

RF - TEST REPORT

Report Number : **6895025113301** Date of Issue: **2025-07-28**

Model : **ATOM Drone: DSDR04C, DSDR04E, DSDR04F**
ATOM Remote Controller: DSRC02A, DSRC02B, DSRC02C

Product : **ATOM**

Applicant : **Shenzhen Potensic Intelligent Co., Ltd.**

Address : **7/F, Building A5, Nanshan Intelligent Park, Nanshan District,**
518000 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

Manufacturer : **Shenzhen Potensic Intelligent Co., Ltd.**

Address : **7/F, Building A5, Nanshan Intelligent Park, Nanshan District,**
518000 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

Test Result : ☒ **Positive** ☐ Negative

Total pages including Appendices : **115**

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1 Report Version

Revision	Release Date	History/Memo.
---	July 28, 2025	Initial Release

2 General Information

2.1 Notes

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This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

Prepared By
Project Engineer

2025-07-28
Date

Sanvin Zheng
Name


Signature

Approved by
Project Manager

2025-07-28
Date

John Zhi
Name




Signature

2.2 Testing Laboratory

Test Site 1:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch

Address: Building 12 & 13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China

Phone: +86-755-8828 6998

Fax: +86-755-8828 5299

Test Site 2:

Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Phone: +86 755 2916 4260

Fax: +86 755 2523 4088

2.3 Details of Applicant

Client: Shenzhen Potensic Intelligent Co., Ltd.

Address: 7/F, Building A5, Nanshan Intelligent Park, Nanshan District, 518000
Shenzhen, PEOPLE'S REPUBLIC OF CHINA

Product Description: ATOM

Submitted Model No.: ATOM Drone: DSDR04C, DSDR04E, DSDR04F
ATOM Remote Controller: DSRC02A, DSRC02B, DSRC02C

2.4 Application Details

Date of receipt of order: 2025-06-06

Date of receipt of test item: 2025-06-06

Date of test: 2025-06-06 –2025-07-09

2.5 Applied Standard

Test Standards	
EN 300 328 V2.2.2 (2019-07)	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonised Standard for access to radio spectrum

For ATOM Drone: DSDR04C, DSDR04E, DSDR04F

EN 62311:2008 EN IEC 62311:2020	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)
EN 50665:2017	Generic standard for assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)

2.6 Test Summary

Summary of results (Requirement for non-FHSS equipment)

Conformance requirement according to ETSI EN 300 328 V2.2.2 (2019-07)		Result	Test Site
Essential parameter	Corresponding technical requirements		
Transmitter requirements	4.3.2.2 RF output power	PASS	Site 2
	4.3.2.3 Power Spectral Density	PASS	Site 2
	4.3.2.4 Duty Cycle, Tx-sequence, Tx-gap*	N/A	---
	4.3.2.5 Medium Utilisation (MU) factor*	N/A	---
	4.3.2.6 Adaptivity	PASS	Site 2
	4.3.2.7 Occupied Channel Bandwidth	PASS	Site 2
	4.3.2.8 Transmitter unwanted emissions in the out-of-band domain	PASS	Site 2
	4.3.2.9 Transmitter unwanted emissions in the spurious domain	PASS	Site 2
Receiver requirements	4.3.2.10 Receiver spurious emissions	PASS	Site 2
	4.3.2.11 Receiver Blocking	PASS	Site 2
	4.3.2.12 Geo-location capability**	N/A	---

NOTE1: Measurement taken is within the measurement uncertainty of measurement system.

NOTE2: "*" This requirement does not apply to adaptive equipment unless operating in a non-adaptive mode.

NOTE3: "***" This requirement only applies to equipment with geo-location capability.

3 Equipment Specification

3.1 General Description

The EUT is a Drone & Remote Controller, which supports 2.4GHz Wi-Fi & GNSS functions.

Only 2.4G Wi-Fi included in this report.

3.2 EUT Identity

NOTE: Unless otherwise noted in the report, the functional boards installed in the units shall be selected from the below list but not means all the functional boards listed below shall be installed in one unit.

3.2.1 Technical Data

EUT Description	
Product Name	ATOM
Model Numbers	ATOM Drone: DSDR04C, DSDR04E, DSDR04F ATOM Remote Controller: DSRC02A, DSRC02B, DSRC02C
Model Differences	All the series models are the same as the test model except for the model names. After evaluation, the models 'DSDR04C' and 'DSRC02A' were selected for the main test.
Working Voltage	Drone: 7.7VDC supplied by rechargeable Li-ion battery or 5VDC supplied by adapter Remote Control: 3.7VDC supplied by rechargeable Li-ion battery or 5VDC supplied by adapter
TX Frequency	2412-2472MHz for 802.11b/g/n20
RX Frequency	2412-2472MHz for 802.11b/g/n20
S/N	N/A
EUT Accessory	
Adapter	Manufacture: Dong Guan GangQi Electronic Co., Ltd. Model: GQ48-120500-AX Input: 100-240VAC, 50/60Hz, 1.5A Max Output: 12.0VDC, 5.0A, 60W
Charging Hub	Model: DSBC02A Input: 12VDC, 5A, 60W Output: 2.2A*3 to batteries USB Output: 5VDC, 1A
Power Cable	Length: 135cm, Unshielded

NOTE: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

3.3 Cables Used during Test

Cable	Length	Shielded/unshielded	With / without ferrite
---	---	---	---

3.4 Associated Equipment Used during Test

Description	Manufacturer	Model No.	S/N
Notebook	REDMI	RMA2201-AG	N/A
Control Box	zave	FT232RL	N/A
Router	Redmi	AC2100	N/A

4 Product Information

4.1 Type of Tested Equipment

☐ Bluetooth	☒ IEEE 802.11	☐ IEEE 802.15.4	☐ Other: _____
☐ FHSS equipment	☒ non-FHSS equipment	☐ Other	
☒ Stand-alone	☐ Plug-in radio	☐ Combined equipment	☐ Other: _____

4.2 The Operational Environment

Extreme Temperature Range over which equipment is to be type tested		
[]	Outdoor and indoor usage	-20°C to +55°C
[]	Indoor usage only	0°C to +35°C
[✓]	Other	[0°C to +40°C declared by manufacturer]

Power source description			
[]	AC mains voltage		
[✓]	DC voltage Nominal	3.7VDC for Remote 7.7VDC for Drone	
Type of DC			
Internal Power Supply	External AC/DC Adapter	Battery	Other
[]	[]	[✓]	[]

4.3 Type of Adaptivity Used

☐ Non-adaptive	☒ Adaptive	☒ LBT	☐ Non LBT
	☐ The system can operate in more than one adaptive mode	☐ System can operate both adaptive & non adaptive mode	
	☐ Frame Based Equipment	☒ Load Based Equipment	
		CCA time implemented [us]	>20

4.4 Antenna Assemblies Profiles

Antenna Type	☒ Integrated	☐ External	
Temporary RF connector	☒ Provided	☐ Not- provided	
☐ SISO - Single antenna equipment	Antenna gain [dBi] =		For Remote: 2dBi for ANT A&B For Drone: 2dBi for ANT A&B
☒ MIMO - Multiple antenna without beam forming	Number of transmit antennas=		2
☐ MIMO/B - Multiple antenna with beam forming	Beam forming gain [dB] Y =		--
Number of receive chains	2	☐ Symmetrical power distribution	
Number of transceive chains	2	☐ Asymmetrical power distribution	
☐ Tx power control (TPC) (antenna connector with multiple power setting)	Nr. of different power level		

4.5 Operating Frequency Range, Modulation and Throughput

Transmitter / Receiver Frequency Range (Tx/Rx)						
☒	Range 1 : from :	2400 MHz	To	2483.5 MHz		
WLAN						
IEEE 802.11 WLAN Mode Supported	☒ IEEE 802.11b	☒ IEEE 802.11g	☒ HT20 802.11n	☐ HT40 802.11n	☐ HE20 802.11ax	☐ HE40 802.11ax
Modulation type	CCK DSSS	OFDM	OFDM	OFDM	OFDMA	OFDMA
Channel Bandwidth [MHz]	20	20	20	40	20	40
Data Rate / Spatial Stream	Single stream		Up to 2 spatial stream			
IEEE 802.11b	1, 2, 5.5, 11 Mbps					
IEEE 802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps					
IEEE 802.11n-HT20	MCS0 to MCS15 (0-15=> 6.5 – 144.4 Mbps)					

4.6 Additional Information

The transmitter can operate only:

- ☒ Modulated
☐ Un-modulated

ITU Class of emissions 1. 22

Duty Cycle: The transmitter is intended for

- ☐ Continuous duty
☐ Intermittent duty
☒ Continuous operation possible for testing purposes

Receiver categories

- [☒] Receiver category 1
[☐] Receiver category 2
[☐] Receiver category 3

About the EUT:

- ☒ The equipment submitted are representative production models.
☐ If not, the equipment submitted are pre-production models.
☐ If preproduction equipment are submitted, the final production equipment will be identical in all respects with the equipment tested.
☐ If not, supply full details: _____

5 General Test Conditions / Configurations

5.1 Test Sample

- ☐ The report applies to single model number.
- ☒ The report applies to several models. The practical measurements are performed using the model number of DSDR04C, DSRC02A.

5.2 Test Modes

NOTE: Typical working modes for each IEEE 802.11 mode are selected to perform tests through pre-scan all kind of modulation and all kind of rates.

Test Mode	Test Modes Description
11b_SISO	IEEE 802.11b with data rate of 1 Mbps (TX and RX).
11g_SISO	IEEE 802.11g with data rate of 6 Mbps (TX and RX).
11n_20M_SISO	IEEE 802.11n with data rate of MCS0 (TX and RX)
11n_20M_MIMO	IEEE 802.11n with data rate of MCS0 and bandwidth of 20 MHz, using MIMO mode (TX and RX).

5.3 Frequencies under Test

Test Mode	RF Channel		
	Lowest/Bottom (B)	Middle (M)	Highest/Top (T)
11b, 11g, 11n_20M	CH01 / 2412 MHz	CH07 / 2442 MHz	CH13 / 2472 MHz

5.4 Test Setups

NOTE: See Appendix I for practical Test Setup Photos.

5.4.1 General Test Setup Configurations

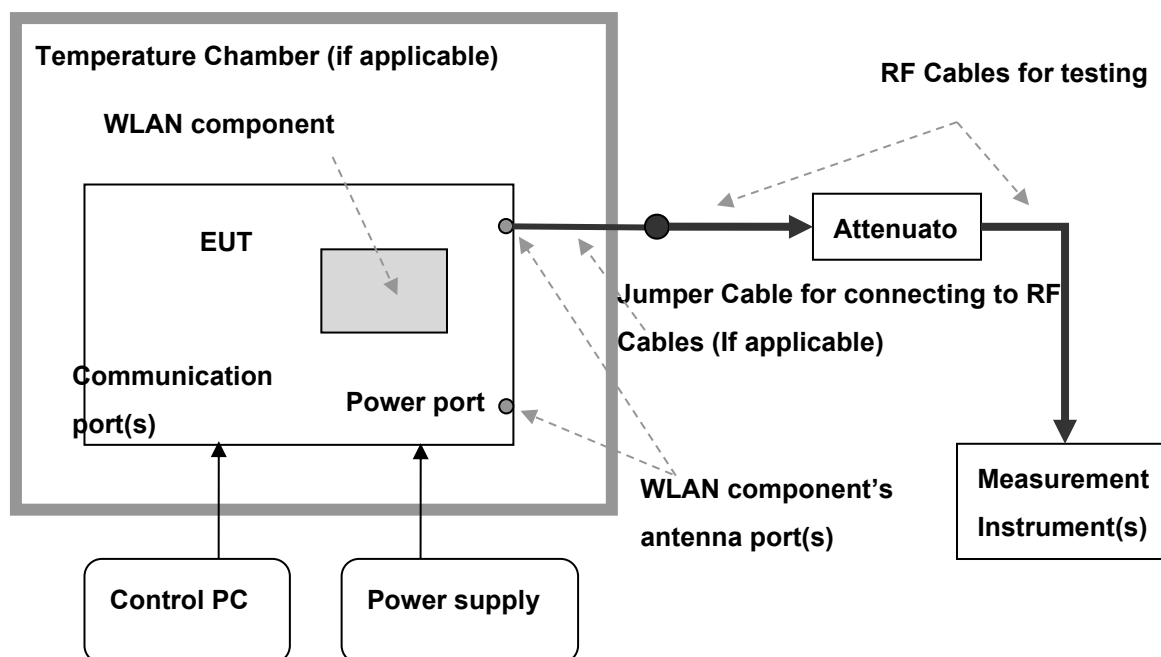
Configuration	Description
Test Antenna Ports	Until declared, all Transmitter tests are performed at all antenna ports of the EUT; all Receiver tests are performed at all antenna ports.
Multiple RF Sources	Other non-WLAN RF source(s) (if applicable) of the EUT are disabled or shutdown during measurements for WLAN RF source, which is considered in the present report.

5.4.2 Test Setup for Conducted Measurements

The EUT (WLAN unit) is placed in a Temperature Chamber (if applicable), and is powered by a Power Supplier. An external Control PC associated with special software(s) is used to configure the EUT (WLAN unit) with the purpose of fulfilling the test requirements by EN standard.

The antenna port(s) of the EUT (WLAN unit) are connected to the Measurement Instrument(s) through an appropriate Attenuator. For the antenna port(s) which are not tested, appropriate 50 Ohm terminations are used.

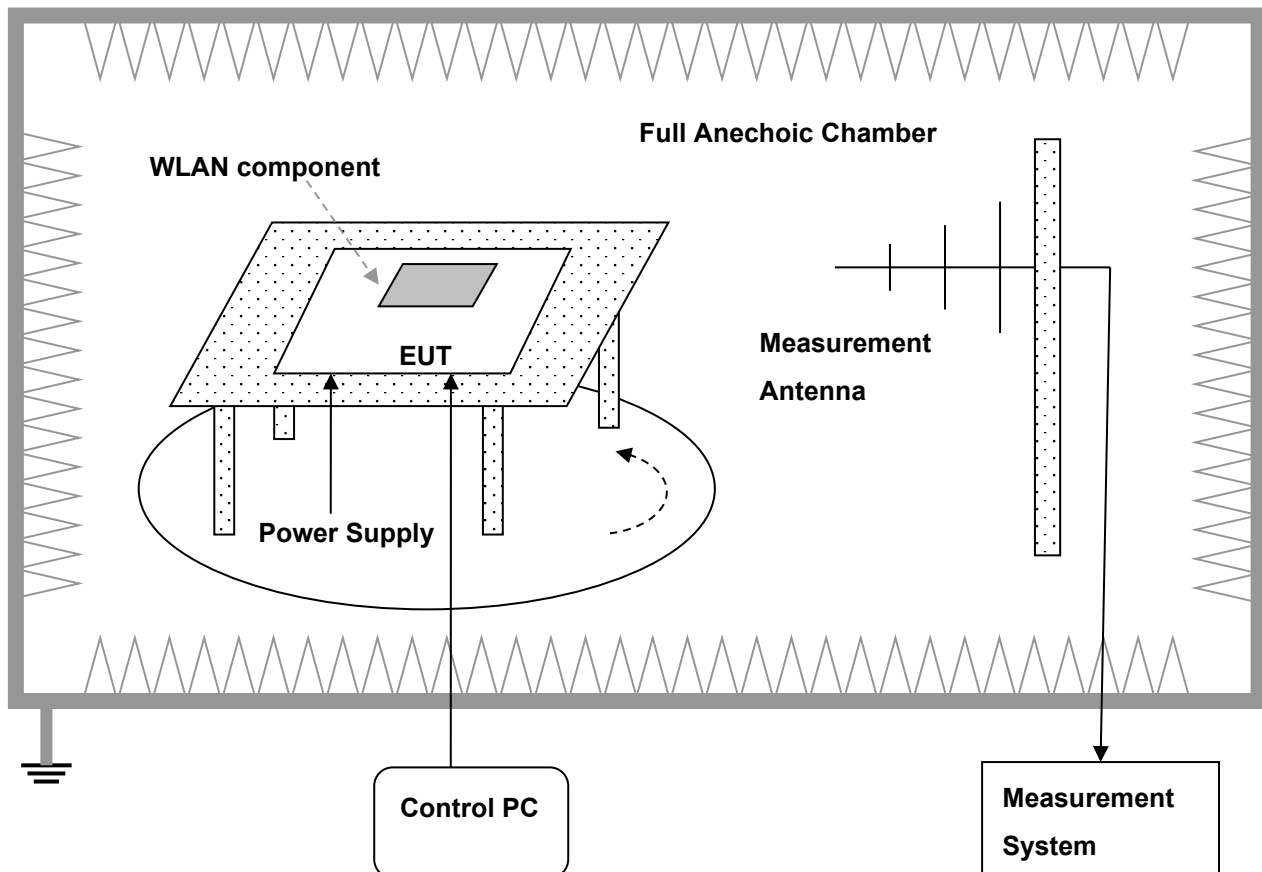
In addition, different setting options for Measurement Instrument(s) for conducted measurement methods can be used for some test items according to the EN standard. The selected option is specified in test conditions for each test case.



5.4.3 Test Setup for Radiated Measurements

The EUT (WLAN unit) is placed in a Fully Anechoic Chamber simulating the free-space conditions. The whole device is positioned on a non-conducting support and is powered by a Power Supplier. An external Control PC associated with special software(s) is used to configure the EUT (WLAN unit) with the purpose of fulfilling the test requirements by EN standards.

An appropriate Measurement Antenna (according to different test frequency ranges) with the distance of 3 m to the whole device is used to obtain maximum response from the whole device, the EUT shall be rotated through 360° in a plane until a higher maximum signal is received. The measurement is performed with the Measurement Antenna in both horizontal and vertical polarization planes.



5.5 Test Conditions

Test Case	Test Conditions	
	Configuration	Description
Equivalent Isotropic Radiated Power (EIRP)	Measurement Method	Conducted
	Power Level	Default
	Test Conditions	NTNV, LTNV, HTNV
	Smart Antenna Systems	ANT A, ANT B
	Test Modes	11B_SISO, 11G_SISO, 11N20M_SISO, 11N20M_MIMO
	Test Frequency	L, M, H
Maximum EIRP Spectral Density	Measurement Method	Conducted
	Power Level	Default
	Test Conditions	NTNV
	Smart Antenna Systems	ANT A, ANT B
	Test Modes	11B_SISO, 11G_SISO, 11N20M_SISO, 11N20M_MIMO
	TX ON time (>10μs)	Fulfilled
Adaptivity	Measurement Method	Conducted
	Power Level	Highest, Lowest (if unable)
	Test Conditions	NTNV
	Smart Antenna Systems	ANT A, ANT B
	Test Modes	11B_SISO, 11G_SISO, 11N20M_SISO, 11N20M_MIMO
	Transmitter Mode	Operating
Occupied Channel Bandwidth	Measurement Method	Conducted
	Test Conditions	NTNV
	Smart Antenna Systems	ANT A, ANT B
	Test Modes	11B_SISO, 11G_SISO, 11N20M_SISO
	Transmitter Mode	Operating
	Test Frequency	L, H
Transmitter unwanted emissions in the out-of-band domain	Measurement Method	Conducted
	Test Conditions	NTNV
	Smart Antenna Systems	ANT A, ANT B
	Test Modes	11B_SISO, 11G_SISO, 11N20M_SISO
	Test Frequency	L, H
Transmitter unwanted emissions in the spurious domain	Measurement Method	Radiated
	Test Conditions	NTNV
	Smart Antenna Systems	ANT A, ANT B
	Test Modes	11B_SISO, 11G_SISO, 11N20M_SISO, 11N20M_MIMO
	Transmitter Mode	Operating
	Test Frequency	L, H
Receiver Spurious	Measurement Method	Radiated
	Test Conditions	NTNV

Test Case	Test Conditions	
	Configuration	Description
Emissions	Smart Antenna Systems	ANT A, ANT B
	Test Modes	11B_SISO, 11G_SISO, 11N20M_SISO, 11N20M_MIMO
	Receiver Mode	Continues Receiving
	Test Frequency	L, H
Receiver Blocking	Measurement Method	Conducted
	Power Level	Default
	Test Conditions	NTNV
	Smart Antenna Systems	ANT A, ANT B
	Test Mode	11B_SISO
	Transmitter Mode	Operating
	Test Frequency	L, H

6 Test Results

No.	Test Item	Test Result
1	4.3.2.2 RF output power	Appendix A
2	4.3.2.3 Power Spectral Density	Appendix B
3	4.3.2.4 Duty Cycle, Tx-sequence, Tx-gap	N/A
4	4.3.2.5 Medium Utilisation (MU) factor	N/A
5	4.3.2.6 Adaptivity	Appendix C
6	4.3.2.7 Occupied Channel Bandwidth	Appendix D
7	4.3.2.8 Transmitter unwanted emissions in the out-of-band domain	Appendix E
8	4.3.2.9 Transmitter unwanted emissions in the spurious domain	Appendix F
9	4.3.2.10 Receiver spurious emissions	Appendix G
10	4.3.2.11 Receiver Blocking	Appendix H

7 Test Requirements

7.1 RF Output Power

The equivalent isotropic radiated power (as EIRP) shall be equal to or less than -10 dBW (= 20 dBm). This limit shall apply for any combination of power level and intended antenna assembly.

7.2 Maximum EIRP Spectral Density

For wide band modulations other than FHSS (e.g. DSSS, OFDM, etc.), the maximum e.i.r.p. spectral density (as PD) is limited to 10 mW per MHz (= 10 dBm/MHz).

7.3 Adaptivity

The equipment used LBT based Detect and Avoid mechanism shall comply with the requirements defined in clause 4.3.2.6.2.2.

LBT based Detect and Avoid mechanism: This mechanism defines 2 types of adaptive equipment using wide band modulations and that uses an LBT based Detect and Avoid mechanism: Frame Based Equipment and Load Based Equipment. The kind of the equipment shall comply with the requirements defined in clause 4.3.2.6.3.2

Short Control Signalling Transmissions: The transmissions used by adaptive equipment to send control signals (e.g. ACK/NACK signals, etc.) without sensing the operating channel for the presence of other signals. Adaptive equipment may or may not have Short Control Signalling Transmissions. If implemented, the limit of Short Control Signalling Transmissions of adaptive equipment using wide band modulations shall have a maximum duty cycle of 10 % within an observation period of 50 ms.

7.4 Occupied Channel Bandwidth

The Occupied Channel Bandwidth shall fall completely within the band given in table 1.

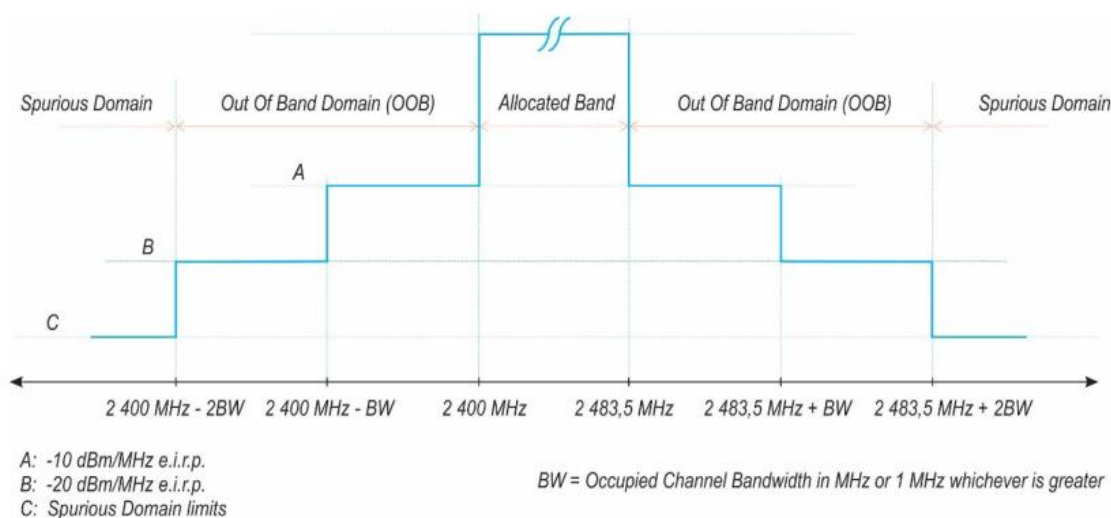
In addition, for non-adaptive equipment using wide band modulations other than FHSS and with e.i.r.p. greater than 10 dBm, the occupied channel bandwidth shall be less than 20 MHz.

Table 1: Service frequency bands

	Service frequency bands
Transmit	2 400 MHz to 2 483,5 MHz
Receive	2 400 MHz to 2 483,5 MHz

7.5 Transmitter Unwanted Emissions in the out-of-band domain

The transmitter unwanted emissions in the out-of-band domain but outside the allocated band, shall not exceed the values provided by the mask in below figure.



NOTE: Within the 2400 MHz to 2483.5 MHz band, the Out-of-band emissions are fulfilled by compliance with the Occupied Channel Bandwidth requirement in clause 4.3.2.7.

7.6 Transmitter Spurious Emissions

The spurious emissions of the transmitter shall not exceed the values in following tables in the indicated bands.

Frequency range	Maximum Power e.r.p.(≤1G) e.i.r.p(>1G)	Measurement Bandwidth
30MHz to 47MHz	-36dBm	100kHz
47MHz-74MHz	-54dBm	100kHz
74MHz-87.5MHz	-36dBm	100kHz
87.5MHZ-118MHz	-54dBm	100kHz
118MHz-174MHz	-36dBm	100kHz
174MHz-230MHz	-54dBm	100kHz
230MHz-470MHz	-36dBm	100kHz
470MHz-694MHz	-54dBm	100kHz
694MHz-1GHz	-36dBm	100kHz
1GHz-12.75GHz	-30dBm	1MHz

NOTE: The above limit values apply to narrowband emissions, e.g. as caused by local oscillator leakage. The measurement bandwidth for such emissions may be as small as necessary to achieve a reliable measurement result.

7.7 Receiver Spurious Emissions

The spurious emissions of the receiver shall not exceed the values in following tables in the indicated bands.

Frequency range	Maximum power, e.r.p	Measurement Bandwidth
30MHz to 1GHz	-57dBm	100kHz
1GHz to 12.75GHz	-47dBm	1MHz

Note: The above limit values apply to narrowband emissions, e.g. as caused by local oscillator leakage. The measurement bandwidth for such emissions may be as small as necessary to achieve a reliable measurement result.

7.8 Receiver Blocking

While maintaining the minimum performance criteria as defined in clause 4.3.2.11.3, the blocking levels at specified frequency offsets shall be equal to or greater than the limits defined for the applicable receiver category provided as below.

Receiver Blocking parameters for Receiver Category 1 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 4)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 4)	Type of blocking signal
(-133 dBm + 10 × log ₁₀ (OCBW)) or -68 dBm whichever is less (see note 2)	2 380 2 504	-34	CW
(-139 dBm + 10 × log ₁₀ (OCBW)) or -74 dBm whichever is less (see note 3)	2 300 2 330 2 360 2 524 2 584 2 674		

NOTE 1: OCBW is in Hz.

NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 26 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 3: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 20 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.

NOTE 4: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.

Receiver Blocking parameters receiver Category 2 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking signal
(-139 dBm + 10 × log ₁₀ (OCBW) + 10 dB) or (-74 dBm + 10 dB) whichever is less (see note 2)	2 380 2 504 2 300 2 584	-34	CW
NOTE 1: OCBW is in Hz. NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{min} + 26$ dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal. NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.			

Receiver Blocking parameters receiver Category 3 equipment

Wanted signal mean power from companion device (dBm) (see notes 1 and 3)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note 3)	Type of blocking signal
(-139 dBm + 10 × log ₁₀ (OCBW) + 20 dB) or (-74 dBm + 20 dB) whichever is less (see note 2)	2 380 2 504 2 300 2 584	-34	CW
NOTE 1: OCBW is in Hz. NOTE 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to $P_{min} + 30$ dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal. NOTE 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned as recorded in clause 5.4.3.2.2.			

8 Main Test Instruments

● RF Conducted Test System							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
☒	AGC-ER-E041	Signal analyzer	Aglient	N9020A	MY52090123	2025-05-16	2026-05-15
☒	AGC-ER-E062	Power Sensor	Agilent	U2021XA	MY54110007	2025-01-14	2026-01-13
☒	AGC-ER-A001	6dB Attenuator	SAIGE	SMA-JK	N/A	2025-01-30	2026-01-29
☒	AGC-ER-E079	Wireless Connectivity Tester	R&S	CMW270	101933	2025-05-08	2026-05-07
☒	AGC-ER-E075	Small Environmental Tester	SH-242	ESPEC	93008290	2024-07-24	2026-07-23
☒	AGC-ER-E059	Signal Generator	Agilent	N5182B	MY53050647	2025-01-14	2026-01-13
☒	AGC-ER-E037	Signal Generator	Agilent	N5182A	MY50140530	2025-05-08	2026-05-07
☒	--	RF Connection Cable	N/A	1#	N/A	Each time	N/A

● Radiated Spurious Emission							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
☒	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	100096	2025-01-14	2026-01-13
☒	AGC-EM-E061	Spectrum Analyzer	Agilent	N9010A	MY53470504	2025-05-08	2026-05-07
☒	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2025-03-14	2027-03-13
☒	AGC-EM-E005	Wideband Antenna	SCHWARZBECK	VULB9168	VULB9168-494	2025-01-14	2027-01-13
☒	AGC-EM-E029	Broadband Ridged Horn Antenna	ETS	3117	00034609	2025-03-27	2026-03-26
☒	AGC-EM-E102	Broadband Ridged Horn Antenna	ETS	3117	00154520	2025-05-18	2026-05-17
☒	AGC-EM-E146	Pre-amplifier	ETS	3117-PA	00246148	2024-07-24	2026-07-23
☒	AGC-EM-A119	2.4G Filter	SongYi	N/A	N/A	2025-05-16	2026-05-15
☒	AGC-EM-A138	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2025-05-16	2027-05-15

● Test Software					
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Version Information
☒	AGC-EM-S011	RSE Test System	Tonscend	TS+-Ver2.1(JS36-RSE)	4.0.0.0
☒	AGC-ER-S012	BT/WIFI Test System	Tonscend	JS1120-2	2.6

Remark: N/A means Non-Calibration required.

9 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Test Item	Measurement Uncertainty
Uncertainty of Radio Frequency	$U_c = \pm 1 \times 10^{-7}$
Uncertainty of Total RF power, Conducted	$U_c = \pm 0.8 \text{ dB}$
Uncertainty of RF Power Density, Conducted	$U_c = \pm 2.6 \text{ dB}$
Uncertainty of Occupied Channel Bandwidth	$U_c = \pm 2 \%$
Uncertainty of spurious Emissions, Conducted	$U_c = \pm 2.7 \text{ dB}$
Uncertainty of Spurious Emissions, Radiated	$U_c = \pm 5.4 \text{ dB}$
Uncertainty of Dwell Time	$U_c = \pm 2 \%$
Uncertainty of Temperature	$U_c = 0.5^\circ \text{ C}$
Uncertainty of Humidity	$U_c = \pm 1 \%$
Uncertainty of DC and Low Frequency Voltages	$U_c = \pm 2 \%$

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2023, clause 4.3.3 and 4.3.4.

10 Appendix A: RF output power

NOTE: For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and then combined into a final result. The result is the calculated linear sum of each chain (as Ant sum).

For Drone (DSDR04C):

Test Result

Test Temperature	24.3°C	Relative Humidity	56 %
Test Engineer	Icey Haung	Testing Time	2025-06-28

Test Data of RF Output Power-ANT A

Test Mode	RF Output Power [dBm]			Limit [dBm]	Verdict
	NT	LT	HT		
11b_TX_2412_1Mbps	13.84	13.82	13.79	20	Pass
11b_TX_2442_1Mbps	14.28	14.24	14.23	20	Pass
11b_TX_2472_1Mbps	13.19	13.17	13.22	20	Pass
11g_TX_2412_6Mbps	11.20	11.05	10.89	20	Pass
11g_TX_2442_6Mbps	11.76	11.67	11.45	20	Pass
11g_TX_2472_6Mbps	7.74	7.79	7.60	20	Pass
11n20_TX_2412_MCS0	9.31	8.93	9.49	20	Pass
11n20_TX_2442_MCS0	9.96	9.55	9.80	20	Pass
11n20_TX_2472_MCS0	7.94	8.04	7.88	20	Pass

Test Data of RF Output Power-ANT B

Test Mode	RF Output Power [dBm]			Limit [dBm]	Verdict
	NT	LT	HT		
11b_TX_2412_1Mbps	13.03	13.01	13.00	20	Pass
11b_TX_2442_1Mbps	14.20	14.18	14.17	20	Pass
11b_TX_2472_1Mbps	13.54	13.52	13.58	20	Pass
11g_TX_2412_6Mbps	11.43	11.34	11.11	20	Pass
11g_TX_2442_6Mbps	12.64	12.41	12.66	20	Pass
11g_TX_2472_6Mbps	7.87	7.85	7.96	20	Pass
11n20_TX_2412_MCS0	9.33	9.07	9.09	20	Pass
11n20_TX_2442_MCS0	10.43	10.25	10.77	20	Pass
11n20_TX_2472_MCS0	8.57	8.51	8.34	20	Pass

Test Data of RF Output Power-MIMO

Test Mode	RF Output Power [dBm]			Limit [dBm]	Verdict
	NT	LT	HT		
11n20_TX_2412_MCS0	12.33	12.01	12.30	20	Pass
11n20_TX_2442_MCS0	13.21	12.92	13.32	20	Pass
11n20_TX_2472_MCS0	11.27	11.29	11.12	20	Pass

For Remote (DSRC02A):**Test Result**

Test Temperature	25.1°C	Relative Humidity	57 %
Test Engineer	Icey Haung	Testing Time	2025-06-30

Test Data of RF Output Power-ANT A

Test Mode	RF Output Power [dBm]			Limit [dBm]	Verdict
	NT	LT	HT		
11b_TX_2412_1Mbps	14.13	14.10	14.10	20	Pass
11b_TX_2442_1Mbps	13.13	13.12	13.14	20	Pass
11b_TX_2472_1Mbps	13.11	13.01	12.97	20	Pass
11g_TX_2412_6Mbps	7.66	7.84	7.74	20	Pass
11g_TX_2442_6Mbps	7.59	7.62	7.51	20	Pass
11g_TX_2472_6Mbps	7.72	7.92	7.74	20	Pass
11n20_TX_2412_MCS0	7.70	7.97	8.02	20	Pass
11n20_TX_2442_MCS0	7.58	7.72	7.64	20	Pass
11n20_TX_2472_MCS0	7.53	7.38	7.35	20	Pass

Test Data of RF Output Power-ANT B

Test Mode	RF Output Power [dBm]			Limit [dBm]	Verdict
	NT	LT	HT		
11b_TX_2412_1Mbps	15.51	15.53	15.51	20	Pass
11b_TX_2442_1Mbps	15.23	15.26	15.20	20	Pass
11b_TX_2472_1Mbps	10.28	10.30	10.29	20	Pass
11g_TX_2412_6Mbps	8.24	8.47	8.37	20	Pass
11g_TX_2442_6Mbps	7.79	7.95	7.97	20	Pass
11g_TX_2472_6Mbps	7.65	7.64	7.80	20	Pass
11n20_TX_2412_MCS0	8.27	8.24	8.36	20	Pass
11n20_TX_2442_MCS0	7.76	7.80	7.80	20	Pass
11n20_TX_2472_MCS0	6.41	6.52	6.48	20	Pass

Test Data of RF Output Power-MIMO

Test Mode	RF Output Power [dBm]			Limit [dBm]	Verdict
	NT	LT	HT		
11n20_TX_2412_MCS0	11.00	11.12	11.20	20	Pass
11n20_TX_2442_MCS0	10.68	10.77	10.73	20	Pass
11n20_TX_2472_MCS0	10.02	9.98	9.95	20	Pass

11 Appendix B: Maximum EIRP Spectral Density

NOTE: For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and then combined into a final result. The result is the calculated linear sum of each chain (as Ant sum).

For Drone (DSDR04C):

Test Result

Test Temperature	24.3°C	Relative Humidity	56 %
Test Engineer	Icey Haung	Testing Time	2025-06-28

Test Data of Power Spectral Density-ANT A

Test Mode	Power Spectral Density [dBm/MHz]	Limit [dBm/MHz]	Verdict
11b_TX_2412_1Mbps	5.09	10	Pass
11b_TX_2442_1Mbps	5.51	10	Pass
11b_TX_2472_1Mbps	4.49	10	Pass
11g_TX_2412_6Mbps	-0.38	10	Pass
11g_TX_2442_6Mbps	0.31	10	Pass
11g_TX_2472_6Mbps	-3.73	10	Pass
11n20_TX_2412_MCS0	-2.60	10	Pass
11n20_TX_2442_MCS0	-1.80	10	Pass
11n20_TX_2472_MCS0	-3.81	10	Pass

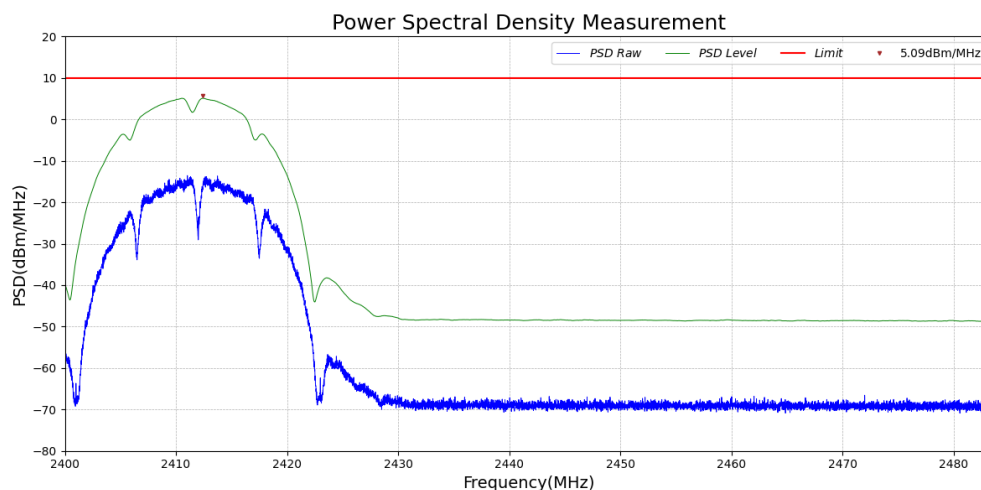
Test Data of Power Spectral Density-ANT B

Test Mode	Power Spectral Density [dBm/MHz]	Limit [dBm/MHz]	Verdict
11b_TX_2412_1Mbps	4.28	10	Pass
11b_TX_2442_1Mbps	5.52	10	Pass
11b_TX_2472_1Mbps	4.78	10	Pass
11g_TX_2412_6Mbps	-0.06	10	Pass
11g_TX_2442_6Mbps	1.25	10	Pass
11g_TX_2472_6Mbps	-3.74	10	Pass
11n20_TX_2412_MCS0	-2.37	10	Pass
11n20_TX_2442_MCS0	-1.23	10	Pass
11n20_TX_2472_MCS0	-3.21	10	Pass

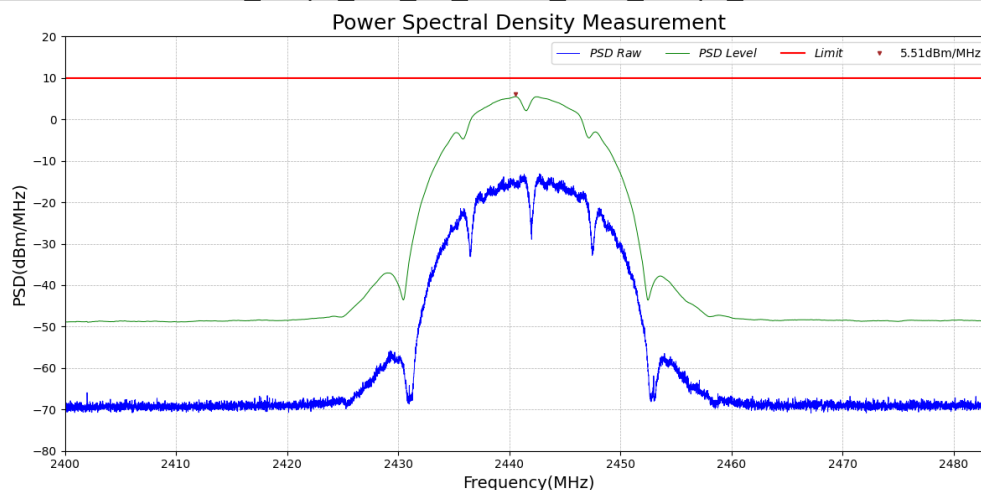
Test Data of Power Spectral Density-MIMO

Test Mode	Power Spectral Density [dBm/MHz]	Limit [dBm/MHz]	Verdict
11n20_TX_2412_MCS0	0.53	10	Pass
11n20_TX_2442_MCS0	1.50	10	Pass
11n20_TX_2472_MCS0	-0.49	10	Pass

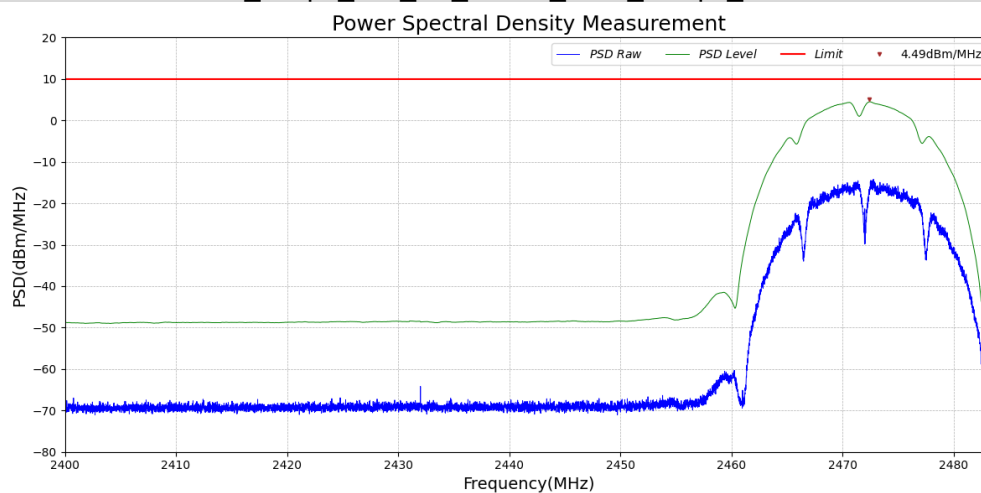
Test Graphs of Power Spectral Density



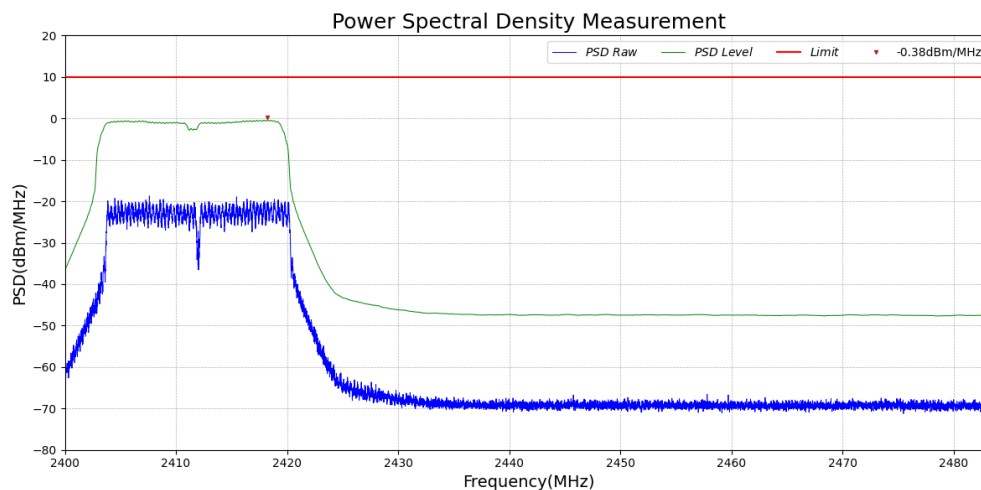
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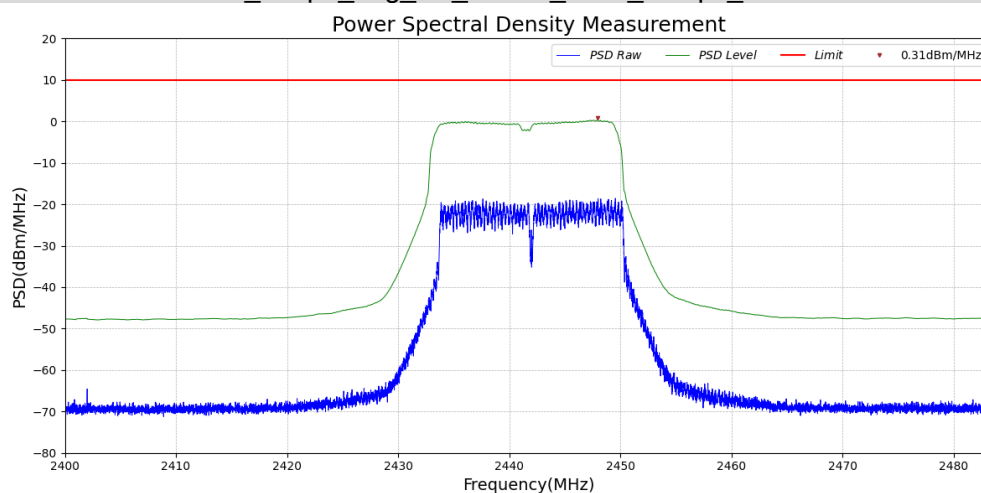
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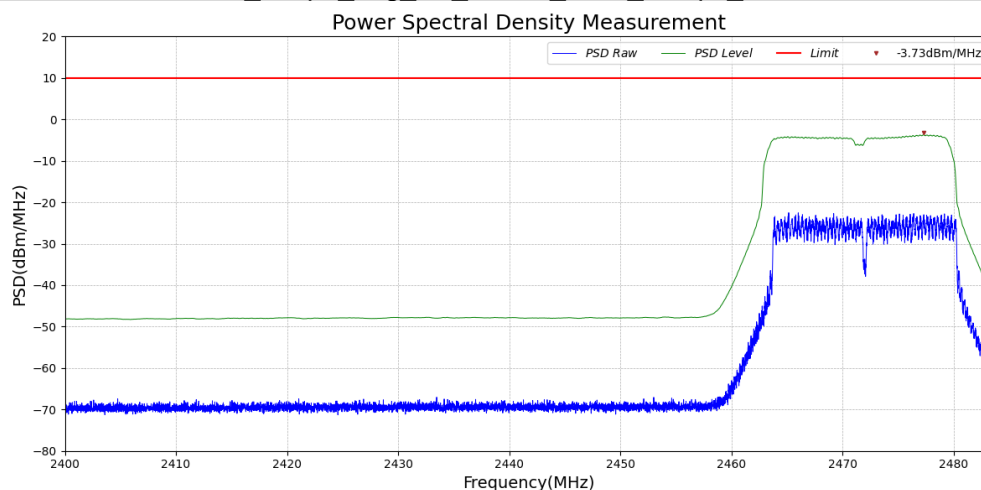
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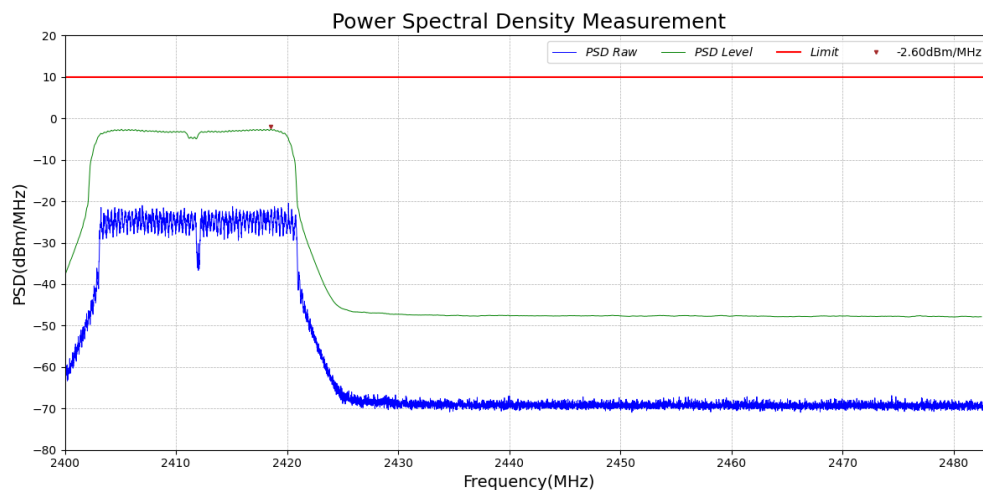
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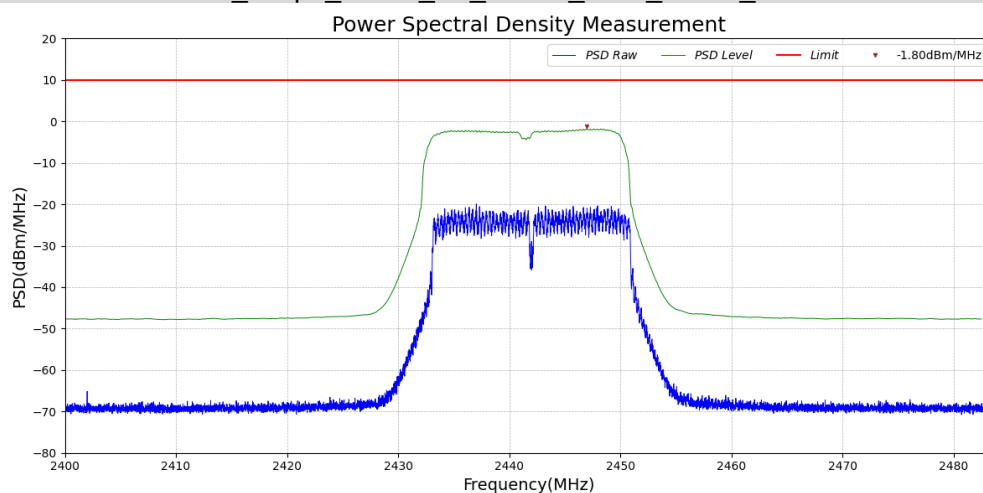
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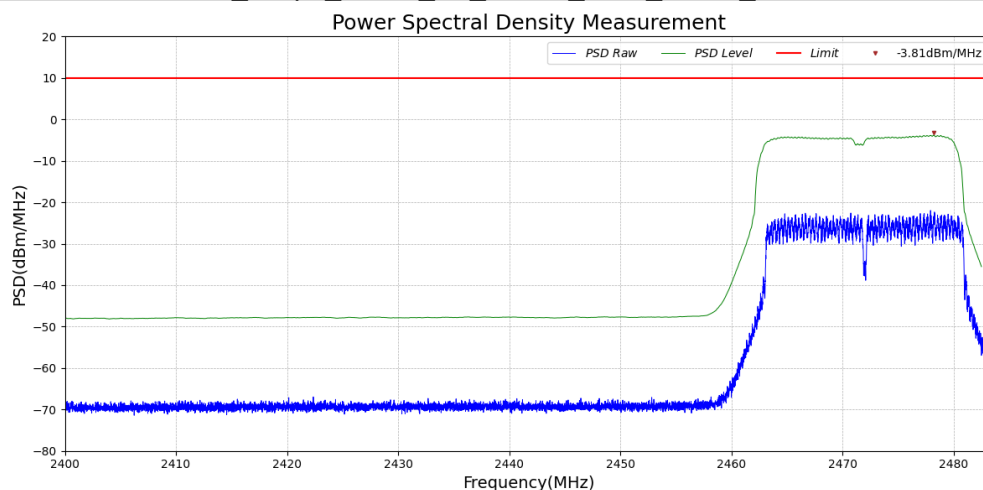
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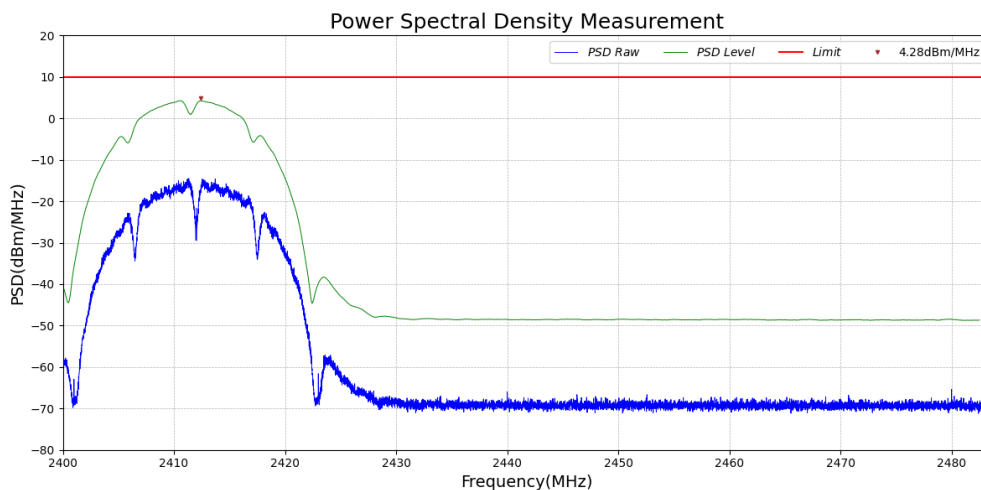
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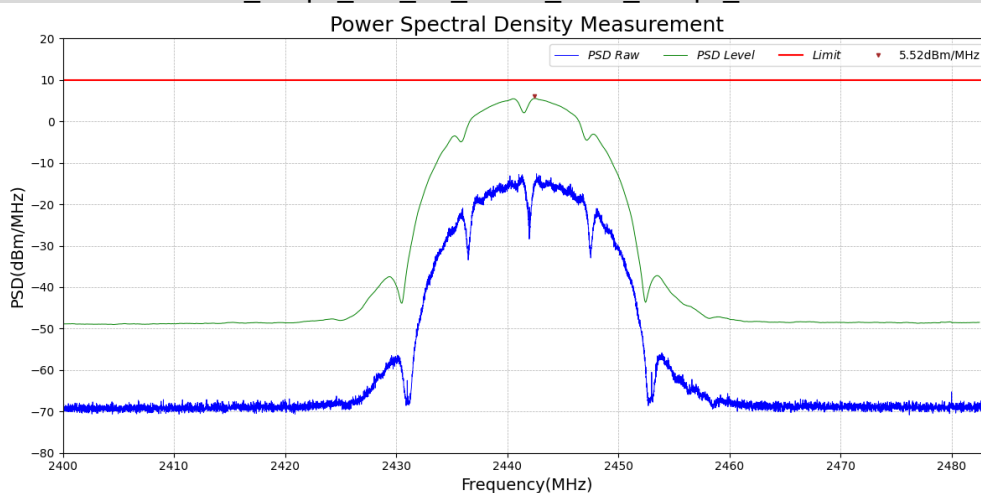
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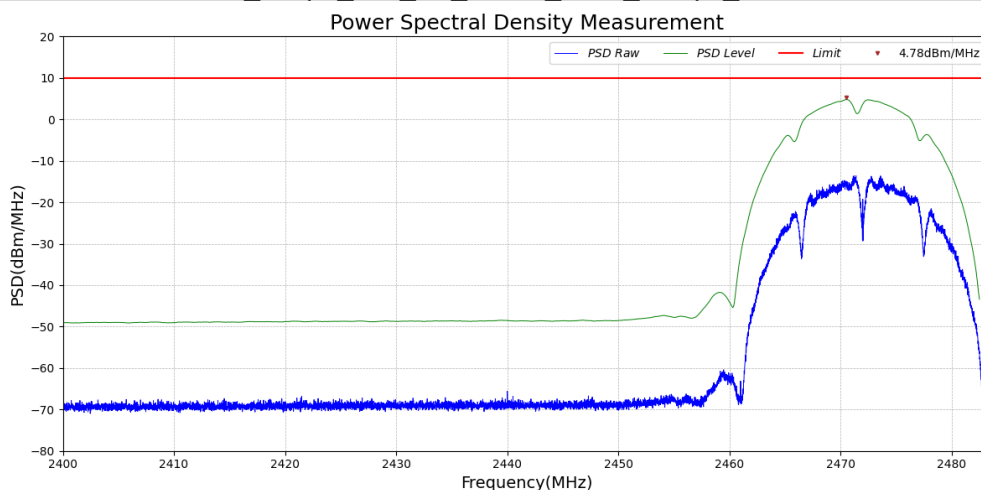
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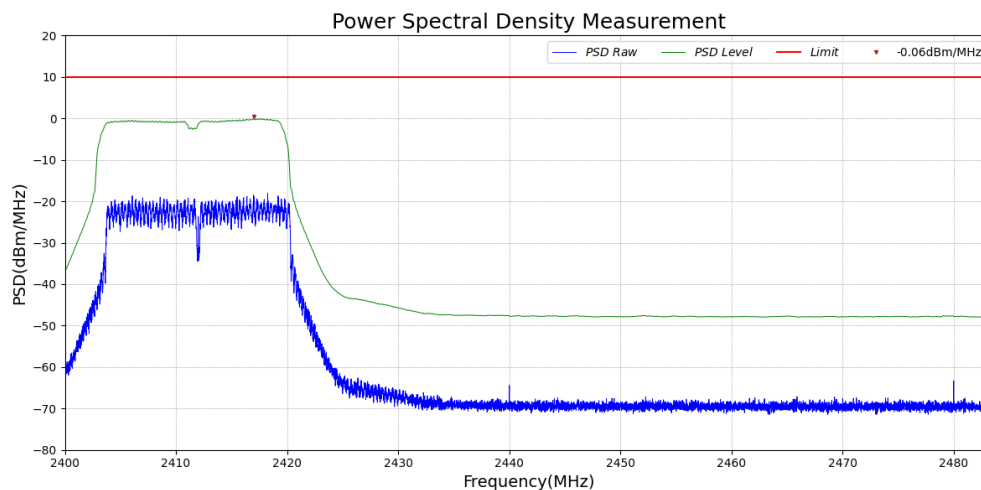
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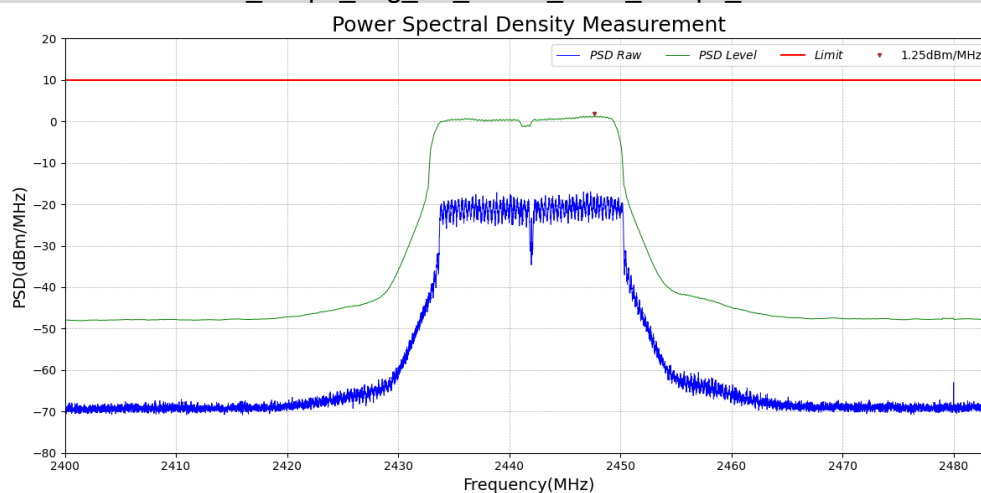
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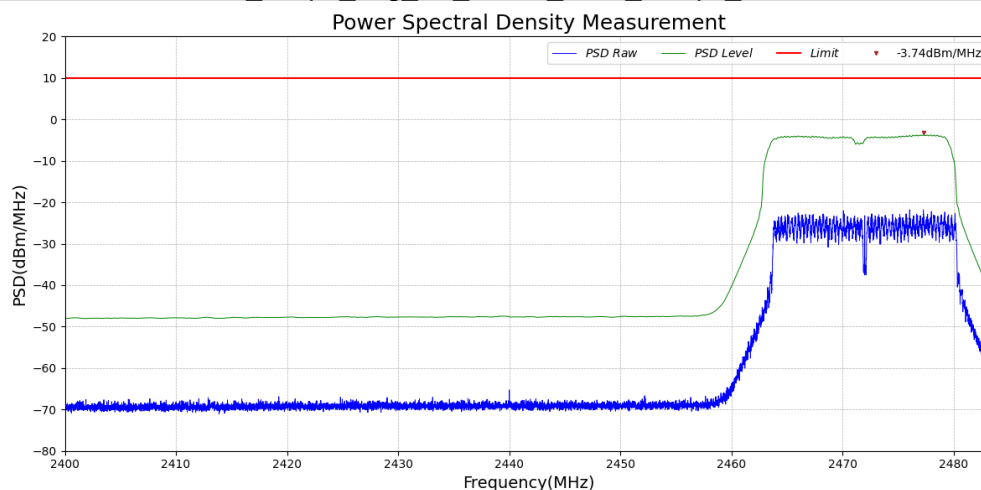
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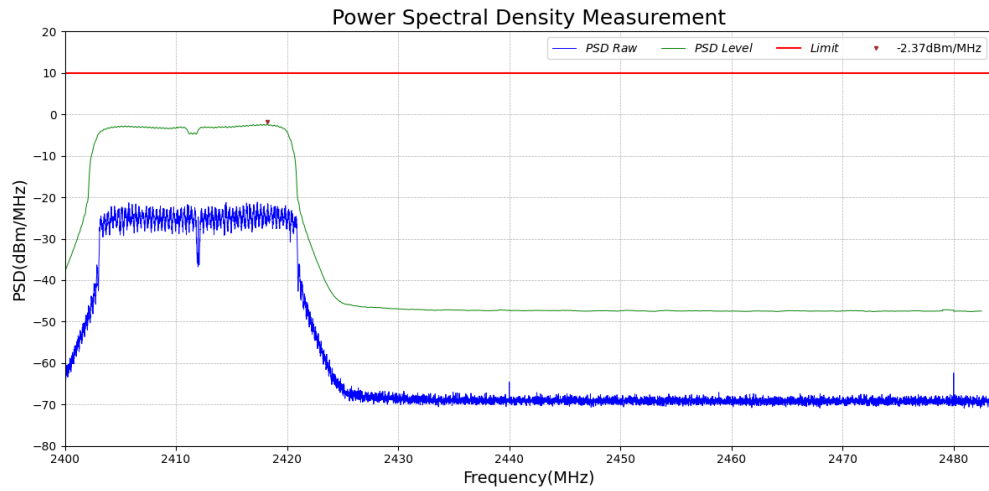
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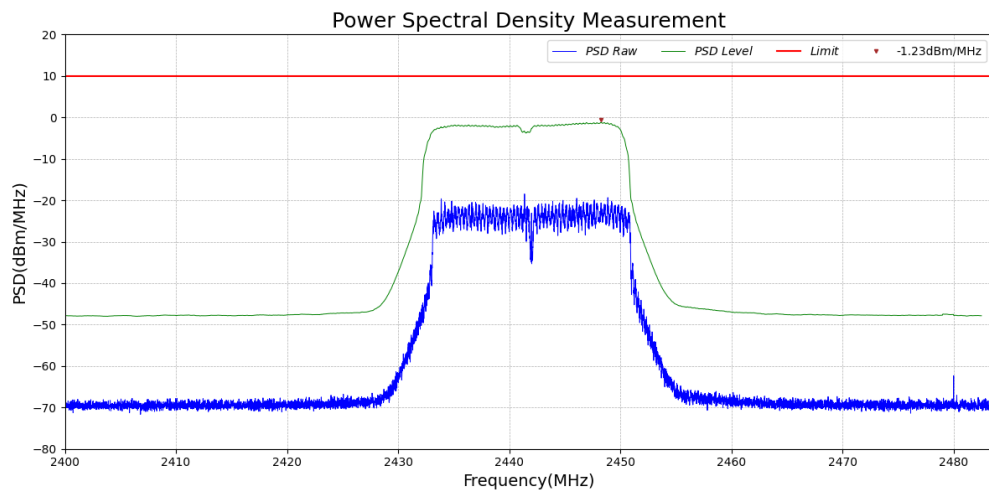
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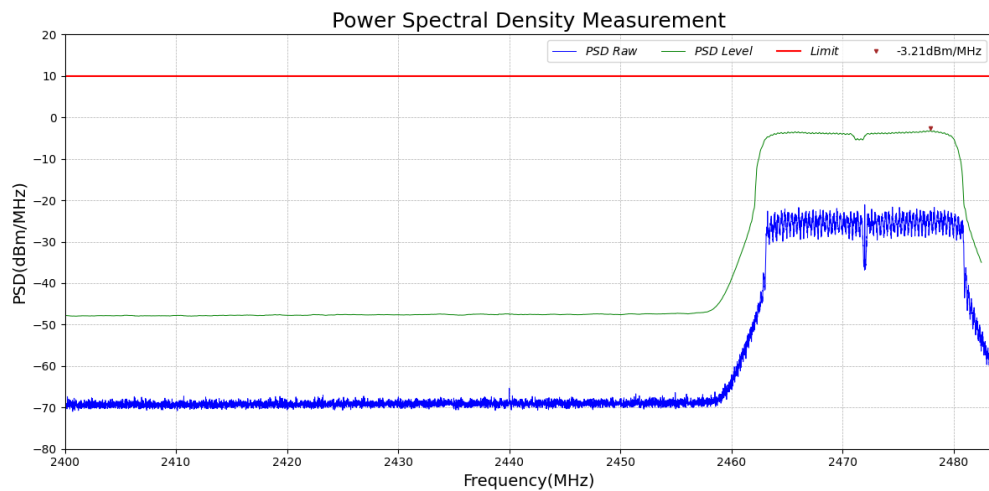
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Test_Graph_11n20_TX_ANT B_2412_MCS0_PSD



Test_Graph_11n20_TX_ANT B_2442_MCS0_PSD



Test_Graph_11n20_TX_ANT B_2472_MCS0_PSD

For Remote (DSRC02A):**Test Result**

Test Temperature	25.1°C	Relative Humidity	57 %
Test Engineer	Icey Haung	Testing Time	2025-06-30

Test Data of Power Spectral Density-ANT A

Test Mode	Power Spectral Density [dBm/MHz]	Limit [dBm/MHz]	Verdict
11b_TX_2412_1Mbps	5.42	10	Pass
11b_TX_2442_1Mbps	4.40	10	Pass
11b_TX_2472_1Mbps	4.40	10	Pass
11g_TX_2412_6Mbps	-3.86	10	Pass
11g_TX_2442_6Mbps	-3.94	10	Pass
11g_TX_2472_6Mbps	-3.97	10	Pass
11n20_TX_2412_MCS0	-4.14	10	Pass
11n20_TX_2442_MCS0	-4.22	10	Pass
11n20_TX_2472_MCS0	-4.28	10	Pass

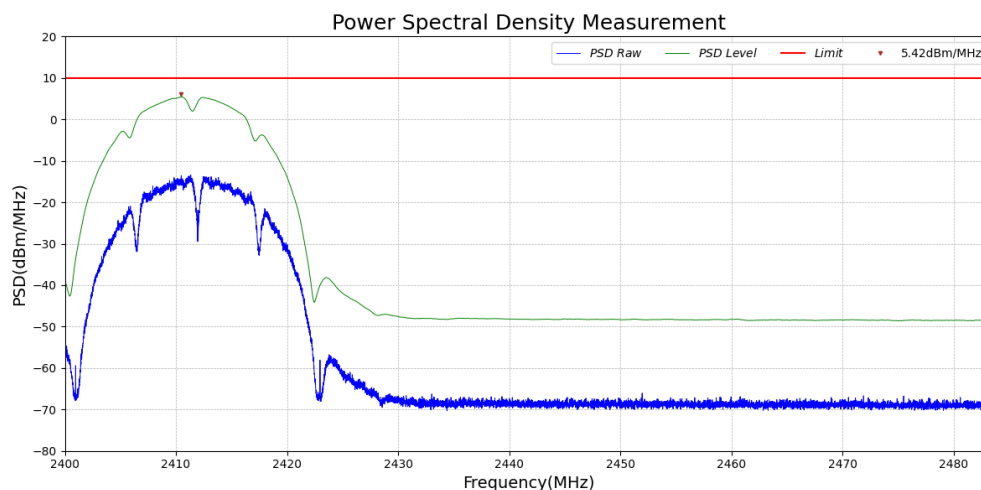
Test Data of Power Spectral Density-ANT B

Test Mode	Power Spectral Density [dBm/MHz]	Limit [dBm/MHz]	Verdict
11b_TX_2412_1Mbps	6.83	10	Pass
11b_TX_2442_1Mbps	6.57	10	Pass
11b_TX_2472_1Mbps	1.55	10	Pass
11g_TX_2412_6Mbps	-3.31	10	Pass
11g_TX_2442_6Mbps	-3.89	10	Pass
11g_TX_2472_6Mbps	-4.02	10	Pass
11n20_TX_2412_MCS0	-3.55	10	Pass
11n20_TX_2442_MCS0	-4.14	10	Pass
11n20_TX_2472_MCS0	-5.45	10	Pass

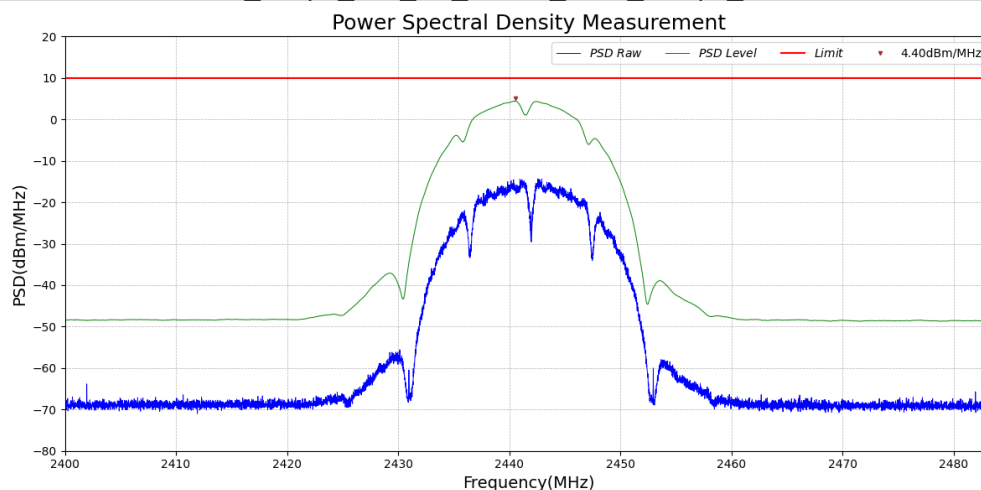
Test Data of Power Spectral Density-MIMO

Test Mode	Power Spectral Density [dBm/MHz]	Limit [dBm/MHz]	Verdict
11n20_TX_2412_MCS0	-0.82	10	Pass
11n20_TX_2442_MCS0	-1.17	10	Pass
11n20_TX_2472_MCS0	-1.82	10	Pass

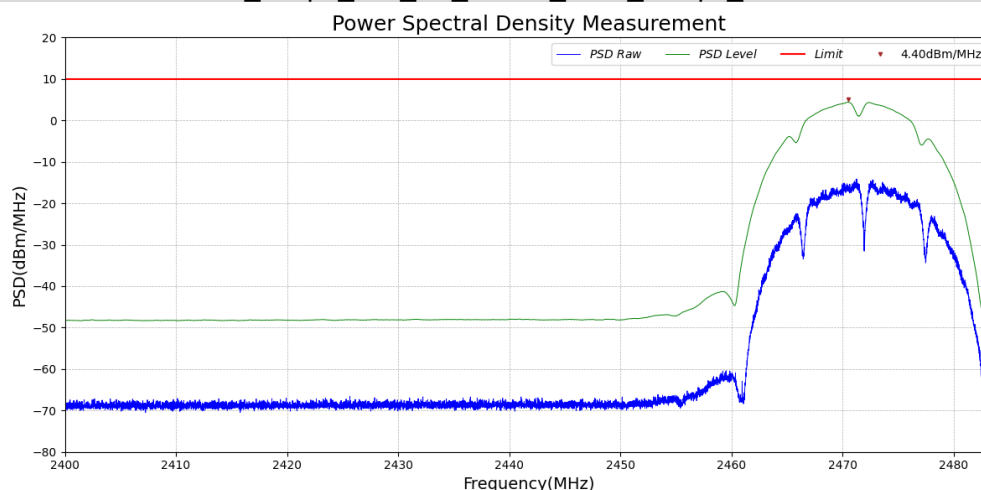
Test Graphs of Power Spectral Density



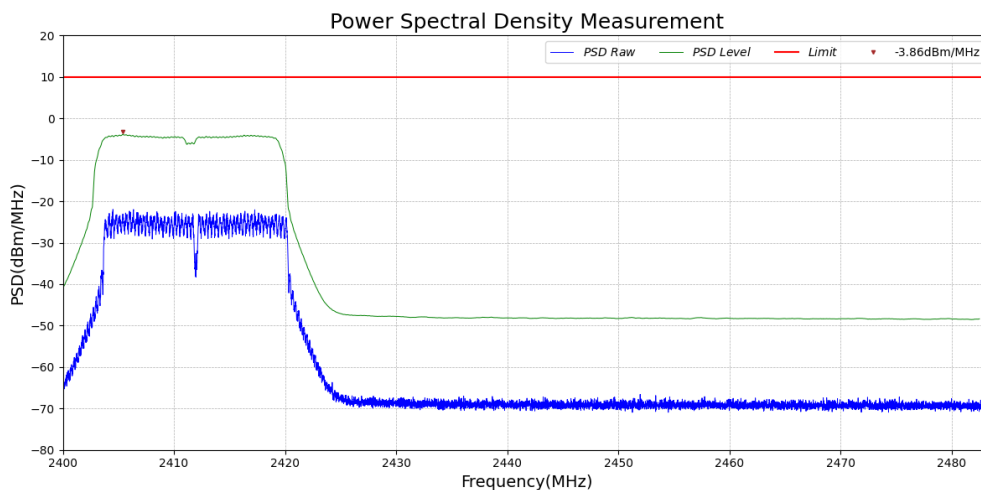
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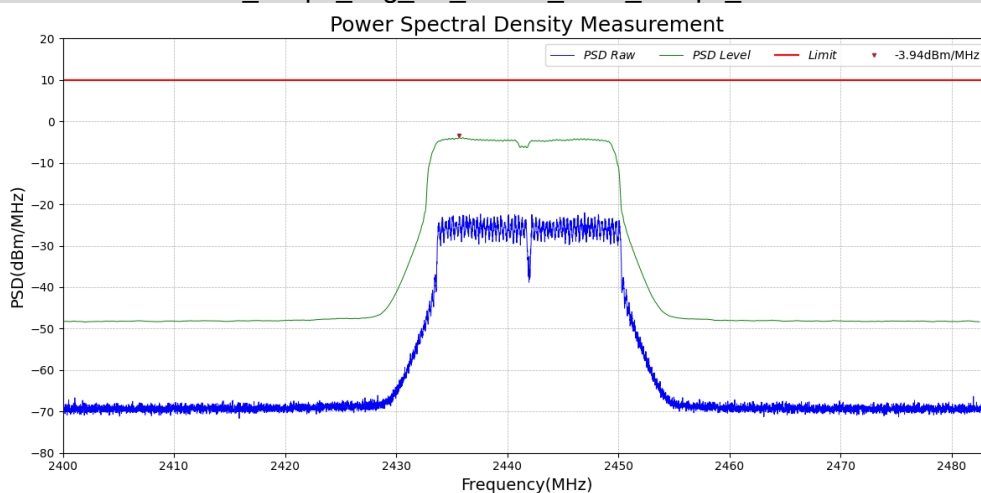
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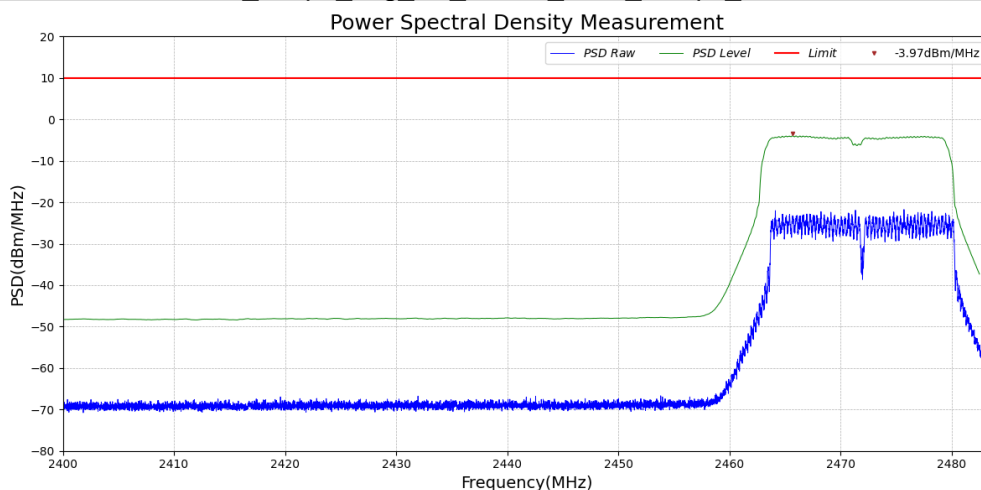
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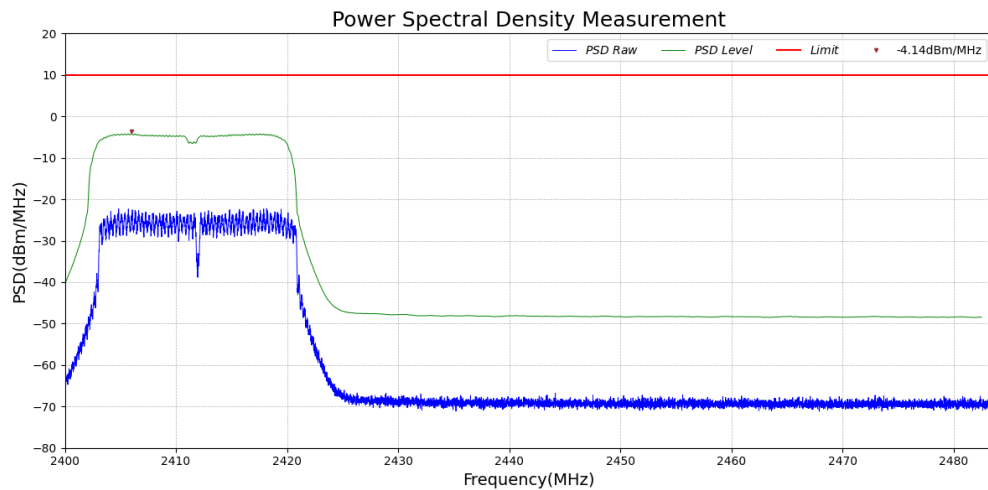
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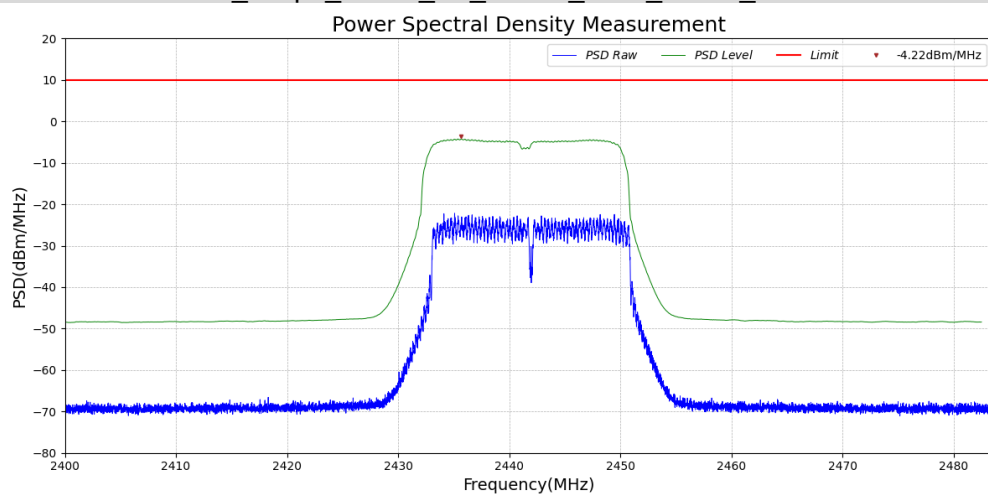
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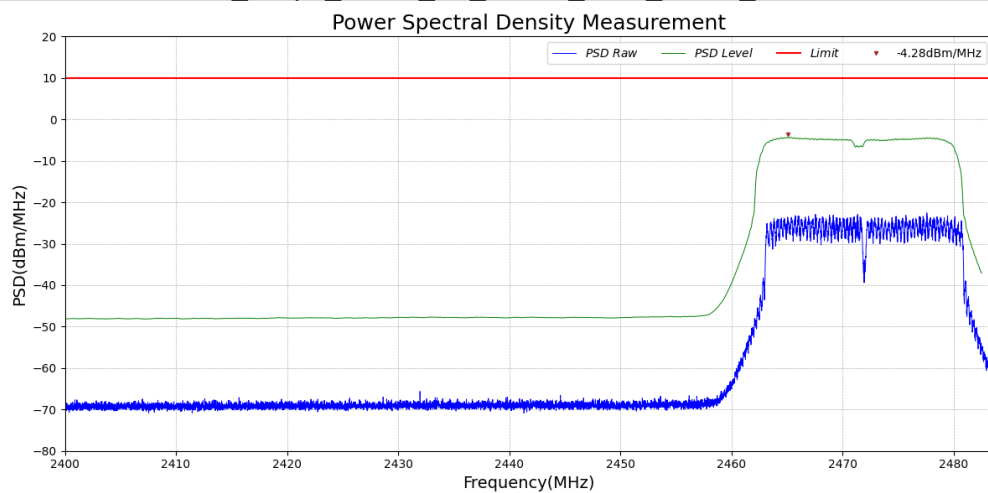
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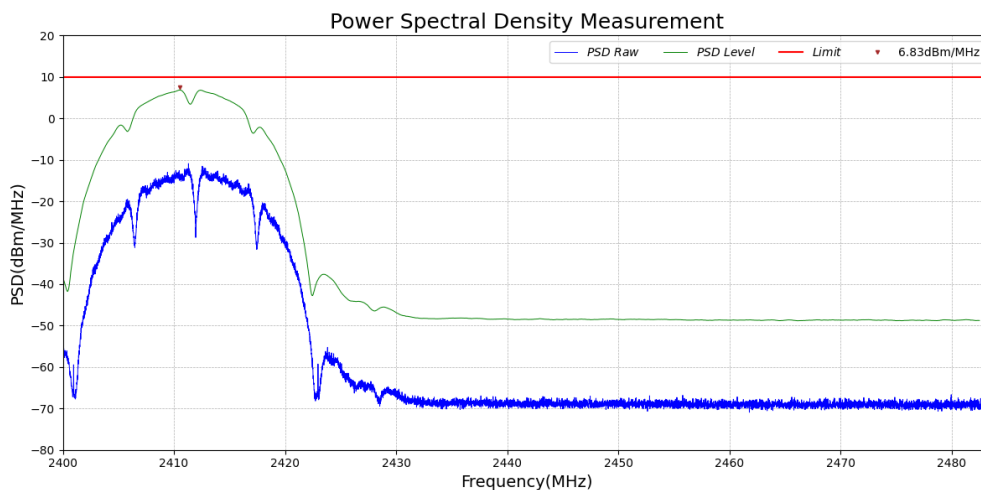
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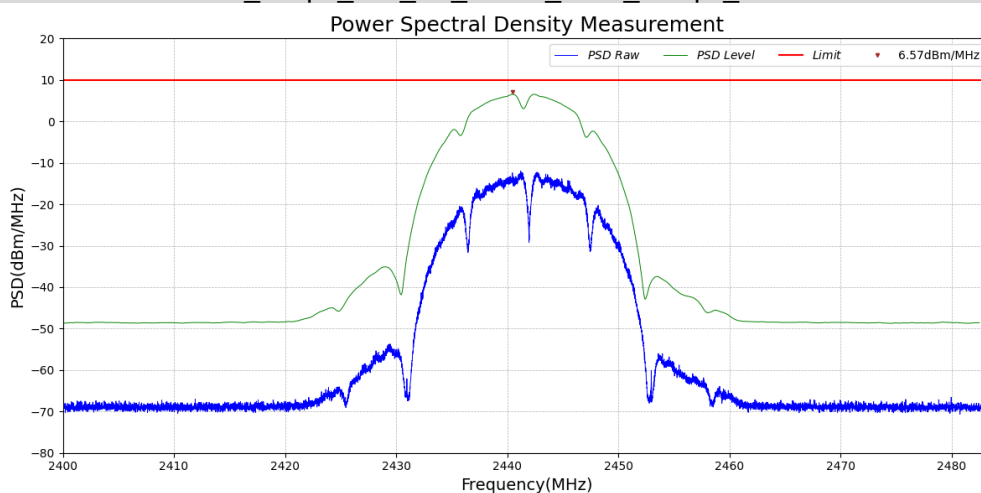
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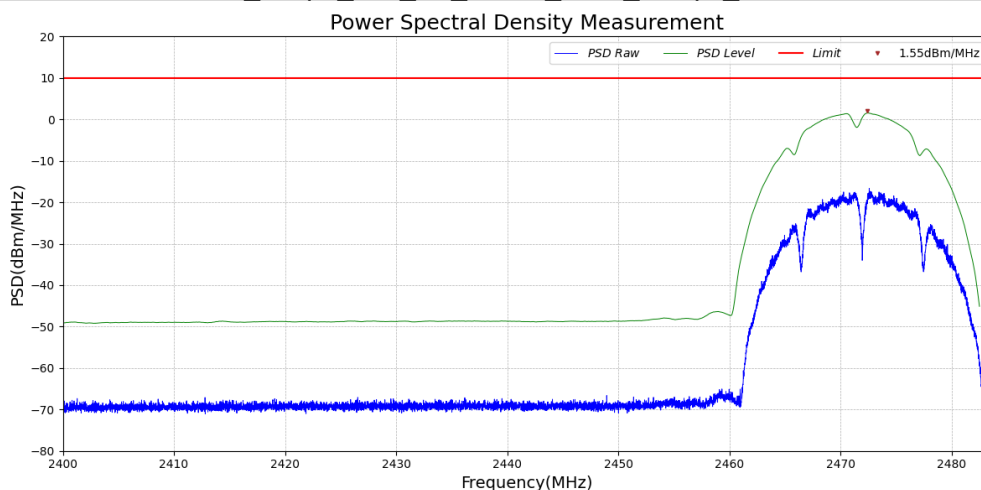
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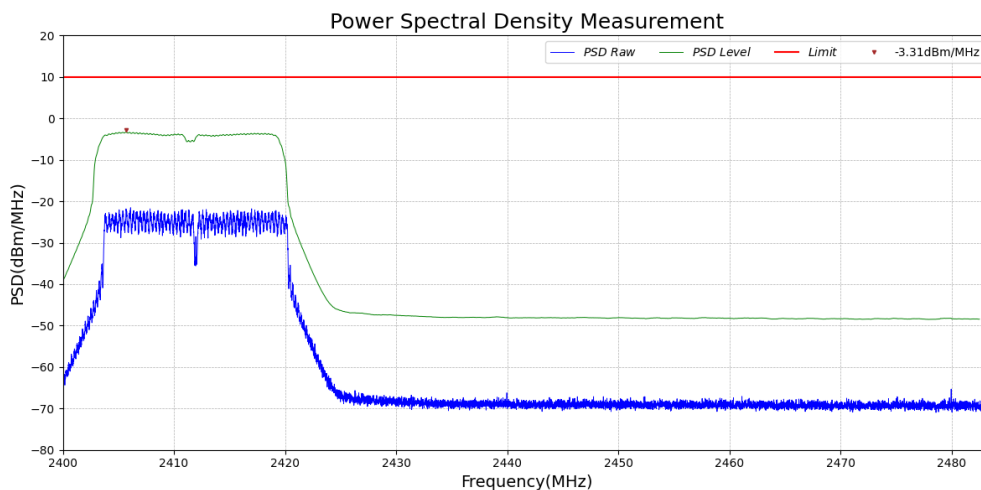
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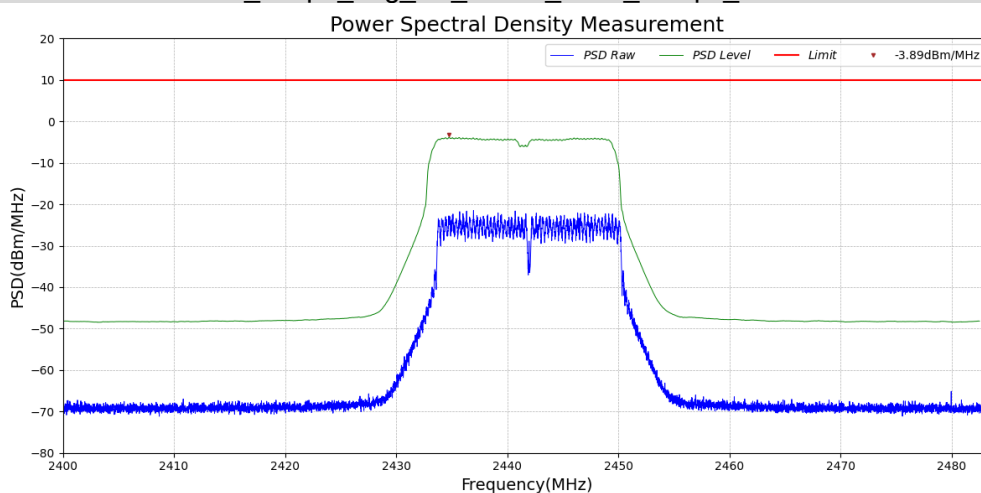
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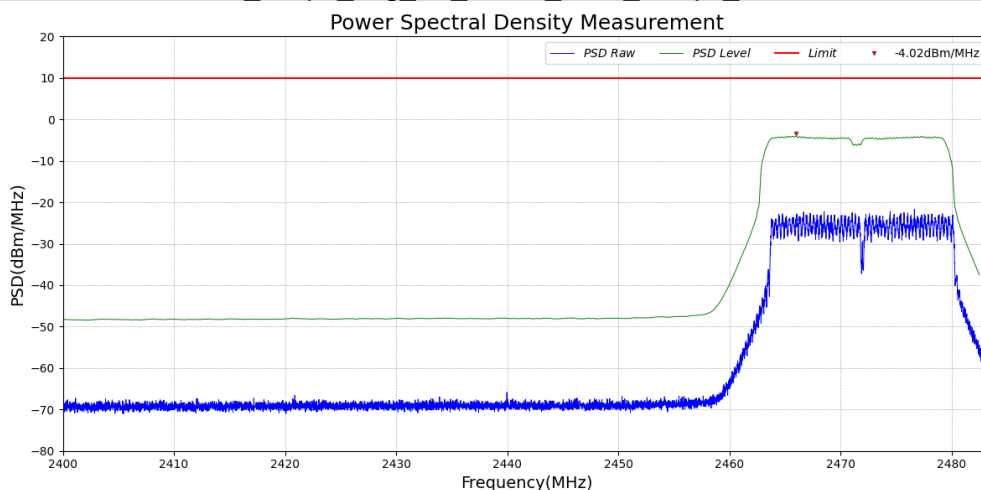
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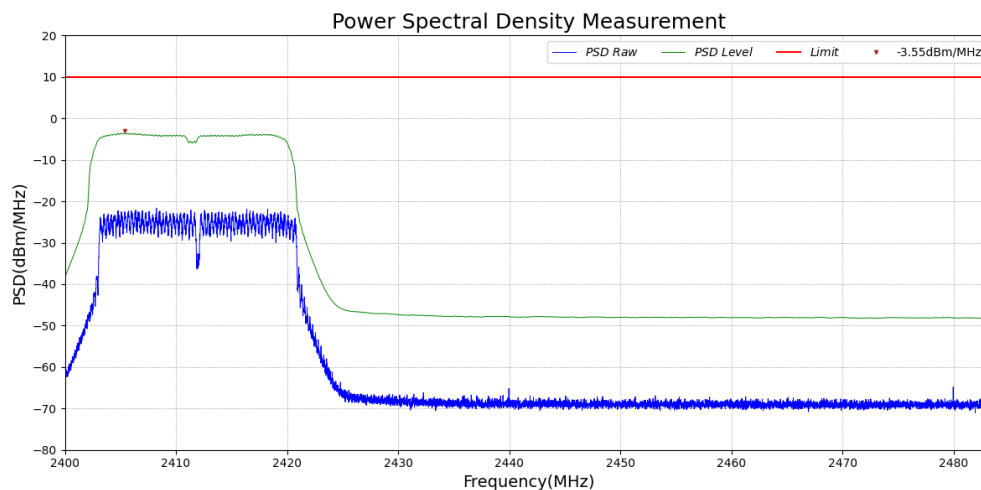
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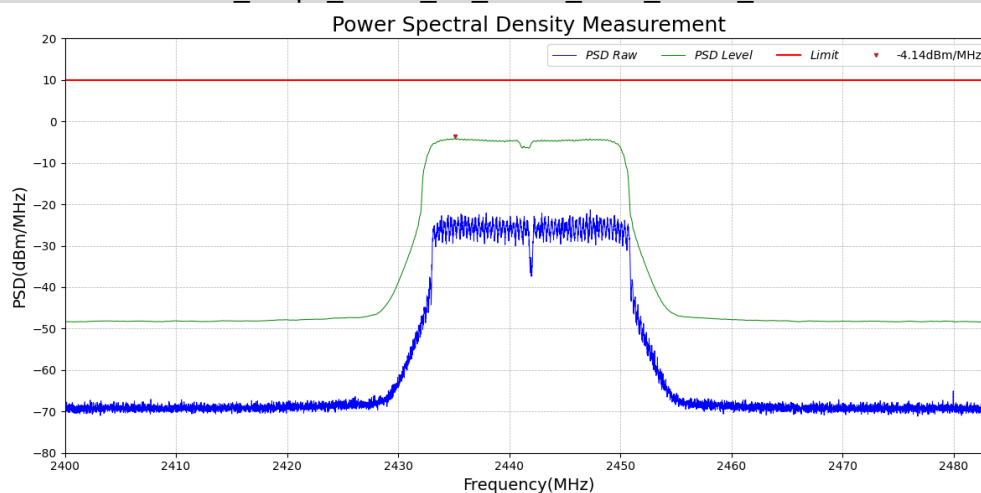
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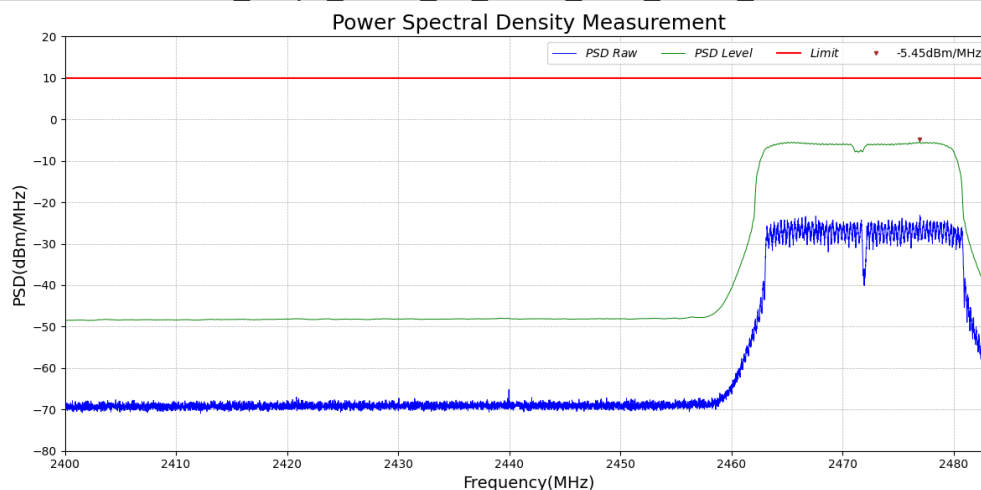
Test_Graph_11g_TX_ANT B_2472_6Mbps_PSD



Test_Graph_11n20_TX_ANT B_2412_MCS0_PSD



Test_Graph_11n20_TX_ANT B_2442_MCS0_PSD



Test_Graph_11n20_TX_ANT B_2472_MCS0_PSD

12 Appendix C: Adaptivity

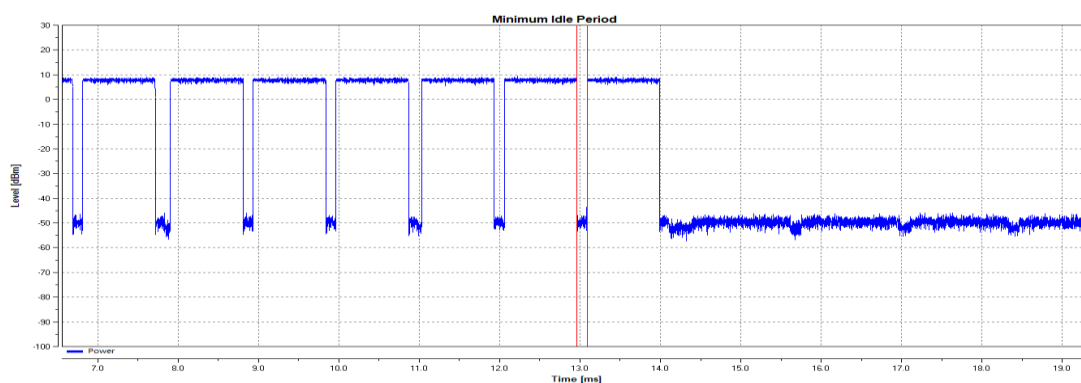
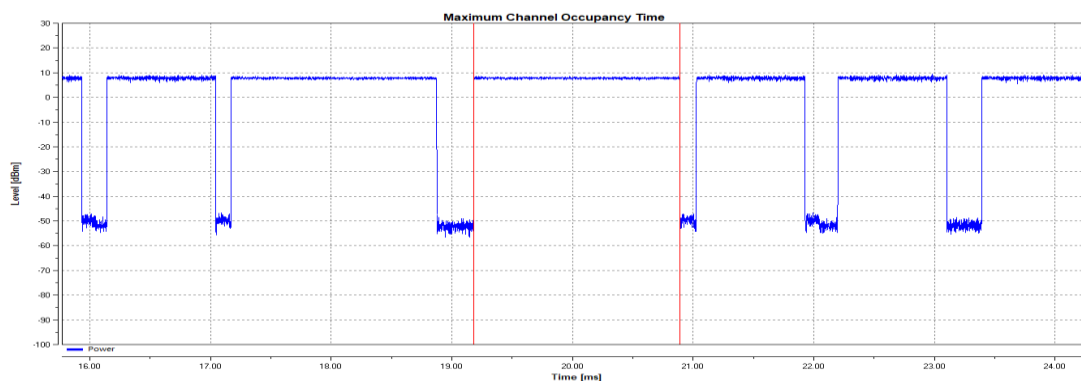
For Drone (DSDR04C):

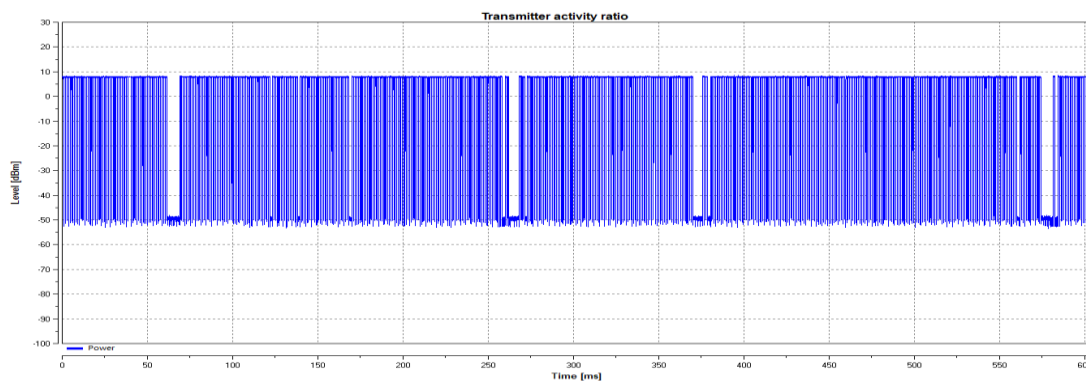
Test Result:

Test Temperature	24.3°C	Relative Humidity	56 %
Test Engineer	Icey Haung	Testing Time	2025-06-28
Remark	The ANT A of 802.11b mode is the worst case because the threshold level is the lowest.		

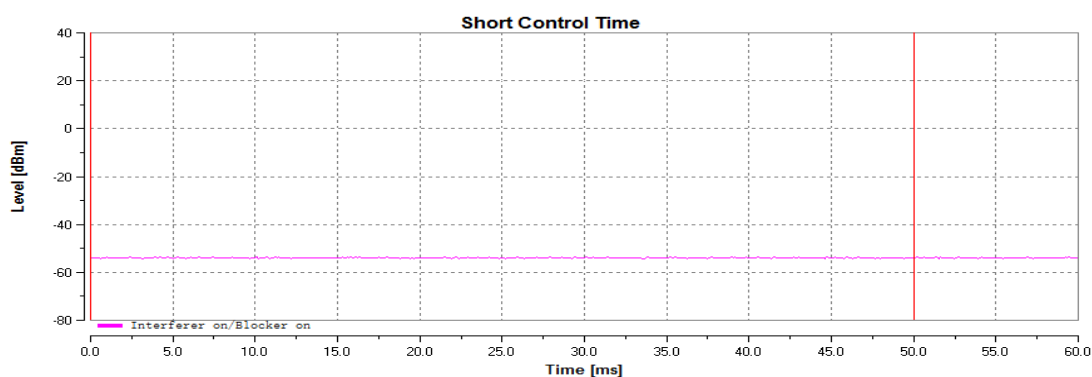
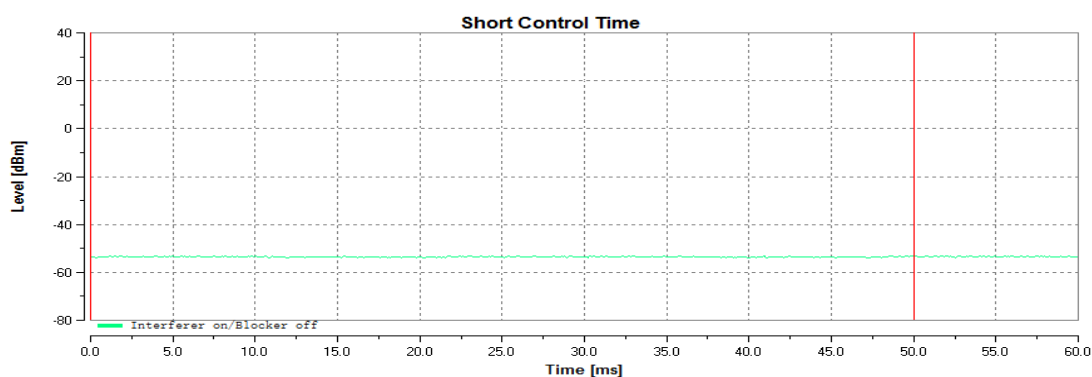
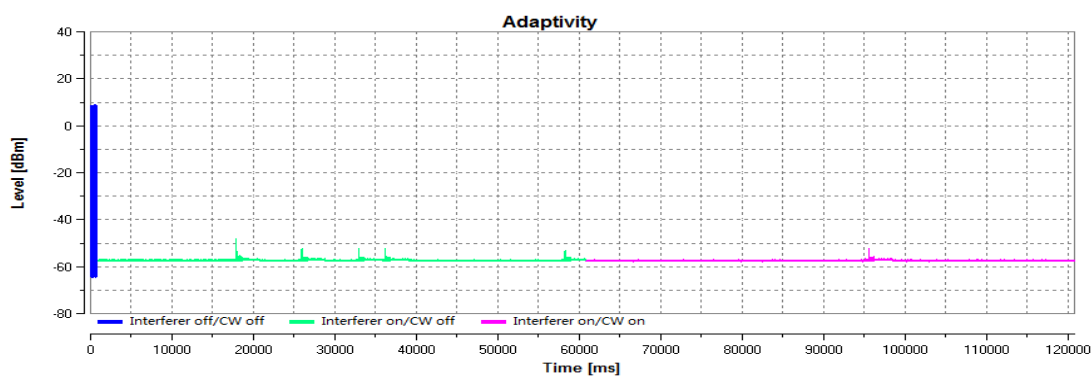
IEEE802.11 b Low Channel	
Threshold Level (dBm/MHz)	-63.84
Blocking Interference Level (dBm)	-33
Max COT Time (ms)	1.706ms
Minimum Idle Time (ms)	0.128ms
Duty Cycle (%) after adding the interference signal 50ms	0.00
Duty Cycle (%) after adding the blocking signal with the interfering signal 50ms	0.00
Verdict	Pass

Max COT Time and Minimum Idle time



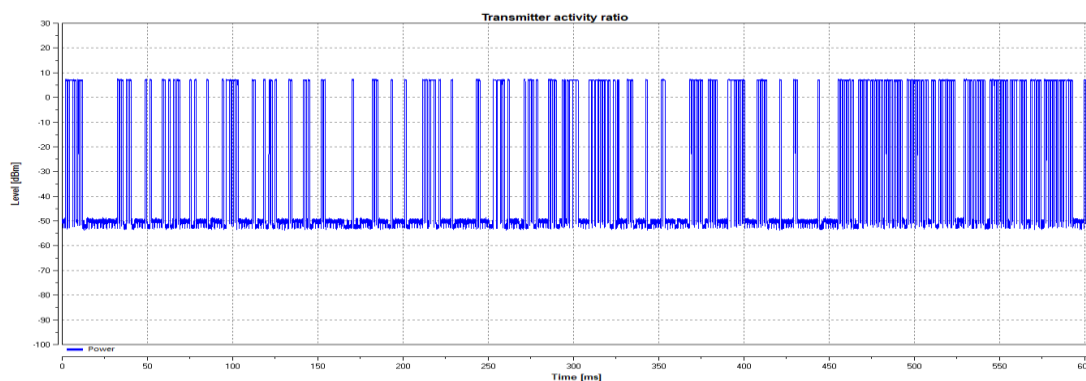
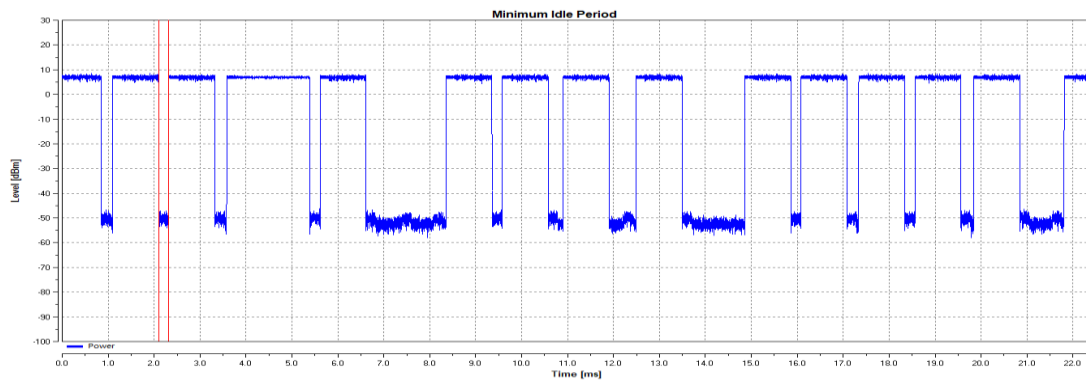
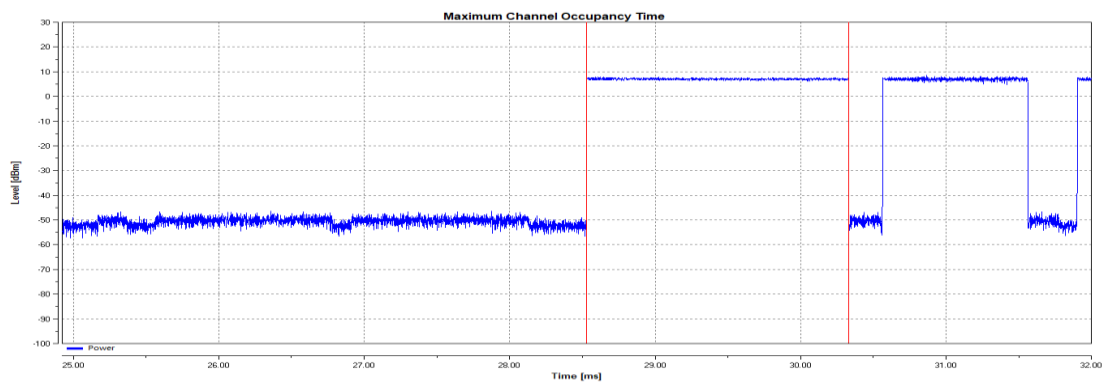


Adding the interference signal (Green line) and the unwanted signal (Red line)

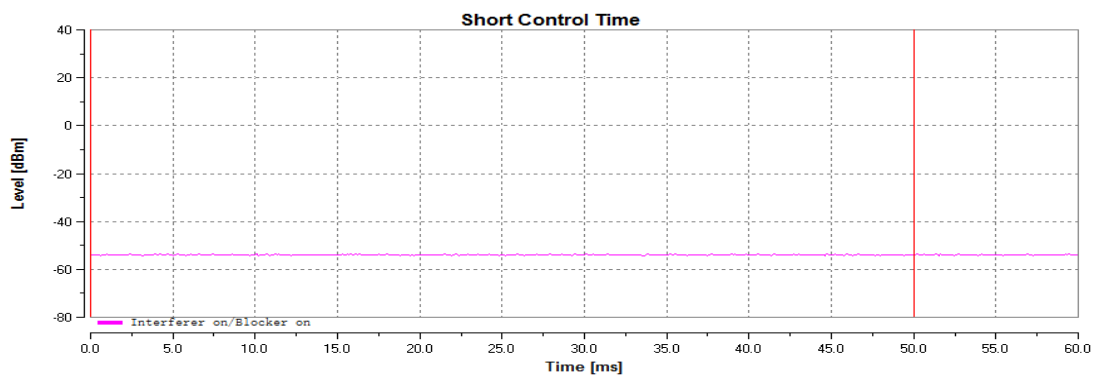
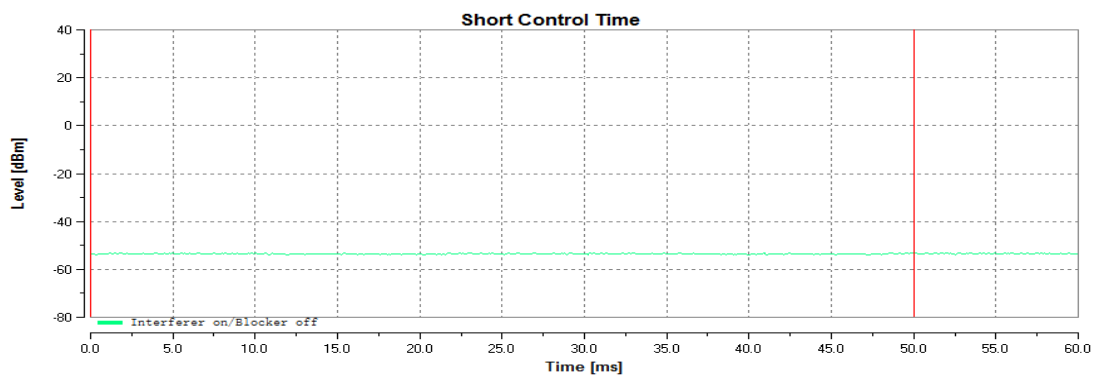
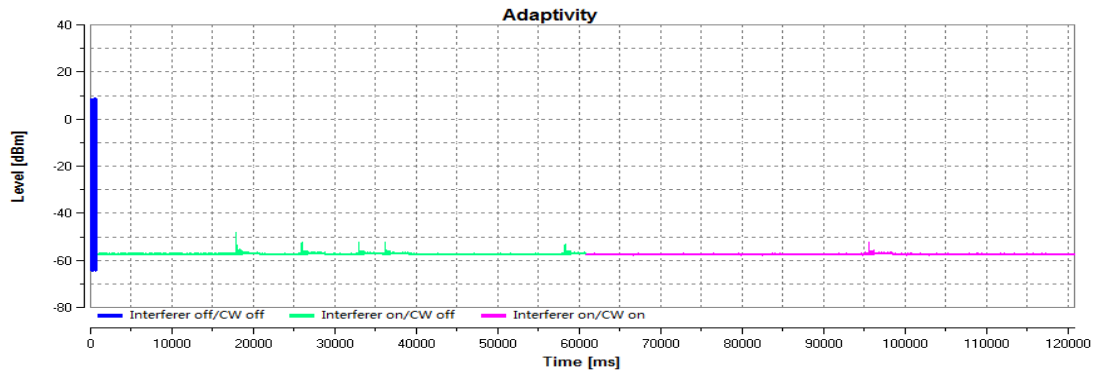


IEEE802.11 b High Channel	
Threshold Level (dBm/MHz)	-63.19
Blocking Interference Level (dBm)	-33
Max COT Time (ms)	1.802ms
Minimum Idle Time (ms)	0.224ms
Duty Cycle (%) after adding the interference signal 50ms	0.00
Duty Cycle (%) after adding the blocking signal with the interfering signal 50ms	0.00
Verdict	Pass

Max COT Time and Minimum Idle time



Adding the interference signal (Green line) and the unwanted signal (Red line)

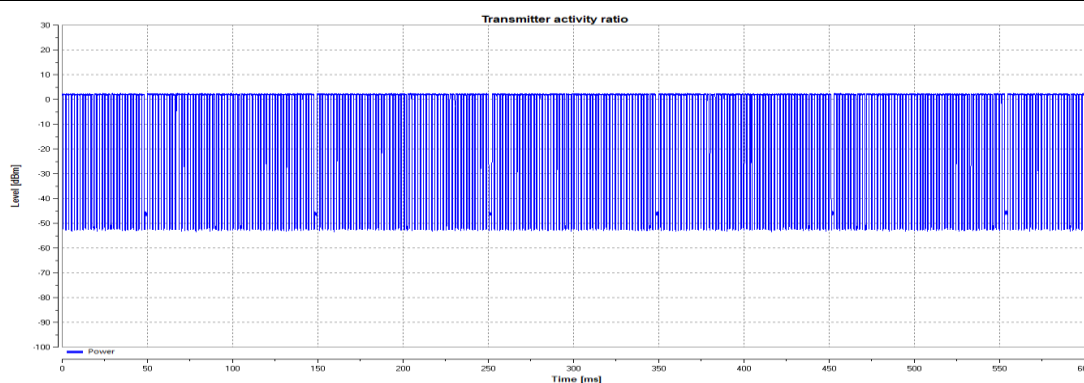
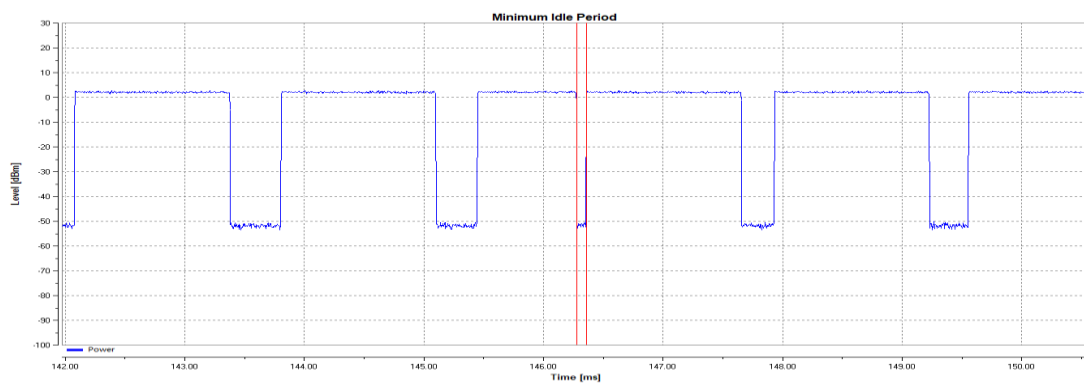
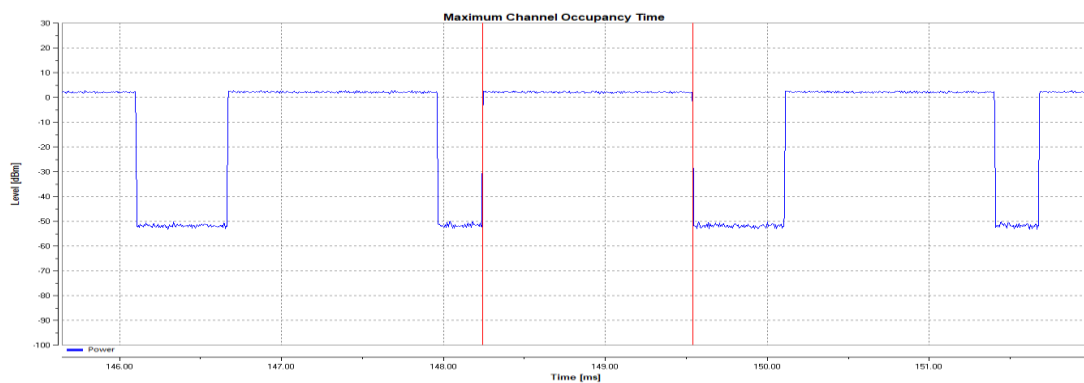


Note: When removal of the interference and blocking signal the UUT will be transmitting again on this channel.

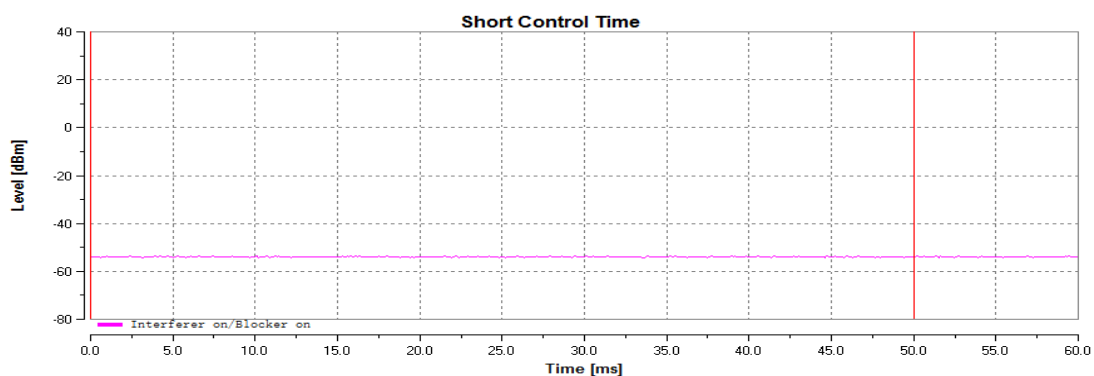
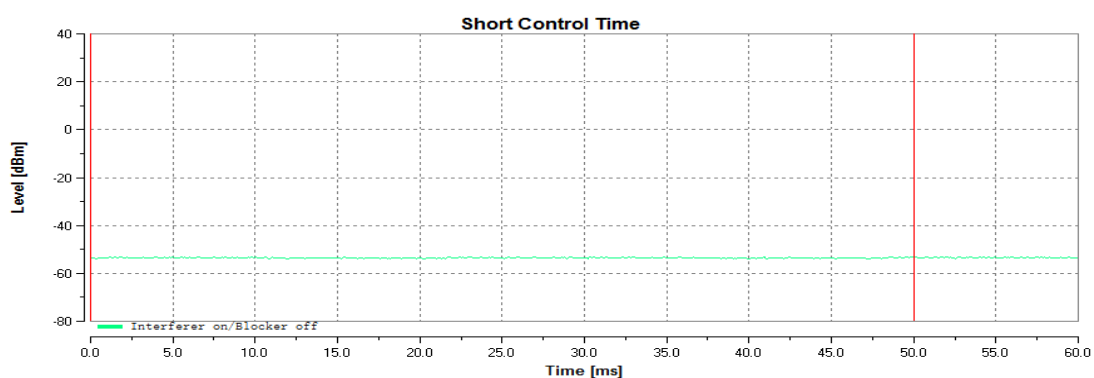
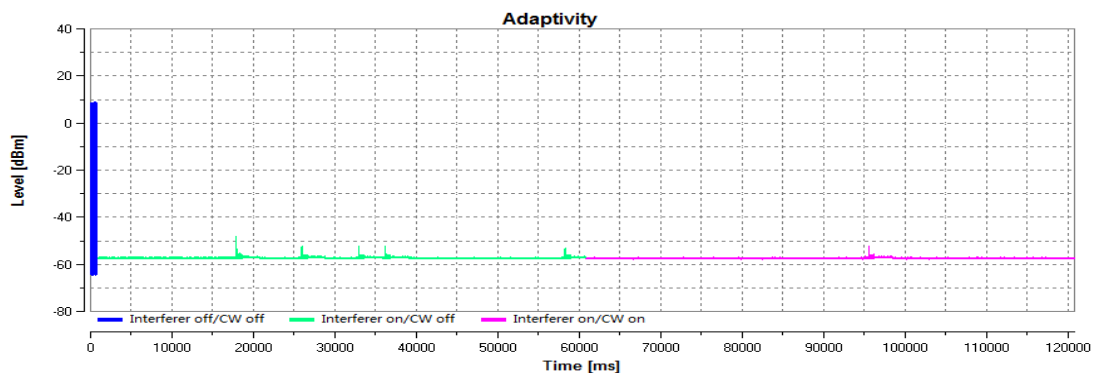
Test Temperature	24.3°C	Relative Humidity	56 %
Test Engineer	Icey Haung	Testing Time	2025-06-28
Remark	The ANT B of 802.11b mode is the worst case because the threshold level is the lowest.		

IEEE802.11 b Low Channel	
Threshold Level (dBm/MHz)	-63.03
Blocking Interference Level (dBm)	-33
Max COT Time (ms)	1.297ms
Minimum Idle Time (ms)	0.086ms
Duty Cycle (%) after adding the interference signal 50ms	0.00
Duty Cycle (%) after adding the blocking signal with the interfering signal 50ms	0.00
Verdict	Pass

Max COT Time and Minimum Idle time

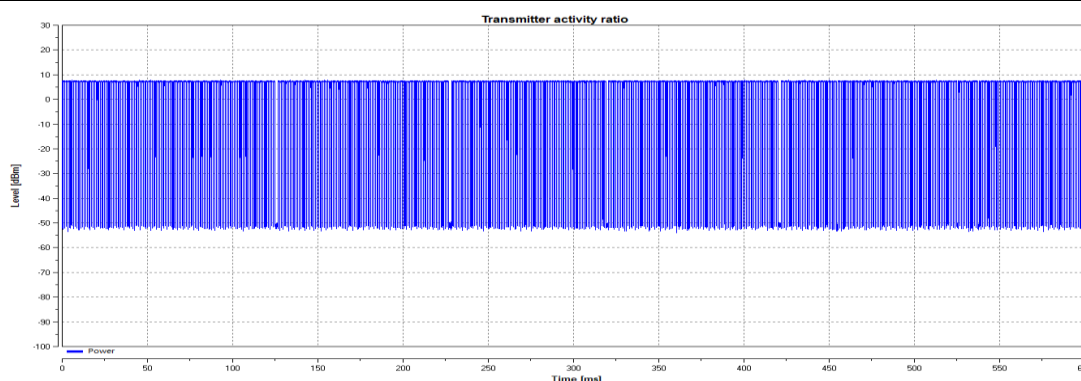
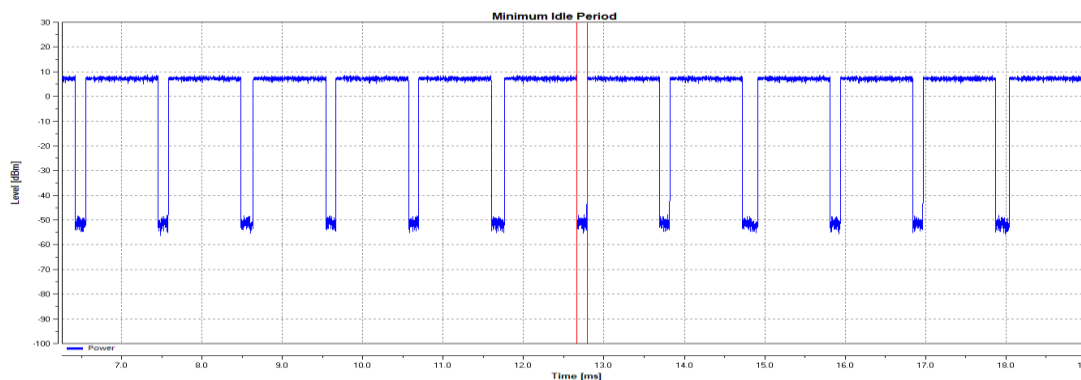
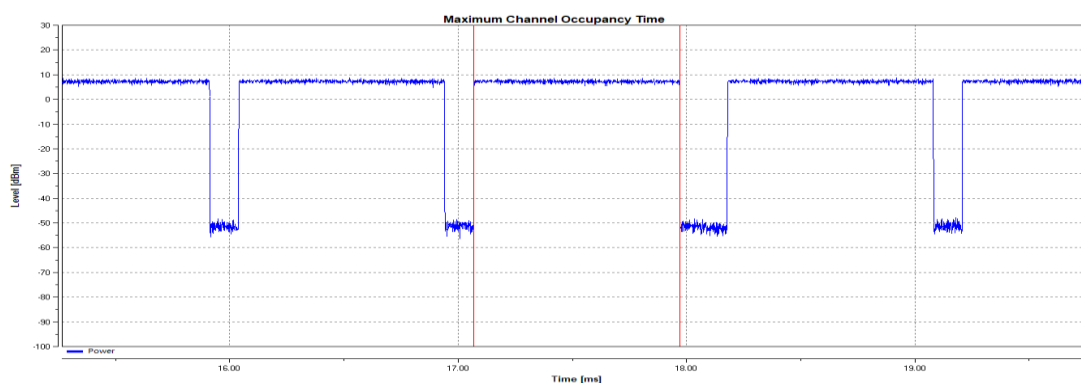


Adding the interference signal (Green line) and the unwanted signal (Red line)

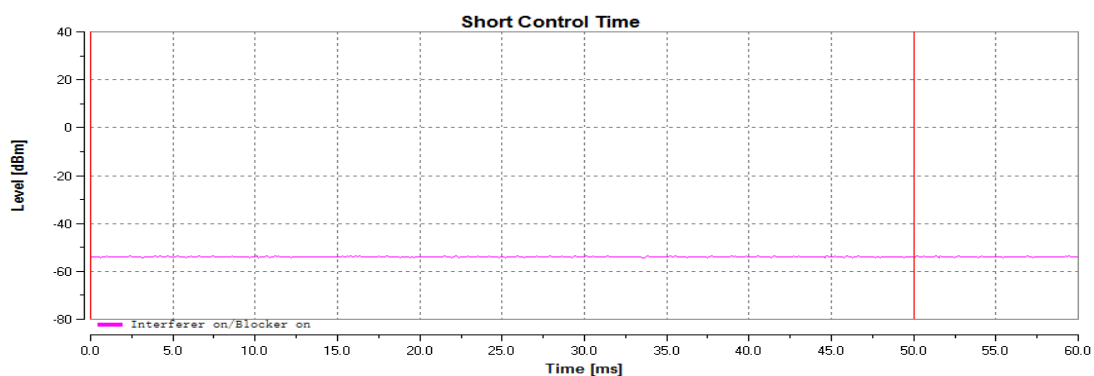
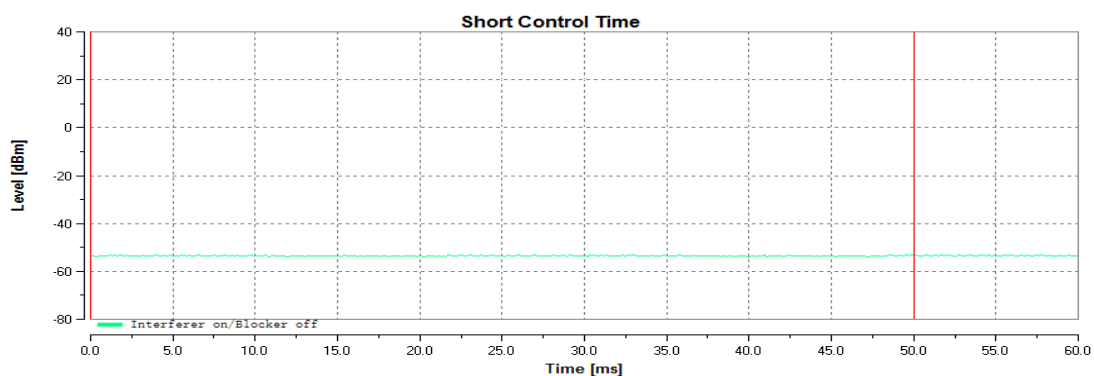
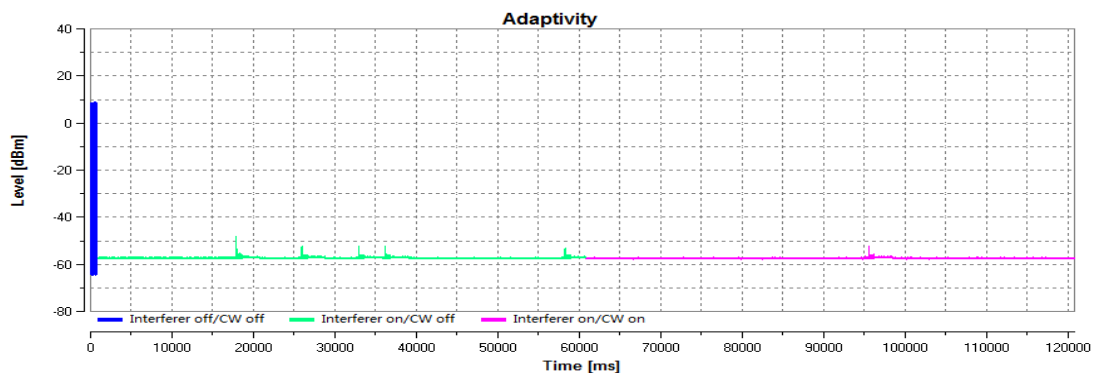


IEEE802.11 b High Channel	
Threshold Level (dBm/MHz)	-63.54
Blocking Interference Level (dBm)	-33
Max COT Time (ms)	0.901ms
Minimum Idle Time (ms)	0.128ms
Duty Cycle (%) after adding the interference signal 50ms	0.00
Duty Cycle (%) after adding the blocking signal with the interfering signal 50ms	0.00
Verdict	Pass

Max COT Time and Minimum Idle time



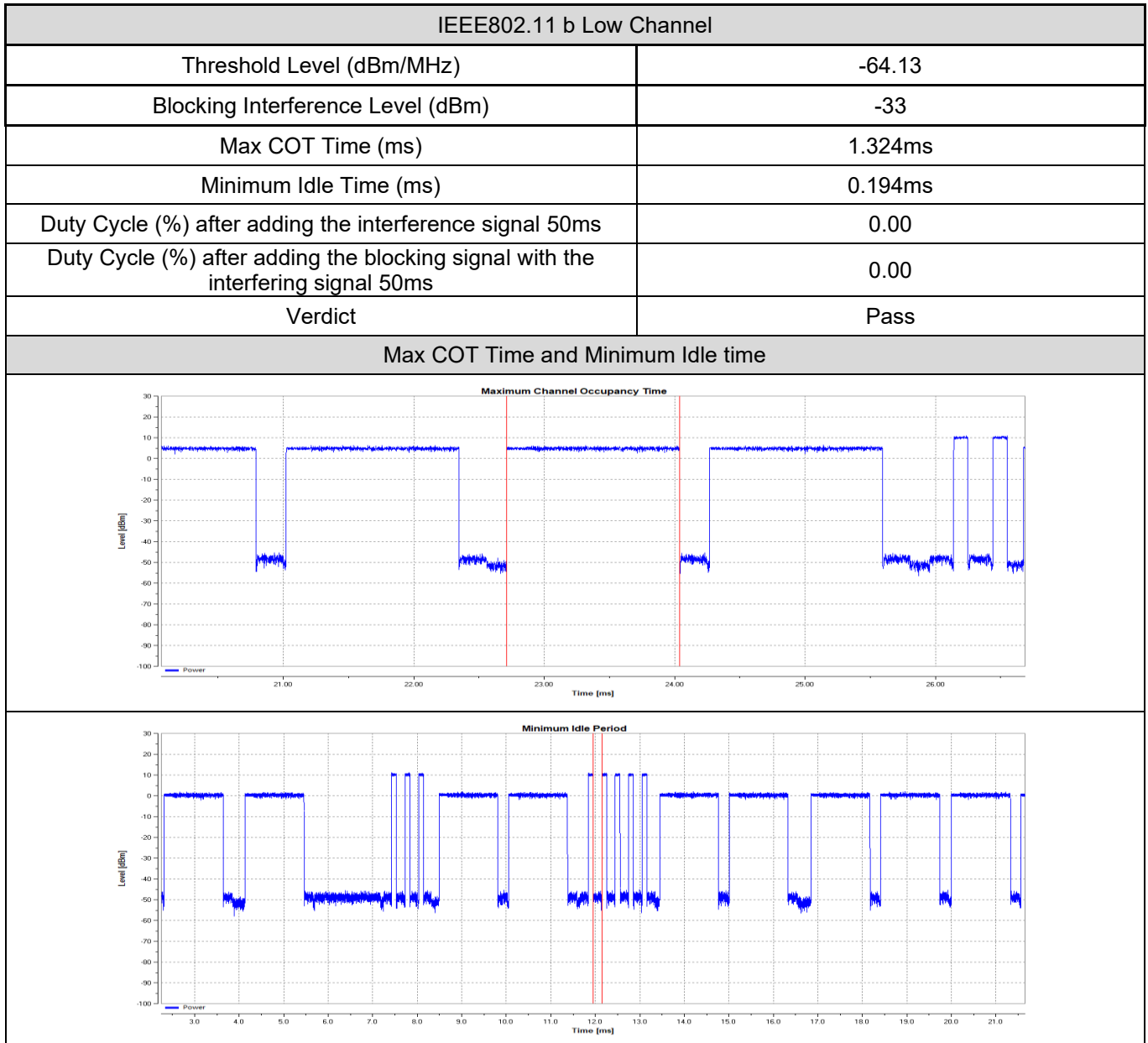
Adding the interference signal (Green line) and the unwanted signal (Red line)

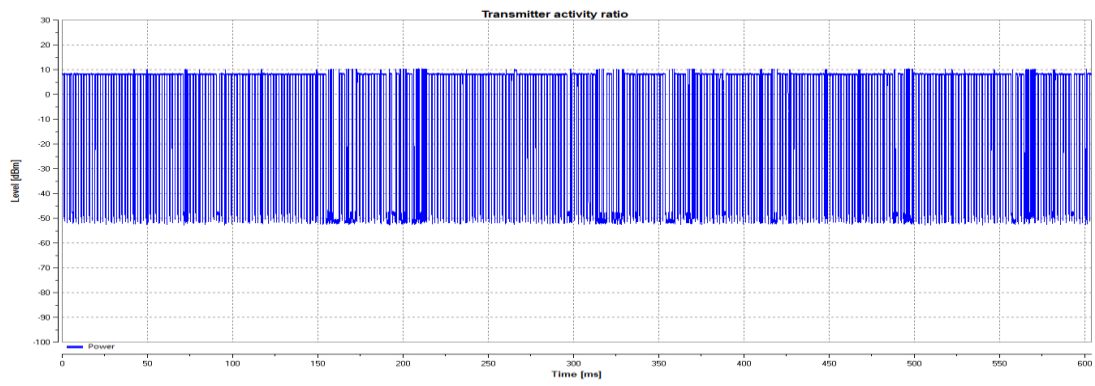


Note: When removal of the interference and blocking signal the UUT will be transmitting again on this channel.

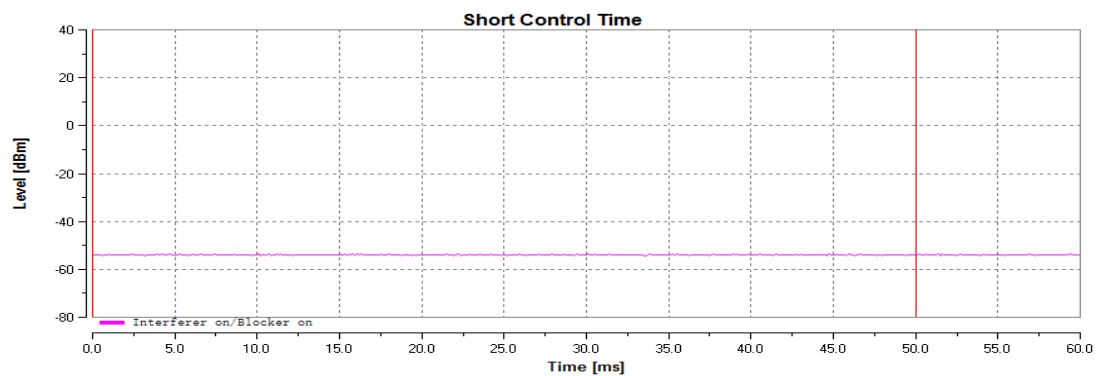
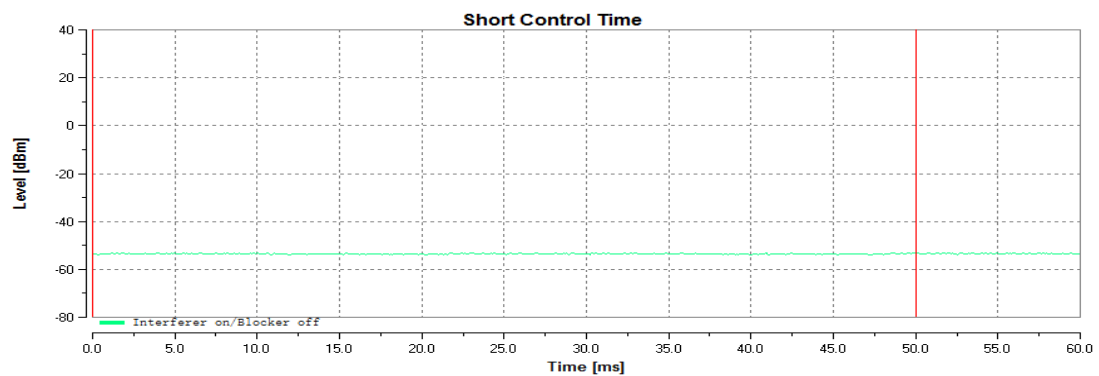
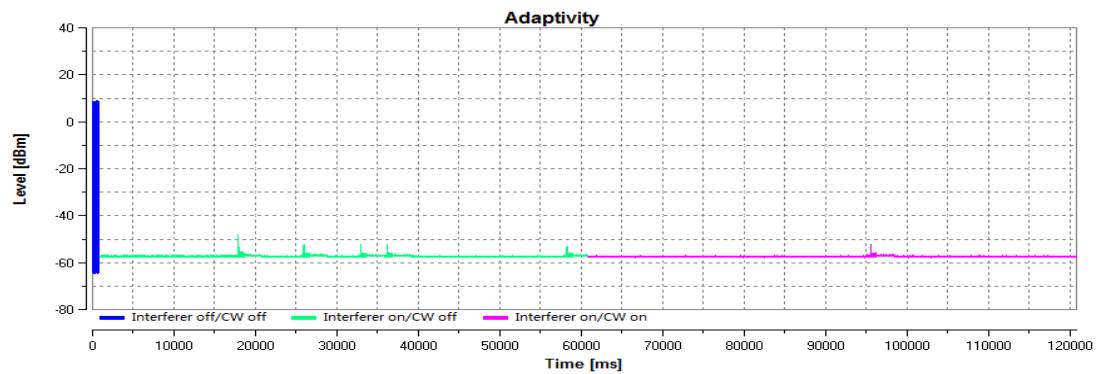
For Remote (DSRC02A):**Test Result:**

Test Temperature	25.1°C	Relative Humidity	57 %
Test Engineer	Icey Haung	Testing Time	2025-06-30
Remark	The ANT A of 802.11b mode is the worst case because the threshold level is the lowest.		



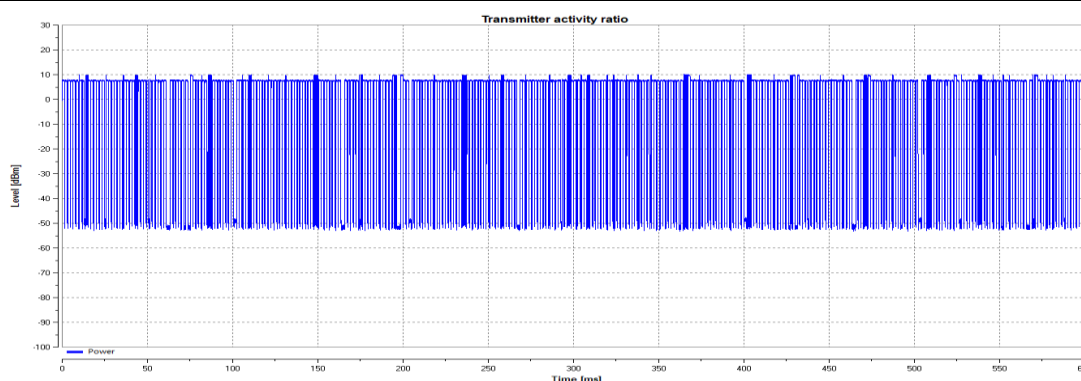
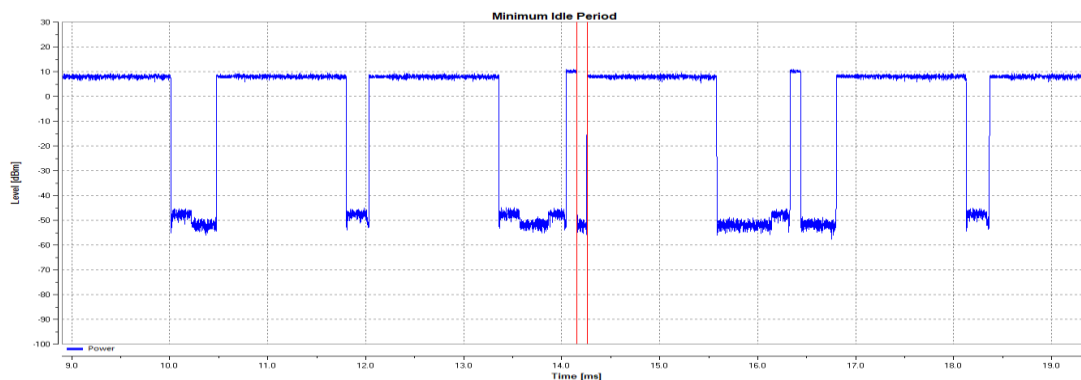
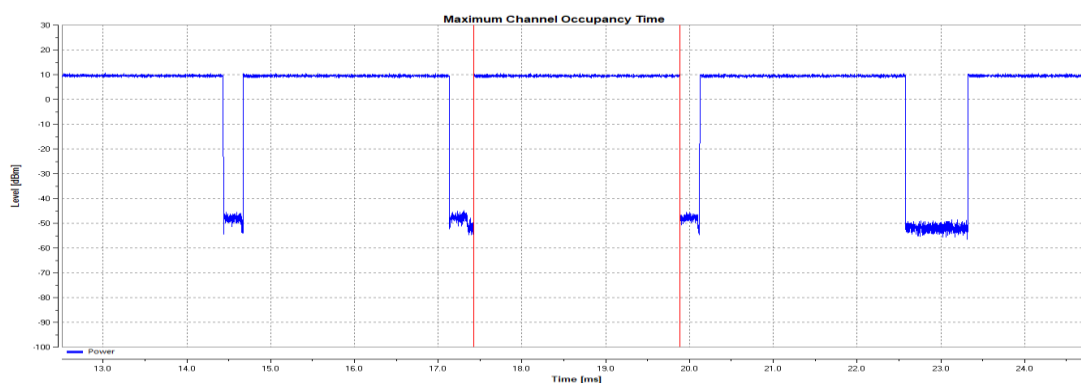


Adding the interference signal (Green line) and the unwanted signal (Red line)

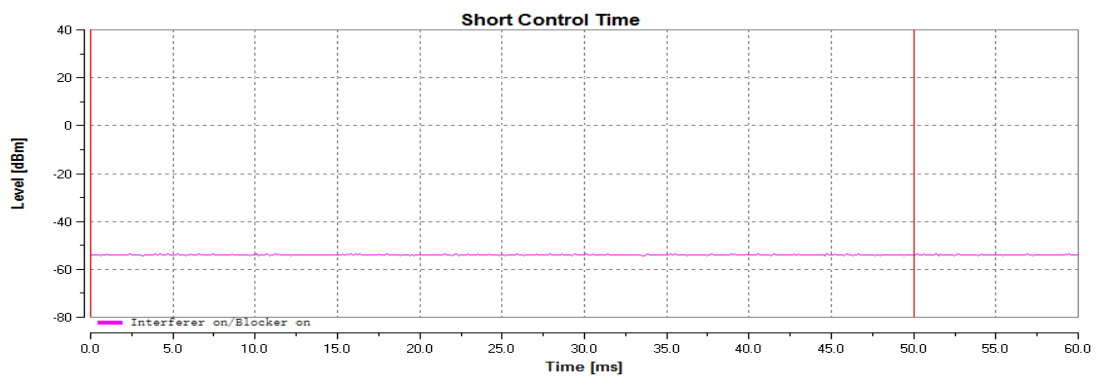
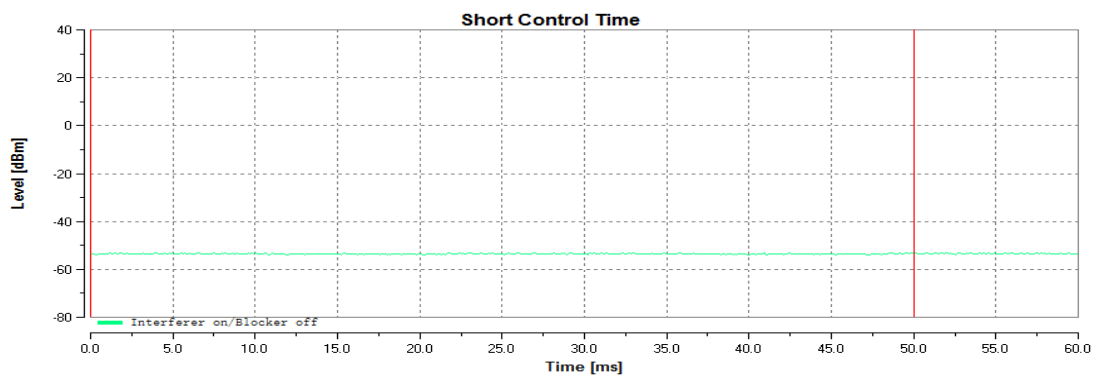
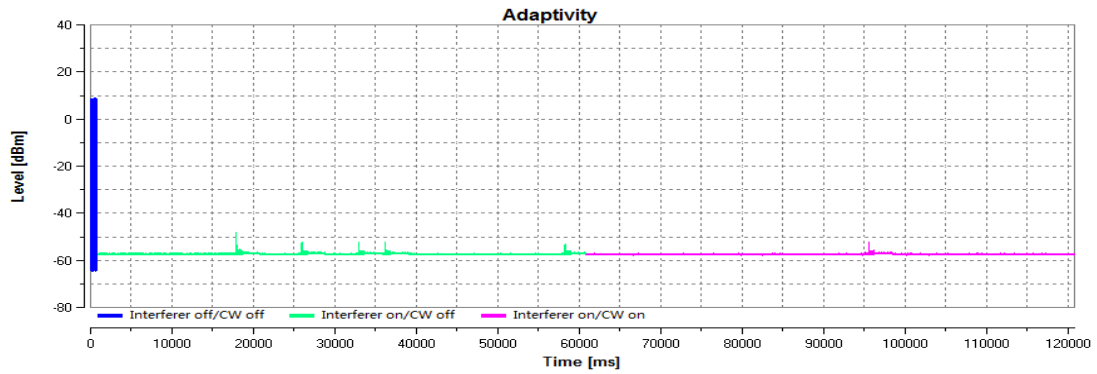


IEEE802.11 b High Channel	
Threshold Level (dBm/MHz)	-63.11
Blocking Interference Level (dBm)	-33
Max COT Time (ms)	2.457ms
Minimum Idle Time (ms)	0.105ms
Duty Cycle (%) after adding the interference signal 50ms	0.00
Duty Cycle (%) after adding the blocking signal with the interfering signal 50ms	0.00
Verdict	Pass

Max COT Time and Minimum Idle time



Adding the interference signal (Green line) and the unwanted signal (Red line)

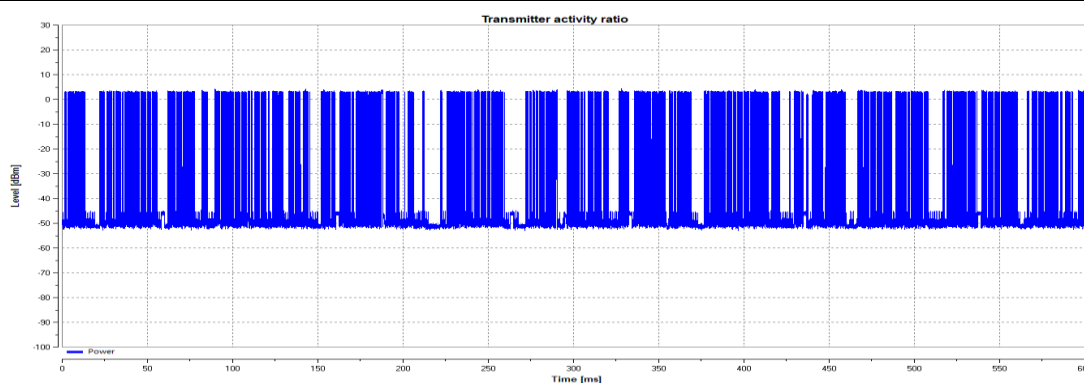
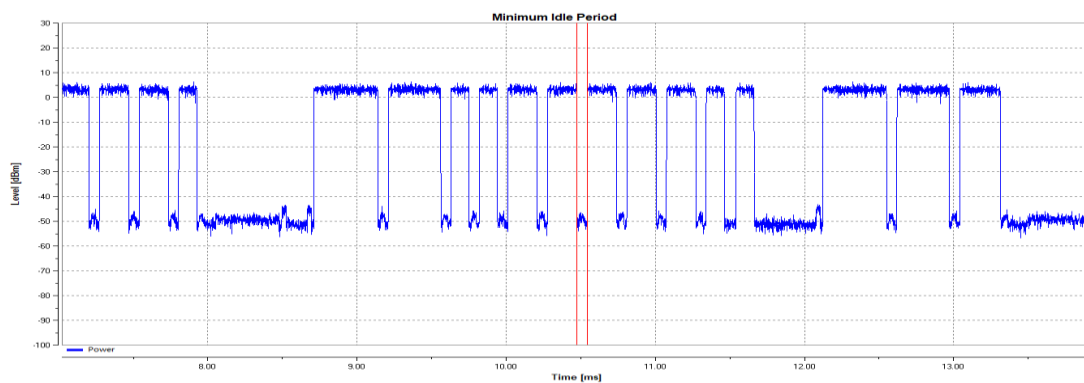
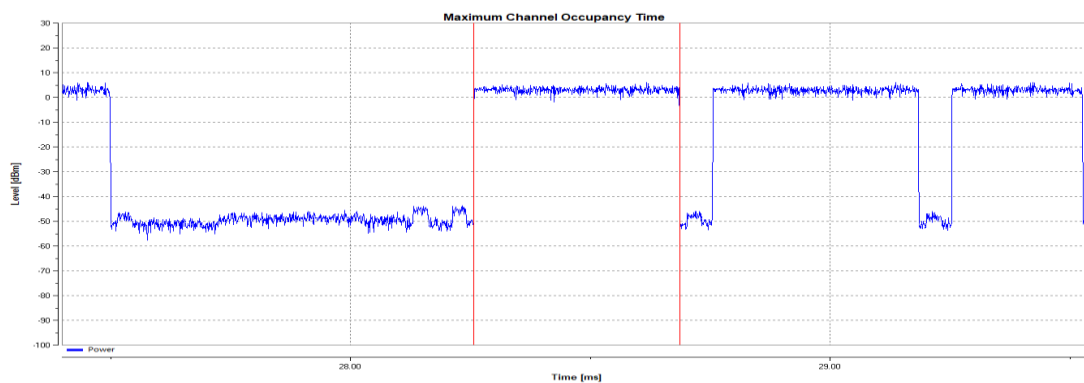


Note: When removal of the interference and blocking signal the UUT will be transmitting again on this channel.

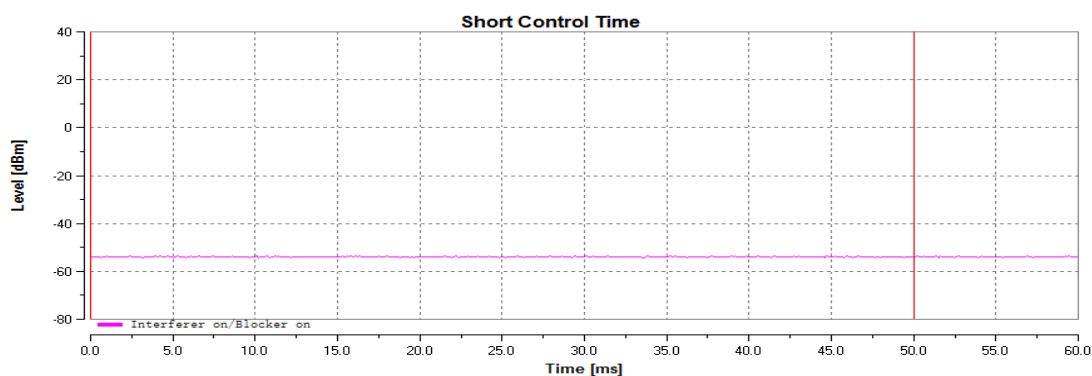
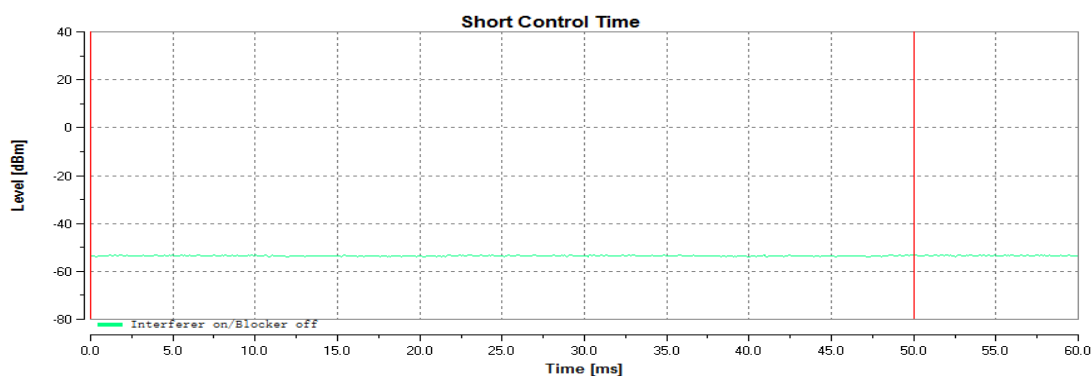
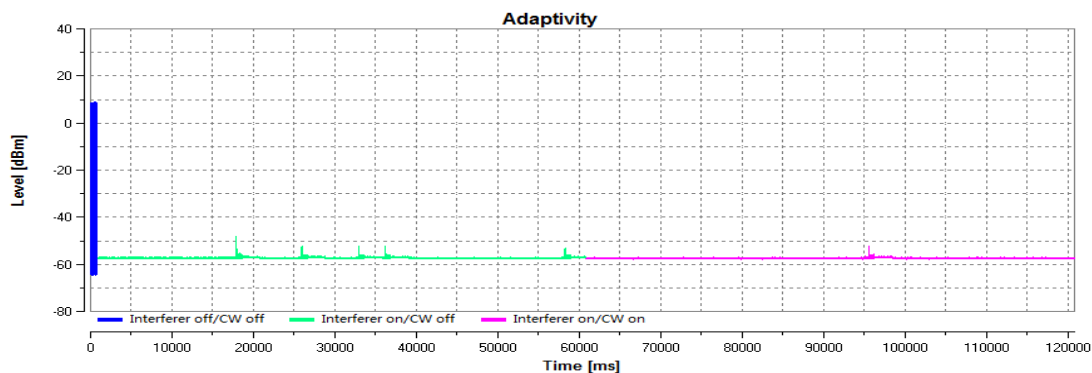
Test Temperature	25.1°C	Relative Humidity	57 %
Test Engineer	Icey Haung	Testing Time	2025-06-30
Remark	The ANT B of 802.11b mode is the worst case because the threshold level is the lowest.		

IEEE802.11 b Low Channel	
Threshold Level (dBm/MHz)	-65.51
Blocking Interference Level (dBm)	-33
Max COT Time (ms)	0.429ms
Minimum Idle Time (ms)	0.069ms
Duty Cycle (%) after adding the interference signal 50ms	0.00
Duty Cycle (%) after adding the blocking signal with the interfering signal 50ms	0.00
Verdict	Pass

Max COT Time and Minimum Idle time

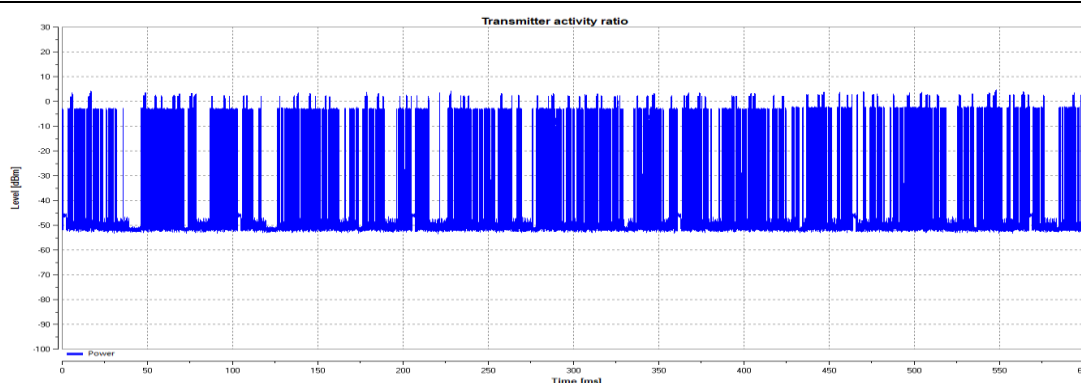
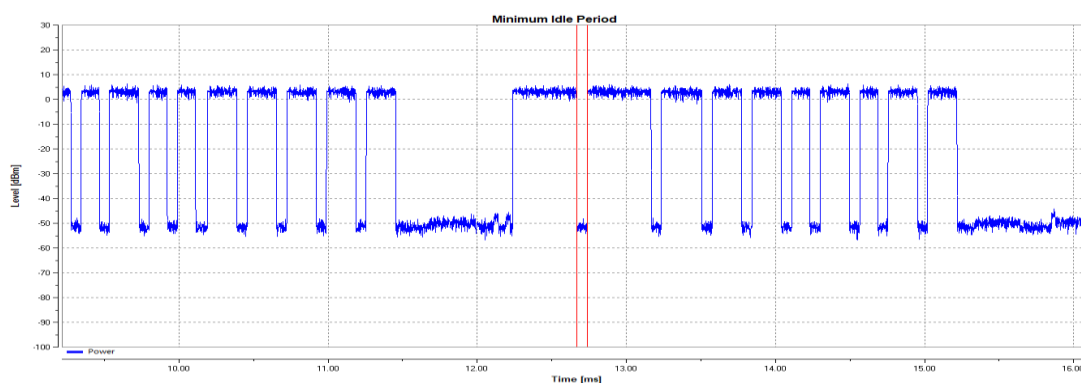
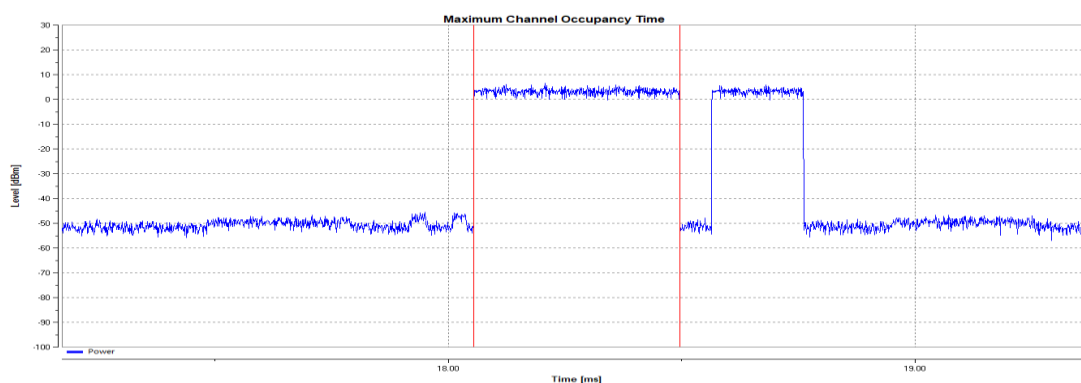


Adding the interference signal (Green line) and the unwanted signal (Red line)

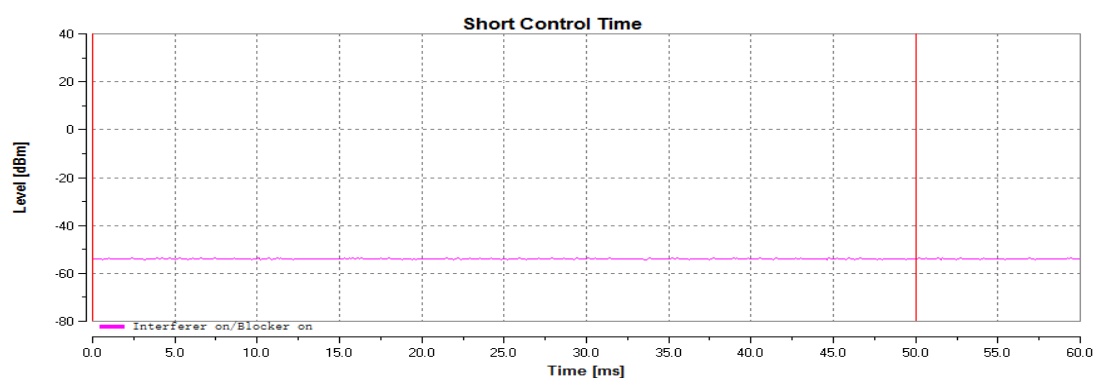
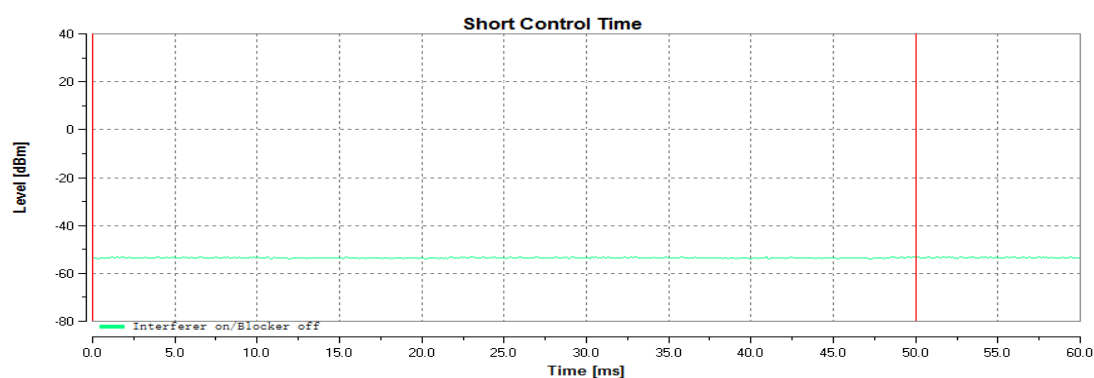
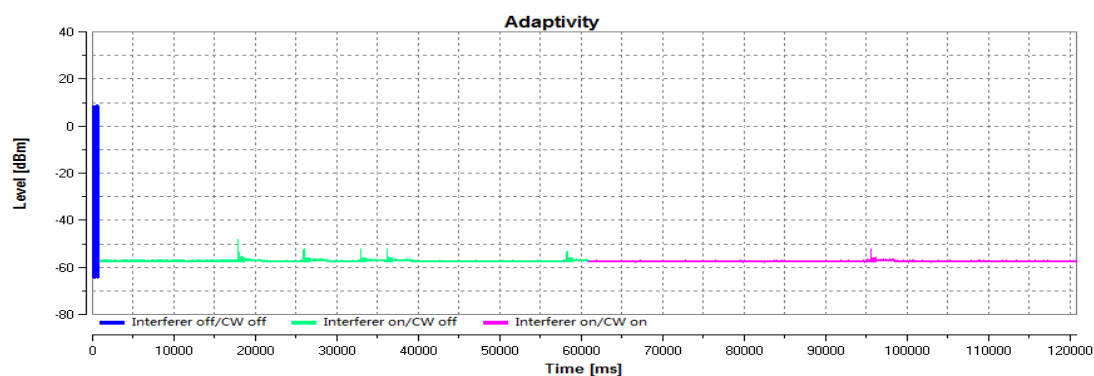


IEEE802.11 b High Channel	
Threshold Level (dBm/MHz)	-60.28
Blocking Interference Level (dBm)	-33
Max COT Time (ms)	0.441ms
Minimum Idle Time (ms)	0.069ms
Duty Cycle (%) after adding the interference signal 50ms	0.00
Duty Cycle (%) after adding the blocking signal with the interfering signal 50ms	0.00
Verdict	Pass

Max COT Time and Minimum Idle time



Adding the interference signal (Green line) and the unwanted signal (Red line)



Note: When removal of the interference and blocking signal the UUT will be transmitting again on this channel.

13 Appendix D: Occupied Channel Bandwidth

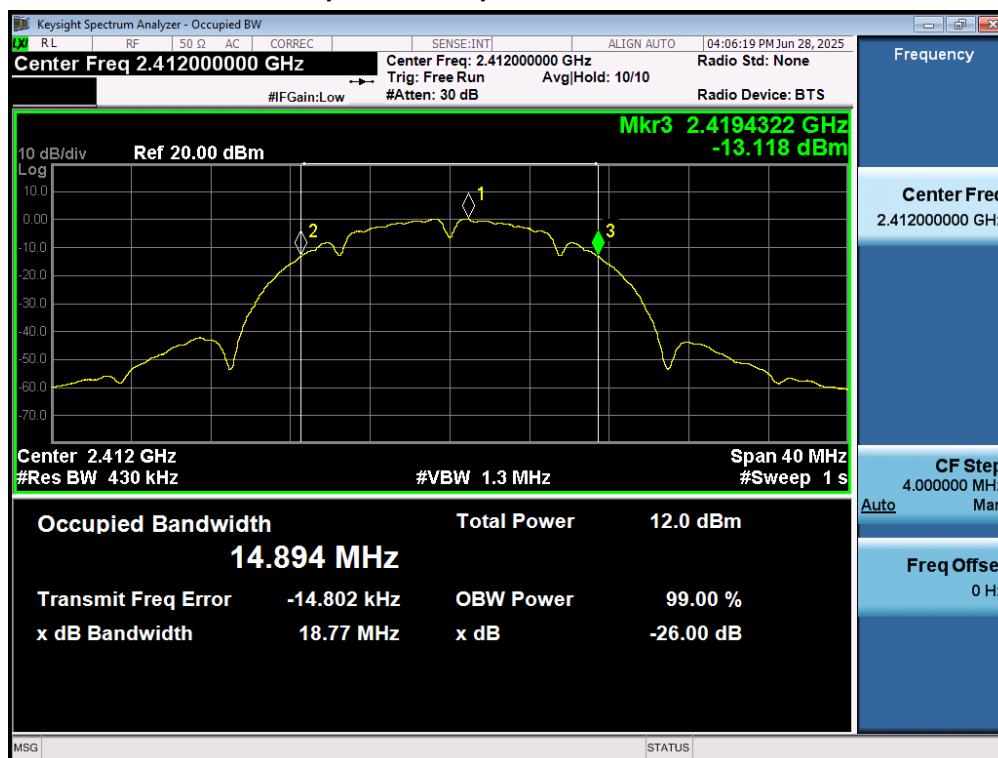
For Drone (DSDR04C):

Test Temperature	24.3°C	Relative Humidity	56 %
Test Engineer	Icey Haung	Testing Time	2025-06-28

Test Data of Occupied Channel Bandwidth-ANT A					
Test Mode	Occupied Channel Bandwidth [MHz]			Limit [MHz]	Verdict
	OCB	FL	FH		
11b_TX_2412_1Mbps	14.894	2404.538	2419.432	2400 to 2483.5	Pass
11b_TX_2442_1Mbps	14.880	2434.587	2449.467	2400 to 2483.5	Pass
11b_TX_2472_1Mbps	15.035	2464.510	2479.545	2400 to 2483.5	Pass
11g_TX_2412_6Mbps	16.574	2403.722	2420.296	2400 to 2483.5	Pass
11g_TX_2442_6Mbps	16.571	2433.739	2450.310	2400 to 2483.5	Pass
11g_TX_2472_6Mbps	16.574	2463.731	2480.305	2400 to 2483.5	Pass
11n20_TX_2412_MCS0	17.713	2403.149	2420.862	2400 to 2483.5	Pass
11n20_TX_2442_MCS0	17.712	2433.167	2450.879	2400 to 2483.5	Pass
11n20_TX_2472_MCS0	17.699	2463.171	2480.870	2400 to 2483.5	Pass

Test Data of Occupied Channel Bandwidth-ANT B					
Test Mode	Occupied Channel Bandwidth [MHz]			Limit [MHz]	Verdict
	OCB	FL	FH		
11b_TX_2412_1Mbps	14.838	2404.598	2419.436	2400 to 2483.5	Pass
11b_TX_2442_1Mbps	14.811	2434.638	2449.449	2400 to 2483.5	Pass
11b_TX_2472_1Mbps	14.982	2464.524	2479.506	2400 to 2483.5	Pass
11g_TX_2412_6Mbps	16.579	2403.732	2420.311	2400 to 2483.5	Pass
11g_TX_2442_6Mbps	16.576	2433.737	2450.313	2400 to 2483.5	Pass
11g_TX_2472_6Mbps	16.564	2463.735	2480.299	2400 to 2483.5	Pass
11n20_TX_2412_MCS0	17.712	2403.162	2420.874	2400 to 2483.5	Pass
11n20_TX_2442_MCS0	17.703	2433.172	2450.875	2400 to 2483.5	Pass
11n20_TX_2472_MCS0	17.702	2463.162	2480.864	2400 to 2483.5	Pass

Test Graphs of Occupied Channel Bandwidth



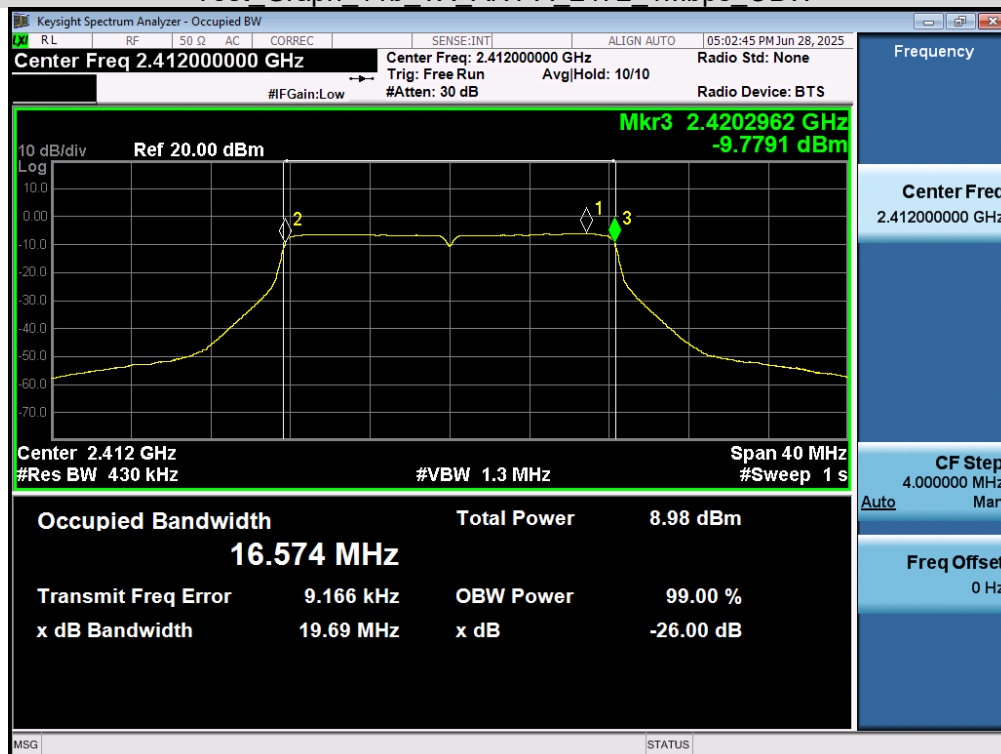
Test Graph 11b TX ANT A 2412 1Mbps OBW



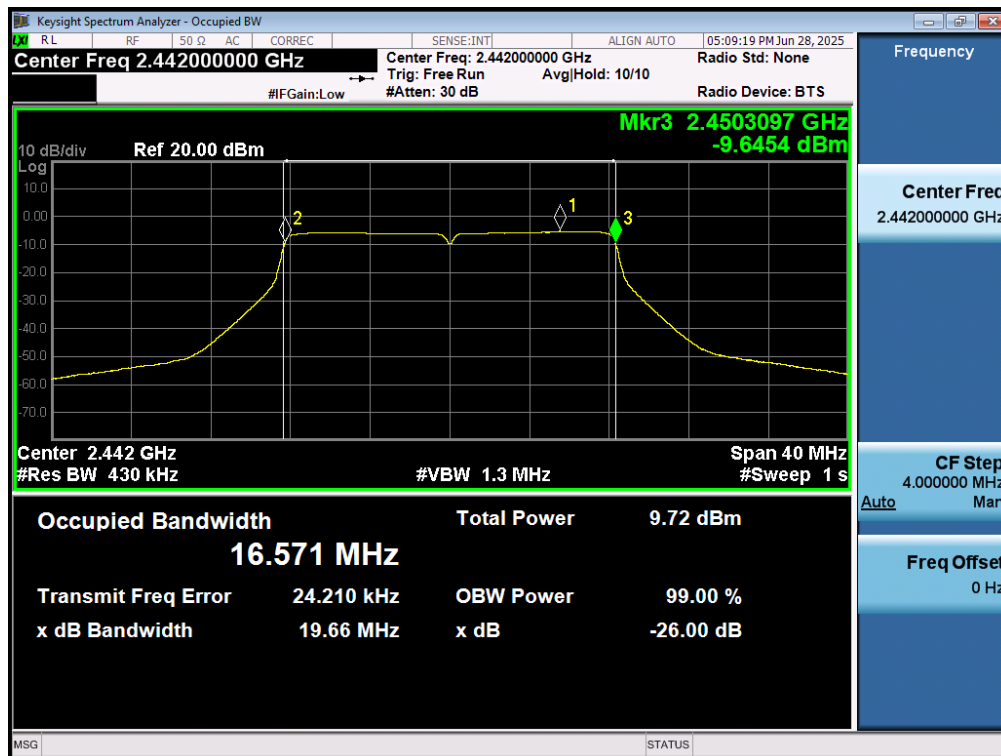
Test_Graph_11b_TX_ANT A_2442_1Mbps_OBW



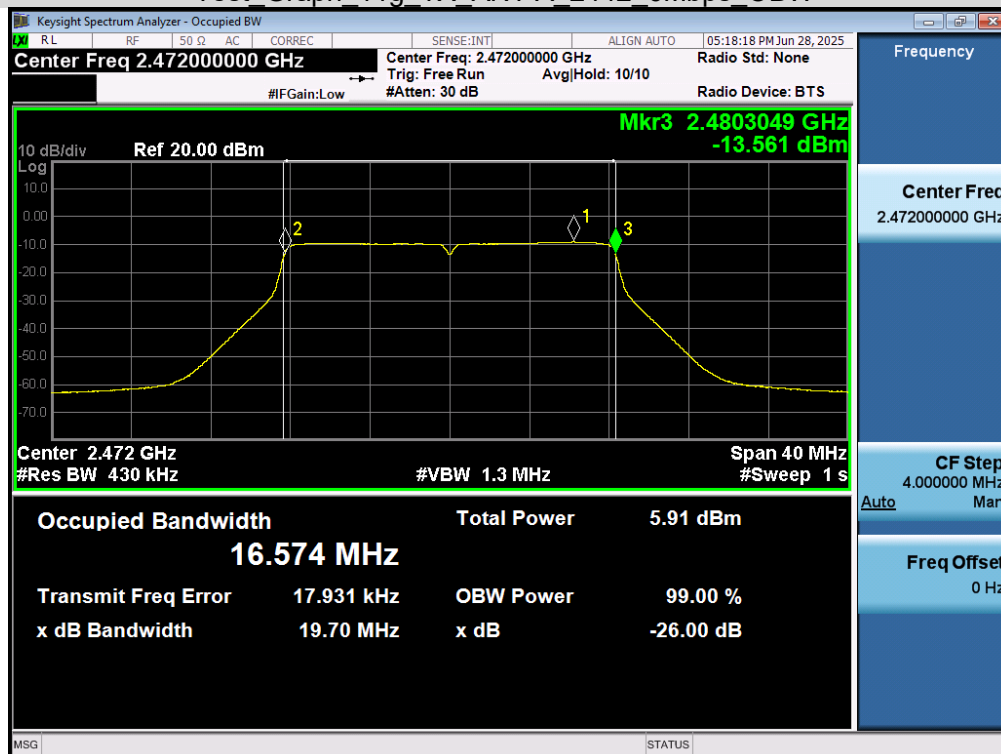
Test Graph 11b TX ANT A 2472 1Mbps OBW



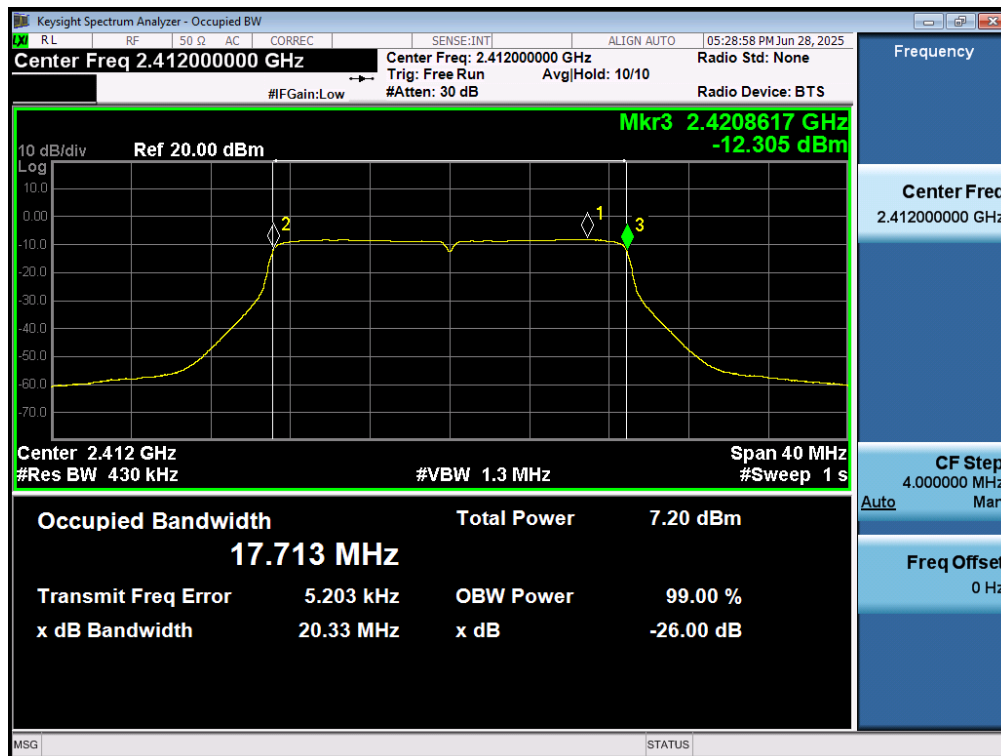
Test_Graph_11g_TX_ANT A 2412_6Mbps_OBW



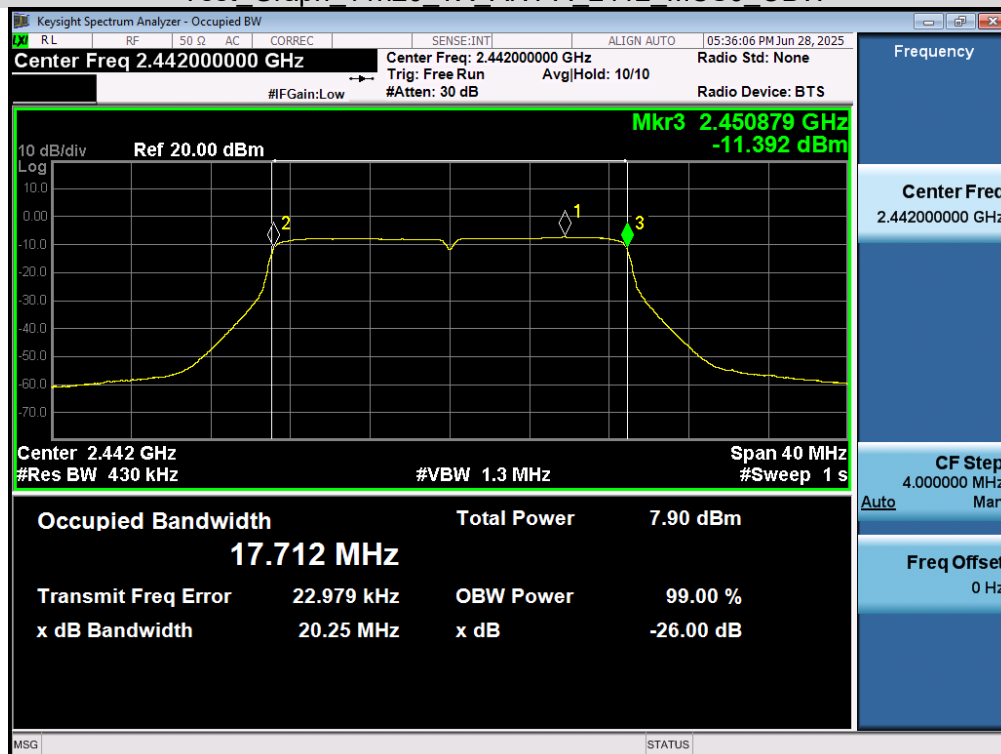
Test Graph 11g_TX_ANT A 2442 6Mbps_OBW



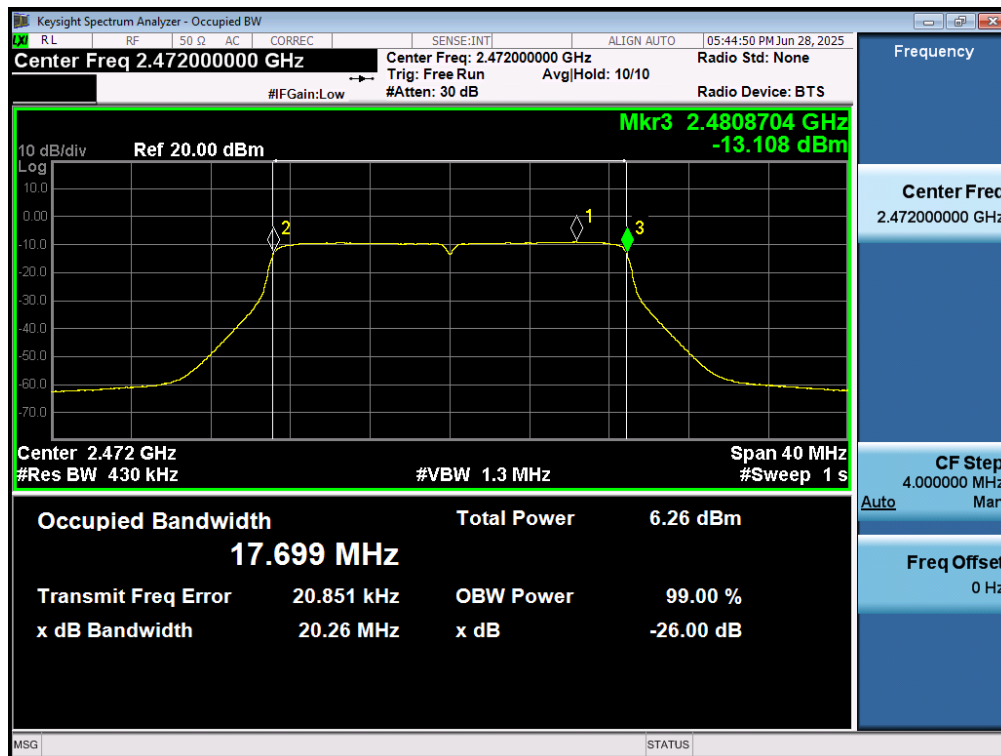
Test_Graph_11g_TX_ANT A 2472 6Mbps_OBW



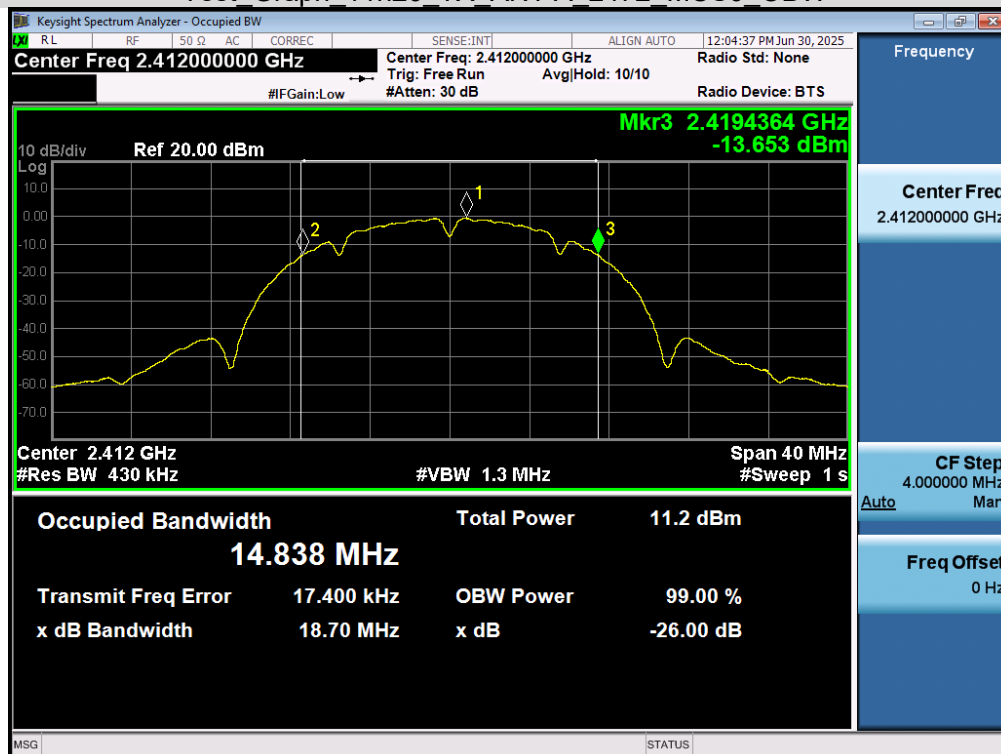
Test Graph 11n20_TX_ANT A_2412_MCS0_OBW



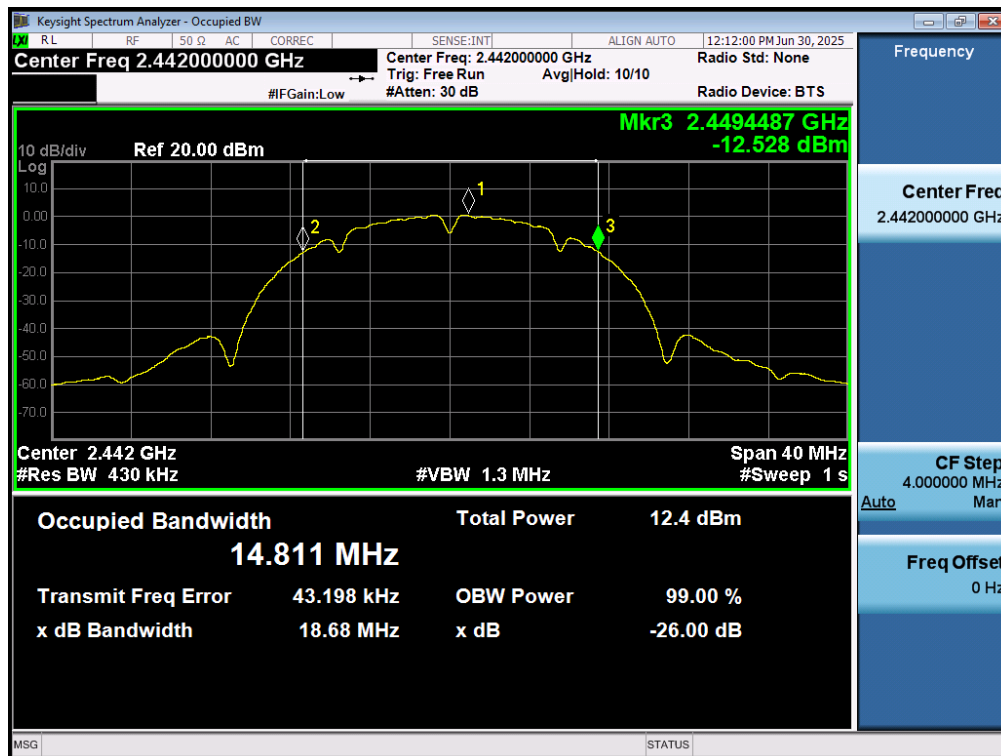
Test_Graph_11n20_TX_ANT A_2442_MCS0_OBW



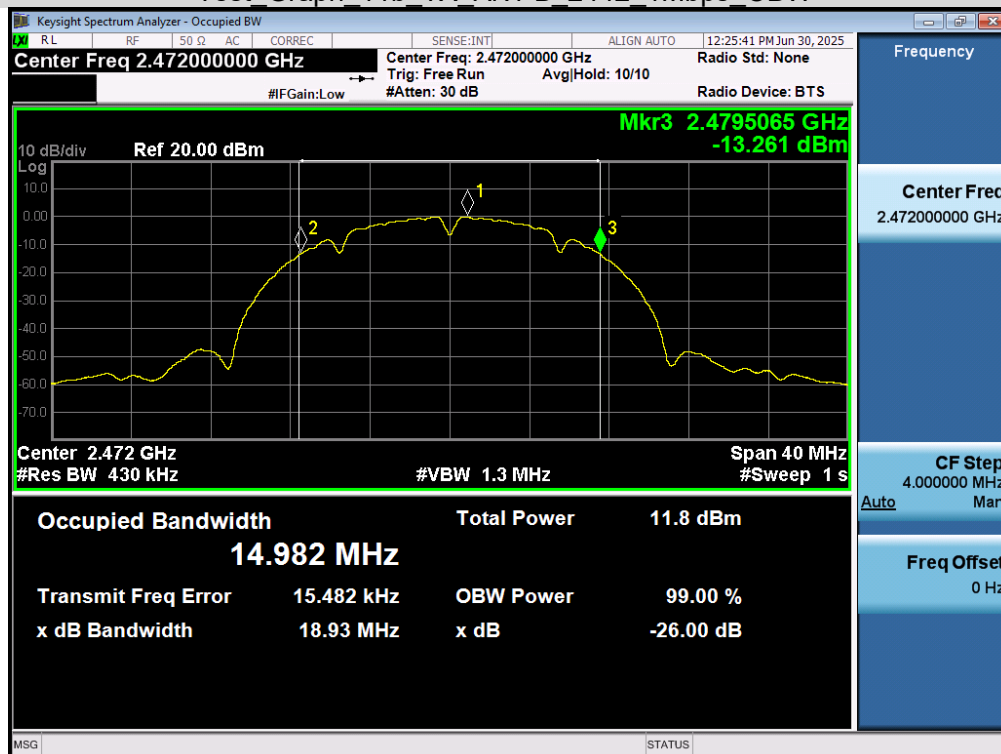
Test Graph 11n20_TX_ANT A_2472_MCS0_OBW



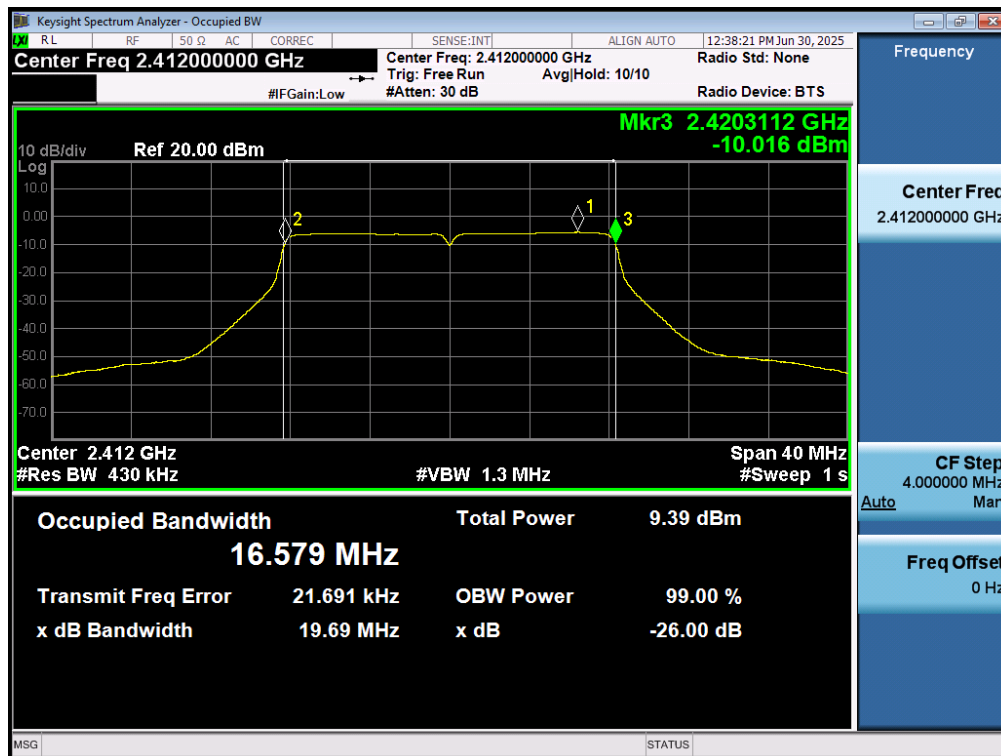
Test_Graph_11b_TX_ANT B_2412_1Mbps_OBW



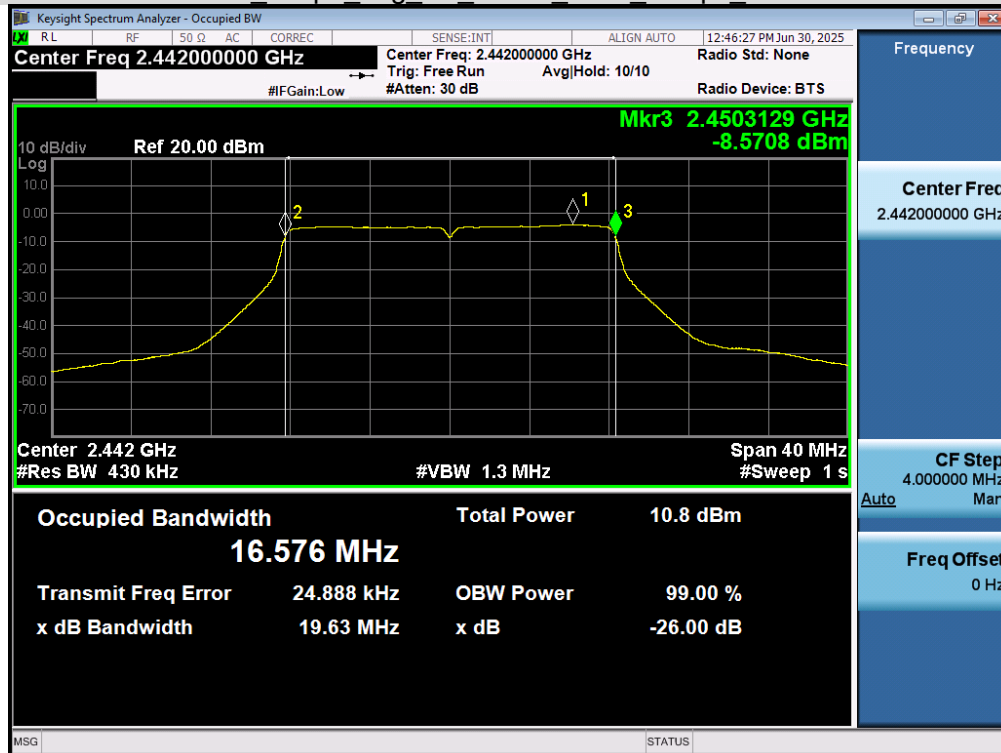
Test Graph 11b TX ANT B 2442 1Mbps OBW



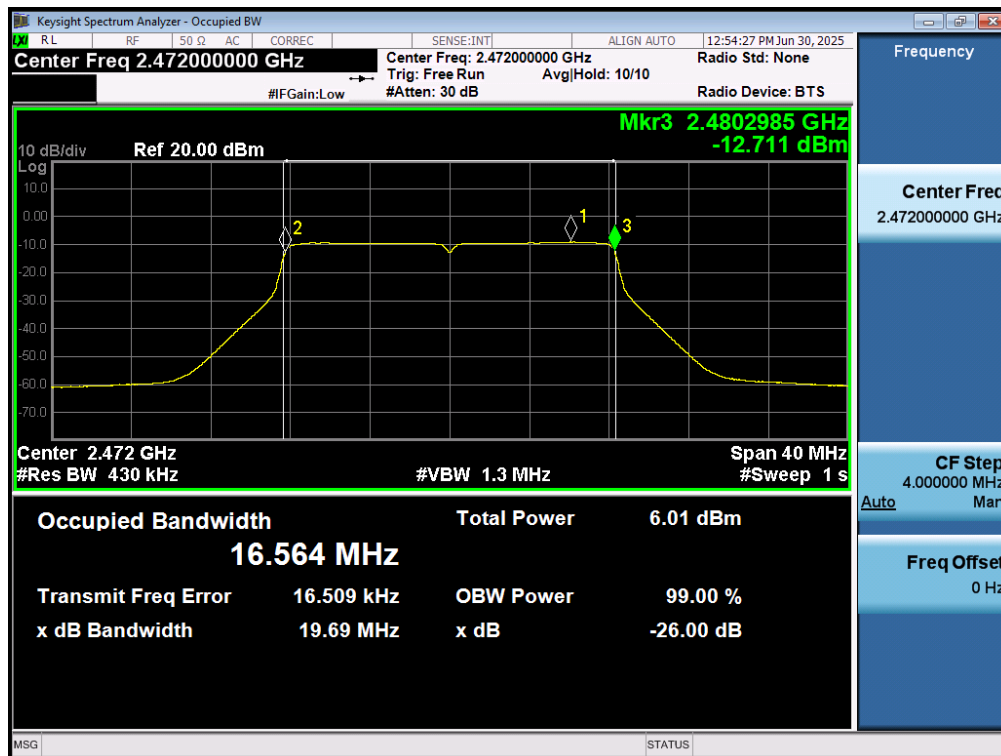
Test_Graph_11b_TX_ANT B_2472_1Mbps_OBW



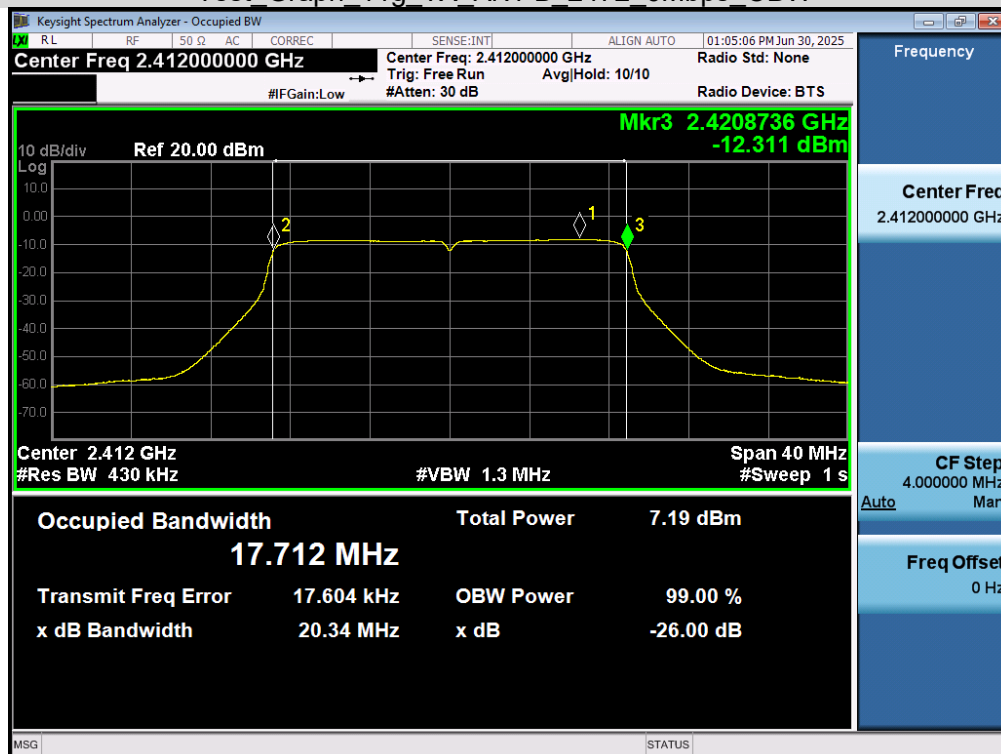
Test Graph 11g TX ANT B 2412 6Mbps OBW



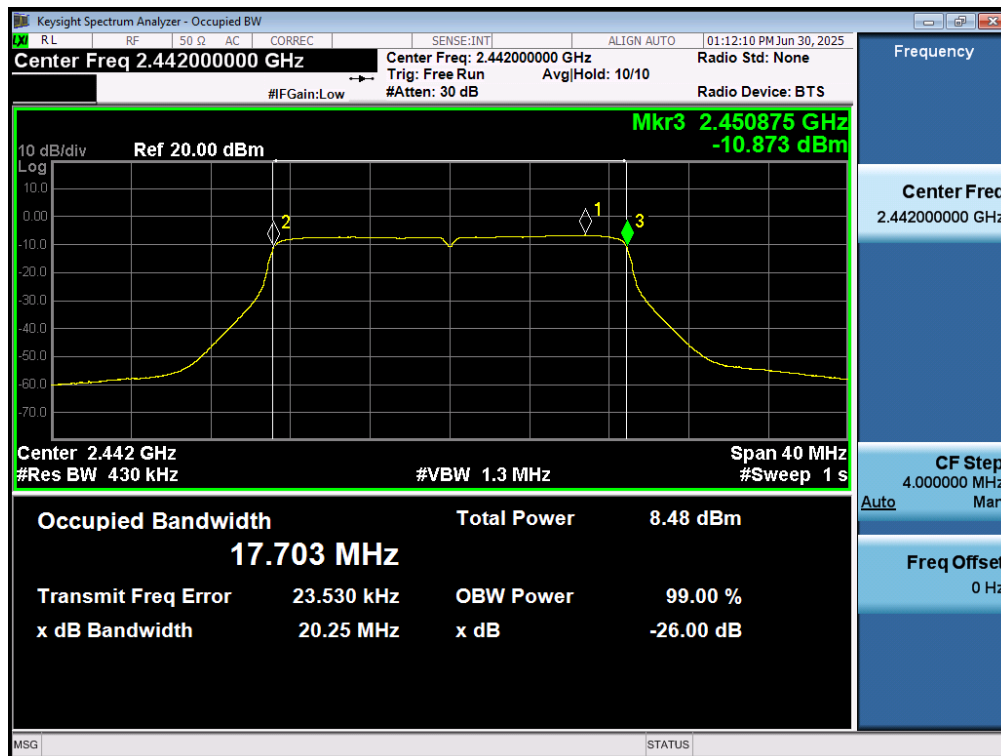
Test_Graph_11g_TX_ANT B_2442_6Mbps_OBW



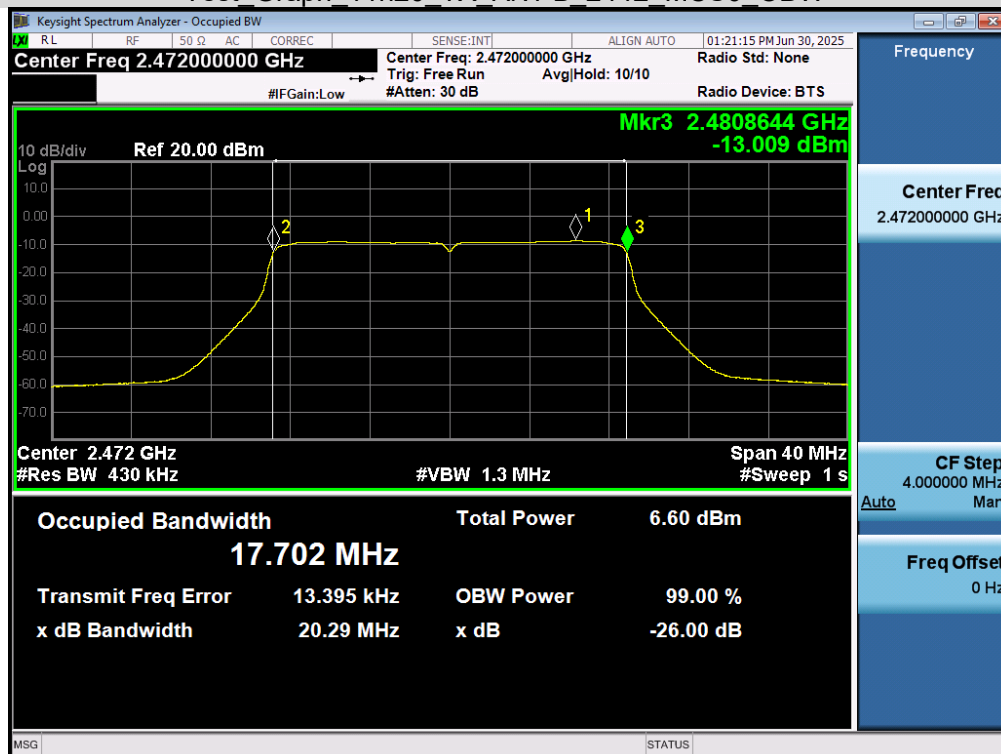
Test Graph 11g TX ANT B 2472 6Mbps OBW



Test_Graph_11n20_TX_ANT B_2412 MCS0_OBW



Test Graph 11n20 TX ANT B 2442 MCS0 OBW



Test Graph 11n20 TX ANT B 2472 MCS0 OBW

For Remote (DSRC02A):

Test Temperature	25.1°C	Relative Humidity	57 %
Test Engineer	Icey Haung	Testing Time	2025-06-30

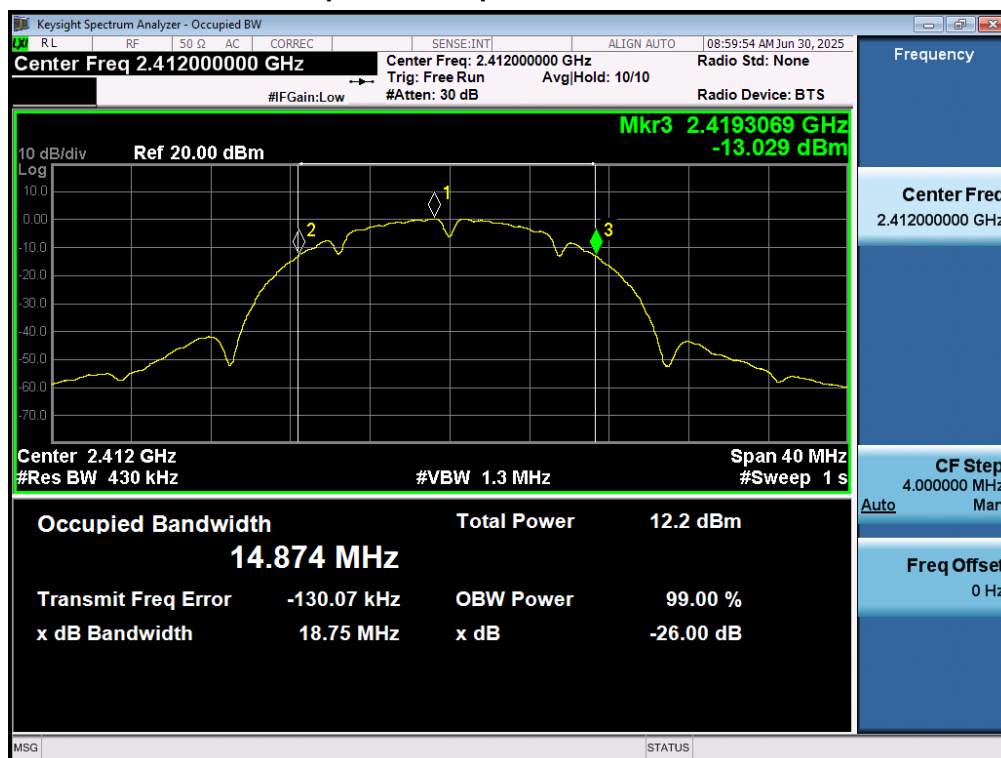
Test Data of Occupied Channel Bandwidth-ANT A

Test Mode	Occupied Channel Bandwidth [MHz]			Limit [MHz]	Verdict
	OCB	FL	FH		
11b_TX_2412_1Mbps	14.874	2404.433	2419.307	2400 to 2483.5	Pass
11b_TX_2442_1Mbps	14.882	2434.437	2449.319	2400 to 2483.5	Pass
11b_TX_2472_1Mbps	14.928	2464.419	2479.347	2400 to 2483.5	Pass
11g_TX_2412_6Mbps	16.536	2403.701	2420.237	2400 to 2483.5	Pass
11g_TX_2442_6Mbps	16.538	2433.699	2450.237	2400 to 2483.5	Pass
11g_TX_2472_6Mbps	16.583	2463.676	2480.259	2400 to 2483.5	Pass
11n20_TX_2412_MCS0	17.653	2403.141	2420.794	2400 to 2483.5	Pass
11n20_TX_2442_MCS0	17.694	2433.117	2450.811	2400 to 2483.5	Pass
11n20_TX_2472_MCS0	17.690	2463.120	2480.810	2400 to 2483.5	Pass

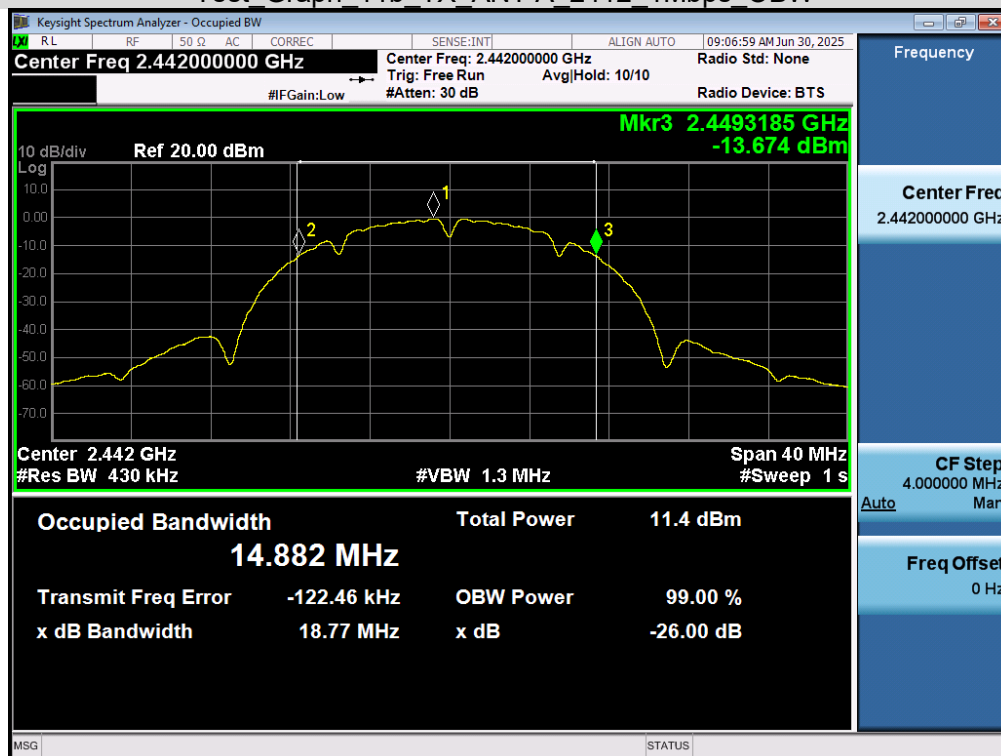
Test Data of Occupied Channel Bandwidth-ANT B

Test Mode	Occupied Channel Bandwidth [MHz]			Limit [MHz]	Verdict
	OCB	FL	FH		
11b_TX_2412_1Mbps	14.873	2404.474	2419.347	2400 to 2483.5	Pass
11b_TX_2442_1Mbps	14.882	2434.478	2449.360	2400 to 2483.5	Pass
11b_TX_2472_1Mbps	15.017	2464.436	2479.453	2400 to 2483.5	Pass
11g_TX_2412_6Mbps	16.575	2403.674	2420.249	2400 to 2483.5	Pass
11g_TX_2442_6Mbps	16.584	2433.669	2450.253	2400 to 2483.5	Pass
11g_TX_2472_6Mbps	16.546	2463.701	2480.247	2400 to 2483.5	Pass
11n20_TX_2412_MCS0	17.717	2403.107	2420.824	2400 to 2483.5	Pass
11n20_TX_2442_MCS0	17.688	2433.123	2450.811	2400 to 2483.5	Pass
11n20_TX_2472_MCS0	17.697	2463.120	2480.817	2400 to 2483.5	Pass

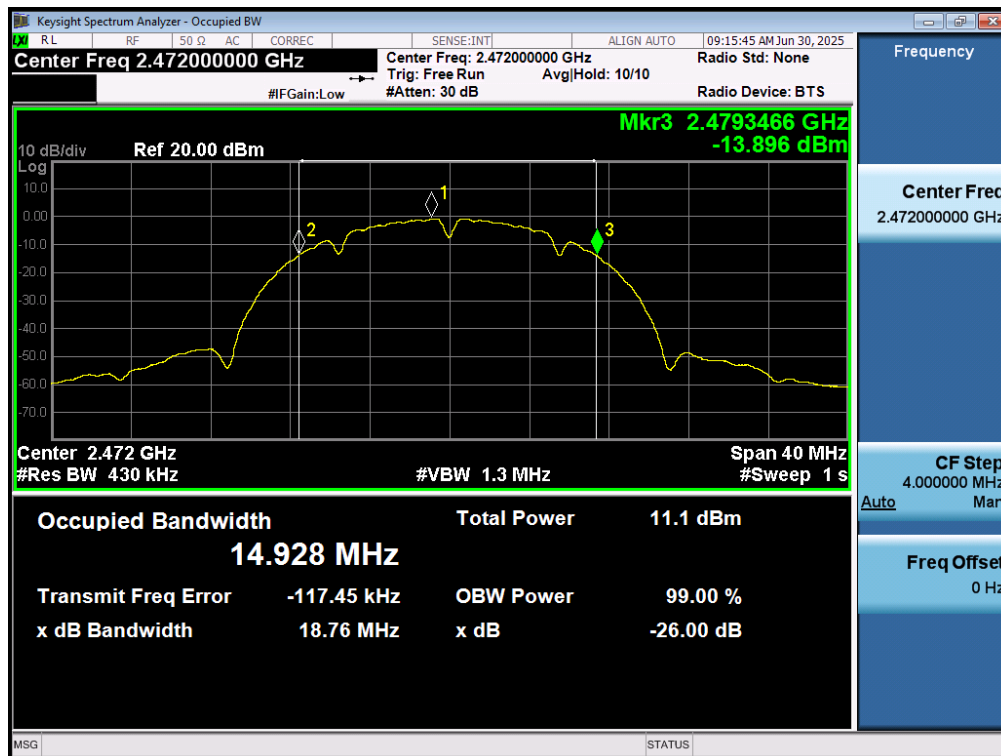
Test Graphs of Occupied Channel Bandwidth



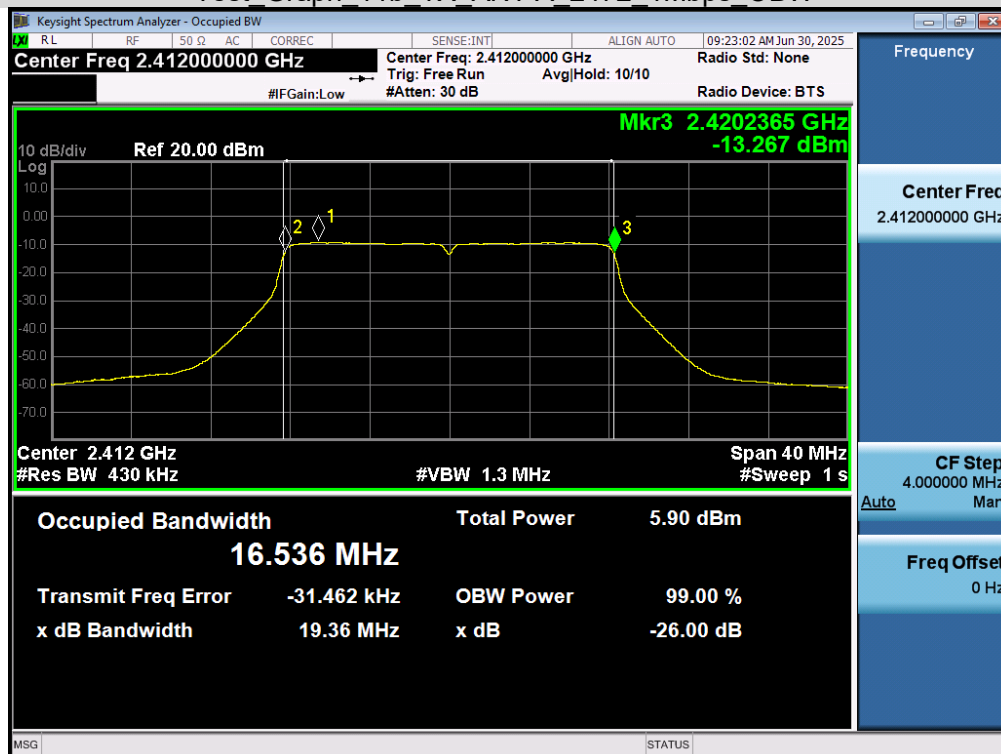
Test Graph 11b TX ANT A 2412 1Mbps OBW



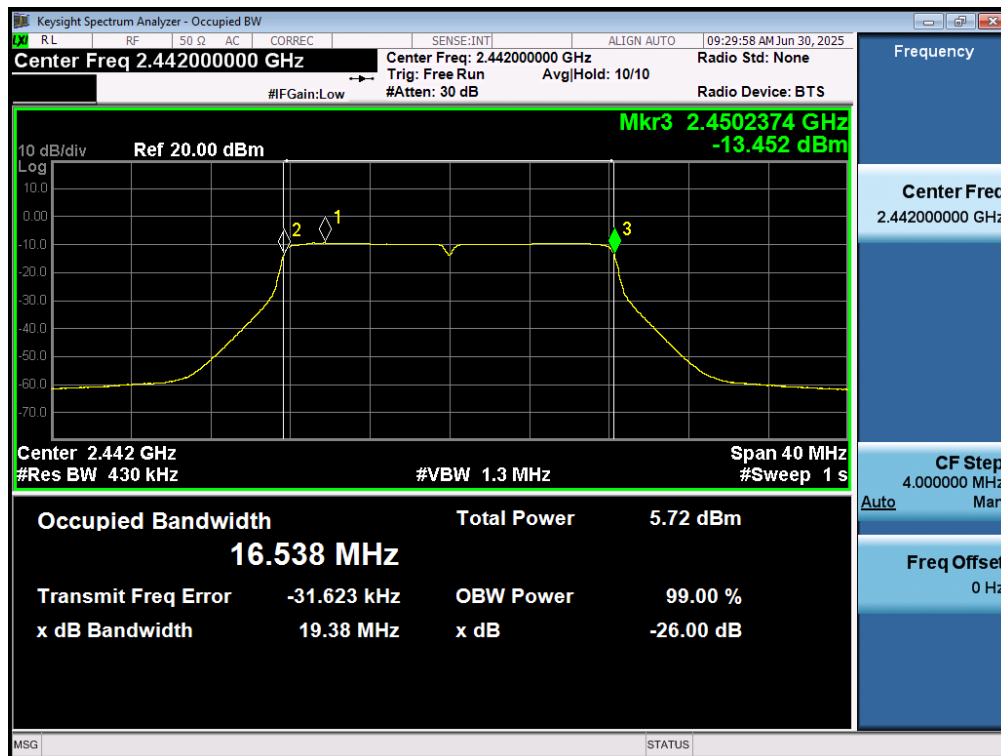
Test_Graph_11b_TX_ANT A 2442 1Mbps OBW



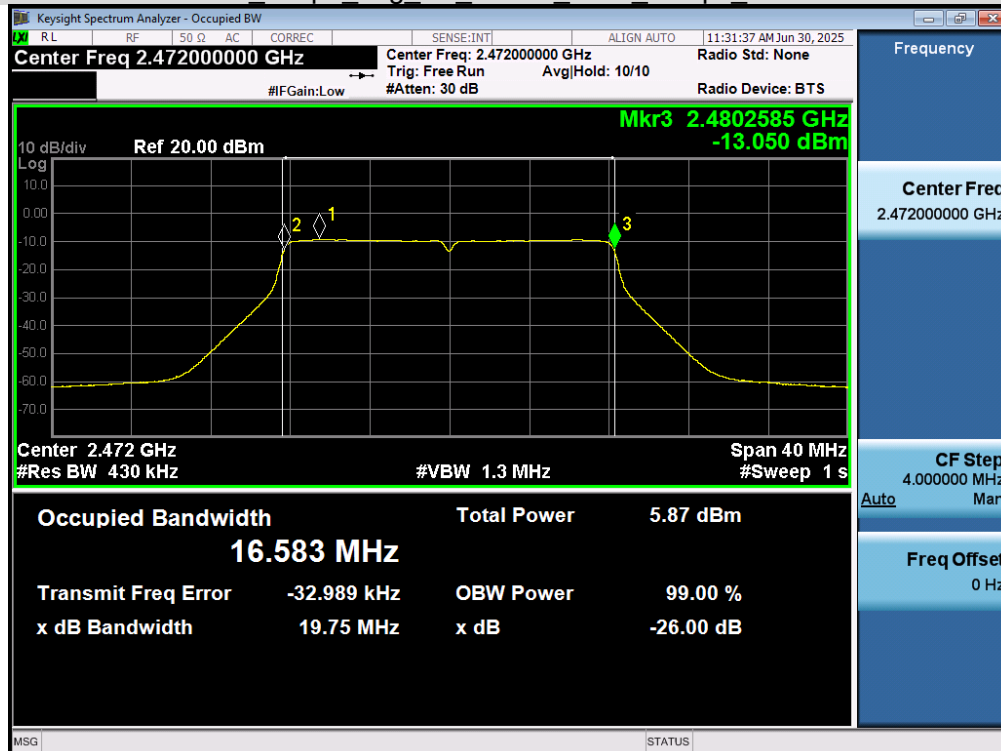
Test Graph 11b TX ANT A 2472 1Mbps OBW



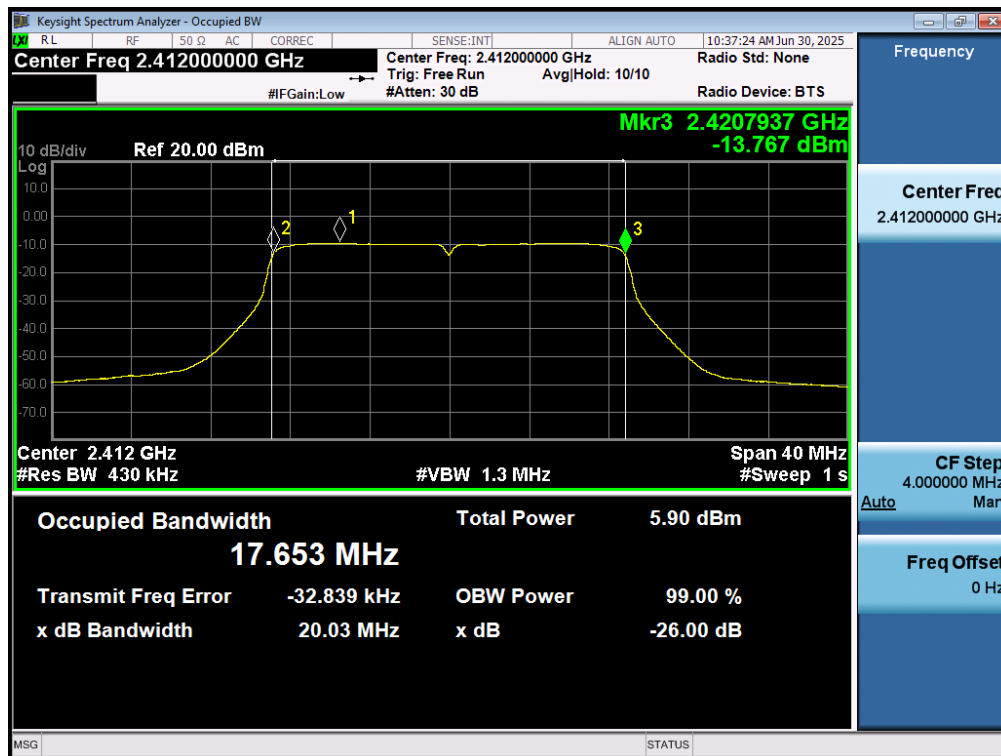
Test_Graph_11g_TX_ANT A 2412_6Mbps_OBW



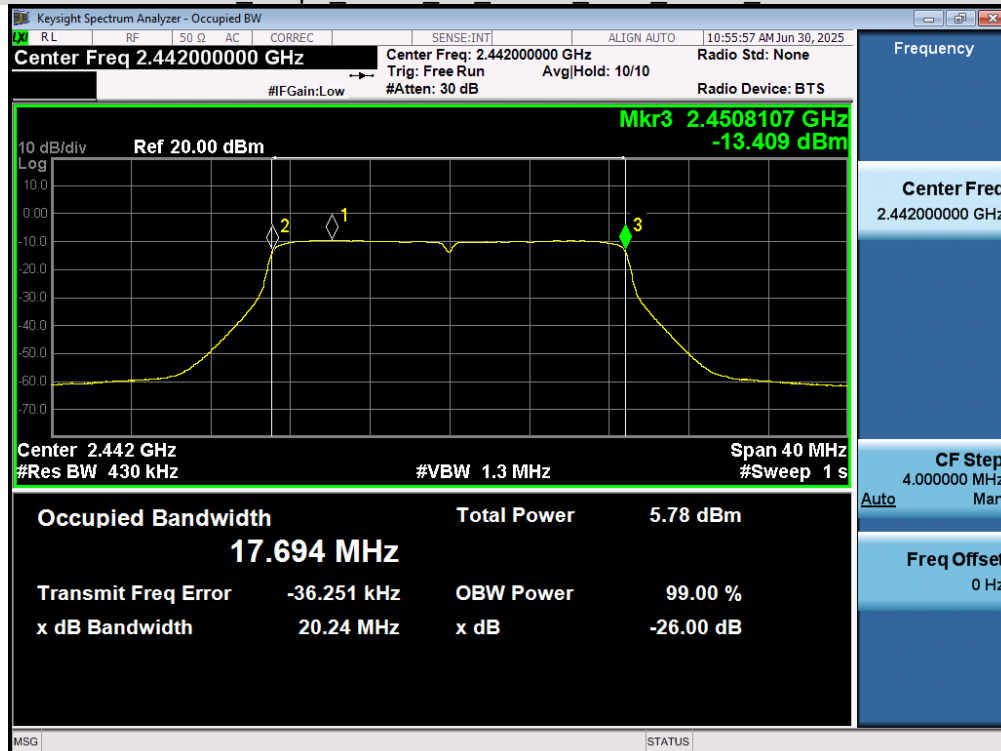
Test Graph 11g_TX_ANT A 2442 6Mbps_OBW



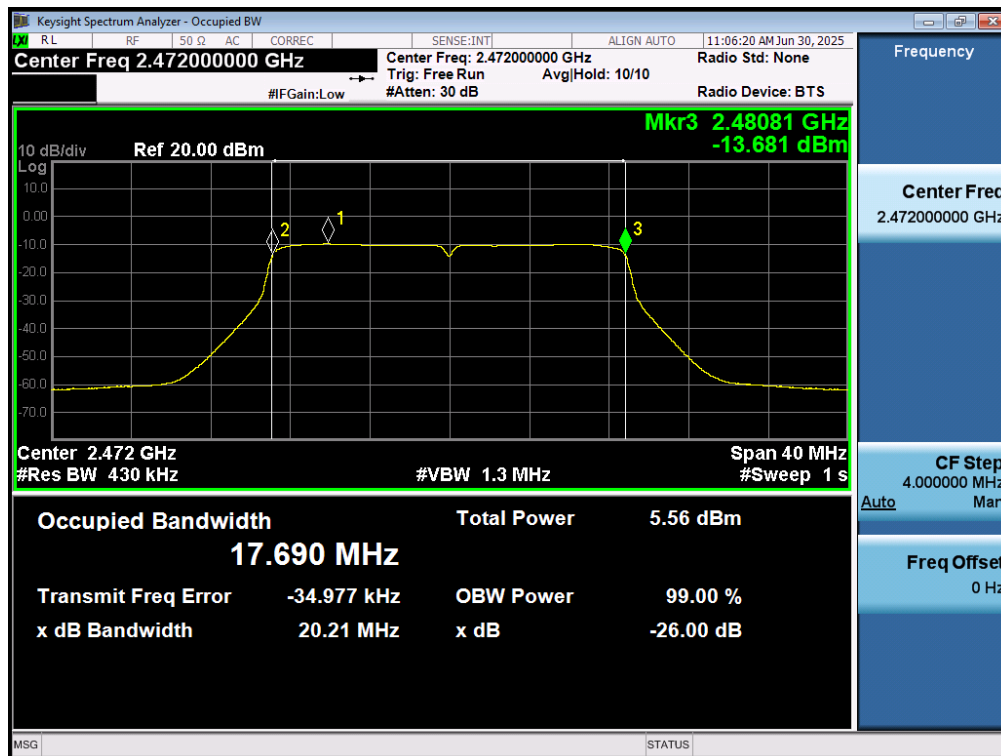
Test_Graph_11g_TX_ANT A 2472 6Mbps_OBW



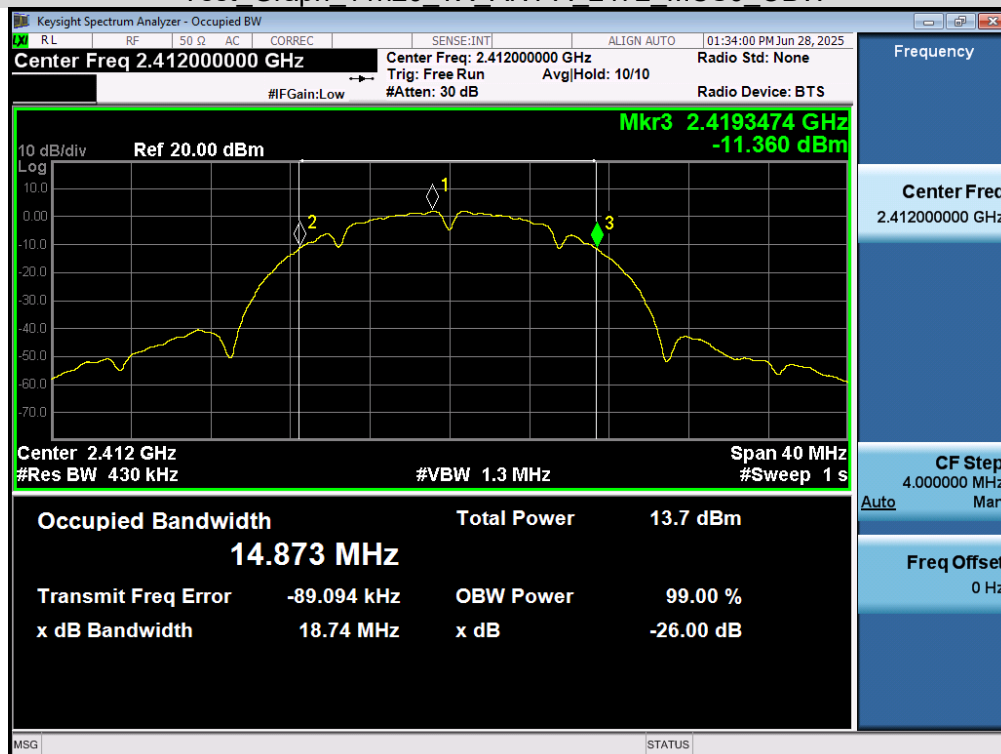
Test Graph 11n20_TX_ANT A_2412_MCS0_OBW



Test_Graph_11n20_TX_ANT A_2442_MCS0_OBW



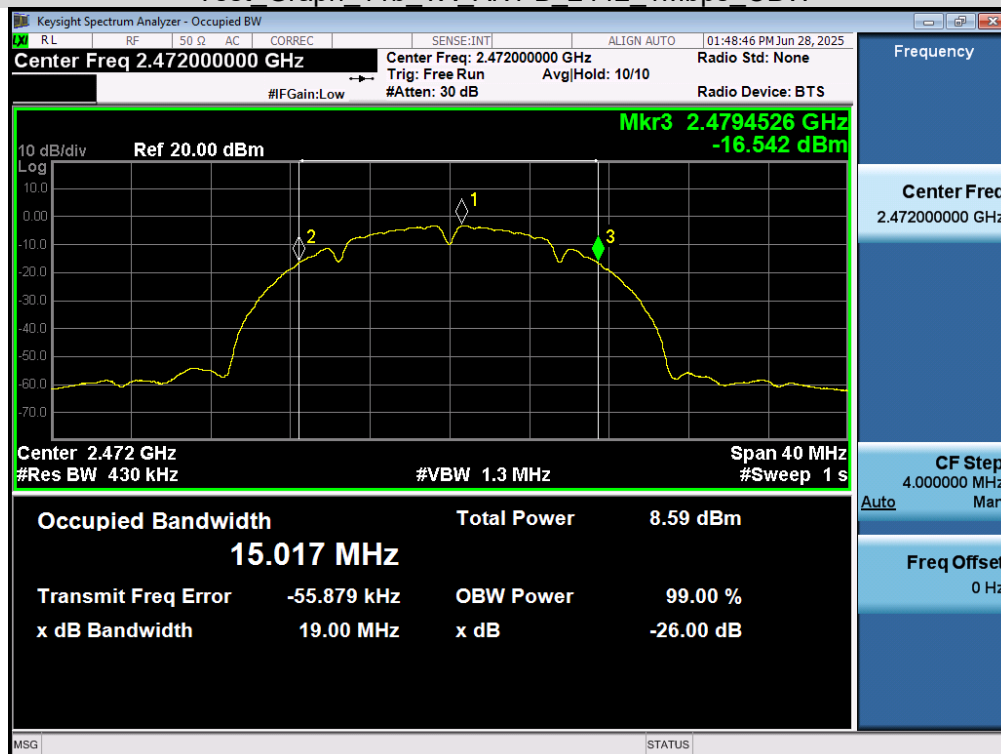
Test Graph 11n20_TX_ANT A_2472_MCS0_OBW



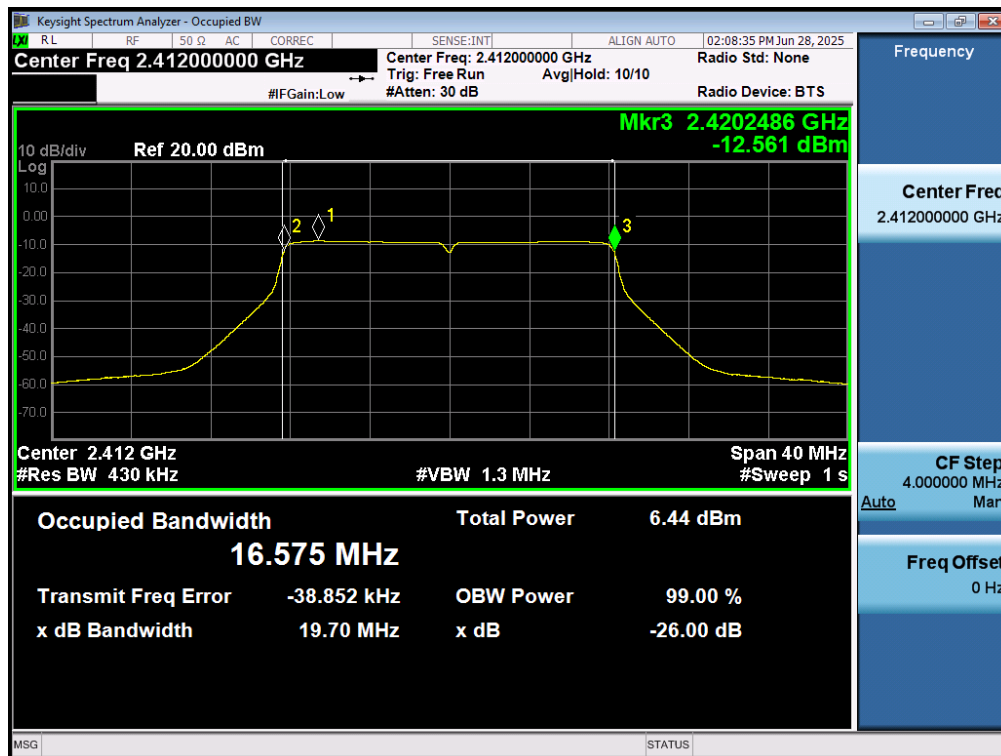
Test_Graph_11b_TX_ANT B_2412_1Mbps_OBW



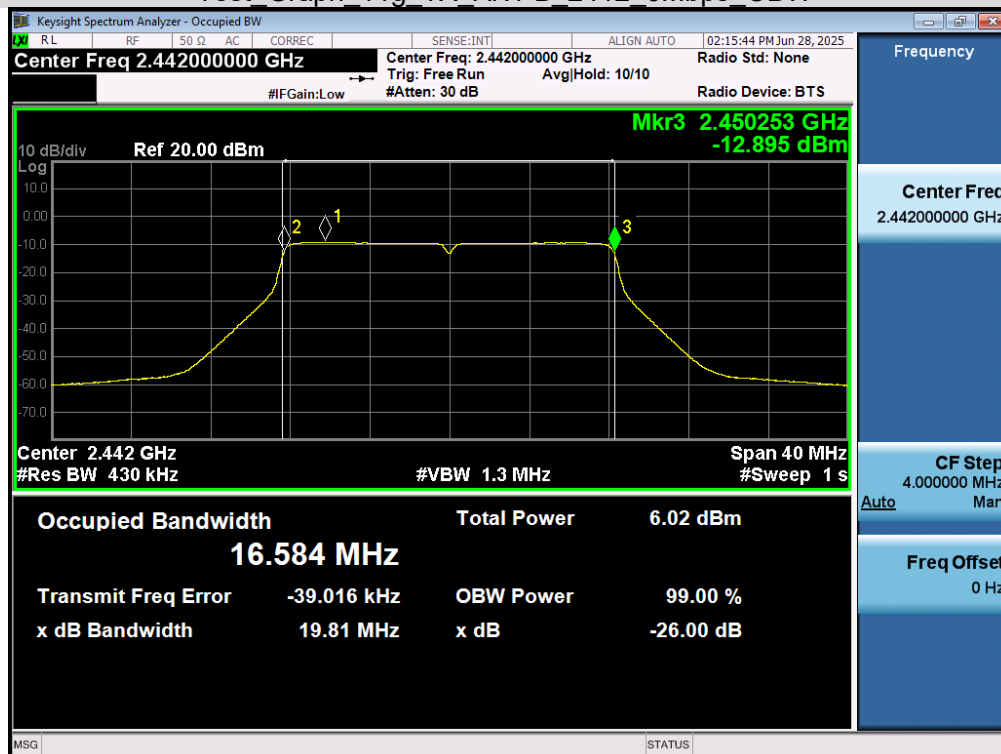
Test Graph 11b TX ANT B 2442 1Mbps OBW



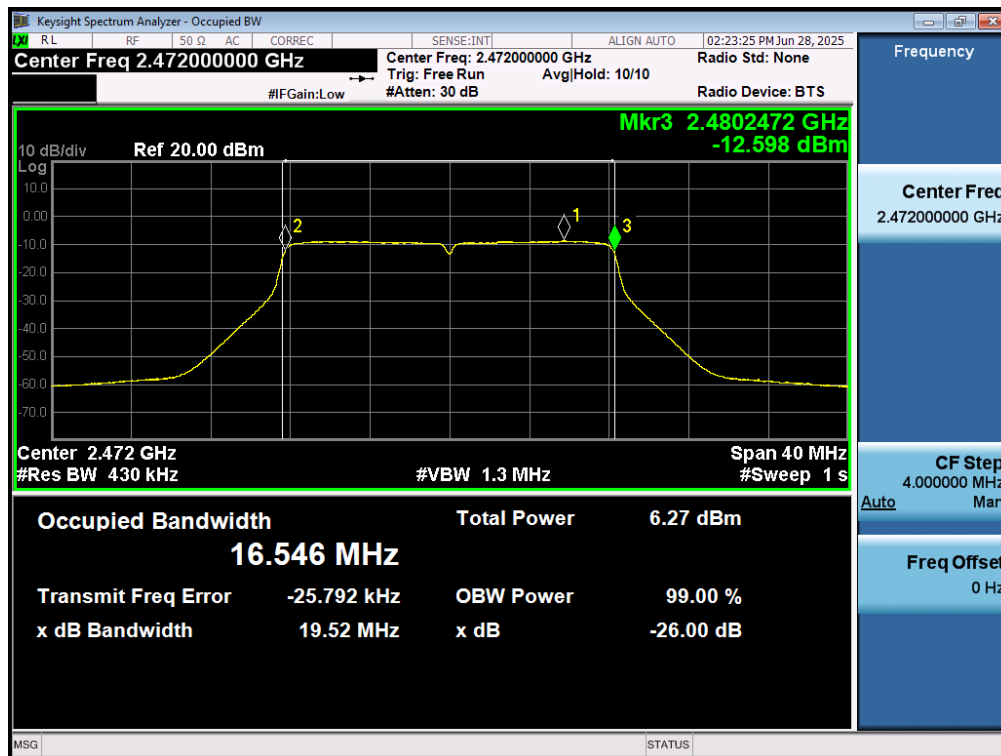
Test_Graph_11b_TX_ANT B_2472_1Mbps_OBW



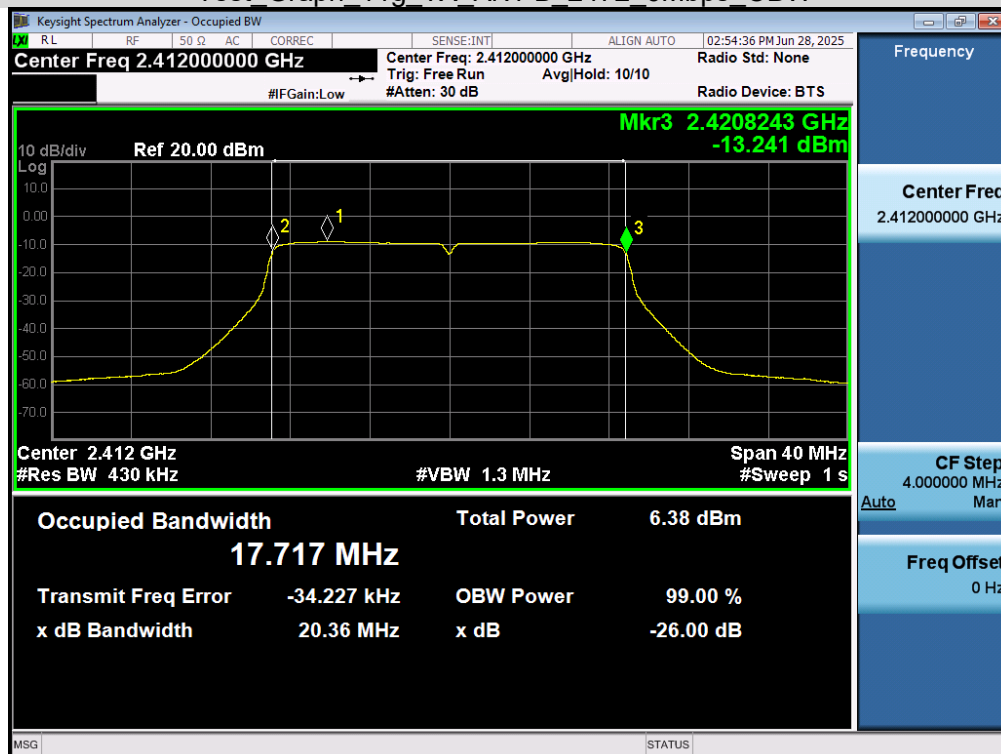
Test Graph 11g TX ANT B 2412 6Mbps OBW



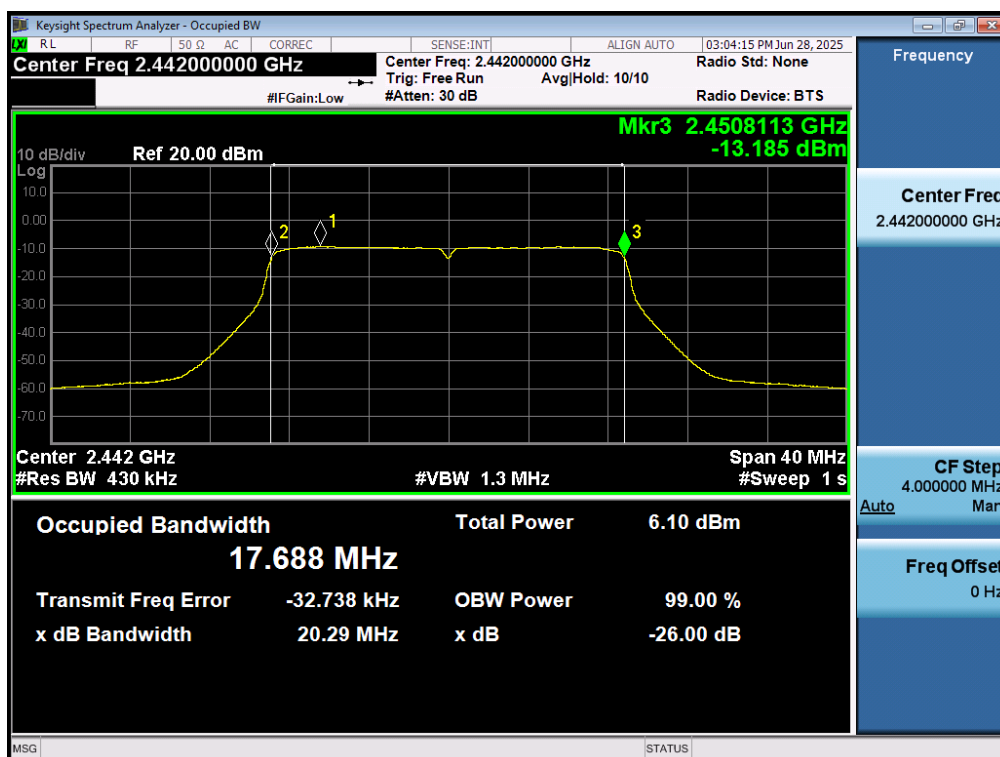
Test_Graph_11g_TX_ANT B_2442_6Mbps_OBW



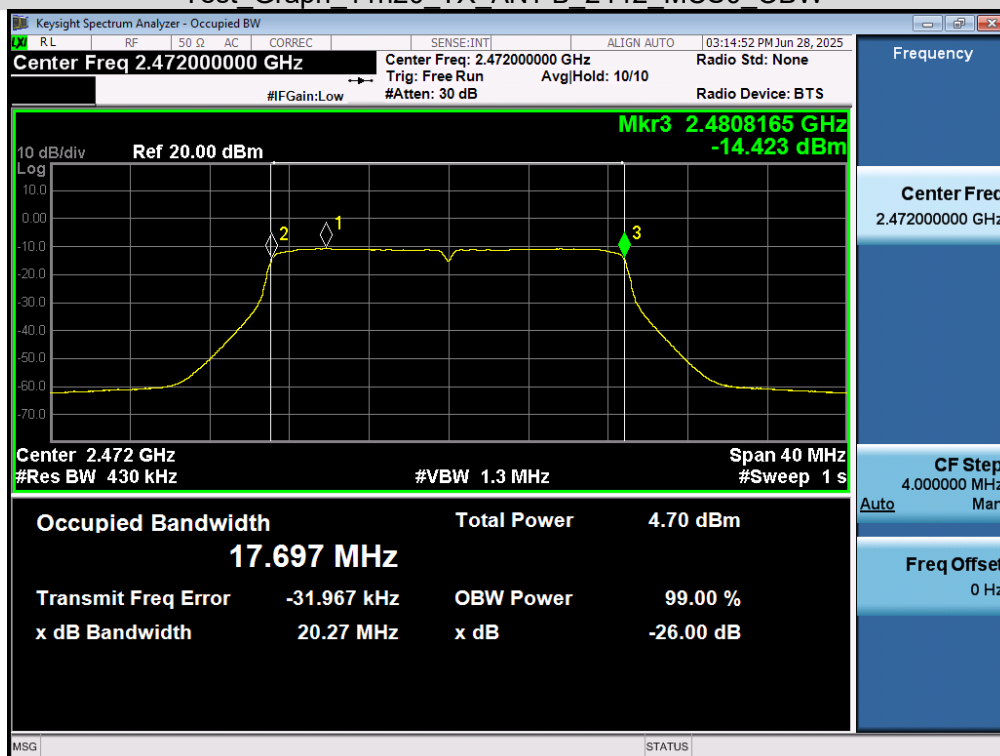
Test Graph 11g TX ANT B 2472 6Mbps OBW



Test_Graph_11n20_TX_ANT B_2412 MCS0_OBW



Test Graph 11n20 TX ANT B 2442 MCS0 OBW



Test Graph 11n20 TX ANT B 2472 MCS0 OBW

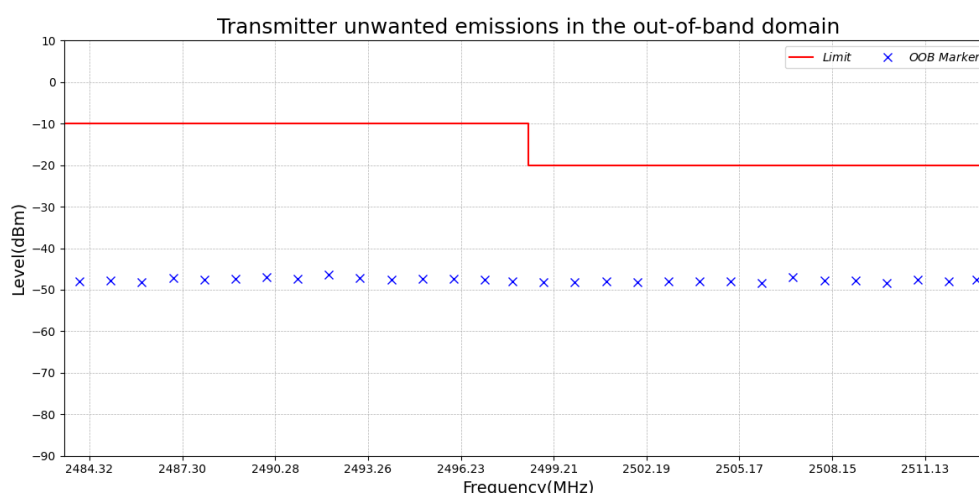
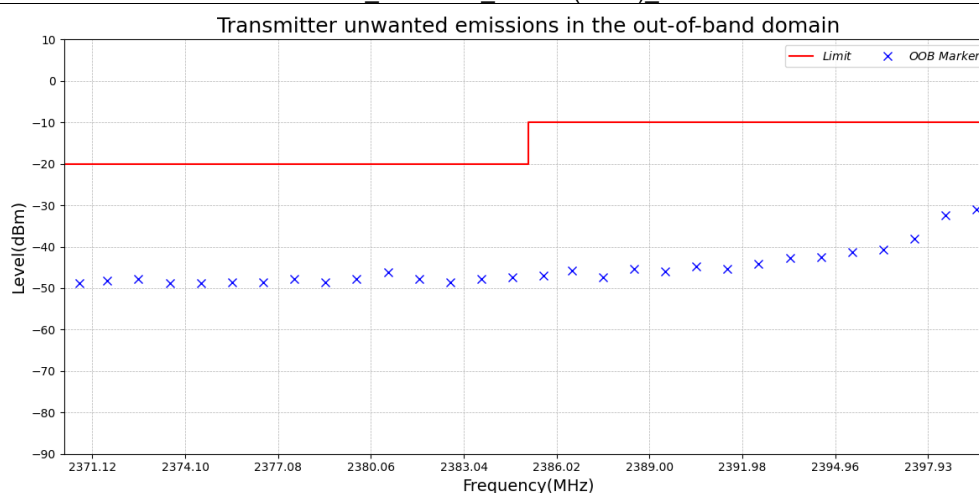
14 Appendix E: Transmitter Unwanted Emissions in the out-of-band domain

For Drone (DSDR04C):

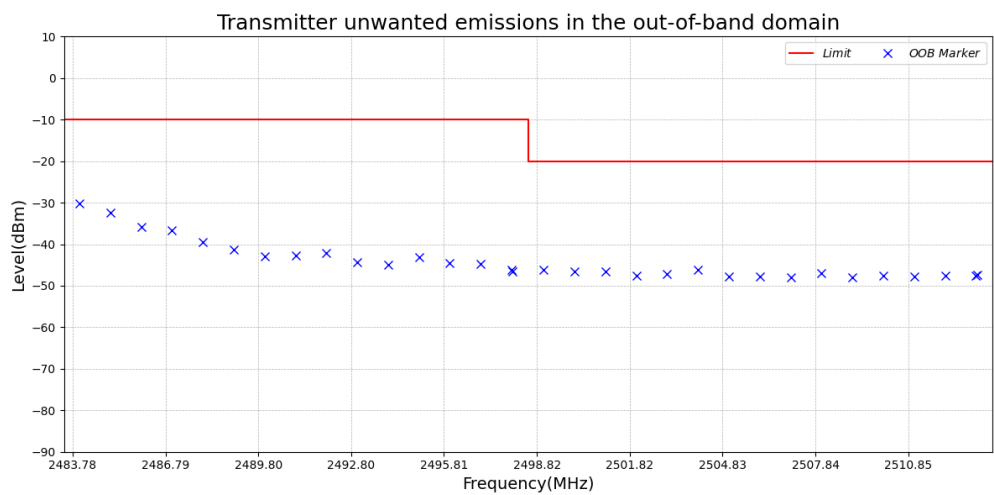
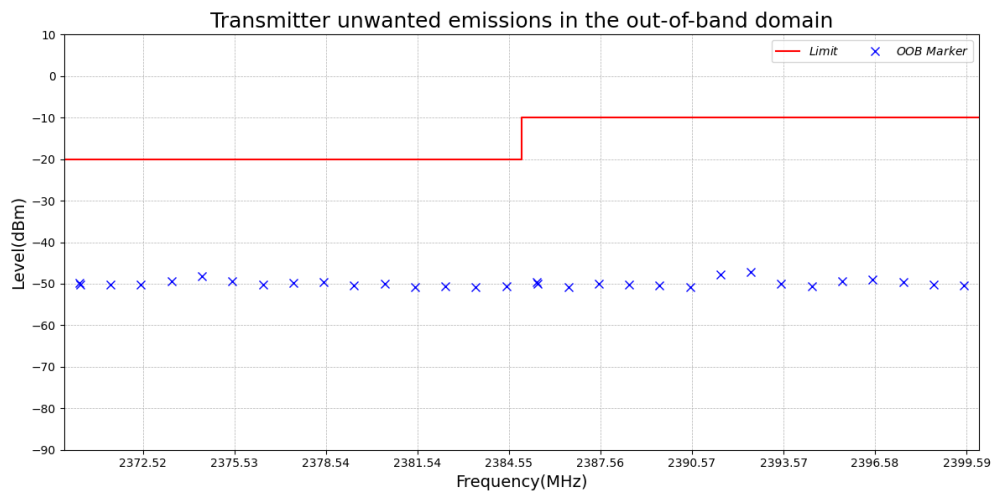
802.11B_SISO_ANT A

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11b_2412MHz_ANT A (SISO)_NTNV



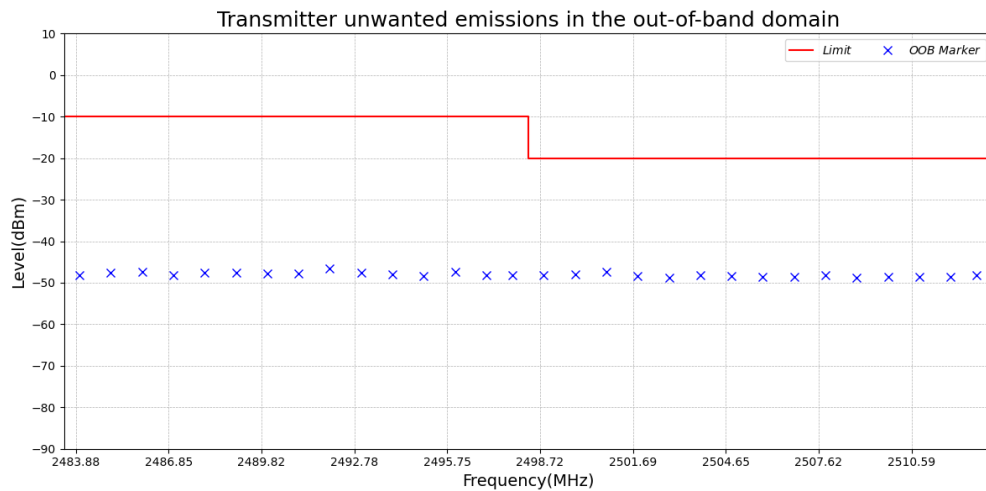
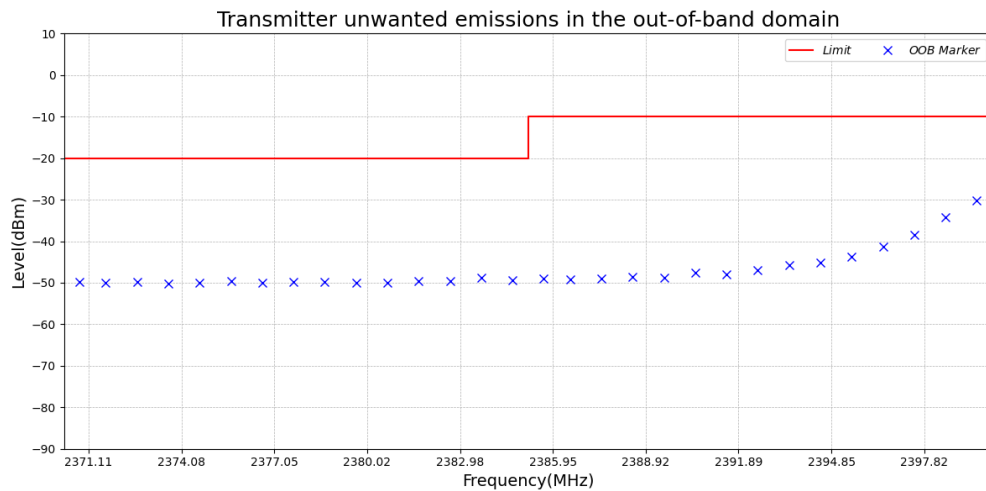
802.11b_2472MHz_ANT A (SISO)_NTNV



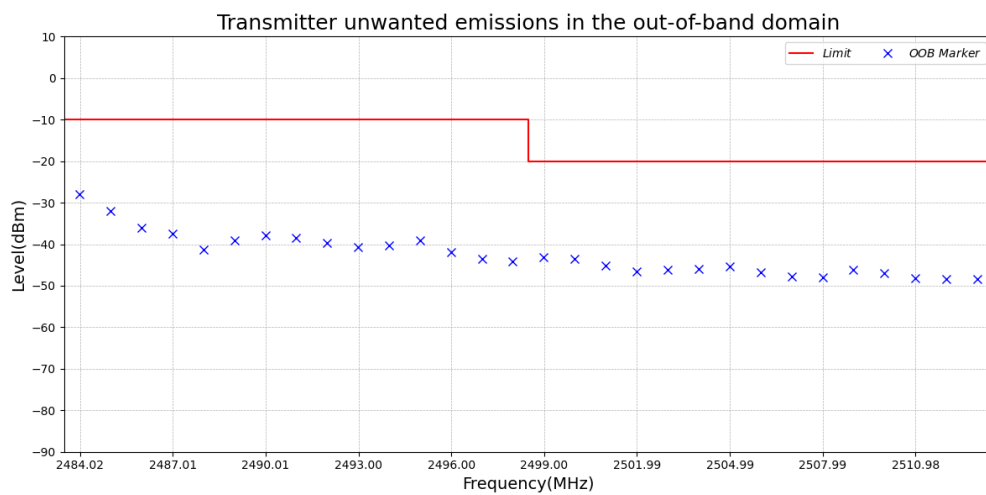
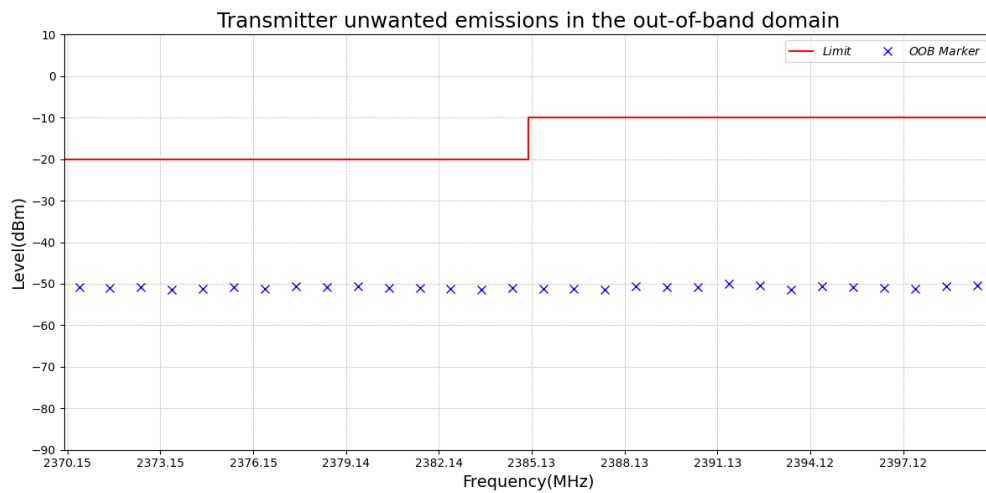
802.11B_SISO_ANT B

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11b_2412MHz_ANT B (SISO)_NTNV



802.11b_2472MHz_ANT B (SISO)_NTNV

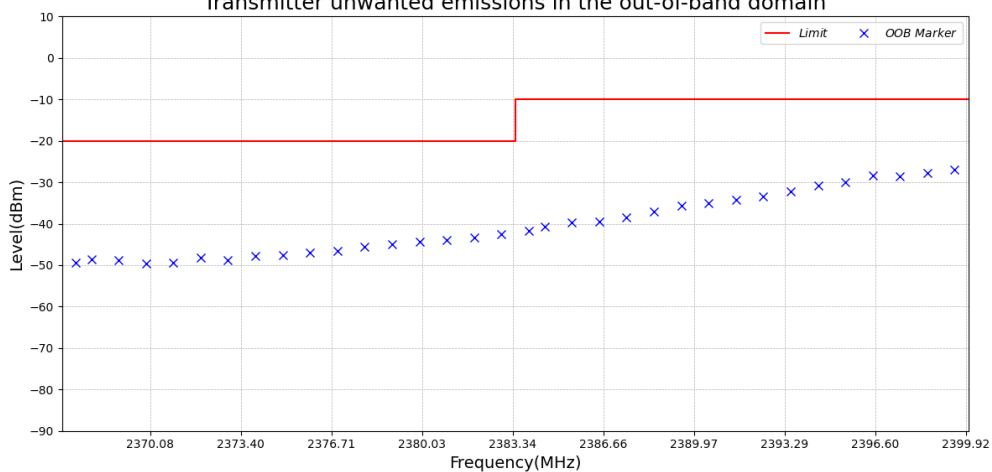


802.11G_SISO_ANT A

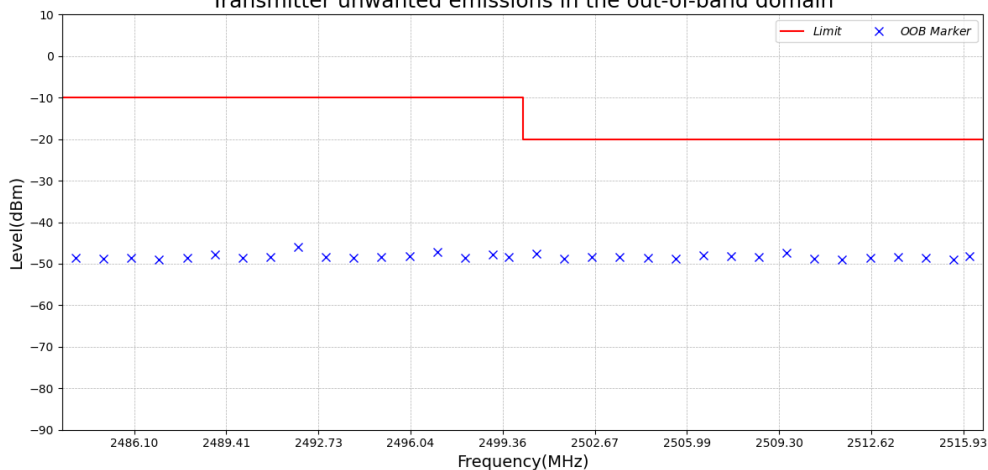
Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11g_2412MHz_ANT A (SISO)_NTNV

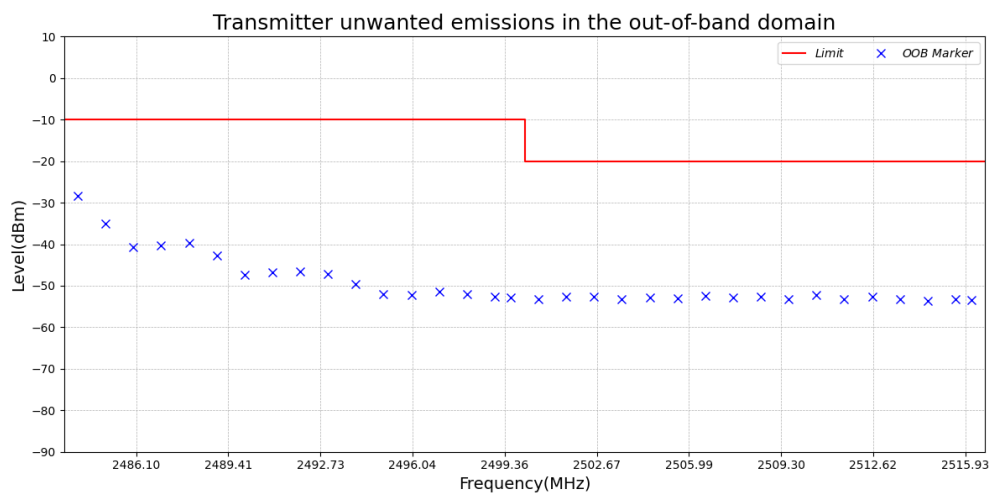
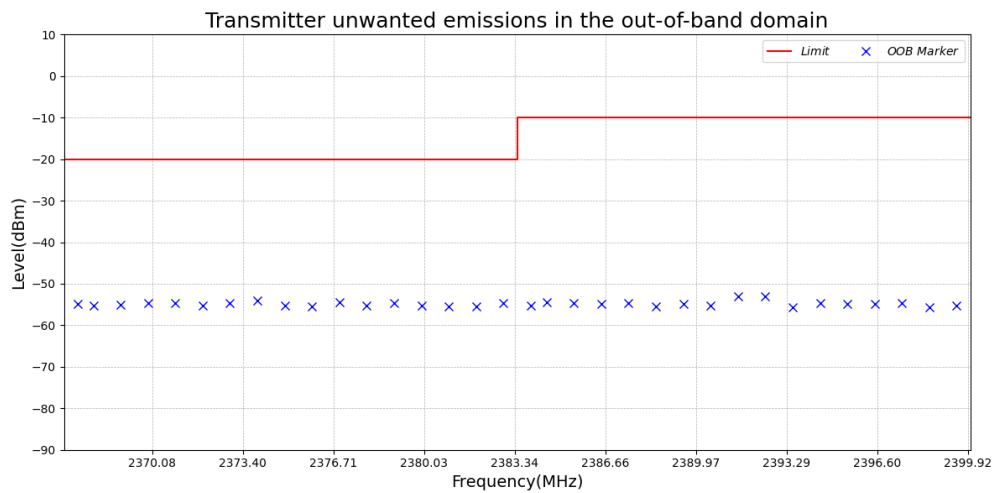
Transmitter unwanted emissions in the out-of-band domain



Transmitter unwanted emissions in the out-of-band domain



802.11g_2472MHz_ANT A (SISO)_NTNV

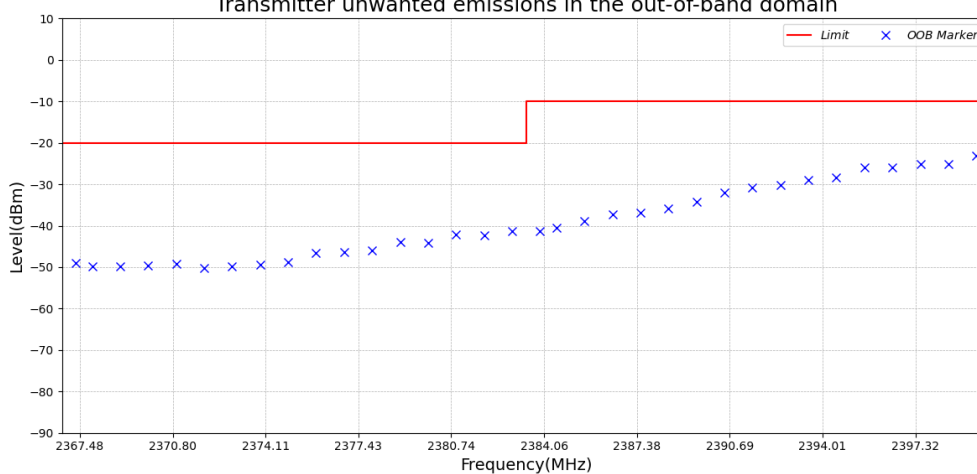


802.11G_SISO_ANT B

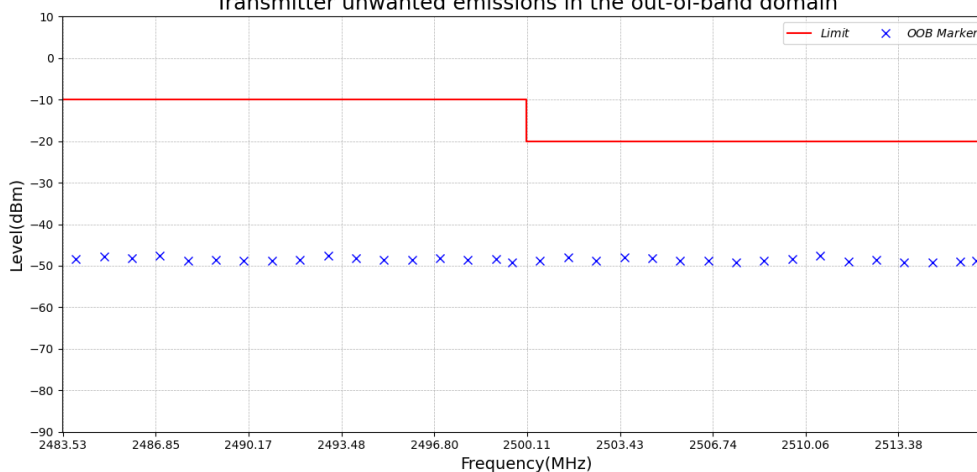
Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

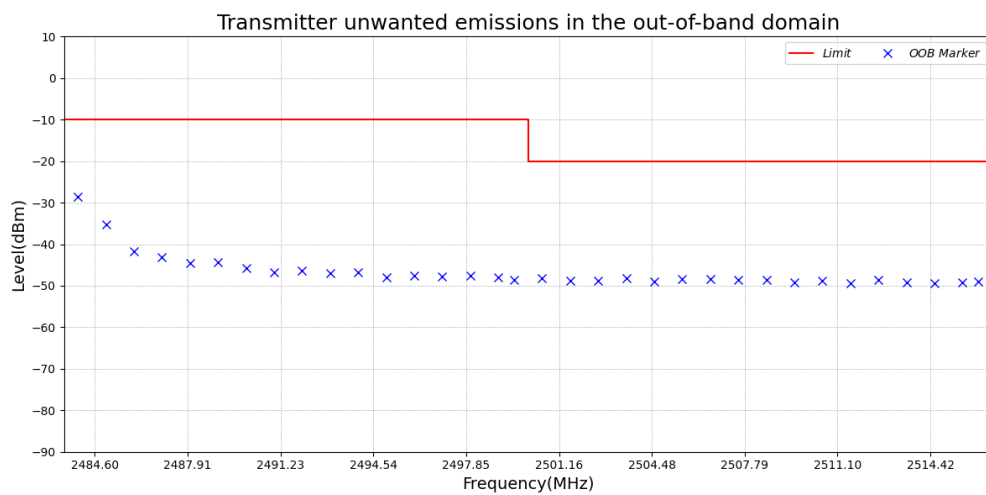
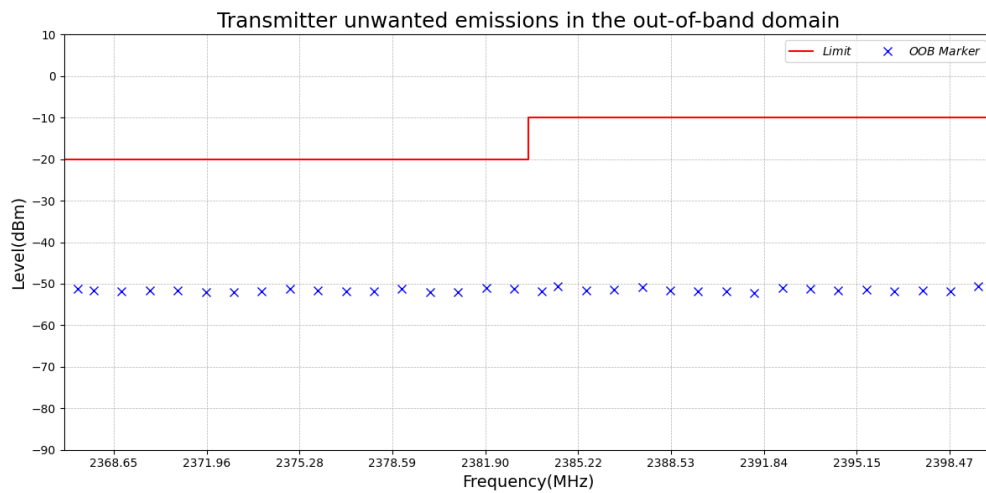
802.11g_2412MHz_ANT B (SISO)_NTNV

Transmitter unwanted emissions in the out-of-band domain



Transmitter unwanted emissions in the out-of-band domain

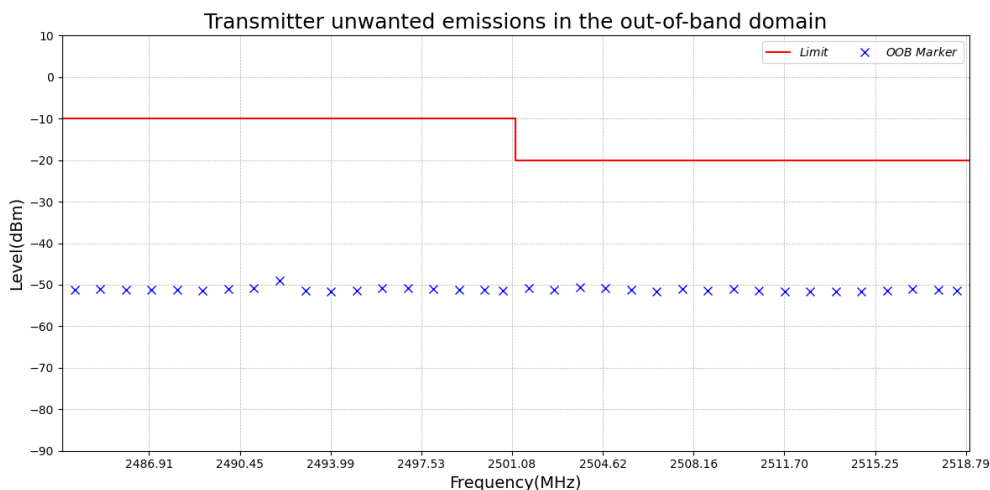
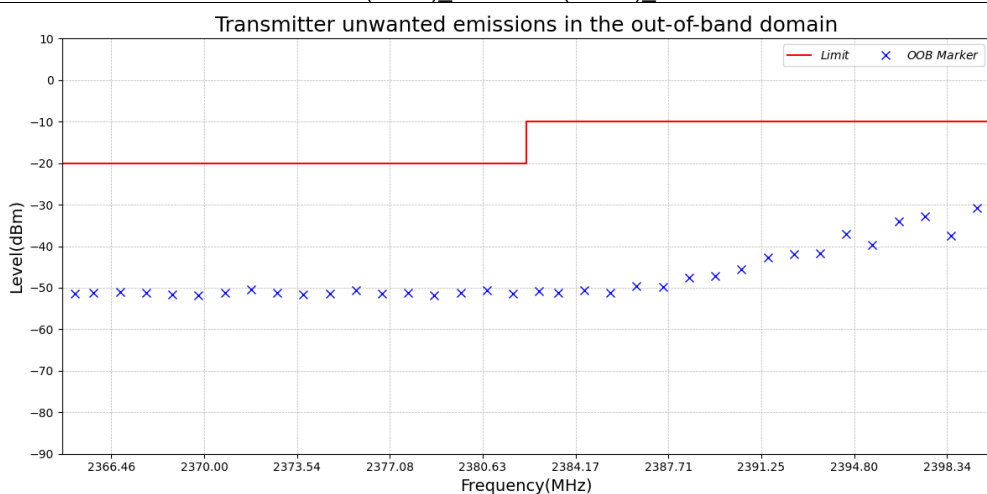
**802.11g_2472MHz_ANT B (SISO)_NTNV**



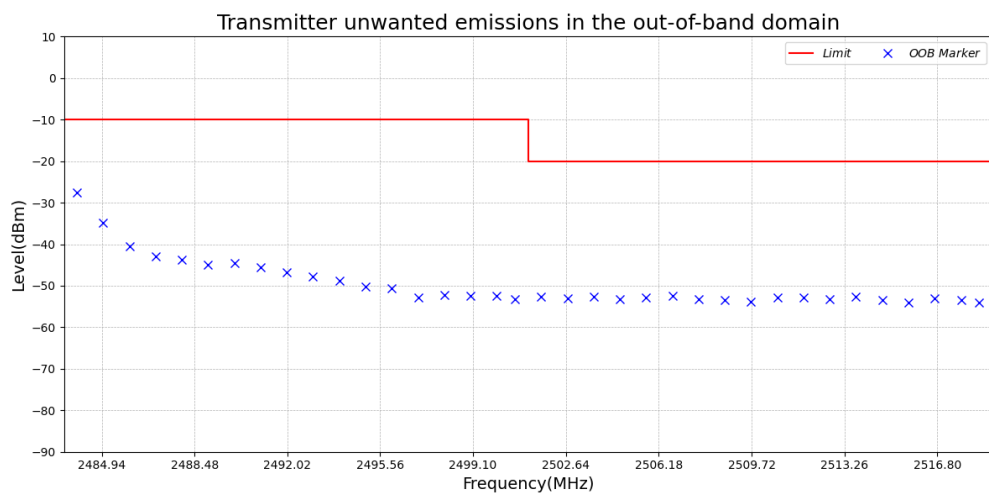
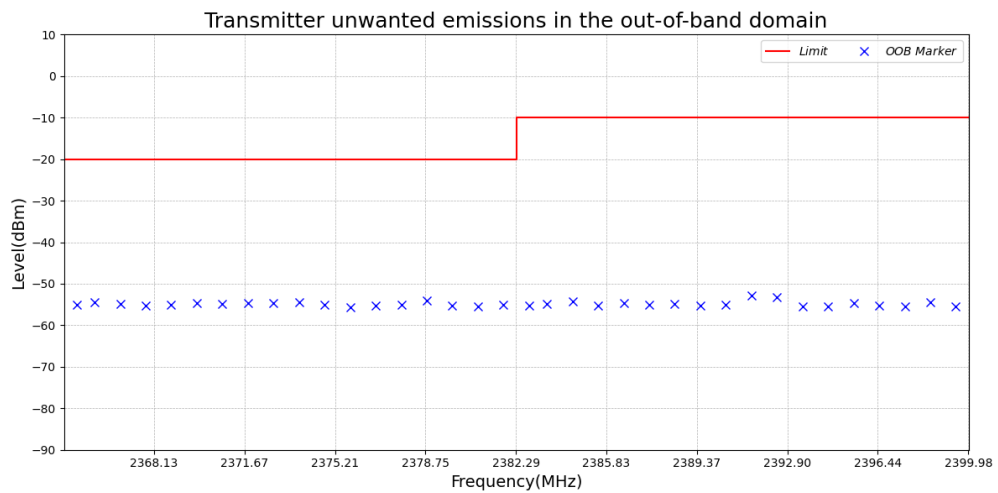
802.11n20_ANT A

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11n(HT20)_2412MHz (MIMO)_NTNV



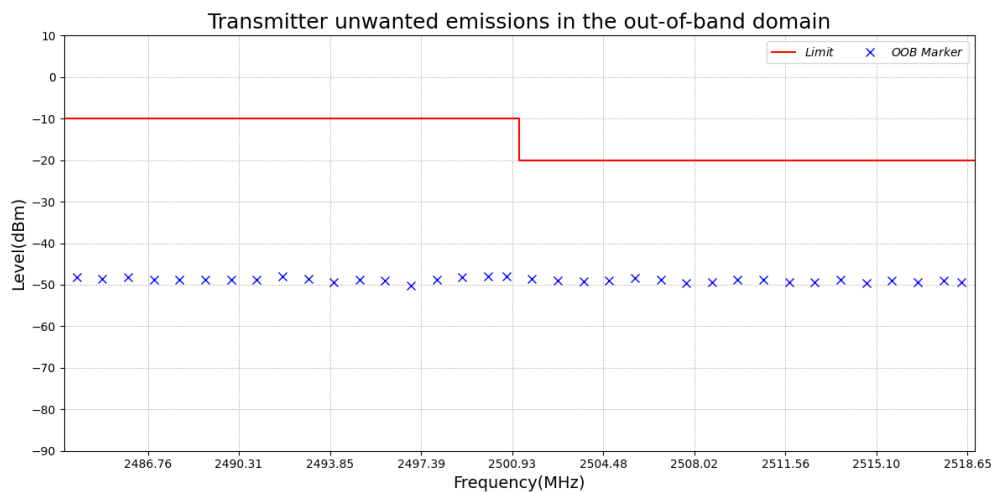
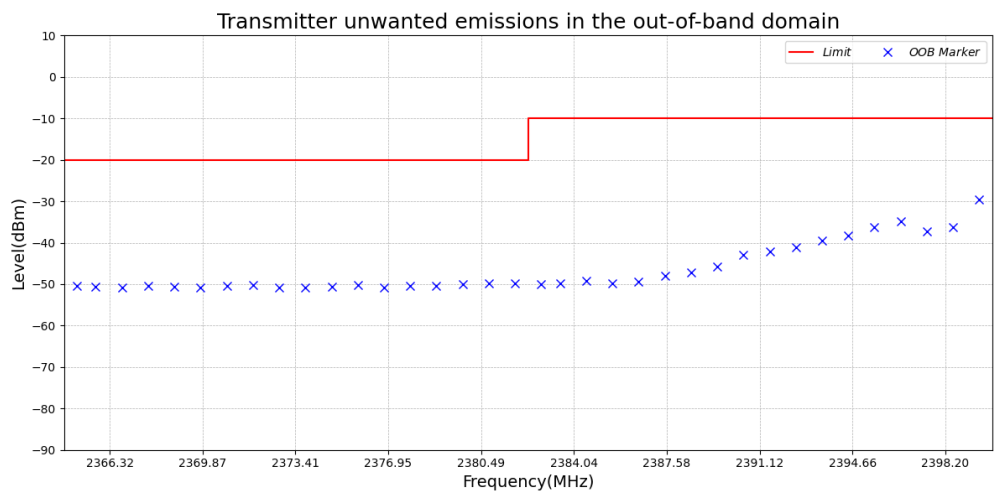
802.11n(HT20)_2472MHz (MIMO)_NTNV



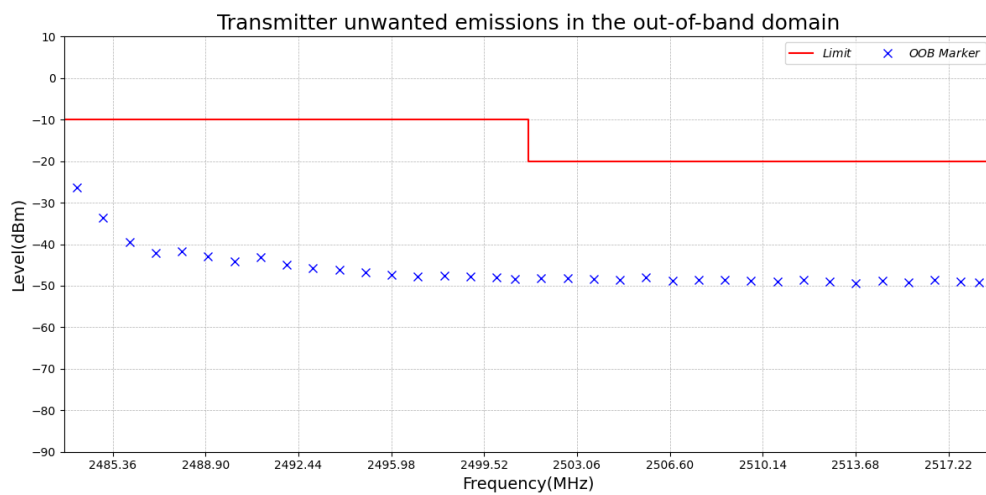
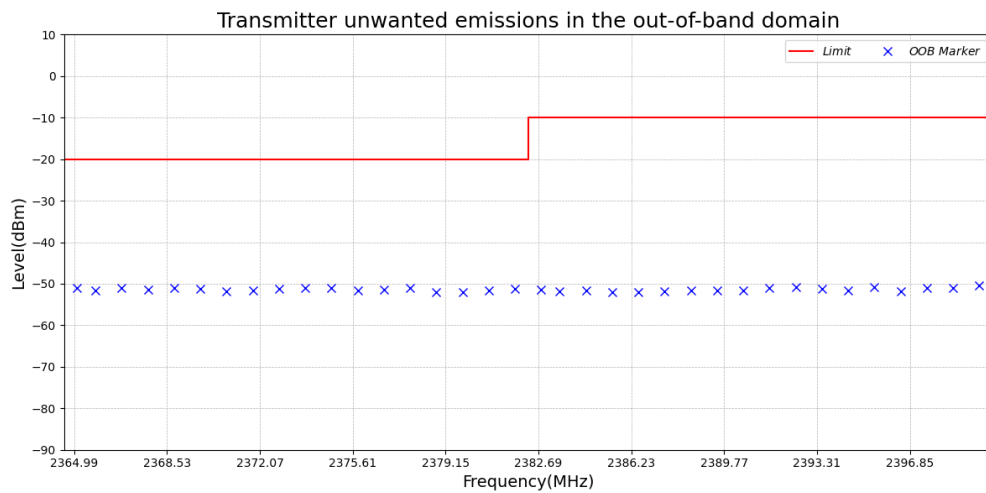
802.11n20_ANT B

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11n(HT20)_2412MHz (MIMO)_NTNV



802.11n(HT20)_2472MHz (MIMO)_NTNV

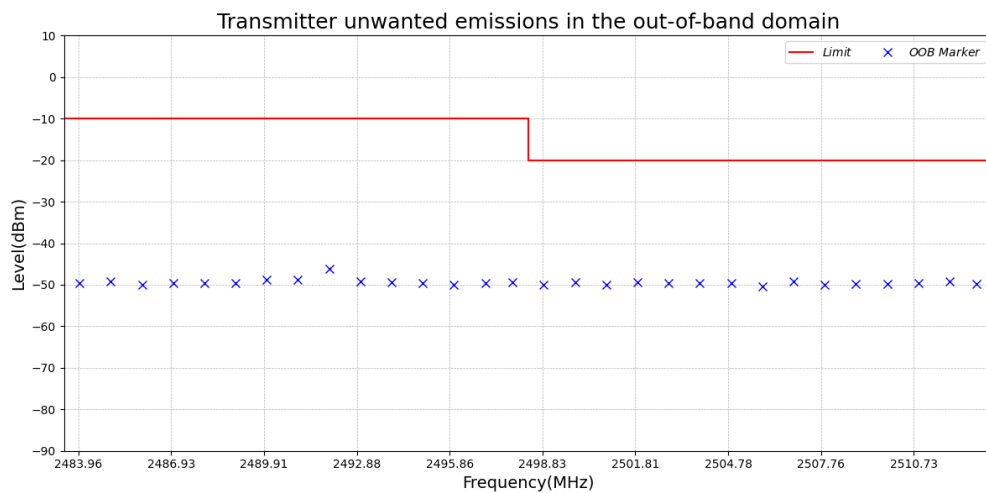
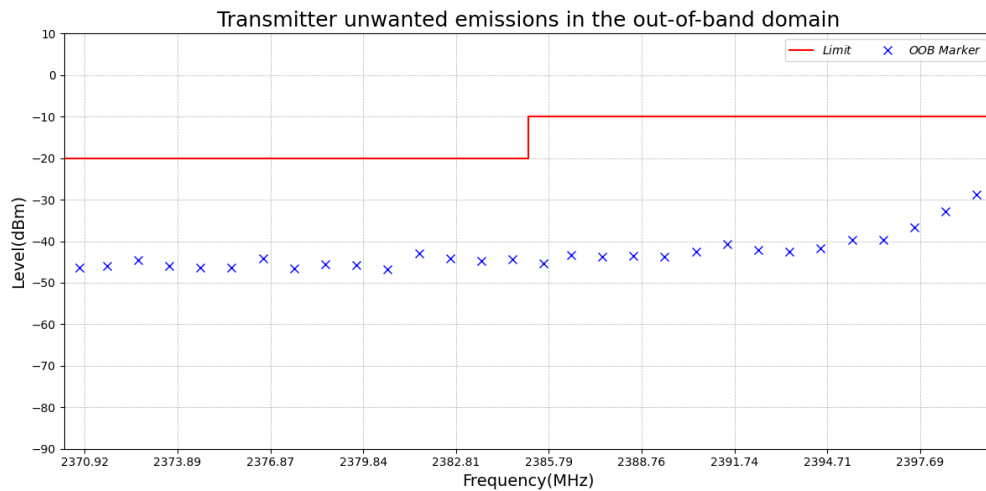


For Remote (DSRC02A):

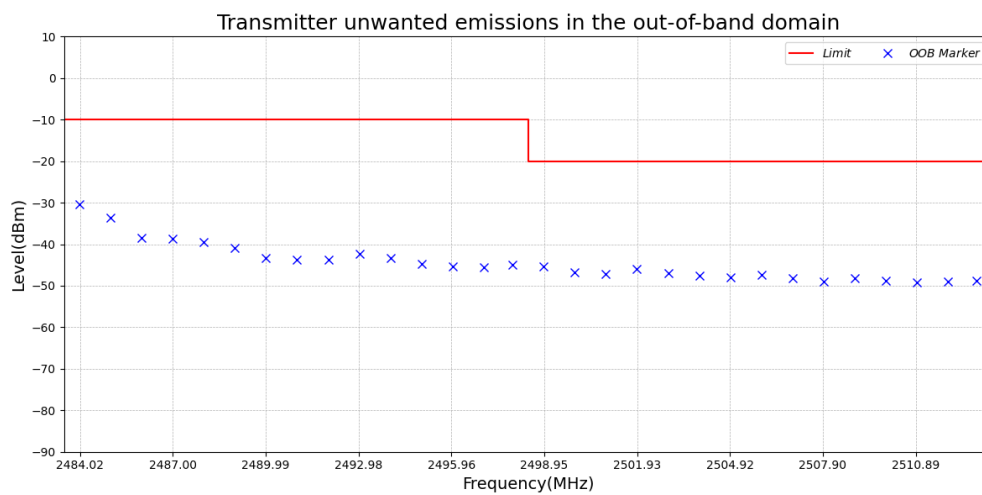
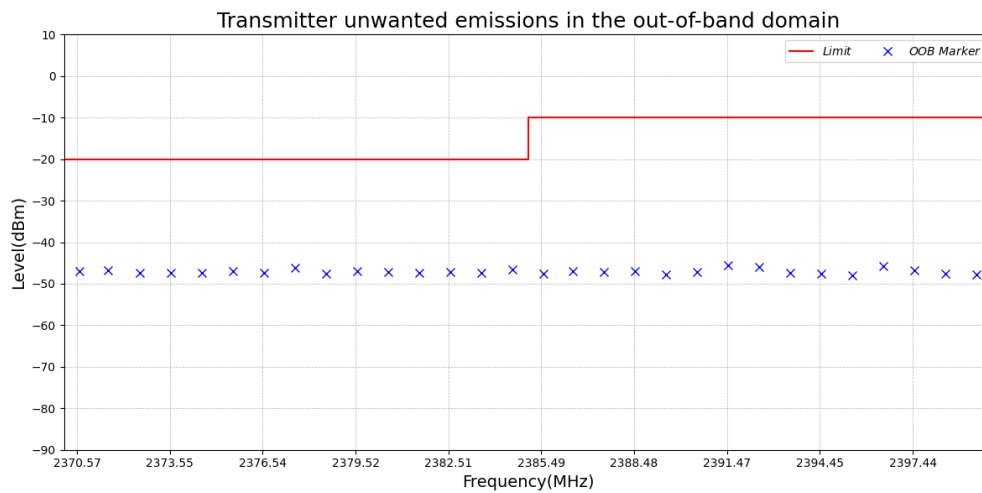
802.11B_SISO_ANT A

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11b_2412MHz_Ant1 (SISO)_NTNV

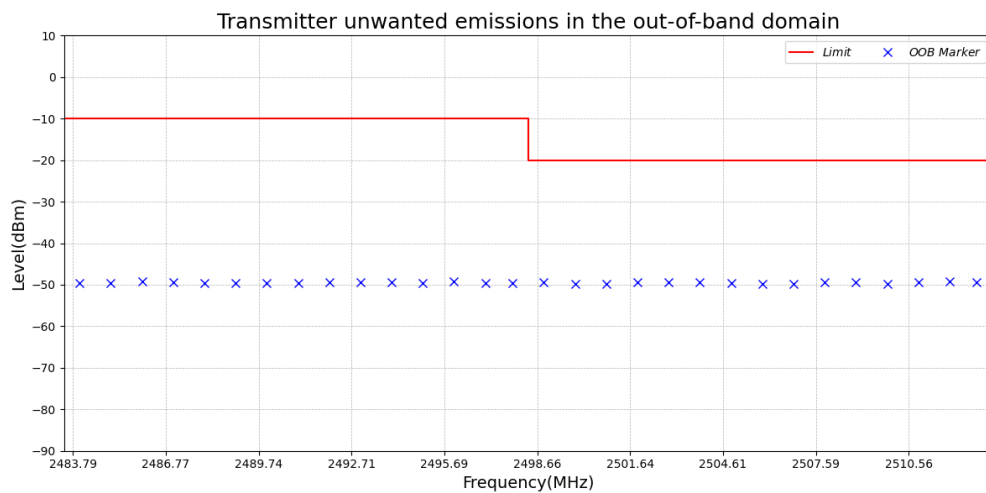
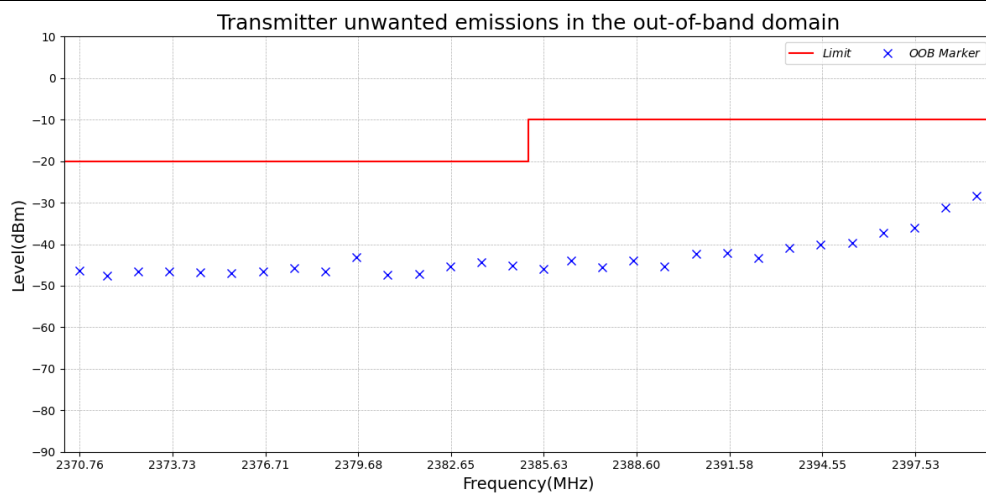


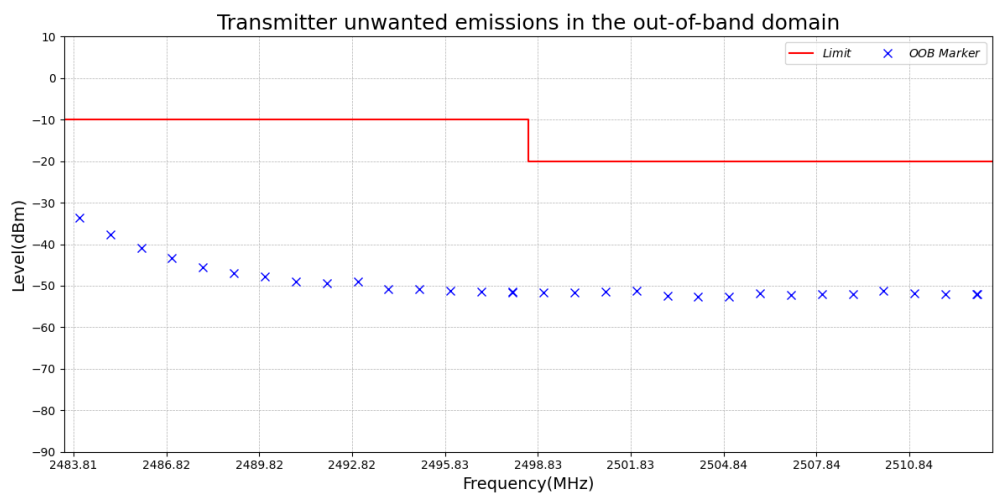
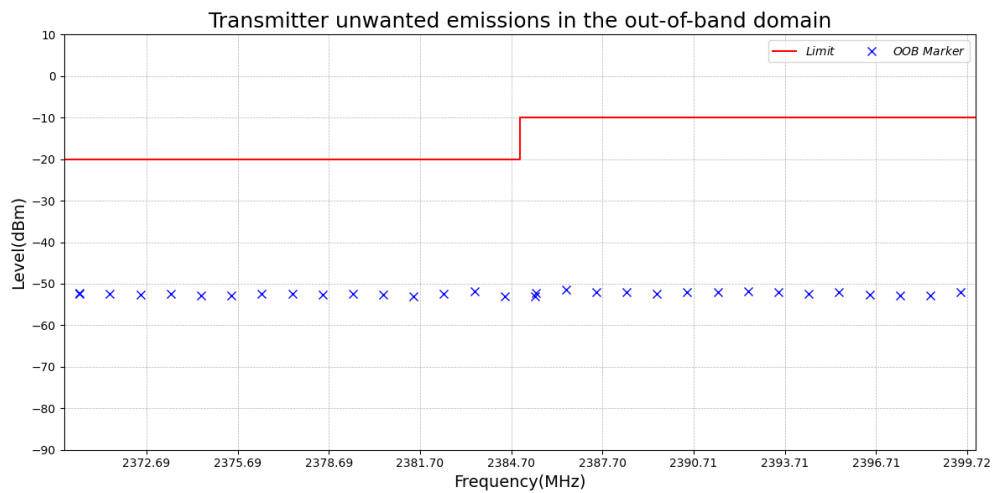
802.11b_2472MHz_Ant1 (SISO)_NTNV



802.11B_SISO_ANT B

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11b_2412MHz_Ant2 (SISO)_NTNV**802.11b_2472MHz_Ant2 (SISO)_NTNV**

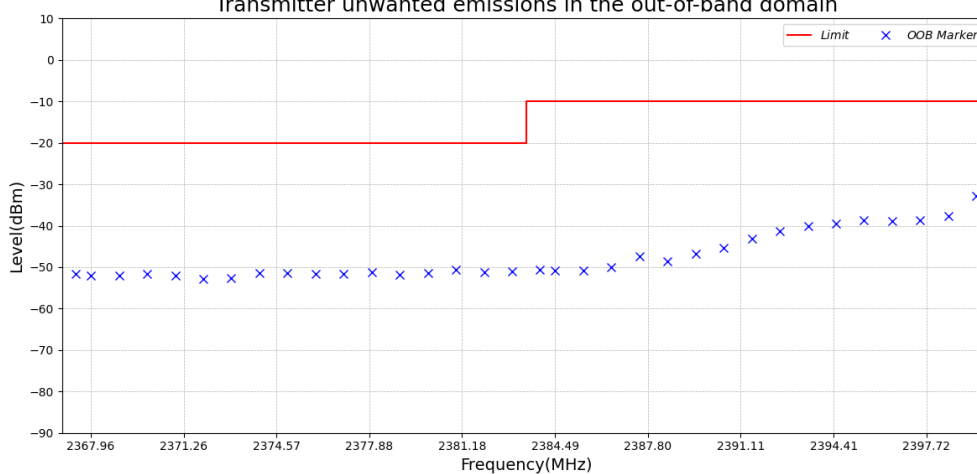


802.11G_SISO_ANT A

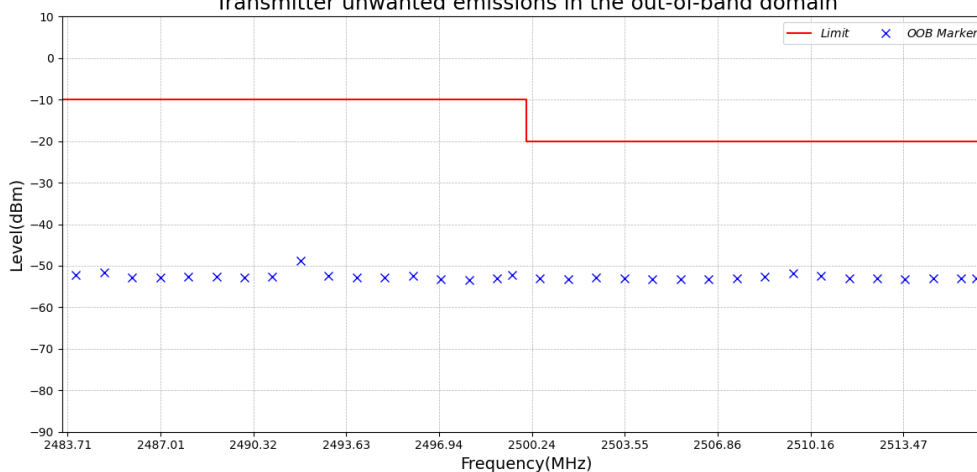
Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11g_2412MHz_Ant1 (SISO)_NTNV

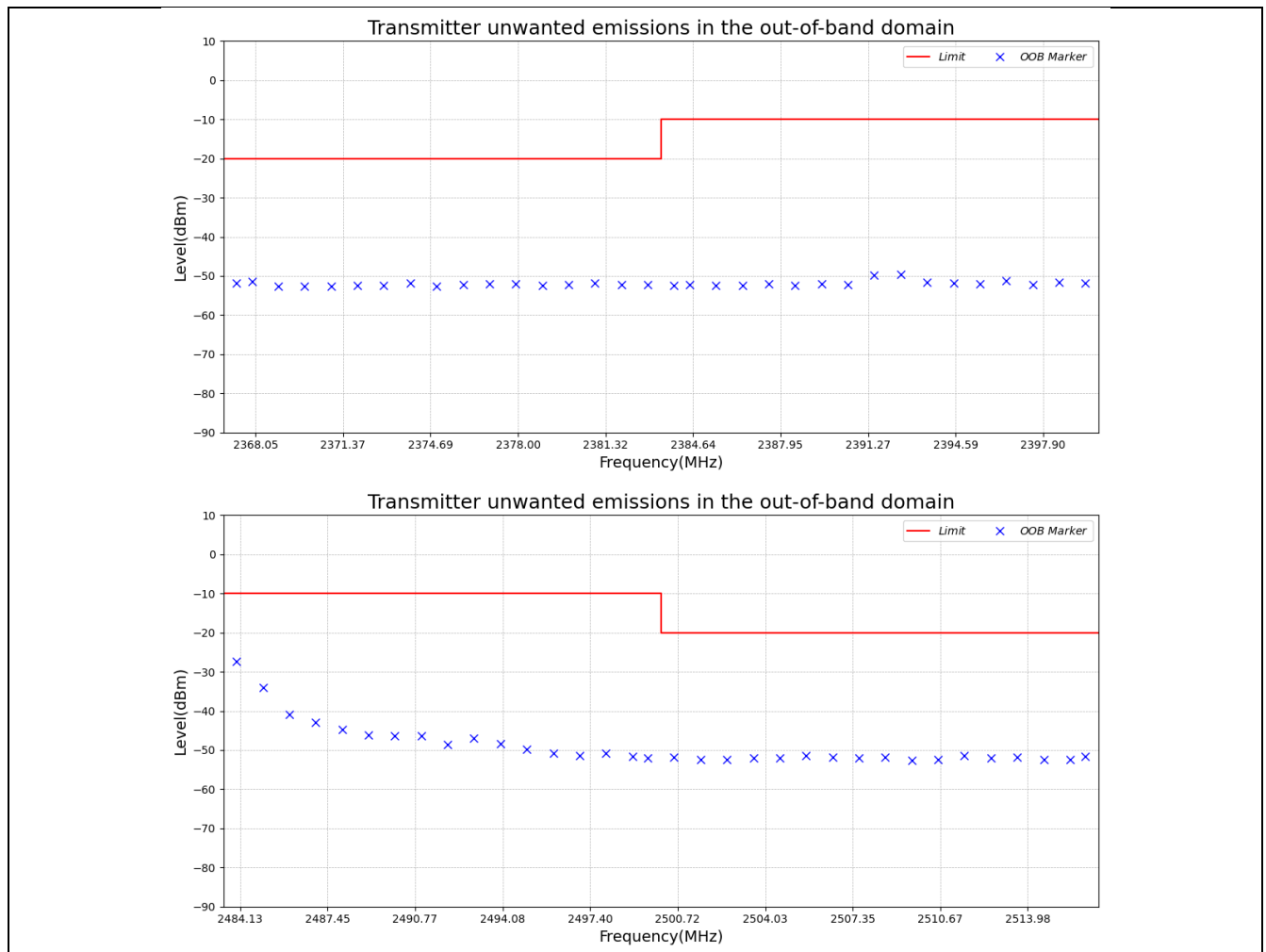
Transmitter unwanted emissions in the out-of-band domain



Transmitter unwanted emissions in the out-of-band domain



802.11g_2472MHz_Ant1 (SISO)_NTNV

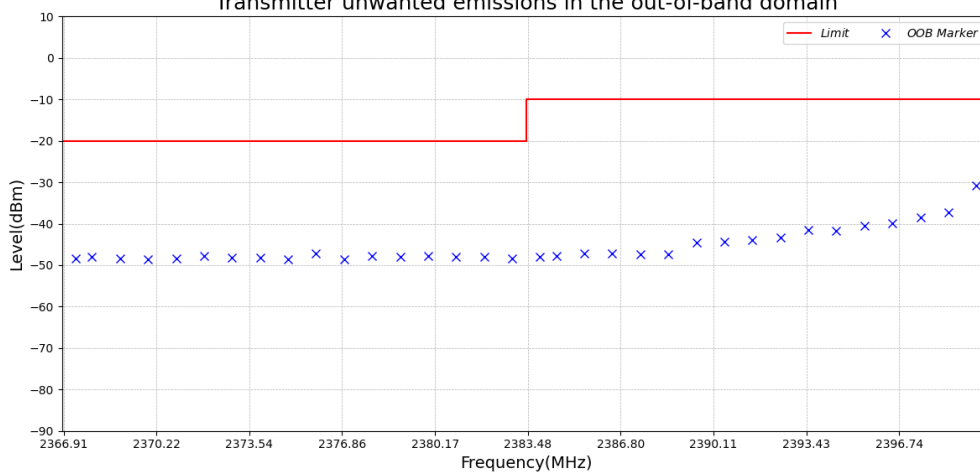


802.11G_SISO_ANT B

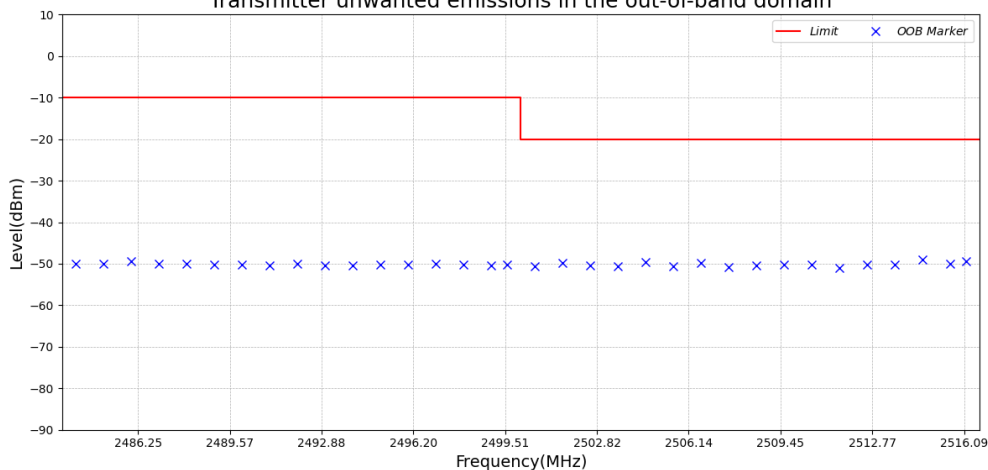
Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

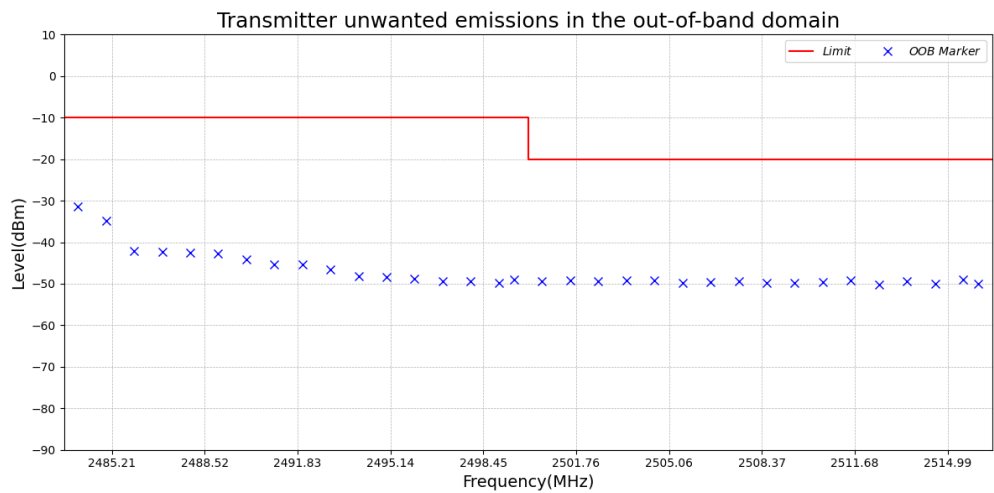
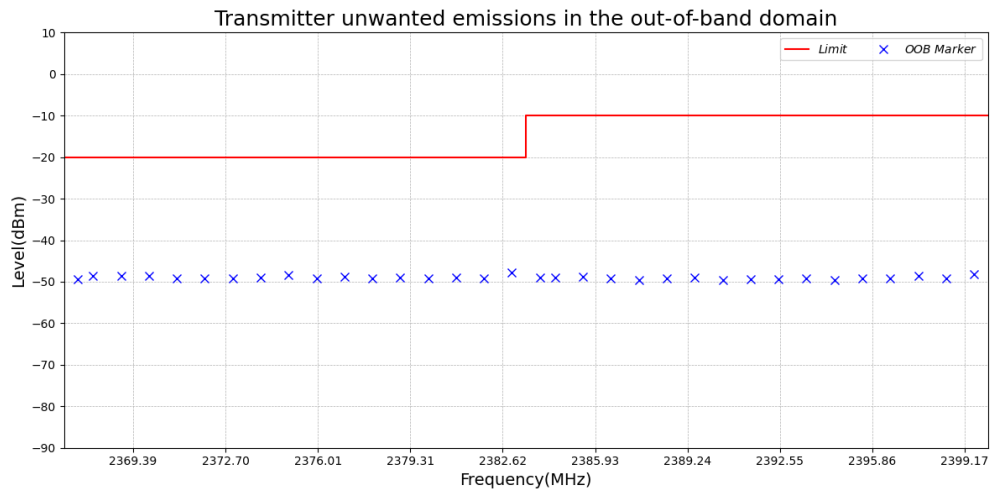
802.11g_2412MHz_Ant2 (SISO)_NTNV

Transmitter unwanted emissions in the out-of-band domain



Transmitter unwanted emissions in the out-of-band domain

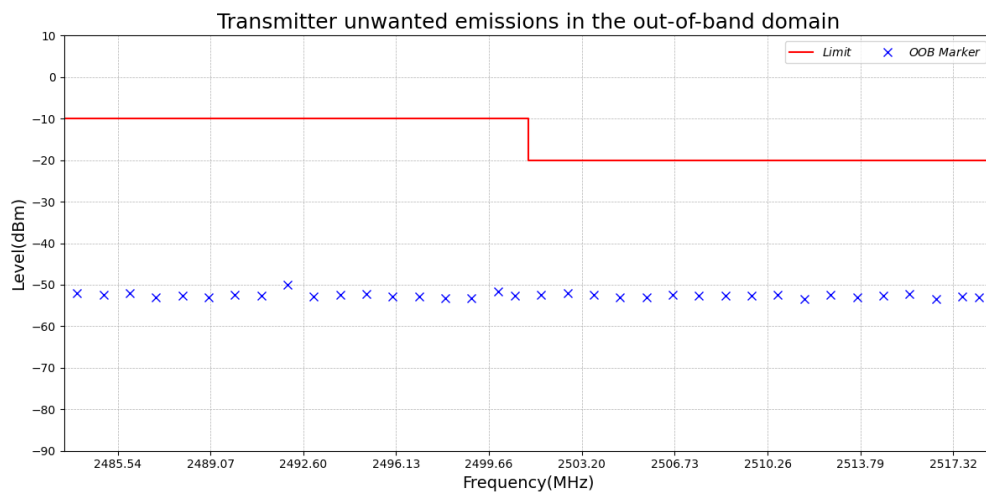
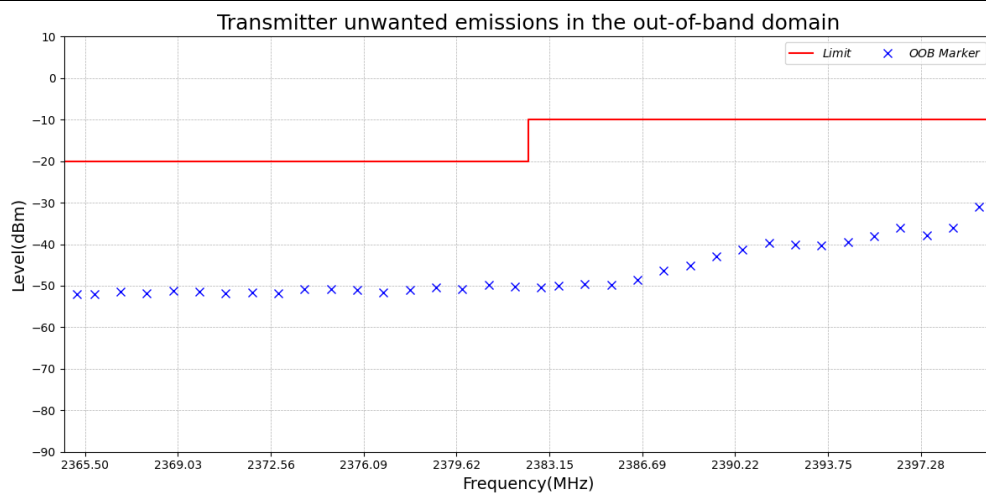
**802.11g_2472MHz_Ant2 (SISO)_NTNV**



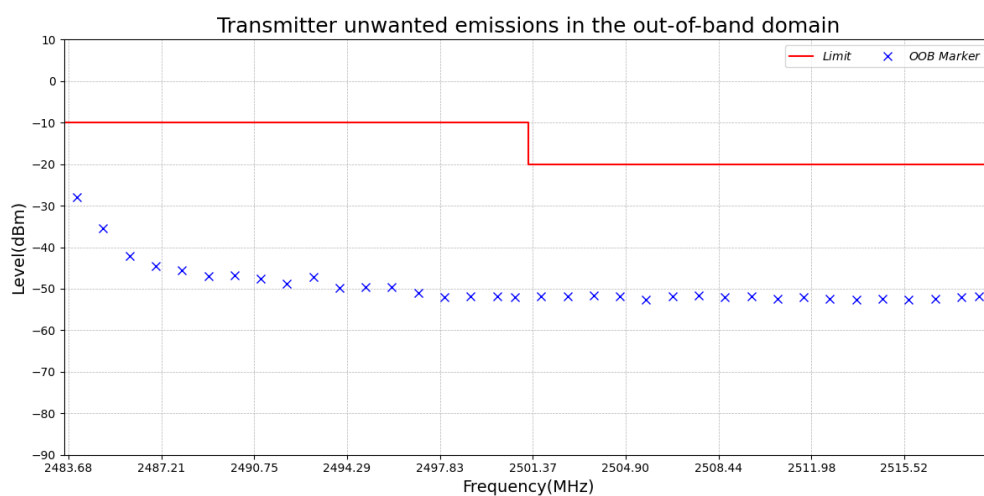
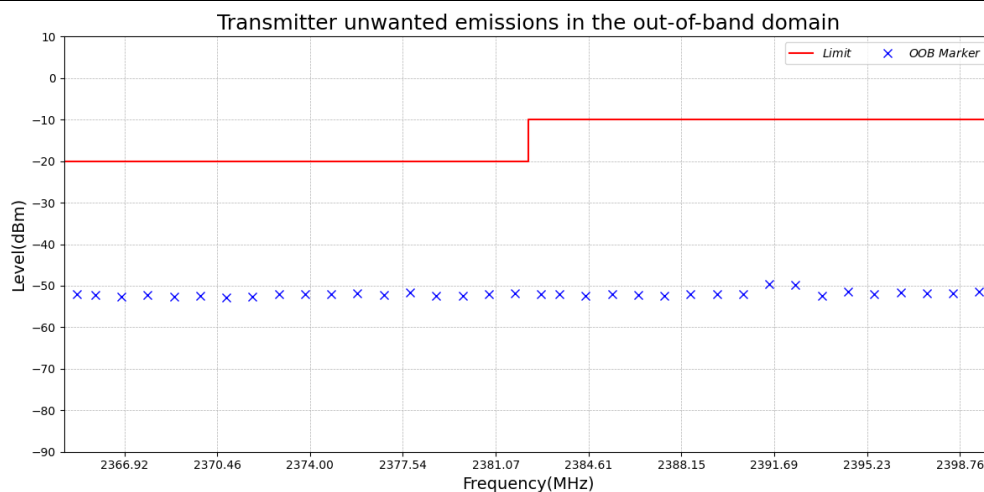
802.11n20_ANT A

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11n(HT20)_2412MHz (MIMO)_NTNV



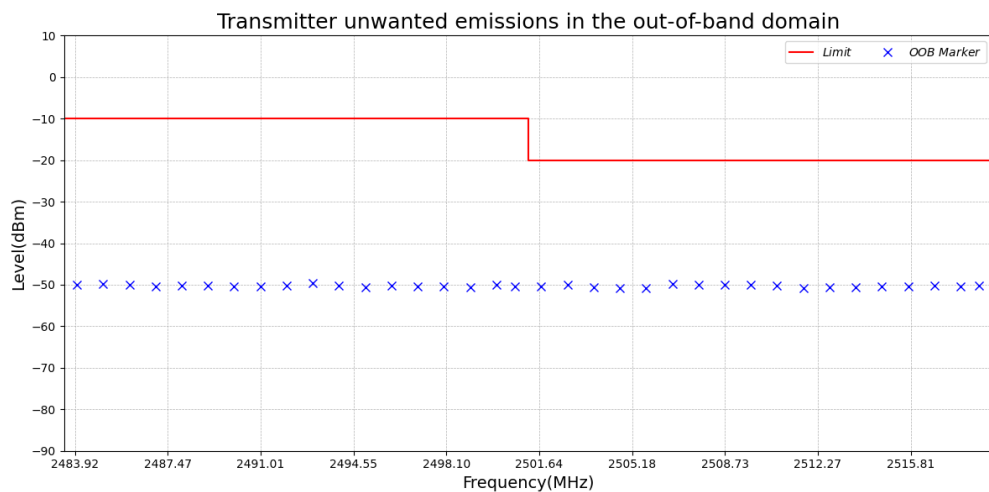
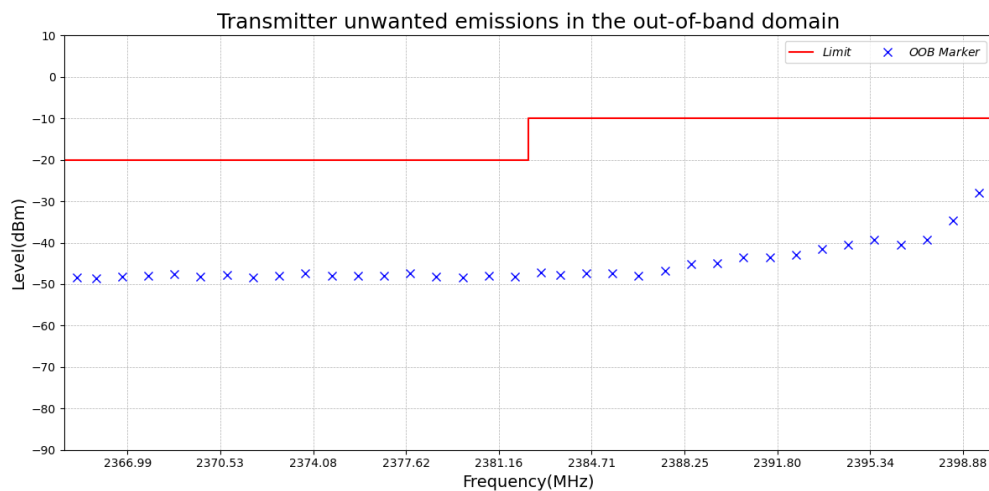
802.11n(HT20)_2472MHz (MIMO)_NTNV



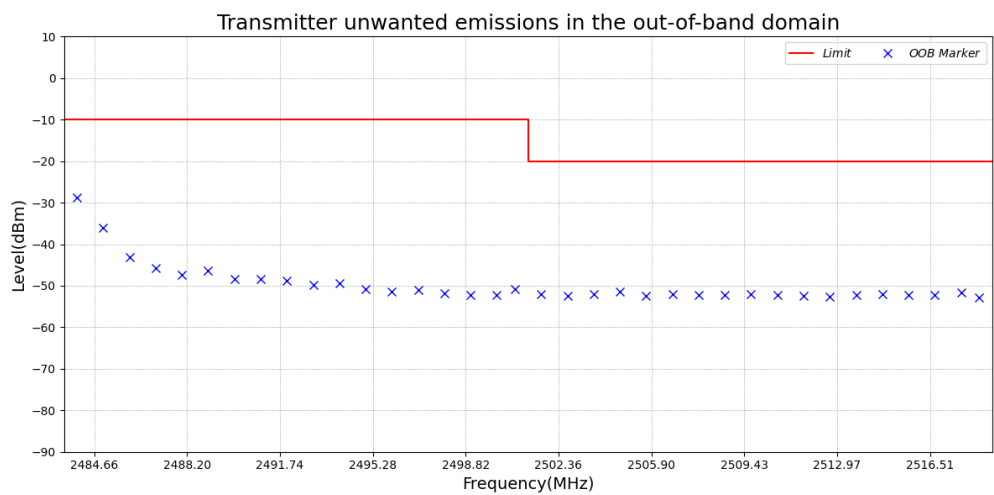
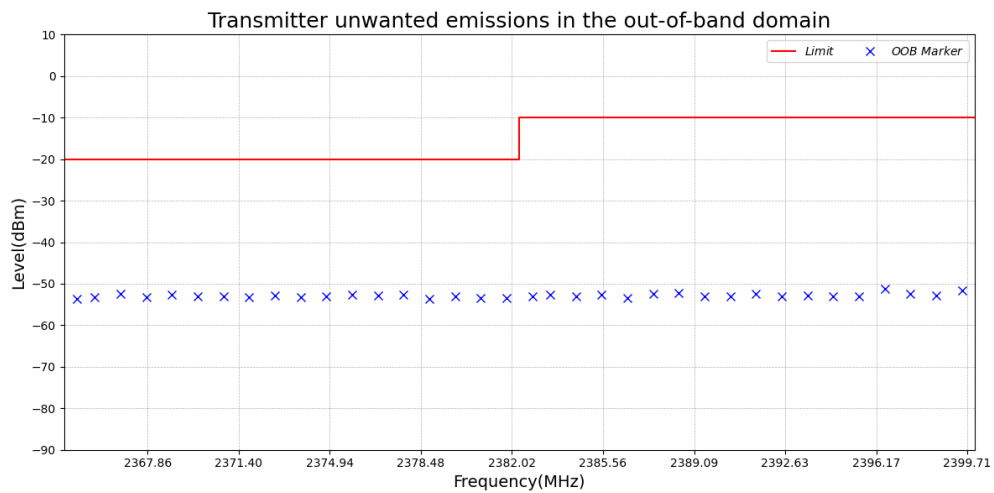
802.11n20_ANT B

Test condition:	Test frequency (MHz)	Test segment (MHz)	Max. Reading (dBm/MHz)	Limit (dBm/MHz)
NTNV	2412	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20
	2472	2400-BW to 2400	<-20	-10
		2400-2BW to 2400-BW	<-20	-20
		2483.5 to 2483.5+BW	<-20	-10
		2483.5+BW to 2483.5+2BW	<-20	-20

802.11n(HT20)_2412MHz (MIMO)_NTNV



802.11n(HT20)_2472MHz (MIMO)_NTNV



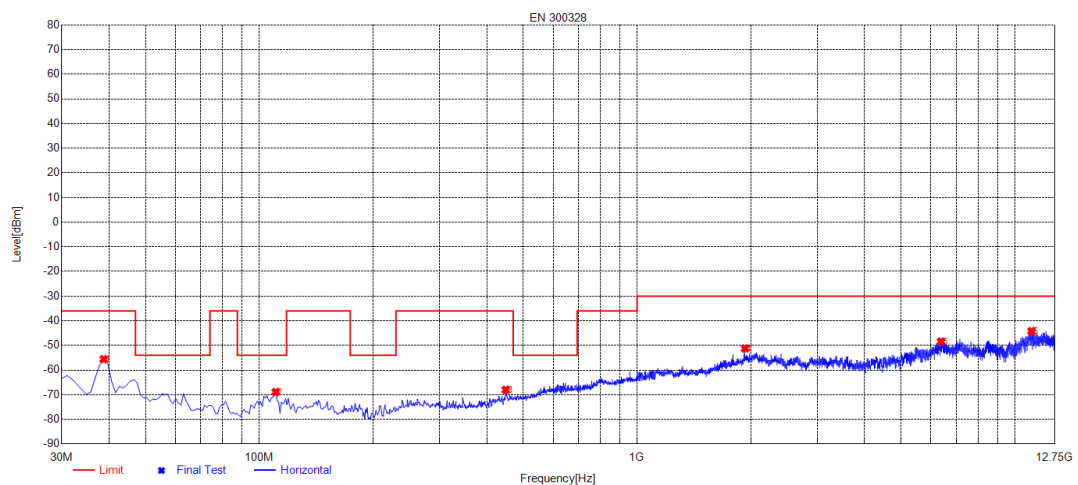
15 Appendix F: Transmitter Spurious Emissions

Test Result

Note: The test results for testing range of “30 MHz to 12.75 GHz” showed as below is the WORST case for all Test Modes and Channels. The detected values which are noise floor or below the limit 20dB will not be recorded.

For Drone (DSDR04C):

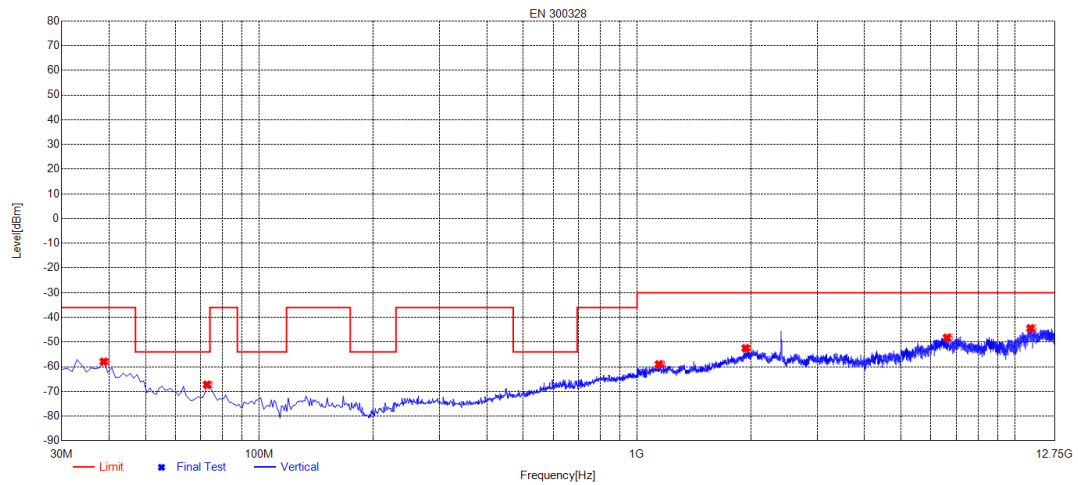
EUT: ATOM
M/N: ATOM Drone: DSDR04C
Operating Condition: 11b_ANT A (TX 2412MHz)- Horizontal
Comment: 30MHz-12.75GHz



Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	38.73	-85.23	-55.59	-36.00	19.59	29.64	157	Horizontal
2	110.51	-89.05	-68.92	-54.00	14.92	20.13	183	Horizontal
3	449.04	-98.26	-68.00	-36.00	32.00	30.26	191	Horizontal
4	1931.86	-52.40	-51.22	-30.00	21.22	1.18	122	Horizontal
5	6376.16	-55.84	-48.42	-30.00	18.42	7.42	340	Horizontal
6	11071.9	-57.97	-44.20	-30.00	14.20	13.77	239	Horizontal

Report Number: 6895025113301

EUT: ATOM
M/N: ATOM Drone: DSDR04C
Operating Condition: 11b_ANT A (TX 2412MHz)- Vertical
Comment: 30MHz-12.75GHz

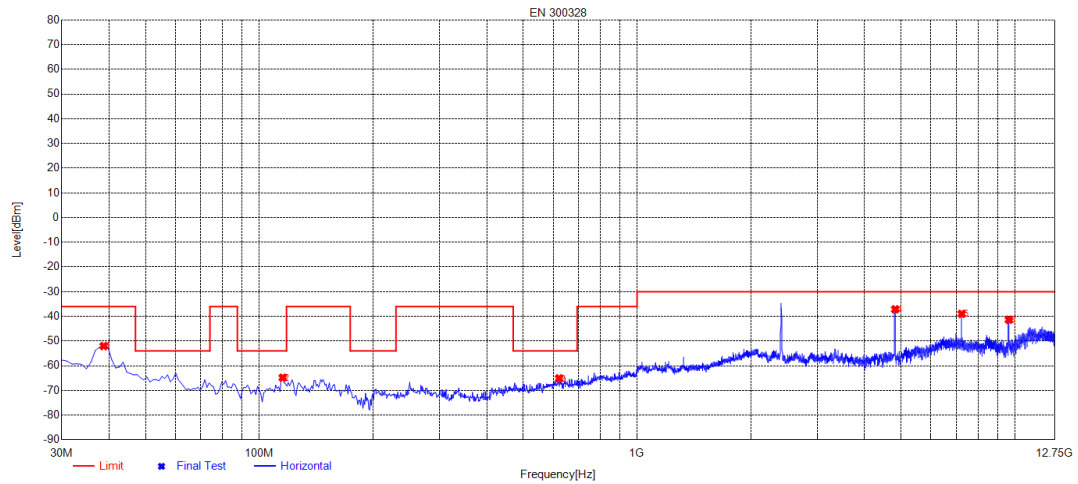


Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	38.73	-87.59	-57.95	-36.00	21.95	29.64	106	Vertical
2	72.68	-91.22	-67.25	-54.00	13.25	23.97	172	Vertical
3	1142.18	-54.93	-59.00	-30.00	29.00	-4.07	1	Vertical
4	1938.91	-53.78	-52.50	-30.00	22.50	1.28	98	Vertical
5	6614.71	-56.04	-48.24	-30.00	18.24	7.80	1	Vertical
6	11001.4	-58.23	-44.41	-30.00	14.41	13.82	359	Vertical

Report Number: 6895025113301

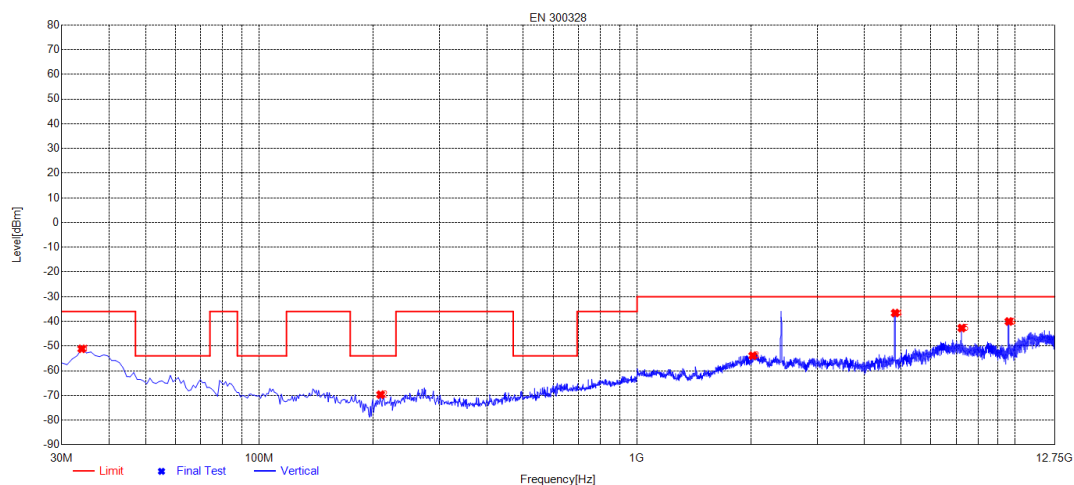
For Remote (DSRC02A):

EUT: ATOM
M/N: ATOM Remote Controller: DSRC02A
Operating Condition: 11b_ANT A (TX 2412MHz)- Horizontal
Comment: 30MHz-12.75GHz



Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	38.73	-81.67	-52.03	-36.00	16.03	29.64	166	Horizontal
2	115.36	-85.97	-64.82	-54.00	10.82	21.15	166	Horizontal
3	621.7	-99.28	-65.09	-54.00	11.09	34.19	10	Horizontal
4	4823.83	-41.93	-37.14	-30.00	7.14	4.79	227	Horizontal
5	7236.34	-46.88	-38.99	-30.00	8.99	7.89	209	Horizontal
6	9647.68	-51.39	-41.34	-30.00	11.34	10.05	36	Horizontal

EUT: ATOM
M/N: ATOM Remote Controller: DSRC02A
Operating Condition: 11b_ANT A (TX 2412MHz)- Vertical
Comment: 30MHz-12.75GHz



Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	33.88	-80.62	-51.11	-36.00	15.11	29.51	208	Vertical
2	209.45	-92.56	-69.66	-54.00	15.66	22.90	216	Vertical
3	2024.70	-55.93	-53.88	-30.00	23.88	2.05	350	Vertical
4	4823.83	-41.41	-36.62	-30.00	6.62	4.79	152	Vertical
5	7237.52	-50.58	-42.70	-30.00	12.70	7.88	224	Vertical
6	9647.68	-50.10	-40.05	-30.00	10.05	10.05	144	Vertical

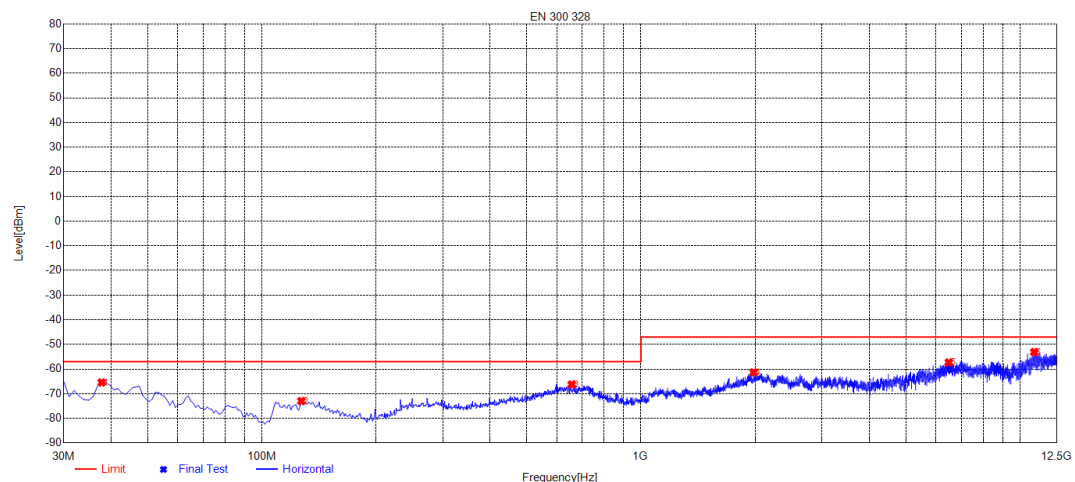
16 Appendix G: Receiver Spurious Emissions

Test Result

Note: The test results for testing range of “30 MHz to 12.75 GHz” showed as below is the WORST case for all Test Modes and Channels. The detected values which are noise floor or below the limit 20Db will not be recorded.

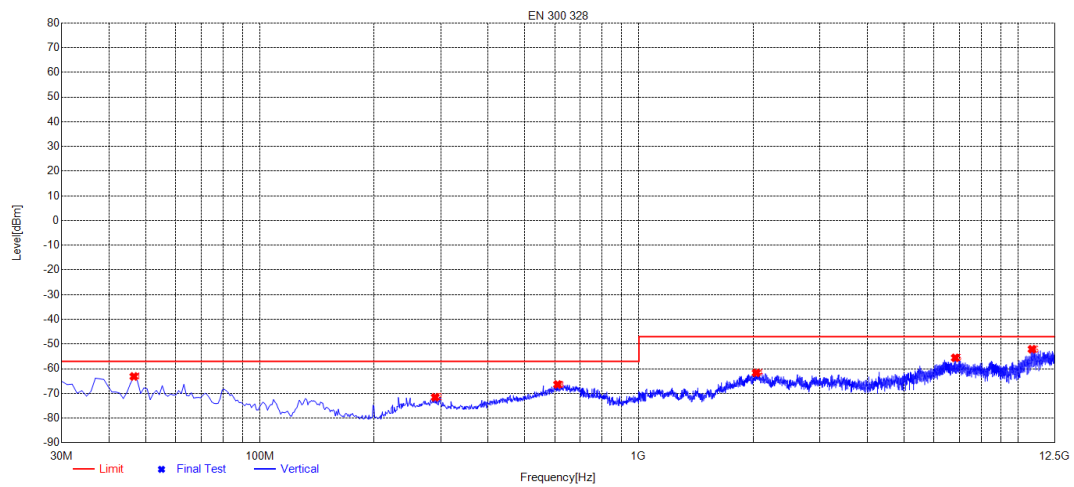
For Drone (DSDR04C):

EUT: ATOM
M/N: ATOM Drone: DSDR04C
Operating Condition: 11b_ANT A (RX 2412MHz)- Horizontal
Comment: 30MHz-12.75GHz



Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	37.76	-95.06	-65.43	-57.00	8.43	29.63	110	Horizontal
2	127	-97.25	-72.96	-57.00	15.96	24.29	180	Horizontal
3	656.62	-100.36	-66.25	-57.00	9.25	34.11	100	Horizontal
4	1982.19	-63.14	-61.34	-47.00	14.34	1.80	190	Horizontal
5	6492.94	-64.96	-57.31	-47.00	10.31	7.65	100	Horizontal
6	10908.2	-66.62	-53.10	-47.00	6.10	13.52	30	Horizontal

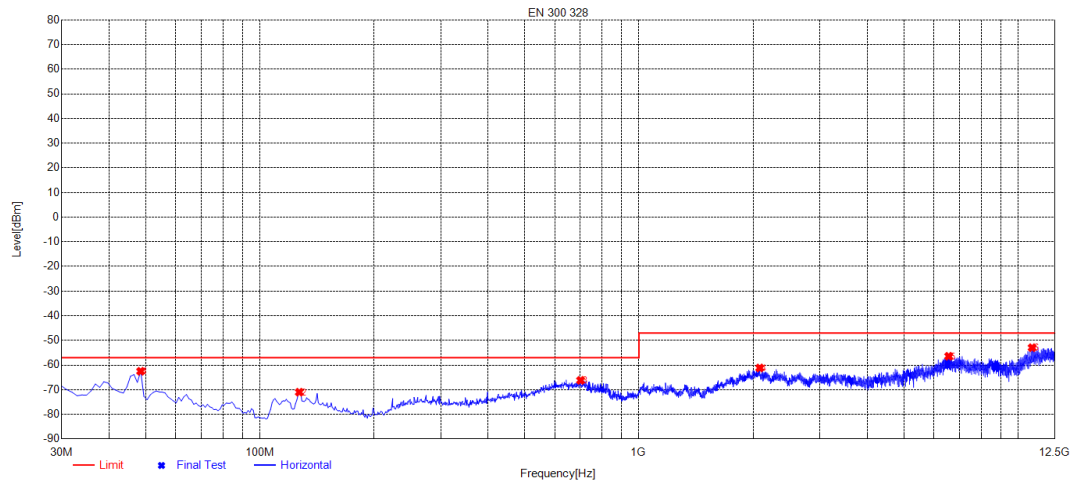
EUT: ATOM
M/N: ATOM Drone: DSDR04C
Operating Condition: 11b_ANT A (RX 2412MHz)- Vertical
Comment: 30MHz-12.75GHz



Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	46.49	-91.48	-63.11	-57.00	6.11	28.37	190	Vertical
2	289.96	-98.77	-71.54	-57.00	14.54	27.23	340	Vertical
3	610.06	-100.46	-66.36	-57.00	9.36	34.10	70	Vertical
4	2038.55	-63.70	-61.65	-47.00	14.65	2.05	90	Vertical
5	6832.23	-63.66	-55.57	-47.00	8.57	8.09	210	Vertical
6	10895.5	-65.54	-52.07	-47.00	5.07	13.47	220	Vertical

For Remote (DSRC02A):

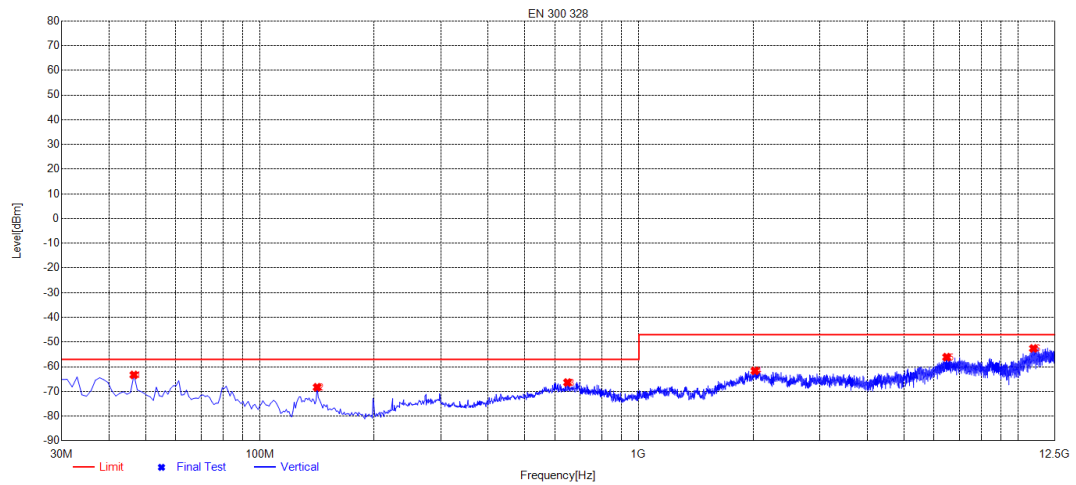
EUT: ATOM
M/N: ATOM Remote Controller: DSRC02A
Operating Condition: 11b_ANT A (RX 2412MHz)- Horizontal
Comment: 30MHz-12.75GHz



Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	48.43	-90.51	-62.50	-57.00	5.50	28.01	20	Horizontal
2	127	-95.27	-70.98	-57.00	13.98	24.29	80	Horizontal
3	701.24	-100.54	-66.20	-57.00	9.20	34.34	360	Horizontal
4	2083.40	-63.26	-61.16	-47.00	14.16	2.10	220	Horizontal
5	6566.55	-64.16	-56.41	-47.00	9.41	7.75	90	Horizontal
6	10900.1	-66.43	-52.94	-47.00	5.94	13.49	170	Horizontal

Report Number: 6895025113301

EUT: ATOM
M/N: ATOM Remote Controller: DSRC02A
Operating Condition: 11b_ANT A (RX 2412MHz)- Vertical
Comment: 30MHz-12.75GHz



Suspected List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	46.49	-91.66	-63.29	-57.00	6.29	28.37	140	Vertical
2	141.55	-95.12	-68.30	-57.00	11.30	26.82	100	Vertical
3	647.89	-100.66	-66.37	-57.00	9.37	34.29	180	Vertical
4	2023.60	-63.67	-61.63	-47.00	14.63	2.04	170	Vertical
5	6486.04	-63.73	-56.10	-47.00	9.10	7.63	110	Vertical
6	10986.4	-66.35	-52.57	-47.00	5.57	13.78	140	Vertical

17 Appendix H: Receiver Blocking

We test two antenna port respectively and only the worst case recorded in this report.

For Drone (DSDR04C):

For ANT A 802.11b ANT A 2412MHz

Test Data of Receiver Blocking						
Test channel	Blocking Signal Frequency (MHz)	Blocking Signal Power(dBm)	Wanted signal mean power from companion device(dBm)	Performance PER	Limit PER	Result
Low	2300	-32.00	-72.00	1.10%	10%	Pass
	2330		-72.00	0.87%		
	2360		-72.00	2.54%		
	2380		-66.00	1.93%		
High	2504		-66.00	0.63%		
	2524		-72.00	1.13%		
	2584		-72.00	0.58%		
	2674		-72.00	1.29%		

For ANT A 802.11b ANT B 2412MHz

Test Data of Receiver Blocking						
Test channel	Blocking Signal Frequency (MHz)	Blocking Signal Power(dBm)	Wanted signal mean power from companion device(dBm)	Performance PER	Limit PER	Result
Low	2300	-32.00	-72.00	1.19%	10%	Pass
	2330		-72.00	0.45%		
	2360		-72.00	2.62%		
	2380		-66.00	1.24%		
High	2504		-66.00	0.49%		
	2524		-72.00	1.46%		
	2584		-72.00	0.35%		
	2674		-72.00	1.42%		

For Remote (DSRC02A):**For Ant1 802.11b_ANT A_2412MHz**

Test Data of Receiver Blocking						
Test channel	Blocking Signal Frequency (MHz)	Blocking Signal Power(dBm)	Wanted signal mean power from companion device(dBm)	Performance PER	Limit PER	Result
Low	2300	-32.00	-72.00	1.46%	10%	Pass
	2330		-72.00	0.52%		
	2360		-72.00	2.38%		
	2380		-66.00	1.41%		
High	2504		-66.00	0.15%		
	2524		-72.00	1.36%		
	2584		-72.00	0.42%		
	2674		-72.00	1.95%		

For Ant1 802.11b_ANT B_2412MHz

Test Data of Receiver Blocking						
Test channel	Blocking Signal Frequency (MHz)	Blocking Signal Power(dBm)	Wanted signal mean power from companion device(dBm)	Performance PER	Limit PER	Result
Low	2300	-32.00	-72.00	1.48%	10%	Pass
	2330		-72.00	0.45%		
	2360		-72.00	2.32%		
	2380		-66.00	1.46%		
High	2504		-66.00	0.28%		
	2524		-72.00	1.41%		
	2584		-72.00	0.52%		
	2674		-72.00	1.34%		

18 Appendix I: Estimation of Exposure of Human to Electromagnetic Fields

According to EN IEC 62311:2020 and EN 50665:2017, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified 1999/519/EC.

Reference levels for electric, magnetic and electromagnetic fields (0 Hz to 300 GHz, unperturbed rms values)				
Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density S_{eq} (W/m ²)
0-1 Hz	—	$3,2 \times 10^4$	4×10^4	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375 \cdot f^{1/2}$	$0,0037 \cdot f^{1/2}$	$0,0046 \cdot f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10

Notes:

1. f as indicated in the frequency range column.
2. For frequencies between 100 kHz and 10 GHz, S_{eq} , E^2 , H^2 , and B^2 are to be averaged over any six-minute period.
3. For frequencies exceeding 10 GHz, S_{eq} , E^2 , H^2 , and B^2 are to be averaged over any $68/f^{1.05}$ -minute period (f in GHz).
4. No E-field value is provided for frequencies < 1 Hz, which are effectively static electric fields. For most people the annoying perception of surface electric charges will not occur at field strengths less than 25 kV/m. Spark discharges causing stress or annoyance should be avoided.

Remark: This section is only applied for ATOM Drone.

For the 2.4GHz band the reference level is E field strength 61V/m.

The Formula

$$r = \frac{\sqrt{30PG(\theta, \phi)}}{E}$$

Whereas,

G=antenna gain relative to an isotropic antenna

$\Theta \Phi$ = elevation and azimuth angles to point of investigation

r=distance from observation point to the antenna

P=the maximum output power of transmitter.

For ATOM Drone: DSDR04C, DSDR04E, DSDR04F

The maximum e.i.r.p of the transmitter is 14.28dBm= 26.79mW= 0.02679W

The antenna of the product, under normal use condition is at least 1.47cm away from the body of the user.

Warning statement to the user for keeping at least 1.47cm separation distance and the prohibition of operating to a person has been printed on the user's manual. So, this product under normal use is located on electromagnetic far field between the human body.

So the requirement is easily met for the user if only user is not close extremely to the product.

19 Appendix J: Test Setup Photos

For Drone (DSDR04C):

Radiated emission test below 1GHz



Radiated emission test above 1GHz



For Remote (DSRC02A):

Radiated emission test below 1GHz



Radiated emission test above 1GHz



20 Appendix K: Photographs of EUT

The EUT photo refer to EMC report: 6876025082301.

---THE END---