

RF Test Report

For

Applicant Name:FOXAddress:3480EUT Name:SmatherBrand Name:FOXModel Number:A55Series Model Number:N/A

FOXX Development Inc.

3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA Smart Phone FOXXD A55AM N/A

Issued By

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd. F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park,
Address:	Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Report Number:	BTF240531R01004
Test Standards:	47 CFR Part 15E
Test Conclusion:	Pass
FCC ID:	2AQRM-A55AM
Test Date:	2024-05-31 to 2024-06-24
Date of Issue:	2024-06-24
	\bigcap
Prepared By:	hris cul
	Chris Liu / Project Engineer
Date:	2024-06-24

Approved By:

Date:

512 Ryan.CJ / EMC Manage 2024-06-24

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Revision History		
Version	Issue Date	Revisions Content
R_V0	2024-06-24	Original

Note: Once the revision has been made, then previous versions reports are invalid.

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1 Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Identification of the Responsible Testing Location

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.		
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China		
Phone Number:	+86-0755-23146130		
Fax Number:	+86-0755-23146130		
FCC Registration Number:	518915		
Designation Number:	CN1330		

1.3 Announcement

(1) The test report reference to the report template version v0.

(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.

(3) The test report is invalid if there is any evidence and/or falsification.

(4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.

(5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

(6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

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Product Information 2

Application Information 2.1

Company Name:	FOXX Development Inc.	
Address:	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA	1000
2.2 Manufacturer I	nformation	342.2
Company Name:	FOXX Development Inc.	

Address: 3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA

2.3 **Factory Information**

Company Name:	FOXX Development Inc.
Address:	3480 Preston Ridge Road, Suite500, Alpharetta, GA 30005, USA

General Description of Equipment under Test (EUT) 2.4

EUT Name:	Smart Phone
Test Model Number:	A55AM
Hardware Version:	N/A
Software Version:	N/A

Technical Information 2.5

Power Supply:	DC 5V from adaptor or DC 3.7V from battery
	Input:100-240V 50/60Hz 0.15A
Power Adaptor:	Output:5.0V==1Amp
	MODEL: A55AM
Operation Frequency	U-NII Band 1: 5.18~5.24 GHz
Range	U-NII Band 3: 5.745~5.825 GHz
	U-NII Band 1: 5.15~5.25 GHz
Frequency Block	U-NII Band 3: 5.725~5.85 GHz
Channel Bandwidth	802.11a: 20 MHz
	802.11n: 20 MHz
	802.11ac: 40 MHz
	802.11ac: 40 MHz
Antenna Type:	PIFA Antenna
Antenna Gain:	-0.49dBi
Note:	

Note:

#: The antenna gain provided by the applicant, and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.

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3 Summary of Test Results

3.1 Test Standards

The tests were performed according to following standards:

47 CFR Part 15E: Unlicensed National Information Infrastructure Devices

3.2 Uncertainty of Test

Item	Measurement Uncertainty
Conducted Emission (150 kHz-30 MHz)	±2.64dB
Occupied Bandwidth	±69kHz
Transmitter Power, Conducted	±0.87dB
Power Spectral Density	±0.69dB
Conducted Spurious Emissions	±0.95dB
Radiated Spurious Emissions (above 1GHz)	1-6GHz: ±3.94dB 6-18GHz: ±4.16dB
Radiated Spurious Emissions (30M - 1GHz)	±4.12dB

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.3 Summary of Test Result

Item	Standard	Requirement	Result
Antenna requirement	47 CFR Part 15E	Part 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15E	47 CFR Part 15.207(a)	Pass
Maximum conducted output power	47 CFR Part 15E	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(2) 47 CFR Part 15.407(a)(3)(i)	Pass
Power spectral density	47 CFR Part 15E	47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(1)(iii) 47 CFR Part 15.407(a)(1)(iv) 47 CFR Part 15.407(a)(2) 47 CFR Part 15.407(a)(3)(i)	Pass
Emission bandwidth and occupied bandwidth	47 CFR Part 15E	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use. 47 CFR Part 15.407(e)	Pass
Channel Availability Check Time	47 CFR Part 15E	47 CFR Part 15.407(h)(2)(ii)	Pass
U-NII Detection Bandwidth	47 CFR Part 15E	47 CFR Part 15.407(h)(2)	Pass
Statistical Performance Check	47 CFR Part 15E	KDB 935210 D02, Clause 5.1 Table 2	Pass
Channel Move Time, Channel Closing Transmission Time	47 CFR Part 15E	47 CFR Part 15.407(h)(2)(iii)	Pass
Non-Occupancy Period Test	47 CFR Part 15E	47 CFR Part 15.407(h)(2)(iv)	Pass
DFS Detection Thresholds	47 CFR Part 15E	KDB 905462 D02, Clause 5.2 Table 3	Pass
Band edge emissions (Radiated)	47 CFR Part 15E	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(2) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass

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Undesirable emission limits (below 1GHz)	47 CFR Part 15E	47 CFR Part 15.407(b)(9)	Pass
Undesirable emission limits (above 1GHz)	47 CFR Part 15E	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(2) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)	Pass

Test Configuration 4

Test Equipment List 4.1

Conducted Emission at AC power line								
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date			
Pulse Limiter	SCHWARZBECK	VTSD 9561-F	00953	2023-11-16	2024-11-15			
Coaxial Switcher	SCHWARZBECK	CX210	CX210	2023-11-16	2024-11-15			
V-LISN	SCHWARZBECK	NSLK 8127	01073	2023-11-16	2024-11-15			
LISN	AFJ	LS16/110VAC	16010020076	2023-11-16	2024-11-15			
EMI Receiver	ROHDE&SCHWA RZ	ESCI3	101422	2023-11-16	2024-11-15			

Duty Cycle					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RFTest software	/	V1.00	/	/	/
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15

Maximum conducted output power							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
RFTest software	/	V1.00	/	/	/		
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15		
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15		
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15		
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15		
WIDEBAND RADIO COMMNUNICATION	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15		

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TESTER			10 March 10		
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15

Power spectral density							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
RFTest software	/	V1.00	/	/	/		
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15		
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15		
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15		
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15		
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15		
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15		

Emission bandwidth and occupied bandwidth							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
RFTest software	/	V1.00	/	/	/		
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15		
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15		
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15		
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15		
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15		
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15		

Channel Availability Check Time								
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date			
RFTest software	/	V1.00	/	/	/			
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15			
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15			
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15			
Adjustable Direct	Dongguan	etm-6050c	20211026123	2023-11-16	2024-11-15			

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Current Regulated Power Supply	Tongmen Electronic Technology Co., LTD	31	3		
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15

U-NII Detection Bandwidth							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
RFTest software	/	V1.00	/	/	/		
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15		
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15		
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15		
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15		
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15		
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15		

Statistical Performance Check							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
RFTest software	/	V1.00	/	/	/		
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15		
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15		
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15		
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15		
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15		
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15		

Channel Move Time, Channel Closing Transmission Time								
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date			
RFTest software	/	V1.00	/	/	/			
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15			
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15			
Programmable constant temperature	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15			

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and humidity box			10 C 10 C		
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15

Non-Occupancy Period Test						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
RFTest software	/	V1.00	/	/	/	
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15	
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15	
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15	
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15	
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15	
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15	

DFS Detection Thresholds						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
RFTest software	/	V1.00	/	/	/	
RF Control Unit	Techy	TR1029-1	/	2023-11-16	2024-11-15	
RF Sensor Unit	Techy	TR1029-2	/	2023-11-16	2024-11-15	
Programmable constant temperature and humidity box	ZZCKONG	ZZ-K02A	20210928007	2023-11-16	2024-11-15	
Adjustable Direct Current Regulated Power Supply	Dongguan Tongmen Electronic Technology Co., LTD	etm-6050c	20211026123	2023-11-16	2024-11-15	
WIDEBAND RADIO COMMNUNICATION TESTER	Rohde & Schwarz	CMW500	161997	2023-11-16	2024-11-15	
MXA Signal Analyzer	KEYSIGHT	N9020A	MY50410020	2023-11-16	2024-11-15	

Band edge emissions (Radiated)							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	/	/		
Preamplifier	SCHWARZBECK	BBV9744	00246	2023-11-16	2023-11-23		

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RE Cable	REBES Talent	UF1-SMASMAM-1 0m	21101566	2023-11-16	2024-11-15
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2023-11-16	2024-11-15
RE Cable	REBES Talent	UF1-SMASMAM-1 m	21101568	2023-11-16	2024-11-15
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2023-11-16	2024-11-15
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2023-11-16	2024-11-15
POSITIONAL CONTROLLER	SKET	PCI-GPIB	1	/	2024-11-15
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2023-11-16	2024-11-15
EMI TEST RECEIVER	ROHDE&SCHWA RZ	ESCI7	101032	2023-11-16	2024-11-15
SIGNAL ANALYZER	ROHDE&SCHWA RZ	FSQ40	100010	2023-11-16	2024-11-15
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	/	/
Broadband Preamplilifier	SCHWARZBECK	BBV9718D	00008	2023-11-16	2024-11-15
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2023-11-16	2024-11-15
EZ_EMC	Frad	FA-03A2 RE+	/	/	/
POSITIONAL CONTROLLER	SKET	PCI-GPIB	1	/	1
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2023-11-16	2024-11-15

Undesirable emission limits (below 1GHz)							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	/	1		
Preamplifier	SCHWARZBECK	BBV9744	00246	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF1-SMASMAM-1 0m	21101566	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF1-SMASMAM-1 m	21101568	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2023-11-16	2024-11-15		
POSITIONAL CONTROLLER	SKET	PCI-GPIB	1	/	/		
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2023-11-16	2024-11-15		
EMI TEST RECEIVER	ROHDE&SCHWA RZ	ESCI7	101032	2023-11-16	2024-11-15		
SIGNAL ANALYZER	ROHDE&SCHWA RZ	FSQ40	100010	2023-11-16	2024-11-15		
POSITIONAL CONTROLLER	SKET	PCI-GPIB	1	/	/		
Broadband Preamplilifier	SCHWARZBECK	BBV9718D	00008	2023-11-16	2024-11-15		
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2023-11-16	2024-11-15		
EZ_EMC	Frad	FA-03A2 RE+	/	/	/		
POSITIONAL CONTROLLER	SKET	PCI-GPIB	1	1	1		

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Log periodic antenna SCHWARZBECK VULB 9168	01328	2021-11-28	2024-11-15
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Undesirable emission limits (above 1GHz)							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
Coaxial cable Multiflex 141	Schwarzbeck	N/SMA 0.5m	517386	/	1		
Preamplifier	SCHWARZBECK	BBV9744	00246	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF1-SMASMAM-1 0m	21101566	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF2-NMNM-10m	21101570	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF1-SMASMAM-1 m	21101568	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF2-NMNM-1m	21101576	2023-11-16	2024-11-15		
RE Cable	REBES Talent	UF2-NMNM-2.5m	21101573	2023-11-16	2024-11-15		
POSITIONAL CONTROLLER	SKET	PCI-GPIB	1	/	1		
Horn Antenna	SCHWARZBECK	BBHA9170	01157	2023-11-16	2024-11-15		
EMI TEST RECEIVER	ROHDE&SCHWA RZ	ESCI7	101032	2023-11-16	2024-11-15		
SIGNAL ANALYZER	ROHDE&SCHWA RZ	FSQ40	100010	2023-11-16	2024-11-15		
POSITIONAL CONTROLLER	SKET	PCI-GPIB	1	/	1		
Broadband Preamplilifier	SCHWARZBECK	BBV9718D	00008	2023-11-16	2024-11-15		
Horn Antenna	SCHWARZBECK	BBHA9120D	2597	2023-11-16	2024-11-15		
EZ_EMC	Frad	FA-03A2 RE+	/	/	/		
POSITIONAL CONTROLLER	SKET	PCI-GPIB	/	1	1		
Log periodic antenna	SCHWARZBECK	VULB 9168	01328	2023-11-16	2024-11-15		



4.2 Test Auxiliary Equipment

The EUT was tested as an independent device.

4.3 Test Modes

No.	Test Modes	Description
TM1	802.11a mode	Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11a modulation type. All data rates has been tested and found the data rate @ 6Mbps is the worst case. Only the data of worst case is recorded in the report.
TM2	802.11n mode	Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11n modulation type. All bandwidth and data rates has been tested and found the data rate @ MCS0 is the worst case. Only the data of worst case is recorded in the report.
TM3	802.11ac mode	Keep the EUT connect to AC power line and works in continuously transmitting mode with 802.11ac modulation type. Only the data of worst case is recorded in the report.
TM4	Normal Operating	Keep the EUT works in normal operating mode and connect to companion device



5 Evaluation Results (Evaluation)

5.1 Antenna requirement

	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a
Test Requirement:	permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

6 Radio Spectrum Matter Test Results (RF)

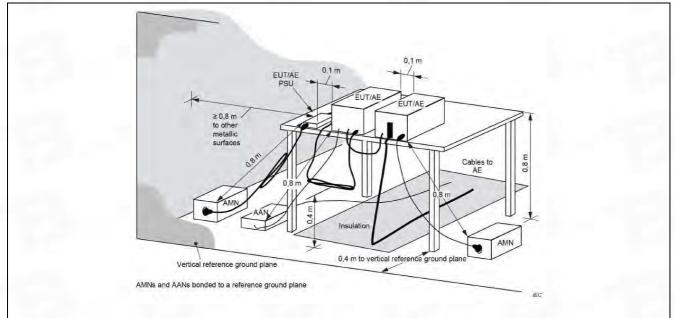
6.1 Conducted Emission at AC power line

Test Requirement:	47 CFR Part 15.207(a)					
Test Method:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices					
	Frequency of emission (MHz) Conducted limit (dBµV)		3μV)			
		Quasi-peak	Average			
Toot Limit:	0.15-0.5	66 to 56*	56 to 46*			
Test Limit:	0.5-5	56	46			
	5-30	60	50			
	*Decreases with the logarithm of t	he frequency.				

6.1.1 E.U.T. Operation:

Operating Environment:				
Temperature:	25.5 °C			
Humidity:	50.6 %	1.00		
Atmospheric Pressure:	1010 mbar			

6.1.2 Test Setup Diagram:



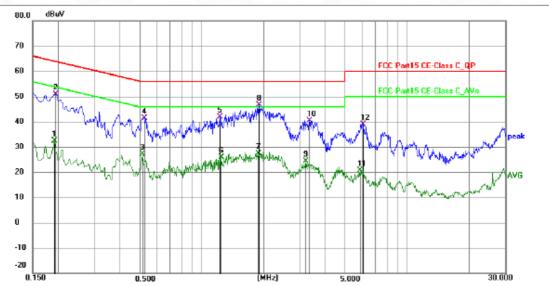
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6.1.3 Test Data:

TM1 / Line: Line / Band: U-NII 1 / BW: 20 / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1905	21.81	10.54	32.35	54.01	-21.66	AVG	Р	
2	0.1949	40.40	10.55	50.95	63.83	-12.88	QP	Ρ	
3	0.5144	16.62	10.59	27.21	46.00	-18.79	AVG	Р	
4	0.5234	30.91	10.59	41.50	56.00	-14.50	QP	Ρ	
5	1.2255	31.23	10.66	41.89	56.00	-14.11	QP	Ρ	
6	1.2480	15.31	10.66	25.97	46.00	-20.03	AVG	Ρ	
7	1.8914	16.79	10.68	27.47	46.00	-18.53	AVG	Р	
8 *	1.9050	36.07	10.68	46.75	56.00	-9.25	QP	Ρ	
9	3.2190	13.78	10.66	24.44	46.00	-21.56	AVG	Ρ	
10	3.3584	29.85	10.64	40.49	56.00	-15.51	QP	Ρ	
11	5.8875	9.87	10.77	20.64	50.00	-29.36	AVG	Р	
12	6.1170	27.99	10.77	38.76	60.00	-21.24	QP	Ρ	

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dBuV 80.0 70 #15 CE-Class C_QP FCC P 60 50 40 30 20 A∀G 10 0 -10 -20 30.000 0.150 0.500 (MHz) 5.000

TM1 / Line: Neutral	/ Deced. II NII 4	/ D\\/. OO	
I MIT / LINE: NEUTRAL	/ Bano [*] U-NII T	/ 600 20	/ (.H· I

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1949	19.73	10.55	30.28	53.83	-23.55	AVG	Р	
2 *	0.1995	41.06	10.56	51.62	63.63	-12.01	QP	Р	
3	0.2535	13.57	10.56	24.13	51.64	-27.51	AVG	Р	
4	0.2625	35.09	10.56	45.65	61.35	-15.70	QP	Р	
5	0.4964	29.90	10.57	40.47	56.06	-15.59	QP	Р	
6	0.5100	10.92	10.58	21.50	46.00	-24.50	AVG	Р	
7	0.8924	29.68	10.68	40.36	56.00	-15.64	QP	Р	
8	0.9510	10.27	10.67	20.94	46.00	-25.06	AVG	Р	
9	1.6350	33.30	10.67	43.97	56.00	-12.03	QP	Р	
10	1.6350	16.09	10.67	26.76	46.00	-19.24	AVG	Р	
11	1.9860	15.34	10.68	26.02	46.00	-19.98	AVG	Р	
12	2.0670	31.97	10.68	42.65	56.00	-13.35	QP	Ρ	

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6.2 Duty Cycle

Test Requirement:	All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, x, and maximum-power transmission duration, T, are required for each tested mode of operation.
Test Method:	ANSI C63.10-2013 section 12.2 (b)
Test Limit:	No limits, only for report use.
Procedure:	 i) Set the center frequency of the instrument to the center frequency of the transmission. ii) Set RBW >= EBW if possible; otherwise, set RBW to the largest available value. iii) Set VBW >= RBW. iv) Set detector = peak. v) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T, where T is defined in item a1) of 12.2, and the number of sweep points across duration T exceeds 100.

6.2.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	50.6 %
Atmospheric Pressure:	1010 mbar

6.2.2 Test Data:

Please Refer to Appendix for Details.



6.3 Maximum conducted output power

Test Requirement: 47 CFR Part 15.407(a)(1)(i) 47 CFR Part 15.407(a)(1)(ii) 47 CFR Part 15.407(a)(2) 47 CFR Part 15.407(a)(2) 47 CFR Part 15.407(a)(2) 47 CFR Part 15.407(a)(2)(i) Test Method: ANSI C63.10-2013, section 12.3 For an outdoor access point operating in the band 5.15-5.25 GHz, the maxim conducted output power over the frequency band of operation shall not excee W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional agin of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not ex 125 mW (21 dBm). For an indoor access point operating in the band 5.15-5.25 GHz, the maximu conducted output power over the frequency band of operation shall not excee W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power over the frequency band of operation shall directional gain of the antenna exceeds 6 dBi. For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain gra exceed 1 W. Fixed point-to-point transmitters that employ a directional antenna gain gra than 23 dBi, a 1 dB reduction in maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain gra than 23 dBi, a 1 dB reduction in maximum conducted output power. For fixe	
Test Nethol 13.407(a)(2) 47 CFR Part 15.407(a)(3)(i) 47 CFR Part 15.407(a)(3)(i) Test Method: ANSI C63.10-2013, section 12.3 For an outdoor access point operating in the band 5.15-5.25 GHz, the maxim conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not ex 125 mW (21 dBm). For an indoor access point operating in the band 5.15-5.25 GHz, the maximu conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna so directional gain greater than 6 dBi. If transmitting antennas of directional gain greater than 6 dBi. For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed V provided the maximum conducted output power over the frequency band of operation and acceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain 23 dBi without any corresponding reduction in the maximum conducted outpu power. For fixed point-to-point transmitters that employ a directional antenna gain gre than 23 dBi, a 1 dB reduction is exceed 52 dBi. <td></td>	
Test Method: ANSI C63.10-2013, section 12.3 For an outdoor access point operating in the band 5.15-5.25 GHz, the maxim conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not ex 125 mW (21 dBm). For an indoor access point operating in the band 5.15-5.25 GHz, the maximuc conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi. For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point u-NII devices may employ antennas with directional gain 23 dBi without any corresponding reduction in the maximum conducted output power is requiree each 1 dB of antenna gain in excees 0 f23 dBi. Fixed, point-to-point operations, and multiple collocated transmitters transmitting same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems omnidirectional applications, and multiple collocated transmitters transmitting and index code d transmitters transmitting and precisionally installed, the installer, is responsible for ensurung that systems employin	
 For an outdoor access point operating in the band 5.15-5.25 GHz, the maxim conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not ex 125 mW (21 dBm). For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi. For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations, and multiple collocated transmitters transmitting same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250	
Test Limit:conducted output power over the frequency band of operation shall not exceed W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.For fixed point-to-point access points operating in the band 5.15-5.25 GHz, th maximum conducted output power over the frequency band of operation shall exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain gain gain greater than 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems omnidirectional applications, and multiple collocated transmitters transmitting same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided	ed 1 the
Test Limit:maximum conducted output power over the frequency band of operation shall exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain gree than 23 dBi, a 1 dB reduction in maximum conducted output power is required each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems omnidirectional applications, and multiple collocated transmitters transmitting same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided	ed 1
Test Limit:For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems omnidirectional applications, and multiple collocated transmitters transmitting same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided	not up to
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provide	d for s,
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.	ed the
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted of power over the frequency bands of operation shall not exceed the lesser of 25 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in mega If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.	50 hertz.

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	For the band 5.725-5.850 GHz, the maximum conducted output power over the
	frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the
	maximum conducted output power shall be reduced by the amount in dB that the
	directional gain of the antenna exceeds 6 dBi.
	However, fixed point-to-point U-NII devices operating in this band may employ
	transmitting antennas with directional gain greater than 6 dBi without any
	corresponding reduction in transmitter conducted power. Fixed, point-to-point
	operations exclude the use of point-to-multipoint systems, omnidirectional
	applications, and multiple collocated transmitters transmitting the same
	information. The operator of the U-NII device, or if the equipment is professionally
	installed, the installer, is responsible for ensuring that systems employing high gain
	directional antennas are used exclusively for fixed, point-to-point operations.
	Method SA-1
	a) Set span to encompass the entire 26 dB EBW or 99% OBW of the signal.
	b) Set RBW = 1 MHz.
	c) Set VBW >= 3 MHz.
	d) Number of points in sweep >= [2 × span / RBW]. (This gives bin-to-bin spacing
	<= RBW / 2, so
	that narrowband signals are not lost between frequency bins.)
	e) Sweep time = auto.
	f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample
	detector mode.
	g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to
	enable triggering
	only on full power pulses. The transmitter shall operate at maximum power control
Procedure:	level for the
Procedure.	entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFF intervals) or
	at duty cycle >= 98%, and if each transmission is entirely at the maximum power
	control level.
	then the trigger shall be set to "free run."
	h) Trace average at least 100 traces in power averaging (rms) mode.
	i) Compute power by integrating the spectrum across the 26 dB EBW or 99% OBW
	of the signal
	using the instrument's band power measurement function, with band limits set
	equal to the
	EBW or OBW band edges. If the instrument does not have a band power function,
	then sum the
	spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB
	EBW or 99%
	OBW of the spectrum.
631 FUT Operati	on:

6.3.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	50.6 %
Atmospheric Pressure:	1010 mbar

6.3.2 Test Data:

Please Refer to Appendix for Details.



6.4 Power spectral density

0.4 I Ower spectral	
	47 CFR Part 15.407(a)(1)(i)
	47 CFR Part 15.407(a)(1)(ii)
Test Requirement:	47 CFR Part 15.407(a)(1)(iii)
	47 CFR Part 15.407(a)(1)(iv)
	47 CFR Part 15.407(a)(2)
	47 CFR Part 15.407(a)(3)(i)
Test Method:	ANSI C63.10-2013, section 12.5
	For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.
	Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.
Test Limit:	Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
	For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the
	maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
	For the band 5.725-5.850 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the
	directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter

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	conducted power.
	Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
	a) Create an average power spectrum for the EUT operating mode being tested by
	following the instructions in 12.3.2 for measuring maximum conducted output power using a spectrum
	analyzer or EMI receiver; that is, select the appropriate test method (SA-1, SA-2, SA-3, or their
	respective alternatives) and apply it up to, but not including, the step labeled, "Compute
	power" (This procedure is required even if the maximum conducted output power
	measurement was performed using the power meter method PM.) b) Use the peak search function on the instrument to find the peak of the spectrum. c) Make the following adjustments to the peak value of the spectrum, if applicable: 1) If method SA-2 or SA-2A was used, then add [10 log (1 / D)], where D is the duty
	cycle, to the peak of the spectrum. 2) If method SA-3A was used and the linear mode was used in step h) of 12.3.2.7, add
Procedure:	1 dB to the final result to compensate for the difference between linear averaging and
	power averaging.
	 d) The result is the PPSD. e) The procedure in item a) through item c) requires the use of 1 MHz resolution bandwidth to
	satisfy the 1 MHz measurement bandwidth specified by some regulatory authorities.This
	requirement also permits use of resolution bandwidths less than 1 MHz "provided that the
	measured power is integrated to show the total power over the measurement bandwidth" (i.e.,
	1 MHz). If measurements are performed using a reduced resolution bandwidth and integrated
	over 1 MHz bandwidth, the following adjustments to the procedures apply: 1) Set RBW $\geq 1 / T$, where T is defined in 12.2 a).
	 2) Set VBW >= [3 × RBW]. 3) Care shall be taken such that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

6.4.1 E.U.T. Operation:

Operating Environment:			
Temperature:	25.5 °C		
Humidity:	50.6 %		
Atmospheric Pressure:	1010 mbar		

6.4.2 Test Data:

Please Refer to Appendix for Details.

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6.5 Emission bandwidth and occupied bandwidth

Test Requirement:	U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
	U-NII 3, U-NII 4: 47 CFR Part 15.407(e)
Test Method:	ANSI C63.10-2013, section 6.9.3 & 12.4
	KDB 789033 D02, Clause C.2 U-NII 1, U-NII 2A, U-NII 2C: No limits, only for report use.
Test Limit:	U-NII 3, U-NII 4: Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the
	minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.
	Emission bandwidth:
	a) Set RBW = approximately 1% of the emission bandwidth.
	b) Set the VBW > RBW.
	c) Detector = peak.
	d) Trace mode = max hold.
	e) Measure the maximum width of the emission that is 26 dB down from the peak
	of the emission.
	Compare this with the RBW setting of the instrument. Readjust RBW and repeat
	measurement
	as needed until the RBW/EBW ratio is approximately 1%.
	Occupied bandwidth: a) The instrument center frequency is set to the nominal EUT channel center
	frequency. The
	frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 time
	the OBW.
	b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of
	the OBW,
	and VBW shall be approximately three times the RBW, unless otherwise specified
	by the
	applicable requirement.
	c) Set the reference level of the instrument as required, keeping the signal from
Dresedure	exceeding the
Procedure:	maximum input mixer level for linear operation. In general, the peak of the spectra envelope
	shall be more than [10 log (OBW/RBW)] below the reference level. Specific
	guidance is given
	in 4.1.5.2.
	d) Step a) through step c) might require iteration to adjust within the specified
	range.
	e) Video averaging is not permitted. Where practical, a sample detection and single
	sweep mode
	shall be used. Otherwise, peak detection and max hold mode (until the trace
	stabilizes) shall be
	used.
	f) Use the 99% power bandwidth function of the instrument (if available) and report the measured
	bandwidth.
	g) If the instrument does not have a 99% power bandwidth function, then the trace
	data points are
	recovered and directly summed in linear power terms. The recovered amplitude
	data points,
	beginning at the lowest frequency, are placed in a running sum until 0.5% of the
	total is reached;
	that frequency is recorded as the lower frequency. The process is repeated until
	99.5% of the
	total is reached; that frequency is recorded as the upper frequency. The 99%
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power bandwidth is
the difference between these two frequencies.
h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument
display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may
be reported in addition to the plot(s).
6 dB emission bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 >= RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the
frequencies associated with the two outermost amplitude points (upper and lower
frequencies) that are attenuated by 6 dB relative to the maximum level measured
in the fundamental emission.

6.5.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	50.6 %
Atmospheric Pressure:	1010 mbar

6.5.2 Test Data:

Please Refer to Appendix for Details.



6.6 Band edge emissions (Radiated)

	47 CFR Part 15.407(b)										
Test Requirement:		47 CFR Part 15.407(b)(2)									
rest ivequirement.	47 CFR Part 15.407(b)(4)										
	47 CFR Part 15.407(b)	47 CFR Part 15.407(b)(10)									
Test Method:	ANSI C63.10-2013, se	ction 12.7.4, 12.7.5, 12	.7.6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
	For transmitters operat	For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the									
	5.15-5.35 GHz band sl	nall not exceed an e.i.r.	p. of −27 dBm/M	1Hz.							
	For transmitters operat	ting in the 5.25-5.35 GH	Iz band: All emis	ssions outside of the							
	5.15-5.35 GHz band sl	5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.									
	For transmitters operat										
	All emissions shall be l										
		e increasing linearly to									
		and from 25 MHz above									
		.6 dBm/MHz at 5 MHz									
	from 5 MHz above or b		creasing linearly	to a level of 27							
	dBm/MHz at the band	•									
	MHz	MHz	MHz	GHz							
	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15							
	¹ 0.495-0.505	16.69475-16.69525		5.35-5.46							
	2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75							
	4.125-4.128	25.5-25.67	1300-1427								
	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2							
	4.20725-4.20775	73-74.6	1645.5-1646.	9.3-9.5							
			5								
	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7							
	6.26775-6.26825	108-121.94	1718.8-1722.	13.25-13.4							
Test Limit:			2								
IESt LIIIII.	6.31175-6.31225	123-138	2200-2300	14.47-14.5							
	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2							
	8.362-8.366	156.52475-156.525	2483.5-2500	17.7-21.4							
		25									
	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12							
	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0							
	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8							
	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5							
	12.57675-12.57725	322-335.4	3600-4400	(²)							
	13.36-13.41										
	1										
	¹ Until February 1, 1999), this restricted band s	hall be 0.490-0.5	510 MHz.							
	241										
	² Above 38.6										
	The field strength of or	nicciona annoaring with	in these frequer	ov bondo oboll not							
		nissions appearing with									
	exceed the limits show										
		the limits in § 15.209sh									
	measurement instrume										
		with the emission limit									
	based on the average		emissions. The	provisions in §							
	15.35apply to these mo	easurements.									
	Event en anotide du la	and any in this such a set	the employing f	and an interational							
	Except as provided els	Except as provided elsewhere in this subpart, the emissions from an intentional									

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Test Report Number: BTF240531R01004



	radiator shall not exceed t	he field strength levels spec	ified in the following table:
	Frequency (MHz)	Field strength	Measurement
		(microvolts/meter)	distance
		(111010101010)	(meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	
		200 **	3
	216-960 Above 000		3
	Above 960	500	3
	Above 1GHz:		
	above the ground at a 3 m degrees to determine the b. The EUT was set 3 met was mounted on the top o	position of the highest radiat ers away from the interferer f a variable-height antenna	r. The table was rotated 360 tion. nce-receiving antenna, which tower.
	determine the maximum v polarizations of the antenn d. For each suspected em the antenna was tuned to of below 30MHz, the anten was turned from 0 degree e. The test-receiver system Bandwidth with Maximum	alue of the field strength. Bo na are set to make the meas ission, the EUT was arrange heights from 1 meter to 4 m nna was tuned to heights 1 r s to 360 degrees to find the n was set to Peak Detect Fu	surement. ed to its worst case and then eters (for the test frequency neter) and the rotatable table maximum reading. unction and Specified
Procedure:	specified, then testing courreported. Otherwise the end	ld be stopped and the peak missions that did not have 1	values of the EUT would be
		est channel, the middle char	nnel, the Highest channel.
		nents are performed in X, Y,	
		und the X axis positioning w	
		es until all frequencies meas	
		ble Loss+ Antenna Factor- I	Preamn Factor
		GHz, the disturbance above	
		lots are the highest emission	
		nts had been displayed. The	
		or which are attenuated more	
		or which are alternuated more	
	need not be reported.	for the man of the second second	In the field star with the tr
		, for frequencies above 1G	•
			strength of any emission shall
			cified above by more than 20
			ns whose peak level is lower
		y the peak measurement is	
		18GHz were very low and the	
		nd when testing, so only the	above harmonics had been
	displayed.		
661 EUT Operation:			

6.6.1 E.U.T. Operation:

Operating Environment:					
Temperature:	25.5 °C				
Humidity:	50.6 %				

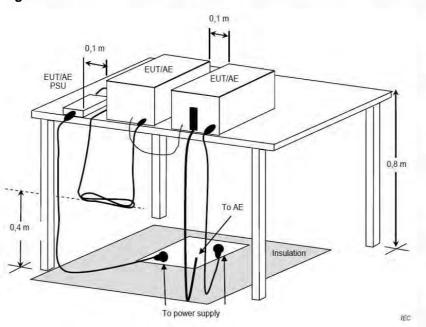
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Atmospheric Pressure: 1010 mbar

6.6.2 Test Setup Diagram:



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6.6.3 Test Data:

Note: All the mode have been tested, and only the worst mode 802.11n(20) are in the report

		11	MIL 4 9 2 A 20M	5400MU- 1	Jarizantal			
<u> </u>		1	NII-1&2A 20M		1	· · ·	t	1
No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		
1	5117.735	44.44	5.28	49.72	68.20	-18.48	peak	Р
2	5150.000	45.38	5.33	50.71	68.20	-17.49	peak	Р
		l	JNII-1&2A 20N	1_5180MHz	Vertical			
	Frequency	Reading	Factor	Level	Limit	Margin	Detector	DIE
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	P/F
1	5092.735	43.19	5.35	48.54	68.20	-19.66	peak	Р
2	5150.000	45.86	5.33	51.19	68.20	-17.01	peak	Р
	-	U	NII-1&2A 20M	5320MHz H	Iorizontal		1	
	Frequency	Reading	Factor	Level	Limit	Margin		
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	P/F
1	5350.000	44.94	5.45	50.39	68.20	-17.81	peak	Р
2	5460.000	46.30	5.52	51.82	68.20	-16.38	peak	P
2	5400.000					-10.30	реак	
r		r	JNII-1&2A 20N			1	1	T
No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB))	
1	5350.000	45.39	5.45	50.84	68.20	-17.36	peak	Р
2	5460.000	47.42	5.52	52.94	68.20	-15.26	peak	Р
			UNII-3 20M_5	745MHz_Ho	rizontal			
No	Frequency	Reading	Factor	Level	Limit	Margin	Detector	D/E
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
No.		Ŭ				-	Detector peak	P/F P
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		
1	(MHz) 5650.000	(dBuV) 44.31	(dB/m) 5.63	(dBuV/m) 49.94	(dBuV/m) 68.20	(dB) -18.26	peak	Р
1	(MHz) 5650.000 5700.000	(dBuV) 44.31 44.77	(dB/m) 5.63 5.70 5.66	(dBuV/m) 49.94 50.47 51.17	(dBuV/m) 68.20 105.20 110.80	(dB) -18.26 -54.73	peak peak	P P
1 2 3	(MHz) 5650.000 5700.000 5720.000	(dBuV) 44.31 44.77 45.51	(dB/m) 5.63 5.70 5.66 UNII-3 20M_	(dBuV/m) 49.94 50.47 51.17 5745MHz_V	(dBuV/m) 68.20 105.20 110.80 ertical	(dB) -18.26 -54.73 -59.63	peak peak peak	P P P
1	(MHz) 5650.000 5700.000 5720.000 Frequency	(dBuV) 44.31 44.77 45.51 Reading	(dB/m) 5.63 5.70 5.66 UNII-3 20M_ Factor	(dBuV/m) 49.94 50.47 51.17 5745MHz_V Level	(dBuV/m) 68.20 105.20 110.80 ertical Limit	(dB) -18.26 -54.73 -59.63 Margin	peak peak	P P
1 2 3	(MHz) 5650.000 5700.000 5720.000 Frequency (MHz)	(dBuV) 44.31 44.77 45.51 Reading (dBuV)	(dB/m) 5.63 5.70 5.66 UNII-3 20M_ Factor (dB/m)	(dBuV/m) 49.94 50.47 51.17 5745MHz_V Level (dBuV/m)	(dBuV/m) 68.20 105.20 110.80 ertical Limit (dBuV/m)	(dB) -18.26 -54.73 -59.63 Margin (dB)	peak peak peak Detector	P P P
1 2 3	(MHz) 5650.000 5700.000 5720.000 Frequency	(dBuV) 44.31 44.77 45.51 Reading	(dB/m) 5.63 5.70 5.66 UNII-3 20M_ Factor	(dBuV/m) 49.94 50.47 51.17 5745MHz_V Level	(dBuV/m) 68.20 105.20 110.80 ertical Limit	(dB) -18.26 -54.73 -59.63 Margin	peak peak peak	P P P

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	UNII-3 20M_5825MHz_Horizontal												
	No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F				
	NO.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	F/F	1.000			
	1	5855.000	46.24	5.73	51.97	110.80	-58.83	peak	Р				
1000	2	5875.000	45.48	5.74	51.22	105.20	-53.98	peak	Р				
	3	5925.000	44.93	5.66	50.59	68.20	-17.61	peak	Р				
				UNII-3 20M_58	825MHz_Ho	rizontal							
	No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F				
	NO.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Delector	F/F				
	1	5855.000	46.52	5.73	52.25	110.80	-58.55	peak	Ρ				
	2	5875.000	46.37	5.74	52.11	105.20	-53.09	peak	Р				
	3	5925.000	45.44	5.66	51.10	68.20	-17.10	peak	Ρ				



Undesirable emission limits (below 1GHz) 6.7

Test Requirement:	47 CFR Part 15.407(b)(9)					
Test Method:	ANSI C63.10-2013, section	on 12.7.4, 12.7.5, 12.7.6				
	Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.					
	Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table: Frequency (MHz) Field strength Measurement					
		(microvolts/meter)	distance			
Test Limit:	the second se	()	(meters)			
	0.009-0.490	2400/F(kHz)	300			
	0.490-1.705	24000/F(kHz)	30			
	1.705-30.0	30	30			
	30-88	100 **	3			
	88-216	150 **	3			
	216-960	200 **	3			
	Above 960	500	3			
Procedure:	above the ground at a 3 m degrees to determine the b. The EUT was set 3 or 1 which was mounted on th c. The antenna height is w determine the maximum w polarizations of the antenna d. For each suspected em the antenna was tuned to of below 30MHz, the ante was turned from 0 degree e. The test-receiver system Bandwidth with Maximum f. If the emission level of t specified, then testing cou- reported. Otherwise the e re-tested one by one usin data sheet. g. Test the EUT in the low h. The radiation measurer Transmitting mode, and for i. Repeat above procedure Remark: 1. Level= Read Level+ Ca 2. Scan from 9kHz to 30M points marked on above p testing, so only above poi emissions from the radiato need not be reported. 3. The disturbance below	position of the highest radiat 0 meters away from the inte- e top of a variable-height and aried from one meter to four value of the field strength. Bo na are set to make the meas hission, the EUT was arrange heights from 1 meter to 4 me nna was tuned to heights 1 m s to 360 degrees to find the m was set to Peak Detect Fu Hold Mode. he EUT in peak mode was 1 Id be stopped and the peak missions that did not have 10 g quasi-peak method as spe est channel, the middle char nents are performed in X, Y, bund the X axis positioning w es until all frequencies meas able Loss+ Antenna Factor- Fi IHz, the disturbance below 3 blots are the highest emission nts had been displayed. The private attenuated more	er. The table was rotated 360 ion. Inference-receiving antenna, tenna tower. Inters above the ground to oth horizontal and vertical urement. The to its worst case and then eters (for the test frequency neter) and the rotatable table maximum reading. Inction and Specified OdB lower than the limit values of the EUT would be OdB margin would be cified and then reported in a annel, the Highest channel. Z axis positioning for which it is the worst case. Ured was complete. Preamp Factor OMHz was very low. The na could be found when amplitude of spurious than 20dB below the limit harmonics were the highest			

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B

a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters
above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360
degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which
was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to
determine the maximum value of the field strength. Both horizontal and vertical
polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then
the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency
of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table
was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified
Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit
specified, then testing could be stopped and the peak values of the EUT would be
reported. Otherwise the emissions that did not have 10dB margin would be
re-tested one by one using peak or average method as specified and then reported
in a data sheet.
g. Test the EUT in the lowest channel, the middle channel, the Highest channel. h. The radiation measurements are performed in X, Y, Z axis positioning for
Transmitting mode, and found the X axis positioning which it is the worst case.
i. Repeat above procedures until all frequencies measured was complete.
Remark:
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The
points marked on above plots are the highest emissions could be found when
testing, so only above points had been displayed. The amplitude of spurious
emissions from the radiator which are attenuated more than 20dB below the limit
need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits
are based on average limits. However, the peak field strength of any emission shall
not exceed the maximum permitted average limits specified above by more than 20
dB under any condition of modulation. For the emissions whose peak level is lower
than the average limit, only the peak measurement is shown in the report.
4. The disturbance above 18GHz were very low and the harmonics were the
highest point could be found when testing, so only the above harmonics had been
displayed.

6.7.1 E.U.T. Operation:

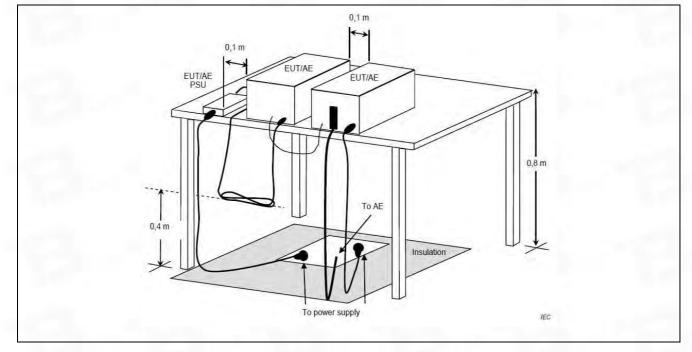
Operating Environment:	
Temperature:	25.5 °C
Humidity:	50.6 %
Atmospheric Pressure:	1010 mbar

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6.7.2 Test Setup Diagram:

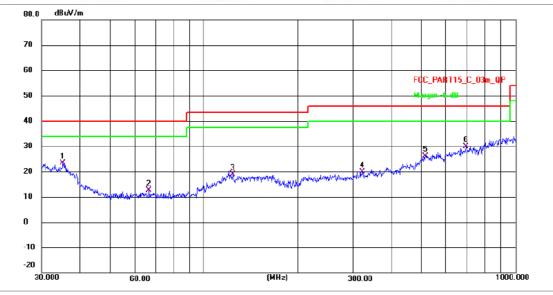


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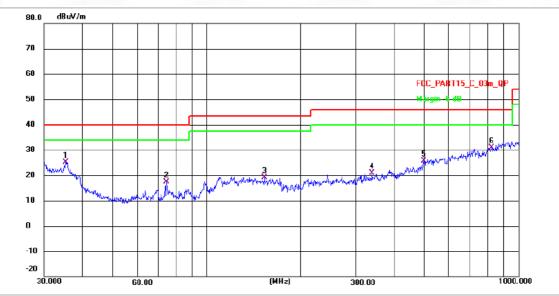
6.7.3 Test Data:

Note: All the mode have been tested, and only the worst mode are in the report TM1 / Polarization: Horizontal / Band: U-NII 1 / BW: 20 / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	35.1894	27.61	-4.31	23.30	40.00	-16.70	QP	Р
2	66.3825	16.82	-4.28	12.54	40.00	-27.46	QP	Р
3	123.2655	41.23	-22.25	18.98	43.50	-24.52	QP	Р
4	322.7540	40.34	-20.44	19.90	46.00	-26.10	QP	Р
5	514.5344	45.03	-18.89	26.14	46.00	-19.86	QP	Р
6 *	694.4174	47.55	-17.65	29.90	46.00	-16.10	QP	Р





TM1 / Polarization: Vertical / Band: U-NII 1 / BW: 20 / CH: L

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	35.3130	29.49	-4.30	25.19	40.00	-14.81	QP	Р
2	74.2652	21.75	-4.28	17.47	40.00	-22.53	QP	Р
3	152.9320	33.54	-14.46	19.08	43.50	-24.42	QP	Р
4	338. 4 001	33.64	-12.83	20.81	46.00	-25.19	QP	Р
5	497.6765	37.68	-12.14	25.54	46.00	-20.46	QP	Р
6	820.2710	48.36	-17.53	30.83	46.00	-15.17	QP	Р



6.8 Undesirable emission limits (above 1GHz)

0.0 Ondeshable		·				
	47 CFR Part 15.407(b)					
Test Deguirement	47 CFR Part 15.407(b)	47 CFR Part 15.407(b)(2)				
Test Requirement:	47 CFR Part 15.407(b)					
	47 CFR Part 15.407(b)	(10)				
Test Method:		ANSI C63.10-2013, section 12.7.4, 12.7.5, 12.7.6				
	For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of					
		5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the				
	5.15-5.35 GHZ band si	nall not exceed an e.i.r.	p. or -27 dbm/w	INZ.		
		in a state in the 5705		L.		
		For transmitters operating solely in the 5.725-5.850 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27				
	from 5 MHz above or b					
	dBm/MHz at the band edge.					
	MHz	MHz	MHz	GHz		
	0.090-0.110	16.42-16.423	399.9-410	4.5-5.15		
	¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46		
	2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75		
	4.125-4.128	25.5-25.67	1300-1427	8.025-8.5		
	4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2		
	4.20725-4.20775	73-74.6	1645.5-1646.	9.3-9.5		
	4.20120 4.20110	1014.0	5	0.0 0.0		
	6.215-6.218	74.8-75.2	1660-1710	10.6-12.7		
	6.26775-6.26825	108-121.94	1718.8-1722.	13.25-13.4		
	0.20775-0.20025	106-121.94	2	13.23-13.4		
	6 21175 6 21225	102 120	2200-2300	14 47 14 5		
Test Limit:	6.31175-6.31225	123-138		14.47-14.5		
	8.291-8.294	149.9-150.05	2310-2390	15.35-16.2		
	8.362-8.366	156.52475-156.525	2483.5-2500	17.7-21.4		
	0.07005.0.00075	25	0000 0000	00.04.00.40		
	8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12		
	8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0		
	12.29-12.293	167.72-173.2	3332-3339	31.2-31.8		
	12.51975-12.52025	240-285	3345.8-3358	36.43-36.5		
	12.57675-12.57725	322-335.4	3600-4400	(²)		
	13.36-13.41					
	¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.					
	² Above 38.6	² Above 38.6				
	The field strength of er	nissions appearing with	in these frequer	ncy bands shall not		
	exceed the limits show	n in § 15.209. At freque	encies equal to c	or less than 1000		
	MHz, compliance with	MHz, compliance with the limits in § 15.209shall be demonstrated using				
		measurement instrumentation employing a CISPR quasi-peak detector. Above				
		1000 MHz, compliance with the emission limits in § 15.209shall be demonstrated based on the average value of the measured emissions. The provisions in §				
	15.35apply to these me					
	i ciccappi i cicco m					
	Except as provided els	Except as provided elsewhere in this subpart, the emissions from an intentional				
		ed the field strength lev				
				Measurement		
	Frequency (MHz)	Field strength		weasurement		

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Test Report Number: BTF240531R01004



		(microvolts/meter)	distance
			(meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
	Above 1GHz:	500	5
Procedure:	 above the ground at a degrees to determine to b. The EUT was set 3 was mounted on the to c. The antenna height determine the maximu polarizations of the and d. For each suspected the antenna was turned from 0 deg e. The test-receiver system and width with Maxim f. If the emission level of specified, then testing reported. Otherwise the re-tested one by one u in a data sheet. g. Test the EUT in the h. The radiation measures the emark: 1. Level= Read Level+ 2. Scan from 18GHz to points marked on above testing, so only above emissions from the radiation the average limit, 4. The disturbance above the testing the radiation the radiati	e EUT was placed on the top of 3 meter fully-anechoic chamber he position of the highest radiat meters away from the interferen op of a variable-height antenna to is varied from one meter to four m value of the field strength. Bo- tenna are set to make the measu- emission, the EUT was arranged to heights from 1 meter to 4 meanters antenna was tuned to heights 1 m rees to 360 degrees to find the re- stem was set to Peak Detect Fu- um Hold Mode. of the EUT in peak mode was 10 could be stopped and the peak re- e emissions that did not have 10 sing peak or average method as lowest channel, the middle cham- urements are performed in X, Y, d found the X axis positioning w dures until all frequencies measu- cable Loss+ Antenna Factor- Fo- 40GHz, the disturbance above re plots are the highest emission points had been displayed. The liator which are attenuated more stion, for frequencies above 1GH limits. However, the peak field si- um permitted average limits speed n of modulation. For the emission only the peak measurement is sponents and the stating, so only the found when testing, so only the	 The table was rotated 360 ion. ce-receiving antenna, which ower. meters above the ground to th horizontal and vertical urement. ed to its worst case and then eters (for the test frequency neter) and the rotatable table maximum reading. nction and Specified OdB lower than the limit values of the EUT would be 0dB margin would be specified and then reported axis positioning for hich it is the worst case. ured was complete. Preamp Factor 18GHz was very low. The sould be found when amplitude of spurious e than 20dB below the limit tz, the field strength limits trength of any emission shall cified above by more than 20 ns whose peak level is lower shown in the report.

6.8.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	50.6 %
Atmospheric Pressure:	1010 mbar

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6.8.2 Test Data:

Not:All of the mode had be tested, only the worse mode of 802.11a are show in the report:

1			UNII-1_2	0M_5180MHz_	Horizontal		1	1			
Ne	Frequency	Reading	Factor	Level	Limit	Margin	Detector	D/F			
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	P/F			
1	10360.000	82.92	-45.12	37.80	74.00	-36.20	peak	Р			
2	15540.000	83.81	-42.88	40.93	74.00	-33.07	peak	Р			
UNII-1_20M_5180MHz_Vertical											
	Frequency	Reading	Factor	Level	Limit	Margin					
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	P/F			
1	10360.000	81.06	-45.18	35.88	74.00	-38.12	peak	Р			
2	15540.000	81.07	-42.94	38.13	74.00	-35.87	peak	Р			
L		ı l	JNII-1_20I	M_5200MHz_H	orizontal		-	1			
	Frequency	Reading	Factor	Level	Limit	Margin					
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	P/F			
1	10400.000	86.38	-45.18	41.20	74.00	-32.80	peak	Р			
2	15600.000	87.27	-42.94	44.33	74.00	-29.67	peak	Р			
•			UNII-1_2	0M_5200MHz_	Vertical		1	•			
No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F			
INO.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		F/F			
1	10400.000	84.62	-45.18	39.44	74.00	-34.56	peak	Р			
2	15600.000	84.63	-42.94	41.69	74.00	-32.31	peak	Р			
1		l	JNII-1_20I	M_5240MHz_H	orizontal	I	I	1			
No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F			
NO.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	17			
1	10460.000	87.36	-45.07	42.29	74.00	-31.71	peak	Р			
2	15690.000	88.25	-42.83	45.42	74.00	-28.58	peak	Р			
	I		UNII-1_2	0M_5240MHz_	Vertical		I				
No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F			
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	200000	• •			
1	10460.000	85.54	-45.07	40.47	74.00	-33.53	peak	Р			
2	15690.000	85.55	-42.83	42.72	74.00	-31.28	peak	Р			
	1	1	UNII-3_20	DM_5745MHz_	Horizontal		ł				
No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F			
NO.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	171			
1	11490.000	84.32	-44.70	39.62	74.00	-34.38	peak	Р			
2	17235.000	83.28	-40.61	42.67	74.00	-31.33	peak	Р			

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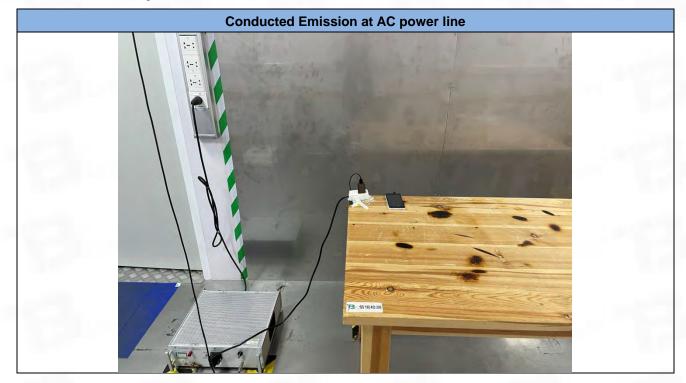


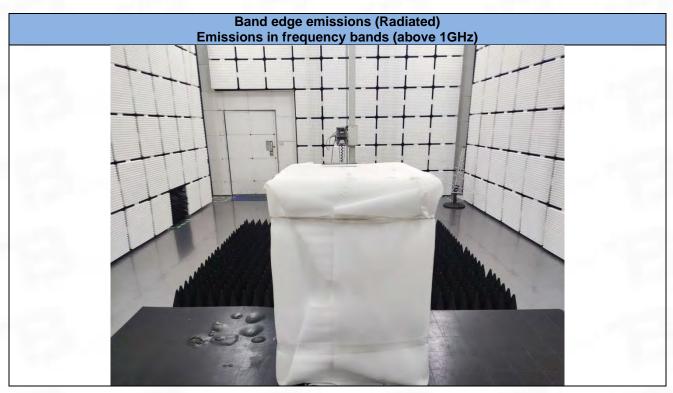
1		I	UNII-3_	20M_5745MHz	Vertical	I	1		P
No.	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F	
NO.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Delector	F/F	
1	11490.000	80.35	-44.70	35.65	74.00	-38.35	peak	Р	
2	17235.000	78.88	-40.61	38.27	74.00	-35.73	peak	Р	
		l	JNII-3_20	M_5785MHz_H	orizontal				
	Frequency	Reading	Factor	Level	Limit	Margin		DIE	
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	P/F	
1	11570.000	85.28	-44.64	40.64	74.00	-33.36	peak	Р	
2	17355.000	84.24	-40.55	43.69	74.00	-30.31	peak	Р	
	•	•	UNII-3_2	0M_5785MHz_	Vertical	•	•		
	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F	/F
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector		
1	11570.000	81.77	-44.64	37.13	74.00	-36.87	peak	Р	
2	17355.000	80.30	-40.55	39.75	74.00	-34.25	peak	Р	
		, l	JNII-3_20	M_5825MHz_H	orizontal				
Nie	Frequency	Reading	Factor	Level	Limit	Margin	Detector	DIE	
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	P/F	
1	11650.000	85.87	-44.59	41.28	74.00	-32.72	peak	Р	
2	17475.000	84.83	-40.50	44.33	74.00	-29.67	peak	Р	
	•		UNII-3_2	0M_5825MHz_	Vertical				
No	Frequency	Reading	Factor	Level	Limit	Margin	Detector	P/F	
No.	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	F/F	
1	11650.000	82.25	-44.59	37.66	74.00	-36.34	peak	Р	
2	17475.000	80.78	-40.50	40.28	74.00	-33.72	peak	Р	

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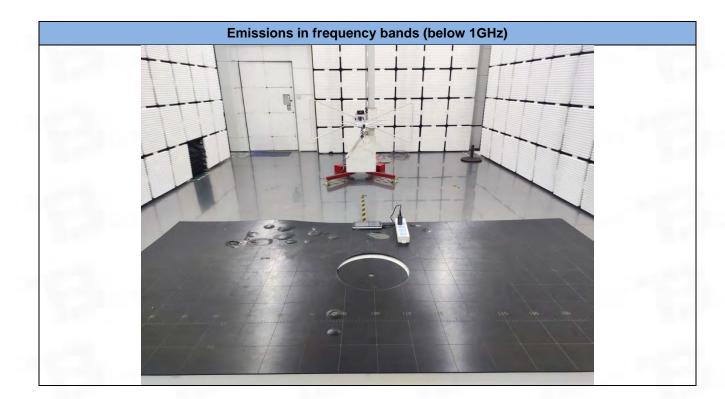
7 Test Setup Photos





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Test Report Number: BTF240531R01004



8 EUT Constructional Details (EUT Photos)

Please refer to the test report No. BTF240531R01001

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Test Report Number: BTF240531R01004

Appendix

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1. Duty Cycle

1.1 Ant1

1.1.1 Test Result

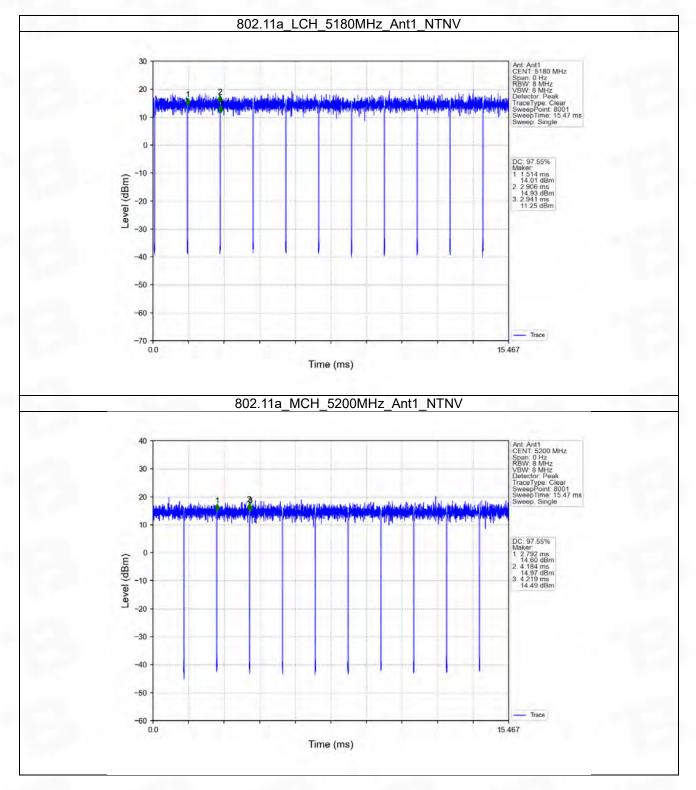
					Ant1		
Mode	ΤX	Frequency	T_on	Period	Duty Cycle	Duty Cycle	Max. DC
wode	Туре	(MHz)	(ms)	(ms)	(%)	Correction Factor (dB)	Variation (%)
		5180	1.392	1.427	97.55	0.11	0.00
		5200	1.392	1.427	97.55	0.11	0.14
802.11a	SISO	5240	1.392	1.427	97.55	0.11	0.14
002.11a	3130	5745	1.392	1.427	97.55	0.11	0.14
		5785	1.392	1.427	97.55	0.11	0.14
		5825	1.392	1.427	97.55	0.11	0.14
		5180	1.301	1.337	97.31	0.12	0.13
		5200	1.301	1.335	97.45	0.11	0.00
802.11n	SISO	5240	1.301	1.336	97.38	0.12	0.00
(HT20)		5745	1.302	1.336	97.46	0.11	0.00
		5785	1.300	1.336	97.31	0.12	0.13
		5825	1.302	1.338	97.31	0.12	0.13
1000	SISO	5190	1.392	1.427	97.55	0.11	0.14
802.11n		5230	1.392	1.426	97.62	0.10	0.00
(HT40)		5755	0.649	0.683	95.02	0.22	0.14
		5795	0.649	0.683	95.02	0.22	0.14
1.00		5180	1.299	1.335	97.30	0.12	0.13
		5200	1.301	1.337	97.31	0.12	0.13
802.11ac	SISO	5240	1.299	1.335	97.30	0.12	0.13
(VHT20)		5745	1.301	1.336	97.38	0.12	0.00
		5785	1.301	1.337	97.31	0.12	0.13
		5825	1.301	1.337	97.31	0.12	0.13
		5190	0.648	0.683	94.88	0.23	0.14
802.11ac	SISO	5230	0.649	0.683	95.02	0.22	0.14
(VHT40)	3130	5755	0.649	0.684	94.88	0.23	0.13
		5795	0.649	0.683	95.02	0.22	0.13

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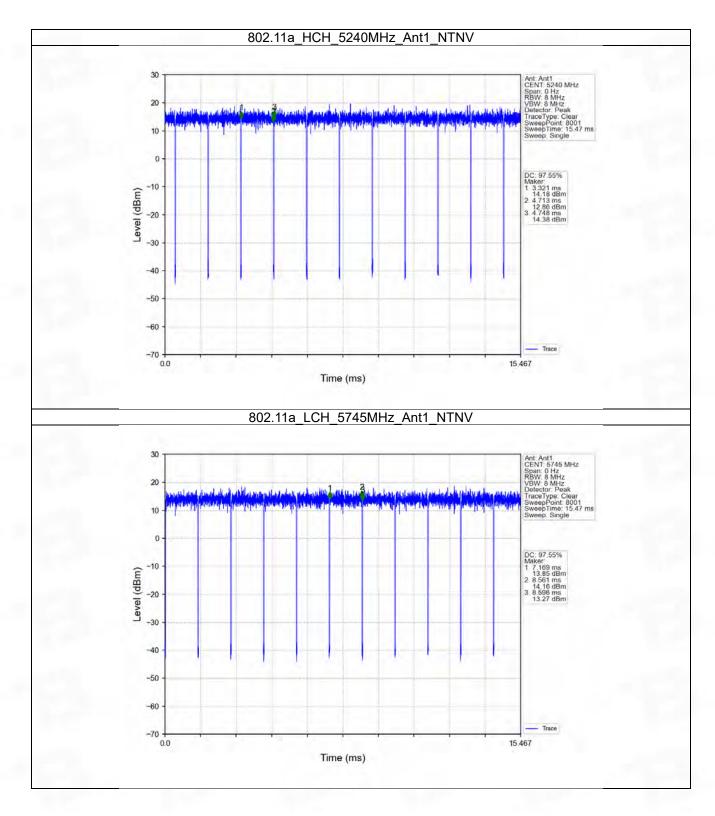


1.1.2 Test Graph



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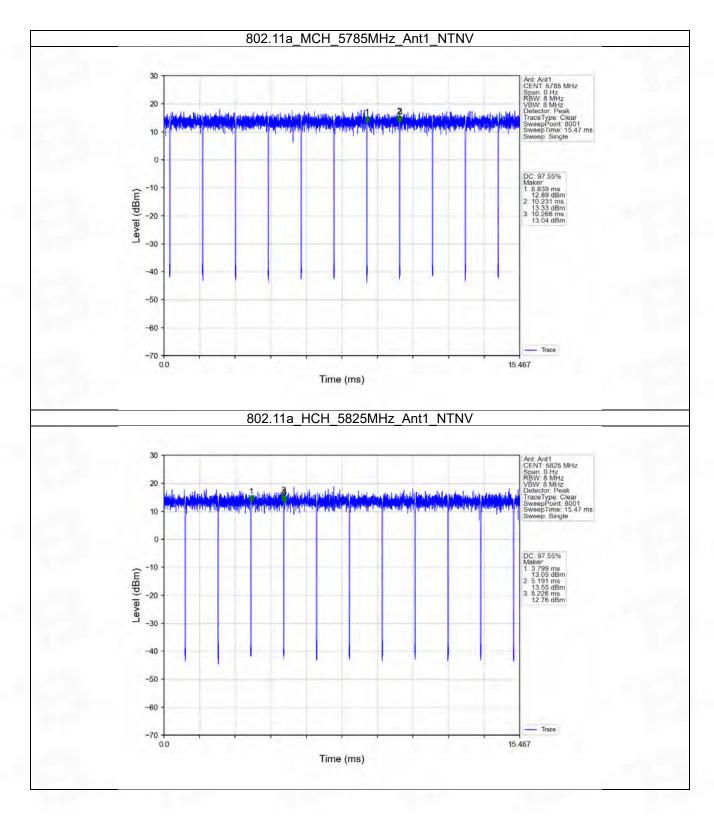




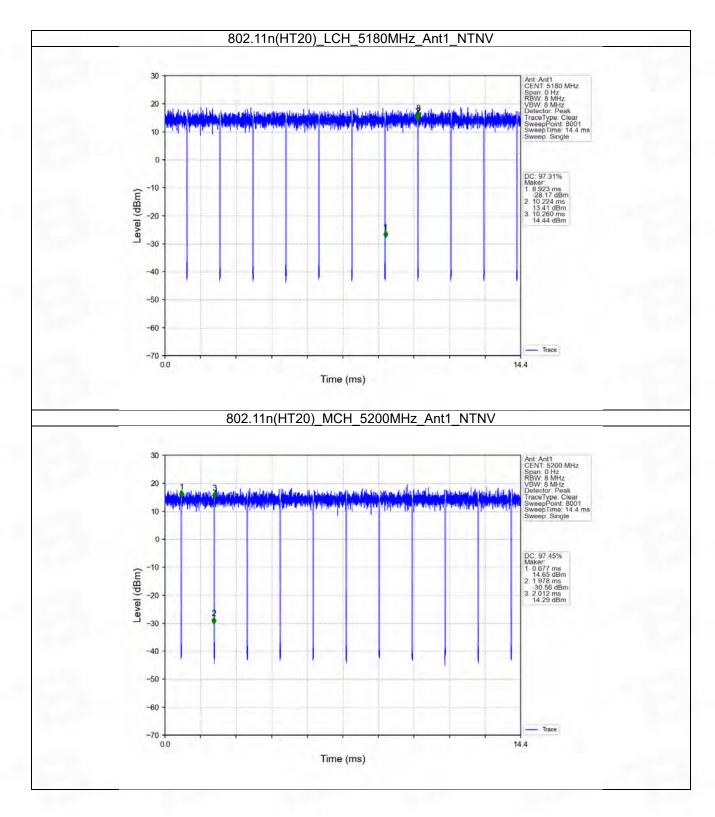
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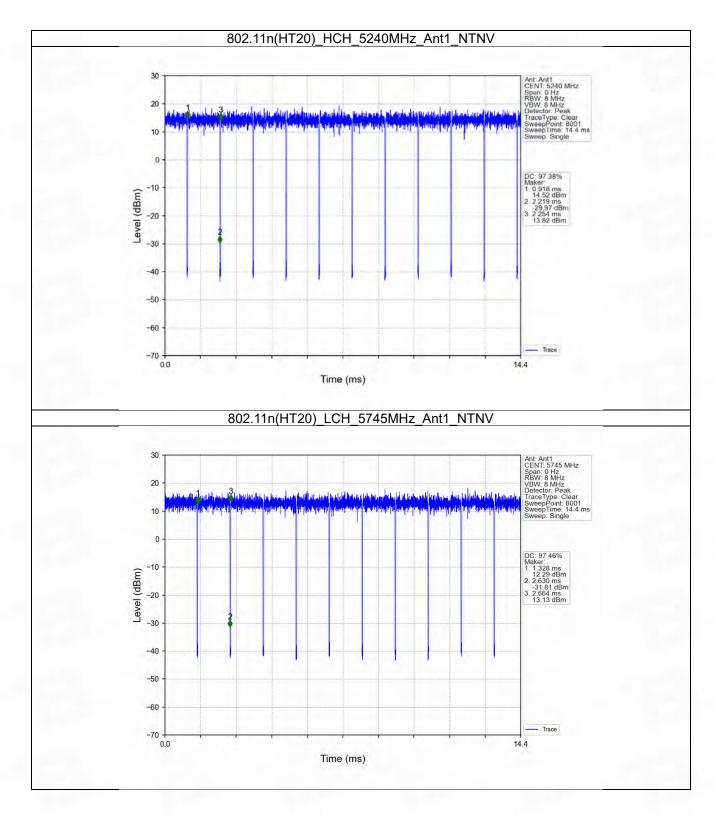




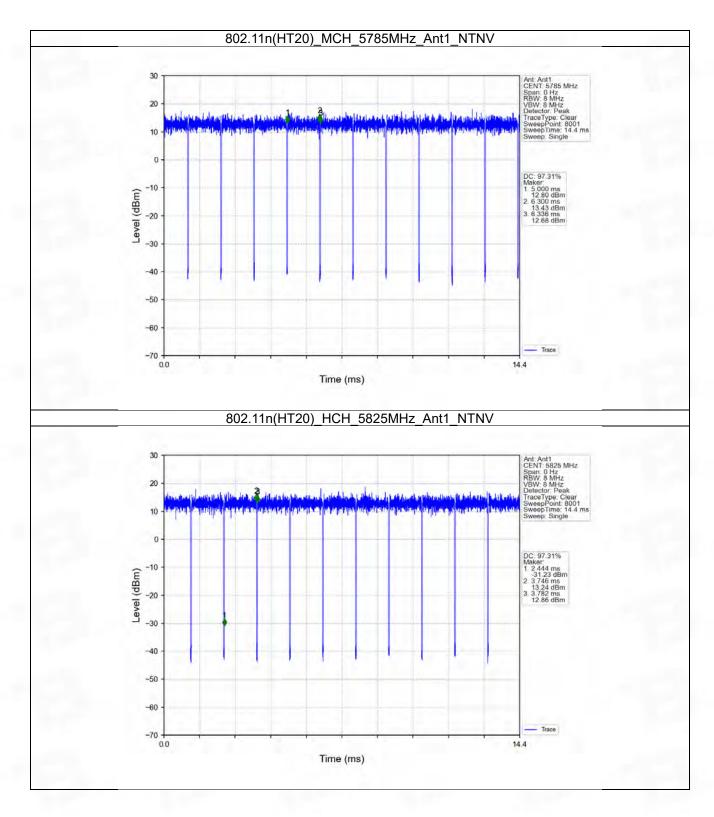


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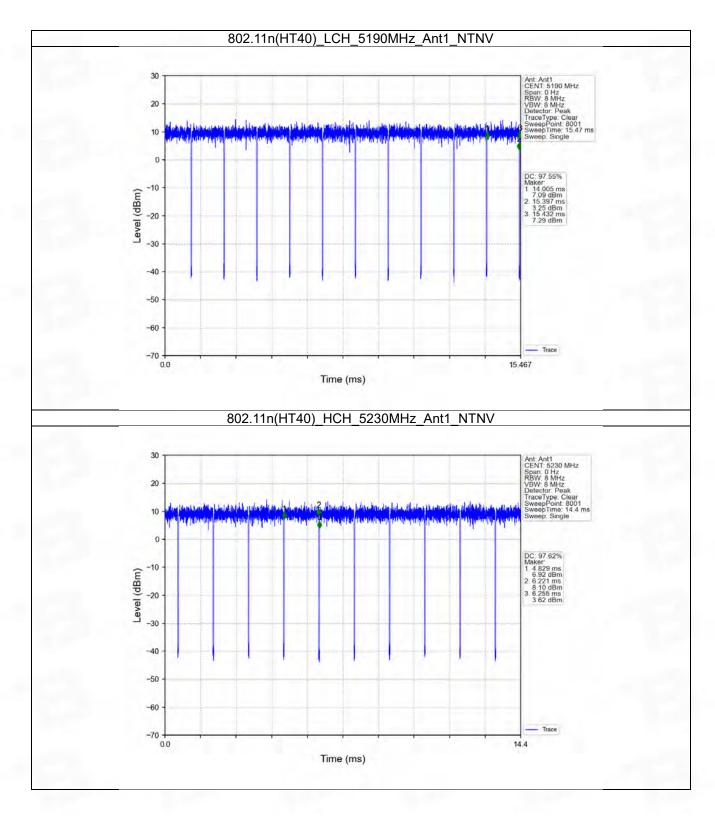






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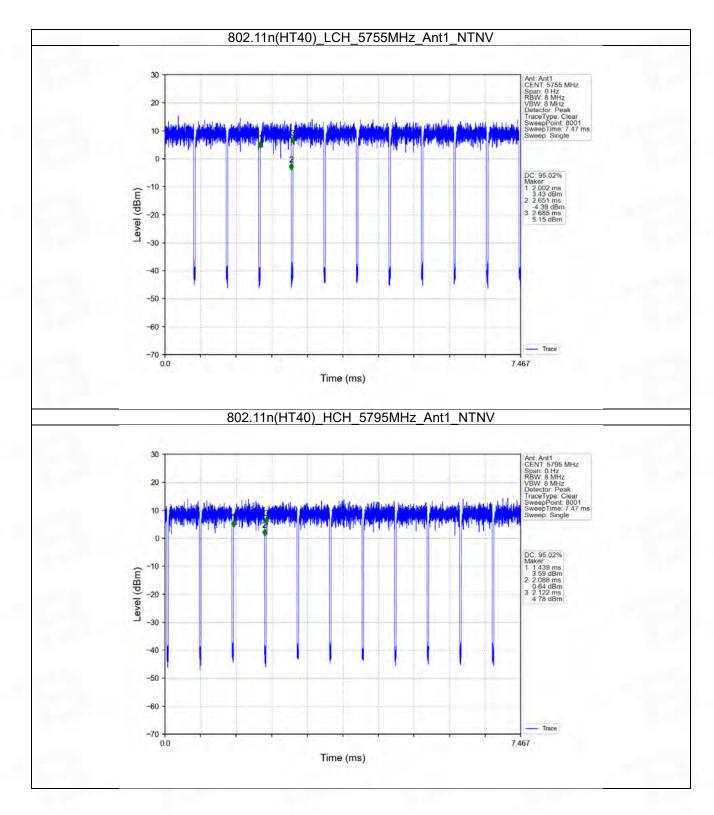




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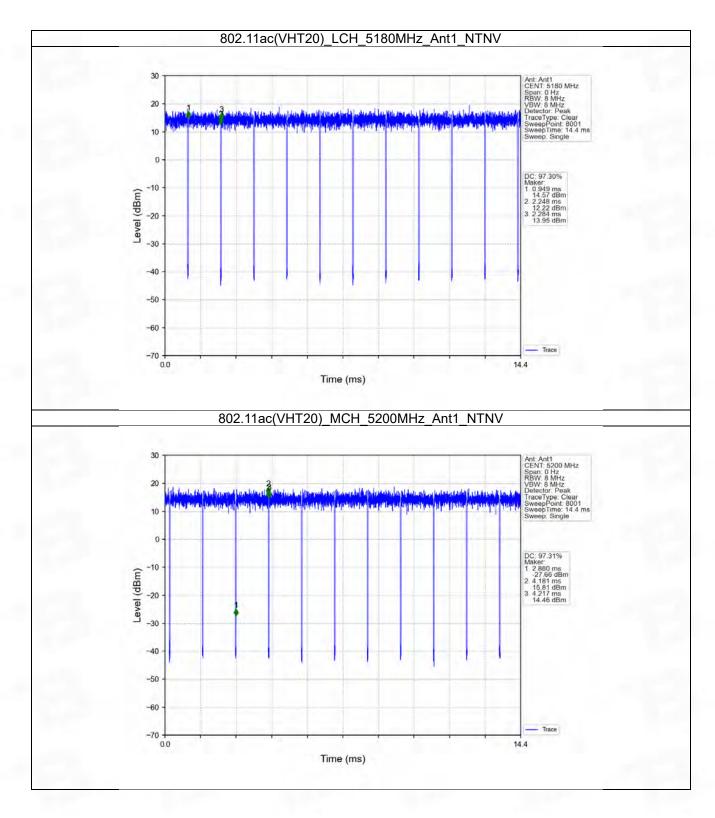
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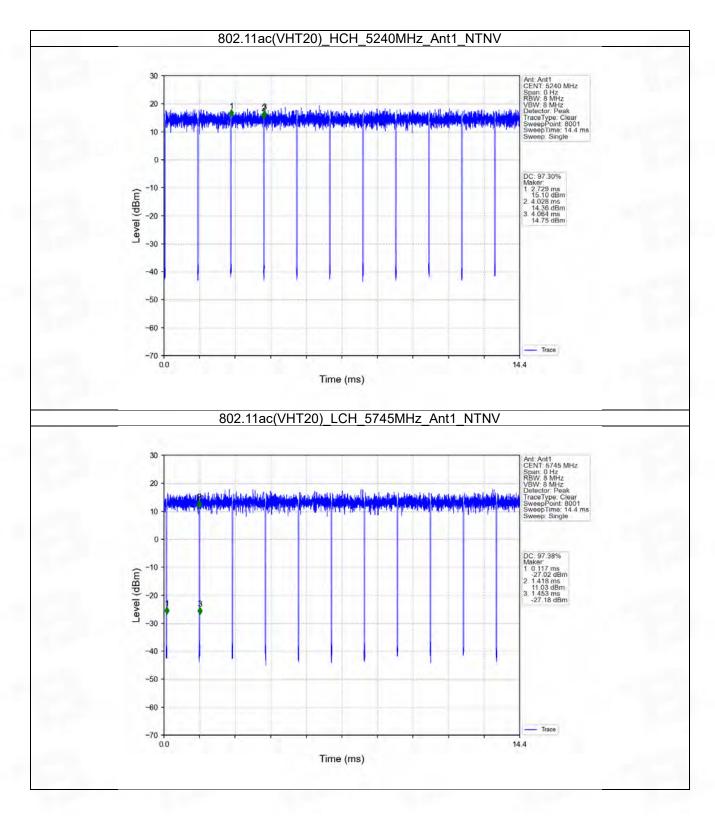
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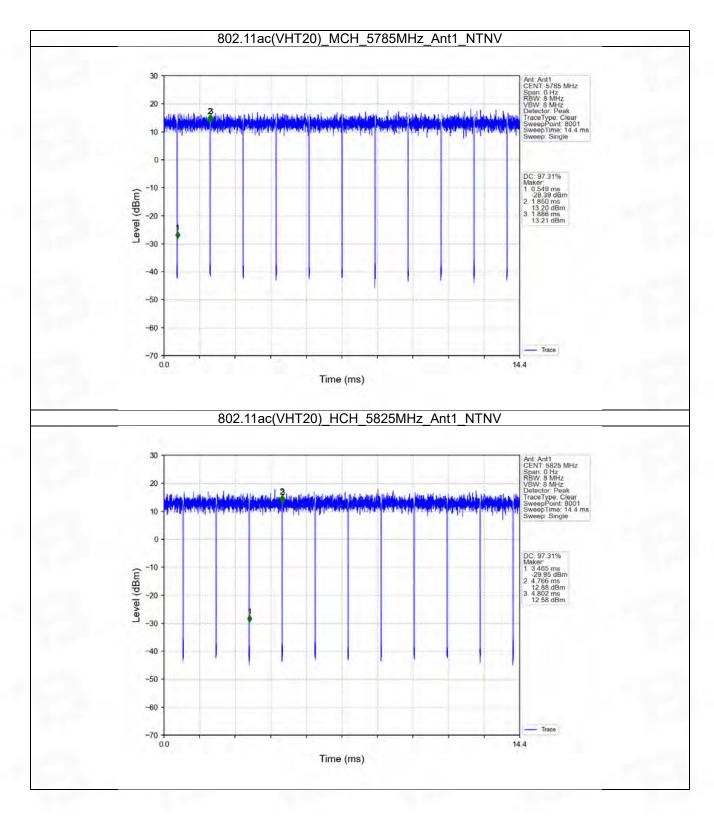
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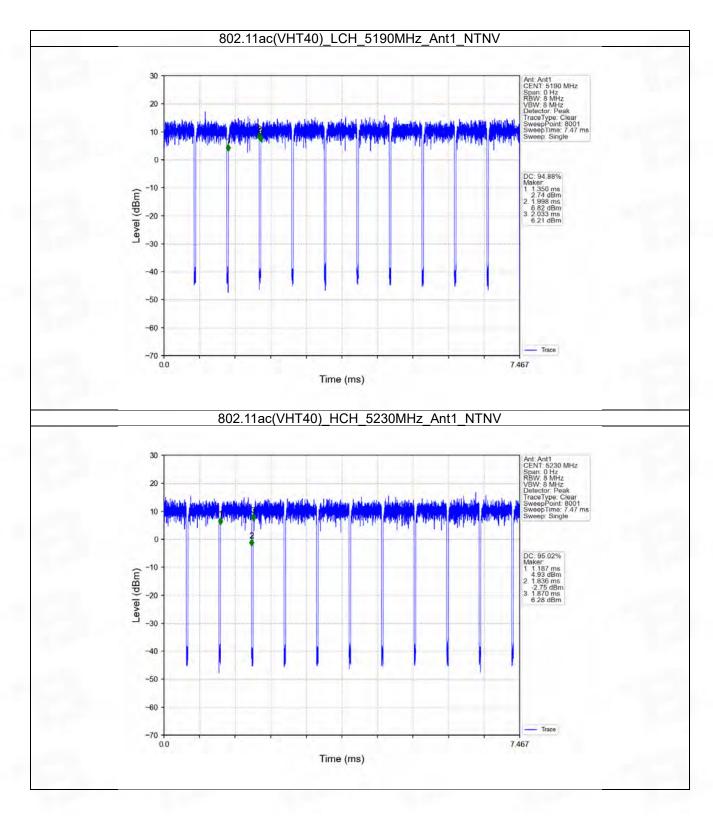
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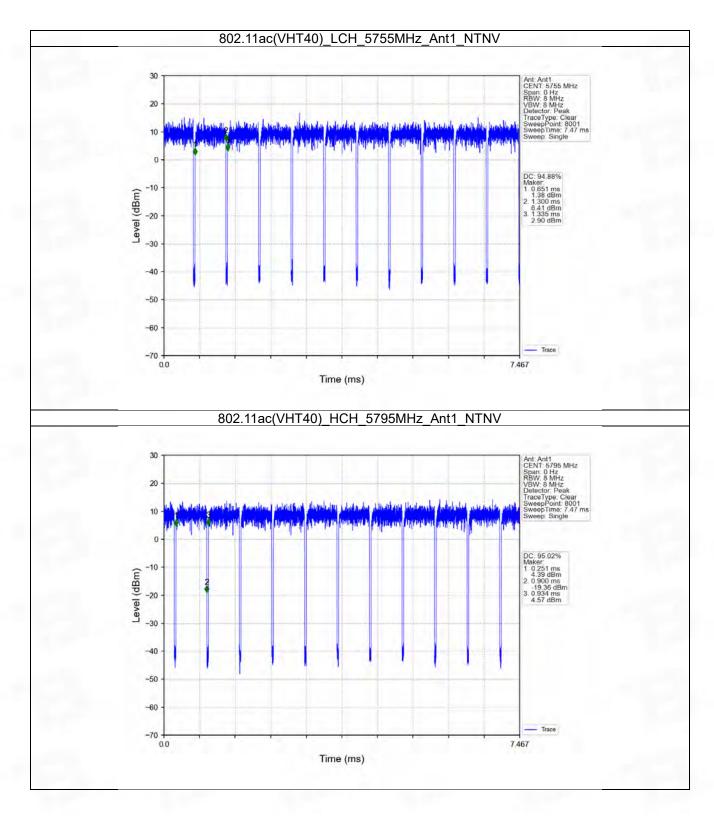




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2. Bandwidth

2.1 OBW

2.1.1 Test Result

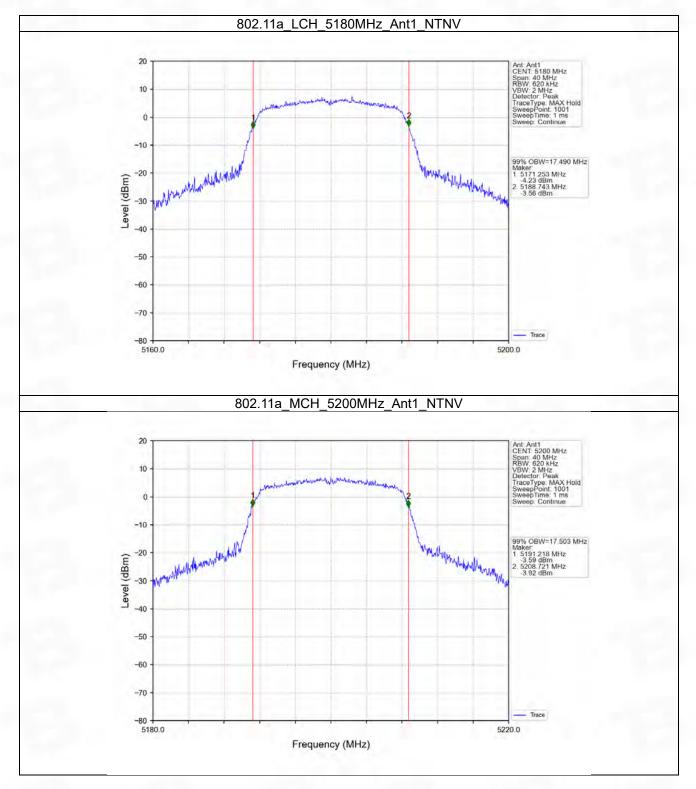
Mode	TX	Frequency (MHz)	ANT	99% Occupied Ba	Vordict	
	Туре		ANT	Result	Limit	Verdict
		5180	1	17.490	1	Pass
		5200	1	17.503	1	Pass
000 11-	SISO	5240	1	17.442	1	Pass
802.11a	5150	5745	1	17.395	1	Pass
		5785	1	17.421	1	Pass
		5825	1	17.444	1	Pass
		5180	1	18.214	/	Pass
		5200	1	18.207	1	Pass
802.11n	SISO	5240	1	18.229	1	Pass
(HT20)		5745	1	18.148	1	Pass
		5785	1	18.151	1	Pass
		5825	1	18.123	1	Pass
	SISO	5190	1	36.992	1	Pass
802.11n		5230	1	36.968	1	Pass
(HT40)		5755	1	36.610	1	Pass
· · ·		5795	1	36.668	/	Pass
	SISO	5180	1	18.187	1	Pass
		5200	1	18.196	1	Pass
802.11ac		5240	1	18.232	1	Pass
(VHT20)		5745	1	18.159	/	Pass
. ,		5785	1	18.164	1	Pass
		5825	1	18.182	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.663	1	Pass
		5230	1	36.685	/	Pass
		5755	1	36.554	/	Pass
		5795	1	36.736	/	Pass

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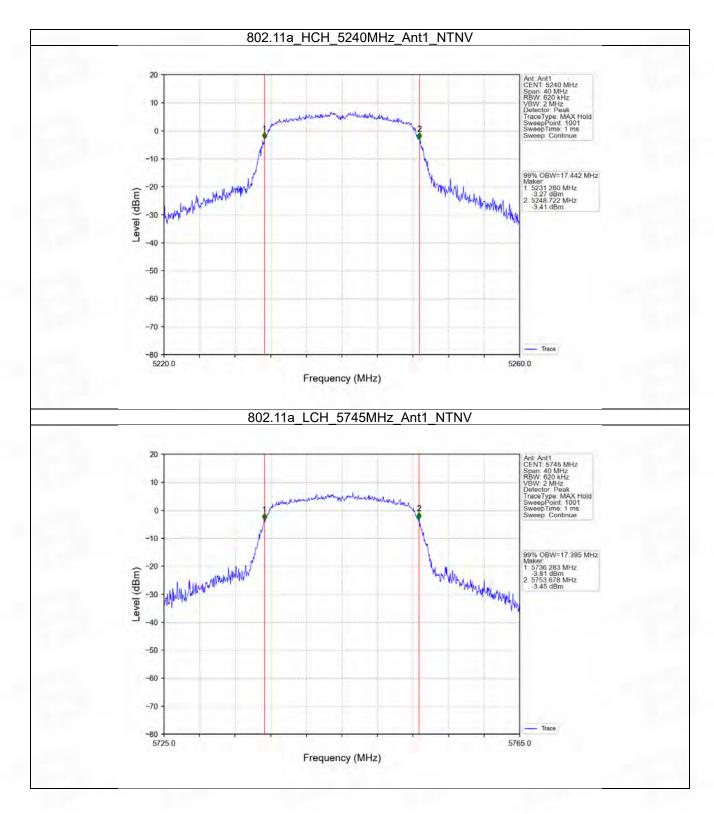
2.1.2 Test Graph



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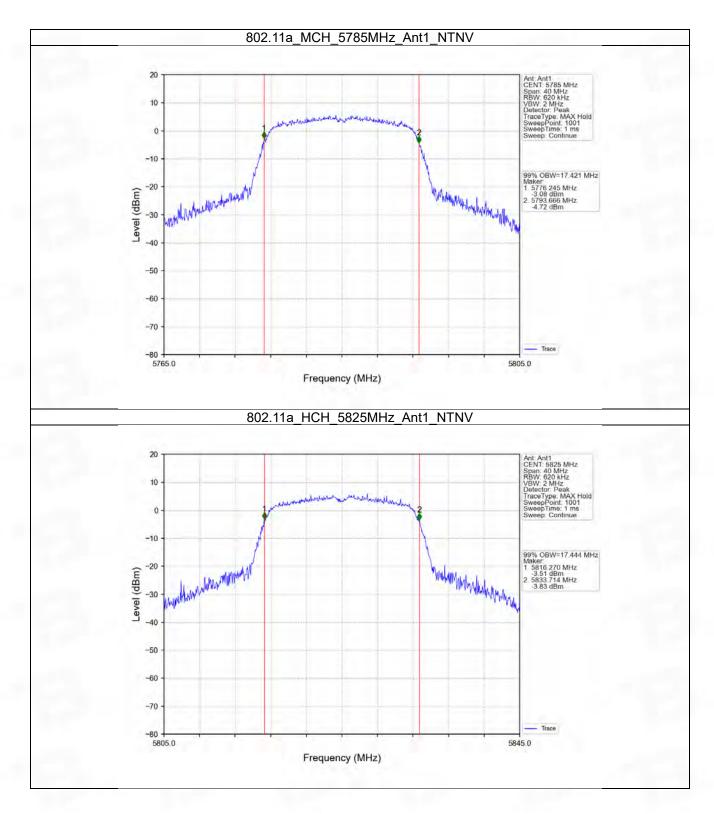
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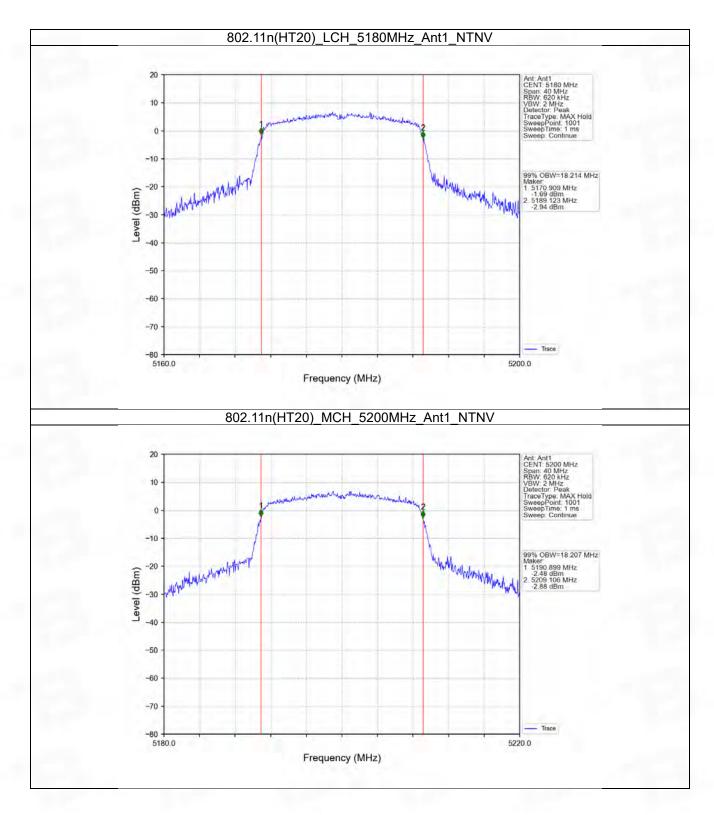


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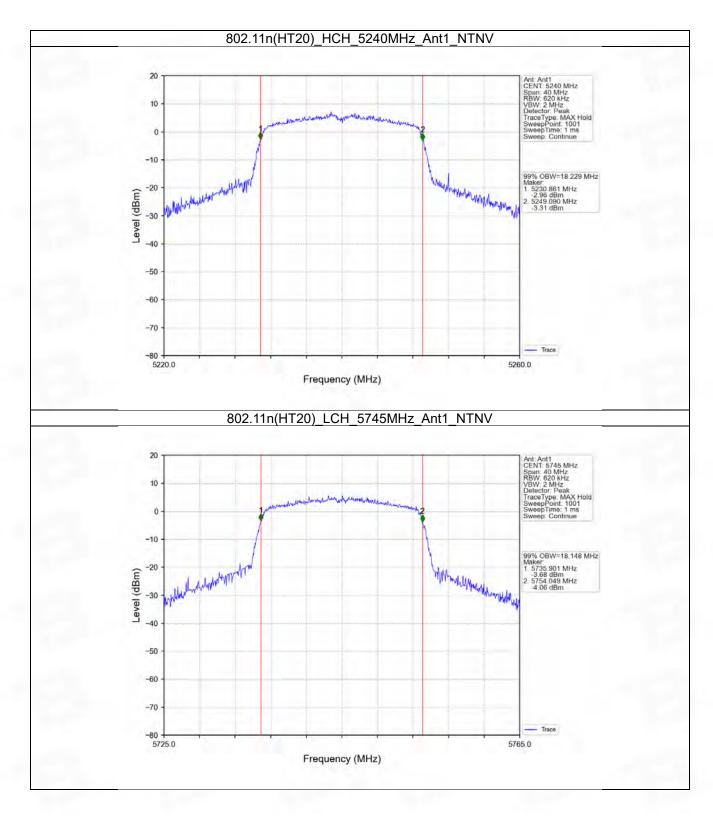






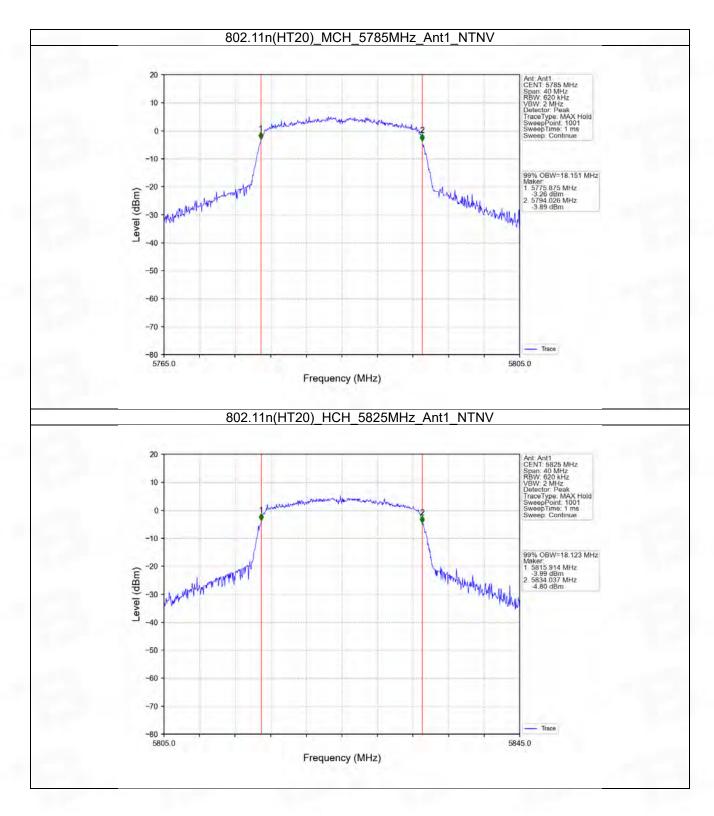
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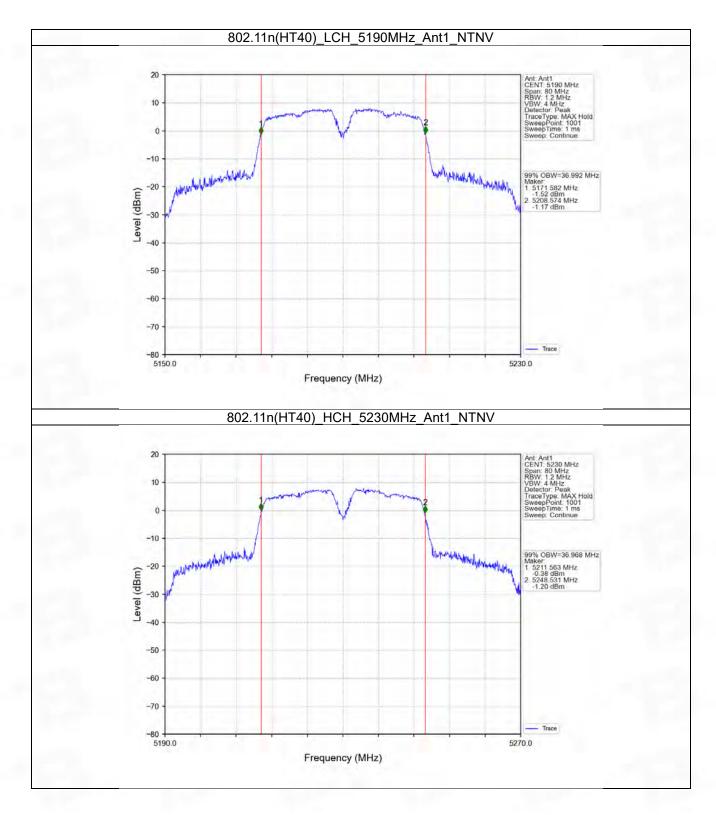


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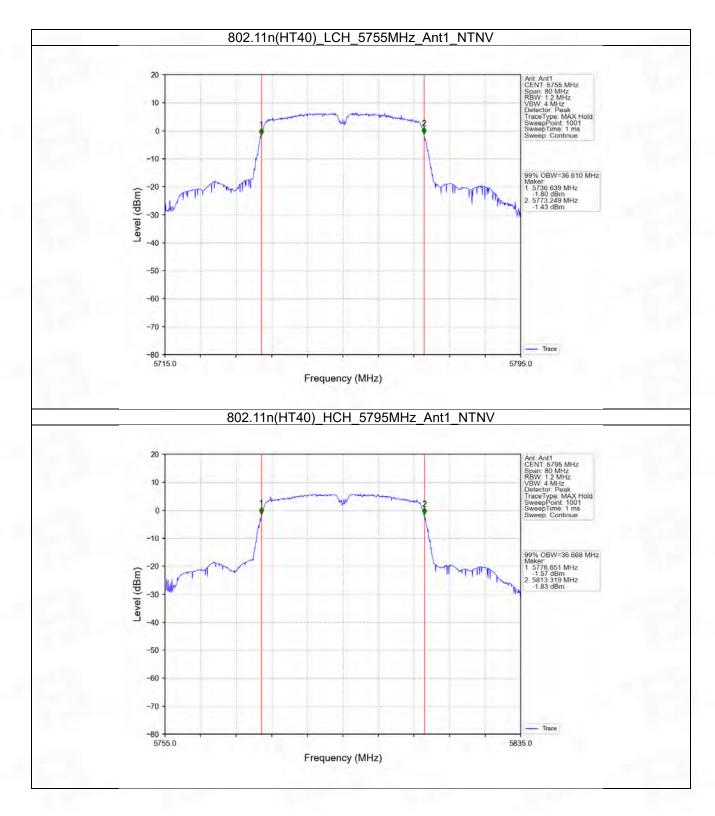






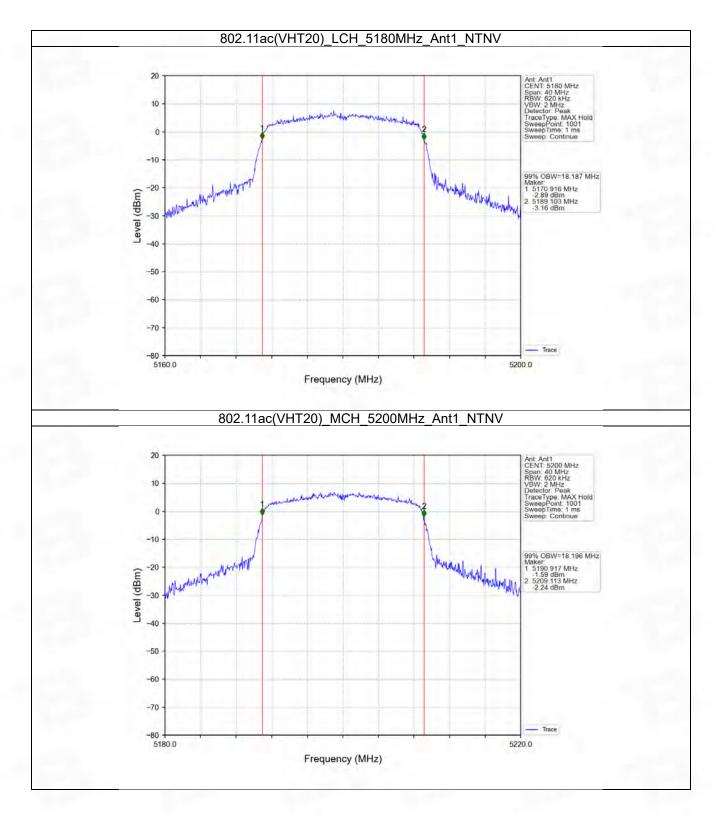




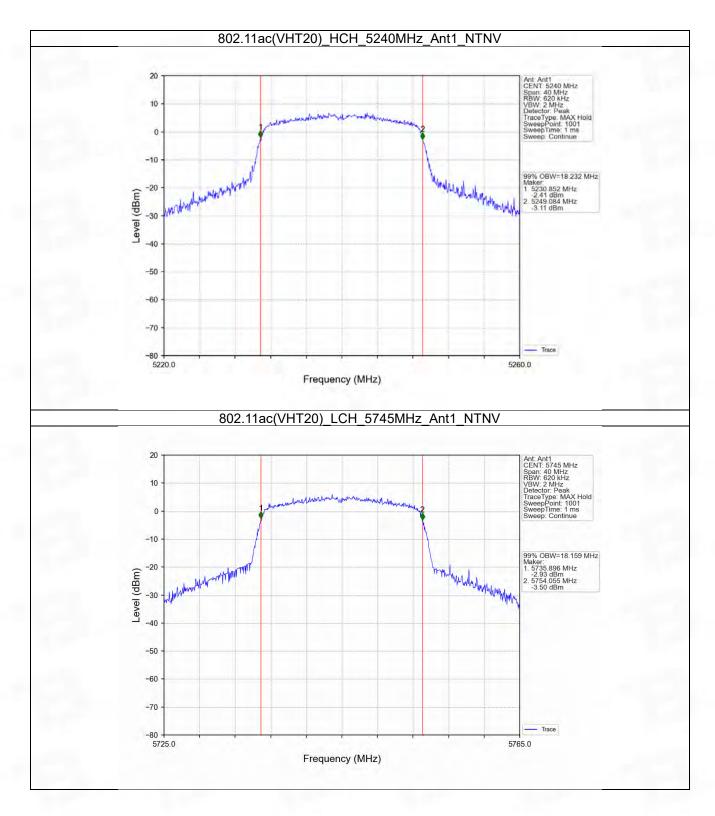


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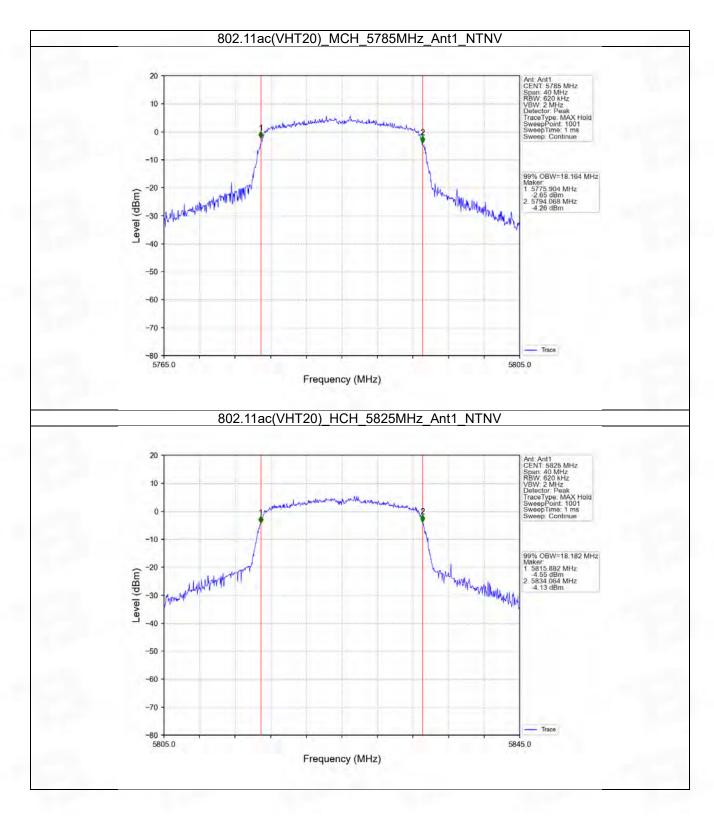




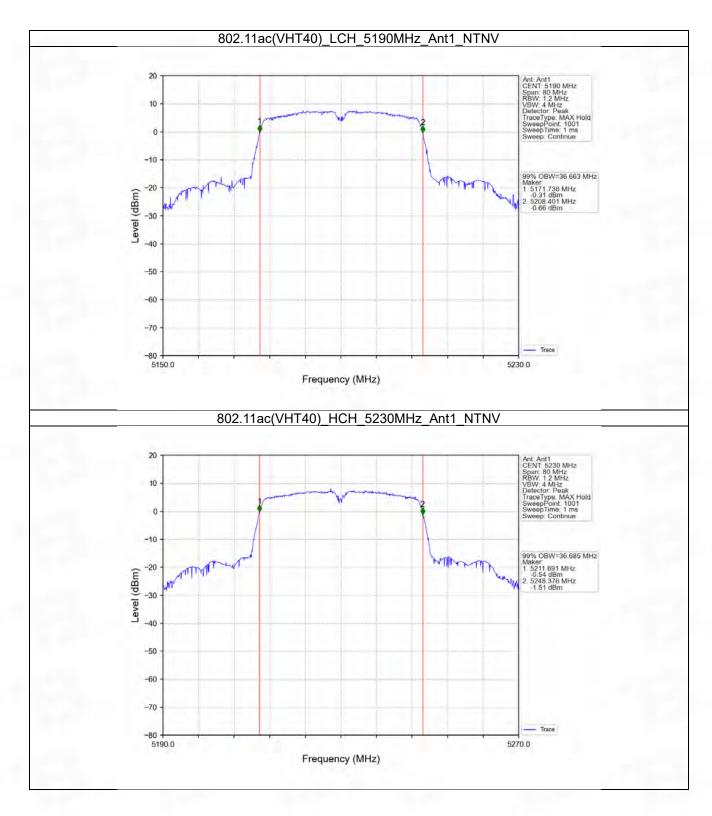


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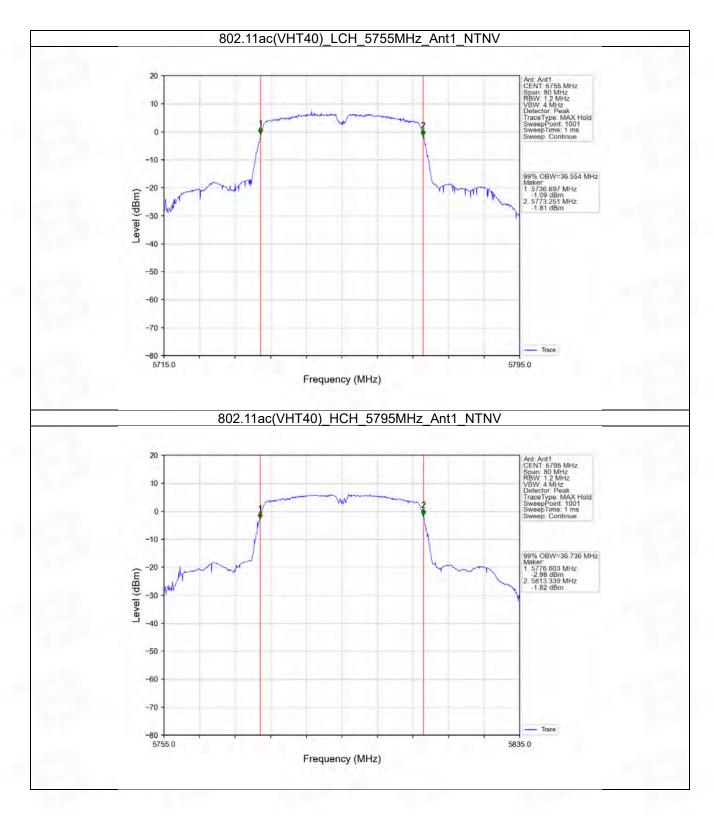






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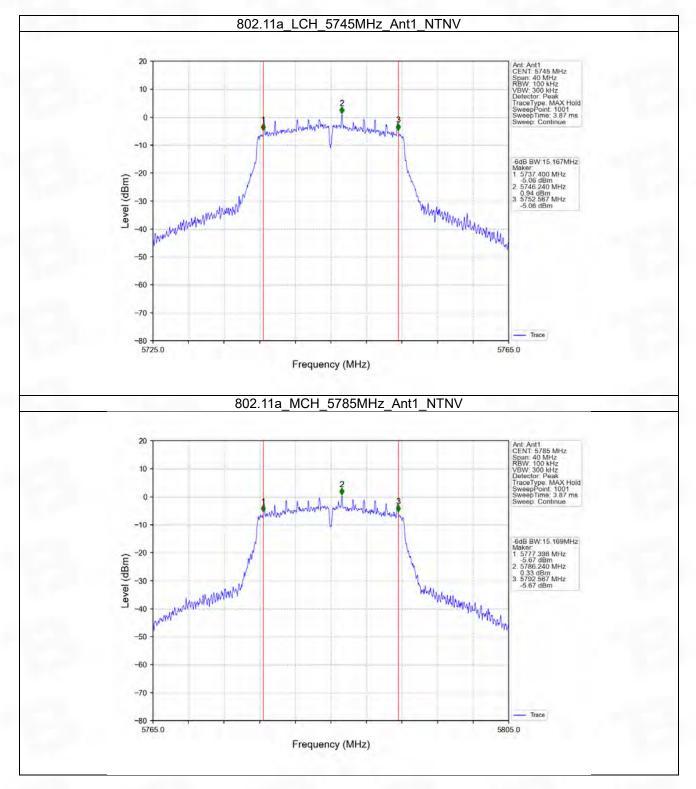
2.2 6dB BW

2.2.1 Test Result

Mode	TX	Frequency		6dB Bandw) (a nelli at	
	Туре	(MHz)	ANT	Result	Limit	Verdict
802.11a	SISO	5745	1	15.167	>=0.5	Pass
		5785	1	15.169	>=0.5	Pass
		5825	1	15.175	>=0.5	Pass
802.11n (HT20)	SISO	5745	1	15.332	>=0.5	Pass
		5785	1	15.167	>=0.5	Pass
		5825	1	15.388	>=0.5	Pass
802.11n (HT40)	SISO	5755	1	35.218	>=0.5	Pass
		5795	1	35.219	>=0.5	Pass
802.11ac (VHT20)	SISO	5745	1	15.957	>=0.5	Pass
		5785	1	15.157	>=0.5	Pass
		5825	1	15.174	>=0.5	Pass
802.11ac	SISO	5755	1	35.212	>=0.5	Pass
(VHT40)	3130	5795	1	35.217	>=0.5	Pass

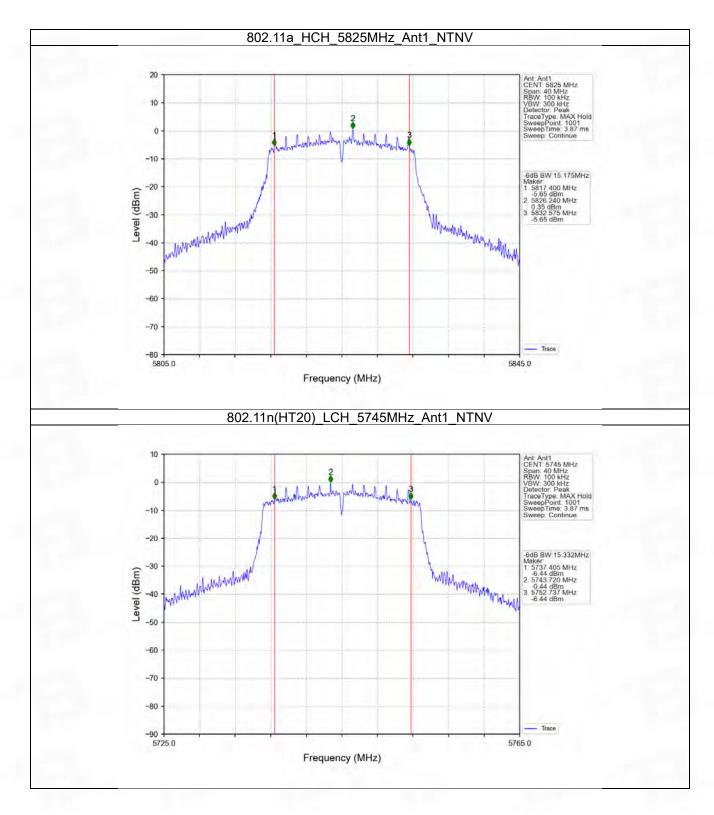


2.2.2 Test Graph

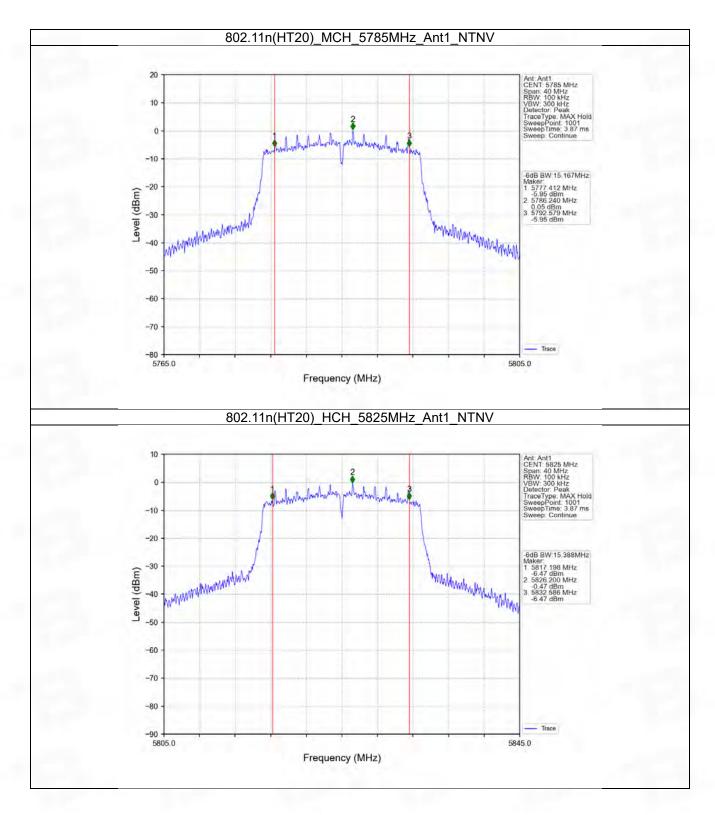


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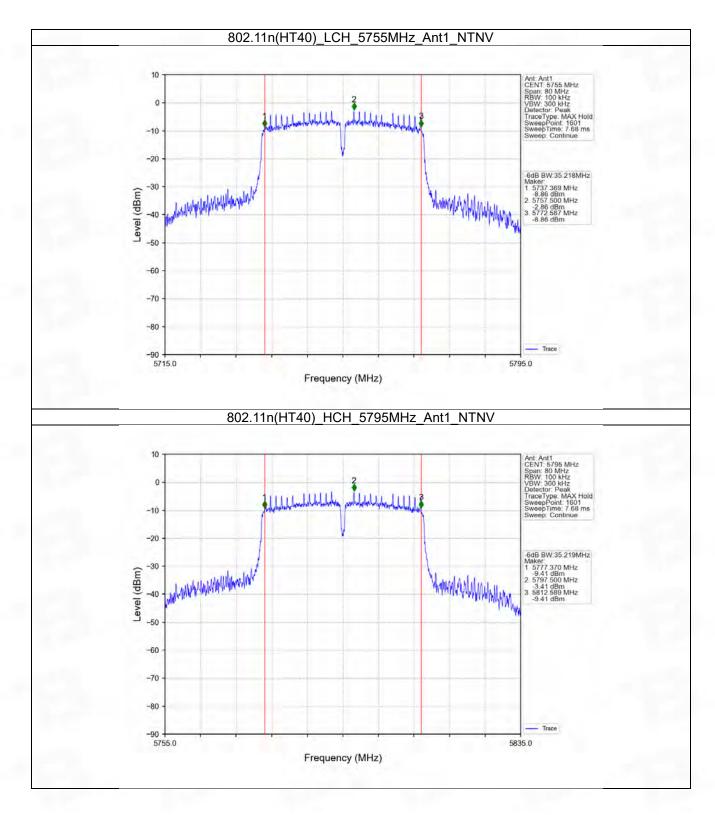




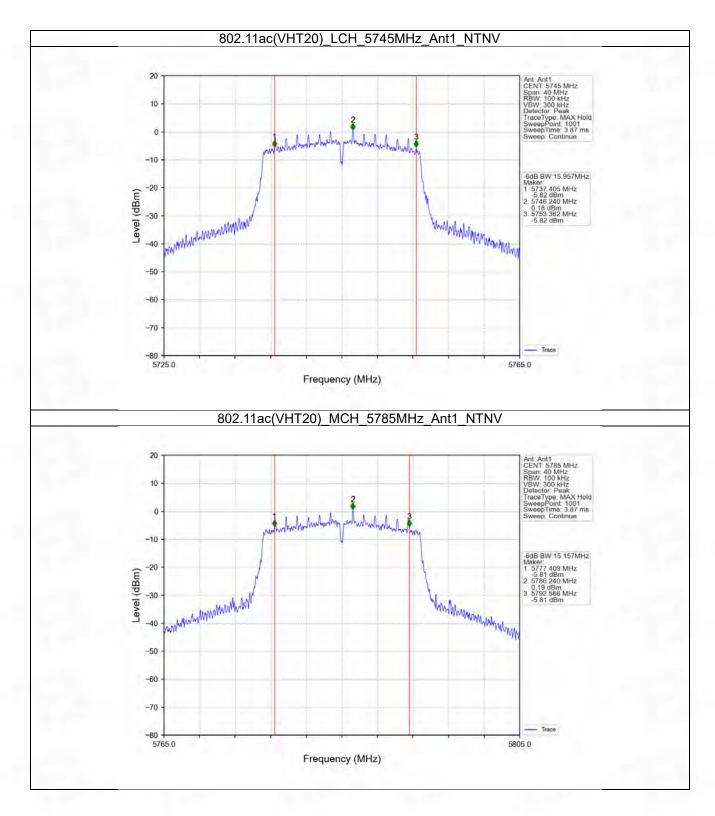






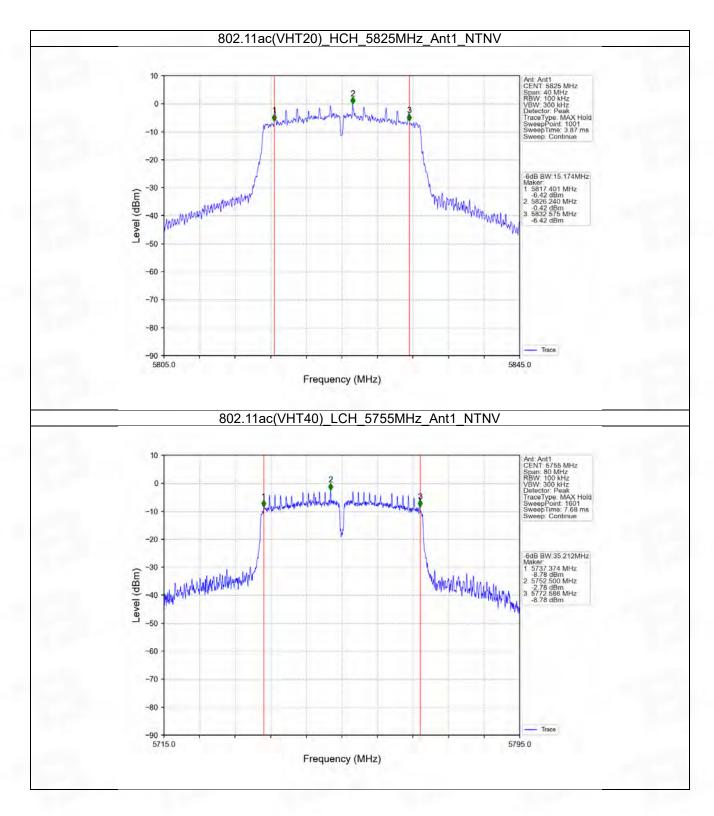






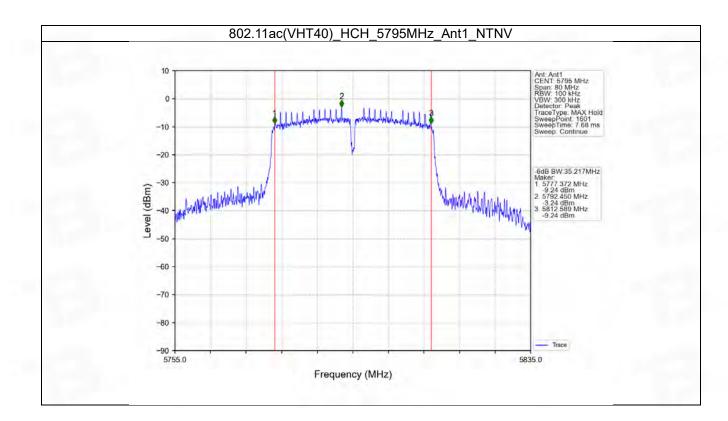
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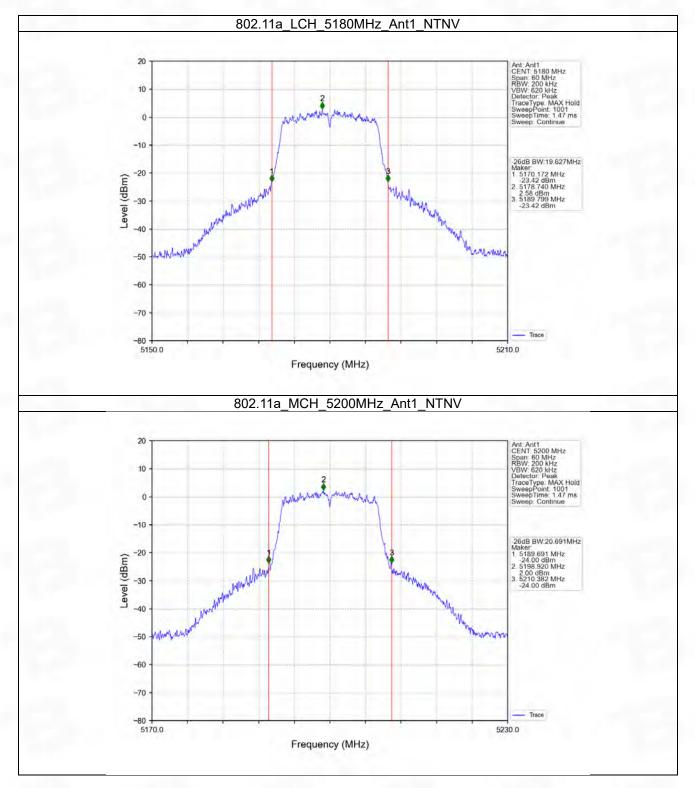
2.3 26dB BW

2.3.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdiet
				Result	Limit	Verdict
802.11a	SISO	5180	1	19.627	/	Pass
		5200	1	20.691	/	Pass
		5240	1	19.436	/	Pass
802.11n (HT20)	SISO	5180	1	19.822	/	Pass
		5200	1	20.109	/	Pass
		5240	1	21.260	/	Pass
802.11n (HT40)	SISO	5190	1	60.168	/	Pass
		5230	1	56.113	/	Pass
802.11ac (VHT20)	SISO	5180	1	19.716	/	Pass
		5200	1	19.957	/	Pass
		5240	1	19.916	/	Pass
802.11ac (VHT40)	SISO	5190	1	45.645	/	Pass
		5230	1	46.719	/	Pass

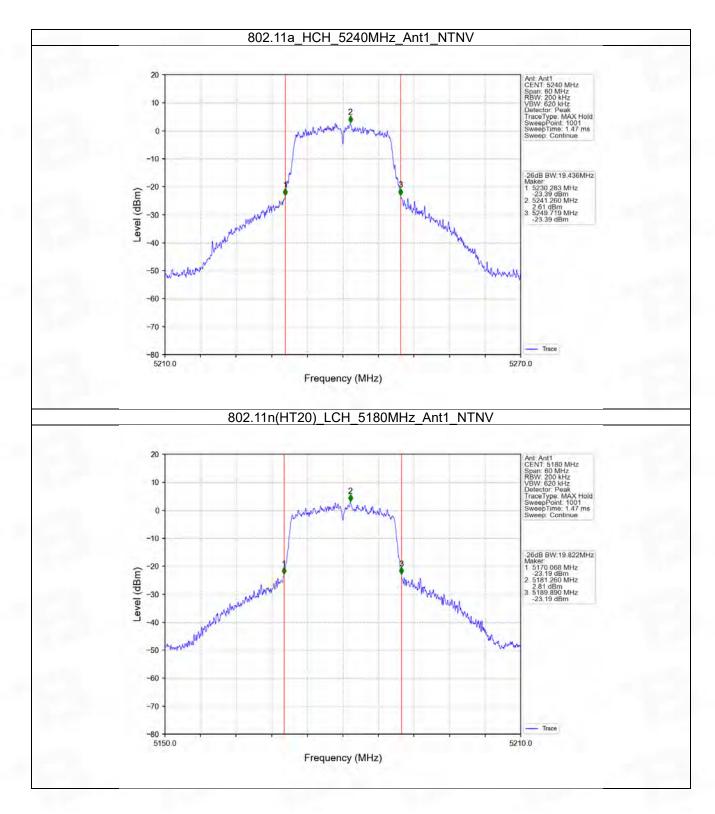


2.3.2 Test Graph



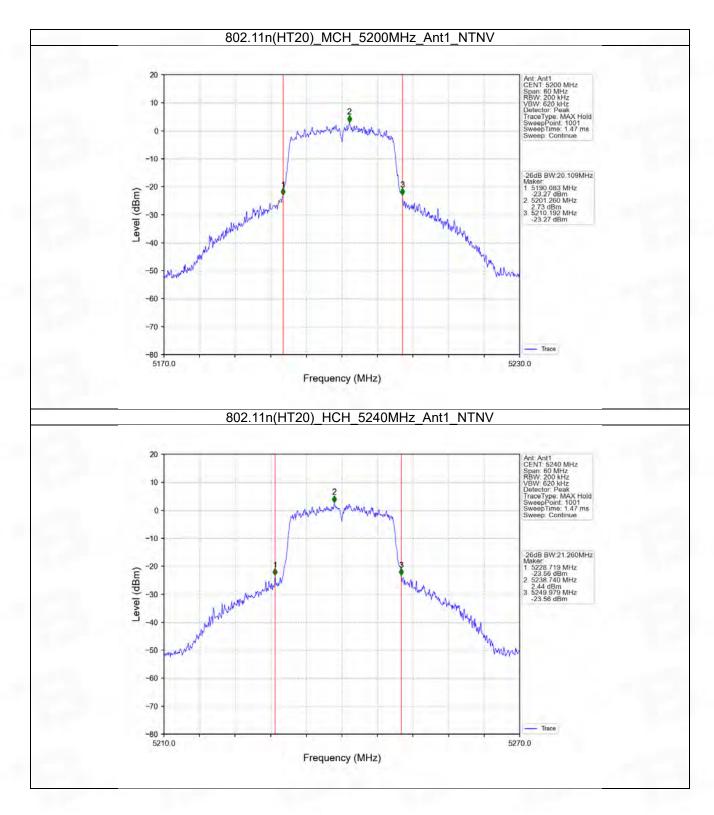
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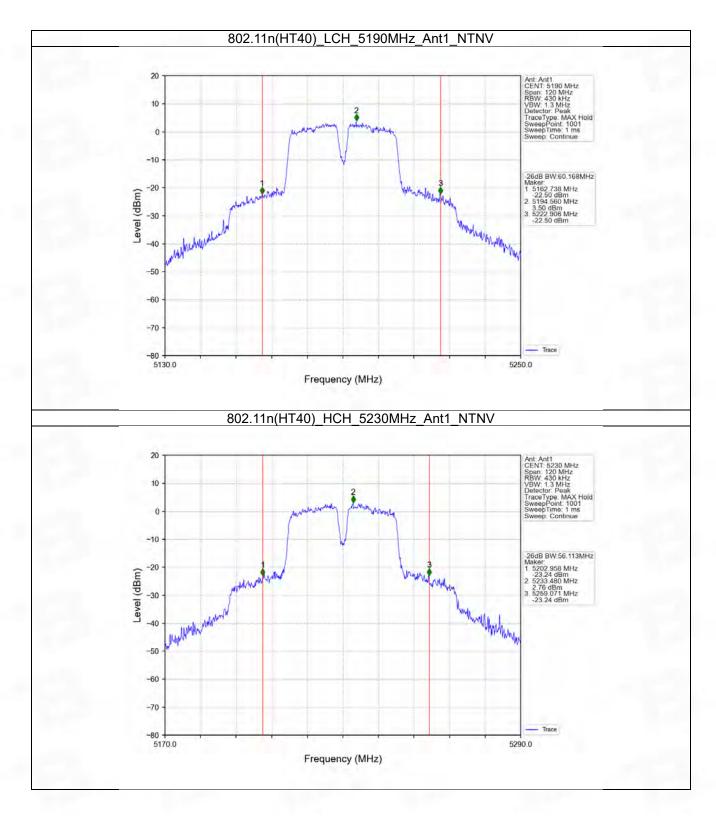
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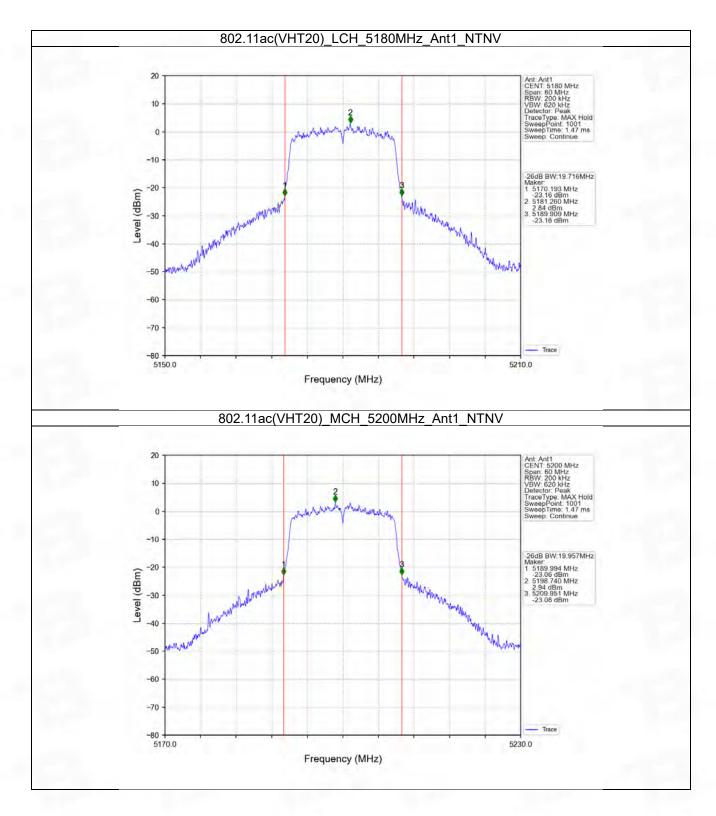


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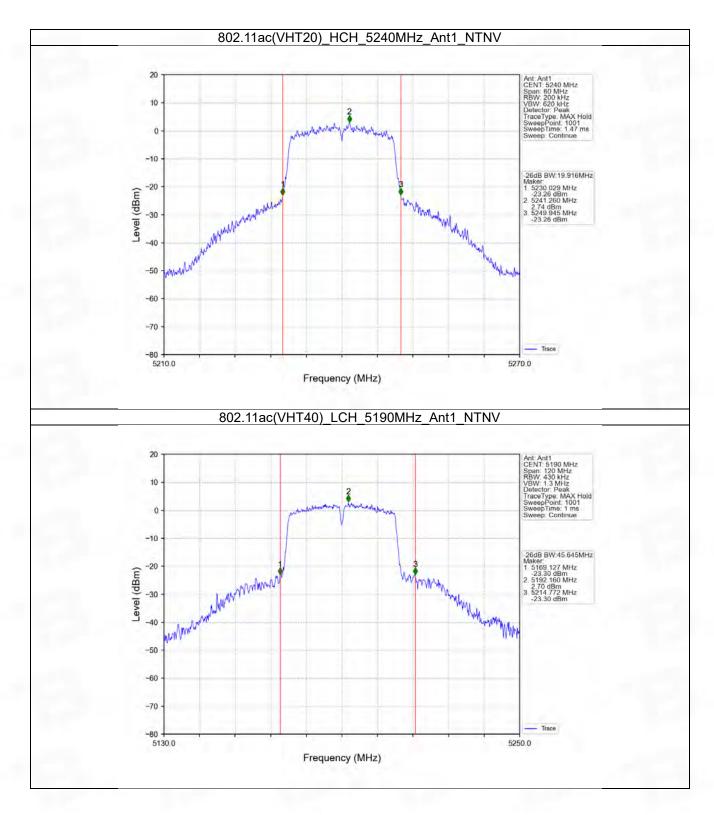




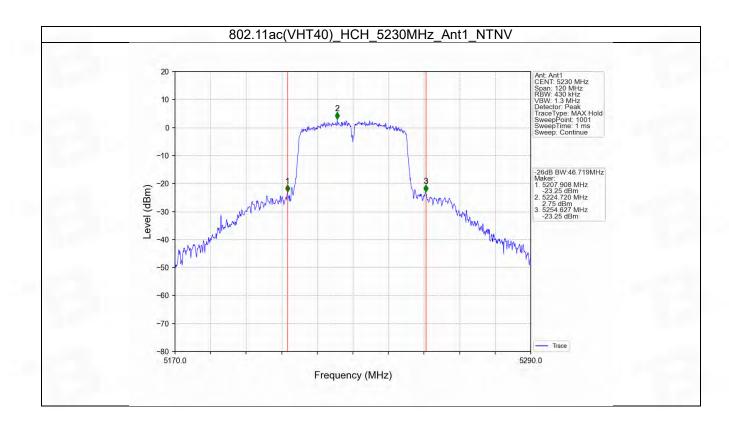














3. Maximum Conducted Output Power

3.1 Power

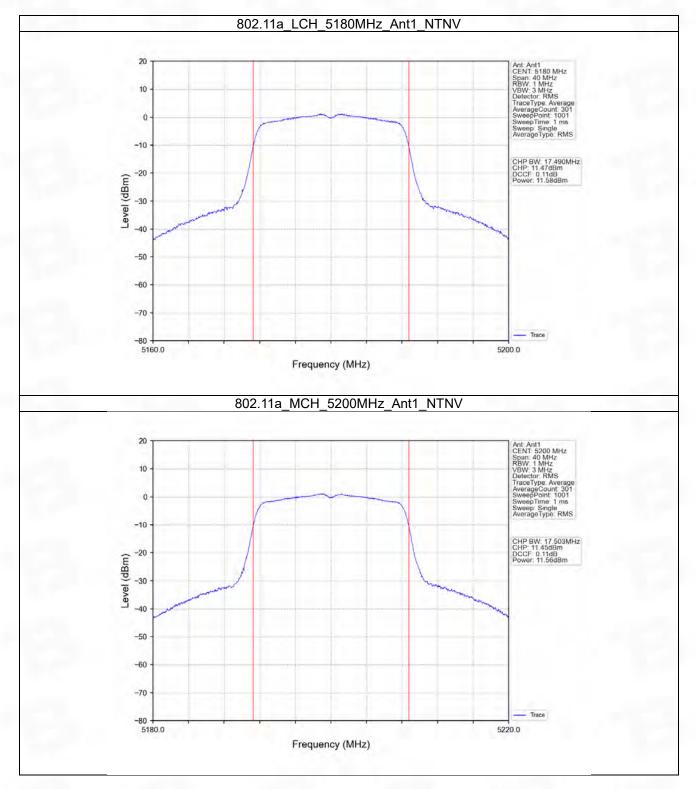
3.1.1 Test Result

Mode	TX	Frequency	Maximum Average Condu	Verdict	
	Туре	(MHz)	ANT1	ANT1 Limit	
802.11a	SISO	5180	11.58	<=23.98	Pass
		5200	11.56	<=23.98	Pass
		5240	11.59	<=23.98	Pass
		5745	10.67	<=30	Pass
		5785	10.34	<=30	Pass
		5825	10.15	<=30	Pass
	SISO	5180	11.66	<=23.98	Pass
		5200	11.43	<=23.98	Pass
802.11n (HT20)		5240	11.34	<=23.98	Pass
		5745	10.12	<=30	Pass
		5785	9.91	<=30	Pass
		5825	9.90	<=30	Pass
802.11n (HT40)	SISO	5190	12.24	<=23.98	Pass
		5230	11.68	<=23.98	Pass
		5755	10.95	<=30	Pass
		5795	10.43	<=30	Pass
802.11ac (VHT20)	SISO	5180	11.72	<=23.98	Pass
		5200	11.81	<=23.98	Pass
		5240	11.62	<=23.98	Pass
		5745	10.43	<=30	Pass
		5785	10.05	<=30	Pass
		5825	9.82	<=30	Pass
802.11ac (VHT40)	SISO	5190	12.14	<=23.98	Pass
		5230	11.98	<=23.98	Pass
		5755	11.03	<=30	Pass
		5795	10.60	<=30	Pass

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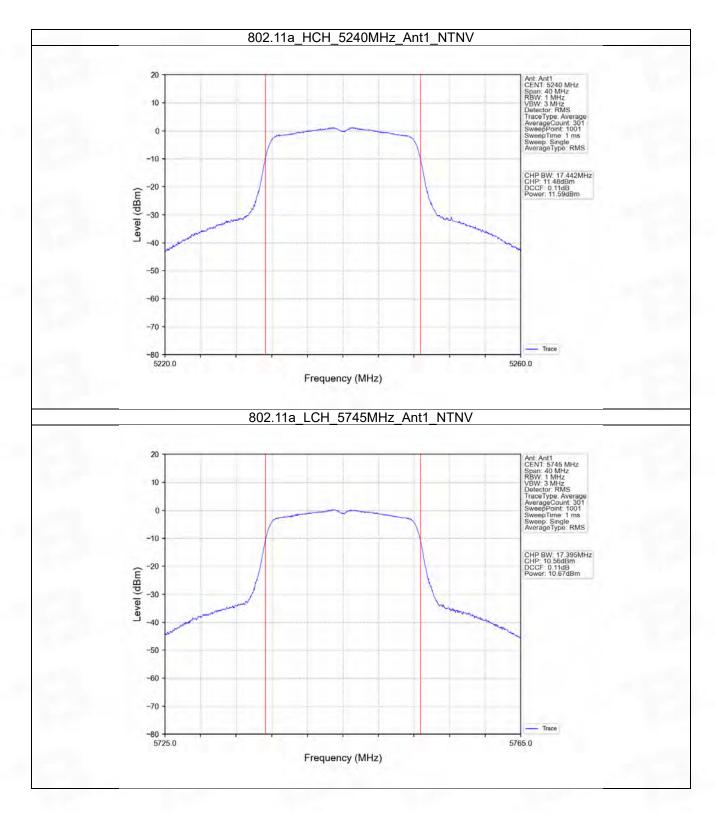


3.1.2 Test Graph



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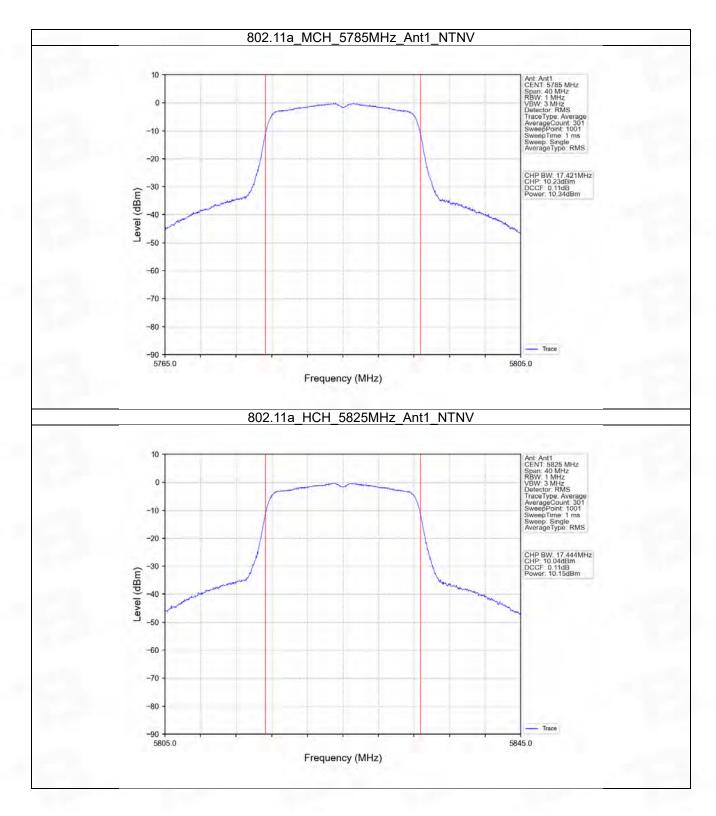




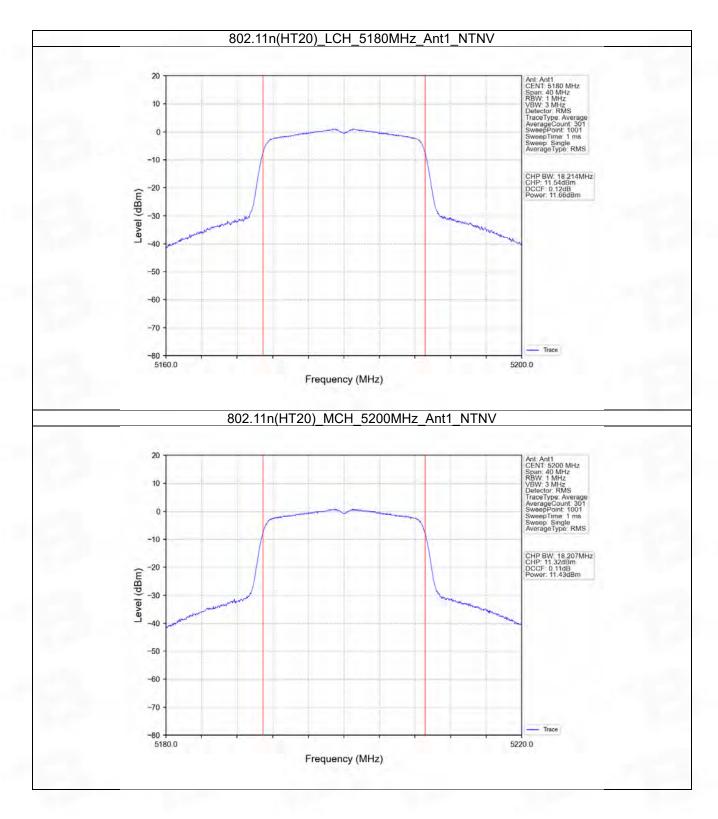
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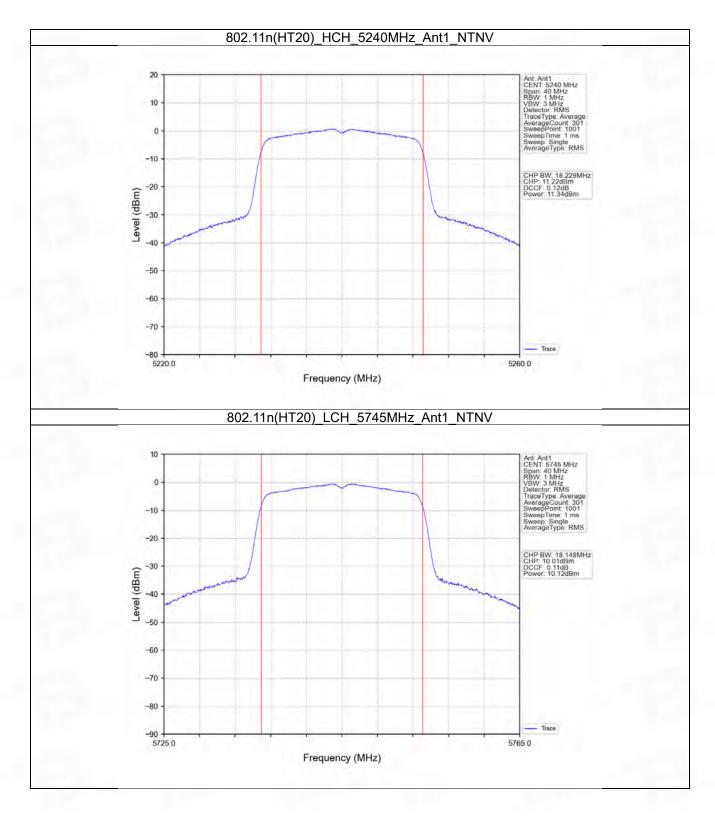




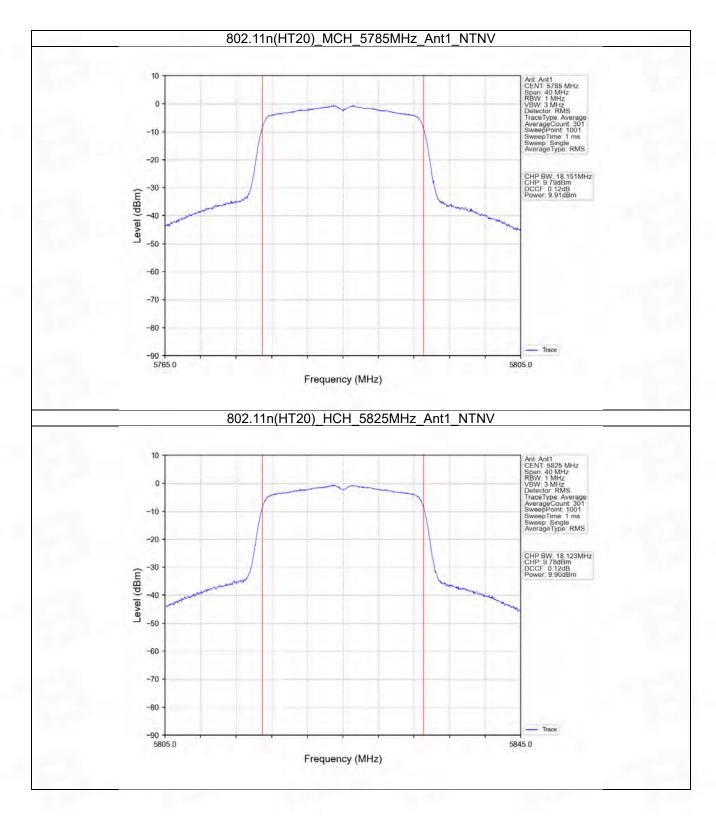


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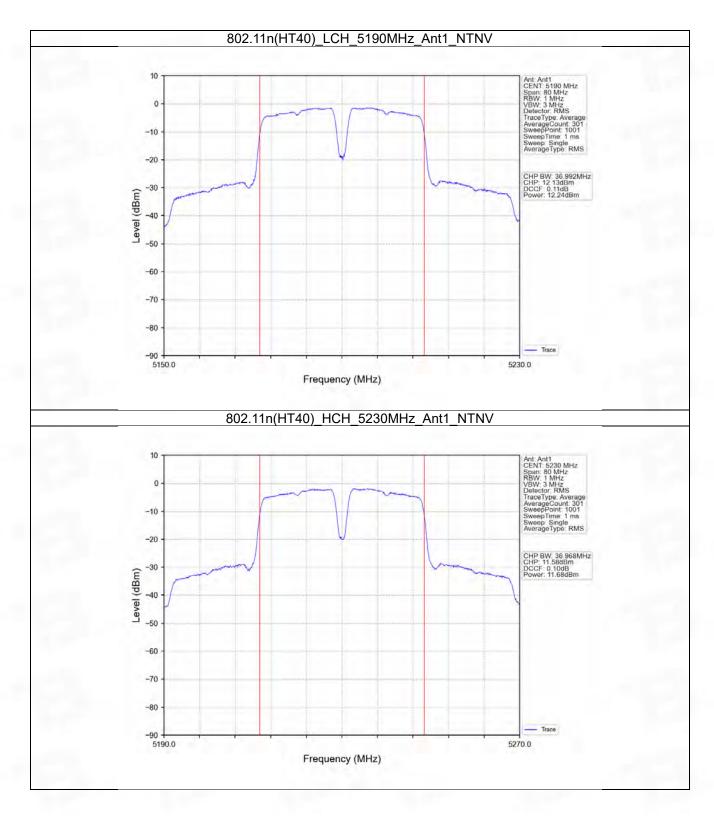




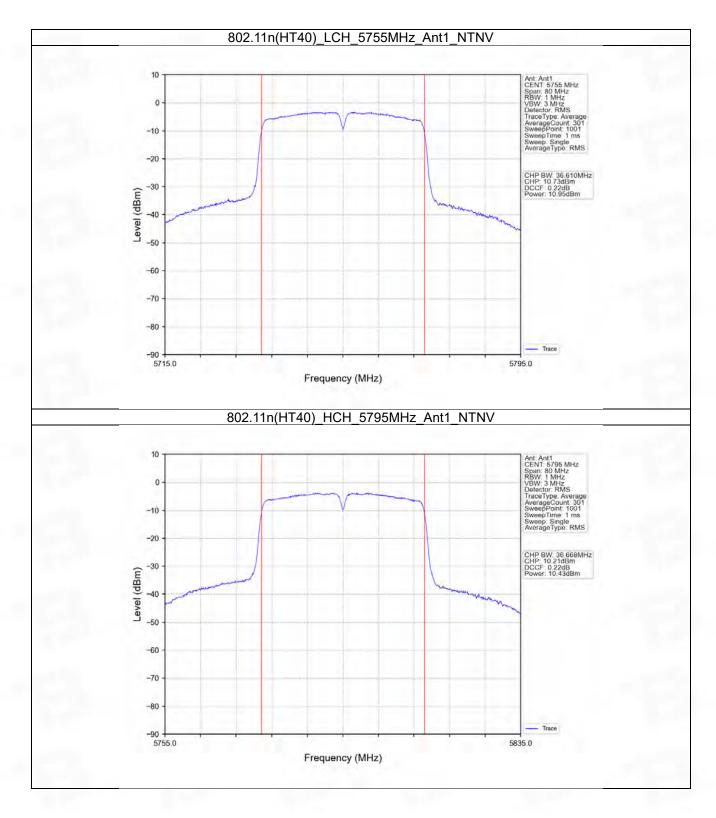


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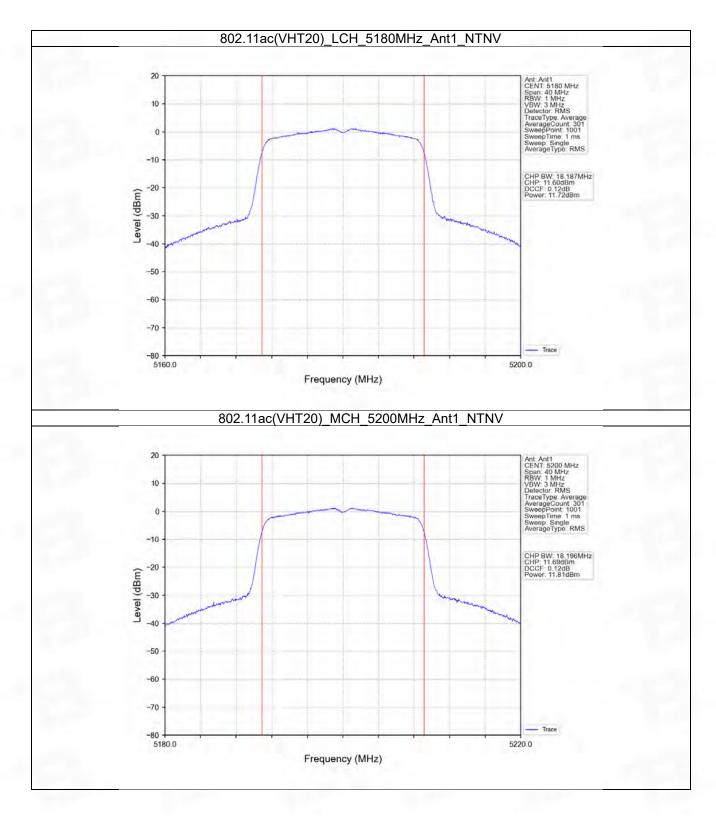




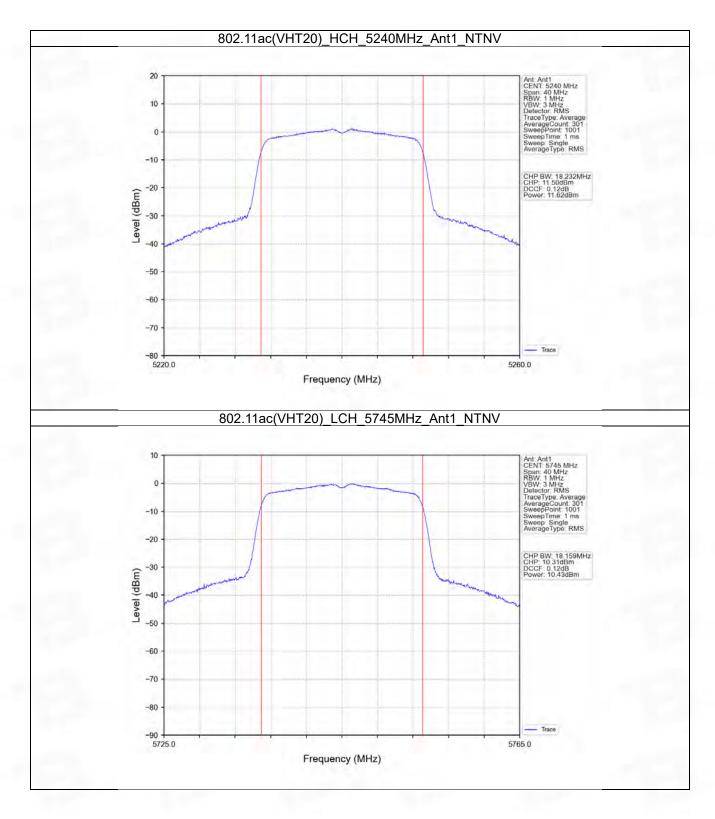


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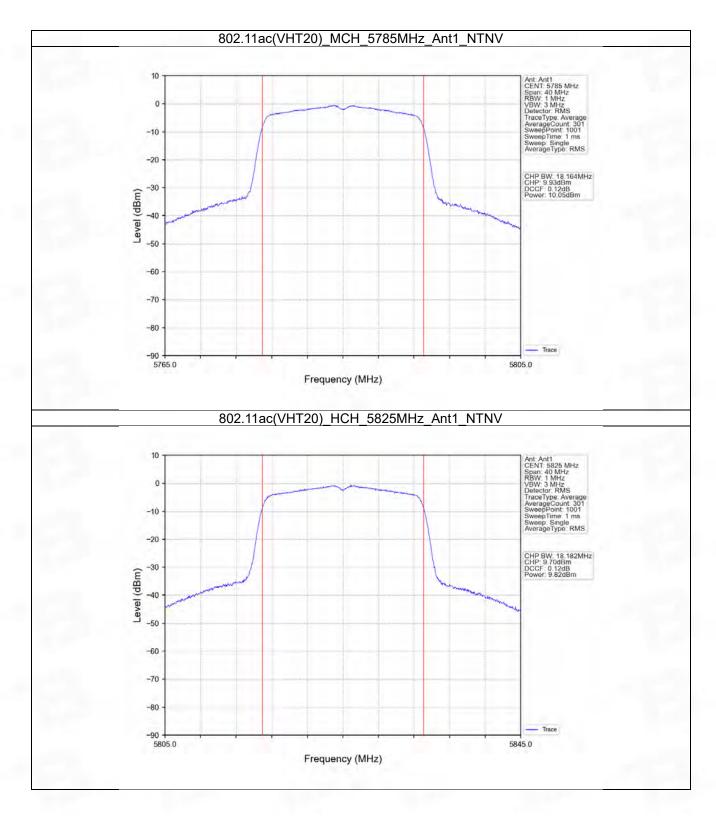




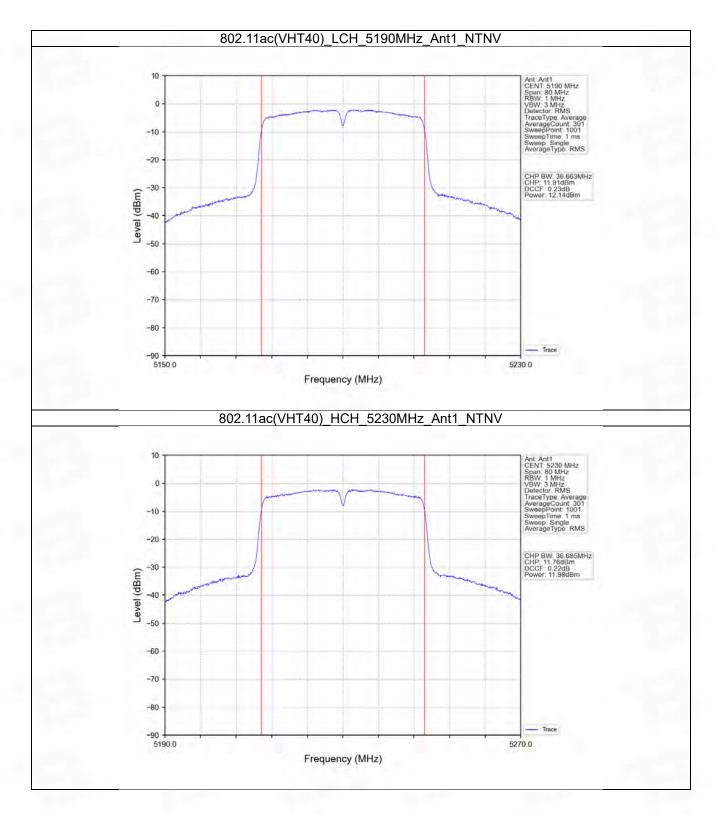




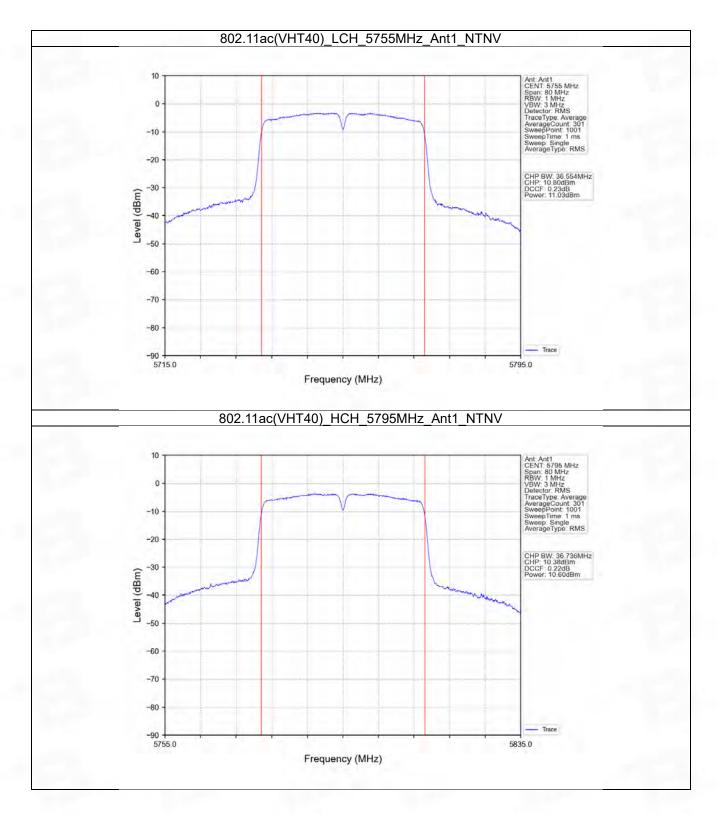












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4. Maximum Power Spectral Density

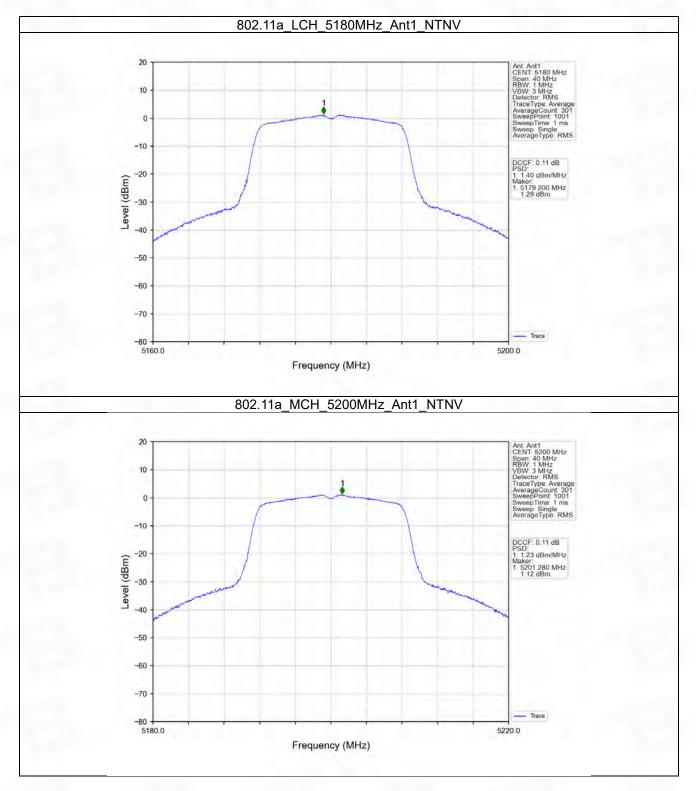
4.1 PSD

4.1.1 Test Result

Mode	TX	Frequency	Maximum PSD (dBm/MHz)		Verdict
	Туре	(MHz)	ANT1	Limit	verdict
802.11a	SISO	5180	1.40	<=11	Pass
		5200	1.23	<=11	Pass
		5240	1.26	<=11	Pass
000.11-	SISO	5180	1.31	<=11	Pass
802.11n (HT20)		5200	0.99	<=11	Pass
(1120)		5240	0.89	<=11	Pass
802.11n (HT40)	SISO	5190	-1.22	<=11	Pass
		5230	-2.01	<=11	Pass
802.11ac	SISO	5180	1.29	<=11	Pass
		5200	1.33	<=11	Pass
(VHT20)		5240	1.29	<=11	Pass
802.11ac (VHT40)	SISO	5190	-1.77	<=11	Pass
		5230	-1.96	<=11	Pass
Note1: Antenna C	Gain: Ant1: -0.49	9dBi;			

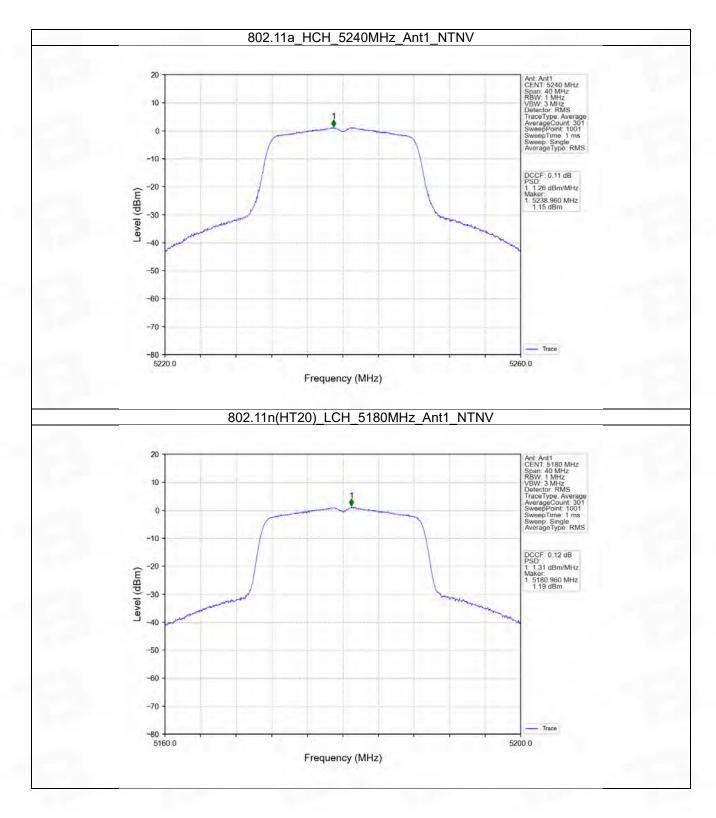


4.1.2 Test Graph



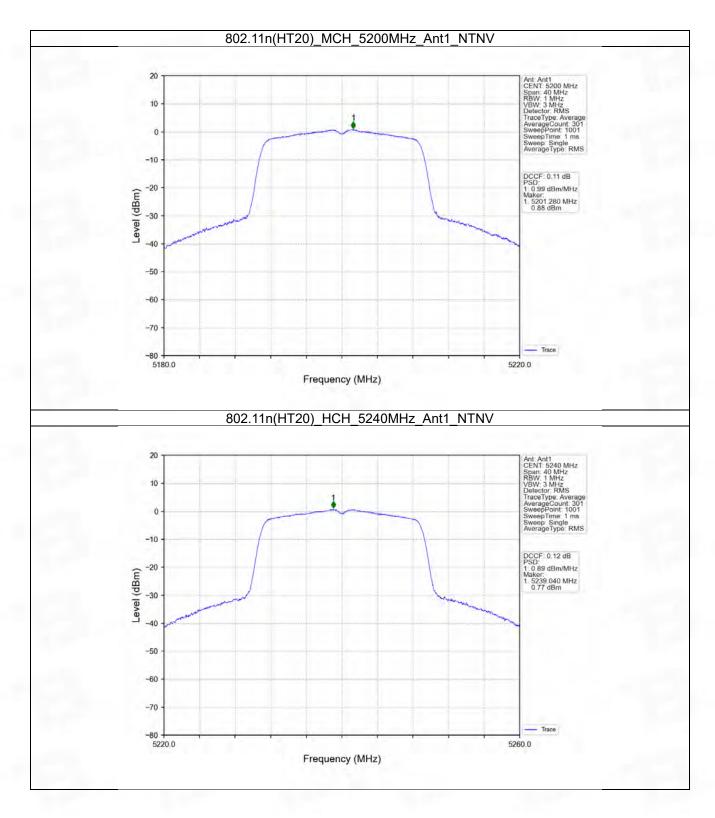
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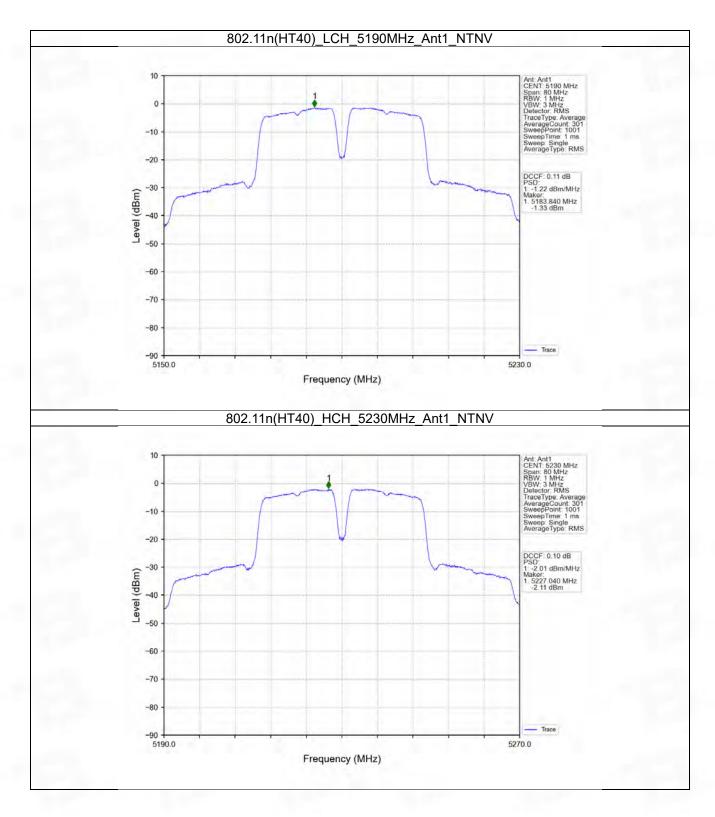
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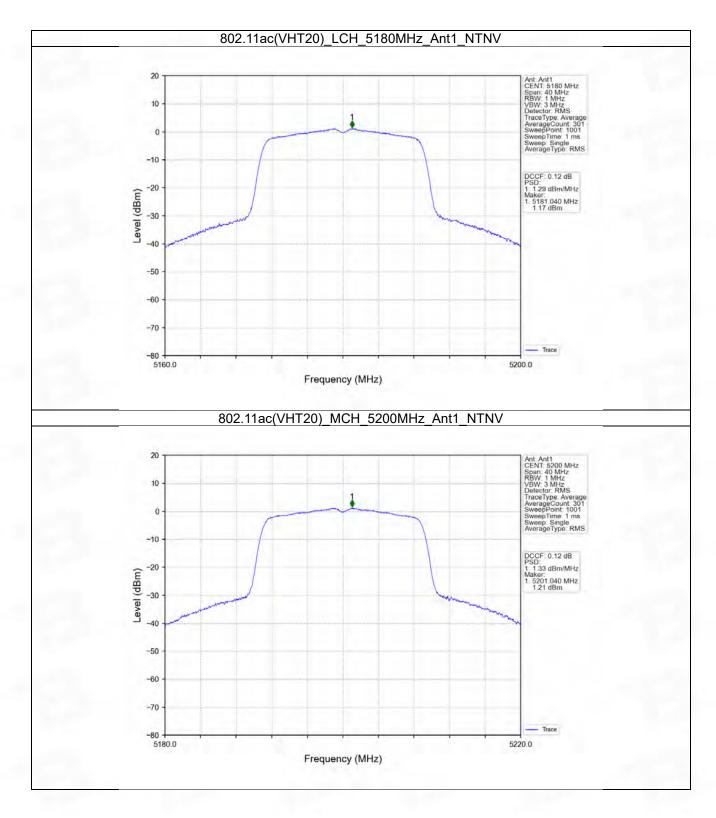
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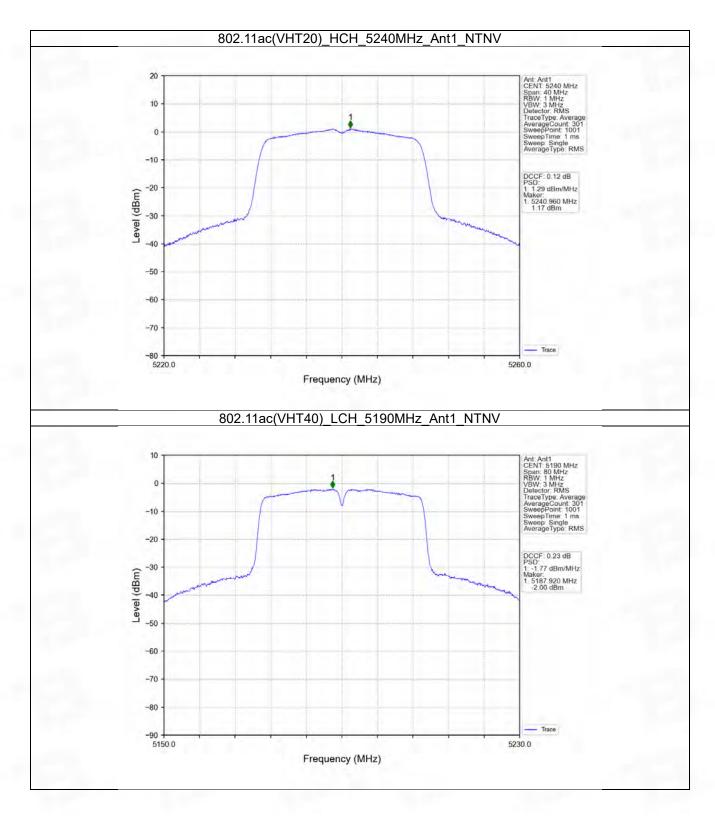
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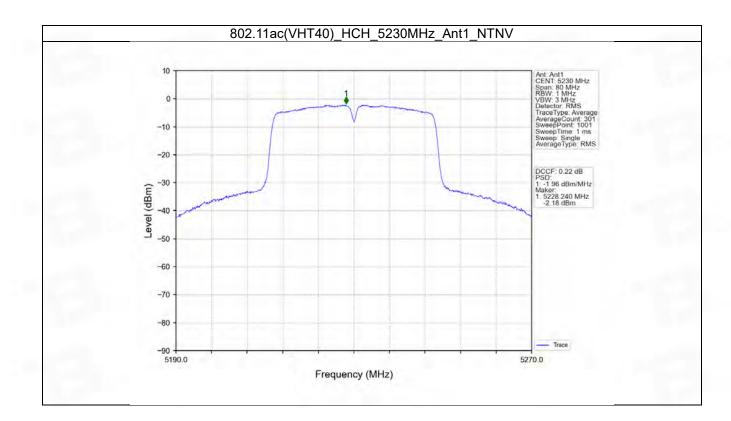


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4.2 PSD-Band3

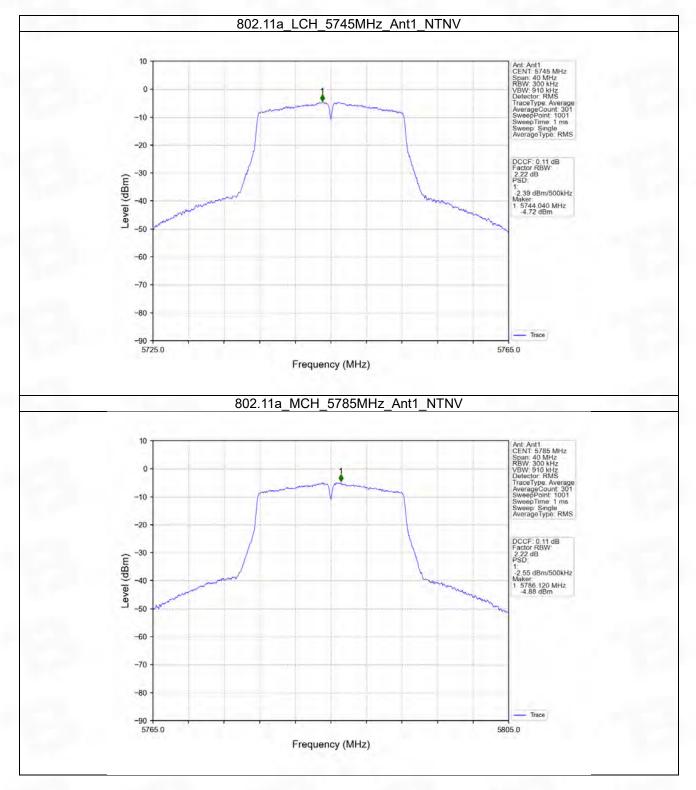
4.2.1 Test Result

Mode	ТΧ	Frequency	Maximum PSD	(dBm/500kHz)	Verdict
wode	Туре	(MHz)	ANT1	Limit	verdict
		5745	-2.39	<=30	Pass
802.11a	SISO	5785	-2.55	<=30	Pass
		5825	-2.89	<=30	Pass
000 11-		5745	-2.89	<=30	Pass
802.11n	SISO	5785	-3.33	<=30	Pass
(HT20)		5825	-3.18	<=30	Pass
802.11n	SISO	5755	-5.84	<=30	Pass
(HT40)	5150	5795	-6.55	<=30	Pass
002 11		5745	-2.78	<=30	Pass
802.11ac	SISO	5785	-3.19	<=30	Pass
(VHT20)		5825	-3.38	<=30	Pass
802.11ac	SISO	5755	-5.59	<=30	Pass
(VHT40)	3130	5795	-6.36	<=30	Pass

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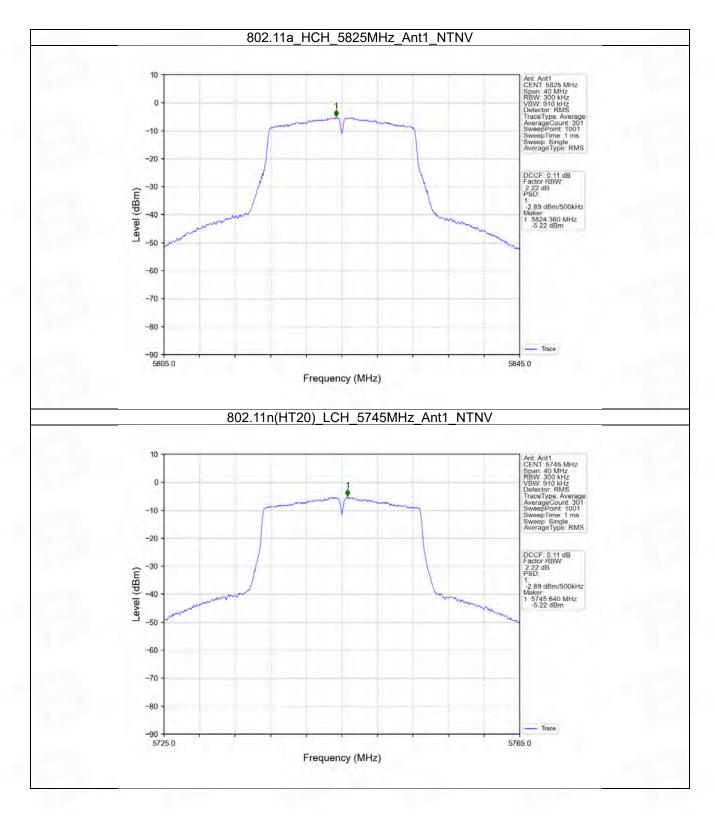


4.2.2 Test Graph

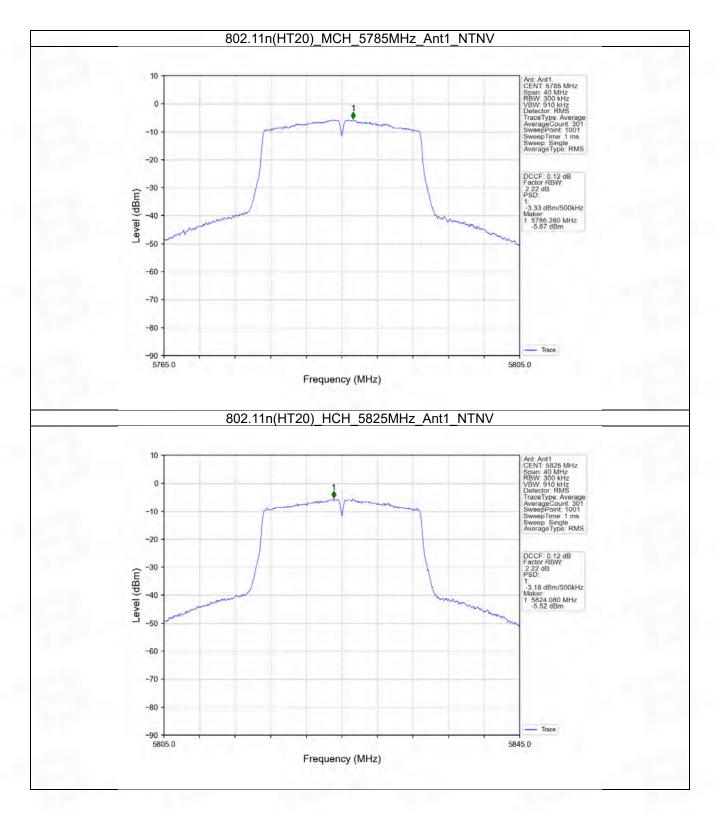


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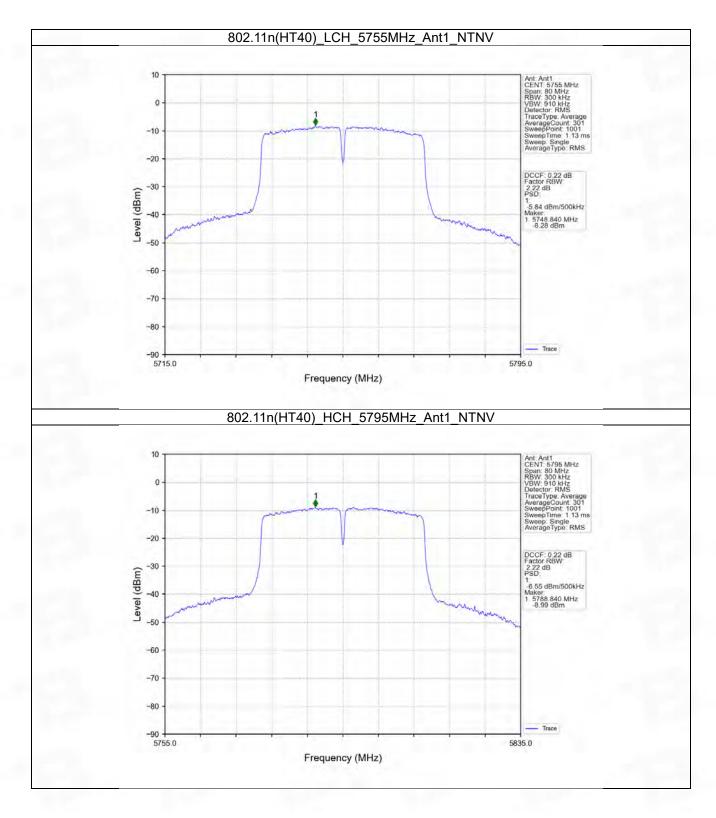




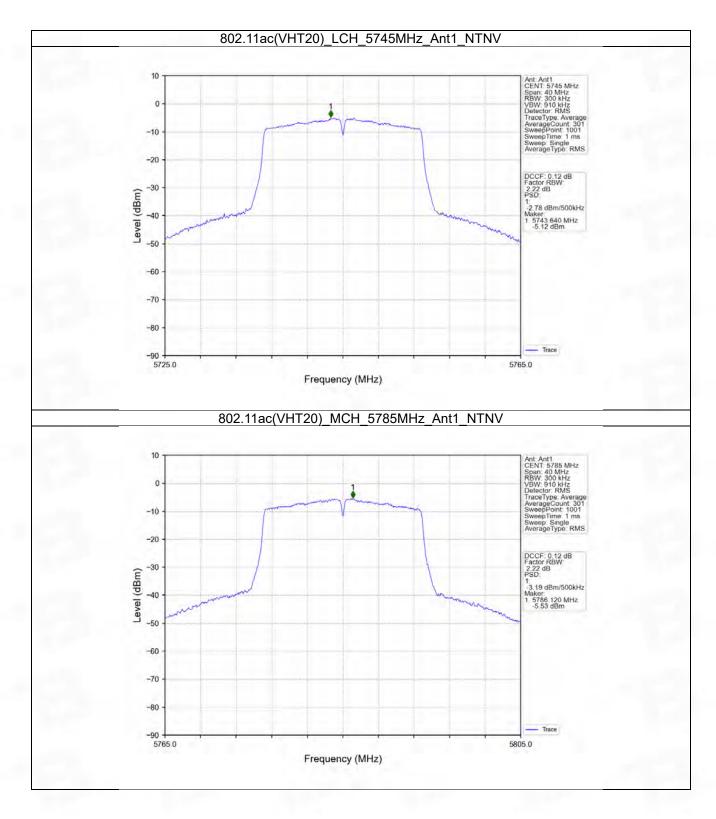


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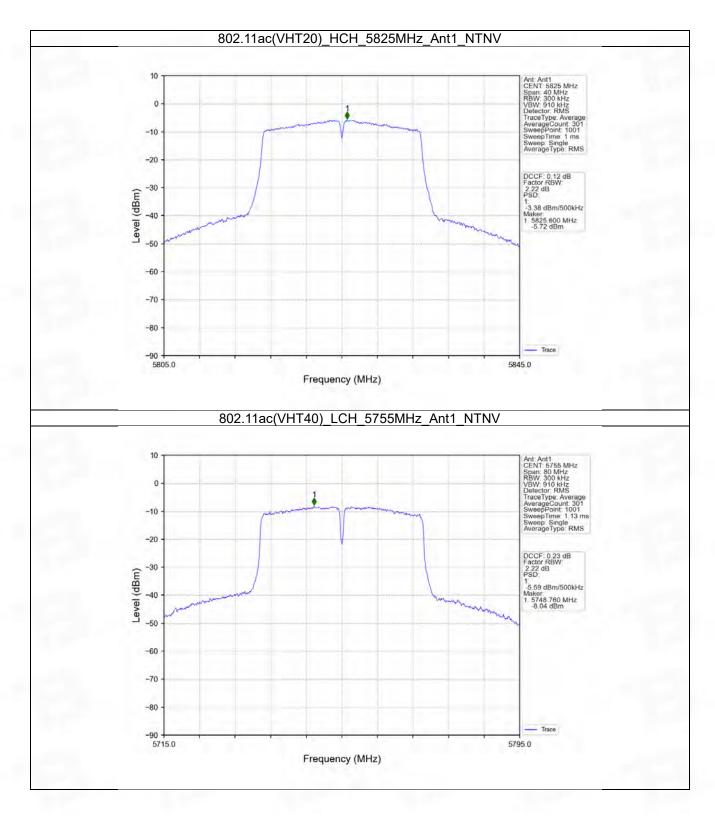




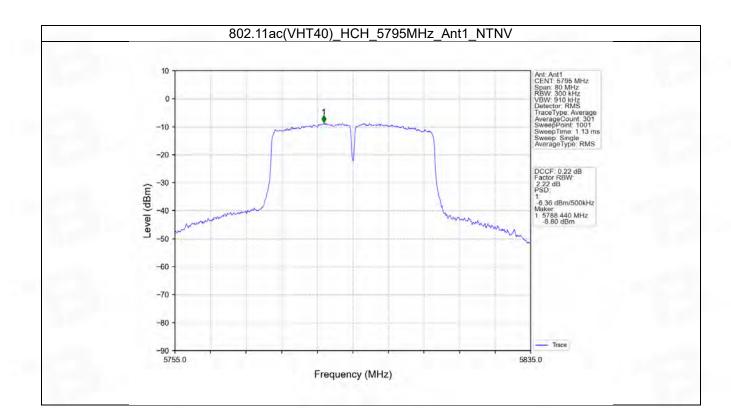














5. Frequency Stability

5.1 Ant1

5.1.1 Test Result

		L _	_	Ant1	· - · - ·			
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VAC)	Measured Frequency (MHz)	Limit (MHz)	Verdict	
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(=)		102	5180.020	5150 to 5250	Pass	
			20	120	5180.020	5150 to 5250	Pass	
				138	5180.040	5150 to 5250	Pass	
			-30	120	5180.000	5150 to 5250	Pass	
			-20	120	5180.040	5150 to 5250	Pass	
		5180	-10	120	5179.980	5150 to 5250	Pass	
			0	120	5180.000	5150 to 5250	Pass	
			10	120	5180.020	5150 to 5250	Pass	
			30	120	5180.000	5150 to 5250	Pass	
			40	120	5180.040	5150 to 5250	Pass	
			50	120	5180.060	5150 to 5250	Pass	
				102	5200.060	5150 to 5250	Pass	
			20	120	5200.020	5150 to 5250	Pass	
				138	5200.020	5150 to 5250	Pass	
			-30	120	5200.020	5150 to 5250	Pass	
		5200 SO	-20	120	5199.980	5150 to 5250	Pass	
			-10	120	5200.040	5150 to 5250	Pass	
			0	120	5200.040	5150 to 5250	Pass	
			10	120	5199.920	5150 to 5250	Pass	
			30	120	5200.020	5150 to 5250	Pass	
802.11a	SISO		-	40	120	5200.020	5150 to 5250	Pass
				50	120	5199.980	5150 to 5250	Pass
				102	5239.900	5150 to 5250	Pass	
			20	120	5240.000	5150 to 5250	Pass	
				138	5240.020	5150 to 5250	Pass	
			-30	120	5239.960	5150 to 5250	Pass	
			-20	120	5240.000	5150 to 5250	Pass	
		5240	-10	120	5240.020	5150 to 5250	Pass	
			0	120	5239.920	5150 to 5250	Pass	
			10	120	5240.040	5150 to 5250	Pass	
			30	120	5240.060	5150 to 5250	Pass	
			40	120	5239.960	5150 to 5250	Pass	
			50	120	5239.920	5150 to 5250	Pass	
				102	5744.960	5725 to 5850	Pass	
			20	120	5745.060	5725 to 5850	Pass	
				138	5744.940	5725 to 5850	Pass	
		5745	-30	120	5744.940	5725 to 5850	Pass	
		5745	-20	120	5744.960	5725 to 5850	Pass	
			-10	120	5744.920	5725 to 5850	Pass	
			0	120	5744.940	5725 to 5850	Pass	
			10	120	5744.940	5725 to 5850	Pass	

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			30	120	5744.980	5725 to 5850	Pass
			40	120	5745.020	5725 to 5850	Pass
			50	120	5745.020	5725 to 5850	Pass
				102	5784.940	5725 to 5850	Pass
			20	120	5785.000	5725 to 5850	Pass
				138	5784.920	5725 to 5850	Pass
			-30	120	5784.980	5725 to 5850	Pass
			-20	120	5784.960	5725 to 5850	Pass
		5785	-10	120	5784.980	5725 to 5850	Pass
		0.00	0	120	5785.040	5725 to 5850	Pass
			10	120	5785.020	5725 to 5850	Pass
			30	120	5784.980	5725 to 5850	Pase
			40	120	5785.020	5725 to 5850	Pas
		100	50	120	5785.020	5725 to 5850	Pas
	-		00	102	5824.960	5725 to 5850	Pase
			20	120	5825.020	5725 to 5850	Pase
			20	138	5825.080	5725 to 5850	Pase
			-30	120	5825.000	5725 to 5850	Pas
			-20	120	5824.980	5725 to 5850	Pas
		5825	-10	120	5825.020	5725 to 5850	Pase
		0020	0	120	5825.040	5725 to 5850	Pase
		-	10	120	5824.960	5725 to 5850	Pas
			30	120	5825.040	5725 to 5850	Pase
			40	120	5825.040	5725 to 5850	Pas
			50	120	5825.040	5725 to 5850	Pase
			00	102	5180.040	5150 to 5250	Pas
			20	120	5179.960	5150 to 5250	Pase
			20	138	5180.060	5150 to 5250	Pase
			-30	120	5179.960	5150 to 5250	Pase
		-	-20	120	5180.000	5150 to 5250	Pas
		5180	-10	120	5180.060	5150 to 5250	Pase
		0100	0	120	5180.020	5150 to 5250	Pas
			10	120	5179.980	5150 to 5250	Pas
			30	120	5180.000	5150 to 5250	Pas
			40	120	5180.000	5150 to 5250	Pas
			50	120	5180.000	5150 to 5250	Pas
			00	102	5199.980	5150 to 5250	Pas
			20	120	5199.980	5150 to 5250	Pase
802.11n			_0	138	5200.040	5150 to 5250	Pas
(HT20)	SISO		-30	120	5200.040	5150 to 5250	Pas
(0)			-20	120	5200.000	5150 to 5250	Pase
		5200	-10	120	5200.000	5150 to 5250	Pas
		0200	0	120	5199.960	5150 to 5250	Pase
			10	120	5200.060	5150 to 5250	Pase
		-	30	120	5199.960	5150 to 5250	Pase
			40	120	5200.020	5150 to 5250	Pase
			50	120	5199.980	5150 to 5250	Pase
			50	102	5240.020	5150 to 5250	Pase
			20	120	5239.980	5150 to 5250	Pas
			20	138	5240.000	5150 to 5250	Pase
		5240	-30	120	5240.040	5150 to 5250	Pase
			-20	120	5239.960	5150 to 5250	Pass
			-10	120	5239.960	5150 to 5250	Pas

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			0	120	5239.960	5150 to 5250	Pass
			10	120	5240.020	5150 to 5250	Pass
			30	120	5240.020	5150 to 5250	Pass
			40	120	5240.040	5150 to 5250	Pass
		F	50	120	5240.000	5150 to 5250	Pass
				102	5744.980	5725 to 5850	Pass
			20	120	5745.020	5725 to 5850	Pass
				138	5744.960	5725 to 5850	Pass
			-30	120	5745.000	5725 to 5850	Pass
			-20	120	5744.940	5725 to 5850	Pass
		5745	-10	120	5744.940	5725 to 5850	Pass
			0	120	5745.040	5725 to 5850	Pass
			10	120	5744.980	5725 to 5850	Pass
			30	120	5744.980	5725 to 5850	Pass
		F	40	120	5744.940	5725 to 5850	Pass
			50	120	5745.000	5725 to 5850	Pass
				102	5784.980	5725 to 5850	Pass
			20	120	5784.980	5725 to 5850	Pass
				138	5784.960	5725 to 5850	Pass
			-30	120	5785.060	5725 to 5850	Pass
			-20	120	5785.040	5725 to 5850	Pass
		5785	-10	120	5785.040	5725 to 5850	Pass
			0	120	5785.020	5725 to 5850	Pass
			10	120	5785.020	5725 to 5850	Pass
			30	120	5784.980	5725 to 5850	Pass
			40	120	5785.040	5725 to 5850	Pass
			50	120	5784.960	5725 to 5850	Pass
				102	5825.020	5725 to 5850	Pass
			20	120	5824.980	5725 to 5850	Pass
			20	138	5825.040	5725 to 5850	Pass
			-30	120	5825.020	5725 to 5850	Pass
			-20	120	5824.960	5725 to 5850	Pass
		5825	-10	120	5824.960	5725 to 5850	Pass
		0020	0	120	5825.020	5725 to 5850	Pass
			10	120	5824.960	5725 to 5850	Pass
		-	30	120	5825.020	5725 to 5850	Pass
			40	120	5824.940	5725 to 5850	Pass
			50	120	5825.040	5725 to 5850	Pass
	+ +		00	102	5190.000	5150 to 5250	Pass
			20	120	5190.000	5150 to 5250	Pass
			20	138	5190.040	5150 to 5250	Pass
		-	-30	120	5190.000	5150 to 5250	Pass
			-30	120	5190.040	5150 to 5250	Pass
		5190	-20	120	5190.040	5150 to 5250	Pass
		5130	-10	120	5190.040	5150 to 5250	Pass
802.11n	SISO		10	120	5190.000	5150 to 5250	Pass
(HT40)	000	000	30	120	5190.000	5150 to 5250	
			40	120	5190.000	5150 to 5250	Pass
			50	120	5190.040		Pass
			50			5150 to 5250	Pass
			20	102	5230.000	5150 to 5250	Pass
		5230	20	120	5230.000	5150 to 5250	Pass
			20	138	5230.000	5150 to 5250	Pass
			-30	120	5230.040	5150 to 5250	Pass

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			-20	120	5230.000	5150 to 5250	Pass
			-10	120	5230.000	5150 to 5250	Pass
			0	120	5230.000	5150 to 5250	Pass
			10	120	5230.040	5150 to 5250	Pass
			30	120	5230.040	5150 to 5250	Pass
			40	120	5230.000	5150 to 5250	Pass
			50	120	5230.000	5150 to 5250	Pass
				102	5755.000	5725 to 5850	Pass
			20	120	5755.000	5725 to 5850	Pass
				138	5755.000	5725 to 5850	Pass
			-30	120	5755.040	5725 to 5850	Pass
			-20	120	5755.000	5725 to 5850	Pass
		5755	-10	120	5755.000	5725 to 5850	Pass
			0	120	5755.000	5725 to 5850	Pass
		_	10	120	5754.960	5725 to 5850	Pass
			30	120	5755.040	5725 to 5850	Pass
			40	120	5755.000	5725 to 5850	Pass
			50	120	5754.920	5725 to 5850	Pass
				102	5795.000	5725 to 5850	Pass
			20	120	5795.000	5725 to 5850	Pass
				138	5794.960	5725 to 5850	Pass
			-30	120	5795.040	5725 to 5850	Pass
			-20	120	5795.000	5725 to 5850	Pass
		5795	-10	120	5795.080	5725 to 5850	Pass
		0/00	0	120	5794.920	5725 to 5850	Pass
			10	120	5795.000	5725 to 5850	Pass
			30	120	5795.000	5725 to 5850	Pass
			40	120	5795.040	5725 to 5850	Pass
			50	120	5795.000	5725 to 5850	Pass
				102	5180.060	5150 to 5250	Pass
			20	120	5180.000	5150 to 5250	Pass
			20	138	5180.040	5150 to 5250	Pass
			-30	120	5179.960	5150 to 5250	Pass
			-20	120	5180.000	5150 to 5250	Pass
		5180	-10	120	5179.980	5150 to 5250	Pass
			0	120	5180.000	5150 to 5250	Pase
			10	120	5179.940	5150 to 5250	Pase
			30	120	5180.000	5150 to 5250	Pass
			40	120	5180.020	5150 to 5250	Pass
			50	120	5179.960	5150 to 5250	Pase
802.11ac			00	102	5200.040	5150 to 5250	Pase
(VHT20)	SISO		20	120	5200.000	5150 to 5250	Pase
(20)			20	138	5199.980	5150 to 5250	Pass
			-30	120	5200.000	5150 to 5250	Pass
			-30	120	5199.980	5150 to 5250	Pass
		5200	-10	120	5199.960	5150 to 5250	Pass
		0200	0	120	5199.960	5150 to 5250	Pass
			10	120	5200.000	5150 to 5250	Pass
			30	120	5200.060	5150 to 5250	Pass
			40	120	5200.000	5150 to 5250	Pass
			50	120	5200.000	5150 to 5250	Pass
				102	5240.020	5150 to 5250	Pass
		5240	20	102	5239.980	5150 to 5250	
				120	5239.900	515010 5250	Pass

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				138	5240.000	5150 to 5250	Pass
			-30	120	5239.980	5150 to 5250	Pass
			-20	120	5240.000	5150 to 5250	Pass
			-10	120	5240.020	5150 to 5250	Pass
			0	120	5240.000	5150 to 5250	Pass
			10	120	5240.040	5150 to 5250	Pass
			30	120	5240.040	5150 to 5250	Pass
1000			40	120		5150 to 5250	Pass
			50		5240.020 5239.940	5150 to 5250	
	-		50	120		5725 to 5850	Pass
			20	102	5744.940		Pass
			20	120	5744.960	5725 to 5850	Pass
			20	138	5744.940	5725 to 5850	Pass
			-30	120	5745.000	5725 to 5850	Pass
		5745	-20	120	5745.000	5725 to 5850	Pass
		5745	-10	120	5744.940	5725 to 5850	Pass
			0	120	5744.980	5725 to 5850	Pass
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			40	120	5744.980	5725 to 5850	Pass
			50	120	5744.940	5725 to 5850	Pass
				102	5785.000	5725 to 5850	Pass
			20	120	5784.960	5725 to 5850	Pass
				138	5785.020	5725 to 5850	Pass
			-30	120	5784.940	5725 to 5850	Pass
			-20	120	5784.940	5725 to 5850	Pass
		5785	-10	120	5784.980	5725 to 5850	Pass
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			30	120	5784.980	5725 to 5850	Pass
			40	120	5784.960	5725 to 5850	Pass
			50	120	5784.960	5725 to 5850	Pass
1.000				102	5825.000	5725 to 5850	Pass
			20	120	5824.960	5725 to 5850	Pass
				138	5824.980	5725 to 5850	Pass
			-30	120	5824.980	5725 to 5850	Pass
			-20	120	5825.000	5725 to 5850	Pass
		5825	-10	120	5825.040	5725 to 5850	Pass
		0020	0	120	5824.980	5725 to 5850	Pass
10.000			10	120	5825.040	5725 to 5850	Pass
			30	120	5825.000	5725 to 5850	Pass
			40	120	5825.000	5725 to 5850	Pass
100			50	120	5825.020	5725 to 5850	Pass
			50	120	5190.000	5150 to 5250	Pass
Sec. 1			20	102	5190.000	5150 to 5250	Pass
			20				
			20	138	5190.000	5150 to 5250	Pass
			-30	120	5190.000	5150 to 5250	Pass
802.11ac	000	E100	-20	120	5190.000	5150 to 5250	Pass
(VHT40)	SISO	5190	-10	120	5190.000	5150 to 5250	Pass
· · · · · · · · · · · · · · · · · · ·			0	120	5190.000	5150 to 5250	Pass
			10	120	5190.000	5150 to 5250	Pass
			30	120	5190.000	5150 to 5250	Pass
			40	120	5190.040	5150 to 5250	Pass
			50	120	5190.040	5150 to 5250	Pass

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		102	5230.080	5150 to 5250	Pass
	20	120	5230.040	5150 to 5250	Pass
		138	5230.000	5150 to 5250	Pass
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	50	120	5230.040	5150 to 5250	Pass
		102	5755.000	5725 to 5850	Pass
	20	120	5755.000	5725 to 5850	Pass
		138	5755.000	5725 to 5850	Pass
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	40	120	5755.000	5725 to 5850	Pass
	50	120	5754.960	5725 to 5850	Pass
		102	5795.000	5725 to 5850	Pass
	20	120	5795.000	5725 to 5850	Pass
		138	5795.000	5725 to 5850	Pass
	-30	120	5795.000	5725 to 5850	Pass
	-20	120	5795.000	5725 to 5850	Pass
5795	-10	120	5795.000	5725 to 5850	Pass
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	10	120	5795.000	5725 to 5850	Pass
	30	120	5795.000	5725 to 5850	Pass
	40	120	5795.000	5725 to 5850	Pass
	50	120	5795.000	5725 to 5850	Pass

6. Form731

6.1 Form731

6.1.1 Test Result

Lower Freq (MHz)	High Freq (MHz)	MAX Power (W)	MAX Power (dBm)
5180	5240	0.0152	11.81
5745	5825	0.0117	10.67
5190	5230	0.0167	12.24
5755	5795	0.0127	11.03

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