded in this report.	



Operating Mode > 1GHz	CTX
	The EUT was performed in Z axis and Y axis position for Radiated emission above 1GHz test, and the worst case was found at Z axis. So the measurement will follow this same test configuration.
1	EUT in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	Place EUT in Z axis - WLAN 2.4GHz(Radio2)+WLAN 5GHz(Radio3)
2	Place EUT in Y axis - WLAN 2.4GHz(Radio2)+WLAN 5GHz(Radio3)
Mode 1 is the worst case and it was record in this test report.	
Refer to Sporton Test Report No.: FA6D1310 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 EUT Operation during Test

For CTX Mode:

For non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	Rating	DC Power Line
Adapter 1	APD	DA-60M12	Input: 100-240V~50-60Hz 1.5A Max. (1.5A Max) Output: 12V, 5A	Non-Shielded, 1.0m.
Adapter 2	Ktec	KSA-65W-120500M2	Input: 100-240V~50-60Hz 1.5A Output: 12V, 5.0A	Non-Shielded, 1.0m.
Others				
Power Core*1 RJ-45 Cable, non-shielded, 1m (For Adapter 1 use: Non-Shielded, 1.3m / for Adapter 2 use: Non-Shielded, 1.7m)				



2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*5	DELL	E6430	DoC
2	Flash disk3.0*2	Transcend	JetFlash-700	DoC

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

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*5	DELL	E4300	DoC
2	Flash disk*2	Silicon Power	I-Series	DoC

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

For Non-Beamforming Mode

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

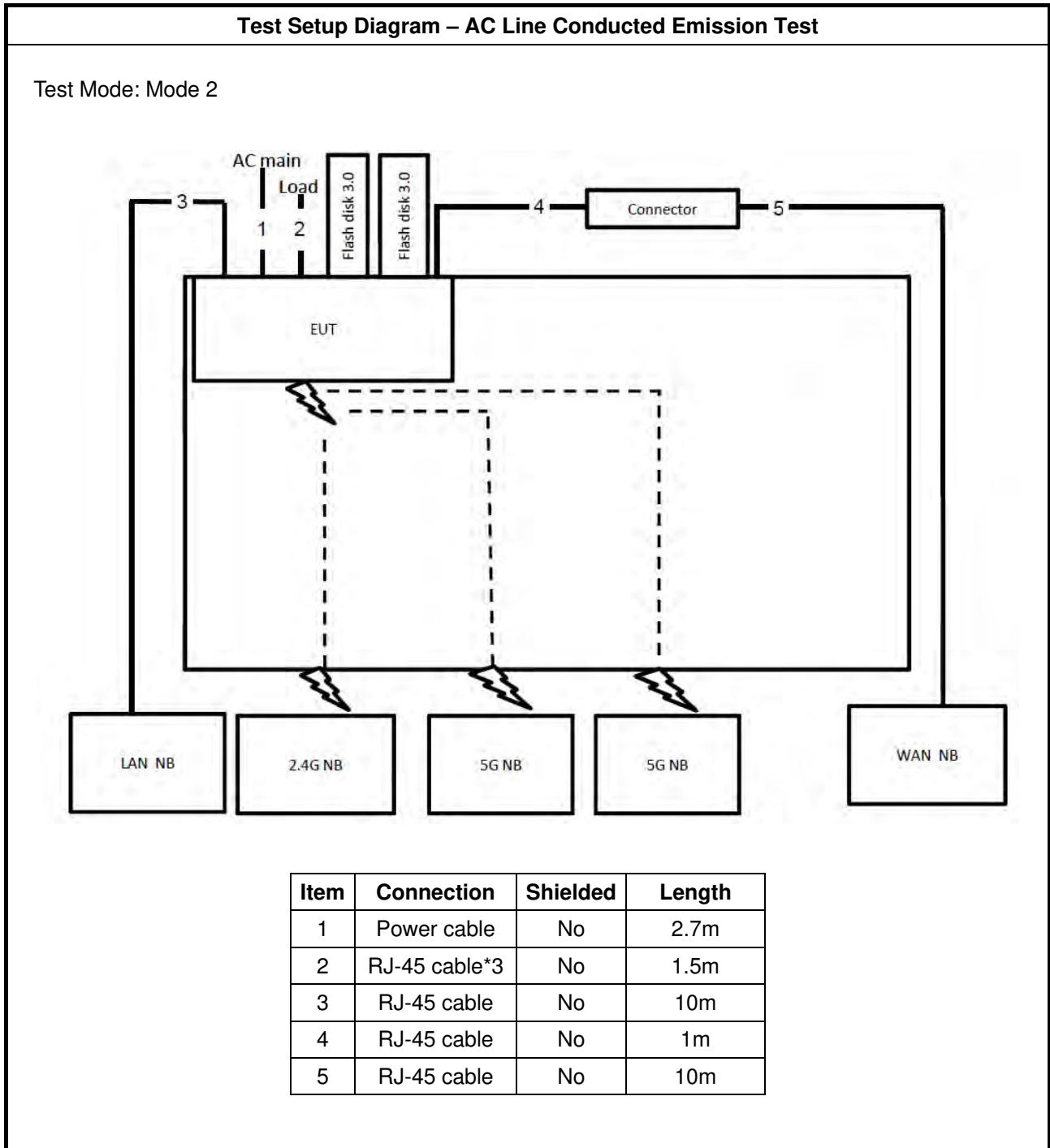
For Beamforming Mode

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook*2	DELL	E4300	DoC
2	RX Device	Boardcom	BCM943162ZP	QDS-BRCM1075

For Test Site No: TH01-CB

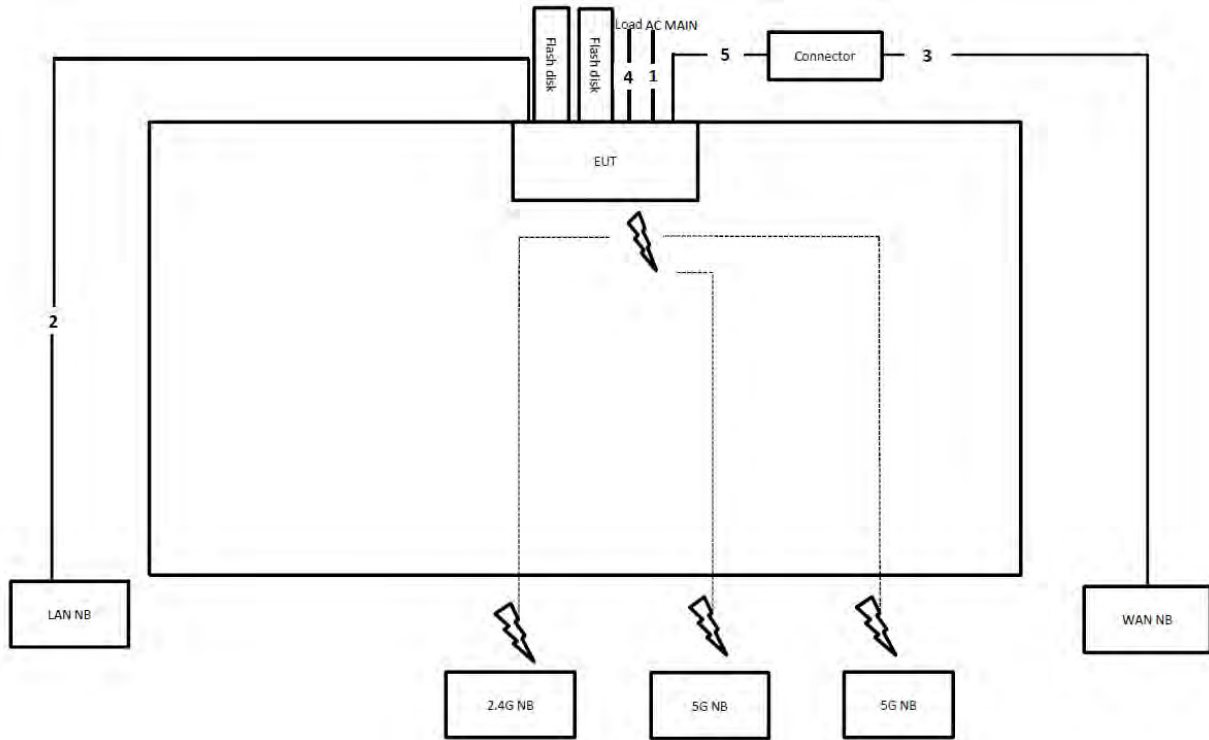
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DoC

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz

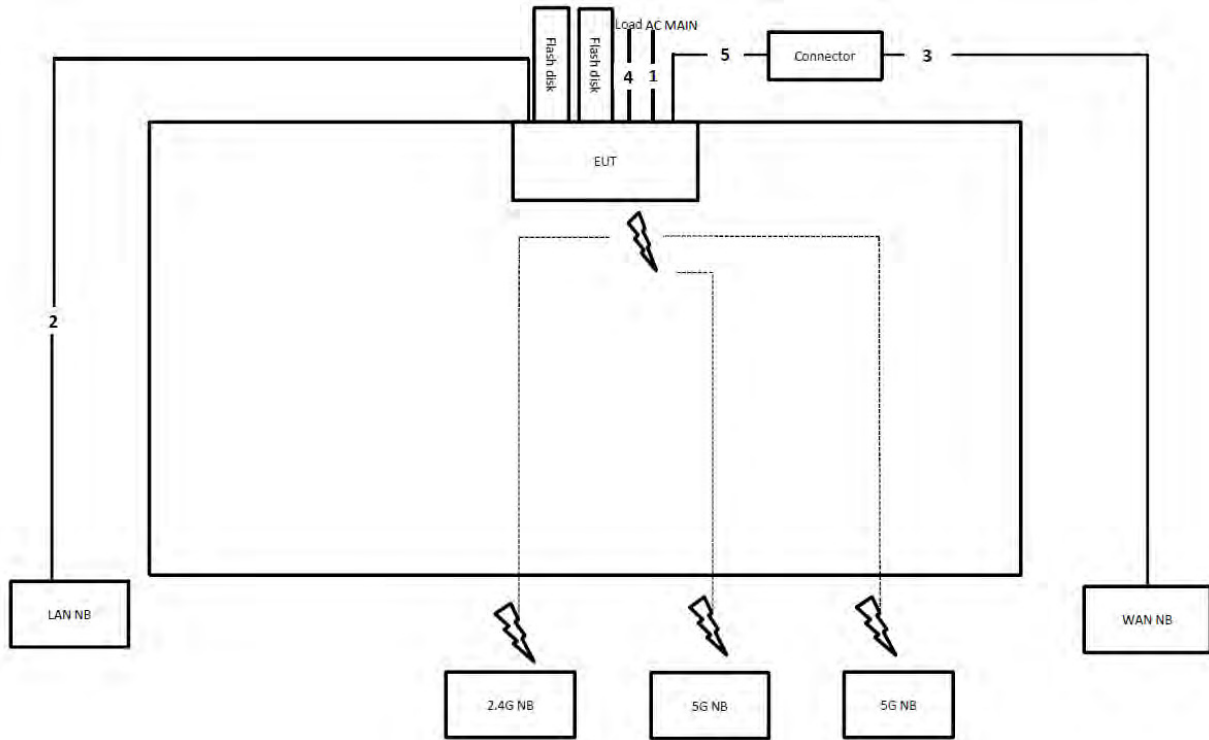
Test Mode: Mode 3



Item	Connection	Shielded	Length
1	Power cable	No	2.7m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable*3	No	1.5m
5	RJ-45 cable	No	1m

Test Setup Diagram - Radiated Test < 1GHz

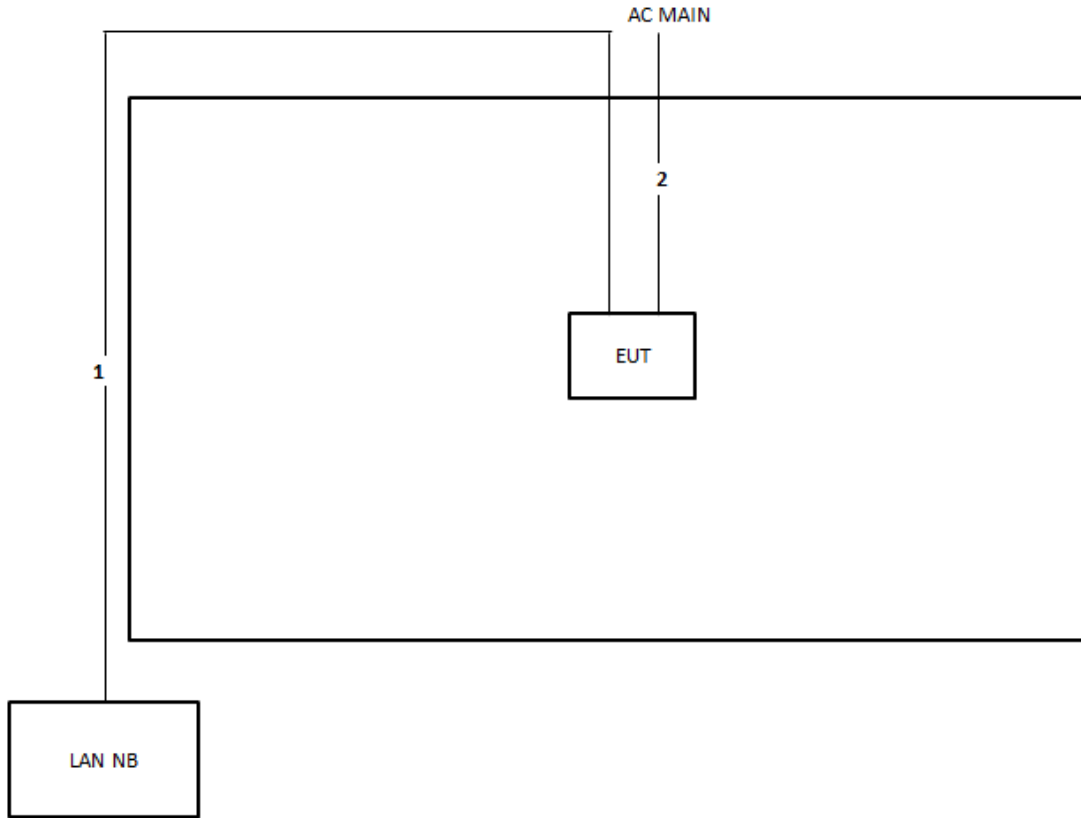
Test Mode: Mode 4



Item	Connection	Shielded	Length
1	Power cable	No	2.3m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable*3	No	1.5m
5	RJ-45 cable	No	1m

Test Setup Diagram - Radiated Test > 1GHz

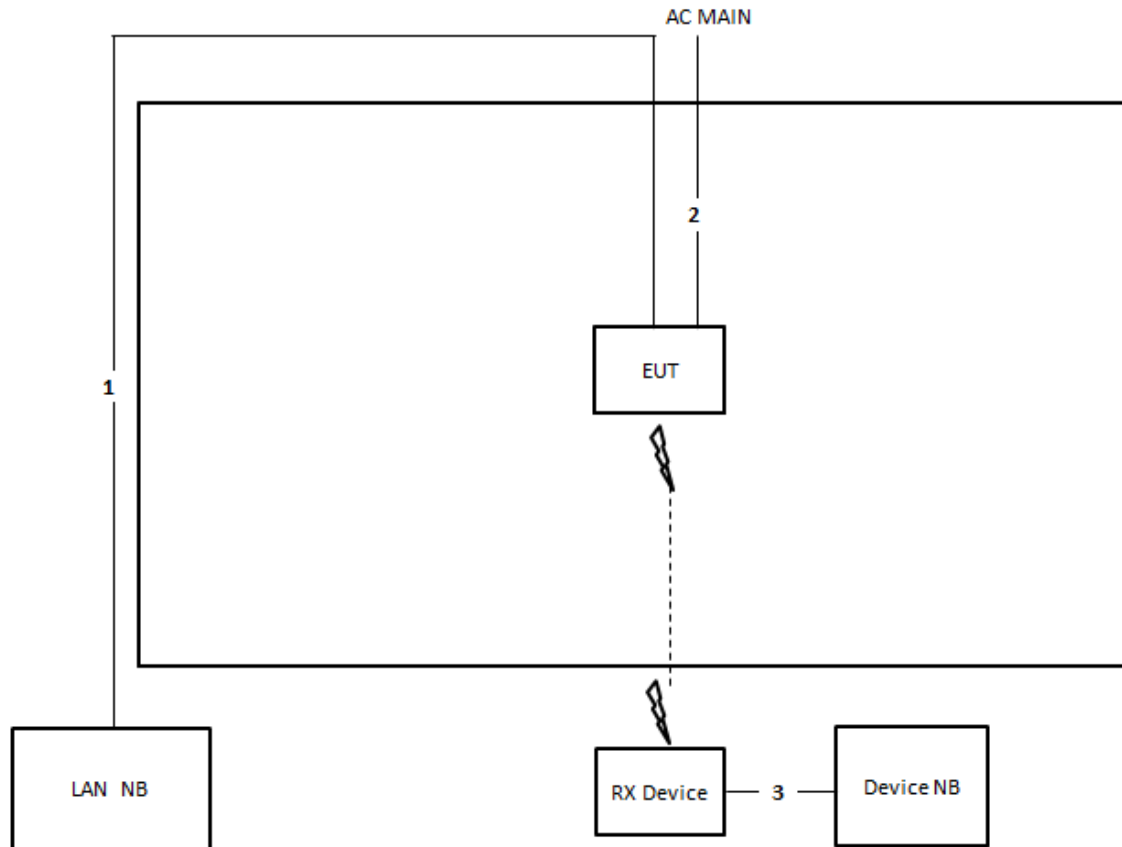
For Non-Beamforming Mode



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.3m

Test Setup Diagram - Radiated Test > 1GHz

For Beamforming Mode



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	2.3m
3	RJ-45 cable	No	1.5m

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.

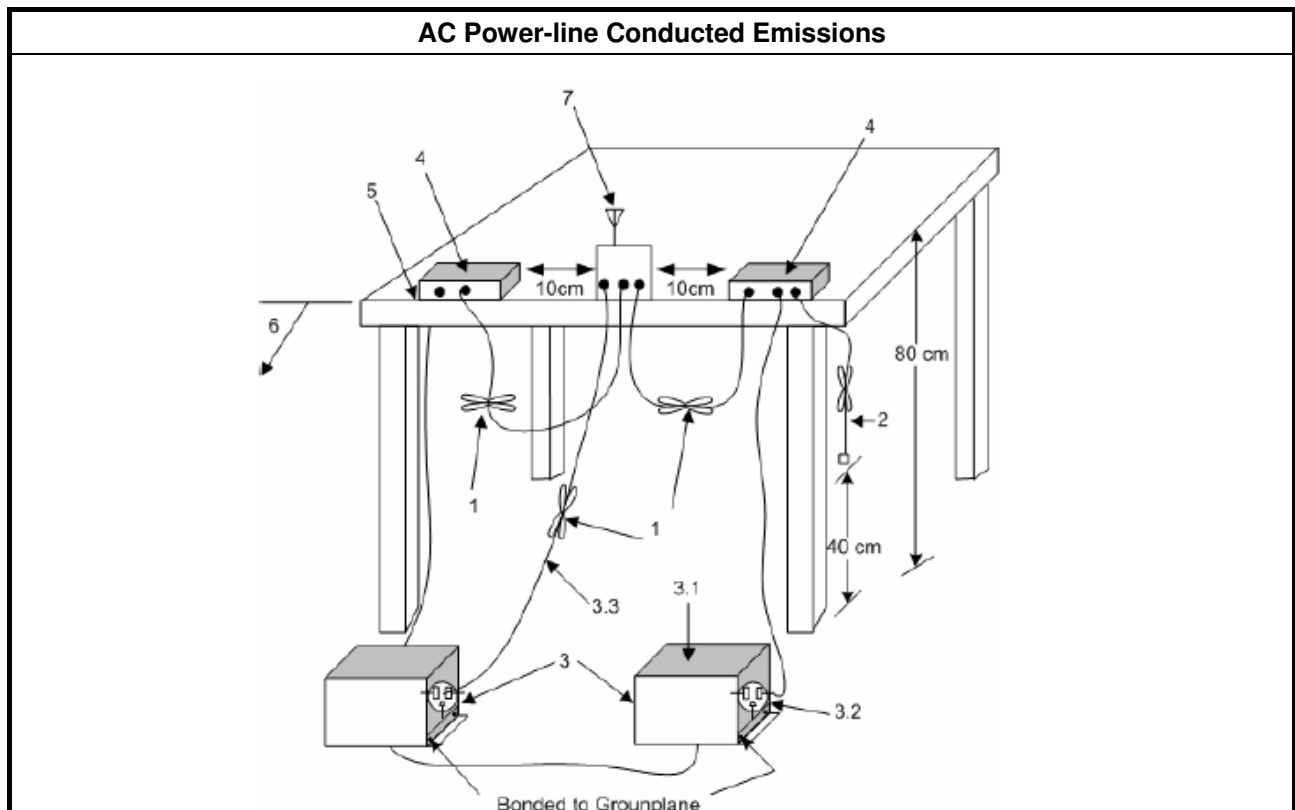
3.1.2 Measuring Instruments

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:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

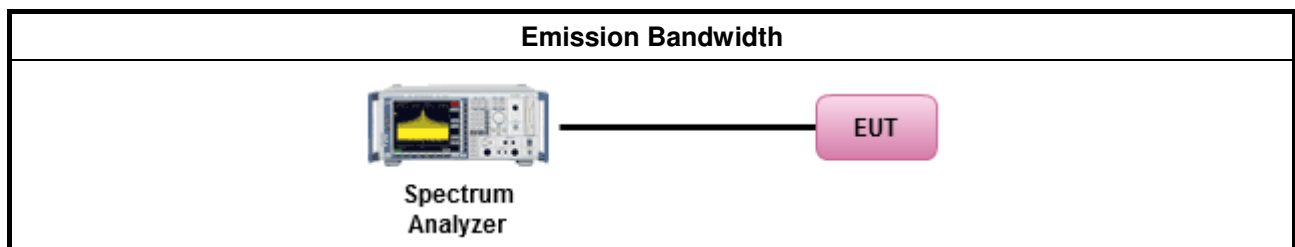
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪ Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

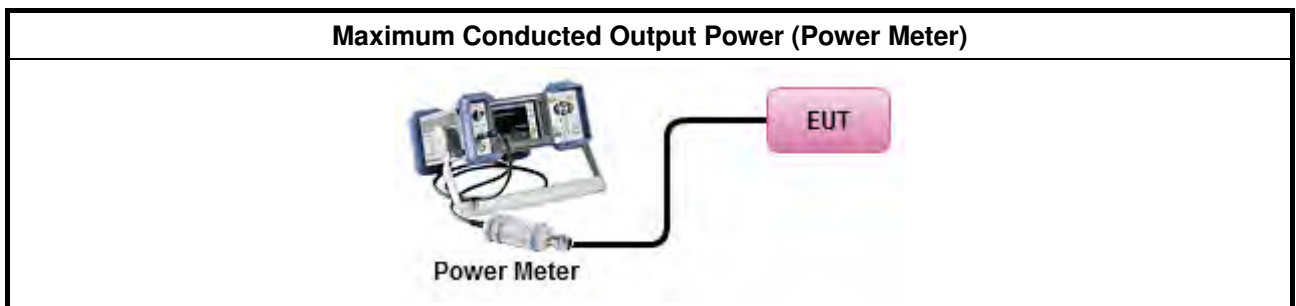
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM-G (using an RF average power meter).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 9.1.2 PKPM1 Peak power meter method.
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

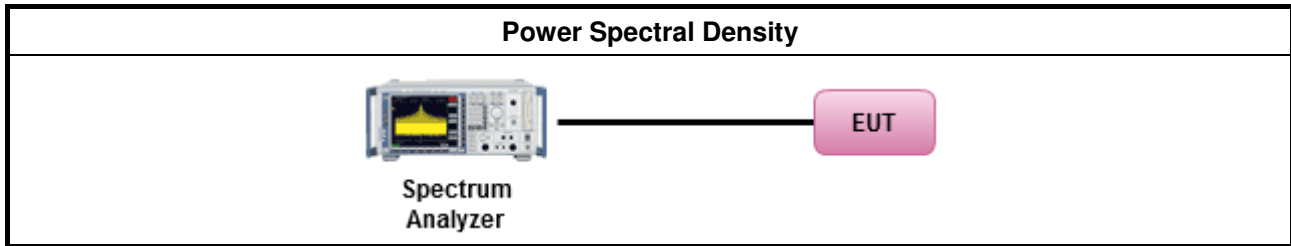
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ 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)
<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: <ul style="list-style-type: none"> <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

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.

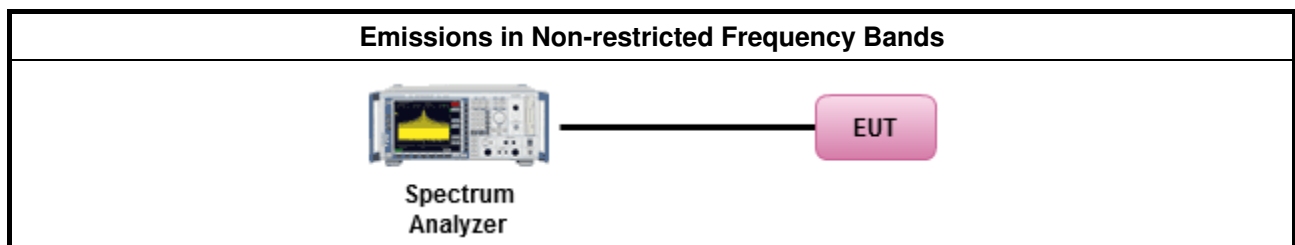
3.5.2 Measuring Instruments

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"> 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.

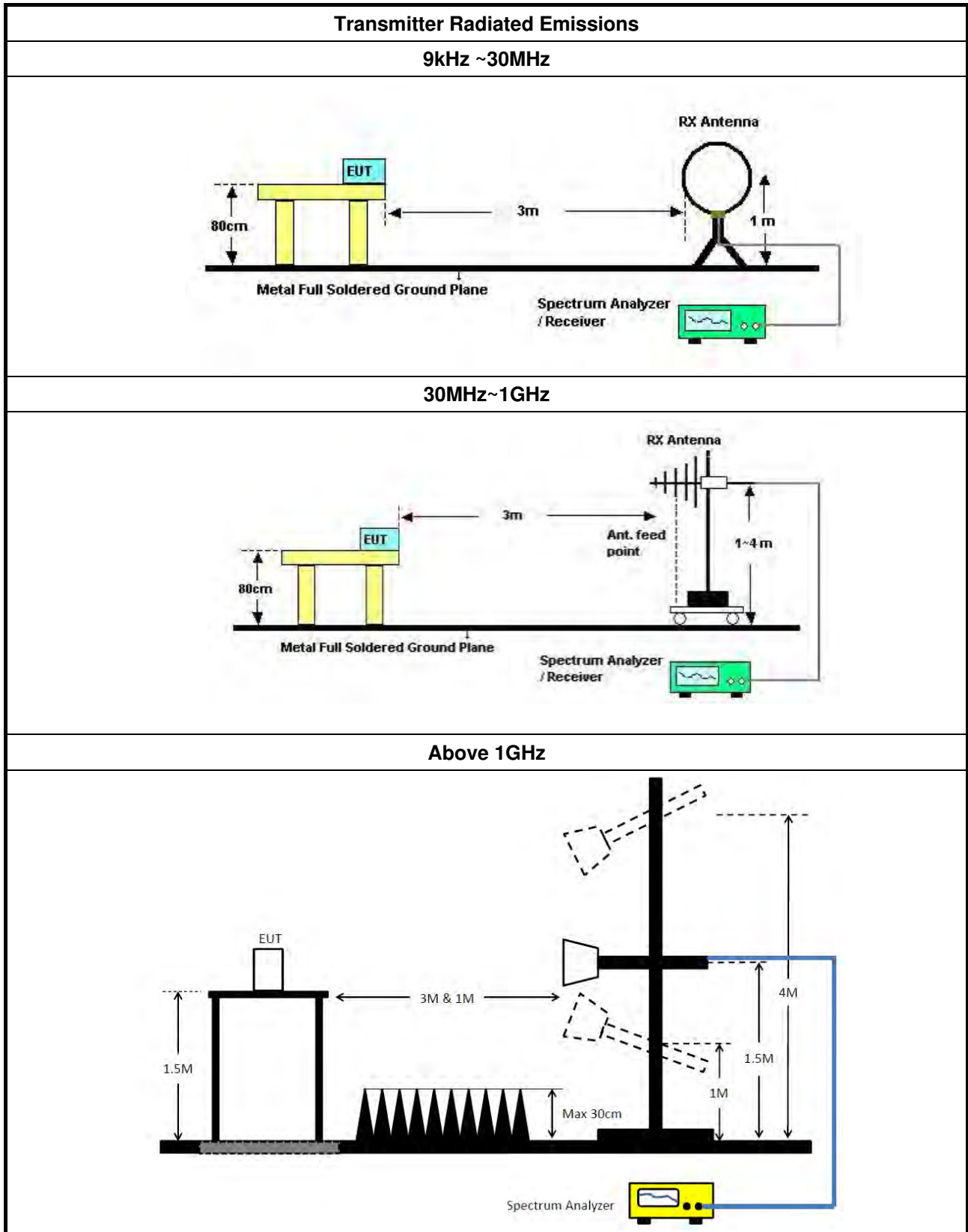
3.6.2 Measuring Instruments

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 \geq 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. 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)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-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	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)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
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)
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.

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



AC Power-line Conducted Emissions Result

Appendix A

AC Power-line Conducted Emissions Result									
Operating Mode	2	Power Phase	Neutral						
Operating Function	Normal Link								
<p style="font-size: small;">Date: 2017-03-13 Time: 15:24:28</p>									
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1508	39.19	-16.77	55.96	29.21	9.94	0.04	Average	NEUTRAL
2	0.1508	55.39	-10.57	65.96	45.41	9.94	0.04	QP	NEUTRAL
3	0.1624	38.03	-17.31	55.34	28.04	9.95	0.04	Average	NEUTRAL
4	0.1624	53.16	-12.18	65.34	43.17	9.95	0.04	QP	NEUTRAL
5	0.1976	34.85	-18.86	53.71	24.82	9.98	0.05	Average	NEUTRAL
6	0.1976	47.32	-16.39	63.71	37.29	9.98	0.05	QP	NEUTRAL
7	0.5293	34.46	-11.54	46.00	24.45	9.97	0.04	Average	NEUTRAL
8	0.5293	41.89	-14.11	56.00	31.88	9.97	0.04	QP	NEUTRAL
9	2.8390	21.29	-24.71	46.00	11.17	10.02	0.10	Average	NEUTRAL
10	2.8390	28.07	-27.93	56.00	17.95	10.02	0.10	QP	NEUTRAL
11	14.8281	22.99	-27.01	50.00	12.54	10.23	0.22	Average	NEUTRAL
12	14.8281	29.90	-30.10	60.00	19.45	10.23	0.22	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

AC Power-line Conducted Emissions Result																																																																																																																																																									
Operating Mode	2	Power Phase	Line																																																																																																																																																						
Operating Function	Normal Link																																																																																																																																																								
<p>The graph displays the AC power-line conducted emissions. The y-axis represents Level in dBuV (0 to 80), and the x-axis represents Frequency in MHz (0.1502 to 30). Two red lines indicate the CISPR limits: CISPR_B_QP (Quasi-Peak) and CISPR_B_AV (Average). The blue line shows the measured emission levels, with several peaks labeled 1 through 12. The measured levels are generally below the CISPR limits, with a notable peak at 0.1516 MHz (point 2) that is highlighted in the table below.</p>																																																																																																																																																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Over</th> <th>Limit</th> <th>Read</th> <th>LISM</th> <th>Cable</th> <th>Remark</th> <th>Pol/Phase</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV</th> <th>Limit</th> <th>Line</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th></th> <th></th> </tr> <tr> <th></th> <th></th> <th></th> <th>dB</th> <th>dBuV</th> <th>dBuV</th> <th>dB</th> <th>dB</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.1516</td> <td>38.95</td> <td>-16.96</td> <td>55.91</td> <td>28.96</td> <td>9.95</td> <td>0.04</td> <td>Average</td> <td>LINE</td> </tr> <tr style="border: 2px solid black;"> <td>2</td> <td>0.1516</td> <td>55.52</td> <td>-10.39</td> <td>65.91</td> <td>45.53</td> <td>9.95</td> <td>0.04</td> <td>QP</td> <td>LINE</td> </tr> <tr> <td>3</td> <td>0.1864</td> <td>35.41</td> <td>-18.79</td> <td>54.20</td> <td>25.43</td> <td>9.93</td> <td>0.05</td> <td>Average</td> <td>LINE</td> </tr> <tr> <td>4</td> <td>0.1864</td> <td>49.23</td> <td>-14.97</td> <td>64.20</td> <td>39.25</td> <td>9.93</td> <td>0.05</td> <td>QP</td> <td>LINE</td> </tr> <tr> <td>5</td> <td>0.5101</td> <td>34.64</td> <td>-11.36</td> <td>46.00</td> <td>24.69</td> <td>9.91</td> <td>0.04</td> <td>Average</td> <td>LINE</td> </tr> <tr> <td>6</td> <td>0.5101</td> <td>41.89</td> <td>-14.11</td> <td>56.00</td> <td>31.94</td> <td>9.91</td> <td>0.04</td> <td>QP</td> <td>LINE</td> </tr> <tr> <td>7</td> <td>2.3962</td> <td>21.08</td> <td>-24.92</td> <td>46.00</td> <td>10.99</td> <td>10.00</td> <td>0.09</td> <td>Average</td> <td>LINE</td> </tr> <tr> <td>8</td> <td>2.3962</td> <td>28.08</td> <td>-27.92</td> <td>56.00</td> <td>17.99</td> <td>10.00</td> <td>0.09</td> <td>QP</td> <td>LINE</td> </tr> <tr> <td>9</td> <td>14.7497</td> <td>23.20</td> <td>-26.80</td> <td>50.00</td> <td>12.83</td> <td>10.15</td> <td>0.22</td> <td>Average</td> <td>LINE</td> </tr> <tr> <td>10</td> <td>14.7497</td> <td>30.34</td> <td>-29.66</td> <td>60.00</td> <td>19.97</td> <td>10.15</td> <td>0.22</td> <td>QP</td> <td>LINE</td> </tr> <tr> <td>11</td> <td>25.8638</td> <td>21.17</td> <td>-28.83</td> <td>50.00</td> <td>10.57</td> <td>10.32</td> <td>0.28</td> <td>Average</td> <td>LINE</td> </tr> <tr> <td>12</td> <td>25.8638</td> <td>27.80</td> <td>-32.20</td> <td>60.00</td> <td>17.20</td> <td>10.32</td> <td>0.28</td> <td>QP</td> <td>LINE</td> </tr> </tbody> </table>					Freq	Level	Over	Limit	Read	LISM	Cable	Remark	Pol/Phase		MHz	dBuV	Limit	Line	Level	Factor	Loss						dB	dBuV	dBuV	dB	dB			1	0.1516	38.95	-16.96	55.91	28.96	9.95	0.04	Average	LINE	2	0.1516	55.52	-10.39	65.91	45.53	9.95	0.04	QP	LINE	3	0.1864	35.41	-18.79	54.20	25.43	9.93	0.05	Average	LINE	4	0.1864	49.23	-14.97	64.20	39.25	9.93	0.05	QP	LINE	5	0.5101	34.64	-11.36	46.00	24.69	9.91	0.04	Average	LINE	6	0.5101	41.89	-14.11	56.00	31.94	9.91	0.04	QP	LINE	7	2.3962	21.08	-24.92	46.00	10.99	10.00	0.09	Average	LINE	8	2.3962	28.08	-27.92	56.00	17.99	10.00	0.09	QP	LINE	9	14.7497	23.20	-26.80	50.00	12.83	10.15	0.22	Average	LINE	10	14.7497	30.34	-29.66	60.00	19.97	10.15	0.22	QP	LINE	11	25.8638	21.17	-28.83	50.00	10.57	10.32	0.28	Average	LINE	12	25.8638	27.80	-32.20	60.00	17.20	10.32	0.28	QP	LINE
	Freq	Level	Over	Limit	Read	LISM	Cable	Remark	Pol/Phase																																																																																																																																																
	MHz	dBuV	Limit	Line	Level	Factor	Loss																																																																																																																																																		
			dB	dBuV	dBuV	dB	dB																																																																																																																																																		
1	0.1516	38.95	-16.96	55.91	28.96	9.95	0.04	Average	LINE																																																																																																																																																
2	0.1516	55.52	-10.39	65.91	45.53	9.95	0.04	QP	LINE																																																																																																																																																
3	0.1864	35.41	-18.79	54.20	25.43	9.93	0.05	Average	LINE																																																																																																																																																
4	0.1864	49.23	-14.97	64.20	39.25	9.93	0.05	QP	LINE																																																																																																																																																
5	0.5101	34.64	-11.36	46.00	24.69	9.91	0.04	Average	LINE																																																																																																																																																
6	0.5101	41.89	-14.11	56.00	31.94	9.91	0.04	QP	LINE																																																																																																																																																
7	2.3962	21.08	-24.92	46.00	10.99	10.00	0.09	Average	LINE																																																																																																																																																
8	2.3962	28.08	-27.92	56.00	17.99	10.00	0.09	QP	LINE																																																																																																																																																
9	14.7497	23.20	-26.80	50.00	12.83	10.15	0.22	Average	LINE																																																																																																																																																
10	14.7497	30.34	-29.66	60.00	19.97	10.15	0.22	QP	LINE																																																																																																																																																
11	25.8638	21.17	-28.83	50.00	10.57	10.32	0.28	Average	LINE																																																																																																																																																
12	25.8638	27.80	-32.20	60.00	17.20	10.32	0.28	QP	LINE																																																																																																																																																
<p>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.)</p>																																																																																																																																																									



Summary

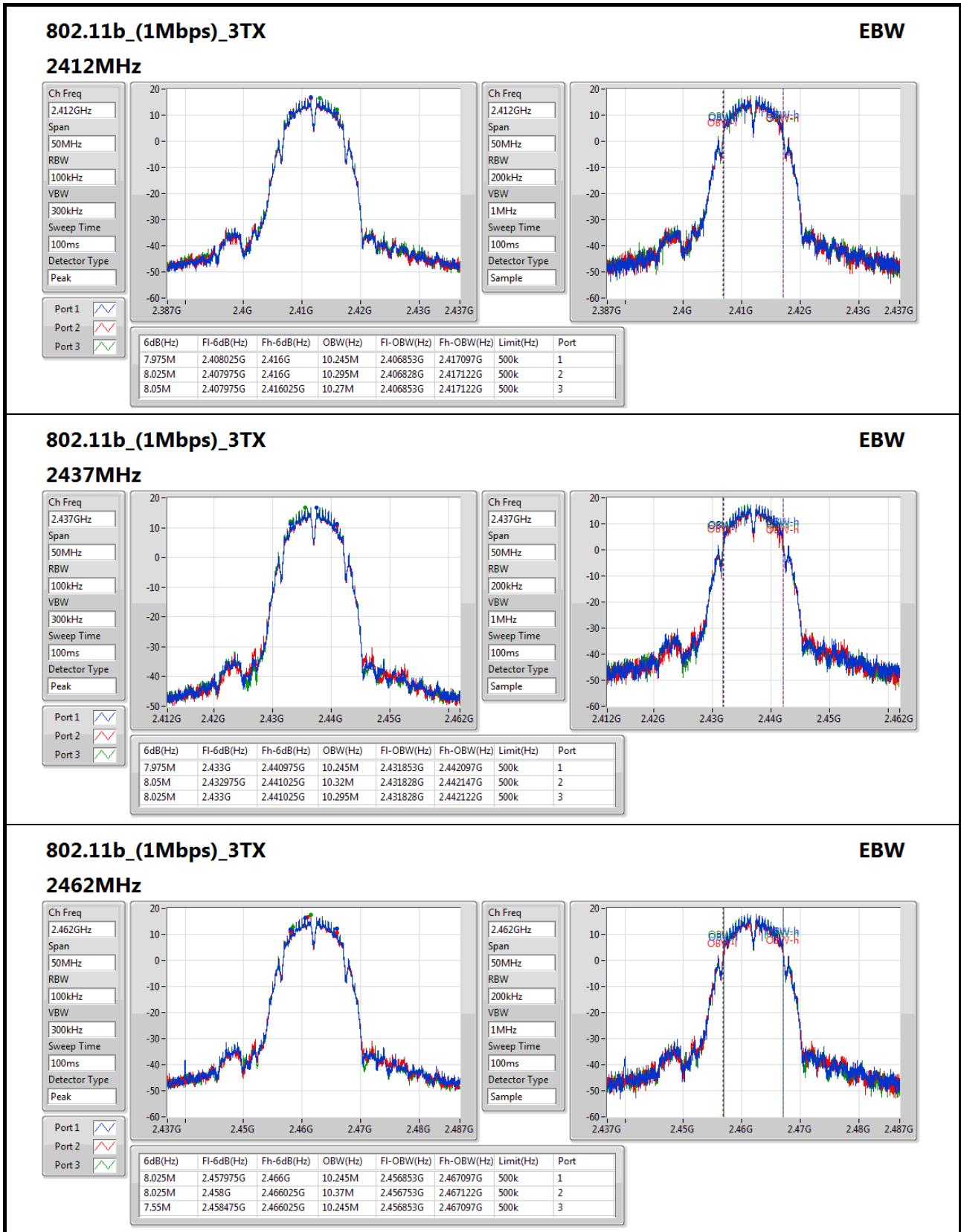
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_3TX	8.05M	10.37M	10M4G1D	7.55M	10.245M
802.11g_(6Mbps)_3TX	16.025M	16.417M	16M4D1D	14.15M	16.342M
802.11ac VHT20_Nss1,(MCS0)_3TX	16M	17.616M	17M6D1D	13.8M	17.541M
802.11ac VHT40_Nss1,(MCS0)_3TX	36.3M	36.282M	36M3D1D	35.75M	36.132M
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	16.275M	17.616M	17M6D1D	13.875M	17.516M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	36.3M	36.332M	36M3D1D	35.7M	36.182M

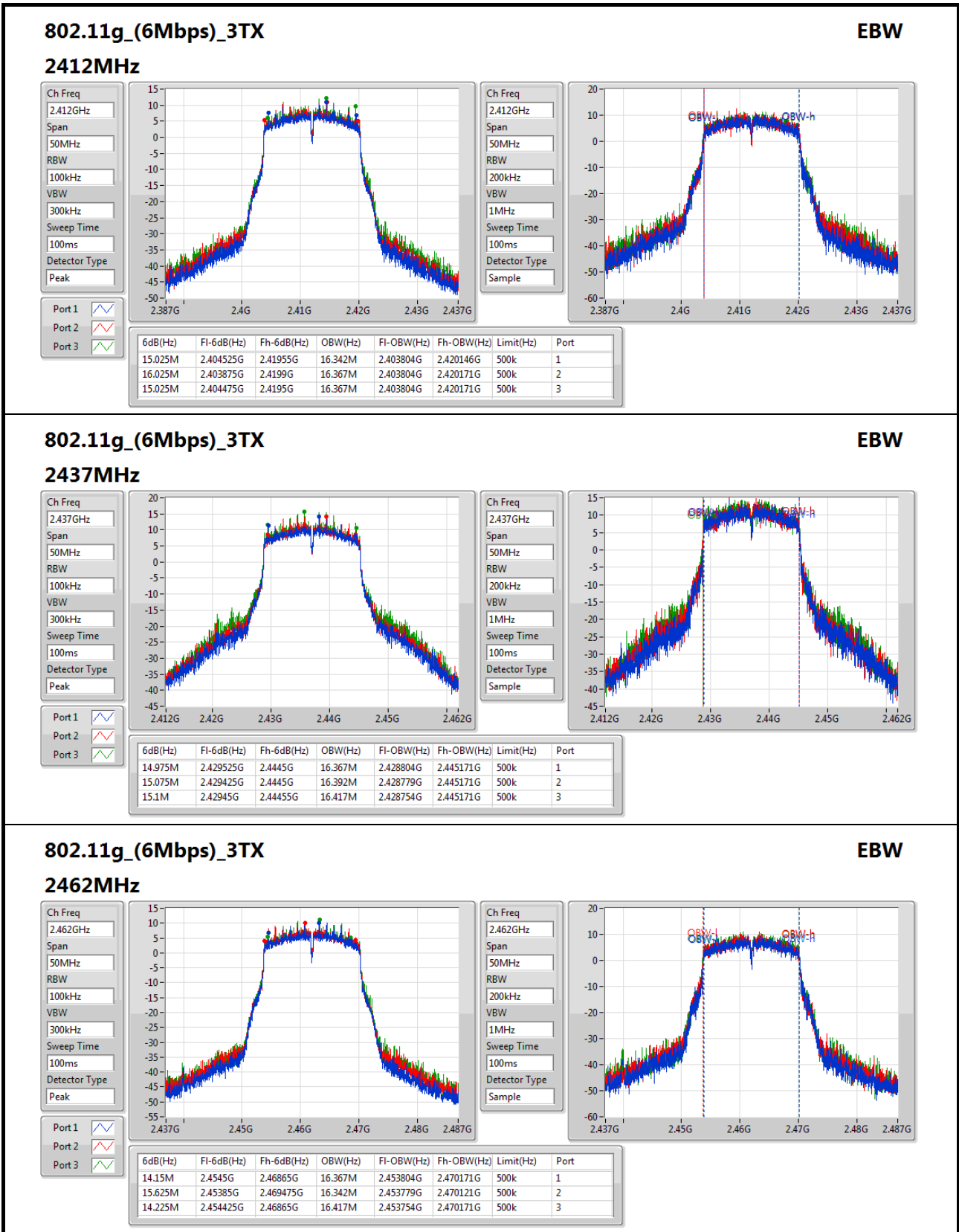
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

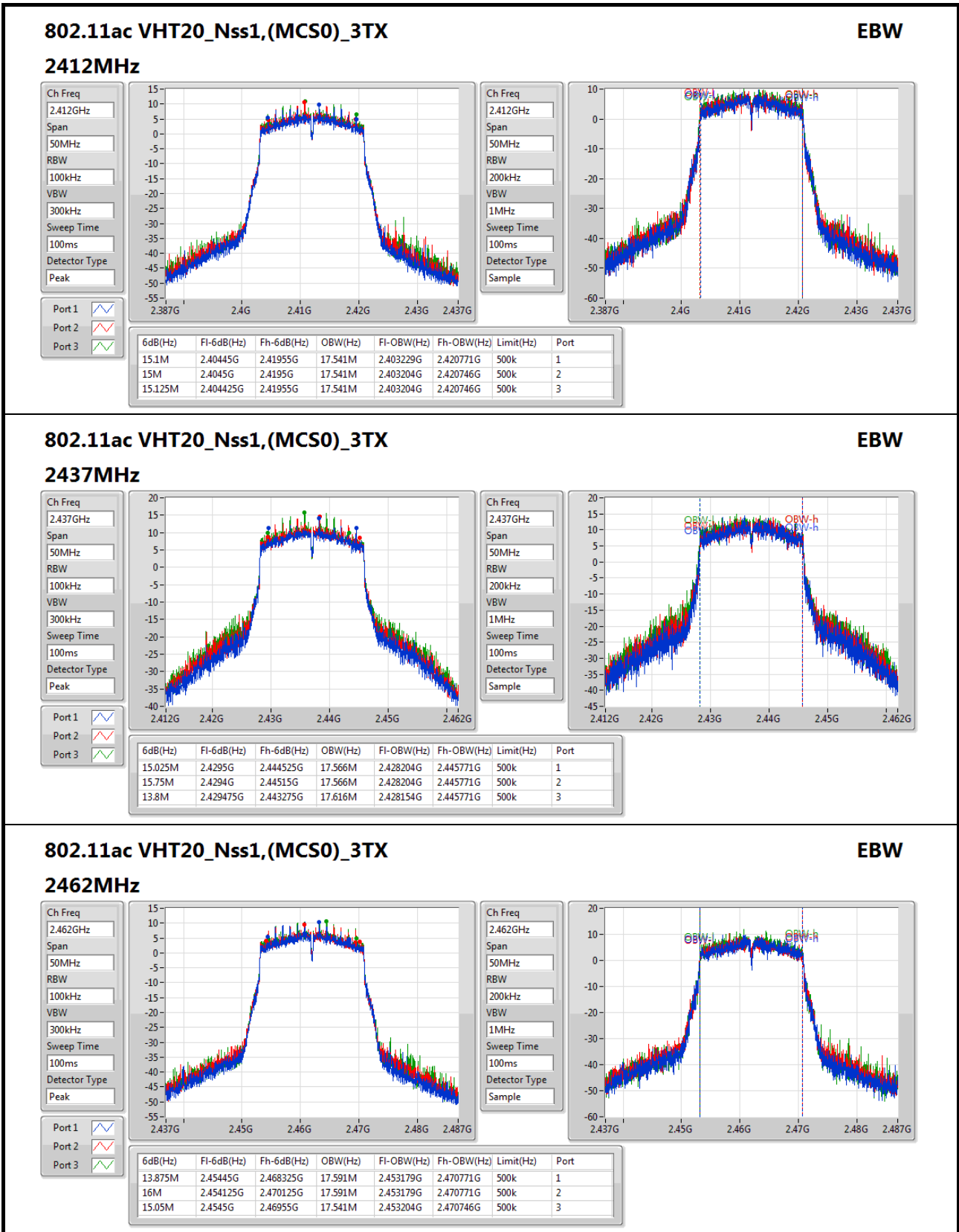
Result

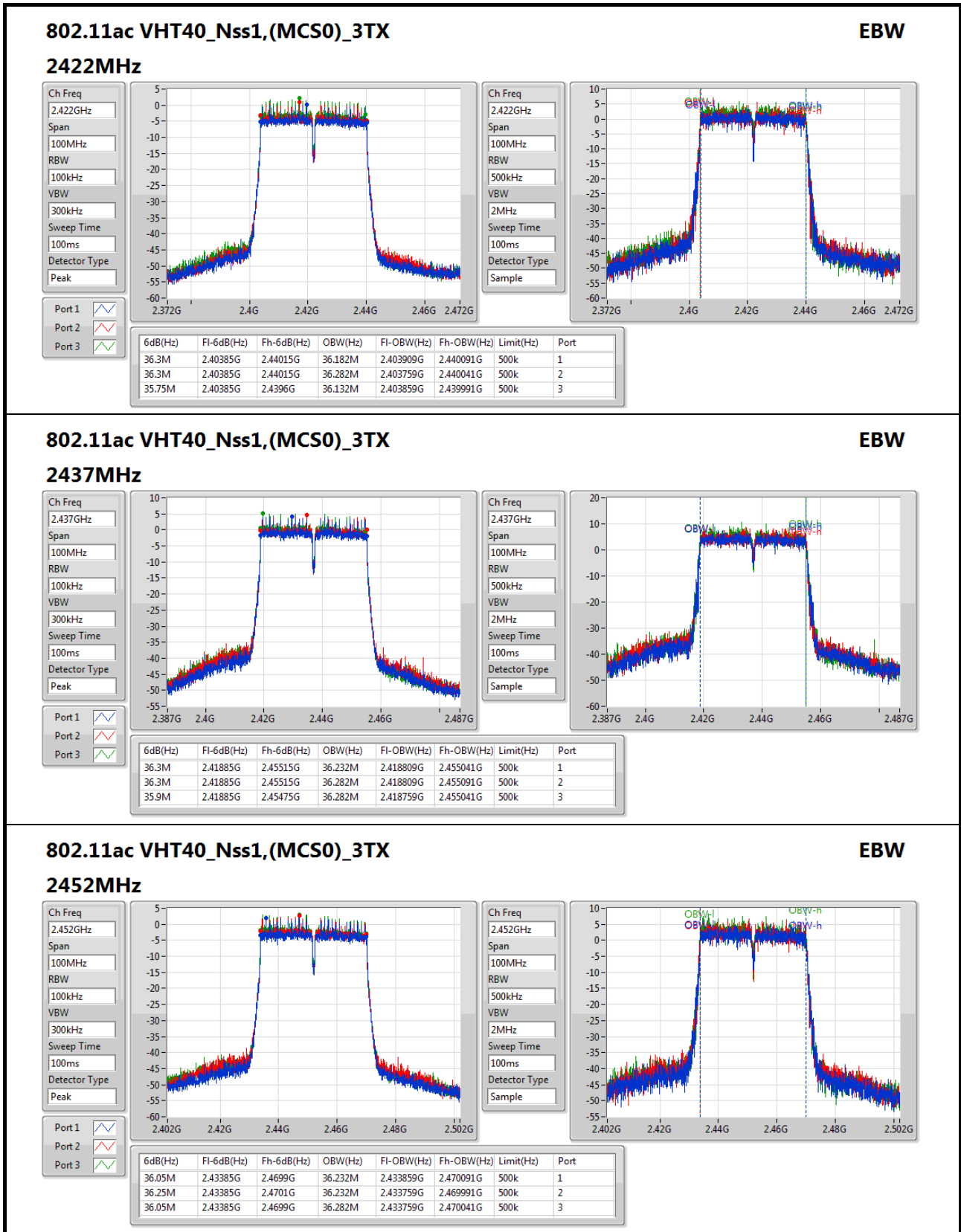
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.975M	10.245M	8.025M	10.295M	8.05M	10.27M
2437MHz	Pass	500k	7.975M	10.245M	8.05M	10.32M	8.025M	10.295M
2462MHz	Pass	500k	8.025M	10.245M	8.025M	10.37M	7.55M	10.245M
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.025M	16.342M	16.025M	16.367M	15.025M	16.367M
2437MHz	Pass	500k	14.975M	16.367M	15.075M	16.392M	15.1M	16.417M
2462MHz	Pass	500k	14.15M	16.367M	15.625M	16.342M	14.225M	16.417M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.1M	17.541M	15M	17.541M	15.125M	17.541M
2437MHz	Pass	500k	15.025M	17.566M	15.75M	17.566M	13.8M	17.616M
2462MHz	Pass	500k	13.875M	17.591M	16M	17.591M	15.05M	17.541M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.3M	36.182M	36.3M	36.282M	35.75M	36.132M
2437MHz	Pass	500k	36.3M	36.232M	36.3M	36.282M	35.9M	36.282M
2452MHz	Pass	500k	36.05M	36.232M	36.25M	36.232M	36.05M	36.282M
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	14M	17.541M	15.1M	17.566M	13.875M	17.566M
2437MHz	Pass	500k	14.625M	17.616M	16.025M	17.516M	15M	17.566M
2462MHz	Pass	500k	15.025M	17.566M	16.275M	17.566M	15.6M	17.566M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.05M	36.282M	36.3M	36.282M	36.3M	36.182M
2437MHz	Pass	500k	36.3M	36.232M	36M	36.232M	36.25M	36.182M
2452MHz	Pass	500k	36.3M	36.232M	35.7M	36.332M	36.3M	36.332M

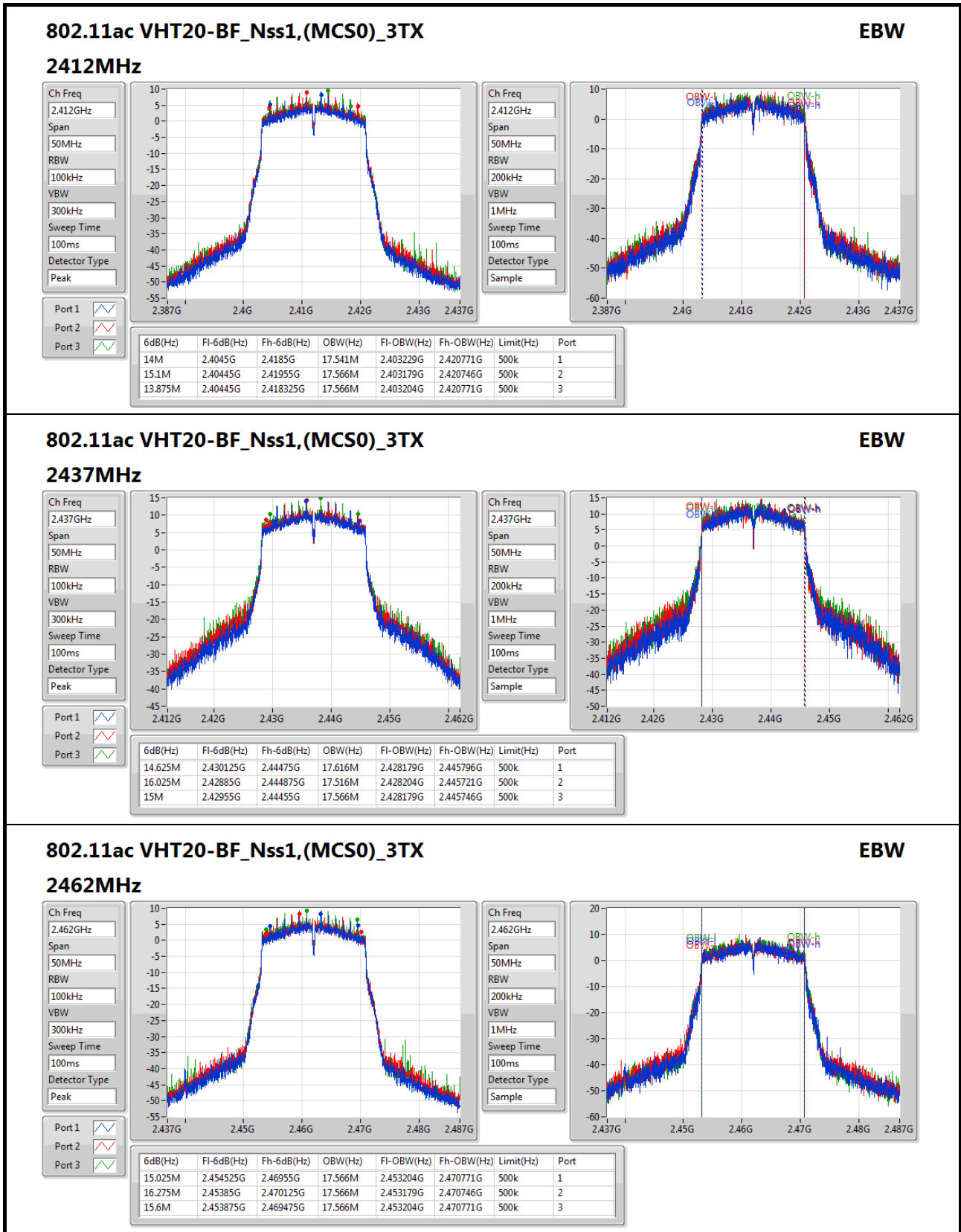
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

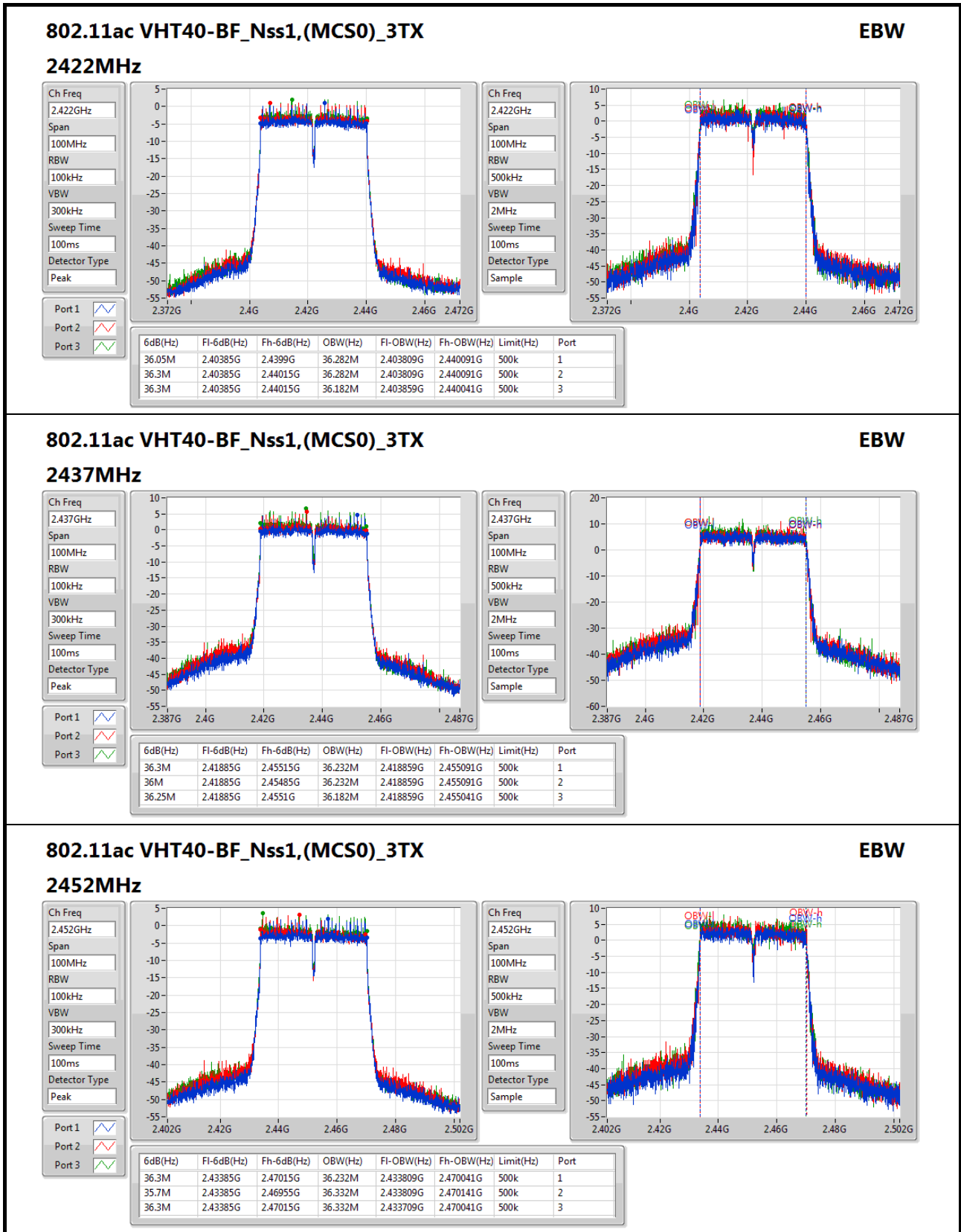











802.11ac VHT40-BF_Nss1,(MCS0)_3TX
EBW
2452MHz

Ch Freq: 2.452GHz
Span: 100MHz
RBW: 100kHz
VBW: 300kHz
Sweep Time: 100ms
Detector Type: Peak

Port 1:
Port 2:
Port 3:

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
36.3M	2.43385G	2.47015G	36.232M	2.433809G	2.470041G	500k	1
35.7M	2.43385G	2.46955G	36.332M	2.433809G	2.470141G	500k	2
36.3M	2.43385G	2.47015G	36.332M	2.433709G	2.470041G	500k	3

Ch Freq: 2.452GHz
Span: 100MHz
RBW: 500kHz
VBW: 2MHz
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
36.3M	2.43385G	2.47015G	36.232M	2.433809G	2.470041G	500k	1
35.7M	2.43385G	2.46955G	36.332M	2.433809G	2.470141G	500k	2
36.3M	2.43385G	2.47015G	36.332M	2.433709G	2.470041G	500k	3



Summary

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_3TX	29.94	0.98628
802.11g_(6Mbps)_3TX	29.93	0.98401
802.11ac VHT20_Nss1,(MCS0)_3TX	29.82	0.9594
802.11ac VHT40_Nss1,(MCS0)_3TX	23.06	0.2023
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	29.52	0.89536
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	23.84	0.2421

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	1.72	25.02	24.76	25.45	29.86	30.00
2437MHz	Pass	1.72	25.05	24.78	25.45	29.87	30.00
2462MHz	Pass	1.72	25.28	24.82	25.38	29.94	30.00
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.72	21.50	22.04	22.69	26.88	30.00
2437MHz	Pass	1.72	24.65	25.00	25.75	29.93	30.00
2462MHz	Pass	1.72	20.60	21.42	21.71	26.04	30.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.72	19.95	20.72	21.07	25.37	30.00
2437MHz	Pass	1.72	24.48	24.87	25.71	29.82	30.00
2462MHz	Pass	1.72	19.60	20.54	21.22	25.28	30.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	1.72	14.20	14.25	15.67	19.53	30.00
2437MHz	Pass	1.72	17.70	18.01	19.05	23.06	30.00
2452MHz	Pass	1.72	15.24	16.04	16.94	20.90	30.00
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.35	18.30	19.06	19.89	23.90	29.65
2437MHz	Pass	6.35	24.24	24.67	25.27	29.52	29.65
2462MHz	Pass	6.35	19.02	19.03	19.88	24.10	29.65
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.35	14.69	14.59	16.04	19.93	29.65
2437MHz	Pass	6.35	18.58	18.63	19.86	23.84	29.65
2452MHz	Pass	6.35	16.04	16.03	17.21	21.23	29.65

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



Summary

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_3TX	5.96
802.11g_(6Mbps)_3TX	5.05
802.11ac VHT20_Nss1,(MCS0)_3TX	3.41
802.11ac VHT40_Nss1,(MCS0)_3TX	-6.72
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	2.66
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-5.22

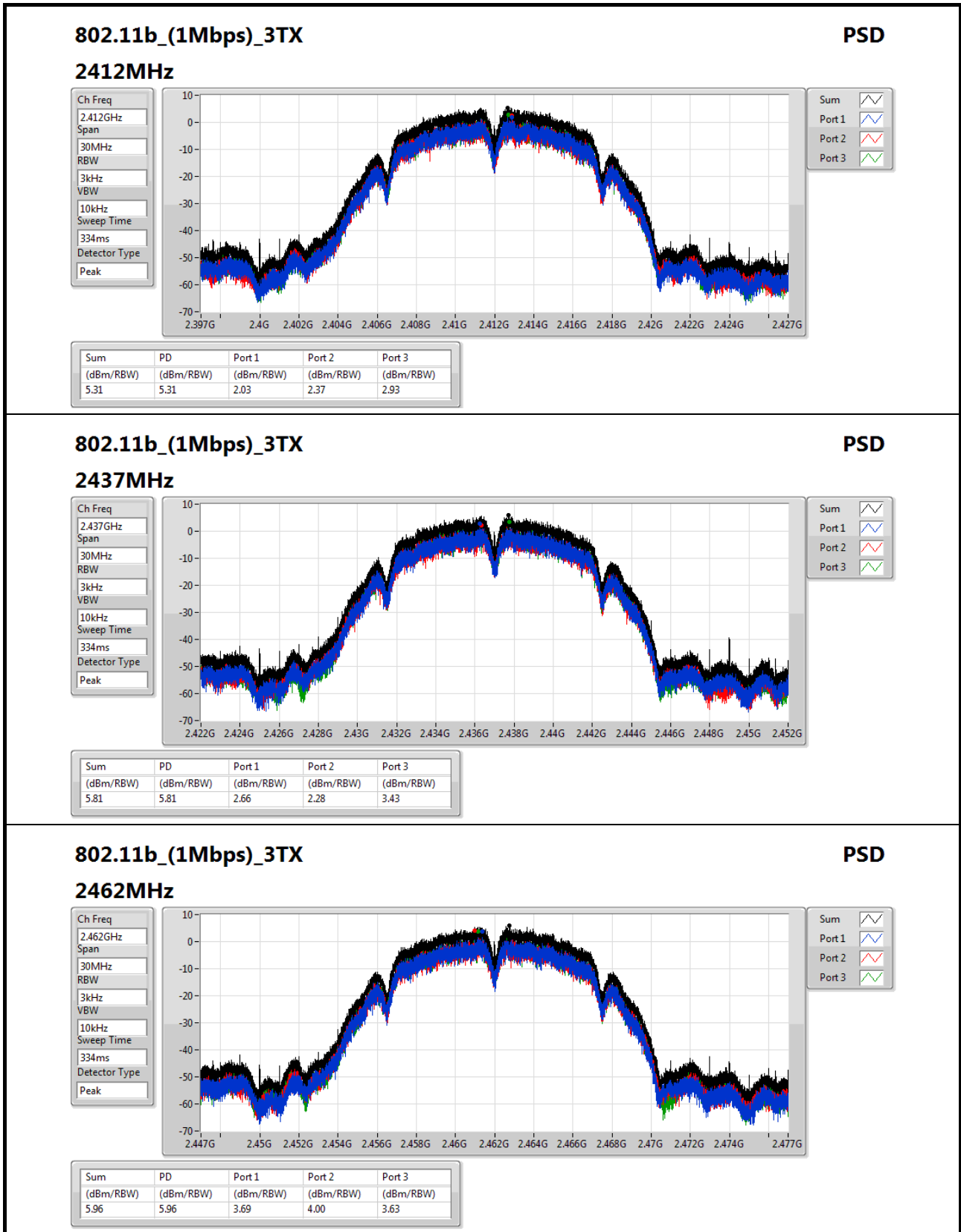
RBW=3kHz.

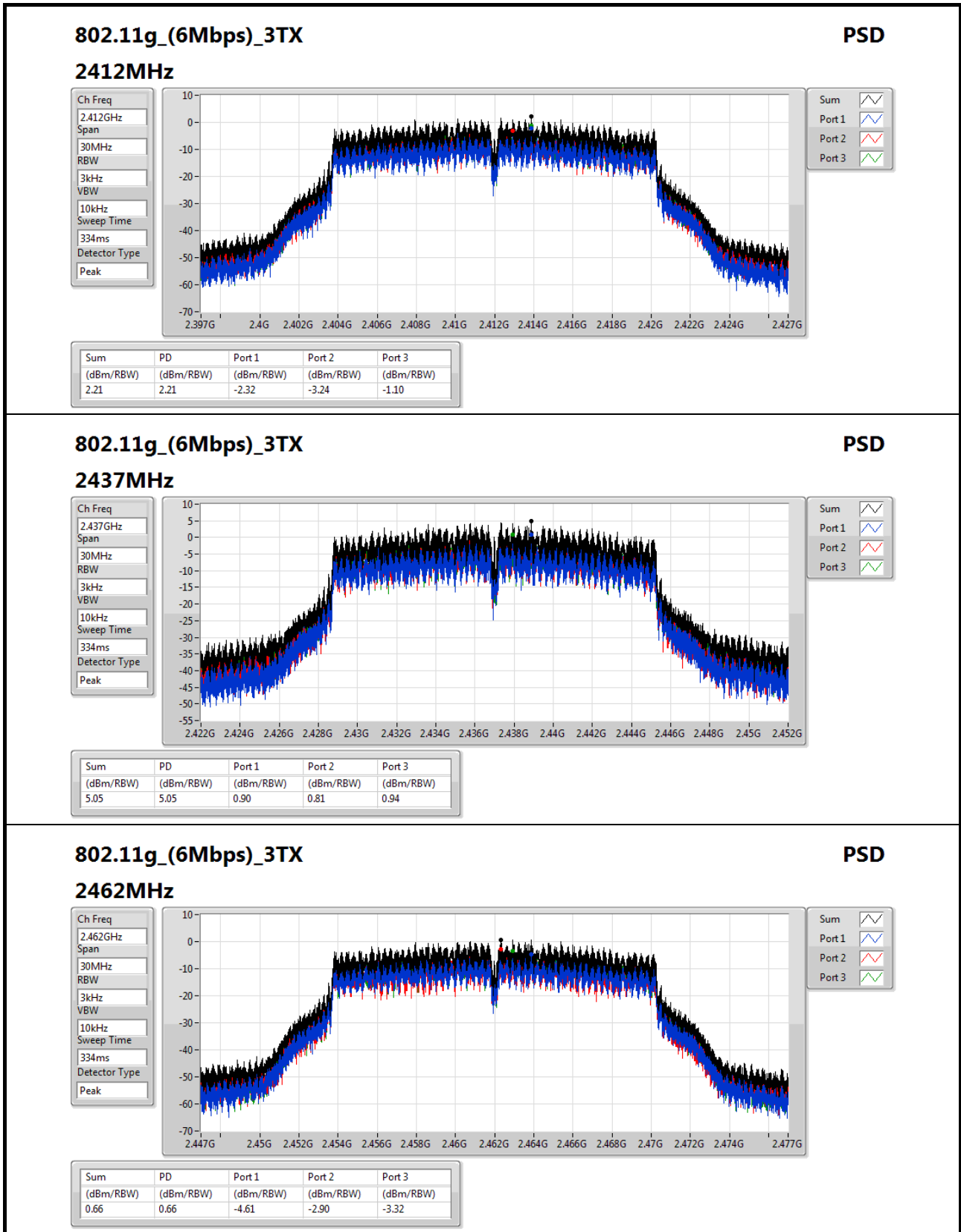
Result

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	6.35	2.03	2.37	2.93	5.31	7.65
2437MHz	Pass	6.35	2.66	2.28	3.43	5.81	7.65
2462MHz	Pass	6.35	3.69	4.00	3.63	5.96	7.65
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.35	-2.32	-3.24	-1.10	2.21	7.65
2437MHz	Pass	6.35	0.90	0.81	0.94	5.05	7.65
2462MHz	Pass	6.35	-4.61	-2.90	-3.32	0.66	7.65
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.35	-5.16	-4.52	-3.76	-1.01	7.65
2437MHz	Pass	6.35	-0.42	0.11	1.26	3.41	7.65
2462MHz	Pass	6.35	-4.74	-2.34	-4.29	-1.28	7.65
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.35	-13.84	-12.74	-12.86	-10.54	7.65
2437MHz	Pass	6.35	-10.90	-9.90	-8.87	-6.72	7.65
2452MHz	Pass	6.35	-12.67	-12.41	-10.98	-8.84	7.65
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.35	-5.49	-5.27	-5.26	-2.97	7.65
2437MHz	Pass	6.35	-0.14	-0.01	0.48	2.66	7.65
2462MHz	Pass	6.35	-6.00	-6.36	-4.76	-2.30	7.65
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.35	-13.06	-12.59	-12.37	-9.82	7.65
2437MHz	Pass	6.35	-8.54	-8.58	-6.95	-5.22	7.65
2452MHz	Pass	6.35	-11.57	-10.84	-10.70	-8.43	7.65

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

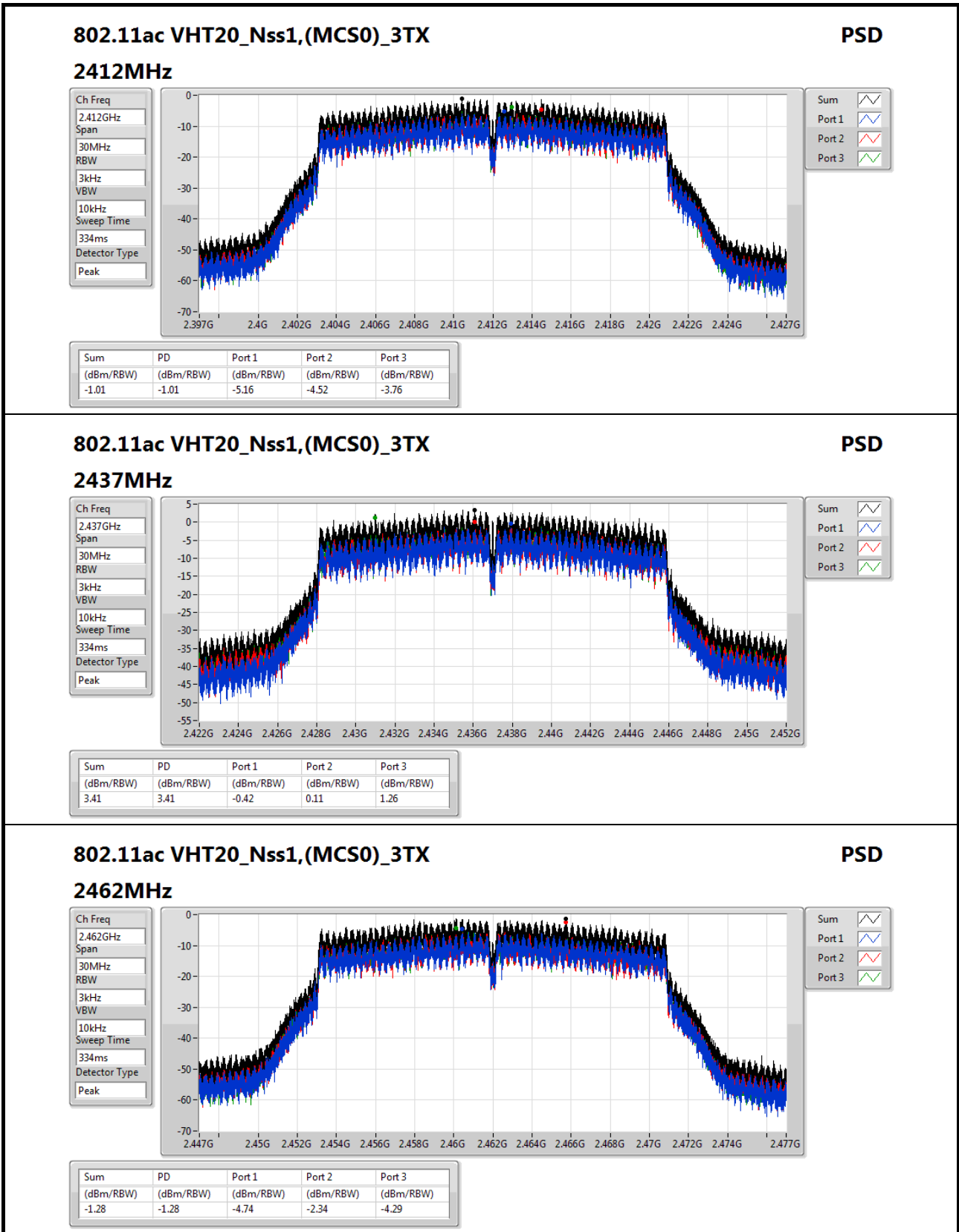
Sum

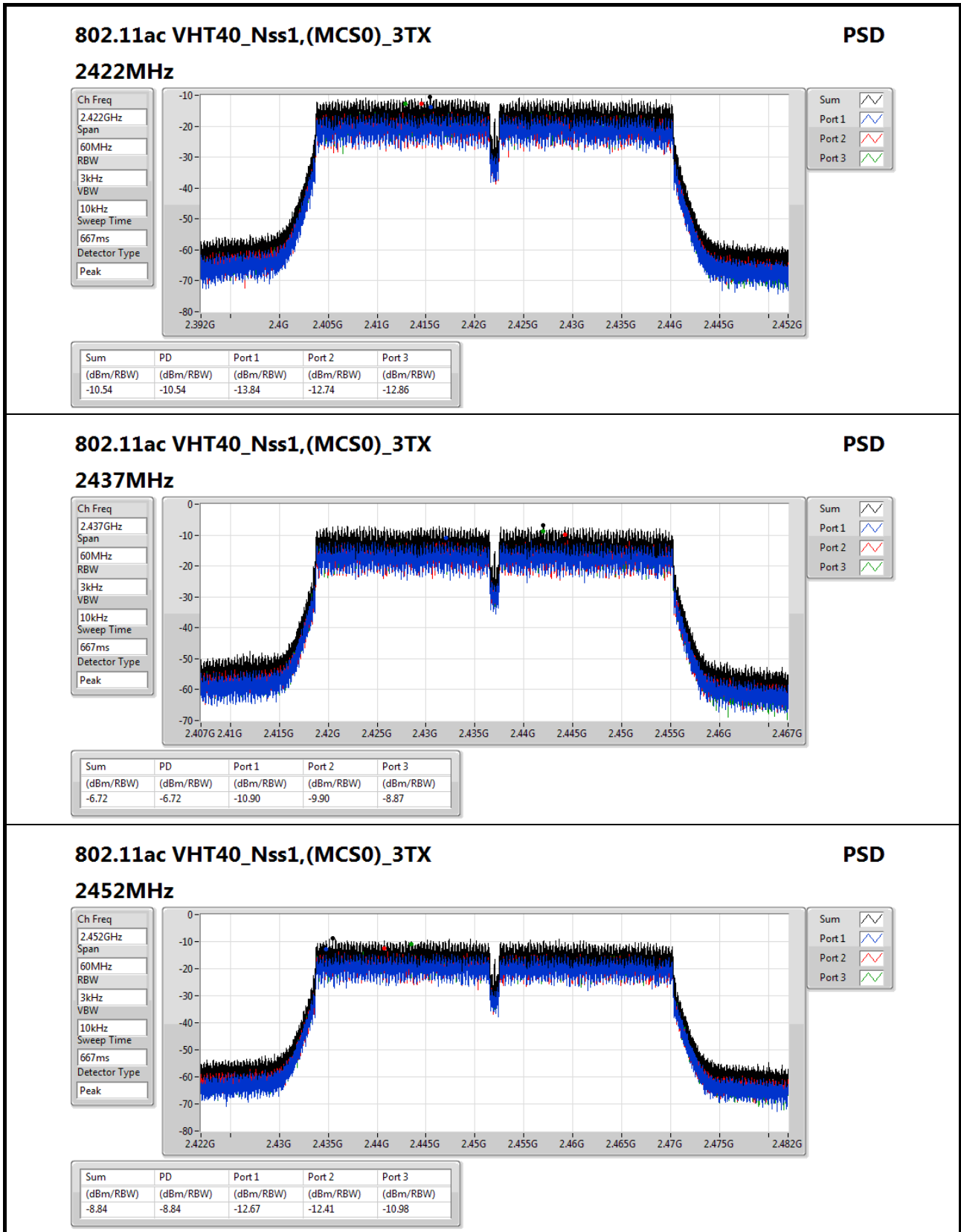
Port 1

Port 2

Port 3

Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.66	0.66	-4.61	-2.90	-3.32




802.11ac VHT40_Nss1,(MCS0)_3TX
PSD

2452MHz

Ch Freq
2.452GHz

Span
60MHz

RBW
3kHz

VBW
10kHz

Sweep Time
667ms

Detector Type
Peak

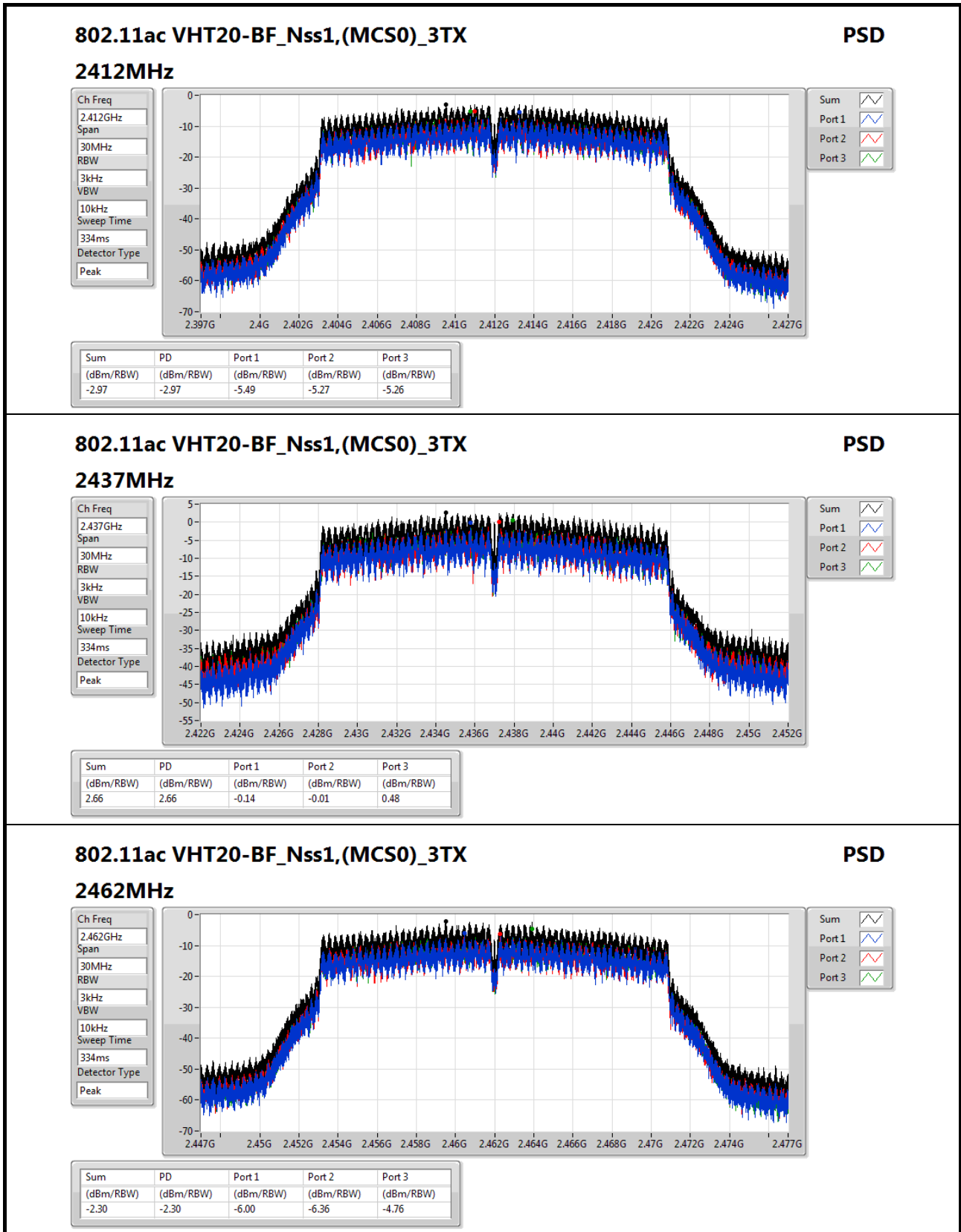
Sum

Port 1

Port 2

Port 3

Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.84	-8.84	-12.67	-12.41	-10.98


802.11ac VHT20-BF_Nss1,(MCS0)_3TX
PSD

2462MHz

Ch Freq
2.462GHz

Span
30MHz

RBW
3kHz

VBW
10kHz

Sweep Time
334ms

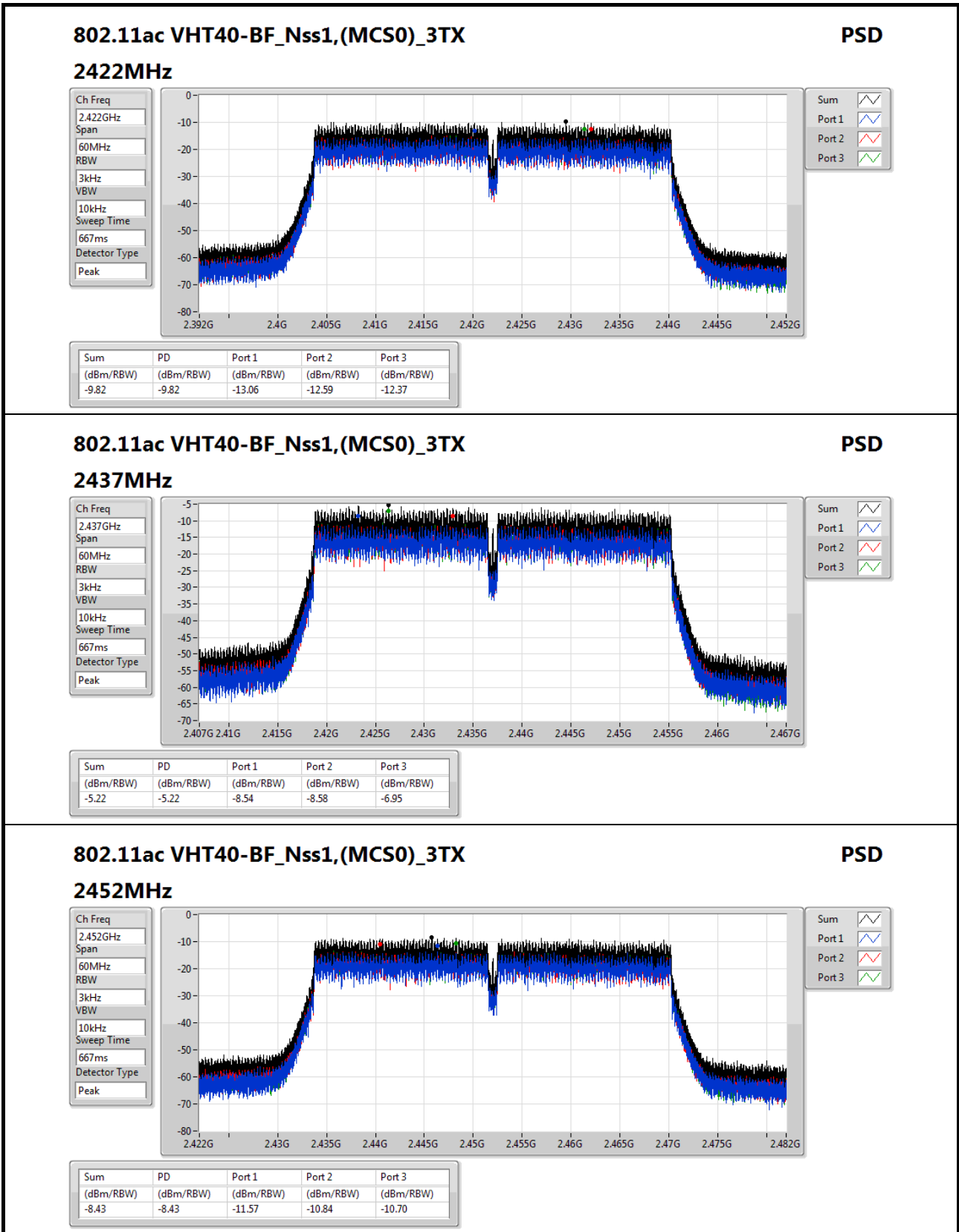
Detector Type
Peak

Sum

Port 1

Port 2

Port 3





CSE 20dB/30dB Down Result

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
2452MHz	Pass	2.440748G	4.88	-25.12	900.2M	-62.88	2.3984G	-49.89	2.48446G	-44.57	5.654128G	-34.35	2

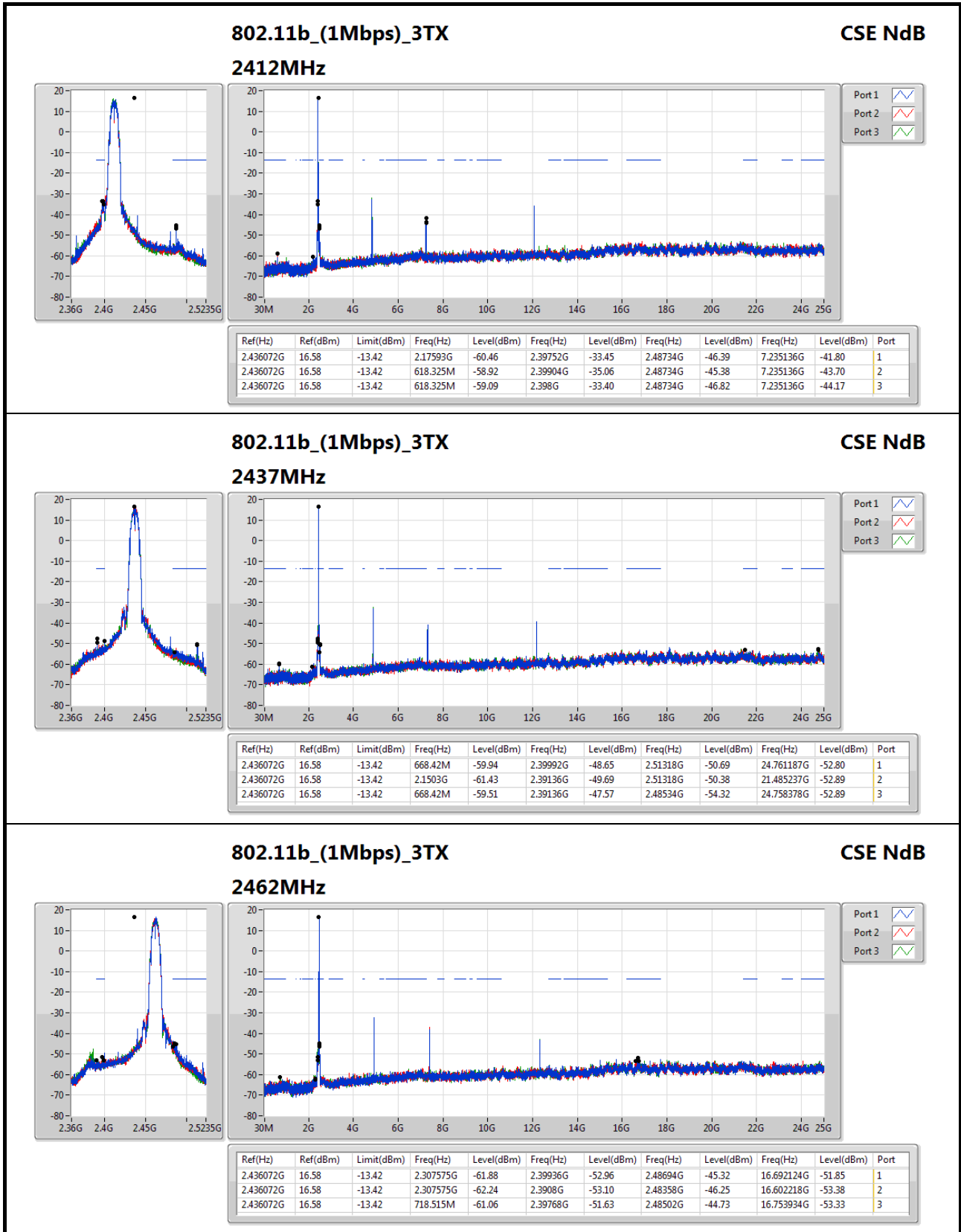
Result

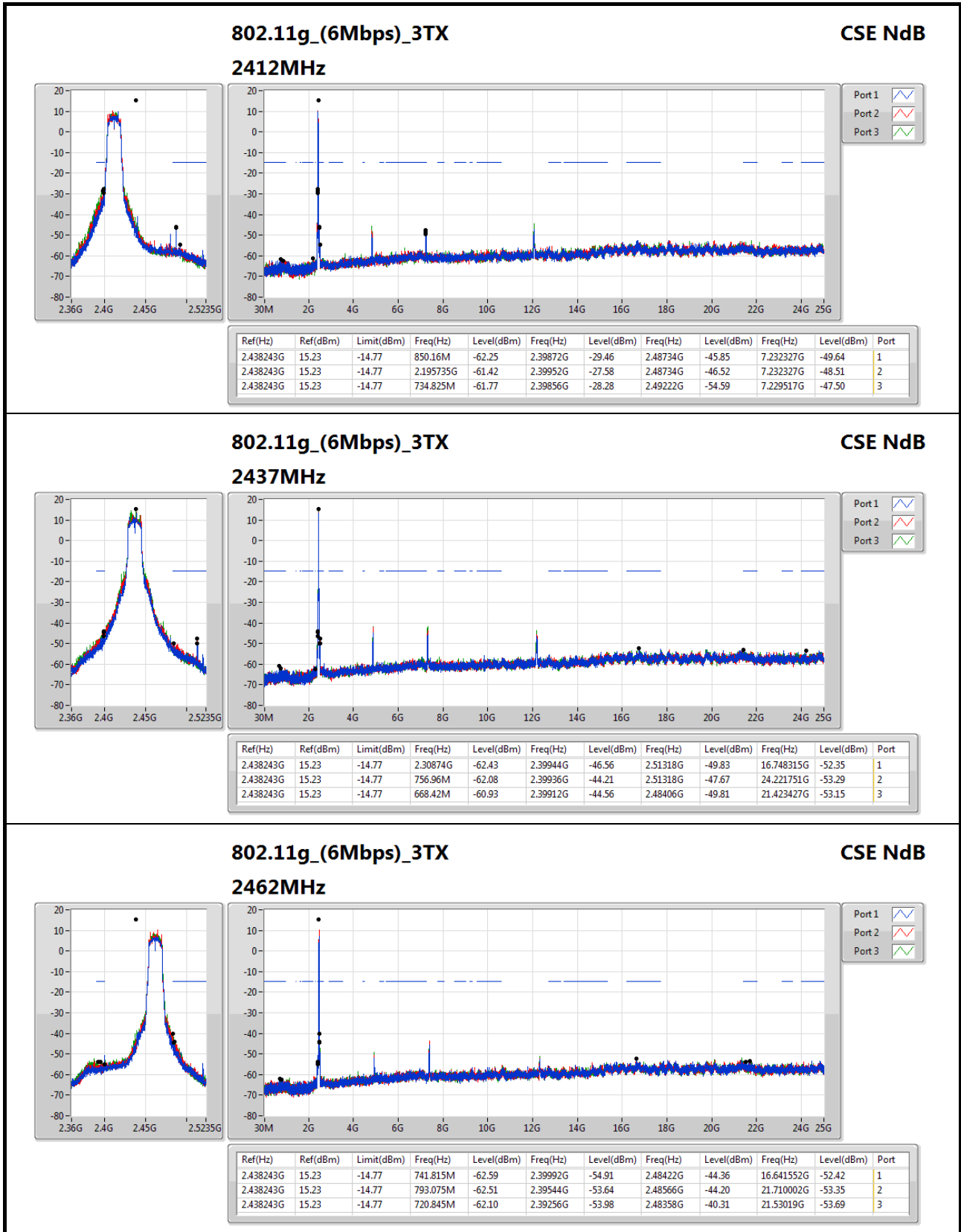
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.436072G	16.58	-13.42	2.17593G	-60.46	2.39752G	-33.45	2.48734G	-46.39	7.235136G	-41.80	1
2412MHz	Pass	2.436072G	16.58	-13.42	618.325M	-58.92	2.39904G	-35.06	2.48734G	-45.38	7.235136G	-43.70	2
2412MHz	Pass	2.436072G	16.58	-13.42	618.325M	-59.09	2.398G	-33.40	2.48734G	-46.82	7.235136G	-44.17	3
2437MHz	Pass	2.436072G	16.58	-13.42	668.42M	-59.94	2.39992G	-48.65	2.51318G	-50.69	24.761187G	-52.80	1
2437MHz	Pass	2.436072G	16.58	-13.42	2.1503G	-61.43	2.39136G	-49.69	2.51318G	-50.38	21.485237G	-52.89	2
2437MHz	Pass	2.436072G	16.58	-13.42	668.42M	-59.51	2.39136G	-47.57	2.48534G	-54.32	24.758378G	-52.89	3
2462MHz	Pass	2.436072G	16.58	-13.42	2.307575G	-61.88	2.39936G	-52.96	2.48694G	-45.32	16.692124G	-51.85	1
2462MHz	Pass	2.436072G	16.58	-13.42	2.307575G	-62.24	2.3908G	-53.10	2.48358G	-46.25	16.602218G	-53.38	2
2462MHz	Pass	2.436072G	16.58	-13.42	718.515M	-61.06	2.39768G	-51.63	2.48502G	-44.73	16.753934G	-53.33	3
802.11g_(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.438243G	15.23	-14.77	850.16M	-62.25	2.39872G	-29.46	2.48734G	-45.85	7.232327G	-49.64	1
2412MHz	Pass	2.438243G	15.23	-14.77	2.195735G	-61.42	2.39952G	-27.58	2.48734G	-46.52	7.232327G	-48.51	2
2412MHz	Pass	2.438243G	15.23	-14.77	734.825M	-61.77	2.39856G	-28.28	2.49222G	-54.59	7.229517G	-47.50	3
2437MHz	Pass	2.438243G	15.23	-14.77	2.30874G	-62.43	2.39944G	-46.56	2.51318G	-49.83	16.748315G	-52.35	1
2437MHz	Pass	2.438243G	15.23	-14.77	756.96M	-62.08	2.39936G	-44.21	2.51318G	-47.67	24.221751G	-53.29	2
2437MHz	Pass	2.438243G	15.23	-14.77	668.42M	-60.93	2.39912G	-44.56	2.48406G	-49.81	21.423427G	-53.15	3
2462MHz	Pass	2.438243G	15.23	-14.77	741.815M	-62.59	2.39992G	-54.91	2.48422G	-44.36	16.641552G	-52.42	1
2462MHz	Pass	2.438243G	15.23	-14.77	793.075M	-62.51	2.39544G	-53.64	2.48566G	-44.20	21.710002G	-53.35	2
2462MHz	Pass	2.438243G	15.23	-14.77	720.845M	-62.10	2.39256G	-53.98	2.48358G	-40.31	21.53019G	-53.69	3
802.11ac_VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	13.38	-16.62	936.37M	-61.51	2.39928G	-32.05	2.48734G	-49.68	7.237946G	-49.77	1
2412MHz	Pass	2.435738G	13.38	-16.62	2.186415G	-61.06	2.39984G	-32.13	2.48734G	-52.17	7.237946G	-50.63	2
2412MHz	Pass	2.435738G	13.38	-16.62	670.75M	-62.53	2.3996G	-31.92	2.48734G	-46.18	7.226708G	-50.16	3
2437MHz	Pass	2.435738G	13.38	-16.62	1.8474G	-61.93	2.39824G	-45.33	2.48414G	-49.40	24.80614G	-53.24	1
2437MHz	Pass	2.435738G	13.38	-16.62	861.81M	-62.35	2.39992G	-43.43	2.48654G	-48.33	21.681907G	-53.97	2
2437MHz	Pass	2.435738G	13.38	-16.62	1.99186G	-62.43	2.39832G	-41.45	2.48654G	-48.79	5.6674G	-32.85	3
2462MHz	Pass	2.435738G	13.38	-16.62	868.8M	-61.96	2.39112G	-55.53	2.48438G	-41.90	21.811147G	-53.44	1
2462MHz	Pass	2.435738G	13.38	-16.62	725.505M	-62.25	2.39912G	-53.82	2.48414G	-42.05	17.683899G	-53.62	2
2462MHz	Pass	2.435738G	13.38	-16.62	907.245M	-62.31	2.39472G	-54.69	2.48382G	-40.15	16.7146G	-52.96	3
802.11ac_VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.440748G	4.88	-25.12	2.12306G	-61.35	2.39696G	-43.92	2.48974G	-54.43	16.799459G	-53.61	1
2422MHz	Pass	2.440748G	4.88	-25.12	778.83M	-62.96	2.39968G	-43.27	2.48542G	-54.78	5.654128G	-34.30	2
2422MHz	Pass	2.440748G	4.88	-25.12	1.920395G	-62.85	2.3936G	-43.84	2.48526G	-54.02	15.338282G	-52.76	3
2437MHz	Pass	2.440748G	4.88	-25.12	912.795M	-61.75	2.39952G	-39.97	2.48574G	-49.83	16.760195G	-53.03	1
2437MHz	Pass	2.440748G	4.88	-25.12	905.925M	-62.74	2.39952G	-39.15	2.48574G	-49.45	21.715857G	-52.86	2
2437MHz	Pass	2.440748G	4.88	-25.12	923.1M	-62.43	2.39952G	-38.34	2.48382G	-49.76	16.715322G	-52.23	3
2452MHz	Pass	2.440748G	4.88	-25.12	934.55M	-62.58	2.39712G	-50.93	2.48446G	-46.90	24.781244G	-53.51	1
2452MHz	Pass	2.440748G	4.88	-25.12	900.2M	-62.88	2.3984G	-49.89	2.48446G	-44.57	5.654128G	-34.35	2
2452MHz	Pass	2.440748G	4.88	-25.12	2.179165G	-62.32	2.39392G	-47.57	2.48814G	-46.00	21.794385G	-53.57	3
802.11ac_VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.435738G	13.97	-16.03	929.38M	-62.31	2.39832G	-34.85	2.48734G	-48.12	17.697947G	-52.75	1
2412MHz	Pass	2.435738G	13.97	-16.03	2.15263G	-62.00	2.39984G	-33.63	2.48734G	-47.60	5.664591G	-45.01	2

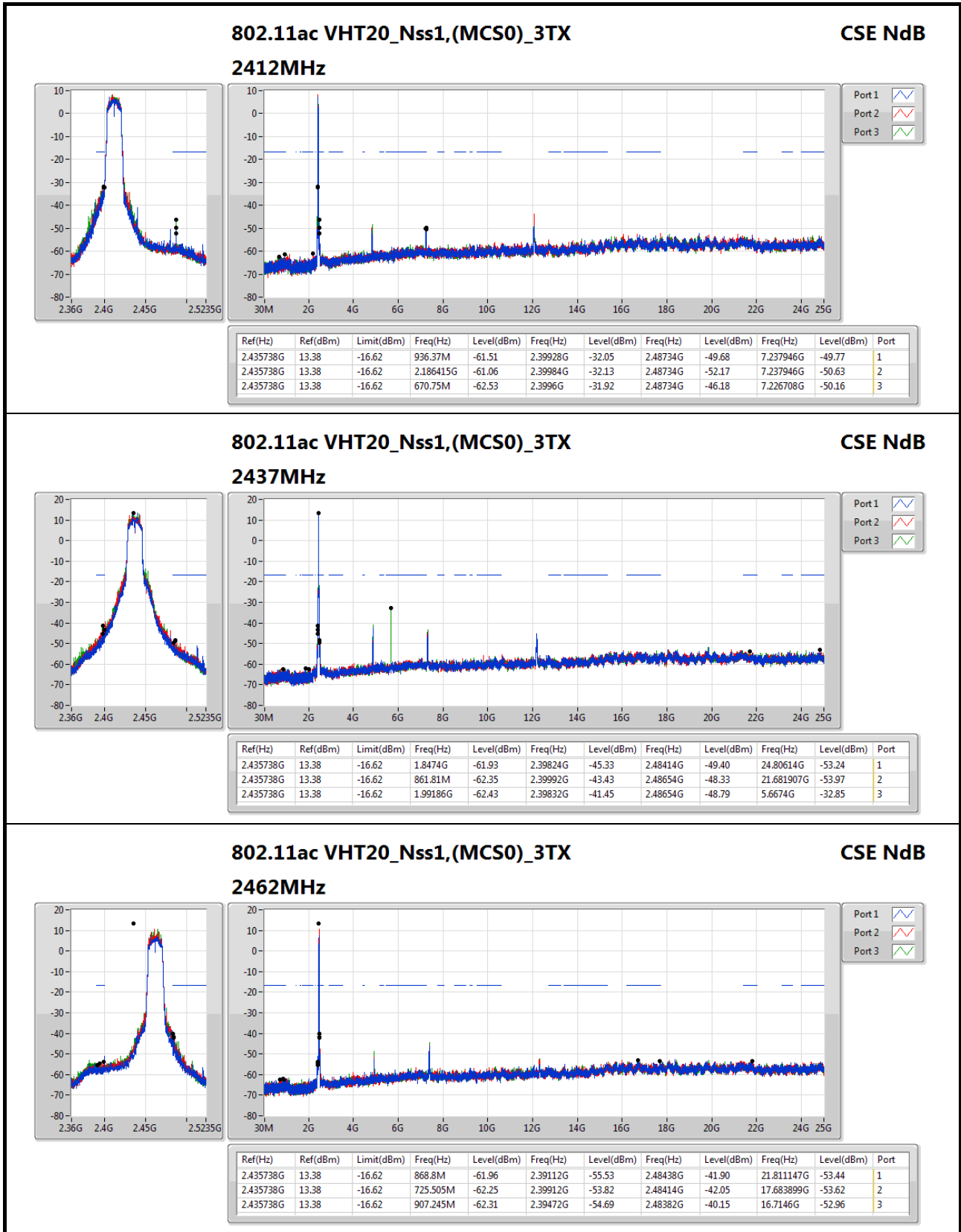


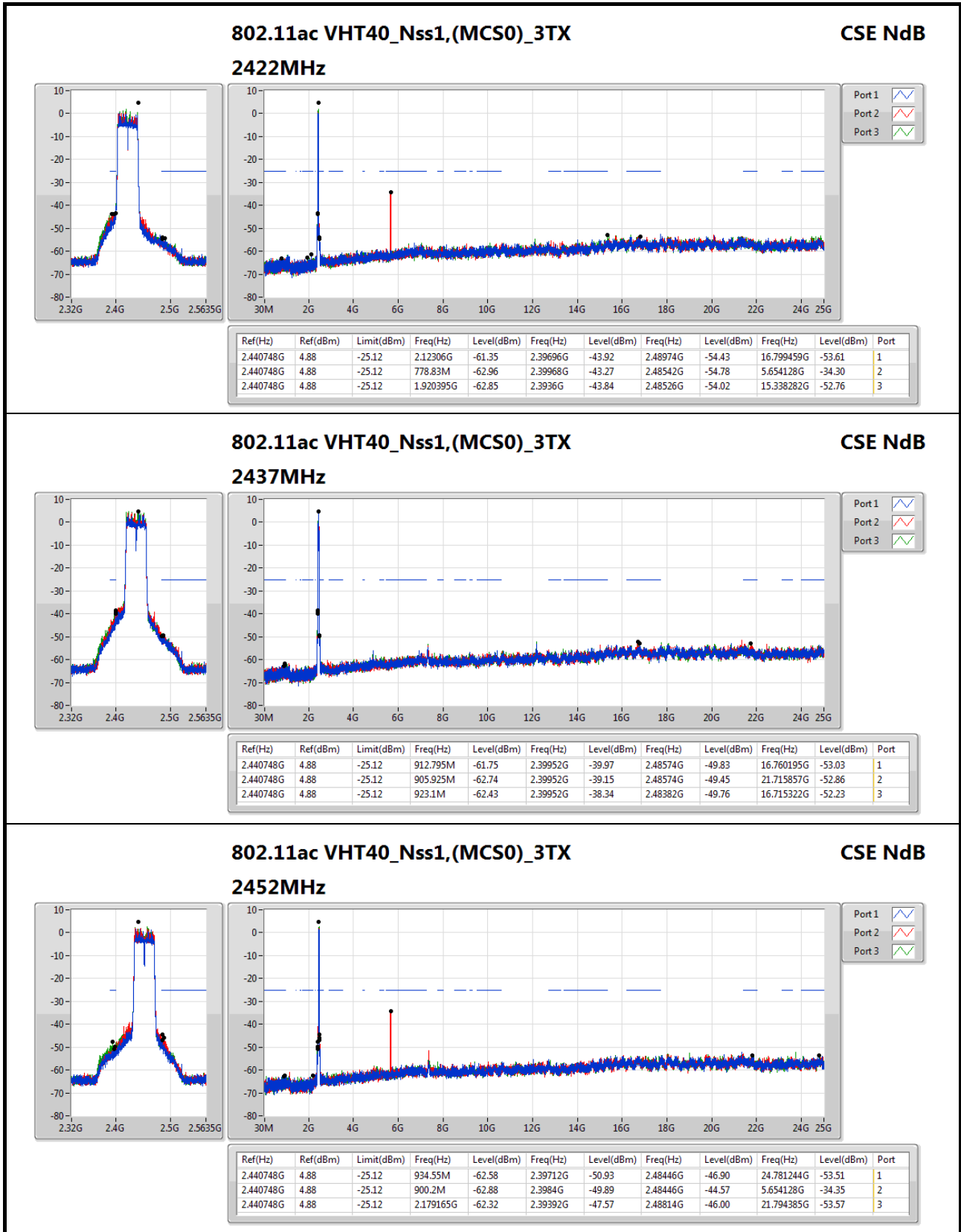
CSE 20dB/30dB Down Result

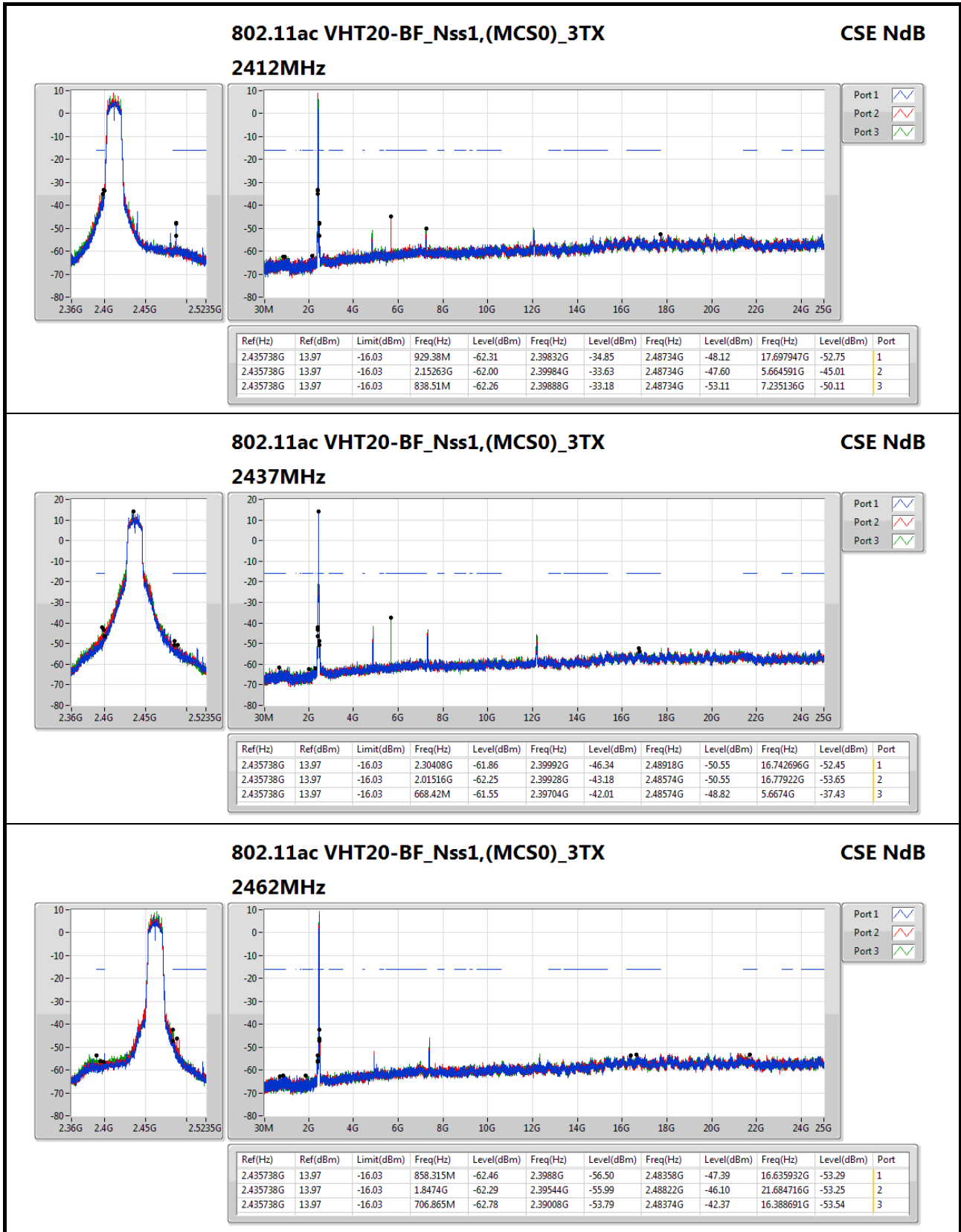
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2412MHz	Pass	2.435738G	13.97	-16.03	838.51M	-62.26	2.39888G	-33.18	2.48734G	-53.11	7.235136G	-50.11	3
2437MHz	Pass	2.435738G	13.97	-16.03	2.30408G	-61.86	2.39992G	-46.34	2.48918G	-50.55	16.742696G	-52.45	1
2437MHz	Pass	2.435738G	13.97	-16.03	2.01516G	-62.25	2.39928G	-43.18	2.48574G	-50.55	16.77922G	-53.65	2
2437MHz	Pass	2.435738G	13.97	-16.03	668.42M	-61.55	2.39704G	-42.01	2.48574G	-48.82	5.6674G	-37.43	3
2462MHz	Pass	2.435738G	13.97	-16.03	858.315M	-62.46	2.3988G	-56.50	2.48358G	-47.39	16.635932G	-53.29	1
2462MHz	Pass	2.435738G	13.97	-16.03	1.8474G	-62.29	2.39544G	-55.99	2.48822G	-46.10	21.684716G	-53.25	2
2462MHz	Pass	2.435738G	13.97	-16.03	706.865M	-62.78	2.39008G	-53.79	2.48374G	-42.37	16.388691G	-53.54	3
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.431897G	6.60	-23.40	392.965M	-62.02	2.3984G	-41.30	2.48366G	-54.65	21.527952G	-53.51	1
2422MHz	Pass	2.431897G	6.60	-23.40	779.975M	-62.65	2.392G	-41.52	2.48718G	-54.44	16.765805G	-52.59	2
2422MHz	Pass	2.431897G	6.60	-23.40	950.58M	-61.59	2.39856G	-42.20	2.48446G	-52.41	21.53917G	-52.81	3
2437MHz	Pass	2.431897G	6.60	-23.40	737.61M	-61.64	2.39952G	-41.24	2.49134G	-48.92	21.799994G	-52.80	1
2437MHz	Pass	2.431897G	6.60	-23.40	834.935M	-62.74	2.39968G	-37.49	2.48526G	-47.17	5.662542G	-40.13	2
2437MHz	Pass	2.431897G	6.60	-23.40	883.025M	-62.87	2.39952G	-36.54	2.48718G	-48.34	17.688506G	-52.85	3
2452MHz	Pass	2.431897G	6.60	-23.40	852.11M	-62.38	2.39936G	-49.73	2.4859G	-45.85	21.404551G	-53.61	1
2452MHz	Pass	2.431897G	6.60	-23.40	897.91M	-62.88	2.39952G	-48.26	2.48478G	-43.58	23.491145G	-53.19	2
2452MHz	Pass	2.431897G	6.60	-23.40	862.415M	-62.57	2.39744G	-48.53	2.48542G	-45.20	16.723736G	-52.74	3

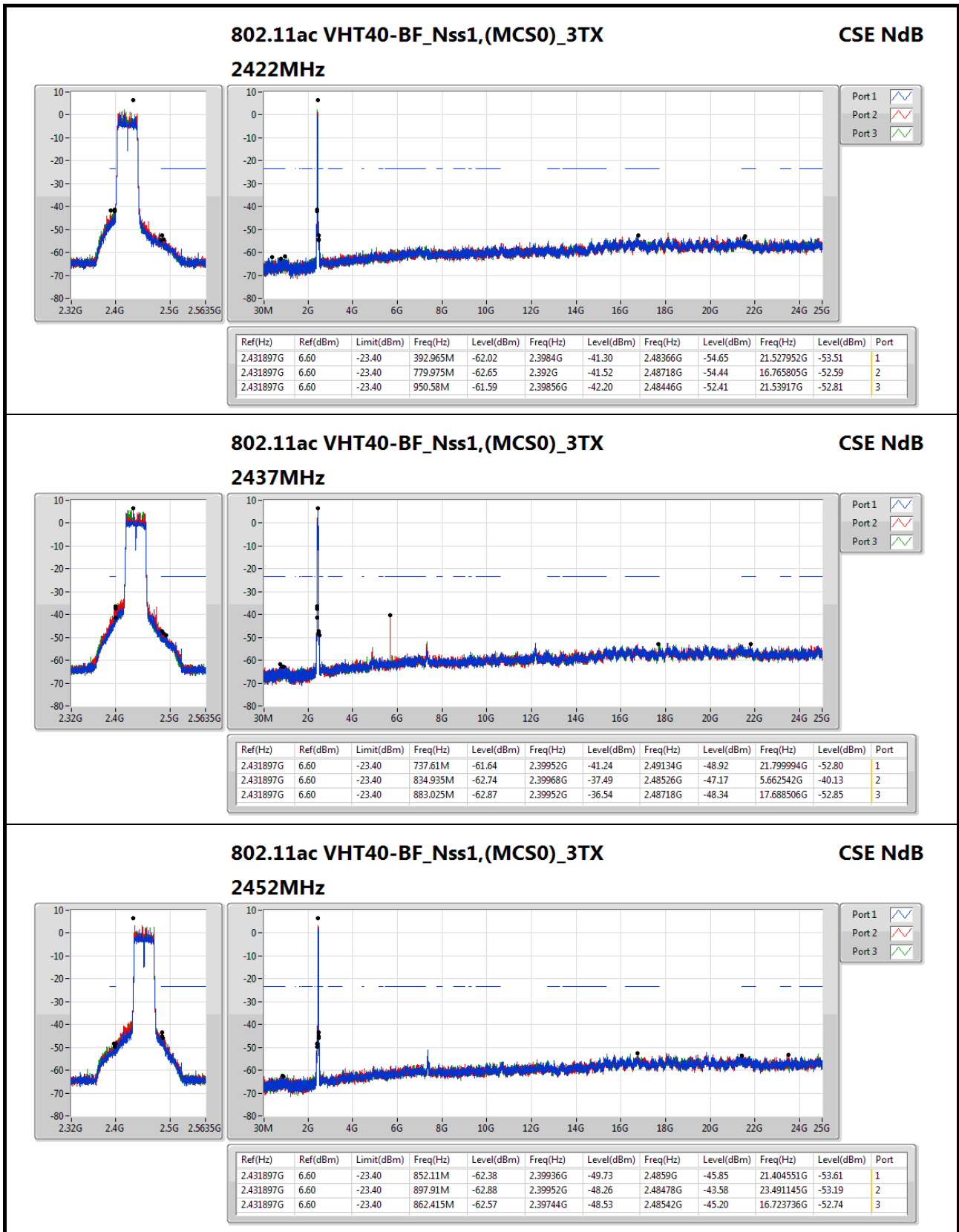








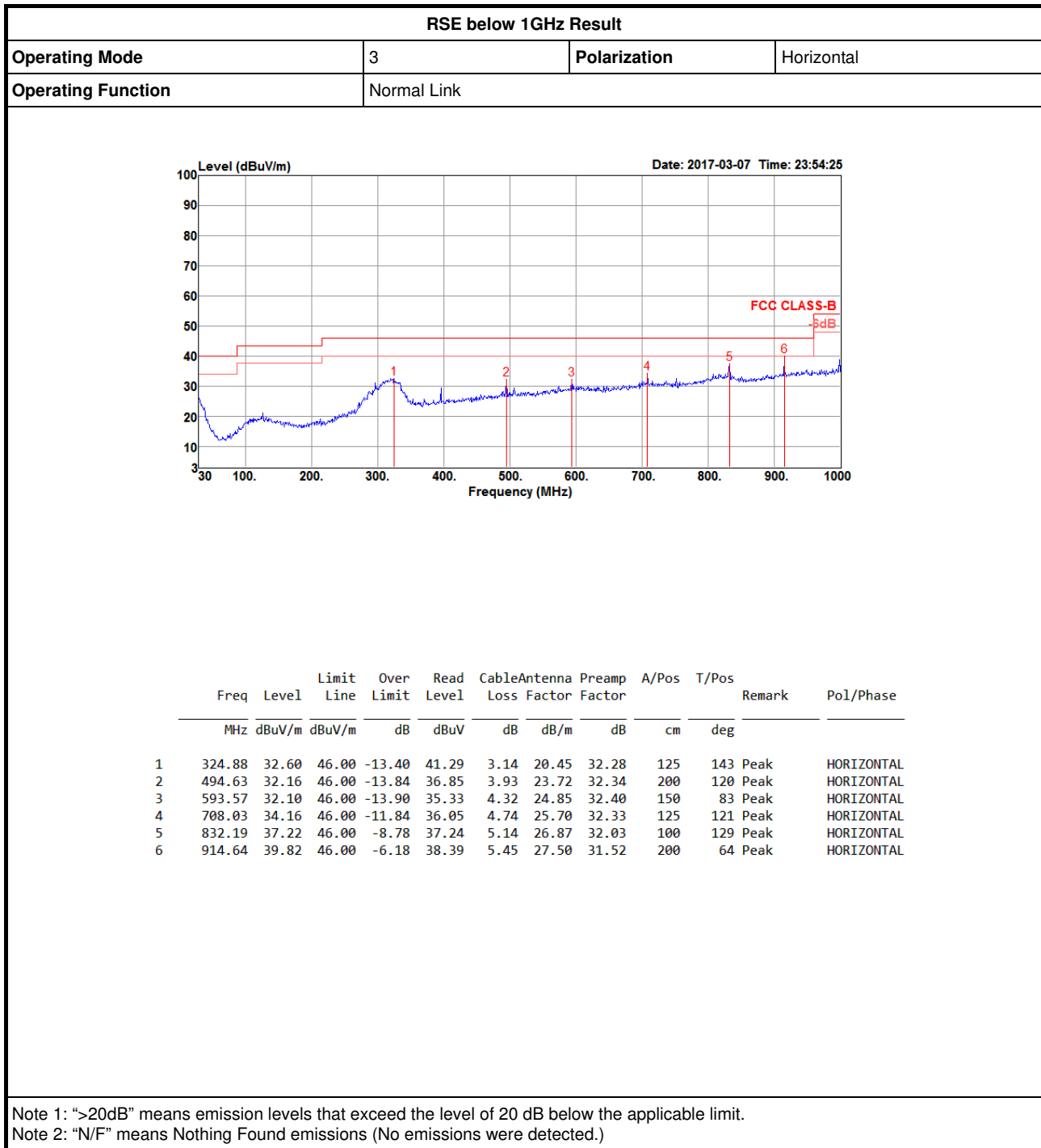






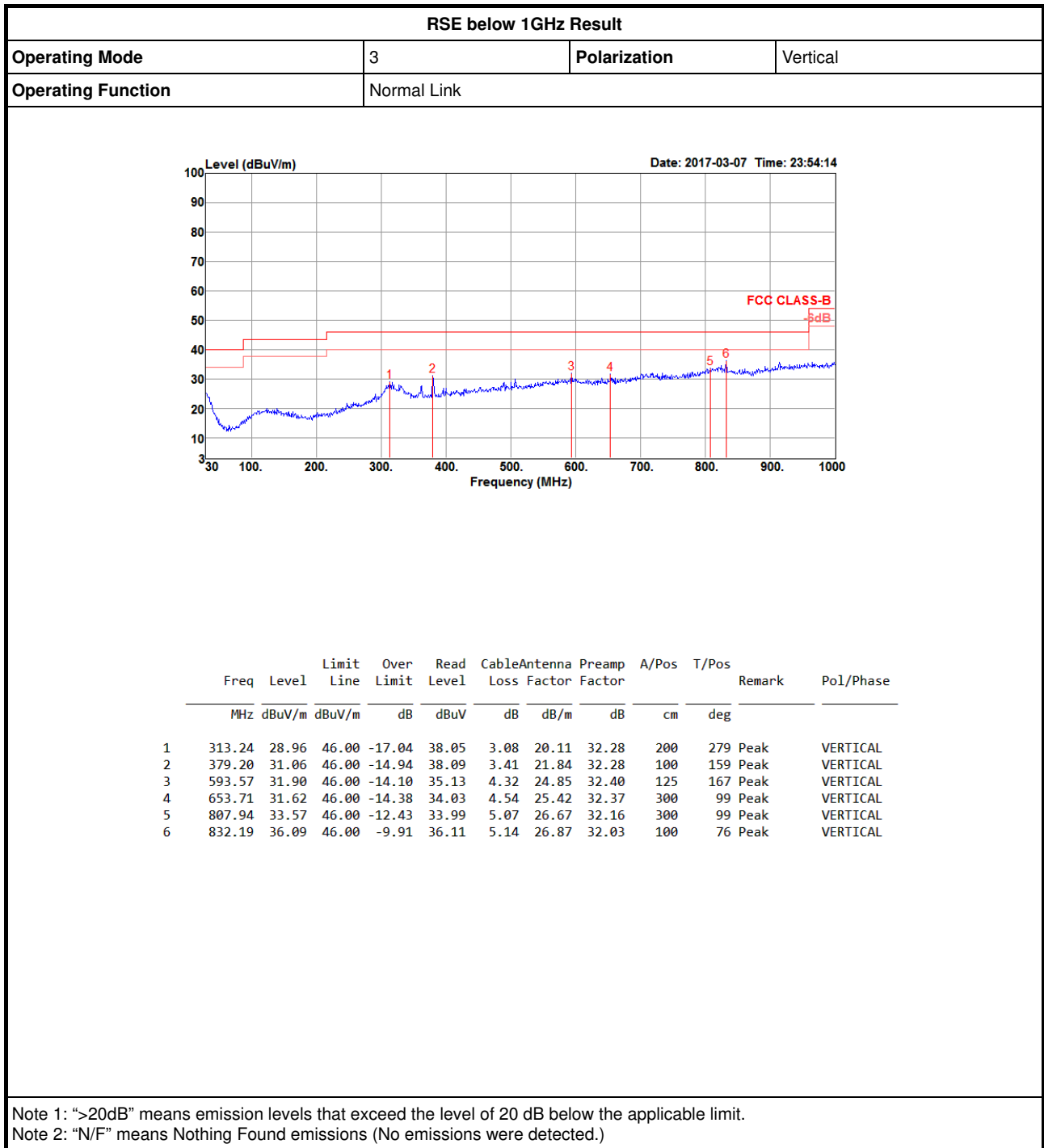
RSE below 1GHz Result

Appendix F.1





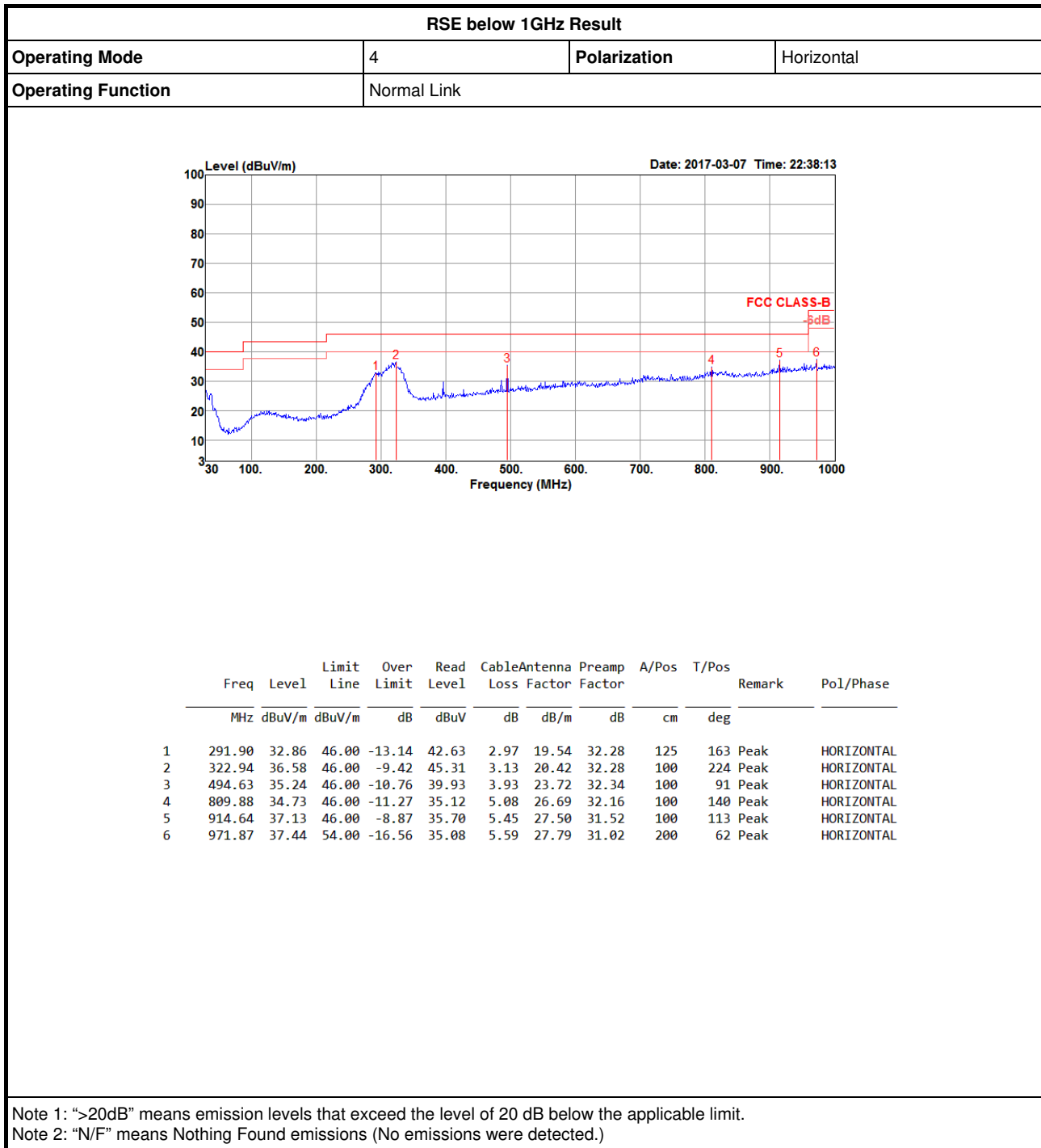
RSE below 1GHz Result





RSE below 1GHz Result

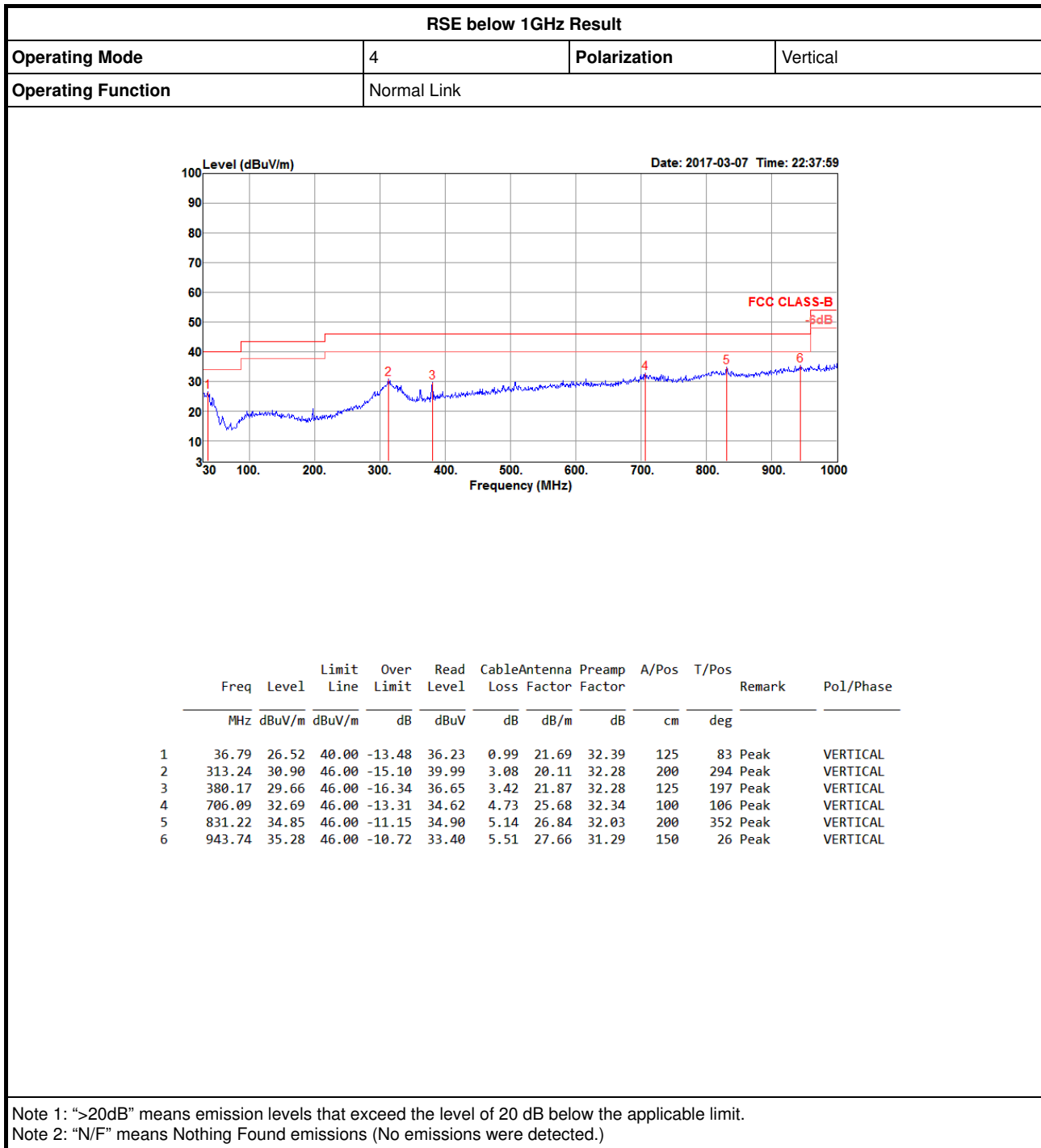
Appendix F.1





RSE below 1GHz Result

Appendix F.1



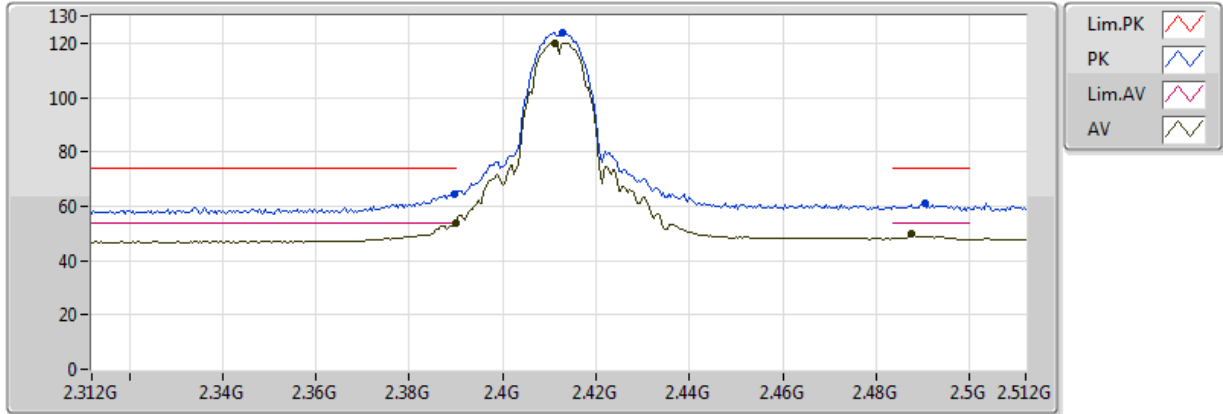


Summary

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	Pass	AV	2.39G	53.99	54.00	-0.01	31.90	3	V	200	1.52	-

802.11b_(1Mbps)_3TX

2412MHz_TX



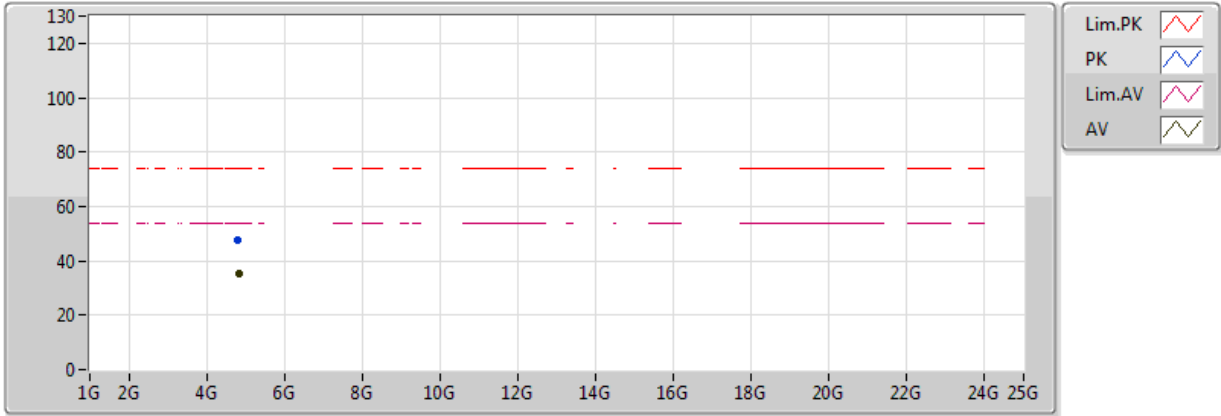
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:105
 02-S-5
 FSU

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	53.99	54.00	-0.01	31.90	3	V	200	1.52	-
AV	2.4112G	120.19	Inf	-Inf	31.96	3	V	200	1.52	-
AV	2.4876G	49.73	54.00	-4.27	32.14	3	V	200	1.52	-
PK	2.3896G	64.29	74.00	-9.71	31.90	3	V	200	1.52	-
PK	2.4128G	123.87	Inf	-Inf	31.96	3	V	200	1.52	-
PK	2.4904G	60.83	74.00	-13.17	32.15	3	V	200	1.52	-



802.11b_(1Mbps)_3TX

2412MHz_TX



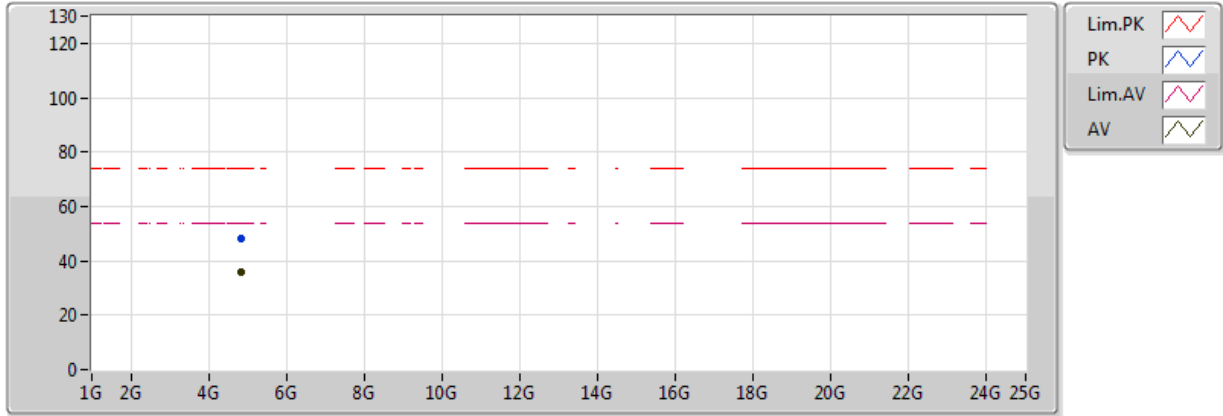
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:105
 02-S-5
 FSU

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	35.03	54.00	-18.97	6.28	3	V	198	2.60	-
PK	4.8165G	47.82	74.00	-26.18	6.26	3	V	198	2.60	-



802.11b_(1Mbps)_3TX

2412MHz_TX

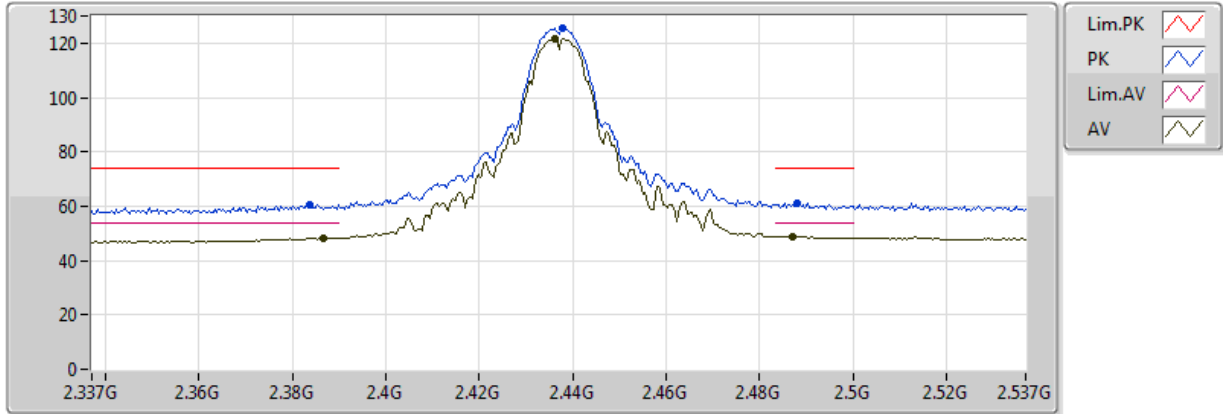


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:105
 02-S-5
 FSU

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	36.06	54.00	-17.94	6.28	3	H	45	2.44	-
PK	4.82418G	47.93	74.00	-26.07	6.28	3	H	45	2.44	-

802.11b_(1Mbps)_3TX

2437MHz_TX



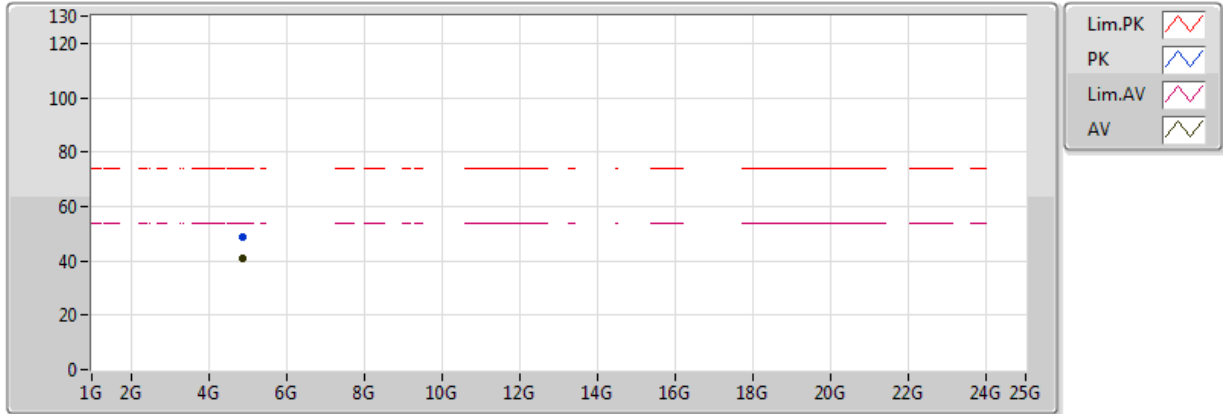
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:114
 02-S-5
 升—over 0.9 db
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3866G	48.35	54.00	-5.65	31.90	3	V	199	1.85	-
AV	2.4362G	121.71	Inf	-Inf	32.02	3	V	199	1.85	-
AV	2.487G	48.83	54.00	-5.17	32.14	3	V	199	1.85	-
PK	2.3838G	60.64	74.00	-13.36	31.89	3	V	199	1.85	-
PK	2.4378G	125.28	Inf	-Inf	32.02	3	V	199	1.85	-
PK	2.4882G	61.03	74.00	-12.97	32.14	3	V	199	1.85	-



802.11b_(1Mbps)_3TX

2437MHz_TX



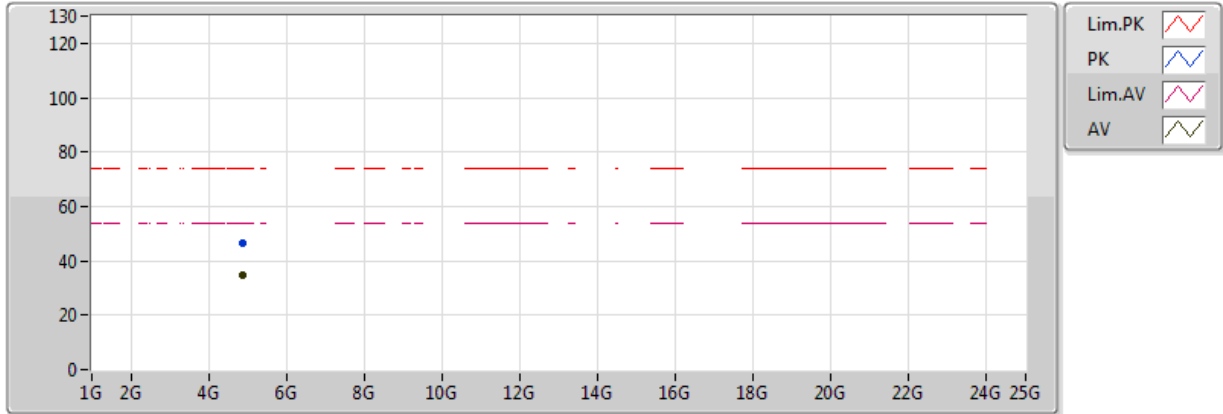
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:114
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87408G	40.71	54.00	-13.29	6.44	3	V	138	2.36	-
PK	4.8742G	48.76	74.00	-25.24	6.44	3	V	138	2.36	-



802.11b_(1Mbps)_3TX

2437MHz_TX

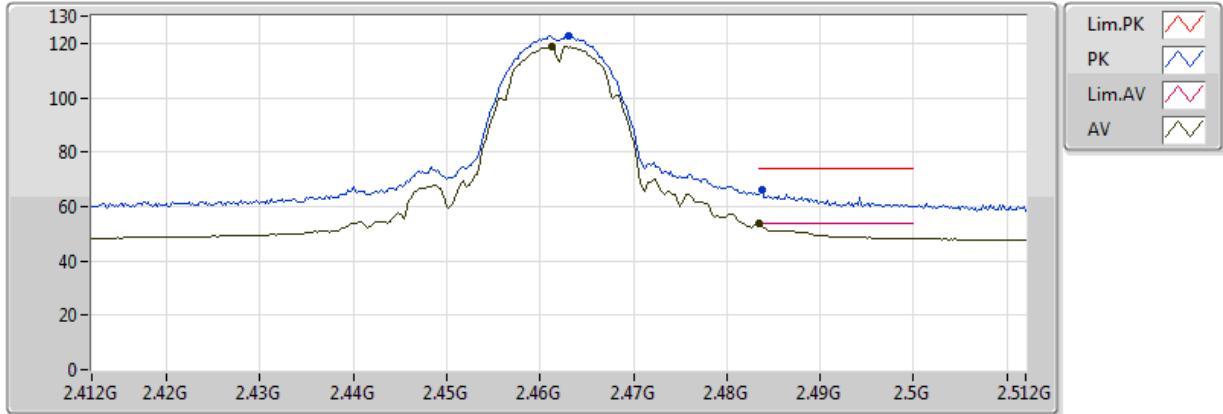


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:114
 02-S-5
 FSU

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	34.93	54.00	-19.07	6.44	3	H	152	1.10	-
PK	4.87376G	46.59	74.00	-27.41	6.44	3	H	152	1.10	-

802.11b_(1Mbps)_3TX

2462MHz_TX

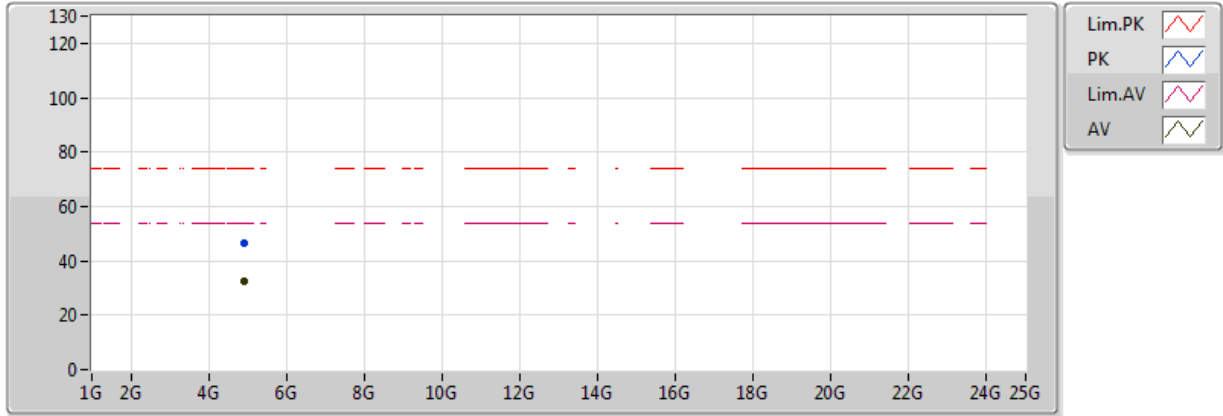


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:101
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4612G	118.74	Inf	-Inf	32.08	3	V	204	1.50	-
AV	2.483502G	53.84	54.00	-0.16	32.13	3	V	204	1.50	-
PK	2.463G	122.63	Inf	-Inf	32.08	3	V	204	1.50	-
PK	2.4838G	66.30	74.00	-7.70	32.13	3	V	204	1.50	-

802.11b_(1Mbps)_3TX

2462MHz_TX

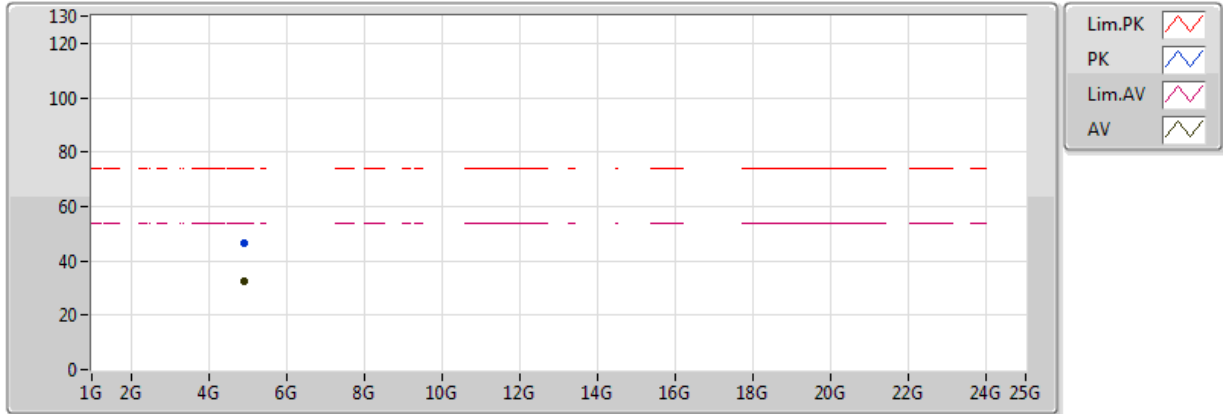


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:101
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9238G	32.55	54.00	-21.45	6.59	3	V	177	1.91	-
PK	4.92368G	46.70	74.00	-27.30	6.59	3	V	177	1.91	-

802.11b_(1Mbps)_3TX

2462MHz_TX

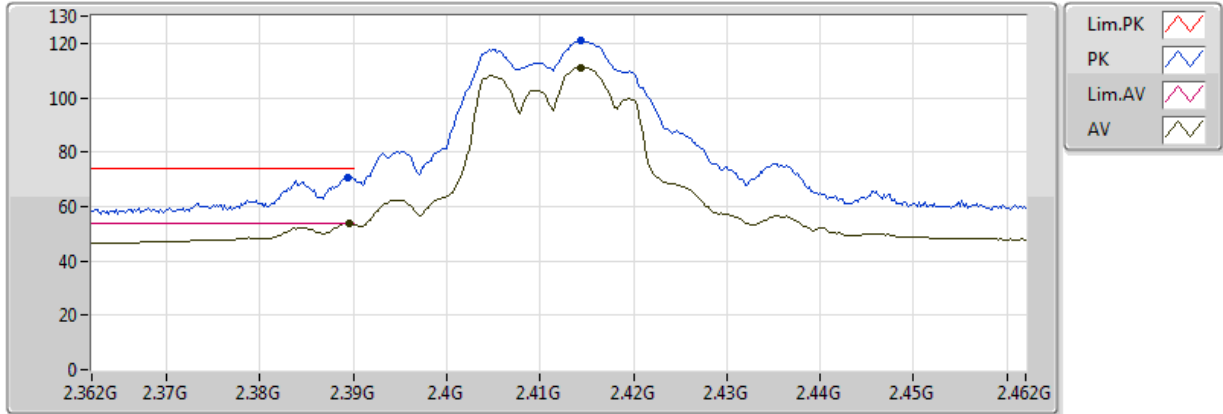


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:101
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91624G	32.44	54.00	-21.56	6.57	3	H	141	1.33	-
PK	4.9176G	46.46	74.00	-27.54	6.57	3	H	141	1.33	-

802.11g_(6Mbps)_3TX

2412MHz_TX

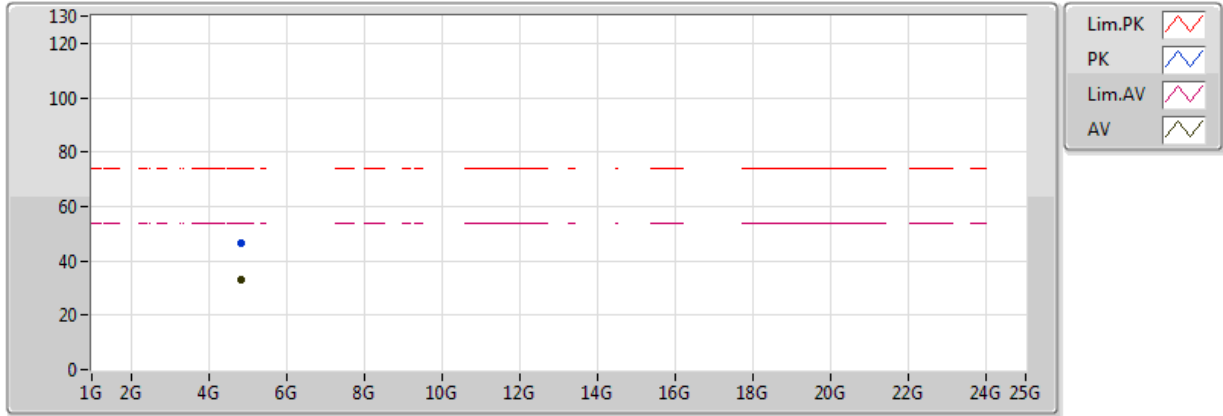


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:88
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	53.93	54.00	-0.07	31.90	3	V	332	1.21	-
AV	2.4144G	111.20	Inf	-Inf	31.96	3	V	332	1.21	-
PK	2.3894G	70.73	74.00	-3.27	31.90	3	V	332	1.21	-
PK	2.4144G	121.09	Inf	-Inf	31.96	3	V	332	1.21	-

802.11g_(6Mbps)_3TX

2412MHz_TX



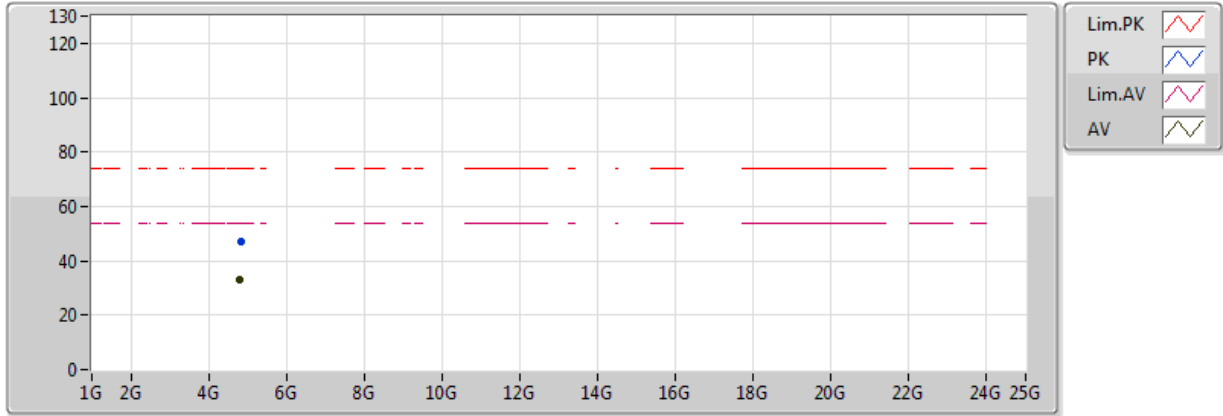
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:88
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82252G	32.85	54.00	-21.15	6.28	3	V	57	1.50	-
PK	4.8298G	46.63	74.00	-27.37	6.30	3	V	57	1.50	-



802.11g_(6Mbps)_3TX

2412MHz_TX

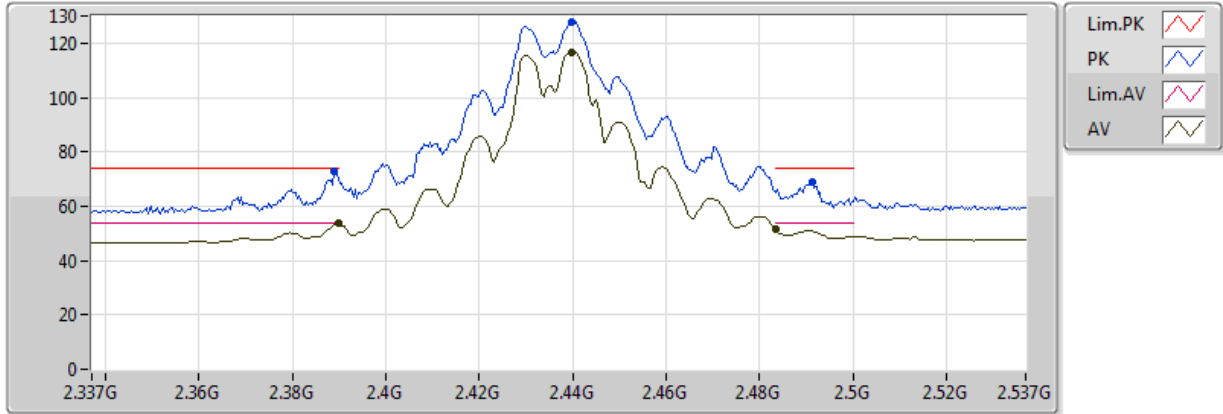


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:88
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.81456G	32.86	54.00	-21.14	6.26	3	H	36	1.04	-
PK	4.83232G	46.88	74.00	-27.12	6.31	3	H	36	1.04	-

802.11g_(6Mbps)_3TX

2437MHz_TX



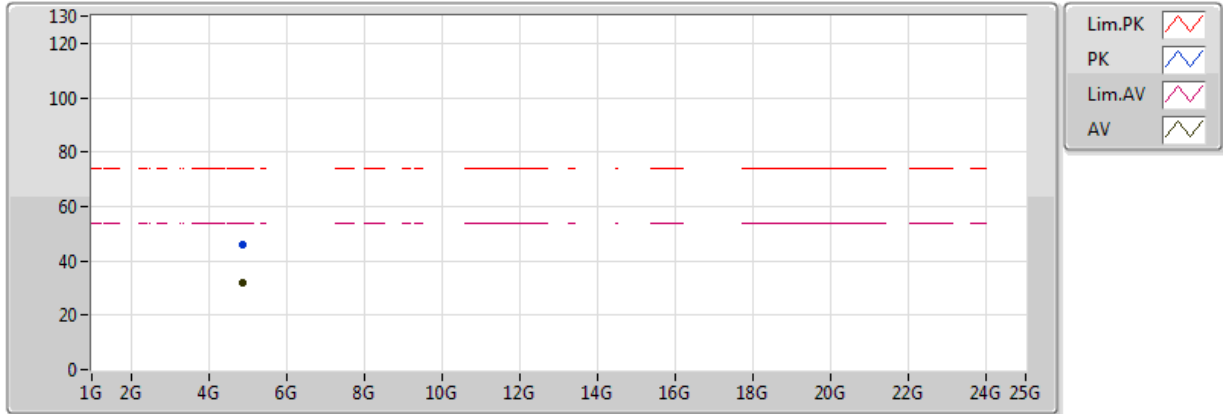
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:112
 02-S-5
 FSU

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	53.79	54.00	-0.21	31.90	3	V	327	1.01	-
AV	2.4398G	116.82	Inf	-Inf	32.03	3	V	327	1.01	-
AV	2.483502G	51.66	54.00	-2.34	32.13	3	V	327	1.01	-
PK	2.389G	72.81	74.00	-1.19	31.90	3	V	327	1.01	-
PK	2.4398G	127.74	Inf	-Inf	32.03	3	V	327	1.01	-
PK	2.4914G	68.76	74.00	-5.24	32.15	3	V	327	1.01	-



802.11g_(6Mbps)_3TX

2437MHz_TX

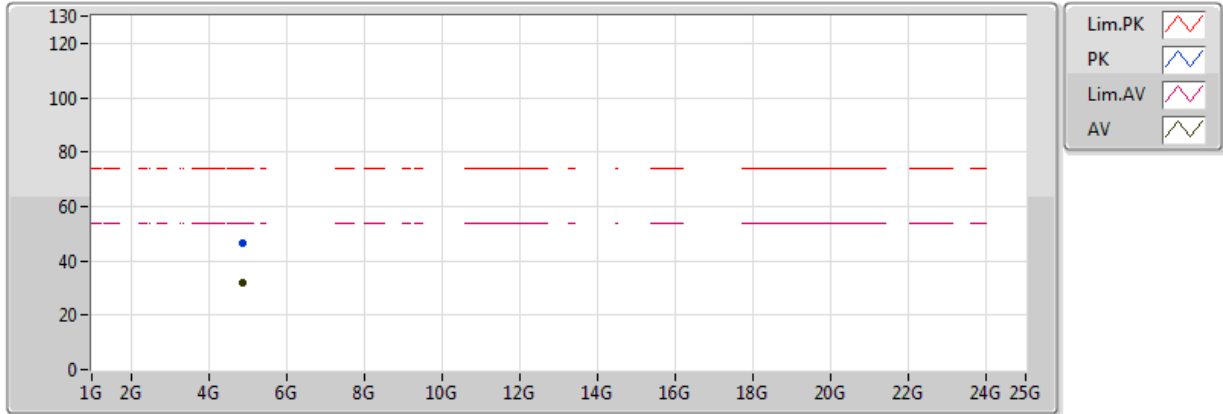


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:112
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.86884G	32.12	54.00	-21.88	6.42	3	V	237	2.20	-
PK	4.87188G	46.14	74.00	-27.86	6.43	3	V	237	2.20	-

802.11g_(6Mbps)_3TX

2437MHz_TX

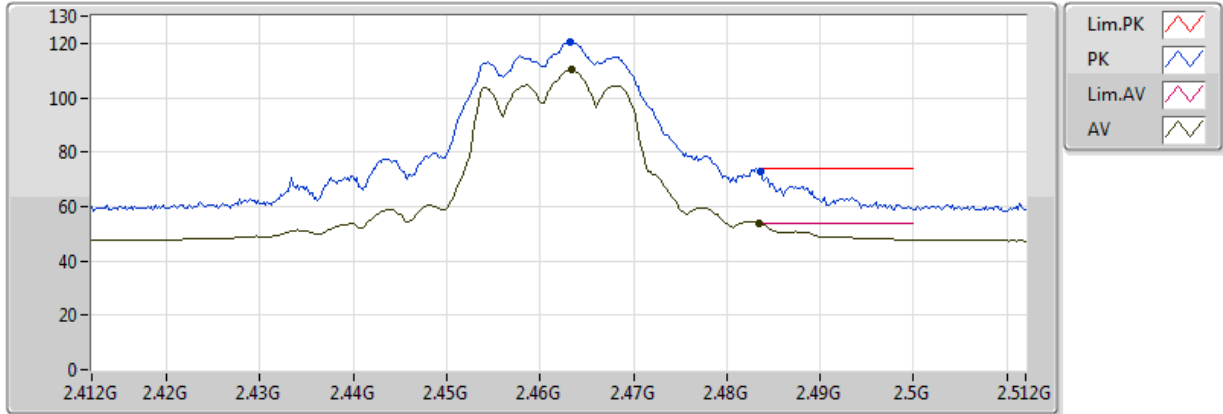


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:112
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87084G	32.17	54.00	-21.83	6.43	3	H	137	1.83	-
PK	4.88184G	46.64	74.00	-27.36	6.46	3	H	137	1.83	-

802.11g_(6Mbps)_3TX

2462MHz_TX



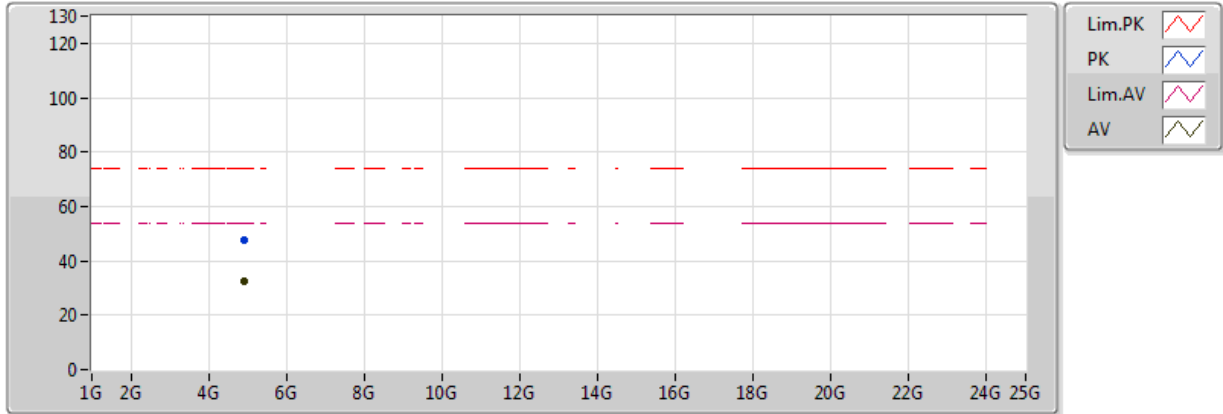
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:84
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4634G	110.11	Inf	-Inf	32.08	3	V	211	1.45	-
AV	2.483502G	53.86	54.00	-0.14	32.13	3	V	211	1.45	-
PK	2.4632G	120.65	Inf	-Inf	32.08	3	V	211	1.45	-
PK	2.4836G	72.74	74.00	-1.26	32.13	3	V	211	1.45	-



802.11g_(6Mbps)_3TX

2462MHz_TX

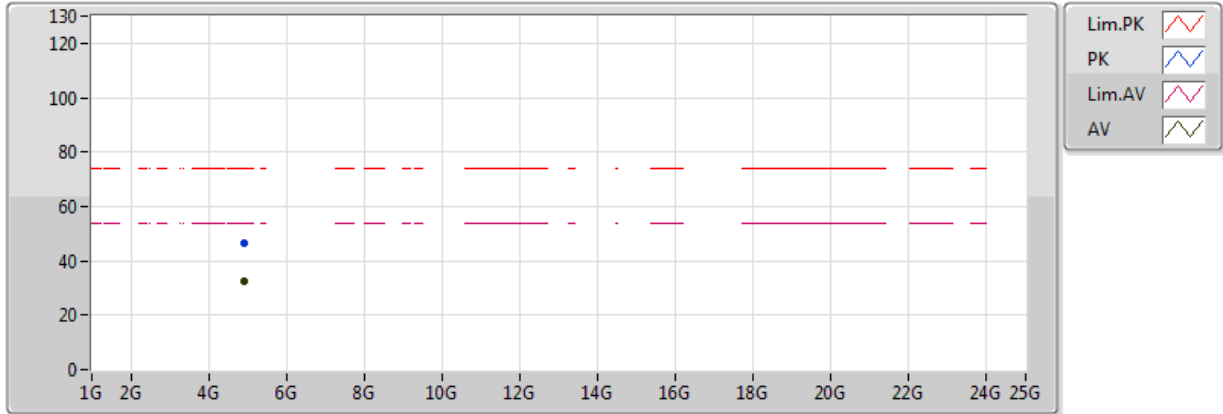


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:84
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91656G	32.39	54.00	-21.61	6.57	3	V	46	1.75	-
PK	4.91828G	47.56	74.00	-26.44	6.58	3	V	46	1.75	-

802.11g_(6Mbps)_3TX

2462MHz_TX

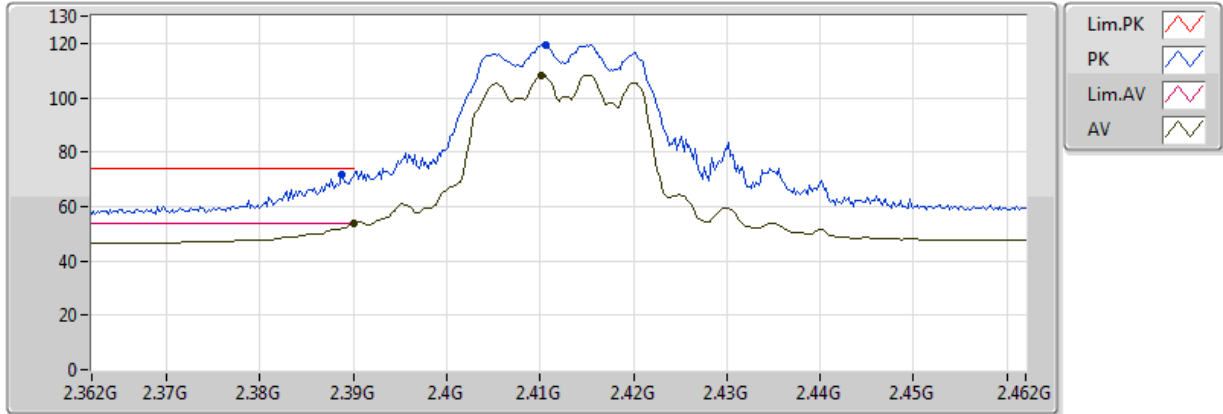


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:84
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91424G	32.40	54.00	-21.60	6.56	3	H	342	1.22	-
PK	4.92692G	46.62	74.00	-27.38	6.60	3	H	342	1.22	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

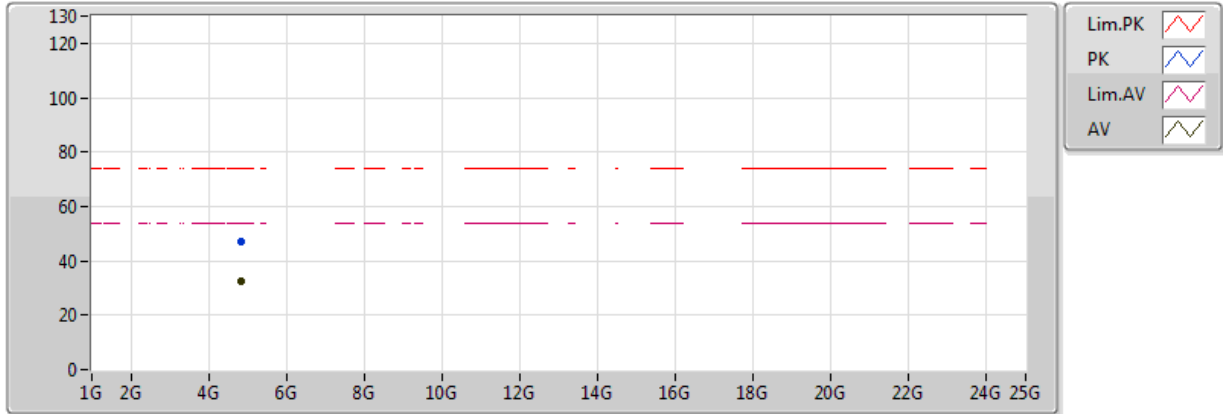


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:82
 02-S-5
 FSU

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	53.93	54.00	-0.07	31.90	3	V	329	1.45	-
AV	2.4102G	108.34	Inf	-Inf	31.95	3	V	329	1.45	-
PK	2.3888G	71.65	74.00	-2.35	31.90	3	V	329	1.45	-
PK	2.4106G	119.47	Inf	-Inf	31.96	3	V	329	1.45	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX



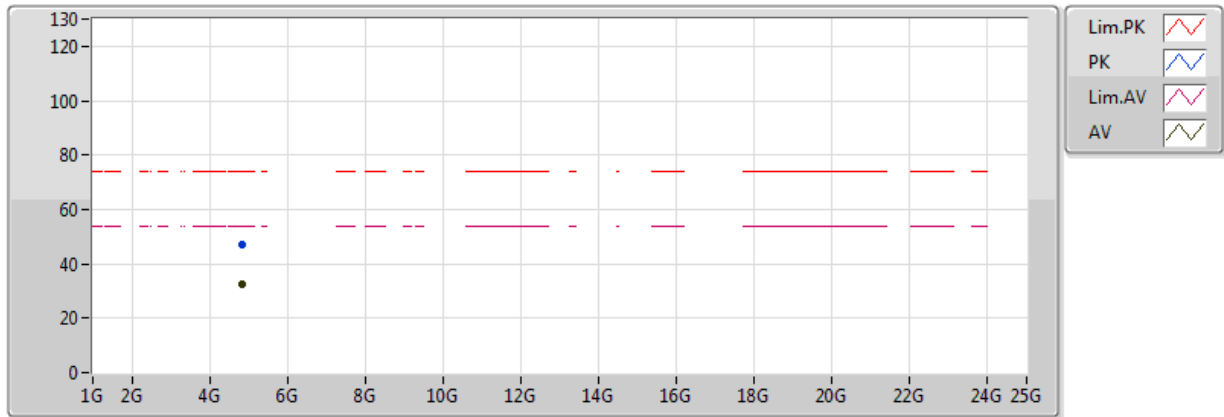
20161227
 EUT_Z_3TX_Non-TXBF
 Setting:82
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82604G	32.35	54.00	-21.65	6.29	3	V	126	1.01	-
PK	4.83328G	46.94	74.00	-27.06	6.31	3	V	126	1.01	-



802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

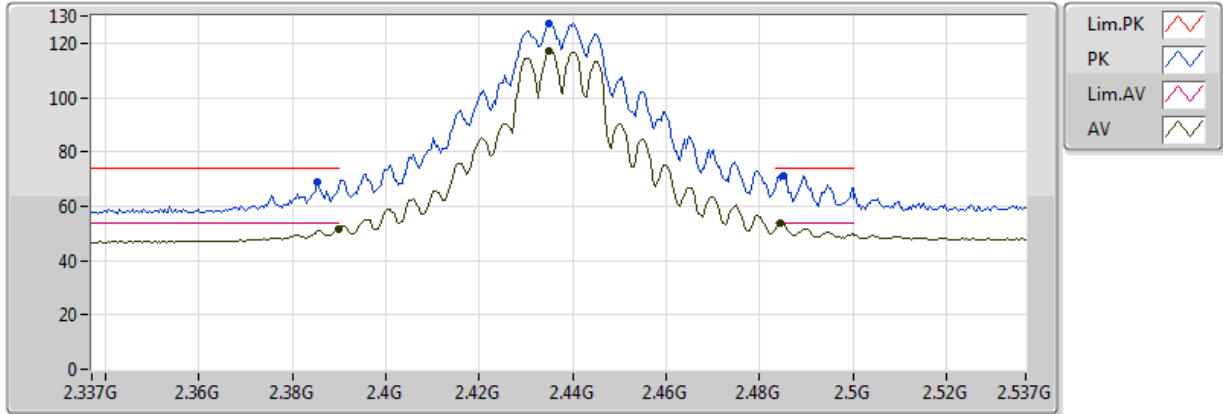


20161227
 EUT_Z_3TX_Non-TXBF
 Setting:82
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.82584G	32.42	54.00	-21.58	6.29	3	H	109	2.49	-
PK	4.82704G	47.14	74.00	-26.86	6.29	3	H	109	2.49	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

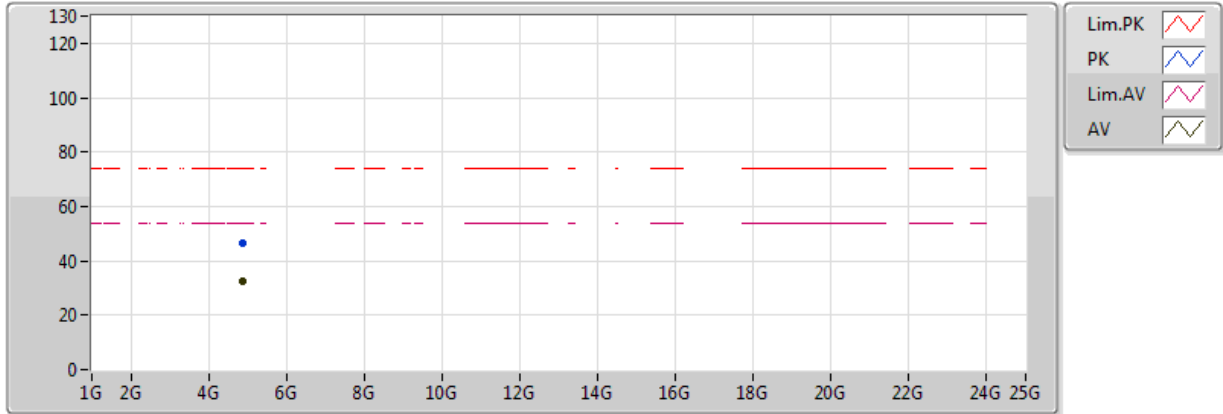


20161227
 EUT_Z_3TX_Non-TXBF
 Setting111
 02-S-5
 FSU

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	51.72	54.00	-2.28	31.90	3	V	332	2.04	-
AV	2.435G	117.37	Inf	-Inf	32.01	3	V	332	2.04	-
AV	2.4846G	53.94	54.00	-0.06	32.13	3	V	332	2.04	-
PK	2.3854G	69.04	74.00	-4.96	31.89	3	V	332	2.04	-
PK	2.435G	127.11	Inf	-Inf	32.01	3	V	332	2.04	-
PK	2.485G	71.06	74.00	-2.94	32.13	3	V	332	2.04	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

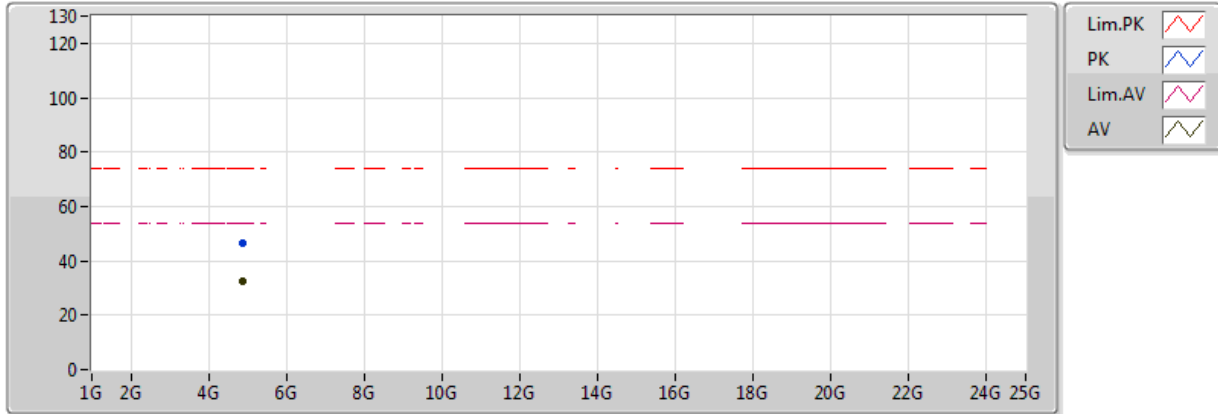


20161227
 EUT_Z_3TX_Non-TXBF
 Setting111
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.86716G	32.69	54.00	-21.31	6.42	3	V	316	2.34	-
PK	4.87052G	46.63	74.00	-27.37	6.43	3	V	316	2.34	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

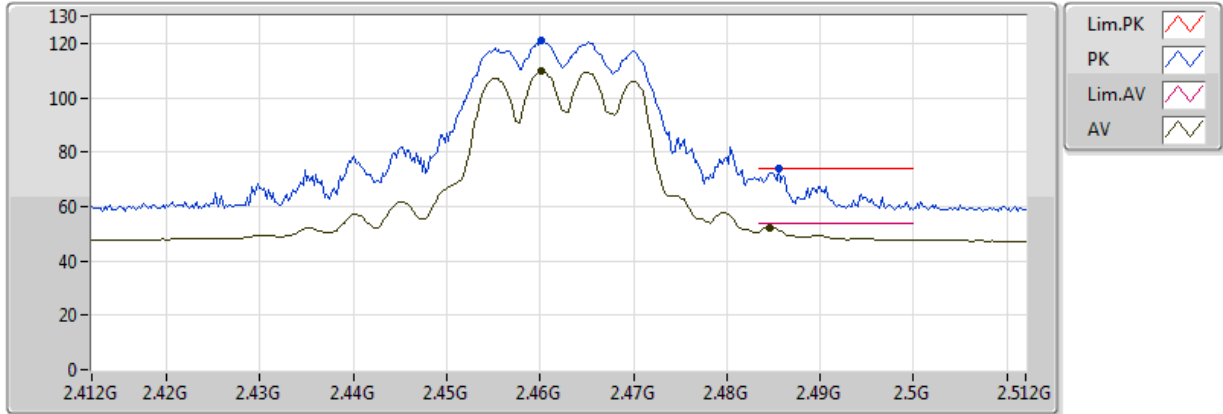


20161227
EUT_Z_3TX_Non-TXBF
Setting111
02-S-5
FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87148G	32.77	54.00	-21.23	6.43	3	H	233	2.02	-
PK	4.86652G	46.32	74.00	-27.68	6.42	3	H	233	2.02	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

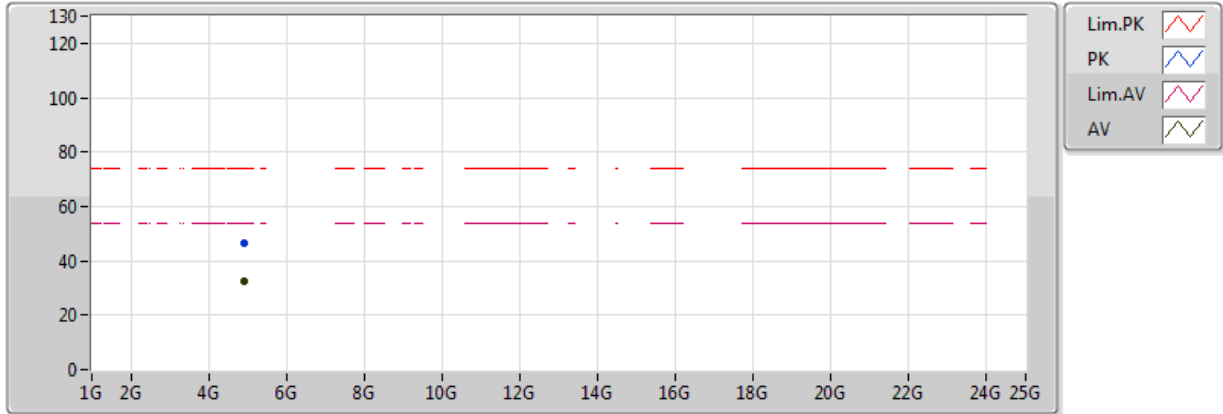


20161227
 EUT_Z_3TX_Non-TXBF
 Setting82
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4602G	109.75	Inf	-Inf	32.07	3	V	332	2.29	-
AV	2.4846G	52.36	54.00	-1.64	32.13	3	V	332	2.29	-
PK	2.4602G	120.76	Inf	-Inf	32.07	3	V	332	2.29	-
PK	2.4856G	73.74	74.00	-0.26	32.14	3	V	332	2.29	-

802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX



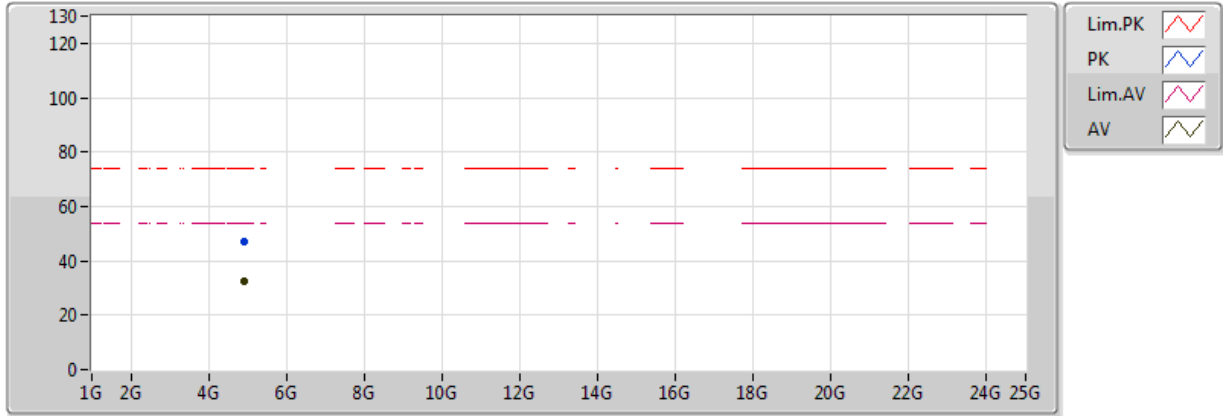
20161227
 EUT_Z_3TX_Non-TXBF
 Setting82
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.92388G	32.29	54.00	-21.71	6.59	3	V	163	1.43	-
PK	4.92644G	46.59	74.00	-27.41	6.60	3	V	163	1.43	-



802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

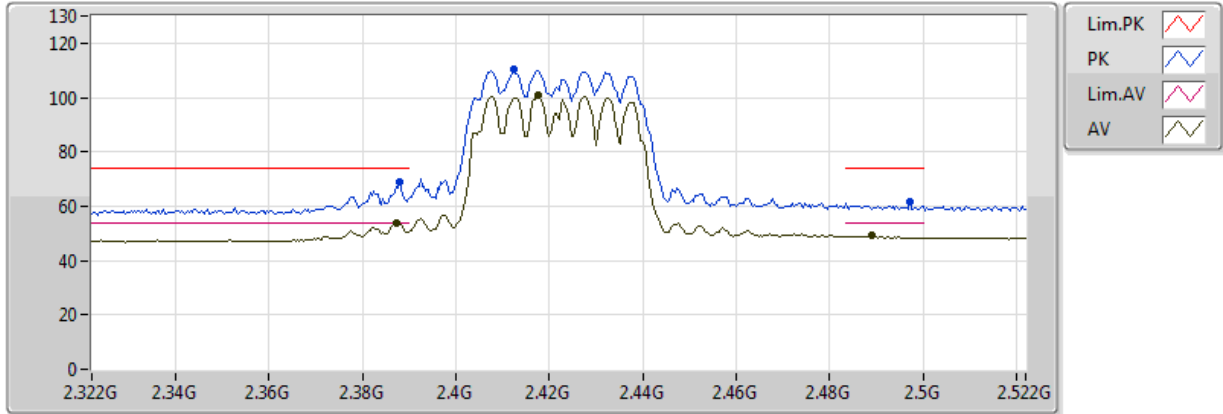


20161227
 EUT_Z_3TX_Non-TXBF
 Setting82
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91828G	32.31	54.00	-21.69	6.58	3	H	242	1.22	-
PK	4.9242G	46.94	74.00	-27.06	6.60	3	H	242	1.22	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX



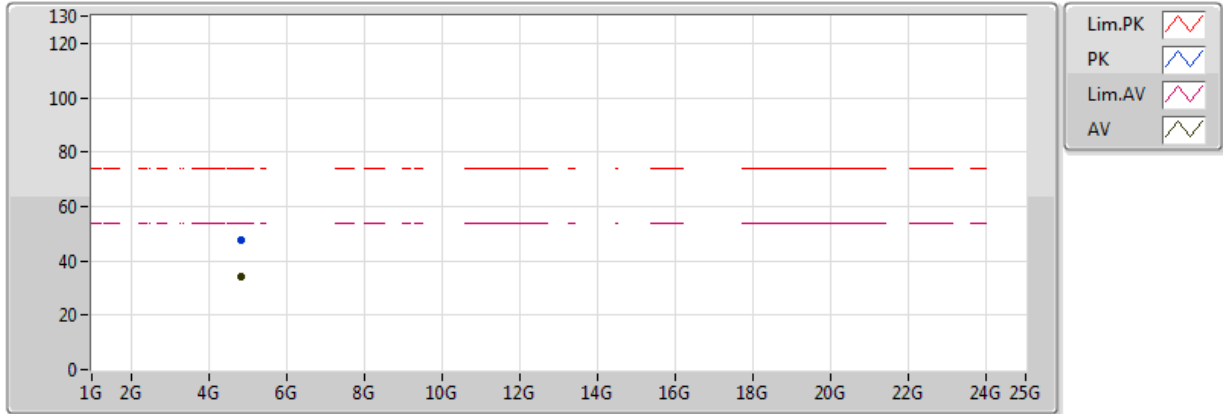
20161227
 EUT_Z_3TX_Non-TXBF
 Setting 59
 02-S-5
 FSU

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	53.99	54.00	-0.01	31.90	3	V	200	1.57	-
AV	2.4176G	100.73	Inf	-Inf	31.97	3	V	200	1.57	-
AV	2.4892G	49.07	54.00	-4.93	32.14	3	V	200	1.57	-
PK	2.388G	68.68	74.00	-5.32	31.90	3	V	200	1.57	-
PK	2.4124G	110.24	Inf	-Inf	31.96	3	V	200	1.57	-
PK	2.4972G	61.75	74.00	-12.25	32.16	3	V	200	1.57	-



802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX



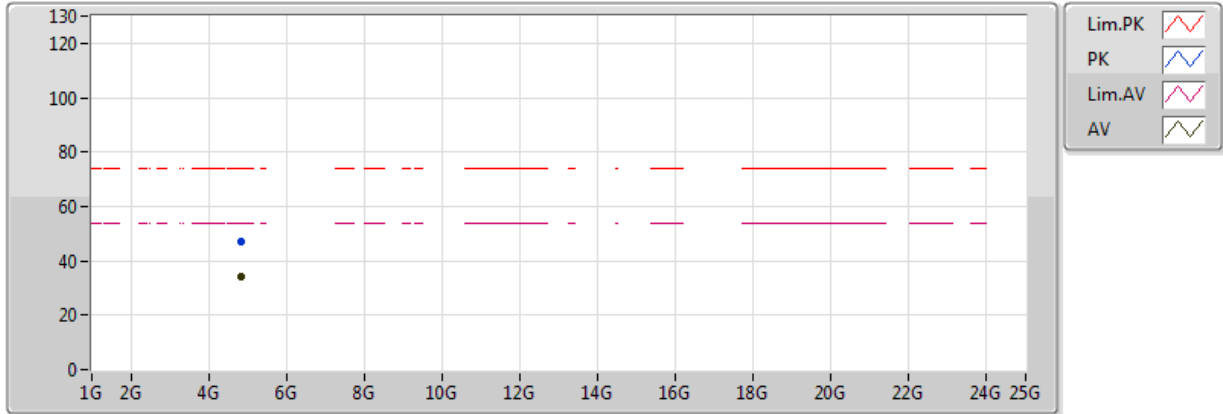
20161227
 EUT_Z_3TX_Non-TXBF
 Setting 59
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.85028G	34.07	54.00	-19.93	6.37	3	V	310	2.32	-
PK	4.84584G	47.84	74.00	-26.16	6.35	3	V	310	2.32	-



802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

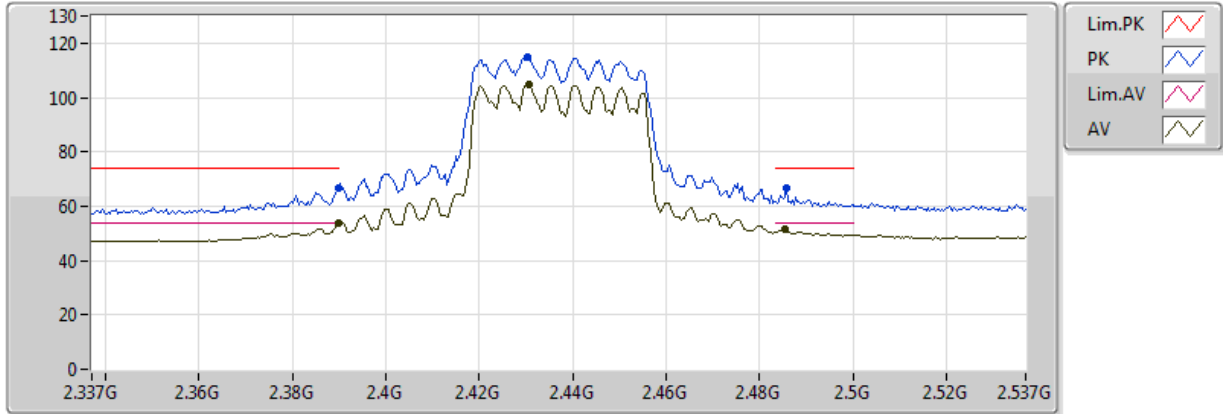


20161227
 EUT_Z_3TX_Non-TXBF
 Setting 59
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8378G	34.10	54.00	-19.90	6.33	3	H	133	1.06	-
PK	4.83544G	46.83	74.00	-27.17	6.32	3	H	133	1.06	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

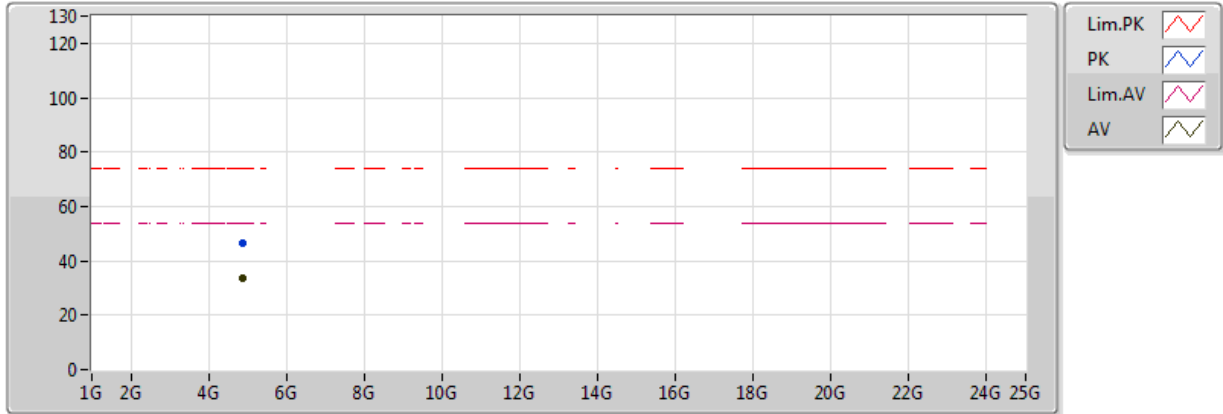


20161227
 EUT_Z_3TX_Non-TXBF
 Setting 74
 02-S-5
 FSU

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	53.98	54.00	-0.02	31.90	3	V	330	1.00	-
AV	2.4306G	104.88	Inf	-Inf	32.00	3	V	330	1.00	-
AV	2.4854G	51.43	54.00	-2.57	32.13	3	V	330	1.00	-
PK	2.389998G	66.76	74.00	-7.24	31.90	3	V	330	1.00	-
PK	2.4302G	114.90	Inf	-Inf	32.00	3	V	330	1.00	-
PK	2.4858G	66.73	74.00	-7.27	32.14	3	V	330	1.00	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX



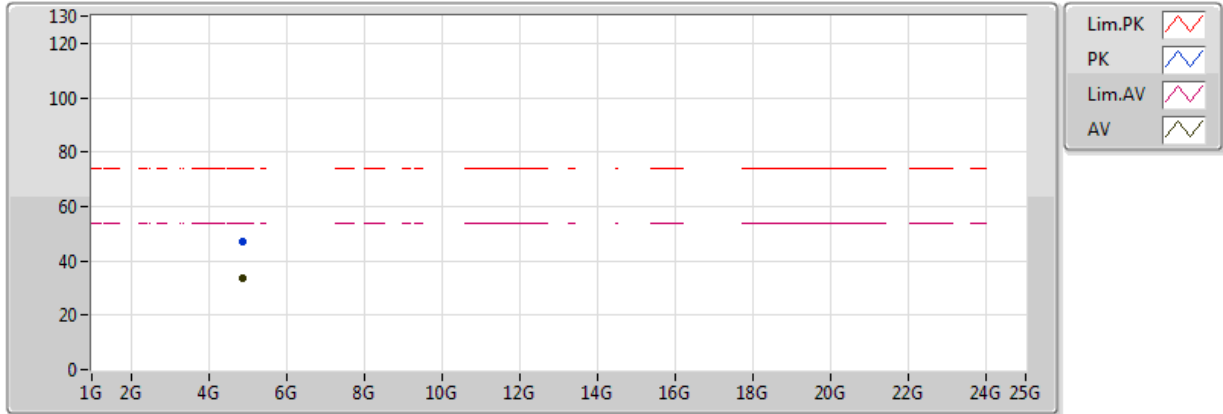
20161227
 EUT_Z_3TX_Non-TXBF
 Setting 74
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87616G	33.81	54.00	-20.19	6.45	3	V	230	1.68	-
PK	4.8688G	46.32	74.00	-27.68	6.42	3	V	230	1.68	-



802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

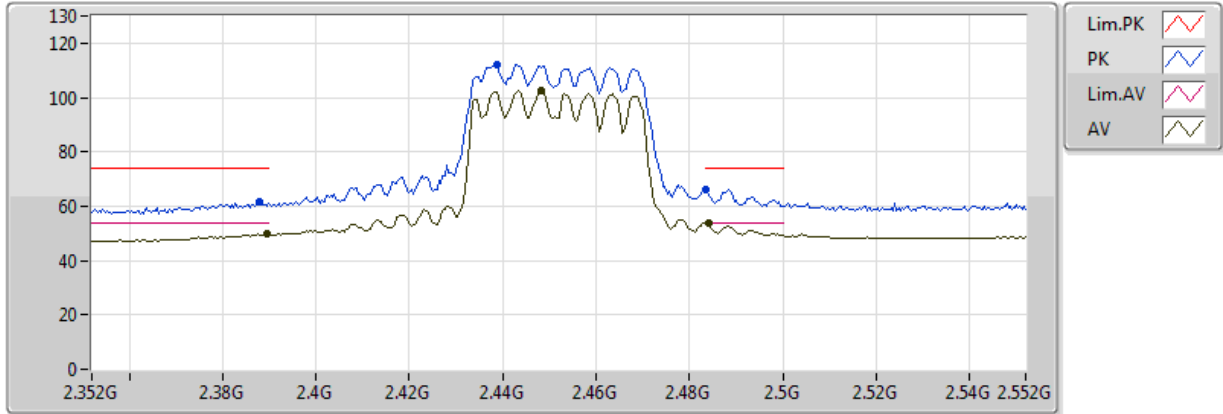


20161227
 EUT_Z_3TX_Non-TXBF
 Setting 74
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87056G	33.81	54.00	-20.19	6.43	3	H	244	2.49	-
PK	4.87848G	46.82	74.00	-27.18	6.45	3	H	244	2.49	-

802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX



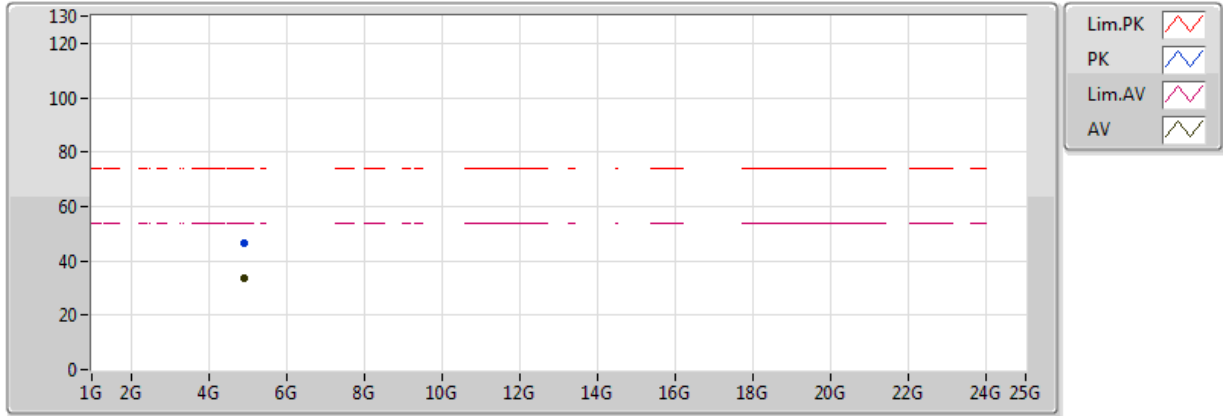
20161227
 EUT_Z_3TX_Non-TXBF
 Setting 64
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	49.72	54.00	-4.28	31.90	3	V	26	1.71	-
AV	2.4484G	102.38	Inf	-Inf	32.05	3	V	26	1.71	-
AV	2.484G	53.88	54.00	-0.12	32.13	3	V	26	1.71	-
PK	2.388G	61.83	74.00	-12.17	31.90	3	V	26	1.71	-
PK	2.4388G	112.08	Inf	-Inf	32.02	3	V	26	1.71	-
PK	2.4836G	65.95	74.00	-8.05	32.13	3	V	26	1.71	-



802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

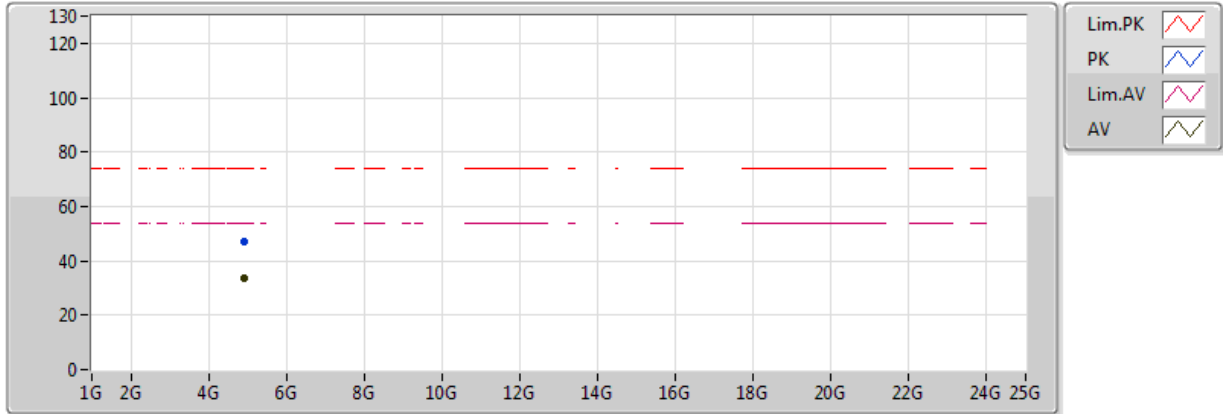


20161227
 EUT_Z_3TX_Non-TXBF
 Setting 64
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91064G	33.52	54.00	-20.48	6.55	3	V	215	2.36	-
PK	4.91136G	46.26	74.00	-27.74	6.56	3	V	215	2.36	-

802.11ac VHT40_Nss1,(MCS0)_3TX

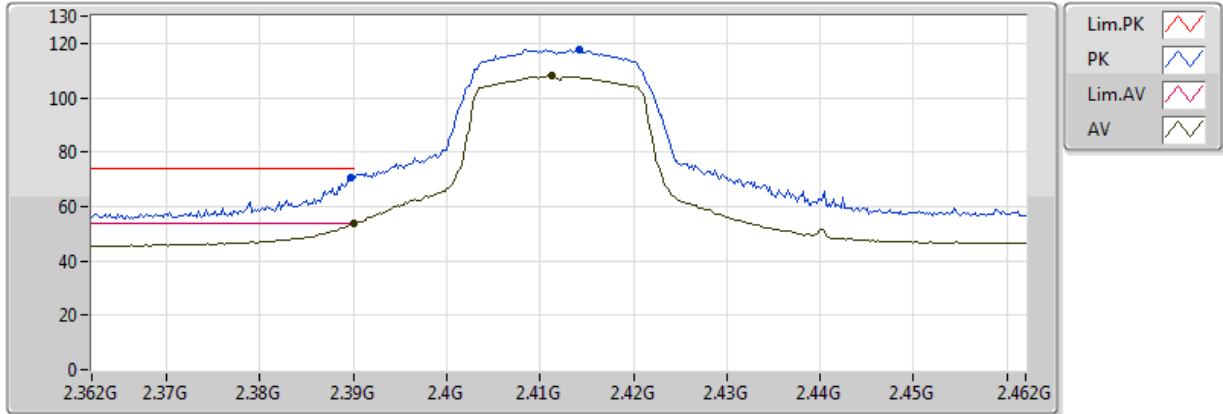
2452MHz_TX



20161227
 EUT_Z_3TX_Non-TXBF
 Setting 64
 02-S-5
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.90472G	33.45	54.00	-20.55	6.53	3	H	64	1.70	-
PK	4.89724G	47.22	74.00	-26.78	6.51	3	H	64	1.70	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX 2412MHz_TX

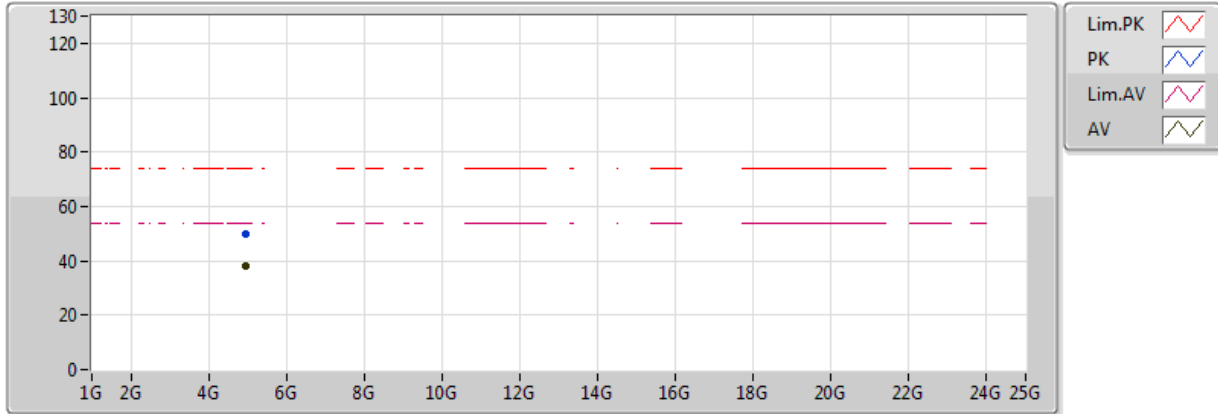


20161228
EUT_Z_3TX_TXBF
Setting 77
06-S-5
FSP

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	53.77	54.00	-0.23	33.16	3	V	0	1.66	-
AV	2.4112G	108.05	Inf	-Inf	33.23	3	V	0	1.66	-
PK	2.3898G	70.64	74.00	-3.36	33.15	3	V	0	1.66	-
PK	2.4142G	117.87	Inf	-Inf	33.24	3	V	0	1.66	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

2412MHz_TX

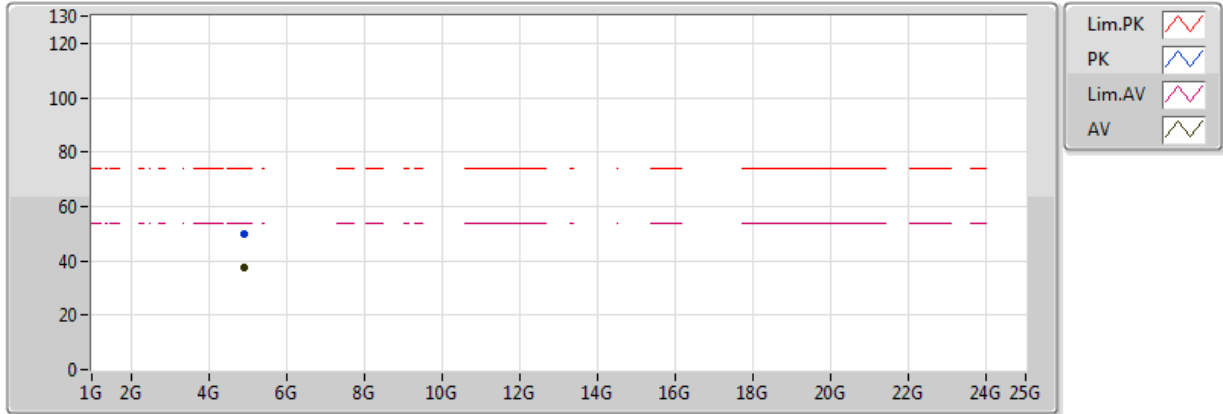


20161228
EUT_Z_3TX_TXBF
Setting 77
06-S-5
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.945G	37.85	54.00	-16.15	9.43	3	V	103	1.37	-
PK	4.9548G	49.87	74.00	-24.13	9.46	3	V	103	1.37	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

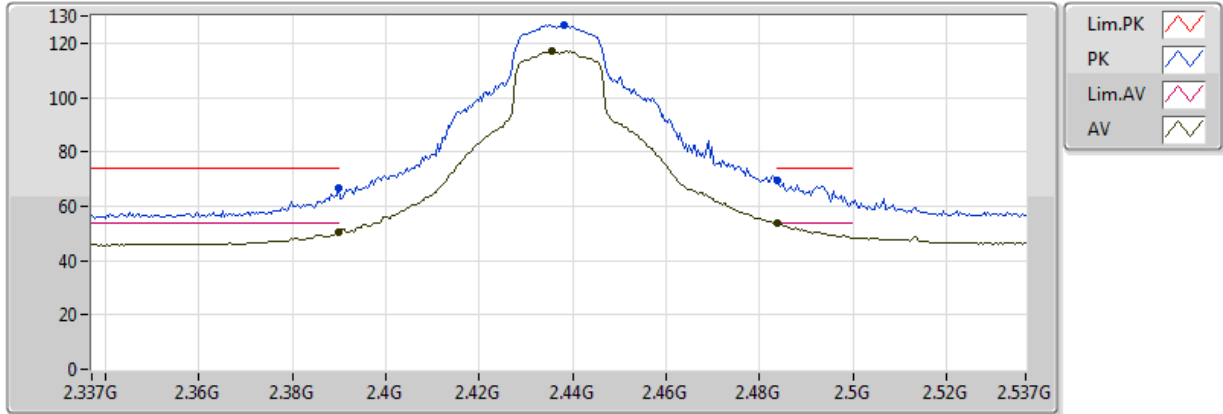
2412MHz_TX



20161228
 EUT_Z_3TX_TXBF
 Setting 77
 06-S-5
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	4.9306G	50.02	74.00	-23.98	9.40	3	H	116	1.02	-
AV	4.9228G	37.45	54.00	-16.55	9.38	3	H	116	1.02	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX 2437MHz_TX

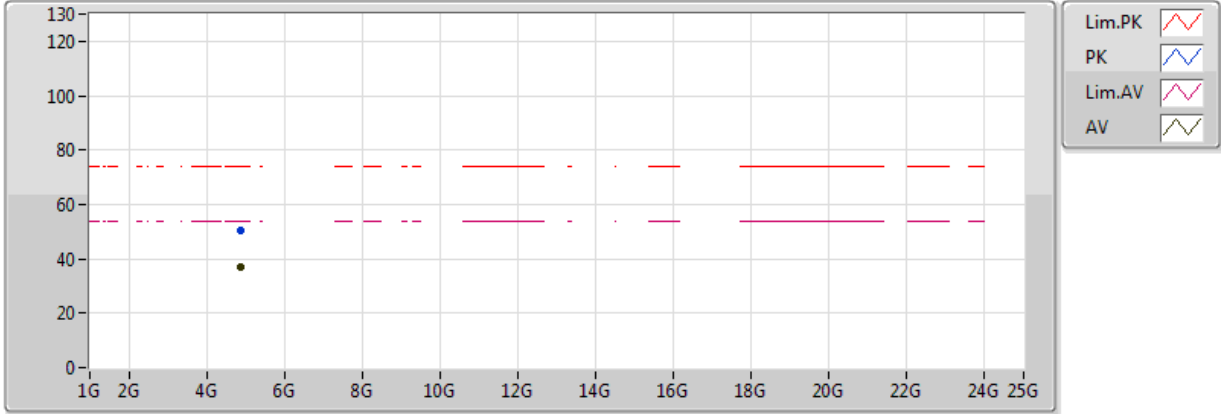


20161228
EUT_Z_3TX_TXBF
Setting 111
06-S-5
FSP

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	50.60	54.00	-3.40	33.15	3	V	332	2.77	-
AV	2.4354G	117.02	Inf	-Inf	33.31	3	V	332	2.77	-
PK	2.3898G	66.45	74.00	-7.55	33.15	3	V	332	2.77	-
PK	2.4382G	126.78	Inf	-Inf	33.32	3	V	332	2.77	-
PK	2.4838G	69.56	74.00	-4.44	33.48	3	V	332	2.77	-
AV	2.4838G	53.84	54.00	-0.16	33.48	3	V	332	2.77	-



**802.11ac VHT20-BF_Nss1,(MCS0)_3TX
2437MHz_TX**

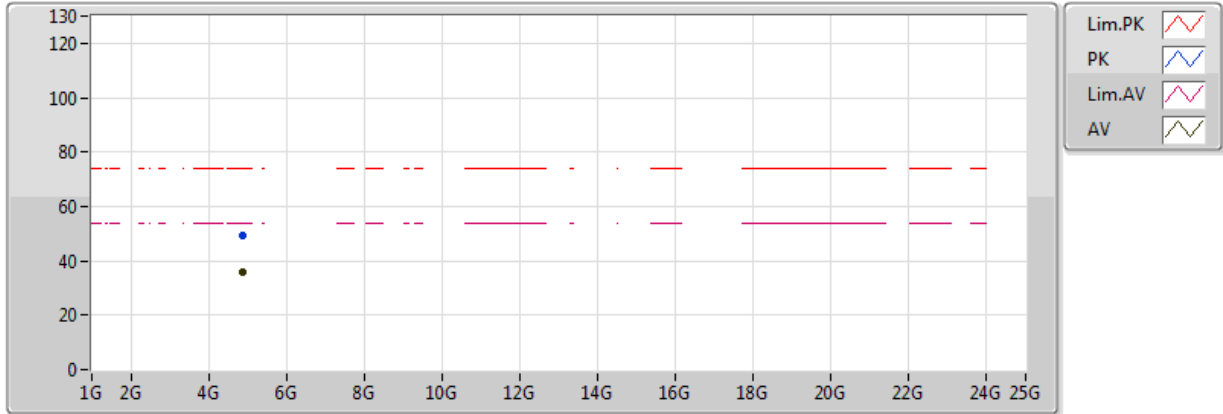


20161228
EUT_Z_3TX_TXBF
Setting 111
06-S-5
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
PK	4.8662G	50.60	74.00	-23.40	9.24	3	V	94	1.21	-
AV	4.86332G	36.85	54.00	-17.15	9.23	3	V	94	1.21	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

2437MHz_TX

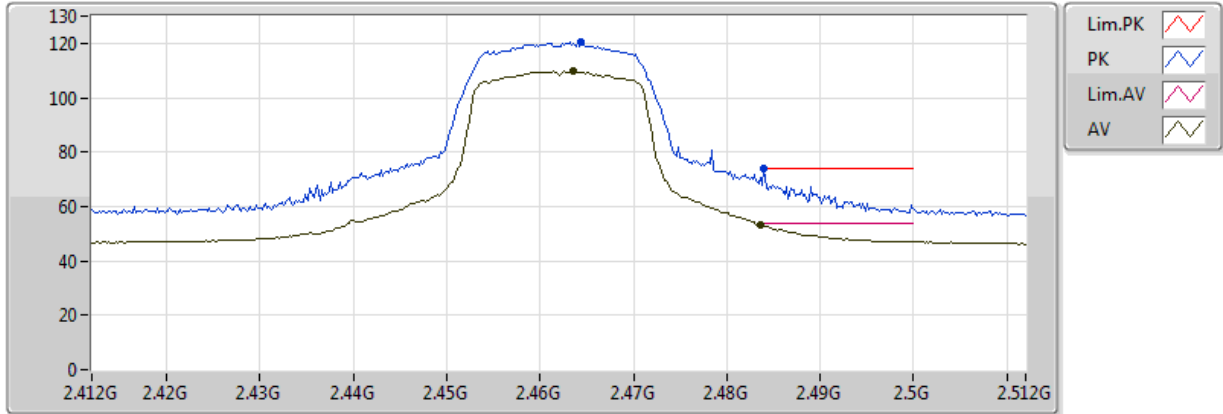


20161228
 EUT_Z_3TX_TXBF
 Setting 111
 06-S-5
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.86602G	36.06	54.00	-17.94	9.24	3	H	103	1.16	-
PK	4.88096G	49.35	74.00	-24.65	9.27	3	H	103	1.16	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

2462MHz_TX

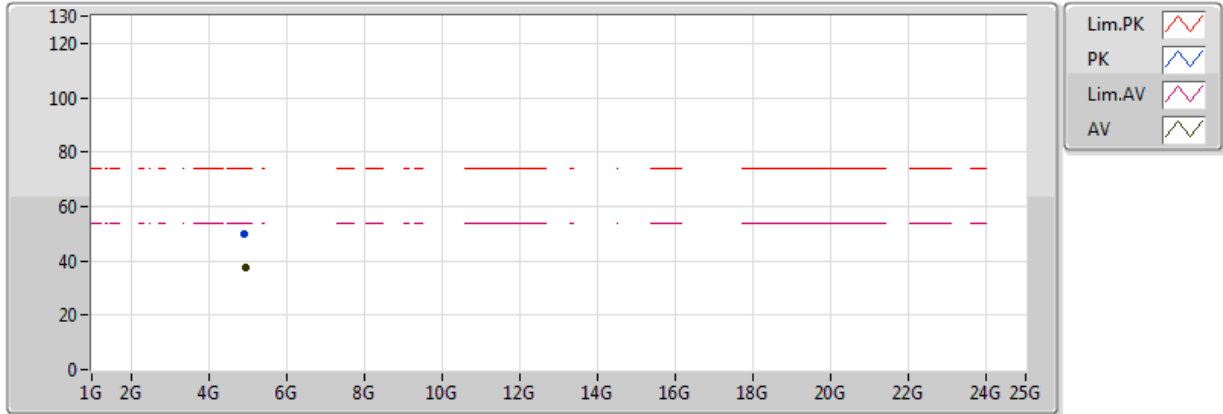


20161228
EUT_Z_3TX_TXBF
Setting 77
06-S-5
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4636G	109.59	Inf	-Inf	33.41	3	V	105	2.31	-
AV	2.4836G	53.32	54.00	-0.68	33.48	3	V	105	2.31	-
PK	2.4644G	120.69	Inf	-Inf	33.42	3	V	105	2.31	-
PK	2.484G	73.87	74.00	-0.13	33.48	3	V	105	2.31	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

2462MHz_TX

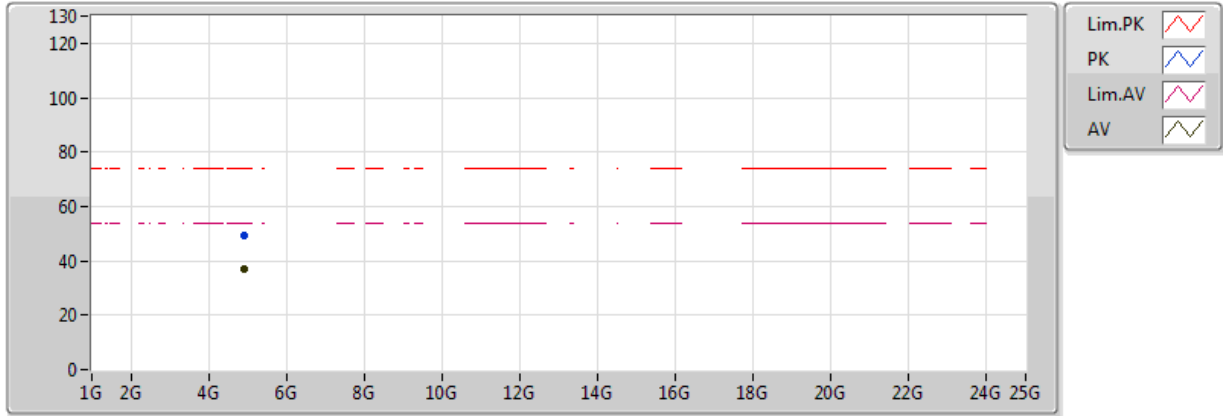


20161228
 EUT_Z_3TX_TXBF
 Setting 77
 06-S-5
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.93576G	37.34	54.00	-16.66	9.41	3	V	100	1.29	-
PK	4.91314G	50.15	74.00	-23.85	9.35	3	V	100	1.29	-

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

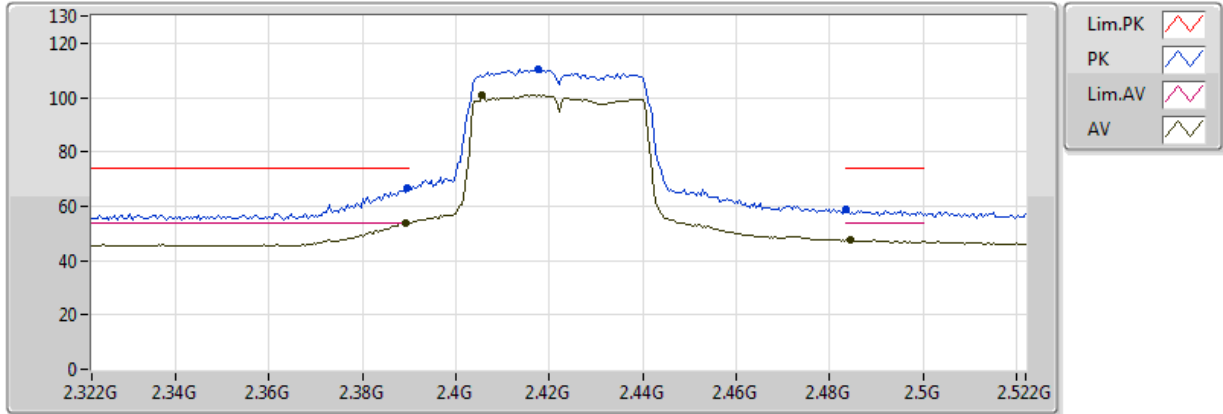
2462MHz_TX



20161228
 EUT_Z_3TX_TXBF
 Setting 77
 06-S-5
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.91038G	37.24	54.00	-16.76	9.35	3	H	159	1.58	-
PK	4.9171G	49.31	74.00	-24.69	9.36	3	H	159	1.58	-

**802.11ac VHT40-BF_Nss1,(MCS0)_3TX
2422MHz_TX**

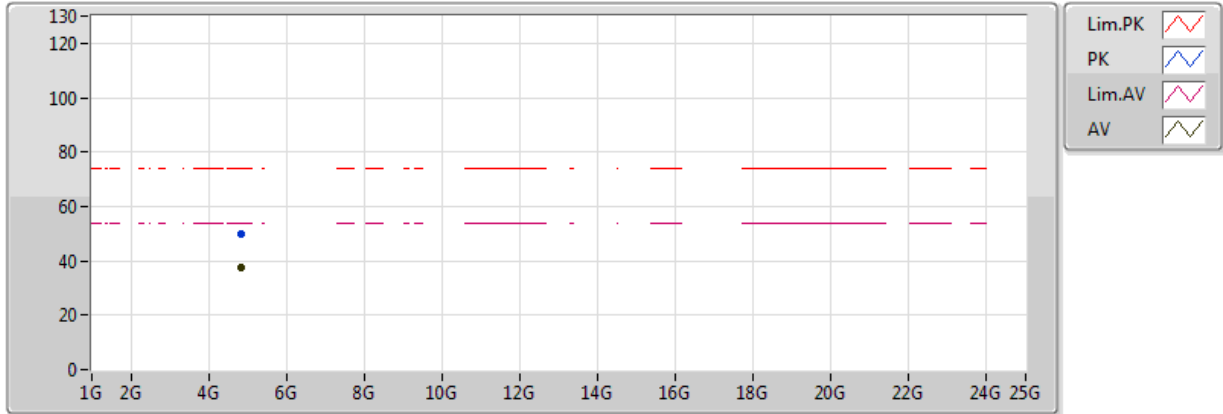


20161229
EUT_Z_3TX_TXBF
Setting 61
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3892G	53.84	54.00	-0.16	33.15	3	V	162	2.04	-
AV	2.4056G	101.11	Inf	-Inf	33.21	3	V	162	2.04	-
AV	2.4844G	47.51	54.00	-6.49	33.49	3	V	162	2.04	-
PK	2.3896G	66.52	74.00	-7.48	33.15	3	V	162	2.04	-
PK	2.4176G	110.24	Inf	-Inf	33.25	3	V	162	2.04	-
PK	2.4836G	58.76	74.00	-15.24	33.48	3	V	162	2.04	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

2422MHz_TX



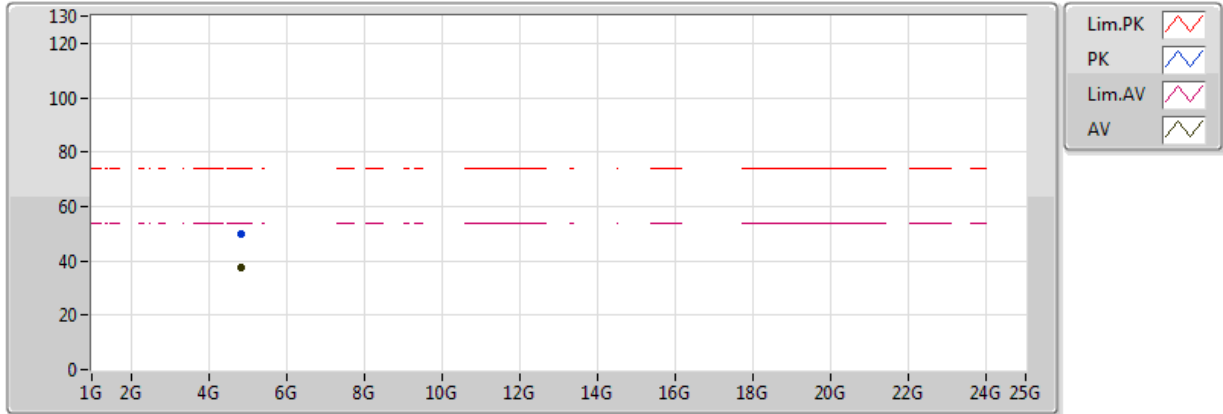
20161229
 EUT_Z_3TX_TXBF
 Setting 61
 06-S-6
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.844652G	37.29	54.00	-16.71	9.18	3	V	4	2.26	-
PK	4.844648G	49.94	74.00	-24.06	9.18	3	V	4	2.26	-



802.11ac VHT40-BF_Nss1,(MCS0)_3TX

2422MHz_TX

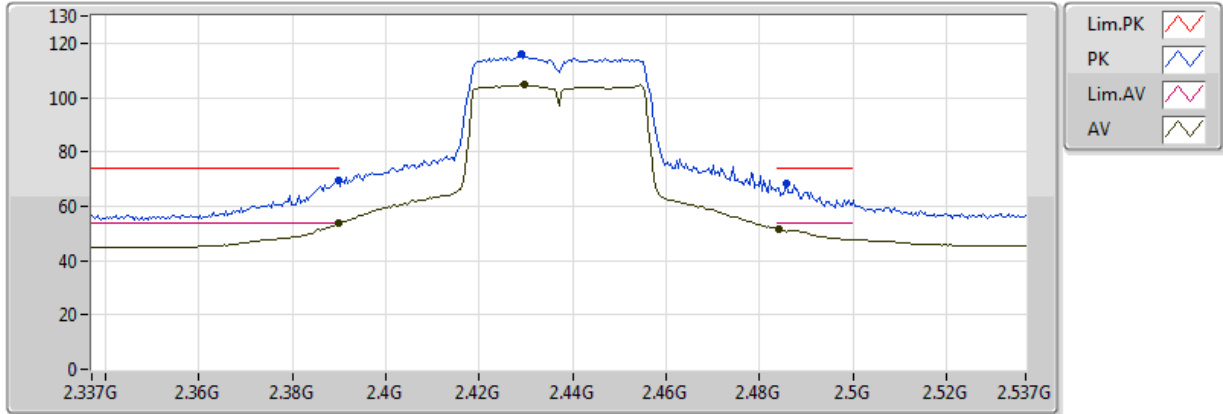


20161229
 EUT_Z_3TX_TXBF
 Setting 61
 06-S-6
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.844464G	37.40	54.00	-16.60	9.18	3	H	66	1.80	-
PK	4.844348G	49.75	74.00	-24.25	9.18	3	H	66	1.80	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

2437MHz_TX



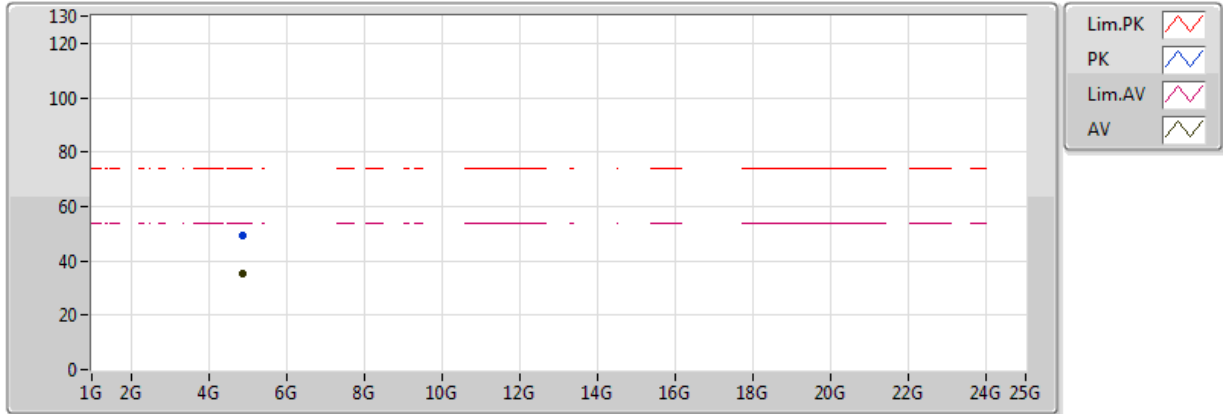
20161229
 EUT_Z_3TX_TXBF
 Setting 77
 06-S-6
 FSP

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	53.78	54.00	-0.22	33.15	3	V	330	2.39	-
AV	2.4298G	104.74	Inf	-Inf	33.29	3	V	330	2.39	-
AV	2.4842G	51.65	54.00	-2.35	33.48	3	V	330	2.39	-
PK	2.3898G	69.51	74.00	-4.49	33.15	3	V	330	2.39	-
PK	2.429G	116.01	Inf	-Inf	33.29	3	V	330	2.39	-
PK	2.4858G	68.09	74.00	-5.91	33.49	3	V	330	2.39	-



802.11ac VHT40-BF_Nss1,(MCS0)_3TX

2437MHz_TX

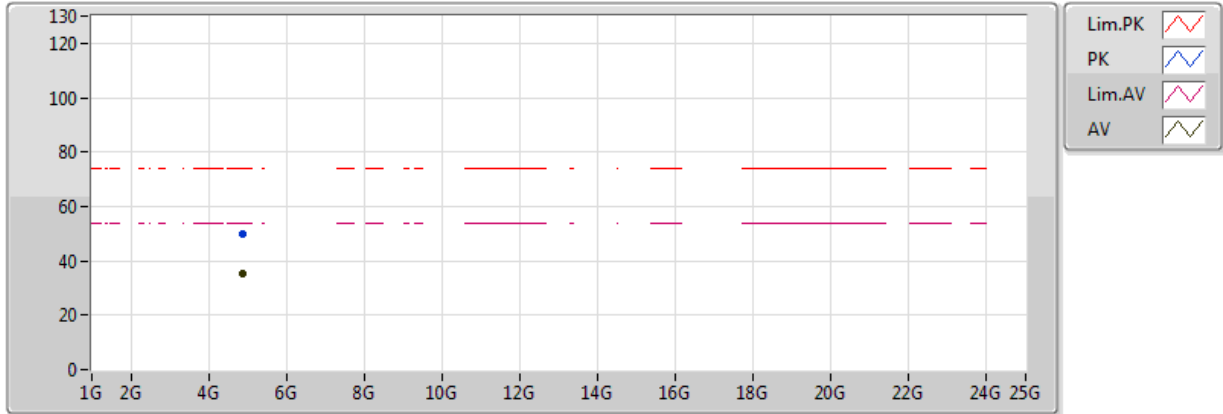


20161229
 EUT_Z_3TX_TXBF
 Setting 77
 06-S-6
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.873488G	35.47	54.00	-18.53	9.25	3	V	57	2.06	-
PK	4.873428G	49.55	74.00	-24.45	9.25	3	V	57	2.06	-

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

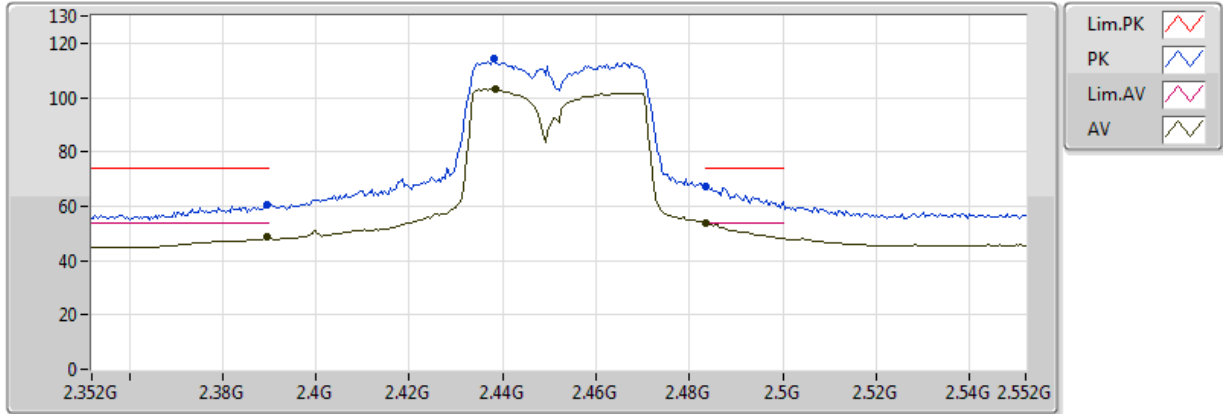
2437MHz_TX



20161229
EUT_Z_3TX_TXBF
Setting 77
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	4.873108G	35.44	54.00	-18.56	9.25	3	H	226	1.92	-
PK	4.874948G	49.78	74.00	-24.22	9.26	3	H	226	1.92	-

**802.11ac VHT40-BF_Nss1,(MCS0)_3TX
2452MHz_TX**



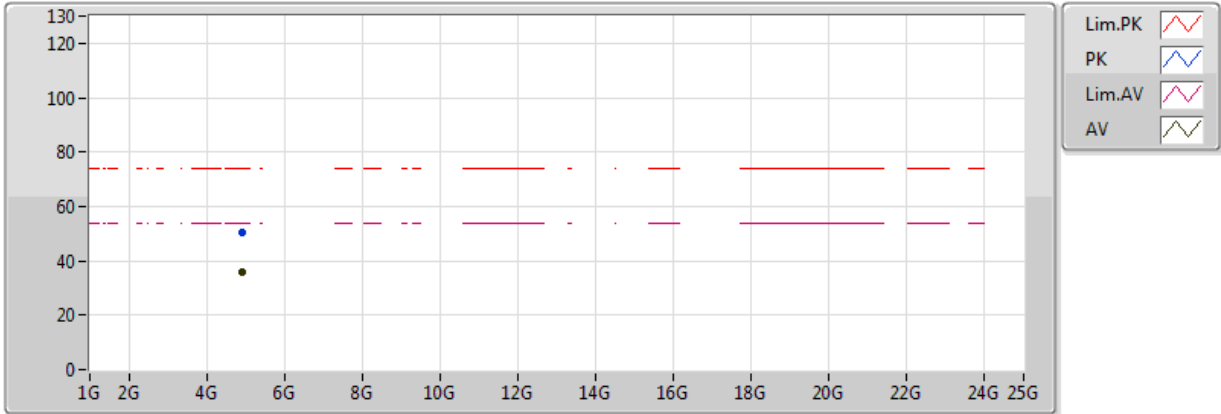
20161229
EUT_Z_3TX_TXBF
Setting 66
06-S-6
FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	48.50	54.00	-5.50	33.15	3	V	105	2.17	-
AV	2.4384G	103.07	Inf	-Inf	33.32	3	V	105	2.17	-
AV	2.4836G	53.68	54.00	-0.32	33.48	3	V	105	2.17	-
PK	2.3896G	60.38	74.00	-13.62	33.15	3	V	105	2.17	-
PK	2.438G	114.45	Inf	-Inf	33.32	3	V	105	2.17	-
PK	2.4836G	67.30	74.00	-6.70	33.48	3	V	105	2.17	-



802.11ac VHT40-BF_Nss1,(MCS0)_3TX

2452MHz_TX



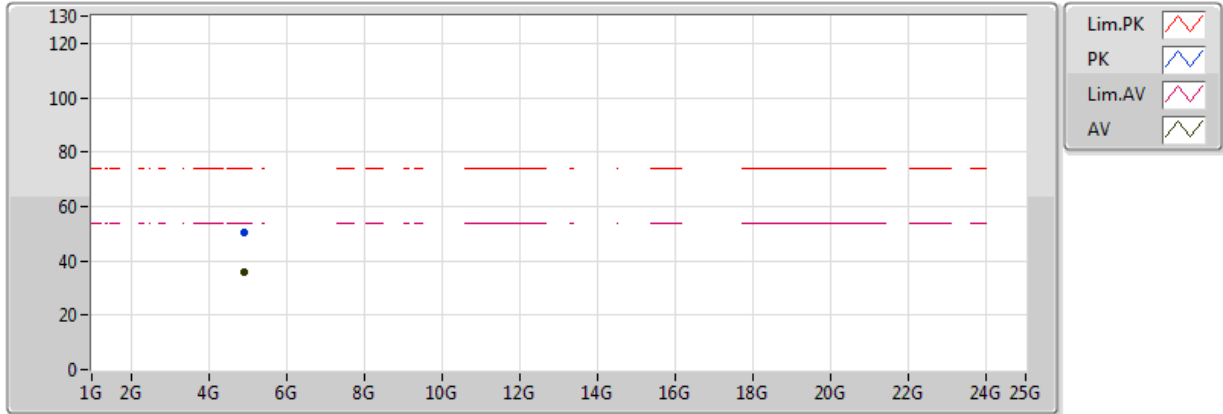
20161229
 EUT_Z_3TX_TXBF
 Setting 66
 06-S-6
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.904756G	35.75	54.00	-18.25	9.33	3	V	216	1.52	-
PK	4.904196G	50.53	74.00	-23.47	9.33	3	V	216	1.52	-



802.11ac VHT40-BF_Nss1,(MCS0)_3TX

2452MHz_TX



20161229
 EUT_Z_3TX_TXBF
 Setting 66
 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	4.904584G	35.62	54.00	-18.38	9.33	3	H	175	1.81	-
PK	4.904588G	50.61	74.00	-23.39	9.33	3	H	175	1.81	-