

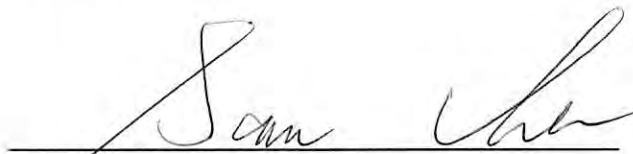


# RADIO TEST REPORT

**FCC ID** : UDX-600191010  
**Equipment** : Catalyst Wireless 9163E Series Wi-Fi 6E Access Point  
**Brand Name** : CISCO  
**Model Name** : CW9163E-B, CW9163E-MR  
**Applicant** : Cisco Systems, Inc.  
170 West Tasman Drive, San Jose, CA 95134 USA  
**Manufacturer** : Cisco Systems, Inc.  
170 West Tasman Drive, San Jose, CA 95134 USA  
**Standard** : 47 CFR FCC Part 15.247

The product was received on Apr. 07, 2023, and testing was started from Apr. 12, 2023 and completed on Sep. 08, 2023. 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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**Photographs of EUT v01**



### History of this test report

Report No.	Version	Description	Issued Date
FR340101AA	01	Initial issue of report	Sep. 19, 2023



## 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	-

**Conformity Assessment Condition:**

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

**Disclaimer:**

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

**Reviewed by: Sam Chen****Report Producer: Viola Huang**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax (HEW20)	2412-2462	1-11 [11]

#### For Radio 1

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX/2TX
2.4-2.4835GHz	802.11g	20	1TX/2TX
2.4-2.4835GHz	802.11n HT20	20	1TX/2TX
2.4-2.4835GHz	802.11n HT20-BF	20	2TX
2.4-2.4835GHz	VHT20	20	1TX/2TX
2.4-2.4835GHz	VHT20-BF	20	2TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX/2TX
2.4-2.4835GHz	802.11ax HEW20-BF	20	2TX

#### For Scanning Radio 2

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11n HT20	20	1TX
2.4-2.4835GHz	VHT20	20	1TX
2.4-2.4835GHz	802.11ax HEW20	20	1TX

#### Note:

- ◆ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ◆ 11g, HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ◆ VHT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ HEW20 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.



**1.1.2 Antenna Information**

Ant.	2.4GHz Port	5GHz Port	Bluetooth / Zigbee	GPS	Brand	Model Name	Antenna Type	Connector	Remark	Gain (dBi)
1	2	2	-	-	CISCO	CW-ANT-O1-NS	Dipole	N-Type	External Antenna	Note 1
2	1	1	-	-	CISCO	CW-ANT-O1-NS	Dipole	N-Type	External Antenna	
3	-	-	-	-	CISCO	CW-ANT-O1-NS	Dipole	N-Type	External Antenna	
4	-	-	-	-	CISCO	CW-ANT-O1-NS	Dipole	N-Type	External Antenna	
5	1	1	-	-	AWAN	A8M6P-100005	PIFA	N-Type	Internal Antenna	
6	-	-	1	-	AWAN	A8M6P-100003	PIFA	N-Type	Internal Antenna	
7	-	-	-	1	AWAN	A8M6P-100004	PIFA	N-Type	Internal Antenna	
8	-	-	-	2	CISCO	CW-ANT-GPS2	Patch	SMA	External Antenna	

Note1:

Ant.	Gain (dBi)										
	2.4GHz	5GHz UNII 1	5GHz UNII 2A	5GHz UNII 2C	5GHz UNII 3	6GHz UNII 5	6GHz UNII 6	6GHz UNII 7	6GHz UNII 8	Bluetooth / Zigbee	GPS
1	4	8	8	8	8	-	-	-	-	-	-
2	4	8	8	8	8	-	-	-	-	-	-
3	-	-	-	-	-	8	8	8	8	-	-
4	-	-	-	-	-	8	8	8	8	-	-
5	4.9	3	3	3.1	3	2.8	3.2	3.2	2.7	-	-
6	-	-	-	-	-	-	-	-	-	5.7	-
7	-	-	-	-	-	-	-	-	-	-	3.7
8	-	-	-	-	-	-	-	-	-	-	3.18

Note2: The above information was declared by manufacturer.

Note3: The 6GHz function of Antennas 3~5 doesn't be enabled at this time.



Note4: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$$

$NSS1(g1,1) = 10^{G1/20}$  ;  $NSS1(g1,2) = 10^{G2/20}$ ;

$g_{j,k} = (Nss1(g1,1) + Nss1(g1,2) )^2$

$DG = 10 \log[(Nss1(g1,1) + Nss1(g1,2) )^2 / N_{ANT}] => 10 \log[(10^{G1/20} + 10^{G2/20} )^2 / N_{ANT}]$

Where ;

Dipole

2.4G G1= 4 dBi ; G2= 4 dBi ;DG= 7.01dBi

5G G1= 8 dBi ; G2= 8 dBi ;DG= 11.01dBi

**<For Radio 1 (2.4GHz/5GHz Functions)>**

**IEEE 802.11b/g/n/VHT/ax**

**For 1TX/2RX:**

The EUT supports the antenna with TX diversity functions.

Both Port 1 and Port 2 support transmit and receive functions, but only one of them will be used to transmit at one time.

**For 2TX/2RX:**

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

Port 1 and Port 2 could transmit/receive simultaneously.

**<For Scanning Radio 2 (2.4GHz/5GHz Functions)>**

**IEEE 802.11b/g/n/VHT/ax**

**For 1TX/1RX:**

Only Port 1 can be use as transmitting/receiving antenna.

**<For Radio 3 / Bluetooth/Zigbee Functions>**

**For 1TX/1RX:**

Only Port 1 can be use as transmitting/receiving antenna.

**<For Radio 4 / GPS Functions>**

**For 1RX:**

The EUT supports the antenna with RX diversity functions.

Both Port 1 and Port 2 support receive functions, but only one of them will be used to receive at one time.



### 1.1.3 Mode Test Duty Cycle

For Radio 1

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.703	1.53	641.25u	3k
802.11g	0.941	0.26	1.978m	1k
802.11ax HEW20	0.801	0.96	5.448m	300
802.11ax HEW20-BF	0.821	0.86	5.447m	300

For Scanning Radio 2

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.708	1.5	641.25u	3k
802.11g	0.934	0.3	1.978m	1k
802.11ax HEW20	0.79	1.02	5.448m	300

Note:

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

### 1.1.4 EUT Operational Condition

<b>EUT Power Type</b>	From PoE			
<b>Beamforming Function</b>	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for 11n/VHT/11ax in 2.4GHz and 11n/11ac/11ax in 5GHz.			
<b>Function</b>	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
<b>Support RU</b>	<input checked="" type="checkbox"/>	Full RU	<input type="checkbox"/>	Partial RU
<b>Test Software Version</b>	QSPR Version 5.0-00202			

Note: The above information was declared by manufacturer.

### 1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	SW
CW9163E-B	Cisco
CW9163E-MR	Meraki

Note 1: From the above models, model: CW9163E-B was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.





**1.1.6 Table of Serial Number**

Test items	Serial Number
1. AC Power-line Conducted Emissions 2. Radiated Emission Co-location (As below for Non Beamforming mode) 3. DTS Bandwidth 4. Maximum Conducted Output Power 5. Power Spectral Density 6. Emissions in Restricted Frequency Bands below 1GHz 7. Emissions in Restricted Frequency Bands above 1GHz 8. Emissions in Non-restricted Frequency Band	DSM2711000W
(As below for Beamforming mode) 9. Maximum Conducted Output Power	DSM2711001S

Note: The above information was declared by manufacturer.

**1.1.7 Table for Radio Function**

Radio	Support Band
1	2.4GHz / 5GHz UNII 1~UNII 3
2	Scanning 2.4GHz / 5GHz UNII 1~UNII 3
3	Bluetooth / Zigbee
4	GPS

Note1: The above information was declared by manufacturer.

Note2: The Radio 1 and Radio 2 can't be operated simultaneously.

**1.1.8 Table for EUT Information**

EUT	RJ-45 Connector	Console Connector
1	Brand Name: UDE Model Name: R66-MK-3001	Brand Name: UDE Model Name: R66-MK-2001
2	Brand Name: ODS Model Name: CMK-RJ45-CAP	Brand Name: ODS Model Name: CMK-RJ45-CG

Note1: From the above EUTs, EUT 1 was selected as representative EUT for all the tests and its data was recorded in this report; EUT 2 was selected as representative EUT for AC Power-line Conducted Emissions, Emissions in Non-restricted Frequency Bands below 1GHz and its data was recorded in this report.

Note2: 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 414788 D01 v01r01

### 1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	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	TH01-CB	Eason Chen	22.9~24 / 61~63	Apr. 17, 2023~Jun. 06, 2023
Radiated below 1GHz	03CH04-CB	Chris Li	22~23.5 / 58~63	Apr. 12, 2023~May 27, 2023
	03CH02-CB	Chris Li	21.8~23.3 / 59~60	Sep. 04, 2023~Sep. 05, 2023
Radiated above 1GHz (for co-location test)	03CH04-CB	Chris Li	22~23.5 / 58~63	Apr. 12, 2023~May 27, 2023
Radiated above 1GHz	03CH02-CB	Chris Li	22.3~22.9 / 57~63	Apr. 12, 2023~May 27, 2023
AC Conduction	CO02-CB	Peter Wu	22~23 / 58~59	Jul. 19, 2023~Sep. 08, 2023

### 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))

**For test date before Jun. 01, 2023**

Test Items	Uncertainty	Remark
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%



**For test date after May 31, 2023**

<b>Test Items</b>	<b>Uncertainty</b>	<b>Remark</b>
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

For Radio 1

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(1)	-
2412MHz	28.5
2437MHz	26.5
2462MHz	25.5
802.11g_Nss1,(6Mbps)_1TX(1)	-
2412MHz	25.5
2417MHz	26.5
2437MHz	28.5
2457MHz	25
2462MHz	24
802.11ax HEW20_Nss1,(MCS0)_1TX(1)	-
2412MHz	25.5
2417MHz	26.5
2437MHz	28.5
2457MHz	25
2462MHz	23
802.11b_Nss1,(1Mbps)_1TX(2)	-
2412MHz	28.5
2437MHz	28.5
2462MHz	27.5
802.11g_Nss1,(6Mbps)_1TX(2)	-
2412MHz	25.5
2417MHz	25
2437MHz	29
2457MHz	25.5
2462MHz	25
802.11ax HEW20_Nss1,(MCS0)_1TX(2)	-
2412MHz	25.5
2417MHz	27
2437MHz	29
2457MHz	26
2462MHz	25
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	26.5
2437MHz	26



Mode	Power Setting
2462MHz	24.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	25
2417MHz	25
2437MHz	26.5
2457MHz	25
2462MHz	24
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	25
2417MHz	26
2437MHz	27
2457MHz	25.5
2462MHz	23.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	25
2417MHz	26
2437MHz	26
2457MHz	25.5
2462MHz	23.5

**For Scanning Radio 2**

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	25
2417MHz	25.5
2437MHz	28.5
2462MHz	27.5
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	20.5
2417MHz	23.5
2437MHz	29
2457MHz	24
2462MHz	23.5
802.11ax HEW20_Nss1,(MCS0)_1TX	-
2412MHz	18
2417MHz	23
2437MHz	29
2457MHz	23.5
2462MHz	22.5



Note:

- ◆ Evaluated HEW20 mode only, due to similar modulation. The power setting of HT20/VHT20 mode are the same or lower than HEW20.
- ◆ 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	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
<b>Operating Mode</b>	CTX
1	EUT 1 + Radio 1 (2.4GHz) + PoE 1
2	EUT 1 + Radio 1 (2.4GHz) + PoE 2
3	EUT 1 + Radio 1 (2.4GHz) + PoE 3
4	EUT 1 + Radio 1 (2.4GHz) + PoE 4
5	EUT 1 + Radio 1 (2.4GHz) + PoE 5
Mode 3 has been evaluated to be the worst case among Mode 1~5, thus measurement for Mode 6 ~ 9 will follow this same test mode.	
6	EUT 1 + Radio 1 (5GHz) + PoE 3
7	EUT 1 + Scanning Radio 2 (2.4GHz) + PoE 3
8	EUT 1 + Scanning Radio 2 (5GHz) + PoE 3
9	EUT 1 + Radio 3 (Bluetooth) + PoE 3
Mode 3 has been evaluated to be the worst case among Mode 1~9, thus measurement for Mode 10 will follow this same test mode.	
10	EUT 2 + Radio 1 (2.4GHz) + PoE 3
Mode 3 has been evaluated to be the worst case among Mode 1~10, thus measurement for Mode 11 will follow this same test mode.	
11	EUT 1 + Radio 3 (Zigbee) + PoE 3
For operating mode 3 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
<b>Test Condition</b>	Conducted measurement at transmit chains
1	EUT 1 + Radio 1
2	EUT 1 + Scanning Radio 2



<b>The Worst Case Mode for Following Conformance Tests</b>	
<b>Tests Item</b>	Emissions in Restricted Frequency Bands
<b>Test Condition</b>	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.
<b>Operating Mode &lt; 1GHz</b>	CTX
	After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis + Radio 1 (2.4GHz) + PoE 1
2	EUT 1 in Y axis + Radio 1 (2.4GHz) + PoE 2
3	EUT 1 in Y axis + Radio 1 (2.4GHz) + PoE 3
4	EUT 1 in Y axis + Radio 1 (2.4GHz) + PoE 4
5	EUT 1 in Y axis + Radio 1 (2.4GHz) + PoE 5
Mode 5 has been evaluated to be the worst case among Mode 1~5, thus measurement for Mode 6 ~ 9 will follow this same test mode.	
6	EUT 1 in Y axis + Radio 1 (5GHz) + PoE 5
7	EUT 1 in Y axis + Scanning Radio 2 (2.4GHz) + PoE 5
8	EUT 1 in Y axis + Scanning Radio 2 (5GHz) + PoE 5
9	EUT 1 in Y axis + Radio 3 (Bluetooth) + PoE 5
Mode 8 has been evaluated to be the worst case among Mode 1~9, thus measurement for Mode 10 will follow this same test mode.	
10	EUT 2 in Y axis + Scanning Radio 2 (5GHz) + PoE 5
Mode 8 has been evaluated to be the worst case among Mode 1~10, thus measurement for Mode 11 will follow this same test mode.	
11	EUT 1 in Y axis + Radio 3 (Zigbee) + PoE 5
For operating mode 8 is the worst case and it was record in this test report.	
<b>Operating Mode &gt; 1GHz</b>	CTX
	After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis + Radio 1
2	EUT 1 in Y axis + Scanning Radio 2





The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Simultaneous Transmission Analysis - Radiated Emission Co-location
<b>Test Condition</b>	Radiated measurement
<b>Operating Mode</b>	Normal Link
	After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis - Radio 1: WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
<b>Operating Mode</b>	
1	Radio 1 (WLAN 2.4GHz+5GHz) + Scanning Radio 2 ( WLAN 2.4GHz) + Radio 3 (Bluetooth)
2	Radio 1 (WLAN 2.4GHz+5GHz) + Scanning Radio 2 ( WLAN 5GHz) + Radio 3 (Bluetooth)
3	Radio 1 (WLAN 2.4GHz+5GHz) + Scanning Radio 2 ( WLAN 2.4GHz) + Radio 3 (Zigbee)
4	Radio 1 (WLAN 2.4GHz+5GHz) + Scanning Radio 2 ( WLAN 5GHz) + Radio 3 (Zigbee)
Refer to Sporton Test Report No.: FA340101 for Co-location RF Exposure Evaluation.	

Note: The PoEs are for measurement only, would not be marketed.  
PoE information as below:

Power	Brand Name	Model Name
PoE 1	PHIHONG	POEA33U-1ATE
PoE 2	PHIHONG	POE60U-1BT-X
PoE 3	PHIHONG	POE29U-1AT(PL)
PoE 4	Delta	ADH-65AR B
PoE 5	Cisco	POEO75U-1BT

### 2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.



## 2.4 Accessories

Equipment	Brand Name	Model Name	Remark
Mount bracket 1*1	Meraki	MA-MNT-MR-16	Used for CW9163E-MR
Mount bracket 2*1	Cisco	AIR-MNT-VERT1	Used for CW9163E-B
Waterproof Covering (Cap) 1*1	UDE	R66-MK-3001	Used for EUT 1
Waterproof Covering (Cap) 2*1	ODS	CMK-RJ45-CAP	Used for EUT 2
Waterproof Covering (Cable Gland) 1*1	UDE	R66-MK-2001	Used for EUT 1
Waterproof Covering (Cable Gland) 2*1	ODS	CMK-RJ45-CG	Used for EUT 2

## 2.5 Support Equipment

### For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	2.5G LAN PC	DELL	T3400	N/A
B	PoE 3	PHIHONG	POE29U-1AT(PL)	N/A

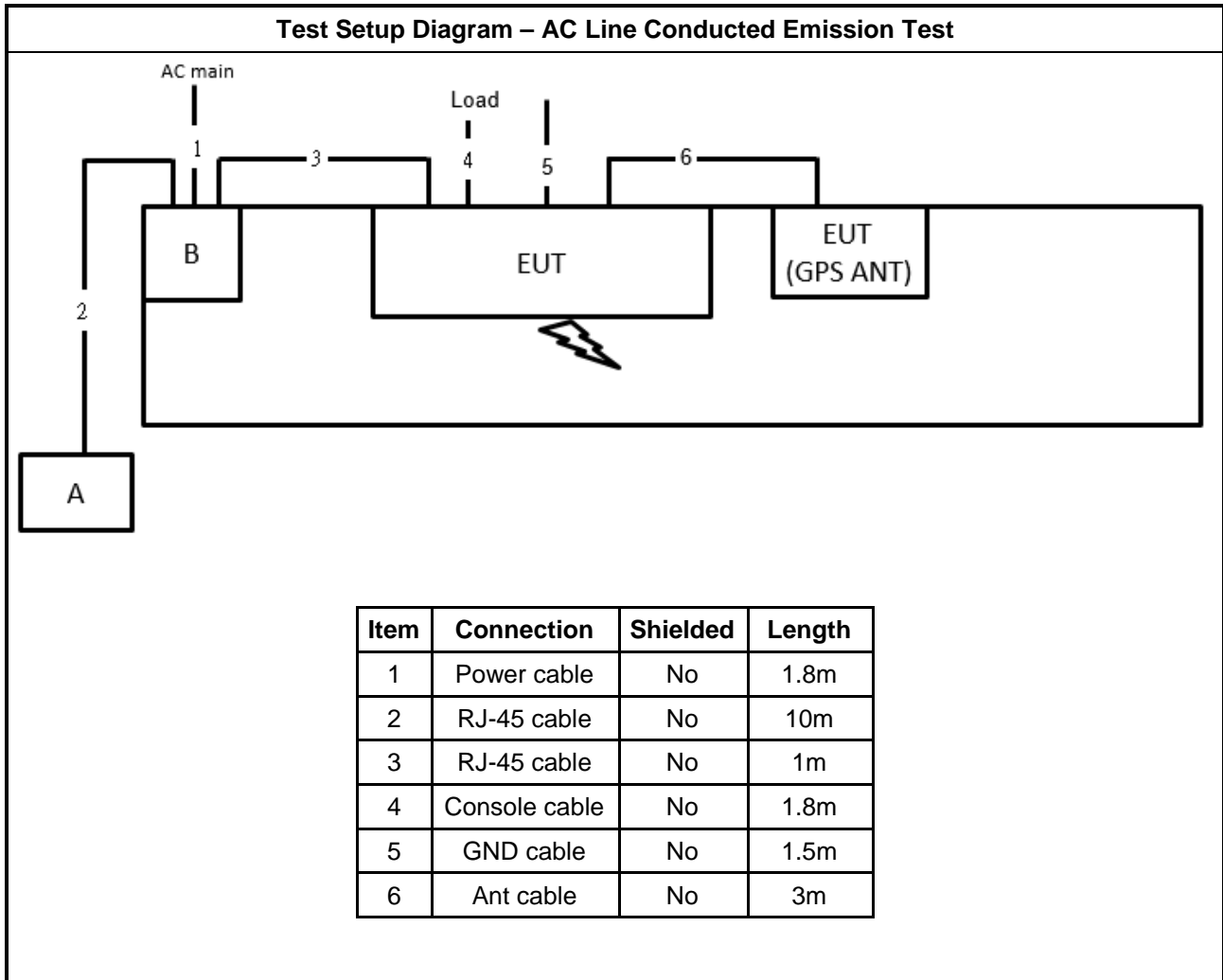
### For Radiated:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 5	Cisco	POEO75U-1BT	N/A
B	Notebook	DELL	E6430	N/A

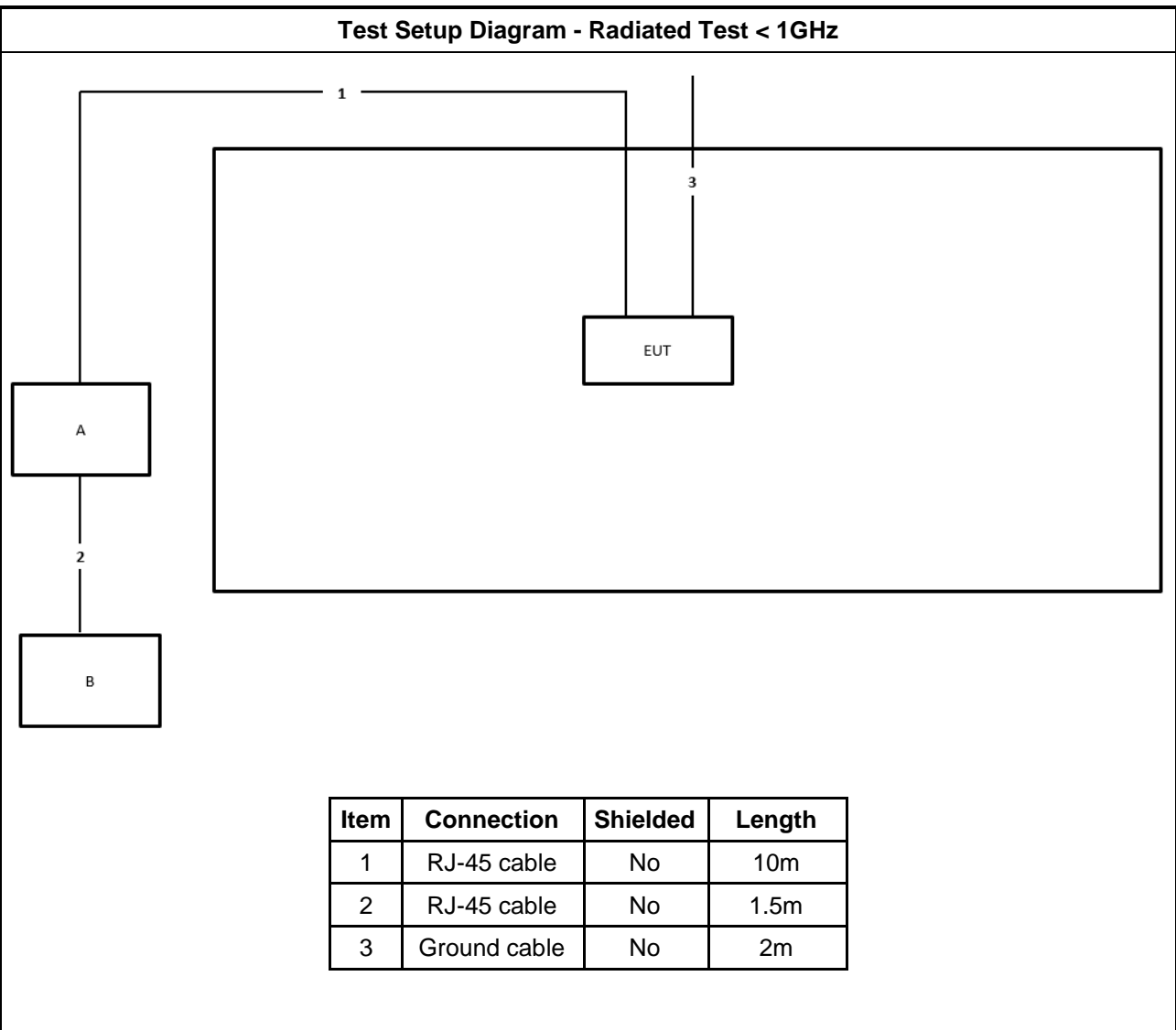
### For RF Conducted:

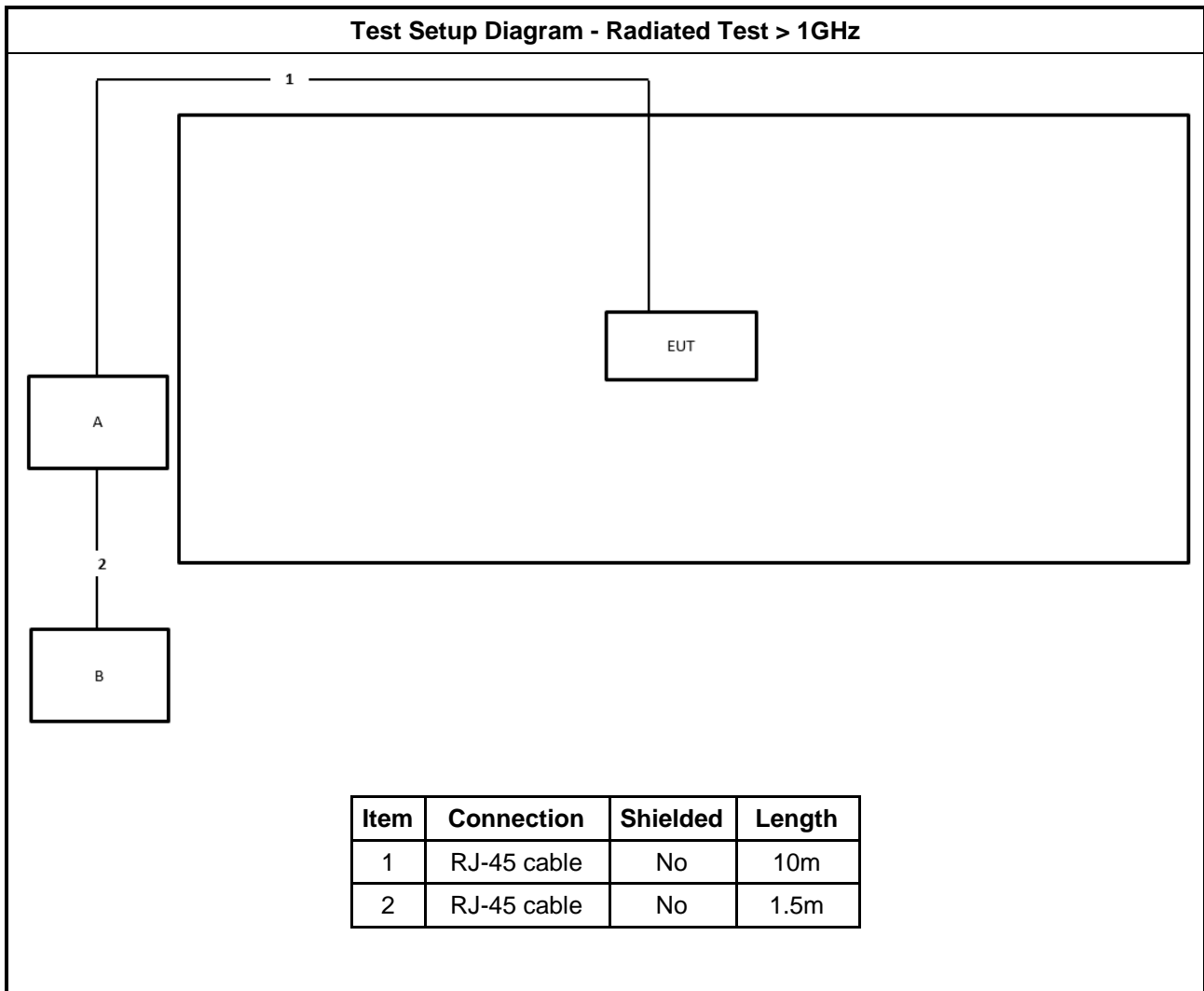
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE 4	Delta	ADH-65AR B	N/A

## 2.6 Test Setup Diagram



**Test Setup Diagram - Radiated Test < 1GHz**







### 3 Transmitter Test Result

#### 3.1 AC Power-line Conducted Emissions

##### 3.1.1 AC Power-line Conducted Emissions Limit

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

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

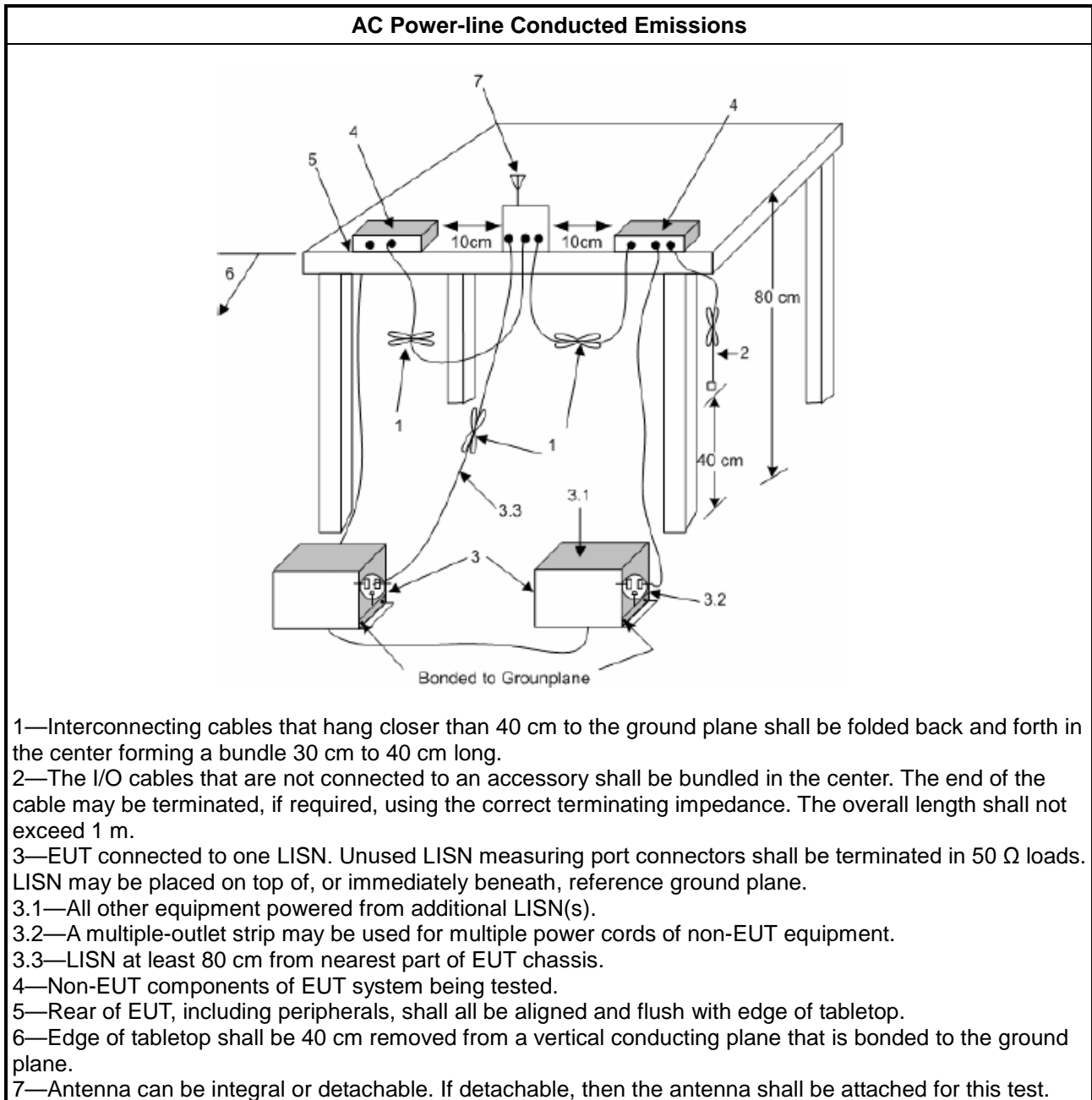
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

### 3.1.4 Test Setup



### 3.1.5 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
<b>Systems using digital modulation techniques:</b>
<ul style="list-style-type: none"> <li>▪ 6 dB bandwidth <math>\geq</math> 500 kHz.</li> </ul>

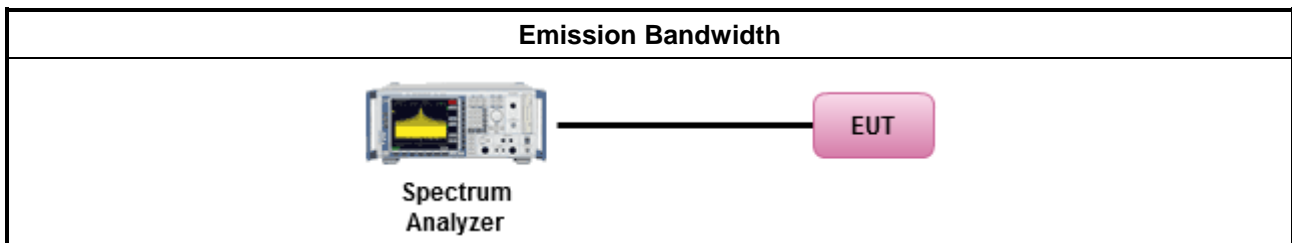
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>▪ For the emission bandwidth shall be measured using one of the options below:</li> </ul>
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

#### 3.2.4 Test Setup



#### 3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B





### 3.3 Maximum Conducted Output Power

#### 3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	<ul style="list-style-type: none"> <li>▪ If <math>G_{TX} \leq 6</math> dBi, then <math>P_{Out} \leq 30</math> dBm (1 W)</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Point-to-multipoint systems (P2M): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Point-to-point systems (P2P): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Smart antenna system (SAS):</li> </ul>
	<ul style="list-style-type: none"> <li>- Single beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>- Overlap beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li> </ul>
	<ul style="list-style-type: none"> <li>- Aggregate power on all beams: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3 + 8</math> dB dBm</li> </ul>
<p><math>P_{Out}</math> = maximum peak conducted output power or maximum conducted output power in dBm,  <math>G_{TX}</math> = the maximum transmitting antenna directional gain in dBi.</p>	

#### 3.3.2 Measuring Instruments

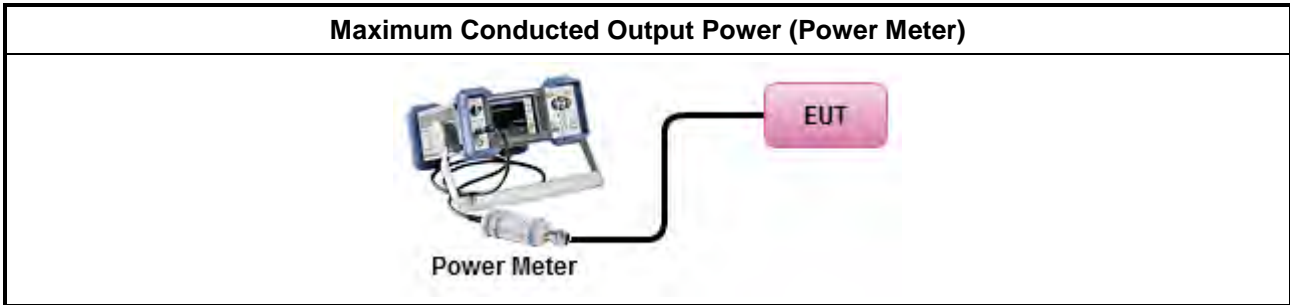
Refer a test equipment and calibration data table in this test report.



**3.3.3 Test Procedures**

Test Method	
<ul style="list-style-type: none"> <li>▪ Maximum Peak Conducted Output Power</li> </ul>	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
<ul style="list-style-type: none"> <li>▪ Maximum Conducted Output Power</li> </ul>	
[duty cycle ≥ 98% or external video / power trigger]	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	<input type="checkbox"/> 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	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	<input type="checkbox"/> 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)	
	<input type="checkbox"/> 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).
	<input checked="" type="checkbox"/> 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).
<ul style="list-style-type: none"> <li>▪ For conducted measurement.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ If multiple transmit chains, EIRP calculation could be following as methods:  <math>P_{total} = P_1 + P_2 + \dots + P_n</math>            (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>	

### 3.3.4 Test Setup



### 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



### 3.4 Power Spectral Density

#### 3.4.1 Power Spectral Density Limit

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

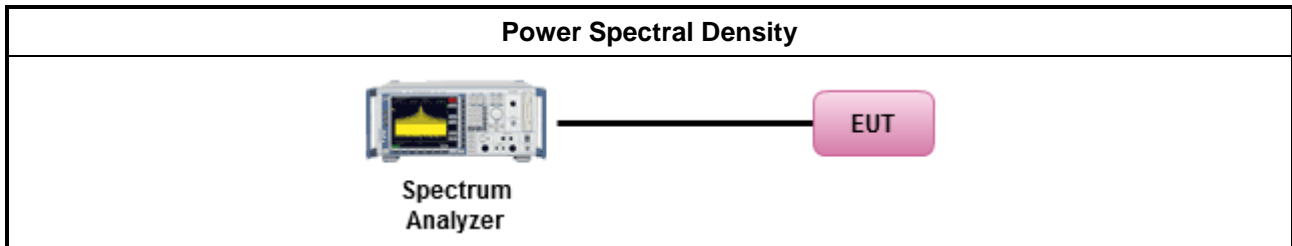
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

Test Method			
<ul style="list-style-type: none"> <li>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).</li> </ul>			
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.			
<ul style="list-style-type: none"> <li>For conducted measurement.             <ul style="list-style-type: none"> <li>If The EUT supports multiple transmit chains using options given below:                 <table border="1"> <tbody> <tr> <td> <input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.                 </td> </tr> <tr> <td> <input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,                 </td> </tr> <tr> <td> <input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.                 </td> </tr> </tbody> </table> </li> </ul> </li> </ul>	<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	<input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.			
<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,			
<input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.			

### 3.4.4 Test Setup



### 3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

### 3.5 Emissions in Non-restricted Frequency Bands

#### 3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (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.

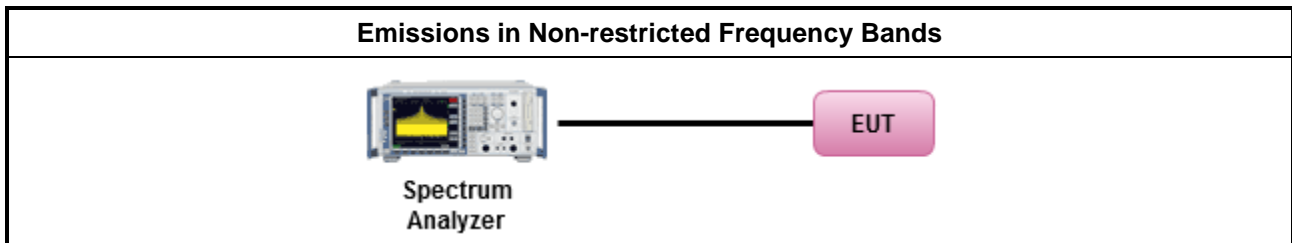
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.</li> </ul>

#### 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.

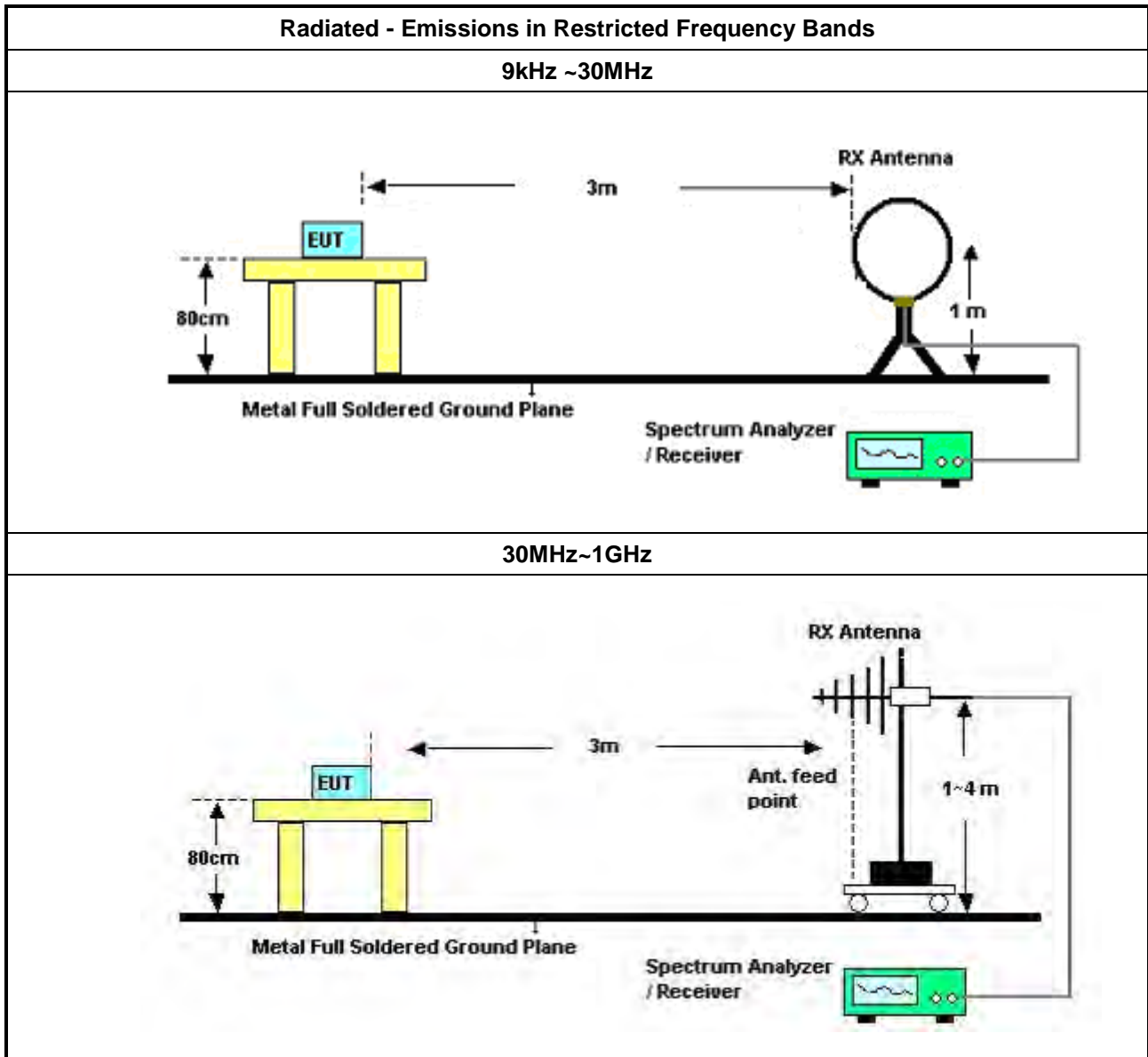


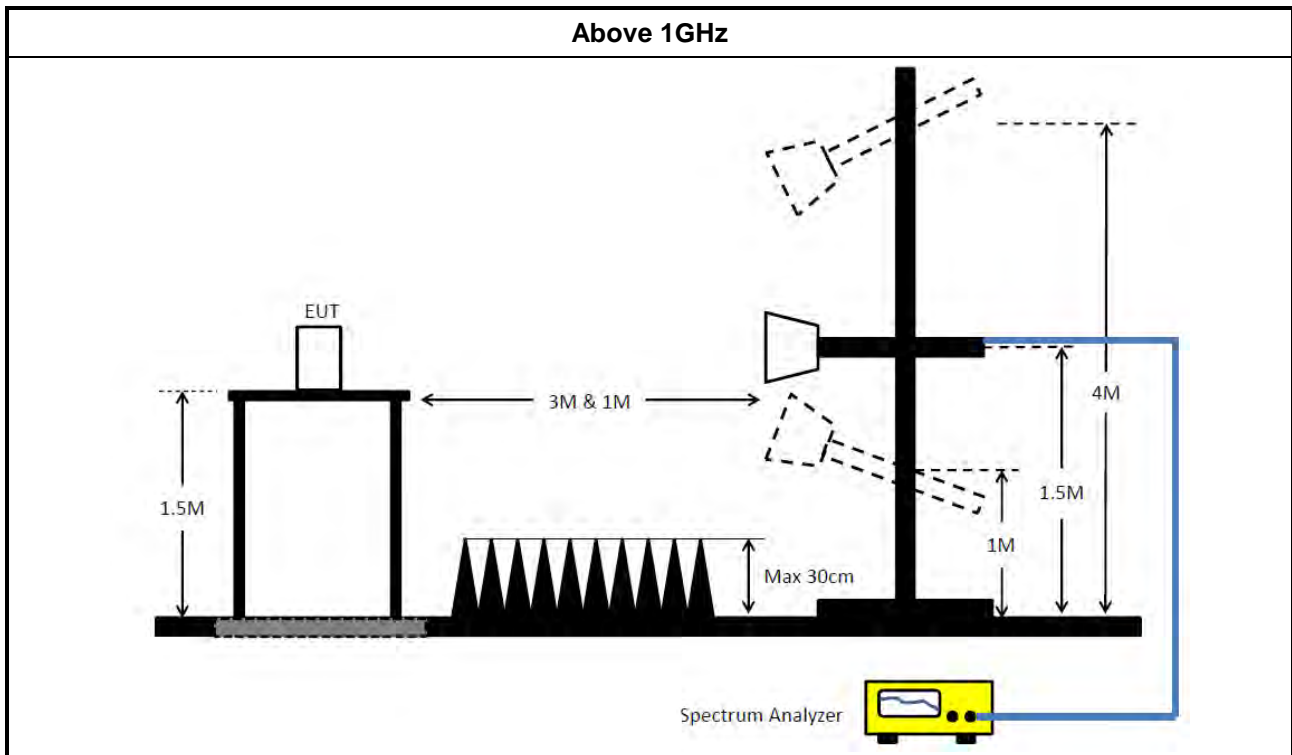
**3.6.3 Test Procedures**

<b>Test Method</b>	
<ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.</li> </ul>
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq$ 98%).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq$ 1/T).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> <li>▪ For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074 clause 8.7 &amp; 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.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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).</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>



**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	Apr. 06, 2023	Apr. 05, 2024	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Dec. 20, 2022	Dec. 19, 2023	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 18, 2023	May 17, 2024	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH04-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 02, 2022	Aug. 01, 2023	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 23, 2023	Feb. 22, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 08, 2022	Oct. 07, 2023	Radiation (03CH04-CB)
Horn Antenna	ETS-Lindgren	3115	00143147	750MHz~18GHz	Oct. 12, 2022	Oct. 11, 2023	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH0301	20230109-2	10M~1GHz	Jan. 13, 2023	Jan. 12, 2024	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz ~ 1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH02-CB)
3m Semi Anechoic Chamber (NSA)	RIKEN	SAC-3M	03CH02-CB	30 MHz ~ 1 GHz	Mar. 25, 2023	Mar. 24, 2024	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 25, 2023	Mar. 24, 2024	Radiation (03CH02-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Dec. 05, 2022	Dec. 04, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Signal Analyzer	R&S	FSV3044	101320	9kHz ~ 44GHz	May 20, 2022	May 19, 2023	Conducted (TH01-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 21, 2023	Apr. 20, 2024	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1 GHz ~26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 22, 2023	Feb. 21, 2024	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 22, 2023	Feb. 21, 2024	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

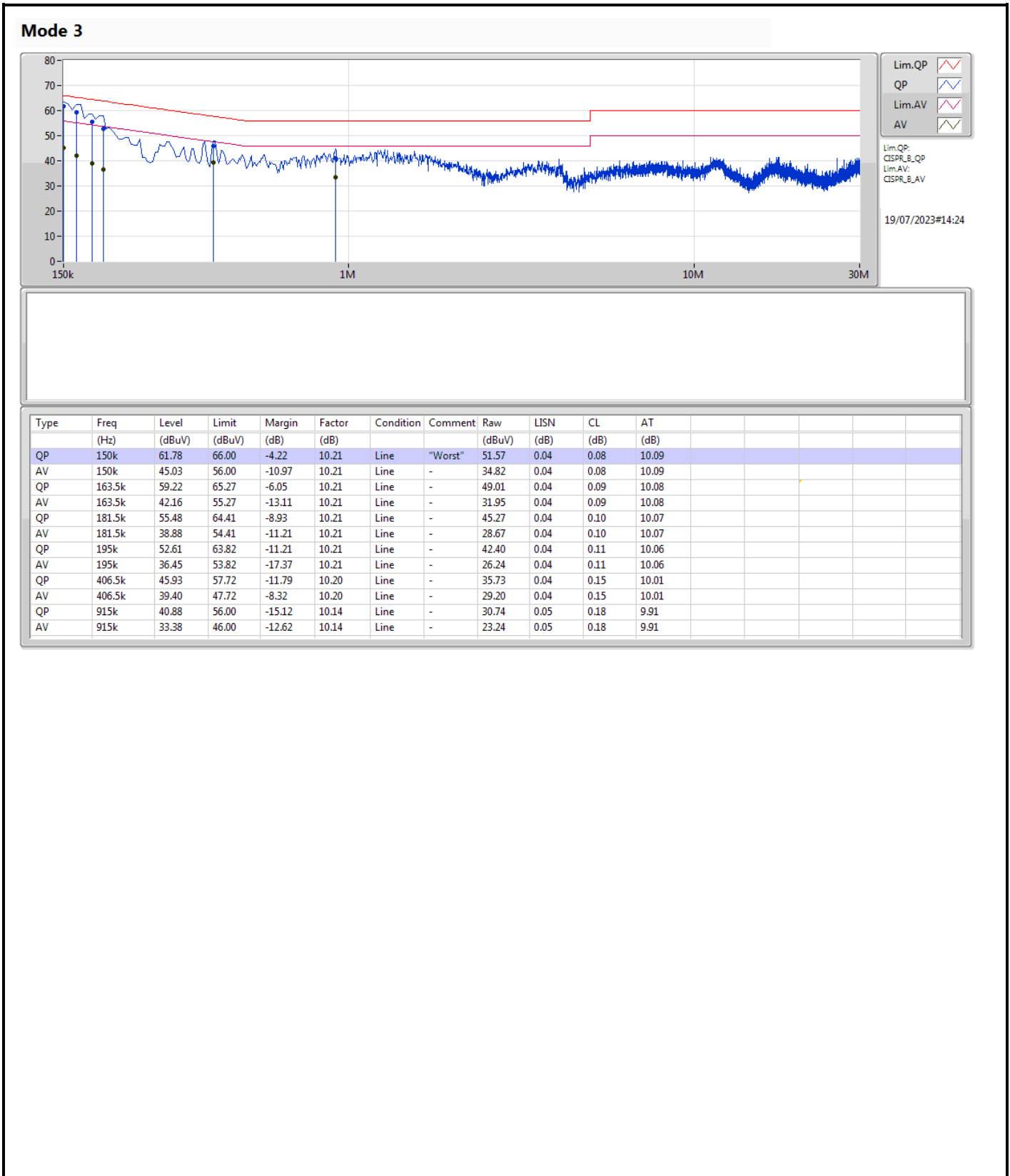
Note: Calibration Interval of instruments listed above is one year.

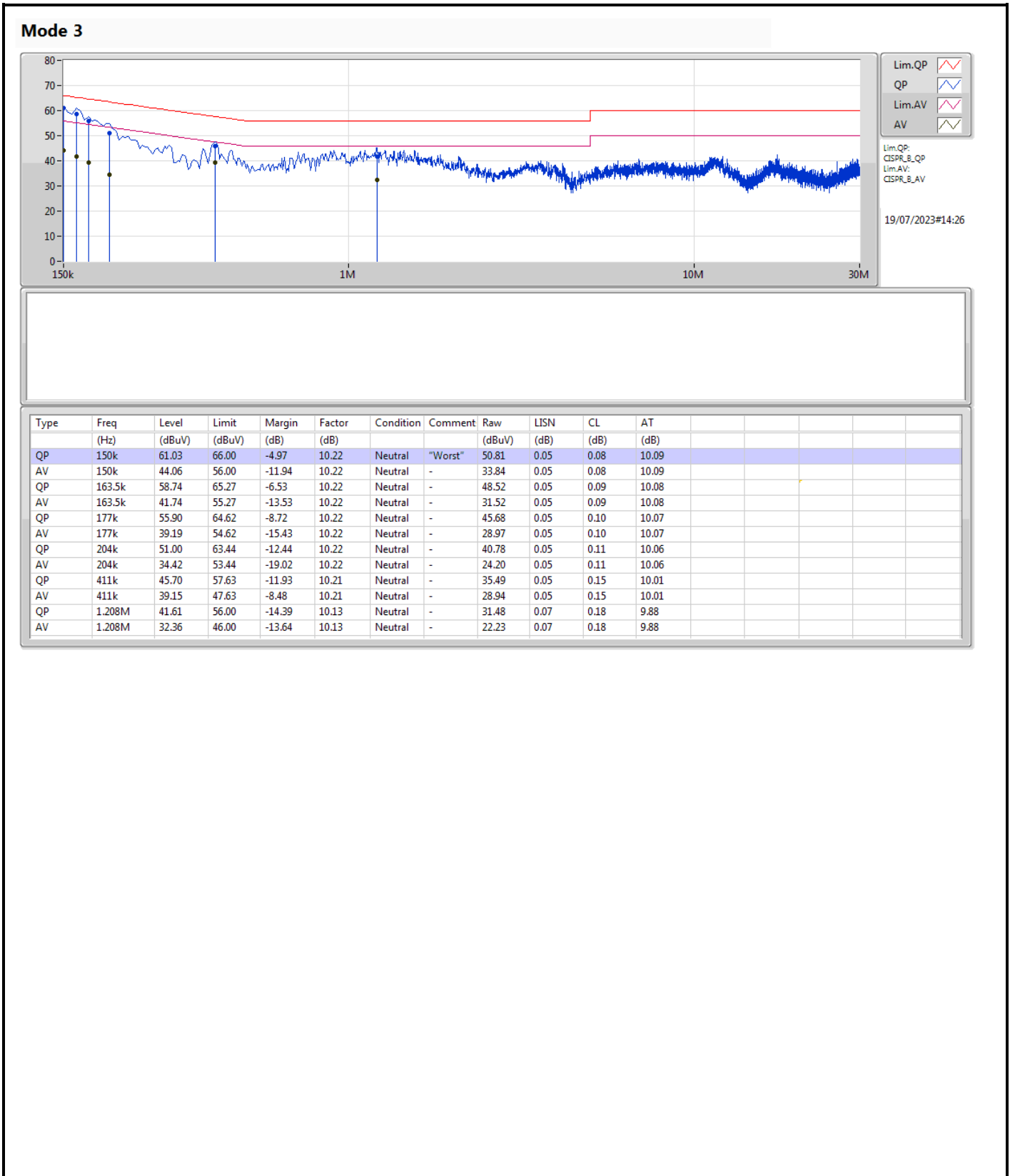
N.C.R. means Non-Calibration required.



**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 3	Pass	QP	150k	61.78	66.00	-4.22	Line









**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)_1TX	8.525M	16.092M	16M1G1D	7.075M	13.235M
802.11b_Nss1,(1Mbps)_1TX	10.05M	20.975M	21M0G1D	8.525M	16.347M
802.11b_Nss1,(1Mbps)_2TX	8.05M	13.791M	13M8G1D	7.1M	13.066M
802.11g_Nss1,(6Mbps)_1TX	16.025M	26.814M	26M8D1D	15.675M	16.542M
802.11g_Nss1,(6Mbps)_1TX	16.275M	23.797M	23M8D1D	15.65M	16.449M
802.11g_Nss1,(6Mbps)_2TX	16.025M	17.845M	17M8D1D	15.125M	16.426M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.025M	24.126M	24M1D1D	16.775M	18.95M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.675M	21.839M	21M8D1D	17.225M	18.937M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.6M	19.321M	19M3D1D	16.825M	18.916M

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

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.525M	16.092M		
2437MHz	Pass	500k	7.075M	13.387M		
2462MHz	Pass	500k	8.05M	13.235M		
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.75M	16.542M		
2437MHz	Pass	500k	16.025M	26.814M		
2462MHz	Pass	500k	15.675M	16.549M		
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.95M	18.989M		
2437MHz	Pass	500k	18.025M	24.126M		
2462MHz	Pass	500k	16.775M	18.95M		
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k			8.525M	16.347M
2437MHz	Pass	500k			9.025M	20.975M
2462MHz	Pass	500k			10.05M	18.278M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k			15.65M	16.449M
2437MHz	Pass	500k			16.275M	23.797M
2462MHz	Pass	500k			15.9M	16.492M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	500k			17.925M	18.937M
2437MHz	Pass	500k			18.675M	21.839M
2462MHz	Pass	500k			17.225M	18.963M
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.05M	13.279M	8M	13.791M
2437MHz	Pass	500k	7.1M	13.125M	7.575M	13.736M
2462MHz	Pass	500k	8.025M	13.066M	8.025M	13.314M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.65M	16.492M	15.45M	16.426M
2437MHz	Pass	500k	16.025M	17.845M	15.125M	16.822M
2462MHz	Pass	500k	15.9M	16.543M	15.925M	16.433M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.325M	18.942M	18.4M	18.916M
2437MHz	Pass	500k	18.6M	19.321M	16.95M	19.134M
2462MHz	Pass	500k	16.825M	18.959M	16.825M	18.928M

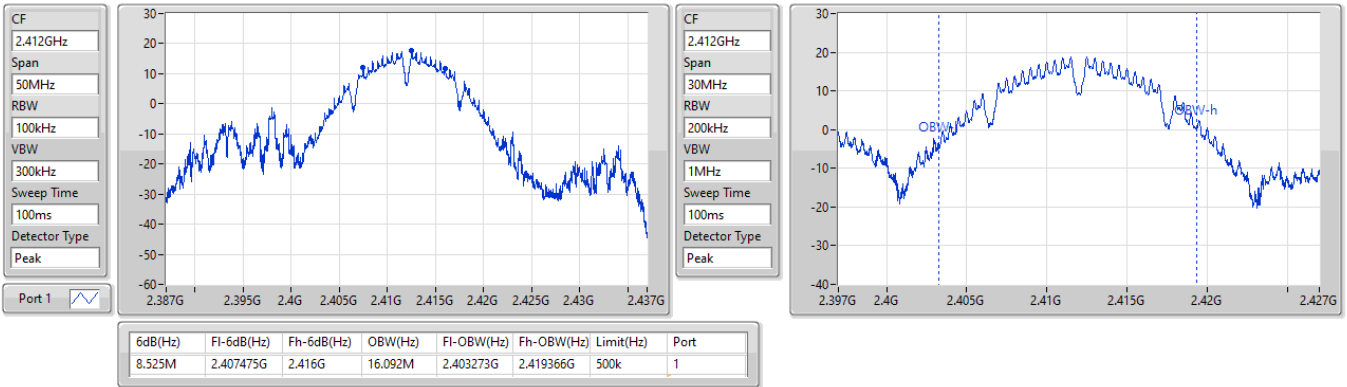
Port X-N dB = Port X 6dB down bandwidth;  
 Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

22/04/2023

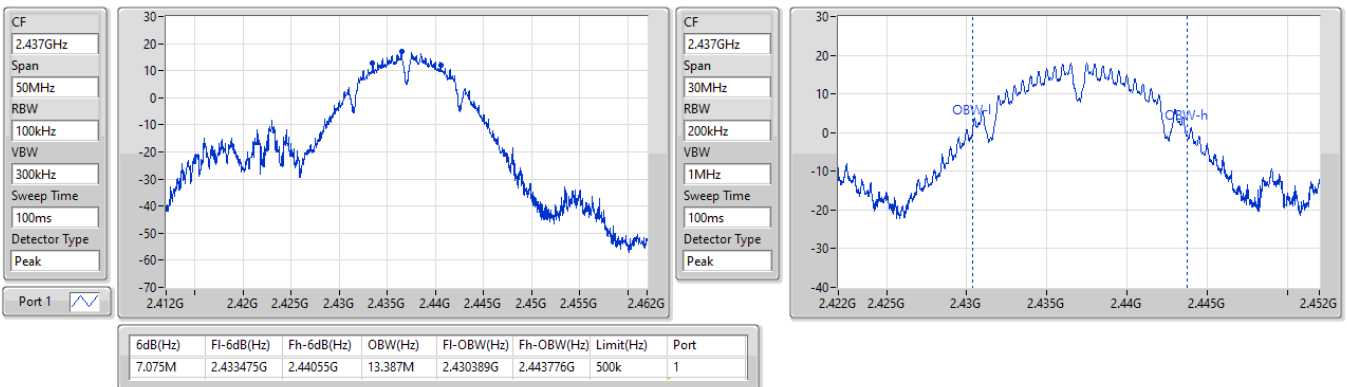


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

22/04/2023

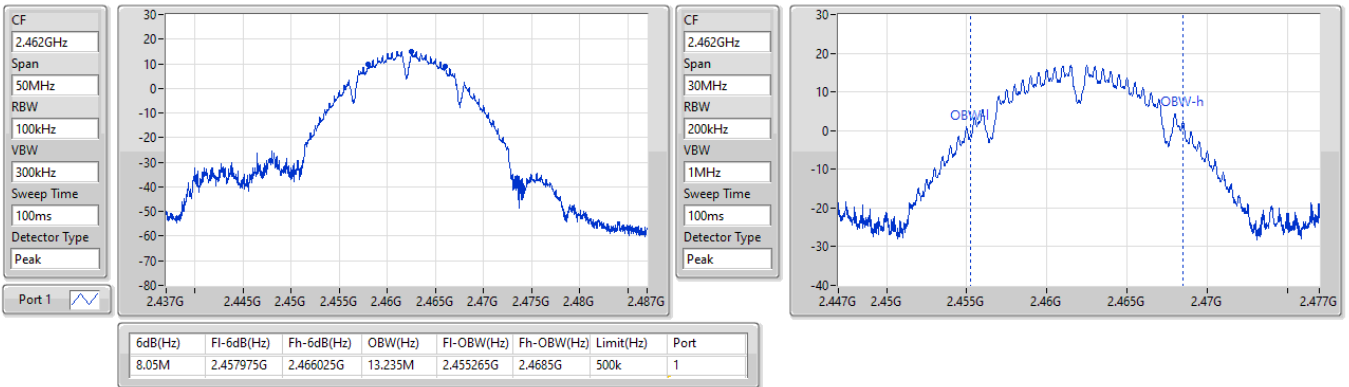


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2462MHz

22/04/2023

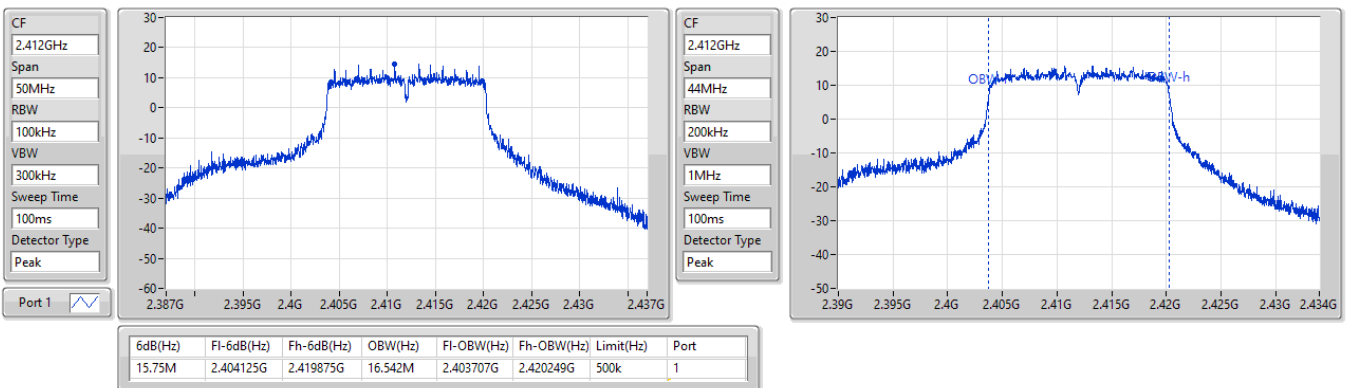


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2412MHz

24/04/2023

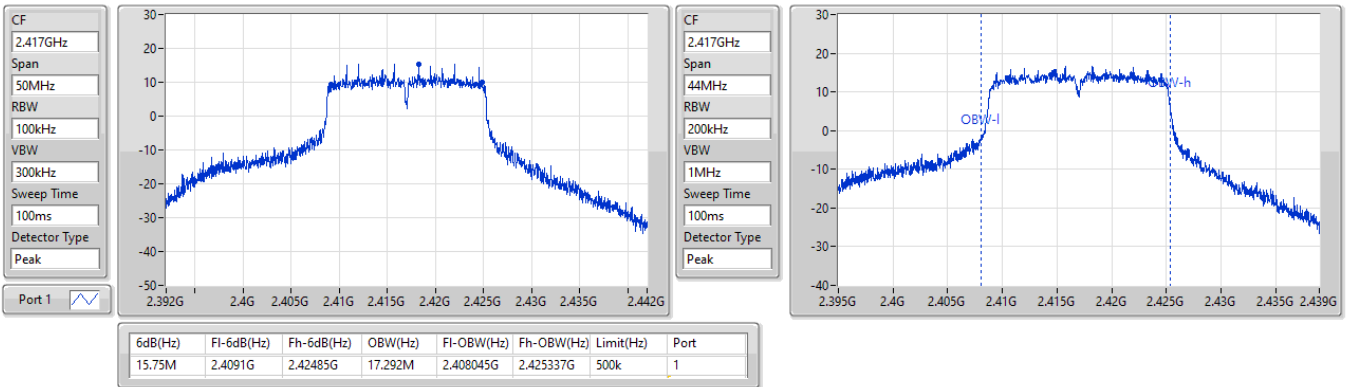


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2417MHz

24/04/2023

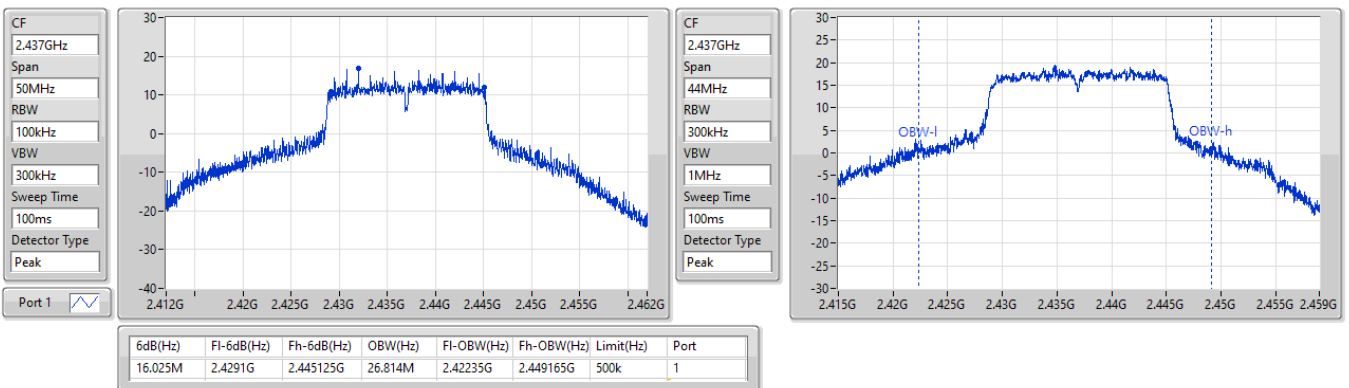


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2437MHz

24/04/2023

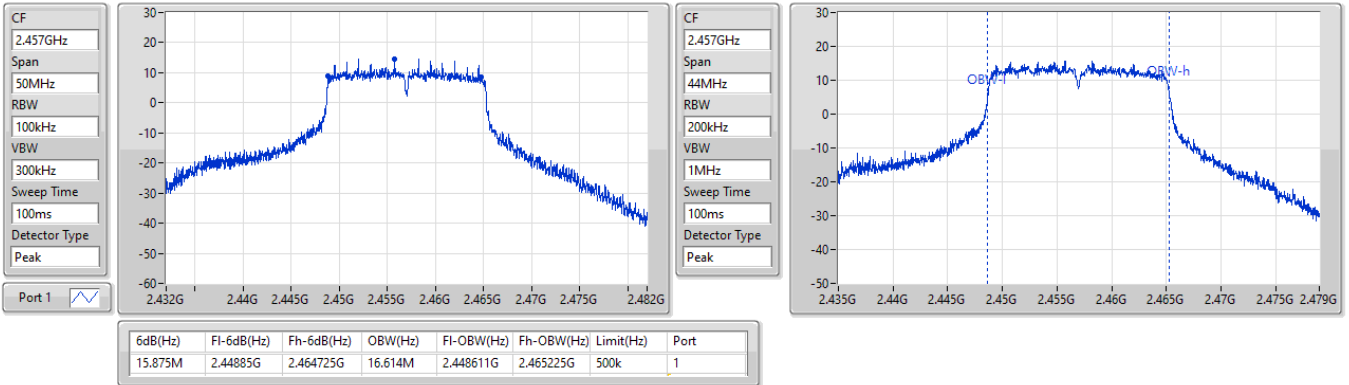


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2457MHz

24/04/2023

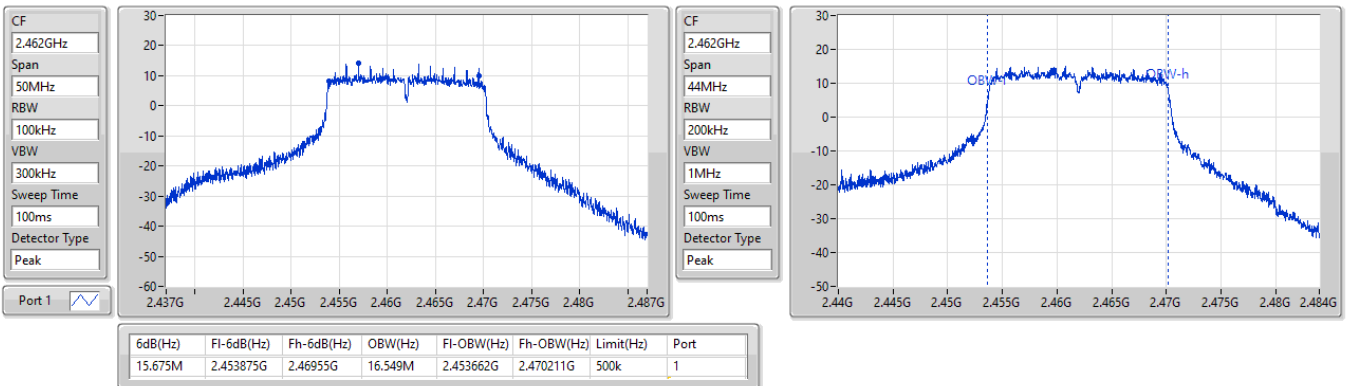


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2462MHz

24/04/2023

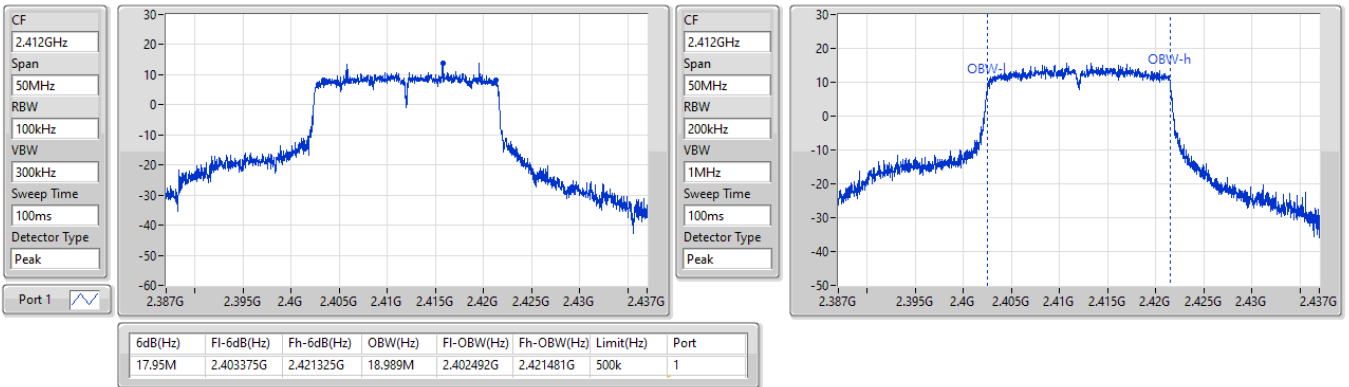


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2412MHz

24/04/2023

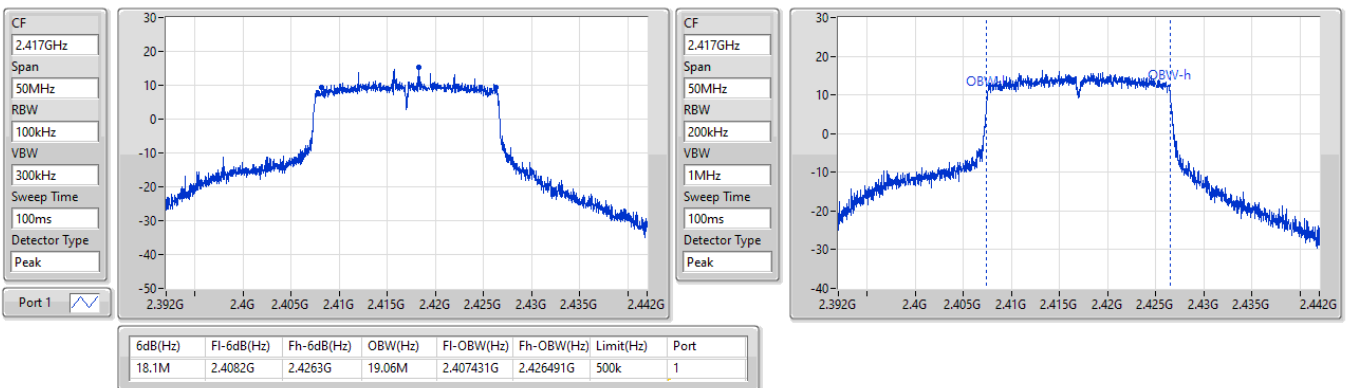


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2417MHz

24/04/2023

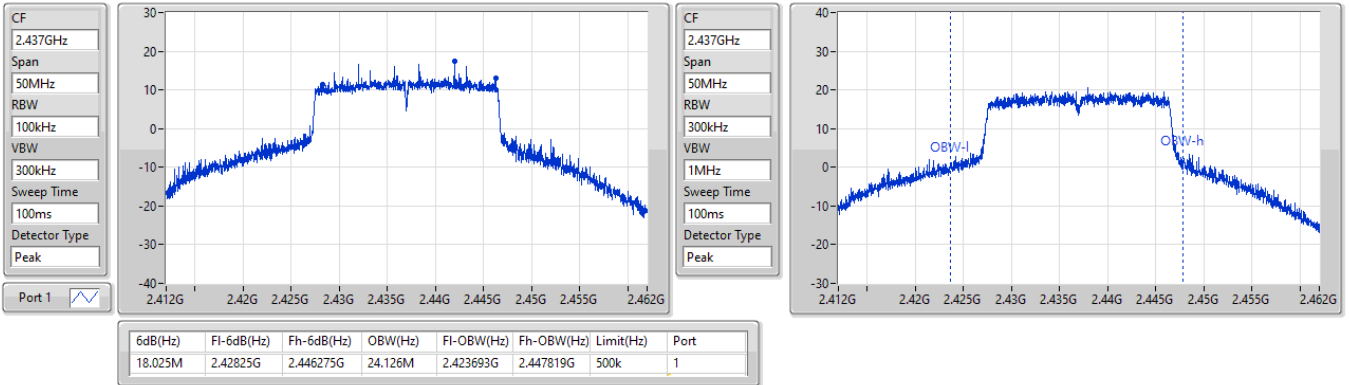


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2437MHz

24/04/2023

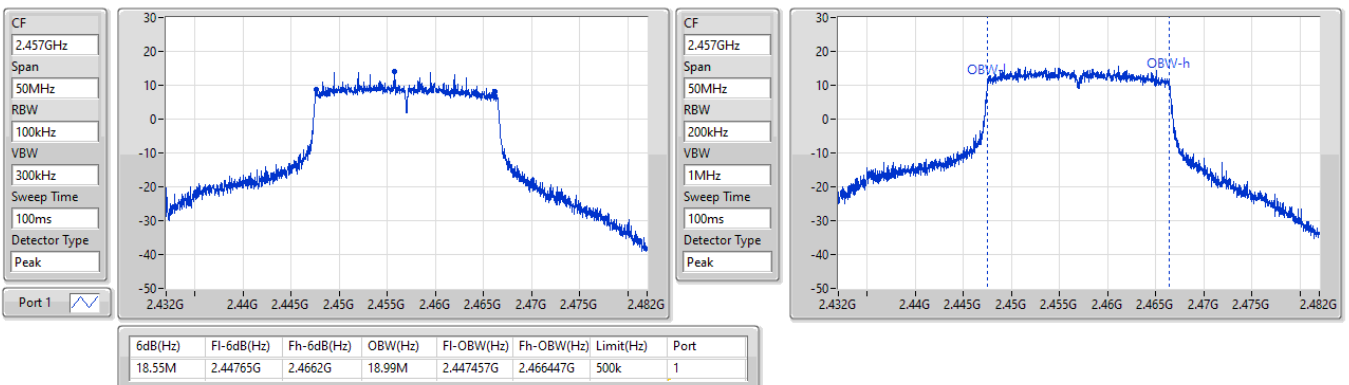


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2457MHz

24/04/2023



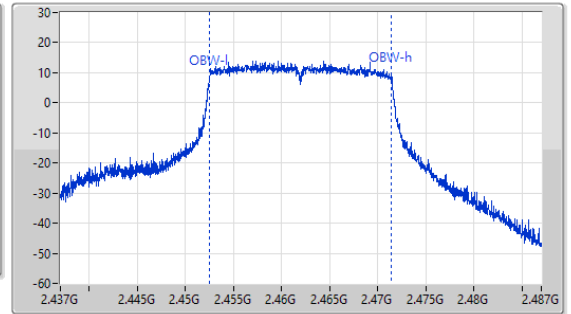
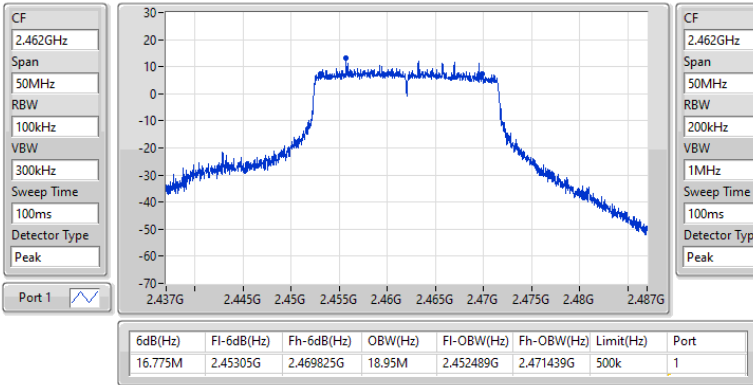


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

24/04/2023

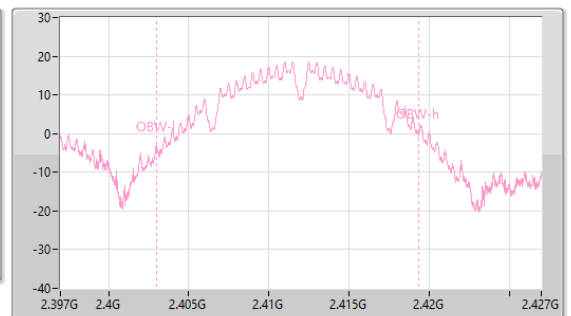
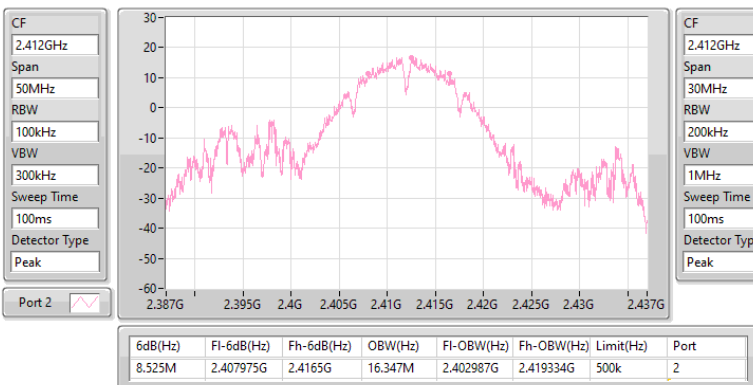


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

24/04/2023

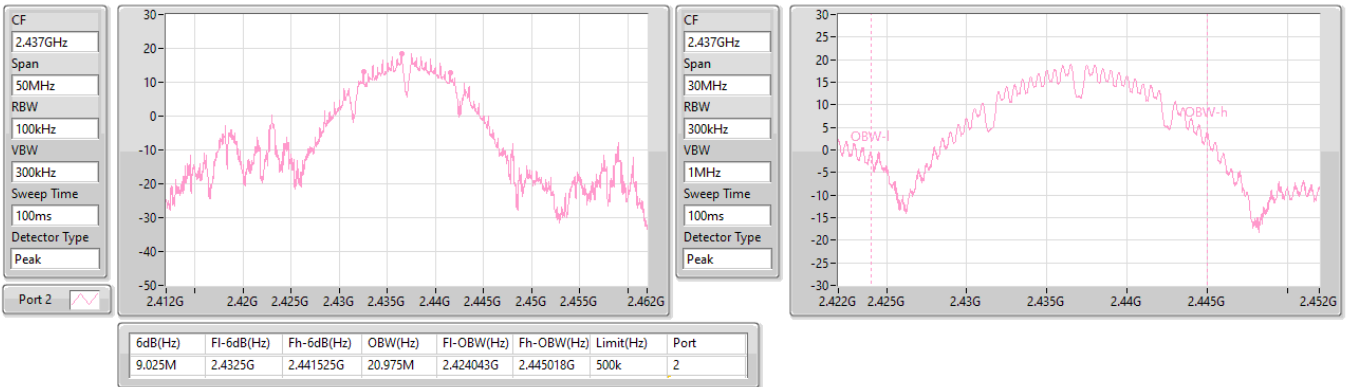


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

22/04/2023

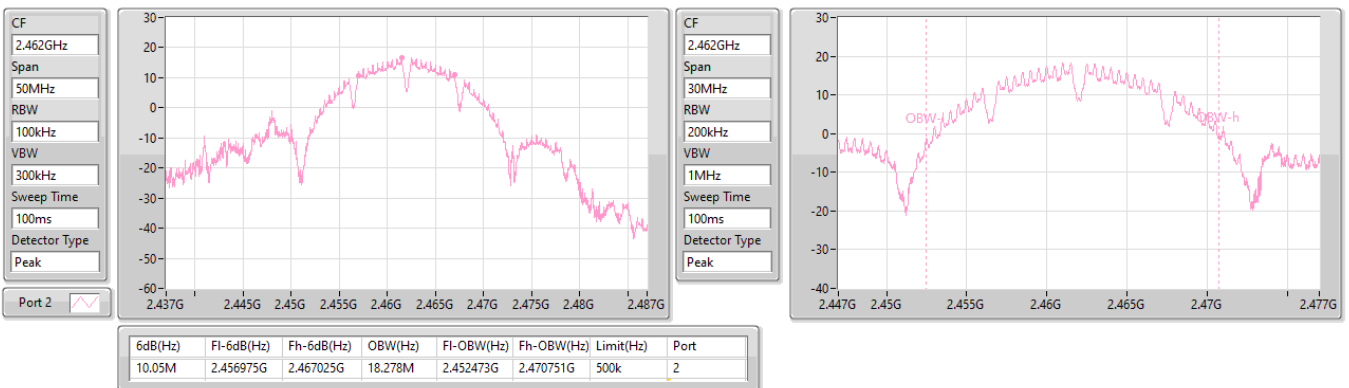


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2462MHz

22/04/2023

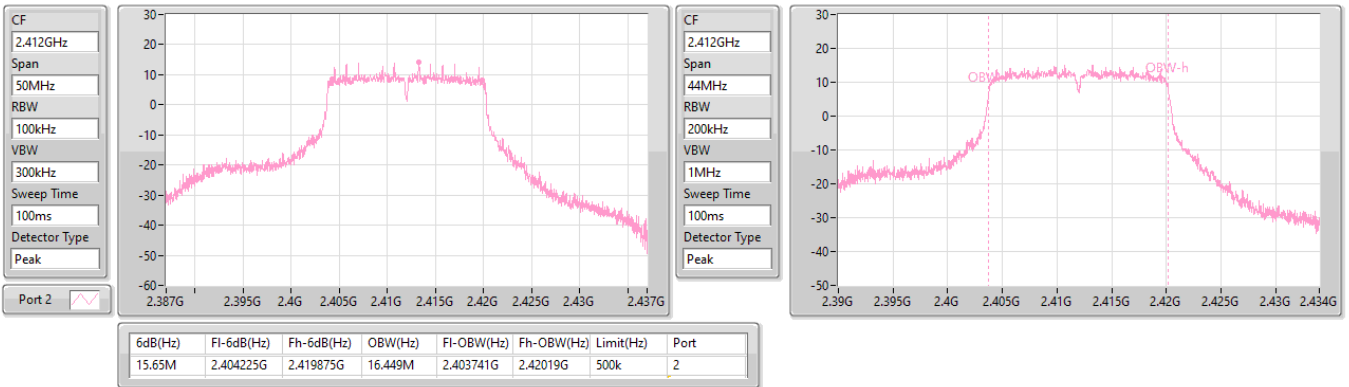


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EBW

2412MHz

24/04/2023

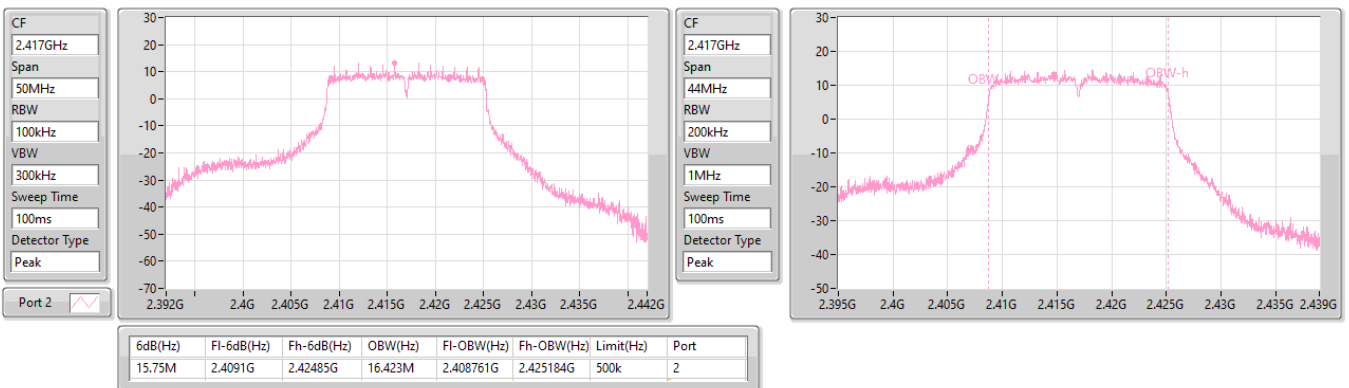


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2417MHz

24/04/2023

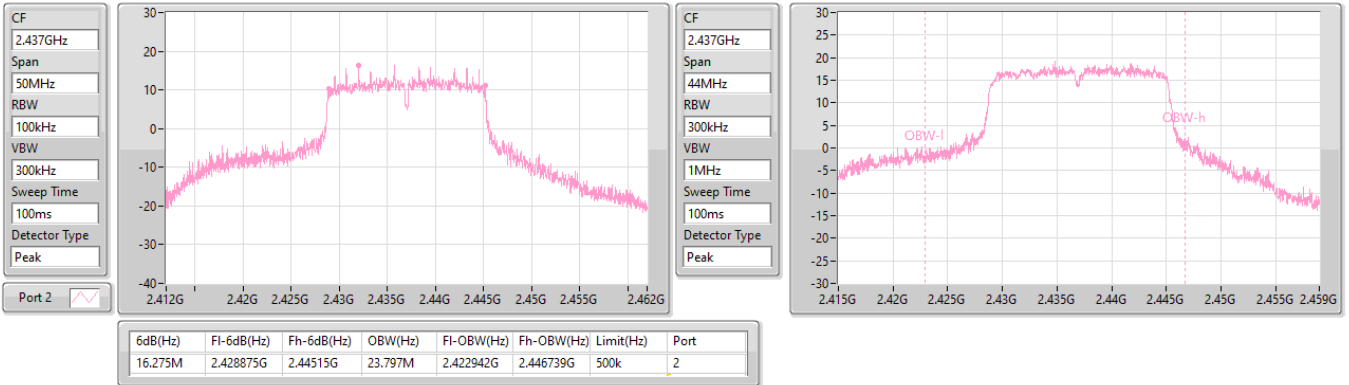


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2437MHz

24/04/2023

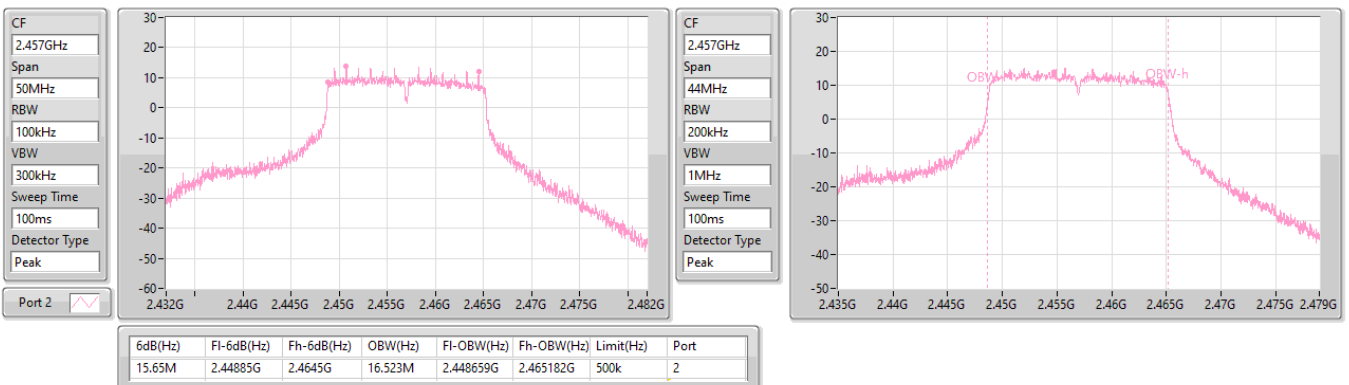


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2457MHz

24/04/2023

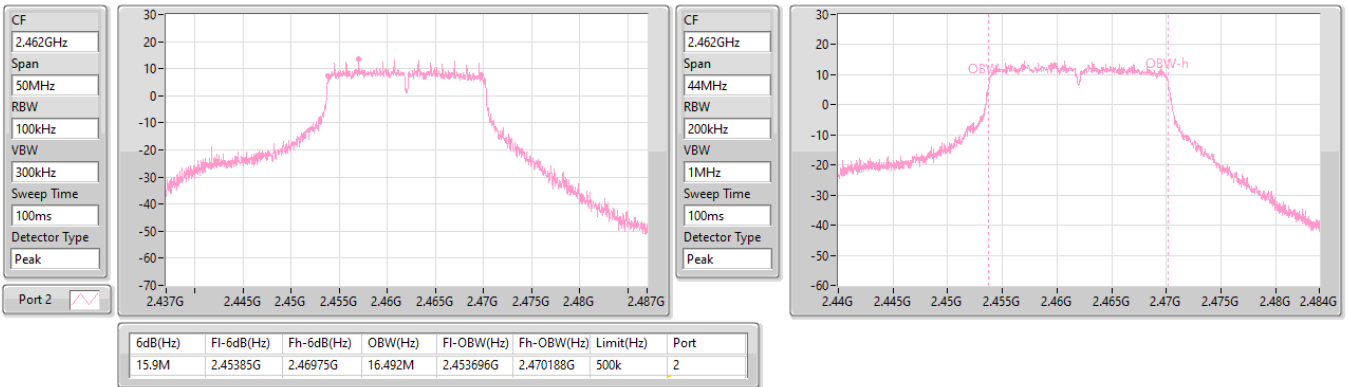


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2462MHz

24/04/2023

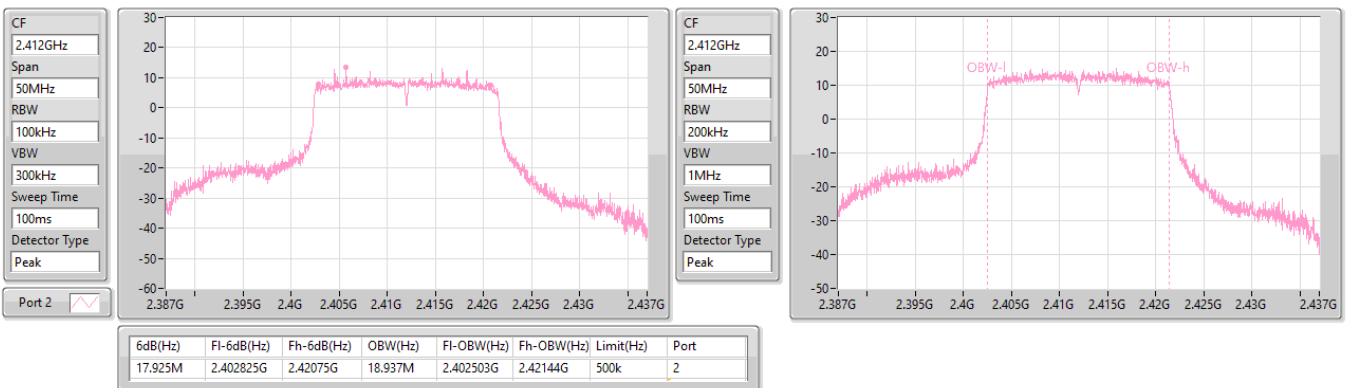


2.4-2.4835GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_1TX

EBW

2412MHz

24/04/2023

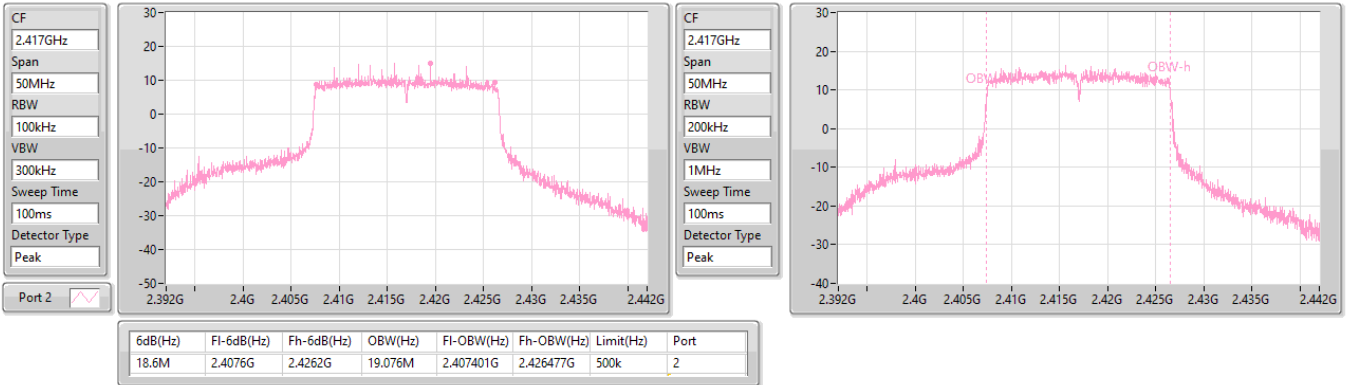


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2417MHz

24/04/2023

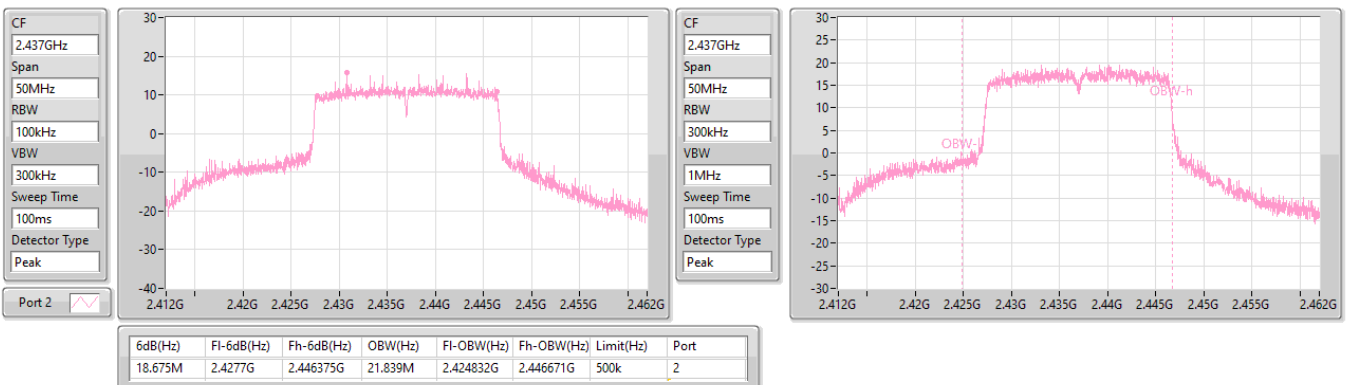


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2437MHz

24/04/2023

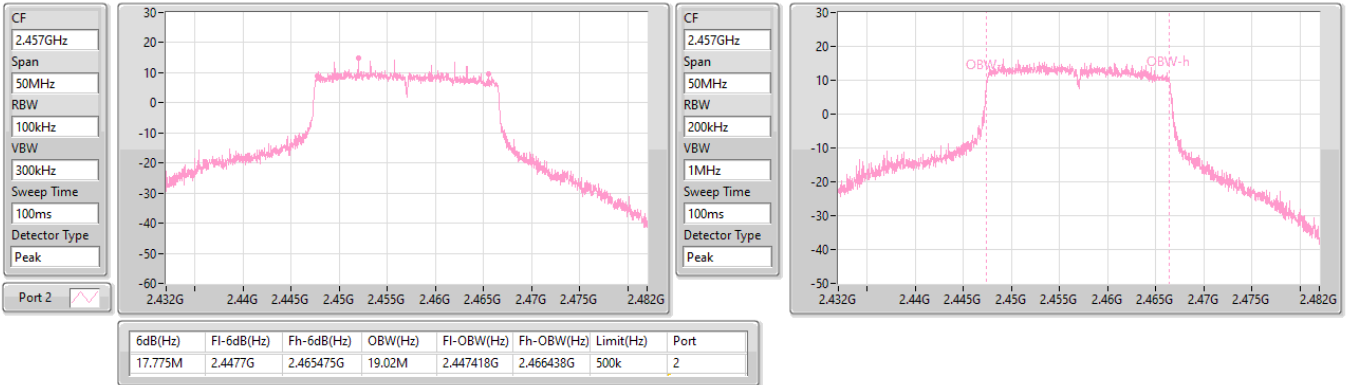


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2457MHz

24/04/2023

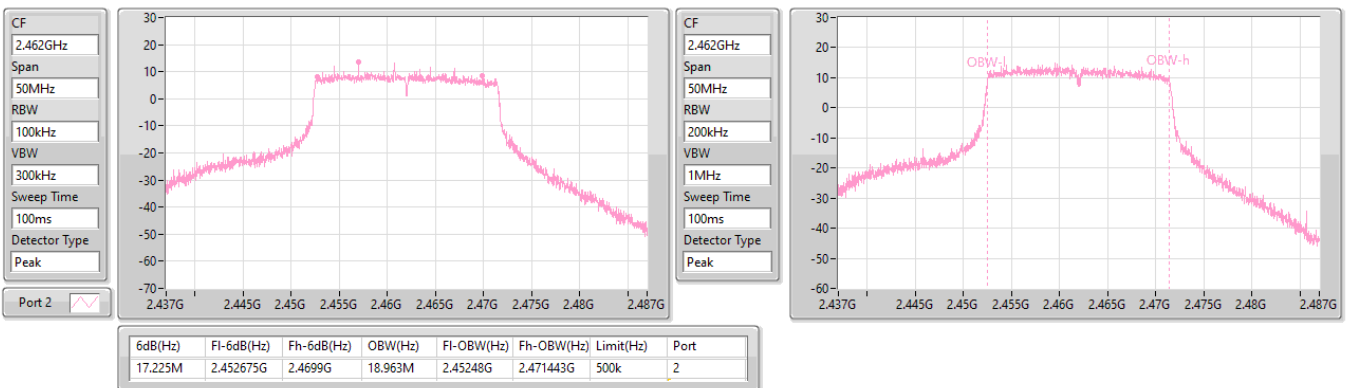


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

24/04/2023

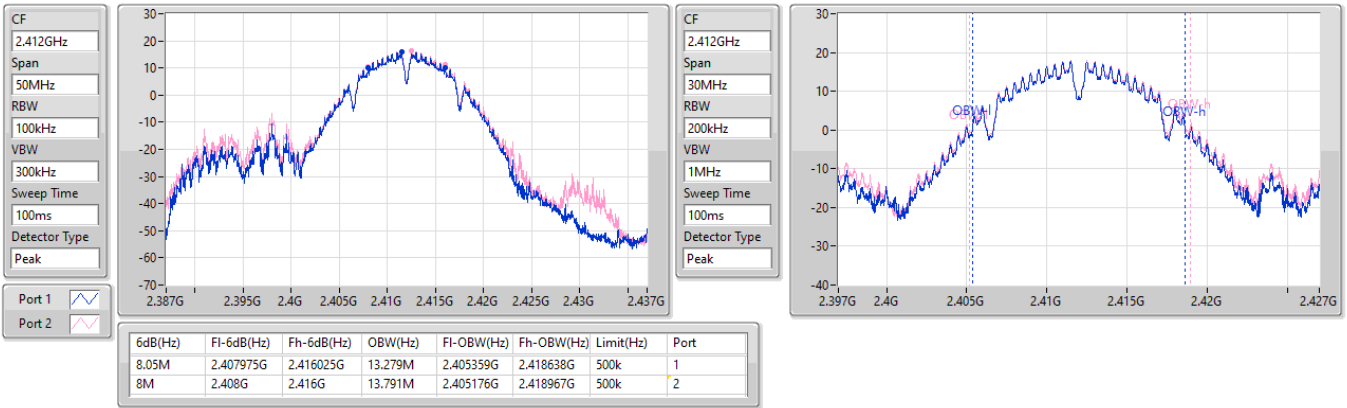


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

EBW

2412MHz

22/04/2023

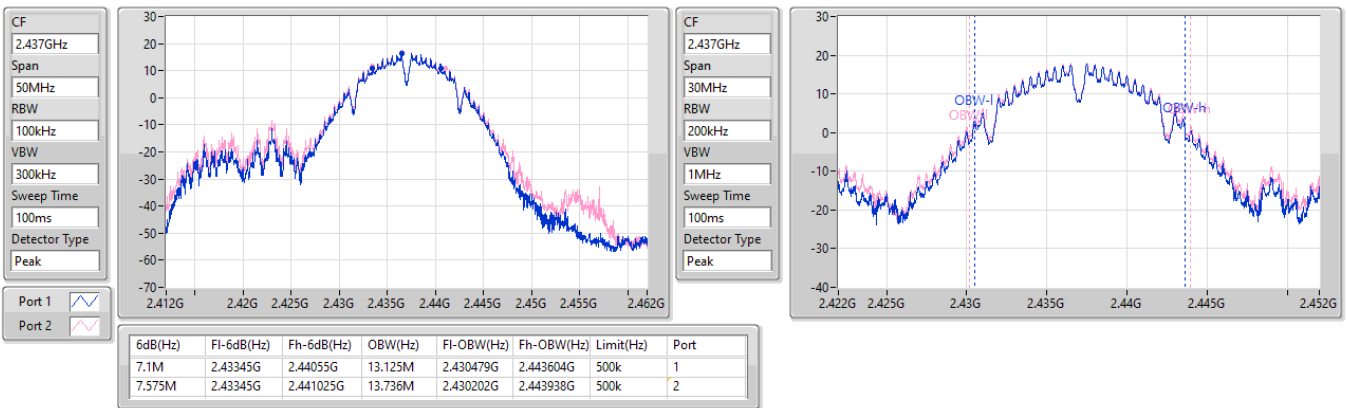


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

EBW

2437MHz

22/04/2023



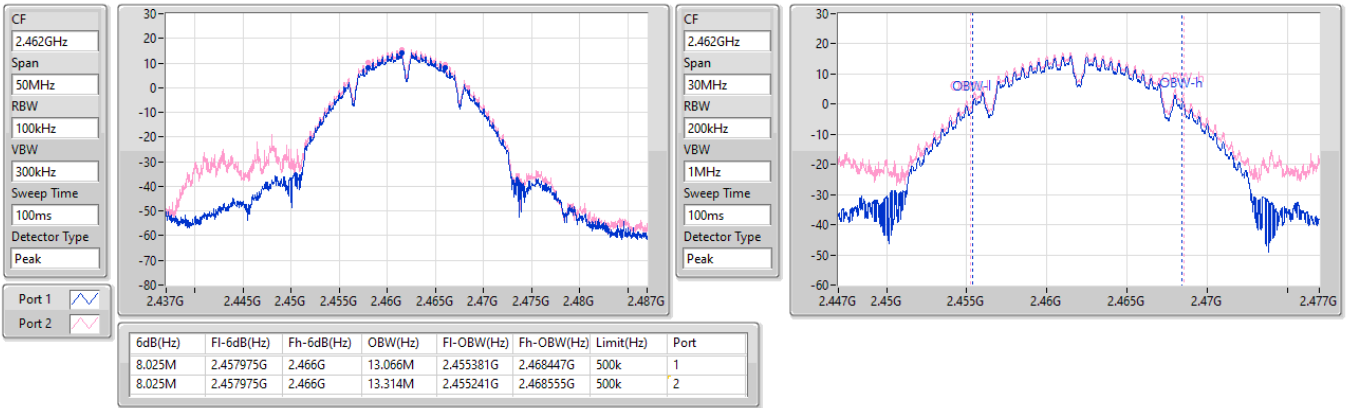


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_2TX

EBW

2462MHz

22/04/2023

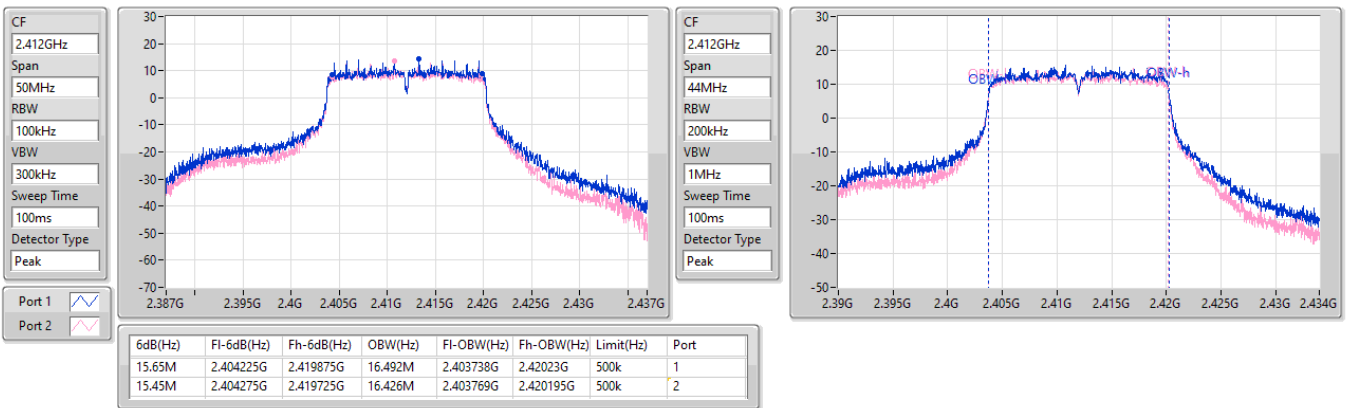


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2412MHz

24/04/2023

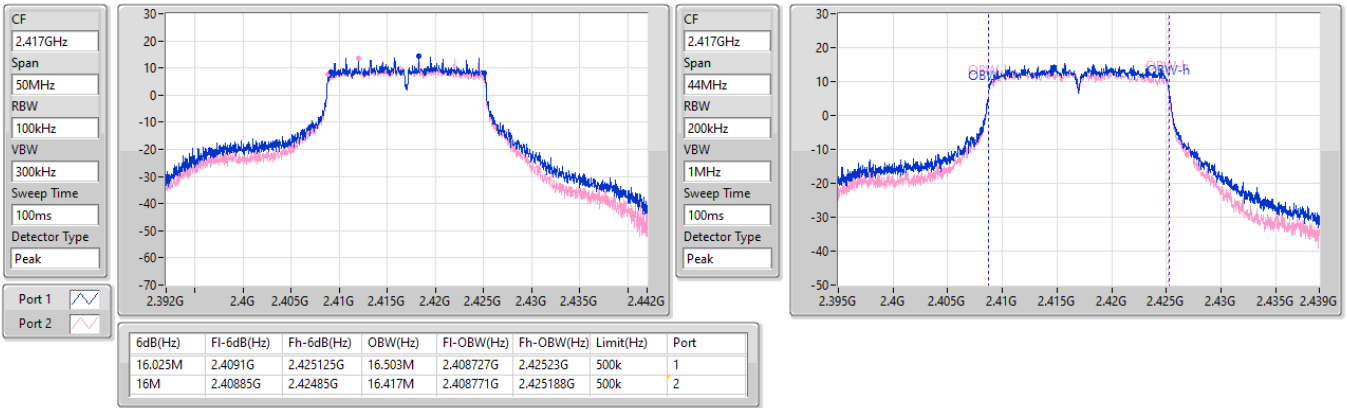


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2417MHz

24/04/2023

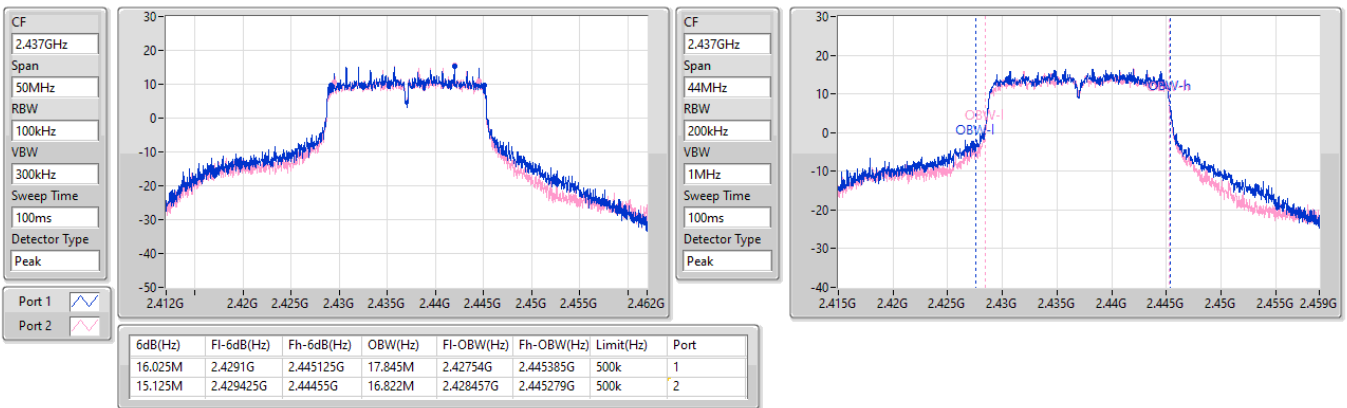


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2437MHz

24/04/2023

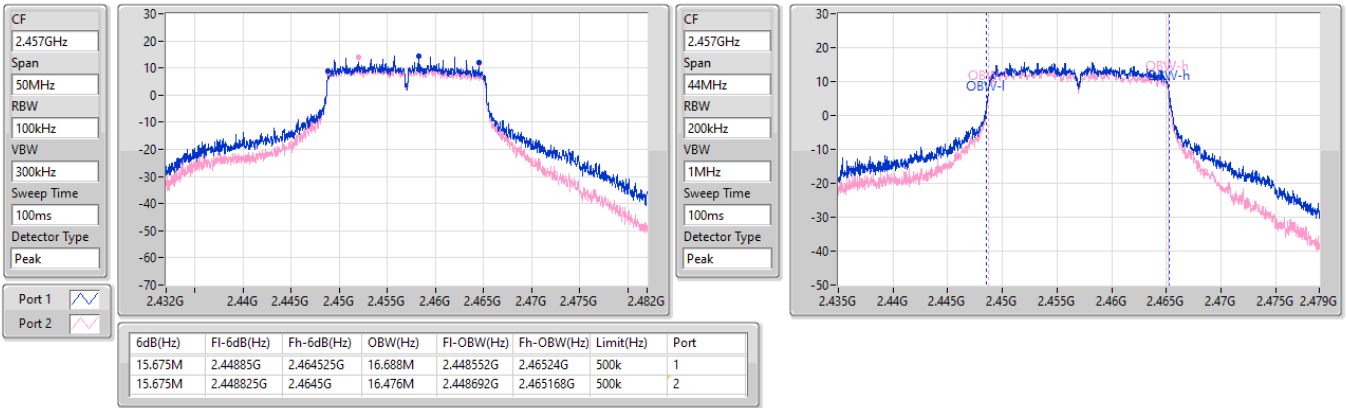


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2457MHz

24/04/2023

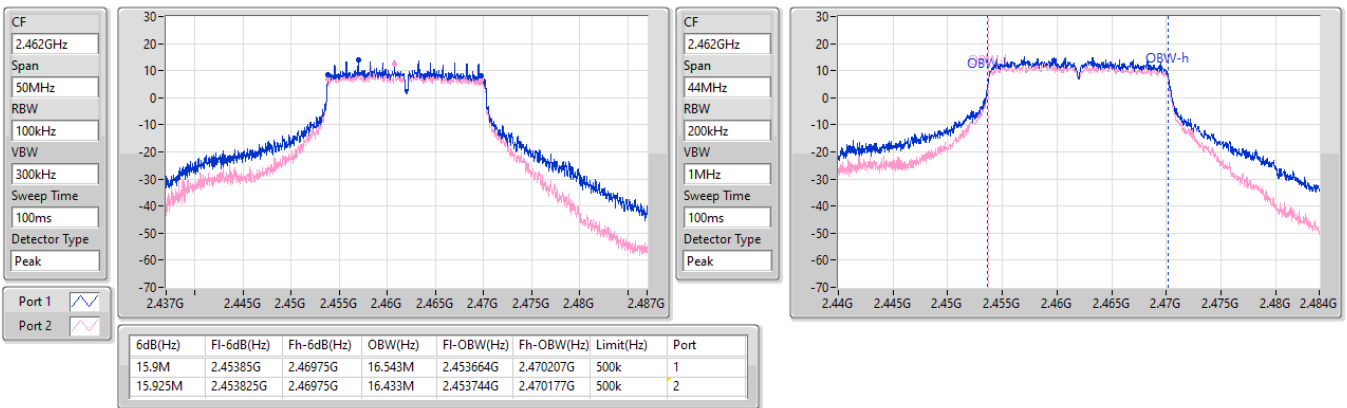


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_2TX

EBW

2462MHz

24/04/2023

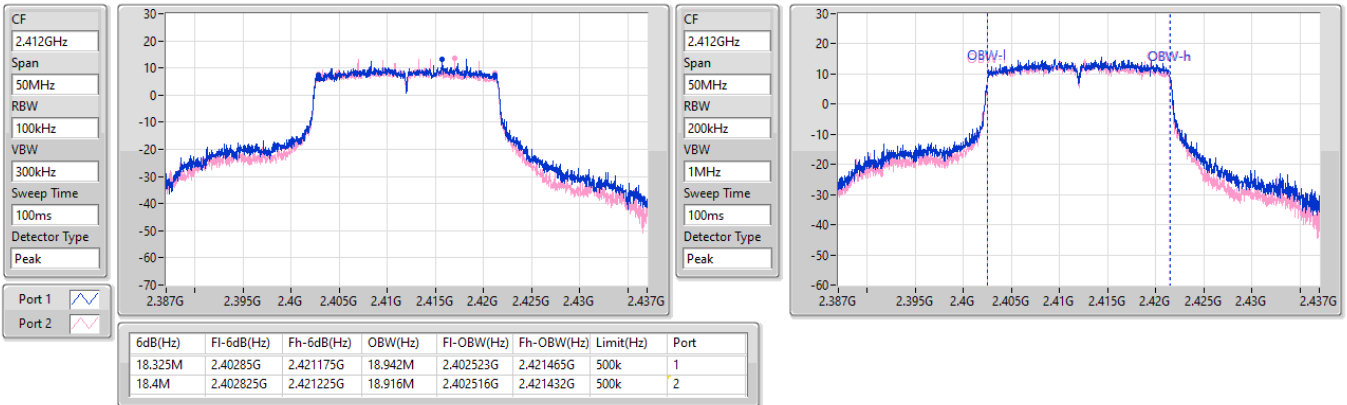


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2412MHz

24/04/2023

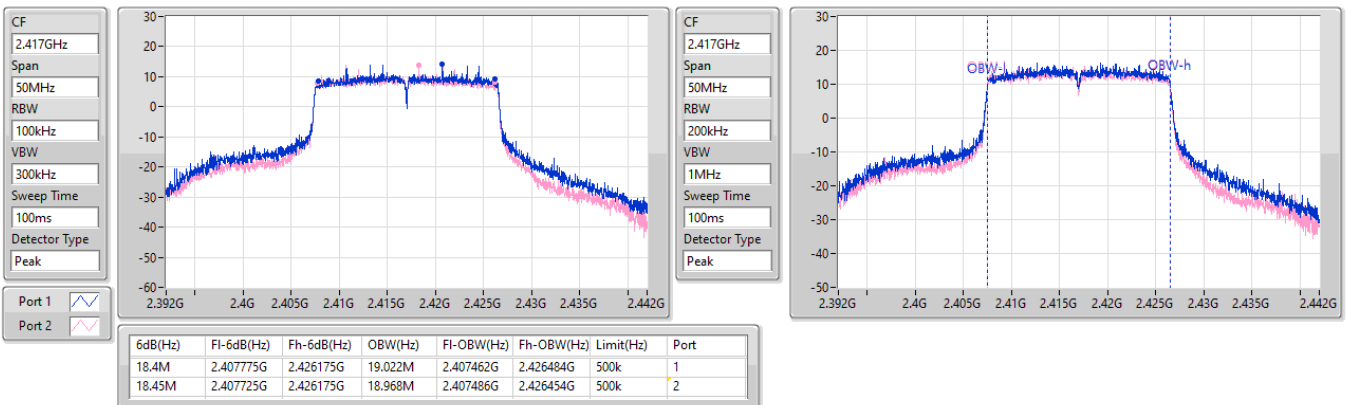


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2417MHz

24/04/2023

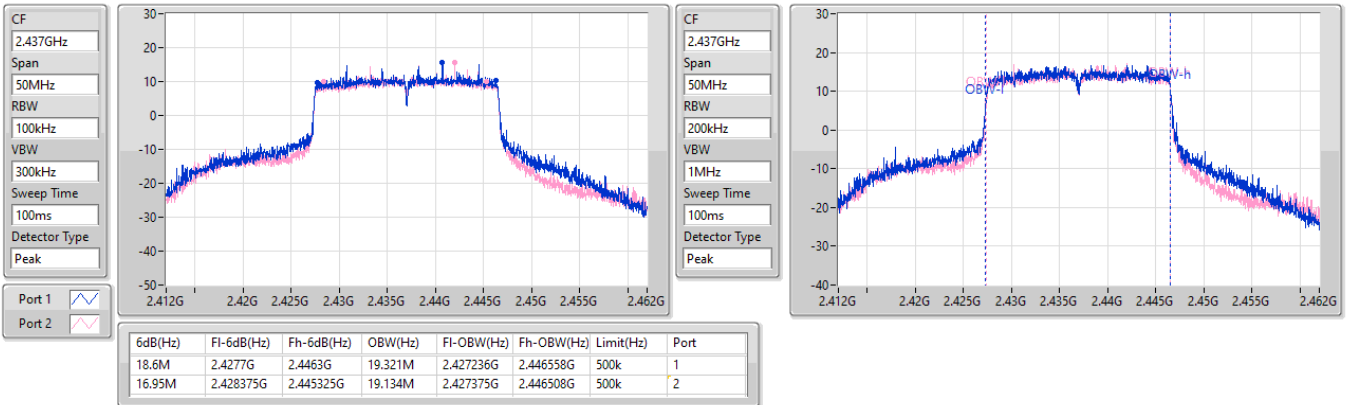


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2437MHz

24/04/2023

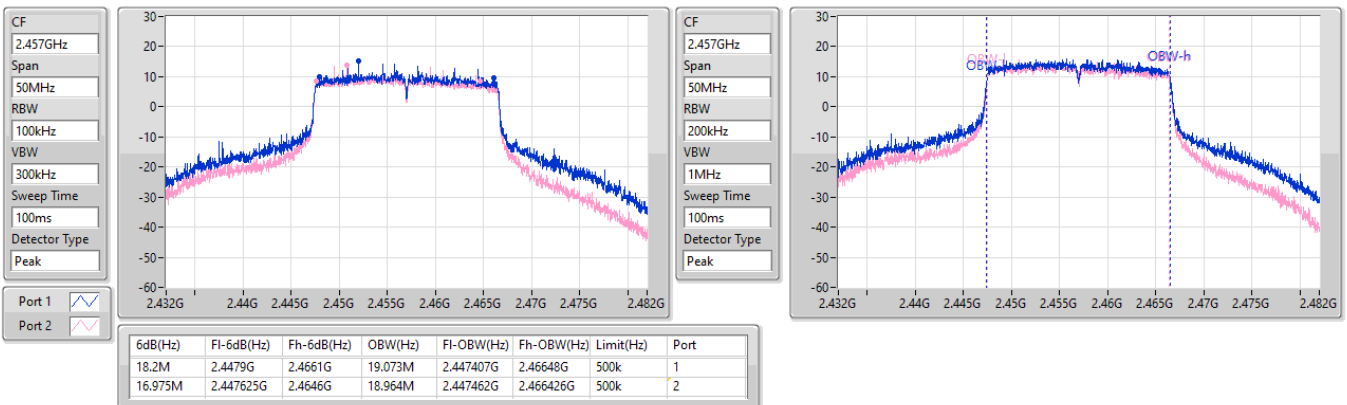


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2457MHz

24/04/2023

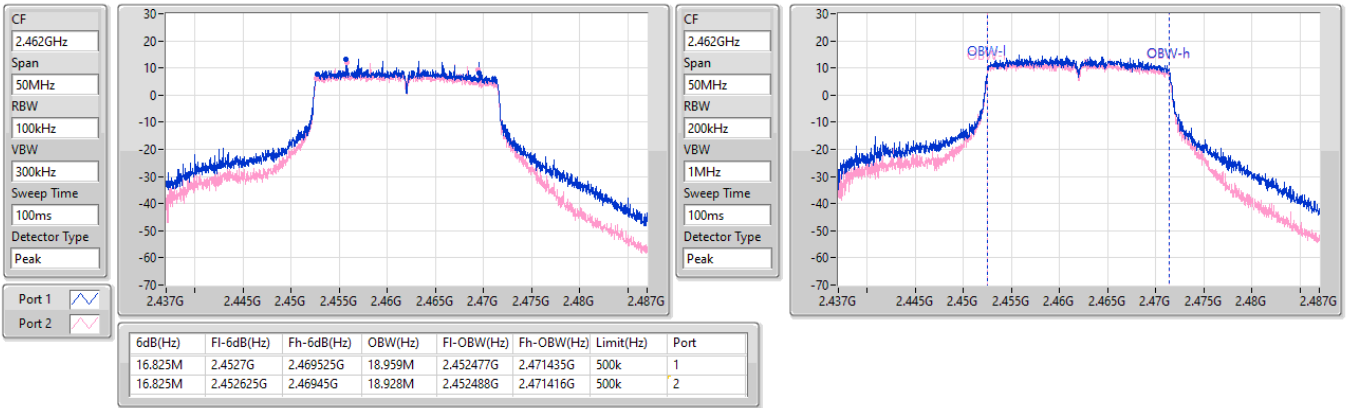


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2462MHz

24/04/2023





**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)_1TX	9.575M	21.43M	21M4G1D	8.075M	13.352M
802.11g_Nss1,(6Mbps)_1TX	16.275M	25.495M	25M5D1D	15.8M	16.321M
802.11ax HEW20_Nss1,(MCS0)_1TX	18.8M	25.694M	25M7D1D	18.35M	18.869M

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)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	8.075M	13.352M
2437MHz	Pass	500k	9.575M	21.43M
2462MHz	Pass	500k	9.275M	19.672M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.275M	16.321M
2437MHz	Pass	500k	16.275M	25.495M
2462MHz	Pass	500k	15.8M	16.543M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	18.35M	18.869M
2437MHz	Pass	500k	18.775M	25.694M
2462MHz	Pass	500k	18.8M	18.956M

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

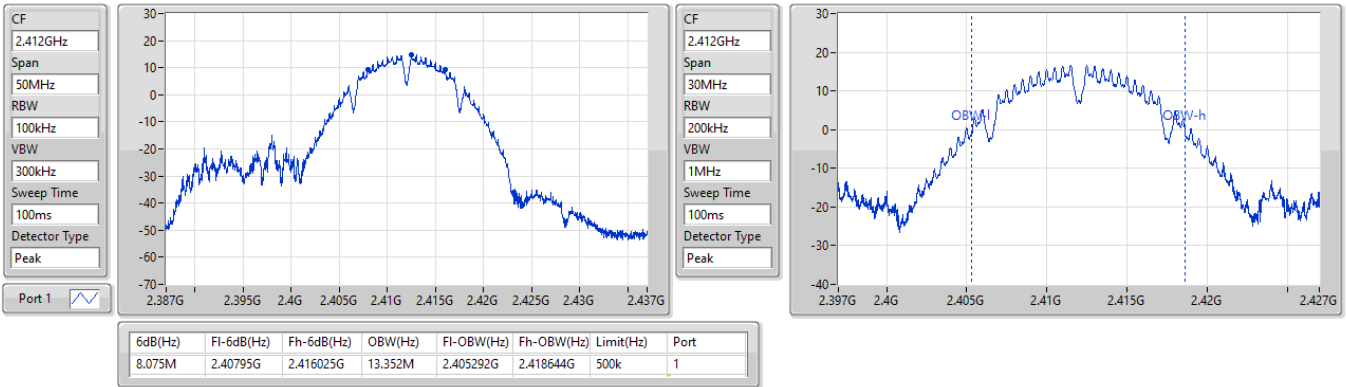


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2412MHz

25/04/2023

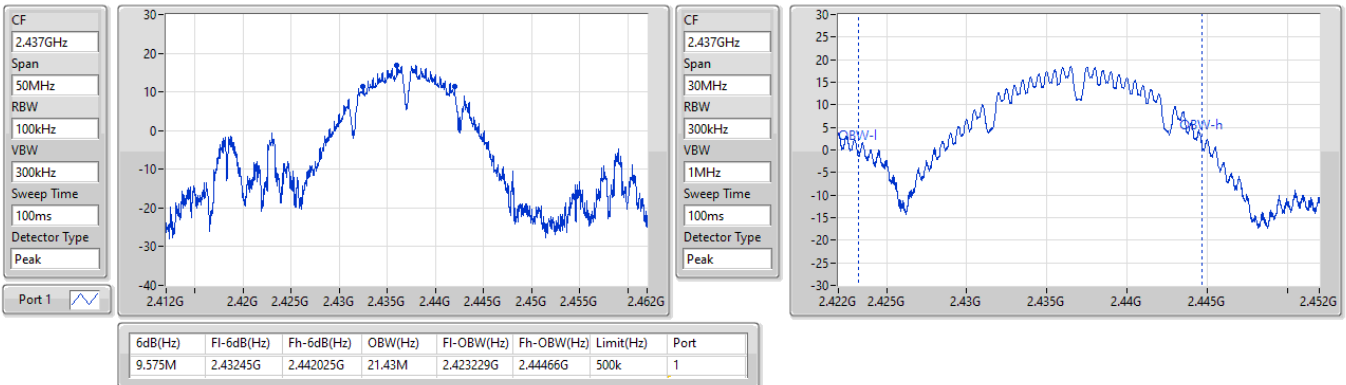


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2437MHz

25/04/2023

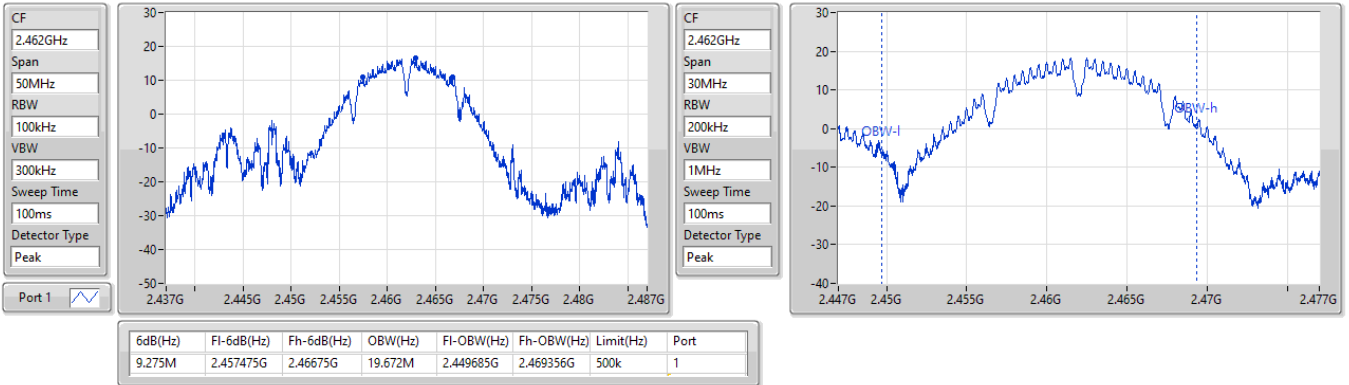


2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

EBW

2462MHz

25/04/2023

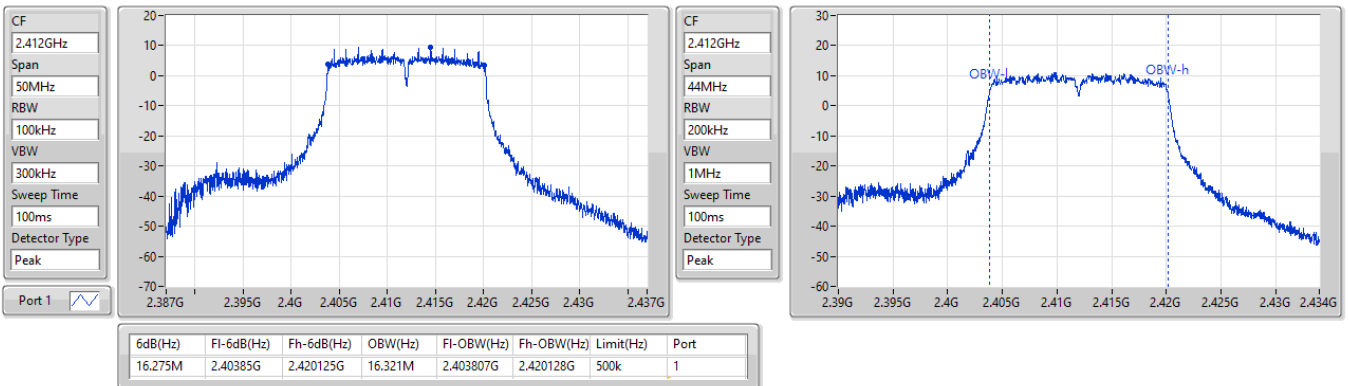


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2412MHz

25/04/2023

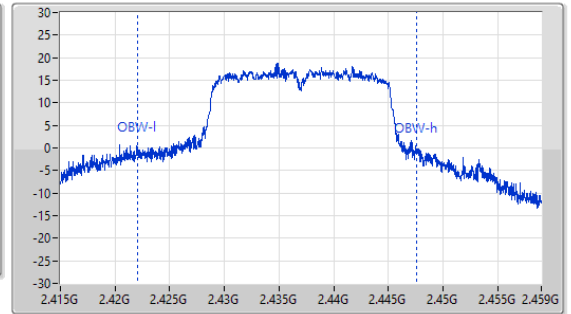
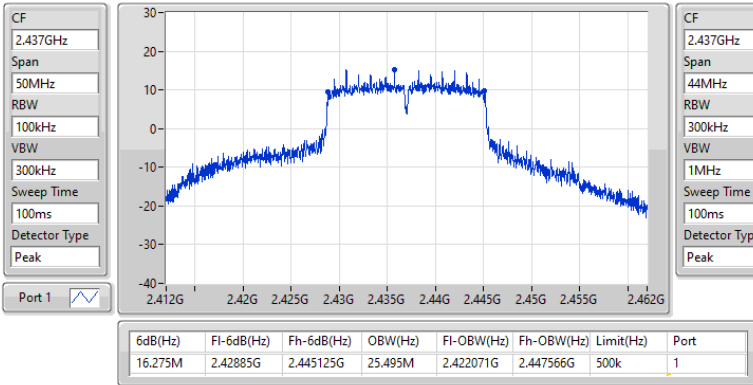


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2437MHz

25/04/2023

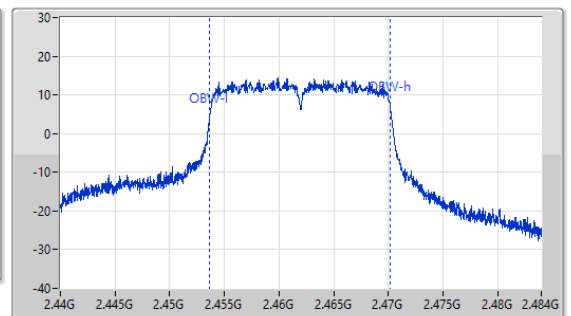
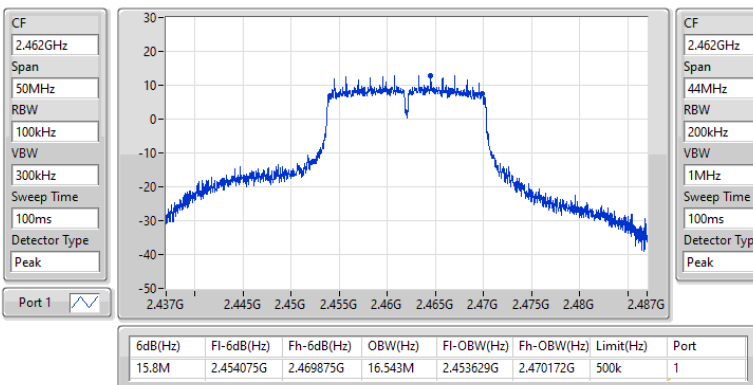


2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

EBW

2462MHz

25/04/2023

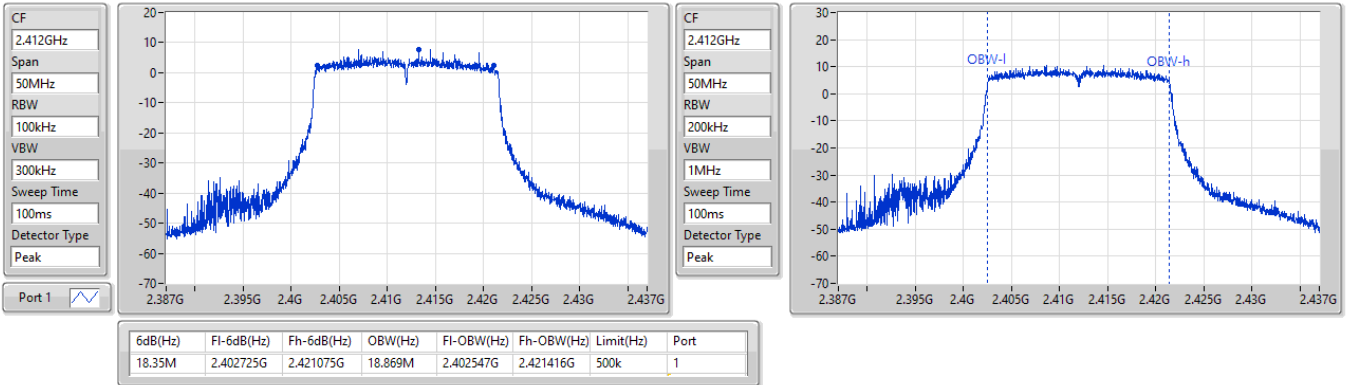


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2412MHz

25/04/2023

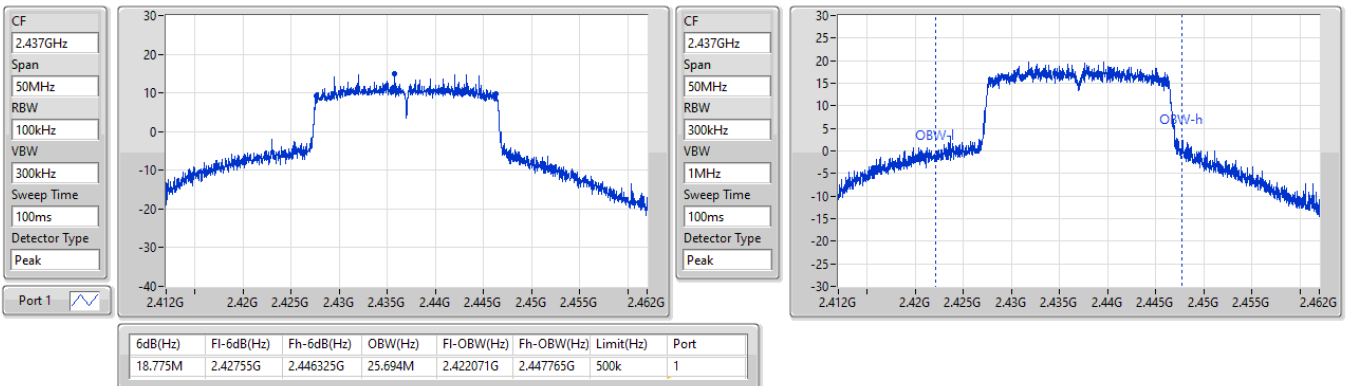


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2437MHz

25/04/2023

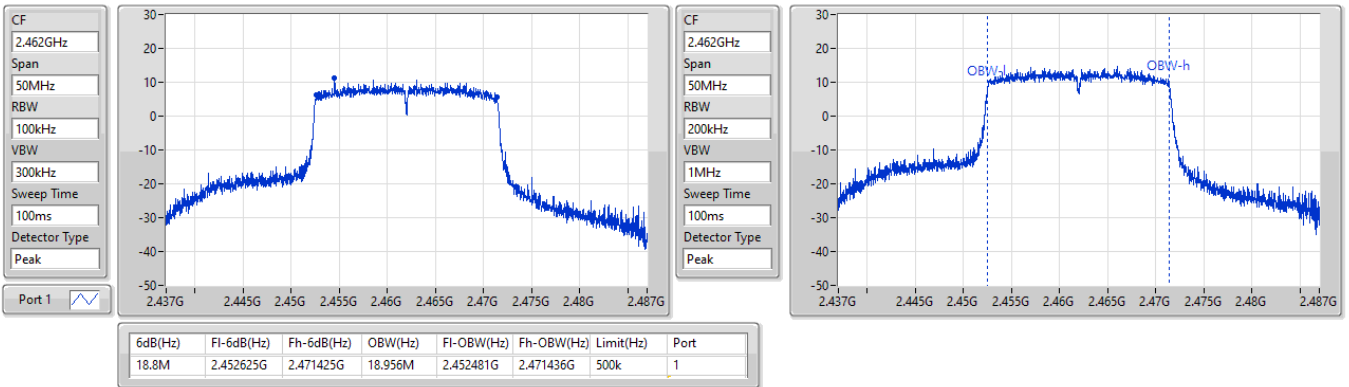


2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

25/04/2023





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	28.35	0.68391
802.11b_Nss1,(1Mbps)_1TX	28.84	0.76560
802.11b_Nss1,(1Mbps)_2TX	29.67	0.92683
802.11g_Nss1,(6Mbps)_1TX	28.71	0.74302
802.11g_Nss1,(6Mbps)_1TX	28.46	0.70146
802.11g_Nss1,(6Mbps)_2TX	29.71	0.93541
802.11ax HEW20_Nss1,(MCS0)_1TX	28.49	0.70632
802.11ax HEW20_Nss1,(MCS0)_1TX	28.10	0.64565
802.11ax HEW20_Nss1,(MCS0)_2TX	29.74	0.94189
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	28.70	0.74131



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	28.35		28.35	30.00
2437MHz	Pass	4.00	26.54		26.54	30.00
2462MHz	Pass	4.00	25.04		25.04	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	25.84		25.84	30.00
2417MHz	Pass	4.00	26.83		26.83	30.00
2437MHz	Pass	4.00	28.71		28.71	30.00
2457MHz	Pass	4.00	25.47		25.47	30.00
2462MHz	Pass	4.00	24.75		24.75	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	25.39		25.39	30.00
2417MHz	Pass	4.00	26.24		26.24	30.00
2437MHz	Pass	4.00	28.49		28.49	30.00
2457MHz	Pass	4.00	24.95		24.95	30.00
2462MHz	Pass	4.00	23.25		23.25	30.00
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-	27.86	27.86	30.00
2437MHz	Pass	4.00	-	28.84	28.84	30.00
2462MHz	Pass	4.00	-	27.71	27.71	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-	25.14	25.14	30.00
2417MHz	Pass	4.00	-	24.61	24.61	30.00
2437MHz	Pass	4.00	-	28.46	28.46	30.00
2457MHz	Pass	4.00	-	24.85	24.85	30.00
2462MHz	Pass	4.00	-	24.29	24.29	30.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-	24.4	24.40	30.00
2417MHz	Pass	4.00	-	26.11	26.11	30.00
2437MHz	Pass	4.00	-	28.1	28.10	30.00
2457MHz	Pass	4.00	-	25.11	25.11	30.00
2462MHz	Pass	4.00	-	23.98	23.98	30.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	26.51	26.81	29.67	30.00
2437MHz	Pass	4.00	26	26.48	29.26	30.00
2462MHz	Pass	4.00	23.89	25.08	27.54	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	25.63	24.83	28.26	30.00
2417MHz	Pass	4.00	25.58	24.88	28.25	30.00
2437MHz	Pass	4.00	26.83	26.56	29.71	30.00
2457MHz	Pass	4.00	25.55	24.49	28.06	30.00
2462MHz	Pass	4.00	24.79	23.35	27.14	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	24.95	24.25	27.62	30.00
2417MHz	Pass	4.00	25.6	25.22	28.42	30.00
2437MHz	Pass	4.00	26.9	26.56	29.74	30.00
2457MHz	Pass	4.00	25.69	24.54	28.16	30.00
2462MHz	Pass	4.00	23.83	22.65	26.29	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	24.95	24.25	27.62	28.99
2417MHz	Pass	7.01	25.6	25.22	28.42	28.99
2437MHz	Pass	7.01	25.91	25.45	28.70	28.99
2457MHz	Pass	7.01	25.69	24.54	28.16	28.99
2462MHz	Pass	7.01	23.83	22.65	26.29	28.99

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



**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	28.26	0.66988
802.11g_Nss1,(6Mbps)_1TX	27.42	0.55208
802.11ax HEW20_Nss1,(MCS0)_1TX	27.81	0.60395





Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.90	24.79	24.79	30.00
2417MHz	Pass	4.90	25.16	25.16	30.00
2437MHz	Pass	4.90	28.26	28.26	30.00
2462MHz	Pass	4.90	27.45	27.45	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.90	21.27	21.27	30.00
2417MHz	Pass	4.90	23.97	23.97	30.00
2437MHz	Pass	4.90	27.42	27.42	30.00
2457MHz	Pass	4.90	24.71	24.71	30.00
2462MHz	Pass	4.90	24.41	24.41	30.00
802.11ax_HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	4.90	19.26	19.26	30.00
2417MHz	Pass	4.90	24.01	24.01	30.00
2437MHz	Pass	4.90	27.81	27.81	30.00
2457MHz	Pass	4.90	24.80	24.80	30.00
2462MHz	Pass	4.90	23.90	23.90	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	3.33
802.11b_Nss1,(1Mbps)_1TX	5.67
802.11b_Nss1,(1Mbps)_2TX	4.35
802.11g_Nss1,(6Mbps)_1TX	0.16
802.11g_Nss1,(6Mbps)_1TX	0.6
802.11g_Nss1,(6Mbps)_2TX	0.56
802.11ax HEW20_Nss1,(MCS0)_1TX	-0.33
802.11ax HEW20_Nss1,(MCS0)_1TX	0.82
802.11ax HEW20_Nss1,(MCS0)_2TX	0.87

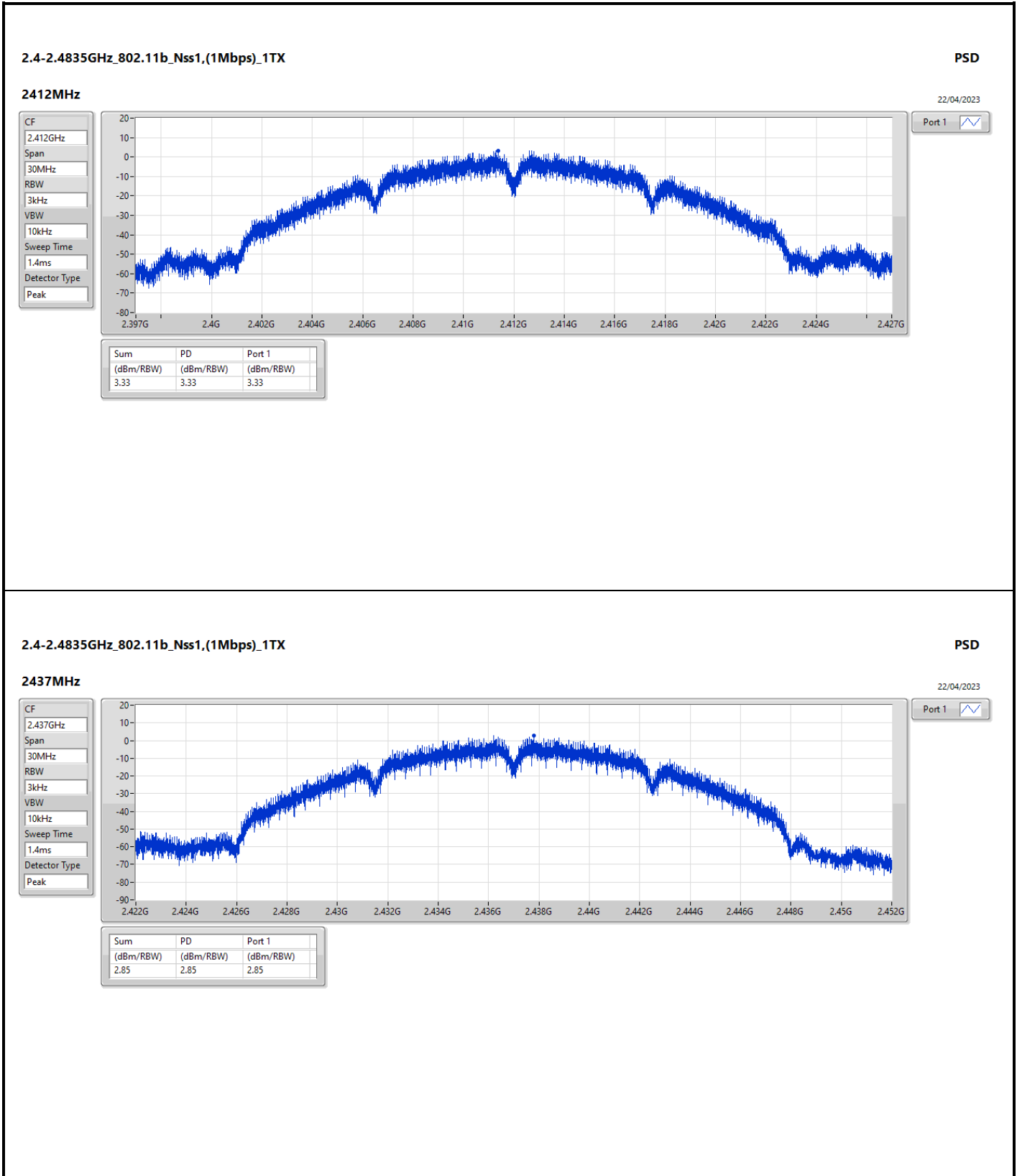
RBW = 3kHz;

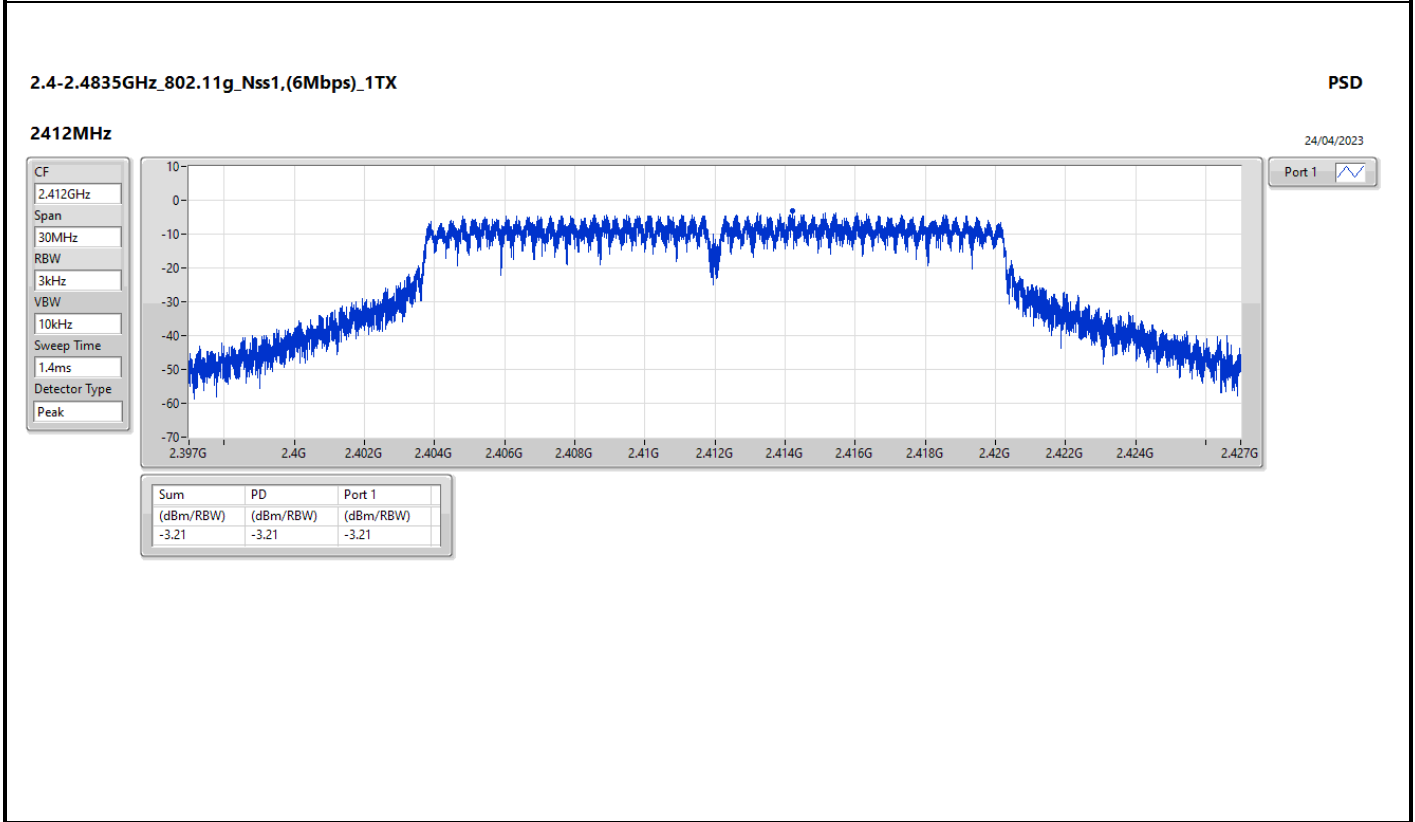
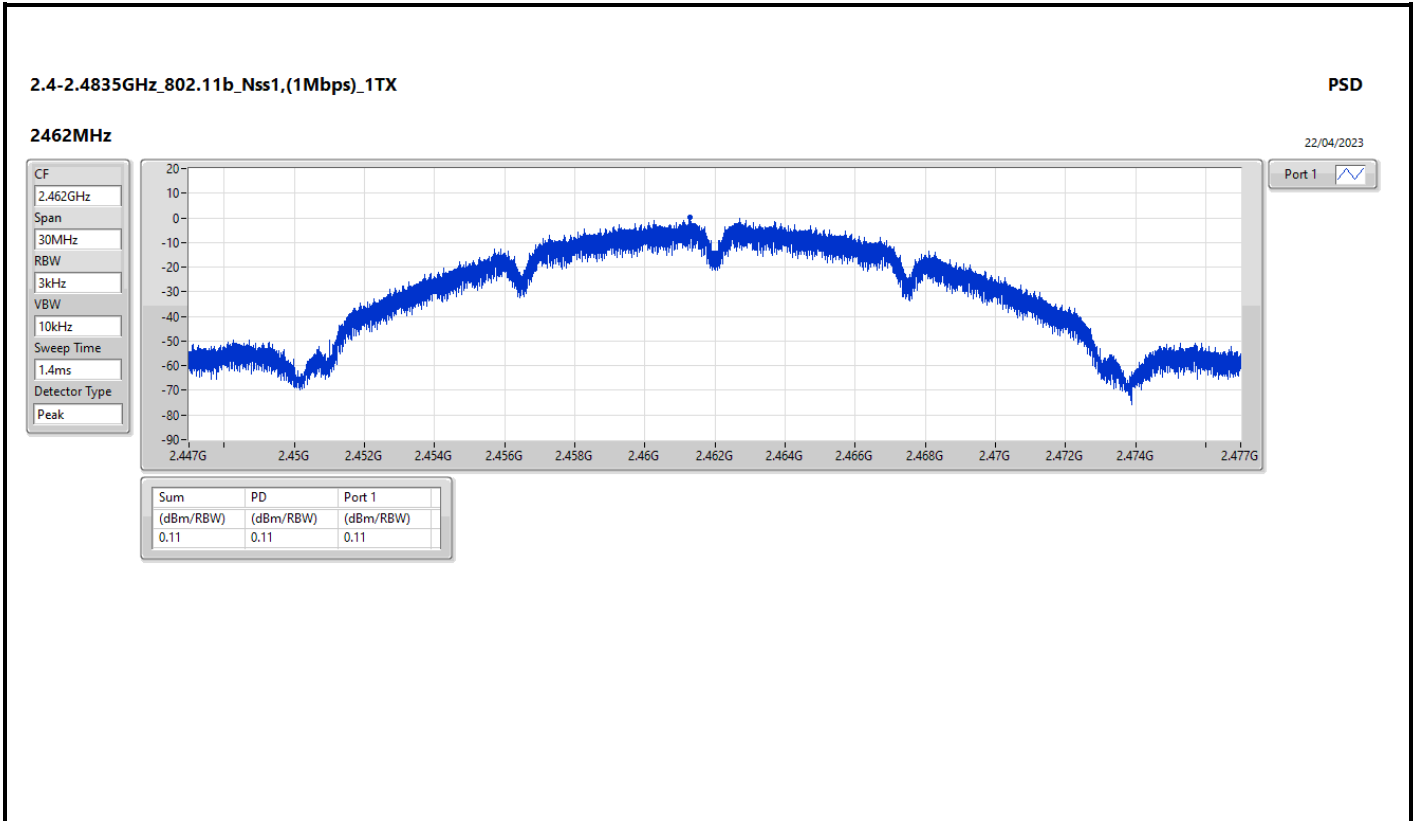


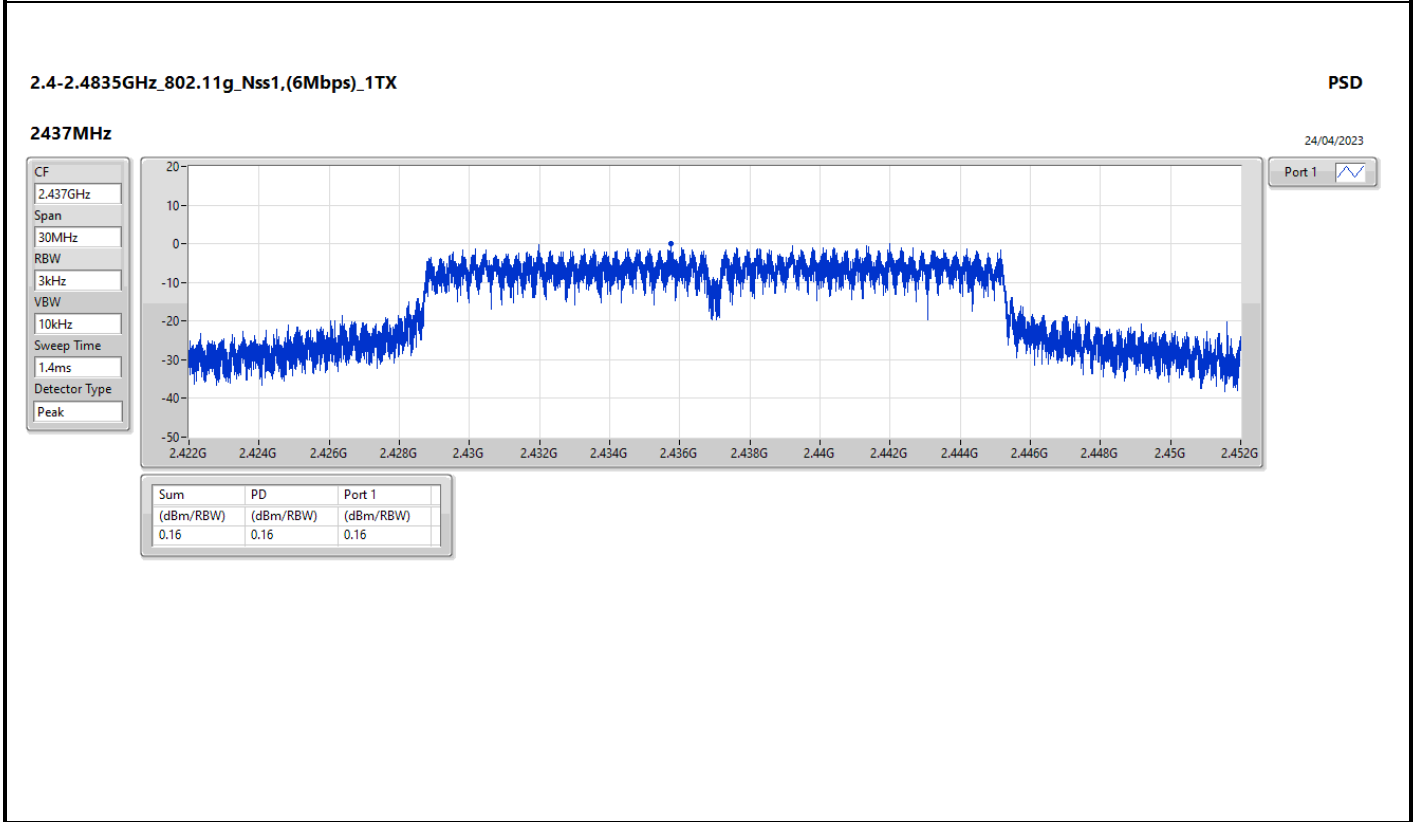
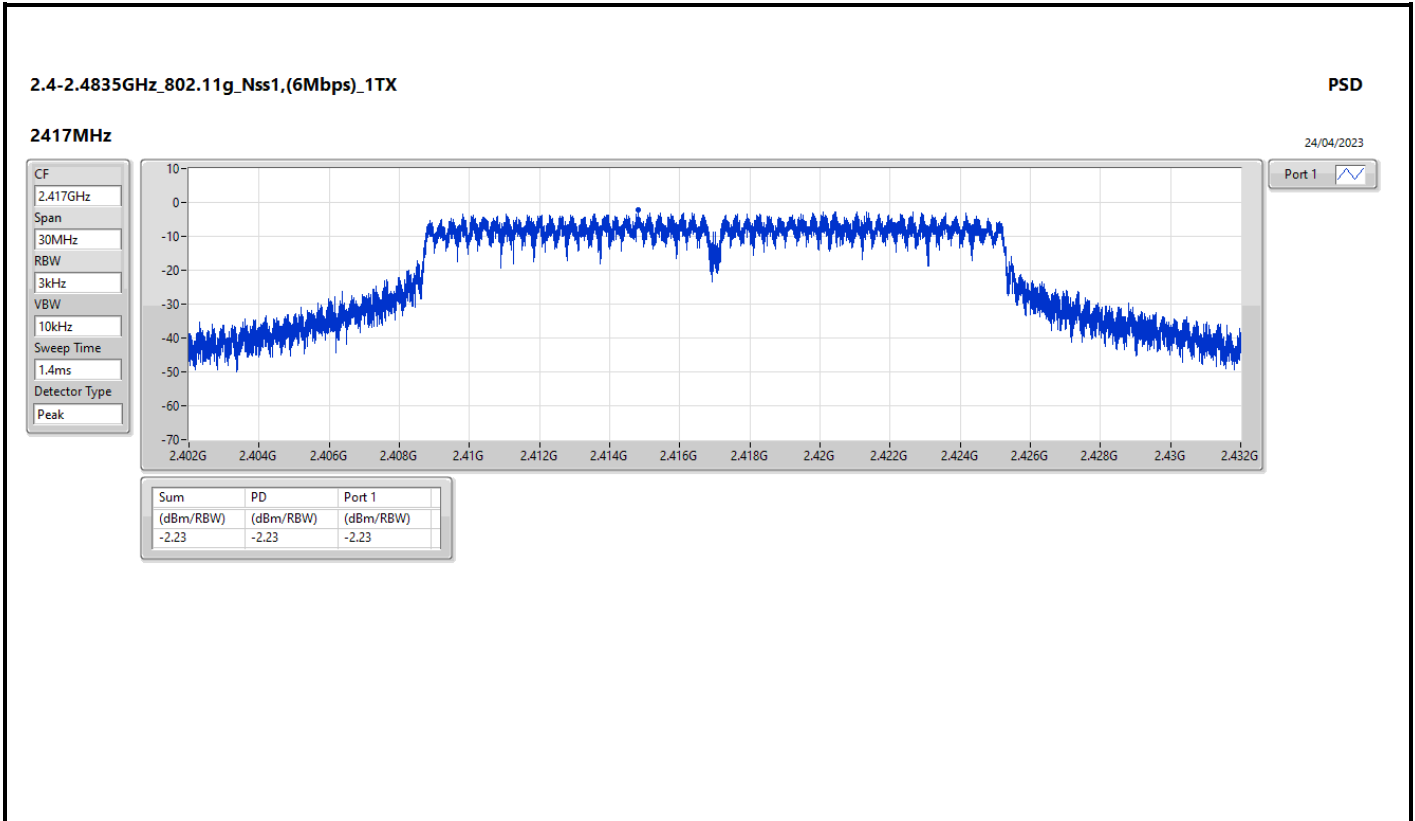
Result

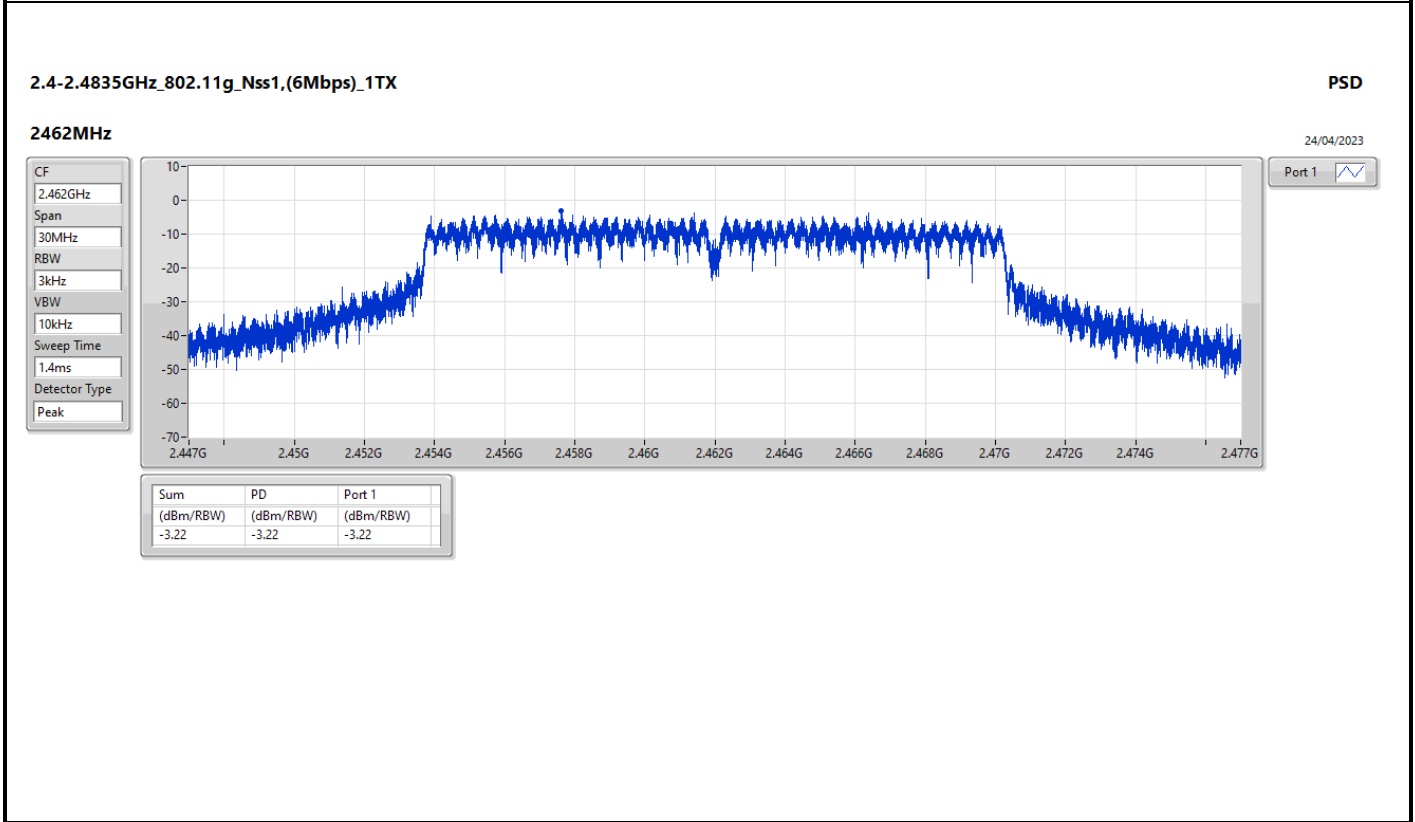
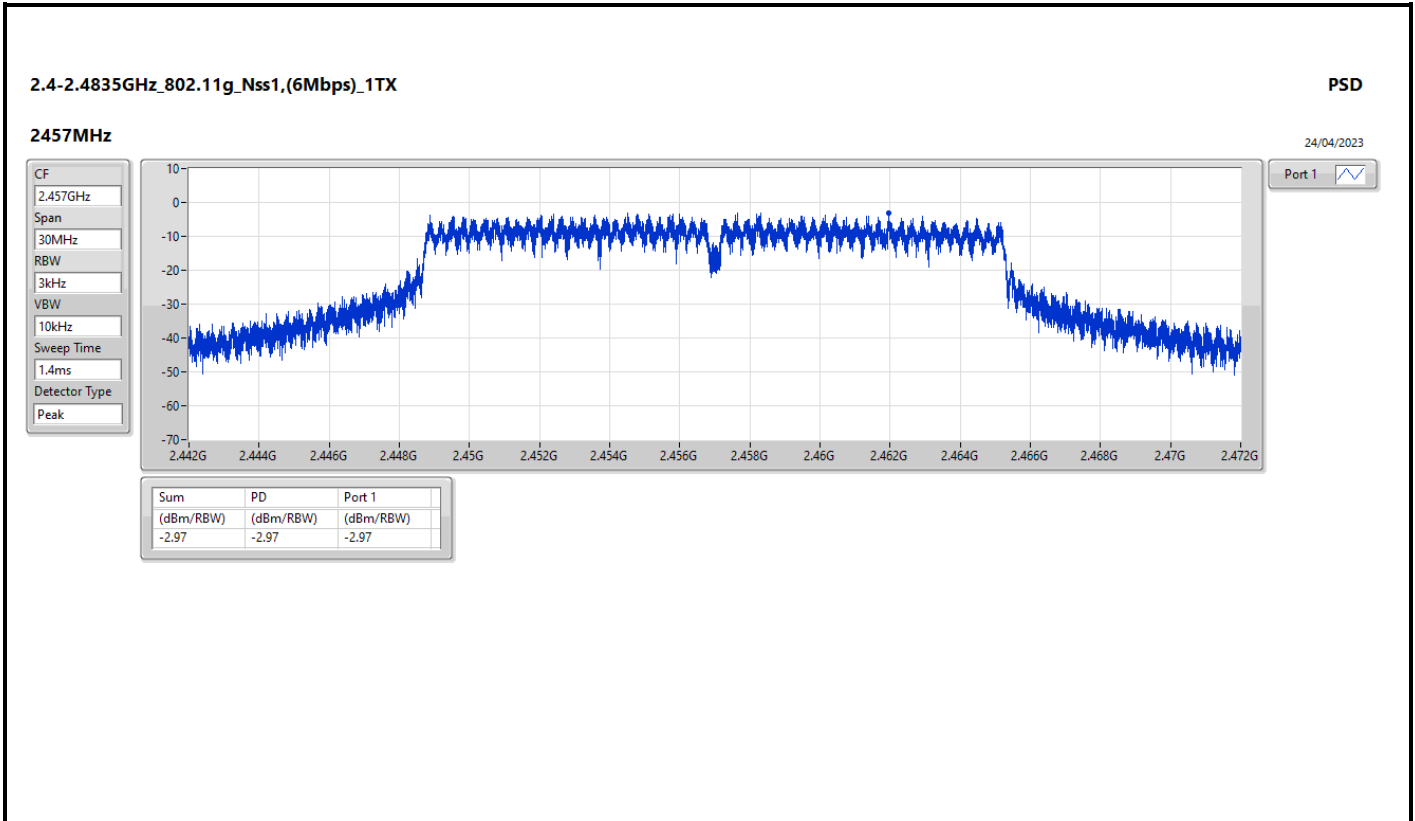
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	3.33		3.33	8.00
2437MHz	Pass	4.00	2.85		2.85	8.00
2462MHz	Pass	4.00	0.11		0.11	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-3.21		-3.21	8.00
2437MHz	Pass	4.00	0.16		0.16	8.00
2462MHz	Pass	4.00	-3.22		-3.22	8.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-2.81		-2.81	8.00
2437MHz	Pass	4.00	-0.33		-0.33	8.00
2462MHz	Pass	4.00	-4.6		-4.60	8.00
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-	1.86	1.86	8.00
2437MHz	Pass	4.00	-	5.67	5.67	8.00
2462MHz	Pass	4.00	-	2.54	2.54	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-	-3.57	-3.57	8.00
2437MHz	Pass	4.00	-	0.6	0.60	8.00
2462MHz	Pass	4.00	-	-2.93	-2.93	8.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-
2412MHz	Pass	4.00	-	-4.28	-4.28	8.00
2437MHz	Pass	4.00	-	0.82	0.82	8.00
2462MHz	Pass	4.00	-	-4.31	-4.31	8.00
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	1.04	2.53	4.02	6.99
2437MHz	Pass	7.01	1.63	1.54	4.35	6.99
2462MHz	Pass	7.01	-0.52	0.4	2.63	6.99
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-3.34	-3.19	-1.13	6.99
2437MHz	Pass	7.01	-1.77	-2.64	0.56	6.99
2462MHz	Pass	7.01	-3.85	-3.67	-1.95	6.99
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-4.09	-4.25	-2.20	6.99
2437MHz	Pass	7.01	-1.1	-0.96	0.87	6.99
2462MHz	Pass	7.01	-4.78	-5.28	-2.67	6.99

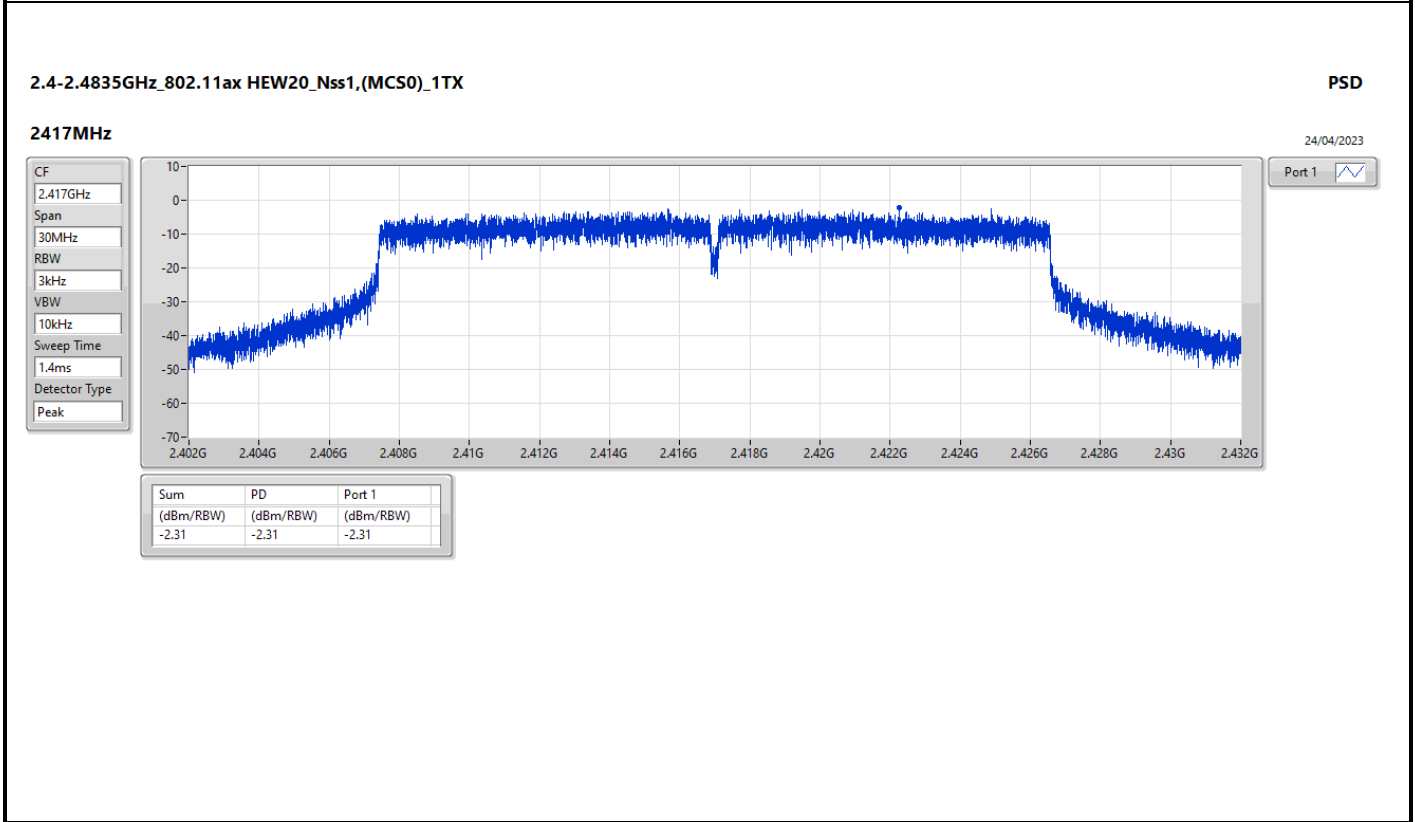
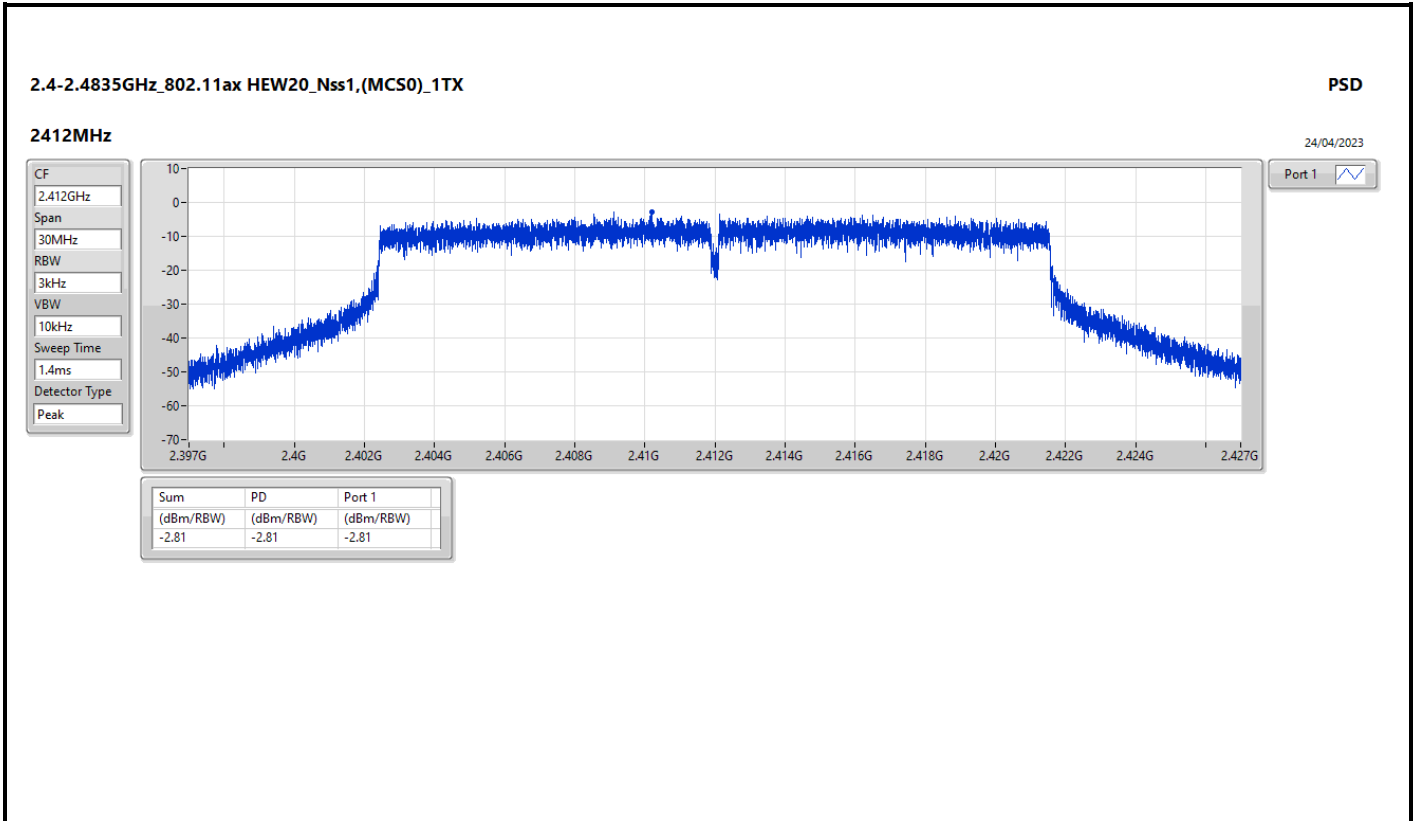
DG = Directional Gain; RBW = 3kHz;  
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;



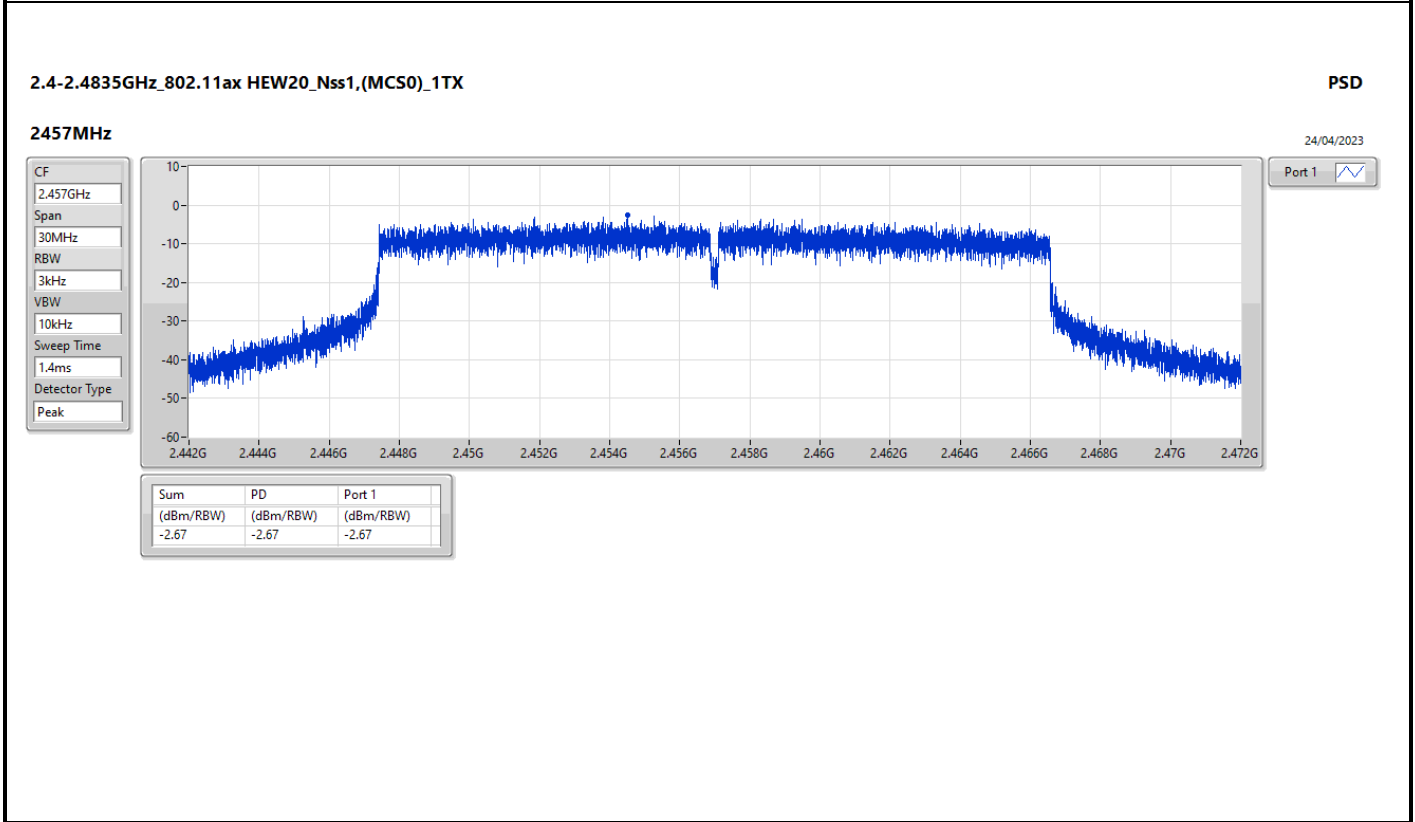
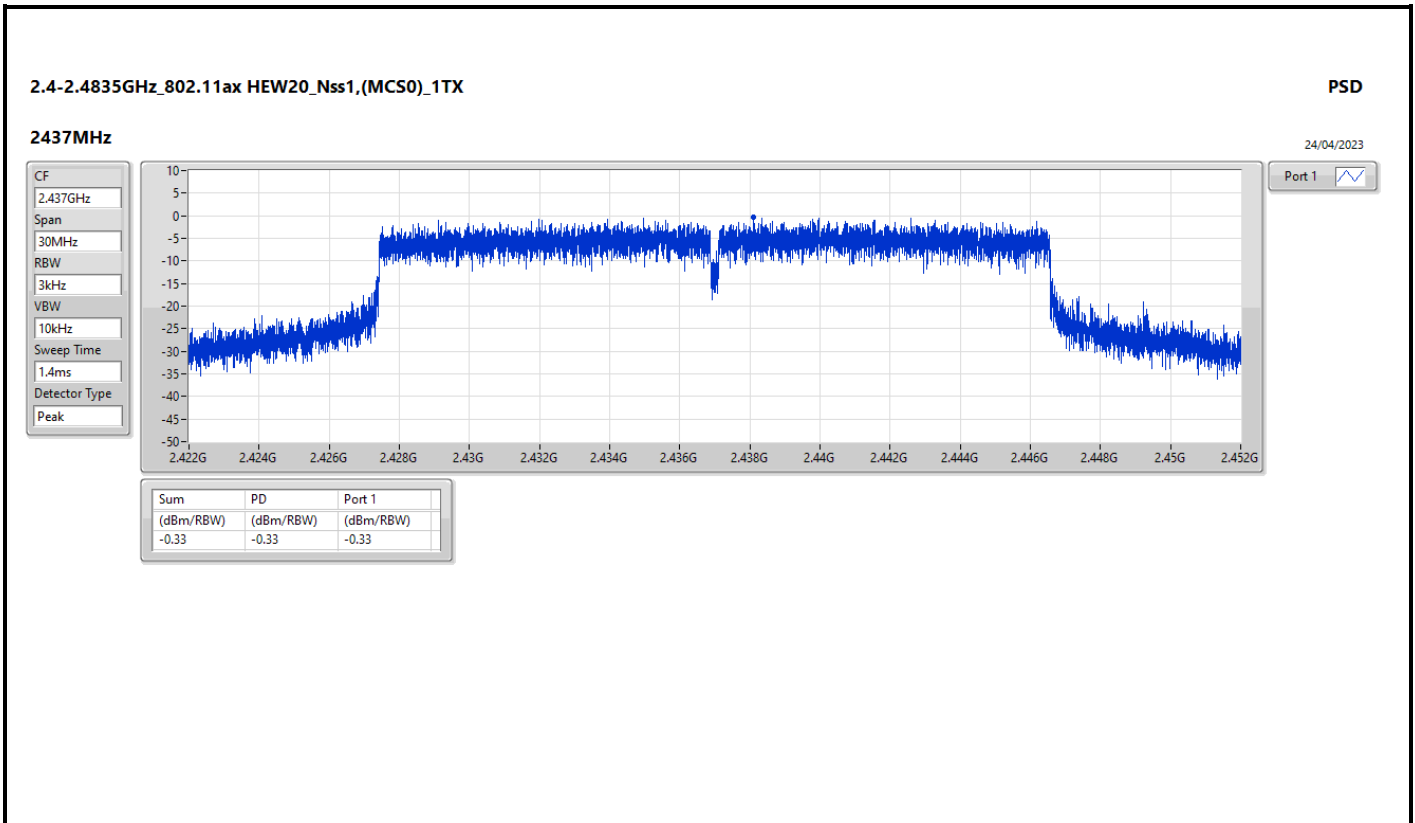


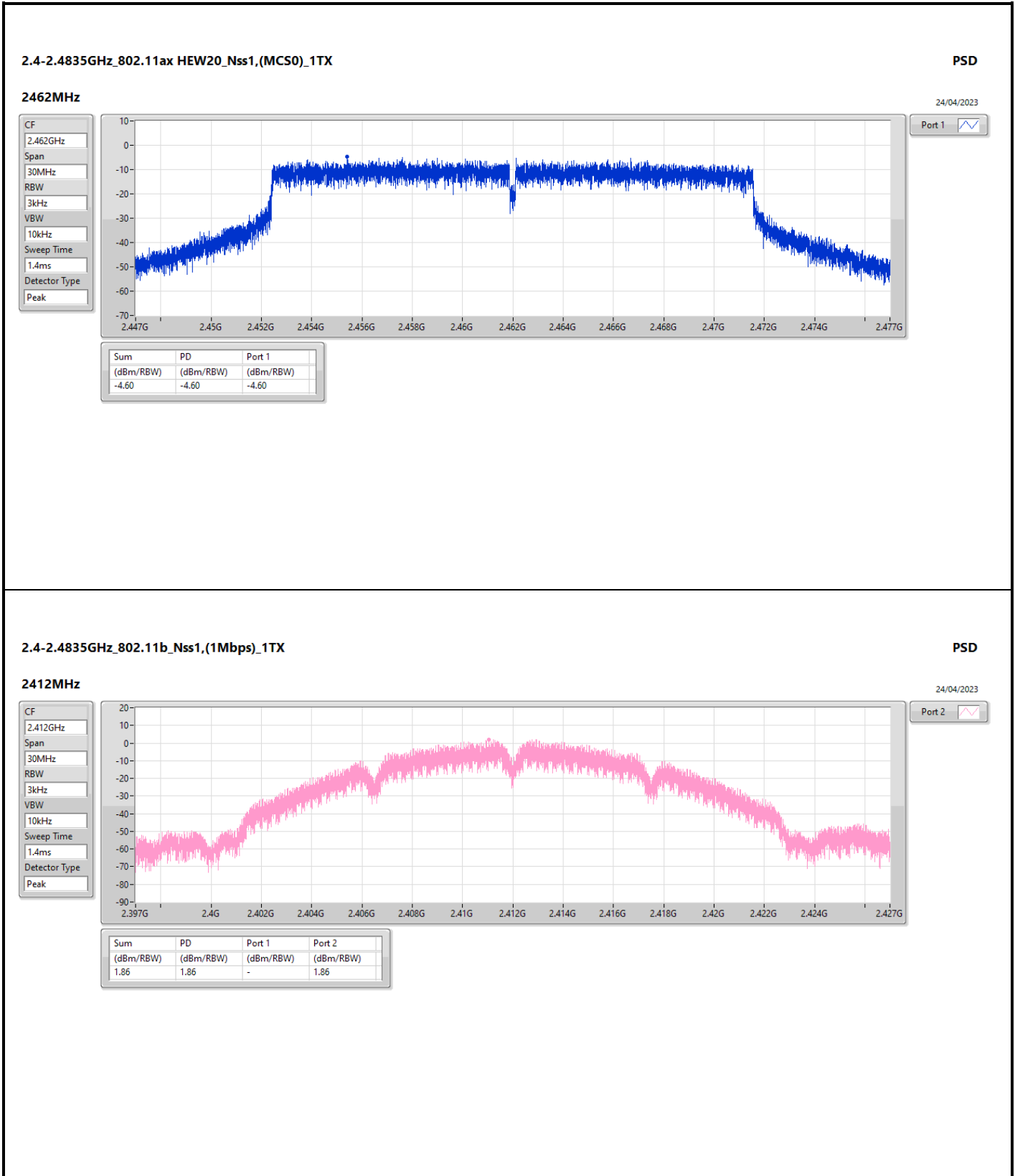


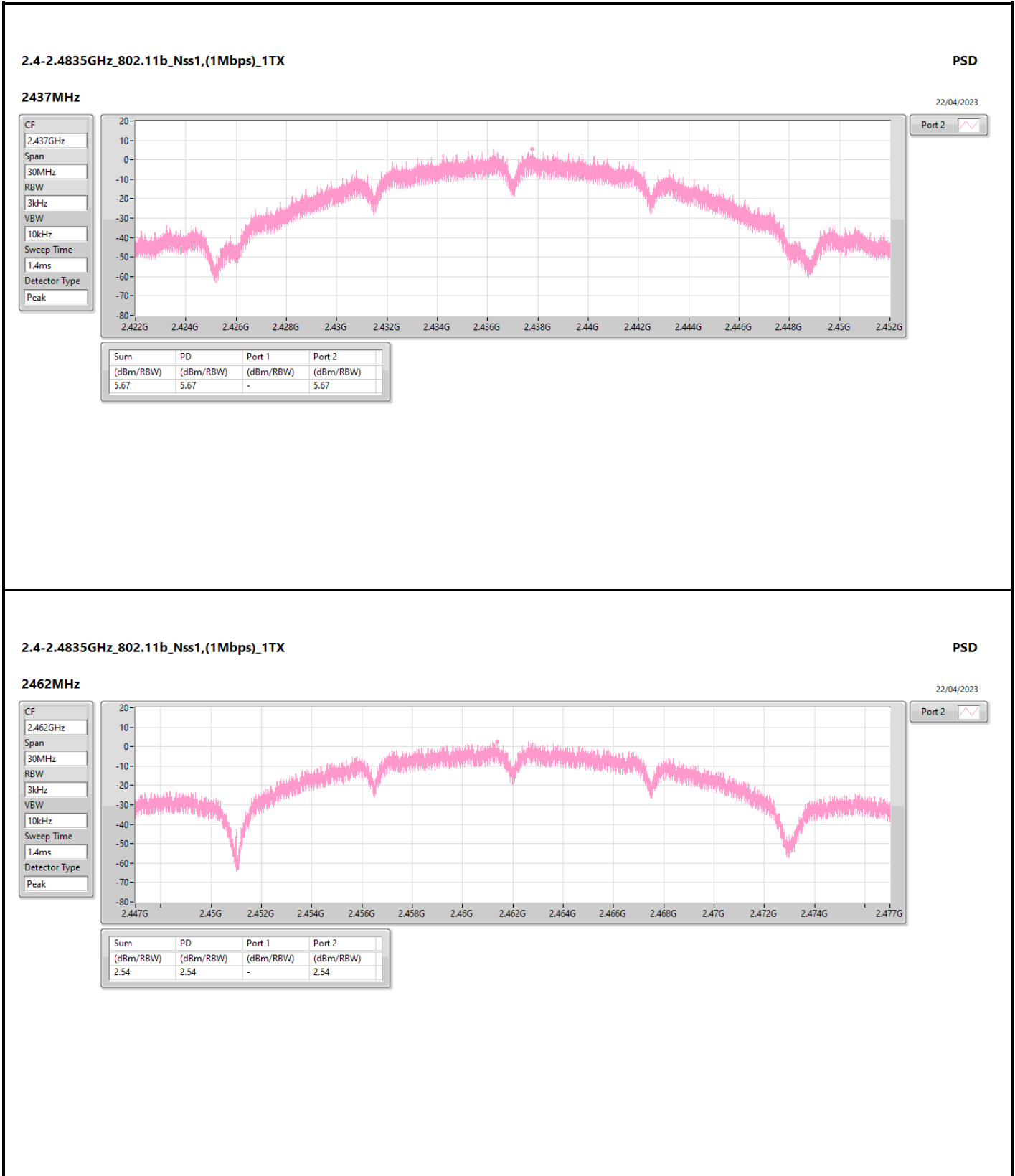


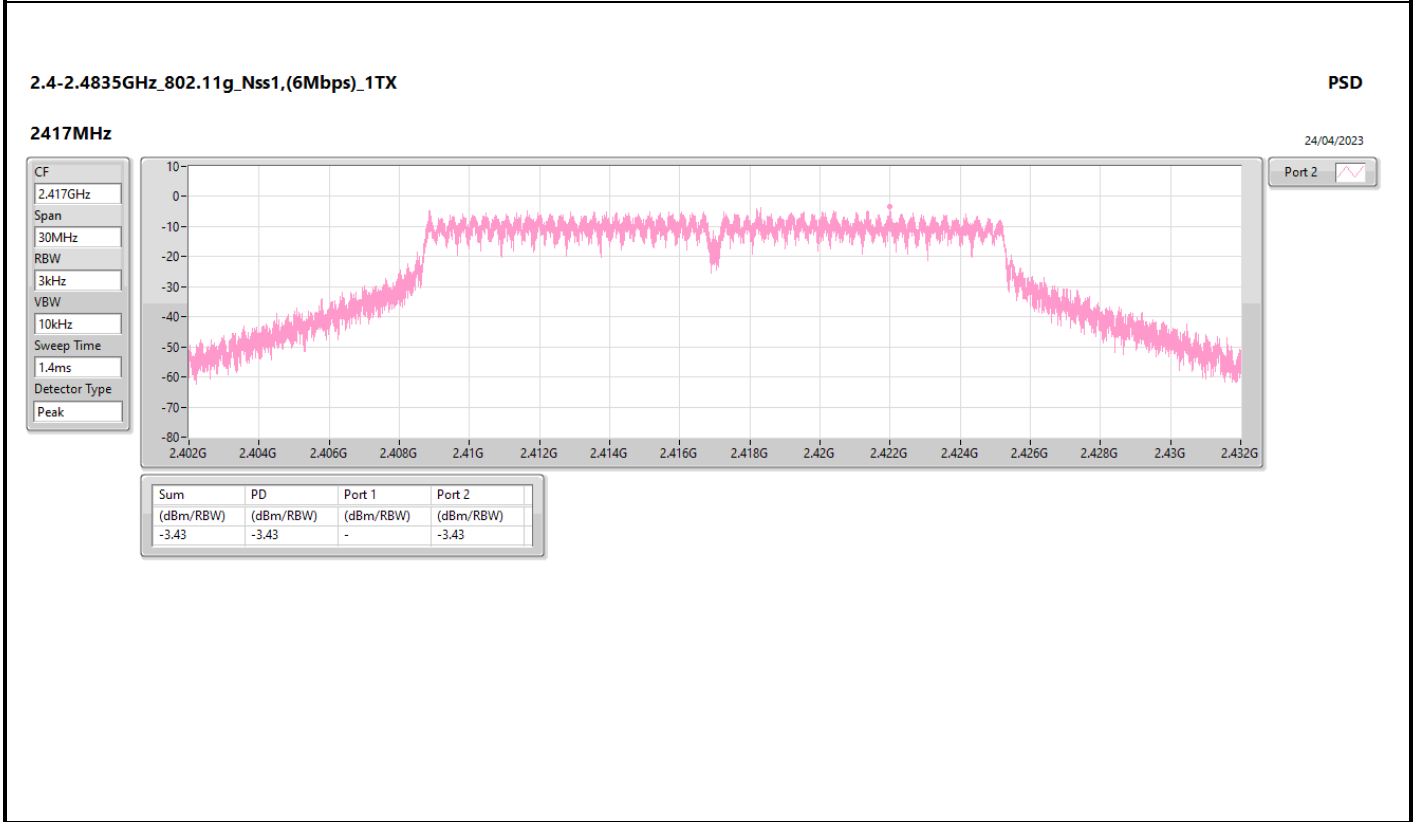
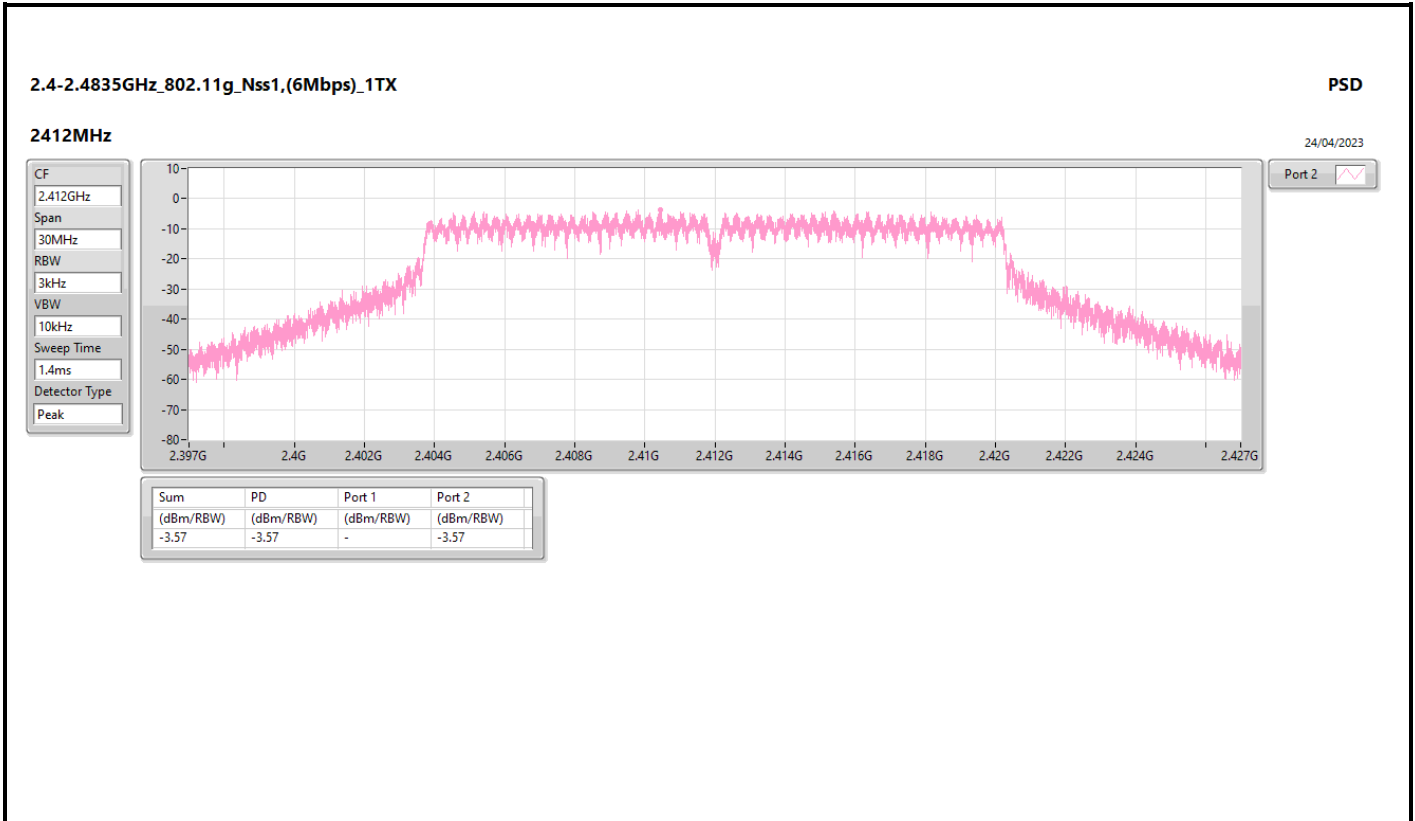


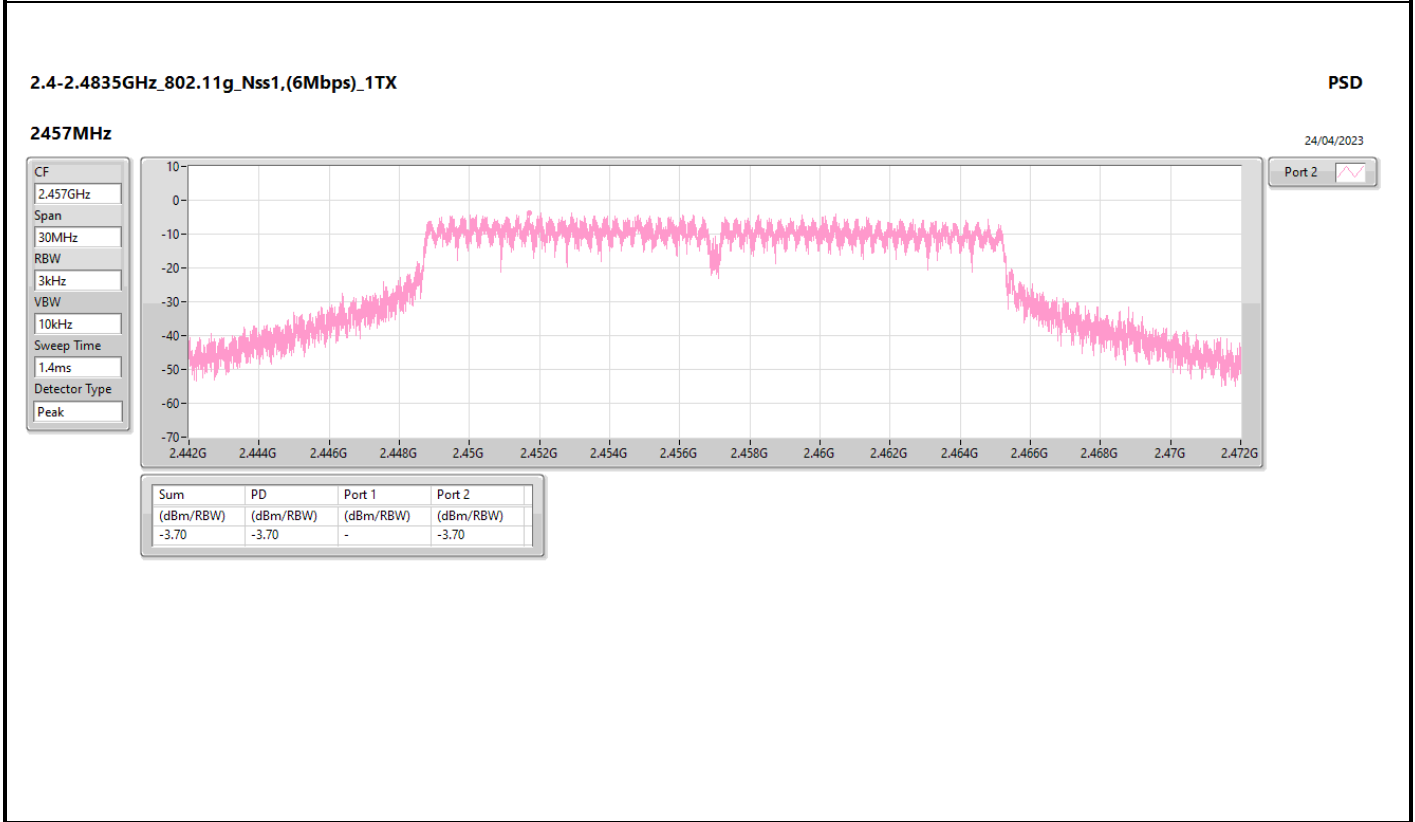
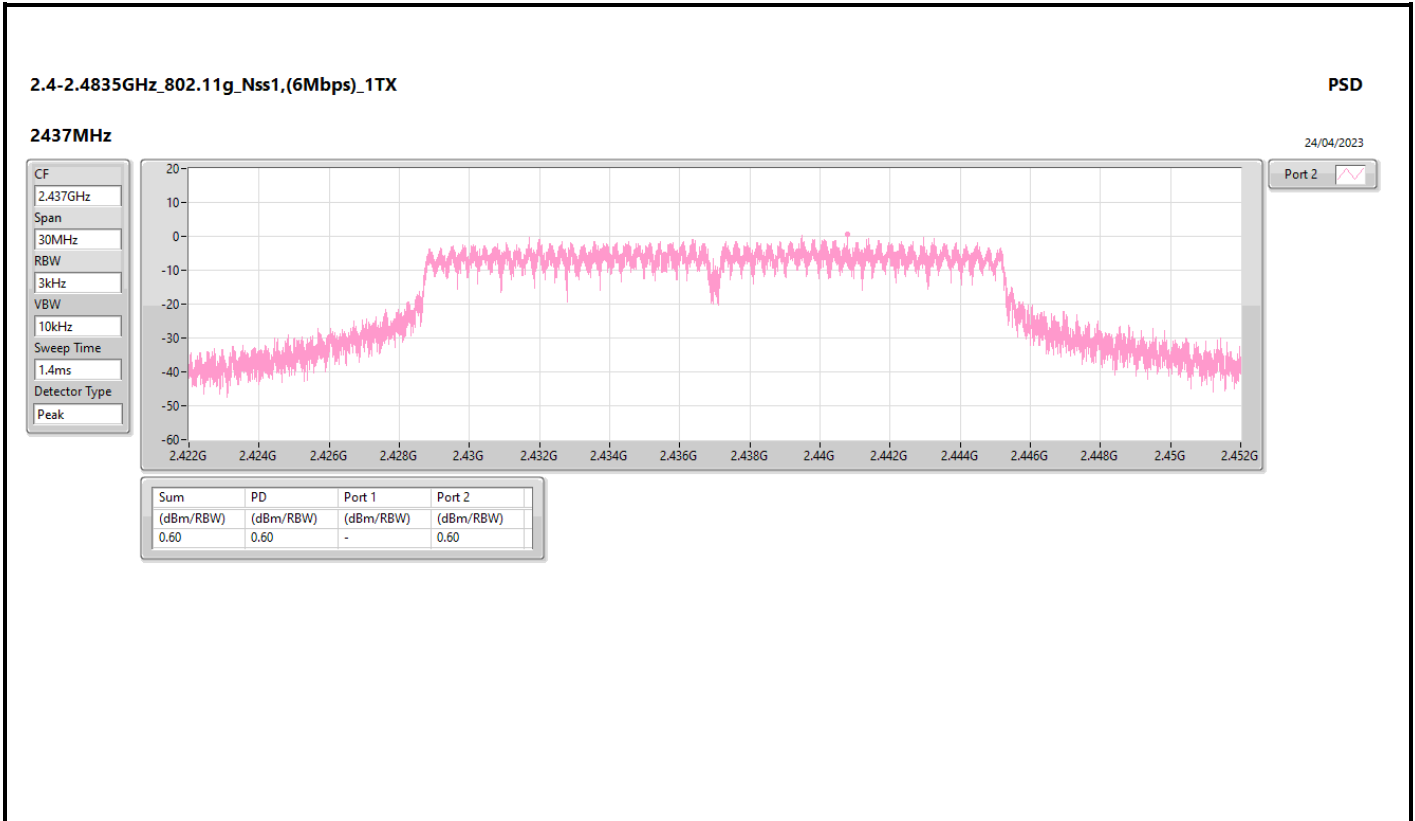


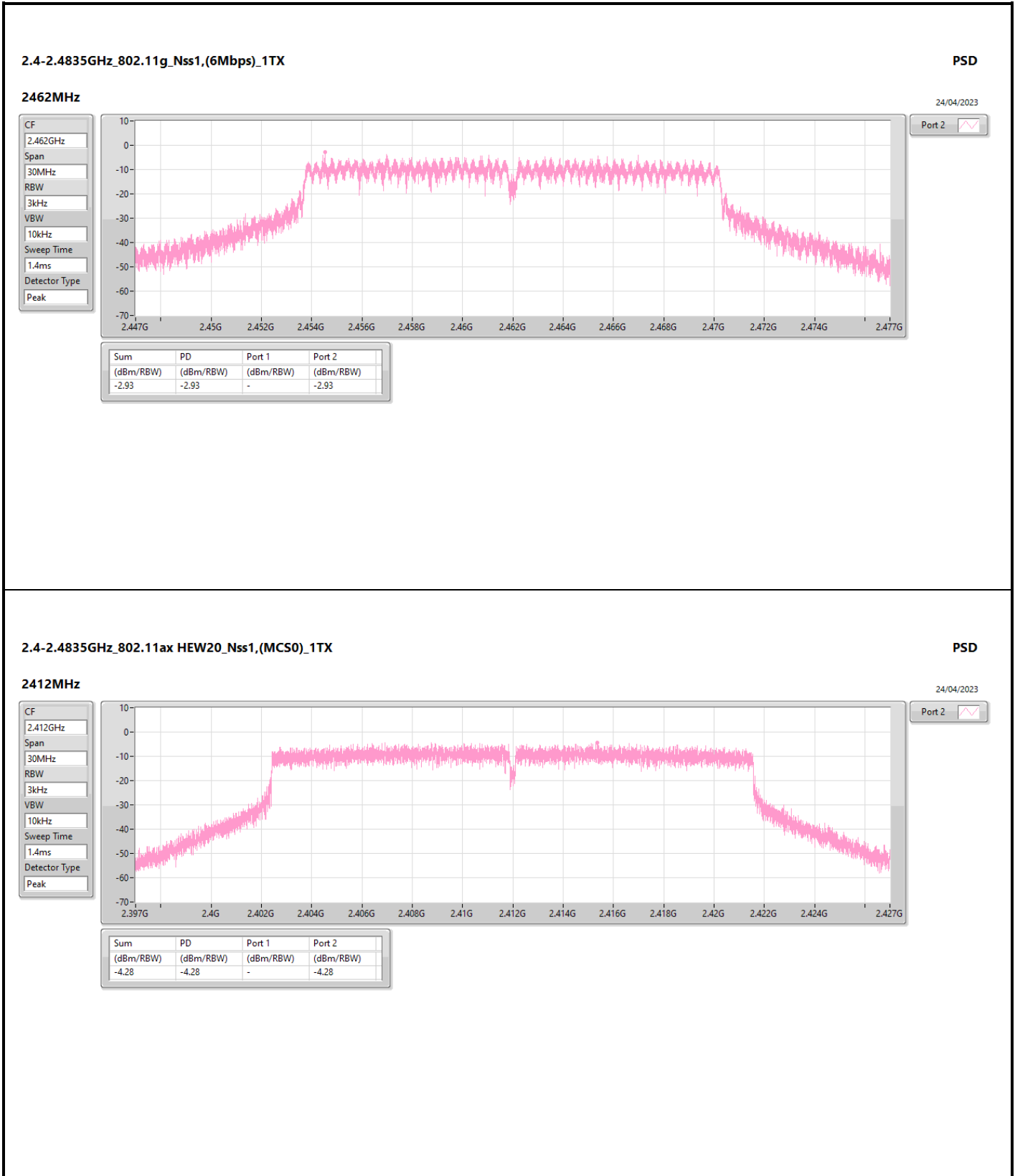


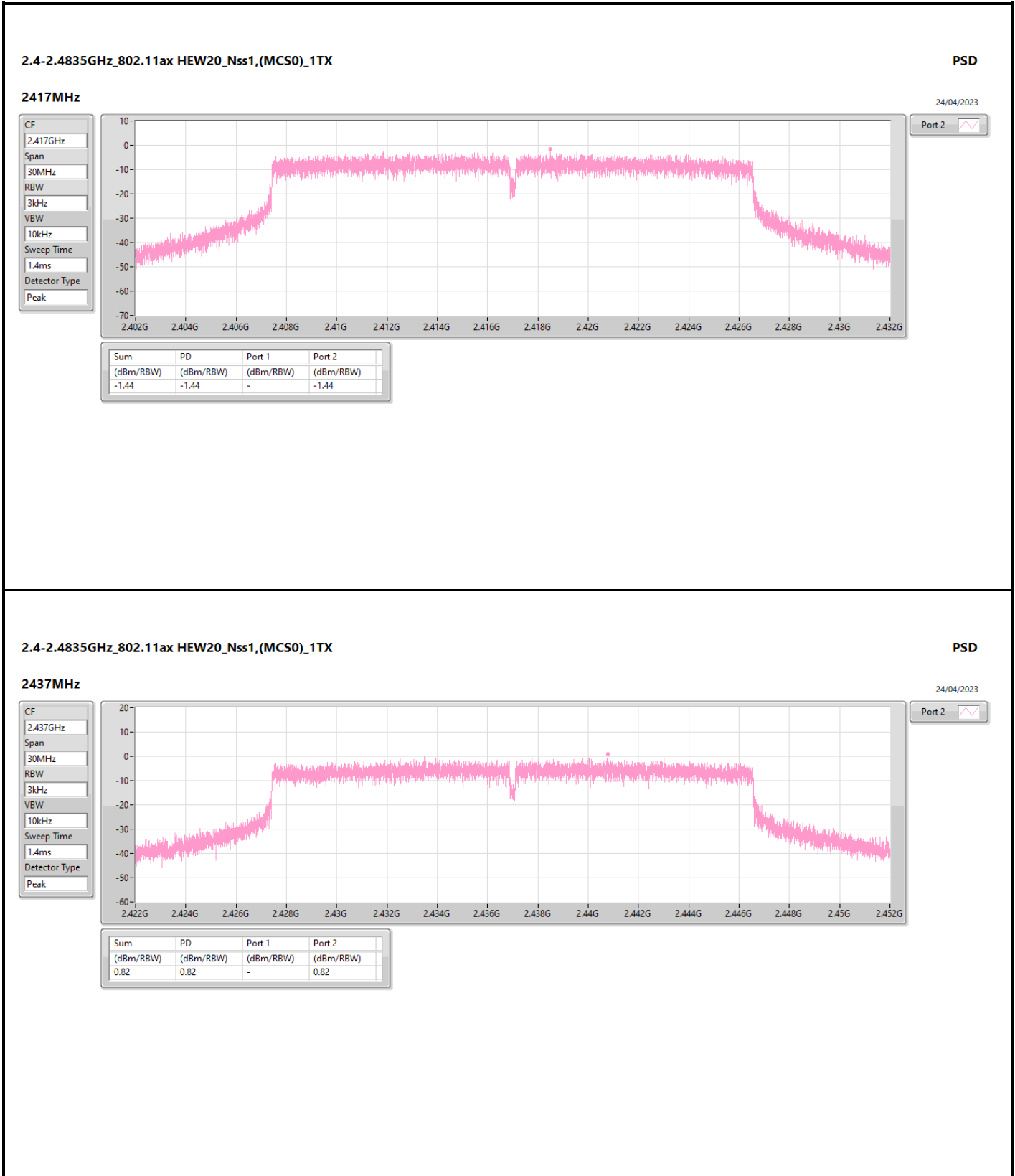


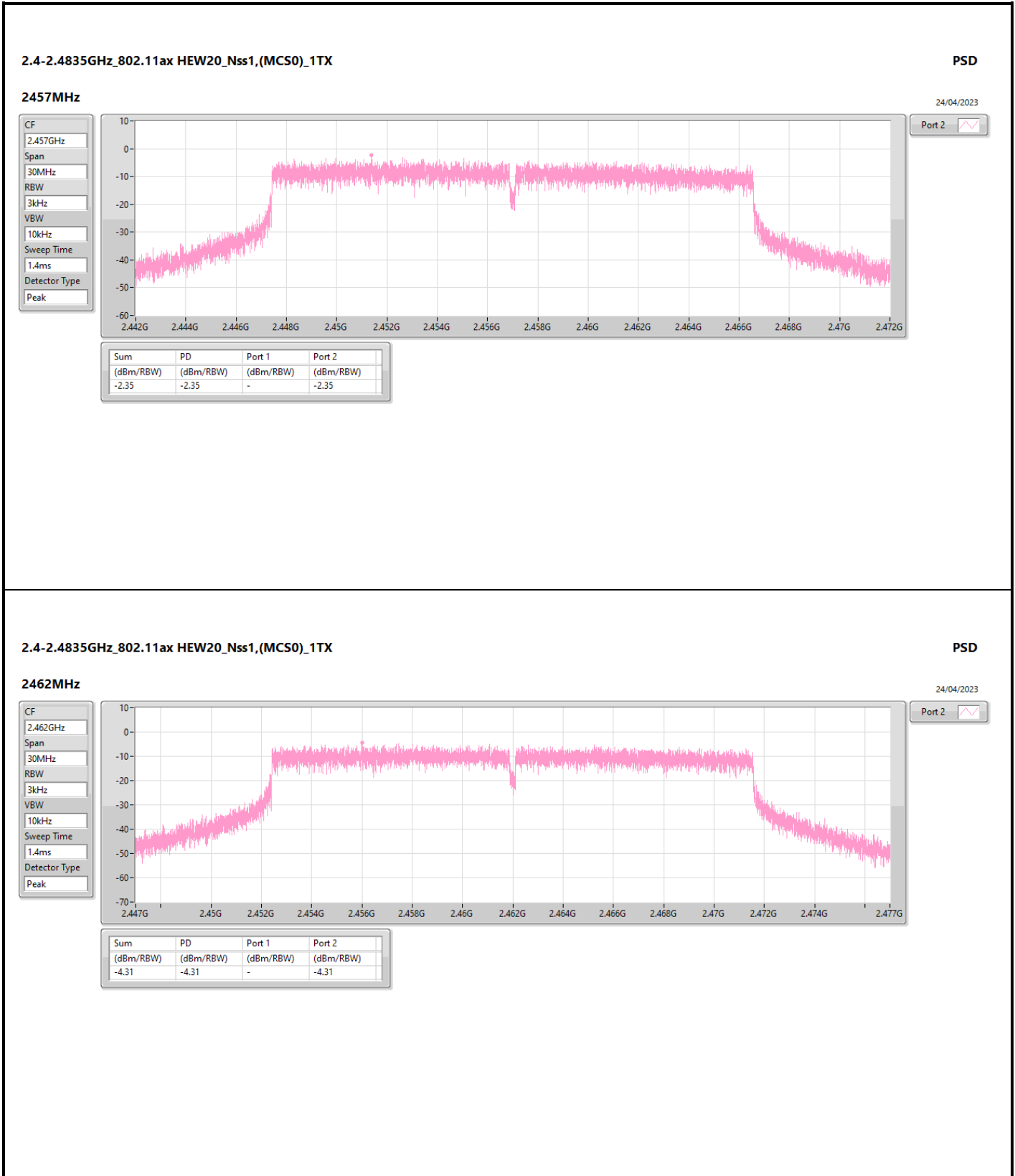




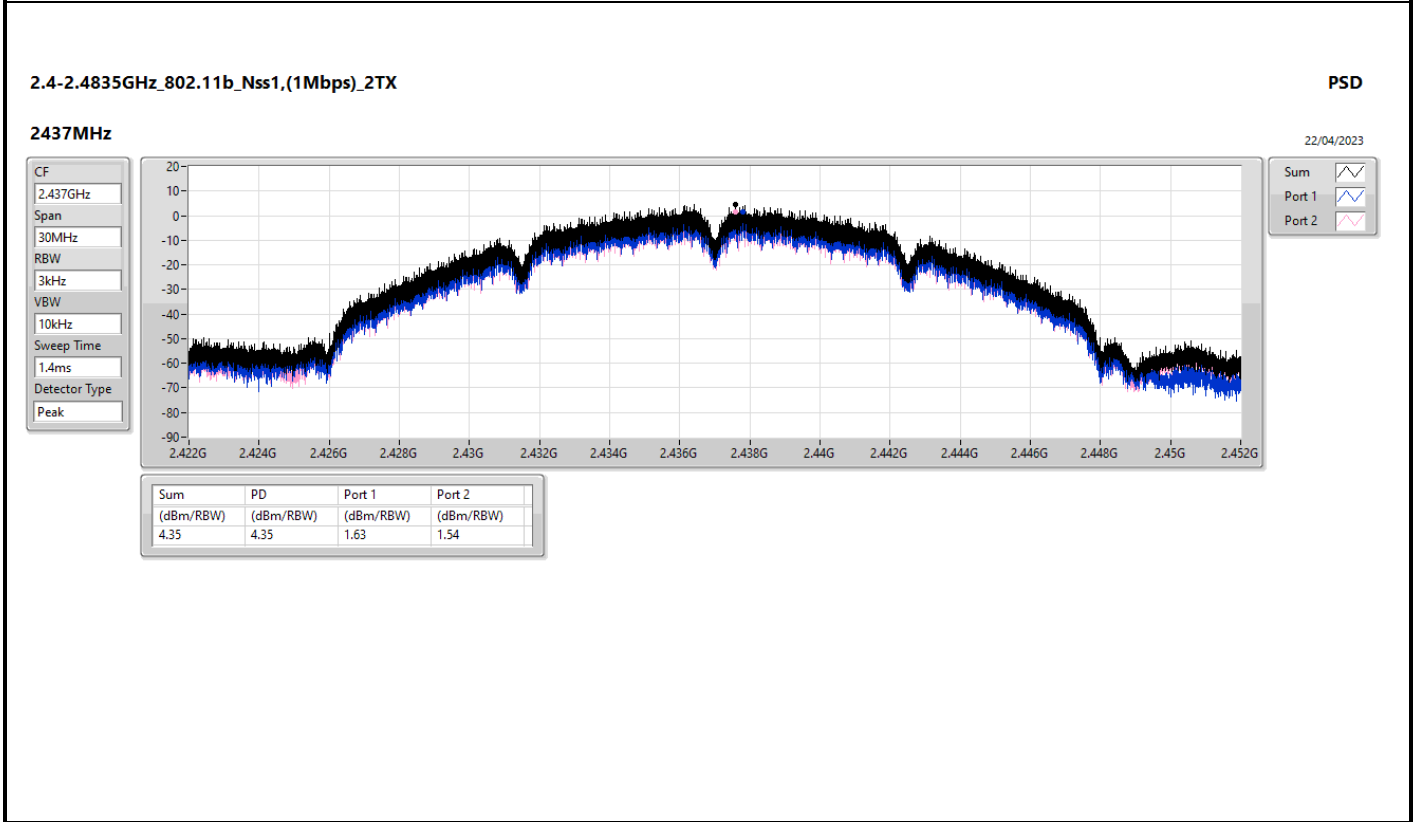
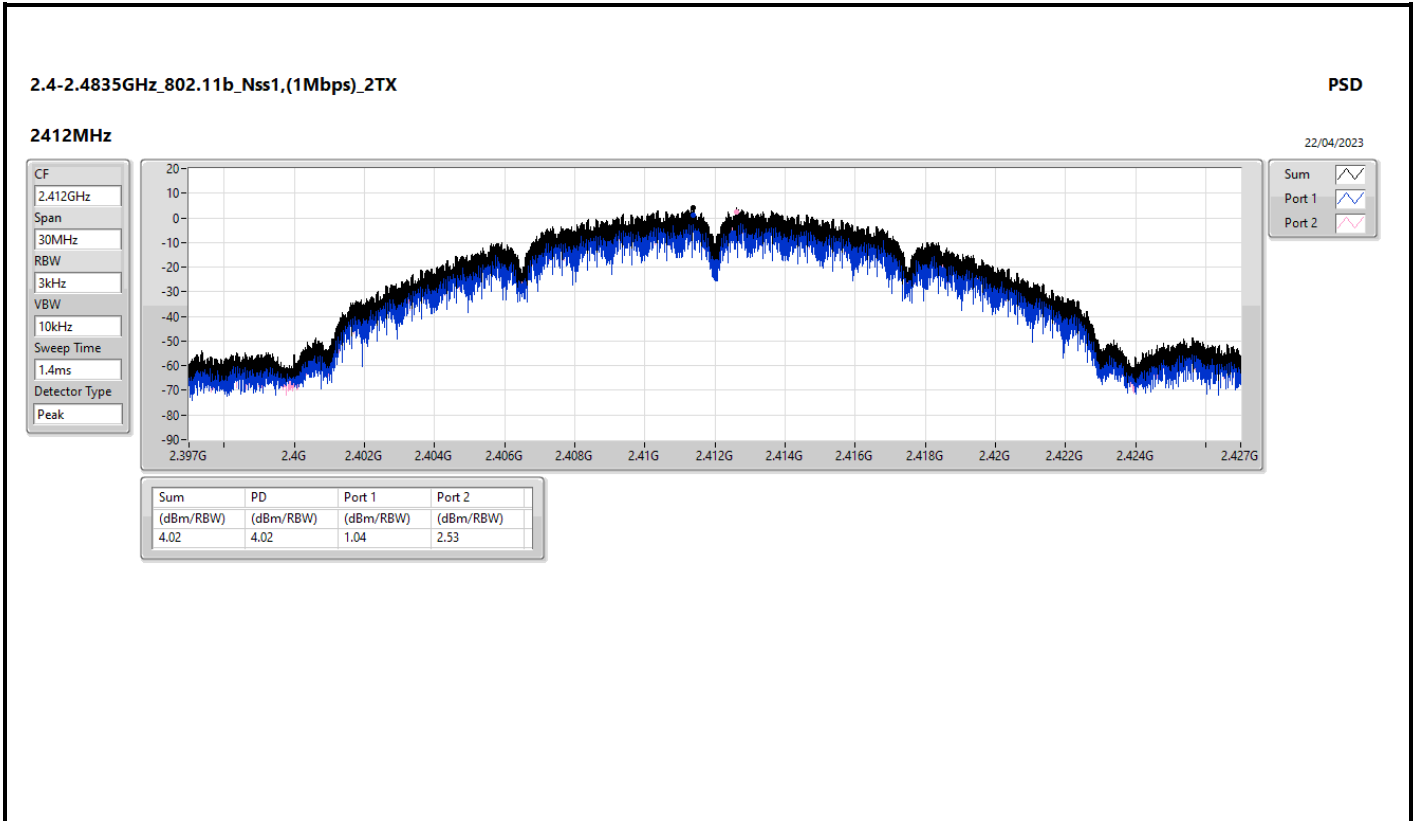


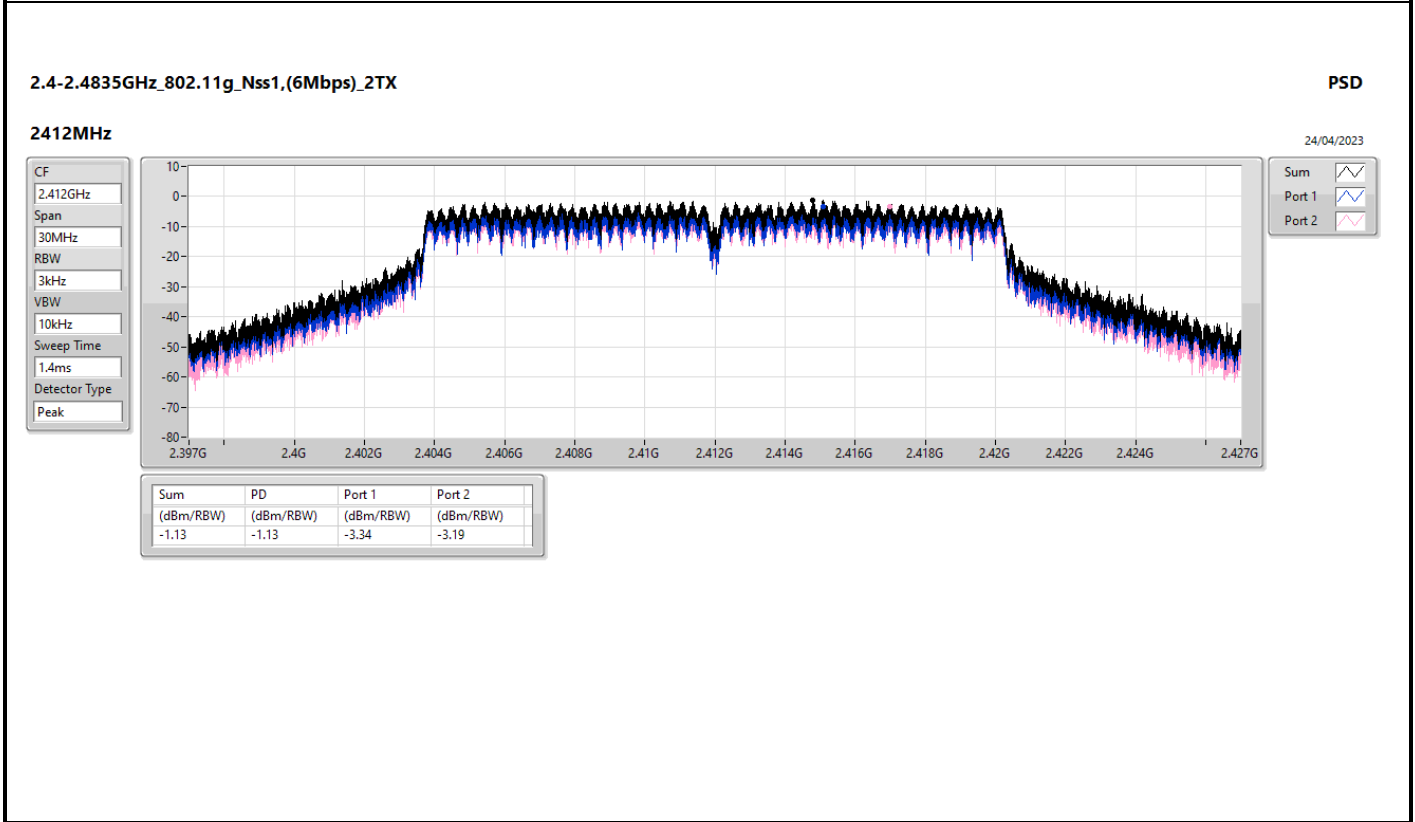
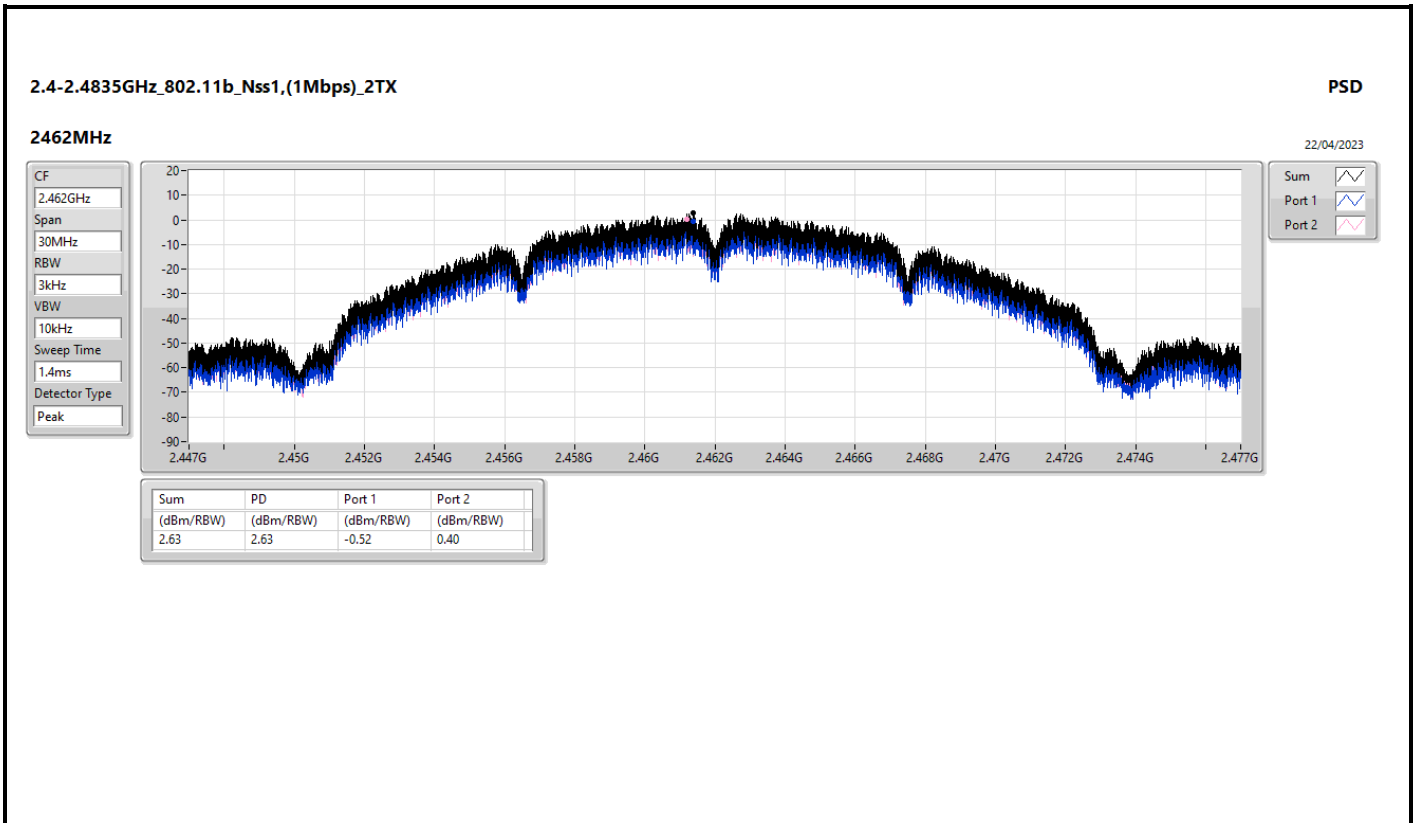


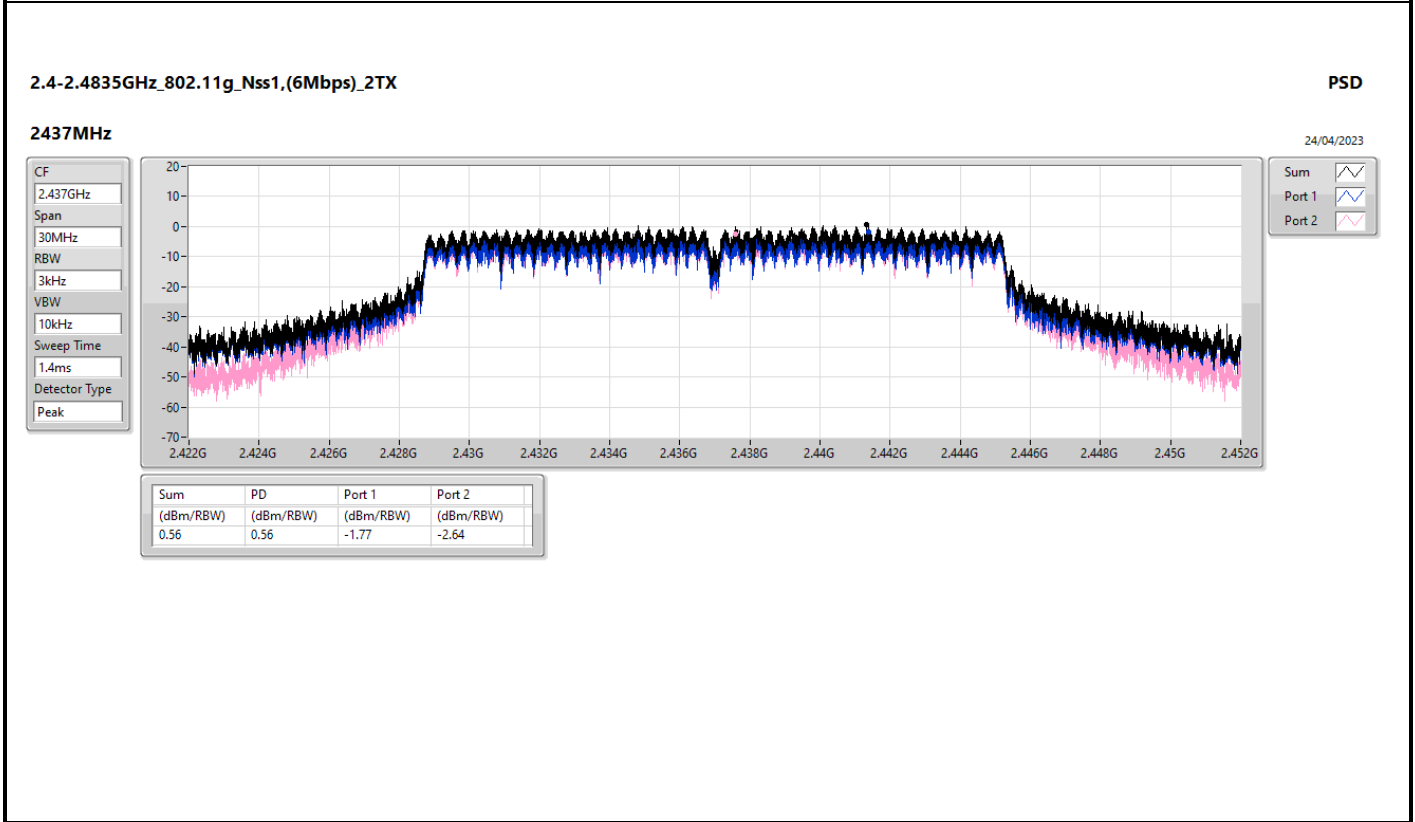
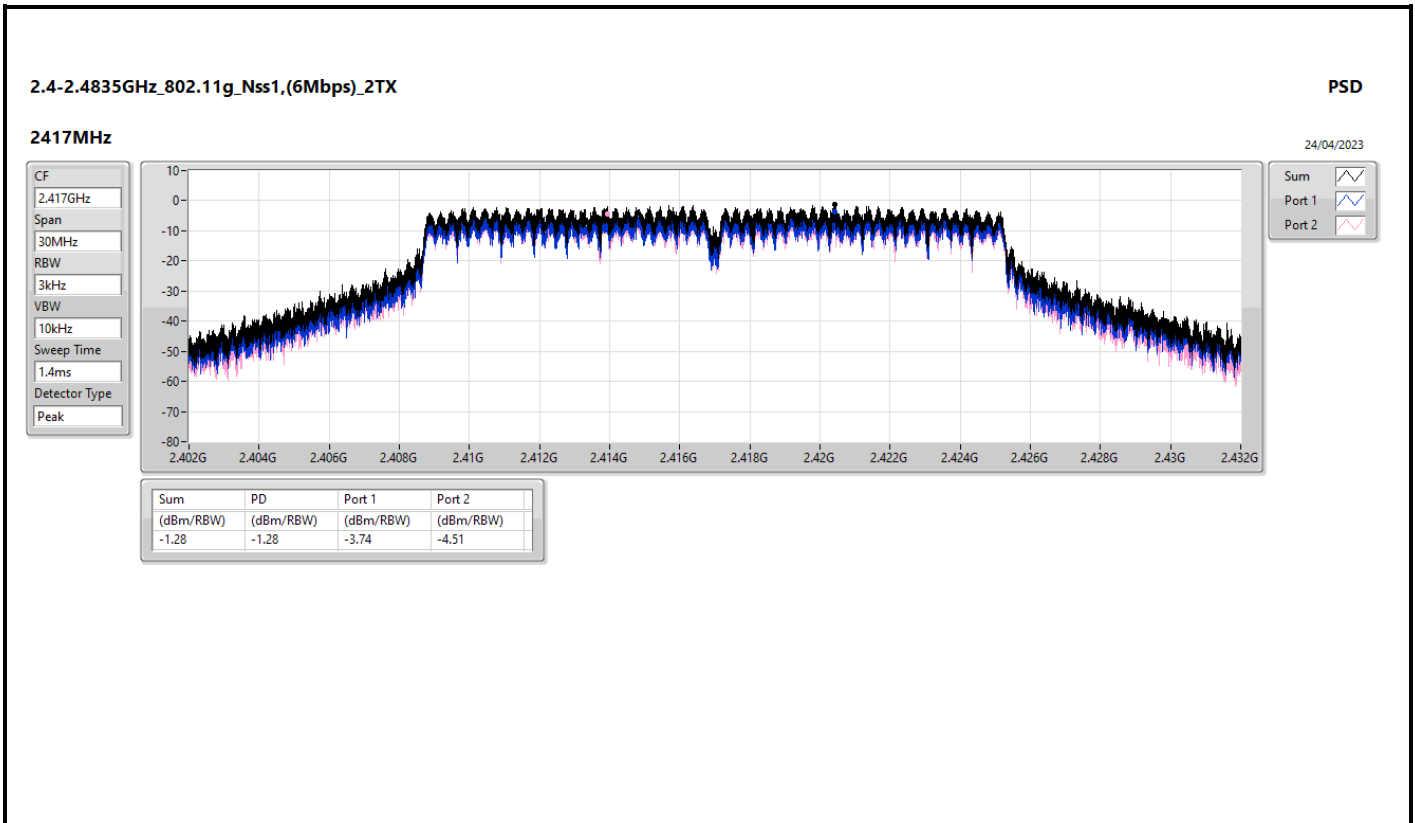


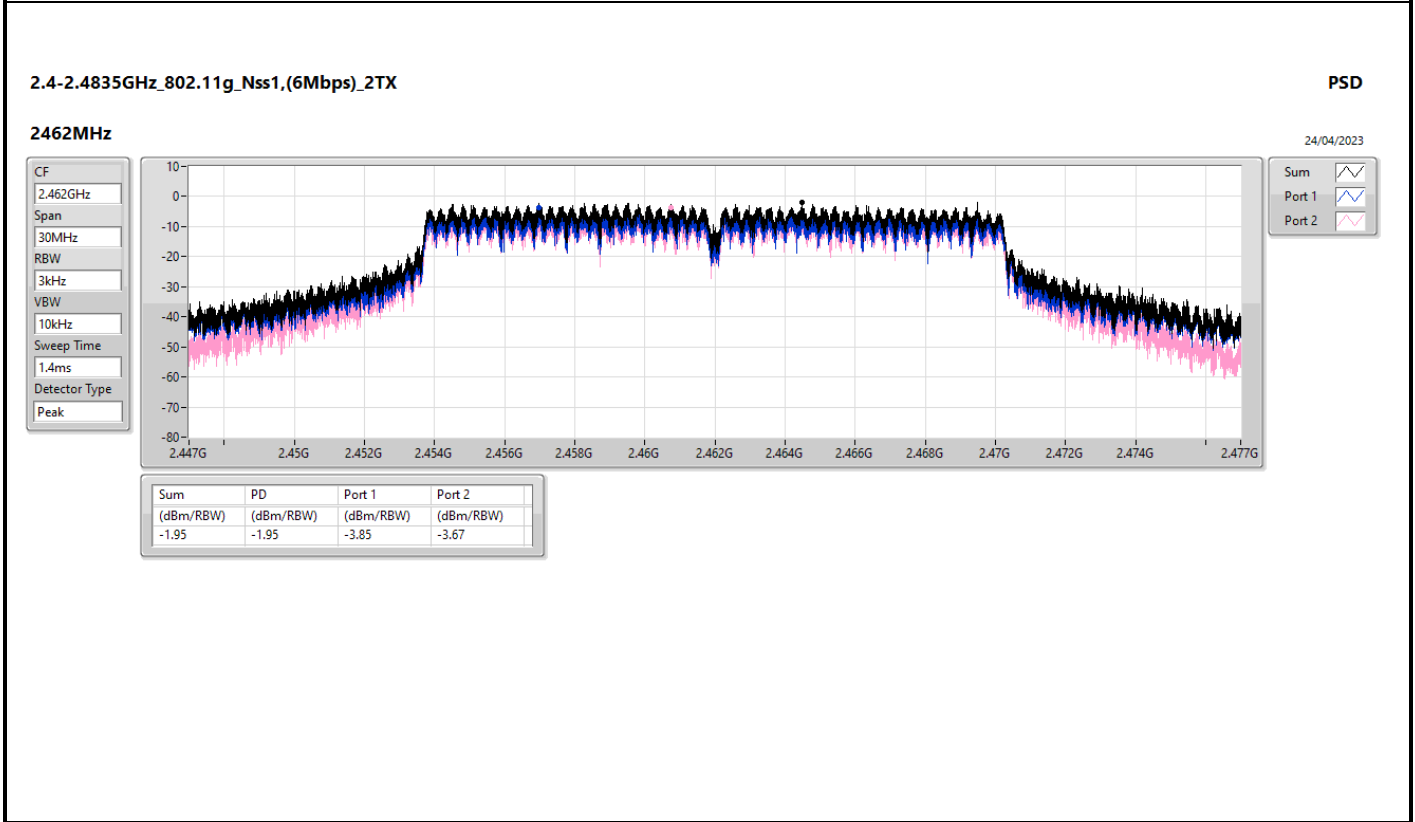
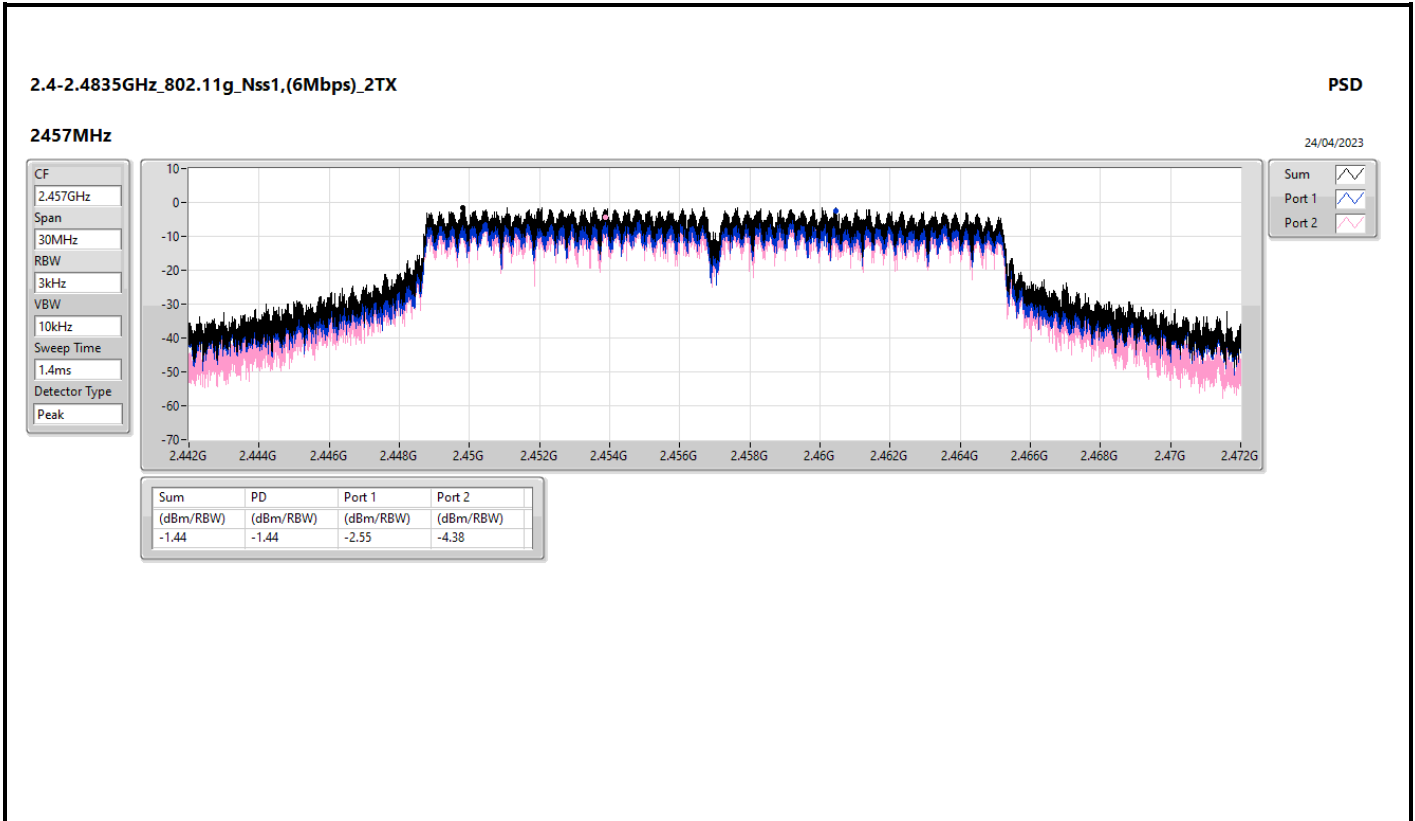


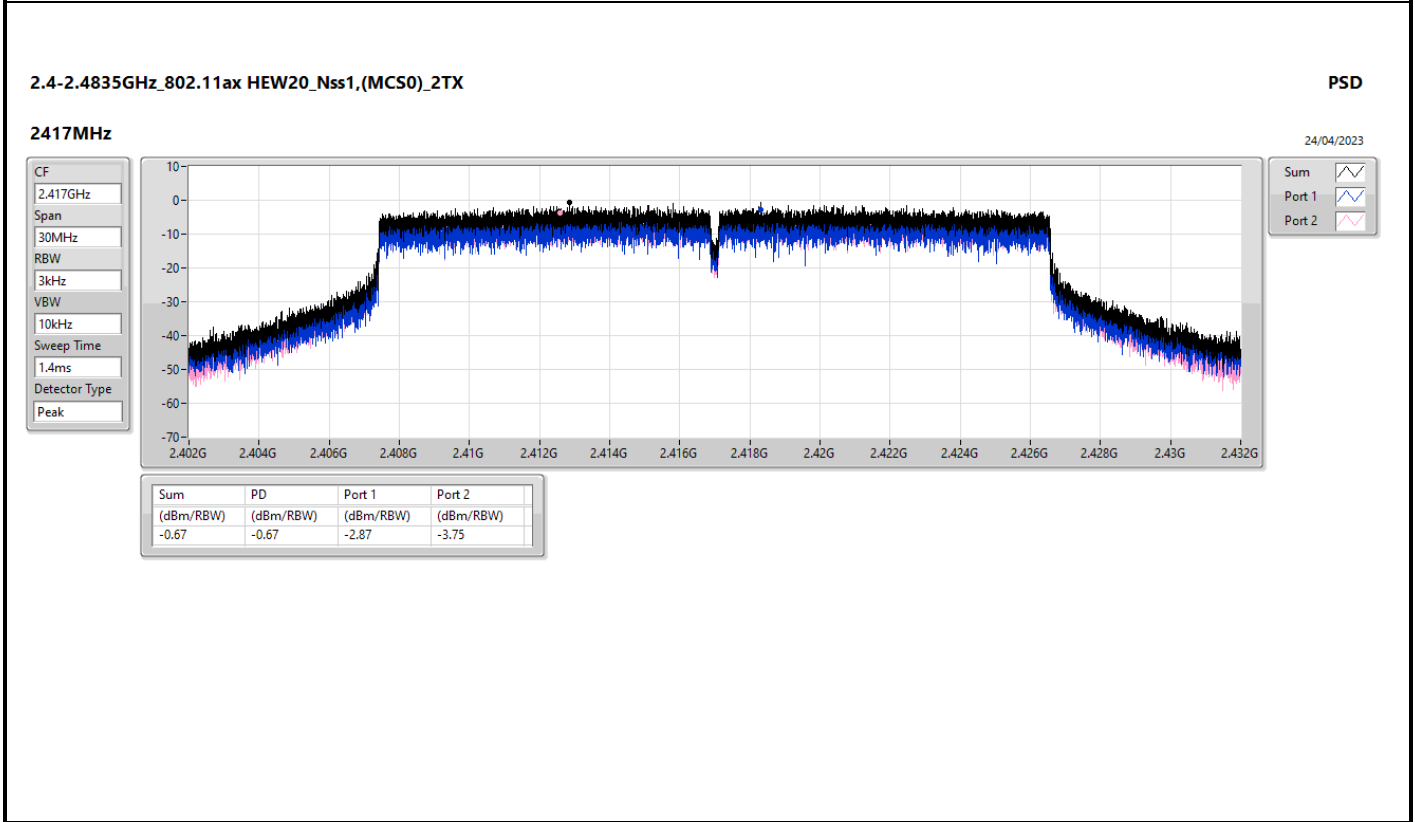
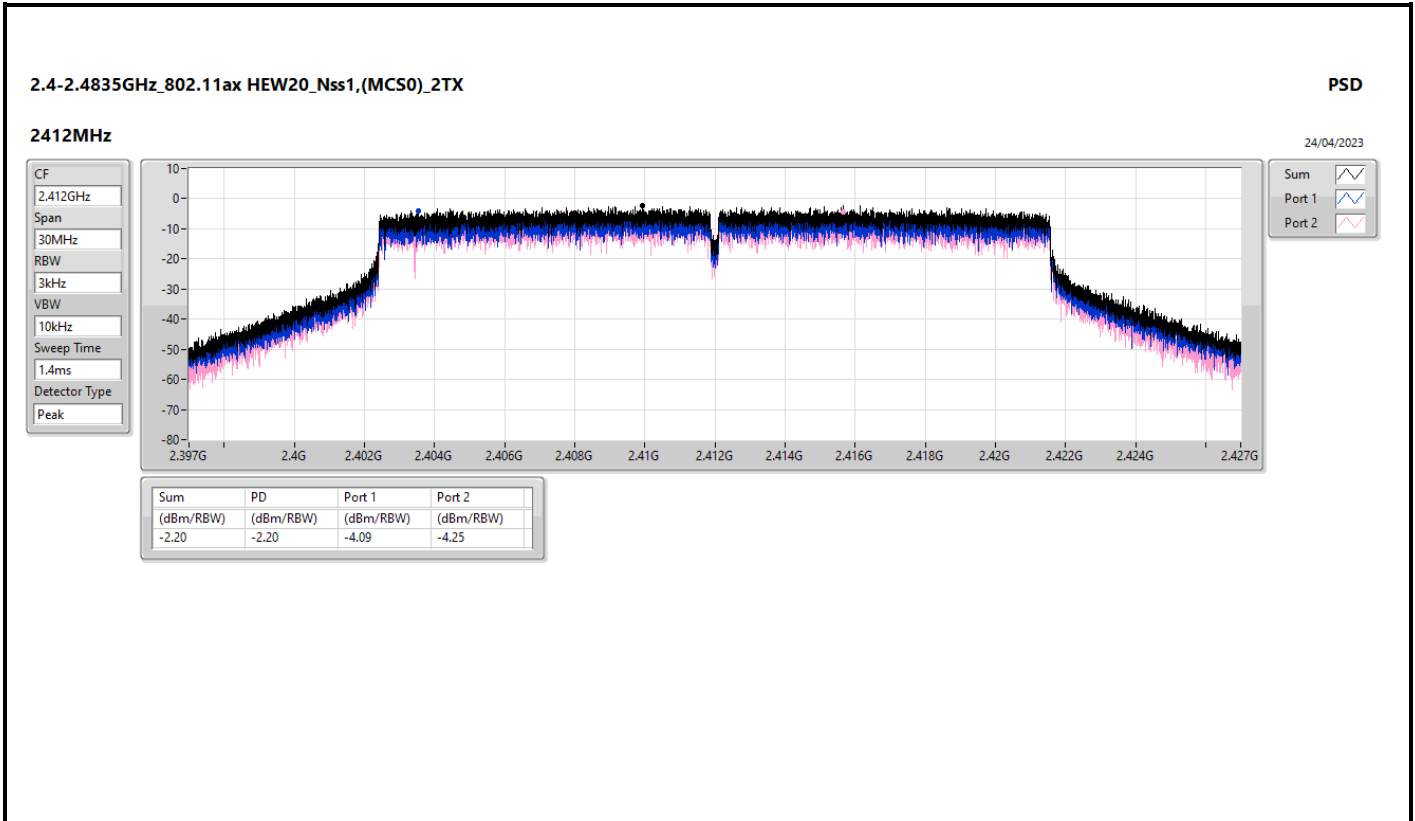


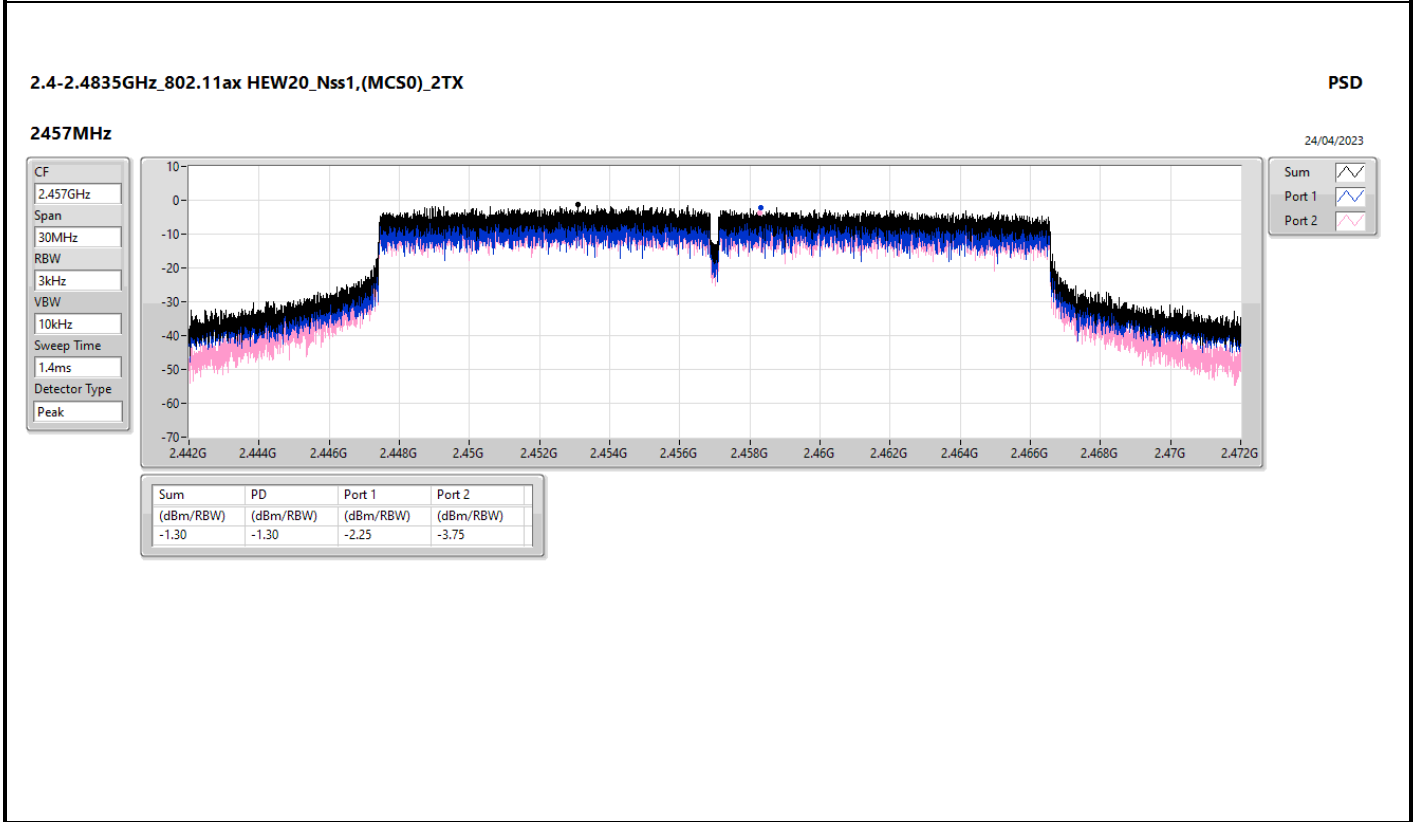
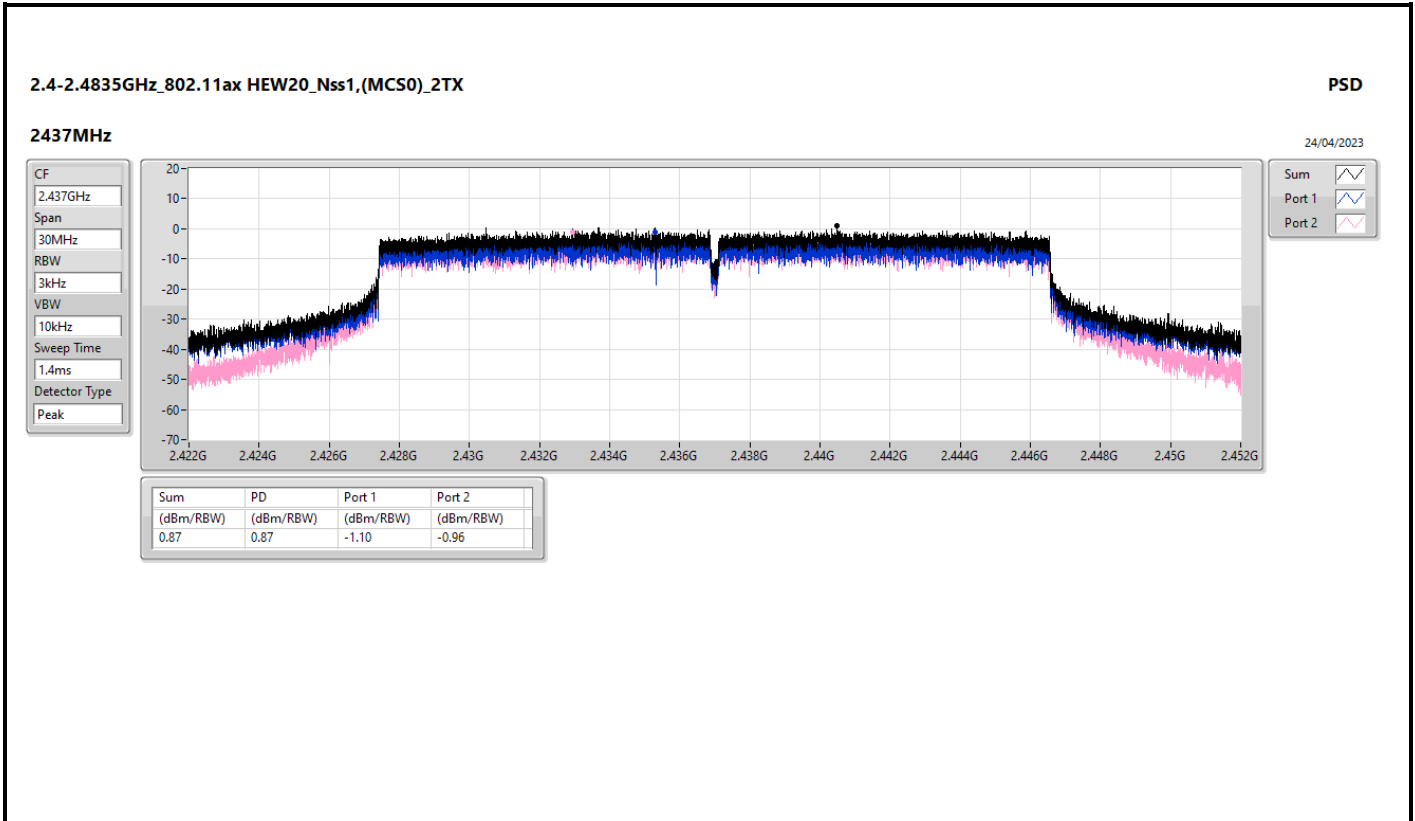


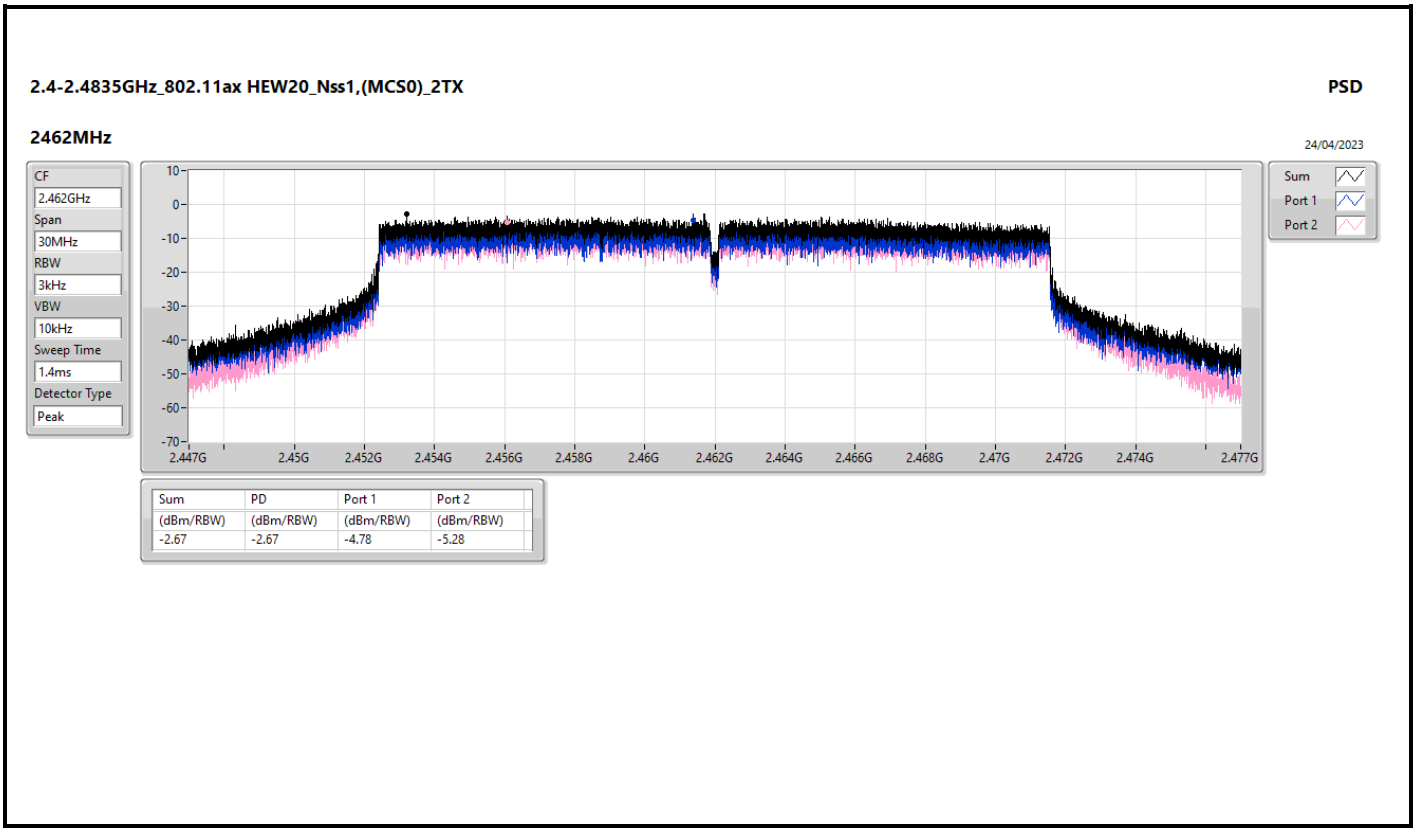














Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	3.83
802.11g_Nss1,(6Mbps)_1TX	-0.68
802.11ax HEW20_Nss1,(MCS0)_1TX	0.21

RBW = 3kHz:

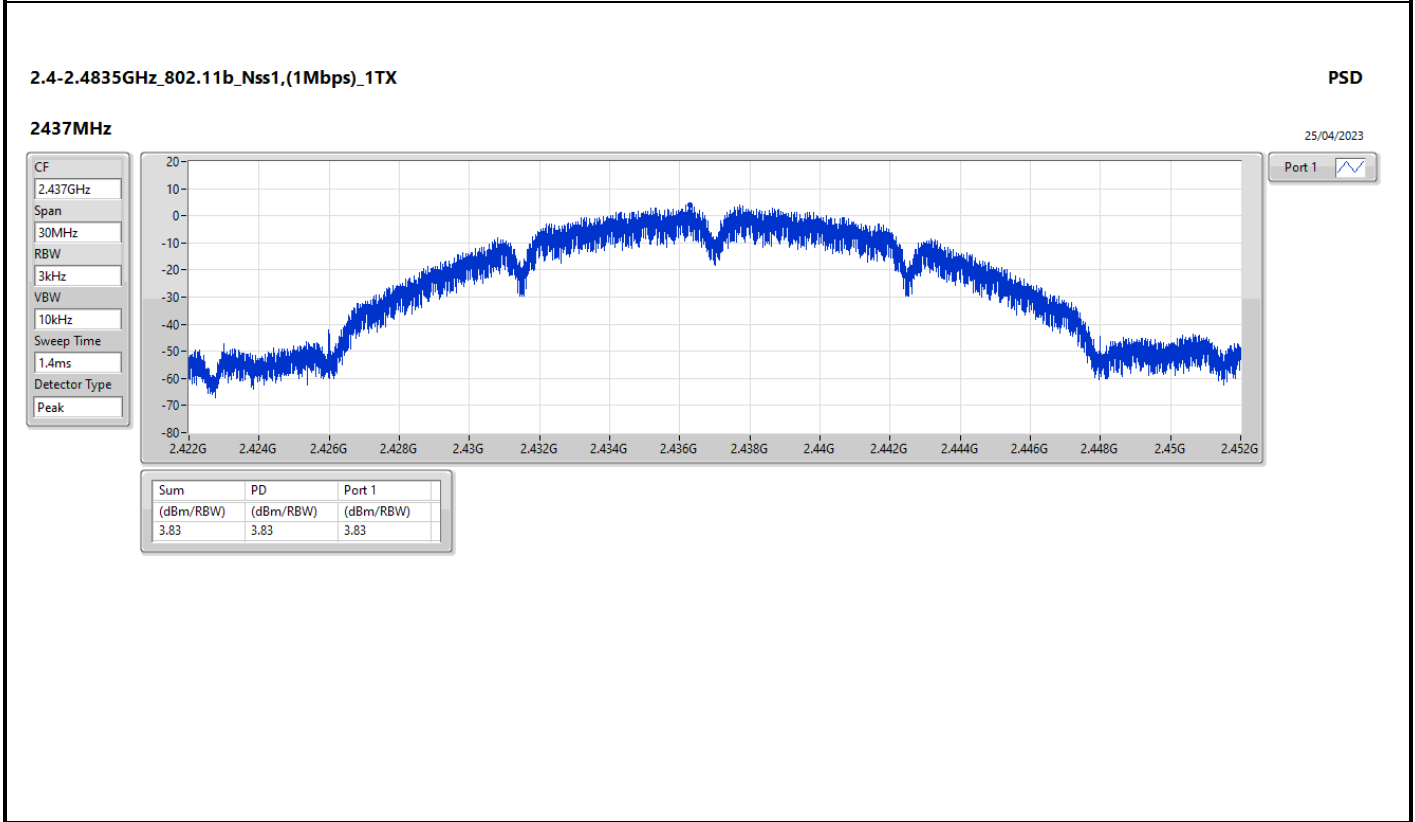
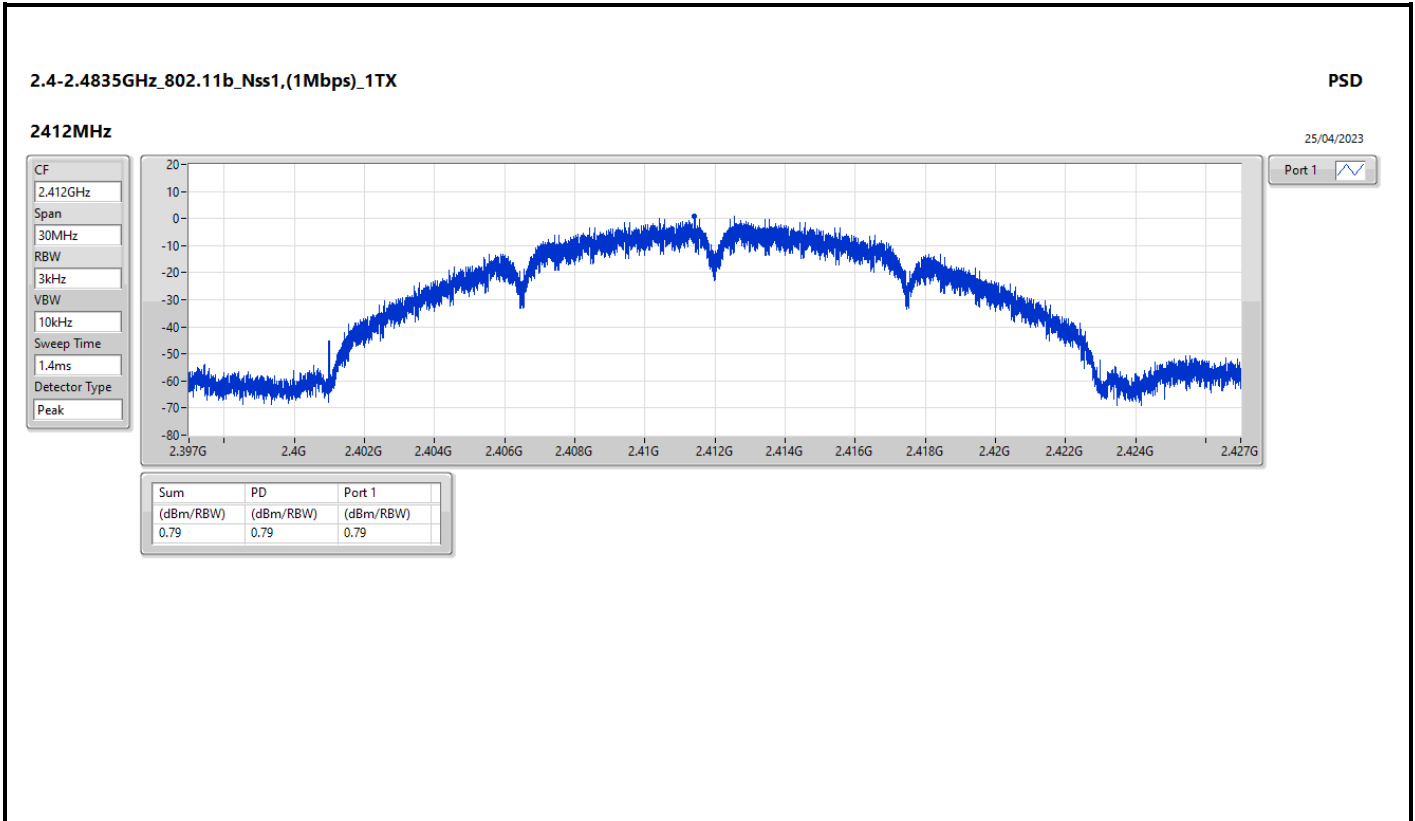


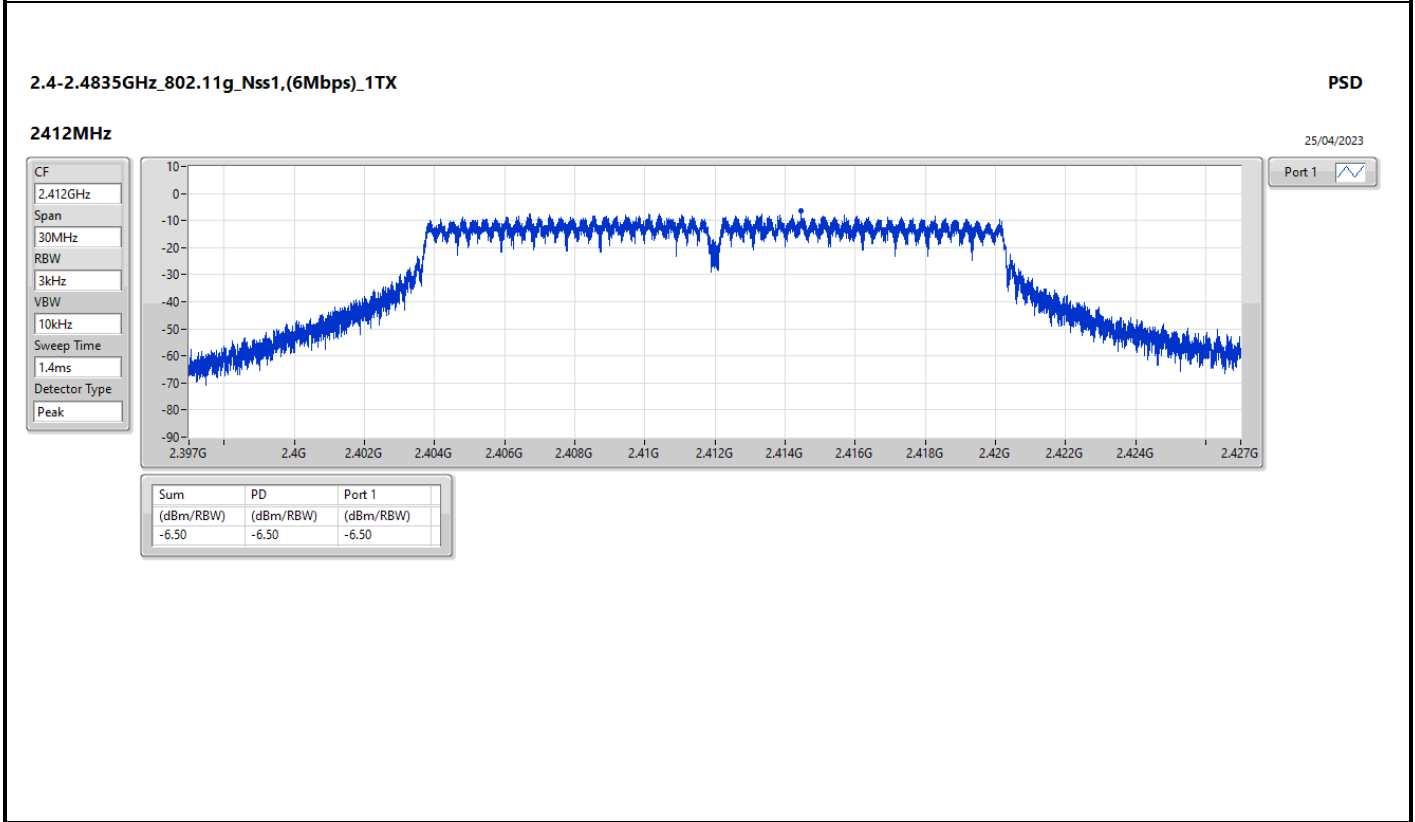
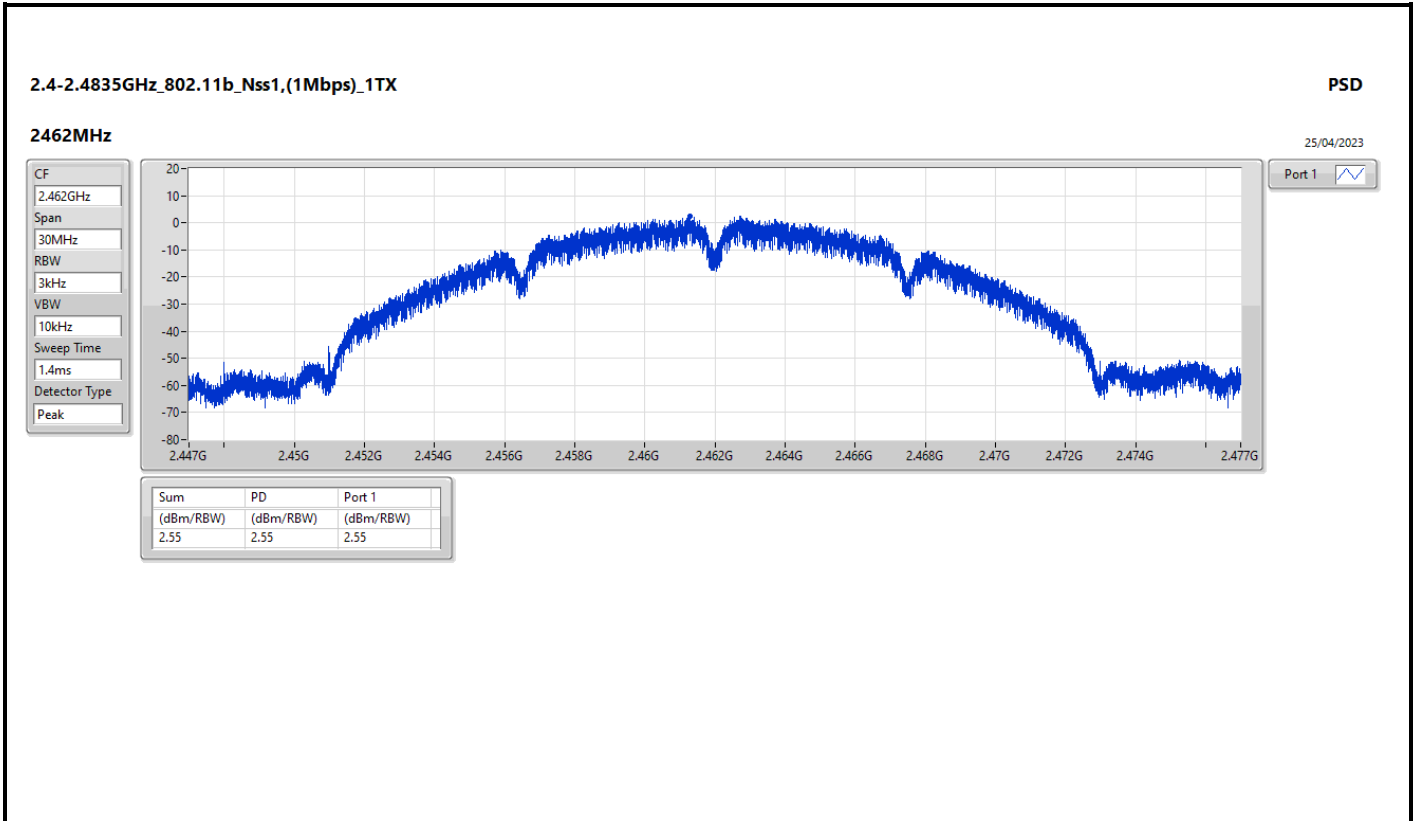


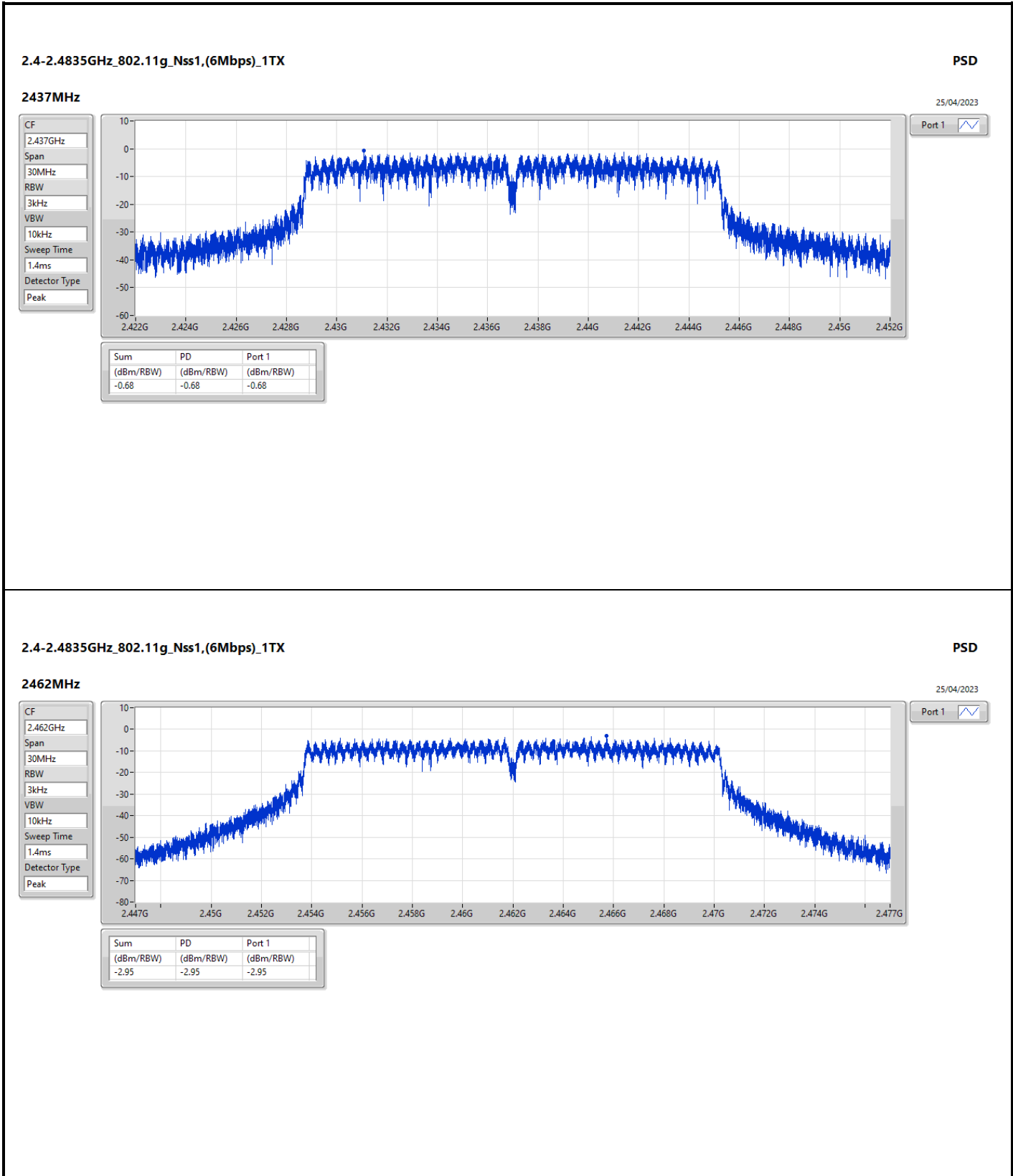
Result

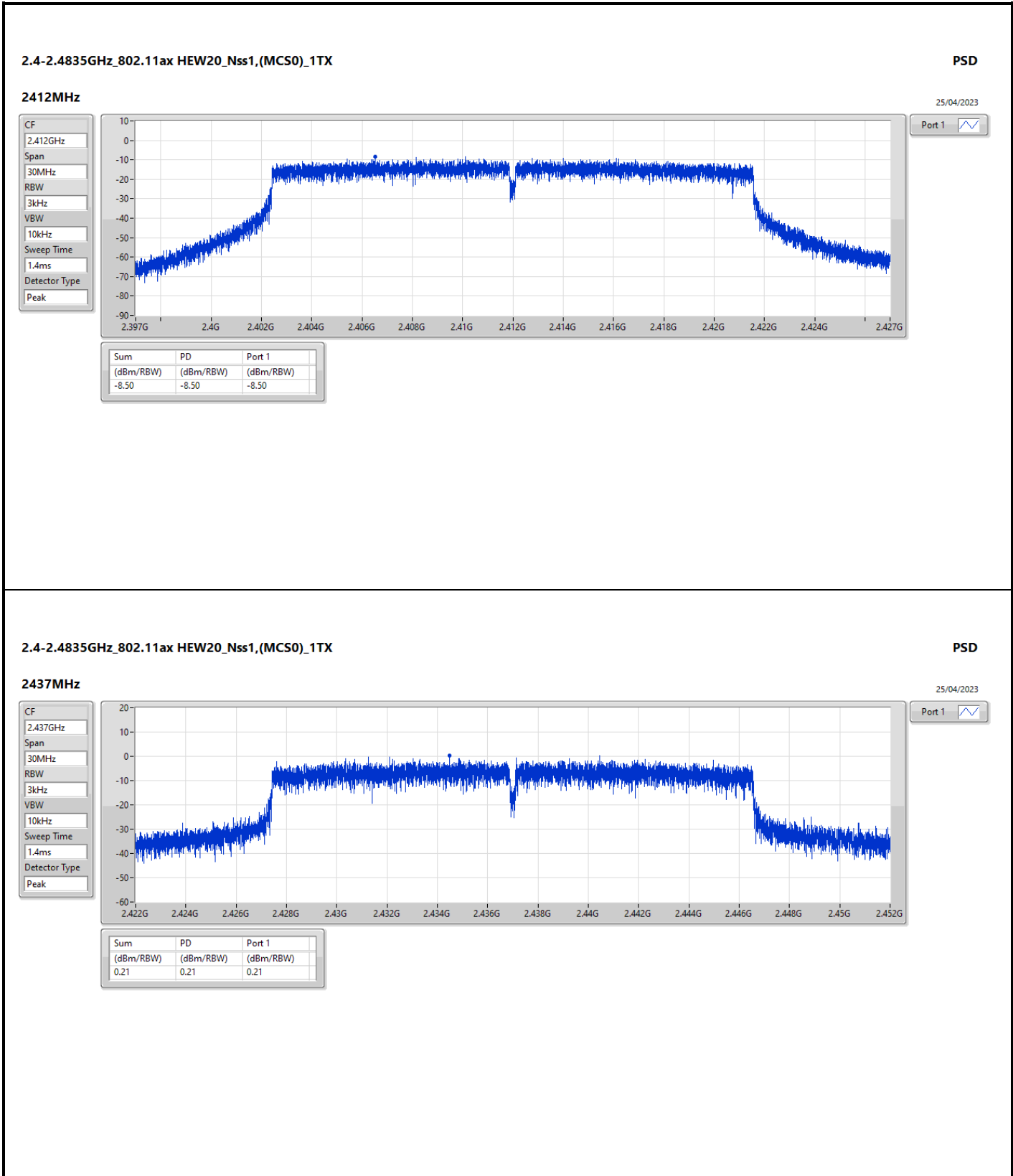
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.90	0.79	0.79	8.00
2437MHz	Pass	4.90	3.83	3.83	8.00
2462MHz	Pass	4.90	2.55	2.55	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	4.90	-6.50	-6.50	8.00
2437MHz	Pass	4.90	-0.68	-0.68	8.00
2462MHz	Pass	4.90	-2.95	-2.95	8.00
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	4.90	-8.50	-8.50	8.00
2437MHz	Pass	4.90	0.21	0.21	8.00
2462MHz	Pass	4.90	-3.89	-3.89	8.00

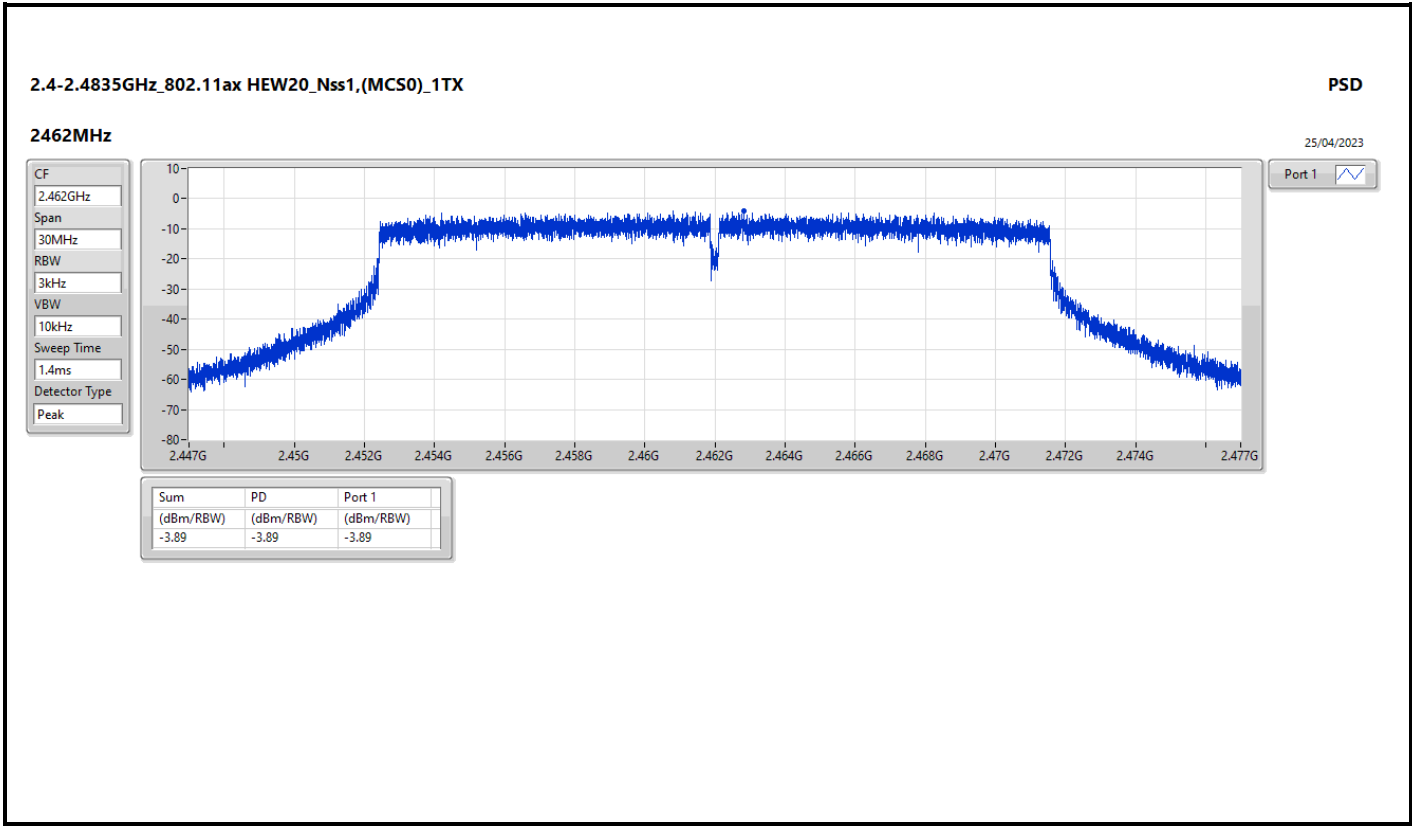
DG = Directional Gain; RBW = 3kHz;  
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;













Summary

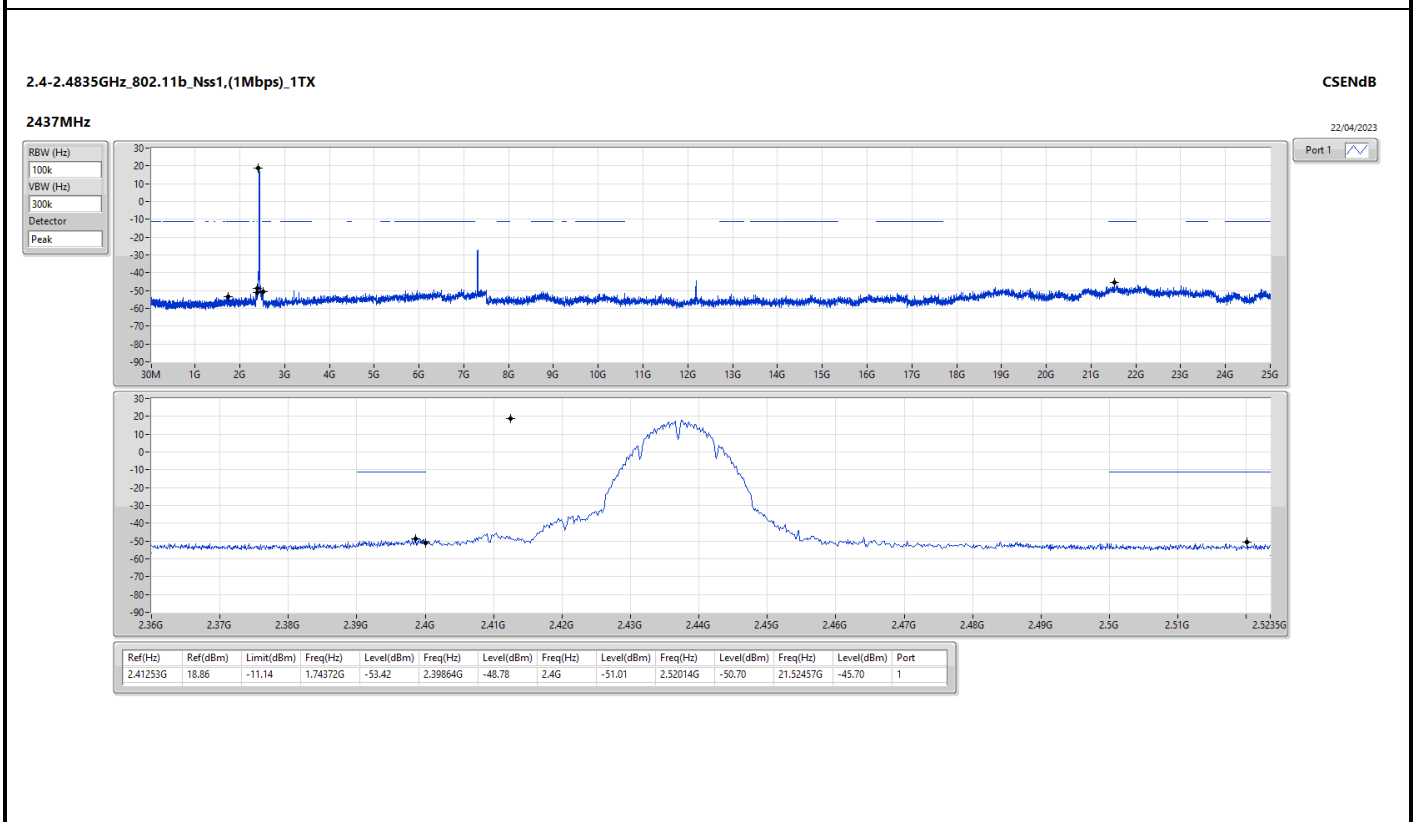
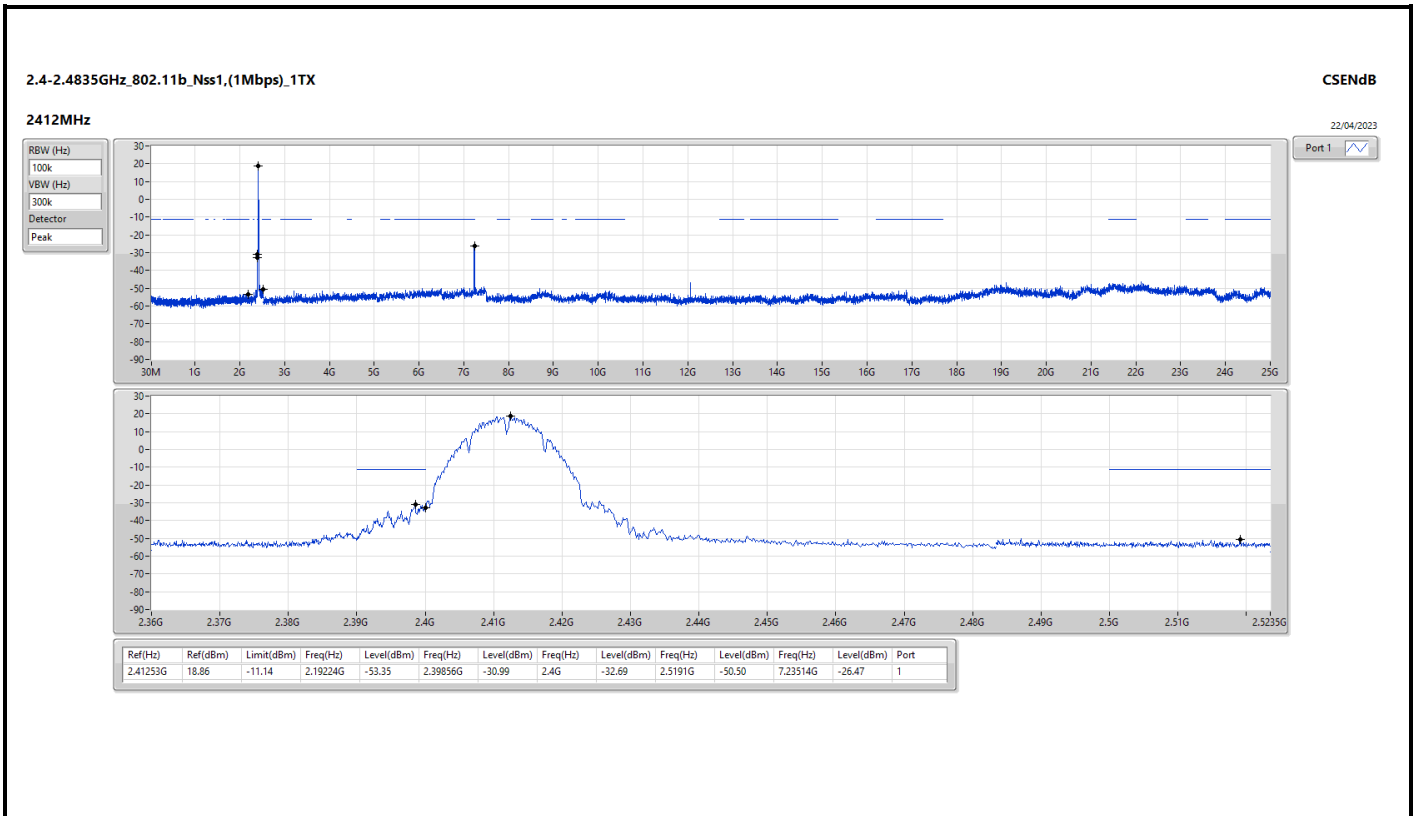
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41253G	18.86	-11.14	2.19224G	-53.35	2.39856G	-30.99	2.4G	-32.69	2.5191G	-50.50	7.23514G	-26.47	1
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41136G	18.29	-11.71	2.12933G	-53.70	2.39904G	-32.37	2.4G	-31.60	2.52262G	-51.03	7.23514G	-25.47	2
802.11b_Nss1,(1Mbps)_2TX	Pass	2.41253G	16.85	-13.15	2.05943G	-52.99	2.39936G	-34.84	2.4G	-35.33	2.5075G	-51.31	7.23514G	-28.22	2
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43824G	17.71	-12.29	1.86371G	-53.46	2.39976G	-20.98	2.4G	-20.04	2.50118G	-50.97	7.24357G	-32.99	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43824G	17.89	-12.11	2.12933G	-53.09	2.39976G	-23.26	2.4G	-20.73	2.50942G	-51.58	7.23514G	-33.10	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.45711G	14.34	-15.66	1.64702G	-53.13	2.4G	-22.55	2.4G	-20.96	2.50766G	-51.26	7.23795G	-30.72	1
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	2.43958G	17.07	-12.93	1.81245G	-53.73	2.39952G	-19.33	2.4G	-18.22	2.51454G	-51.44	7.23514G	-31.58	1
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	2.43824G	16.69	-13.31	2.16894G	-52.93	2.39992G	-22.07	2.4G	-19.43	2.51086G	-51.43	7.21547G	-32.20	2
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.44075G	15.90	-14.10	1.84391G	-53.68	2.4G	-21.11	2.4G	-19.84	2.51102G	-51.05	7.23795G	-37.09	1

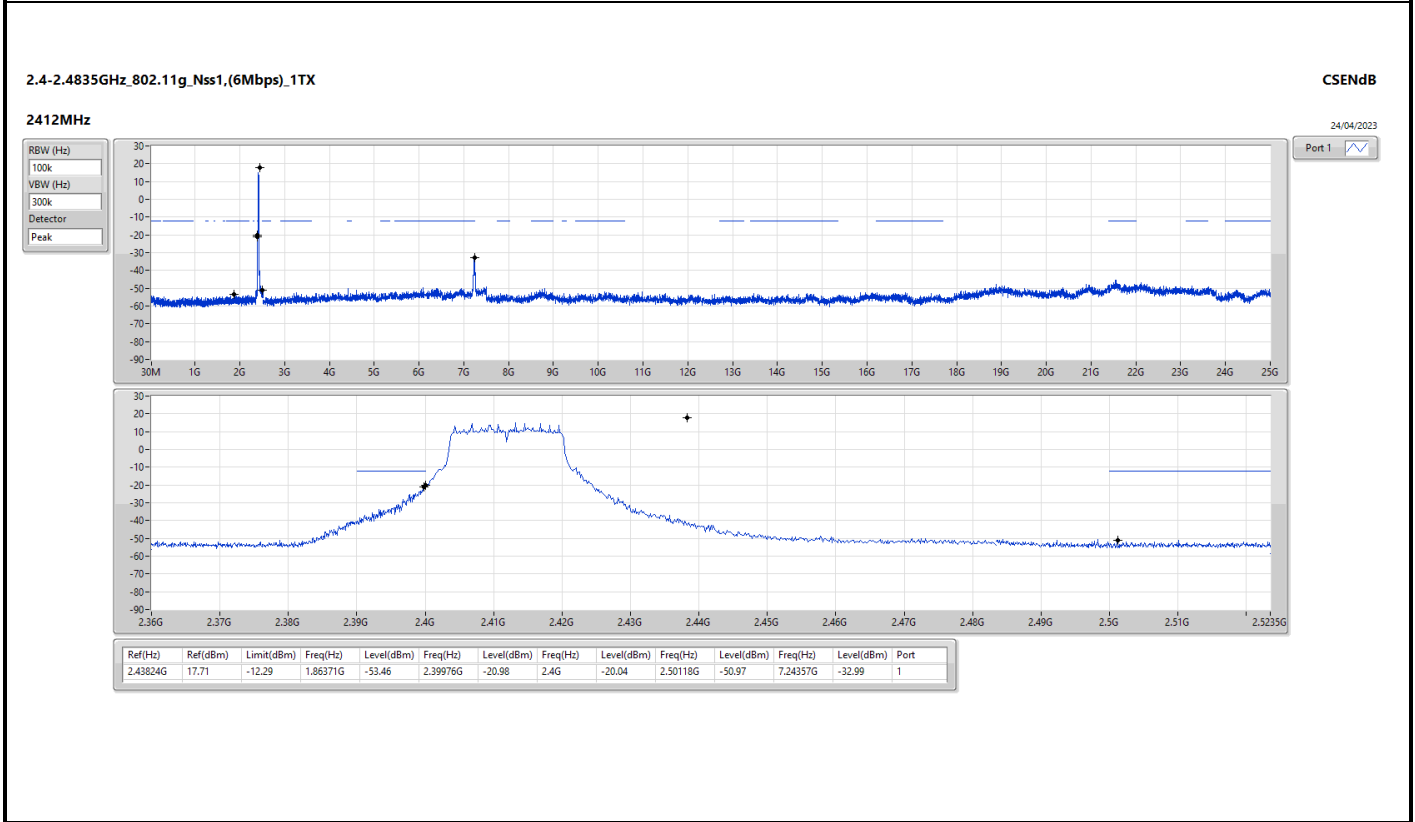
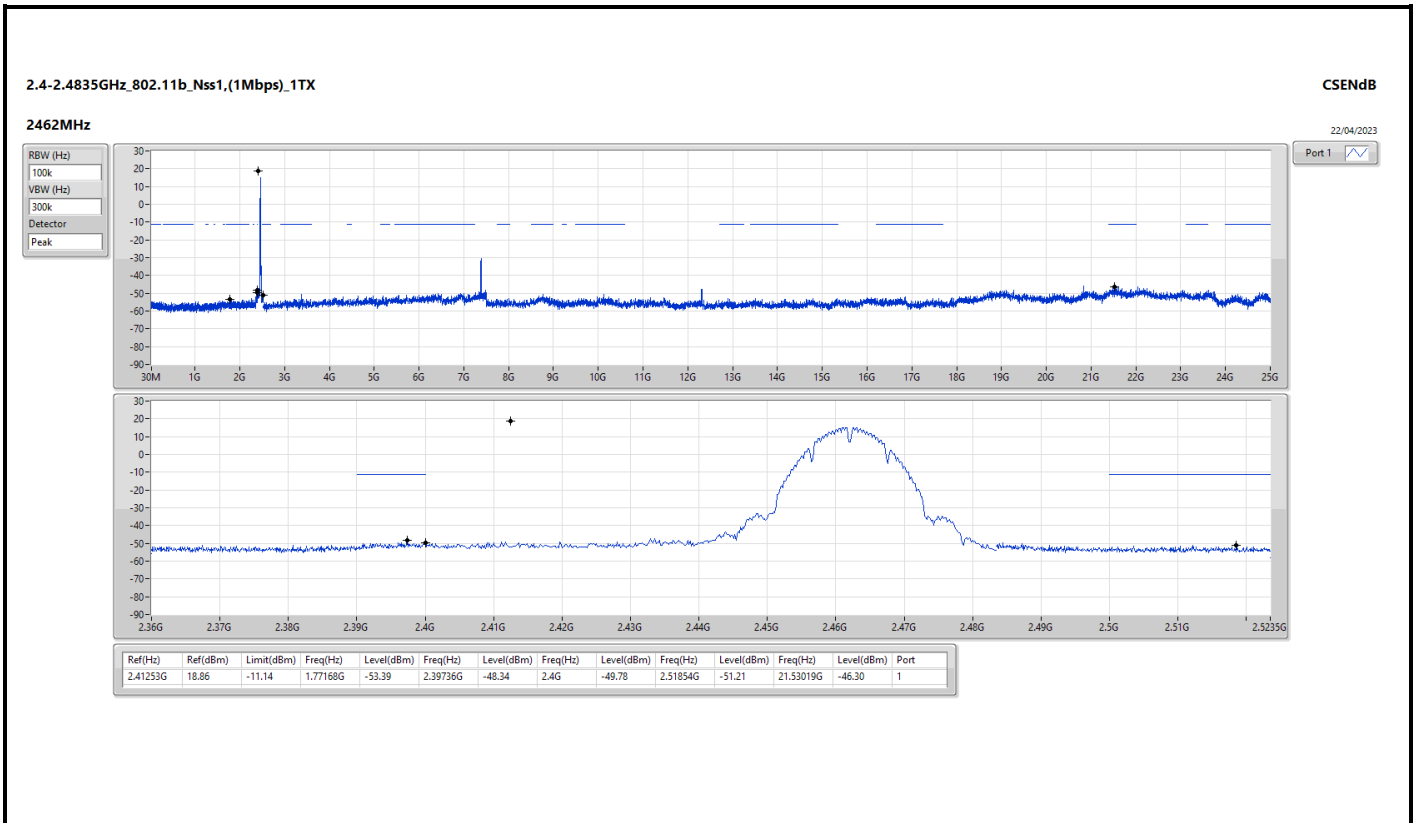


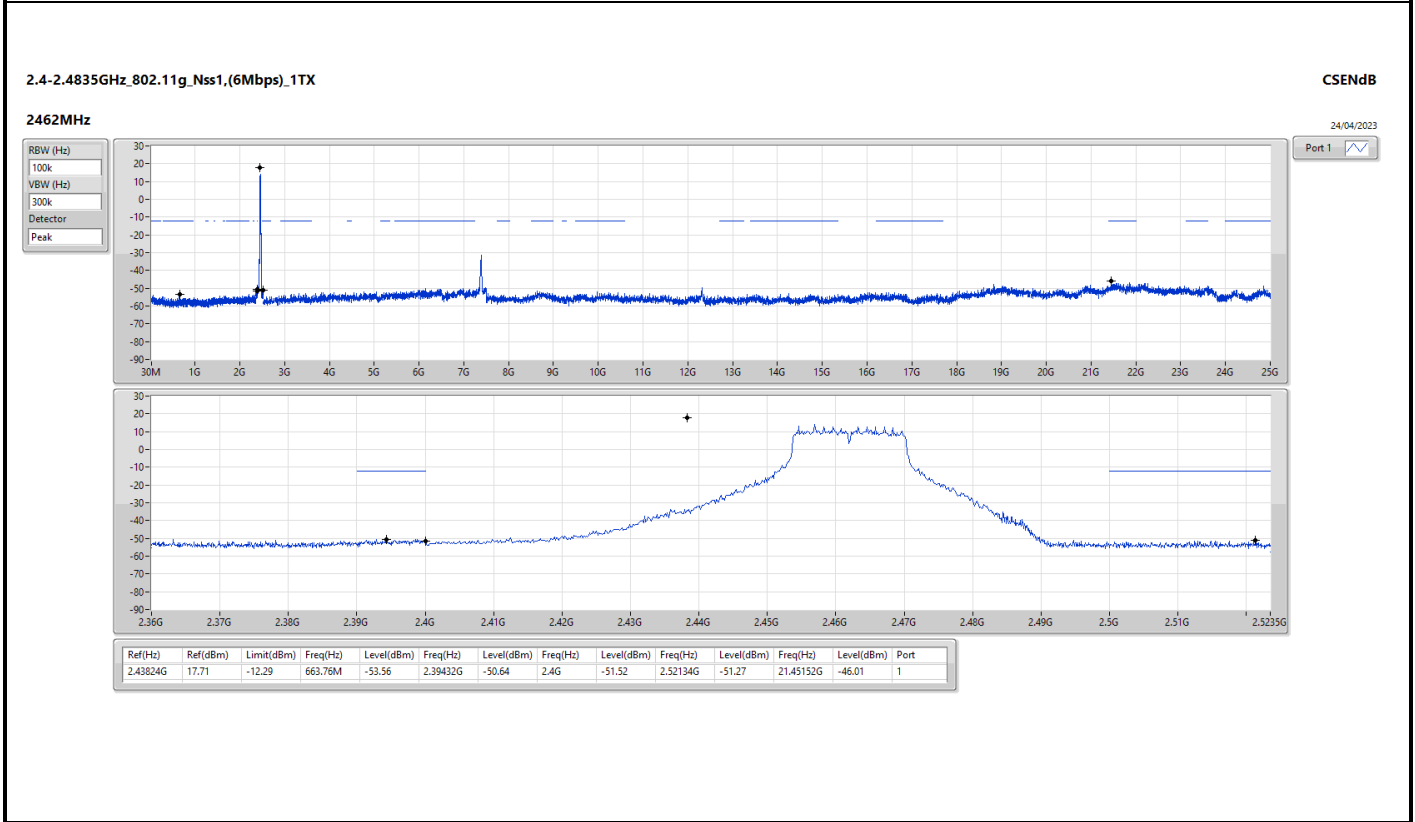
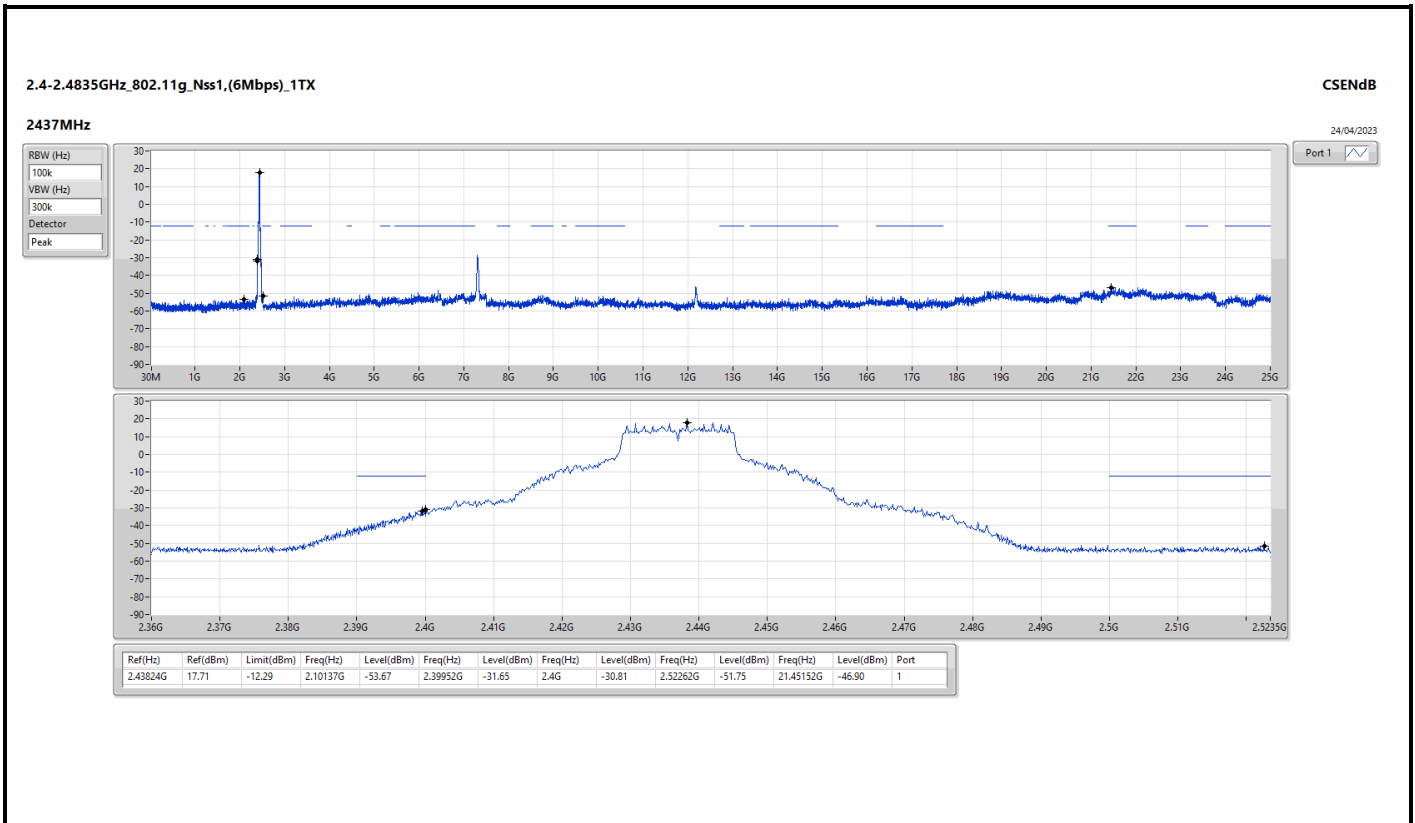
Result

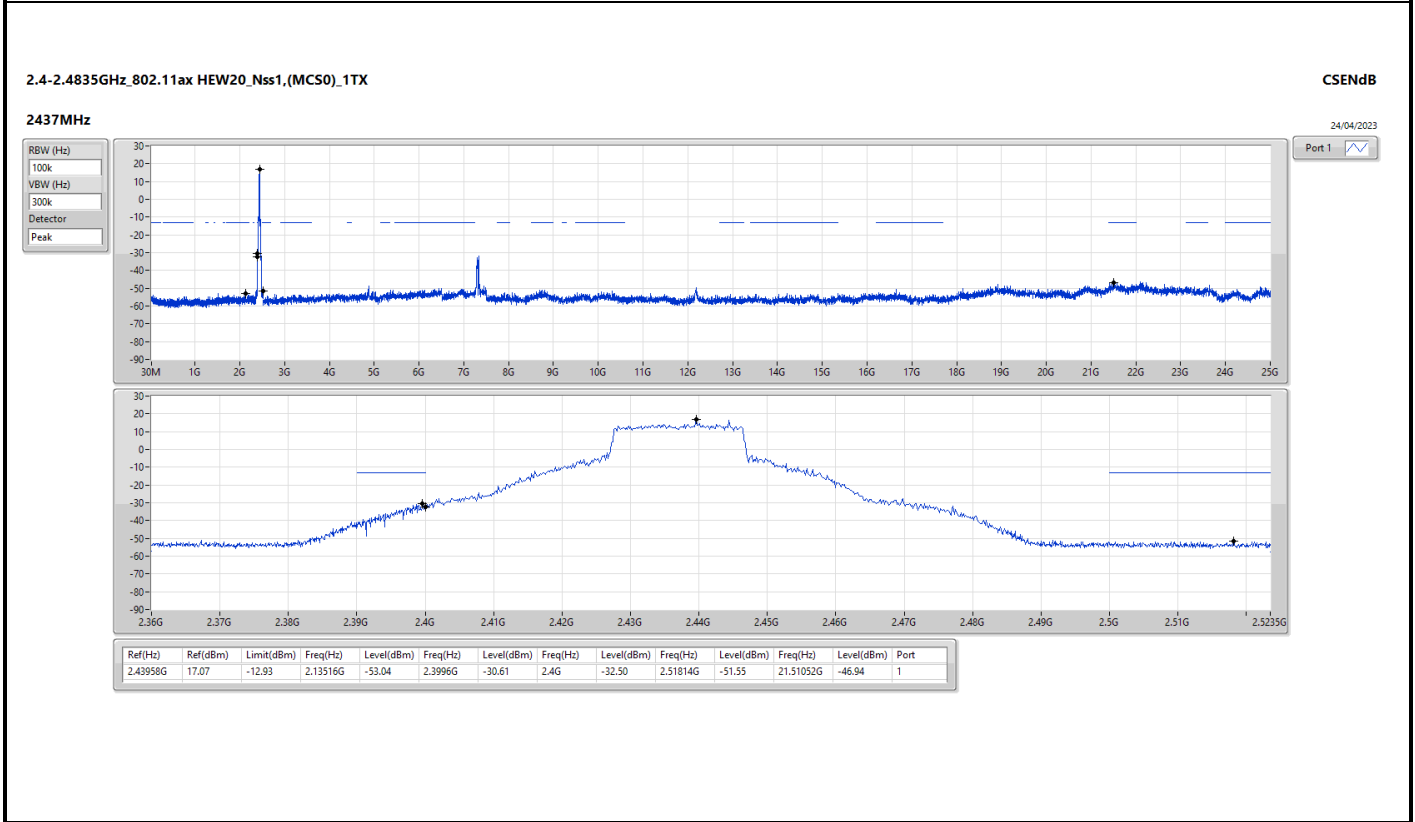
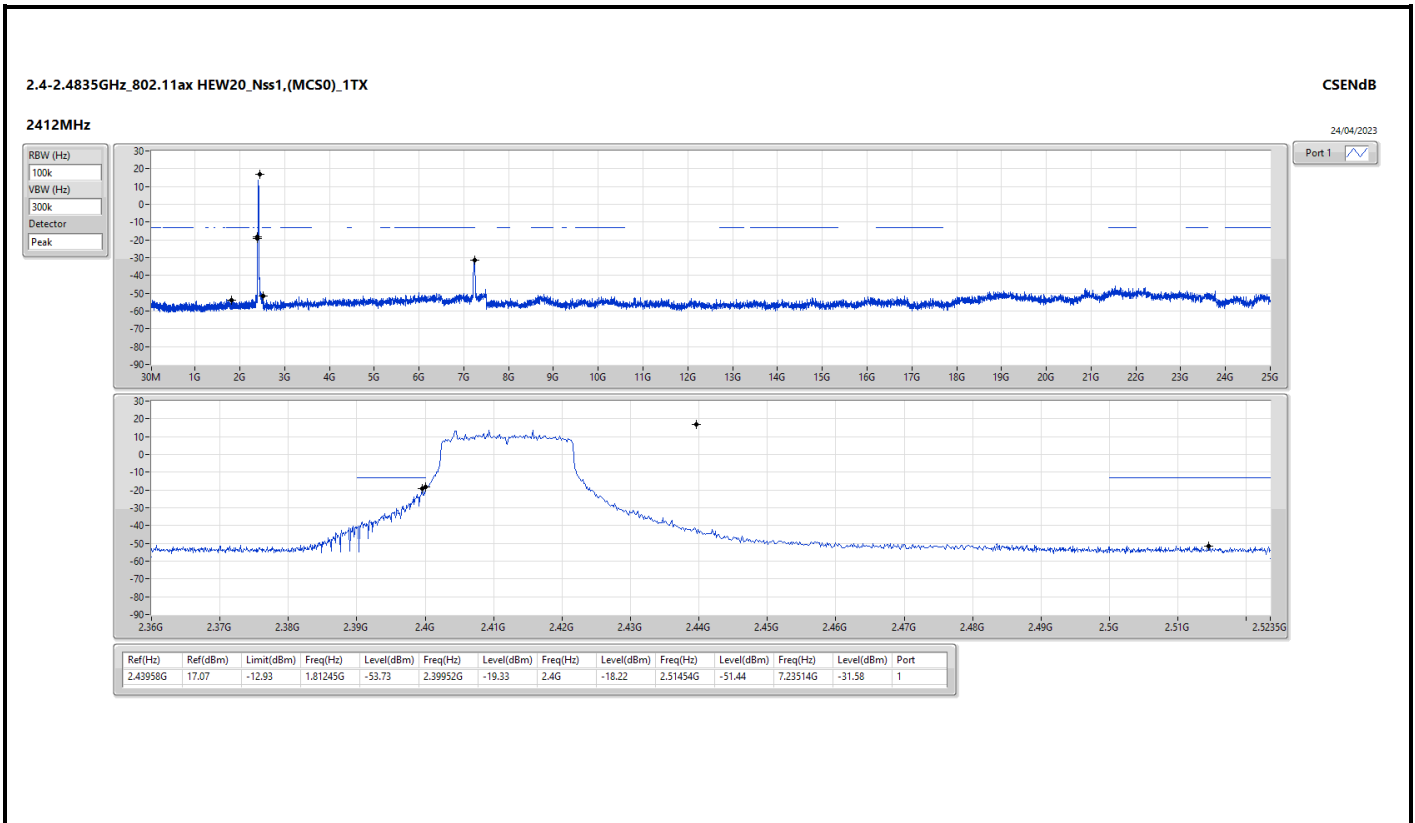
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41253G	18.86	-11.14	2.19224G	-53.35	2.39856G	-30.99	2.4G	-32.69	2.5191G	-50.50	7.23514G	-26.47	1
2437MHz	Pass	2.41253G	18.86	-11.14	1.74372G	-53.42	2.39864G	-48.78	2.4G	-51.01	2.52014G	-50.70	21.52457G	-45.70	1
2462MHz	Pass	2.41253G	18.86	-11.14	1.77168G	-53.39	2.39736G	-48.34	2.4G	-49.78	2.51854G	-51.21	21.53019G	-46.30	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	17.71	-12.29	1.86371G	-53.46	2.39976G	-20.98	2.4G	-20.04	2.50118G	-50.97	7.24357G	-32.99	1
2437MHz	Pass	2.43824G	17.71	-12.29	2.10137G	-53.67	2.39952G	-31.65	2.4G	-30.81	2.52262G	-51.75	21.45152G	-46.90	1
2462MHz	Pass	2.43824G	17.71	-12.29	663.76M	-53.56	2.39432G	-50.64	2.4G	-51.52	2.52134G	-51.27	21.45152G	-46.01	1
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43958G	17.07	-12.93	1.81245G	-53.73	2.39952G	-19.33	2.4G	-18.22	2.51454G	-51.44	7.23514G	-31.58	1
2437MHz	Pass	2.43958G	17.07	-12.93	2.13516G	-53.04	2.3996G	-30.61	2.4G	-32.50	2.51814G	-51.55	21.51052G	-46.94	1
2462MHz	Pass	2.43958G	17.07	-12.93	1.76702G	-53.57	2.39688G	-49.59	2.4G	-52.03	2.51894G	-51.16	21.63976G	-47.12	1
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41136G	18.29	-11.71	2.19574G	-53.76	2.39936G	-32.20	2.4G	-34.47	2.50366G	-51.21	21.47119G	-47.16	2
2437MHz	Pass	2.41136G	18.29	-11.71	2.12933G	-53.70	2.39904G	-32.37	2.4G	-31.60	2.52262G	-51.03	7.23514G	-25.47	2
2462MHz	Pass	2.41136G	18.29	-11.71	1.82643G	-53.13	2.4G	-50.05	2.4G	-50.75	2.50958G	-50.50	21.56391G	-47.20	2
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	17.89	-12.11	2.12933G	-53.09	2.39976G	-23.26	2.4G	-20.73	2.50942G	-51.58	7.23514G	-33.10	2
2437MHz	Pass	2.43824G	17.89	-12.11	1.98487G	-53.83	2.39952G	-40.61	2.4G	-40.51	2.52342G	-51.51	21.66505G	-46.74	2
2462MHz	Pass	2.43824G	17.89	-12.11	2.11186G	-53.55	2.39536G	-49.46	2.4G	-50.49	2.5135G	-50.81	21.52738G	-47.03	2
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	16.69	-13.31	2.16894G	-52.93	2.39992G	-22.07	2.4G	-19.43	2.51086G	-51.43	7.21547G	-32.20	2
2437MHz	Pass	2.43824G	16.69	-13.31	1.78799G	-53.79	2.39776G	-39.94	2.4G	-39.07	2.52222G	-51.53	21.50771G	-46.63	2
2462MHz	Pass	2.43824G	16.69	-13.31	49.81M	-53.31	2.39936G	-49.18	2.4G	-50.99	2.51294G	-51.09	21.49929G	-47.66	2
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41253G	16.85	-13.15	1.90216G	-53.60	2.4G	-35.24	2.4G	-35.45	2.51862G	-51.12	7.23514G	-28.14	1
2412MHz	Pass	2.41253G	16.85	-13.15	2.05943G	-52.99	2.39936G	-34.84	2.4G	-35.33	2.5075G	-51.31	7.23514G	-28.22	2
2437MHz	Pass	2.41253G	16.85	-13.15	2.18292G	-53.33	2.3952G	-49.02	2.4G	-51.94	2.50126G	-50.67	21.47962G	-47.00	1
2437MHz	Pass	2.41253G	16.85	-13.15	1.84041G	-51.52	2.39952G	-49.41	2.4G	-51.65	2.50734G	-50.17	21.50209G	-46.88	2
2462MHz	Pass	2.41253G	16.85	-13.15	1.62722G	-53.70	2.3932G	-50.21	2.4G	-51.97	2.50238G	-50.98	21.48243G	-45.60	1
2462MHz	Pass	2.41253G	16.85	-13.15	1.99536G	-53.51	2.39816G	-49.54	2.4G	-53.37	2.51838G	-50.65	21.44871G	-46.84	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.45711G	14.34	-15.66	1.64702G	-53.13	2.4G	-22.55	2.4G	-20.96	2.50766G	-51.26	7.23795G	-30.72	1
2412MHz	Pass	2.45711G	14.34	-15.66	1.85206G	-53.37	2.39976G	-23.86	2.4G	-22.18	2.5203G	-50.99	7.24357G	-33.50	2
2437MHz	Pass	2.45711G	14.34	-15.66	2.14564G	-52.77	2.4G	-49.46	2.4G	-51.98	2.51142G	-51.26	21.51895G	-47.16	1
2437MHz	Pass	2.45711G	14.34	-15.66	2.18292G	-53.52	2.4G	-48.85	2.4G	-50.65	2.5079G	-51.02	21.59481G	-46.70	2
2462MHz	Pass	2.45711G	14.34	-15.66	2.1305G	-53.30	2.39904G	-49.23	2.4G	-51.00	2.50054G	-51.49	21.54986G	-47.02	1
2462MHz	Pass	2.45711G	14.34	-15.66	1.93944G	-52.80	2.39304G	-48.98	2.4G	-51.20	2.51446G	-51.17	21.95443G	-46.08	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44075G	15.90	-14.10	1.84391G	-53.68	2.4G	-21.11	2.4G	-19.84	2.51102G	-51.05	7.23795G	-37.09	1
2412MHz	Pass	2.44075G	15.90	-14.10	1.85672G	-53.83	2.4G	-22.04	2.4G	-21.12	2.51182G	-50.70	7.23514G	-32.88	2
2437MHz	Pass	2.44075G	15.90	-14.10	2.13982G	-53.32	2.3996G	-40.72	2.4G	-40.65	2.52166G	-51.01	21.54986G	-46.38	1
2437MHz	Pass	2.44075G	15.90	-14.10	1.75071G	-53.44	2.39816G	-45.91	2.4G	-46.55	2.51174G	-51.05	21.41781G	-46.59	2
2462MHz	Pass	2.44075G	15.90	-14.10	34.66M	-52.14	2.39856G	-49.33	2.4G	-52.29	2.52262G	-50.26	21.66786G	-47.41	1
2462MHz	Pass	2.44075G	15.90	-14.10	2.06293G	-53.43	2.39808G	-50.02	2.4G	-50.77	2.51134G	-51.77	21.53862G	-47.55	2

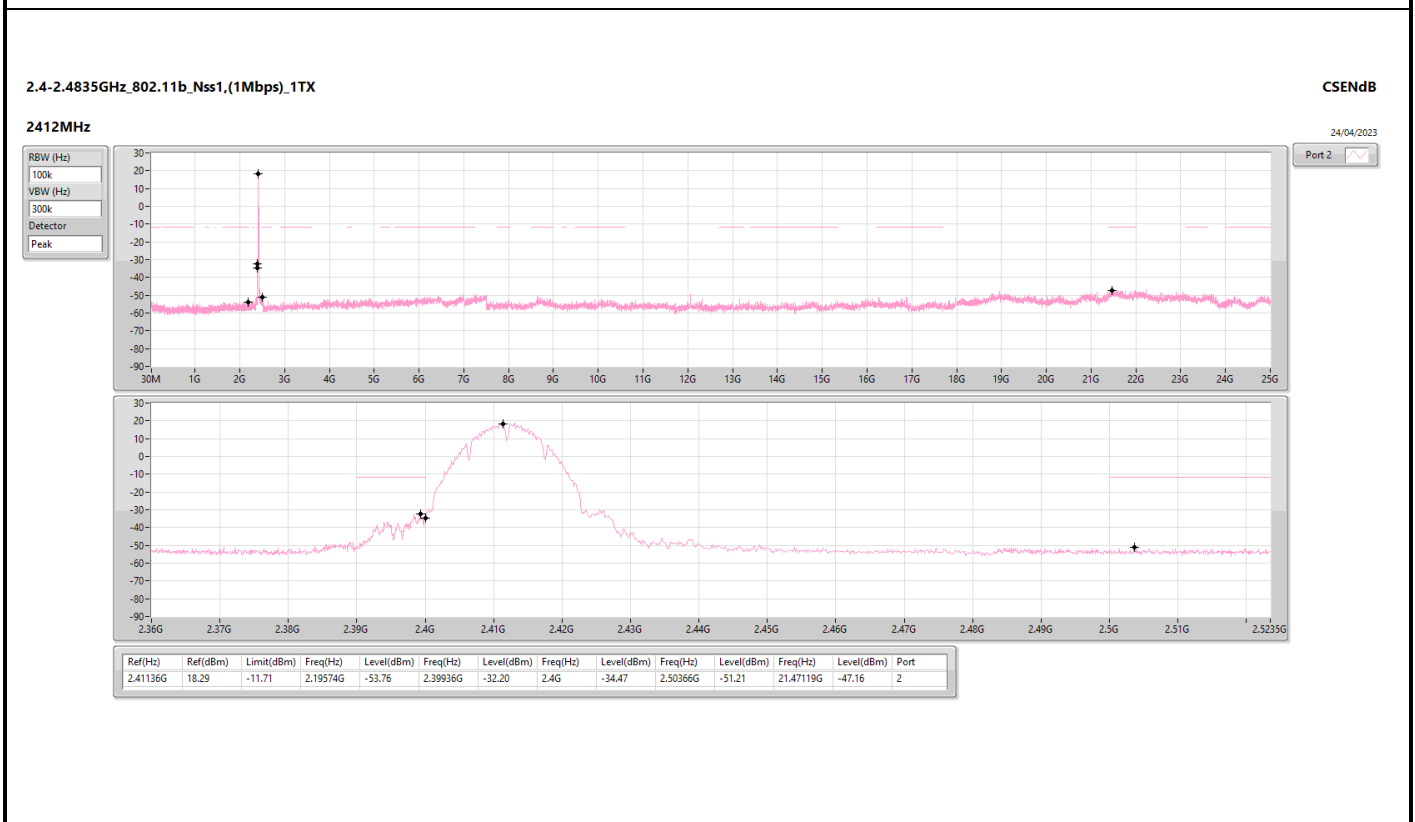
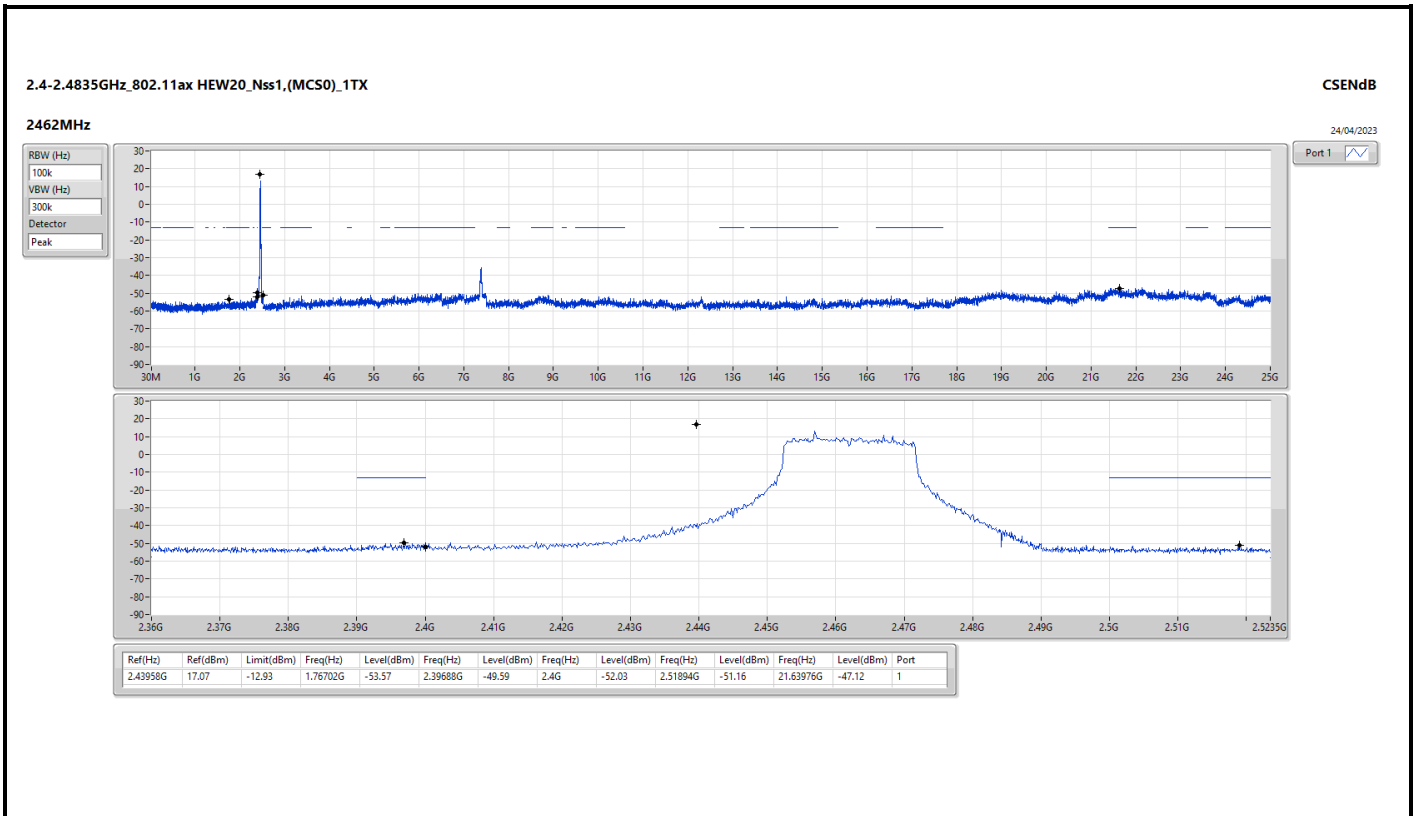


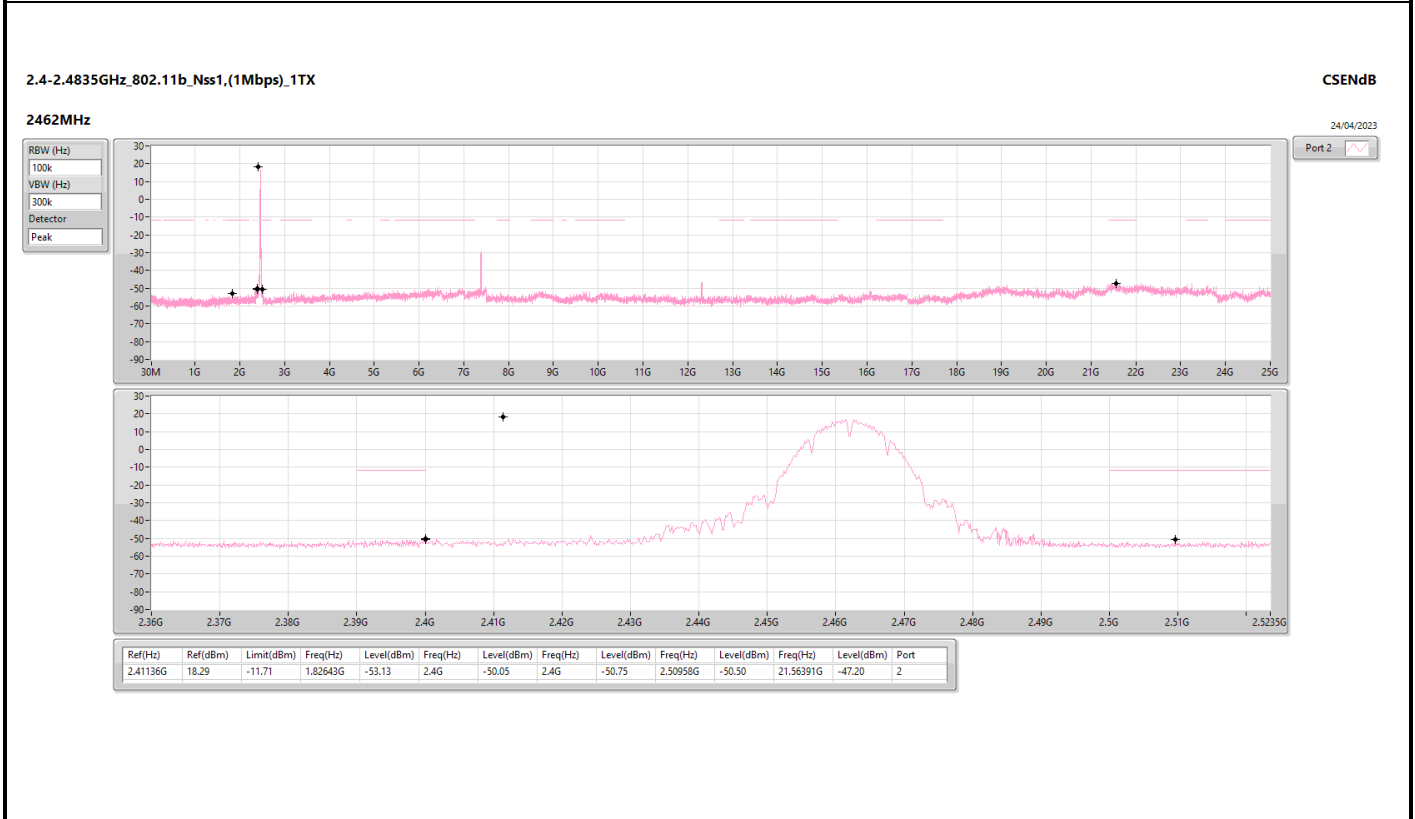
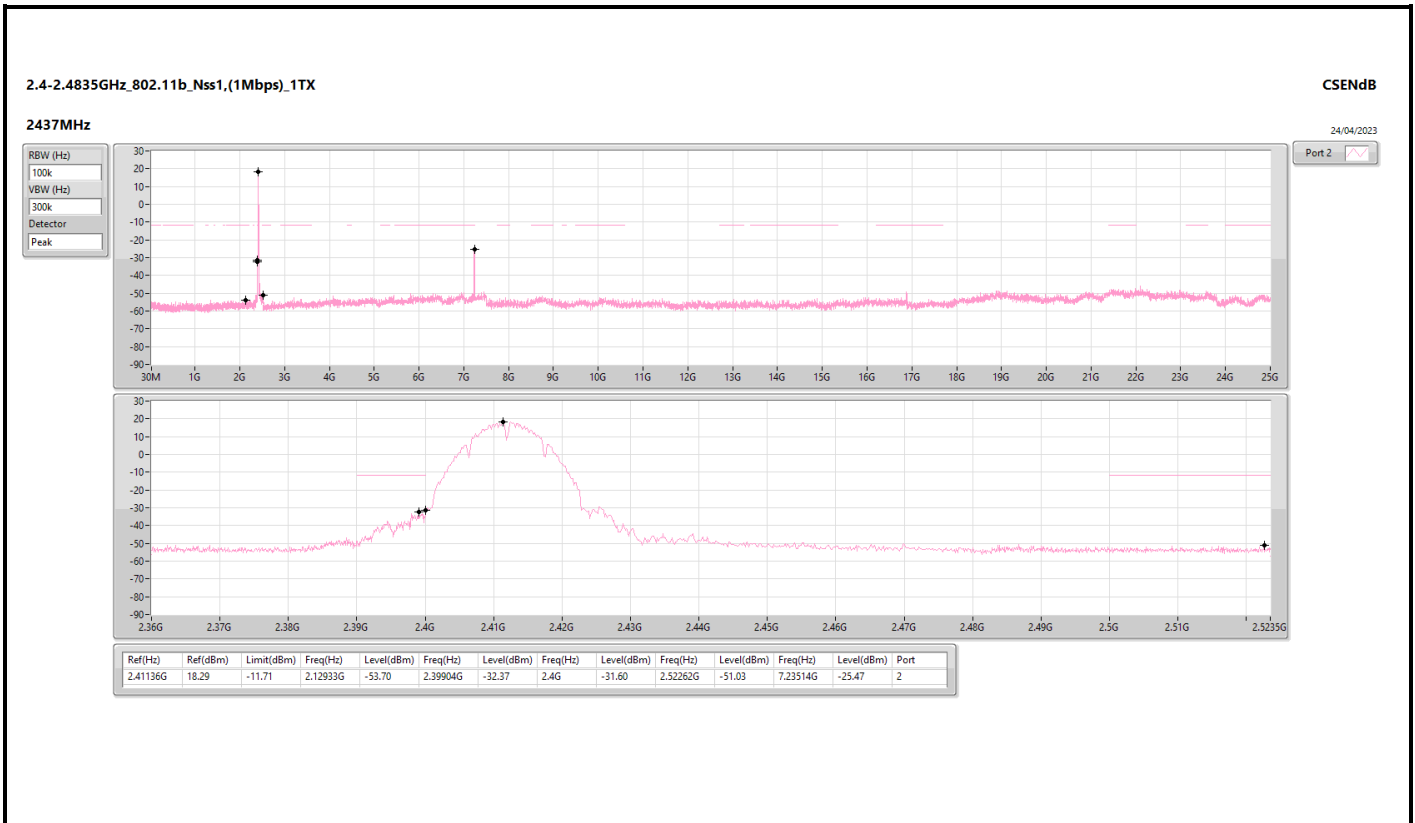


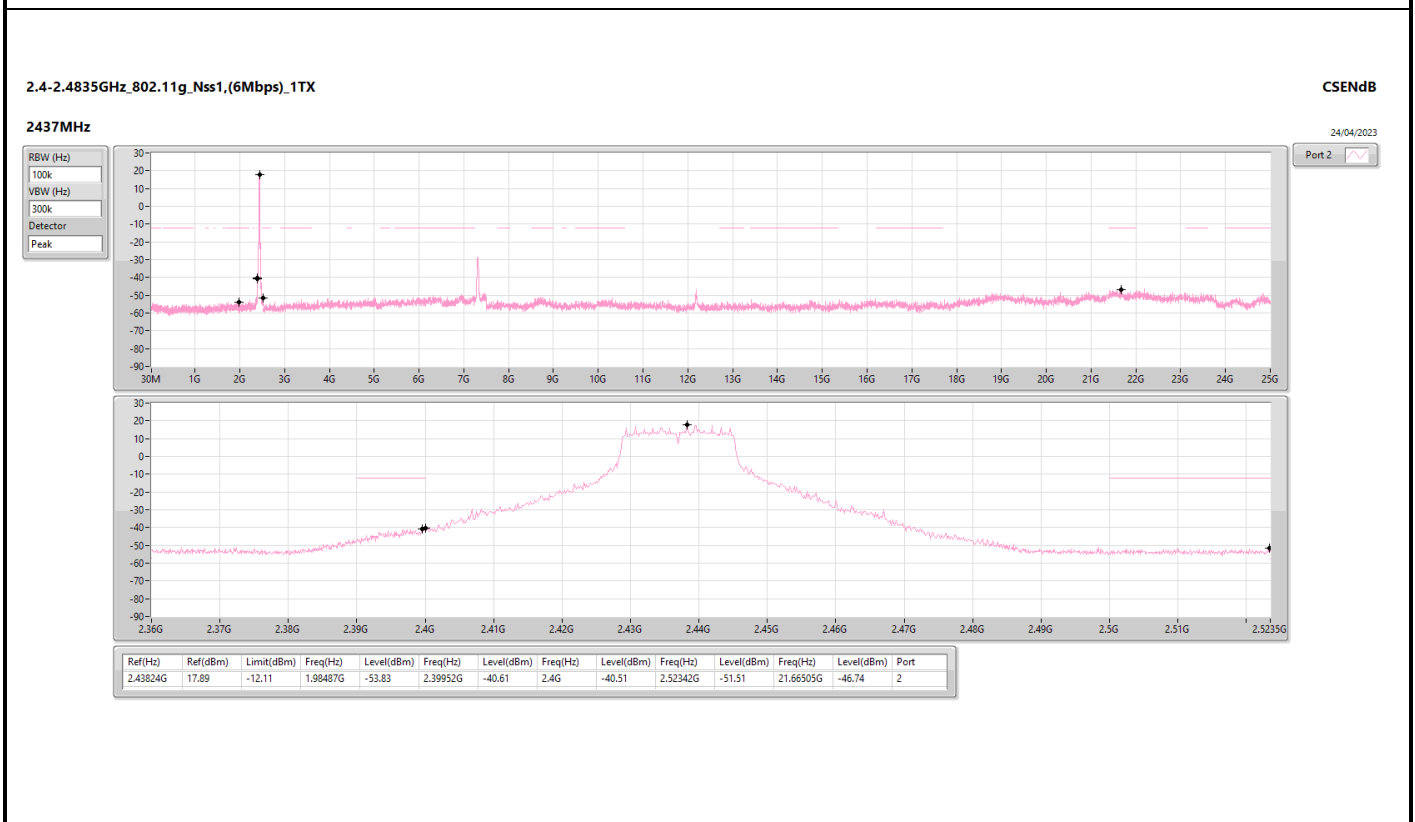
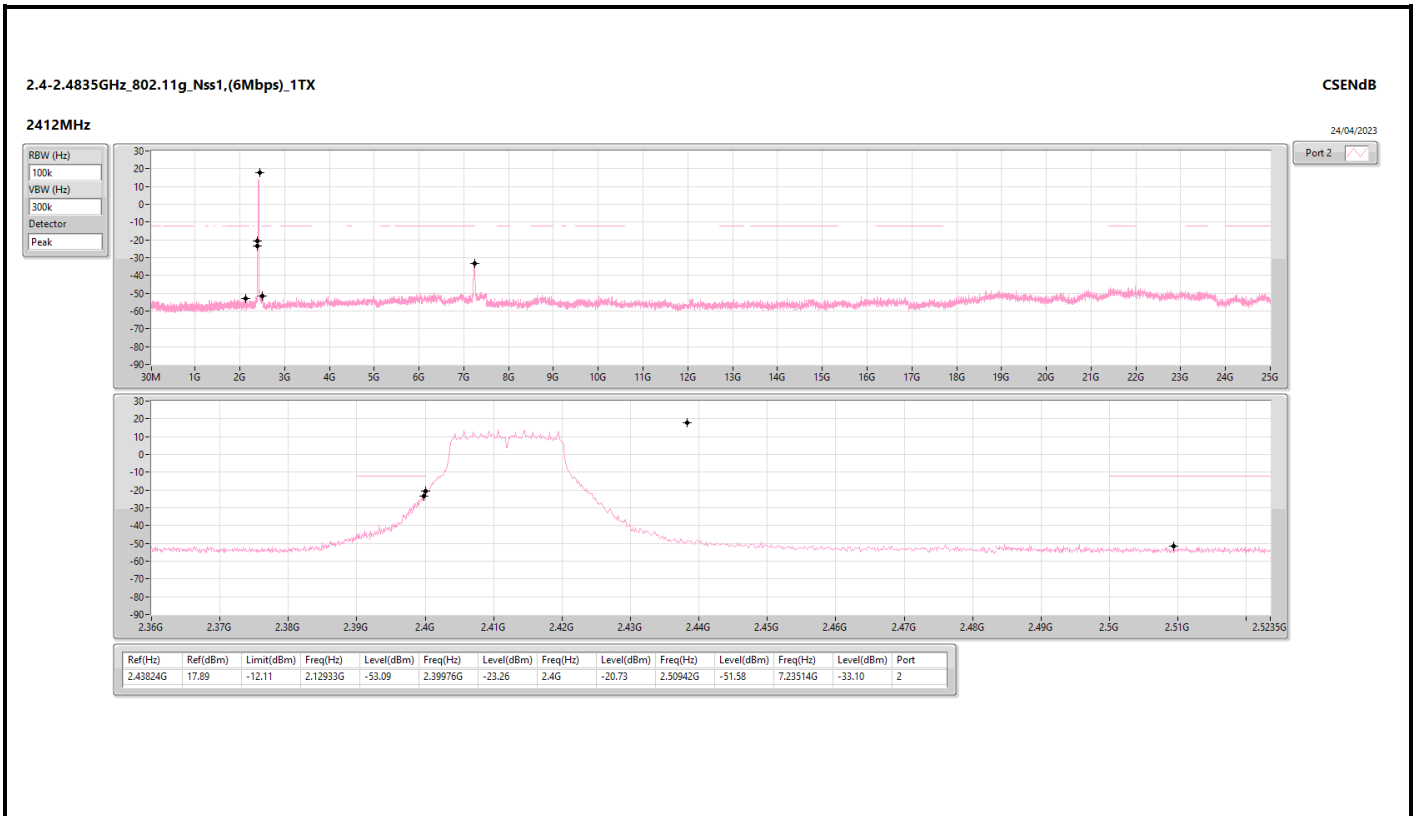


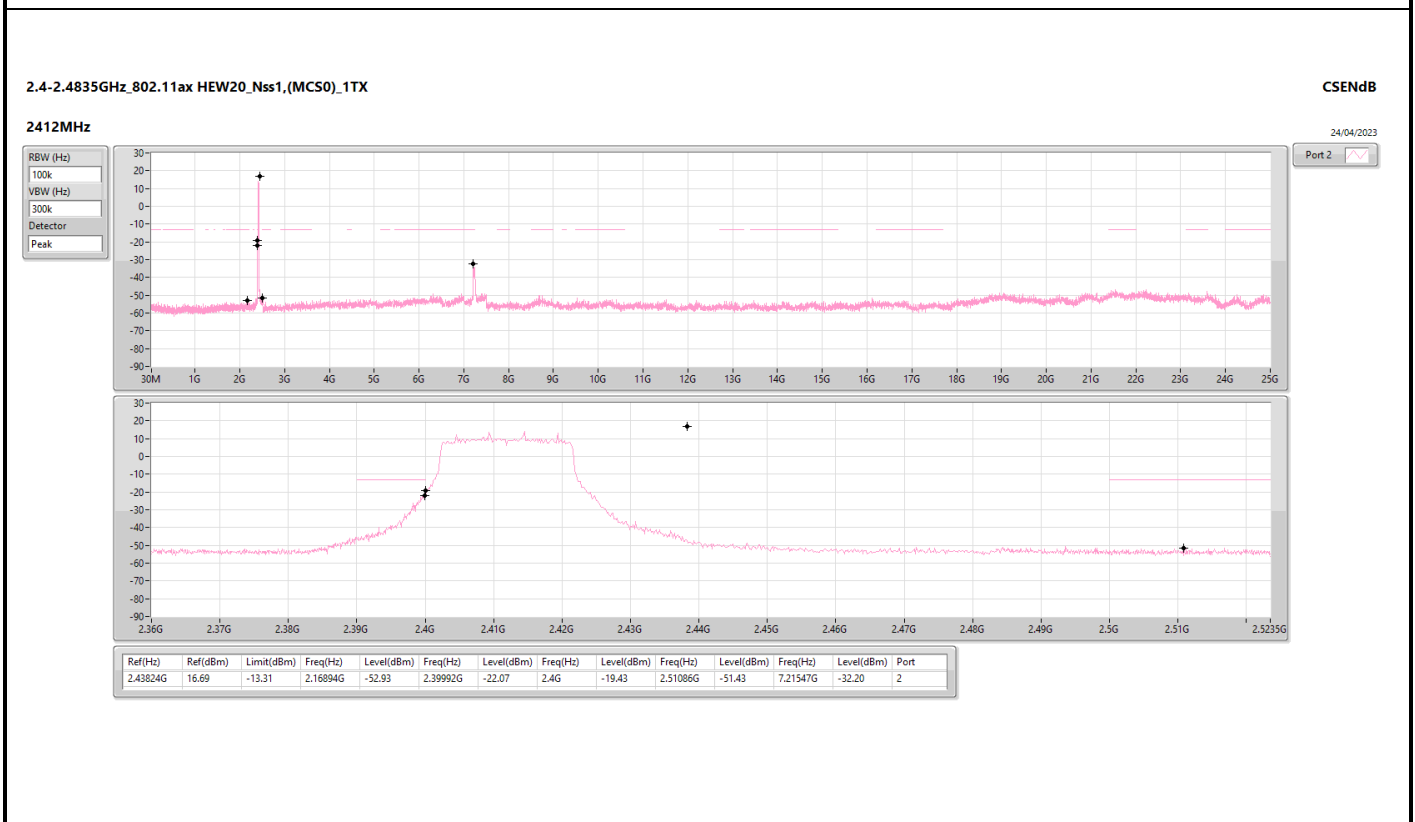
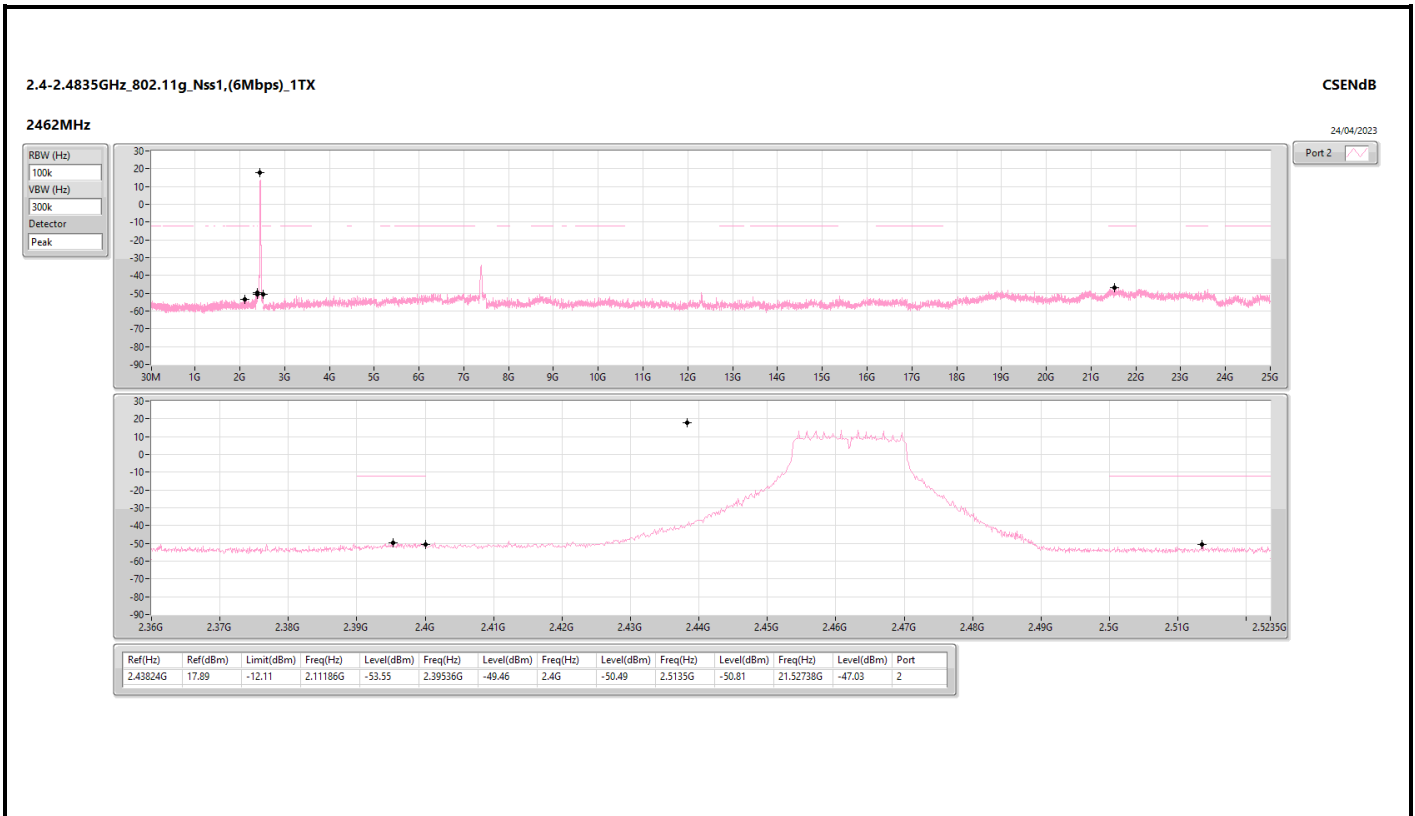




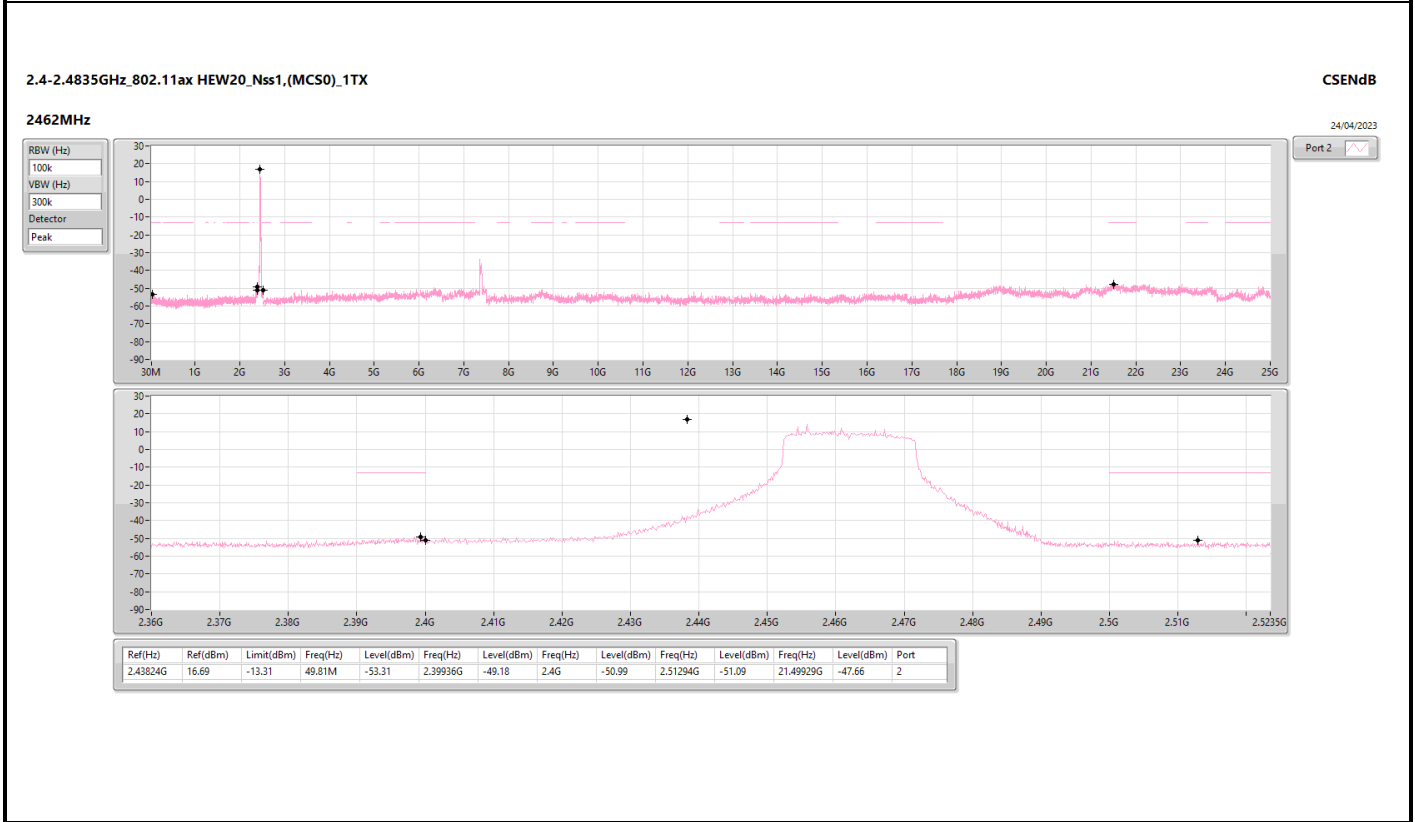
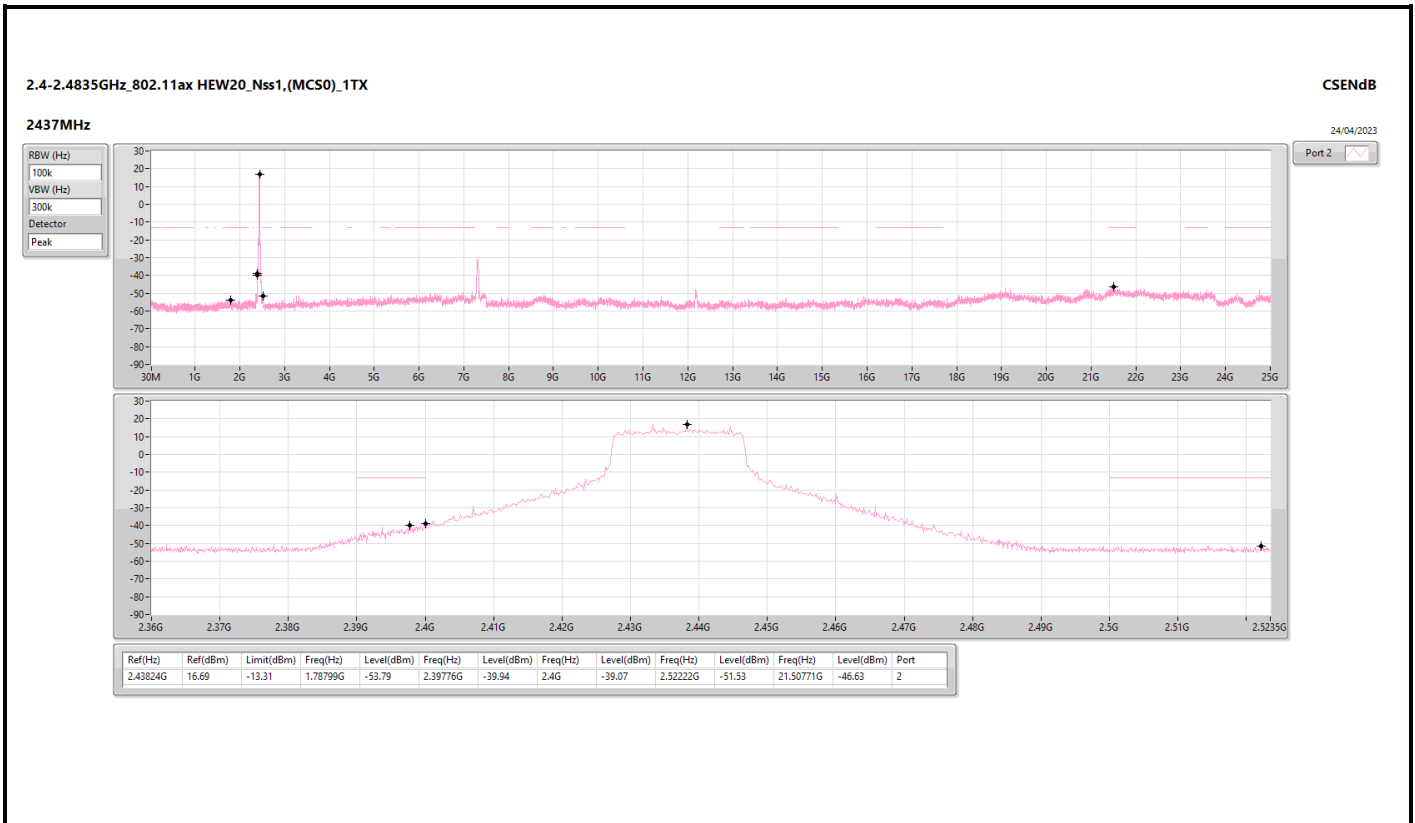


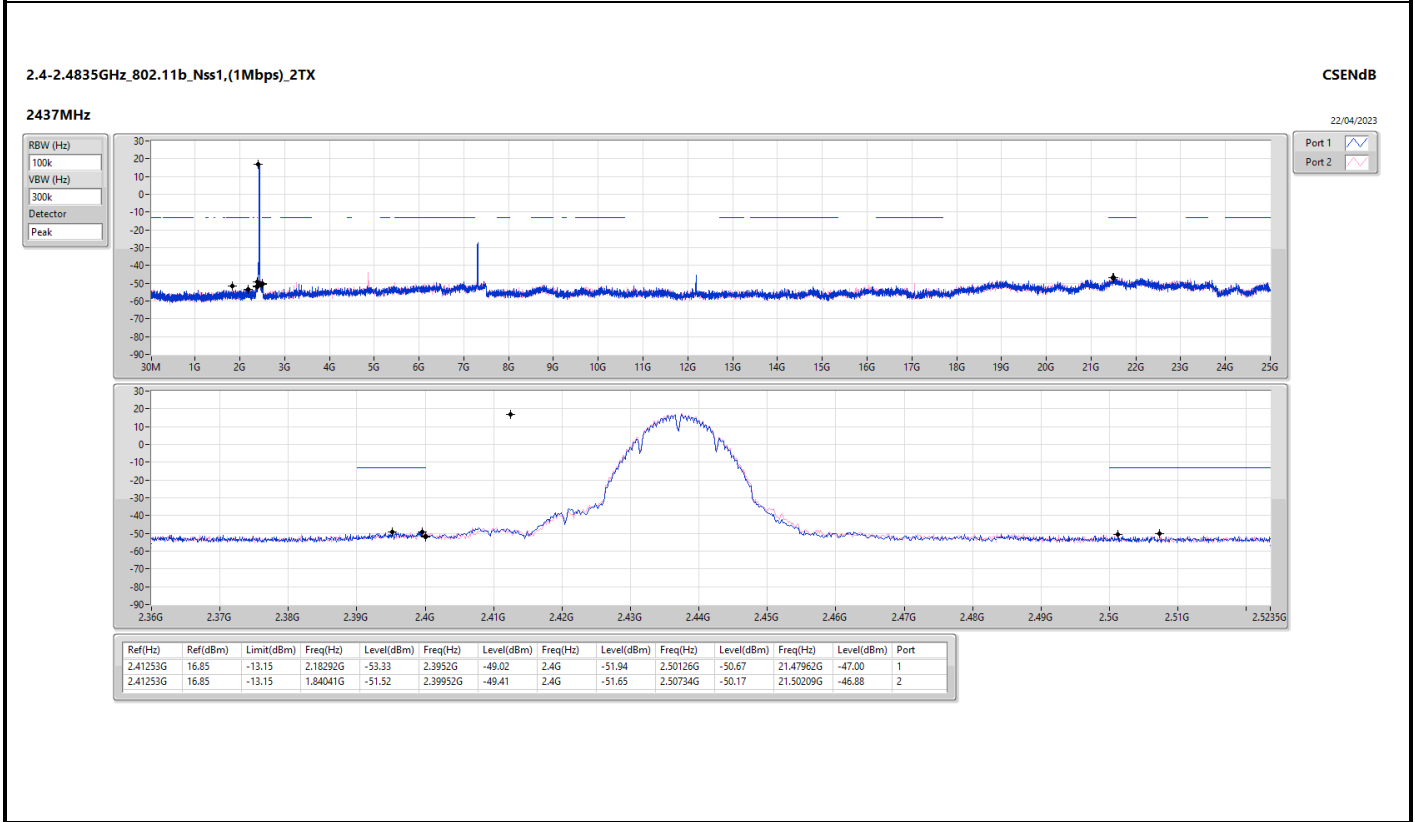
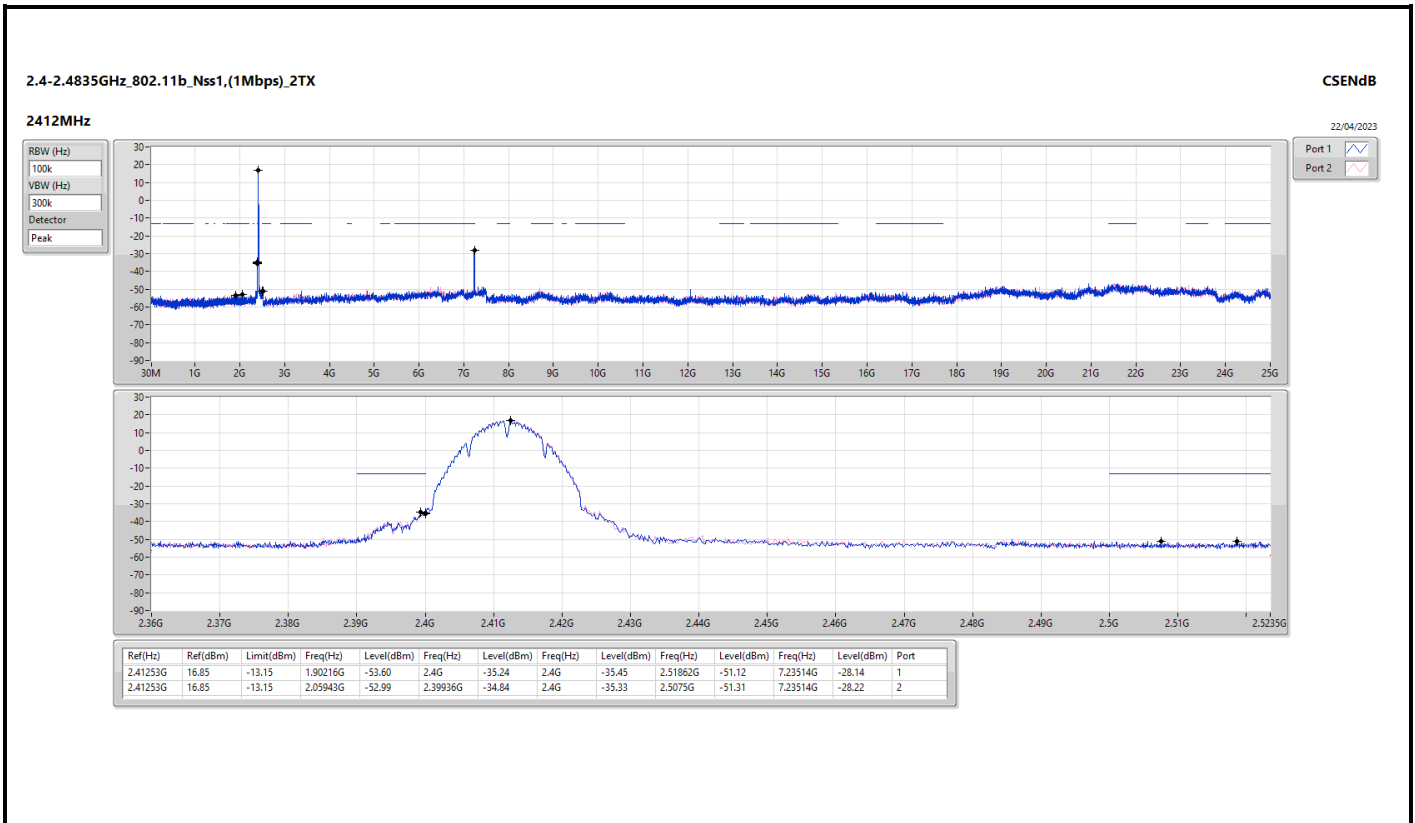


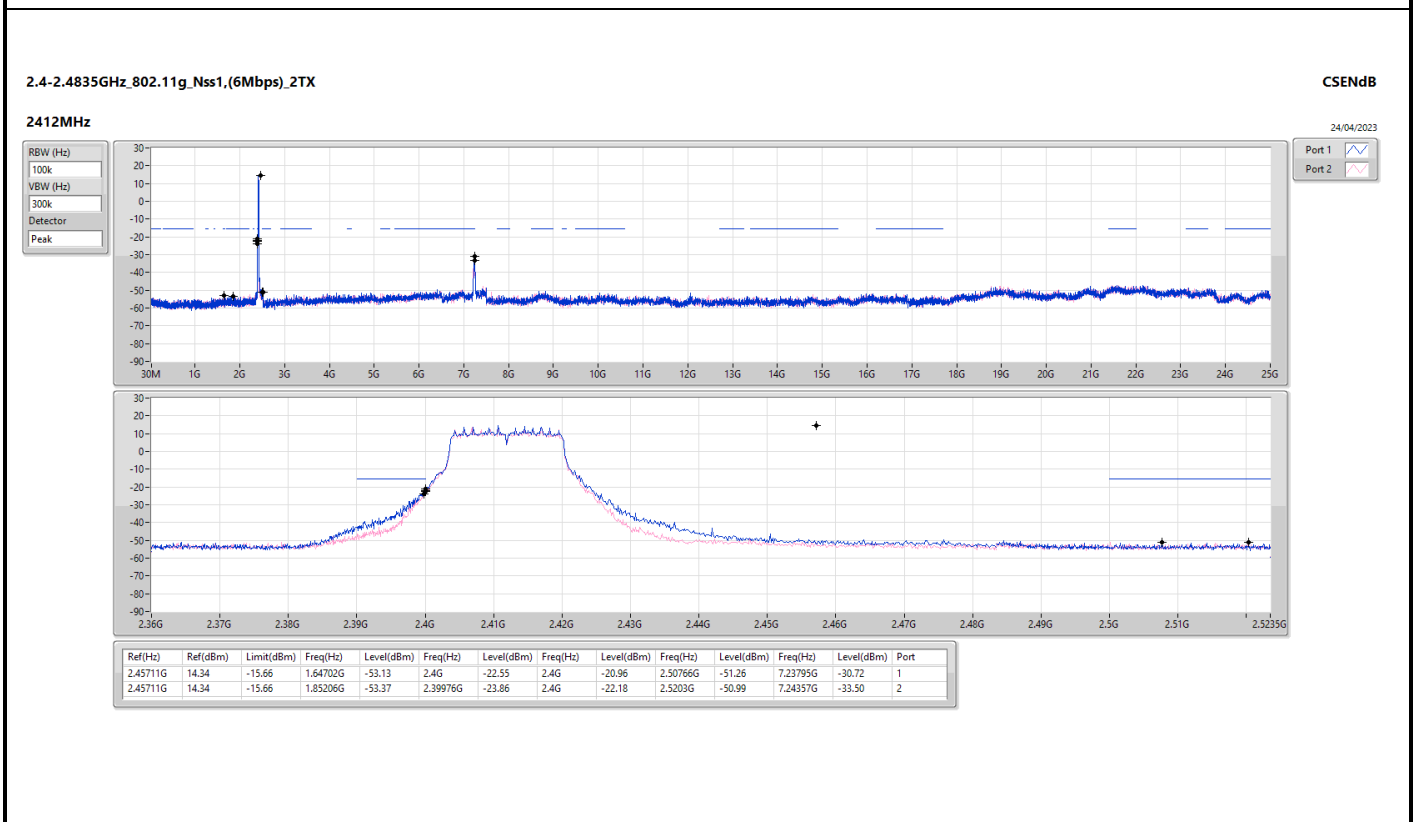
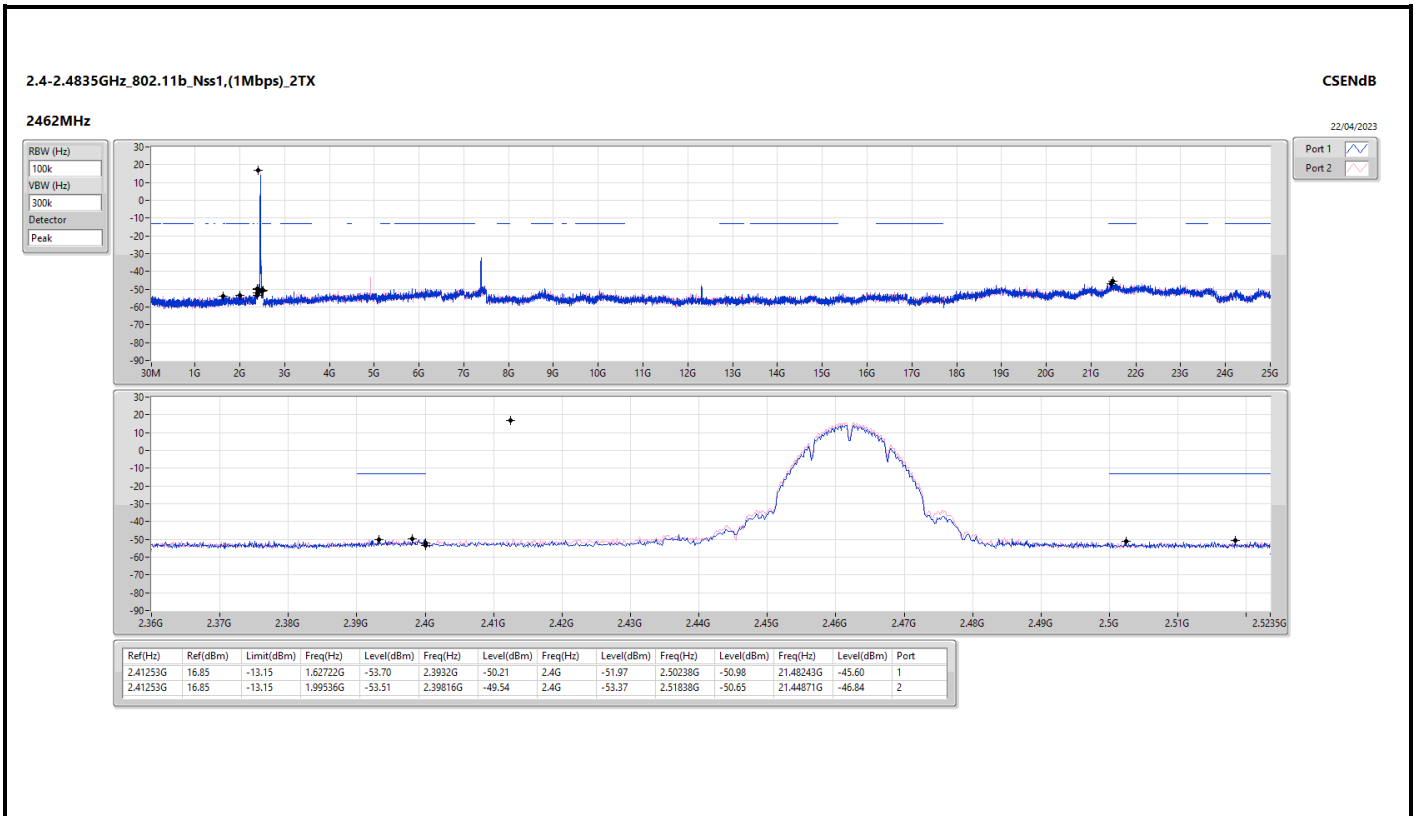


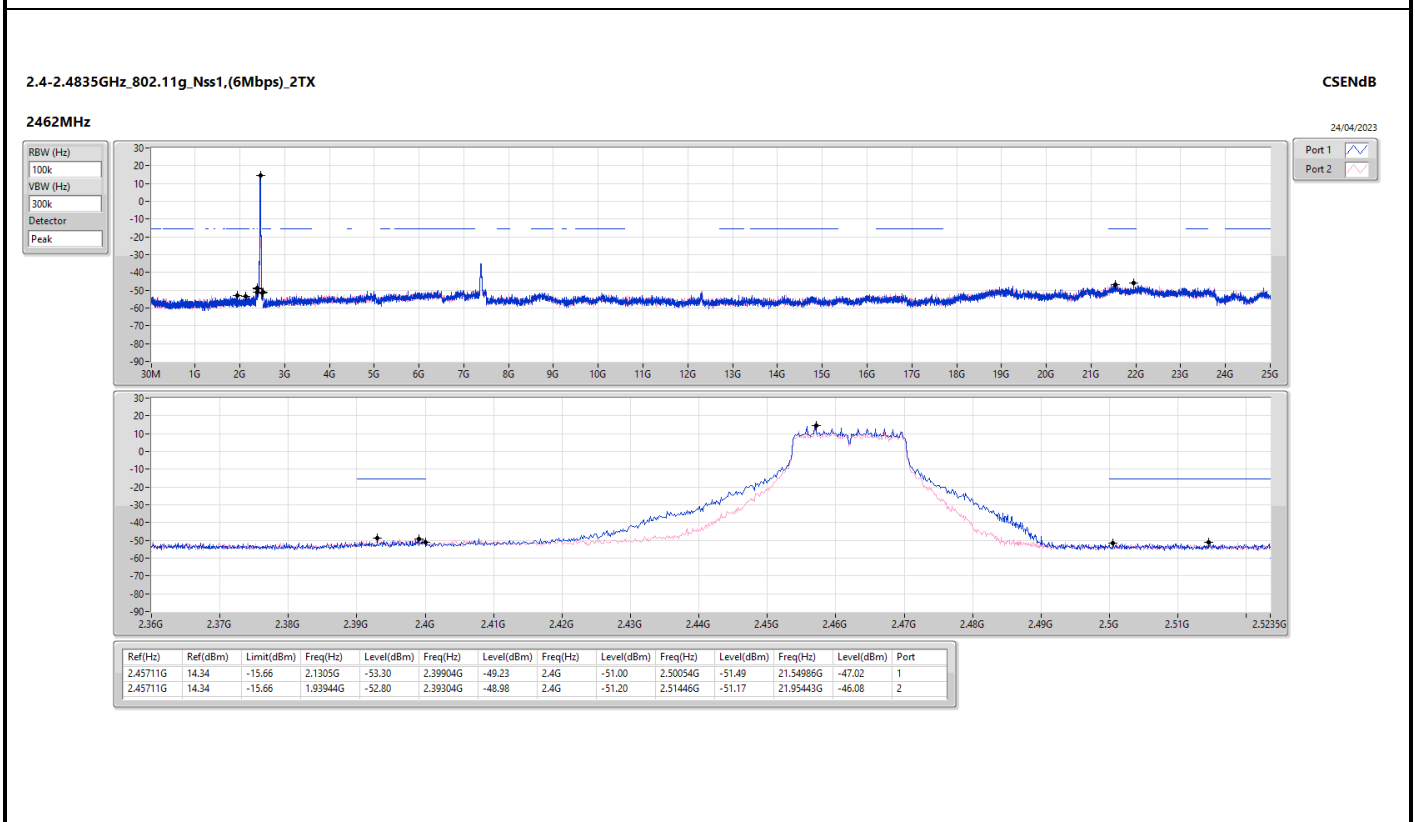
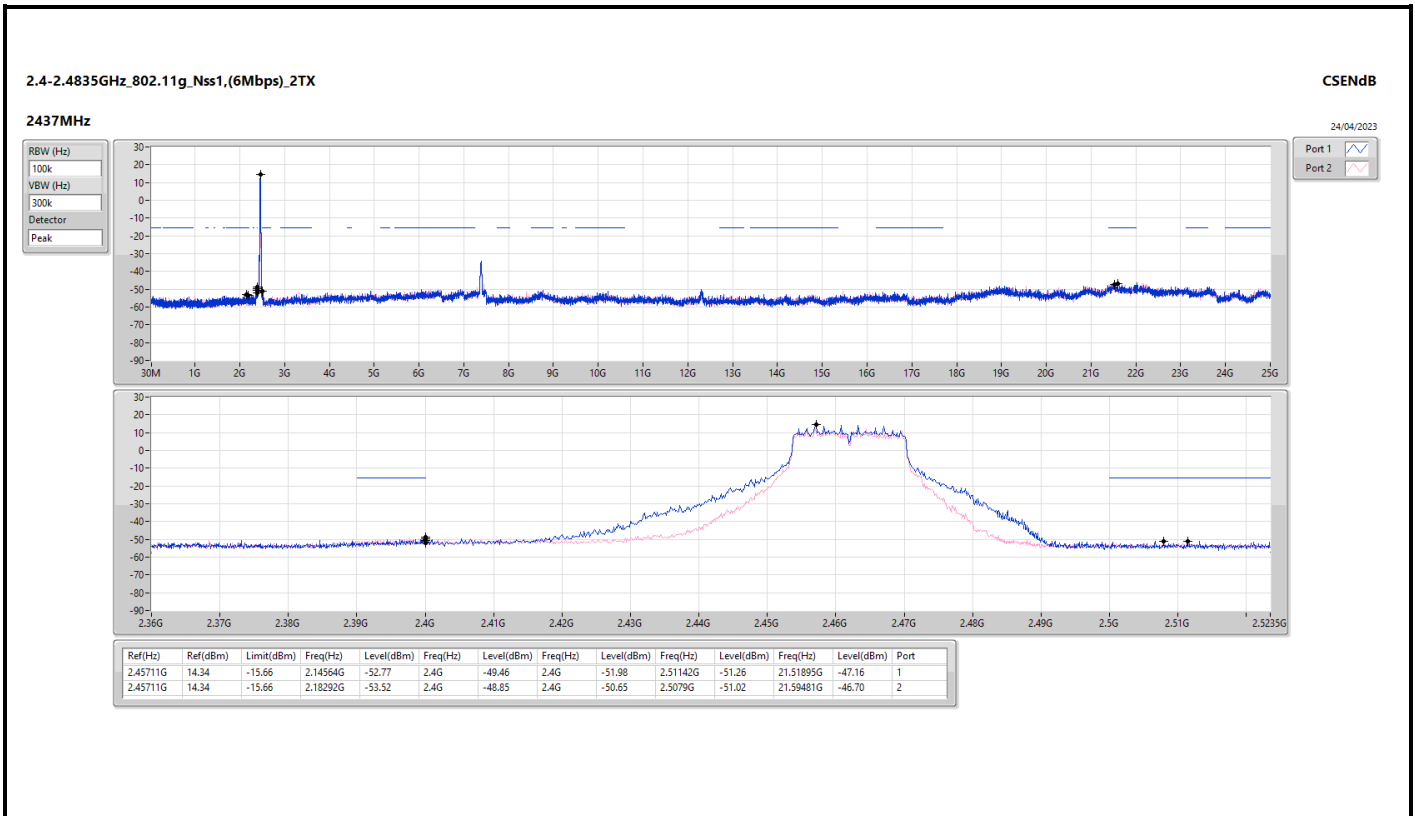


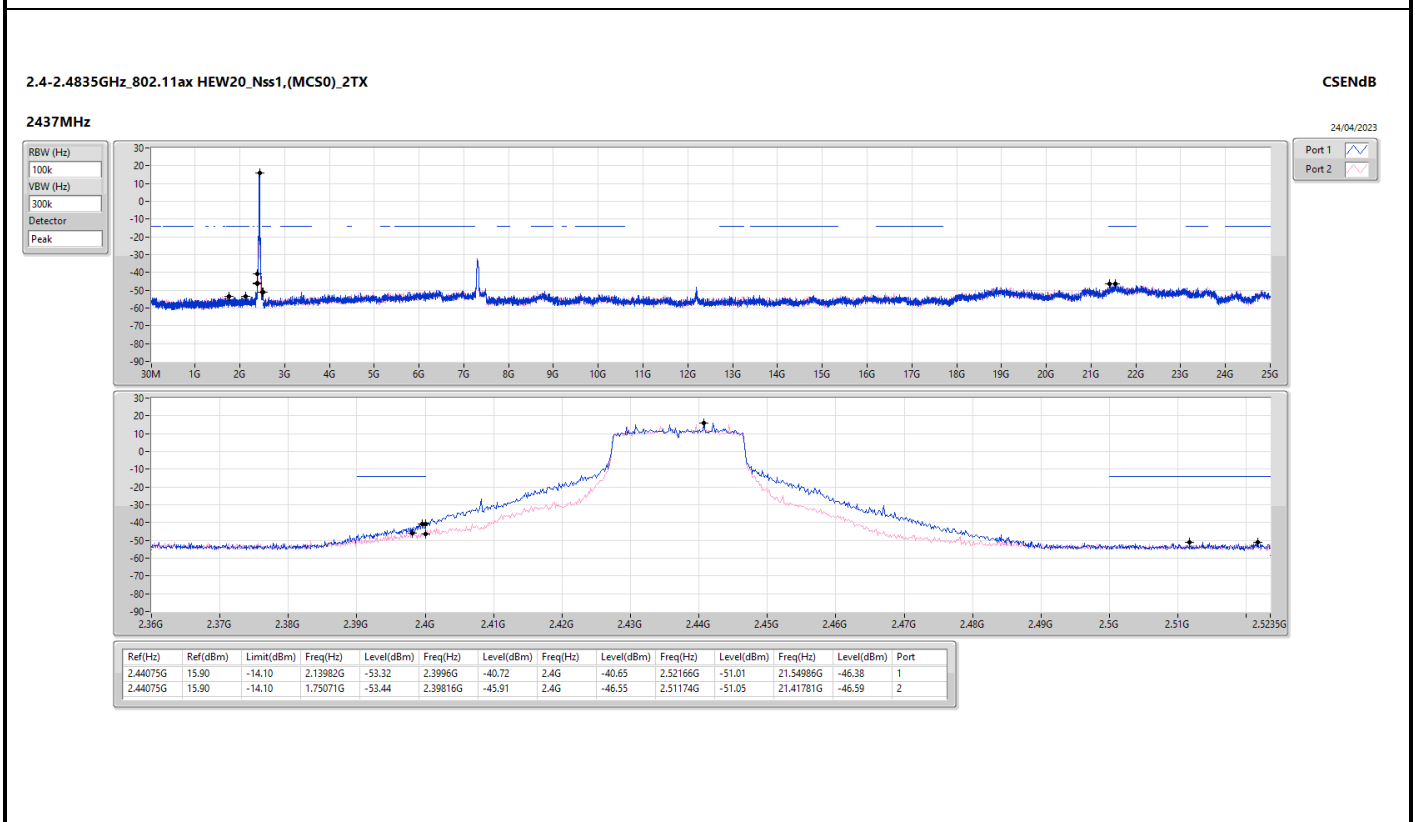
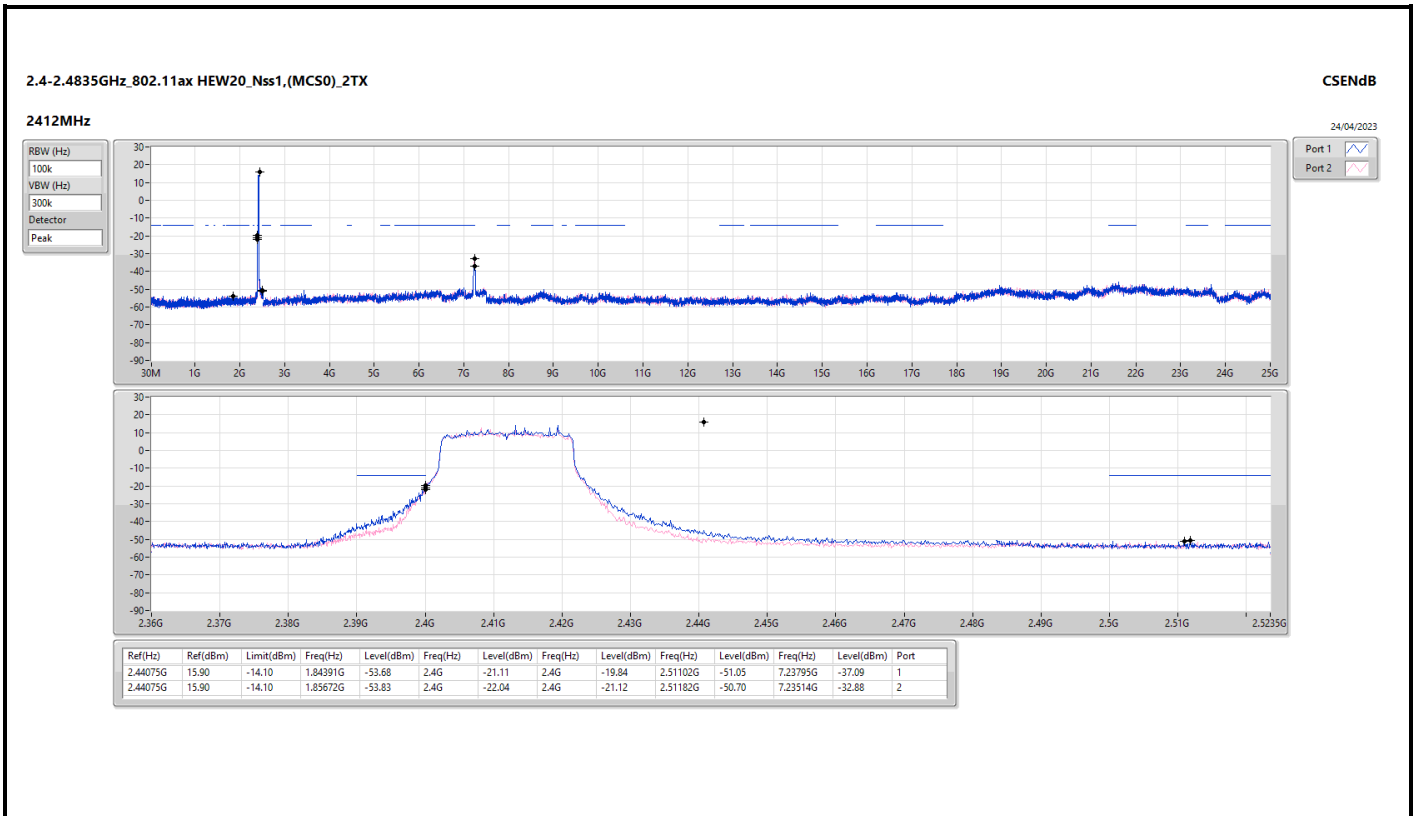


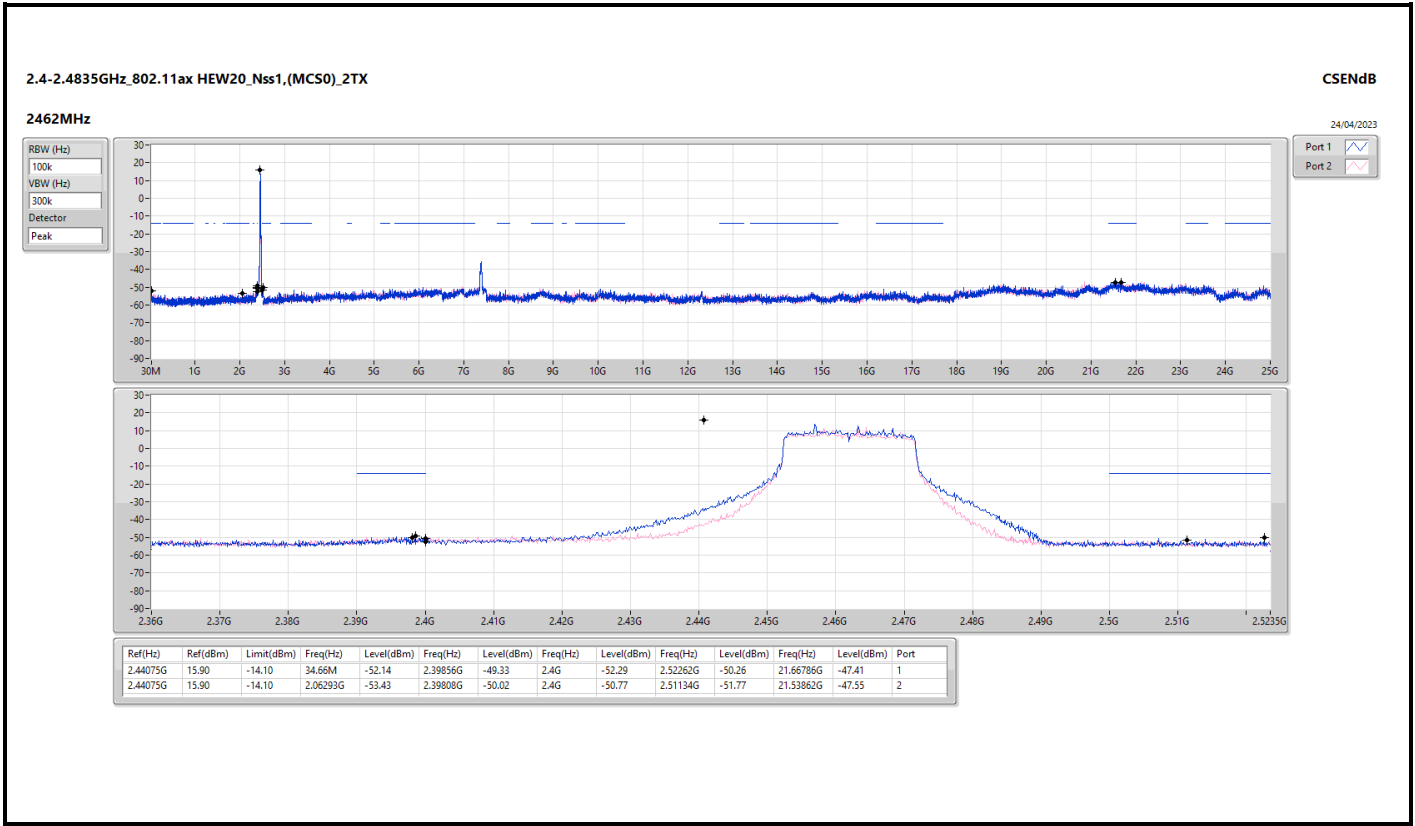














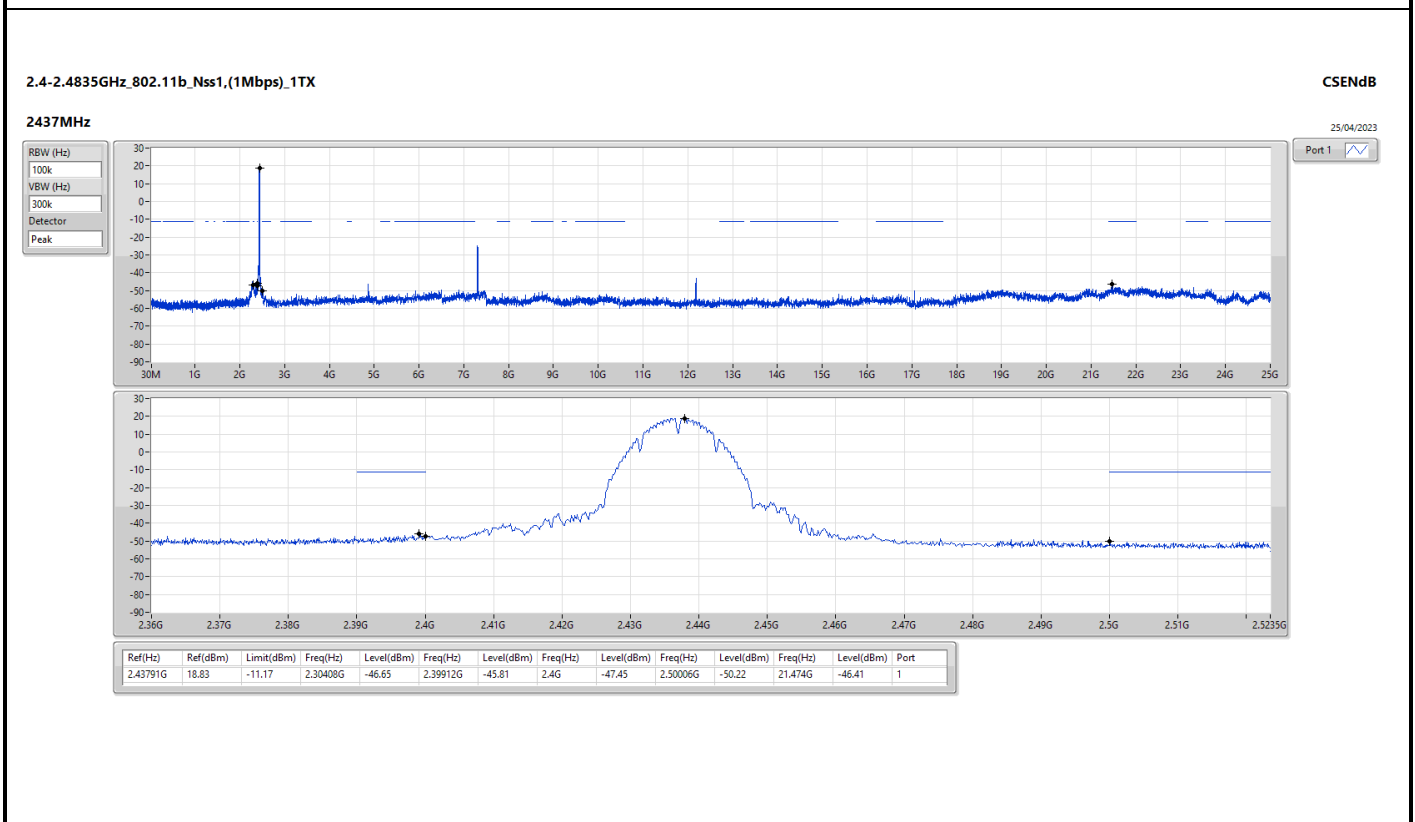
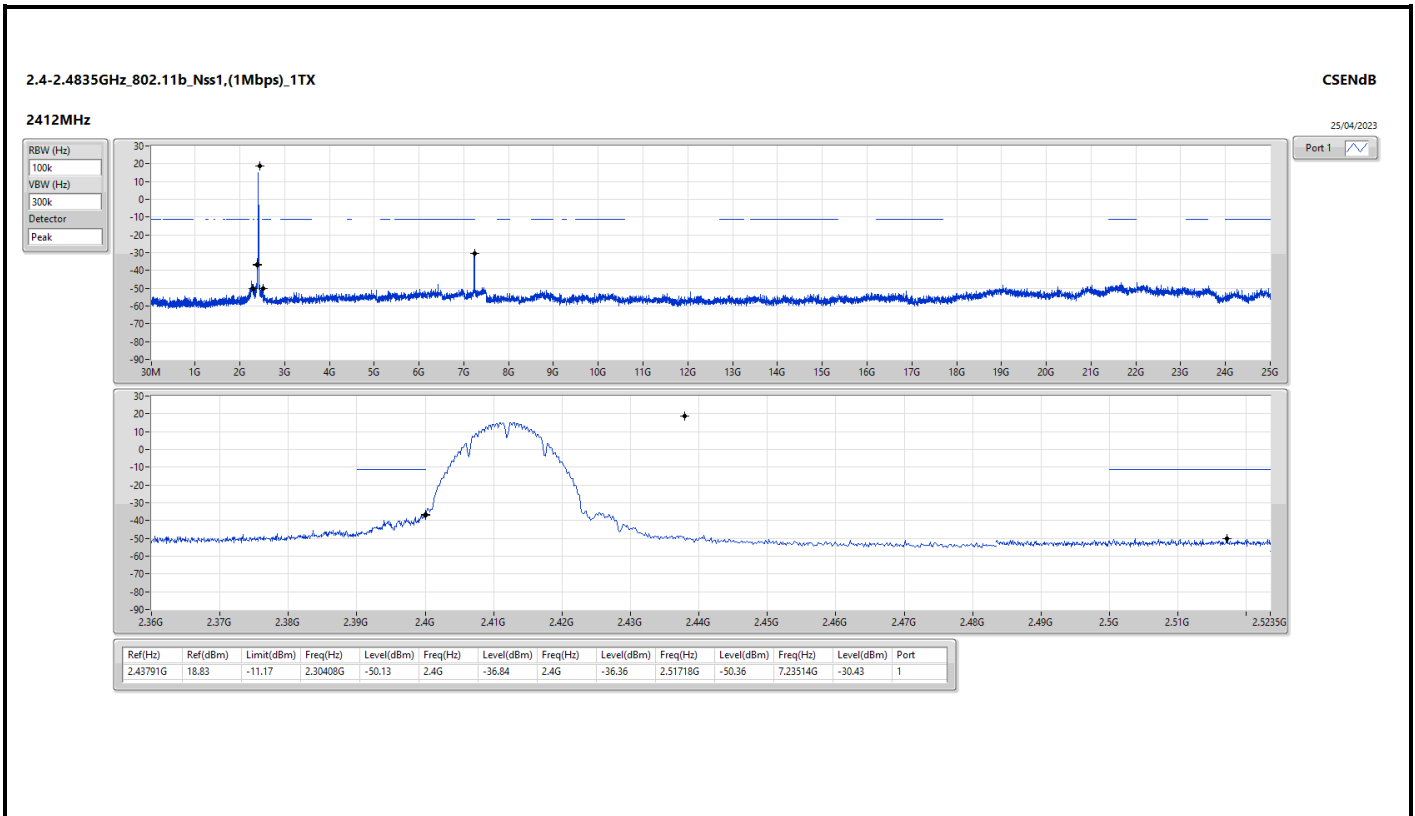
Summary

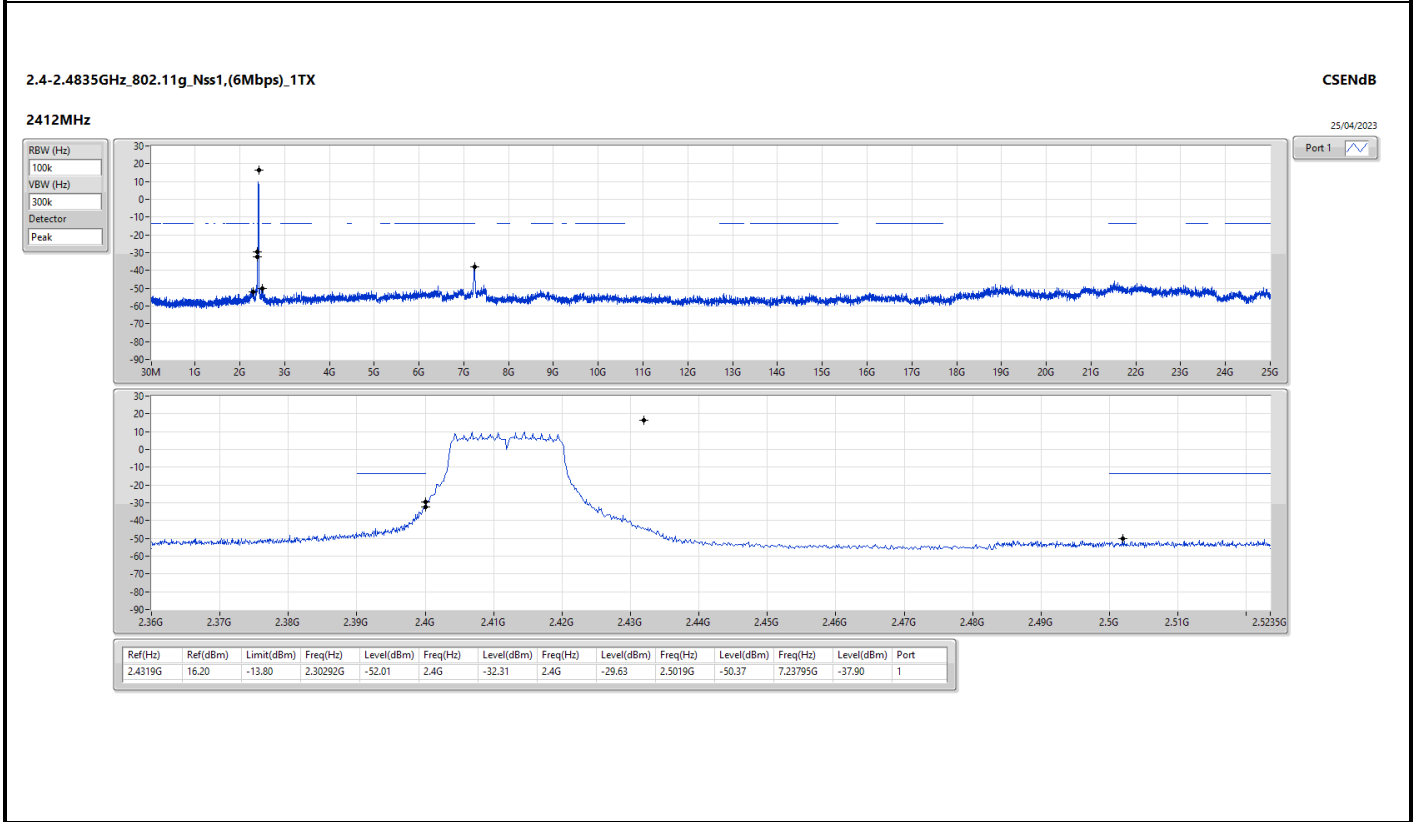
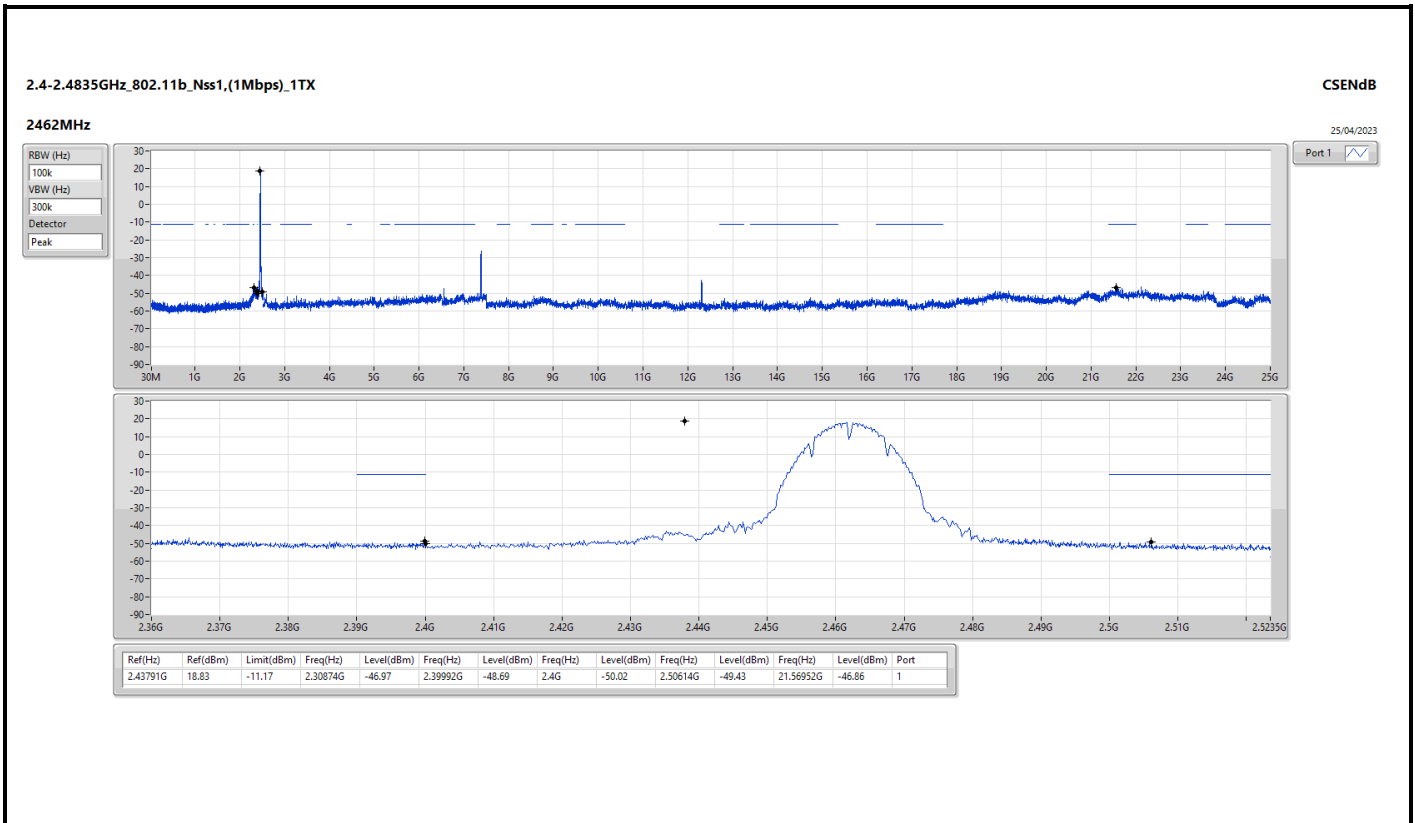
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.43791G	18.83	-11.17	2.30408G	-50.13	2.4G	-36.84	2.4G	-36.36	2.51718G	-50.36	7.23514G	-30.43	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.4319G	16.20	-13.80	2.30292G	-52.01	2.4G	-32.31	2.4G	-29.63	2.5019G	-50.37	7.23795G	-37.90	1
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	2.44192G	16.50	-13.50	2.13982G	-53.56	2.39992G	-31.39	2.4G	-31.51	2.5215G	-50.65	7.24076G	-42.60	1

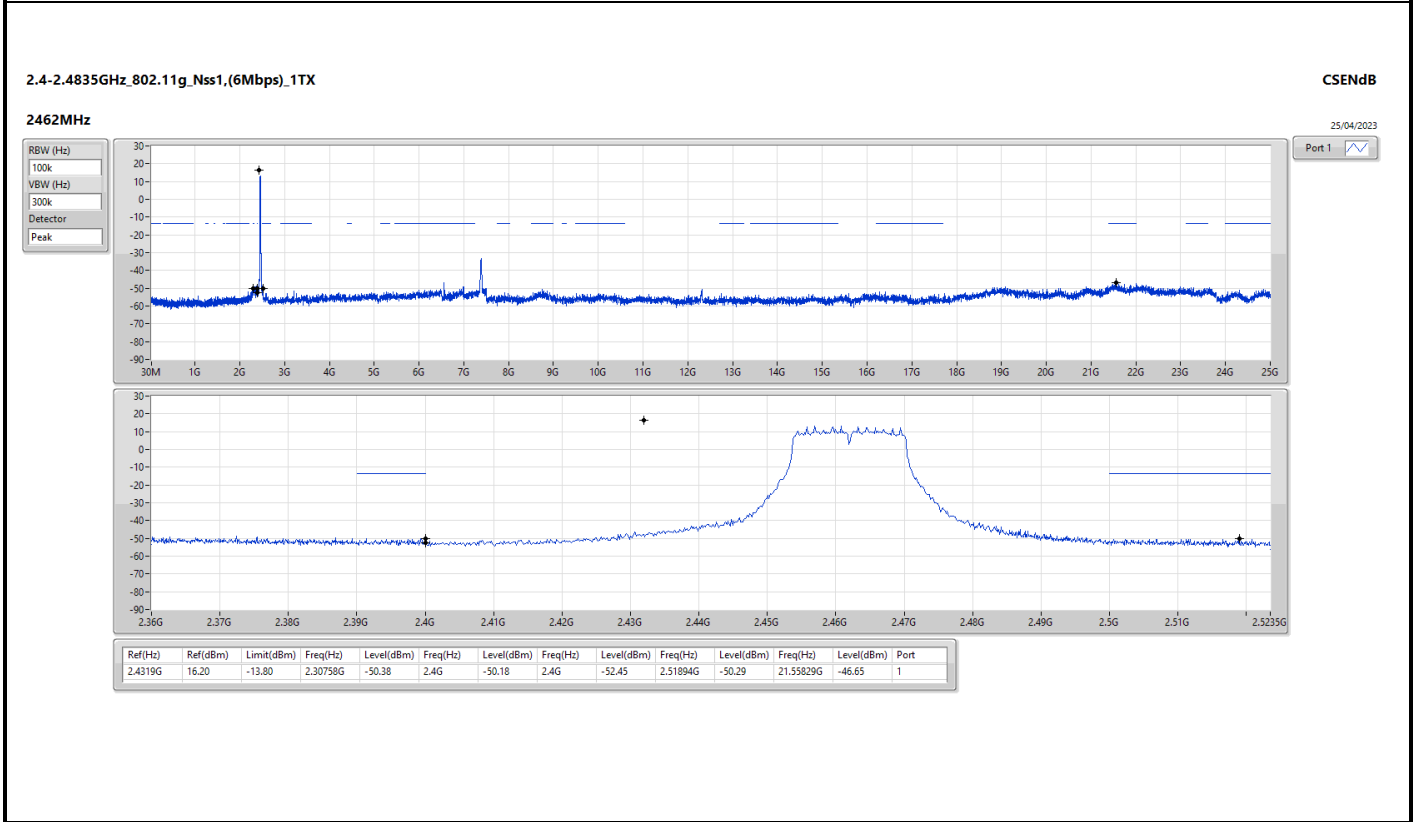
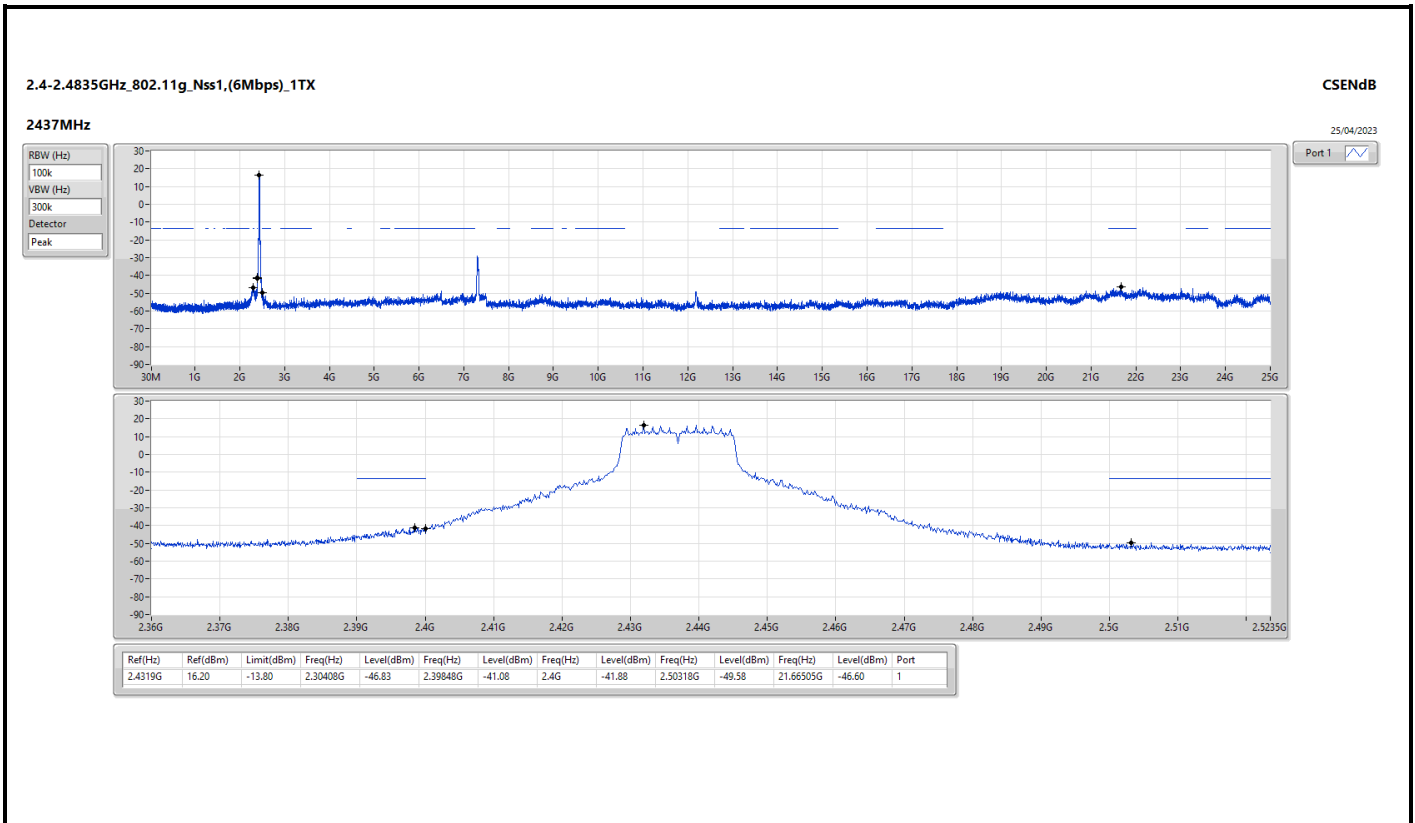
Result

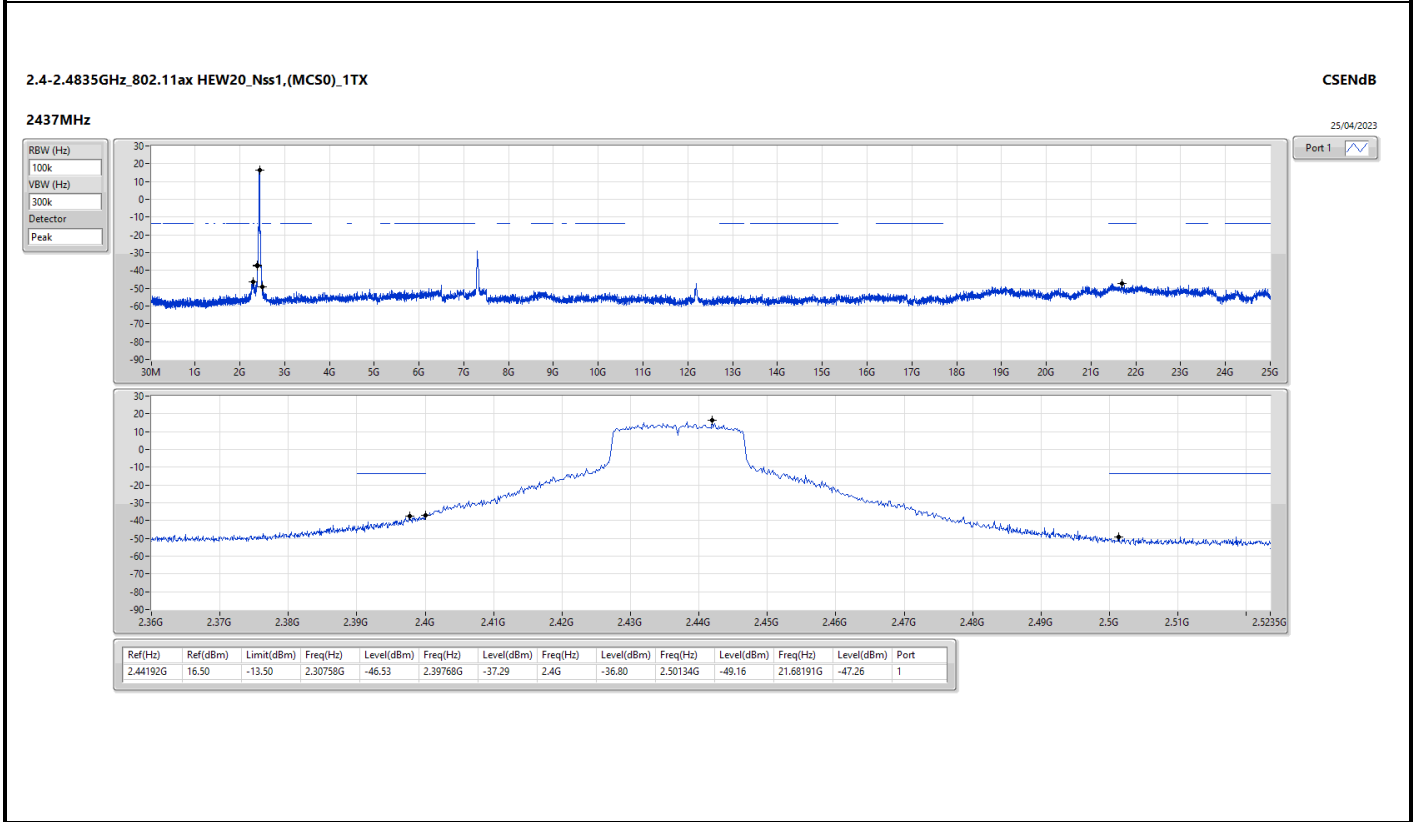
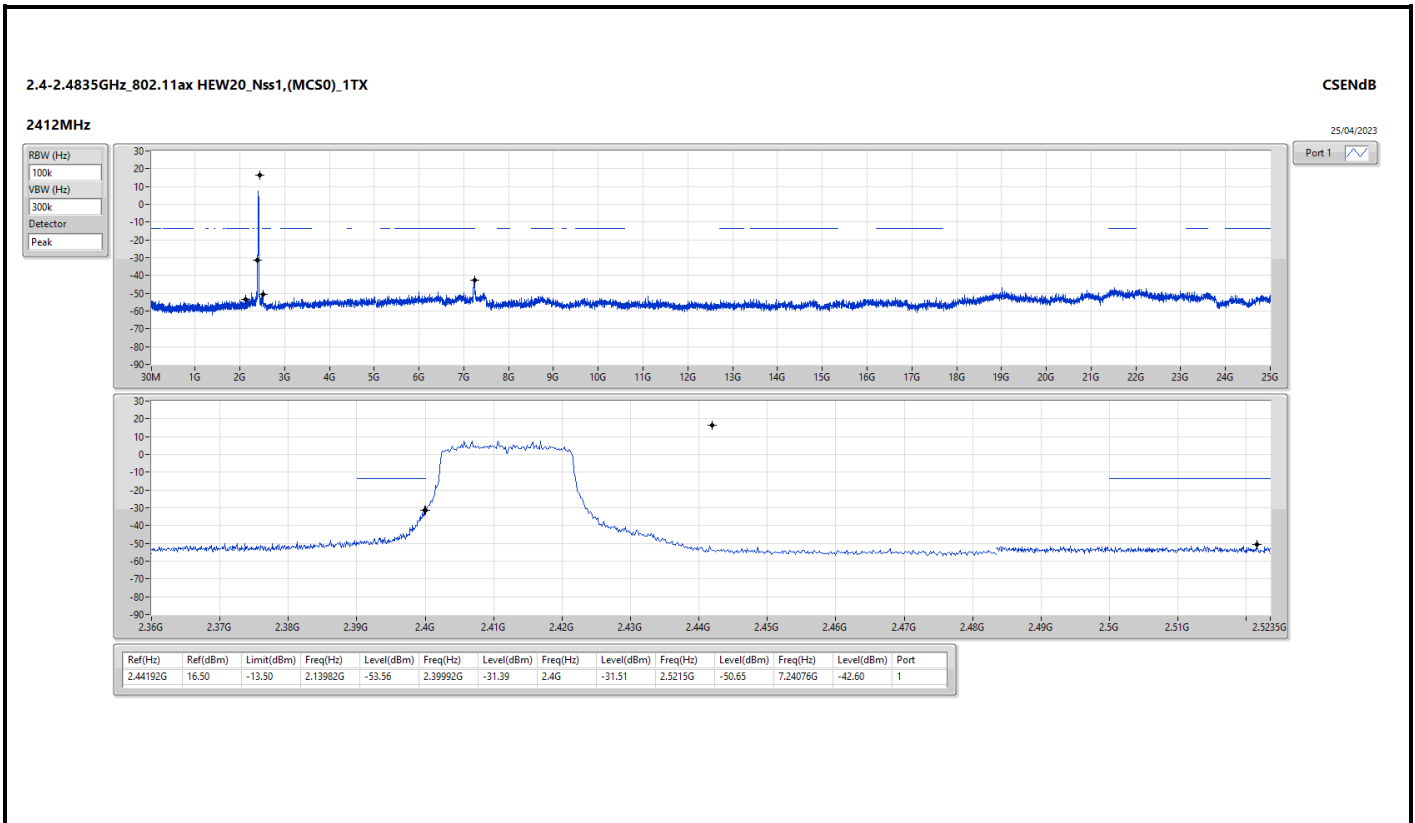
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43791G	18.83	-11.17	2.30408G	-50.13	2.4G	-36.84	2.4G	-36.36	2.51718G	-50.36	7.23514G	-30.43	1
2437MHz	Pass	2.43791G	18.83	-11.17	2.30408G	-46.65	2.39912G	-45.81	2.4G	-47.45	2.50006G	-50.22	21.474G	-46.41	1
2462MHz	Pass	2.43791G	18.83	-11.17	2.30874G	-46.97	2.39992G	-48.69	2.4G	-50.02	2.50614G	-49.43	21.56952G	-46.86	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4319G	16.20	-13.80	2.30292G	-52.01	2.4G	-32.31	2.4G	-29.63	2.5019G	-50.37	7.23795G	-37.90	1
2437MHz	Pass	2.4319G	16.20	-13.80	2.30408G	-46.83	2.39848G	-41.08	2.4G	-41.88	2.50318G	-49.58	21.66505G	-46.60	1
2462MHz	Pass	2.4319G	16.20	-13.80	2.30758G	-50.38	2.4G	-50.18	2.4G	-52.45	2.51894G	-50.29	21.55829G	-46.65	1
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44192G	16.50	-13.50	2.13982G	-53.56	2.39992G	-31.39	2.4G	-31.51	2.5215G	-50.65	7.24076G	-42.60	1
2437MHz	Pass	2.44192G	16.50	-13.50	2.30758G	-46.53	2.39768G	-37.29	2.4G	-36.80	2.50134G	-49.16	21.68191G	-47.26	1
2462MHz	Pass	2.44192G	16.50	-13.50	2.30525G	-51.54	2.3964G	-49.90	2.4G	-52.69	2.5119G	-50.37	21.55548G	-46.88	1

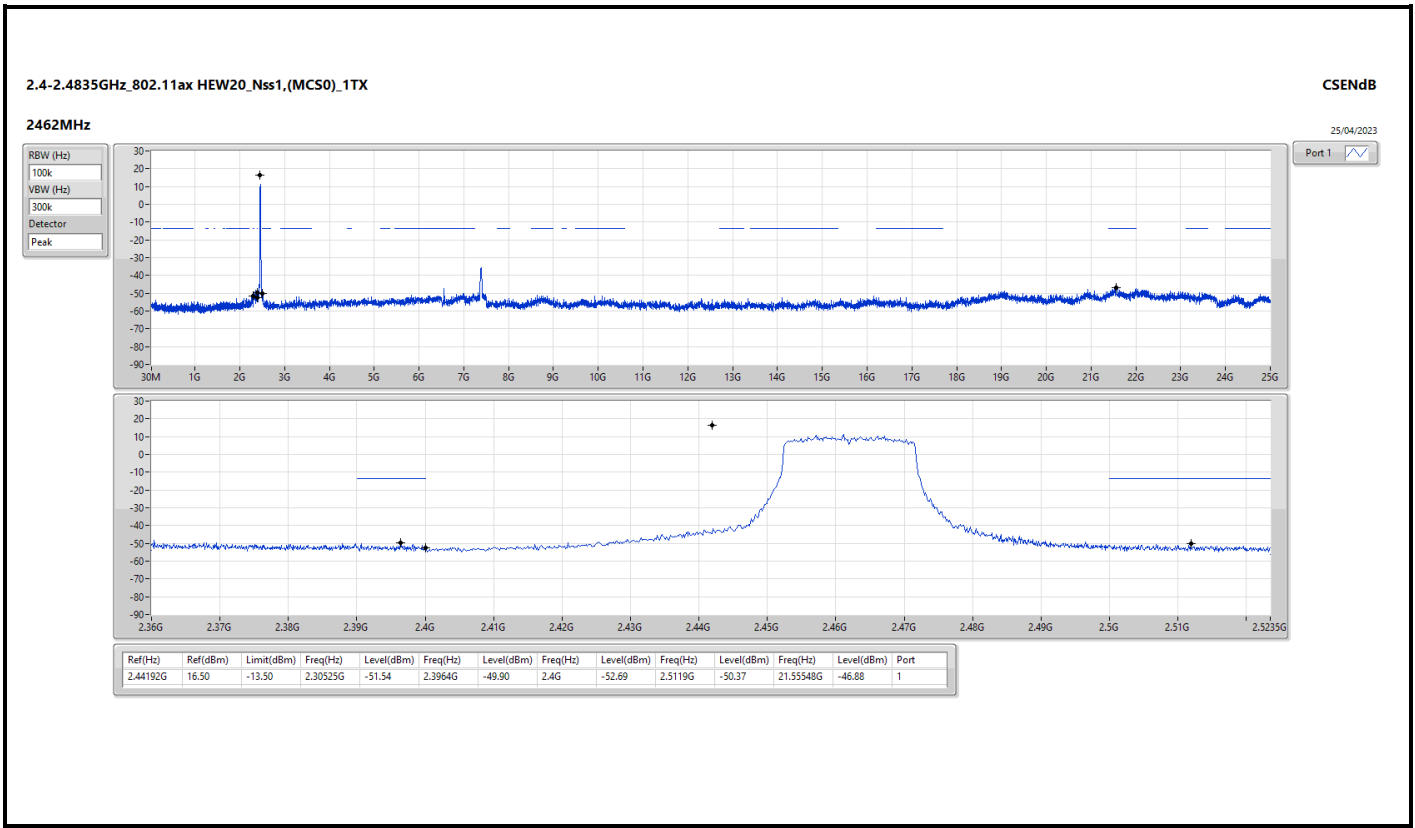










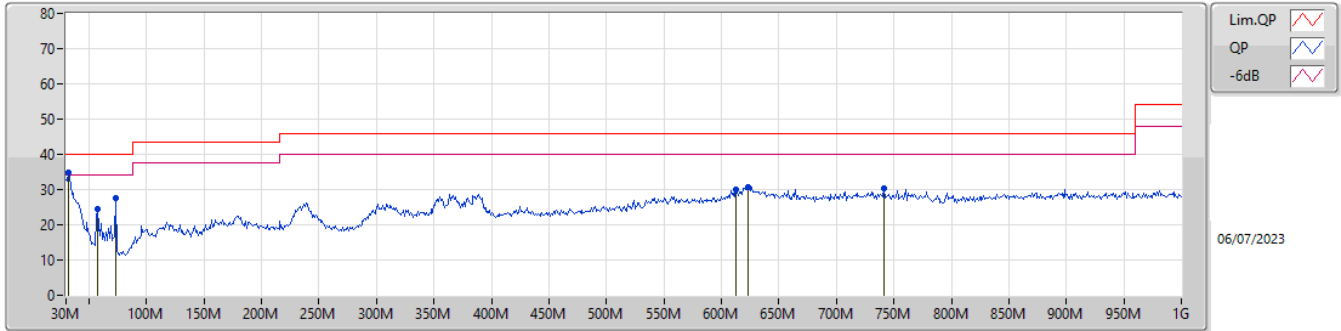




**Summary**

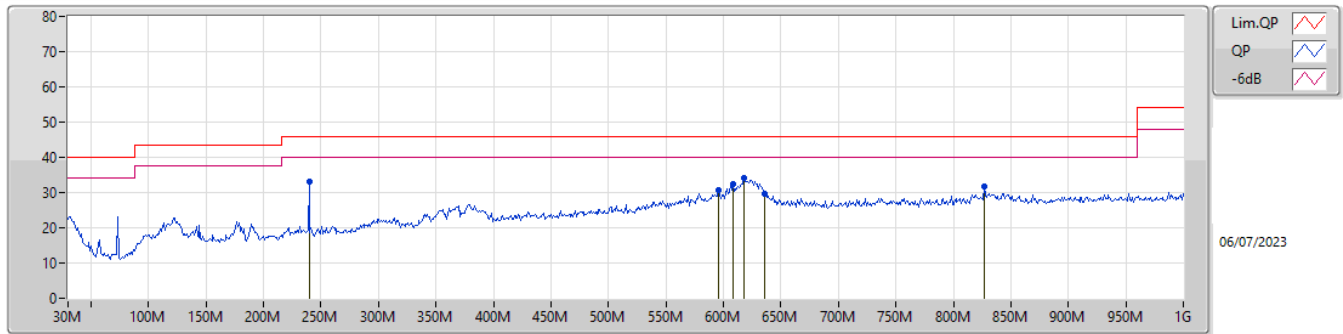
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 8	Pass	PK	31.94M	34.87	40.00	-5.13	Vertical

Mode 8



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	31.94M	34.87	40.00	-5.13	-7.31	3	Vertical	94	2.00	"Worst"	42.18	23.26	0.65	31.22
PK	57.16M	24.54	40.00	-15.46	-17.70	3	Vertical	319	1.00	-	42.24	13.16	0.85	31.71
PK	73.65M	27.49	40.00	-12.51	-18.10	3	Vertical	187	1.25	-	45.59	12.65	0.95	31.70
PK	612.97M	30.15	46.00	-15.85	-4.42	3	Vertical	360	1.50	-	34.57	25.13	2.65	32.20
PK	623.64M	30.64	46.00	-15.36	-4.27	3	Vertical	2	1.50	-	34.91	25.29	2.68	32.24
PK	741.01M	30.28	46.00	-15.72	-3.65	3	Vertical	0	2.00	-	33.93	25.72	2.94	32.31

Mode 8



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	240M	33.27	46.00	-12.73	-12.94	3	Horizontal	122	1.25	-	46.21	17.16	1.70	31.80
PK	595.51M	30.69	46.00	-15.31	-4.72	3	Horizontal	360	1.00	-	35.41	24.82	2.61	32.15
PK	608M	32.57	46.00	-13.43	-4.49	3	Horizontal	0	1.25	-	37.06	25.05	2.64	32.18
PK	617.82M	34.11	46.00	-11.89	-4.34	3	Horizontal	7	1.25	"Worst"	38.45	25.22	2.66	32.22
PK	636.25M	29.80	46.00	-16.20	-4.32	3	Horizontal	0	1.25	-	34.12	25.26	2.71	32.29
PK	827.34M	31.75	46.00	-14.25	-3.00	3	Horizontal	352	1.50	-	34.75	26.20	3.12	32.32



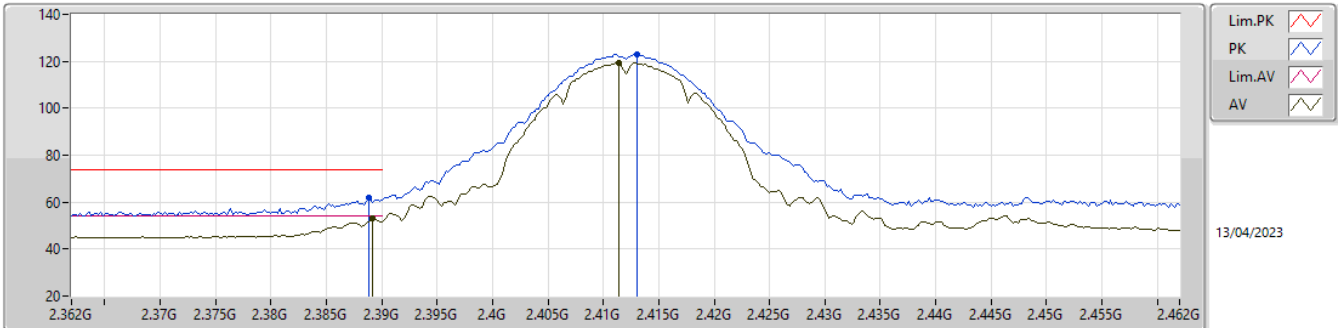


Summary

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)_1TX	Pass	AV	2.4835G	53.99	54.00	-0.01	3	Vertical	203	1.92	-

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2412MHz\_TX

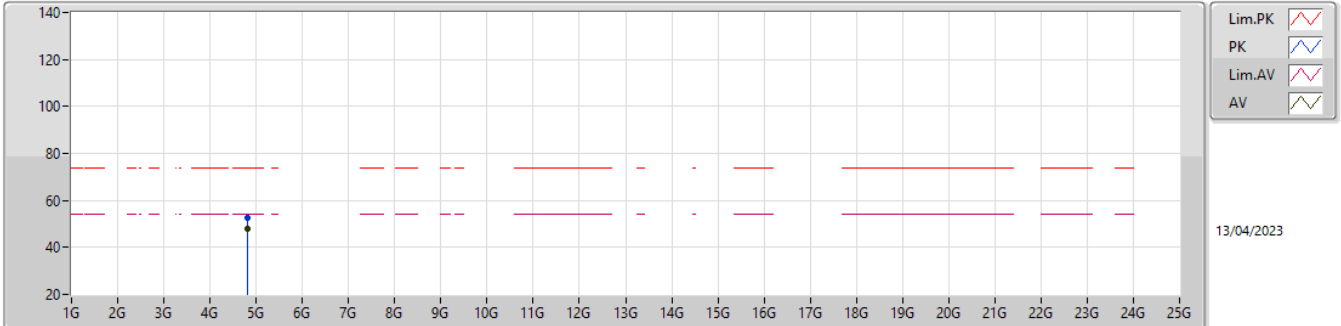


EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3888G	61.71	74.00	-12.29	31.19	3	Vertical	28	1.04	-	27.33	3.19	-
AV	2.3892G	52.95	54.00	-1.05	22.42	3	Vertical	28	1.04	-	27.34	3.19	-
PK	2.413G	123.02	Inf	-Inf	92.36	3	Vertical	28	1.04	-	27.45	3.21	-
AV	2.4114G	119.41	Inf	-Inf	88.75	3	Vertical	28	1.04	-	27.45	3.21	-

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2412MHz\_TX

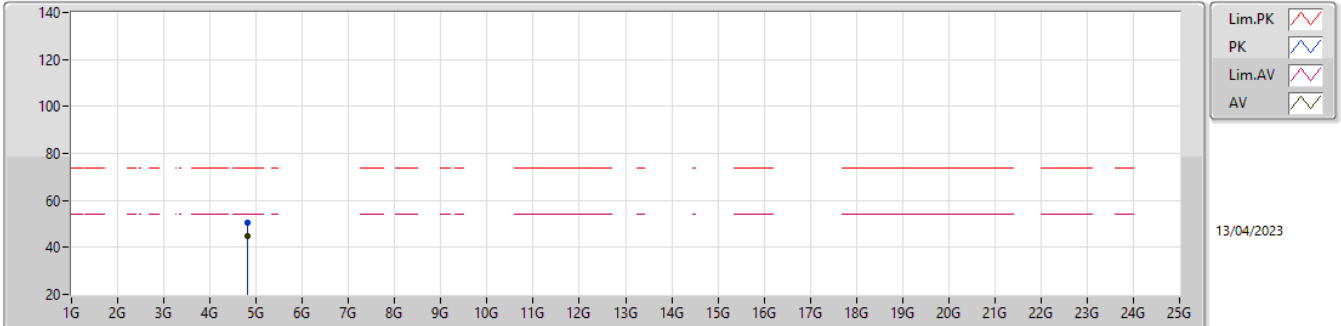


EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.824G	52.53	74.00	-21.47	45.32	3	Vertical	123	1.49	-	32.40	5.61	30.80
AV	4.824G	47.84	54.00	-6.16	40.63	3	Vertical	123	1.49	-	32.40	5.61	30.80

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2412MHz\_TX

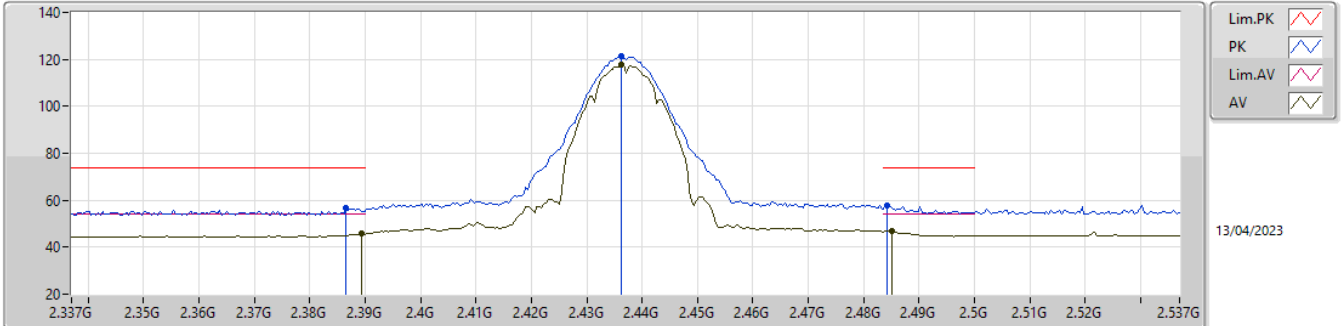


EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82405G	50.76	74.00	-23.24	43.55	3	Horizontal	156	1.61	-	32.40	5.61	30.80
AV	4.82406G	44.80	54.00	-9.20	37.59	3	Horizontal	156	1.61	-	32.40	5.61	30.80

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2437MHz\_TX

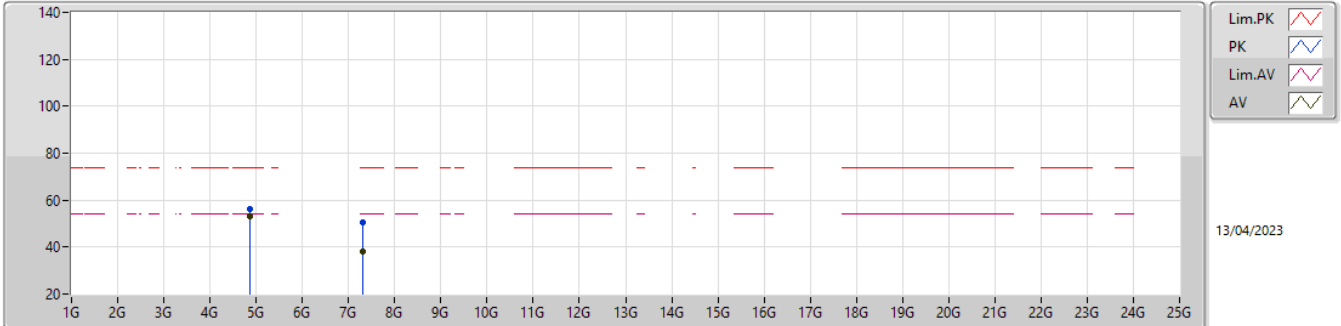


EUT\_Y\_1TX(Port1)  
Setting 26.5  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3866G	56.74	74.00	-17.26	26.23	3	Vertical	243	1.72	-	27.32	3.19	-
AV	2.3894G	45.73	54.00	-8.27	15.20	3	Vertical	243	1.72	-	27.34	3.19	-
PK	2.4362G	121.21	Inf	-Inf	90.45	3	Vertical	243	1.72	-	27.54	3.22	-
AV	2.4362G	117.62	Inf	-Inf	86.86	3	Vertical	243	1.72	-	27.54	3.22	-
PK	2.4842G	57.60	74.00	-16.40	26.55	3	Vertical	243	1.72	-	27.81	3.24	-
AV	2.485G	46.97	54.00	-7.03	15.92	3	Vertical	243	1.72	-	27.81	3.24	-

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2437MHz\_TX

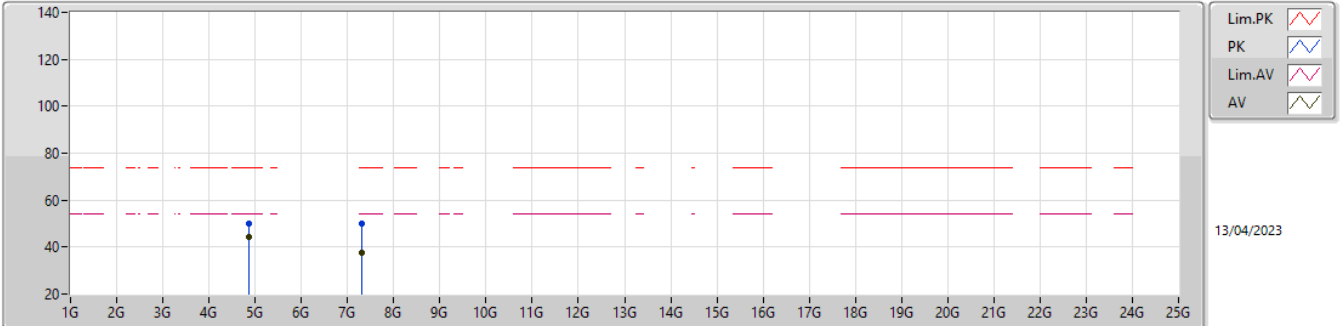


EUT\_Y\_1TX(Port1)  
 Setting 26.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87398G	56.19	74.00	-17.81	48.78	3	Vertical	123	1.81	-	32.55	5.64	30.78
AV	4.87398G	53.24	54.00	-0.76	45.83	3	Vertical	123	1.81	-	32.55	5.64	30.78
PK	7.31062G	50.60	74.00	-23.40	38.92	3	Vertical	82	1.42	-	36.76	6.84	31.92
AV	7.3149G	37.94	54.00	-16.06	26.28	3	Vertical	82	1.42	-	36.74	6.84	31.92

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2437MHz\_TX

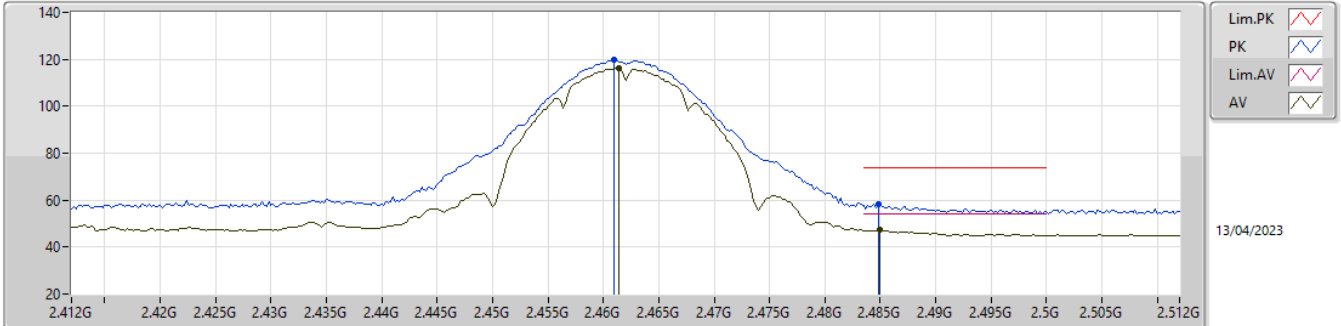


EUT Y\_1TX(Port1)  
Setting 26.5  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87404G	50.14	74.00	-23.86	42.73	3	Horizontal	133	1.82	-	32.55	5.64	30.78
AV	4.87398G	44.27	54.00	-9.73	36.86	3	Horizontal	133	1.82	-	32.55	5.64	30.78
PK	7.31308G	50.00	74.00	-24.00	38.33	3	Horizontal	220	2.08	-	36.75	6.84	31.92
AV	7.31248G	37.66	54.00	-16.34	25.99	3	Horizontal	220	2.08	-	36.75	6.84	31.92

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2462MHz\_TX



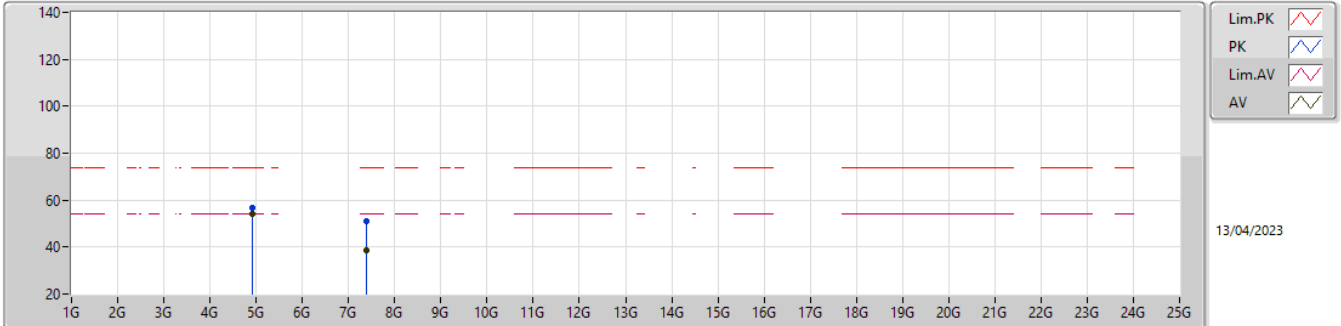
EUT\_Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.461G	119.74	Inf	-Inf	88.84	3	Vertical	345	1.89	-	27.67	3.23	-
AV	2.4614G	116.27	Inf	-Inf	85.37	3	Vertical	345	1.89	-	27.67	3.23	-
PK	2.4848G	58.50	74.00	-15.50	27.45	3	Vertical	345	1.89	-	27.81	3.24	-
AV	2.485G	47.23	54.00	-6.77	16.18	3	Vertical	345	1.89	-	27.81	3.24	-



2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2462MHz\_TX

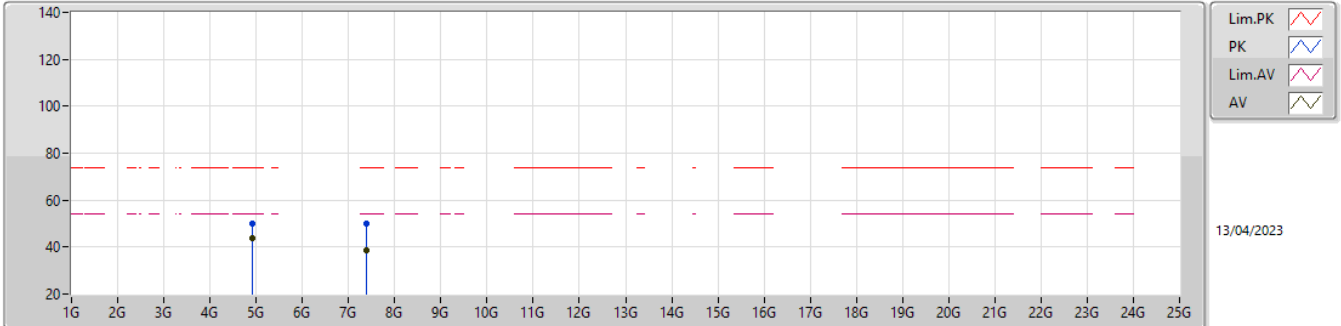


EUT\_Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92402G	56.52	74.00	-17.48	48.88	3	Vertical	123	1.80	-	32.74	5.66	30.76
AV	4.92398G	53.94	54.00	-0.06	46.30	3	Vertical	123	1.80	-	32.74	5.66	30.76
PK	7.38856G	51.09	74.00	-22.91	39.65	3	Vertical	263	2.09	-	36.60	6.81	31.97
AV	7.38998G	38.44	54.00	-15.56	27.00	3	Vertical	263	2.09	-	36.60	6.81	31.97

2.4-2.4835GHz\_802.11b\_Nss1,(1Mbps)\_1TX

2462MHz\_TX

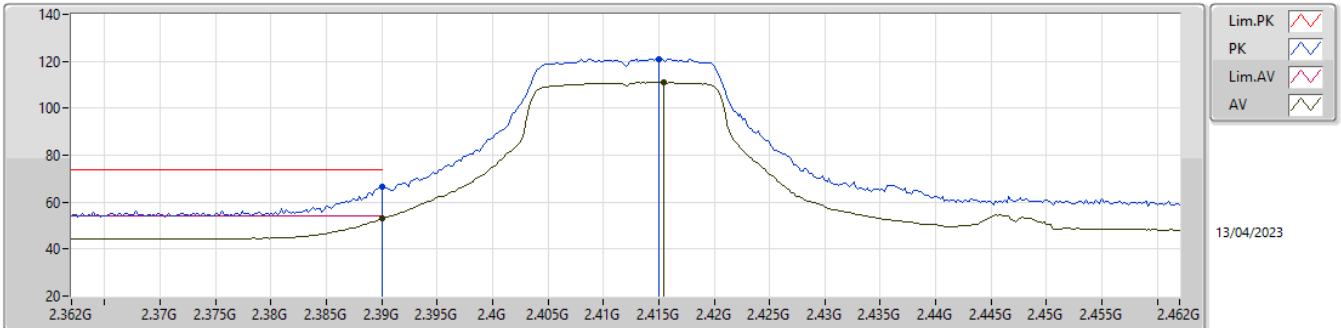


EUT\_Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92406G	49.99	74.00	-24.01	42.35	3	Horizontal	143	1.88	-	32.74	5.66	30.76
AV	4.92398G	43.90	54.00	-10.10	36.26	3	Horizontal	143	1.88	-	32.74	5.66	30.76
PK	7.38312G	50.18	74.00	-23.82	38.73	3	Horizontal	32	1.12	-	36.60	6.81	31.96
AV	7.38618G	38.48	54.00	-15.52	27.03	3	Horizontal	32	1.12	-	36.60	6.81	31.96

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2412MHz\_TX

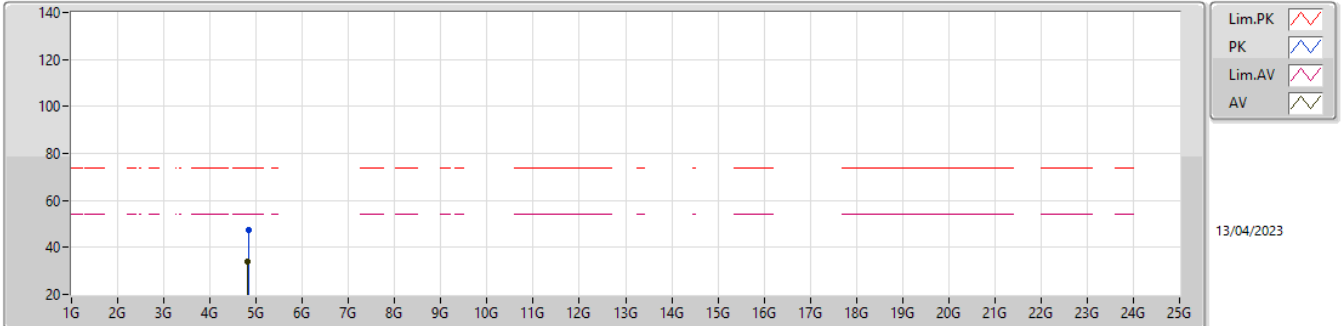


EUT\_Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	66.53	74.00	-7.47	35.99	3	Vertical	30	1.03	-	27.34	3.20	-
AV	2.39G	52.91	54.00	-1.09	22.37	3	Vertical	30	1.03	-	27.34	3.20	-
PK	2.415G	120.91	Inf	-Inf	90.24	3	Vertical	30	1.03	-	27.46	3.21	-
AV	2.4154G	111.21	Inf	-Inf	80.54	3	Vertical	30	1.03	-	27.46	3.21	-

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2412MHz\_TX

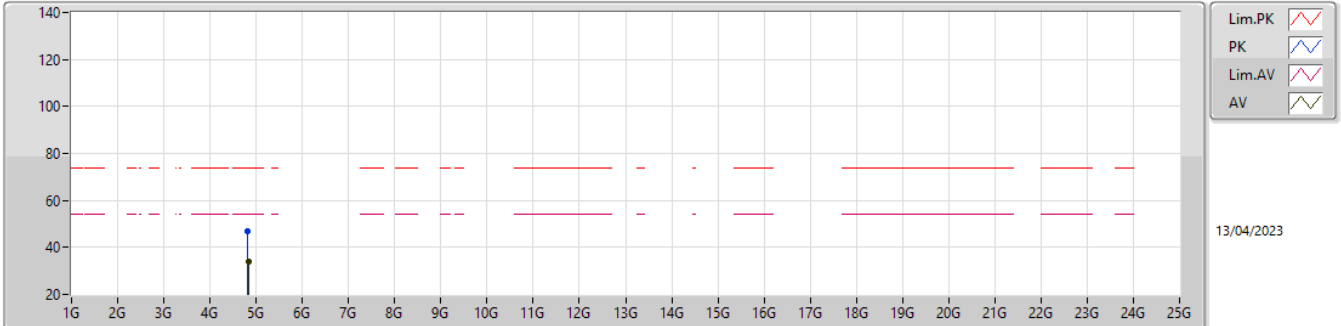


EUT\_Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

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	4.82572G	47.46	74.00	-26.54	40.25	3	Vertical	119	1.31	-	32.40	5.61	30.80
AV	4.82166G	33.92	54.00	-20.08	26.72	3	Vertical	119	1.31	-	32.39	5.61	30.80

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2412MHz\_TX

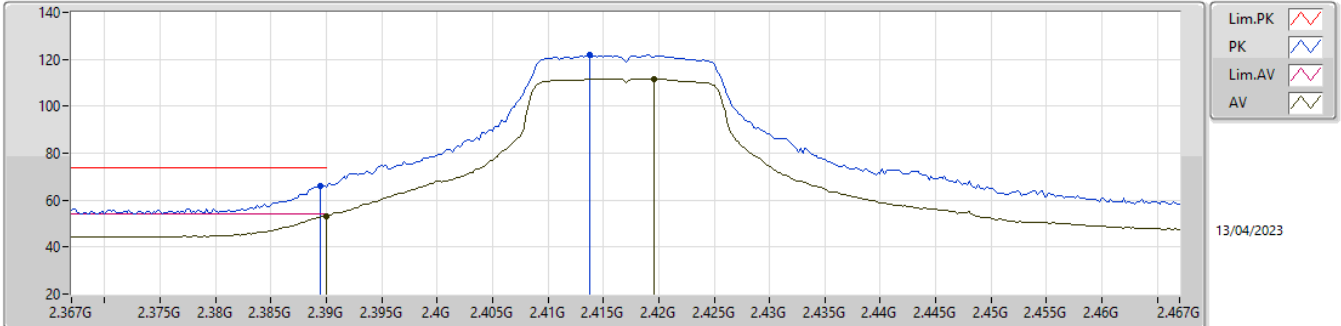


EUT Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

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	4.81936G	46.86	74.00	-27.14	39.68	3	Horizontal	299	2.07	-	32.38	5.61	30.81			
AV	4.82604G	33.91	54.00	-20.09	26.70	3	Horizontal	299	2.07	-	32.40	5.61	30.80			

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2417MHz\_TX

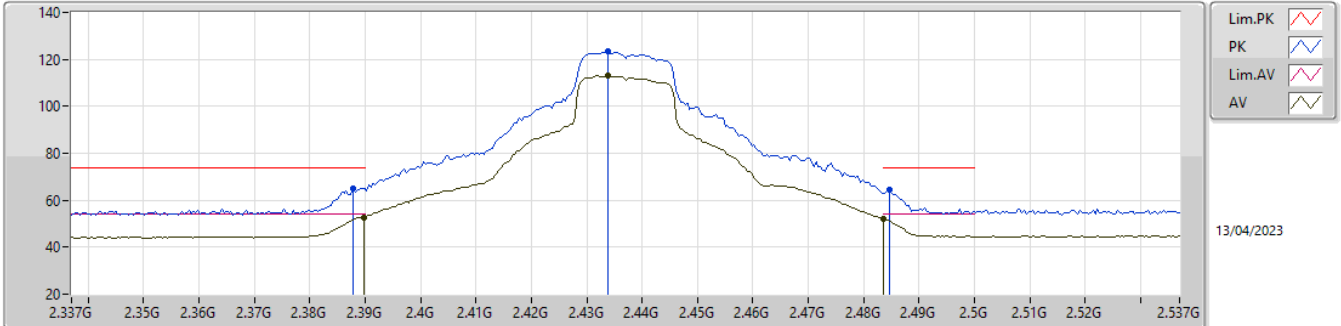


EUT\_Y\_1TX(Port1)  
 Setting 26.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	66.15	74.00	-7.85	35.62	3	Vertical	29	1.02	-	27.34	3.19	-
AV	2.39G	53.36	54.00	-0.64	22.82	3	Vertical	29	1.02	-	27.34	3.20	-
PK	2.4138G	121.89	Inf	-Inf	91.22	3	Vertical	29	1.02	-	27.46	3.21	-
AV	2.4196G	111.68	Inf	-Inf	80.99	3	Vertical	29	1.02	-	27.48	3.21	-

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2437MHz\_TX

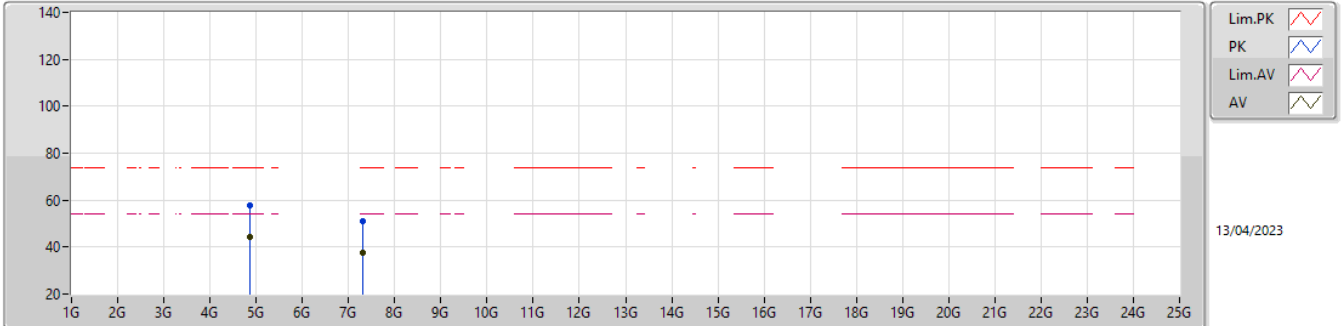


EUT Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3878G	65.00	74.00	-9.00	34.48	3	Vertical	254	1.28	-	27.33	3.19	-
AV	2.3898G	52.71	54.00	-1.29	22.18	3	Vertical	254	1.28	-	27.34	3.19	-
PK	2.4338G	123.52	Inf	-Inf	92.76	3	Vertical	254	1.28	-	27.54	3.22	-
AV	2.4338G	113.14	Inf	-Inf	82.38	3	Vertical	254	1.28	-	27.54	3.22	-
PK	2.4846G	64.39	74.00	-9.61	33.34	3	Vertical	254	1.28	-	27.81	3.24	-
AV	2.4835G	52.08	54.00	-1.92	21.04	3	Vertical	254	1.28	-	27.80	3.24	-

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2437MHz\_TX



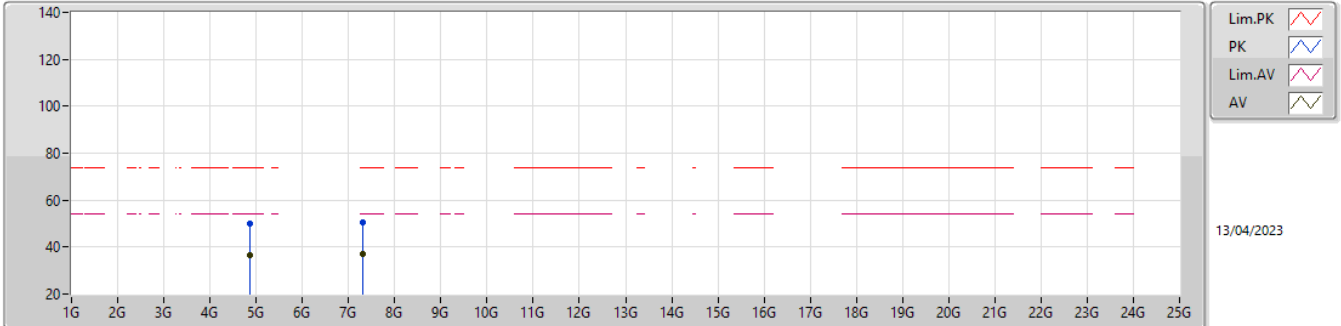
EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87448G	57.75	74.00	-16.25	50.34	3	Vertical	121	1.80	-	32.55	5.64	30.78
AV	4.87616G	44.11	54.00	-9.89	36.70	3	Vertical	121	1.80	-	32.55	5.64	30.78
PK	7.3119G	50.85	74.00	-23.15	39.18	3	Vertical	171	2.25	-	36.75	6.84	31.92
AV	7.31482G	37.39	54.00	-16.61	25.73	3	Vertical	171	2.25	-	36.74	6.84	31.92



2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2437MHz\_TX

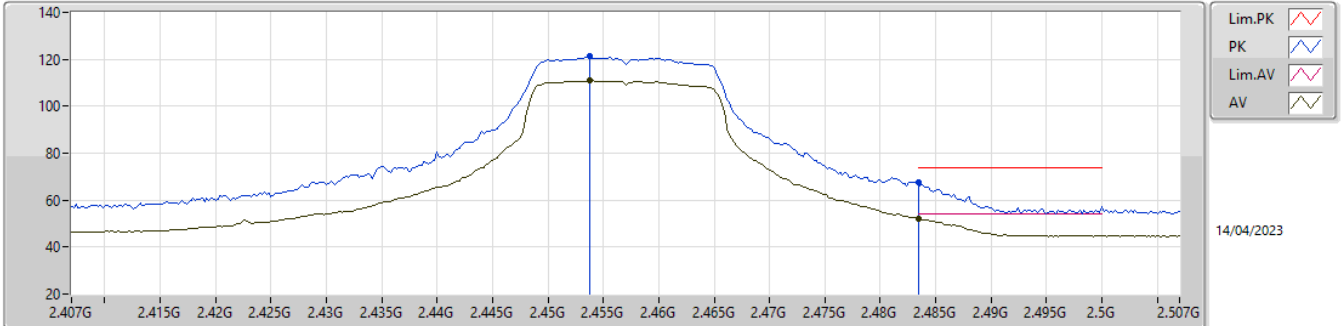


EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.86848G	50.25	74.00	-23.75	42.87	3	Horizontal	132	1.84	-	32.54	5.63	30.79
AV	4.87436G	36.61	54.00	-17.39	29.20	3	Horizontal	132	1.84	-	32.55	5.64	30.78
PK	7.30982G	50.72	74.00	-23.28	39.03	3	Horizontal	341	2.52	-	36.76	6.85	31.92
AV	7.31398G	37.26	54.00	-16.74	25.60	3	Horizontal	341	2.52	-	36.74	6.84	31.92

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2457MHz\_TX

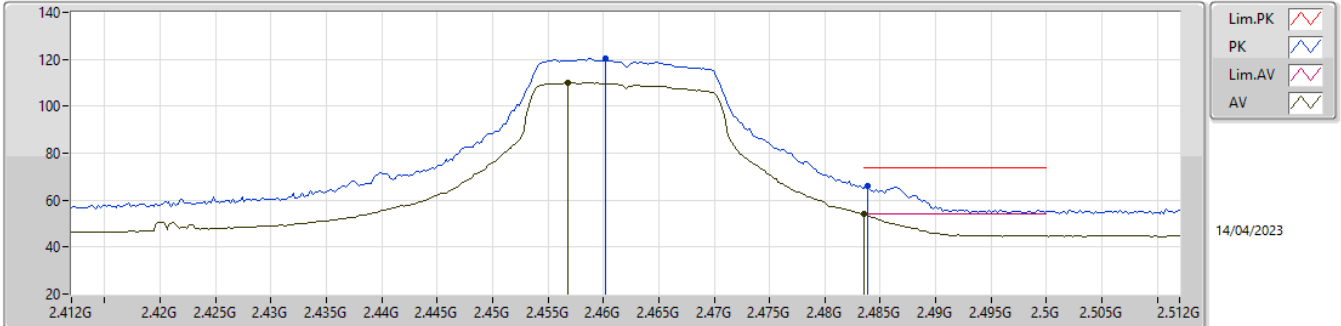


EUT\_Y\_1TX(Port1)  
Setting 25  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4538G	121.21	Inf	-Inf	90.36	3	Vertical	340	1.94	-	27.62	3.23	-
AV	2.4538G	110.95	Inf	-Inf	80.10	3	Vertical	340	1.94	-	27.62	3.23	-
PK	2.4835G	67.64	74.00	-6.36	36.60	3	Vertical	340	1.94	-	27.80	3.24	-
AV	2.4835G	51.90	54.00	-2.10	20.86	3	Vertical	340	1.94	-	27.80	3.24	-

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2462MHz\_TX

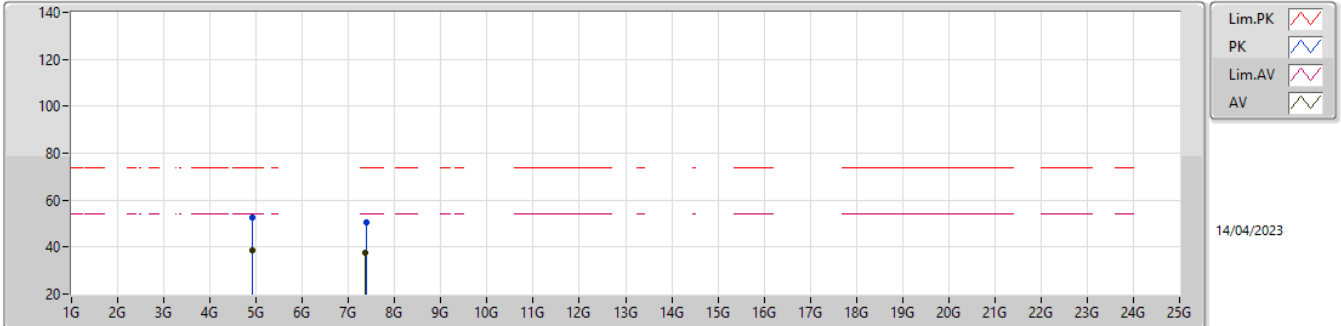


EUT\_Y\_1TX(Port1)  
Setting 24  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4602G	120.57	Inf	-Inf	89.68	3	Vertical	342	1.98	-	27.66	3.23	-
AV	2.4568G	110.02	Inf	-Inf	79.15	3	Vertical	342	1.98	-	27.64	3.23	-
PK	2.4838G	66.24	74.00	-7.76	35.20	3	Vertical	342	1.98	-	27.80	3.24	-
AV	2.4835G	53.97	54.00	-0.03	22.93	3	Vertical	342	1.98	-	27.80	3.24	-

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2462MHz\_TX

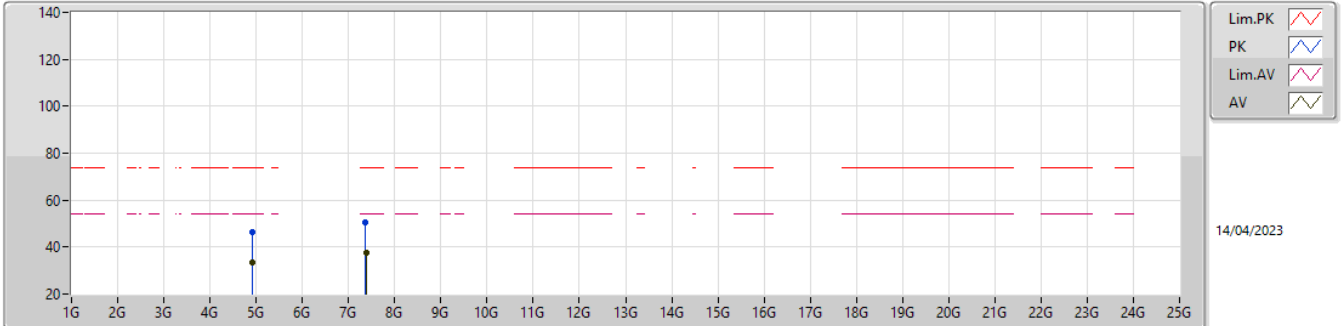


EUT Y\_1TX(Port1)  
Setting 24  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92574G	52.39	74.00	-21.61	44.74	3	Vertical	123	1.80	-	32.75	5.66	30.76
AV	4.92424G	38.79	54.00	-15.21	31.14	3	Vertical	123	1.80	-	32.75	5.66	30.76
PK	7.38792G	50.47	74.00	-23.53	39.02	3	Vertical	231	2.44	-	36.60	6.81	31.96
AV	7.37202G	37.58	54.00	-16.42	26.13	3	Vertical	231	2.44	-	36.60	6.81	31.96

2.4-2.4835GHz\_802.11g\_Nss1,(6Mbps)\_1TX

2462MHz\_TX

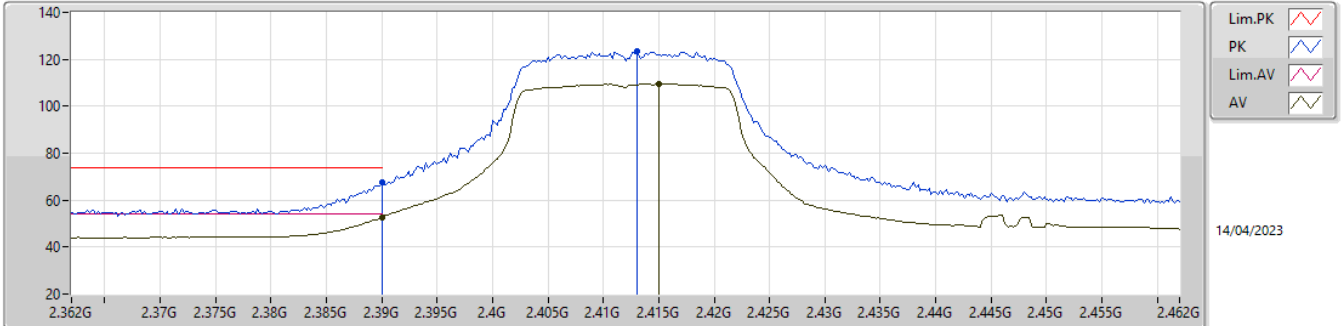


EUT\_Y\_1TX(Port1)  
Setting 24  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.924666G	46.51	74.00	-27.49	38.86	3	Horizontal	138	1.83	-	32.75	5.66	30.76
AV	4.9261G	33.64	54.00	-20.36	25.98	3	Horizontal	138	1.83	-	32.76	5.66	30.76
PK	7.37124G	50.31	74.00	-23.69	38.86	3	Horizontal	318	2.41	-	36.60	6.81	31.96
AV	7.3758G	37.44	54.00	-16.56	25.99	3	Horizontal	318	2.41	-	36.60	6.81	31.96

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2412MHz\_TX

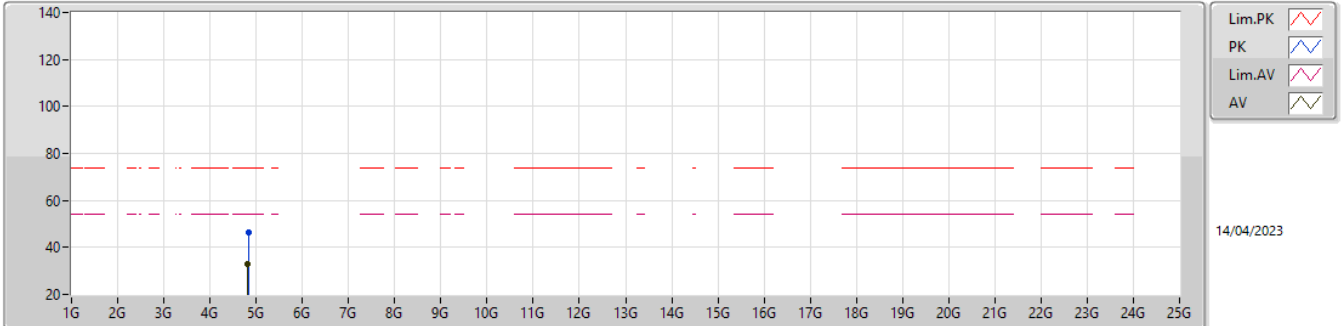


EUT\_Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	67.58	74.00	-6.42	37.04	3	Vertical	29	1.03	-	27.34	3.20	-
AV	2.39G	52.66	54.00	-1.34	22.12	3	Vertical	29	1.03	-	27.34	3.20	-
PK	2.413G	123.50	Inf	-Inf	92.84	3	Vertical	29	1.03	-	27.45	3.21	-
AV	2.415G	109.56	Inf	-Inf	78.89	3	Vertical	29	1.03	-	27.46	3.21	-

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2412MHz\_TX

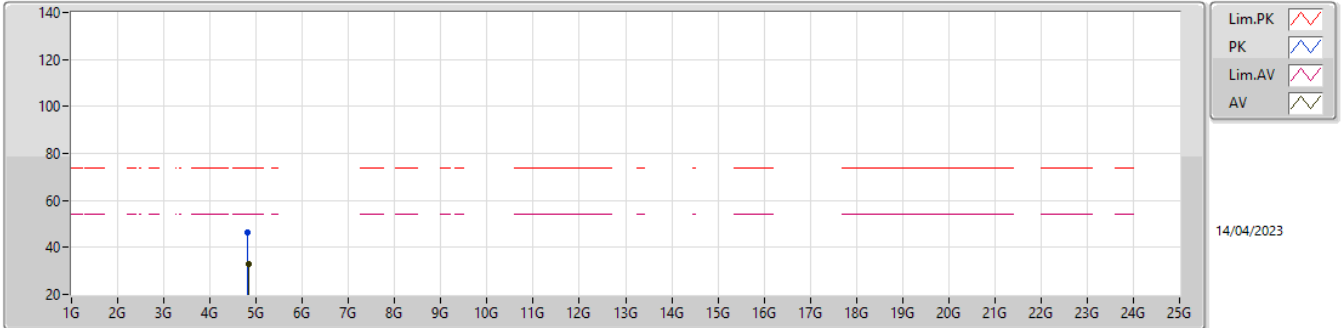


EUT Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82718G	46.50	74.00	-27.50	39.28	3	Vertical	188	2.88	-	32.41	5.61	30.80
AV	4.8243G	32.73	54.00	-21.27	25.52	3	Vertical	188	2.88	-	32.40	5.61	30.80

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2412MHz\_TX



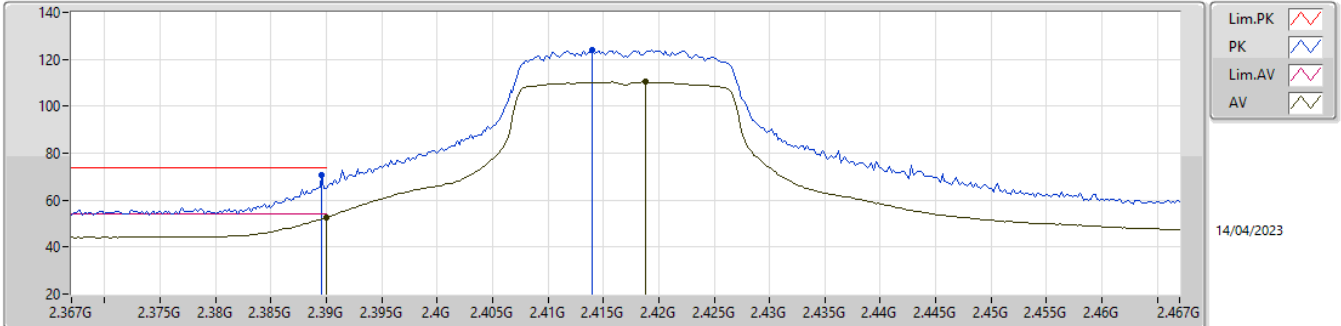
EUT Y\_1TX(Port1)  
 Setting 25.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82286G	46.22	74.00	-27.78	39.02	3	Horizontal	172	1.39	-	32.39	5.61	30.80
AV	4.83018G	32.72	54.00	-21.28	25.48	3	Horizontal	172	1.39	-	32.42	5.62	30.80



2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2417MHz\_TX

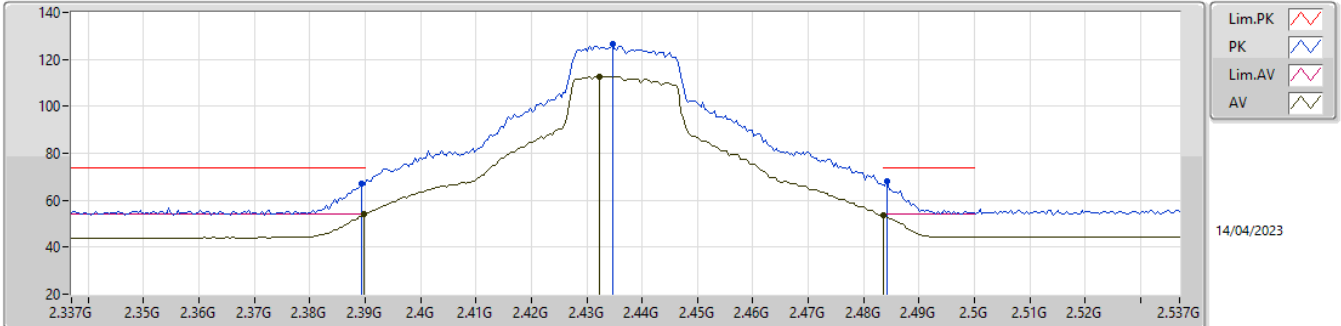


EUT Y\_1TX(Port1)  
Setting 26.5  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3896G	70.57	74.00	-3.43	40.04	3	Vertical	32	1.03	-	27.34	3.19	-
AV	2.39G	52.49	54.00	-1.51	21.95	3	Vertical	32	1.03	-	27.34	3.20	-
PK	2.414G	123.89	Inf	-Inf	93.22	3	Vertical	32	1.03	-	27.46	3.21	-
AV	2.4188G	110.34	Inf	-Inf	79.65	3	Vertical	32	1.03	-	27.48	3.21	-

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2437MHz\_TX

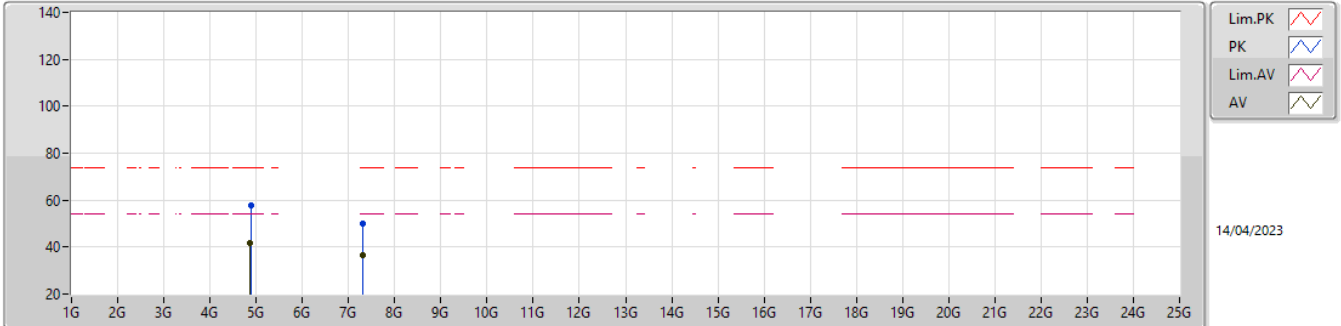


EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	67.02	74.00	-6.98	36.49	3	Vertical	246	1.37	-	27.34	3.19	-
AV	2.3898G	53.93	54.00	-0.07	23.40	3	Vertical	246	1.37	-	27.34	3.19	-
PK	2.4346G	126.41	Inf	-Inf	95.65	3	Vertical	246	1.37	-	27.54	3.22	-
AV	2.4322G	112.75	Inf	-Inf	82.00	3	Vertical	246	1.37	-	27.53	3.22	-
PK	2.4842G	68.09	74.00	-5.91	37.04	3	Vertical	246	1.37	-	27.81	3.24	-
AV	2.4835G	53.66	54.00	-0.34	22.62	3	Vertical	246	1.37	-	27.80	3.24	-

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2437MHz\_TX

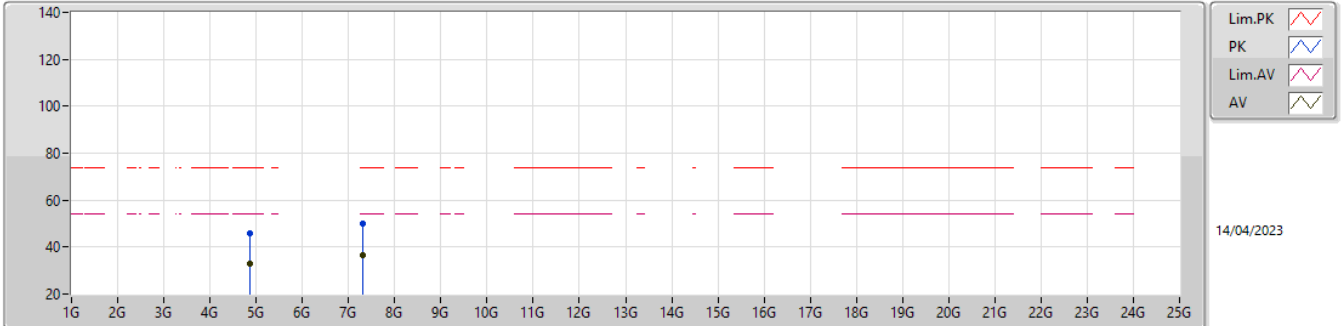


EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87784G	57.55	74.00	-16.45	50.13	3	Vertical	120	1.80	-	32.56	5.64	30.78
AV	4.87382G	41.86	54.00	-12.14	34.45	3	Vertical	120	1.80	-	32.55	5.64	30.78
PK	7.3194G	50.15	74.00	-23.85	38.52	3	Vertical	276	2.41	-	36.72	6.84	31.93
AV	7.31406G	36.70	54.00	-17.30	25.04	3	Vertical	276	2.41	-	36.74	6.84	31.92

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2437MHz\_TX

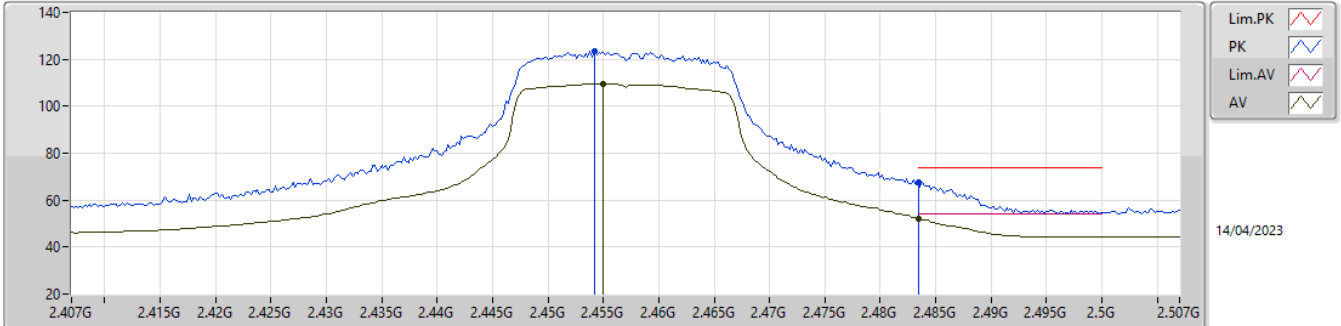


EUT\_Y\_1TX(Port1)  
 Setting 28.5  
 02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.86734G	45.69	74.00	-28.31	38.32	3	Horizontal	18	2.16	-	32.53	5.63	30.79
AV	4.87472G	32.97	54.00	-21.03	25.56	3	Horizontal	18	2.16	-	32.55	5.64	30.78
PK	7.31556G	50.25	74.00	-23.75	38.59	3	Horizontal	323	2.03	-	36.74	6.84	31.92
AV	7.31886G	36.67	54.00	-17.33	25.03	3	Horizontal	323	2.03	-	36.72	6.84	31.92

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2457MHz\_TX

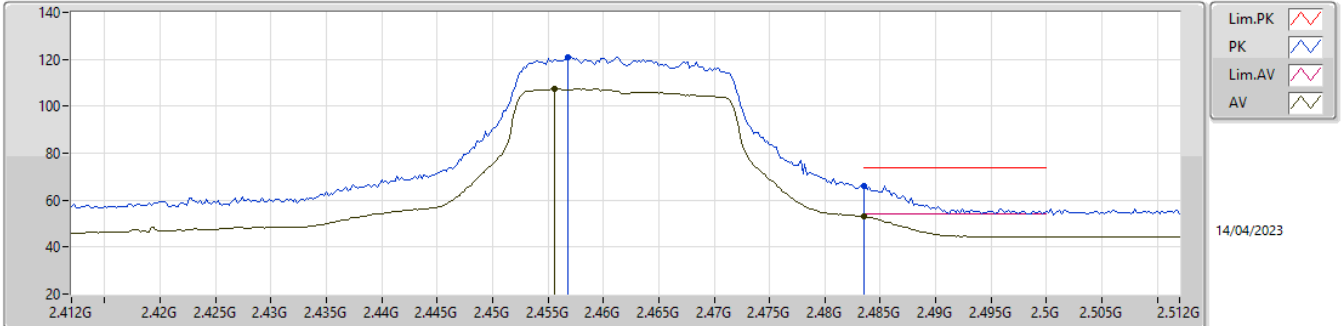


EUT\_Y\_1TX(Port1)  
Setting 25  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4542G	123.57	Inf	-Inf	92.71	3	Vertical	340	1.96	-	27.63	3.23	-
AV	2.455G	109.48	Inf	-Inf	78.62	3	Vertical	340	1.96	-	27.63	3.23	-
PK	2.4835G	67.69	74.00	-6.31	36.65	3	Vertical	340	1.96	-	27.80	3.24	-
AV	2.4835G	52.15	54.00	-1.85	21.11	3	Vertical	340	1.96	-	27.80	3.24	-

2.4-2.4835GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

2462MHz\_TX



EUT\_Y\_1TX(Port1)  
Setting 23  
02-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4568G	121.12	Inf	-Inf	90.25	3	Vertical	342	1.80	-	27.64	3.23	-
AV	2.4556G	107.29	Inf	-Inf	76.43	3	Vertical	342	1.80	-	27.63	3.23	-
PK	2.4835G	66.13	74.00	-7.87	35.09	3	Vertical	342	1.80	-	27.80	3.24	-
AV	2.4835G	52.94	54.00	-1.06	21.90	3	Vertical	342	1.80	-	27.80	3.24	-