



EMISSION BANDWIDTH - 5.8 GHz BAND

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Generator - Signal	Keysight	N5182B	TFU	2020-11-20	2022-11-20
Cable	Micro-Coax	UFD150A-1-0720-200200	EVK	2021-03-14	2022-03-14
Attenuator	S.M. Electronics	SA26B-20	AUY	2021-03-14	2022-03-14
Block - DC	Fairview Microwave	SD3379	AMW	2021-03-14	2022-03-14
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFO	2021-07-06	2022-07-06

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The transmit frequencies and data rates listed in the datasheet were measured in each band utilized by the radio. The transmit power was set to its default maximum.

Per ANSI C63.10:2013, Clause 6.9.3, the spectrum analyzer settings were as follows:

- RBW = 100 kHz
- VBW = $\geq 3x$ RBW
- Detector = Peak
- Trace mode = max hold

The spectrum analyzer occupied bandwidth measurement function was then used to measure the 6 dB emission bandwidth.

EMISSION BANDWIDTH - 5.8 GHz BAND



Tel: 2021.12.14.1 XMI: 2020.12.30.0

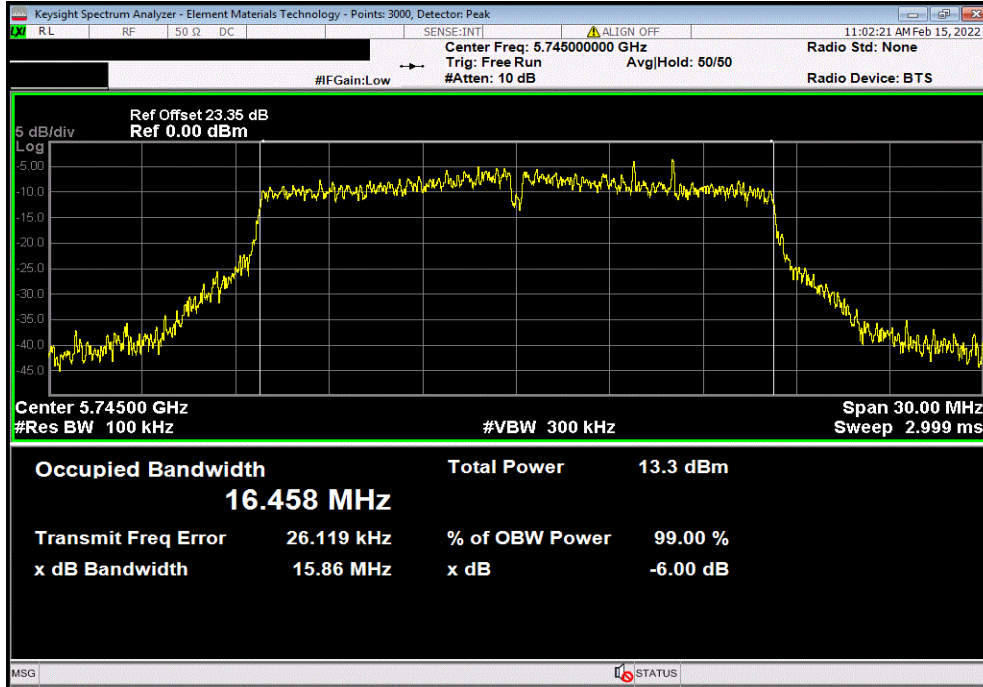
EUT: A-dec Gateway		Work Order: A-DE0169	
Serial Number: 521A000118		Date: 17-Feb-22	
Customer: A-dec, Inc.		Temperature: 20 °C	
Attendees: None		Humidity: 41.4% RH	
Project: None		Barometric Pres.: 1036 mbar	
Tested by: Jeff Alcoke		Power: 24 VDC via 110VAC/60Hz	
		Job Site: EV06	
TEST SPECIFICATIONS			
FCC 15.407:2022		Test Method	
		ANSI C63.10:2013	
COMMENTS			
Reference level offset includes: DC Block, 20 dB attenuator, and measurement cable			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	3	Signature	
		Value	Limit (>)
20 MHz			
802.11(a) 6 Mbps			
Ch 149, Low Channel 5745 MHz		15.857 MHz	500 kHz
Ch 157, Mid Channel 5785 MHz		16.295 MHz	500 kHz
Ch 165, High Channel 5825 MHz		15.999 MHz	500 kHz
802.11(a) 36 Mbps			
Ch 149, Low Channel 5745 MHz		16.31 MHz	500 kHz
Ch 157, Mid Channel 5785 MHz		16.206 MHz	500 kHz
Ch 165, High Channel 5825 MHz		16.366 MHz	500 kHz
802.11(a) 54 Mbps			
Ch 149, Low Channel 5745 MHz		16.112 MHz	500 kHz
Ch 157, Mid Channel 5785 MHz		16.125 MHz	500 kHz
Ch 165, High Channel 5825 MHz		16.218 MHz	500 kHz
802.11(n) MCS0			
Ch 149, Low Channel 5745 MHz		17.537 MHz	500 kHz
Ch 157, Mid Channel 5785 MHz		17.542 MHz	500 kHz
Ch 165, High Channel 5825 MHz		17.288 MHz	500 kHz
802.11(n) MCS7			
Ch 149, Low Channel 5745 MHz		17.546 MHz	500 kHz
Ch 157, Mid Channel 5785 MHz		17.491 MHz	500 kHz
Ch 165, High Channel 5825 MHz		17.643 MHz	500 kHz
802.11(ac) MCS8 (256-QAM)			
Ch 149, Low Channel 5745 MHz		17.597 MHz	500 kHz
Ch 157, Mid Channel 5785 MHz		17.525 MHz	500 kHz
Ch 165, High Channel 5825 MHz		17.351 MHz	500 kHz
40 MHz			
802.11(n) MCS0			
Ch 149/153, Low Channel 5755 MHz		35.422 MHz	500 kHz
Ch 157/161, High Channel 5795 MHz		35.702 MHz	500 kHz
802.11(n) MCS7			
Ch 149/153, Low Channel 5755 MHz		36.367 MHz	500 kHz
Ch 157/161, High Channel 5795 MHz		36.273 MHz	500 kHz
802.11(ac) MCS9 (256-QAM)			
Ch 149/153, Low Channel 5755 MHz		36.291 MHz	500 kHz
Ch 157/161, High Channel 5795 MHz		35.974 MHz	500 kHz
80 MHz			
802.11(ac) MCS0			
Ch 149-161, Low Channel 5775 MHz		75.132 MHz	500 kHz
802.11(ac) MCS9 (256-QAM)			
Ch 149-161, Low Channel 5775 MHz		75.79 MHz	500 kHz

EMISSION BANDWIDTH - 5.8 GHz BAND

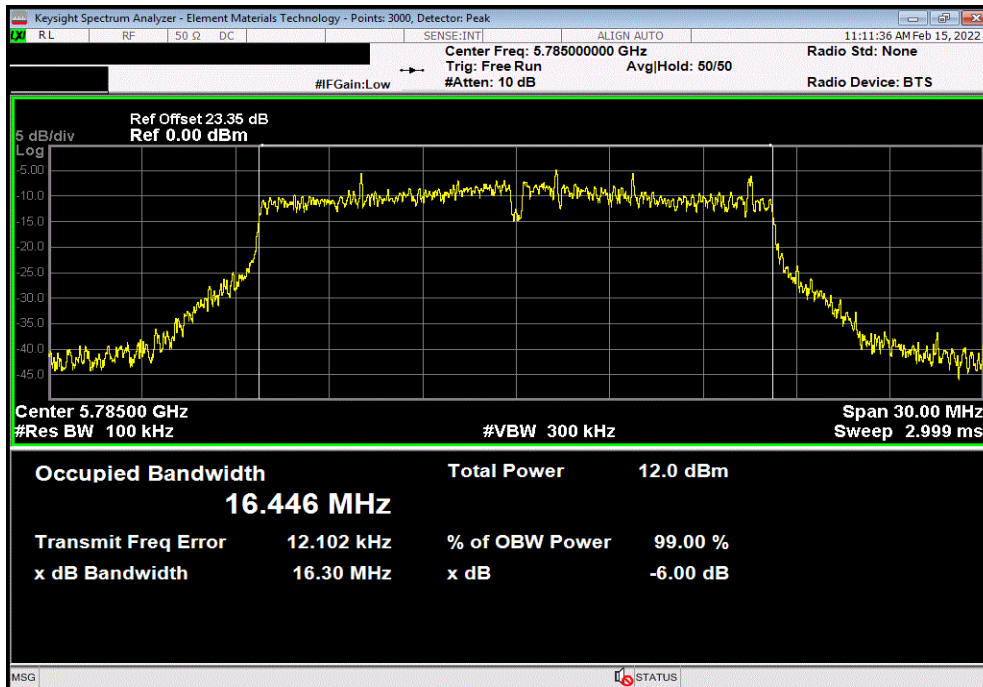


TuTx 2021.12.14.1 XMt 2020.12.30.0

20 MHz, 802.11(a) 6 Mbps, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				15.857 MHz	500 kHz	Pass



20 MHz, 802.11(a) 6 Mbps, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				16.295 MHz	500 kHz	Pass

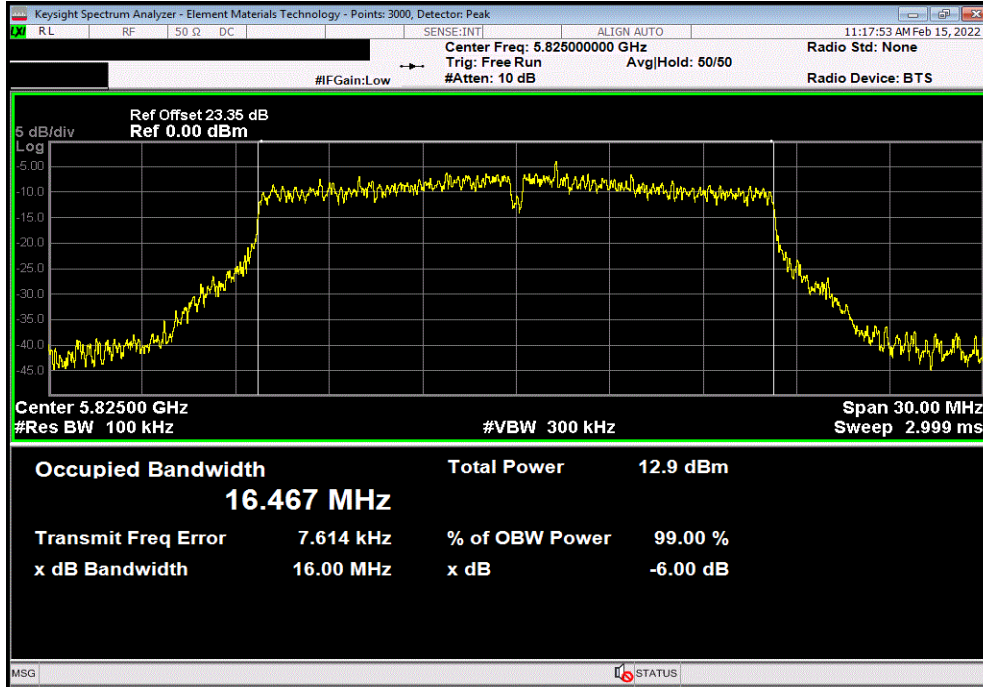


EMISSION BANDWIDTH - 5.8 GHz BAND

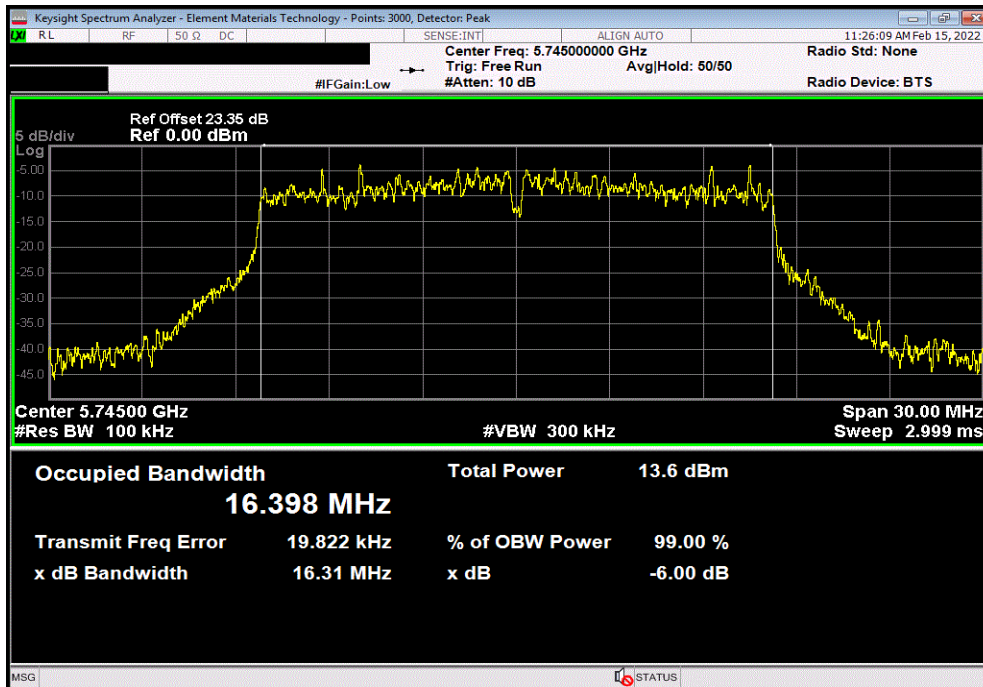


TbTx 2021.12.14.1 XMI 2020.12.30.0

20 MHz, 802.11(a) 6 Mbps, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				15.999 MHz	500 kHz	Pass



20 MHz, 802.11(a) 36 Mbps, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				16.31 MHz	500 kHz	Pass

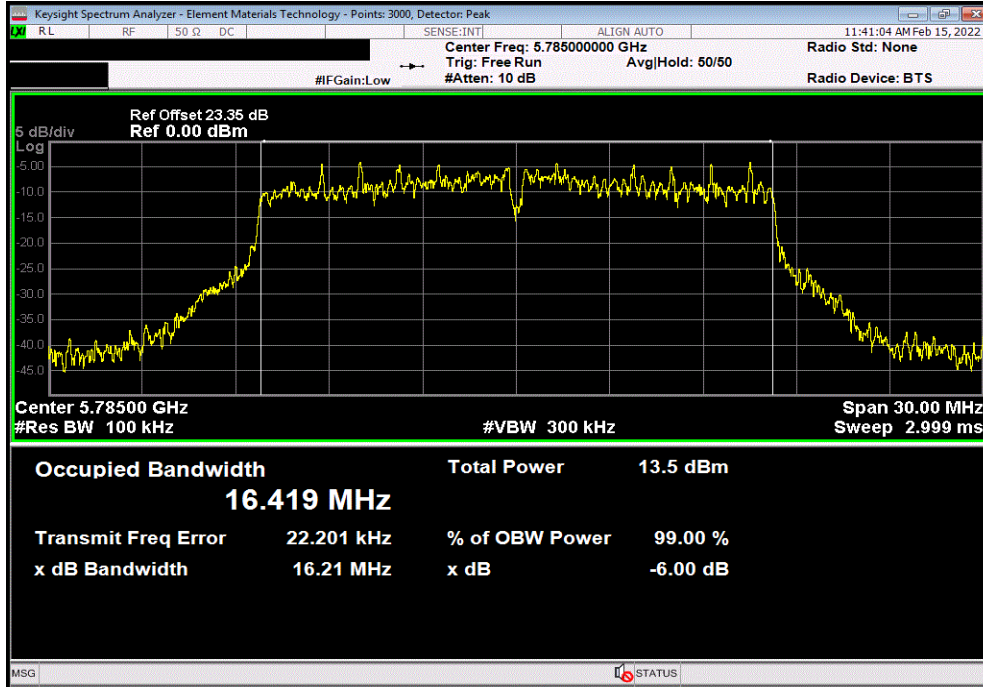


EMISSION BANDWIDTH - 5.8 GHz BAND

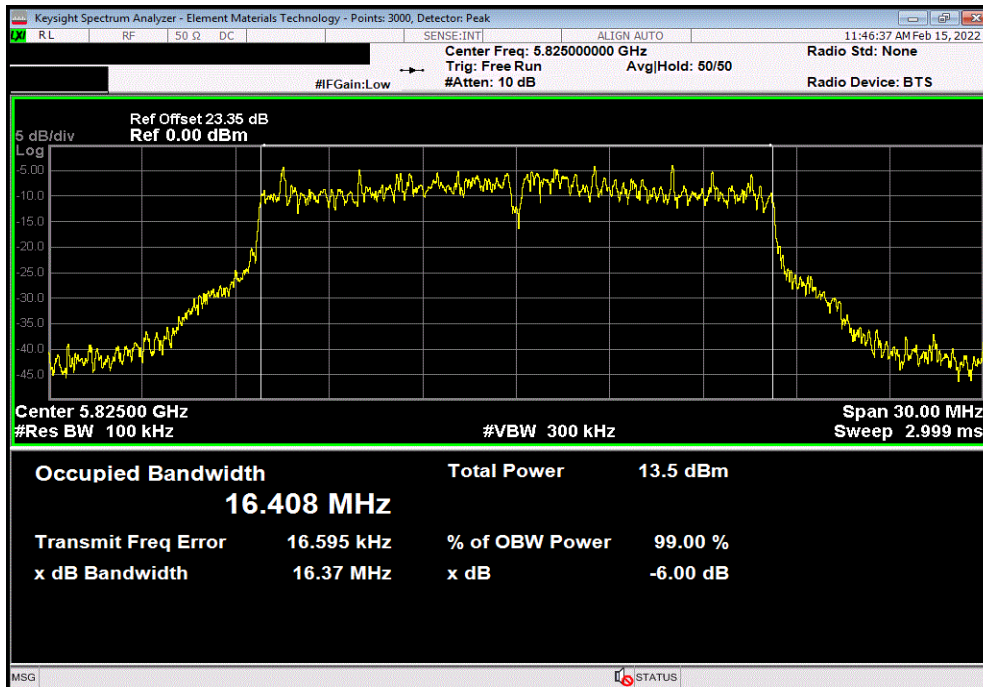


TuTx 2021.12.14.1 XMt 2020.12.30.0

20 MHz, 802.11(a) 36 Mbps, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				16.206 MHz	500 kHz	Pass



20 MHz, 802.11(a) 36 Mbps, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				16.366 MHz	500 kHz	Pass

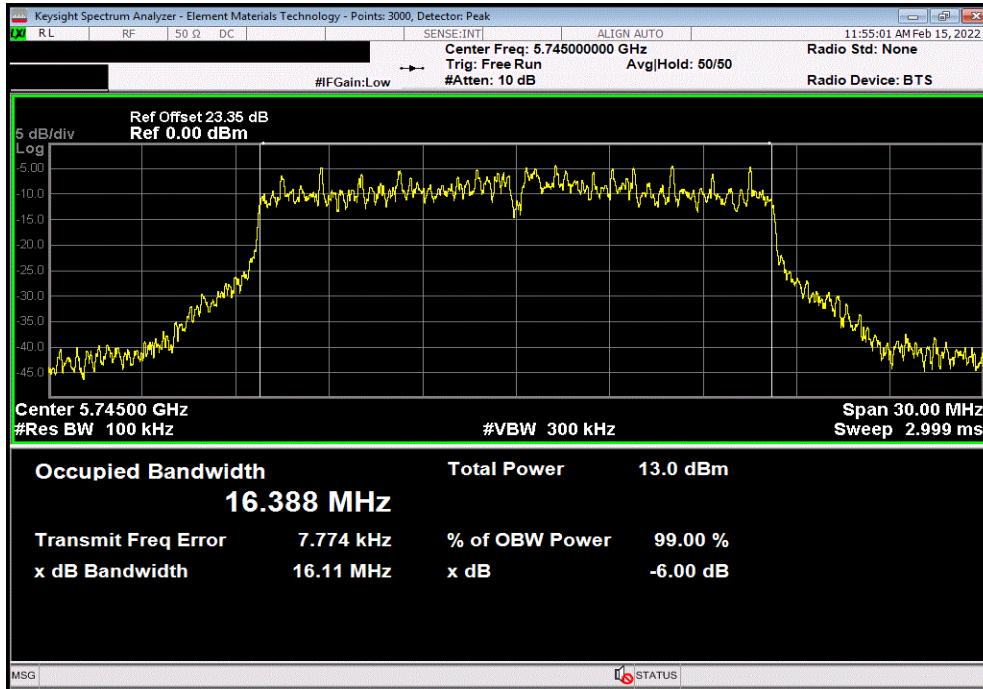


EMISSION BANDWIDTH - 5.8 GHz BAND

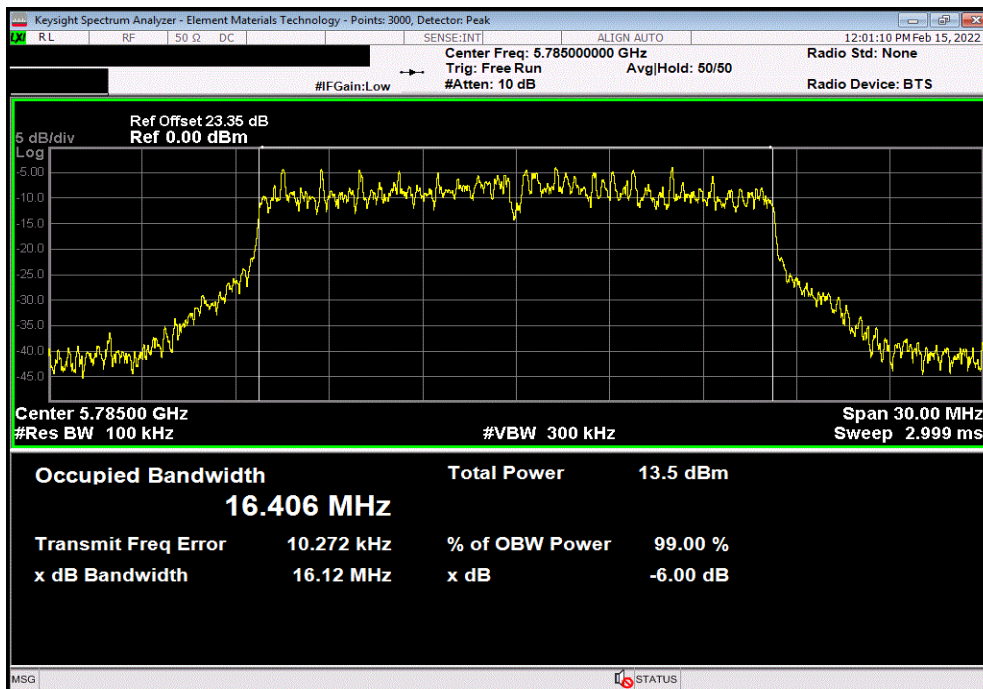


TuTx 2021.12.14.1 XMt 2020.12.30.0

20 MHz, 802.11(a) 54 Mbps, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				16.112 MHz	500 kHz	Pass



20 MHz, 802.11(a) 54 Mbps, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				16.125 MHz	500 kHz	Pass

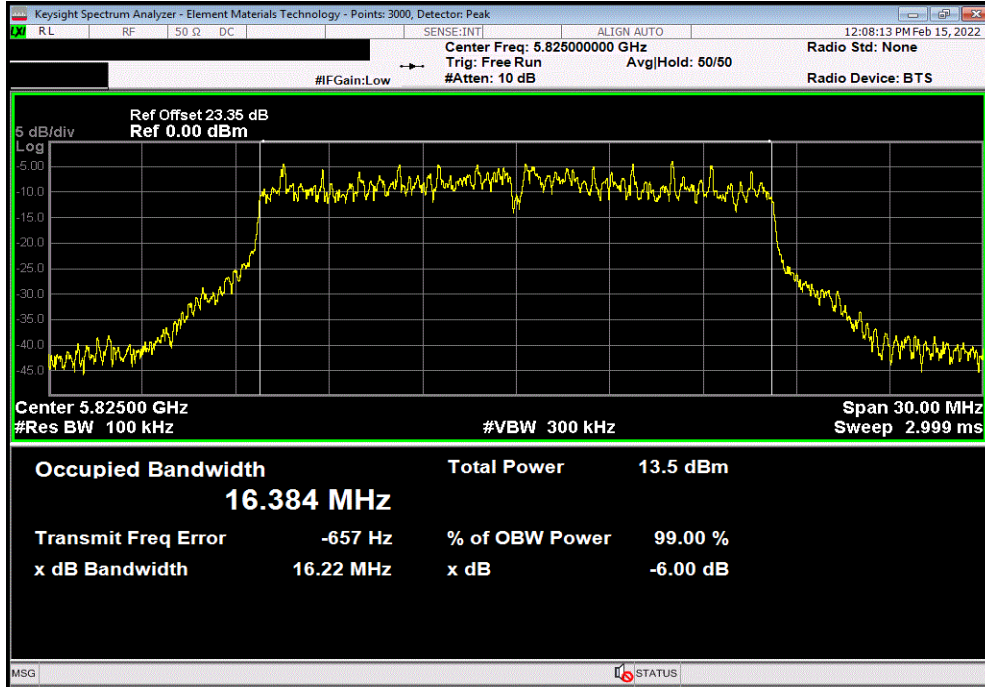


EMISSION BANDWIDTH - 5.8 GHz BAND

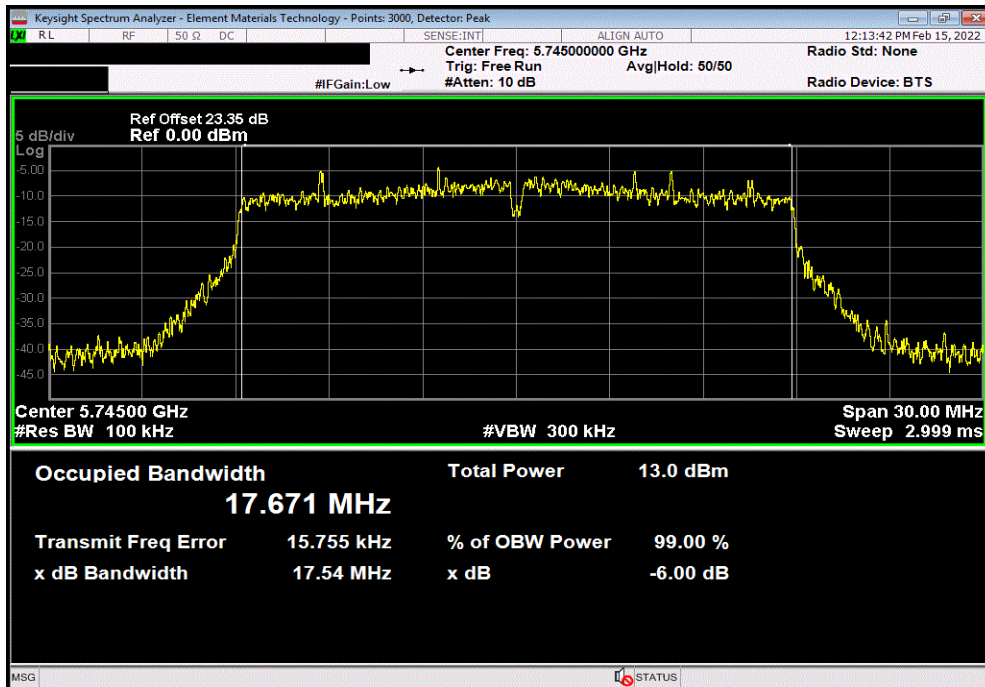


TuTx 2021.12.14.1 XMi 2020.12.30.0

20 MHz, 802.11(a) 54 Mbps, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				16.218 MHz	500 kHz	Pass



20 MHz, 802.11(n) MCS0, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				17.537 MHz	500 kHz	Pass

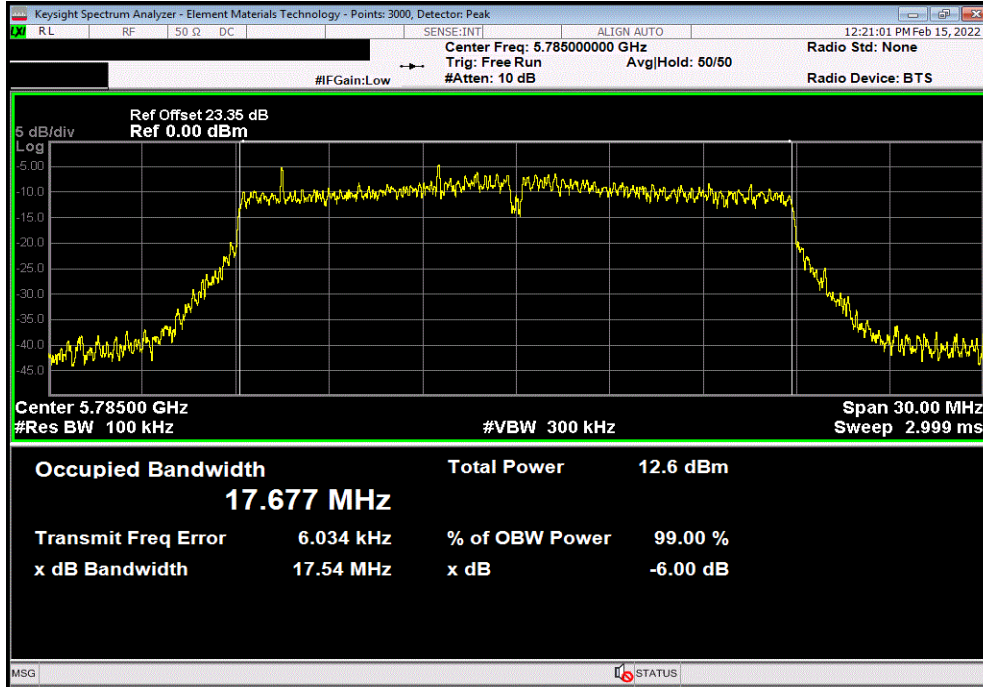


EMISSION BANDWIDTH - 5.8 GHz BAND

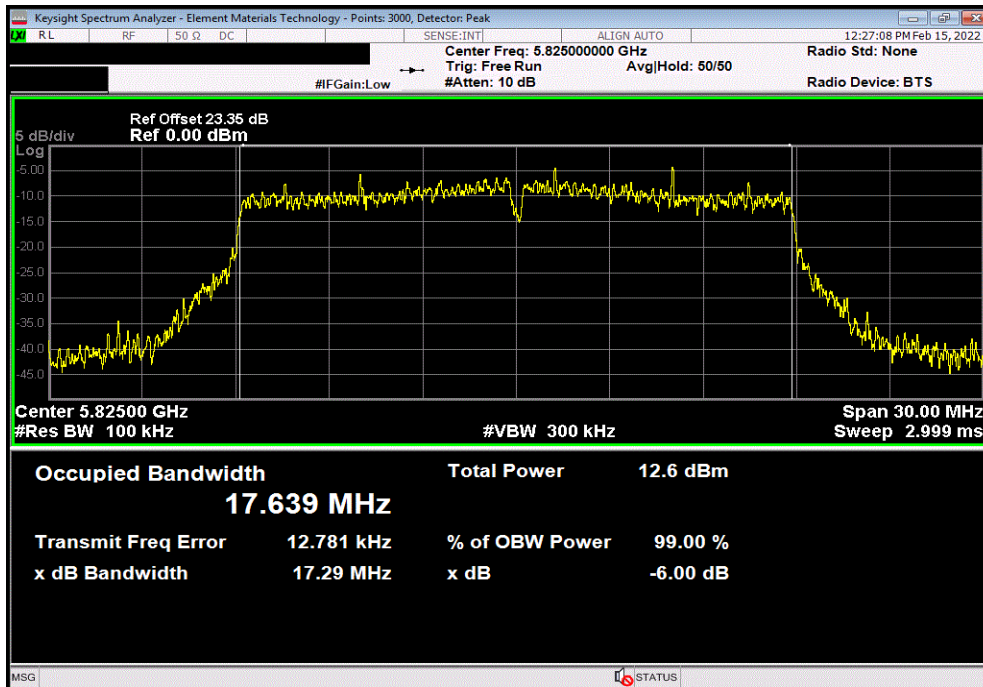


TuTx 2021.12.14.1 XMI 2020.12.30.0

20 MHz, 802.11(n) MCS0, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				17.542 MHz	500 kHz	Pass



20 MHz, 802.11(n) MCS0, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				17.288 MHz	500 kHz	Pass

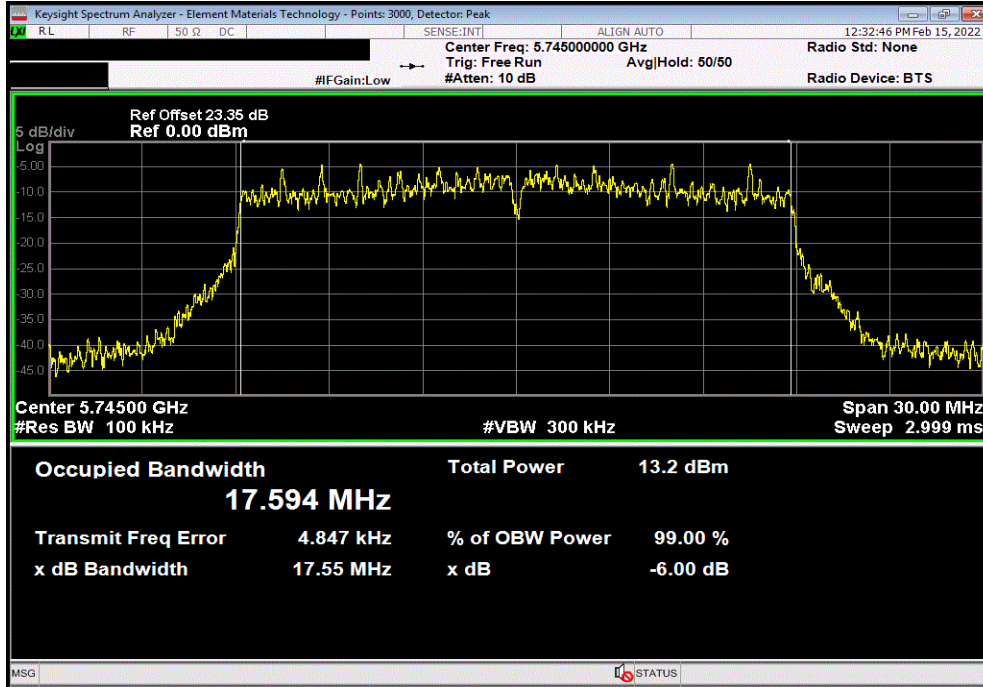


EMISSION BANDWIDTH - 5.8 GHz BAND

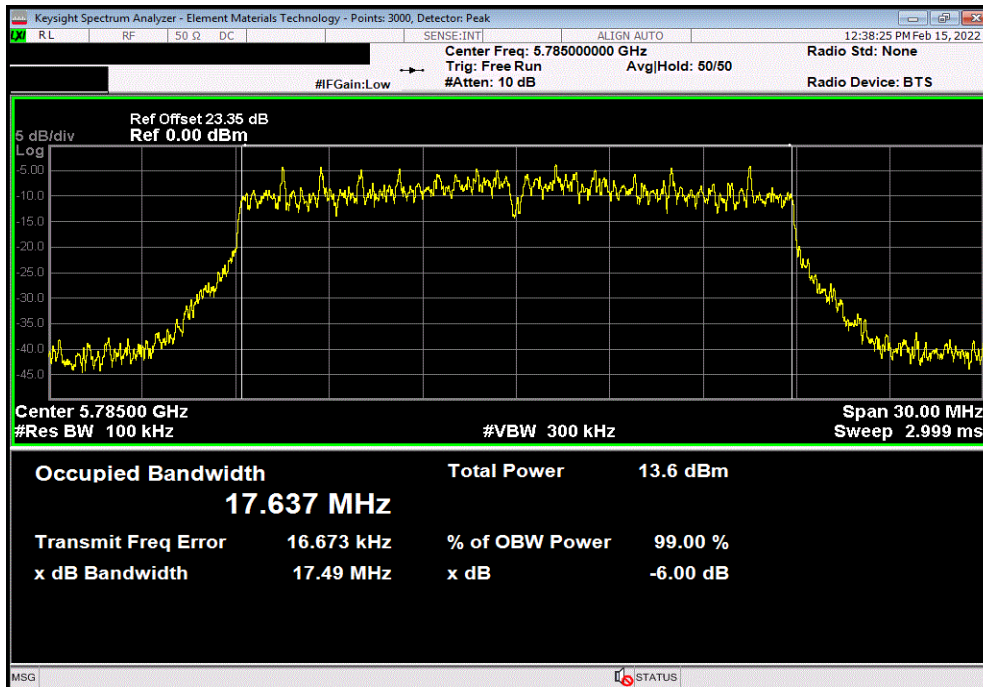


TuTx 2021.12.14.1 XMt 2020.12.30.0

20 MHz, 802.11(n) MCS7, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				17.546 MHz	500 kHz	Pass



20 MHz, 802.11(n) MCS7, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				17.491 MHz	500 kHz	Pass

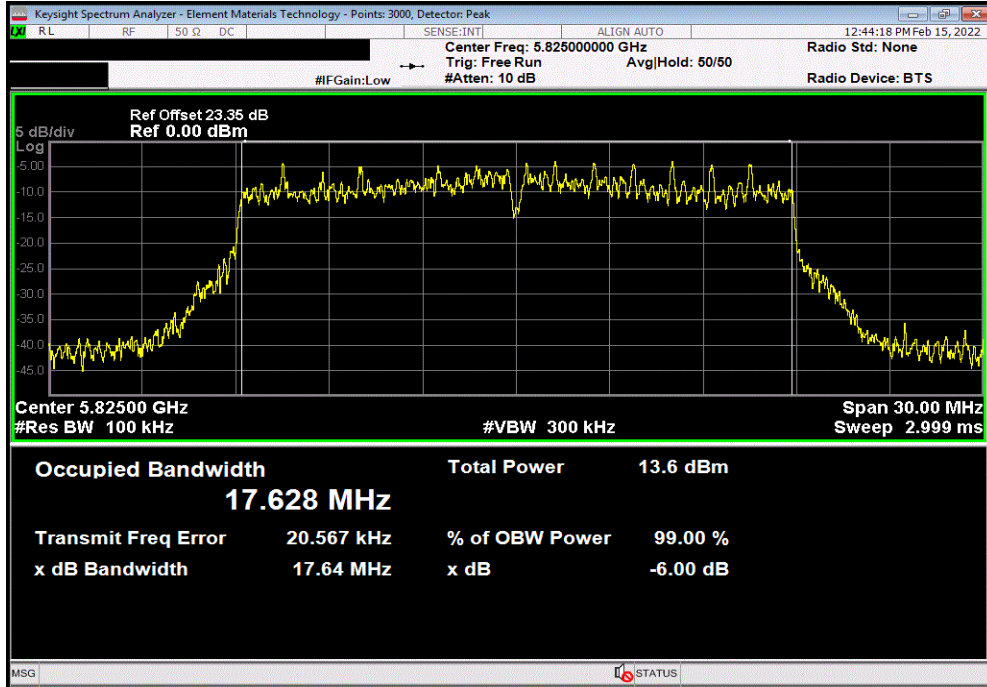


EMISSION BANDWIDTH - 5.8 GHz BAND

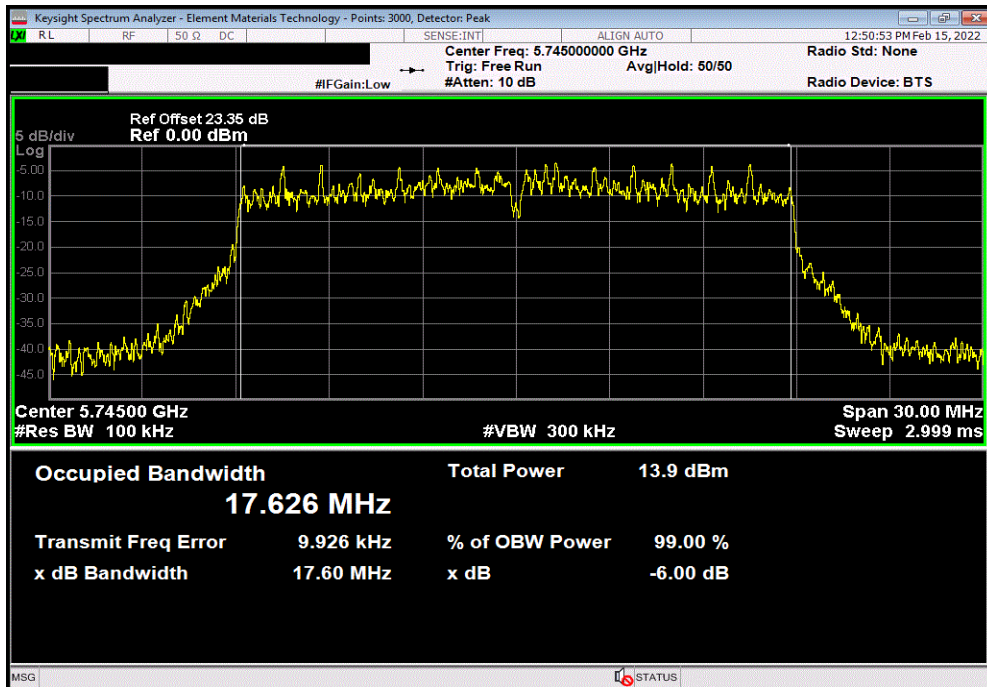


TuTx 2021.12.14.1 XMit 2020.12.30.0

20 MHz, 802.11(n) MCS7, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				17.643 MHz	500 kHz	Pass



20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				17.597 MHz	500 kHz	Pass

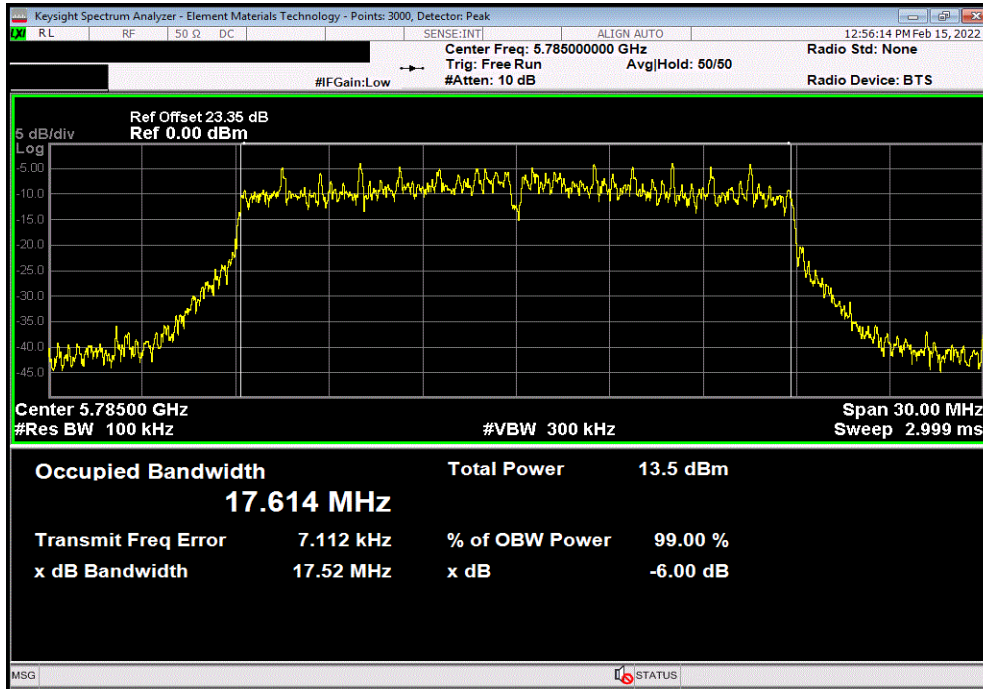


EMISSION BANDWIDTH - 5.8 GHz BAND

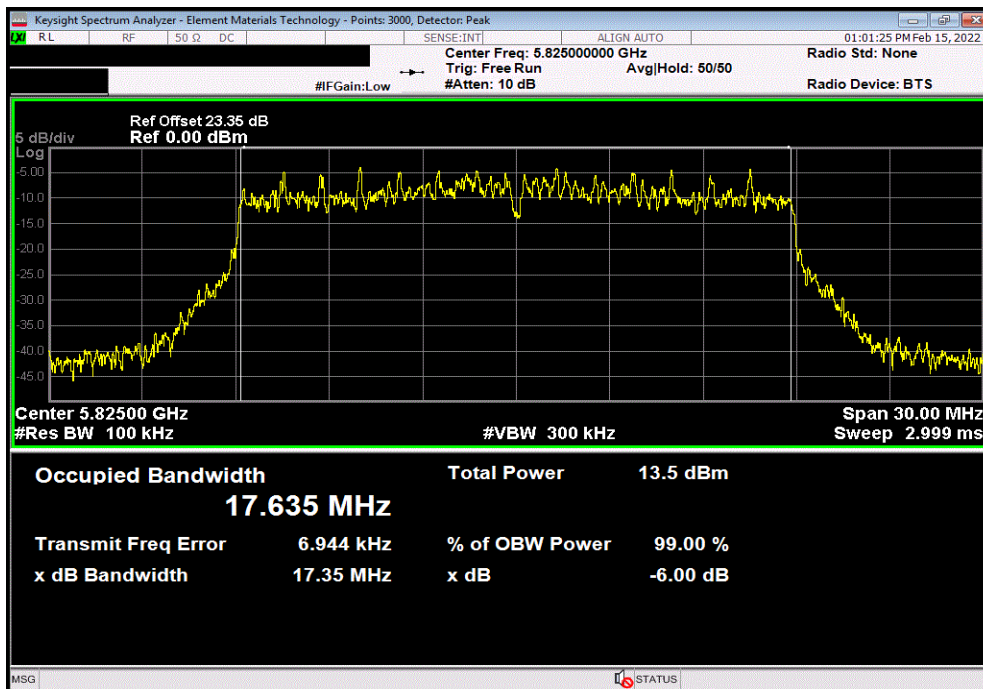


TuTx 2021.12.14.1 XMI 2020.12.30.0

20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				17.525 MHz	500 kHz	Pass



20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				17.351 MHz	500 kHz	Pass

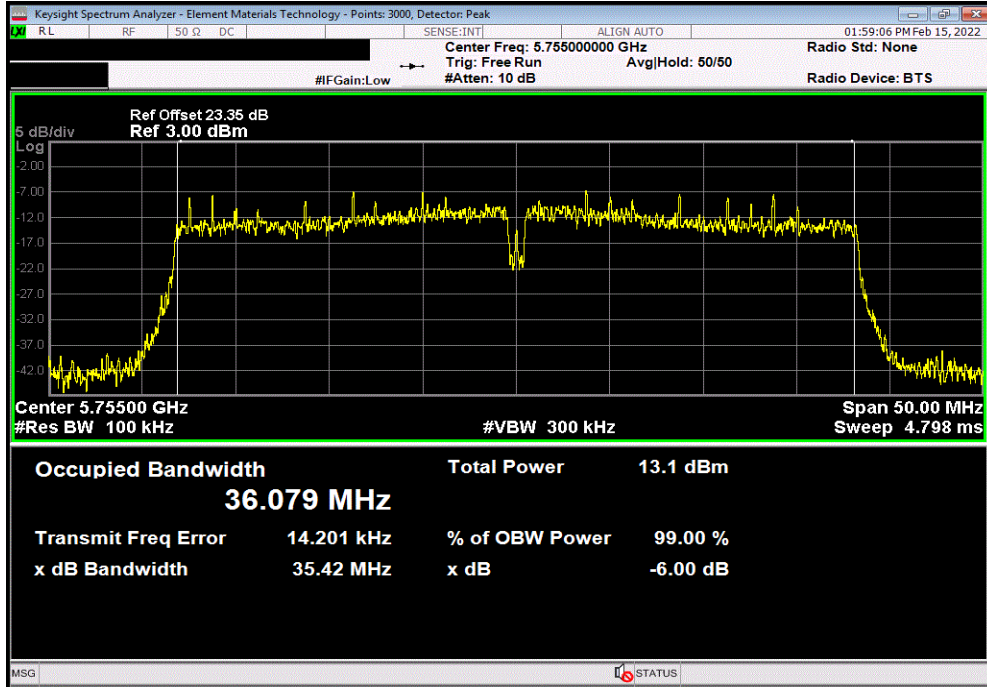


EMISSION BANDWIDTH - 5.8 GHz BAND

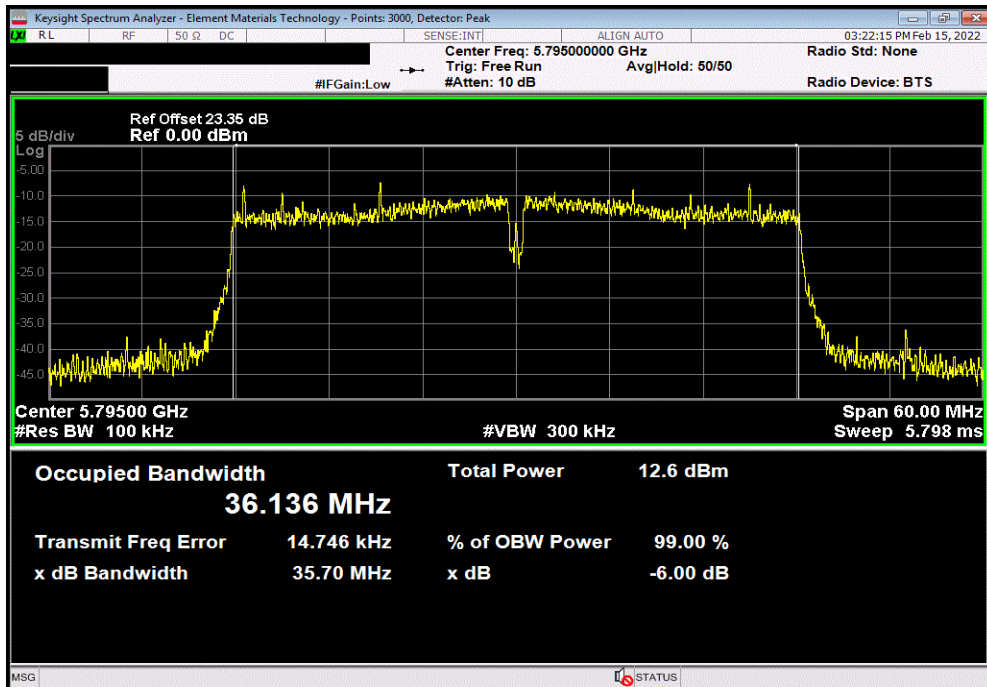


TuTx 2021.12.14.1 XMit 2020.12.30.0

40 MHz, 802.11(n) MCS0, Ch 149/153, Low Channel 5755 MHz						
				Value	Limit	Result
				35.422 MHz	500 kHz	Pass



40 MHz, 802.11(n) MCS0, Ch 157/161, High Channel 5795 MHz						
				Value	Limit	Result
				35.702 MHz	500 kHz	Pass

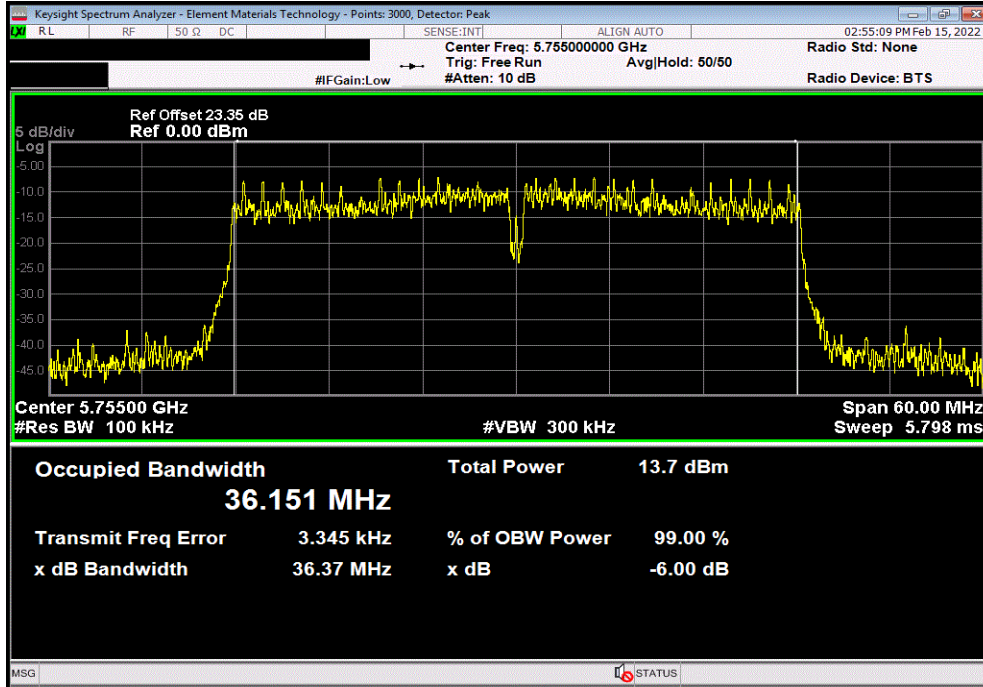


EMISSION BANDWIDTH - 5.8 GHz BAND

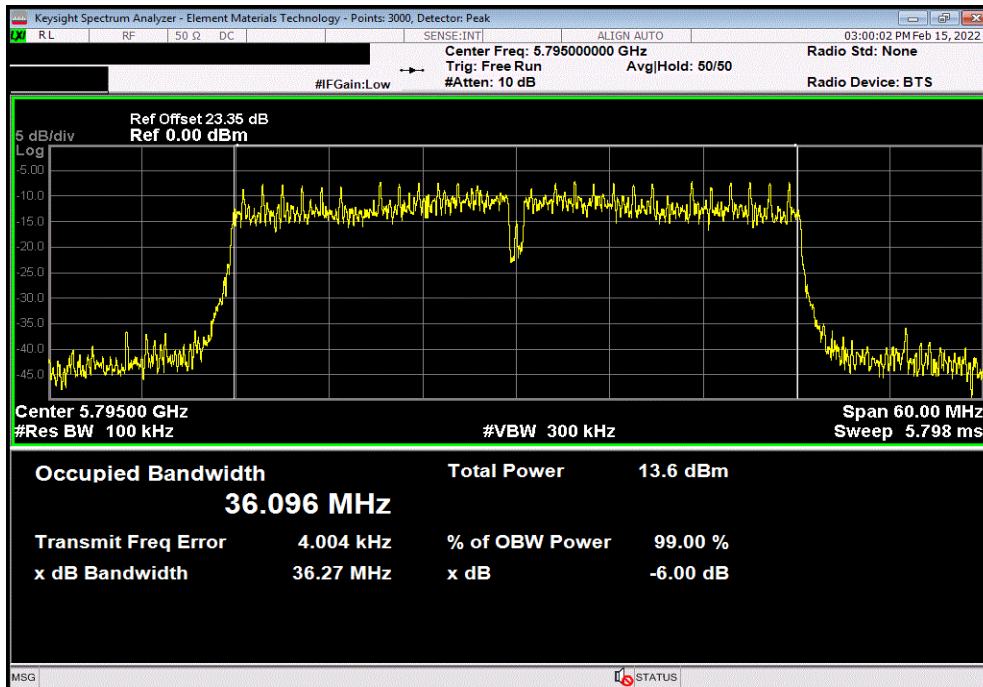


TuTx 2021.12.14.1 XMI 2020.12.30.0

40 MHz, 802.11(n) MCS7, Ch 149/153, Low Channel 5755 MHz						
				Value	Limit	Result
				36.367 MHz	500 kHz	Pass



40 MHz, 802.11(n) MCS7, Ch 157/161, High Channel 5795 MHz						
				Value	Limit	Result
				36.273 MHz	500 kHz	Pass

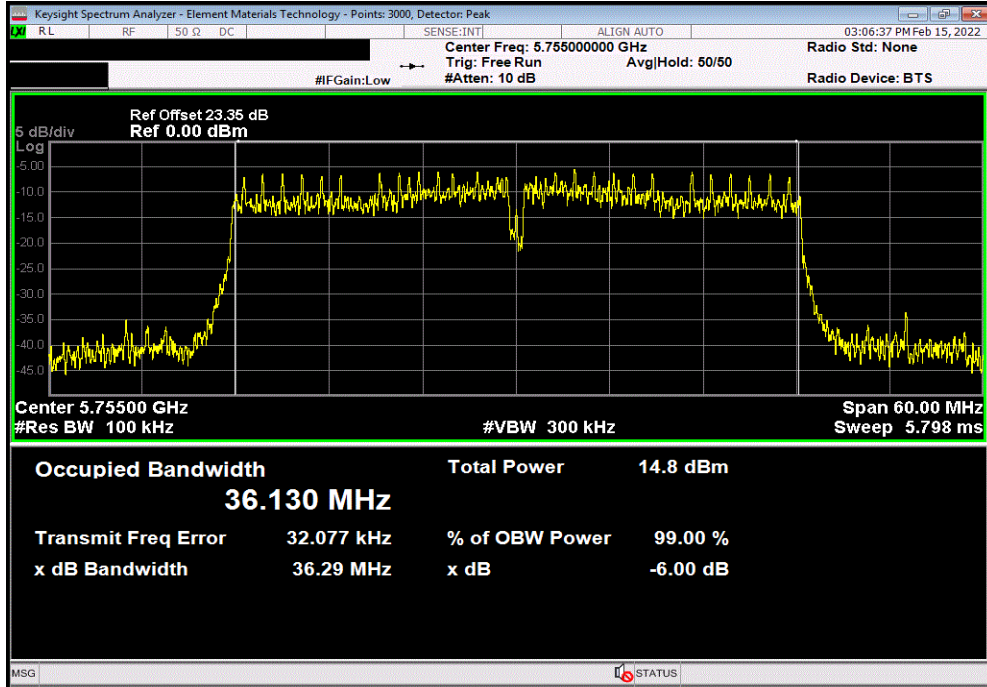


EMISSION BANDWIDTH - 5.8 GHz BAND

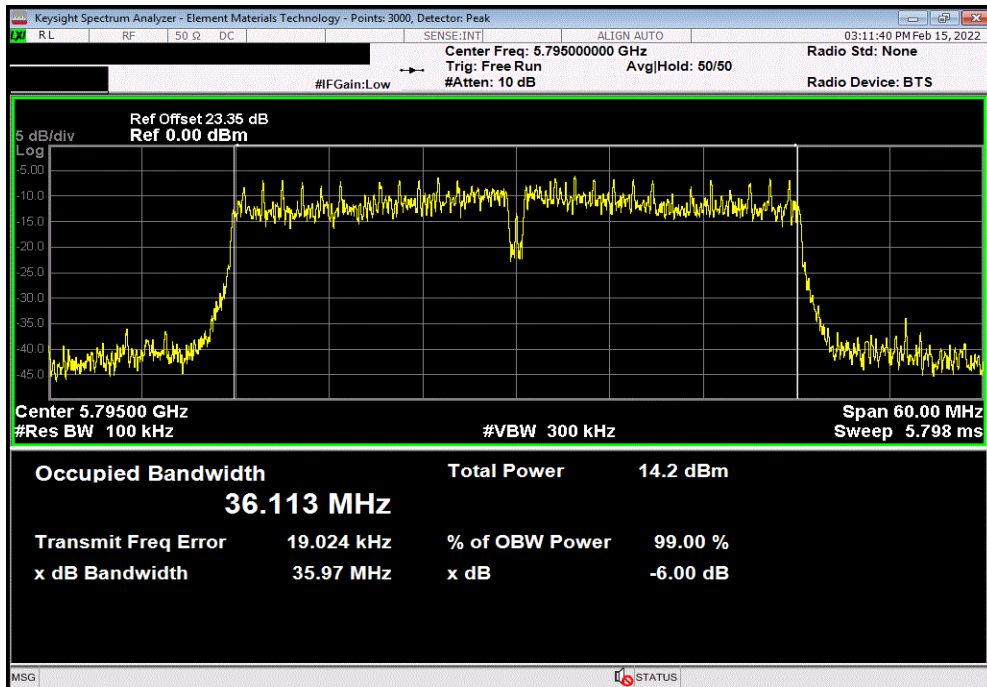


TuTx 2021.12.14.1 XMt 2020.12.30.0

40 MHz, 802.11(ac) MCS9 (256-QAM), Ch 149/153, Low Channel 5755 MHz						
				Value	Limit	Result
				36.291 MHz	500 kHz	Pass



40 MHz, 802.11(ac) MCS9 (256-QAM), Ch 157/161, High Channel 5795 MHz						
				Value	Limit	Result
				35.974 MHz	500 kHz	Pass

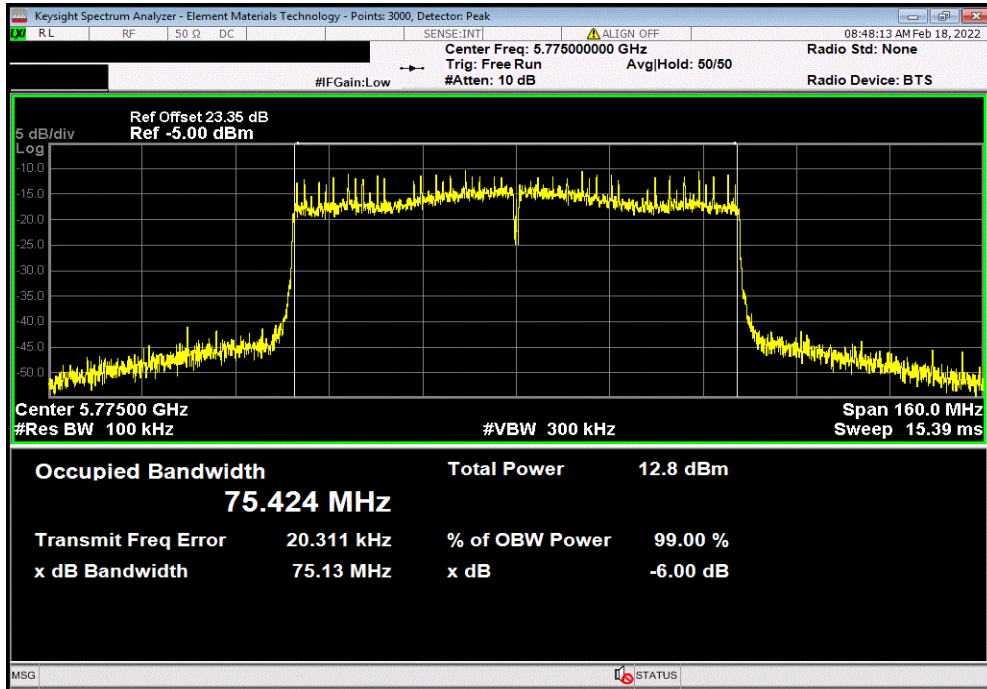


EMISSION BANDWIDTH - 5.8 GHz BAND

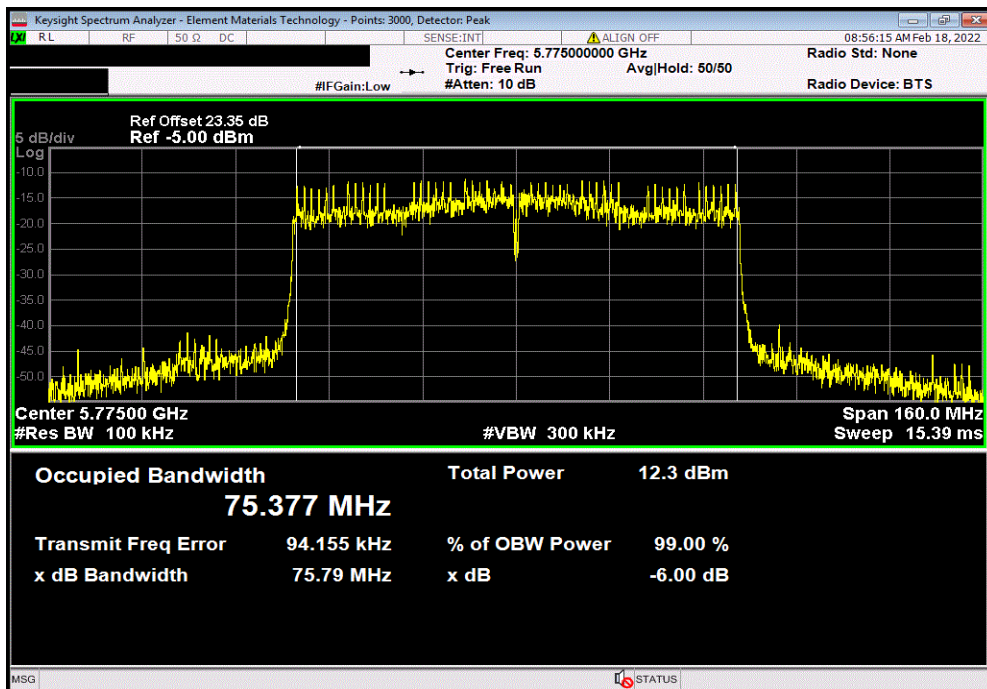


TuTx 2021.12.14.1 XMt 2020.12.30.0

80 MHz, 802.11(ac) MCS0, Ch 149-161, Low Channel 5775 MHz						
				Value	Limit	Result
				75.132 MHz	500 kHz	Pass



80 MHz, 802.11(ac) MCS9 (256-QAM), Ch 149-161, Low Channel 5775 MHz						
				Value	Limit	Result
				75.79 MHz	500 kHz	Pass





OCCUPIED BANDWIDTH - 5.8 GHZ BAND

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Attenuator	S.M. Electronics	SA26B-20	AUY	2021-03-14	2022-03-14
Generator - Signal	Keysight	N5182B	TFU	2020-11-20	2022-11-20
Cable	Micro-Coax	UFD150A-1-0720-200200	EVK	2021-03-14	2022-03-14
Block - DC	Fairview Microwave	SD3379	AMW	2021-03-14	2022-03-14
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFO	2021-07-06	2022-07-06

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The transmit frequencies and data rates listed in the datasheet were measured in each band utilized by the radio. The transmit power was set to its default maximum.

Per FCC KDB 789033 D02 General UNII Test Procedures v02r01, Clause D the spectrum analyzer settings were as follows:

- Span = 1.5 – 5 times the occupied bandwidth (B)
- RBW = 1% - 5% of the occupied bandwidth (B).
- VBW = > 3 x RBW
- Detector = Sample
- Trace mode = max hold

The spectrum analyzer occupied bandwidth measurement function was then used to measure the 99% occupied bandwidth

There is no required limit to be met in the rule part for this test. The purpose of the test is to both report the results as required and to utilize the emission bandwidth for setting the channel power integration bandwidth during conducted output power testing.

OCCUPIED BANDWIDTH - 5.8 GHz BAND



Tel# 2021.10.29.2 XM# 2022.02.07.0

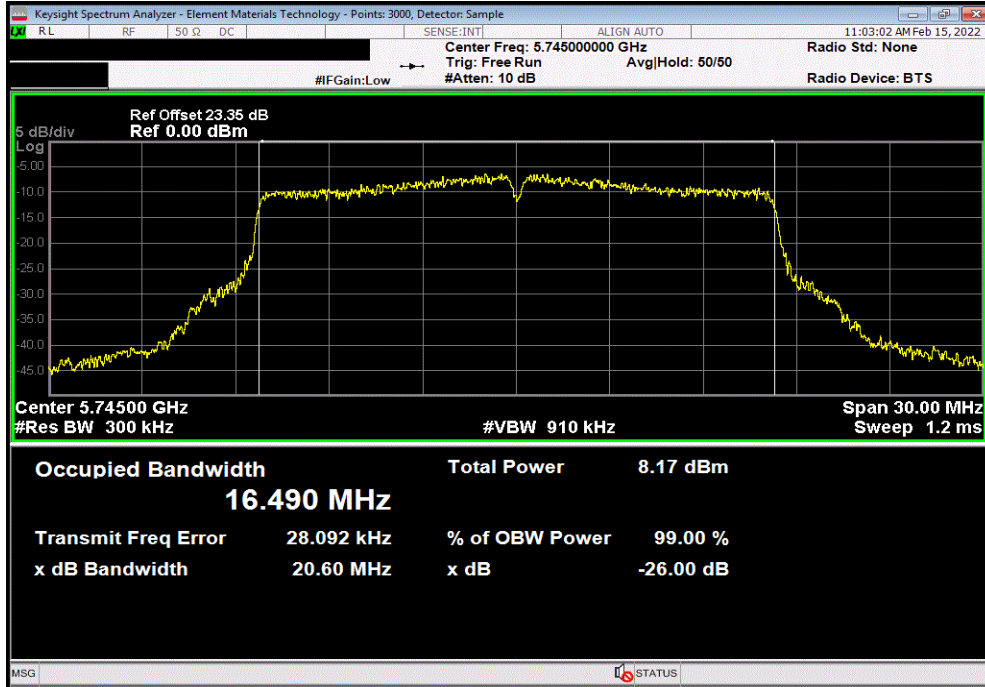
EUT: A-dec Gateway		Work Order: A-DE0169	
Serial Number: 521A000118		Date: 17-Feb-22	
Customer: A-dec, Inc.		Temperature: 20.2 °C	
Attendees: None		Humidity: 41.7% RH	
Project: None		Barometric Pres.: 1033 mbar	
Tested by: Jeff Alcoke		Power: 24 VDC via 110VAC/60Hz	
		Job Site: EV06	
TEST SPECIFICATIONS			
FCC 15.407:2022		Test Method	
		ANSI C63.10:2013	
COMMENTS			
Reference level offset includes: DC Block, 20 dB attenuator, and measurement cable			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	3	Signature	
		Value	Limit
20 MHz			
802.11(a) 6 Mbps			
Ch 149, Low Channel 5745 MHz		16.49 MHz	N/A
Ch 157, Mid Channel 5785 MHz		16.501 MHz	N/A
Ch 165, High Channel 5825 MHz		16.479 MHz	N/A
802.11(a) 36 Mbps			
Ch 149, Low Channel 5745 MHz		16.441 MHz	N/A
Ch 157, Mid Channel 5785 MHz		16.444 MHz	N/A
Ch 165, High Channel 5825 MHz		16.476 MHz	N/A
802.11(a) 54 Mbps			
Ch 149, Low Channel 5745 MHz		16.451 MHz	N/A
Ch 157, Mid Channel 5785 MHz		16.483 MHz	N/A
Ch 165, High Channel 5825 MHz		16.472 MHz	N/A
802.11(n) MCS0			
Ch 149, Low Channel 5745 MHz		17.703 MHz	N/A
Ch 157, Mid Channel 5785 MHz		17.7 MHz	N/A
Ch 165, High Channel 5825 MHz		17.68 MHz	N/A
802.11(n) MCS7			
Ch 149, Low Channel 5745 MHz		17.659 MHz	N/A
Ch 157, Mid Channel 5785 MHz		17.695 MHz	N/A
Ch 165, High Channel 5825 MHz		17.629 MHz	N/A
802.11(ac) MCS8 (256-QAM)			
Ch 149, Low Channel 5745 MHz		17.647 MHz	N/A
Ch 157, Mid Channel 5785 MHz		17.681 MHz	N/A
Ch 165, High Channel 5825 MHz		17.66 MHz	N/A
40 MHz			
802.11(n) MCS0			
Ch 149/153, Low Channel 5755 MHz		36.395 MHz	N/A
Ch 157/161, High Channel 5795 MHz		36.406 MHz	N/A
802.11(n) MCS7			
Ch 149/153, Low Channel 5755 MHz		36.416 MHz	N/A
Ch 157/161, High Channel 5795 MHz		36.311 MHz	N/A
802.11(ac) MCS9 (256-QAM)			
Ch 149/153, Low Channel 5755 MHz		36.37 MHz	N/A
Ch 157/161, High Channel 5795 MHz		36.393 MHz	N/A
80 MHz			
802.11(ac) MCS0			
Ch 149-161, Low Channel 5775 MHz		75.793 MHz	N/A
802.11(ac) MCS9 (256-QAM)			
Ch 149-161, Low Channel 5775 MHz		76.01 MHz	N/A

OCCUPIED BANDWIDTH - 5.8 GHz BAND

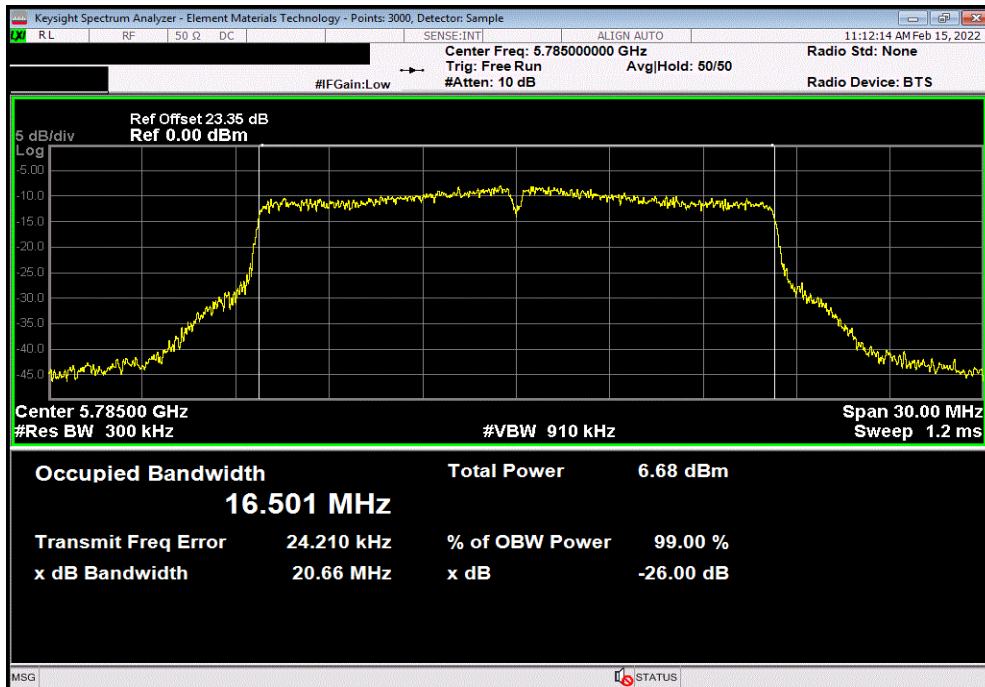


TuTt 2021.10.29.2 XMI 2022.02.07.0

20 MHz, 802.11(a) 6 Mbps, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				16.49 MHz	N/A	N/A



20 MHz, 802.11(a) 6 Mbps, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				16.501 MHz	N/A	N/A

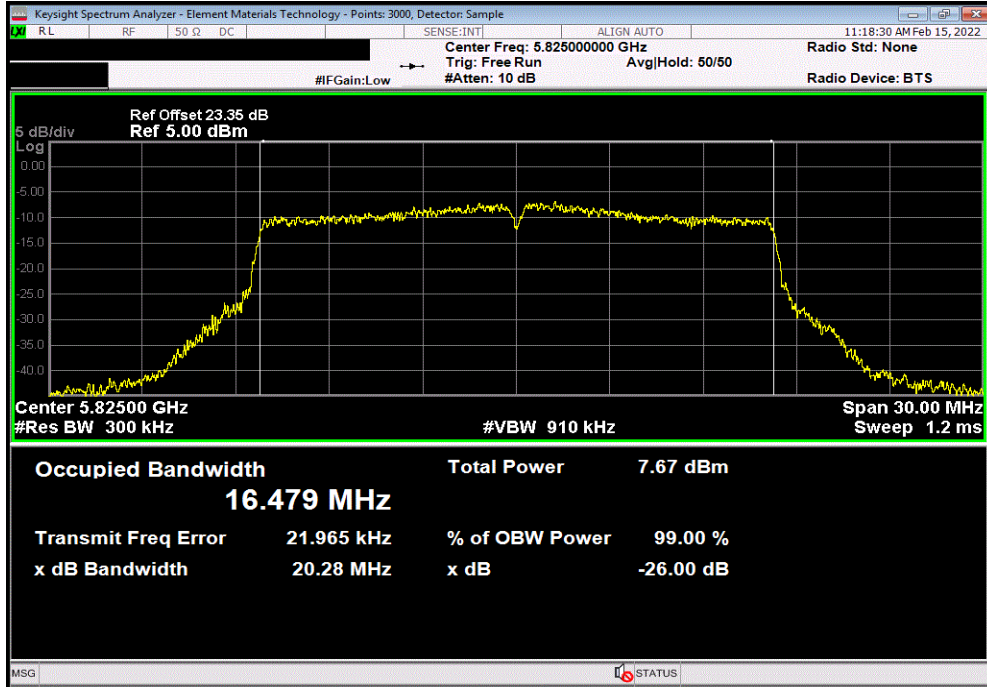


OCCUPIED BANDWIDTH - 5.8 GHz BAND

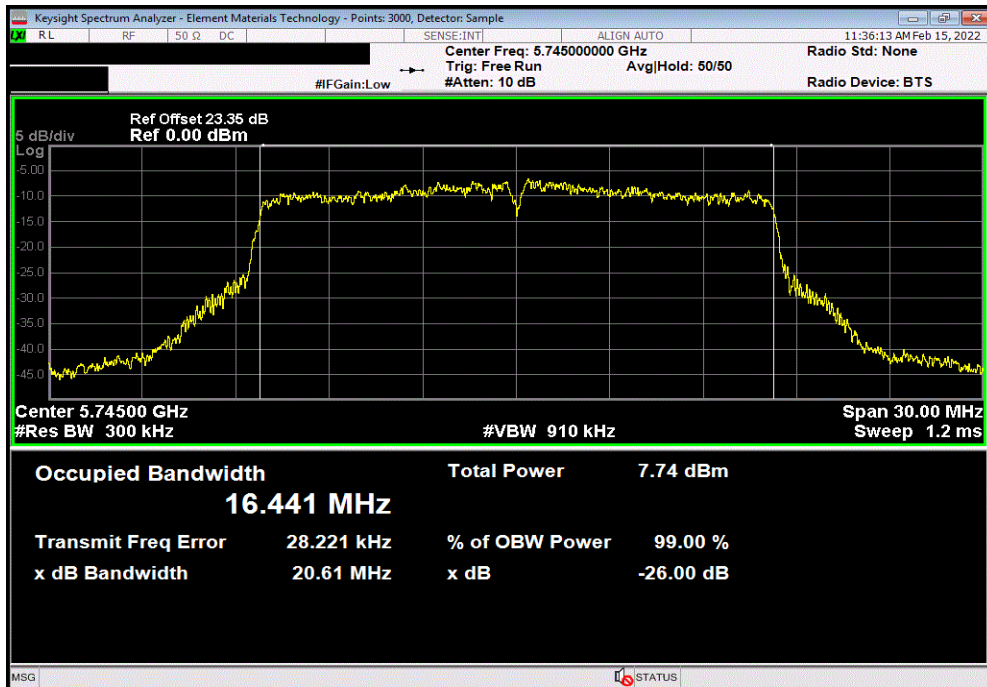


TuTx 2021.10.29.2 XMt 2022.02.07.0

20 MHz, 802.11(a) 6 Mbps, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				16.479 MHz	N/A	N/A



20 MHz, 802.11(a) 36 Mbps, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				16.441 MHz	N/A	N/A

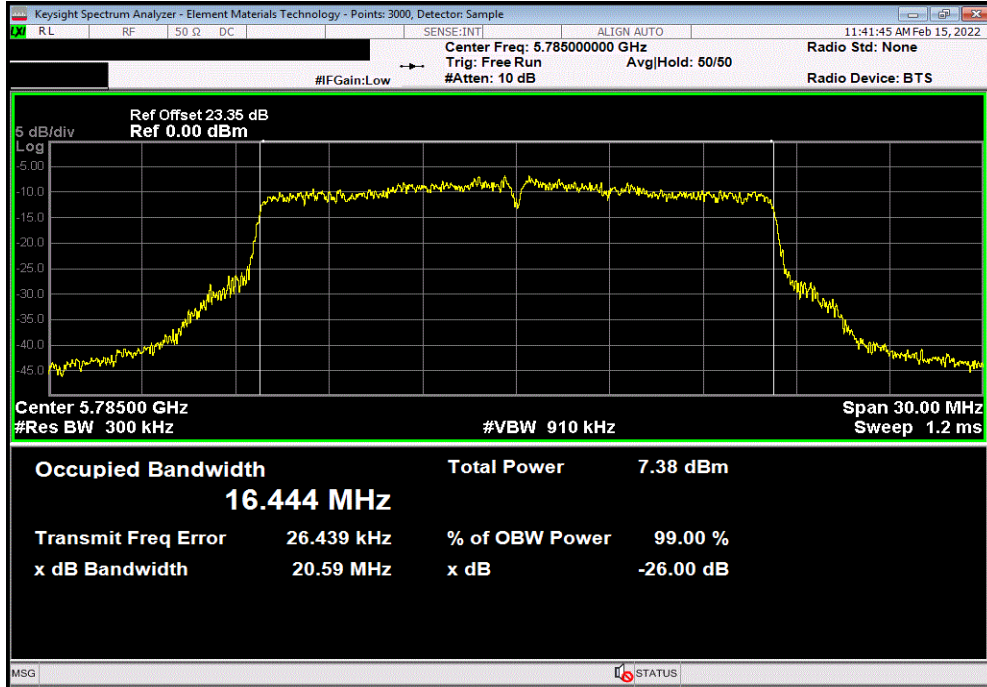


OCCUPIED BANDWIDTH - 5.8 GHz BAND

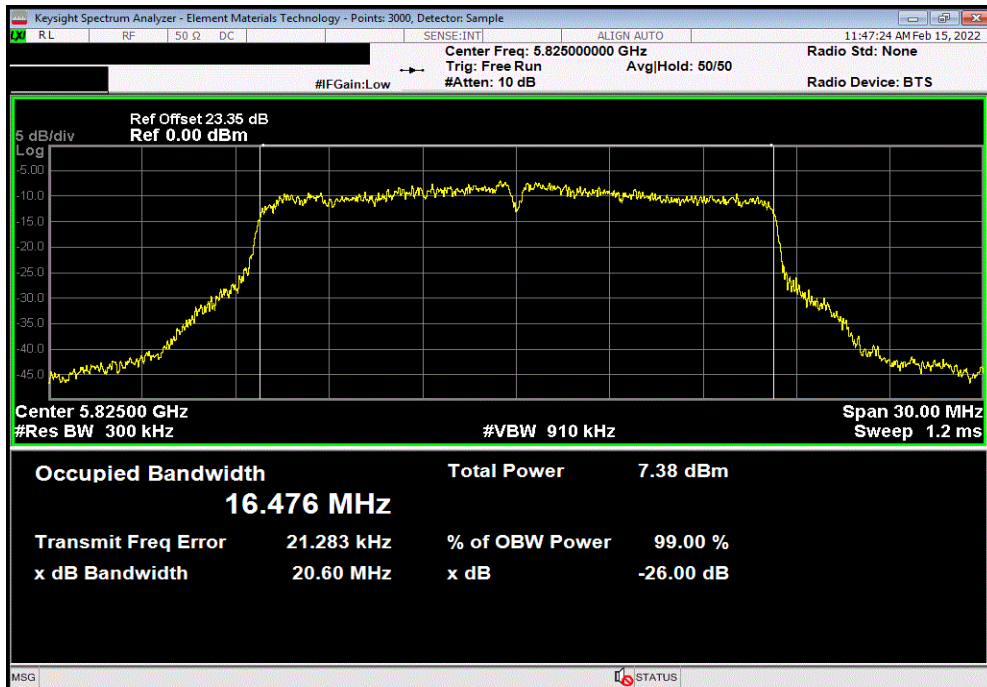


TuTx 2021.10.29.2 XMt 2022.02.07.0

20 MHz, 802.11(a) 36 Mbps, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				16.444 MHz	N/A	N/A



20 MHz, 802.11(a) 36 Mbps, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				16.476 MHz	N/A	N/A

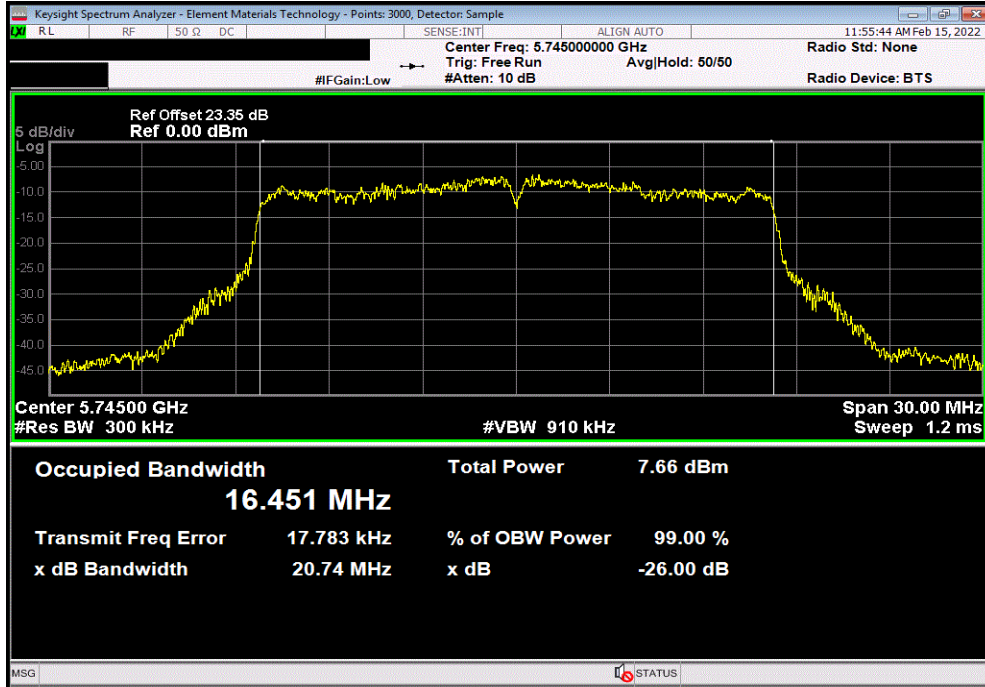


OCCUPIED BANDWIDTH - 5.8 GHz BAND

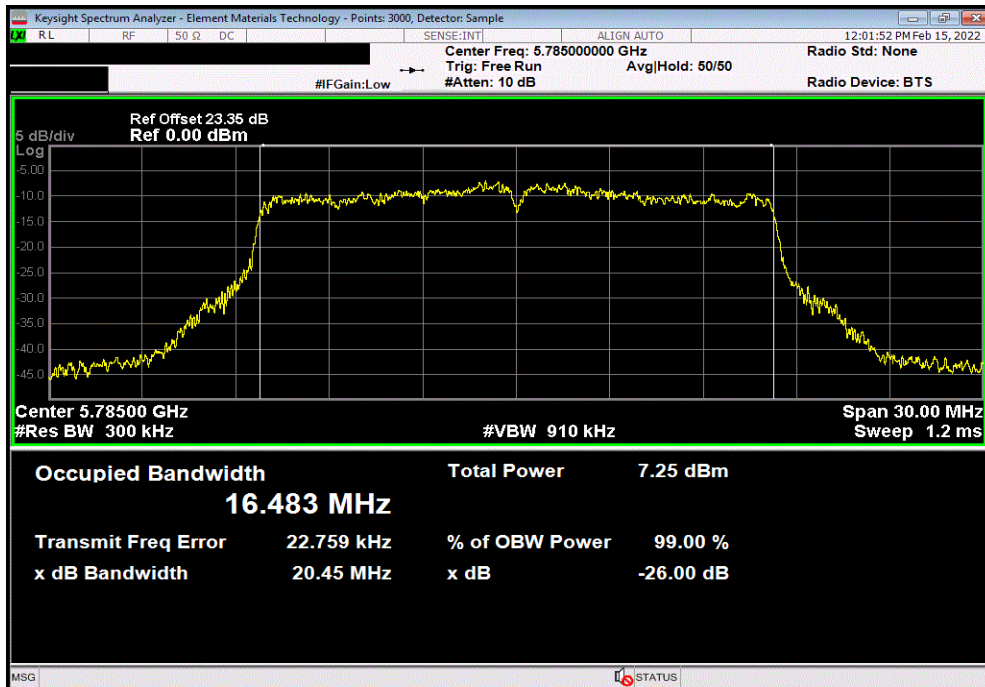


TuTx 2021.10.29.2 XMt 2022.02.07.0

20 MHz, 802.11(a) 54 Mbps, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				16.451 MHz	N/A	N/A



20 MHz, 802.11(a) 54 Mbps, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				16.483 MHz	N/A	N/A

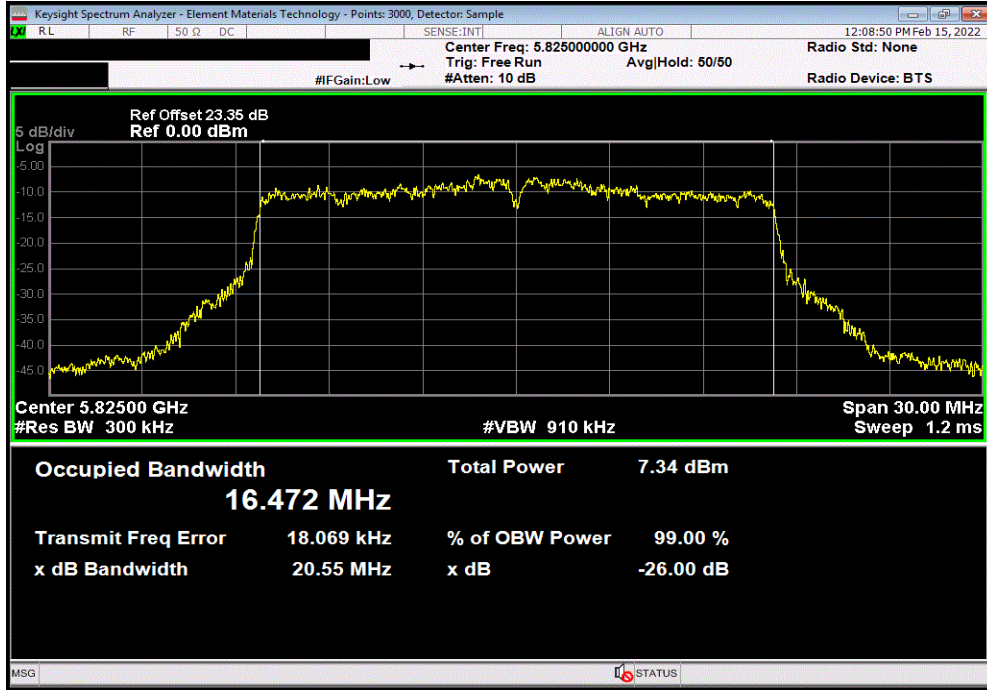


OCCUPIED BANDWIDTH - 5.8 GHz BAND

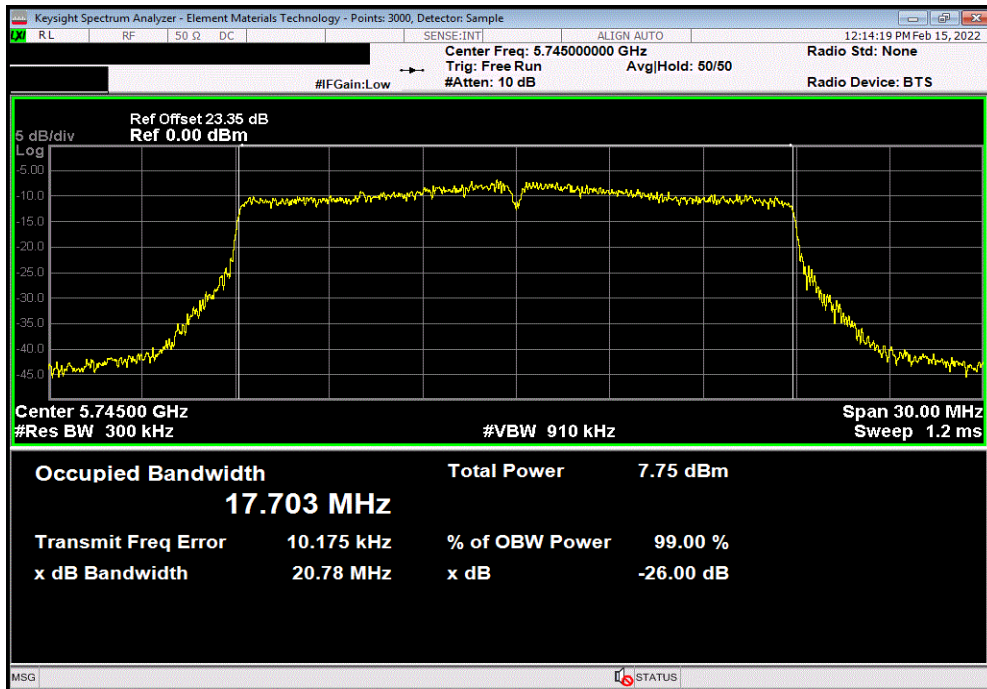


TuTx 2021.10.29.2 XMt 2022.02.07.0

20 MHz, 802.11(a) 54 Mbps, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				16.472 MHz	N/A	N/A



20 MHz, 802.11(n) MCS0, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				17.703 MHz	N/A	N/A

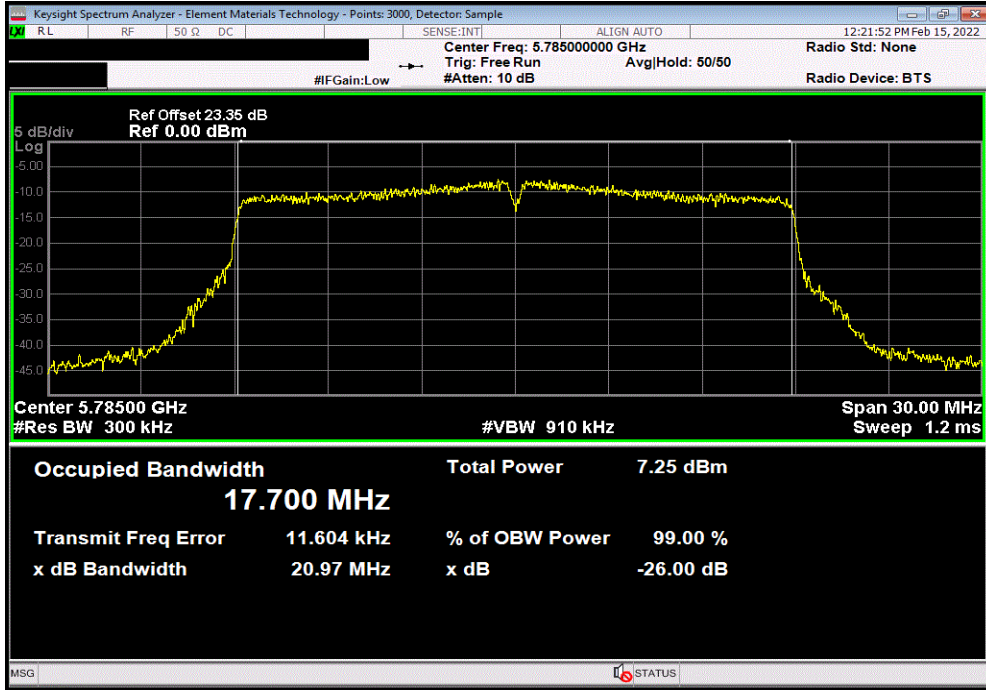


OCCUPIED BANDWIDTH - 5.8 GHz BAND

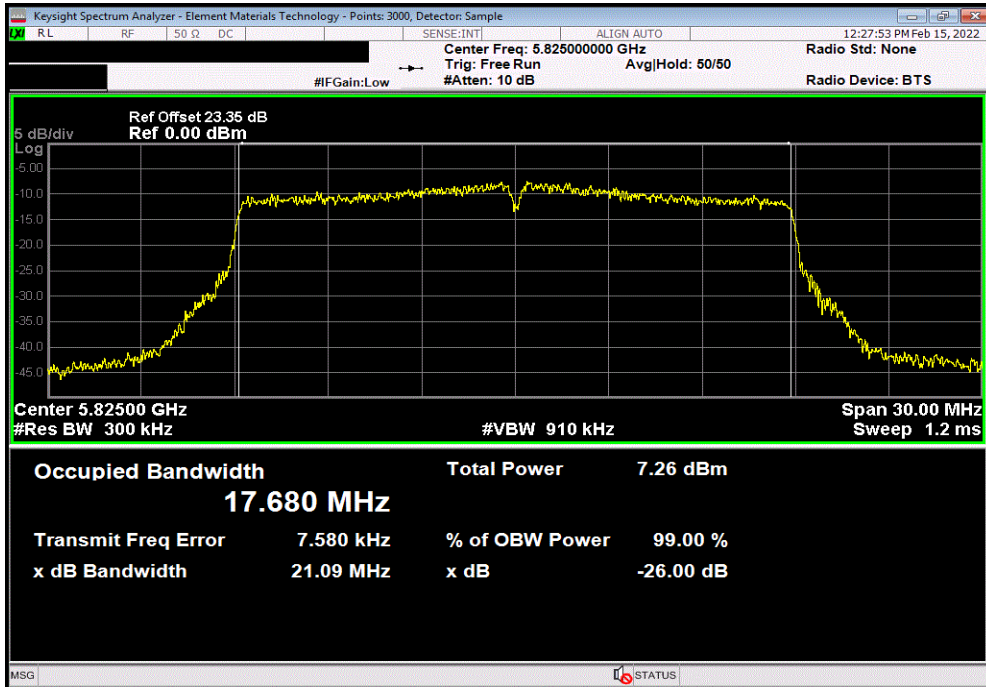


TuTx 2021.10.29.2 XMt 2022.02.07.0

20 MHz, 802.11(n) MCS0, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				17.7 MHz	N/A	N/A



20 MHz, 802.11(n) MCS0, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				17.68 MHz	N/A	N/A

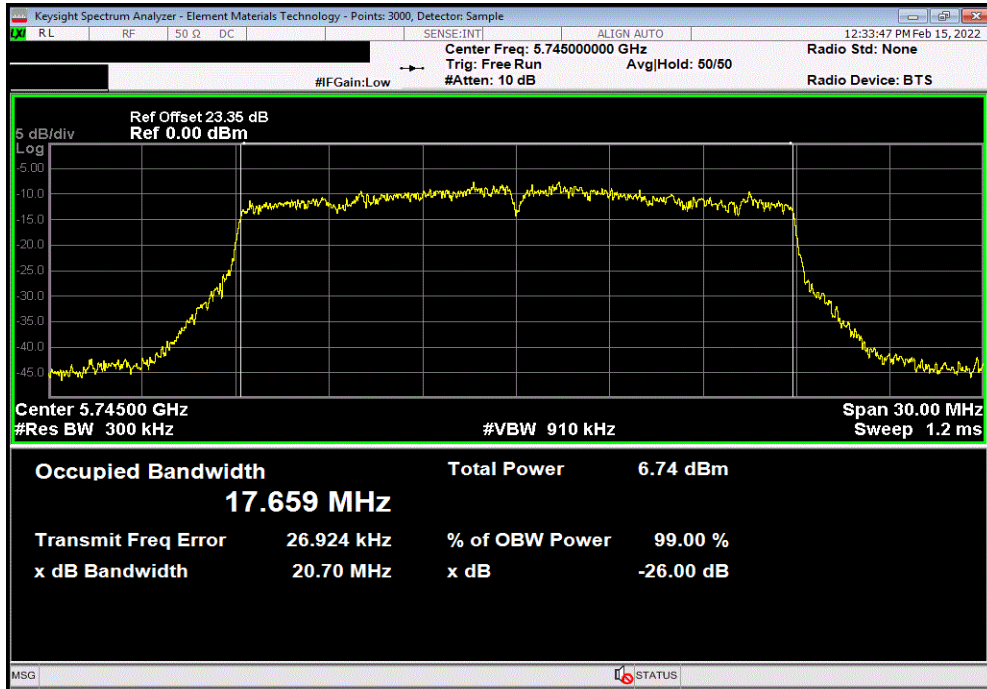


OCCUPIED BANDWIDTH - 5.8 GHz BAND

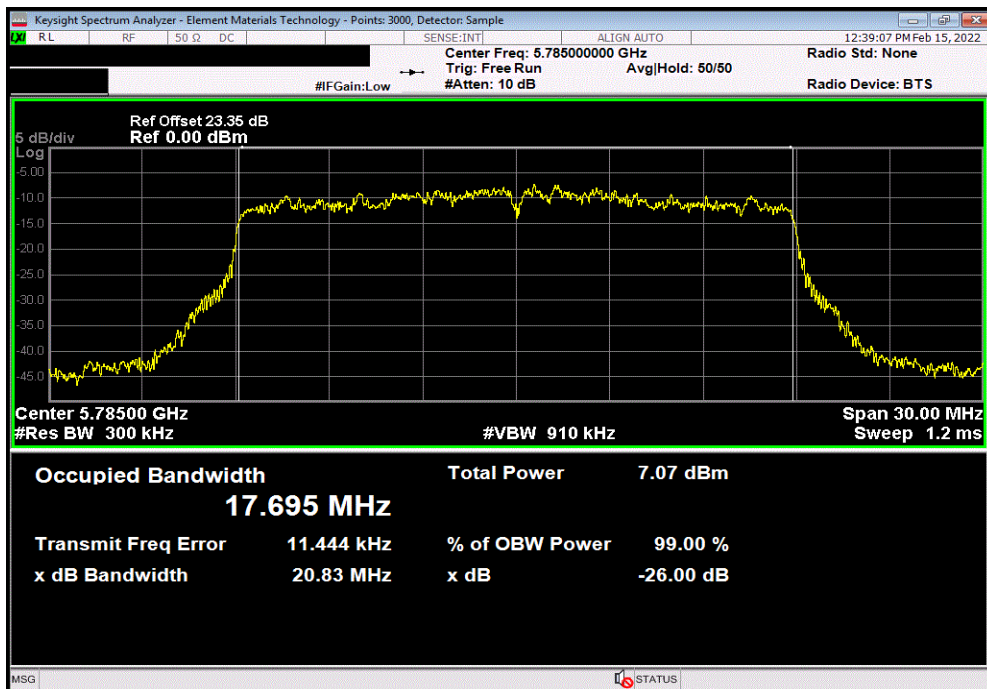


TuTx 2021.10.29.2 XMt 2022.02.07.0

20 MHz, 802.11(n) MCS7, Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				17.659 MHz	N/A	N/A



20 MHz, 802.11(n) MCS7, Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				17.695 MHz	N/A	N/A

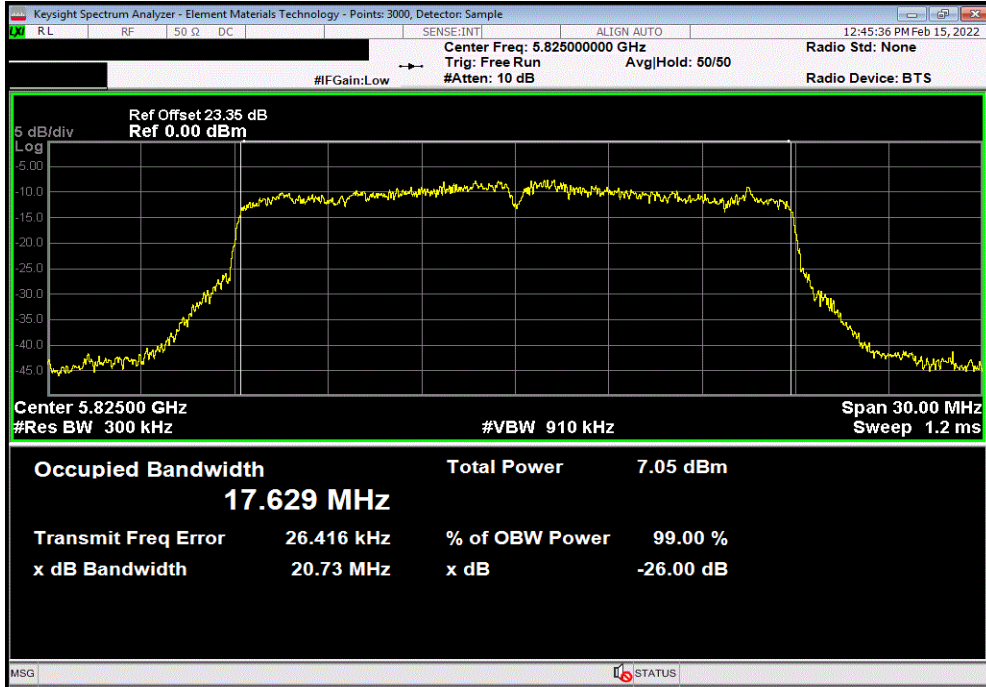


OCCUPIED BANDWIDTH - 5.8 GHz BAND

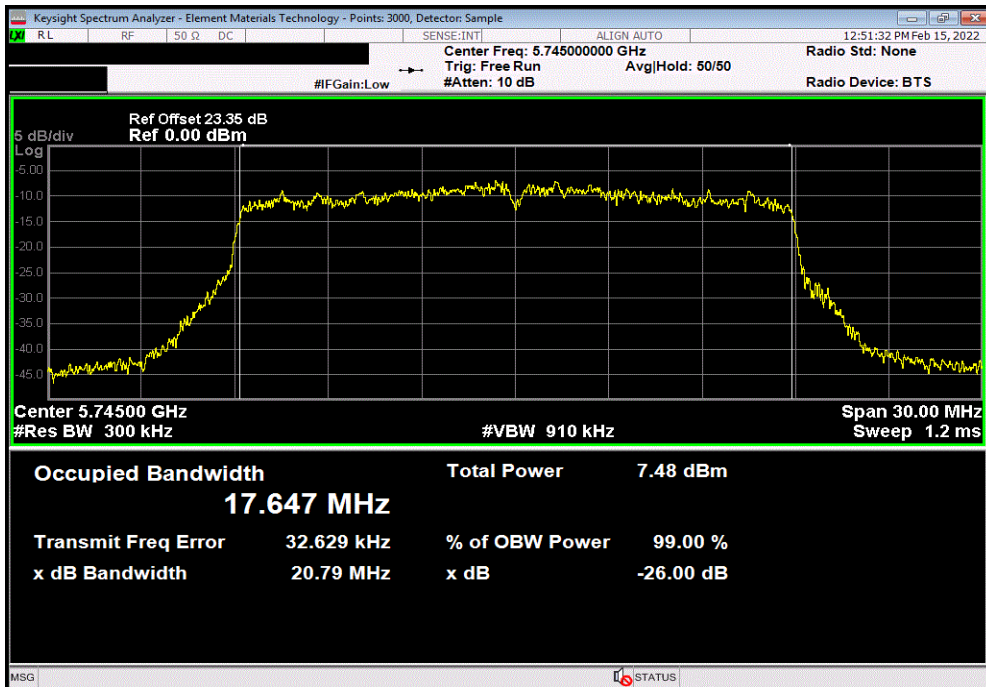


TuTx 2021.10.29.2 XMt 2022.02.07.0

20 MHz, 802.11(n) MCS7, Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				17.629 MHz	N/A	N/A



20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 149, Low Channel 5745 MHz						
				Value	Limit	Result
				17.647 MHz	N/A	N/A

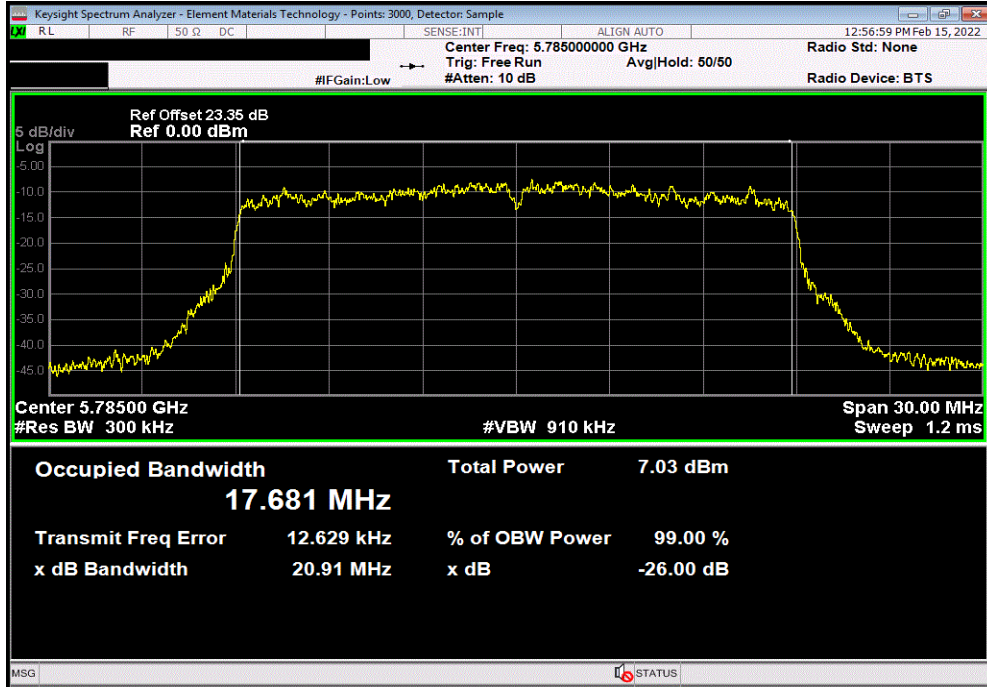


OCCUPIED BANDWIDTH - 5.8 GHz BAND

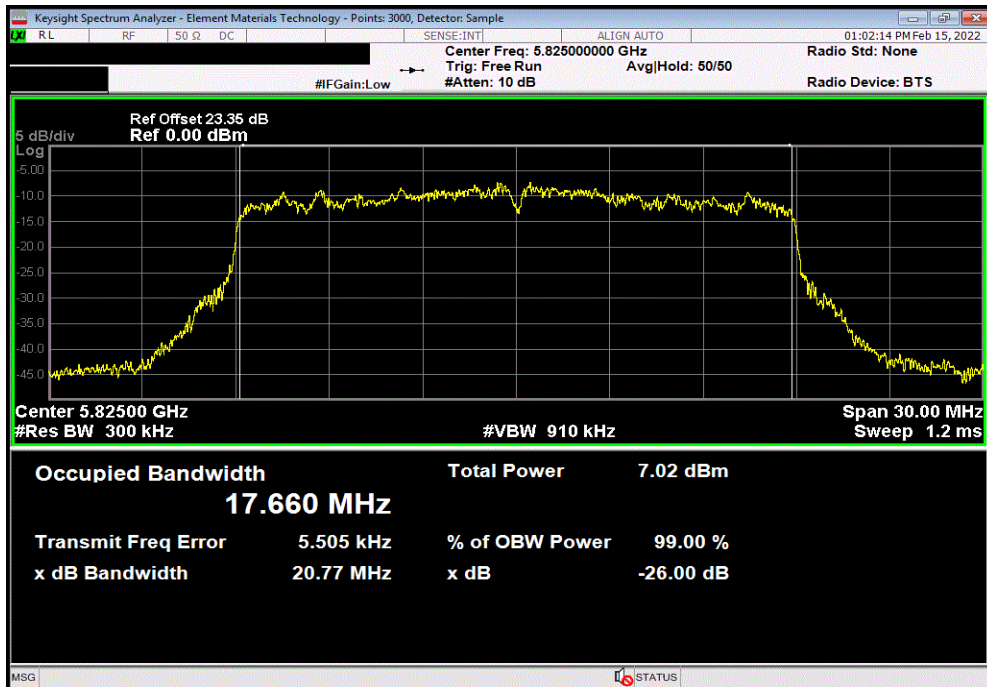


TuTx 2021.10.29.2 XMI 2022.02.07.0

20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 157, Mid Channel 5785 MHz						
				Value	Limit	Result
				17.681 MHz	N/A	N/A



20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 165, High Channel 5825 MHz						
				Value	Limit	Result
				17.66 MHz	N/A	N/A

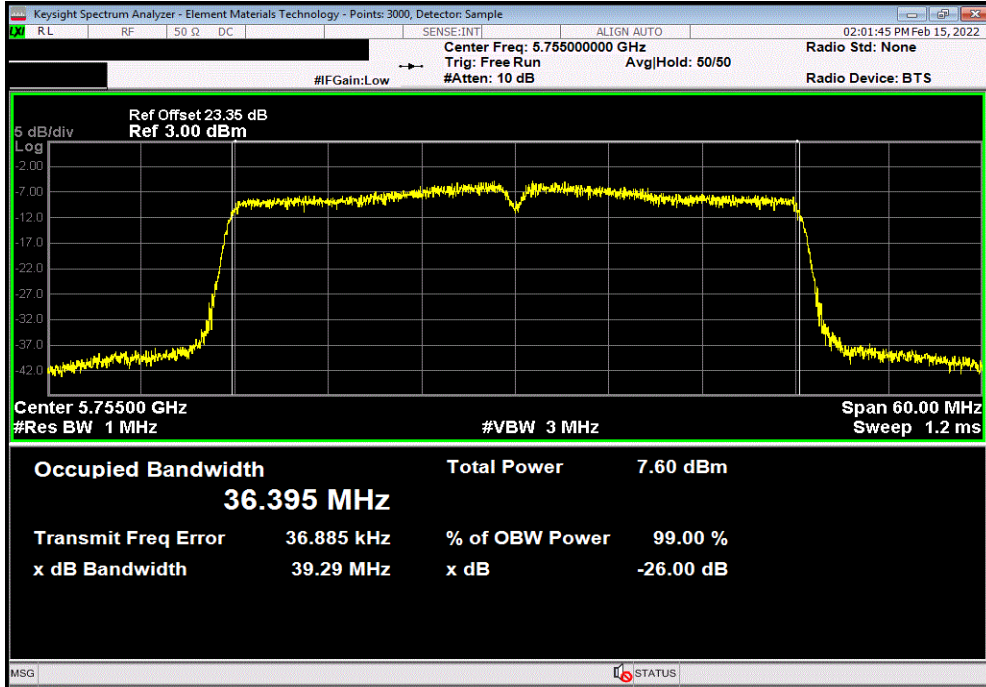


OCCUPIED BANDWIDTH - 5.8 GHz BAND

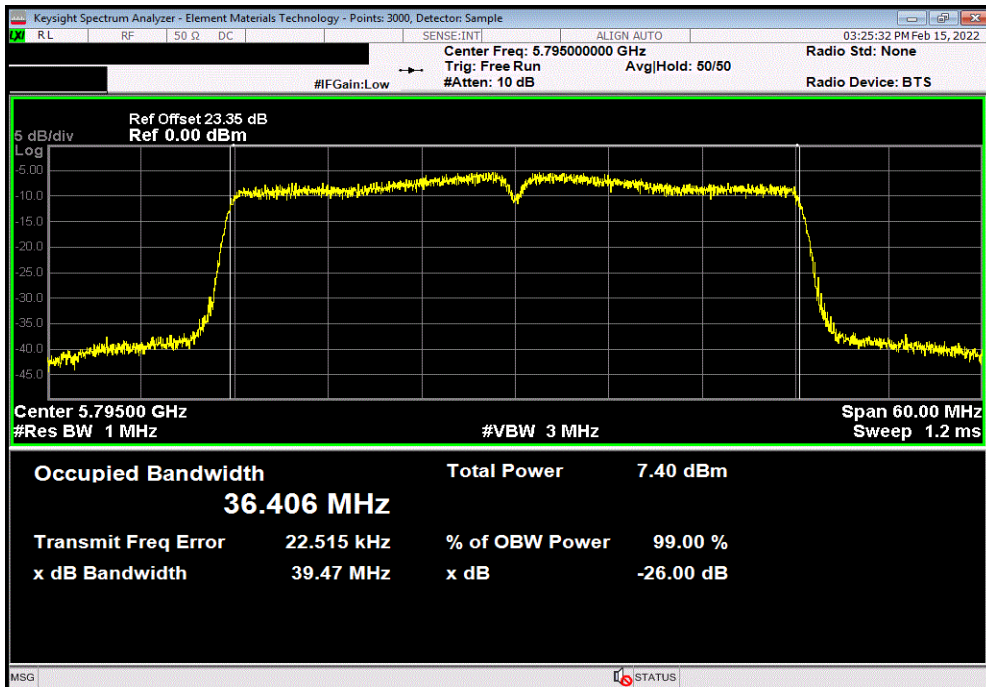


TuTx 2021.10.29.2 XMI 2022.02.07.0

40 MHz, 802.11(n) MCS0, Ch 149/153, Low Channel 5755 MHz			
	Value	Limit	Result
	36.395 MHz	N/A	N/A



40 MHz, 802.11(n) MCS0, Ch 157/161, High Channel 5795 MHz			
	Value	Limit	Result
	36.406 MHz	N/A	N/A

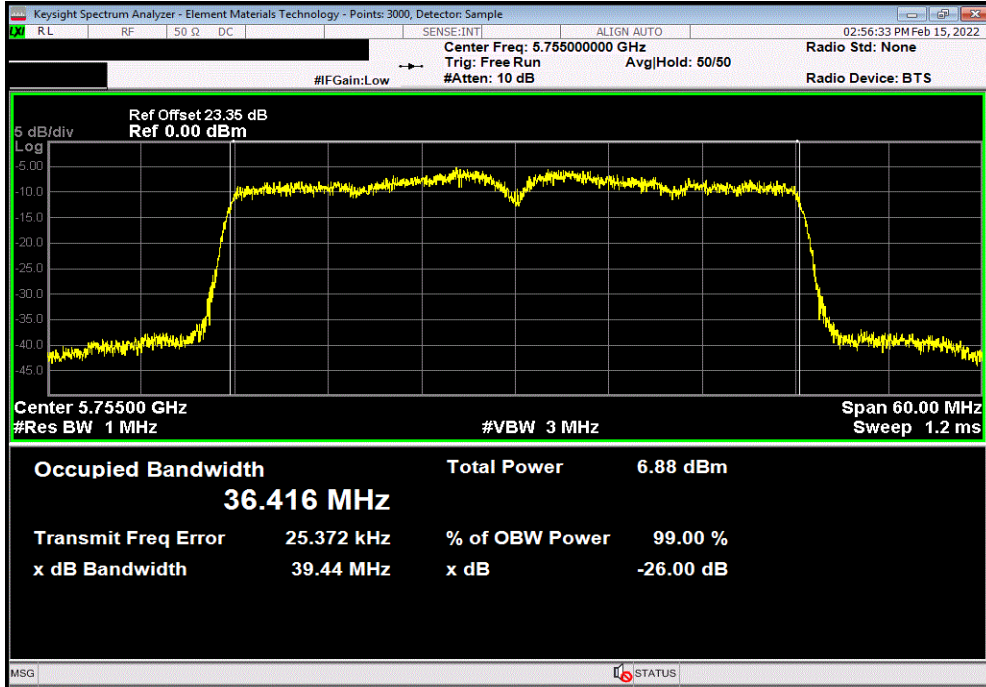


OCCUPIED BANDWIDTH - 5.8 GHz BAND

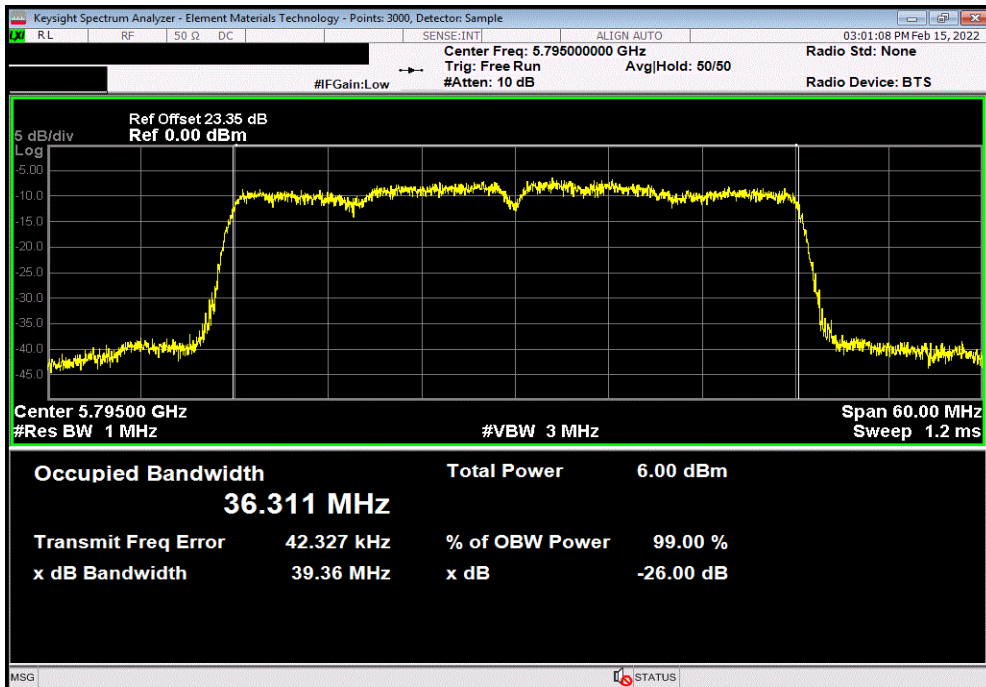


TuTx 2021.10.29.2 XMI 2022.02.07.0

40 MHz, 802.11(n) MCS7, Ch 149/153, Low Channel 5755 MHz						
				Value	Limit	Result
				36.416 MHz	N/A	N/A



40 MHz, 802.11(n) MCS7, Ch 157/161, High Channel 5795 MHz						
				Value	Limit	Result
				36.311 MHz	N/A	N/A

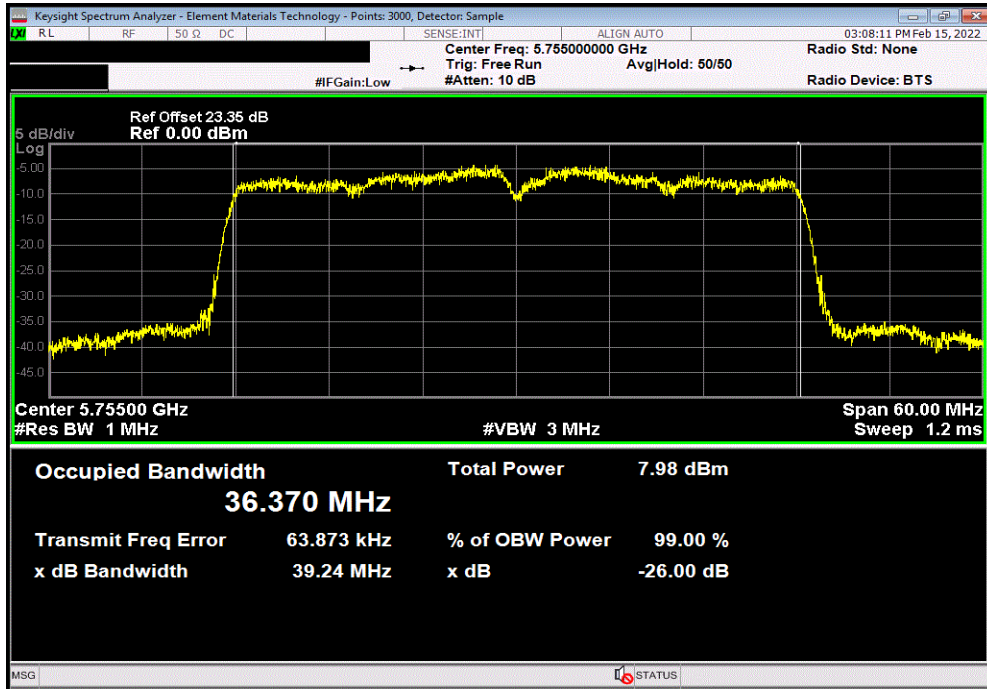


OCCUPIED BANDWIDTH - 5.8 GHz BAND

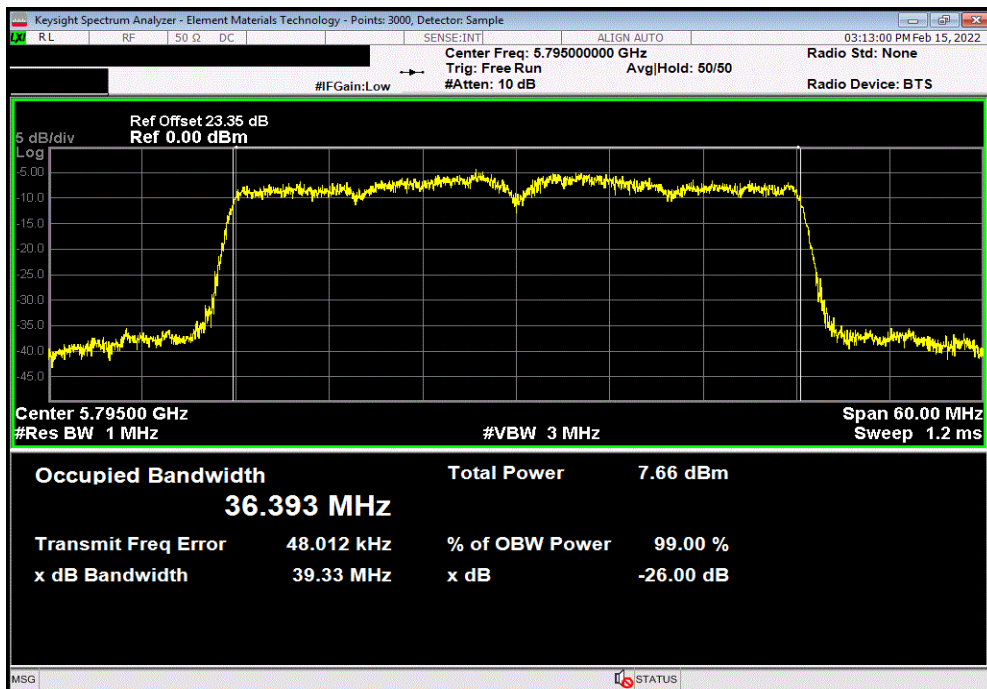


TuTx 2021.10.29.2 XMI 2022.02.07.0

40 MHz, 802.11(ac) MCS9 (256-QAM), Ch 149/153, Low Channel 5755 MHz						
				Value	Limit	Result
				36.37 MHz	N/A	N/A



40 MHz, 802.11(ac) MCS9 (256-QAM), Ch 157/161, High Channel 5795 MHz						
				Value	Limit	Result
				36.393 MHz	N/A	N/A



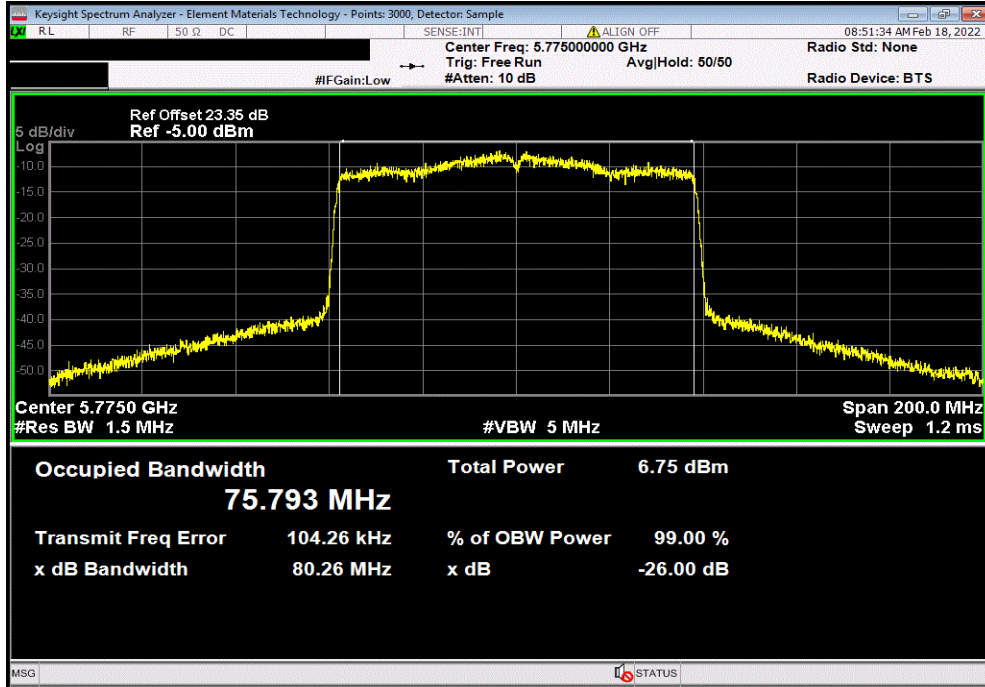
OCCUPIED BANDWIDTH - 5.8 GHz BAND



TbTx 2021.10.29.2 XMI 2022.02.07.0

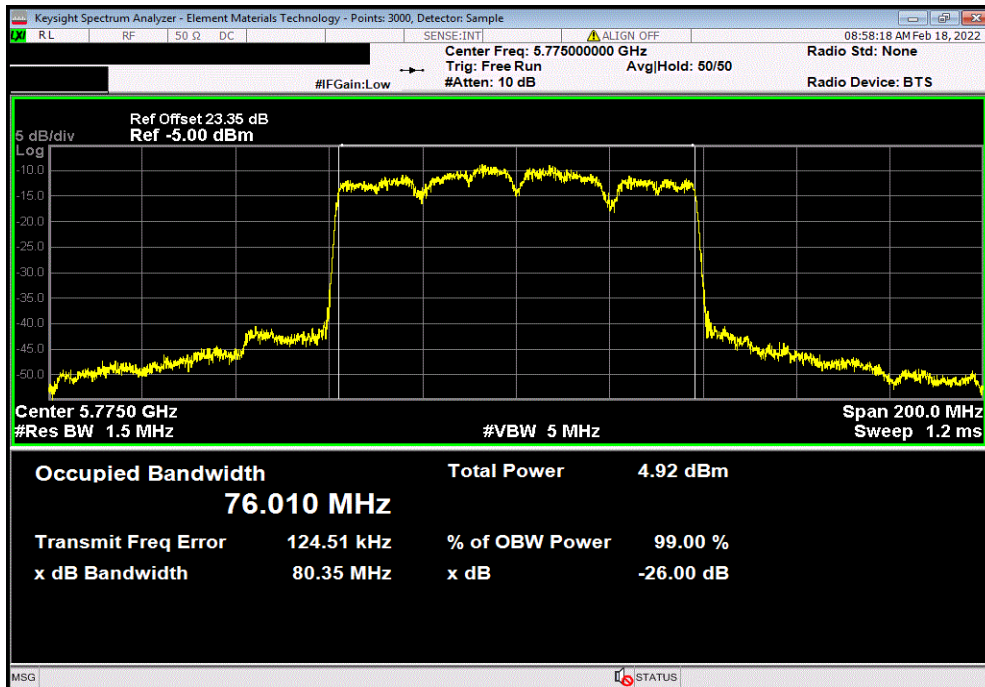
80 MHz, 802.11(ac) MCS0, Ch 149-161, Low Channel 5775 MHz

Value	Limit	Result
75.793 MHz	N/A	N/A



80 MHz, 802.11(ac) MCS9 (256-QAM), Ch 149-161, Low Channel 5775 MHz

Value	Limit	Result
76.01 MHz	N/A	N/A



BAND EDGE - 5.8 GHz BAND



XMit 2020.12.30.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Generator - Signal	Agilent	N5181A	TIG	2020-04-16	2023-04-16
Cable	Micro-Coax	UFD150A-1-0720-200200	EVK	2021-03-14	2022-03-14
Attenuator	S.M. Electronics	SA26B-20	AUY	2021-03-14	2022-03-14
Block - DC	Fairview Microwave	SD3379	AMW	2021-03-14	2022-03-14
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFO	2021-07-06	2022-07-06

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The 99% emission bandwidth of the carrier was measured using the occupied bandwidth function of the spectrum analyzer. The markers of the 99% emission bandwidth measurement were evaluated to ensure that no part of the carrier operating in a non-DFS band was operating in a band where DFS testing is required.

This test is done with the U-NII-3 band (5.8 GHz band) to ensure no portion of the carrier is contained in the U-NII-2C band.

The transmit frequencies and data rates listed in the datasheet were measured.

The transmit power was set to its default maximum.

BAND EDGE - 5.8 GHz BAND



Tel: 2021.10.29.2 XM: 2020.12.30.0

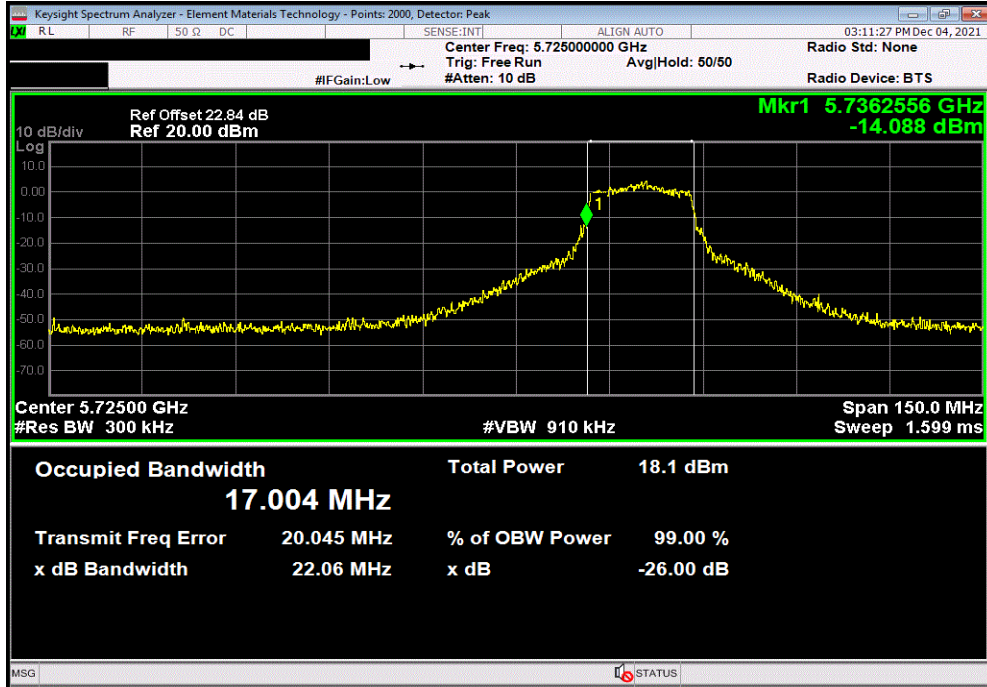
EUT: A-dec Gateway		Work Order: A-DE0169	
Serial Number: 521A000118		Date: 3-Dec-21	
Customer: A-dec, Inc.		Temperature: 20.6 °C	
Attendees: None		Humidity: 40.9% RH	
Project: None		Barometric Pres.: 1024 mbar	
Tested by: Jeff Alcoke		Power: 24 VDC via 110VAC/60Hz	
		Job Site: EV06	
TEST SPECIFICATIONS			
FCC 15.407:2021		ANSI C63.10:2013	
TEST METHOD			
COMMENTS			
Reference level offset includes: DC block, 20 dB attenuator, and measurement cable.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	3	Signature	
		OBW Within Band	Band Edge (MHz) Result
20 MHz	802.11(a) 6 Mbps		
	Ch 149, Low Channel 5745 MHz	Yes	5725 Pass
	802.11(a) 52 Mbps		
	Ch 149, Low Channel 5745 MHz	Yes	5725 Pass
	802.11(a) 54 Mbps		
	Ch 149, Low Channel 5745 MHz	Yes	5725 Pass
	802.11(n) MCS0		
	Ch 149, Low Channel 5745 MHz	Yes	5725 Pass
	802.11(n) MCS7		
	Ch 149, Low Channel 5745 MHz	Yes	5725 Pass
	802.11(ac) MCS8 (256-QAM)		
	Ch 149, Low Channel 5745 MHz	Yes	5725 Pass
40 MHz	802.11(n) MCS0		
	Ch 149/153, Low Channel 5755 MHz	Yes	5725 Pass
	802.11(n) MCS7		
	Ch 149/153, Low Channel 5755 MHz	Yes	5725 Pass
	802.11(ac) MCS9 (256-QAM)		
	Ch 149/153, Low Channel 5755 MHz	Yes	5725 Pass
80 MHz	802.11(ac) MCS0		
	Ch 149-161, Low Channel 5775 MHz	Yes	5725 Pass
	802.11(ac) MCS9 (256-QAM)		
	Ch 149-161, Low Channel 5775 MHz	Yes	5725 Pass

BAND EDGE - 5.8 GHz BAND

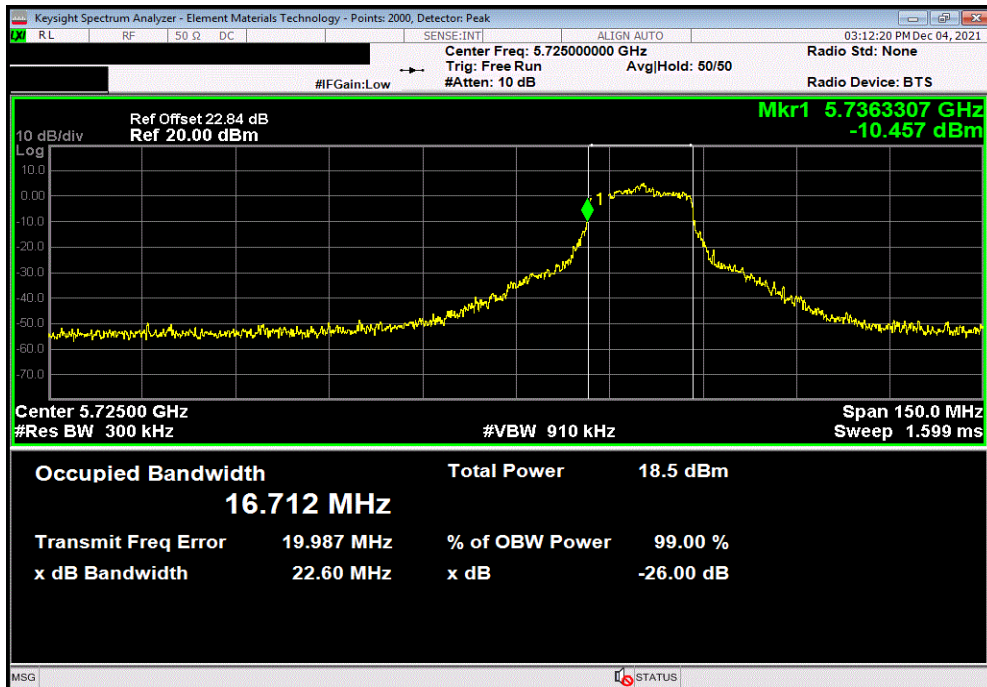


TuTx 2021.10.29.2 XMt 2020.12.30.0

20 MHz, 802.11(a) 6 Mbps, Ch 149, Low Channel 5745 MHz						
	OBW	Band Edge				
	Within Band	(MHz)				
	Yes	5725	Result			
						Pass



20 MHz, 802.11(a) 52 Mbps, Ch 149, Low Channel 5745 MHz						
	OBW	Band Edge				
	Within Band	(MHz)				
	Yes	5725	Result			
						Pass

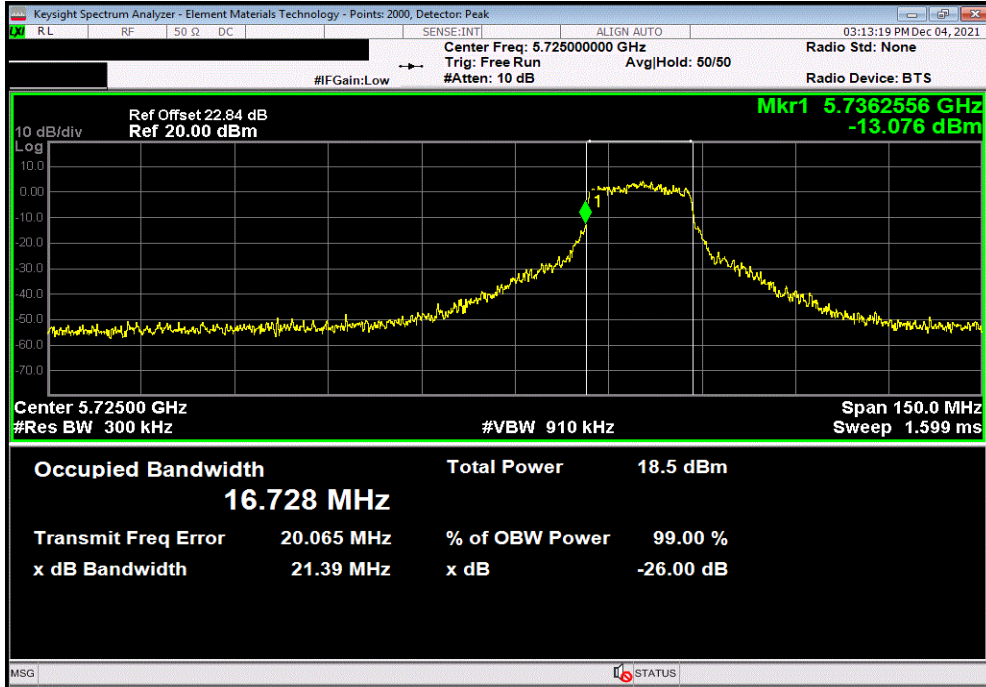


BAND EDGE - 5.8 GHz BAND

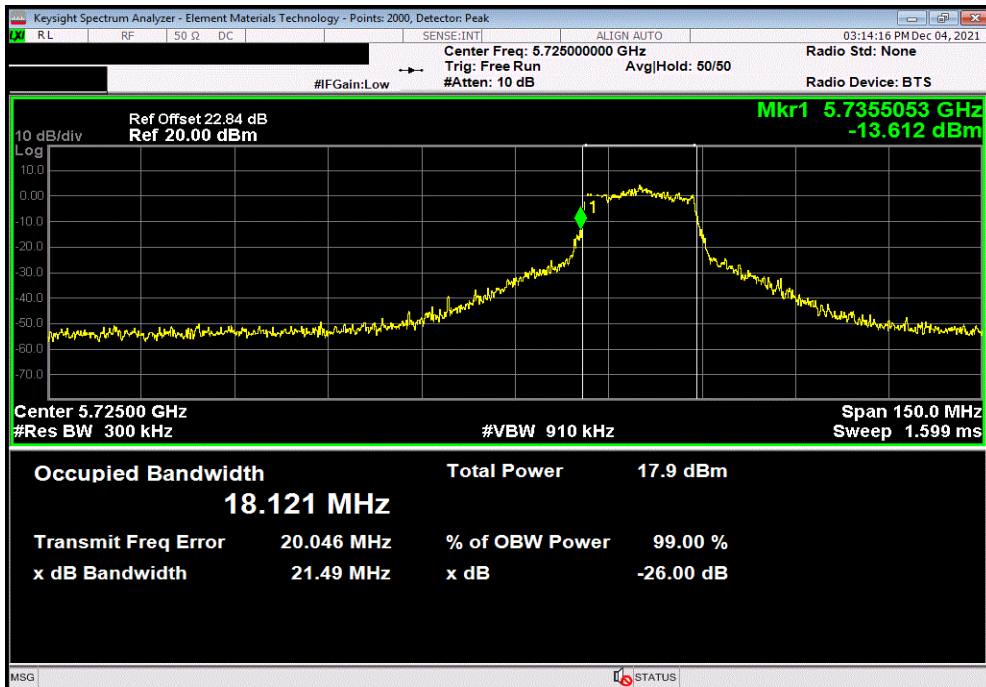


TuTx 2021.10.29.2 XMt 2020.12.30.0

20 MHz, 802.11(a) 54 Mbps, Ch 149, Low Channel 5745 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		



20 MHz, 802.11(n) MCS0, Ch 149, Low Channel 5745 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		

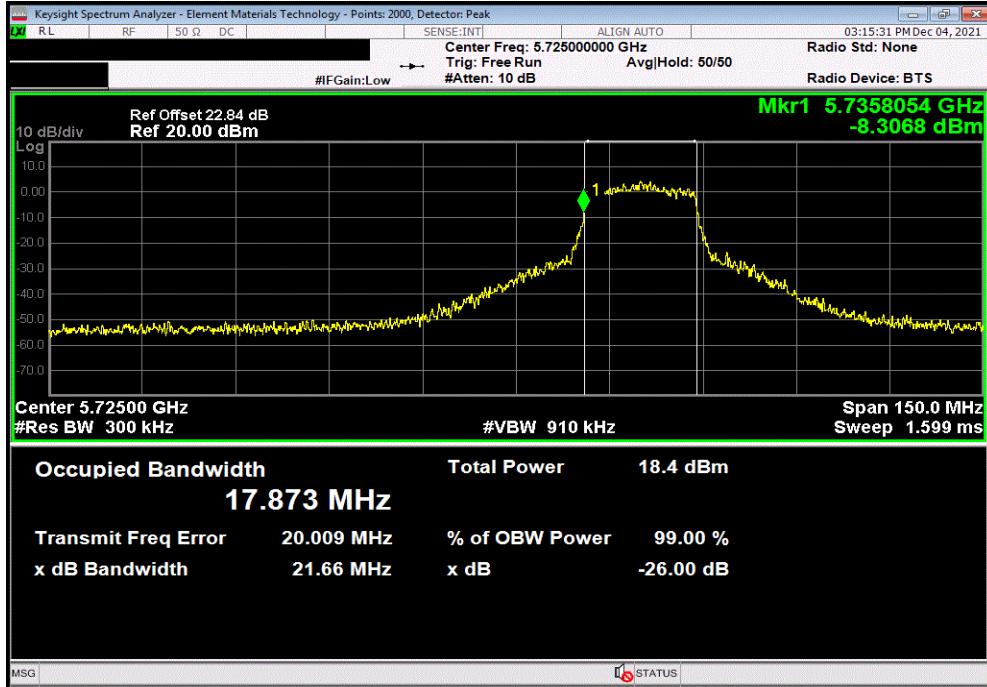


BAND EDGE - 5.8 GHz BAND

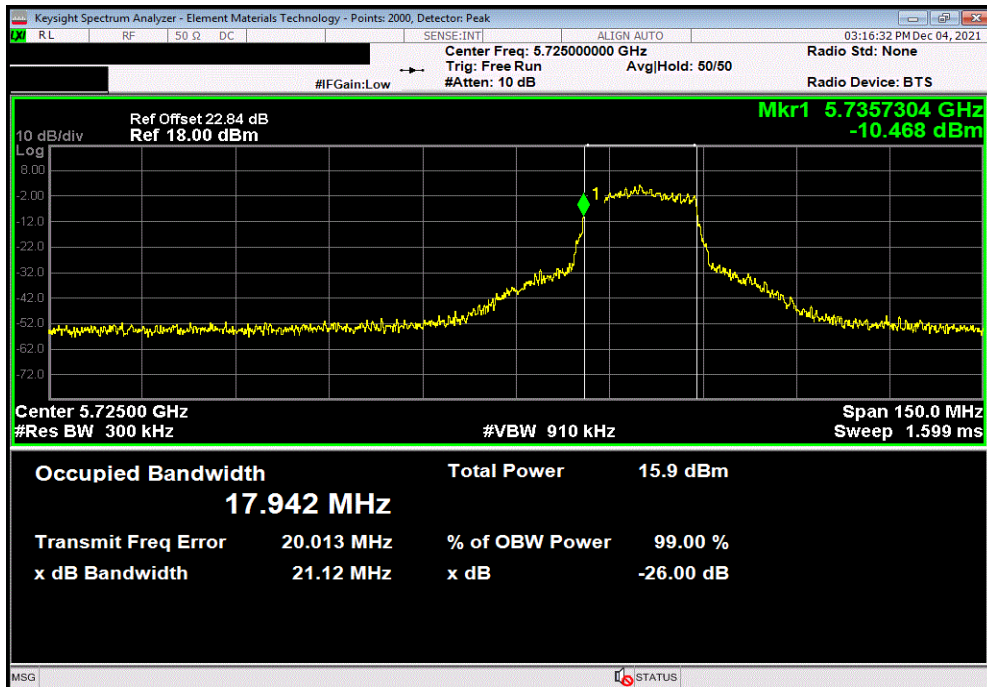


TuTx 2021.10.29.2 XMI 2020.12.30.0

20 MHz, 802.11(n) MCS7, Ch 149, Low Channel 5745 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		



20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 149, Low Channel 5745 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		

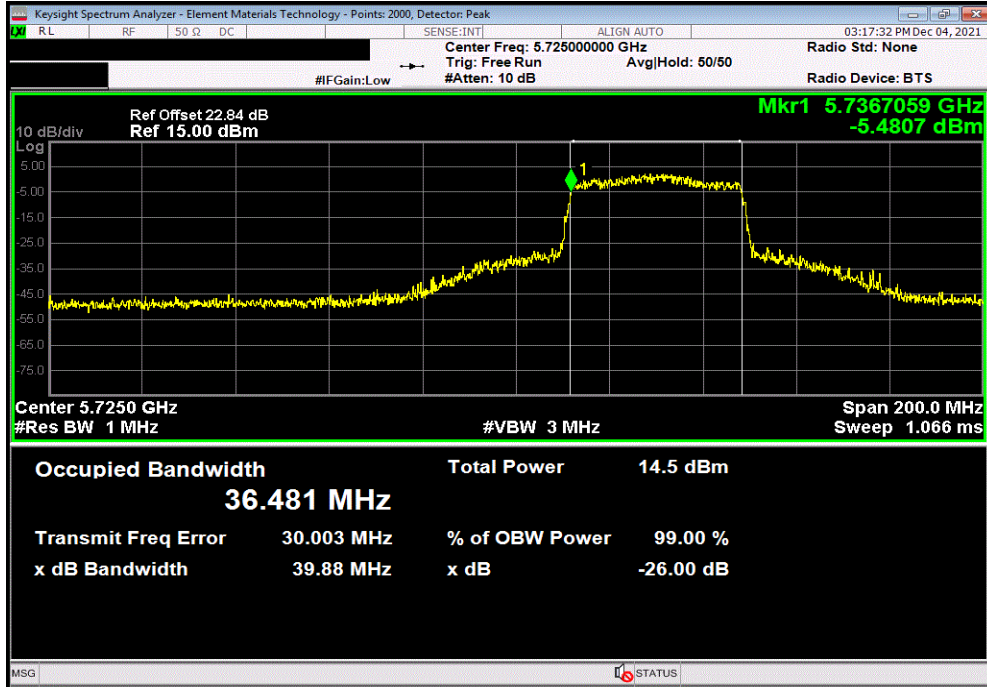


BAND EDGE - 5.8 GHz BAND

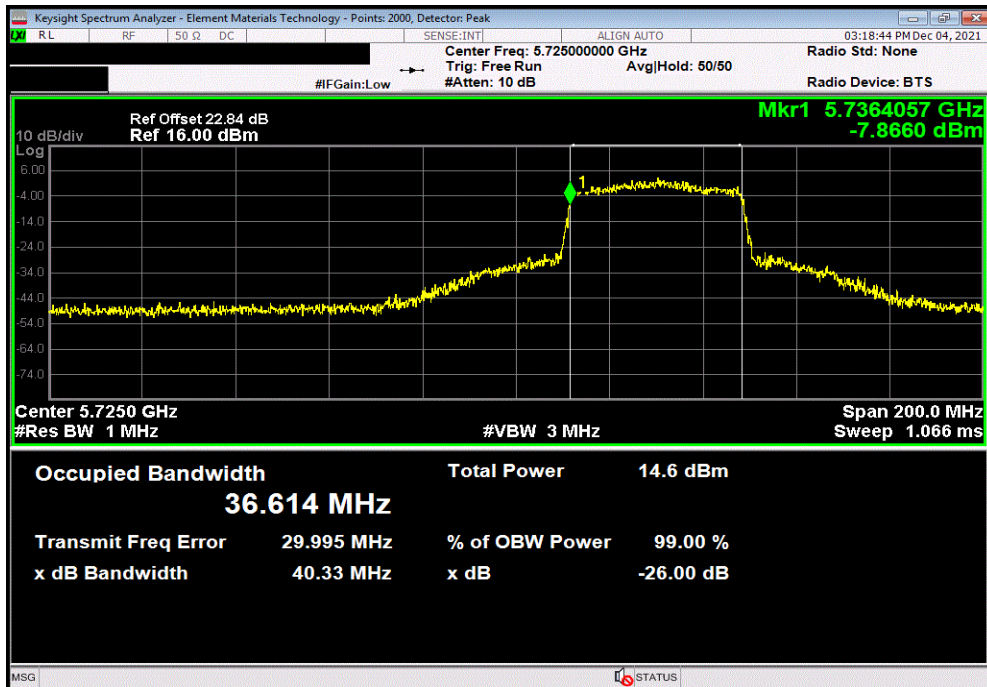


TuTx 2021.10.29.2 XMt 2020.12.30.0

40 MHz, 802.11(n) MCS0, Ch 149/153, Low Channel 5755 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		



40 MHz, 802.11(n) MCS7, Ch 149/153, Low Channel 5755 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		

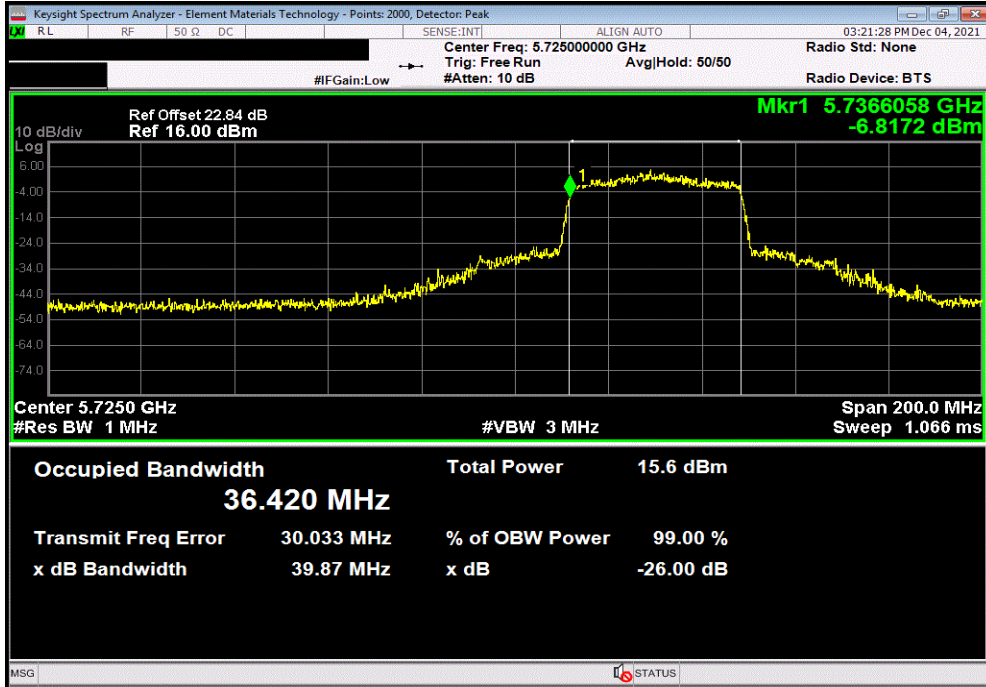


BAND EDGE - 5.8 GHz BAND

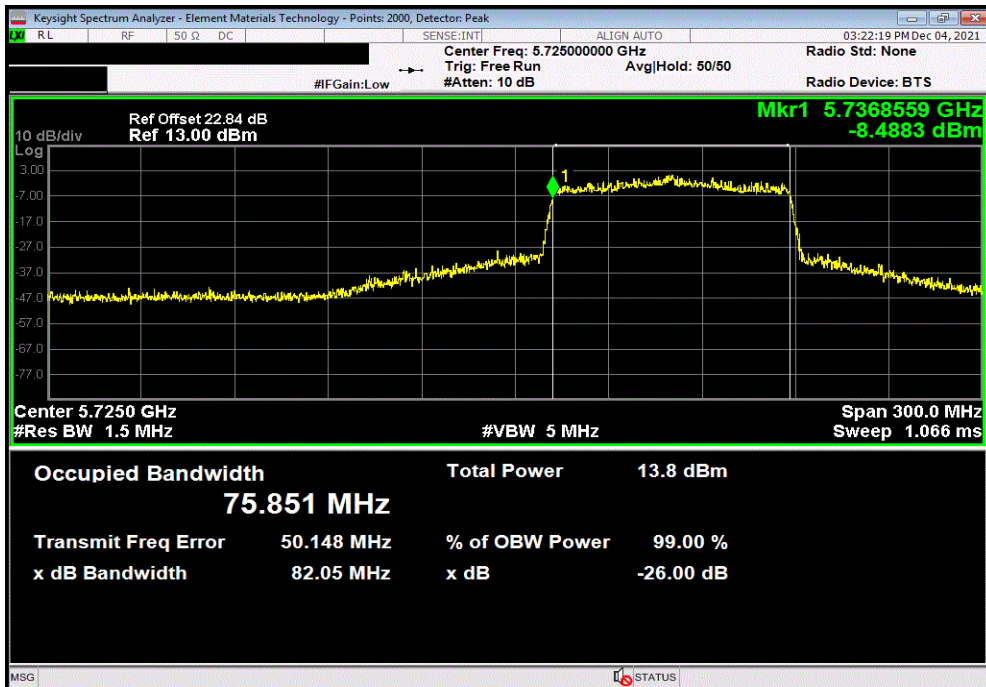


TuTx 2021.10.29.2 XMI 2020.12.30.0

40 MHz, 802.11(ac) MCS9 (256-QAM), Ch 149/153, Low Channel 5755 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		



80 MHz, 802.11(ac) MCS0, Ch 149-161, Low Channel 5775 MHz						
		OBW	Band Edge			
		Within Band	(MHz)	Result		
		Yes	5725	Pass		



BAND EDGE - 5.8 GHz BAND



TbTx 2021.10.29.2 XMI 2020.12.30.0

80 MHz, 802.11(ac) MCS9 (256-QAM), Ch 149-161, Low Channel 5775 MHz			
OBW		Band Edge	
Within Band		(MHz)	Result
Yes		5725	Pass

