OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
WTD.2024.01.16.0

TEST DESCRIPTION

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.

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

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth as defined in RSS-Gen Clause 6.7. This value is also used to set the integration bandwidth for output power as allowed per ANSI C63.10 section 12.3.

The 99% occupied bandwidth was measured with the EUT configured for continuous modulated operation.

The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The resolution bandwidth (RBW) of the spectrum analyzer was set to the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) bandwidth was set to at least 3 times the resolution bandwidth. The analyzer sweep time was set to auto to prevent video filtering or averaging. A sample detector was used unless the device was not able to be operated in a continuous transmit mode, in which case a peak detector was used.

The spectrum analyzer occupied bandwidth measurement function was used to sum the power of the transmission in linear terms to obtain the 99% bandwidth.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	2024-05-22	2025-05-22
Generator - Signal	Agilent	N5183A	TIK	2022-01-24	2025-01-24
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	2023-09-05	2024-09-05
Block - DC	Fairview Microwave	SD3379	ANH	2023-09-05	2024-09-05
Attenuator	Fairview Microwave	SA4014-20	AQI	2023-09-05	2024-09-05

OCCUPIED BANDWIDTH

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EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005204	Date:	2024-07-23
Customer:	Ademco, Inc.	Temperature:	22°C
Attendees:	None	Relative Humidity:	57.1%
Customer Project:	None	Bar. Pressure (PMSL):	1016 mbar
Tested By:	Christopher Heintzelman, Arnauld Dedry	Job Site:	MN11
Power:	110VAC/60Hz	Configuration:	ADEM0044-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.407:2024	ANSI C63.10:2013
RSS-247 Issue 3:2023	ANSI C63.10:2013

COMMENTS

Reference level offset includes attenuator, measurement cable, and DC block.

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

N/A

Tested By

TEST RESULTS

	Value	Limit	Result
5150 - 5250 MHz Band, UNII-1, 20 MHz			
Mid Channel, Ch 40 - 5200 MHz			
802.11(a) 6 Mbps	16.629 MHz	N/A	N/A
802.11(a) 36 Mbps	16.473 MHz	N/A	N/A
802.11(a) 54 Mbps	16.445 MHz	N/A	N/A
802.11(n) MCS0	17.677 MHz	N/A	N/A
802.11(n) MCS7	17.577 MHz	N/A	N/A
High Channel, Ch 48 - 5240 MHz			
802.11(a) 6 Mbps	17.54 MHz	N/A	N/A
802.11(a) 36 Mbps	16.529 MHz	N/A	N/A
802.11(a) 54 Mbps	16.478 MHz	N/A	N/A
802.11(n) MCS0	17.726 MHz	N/A	N/A
802.11(n) MCS7	17.563 MHz	N/A	N/A
5250 - 5350 MHz Band,UNII-2A, 20 MHz			
Low Channel, Ch 52 - 5260 MHz			
802.11(a) 6 Mbps	16.786 MHz	N/A	N/A
802.11(a) 36 Mbps	16.472 MHz	N/A	N/A
802.11(a) 54 Mbps	16.448 MHz	N/A	N/A
802.11(n) MCS0	17.711 MHz	N/A	N/A
802.11(n) MCS7	17.642 MHz	N/A	N/A
Mid Channel, Ch 60 - 5300 MHz			

OCCUPIED BANDWIDTH

element
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	Value	Limit	Result
802.11(a) 6 Mbps	16.681 MHz	N/A	N/A
802.11(a) 36 Mbps	16.508 MHz	N/A	N/A
802.11(a) 54 Mbps	16.482 MHz	N/A	N/A
802.11(n) MCS0	17.77 MHz	N/A	N/A
802.11(n) MCS7	17.658 MHz	N/A	N/A
High Channel, Ch 64 - 5320 MHz			
802.11(a) 6 Mbps	16.639 MHz	N/A	N/A
802.11(a) 36 Mbps	16.521 MHz	N/A	N/A
802.11(a) 54 Mbps	16.463 MHz	N/A	N/A
802.11(n) MCS0	17.731 MHz	N/A	N/A
802.11(n) MCS7	17.637 MHz	N/A	N/A
5470 - 5725 MHz Band,UNII-2C, 20 MHz			
Low Channel, Ch 100 - 5500 MHz			
802.11(a) 6 Mbps	16.598 MHz	N/A	N/A
802.11(a) 36 Mbps	16.495 MHz	N/A	N/A
802.11(a) 54 Mbps	16.505 MHz	N/A	N/A
802.11(n) MCS0	17.757 MHz	N/A	N/A
802.11(n) MCS7	17.623 MHz	N/A	N/A
Mid Channel, Ch 116 - 5580 MHz			
802.11(a) 6 Mbps	16.55 MHz	N/A	N/A
802.11(a) 36 Mbps	16.467 MHz	N/A	N/A
802.11(a) 54 Mbps	16.494 MHz	N/A	N/A
802.11(n) MCS0	17.666 MHz	N/A	N/A
802.11(n) MCS7	17.548 MHz	N/A	N/A
High Channel, Ch 140 - 5700 MHz			
802.11(a) 6 Mbps	16.48 MHz	N/A	N/A
802.11(a) 36 Mbps	16.442 MHz	N/A	N/A
802.11(a) 54 Mbps	16.46 MHz	N/A	N/A
802.11(n) MCS0	17.655 MHz	N/A	N/A
802.11(n) MCS7	17.52 MHz	N/A	N/A
5725 - 5785 MHz Band			
Low Channel, Ch 149 - 5745 MHz			
802.11(a) 6 Mbps	16.549 MHz	N/A	N/A
802.11(a) 36 Mbps	16.443 MHz	N/A	N/A
802.11(a) 54 Mbps	16.446 MHz	N/A	N/A
802.11(n) MCS0	17.672 MHz	N/A	N/A
802.11(n) MCS7	17.699 MHz	N/A	N/A
Mid Channel, Ch 157 - 5785 MHz			
802.11(a) 6 Mbps	16.518 MHz	N/A	N/A
802.11(a) 36 Mbps	16.507 MHz	N/A	N/A
802.11(a) 54 Mbps	16.46 MHz	N/A	N/A
802.11(n) MCS0	17.638 MHz	N/A	N/A

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
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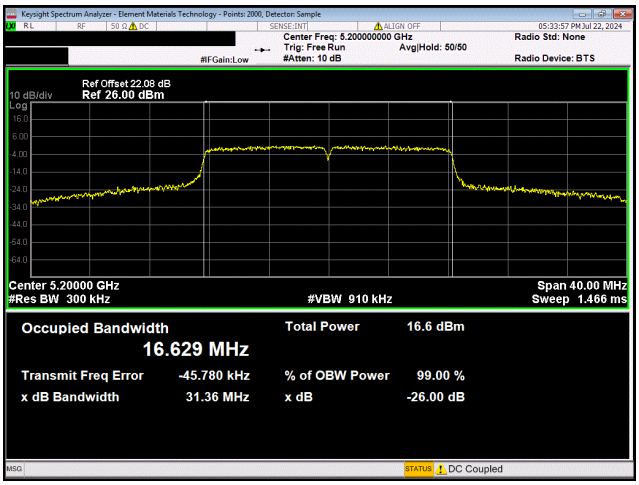
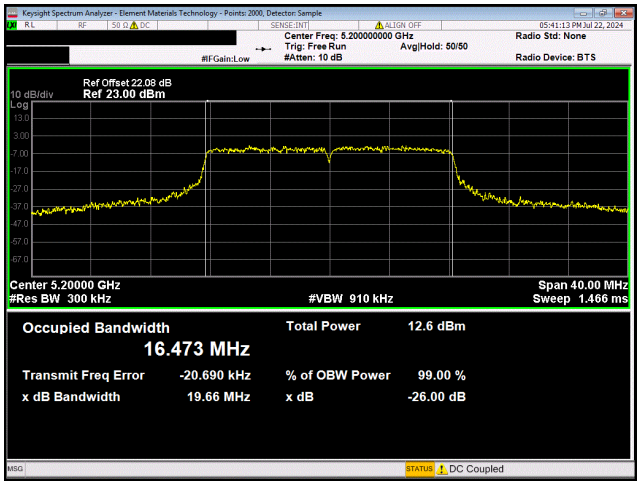
	Value	Limit	Result
802.11(n) MCS7	17.593 MHz	N/A	N/A
High Channel, Ch 165 - 5825 MHz			
802.11(a) 6 Mbps	16.571 MHz	N/A	N/A
802.11(a) 36 Mbps	16.471 MHz	N/A	N/A
802.11(a) 54 Mbps	16.479 MHz	N/A	N/A
802.11(n) MCS0	17.69 MHz	N/A	N/A
802.11(n) MCS7	17.668 MHz	N/A	N/A

OCCUPIED BANDWIDTH

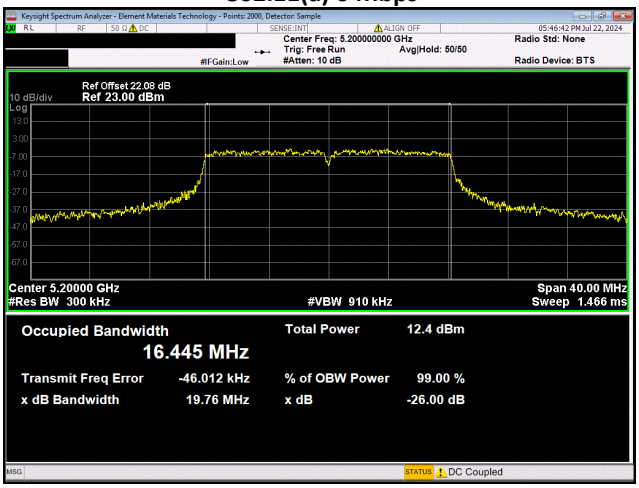
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



5150 - 5250 MHz Band, UNII-1, 20 MHz
Mid Channel, Ch 40 - 5200 MHz
802.11(a) 6 Mbps



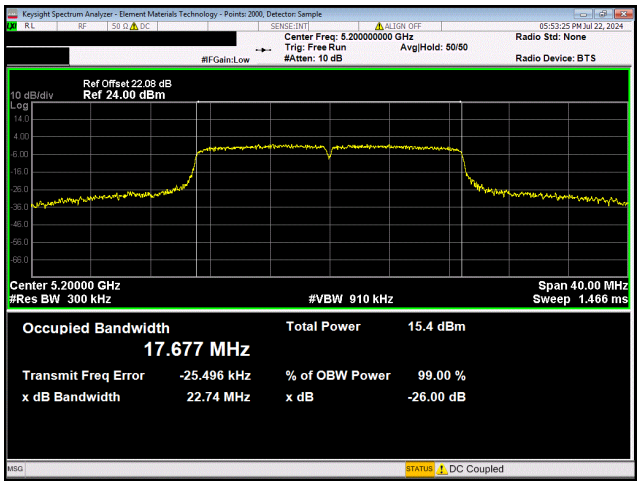
5150 - 5250 MHz Band, UNII-1, 20 MHz
Mid Channel, Ch 40 - 5200 MHz
802.11(a) 36 Mbps



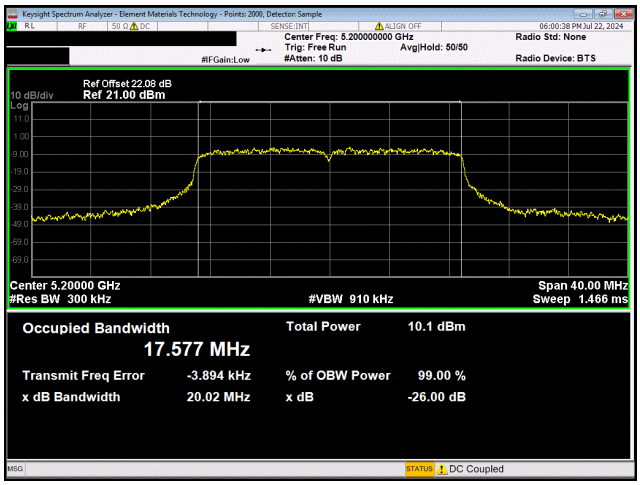
5150 - 5250 MHz Band, UNII-1, 20 MHz
Mid Channel, Ch 40 - 5200 MHz
802.11(a) 54 Mbps

OCCUPIED BANDWIDTH

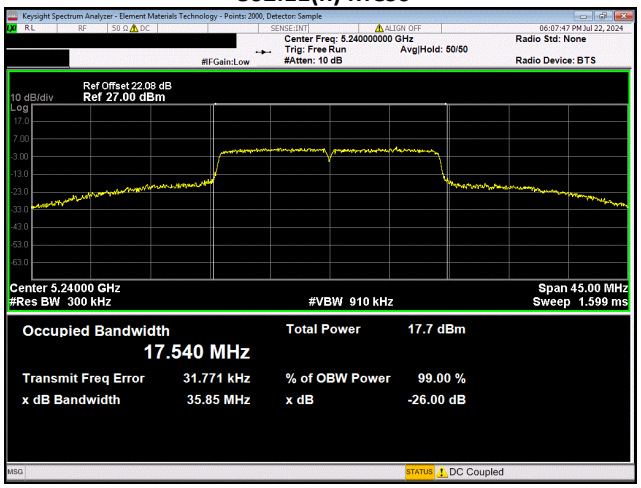
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



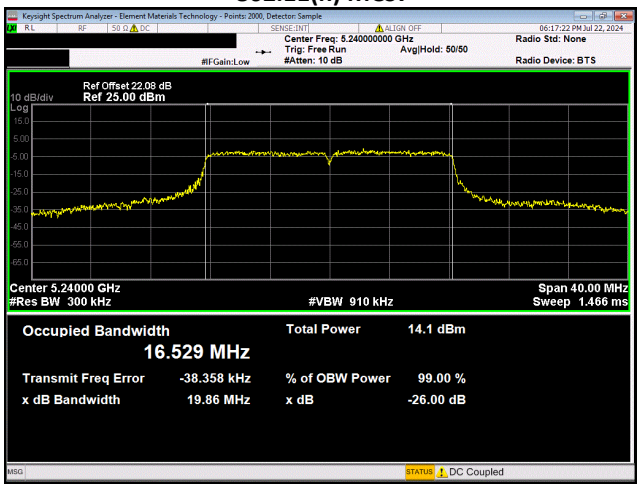
5150 - 5250 MHz Band, UNII-1, 20 MHz
Mid Channel, Ch 40 - 5200 MHz
802.11(n) MCS0



5150 - 5250 MHz Band, UNII-1, 20 MHz
Mid Channel, Ch 40 - 5200 MHz
802.11(n) MCS7



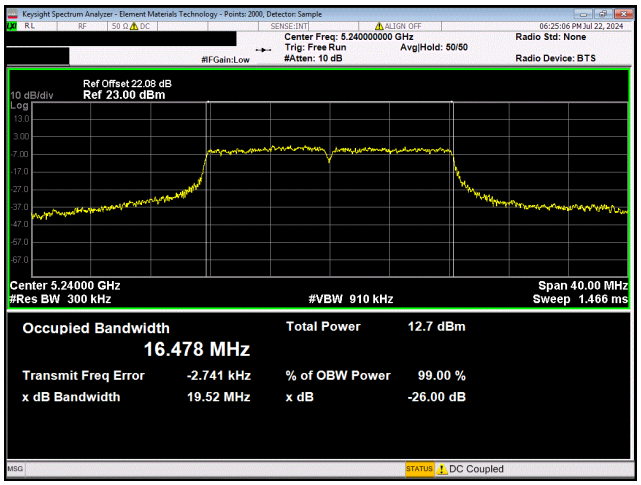
5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(a) 6 Mbps



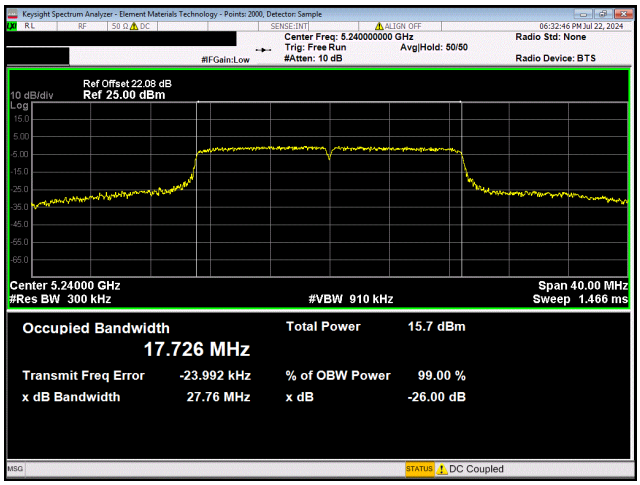
5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(a) 36 Mbps

OCCUPIED BANDWIDTH

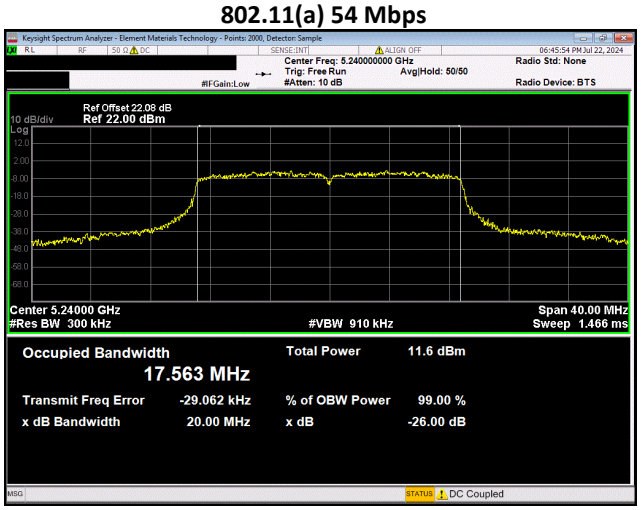
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



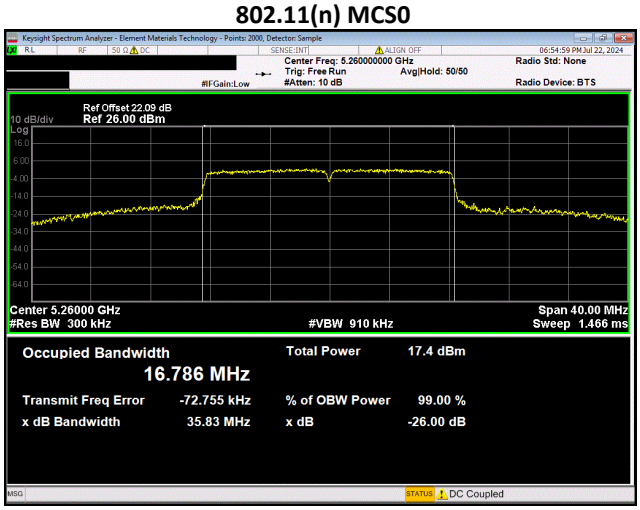
5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(a) 54 Mbps



5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(n) MCS0



5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(n) MCS7



5250 - 5350 MHz Band,UNII-2A, 20 MHz
Low Channel, Ch 52 - 5260 MHz
802.11(a) 6 Mbps

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
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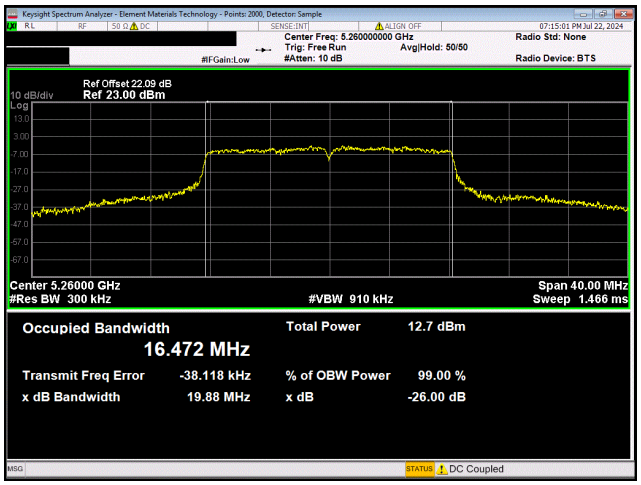
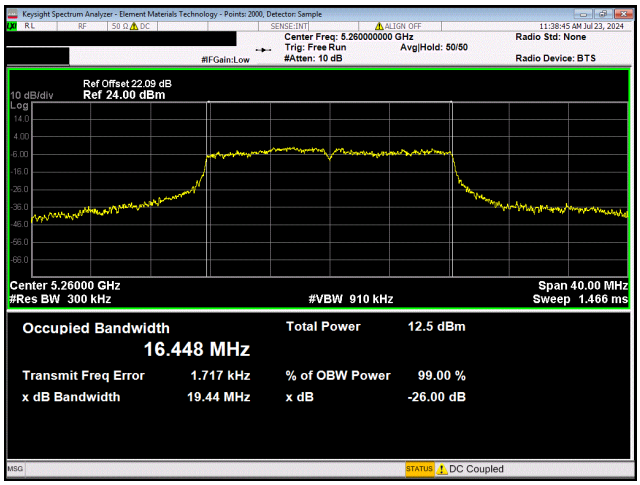
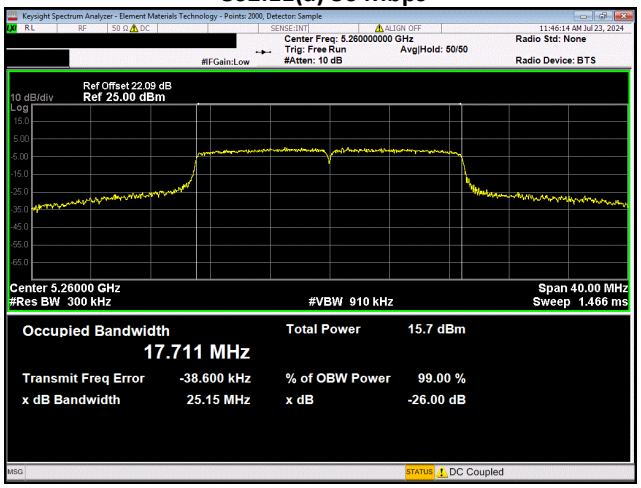


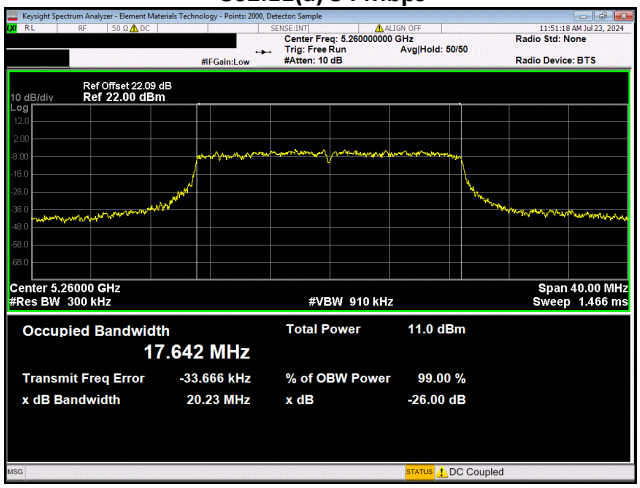
5250 - 5350 MHz Band,UNII-2A, 20 MHz
Low Channel, Ch 52 - 5260 MHz
802.11(a) 36 Mbps



5250 - 5350 MHz Band,UNII-2A, 20 MHz
Low Channel, Ch 52 - 5260 MHz
802.11(a) 54 Mbps



5250 - 5350 MHz Band,UNII-2A, 20 MHz
Low Channel, Ch 52 - 5260 MHz
802.11(n) MCS0



5250 - 5350 MHz Band,UNII-2A, 20 MHz
Low Channel, Ch 52 - 5260 MHz
802.11(n) MCS7

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
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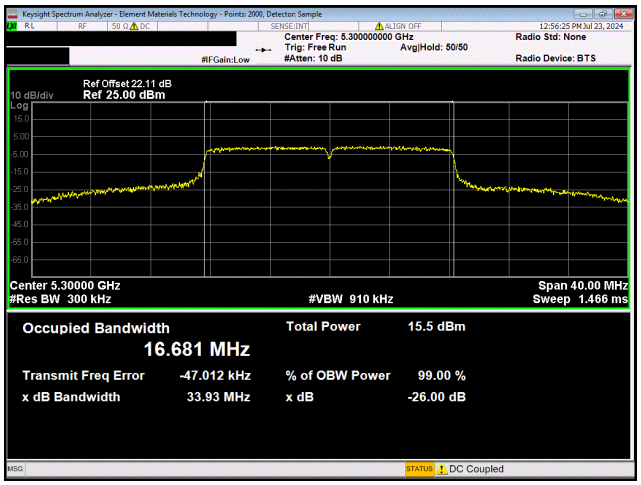
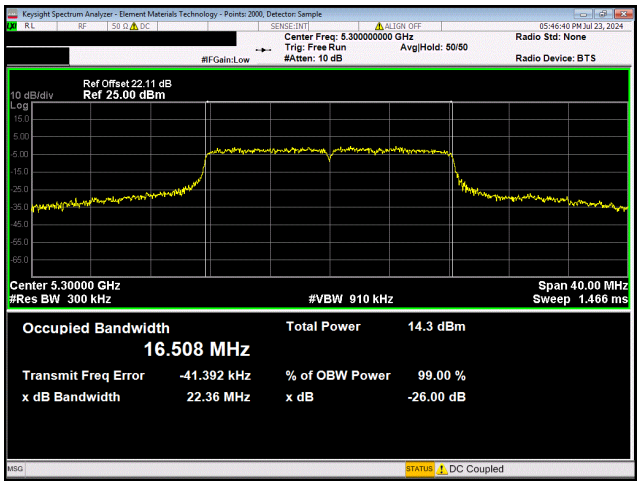
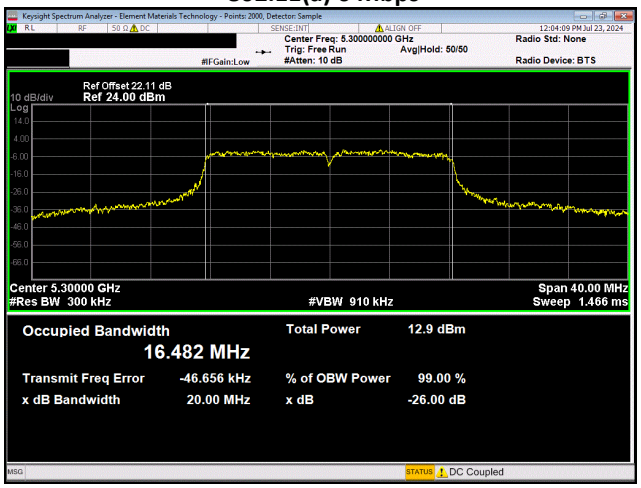


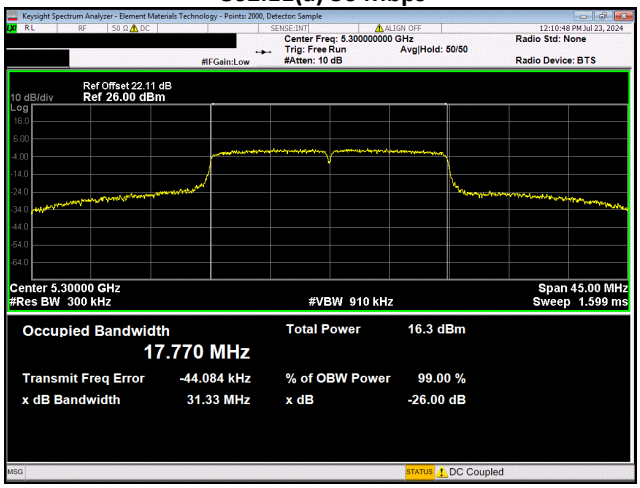
5250 - 5350 MHz Band,UNII-2A, 20 MHz
Mid Channel, Ch 60 - 5300 MHz
802.11(a) 6 Mbps



5250 - 5350 MHz Band,UNII-2A, 20 MHz
Mid Channel, Ch 60 - 5300 MHz
802.11(a) 36 Mbps



5250 - 5350 MHz Band,UNII-2A, 20 MHz
Mid Channel, Ch 60 - 5300 MHz
802.11(a) 54 Mbps



5250 - 5350 MHz Band,UNII-2A, 20 MHz
Mid Channel, Ch 60 - 5300 MHz
802.11(n) MCS0

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
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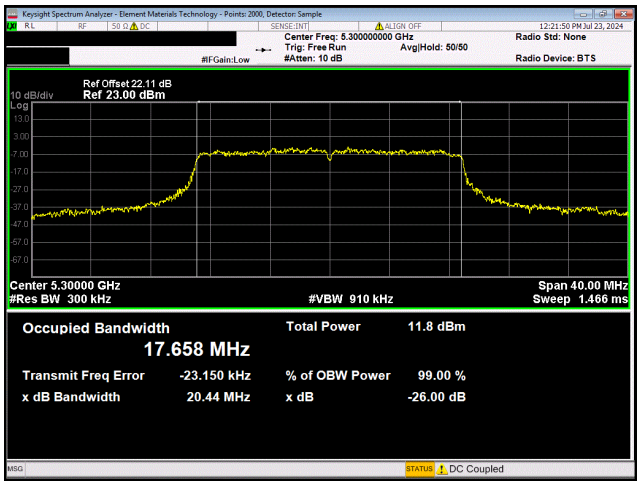
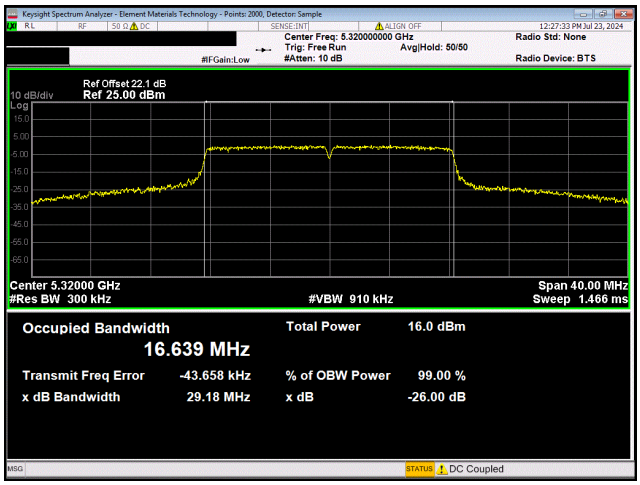
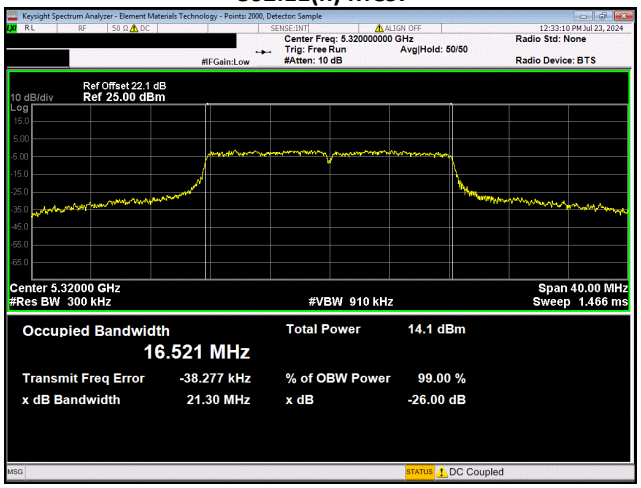


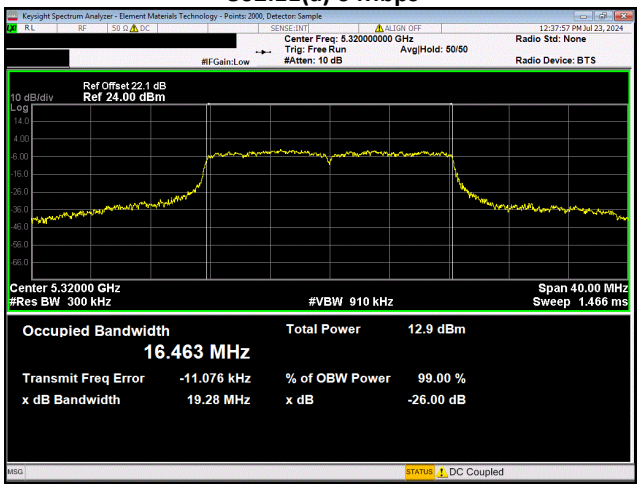
5250 - 5350 MHz Band,UNII-2A, 20 MHz
Mid Channel, Ch 60 - 5300 MHz
802.11(n) MCS7



5250 - 5350 MHz Band,UNII-2A, 20 MHz
High Channel, Ch 64 - 5320 MHz
802.11(a) 6 Mbps



5250 - 5350 MHz Band,UNII-2A, 20 MHz
High Channel, Ch 64 - 5320 MHz
802.11(a) 36 Mbps



5250 - 5350 MHz Band,UNII-2A, 20 MHz
High Channel, Ch 64 - 5320 MHz
802.11(a) 54 Mbps

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
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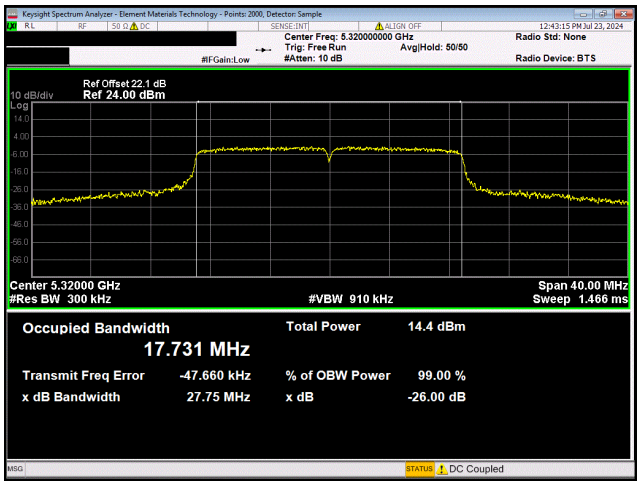
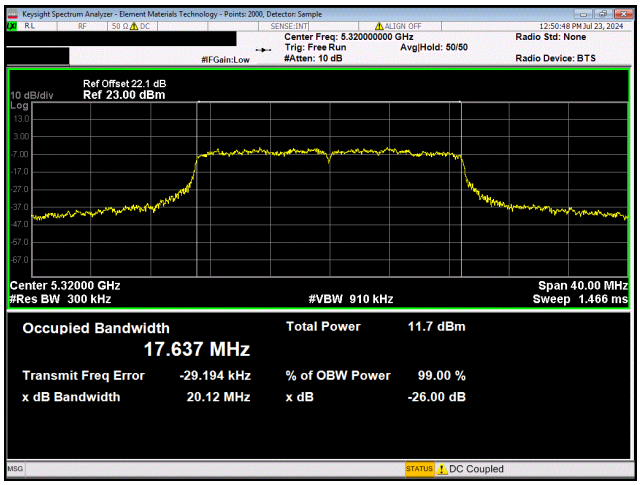
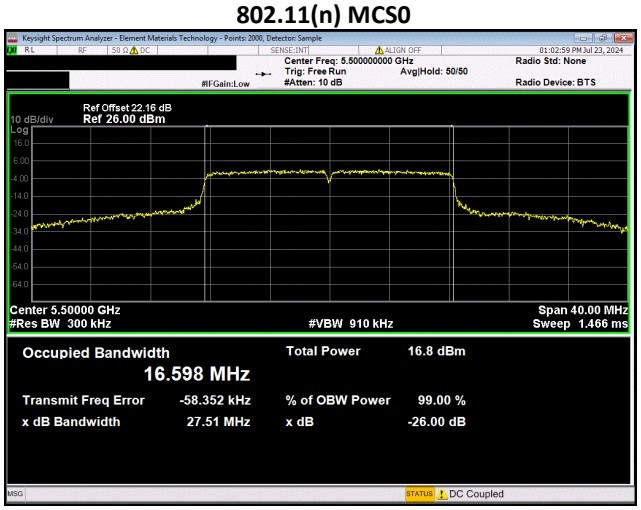


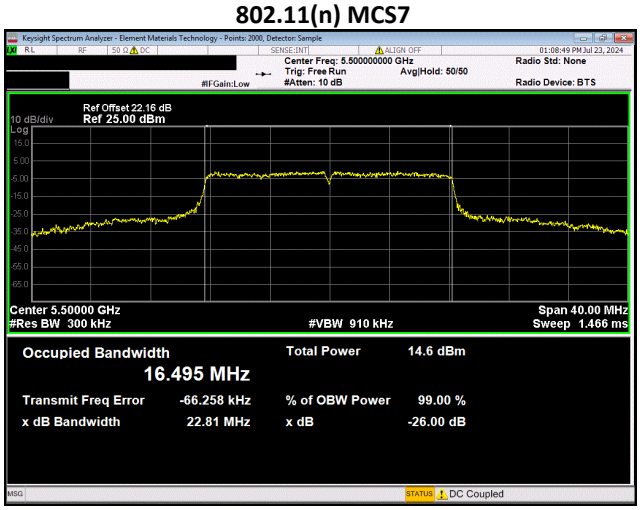
5250 - 5350 MHz Band,UNII-2A, 20 MHz
High Channel, Ch 64 - 5320 MHz
802.11(n) MCS0



5250 - 5350 MHz Band,UNII-2A, 20 MHz
High Channel, Ch 64 - 5320 MHz
802.11(n) MCS7



5470 - 5725 MHz Band,UNII-2C, 20 MHz
Low Channel, Ch 100 - 5500 MHz
802.11(a) 6 Mbps



5470 - 5725 MHz Band,UNII-2C, 20 MHz
Low Channel, Ch 100 - 5500 MHz
802.11(a) 36 Mbps

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
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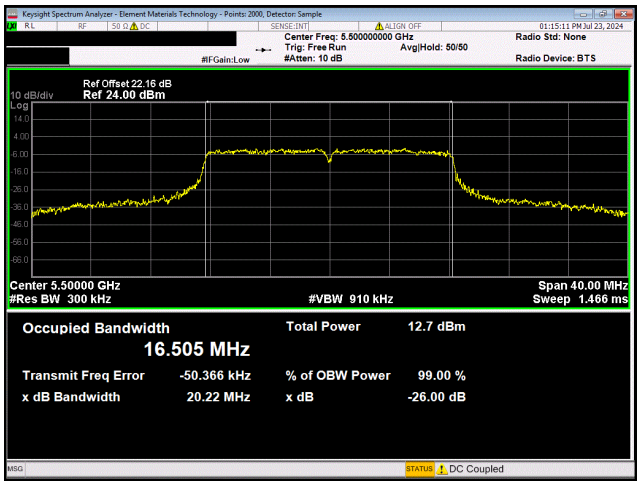
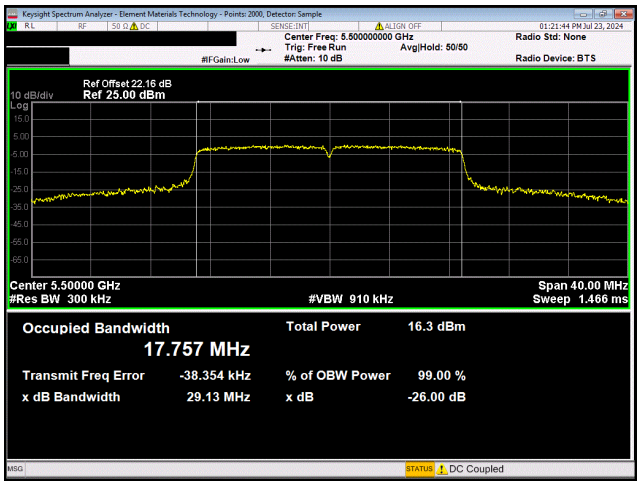
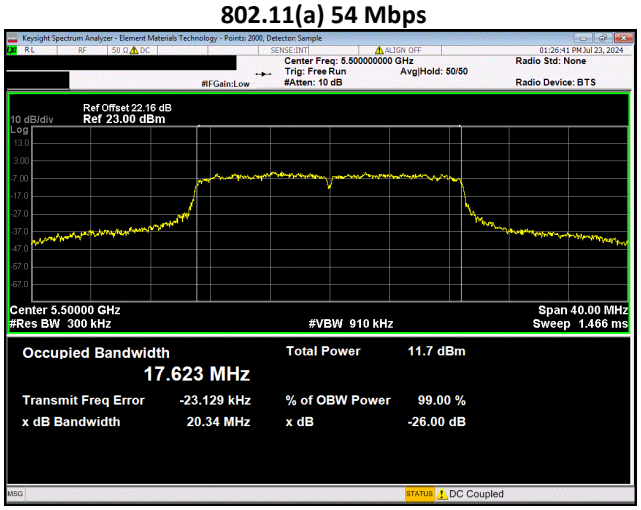


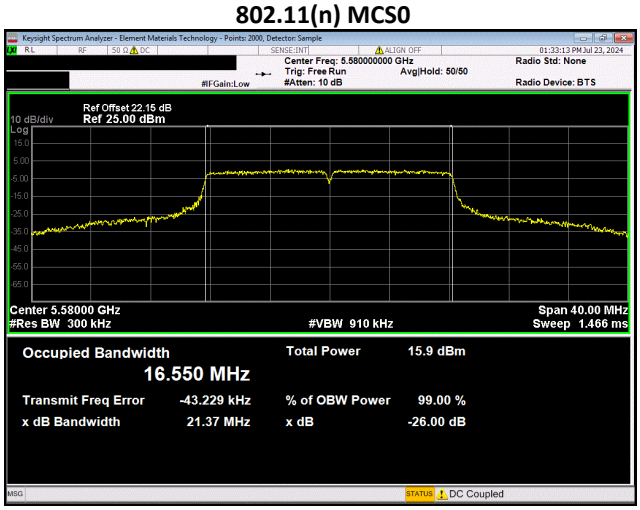
5470 - 5725 MHz Band,UNII-2C, 20 MHz
Low Channel, Ch 100 - 5500 MHz
802.11(a) 54 Mbps



5470 - 5725 MHz Band,UNII-2C, 20 MHz
Low Channel, Ch 100 - 5500 MHz
802.11(n) MCS0



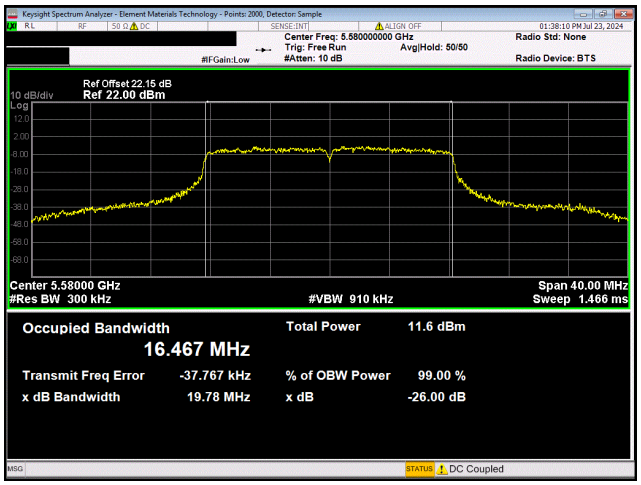
5470 - 5725 MHz Band,UNII-2C, 20 MHz
Low Channel, Ch 100 - 5500 MHz
802.11(n) MCS7



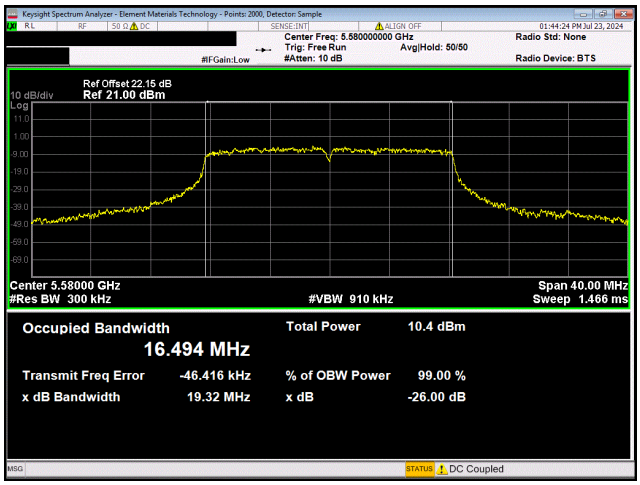
5470 - 5725 MHz Band,UNII-2C, 20 MHz
Mid Channel, Ch 116 - 5580 MHz
802.11(a) 6 Mbps

OCCUPIED BANDWIDTH

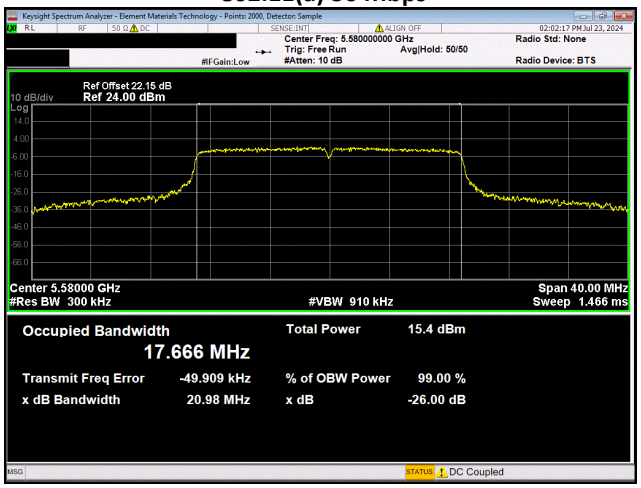
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



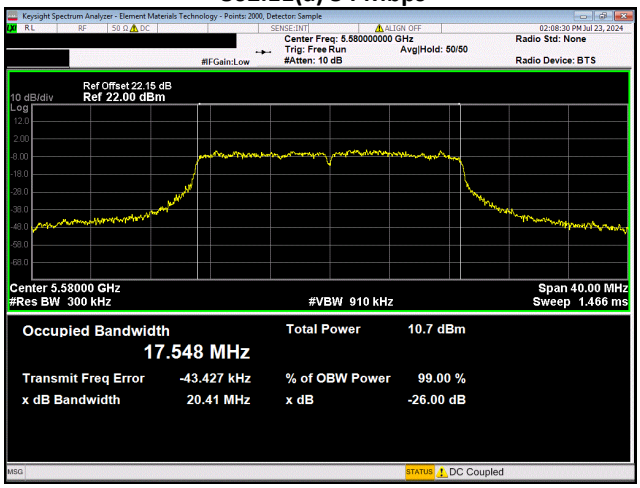
5470 - 5725 MHz Band,UNII-2C, 20 MHz
Mid Channel, Ch 116 - 5580 MHz
802.11(a) 36 Mbps



5470 - 5725 MHz Band,UNII-2C, 20 MHz
Mid Channel, Ch 116 - 5580 MHz
802.11(a) 54 Mbps



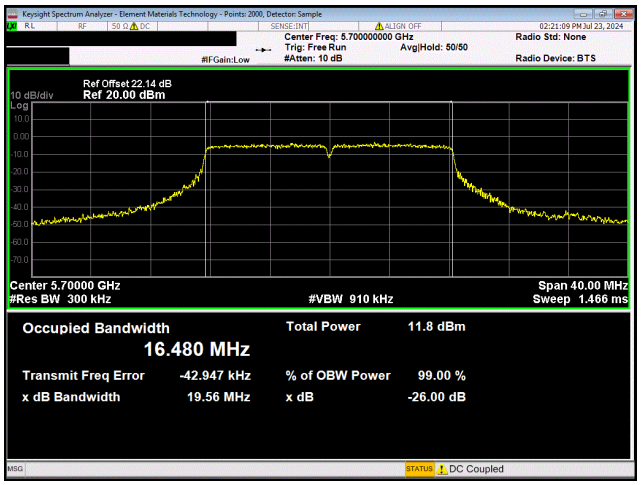
5470 - 5725 MHz Band,UNII-2C, 20 MHz
Mid Channel, Ch 116 - 5580 MHz
802.11(n) MCS0



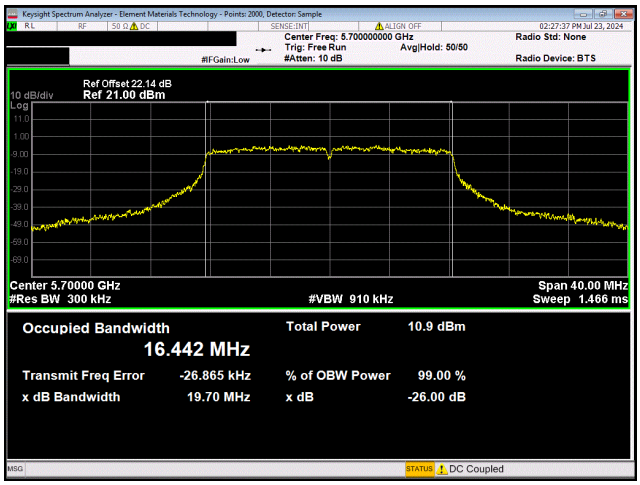
5470 - 5725 MHz Band,UNII-2C, 20 MHz
Mid Channel, Ch 116 - 5580 MHz
802.11(n) MCS7

OCCUPIED BANDWIDTH

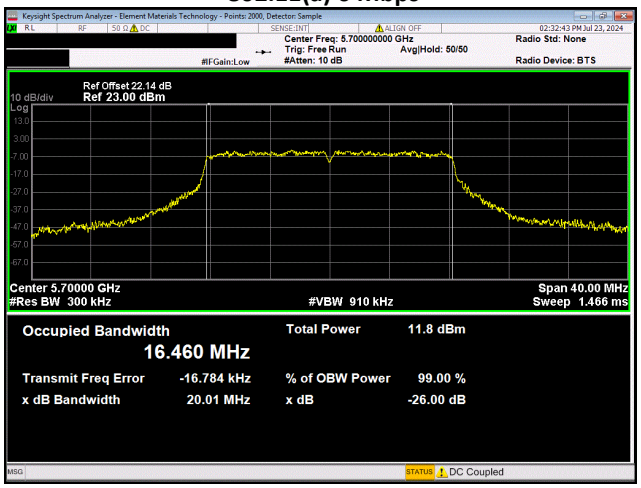
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



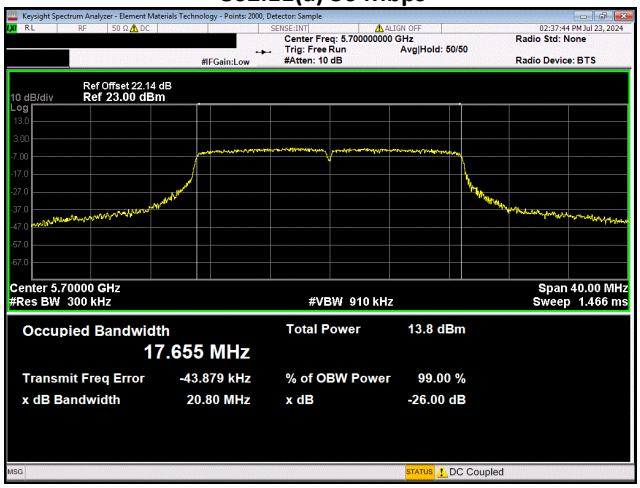
5470 - 5725 MHz Band,UNII-2C, 20 MHz
High Channel, Ch 140 - 5700 MHz
802.11(a) 6 Mbps



5470 - 5725 MHz Band,UNII-2C, 20 MHz
High Channel, Ch 140 - 5700 MHz
802.11(a) 36 Mbps



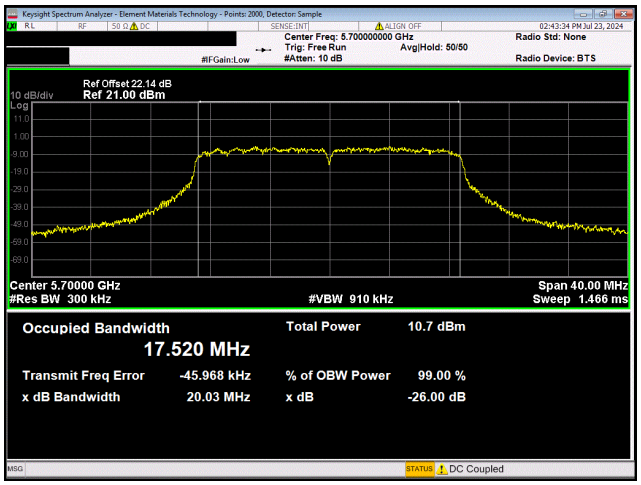
5470 - 5725 MHz Band,UNII-2C, 20 MHz
High Channel, Ch 140 - 5700 MHz
802.11(a) 54 Mbps



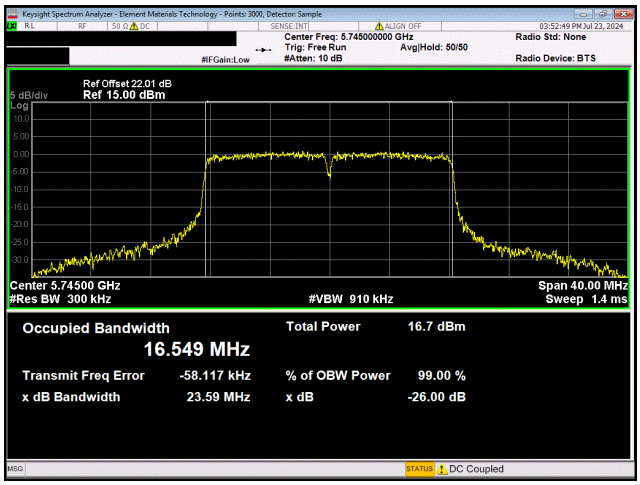
5470 - 5725 MHz Band,UNII-2C, 20 MHz
High Channel, Ch 140 - 5700 MHz
802.11(n) MCS0

OCCUPIED BANDWIDTH

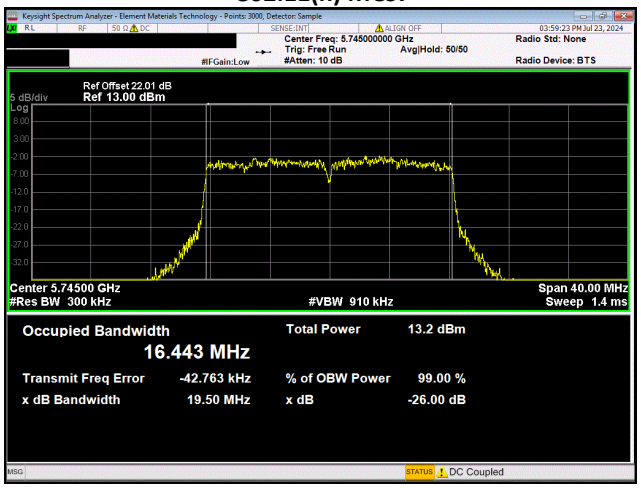
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



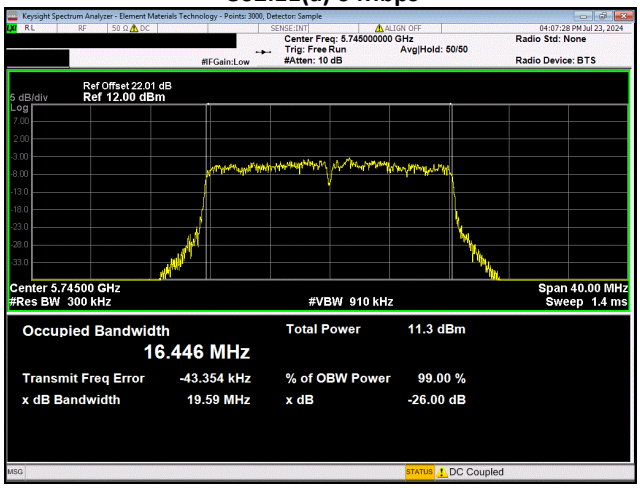
5470 - 5725 MHz Band,UNII-2C, 20 MHz
High Channel, Ch 140 - 5700 MHz
802.11(n) MCS7



5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(a) 6 Mbps



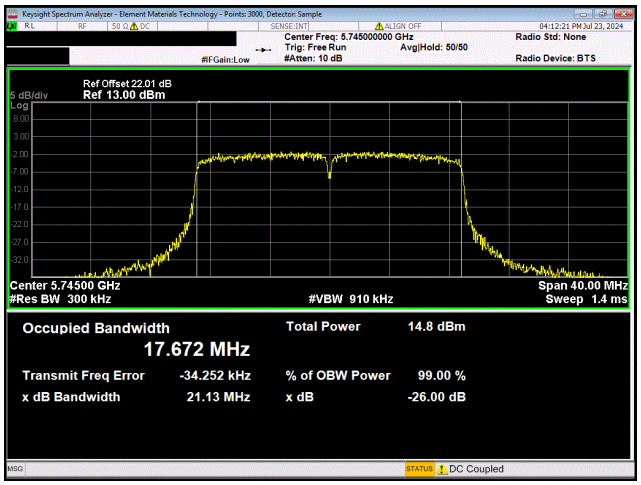
5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(a) 36 Mbps



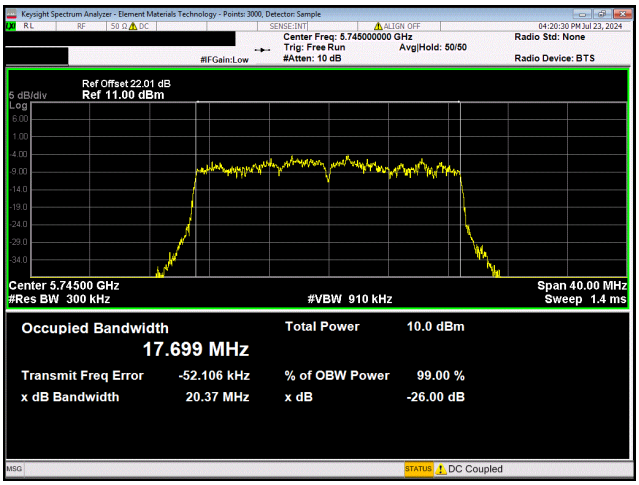
5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(a) 54 Mbps

OCCUPIED BANDWIDTH

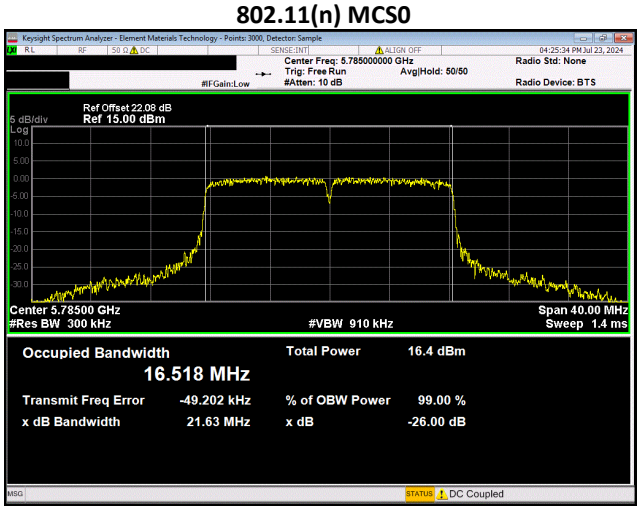
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



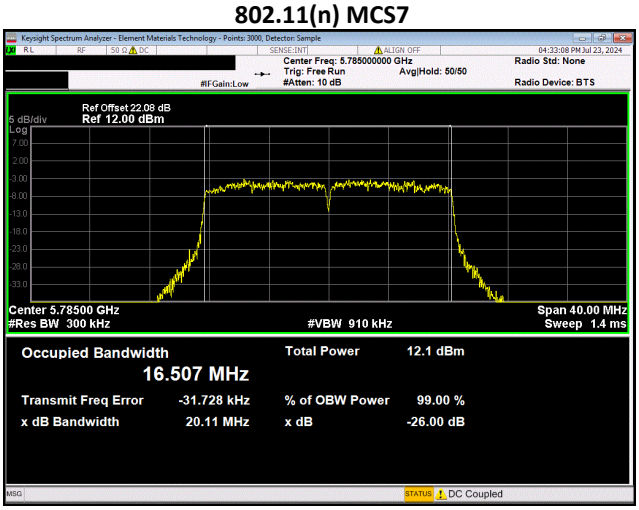
5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(n) MCS0



5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(n) MCS7



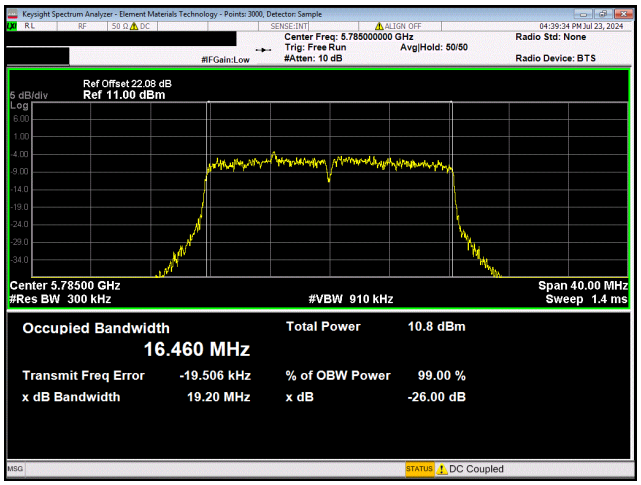
5725 - 5785 MHz Band
Mid Channel, Ch 157 - 5785 MHz
802.11(a) 6 Mbps



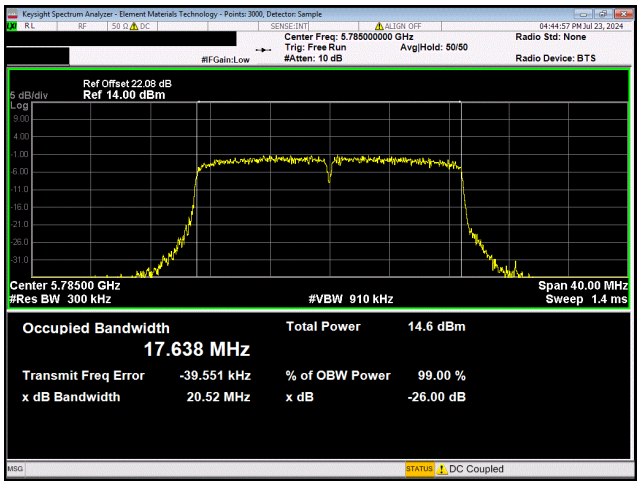
5725 - 5785 MHz Band
Mid Channel, Ch 157 - 5785 MHz
802.11(a) 36 Mbps

OCCUPIED BANDWIDTH

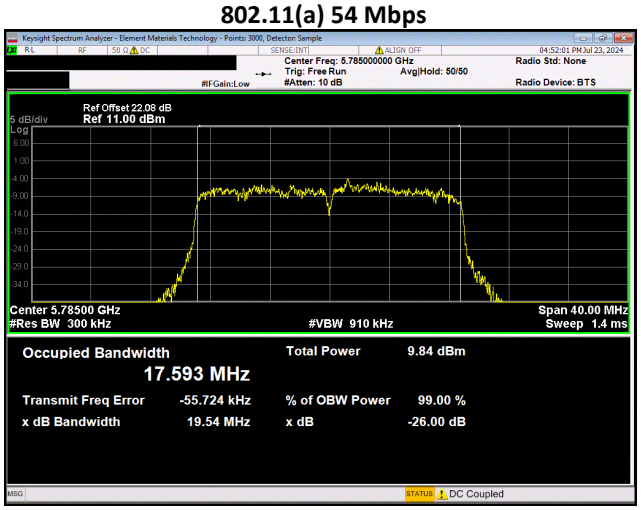
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



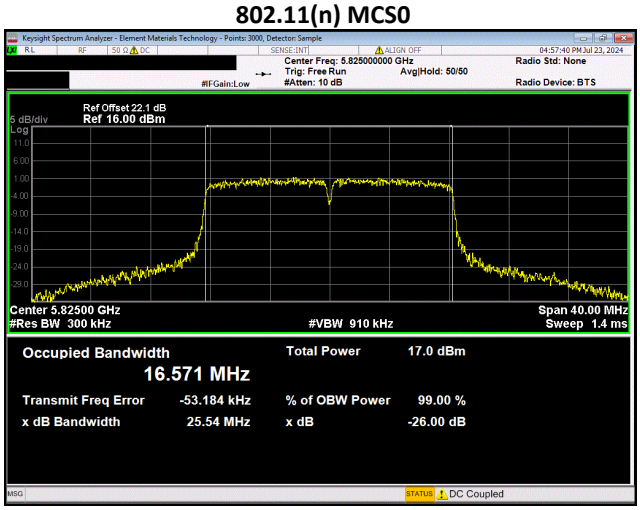
5725 - 5785 MHz Band
Mid Channel, Ch 157 - 5785 MHz
802.11(a) 54 Mbps



5725 - 5785 MHz Band
Mid Channel, Ch 157 - 5785 MHz
802.11(n) MCS0



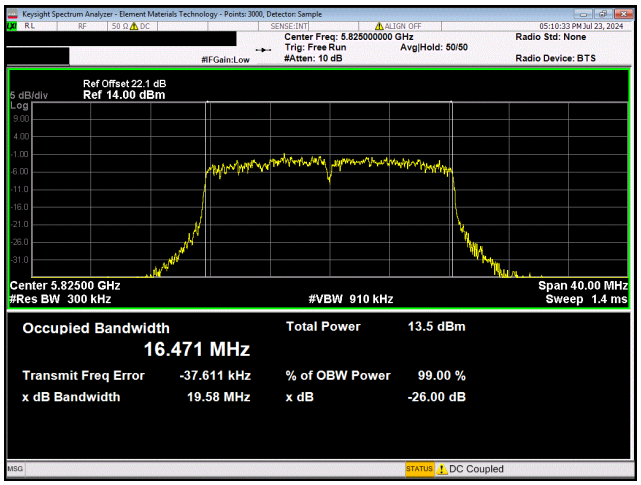
5725 - 5785 MHz Band
Mid Channel, Ch 157 - 5785 MHz
802.11(n) MCS7



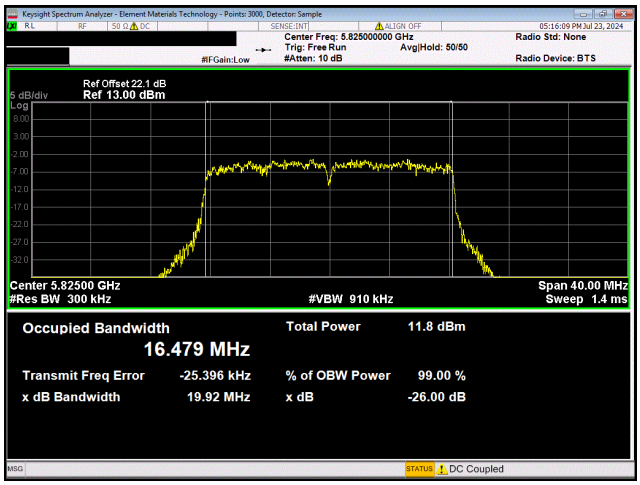
5725 - 5785 MHz Band
High Channel, Ch 165 - 5825 MHz
802.11(a) 6 Mbps

OCCUPIED BANDWIDTH

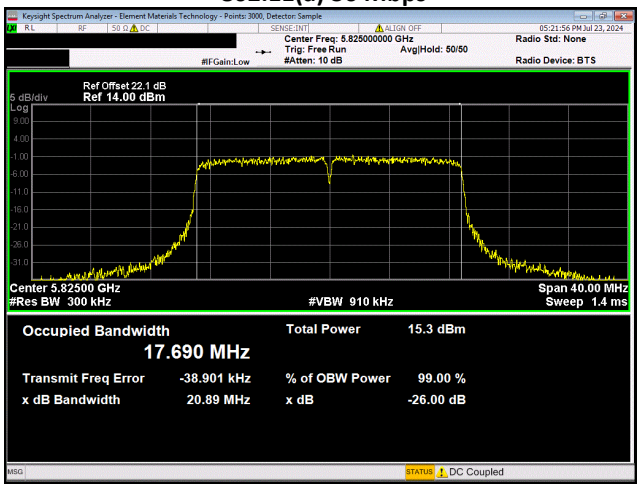
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



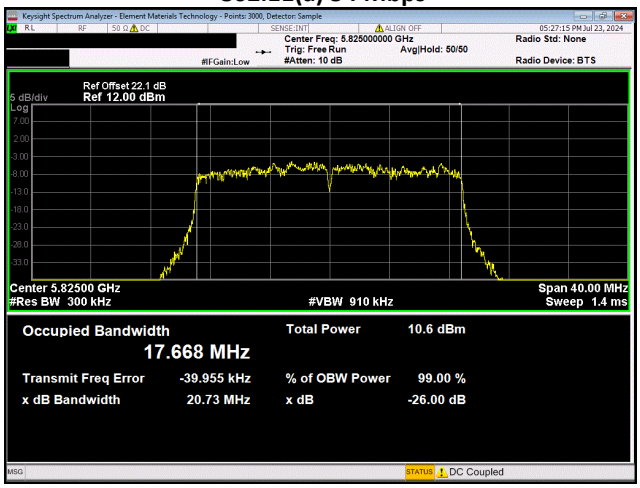
5725 - 5785 MHz Band
High Channel, Ch 165 - 5825 MHz
802.11(a) 36 Mbps



5725 - 5785 MHz Band
High Channel, Ch 165 - 5825 MHz
802.11(a) 54 Mbps



5725 - 5785 MHz Band
High Channel, Ch 165 - 5825 MHz
802.11(n) MCS0



5725 - 5785 MHz Band
High Channel, Ch 165 - 5825 MHz
802.11(n) MCS7

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
WTD.2024.01.16.0

TEST DESCRIPTION

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.

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

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth as defined in RSS-Gen Clause 6.7. This value is also used to set the integration bandwidth for output power as allowed per ANSI C63.10 section 12.3.

The 99% occupied bandwidth was measured with the EUT configured for continuous modulated operation.

The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The resolution bandwidth (RBW) of the spectrum analyzer was set to the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) bandwidth was set to at least 3 times the resolution bandwidth. The analyzer sweep time was set to auto to prevent video filtering or averaging. A sample detector was used unless the device was not able to be operated in a continuous transmit mode, in which case a peak detector was used.

The spectrum analyzer occupied bandwidth measurement function was used to sum the power of the transmission in linear terms to obtain the 99% bandwidth.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	2024-05-22	2025-05-22
Generator - Signal	Agilent	N5183A	TIK	2022-01-24	2025-01-24
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	2023-09-05	2024-09-05
Block - DC	Fairview Microwave	SD3379	ANH	2023-09-05	2024-09-05
Attenuator	Fairview Microwave	SA4014-20	AQI	2023-09-05	2024-09-05

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
WTD.2024.01.16.0

EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005143	Date:	2024-08-26
Customer:	Ademco, Inc.	Temperature:	21.9°C
Attendees:	None	Relative Humidity:	68.2%
Customer Project:	None	Bar. Pressure (PMSL):	1015 mbar
Tested By:	Christopher Heintzelman	Job Site:	MN11
Power:	110VAC/60Hz	Configuration:	ADEM0044-8

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.407:2024	ANSI C63.10:2013
RSS-247 Issue 3:2023	ANSI C63.10:2013

COMMENTS

Power setting 107.

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

N/A

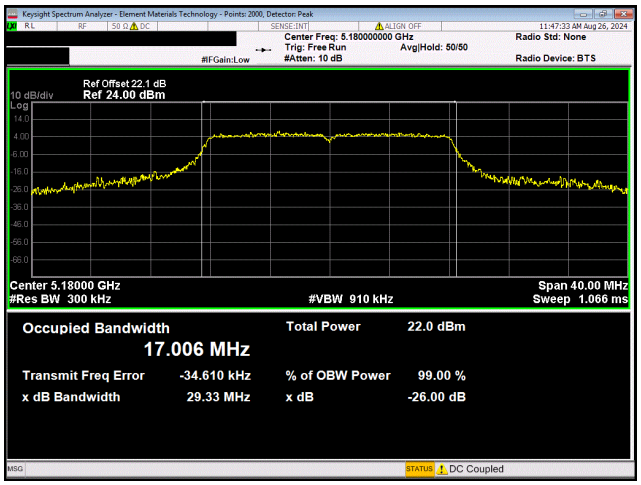
Tested By

TEST RESULTS

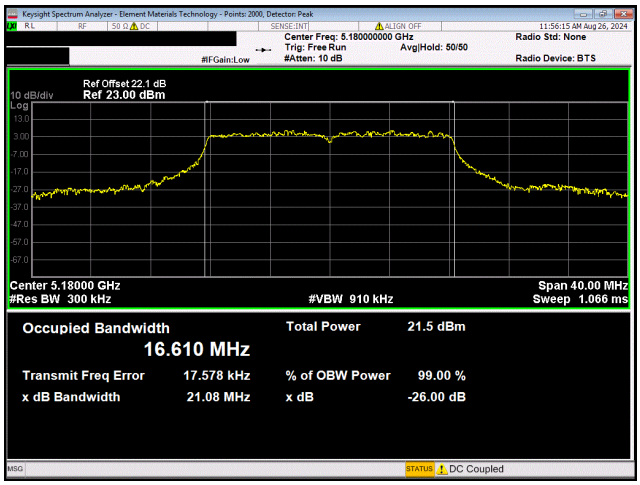
	Value	Limit	Result
5150 - 5250 MHz Band, UNII-1, 20 MHz			
Low Channel, Ch 36 - 5180 MHz			
802.11(a) 6 Mbps	17.006 MHz	N/A	N/A
802.11(a) 36 Mbps	16.61 MHz	N/A	N/A
802.11(a) 54 Mbps	16.723 MHz	N/A	N/A
802.11(n) MCS0	17.987 MHz	N/A	N/A
802.11(n) MCS7	17.752 MHz	N/A	N/A

OCCUPIED BANDWIDTH

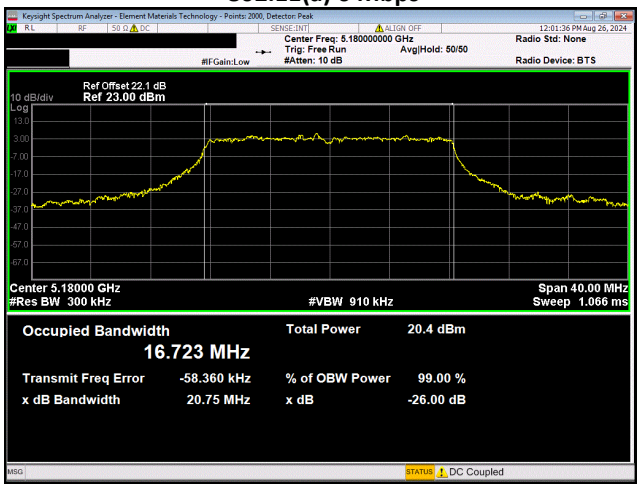
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



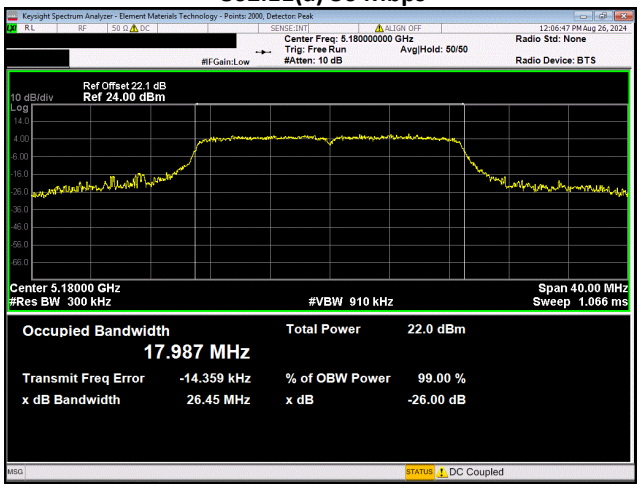
5150 - 5250 MHz Band, UNII-1, 20 MHz
Low Channel, Ch 36 - 5180 MHz
802.11(a) 6 Mbps



5150 - 5250 MHz Band, UNII-1, 20 MHz
Low Channel, Ch 36 - 5180 MHz
802.11(a) 36 Mbps



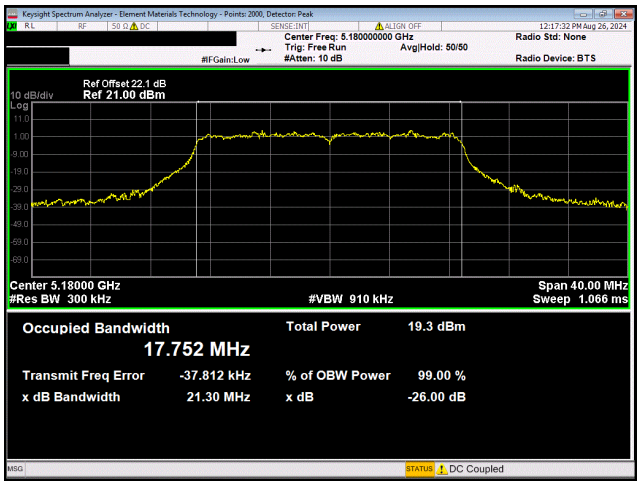
5150 - 5250 MHz Band, UNII-1, 20 MHz
Low Channel, Ch 36 - 5180 MHz
802.11(a) 54 Mbps



5150 - 5250 MHz Band, UNII-1, 20 MHz
Low Channel, Ch 36 - 5180 MHz
802.11(n) MCS0

OCCUPIED BANDWIDTH

element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



5150 - 5250 MHz Band, UNII-1, 20 MHz
Low Channel, Ch 36 - 5180 MHz
802.11(n) MCS7

BAND EDGE

element
TbtTx 2024.05.24.1
WTD.2024.01.16.0

TEST DESCRIPTION

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.

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

This test is done with the U-NII-1 band (5.2 GHz band) to ensure no portion of the carrier is contained within the U-NII-2A band (5.3 GHz band) and 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 (5.6 GHz band).

Per FCC KDB 789033 DO2 General UNII Test Procedures New Rules v02r01, Clause B.2.a.(i) as an alternative to the 26 dB bandwidth, the 99% bandwidth may used to show compliance to this rule part and better aligns with RSS-247.

Per RSS-247, Clause 6.2.1.2, the 26 dB bandwidth may fall into the 5250 – 5350 MHz band; however if the 99% occupied bandwidth also falls into the 5250 – 5350 MHz band, the transmission is considered as intentional and the device shall comply with all the requirements in the 5250 – 5350 MHz band including implementing DFS and TPC on the portion of the emission that resides in the 5250 – 5350 MHz Band.

Per RSS-247 section 6.3, if any part of an operating device's emission bandwidth falls in the bands 5250-5350 MHz, 5470-5600 MHz or 5650-5725 MHz, the device shall comply with DFS requirements.

The analyzer was configured to the following settings:

Center frequency = edge of the allowable band*
RBW = Approx 1-2% of the emission bandwidth (B)
VBW => 3x RBW
Detector = Peak
Trace mode = max hold

*For the U-NII-1 this is 5250 MHz
*For the U-NII-3 this is 5725 MHz

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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	2024-05-22	2025-05-22
Generator - Signal	Agilent	N5183A	TIK	2022-01-24	2025-01-24
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	2023-09-05	2024-09-05
Block - DC	Fairview Microwave	SD3379	ANH	2023-09-05	2024-09-05
Attenuator	Fairview Microwave	SA4014-20	AQI	2023-09-05	2024-09-05

BAND EDGE

element
TbtTx 2024.05.24.1
WTD.2024.01.16.0

EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005204	Date:	2024-07-23
Customer:	Ademco, Inc.	Temperature:	21.9°C
Attendees:	None	Relative Humidity:	56.2%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mbar
Tested By:	Christopher Heintzelman	Job Site:	MN11
Power:	110VAC/60Hz	Configuration:	ADEM0044-1

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.407:2024	ANSI C63.10:2013
RSS-247 Issue 3:2023	ANSI C63.10:2013

COMMENTS

Reference level offset includes attenuator, measurement cable, and DC block.
Configuration ADEM0044-8 (SN 52202030005143) was used for the 5240 MHz 6 Mbps measurement.

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

Pass

Tested By

TEST RESULTS

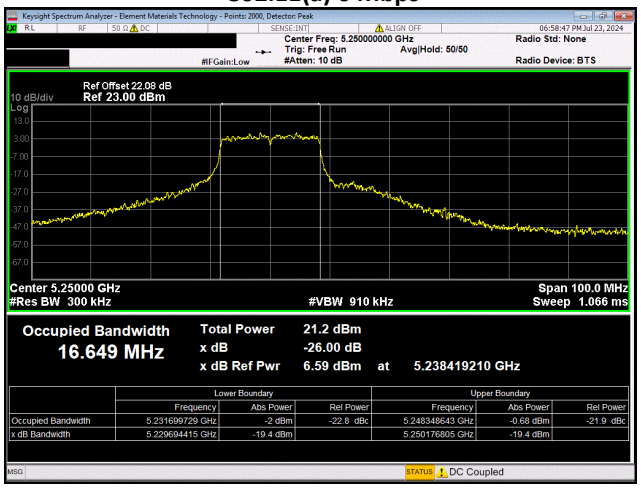
	OBW Within Band	Band Edge (MHz)	Result
5150 - 5250 MHz Band, UNII-1, 20 MHz			
High Channel, Ch 48 - 5240 MHz			
802.11(a) 6 Mbps	Yes	5250	Pass
802.11(a) 36 Mbps	Yes	5250	Pass
802.11(a) 54 Mbps	Yes	5250	Pass
802.11(n) MCS0	Yes	5250	Pass
802.11(n) MCS7	Yes	5250	Pass
5725 - 5785 MHz Band			
Low Channel, Ch 149 - 5745 MHz			
802.11(a) 6 Mbps	Yes	5725	Pass
802.11(a) 36 Mbps	Yes	5725	Pass
802.11(a) 54 Mbps	Yes	5725	Pass
802.11(n) MCS0	Yes	5725	Pass
802.11(n) MCS7	Yes	5725	Pass

BAND EDGE

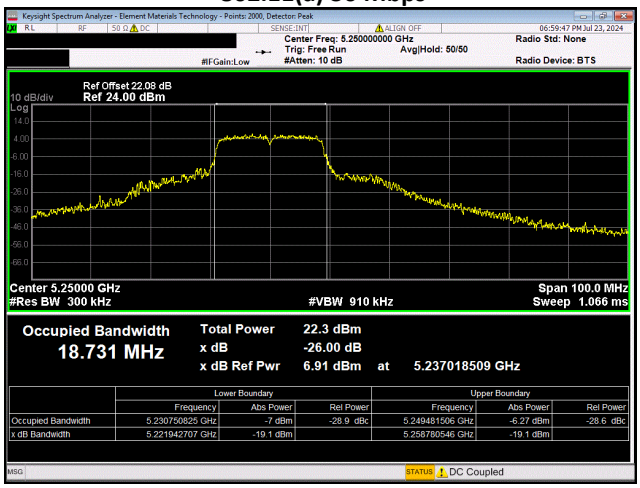
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0

5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(a) 6 Mbps

5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(a) 36 Mbps



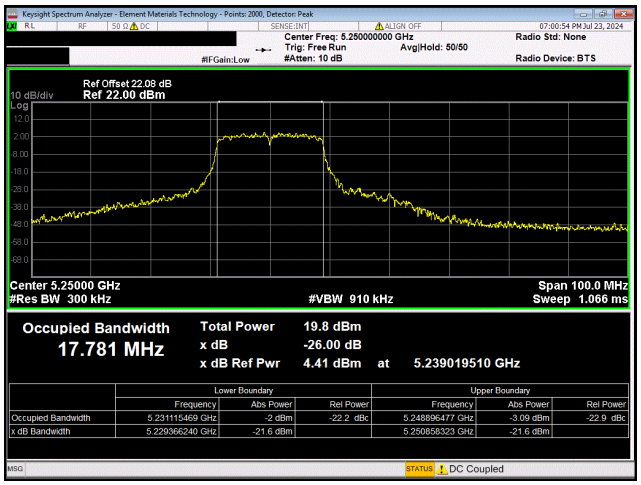
5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(a) 54 Mbps



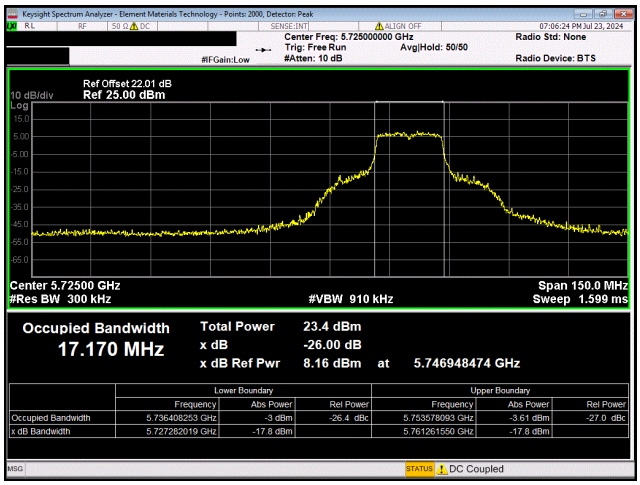
5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(n) MCS0

BAND EDGE

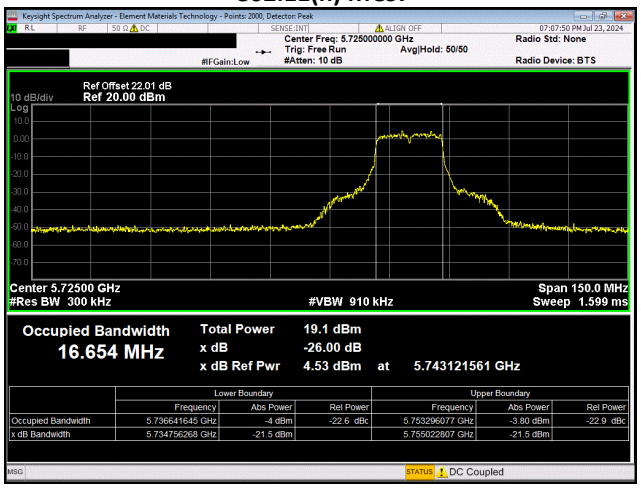
element
TbtTx 2024.05.24.1
WTD.2024.01.16.0



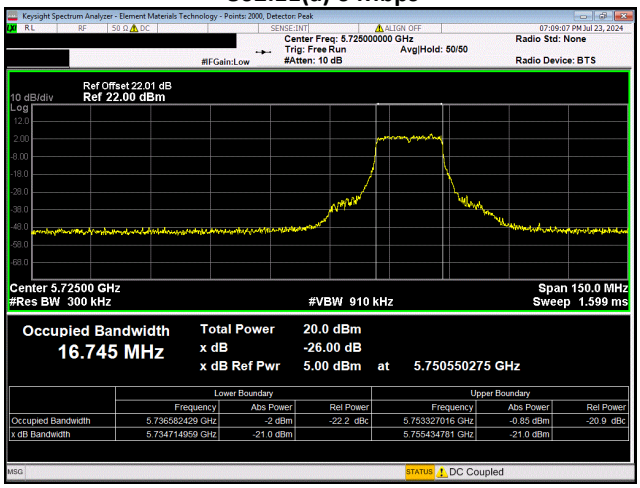
5150 - 5250 MHz Band, UNII-1, 20 MHz
High Channel, Ch 48 - 5240 MHz
802.11(n) MCS7



5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(a) 6 Mbps



5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(a) 36 Mbps

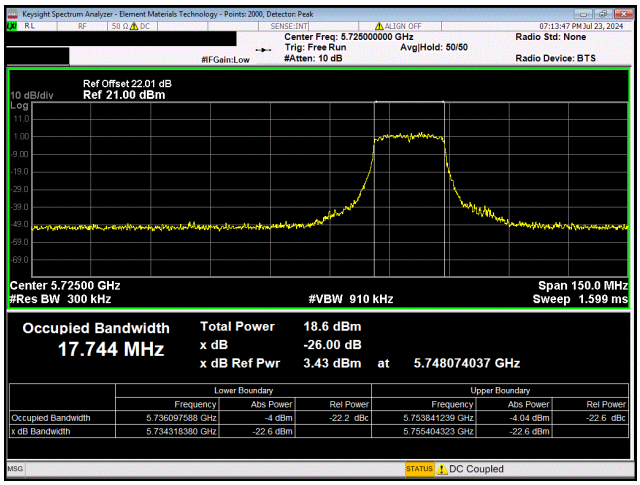


5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(a) 54 Mbps

BAND EDGE

element
TbtTx 2024.05.24.1
WTD.2024.01.16.0

5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(n) MCS0



5725 - 5785 MHz Band
Low Channel, Ch 149 - 5745 MHz
802.11(n) MCS7