

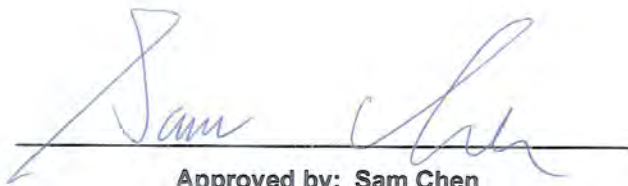


FCC RADIO TEST REPORT

FCC ID : 2AW26TR-WIFICMD-X
Equipment : Wi-Fi sensor
Brand Name : Origin Wireless Taiwan Corporation
Model Name : Hex Command
Applicant : Origin Wireless Taiwan Corp.
3F A1-1 No. 1, Lixing 1st. Rd., Easr Dist. Hsinchu
City 300, Taiwan
Manufacturer : Wistron NeWeb Corporation
20 Park Avenue II (or Yuanchiu 2nd Rd.), Hsinchu
Science Park, Hsinchu 308, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on May 06, 2020, and testing was started from May 11, 2020 and completed on May 19, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	7
1.3 Testing Location Information	7
1.4 Measurement Uncertainty	7
2 Test Configuration of EUT	8
2.1 Test Channel Mode	8
2.2 The Worst Case Measurement Configuration	9
2.3 EUT Operation during Test	10
2.4 Accessories	10
2.5 Support Equipment.....	11
2.6 Test Setup Diagram	12
3 Transmitter Test Result	15
3.1 AC Power-line Conducted Emissions	15
3.2 DTS Bandwidth.....	17
3.3 Maximum Conducted Output Power	18
3.4 Power Spectral Density	21
3.5 Emissions in Non-restricted Frequency Bands	23
3.6 Emissions in Restricted Frequency Bands.....	24
4 Test Equipment and Calibration Data	28
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	



TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_10 Ver1.2



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-
Reference to Sporton Project No.: 050538.				

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Cindy Peng



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

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	VHT20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX
2.4-2.4835GHz	VHT40	40	2TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

**1.1.2 Antenna Information**

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
						2.4GHz	5GHz
1	1	WNC	OWS1200	PIFA	I-PEX	3.17	4.58
2	2	WNC	OWS1200	PIFA	I-PEX	3.06	5.07

Note: The above information was declared by manufacturer.

For 2.4GHz function:**For IEEE 802.11b/g/n/VHT (2TX/2RX):**

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

Pot 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:**For IEEE 802.11a/n/ac (2TX/2RX):**

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

Pot 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.992	0.03	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11g	0.96	0.18	2.068m	1k
VHT20	0.983	0.07	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
VHT40	0.967	0.15	2.433m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	QRCT (Version:4.0.00123)			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT support function

Function
Master (AP)
Client without radar detection



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location				
☐	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	TEL : 886-3-327-3456	FAX : 886-3-327-0973
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH02-CB	Benson Su	23.2-24°C / 59-62 %	May 13, 2020~ May 19, 2020
Radiated <Below 1GHz>	03CH04-CB	Eason Chen	21.9-22.7°C / 56-58%	May 14, 2020
Radiated <Above 1GHz>	03CH02-CB 03CH03-CB 03CH04-CB 03CH06-CB	Brian Sun	23.7-24.6°C / 58-62%	May 11, 2020~ May 18, 2020
AC Conduction	CO01-CB	GN Hou	23~25°C / 64~66%	May 11, 2020

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



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	22
2437MHz	20
2462MHz	18
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	17.5
2417MHz	20.5
2437MHz	27
2457MHz	22.5
2462MHz	19.5
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	16
2417MHz	22.5
2437MHz	27
2457MHz	22.5
2462MHz	19
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	16.5
2427MHz	17
2437MHz	20.5
2452MHz	19

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 VHT20 and VHT40.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	Normal Link <Master>: EUT
2	Normal Link <Client without radar detection>: EUT
For operating mode 1 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	Normal Link <Master>: Place EUT in Z axis
2	Normal Link <Master>: Place EUT in Y axis
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	Normal Link <Client without radar detection>: Place EUT in Y axis
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at Y axis and Z axis position. The worst case was found at Z axis, thus the measurement will follow this same test configuration.	



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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz <Master>
2	WLAN 2.4GHz + WLAN 5GHz <Client without radar detection>
Refer to Sporton Test Report No.: FA050538-02 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter	LEI	MU12B1120100-A1	INPUT: 100-240V ~ 600mA, 50/60Hz OUTPUT: 48V, 380mA



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Device	WNC	OWS1200	N/A
B	2.4G NB	DELL	E6430	N/A
C	Device NB	DELL	E6430	N/A

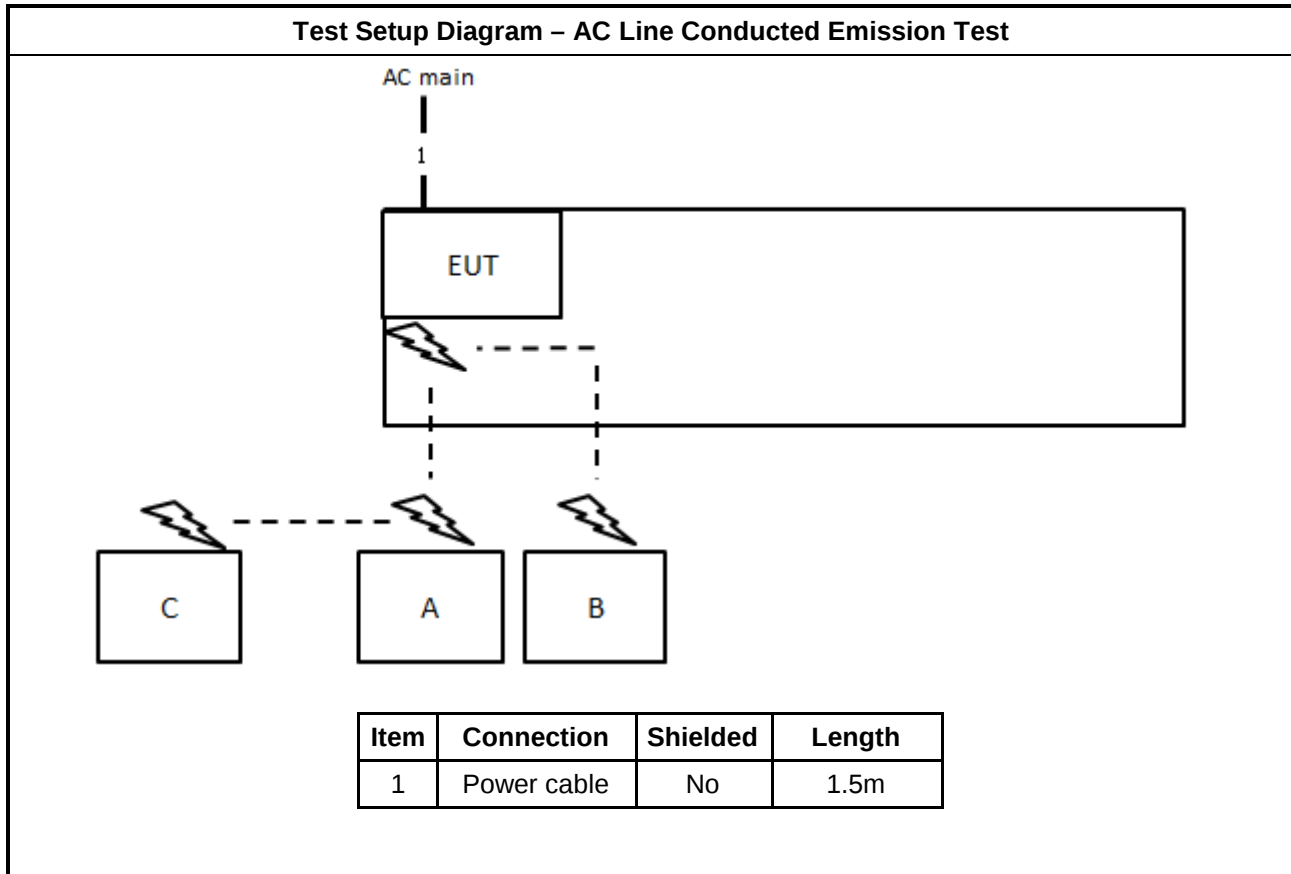
For Radiated (below 1GHz):

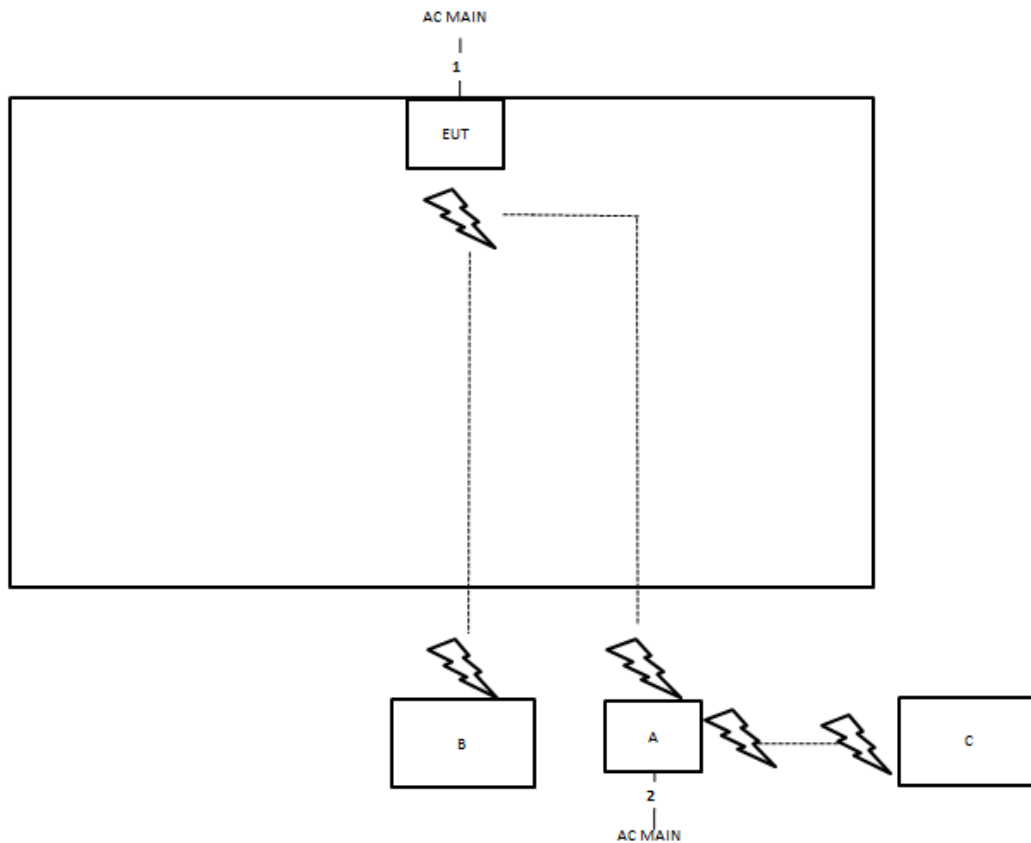
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Device	WNC	OWS1200	N/A
B	NB	DELL	E4300	N/A
C	NB	DELL	E4300	N/A

For Radiated (above 1GHz) and RF Conducted:

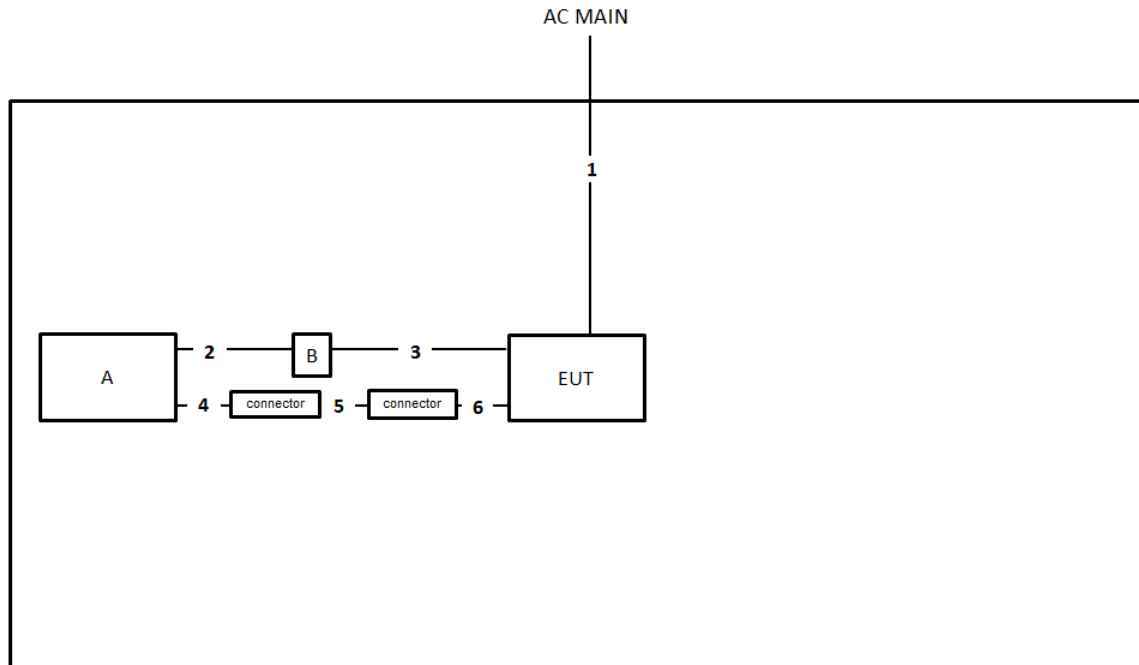
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Fixture	WNC	480IUART.SGA	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	USB cable	Yes	1m
3	Console cable	No	0.3m
4	USB cable	Yes	0.6m
5	USB to RJ45 cable	Yes	0.1m
6	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.		

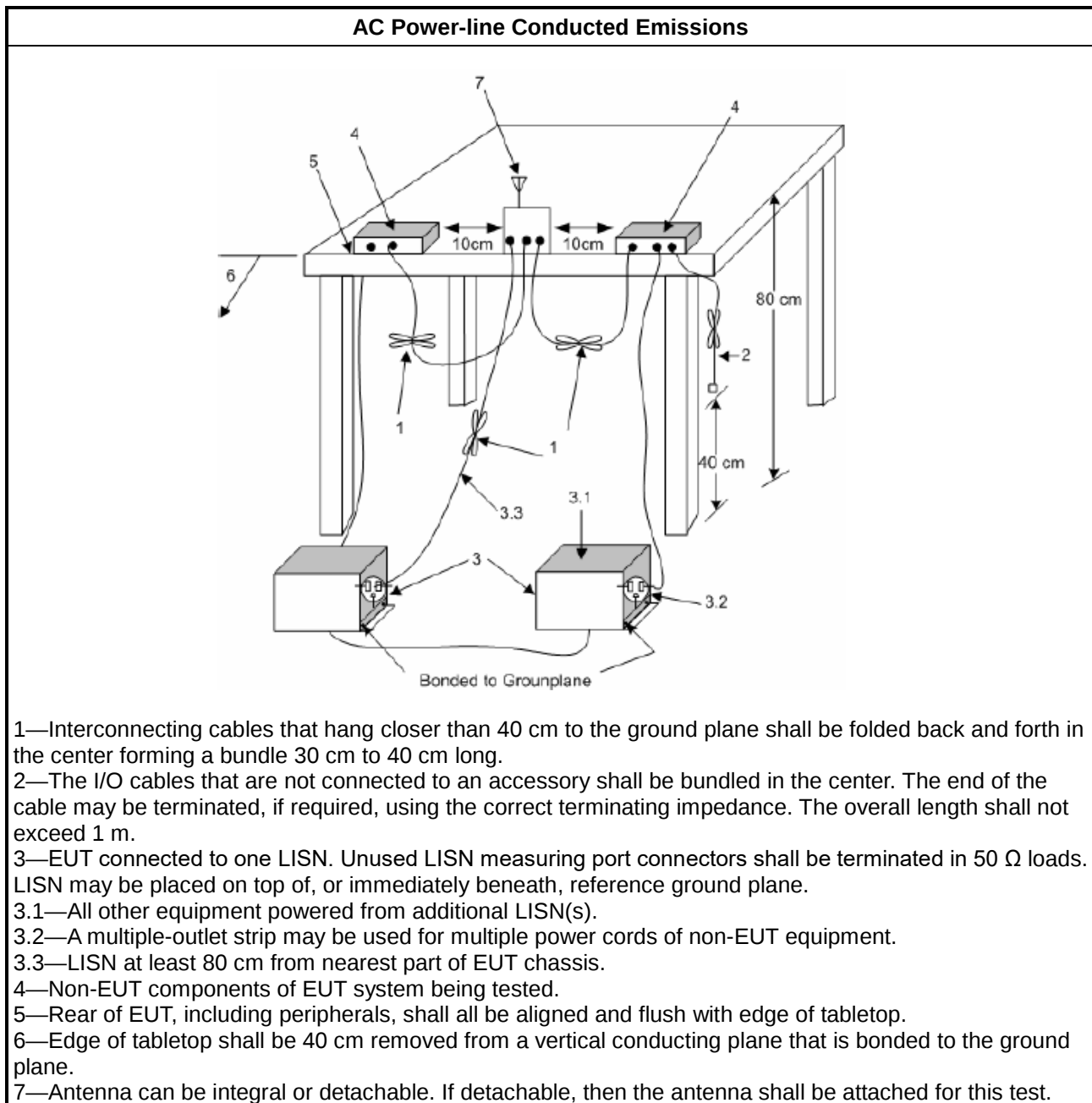
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

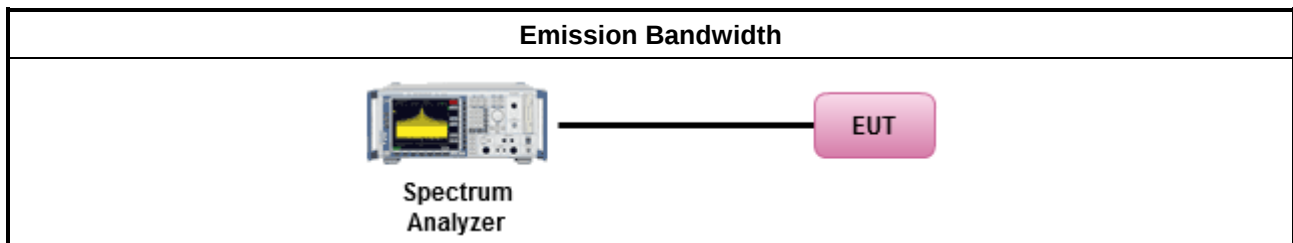
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
☐	Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

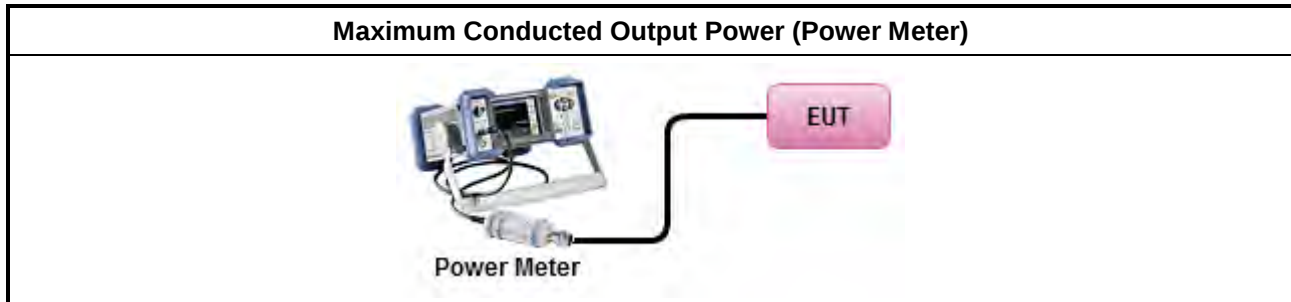
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
☐	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
☒	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

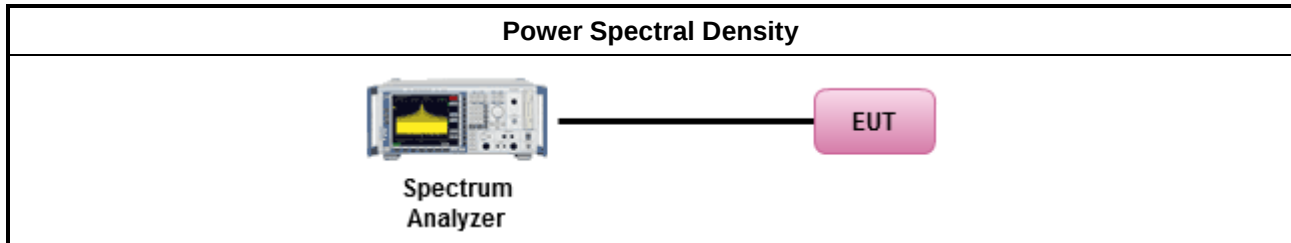
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).	
☒	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

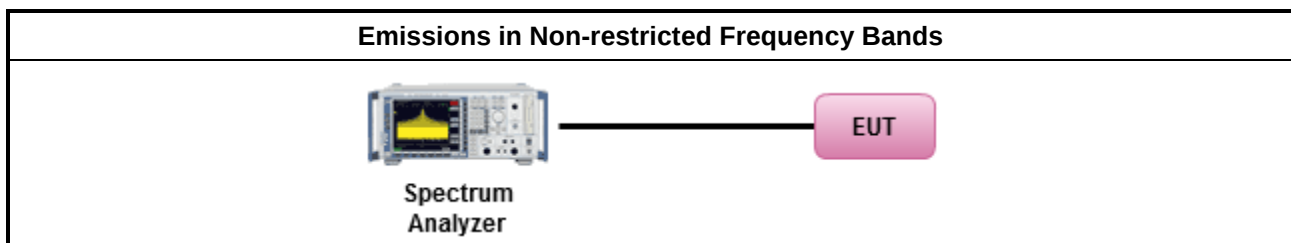
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

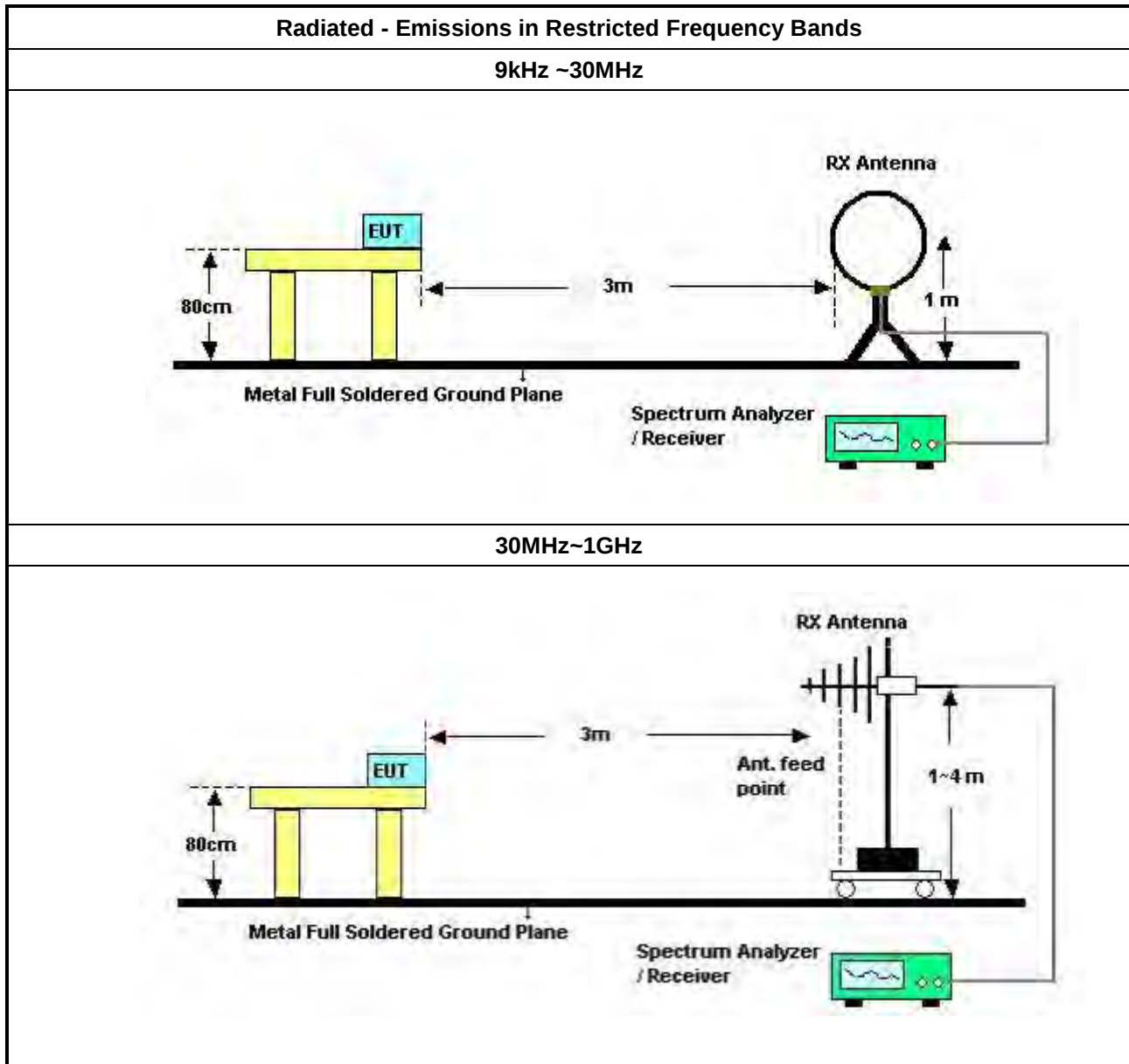
Refer a test equipment and calibration data table in this test report.

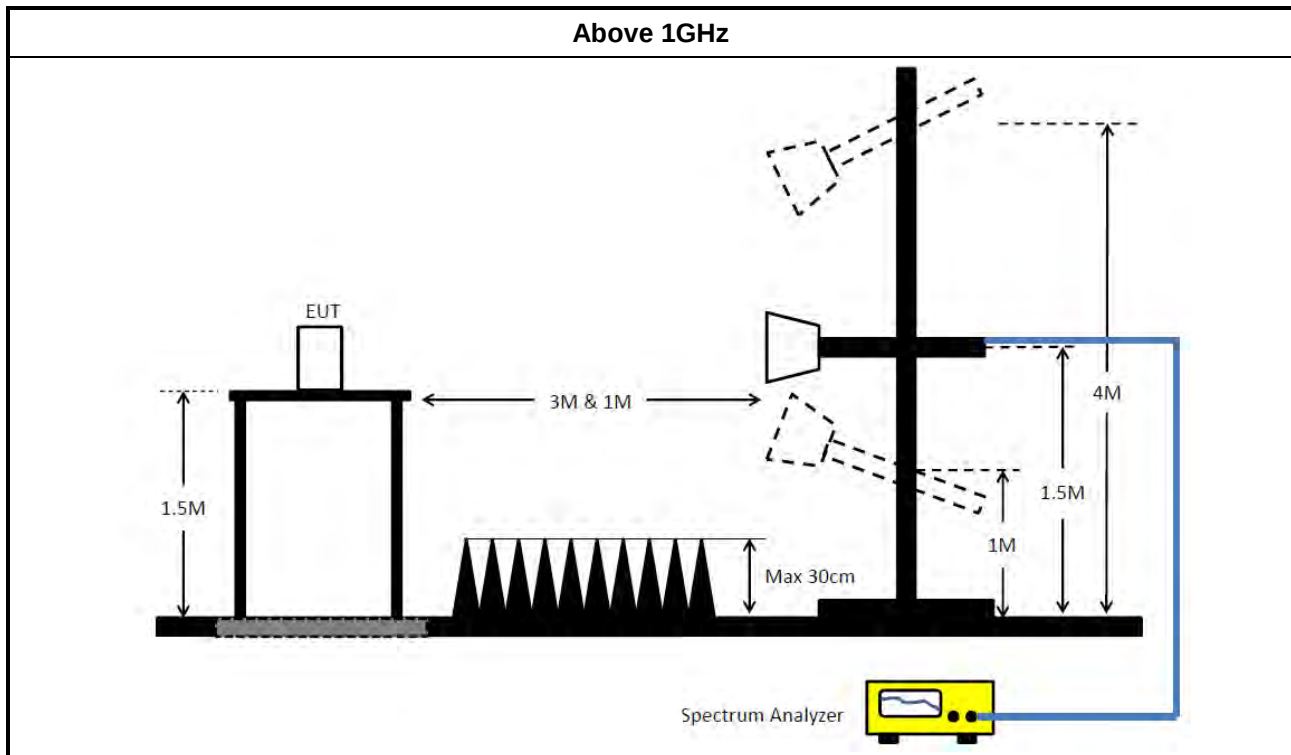


3.6.3 Test Procedures

Test Method	
The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
☐	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
☐	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
☐	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
☒	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N0607	30MHz ~ 1GHz	Oct. 12, 2019	Oct. 11, 2020	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Mar. 19, 2020	Mar. 18, 2021	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Dec. 18, 2019	Dec. 17, 2020	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+22	30MHz ~ 1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 22, 2019	Oct. 21, 2020	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Mar. 11, 2020	Mar. 10, 2021	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+22	1GHz - 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 21, 2020	Apr. 20, 2021	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Aug. 21, 2019	Aug. 20, 2020	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH02-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH02-CB)
High Cable	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)
High Cable	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 20, 2020	Jan. 19, 2021	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Dec. 19, 2019	Dec.18, 2020	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 19, 2019	Jun. 18, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 07, 2020	May 06, 2021	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 02, 2019	Jul. 01, 2020	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

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



AC Power Port Conducted Emission Result

Appendix A

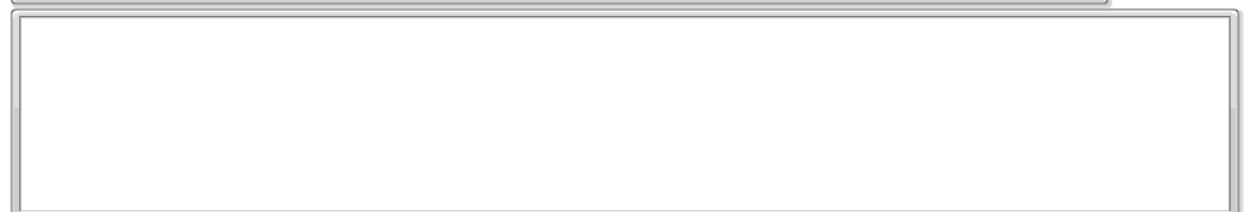
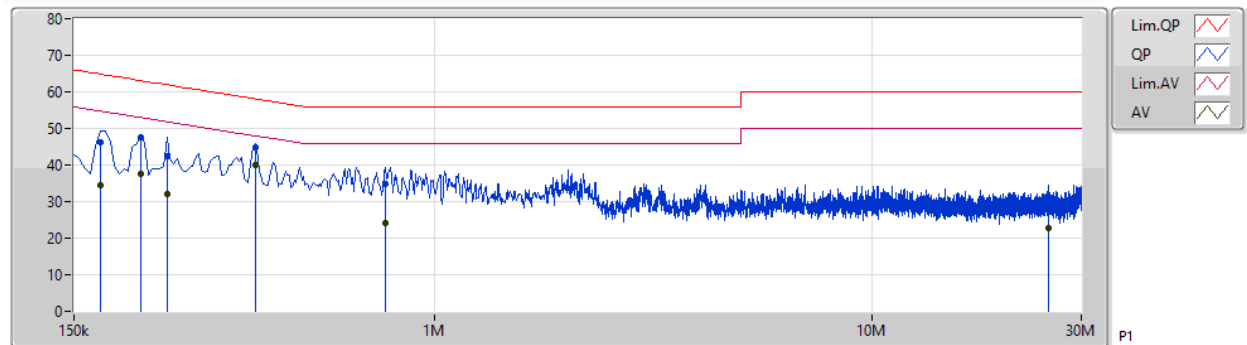
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 1	Pass	AV	388.5k	39.84	48.10	-8.26	9.91	Line



Mode 1

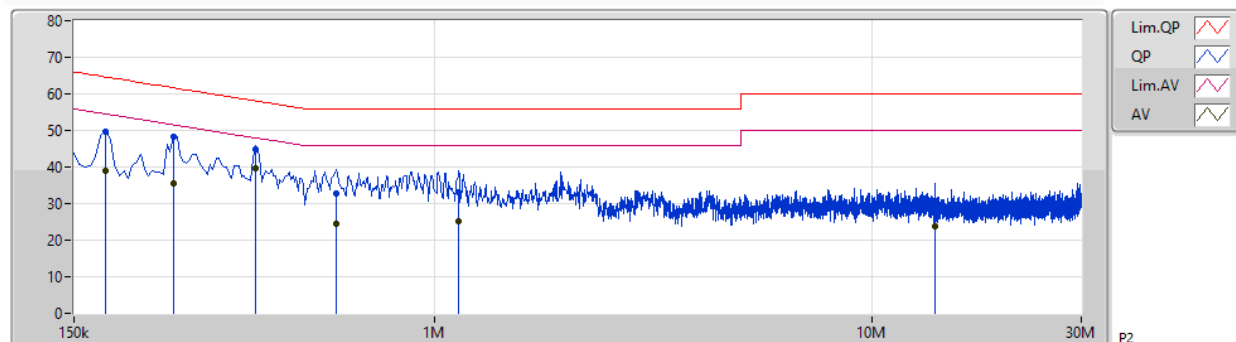
11/05/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	172.5k	46.33	64.83	-18.50	9.90	Line	-	36.43	0.05	0.06	9.79			
AV	172.5k	34.41	54.83	-20.42	9.90	Line	-	24.51	0.05	0.06	9.79			
QP	213k	47.43	63.09	-15.66	9.89	Line	-	37.54	0.04	0.06	9.79			
AV	213k	37.47	53.09	-15.62	9.89	Line	-	27.58	0.04	0.06	9.79			
QP	244.5k	42.55	61.95	-19.40	9.90	Line	-	32.65	0.04	0.06	9.80			
AV	244.5k	31.91	51.95	-20.04	9.90	Line	-	22.01	0.04	0.06	9.80			
QP	388.5k	44.92	58.10	-13.18	9.91	Line	-	35.01	0.04	0.06	9.81			
AV	388.5k	39.84	48.10	-8.26	9.91	Line	"Worst"	29.93	0.04	0.06	9.81			
QP	771k	34.93	56.00	-21.07	9.95	Line	-	24.98	0.05	0.08	9.82			
AV	771k	24.26	46.00	-21.74	9.95	Line	-	14.31	0.05	0.08	9.82			
QP	25.206M	29.61	60.00	-30.39	10.65	Line	-	18.96	0.27	0.36	10.02			
AV	25.206M	22.64	50.00	-27.36	10.65	Line	-	11.99	0.27	0.36	10.02			

Mode 1

11/05/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	177k	49.79	64.62	-14.83	9.89	Neutral	-	39.90	0.04	0.06	9.79			
AV	177k	38.95	54.62	-15.67	9.89	Neutral	-	29.06	0.04	0.06	9.79			
QP	253.5k	48.36	61.64	-13.28	9.90	Neutral	-	38.46	0.04	0.06	9.80			
AV	253.5k	35.45	51.64	-16.19	9.90	Neutral	-	25.55	0.04	0.06	9.80			
QP	388.5k	44.92	58.10	-13.18	9.91	Neutral	-	35.01	0.04	0.06	9.81			
AV	388.5k	39.71	48.10	-8.39	9.91	Neutral	"Worst"	29.80	0.04	0.06	9.81			
QP	595.5k	32.79	56.00	-23.21	9.93	Neutral	-	22.86	0.05	0.07	9.81			
AV	595.5k	24.38	46.00	-21.62	9.93	Neutral	-	14.45	0.05	0.07	9.81			
QP	1.136M	33.10	56.00	-22.90	9.98	Neutral	-	23.12	0.06	0.10	9.82			
AV	1.136M	25.11	46.00	-20.89	9.98	Neutral	-	15.13	0.06	0.10	9.82			
QP	13.902M	30.78	60.00	-29.22	10.33	Neutral	-	20.45	0.19	0.22	9.92			
AV	13.902M	23.84	50.00	-26.16	10.33	Neutral	-	13.51	0.19	0.22	9.92			

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.05M	12.819M	12M8G1D	7.525M	12.669M
802.11g_Nss1,(6Mbps)_2TX	16.35M	24.513M	24M5D1D	16.275M	16.367M
VHT20_Nss1,(MCS0)_2TX	16.35M	24.388M	24M4D1D	16.275M	16.367M
VHT40_Nss1,(MCS0)_2TX	33.8M	35.482M	35M5D1D	31.25M	35.282M

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

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

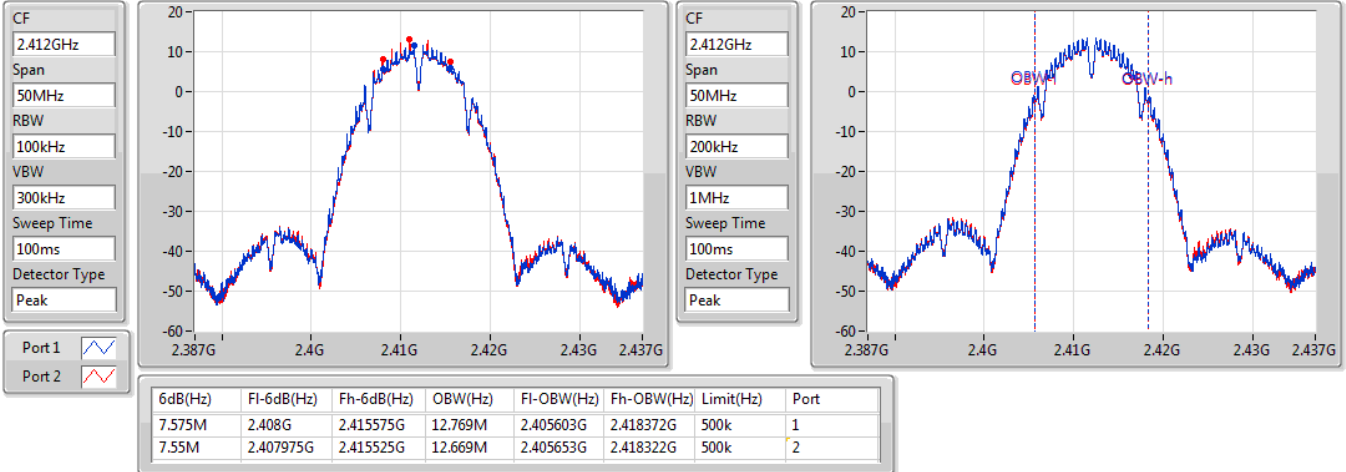
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.575M	12.769M	7.55M	12.669M
2437MHz	Pass	500k	8M	12.719M	7.975M	12.669M
2462MHz	Pass	500k	8.05M	12.744M	7.525M	12.819M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.417M	16.325M	16.367M
2437MHz	Pass	500k	16.275M	24.513M	16.3M	23.738M
2462MHz	Pass	500k	16.325M	16.417M	16.325M	16.367M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.417M	16.325M	16.367M
2437MHz	Pass	500k	16.275M	24.388M	16.3M	23.413M
2462MHz	Pass	500k	16.325M	16.417M	16.325M	16.367M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	31.25M	35.382M	33.8M	35.332M
2437MHz	Pass	500k	31.4M	35.482M	33.8M	35.382M
2452MHz	Pass	500k	32.55M	35.432M	31.25M	35.282M

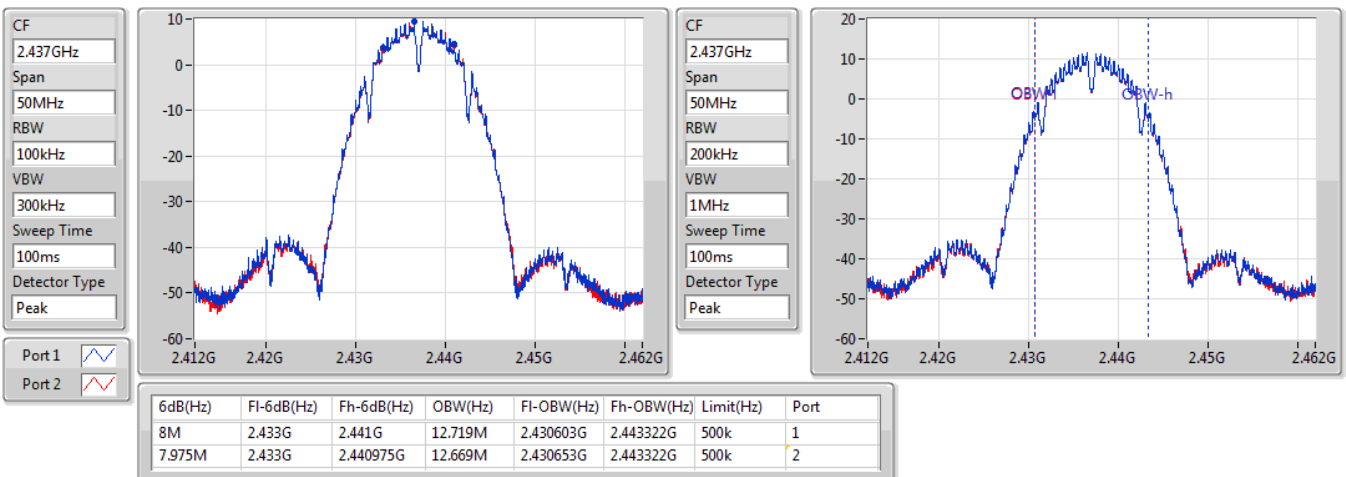
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

19/05/2020

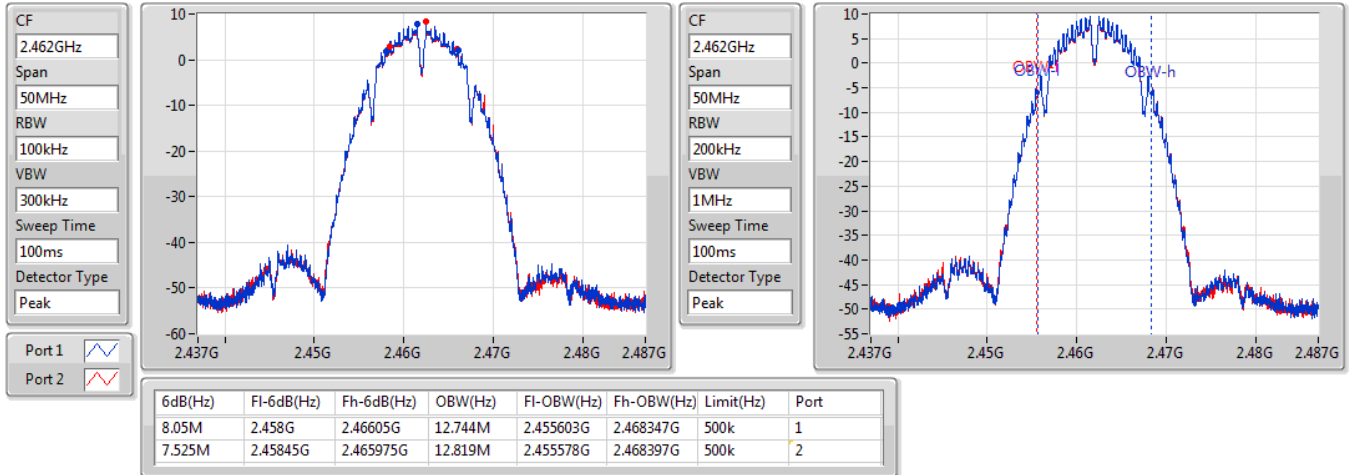

802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

19/05/2020

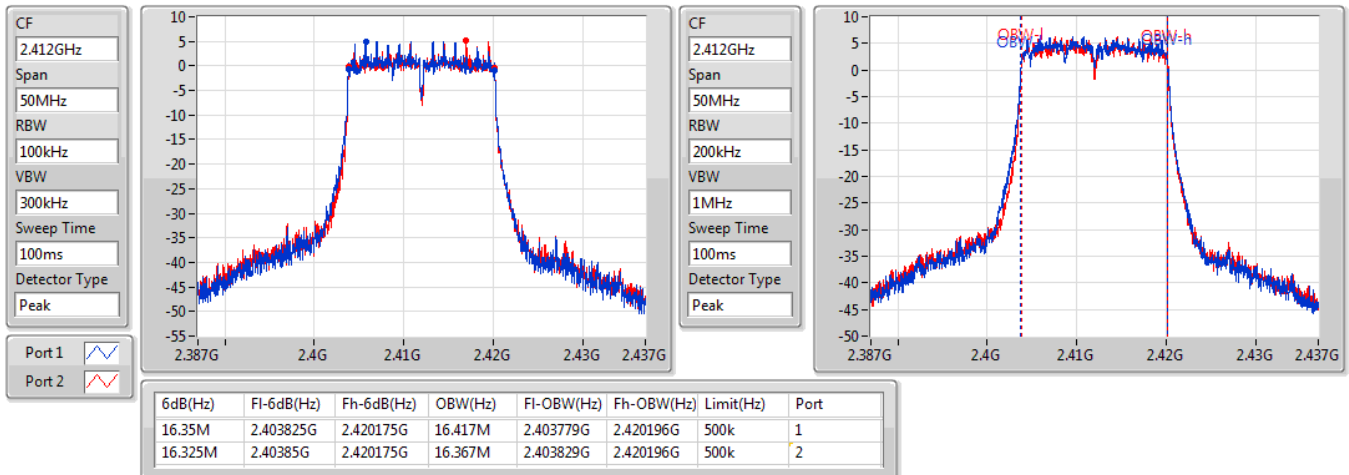


802.11b_Nss1,(1Mbps)_2TX
EBW
2462MHz

19/05/2020

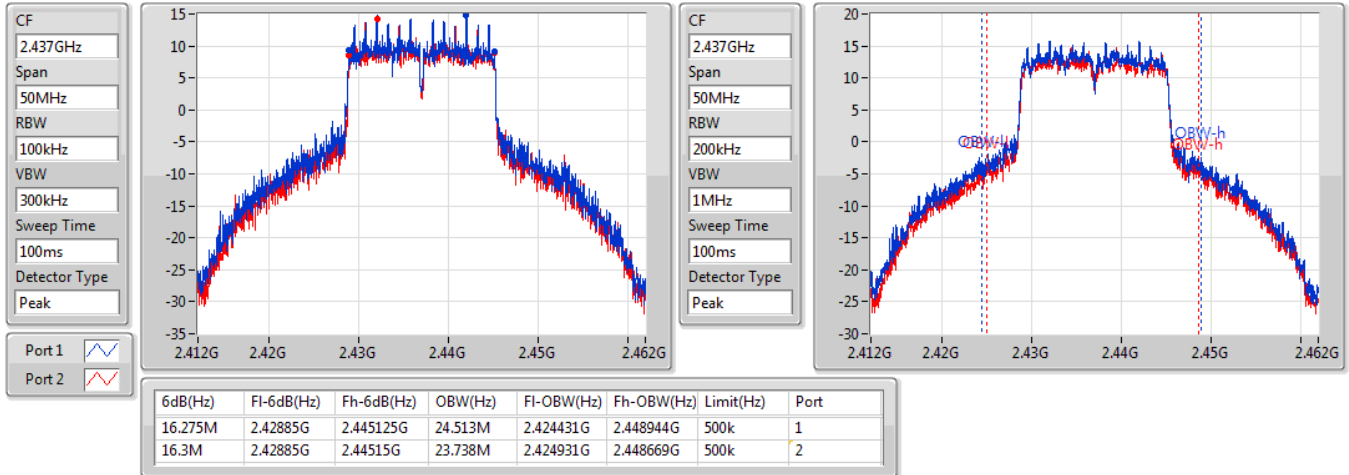

802.11g_Nss1,(6Mbps)_2TX
EBW
2412MHz

13/05/2020

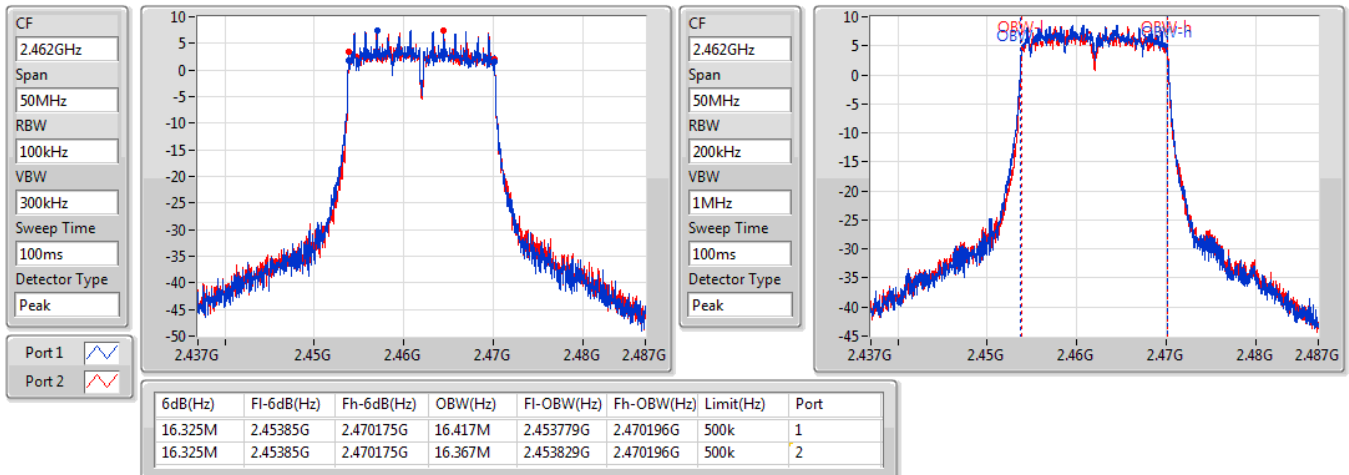


802.11g_Nss1,(6Mbps)_2TX
EBW
2437MHz

13/05/2020


802.11g_Nss1,(6Mbps)_2TX
EBW
2462MHz

13/05/2020

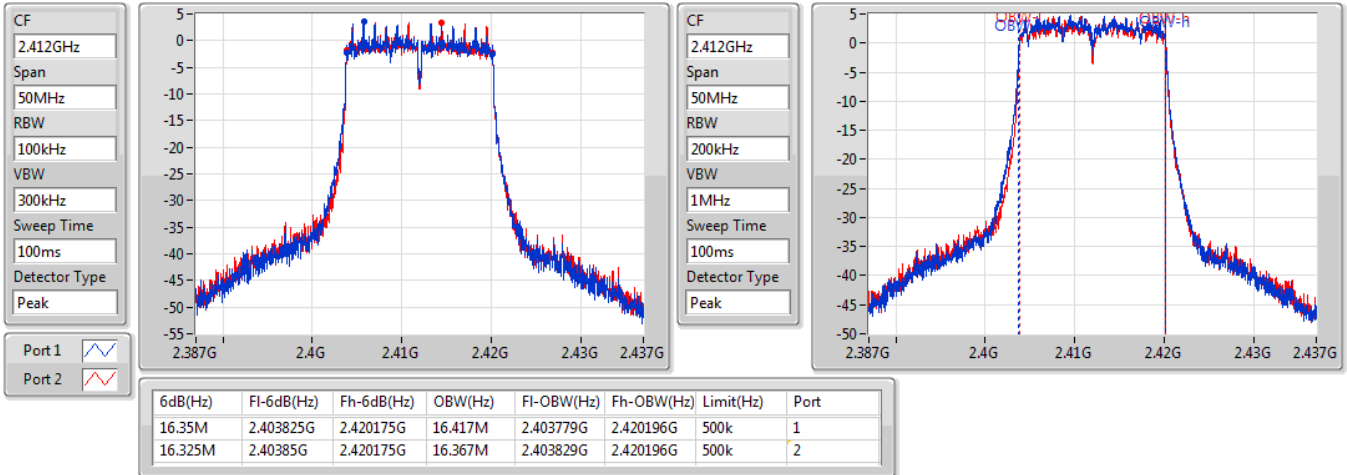


VHT20_Nss1,(MCS0)_2TX

EBW

2412MHz

13/05/2020

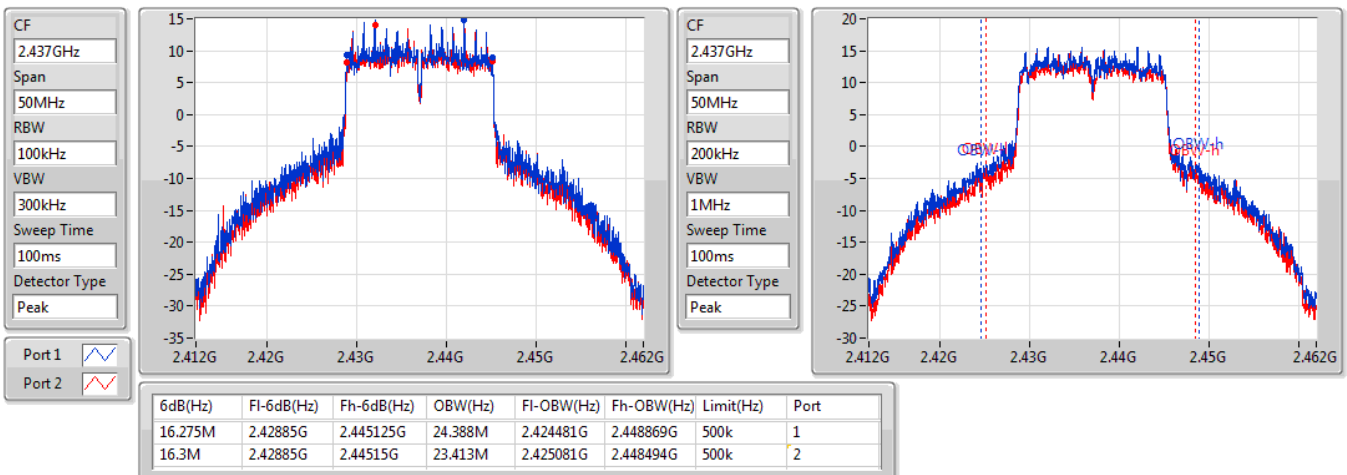


VHT20_Nss1,(MCS0)_2TX

EBW

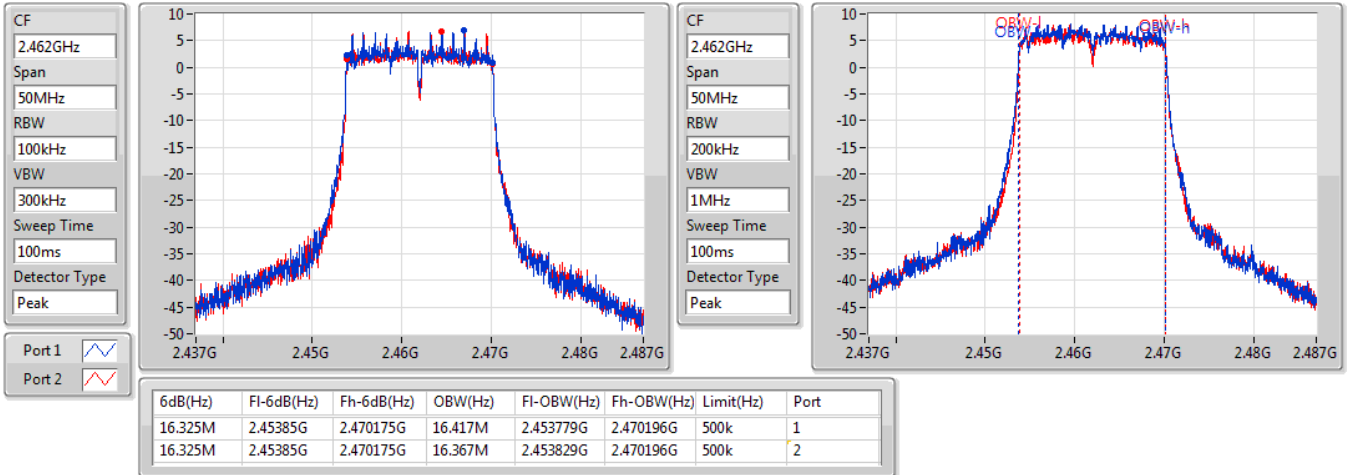
2437MHz

13/05/2020

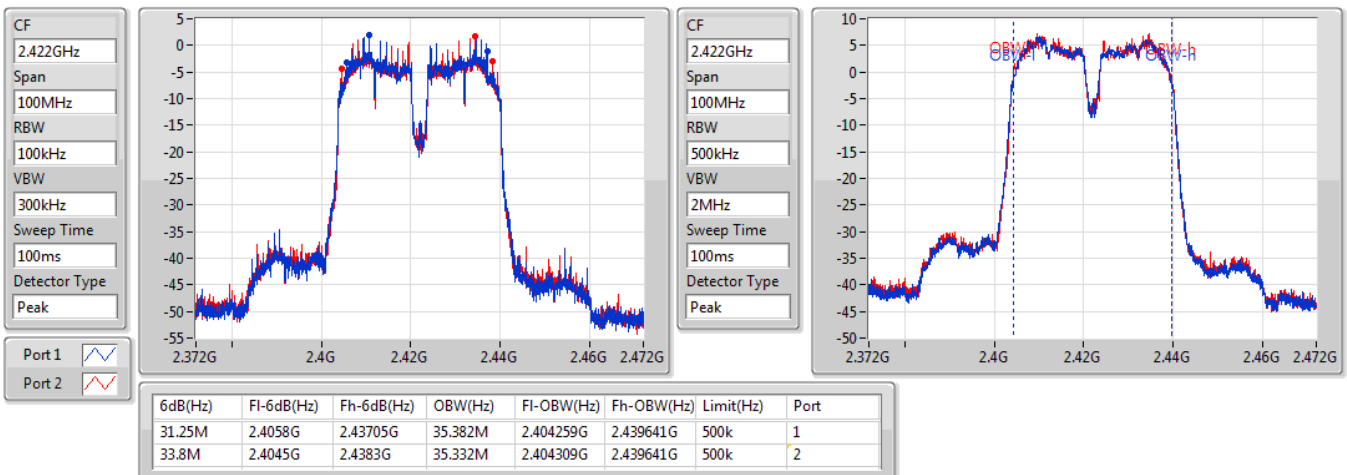


VHT20_Nss1,(MCS0)_2TX
EBW
2462MHz

13/05/2020

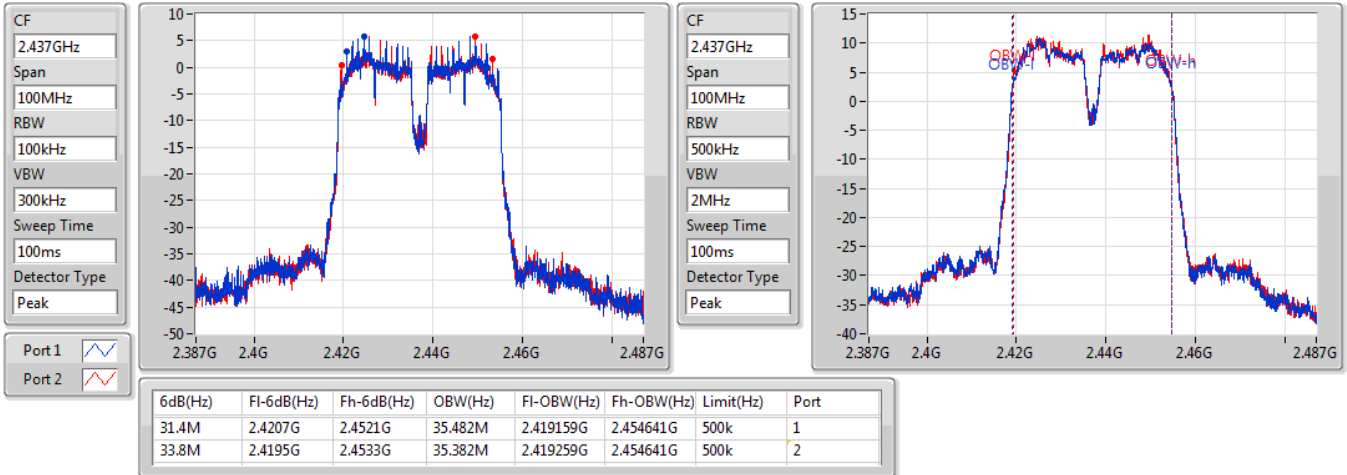

VHT40_Nss1,(MCS0)_2TX
EBW
2422MHz

13/05/2020

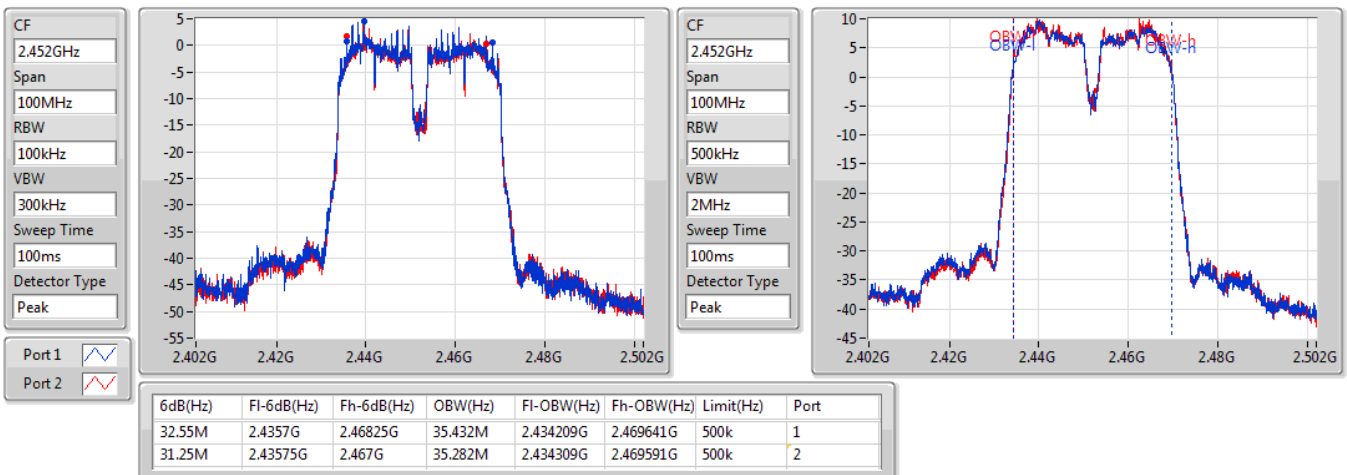


VHT40_Nss1,(MCS0)_2TX
EBW
2437MHz

13/05/2020


VHT40_Nss1,(MCS0)_2TX
EBW
2452MHz

13/05/2020





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	24.03	0.25293
802.11g_Nss1,(6Mbps)_2TX	27.77	0.59841
VHT20_Nss1,(MCS0)_2TX	27.54	0.56754
VHT40_Nss1,(MCS0)_2TX	21.28	0.13428

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.17	21.13	20.90	24.03	30.00
2437MHz	Pass	3.17	18.85	18.81	21.84	30.00
2462MHz	Pass	3.17	17.31	17.16	20.25	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.17	16.47	16.55	19.52	30.00
2417MHz	Pass	3.17	19.43	19.38	22.42	30.00
2437MHz	Pass	3.17	25.00	24.50	27.77	30.00
2457MHz	Pass	3.17	21.20	21.39	24.31	30.00
2462MHz	Pass	3.17	18.63	18.55	21.60	30.00
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.17	15.10	14.84	17.98	30.00
2417MHz	Pass	3.17	21.29	21.30	24.31	30.00
2437MHz	Pass	3.17	24.76	24.29	27.54	30.00
2457MHz	Pass	3.17	21.26	21.41	24.35	30.00
2462MHz	Pass	3.17	18.16	18.01	21.10	30.00
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	3.17	14.57	14.27	17.43	30.00
2427MHz	Pass	3.17	15.03	14.71	17.88	30.00
2437MHz	Pass	3.17	18.43	18.11	21.28	30.00
2452MHz	Pass	3.17	17.03	16.86	19.96	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-3.81
802.11g_Nss1,(6Mbps)_2TX	-0.14
VHT20_Nss1,(MCS0)_2TX	-1.09
VHT40_Nss1,(MCS0)_2TX	-8.54

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.13	-5.40	-6.84	-3.81	7.87
2437MHz	Pass	6.13	-8.20	-7.59	-5.54	7.87
2462MHz	Pass	6.13	-8.85	-10.17	-7.49	7.87
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.13	-10.85	-11.70	-9.02	7.87
2437MHz	Pass	6.13	-2.89	-1.98	-0.14	7.87
2462MHz	Pass	6.13	-8.50	-8.99	-6.68	7.87
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.13	-12.39	-11.22	-9.52	7.87
2437MHz	Pass	6.13	-3.08	-3.57	-1.09	7.87
2462MHz	Pass	6.13	-9.05	-9.83	-7.31	7.87
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.13	-15.35	-15.20	-12.75	7.87
2437MHz	Pass	6.13	-10.95	-10.77	-8.54	7.87
2452MHz	Pass	6.13	-12.02	-9.93	-8.95	7.87

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

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

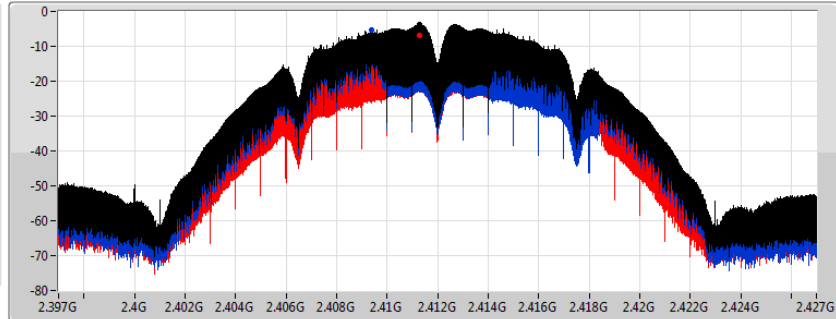
802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

19/05/2020

CF
2.412GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
4.424357ms
Detector Type
Peak



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/100Hz)	(dBm/100Hz)	(dBm/100Hz)	(dBm/100Hz)
-3.81	-3.81	-5.40	-6.84

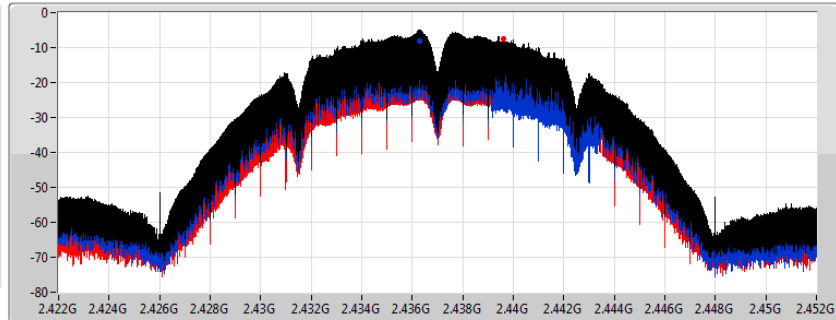
802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

19/05/2020

CF
2.437GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
4.424357ms
Detector Type
Peak



Sum
Port 1
Port 2

Sum	PD	Port 1	Port 2
(dBm/100Hz)	(dBm/100Hz)	(dBm/100Hz)	(dBm/100Hz)
-5.54	-5.54	-8.20	-7.59

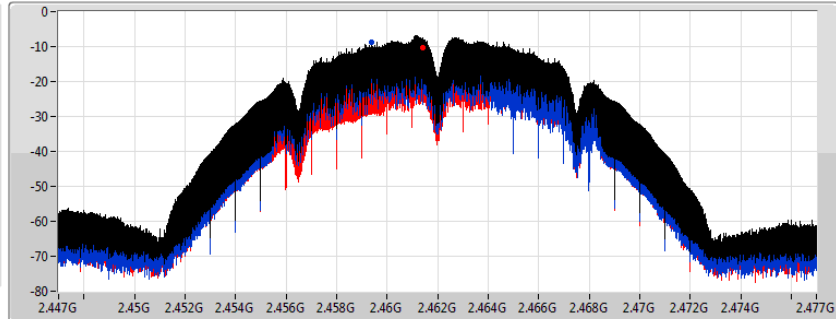
802.11b_Nss1,(1Mbps)_2TX

PSD

2462MHz

19/05/2020

CF
2.462GHz
Span
30MHz
RBW
3kHz
VBW
10kHz
Sweep Time
4.424357ms
Detector Type
Peak



Sum
Port 1
Port 2

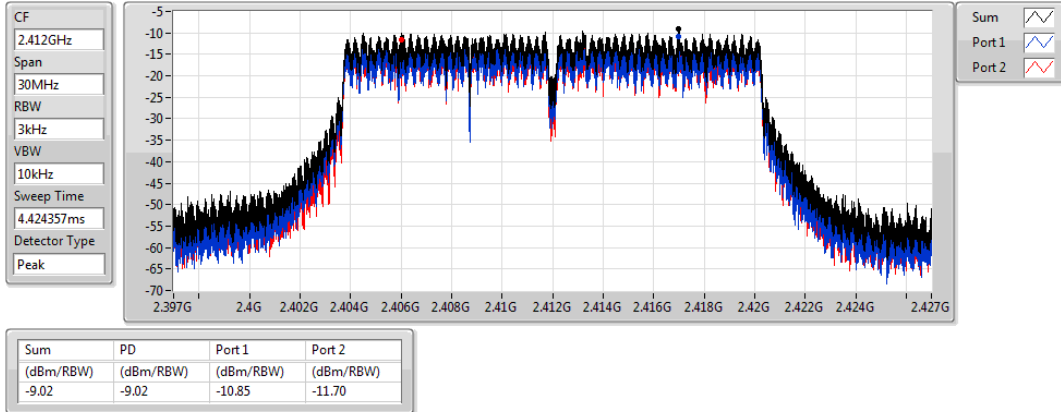
Sum	PD	Port 1	Port 2
(dBm/100Hz)	(dBm/100Hz)	(dBm/100Hz)	(dBm/100Hz)
-7.49	-7.49	-8.85	-10.17

802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

13/05/2020

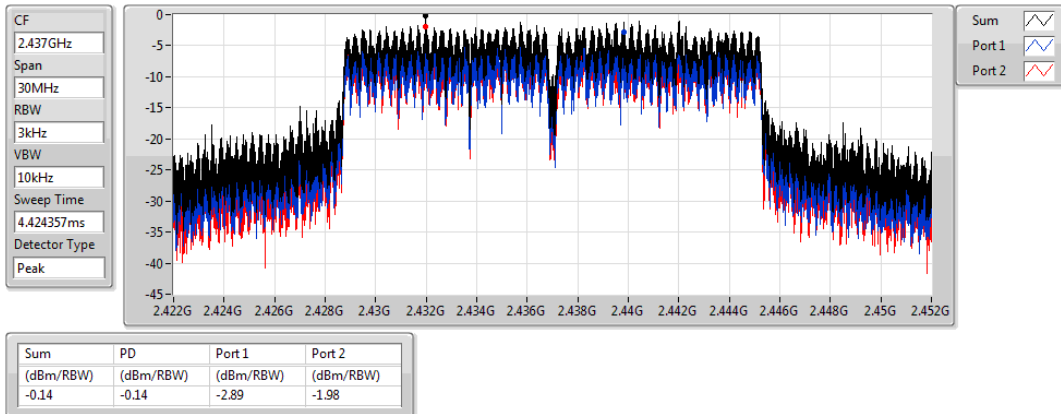


802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

13/05/2020

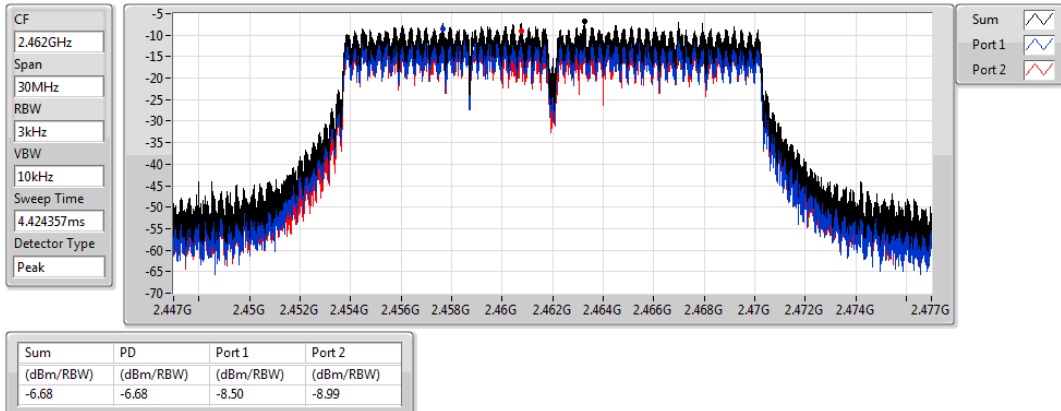


802.11g_Nss1,(6Mbps)_2TX

PSD

2462MHz

13/05/2020

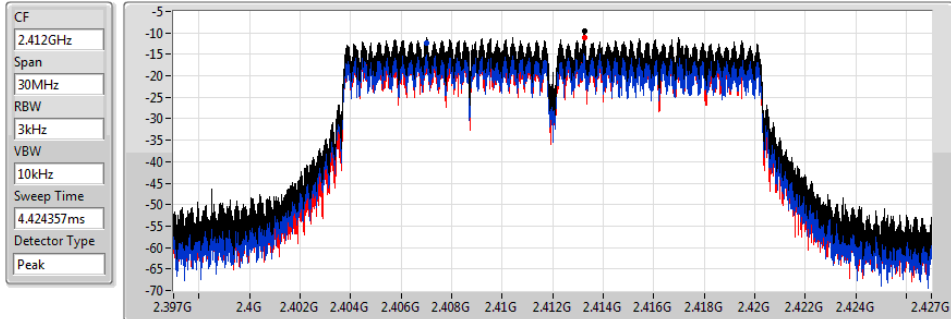


VHT20_Nss1,(MCS0)_2TX

PSD

2412MHz

13/05/2020



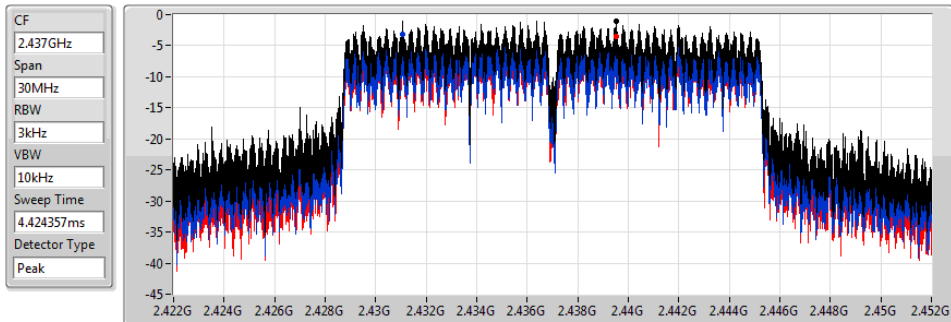
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.52	-9.52	-12.39	-11.22

VHT20_Nss1,(MCS0)_2TX

PSD

2437MHz

13/05/2020



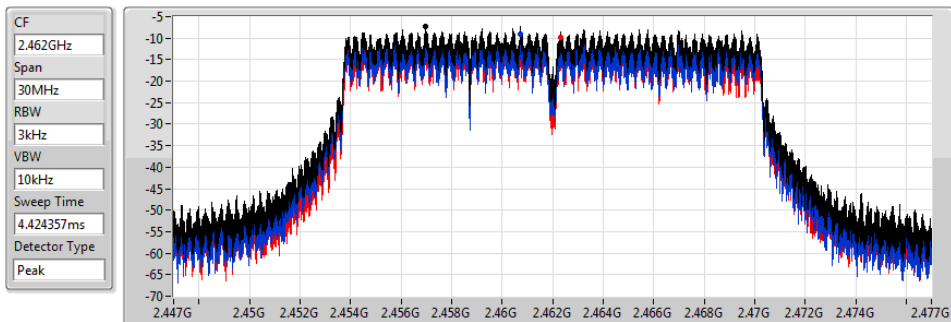
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.09	-1.09	-3.08	-3.57

VHT20_Nss1,(MCS0)_2TX

PSD

2462MHz

13/05/2020



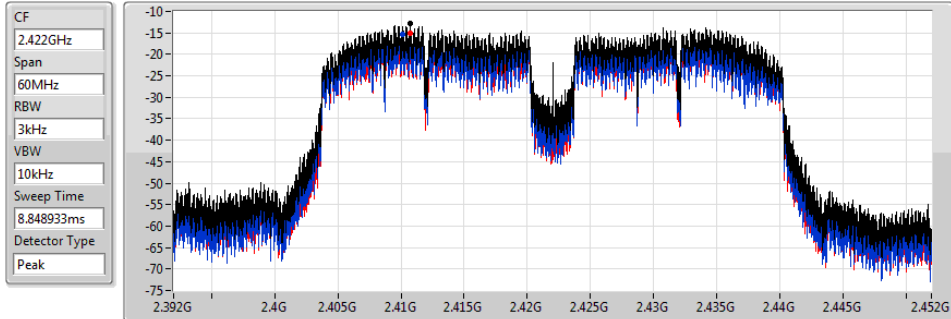
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.31	-7.31	-9.05	-9.83

VHT40_Nss1,(MCS0)_2TX

PSD

2422MHz

13/05/2020



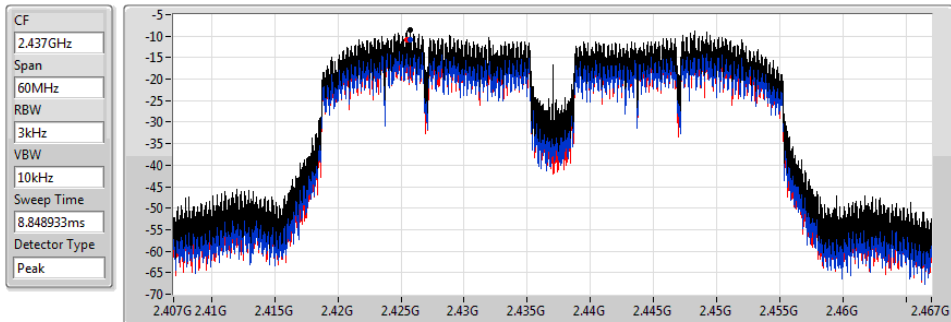
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-12.75	-12.75	-15.35	-15.20

VHT40_Nss1,(MCS0)_2TX

PSD

2437MHz

13/05/2020



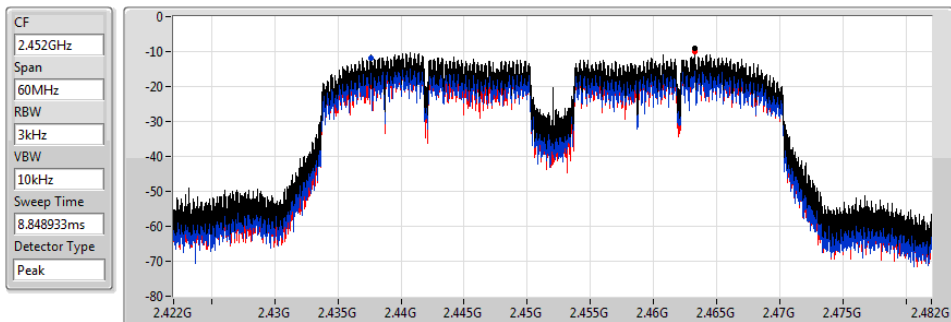
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-8.54	-8.54	-10.95	-10.77

VHT40_Nss1,(MCS0)_2TX

PSD

2452MHz

13/05/2020



Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-8.95	-8.95	-12.02	-9.93



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)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.41148G	11.43	-18.57	2.1069G	-53.41	2.39702G	-32.97	2.4G	-39.89	2.50352G	-51.05	3.21465G	-42.08	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43198G	14.89	-15.11	49.81M	-50.62	2.397G	-32.16	2.4G	-34.02	2.49612G	-50.94	16.97027G	-42.59	2
VHT20_Nss1,(MCS0)_2TX	Pass	2.43073G	14.76	-15.24	2.30554G	-50.99	2.3989G	-33.74	2.4G	-35.95	2.5025G	-51.43	16.35217G	-42.50	2
VHT40_Nss1,(MCS0)_2TX	Pass	2.42576G	6.39	-23.61	49.75M	-46.66	2.3908G	-35.10	2.4G	-41.34	2.48374G	-50.18	24.41665G	-42.32	2

Result

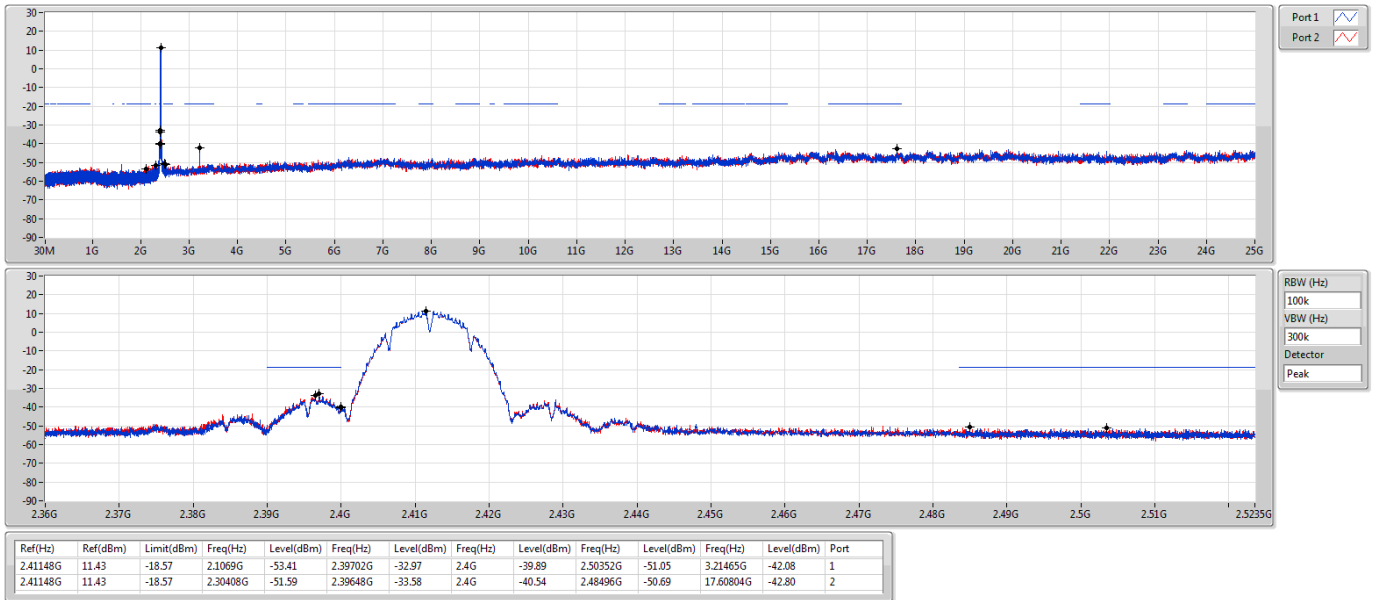
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41148G	11.43	-18.57	2.1069G	-53.41	2.39702G	-32.97	2.4G	-39.89	2.50352G	-51.05	3.21465G	-42.08	1
2412MHz	Pass	2.41148G	11.43	-18.57	2.30408G	-51.59	2.39648G	-33.58	2.4G	-40.54	2.48496G	-50.69	17.60804G	-42.80	2
2437MHz	Pass	2.41148G	11.43	-18.57	2.30408G	-51.02	2.4G	-47.11	2.4G	-47.14	2.50514G	-49.90	23.33393G	-42.69	1
2437MHz	Pass	2.41148G	11.43	-18.57	2.30175G	-52.24	2.39988G	-50.04	2.4G	-51.02	2.49604G	-50.37	24.62914G	-43.82	2
2462MHz	Pass	2.41148G	11.43	-18.57	1.94555G	-52.65	2.39444G	-51.16	2.4G	-50.96	2.49228G	-50.75	24.99157G	-43.04	1
2462MHz	Pass	2.41148G	11.43	-18.57	899.67M	-53.54	2.39304G	-51.74	2.4835G	-54.13	2.48704G	-50.84	16.8017G	-43.19	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	14.89	-15.11	49.81M	-50.95	2.39704G	-33.91	2.4G	-34.23	2.51004G	-50.91	16.29878G	-42.05	1
2412MHz	Pass	2.43198G	14.89	-15.11	49.81M	-50.62	2.397G	-32.16	2.4G	-34.02	2.49612G	-50.94	16.97027G	-42.59	2
2437MHz	Pass	2.43198G	14.89	-15.11	49.81M	-51.79	2.39924G	-33.74	2.4G	-36.64	2.48362G	-37.99	16.54322G	-42.29	1
2437MHz	Pass	2.43198G	14.89	-15.11	49.81M	-53.17	2.39952G	-34.90	2.4G	-37.61	2.48636G	-39.28	16.52074G	-42.16	2
2462MHz	Pass	2.43198G	14.89	-15.11	49.81M	-47.91	2.4G	-48.01	2.4835G	-41.06	2.48362G	-41.70	16.54884G	-42.27	1
2462MHz	Pass	2.43198G	14.89	-15.11	49.81M	-47.22	2.39822G	-51.21	2.4835G	-42.26	2.48356G	-40.55	16.82136G	-42.22	2
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	14.76	-15.24	49.81M	-52.18	2.39702G	-34.54	2.4G	-36.18	2.49178G	-51.97	3.21465G	-41.86	1
2412MHz	Pass	2.43073G	14.76	-15.24	2.30554G	-50.99	2.3989G	-33.74	2.4G	-35.95	2.5025G	-51.43	16.35217G	-42.50	2
2437MHz	Pass	2.43073G	14.76	-15.24	49.81M	-52.00	2.39946G	-34.64	2.4G	-35.95	2.4839G	-36.70	17.40294G	-41.93	1
2437MHz	Pass	2.43073G	14.76	-15.24	49.81M	-53.28	2.39828G	-34.31	2.4G	-37.45	2.48636G	-38.88	24.941G	-42.48	2
2462MHz	Pass	2.43073G	14.76	-15.24	49.81M	-50.72	2.4G	-49.71	2.4835G	-43.41	2.48356G	-42.88	16.54884G	-41.90	1
2462MHz	Pass	2.43073G	14.76	-15.24	49.81M	-49.26	2.39332G	-51.34	2.4835G	-43.28	2.4845G	-41.95	16.8326G	-42.24	2
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42576G	6.39	-23.61	49.75M	-47.47	2.39072G	-35.60	2.4G	-40.34	2.48738G	-51.24	17.61839G	-42.67	1
2422MHz	Pass	2.42576G	6.39	-23.61	49.75M	-46.66	2.3908G	-35.10	2.4G	-41.34	2.48374G	-50.18	24.41665G	-42.32	2
2437MHz	Pass	2.42576G	6.39	-23.61	49.75M	-46.86	2.3964G	-37.36	2.4G	-39.54	2.48386G	-41.76	21.5588G	-41.88	1
2437MHz	Pass	2.42576G	6.39	-23.61	49.75M	-46.28	2.39892G	-36.35	2.4G	-39.87	2.48886G	-42.23	14.61471G	-41.89	2
2452MHz	Pass	2.42576G	6.39	-23.61	49.75M	-45.70	2.39916G	-43.22	2.4G	-44.64	2.48422G	-42.46	17.6212G	-42.91	1
2452MHz	Pass	2.42576G	6.39	-23.61	49.75M	-46.71	2.39832G	-43.08	2.4835G	-42.12	2.48418G	-41.75	17.14442G	-42.01	2

802.11b_Nss1,(1Mbps)_2TX

CSE NdB

2412MHz

19/05/2020

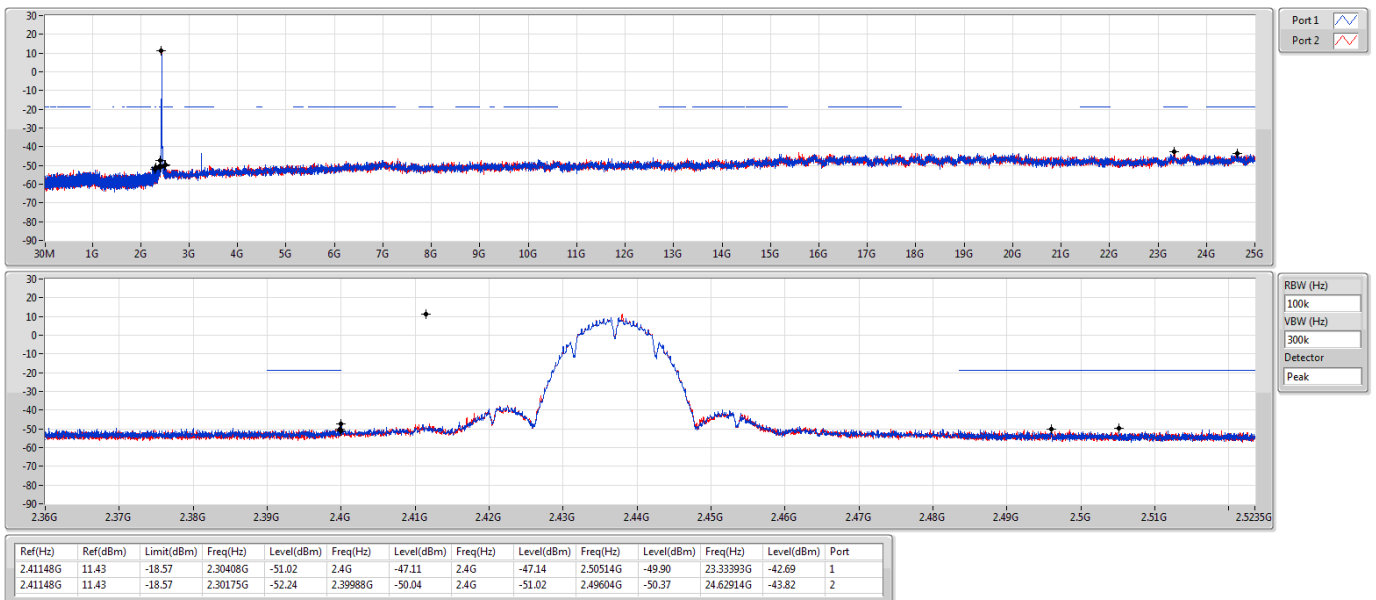


802.11b_Nss1,(1Mbps)_2TX

CSE NdB

2437MHz

19/05/2020

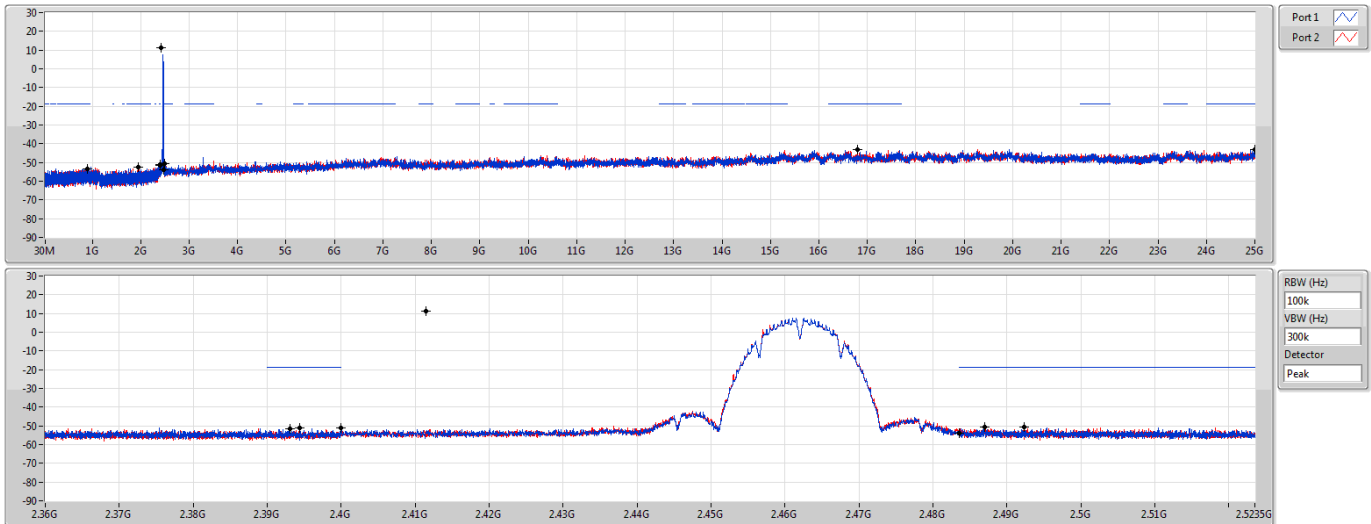


802.11b_Nss1,(1Mbps)_2TX

2462MHz

CSE NdB

19/05/2020



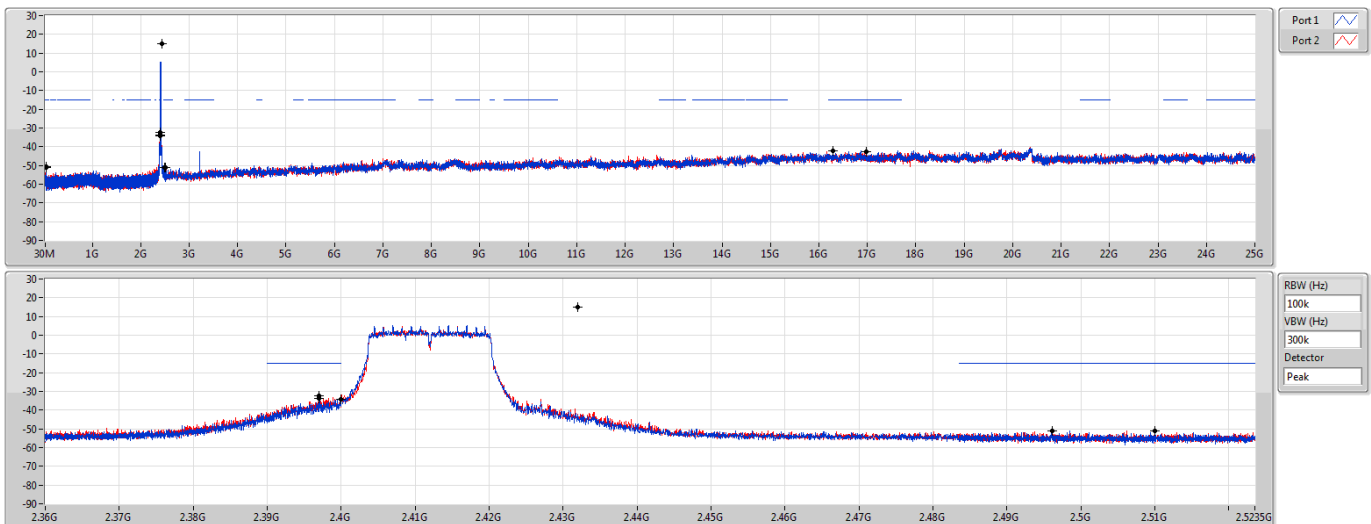
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41148G	11.43	-18.57	1.94555G	-52.65	2.39444G	-51.16	2.4G	-50.96	2.49228G	-50.75	24.99157G	-43.04	1
2.41148G	11.43	-18.57	899.67M	-53.54	2.39304G	-51.74	2.4835G	-54.13	2.48704G	-50.84	16.8017G	-43.19	2

802.11g_Nss1,(6Mbps)_2TX

2412MHz

CSE NdB

13/05/2020



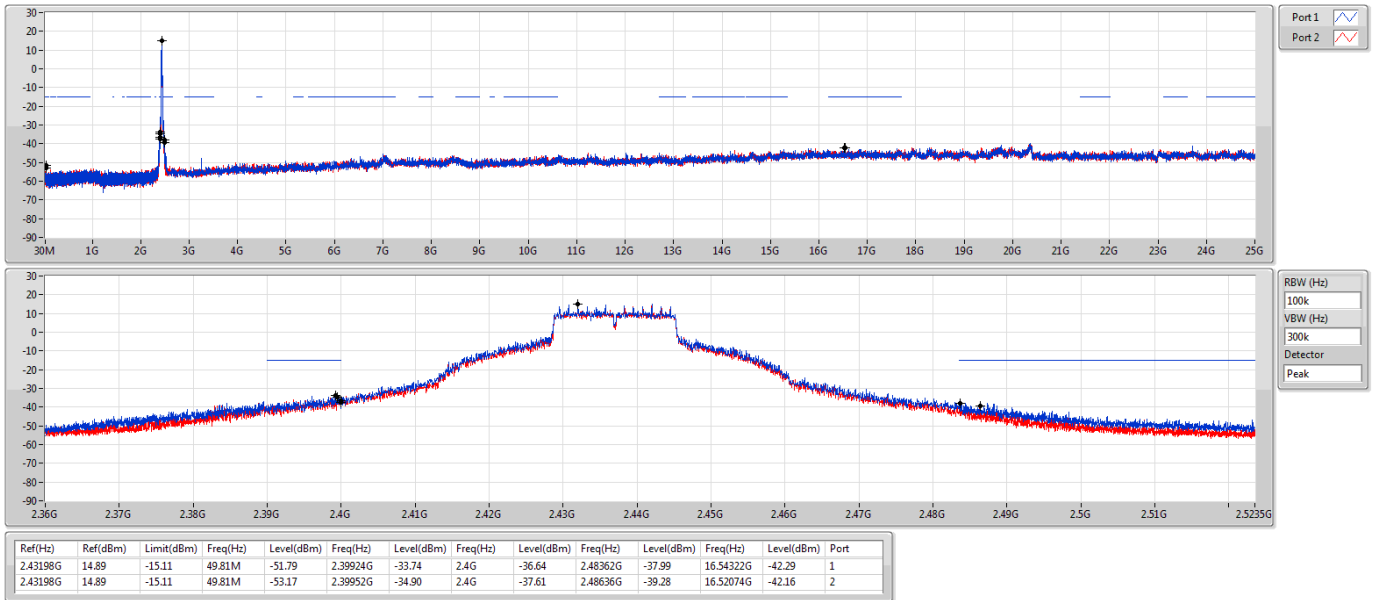
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2.43198G	14.89	-15.11	49.81M	-50.95	2.39704G	-33.91	2.4G	-34.23	2.51004G	-50.91	16.29878G	-42.05	1
2.43198G	14.89	-15.11	49.81M	-50.62	2.397G	-32.16	2.4G	-34.02	2.49612G	-50.94	16.97027G	-42.59	2

802.11g_Nss1,(6Mbps)_2TX

2437MHz

CSE NdB

13/05/2020

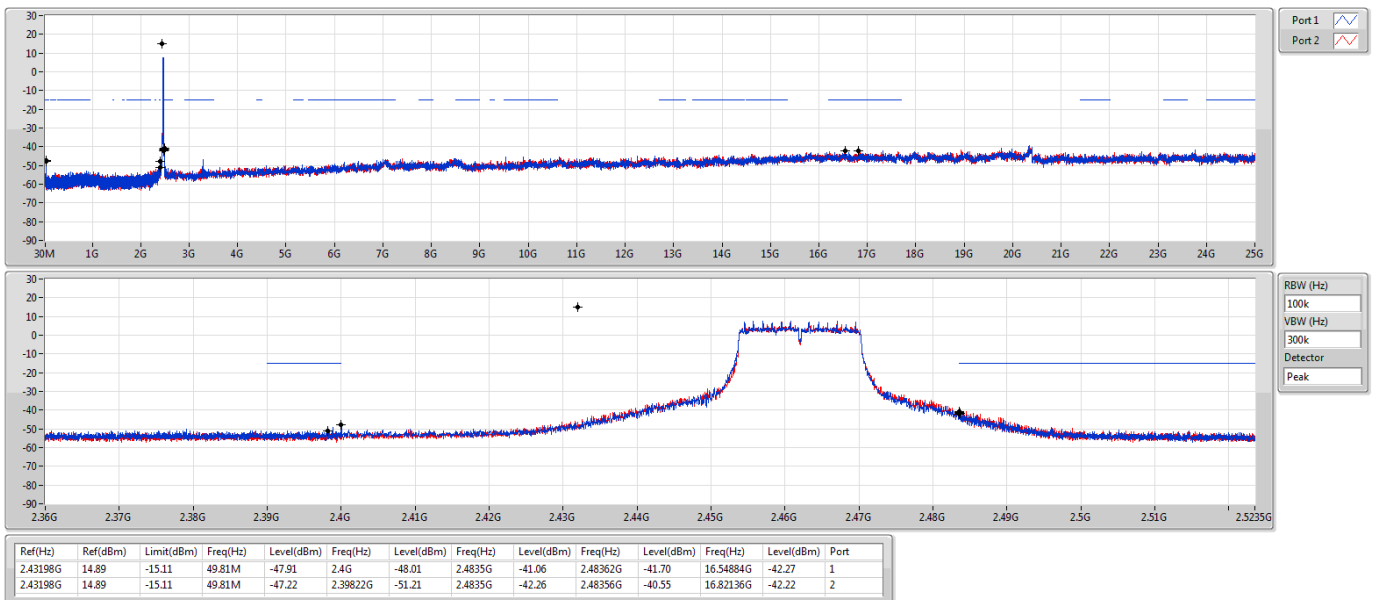


802.11g_Nss1,(6Mbps)_2TX

2462MHz

CSE NdB

13/05/2020

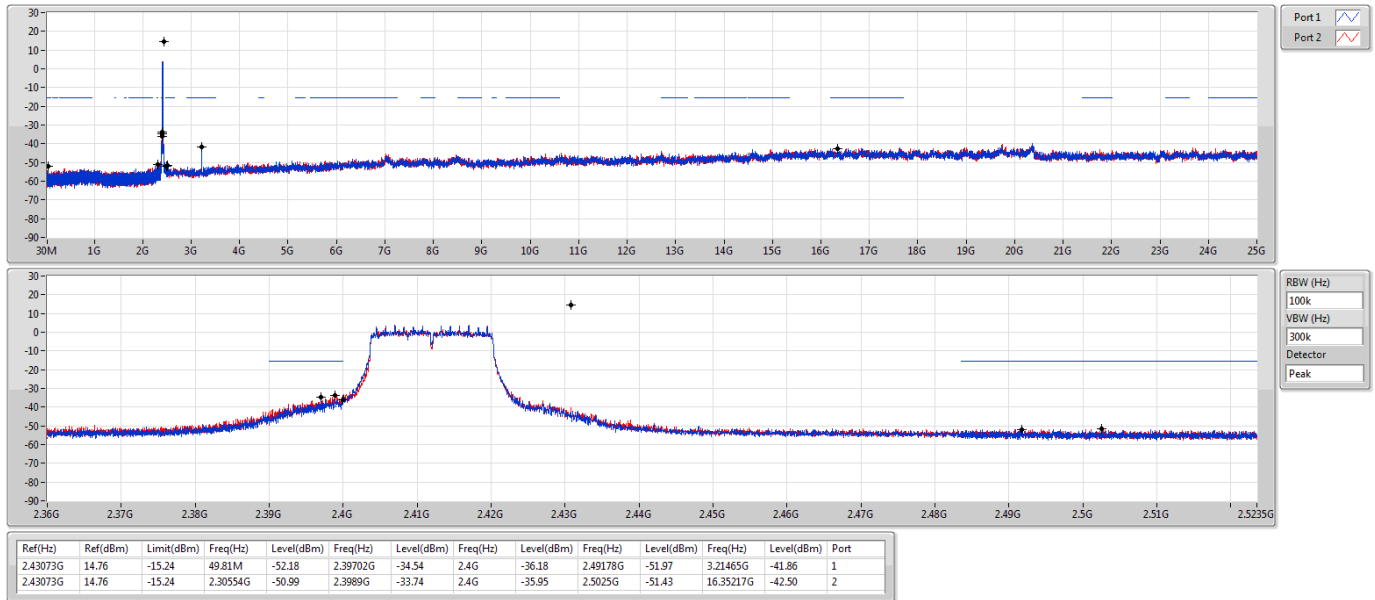


VHT20_Nss1,(MCS0)_2TX

2412MHz

CSE NdB

13/05/2020

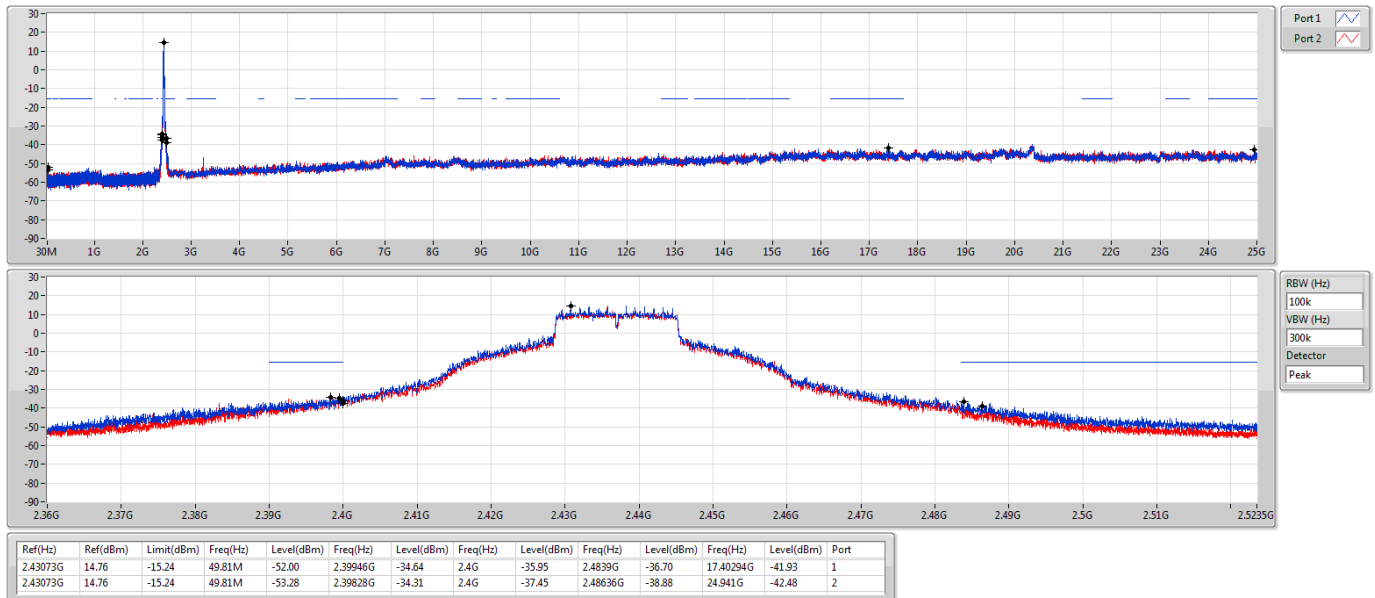


VHT20_Nss1,(MCS0)_2TX

2437MHz

CSE NdB

13/05/2020

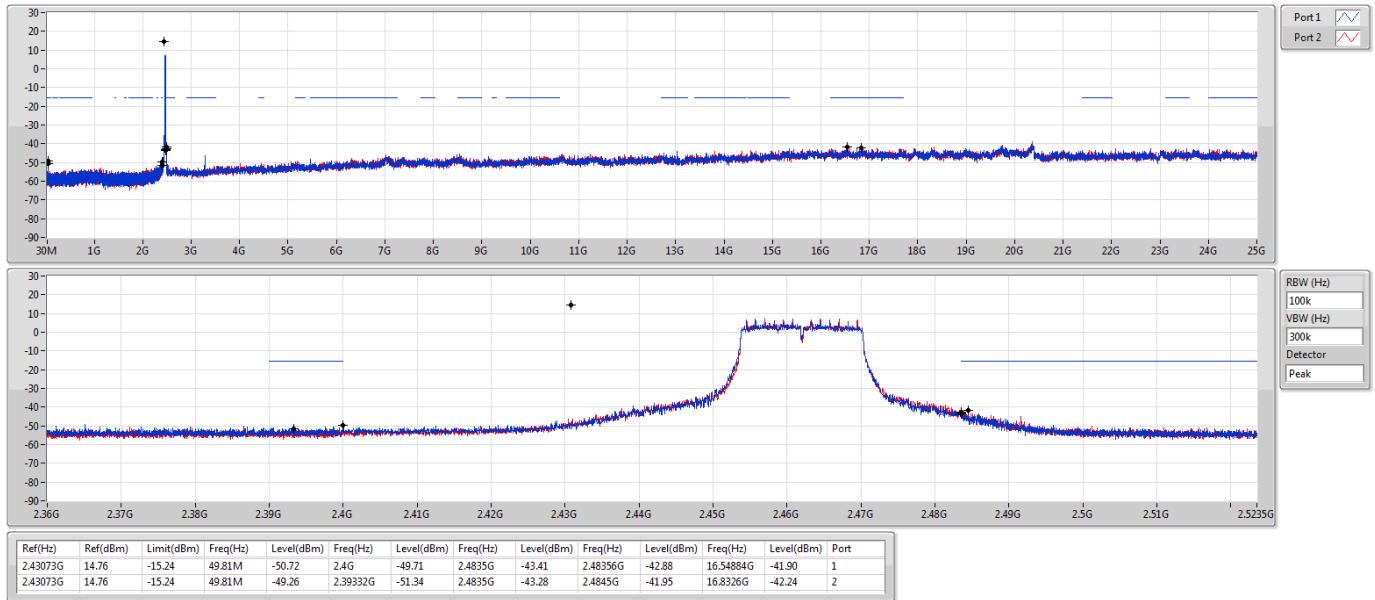


VHT20_Nss1,(MCS0)_2TX

2462MHz

CSE NdB

13/05/2020

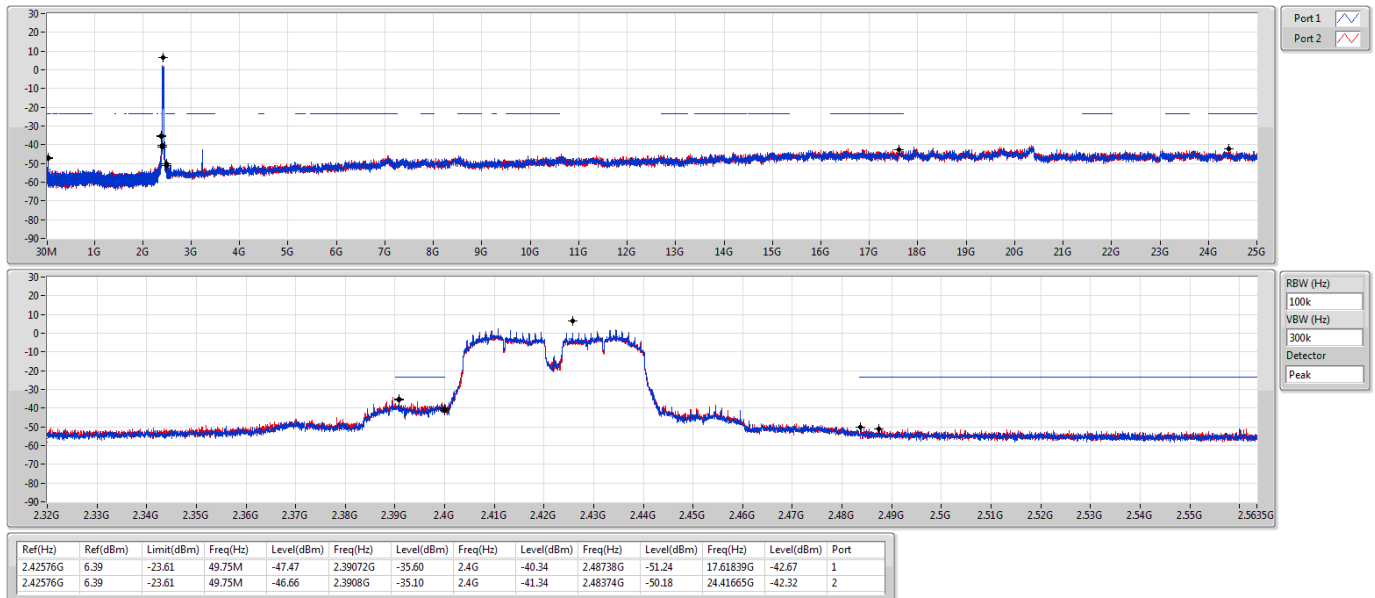


VHT40_Nss1,(MCS0)_2TX

2422MHz

CSE NdB

13/05/2020

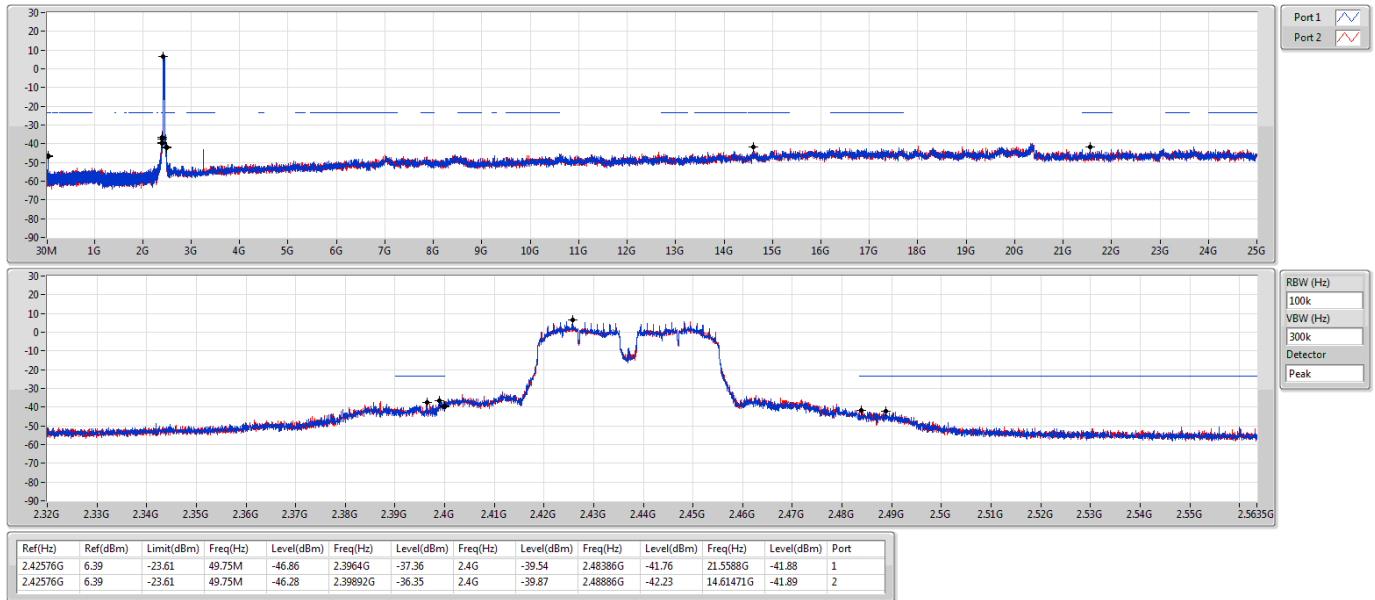


VHT40_Nss1,(MCS0)_2TX

2437MHz

CSE NdB

13/05/2020

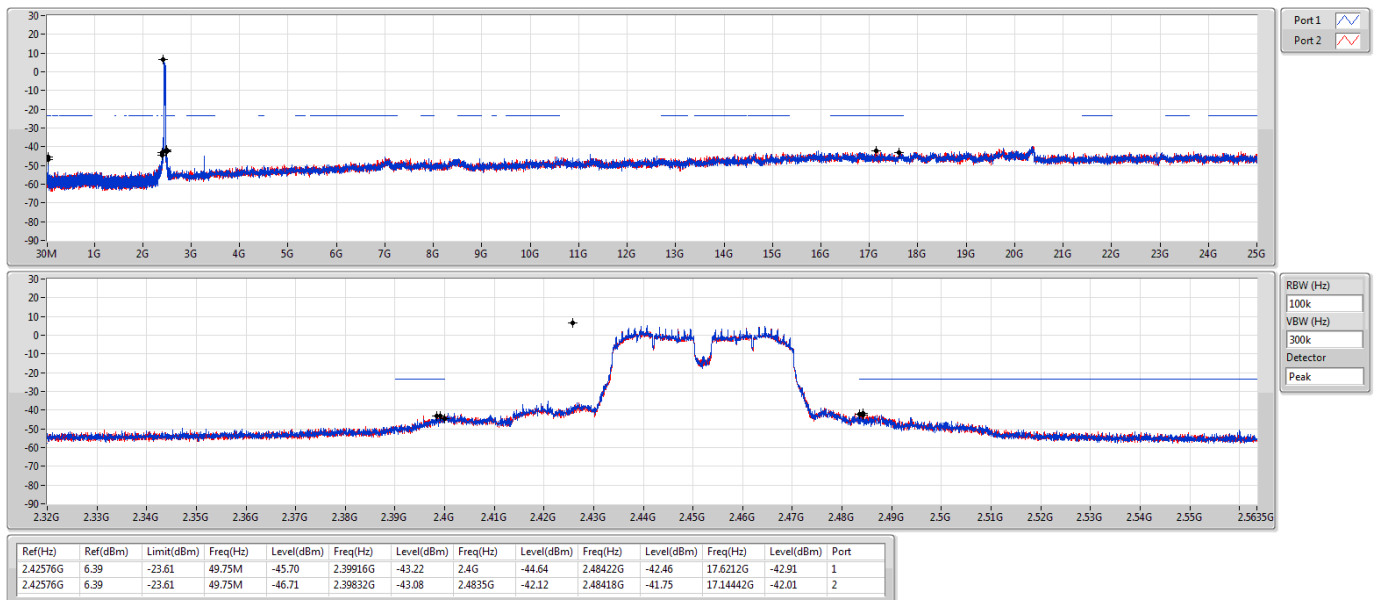


VHT40_Nss1,(MCS0)_2TX

2452MHz

CSE NdB

13/05/2020





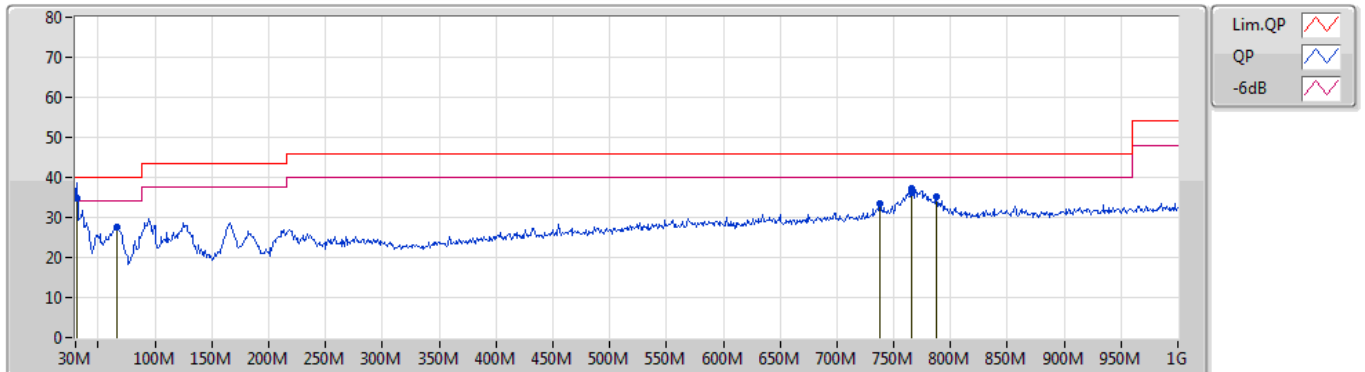
Radiated Emissions below 1GHz

Appendix F.1

Summary

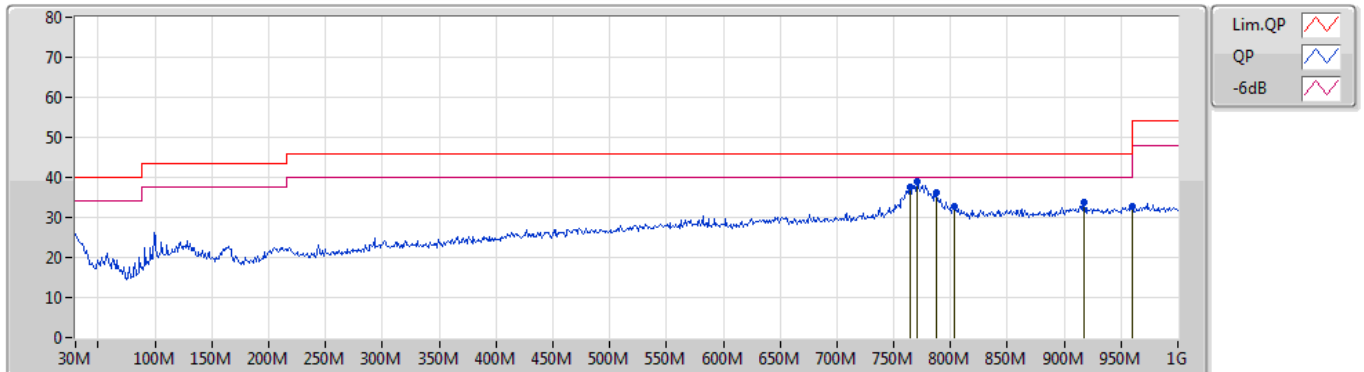
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	30.97M	34.73	40.00	-5.27	Vertical

14/05/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	30.97M	34.73	40.00	-5.27	-8.09	3	Vertical	275	1.00	"Worst"	42.82	23.57	0.70	32.36
PK	65.89M	27.55	40.00	-12.45	-19.23	3	Vertical	217	1.50	-	46.78	12.25	0.92	32.40
PK	738.1M	33.55	46.00	-12.45	-3.29	3	Vertical	200	1.00	-	36.84	25.70	3.28	32.27
PK	765.26M	36.23	46.00	-9.77	-3.08	3	Vertical	328	2.00	-	39.31	25.83	3.30	32.21
PK	766.23M	37.21	46.00	-8.79	-3.08	3	Vertical	161	1.00	-	40.29	25.83	3.30	32.21
PK	787.57M	35.15	46.00	-10.85	-2.97	3	Vertical	360	2.00	-	38.12	25.93	3.30	32.20

14/05/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	764.29M	37.44	46.00	-8.56	-3.08	3	Horizontal	79	1.25	-	40.52	25.83	3.30	32.21
PK	770.11M	38.91	46.00	-7.09	-3.06	3	Horizontal	79	1.25	"Worst"	41.97	25.85	3.30	32.21
PK	787.57M	36.05	46.00	-9.95	-2.97	3	Horizontal	71	1.25	-	39.02	25.93	3.30	32.20
PK	803.09M	32.69	46.00	-13.31	-2.86	3	Horizontal	87	1.25	-	35.55	26.00	3.31	32.17
PK	917.55M	33.73	46.00	-12.27	-1.18	3	Horizontal	290	3.00	-	34.91	26.76	3.67	31.61
PK	960M	32.60	54.00	-21.40	-0.53	3	Horizontal	202	3.00	-	33.13	26.98	3.80	31.31



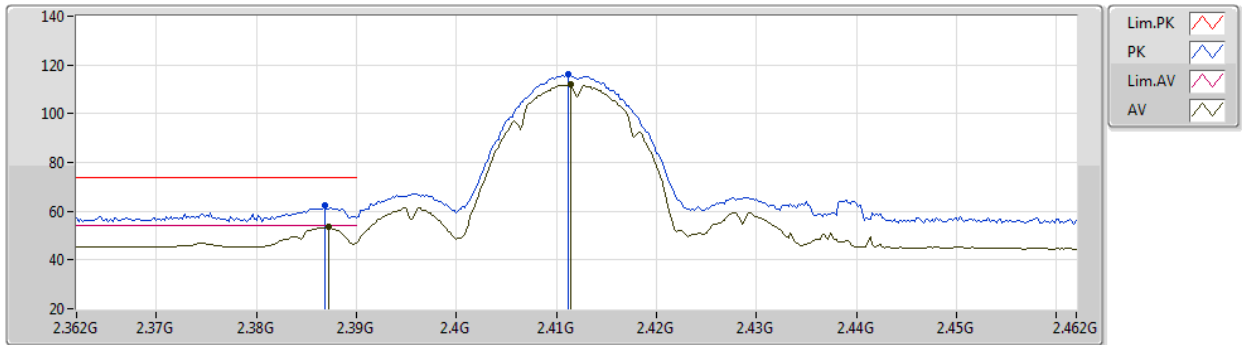
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
VHT40_Nss1,(MCS0)_2TX	Pass	AV	2.3898G	53.94	54.00	-0.06	3	Vertical	356	2.12	-

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2412MHz_TX



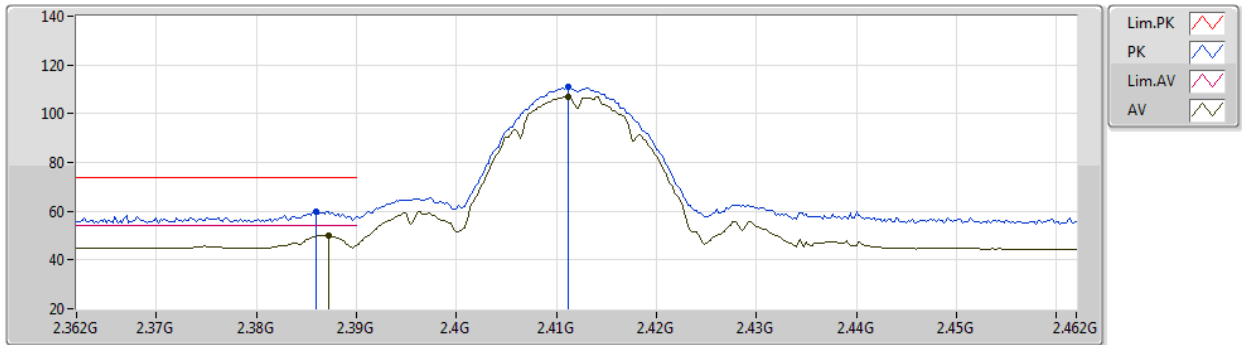
EUT Z_2TX
Setting 22
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3868G	62.19	74.00	-11.81	30.56	3	Vertical	260	2.31	-	27.64	3.99	-
AV	2.3872G	53.70	54.00	-0.30	22.07	3	Vertical	260	2.31	-	27.64	3.99	-
PK	2.4112G	116.15	Inf	-Inf	84.57	3	Vertical	260	2.31	-	27.57	4.01	-
AV	2.4114G	112.01	Inf	-Inf	80.43	3	Vertical	260	2.31	-	27.57	4.01	-

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2412MHz_TX



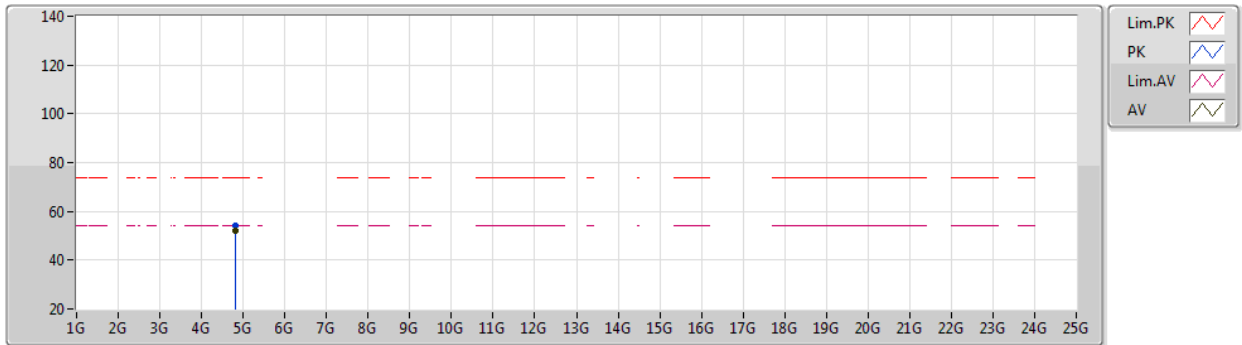
EUT Z_2TX
Setting 22
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.386G	59.73	74.00	-14.27	28.10	3	Horizontal	312	2.74	-	27.64	3.99	-
AV	2.3872G	50.11	54.00	-3.89	18.48	3	Horizontal	312	2.74	-	27.64	3.99	-
PK	2.4112G	110.95	Inf	-Inf	79.37	3	Horizontal	312	2.74	-	27.57	4.01	-
AV	2.4112G	107.13	Inf	-Inf	75.55	3	Horizontal	312	2.74	-	27.57	4.01	-

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2412MHz_TX



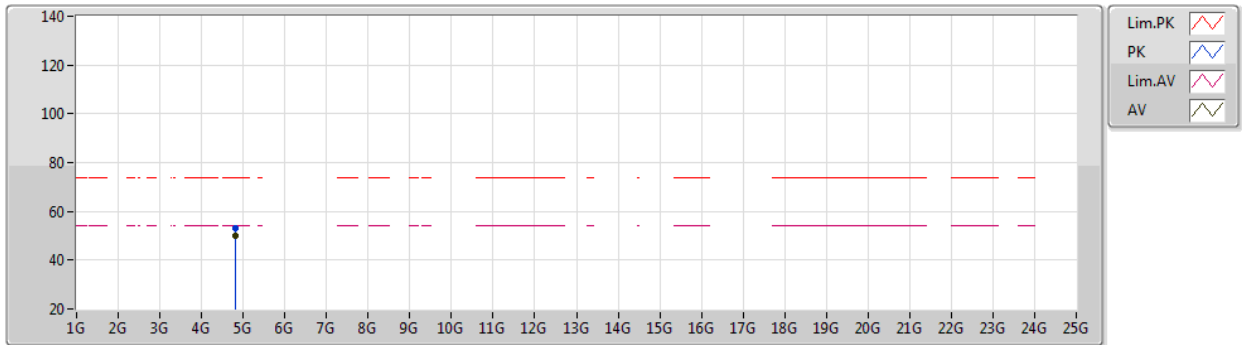
EUT_Z_2TX
Setting 22
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
AV	4.82403G	51.89	54.00	-2.11	47.21	3	Vertical	178	2.28	-	31.02	5.33	31.67
PK	4.82411G	54.01	74.00	-19.99	49.33	3	Vertical	178	2.28	-	31.02	5.33	31.67

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2412MHz_TX



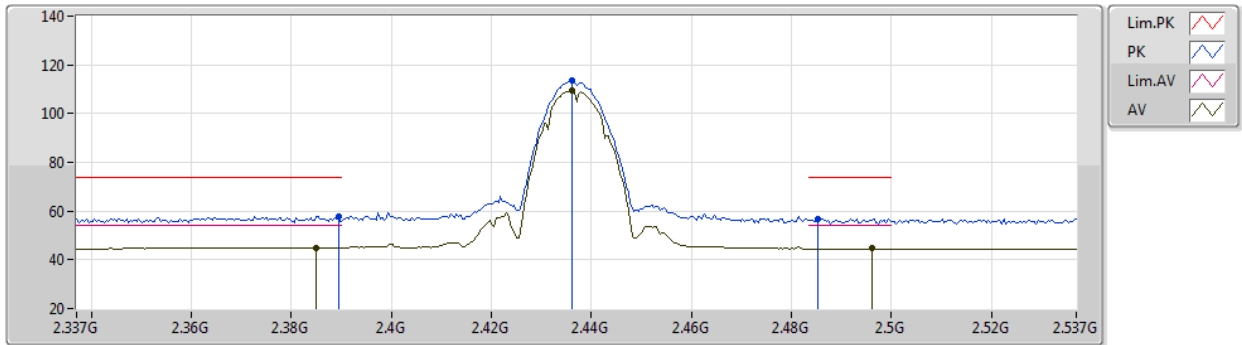
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Setting 22
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82402G	53.22	74.00	-20.78	48.54	3	Horizontal	136	1.80	-	31.02	5.33	31.67
AV	4.82405G	50.07	54.00	-3.93	45.39	3	Horizontal	136	1.80	-	31.02	5.33	31.67

802.11b_Nss1,(1Mbps)_2TX

12/05/2020

2437MHz_TX



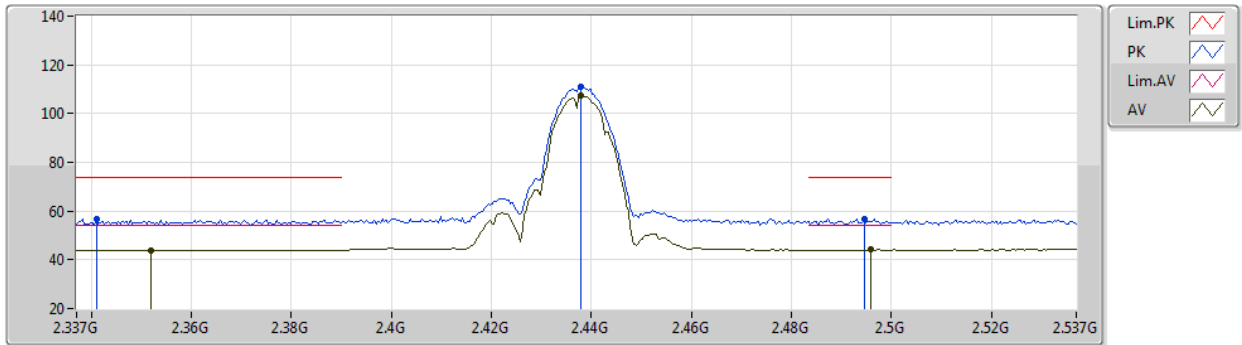
EUT Z_2TX
Setting 20
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	57.82	74.00	-16.18	25.81	3	Vertical	360	2.22	-	28.28	3.73	-
AV	2.385G	45.08	54.00	-8.92	13.08	3	Vertical	360	2.22	-	28.27	3.73	-
PK	2.4362G	113.47	Inf	-Inf	81.30	3	Vertical	360	2.22	-	28.41	3.76	-
AV	2.4362G	109.64	Inf	-Inf	77.47	3	Vertical	360	2.22	-	28.41	3.76	-
PK	2.4854G	56.94	74.00	-17.06	24.59	3	Vertical	360	2.22	-	28.56	3.79	-
AV	2.4962G	44.92	54.00	-9.08	12.53	3	Vertical	360	2.22	-	28.59	3.80	-

802.11b_Nss1,(1Mbps)_2TX

12/05/2020

2437MHz_TX



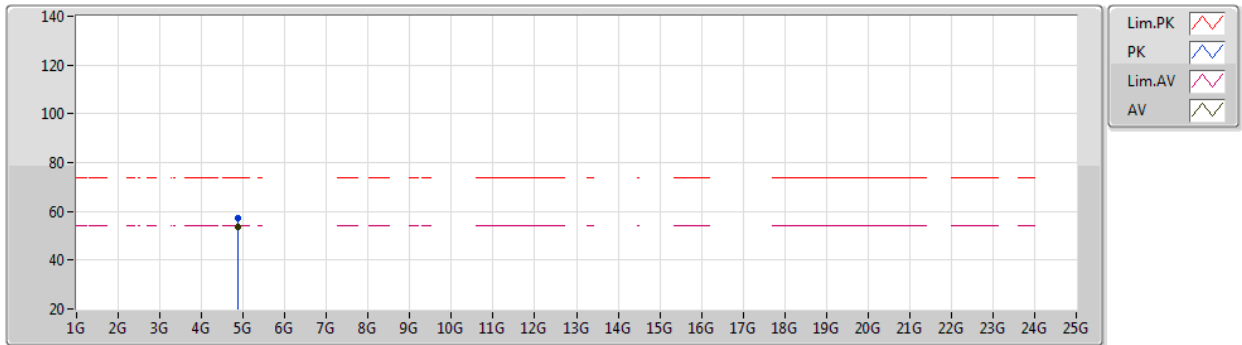
EUT Z_2TX
Setting 20
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.341G	56.92	74.00	-17.08	25.04	3	Horizontal	256	2.80	-	28.18	3.70	-
AV	2.3518G	44.01	54.00	-9.99	12.10	3	Horizontal	256	2.80	-	28.20	3.71	-
PK	2.4378G	111.26	Inf	-Inf	79.09	3	Horizontal	256	2.80	-	28.41	3.76	-
AV	2.4378G	107.25	Inf	-Inf	75.08	3	Horizontal	256	2.80	-	28.41	3.76	-
PK	2.4946G	56.91	74.00	-17.09	24.53	3	Horizontal	256	2.80	-	28.58	3.80	-
AV	2.4958G	44.08	54.00	-9.92	11.69	3	Horizontal	256	2.80	-	28.59	3.80	-

802.11b_Nss1,(1Mbps)_2TX

12/05/2020

2437MHz_TX



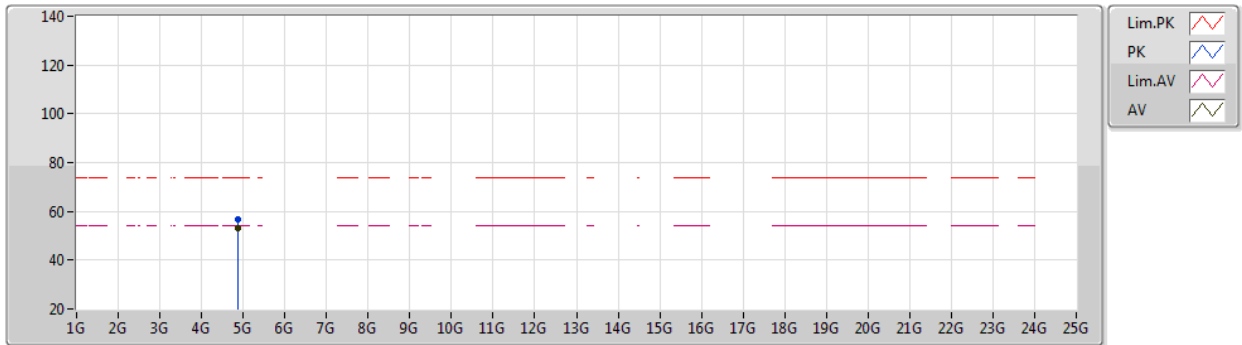
EUT Z_2TX
Setting 20
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.87402G	57.13	74.00	-16.87	51.68	3	Vertical	20	2.06	-	33.65	6.58	34.78	
AV	4.87404G	53.59	54.00	-0.41	48.14	3	Vertical	20	2.06	-	33.65	6.58	34.78	

802.11b_Nss1,(1Mbps)_2TX

12/05/2020

2437MHz_TX



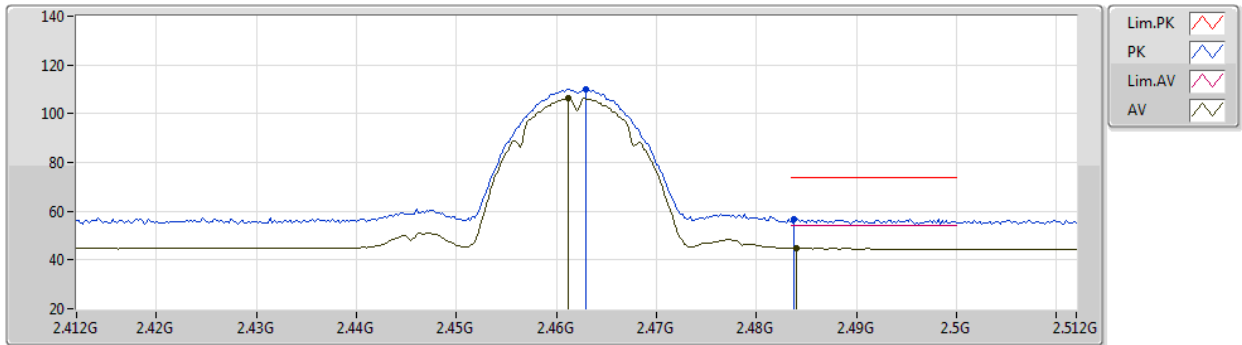
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Setting 20
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87401G	56.96	74.00	-17.04	51.51	3	Horizontal	17	2.06	-	33.65	6.58	34.78
AV	4.87404G	53.00	54.00	-1.00	47.55	3	Horizontal	17	2.06	-	33.65	6.58	34.78

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2462MHz_TX



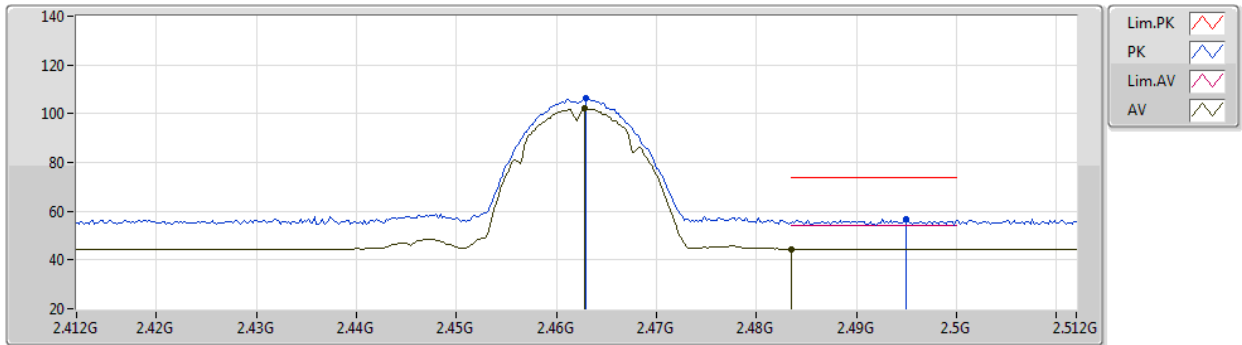
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Setting 18
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	110.12	Inf	-Inf	78.68	3	Vertical	253	2.26	-	27.41	4.03	-
AV	2.4612G	106.30	Inf	-Inf	74.85	3	Vertical	253	2.26	-	27.42	4.03	-
PK	2.4838G	56.87	74.00	-17.13	25.48	3	Vertical	253	2.26	-	27.35	4.04	-
AV	2.484G	44.80	54.00	-9.20	13.41	3	Vertical	253	2.26	-	27.35	4.04	-

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2462MHz_TX



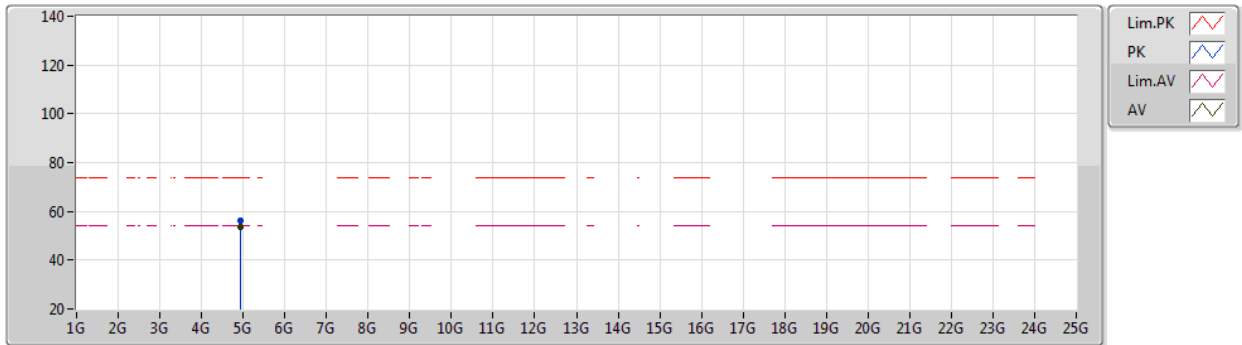
EUT_Z_2TX
Setting 18
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	106.13	Inf	-Inf	74.69	3	Horizontal	150	1.22	-	27.41	4.03	-
AV	2.4628G	102.16	Inf	-Inf	70.72	3	Horizontal	150	1.22	-	27.41	4.03	-
PK	2.495G	56.85	74.00	-17.15	25.48	3	Horizontal	150	1.22	-	27.32	4.05	-
AV	2.4835G	44.43	54.00	-9.57	13.04	3	Horizontal	150	1.22	-	27.35	4.04	-

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2462MHz_TX



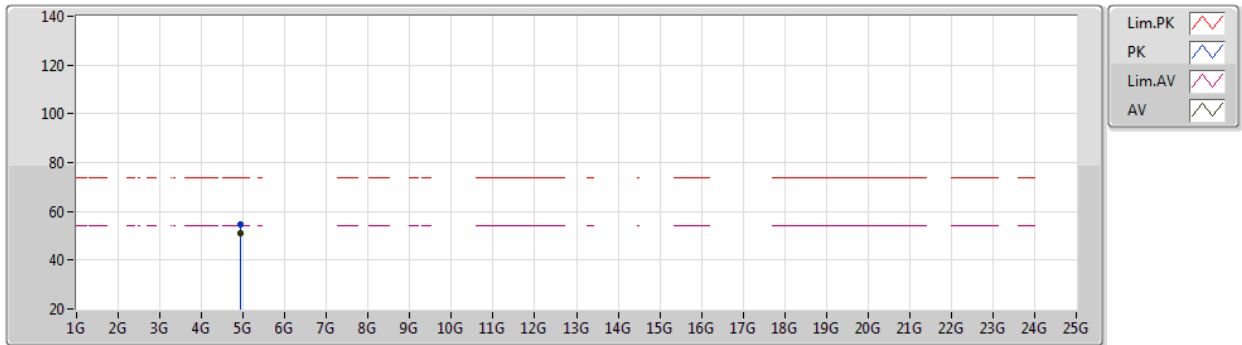
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Setting 18
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9241G	56.46	74.00	-17.54	51.39	3	Vertical	156	2.58	-	31.20	5.48	31.61
AV	4.92408G	53.74	54.00	-0.26	48.67	3	Vertical	156	2.58	-	31.20	5.48	31.61

802.11b_Nss1,(1Mbps)_2TX

18/05/2020

2462MHz_TX



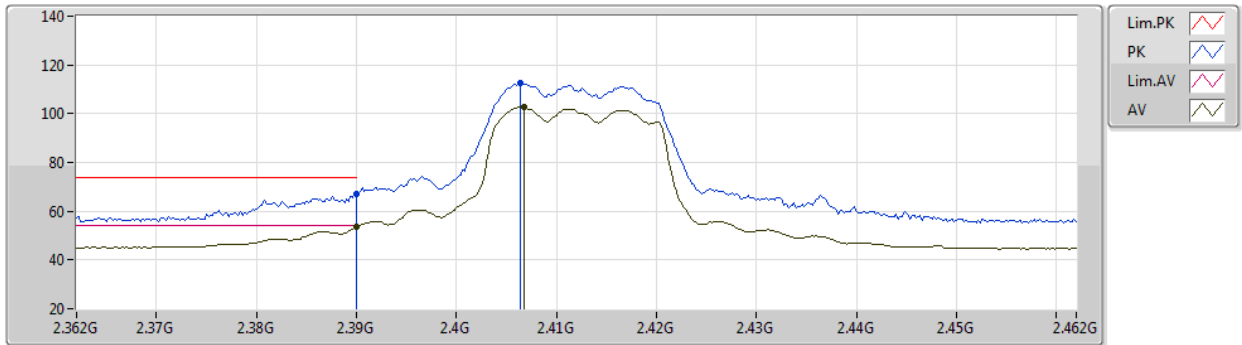
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Setting 18
06-E-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92406G	54.61	74.00	-19.39	49.54	3	Horizontal	135	2.33	-	31.20	5.48	31.61
AV	4.92404G	50.93	54.00	-3.07	45.86	3	Horizontal	135	2.33	-	31.20	5.48	31.61

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2412MHz_TX



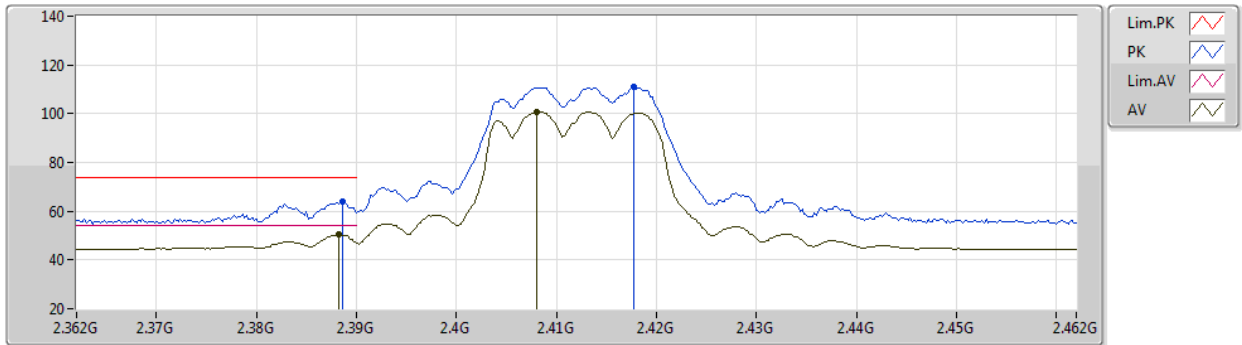
EUT Z_2TX
Setting 17.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	66.98	74.00	-7.02	34.97	3	Vertical	360	2.75	-	28.28	3.73	-
AV	2.39G	53.59	54.00	-0.41	21.58	3	Vertical	360	2.75	-	28.28	3.73	-
PK	2.4064G	112.69	Inf	-Inf	80.63	3	Vertical	360	2.75	-	28.32	3.74	-
AV	2.4068G	102.62	Inf	-Inf	70.56	3	Vertical	360	2.75	-	28.32	3.74	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2412MHz_TX



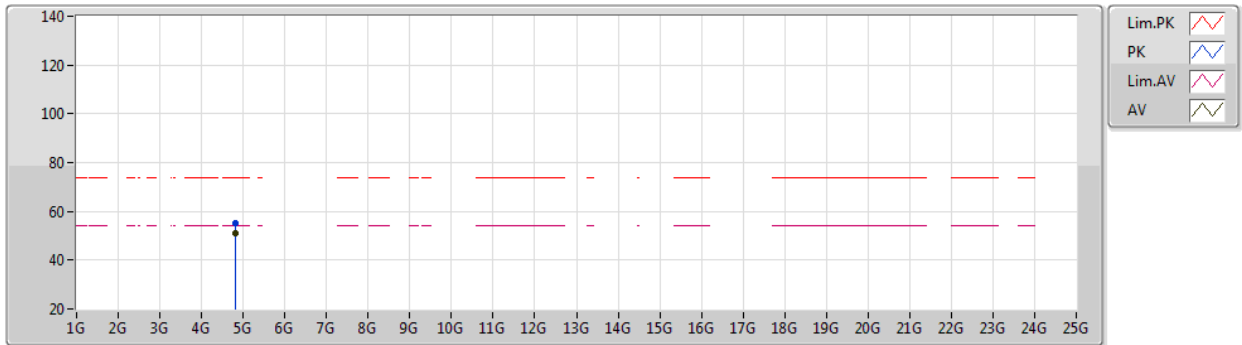
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Setting 17.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	63.93	74.00	-10.07	31.92	3	Horizontal	262	2.85	-	28.28	3.73	-
AV	2.3882G	50.37	54.00	-3.63	18.36	3	Horizontal	262	2.85	-	28.28	3.73	-
PK	2.4178G	110.83	Inf	-Inf	78.73	3	Horizontal	262	2.85	-	28.35	3.75	-
AV	2.408G	100.77	Inf	-Inf	68.71	3	Horizontal	262	2.85	-	28.32	3.74	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2412MHz_TX



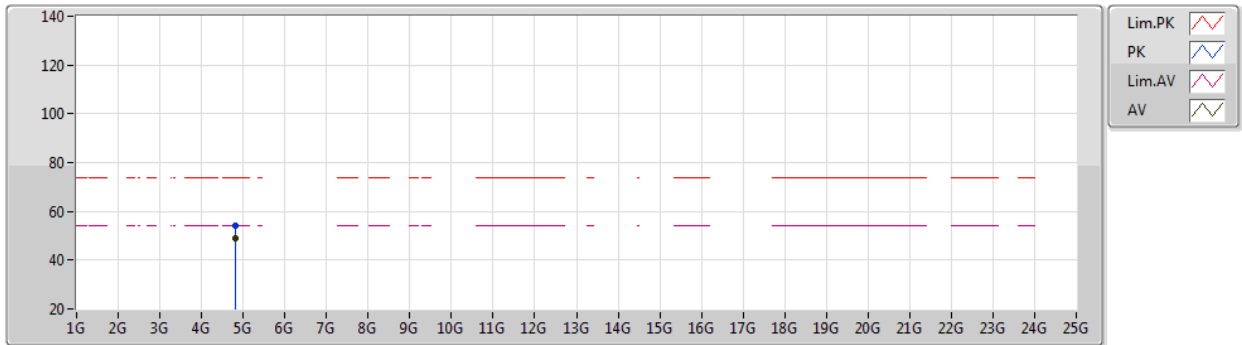
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Setting 17.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82396G	55.04	74.00	-18.96	49.74	3	Vertical	168	2.26	-	33.55	6.57	34.82
AV	4.8241G	50.92	54.00	-3.08	45.62	3	Vertical	168	2.26	-	33.55	6.57	34.82

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2412MHz_TX



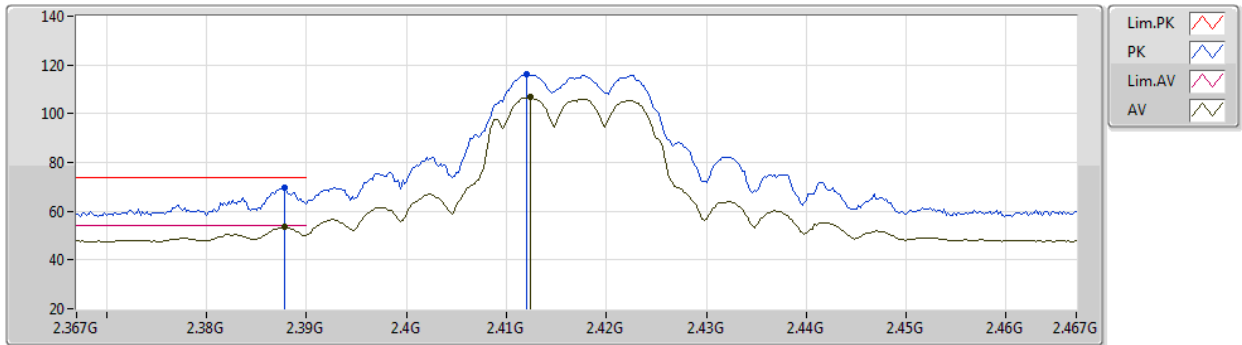
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Setting 17.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82417G	53.95	74.00	-20.05	48.65	3	Horizontal	3	2.25	-	33.55	6.57	34.82
AV	4.82407G	48.90	54.00	-5.10	43.60	3	Horizontal	3	2.25	-	33.55	6.57	34.82

802.11g_Nss1,(6Mbps)_2TX

13/05/2020

2417MHz_TX



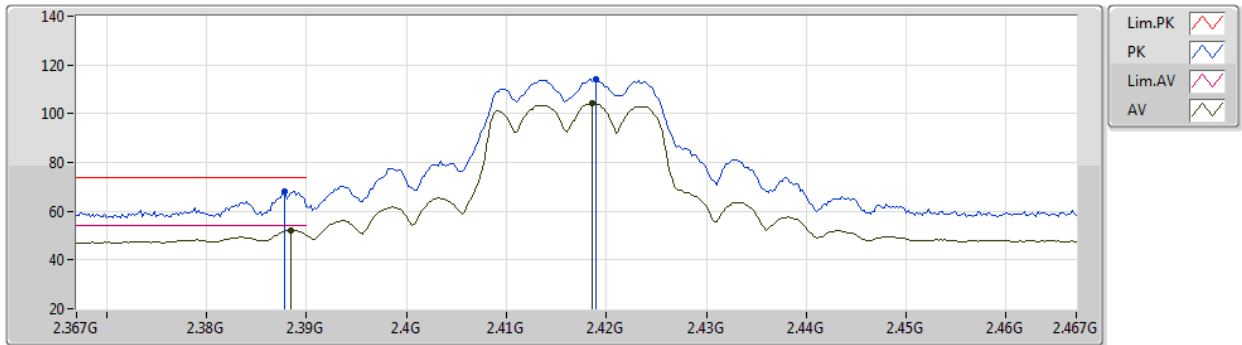
EUT_Z_2TX
Setting 20.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3878G	69.83	74.00	-4.17	38.07	3	Vertical	140	1.21	-	28.26	3.50	-
AV	2.3878G	53.53	54.00	-0.47	21.77	3	Vertical	140	1.21	-	28.26	3.50	-
PK	2.412G	116.16	Inf	-Inf	84.31	3	Vertical	140	1.21	-	28.34	3.51	-
AV	2.4124G	106.67	Inf	-Inf	74.82	3	Vertical	140	1.21	-	28.34	3.51	-

802.11g_Nss1,(6Mbps)_2TX

13/05/2020

2417MHz_TX



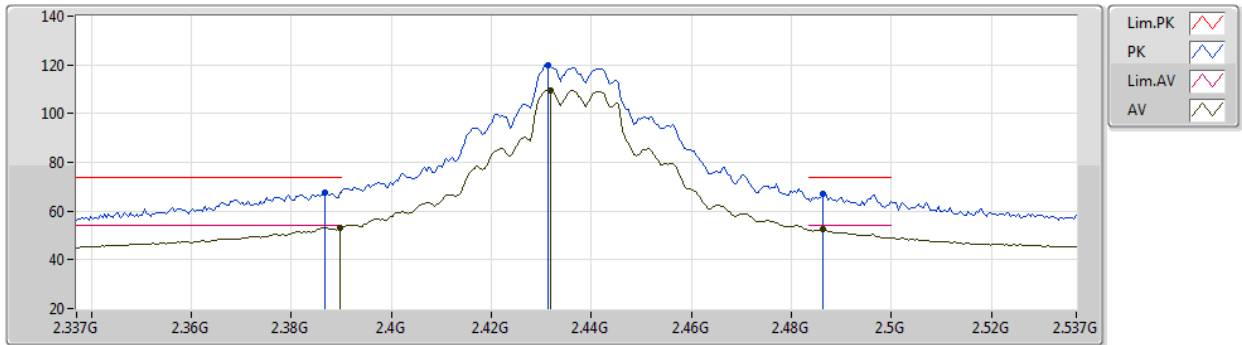
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Setting 20.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3878G	68.23	74.00	-5.77	36.47	3	Horizontal	106	1.76	-	28.26	3.50	-
AV	2.3884G	52.26	54.00	-1.74	20.49	3	Horizontal	106	1.76	-	28.27	3.50	-
PK	2.419G	114.33	Inf	-Inf	82.45	3	Horizontal	106	1.76	-	28.36	3.52	-
AV	2.4186G	104.08	Inf	-Inf	72.20	3	Horizontal	106	1.76	-	28.36	3.52	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2437MHz_TX



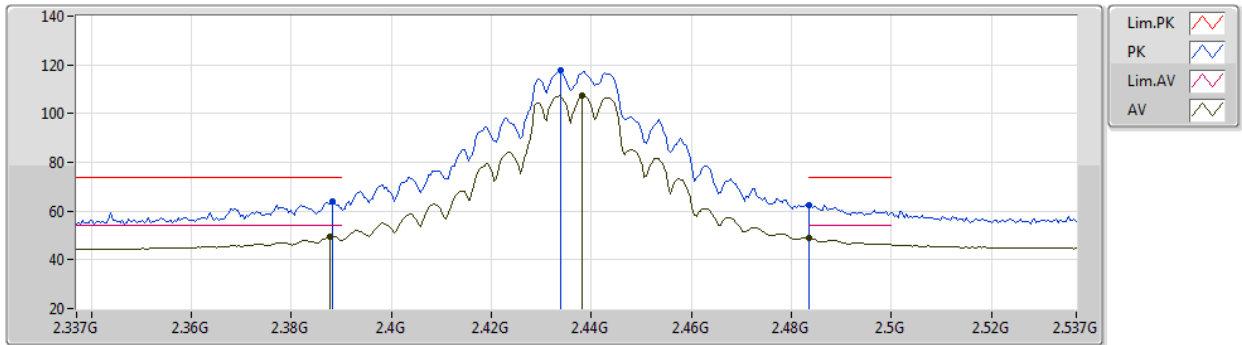
EUT Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3866G	67.76	74.00	-6.24	35.76	3	Vertical	360	2.12	-	28.27	3.73	-
AV	2.3898G	53.15	54.00	-0.85	21.14	3	Vertical	360	2.12	-	28.28	3.73	-
PK	2.4314G	120.04	Inf	-Inf	87.89	3	Vertical	360	2.12	-	28.39	3.76	-
AV	2.4318G	109.73	Inf	-Inf	77.57	3	Vertical	360	2.12	-	28.40	3.76	-
PK	2.4862G	66.94	74.00	-7.06	34.59	3	Vertical	360	2.12	-	28.56	3.79	-
AV	2.4862G	52.33	54.00	-1.67	19.98	3	Vertical	360	2.12	-	28.56	3.79	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2437MHz_TX



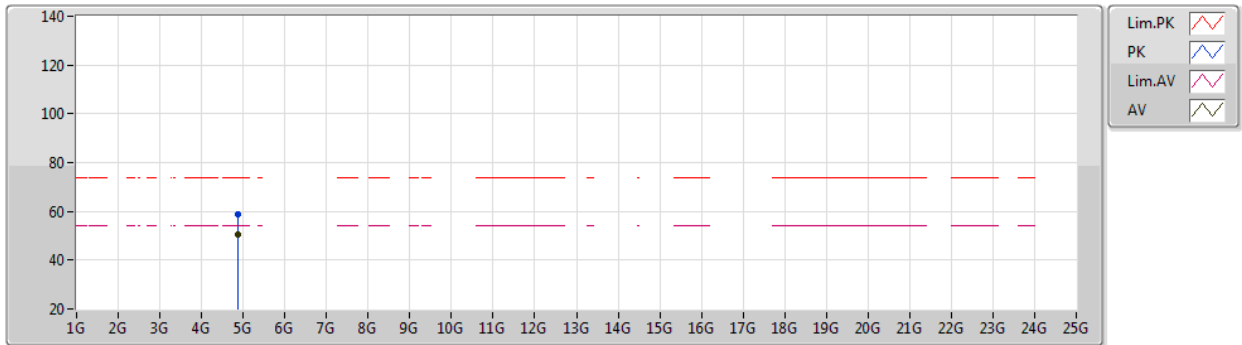
EUT Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3882G	64.05	74.00	-9.95	32.04	3	Horizontal	265	2.83	-	28.28	3.73	-
AV	2.3878G	49.65	54.00	-4.35	17.64	3	Horizontal	265	2.83	-	28.28	3.73	-
PK	2.4338G	117.73	Inf	-Inf	85.57	3	Horizontal	265	2.83	-	28.40	3.76	-
AV	2.4382G	107.42	Inf	-Inf	75.25	3	Horizontal	265	2.83	-	28.41	3.76	-
PK	2.4835G	62.42	74.00	-11.58	30.08	3	Horizontal	265	2.83	-	28.55	3.79	-
AV	2.4835G	48.91	54.00	-5.09	16.57	3	Horizontal	265	2.83	-	28.55	3.79	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2437MHz_TX



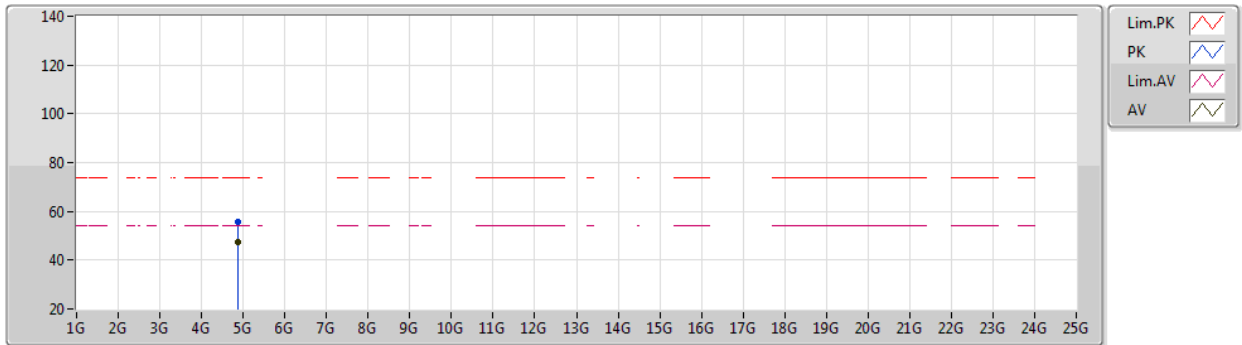
EUT Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8742G	58.79	74.00	-15.21	53.34	3	Vertical	25	1.14	-	33.65	6.58	34.78
AV	4.87411G	50.38	54.00	-3.62	44.93	3	Vertical	25	1.14	-	33.65	6.58	34.78

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2437MHz_TX



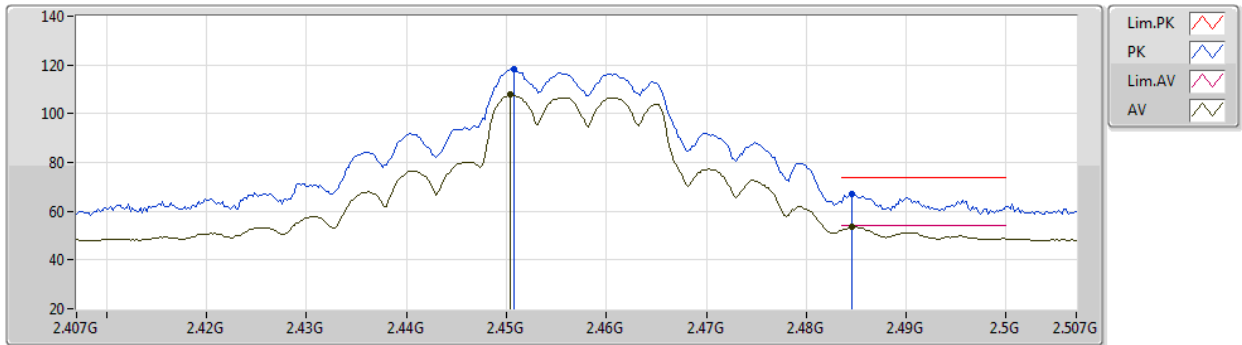
EUT_Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87438G	55.78	74.00	-18.22	50.33	3	Horizontal	11	2.10	-	33.65	6.58	34.78
AV	4.87408G	47.51	54.00	-6.49	42.06	3	Horizontal	11	2.10	-	33.65	6.58	34.78

802.11g_Nss1,(6Mbps)_2TX

13/05/2020

2457MHz_TX



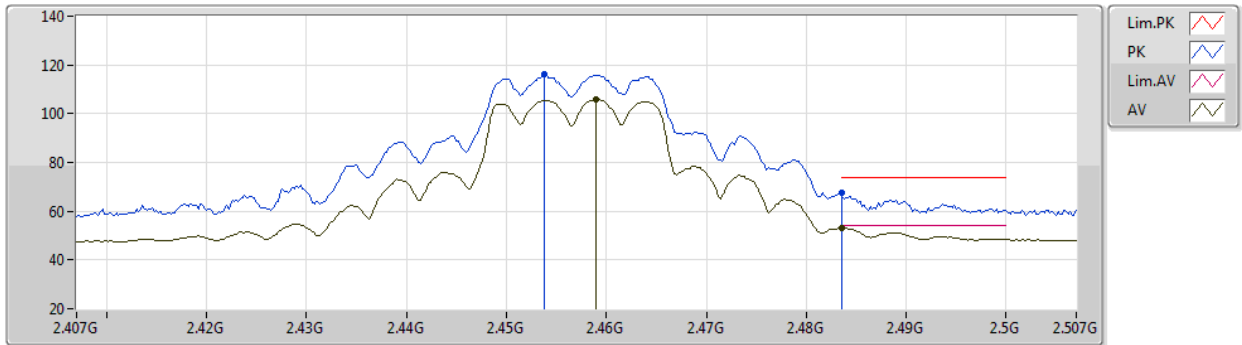
EUT Z_2TX
Setting 22.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4508G	118.23	Inf	-Inf	86.23	3	Vertical	212	1.79	-	28.45	3.55	-
AV	2.4504G	107.69	Inf	-Inf	75.69	3	Vertical	212	1.79	-	28.45	3.55	-
PK	2.4846G	67.22	74.00	-6.78	35.09	3	Vertical	212	1.79	-	28.55	3.58	-
AV	2.4846G	53.45	54.00	-0.55	21.32	3	Vertical	212	1.79	-	28.55	3.58	-

802.11g_Nss1,(6Mbps)_2TX

13/05/2020

2457MHz_TX



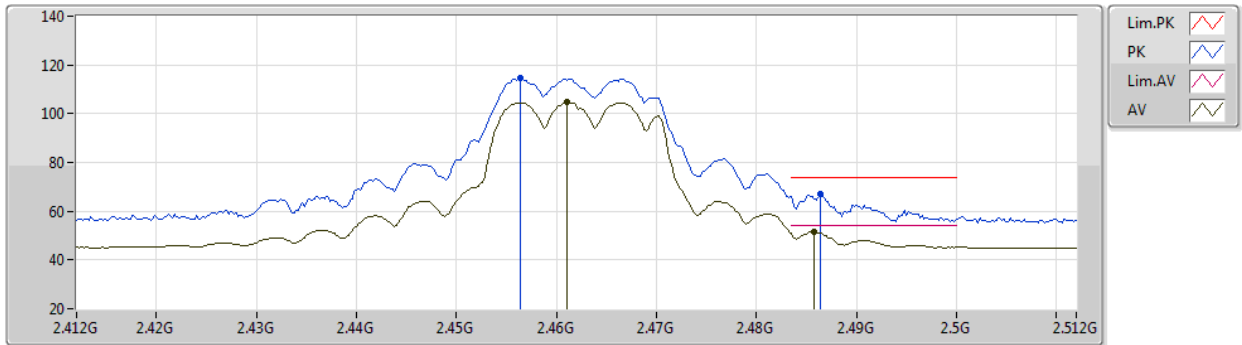
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Setting 22.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4538G	116.03	Inf	-Inf	84.02	3	Horizontal	104	2.97	-	28.46	3.55	-
AV	2.459G	105.77	Inf	-Inf	73.73	3	Horizontal	104	2.97	-	28.48	3.56	-
PK	2.4835G	67.36	74.00	-6.64	35.23	3	Horizontal	104	2.97	-	28.55	3.58	-
AV	2.4836G	53.21	54.00	-0.79	21.08	3	Horizontal	104	2.97	-	28.55	3.58	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2462MHz_TX



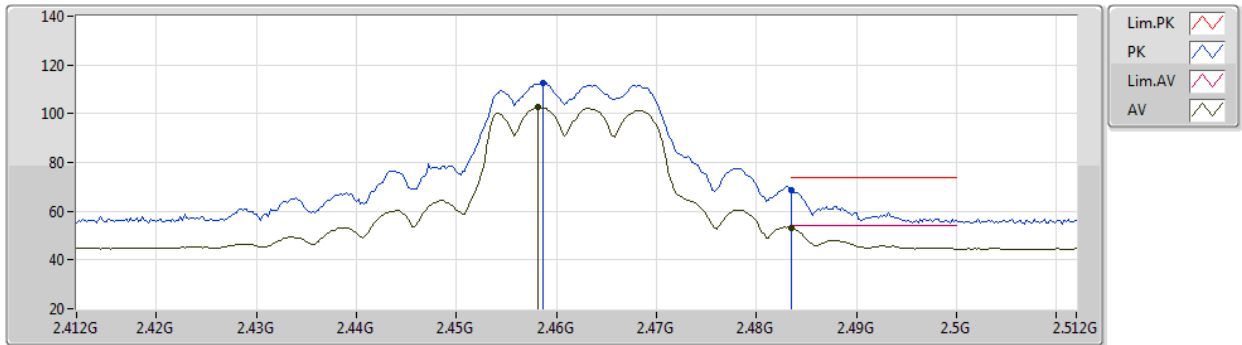
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Setting 19.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4564G	114.55	Inf	-Inf	82.31	3	Vertical	0	1.23	-	28.47	3.77	-
AV	2.461G	104.70	Inf	-Inf	72.44	3	Vertical	0	1.23	-	28.48	3.78	-
PK	2.4864G	66.88	74.00	-7.12	34.53	3	Vertical	0	1.23	-	28.56	3.79	-
AV	2.4858G	51.69	54.00	-2.31	19.34	3	Vertical	0	1.23	-	28.56	3.79	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2462MHz_TX



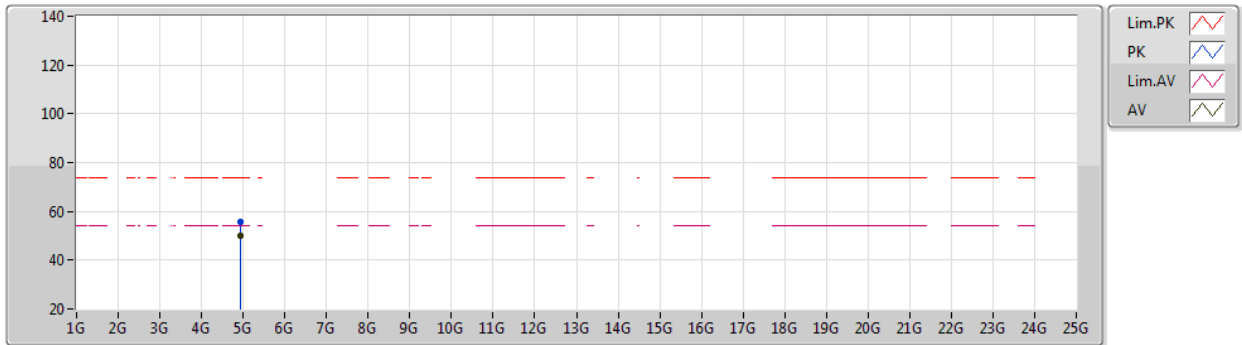
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Setting 19.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4586G	112.65	Inf	-Inf	80.39	3	Horizontal	265	2.80	-	28.48	3.78	-
AV	2.4582G	102.52	Inf	-Inf	70.28	3	Horizontal	265	2.80	-	28.47	3.77	-
PK	2.4835G	68.62	74.00	-5.38	36.28	3	Horizontal	265	2.80	-	28.55	3.79	-
AV	2.4835G	53.16	54.00	-0.84	20.82	3	Horizontal	265	2.80	-	28.55	3.79	-

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2462MHz_TX



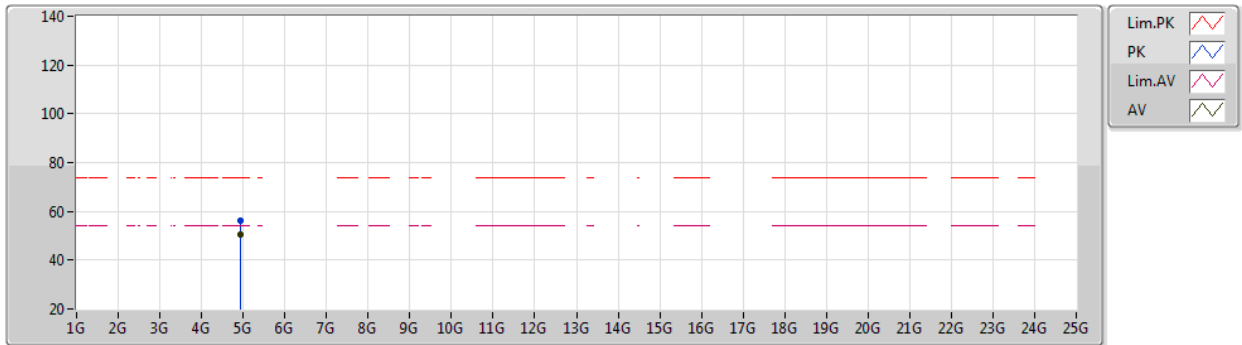
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Setting 19.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.92403G	55.45	74.00	-18.55	49.84	3	Vertical	276	2.68	-	33.75	6.60	34.74	
AV	4.92409G	50.07	54.00	-3.93	44.46	3	Vertical	276	2.68	-	33.75	6.60	34.74	

802.11g_Nss1,(6Mbps)_2TX

12/05/2020

2462MHz_TX



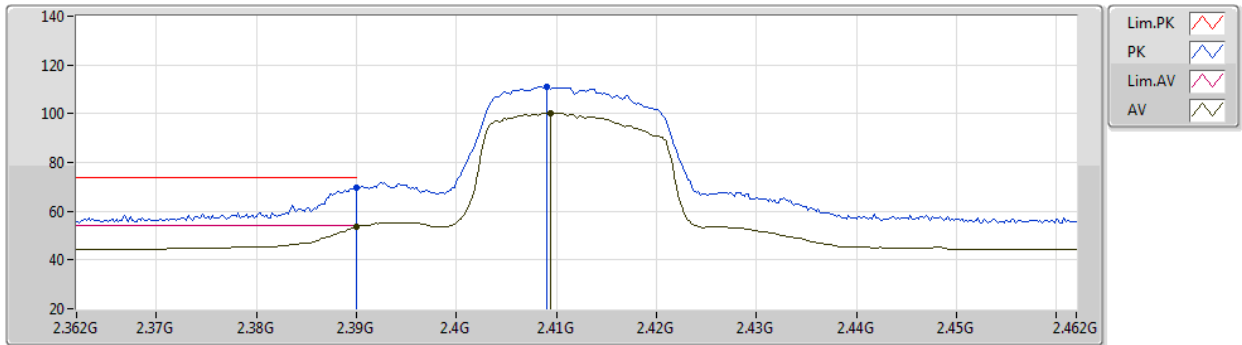
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Setting 19.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92422G	56.10	74.00	-17.90	50.49	3	Horizontal	142	2.50	-	33.75	6.60	34.74
AV	4.92407G	50.54	54.00	-3.46	44.93	3	Horizontal	142	2.50	-	33.75	6.60	34.74

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2412MHz_TX



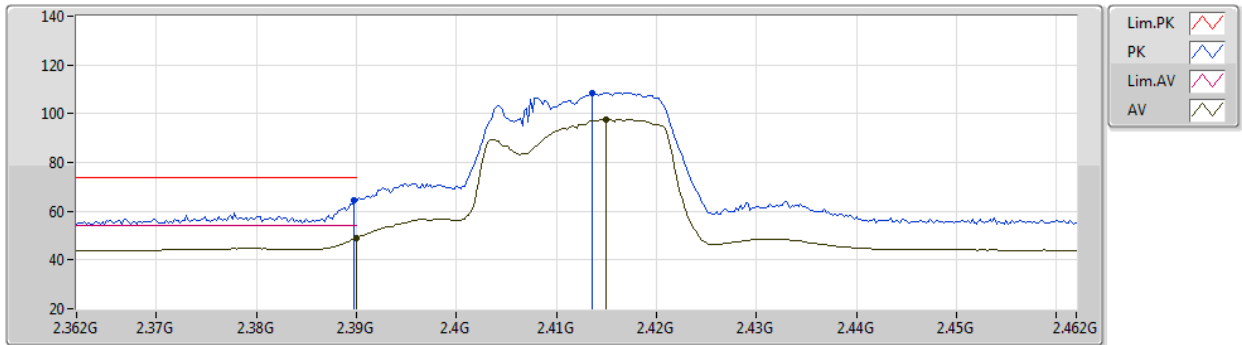
EUT Z_2TX
Setting 16
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	69.55	74.00	-4.45	37.54	3	Vertical	357	2.75	-	28.28	3.73	-
AV	2.39G	53.72	54.00	-0.28	21.71	3	Vertical	357	2.75	-	28.28	3.73	-
PK	2.409G	111.13	Inf	-Inf	79.05	3	Vertical	357	2.75	-	28.33	3.75	-
AV	2.4094G	100.33	Inf	-Inf	68.25	3	Vertical	357	2.75	-	28.33	3.75	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2412MHz_TX



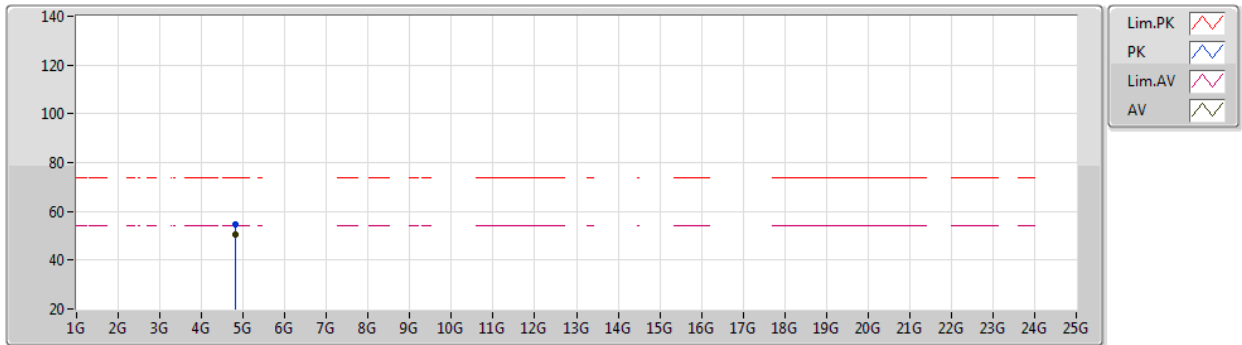
EUT Z_2TX
Setting 16
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	64.27	74.00	-9.73	32.26	3	Horizontal	263	2.85	-	28.28	3.73	-
AV	2.39G	49.19	54.00	-4.81	17.18	3	Horizontal	263	2.85	-	28.28	3.73	-
PK	2.4136G	108.70	Inf	-Inf	76.61	3	Horizontal	263	2.85	-	28.34	3.75	-
AV	2.415G	97.68	Inf	-Inf	65.59	3	Horizontal	263	2.85	-	28.34	3.75	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2412MHz_TX



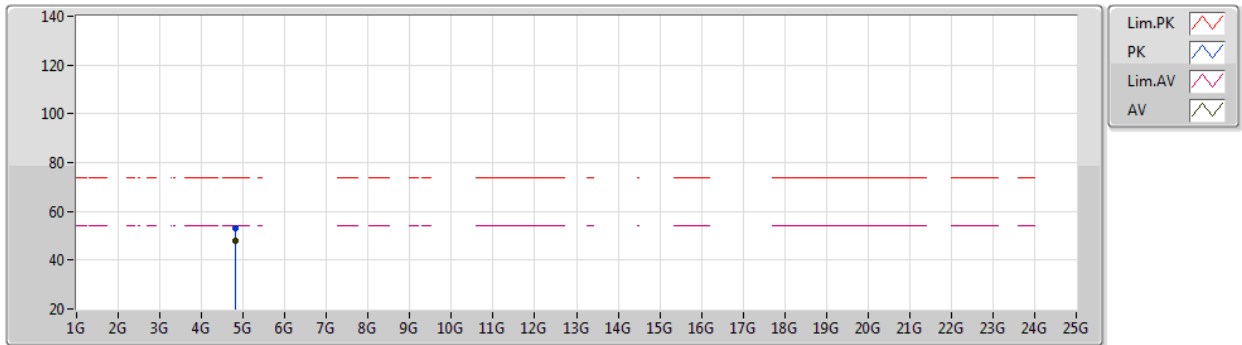
EUT Z_2TX
Setting 16
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.82405G	54.61	74.00	-19.39	49.31	3	Vertical	279	2.78	-	33.55	6.57	34.82	
AV	4.82408G	50.52	54.00	-3.48	45.22	3	Vertical	279	2.78	-	33.55	6.57	34.82	

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2412MHz_TX



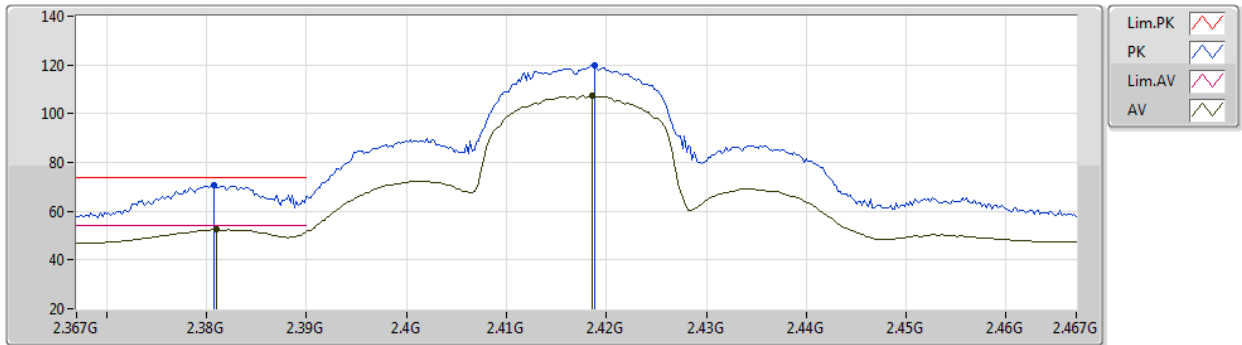
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Setting 16
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82422G	53.24	74.00	-20.76	47.94	3	Horizontal	134	2.86	-	33.55	6.57	34.82
AV	4.82404G	47.95	54.00	-6.05	42.65	3	Horizontal	134	2.86	-	33.55	6.57	34.82

VHT20_Nss1,(MCS0)_2TX

13/05/2020

2417MHz_TX



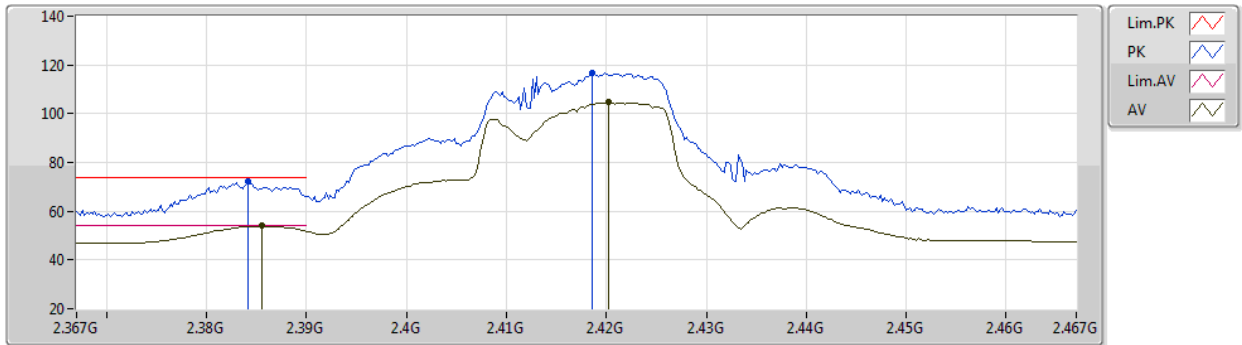
EUT_Z_2TX
Setting 22.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3808G	70.79	74.00	-3.21	39.05	3	Vertical	140	1.17	-	28.24	3.50	-
AV	2.381G	52.39	54.00	-1.61	20.65	3	Vertical	140	1.17	-	28.24	3.50	-
PK	2.4188G	119.74	Inf	-Inf	87.86	3	Vertical	140	1.17	-	28.36	3.52	-
AV	2.4186G	107.37	Inf	-Inf	75.49	3	Vertical	140	1.17	-	28.36	3.52	-

VHT20_Nss1,(MCS0)_2TX

13/05/2020

2417MHz_TX



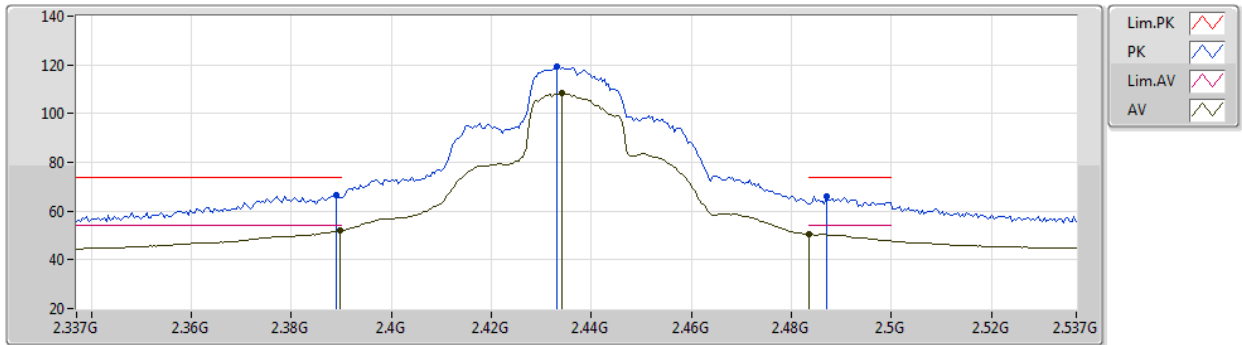
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Setting 22.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3842G	72.30	74.00	-1.70	40.55	3	Horizontal	108	2.02	-	28.25	3.50	-
AV	2.3856G	53.89	54.00	-0.11	22.13	3	Horizontal	108	2.02	-	28.26	3.50	-
PK	2.4186G	116.62	Inf	-Inf	84.74	3	Horizontal	108	2.02	-	28.36	3.52	-
AV	2.4202G	104.71	Inf	-Inf	72.83	3	Horizontal	108	2.02	-	28.36	3.52	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



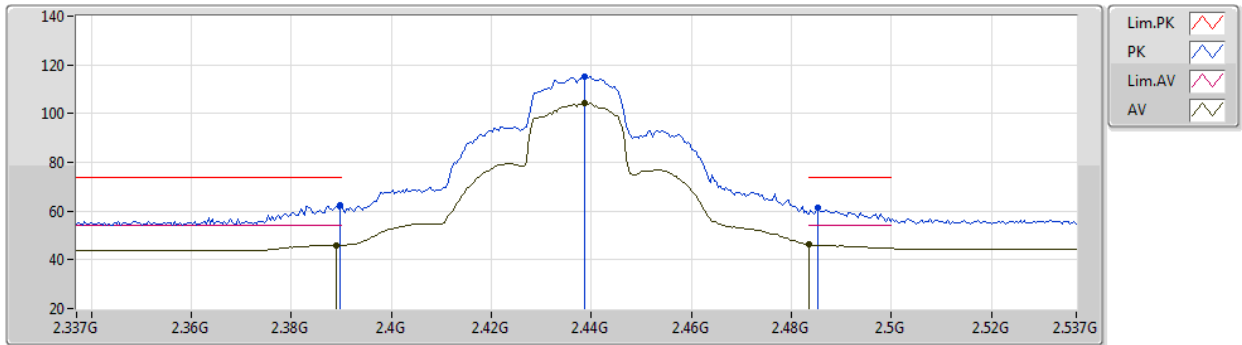
EUT Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	66.77	74.00	-7.23	34.76	3	Vertical	0	2.13	-	28.28	3.73	-
AV	2.3898G	52.03	54.00	-1.97	20.02	3	Vertical	0	2.13	-	28.28	3.73	-
PK	2.433G	119.12	Inf	-Inf	86.96	3	Vertical	0	2.13	-	28.40	3.76	-
AV	2.4342G	108.33	Inf	-Inf	76.17	3	Vertical	0	2.13	-	28.40	3.76	-
PK	2.487G	65.84	74.00	-8.16	33.49	3	Vertical	0	2.13	-	28.56	3.79	-
AV	2.4835G	50.45	54.00	-3.55	18.11	3	Vertical	0	2.13	-	28.55	3.79	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



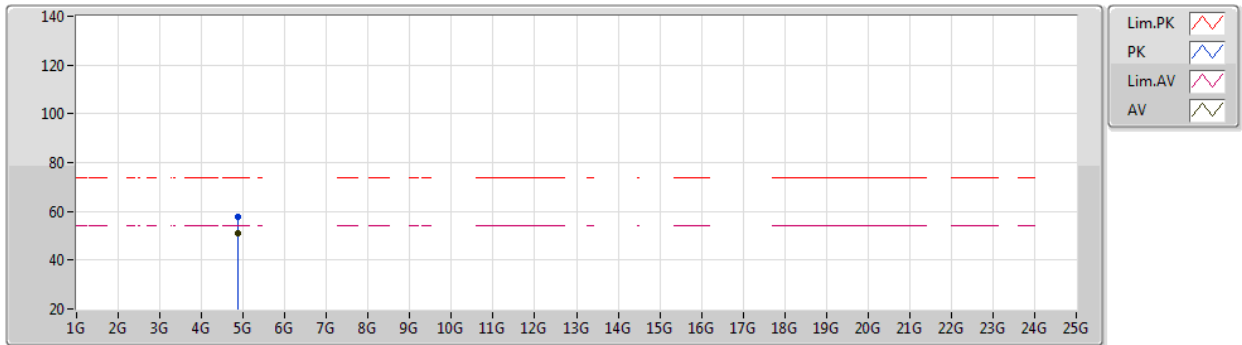
EUT Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	62.52	74.00	-11.48	30.51	3	Horizontal	135	1.68	-	28.28	3.73	-
AV	2.389G	45.97	54.00	-8.03	13.96	3	Horizontal	135	1.68	-	28.28	3.73	-
PK	2.4386G	115.32	Inf	-Inf	83.14	3	Horizontal	135	1.68	-	28.42	3.76	-
AV	2.4386G	104.14	Inf	-Inf	71.96	3	Horizontal	135	1.68	-	28.42	3.76	-
PK	2.4854G	61.14	74.00	-12.86	28.79	3	Horizontal	135	1.68	-	28.56	3.79	-
AV	2.4835G	46.26	54.00	-7.74	13.92	3	Horizontal	135	1.68	-	28.55	3.79	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



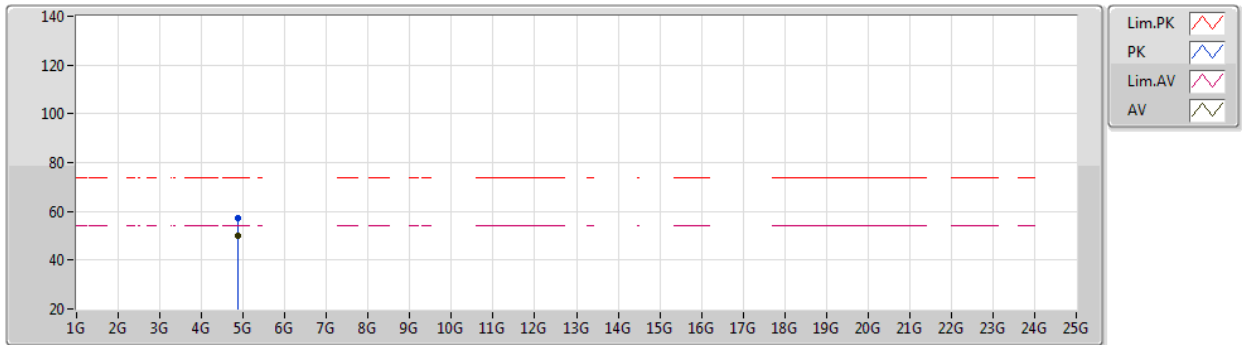
EUT_Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87414G	57.77	74.00	-16.23	52.32	3	Vertical	192	2.64	-	33.65	6.58	34.78
AV	4.87407G	51.05	54.00	-2.95	45.60	3	Vertical	192	2.64	-	33.65	6.58	34.78

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



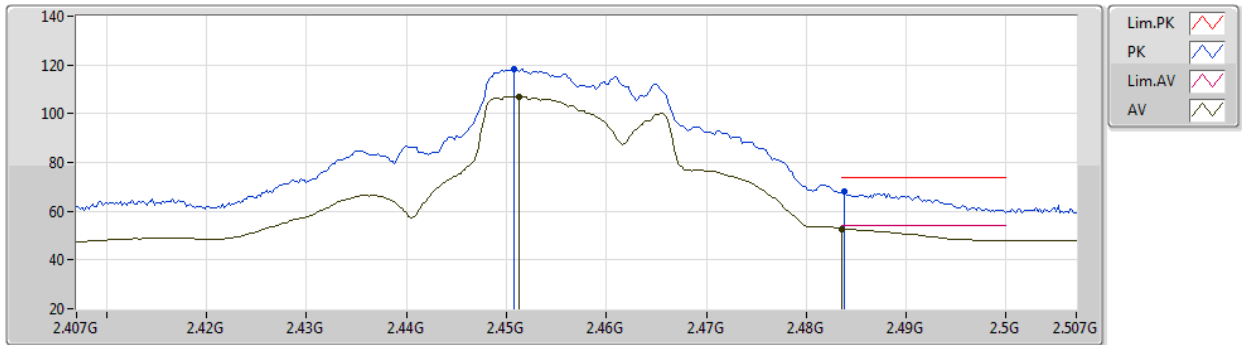
EUT Z_2TX
Setting 27
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.87408G	57.32	74.00	-16.68	51.87	3	Horizontal	134	2.68	-	33.65	6.58	34.78	
AV	4.87407G	50.09	54.00	-3.91	44.64	3	Horizontal	134	2.68	-	33.65	6.58	34.78	

VHT20_Nss1,(MCS0)_2TX

13/05/2020

2457MHz_TX



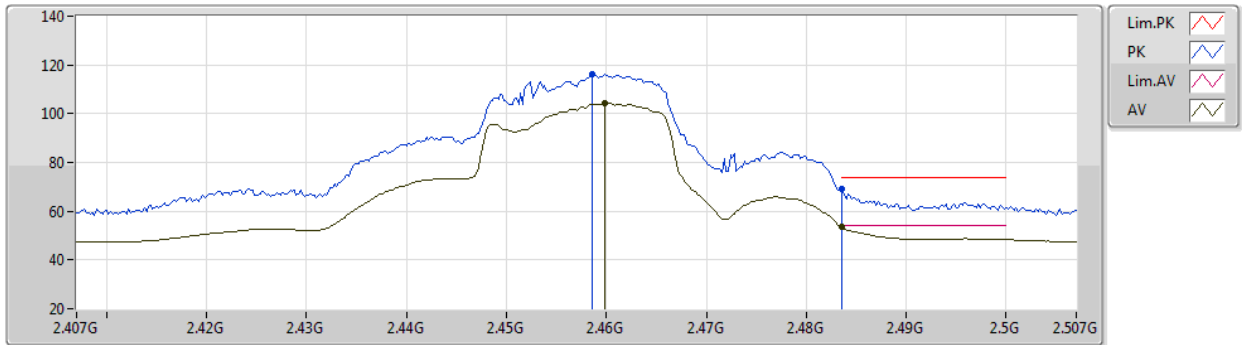
EUT_Z_2TX
Setting 22.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4508G	118.39	Inf	-Inf	86.39	3	Vertical	212	1.80	-	28.45	3.55	-
AV	2.4512G	107.12	Inf	-Inf	75.12	3	Vertical	212	1.80	-	28.45	3.55	-
PK	2.4838G	68.18	74.00	-5.82	36.05	3	Vertical	212	1.80	-	28.55	3.58	-
AV	2.4836G	52.70	54.00	-1.30	20.57	3	Vertical	212	1.80	-	28.55	3.58	-

VHT20_Nss1,(MCS0)_2TX

13/05/2020

2457MHz_TX



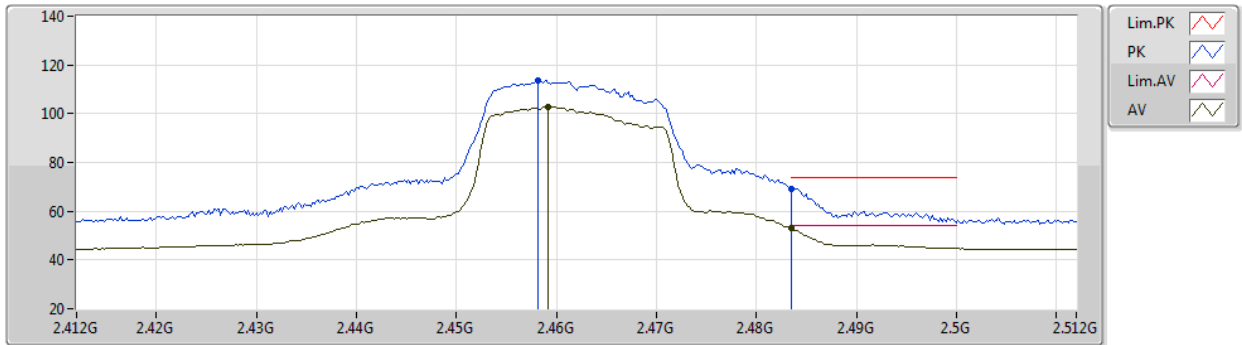
EUT_Z_2TX
Setting 22.5
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4586G	116.42	Inf	-Inf	84.38	3	Horizontal	111	1.89	-	28.48	3.56	-
AV	2.4598G	104.25	Inf	-Inf	72.21	3	Horizontal	111	1.89	-	28.48	3.56	-
PK	2.4835G	69.12	74.00	-4.88	36.99	3	Horizontal	111	1.89	-	28.55	3.58	-
AV	2.4835G	53.62	54.00	-0.38	21.49	3	Horizontal	111	1.89	-	28.55	3.58	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2462MHz_TX



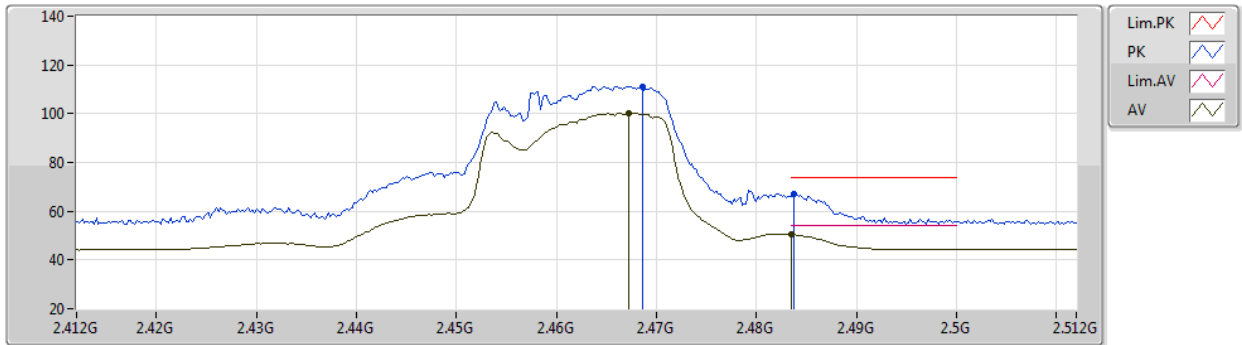
EUT Z_2TX
Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4582G	113.47	Inf	-Inf	81.23	3	Vertical	0	2.30	-	28.47	3.77	-
AV	2.4592G	102.59	Inf	-Inf	70.33	3	Vertical	0	2.30	-	28.48	3.78	-
PK	2.4835G	69.18	74.00	-4.82	36.84	3	Vertical	0	2.30	-	28.55	3.79	-
AV	2.4835G	53.12	54.00	-0.88	20.78	3	Vertical	0	2.30	-	28.55	3.79	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2462MHz_TX



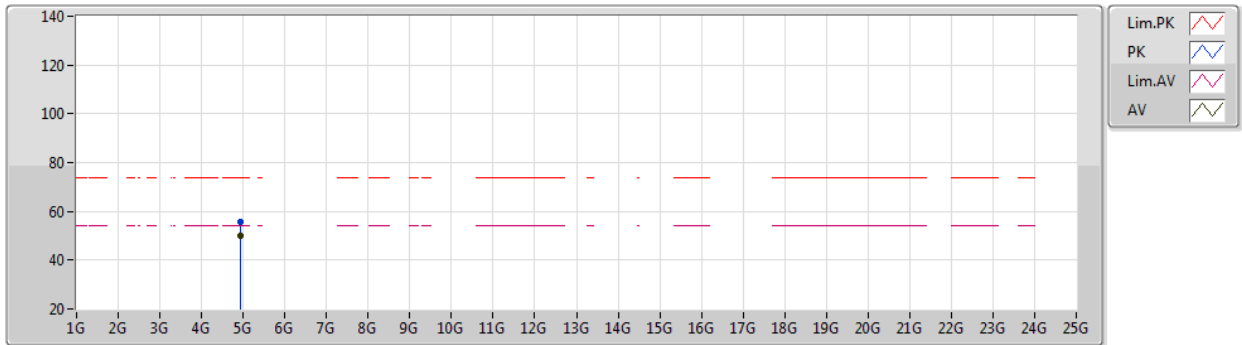
EUT Z_2TX
Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4686G	111.16	Inf	-Inf	78.87	3	Horizontal	264	2.75	-	28.51	3.78	-
AV	2.4672G	100.22	Inf	-Inf	67.94	3	Horizontal	264	2.75	-	28.50	3.78	-
PK	2.4838G	66.94	74.00	-7.06	34.60	3	Horizontal	264	2.75	-	28.55	3.79	-
AV	2.4835G	50.46	54.00	-3.54	18.12	3	Horizontal	264	2.75	-	28.55	3.79	-

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2462MHz_TX



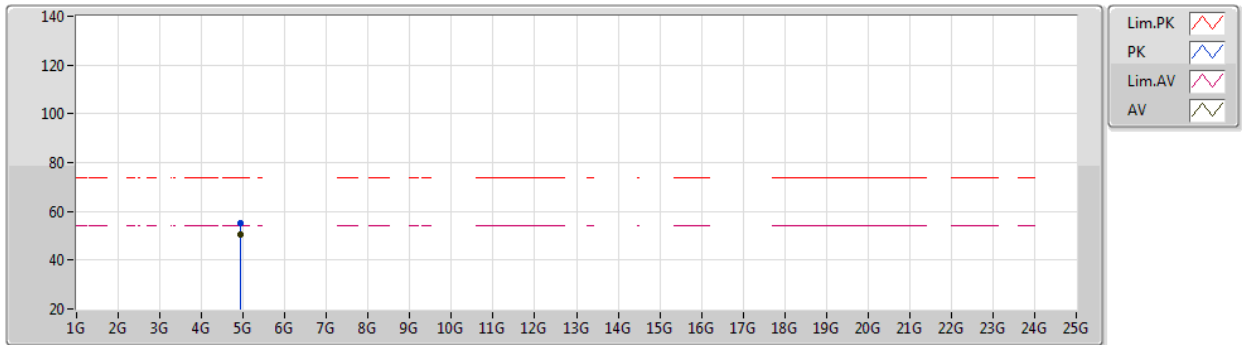
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Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.92413G	55.81	74.00	-18.19	50.20	3	Vertical	192	2.62	-	33.75	6.60	34.74	
AV	4.92409G	50.13	54.00	-3.87	44.52	3	Vertical	192	2.62	-	33.75	6.60	34.74	

VHT20_Nss1,(MCS0)_2TX

12/05/2020

2462MHz_TX



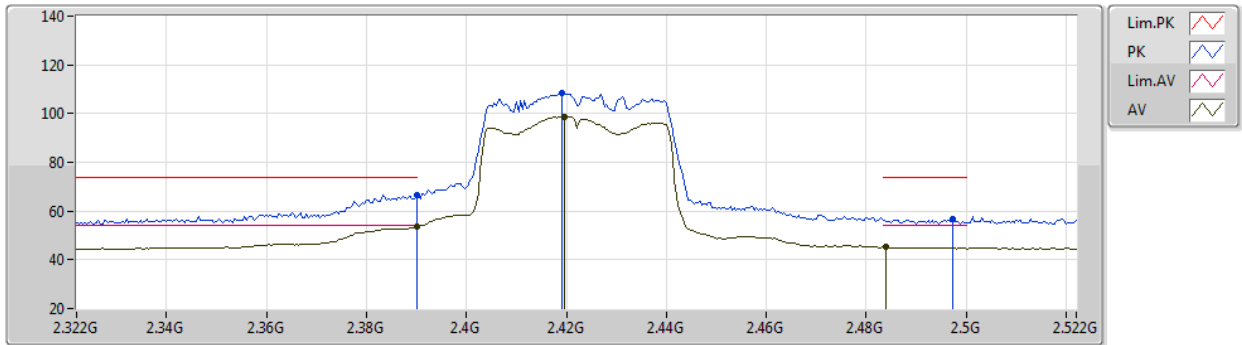
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Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.92412G	55.41	74.00	-18.59	49.80	3	Horizontal	134	2.62	-	33.75	6.60	34.74	
AV	4.92406G	50.49	54.00	-3.51	44.88	3	Horizontal	134	2.62	-	33.75	6.60	34.74	

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2422MHz_TX



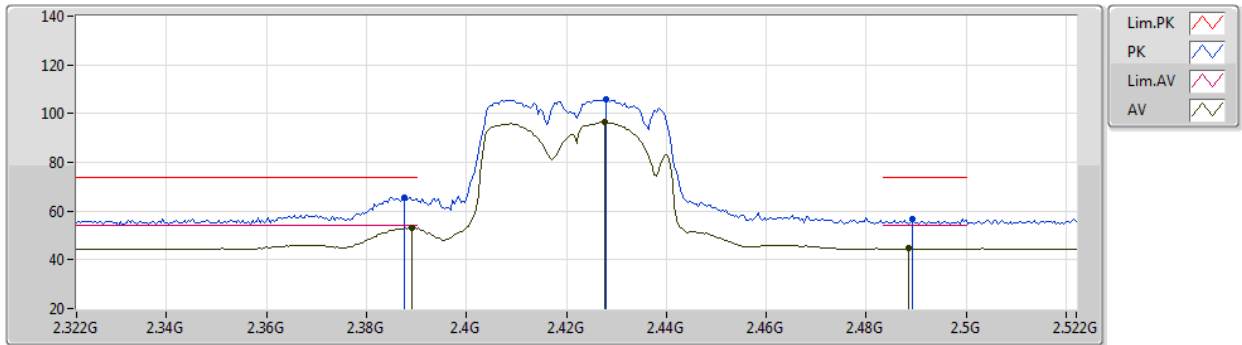
EUT_Z_2TX
Setting 16.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	66.39	74.00	-7.61	34.38	3	Vertical	356	2.69	-	28.28	3.73	-
AV	2.39G	53.74	54.00	-0.26	21.73	3	Vertical	356	2.69	-	28.28	3.73	-
PK	2.4192G	108.50	Inf	-Inf	76.39	3	Vertical	356	2.69	-	28.36	3.75	-
AV	2.4196G	98.85	Inf	-Inf	66.74	3	Vertical	356	2.69	-	28.36	3.75	-
PK	2.4972G	56.98	74.00	-17.02	24.59	3	Vertical	356	2.69	-	28.59	3.80	-
AV	2.484G	45.15	54.00	-8.85	12.81	3	Vertical	356	2.69	-	28.55	3.79	-

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2422MHz_TX

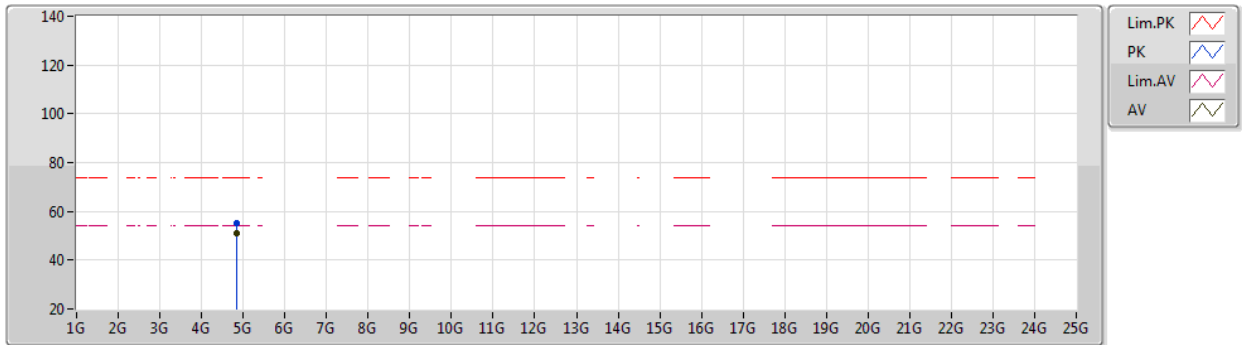

EUT_Z_2TX
Setting 16.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3876G	65.42	74.00	-8.58	33.41	3	Horizontal	265	2.85	-	28.28	3.73	-
AV	2.3892G	53.02	54.00	-0.98	21.01	3	Horizontal	265	2.85	-	28.28	3.73	-
PK	2.428G	105.76	Inf	-Inf	73.62	3	Horizontal	265	2.85	-	28.38	3.76	-
AV	2.4276G	96.36	Inf	-Inf	64.22	3	Horizontal	265	2.85	-	28.38	3.76	-
PK	2.4892G	56.64	74.00	-17.36	24.28	3	Horizontal	265	2.85	-	28.57	3.79	-
AV	2.4884G	44.58	54.00	-9.42	12.22	3	Horizontal	265	2.85	-	28.57	3.79	-

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2422MHz_TX



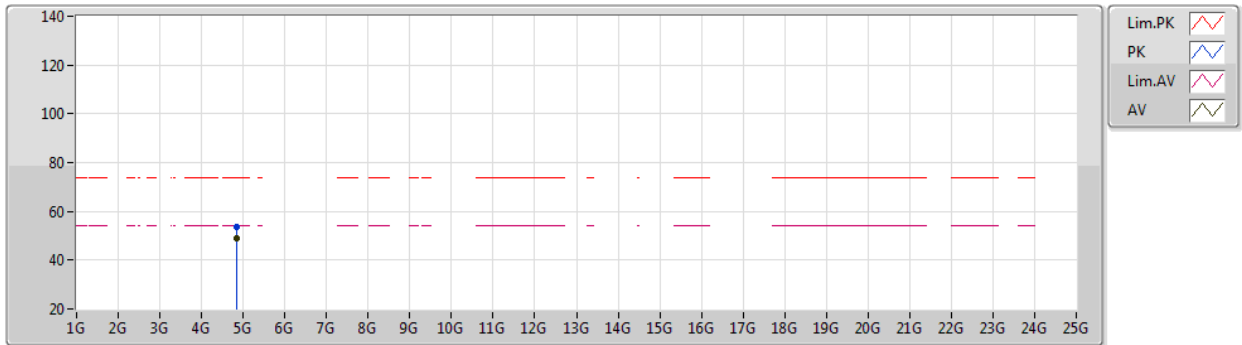
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Setting 16.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.844G	54.98	74.00	-19.02	49.62	3	Vertical	275	2.76	-	33.59	6.57	34.80	
AV	4.8441G	51.25	54.00	-2.75	45.89	3	Vertical	275	2.76	-	33.59	6.57	34.80	

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2422MHz_TX



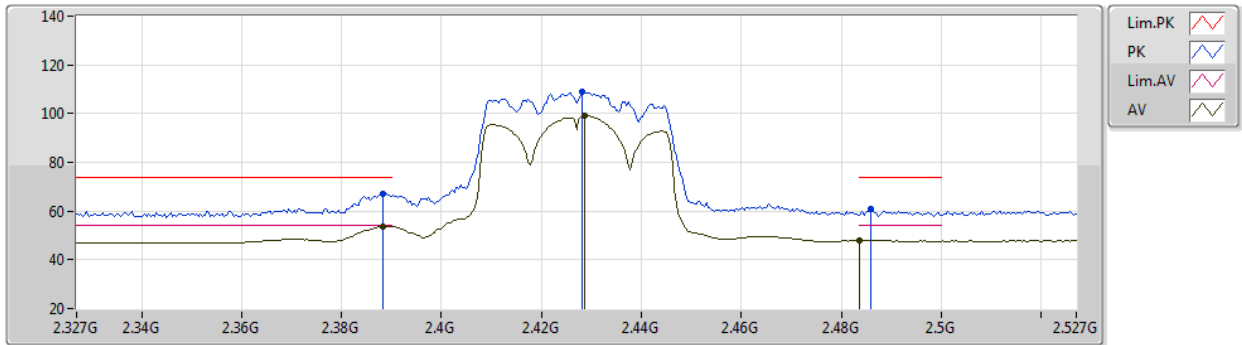
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Setting 16.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84408G	53.82	74.00	-20.18	48.46	3	Horizontal	133	2.90	-	33.59	6.57	34.80
AV	4.84408G	49.16	54.00	-4.84	43.80	3	Horizontal	133	2.90	-	33.59	6.57	34.80

VHT40_Nss1,(MCS0)_2TX

13/05/2020

2427MHz_TX



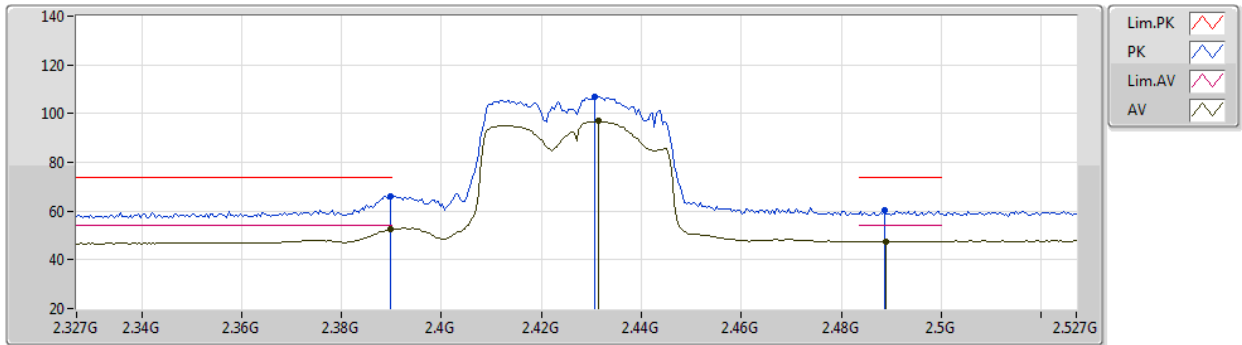
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Setting 17
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3882G	67.31	74.00	-6.69	35.55	3	Vertical	143	1.05	-	28.26	3.50	-
AV	2.3882G	53.80	54.00	-0.20	22.04	3	Vertical	143	1.05	-	28.26	3.50	-
PK	2.4282G	108.72	Inf	-Inf	76.81	3	Vertical	143	1.05	-	28.38	3.53	-
AV	2.4286G	99.07	Inf	-Inf	67.15	3	Vertical	143	1.05	-	28.39	3.53	-
PK	2.4858G	60.77	74.00	-13.23	28.62	3	Vertical	143	1.05	-	28.56	3.59	-
AV	2.4835G	47.83	54.00	-6.17	15.70	3	Vertical	143	1.05	-	28.55	3.58	-

VHT40_Nss1,(MCS0)_2TX

13/05/2020

2427MHz_TX



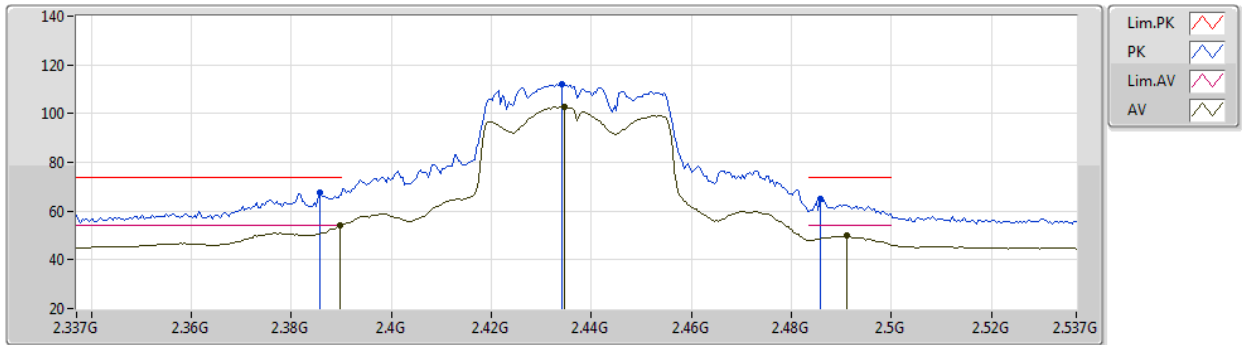
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Setting 17
02-B-J-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	66.20	74.00	-7.80	34.43	3	Horizontal	102	1.76	-	28.27	3.50	-
AV	2.3898G	52.58	54.00	-1.42	20.81	3	Horizontal	102	1.76	-	28.27	3.50	-
PK	2.4306G	106.86	Inf	-Inf	74.94	3	Horizontal	102	1.76	-	28.39	3.53	-
AV	2.4314G	96.82	Inf	-Inf	64.90	3	Horizontal	102	1.76	-	28.39	3.53	-
PK	2.4886G	60.23	74.00	-13.77	28.07	3	Horizontal	102	1.76	-	28.57	3.59	-
AV	2.489G	47.67	54.00	-6.33	15.51	3	Horizontal	102	1.76	-	28.57	3.59	-

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



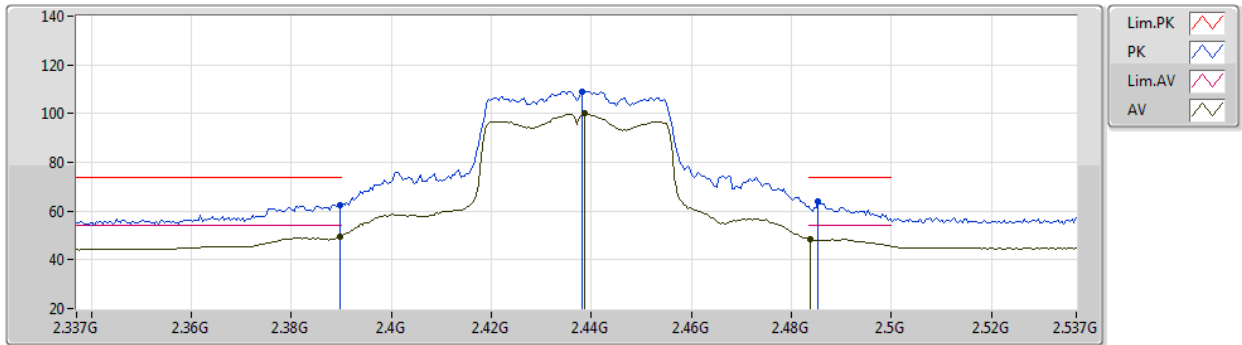
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Setting 20.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3858G	67.54	74.00	-6.46	35.54	3	Vertical	356	2.12	-	28.27	3.73	-
AV	2.3898G	53.94	54.00	-0.06	21.93	3	Vertical	356	2.12	-	28.28	3.73	-
PK	2.4342G	112.31	Inf	-Inf	80.15	3	Vertical	356	2.12	-	28.40	3.76	-
AV	2.4346G	102.61	Inf	-Inf	70.45	3	Vertical	356	2.12	-	28.40	3.76	-
PK	2.4858G	64.88	74.00	-9.12	32.53	3	Vertical	356	2.12	-	28.56	3.79	-
AV	2.491G	49.75	54.00	-4.25	17.39	3	Vertical	356	2.12	-	28.57	3.79	-

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



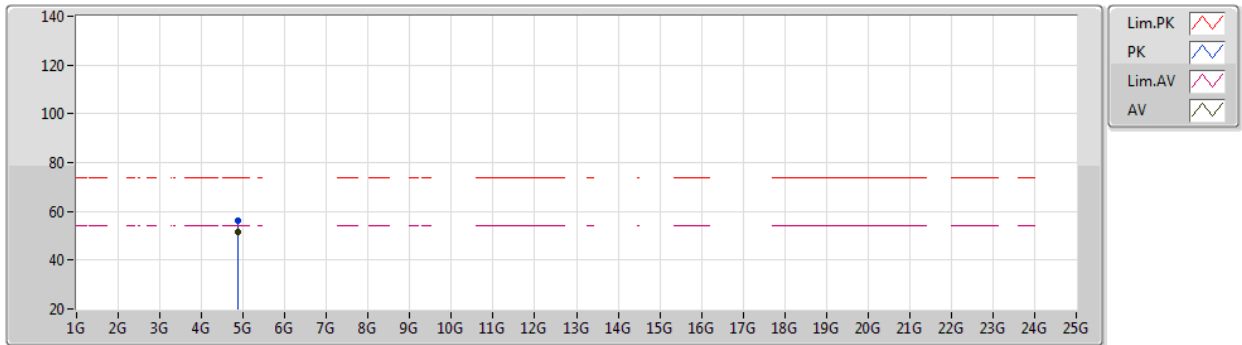
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Setting 20.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	62.24	74.00	-11.76	30.23	3	Horizontal	131	1.47	-	28.28	3.73	-
AV	2.3898G	49.64	54.00	-4.36	17.63	3	Horizontal	131	1.47	-	28.28	3.73	-
PK	2.4382G	109.13	Inf	-Inf	76.96	3	Horizontal	131	1.47	-	28.41	3.76	-
AV	2.4386G	100.00	Inf	-Inf	67.82	3	Horizontal	131	1.47	-	28.42	3.76	-
PK	2.4854G	63.72	74.00	-10.28	31.37	3	Horizontal	131	1.47	-	28.56	3.79	-
AV	2.4838G	48.50	54.00	-5.50	16.16	3	Horizontal	131	1.47	-	28.55	3.79	-

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



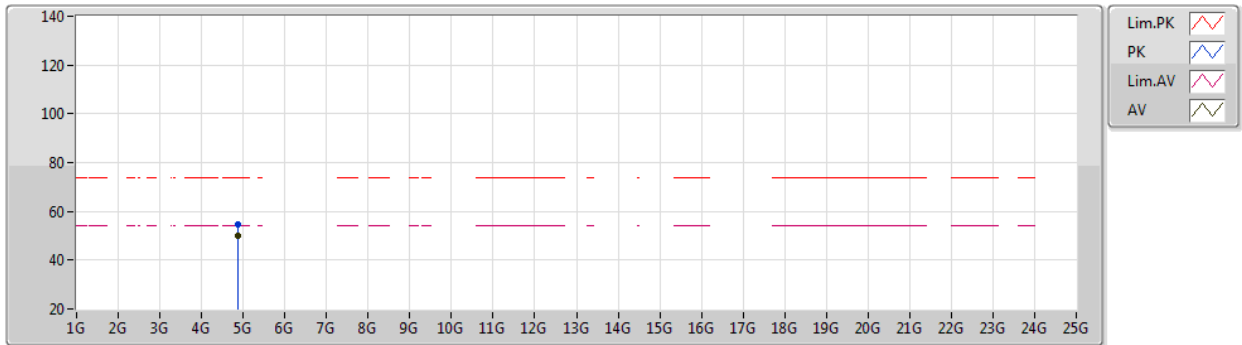
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Setting 20.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87403G	56.20	74.00	-17.80	50.75	3	Vertical	276	2.71	-	33.65	6.58	34.78
AV	4.87409G	51.44	54.00	-2.56	45.99	3	Vertical	276	2.71	-	33.65	6.58	34.78

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2437MHz_TX



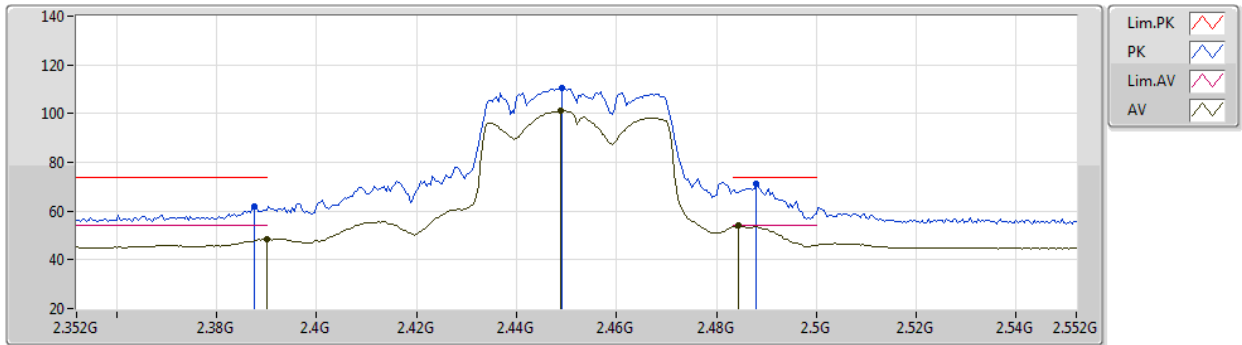
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Setting 20.5
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87405G	54.80	74.00	-19.20	49.35	3	Horizontal	133	2.85	-	33.65	6.58	34.78
AV	4.8741G	50.13	54.00	-3.87	44.68	3	Horizontal	133	2.85	-	33.65	6.58	34.78

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2452MHz_TX



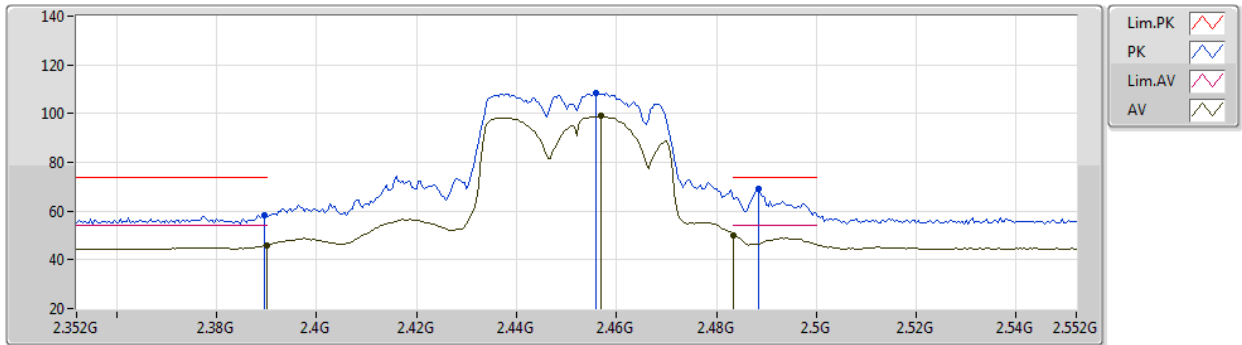
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Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3876G	62.15	74.00	-11.85	30.14	3	Vertical	360	1.37	-	28.28	3.73	-
AV	2.39G	48.28	54.00	-5.72	16.27	3	Vertical	360	1.37	-	28.28	3.73	-
PK	2.4492G	110.72	Inf	-Inf	78.50	3	Vertical	360	1.37	-	28.45	3.77	-
AV	2.4488G	101.26	Inf	-Inf	69.04	3	Vertical	360	1.37	-	28.45	3.77	-
PK	2.488G	71.00	74.00	-3.00	38.65	3	Vertical	360	1.37	-	28.56	3.79	-
AV	2.4844G	53.91	54.00	-0.09	21.57	3	Vertical	360	1.37	-	28.55	3.79	-

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2452MHz_TX



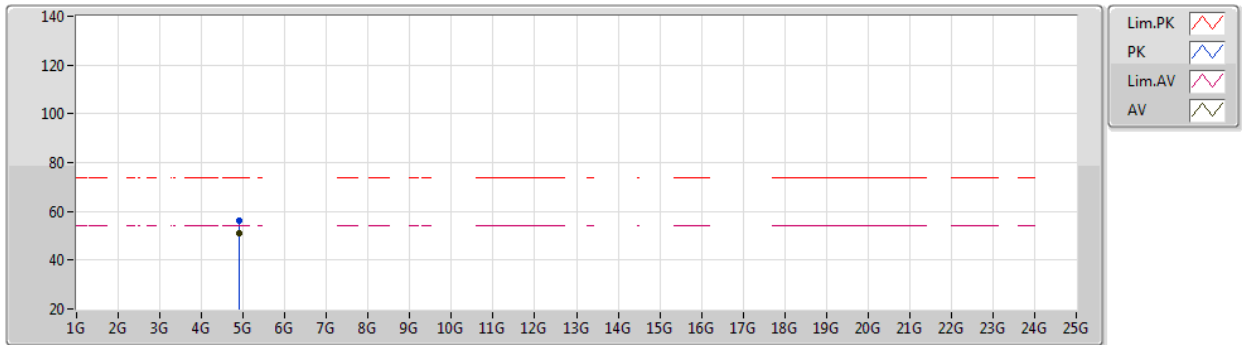
EUT Z_2TX
Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3896G	58.45	74.00	-15.55	26.44	3	Horizontal	264	2.79	-	28.28	3.73	-
AV	2.39G	45.84	54.00	-8.16	13.83	3	Horizontal	264	2.79	-	28.28	3.73	-
PK	2.456G	108.37	Inf	-Inf	76.13	3	Horizontal	264	2.79	-	28.47	3.77	-
AV	2.4568G	98.94	Inf	-Inf	66.70	3	Horizontal	264	2.79	-	28.47	3.77	-
PK	2.4884G	69.28	74.00	-4.72	36.92	3	Horizontal	264	2.79	-	28.57	3.79	-
AV	2.4835G	50.05	54.00	-3.95	17.71	3	Horizontal	264	2.79	-	28.55	3.79	-

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2452MHz_TX



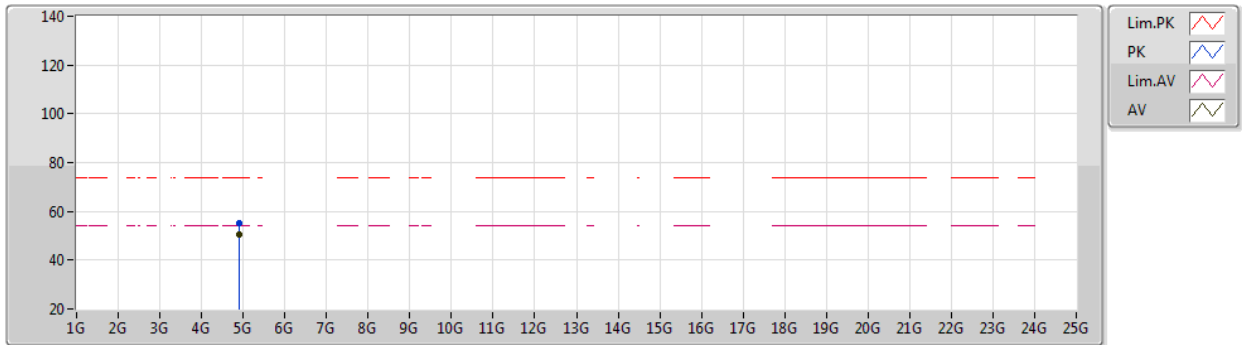
EUT Z_2TX
Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90415G	56.29	74.00	-17.71	50.75	3	Vertical	274	2.66	-	33.71	6.59	34.76
AV	4.90409G	51.29	54.00	-2.71	45.75	3	Vertical	274	2.66	-	33.71	6.59	34.76

VHT40_Nss1,(MCS0)_2TX

12/05/2020

2452MHz_TX



EUT_Z_2TX
Setting 19
03-A-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9041G	54.98	74.00	-19.02	49.44	3	Horizontal	133	2.66	-	33.71	6.59	34.76
AV	4.90408G	50.42	54.00	-3.58	44.88	3	Horizontal	133	2.66	-	33.71	6.59	34.76



Radiated Emissions above 1GHz

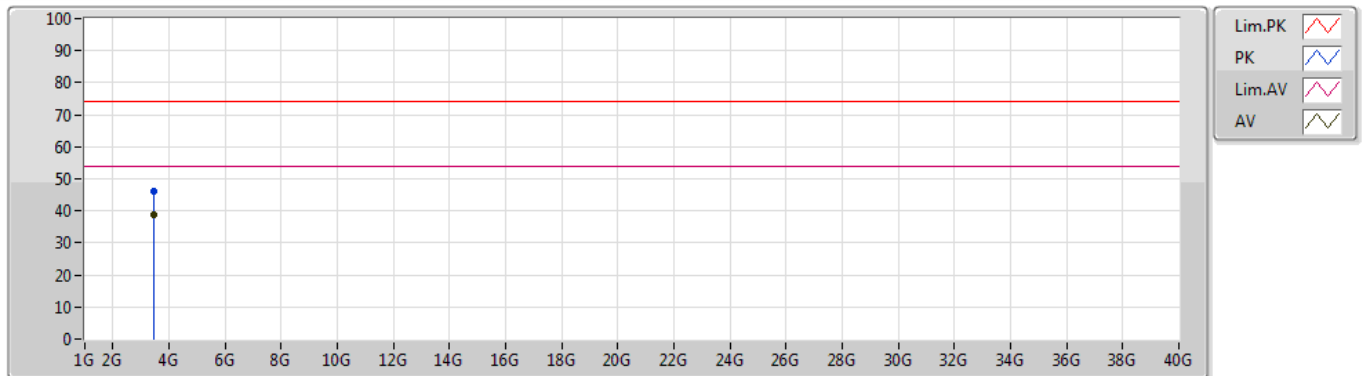
Appendix G

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	3.47333G	39.24	54.00	-14.76	Horizontal

Mode 1

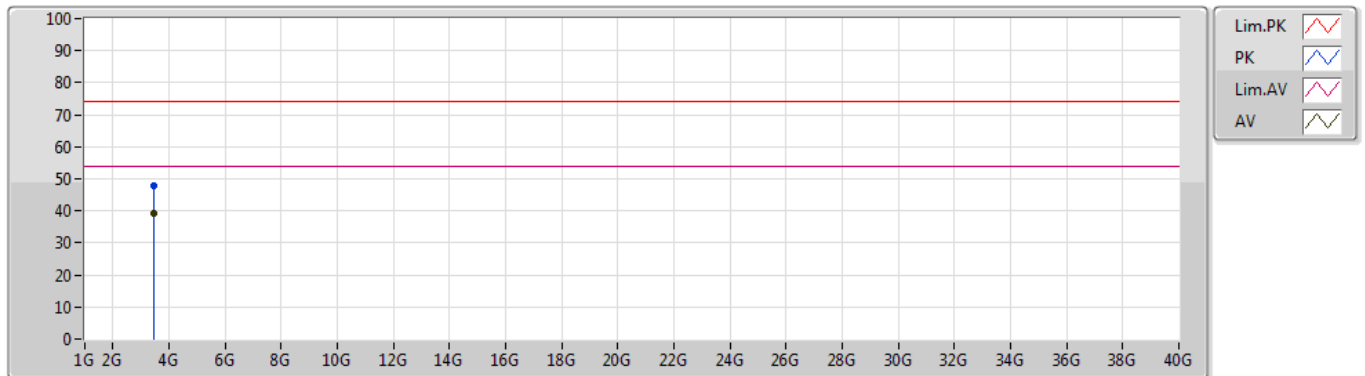
14/05/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	3.47323G	46.02	74.00	-27.98	0.48	3	Vertical	182	1.24	-	45.54	30.47	4.17	34.16
AV	3.47335G	38.79	54.00	-15.21	0.48	3	Vertical	182	1.24	"Worst"	38.31	30.47	4.17	34.16

Mode 1

14/05/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	3.4734G	47.85	74.00	-26.15	0.48	3	Horizontal	160	1.00	-	47.37	30.47	4.17	34.16
AV	3.47333G	39.24	54.00	-14.76	0.48	3	Horizontal	160	1.00	"Worst"	38.76	30.47	4.17	34.16