

 MOTOROLA SOLUTIONS	    CERTIFICATE 2518.08 MS ISO/IEC 17025 TESTING SAMM NO. 0825																															
MOTOROLA PENANG ADV. COMM. LABORATORY Motorola Solutions Malaysia Sdn. Bhd. Plot 2A Medan Bayan Lepas, Mukim 12, S.W.D. 11900 Bayan Lepas, Penang, Malaysia.	FCC / IC TEST REPORT Report Revision : Rev.A																															
<table><tr><td>Date/s Tested</td><td>: 13-Aug-2020 - 28-Aug-2020</td><td rowspan="10"></td></tr><tr><td>Manufacturer/Location</td><td>: Motorola Solutions Malaysia SDN BHD</td></tr><tr><td>Manufacturer Address</td><td>: Plot 2A Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia</td></tr><tr><td>Requestor</td><td>: SIEW KHENG TAN</td></tr><tr><td>Product Type</td><td>: Hand-held</td></tr><tr><td>Product Version (PMN)</td><td>: MSLB-MKZ900</td></tr><tr><td>Model Number (HVIN)</td><td>: AAH90ZDU9RH1AN (PMUE5674A)</td></tr><tr><td>Frequency Band</td><td>: 5180-5825 MHz</td></tr><tr><td>Firmware Version (FVIN)</td><td>: 102.20.02.0032 (BP), D00.00.39 (AP)</td></tr><tr><td>Applicant Name</td><td>: Motorola Solutions Inc</td></tr><tr><td>Applicant Address</td><td>: 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322</td></tr><tr><td>FCC Registrations</td><td>: 461337</td><td></td></tr><tr><td>ISED Registrations</td><td>: MY0001</td><td></td></tr></table> The equipment was tested accordance to the requirement listed below: <table><tr><td>(5GHz Wi-Fi) FCC 47 CFR Part 15 Subpart E IC RSS 247 Issue 2 February 2017</td><td>PASS</td></tr></table>		Date/s Tested	: 13-Aug-2020 - 28-Aug-2020		Manufacturer/Location	: Motorola Solutions Malaysia SDN BHD	Manufacturer Address	: Plot 2A Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia	Requestor	: SIEW KHENG TAN	Product Type	: Hand-held	Product Version (PMN)	: MSLB-MKZ900	Model Number (HVIN)	: AAH90ZDU9RH1AN (PMUE5674A)	Frequency Band	: 5180-5825 MHz	Firmware Version (FVIN)	: 102.20.02.0032 (BP), D00.00.39 (AP)	Applicant Name	: Motorola Solutions Inc	Applicant Address	: 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322	FCC Registrations	: 461337		ISED Registrations	: MY0001		(5GHz Wi-Fi) FCC 47 CFR Part 15 Subpart E IC RSS 247 Issue 2 February 2017	PASS
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Table of Contents

1.0. Summary of Test Results	3
2.0. Measurement Uncertainty	4
3.0. Equipment List	5
4.0. General Information	6
5.0. Test Mode Applicability and Test Channel Detail	9
6.0. Duty Cycle of Test Signal	13
6.0.1. Test Setup	13
6.0.2. Test Data	13
7.0. Transmitter Test Parameters	16
7.1. Bandwidth measurements	16
7.1.1. Test Setup	16
7.1.2. Test Limits	16
7.1.3. Test Data	17
7.2. Maximum Conducted Output Power	32
7.2.1. Test Setup	32
7.2.2. Test Limits	32
7.2.3. Additional Info	33
7.2.4. Test Data	33
7.3. Maximum Power Spectral Density	58
7.3.1. Test Setup	58
7.3.2. Test Limits	58
7.3.3. Additional Info	59
7.3.4. Test Data	60
7.4. 6dB Bandwidth	78
7.4.1. Test Setup	78
7.4.2. Test Limits	78
7.4.3. Test Data	79
7.5. Frequency Stability	85
7.5.1. Test Setup	85
7.5.2. Test Limits	85
7.5.3. Test Data	86
7.6. Band Edge Radiated Spurious Emission Measurement	87
7.6.1. Test Setup	87
7.6.2. Test Limits	88
7.6.3. Test Result	89
7.7. Radiated Spurious Emission Measurement	159
7.7.1. Test Setup	159
7.7.2. Test Limits	160
7.7.3. Test Data	161
7.8. AC Powerline Conducted Emission	317
7.8.1. Test Setup	317
7.8.2. Test Limits	317
7.8.3. Test Data	318

1.0. Summary of Test Results

FCC Clause	IC Clause	Test Item	Result	Remarks	Serial Number tested	Tested by
15.407 (a)(1/2/3)	RSS 247 6.2	Maximum Conducted Output Power (Average)	Pass	Highest output power: 802.11a: 17.369 dBm 802.11n20: 17.503 dBm 802.11n40: 17.661 dBm 802.11ac80: 17.681 dBm	734TWP0317	Gan
15.407(a) (1/2/3)	RSS 247 6.2	Maximum Power Spectral Density	Pass	NA	734TWP0317	Gan
15.407 (e)	RSS 247 6.2.4	6dB Bandwidth	Pass	Highest 99% OCB: 802.11a: 16.748 MHz (16M8D1D) 802.11n20: 17.894 MHz(17M9D1D) 802.11n40: 36.297 MHz(36M3D1D) 802.11ac80: 75.659 MHz (75M7D1D)	734TWP0317	Gan
15.407 (g)	RSS Gen 6.11	Frequency Stability	Pass	NA	734TWP0317	Gan
15.407 (b) (1/2/3/4/6)	RSS 247 6.2	Band Edge Radiated Spurious Emission Measurement	Pass	Worst case emission: 802.11a: No spur detect (Noise Floor) 802.11n20 No spur detect (Noise Floor) 802.11n40 No spur detect (Noise Floor) 802.11ac80: No spur detect (Noise Floor)	734TWP0311	Nazrin &Fendi
15.407 (b) (1/2/3/4/6)	RSS 247 6.2	Radiated Spurious Emission Measurement	Pass	Worst case emission: 802.11a: No spur detect (Noise Floor) 802.11n20 No spur detect (Noise Floor) 802.11n40 No spur detect (Noise Floor) 802.11ac80: No spur detect (Noise Floor)	734TWP0311	Qawiman &Fendi
15.207 15.407 (b)(6)	RSS Gen 8.8	AC Powerline Conducted Emission	Pass	NA	734TWP0311	Azil & Iskandar
15.203	-	Antenna requirement	Pass	Internal antenna is not accessible to the end-user		

2.0. Measurement Uncertainty

Measurement	Frequency	Expanded Uncertainty (k=1.96) (±dB)
AC Power Line Conducted Spurious Emission	150KHz ~ 30MHz	3.43
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	5.01
	200MHz ~ 1000MHz	5.01
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.01
	18GHz ~ 25GHz	5.01
Conducted Spurious Emissions	9kHz ~ 12.75GHz	2.82

3.0. Equipment List

Bluetooth ATE # 1 (SW Version: Ate Main_3.1.10_R2)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
SPECTRUM ANALYZER	FSEK30	838495/014	19-Oct-19	19-Oct-20
CHAMBER	SH-641	92002639	9-Dec-19	9-Dec-20
POWER	6652A	3541A02565	26-Jun-20	26-Jun-21
SPECTRUM ANALYZER	E4440A	MY48250517	1-Nov-19	1-Nov-20
N to N RF Cable # 1	SF126/11N/11N	NA	NA	NA

Radiated Emission Station (SW Version: EMC FCC RE v1.6.2)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
DRG HORN FREQ.	SAS-571	720	21-Mar-19	21-Mar-21
DRG HORN FREQ.	SAS-571	1143	14-Feb-19	14-Feb-21
POWER SUPPLY	6032A	2615A01178	21-MAY-20	21-MAY-21
SIGNAL GENERATOR	SMB 100A	181117	8-Nov-18	8-Nov-21
EMI TEST RECEIVER	ESW44	101750	24-Jul-19	24-Sep-20
EMI TEST RECEIVER	ESIB26	100017	19-Jul-19	19-Sep-20
5m Semi-anechoic Chamber	S800-HX	J2308	Not Required	Not Required
BILOG ANTENNA	CBL6112B	2964	23-Apr-19	23-Apr-21
BILOG ANTENNA	CBL6112B	2950	8-Jul-19	8-Jul-21
DATA LOGGER	SDL500	A.016776	4-Jun-20	4-Jun-21
SYSTEM CONTROLLER	SC104V	050806-1	Not Required	Not Required
TURNTABLE FLUSH MOUNT 2M	FM2011	NA	Not Required	Not Required
ANTENNA POSITIONING TOWER	TLT2	NA	Not Required	Not Required
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170255	27-Jan-20	27-Jan-21
18 - 40GHz PREAMPLIFIER	Miteq Hi Gain Sucoflex	001	Not Required	Not Required
PREAMPLIFIER	PAM-0118	269	24-May-19	24-May-22
LOOP ANTENNA	6502	00208416	5-Sep-19	5-Sep-20

AC Power Line Conducted Spurious Emission(SW Version: EMC 32 Ver. 10.60.10)

Description	Model #	Serial Number	Calibration Date	Calibration Due Date
TEMPERATURE & HUMIDITY LOGGER	TM320	16344143	20-May-20	20-May-21
V-NETWORK 2-LINE	ENV216V	101039	20-Jul-19	20-Sep-20
EMI TEST RECEIVER	ESIB26	827769/009	25-Jul-19	25-Sep-20
PROGRAMMABLE AC SOURCE	61604	ABR000000926	10-July-2020	10-July-2021

4.0. General Information

General Description of EUT:

Product	Hand-held
Brand	Motorola Solutions
Test Model	MSLB-MKZ900
Power Supply Rating	7.5V
Mode of operation	WLAN 5GHz
Modulation Type	QPSK, BPSK, 16QAM, 64QAM, 256QAM
Modulation Technology	OFDM
Transfer Rate	802.11a: 6.0/9.0/12.0/18.0/24.0/36.0/48.0/54.0 Mbps 802.11n: up to MCS15 802.11ac: up to MCS9
Operating Frequency	5.180 ~ 5.240 GHz, 5.260 ~ 5.320 GHz, 5.50 ~ 5.720 GHz, 5.745 ~ 5.825 GHz
Output Power (26 EBW or 99% OBW)	63.1 mW for 5.180 ~ 5.240 GHz 63.1mW for 5.260 ~ 5.320 GHz 63.1 mW for 5.50 ~ 5.720 GHz 63.1 mW for 5.745 ~ 5.825 GHz
Antenna Type	Inverted-L Monopole 1.58 dBi gain
SW Version	I02.20.02.0032 (BP), D00.00.39 (AP)

Note:

The EUT contains following accessory devices and data cable:

Item	Brand	Model or P/N
BATTERY PACK,BATTERY PACK,IMPRES GEN2, LIION,IP68, 2900T, TIA4950	MOTOROLA	PMNN4804A
UHF STUBBY ANTENNA (400-527MHZ), 90MM, FERRULE	MOTOROLA	AN000348A01
CABLE,MACKENZIE PROG,TEST&ALIGN CABLE W/ TTR	MOTOROLA	PMKN4229A

Description of Test Modes:

For 5180 to 5240 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT20)

Channel	Frequency (MHz)
36	5180
40	5200
44	5220
48	5240

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency (MHz)
38	5190
46	5230

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
42	5210

For 5260 to 5320 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT20)

Channel	Frequency (MHz)
52	5260
56	5280
60	5300
64	5320

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency (MHz)
54	5270
62	5310

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
58	5290

For 5500 to 5720 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT20)

Channel	Frequency (MHz)
100	5500
104	5520
108	5540
112	5560
116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700
144	5720

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency (MHz)
102	5510
110	5550
118	5590
126	5630
134	5670
142	5710

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
106	5530
122	5610
138	5690

For 5745 to 5825 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT40)

Channel	Frequency(MHz)
149	5745
153	5765
157	5785
161	5805
165	5825

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency(MHz)
151	5755
159	5795

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
155	5775

General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, the EUT is to comply with the requirements of the following standards:

FCC Part15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01r04

644545 D03 Guidance for IEEE 802 11ac New Rules v01

ANSI C63.10-2013

RSS 247 Issue 2, RSS Gen

All test have been performed and recorded as per above standards.

Deviation from standard

Not applicable as no deviation from standard test method

Modifications to EUT

No modifications were done to the UUT to facilitate the tests in this report.

5.0. Test Mode Applicability and Test Channel Detail

EUT Configure Mode	Applicable to				Description
	RE$\geq$1G	RE<1G	PLC	APCM	
A	√	√	√	√	Power from adapter
B	x	√	x	x	Power from carcharger (12Vdc)
C	x	√	x	x	Power from carcharger (24Vdc)

Where:

RE $\geq$ 1G: Radiated Emission above 1GHz & Band edge Measurement

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note: The EUT had been pre-scanned on the position of each 3 axis planes. The worst case was found when positioned on **Y-plane**.

Radiated Emission Test (Above 1GHz)

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Frequency Band	MODE	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36-48	36,44,48	OFDM	BPSK	6.0
-	5180-5240	802.11n/ac (HT20, VHT20)	36-48	36,44,48	OFDM	BPSK	6.5
-	5180-5240	802.11n/ac (HT40,VHT40)	38-46	38,46	OFDM	BPSK	13.5
-	5180-5240	802.11ac (VHT80)	42	42	OFDM	BPSK	29.3
-	5260-5320	802.11a	52-64	52,60,64	OFDM	BPSK	6.0
-	5260-5320	802.11n/ac (HT20, VHT20)	52-46	52,60,64	OFDM	BPSK	6.5
-	5260-5320	802.11n/ac (HT40,VHT40)	54-62	54,62	OFDM	BPSK	13.5
-	5260-5320	802.11ac (VHT80)	58	58	OFDM	BPSK	29.3
-	5500-5700	802.11a	100-140	100,116,140	OFDM	BPSK	6.0
-	5500-5720	802.11n/ac (HT20, VHT20)	100-144	100,116,144	OFDM	BPSK	6.5
-	5500-5720	802.11n/ac (HT40,VHT40)	102-142	102,110,142	OFDM	BPSK	13.5
-	5500-5720	802.11ac (VHT80)	106-138	106,122,138	OFDM	BPSK	29.3
-	5745-5825	802.11a	149-165	149,157,165	OFDM	BPSK	6.0
-	5745-5825	802.11n/ac (HT20, VHT20)	149-165	149,157,165	OFDM	BPSK	6.5
-	5745-5825	802.11n/ac (HT40,VHT40)	151-159	151,159	OFDM	BPSK	13.5
-	5745-5825	802.11ac (VHT80)	155	155	OFDM	BPSK	29.3

Radiated Emission Test (Below 1GHz)

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	MODE	Frequency band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36	OFDM	BPSK	6.0
-	802.11a	5260-5320	52 to 64		OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0
-	802.11a	5745-5825	149 to 165		OFDM	BPSK	6.0

Power Line Conducted Emission Test

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	MODE	Frequency band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36	OFDM	BPSK	6.0
-	802.11a	5260-5320	52 to 64		OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0
-	802.11a	5745-5825	149 to 165		OFDM	BPSK	6.0

Antenna Port Conducted Measurement:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Frequency Band	MODE	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36-48	36,44,48	OFDM	BPSK	6.0
-	5180-5240	802.11n/ac (HT20, VHT20)	36-48	36,44,48	OFDM	BPSK	6.5
-	5180-5240	802.11n/ac (HT40,VHT40)	38-46	38,46	OFDM	BPSK	13.5
-	5180-5240	802.11ac (VHT80)	42	42	OFDM	BPSK	29.3
-	5260-5320	802.11a	52-64	52,60,64	OFDM	BPSK	6.0
-	5260-5320	802.11n/ac (HT20, VHT20)	52-64	52,60,64	OFDM	BPSK	6.5
-	5260-5320	802.11n/ac (HT40,VHT40)	54-62	54,62	OFDM	BPSK	13.5
-	5260-5320	802.11ac (VHT80)	58	58	OFDM	BPSK	29.3
-	5500-5700	802.11a	100-140	100,116,140	OFDM	BPSK	6.0
-	5500-5720	802.11n/ac (HT20, VHT20)	100-144	100,116,144	OFDM	BPSK	6.5
-	5500-5720	802.11n/ac (HT40,VHT40)	102-142	102,110,142	OFDM	BPSK	13.5
-	5500-5720	802.11ac (VHT80)	106-138	106,122,138	OFDM	BPSK	29.3
-	5745-5825	802.11a	149-165	149,157,165	OFDM	BPSK	6.0
-	5745-5825	802.11n/ac (HT20, VHT20)	149-165	149,157,165	OFDM	BPSK	6.5
-	5745-5825	802.11n/ac (HT40,VHT40)	151-159	151,159	OFDM	BPSK	13.5
-	5745-5825	802.11ac (VHT80)	155	155	OFDM	BPSK	29.3

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested By
RE≥1G	24.5°C, 70.3% RH	7.5V DC	Qawiman&Fendi
RE<1G	24.5°C, 70.3% RH	7.5V DC	Qawiman&Fendi
PLC	21.4°C, 61.1% RH	120V AC,240V AC	Azil
APCM	25°C, 50% RH	7.5V DC	Gan

Duty Cycle of Test Signal

802.11a and 802.11n (HT20): Duty cycle of test signal is 98%.

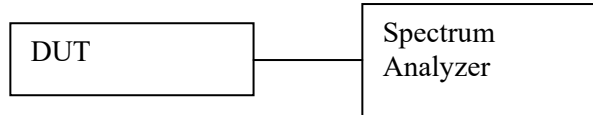
802.11n (HT40): Duty cycle of test signal is 96%.

802.11ac (VHT80): Duty cycle of test signal is 92%.

If Duty cycle of test signal is <98%, duty cycle factor shall be considered. (Refer to section 6.0 for duty cycle measurement)

6.0. Duty Cycle of Test Signal

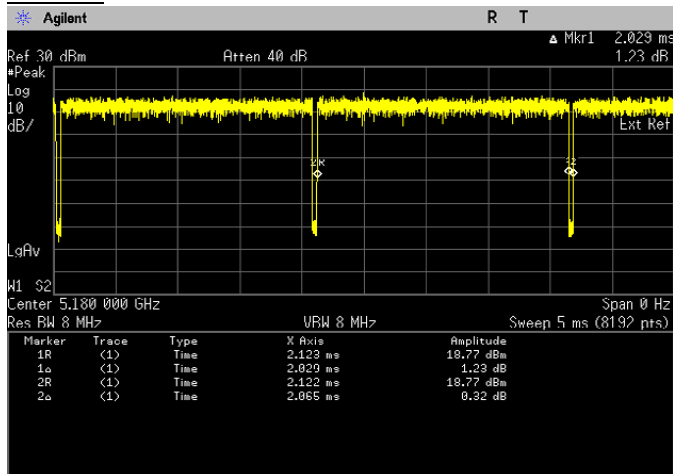
6.0.1. Test Setup



- 1) Set DUT to desire transmit frequency and transmit with maximum power.
- 2) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
- 3) Setting of Spectrum analyzer :
 - a. Set the RBW = 10 MHz or the highest RBW available on spectrum analyzer.
 - b. Set the VBW ≥ RBW.
 - c. Set to Zero Span.
 - d. Detector = Peak.
 - e. Sweep time = 10ms or others that allow to measure accurate duty cycle.
 - f. Trace mode = Max hold.
- 4) Record the duty cycle as X and save the plot.

6.0.2. Test Data

802.11a

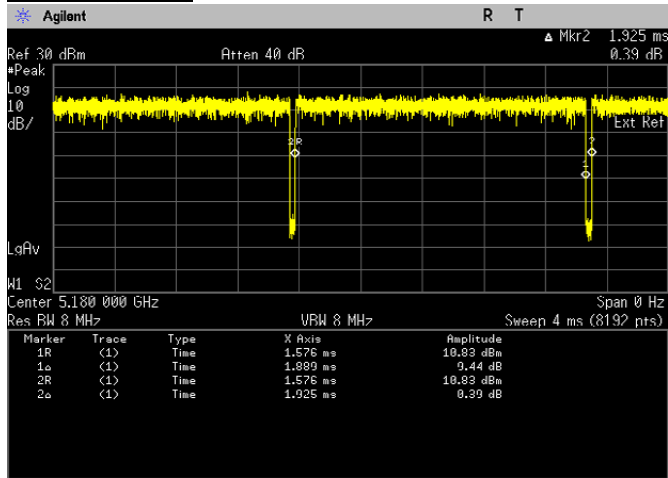


On time	2.029	ms
On + off time	2.065	ms
Duty Cycle	0.9826	
Duty Cycle Factor	0.076	

*Duty cycle = On time/ On +off time

*Duty Cycle factor = 10*log (1/Duty Cycle)

802.11n (HT20)

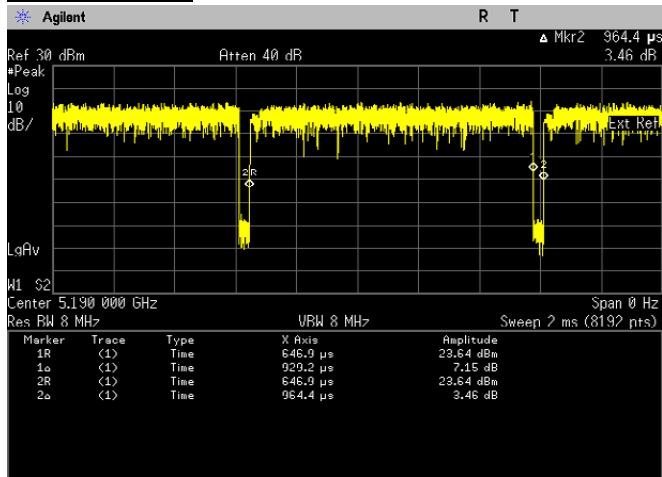


On time	1.889	ms
On + off time	1.925	ms
Duty Cycle	0.9813	
Duty Cycle Factor	0.082	

*Duty cycle = On time/ On +off time

*Duty Cycle factor = $10 \cdot \log(1/\text{Duty Cycle})$

802.11n (HT40)

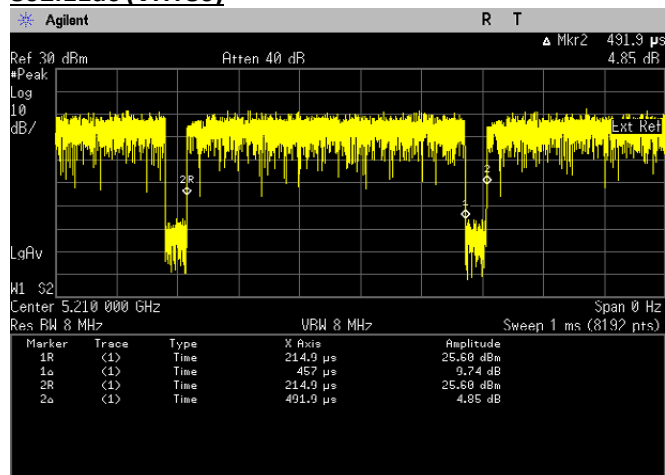


On time	0.9292	ms
On + off time	0.9644	ms
Duty cycle	0.9635	
Duty Cycle factor	0.161	

*Duty cycle = On time/ On +off time

*Duty Cycle factor = $10 \cdot \log(1/\text{Duty Cycle})$

802.11ac (VHT80)



On time	0.457	ms
On + off time	0.4919	ms
Duty cycle	0.9291	
Duty Cycle factor	0.32	

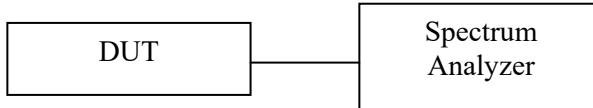
*Duty cycle = On time/ On +off time

*Duty Cycle factor = 10*log (1/Duty Cycle)

7.0. Transmitter Test Parameters

7.1. Bandwidth measurements

7.1.1. Test Setup



- a) Test Setup as per illustrated above.
- b) Set DUT to transmit at desire transmit frequency.
- c) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
- d) Setting of Spectrum analyzer for 26dB EBW:
 - RBW = approximate 1% of emission bandwidth
 - VBW > RBW
 - Detector = Peak
 - Trace =Max hold
 - Measure the maximum width of the emission that is 26 dB down from the maximum of the emission.
 - Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
- e) Setting of Spectrum analyzer for 99% Occupied bandwidth:
 - Span = 1.5 times to 5.0 times the OBW
 - RBW = 1% to 5 % of the OBW
 - VBW $\geq 3 \cdot$ RBW
 - Detector = Peak
 - Trace = Max Hold
 - Use the 99% power bandwidth function of the instrument
- f) The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause C.1) & D).

7.1.2. Test Limits

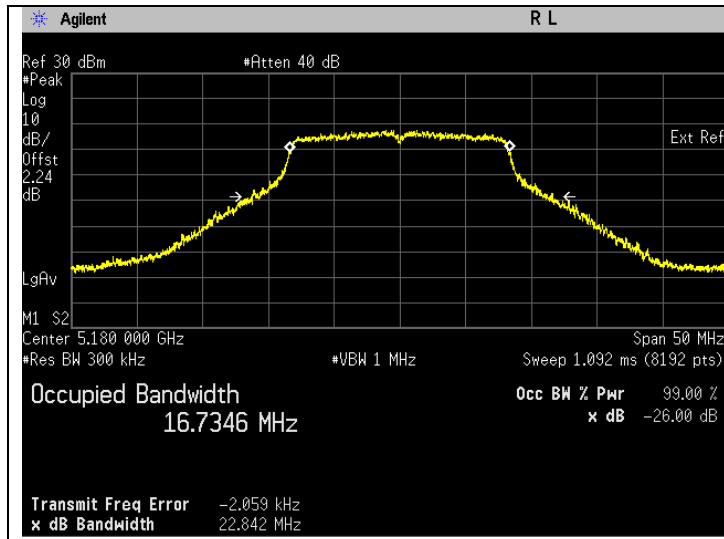
Not applicable.

7.1.3. Test Data

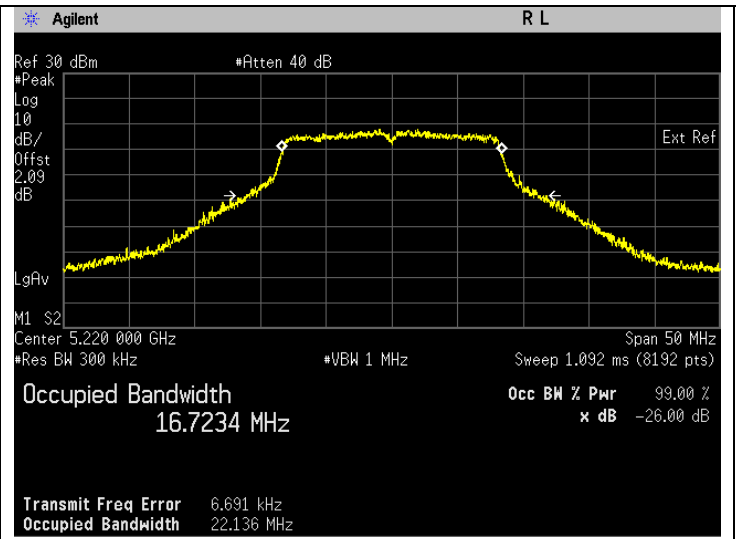
802.11a

Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5180	Mod Type: BPSK, Data Rate: 6	22.842	Pass	16.735	Pass
5220	Mod Type: BPSK, Data Rate: 6	22.137	Pass	16.724	Pass
5240	Mod Type: BPSK, Data Rate: 6	22.384	Pass	16.737	Pass
5260	Mod Type: BPSK, Data Rate: 6	23.171	Pass	16.724	Pass
5300	Mod Type: BPSK, Data Rate: 6	23.191	Pass	16.748	Pass
5320	Mod Type: BPSK, Data Rate: 6	22.040	Pass	16.711	Pass
5500	Mod Type: BPSK, Data Rate: 6	22.586	Pass	16.688	Pass
5580	Mod Type: BPSK, Data Rate: 6	22.805	Pass	16.743	Pass
5700	Mod Type: BPSK, Data Rate: 6	22.333	Pass	16.727	Pass
5720	Mod Type: BPSK, Data Rate: 6, UNII-2C	16.758	Pass	13.367	Pass
5720	Mod Type: BPSK, Data Rate: 6, UNII-3	6.758	Pass	3.367	Pass
5745	Mod Type: BPSK, Data Rate: 6	22.732	Pass	16.719	Pass
5785	Mod Type: BPSK, Data Rate: 6	23.559	Pass	16.745	Pass
5825	Mod Type: BPSK, Data Rate: 6	23.175	Pass	16.754	Pass

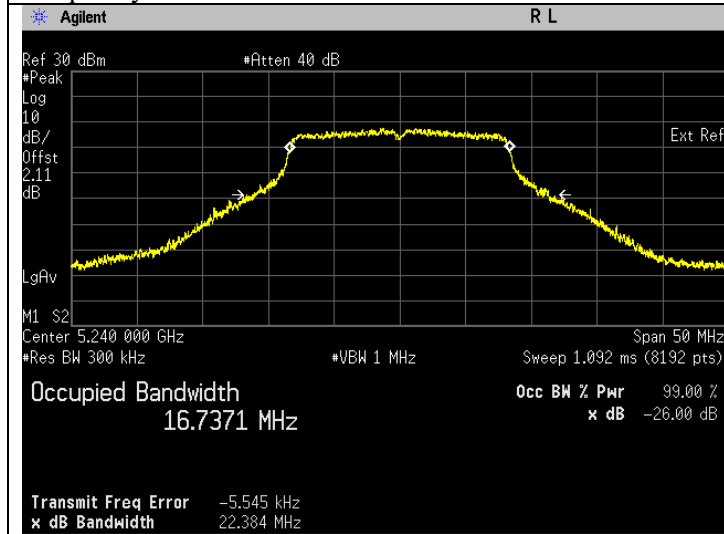
26 dB Bandwidth/ 99% Bandwidth



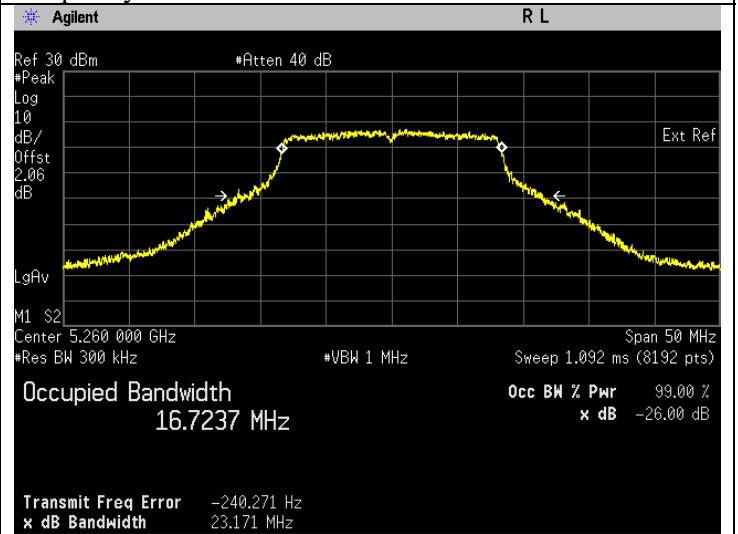
Frequency 5180 MHz



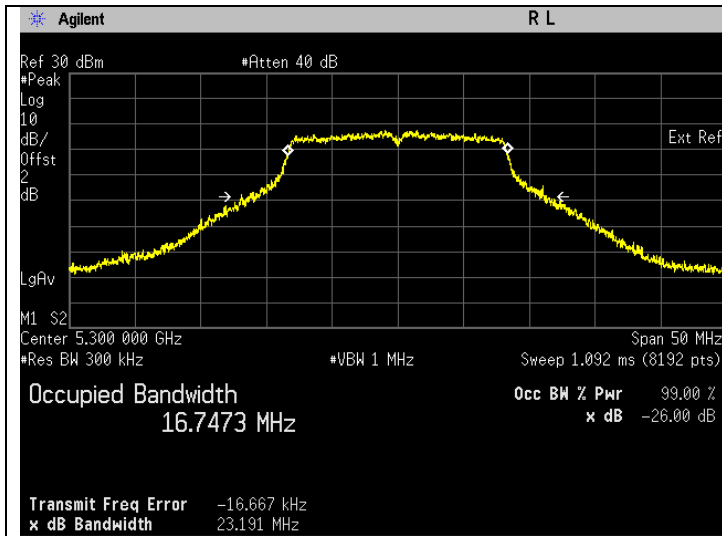
Frequency 5220 MHz



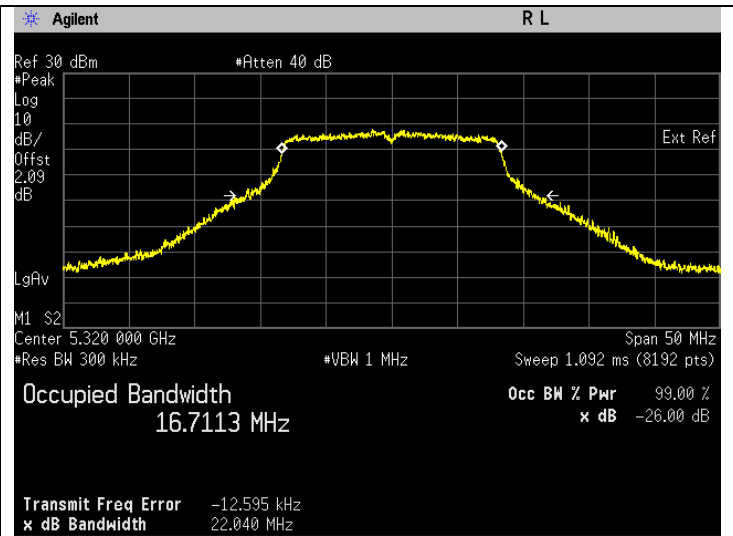
Frequency 5240 MHz



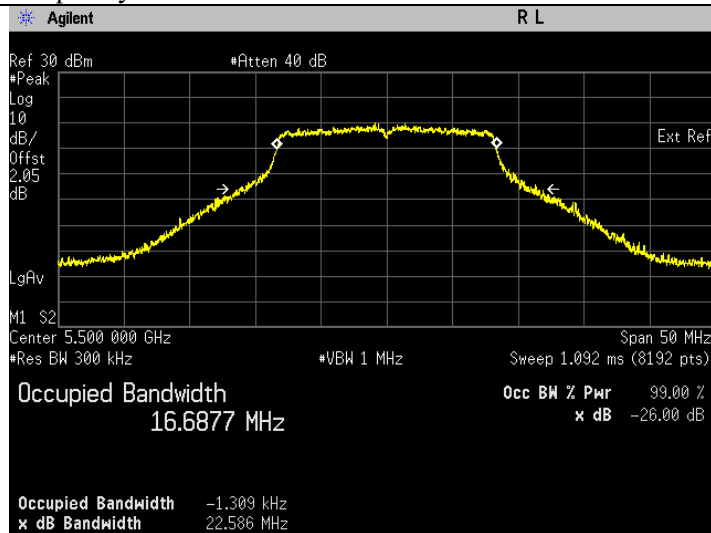
Frequency 5260 MHz



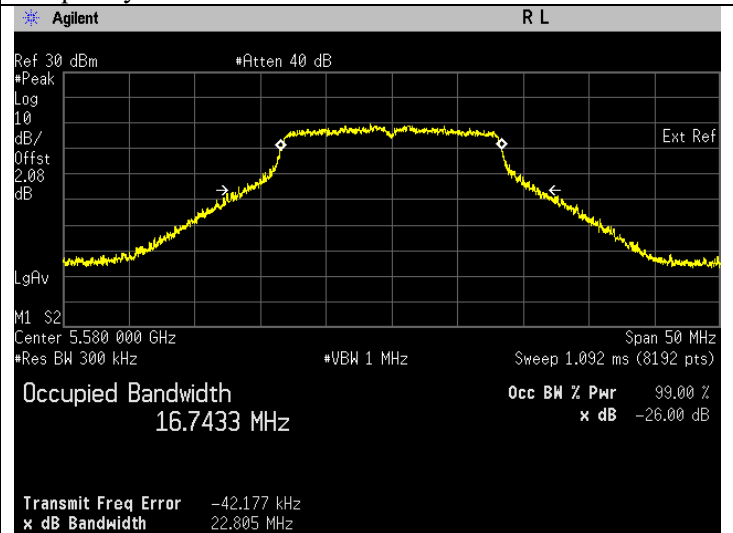
Frequency 5300 MHz



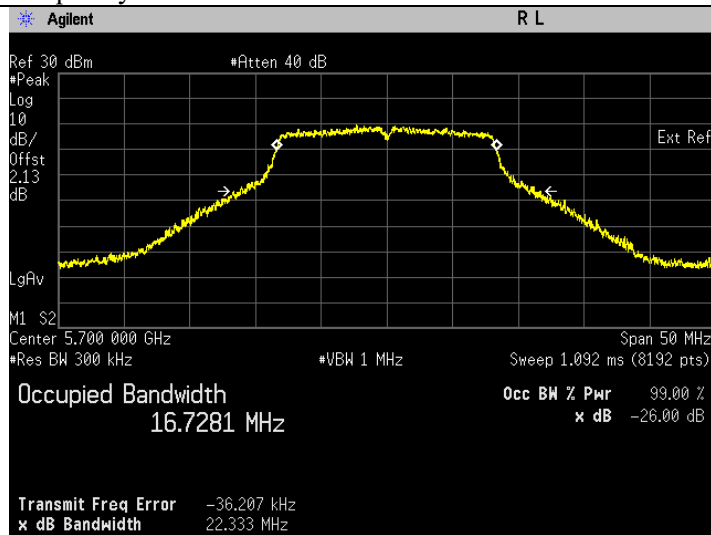
Frequency 5320 MHz



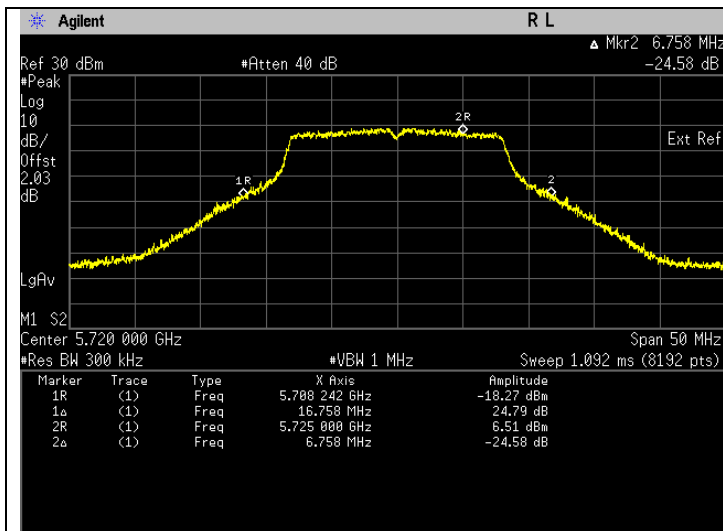
Frequency 5500 MHz



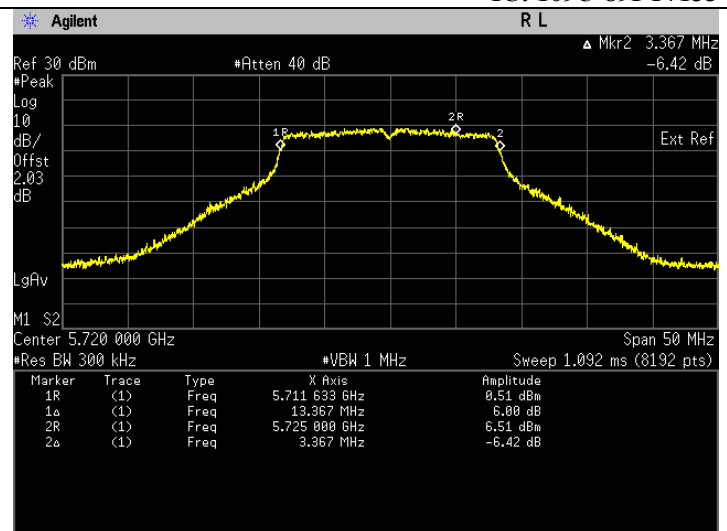
Frequency 5580 MHz



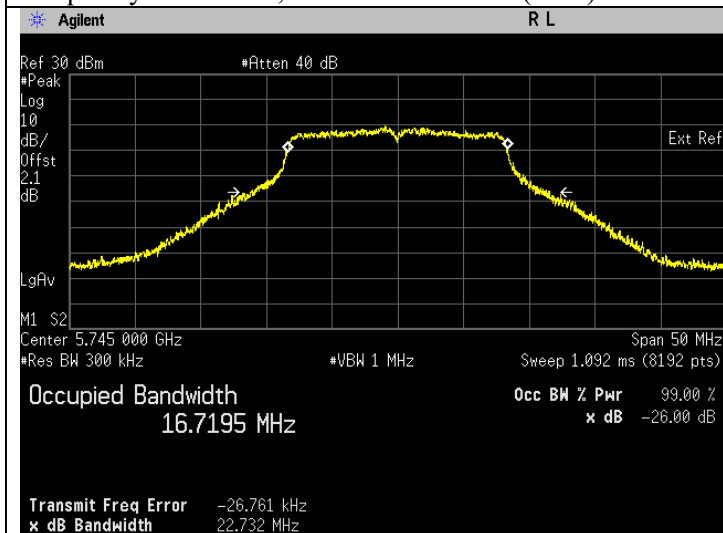
Frequency 5700 MHz



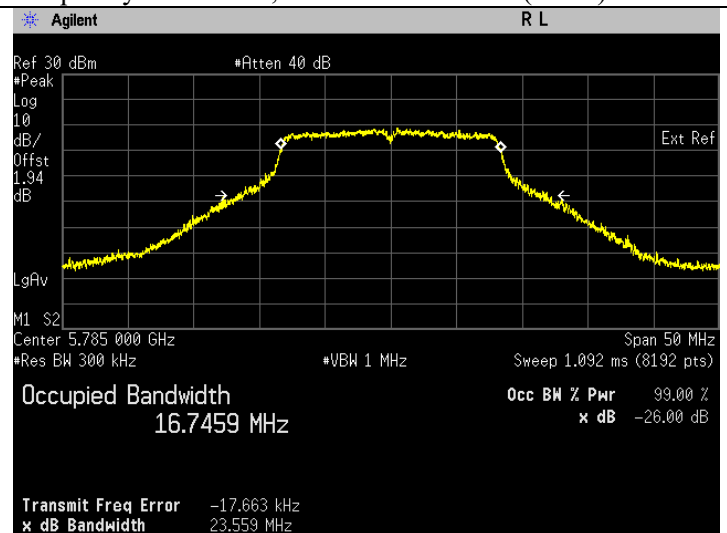
Frequency 5720 MHz, UNII-2C & UNII-3(FCC)



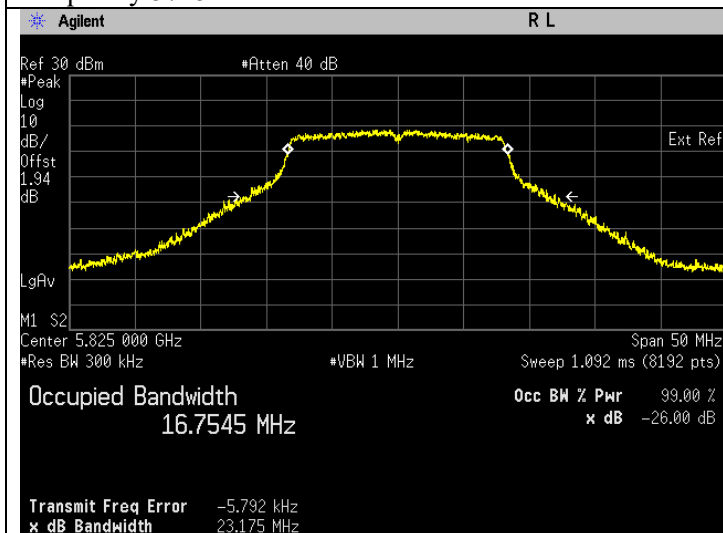
Frequency 5720 MHz, UNII-2C & UNII-3 (ISED)



Frequency 5745 MHz



Frequency 5785 MHz

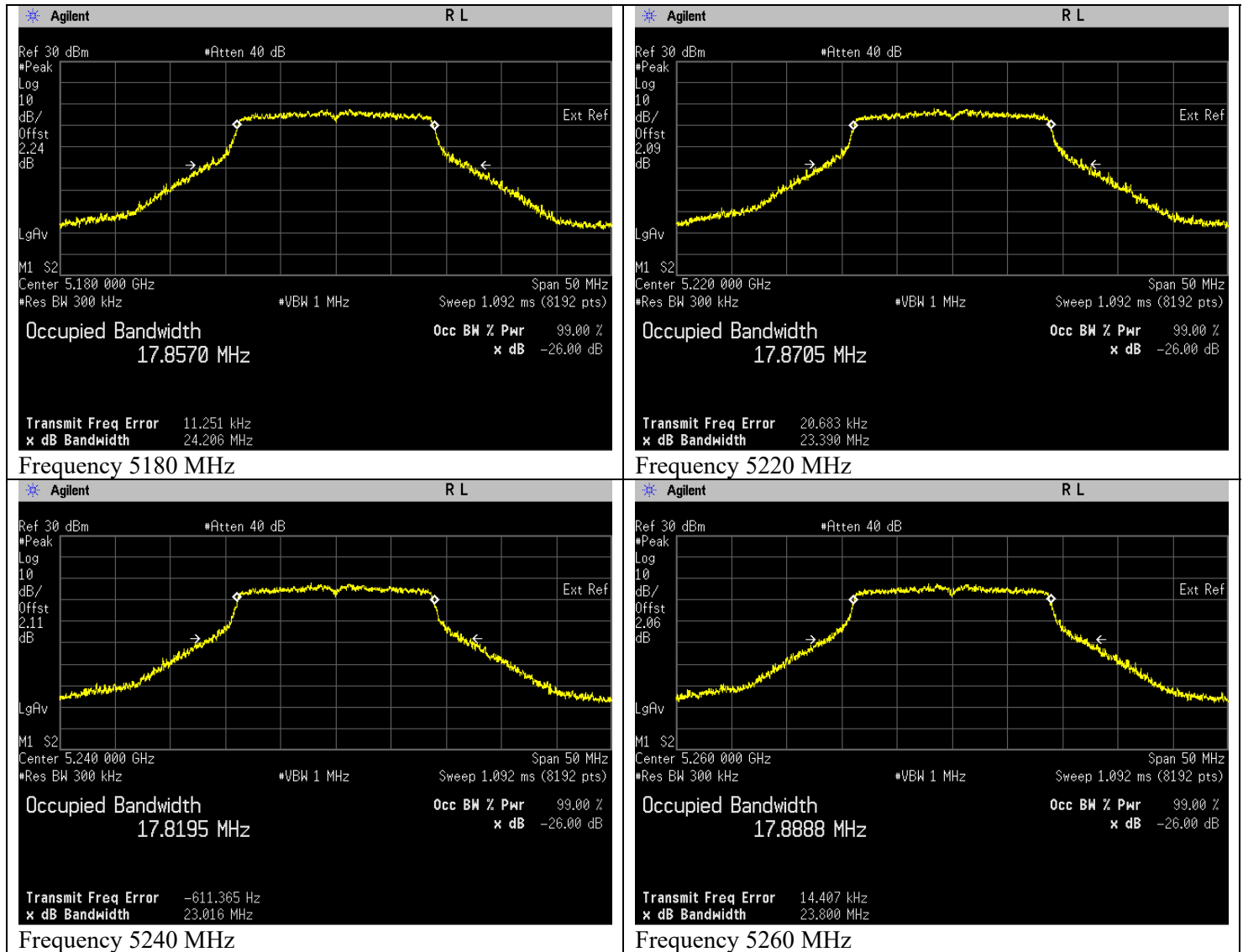


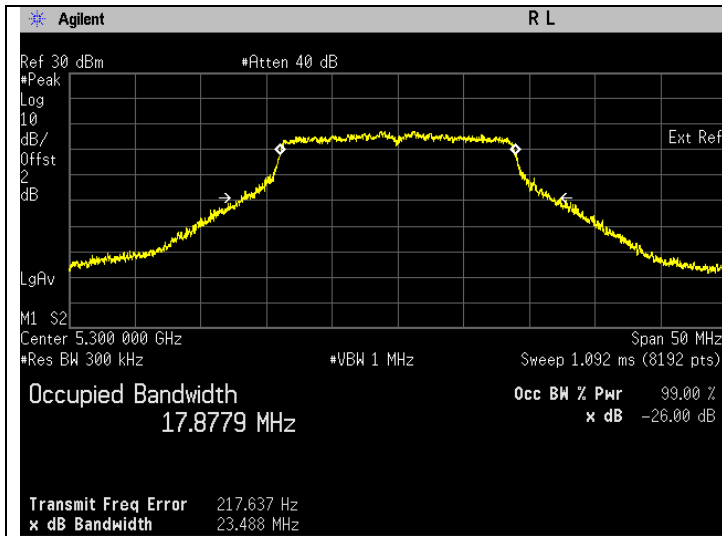
Frequency 5825 MHz

802.11n (HT20)

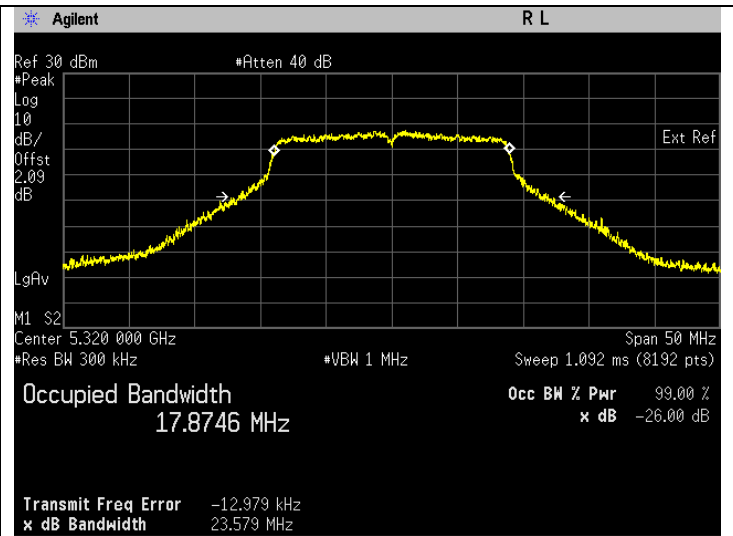
Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.206	Pass	17.857	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.390	Pass	17.871	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.016	Pass	17.820	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.800	Pass	17.889	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.488	Pass	17.878	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.579	Pass	17.875	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.635	Pass	17.894	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.978	Pass	17.843	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.212	Pass	17.859	Pass
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5), UNII-2C	16.709	Pass	13.937	Pass
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5), UNII-3	6.709	Pass	3.937	Pass
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.263	Pass	17.859	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.599	Pass	17.900	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.139	Pass	17.882	Pass

26 dB Bandwidth/ 99% Bandwidth

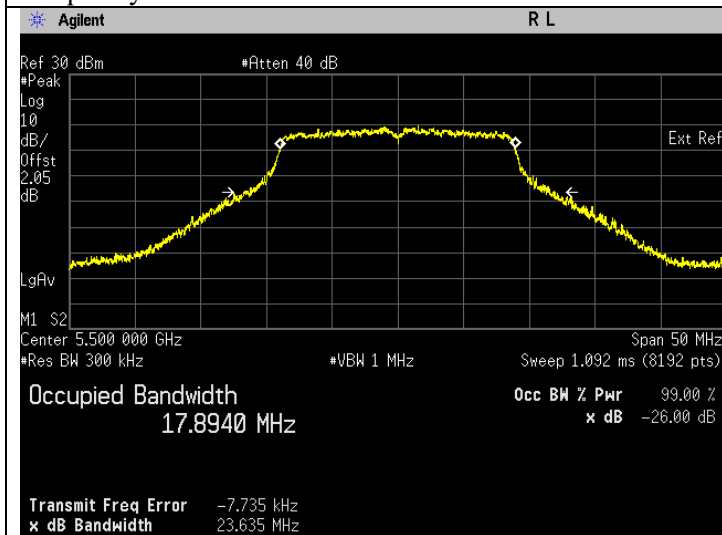




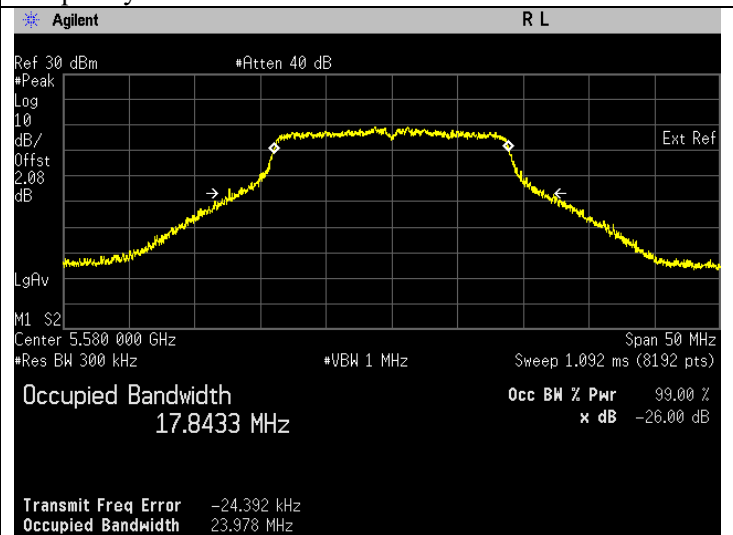
Frequency 5300 MHz



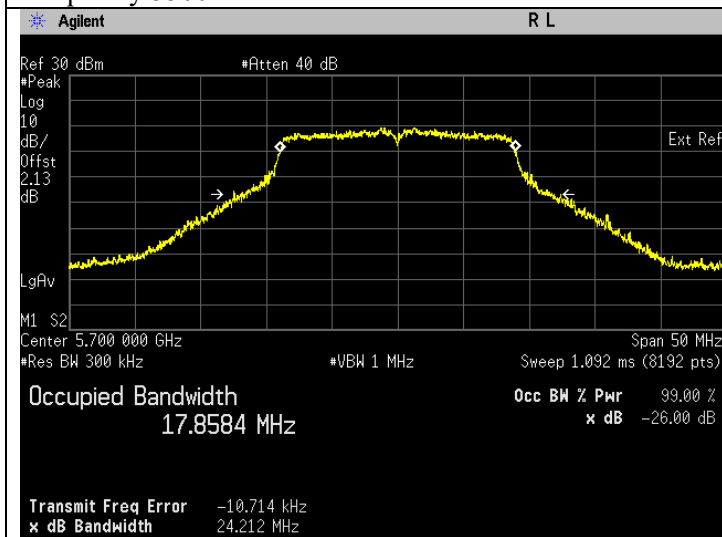
Frequency 5320 MHz



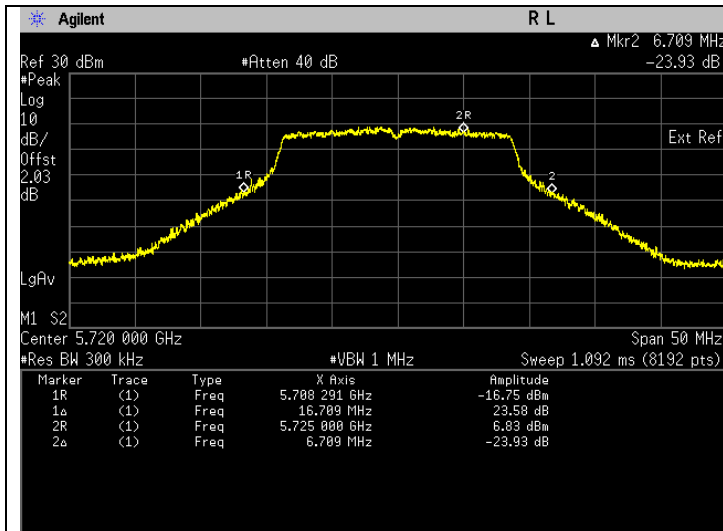
Frequency 5500 MHz



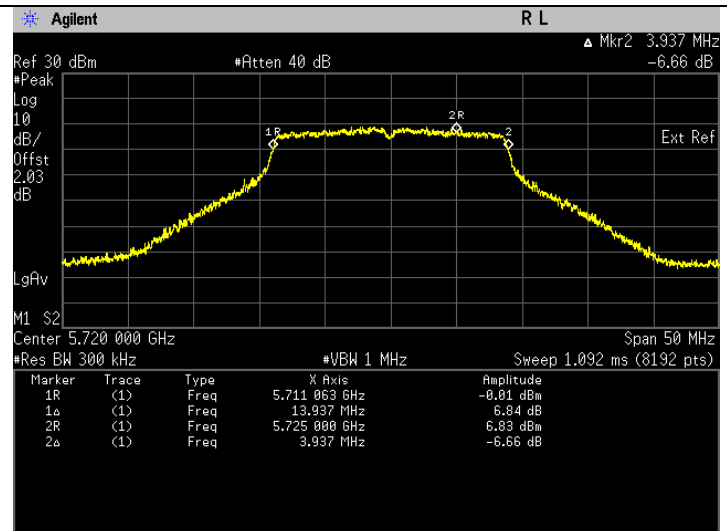
Frequency 5580 MHz



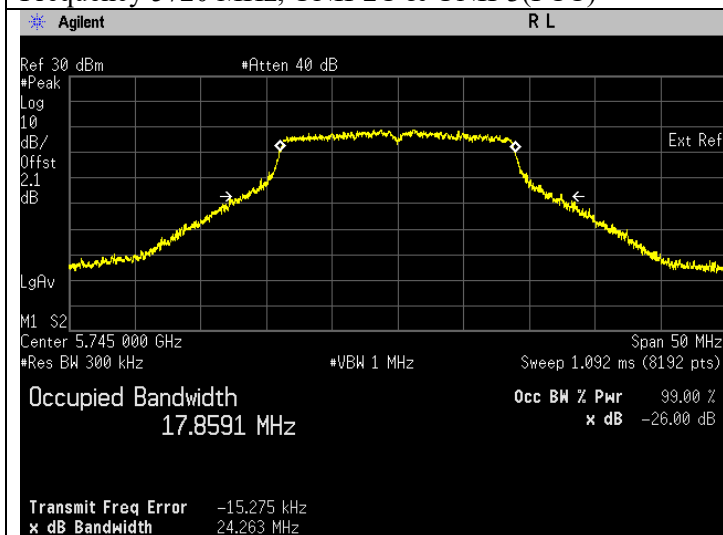
Frequency 5700 MHz



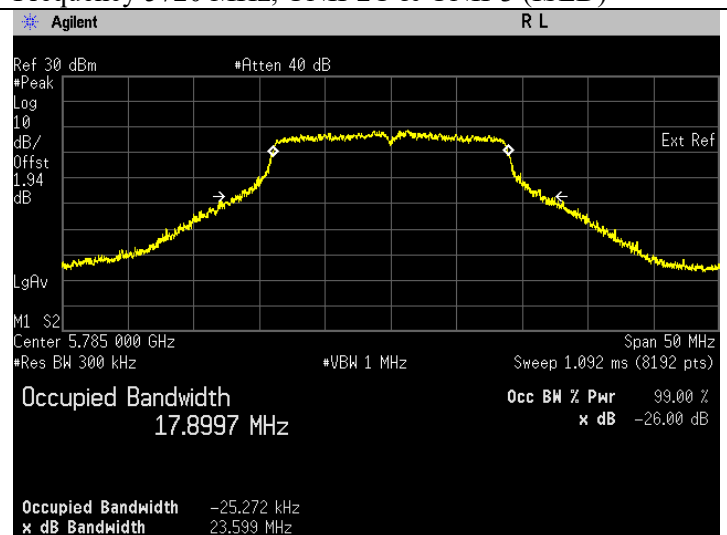
Frequency 5720 MHz, UNII-2C & UNII-3(FCC)



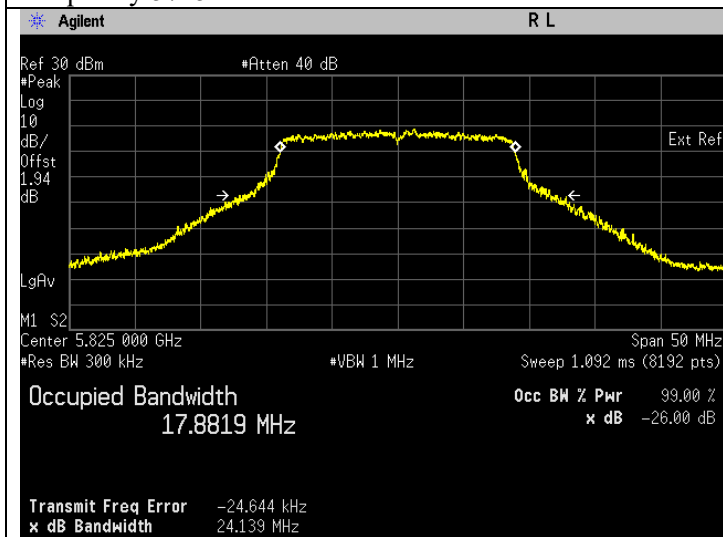
Frequency 5720 MHz, UNII-2C & UNII-3 (ISED)



Frequency 5745 MHz



Frequency 5785 MHz

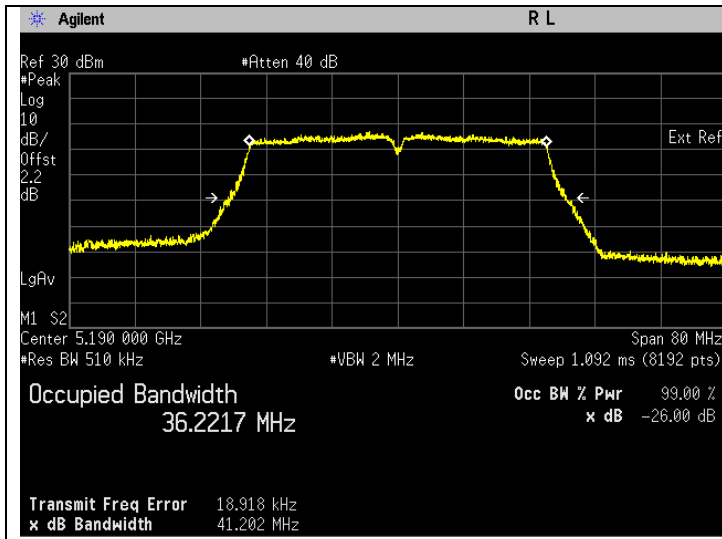


Frequency 5825 MHz

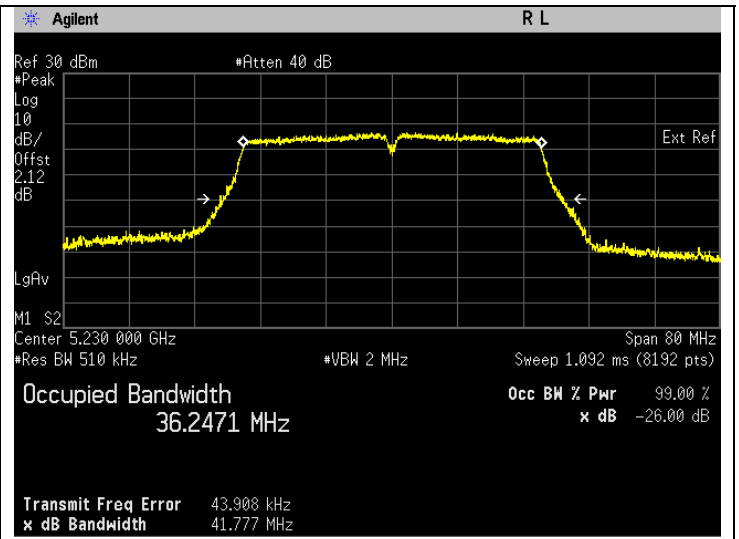
802.11n (HT40)

Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5190	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.202	Pass	36.222	Pass
5230	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.777	Pass	36.247	Pass
5270	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.621	Pass	36.253	Pass
5310	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.405	Pass	36.297	Pass
5510	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.089	Pass	36.263	Pass
5590	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.520	Pass	36.270	Pass
5670	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.367	Pass	36.261	Pass
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5), UNII-2C	35.659	Pass	33.130	Pass
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5), UNII-3	5.659	Pass	3.130	Pass
5755	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.288	Pass	36.239	Pass
5795	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.630	Pass	36.292	Pass

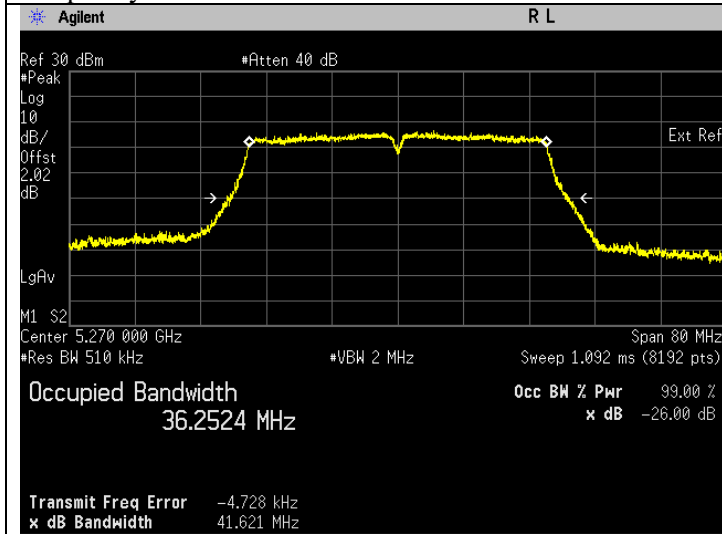
26 dB Bandwidth/ 99% Bandwidth



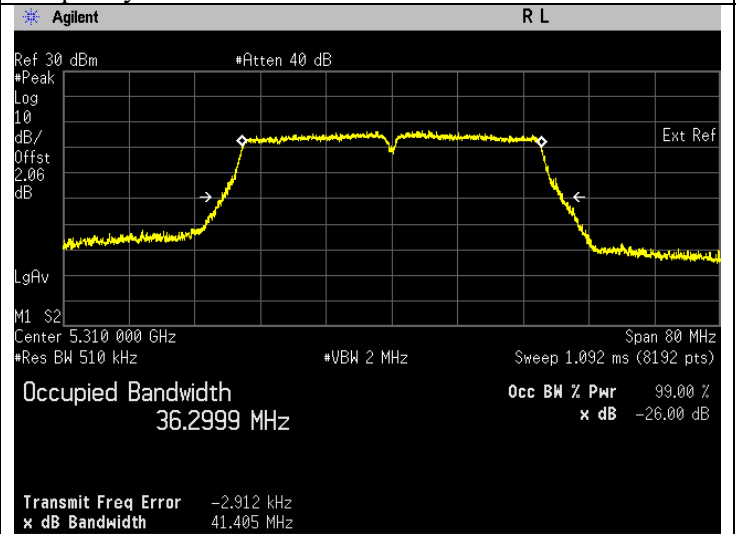
Frequency 5190 MHz



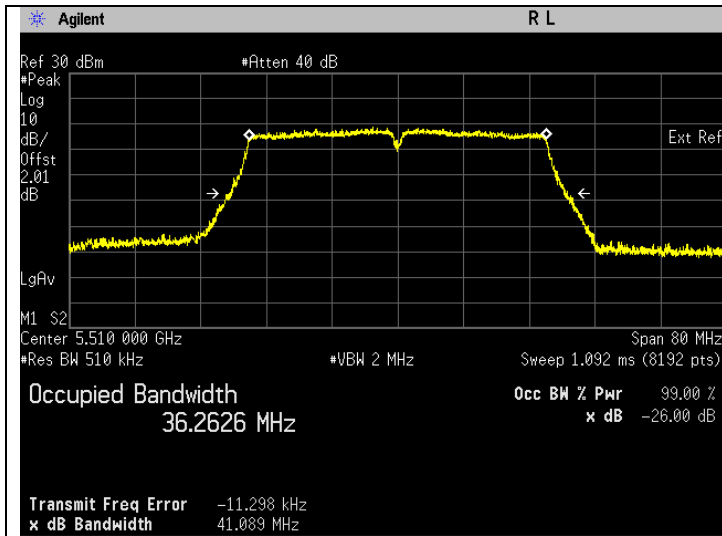
Frequency 5230 MHz



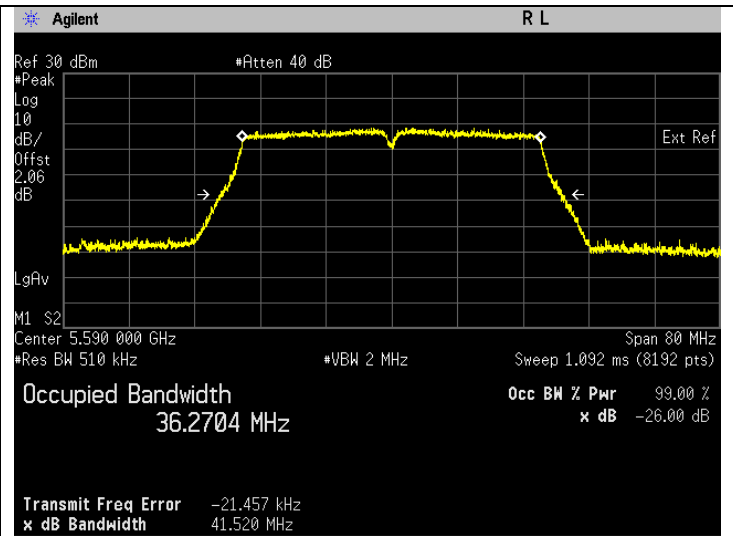
Frequency 5270 MHz



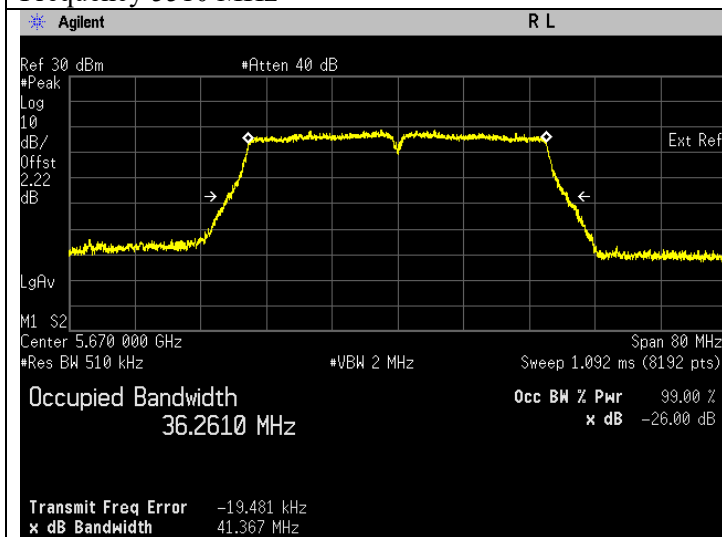
Frequency 5310 MHz



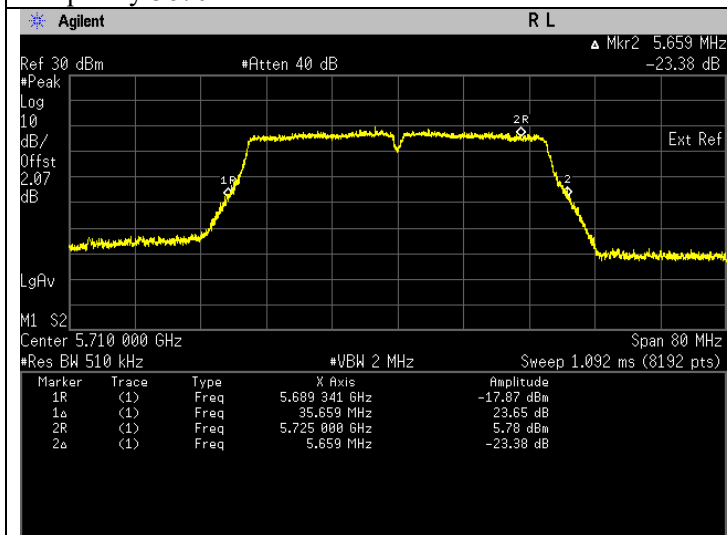
Frequency 5510 MHz



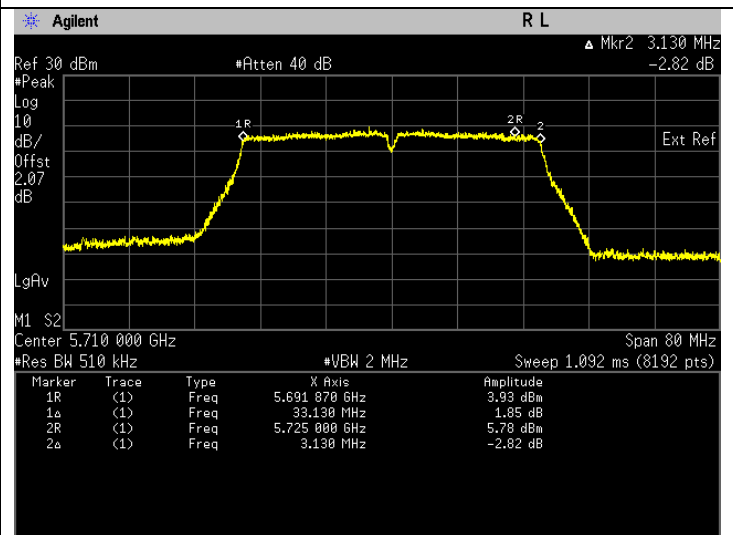
Frequency 5590 MHz



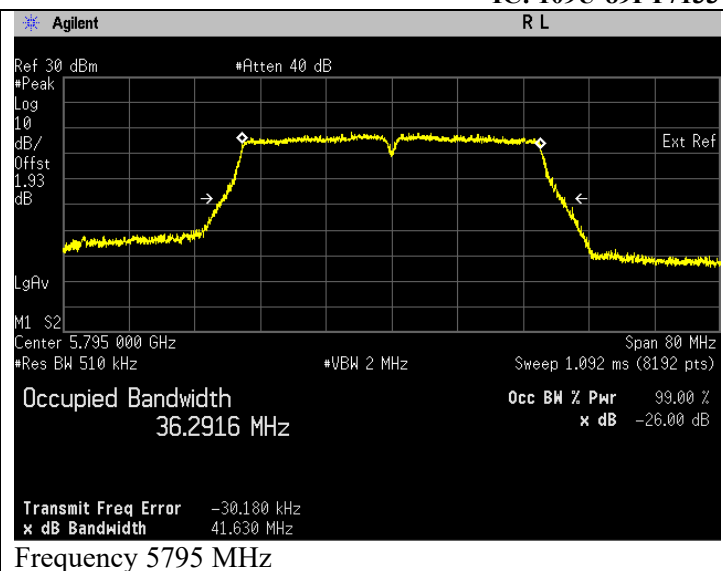
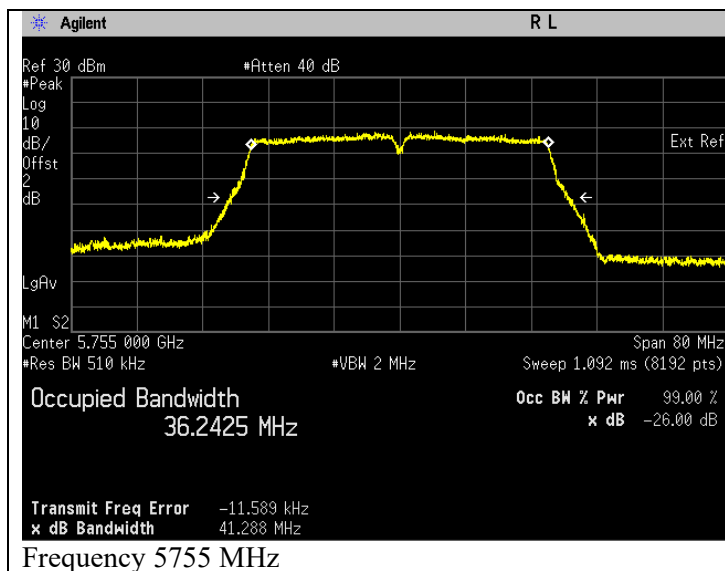
Frequency 5670 MHz



Frequency 5710 MHz, UNII-2C & UNII-3(FCC)



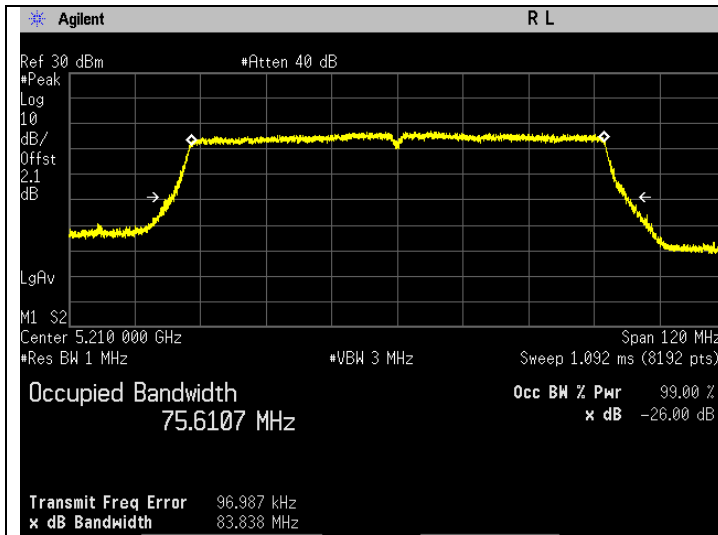
Frequency 5710 MHz, UNII-2C & UNII-3 (ISED)



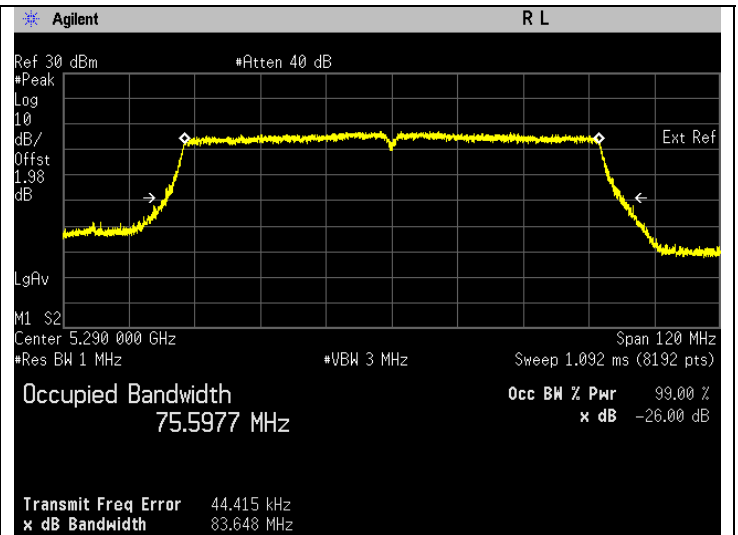
802.11ac (HT80)

Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5210	Mod Type: BPSK, Data Rate: MCS0(29.3)	83.838	Pass	75.610	Pass
5290	Mod Type: BPSK, Data Rate: MCS0(29.3)	83.648	Pass	75.598	Pass
5530	Mod Type: BPSK, Data Rate: MCS0(29.3)	83.856	Pass	75.611	Pass
5610	Mod Type: BPSK, Data Rate: MCS0(29.3)	83.770	Pass	75.659	Pass
5690	Mod Type: BPSK, Data Rate: MCS0(29.3), UNII-2C	76.595	Pass	72.809	Pass
5690	Mod Type: BPSK, Data Rate: MCS0(29.3), UNII-3	6.595	Pass	2.809	Pass
5775	Mod Type: BPSK, Data Rate: MCS0(29.3)	83.502	Pass	75.631	Pass

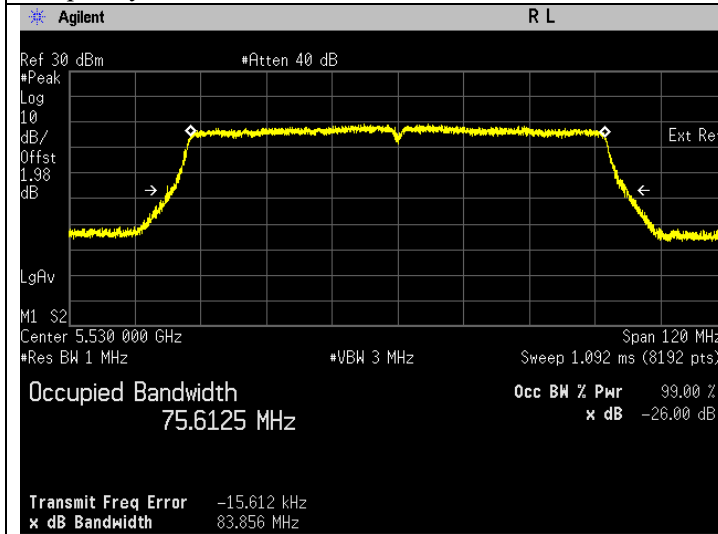
26 dB Bandwidth/ 99% Bandwidth



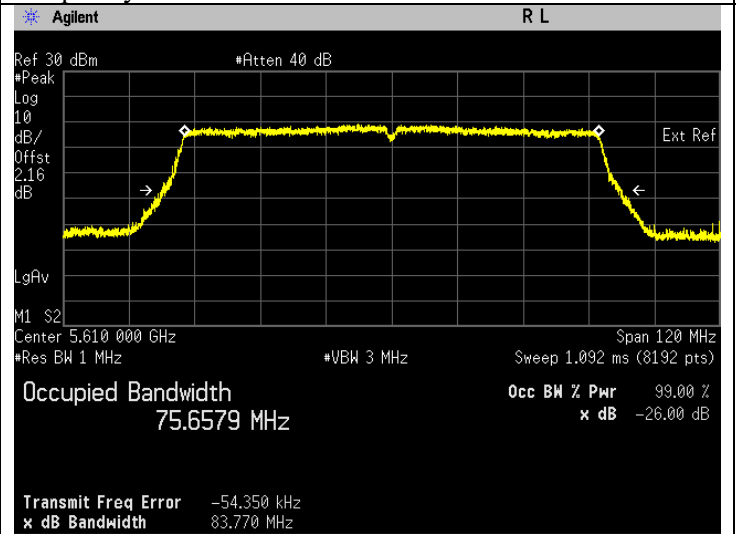
Frequency 5210 MHz



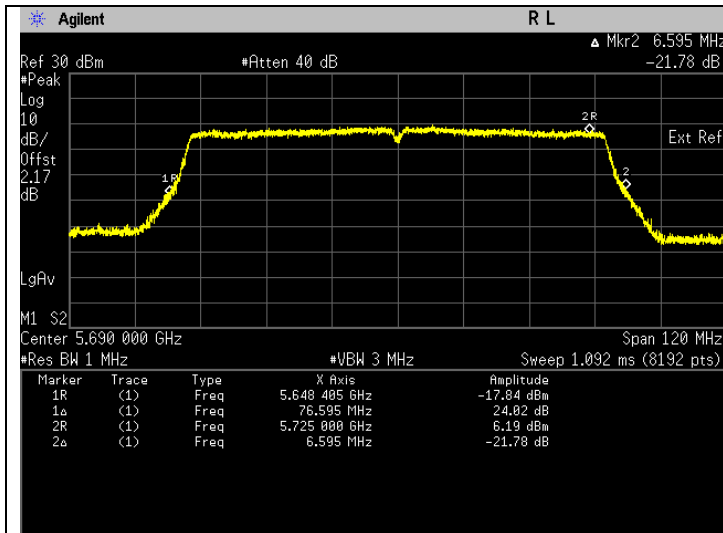
Frequency 5290 MHz



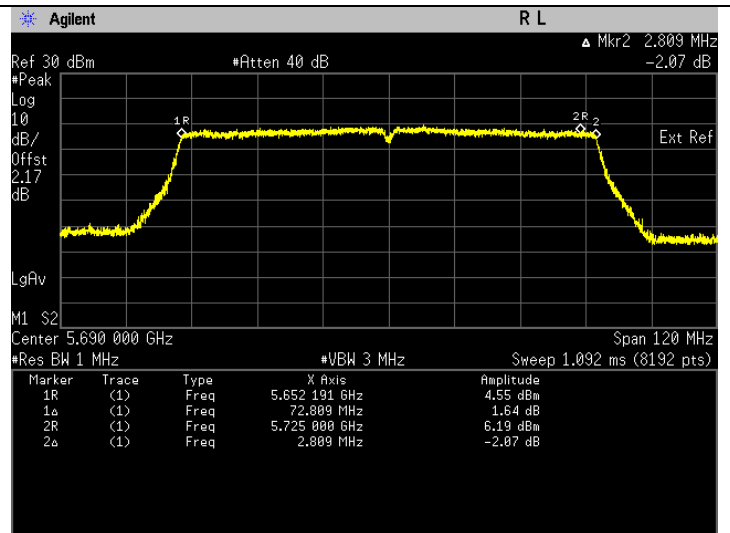
Frequency 5530 MHz



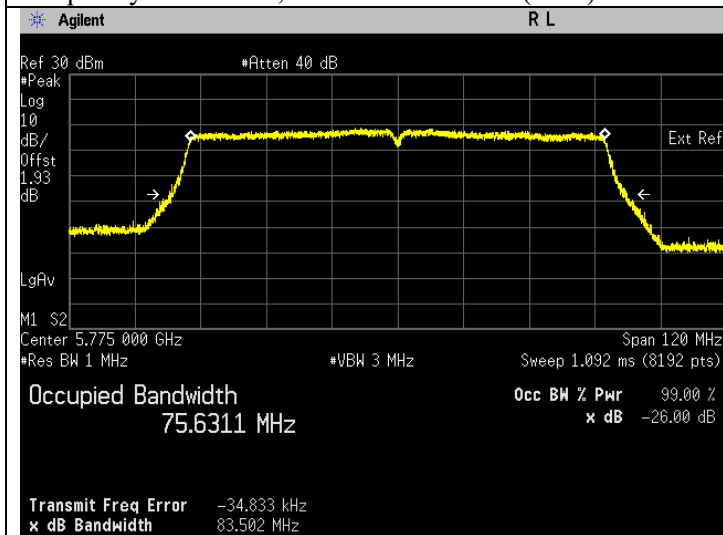
Frequency 5610 MHz



Frequency 5690 MHz, UNII-2C & UNII-3(FCC)



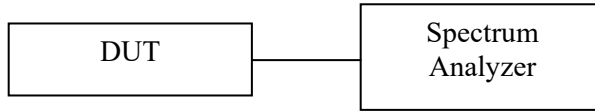
Frequency 5690 MHz, UNII-2C & UNII-3 (ISED)



Frequency 5775 MHz

7.2. Maximum Conducted Output Power

7.2.1. Test Setup



- Test setup as per illustrated above.
- Set DUT to transmit at desire transmit frequency.
- Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
- Setting of Spectrum analyzer :
 - Span to encompass the entire 26dB EBW or 99% Occupied Bandwidth.
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = power averaging (RMS)
 - Trace = Max hold
 - Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$
 - Sweep time = auto
 - Trace average at least 100 traces in power averaging (rms) mode
 - Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges.
 - Add $10 \log (1/x)$, where x is the duty cycle, to the measured power to compute the average power during the actual transmission times
- The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause E.2.d) Method SA-2.
- The Maximum output power results are included duty cycle correction factor.

7.2.2. Test Limits

FCC 15.407(a)

Range(GHz)	Condition	Output Power Limit
5.15-5.25 (UNII-1)	Outdoor AP	$\leq 1\text{W}$
	Indoor AP	$\leq 1\text{W}$
	Fixed Point to Point AP	$\leq 1\text{W}$
	√ Mobile and Portable client devices	$\leq 250\text{mW}$
5.25-5.35 (UNII-2A)	√	$\leq 250\text{mW}$ or $11\text{dBm} + 10\log_{10} B^*$
5.47-5.525 (UNII-2C)	√	*B is 26dB emission bandwidth in MHz
5.725-5.85 (UNII-3)	√	$\leq 1\text{W}$

RSS-247 6.2

Range(GHz)	Condition	Output Power Limit
5.15-5.25	indoor only (e.i.r.p.)	$\leq 200\text{mW}$ or $10+10\log_{10}B^*$ *B is 99% emission bandwidth in 1MHz
5.25-5.35	(Conducted & e.i.r.p.)	Conducted: $\leq 250\text{mW}$ or $11+10\log_{10}B^*$ EIRP: $< 1.0\text{W}$ or $17+10\log_{10}B^*$ *B is 99% emission bandwidth in 1MHz
5.47-5.6 5.65-5.725	(Conducted & e.i.r.p.)	Conducted: $\leq 250\text{mW}$ or $11+10\log_{10}B^*$ EIRP: $< 1.0\text{W}$ or $17+10\log_{10}B^*$ *B is 99% emission bandwidth in 1MHz
5.725-5.85	(Conducted)	$\leq 1\text{W}$

7.2.3. Additional Info

Antenna	Gain (dBi)
Antenna 1	1.58
Duty Cycle Correction Factor	
802.11a	0.076
802.11n20	0.082
802.11n40	0.161
802.11ac80	0.320

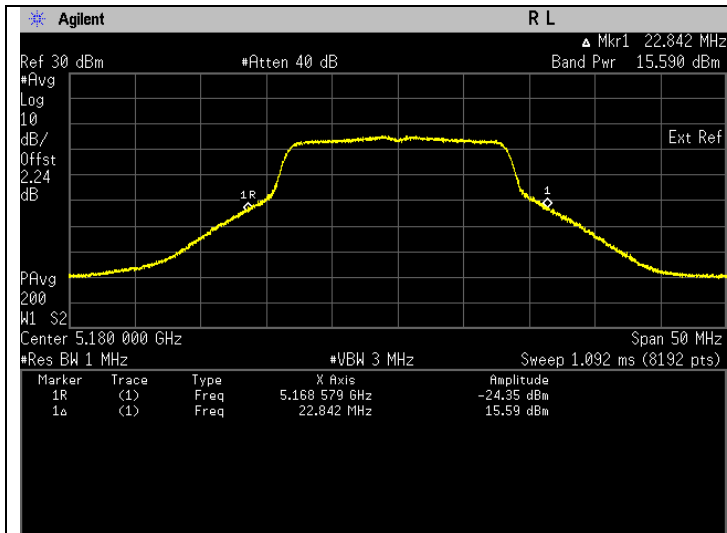
7.2.4. Test Data

Summary table

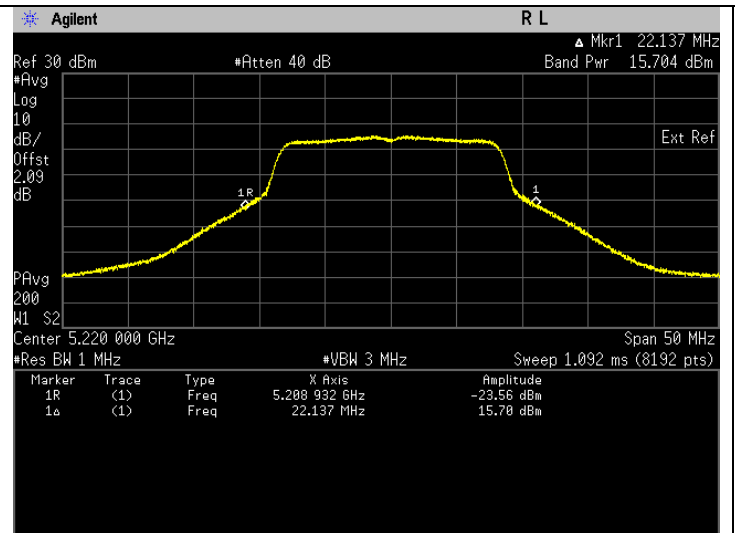
WLAN	Frequency Range (MHz)	Bandwidth (MHz)	RF Power Output		EIRP	
			Max measured (mW)	Max declared (mW)	Max measured (mW)	Max declared (mW)
802.11a	5180-5240	20	36.915	39.81	53.11	57.28
	5260-5320	20	35.975	39.81	51.76	57.28
	5500-5720	20	53.74	63.1	77.32	90.78
	5745-5825	20	52.18	63.1	75.08	90.78
802.11n	5180-5240	20	36.025	39.81	51.83	57.28
	5260-5320	20	34.898	39.81	50.21	57.28
	5500-5720	20	54.752	63.1	78.78	90.78
	5745-5825	20	51.963	63.1	74.77	90.78
802.11n	5190-5230	40	38.38	39.81	55.22	57.28
	5270-5310	40	35.335	39.81	50.84	57.28
	5510-5710	40	57.69	63.1	83	90.78
	5755-5795	40	53.186	63.1	76.52	90.78
802.11ac	5210	80	34.554	39.81	49.72	57.28
	5290	80	36.543	39.81	52.57	57.28
	5530-5690	80	58.143	63.1	83.64	90.78
	5775	80	52.517	63.1	75.54	90.78

802.11a (26dB EBW)

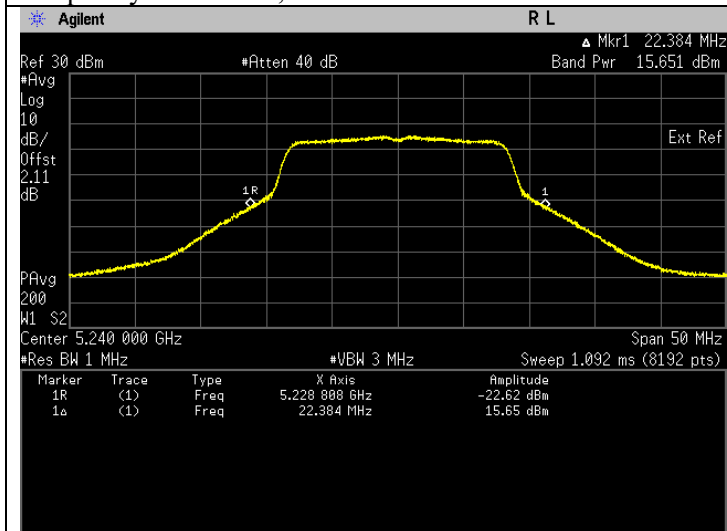
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5180	Mod Type: BPSK, Data Rate: 6	36.864	15.666	Pass
5220	Mod Type: BPSK, Data Rate: 6	37.844	15.780	Pass
5240	Mod Type: BPSK, Data Rate: 6	37.385	15.727	Pass
5260	Mod Type: BPSK, Data Rate: 6	34.285	15.351	Pass
5300	Mod Type: BPSK, Data Rate: 6	34.119	15.330	Pass
5320	Mod Type: BPSK, Data Rate: 6	36.509	15.624	Pass
5500	Mod Type: BPSK, Data Rate: 6	53.691	17.299	Pass
5580	Mod Type: BPSK, Data Rate: 6	53.728	17.302	Pass
5700	Mod Type: BPSK, Data Rate: 6	54.563	17.369	Pass
5745	Mod Type: BPSK, Data Rate: 6	52.735	17.221	Pass
5785	Mod Type: BPSK, Data Rate: 6	48.876	16.891	Pass
5825	Mod Type: BPSK, Data Rate: 6	49.102	16.911	Pass



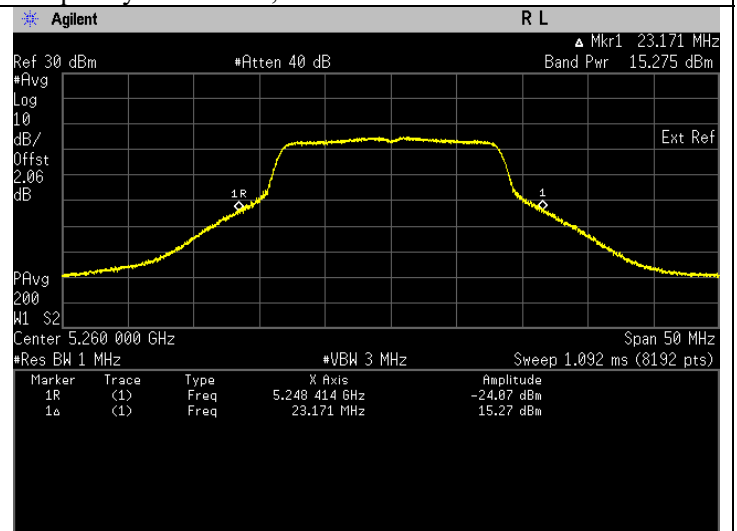
Frequency 5180 MHz, FCC.



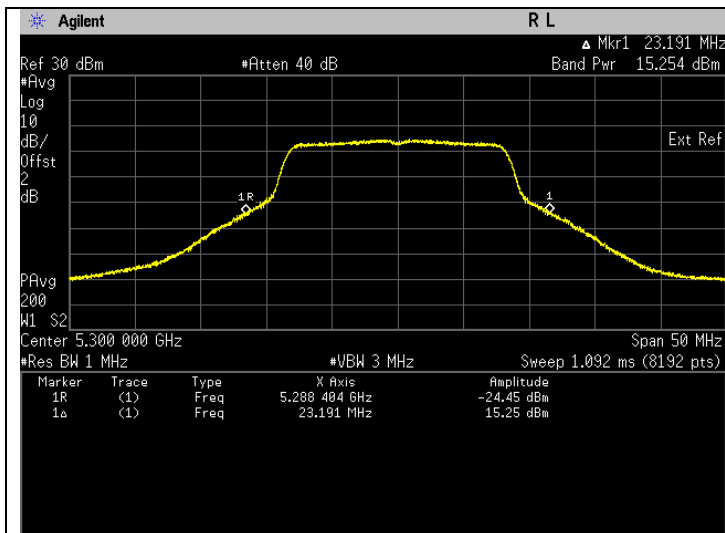
Frequency 5220 MHz, FCC.



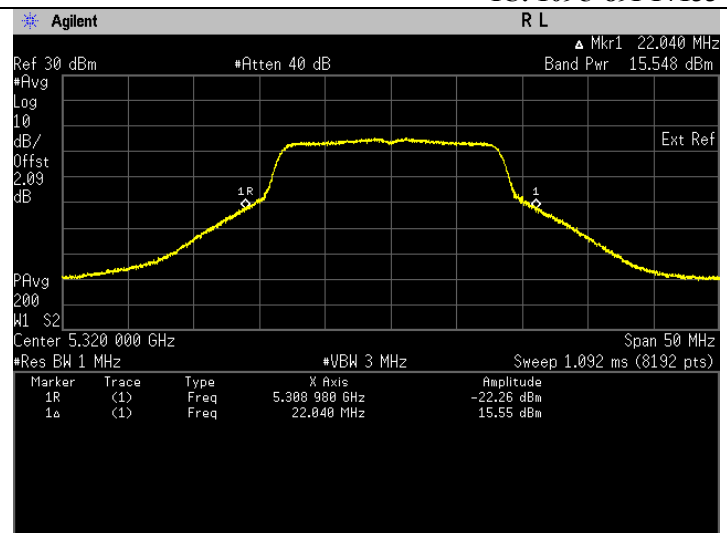
Frequency 5240 MHz, FCC.



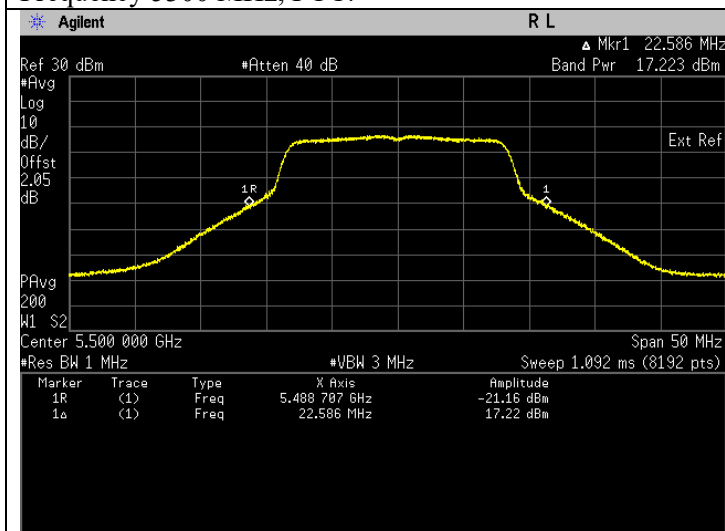
Frequency 5260 MHz, FCC.



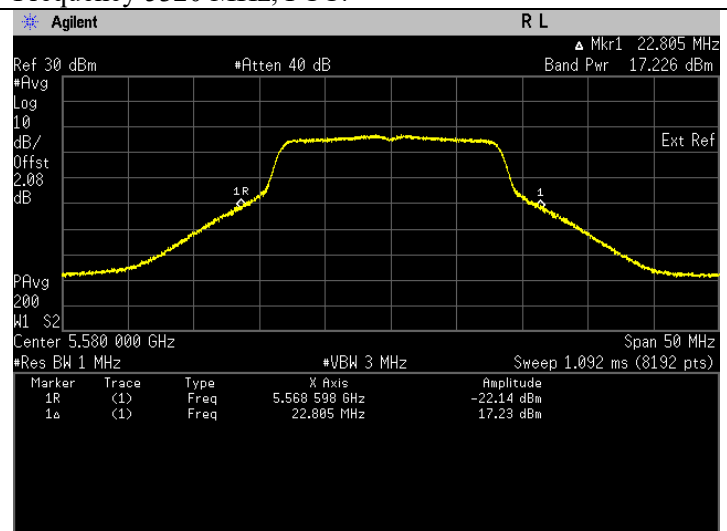
Frequency 5300 MHz, FCC.



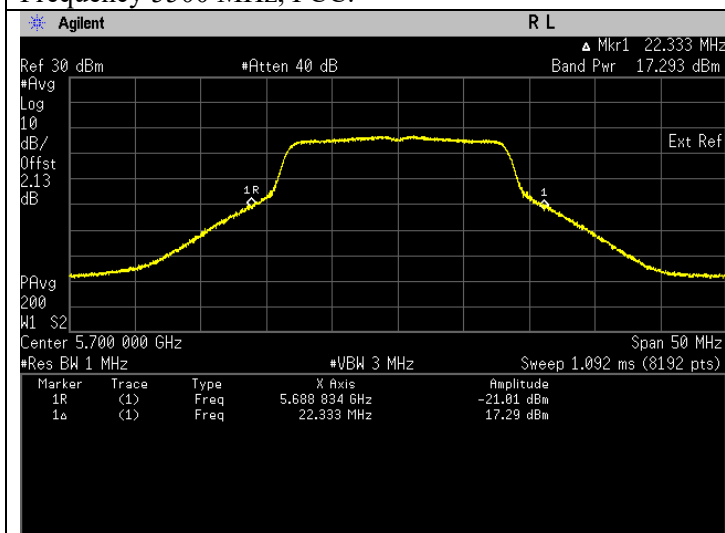
Frequency 5320 MHz, FCC.



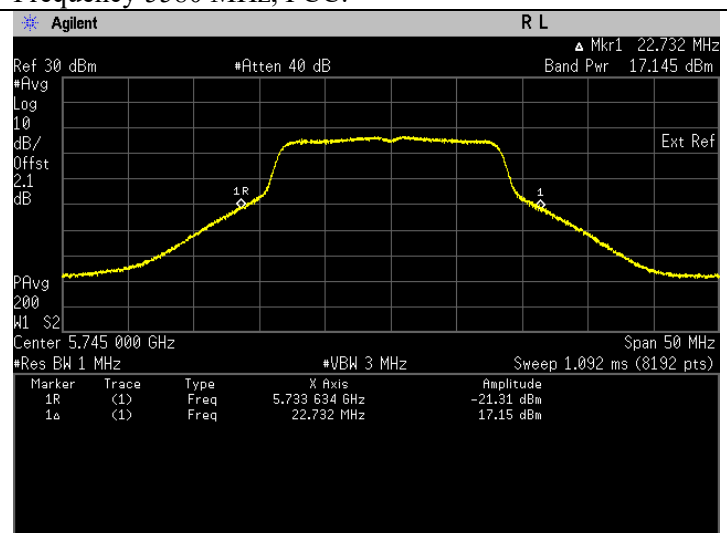
Frequency 5500 MHz, FCC.



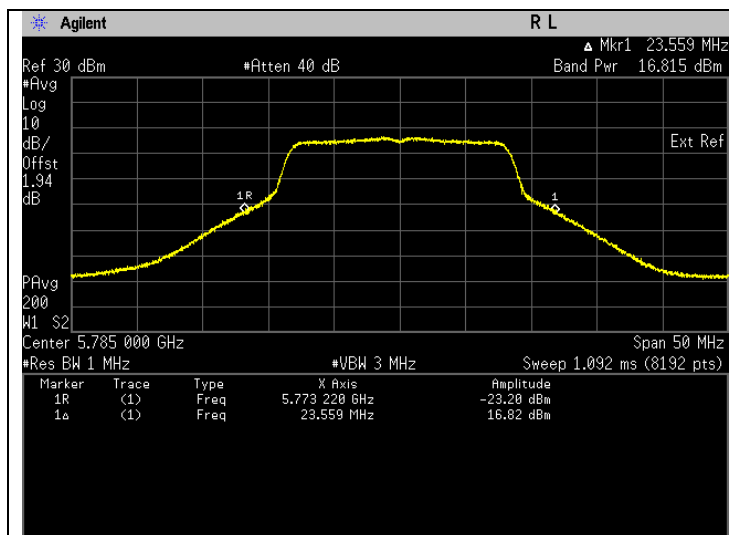
Frequency 5580 MHz, FCC.



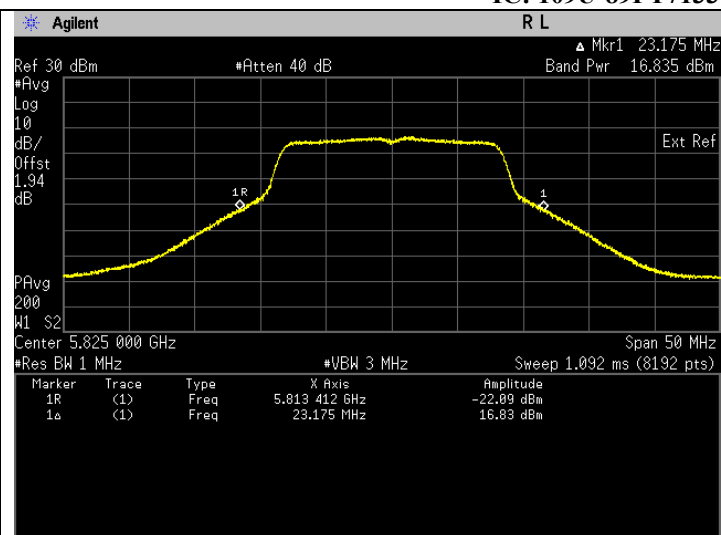
Frequency 5700 MHz, FCC.



Frequency 5745 MHz, FCC.



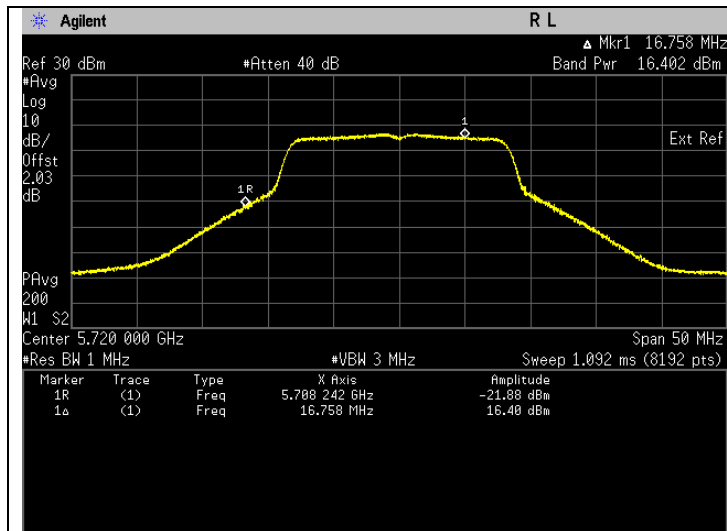
Frequency 5785 MHz, FCC.



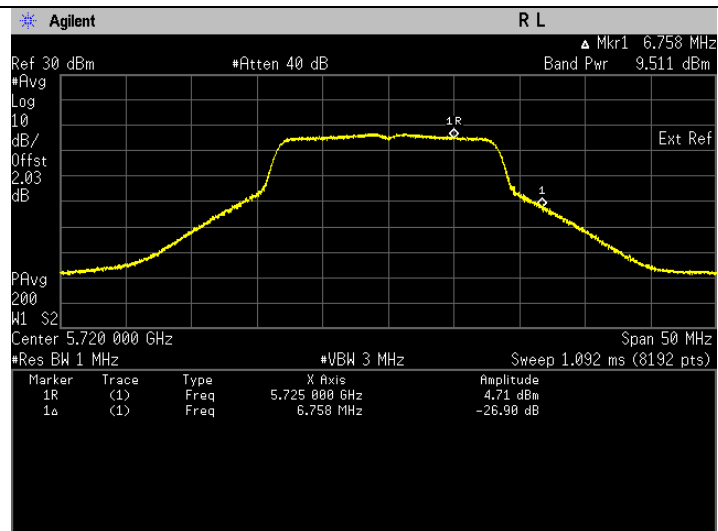
Frequency 5825 MHz, FCC.

Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5720	Mod Type: BPSK, Data Rate: 6	44.443	16.478	Pass
		U-NII-3		
5720	Mod Type: BPSK, Data Rate: 6	9.093	9.587	Pass



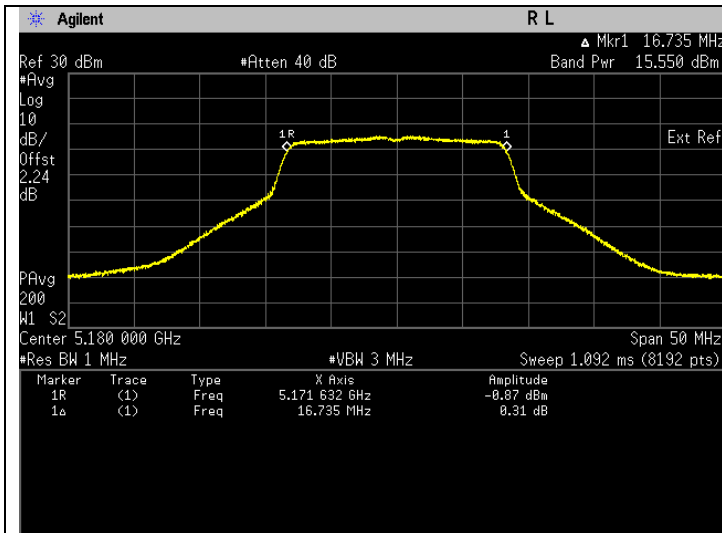
Frequency 5720 MHz, FCC, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



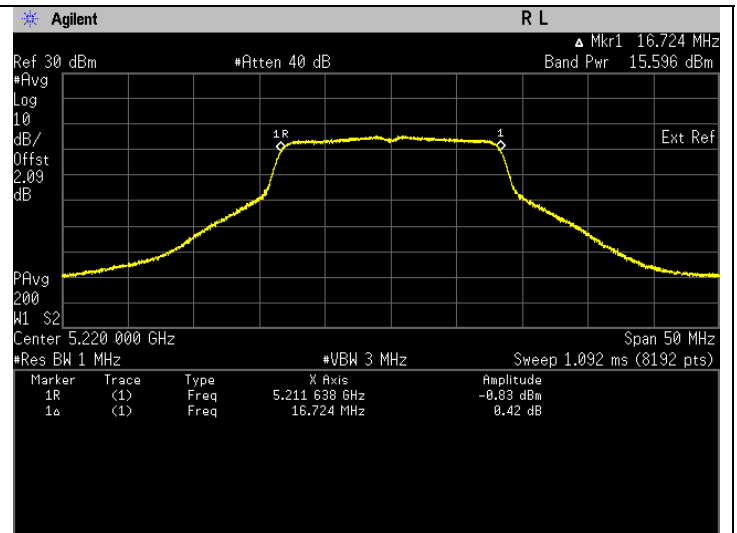
Frequency 5720 MHz, FCC, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11a (99% EBW)

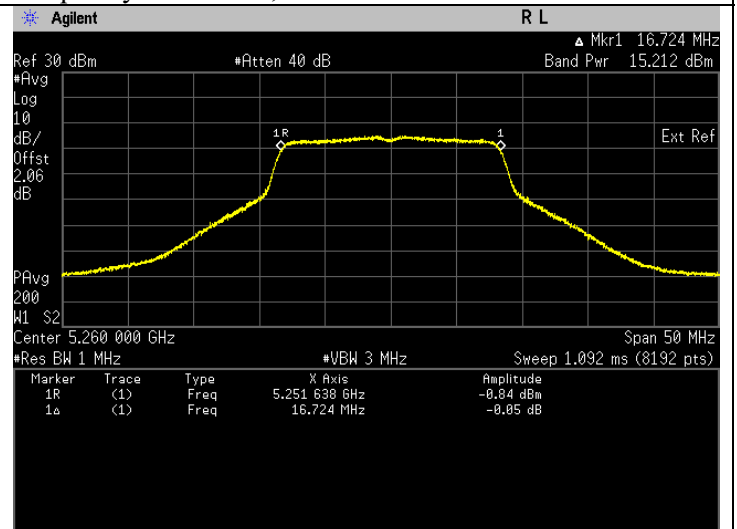
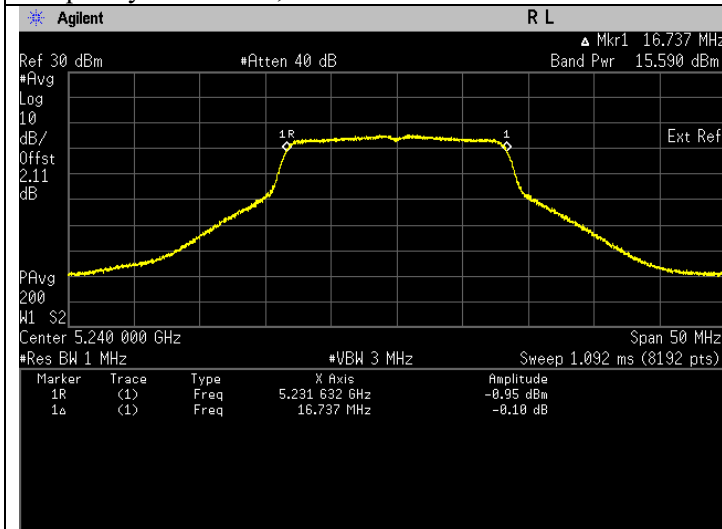
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5180	Mod Type: BPSK, Data Rate: 6	36.526	15.626	Pass	17.206	Pass
5220	Mod Type: BPSK, Data Rate: 6	36.915	15.672	Pass	17.252	Pass
5240	Mod Type: BPSK, Data Rate: 6	36.864	15.666	Pass	17.246	Pass
5260	Mod Type: BPSK, Data Rate: 6	33.791	15.288	Pass	16.868	Pass
5300	Mod Type: BPSK, Data Rate: 6	33.497	15.250	Pass	16.830	Pass
5320	Mod Type: BPSK, Data Rate: 6	35.975	15.560	Pass	17.140	Pass
5500	Mod Type: BPSK, Data Rate: 6	53.740	17.303	Pass	18.883	Pass
5580	Mod Type: BPSK, Data Rate: 6	52.979	17.241	Pass	18.821	Pass
5700	Mod Type: BPSK, Data Rate: 6	53.716	17.301	Pass	18.881	Pass
5745	Mod Type: BPSK, Data Rate: 6	52.180	17.175	Pass	18.755	Pass
5785	Mod Type: BPSK, Data Rate: 6	48.095	16.821	Pass	18.401	Pass
5825	Mod Type: BPSK, Data Rate: 6	49.261	16.925	Pass	18.505	Pass



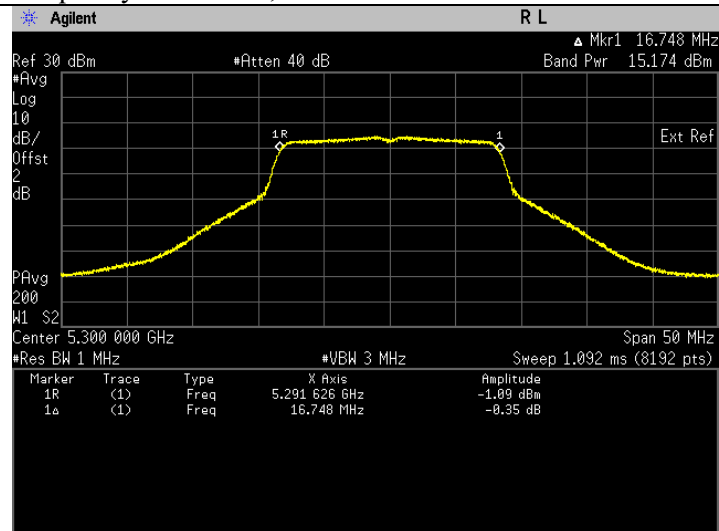
Frequency 5180 MHz, ISED



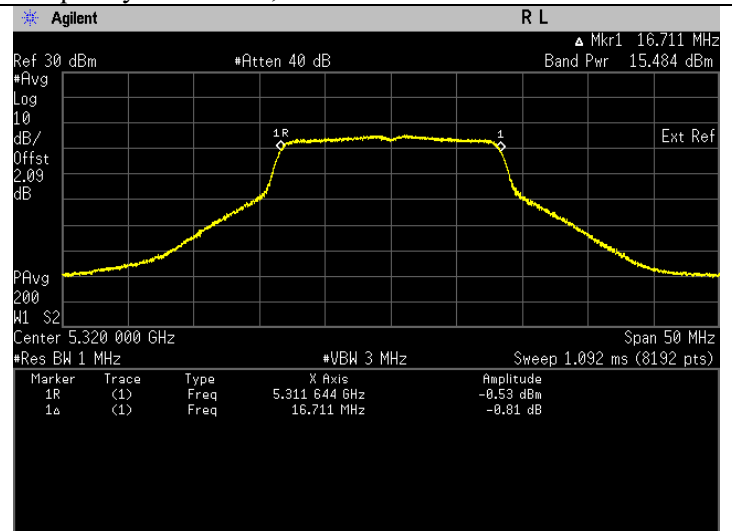
Frequency 5220 MHz, ISED



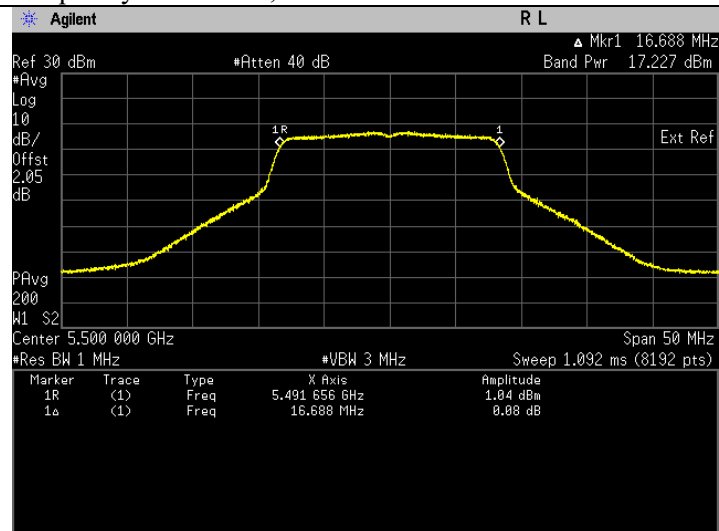
Frequency 5240 MHz, ISED



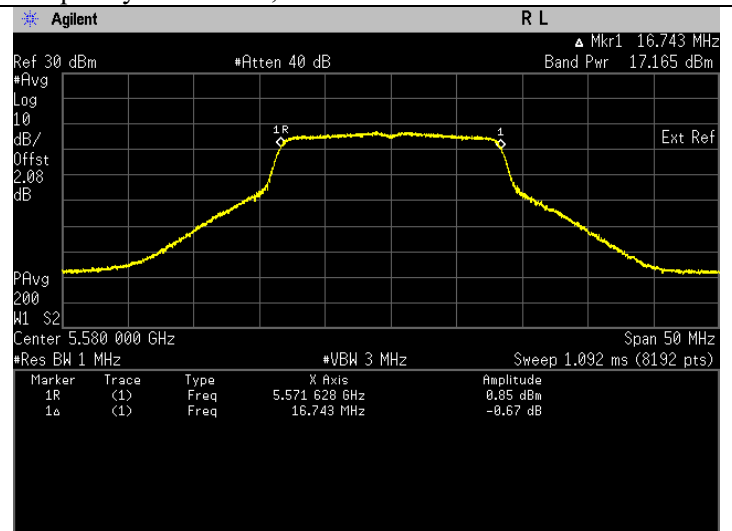
Frequency 5260 MHz, ISED



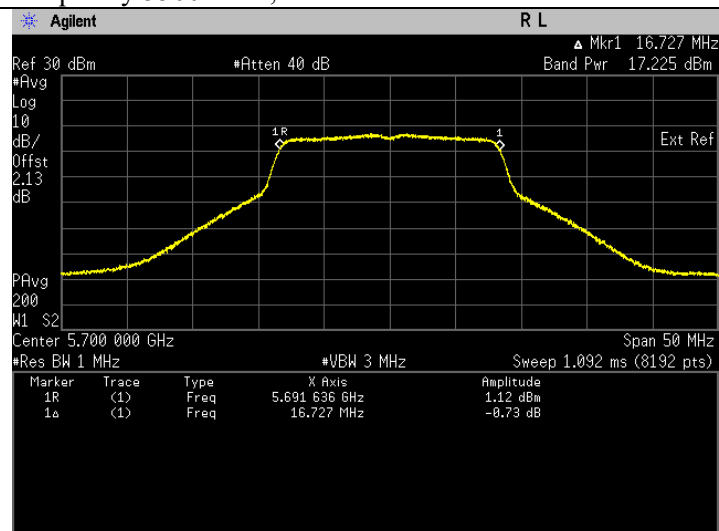
Frequency 5300 MHz, ISED



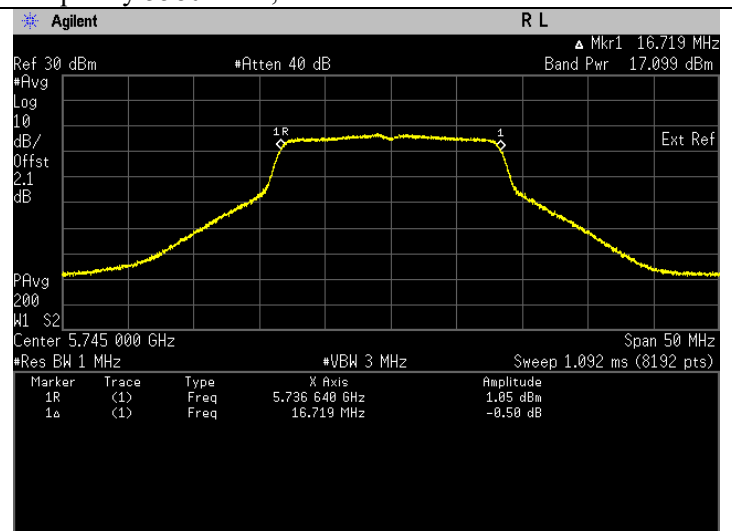
Frequency 5320 MHz, ISED

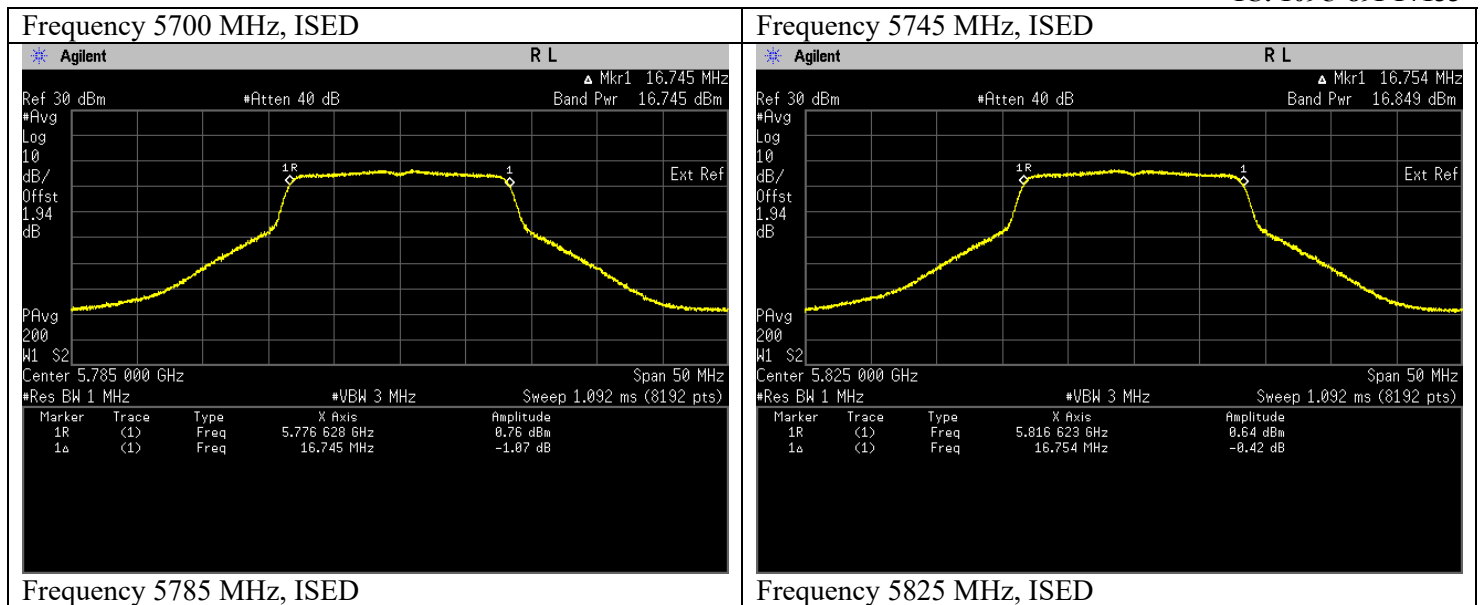


Frequency 5500 MHz, ISED



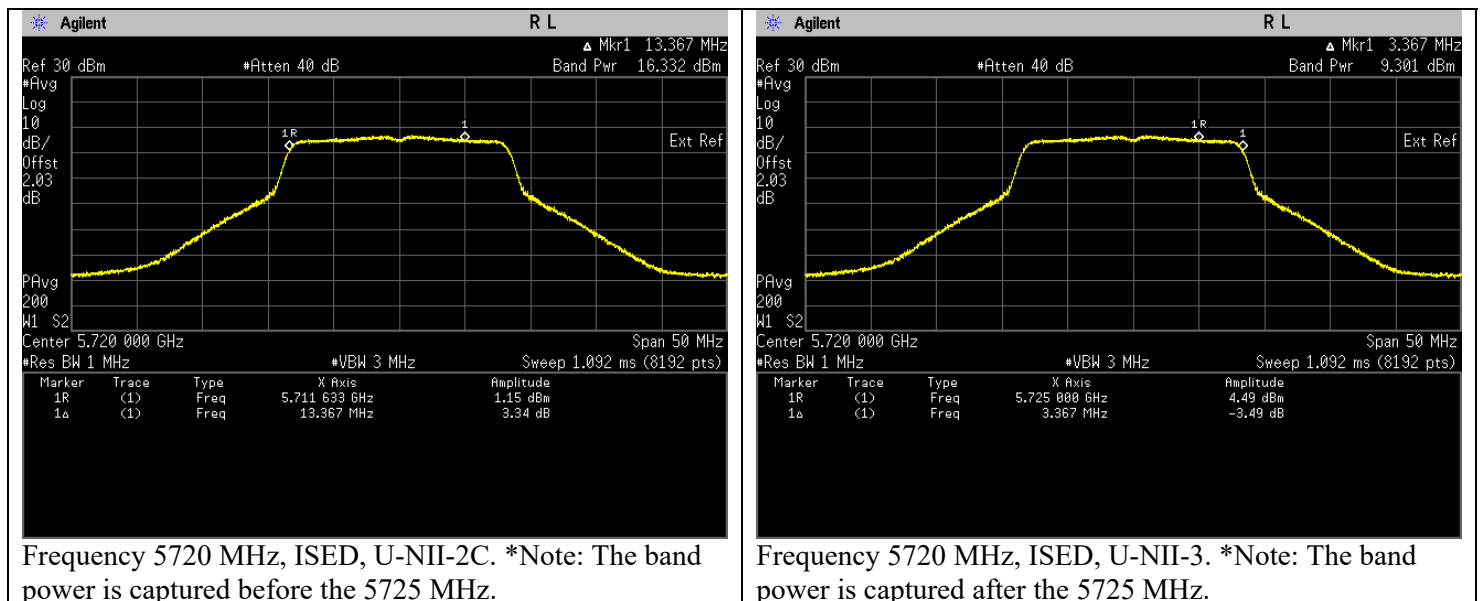
Frequency 5580 MHz, ISED





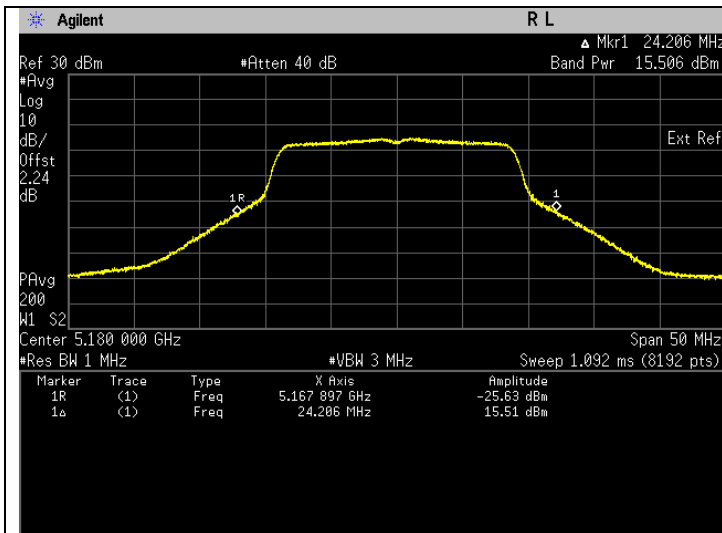
Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	43.732	16.408	Pass	17.988	Pass
		U-NII-3				
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	8.664	9.377	Pass	10.957	Pass

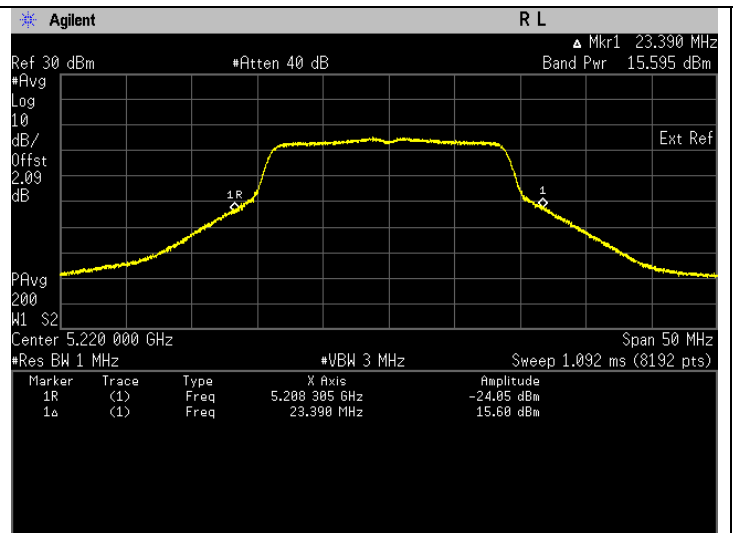


802.11n (HT20)(26dB EBW)

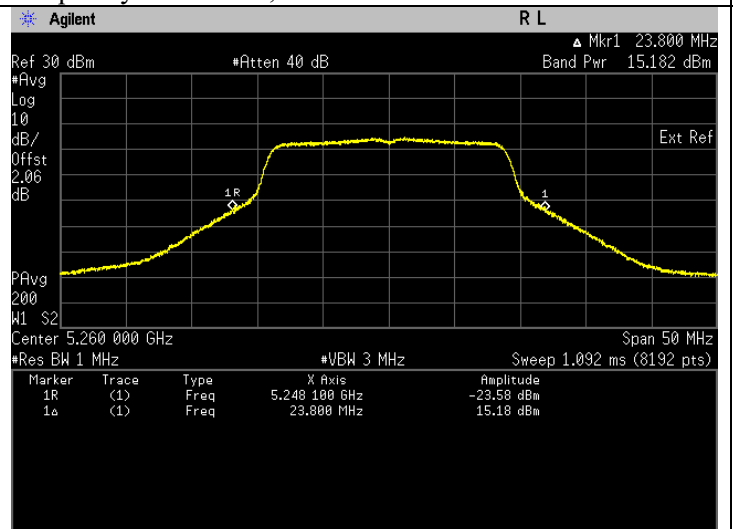
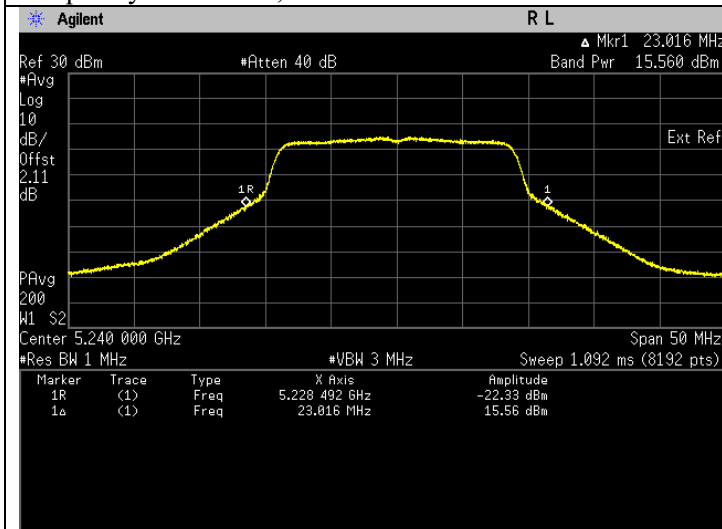
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	36.207	15.588	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	36.957	15.677	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	36.660	15.642	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	33.605	15.264	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	33.947	15.308	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	36.000	15.563	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	56.273	17.503	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	53.963	17.321	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	53.579	17.290	Pass
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	52.771	17.224	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	48.106	16.822	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	49.785	16.971	Pass



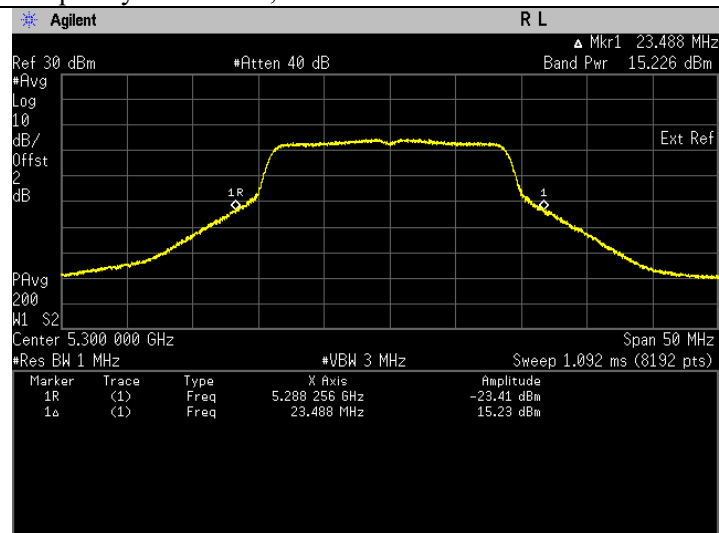
Frequency 5180 MHz, FCC.



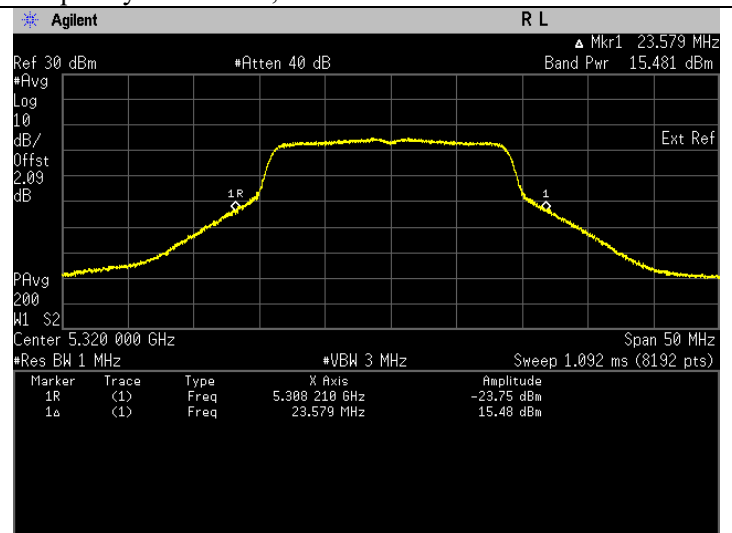
Frequency 5220 MHz, FCC.



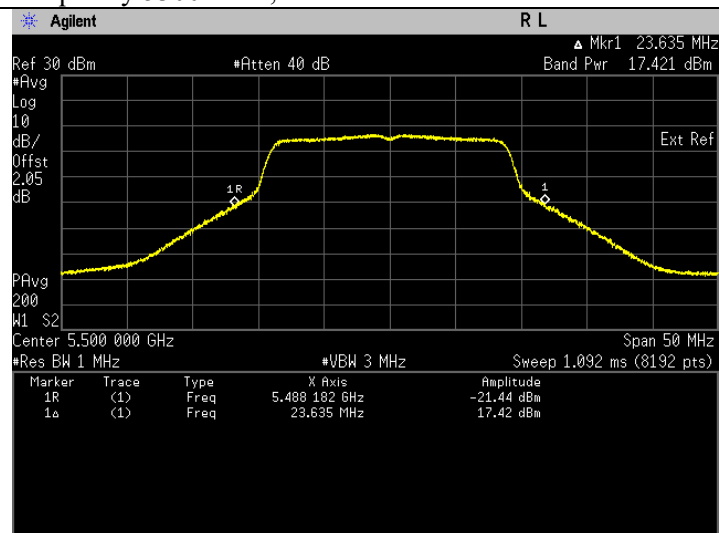
Frequency 5240 MHz, FCC.



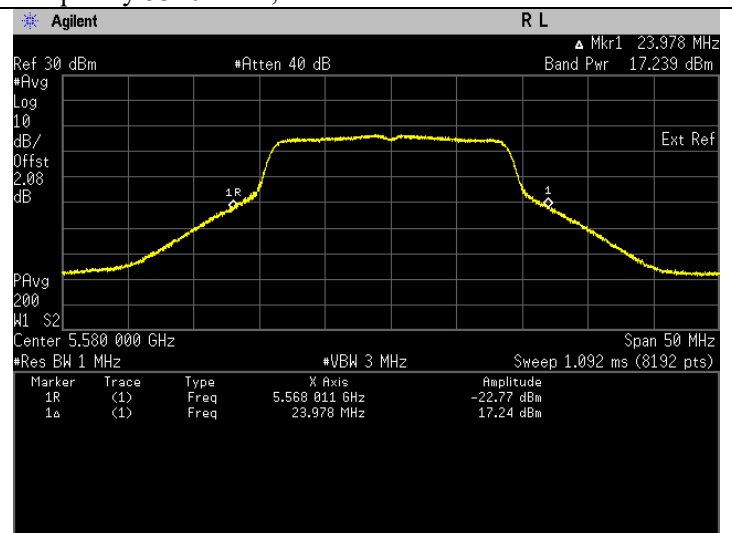
Frequency 5260 MHz, FCC.



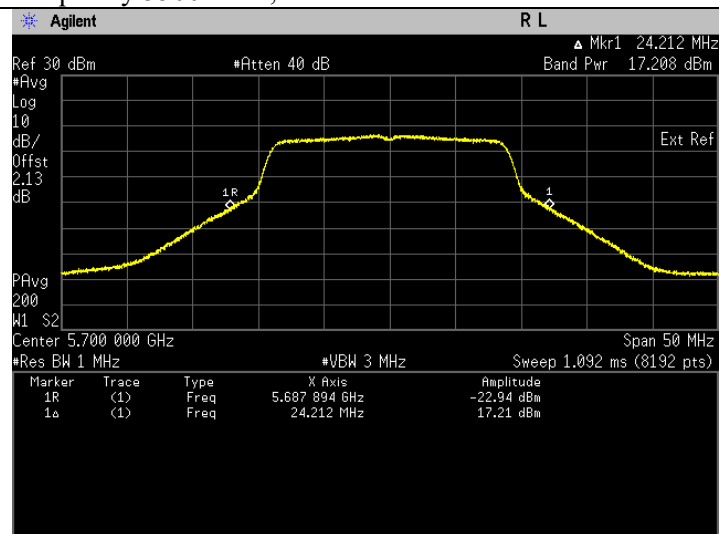
Frequency 5300 MHz, FCC.



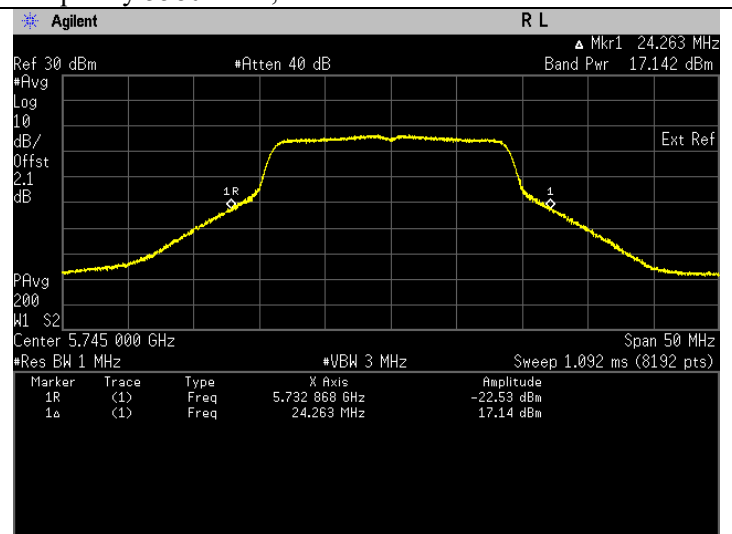
Frequency 5320 MHz, FCC.

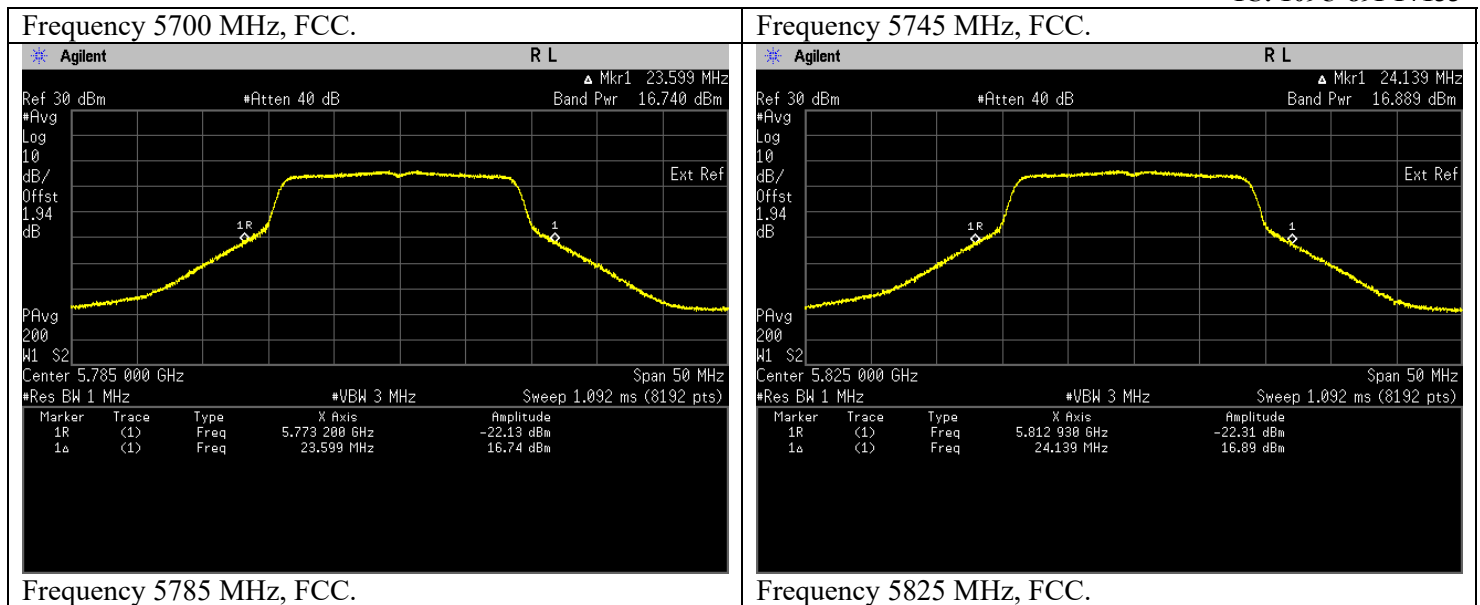


Frequency 5500 MHz, FCC.



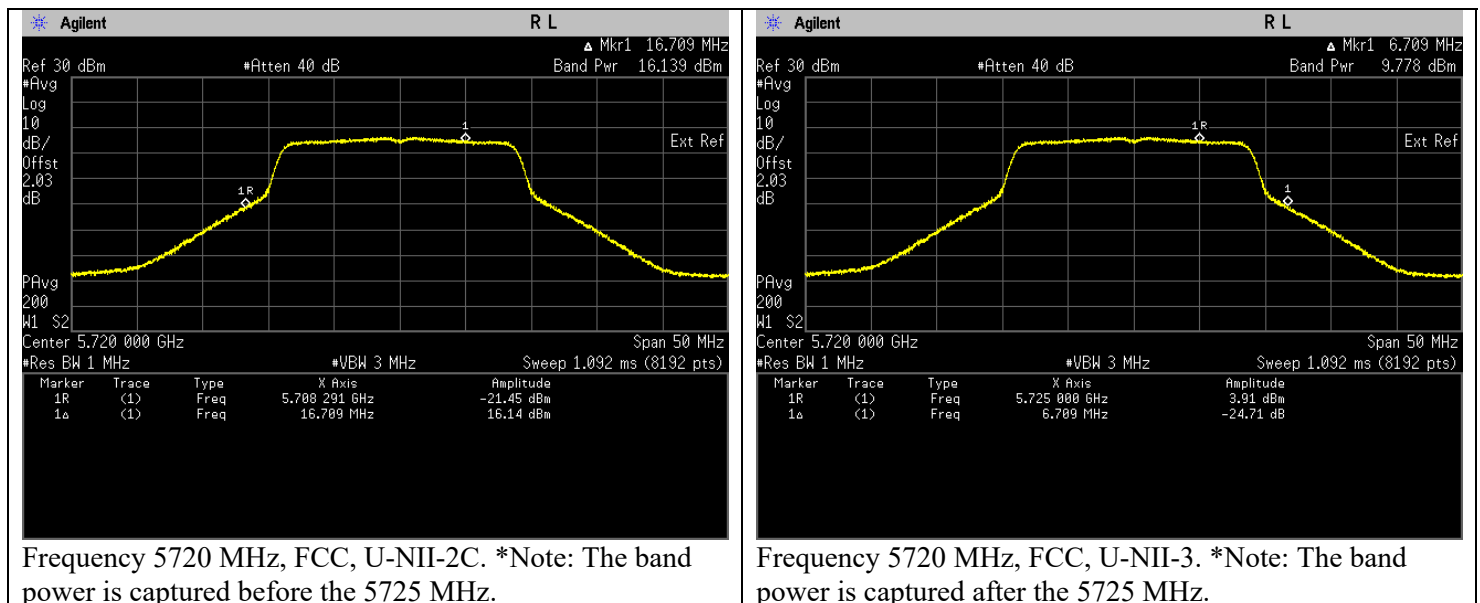
Frequency 5580 MHz, FCC.





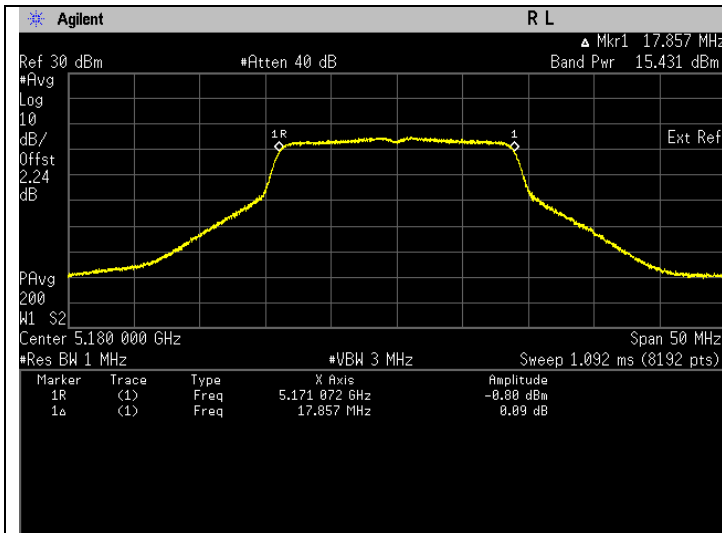
Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	41.889	16.221	Pass
		U-NII-3		
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	9.683	9.860	Pass

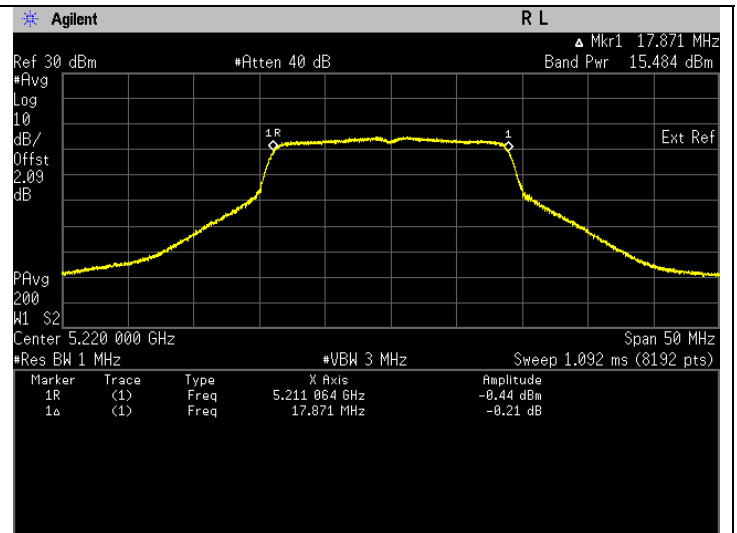


802.11n (HT20)(99% EBW)

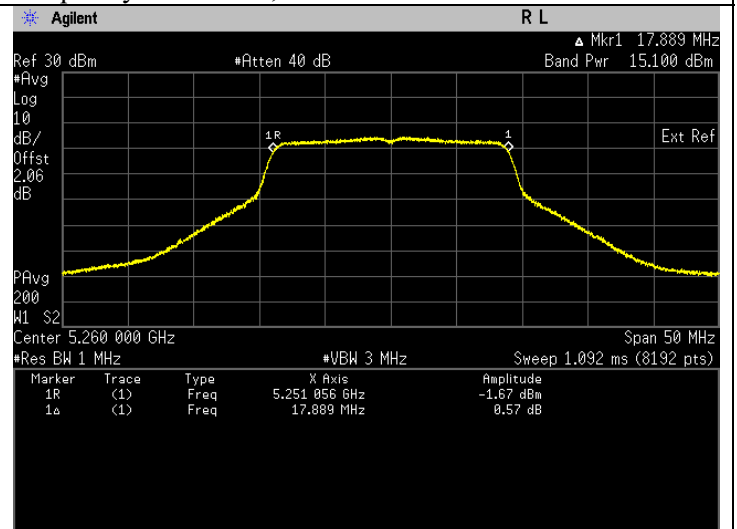
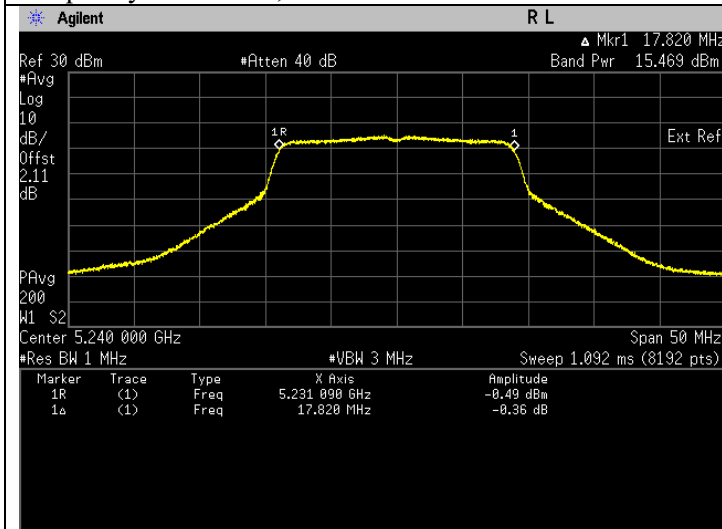
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	35.588	15.513	Pass	17.093	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	36.025	15.566	Pass	17.146	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	35.900	15.551	Pass	17.131	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	32.976	15.182	Pass	16.762	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	33.220	15.214	Pass	16.794	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	34.898	15.428	Pass	17.008	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	54.752	17.384	Pass	18.964	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	53.198	17.259	Pass	18.839	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	52.856	17.231	Pass	18.811	Pass
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	51.963	17.157	Pass	18.737	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	47.304	16.749	Pass	18.329	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	47.577	16.774	Pass	18.354	Pass



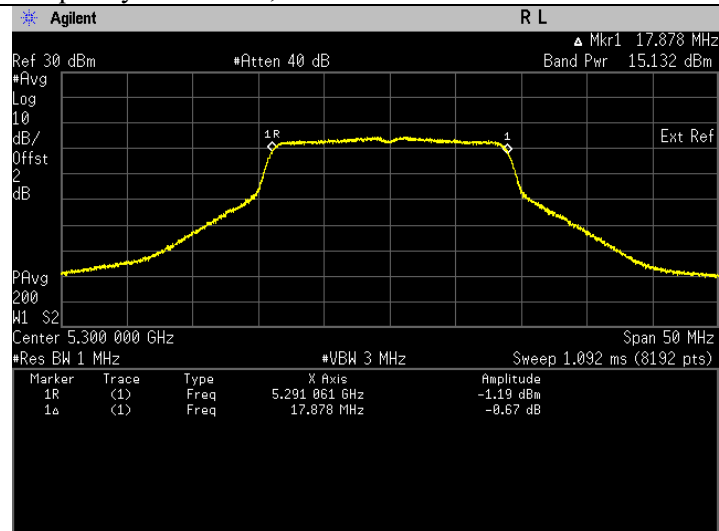
Frequency 5180 MHz, ISED



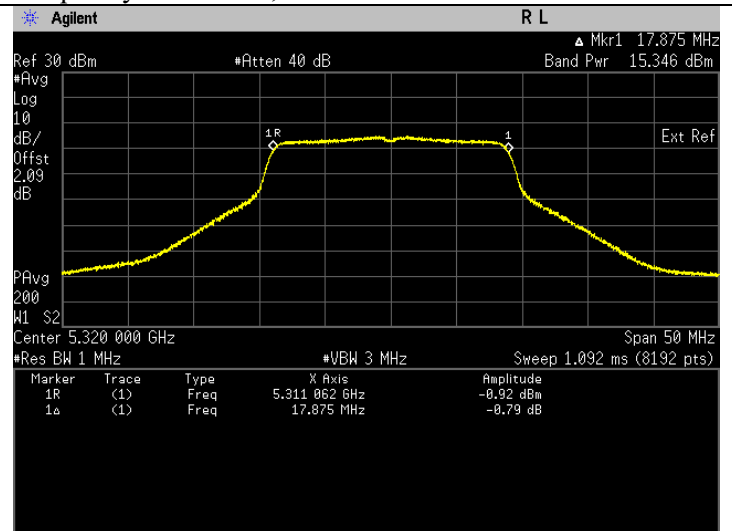
Frequency 5220 MHz, ISED



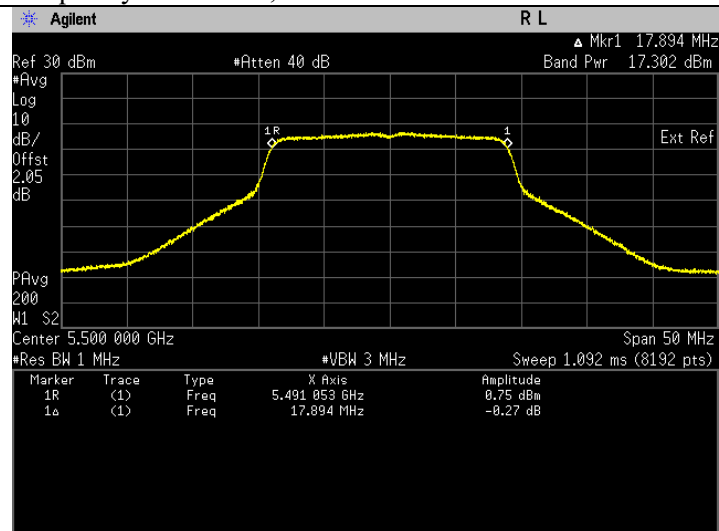
Frequency 5240 MHz, ISED



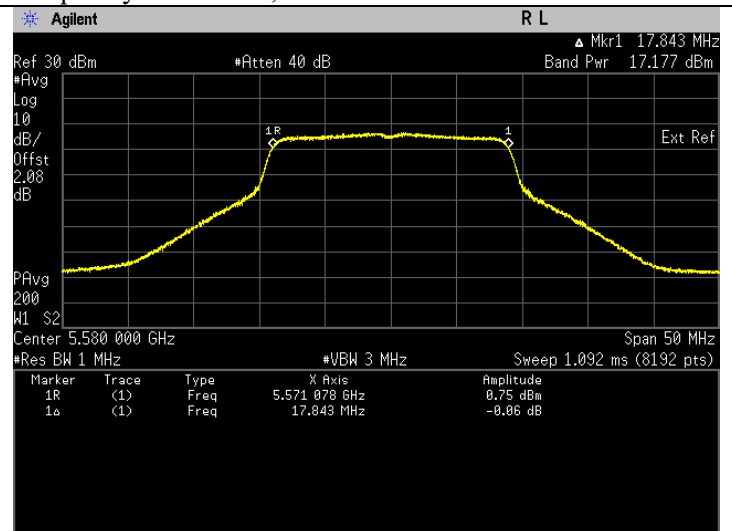
Frequency 5260 MHz, ISED



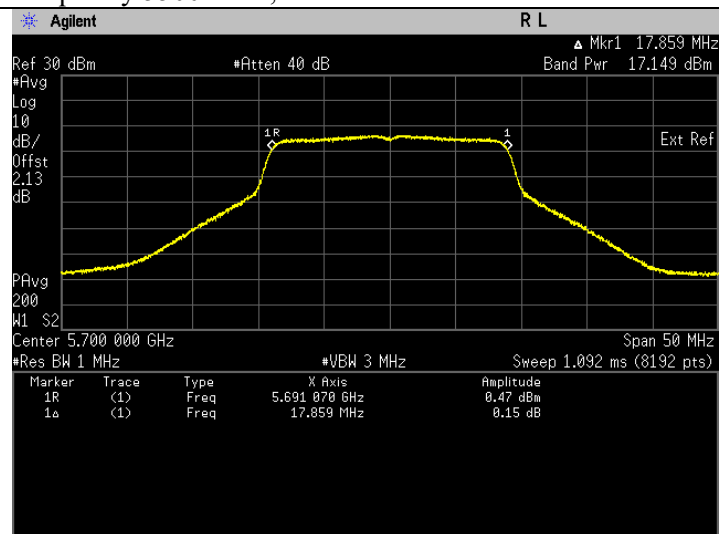
Frequency 5300 MHz, ISED



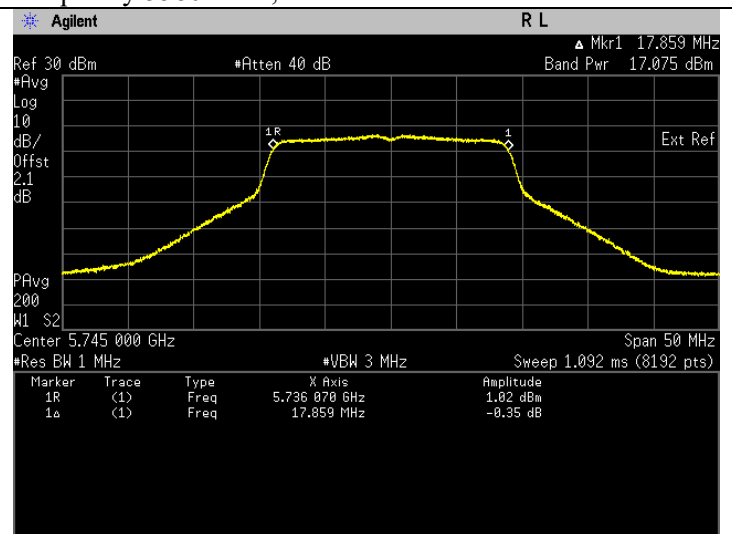
Frequency 5320 MHz, ISED

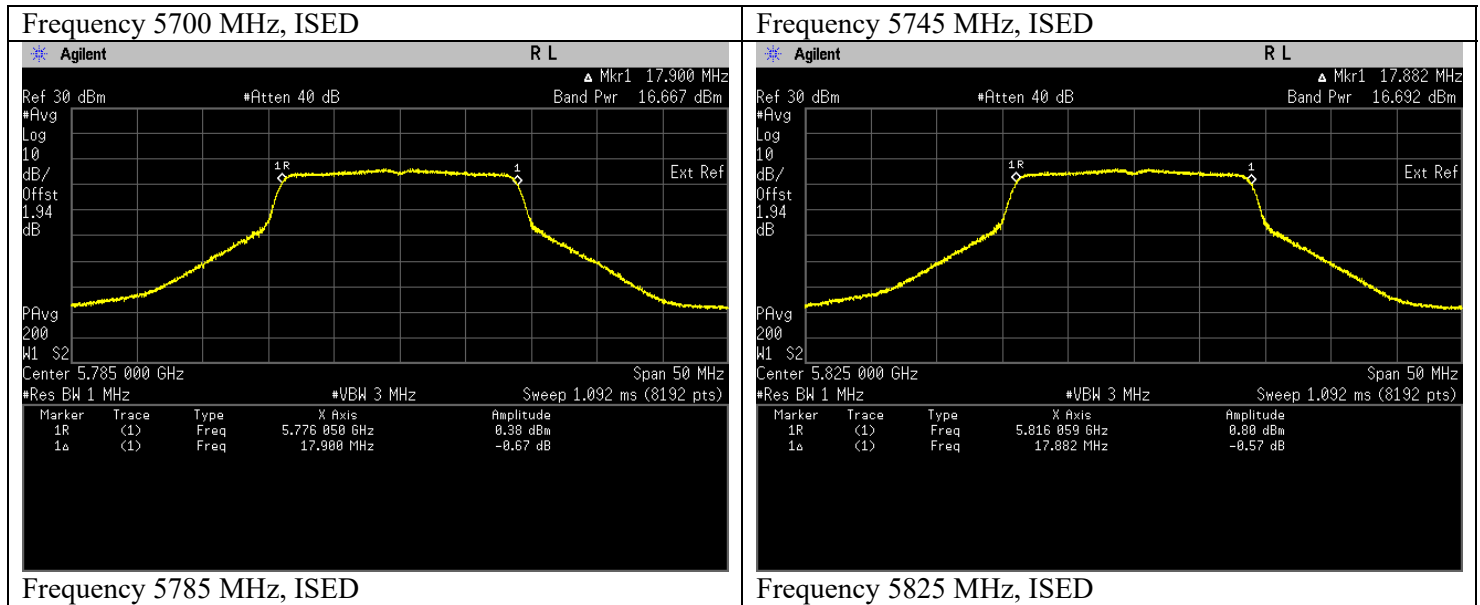


Frequency 5500 MHz, ISED



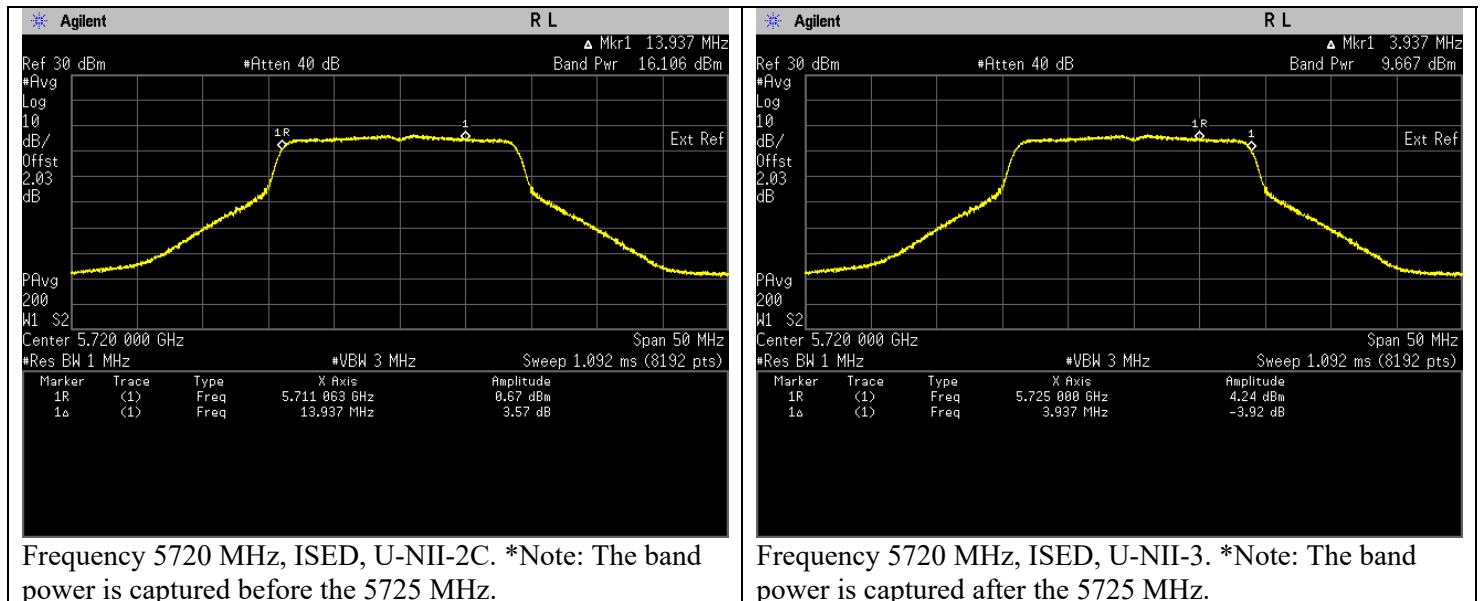
Frequency 5580 MHz, ISED





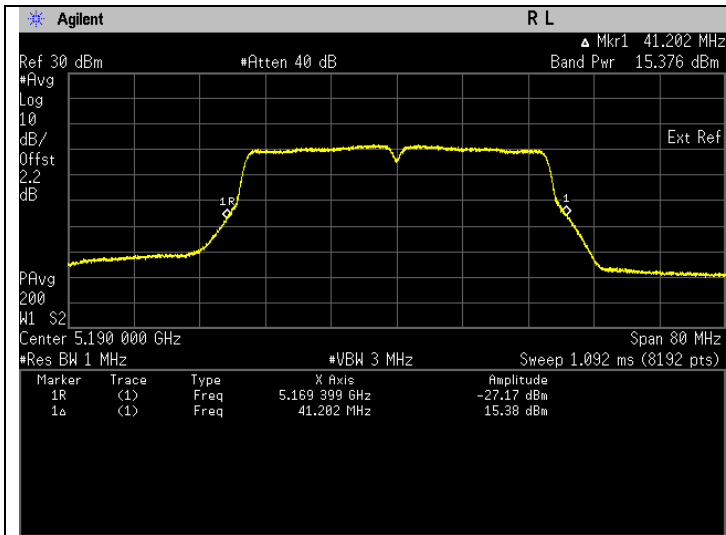
Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	41.572	16.188	Pass	17.768	Pass
U-NII-3						
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	9.438	9.749	Pass	11.329	Pass

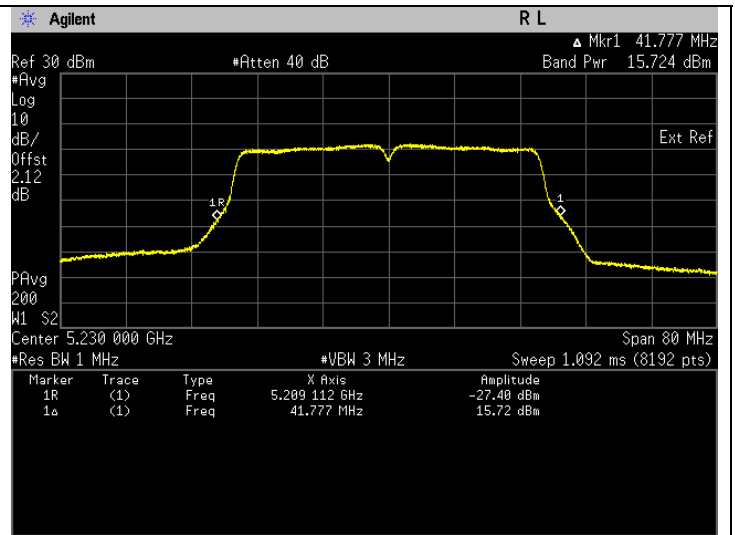


802.11n (HT40)(26dB EBW)

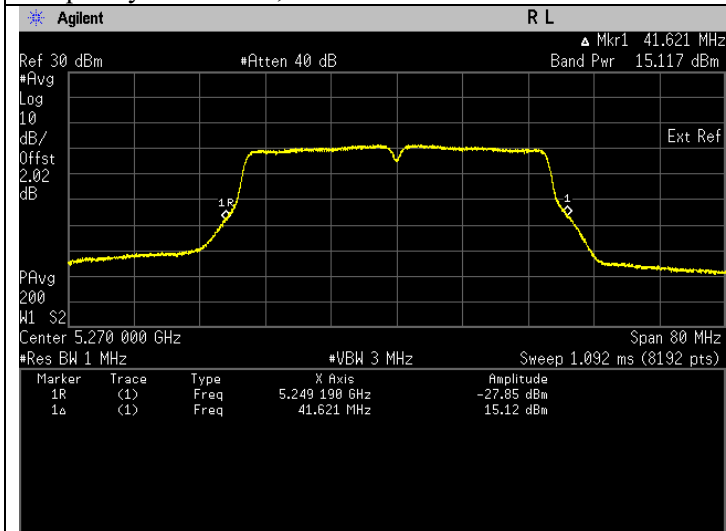
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5190	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	35.785	15.537	Pass
5230	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	38.770	15.885	Pass
5270	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	33.713	15.278	Pass
5310	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	35.571	15.511	Pass
5510	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	58.358	17.661	Pass
5590	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	57.491	17.596	Pass
5670	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	58.063	17.639	Pass
5755	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	54.051	17.328	Pass
5795	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	51.511	17.119	Pass



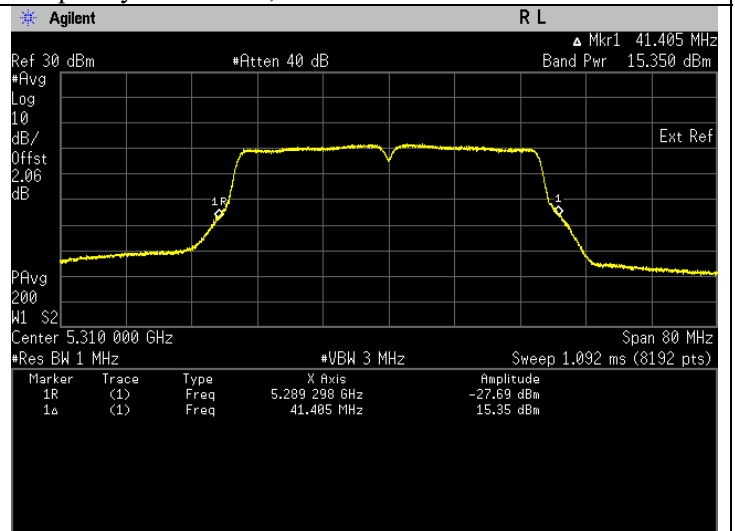
Frequency 5190 MHz, FCC.



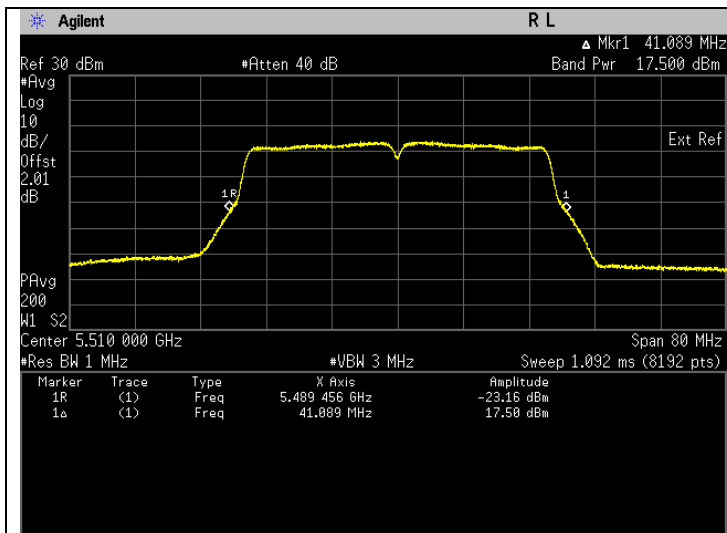
Frequency 5230 MHz, FCC.



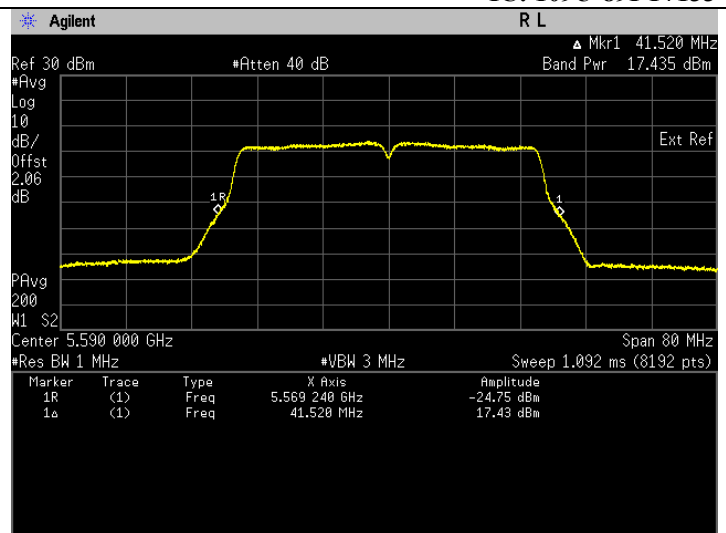
Frequency 5270 MHz, FCC.



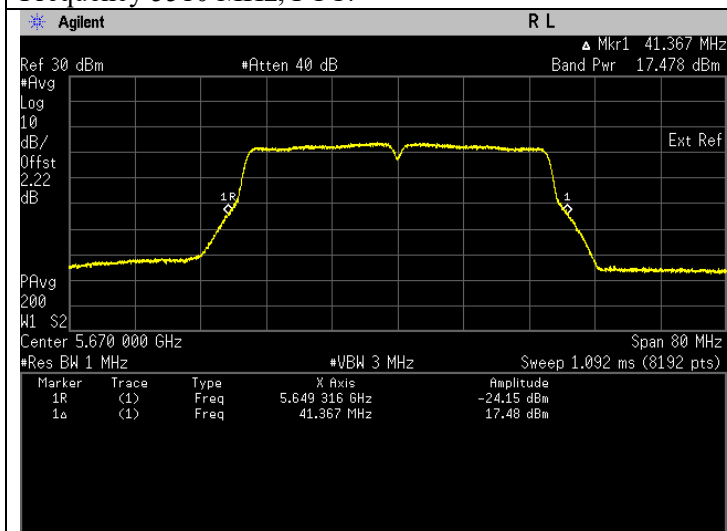
Frequency 5310 MHz, FCC.



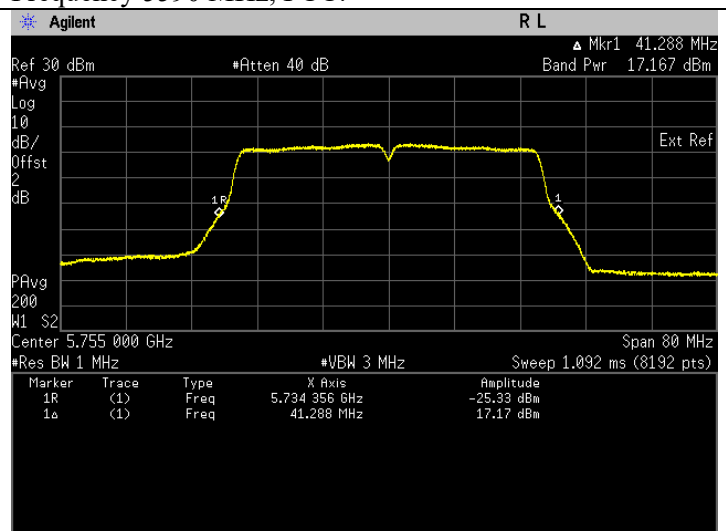
Frequency 5510 MHz, FCC.



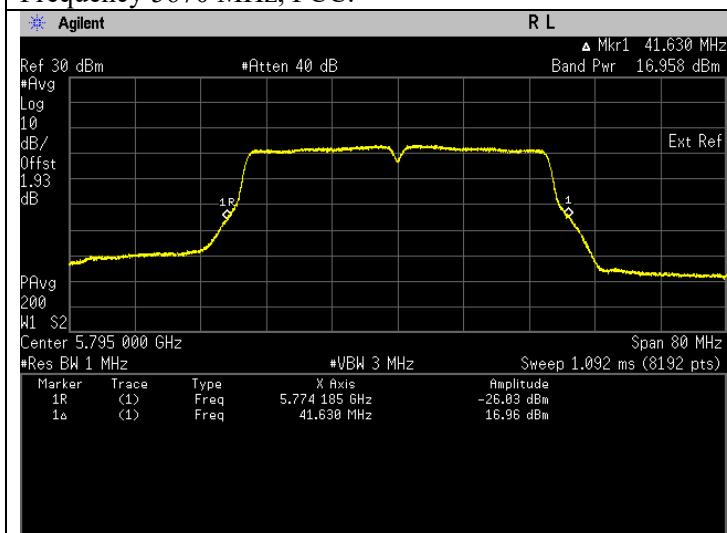
Frequency 5590 MHz, FCC.



Frequency 5670 MHz, FCC.



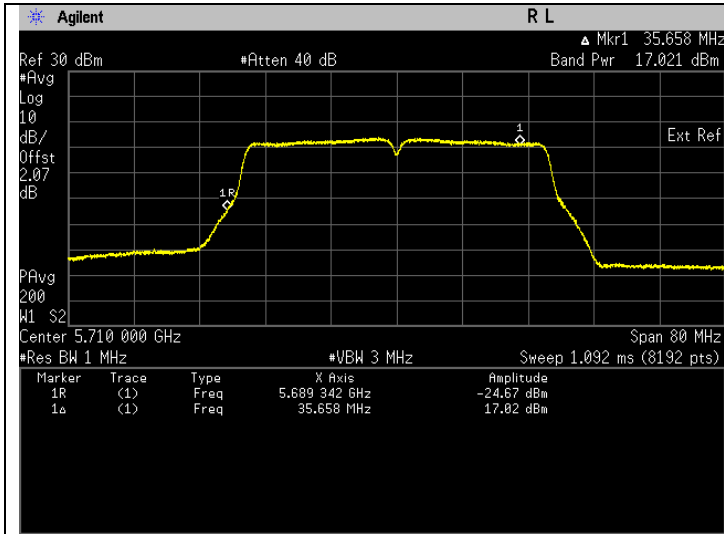
Frequency 5755 MHz, FCC.



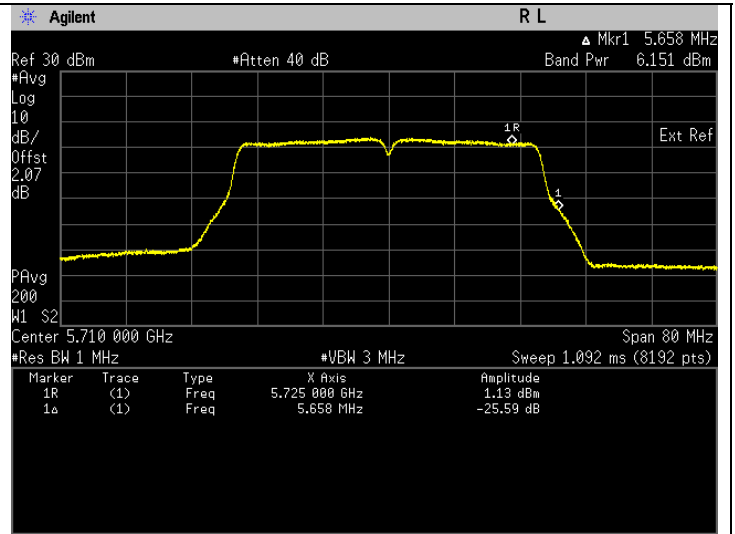
Frequency 5795 MHz, FCC.

Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	52.264	17.182	Pass
		U-NII-3		
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.278	6.312	Pass



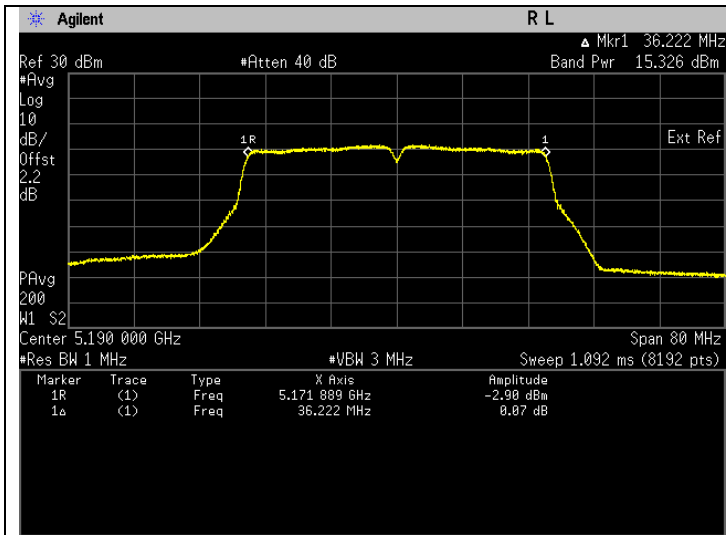
Frequency 5710 MHz, FCC, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



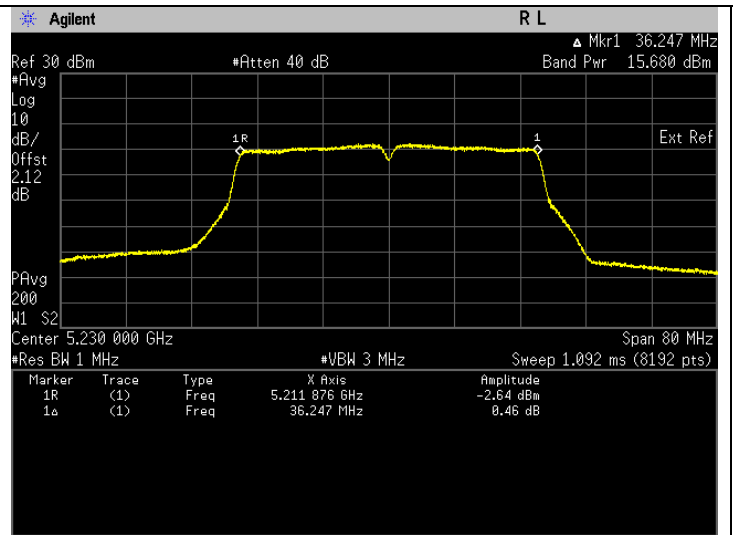
Frequency 5710 MHz, FCC, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11n (HT40)(99% EBW)

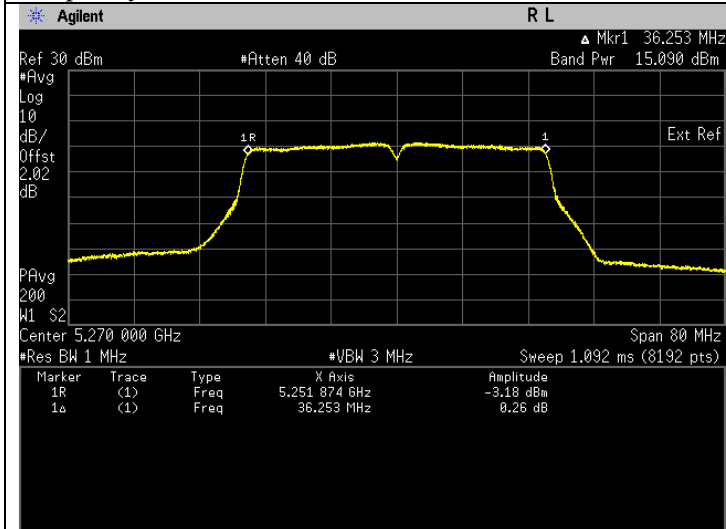
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5190	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	35.375	15.487	Pass	17.067	Pass
5230	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	38.380	15.841	Pass	17.421	Pass
5270	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	33.504	15.251	Pass	16.831	Pass
5310	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	35.335	15.482	Pass	17.062	Pass
5510	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	57.690	17.611	Pass	19.191	Pass
5590	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	56.872	17.549	Pass	19.129	Pass
5670	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	56.846	17.547	Pass	19.127	Pass
5755	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	53.186	17.258	Pass	18.838	Pass
5795	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	50.711	17.051	Pass	18.631	Pass



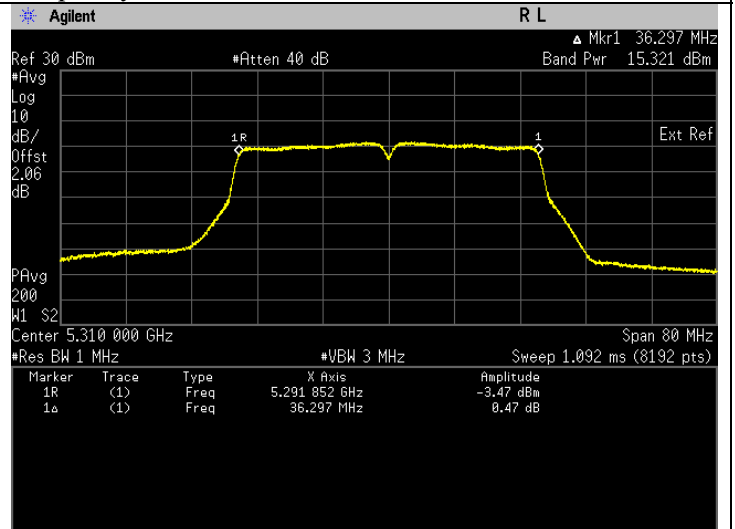
Frequency 5190 MHz, ISED



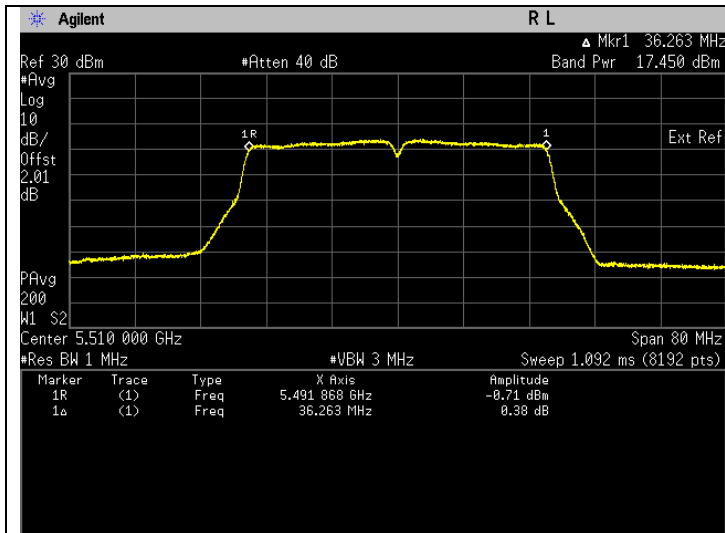
Frequency 5230 MHz, ISED



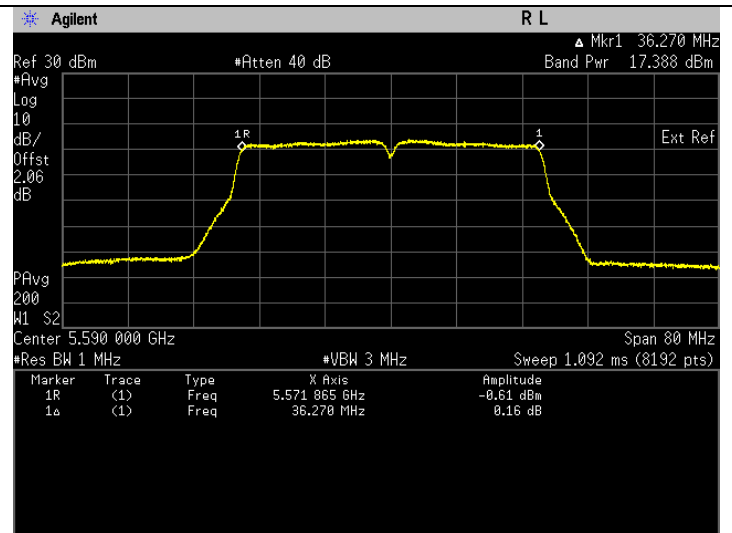
Frequency 5270 MHz, ISED



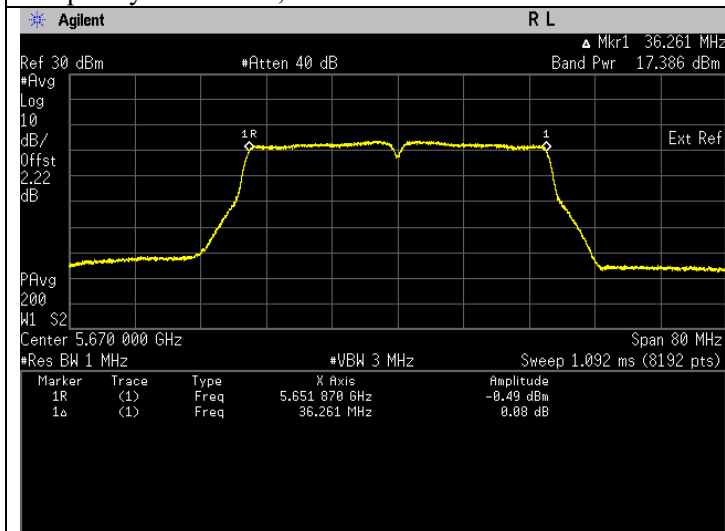
Frequency 5310 MHz, ISED



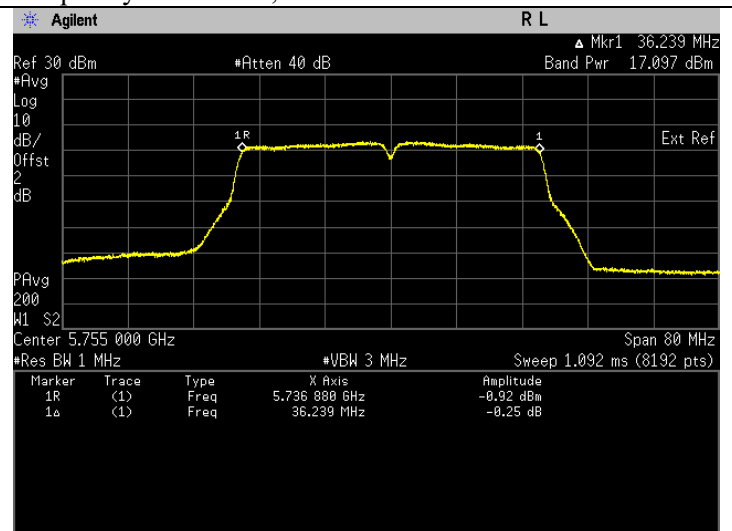
Frequency 5510 MHz, ISED



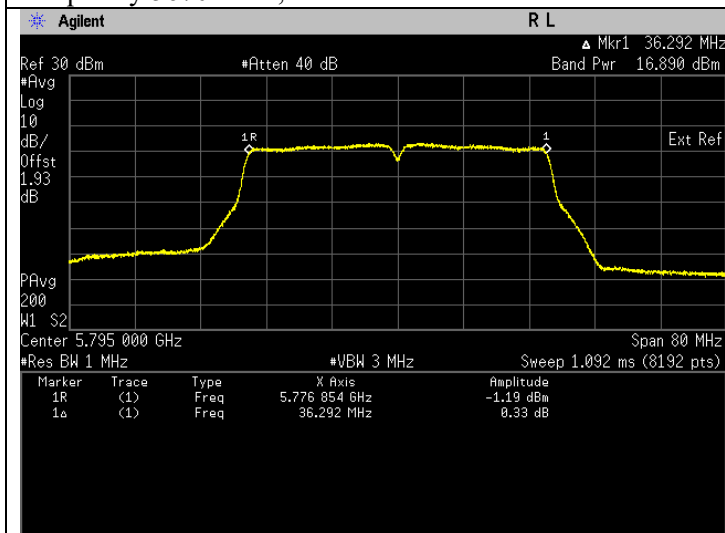
Frequency 5590 MHz, ISED



Frequency 5670 MHz, ISED



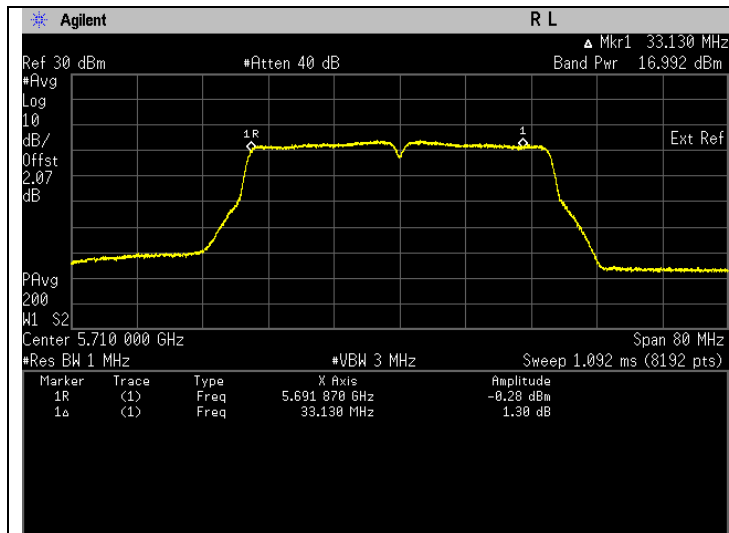
Frequency 5755 MHz, ISED



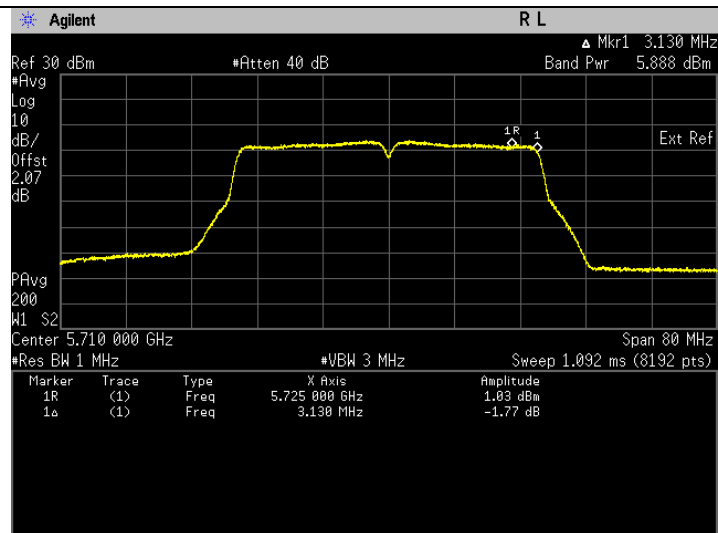
Frequency 5795 MHz, ISED

Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	51.916	17.153	Pass	18.733	Pass
		U-NII-3				
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.026	6.049	Pass	7.629	Pass



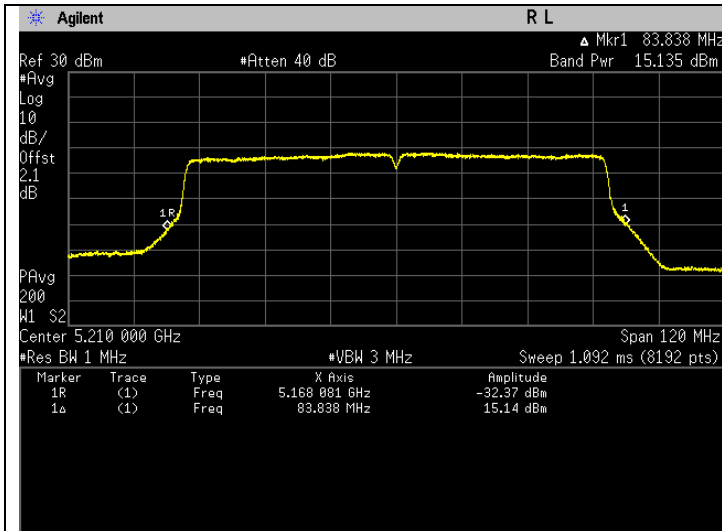
Frequency 5710 MHz, ISSED, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



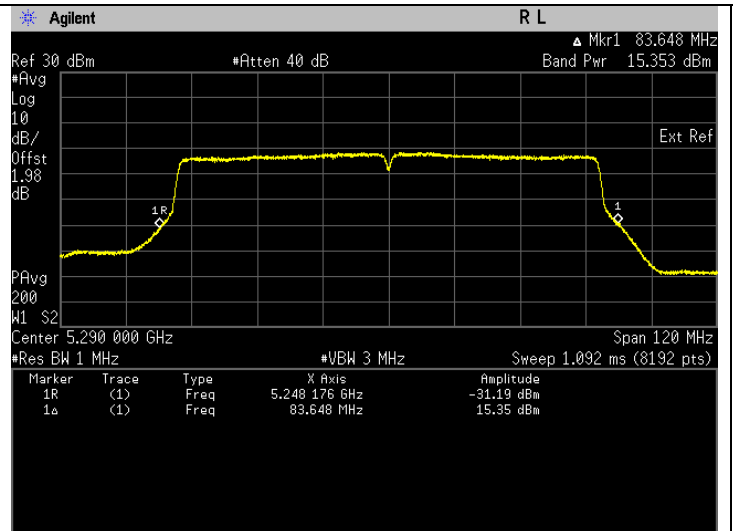
Frequency 5710 MHz, ISSED, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11ac (HT80)(26dB EBW)

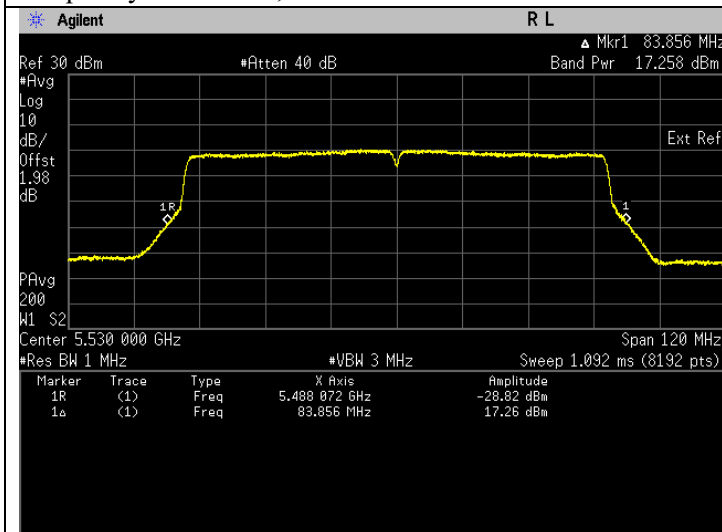
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5210	Mod Type: BPSK, Data Rate: MCS0(29.3)	35.116	15.455	Pass
5290	Mod Type: BPSK, Data Rate: MCS0(29.3)	36.923	15.673	Pass
5530	Mod Type: BPSK, Data Rate: MCS0(29.3)	57.253	17.578	Pass
5610	Mod Type: BPSK, Data Rate: MCS0(29.3)	58.627	17.681	Pass
5775	Mod Type: BPSK, Data Rate: MCS0(29.3)	53.321	17.269	Pass



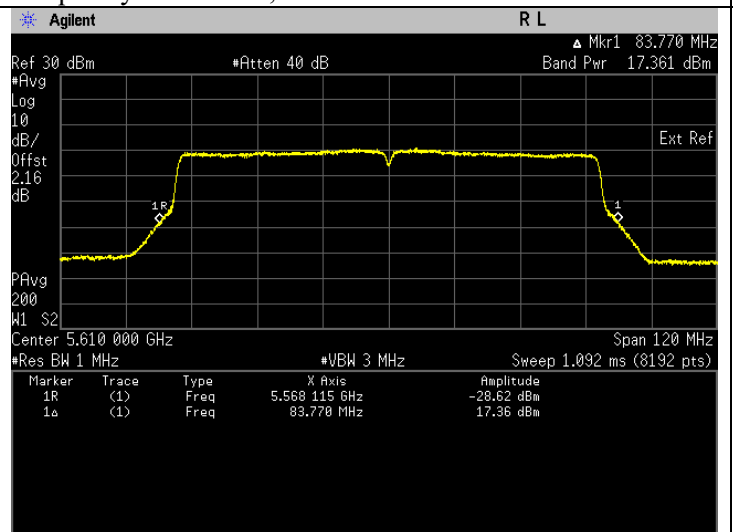
Frequency 5210 MHz, FCC.



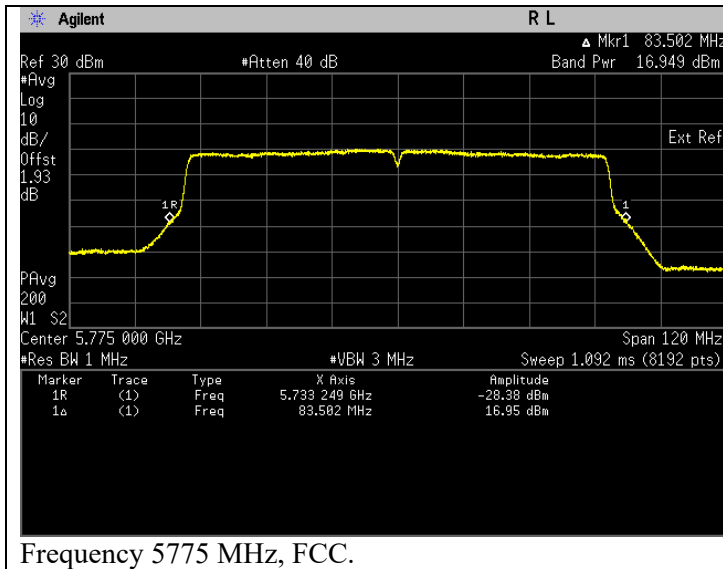
Frequency 5290 MHz, FCC.



Frequency 5530 MHz, FCC.

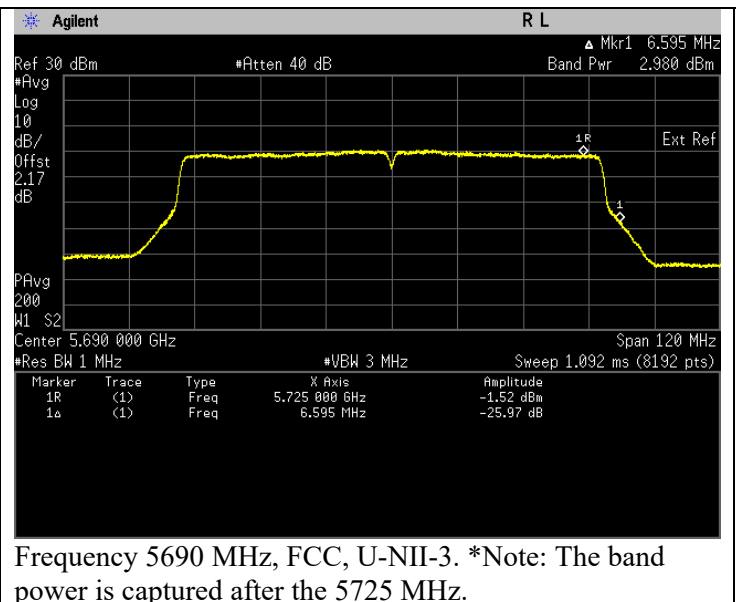
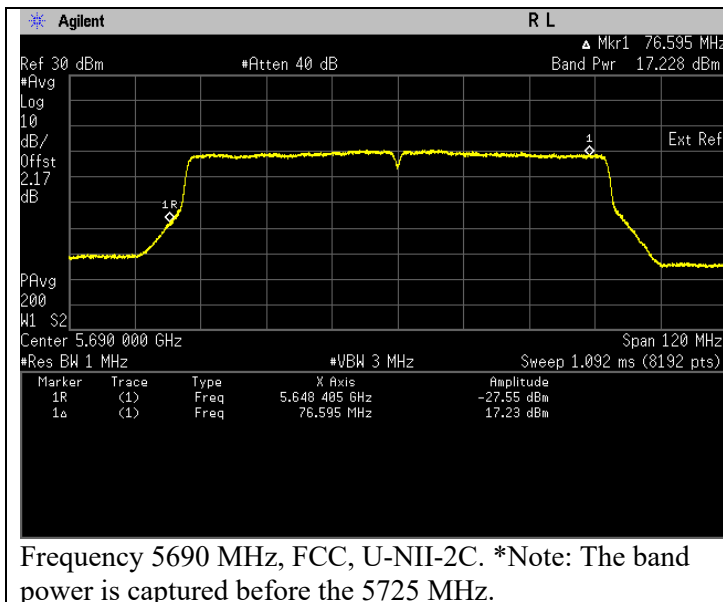


Frequency 5610 MHz, FCC.



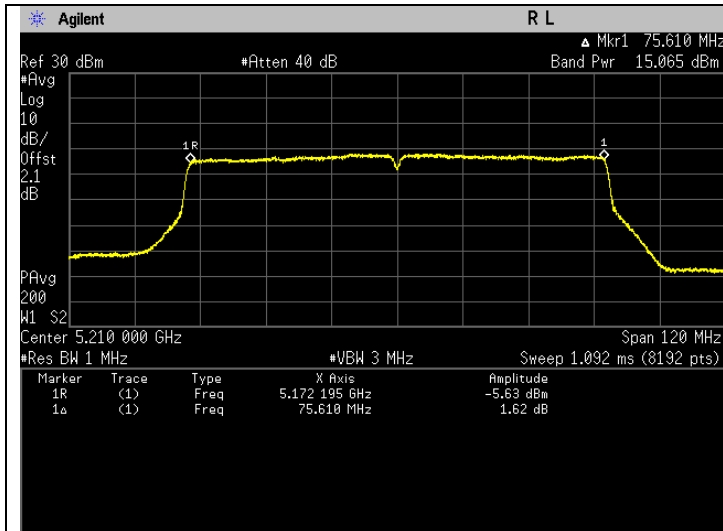
Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	56.859	17.548	Pass
		U-NII-3		
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	2.138	3.300	Pass

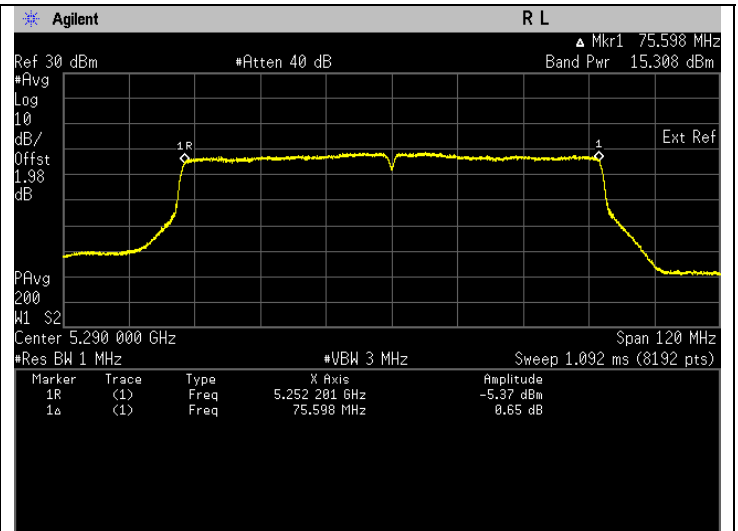


802.11ac (HT80)(99% EBW)

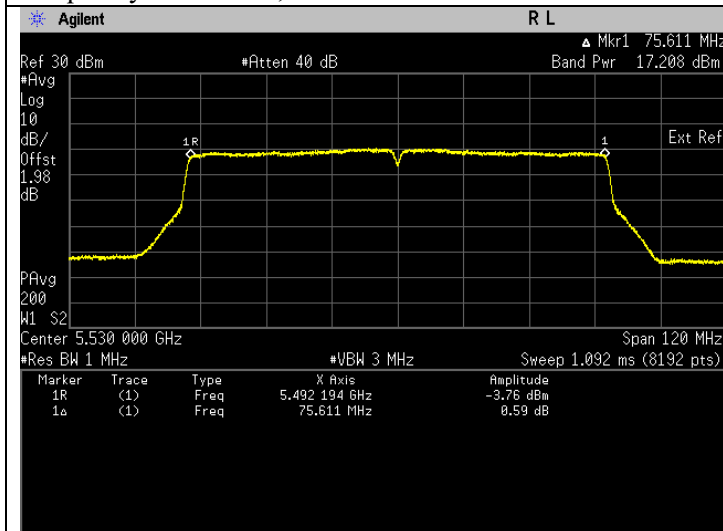
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5210	Mod Type: BPSK, Data Rate: MCS0(29.3)	34.554	15.385	Pass	16.965	Pass
5290	Mod Type: BPSK, Data Rate: MCS0(29.3)	36.543	15.628	Pass	17.207	Pass
5530	Mod Type: BPSK, Data Rate: MCS0(29.3)	56.598	17.528	Pass	19.107	Pass
5610	Mod Type: BPSK, Data Rate: MCS0(29.3)	58.143	17.645	Pass	19.224	Pass
5775	Mod Type: BPSK, Data Rate: MCS0(29.3)	52.517	17.203	Pass	18.782	Pass



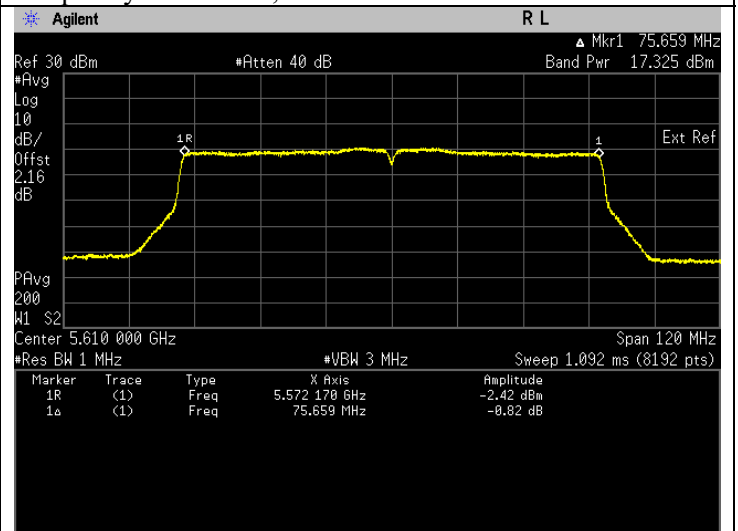
Frequency 5210 MHz, ISED



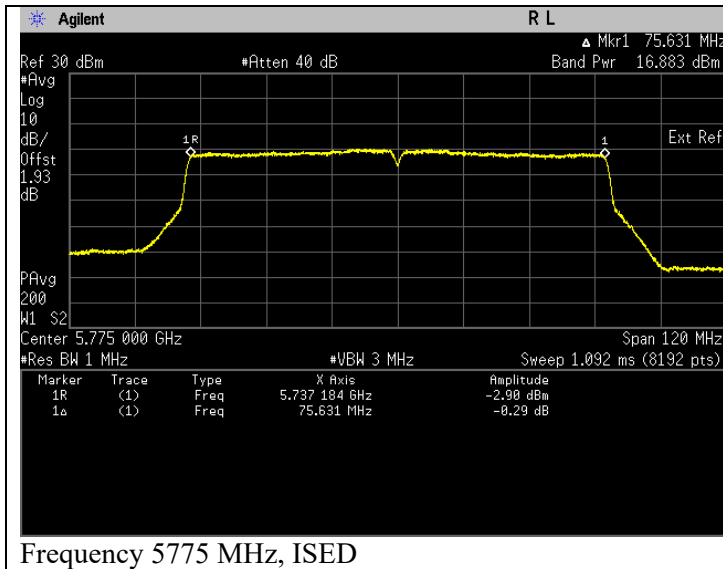
Frequency 5290 MHz, ISED



Frequency 5530 MHz, ISED

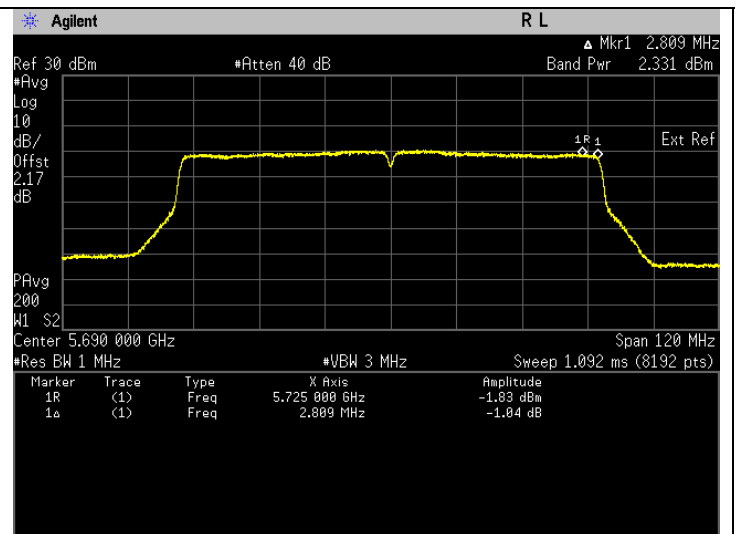
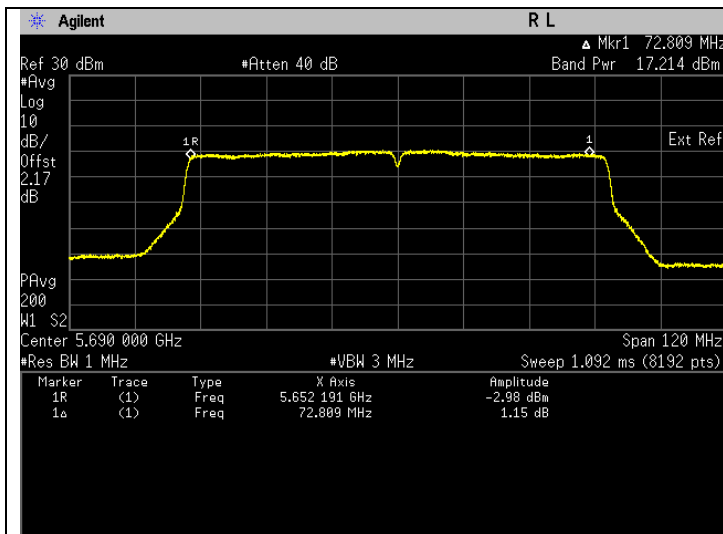


Frequency 5610 MHz, ISED



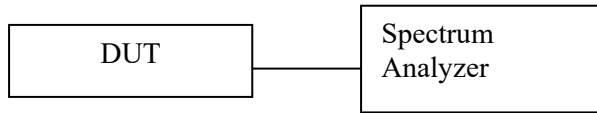
Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	56.676	17.534	Pass	19.114	Pass
		U-NII-3				
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	1.841	2.651	Pass	4.231	Pass



7.3. Maximum Power Spectral Density

7.3.1. Test Setup



- a) Test setup as per illustrated above.
- b) Set DUT to transmit at desire transmit frequency.
- c) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
- d) Setting of Spectrum analyzer :
 - Span to encompass the entire 26dB EBW or 99% occupied bandwidth.
 - RBW = 1 MHz (5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz) / 500 kHz (5.725-5.85 GHz)
 - VBW $\geq 3 \cdot$ RBW
 - Detector = power averaging (RMS)
 - Trace = Max hold
 - Number of points in sweep $\geq 2 \times$ span / RBW
 - Sweep time = auto
 - Trace average at least 100 traces in power averaging (rms) mode
- e) Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- f) Add $10 \log (1/x)$, where x is the duty cycle, to the peak of the spectrum.
- g) The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause F) Method SA-2.
- h) The Maximum power spectral density results are included duty cycle correction factor.

7.3.2. Test Limits

FCC 15.407(a)

Range (GHz)	Condition	Limit
5.15-5.25	Outdoor AP	17dBm/ 1MHz
	Indoor AP	17dBm/ 1MHz
	Fixed Point to Point AP	17dBm/ 1MHz
	√ Mobile and Portable Client Devices	11dBm/ 1MHz
5.25-5.35	√	11dBm/ 1MHz
5.47-5.525	√	11dBm/ 1MHz
5.725-5.85	√	30dBm/ 500kHz

RSS-247 6.2

Range(GHz)	Condition	Limit
5.15-5.25	Indoor Operation Only	EIRP: 10dBm/ 1MHz
5.25-5.35		11dBm/ 1MHz
5.47-5.6 5.6-5.525		11dBm/ 1MHz
5.725-5.85		30dBm/ 500kHz

7.3.3. Additional Info

Antenna	Gain (dBi)
Antenna 1	1.58
Duty Cycle Correction Factor	
802.11a	0.076
802.11n20	0.082
802.11n40	0.161
802.11ac80	0.320

7.3.4. Test Data

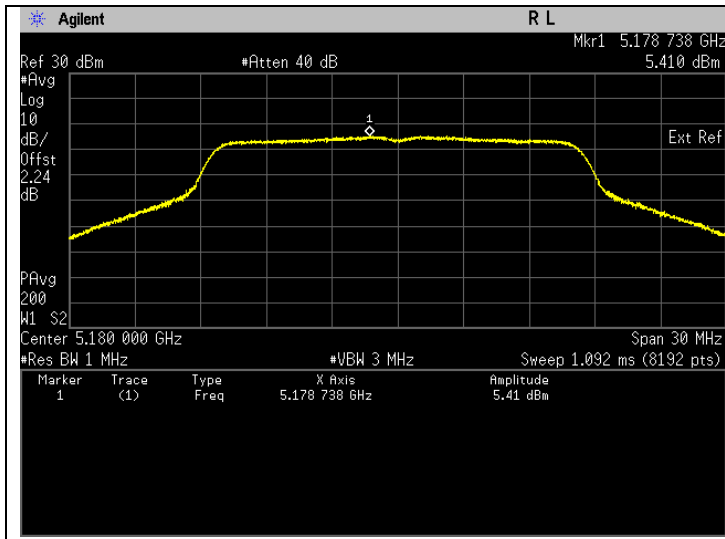
802.11a (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: 6	5.486	Pass
5220	Mod Type: BPSK, Data Rate: 6	5.492	Pass
5240	Mod Type: BPSK, Data Rate: 6	5.319	Pass
5260	Mod Type: BPSK, Data Rate: 6	5.102	Pass
5300	Mod Type: BPSK, Data Rate: 6	5.016	Pass
5320	Mod Type: BPSK, Data Rate: 6	5.524	Pass
5500	Mod Type: BPSK, Data Rate: 6	7.204	Pass
5580	Mod Type: BPSK, Data Rate: 6	7.007	Pass
5700	Mod Type: BPSK, Data Rate: 6	6.949	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5745	Mod Type: BPSK, Data Rate: 6	4.318	Pass
5785	Mod Type: BPSK, Data Rate: 6	3.690	Pass
5825	Mod Type: BPSK, Data Rate: 6	3.752	Pass

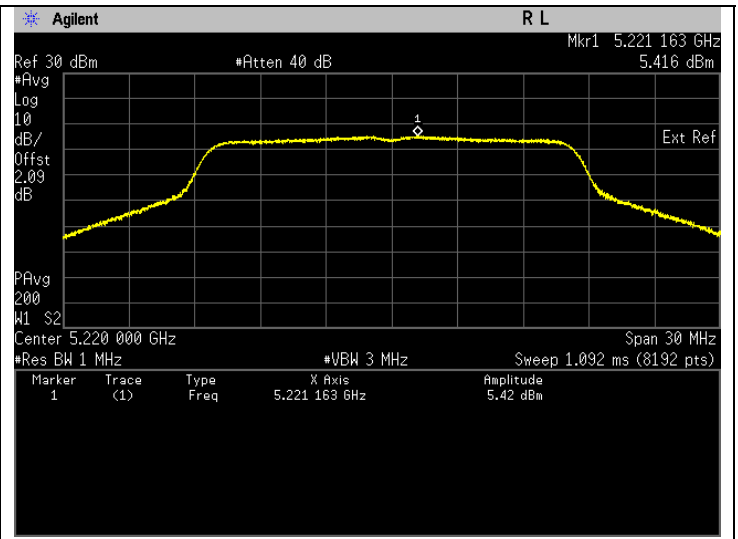
802.11a (99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: 6	5.486	Pass	7.066	Pass
5220	Mod Type: BPSK, Data Rate: 6	5.492	Pass	7.072	Pass
5240	Mod Type: BPSK, Data Rate: 6	5.319	Pass	6.899	Pass
5260	Mod Type: BPSK, Data Rate: 6	5.102	Pass	6.682	Pass
5300	Mod Type: BPSK, Data Rate: 6	5.016	Pass	6.596	Pass
5320	Mod Type: BPSK, Data Rate: 6	5.524	Pass	7.104	Pass
5500	Mod Type: BPSK, Data Rate: 6	7.204	Pass	8.784	Pass
5580	Mod Type: BPSK, Data Rate: 6	7.007	Pass	8.587	Pass
5700	Mod Type: BPSK, Data Rate: 6	6.949	Pass	8.529	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status	EIRP (dBm/MHz)	Status
5745	Mod Type: BPSK, Data Rate: 6	4.318	Pass	5.898	Pass
5785	Mod Type: BPSK, Data Rate: 6	3.690	Pass	5.270	Pass
5825	Mod Type: BPSK, Data Rate: 6	3.752	Pass	5.332	Pass

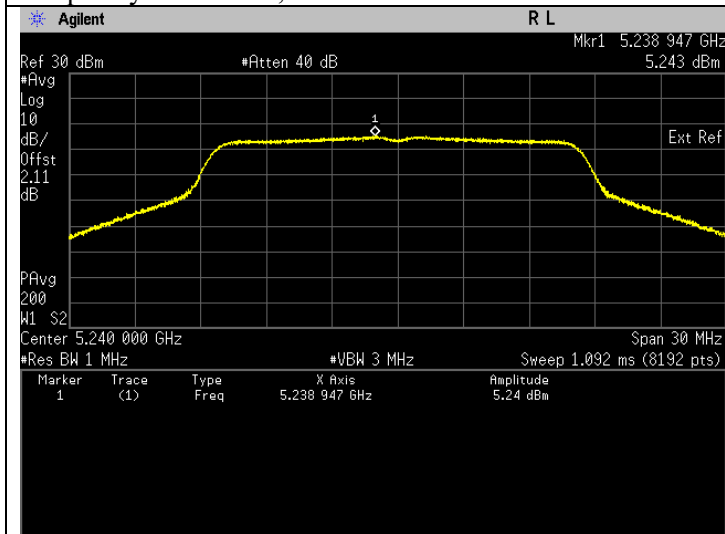
Plots for 802.11a (26dB EBW & 99% EBW)



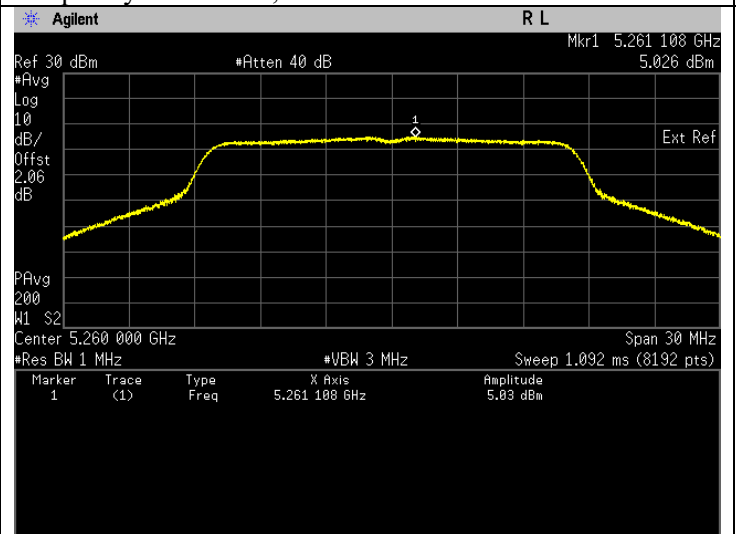
Frequency 5180 MHz, FCC & ISSED.



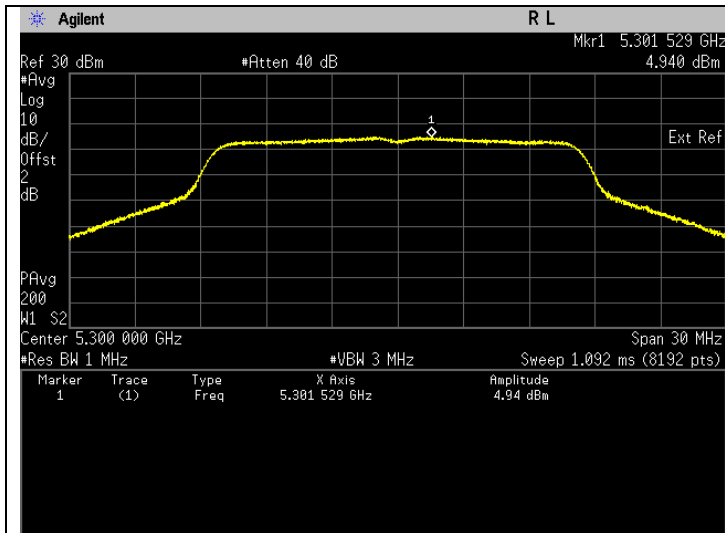
Frequency 5220 MHz, FCC & ISSED.



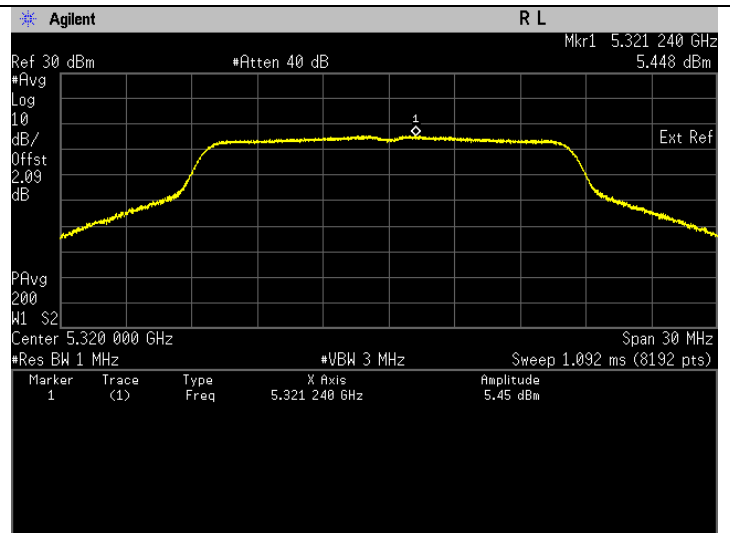
Frequency 5240 MHz, FCC & ISSED.



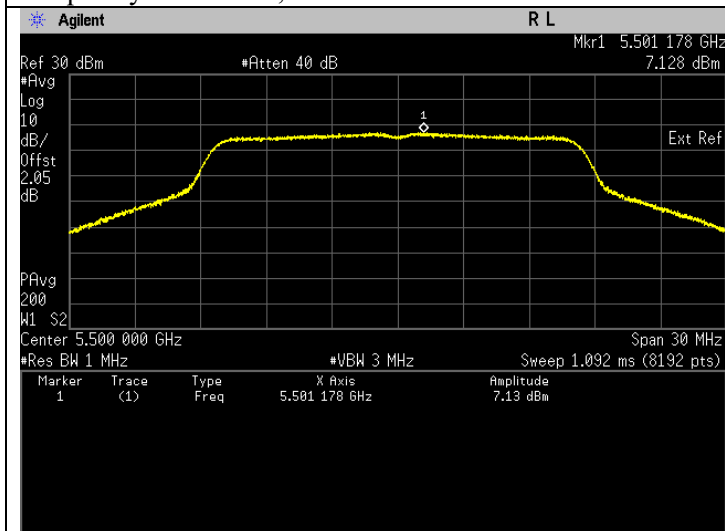
Frequency 5260 MHz, FCC & ISSED.



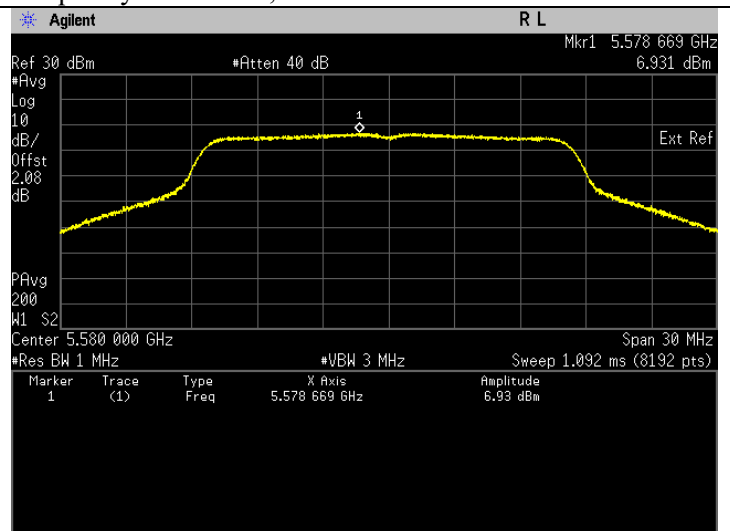
Frequency 5300 MHz, FCC & ISSED.



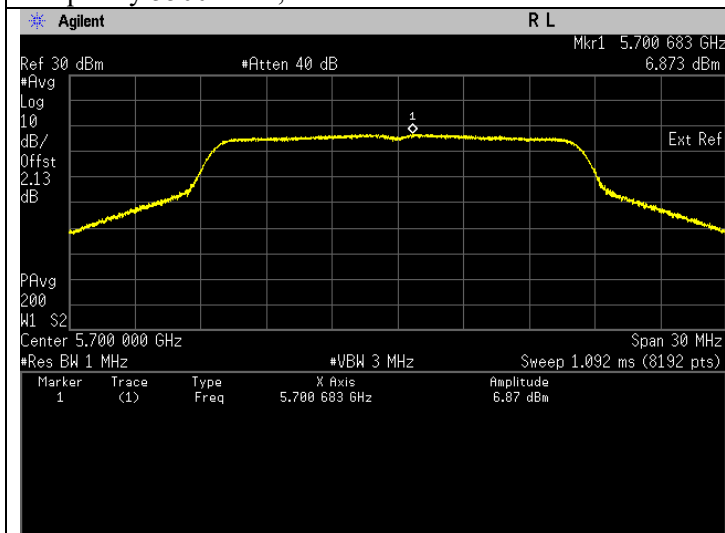
Frequency 5320 MHz, FCC & ISSED.



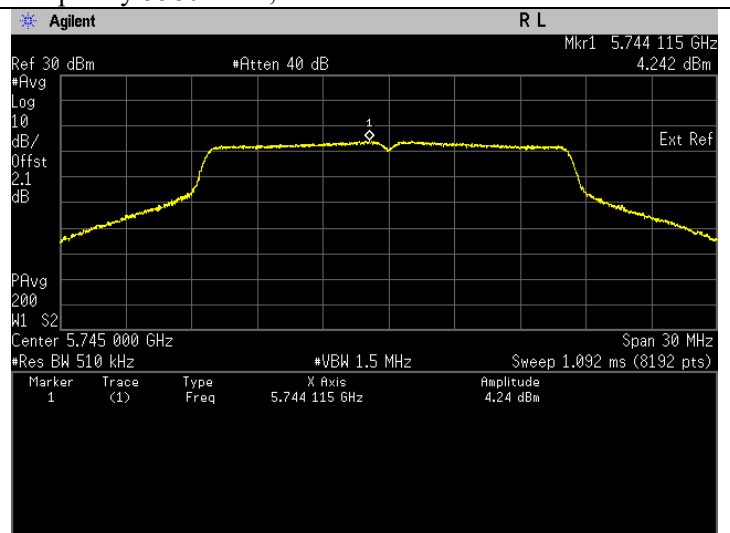
Frequency 5500 MHz, FCC & ISSED.



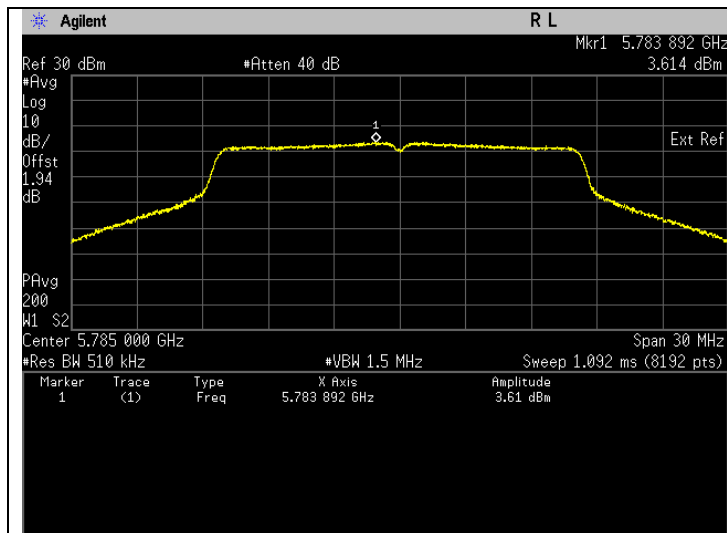
Frequency 5580 MHz, FCC & ISSED.



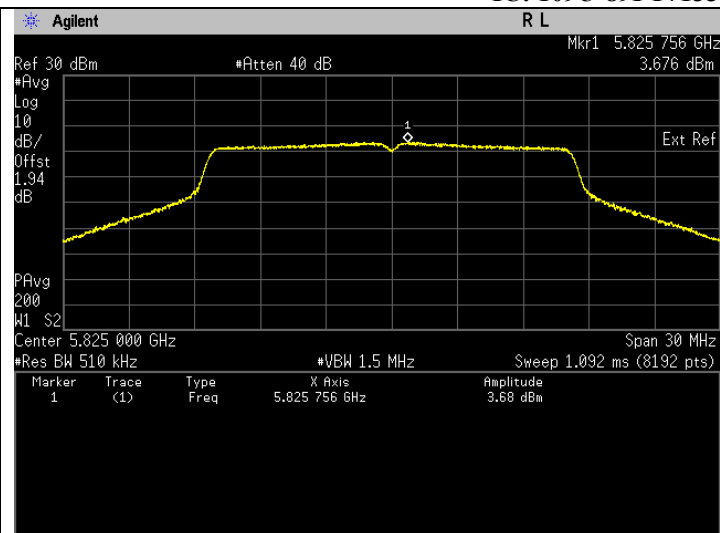
Frequency 5700 MHz, FCC & ISSED.



Frequency 5745 MHz, FCC & ISSED.



Frequency 5785 MHz, FCC & ISSED.



Frequency 5825 MHz, FCC & ISSED.

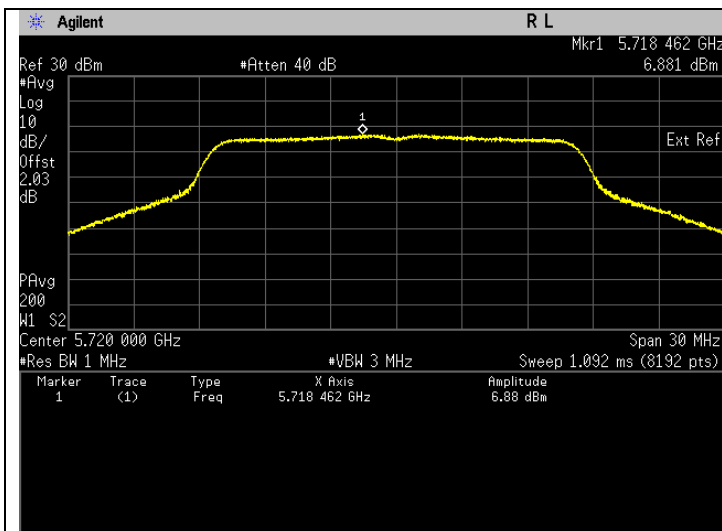
Straddle Frequency for 802.11a (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: OFDM, Mod Tech: BPSK, Data Rate: 6	6.959	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: OFDM, Mod Tech: BPSK, Data Rate: 6	5.432	Pass

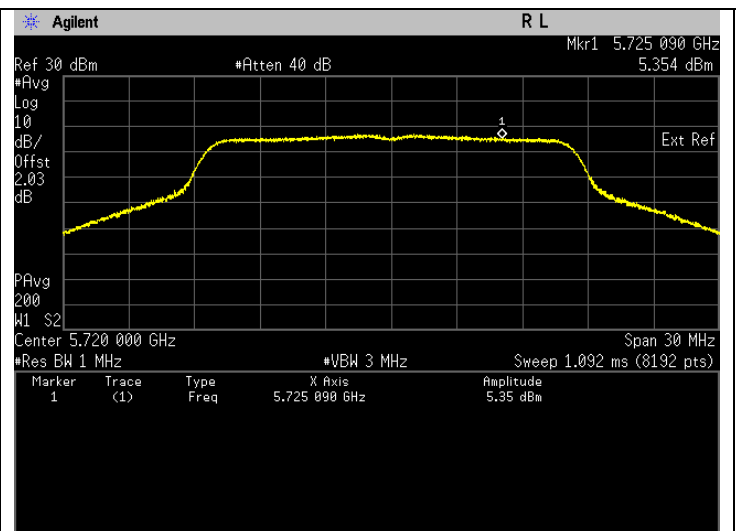
Straddle Frequency for 802.11a (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: OFDM, Mod Tech: BPSK, Data Rate: 6	6.959	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: OFDM, Mod Tech: BPSK, Data Rate: 6	5.432	Pass

Plots for 802.11a Straddle Frequency (26dB EBW & 99% EBW)



Frequency 5720 MHz, FCC & ISSED,U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5720 MHz, FCC & ISSED, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

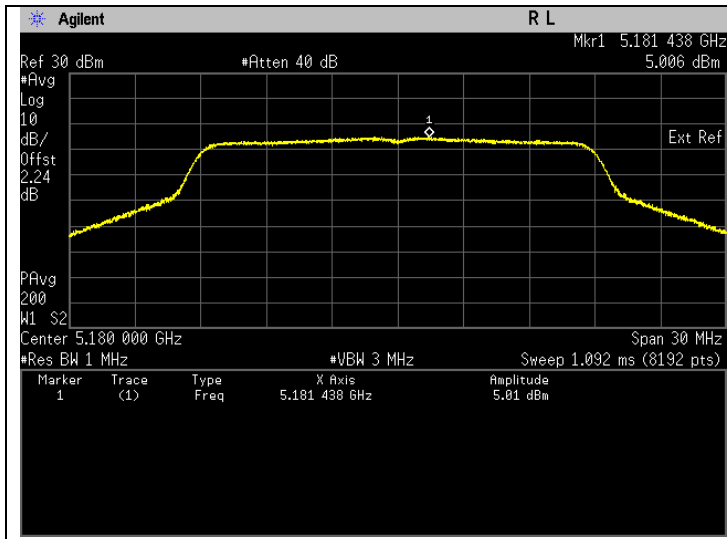
802.11n (HT20)(26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.088	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.077	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.030	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	4.676	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	4.731	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	4.969	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.857	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.896	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.822	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	3.850	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	3.460	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	3.539	Pass

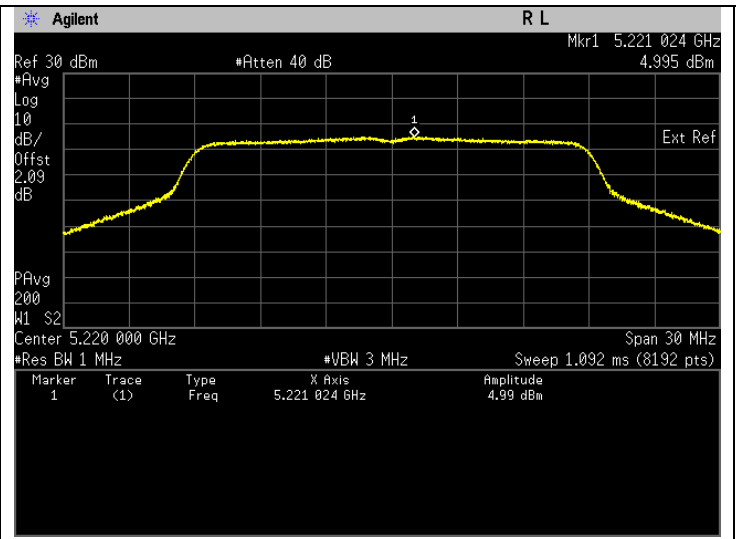
802.11n (HT20)(99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.088	Pass	6.668	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.077	Pass	6.657	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.030	Pass	6.610	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	4.676	Pass	6.256	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	4.731	Pass	6.311	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	4.969	Pass	6.549	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.857	Pass	8.437	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.896	Pass	8.476	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.822	Pass	8.402	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status	EIRP (dBm/MHz)	Status
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	3.850	Pass	5.430	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	3.460	Pass	5.040	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	3.539	Pass	5.119	Pass

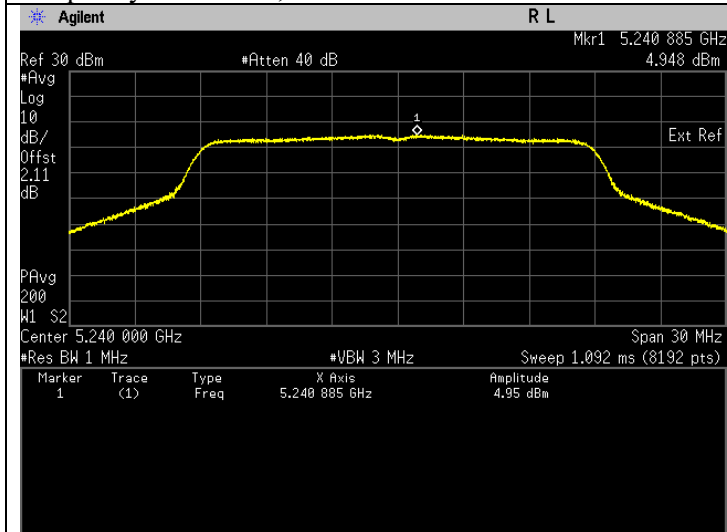
Plots for 802.11n (HT20) (26dB EBW & 99% EBW)



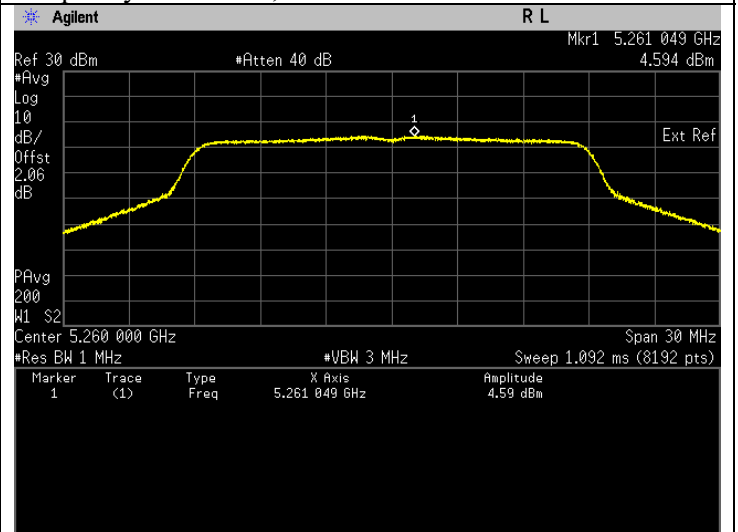
Frequency 5180 MHz, FCC & ISSED.



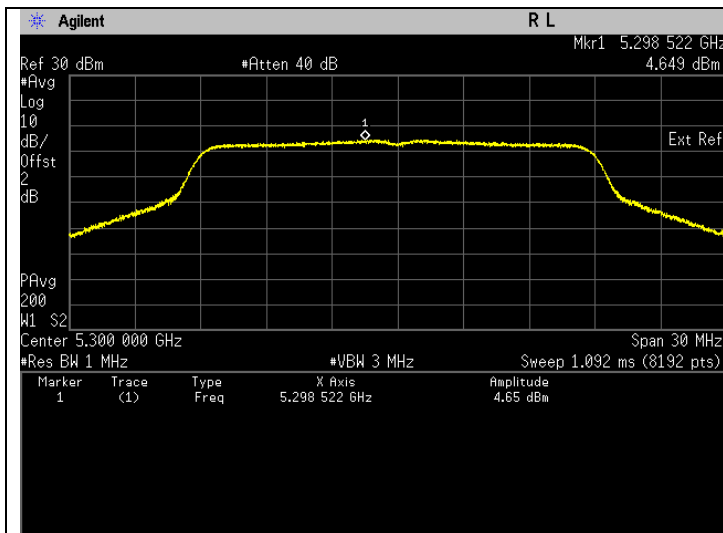
Frequency 5220 MHz, FCC & ISSED.



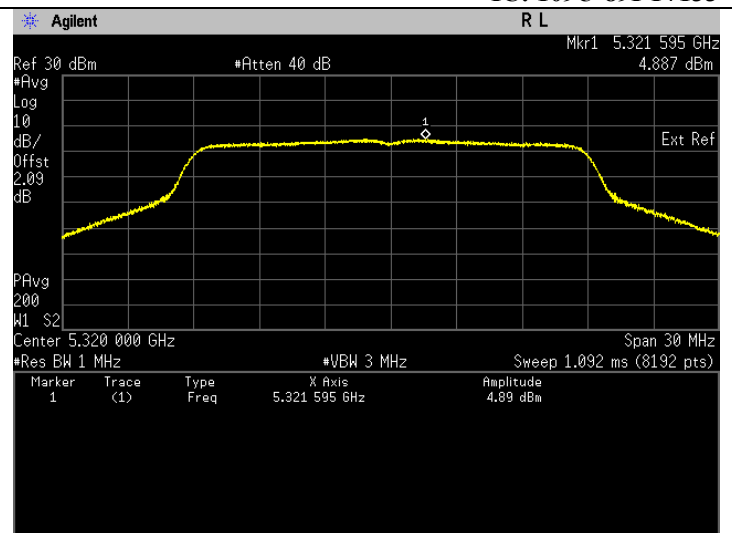
Frequency 5240 MHz, FCC & ISSED.



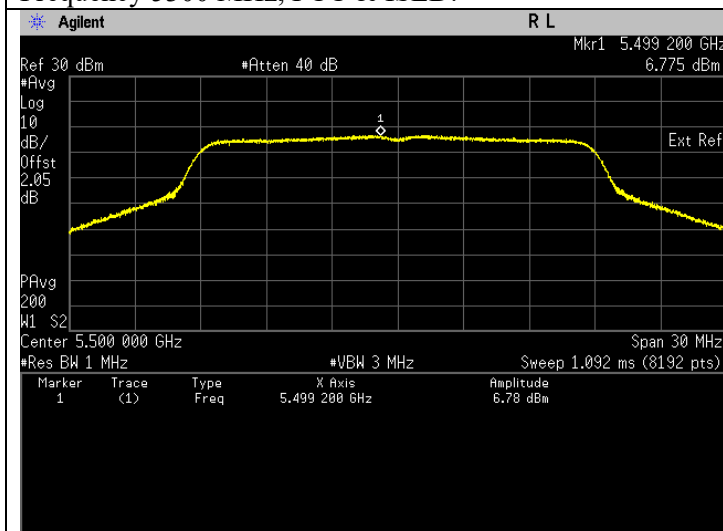
Frequency 5260 MHz, FCC & ISSED.



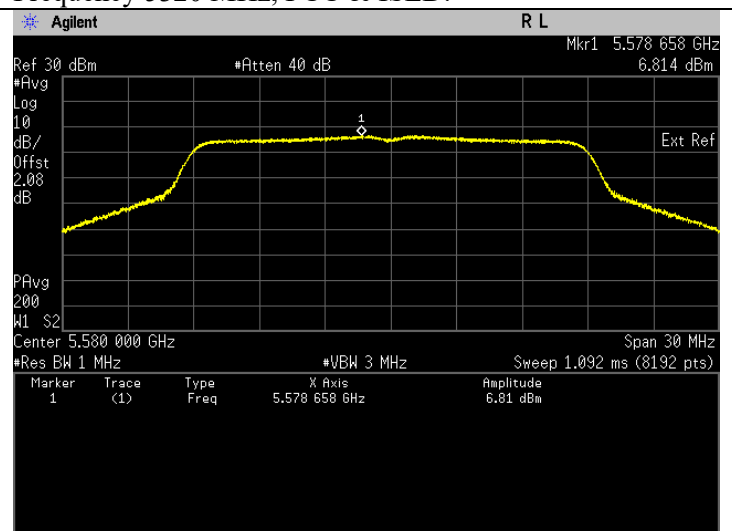
Frequency 5300 MHz, FCC & ISSED.



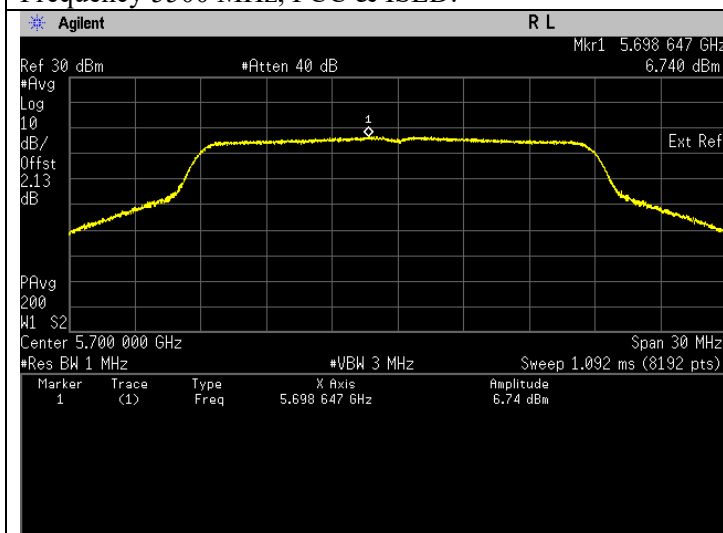
Frequency 5320 MHz, FCC & ISSED.



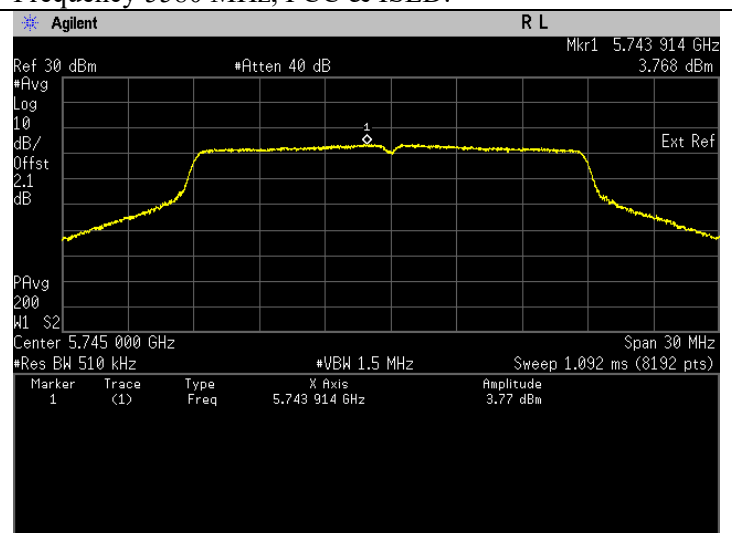
Frequency 5500 MHz, FCC & ISSED.



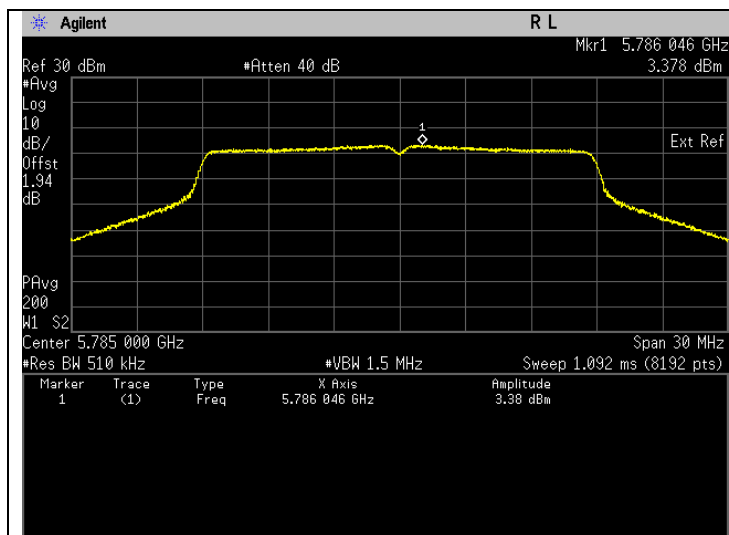
Frequency 5580 MHz, FCC & ISSED.



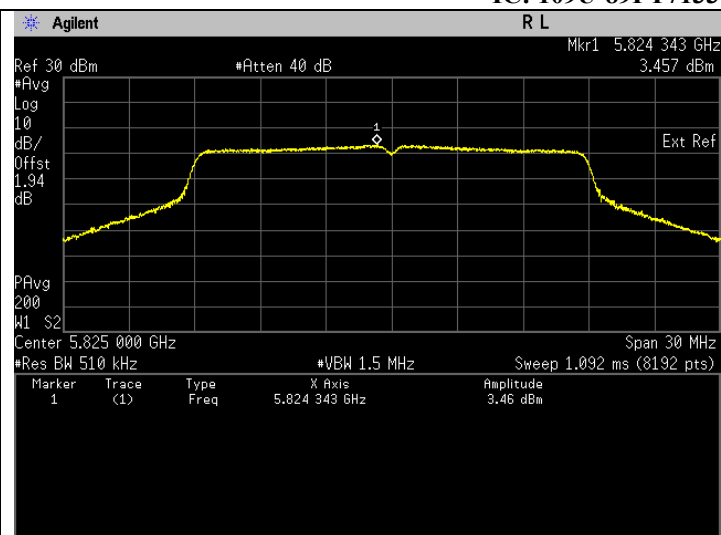
Frequency 5700 MHz, FCC & ISSED.



Frequency 5745 MHz, FCC & ISSED.



Frequency 5785 MHz, FCC & ISSED.



Frequency 5825 MHz, FCC & ISSED.

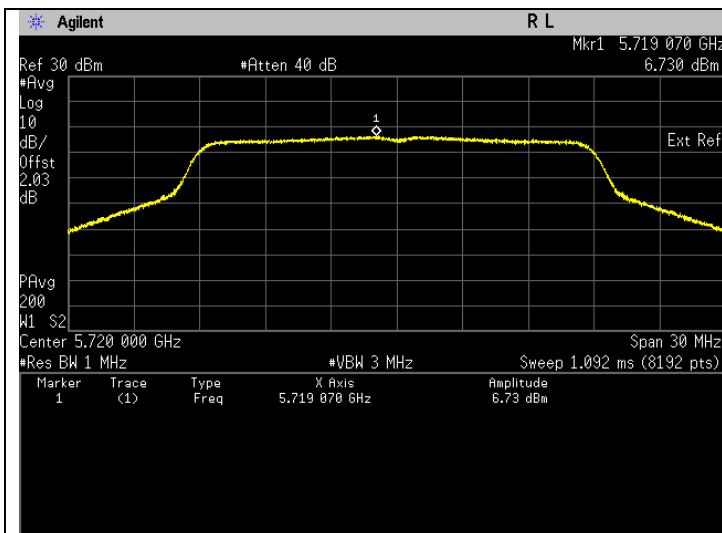
Straddle Frequency for 802.11n (HT20) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.812	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.145	Pass

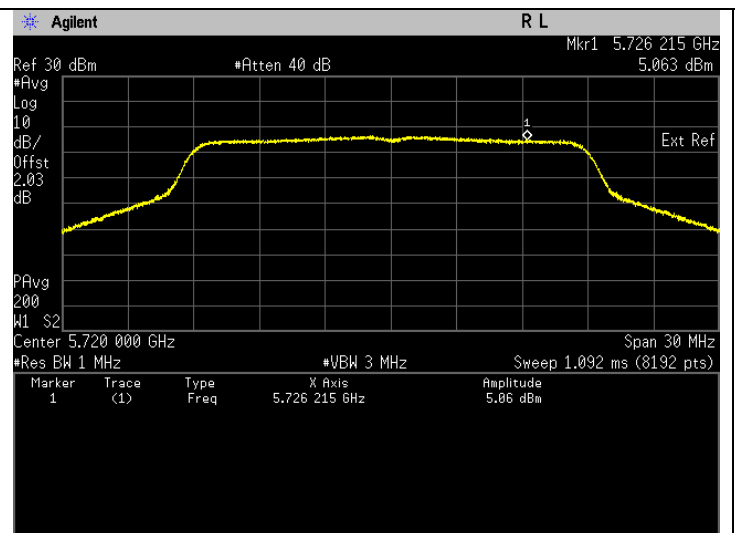
Straddle Frequency for 802.11n (HT20) (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.812	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.145	Pass

Plots for 802.11n (HT20) Straddle Frequency (26dB EBW & 99% EBW)



Frequency 5720 MHz, FCC & ISSED,U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5720 MHz, FCC & ISSED, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

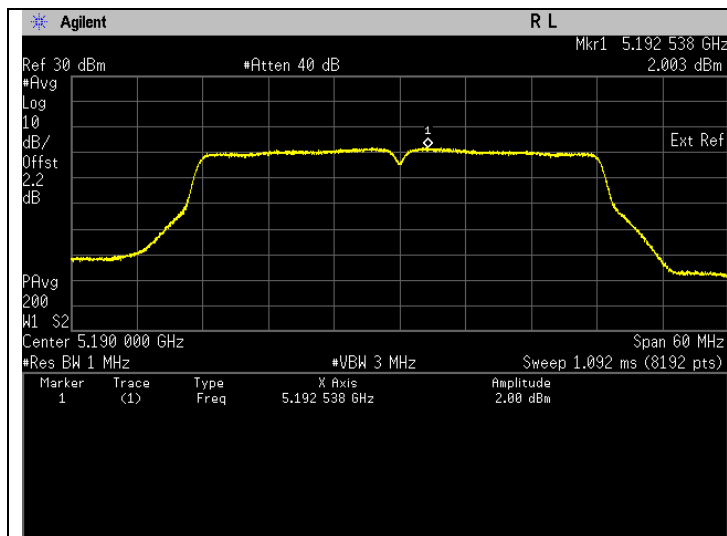
802.11n (HT40) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5190	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.160	Pass
5230	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.314	Pass
5270	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.705	Pass
5310	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.887	Pass
5510	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.106	Pass
5590	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.335	Pass
5670	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.197	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5755	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	0.878	Pass
5795	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	0.728	Pass

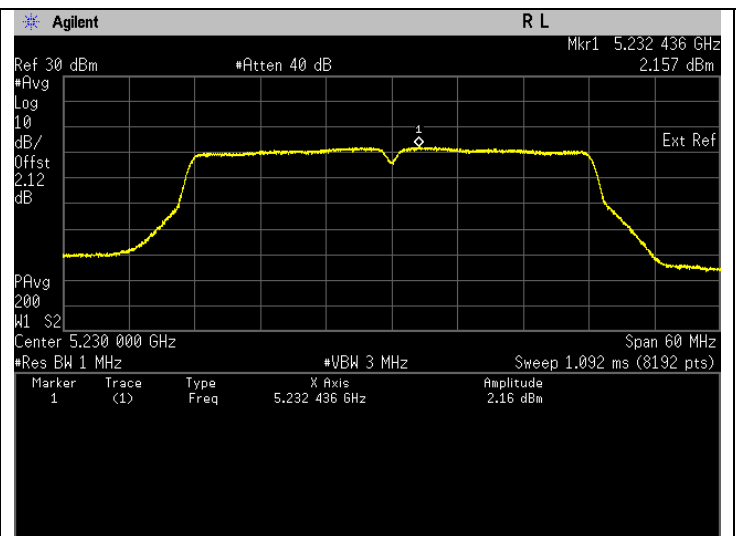
802.11n (HT40)(99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5190	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.164	Pass	3.744	Pass
5230	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.318	Pass	3.898	Pass
5270	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.709	Pass	3.289	Pass
5310	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.891	Pass	3.471	Pass
5510	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.110	Pass	5.690	Pass
5590	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.339	Pass	5.919	Pass
5670	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.201	Pass	5.781	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status	EIRP (dBm/MHz)	Status
5755	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	0.882	Pass	2.462	Pass
5795	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	0.732	Pass	2.312	Pass

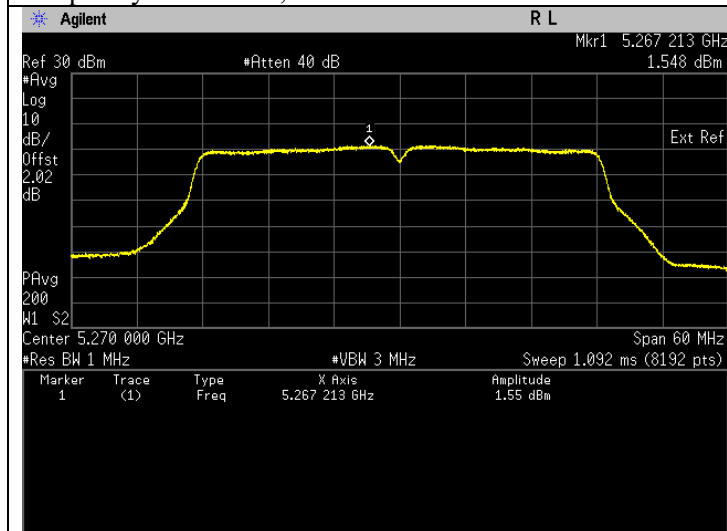
Plots for 802.11n (HT40) (26dB EBW & 99% EBW)



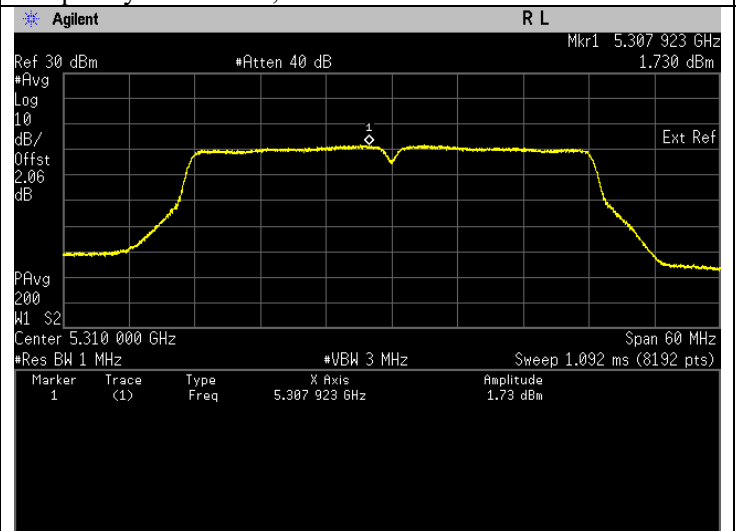
Frequency 5190 MHz, FCC & ISSED.



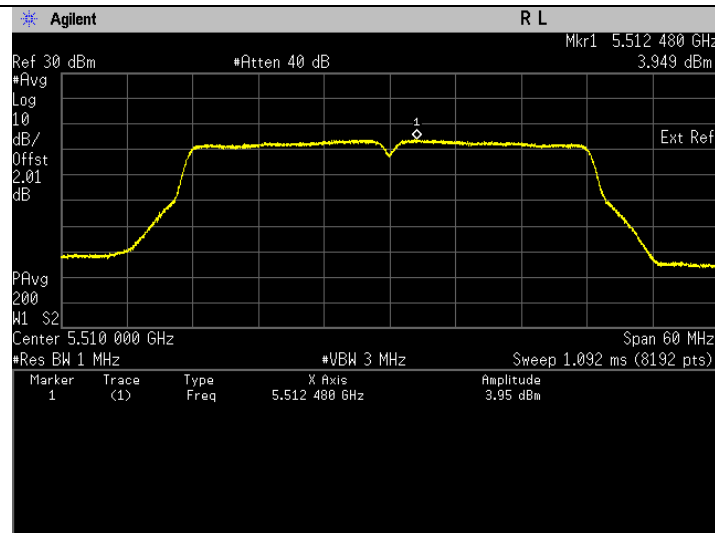
Frequency 5230 MHz, FCC & ISSED.



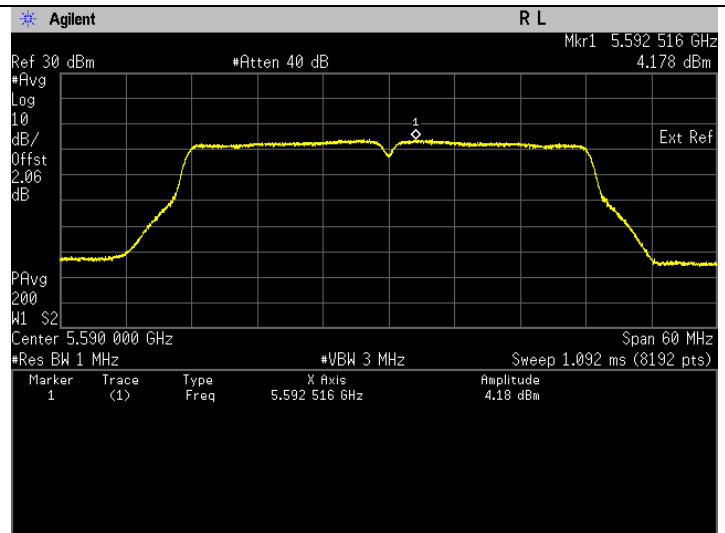
Frequency 5270 MHz, FCC & ISSED.



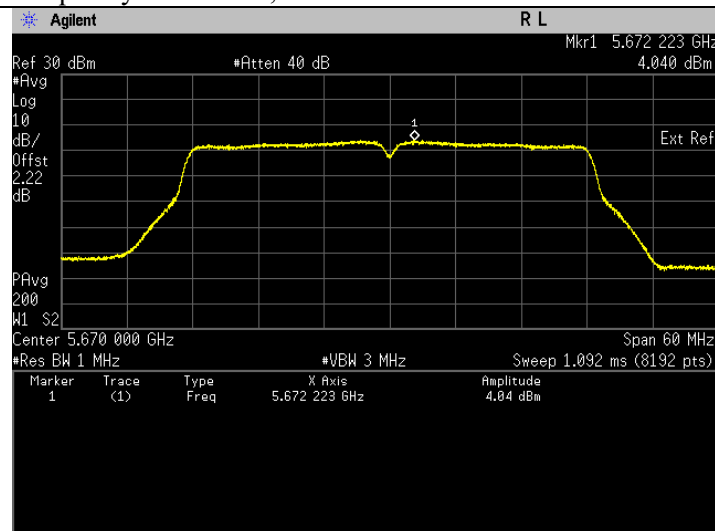
Frequency 5310 MHz, FCC & ISSED.



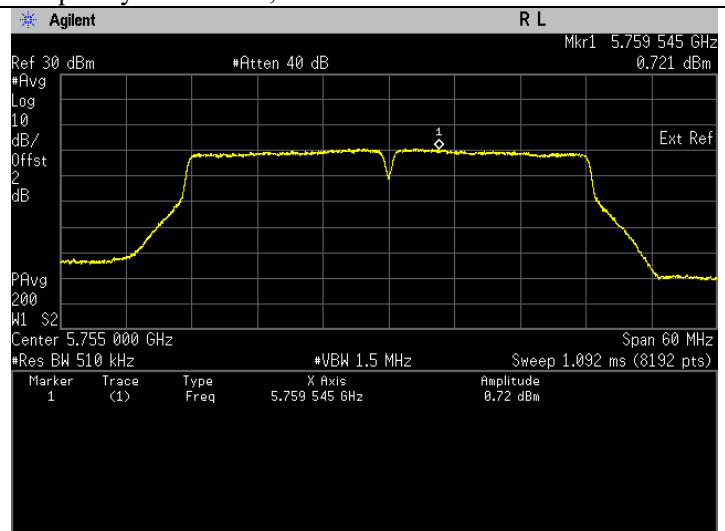
Frequency 5510 MHz, FCC & ISSED.



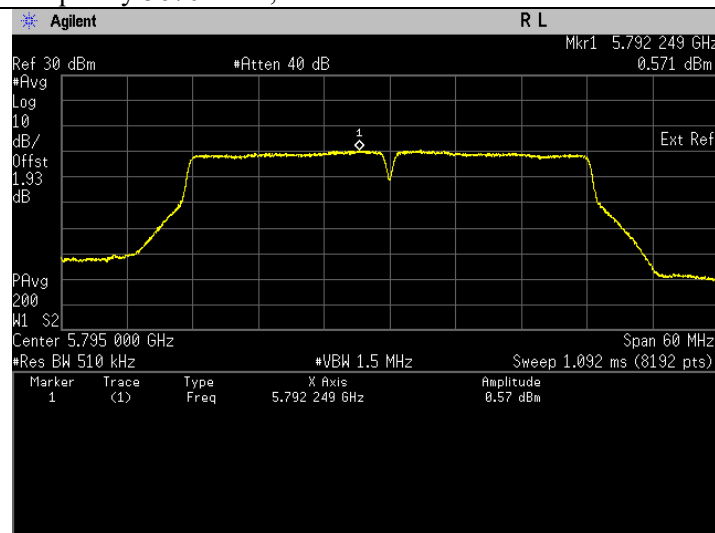
Frequency 5590 MHz, FCC & ISSED.



Frequency 5670 MHz, FCC & ISSED.



Frequency 5755 MHz, FCC & ISSED.



Frequency 5795 MHz, FCC & ISSED.

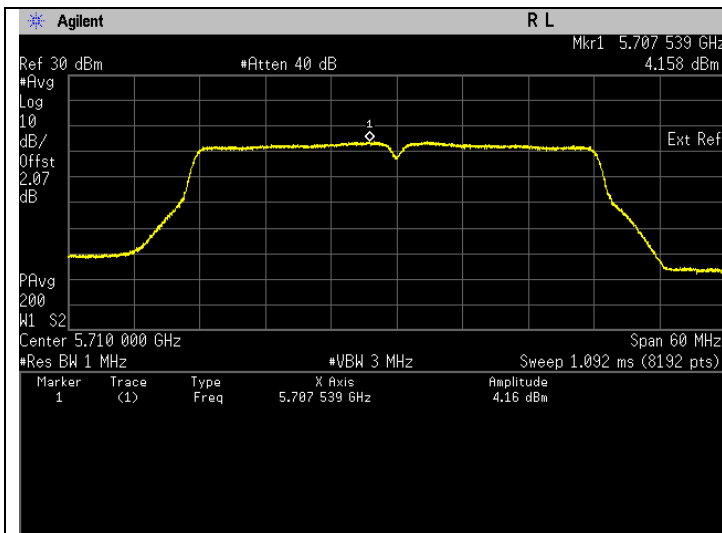
Straddle Frequency 802.11n (HT40) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.319	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.252	Pass

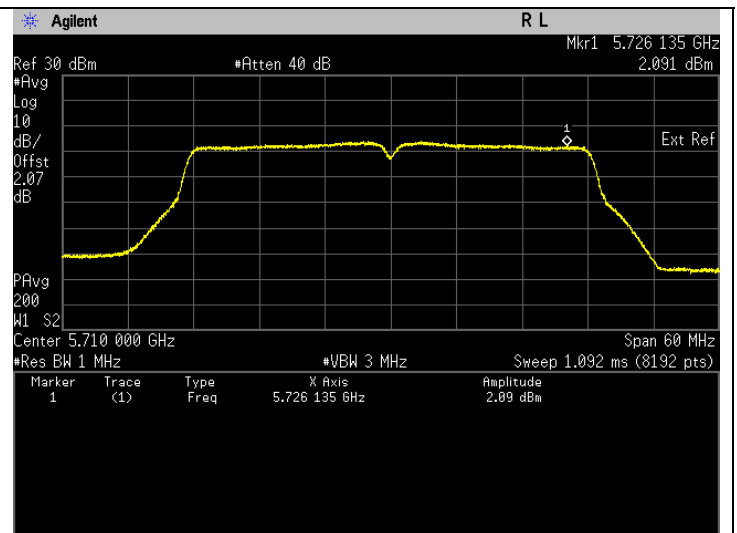
Straddle Frequency 802.11n (HT40) (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.319	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5710	Mod Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.252	Pass

Plots for 802.11n (HT40) Straddle Frequency (26dB EBW & 99% EBW)



Frequency 5710 MHz, FCC & ISSED,U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5710 MHz, FCC & ISSED, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

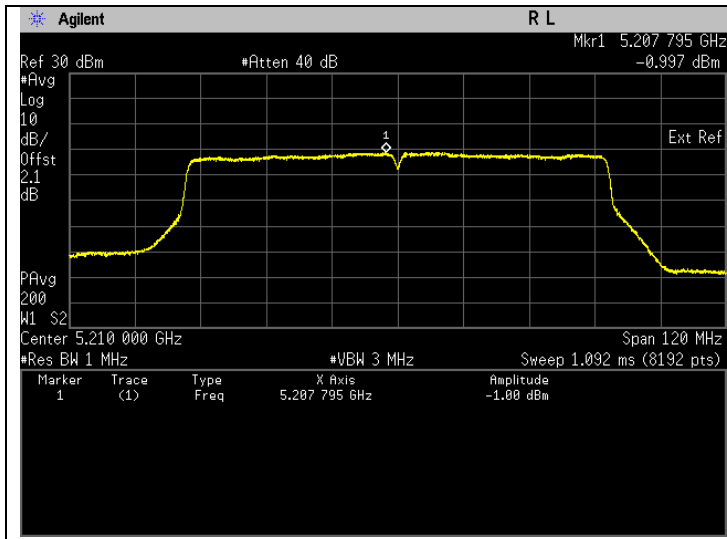
802.11ac (VHT80)(26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5210	Mod Type: BPSK, Data Rate: MCS0(29.3)	-0.678	Pass
5290	Mod Type: BPSK, Data Rate: MCS0(29.3)	-1.064	Pass
5530	Mod Type: BPSK, Data Rate: MCS0(29.3)	1.180	Pass
5610	Mod Type: BPSK, Data Rate: MCS0(29.3)	0.998	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5775	Mod Type: BPSK, Data Rate: MCS0(29.3)	-2.252	Pass

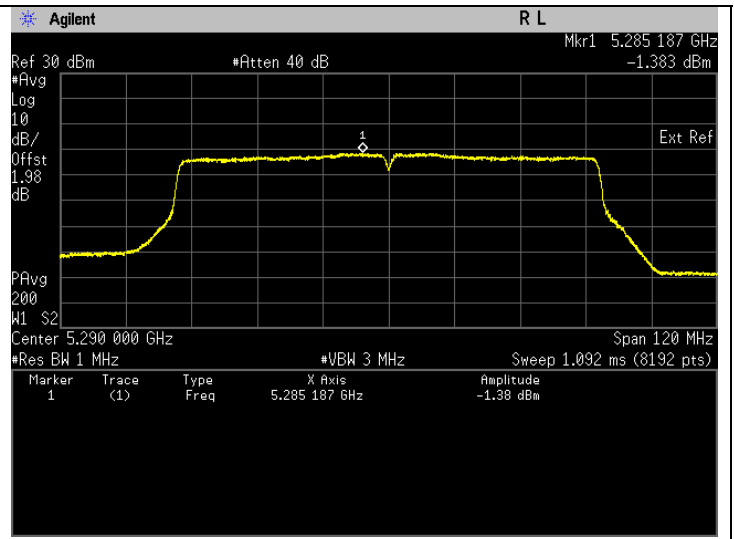
802.11ac (HT80)(99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5210	Mod Type: BPSK, Data Rate: MCS0(29.3)	-0.677	Pass	0.903	Pass
5290	Mod Type: BPSK, Data Rate: MCS0(29.3)	-1.063	Pass	0.517	Pass
5530	Mod Type: BPSK, Data Rate: MCS0(29.3)	1.181	Pass	2.761	Pass
5610	Mod Type: BPSK, Data Rate: MCS0(29.3)	0.999	Pass	2.579	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status	EIRP (dBm/MHz)	Status
5775	Mod Type: BPSK, Data Rate: MCS0(29.3)	-2.251	Pass	-0.671	Pass

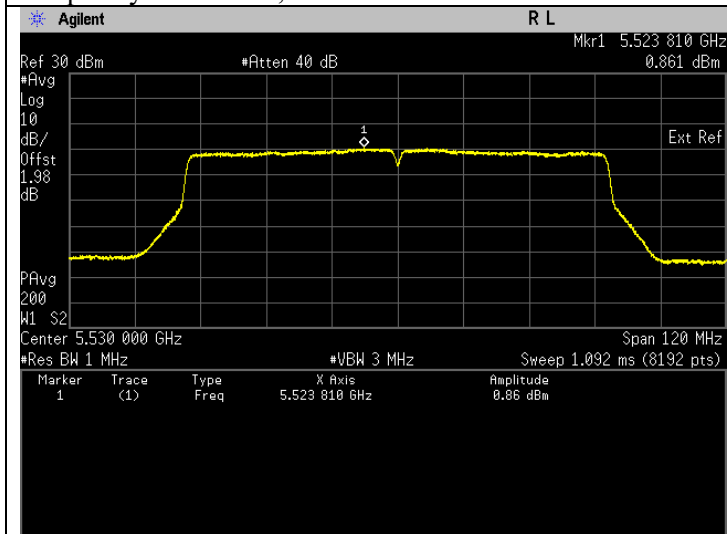
Plots for 802.11ac (HT80) (26dB EBW & 99% EBW)



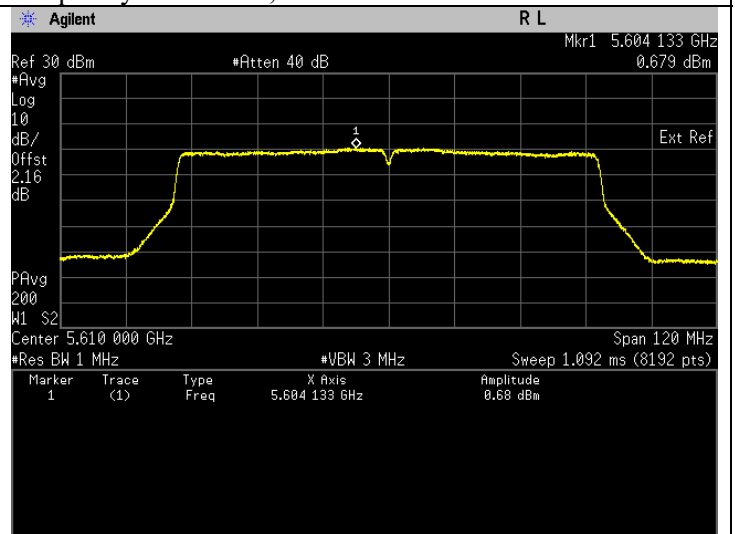
Frequency 5210 MHz, FCC & ISSED.



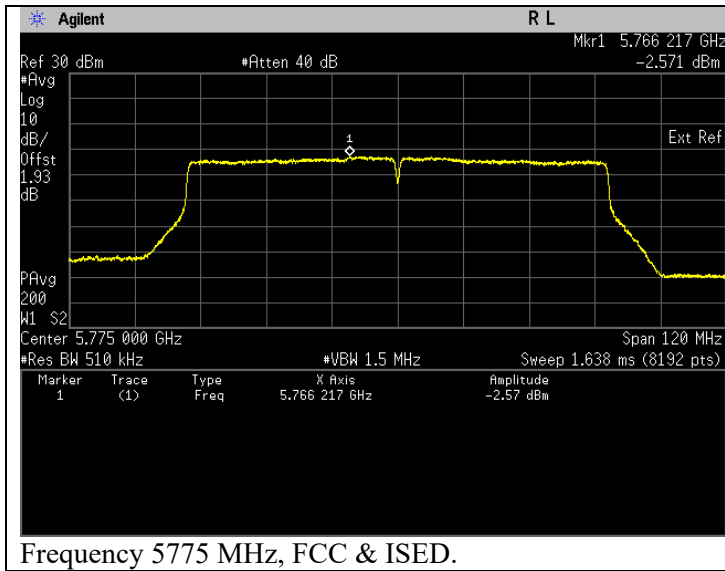
Frequency 5290 MHz, FCC & ISSED.



Frequency 5530 MHz, FCC & ISSED.



Frequency 5610 MHz, FCC & ISSED.



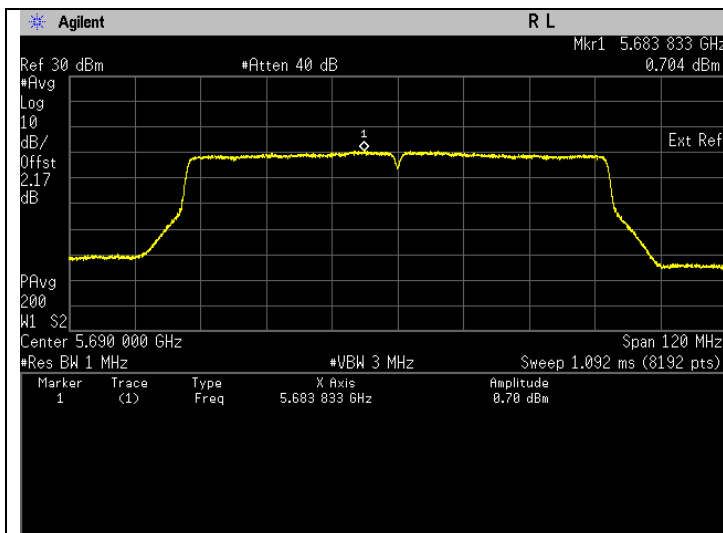
Straddle Frequency 802.11ac (HT80) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	1.024	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	-0.898	Pass

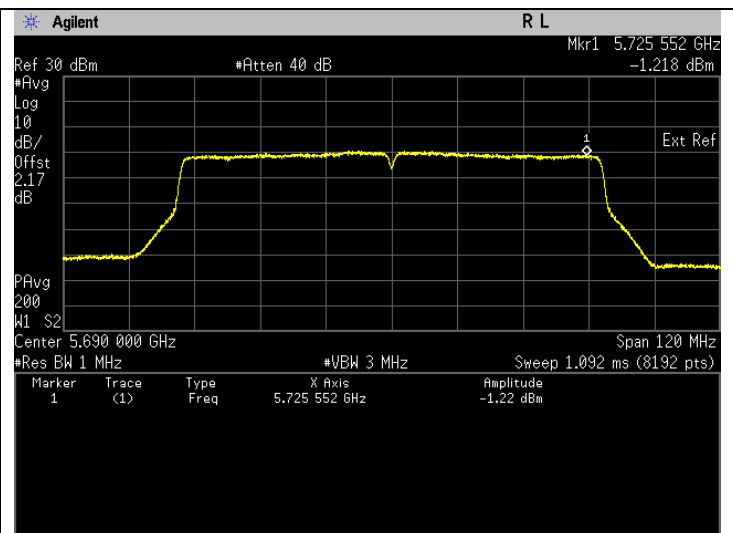
Straddle Frequency 802.11ac (HT80) (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	1.024	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0(29.3)	-0.898	Pass

Plots for 802.11ac (HT80) Straddle Frequency (26dB EBW & 99% EBW)



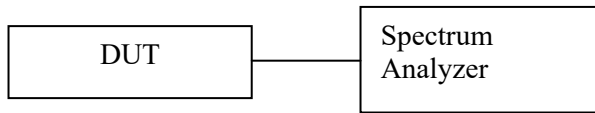
Frequency 5690 MHz, FCC & ISSED, U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5690 MHz, FCC & ISSED, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

7.4. 6dB Bandwidth

7.4.1. Test Setup



- a) Test setup as per illustrated above.
- b) Set DUT to transmit at desire transmit frequency.
- c) 6dB bandwidth is applicable for the band 5.725-5.85GHz only.
- d) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
- e) Setting of Spectrum analyzer :
 - RBW = 100 kHz
 - VBW $\geq 3 \cdot$ RBW
 - Detector = Peak
 - Trace = Max Hold
 - Sweep = Auto couple
- f) Allow 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.
- h) The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause C.2).

7.4.2. Test Limits

FCC 15.407(e)

Within the 5.725-5.85GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

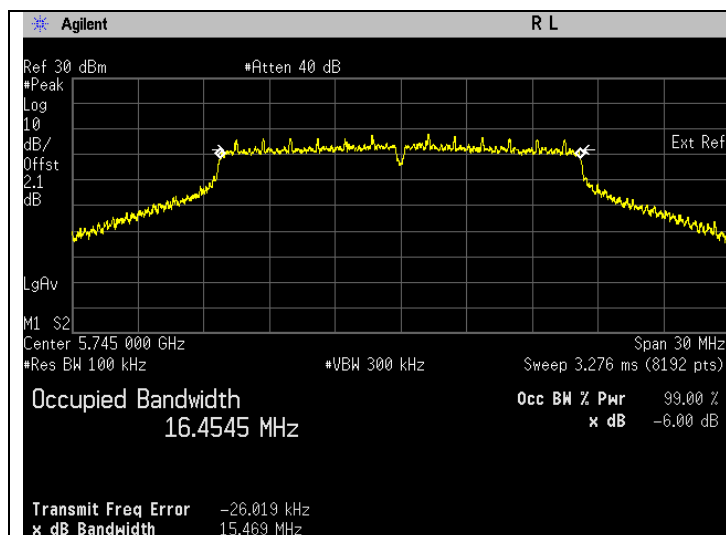
RSS 247 6.2.4

For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

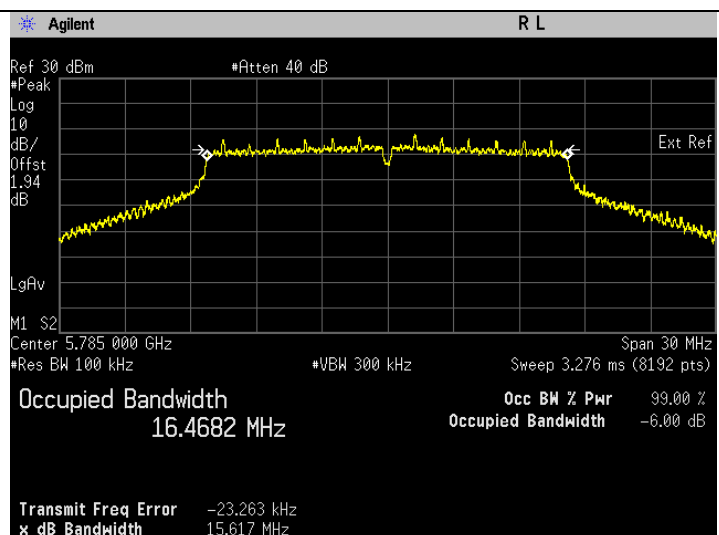
7.4.3. Test Data

802.11a

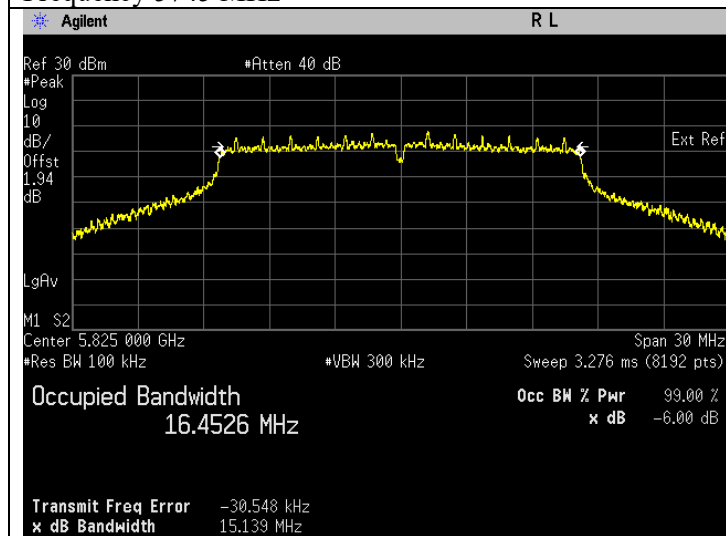
Freq. (MHz)	Test Configuration	Results	
		Bandwidth(MHz)	Status
5745	Mod Type: BPSK, Data Rate: 6	15.469	Pass
5785	Mod Type: BPSK, Data Rate: 6	15.617	Pass
5825	Mod Type: BPSK, Data Rate: 6	15.139	Pass



Frequency 5745 MHz



Frequency 5785 MHz



Frequency 5825 MHz

Straddle Frequency for 802.11a

Freq. (MHz)	Test Conditions	Results	
		Power/Freq. (dBm/MHz)	Status
		U-NII- 3	
5720	Mod Type: BPSK, Data Rate: 6	3.144	Pass

Plots for 802.11a Straddle Frequency

