

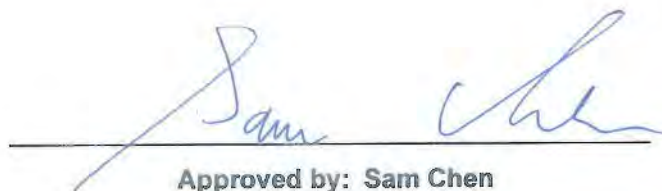


RADIO TEST REPORT

FCC ID : VW3FAST399
Equipment : Wireless Home Router
Brand Name : SAGEMCOM
Model Name : FAST 399
Applicant : SAGEMCOM BROADBAND SAS
250 Route de l'Empereur - 92848 RUEIL
MALMAISON CEDEX- FRANCE
Manufacturer : SAGEMCOM BROADBAND SAS
250 Route de l'Empereur - 92848 RUEIL
MALMAISON CEDEX- FRANCE
Standard : 47 CFR FCC Part 15.247

The product was received on Jul. 02, 2021, and testing was started from Jul. 02, 2021 and completed on Jul. 20, 2021. We, Sporton International Inc. Hsinchu 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. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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History of this test report

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

Page Number : 3 of 31
Issued Date : Aug. 05, 2021
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: Vicky 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	3TX
2.4-2.4835GHz	802.11g	20	3TX
2.4-2.4835GHz	802.11n HT20	20	3TX
2.4-2.4835GHz	802.11n HT20-BF	20	3TX
2.4-2.4835GHz	VHT20	20	3TX
2.4-2.4835GHz	VHT20-BF	20	3TX
2.4-2.4835GHz	802.11ax HEW20	20	3TX
2.4-2.4835GHz	802.11ax HEW20-BF	20	3TX
2.4-2.4835GHz	802.11n HT40	40	3TX
2.4-2.4835GHz	802.11n HT40-BF	40	3TX
2.4-2.4835GHz	VHT40	40	3TX
2.4-2.4835GHz	VHT40-BF	40	3TX
2.4-2.4835GHz	802.11ax HEW40	40	3TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	3TX

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

Ant.	Port			Brand	Model Name	Type	Connector	Gain (dBi)	Remark
	2.4GHz	5GHz	6GHz						
1	3	3	-	Galtronics	02102140-07501-1 DB1	PCB	I-Pex	Note1	WLAN 2.4G+ WLAN 5G U-NII 1, U-NII 2A,U-NII 2C, U-NII 3
2	2	2	-	Galtronics	02102140-07501-2 DB2	PCB	I-Pex		WLAN 2.4G+ WLAN 5G U-NII 1, U-NII 2A,U-NII 2C, U-NII 3
3	1	1	-	Galtronics	02102140-07501-3 DB3	PCB	I-Pex		WLAN 2.4G+ WLAN 5G U-NII 1, U-NII 2A,U-NII 2C, U-NII 3
4	-	4	-	Galtronics	02102142-07501 5G	PCB	I-Pex		WLAN 2.4G+ WLAN 5G U-NII 1, U-NII 2A,U-NII 2C, U-NII 3
5	-	-	1	Galtronics	02102475-07501B1 6G1 (HPOLOMNI)	PCB	I-Pex		WLAN 6G U-NII 5~8
6	-	-	2	Galtronics	02102475-07501B2 6G2 (HPOLOMNI)	PCB	I-Pex		WLAN 6G U-NII 5~8
7	-	-	3	Galtronics	02102475-07501A1 6G3	PCB	I-Pex		WLAN 6G U-NII 5~8
8	-	-	4	Galtronics	02102475-07501A2 6G4	PCB	I-Pex		WLAN 6G U-NII 5~8

Note1:

Ant.	Gain (dBi)								
	2.4GHz	5GHz U-NII 1	5GHz U-NII 2A	5GHz U-NII 2C	5GHz U-NII 3	6GHz U-NII 5	6GHz U-NII 6	6GHz U-NII 7	6GHz U-NII 8
1	2.09	1.76	2.15	2.23	2.97	-	-	-	-
2	2.6	2.28	2.63	2.67	2.83	-	-	-	-
3	4.02	1.42	1.4	1.84	2.02	-	-	-	-
4	-	4.5	5.57	4.43	3.11	-	-	-	-
5	-	-	-	-	-	2.99	1.45	1.77	2.2
6	-	-	-	-	-	2.38	3.49	3.74	2.76
7	-	-	-	-	-	3.66	1.86	2.74	3.85
8	-	-	-	-	-	3.84	4.81	3.52	4.82
Directional Gain (dBi) (3T1S)	4.42	-	-	-	-	-	-	-	-
Directional Gain (dBi) (4T1S)	-	5.03	5.88	5.41	4.22	4.27	5.04	3.8	5.37

Note2: The above information was declared by manufacturer.

For WLAN 2.4GHz function, 802.11 b/g/n/VHT/ax mode (3TX/3RX):

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

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

**For WLAN 5GHz UNII 1, 3 function, 802.11a/n/ac/ax mode (4TX/4RX):**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For WLAN 6GHz UNII 5~8 function, 802.11ax mode (4TX/4RX):

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.925	0.34	8.469m	300
802.11g	0.552	2.58	128.75u	10k
802.11ax HEW20	0.913	0.4	318.75u	10k
802.11ax HEW40	0.902	0.45	305u	10k

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
	For 802.11n/ax/VHT in 2.4GHz, 802.11n/ac/ax in 5GHz and 802.11ax in 6GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	accessMtool(version 3.2.1.3)			

Note: The above information was declared by manufacturer.



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 15.247
- ♦ 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 662911 D03 v01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Owen Hsu	23.1-23.7 / 72-75	Jul. 05, 2021~ Jul. 17, 2021
Radiated (below 1GHz)	03CH04-CB	Stim Sung	26.4~26.7 / 63~66	Jul. 02, 2021~ Jul. 19, 2021
Radiated (above 1GHz)	03CH04-CB	Stim Sung	25.3-27 / 65-67	Jul. 02, 2021~ Jul. 19, 2021
Radiated (Co-location)	03CH05-CB	Stim Sung	25.6~27.1 / 63~66	Jul. 02, 2021~ Jul. 19, 2021
AC Conduction	CO01-CB	Peter Wu	24~25 / 56~58	Jul. 20, 2021

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 (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For non-beamforming mode:

Mode	Power Setting
802.11b_Nss1,(1Mbps)_3TX	-
2412MHz	98
2437MHz	98
2462MHz	96
802.11g_Nss1,(6Mbps)_3TX	-
2412MHz	86
2417MHz	91
2437MHz	102
2457MHz	85
2462MHz	78
802.11ax HEW20_Nss1,(MCS0)_3TX	-
2412MHz	77
2417MHz	89
2437MHz	97
2457MHz	80
2462MHz	72
802.11ax HEW40_Nss1,(MCS0)_3TX	-
2422MHz	78
2437MHz	81
2452MHz	74



For beamforming mode:

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-
2412MHz	77
2417MHz	89
2437MHz	97
2457MHz	80
2462MHz	72
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-
2422MHz	78
2437MHz	81
2452MHz	74

Note:

- ♦ HEW20/HEW40 covers HT20/HT40/VHT20/VHT40, due to similar modulation. The power setting for HT20/HT40/VHT20/VHT40 are the same or lower than HEW20/HEW40
- ♦ The EUT supports non-beamforming and beamforming modes, after evaluating, the non-beamforming mode has been selected to execute all tests. The beamforming mode evaluates the output power only.

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 Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	EUT-WLAN 2.4GHz
2	EUT-WLAN 5GHz
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

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-WLAN 2.4GHz
2	EUT-WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

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



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA170737 for Co-location RF Exposure Evaluation.	

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

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter	SAGEMCOM	ADS-36FLJ-12 12030EPCU-L	INPUT: 100-127V~50/60Hz, Max.0.9A OUTPUT: 12V, 2.5A

2.5 Support Equipment

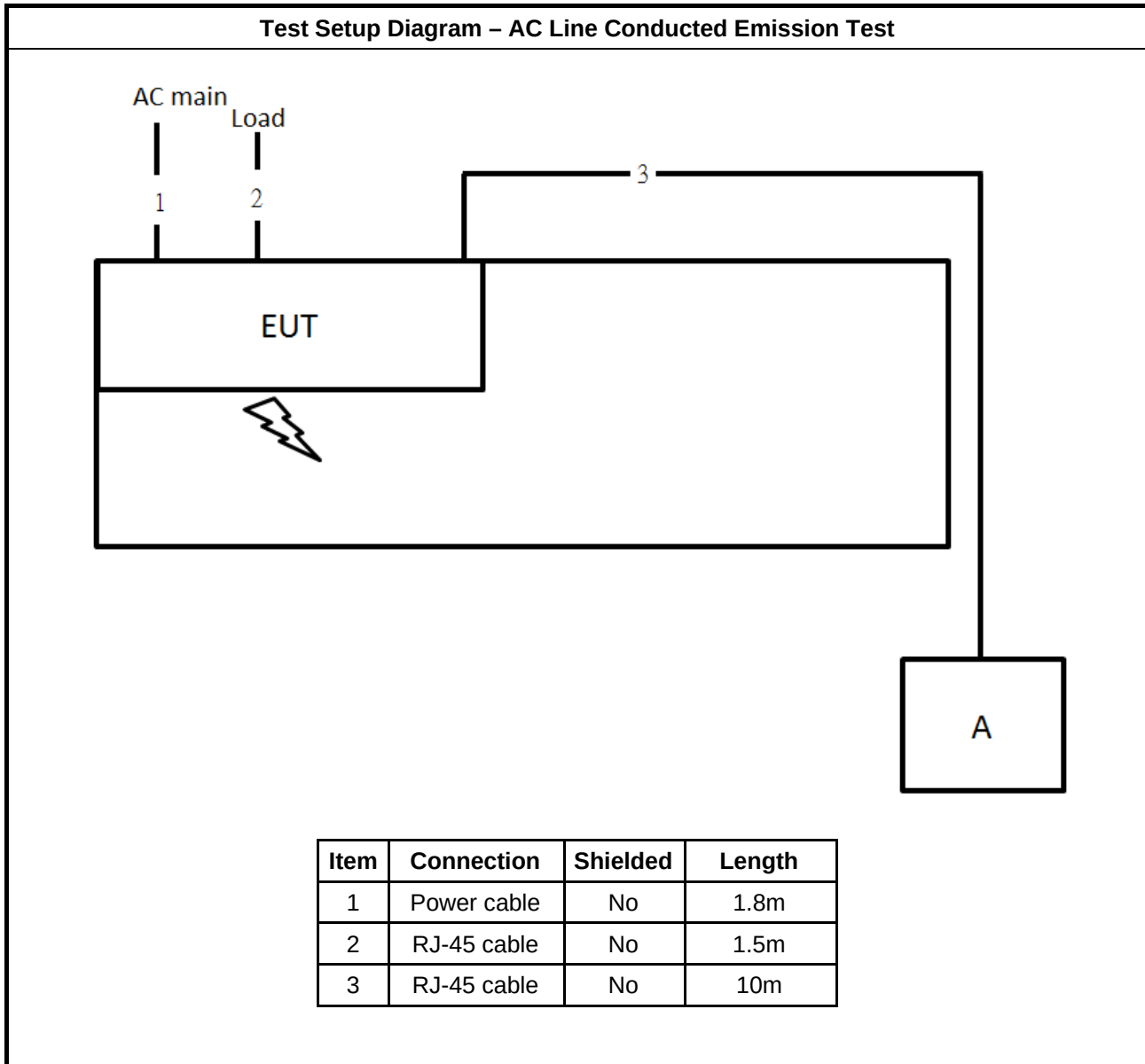
For AC Conduction:

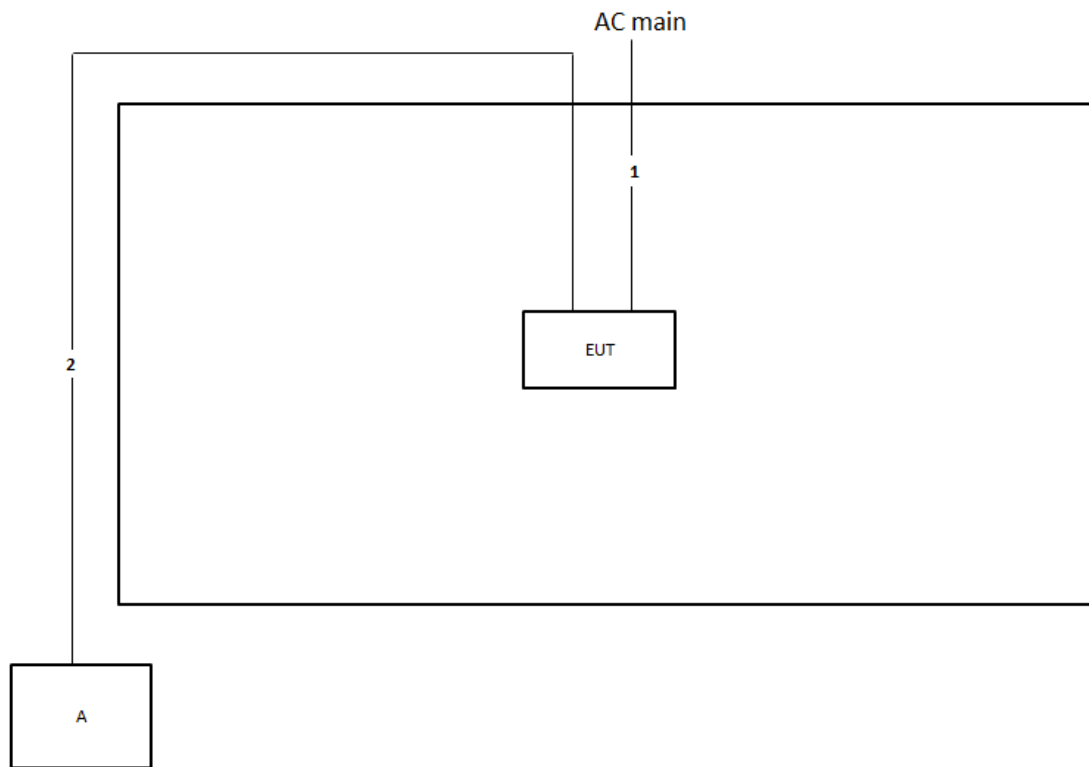
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E6430	N/A

For Radiated and RF Conducted:

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

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

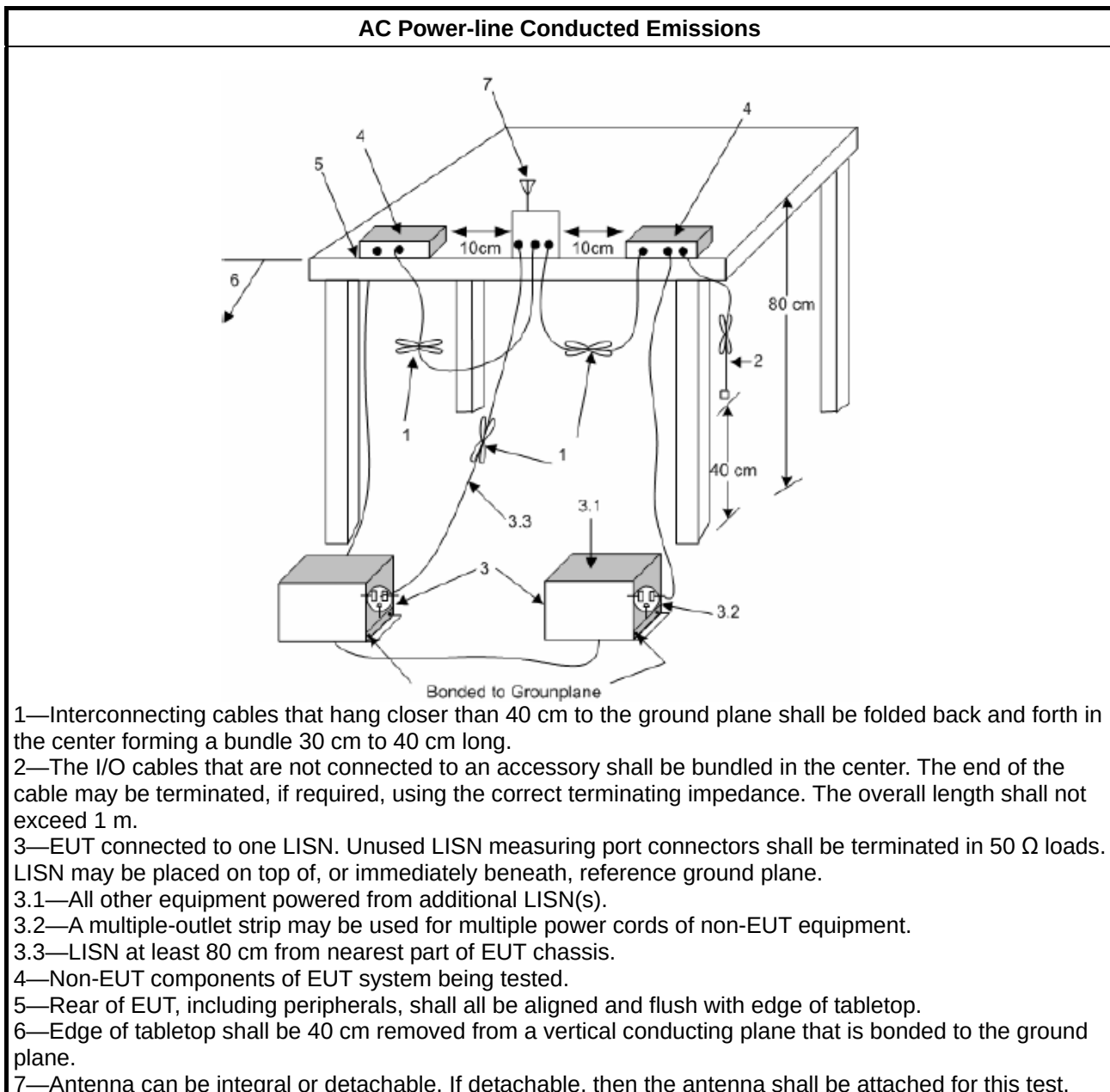
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ 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:

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

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

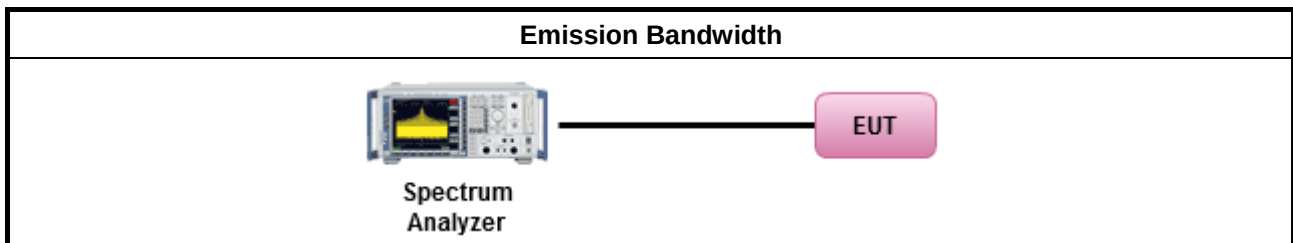
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

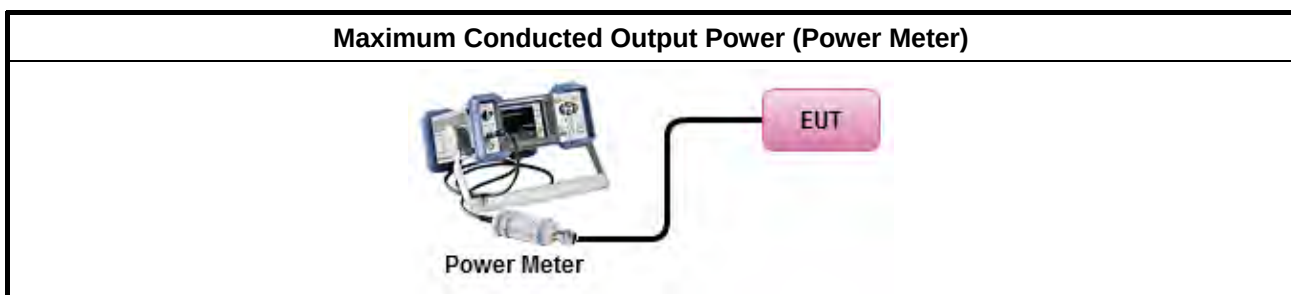
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup





3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

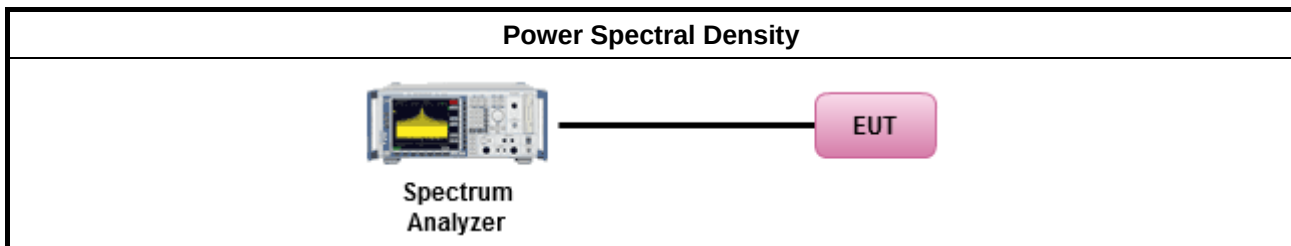
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

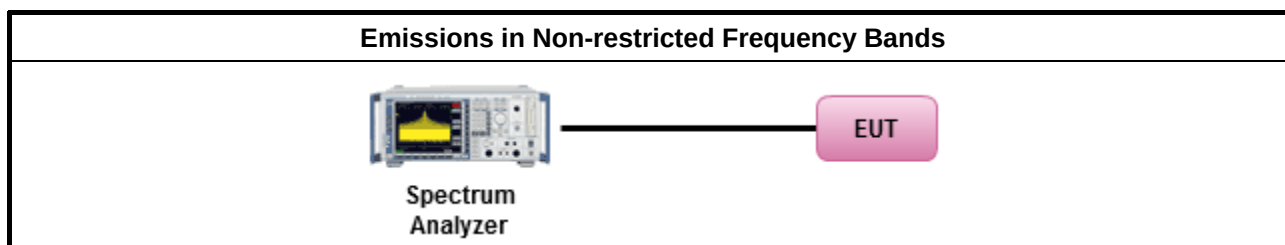
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

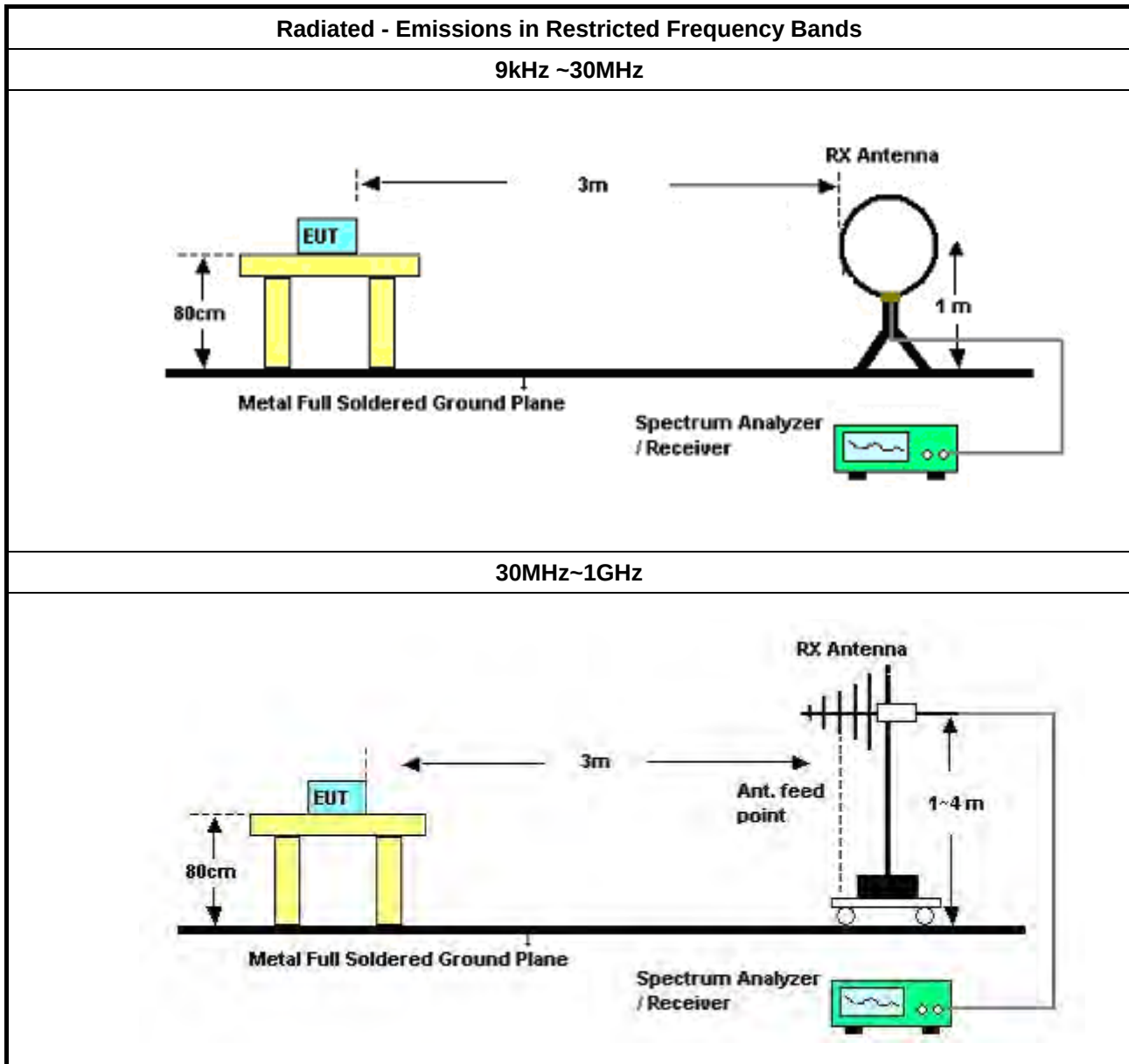
Refer a test equipment and calibration data table in this test report.

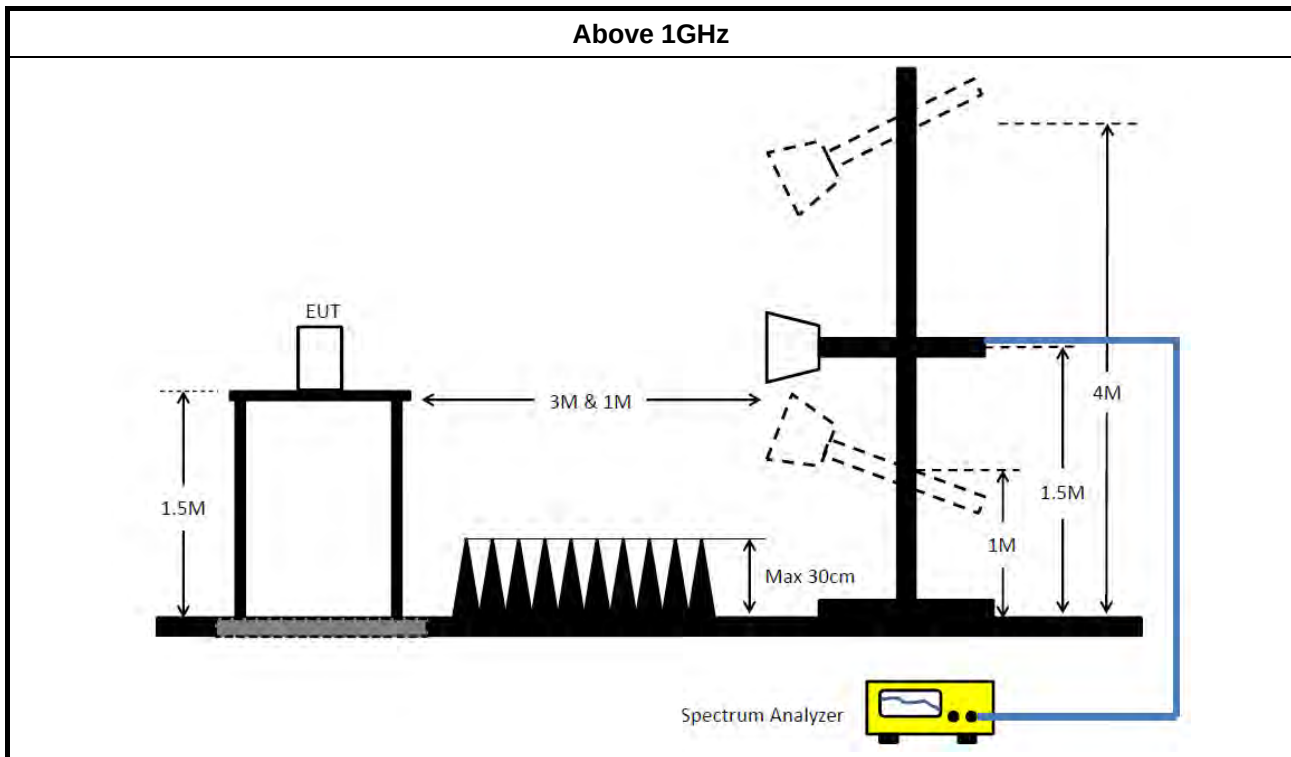


3.6.3 Test Procedures

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

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 09, 2020	Aug. 08, 2021	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 25, 2021	Feb. 24, 2022	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 11, 2020	Oct. 10, 2021	Radiation (03CH04-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH04-CB)
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 23, 2020	Oct. 22, 2021	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 18, 2021	Jun. 17, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Dec. 17, 2020	Dec. 16, 2021	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 14, 2020	Jul. 13, 2021	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH04-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun.15, 2021	Jun. 14, 2022	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Feb. 19, 2021	Feb. 18, 2022	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz ~ 1GHz	Nov. 05, 2020	Nov. 04, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Nov. 05, 2020	Nov. 04, 2021	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 08, 2020	Nov. 07, 2021	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Sep. 05, 2020	Sep. 04, 2021	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun.15, 2021	Jun. 14, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 27, 2020	Jul. 26, 2021	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

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



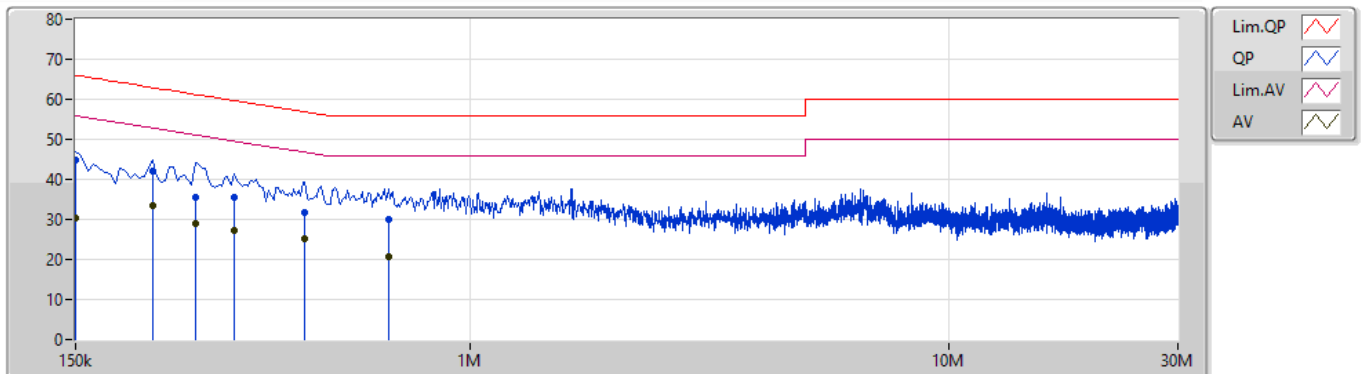
Conducted Emissions at Powerline

Appendix A

Summary

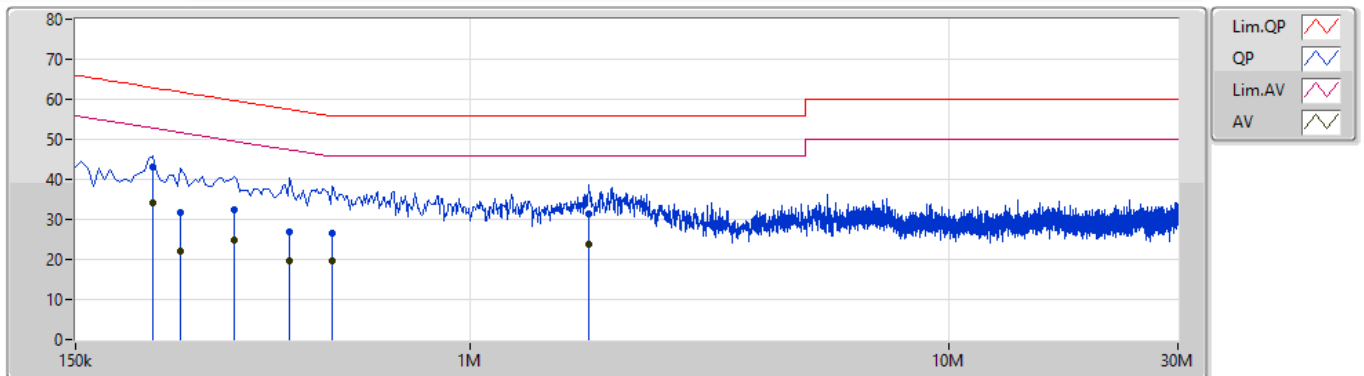
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	217.5k	34.27	52.92	-18.65	Neutral

20/07/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	150k	44.89	66.00	-21.11	9.89	Line	-	35.00	0.04	0.04	9.81			
AV	150k	30.43	56.00	-25.57	9.89	Line	-	20.54	0.04	0.04	9.81			
QP	217.5k	42.17	62.92	-20.75	9.89	Line	-	32.28	0.04	0.04	9.81			
AV	217.5k	33.52	52.92	-19.40	9.89	Line	"Worst"	23.63	0.04	0.04	9.81			
QP	267k	35.60	61.20	-25.60	9.89	Line	-	25.71	0.04	0.04	9.81			
AV	267k	28.87	51.20	-22.33	9.89	Line	-	18.98	0.04	0.04	9.81			
QP	321k	35.40	59.67	-24.27	9.90	Line	-	25.50	0.04	0.04	9.82			
AV	321k	27.21	49.67	-22.46	9.90	Line	-	17.31	0.04	0.04	9.82			
QP	451.5k	31.63	56.84	-25.21	9.90	Line	-	21.73	0.04	0.04	9.82			
AV	451.5k	25.31	46.84	-21.53	9.90	Line	-	15.41	0.04	0.04	9.82			
QP	676.5k	29.84	56.00	-26.16	9.92	Line	-	19.92	0.05	0.04	9.83			
AV	676.5k	20.82	46.00	-25.18	9.92	Line	-	10.90	0.05	0.04	9.83			

20/07/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	217.5k	43.13	62.92	-19.79	9.88	Neutral	-	33.25	0.03	0.04	9.81			
AV	217.5k	34.27	52.92	-18.65	9.88	Neutral	"Worst"	24.39	0.03	0.04	9.81			
QP	249k	31.80	61.79	-19.07	9.88	Neutral	-	21.92	0.03	0.04	9.81			
AV	249k	21.91	51.79	-29.88	9.88	Neutral	-	12.03	0.03	0.04	9.81			
QP	321k	32.49	59.67	-27.18	9.89	Neutral	-	22.60	0.03	0.04	9.82			
AV	321k	24.82	49.67	-24.85	9.89	Neutral	-	14.93	0.03	0.04	9.82			
QP	420k	26.84	57.45	-30.61	9.89	Neutral	-	16.95	0.03	0.04	9.82			
AV	420k	19.74	47.45	-27.71	9.89	Neutral	-	9.85	0.03	0.04	9.82			
QP	514.5k	26.39	56.00	-29.61	9.90	Neutral	-	16.49	0.04	0.04	9.82			
AV	514.5k	19.54	46.00	-26.46	9.90	Neutral	-	9.64	0.04	0.04	9.82			
QP	1.77M	31.23	56.00	-24.77	9.95	Neutral	-	21.28	0.07	0.06	9.82			
AV	1.77M	23.84	46.00	-22.16	9.95	Neutral	-	13.89	0.07	0.06	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	12.594M	12M6G1D	6.5M	10.895M
802.11g_Nss1,(6Mbps)_3TX	16.325M	17.741M	17M7D1D	15.725M	16.592M
802.11ax HEW20_Nss1,(MCS0)_3TX	18.85M	19.19M	19M2D1D	18.45M	18.966M
802.11ax HEW40_Nss1,(MCS0)_3TX	37.6M	37.731M	37M7D1D	36.15M	37.531M

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

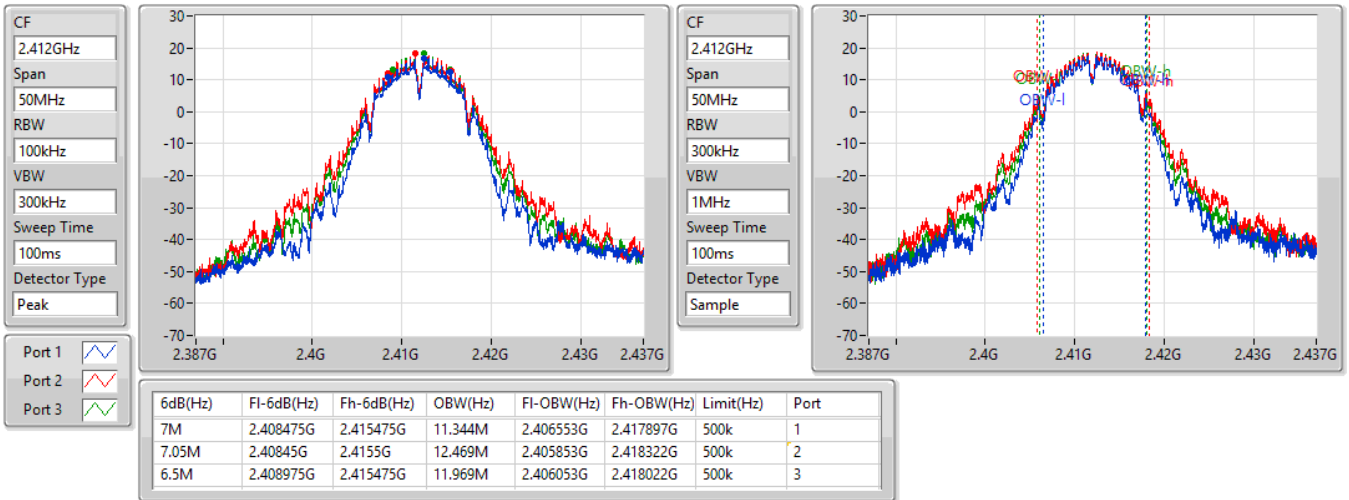
Result

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	7M	11.344M	7.05M	12.469M	6.5M	11.969M
2437MHz	Pass	500k	7.05M	11.594M	7.025M	12.594M	7.05M	12.094M
2462MHz	Pass	500k	7.05M	10.895M	6.575M	12.094M	7.05M	11.819M
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.05M	16.767M	15.75M	16.642M	15.725M	16.642M
2437MHz	Pass	500k	16.3M	17.716M	16.325M	17.441M	16.05M	17.741M
2462MHz	Pass	500k	16.3M	16.667M	16.3M	16.642M	16.3M	16.592M
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.55M	19.015M	18.45M	19.015M	18.525M	18.966M
2437MHz	Pass	500k	18.85M	19.165M	18.7M	19.19M	18.75M	19.115M
2462MHz	Pass	500k	18.85M	18.991M	18.825M	19.015M	18.7M	18.991M
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.5M	37.681M	36.15M	37.531M	36.35M	37.581M
2437MHz	Pass	500k	37.55M	37.731M	36.85M	37.631M	37.6M	37.731M
2452MHz	Pass	500k	37.6M	37.681M	36.3M	37.731M	37.6M	37.731M

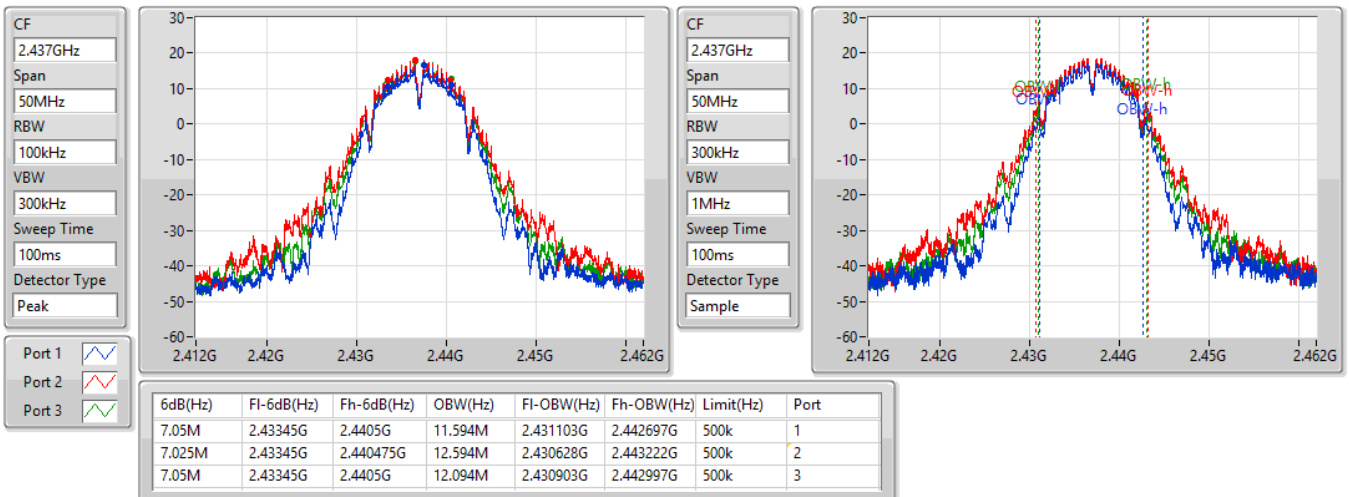
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_3TX
EBW
2412MHz

05/07/2021

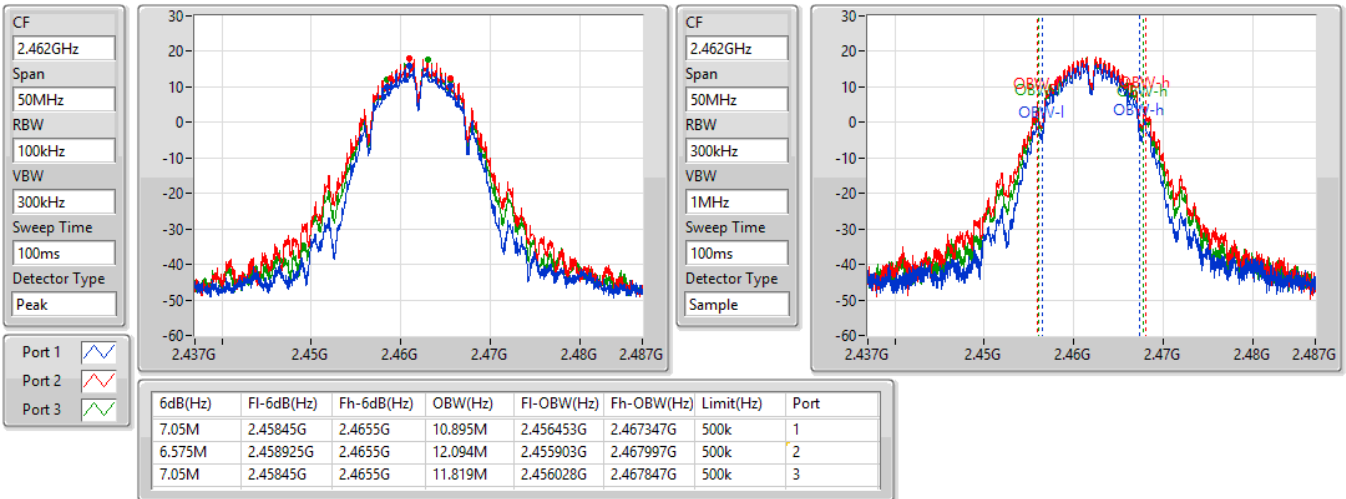

802.11b_Nss1,(1Mbps)_3TX
EBW
2437MHz

05/07/2021

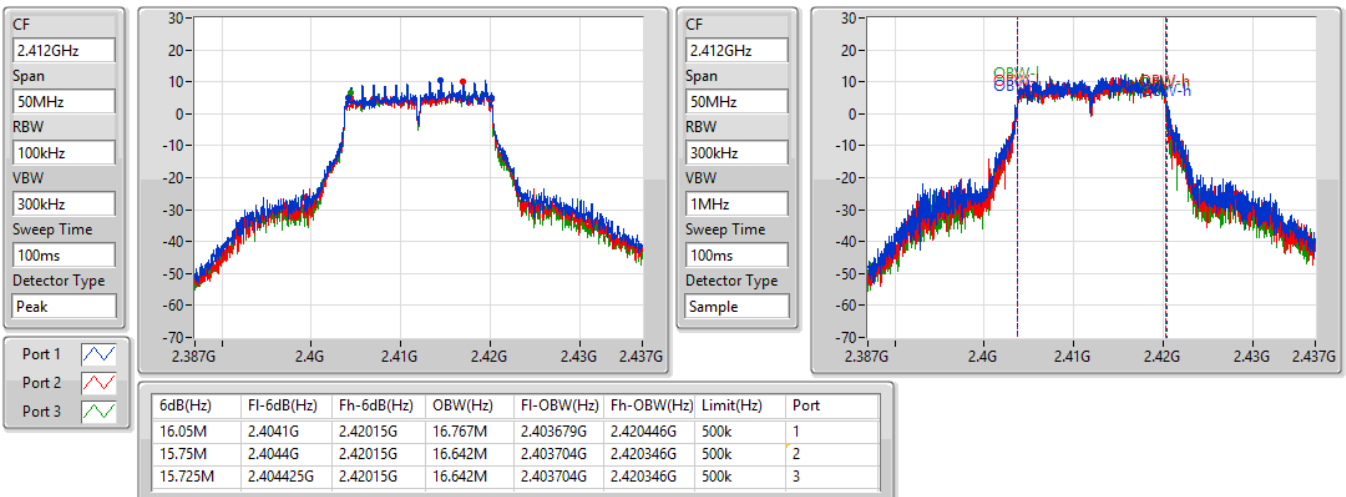


802.11b_Nss1,(1Mbps)_3TX
EBW
2462MHz

05/07/2021


802.11g_Nss1,(6Mbps)_3TX
EBW
2412MHz

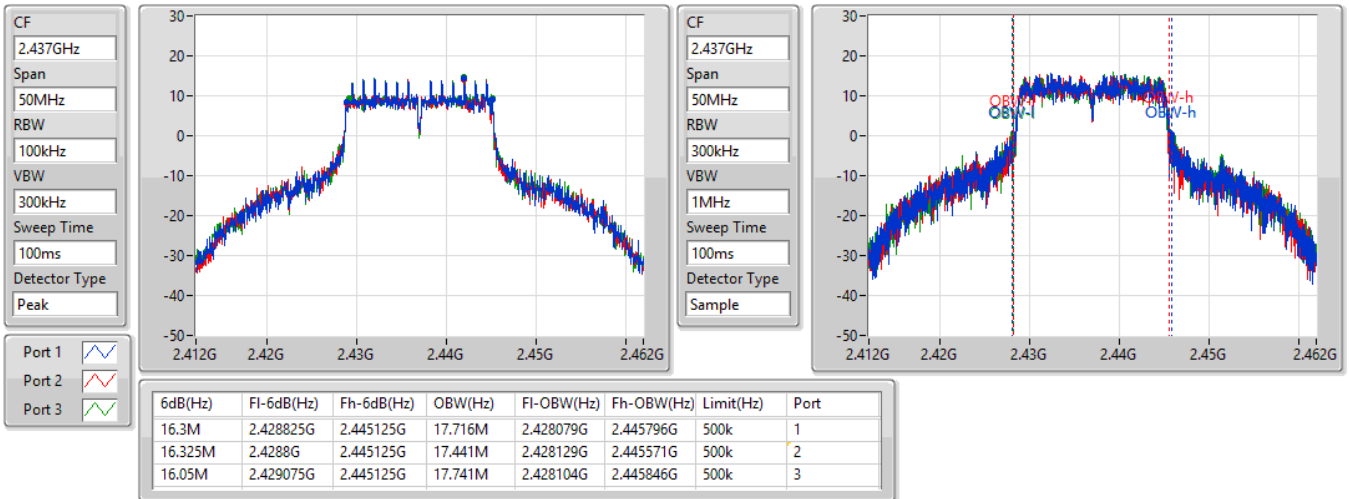
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802.11g_Nss1,(6Mbps)_3TX

EBW
2437MHz

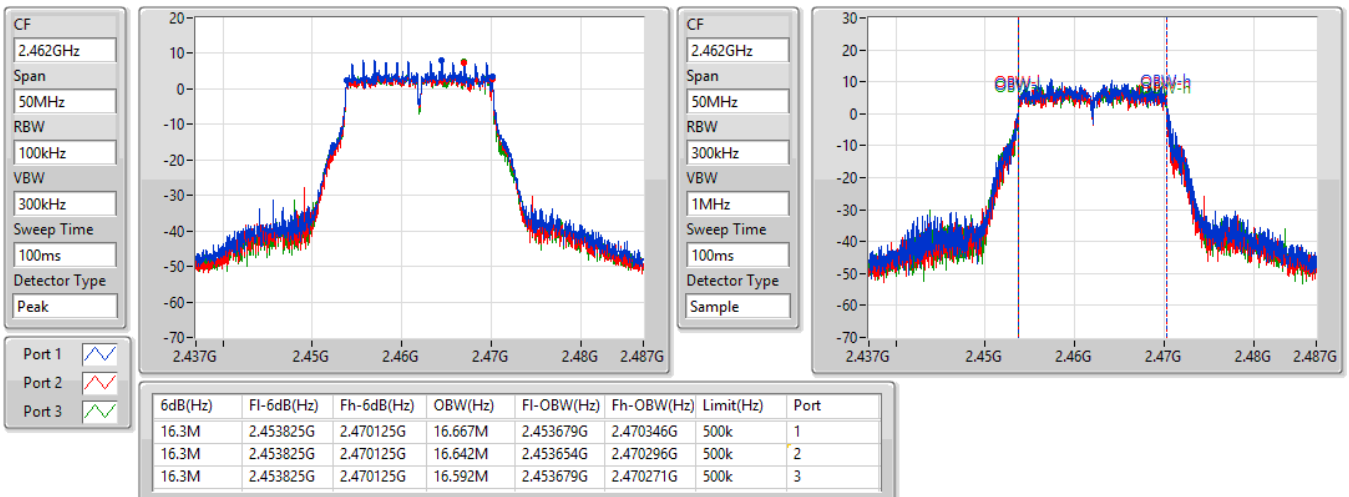
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802.11g_Nss1,(6Mbps)_3TX

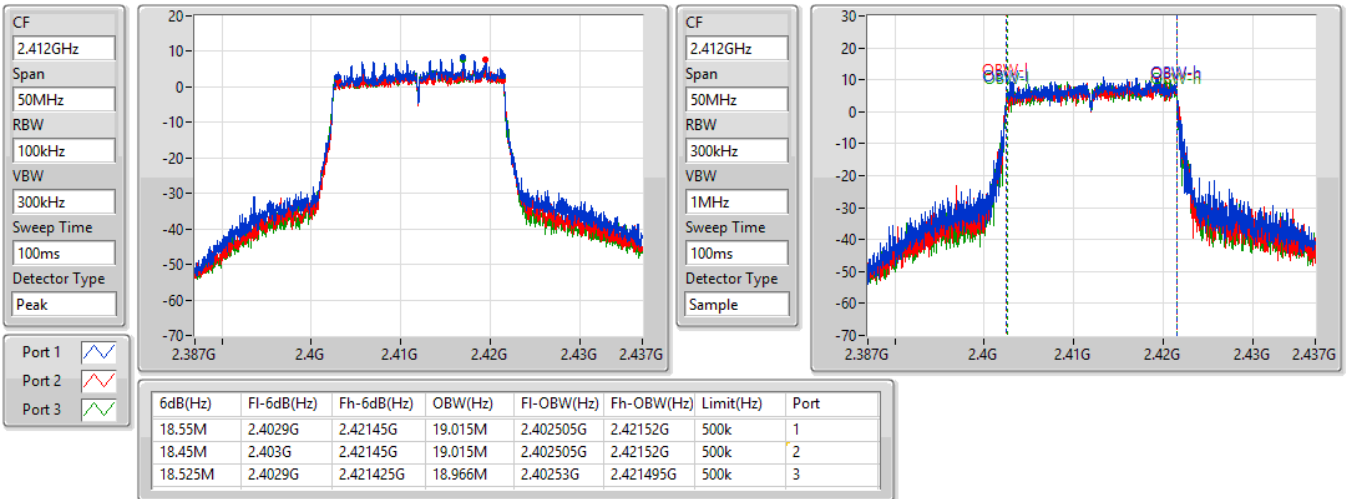
EBW
2462MHz

05/07/2021

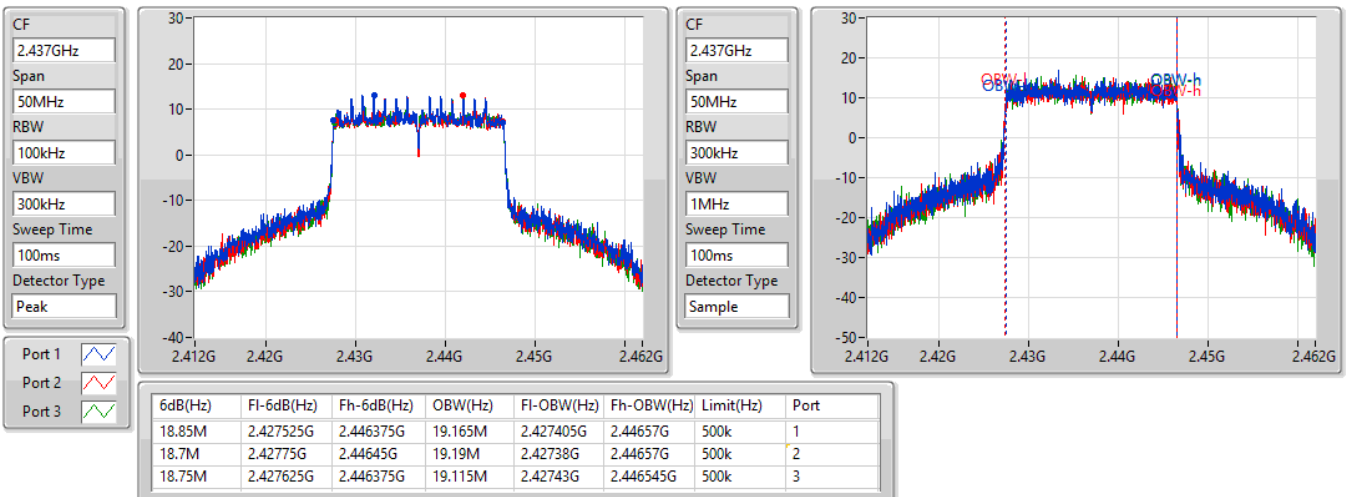


802.11ax HEW20_Nss1,(MCS0)_3TX
EBW
2412MHz

05/07/2021

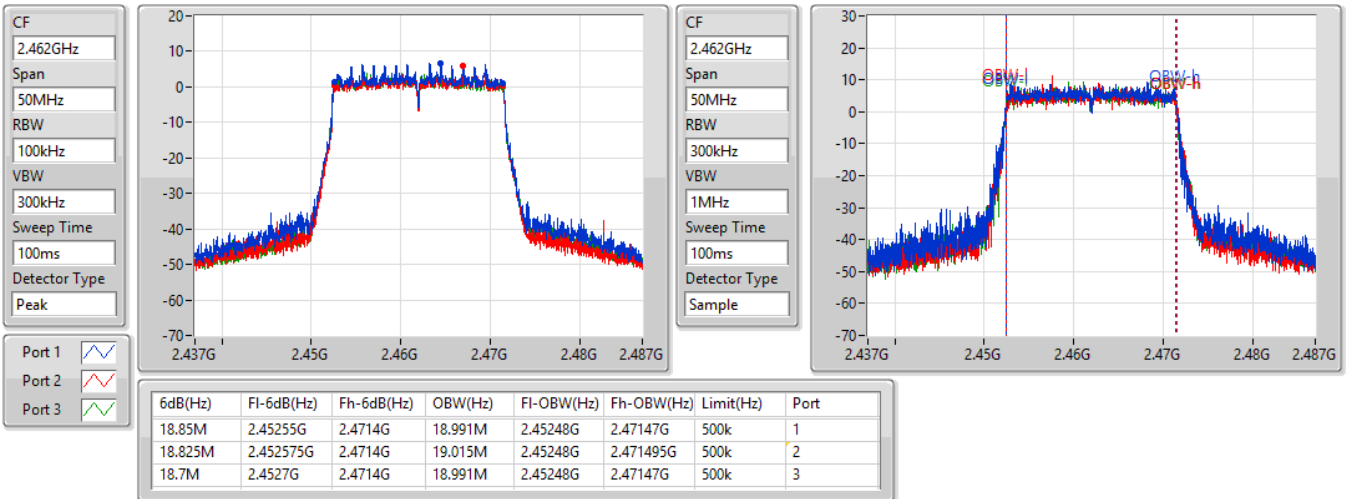

802.11ax HEW20_Nss1,(MCS0)_3TX
EBW
2437MHz

05/07/2021

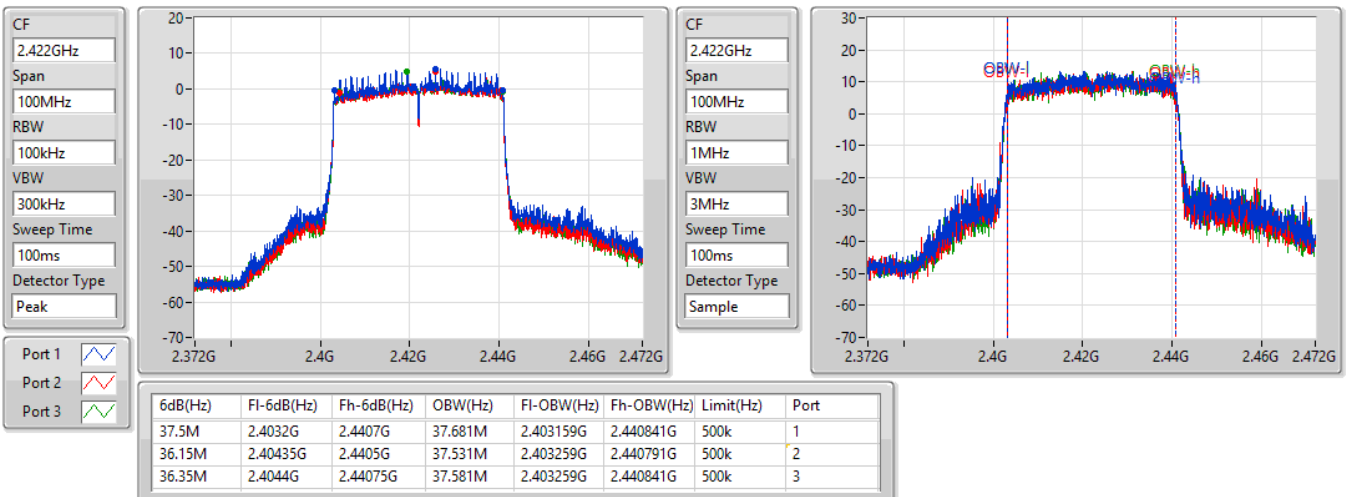


802.11ax HEW20_Nss1,(MCS0)_3TX
EBW
2462MHz

05/07/2021

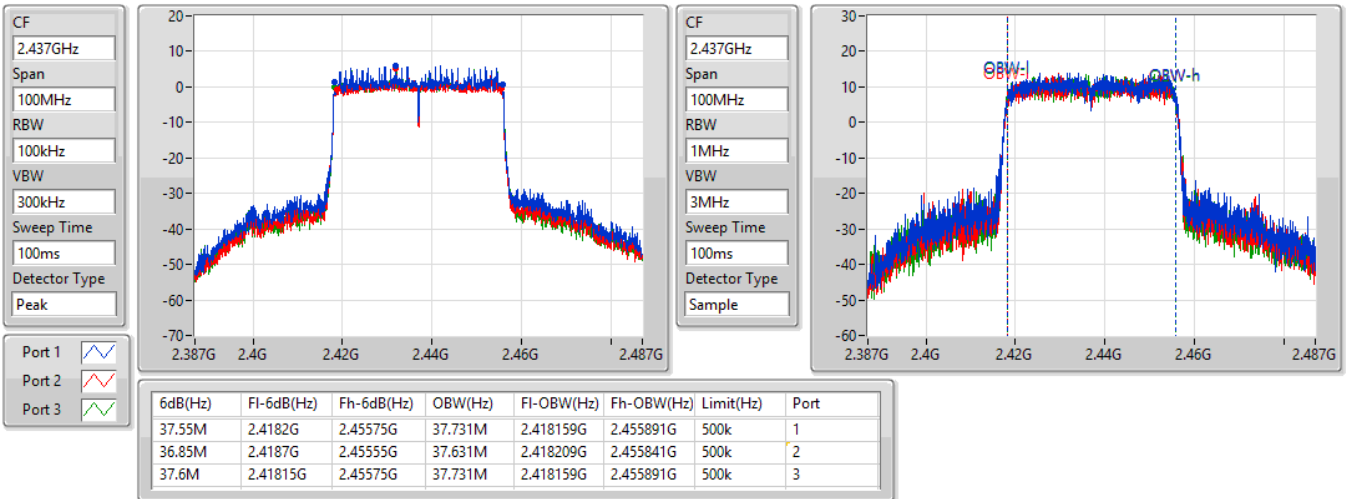

802.11ax HEW40_Nss1,(MCS0)_3TX
EBW
2422MHz

05/07/2021

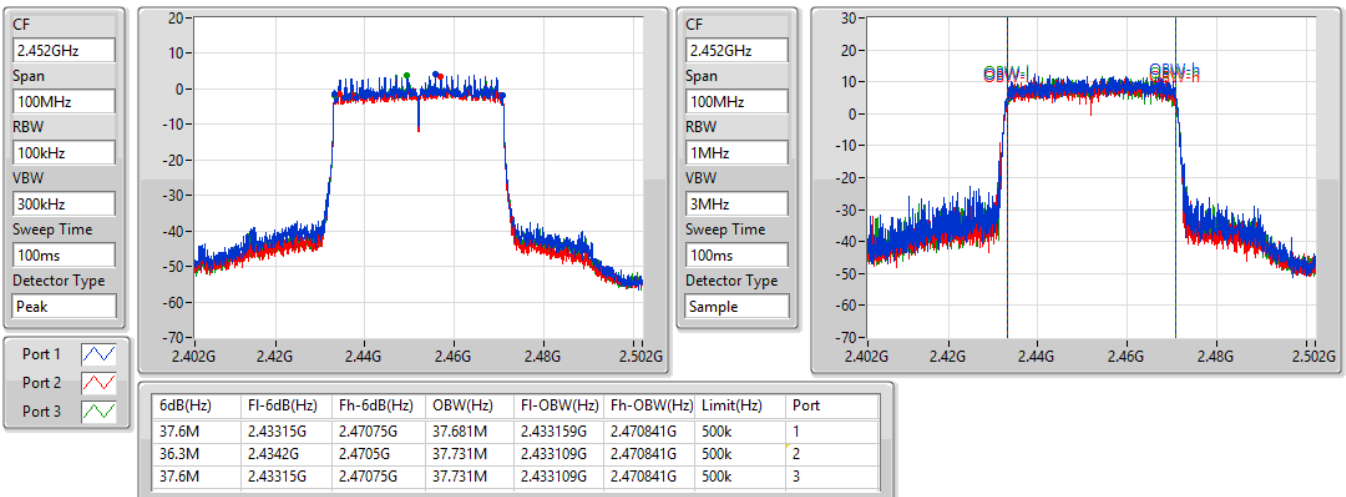


802.11ax HEW40_Nss1,(MCS0)_3TX
EBW
2437MHz

05/07/2021


802.11ax HEW40_Nss1,(MCS0)_3TX
EBW
2452MHz

05/07/2021





For Non-beamforming mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_3TX	29.94	0.98628
802.11g_Nss1,(6Mbps)_3TX	28.74	0.74817
802.11ax HEW20_Nss1,(MCS0)_3TX	28.64	0.73114
802.11ax HEW40_Nss1,(MCS0)_3TX	24.02	0.25235

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	4.02	24.04	25.45	25.61	29.86	30.00
2437MHz	Pass	4.02	24.14	25.63	25.57	29.94	30.00
2462MHz	Pass	4.02	23.63	25.16	25.11	29.46	30.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	4.02	20.34	19.66	19.87	24.74	30.00
2417MHz	Pass	4.02	21.80	21.15	21.33	26.21	30.00
2437MHz	Pass	4.02	23.92	23.88	24.10	28.74	30.00
2457MHz	Pass	4.02	20.21	19.70	19.77	24.67	30.00
2462MHz	Pass	4.02	18.30	17.61	17.84	22.70	30.00
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	4.02	19.06	18.32	18.46	23.40	30.00
2417MHz	Pass	4.02	22.18	21.71	21.90	26.71	30.00
2437MHz	Pass	4.02	23.85	23.77	23.98	28.64	30.00
2457MHz	Pass	4.02	19.83	19.36	19.49	24.34	30.00
2462MHz	Pass	4.02	17.95	16.93	17.25	22.17	30.00
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	4.02	18.91	18.32	18.42	23.33	30.00
2437MHz	Pass	4.02	19.59	18.98	19.15	24.02	30.00
2452MHz	Pass	4.02	17.69	17.02	17.38	22.14	30.00

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



For beamforming mode
Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	28.64	0.73114
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	24.02	0.25235



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	4.42	19.06	18.32	18.46	23.40	30.00
2417MHz	Pass	4.42	22.18	21.71	21.9	26.71	30.00
2437MHz	Pass	4.42	23.85	23.77	23.98	28.64	30.00
2457MHz	Pass	4.42	19.83	19.36	19.49	24.34	30.00
2462MHz	Pass	4.42	17.95	16.93	17.25	22.17	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	4.42	18.91	18.32	18.42	23.33	30.00
2437MHz	Pass	4.42	19.59	18.98	19.15	24.02	30.00
2452MHz	Pass	4.42	17.69	17.02	17.38	22.14	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	6.05
802.11g_Nss1,(6Mbps)_3TX	3.48
802.11ax HEW20_Nss1,(MCS0)_3TX	1.38
802.11ax HEW40_Nss1,(MCS0)_3TX	-5.30

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	4.42	1.66	3.27	2.65	5.43	8.00
2437MHz	Pass	4.42	2.34	3.74	3.42	6.05	8.00
2462MHz	Pass	4.42	0.89	3.45	3.11	5.56	8.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	4.42	-4.28	-5.79	-5.86	-0.48	8.00
2437MHz	Pass	4.42	-1.23	-1.00	-1.68	3.48	8.00
2462MHz	Pass	4.42	-6.97	-7.63	-8.23	-2.87	8.00
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	4.42	-6.94	-7.42	-7.78	-3.15	8.00
2437MHz	Pass	4.42	-2.44	-3.07	-3.40	1.38	8.00
2462MHz	Pass	4.42	-8.31	-9.25	-9.24	-4.51	8.00
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	4.42	-10.50	-10.68	-10.96	-6.16	8.00
2437MHz	Pass	4.42	-10.06	-9.21	-10.52	-5.30	8.00
2452MHz	Pass	4.42	-11.62	-11.49	-11.69	-7.07	8.00

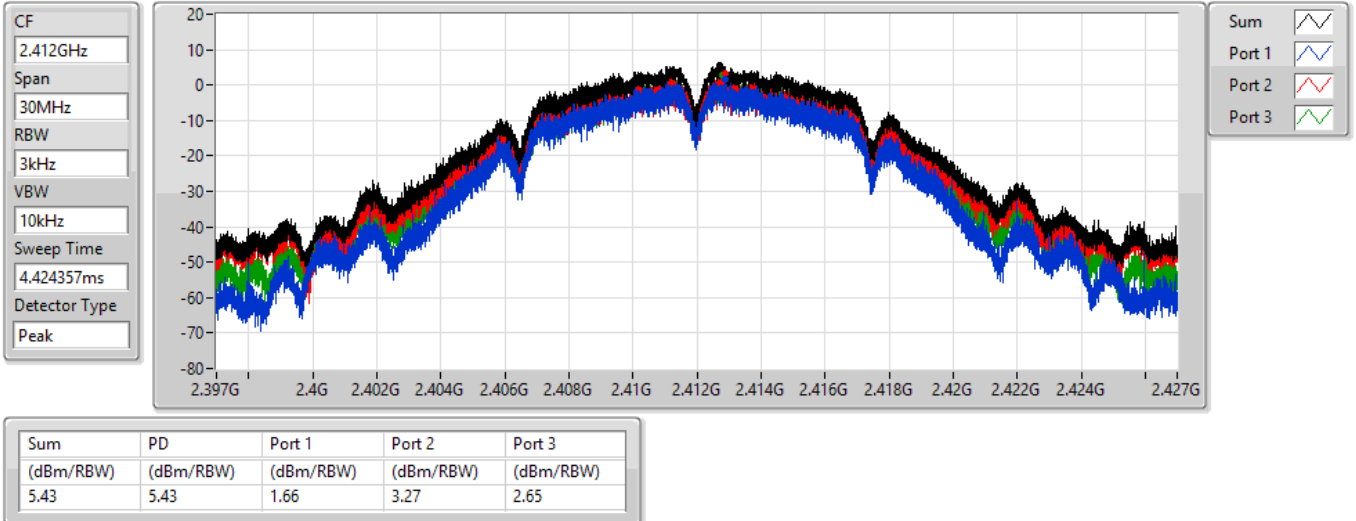
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_3TX

PSD

2412MHz

05/07/2021

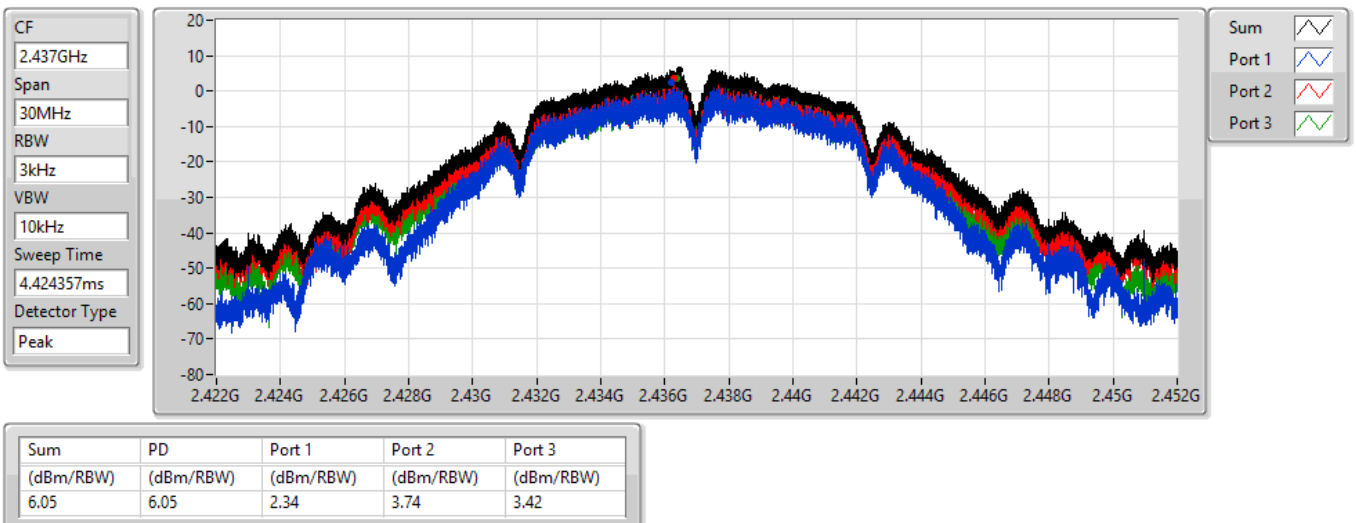


802.11b_Nss1,(1Mbps)_3TX

PSD

2437MHz

05/07/2021

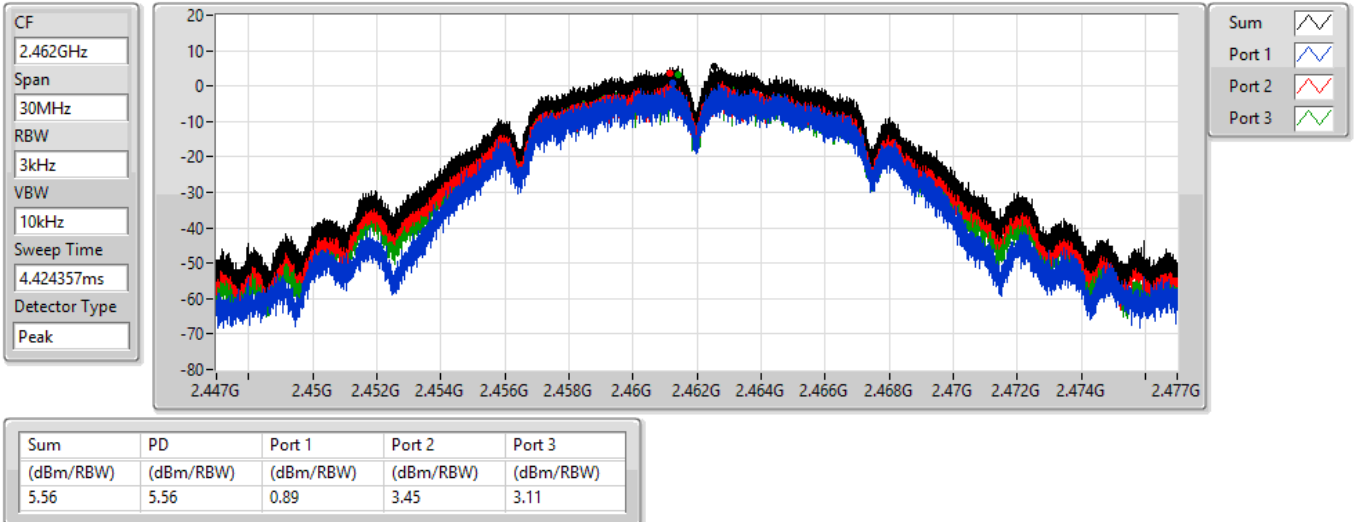


802.11b_Nss1,(1Mbps)_3TX

PSD

2462MHz

05/07/2021

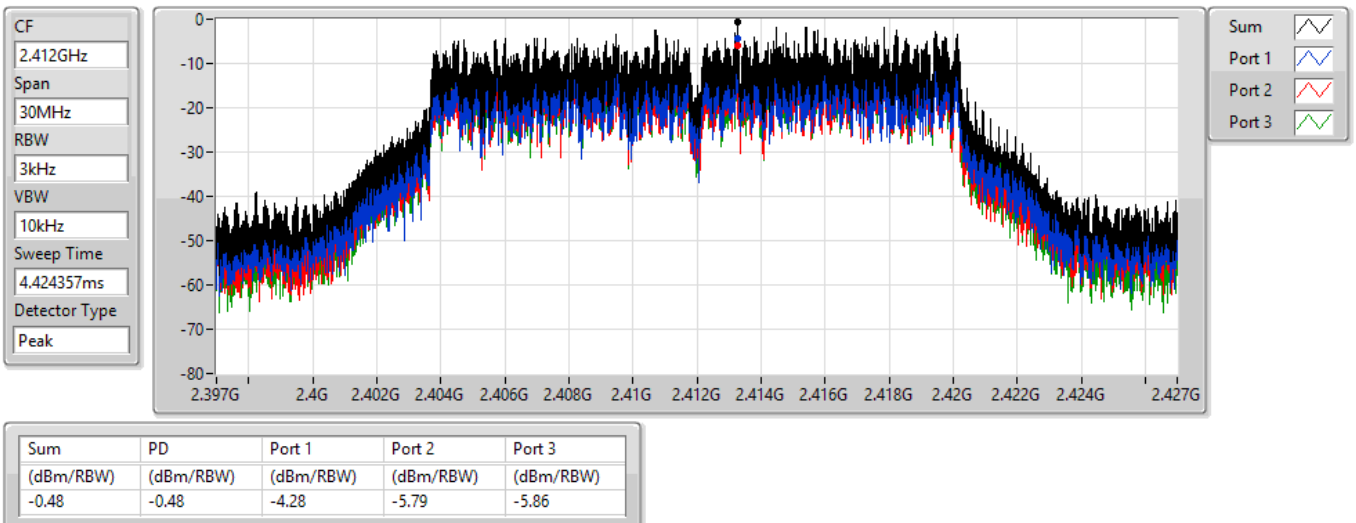


802.11g_Nss1,(6Mbps)_3TX

PSD

2412MHz

05/07/2021

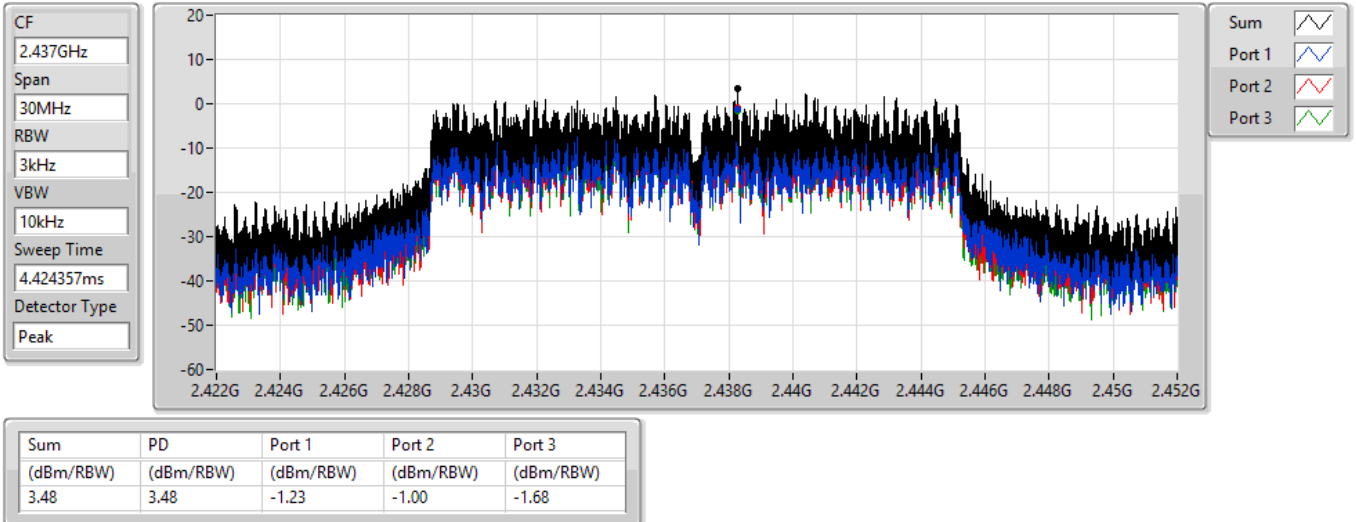


802.11g_Nss1,(6Mbps)_3TX

2437MHz

PSD

05/07/2021

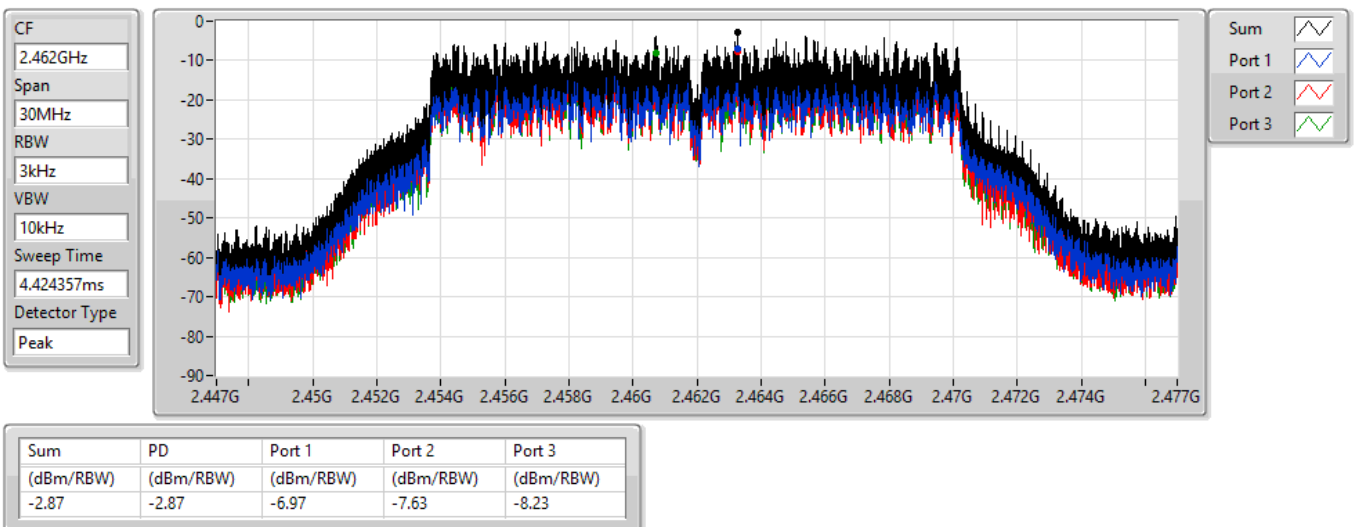


802.11g_Nss1,(6Mbps)_3TX

2462MHz

PSD

05/07/2021

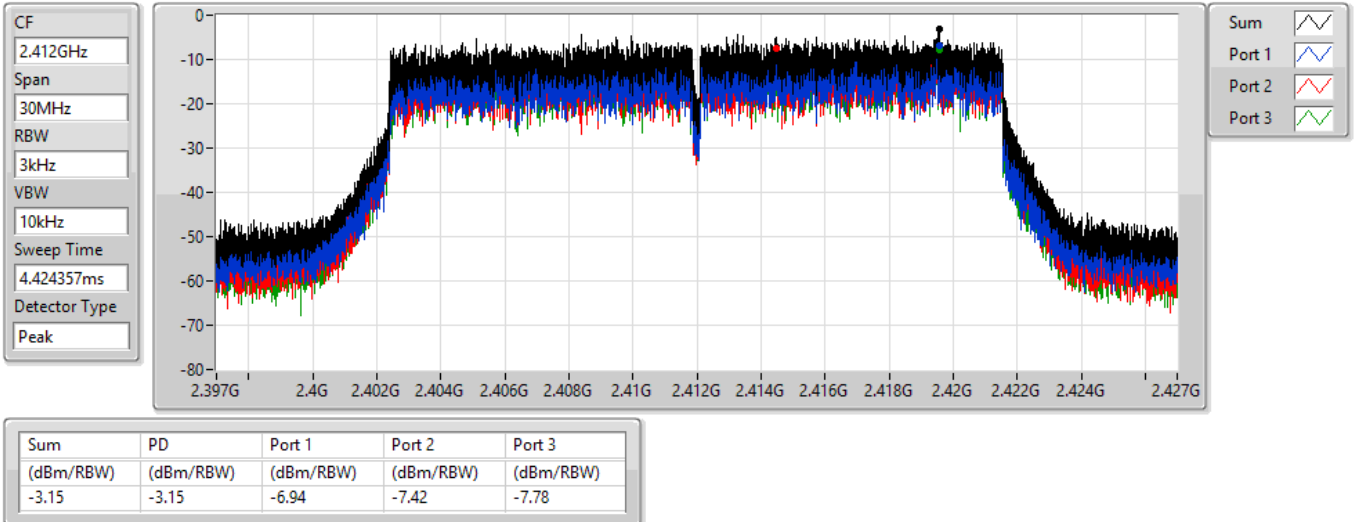


802.11ax HEW20_Nss1,(MCS0)_3TX

PSD

2412MHz

05/07/2021

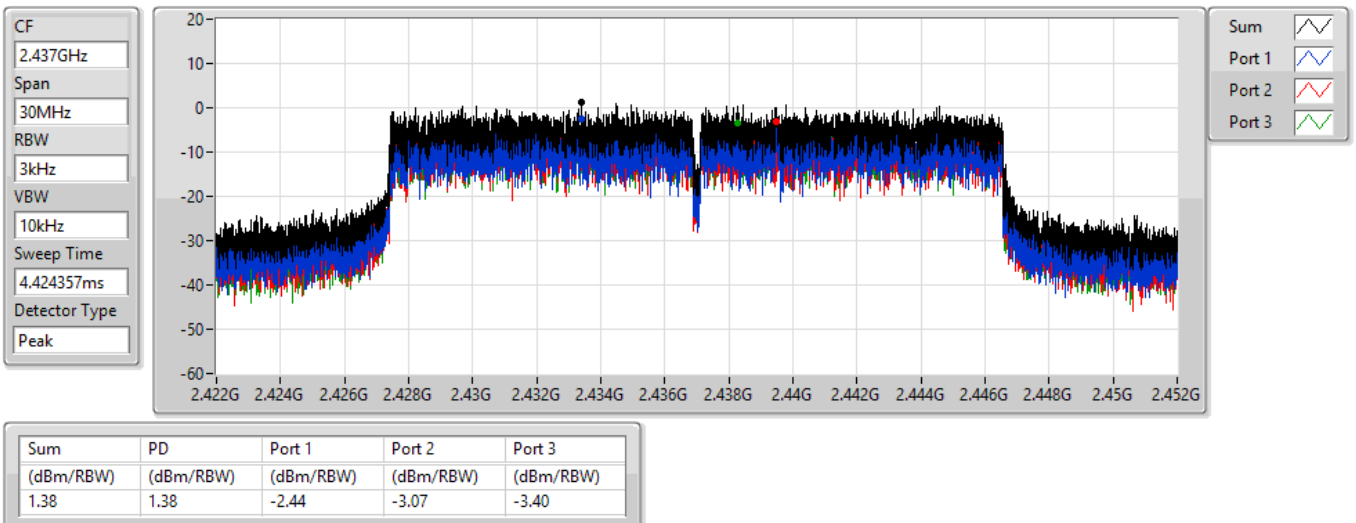


802.11ax HEW20_Nss1,(MCS0)_3TX

PSD

2437MHz

05/07/2021

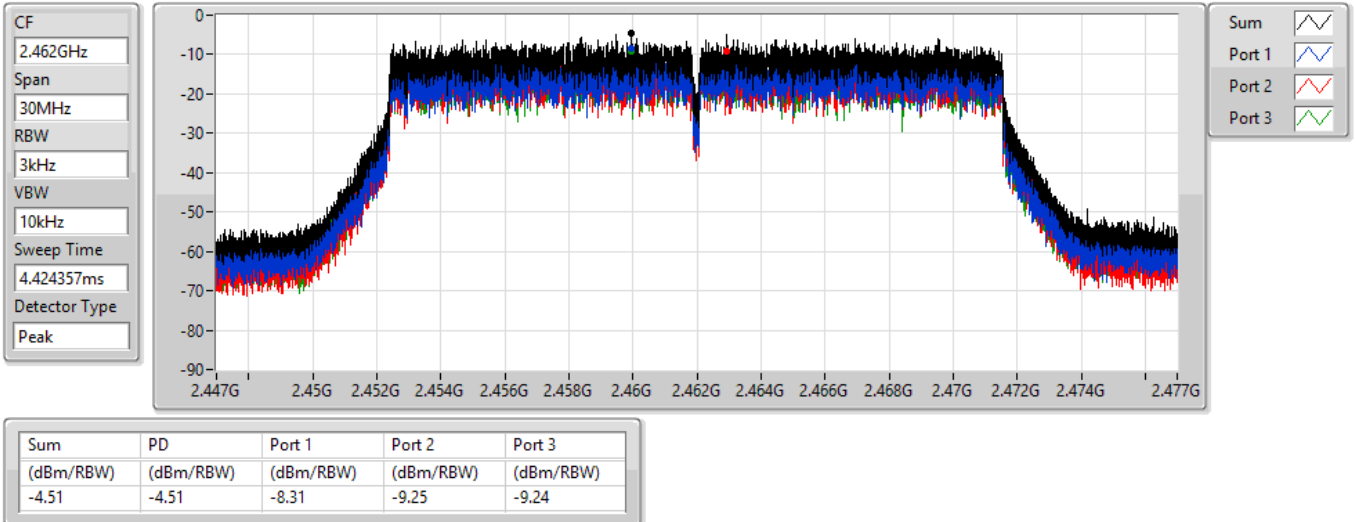


802.11ax HEW20_Nss1,(MCS0)_3TX

PSD

2462MHz

05/07/2021

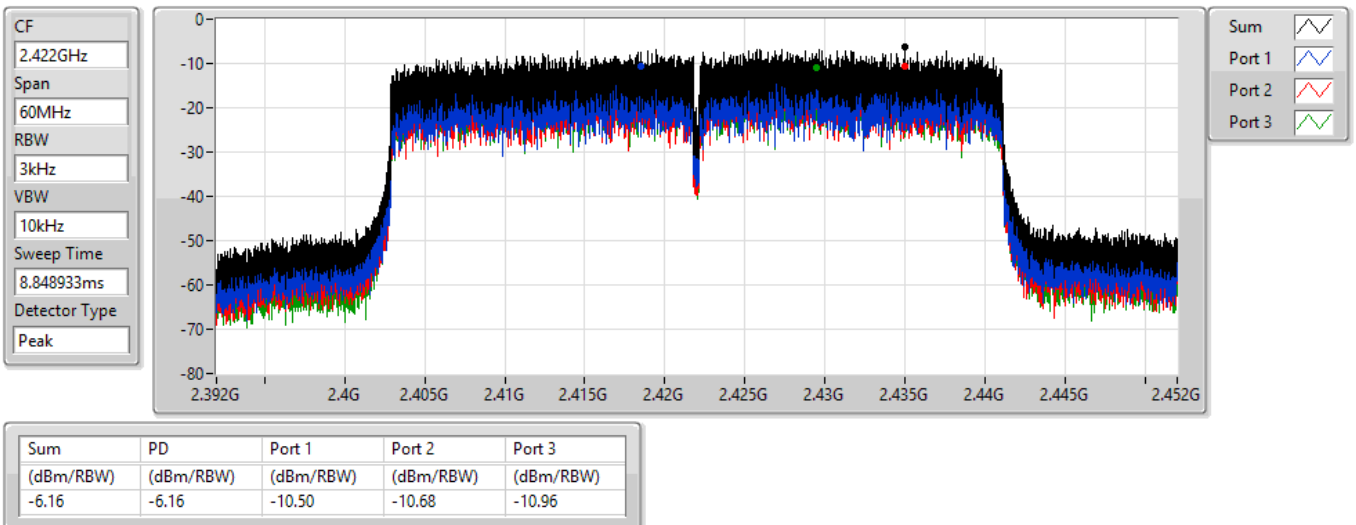


802.11ax HEW40_Nss1,(MCS0)_3TX

PSD

2422MHz

05/07/2021

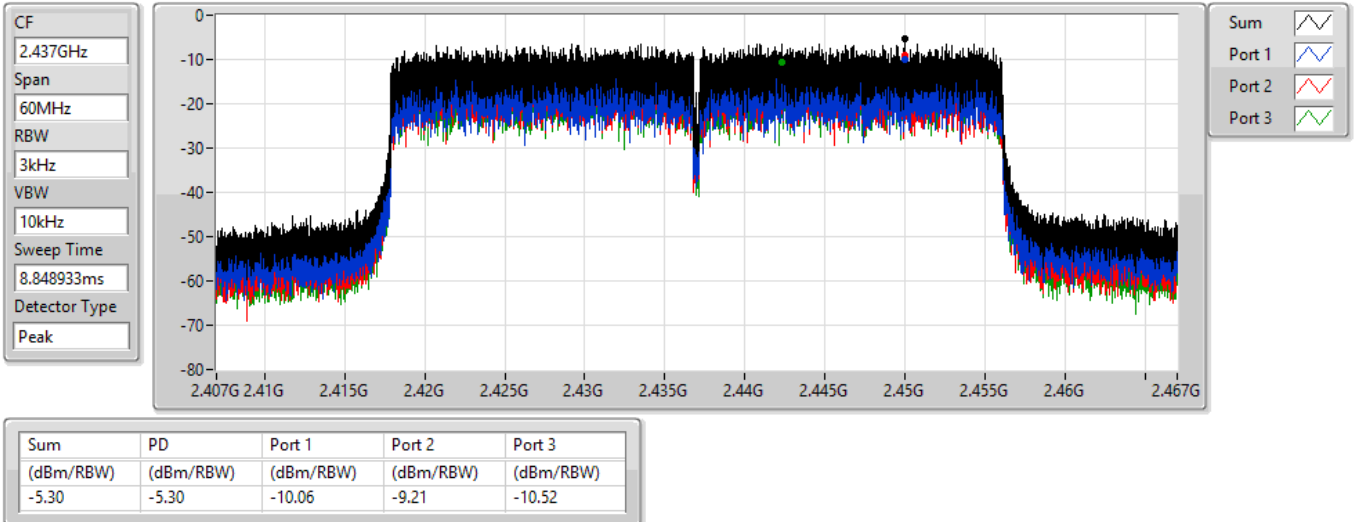


802.11ax HEW40_Nss1,(MCS0)_3TX

PSD

2437MHz

05/07/2021

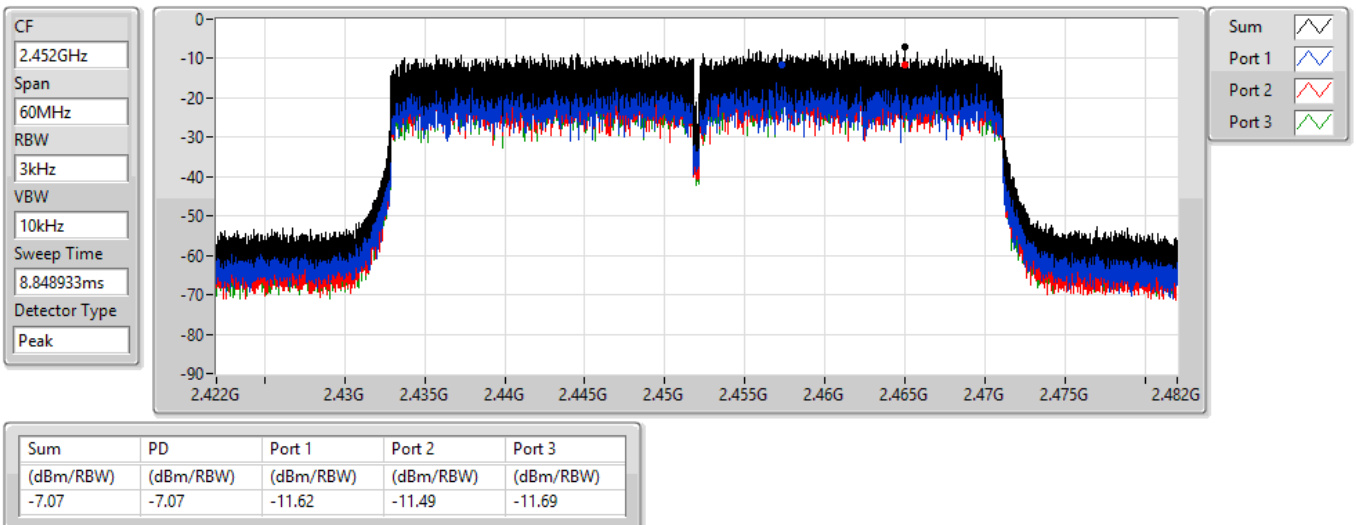


802.11ax HEW40_Nss1,(MCS0)_3TX

PSD

2452MHz

05/07/2021



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	2.43645G	17.87	-12.13	47.77M	-46.36	2.39896G	-23.35	2.4G	-32.15	2.48378G	-47.59	24.46899G	-43.62	2
802.11g_Nss1.(6Mbps)_3TX	Pass	2.44196G	14.86	-15.14	47.77M	-49.24	2.3986G	-25.02	2.4G	-31.01	2.4852G	-48.96	24.10937G	-44.76	2
802.11ax HEW20_Nss1.(MCS0)_3TX	Pass	2.44196G	13.26	-16.74	47.77M	-46.37	2.39906G	-29.94	2.4G	-32.82	2.4878G	-49.48	24.13746G	-45.90	1
802.11ax HEW40_Nss1.(MCS0)_3TX	Pass	2.43194G	6.06	-23.94	47.75M	-46.07	2.39484G	-32.85	2.4G	-38.20	2.48726G	-47.71	14.35108G	-45.38	1

Result

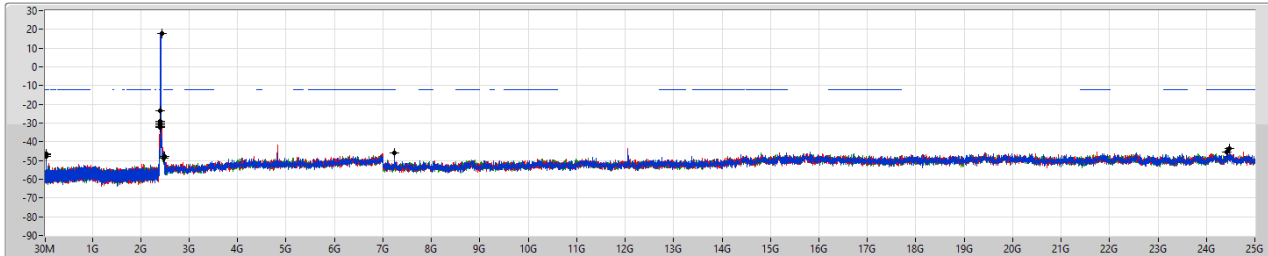
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43645G	17.87	-12.13	47.77M	-46.74	2.39996G	-31.78	2.4G	-31.09	2.4845G	-47.71	24.41842G	-45.70	1
2412MHz	Pass	2.43645G	17.87	-12.13	47.77M	-46.36	2.39896G	-23.35	2.4G	-32.15	2.48378G	-47.59	24.46899G	-43.62	2
2412MHz	Pass	2.43645G	17.87	-12.13	47.77M	-47.95	2.39998G	-29.17	2.4G	-29.90	2.4835G	-48.84	7.23514G	-45.95	3
2437MHz	Pass	2.43645G	17.87	-12.13	47.77M	-45.52	2.39862G	-46.79	2.4G	-49.59	2.48398G	-45.96	15.16091G	-45.49	1
2437MHz	Pass	2.43645G	17.87	-12.13	47.77M	-48.28	2.39898G	-44.95	2.4G	-46.10	2.4862G	-46.17	15.17215G	-45.47	2
2437MHz	Pass	2.43645G	17.87	-12.13	47.77M	-47.46	2.3998G	-46.35	2.4G	-48.52	2.48372G	-46.25	15.19182G	-45.14	3
2462MHz	Pass	2.43645G	17.87	-12.13	47.77M	-46.79	2.39576G	-48.46	2.4835G	-46.29	2.48856G	-44.06	21.8842G	-46.39	1
2462MHz	Pass	2.43645G	17.87	-12.13	47.77M	-47.27	2.39992G	-49.04	2.4835G	-43.03	2.48444G	-42.45	24.4718G	-45.62	2
2462MHz	Pass	2.43645G	17.87	-12.13	47.77M	-48.06	2.3956G	-48.91	2.4835G	-43.82	2.4846G	-41.85	24.42966G	-45.08	3
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	14.86	-15.14	47.77M	-46.23	2.39898G	-25.22	2.4G	-26.19	2.48428G	-48.64	24.12904G	-46.10	1
2412MHz	Pass	2.44196G	14.86	-15.14	47.77M	-49.24	2.3986G	-25.02	2.4G	-31.01	2.4812G	-48.96	24.10937G	-44.76	2
2412MHz	Pass	2.44196G	14.86	-15.14	47.77M	-46.92	2.3999G	-28.21	2.4G	-32.64	2.48722G	-48.93	15.33791G	-45.78	3
2437MHz	Pass	2.44196G	14.86	-15.14	47.77M	-46.50	2.39898G	-39.34	2.4G	-41.10	2.48556G	-44.37	23.44069G	-46.02	1
2437MHz	Pass	2.44196G	14.86	-15.14	47.77M	-48.62	2.39952G	-39.21	2.4G	-41.53	2.48886G	-44.85	6.92327G	-46.15	2
2437MHz	Pass	2.44196G	14.86	-15.14	47.77M	-47.91	2.39962G	-38.72	2.4G	-40.40	2.48514G	-43.03	16.88317G	-46.02	3
2462MHz	Pass	2.44196G	14.86	-15.14	47.77M	-46.60	2.39746G	-49.11	2.4835G	-45.76	2.48358G	-43.52	24.44652G	-44.88	1
2462MHz	Pass	2.44196G	14.86	-15.14	47.77M	-47.73	2.3973G	-50.32	2.4835G	-47.58	2.48386G	-45.78	24.4409G	-45.29	2
2462MHz	Pass	2.44196G	14.86	-15.14	47.77M	-47.27	2.39768G	-50.84	2.4835G	-47.29	2.48512G	-45.68	16.36902G	-45.02	3
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	13.26	-16.74	47.77M	-46.37	2.39906G	-29.94	2.4G	-32.82	2.4878G	-49.48	24.13746G	-45.90	1
2412MHz	Pass	2.44196G	13.26	-16.74	47.77M	-47.76	2.3999G	-30.18	2.4G	-34.45	2.48536G	-49.91	24.77804G	-45.58	2
2412MHz	Pass	2.44196G	13.26	-16.74	47.77M	-47.52	2.4G	-31.15	2.4G	-37.21	2.4841G	-49.71	24.54485G	-45.31	3
2437MHz	Pass	2.44196G	13.26	-16.74	47.77M	-45.94	2.39954G	-39.48	2.4G	-41.23	2.4857G	-43.51	15.19463G	-46.05	1
2437MHz	Pass	2.44196G	13.26	-16.74	47.77M	-47.72	2.39996G	-39.82	2.4G	-41.61	2.48488G	-44.55	21.887G	-45.80	2
2437MHz	Pass	2.44196G	13.26	-16.74	47.77M	-47.24	2.3997G	-39.94	2.4G	-42.05	2.48472G	-43.06	24.18804G	-45.54	3
2462MHz	Pass	2.44196G	13.26	-16.74	47.77M	-45.35	2.3988G	-51.09	2.4835G	-45.84	2.48484G	-43.39	21.84205G	-44.97	1
2462MHz	Pass	2.44196G	13.26	-16.74	47.77M	-47.65	2.39672G	-50.85	2.4835G	-48.31	2.48378G	-46.39	15.19744G	-44.73	2
2462MHz	Pass	2.44196G	13.26	-16.74	47.77M	-47.08	2.39558G	-51.16	2.4835G	-46.22	2.48412G	-43.03	15.1862G	-45.71	3
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43194G	6.06	-23.94	47.75M	-46.07	2.39484G	-32.85	2.4G	-38.20	2.48726G	-47.71	14.35108G	-45.38	1
2422MHz	Pass	2.43194G	6.06	-23.94	47.75M	-47.22	2.39724G	-34.68	2.4G	-40.58	2.48842G	-49.26	15.19244G	-45.19	2
2422MHz	Pass	2.43194G	6.06	-23.94	47.75M	-47.68	2.3948G	-35.56	2.4G	-41.59	2.48702G	-47.73	24.45591G	-45.90	3
2437MHz	Pass	2.43194G	6.06	-23.94	47.75M	-46.42	2.3998G	-33.10	2.4G	-37.48	2.48474G	-38.77	24.45591G	-45.46	1
2437MHz	Pass	2.43194G	6.06	-23.94	47.75M	-46.84	2.39948G	-34.24	2.4G	-38.53	2.48478G	-40.81	15.18123G	-44.40	2
2437MHz	Pass	2.43194G	6.06	-23.94	47.75M	-47.23	2.39948G	-34.25	2.4G	-38.21	2.48482G	-40.83	15.19805G	-45.57	3
2452MHz	Pass	2.43194G	6.06	-23.94	47.75M	-46.09	2.39908G	-48.99	2.4835G	-42.56	2.48786G	-41.35	16.67886G	-45.78	1
2452MHz	Pass	2.43194G	6.06	-23.94	47.75M	-47.98	2.3998G	-49.43	2.4835G	-45.34	2.48818G	-43.71	24.80368G	-45.95	2
2452MHz	Pass	2.43194G	6.06	-23.94	47.75M	-48.28	2.3992G	-49.36	2.4835G	-44.40	2.48506G	-41.30	24.48677G	-45.89	3

802.11b_Nss1,(1Mbps)_3TX

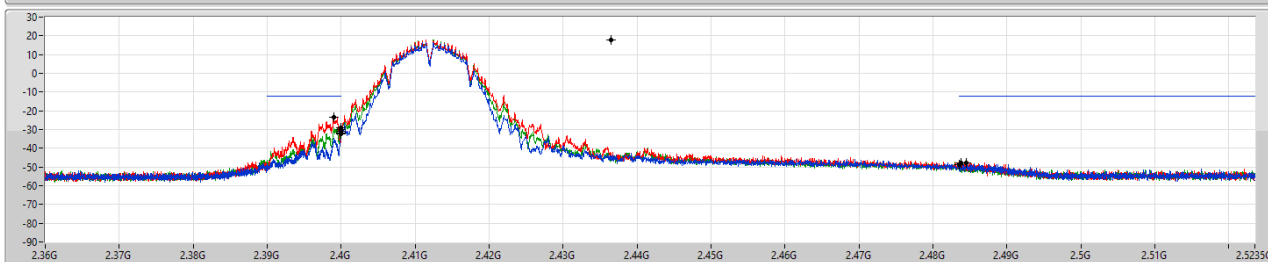
2412MHz

CSENdB

05/07/2021



Port 1
Port 2
Port 3



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

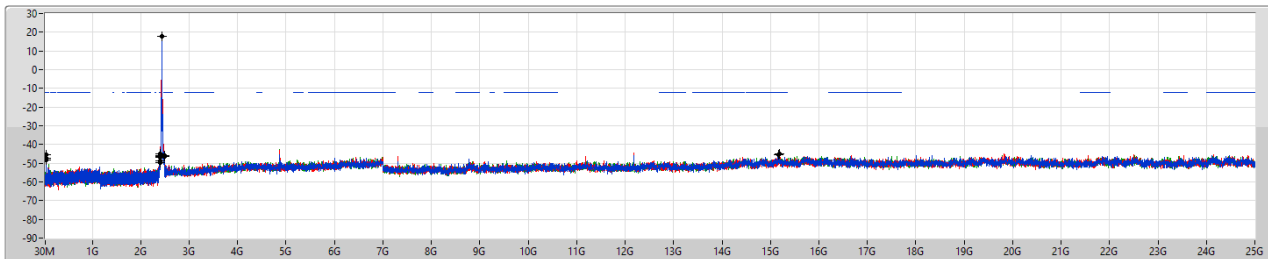
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43645G	17.87	-12.13	47.77M	-46.74	2.39996G	-31.78	2.4G	-31.09	2.4845G	-47.71	24.41842G	-45.70	1
2.43645G	17.87	-12.13	47.77M	-46.36	2.39896G	-23.35	2.4G	-32.15	2.48378G	-47.59	24.46899G	-43.62	2
2.43645G	17.87	-12.13	47.77M	-47.95	2.39996G	-29.17	2.4G	-29.90	2.4835G	-48.84	7.23514G	-45.95	3

802.11b_Nss1,(1Mbps)_3TX

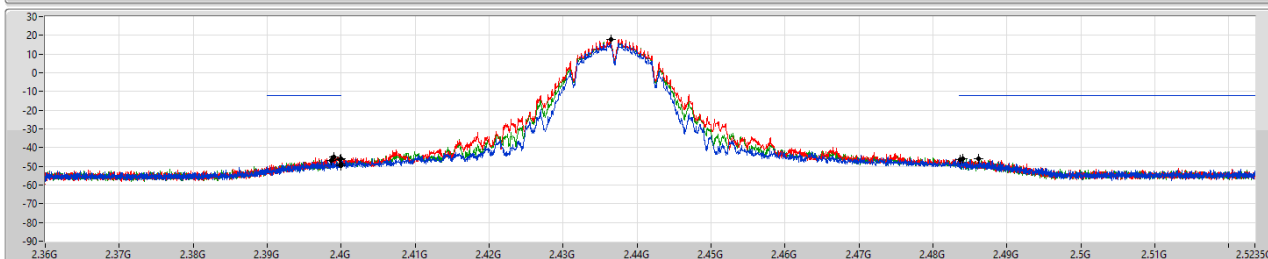
2437MHz

CSENdB

05/07/2021



Port 1
Port 2
Port 3



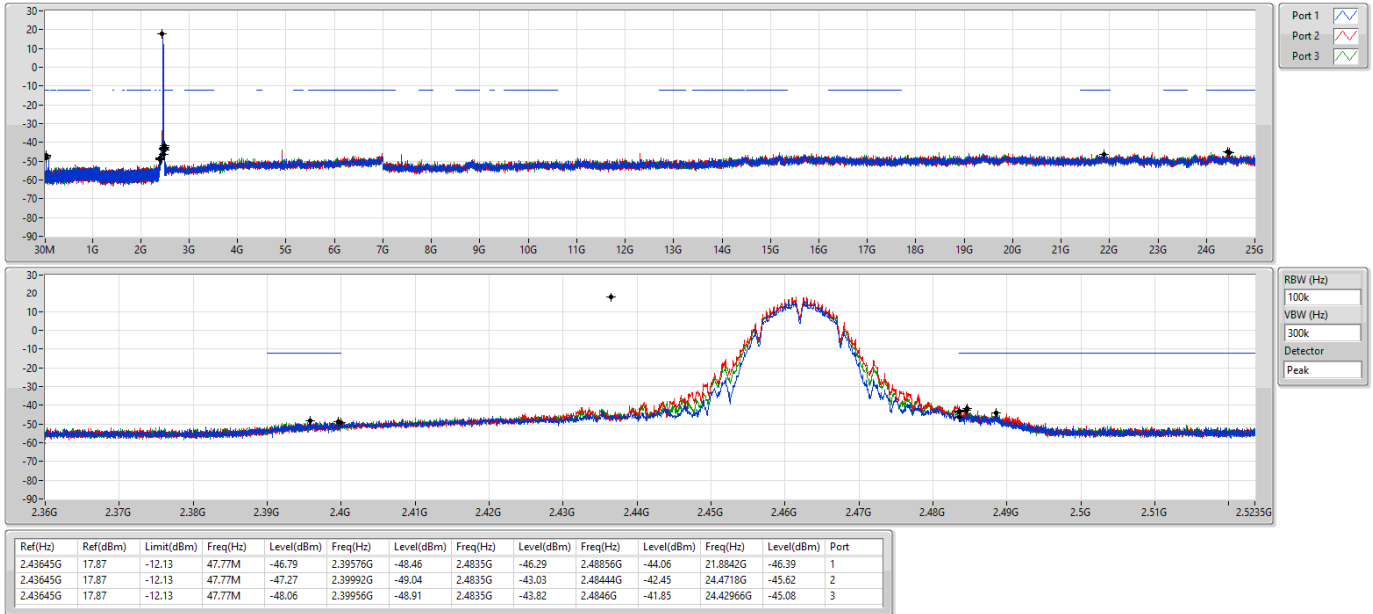
RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.43645G	17.87	-12.13	47.77M	-45.52	2.39862G	-46.79	2.4G	-49.59	2.48398G	-45.96	15.16091G	-45.49	1
2.43645G	17.87	-12.13	47.77M	-46.28	2.39898G	-44.95	2.4G	-46.10	2.4862G	-46.17	15.17215G	-45.47	2
2.43645G	17.87	-12.13	47.77M	-47.46	2.39996G	-46.35	2.4G	-48.52	2.48372G	-46.25	15.19182G	-45.14	3

802.11b_Nss1,(1Mbps)_3TX

CSENdB

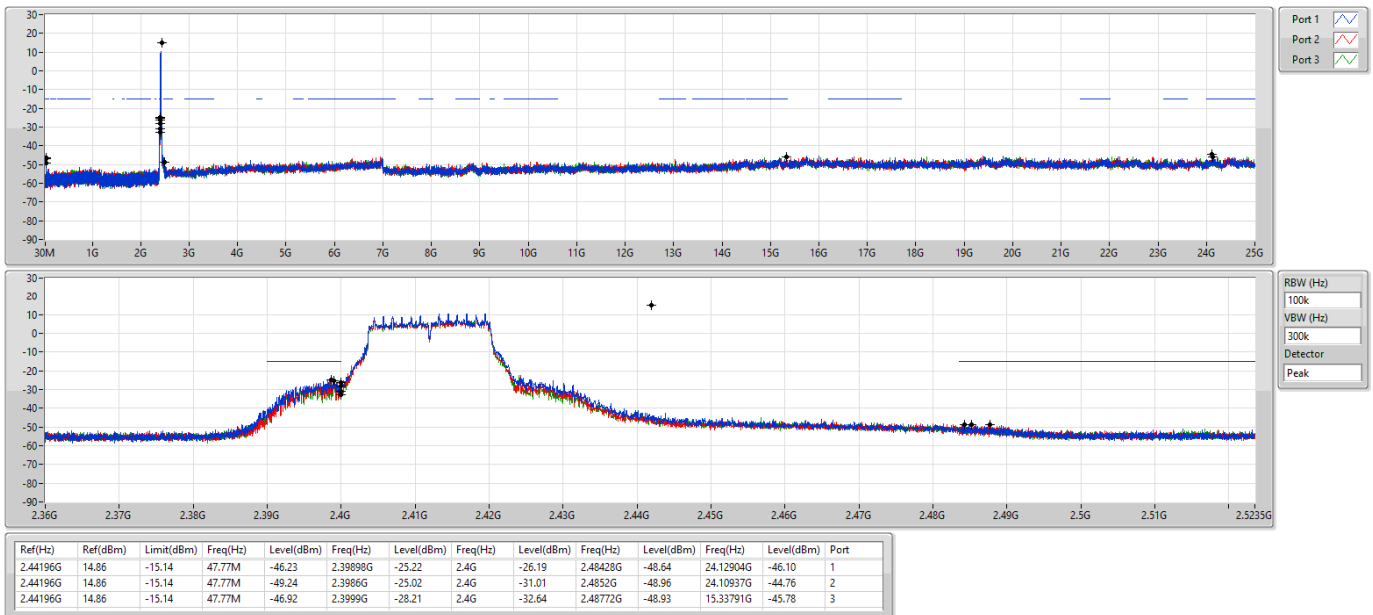
2462MHz



802.11g_Nss1,(6Mbps)_3TX

CSENdB

2412MHz

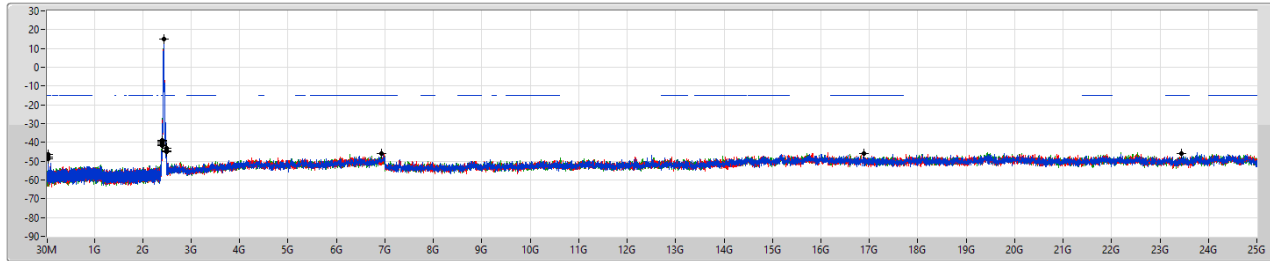


802.11g_Nss1,(6Mbps)_3TX

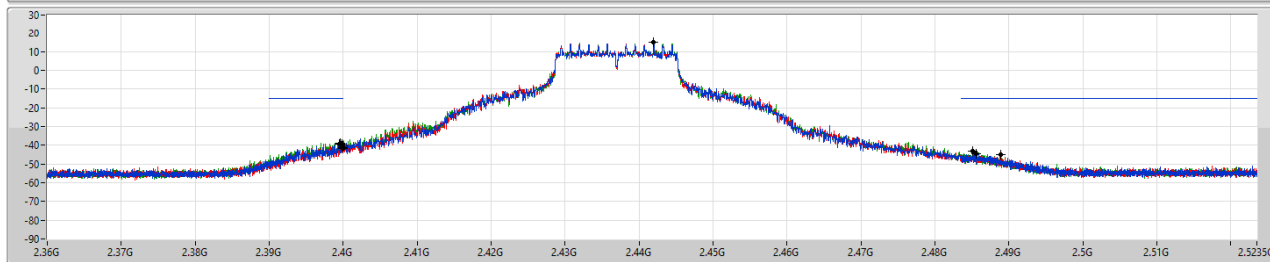
CSENdB

2437MHz

05/07/2021



Port 1
Port 2
Port 3



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

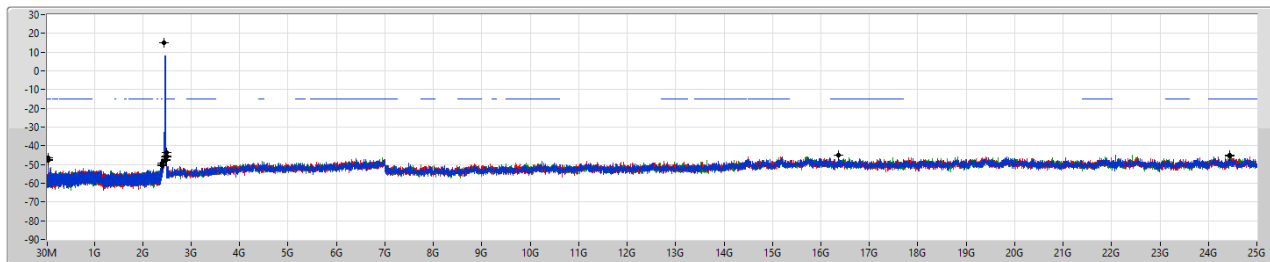
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44196G	14.86	-15.14	47.77M	-46.50	2.39986G	-39.34	2.4G	-41.10	2.48556G	-44.37	23.44069G	-46.02	1
2.44196G	14.86	-15.14	47.77M	-48.62	2.39952G	-39.21	2.4G	-41.53	2.48886G	-44.85	6.92327G	-46.15	2
2.44196G	14.86	-15.14	47.77M	-47.91	2.39962G	-38.72	2.4G	-40.40	2.48514G	-43.03	16.88317G	-46.02	3

802.11g_Nss1,(6Mbps)_3TX

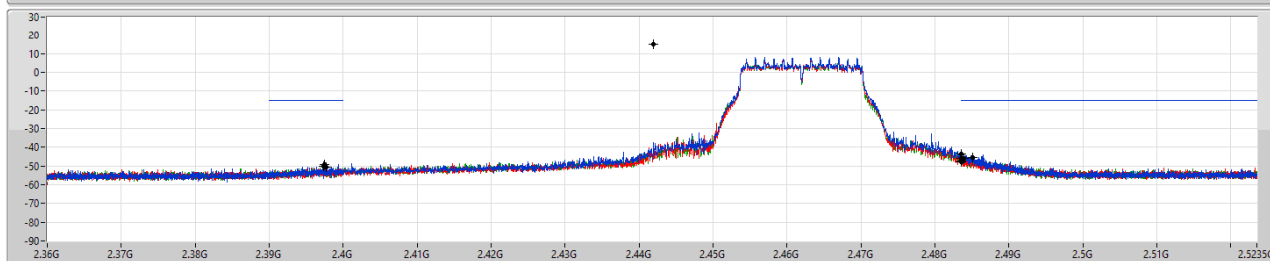
CSENdB

2462MHz

05/07/2021



Port 1
Port 2
Port 3



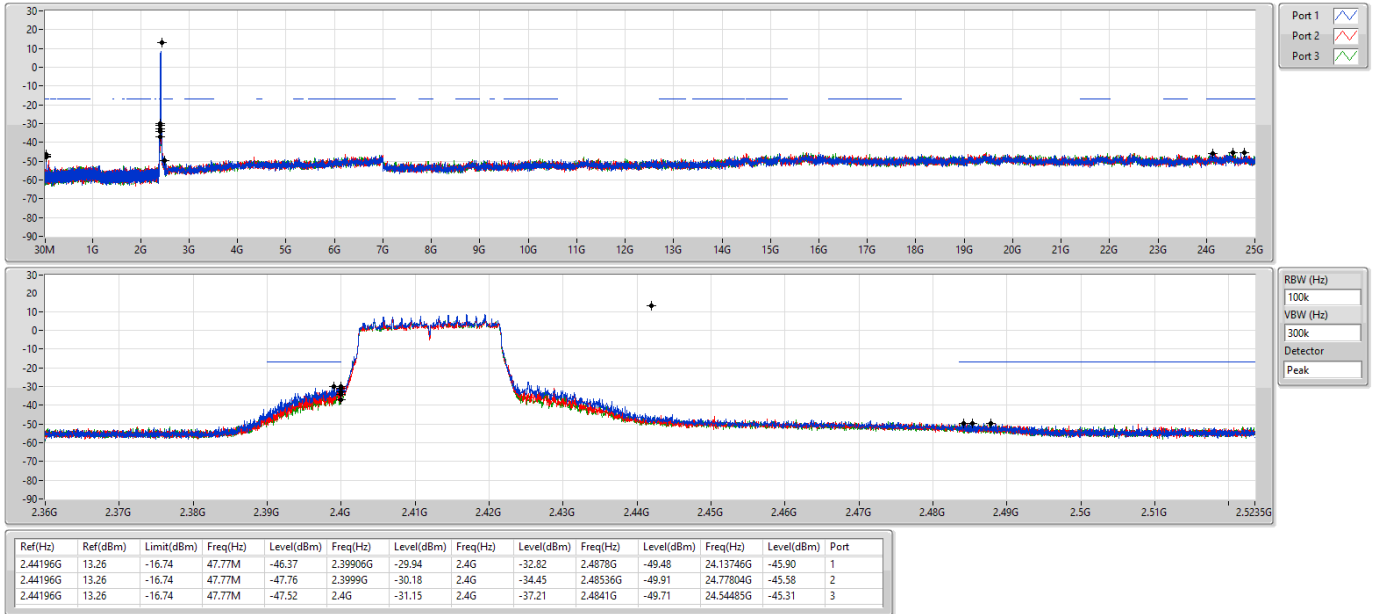
RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.44196G	14.86	-15.14	47.77M	-46.60	2.39746G	-49.11	2.4835G	-45.76	2.48358G	-43.52	24.44652G	-44.88	1
2.44196G	14.86	-15.14	47.77M	-47.73	2.3973G	-50.32	2.4835G	-47.58	2.48386G	-45.78	24.4409G	-45.29	2
2.44196G	14.86	-15.14	47.77M	-47.27	2.39768G	-50.84	2.4835G	-47.29	2.48512G	-45.68	16.36902G	-45.02	3

802.11ax HEW20_Nss1,(MCS0)_3TX

CSENdB

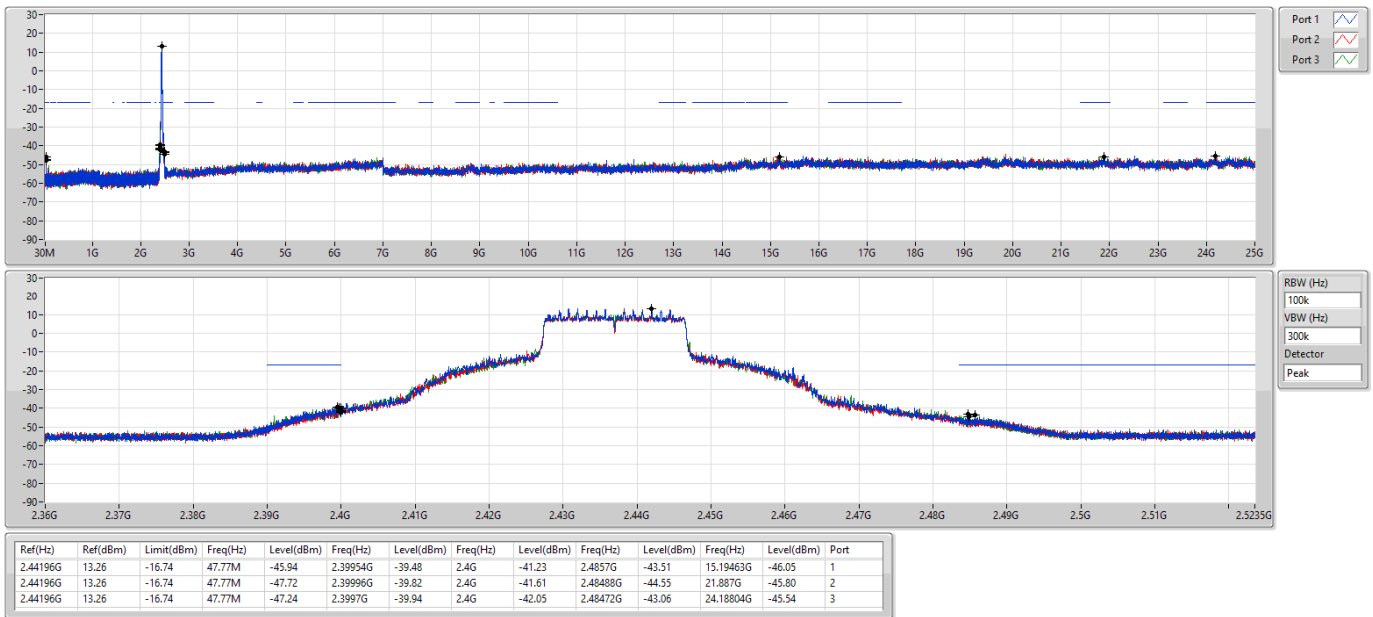
2412MHz



802.11ax HEW20_Nss1,(MCS0)_3TX

CSENdB

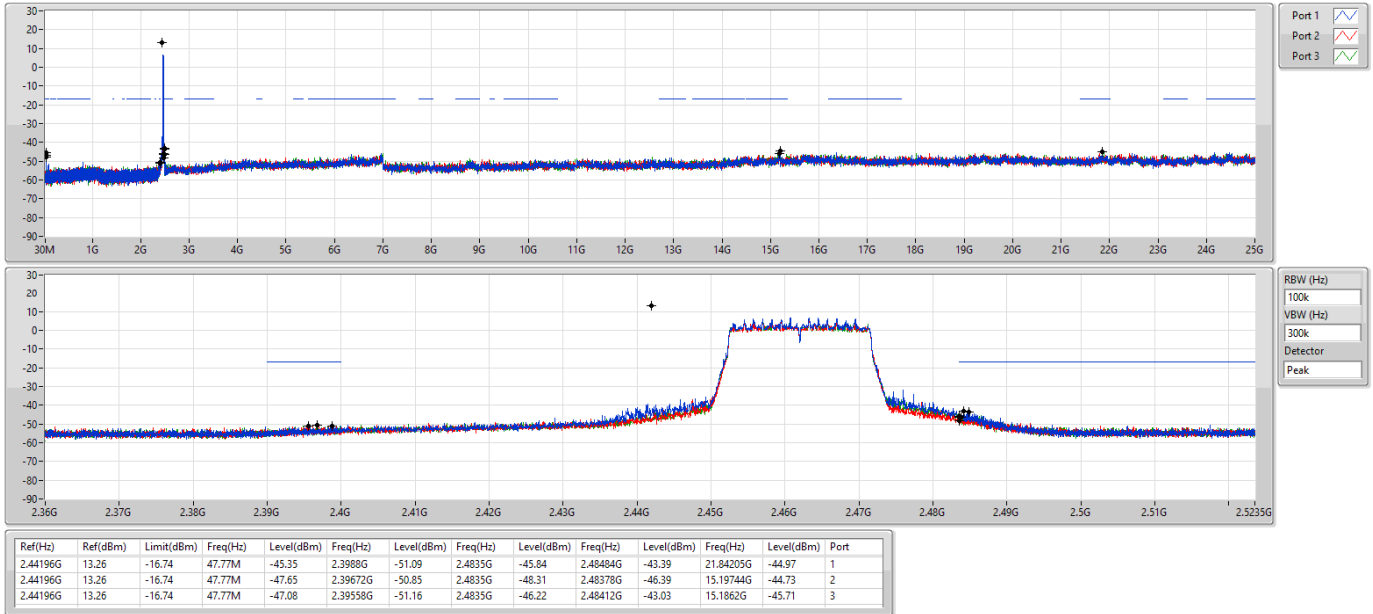
2437MHz



802.11ax HEW20_Nss1,(MCS0)_3TX

CSENdB

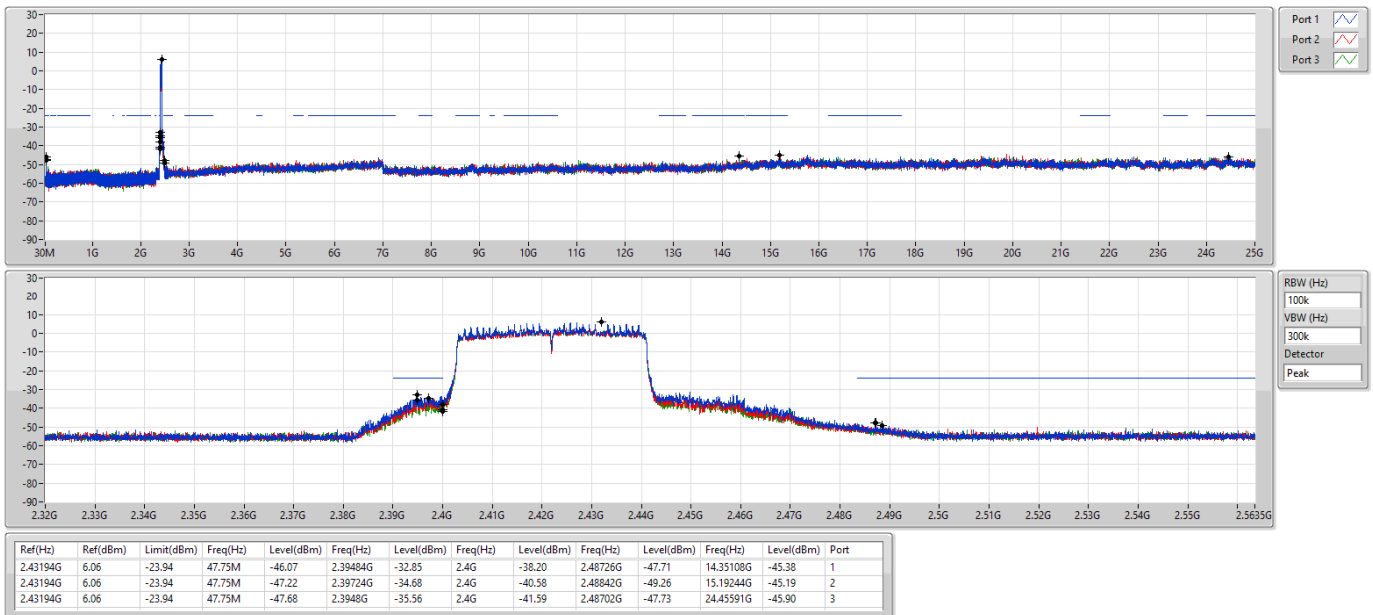
2462MHz



802.11ax HEW40_Nss1,(MCS0)_3TX

CSENdB

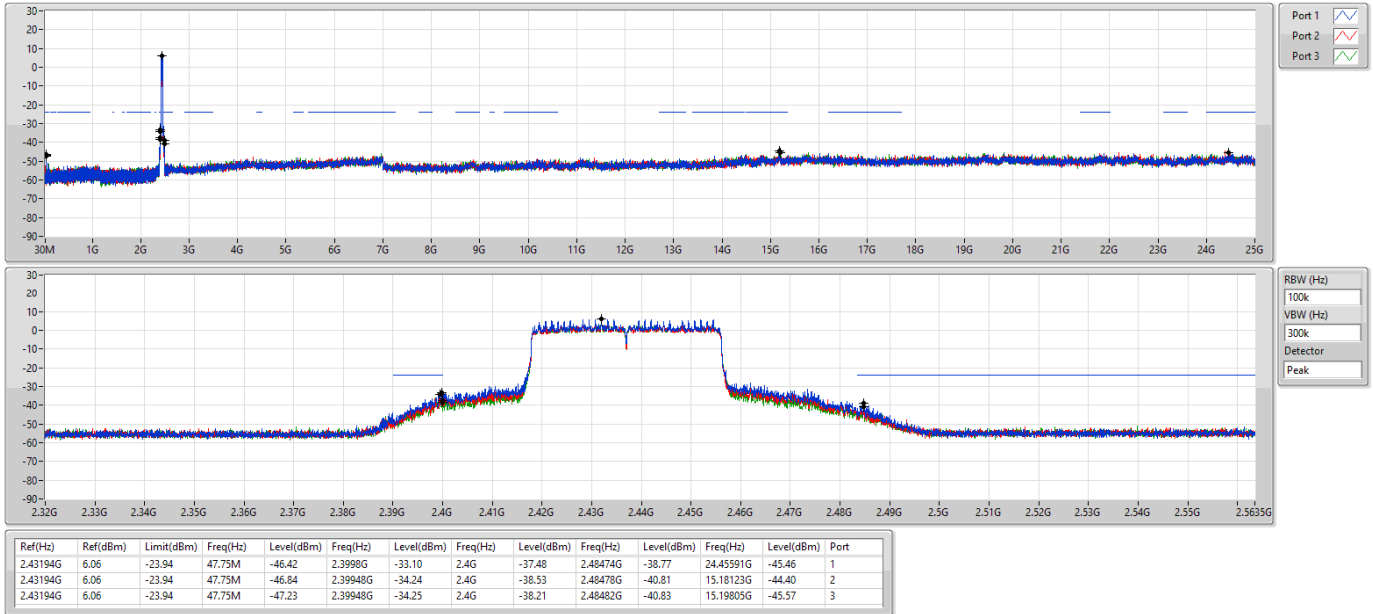
2422MHz



802.11ax HEW40_Nss1,(MCS0)_3TX

CSENdB

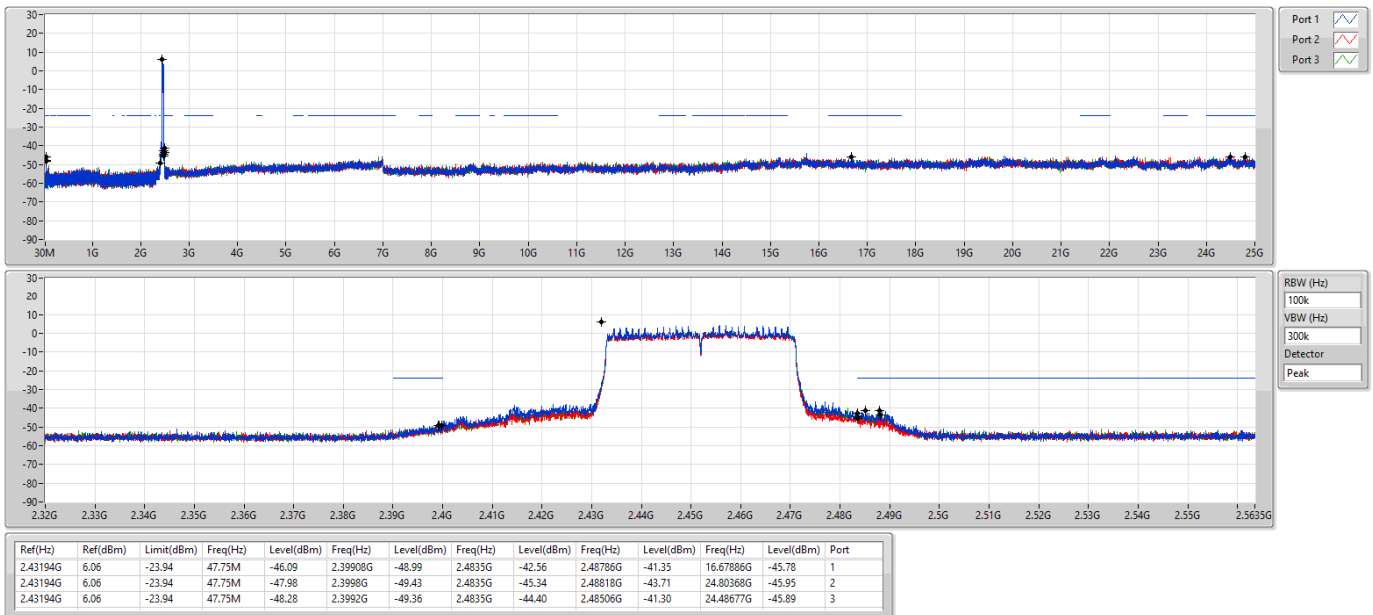
2437MHz

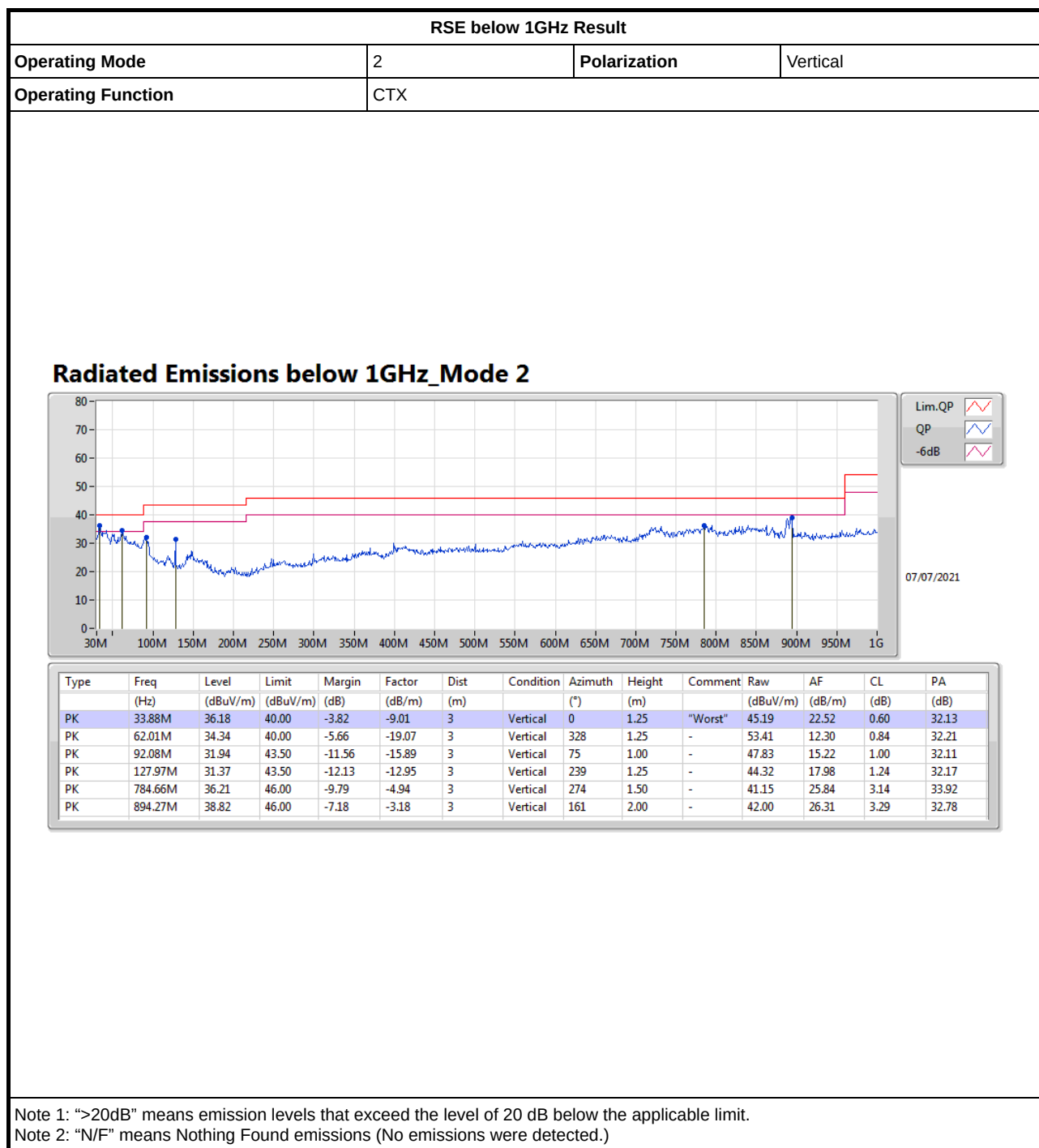


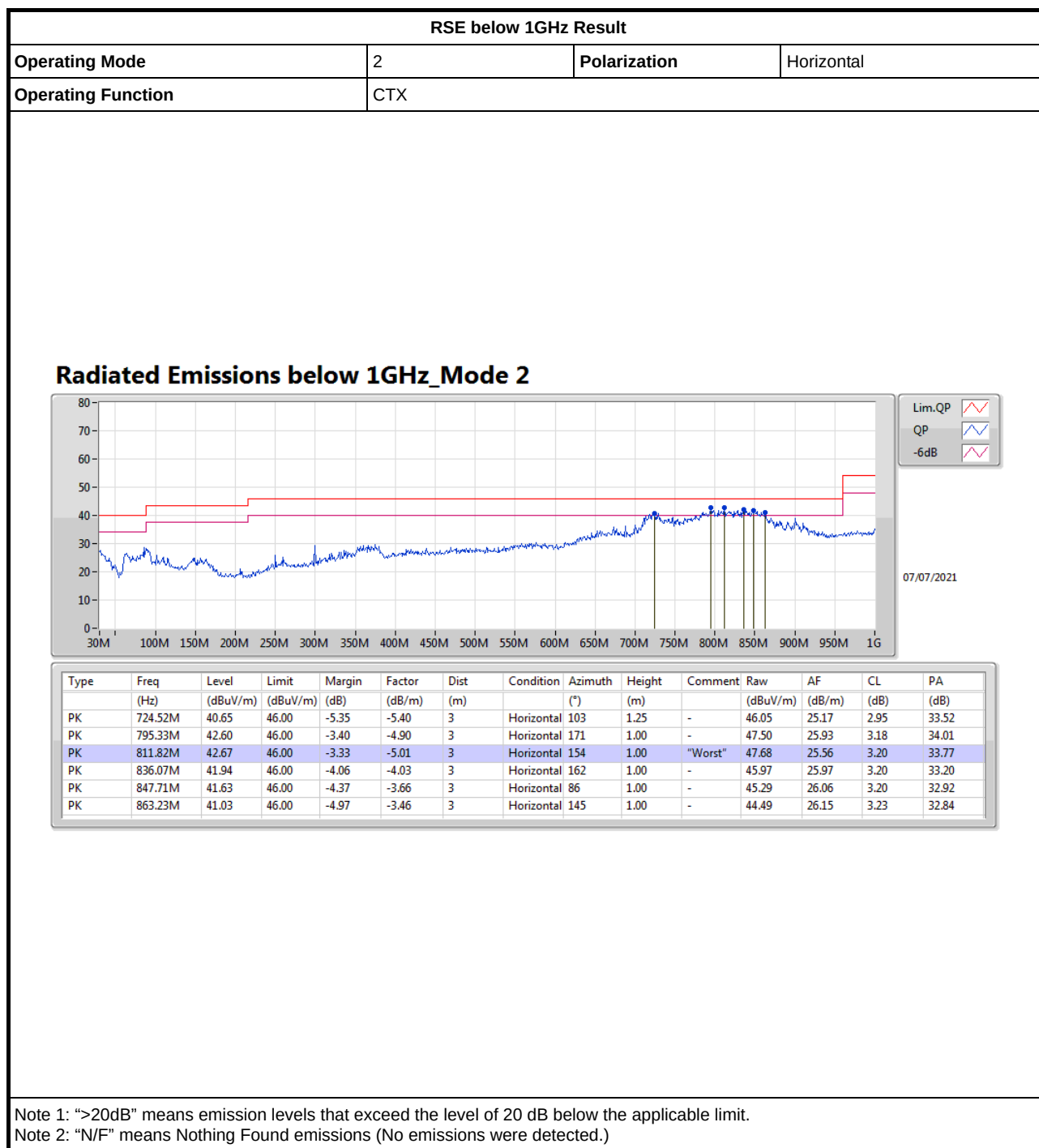
802.11ax HEW40_Nss1,(MCS0)_3TX

CSENdB

2452MHz







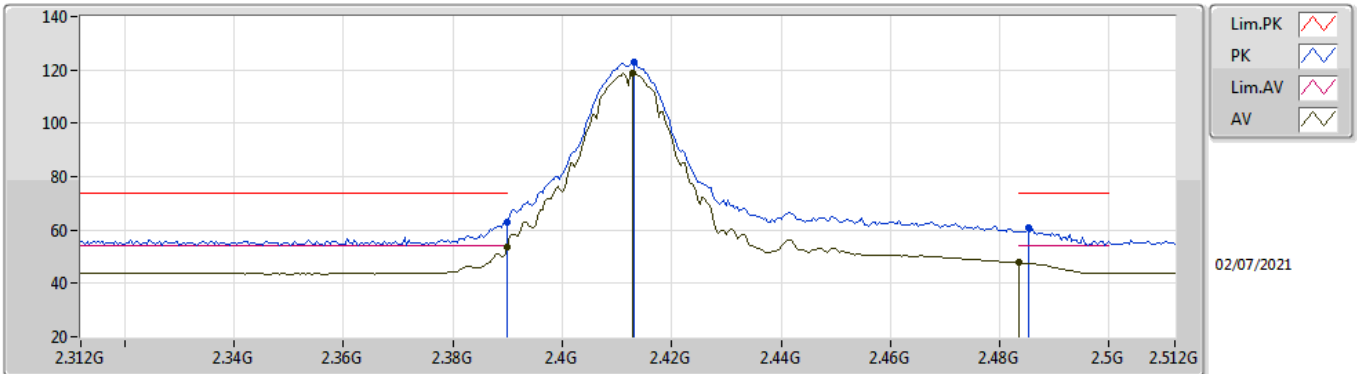


Summary

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	240	2.27	-

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

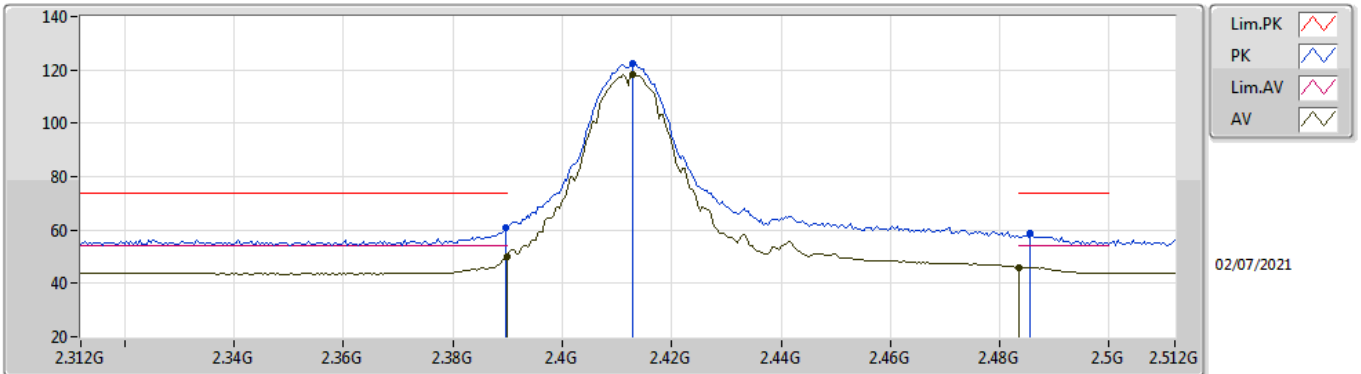


EUT_Y_3TX
Setting 98
04-C-K-4

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	62.82	74.00	-11.18	32.14	3	Vertical	236	1.80	-	27.48	3.20	-
AV	2.39G	53.62	54.00	-0.38	22.94	3	Vertical	236	1.80	-	27.48	3.20	-
PK	2.4132G	122.72	Inf	-Inf	91.98	3	Vertical	236	1.80	-	27.53	3.21	-
AV	2.4128G	118.80	Inf	-Inf	88.06	3	Vertical	236	1.80	-	27.53	3.21	-
PK	2.4852G	61.07	74.00	-12.93	30.04	3	Vertical	236	1.80	-	27.74	3.29	-
AV	2.4835G	47.69	54.00	-6.31	16.68	3	Vertical	236	1.80	-	27.73	3.28	-

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

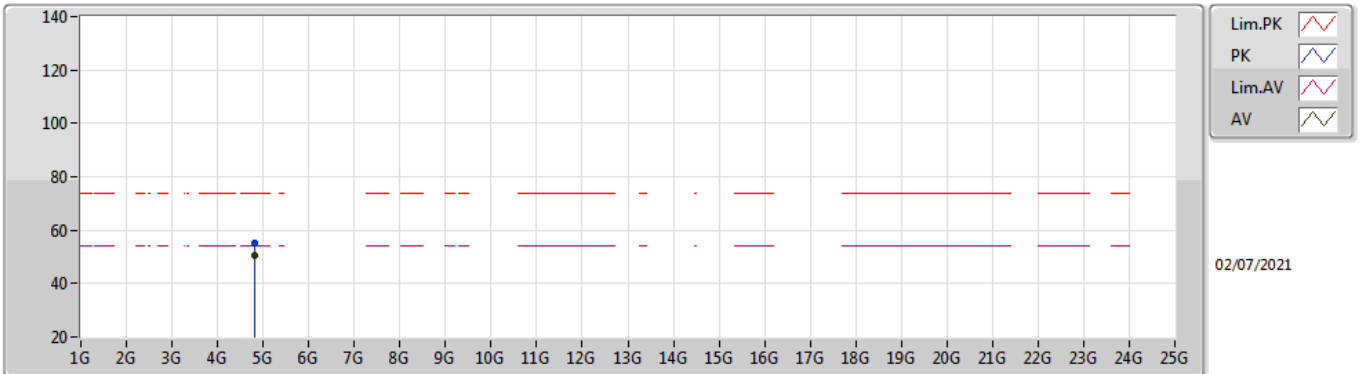


EUT_Y_3TX
Setting 98
04-C-K-4

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	60.91	74.00	-13.09	30.23	3	Horizontal	139	2.56	-	27.48	3.20	-
AV	2.39G	49.78	54.00	-4.22	19.10	3	Horizontal	139	2.56	-	27.48	3.20	-
PK	2.4128G	122.49	Inf	-Inf	91.75	3	Horizontal	139	2.56	-	27.53	3.21	-
AV	2.4128G	118.49	Inf	-Inf	87.75	3	Horizontal	139	2.56	-	27.53	3.21	-
PK	2.4856G	58.72	74.00	-15.28	27.69	3	Horizontal	139	2.56	-	27.74	3.29	-
AV	2.4835G	46.06	54.00	-7.94	15.05	3	Horizontal	139	2.56	-	27.73	3.28	-

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

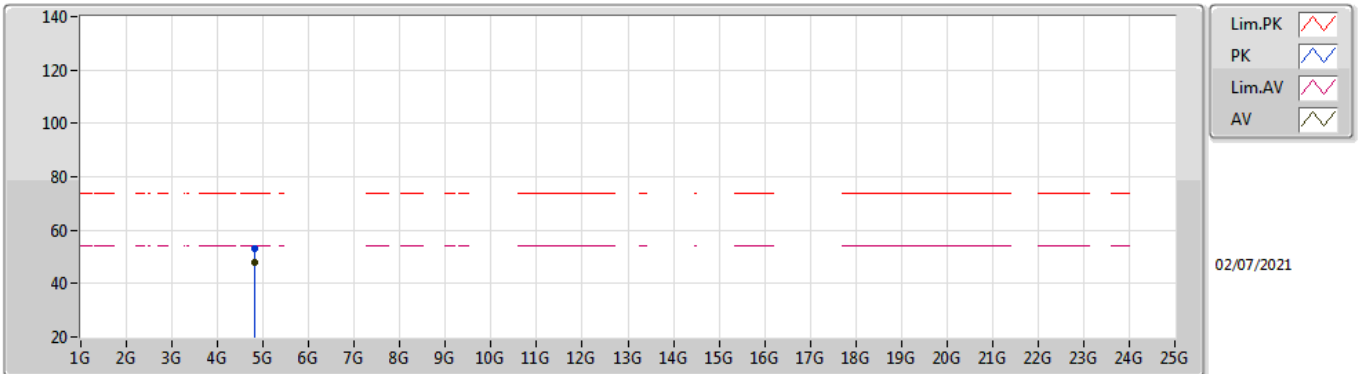


EUT Y_3TX
Setting 98
04-C-K-4

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	4.82392G	55.13	74.00	-18.87	50.06	3	Vertical	160	1.50	-	32.54	5.41	32.88
AV	4.82396G	50.61	54.00	-3.39	45.54	3	Vertical	160	1.50	-	32.54	5.41	32.88

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

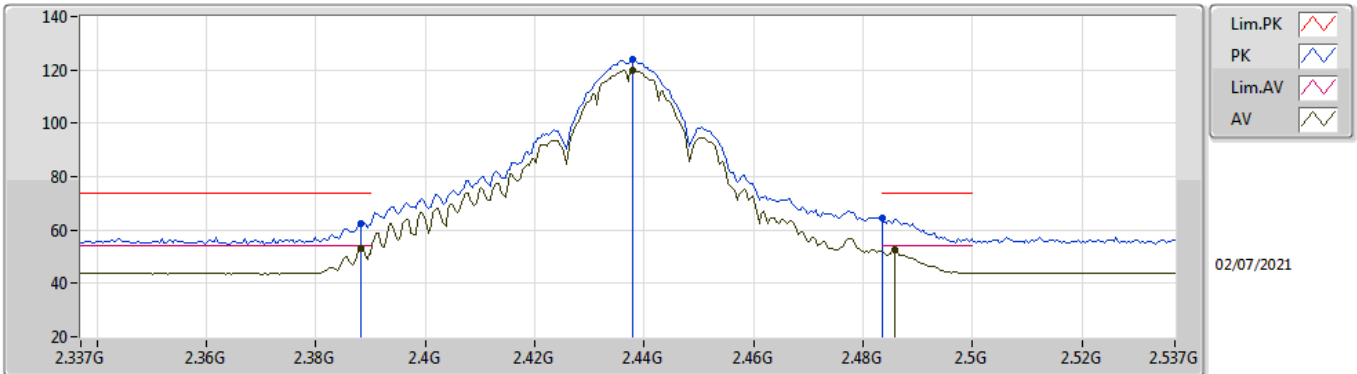


EUT Y_3TX
Setting 98
04-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82402G	53.11	74.00	-20.89	48.04	3	Horizontal	186	1.80	-	32.54	5.41	32.88
AV	4.82394G	48.12	54.00	-5.88	43.05	3	Horizontal	186	1.80	-	32.54	5.41	32.88

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

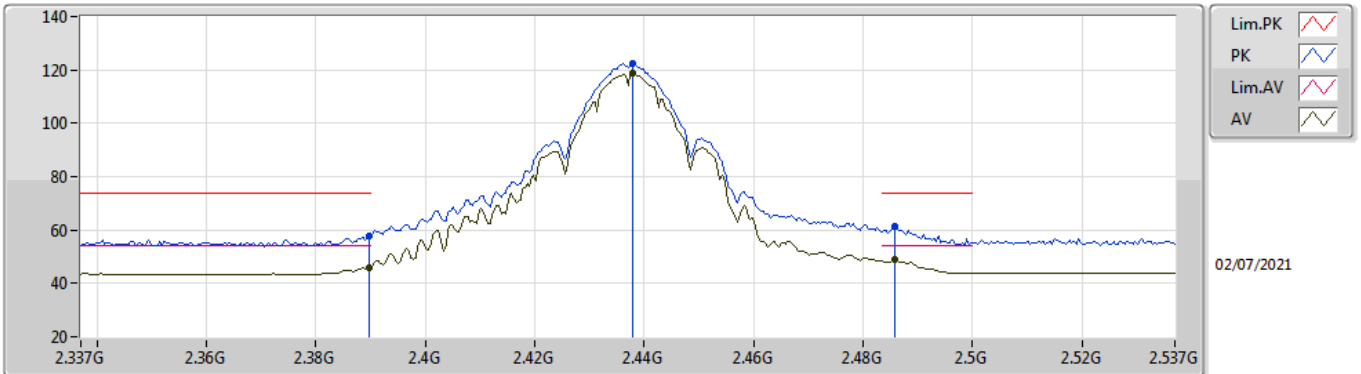


EUT_Y_3TX
Setting 107
04-C-K-4

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	62.52	74.00	-11.48	31.84	3	Vertical	233	1.33	-	27.48	3.20	-
AV	2.3882G	53.30	54.00	-0.70	22.62	3	Vertical	233	1.33	-	27.48	3.20	-
PK	2.4378G	123.84	Inf	-Inf	93.02	3	Vertical	233	1.33	-	27.58	3.24	-
AV	2.4378G	119.94	Inf	-Inf	89.12	3	Vertical	233	1.33	-	27.58	3.24	-
PK	2.4835G	64.32	74.00	-9.68	33.31	3	Vertical	233	1.33	-	27.73	3.28	-
AV	2.4858G	52.33	54.00	-1.67	21.30	3	Vertical	233	1.33	-	27.74	3.29	-

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

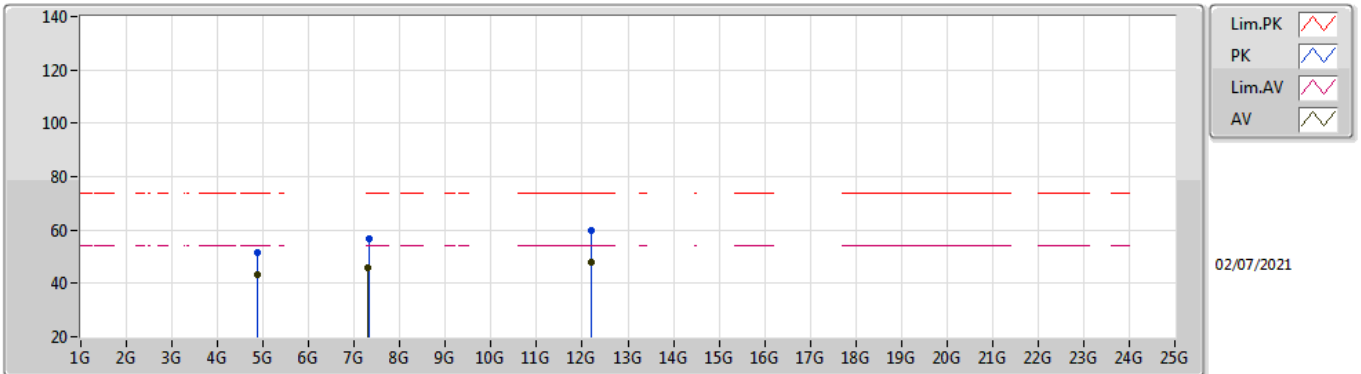


EUT_Y_3TX
Setting 107
04-C-K-4

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	57.52	74.00	-16.48	26.84	3	Horizontal	141	2.28	-	27.48	3.20	-	
AV	2.3898G	45.66	54.00	-8.34	14.98	3	Horizontal	141	2.28	-	27.48	3.20	-	
PK	2.4378G	122.47	Inf	-Inf	91.65	3	Horizontal	141	2.28	-	27.58	3.24	-	
AV	2.4378G	118.55	Inf	-Inf	87.73	3	Horizontal	141	2.28	-	27.58	3.24	-	
PK	2.4858G	61.37	74.00	-12.63	30.34	3	Horizontal	141	2.28	-	27.74	3.29	-	
AV	2.4858G	48.71	54.00	-5.29	17.68	3	Horizontal	141	2.28	-	27.74	3.29	-	

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

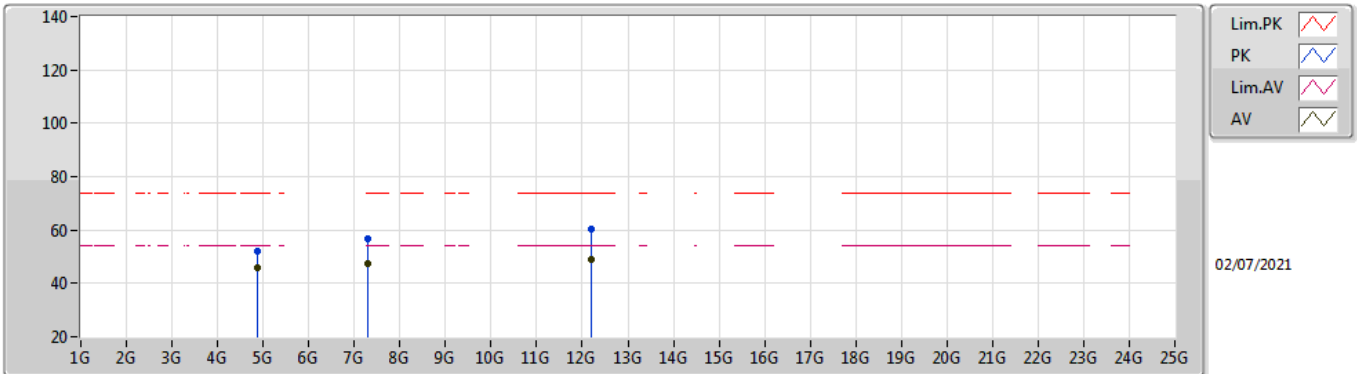


EUT_Y_3TX
Setting 107
04-C-K-4

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	4.874G	51.62	74.00	-22.38	46.30	3	Vertical	179	1.80	-	32.75	5.44	32.87
AV	4.87394G	43.19	54.00	-10.81	37.87	3	Vertical	179	1.80	-	32.75	5.44	32.87
PK	7.3106G	56.47	74.00	-17.53	45.55	3	Vertical	158	3.00	-	37.40	6.86	33.34
AV	7.31016G	45.93	54.00	-8.07	35.01	3	Vertical	158	3.00	-	37.40	6.86	33.34
PK	12.18548G	59.58	74.00	-14.42	45.64	3	Vertical	136	2.76	-	38.54	9.69	34.29
AV	12.1857G	47.74	54.00	-6.26	33.80	3	Vertical	136	2.76	-	38.54	9.69	34.29

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

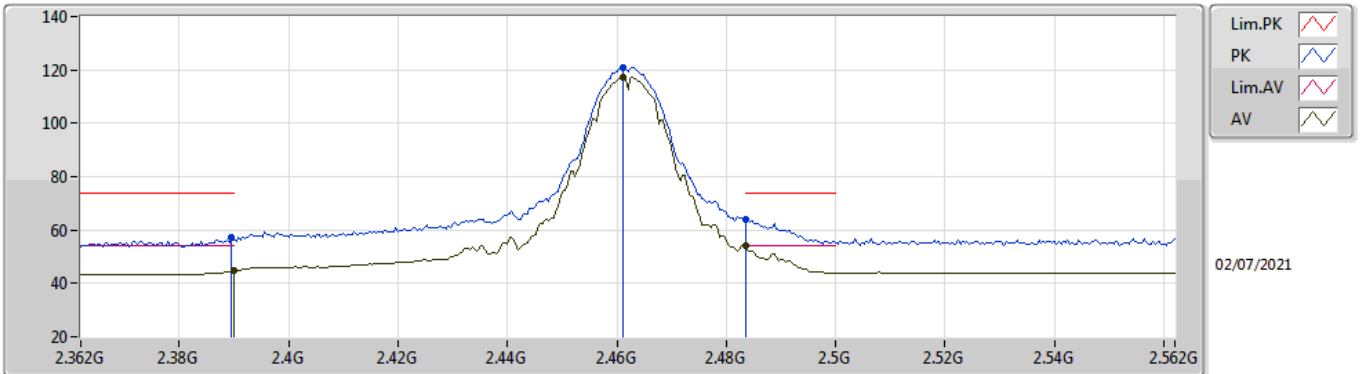


EUT_Y_3TX
Setting 107
04-C-K-4

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	4.8739G	51.93	74.00	-22.07	46.61	3	Horizontal	70	1.70	-	32.75	5.44	32.87
AV	4.87396G	45.90	54.00	-8.10	40.58	3	Horizontal	70	1.70	-	32.75	5.44	32.87
PK	7.31002G	56.83	74.00	-17.17	45.91	3	Horizontal	82	3.00	-	37.40	6.86	33.34
AV	7.31016G	47.23	54.00	-6.77	36.31	3	Horizontal	82	3.00	-	37.40	6.86	33.34
PK	12.1834G	60.10	74.00	-13.90	46.15	3	Horizontal	30	1.80	-	38.55	9.69	34.29
AV	12.18558G	48.78	54.00	-5.22	34.84	3	Horizontal	30	1.80	-	38.54	9.69	34.29

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

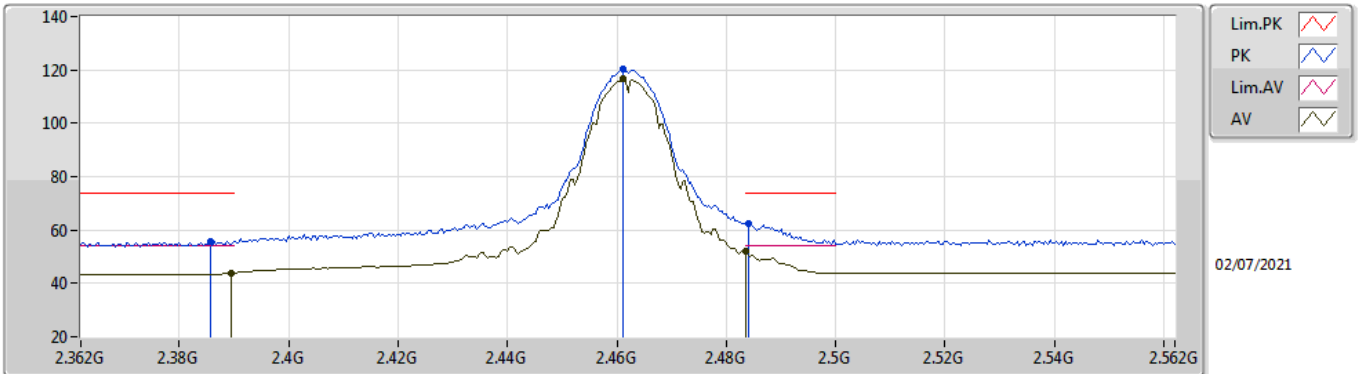


EUT_Y_3TX
Setting 96
04-C-K-4

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	57.18	74.00	-16.82	26.50	3	Vertical	356	2.15	-	27.48	3.20	-
AV	2.39G	44.61	54.00	-9.39	13.93	3	Vertical	356	2.15	-	27.48	3.20	-
PK	2.4612G	120.98	Inf	-Inf	90.08	3	Vertical	356	2.15	-	27.64	3.26	-
AV	2.4612G	117.33	Inf	-Inf	86.43	3	Vertical	356	2.15	-	27.64	3.26	-
PK	2.4835G	64.17	74.00	-9.83	33.16	3	Vertical	356	2.15	-	27.73	3.28	-
AV	2.4835G	53.97	54.00	-0.03	22.96	3	Vertical	356	2.15	-	27.73	3.28	-

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

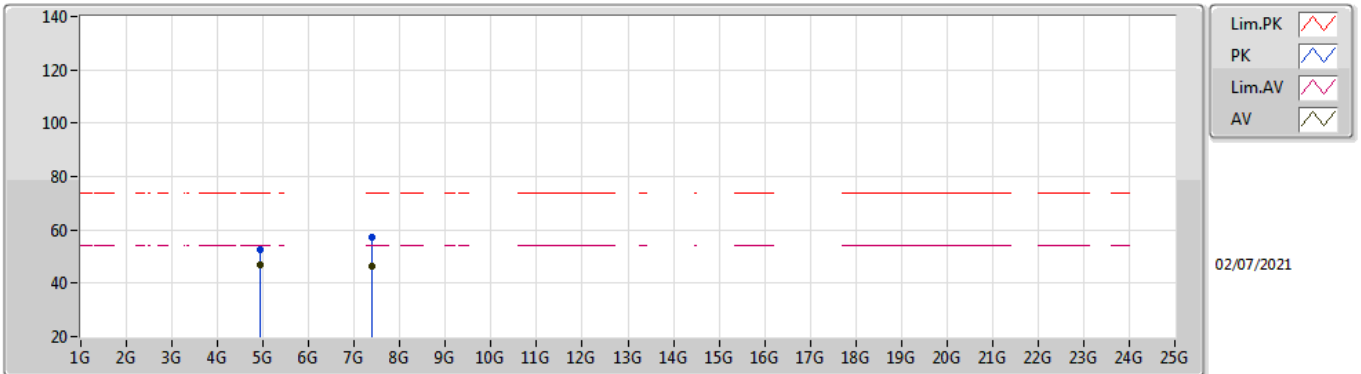


EUT_Y_3TX
Setting 96
04-C-K-4

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	2.3856G	55.90	74.00	-18.10	25.23	3	Horizontal	15	1.87	-	27.47	3.20	-	
AV	2.3896G	43.91	54.00	-10.09	13.23	3	Horizontal	15	1.87	-	27.48	3.20	-	
PK	2.4612G	120.10	Inf	-Inf	89.20	3	Horizontal	15	1.87	-	27.64	3.26	-	
AV	2.4612G	116.49	Inf	-Inf	85.59	3	Horizontal	15	1.87	-	27.64	3.26	-	
PK	2.484G	62.48	74.00	-11.52	31.46	3	Horizontal	15	1.87	-	27.74	3.28	-	
AV	2.4835G	51.82	54.00	-2.18	20.81	3	Horizontal	15	1.87	-	27.73	3.28	-	

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

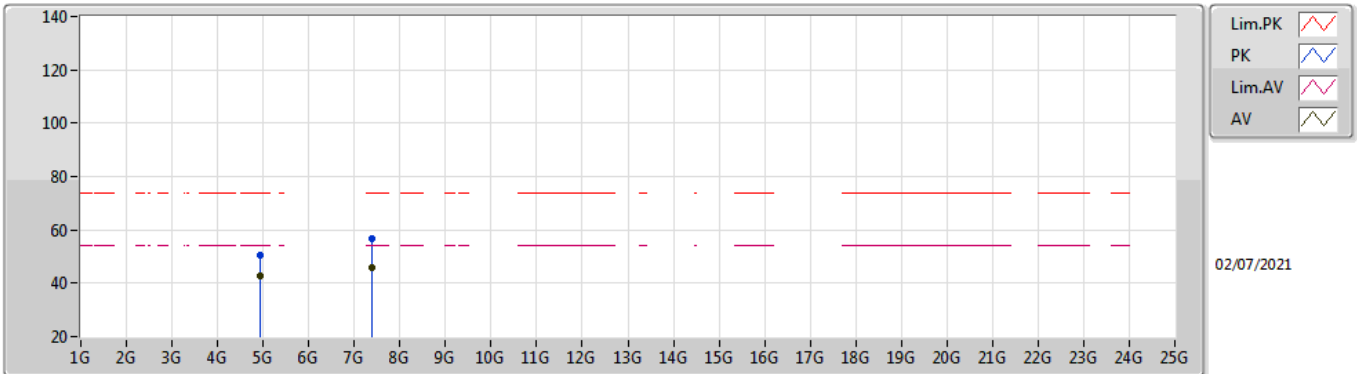


EUT Y_3TX
Setting 96
04-C-K-4

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	4.92396G	52.63	74.00	-21.37	47.13	3	Vertical	176	1.36	-	32.90	5.46	32.86
AV	4.92396G	46.75	54.00	-7.25	41.25	3	Vertical	176	1.36	-	32.90	5.46	32.86
PK	7.38644G	57.24	74.00	-16.76	46.34	3	Vertical	167	1.80	-	37.40	6.89	33.39
AV	7.38472G	46.17	54.00	-7.83	35.27	3	Vertical	167	1.80	-	37.40	6.89	33.39

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

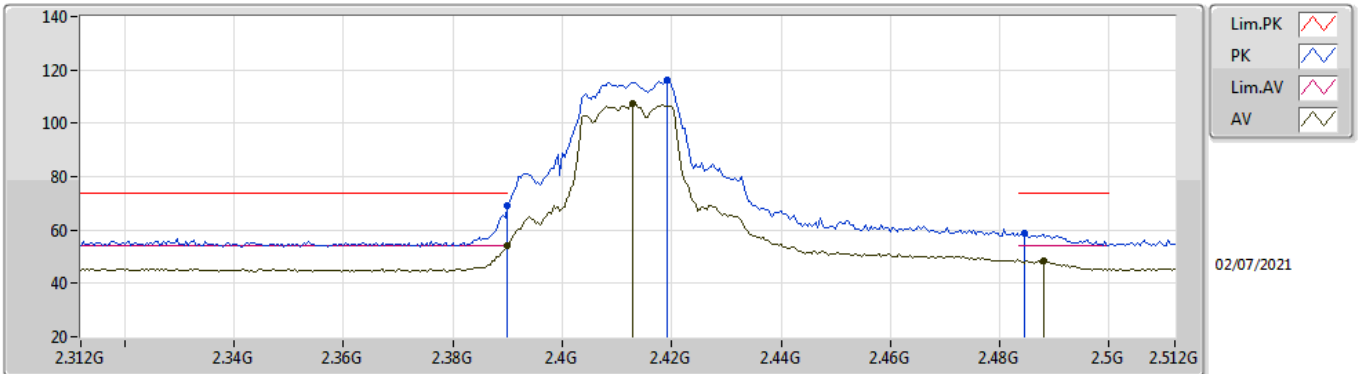


EUT Y_3TX
Setting 96
04-C-K-4

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	4.92404G	50.50	74.00	-23.50	45.00	3	Horizontal	105	2.42	-	32.90	5.46	32.86
AV	4.92392G	42.76	54.00	-11.24	37.26	3	Horizontal	105	2.42	-	32.90	5.46	32.86
PK	7.38484G	56.65	74.00	-17.35	45.75	3	Horizontal	168	2.08	-	37.40	6.89	33.39
AV	7.38468G	46.10	54.00	-7.90	35.20	3	Horizontal	168	2.08	-	37.40	6.89	33.39

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

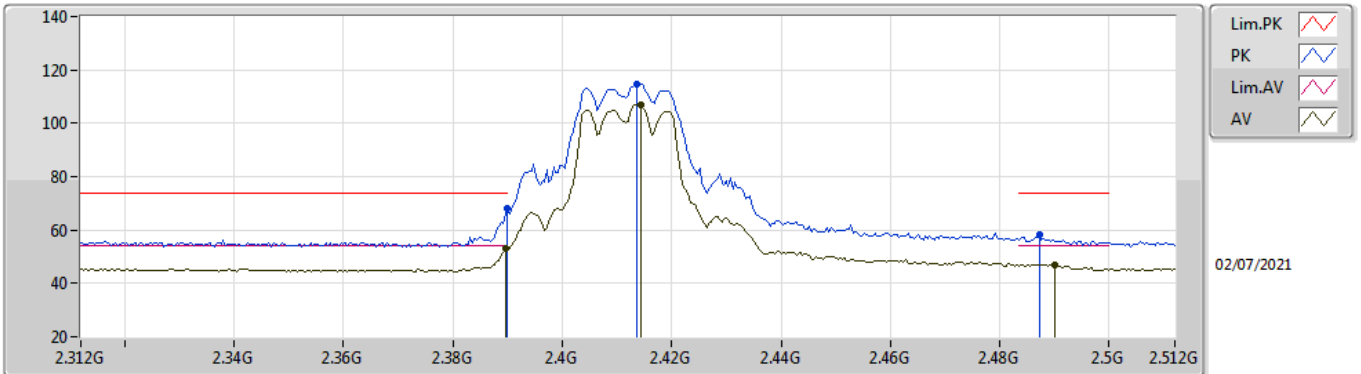


EUT_Y_3TX
Setting 86
04-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	69.07	74.00	-4.93	38.39	3	Vertical	239	2.36	-	27.48	3.20	-
AV	2.39G	53.96	54.00	-0.04	23.28	3	Vertical	239	2.36	-	27.48	3.20	-
PK	2.4192G	115.97	Inf	-Inf	85.21	3	Vertical	239	2.36	-	27.54	3.22	-
AV	2.4128G	107.46	Inf	-Inf	76.72	3	Vertical	239	2.36	-	27.53	3.21	-
PK	2.4844G	58.80	74.00	-15.20	27.78	3	Vertical	239	2.36	-	27.74	3.28	-
AV	2.488G	48.61	54.00	-5.39	17.57	3	Vertical	239	2.36	-	27.75	3.29	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

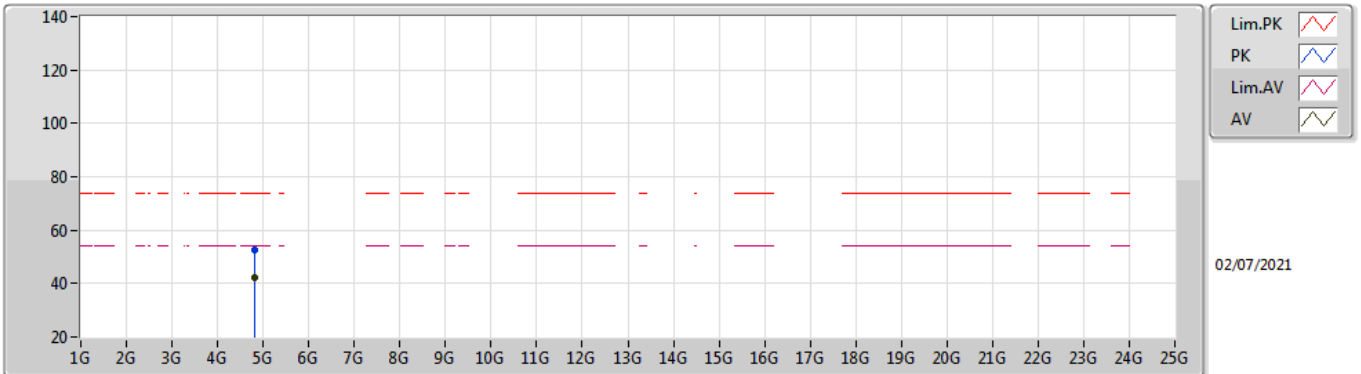


EUT_Y_3TX
Setting 86
04-C-K-4

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	68.31	74.00	-5.69	37.63	3	Horizontal	357	1.80	-	27.48	3.20	-
AV	2.3896G	52.91	54.00	-1.09	22.23	3	Horizontal	357	1.80	-	27.48	3.20	-
PK	2.4136G	114.58	Inf	-Inf	83.84	3	Horizontal	357	1.80	-	27.53	3.21	-
AV	2.4144G	107.01	Inf	-Inf	76.27	3	Horizontal	357	1.80	-	27.53	3.21	-
PK	2.4872G	58.51	74.00	-15.49	27.47	3	Horizontal	357	1.80	-	27.75	3.29	-
AV	2.49G	47.15	54.00	-6.85	16.10	3	Horizontal	357	1.80	-	27.76	3.29	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

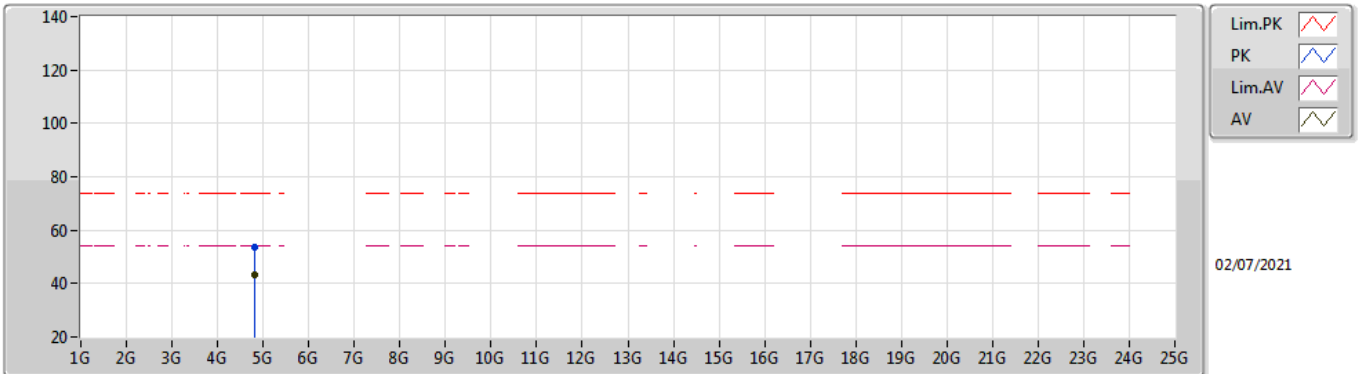


EUT Y_3TX
Setting 86
04-C-K-4

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	4.82724G	52.35	74.00	-21.65	47.26	3	Vertical	153	2.88	-	32.56	5.41	32.88
AV	4.827G	42.21	54.00	-11.79	37.12	3	Vertical	153	2.88	-	32.56	5.41	32.88

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

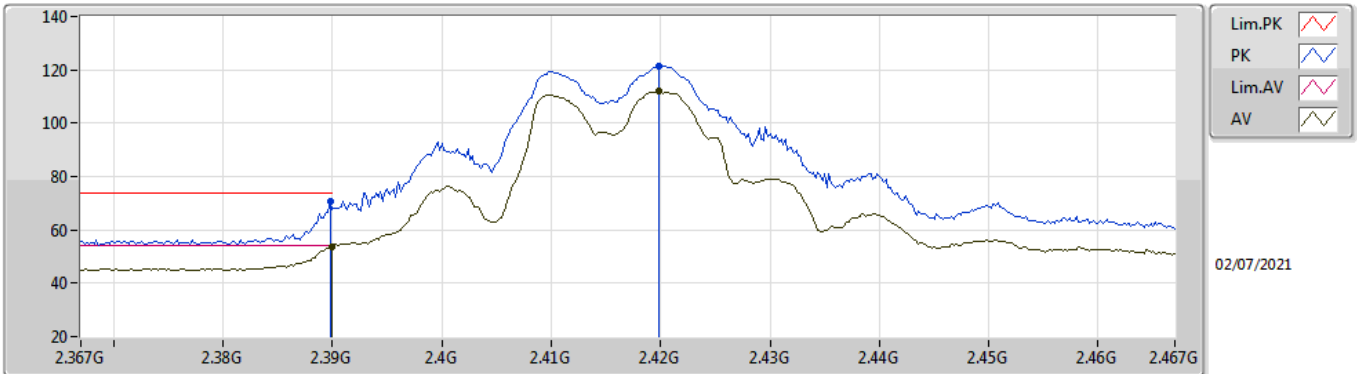


EUT Y_3TX
Setting 86
04-C-K-4

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	4.82712G	53.47	74.00	-20.53	48.38	3	Horizontal	112	2.18	-	32.56	5.41	32.88	
AV	4.82688G	43.36	54.00	-10.64	38.27	3	Horizontal	112	2.18	-	32.56	5.41	32.88	

802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

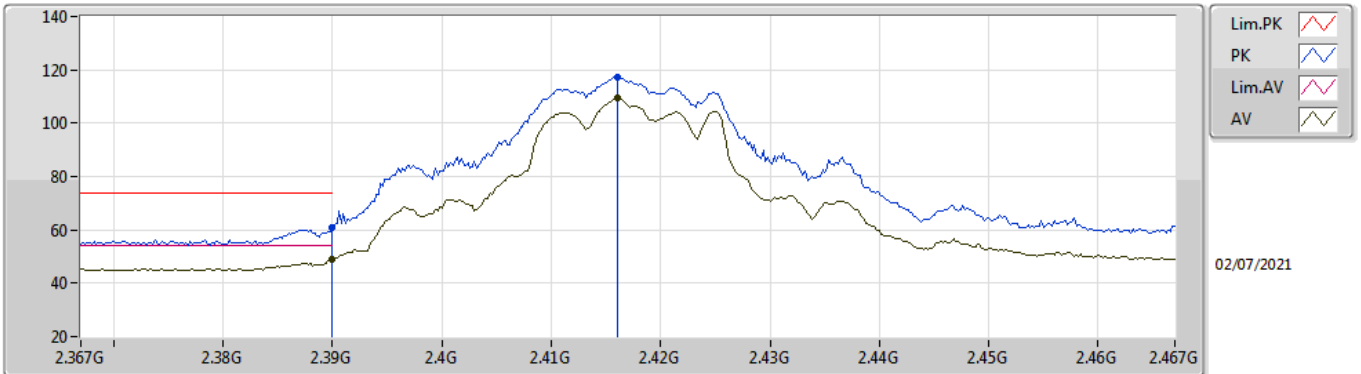


EUT Y_3TX
Setting 91
04-C-B-3

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	70.81	74.00	-3.19	40.13	3	Vertical	239	2.63	-	27.48	3.20	-	
AV	2.39G	53.72	54.00	-0.28	23.04	3	Vertical	239	2.63	-	27.48	3.20	-	
PK	2.4198G	121.56	Inf	-Inf	90.80	3	Vertical	239	2.63	-	27.54	3.22	-	
AV	2.4198G	111.95	Inf	-Inf	81.19	3	Vertical	239	2.63	-	27.54	3.22	-	

802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

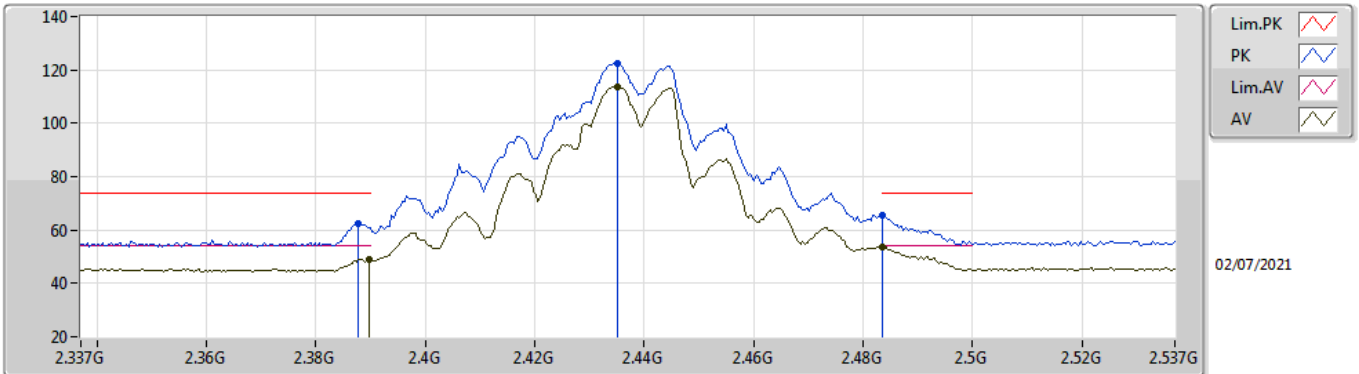


EUT Y_3TX
Setting 91
04-C-B-3

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	60.89	74.00	-13.11	30.21	3	Horizontal	6	1.93	-	27.48	3.20	-
AV	2.39G	49.16	54.00	-4.84	18.48	3	Horizontal	6	1.93	-	27.48	3.20	-
PK	2.416G	117.10	Inf	-Inf	86.35	3	Horizontal	6	1.93	-	27.53	3.22	-
AV	2.416G	109.30	Inf	-Inf	78.55	3	Horizontal	6	1.93	-	27.53	3.22	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

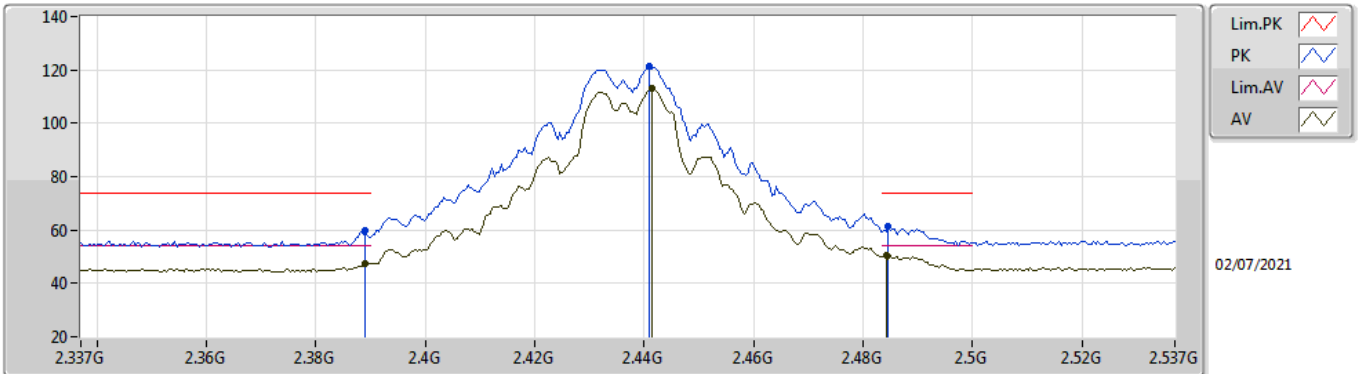


EUT_Y_3TX
Setting 102
04-C-K-4

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	62.34	74.00	-11.66	31.66	3	Vertical	245	2.38	-	27.48	3.20	-
AV	2.3898G	48.95	54.00	-5.05	18.27	3	Vertical	245	2.38	-	27.48	3.20	-
PK	2.435G	122.37	Inf	-Inf	91.56	3	Vertical	245	2.38	-	27.57	3.24	-
AV	2.435G	113.64	Inf	-Inf	82.83	3	Vertical	245	2.38	-	27.57	3.24	-
PK	2.4835G	65.77	74.00	-8.23	34.76	3	Vertical	245	2.38	-	27.73	3.28	-
AV	2.4835G	53.54	54.00	-0.46	22.53	3	Vertical	245	2.38	-	27.73	3.28	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

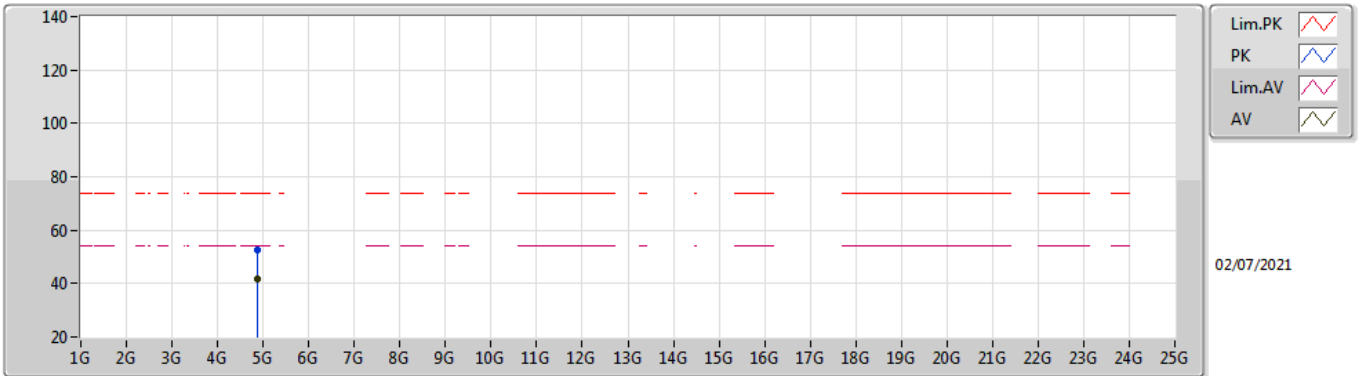


EUT_Y_3TX
Setting 102
04-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	59.71	74.00	-14.29	29.03	3	Horizontal	8	2.31	-	27.48	3.20	-
AV	2.389G	47.64	54.00	-6.36	16.96	3	Horizontal	8	2.31	-	27.48	3.20	-
PK	2.441G	121.26	Inf	-Inf	90.44	3	Horizontal	8	2.31	-	27.58	3.24	-
AV	2.4414G	112.87	Inf	-Inf	82.05	3	Horizontal	8	2.31	-	27.58	3.24	-
PK	2.4846G	61.23	74.00	-12.77	30.21	3	Horizontal	8	2.31	-	27.74	3.28	-
AV	2.4842G	50.46	54.00	-3.54	19.44	3	Horizontal	8	2.31	-	27.74	3.28	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

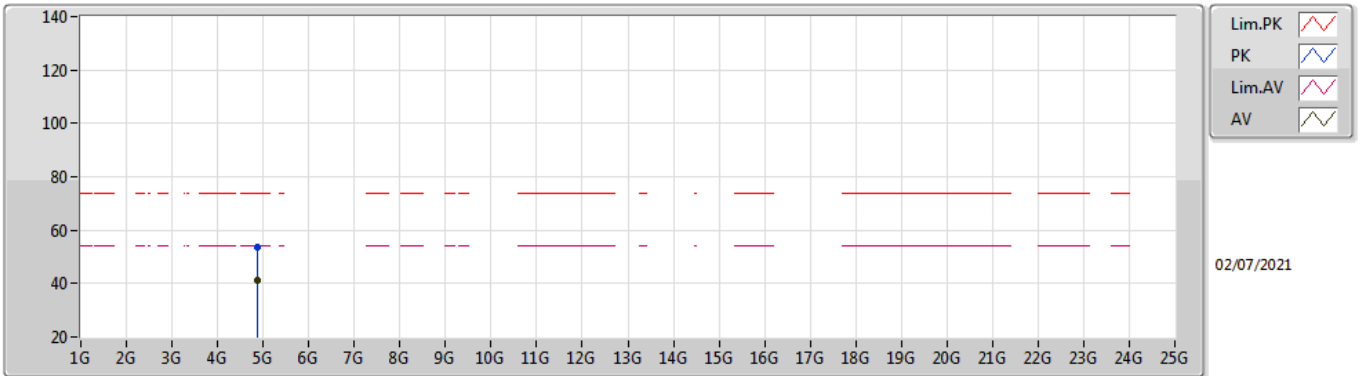


EUT Y_3TX
Setting 102
04-C-K-4

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	4.86716G	52.51	74.00	-21.49	47.22	3	Vertical	164	1.80	-	32.73	5.43	32.87	
AV	4.86752G	41.55	54.00	-12.45	36.25	3	Vertical	164	1.80	-	32.74	5.43	32.87	

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

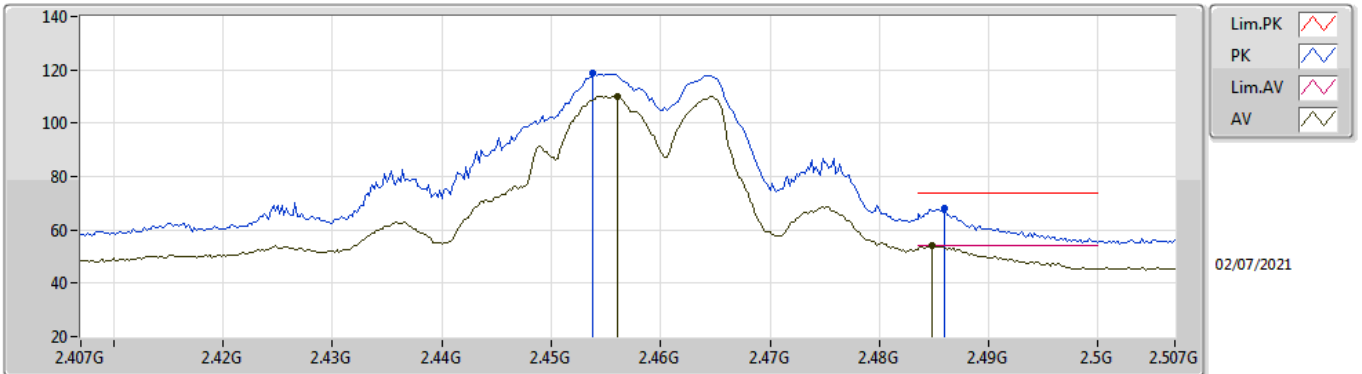


EUT Y_3TX
Setting 102
04-C-K-4

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	4.86716G	53.74	74.00	-20.26	48.45	3	Horizontal	67	1.71	-	32.73	5.43	32.87	
AV	4.86752G	41.40	54.00	-12.60	36.10	3	Horizontal	67	1.71	-	32.74	5.43	32.87	

802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

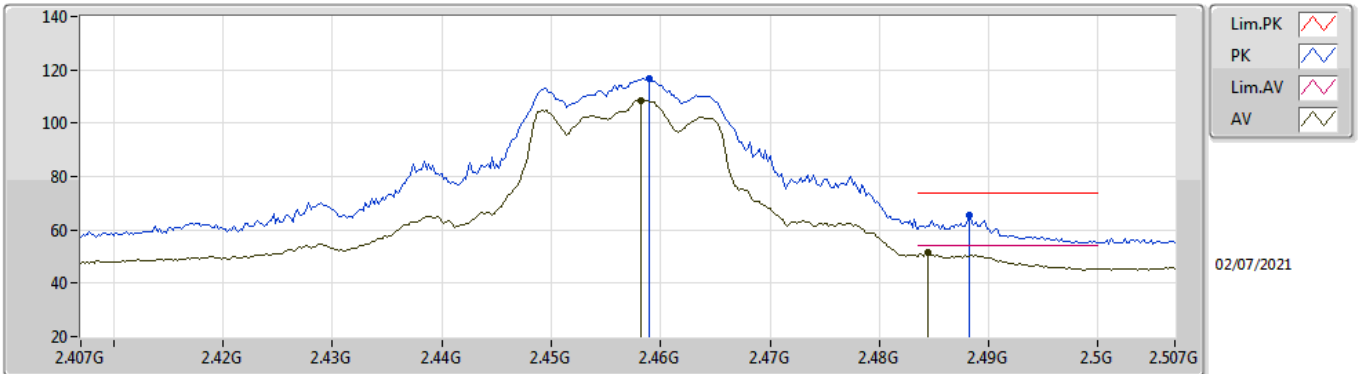


EUT Y_3TX
Setting 85
04-C-B-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.4538G	118.57	Inf	-Inf	87.70	3	Vertical	239	2.56	-	27.62	3.25	-	
AV	2.456G	110.21	Inf	-Inf	79.33	3	Vertical	239	2.56	-	27.62	3.26	-	
PK	2.486G	68.16	74.00	-5.84	37.13	3	Vertical	239	2.56	-	27.74	3.29	-	
AV	2.4848G	53.89	54.00	-0.11	22.87	3	Vertical	239	2.56	-	27.74	3.28	-	

802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

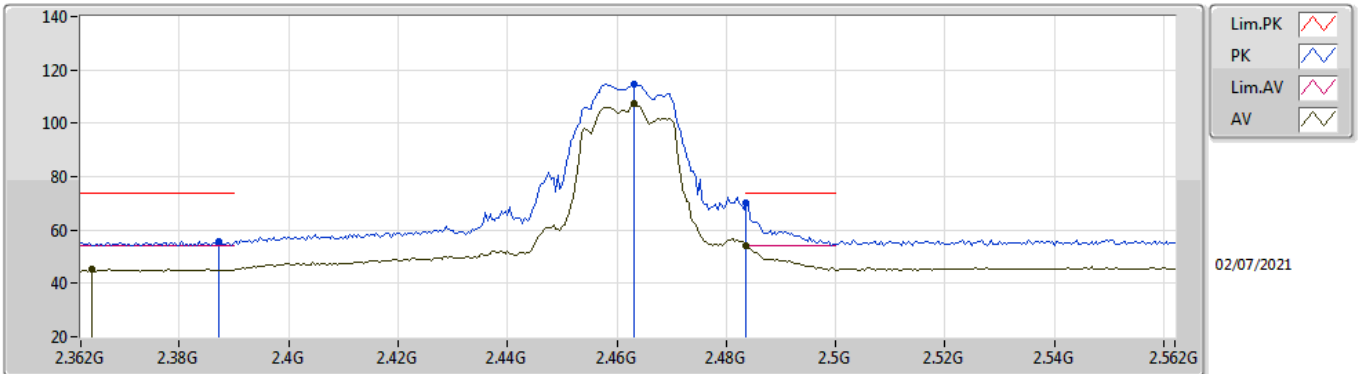


EUT Y_3TX
Setting 85
04-C-B-3

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	2.459G	116.66	Inf	-Inf	85.76	3	Horizontal	310	2.51	-	27.64	3.26	-
AV	2.4582G	108.52	Inf	-Inf	77.63	3	Horizontal	310	2.51	-	27.63	3.26	-
PK	2.4882G	65.42	74.00	-8.58	34.38	3	Horizontal	310	2.51	-	27.75	3.29	-
AV	2.4844G	51.40	54.00	-2.60	20.38	3	Horizontal	310	2.51	-	27.74	3.28	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

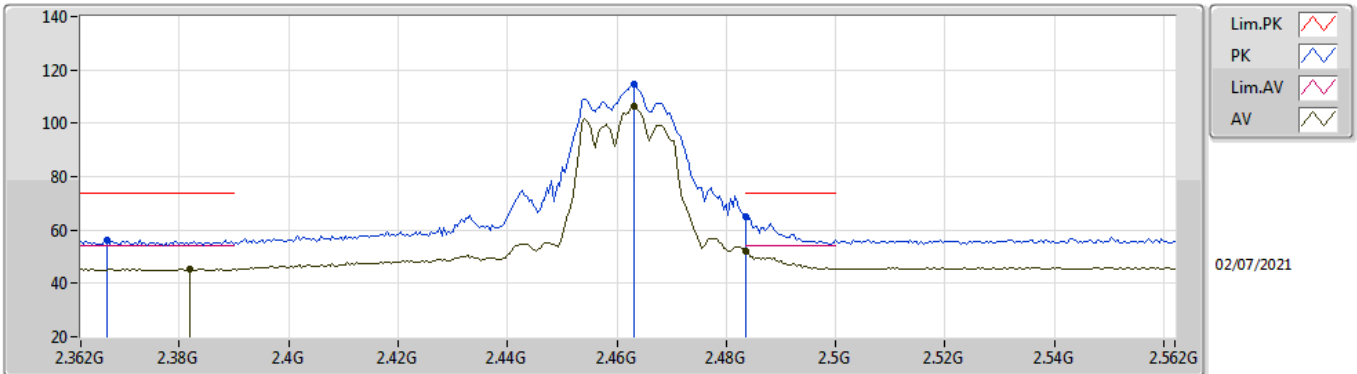


EUT_Y_3TX
Setting 78
04-C-K-4

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	55.72	74.00	-18.28	25.05	3	Vertical	240	2.27	-	27.47	3.20	-
AV	2.384G	45.27	54.00	-8.73	14.64	3	Vertical	240	2.27	-	27.43	3.20	-
PK	2.4632G	114.89	Inf	-Inf	83.98	3	Vertical	240	2.27	-	27.65	3.26	-
AV	2.4632G	107.18	Inf	-Inf	76.27	3	Vertical	240	2.27	-	27.65	3.26	-
PK	2.4835G	70.14	74.00	-3.86	39.13	3	Vertical	240	2.27	-	27.73	3.28	-
AV	2.4835G	53.99	54.00	-0.01	22.98	3	Vertical	240	2.27	-	27.73	3.28	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

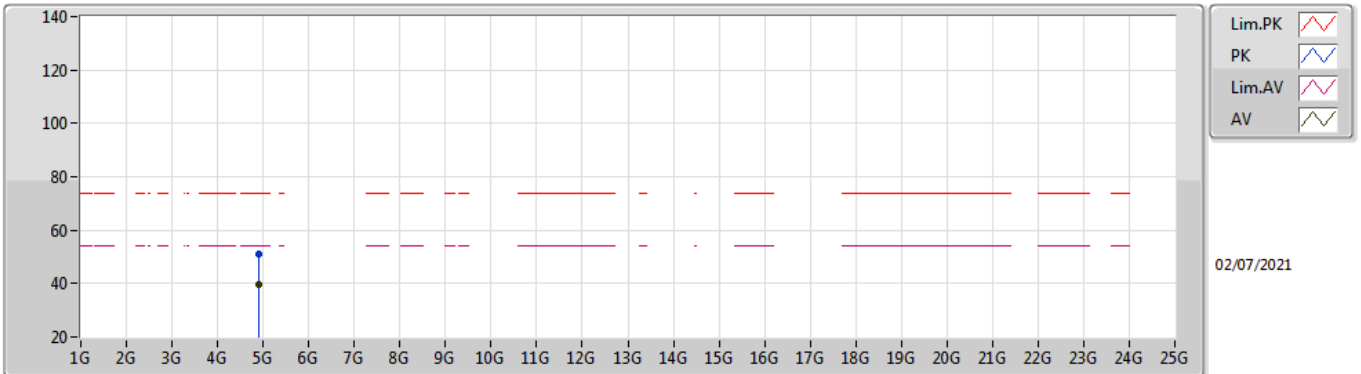


EUT_Y_3TX
Setting 78
04-C-K-4

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	2.3668G	56.45	74.00	-17.55	25.82	3	Horizontal	130	2.09	-	27.43	3.20	-
AV	2.382G	45.48	54.00	-8.52	14.82	3	Horizontal	130	2.09	-	27.46	3.20	-
PK	2.4632G	114.60	Inf	-Inf	83.69	3	Horizontal	130	2.09	-	27.65	3.26	-
AV	2.4632G	106.46	Inf	-Inf	75.55	3	Horizontal	130	2.09	-	27.65	3.26	-
PK	2.4835G	64.96	74.00	-9.04	33.95	3	Horizontal	130	2.09	-	27.73	3.28	-
AV	2.4835G	52.14	54.00	-1.86	21.13	3	Horizontal	130	2.09	-	27.73	3.28	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

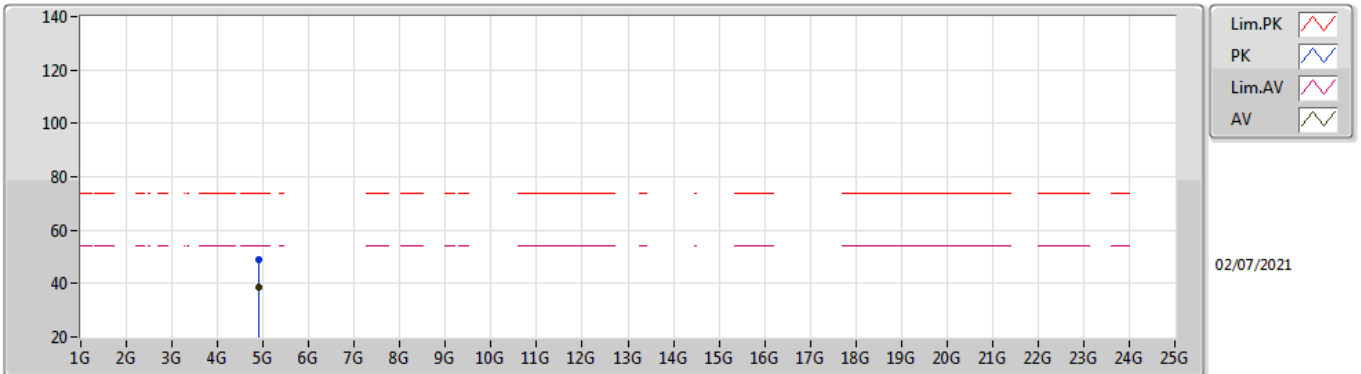


EUT Y_3TX
Setting 78
04-C-K-4

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	4.918G	50.90	74.00	-23.10	45.43	3	Vertical	144	1.00	-	32.87	5.46	32.86	
AV	4.9174G	39.76	54.00	-14.24	34.29	3	Vertical	144	1.00	-	32.87	5.46	32.86	

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

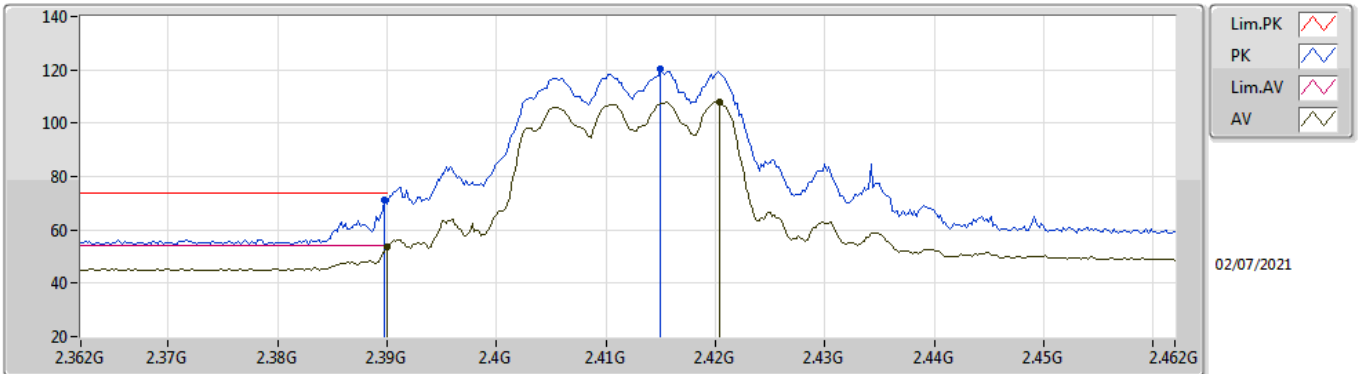


EUT Y_3TX
Setting 78
04-C-K-4

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	4.918G	49.04	74.00	-24.96	43.57	3	Horizontal	126	1.80	-	32.87	5.46	32.86	
AV	4.9174G	38.76	54.00	-15.24	33.29	3	Horizontal	126	1.80	-	32.87	5.46	32.86	

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

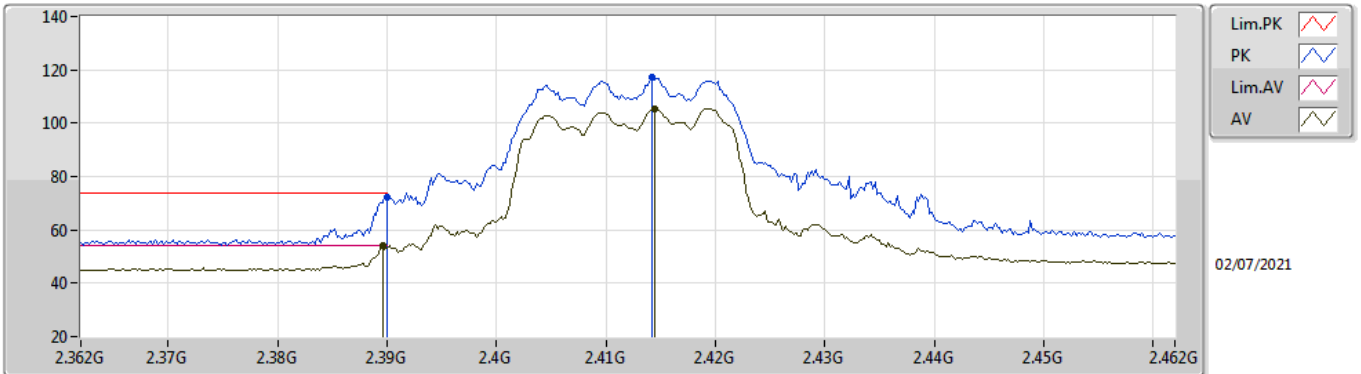


EUT Y_3TX
Setting 77
04-C-B-3

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	71.21	74.00	-2.79	40.53	3	Vertical	238	2.65	-	27.48	3.20	-
AV	2.39G	53.81	54.00	-0.19	23.13	3	Vertical	238	2.65	-	27.48	3.20	-
PK	2.415G	120.17	Inf	-Inf	89.43	3	Vertical	238	2.65	-	27.53	3.21	-
AV	2.4204G	107.79	Inf	-Inf	77.03	3	Vertical	238	2.65	-	27.54	3.22	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

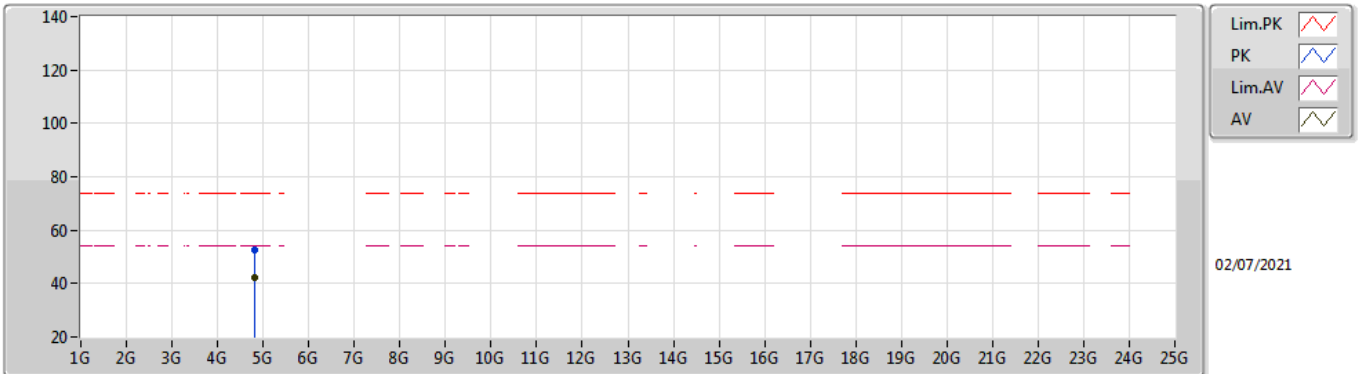


EUT Y_3TX
Setting 77
04-C-B-3

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	72.37	74.00	-1.63	41.69	3	Horizontal	147	2.70	-	27.48	3.20	-	
AV	2.3896G	53.93	54.00	-0.07	23.25	3	Horizontal	147	2.70	-	27.48	3.20	-	
PK	2.4142G	117.39	Inf	-Inf	86.65	3	Horizontal	147	2.70	-	27.53	3.21	-	
AV	2.4144G	105.40	Inf	-Inf	74.66	3	Horizontal	147	2.70	-	27.53	3.21	-	

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

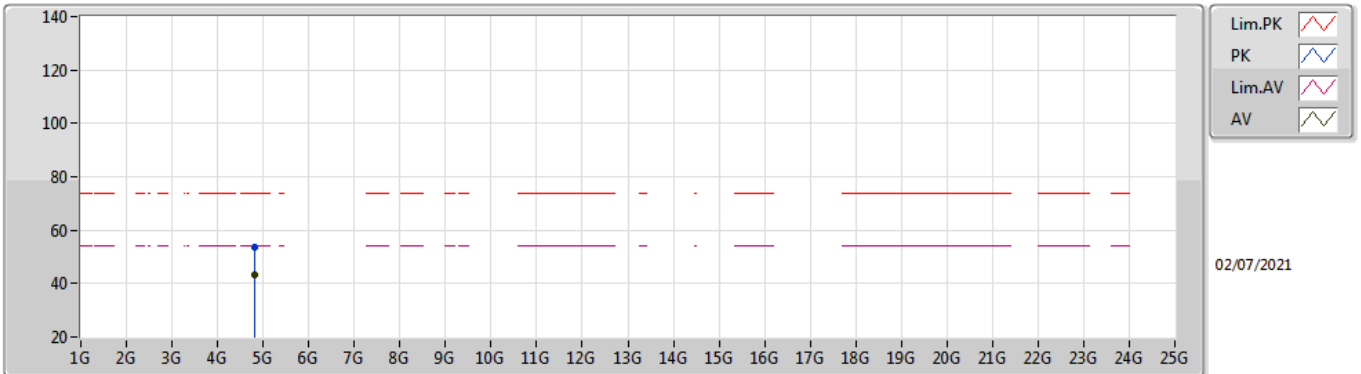


EUT Y_3TX
Setting 77
04-C-B-3

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	4.827G	52.60	74.00	-21.40	47.51	3	Vertical	151	1.60	-	32.56	5.41	32.88
AV	4.82706G	42.34	54.00	-11.66	37.25	3	Vertical	151	1.60	-	32.56	5.41	32.88

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

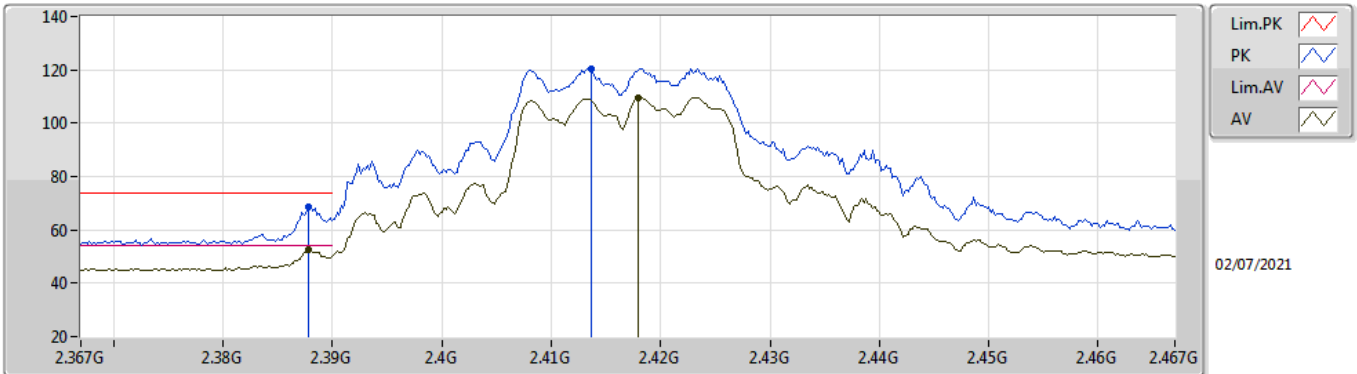


EUT Y_3TX
Setting 77
04-C-B-3

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	4.82168G	53.68	74.00	-20.32	48.62	3	Horizontal	106	2.19	-	32.53	5.41	32.88
AV	4.82184G	43.21	54.00	-10.79	38.15	3	Horizontal	106	2.19	-	32.53	5.41	32.88

802.11ax HEW20_Nss1,(MCS0)_3TX

2417MHz_TX

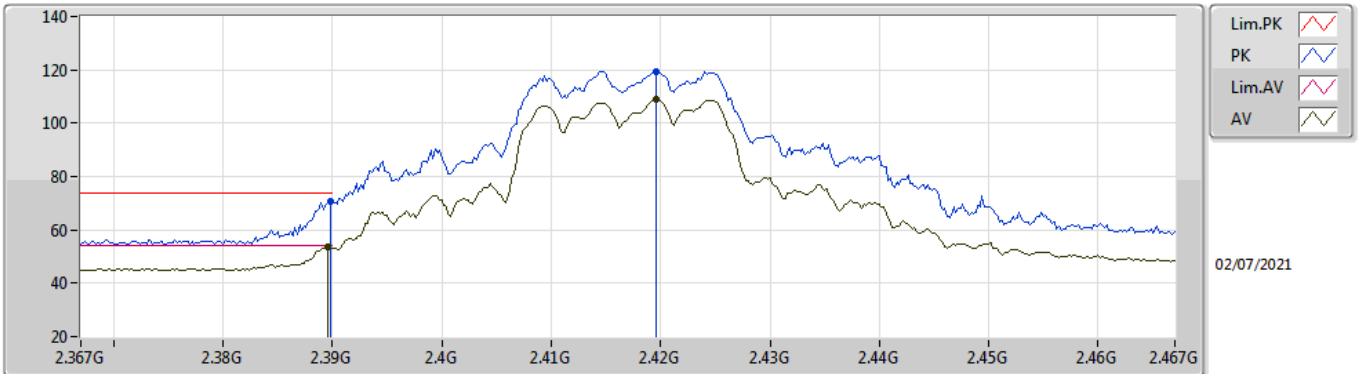


EUT Y_3TX
Setting 89
04-C-B-3

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	68.73	74.00	-5.27	38.05	3	Vertical	258	2.38	-	27.48	3.20	-
AV	2.3878G	52.44	54.00	-1.56	21.76	3	Vertical	258	2.38	-	27.48	3.20	-
PK	2.4136G	120.36	Inf	-Inf	89.62	3	Vertical	258	2.38	-	27.53	3.21	-
AV	2.418G	109.32	Inf	-Inf	78.56	3	Vertical	258	2.38	-	27.54	3.22	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2417MHz_TX

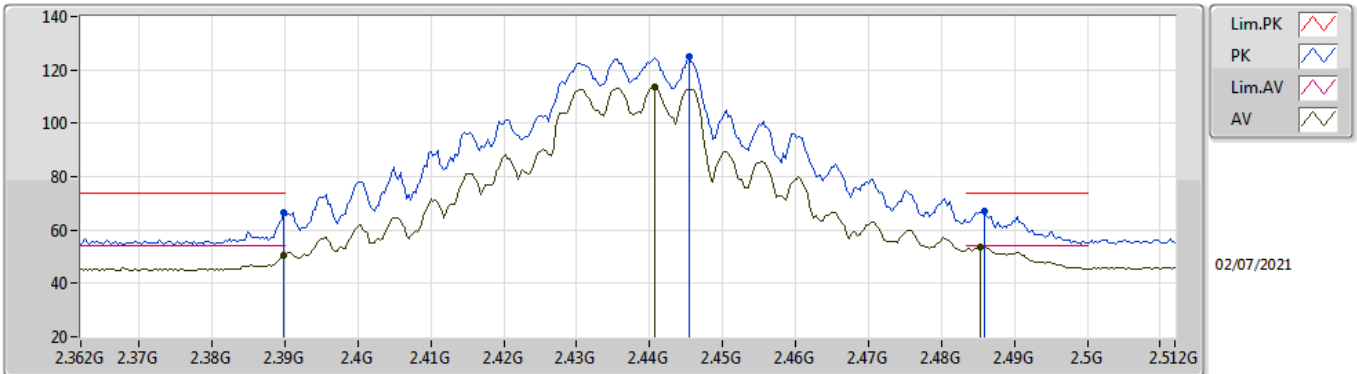


EUT Y_3TX
Setting 89
04-C-B-3

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	70.47	74.00	-3.53	39.79	3	Horizontal	9	2.38	-	27.48	3.20	-
AV	2.3896G	53.85	54.00	-0.15	23.17	3	Horizontal	9	2.38	-	27.48	3.20	-
PK	2.4196G	119.56	Inf	-Inf	88.80	3	Horizontal	9	2.38	-	27.54	3.22	-
AV	2.4196G	108.84	Inf	-Inf	78.08	3	Horizontal	9	2.38	-	27.54	3.22	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

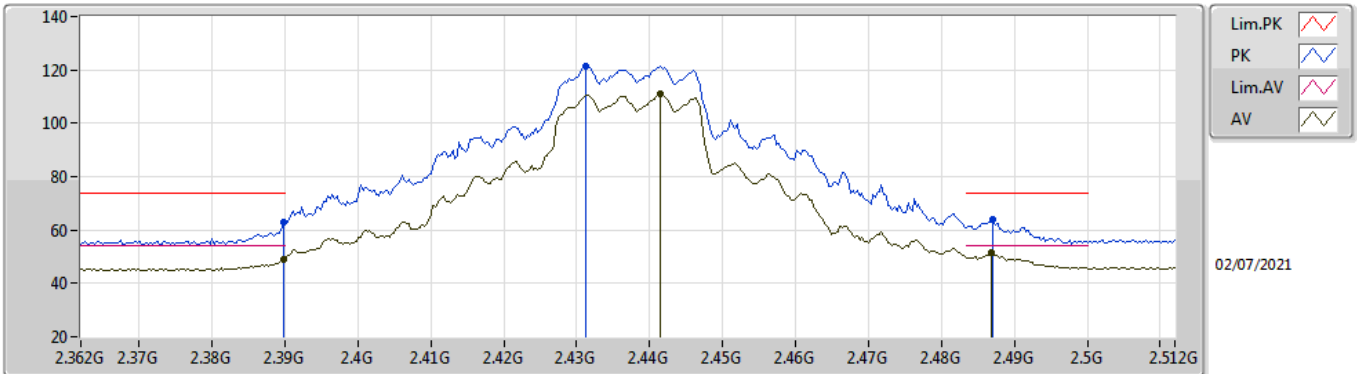


EUT Y_3TX
Setting 97
04-C-B-3

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	2.3899G	66.30	74.00	-7.70	35.62	3	Vertical	240	2.33	-	27.48	3.20	-
AV	2.3899G	50.61	54.00	-3.39	19.93	3	Vertical	240	2.33	-	27.48	3.20	-
PK	2.4454G	124.89	Inf	-Inf	94.05	3	Vertical	240	2.33	-	27.59	3.25	-
AV	2.4406G	113.39	Inf	-Inf	82.57	3	Vertical	240	2.33	-	27.58	3.24	-
PK	2.4859G	66.85	74.00	-7.15	35.82	3	Vertical	240	2.33	-	27.74	3.29	-
AV	2.4853G	53.75	54.00	-0.25	22.72	3	Vertical	240	2.33	-	27.74	3.29	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

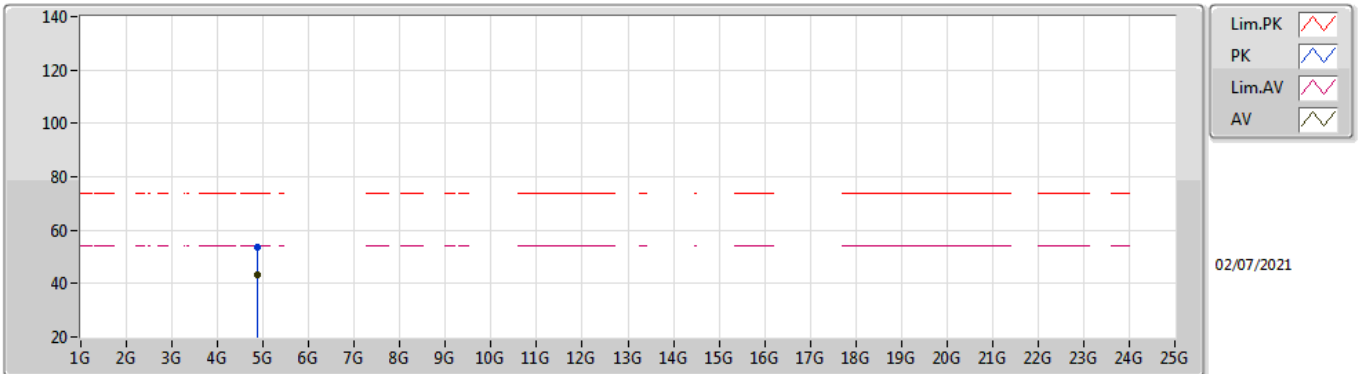


EUT_Y_3TX
Setting 97
04-C-B-3

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	2.3899G	62.96	74.00	-11.04	32.28	3	Horizontal	186	1.80	-	27.48	3.20	-
AV	2.3899G	48.85	54.00	-5.15	18.17	3	Horizontal	186	1.80	-	27.48	3.20	-
PK	2.4313G	121.60	Inf	-Inf	90.81	3	Horizontal	186	1.80	-	27.56	3.23	-
AV	2.4415G	110.81	Inf	-Inf	79.99	3	Horizontal	186	1.80	-	27.58	3.24	-
PK	2.4871G	64.16	74.00	-9.84	33.12	3	Horizontal	186	1.80	-	27.75	3.29	-
AV	2.4868G	51.59	54.00	-2.41	20.55	3	Horizontal	186	1.80	-	27.75	3.29	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

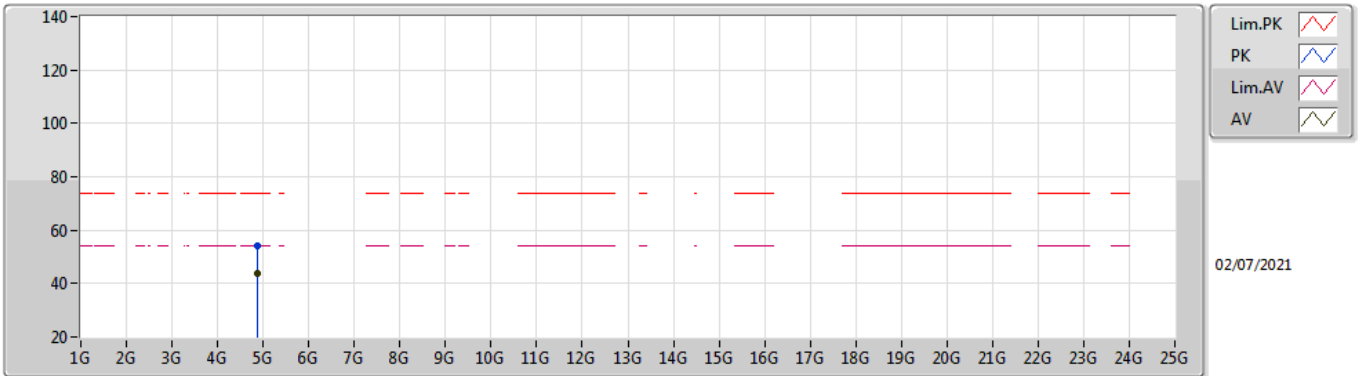


EUT Y_3TX
Setting 97
04-C-B-3

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	4.87218G	53.63	74.00	-20.37	48.32	3	Vertical	164	1.59	-	32.74	5.44	32.87	
AV	4.87224G	43.17	54.00	-10.83	37.86	3	Vertical	164	1.59	-	32.74	5.44	32.87	

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

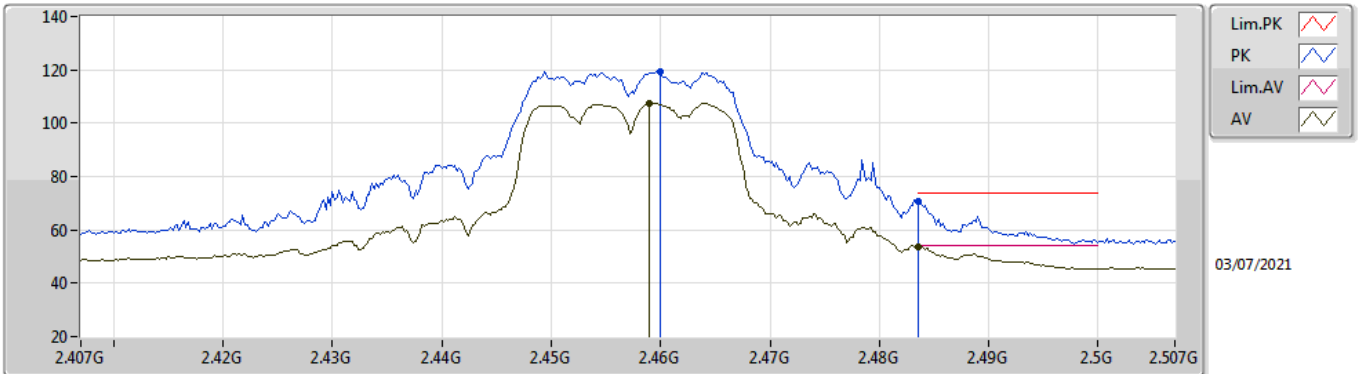


EUT Y_3TX
Setting 97
04-C-B-3

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	4.87158G	53.99	74.00	-20.01	48.68	3	Horizontal	69	1.69	-	32.74	5.44	32.87	
AV	4.872G	43.80	54.00	-10.20	38.49	3	Horizontal	69	1.69	-	32.74	5.44	32.87	

802.11ax HEW20_Nss1,(MCS0)_3TX

2457MHz_TX

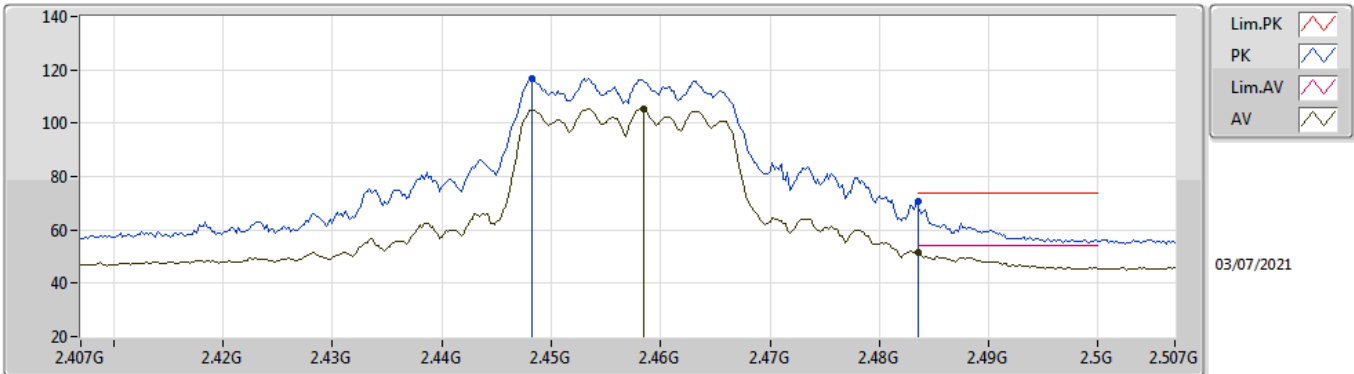


EUT Y_3TX
Setting 80
04-C-B-3

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	2.46G	119.22	Inf	-Inf	88.32	3	Vertical	228	1.91	-	27.64	3.26	-	
AV	2.459G	107.60	Inf	-Inf	76.70	3	Vertical	228	1.91	-	27.64	3.26	-	
PK	2.4836G	70.59	74.00	-3.41	39.58	3	Vertical	228	1.91	-	27.73	3.28	-	
AV	2.4835G	53.75	54.00	-0.25	22.74	3	Vertical	228	1.91	-	27.73	3.28	-	

802.11ax HEW20_Nss1,(MCS0)_3TX

2457MHz_TX

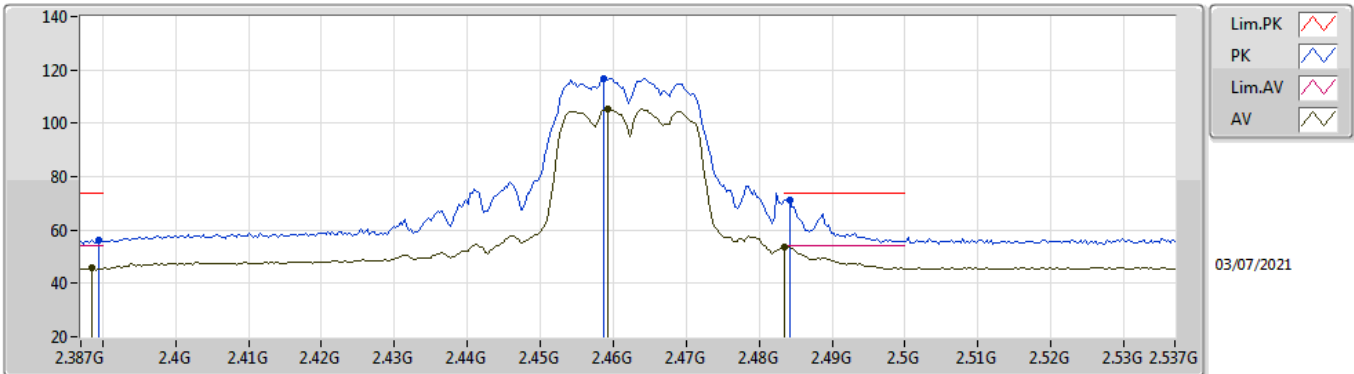


EUT Y_3TX
Setting 80
04-C-B-3

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	2.4482G	116.60	Inf	-Inf	85.75	3	Horizontal	8	1.80	-	27.60	3.25	-
AV	2.4584G	105.14	Inf	-Inf	74.25	3	Horizontal	8	1.80	-	27.63	3.26	-
PK	2.4835G	70.88	74.00	-3.12	39.87	3	Horizontal	8	1.80	-	27.73	3.28	-
AV	2.4835G	51.69	54.00	-2.31	20.68	3	Horizontal	8	1.80	-	27.73	3.28	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

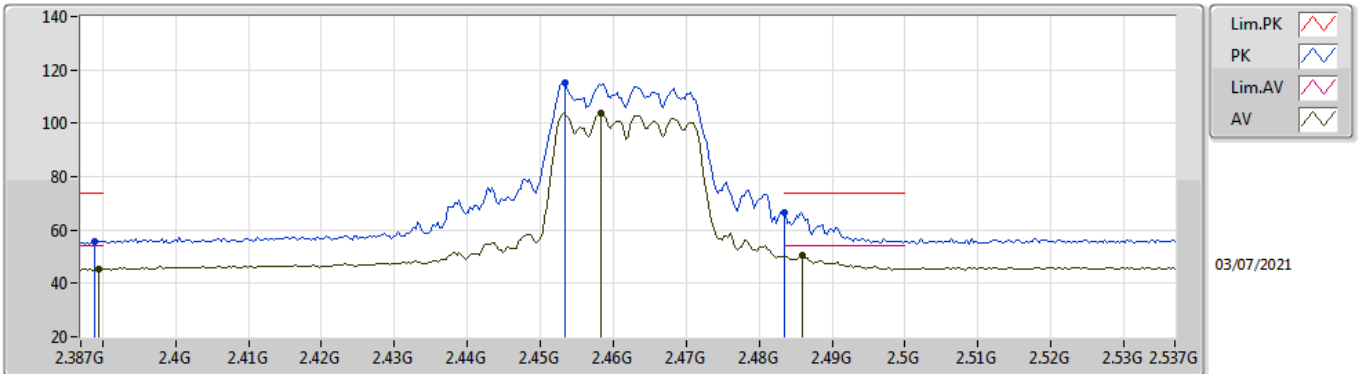


EUT_Y_3TX
Setting 72
04-C-B-3

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	56.18	74.00	-17.82	25.50	3	Vertical	230	1.90	-	27.48	3.20	-
AV	2.3885G	45.68	54.00	-8.32	15.00	3	Vertical	230	1.90	-	27.48	3.20	-
PK	2.4587G	116.89	Inf	-Inf	86.00	3	Vertical	230	1.90	-	27.63	3.26	-
AV	2.4593G	105.47	Inf	-Inf	74.57	3	Vertical	230	1.90	-	27.64	3.26	-
PK	2.4842G	71.29	74.00	-2.71	40.27	3	Vertical	230	1.90	-	27.74	3.28	-
AV	2.4835G	53.83	54.00	-0.17	22.82	3	Vertical	230	1.90	-	27.73	3.28	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

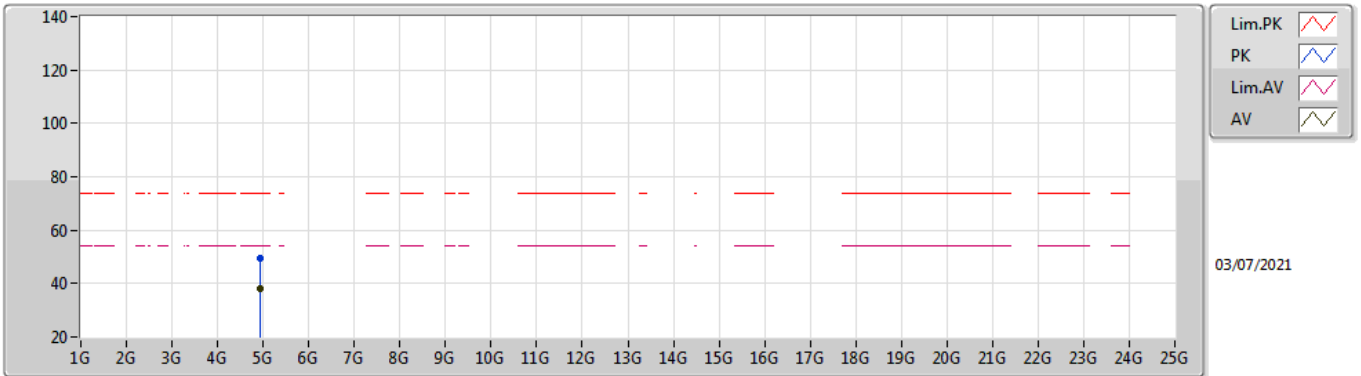


EUT_Y_3TX
Setting 72
04-C-B-3

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	55.94	74.00	-18.06	25.26	3	Horizontal	15	1.85	-	27.48	3.20	-	
AV	2.3894G	45.31	54.00	-8.69	14.63	3	Horizontal	15	1.85	-	27.48	3.20	-	
PK	2.4533G	115.35	Inf	-Inf	84.49	3	Horizontal	15	1.85	-	27.61	3.25	-	
AV	2.4584G	103.66	Inf	-Inf	72.77	3	Horizontal	15	1.85	-	27.63	3.26	-	
PK	2.4835G	66.53	74.00	-7.47	35.52	3	Horizontal	15	1.85	-	27.73	3.28	-	
AV	2.486G	50.71	54.00	-3.29	19.68	3	Horizontal	15	1.85	-	27.74	3.29	-	

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

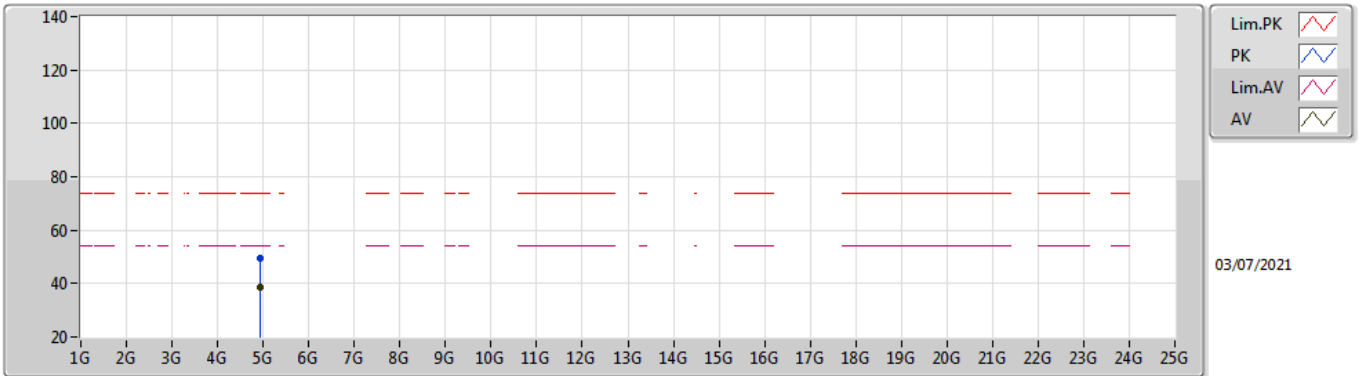


EUT Y_3TX
Setting 72
04-C-B-3

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	4.92194G	49.33	74.00	-24.67	43.84	3	Vertical	178	1.80	-	32.89	5.46	32.86	
AV	4.92756G	38.34	54.00	-15.66	32.83	3	Vertical	178	1.80	-	32.91	5.46	32.86	

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

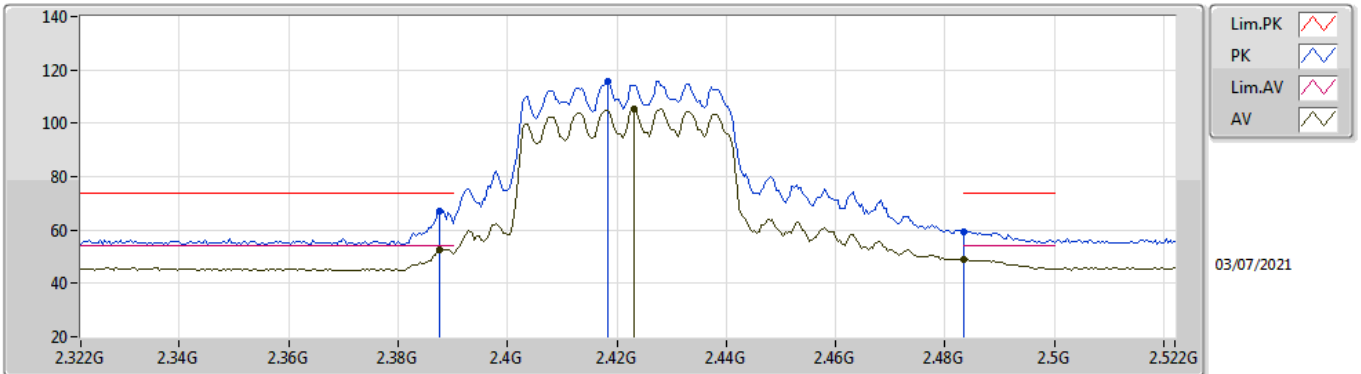


EUT Y_3TX
Setting 72
04-C-B-3

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	4.9215G	49.61	74.00	-24.39	44.12	3	Horizontal	72	1.67	-	32.89	5.46	32.86	
AV	4.92202G	38.39	54.00	-15.61	32.90	3	Horizontal	72	1.67	-	32.89	5.46	32.86	

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

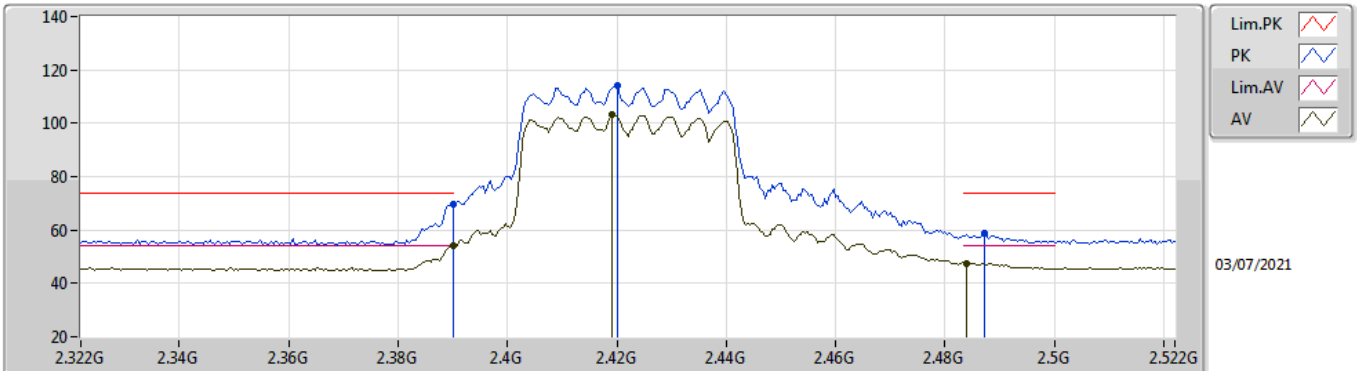


EUT_Y_3TX
Setting 78
04-C-B-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3876G	67.15	74.00	-6.85	36.47	3	Vertical	246	2.15	-	27.48	3.20	-
AV	2.3876G	52.80	54.00	-1.20	22.12	3	Vertical	246	2.15	-	27.48	3.20	-
PK	2.4184G	115.70	Inf	-Inf	84.94	3	Vertical	246	2.15	-	27.54	3.22	-
AV	2.4232G	105.44	Inf	-Inf	74.67	3	Vertical	246	2.15	-	27.55	3.22	-
PK	2.4835G	59.51	74.00	-14.49	28.50	3	Vertical	246	2.15	-	27.73	3.28	-
AV	2.4835G	49.05	54.00	-4.95	18.04	3	Vertical	246	2.15	-	27.73	3.28	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

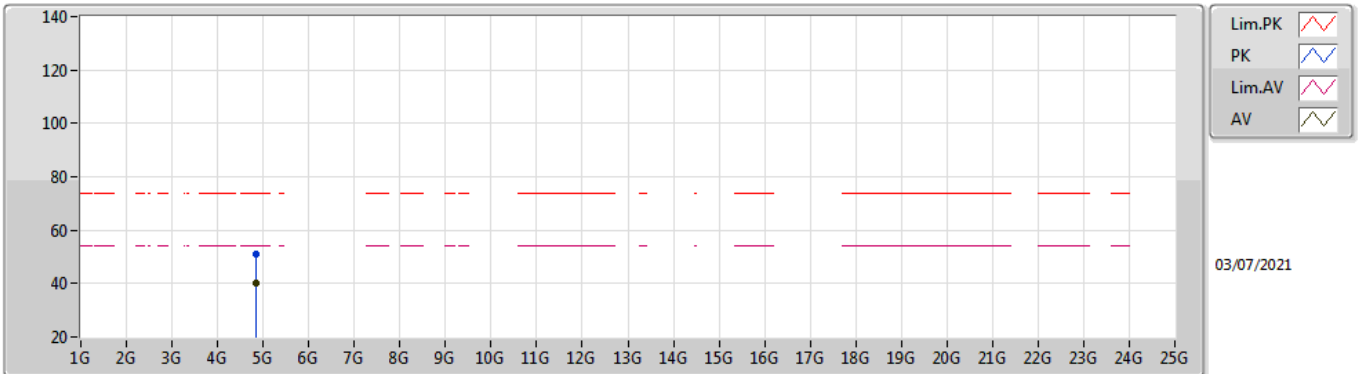


EUT Y_3TX
Setting 78
04-C-B-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	69.82	74.00	-4.18	39.14	3	Horizontal	185	2.45	-	27.48	3.20	-
AV	2.39G	53.97	54.00	-0.03	23.29	3	Horizontal	185	2.45	-	27.48	3.20	-
PK	2.42G	114.19	Inf	-Inf	83.43	3	Horizontal	185	2.45	-	27.54	3.22	-
AV	2.4192G	103.08	Inf	-Inf	72.32	3	Horizontal	185	2.45	-	27.54	3.22	-
PK	2.4872G	58.83	74.00	-15.17	27.79	3	Horizontal	185	2.45	-	27.75	3.29	-
AV	2.484G	47.53	54.00	-6.47	16.51	3	Horizontal	185	2.45	-	27.74	3.28	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

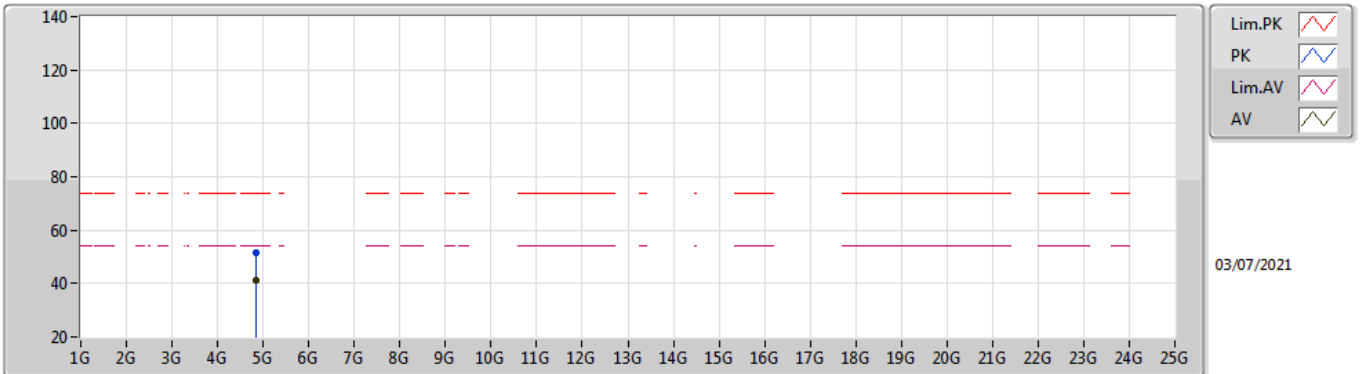


EUT Y_3TX
Setting 78
04-C-B-3

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	4.8469G	51.06	74.00	-22.94	45.83	3	Vertical	157	1.80	-	32.68	5.42	32.87	
AV	4.84194G	40.36	54.00	-13.64	35.17	3	Vertical	157	1.80	-	32.65	5.42	32.88	

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

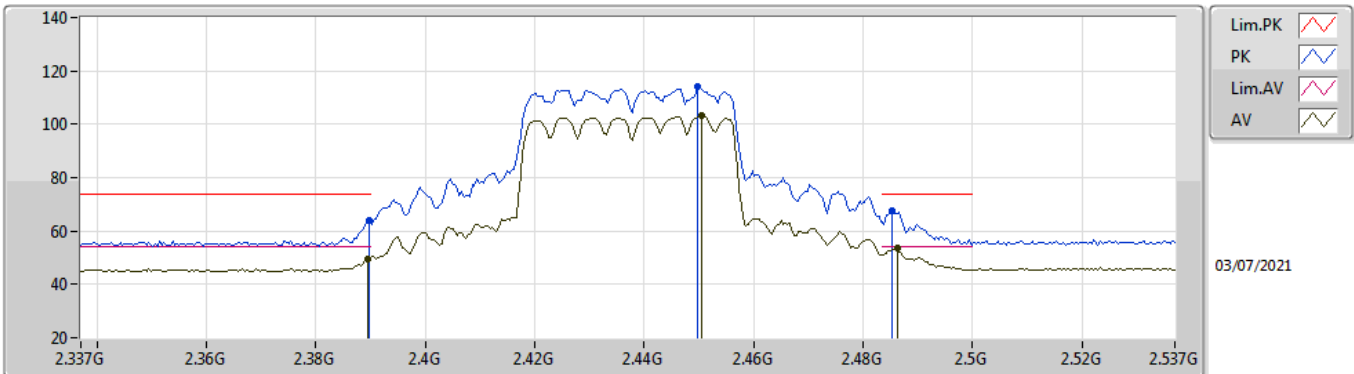


EUT Y_3TX
Setting 78
04-C-B-3

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	4.84688G	51.53	74.00	-22.47	46.30	3	Horizontal	106	2.15	-	32.68	5.42	32.87	
AV	4.8471G	41.38	54.00	-12.62	36.15	3	Horizontal	106	2.15	-	32.68	5.42	32.87	

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

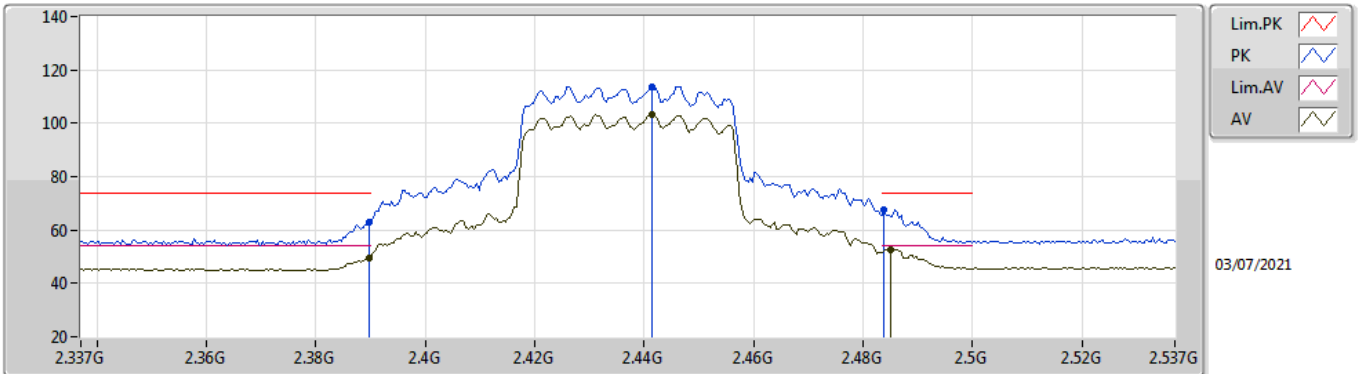


EUT_V_3TX
Setting 81
04-C-B-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	64.00	74.00	-10.00	33.32	3	Vertical	23	1.85	-	27.48	3.20	-
AV	2.3894G	49.65	54.00	-4.35	18.97	3	Vertical	23	1.85	-	27.48	3.20	-
PK	2.4498G	114.22	Inf	-Inf	83.37	3	Vertical	23	1.85	-	27.60	3.25	-
AV	2.4506G	103.11	Inf	-Inf	72.26	3	Vertical	23	1.85	-	27.60	3.25	-
PK	2.4854G	67.37	74.00	-6.63	36.34	3	Vertical	23	1.85	-	27.74	3.29	-
AV	2.4862G	53.48	54.00	-0.52	22.45	3	Vertical	23	1.85	-	27.74	3.29	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

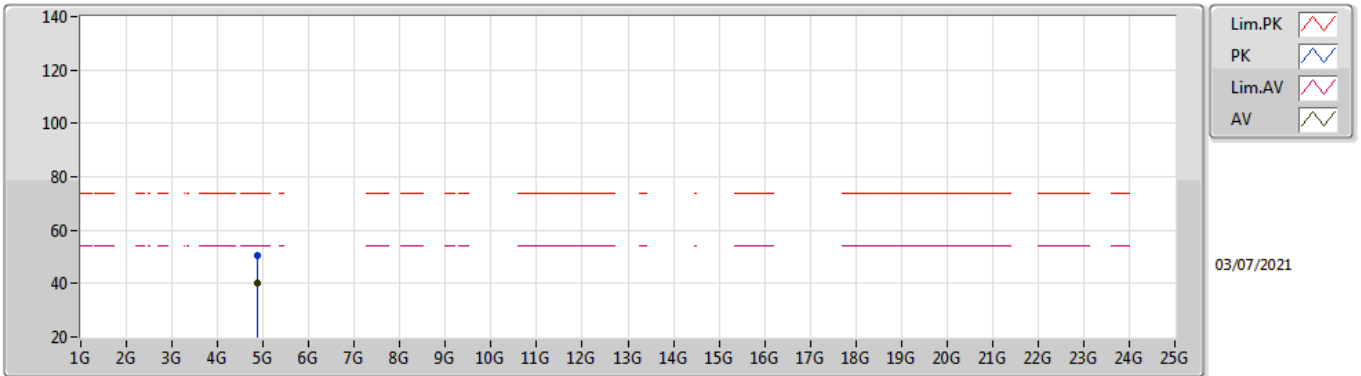


EUT_Y_3TX
Setting 81
04-C-B-3

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	63.02	74.00	-10.98	32.34	3	Horizontal	184	1.80	-	27.48	3.20	-
AV	2.3898G	49.72	54.00	-4.28	19.04	3	Horizontal	184	1.80	-	27.48	3.20	-
PK	2.4414G	113.84	Inf	-Inf	83.02	3	Horizontal	184	1.80	-	27.58	3.24	-
AV	2.4414G	103.24	Inf	-Inf	72.42	3	Horizontal	184	1.80	-	27.58	3.24	-
PK	2.4838G	67.57	74.00	-6.43	36.55	3	Horizontal	184	1.80	-	27.74	3.28	-
AV	2.485G	52.75	54.00	-1.25	21.72	3	Horizontal	184	1.80	-	27.74	3.29	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

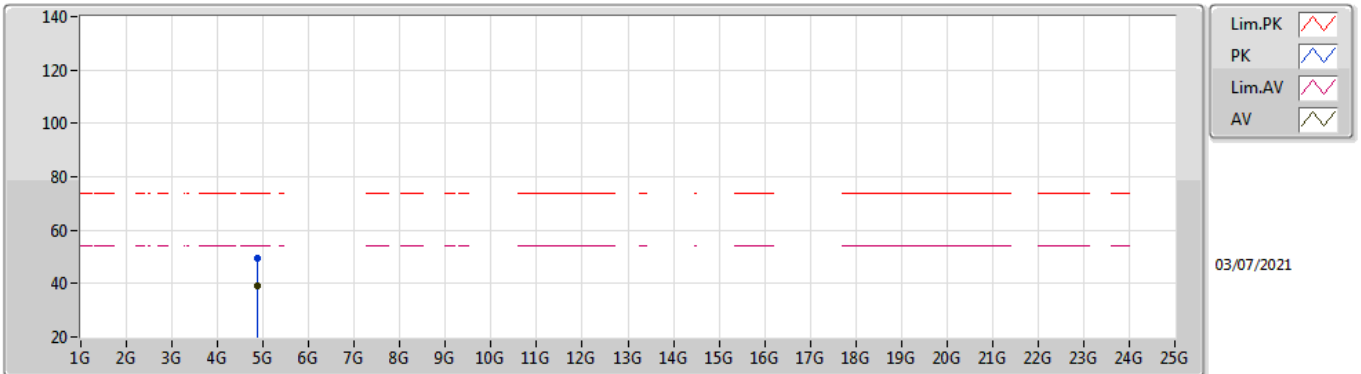


EUT Y_3TX
Setting 81
04-C-B-3

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	4.8725G	50.62	74.00	-23.38	45.31	3	Vertical	150	1.59	-	32.74	5.44	32.87	
AV	4.8724G	39.98	54.00	-14.02	34.67	3	Vertical	150	1.59	-	32.74	5.44	32.87	

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

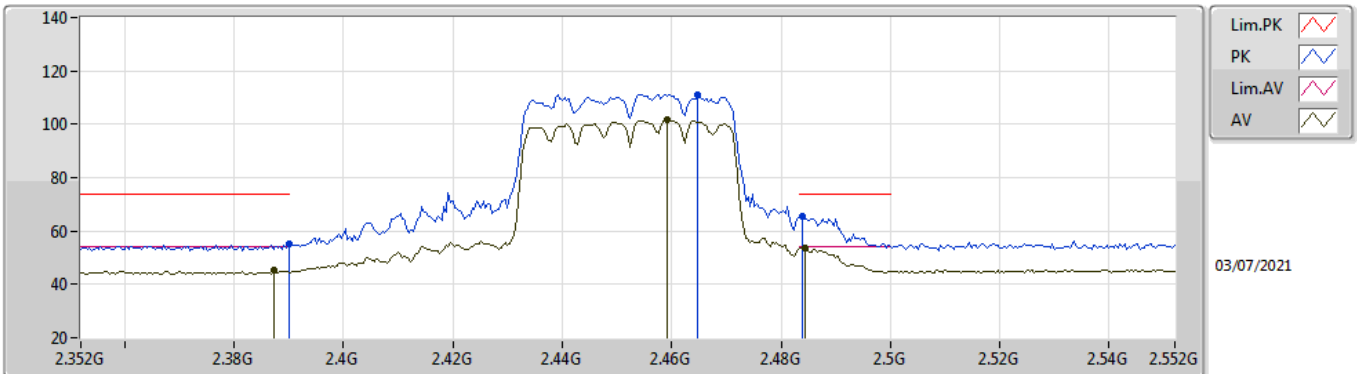


EUT Y_3TX
Setting 81
04-C-B-3

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	4.87126G	49.74	74.00	-24.26	44.43	3	Horizontal	74	1.80	-	32.74	5.44	32.87	
AV	4.8717G	39.01	54.00	-14.99	33.70	3	Horizontal	74	1.80	-	32.74	5.44	32.87	

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX

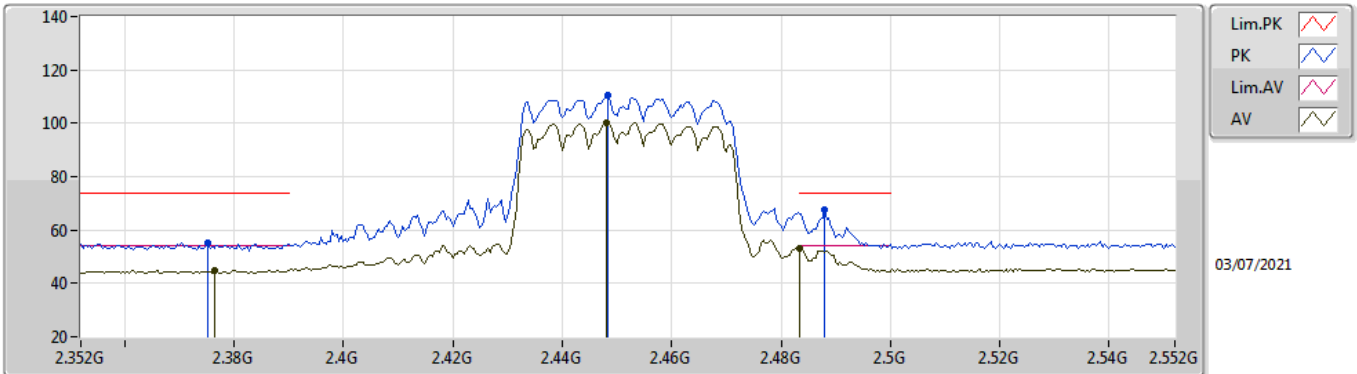


EUT_Y_3TX
Setting 74
04-C-K-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	55.27	74.00	-18.73	24.59	3	Vertical	228	2.36	-	27.48	3.20	-
AV	2.3872G	45.11	54.00	-8.89	14.44	3	Vertical	228	2.36	-	27.47	3.20	-
PK	2.4648G	111.03	Inf	-Inf	80.11	3	Vertical	228	2.36	-	27.66	3.26	-
AV	2.4592G	101.53	Inf	-Inf	70.63	3	Vertical	228	2.36	-	27.64	3.26	-
PK	2.484G	65.50	74.00	-8.50	34.48	3	Vertical	228	2.36	-	27.74	3.28	-
AV	2.4844G	53.72	54.00	-0.28	22.70	3	Vertical	228	2.36	-	27.74	3.28	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX

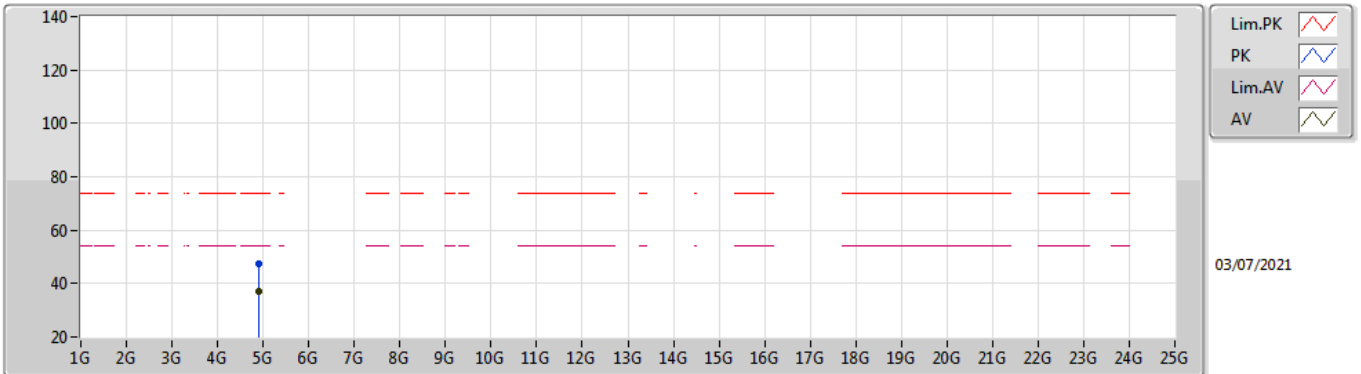


EUT Y_3TX
Setting 74
04-C-K-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3752G	55.35	74.00	-18.65	24.70	3	Horizontal	132	2.30	-	27.45	3.20	-
AV	2.3764G	44.94	54.00	-9.06	14.29	3	Horizontal	132	2.30	-	27.45	3.20	-
PK	2.4484G	110.35	Inf	-Inf	79.50	3	Horizontal	132	2.30	-	27.60	3.25	-
AV	2.448G	100.34	Inf	-Inf	69.49	3	Horizontal	132	2.30	-	27.60	3.25	-
PK	2.488G	67.51	74.00	-6.49	36.47	3	Horizontal	132	2.30	-	27.75	3.29	-
AV	2.4835G	53.14	54.00	-0.86	22.13	3	Horizontal	132	2.30	-	27.73	3.28	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX

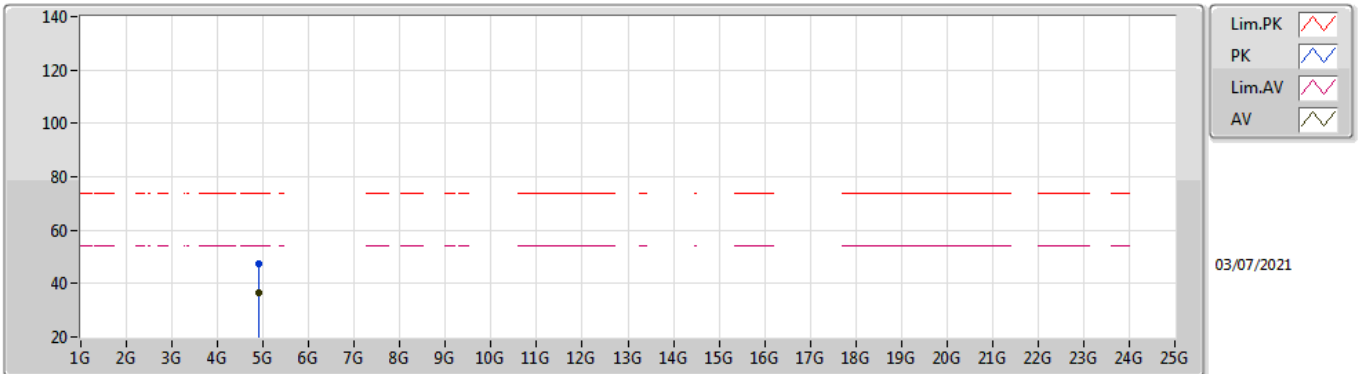


EUT Y_3TX
Setting 74
04-C-K-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.9122G	47.49	74.00	-26.51	42.04	3	Vertical	168	1.80	-	32.85	5.46	32.86	
AV	4.90264G	37.31	54.00	-16.69	31.92	3	Vertical	168	1.80	-	32.81	5.45	32.87	

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX



EUT Y_3TX
Setting 74
04-C-K-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.90036G	47.22	74.00	-26.78	41.84	3	Horizontal	216	1.65	-	32.80	5.45	32.87	
AV	4.89872G	36.39	54.00	-17.61	31.01	3	Horizontal	216	1.65	-	32.80	5.45	32.87	

