



RADIO TEST REPORT

FCC ID : VW3FAST287
Equipment : Wireless Home Router
Brand Name : SAGEMCOM
Model Name : FAST 287
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 May 07, 2021, and testing was started from Jul. 17, 2021 and completed on Aug. 03, 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 30
Issued Date : Aug. 12, 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: Wendy Pan



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	Antenna Type	Connector	Antenna Gain (dBi)
1	1	Galtronics	02102140-07500-1 DB1	PCB	I-PEX	Note 1
2	2	Galtronics	02102140-07500-2 DB2	PCB	I-PEX	
3	3	Galtronics	02102140-07500-3 DB3	PCB	I-PEX	
4	4	Galtronics	02102142-07500 5G	PCB	I-PEX	

Note1:

Ant.	Port	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 3
1	1	2.39	4.83	2.94
2	2	2.75	2.22	2.08
3	3	3.31	3.23	3.33
4	4	-	2.17	3.27

Directional Gain (dBi)		
WLAN 2.4GHz 3T1S	WLAN 5GHz UNII 1 4T1S	WLAN 5GHz UNII 3 4T1S
3.79	4.89	5.16

Note2: For 2.4GHz function:

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

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

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

For 5GHz function:

For IEEE 802.11a/n/ac/ax (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) $\geq 1/T$
802.11b	0.949	0.23	12.488m	100
802.11g	0.958	0.19	2.066m	1k
802.11ax HEW20	0.982	0.08	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW40	0.964	0.16	781.25u	3k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	Mtool 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	TH03-CB	Serway Lee	25.4~26.5 / 65~67	Jul. 19, 2021 ~ Jul. 22, 2021
Radiated<1GHz	03CH05-CB	Ken Yeh	25.1~27.2 / 66~77	Jul. 17, 2021 ~ Aug. 03, 2021
Radiated Co-Location	03CH05-CB	Ken Yeh	25.3~27.5 / 68~79	Jul. 17, 2021 ~ Aug. 03, 2021
Radiated>1GHz	03CH03-CB	Ken Yeh	24.4~26.6 / 65~71	Jul. 17, 2021 ~ Aug. 03, 2021
AC Conduction	CO02-CB	Peter Wu	24~25 / 56~58	Aug. 02, 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

Mode	Power Setting
802.11b_Nss1,(1Mbps)_3TX	-
2412MHz	103
2437MHz	103
2462MHz	101
802.11g_Nss1,(6Mbps)_3TX	-
2412MHz	81
2417MHz	96
2437MHz	105
2457MHz	90
2462MHz	80
802.11ax HEW20_Nss1,(MCS0)_3TX	-
2412MHz	81
2417MHz	94
2437MHz	105
2457MHz	87
2462MHz	80
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-
2412MHz	81
2417MHz	94
2437MHz	105
2457MHz	87
2462MHz	80
802.11ax HEW40_Nss1,(MCS0)_3TX	-
2422MHz	78
2437MHz	81
2452MHz	76
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-
2422MHz	78
2437MHz	81
2452MHz	76

Note:

- ♦ Evaluated HEW20/HEW40 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40 mode are the same or lower than HEW20/HEW40.
- ♦ The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

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

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - 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.: FA170715 for Co-location RF Exposure Evaluation.	

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

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories			
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

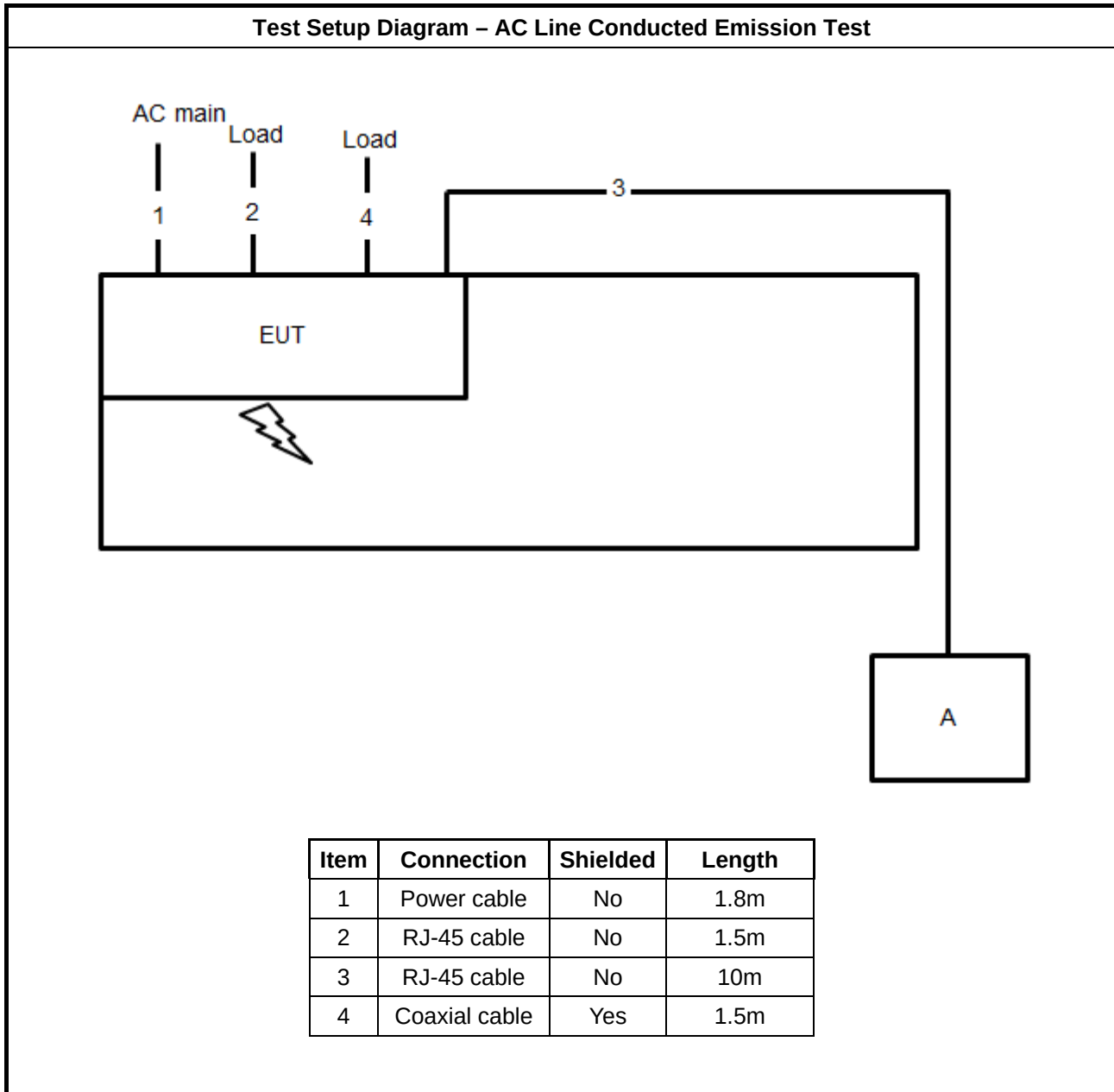
For AC Conduction:

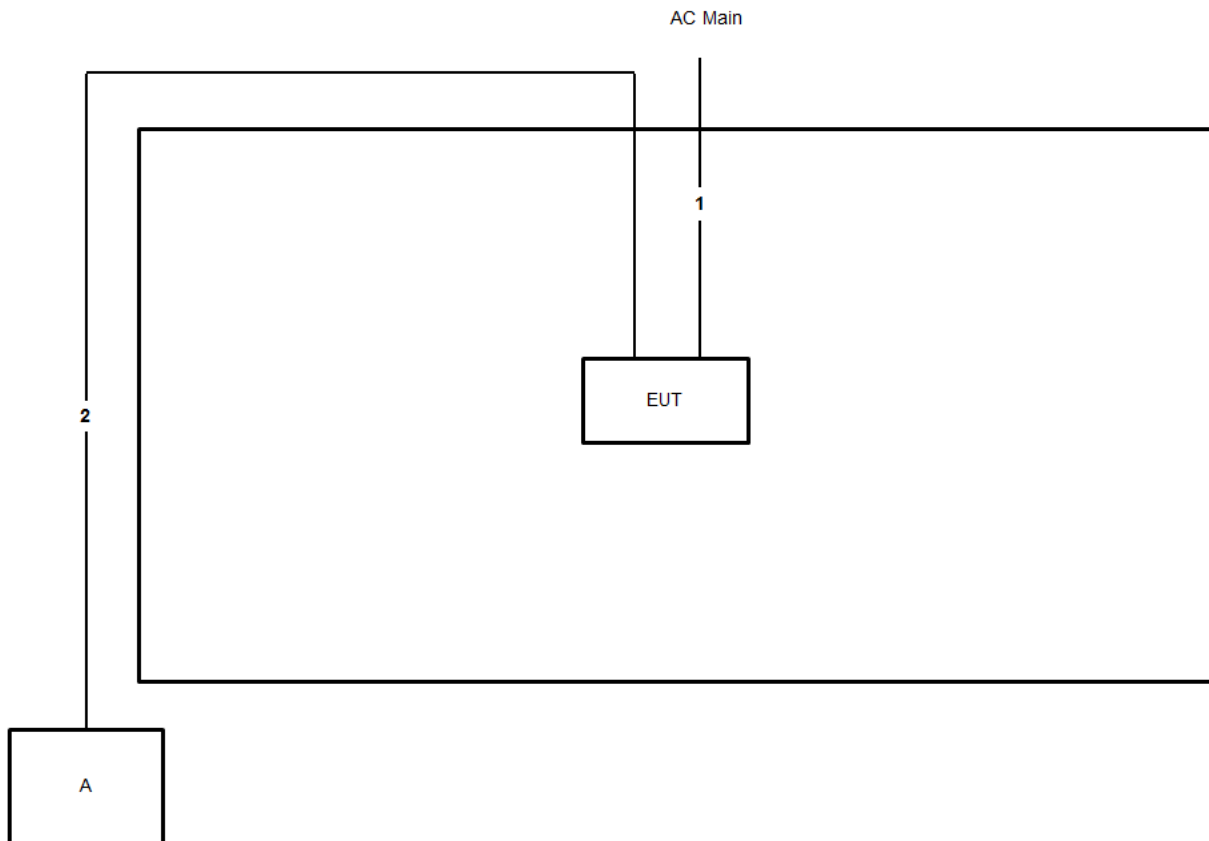
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E6430	N/A

For Radiated and RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	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.

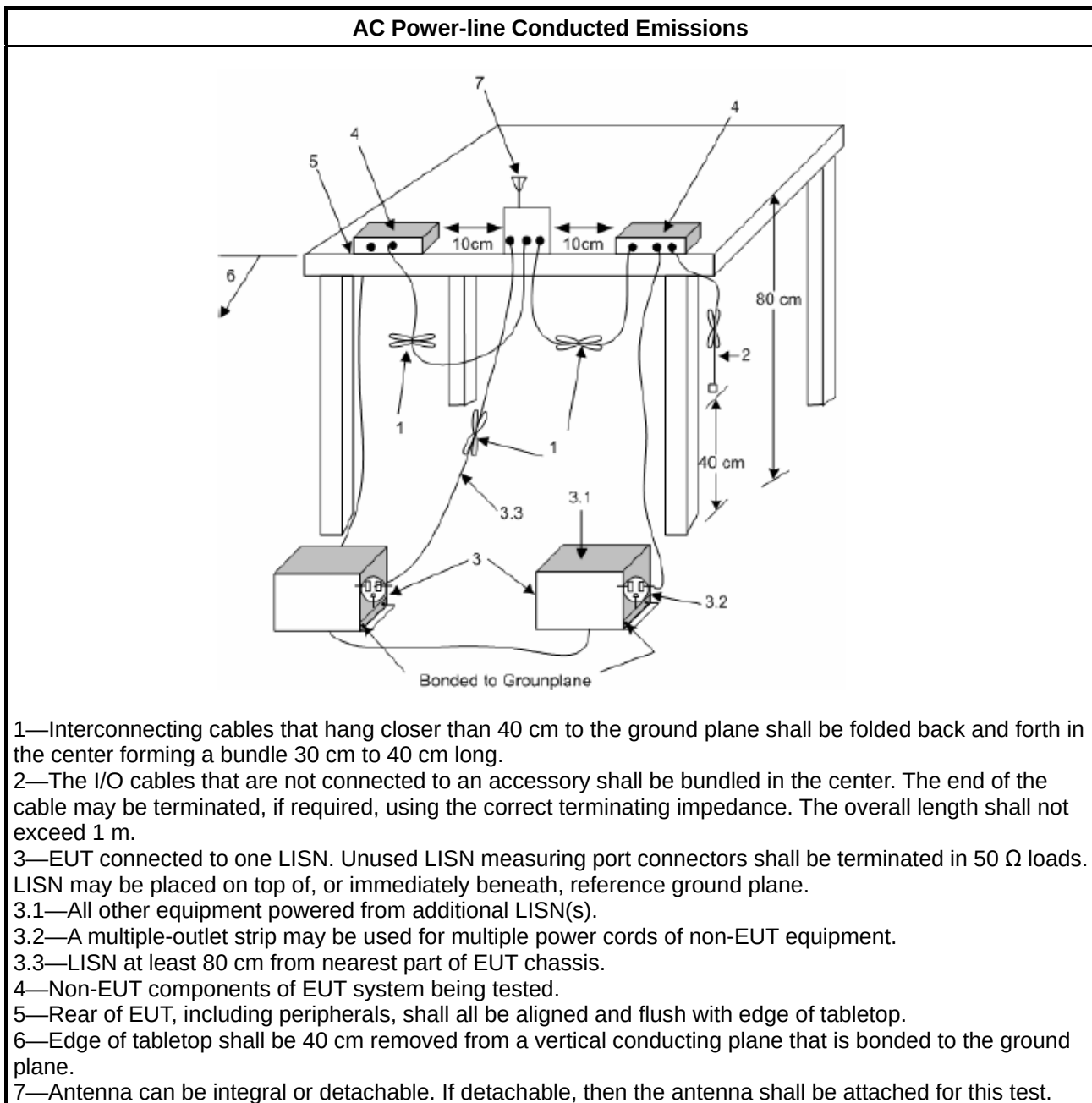
3.1.2 Measuring Instruments

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:

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

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

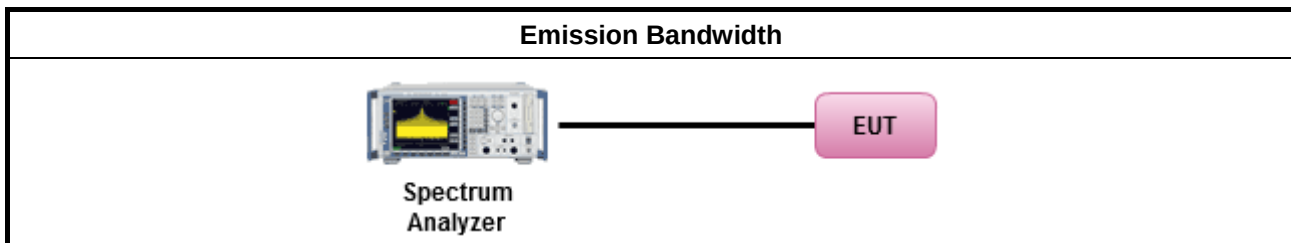
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

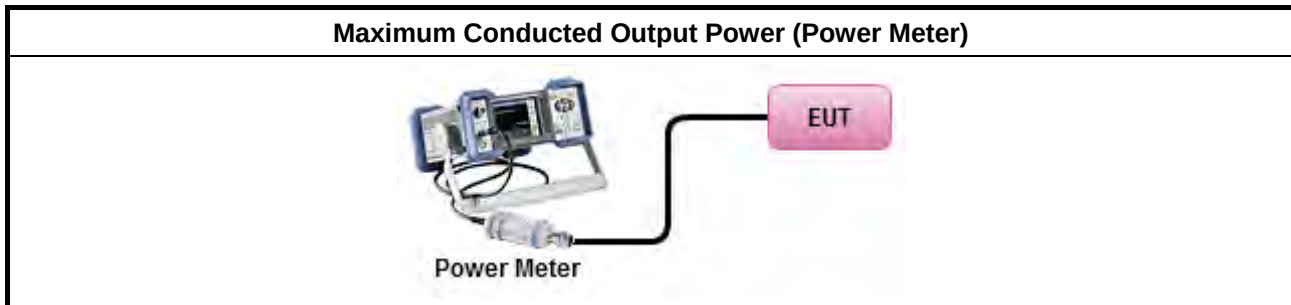
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

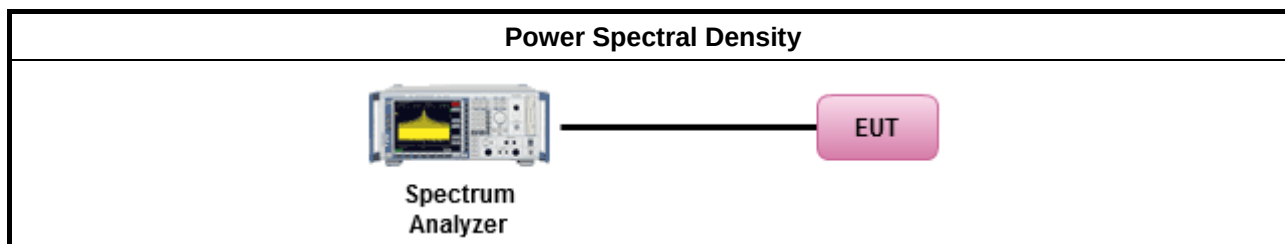
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

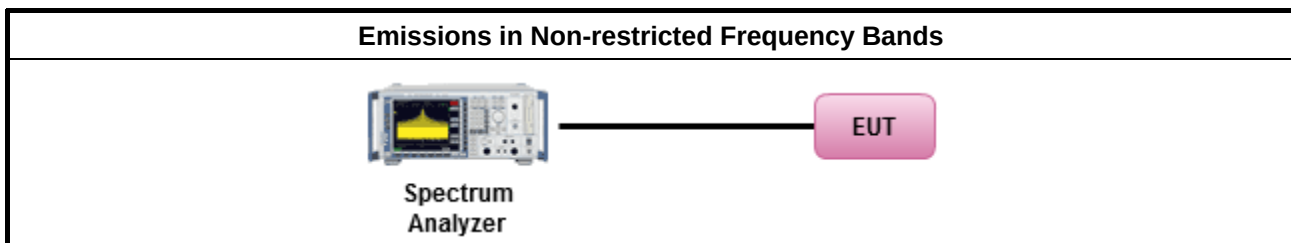
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

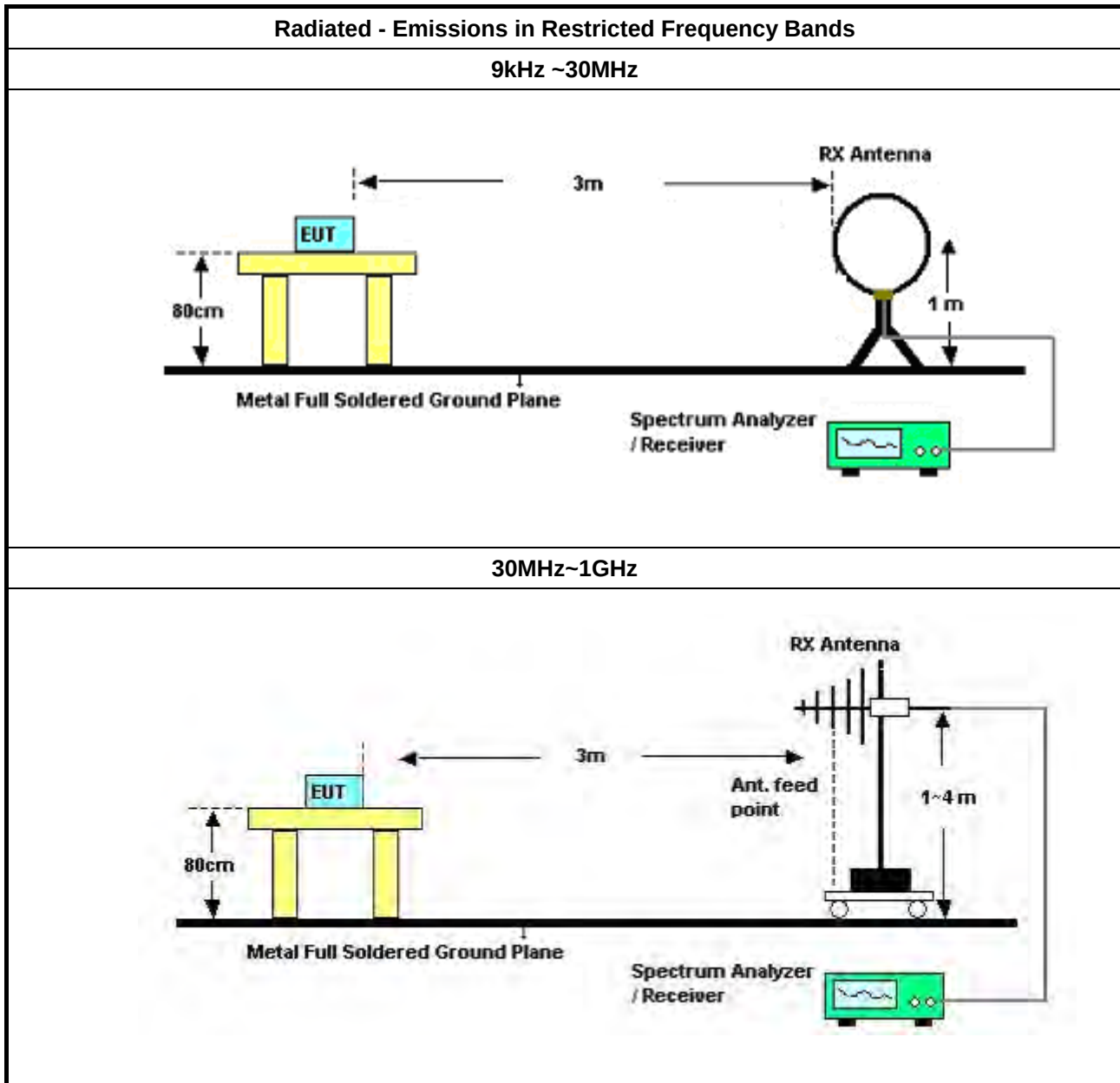
Refer a test equipment and calibration data table in this test report.

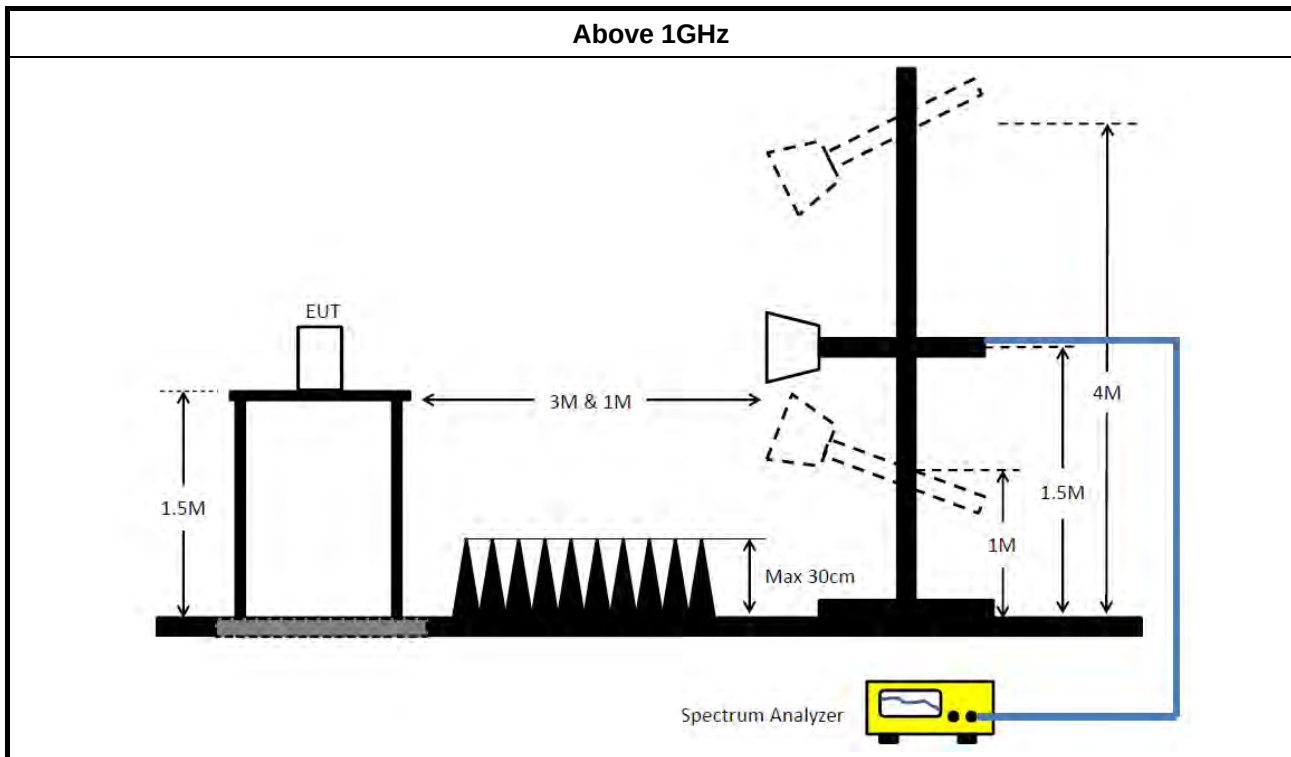


3.6.3 Test Procedures

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

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Dec. 04, 2020	Dec. 03, 2021	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 20, 2020	Nov. 19, 2021	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 05, 2021	May 04, 2022	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 20, 2020	Oct. 19, 2021	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 18, 2021	Mar. 17, 2022	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 10, 2020	Aug. 09, 2021	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 08, 2020	Nov. 07, 2021	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	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)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 18, 2021	Jun. 17, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	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)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 05, 2020	Oct. 04, 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-04+28	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-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. 15, 2021	Jul. 14, 2022	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)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 06, 2021	May 05, 2022	Radiation (03CH03-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 26, 2021	Jan. 25, 2022	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 18, 2021	Jun. 17, 2022	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH03-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun.15, 2021	Jun. 14, 2022	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 04, 2021	Jun. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 31, 2020	Dec. 30, 2021	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 17, 2020	Aug. 16, 2021	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 17, 2020	Aug. 16, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)



RADIO TEST REPORT

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Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

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



Conducted Emissions at Powerline

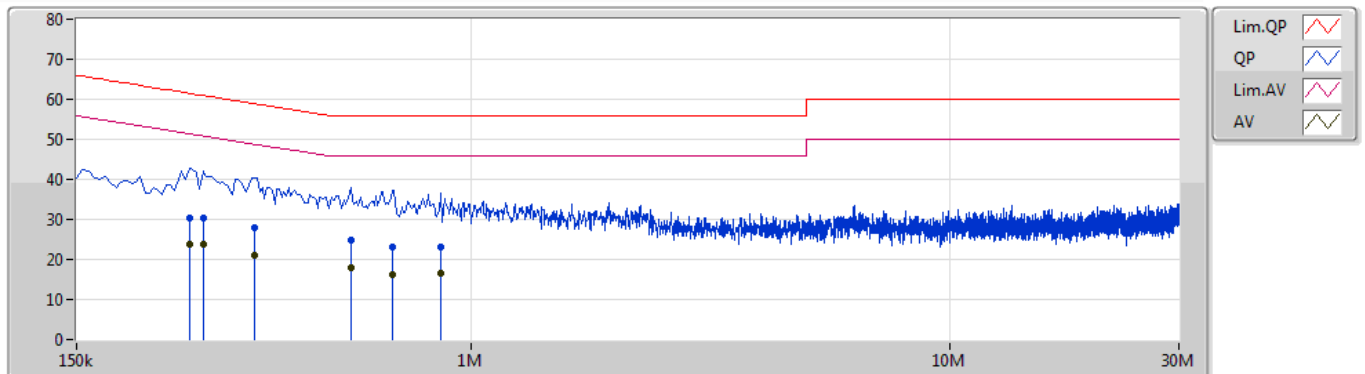
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	276k	23.74	50.93	-27.19	Line

Mode 1

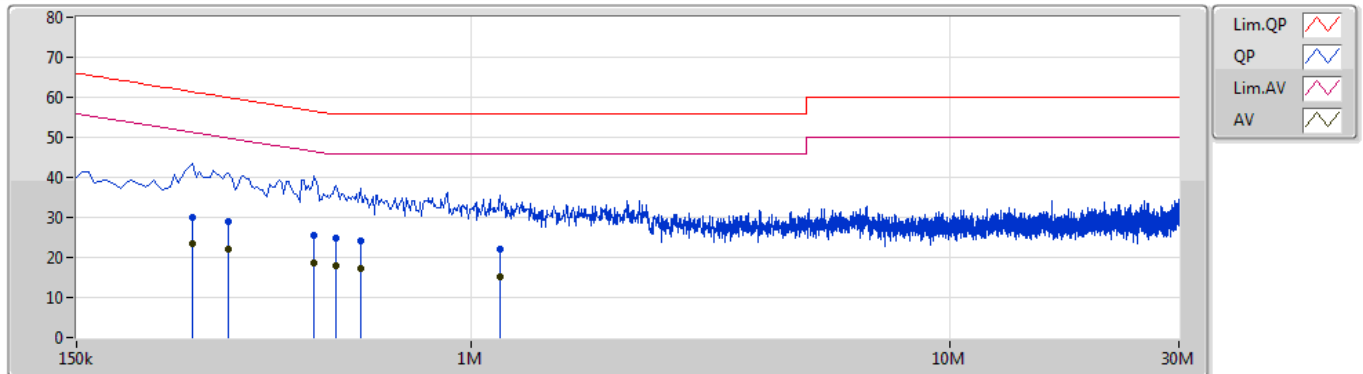
02/08/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	258k	30.35	61.49	-31.14	10.28	Line	-	20.07	0.07	0.07	10.14			
AV	258k	23.69	51.49	-27.80	10.28	Line	-	13.41	0.07	0.07	10.14			
QP	276k	30.34	60.93	-30.59	10.28	Line	-	20.06	0.07	0.07	10.14			
AV	276k	23.74	50.93	-27.19	10.28	Line	"Worst"	13.46	0.07	0.07	10.14			
QP	352.5k	27.81	58.91	-31.10	10.26	Line	-	17.55	0.08	0.06	10.12			
AV	352.5k	20.99	48.91	-27.92	10.26	Line	-	10.73	0.08	0.06	10.12			
QP	559.5k	24.75	56.00	-31.25	10.26	Line	-	14.49	0.08	0.07	10.11			
AV	559.5k	17.85	46.00	-28.15	10.26	Line	-	7.59	0.08	0.07	10.11			
QP	685.5k	23.20	56.00	-32.80	10.26	Line	-	12.94	0.09	0.07	10.10			
AV	685.5k	16.36	46.00	-29.64	10.26	Line	-	6.10	0.09	0.07	10.10			
QP	865.5k	23.20	56.00	-32.80	10.27	Line	-	12.93	0.09	0.08	10.10			
AV	865.5k	16.55	46.00	-29.45	10.27	Line	-	6.28	0.09	0.08	10.10			

Mode 1

02/08/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	262.5k	30.17	61.35	-31.18	10.27	Neutral	-	19.90	0.06	0.07	10.14			
AV	262.5k	23.40	51.35	-27.95	10.27	Neutral	-	13.13	0.06	0.07	10.14			
QP	312k	28.93	59.92	-30.99	10.25	Neutral	-	18.68	0.06	0.06	10.13			
AV	312k	22.05	49.92	-27.87	10.25	Neutral	-	11.80	0.06	0.06	10.13			
QP	469.5k	25.62	56.52	-30.90	10.23	Neutral	-	15.39	0.06	0.06	10.11			
AV	469.5k	18.73	46.52	-27.79	10.23	Neutral	"Worst"	8.50	0.06	0.06	10.11			
QP	523.5k	24.79	56.00	-31.21	10.25	Neutral	-	14.54	0.07	0.07	10.11			
AV	523.5k	18.05	46.00	-27.95	10.25	Neutral	-	7.80	0.07	0.07	10.11			
QP	586.5k	24.02	56.00	-31.98	10.25	Neutral	-	13.77	0.07	0.07	10.11			
AV	586.5k	17.20	46.00	-28.80	10.25	Neutral	-	6.95	0.07	0.07	10.11			
QP	1.149M	22.06	56.00	-33.94	10.27	Neutral	-	11.79	0.08	0.08	10.11			
AV	1.149M	15.16	46.00	-30.84	10.27	Neutral	-	4.89	0.08	0.08	10.11			

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	7.525M	12.294M	12M3G1D	6.075M	11.169M
802.11g_Nss1,(6Mbps)_3TX	16.45M	21.789M	21M8D1D	15.725M	16.592M
802.11ax HEW20_Nss1,(MCS0)_3TX	18.975M	22.814M	22M8D1D	18.05M	18.941M
802.11ax HEW40_Nss1,(MCS0)_3TX	37.6M	37.831M	37M8D1D	35.5M	37.481M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.525M	12.169M	7.5M	11.969M	7M	11.369M
2437MHz	Pass	500k	7.025M	12.294M	7.525M	12.069M	6.575M	11.769M
2462MHz	Pass	500k	7.475M	11.894M	6.075M	11.794M	7.525M	11.169M
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	15.725M	16.692M	16.45M	16.667M	16.275M	16.642M
2437MHz	Pass	500k	16.325M	21.789M	16.3M	20.94M	16.325M	18.041M
2462MHz	Pass	500k	16.35M	16.592M	16.325M	16.667M	16.325M	16.642M
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.225M	18.991M	18.05M	18.991M	18.825M	18.941M
2437MHz	Pass	500k	18.875M	22.814M	18.7M	22.289M	18.825M	19.44M
2462MHz	Pass	500k	18.925M	18.991M	18.95M	18.941M	18.975M	18.991M
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	36.25M	37.481M	35.5M	37.581M	36.8M	37.631M
2437MHz	Pass	500k	37.6M	37.831M	36.15M	37.731M	37.6M	37.731M
2452MHz	Pass	500k	36.8M	37.631M	36.05M	37.631M	37M	37.631M

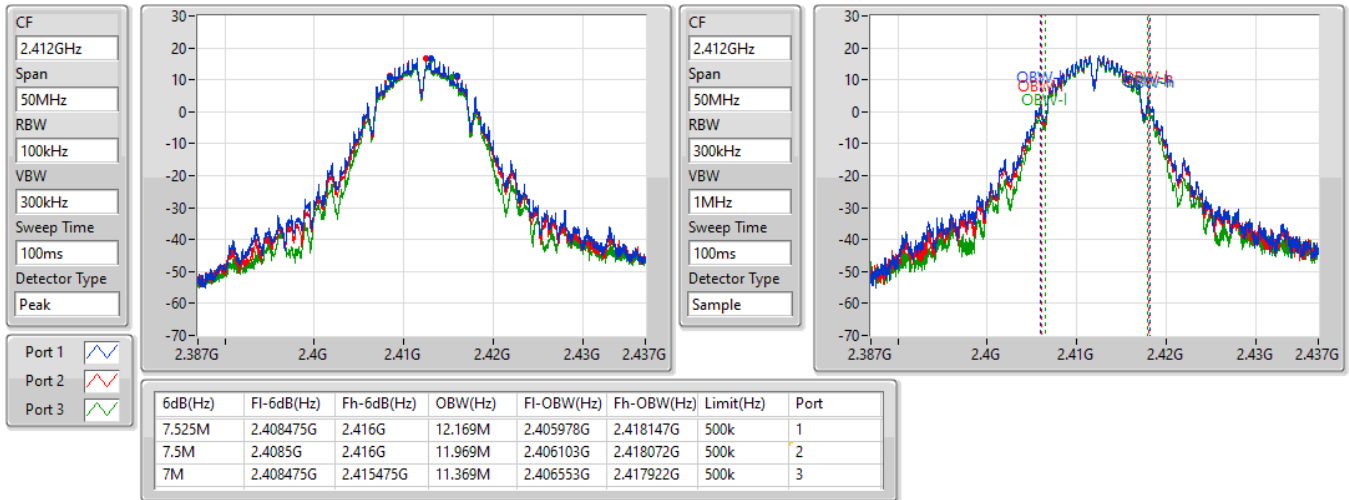
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_3TX

EBW

2412MHz

19/07/2021

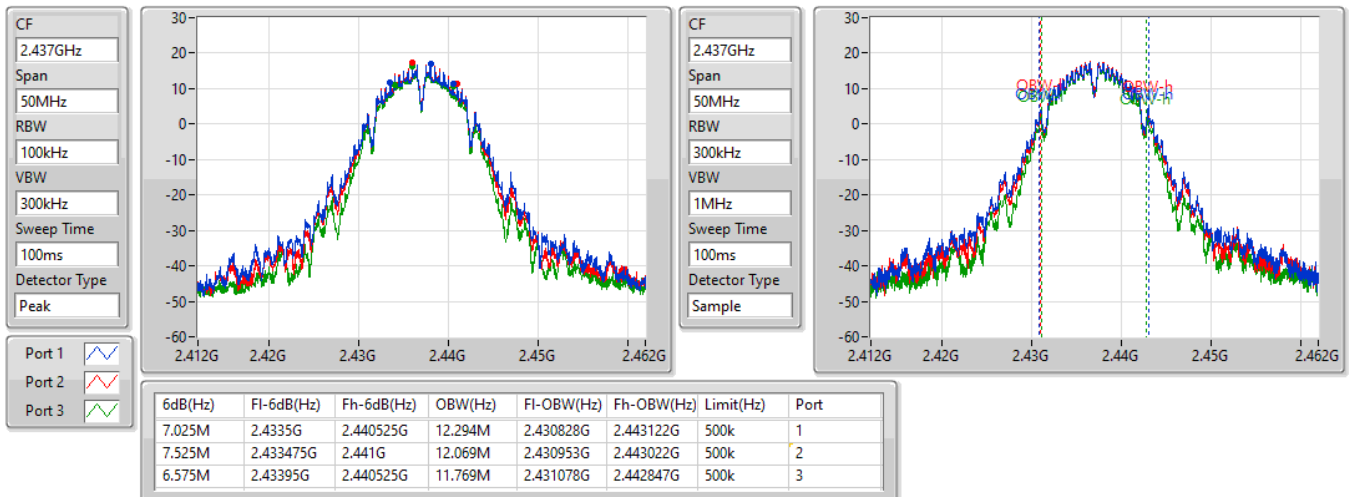


802.11b_Nss1,(1Mbps)_3TX

EBW

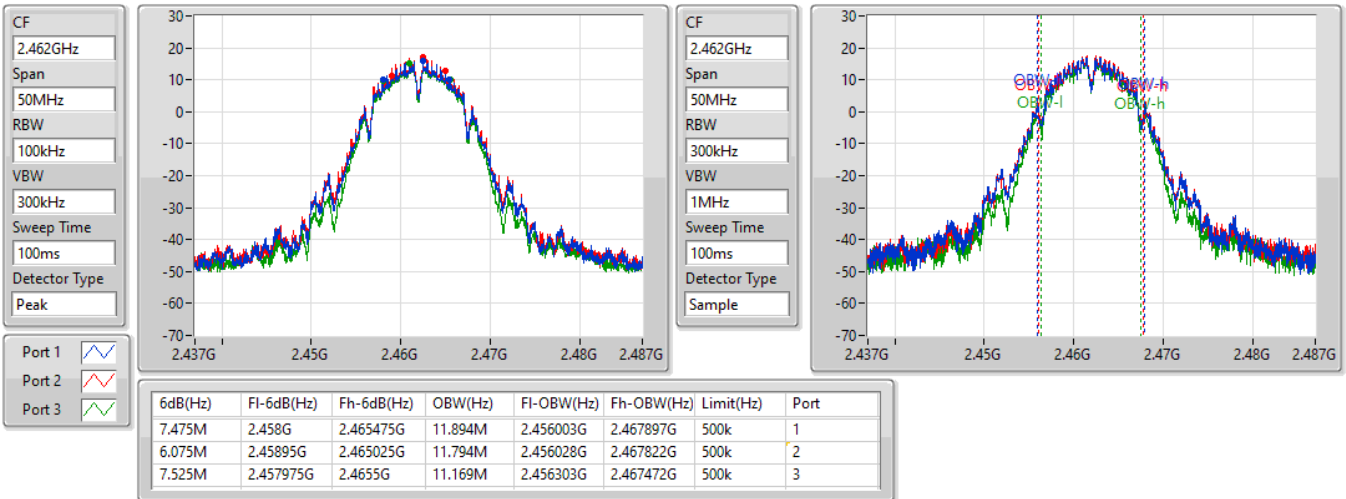
2437MHz

19/07/2021

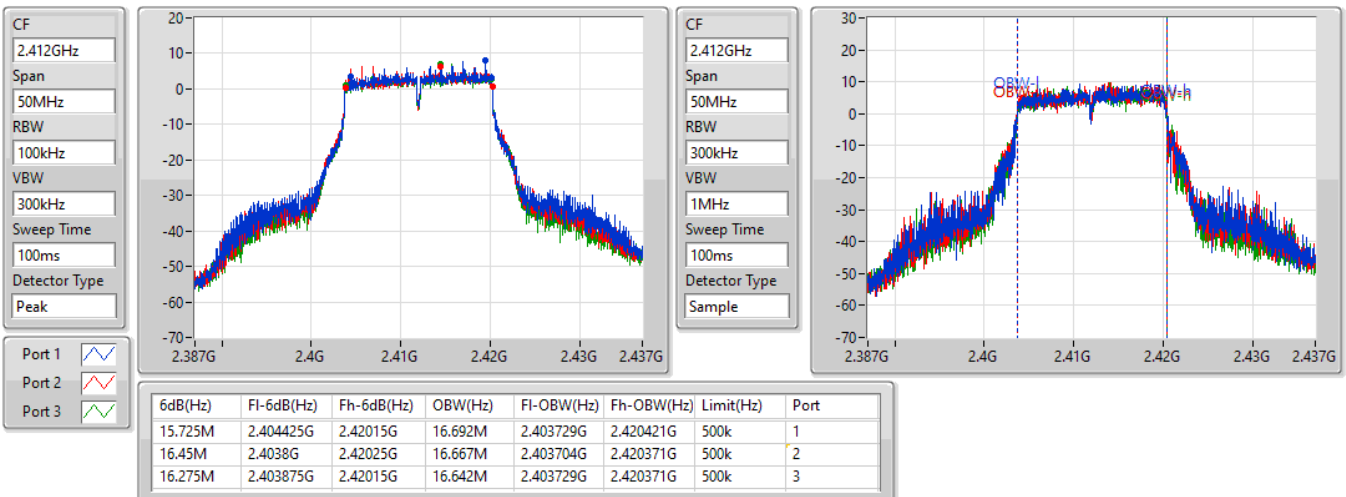


802.11b_Nss1,(1Mbps)_3TX
EBW
2462MHz

19/07/2021

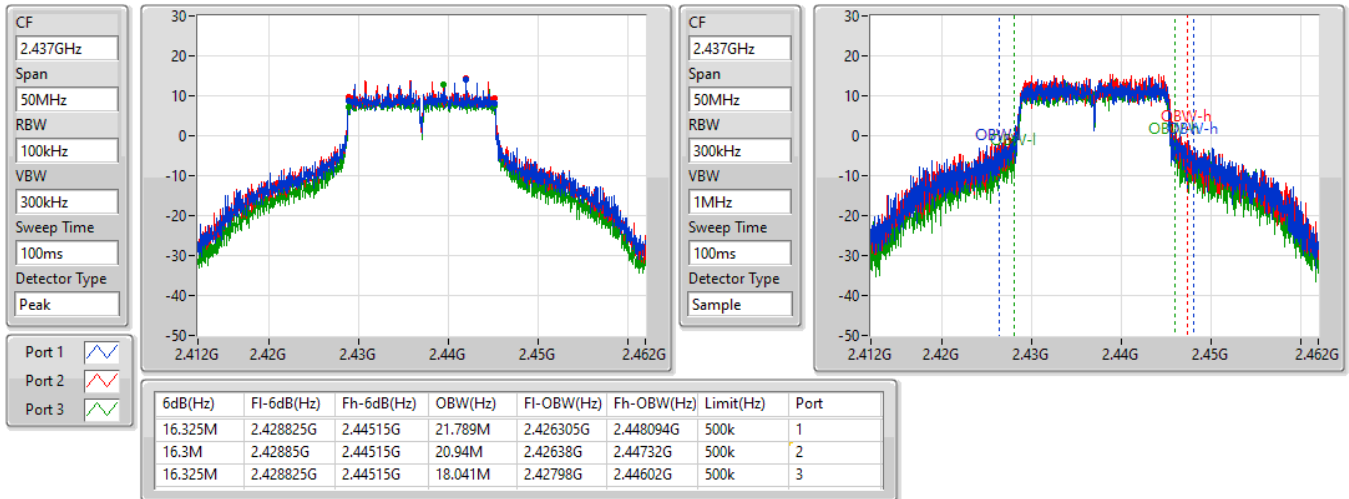

802.11g_Nss1,(6Mbps)_3TX
EBW
2412MHz

19/07/2021

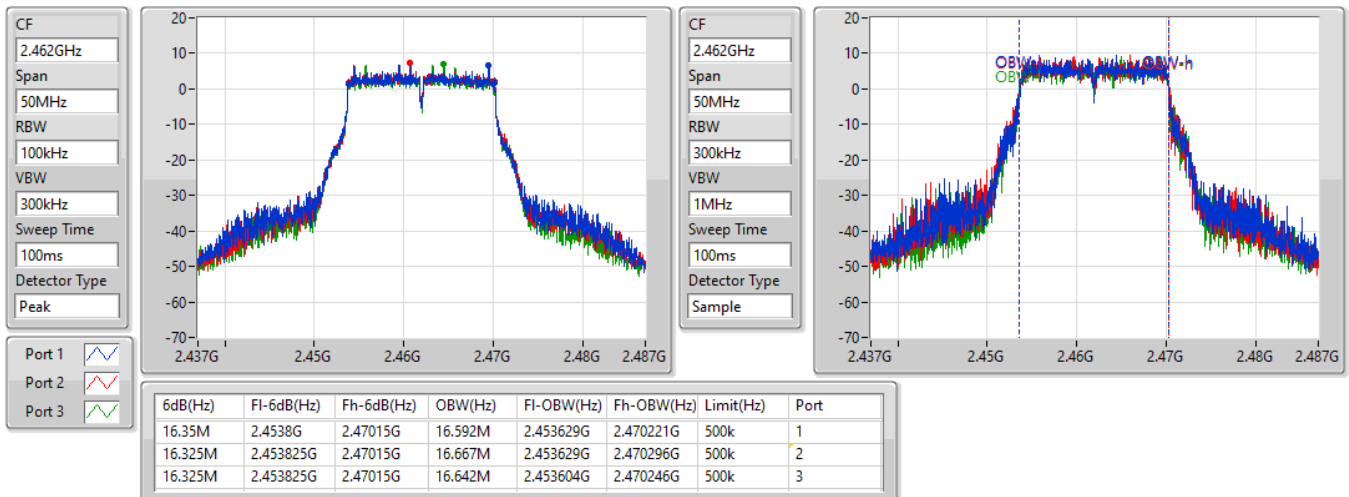


802.11g_Nss1,(6Mbps)_3TX
EBW
2437MHz

19/07/2021

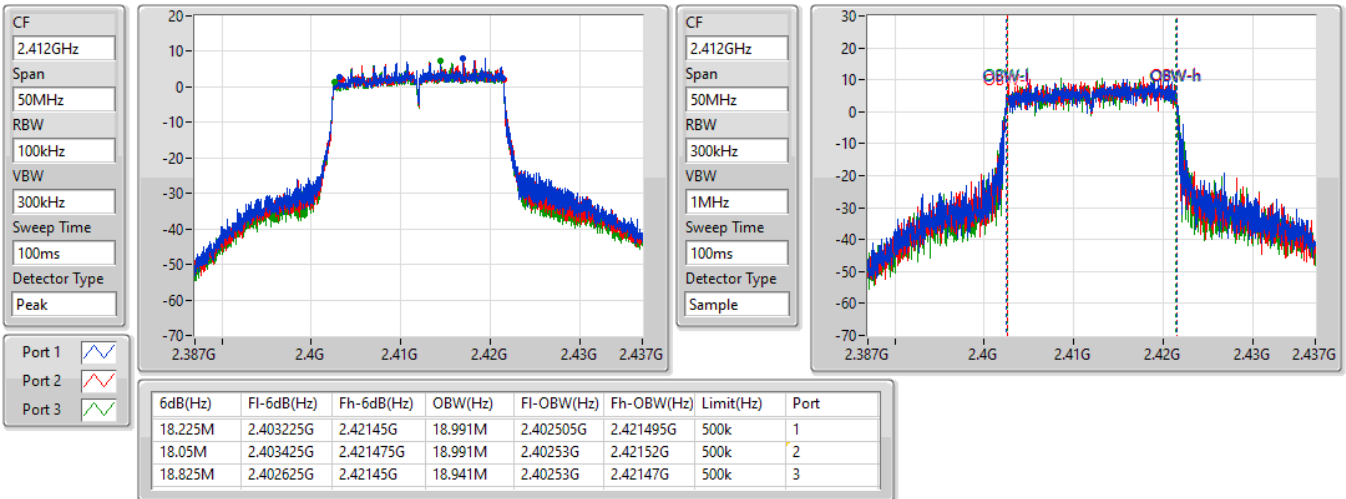

802.11g_Nss1,(6Mbps)_3TX
EBW
2462MHz

19/07/2021

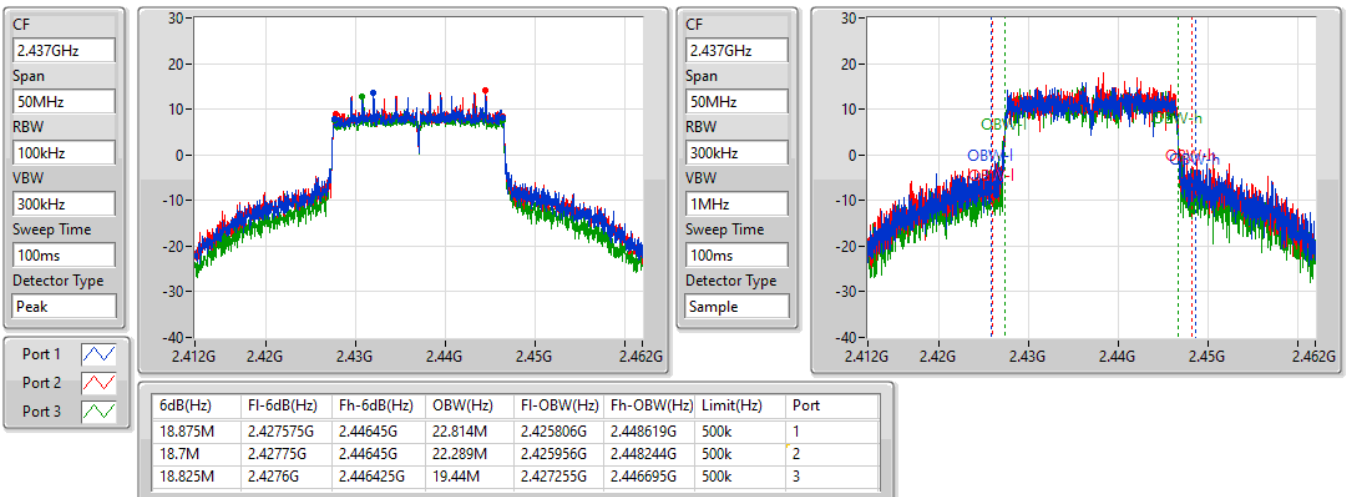


802.11ax HEW20_Nss1,(MCS0)_3TX
EBW
2412MHz

19/07/2021

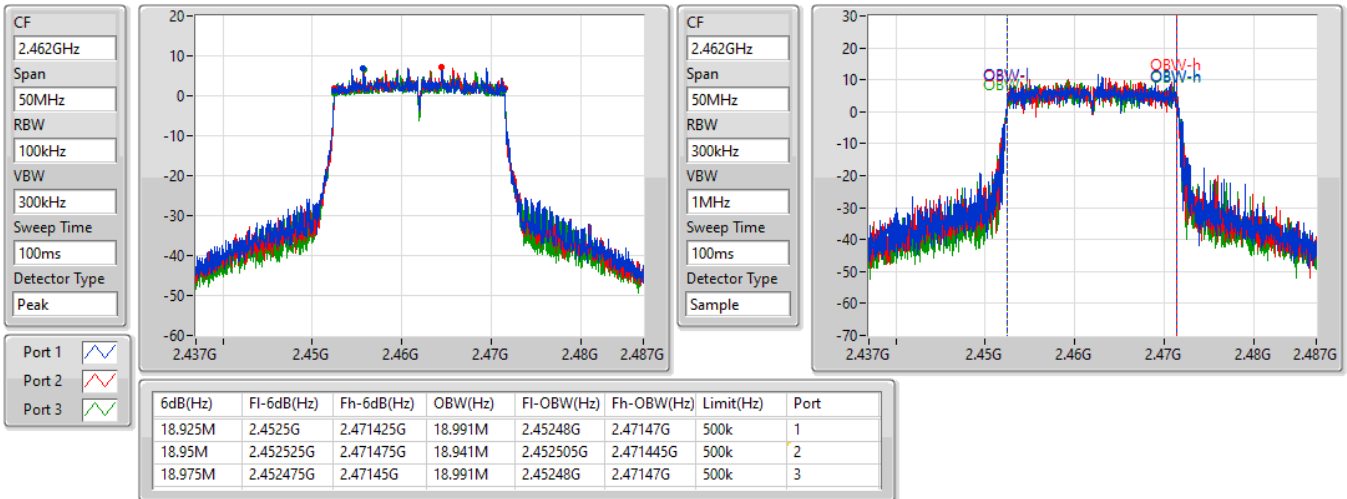

802.11ax HEW20_Nss1,(MCS0)_3TX
EBW
2437MHz

19/07/2021

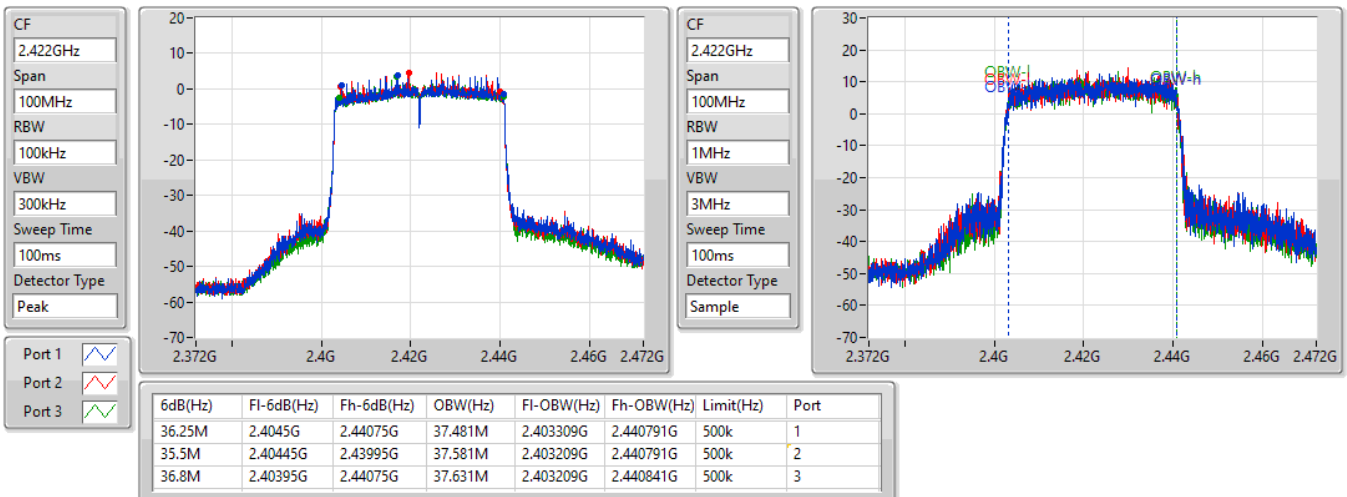


802.11ax HEW20_Nss1,(MCS0)_3TX
EBW
2462MHz

19/07/2021

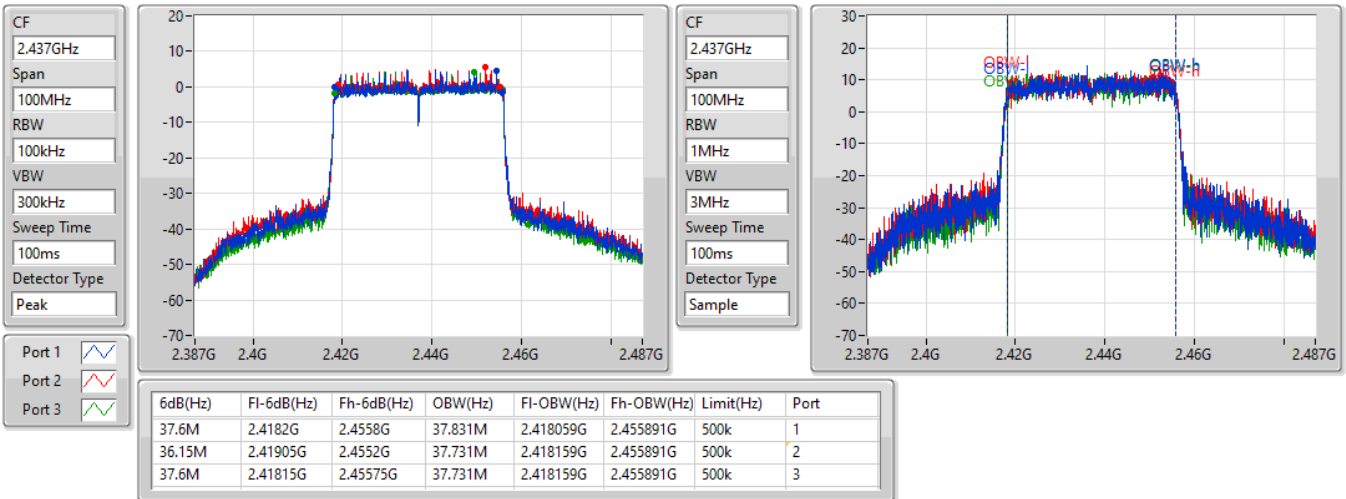

802.11ax HEW40_Nss1,(MCS0)_3TX
EBW
2422MHz

19/07/2021

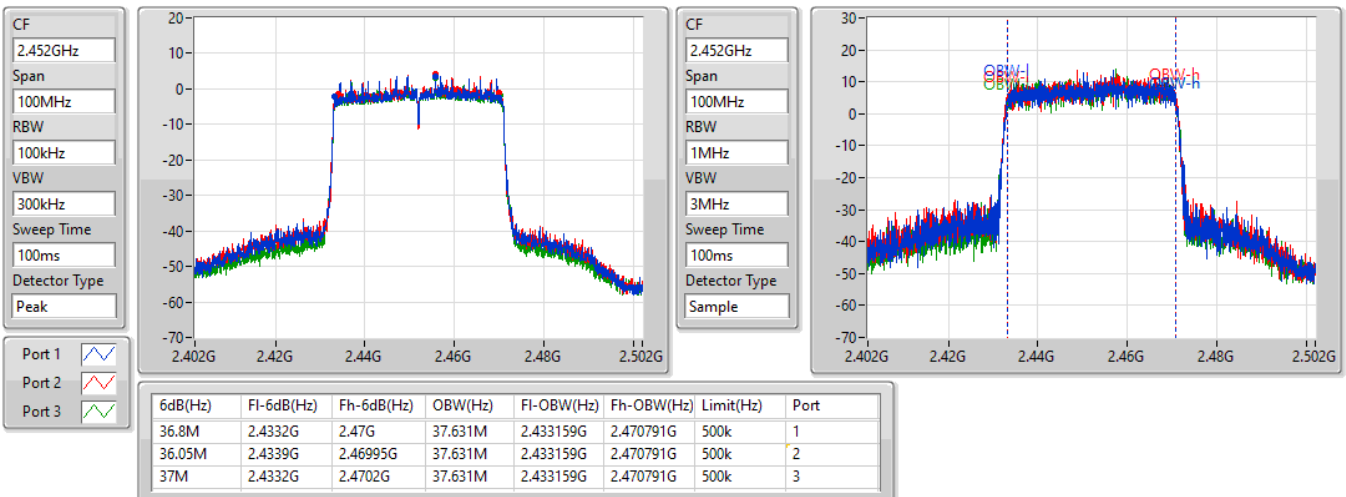


802.11ax HEW40_Nss1,(MCS0)_3TX
EBW
2437MHz

19/07/2021


802.11ax HEW40_Nss1,(MCS0)_3TX
EBW
2452MHz

19/07/2021





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_3TX	29.93	0.98401
802.11g_Nss1,(6Mbps)_3TX	29.90	0.97724
802.11ax HEW20_Nss1,(MCS0)_3TX	29.98	0.99541
802.11ax HEW40_Nss1,(MCS0)_3TX	24.57	0.28642

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	3.31	25.23	25.21	24.76	29.84	30.00
2437MHz	Pass	3.31	25.36	25.40	24.67	29.93	30.00
2462MHz	Pass	3.31	24.70	25.33	23.92	29.46	30.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.31	19.51	19.65	18.94	24.15	30.00
2417MHz	Pass	3.31	23.15	23.45	22.62	27.86	30.00
2437MHz	Pass	3.31	25.14	25.52	24.67	29.90	30.00
2457MHz	Pass	3.31	22.07	22.16	21.68	26.75	30.00
2462MHz	Pass	3.31	19.42	19.34	19.10	24.06	30.00
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.31	19.63	19.78	19.33	24.36	30.00
2417MHz	Pass	3.31	23.01	23.08	22.46	27.63	30.00
2437MHz	Pass	3.31	25.26	25.71	24.57	29.98	30.00
2457MHz	Pass	3.31	21.60	21.74	21.10	26.26	30.00
2462MHz	Pass	3.31	19.69	19.66	19.31	24.33	30.00
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	3.31	18.82	19.18	18.55	23.63	30.00
2437MHz	Pass	3.31	19.66	20.20	19.50	24.57	30.00
2452MHz	Pass	3.31	18.41	18.94	18.10	23.27	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
ax20-BF_Nss1,(MCS0)_3TX	29.98	0.99541
ax40-BF_Nss1,(MCS0)_3TX	24.57	0.28642

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
ax20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.79	19.63	19.78	19.33	24.36	30.00
2417MHz	Pass	3.79	23.01	23.08	22.46	27.63	30.00
2437MHz	Pass	3.79	25.26	25.71	24.57	29.98	30.00
2457MHz	Pass	3.79	21.6	21.74	21.1	26.26	30.00
2462MHz	Pass	3.79	19.69	19.66	19.31	24.33	30.00
ax40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	3.79	18.82	19.18	18.55	23.63	30.00
2437MHz	Pass	3.79	19.66	20.2	19.5	24.57	30.00
2452MHz	Pass	3.79	18.41	18.94	18.1	23.27	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_3TX	5.08
802.11g_Nss1,(6Mbps)_3TX	2.86
802.11ax HEW20_Nss1,(MCS0)_3TX	4.16
802.11ax HEW40_Nss1,(MCS0)_3TX	-5.20

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.79	1.51	1.61	2.03	5.08	8.00
2437MHz	Pass	3.79	1.78	3.19	1.11	5.08	8.00
2462MHz	Pass	3.79	1.27	2.54	0.37	4.75	8.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.79	-5.46	-6.78	-6.70	-1.82	8.00
2437MHz	Pass	3.79	-1.44	-1.19	-1.25	2.86	8.00
2462MHz	Pass	3.79	-5.95	-7.13	-7.38	-2.97	8.00
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	3.79	-6.89	-6.79	-7.07	-2.14	8.00
2437MHz	Pass	3.79	-0.69	0.07	-1.33	4.16	8.00
2462MHz	Pass	3.79	-7.49	-5.42	-6.71	-1.97	8.00
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	3.79	-10.93	-10.76	-10.74	-6.18	8.00
2437MHz	Pass	3.79	-9.95	-9.63	-10.37	-5.20	8.00
2452MHz	Pass	3.79	-10.88	-10.30	-11.79	-6.27	8.00

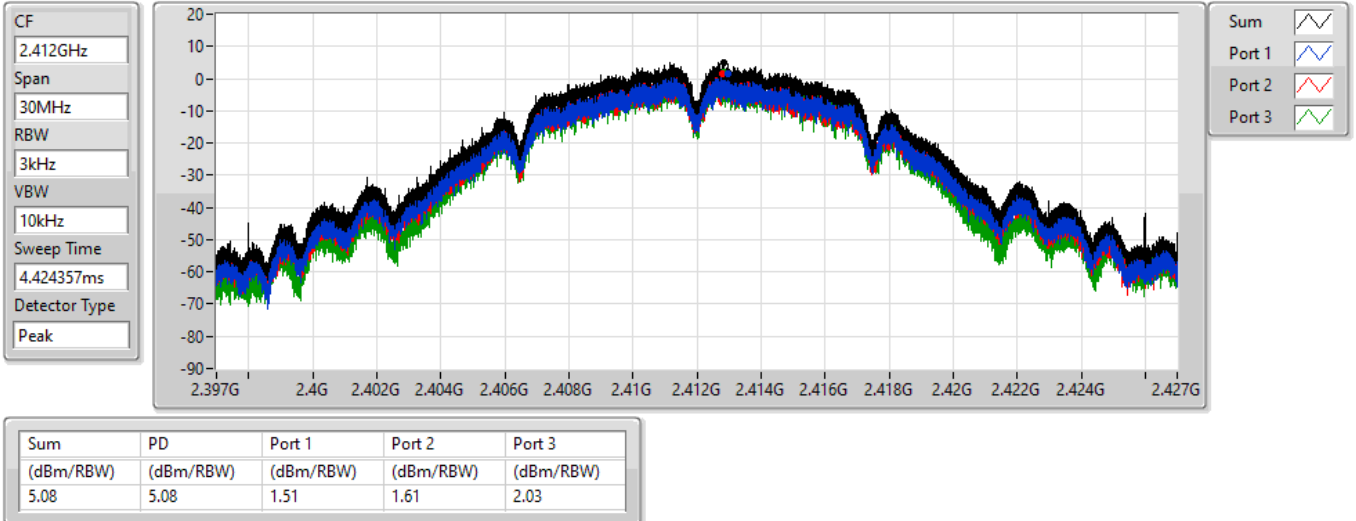
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_3TX

PSD

2412MHz

19/07/2021

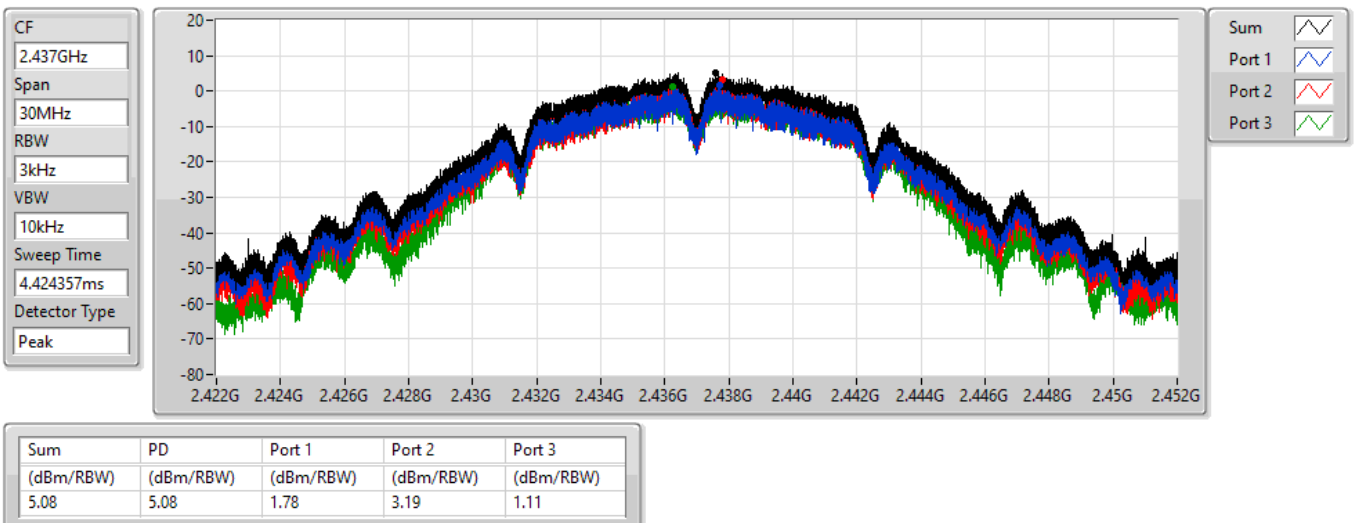


802.11b_Nss1,(1Mbps)_3TX

PSD

2437MHz

19/07/2021

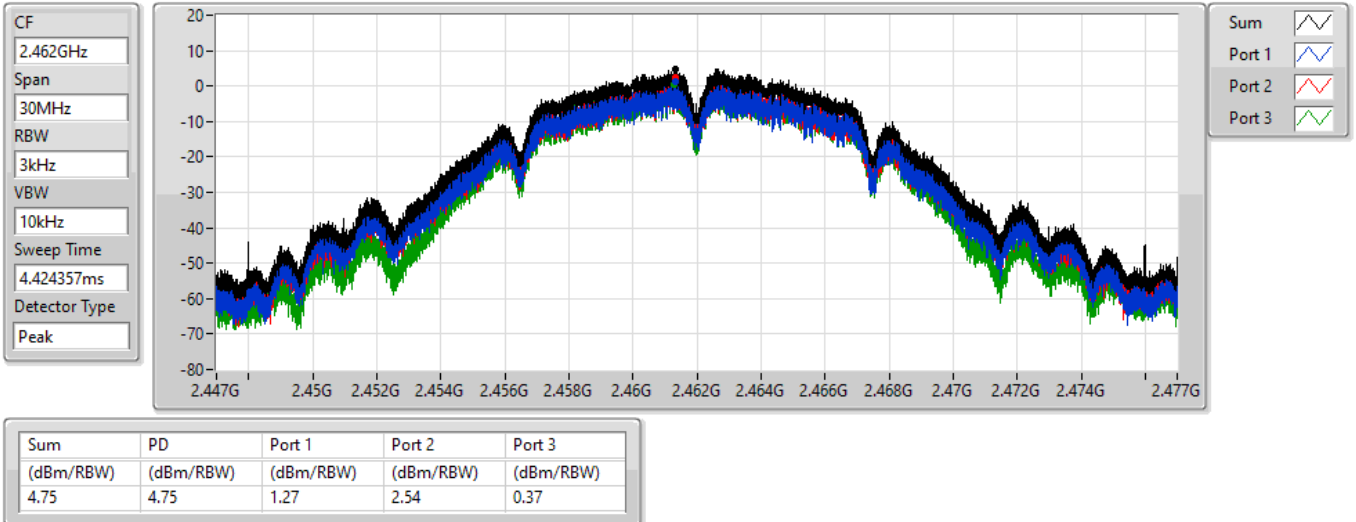


802.11b_Nss1,(1Mbps)_3TX

PSD

2462MHz

19/07/2021

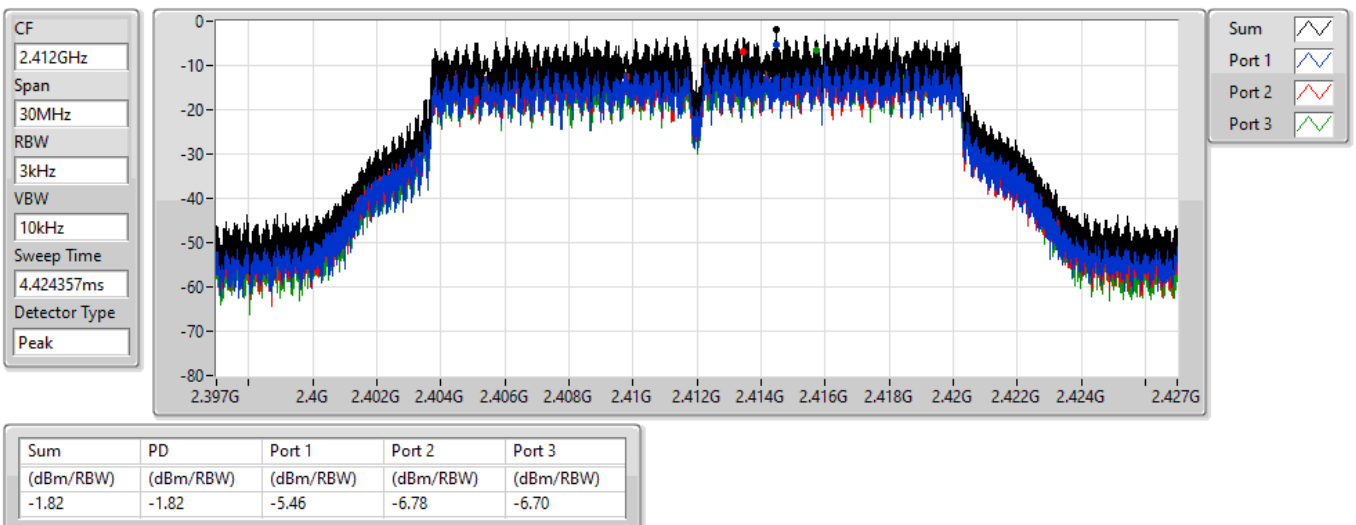


802.11g_Nss1,(6Mbps)_3TX

PSD

2412MHz

19/07/2021

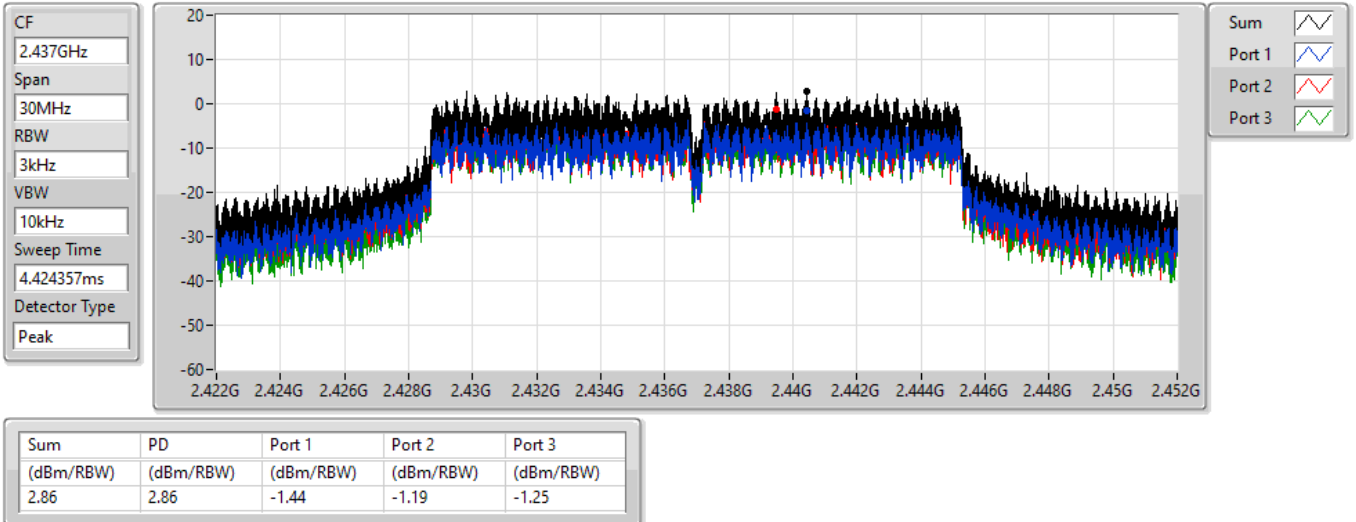


802.11g_Nss1,(6Mbps)_3TX

2437MHz

PSD

19/07/2021

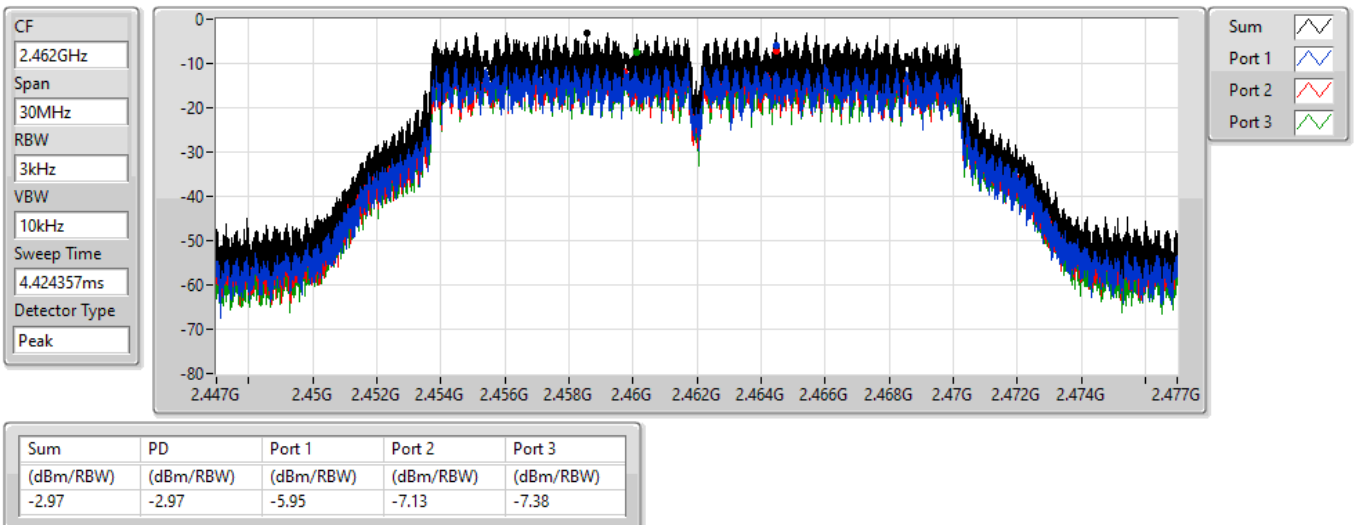


802.11g_Nss1,(6Mbps)_3TX

2462MHz

PSD

19/07/2021

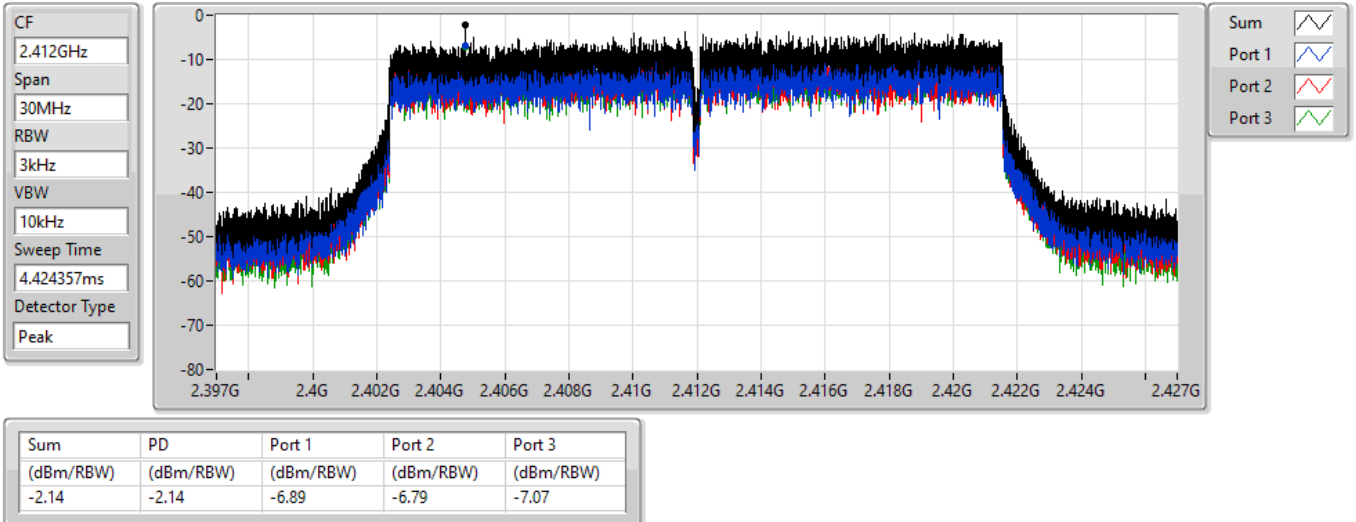


802.11ax HEW20_Nss1,(MCS0)_3TX

PSD

2412MHz

19/07/2021

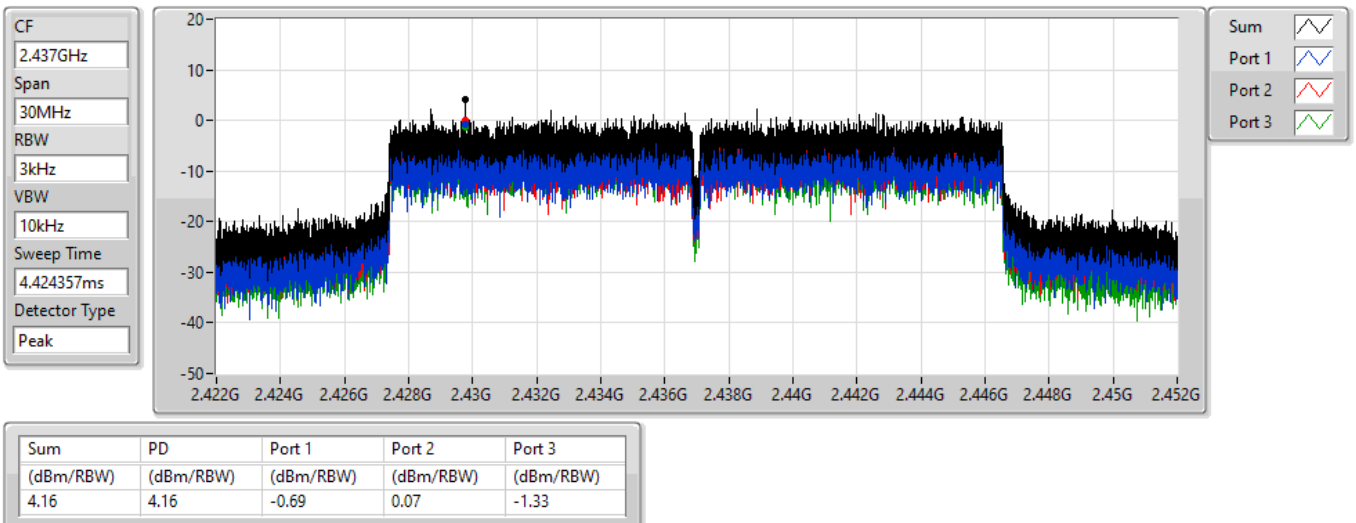


802.11ax HEW20_Nss1,(MCS0)_3TX

PSD

2437MHz

19/07/2021

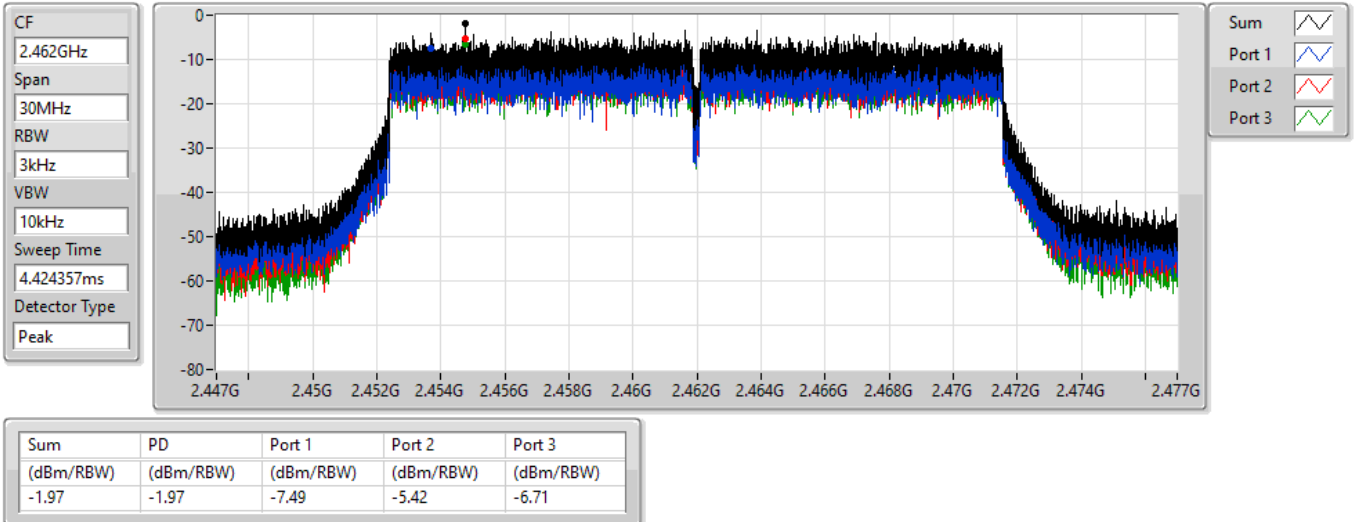


802.11ax HEW20_Nss1,(MCS0)_3TX

PSD

2462MHz

19/07/2021

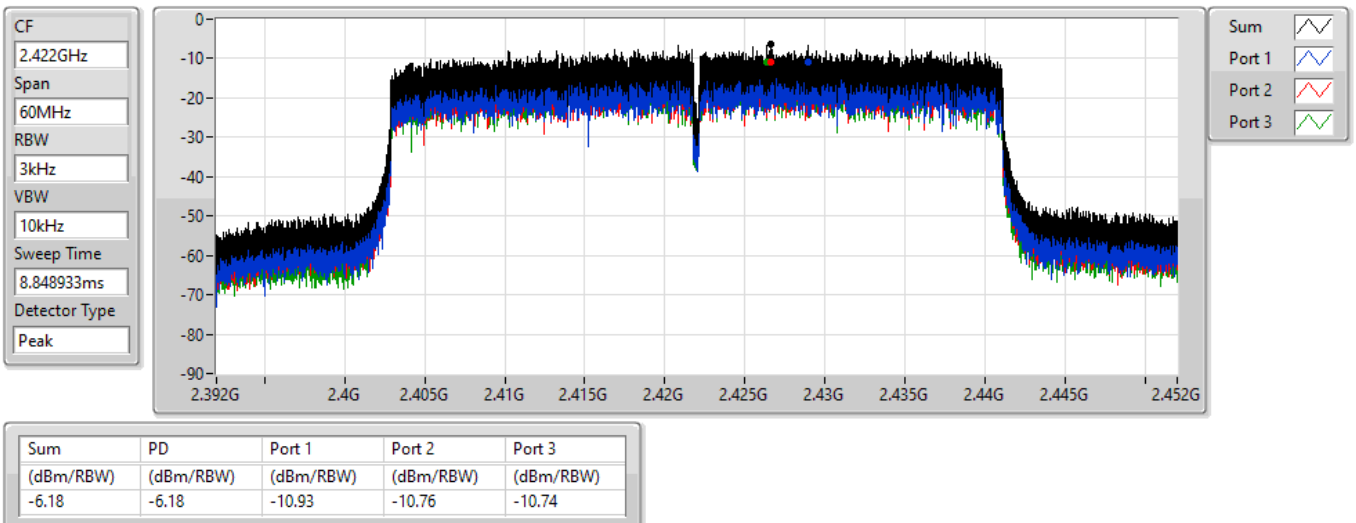


802.11ax HEW40_Nss1,(MCS0)_3TX

PSD

2422MHz

19/07/2021

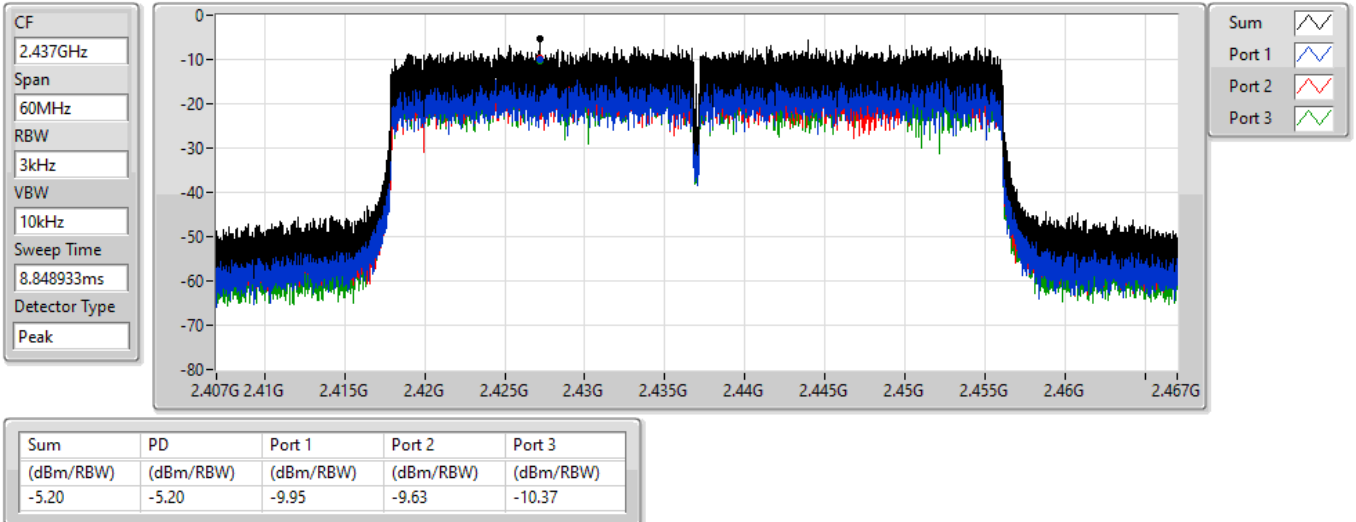


802.11ax HEW40_Nss1,(MCS0)_3TX

PSD

2437MHz

19/07/2021

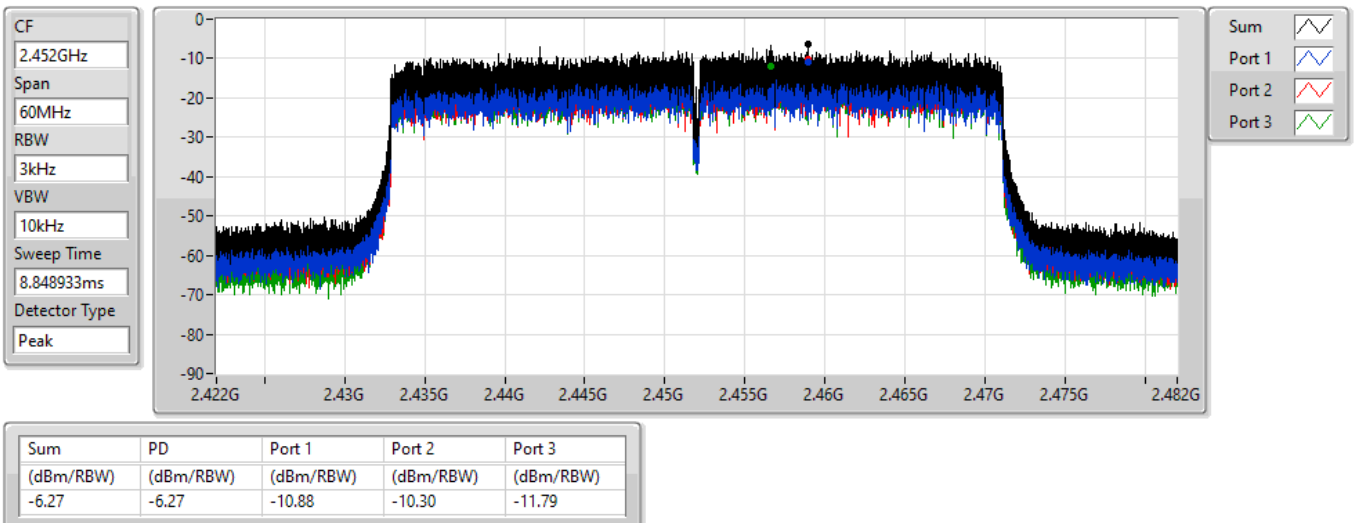


802.11ax HEW40_Nss1,(MCS0)_3TX

PSD

2452MHz

19/07/2021





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	2.43749G	17.32	-12.68	32.04M	-52.33	2.399G	-26.55	2.4G	-28.86	2.48616G	-47.86	17.65018G	-47.74	1
802.11g_Nss1,(6Mbps)_3TX	Pass	2.44196G	14.57	-15.43	31.75M	-52.17	2.39948G	-28.10	2.4G	-31.55	2.48364G	-49.33	14.91929G	-48.72	1
802.11ax HEW20_Nss1,(MCS0)_3TX	Pass	2.43198G	14.18	-15.82	49.81M	-52.30	2.39968G	-25.34	2.4G	-27.76	2.48516G	-49.00	16.23697G	-47.90	2
802.11ax HEW40_Nss1,(MCS0)_3TX	Pass	2.45198G	5.52	-24.48	1.98938G	-53.52	2.39956G	-35.25	2.4G	-38.00	2.48406G	-42.56	16.59473G	-48.29	2

Result

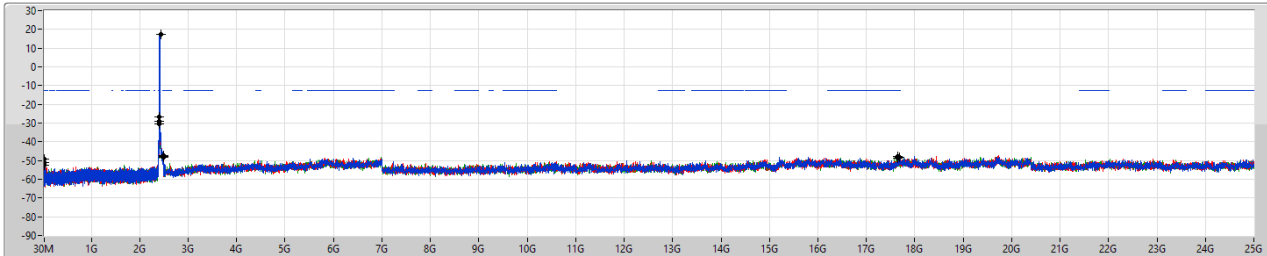
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43749G	17.32	-12.68	32.04M	-52.33	2.399G	-26.55	2.4G	-28.86	2.48616G	-47.86	17.65018G	-47.74	1
2412MHz	Pass	2.43749G	17.32	-12.68	31.75M	-51.31	2.39998G	-29.15	2.4G	-28.98	2.48606G	-47.50	17.64457G	-48.90	2
2412MHz	Pass	2.43749G	17.32	-12.68	32.04M	-49.31	2.39996G	-30.51	2.4G	-30.61	2.48702G	-48.28	17.68952G	-48.11	3
2437MHz	Pass	2.43749G	17.32	-12.68	31.75M	-49.85	2.3994G	-47.15	2.4G	-48.50	2.48578G	-47.02	16.34655G	-48.32	1
2437MHz	Pass	2.43749G	17.32	-12.68	32.04M	-50.72	2.3985G	-45.70	2.4835G	-48.44	2.48606G	-45.56	5.76854G	-47.93	2
2437MHz	Pass	2.43749G	17.32	-12.68	31.75M	-50.56	2.39752G	-47.26	2.4835G	-47.58	2.4851G	-47.60	17.65299G	-48.55	3
2462MHz	Pass	2.43749G	17.32	-12.68	31.75M	-51.97	2.3996G	-49.23	2.4835G	-44.05	2.4835G	-43.79	15.22834G	-48.17	1
2462MHz	Pass	2.43749G	17.32	-12.68	31.75M	-50.47	2.3997G	-49.97	2.4835G	-44.43	2.48486G	-42.35	16.24259G	-48.59	2
2462MHz	Pass	2.43749G	17.32	-12.68	2.12613G	-51.37	2.39664G	-49.02	2.4835G	-46.97	2.48484G	-44.97	5.88374G	-46.81	3
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	14.57	-15.43	31.75M	-52.17	2.39948G	-28.10	2.4G	-31.55	2.48364G	-49.33	14.91929G	-48.72	1
2412MHz	Pass	2.44196G	14.57	-15.43	2.13283G	-53.04	2.39984G	-28.35	2.4G	-33.01	2.48672G	-49.20	16.20607G	-48.46	2
2412MHz	Pass	2.44196G	14.57	-15.43	49.81M	-52.95	2.39962G	-31.21	2.4G	-33.74	2.49012G	-49.23	16.95903G	-48.50	3
2437MHz	Pass	2.44196G	14.57	-15.43	2.3G	-53.30	2.39852G	-31.84	2.4G	-37.33	2.48476G	-40.33	16.37464G	-48.23	1
2437MHz	Pass	2.44196G	14.57	-15.43	31.75M	-50.98	2.39978G	-33.09	2.4G	-38.54	2.4865G	-41.66	16.88879G	-47.76	2
2437MHz	Pass	2.44196G	14.57	-15.43	31.75M	-52.02	2.39852G	-37.85	2.4G	-41.88	2.48418G	-42.50	5.87531G	-48.40	3
2462MHz	Pass	2.44196G	14.57	-15.43	2.18234G	-52.68	2.3974G	-50.27	2.4835G	-38.82	2.48354G	-36.40	6.94294G	-47.34	1
2462MHz	Pass	2.44196G	14.57	-15.43	49.81M	-52.95	2.39944G	-50.66	2.4835G	-42.99	2.48358G	-39.23	16.20607G	-47.66	2
2462MHz	Pass	2.44196G	14.57	-15.43	31.75M	-52.71	2.39658G	-51.21	2.4835G	-43.24	2.4839G	-41.73	23.42103G	-47.65	3
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	14.18	-15.82	31.75M	-51.30	2.39944G	-25.76	2.4G	-27.54	2.48556G	-50.17	6.62546G	-48.20	1
2412MHz	Pass	2.43198G	14.18	-15.82	49.81M	-52.30	2.39968G	-25.34	2.4G	-27.76	2.48516G	-49.00	16.23697G	-47.90	2
2412MHz	Pass	2.43198G	14.18	-15.82	1.6176G	-53.54	2.39944G	-26.58	2.4G	-29.58	2.48486G	-50.70	5.94274G	-48.03	3
2437MHz	Pass	2.43198G	14.18	-15.82	49.81M	-53.15	2.39984G	-32.14	2.4G	-32.74	2.4847G	-39.58	15.2171G	-48.46	1
2437MHz	Pass	2.43198G	14.18	-15.82	49.81M	-52.37	2.39984G	-32.69	2.4G	-33.49	2.486G	-40.54	24.86795G	-47.62	2
2437MHz	Pass	2.43198G	14.18	-15.82	31.75M	-51.02	2.39818G	-35.63	2.4G	-39.83	2.487G	-42.39	6.76875G	-48.30	3
2462MHz	Pass	2.43198G	14.18	-15.82	32.04M	-50.37	2.39924G	-50.53	2.4835G	-38.87	2.48498G	-37.42	6.93451G	-48.36	1
2462MHz	Pass	2.43198G	14.18	-15.82	33.2M	-52.94	2.39678G	-50.22	2.4835G	-39.47	2.48388G	-38.49	17.67828G	-48.16	2
2462MHz	Pass	2.43198G	14.18	-15.82	32.04M	-51.46	2.3986G	-49.94	2.4835G	-41.93	2.48362G	-39.27	16.39431G	-48.33	3
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.45198G	5.52	-24.48	32M	-51.35	2.39908G	-36.63	2.4G	-37.73	2.48662G	-48.55	17.64924G	-47.87	1
2422MHz	Pass	2.45198G	5.52	-24.48	32M	-49.87	2.39852G	-36.62	2.4G	-38.10	2.48522G	-49.19	5.85606G	-48.47	2
2422MHz	Pass	2.45198G	5.52	-24.48	31.72M	-51.22	2.39872G	-38.33	2.4G	-40.67	2.48922G	-49.13	5.94861G	-48.30	3
2437MHz	Pass	2.45198G	5.52	-24.48	33.15M	-51.76	2.39948G	-38.03	2.4G	-40.94	2.48414G	-43.14	5.82801G	-47.57	1
2437MHz	Pass	2.45198G	5.52	-24.48	1.98938G	-53.52	2.39956G	-35.25	2.4G	-38.00	2.48406G	-42.56	16.59473G	-48.29	2
2437MHz	Pass	2.45198G	5.52	-24.48	32M	-51.05	2.39952G	-36.92	2.4G	-42.26	2.4841G	-44.72	5.89252G	-48.72	3
2452MHz	Pass	2.45198G	5.52	-24.48	49.75M	-51.50	2.3986G	-49.06	2.4835G	-44.52	2.4845G	-39.30	17.65766G	-48.33	1
2452MHz	Pass	2.45198G	5.52	-24.48	1.6579G	-53.10	2.4G	-47.16	2.4835G	-45.08	2.48506G	-40.35	16.44608G	-47.99	2
2452MHz	Pass	2.45198G	5.52	-24.48	918.23M	-53.00	2.39952G	-50.49	2.4835G	-46.64	2.48362G	-41.95	5.85045G	-48.06	3

802.11b_Nss1,(1Mbps)_3TX

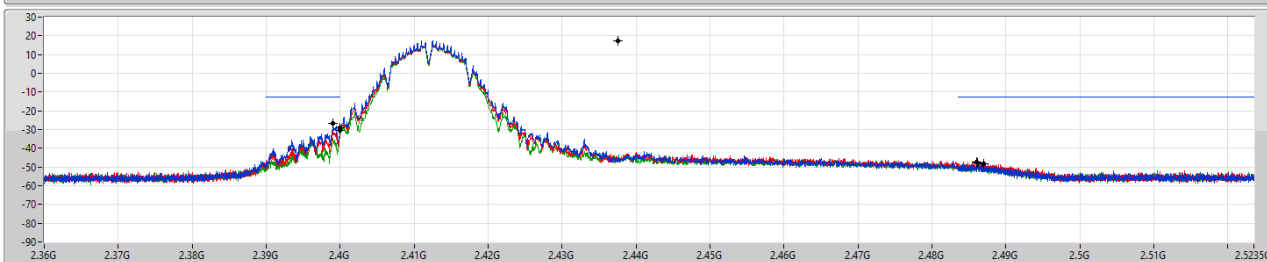
2412MHz

CSENdB

19/07/2021



Port 1
Port 2
Port 3



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

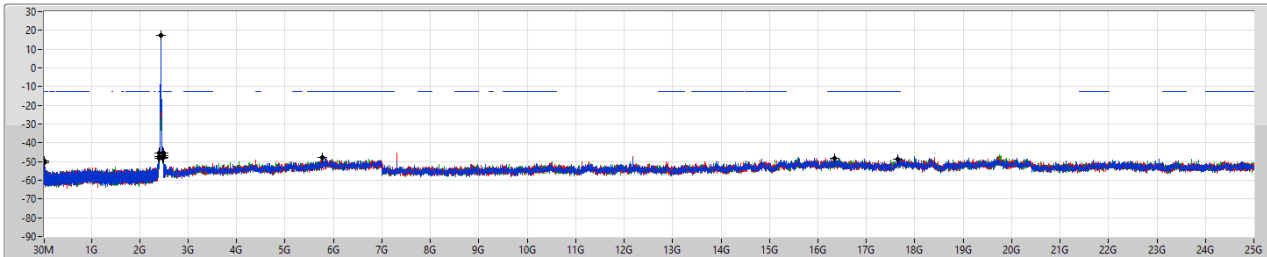
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43749G	17.32	-12.68	32.04M	-52.33	2.399G	-26.55	2.4G	-28.86	2.48616G	-47.86	17.65018G	-47.74	1
2.43749G	17.32	-12.68	31.75M	-51.31	2.39998G	-29.15	2.4G	-28.98	2.48606G	-47.50	17.64457G	-48.90	2
2.43749G	17.32	-12.68	32.04M	-49.31	2.39996G	-30.51	2.4G	-30.61	2.48702G	-48.28	17.68952G	-48.11	3

802.11b_Nss1,(1Mbps)_3TX

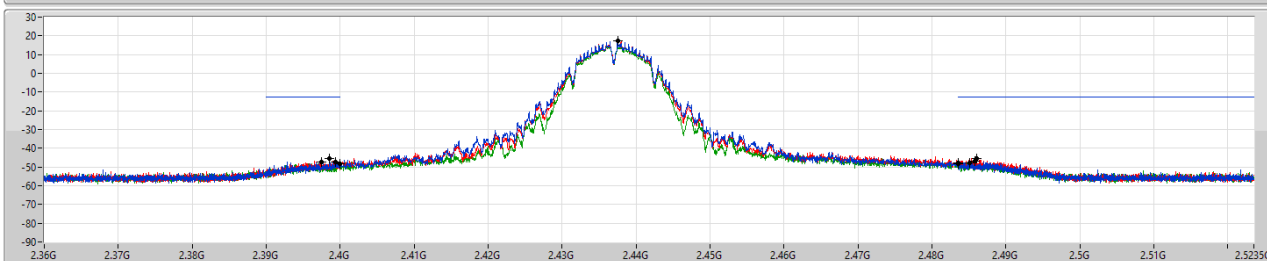
2437MHz

CSENdB

19/07/2021



Port 1
Port 2
Port 3



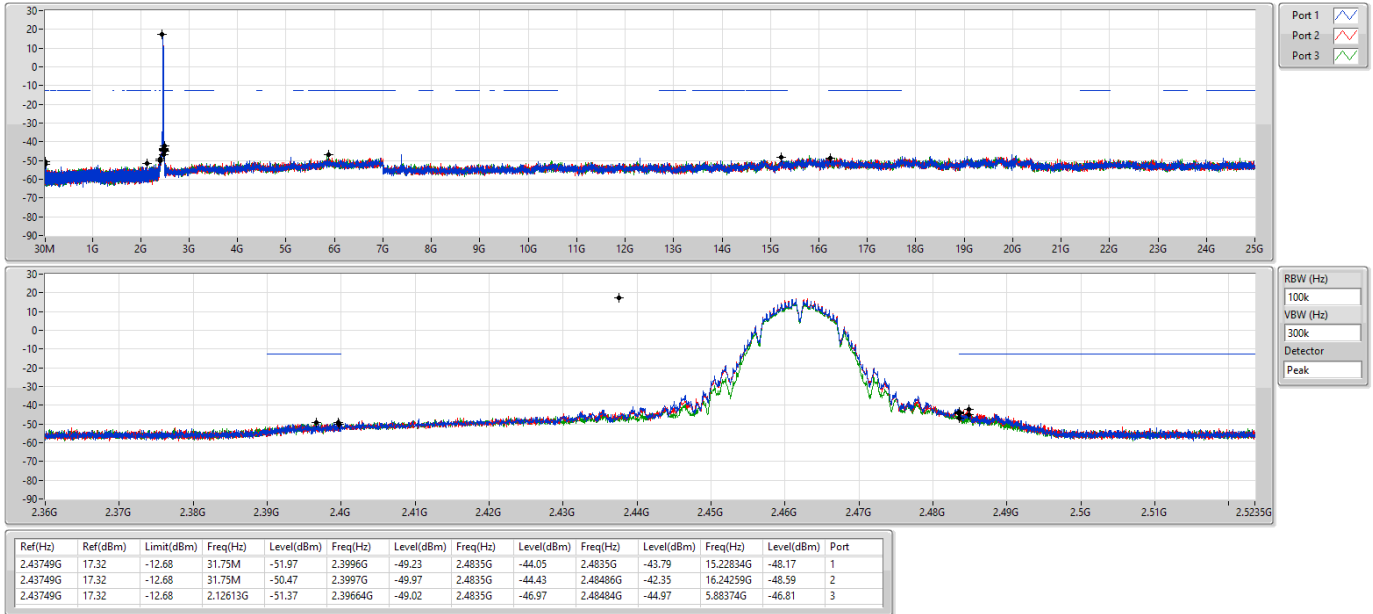
RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.43749G	17.32	-12.68	31.75M	-49.85	2.3994G	-47.15	2.4G	-48.50	2.48578G	-47.02	16.34655G	-48.32	1
2.43749G	17.32	-12.68	32.04M	-50.72	2.3985G	-45.70	2.4835G	-48.44	2.48606G	-45.56	5.78854G	-47.93	2
2.43749G	17.32	-12.68	31.75M	-50.56	2.39752G	-47.26	2.4835G	-47.58	2.4851G	-47.60	17.65299G	-48.55	3

802.11b_Nss1,(1Mbps)_3TX

CSENdB

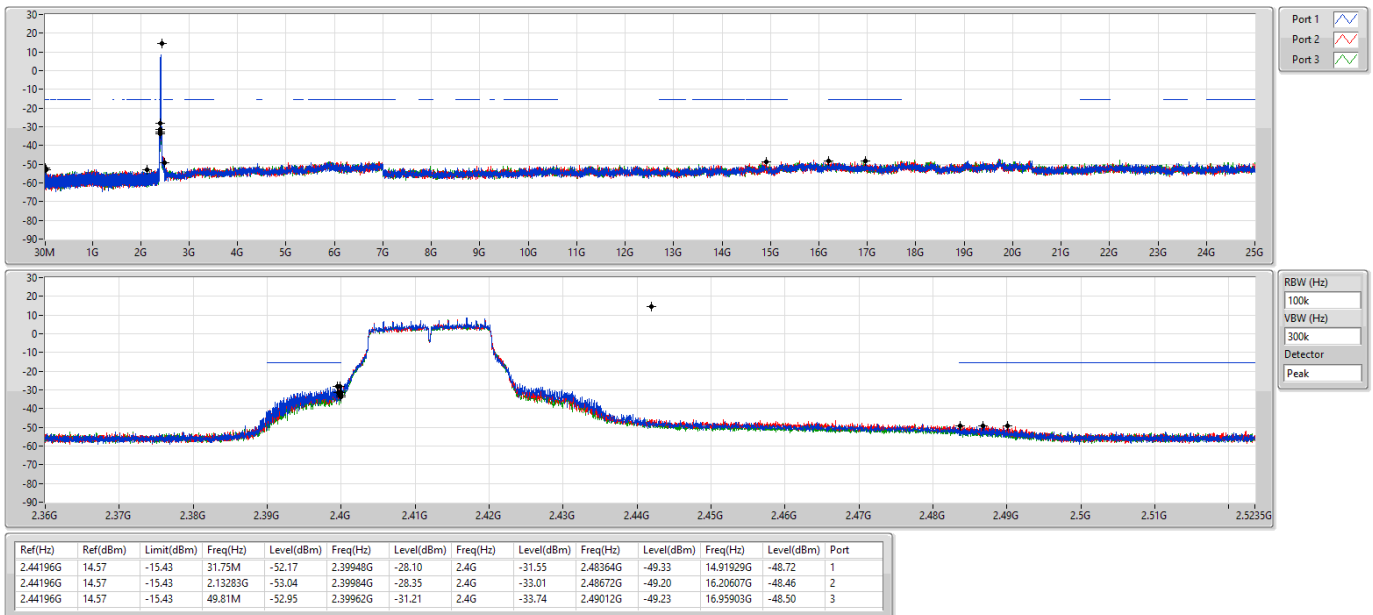
2462MHz



802.11g_Nss1,(6Mbps)_3TX

CSENdB

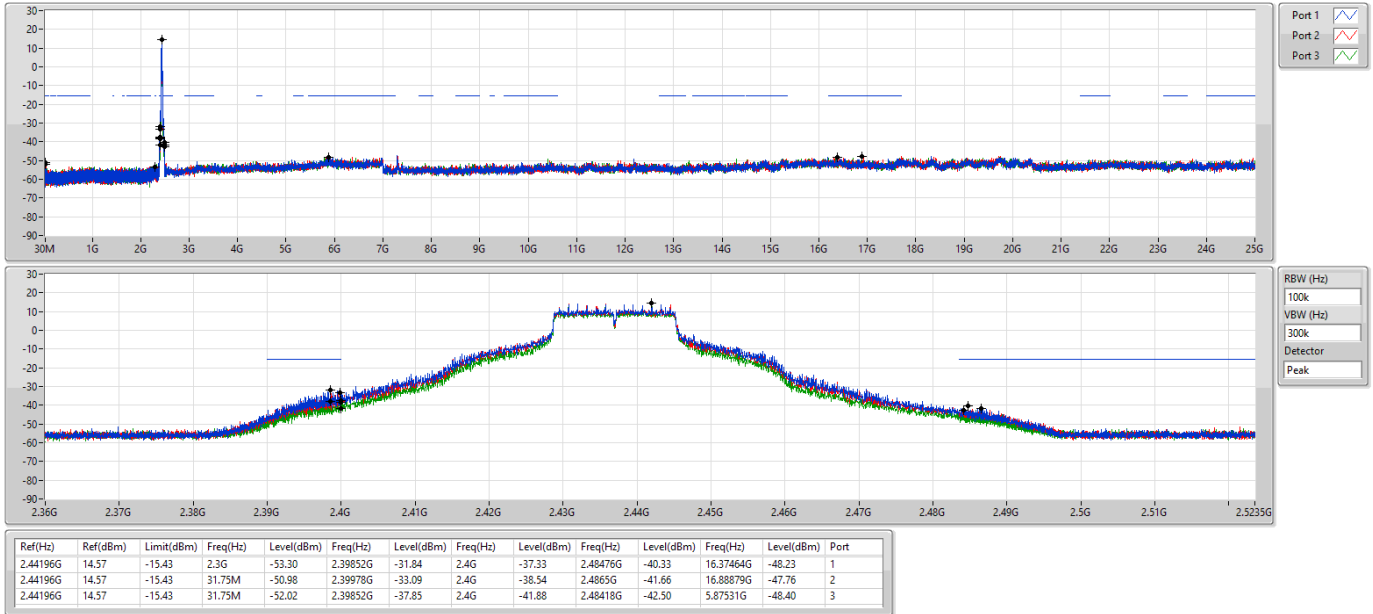
2412MHz



802.11g_Nss1,(6Mbps)_3TX

CSENdB

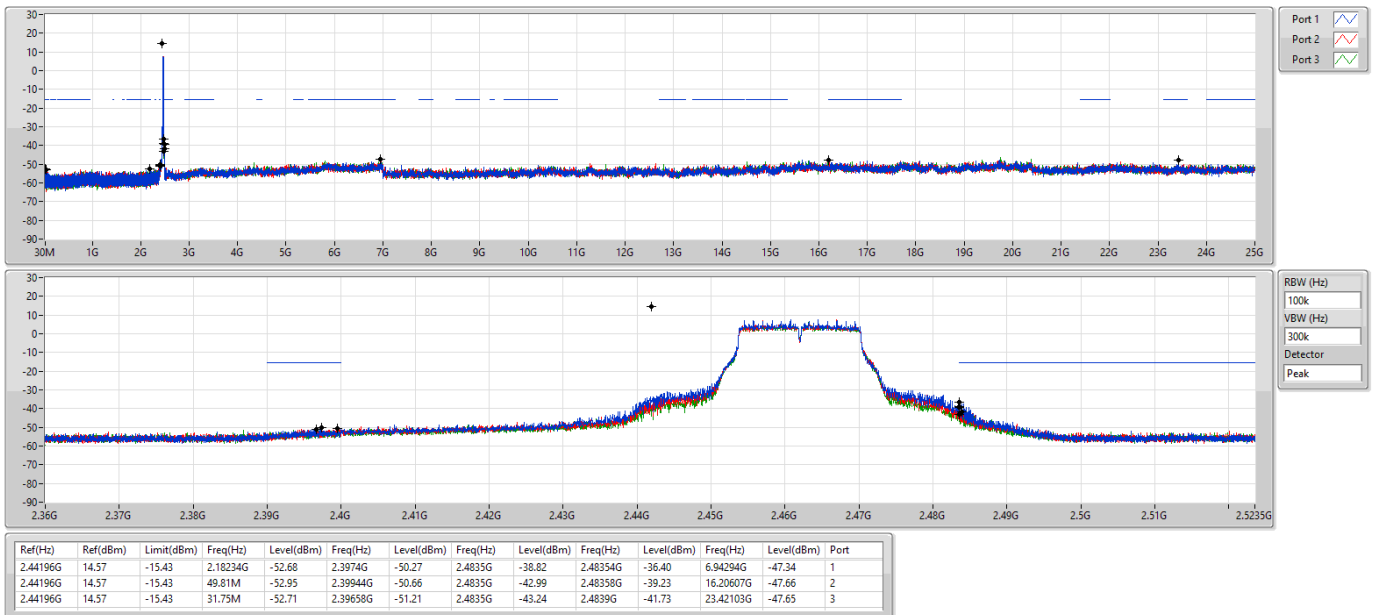
2437MHz



802.11g_Nss1,(6Mbps)_3TX

CSENdB

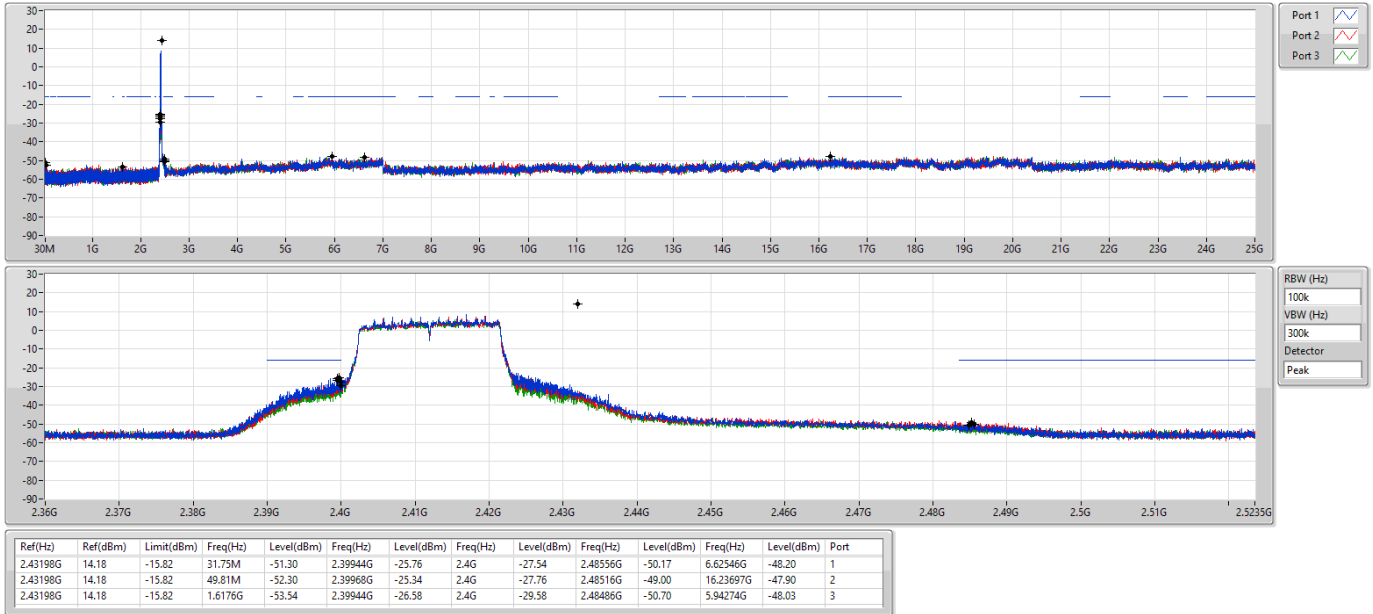
2462MHz



802.11ax HEW20_Nss1,(MCS0)_3TX

CSENdB

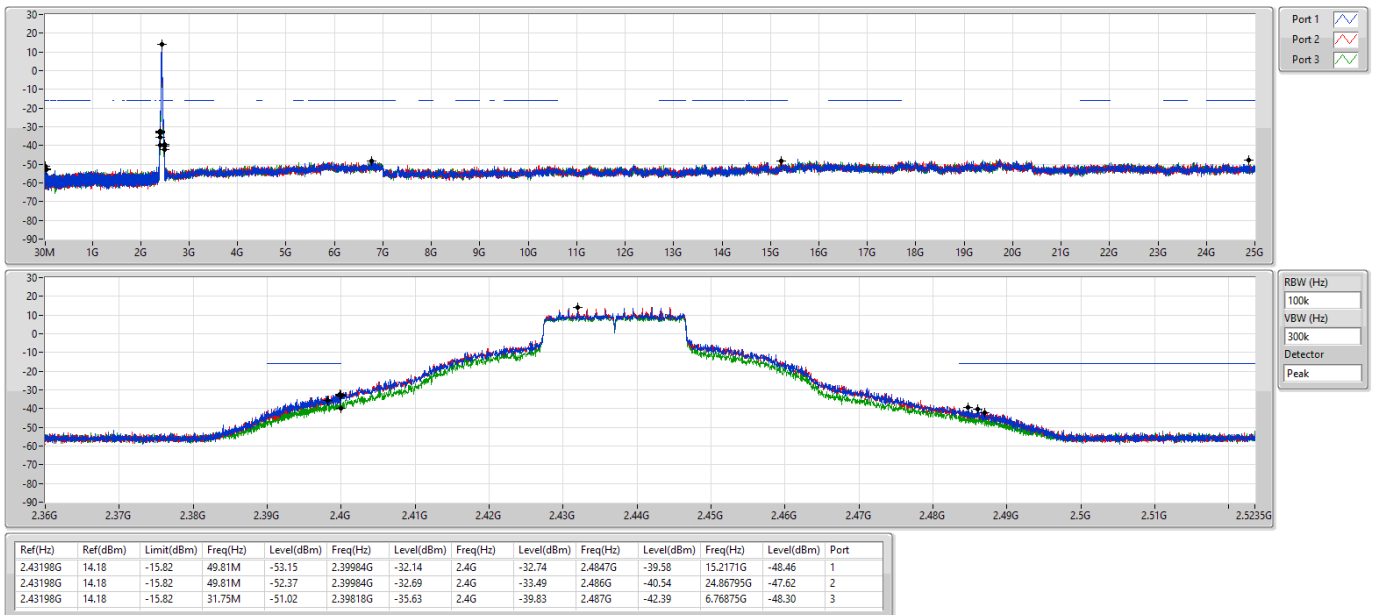
2412MHz



802.11ax HEW20_Nss1,(MCS0)_3TX

CSENdB

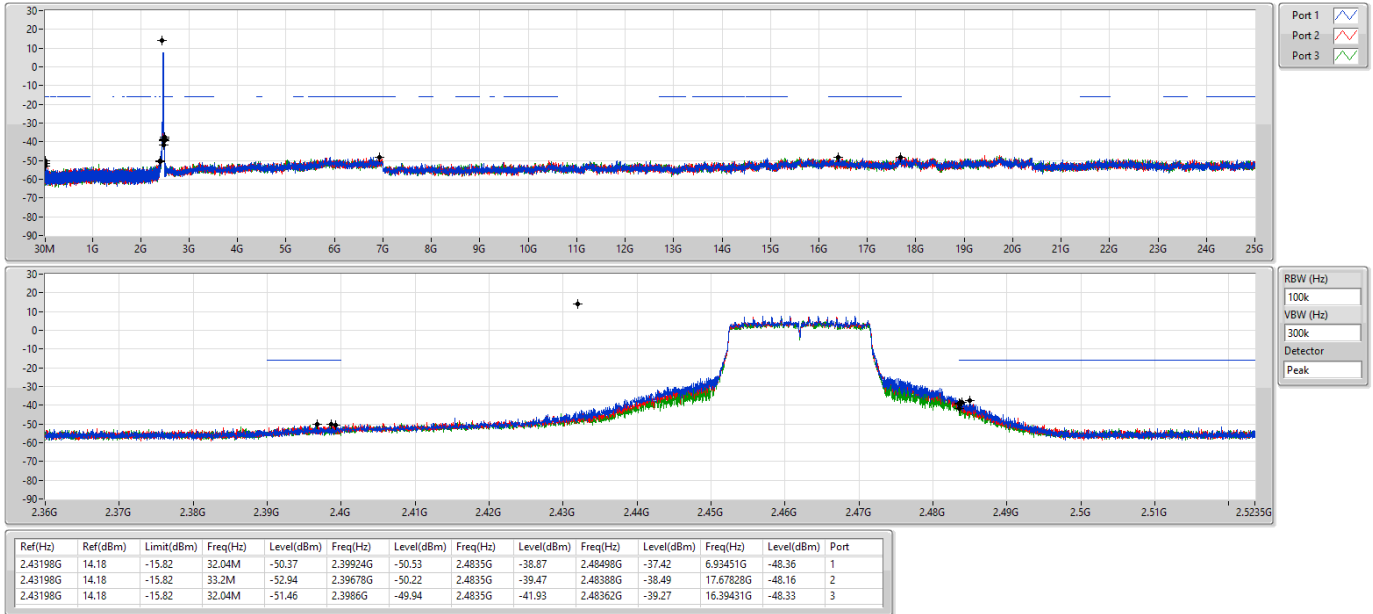
2437MHz



802.11ax HEW20_Nss1,(MCS0)_3TX

CSENdB

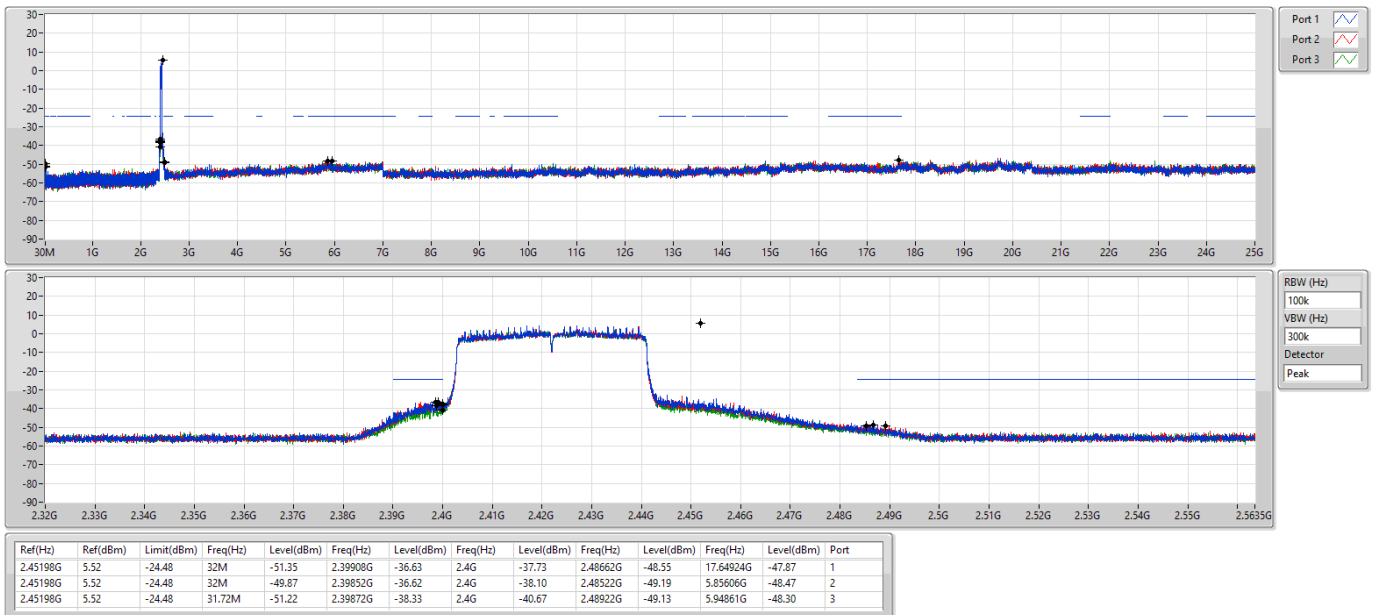
2462MHz



802.11ax HEW40_Nss1,(MCS0)_3TX

CSENdB

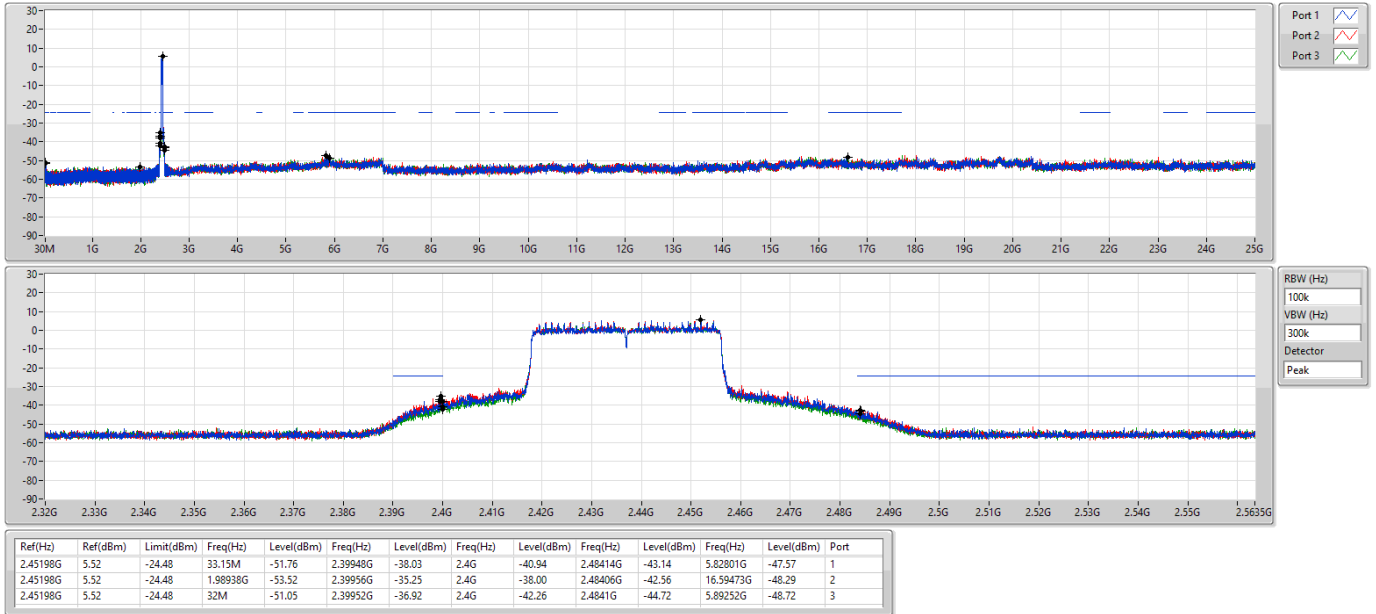
2422MHz



802.11ax HEW40_Nss1,(MCS0)_3TX

CSENdB

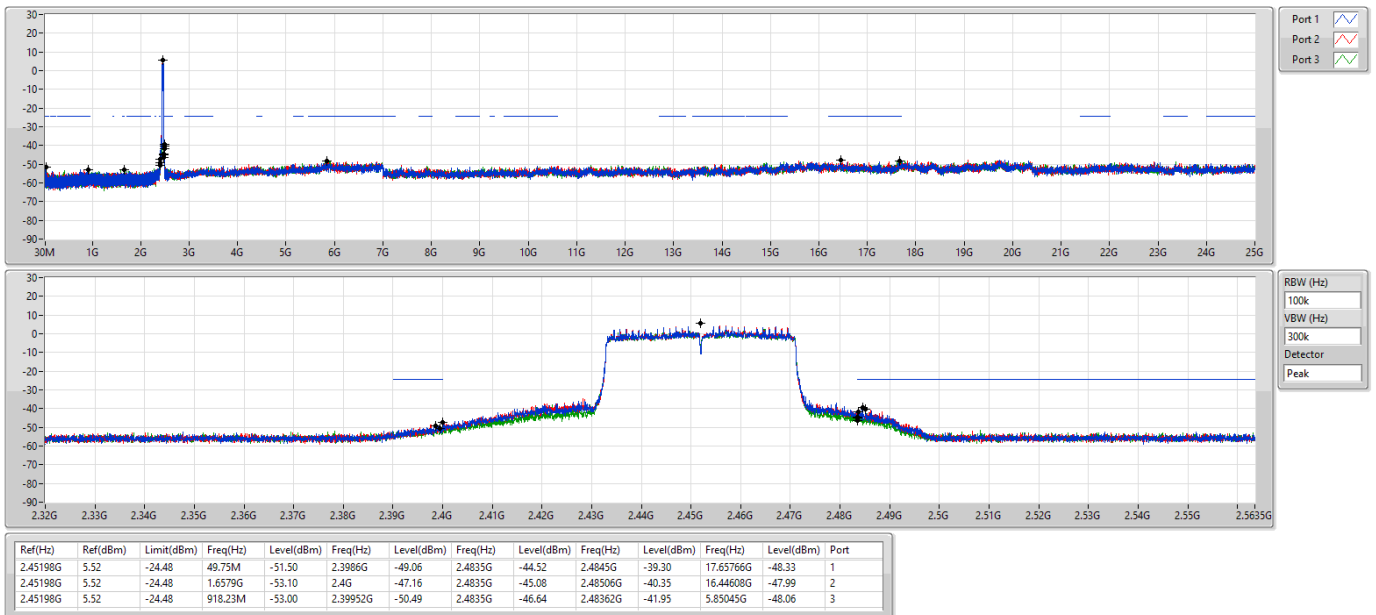
2437MHz



802.11ax HEW40_Nss1,(MCS0)_3TX

CSENdB

2452MHz





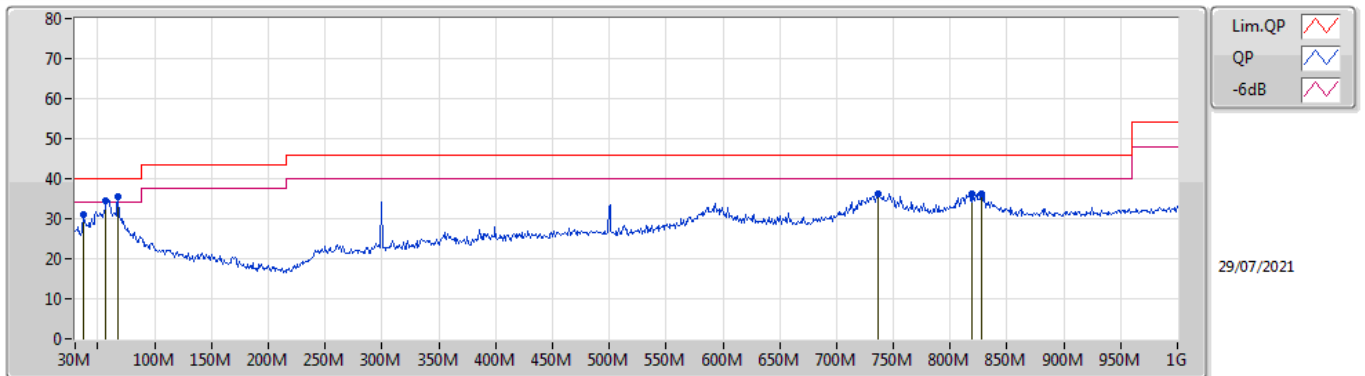
Radiated Emissions below 1GHz

Appendix F.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	822.49M	42.94	46.00	-3.06	Horizontal

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	36.79M	31.17	40.00	-8.83	-10.55	3	Vertical	132	1.00	-	41.72	20.53	0.54	31.62
PK	57.16M	34.41	40.00	-5.59	-18.71	3	Vertical	138	1.00	-	53.12	12.37	0.74	31.82
PK	67.83M	35.58	40.00	-4.42	-19.03	3	Vertical	237	1.50	"Worst"	54.61	12.05	0.80	31.88
PK	736.16M	36.10	46.00	-9.90	-4.07	3	Vertical	228	1.00	-	40.17	25.05	3.57	32.69
PK	819.58M	36.36	46.00	-9.64	-3.37	3	Vertical	105	1.00	-	39.73	25.45	3.84	32.66
PK	827.34M	36.30	46.00	-9.70	-3.22	3	Vertical	105	1.00	-	39.52	25.58	3.85	32.65

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	299.66M	39.17	46.00	-6.83	-10.93	3	Horizontal	120	1.00	-	50.10	18.95	2.20	32.08
PK	752.65M	37.45	46.00	-8.55	-3.87	3	Horizontal	209	1.00	-	41.32	25.23	3.61	32.71
PK	801.15M	40.61	46.00	-5.39	-3.31	3	Horizontal	176	1.00	-	43.92	25.58	3.80	32.69
PK	817.64M	42.32	46.00	-3.68	-3.37	3	Horizontal	157	1.00	-	45.69	25.46	3.84	32.67
PK	822.49M	42.94	46.00	-3.06	-3.32	3	Horizontal	163	1.00	"Worst"	46.26	25.50	3.84	32.66
PK	846.74M	38.81	46.00	-7.19	-2.92	3	Horizontal	137	1.00	-	41.73	25.81	3.89	32.62

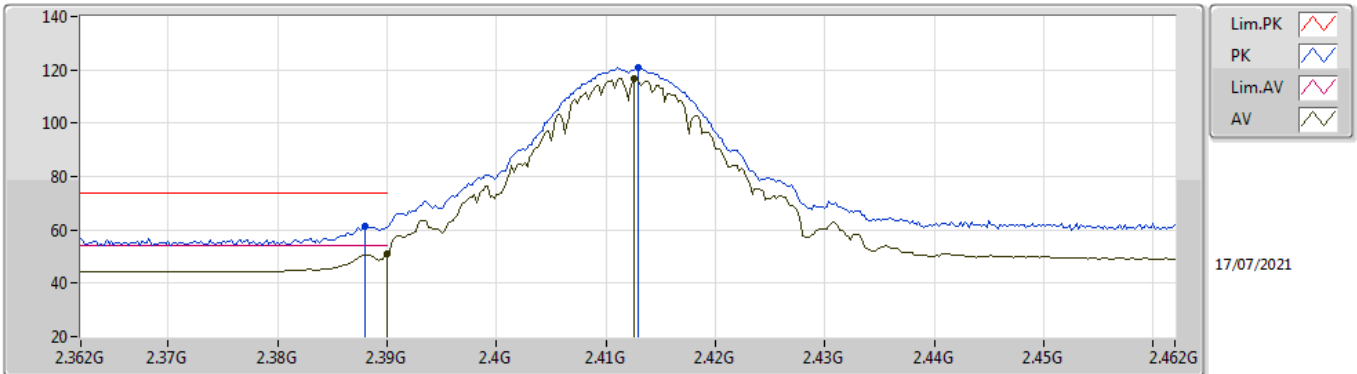


Summary

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	35	2.18	-

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

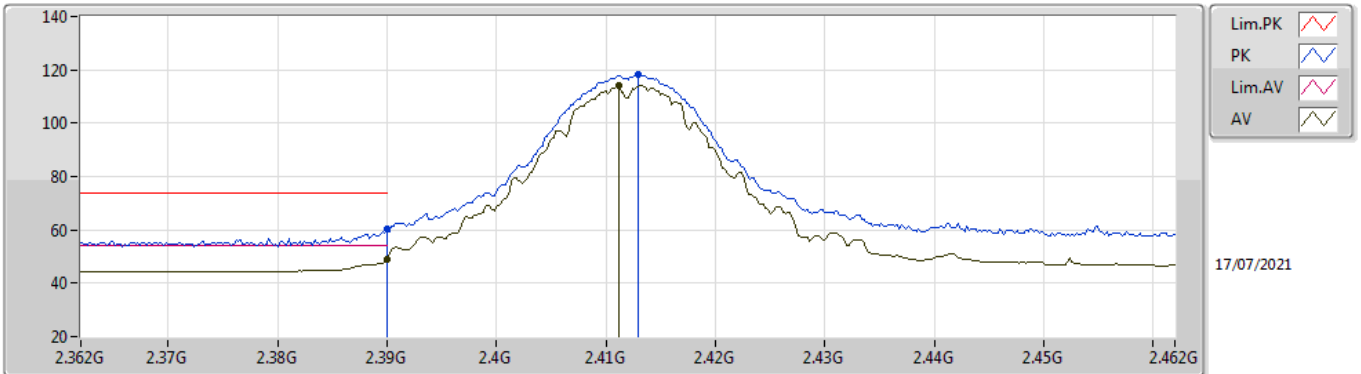


EUT Y_3TX
Setting 105
03-D-K-5

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	2.388G	61.23	74.00	-12.77	29.42	3	Vertical	49	1.57	-	28.32	3.49	-
AV	2.39G	51.01	54.00	-2.99	19.20	3	Vertical	49	1.57	-	28.32	3.49	-
PK	2.413G	120.77	Inf	-Inf	88.93	3	Vertical	49	1.57	-	28.33	3.51	-
AV	2.4126G	116.89	Inf	-Inf	85.05	3	Vertical	49	1.57	-	28.33	3.51	-

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

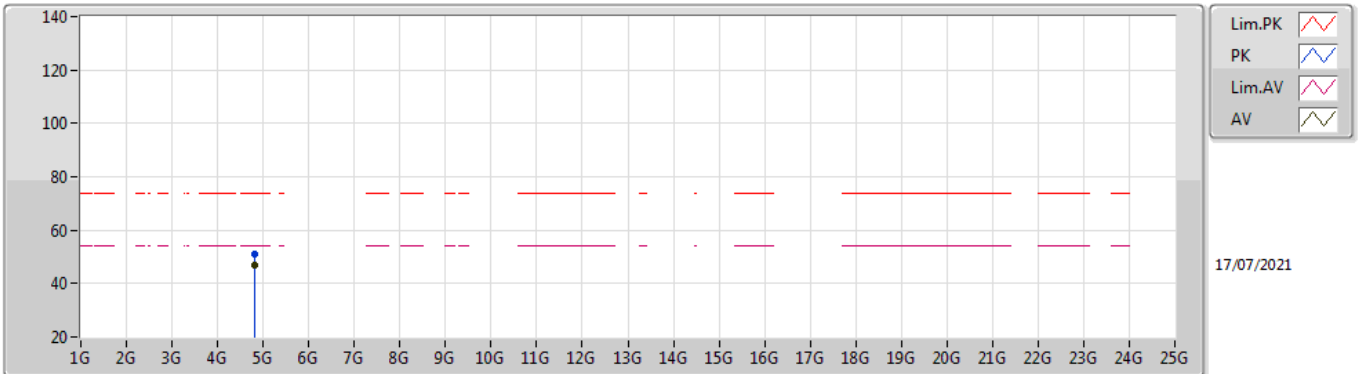


EUT_V_3TX
Setting 105
03-D-K-5

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	60.27	74.00	-13.73	28.46	3	Horizontal	156	2.10	-	28.32	3.49	-	
AV	2.39G	49.02	54.00	-4.98	17.21	3	Horizontal	156	2.10	-	28.32	3.49	-	
PK	2.413G	118.50	Inf	-Inf	86.66	3	Horizontal	156	2.10	-	28.33	3.51	-	
AV	2.4112G	114.11	Inf	-Inf	82.28	3	Horizontal	156	2.10	-	28.32	3.51	-	

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

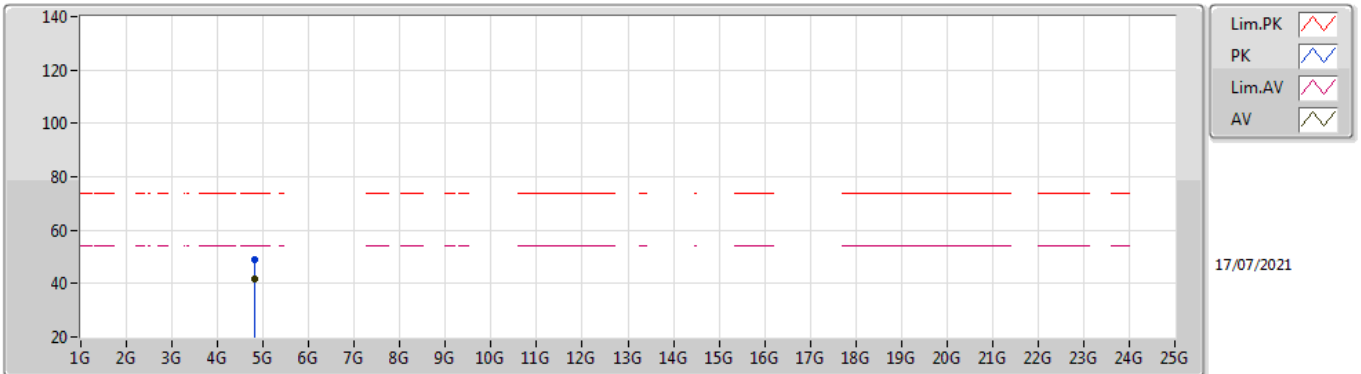


EUT Y_3TX
Setting 105
03-D-K-5

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	4.82392G	51.21	74.00	-22.79	46.99	3	Vertical	150	1.00	-	33.40	6.24	35.42
AV	4.82394G	46.77	54.00	-7.23	42.55	3	Vertical	150	1.00	-	33.40	6.24	35.42

802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

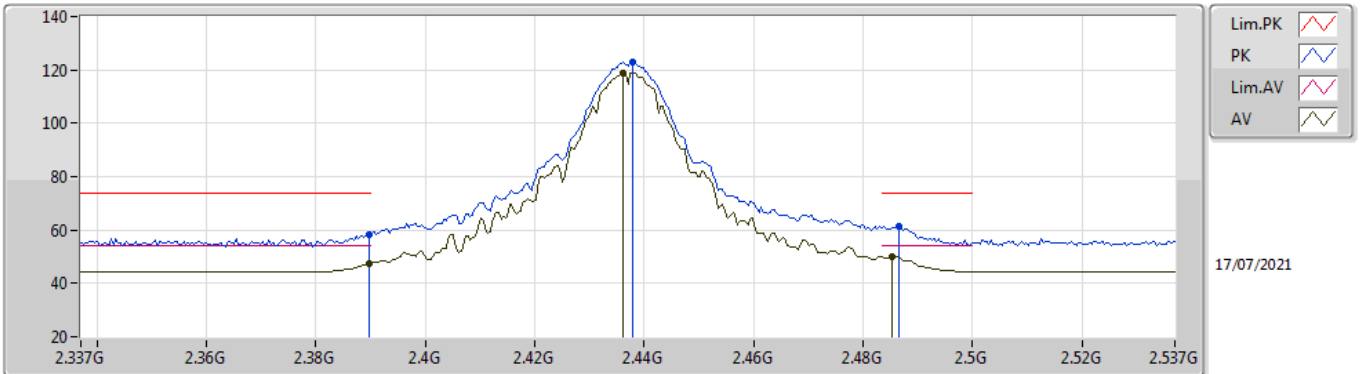


EUT Y_3TX
Setting 105
03-D-K-5

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	4.82396G	48.89	74.00	-25.11	44.67	3	Horizontal	234	1.43	-	33.40	6.24	35.42	
AV	4.82398G	41.60	54.00	-12.40	37.38	3	Horizontal	234	1.43	-	33.40	6.24	35.42	

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

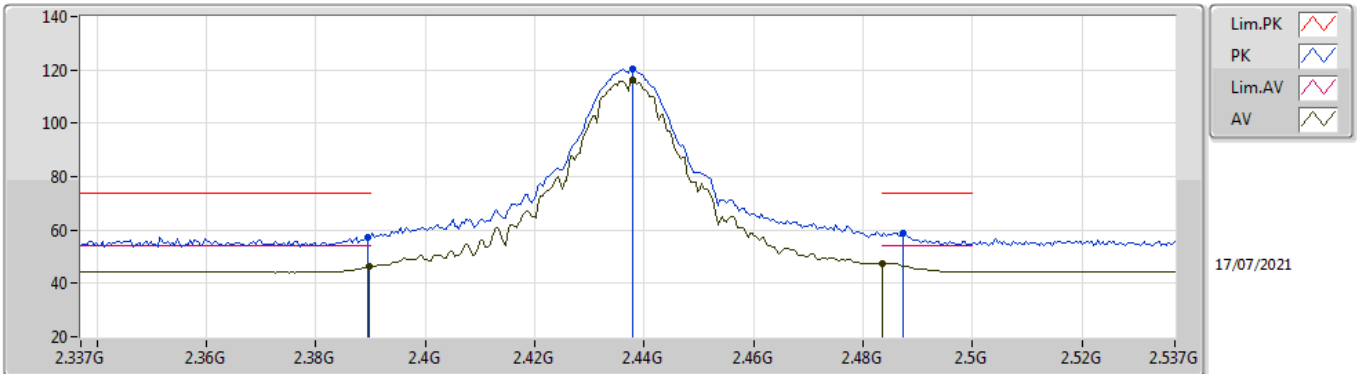


EUT_Y_3TX
Setting 108
03-D-K-5

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	2.3898G	58.18	74.00	-15.82	26.37	3	Vertical	47	2.12	-	28.32	3.49	-
AV	2.3898G	47.27	54.00	-6.73	15.46	3	Vertical	47	2.12	-	28.32	3.49	-
PK	2.4378G	122.93	Inf	-Inf	91.01	3	Vertical	47	2.12	-	28.38	3.54	-
AV	2.4362G	119.05	Inf	-Inf	87.14	3	Vertical	47	2.12	-	28.37	3.54	-
PK	2.4866G	61.54	74.00	-12.46	29.33	3	Vertical	47	2.12	-	28.62	3.59	-
AV	2.4854G	50.11	54.00	-3.89	17.91	3	Vertical	47	2.12	-	28.61	3.59	-

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

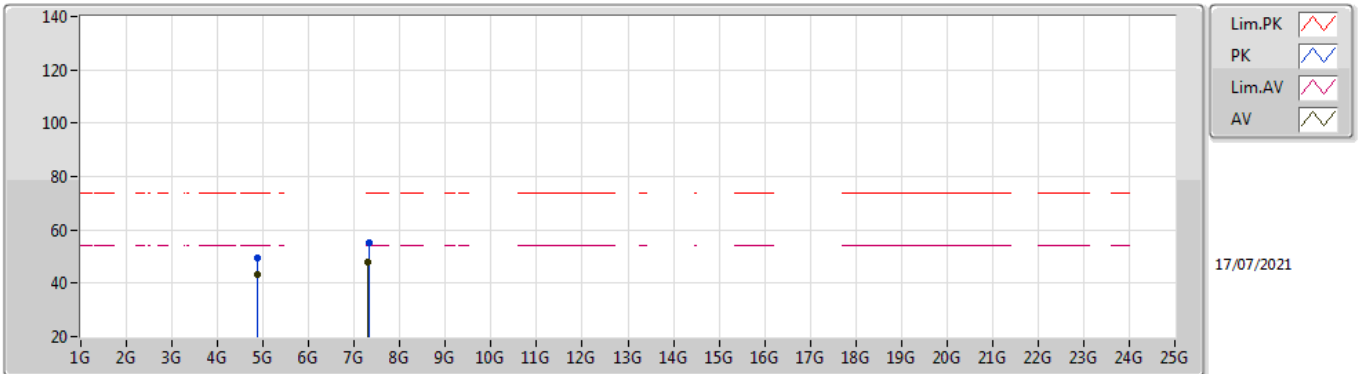


EUT Y_3TX
Setting 108
03-D-K-5

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	2.3894G	57.43	74.00	-16.57	25.62	3	Horizontal	317	1.86	-	28.32	3.49	-
AV	2.3898G	46.21	54.00	-7.79	14.40	3	Horizontal	317	1.86	-	28.32	3.49	-
PK	2.4378G	120.30	Inf	-Inf	88.38	3	Horizontal	317	1.86	-	28.38	3.54	-
AV	2.4378G	116.15	Inf	-Inf	84.23	3	Horizontal	317	1.86	-	28.38	3.54	-
PK	2.4874G	58.80	74.00	-15.20	26.59	3	Horizontal	317	1.86	-	28.62	3.59	-
AV	2.4835G	47.55	54.00	-6.45	15.37	3	Horizontal	317	1.86	-	28.60	3.58	-

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

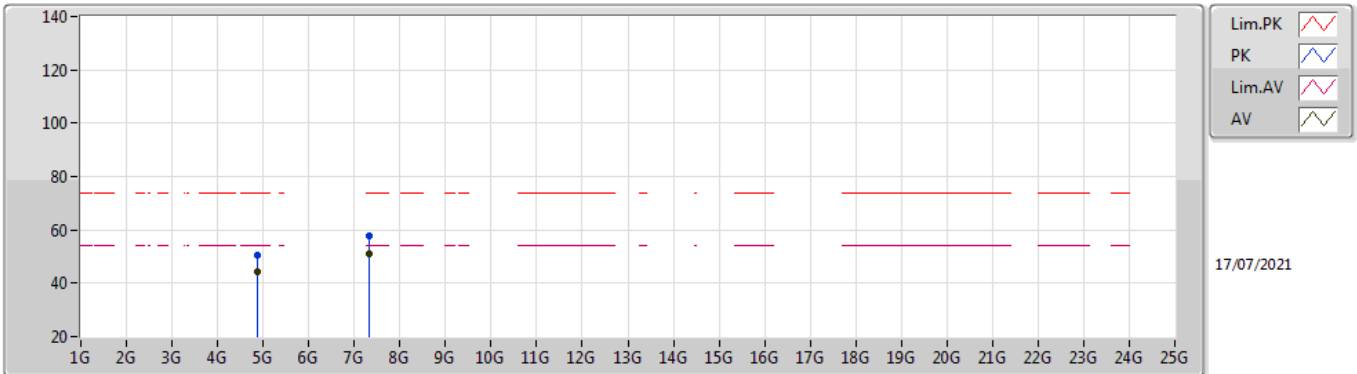


EUT Y_3TX
Setting 108
03-D-K-5

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	4.87392G	49.45	74.00	-24.55	45.04	3	Vertical	168	1.80	-	33.50	6.31	35.40
AV	4.87394G	43.26	54.00	-10.74	38.85	3	Vertical	168	1.80	-	33.50	6.31	35.40
PK	7.31184G	55.22	74.00	-18.78	45.92	3	Vertical	141	1.98	-	37.00	7.87	35.57
AV	7.3102G	47.77	54.00	-6.23	38.47	3	Vertical	141	1.98	-	37.00	7.87	35.57

802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

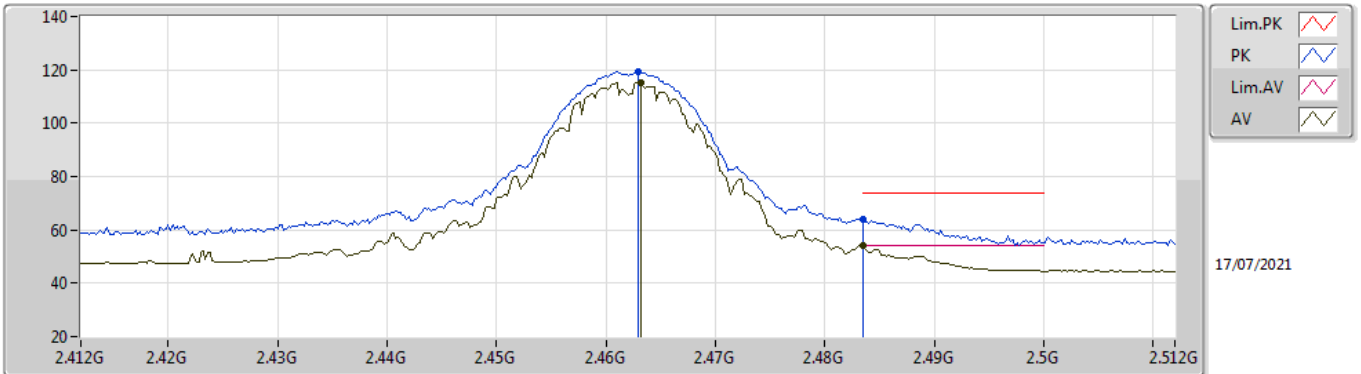


EUT Y_3TX
Setting 108
03-D-K-5

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	4.87392G	50.26	74.00	-23.74	45.85	3	Horizontal	152	1.00	-	33.50	6.31	35.40
AV	4.87384G	44.56	54.00	-9.44	40.15	3	Horizontal	152	1.00	-	33.50	6.31	35.40
PK	7.3114G	57.92	74.00	-16.08	48.62	3	Horizontal	42	2.01	-	37.00	7.87	35.57
AV	7.31168G	51.15	54.00	-2.85	41.85	3	Horizontal	42	2.01	-	37.00	7.87	35.57

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

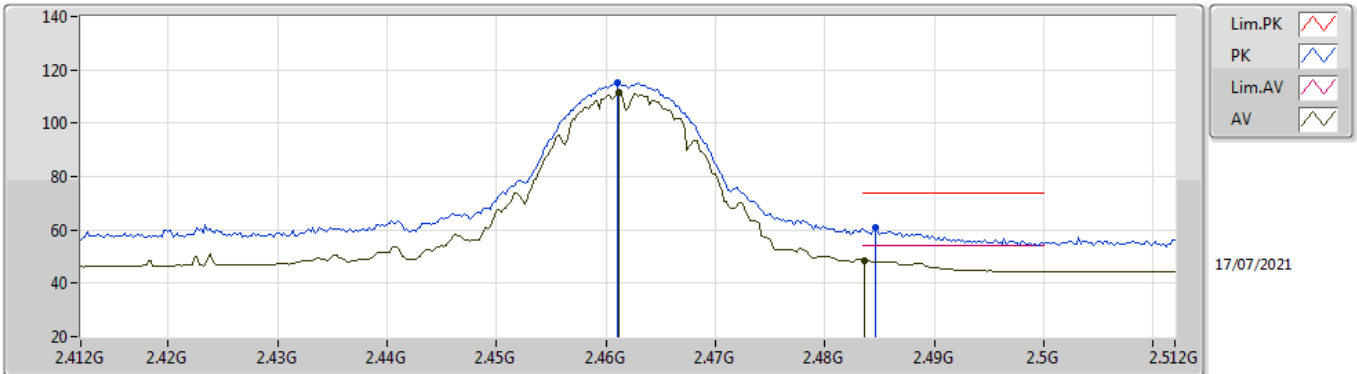


EUT Y_3TX
Setting 101
03-D-K-5

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	2.463G	119.48	Inf	-Inf	87.44	3	Vertical	44	1.70	-	28.48	3.56	-
AV	2.4632G	115.16	Inf	-Inf	83.12	3	Vertical	44	1.70	-	28.48	3.56	-
PK	2.4835G	64.19	74.00	-9.81	32.01	3	Vertical	44	1.70	-	28.60	3.58	-
AV	2.4835G	53.96	54.00	-0.04	21.78	3	Vertical	44	1.70	-	28.60	3.58	-

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

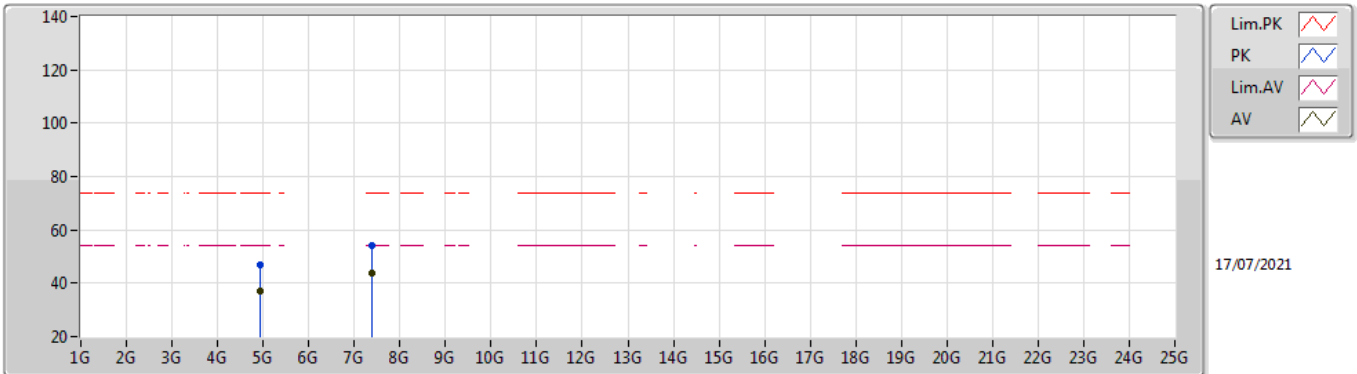


EUT Y_3TX
Setting 101
03-D-K-5

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	2.461G	115.11	Inf	-Inf	83.08	3	Horizontal	196	2.08	-	28.47	3.56	-	
AV	2.4612G	111.32	Inf	-Inf	79.29	3	Horizontal	196	2.08	-	28.47	3.56	-	
PK	2.4846G	60.92	74.00	-13.08	28.73	3	Horizontal	196	2.08	-	28.61	3.58	-	
AV	2.4836G	48.47	54.00	-5.53	16.29	3	Horizontal	196	2.08	-	28.60	3.58	-	

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

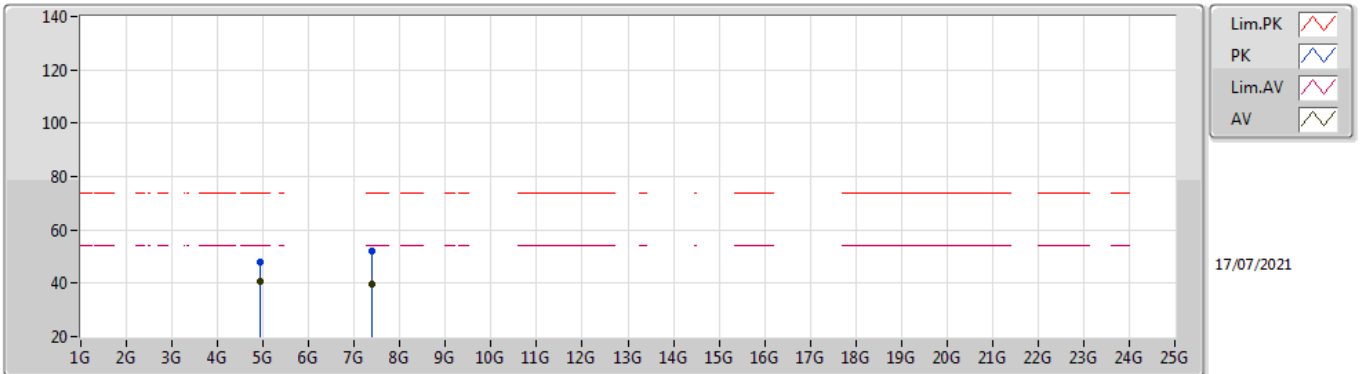


EUT Y_3TX
Setting 101
03-D-K-5

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	4.92394G	46.67	74.00	-27.33	42.00	3	Vertical	30	1.96	-	33.65	6.39	35.37
AV	4.92392G	36.83	54.00	-17.17	32.16	3	Vertical	30	1.96	-	33.65	6.39	35.37
PK	7.388G	54.14	74.00	-19.86	44.67	3	Vertical	4	1.00	-	37.08	7.98	35.59
AV	7.3867G	43.67	54.00	-10.33	34.21	3	Vertical	4	1.00	-	37.07	7.98	35.59

802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

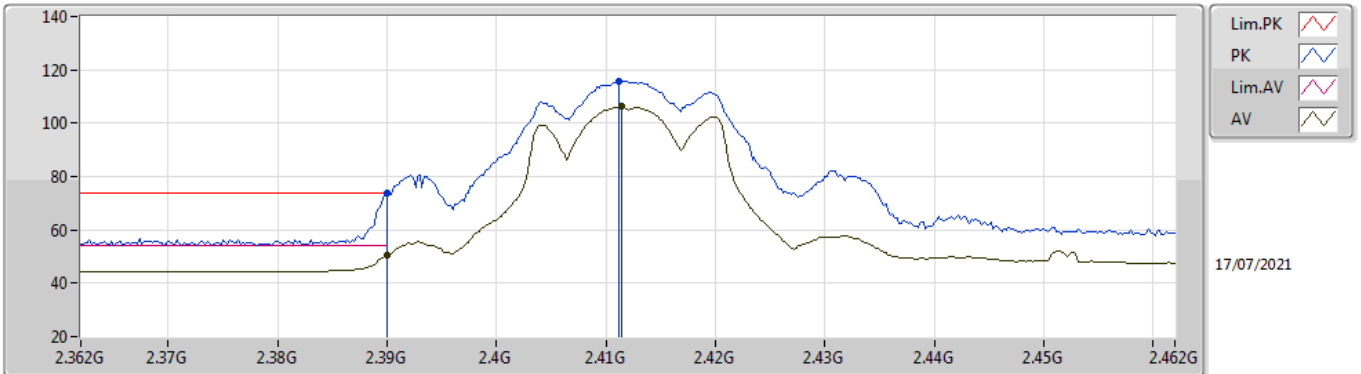


EUT_Y_3TX
Setting 101
03-D-K-5

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	4.92384G	48.11	74.00	-25.89	43.44	3	Horizontal	153	1.00	-	33.65	6.39	35.37
AV	4.92392G	40.44	54.00	-13.56	35.77	3	Horizontal	153	1.00	-	33.65	6.39	35.37
PK	7.38712G	52.17	74.00	-21.83	42.71	3	Horizontal	138	2.06	-	37.07	7.98	35.59
AV	7.38788G	39.72	54.00	-14.28	30.25	3	Horizontal	138	2.06	-	37.08	7.98	35.59

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

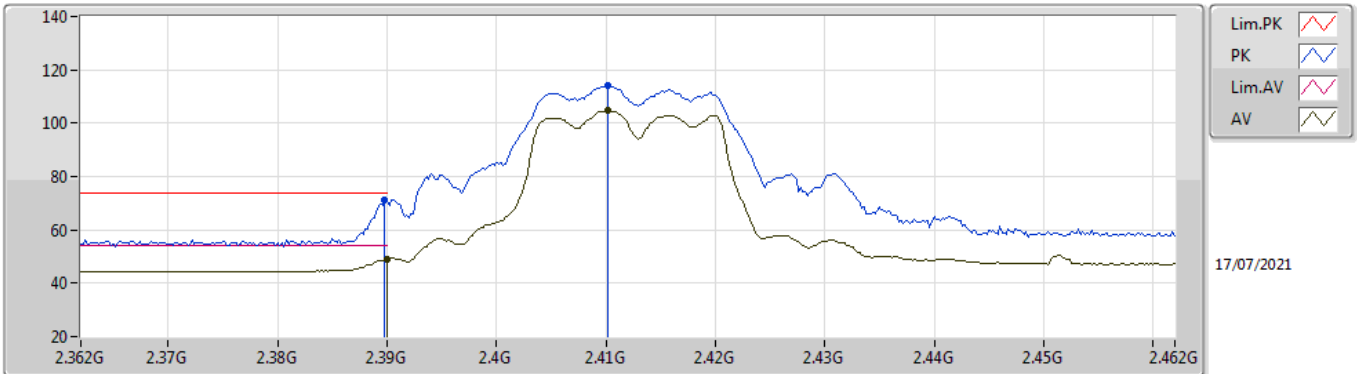


EUT Y_3TX
Setting 81
03-D-K-5

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	73.69	74.00	-0.31	41.88	3	Vertical	218	2.37	-	28.32	3.49	-
AV	2.39G	50.62	54.00	-3.38	18.81	3	Vertical	218	2.37	-	28.32	3.49	-
PK	2.4112G	115.90	Inf	-Inf	84.07	3	Vertical	218	2.37	-	28.32	3.51	-
AV	2.4114G	106.17	Inf	-Inf	74.34	3	Vertical	218	2.37	-	28.32	3.51	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

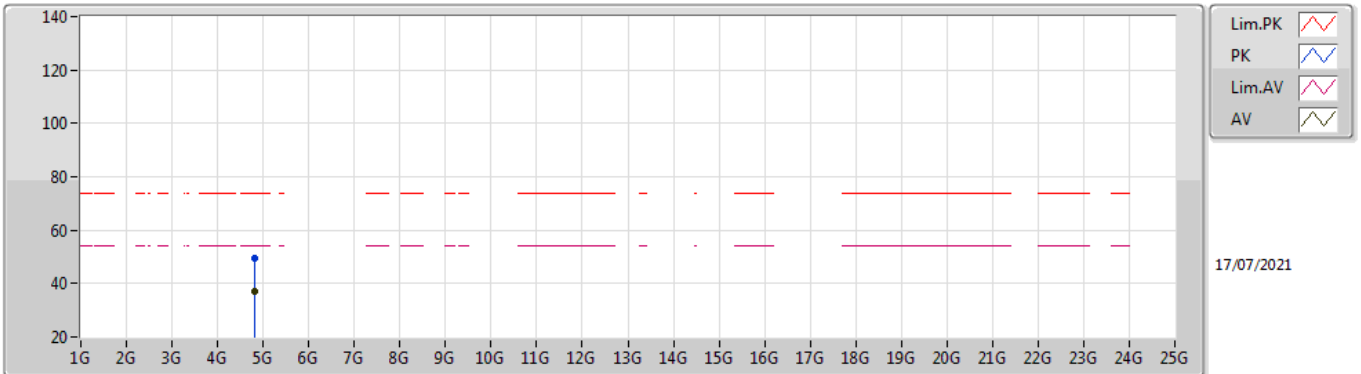


EUT Y_3TX
Setting 81
03-D-K-5

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	2.3898G	71.16	74.00	-2.84	39.35	3	Horizontal	322	2.19	-	28.32	3.49	-
AV	2.39G	49.08	54.00	-4.92	17.27	3	Horizontal	322	2.19	-	28.32	3.49	-
PK	2.4102G	114.03	Inf	-Inf	82.20	3	Horizontal	322	2.19	-	28.32	3.51	-
AV	2.4102G	104.60	Inf	-Inf	72.77	3	Horizontal	322	2.19	-	28.32	3.51	-

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

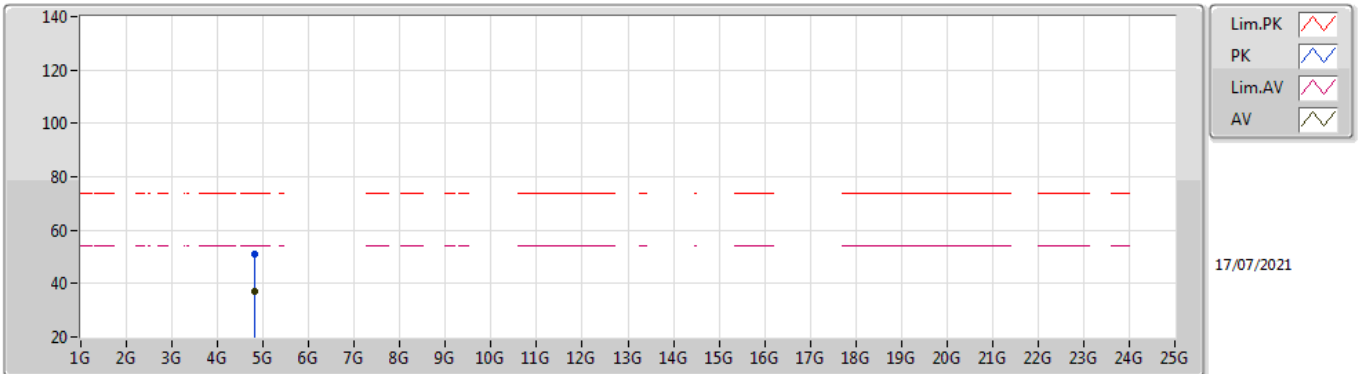


EUT Y_3TX
Setting 81
03-D-K-5

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	4.82706G	49.57	74.00	-24.43	45.35	3	Vertical	164	1.59	-	33.40	6.24	35.42
AV	4.82706G	37.14	54.00	-16.86	32.92	3	Vertical	164	1.59	-	33.40	6.24	35.42

802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

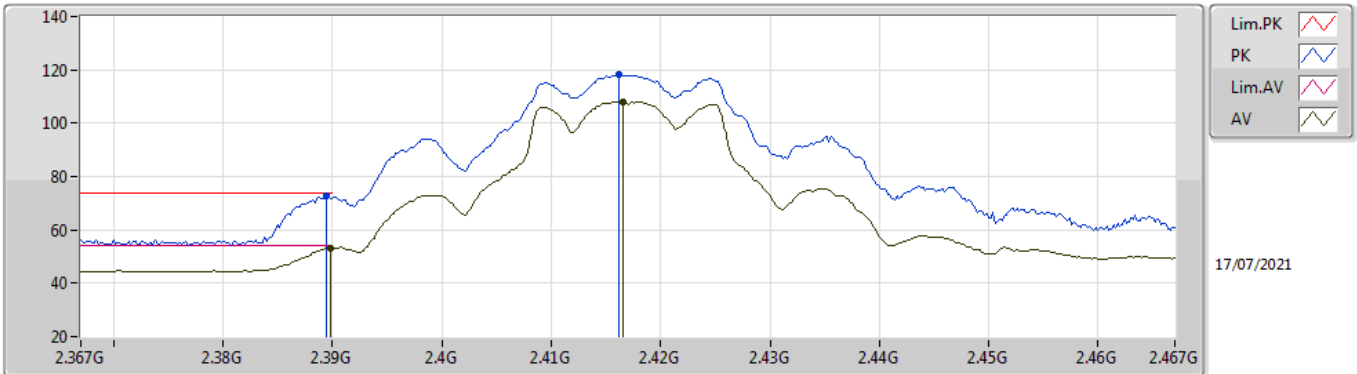


EUT Y_3TX
Setting 81
03-D-K-5

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	4.81782G	50.86	74.00	-23.14	46.65	3	Horizontal	194	2.03	-	33.40	6.23	35.42
AV	4.82676G	37.23	54.00	-16.77	33.01	3	Horizontal	194	2.03	-	33.40	6.24	35.42

802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

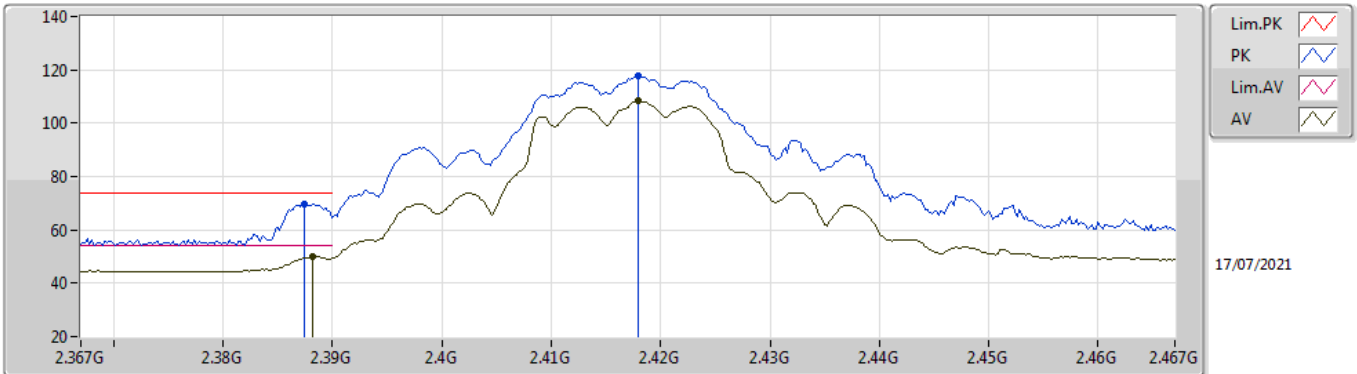


EUT Y_3TX
Setting 96
03-D-K-5

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	2.3894G	72.56	74.00	-1.44	40.75	3	Vertical	220	1.80	-	28.32	3.49	-	
AV	2.3898G	53.29	54.00	-0.71	21.48	3	Vertical	220	1.80	-	28.32	3.49	-	
PK	2.4162G	118.49	Inf	-Inf	86.64	3	Vertical	220	1.80	-	28.33	3.52	-	
AV	2.4166G	108.18	Inf	-Inf	76.33	3	Vertical	220	1.80	-	28.33	3.52	-	

802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

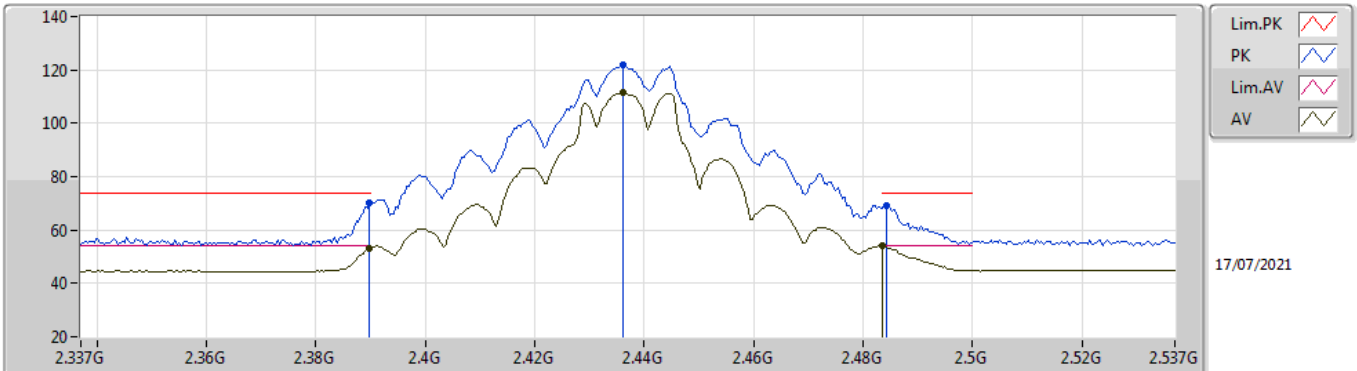


EUT Y_3TX
Setting 96
03-D-K-5

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	2.3874G	69.79	74.00	-4.21	37.97	3	Horizontal	322	2.12	-	28.33	3.49	-
AV	2.3882G	50.08	54.00	-3.92	18.27	3	Horizontal	322	2.12	-	28.32	3.49	-
PK	2.418G	117.51	Inf	-Inf	85.65	3	Horizontal	322	2.12	-	28.34	3.52	-
AV	2.418G	108.31	Inf	-Inf	76.45	3	Horizontal	322	2.12	-	28.34	3.52	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

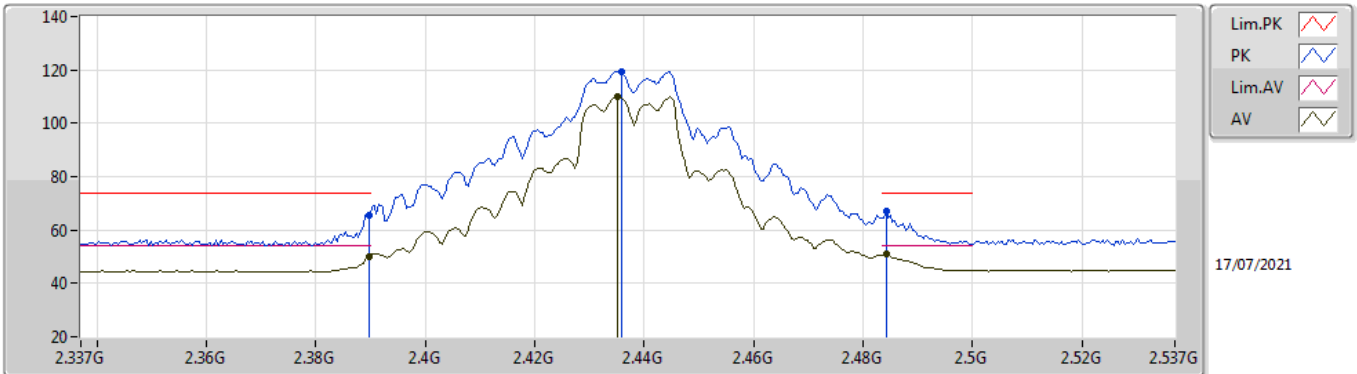


EUT_V_3TX
Setting 106
03-D-K-5

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	2.3898G	70.14	74.00	-3.86	38.33	3	Vertical	35	2.18	-	28.32	3.49	-
AV	2.3898G	53.00	54.00	-1.00	21.19	3	Vertical	35	2.18	-	28.32	3.49	-
PK	2.4362G	121.74	Inf	-Inf	89.83	3	Vertical	35	2.18	-	28.37	3.54	-
AV	2.4362G	111.45	Inf	-Inf	79.54	3	Vertical	35	2.18	-	28.37	3.54	-
PK	2.4842G	69.24	74.00	-4.76	37.05	3	Vertical	35	2.18	-	28.61	3.58	-
AV	2.4835G	53.99	54.00	-0.01	21.81	3	Vertical	35	2.18	-	28.60	3.58	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

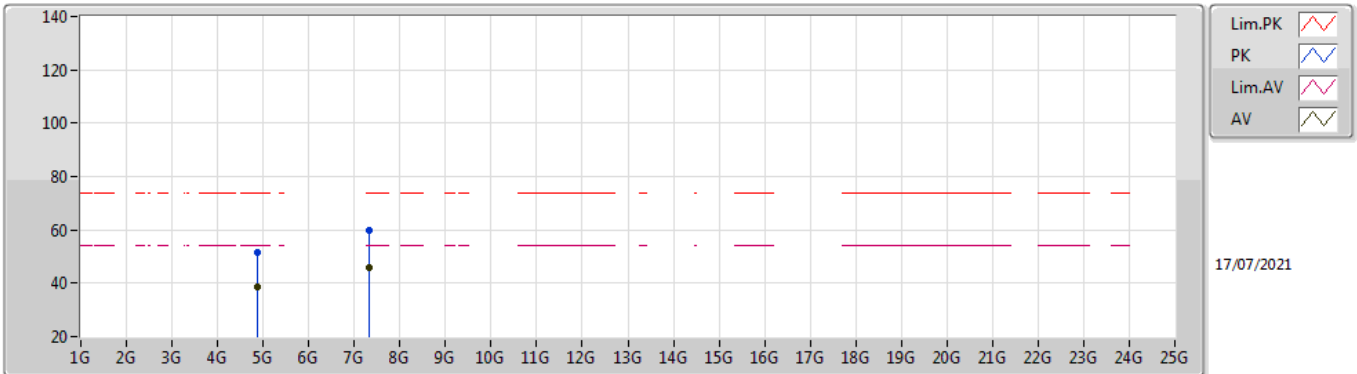


EUT_Y_3TX
Setting 106
03-D-K-5

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	2.3898G	65.76	74.00	-8.24	33.95	3	Horizontal	320	1.89	-	28.32	3.49	-
AV	2.3898G	50.09	54.00	-3.91	18.28	3	Horizontal	320	1.89	-	28.32	3.49	-
PK	2.4358G	119.31	Inf	-Inf	87.40	3	Horizontal	320	1.89	-	28.37	3.54	-
AV	2.435G	109.89	Inf	-Inf	77.98	3	Horizontal	320	1.89	-	28.37	3.54	-
PK	2.4842G	66.92	74.00	-7.08	34.73	3	Horizontal	320	1.89	-	28.61	3.58	-
AV	2.4842G	51.04	54.00	-2.96	18.85	3	Horizontal	320	1.89	-	28.61	3.58	-

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

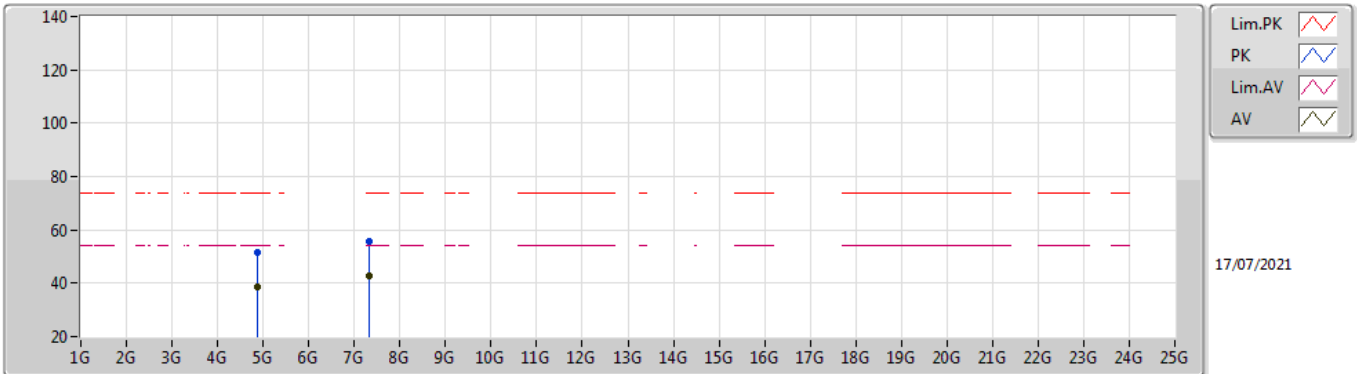


EUT Y_3TX
Setting 106
03-D-K-5

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	4.8671G	51.80	74.00	-22.20	47.43	3	Vertical	169	1.71	-	33.47	6.30	35.40
AV	4.87634G	38.72	54.00	-15.28	34.29	3	Vertical	169	1.71	-	33.51	6.31	35.39
PK	7.3116G	59.57	74.00	-14.43	50.27	3	Vertical	0	1.02	-	37.00	7.87	35.57
AV	7.31118G	45.94	54.00	-8.06	36.64	3	Vertical	0	1.02	-	37.00	7.87	35.57

802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

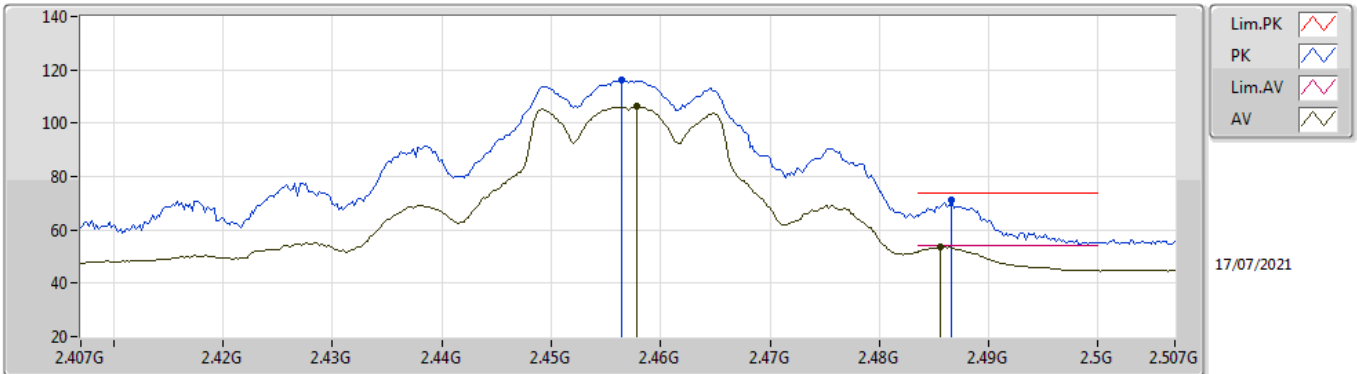


EUT_Y_3TX
Setting 106
03-D-K-5

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	4.86698G	51.51	74.00	-22.49	47.14	3	Horizontal	207	1.03	-	33.47	6.30	35.40
AV	4.87688G	38.48	54.00	-15.52	34.04	3	Horizontal	207	1.03	-	33.51	6.32	35.39
PK	7.31154G	55.88	74.00	-18.12	46.58	3	Horizontal	133	2.04	-	37.00	7.87	35.57
AV	7.31112G	42.93	54.00	-11.07	33.63	3	Horizontal	133	2.04	-	37.00	7.87	35.57

802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

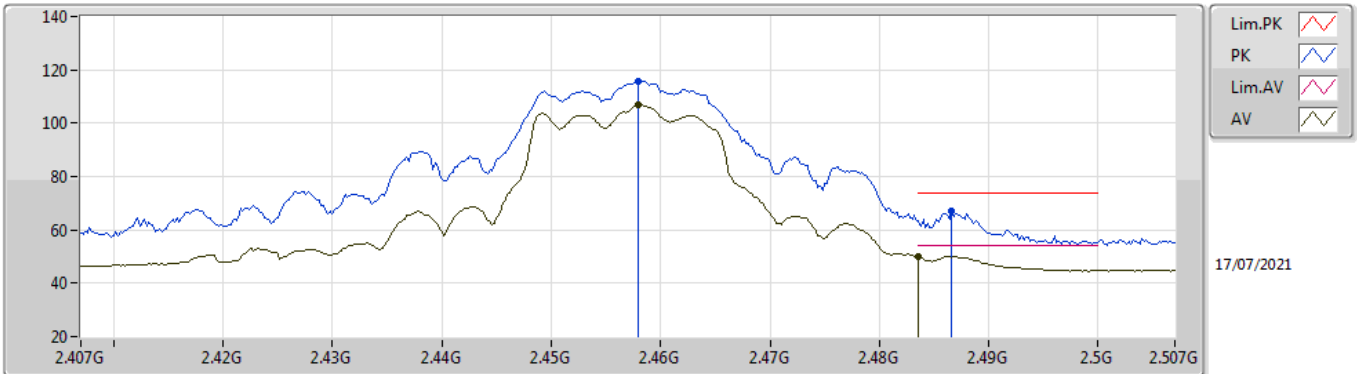


EUT Y_3TX
Setting 90
03-D-K-5

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	2.4564G	116.29	Inf	-Inf	84.29	3	Vertical	44	1.80	-	28.44	3.56	-
AV	2.4578G	106.44	Inf	-Inf	74.43	3	Vertical	44	1.80	-	28.45	3.56	-
PK	2.4866G	70.95	74.00	-3.05	38.74	3	Vertical	44	1.80	-	28.62	3.59	-
AV	2.4856G	53.62	54.00	-0.38	21.42	3	Vertical	44	1.80	-	28.61	3.59	-

802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

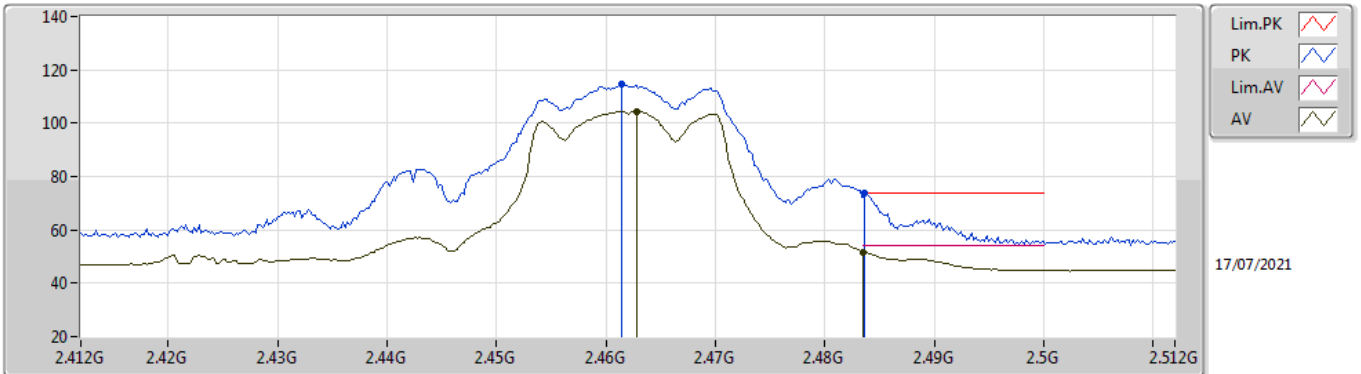


EUT Y_3TX
Setting 90
03-D-K-5

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	2.458G	115.75	Inf	-Inf	83.74	3	Horizontal	315	1.82	-	28.45	3.56	-	
AV	2.458G	106.74	Inf	-Inf	74.73	3	Horizontal	315	1.82	-	28.45	3.56	-	
PK	2.4866G	67.32	74.00	-6.68	35.11	3	Horizontal	315	1.82	-	28.62	3.59	-	
AV	2.4835G	49.99	54.00	-4.01	17.81	3	Horizontal	315	1.82	-	28.60	3.58	-	

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

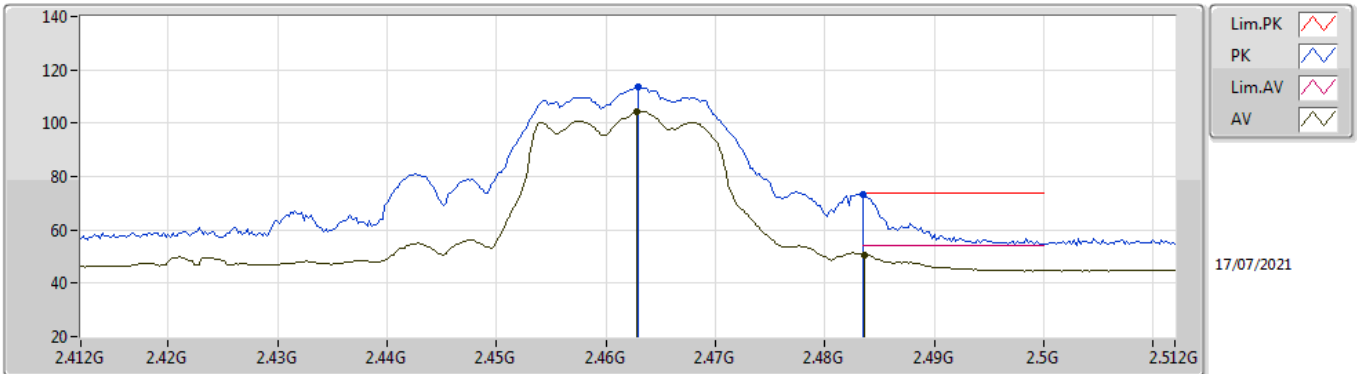


EUT Y_3TX
Setting 80
03-D-K-5

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	2.4614G	114.42	Inf	-Inf	82.39	3	Vertical	226	1.20	-	28.47	3.56	-	
AV	2.4628G	104.43	Inf	-Inf	72.39	3	Vertical	226	1.20	-	28.48	3.56	-	
PK	2.4836G	73.92	74.00	-0.08	41.74	3	Vertical	226	1.20	-	28.60	3.58	-	
AV	2.4835G	51.80	54.00	-2.20	19.62	3	Vertical	226	1.20	-	28.60	3.58	-	

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

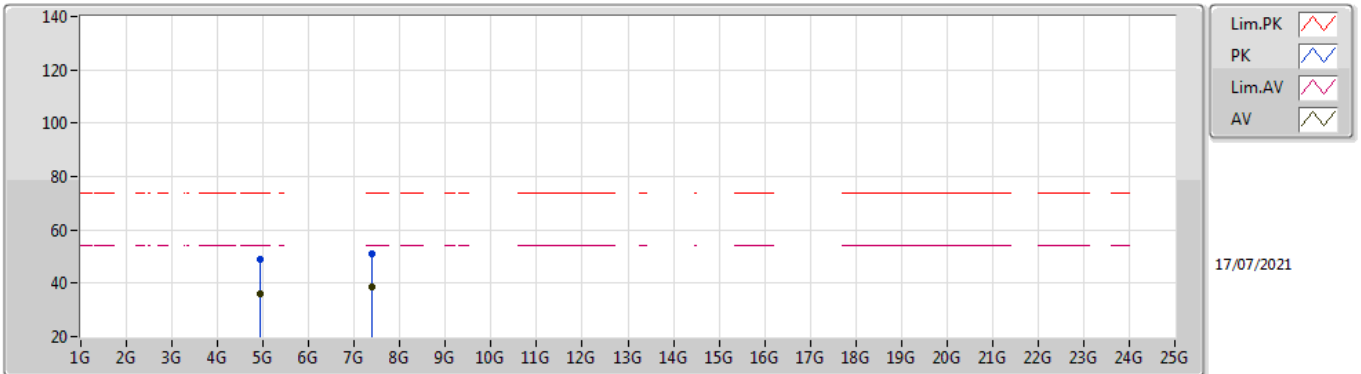


EUT Y_3TX
Setting 80
03-D-K-5

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	2.463G	113.44	Inf	-Inf	81.40	3	Horizontal	312	2.10	-	28.48	3.56	-
AV	2.4628G	104.34	Inf	-Inf	72.30	3	Horizontal	312	2.10	-	28.48	3.56	-
PK	2.4835G	73.24	74.00	-0.76	41.06	3	Horizontal	312	2.10	-	28.60	3.58	-
AV	2.4836G	50.76	54.00	-3.24	18.58	3	Horizontal	312	2.10	-	28.60	3.58	-

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

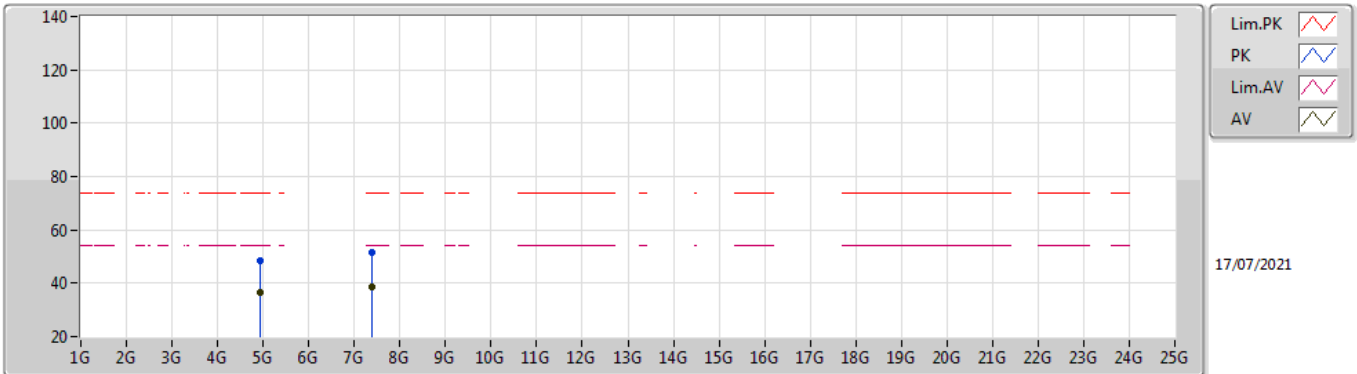


EUT Y_3TX
Setting 80
03-D-K-5

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	4.92766G	48.93	74.00	-25.07	44.25	3	Vertical	169	1.56	-	33.66	6.39	35.37
AV	4.92682G	35.96	54.00	-18.04	31.29	3	Vertical	169	1.56	-	33.65	6.39	35.37
PK	7.40046G	50.83	74.00	-23.17	41.32	3	Vertical	165	1.86	-	37.10	8.00	35.59
AV	7.39836G	38.56	54.00	-15.44	29.05	3	Vertical	165	1.86	-	37.10	8.00	35.59

802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

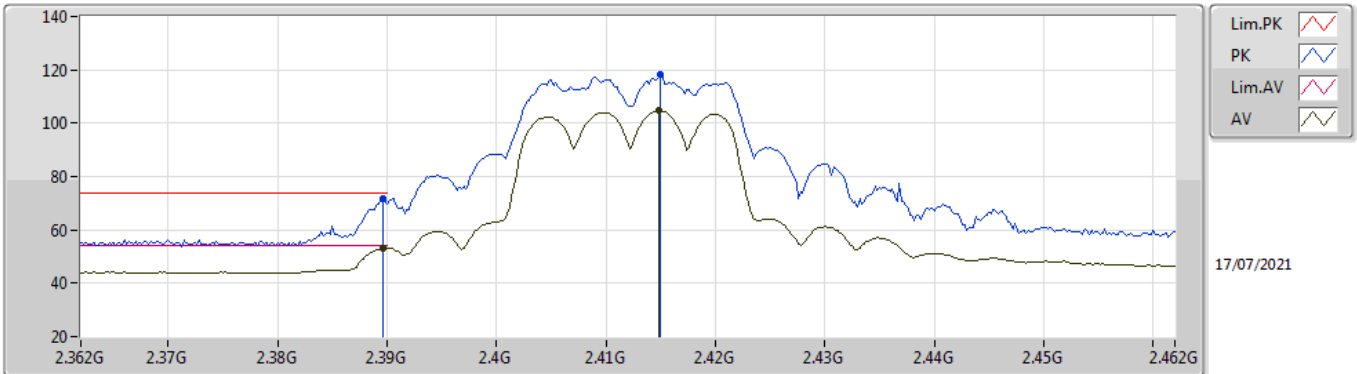


EUT Y_3TX
Setting 80
03-D-K-5

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	4.92682G	48.55	74.00	-25.45	43.88	3	Horizontal	150	1.09	-	33.65	6.39	35.37
AV	4.92688G	36.44	54.00	-17.56	31.77	3	Horizontal	150	1.09	-	33.65	6.39	35.37
PK	7.39326G	51.78	74.00	-22.22	42.29	3	Horizontal	141	1.05	-	37.09	7.99	35.59
AV	7.3986G	38.70	54.00	-15.30	29.19	3	Horizontal	141	1.05	-	37.10	8.00	35.59

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

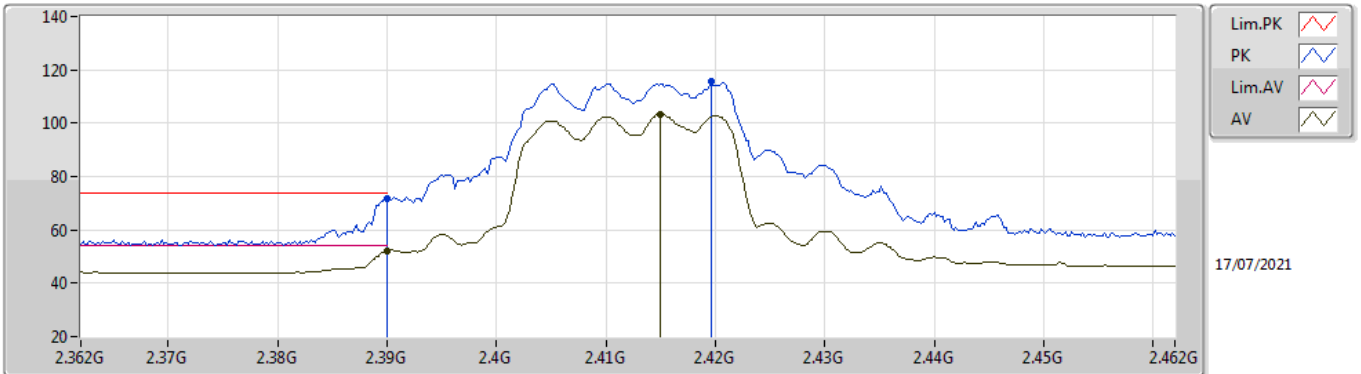


EUT_V_3TX
Setting 81
03-D-K-5

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	2.3896G	71.65	74.00	-2.35	39.84	3	Vertical	40	1.74	-	28.32	3.49	-
AV	2.3896G	53.33	54.00	-0.67	21.52	3	Vertical	40	1.74	-	28.32	3.49	-
PK	2.415G	118.28	Inf	-Inf	86.44	3	Vertical	40	1.74	-	28.33	3.51	-
AV	2.4148G	104.69	Inf	-Inf	72.85	3	Vertical	40	1.74	-	28.33	3.51	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

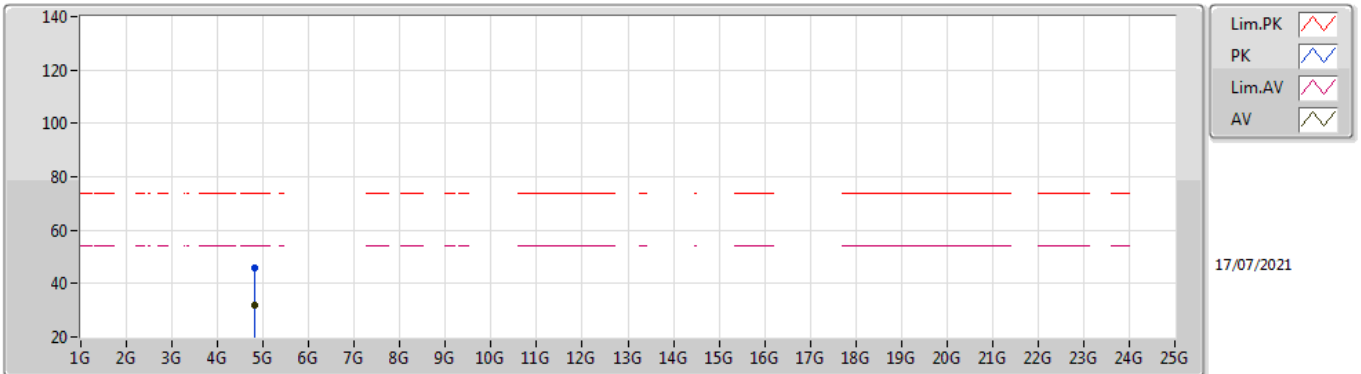


EUT_V_3TX
Setting 81
03-D-K-5

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	71.67	74.00	-2.33	39.86	3	Horizontal	323	2.11	-	28.32	3.49	-
AV	2.39G	52.32	54.00	-1.68	20.51	3	Horizontal	323	2.11	-	28.32	3.49	-
PK	2.4196G	115.73	Inf	-Inf	83.87	3	Horizontal	323	2.11	-	28.34	3.52	-
AV	2.415G	103.40	Inf	-Inf	71.56	3	Horizontal	323	2.11	-	28.33	3.51	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

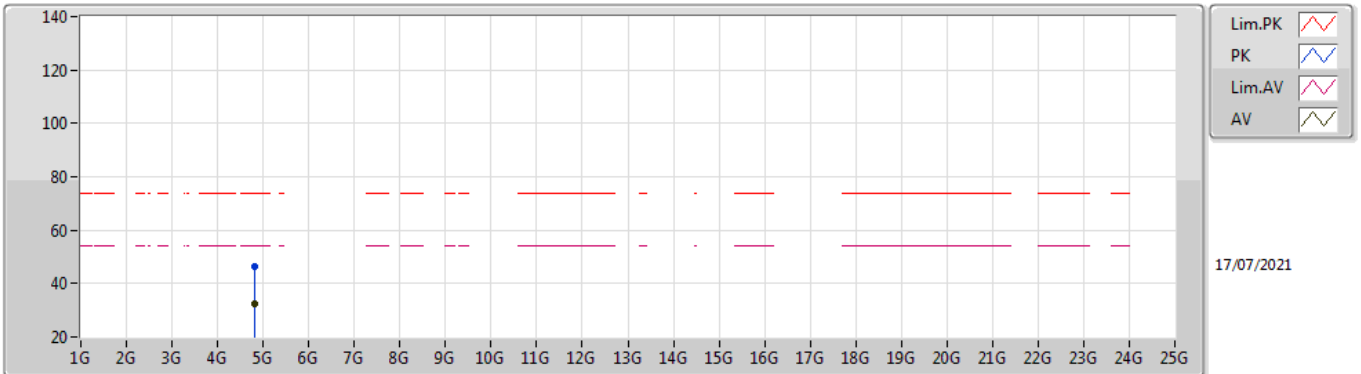


EUT Y_3TX
Setting 81
03-D-K-5

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	4.8214G	46.01	74.00	-27.99	41.80	3	Vertical	298	1.08	-	33.40	6.23	35.42
AV	4.82152G	32.15	54.00	-21.85	27.94	3	Vertical	298	1.08	-	33.40	6.23	35.42

802.11ax HEW20_Nss1,(MCS0)_3TX

2412MHz_TX

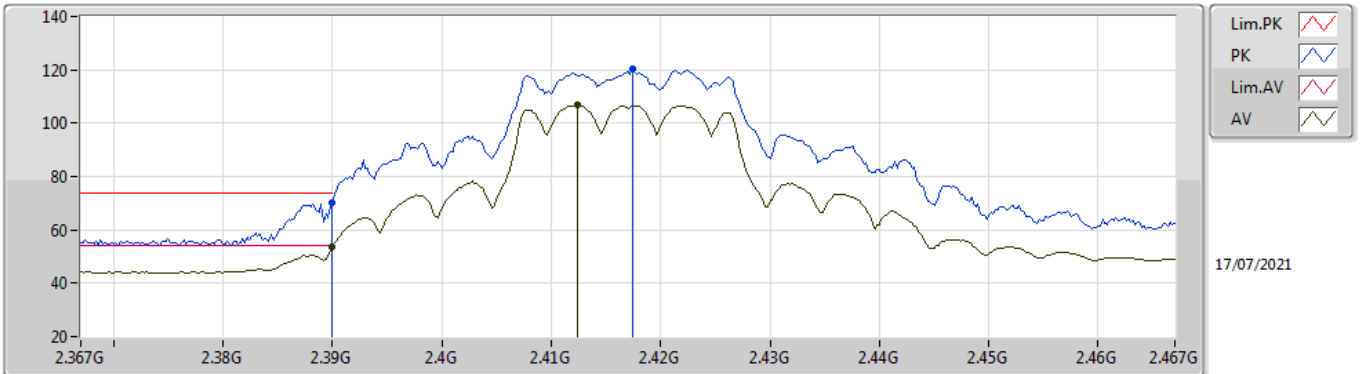


EUT Y_3TX
Setting 81
03-D-K-5

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	4.82728G	46.36	74.00	-27.64	42.14	3	Horizontal	172	2.41	-	33.40	6.24	35.42
AV	4.82636G	32.55	54.00	-21.45	28.33	3	Horizontal	172	2.41	-	33.40	6.24	35.42

802.11ax HEW20_Nss1,(MCS0)_3TX

2417MHz_TX

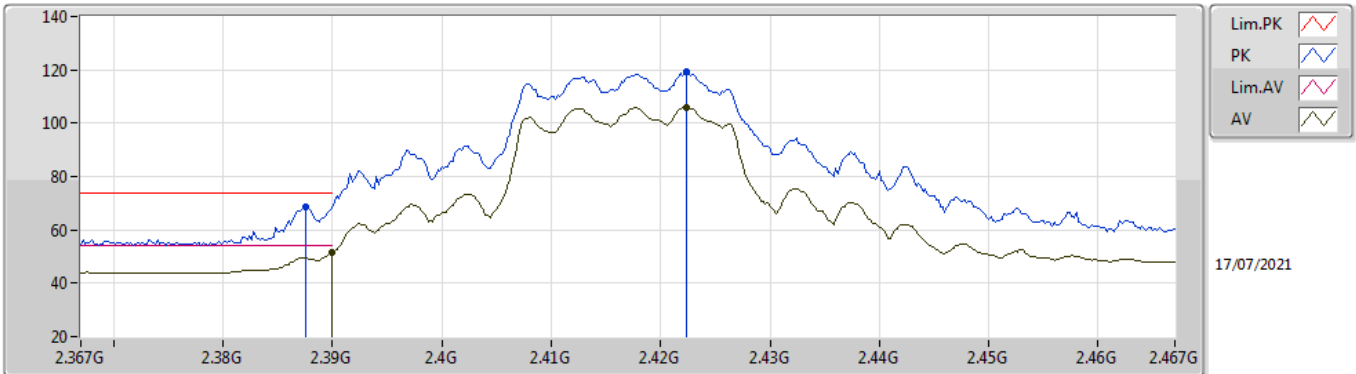


EUT_V_3TX
Setting 94
03-D-K-5

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	70.00	74.00	-4.00	38.19	3	Vertical	217	2.37	-	28.32	3.49	-	
AV	2.39G	53.67	54.00	-0.33	21.86	3	Vertical	217	2.37	-	28.32	3.49	-	
PK	2.4174G	120.24	Inf	-Inf	88.39	3	Vertical	217	2.37	-	28.33	3.52	-	
AV	2.4124G	106.82	Inf	-Inf	74.99	3	Vertical	217	2.37	-	28.32	3.51	-	

802.11ax HEW20_Nss1,(MCS0)_3TX

2417MHz_TX

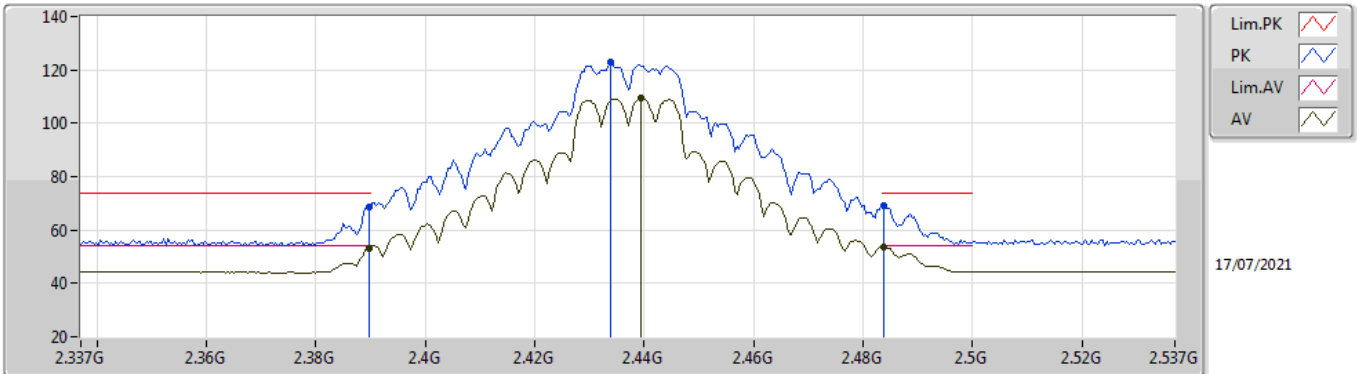


EUT Y_3TX
Setting 94
03-D-K-5

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	2.3876G	68.59	74.00	-5.41	36.78	3	Horizontal	317	2.11	-	28.32	3.49	-
AV	2.39G	51.62	54.00	-2.38	19.81	3	Horizontal	317	2.11	-	28.32	3.49	-
PK	2.4224G	119.35	Inf	-Inf	87.49	3	Horizontal	317	2.11	-	28.34	3.52	-
AV	2.4224G	106.02	Inf	-Inf	74.16	3	Horizontal	317	2.11	-	28.34	3.52	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

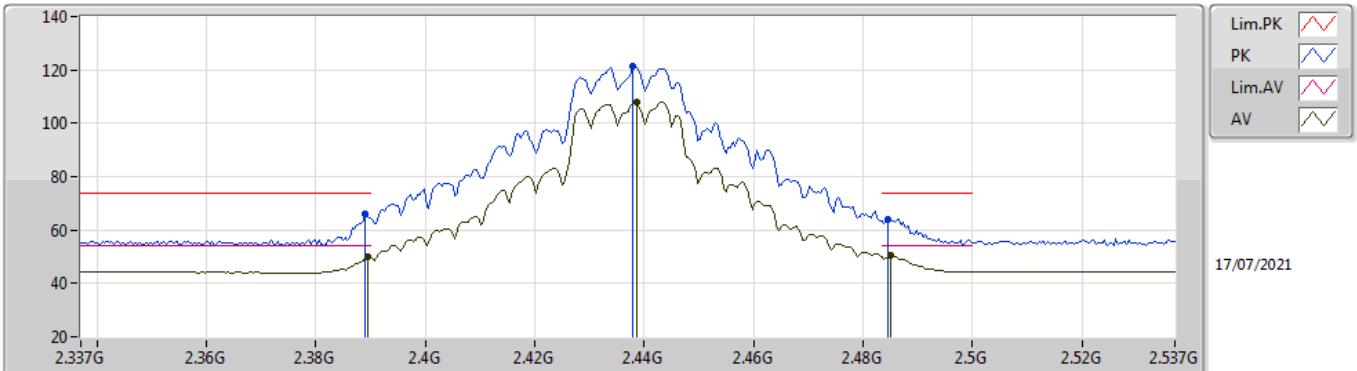


EUT Y_3TX
Setting 105
03-D-K-5

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	2.3898G	68.83	74.00	-5.17	37.02	3	Vertical	45	1.96	-	28.32	3.49	-
AV	2.3898G	53.29	54.00	-0.71	21.48	3	Vertical	45	1.96	-	28.32	3.49	-
PK	2.4338G	123.10	Inf	-Inf	91.20	3	Vertical	45	1.96	-	28.37	3.53	-
AV	2.4394G	109.36	Inf	-Inf	77.44	3	Vertical	45	1.96	-	28.38	3.54	-
PK	2.4838G	69.01	74.00	-4.99	36.83	3	Vertical	45	1.96	-	28.60	3.58	-
AV	2.4838G	53.56	54.00	-0.44	21.38	3	Vertical	45	1.96	-	28.60	3.58	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

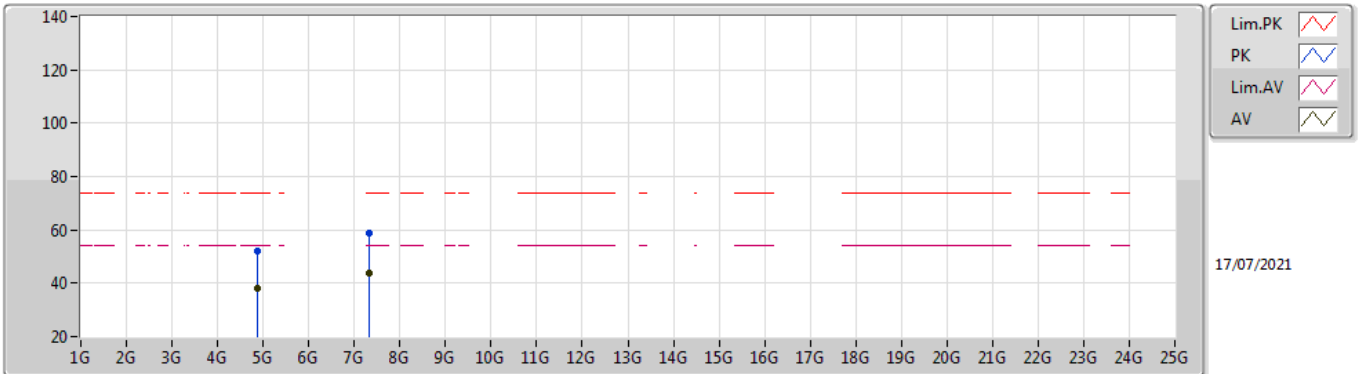


EUT_V_3TX
Setting 105
03-D-K-5

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	2.389G	66.10	74.00	-7.90	34.29	3	Horizontal	318	2.41	-	28.32	3.49	-
AV	2.3894G	49.81	54.00	-4.19	18.00	3	Horizontal	318	2.41	-	28.32	3.49	-
PK	2.4378G	121.17	Inf	-Inf	89.25	3	Horizontal	318	2.41	-	28.38	3.54	-
AV	2.4386G	107.87	Inf	-Inf	75.95	3	Horizontal	318	2.41	-	28.38	3.54	-
PK	2.4846G	64.20	74.00	-9.80	32.01	3	Horizontal	318	2.41	-	28.61	3.58	-
AV	2.485G	50.39	54.00	-3.61	18.19	3	Horizontal	318	2.41	-	28.61	3.59	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

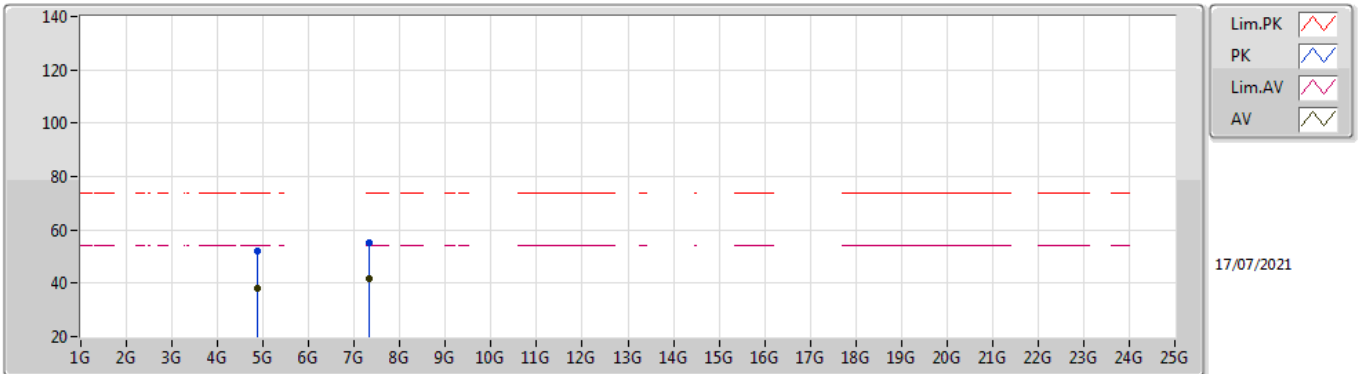


EUT Y_3TX
Setting 105
03-D-K-5

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	4.87164G	52.16	74.00	-21.84	47.76	3	Vertical	151	1.46	-	33.49	6.31	35.40
AV	4.87676G	38.19	54.00	-15.81	33.75	3	Vertical	151	1.46	-	33.51	6.32	35.39
PK	7.31588G	58.65	74.00	-15.35	49.35	3	Vertical	0	1.00	-	37.00	7.87	35.57
AV	7.3108G	43.76	54.00	-10.24	34.46	3	Vertical	0	1.00	-	37.00	7.87	35.57

802.11ax HEW20_Nss1,(MCS0)_3TX

2437MHz_TX

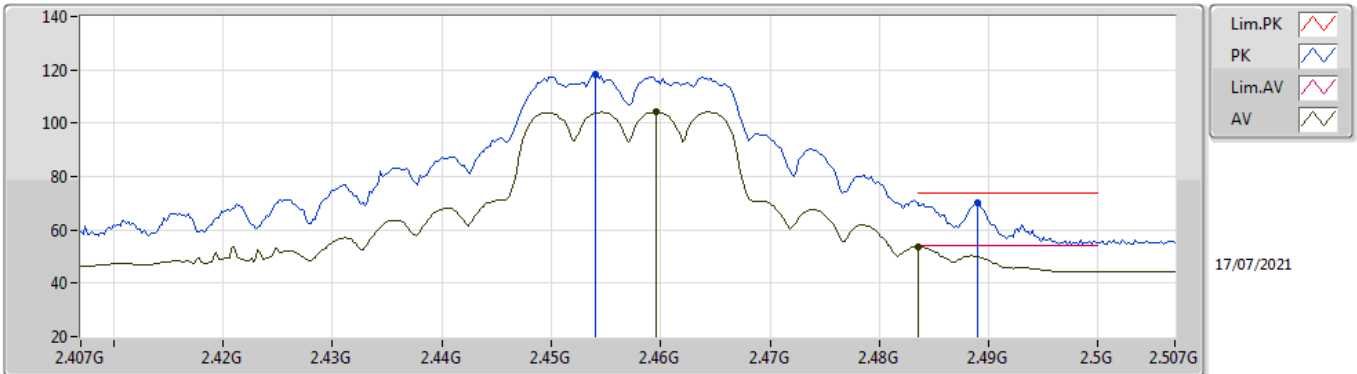


EUT Y_3TX
Setting 105
03-D-K-5

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	4.87176G	52.04	74.00	-21.96	47.64	3	Horizontal	226	1.09	-	33.49	6.31	35.40
AV	4.87668G	38.34	54.00	-15.66	33.90	3	Horizontal	226	1.09	-	33.51	6.32	35.39
PK	7.31636G	55.38	74.00	-18.62	46.08	3	Horizontal	134	2.04	-	37.00	7.87	35.57
AV	7.31152G	41.62	54.00	-12.38	32.32	3	Horizontal	134	2.04	-	37.00	7.87	35.57

802.11ax HEW20_Nss1,(MCS0)_3TX

2457MHz_TX

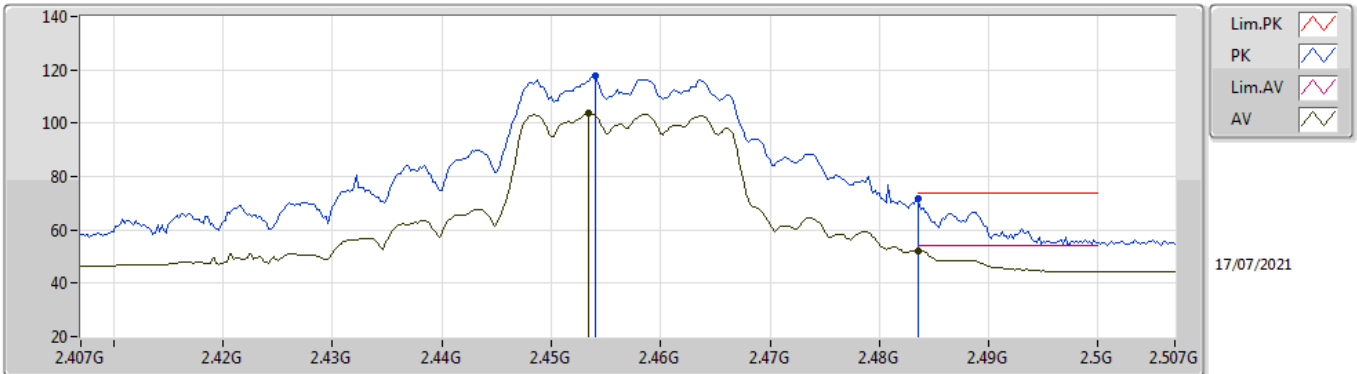


EUT Y_3TX
Setting 87
03-D-K-5

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	2.454G	118.23	Inf	-Inf	86.26	3	Vertical	43	1.64	-	28.42	3.55	-
AV	2.4596G	104.14	Inf	-Inf	72.12	3	Vertical	43	1.64	-	28.46	3.56	-
PK	2.489G	69.98	74.00	-4.02	37.76	3	Vertical	43	1.64	-	28.63	3.59	-
AV	2.4835G	53.80	54.00	-0.20	21.62	3	Vertical	43	1.64	-	28.60	3.58	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2457MHz_TX

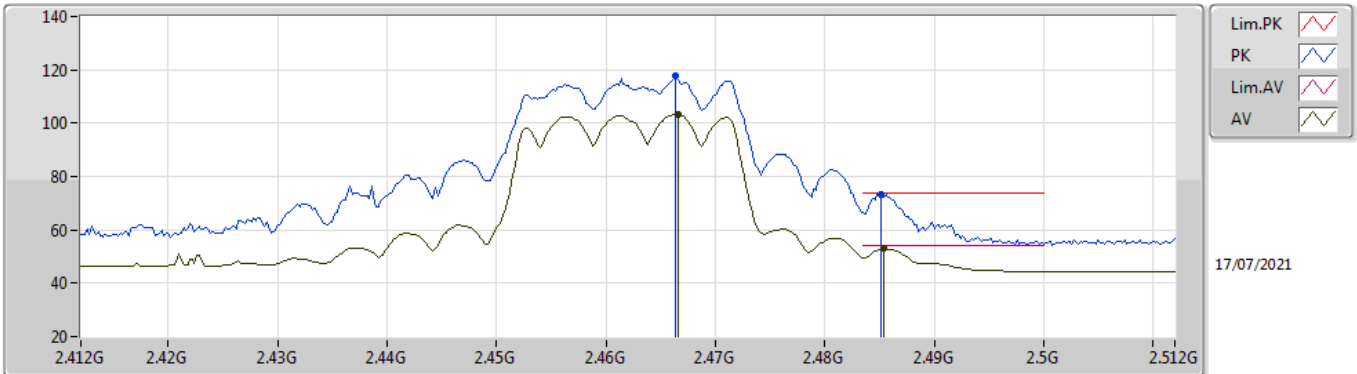


EUT Y_3TX
Setting 87
03-D-K-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.454G	117.56	Inf	-Inf	85.59	3	Horizontal	316	2.46	-	28.42	3.55	-
AV	2.4534G	103.68	Inf	-Inf	71.71	3	Horizontal	316	2.46	-	28.42	3.55	-
PK	2.4835G	71.56	74.00	-2.44	39.38	3	Horizontal	316	2.46	-	28.60	3.58	-
AV	2.4835G	52.30	54.00	-1.70	20.12	3	Horizontal	316	2.46	-	28.60	3.58	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

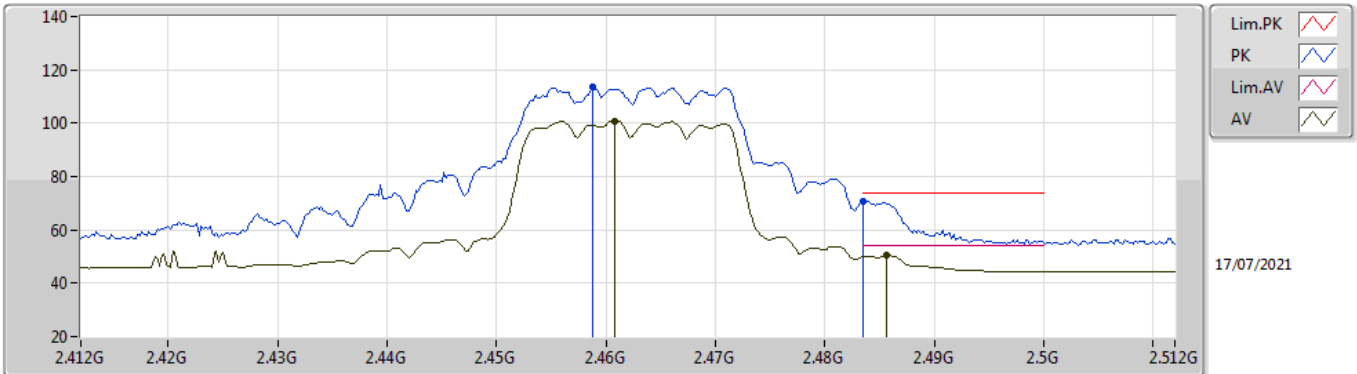


EUT Y_3TX
Setting 80
03-D-K-5

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	2.4664G	117.85	Inf	-Inf	85.78	3	Vertical	211	1.48	-	28.50	3.57	-
AV	2.4666G	103.26	Inf	-Inf	71.19	3	Vertical	211	1.48	-	28.50	3.57	-
PK	2.4852G	73.53	74.00	-0.47	41.33	3	Vertical	211	1.48	-	28.61	3.59	-
AV	2.4854G	53.01	54.00	-0.99	20.81	3	Vertical	211	1.48	-	28.61	3.59	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

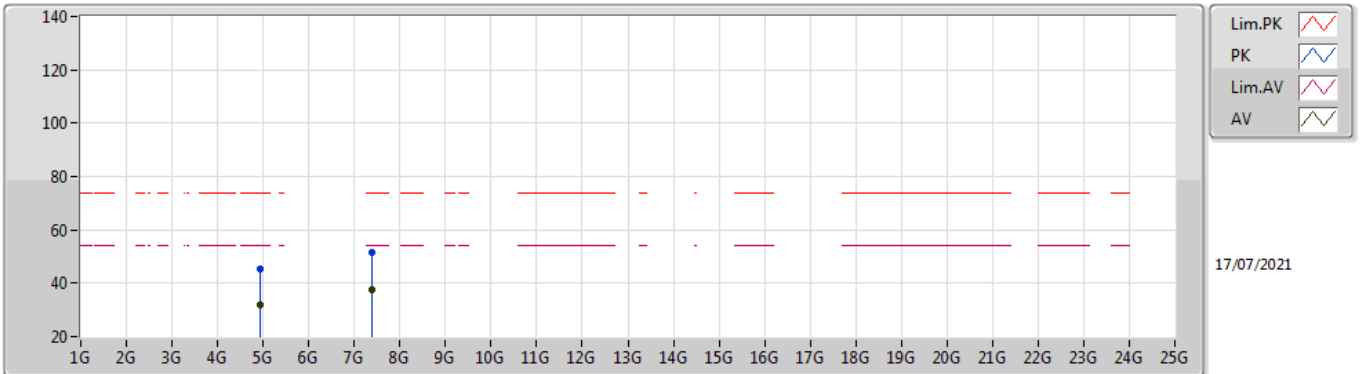


EUT V_3TX
Setting 80
03-D-K-5

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	2.4588G	113.43	Inf	-Inf	81.42	3	Horizontal	307	2.21	-	28.45	3.56	-
AV	2.4608G	100.88	Inf	-Inf	68.86	3	Horizontal	307	2.21	-	28.46	3.56	-
PK	2.4835G	70.56	74.00	-3.44	38.38	3	Horizontal	307	2.21	-	28.60	3.58	-
AV	2.4856G	50.35	54.00	-3.65	18.15	3	Horizontal	307	2.21	-	28.61	3.59	-

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

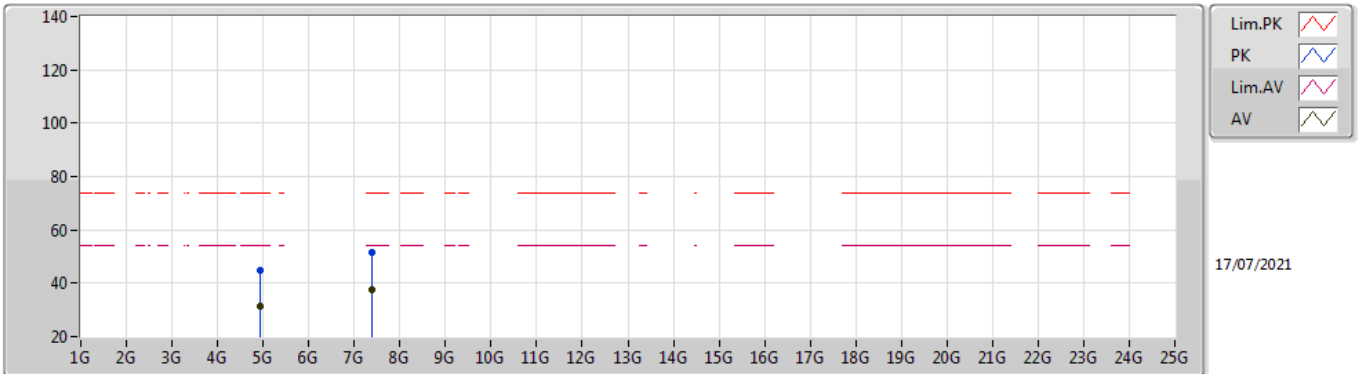


EUT Y_3TX
Setting 80
03-D-K-5

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	4.92912G	45.22	74.00	-28.78	40.54	3	Vertical	167	1.78	-	33.66	6.39	35.37
AV	4.92664G	31.98	54.00	-22.02	27.31	3	Vertical	167	1.78	-	33.65	6.39	35.37
PK	7.38684G	51.46	74.00	-22.54	42.00	3	Vertical	334	1.11	-	37.07	7.98	35.59
AV	7.39424G	37.77	54.00	-16.23	28.28	3	Vertical	334	1.11	-	37.09	7.99	35.59

802.11ax HEW20_Nss1,(MCS0)_3TX

2462MHz_TX

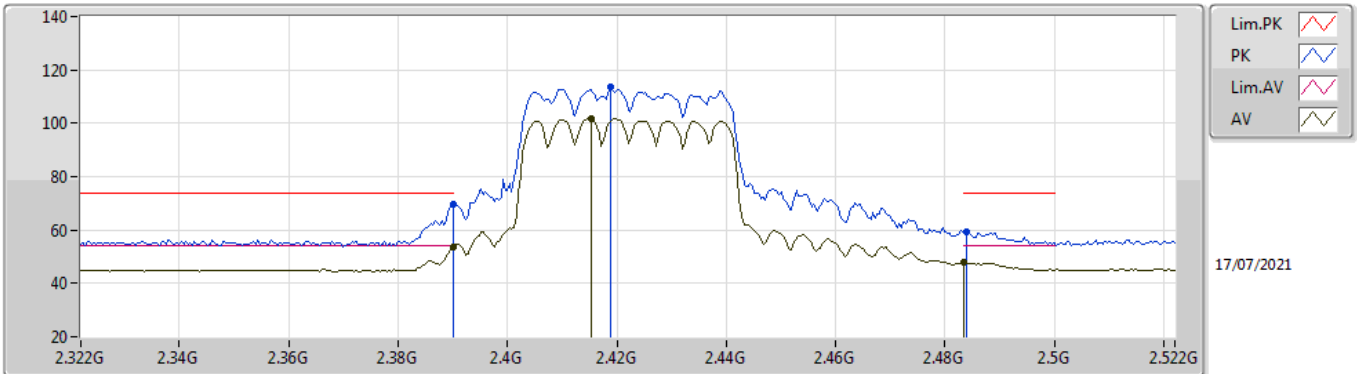


EUT Y_3TX
Setting 80
03-D-K-5

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	4.9204G	45.08	74.00	-28.92	40.43	3	Horizontal	51	1.52	-	33.64	6.38	35.37
AV	4.92928G	31.60	54.00	-22.40	26.92	3	Horizontal	51	1.52	-	33.66	6.39	35.37
PK	7.38748G	51.55	74.00	-22.45	42.09	3	Horizontal	163	2.90	-	37.07	7.98	35.59
AV	7.3934G	37.65	54.00	-16.35	28.16	3	Horizontal	163	2.90	-	37.09	7.99	35.59

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

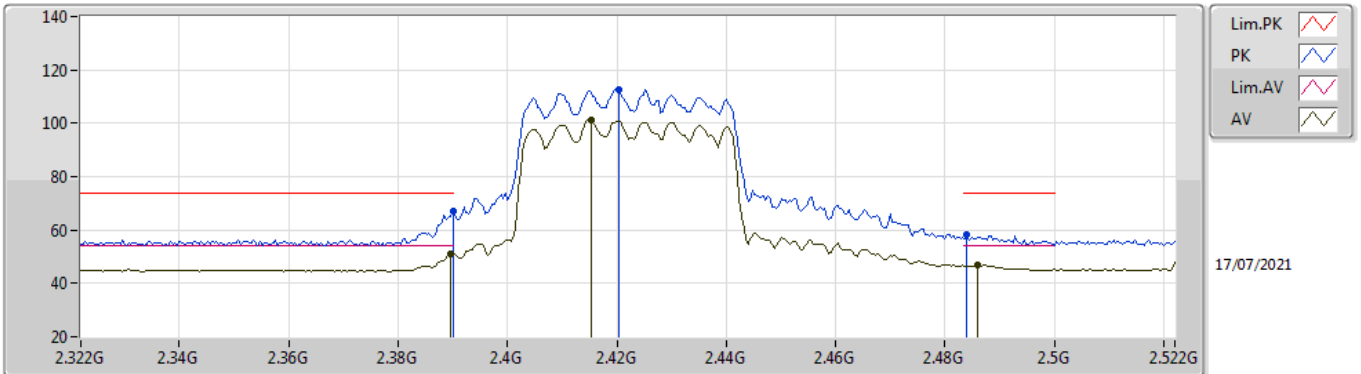


EUT_V_3TX
Setting 78
03-D-K-5

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	69.87	74.00	-4.13	38.06	3	Vertical	218	2.37	-	28.32	3.49	-
AV	2.39G	53.65	54.00	-0.35	21.84	3	Vertical	218	2.37	-	28.32	3.49	-
PK	2.4188G	113.43	Inf	-Inf	81.57	3	Vertical	218	2.37	-	28.34	3.52	-
AV	2.4152G	101.80	Inf	-Inf	69.95	3	Vertical	218	2.37	-	28.33	3.52	-
PK	2.484G	59.27	74.00	-14.73	27.09	3	Vertical	218	2.37	-	28.60	3.58	-
AV	2.4835G	47.94	54.00	-6.06	15.76	3	Vertical	218	2.37	-	28.60	3.58	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

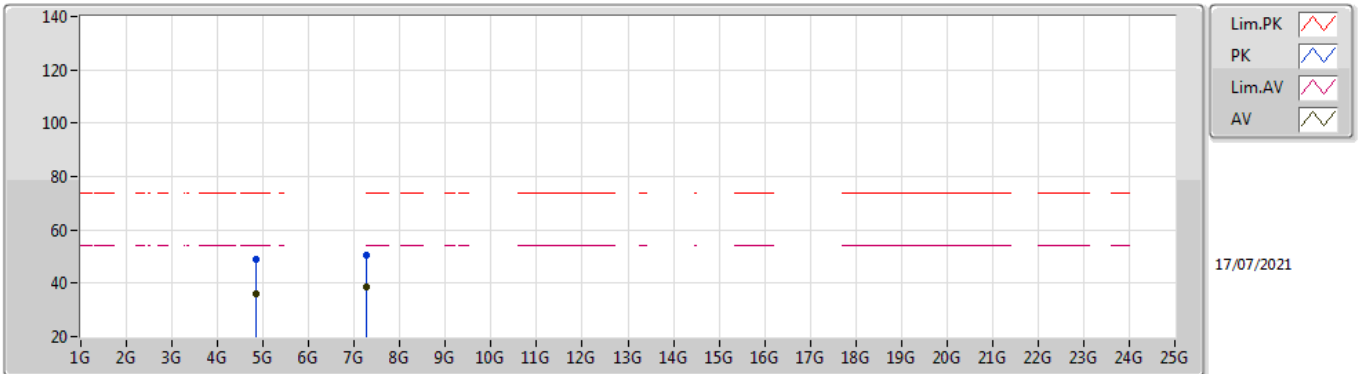


EUT_V_3TX
Setting 78
03-D-K-5

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	66.91	74.00	-7.09	35.10	3	Horizontal	323	2.10	-	28.32	3.49	-
AV	2.3896G	51.23	54.00	-2.77	19.42	3	Horizontal	323	2.10	-	28.32	3.49	-
PK	2.4204G	112.80	Inf	-Inf	80.94	3	Horizontal	323	2.10	-	28.34	3.52	-
AV	2.4152G	101.08	Inf	-Inf	69.23	3	Horizontal	323	2.10	-	28.33	3.52	-
PK	2.484G	58.47	74.00	-15.53	26.29	3	Horizontal	323	2.10	-	28.60	3.58	-
AV	2.486G	46.94	54.00	-7.06	14.73	3	Horizontal	323	2.10	-	28.62	3.59	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

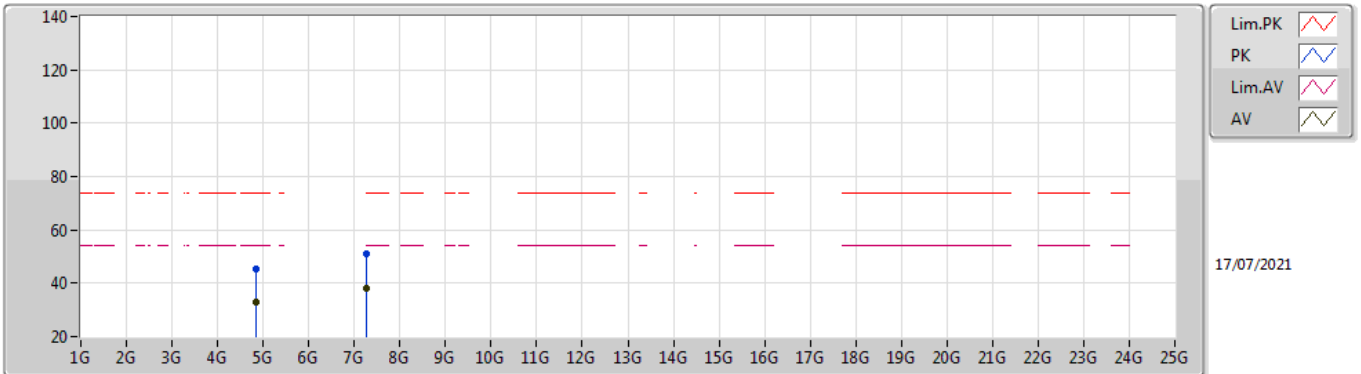


EUT Y_3TX
Setting 78
03-D-K-5

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	4.84172G	49.20	74.00	-24.80	44.95	3	Vertical	152	1.38	-	33.40	6.26	35.41
AV	4.84668G	36.17	54.00	-17.83	31.91	3	Vertical	152	1.38	-	33.40	6.27	35.41
PK	7.25992G	50.55	74.00	-23.45	41.48	3	Vertical	252	1.70	-	36.84	7.79	35.56
AV	7.25984G	38.49	54.00	-15.51	29.42	3	Vertical	252	1.70	-	36.84	7.79	35.56

802.11ax HEW40_Nss1,(MCS0)_3TX

2422MHz_TX

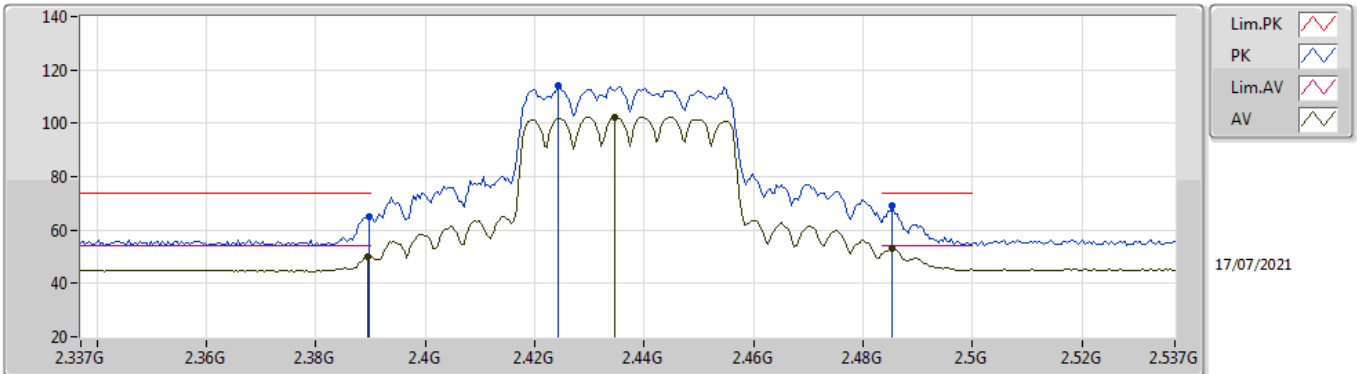


EUT Y_3TX
Setting 78
03-D-K-5

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	4.84212G	45.25	74.00	-28.75	41.00	3	Horizontal	245	2.70	-	33.40	6.26	35.41
AV	4.8432G	33.16	54.00	-20.84	28.91	3	Horizontal	245	2.70	-	33.40	6.26	35.41
PK	7.2658G	51.05	74.00	-22.95	41.95	3	Horizontal	222	1.56	-	36.86	7.80	35.56
AV	7.26208G	38.25	54.00	-15.75	29.17	3	Horizontal	222	1.56	-	36.85	7.79	35.56

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

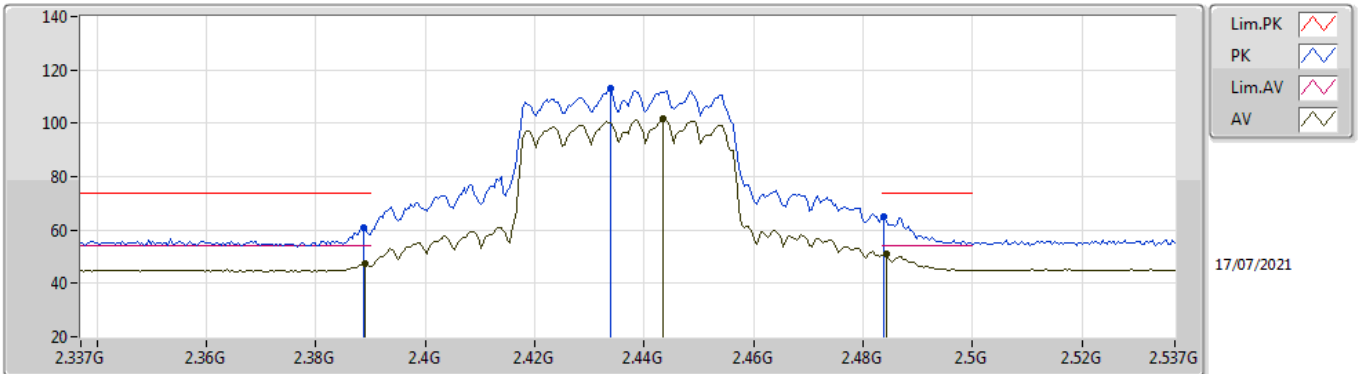


EUT_V_3TX
Setting 81
03-D-K-5

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	2.3898G	65.23	74.00	-8.77	33.42	3	Vertical	43	1.98	-	28.32	3.49	-
AV	2.3894G	50.10	54.00	-3.90	18.29	3	Vertical	43	1.98	-	28.32	3.49	-
PK	2.4242G	113.88	Inf	-Inf	82.01	3	Vertical	43	1.98	-	28.35	3.52	-
AV	2.4346G	102.28	Inf	-Inf	70.38	3	Vertical	43	1.98	-	28.37	3.53	-
PK	2.4854G	68.98	74.00	-5.02	36.78	3	Vertical	43	1.98	-	28.61	3.59	-
AV	2.4854G	53.04	54.00	-0.96	20.84	3	Vertical	43	1.98	-	28.61	3.59	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

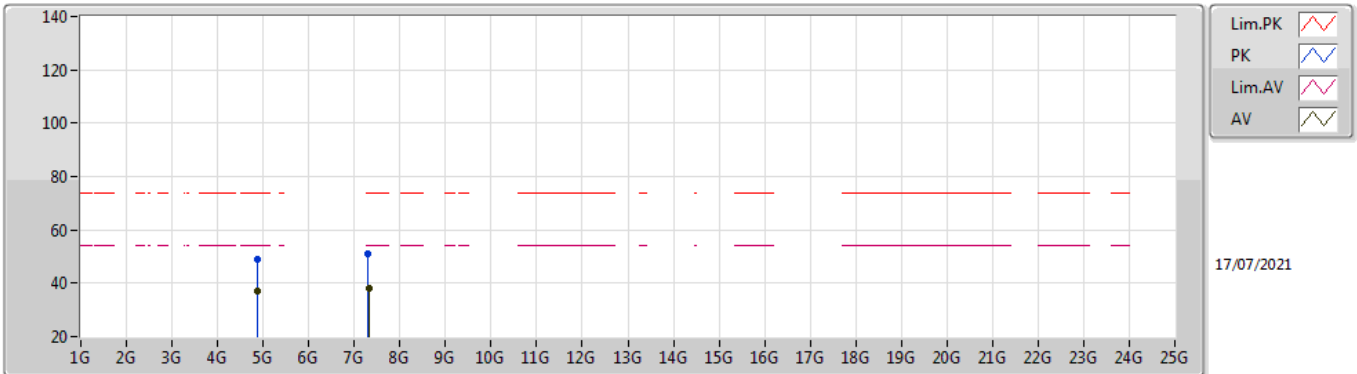


EUT_V_3TX
Setting 81
03-D-K-5

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	2.3886G	60.84	74.00	-13.16	29.03	3	Horizontal	321	2.42	-	28.32	3.49	-
AV	2.389G	47.51	54.00	-6.49	15.70	3	Horizontal	321	2.42	-	28.32	3.49	-
PK	2.4338G	112.98	Inf	-Inf	81.08	3	Horizontal	321	2.42	-	28.37	3.53	-
AV	2.4434G	101.74	Inf	-Inf	69.81	3	Horizontal	321	2.42	-	28.39	3.54	-
PK	2.4838G	64.76	74.00	-9.24	32.58	3	Horizontal	321	2.42	-	28.60	3.58	-
AV	2.4842G	50.79	54.00	-3.21	18.60	3	Horizontal	321	2.42	-	28.61	3.58	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

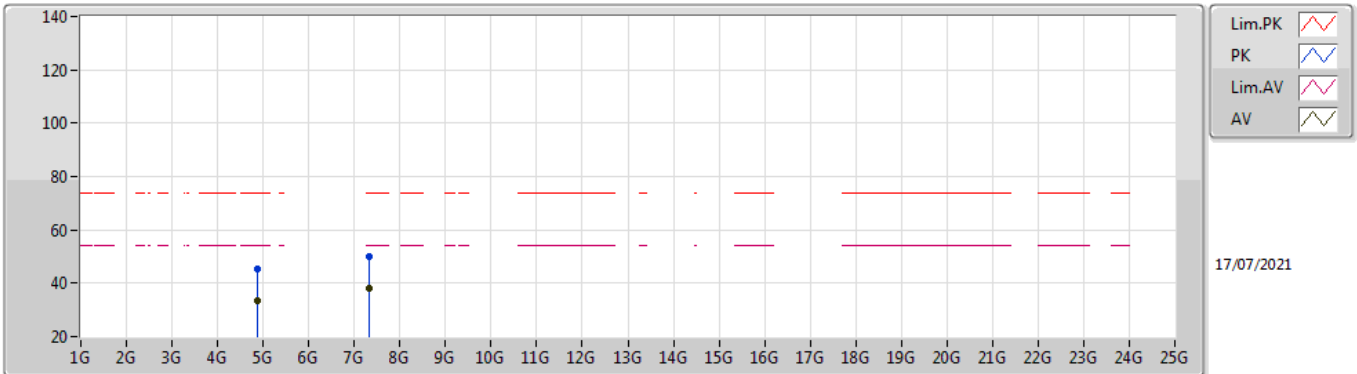


EUT Y_3TX
Setting 81
03-D-K-5

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	4.87648G	48.71	74.00	-25.29	44.28	3	Vertical	152	1.46	-	33.51	6.31	35.39
AV	4.87692G	36.82	54.00	-17.18	32.38	3	Vertical	152	1.46	-	33.51	6.32	35.39
PK	7.30376G	51.16	74.00	-22.84	41.87	3	Vertical	214	2.34	-	37.00	7.86	35.57
AV	7.31952G	38.11	54.00	-15.89	28.80	3	Vertical	214	2.34	-	37.00	7.88	35.57

802.11ax HEW40_Nss1,(MCS0)_3TX

2437MHz_TX

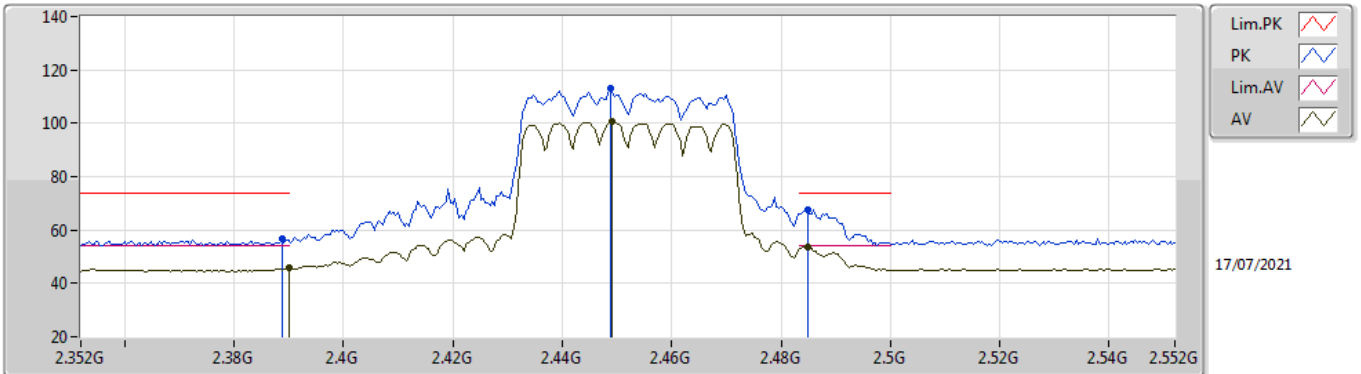


EUT Y_3TX
Setting 81
03-D-K-5

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	4.88308G	45.44	74.00	-28.56	40.98	3	Horizontal	229	1.92	-	33.53	6.32	35.39
AV	4.87904G	33.42	54.00	-20.58	28.97	3	Horizontal	229	1.92	-	33.52	6.32	35.39
PK	7.31872G	49.97	74.00	-24.03	40.66	3	Horizontal	213	2.05	-	37.00	7.88	35.57
AV	7.32052G	38.24	54.00	-15.76	28.93	3	Horizontal	213	2.05	-	37.00	7.88	35.57

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX

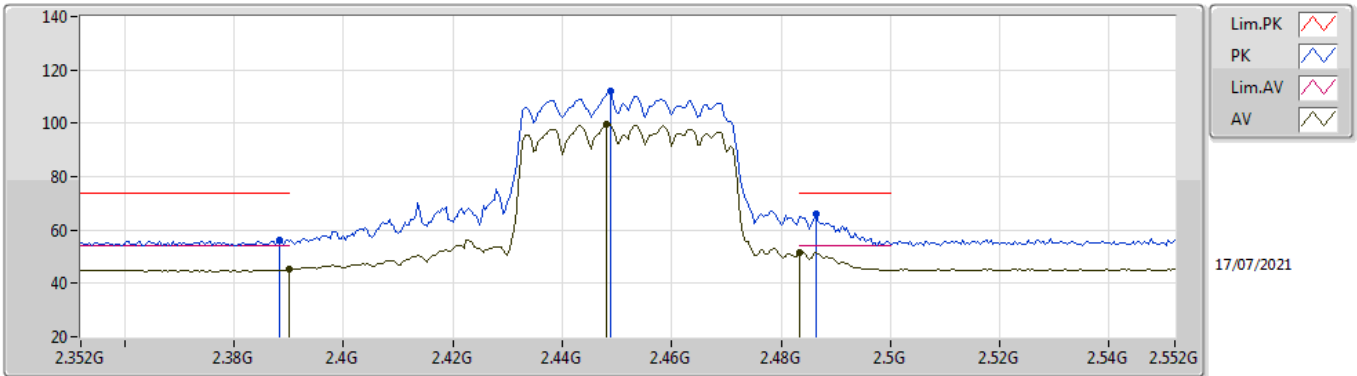


EUT_Y_3TX
Setting 76
03-D-K-5

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	2.3888G	56.66	74.00	-17.34	24.85	3	Vertical	47	1.98	-	28.32	3.49	-
AV	2.39G	45.70	54.00	-8.30	13.89	3	Vertical	47	1.98	-	28.32	3.49	-
PK	2.4488G	113.07	Inf	-Inf	81.12	3	Vertical	47	1.98	-	28.40	3.55	-
AV	2.4492G	100.47	Inf	-Inf	68.52	3	Vertical	47	1.98	-	28.40	3.55	-
PK	2.4848G	67.83	74.00	-6.17	35.64	3	Vertical	47	1.98	-	28.61	3.58	-
AV	2.4848G	53.59	54.00	-0.41	21.40	3	Vertical	47	1.98	-	28.61	3.58	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX

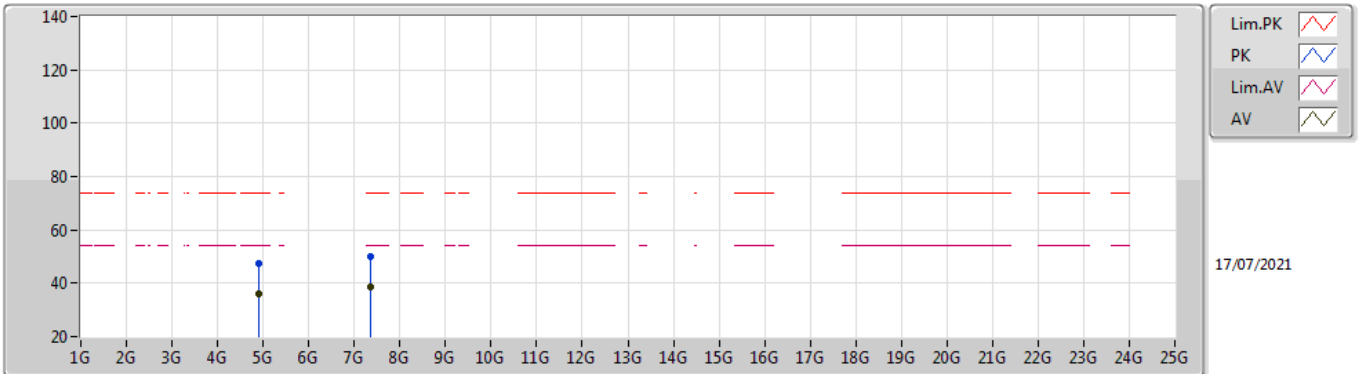


EUT Y_3TX
Setting 76
03-D-K-5

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	2.3884G	56.09	74.00	-17.91	24.28	3	Horizontal	318	1.79	-	28.32	3.49	-
AV	2.39G	45.17	54.00	-8.83	13.36	3	Horizontal	318	1.79	-	28.32	3.49	-
PK	2.4488G	112.20	Inf	-Inf	80.25	3	Horizontal	318	1.79	-	28.40	3.55	-
AV	2.448G	99.79	Inf	-Inf	67.84	3	Horizontal	318	1.79	-	28.40	3.55	-
PK	2.4864G	65.89	74.00	-8.11	33.68	3	Horizontal	318	1.79	-	28.62	3.59	-
AV	2.4835G	51.63	54.00	-2.37	19.45	3	Horizontal	318	1.79	-	28.60	3.58	-

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX

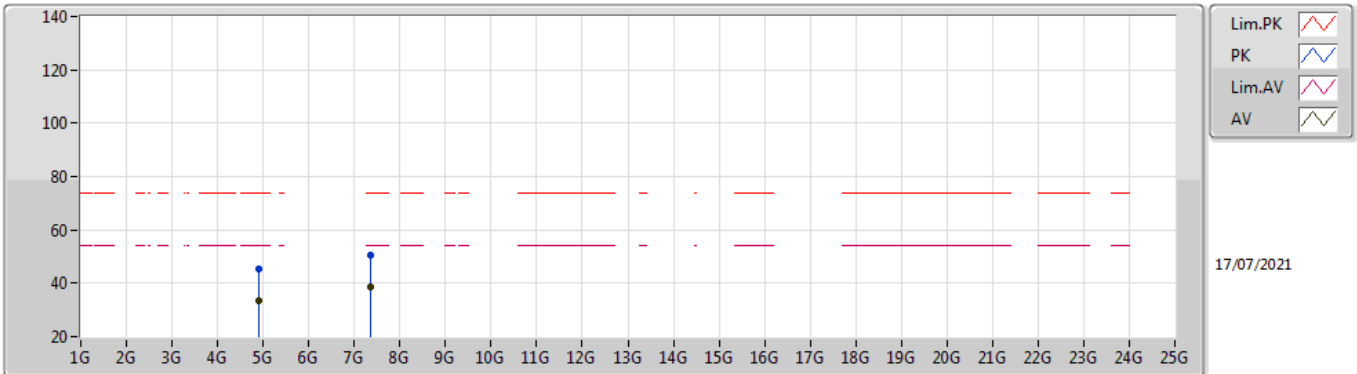


EUT Y_3TX
Setting 76
03-D-K-5

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	4.90656G	47.51	74.00	-26.49	42.92	3	Vertical	151	1.44	-	33.61	6.36	35.38
AV	4.90692G	35.86	54.00	-18.14	31.27	3	Vertical	151	1.44	-	33.61	6.36	35.38
PK	7.348G	50.25	74.00	-23.75	40.91	3	Vertical	285	2.43	-	37.00	7.92	35.58
AV	7.34672G	38.57	54.00	-15.43	29.23	3	Vertical	285	2.43	-	37.00	7.92	35.58

802.11ax HEW40_Nss1,(MCS0)_3TX

2452MHz_TX



EUT Y_3TX
Setting 76
03-D-K-5

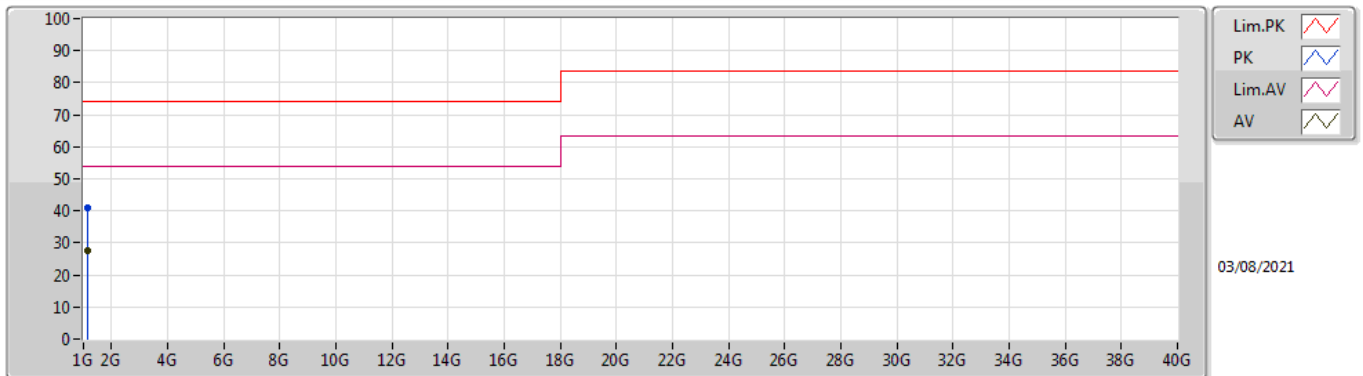
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.91344G	45.38	74.00	-28.62	40.76	3	Horizontal	99	1.96	-	33.63	6.37	35.38
AV	4.90016G	33.51	54.00	-20.49	28.94	3	Horizontal	99	1.96	-	33.60	6.35	35.38
PK	7.35844G	50.63	74.00	-23.37	41.25	3	Horizontal	0	1.55	-	37.02	7.94	35.58
AV	7.36588G	38.40	54.00	-15.60	29.01	3	Horizontal	0	1.55	-	37.03	7.95	35.59



Summary

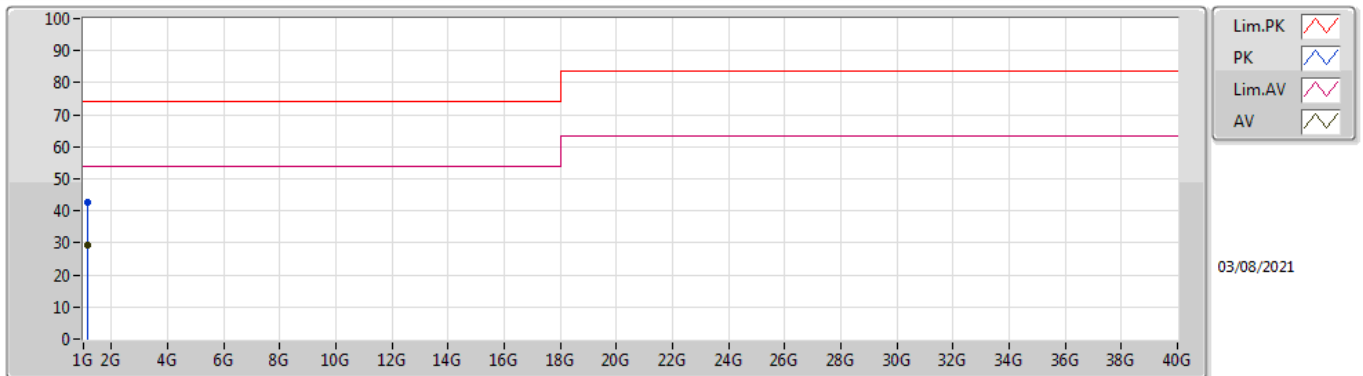
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.13696G	29.27	54.00	-24.73	Horizontal

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	1.1376G	41.05	74.00	-32.95	-9.55	3	Vertical	196	2.46	-	50.60	25.03	2.71	37.29
AV	1.13725G	27.53	54.00	-26.47	-9.56	3	Vertical	196	2.46	"Worst"	37.09	25.02	2.71	37.29

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	1.13733G	42.73	74.00	-31.27	-9.56	3	Horizontal	282	1.48	-	52.29	25.02	2.71	37.29
AV	1.13696G	29.27	54.00	-24.73	-9.56	3	Horizontal	282	1.48	"Worst"	38.83	25.02	2.71	37.29