



FCC RADIO TEST REPORT

FCC ID : MSQ-RTAXIA00
Equipment : Dual Band Wi-Fi Router
Brand Name : ASUS
Model Name : RT-AX68U
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Manufacturer (1) : Compal Networking (KunShan) Co., LTD.
No. 520, Nanbang Rd., Economic & Technical
Development Zone Kunshan, Jiangsu Province China
Manufacturer (2) : ARCADYAN TECHNOLOGY (VIETNAM) CO., LTD.
Ba Thien Industrial Park, Ba Hien commune, Binh
Xuyen district, Vinh Phuc Province
Standard : 47 CFR FCC Part 15.247

The product was received on Apr. 07, 2020, and testing was started from Apr. 08, 2020 and completed on Jul. 23, 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.)



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Photographs of EUT v01



History of this test report

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

Page Number : 3 of 34
Issued Date : Jul. 31, 2020
Report Version : 01



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	-

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: Viola Huang



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, ax (HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), VHT40, ax (HEW40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	3
2.4-2.4835GHz	802.11g	20	3
2.4-2.4835GHz	802.11n HT20	20	3
2.4-2.4835GHz	802.11n HT20-BF	20	3
2.4-2.4835GHz	VHT20	20	3
2.4-2.4835GHz	VHT20-BF	20	3
2.4-2.4835GHz	802.11ax HEW20	20	3
2.4-2.4835GHz	802.11ax HEW20-BF	20	3
2.4-2.4835GHz	802.11n HT40	40	3
2.4-2.4835GHz	802.11n HT40-BF	40	3
2.4-2.4835GHz	VHT40	40	3
2.4-2.4835GHz	VHT40-BF	40	3
2.4-2.4835GHz	802.11ax HEW40	40	3
2.4-2.4835GHz	802.11ax HEW40-BF	40	3

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, 1024QAM modulation.
- ♦ HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Set	Ant.	Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	1	1	M.gear	C660-510507-A	Dipole Antenna	I-PEX	Note 1
	2	2	M.gear	C660-510508-A	Dipole Antenna	I-PEX	
	3	3	M.gear	C660-510510-A	Dipole Antenna	I-PEX	
2	1	1	PSA	RFDPA140813IMLB701	Dipole Antenna	I-PEX	
	2	2	PSA	RFDPA140806IMLB701	Dipole Antenna	I-PEX	
	3	3	PSA	RFDPA140805IMLB701	Dipole Antenna	I-PEX	
3	1	1	Airgain	M03ASACB-B1X175BU	Dipole Antenna	I-PEX	
	2	2	Airgain	M03ASACB-HSR3-B1X105BU	Dipole Antenna	I-PEX	
	3	3	Airgain	M03ASACB-HSY3-B1X95BU	Dipole Antenna	I-PEX	

Note 1:

Set	Ant.	Port	Gain (dBi)	
			2.4GHz	5GHz
1	1	1	1.69	1.89
	2	2	1.70	1.70
	3	3	1.71	1.86
2	1	1	1.68	1.84
	2	2	1.69	1.70
	3	3	1.66	1.81
3	1	1	1.48	1.47
	2	2	1.70	0.80
	3	3	1.30	0.80

Note 2: The above information was declared by manufacturer.

Note 3: The EUT has two set of antenna and each set has three antennas. There are the same type, so only the highest gain set 1 antenna was selected to test and record in this report.

For 2.4GHz function:

IEEE 802.11b/g/n/VHT/ax (3TX/3RX):

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

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

For 5GHz function:

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

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

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

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_3TX	0.962	0.17	16.506m	100
802.11g_Nss1,(6Mbps)_3TX	0.963	0.16	2.75m	1k
802.11ax HEW40_Nss1,(MCS0)_3TX	0.979	0.09	1.489m	1k
802.11ax HEW40_Nss3,(MCS0)_3TX	0.981	0.08	1.66m	10
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	0.948	0.23	2.95m	1k
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	0.943	0.25	4.387m	300
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	0.94	0.27	5.112m	300

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
	The product has beamforming function for 11n/VHT/11ax in 2.4GHz and 11n/11ac/11ax in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	Non beamforming mode: Mtool V3.2.0.0 Beamforming mode: Telnet			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT supports functions

Function	Support Type
AP Router	Master
Bridge	Slave without radar detection
Repeater	Master
Mesh	Master

Note: After evaluating, there are only AP Router and Mesh were selected to test and record in the report.



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	Serway Li	23.4~24.4°C / 59~63%	May 12, 2020
Radiated below 1GHz	03CH05-CB	Stim Sung	32.1~33.3°C / 42~45%	Jun. 30, 2020
Radiated above 1GHz	03CH02-CB	Stim Sung	23.9~24.5°C / 52~23%	Apr. 08, 2020 ~ May 18, 2020
	03CH03-CB	Stim Sung	23.4~24.5°C / 51~55%	Apr. 08, 2020 ~ May 18, 2020
	03CH04-CB	Stim Sung	23.4~24.9°C / 59~61%	Apr. 08, 2020 ~ May 18, 2020
	03CH06-CB	Stim Sung	24.2~24.5°C / 52~53%	Apr. 08, 2020 ~ May 18, 2020
Radiated above 1GHz (For co-location)	03CH02-CB	JN Du	25.8~26.7°C / 59~61%	Jul. 23, 2020
AC Conduction	CO01-CB	Ryo Fan	21~22°C / 60~61%	Jun. 19, 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)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 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)_3TX	-
2412MHz	100
2437MHz	100
2462MHz	96
802.11g_Nss1,(6Mbps)_3TX	-
2412MHz	83
2417MHz	86
2437MHz	100
2457MHz	85
2462MHz	83
802.11ax HEW40_Nss3,(MCS0)_3TX	-
2437MHz	83
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-
2412MHz	74
2417MHz	82
2437MHz	99
2457MHz	83
2462MHz	81
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-
2422MHz	69
2427MHz	69
2437MHz	83
2447MHz	76
2452MHz	75
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	-
2437MHz	81

Note:

- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
- ♦ There are two modes of EUT for 802.11n/VHT/ax in 2.4GHz and 802.11n/ac/ax in 5GHz. One is beamforming mode, and the other is non-beamforming mode, after evaluating, beamforming mode has been evaluated to be the worst case, so it was selected to test and record in this test report.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	AP Router mode-EUT + Adapter 1 + Antenna Set 1
2	AP Router mode-EUT + Adapter 2 + Antenna Set 1
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 ~ 4 will follow this same test mode.	
3	Mesh mode-EUT_2.4GHz + Adapter 2 + Antenna Set 1
4	Mesh mode-EUT_5GHz + Adapter 2 + Antenna Set 1
For operating mode 2 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
1	EUT + Antenna Set 1

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	EUT_2.4GHz + Adapter 1 + Antenna Set 1
2	EUT_2.4GHz + Adapter 2 + Antenna Set 1
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	EUT_5GHz + Adapter 2 + Antenna Set 1
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	EUT + Antenna Set 1



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 - EUT + Antenna Set 1
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 - EUT + Antenna Set 1
Refer to Sporton Test Report No.: FA040722 for Co-location RF Exposure Evaluation.	

Note: The EUT can only use Y axis position.



2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

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

The program was executed as follows:

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

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter 1	DELTA	ADP-33AW Y	Input: 100-240V ~ 1.0A, 50-60Hz Output: 19.0V, 1.75A 33.0W
Adapter 2	PI	AD2131320	Input: 100-240V ~ 50/60Hz 0.8A Output: 19.0V, 1.75A 33.0W
Others			
RJ-45 cable*1: Non-shielded, 1.5m			



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	HDD3.0	WD	WDBACY5000AWT	N/A
B	LAN1 NB	DELL	E6430	N/A
C	LAN4 NB	DELL	E6430	N/A
D	2.4G NB	DELL	E6430	N/A
E	5G NB	DELL	E6430	N/A
F	HDD3.0	WD	WDBACY5000AWT	N/A
G	WAN NB	DELL	T3400	N/A

For Radiated (below 1GHz) and RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

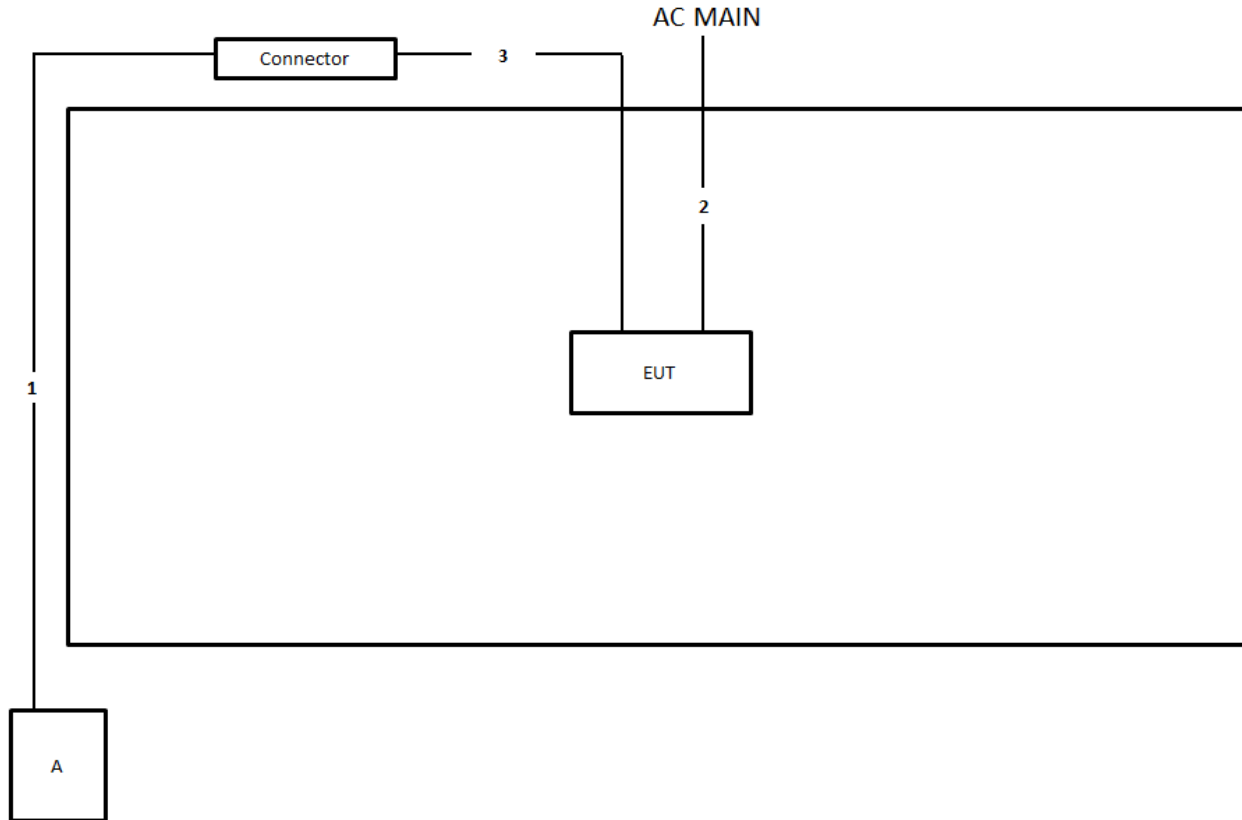
For Radiated (above 1GHz):

For non beamforming mode

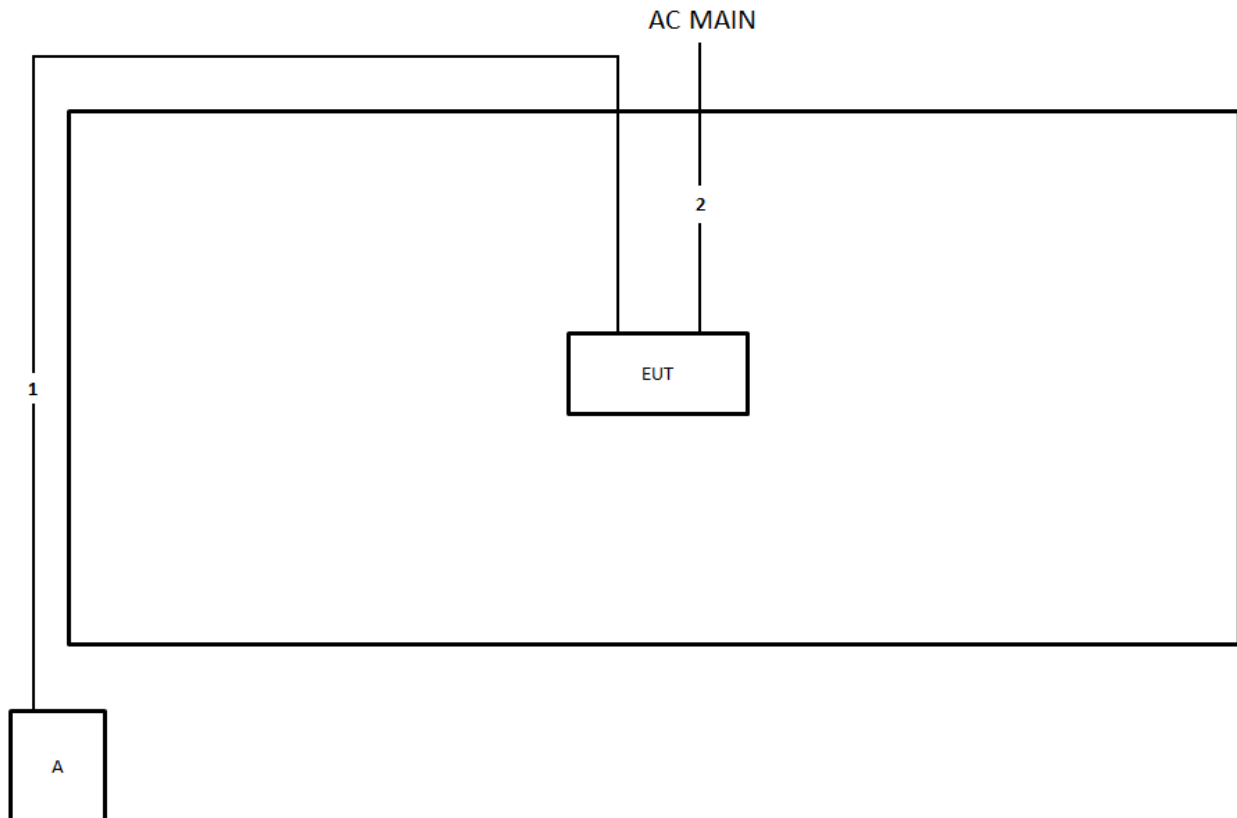
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

For beamforming mode

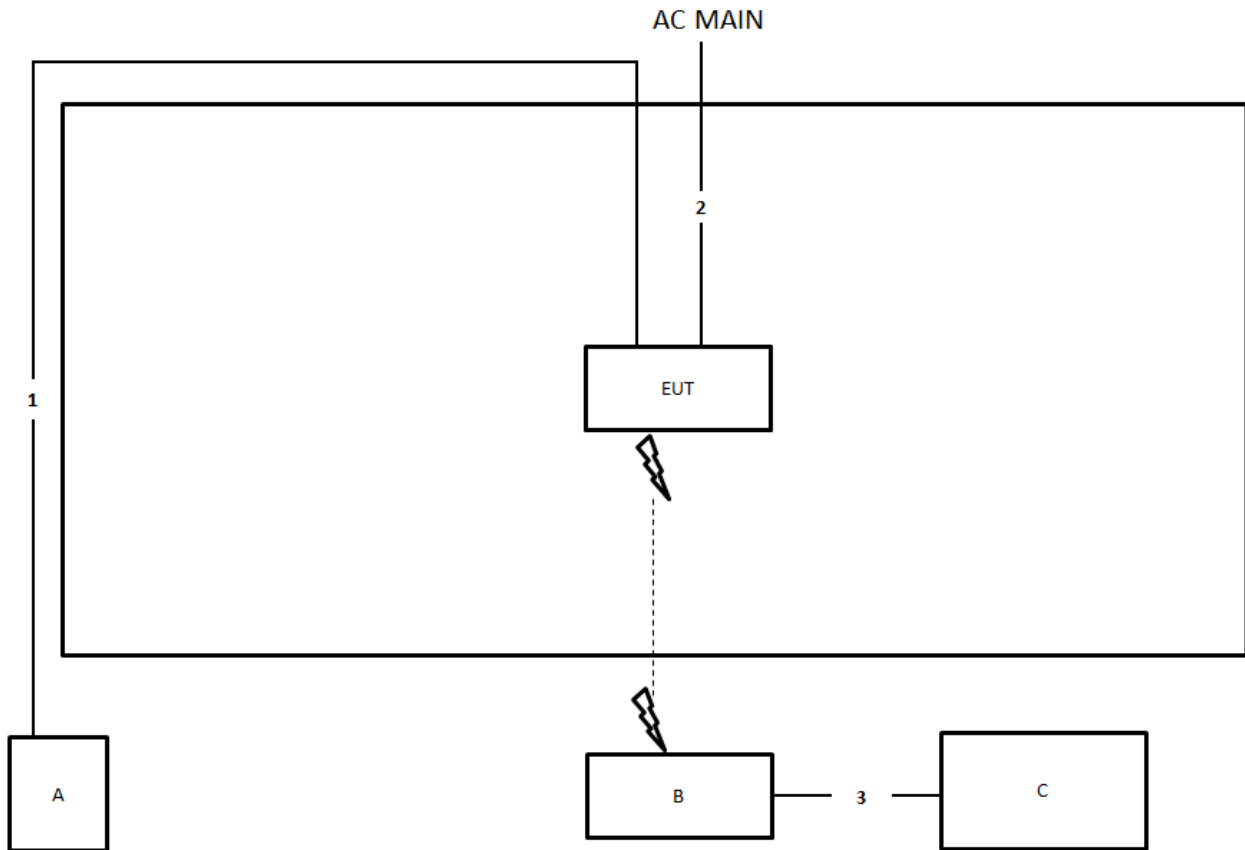
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	RX Device	ASUS	RT-AX82U	N/A
C	Notebook	DELL	E4300	N/A

Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.9m
3	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz / Non beamforming mode


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.9m

Test Setup Diagram - Radiated Test > 1GHz / Beamforming mode


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.9m
3	RJ-45 cable	No	1.5m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

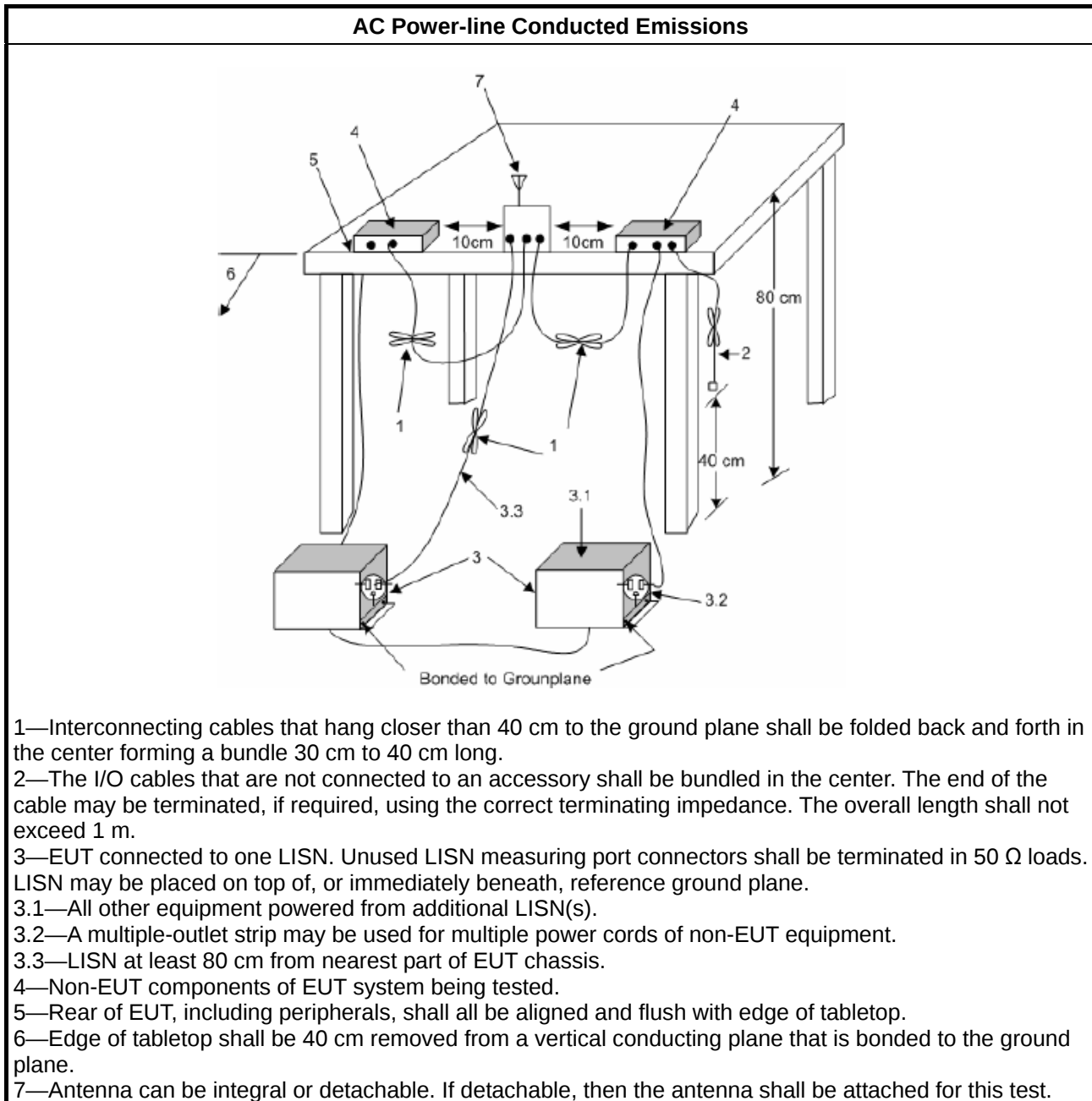
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ 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 (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

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.

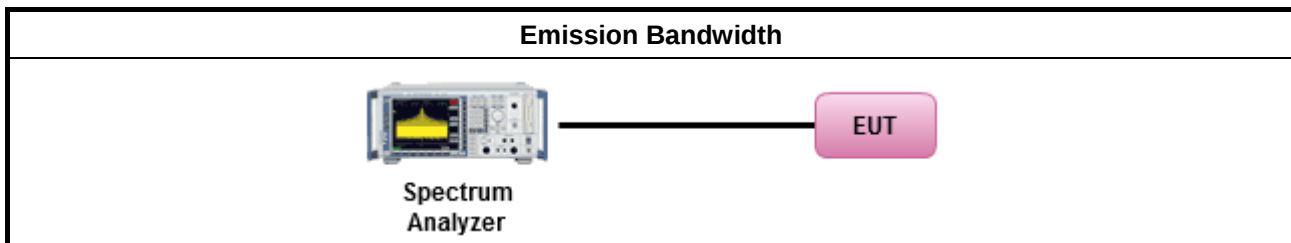
3.2.2 Measuring Instruments

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.	

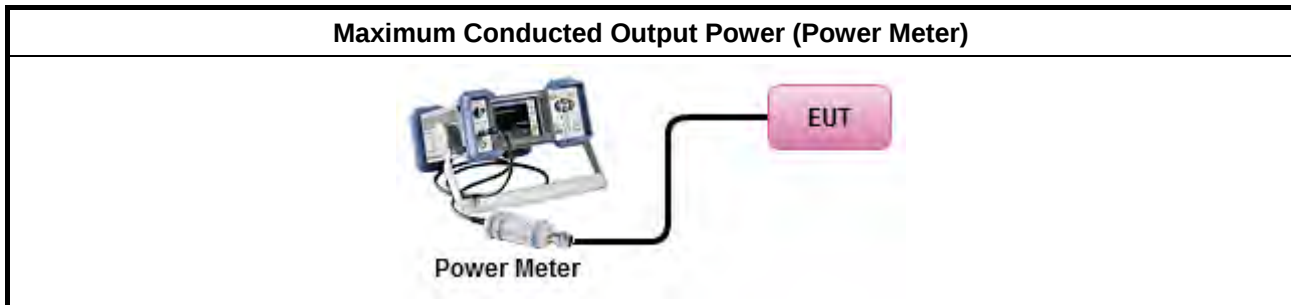
3.3.2 Measuring Instruments

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

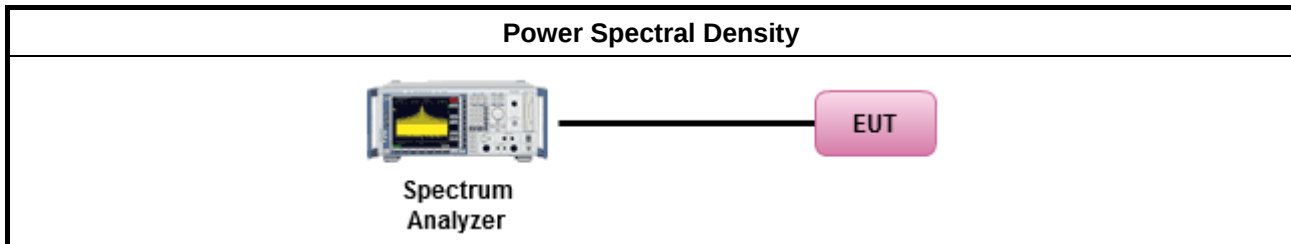
3.4.2 Measuring Instruments

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.	

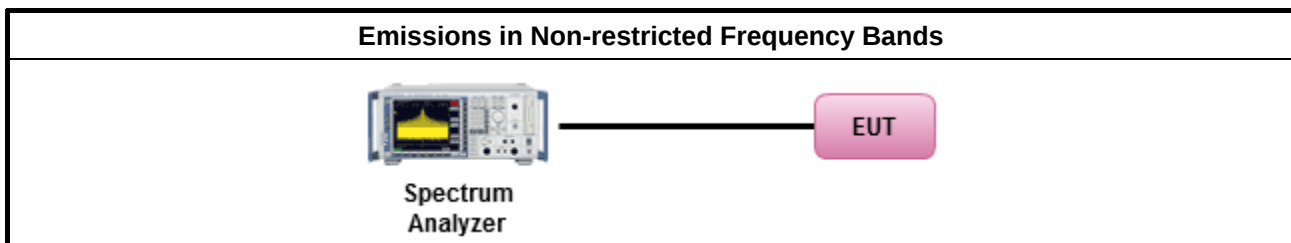
3.5.2 Measuring Instruments

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.

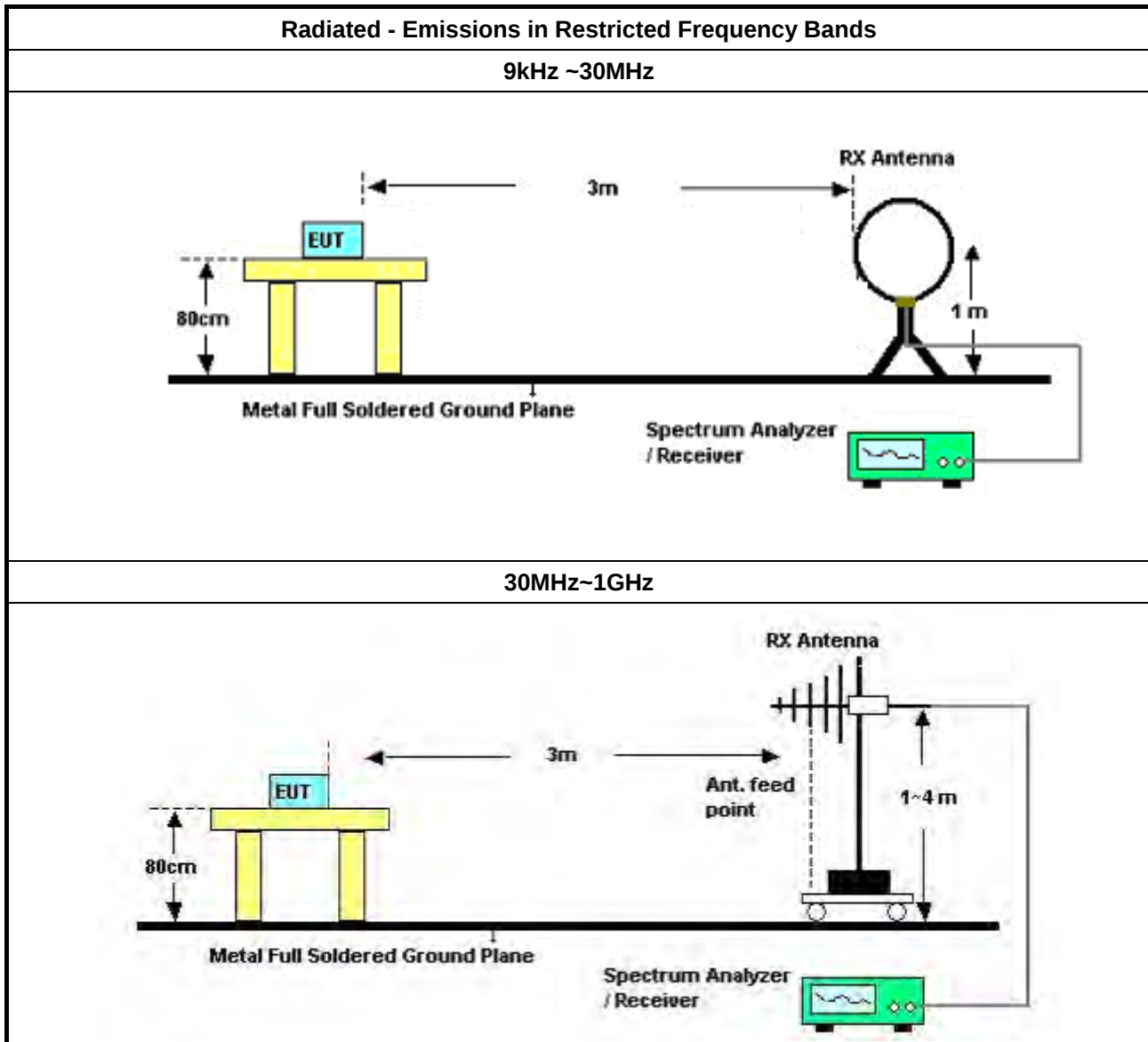
3.6.2 Measuring Instruments

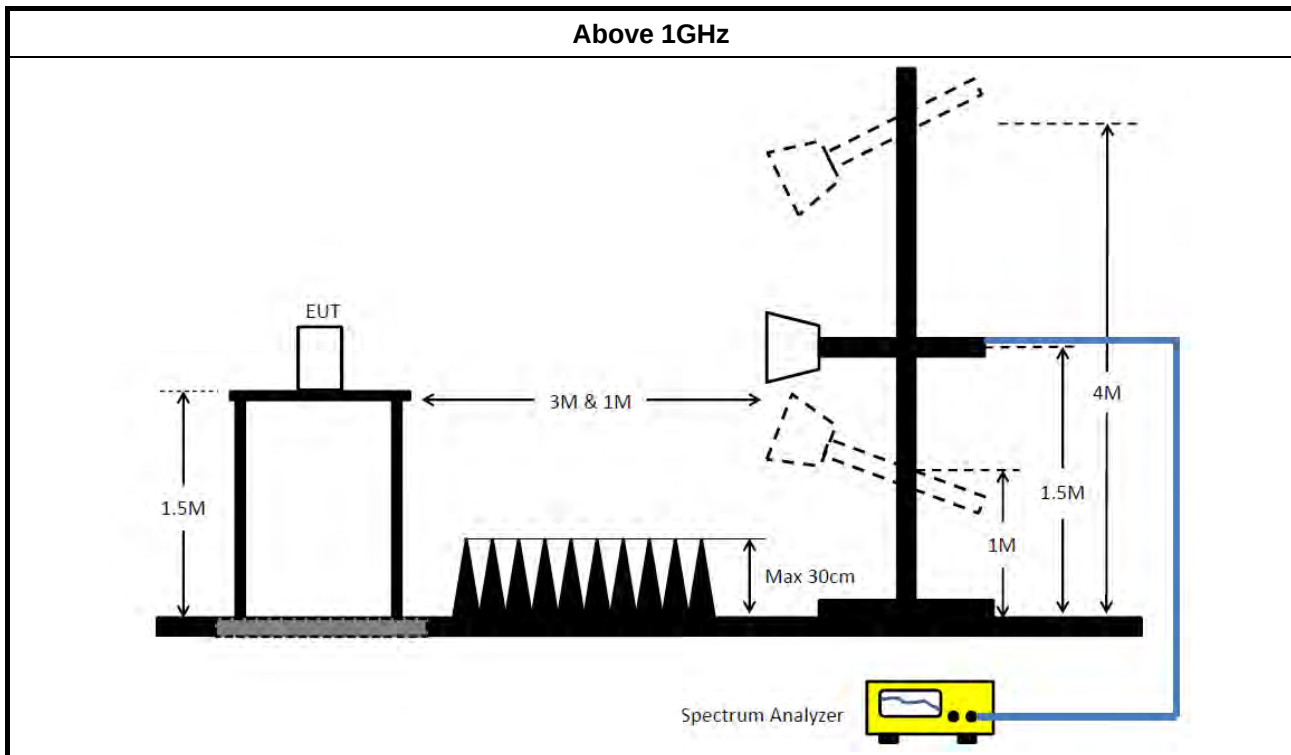
Refer a test equipment and calibration data table in this test report.

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 + Cable Loss + Read Level - Preamp Factor (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 10 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 20, 2020	May 19, 2021	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	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 (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 27, 2020	Mar. 26, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 28, 2020	Apr. 27, 2021	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 24, 2019	Apr. 23, 2020	Radiation (03CH02-CB)
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)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Aug. 21, 2019	Aug. 20, 2020	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 13, 2020	Jul. 12, 2021	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH02-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun. 19, 2020	Jun. 18, 2021	Radiation (03CH02-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH02-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
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)
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)
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-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Dec. 18, 2019	Dec. 17, 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)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 08, 2019	May 07, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 07, 2020	May 06, 2021	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	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)
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)

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

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



AC Power Port Conducted Emission Result

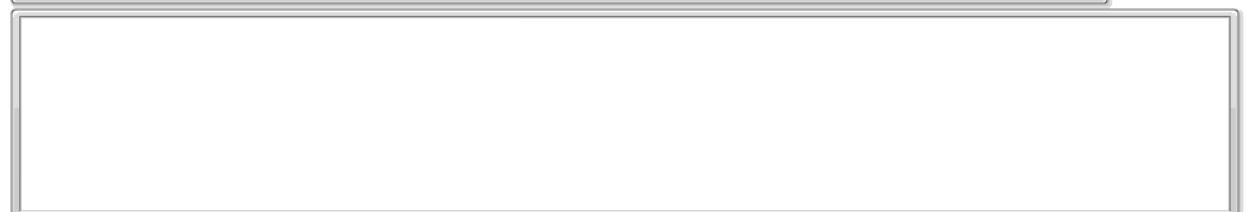
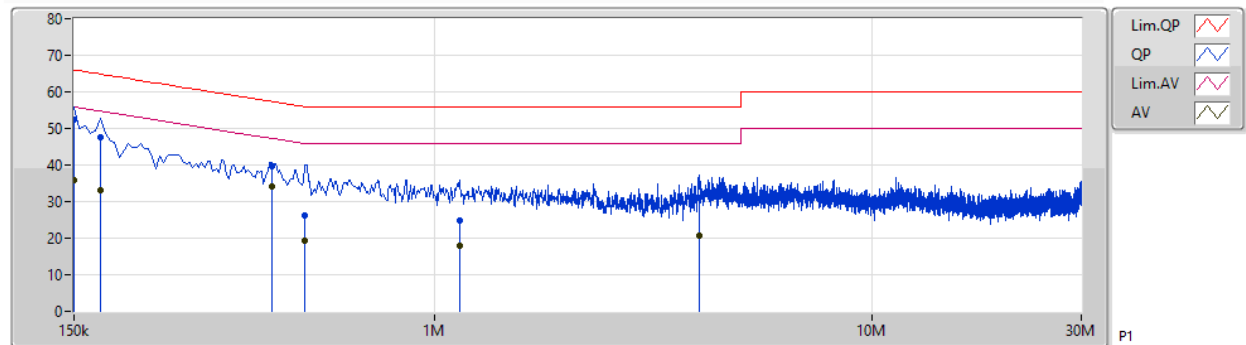
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 2	Pass	AV	424.5k	34.47	47.36	-12.89	9.88	Neutral

Mode 2

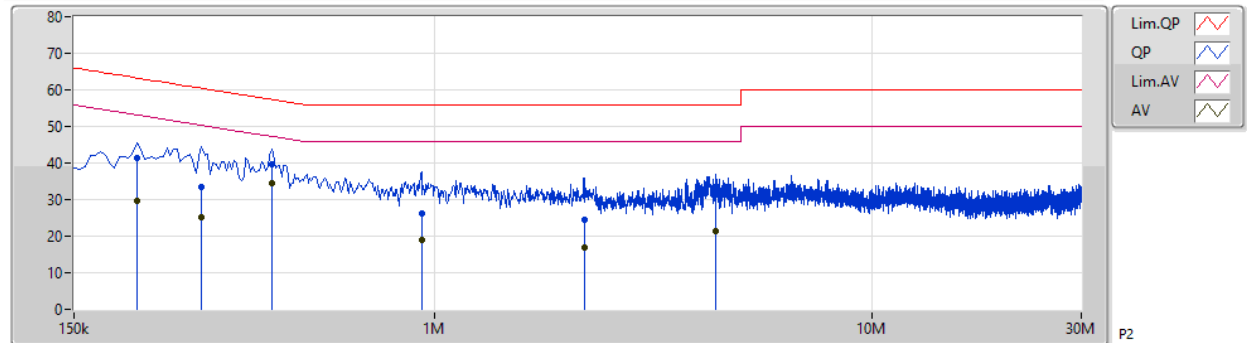
19/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	150k	52.32	66.00	-13.68	9.87	Line	-	42.45	0.05	0.03	9.79			
AV	150k	35.85	56.00	-20.15	9.87	Line	-	25.98	0.05	0.03	9.79			
QP	172.5k	47.66	64.83	-17.17	9.87	Line	-	37.79	0.05	0.03	9.79			
AV	172.5k	33.24	54.83	-21.59	9.87	Line	-	23.37	0.05	0.03	9.79			
QP	424.5k	39.73	57.36	-17.63	9.88	Line	-	29.85	0.04	0.03	9.81			
AV	424.5k	34.15	47.36	-13.21	9.88	Line	"Worst"	24.27	0.04	0.03	9.81			
QP	505.5k	26.37	56.00	-29.63	9.88	Line	-	16.49	0.04	0.03	9.81			
AV	505.5k	19.30	46.00	-26.70	9.88	Line	-	9.42	0.04	0.03	9.81			
QP	1.14M	24.77	56.00	-31.23	9.92	Line	-	14.85	0.05	0.05	9.82			
AV	1.14M	17.92	46.00	-28.08	9.92	Line	-	8.00	0.05	0.05	9.82			
QP	4.029M	30.92	56.00	-25.08	10.03	Line	-	20.89	0.09	0.13	9.81			
AV	4.029M	20.84	46.00	-25.16	10.03	Line	-	10.81	0.09	0.13	9.81			

Mode 2

19/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	208.5k	41.23	63.27	-22.04	9.86	Neutral	-	31.37	0.04	0.03	9.79			
AV	208.5k	29.79	53.27	-23.48	9.86	Neutral	-	19.93	0.04	0.03	9.79			
QP	294k	33.47	60.42	-26.95	9.87	Neutral	-	23.60	0.04	0.03	9.80			
AV	294k	25.02	50.42	-25.40	9.87	Neutral	-	15.15	0.04	0.03	9.80			
QP	424.5k	39.78	57.36	-17.58	9.88	Neutral	-	29.90	0.04	0.03	9.81			
AV	424.5k	34.47	47.36	-12.89	9.88	Neutral	"Worst"	24.59	0.04	0.03	9.81			
QP	933k	26.21	56.00	-29.79	9.92	Neutral	-	16.29	0.06	0.04	9.82			
AV	933k	19.07	46.00	-26.93	9.92	Neutral	-	9.15	0.06	0.04	9.82			
QP	2.193M	24.34	56.00	-31.66	9.98	Neutral	-	14.36	0.07	0.08	9.83			
AV	2.193M	16.97	46.00	-29.03	9.98	Neutral	-	6.99	0.07	0.08	9.83			
QP	4.394M	32.46	56.00	-23.54	10.05	Neutral	-	22.41	0.10	0.13	9.82			
AV	4.394M	21.34	46.00	-24.66	10.05	Neutral	-	11.29	0.10	0.13	9.82			

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)_3TX	7.05M	10.395M	10M4G1D	6.525M	10.245M
802.11g_Nss1,(6Mbps)_3TX	16.35M	16.992M	17M0D1D	16.325M	16.667M
802.11ax HEW40_Nss3,(MCS0)_3TX	37.65M	37.631M	37M6D1D	37.5M	37.431M
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	19M	19.14M	19M1D1D	18.9M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	37.8M	37.581M	37M6D1D	36.8M	37.431M
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	37.65M	37.581M	37M6D1D	37.15M	37.481M

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

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

Result

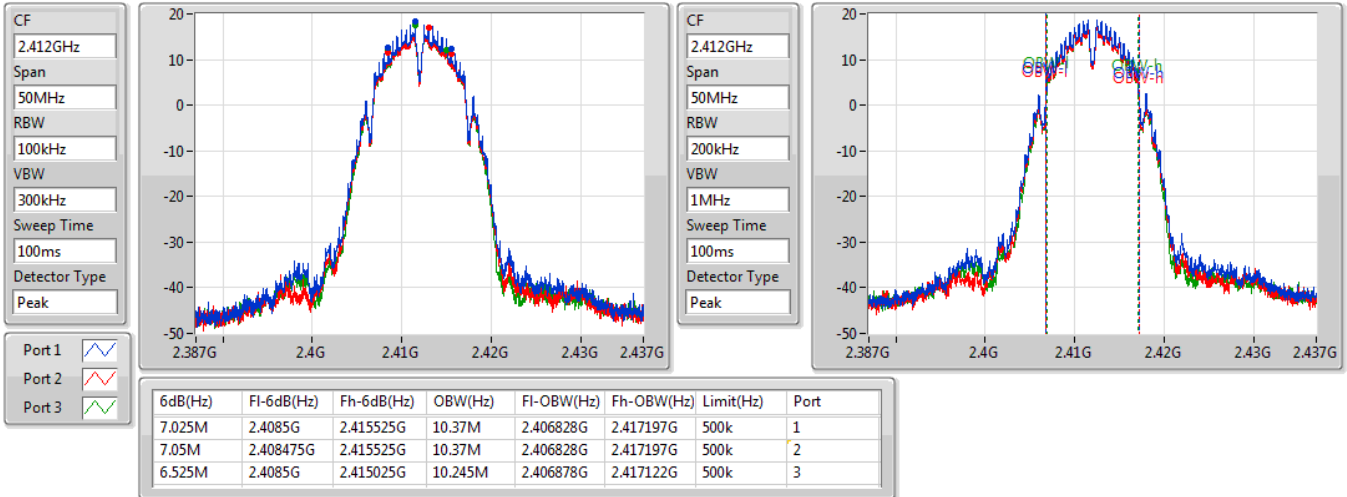
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.025M	10.37M	7.05M	10.37M	6.525M	10.245M
2437MHz	Pass	500k	7.05M	10.37M	7M	10.395M	6.575M	10.27M
2462MHz	Pass	500k	7.025M	10.27M	6.975M	10.295M	6.575M	10.245M
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.35M	16.817M	16.35M	16.692M	16.35M	16.667M
2437MHz	Pass	500k	16.325M	16.992M	16.325M	16.867M	16.325M	16.792M
2462MHz	Pass	500k	16.35M	16.817M	16.35M	16.667M	16.35M	16.667M
802.11ax HEW40_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-	-
2437MHz	Pass	500k	37.55M	37.631M	37.5M	37.431M	37.65M	37.581M
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.975M	19.09M	18.975M	18.991M	18.975M	19.015M
2437MHz	Pass	500k	18.95M	19.14M	18.95M	19.09M	18.9M	19.09M
2462MHz	Pass	500k	19M	19.065M	18.95M	19.015M	18.95M	19.04M
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.8M	37.531M	37.45M	37.531M	37.65M	37.531M
2437MHz	Pass	500k	37.55M	37.503M	36.8M	37.501M	37.1M	37.502M
2452MHz	Pass	500k	37.65M	37.581M	37.45M	37.431M	37.45M	37.481M
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
2437MHz	Pass	500k	37.4M	37.481M	37.15M	37.581M	37.65M	37.581M

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

802.11b_Nss1,(1Mbps)_3TX

EBW
2412MHz

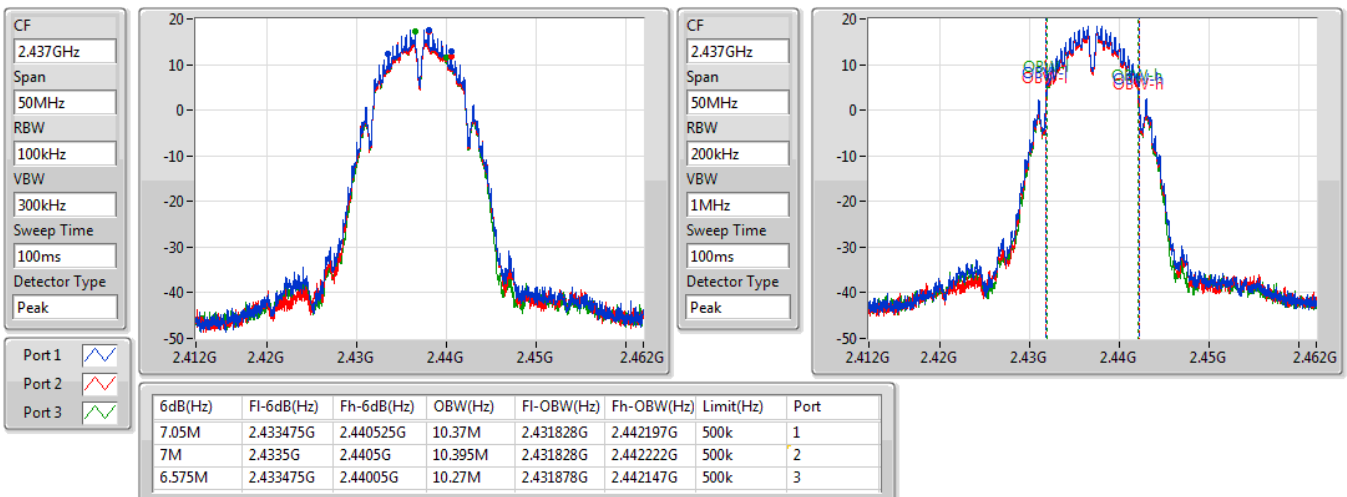
12/05/2020



802.11b_Nss1,(1Mbps)_3TX

EBW
2437MHz

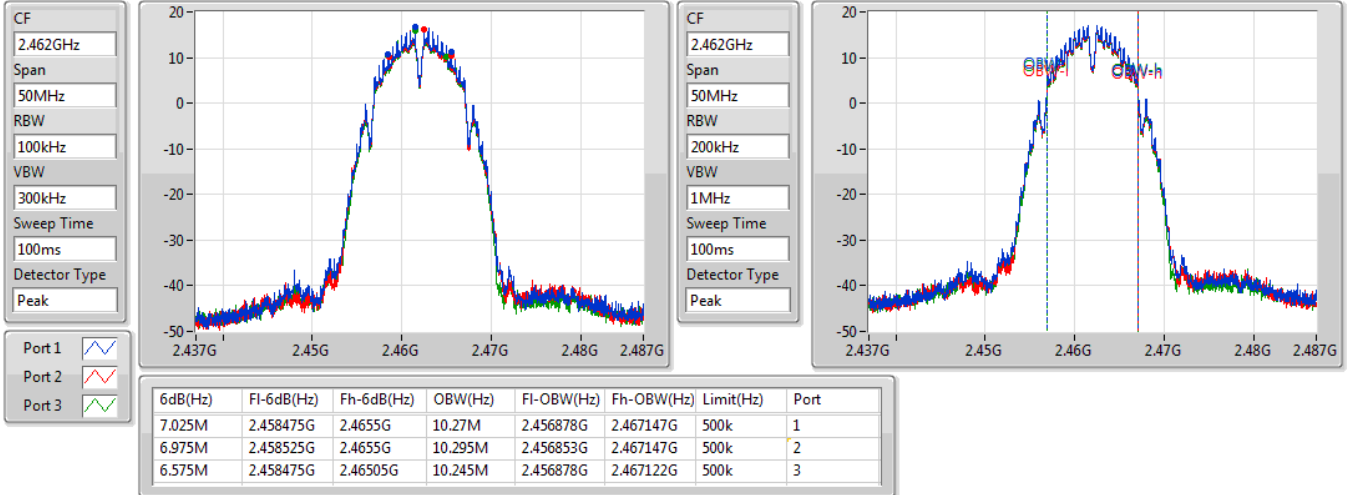
12/05/2020



802.11b_Nss1,(1Mbps)_3TX

EBW
2462MHz

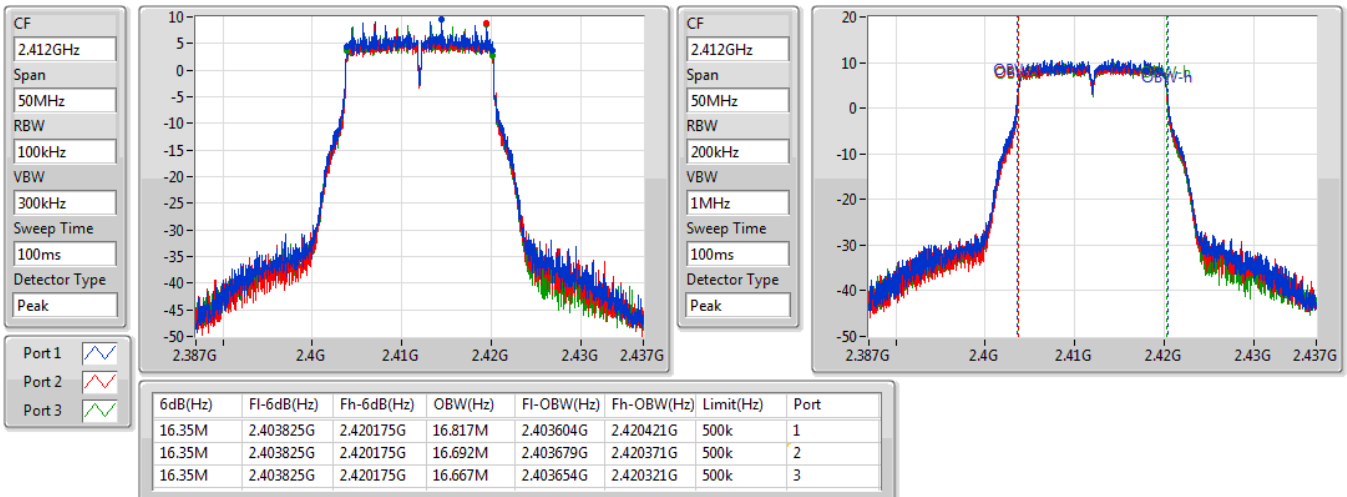
12/05/2020



802.11g_Nss1,(6Mbps)_3TX

EBW
2412MHz

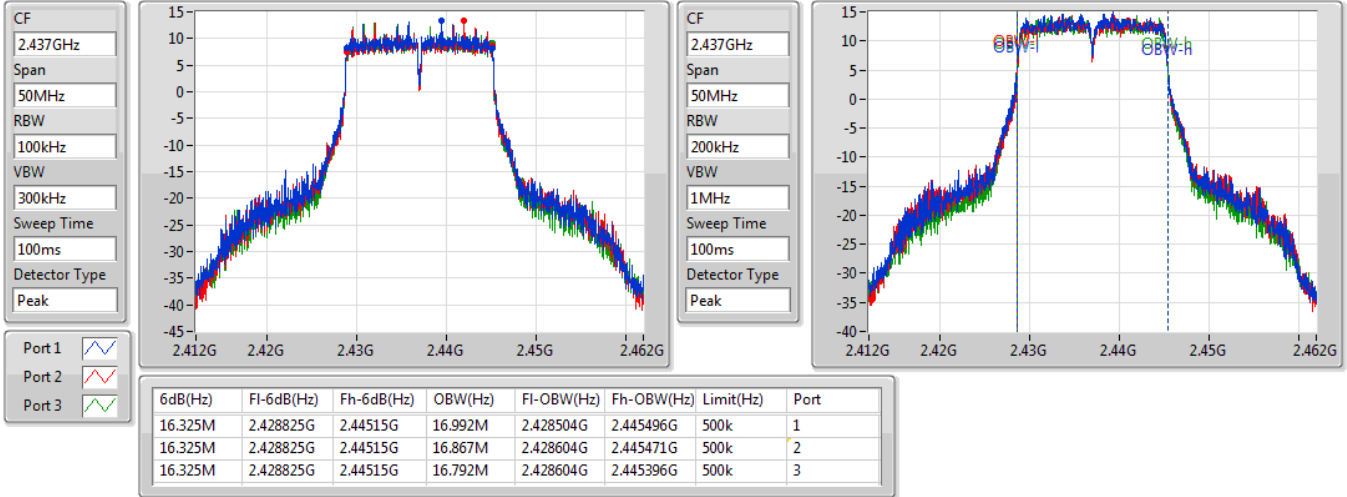
12/05/2020



802.11g_Nss1,(6Mbps)_3TX

EBW
2437MHz

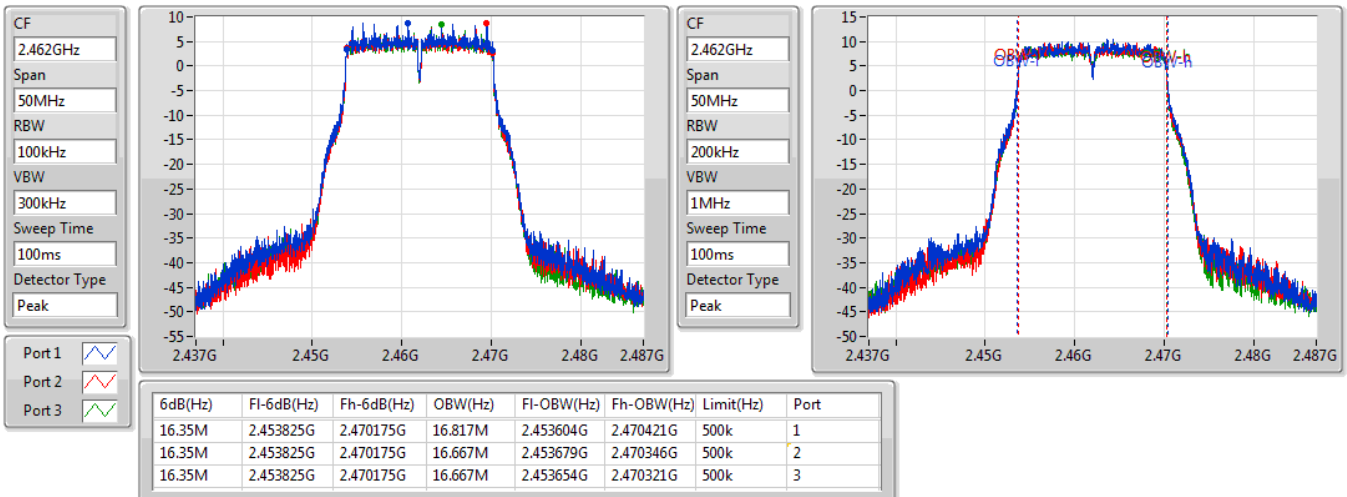
12/05/2020



802.11g_Nss1,(6Mbps)_3TX

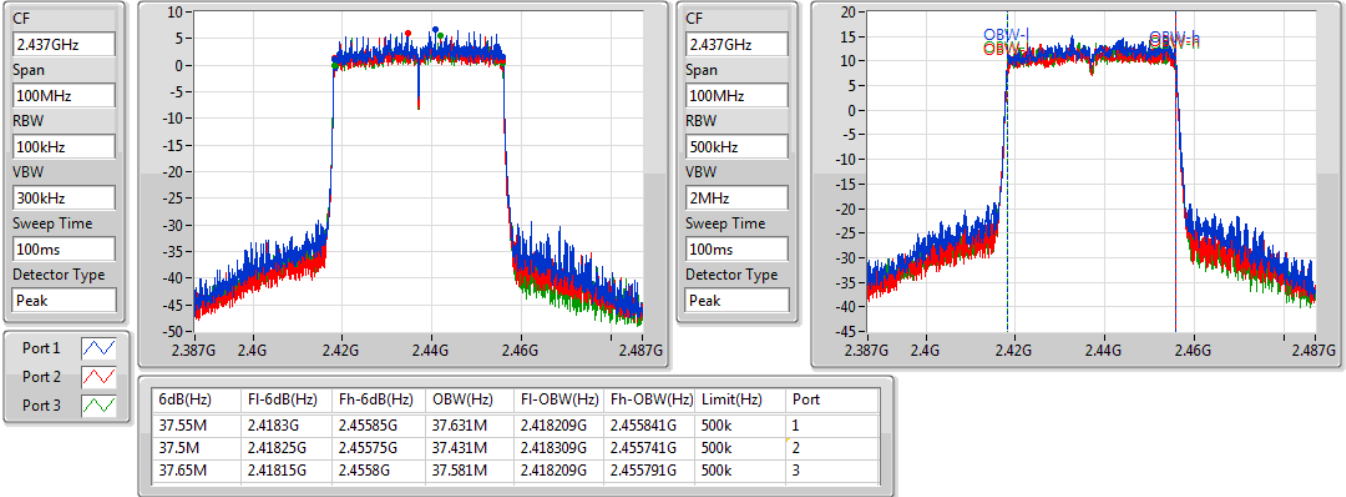
EBW
2462MHz

12/05/2020

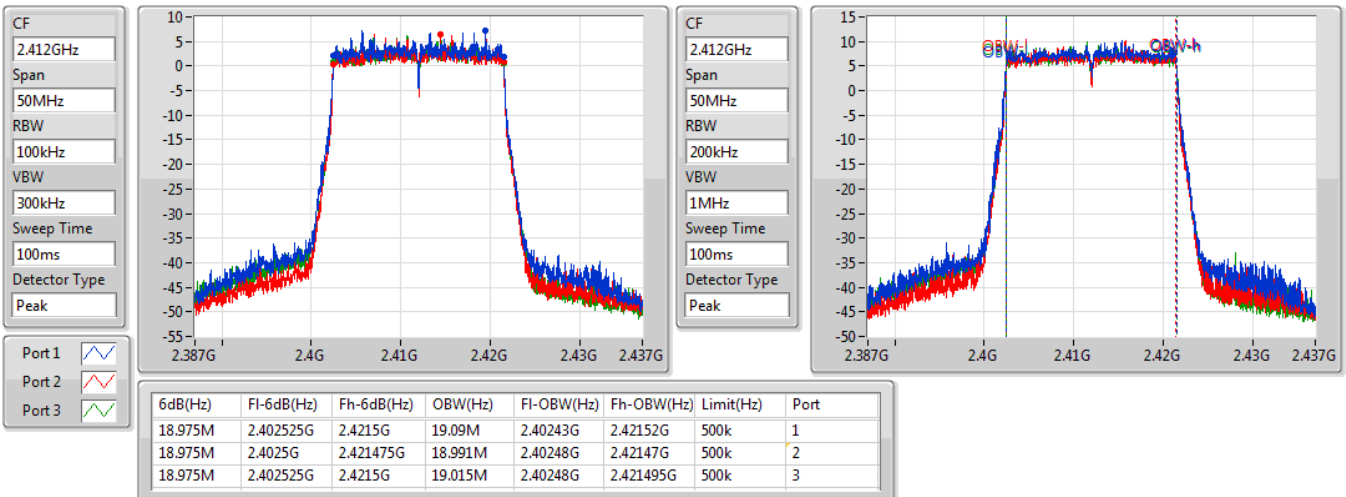


802.11ax HEW40_Nss3,(MCS0)_3TX
EBW
2437MHz

12/05/2020

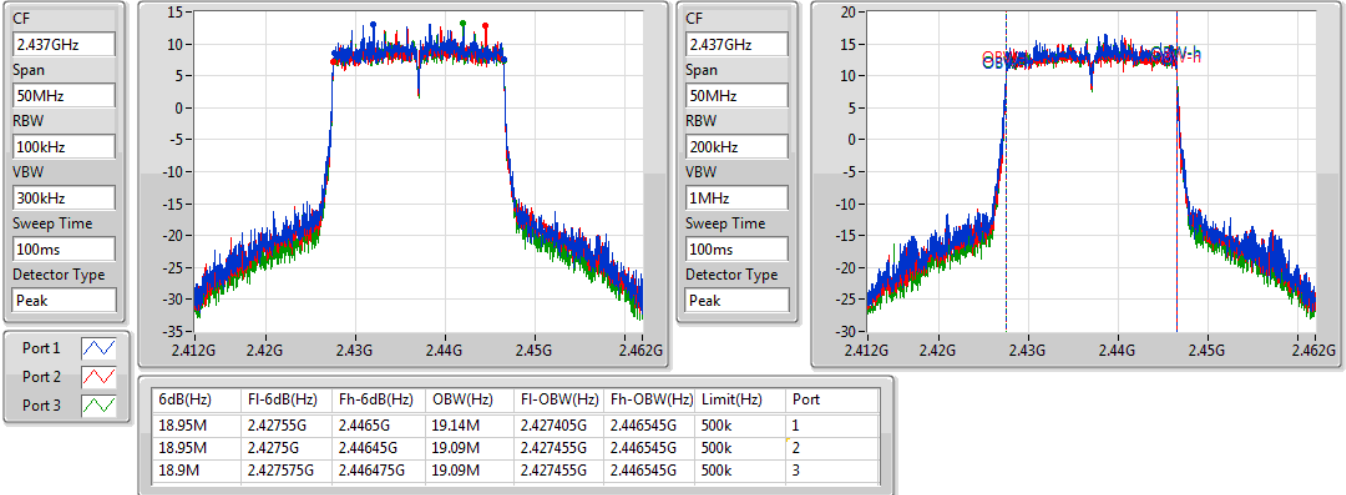

802.11ax HEW20-BF_Nss1,(MCS0)_3TX
EBW
2412MHz

12/05/2020

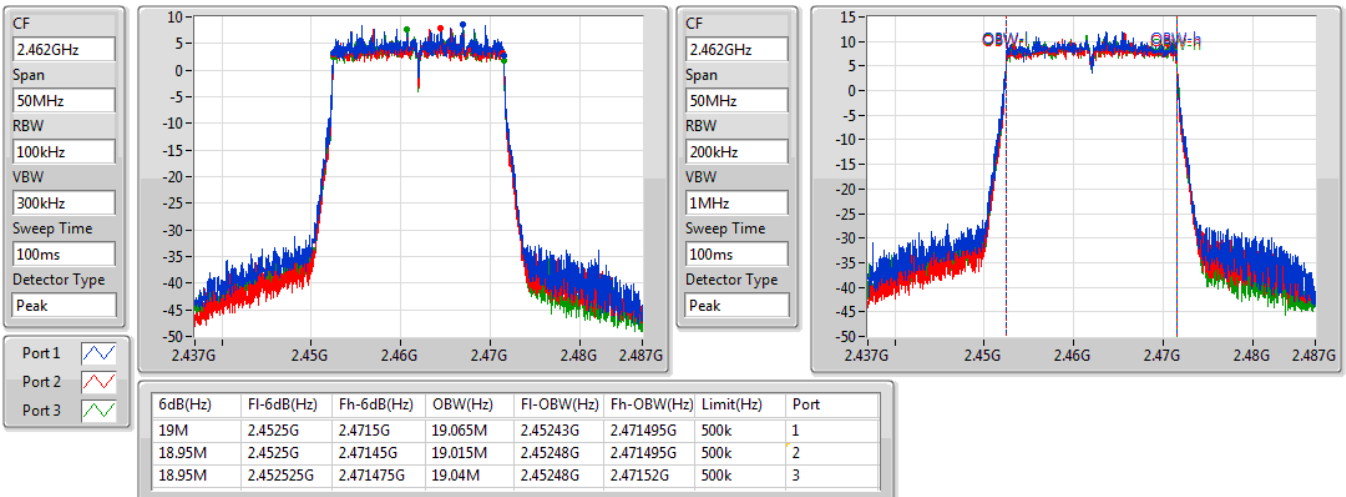


802.11ax HEW20-BF_Nss1,(MCS0)_3TX
EBW
2437MHz

12/05/2020

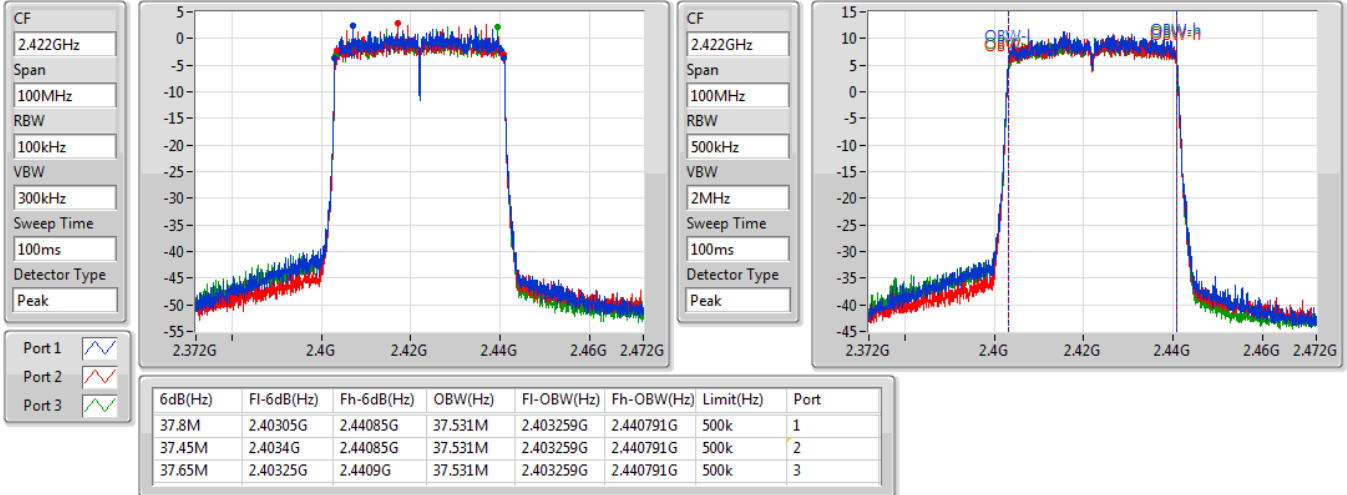

802.11ax HEW20-BF_Nss1,(MCS0)_3TX
EBW
2462MHz

12/05/2020

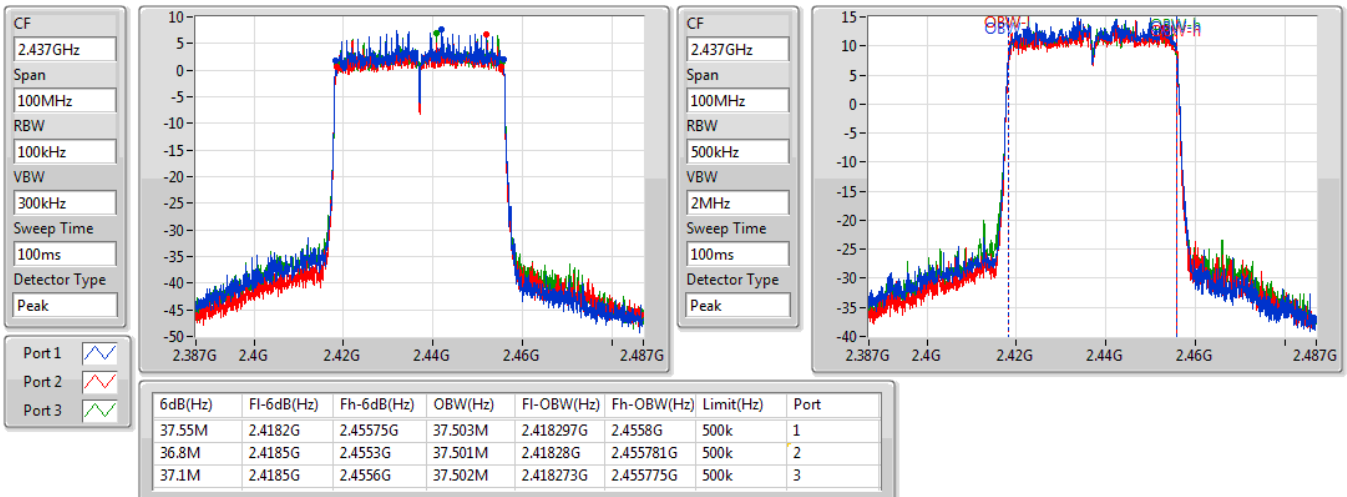


802.11ax HEW40-BF_Nss1,(MCS0)_3TX
EBW
2422MHz

12/05/2020


802.11ax HEW40-BF_Nss1,(MCS0)_3TX
EBW
2437MHz

19/05/2020

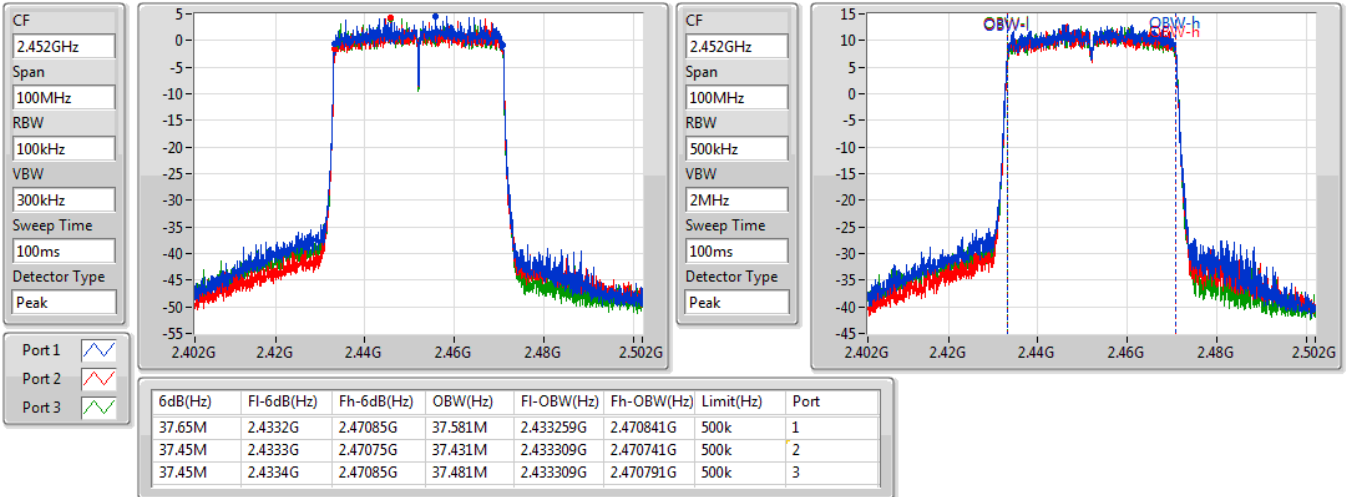


802.11ax HEW40-BF_Nss1,(MCS0)_3TX

EBW

2452MHz

12/05/2020

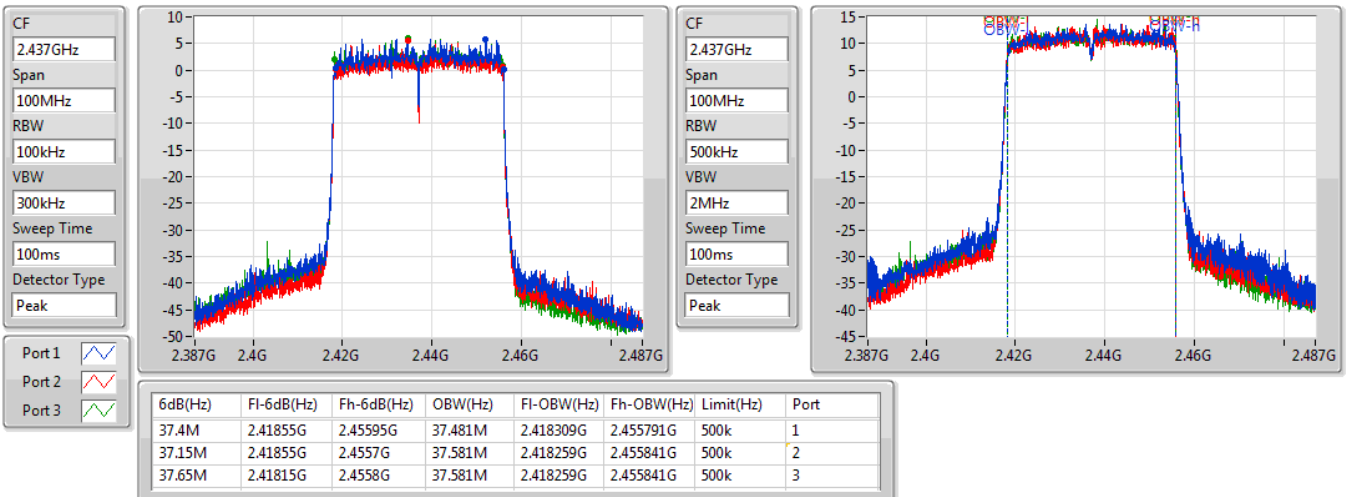


802.11ax HEW40-BF_Nss2,(MCS0)_3TX

EBW

2437MHz

12/05/2020



**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_3TX	29.91	0.97949
802.11g_Nss1,(6Mbps)_3TX	29.58	0.90782
802.11ax HEW40_Nss3,(MCS0)_3TX	25.73	0.37411
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	29.36	0.86298
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	25.78	0.37844
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	25.31	0.33963

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.71	25.60	24.81	24.96	29.91	30.00
2437MHz	Pass	1.71	25.43	24.99	24.70	29.82	30.00
2462MHz	Pass	1.71	24.09	23.70	23.51	28.54	30.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.71	21.04	20.55	20.51	25.48	30.00
2417MHz	Pass	1.71	21.82	21.19	21.16	26.17	30.00
2437MHz	Pass	1.71	25.05	24.61	24.76	29.58	30.00
2457MHz	Pass	1.71	20.83	20.67	20.69	25.50	30.00
2462MHz	Pass	1.71	20.57	20.41	20.19	25.16	30.00
802.11ax HEW40_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-
2437MHz	Pass	1.70	21.27	20.82	20.77	25.73	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.47	19.31	18.57	18.77	23.67	29.53
2417MHz	Pass	6.47	20.96	20.57	20.39	25.42	29.53
2437MHz	Pass	6.47	24.86	24.60	24.28	29.36	29.53
2457MHz	Pass	6.47	20.89	20.84	20.45	25.50	29.53
2462MHz	Pass	6.47	20.50	19.84	19.87	24.85	29.53
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.47	17.96	17.54	17.58	22.47	29.53
2427MHz	Pass	6.47	17.99	17.51	17.40	22.41	29.53
2437MHz	Pass	6.47	21.40	20.63	20.97	25.78	29.53
2447MHz	Pass	6.47	19.45	19.12	19.19	24.03	29.53
2452MHz	Pass	6.47	19.05	18.94	18.74	23.68	29.53
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
2437MHz	Pass	3.92	20.76	20.42	20.42	25.31	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_3TX	5.59
802.11g_Nss1,(6Mbps)_3TX	3.88
802.11ax HEW40_Nss3,(MCS0)_3TX	-5.59
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	2.56
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-2.74
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	-5.07

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)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.47	2.33	1.88	2.51	5.59	7.53
2437MHz	Pass	6.47	2.49	2.05	2.34	5.16	7.53
2462MHz	Pass	6.47	2.09	1.99	1.71	4.80	7.53
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.47	-4.78	-5.25	-5.47	-0.99	7.53
2437MHz	Pass	6.47	-0.31	-0.29	-0.16	3.88	7.53
2462MHz	Pass	6.47	-5.31	-5.79	-5.73	-1.36	7.53
802.11ax HEW40_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-
2437MHz	Pass	1.70	-7.99	-8.56	-7.91	-5.59	8.00
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.47	-7.22	-8.65	-8.00	-3.77	7.53
2437MHz	Pass	6.47	-1.78	-1.78	-1.66	2.56	7.53
2462MHz	Pass	6.47	-6.53	-6.59	-6.77	-3.29	7.53
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.47	-11.19	-11.90	-11.54	-6.76	7.53
2437MHz	Pass	6.47	-7.20	-7.75	-7.47	-2.74	7.53
2452MHz	Pass	6.47	-9.09	-10.30	-9.54	-5.40	7.53
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
2437MHz	Pass	3.47	-8.52	-8.59	-8.70	-5.07	8.00

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

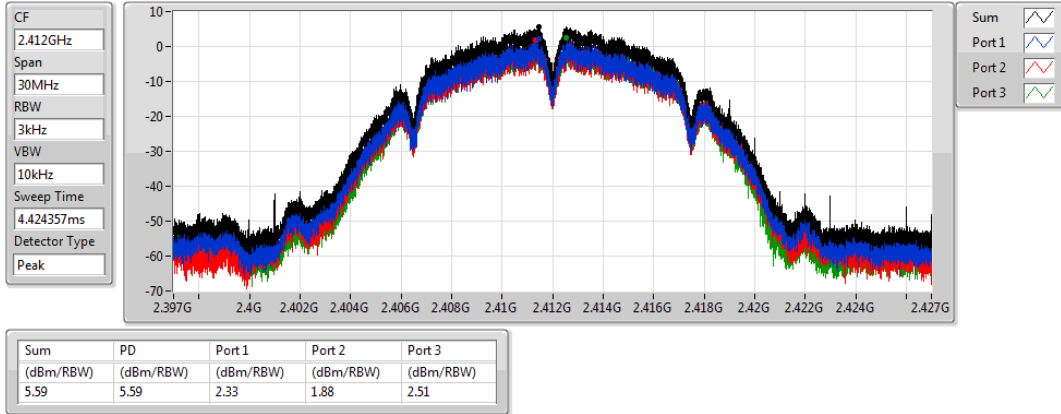
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_3TX

PSD

2412MHz

12/05/2020

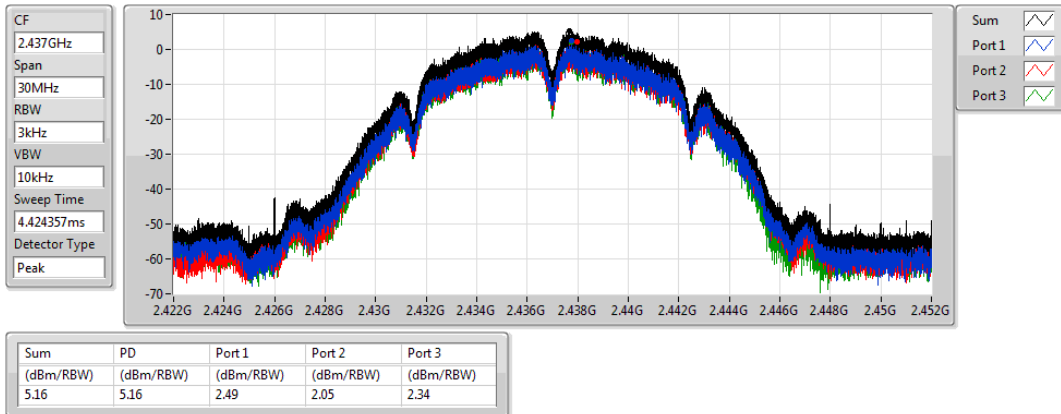


802.11b_Nss1,(1Mbps)_3TX

PSD

2437MHz

12/05/2020

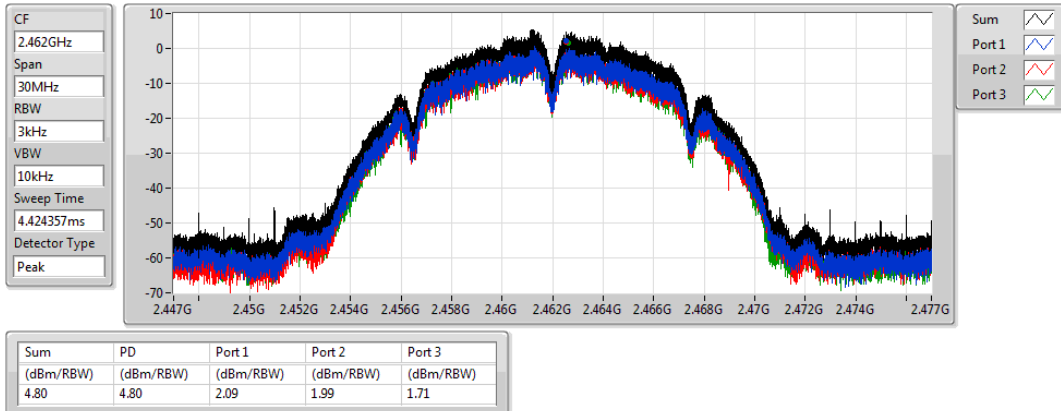


802.11b_Nss1,(1Mbps)_3TX

PSD

2462MHz

12/05/2020

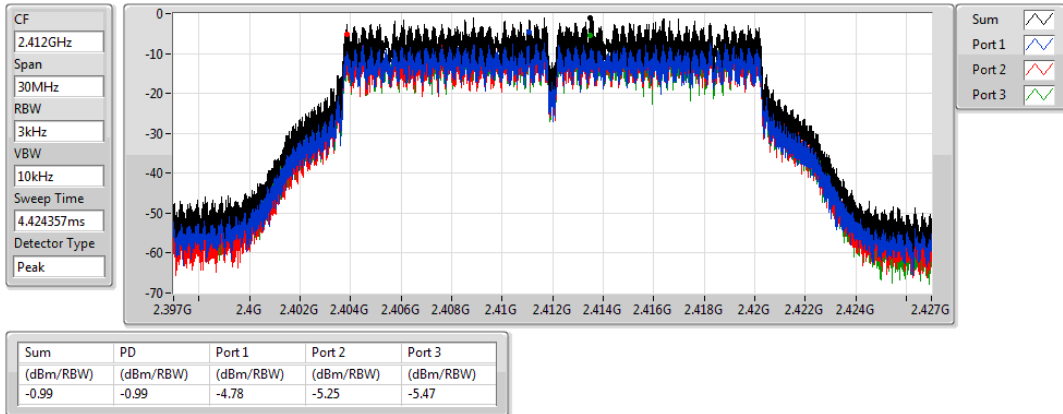


802.11g_Nss1,(6Mbps)_3TX

PSD

2412MHz

12/05/2020

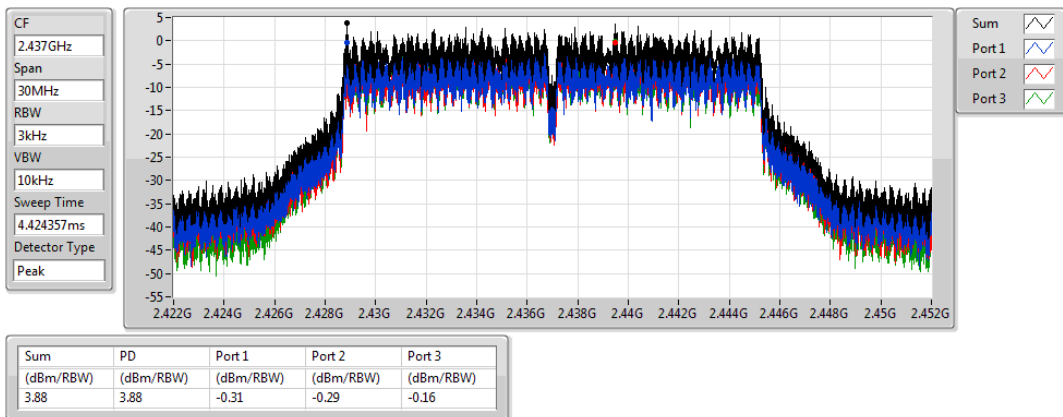


802.11g_Nss1,(6Mbps)_3TX

PSD

2437MHz

12/05/2020

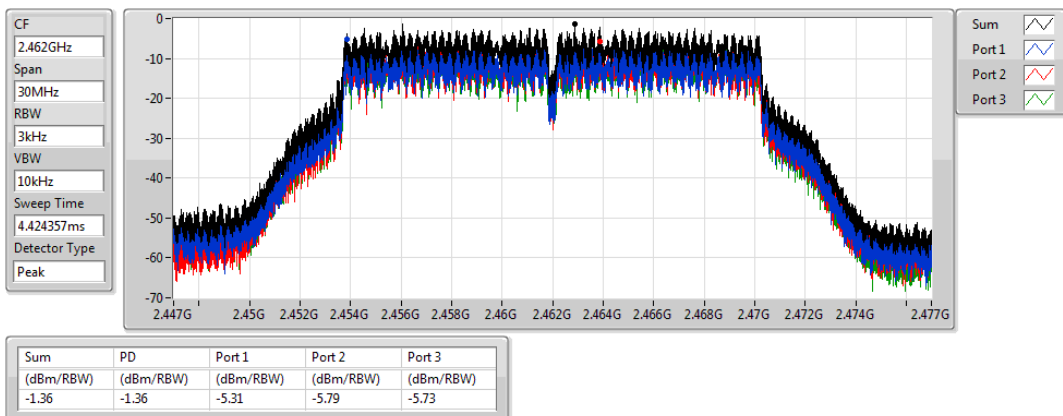


802.11g_Nss1,(6Mbps)_3TX

PSD

2462MHz

12/05/2020

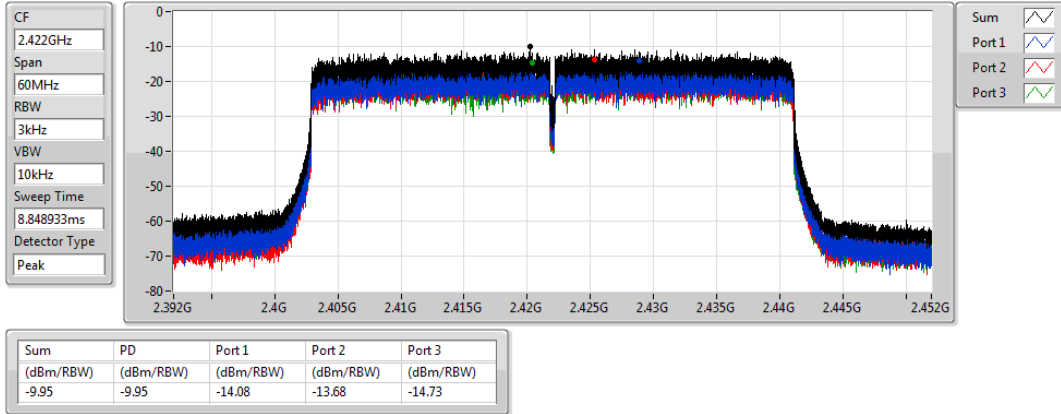


802.11ax HEW40_Nss1,(MCS0)_3TX

PSD

2422MHz

12/05/2020

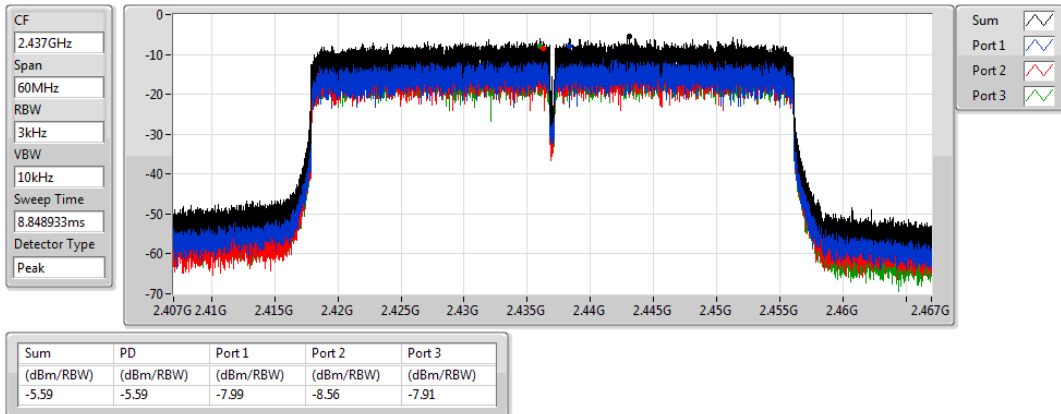


802.11ax HEW40_Nss3,(MCS0)_3TX

PSD

2437MHz

12/05/2020

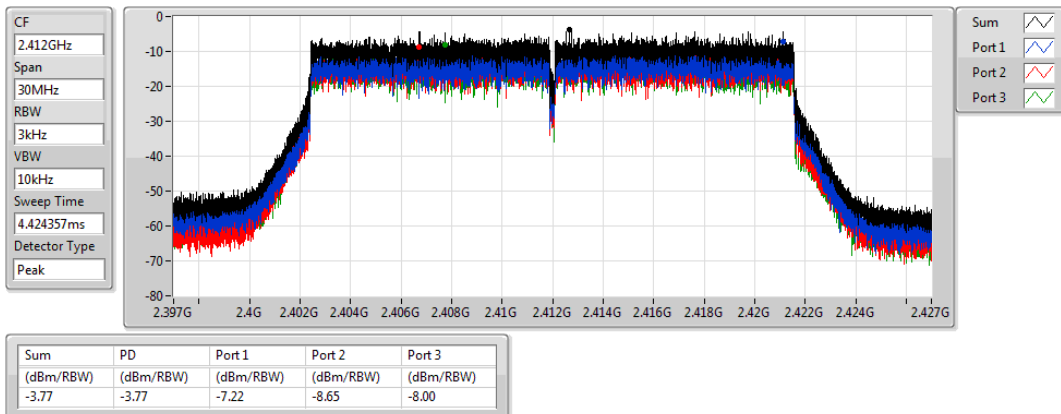


802.11ax HEW20-BF_Nss1,(MCS0)_3TX

PSD

2412MHz

12/05/2020

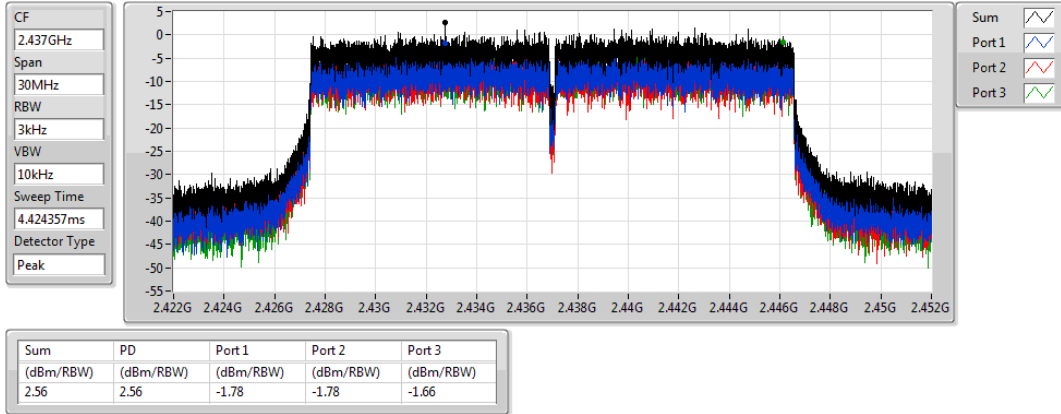


802.11ax HEW20-BF_Nss1,(MCS0)_3TX

PSD

2437MHz

12/05/2020

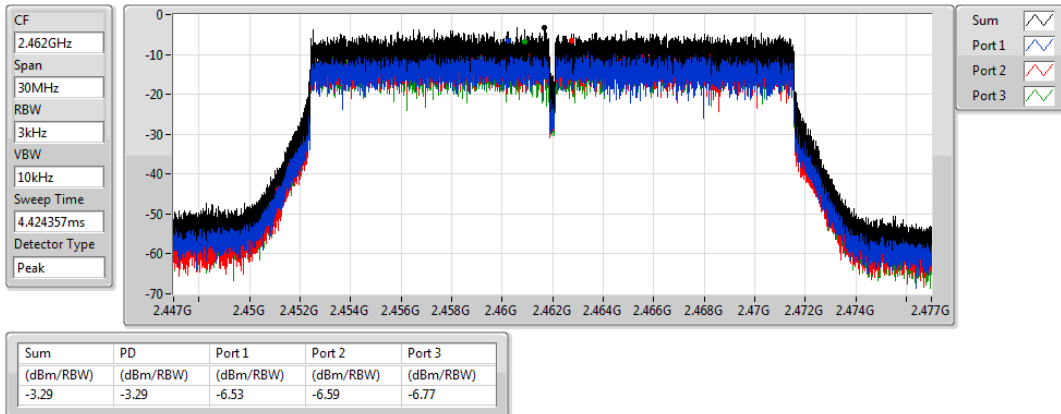


802.11ax HEW20-BF_Nss1,(MCS0)_3TX

PSD

2462MHz

12/05/2020

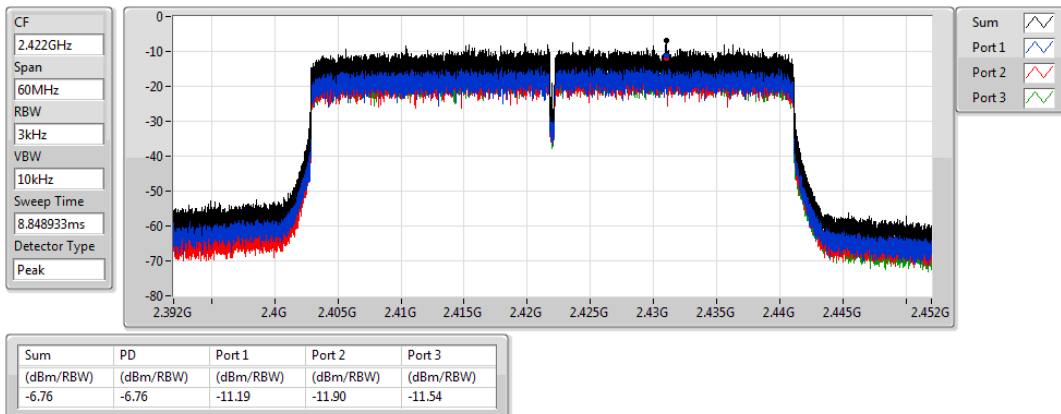


802.11ax HEW40-BF_Nss1,(MCS0)_3TX

PSD

2422MHz

12/05/2020

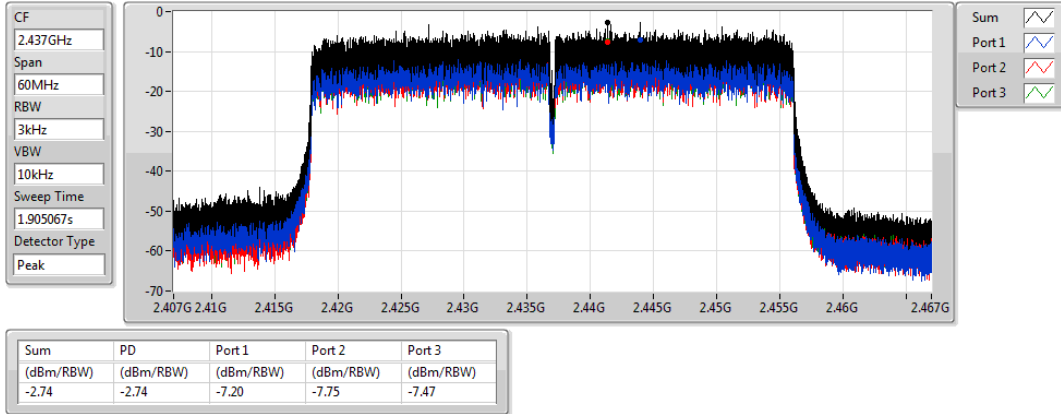


802.11ax HEW40-BF_Nss1,(MCS0)_3TX

PSD

2437MHz

19/05/2020

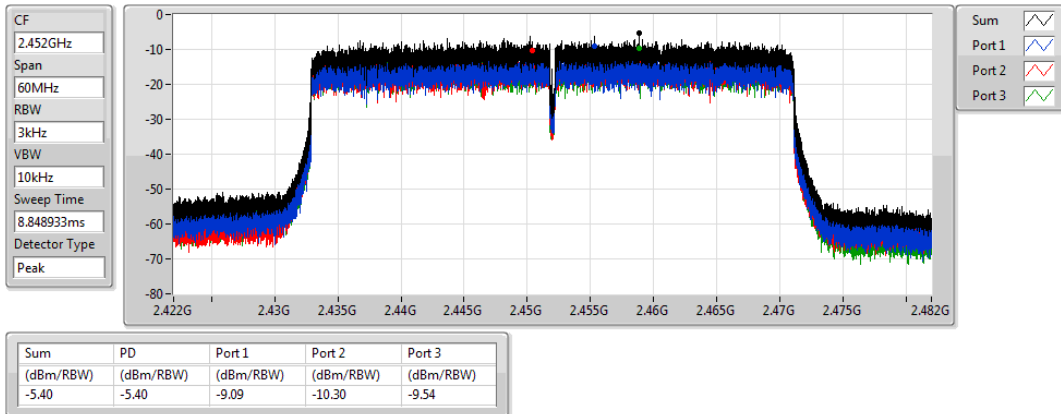


802.11ax HEW40-BF_Nss1,(MCS0)_3TX

PSD

2452MHz

21/05/2020

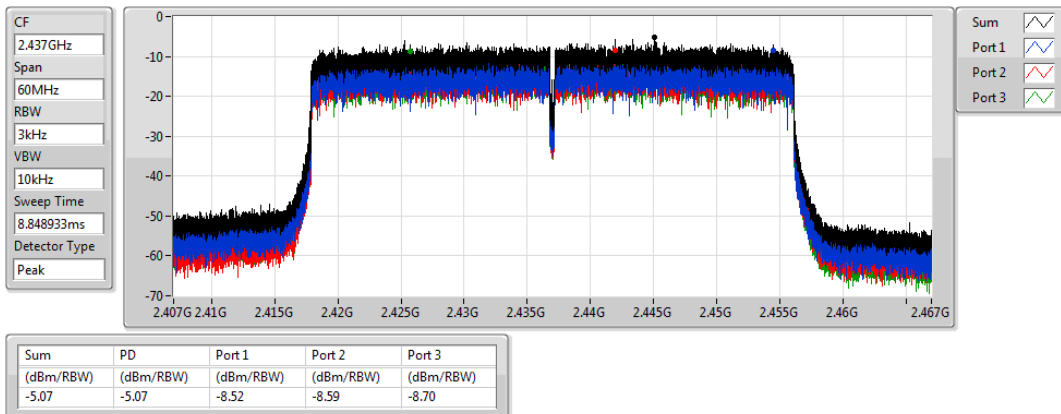


802.11ax HEW40-BF_Nss2,(MCS0)_3TX

PSD

2437MHz

12/05/2020



**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)_3TX	Pass	2.41148G	17.49	-12.51	2.30874G	-50.60	2.399G	-34.18	2.4G	-42.10	2.513G	-43.49	17.60523G	-41.62	1
802.11g_Nss1,(6Mbps)_3TX	Pass	2.44196G	13.74	-16.26	2.30961G	-51.83	2.397G	-30.16	2.4G	-30.49	2.51638G	-46.34	17.65299G	-41.70	1
802.11ax HEW40_Nss3,(MCS0)_3TX	Pass	2.442G	6.89	-23.11	2.30225G	-52.94	2.39828G	-34.08	2.4G	-38.51	2.48542G	-40.83	16.60314G	-42.03	1
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	Pass	2.44451G	13.15	-16.85	2.30641G	-52.42	2.39982G	-33.97	2.4G	-36.04	2.50298G	-48.32	16.79608G	-41.87	1
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	Pass	2.442G	6.30	-23.70	50.04M	-37.15	2.39956G	-38.20	2.4G	-39.64	2.48478G	-46.13	24.99439G	-45.43	1
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	Pass	2.44572G	6.63	-23.37	2.12506G	-52.62	2.39948G	-36.23	2.4G	-40.05	2.48678G	-44.71	16.51339G	-42.31	1

Result

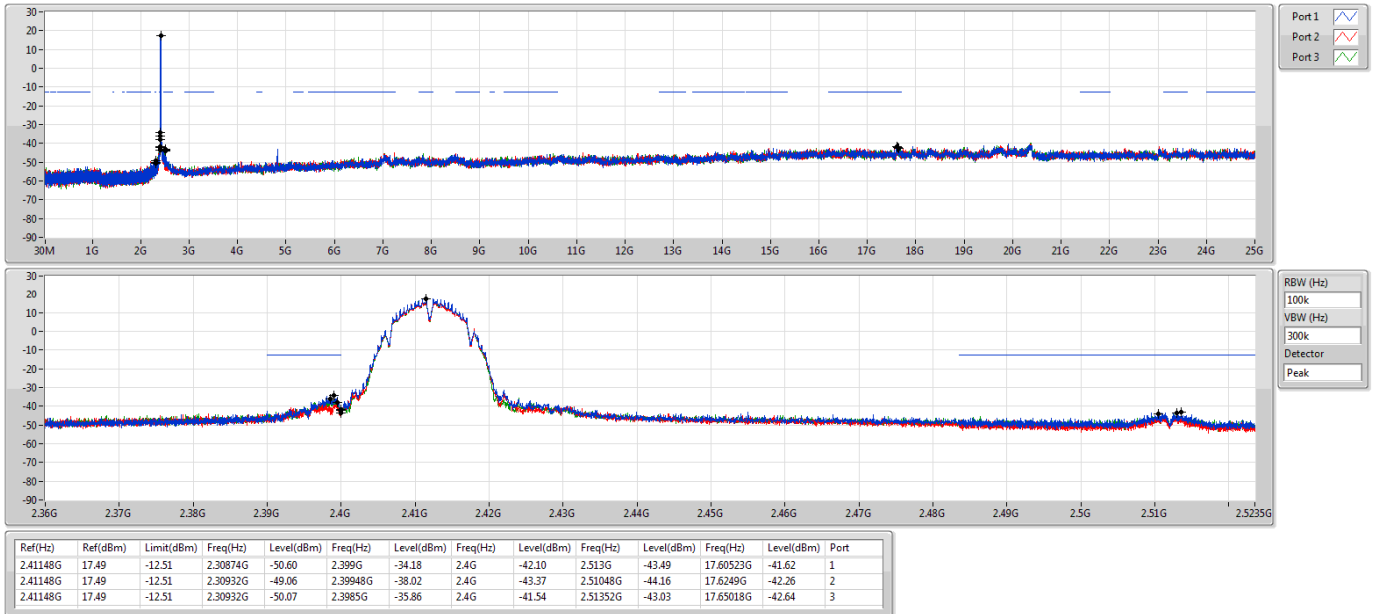
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41148G	17.49	-12.51	2.30874G	-50.60	2.399G	-34.18	2.4G	-42.10	2.513G	-43.49	17.60523G	-41.62	1
2412MHz	Pass	2.41148G	17.49	-12.51	2.30932G	-49.06	2.39948G	-38.02	2.4G	-43.37	2.51048G	-44.16	17.6249G	-42.26	2
2412MHz	Pass	2.41148G	17.49	-12.51	2.30932G	-50.07	2.3985G	-35.86	2.4G	-41.54	2.51352G	-43.03	17.65018G	-42.64	3
2437MHz	Pass	2.41148G	17.49	-12.51	2.30874G	-51.03	2.3967G	-46.75	2.4835G	-47.64	2.48742G	-45.19	17.03489G	-42.29	1
2437MHz	Pass	2.41148G	17.49	-12.51	2.30903G	-51.94	2.39246G	-45.58	2.4G	-49.15	2.48584G	-46.20	24.35942G	-41.82	2
2437MHz	Pass	2.41148G	17.49	-12.51	2.30874G	-50.89	2.3998G	-44.34	2.4G	-47.44	2.49596G	-45.15	17.17818G	-42.08	3
2462MHz	Pass	2.41148G	17.49	-12.51	2.30437G	-51.91	2.399G	-47.07	2.4835G	-45.87	2.49936G	-43.83	16.95903G	-42.07	1
2462MHz	Pass	2.41148G	17.49	-12.51	894.43M	-52.39	2.39956G	-48.75	2.4835G	-46.38	2.48512G	-44.97	23.35922G	-42.31	2
2462MHz	Pass	2.41148G	17.49	-12.51	2.30233G	-52.18	2.39894G	-47.39	2.4835G	-45.19	2.48644G	-43.58	17.65861G	-41.30	3
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	13.74	-16.26	2.30961G	-51.83	2.397G	-30.16	2.4G	-30.49	2.51638G	-46.34	17.65299G	-41.70	1
2412MHz	Pass	2.44196G	13.74	-16.26	2.30874G	-50.41	2.39986G	-30.46	2.4G	-35.36	2.50624G	-47.40	16.4505G	-42.44	2
2412MHz	Pass	2.44196G	13.74	-16.26	2.30991G	-51.25	2.3992G	-32.26	2.4G	-33.31	2.48428G	-47.89	17.63614G	-41.28	3
2437MHz	Pass	2.44196G	13.74	-16.26	2.30408G	-51.94	2.39924G	-41.37	2.4G	-46.18	2.48448G	-44.38	16.54884G	-42.57	1
2437MHz	Pass	2.44196G	13.74	-16.26	2.30437G	-50.56	2.3989G	-42.04	2.4G	-43.13	2.49074G	-43.68	16.57412G	-41.76	2
2437MHz	Pass	2.44196G	13.74	-16.26	2.30932G	-50.83	2.3967G	-39.06	2.4G	-42.96	2.49332G	-44.72	16.48984G	-41.65	3
2462MHz	Pass	2.44196G	13.74	-16.26	2.18234G	-52.23	2.39144G	-48.34	2.4835G	-45.43	2.48354G	-41.18	16.77922G	-41.65	1
2462MHz	Pass	2.44196G	13.74	-16.26	2.05186G	-52.50	2.39196G	-48.57	2.4835G	-41.68	2.48456G	-40.38	16.81013G	-42.05	2
2462MHz	Pass	2.44196G	13.74	-16.26	49.81M	-52.88	2.399G	-49.23	2.4835G	-44.65	2.48448G	-42.46	14.1888G	-42.30	3
802.11ax HEW40_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	2.442G	6.89	-23.11	2.30225G	-52.94	2.39828G	-34.08	2.4G	-38.51	2.48542G	-40.83	16.60314G	-42.03	1
2437MHz	Pass	2.442G	6.89	-23.11	2.30483G	-51.56	2.3982G	-36.28	2.4G	-40.24	2.48574G	-40.92	16.54424G	-41.86	2
2437MHz	Pass	2.442G	6.89	-23.11	2.09673G	-52.01	2.39824G	-35.88	2.4G	-38.43	2.48546G	-41.45	16.8247G	-42.61	3
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44451G	13.15	-16.85	2.30641G	-52.42	2.39982G	-33.97	2.4G	-36.04	2.50298G	-48.32	16.79608G	-41.87	1
2412MHz	Pass	2.44451G	13.15	-16.85	2.30583G	-51.73	2.4G	-39.15	2.4G	-40.55	2.48928G	-49.15	17.68952G	-42.47	2
2412MHz	Pass	2.44451G	13.15	-16.85	2.30845G	-52.97	2.39816G	-35.81	2.4G	-37.20	2.50252G	-48.58	16.50107G	-41.80	3
2437MHz	Pass	2.44451G	13.15	-16.85	2.30874G	-51.07	2.3996G	-39.16	2.4G	-41.13	2.48874G	-43.73	16.4786G	-42.00	1
2437MHz	Pass	2.44451G	13.15	-16.85	2.03089G	-50.11	2.39966G	-40.13	2.4G	-42.35	2.49288G	-44.28	16.57693G	-42.32	2
2437MHz	Pass	2.44451G	13.15	-16.85	2.30787G	-52.08	2.39676G	-40.82	2.4G	-40.90	2.48354G	-43.63	24.76681G	-42.65	3
2462MHz	Pass	2.44451G	13.15	-16.85	2.1471G	-52.03	2.39524G	-49.58	2.4835G	-42.86	2.4836G	-38.47	14.97267G	-42.22	1
2462MHz	Pass	2.44451G	13.15	-16.85	2.30903G	-53.12	2.39712G	-49.53	2.4835G	-44.62	2.48352G	-40.05	16.82136G	-42.72	2
2462MHz	Pass	2.44451G	13.15	-16.85	2.30961G	-52.48	2.3933G	-49.40	2.4835G	-40.96	2.4837G	-41.00	17.64176G	-41.73	3
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.37	2.3968G	-40.28	2.4G	-42.77	2.51106G	-51.28	24.9383G	-45.82	1
2422MHz	Pass	2.442G	6.30	-23.70	50.04M	-38.09	2.39916G	-45.39	2.4G	-46.38	2.48846G	-51.48	24.83734G	-44.98	2
2422MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.81	2.3972G	-41.52	2.4G	-42.76	2.4841G	-51.16	24.88501G	-45.37	3
2437MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.15	2.39956G	-38.20	2.4G	-39.64	2.48478G	-46.13	24.99439G	-45.43	1
2437MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.73	2.39948G	-40.49	2.4G	-41.83	2.49454G	-44.73	24.90464G	-46.01	2
2437MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.53	2.39956G	-37.15	2.4G	-39.05	2.4851G	-45.48	24.82892G	-45.55	3
2452MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.53	2.4G	-48.45	2.4G	-47.77	2.48582G	-47.12	24.29045G	-45.98	1
2452MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.79	2.39876G	-49.90	2.4835G	-45.39	2.48826G	-43.78	24.43909G	-45.61	2
2452MHz	Pass	2.442G	6.30	-23.70	50.04M	-37.86	2.39988G	-48.27	2.4835G	-46.06	2.48362G	-43.87	24.80929G	-46.00	3
802.11ax HEW40-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	2.44572G	6.63	-23.37	2.12506G	-52.62	2.39948G	-36.23	2.4G	-40.05	2.48678G	-44.71	16.51339G	-42.31	1
2437MHz	Pass	2.44572G	6.63	-23.37	2.30225G	-51.67	2.39832G	-40.47	2.4G	-42.16	2.48474G	-44.82	16.8247G	-42.05	2
2437MHz	Pass	2.44572G	6.63	-23.37	2.30655G	-53.08	2.39828G	-37.16	2.4G	-41.47	2.48686G	-45.26	17.63802G	-40.04	3

802.11b_Nss1,(1Mbps)_3TX

CSE NdB

2412MHz

12/05/2020

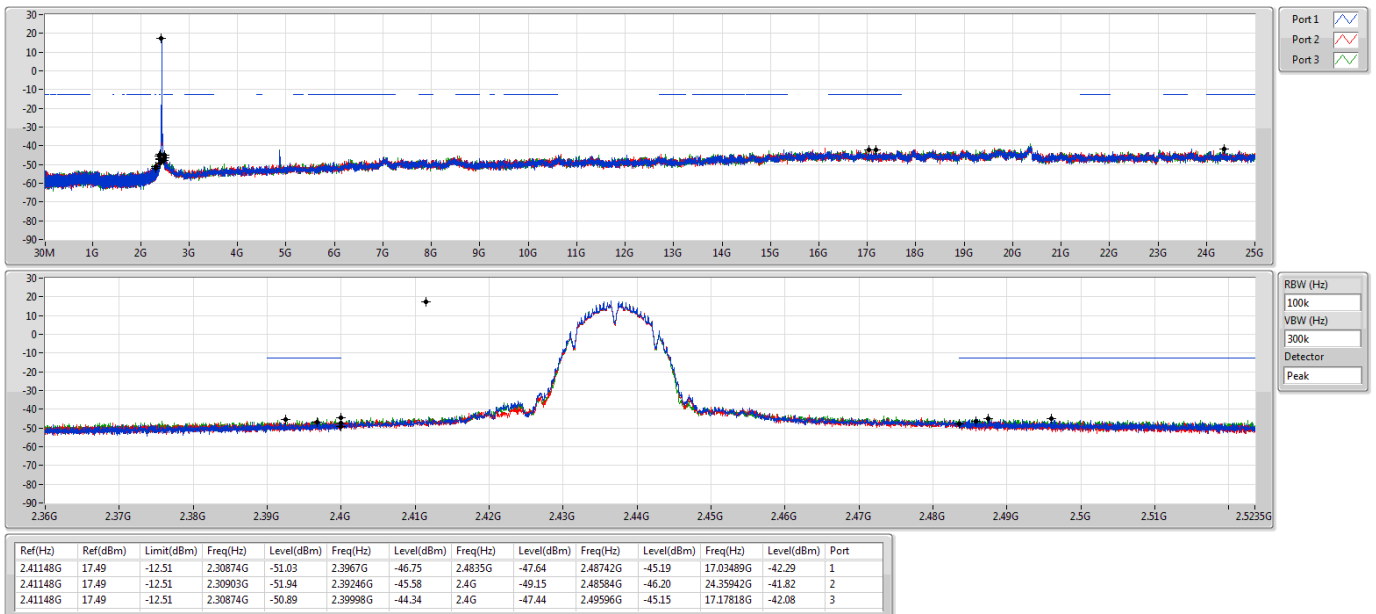


802.11b_Nss1,(1Mbps)_3TX

CSE NdB

2437MHz

12/05/2020

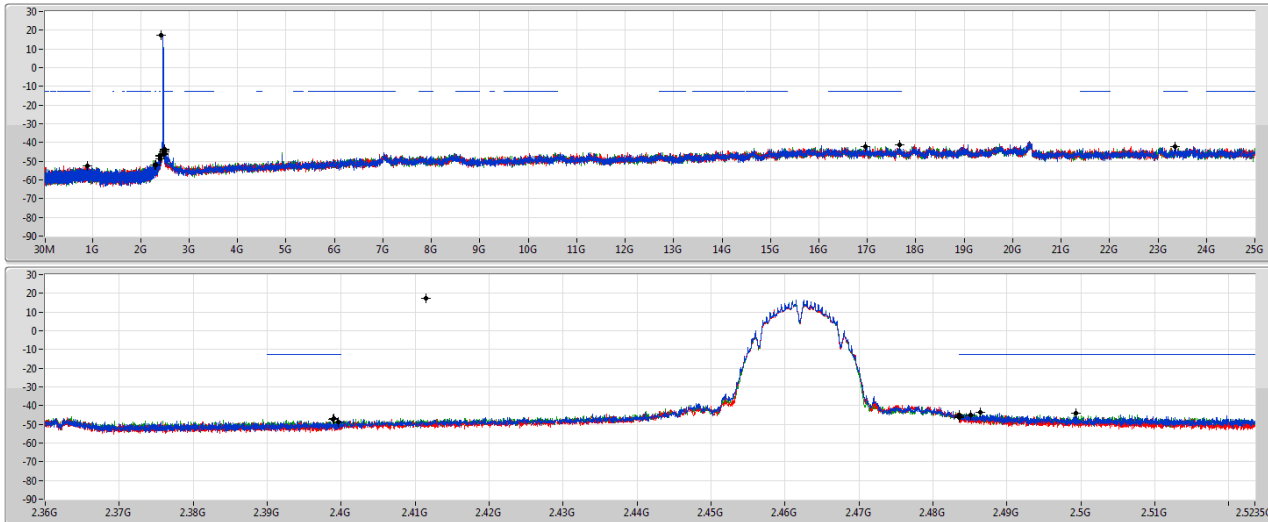


802.11b_Nss1,(1Mbps)_3TX

2462MHz

CSE NdB

12/05/2020



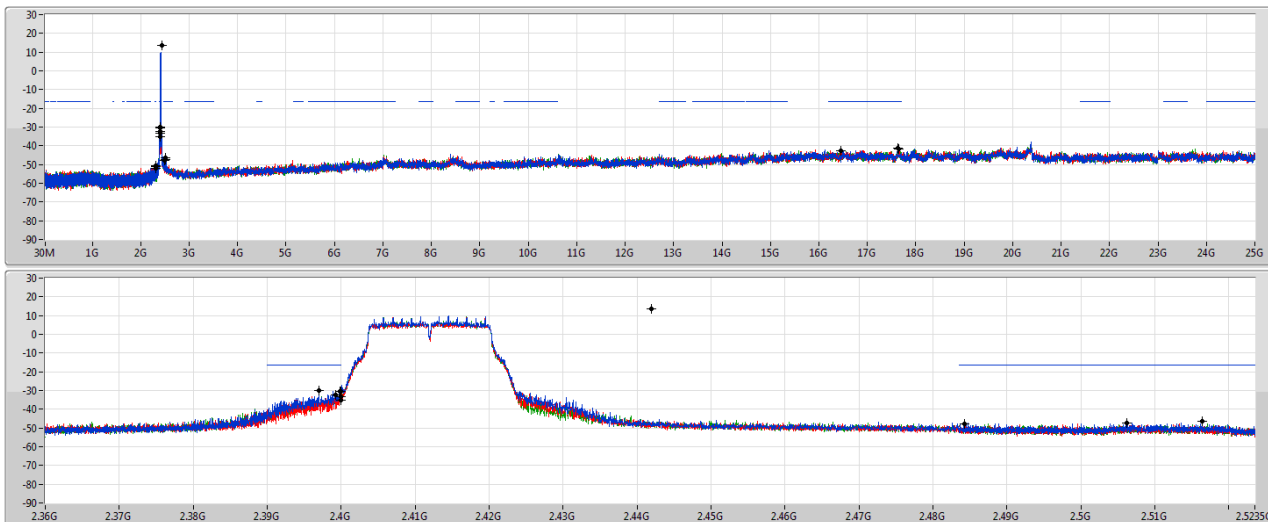
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41148G	17.49	-12.51	2.30437G	-51.91	2.399G	-47.07	2.4835G	-45.87	2.49936G	-43.83	16.95903G	-42.07	1
2.41148G	17.49	-12.51	894.43M	-52.39	2.39956G	-48.75	2.4835G	-46.38	2.48512G	-44.97	23.35922G	-42.31	2
2.41148G	17.49	-12.51	2.30233G	-52.18	2.39894G	-47.39	2.4835G	-45.19	2.48644G	-43.58	17.65861G	-41.30	3

802.11g_Nss1,(6Mbps)_3TX

2412MHz

CSE NdB

12/05/2020



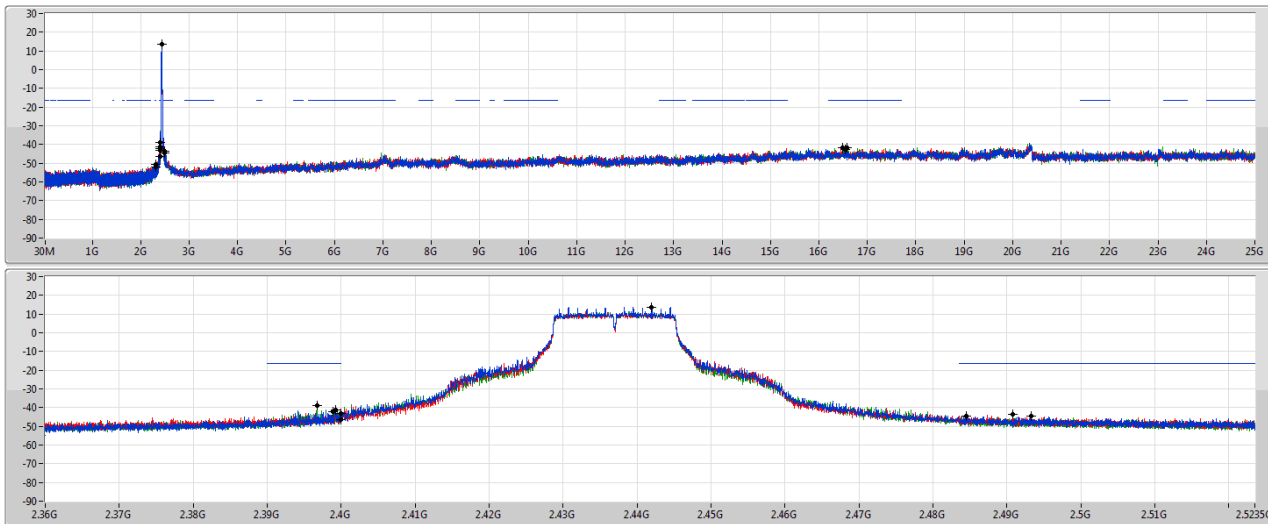
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2.44196G	13.74	-16.26	2.30961G	-51.83	2.397G	-30.16	2.4G	-30.49	2.51638G	-46.34	17.65299G	-41.70	1
2.44196G	13.74	-16.26	2.30874G	-50.41	2.39886G	-30.46	2.4G	-35.36	2.50624G	-47.40	16.4505G	-42.44	2
2.44196G	13.74	-16.26	2.30991G	-51.25	2.3992G	-32.26	2.4G	-33.31	2.48428G	-47.89	17.63614G	-41.28	3

802.11g_Nss1,(6Mbps)_3TX

2437MHz

CSE NdB

12/05/2020



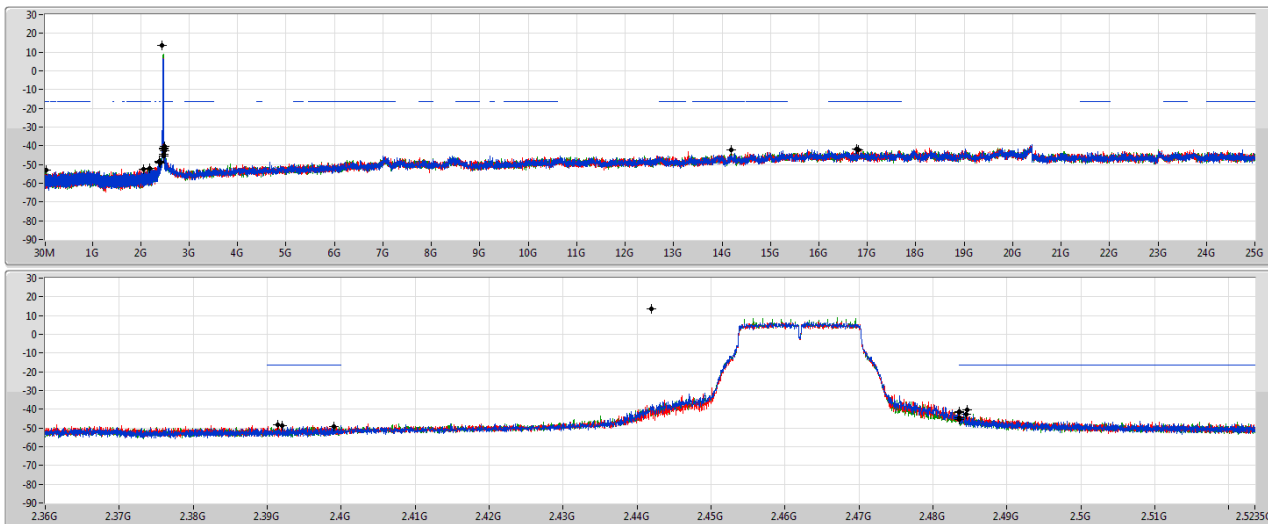
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2.44196G	13.74	-16.26	2.30408G	-51.94	2.39924G	-41.37	2.4G	-46.18	2.48448G	-44.38	16.54884G	-42.57	1
2.44196G	13.74	-16.26	2.30437G	-50.56	2.3989G	-42.04	2.4G	-43.13	2.49074G	-43.68	16.57412G	-41.76	2
2.44196G	13.74	-16.26	2.30932G	-50.83	2.3967G	-39.06	2.4G	-42.96	2.49332G	-44.72	16.48984G	-41.65	3

802.11g_Nss1,(6Mbps)_3TX

2462MHz

CSE NdB

12/05/2020



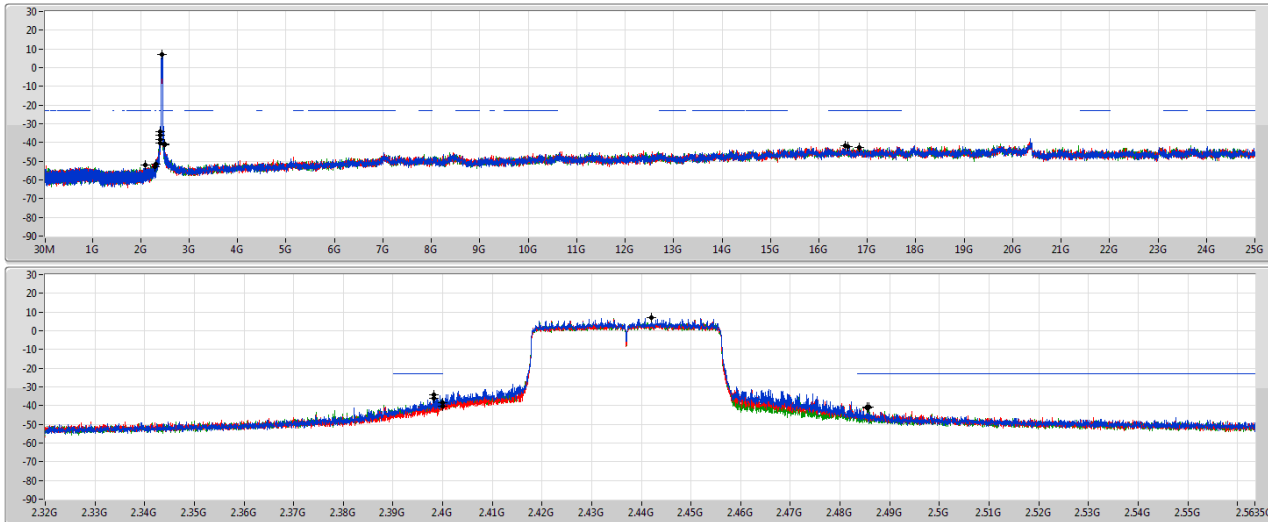
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2.44196G	13.74	-16.26	2.18234G	-52.23	2.39144G	-48.34	2.4835G	-45.43	2.48354G	-41.18	16.77922G	-41.65	1
2.44196G	13.74	-16.26	2.05186G	-52.50	2.39196G	-48.57	2.4835G	-41.68	2.48456G	-40.38	16.81013G	-42.05	2
2.44196G	13.74	-16.26	49.81M	-52.88	2.399G	-49.23	2.4835G	-44.65	2.48448G	-42.46	14.1888G	-42.30	3

802.11ax HEW40_Nss3,(MCS0)_3TX

2437MHz

CSE NdB

12/05/2020



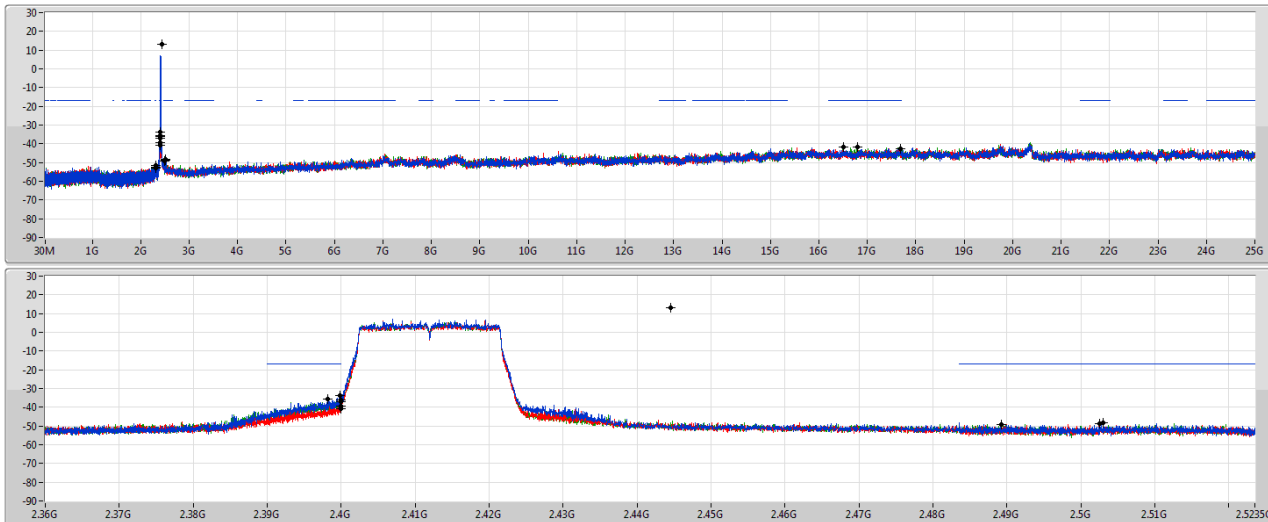
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2.442G	6.89	-23.11	2.30225G	-52.94	2.39828G	-34.08	2.4G	-38.51	2.48542G	-40.83	16.60314G	-42.03	1
2.442G	6.89	-23.11	2.30483G	-51.56	2.3982G	-36.28	2.4G	-40.24	2.48574G	-40.92	16.54424G	-41.86	2
2.442G	6.89	-23.11	2.09673G	-52.01	2.39824G	-35.88	2.4G	-38.43	2.48546G	-41.45	16.8247G	-42.61	3

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

2412MHz

CSE NdB

12/05/2020



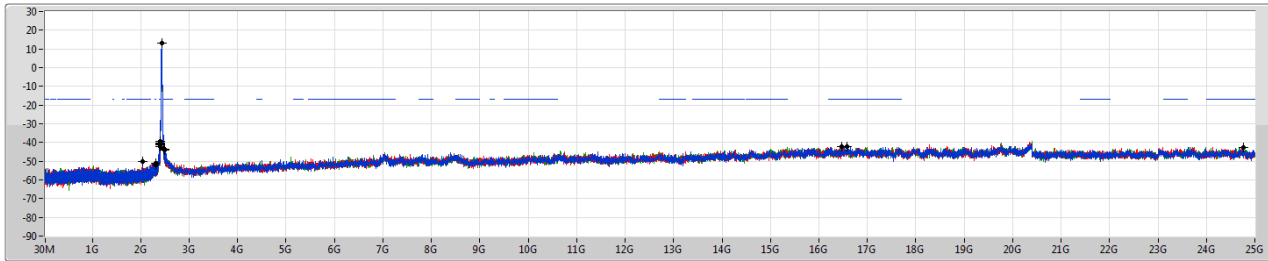
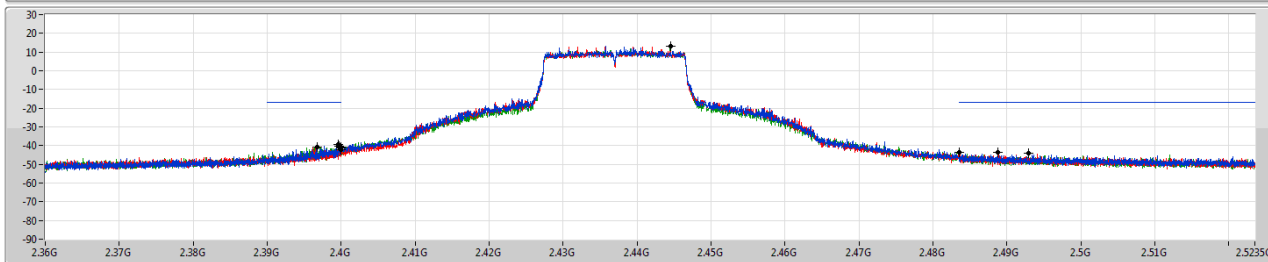
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44451G	13.15	-16.85	2.30641G	-52.42	2.39982G	-33.97	2.4G	-36.04	2.50298G	-48.32	16.79608G	-41.87	1
2.44451G	13.15	-16.85	2.30583G	-51.73	2.4G	-39.15	2.4G	-40.55	2.48928G	-49.15	17.68952G	-42.47	2
2.44451G	13.15	-16.85	2.30845G	-52.97	2.39816G	-35.81	2.4G	-37.20	2.50252G	-48.58	16.50107G	-41.80	3

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

CSE NdB

2437MHz

12/05/2020

Port 1
Port 2
Port 3RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

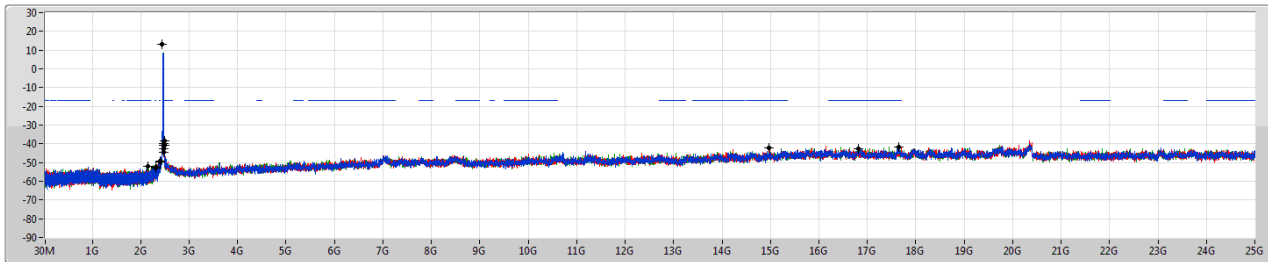
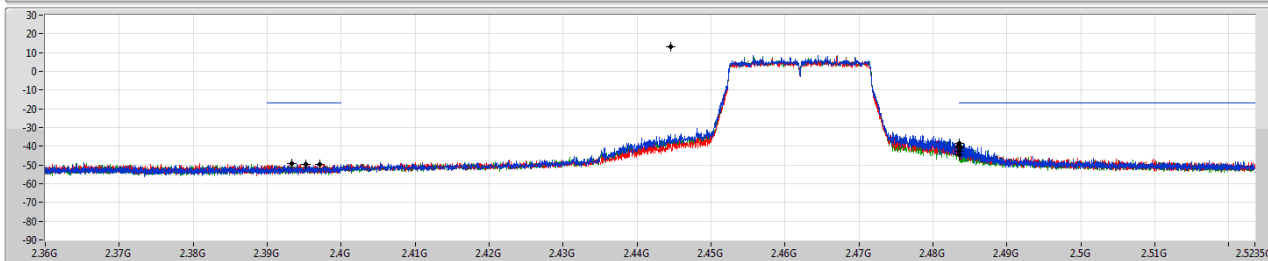
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44451G	13.15	-16.85	2.30874G	-51.07	2.39966G	-39.16	2.4G	-41.13	2.48874G	-43.73	16.4786G	-42.00	1
2.44451G	13.15	-16.85	2.03089G	-50.11	2.39966G	-40.13	2.4G	-42.35	2.49288G	-44.28	16.57693G	-42.32	2
2.44451G	13.15	-16.85	2.30787G	-52.08	2.39676G	-40.82	2.4G	-40.90	2.48354G	-43.63	24.76681G	-42.65	3

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

CSE NdB

2462MHz

12/05/2020

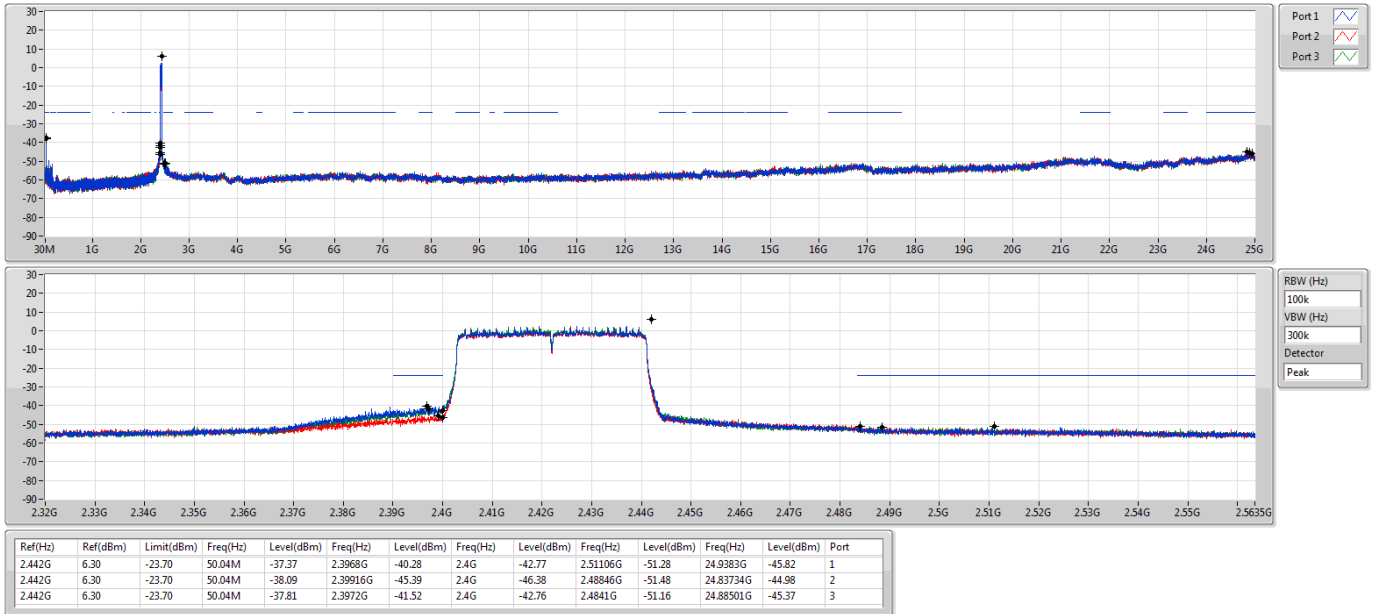
Port 1
Port 2
Port 3RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.44451G	13.15	-16.85	2.1471G	-52.03	2.39524G	-49.58	2.4835G	-42.86	2.4836G	-38.47	14.97267G	-42.22	1
2.44451G	13.15	-16.85	2.30903G	-53.12	2.39712G	-49.53	2.4835G	-44.62	2.48352G	-40.05	16.82136G	-42.72	2
2.44451G	13.15	-16.85	2.30961G	-52.48	2.3933G	-49.40	2.4835G	-40.96	2.4837G	-41.00	17.64176G	-41.73	3

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

CSE NdB

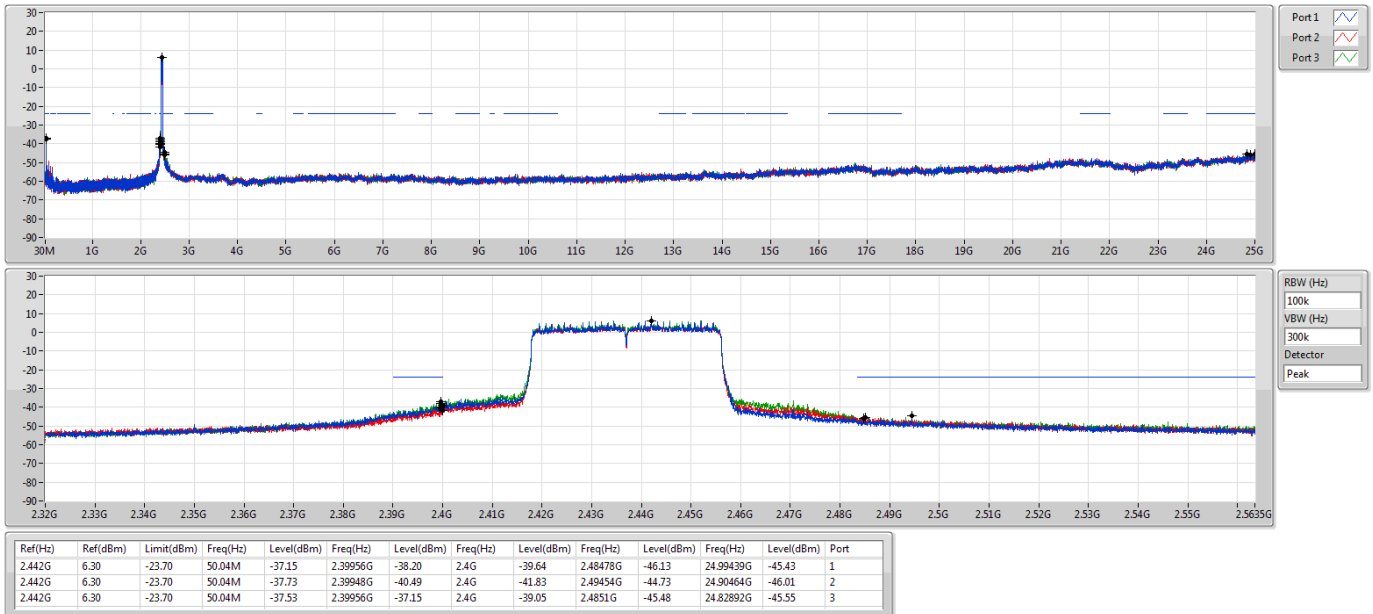
2422MHz



802.11ax HEW40-BF_Nss1,(MCS0)_3TX

CSE NdB

2437MHz

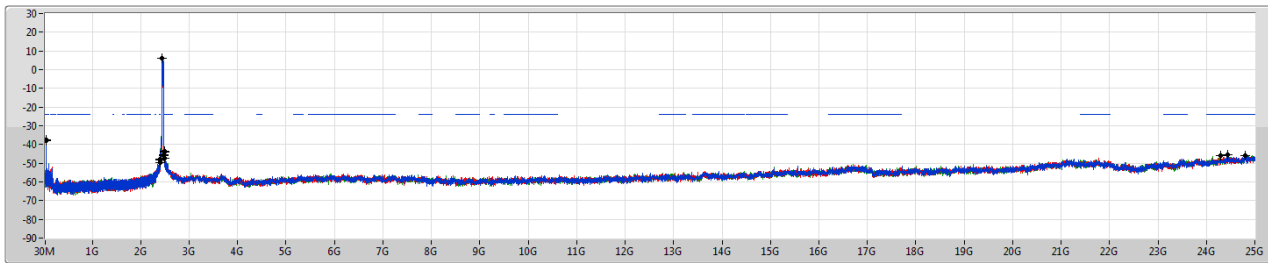


802.11ax HEW40-BF_Nss1,(MCS0)_3TX

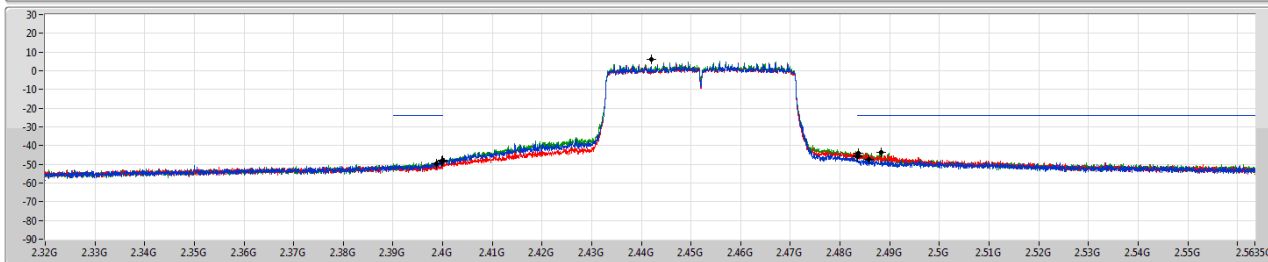
2452MHz

CSE NdB

19/05/2020



Port 1
Port 2
Port 3



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

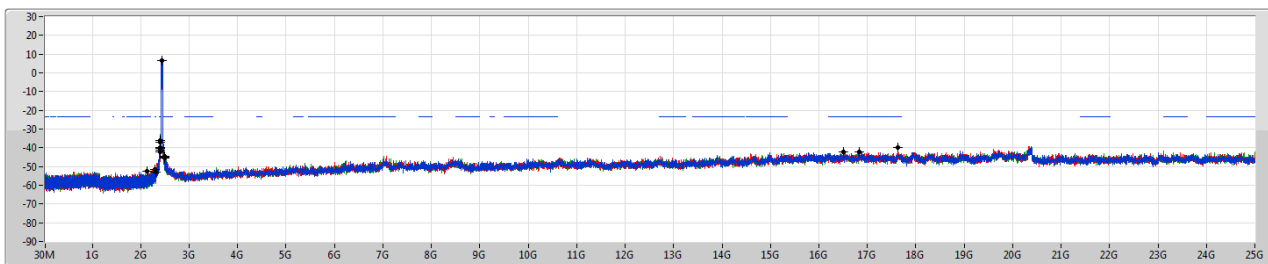
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	6.30	-23.70	50.04M	-37.53	2.4G	-48.45	2.4G	-47.77	2.48582G	-47.12	24.29045G	-45.98	1
2.442G	6.30	-23.70	50.04M	-37.79	2.39876G	-49.90	2.4835G	-45.39	2.48826G	-43.78	24.43909G	-45.61	2
2.442G	6.30	-23.70	50.04M	-37.86	2.39988G	-48.27	2.4835G	-46.06	2.48362G	-43.87	24.80929G	-46.00	3

802.11ax HEW40-BF_Nss2,(MCS0)_3TX

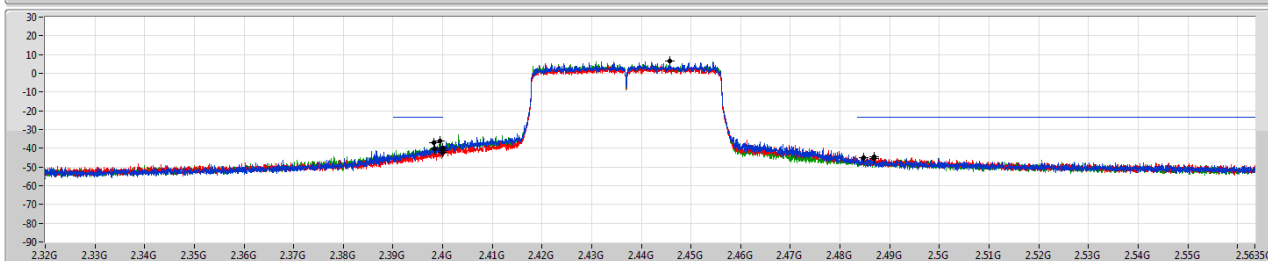
2437MHz

CSE NdB

12/05/2020



Port 1
Port 2
Port 3



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.44572G	6.63	-23.37	2.12506G	-52.62	2.39948G	-36.23	2.4G	-40.05	2.48678G	-44.71	16.51339G	-42.31	1
2.44572G	6.63	-23.37	2.30225G	-51.67	2.39832G	-40.47	2.4G	-42.16	2.48474G	-44.82	16.8247G	-42.05	2
2.44572G	6.63	-23.37	2.30655G	-53.08	2.39828G	-37.16	2.4G	-41.47	2.48686G	-45.26	17.63802G	-40.04	3



Radiated Emissions below 1GHz

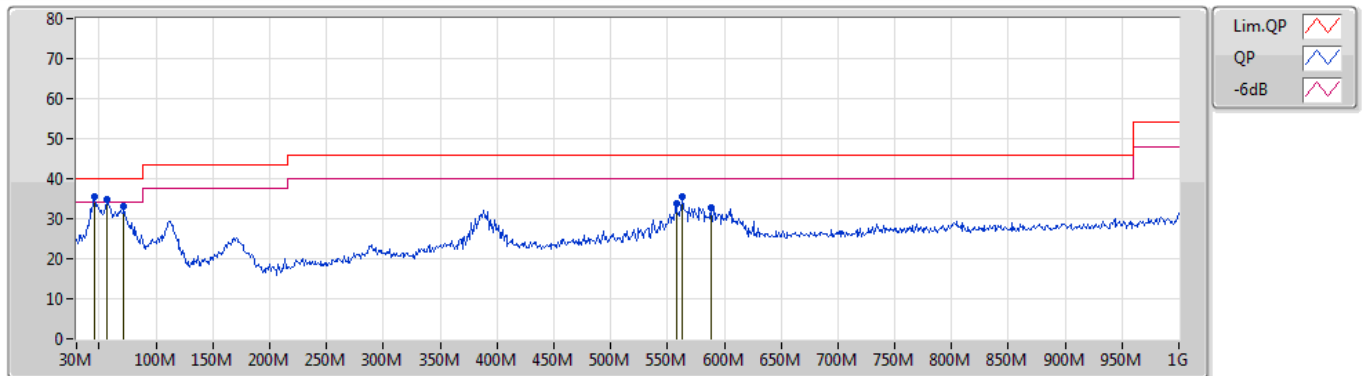
Appendix F.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	45.52M	35.42	40.00	-4.58	Vertical

Mode 2

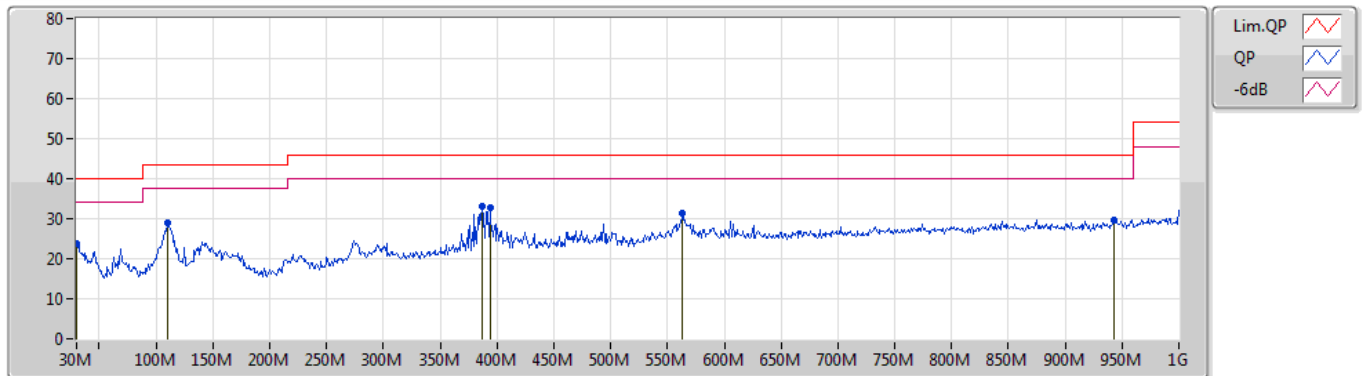
30/06/2020



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	45.52M	35.42	40.00	-4.58	-13.87	3	Vertical	0	1.00	"Worst"	49.29	16.42	1.20	31.49
PK	57.16M	34.84	40.00	-5.16	-17.84	3	Vertical	220	1.00	-	52.68	12.79	1.14	31.77
PK	71.71M	33.00	40.00	-7.00	-17.93	3	Vertical	187	1.50	-	50.93	12.54	1.30	31.77
PK	557.68M	33.71	46.00	-12.29	-4.64	3	Vertical	47	1.00	-	38.35	24.30	3.33	32.27
PK	563.5M	35.44	46.00	-10.56	-4.67	3	Vertical	270	1.00	-	40.11	24.25	3.35	32.27
PK	588.72M	32.78	46.00	-13.22	-4.69	3	Vertical	0	1.00	-	37.47	24.14	3.46	32.29

Mode 2

30/06/2020



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/m)	(dB/m)	(dB)	(dB)
PK	30M	23.87	40.00	-16.13	-6.17	3	Horizontal	188	1.50	-	30.04	24.19	1.20	31.56
PK	110.51M	28.80	43.50	-14.70	-12.27	3	Horizontal	224	2.00	-	41.07	17.90	1.61	31.78
PK	386.96M	32.95	46.00	-13.05	-8.70	3	Horizontal	238	1.00	"Worst"	41.65	20.57	2.82	32.09
PK	393.75M	32.71	46.00	-13.29	-8.39	3	Horizontal	232	1.00	-	41.10	20.86	2.86	32.11
PK	563.5M	31.40	46.00	-14.60	-4.67	3	Horizontal	158	1.50	-	36.07	24.25	3.35	32.27
PK	942.77M	29.62	46.00	-16.38	-1.48	3	Horizontal	289	3.00	-	31.10	26.15	4.51	32.14



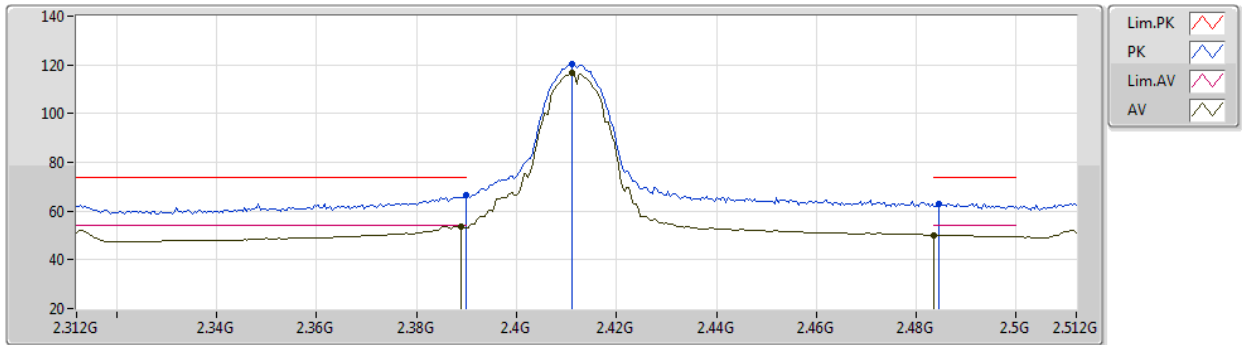
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1.(6Mbps)_3TX	Pass	AV	2.4835G	53.99	54.00	-0.01	3	Vertical	138	1.98	-

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2412MHz_TX



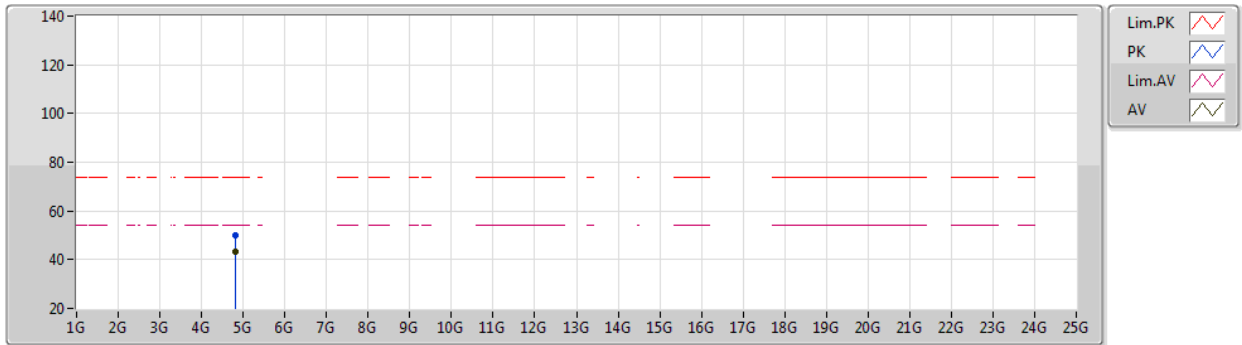
EUT V_3TX
Setting 104
06-E-S-5
ANT WV0331
DUT R110#11

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	34.76	3	Vertical	322	1.80	-	27.63	4.00	-
AV	2.3888G	53.76	54.00	-0.24	22.14	3	Vertical	322	1.80	-	27.63	3.99	-
PK	2.4112G	120.48	Inf	-Inf	88.90	3	Vertical	322	1.80	-	27.57	4.01	-
AV	2.4112G	116.61	Inf	-Inf	85.03	3	Vertical	322	1.80	-	27.57	4.01	-
PK	2.4844G	62.99	74.00	-11.01	31.60	3	Vertical	322	1.80	-	27.35	4.04	-
AV	2.4835G	50.15	54.00	-3.85	18.76	3	Vertical	322	1.80	-	27.35	4.04	-

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2412MHz_TX



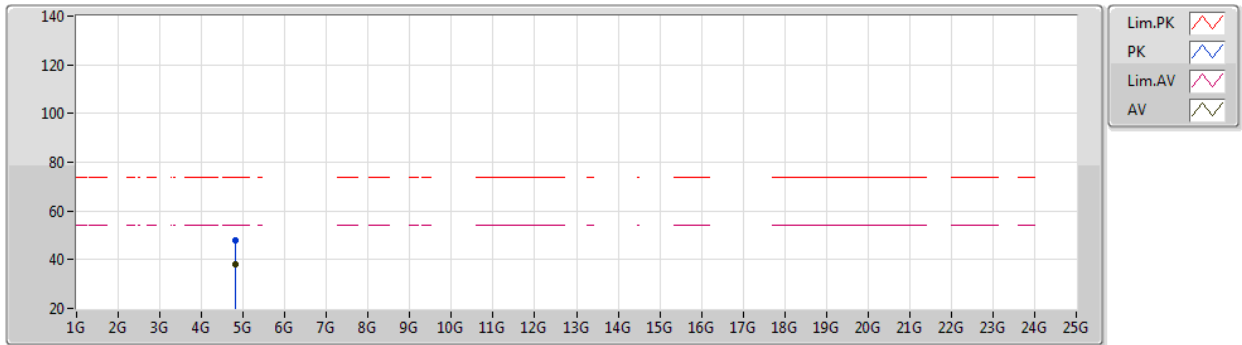
EUT V_3TX
Setting 104
06-E-L-2
ANT WY0331
DUT R110#11

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	4.82408G	49.87	74.00	-24.13	45.19	3	Vertical	216	1.80	-	31.02	5.33	31.67
AV	4.82396G	43.53	54.00	-10.47	38.85	3	Vertical	216	1.80	-	31.02	5.33	31.67

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2412MHz_TX



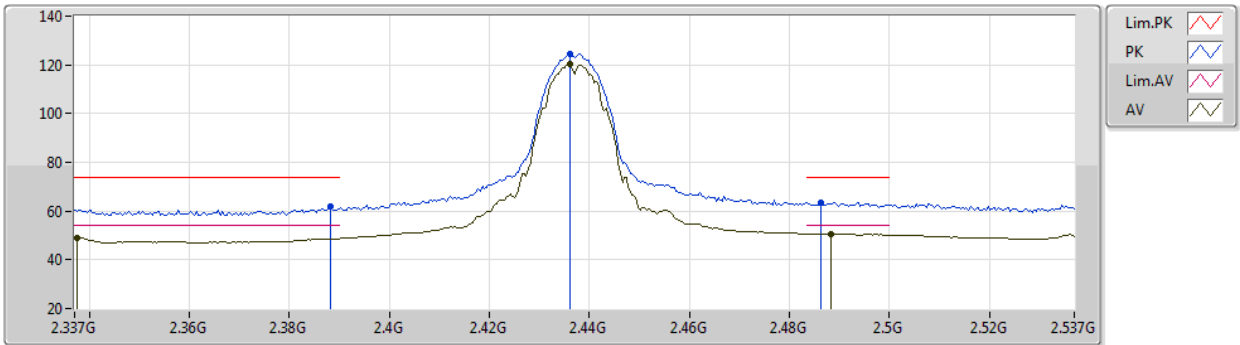
EUT V_3TX
Setting 104
06-E-L-2
ANT WV0331
DUT R110#11

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	4.82408G	47.84	74.00	-26.16	43.16	3	Horizontal	159	1.93	-	31.02	5.33	31.67
AV	4.824G	38.32	54.00	-15.68	33.64	3	Horizontal	159	1.93	-	31.02	5.33	31.67

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2437MHz_TX



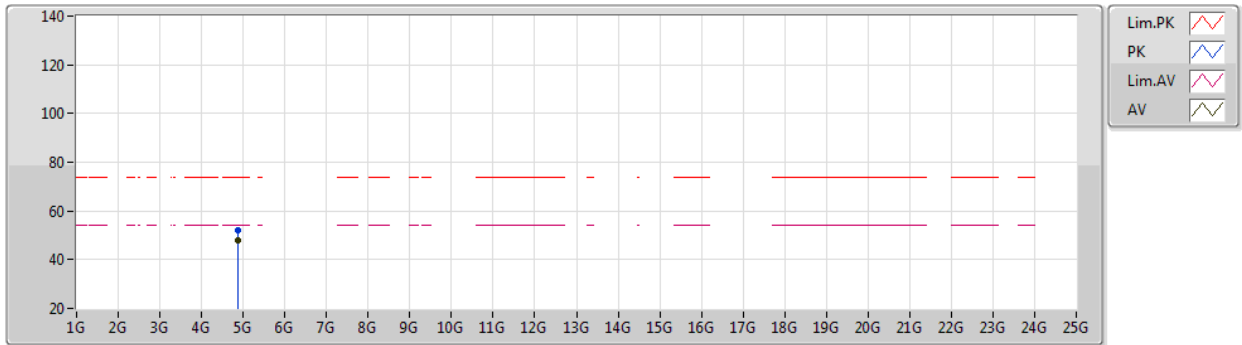
EUT Y_3TX
Setting 104
06-E-S-5
ANT WV0331
DUT R110#11

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	61.70	74.00	-12.30	30.07	3	Vertical	8	1.80	-	27.64	3.99	-
AV	2.3374G	49.12	54.00	-4.88	17.36	3	Vertical	8	1.80	-	27.79	3.97	-
PK	2.4362G	124.43	Inf	-Inf	92.92	3	Vertical	8	1.80	-	27.49	4.02	-
AV	2.4362G	120.51	Inf	-Inf	89.00	3	Vertical	8	1.80	-	27.49	4.02	-
PK	2.4862G	63.47	74.00	-10.53	32.09	3	Vertical	8	1.80	-	27.34	4.04	-
AV	2.4882G	50.74	54.00	-3.26	19.36	3	Vertical	8	1.80	-	27.34	4.04	-

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2437MHz_TX



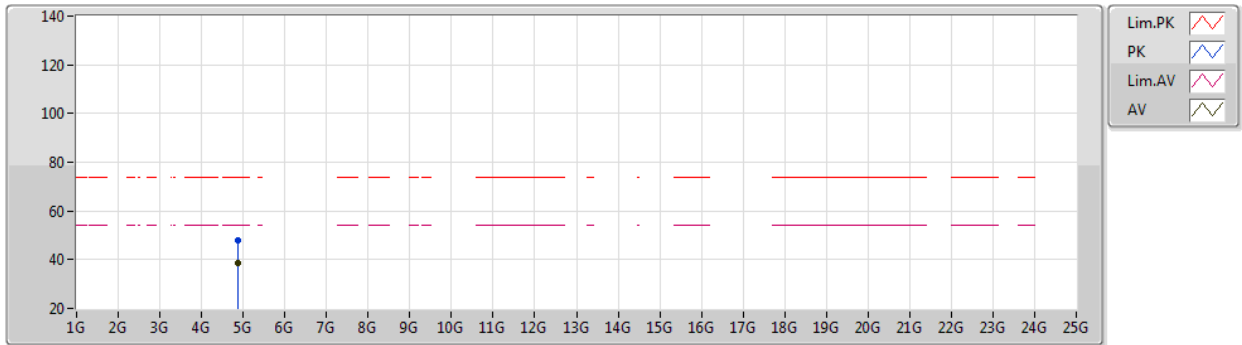
EUT V_3TX
Setting 104
06-E-S-5
ANT WV0331
DUT R110#11

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	4.87404G	52.14	74.00	-21.86	47.31	3	Vertical	352	2.69	-	31.07	5.40	31.64
AV	4.874G	47.94	54.00	-6.06	43.11	3	Vertical	352	2.69	-	31.07	5.40	31.64

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2437MHz_TX



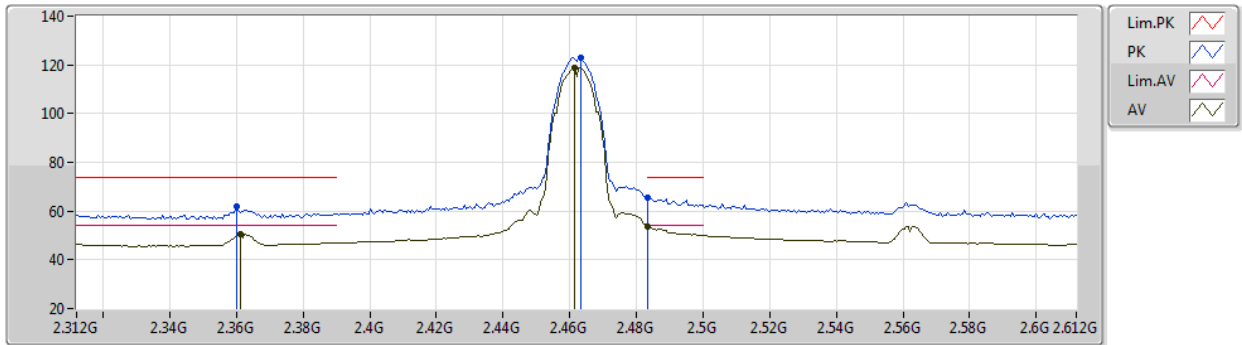
EUT V_3TX
Setting 104
06-E-S-5
ANT WV0331
DUT R110#11

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	4.87404G	47.98	74.00	-26.02	43.15	3	Horizontal	330	1.78	-	31.07	5.40	31.64
AV	4.87396G	38.87	54.00	-15.13	34.04	3	Horizontal	330	1.78	-	31.07	5.40	31.64

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2462MHz_TX



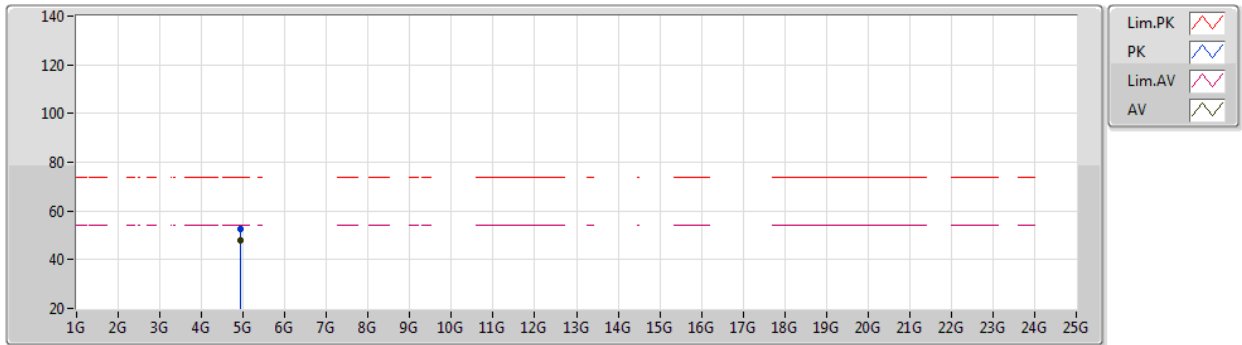
EUT V_3TX
Setting 96
06-E-S-5
ANT WV0331
DUT R110#11

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	2.36G	61.92	74.00	-12.08	30.22	3	Vertical	183	1.41	-	27.72	3.98	-
AV	2.3612G	50.39	54.00	-3.61	18.69	3	Vertical	183	1.41	-	27.72	3.98	-
PK	2.4632G	122.85	Inf	-Inf	91.41	3	Vertical	183	1.41	-	27.41	4.03	-
AV	2.4614G	118.94	Inf	-Inf	87.49	3	Vertical	183	1.41	-	27.42	4.03	-
PK	2.4835G	65.65	74.00	-8.35	34.26	3	Vertical	183	1.41	-	27.35	4.04	-
AV	2.4835G	53.78	54.00	-0.22	22.39	3	Vertical	183	1.41	-	27.35	4.04	-

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2462MHz_TX



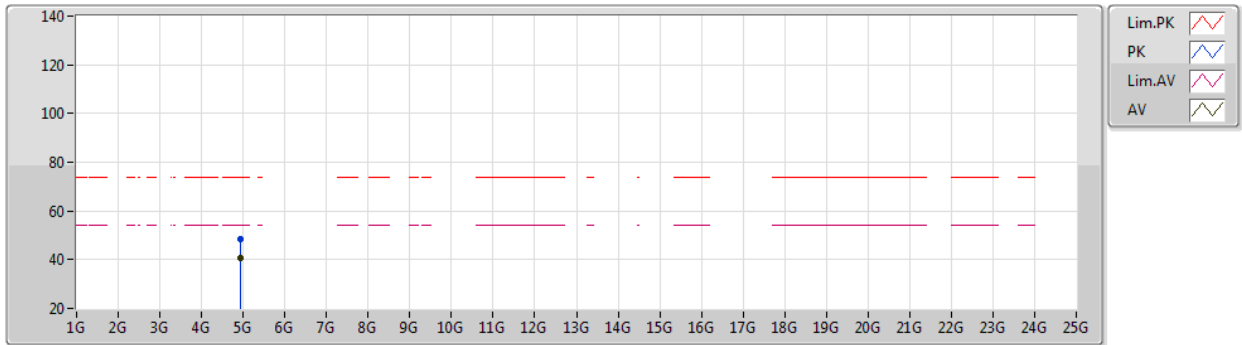
EUT V_3TX
Setting 96
06-E-L-2
ANT WY0331
DUT R110#11

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	4.924G	52.39	74.00	-21.61	47.32	3	Vertical	0	1.66	-	31.20	5.48	31.61
AV	4.924G	48.15	54.00	-5.85	43.08	3	Vertical	0	1.66	-	31.20	5.48	31.61

802.11b_Nss1,(1Mbps)_3TX

08/04/2020

2462MHz_TX



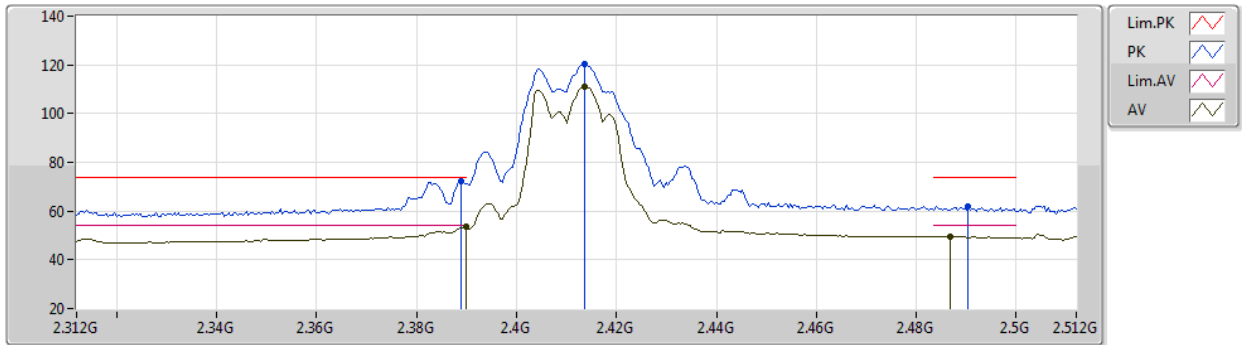
EUT V_3TX
Setting 96
06-E-L-2
ANT WY0331
DUT R110#11

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	48.37	74.00	-25.63	43.30	3	Horizontal	331	1.75	-	31.20	5.48	31.61
AV	4.924G	40.85	54.00	-13.15	35.78	3	Horizontal	331	1.75	-	31.20	5.48	31.61

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2412MHz_TX



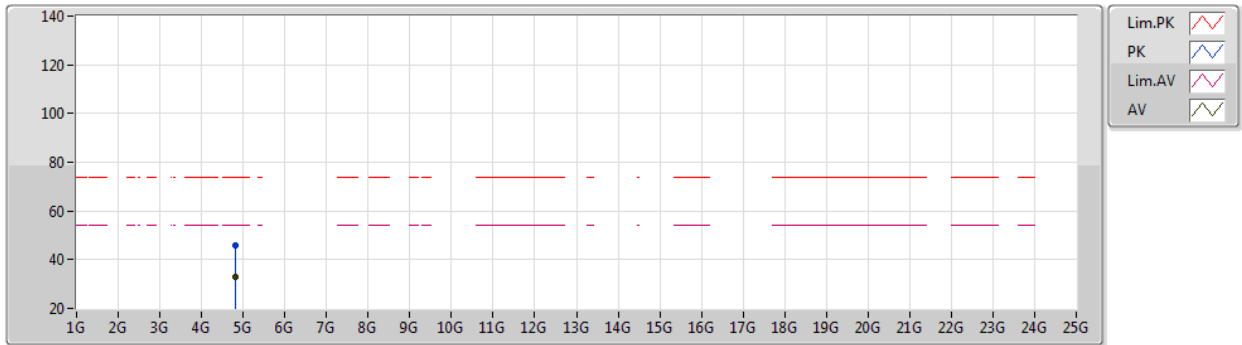
EUT Y_3TX
Setting 83
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3888G	72.12	74.00	-1.88	40.50	3	Vertical	331	1.80	-	27.63	3.99	-
AV	2.39G	53.37	54.00	-0.63	21.74	3	Vertical	331	1.80	-	27.63	4.00	-
PK	2.4136G	120.26	Inf	-Inf	88.69	3	Vertical	331	1.80	-	27.56	4.01	-
AV	2.4136G	110.88	Inf	-Inf	79.31	3	Vertical	331	1.80	-	27.56	4.01	-
PK	2.4904G	61.89	74.00	-12.11	30.51	3	Vertical	331	1.80	-	27.33	4.05	-
AV	2.4868G	49.65	54.00	-4.35	18.27	3	Vertical	331	1.80	-	27.34	4.04	-

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2412MHz_TX



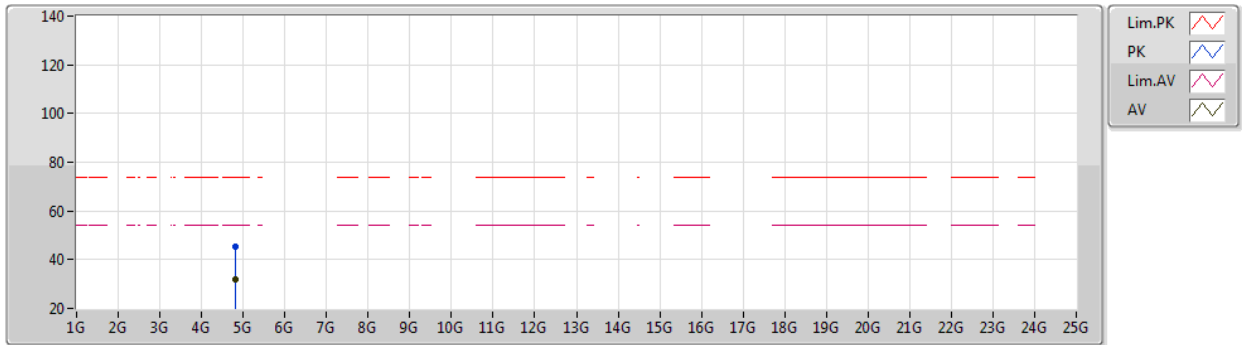
EUT V_3TX
Setting 83
06-E-L-2
ANT WY0331
DUT R110#11

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	4.82706G	45.74	74.00	-28.26	41.03	3	Vertical	152	1.73	-	31.03	5.34	31.66
AV	4.82698G	33.01	54.00	-20.99	28.30	3	Vertical	152	1.73	-	31.03	5.34	31.66

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2412MHz_TX



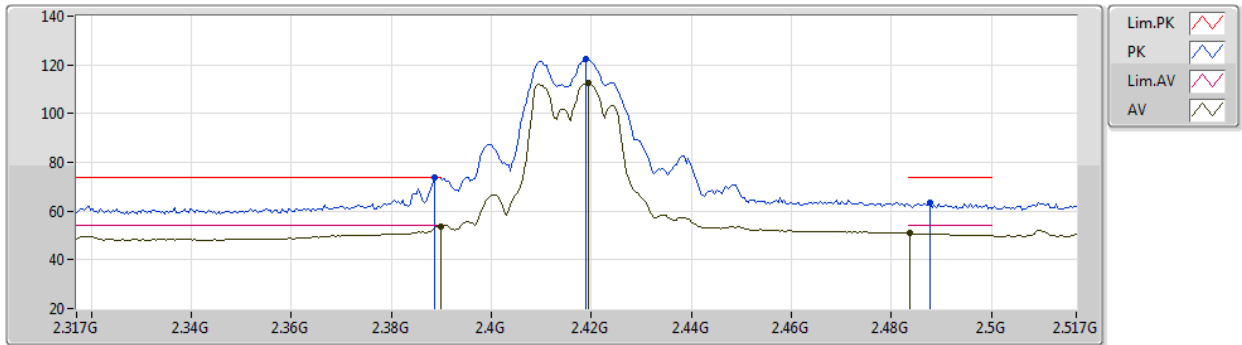
EUT V_3TX
Setting 83
06-E-L-2
ANT WY0331
DUT R110#11

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	4.82814G	45.24	74.00	-28.76	40.53	3	Horizontal	239	1.80	-	31.03	5.34	31.66
AV	4.82818G	32.01	54.00	-21.99	27.30	3	Horizontal	239	1.80	-	31.03	5.34	31.66

802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

08/04/2020



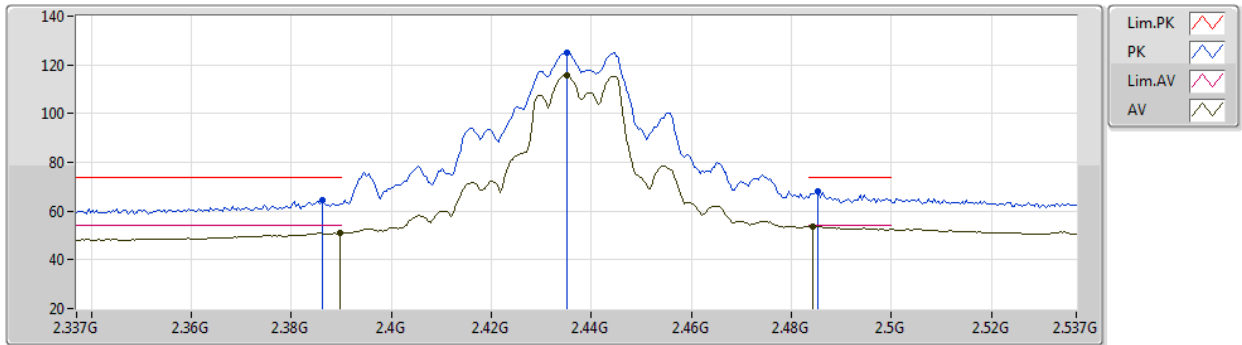
EUT Y_3TX
Setting 86
06-E-S-5
ANT WV0331
DUT R110#11

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	73.70	74.00	-0.30	42.08	3	Vertical	327	1.53	-	27.63	3.99	-
AV	2.3898G	53.82	54.00	-0.18	22.20	3	Vertical	327	1.53	-	27.63	3.99	-
PK	2.419G	122.21	Inf	-Inf	90.66	3	Vertical	327	1.53	-	27.54	4.01	-
AV	2.4194G	112.46	Inf	-Inf	80.91	3	Vertical	327	1.53	-	27.54	4.01	-
PK	2.4878G	63.22	74.00	-10.78	31.84	3	Vertical	327	1.53	-	27.34	4.04	-
AV	2.4838G	50.91	54.00	-3.09	19.52	3	Vertical	327	1.53	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

08/04/2020



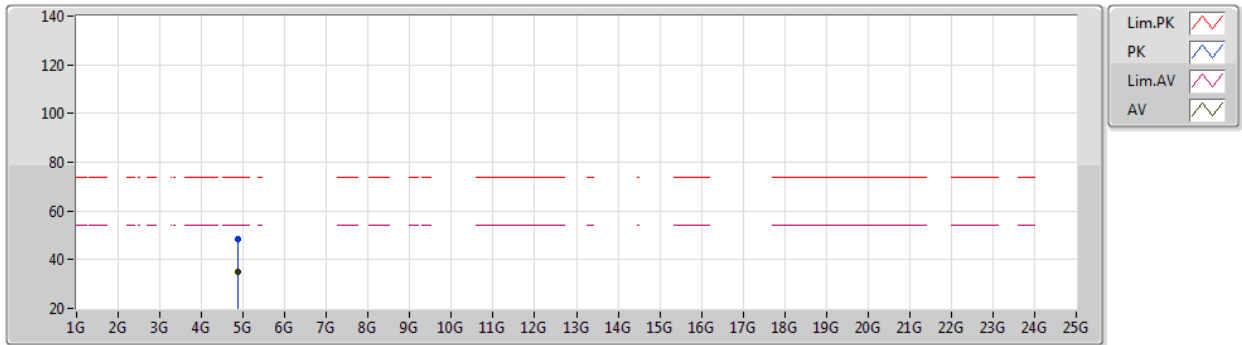
EUT Y_3TX
Setting 100
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3862G	64.38	74.00	-9.62	32.75	3	Vertical	143	2.04	-	27.64	3.99	-
AV	2.3898G	50.97	54.00	-3.03	19.35	3	Vertical	143	2.04	-	27.63	3.99	-
PK	2.435G	124.90	Inf	-Inf	93.38	3	Vertical	143	2.04	-	27.50	4.02	-
AV	2.435G	115.58	Inf	-Inf	84.06	3	Vertical	143	2.04	-	27.50	4.02	-
PK	2.4854G	68.28	74.00	-5.72	36.90	3	Vertical	143	2.04	-	27.34	4.04	-
AV	2.4842G	53.86	54.00	-0.14	22.47	3	Vertical	143	2.04	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2437MHz_TX



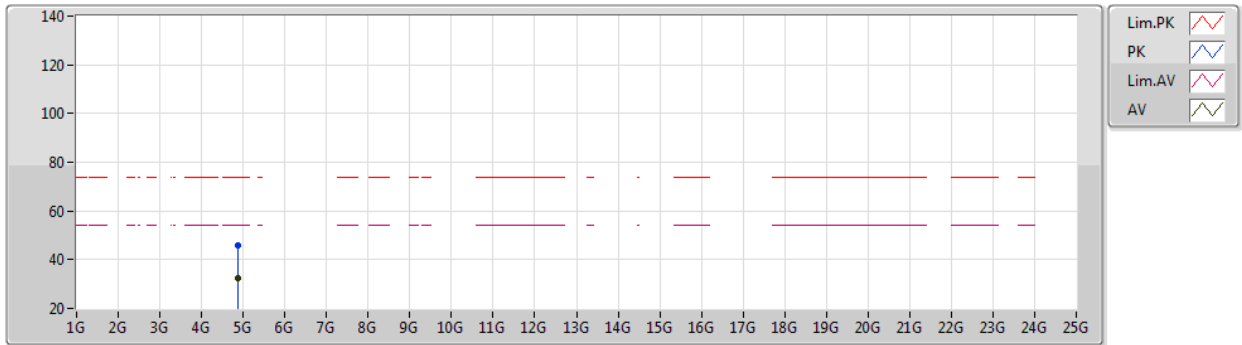
EUT V_3TX
Setting 100
06-E-L-2
ANT WY0331
DUT R110#11

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	4.87378G	48.48	74.00	-25.52	43.65	3	Vertical	357	1.80	-	31.07	5.40	31.64
AV	4.87296G	35.11	54.00	-18.89	30.28	3	Vertical	357	1.80	-	31.07	5.40	31.64

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2437MHz_TX



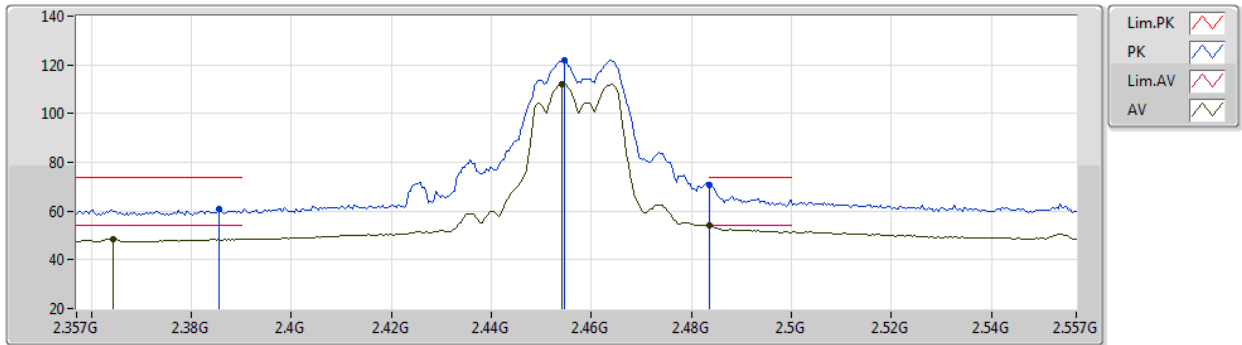
EUT V_3TX
Setting 100
06-E-L-2
ANT WY0331
DUT R110#11

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	4.87342G	45.94	74.00	-28.06	41.11	3	Horizontal	332	1.80	-	31.07	5.40	31.64
AV	4.87308G	32.63	54.00	-21.37	27.80	3	Horizontal	332	1.80	-	31.07	5.40	31.64

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2457MHz_TX



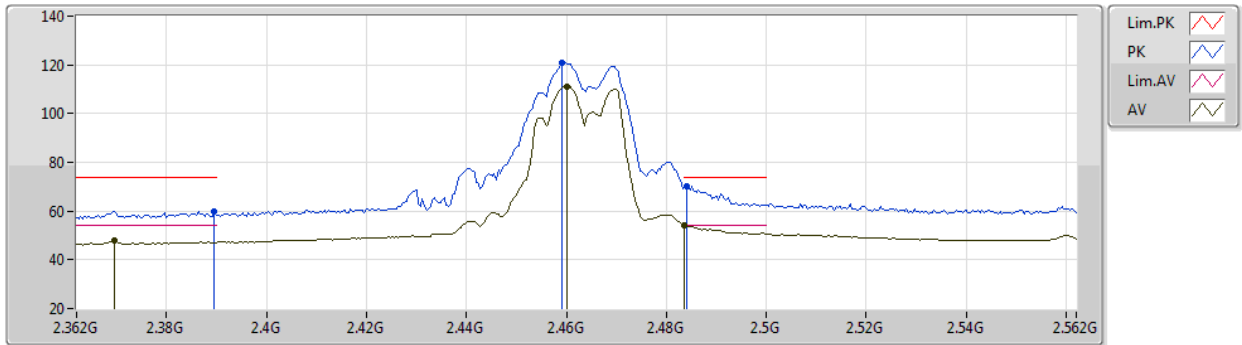
EUT V_3TX
Setting 85
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3854G	61.03	74.00	-12.97	29.40	3	Vertical	138	1.98	-	27.64	3.99	-
AV	2.3642G	48.54	54.00	-5.46	16.85	3	Vertical	138	1.98	-	27.71	3.98	-
PK	2.4546G	121.71	Inf	-Inf	90.24	3	Vertical	138	1.98	-	27.44	4.03	-
AV	2.4542G	112.10	Inf	-Inf	80.63	3	Vertical	138	1.98	-	27.44	4.03	-
PK	2.4835G	70.75	74.00	-3.25	39.36	3	Vertical	138	1.98	-	27.35	4.04	-
AV	2.4835G	53.99	54.00	-0.01	22.60	3	Vertical	138	1.98	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2462MHz_TX



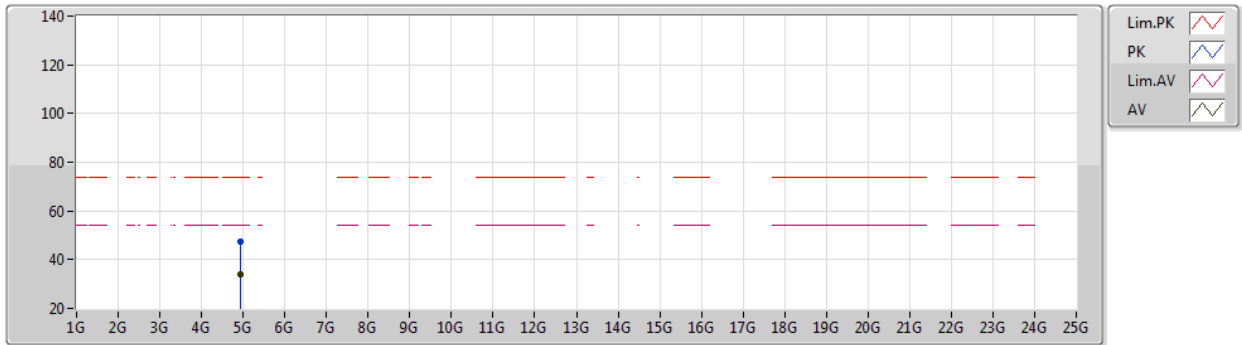
EUT Y_3TX
Setting 83
06-E-S-5
ANT WV0331
DUT R110#11

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	59.90	74.00	-14.10	28.28	3	Vertical	321	1.59	-	27.63	3.99	-
AV	2.3696G	47.99	54.00	-6.01	16.32	3	Vertical	321	1.59	-	27.69	3.98	-
PK	2.4592G	120.67	Inf	-Inf	89.22	3	Vertical	321	1.59	-	27.42	4.03	-
AV	2.46G	111.22	Inf	-Inf	79.77	3	Vertical	321	1.59	-	27.42	4.03	-
PK	2.484G	70.19	74.00	-3.81	38.80	3	Vertical	321	1.59	-	27.35	4.04	-
AV	2.4835G	53.94	54.00	-0.06	22.55	3	Vertical	321	1.59	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2462MHz_TX



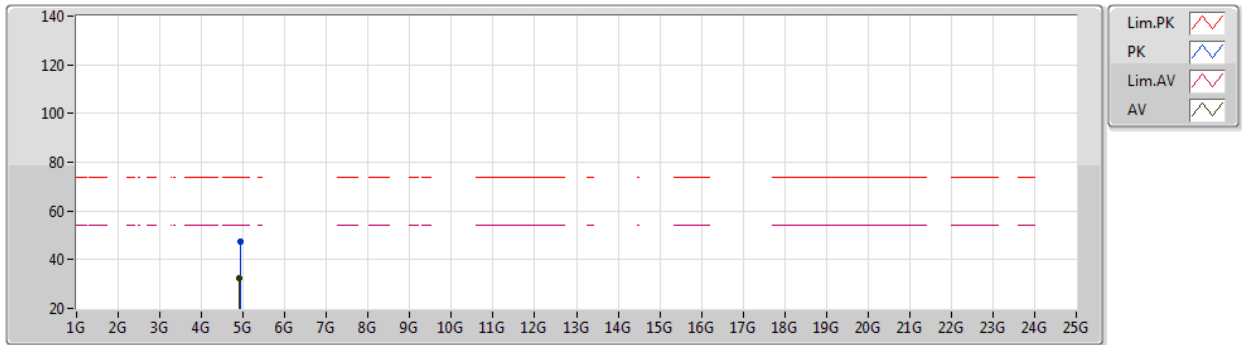
EUT V_3TX
Setting 83
06-E-L-2
ANT WY0331
DUT R110#11

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	4.92336G	47.17	74.00	-26.83	42.11	3	Vertical	359	1.86	-	31.19	5.48	31.61
AV	4.92378G	33.93	54.00	-20.07	28.86	3	Vertical	359	1.86	-	31.20	5.48	31.61

802.11g_Nss1,(6Mbps)_3TX

08/04/2020

2462MHz_TX



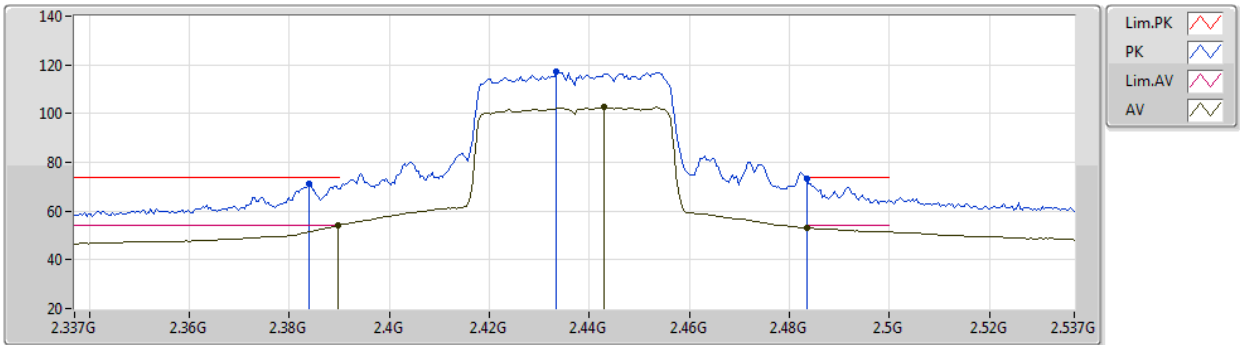
EUT V_3TX
Setting 83
06-E-L-2
ANT WY0331
DUT R110#11

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	4.91958G	47.23	74.00	-26.77	42.19	3	Horizontal	176	1.80	-	31.18	5.47	31.61
AV	4.91912G	32.18	54.00	-21.82	27.14	3	Horizontal	176	1.80	-	31.18	5.47	31.61

802.11ax HEW40_Nss3,(MCS0)_3TX

08/04/2020

2437MHz_TX



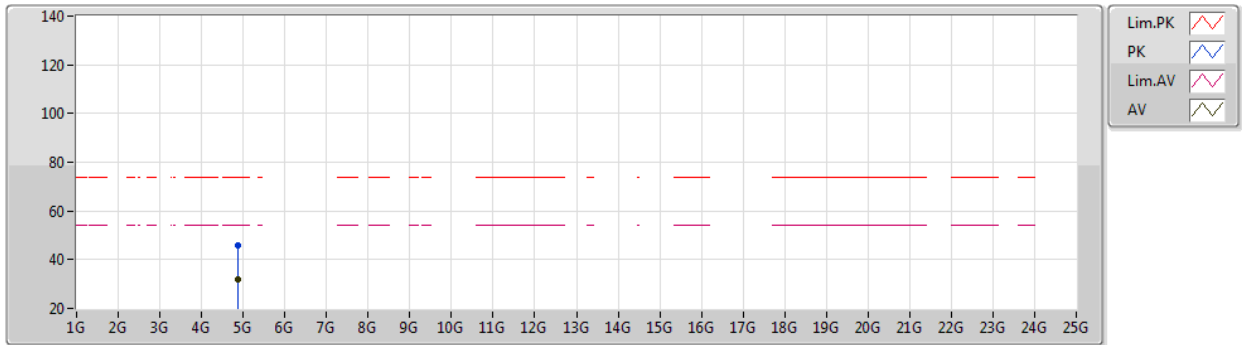
EUT Y_3TX
Setting 83
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3838G	71.24	74.00	-2.76	39.60	3	Vertical	331	1.74	-	27.65	3.99	-
AV	2.3898G	53.90	54.00	-0.10	22.28	3	Vertical	331	1.74	-	27.63	3.99	-
PK	2.4334G	116.99	Inf	-Inf	85.47	3	Vertical	331	1.74	-	27.50	4.02	-
AV	2.443G	102.75	Inf	-Inf	71.26	3	Vertical	331	1.74	-	27.47	4.02	-
PK	2.4835G	73.04	74.00	-0.96	41.65	3	Vertical	331	1.74	-	27.35	4.04	-
AV	2.4835G	53.06	54.00	-0.94	21.67	3	Vertical	331	1.74	-	27.35	4.04	-

802.11ax HEW40_Nss3,(MCS0)_3TX

08/04/2020

2437MHz_TX



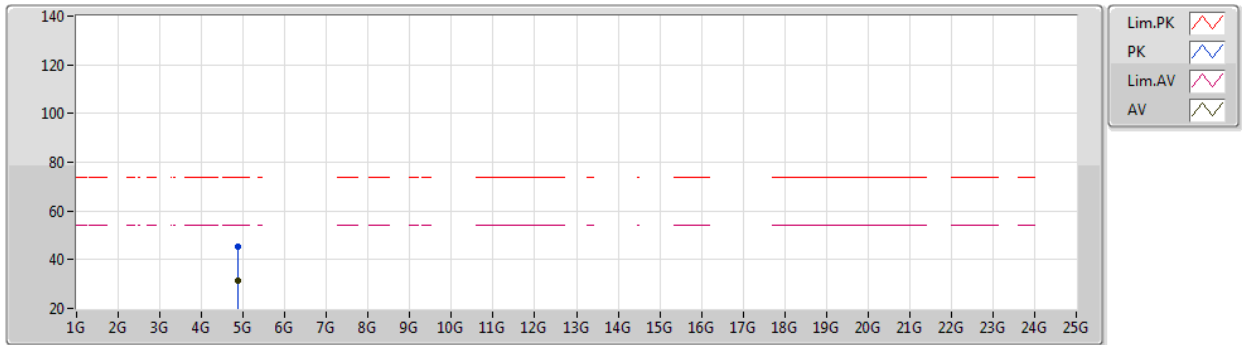
EUT V_3TX
Setting 83
06-E-L-2
ANT WY0331
DUT R110#11

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	4.87356G	45.78	74.00	-28.22	40.95	3	Vertical	0	1.80	-	31.07	5.40	31.64
AV	4.87718G	31.80	54.00	-22.20	26.94	3	Vertical	0	1.80	-	31.08	5.41	31.63

802.11ax HEW40_Nss3,(MCS0)_3TX

08/04/2020

2437MHz_TX



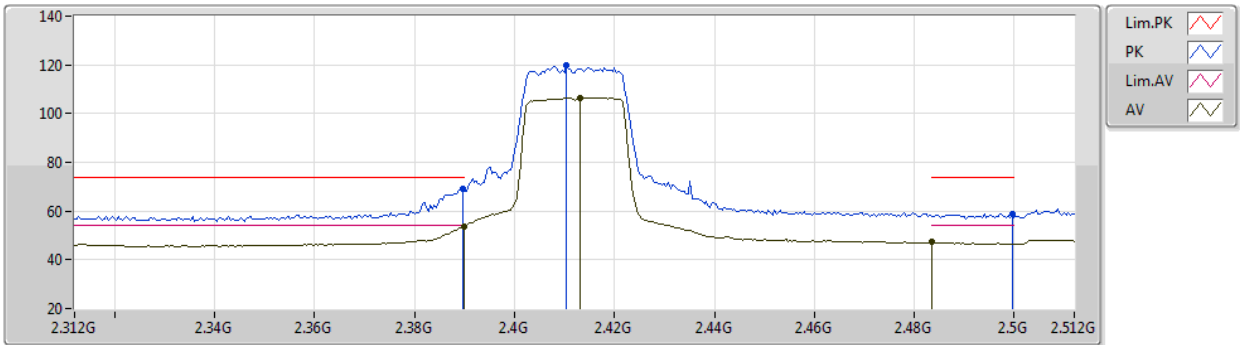
EUT V_3TX
Setting 83
06-E-L-2
ANT WY0331
DUT R110#11

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	4.87816G	45.43	74.00	-28.57	40.57	3	Horizontal	77	1.80	-	31.08	5.41	31.63
AV	4.87854G	31.31	54.00	-22.69	26.45	3	Horizontal	77	1.80	-	31.08	5.41	31.63

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2412MHz_TX



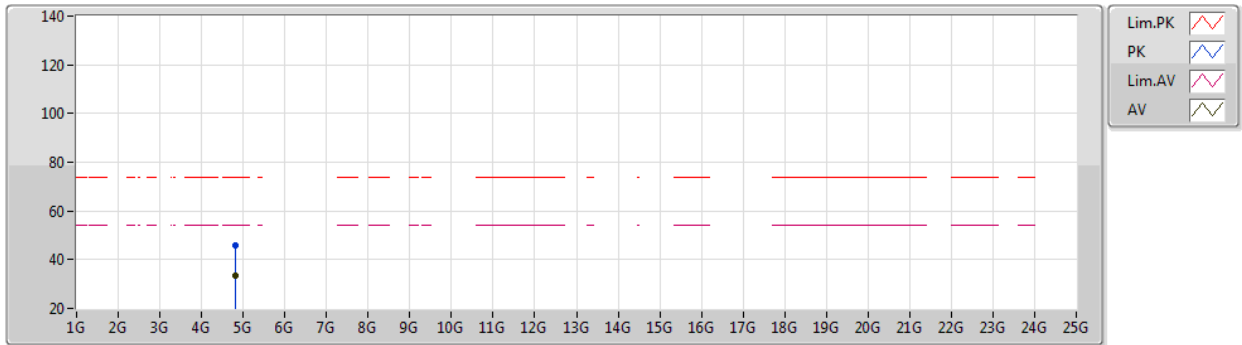
EUT V_3TX
Setting 74
06-E-S-5
ANT WV0331
DUT R110#11

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	69.07	74.00	-4.93	37.45	3	Vertical	129	1.79	-	27.63	3.99	-
AV	2.39G	53.86	54.00	-0.14	22.23	3	Vertical	129	1.79	-	27.63	4.00	-
PK	2.4104G	120.06	Inf	-Inf	88.48	3	Vertical	129	1.79	-	27.57	4.01	-
AV	2.4132G	106.54	Inf	-Inf	74.97	3	Vertical	129	1.79	-	27.56	4.01	-
PK	2.4996G	58.80	74.00	-15.20	27.45	3	Vertical	129	1.79	-	27.30	4.05	-
AV	2.4835G	47.18	54.00	-6.82	15.79	3	Vertical	129	1.79	-	27.35	4.04	-

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2412MHz_TX



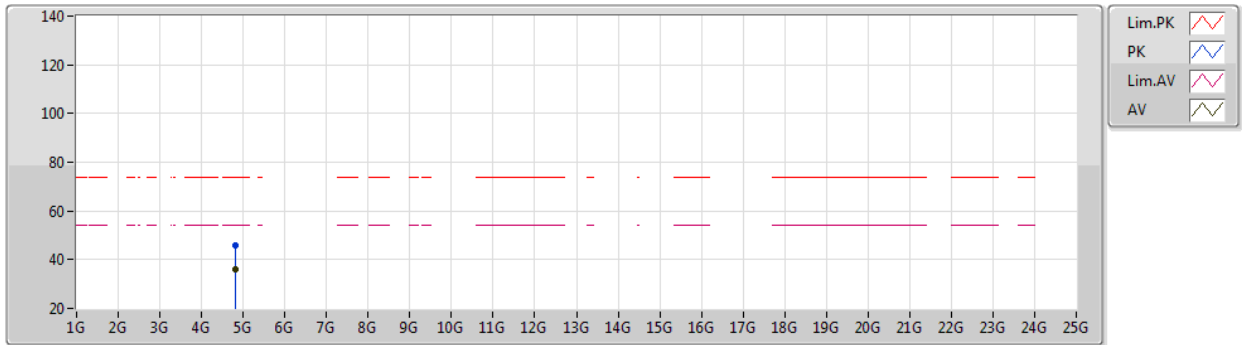
EUT V_3TX
Setting 74
02-B-J-7
ANT WY0331
DUT R110#11

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	4.8236G	46.02	74.00	-27.98	37.69	3	Vertical	161	1.71	-	32.89	5.81	30.37
AV	4.82378G	33.28	54.00	-20.72	24.94	3	Vertical	161	1.71	-	32.90	5.81	30.37

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2412MHz_TX



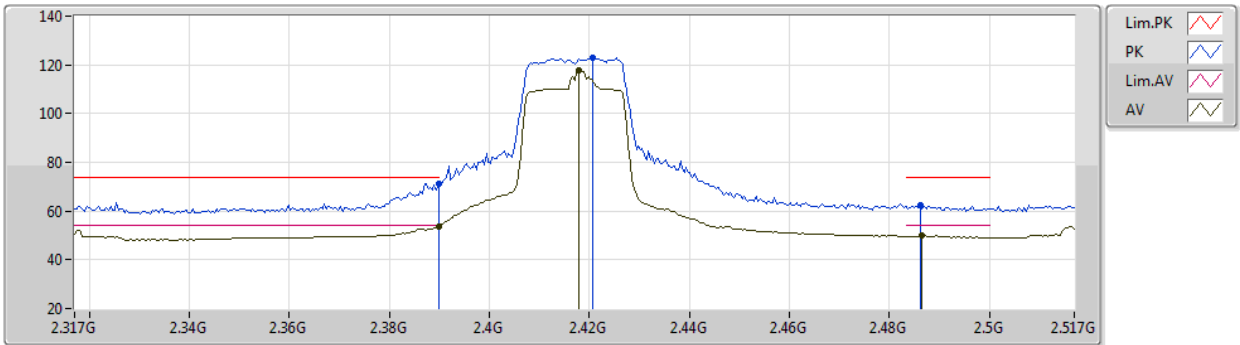
EUT V_3TX
Setting 74
02-B-J-7
ANT WY0331
DUT R110#11

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	4.82384G	46.02	74.00	-27.98	37.68	3	Horizontal	198	1.80	-	32.90	5.81	30.37
AV	4.82392G	36.09	54.00	-17.91	27.75	3	Horizontal	198	1.80	-	32.90	5.81	30.37

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2417MHz_TX



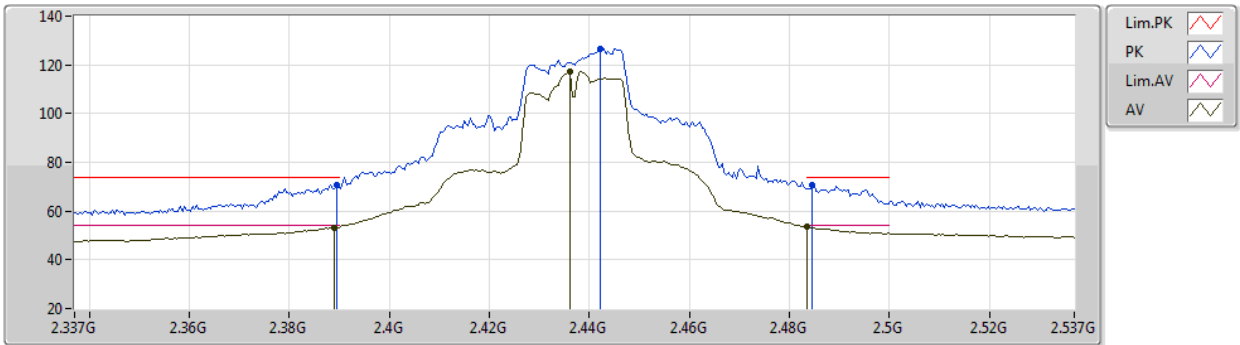
EUT V_3TX
Setting 82
06-E-S-5
ANT WV0331
DUT R110#11

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	71.34	74.00	-2.66	39.72	3	Vertical	344	1.78	-	27.63	3.99	-
AV	2.3898G	53.81	54.00	-0.19	22.19	3	Vertical	344	1.78	-	27.63	3.99	-
PK	2.4206G	122.98	Inf	-Inf	91.43	3	Vertical	344	1.78	-	27.54	4.01	-
AV	2.4178G	117.91	Inf	-Inf	86.35	3	Vertical	344	1.78	-	27.55	4.01	-
PK	2.4862G	62.23	74.00	-11.77	30.85	3	Vertical	344	1.78	-	27.34	4.04	-
AV	2.4866G	49.99	54.00	-4.01	18.61	3	Vertical	344	1.78	-	27.34	4.04	-

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2437MHz_TX



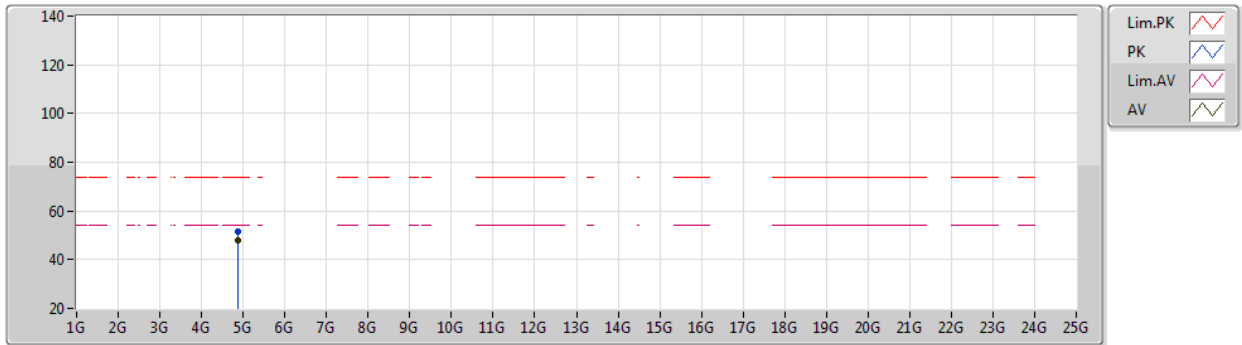
EUT Y_3TX
Setting 104
06-E-S-5
ANT WV0331
DUT R110#11

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	70.62	74.00	-3.38	39.00	3	Vertical	51	2.57	-	27.63	3.99	-
AV	2.389G	53.27	54.00	-0.73	21.65	3	Vertical	51	2.57	-	27.63	3.99	-
PK	2.4422G	126.48	Inf	-Inf	94.99	3	Vertical	51	2.57	-	27.47	4.02	-
AV	2.4362G	117.24	Inf	-Inf	85.73	3	Vertical	51	2.57	-	27.49	4.02	-
PK	2.4846G	70.64	74.00	-3.36	39.25	3	Vertical	51	2.57	-	27.35	4.04	-
AV	2.4835G	53.37	54.00	-0.63	21.98	3	Vertical	51	2.57	-	27.35	4.04	-

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2437MHz_TX



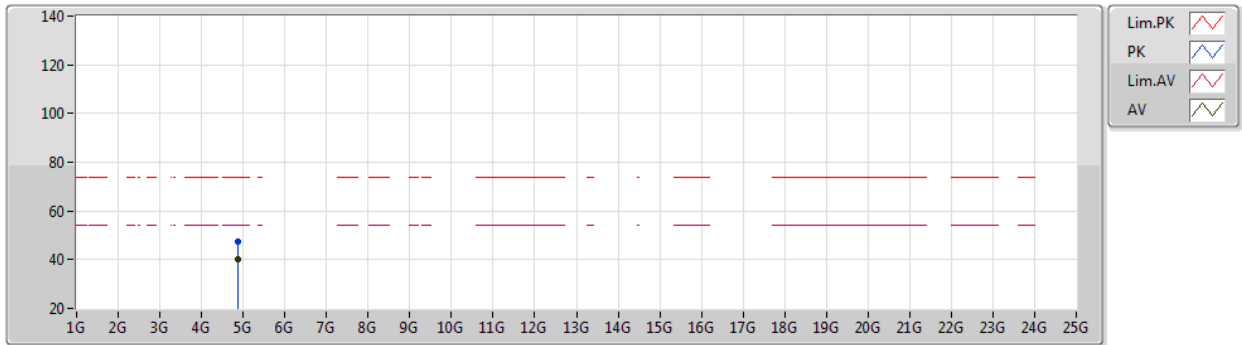
EUT V_3TX
Setting 104
02-B-J-7
ANT WV0331
DUT R110#11

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	51.64	74.00	-22.36	43.06	3	Vertical	0	1.69	-	33.10	5.84	30.36
AV	4.87399G	48.03	54.00	-5.97	39.45	3	Vertical	0	1.69	-	33.10	5.84	30.36

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2437MHz_TX



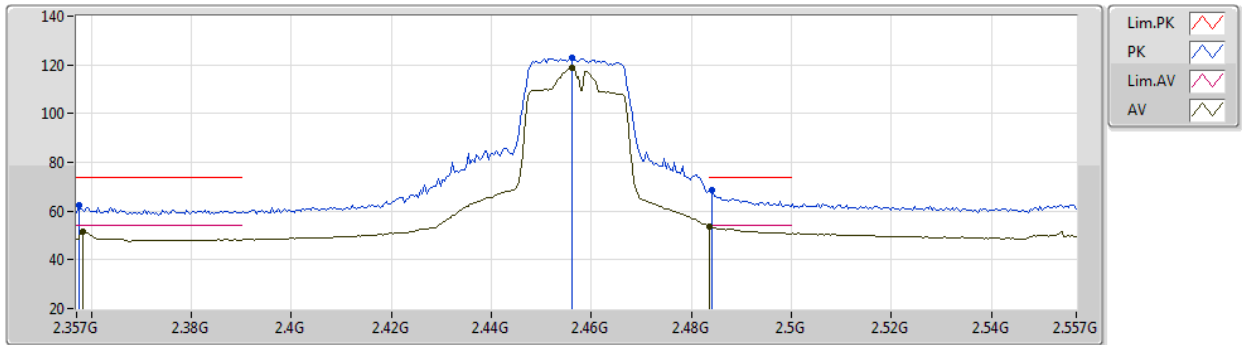
EUT V_3TX
Setting 104
02-B-J-7
ANT WV0331
DUT R110#11

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	4.87397G	47.51	74.00	-26.49	38.93	3	Horizontal	200	1.94	-	33.10	5.84	30.36
AV	4.87406G	40.27	54.00	-13.73	31.69	3	Horizontal	200	1.94	-	33.10	5.84	30.36

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

2457MHz_TX

08/04/2020



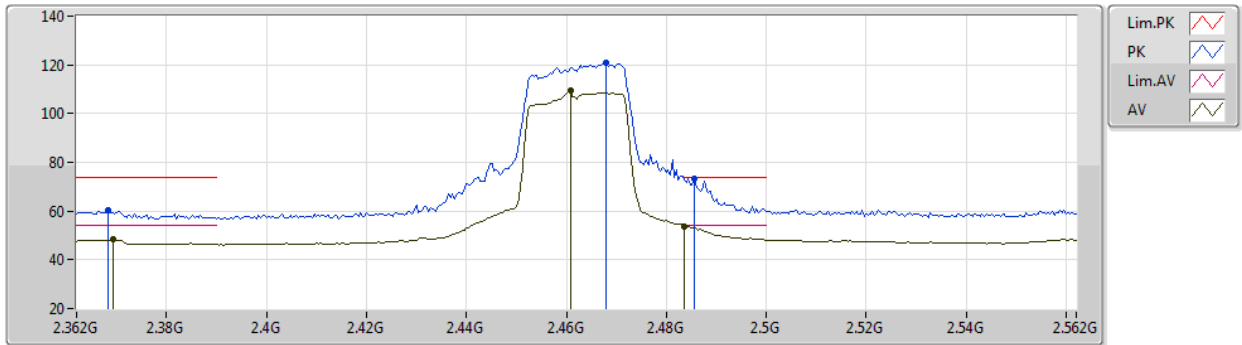
EUT Y_3TX
Setting 83
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3574G	62.51	74.00	-11.49	30.80	3	Vertical	340	1.52	-	27.73	3.98	-
AV	2.3582G	51.59	54.00	-2.41	19.88	3	Vertical	340	1.52	-	27.73	3.98	-
PK	2.4562G	122.94	Inf	-Inf	91.48	3	Vertical	340	1.52	-	27.43	4.03	-
AV	2.4562G	118.91	Inf	-Inf	87.45	3	Vertical	340	1.52	-	27.43	4.03	-
PK	2.4842G	68.57	74.00	-5.43	37.18	3	Vertical	340	1.52	-	27.35	4.04	-
AV	2.4835G	53.87	54.00	-0.13	22.48	3	Vertical	340	1.52	-	27.35	4.04	-

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2462MHz_TX



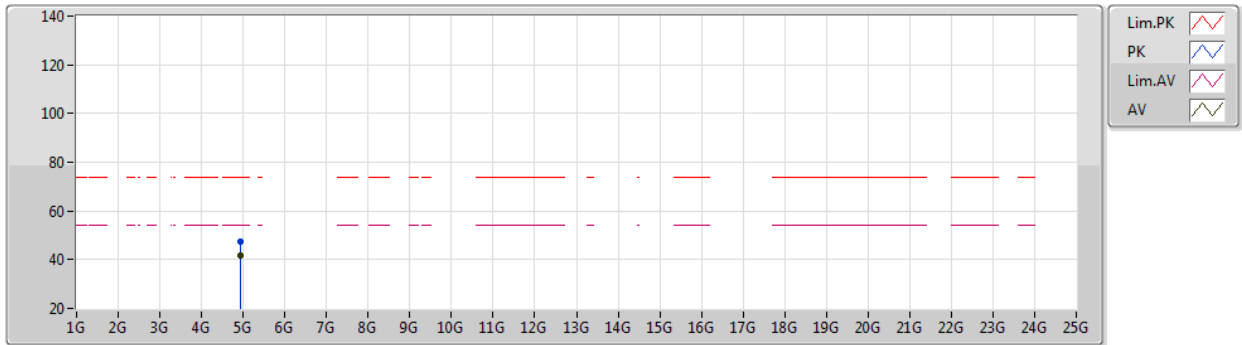
EUT Y_3TX
Setting 81
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3684G	60.19	74.00	-13.81	28.52	3	Vertical	285	2.17	-	27.69	3.98	-
AV	2.3692G	48.26	54.00	-5.74	16.59	3	Vertical	285	2.17	-	27.69	3.98	-
PK	2.468G	120.74	Inf	-Inf	89.31	3	Vertical	285	2.17	-	27.40	4.03	-
AV	2.4608G	109.32	Inf	-Inf	77.87	3	Vertical	285	2.17	-	27.42	4.03	-
PK	2.4856G	73.40	74.00	-0.60	42.02	3	Vertical	285	2.17	-	27.34	4.04	-
AV	2.4835G	53.79	54.00	-0.21	22.40	3	Vertical	285	2.17	-	27.35	4.04	-

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2462MHz_TX



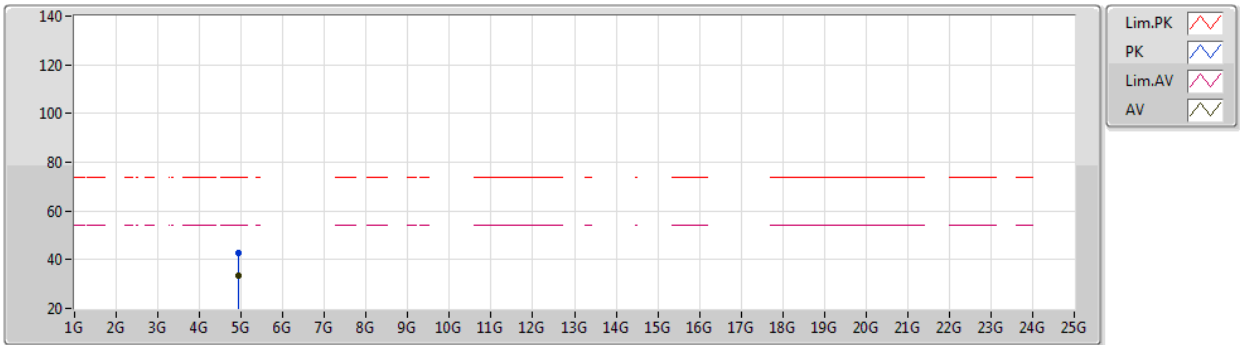
EUT V_3TX
Setting 81
02-B-J-7
ANT WV0331
DUT R110#11

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	4.92398G	47.22	74.00	-26.78	38.49	3	Vertical	0	1.95	-	33.22	5.86	30.35
AV	4.92392G	41.89	54.00	-12.11	33.16	3	Vertical	0	1.95	-	33.22	5.86	30.35

802.11ax HEW20-BF_Nss1,(MCS0)_3TX

08/04/2020

2462MHz_TX



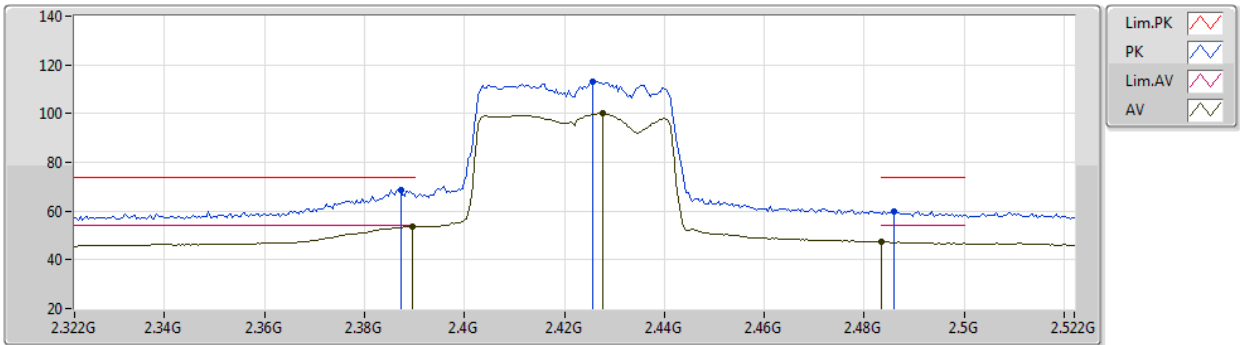
EUT V_3TX
Setting 81
02-B-J-7
ANT WY0331
DUT R110#11

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	4.92388G	42.98	74.00	-31.02	34.25	3	Horizontal	332	1.57	-	33.22	5.86	30.35
AV	4.924G	33.53	54.00	-20.47	24.80	3	Horizontal	332	1.57	-	33.22	5.86	30.35

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2422MHz_TX



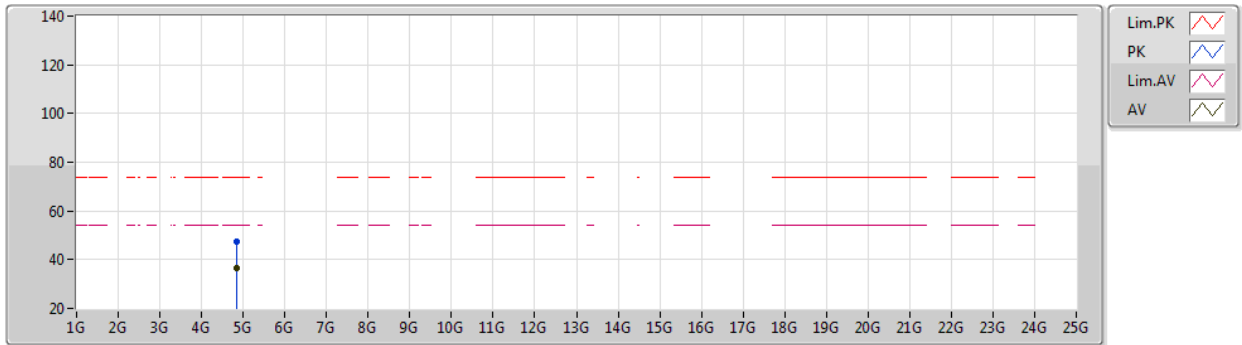
EUT Y_3TX
Setting 69
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3872G	68.65	74.00	-5.35	37.02	3	Vertical	314	1.50	-	27.64	3.99	-
AV	2.3896G	53.53	54.00	-0.47	21.91	3	Vertical	314	1.50	-	27.63	3.99	-
PK	2.4256G	113.25	Inf	-Inf	81.72	3	Vertical	314	1.50	-	27.52	4.01	-
AV	2.4276G	100.03	Inf	-Inf	68.50	3	Vertical	314	1.50	-	27.52	4.01	-
PK	2.486G	59.91	74.00	-14.09	28.53	3	Vertical	314	1.50	-	27.34	4.04	-
AV	2.4835G	47.65	54.00	-6.35	16.26	3	Vertical	314	1.50	-	27.35	4.04	-

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2422MHz_TX



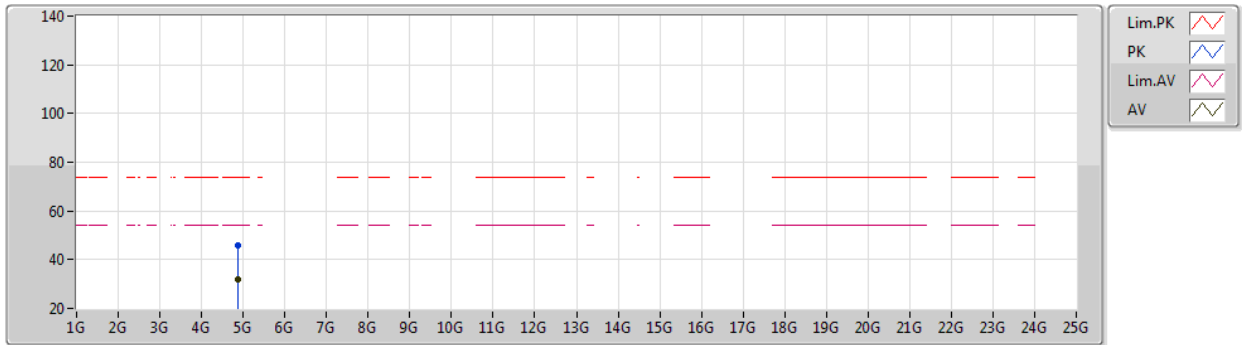
EUT V_3TX
Setting 69
02-B-J-7
ANT WY0331
DUT R110#11

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	4.84391G	47.23	74.00	-26.77	38.80	3	Vertical	0	1.80	-	32.98	5.82	30.37
AV	4.84397G	36.67	54.00	-17.33	28.24	3	Vertical	0	1.80	-	32.98	5.82	30.37

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2422MHz_TX



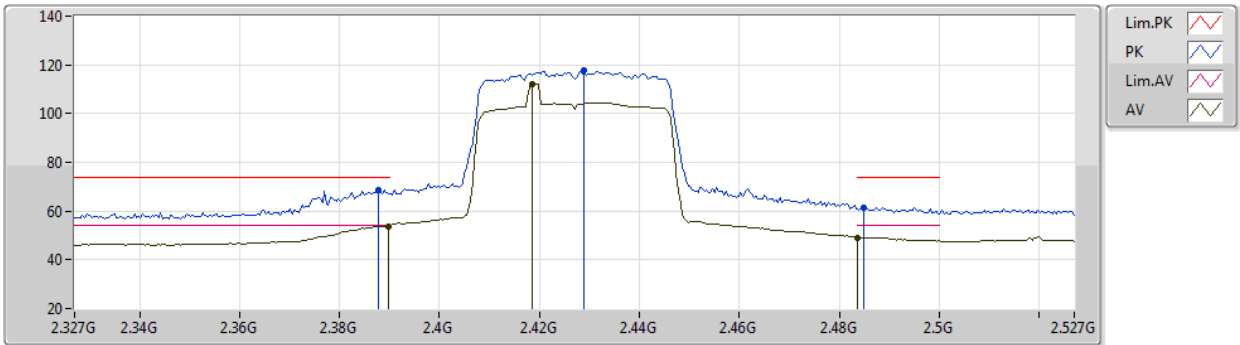
EUT V_3TX
Setting 69
02-B-J-7
ANT WV0331
DUT R110#11

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	4.87377G	45.89	74.00	-28.11	37.31	3	Horizontal	195	2.08	-	33.10	5.84	30.36
AV	4.87448G	31.98	54.00	-22.02	23.40	3	Horizontal	195	2.08	-	33.10	5.84	30.36

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2427MHz_TX



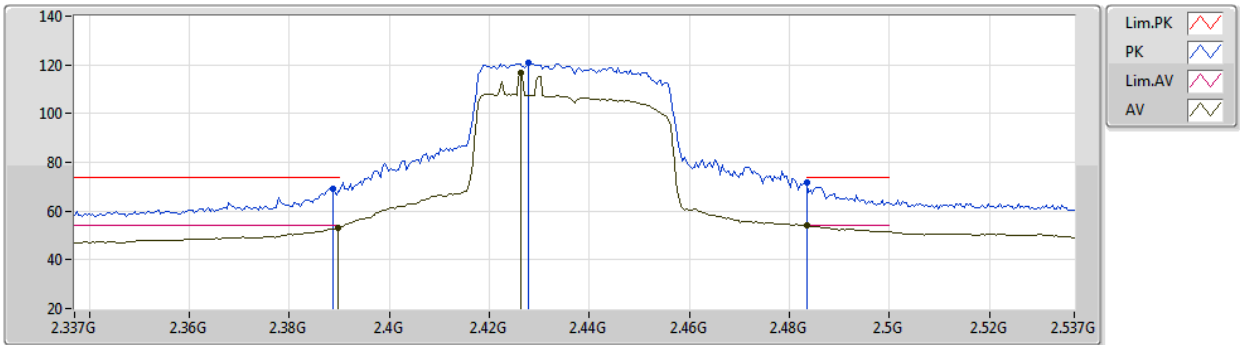
EUT Y_3TX
Setting 69
06-E-S-5
ANT WV0331
DUT R110#11

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	68.66	74.00	-5.34	37.03	3	Vertical	152	2.23	-	27.64	3.99	-
AV	2.3898G	53.86	54.00	-0.14	22.24	3	Vertical	152	2.23	-	27.63	3.99	-
PK	2.429G	117.52	Inf	-Inf	86.00	3	Vertical	152	2.23	-	27.51	4.01	-
AV	2.4186G	112.21	Inf	-Inf	80.66	3	Vertical	152	2.23	-	27.54	4.01	-
PK	2.485G	61.60	74.00	-12.40	30.22	3	Vertical	152	2.23	-	27.34	4.04	-
AV	2.4835G	49.17	54.00	-4.83	17.78	3	Vertical	152	2.23	-	27.35	4.04	-

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

18/05/2020

2437MHz_TX



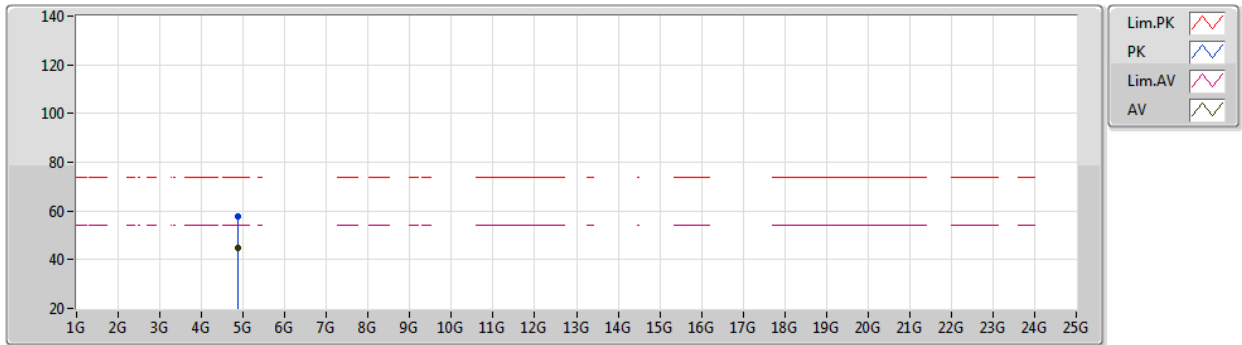
EUT Y_3TX
Setting 83
04-F-J-5
#11(NO BACK SHD)

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	69.11	74.00	-4.89	38.75	3	Vertical	9	1.25	-	27.51	2.85	-
AV	2.3898G	53.16	54.00	-0.84	22.80	3	Vertical	9	1.25	-	27.51	2.85	-
PK	2.4278G	120.69	Inf	-Inf	90.20	3	Vertical	9	1.25	-	27.61	2.88	-
AV	2.4262G	116.72	Inf	-Inf	86.24	3	Vertical	9	1.25	-	27.60	2.88	-
PK	2.4835G	71.75	74.00	-2.25	41.01	3	Vertical	9	1.25	-	27.83	2.91	-
AV	2.4835G	53.96	54.00	-0.04	23.22	3	Vertical	9	1.25	-	27.83	2.91	-

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

18/05/2020

2437MHz_TX



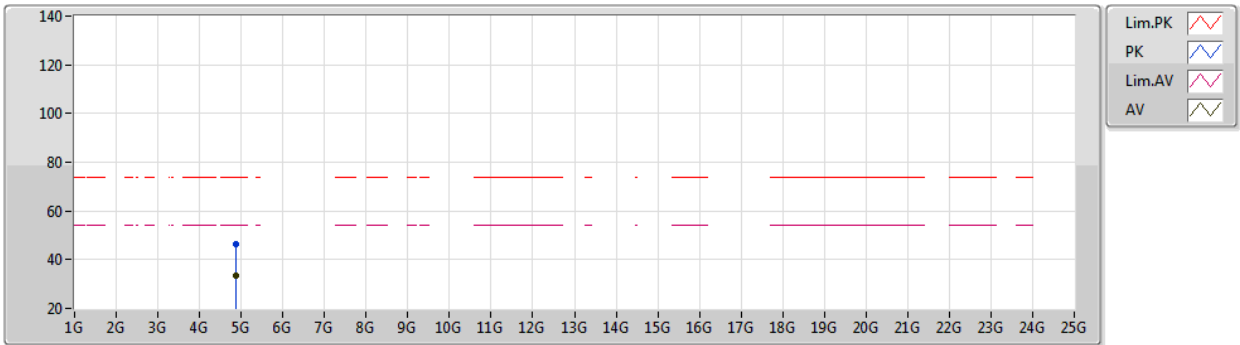
EUT Y_3TX
Setting 83
04-F-J-5
#11(NO BACK SHD)

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	4.88546G	57.96	74.00	-16.04	53.60	3	Vertical	3	1.80	-	32.84	4.96	33.44
AV	4.8809G	44.57	54.00	-9.43	40.23	3	Vertical	3	1.80	-	32.82	4.96	33.44

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

18/05/2020

2437MHz_TX



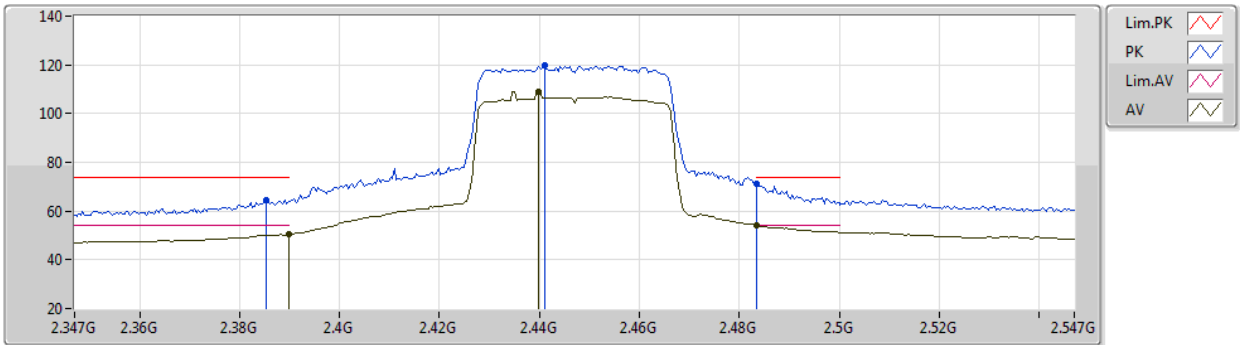
EUT Y_3TX
Setting 83
04-F-J-5
#11(NO BACK SHD)

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	4.8815G	46.35	74.00	-27.65	42.00	3	Horizontal	185	2.16	-	32.83	4.96	33.44
AV	4.88828G	33.26	54.00	-20.74	28.89	3	Horizontal	185	2.16	-	32.85	4.96	33.44

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2447MHz_TX



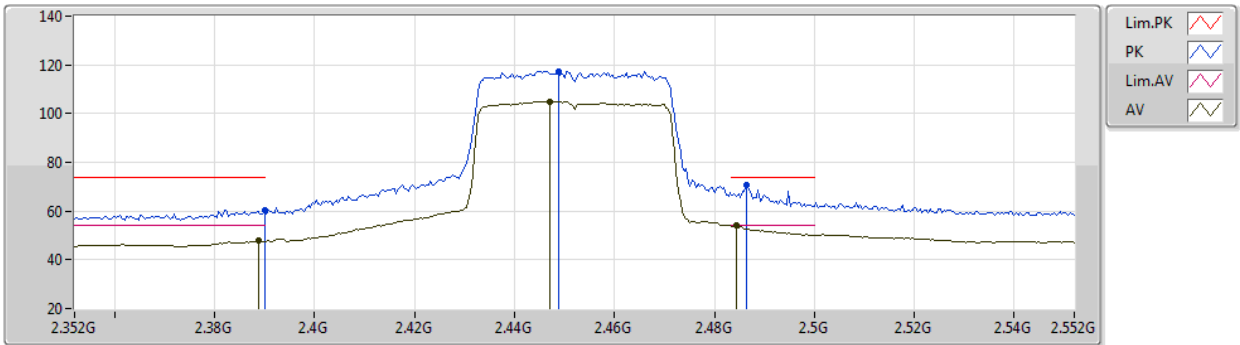
EUT V_3TX
Setting 76
06-E-S-5
ANT WV0331
DUT R110#11

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	2.3854G	64.70	74.00	-9.30	33.07	3	Vertical	314	1.63	-	27.64	3.99	-
AV	2.3898G	50.40	54.00	-3.60	18.78	3	Vertical	314	1.63	-	27.63	3.99	-
PK	2.441G	119.61	Inf	-Inf	88.11	3	Vertical	314	1.63	-	27.48	4.02	-
AV	2.4398G	109.02	Inf	-Inf	77.52	3	Vertical	314	1.63	-	27.48	4.02	-
PK	2.4835G	71.34	74.00	-2.66	39.95	3	Vertical	314	1.63	-	27.35	4.04	-
AV	2.4835G	53.88	54.00	-0.12	22.49	3	Vertical	314	1.63	-	27.35	4.04	-

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2452MHz_TX



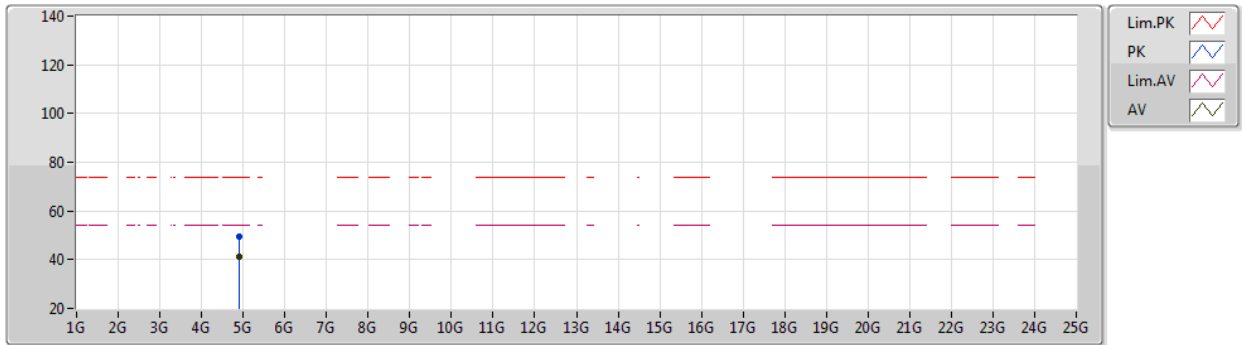
EUT Y_3TX
Setting 75
03-A-W-3
ANT WV0331
DUT R110#11

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	60.19	74.00	-13.81	28.18	3	Vertical	320	1.60	-	28.28	3.73	-
AV	2.3888G	48.00	54.00	-6.00	15.99	3	Vertical	320	1.60	-	28.28	3.73	-
PK	2.4488G	117.47	Inf	-Inf	85.25	3	Vertical	320	1.60	-	28.45	3.77	-
AV	2.4472G	105.04	Inf	-Inf	72.83	3	Vertical	320	1.60	-	28.44	3.77	-
PK	2.4864G	70.58	74.00	-3.42	38.23	3	Vertical	320	1.60	-	28.56	3.79	-
AV	2.4844G	53.92	54.00	-0.08	21.58	3	Vertical	320	1.60	-	28.55	3.79	-

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2452MHz_TX



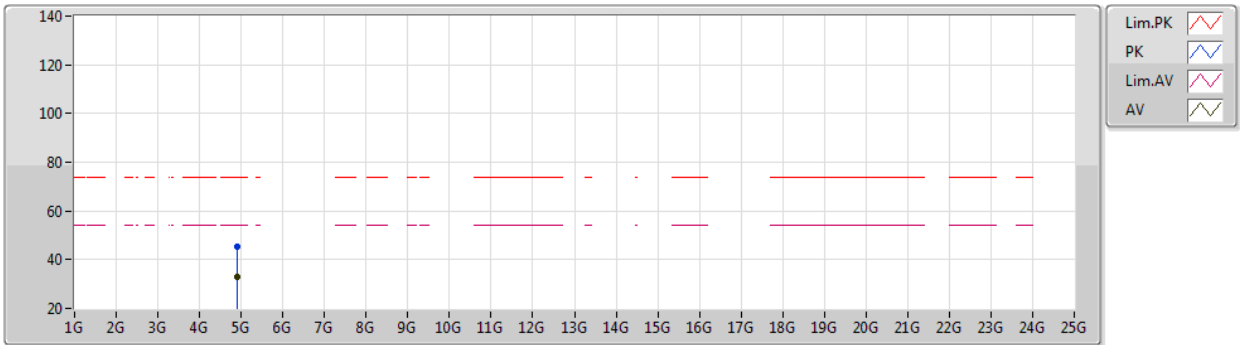
EUT V_3TX
Setting 75
03-A-W-3
ANT WV0331
DUT R110#11

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	4.90411G	49.48	74.00	-24.52	43.94	3	Vertical	355	1.80	-	33.71	6.59	34.76
AV	4.90403G	41.09	54.00	-12.91	35.55	3	Vertical	355	1.80	-	33.71	6.59	34.76

802.11ax HEW40-BF_Nss1,(MCS0)_3TX

08/04/2020

2452MHz_TX



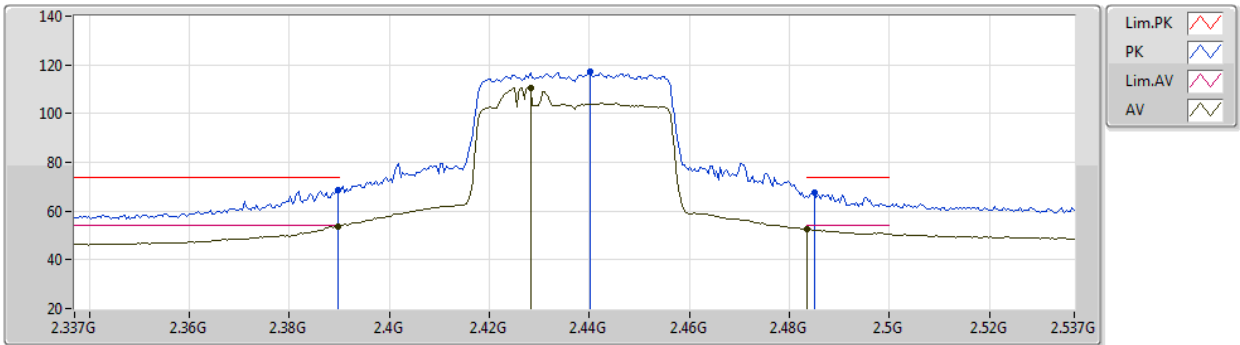
EUT V_3TX
Setting 75
03-A-W-3
ANT WV0331
DUT R110#11

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	4.90395G	45.55	74.00	-28.45	40.01	3	Horizontal	135	2.01	-	33.71	6.59	34.76
AV	4.90410G	33.08	54.00	-20.92	27.54	3	Horizontal	135	2.01	-	33.71	6.59	34.76

802.11ax HEW40-BF_Nss2,(MCS0)_3TX

08/04/2020

2437MHz_TX



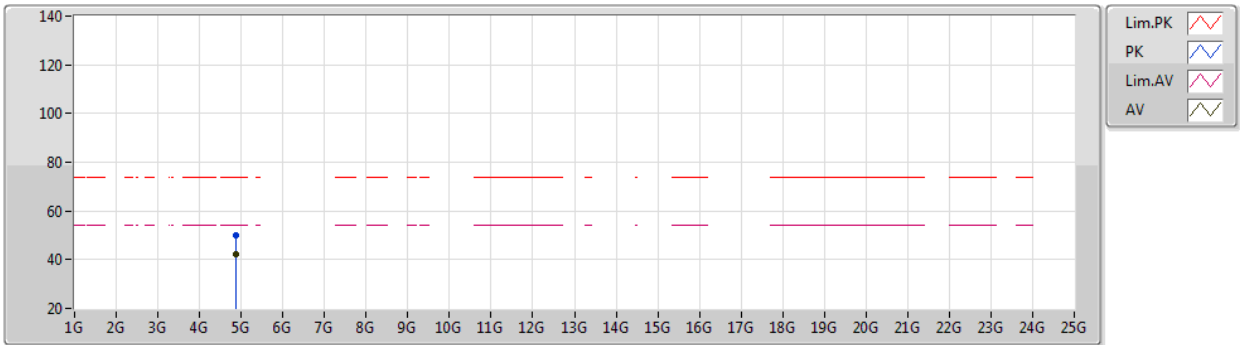
EUT Y_3TX
Setting 81
06-E-S-5
ANT WV0331
DUT R110#11

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	68.49	74.00	-5.51	36.87	3	Vertical	130	1.92	-	27.63	3.99	-
AV	2.3898G	53.64	54.00	-0.36	22.02	3	Vertical	130	1.92	-	27.63	3.99	-
PK	2.4402G	117.28	Inf	-Inf	85.78	3	Vertical	130	1.92	-	27.48	4.02	-
AV	2.4282G	110.69	Inf	-Inf	79.16	3	Vertical	130	1.92	-	27.52	4.01	-
PK	2.485G	67.76	74.00	-6.24	36.38	3	Vertical	130	1.92	-	27.34	4.04	-
AV	2.4835G	52.50	54.00	-1.50	21.11	3	Vertical	130	1.92	-	27.35	4.04	-

802.11ax HEW40-BF_Nss2,(MCS0)_3TX

08/04/2020

2437MHz_TX



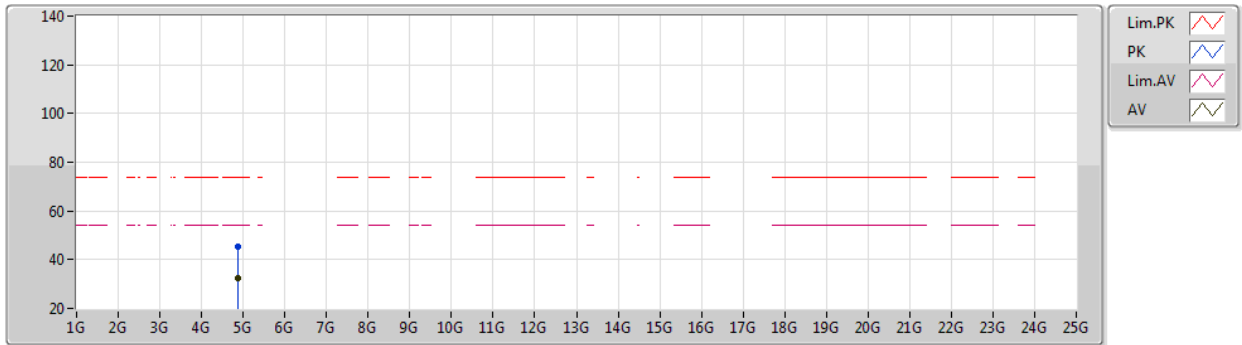
EUT V_3TX
Setting 81
02-B-J-7
ANT WV0331
DUT R110#11

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	4.87387G	50.22	74.00	-23.78	41.64	3	Vertical	115	2.28	-	33.10	5.84	30.36
AV	4.87375G	42.25	54.00	-11.75	33.67	3	Vertical	115	2.28	-	33.10	5.84	30.36

802.11ax HEW40-BF_Nss2,(MCS0)_3TX

08/04/2020

2437MHz_TX



EUT V_3TX
Setting 81
02-B-J-7
ANT WV0331
DUT R110#11

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	4.87491G	45.42	74.00	-28.58	36.84	3	Horizontal	32	1.71	-	33.10	5.84	30.36
AV	4.87409G	32.43	54.00	-21.57	23.85	3	Horizontal	32	1.71	-	33.10	5.84	30.36

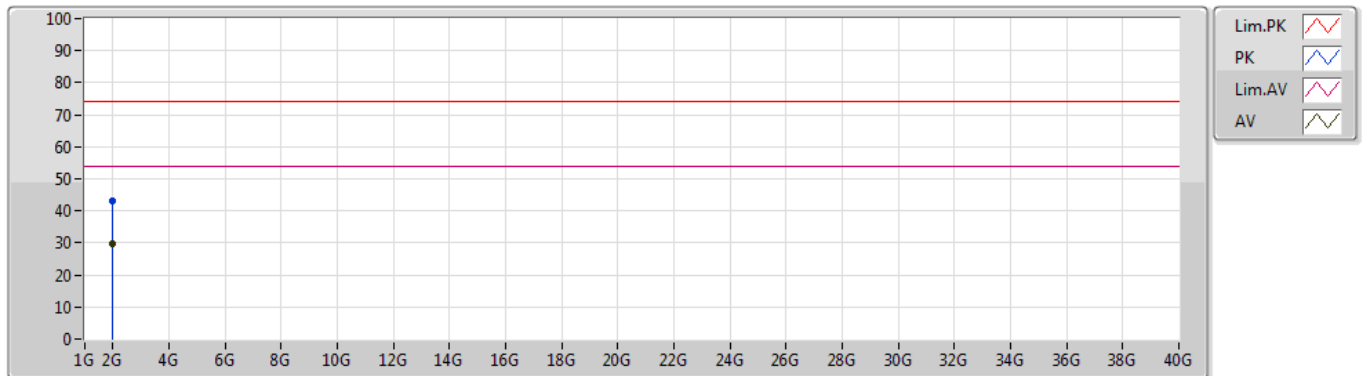


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	2.076G	29.70	54.00	-24.30	Horizontal

Mode 1

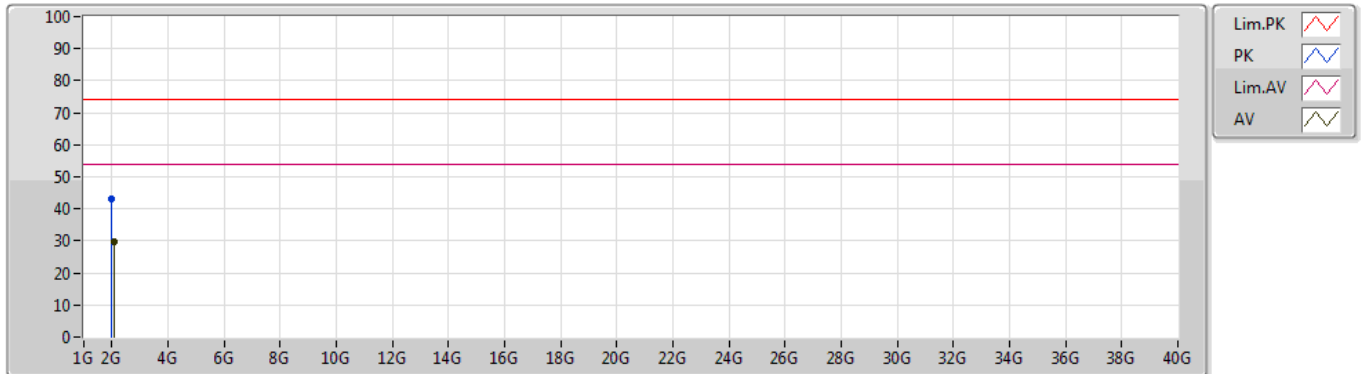
23/07/2020



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	2.00078G	43.06	74.00	-30.94	-0.74	3	Vertical	335	1.01	-	43.80	27.80	4.00	32.54
AV	2.00012G	29.64	54.00	-24.36	-0.74	3	Vertical	335	1.01	"Worst"	30.38	27.80	4.00	32.54

Mode 1

23/07/2020



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	2.0081G	43.24	74.00	-30.76	-0.73	3	Horizontal	113	1.52	-	43.97	27.81	4.00	32.54
AV	2.076G	29.70	54.00	-24.30	-0.57	3	Horizontal	113	1.52	"Worst"	30.27	27.88	4.04	32.49