



REPORT No. : SZ17120100W04

TEST REPORT

APPLICANT : Shenzhen Jingwah Information Technology Co., Ltd.

PRODUCT NAME : Laptop

MODEL NAME : N141A, N14500

BRAND NAME : PACKARD BELL

FCC ID : RBD-N141A

STANDARD(S) : 47 CFR Part 15 Subpart E

TEST DATE : 2017-12-28 to 2018-01-06

ISSUE DATE : 2018-01-09

Tested by: Li Jingzong
Li Jingzong (Test Engineer)

Approved by: Andy Yeh
Andy Yeh (Technical Director)

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MORLAB

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REPORT No. : SZ17120100W04

Change History		
Issue	Date	Reason for change
1.0	2018-01-09	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Shenzhen Jingwah Information Technology Co., Ltd
Applicant Address:	4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China
Manufacturer:	Shenzhen Jingwah Information Technology Co., Ltd.
Manufacturer Address:	4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China

1.2. Equipment Under Test (EUT) Description

Product Name:	Laptop
Serial No:	(N/A, marked #1 by test site)
Hardware Version:	EM_A8316C_178B_V1.0
Software Version:	windows 10 home
Modulation Type:	OFDM
Modulation Mode:	802.11a, 802.11n(HT20), 802.11n(HT40)
Operating Frequency Range:	5.150 GHz- 5.250 GHz; 5.250 GHz -5.350 GHz ; 5.470 GHz -5.725 GHz ; 5.725GHz- 5.850GHz
Channel Number:	Refer to 1.3
Antenna Type:	PIFA Antenna
Antenna Gain:	5.0 dBi

Note 1: The U-NII band is applicable to this report, another bands of operation (2.4GHz) is documented in a separate report.

Note 2: According to the certificate holder, they declared that the models: N141A, N14500 only the models name are different, the others are the same. The main measuring model is N141A, only the results for N141A were recorded in this report.

Note 3: WIFI hotspot does not support U-NII band.

Note 4: During test, the duty cycle of the EUT was setting to 100%.

Note 5: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.3.The channel number and frequency of EUT

Frequency Range: 5150-5250MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	36	5180	40	5200
	44	5220	48	5240
40MHz	38	5190	46	5230
Frequency Range: 5250-5350MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	52	5260	56	5280
	60	5300	64	5320
40MHz	54	5270	62	5310
Frequency Range: 5470-5725MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	100	5500	105	5520
	108	5540	112	5560
	116	5580	120	5600
	124	5620	128	5640
	132	5660	136	5680
	140	5700		
40MHz	102	5510	110	5550
	118	5590	126	5630
	134	5670		
Frequency Range: 5725-5805MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	149	5745	153	5765
	157	5785	161	5805
	165	5825		
40MHz	151	5775	159	5795

Note 1: The black bold channels were selected for test.



1.4. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart E (U-NII band) for the EUT FCC ID Certification:

No	Identity	Document Title
1	47 CFR Part 15 (5-1-14 Edition)	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Test Date	Test Engineer	Result
1	15.203	Antenna Requirement	N/A	N/A	PASS
2	15.407(a) (e)	Emission Bandwidth	Dec 28, 2017	Li Jingzong	PASS
3	15.407(a)	Maximum conducted output Power	Dec 28, 2017	Li Jingzong	PASS
4	15.407(a)	Peak Power spectral density	Dec 28, 2017	Li Jingzong	PASS
5	15.407(b)	Restricted Frequency Bands	Jan 05, 2018	Wang Dalong	PASS
6	15.407(g)	Frequency Stability	Dec 28, 2017	Li Jingzong	PASS
7	15.207	Conducted Emission	Jan 06, 2018	Wang Dalong	PASS
8	15.407(b)	Radiated Emission	Jan 06, 2018	Wang Dalong	PASS
9	15.407(c)	Automatically discontinue transmission requirement	N/A	N/A	PASS

Note1: The DFS test report was documented in a separate report (Report No.: SZ17120100W05).

Note2: The tests of Conducted Emission and Radiated Emission were performed according to the method of measurements prescribed in ANSI C63.10 2013.

Note3: These RF tests were performed according to the method of measurements prescribed in KDB789033 D02 General UNII Test Procedures New Rules v01r03

1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86-106



2. 47 CFR Part 15C Requirements

2.1. Antenna requirement

2.1.1. Applicable Standard

According to FCC 15.203, 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 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.

2.1.2. 2.1.2 Result: Compliant

The EUT has a permanently and irreplaceable attached antenna. Please refer to the EUT internal photos.

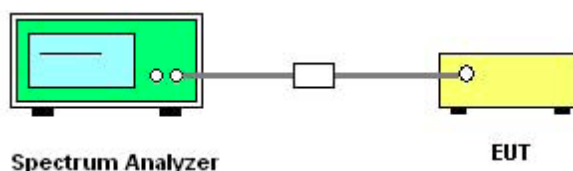
2.2. Emission Bandwidth

2.2.1. Requirement

For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement. Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

2.2.2. Test Description

A. Test Set:



The EUT is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading.

B. Test Procedure

1. KDB 789033 Section C) 1) Emission Bandwidth was used in order to prove compliance
 - 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 analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
2. KDB 789033 Section C) 2) minimum emission bandwidth for the band 5.725-5.85GHz was used in order to prove compliance.
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
 - a) Set RBW = 100 kHz.
 - b) Set the video bandwidth (VBW) $\geq 3 \times$ 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.

2.2.3. Test Result

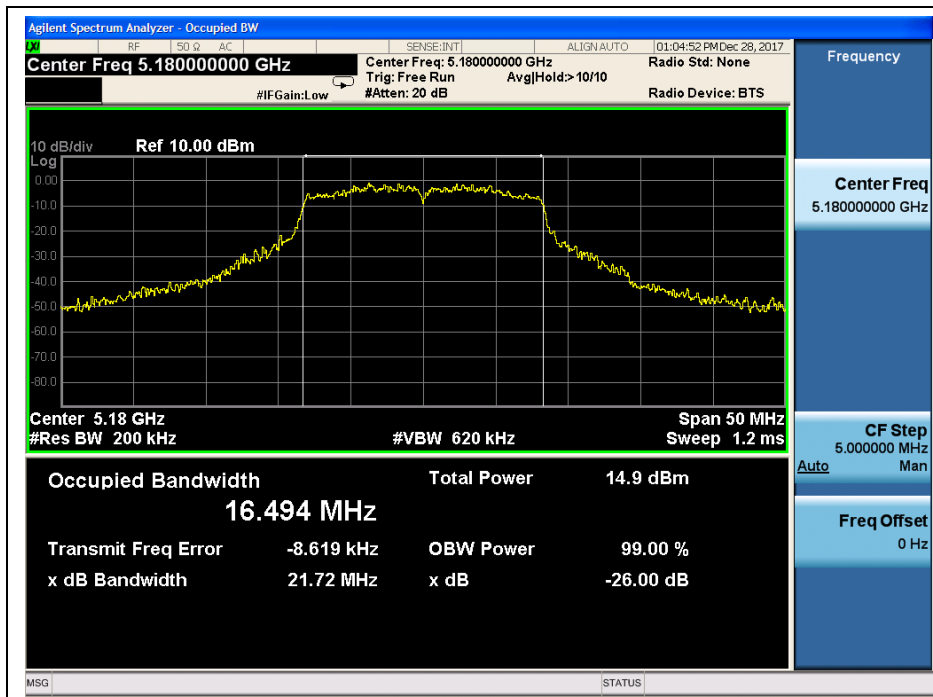
802.11a Test mode

A. Test Verdict:

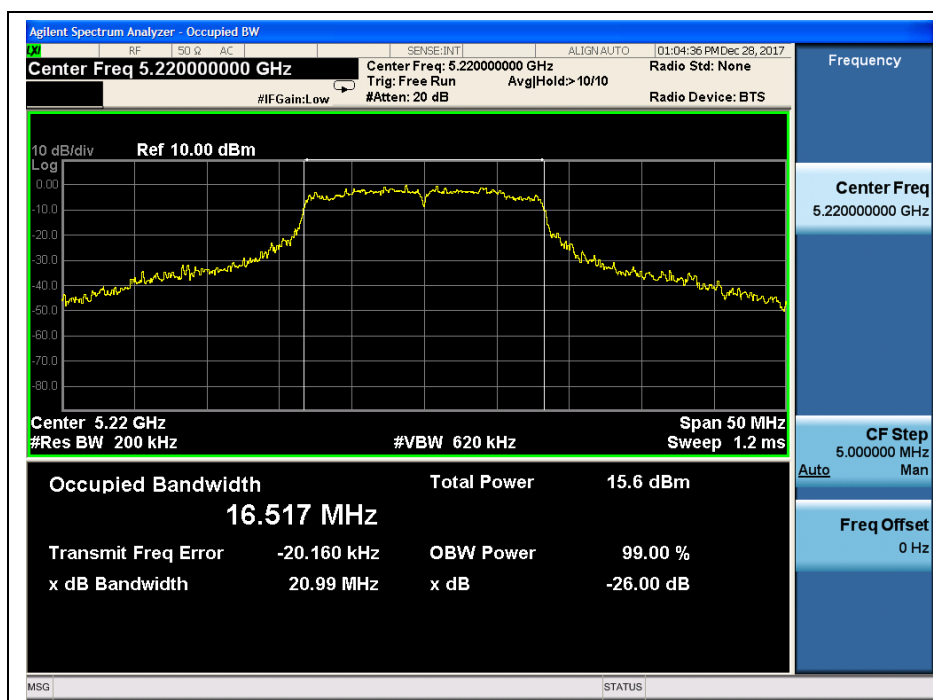
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
36	5180	21.72
44	5220	20.99
48	5240	20.28
52	5260	21.95
60	5300	22.07
64	5320	20.98
100	5500	22.23
120	5600	22.68
140	5700	22.69
Channel	Frequency (MHz)	6dB Bandwidth (MHz)
149	5745	15.07
157	5785	12.59
165	5825	13.87



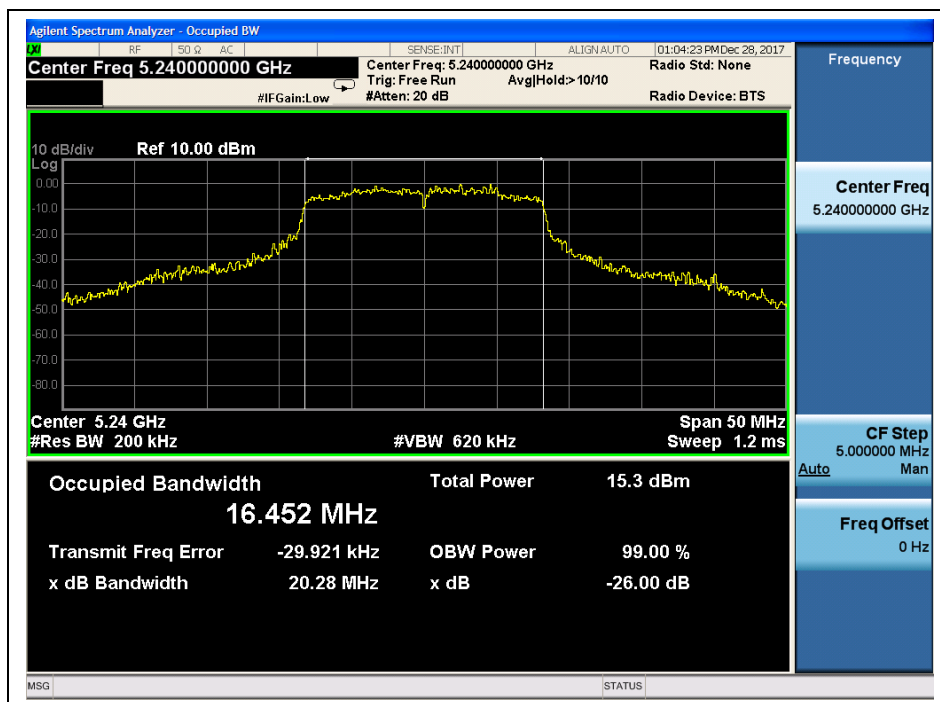
B. Test Plots



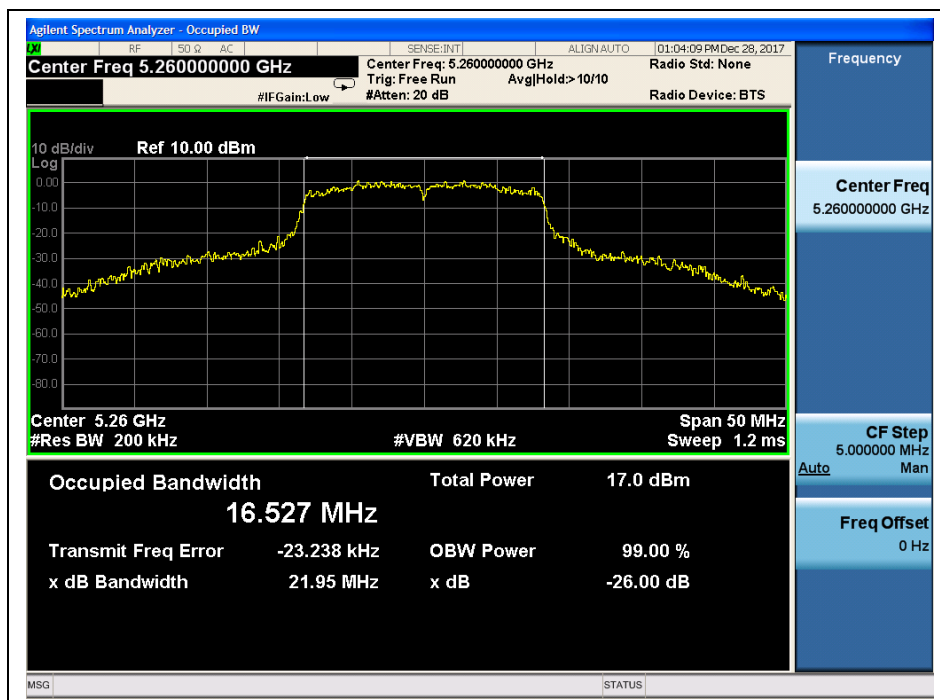
(Channel 36, 5180MHz, 802.11a,)



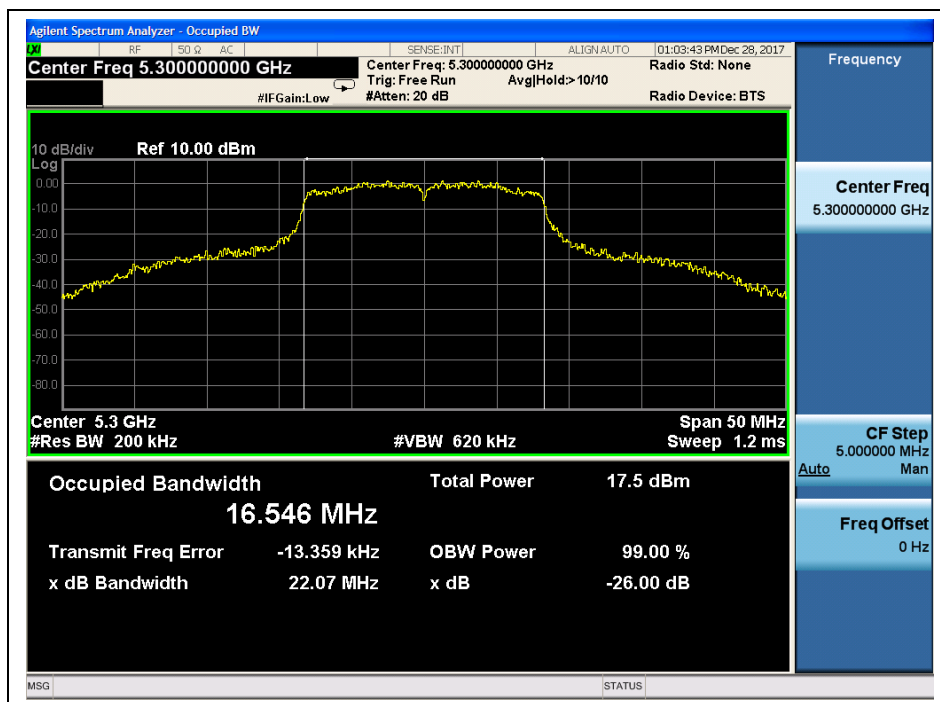
(Channel 44, 5220 MHz, 802.11a,)



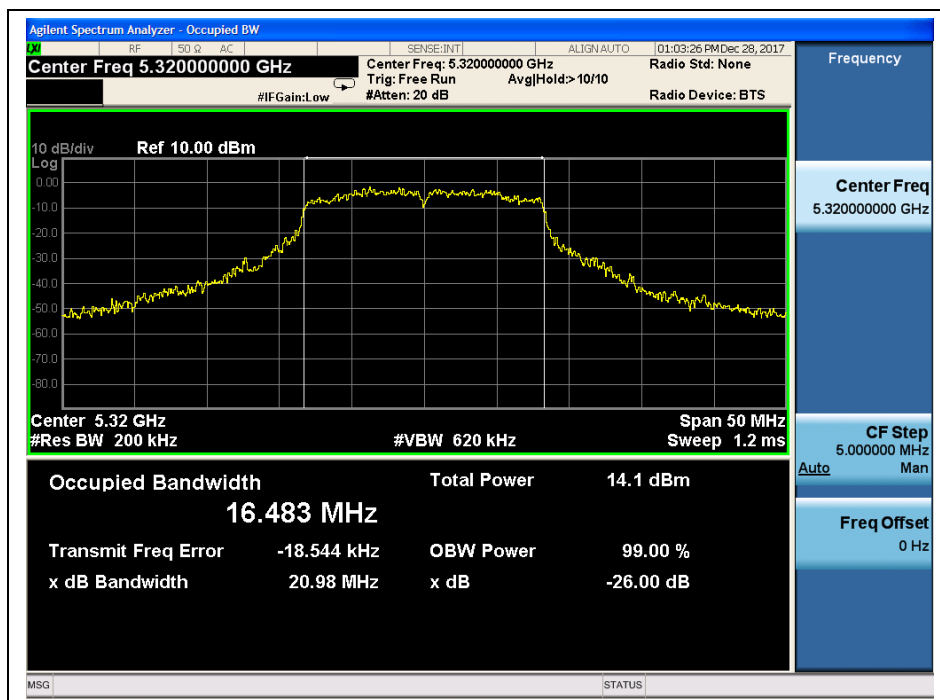
(Channel 48, 5240MHz, 802.11a,)



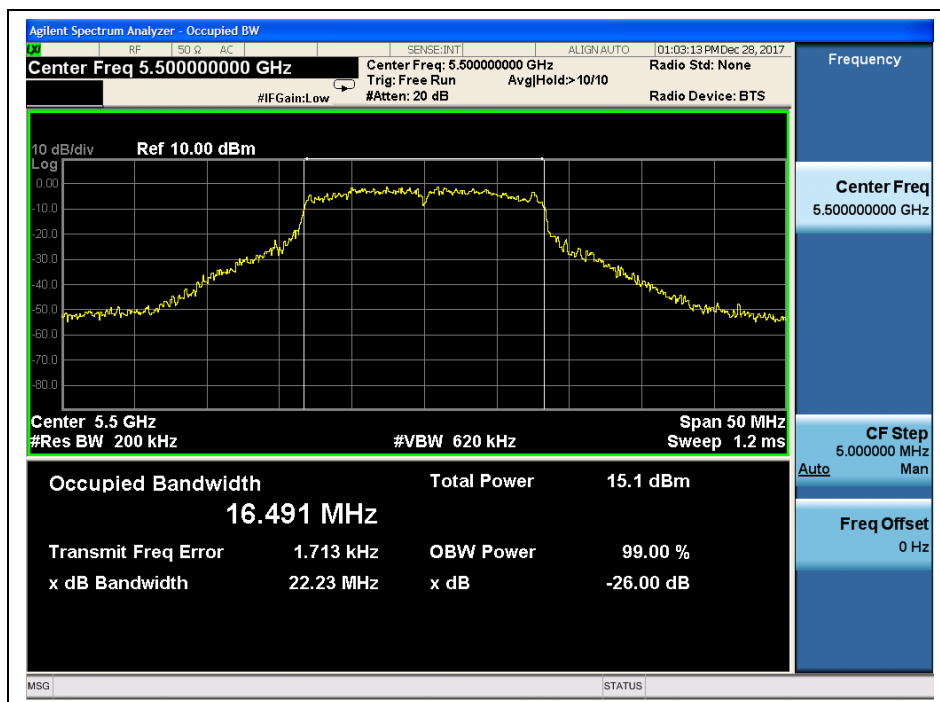
(Channel 52, 5260MHz, 802.11a,)



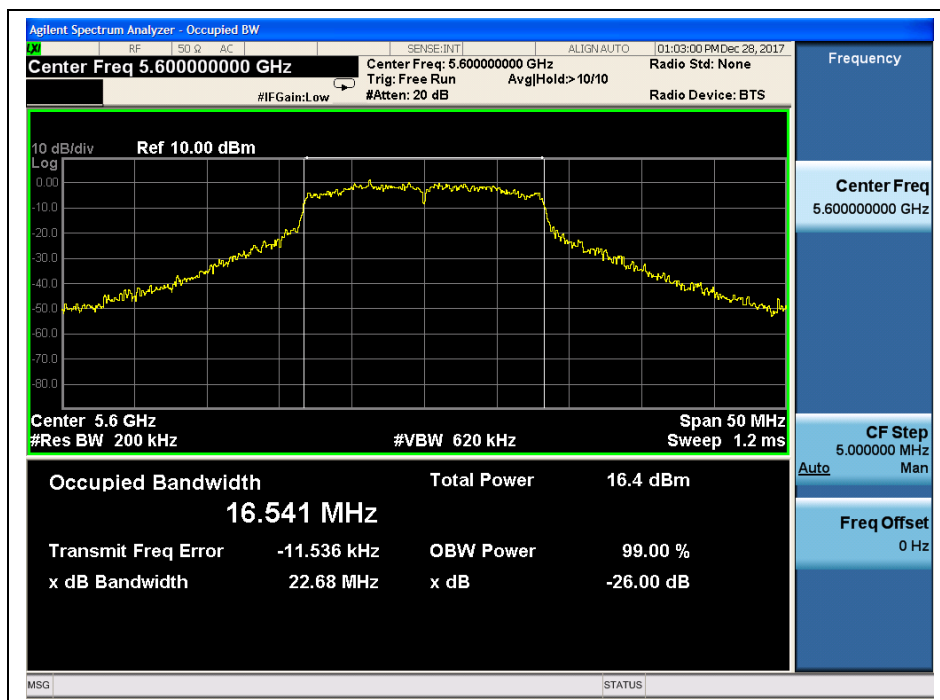
(Channel 60, 5300 MHz, 802.11a,)



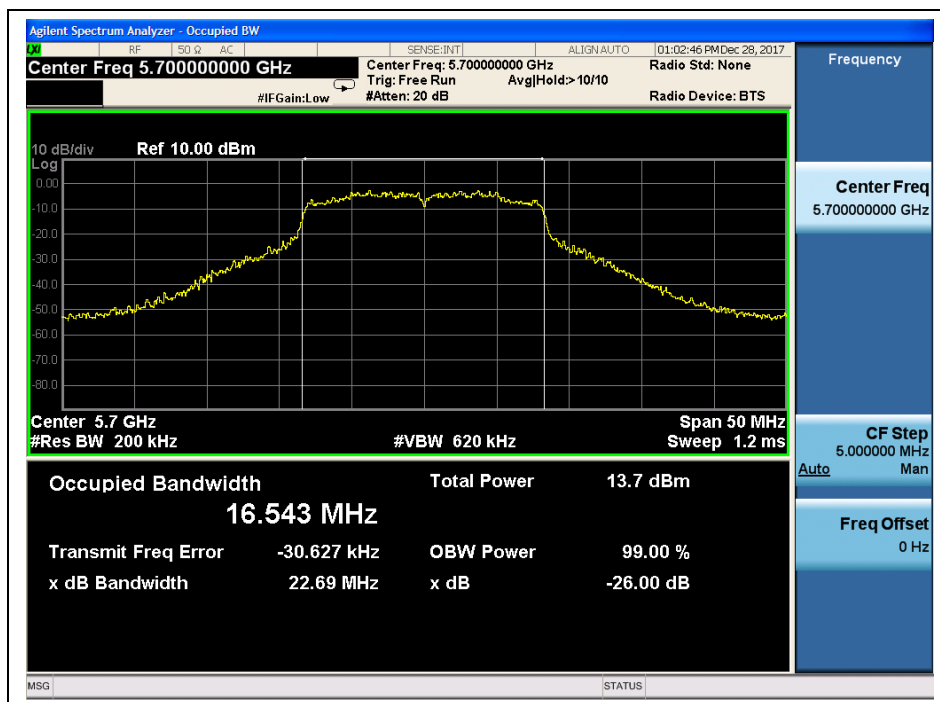
(Channel 64, 5320MHz, 802.11a,)



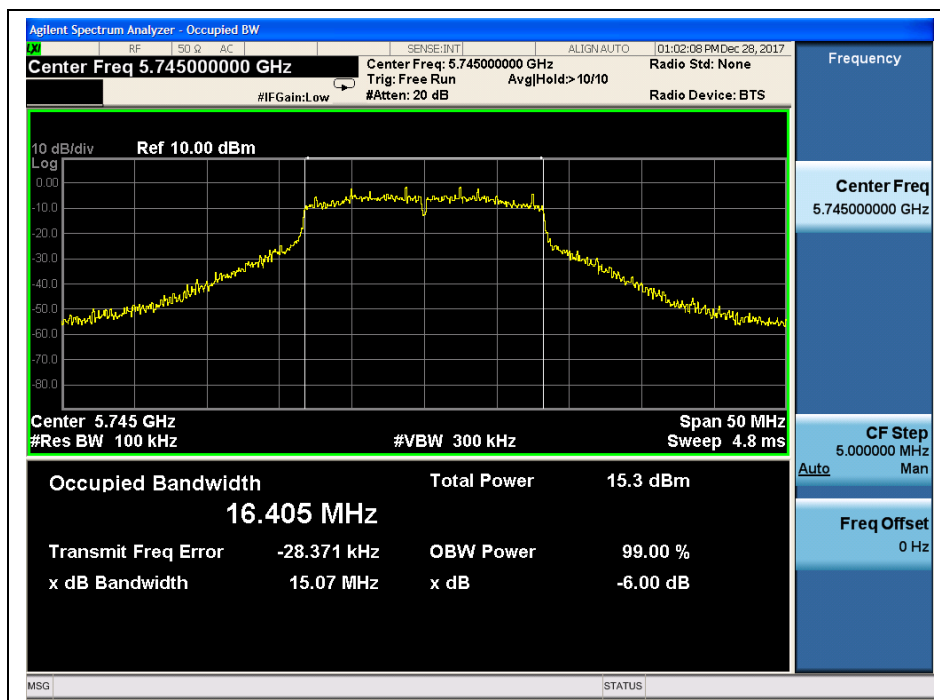
(Channel 100, 5500MHz, 802.11a,)



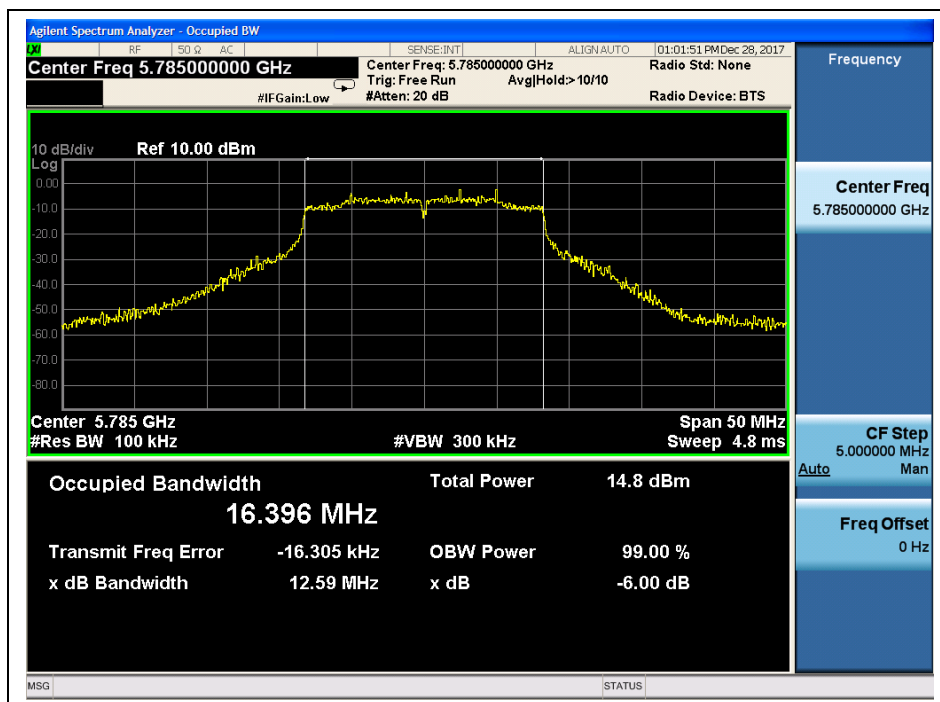
(Channel 120, 5600 MHz, 802.11a,)



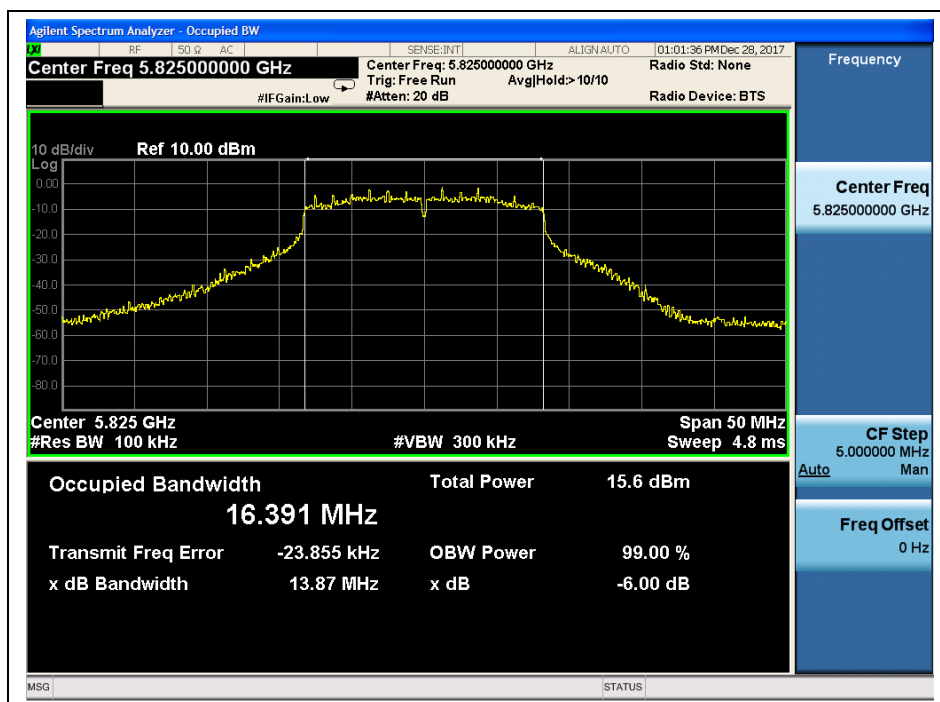
(Channel 140, 5700MHz, 802.11a,)



(Channel 149, 5745MHz, 802.11a)



(Channel 157, 5785MHz, 802.11a)



(Channel 165, 5825MHz, 802.11a)

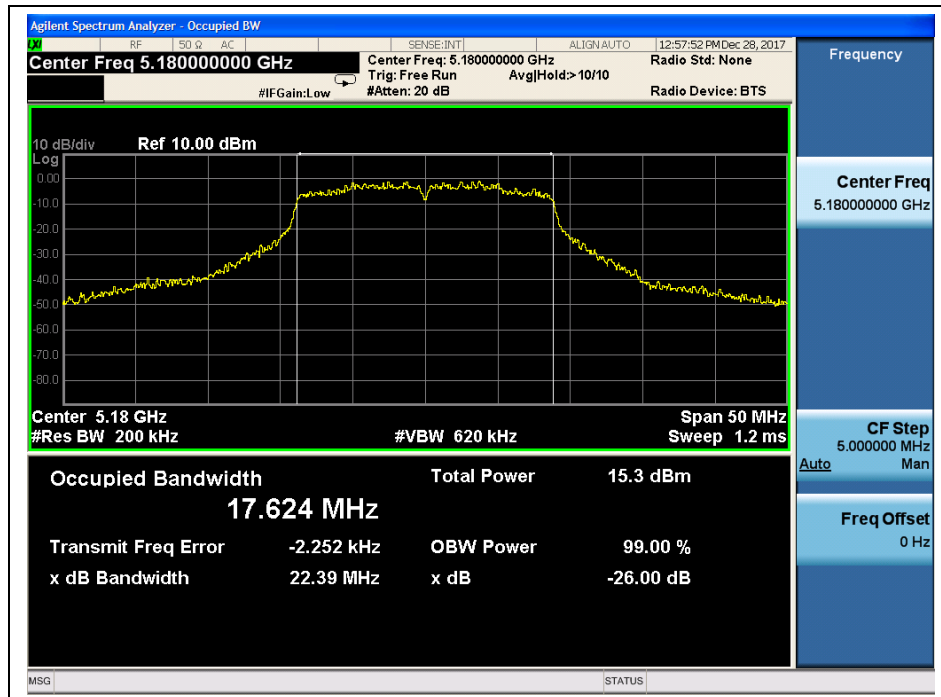


802.11n (HT20) Test mode

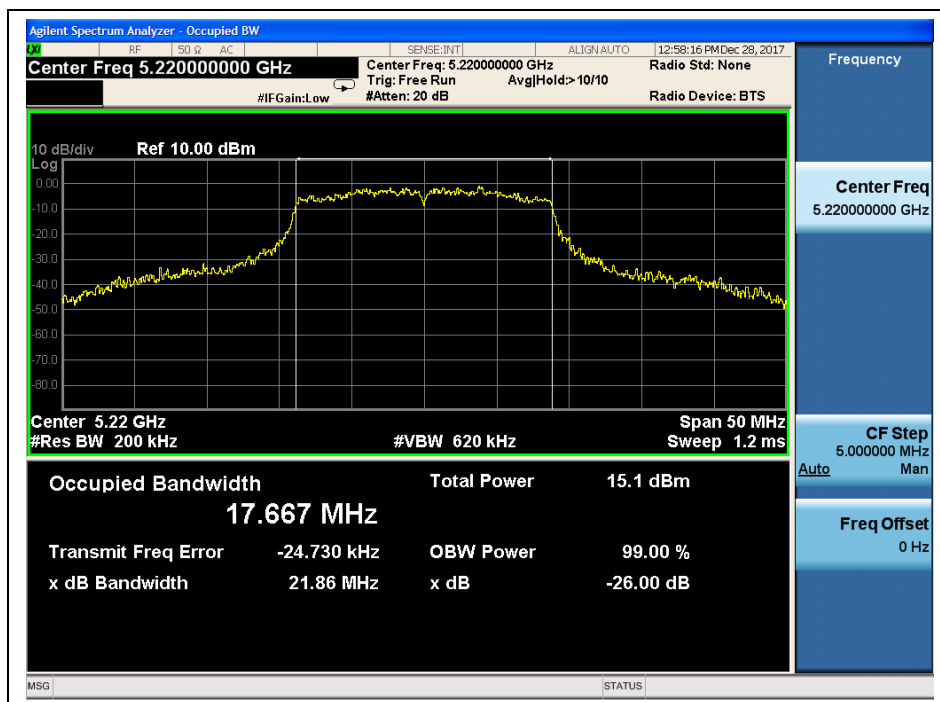
A. Test Verdict:

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
36	5180	22.39
44	5220	21.86
48	5240	21.34
52	5260	25.73
60	5300	21.62
64	5320	21.76
100	5500	21.61
120	5600	23.68
140	5700	23.03
Channel	Frequency (MHz)	6dB Bandwidth (MHz)
149	5745	15.13
157	5785	15.13
165	5825	12.90

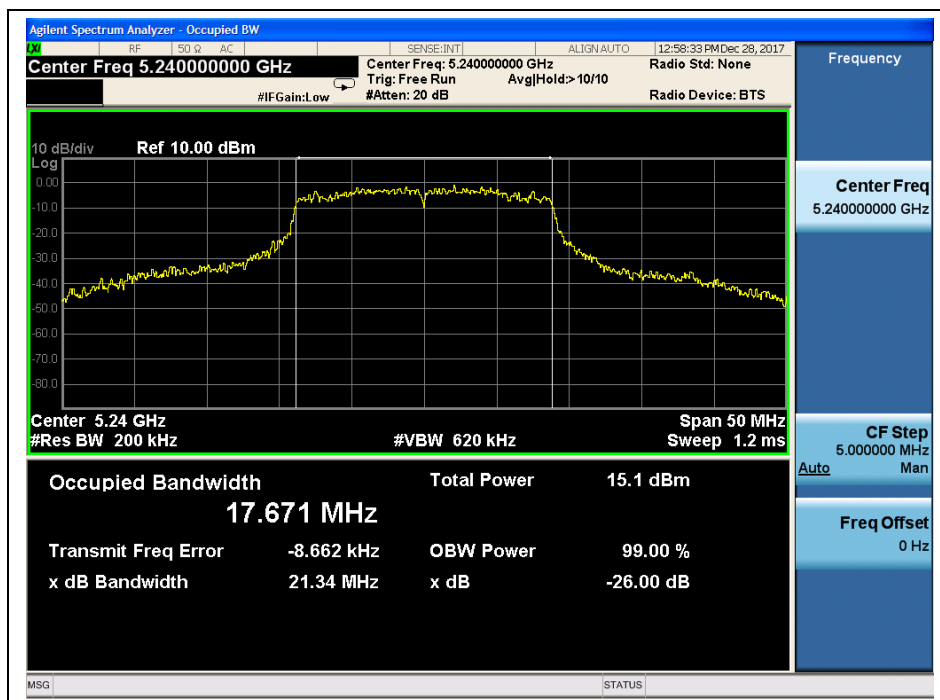
B. Test Plots



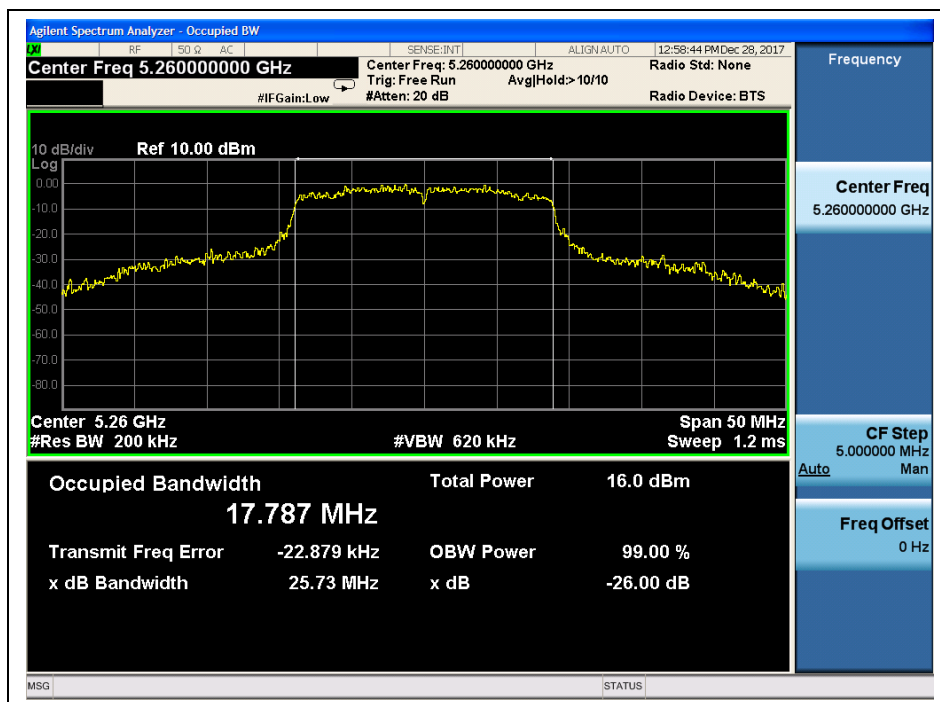
(Channel 36, 5180MHz, 802.11 n (HT20))



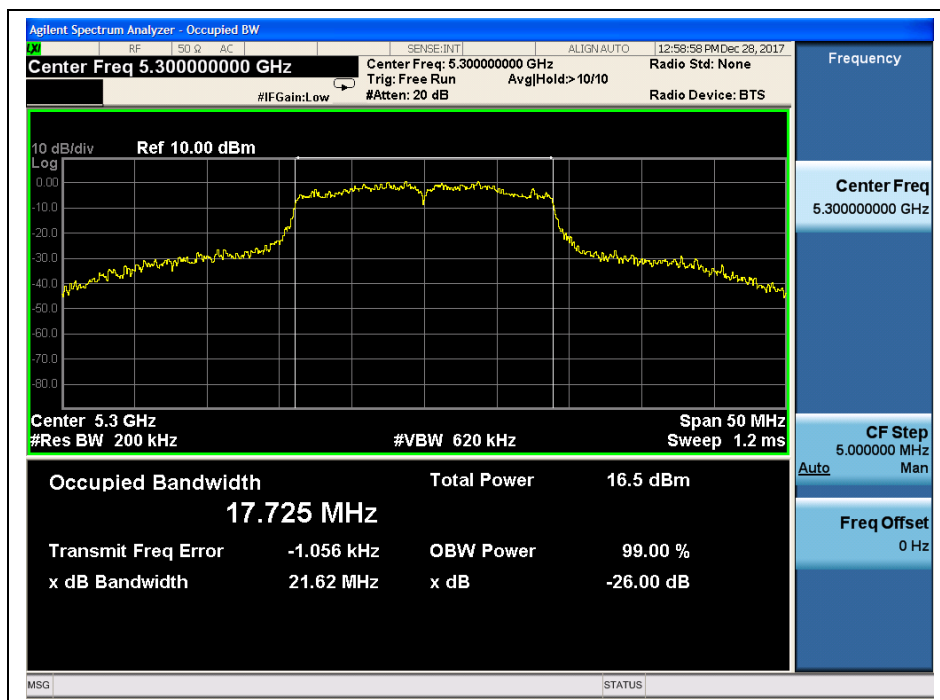
(Channel 44, 5220 MHz, 802.11 n (HT20))



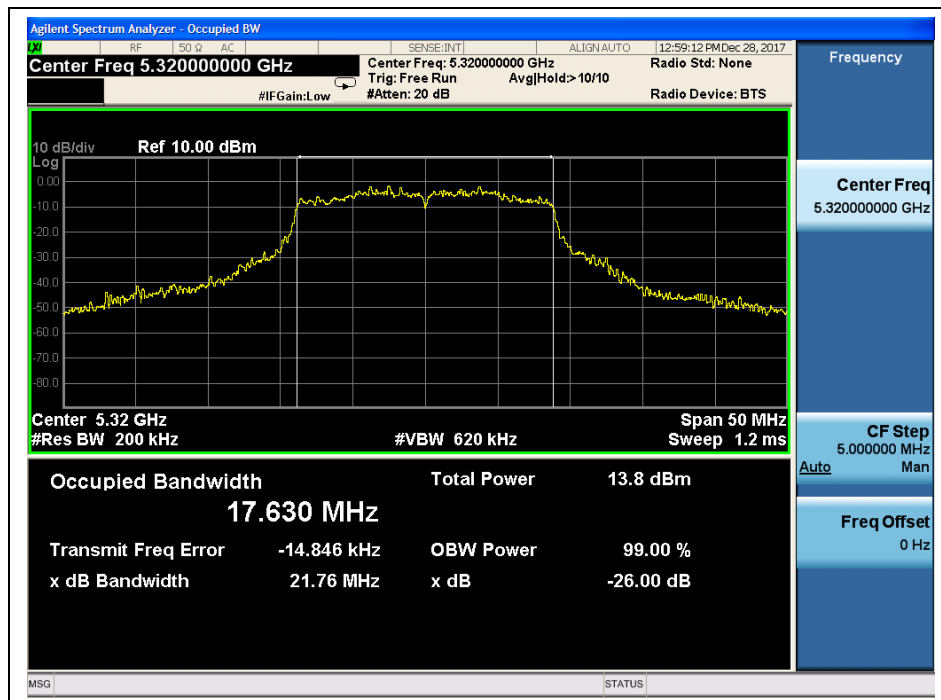
(Channel 48, 5240MHz, 802.11 n (HT20))



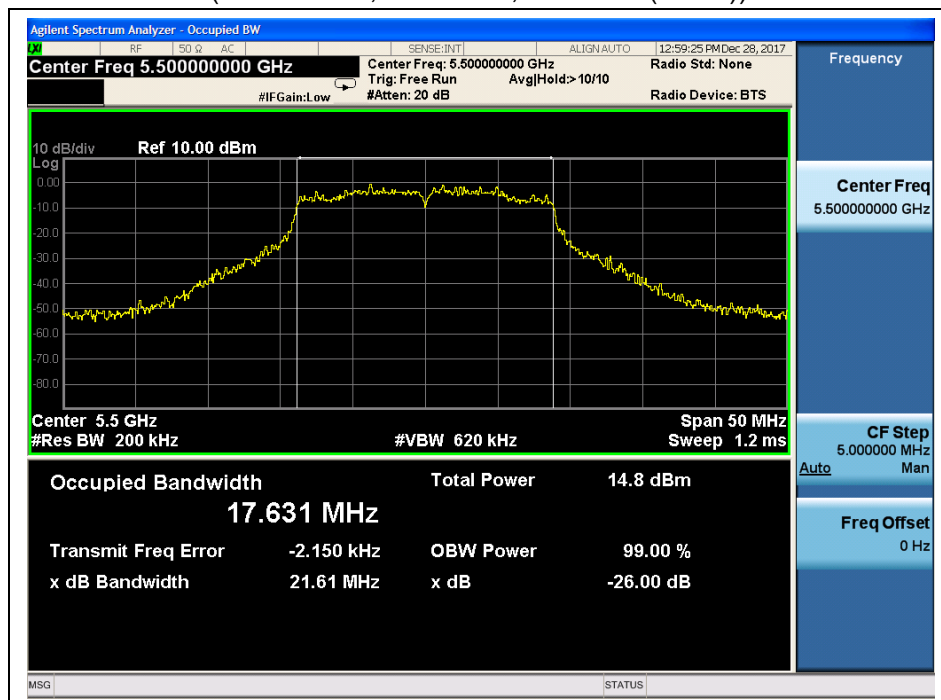
(Channel 52, 5260MHz, 802.11 n (HT20))



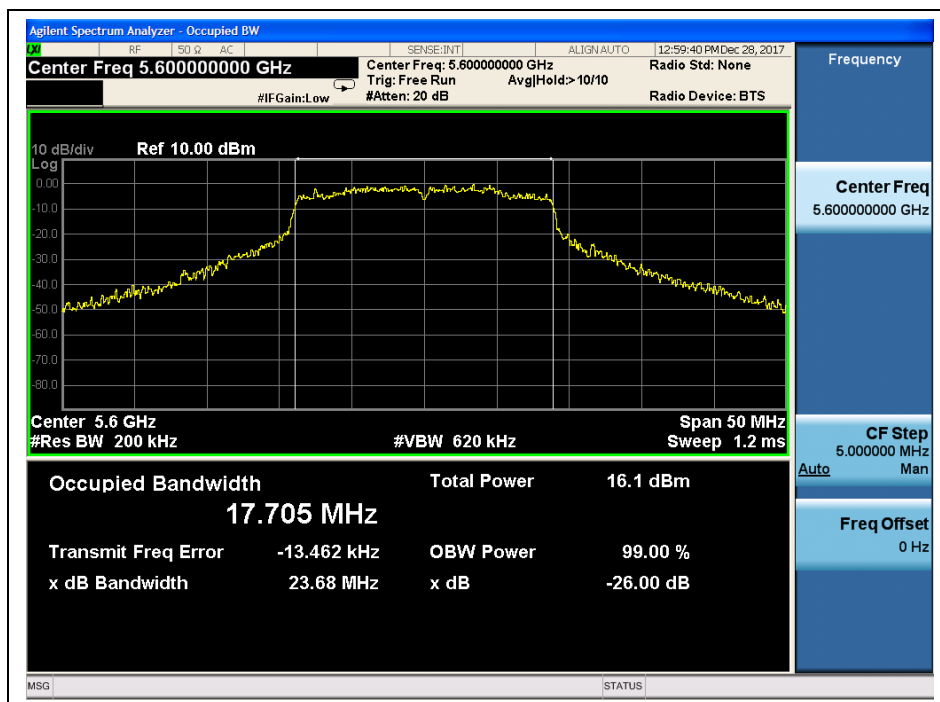
(Channel 60, 5300 MHz, 802.11 n (HT20))



(Channel 64, 5320MHz, 802.11 n (HT20))



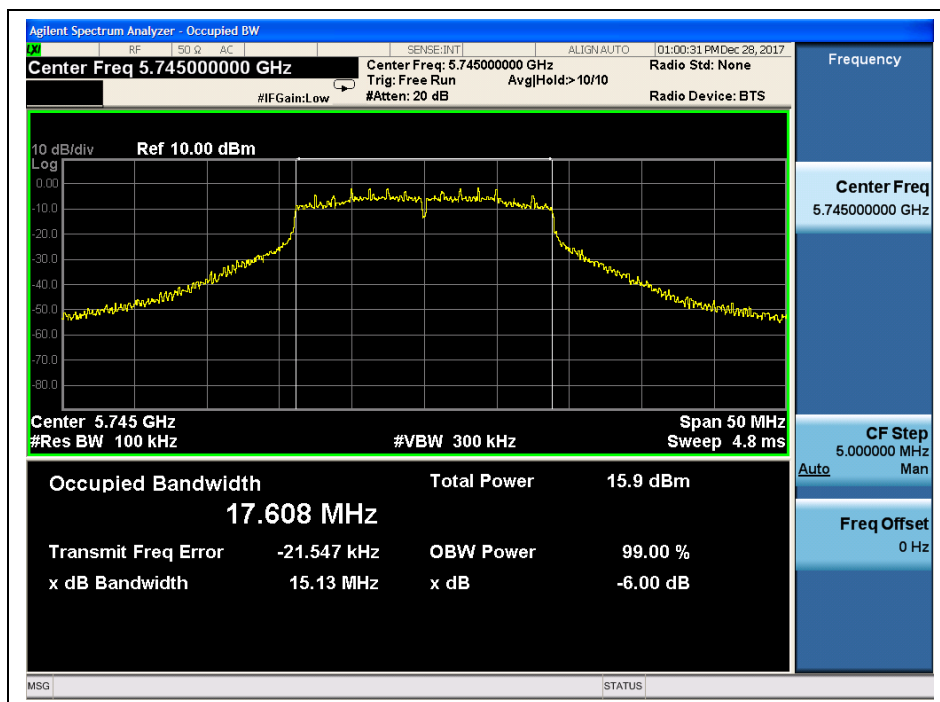
(Channel 100, 5500MHz, 802.11 n (HT20))



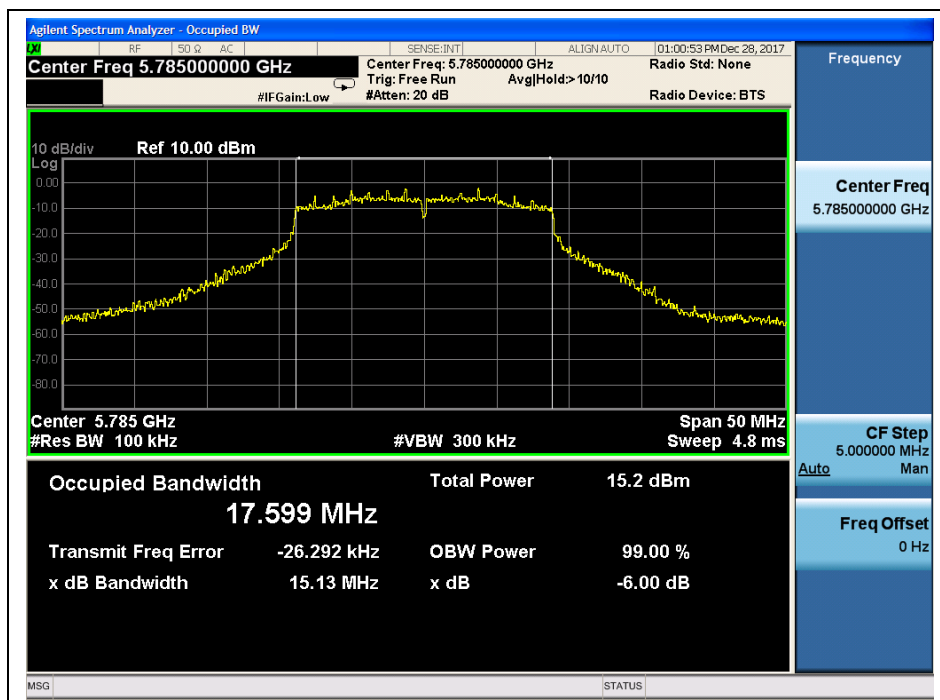
(Channel 120, 5600 MHz, 802.11 n (HT20))



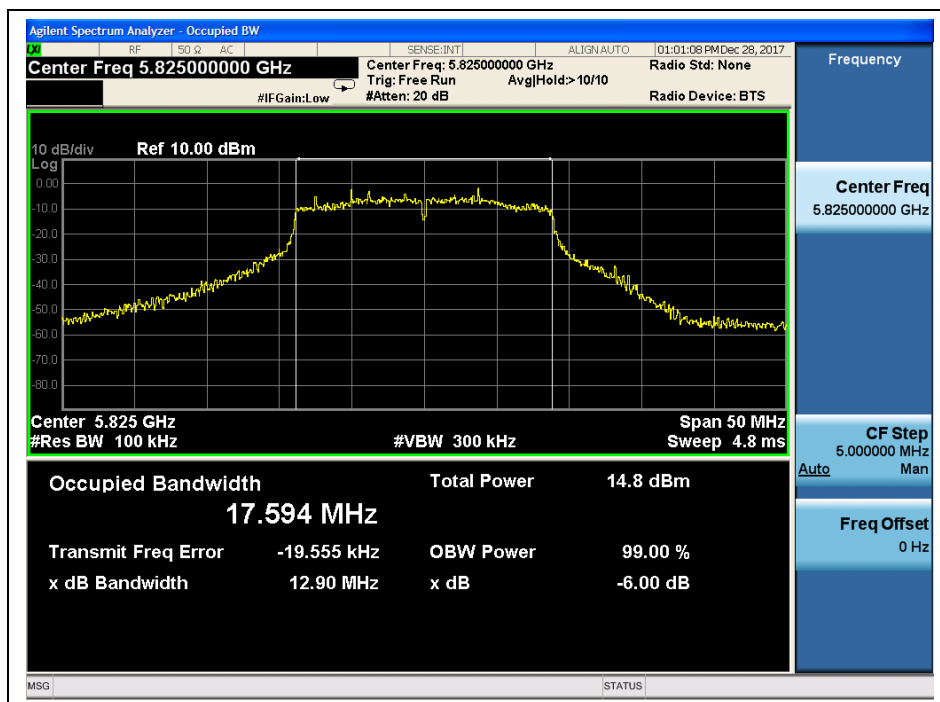
(Channel 140, 5700MHz, 802.11 n (HT20))



(Channel 149, 5745MHz, 802.11 n (HT20))



(Channel 157, 5785MHz, 802.11 n (HT20))



(Channel 165, 5825MHz, 802.11 n (HT20))

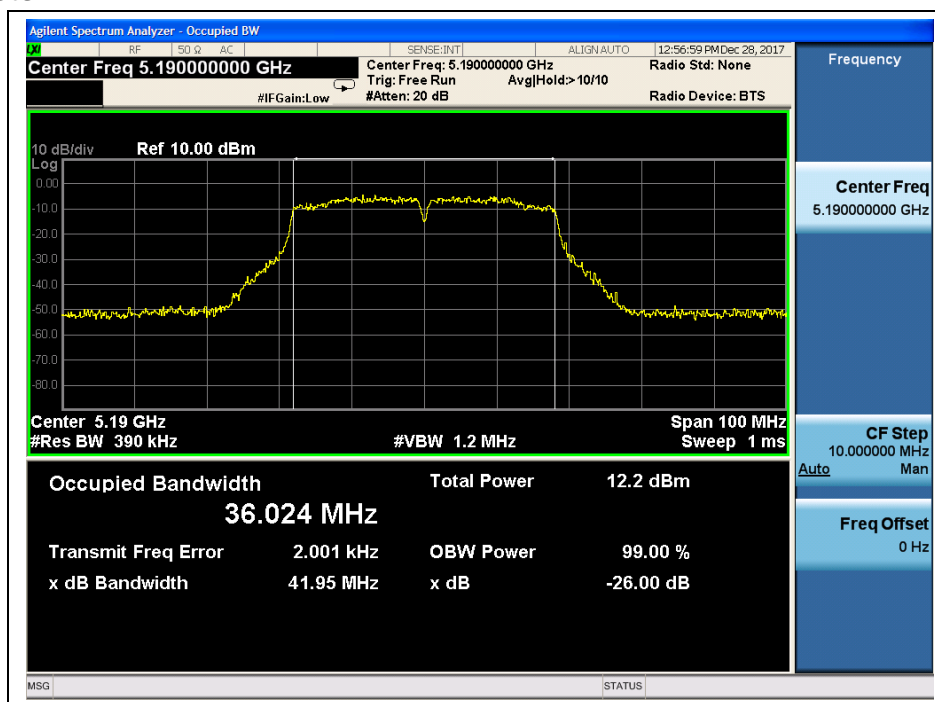


802.11n (HT40) Test mode

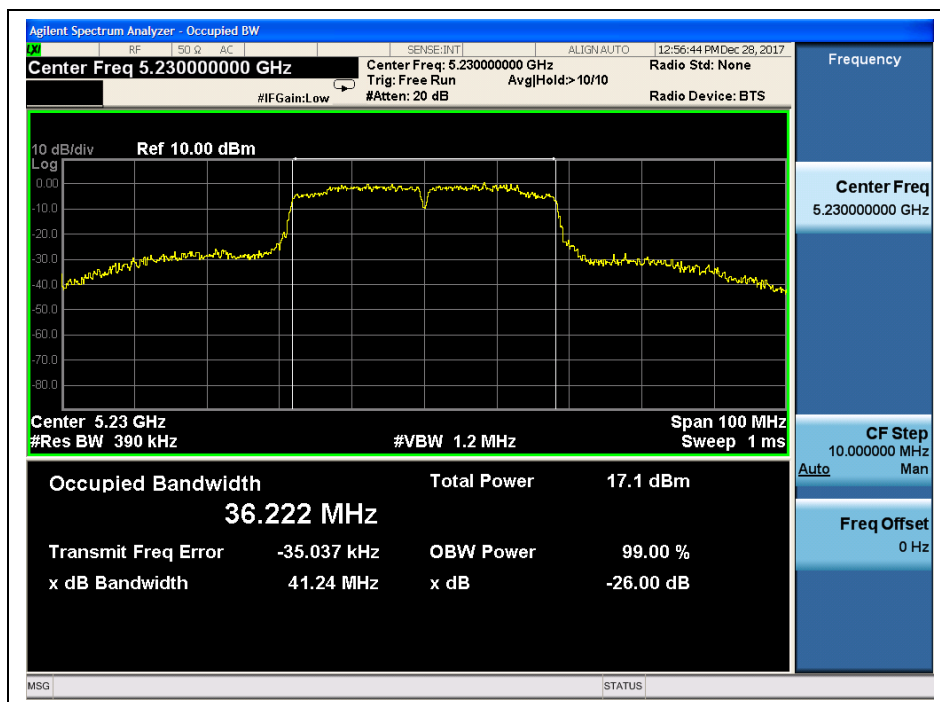
A. Test Verdict:

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
38	5190	41.95
46	5230	41.24
54	5270	53.62
62	5310	41.69
102	5510	41.86
126	5630	43.33
142	5670	43.79
Channel	Frequency (MHz)	6dB Bandwidth (MHz)
151	5755	35.22
159	5795	35.23

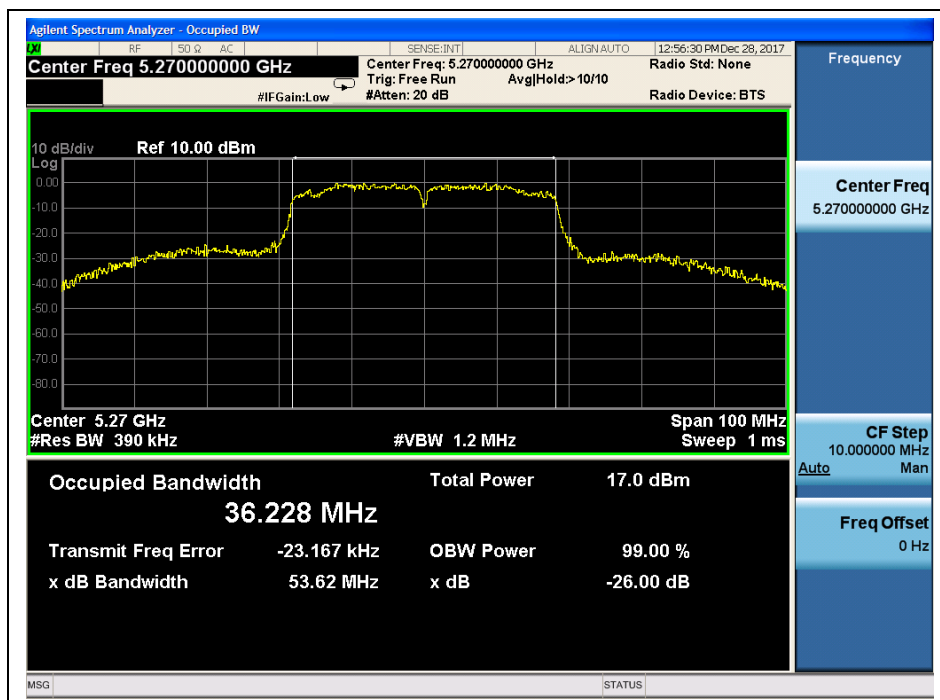
B. Test Plots



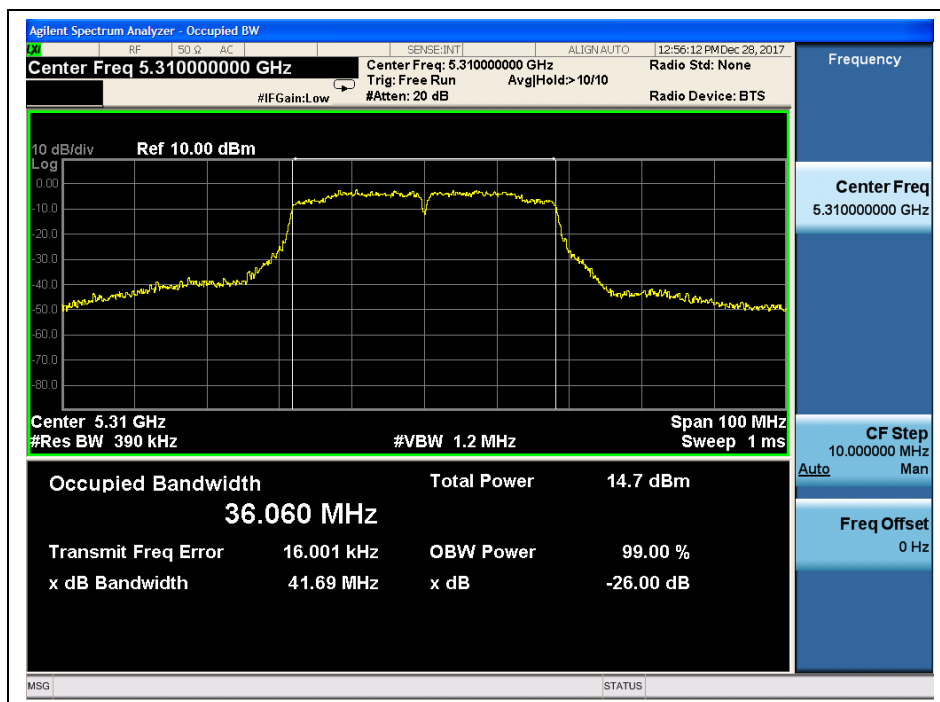
(Channel 38, 5190MHz, 802.11n (HT40))



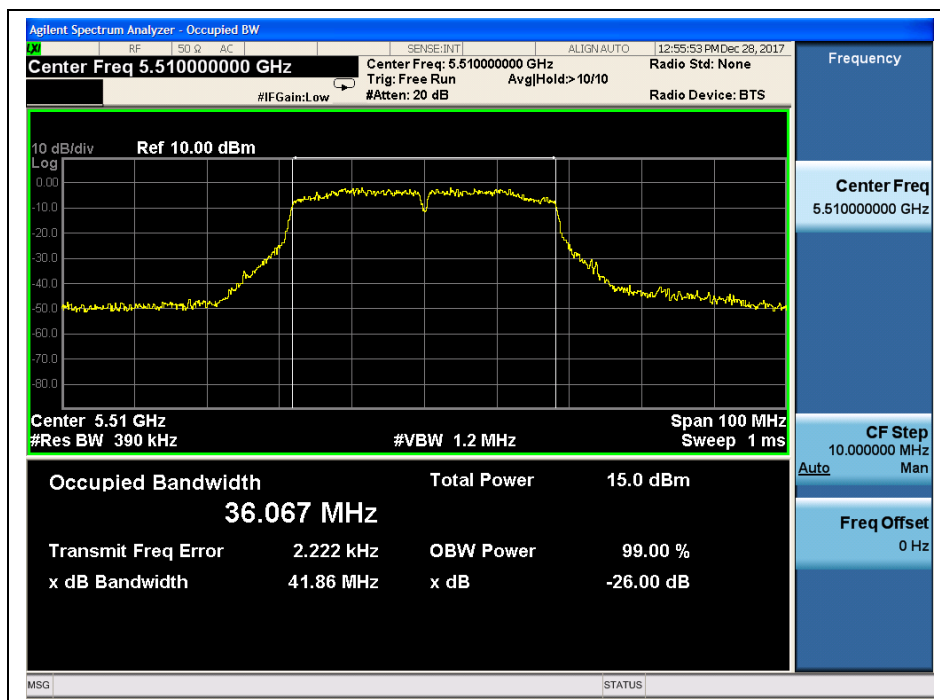
(Channel 46, 5230 MHz, 802.11n (HT40))



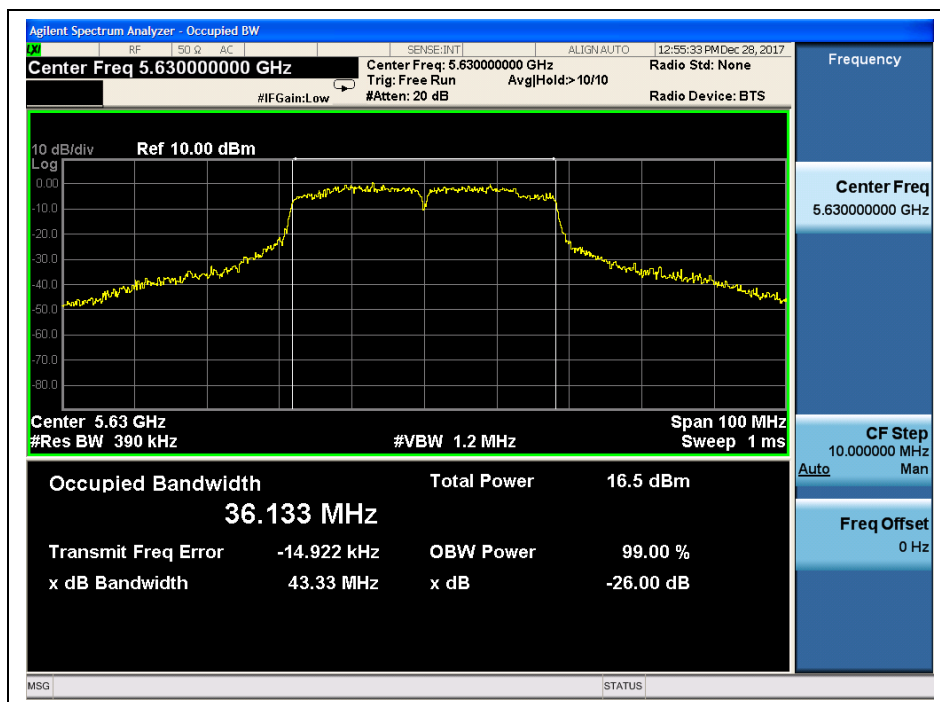
(Channel 54, 5270MHz, 802.11n (HT40))



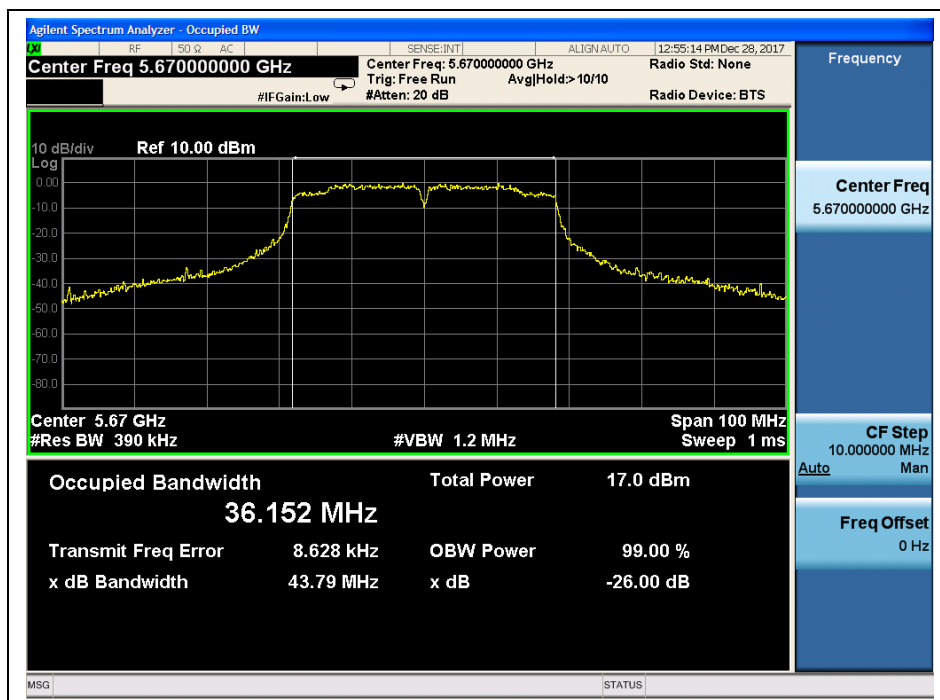
(Channel 62, 5310 MHz, 802.11n (HT40))



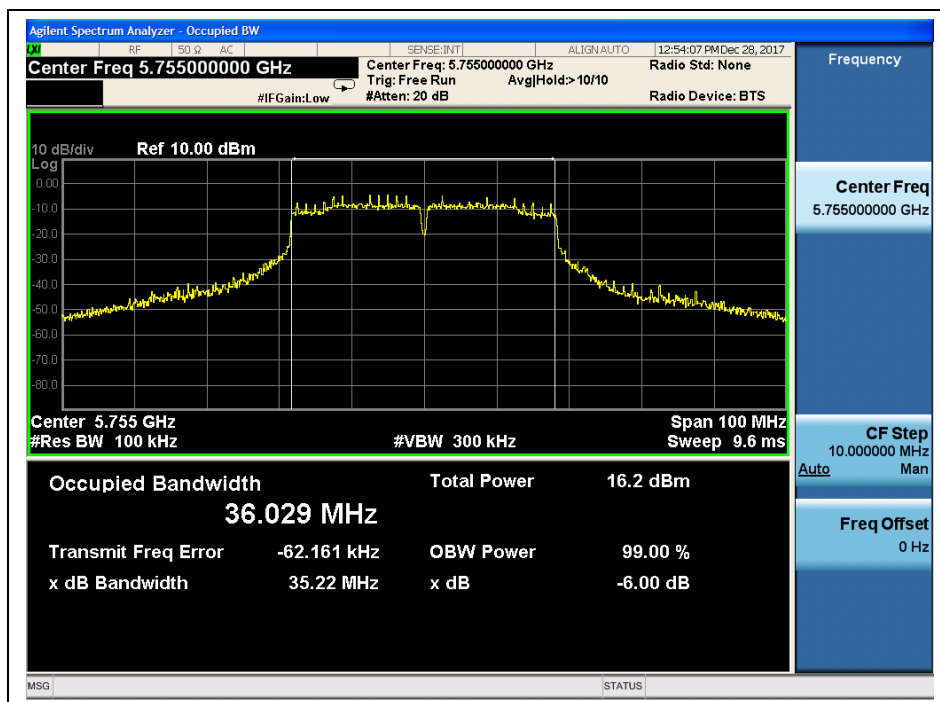
(Channel 102, 5510MHz, 802.11n (HT40))



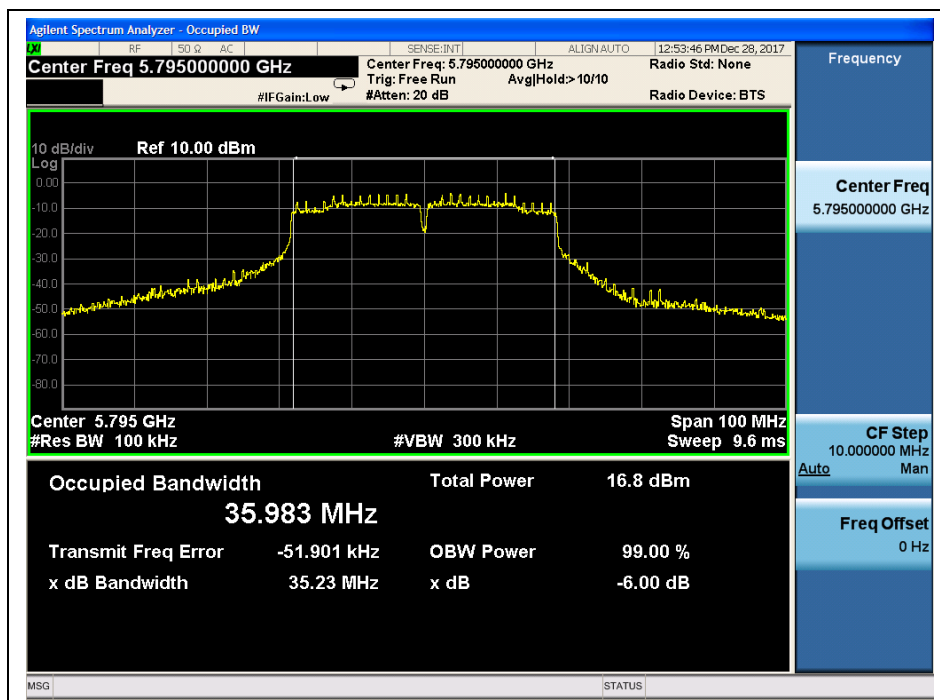
(Channel 126, 5630 MHz, 802.11n (HT40))



(Channel 142, 5670MHz, 802.11n (HT40))



(Channel 151, 5755 MHz, 802.11n (HT40))



(Channel 159, 5795MHz, 802.11n (HT40))

2.3. Maximum conducted output power

2.3.1. Requirement

(1) 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 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 the directional gain of the antenna exceeds 6 dBi.

(2) For the band 5.725-5.85 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.

(3) According to KDB662911D01 Measure-and-sum technique, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in units that are directly proportional to power.

(4) According to KDB 662911 D01, the directional gain = $G_{ANT} + 10\log(N_{ANT})$ dBi, where G_{ANT} is the antenna gain in dBi, N_{ANT} is the number of outputs.

2.3.2. Test Description

Section E) 3) of KDB 789033 defines a methodology using a USB Wideband Power Sensor.

A. Test Setup:



The EUT (Equipment under the test) which is coupled to the USB Wideband Power Sensor; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading, all test result in USB Wideband Power Sensor.

**2.3.3. Test Result****802.11a Test mode**

Channel	Frequency (MHz)	Measured Peak Power (dBm)	Limit (dBm)	Verdict
36	5180	15.26	24	PASS
44	5220	16.22		
48	5240	16.01		
52	5260	17.79		
60	5300	18.18		
64	5320	14.66		
100	5500	14.83		
116	5600	16.22		
140	5700	12.53		
149	5745	15.07	30	
157	5785	14.74		
165	5825	14.89		

Channel	Frequency (MHz)	Measured Average Power (dBm)	Limit (dBm)	Verdict
36	5180	9.24	24	PASS
44	5220	10.55		
48	5240	9.98		
52	5260	11.68		
60	5300	12.00		
64	5320	9.31		
100	5500	9.79		
116	5600	11.33		
140	5700	7.53		
149	5745	9.98	30	
157	5785	9.63		
165	5825	9.58		

**802.11n (HT20) Test mode**

Channel	Frequency (MHz)	Measured Peak Power (dBm)	Limit (dBm)	Verdict
36	5180	14.23	24	PASS
44	5220	16.45		
48	5240	15.57		
52	5260	17.40		
60	5300	17.90		
64	5320	14.32		
100	5500	14.58		
116	5600	15.79		
140	5700	12.38		
149	5745	14.68	30	
157	5785	14.77		
165	5825	14.70		

Channel	Frequency (MHz)	Measured Average Power (dBm)	Limit (dBm)	Verdict
36	5180	8.65	24	PASS
44	5220	10.22		
48	5240	9.65		
52	5260	10.99		
60	5300	11.41		
64	5320	8.78		
100	5500	9.27		
116	5600	10.96		
140	5700	7.09		
149	5745	9.62	30	
157	5785	9.16		
165	5825	9.47		

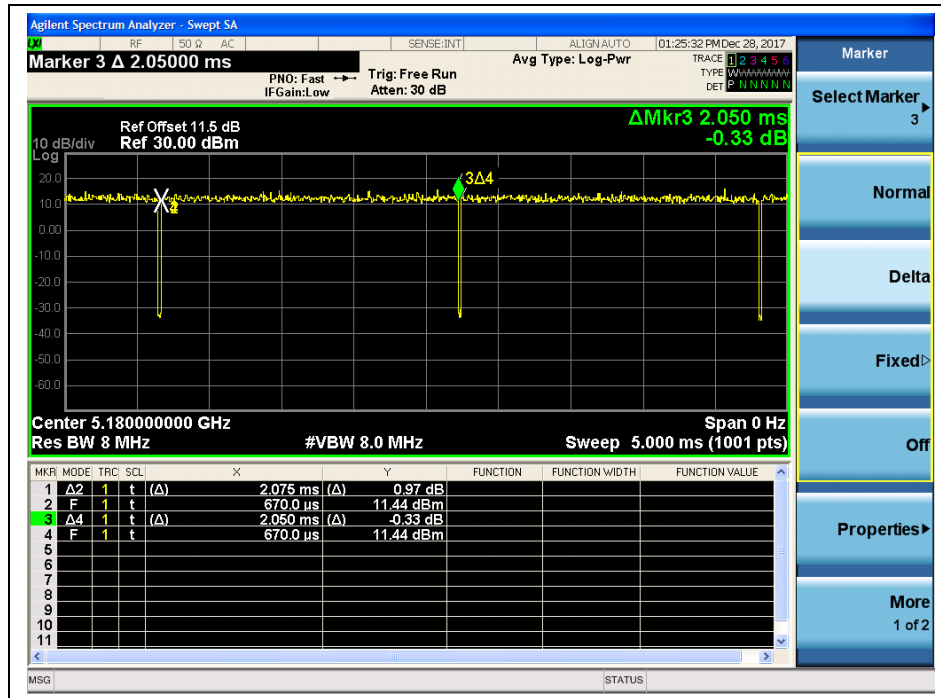
**802.11n (HT40) Test mode**

Channel	Frequency (MHz)	Measured Peak Power (dBm)	Limit (dBm)	Verdict
38	5190	10.57	24	PASS
46	5230	15.93		
54	5270	16.41		
62	5310	12.91		
102	5510	13.37		
126	5630	14.73		
134	5670	14.43		
151	5755	14.13	30	
159	5795	13.69		

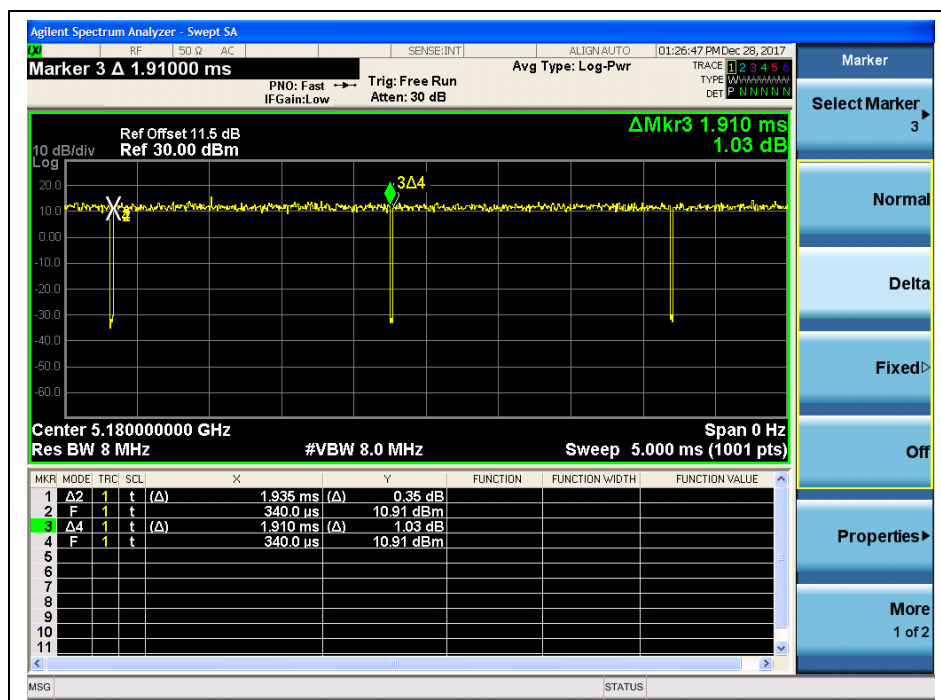
Channel	Frequency (MHz)	Measured Average Power (dBm)	Limit (dBm)	Verdict
38	5190	5.82	24	PASS
46	5230	10.55		
54	5270	10.99		
62	5310	8.09		
102	5510	8.47		
126	5630	10.29		
134	5670	9.72		
151	5755	9.64	30	
159	5795	9.05		



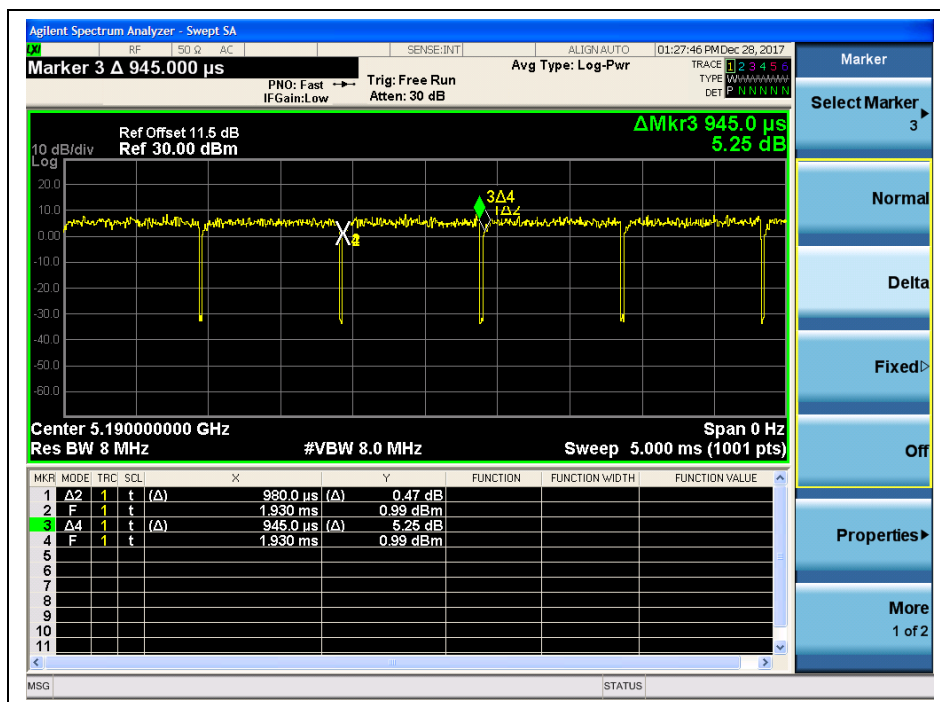
Plot for duty cycle



(Duty cycle for 802.11 a)



(Duty cycle for 802.11 n(HT20))



(Duty cycle for 802.11 n(HT40))

2.4. Peak Power spectral density

2.4.1. Requirement

(1) 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.

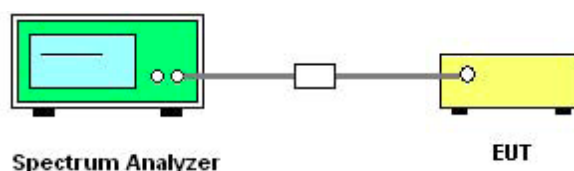
(2) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500KHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) According to KDB662911D01 Measure-and-sum technique, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in units that are directly proportional to power.

(4) According to KDB 662911 D01, the directional gain = $G_{ANT} + 10\log(N_{ANT})$ dBi, where G_{ANT} is the antenna gain in dBi, N_{ANT} is the number of outputs.

2.4.2. Test Description

A. Test Set:



The EUT is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

B. Test Procedure

KDB 789033 Section F) Maximum Power Spectral Density (PSD) Method SA-1 was used in order to prove compliance

- 1) Set span to encompass the entire 26-dB emission bandwidth
- 2) Set RBW = 1 MHz. Set VBW \geq 3 MHz.
- 3) Number of points in sweep \geq 2 Span / RBW. Sweep time = auto.
- 4) Detector = RMS (i.e., power averaging)
- 5) Trace average at least 100 traces in power averaging (i.e., RMS) mode
- 6) Record the max value

2.4.3. Test Result

802.11a Test mode

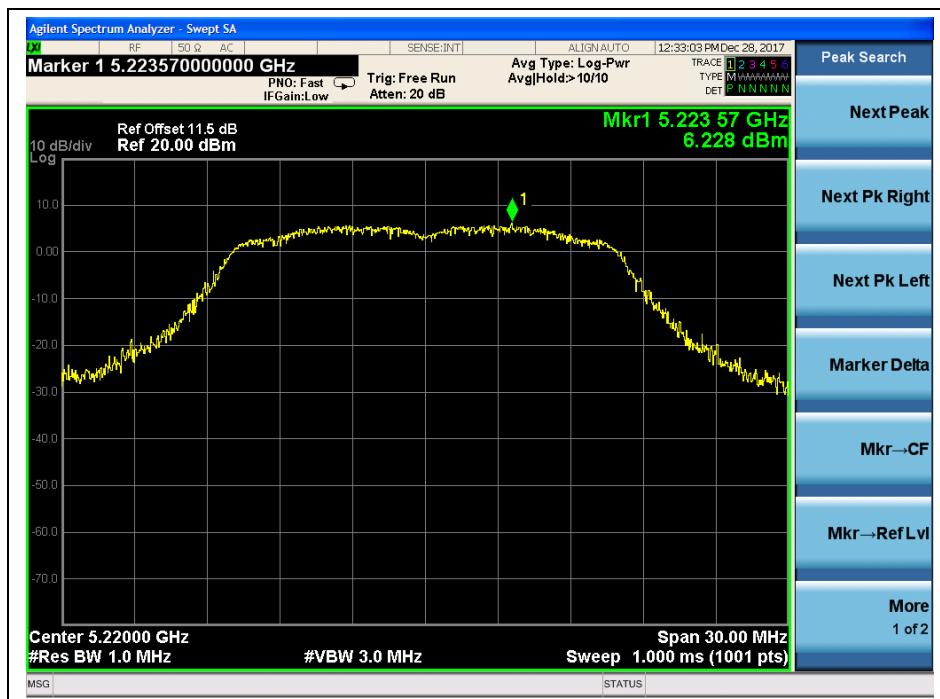
A. Test Verdict:

Channel	Frequency (MHz)	Measured PPSP (dBm/MHz)	Limit (dBm/MHz)	Verdict
36	5180	5.27	11	PASS
44	5220	6.23		
48	5240	5.79		
52	5260	6.70		
60	5300	7.30		
64	5320	4.83		
100	5500	5.41		
116	5600	6.77		
140	5700	3.54		
Channel	Frequency (MHz)	Measured PPSP (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
149	5745	1.74	30	PASS
157	5785	2.11		
165	5825	2.58		

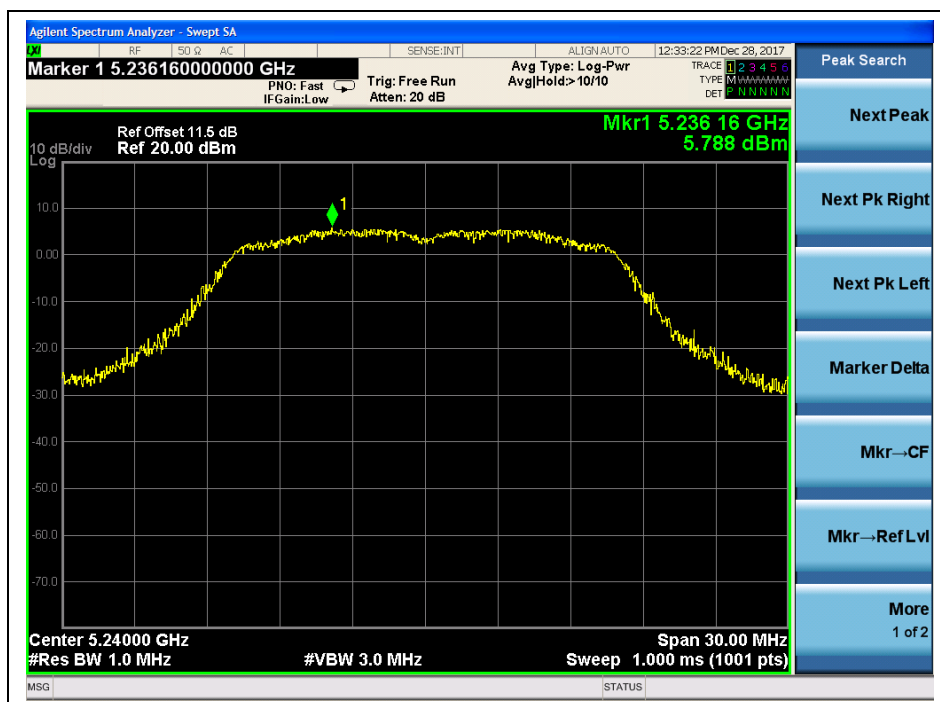
B. Test Plots



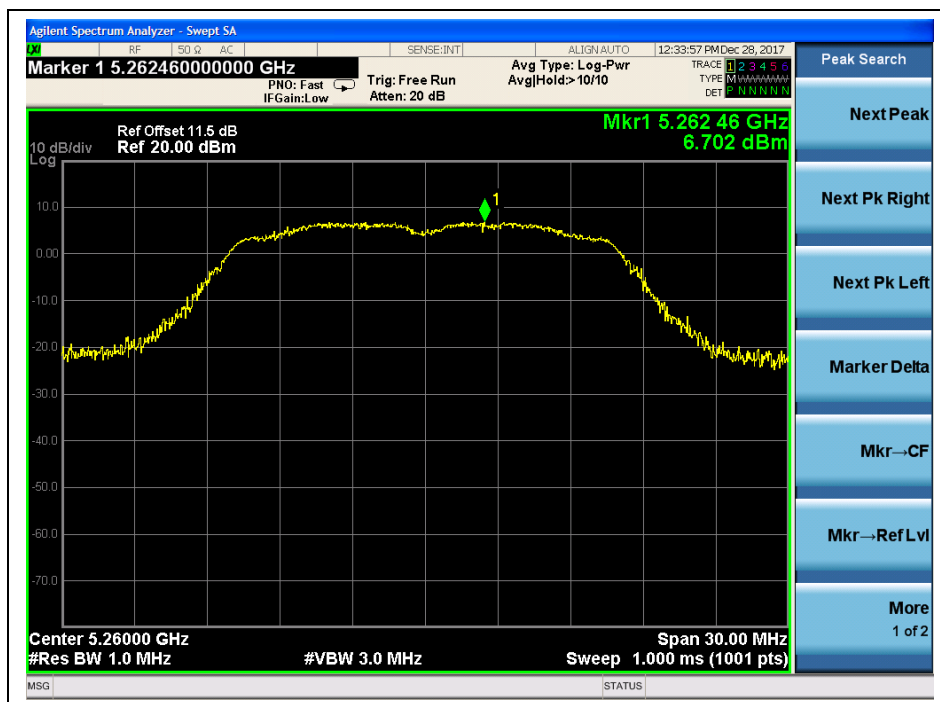
(Channel 36, 5180MHz, 802.11a,)



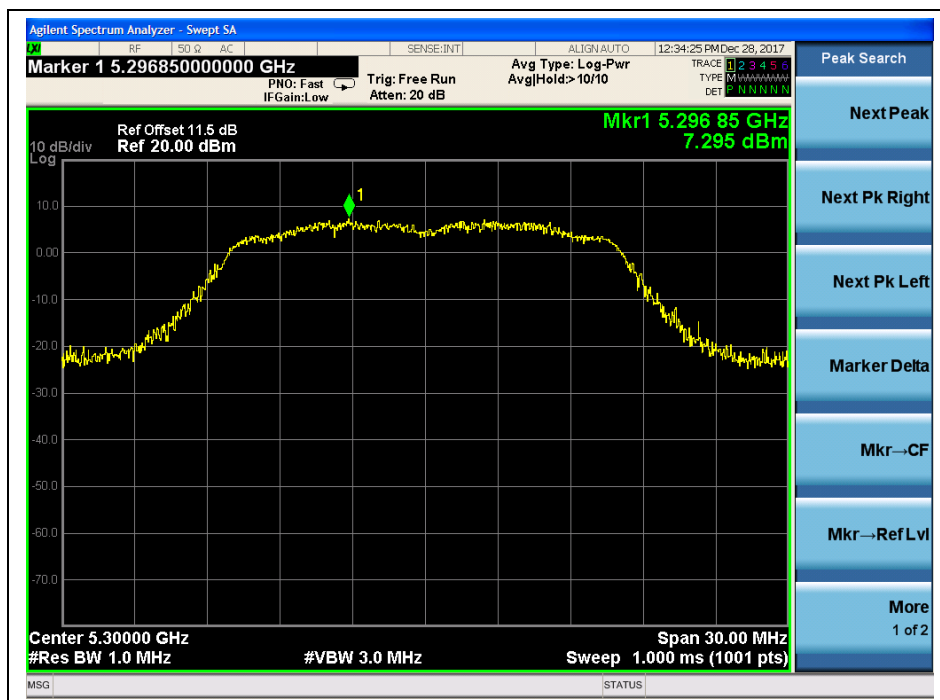
(Channel 44, 5220 MHz, 802.11a,)



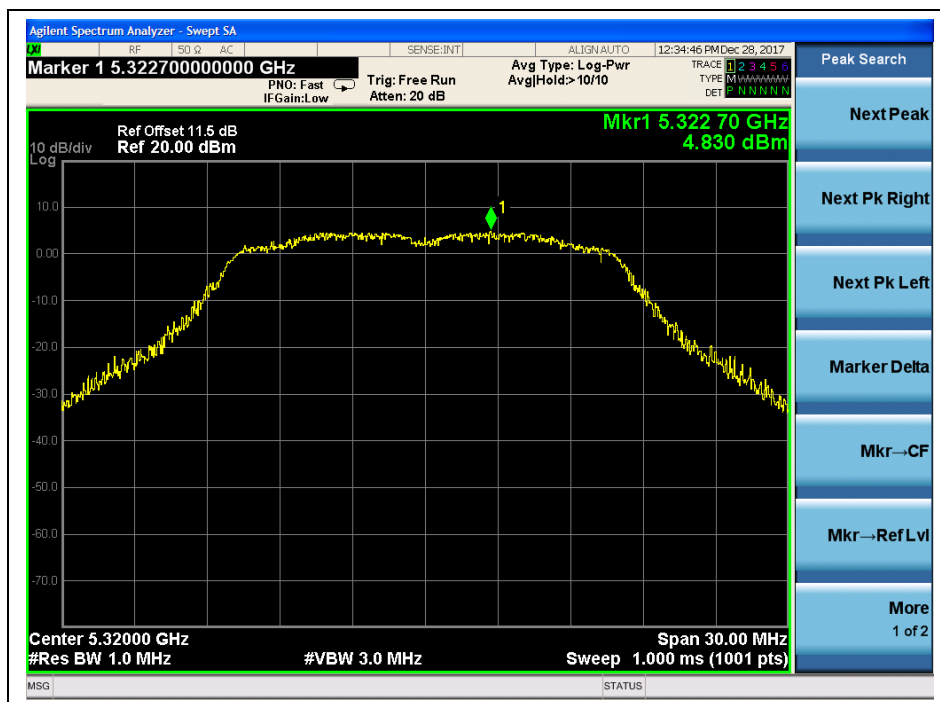
(Channel 48, 5240MHz, 802.11a,)



(Channel 52, 5260MHz, 802.11a,)



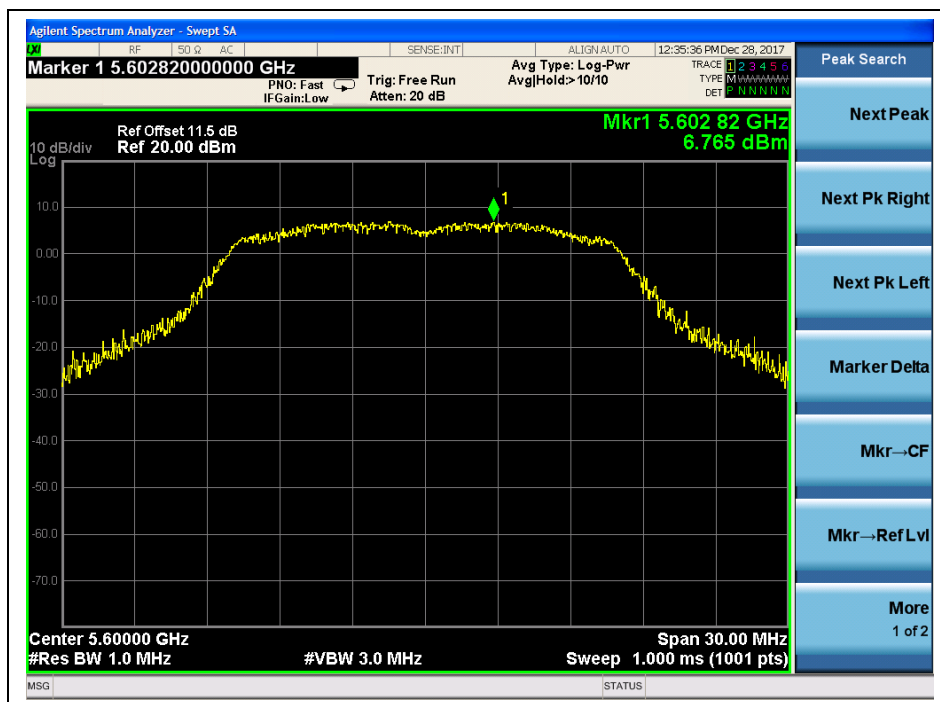
(Channel 60, 5300 MHz, 802.11a,)



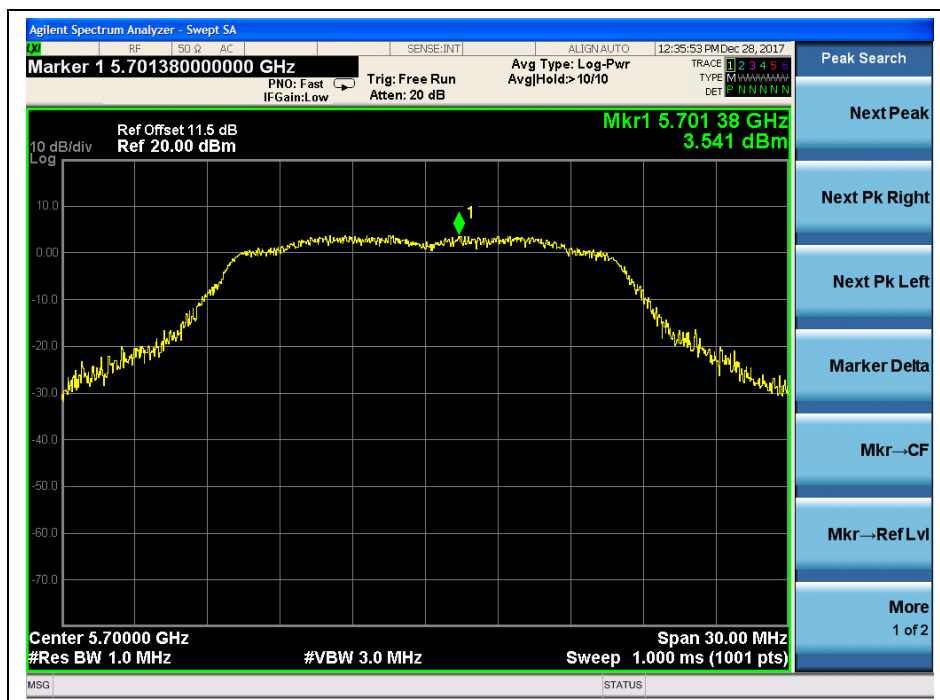
(Channel 64, 5320MHz, 802.11a,)



(Channel 100, 5500MHz, 802.11a,)



(Channel 120, 5600 MHz, 802.11a,)



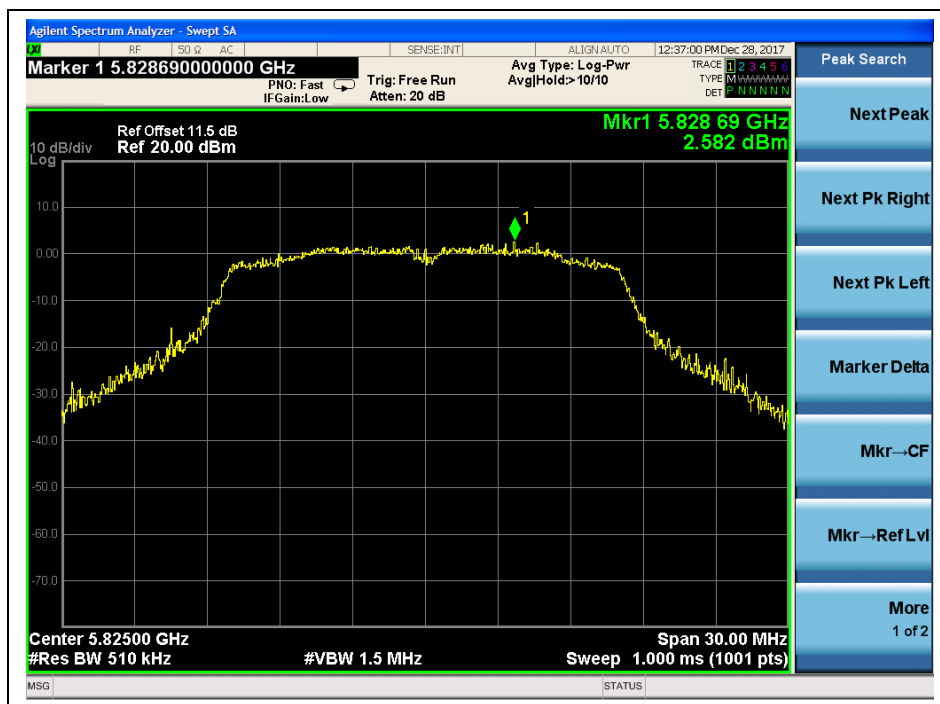
(Channel 140, 5700MHz, 802.11a,)



(Channel 149, 5745MHz, 802.11a)



(Channel 157, 5785MHz, 802.11a)



(Channel 165, 5825MHz, 802.11a)

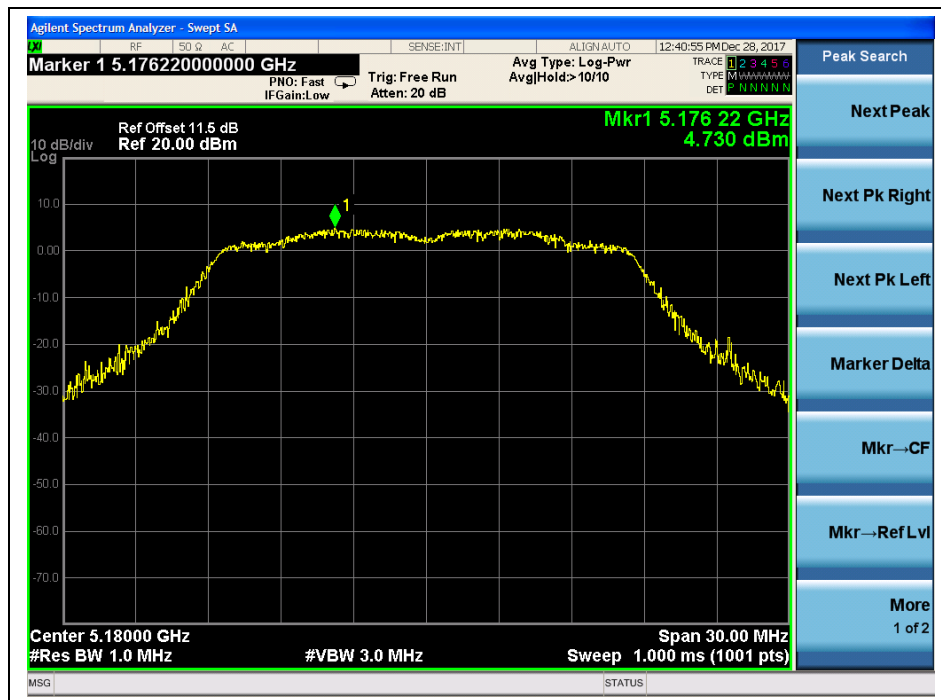


802.11n (HT20) Test mode

A. Test Verdict:

Channel	Frequency (MHz)	Measured PPSP (dBm/MHz)	Limit (dBm/MHz)	Verdict
36	5180	4.73	11	PASS
44	5220	5.66		
48	5240	5.86		
52	5260	6.84		
60	5300	6.68		
64	5320	4.41		
100	5500	5.58		
116	5600	6.32		
140	5700	2.92		
Channel	Frequency (MHz)	Measured PPSP (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
149	5745	1.48	30	PASS
157	5785	1.47		
165	5825	1.88		

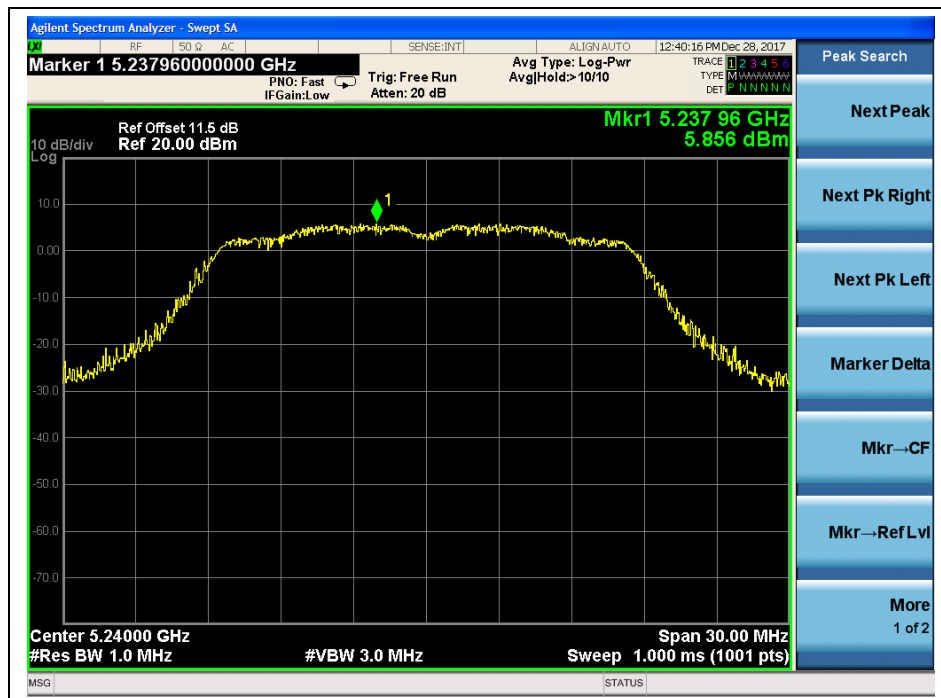
B. Test Plots



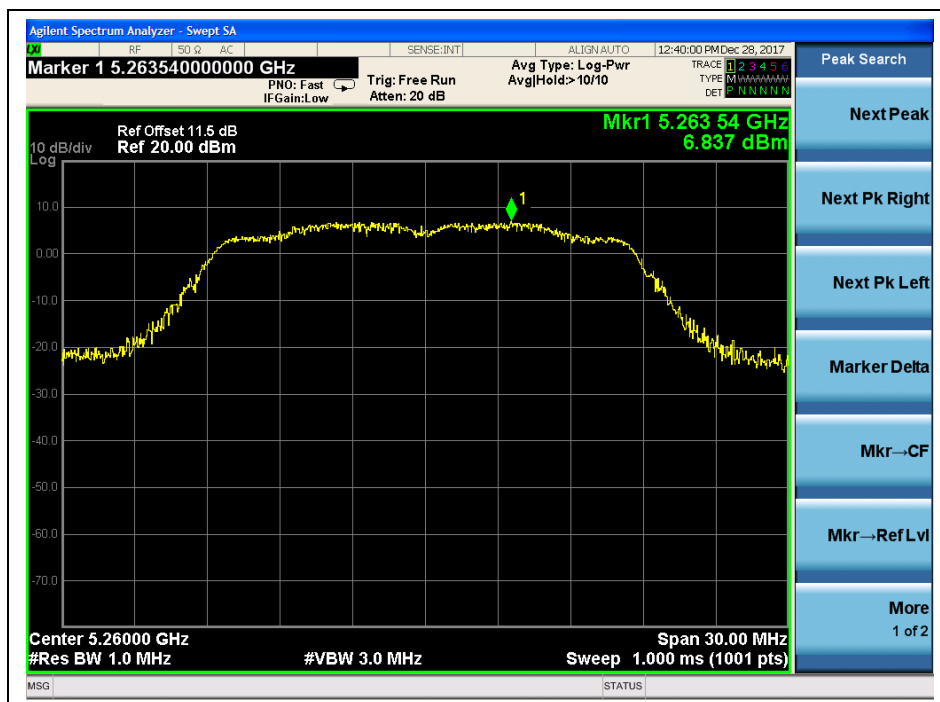
(Channel 36, 5180MHz, 802.11 n (HT20))



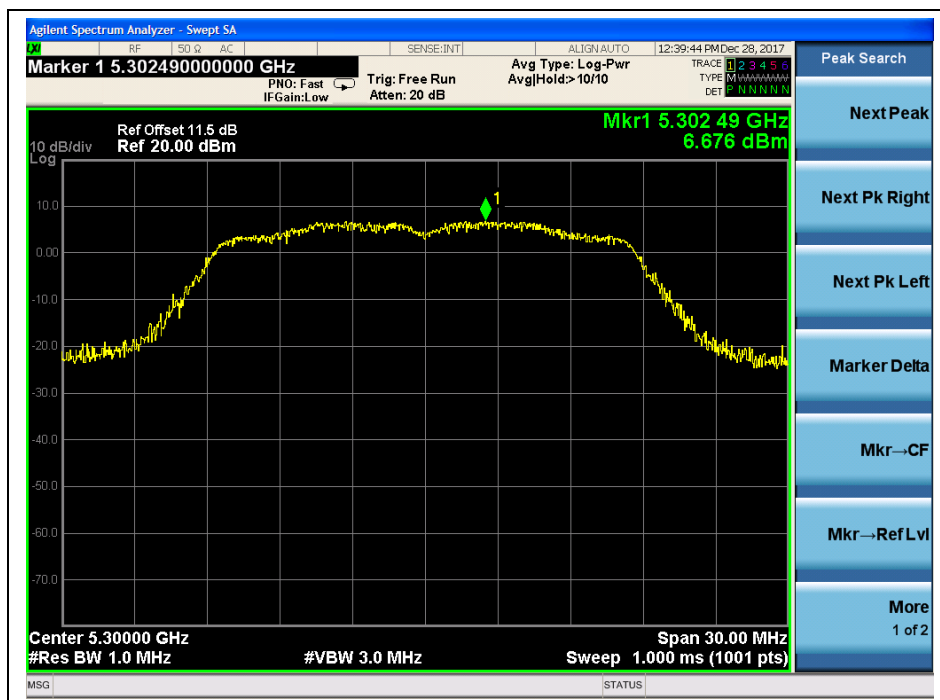
(Channel 44, 5220 MHz, 802.11 n (HT20))



(Channel 48, 5240MHz, 802.11 n (HT20))



(Channel 52, 5260MHz, 802.11 n (HT20))



(Channel 60, 5300 MHz, 802.11 n (HT20))



(Channel 64, 5320MHz, 802.11 n (HT20))



(Channel 100, 5500MHz, 802.11 n (HT20))



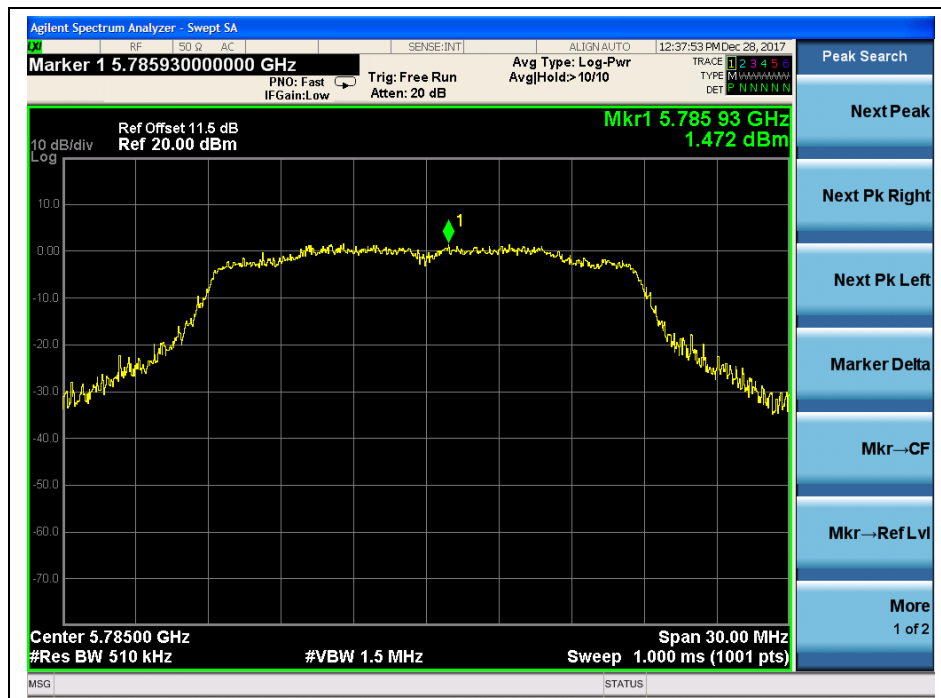
(Channel 120, 5600 MHz, 802.11 n (HT20))



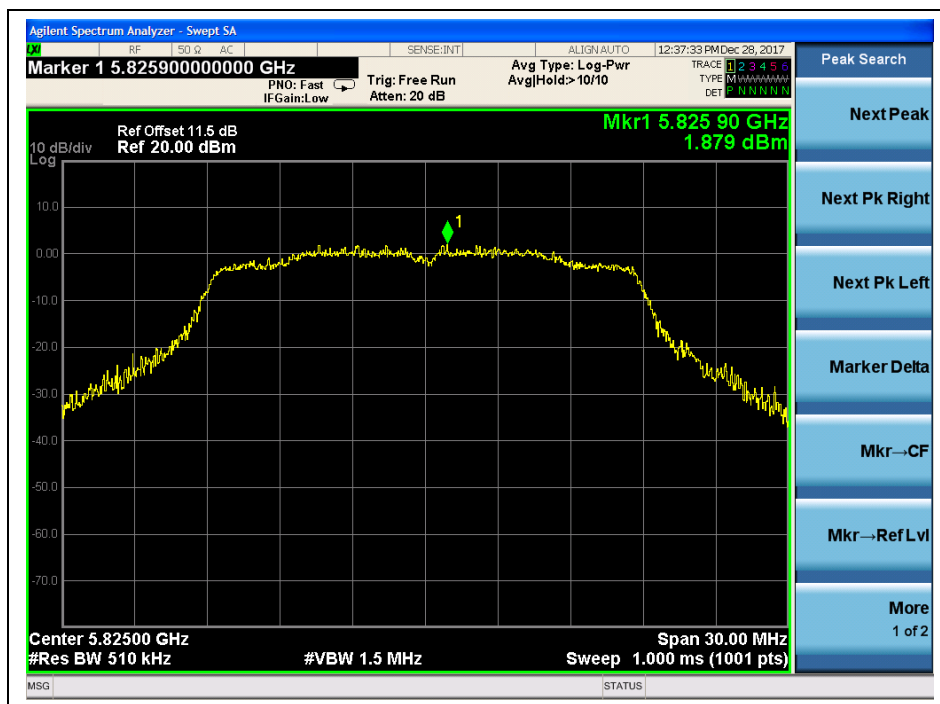
(Channel 140, 5700MHz, 802.11 n (HT20))



(Channel 149, 5745MHz, 802.11 n (HT20))



(Channel 157, 5785MHz, 802.11 n (HT20))



(Channel 165, 5825MHz, 802.11 n (HT20))



802.11n (HT40) Test mode

A. Test Verdict:

Channel	Frequency (MHz)	Measured PPSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
38	5190	0.04	11	PASS
46	5230	4.19		
54	5270	4.05		
62	5310	1.32		
102	5510	2.65		
126	5630	4.12		
134	5670	4.07		
Channel	Frequency (MHz)	Measured PPSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
151	5755	-1.05	30	PASS
159	5795	-0.65		

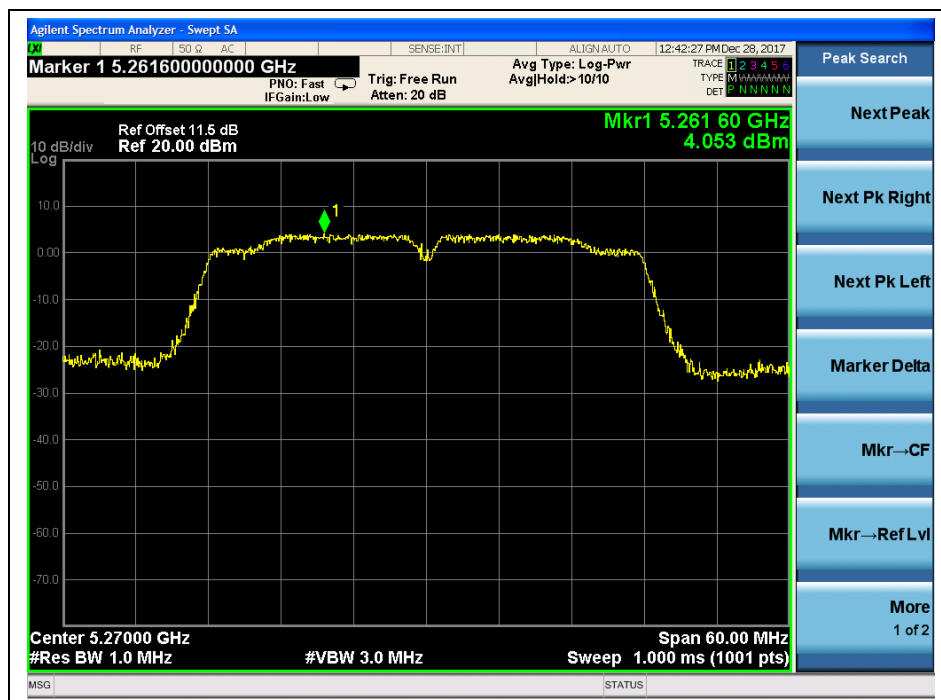
B. Test Plots



(Channel 38, 5190MHz, 802.11n (HT40))



(Channel 46, 5230 MHz, 802.11n (HT40))



(Channel 54, 5270MHz, 802.11n (HT40))



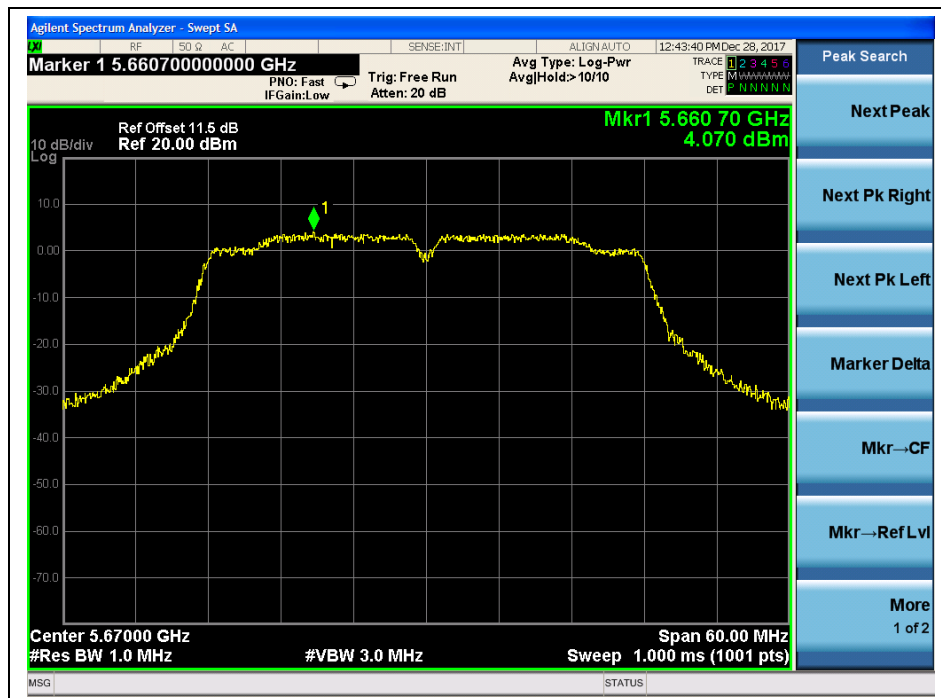
(Channel 62, 5310 MHz, 802.11n (HT40))



(Channel 102, 5510MHz, 802.11n (HT40))



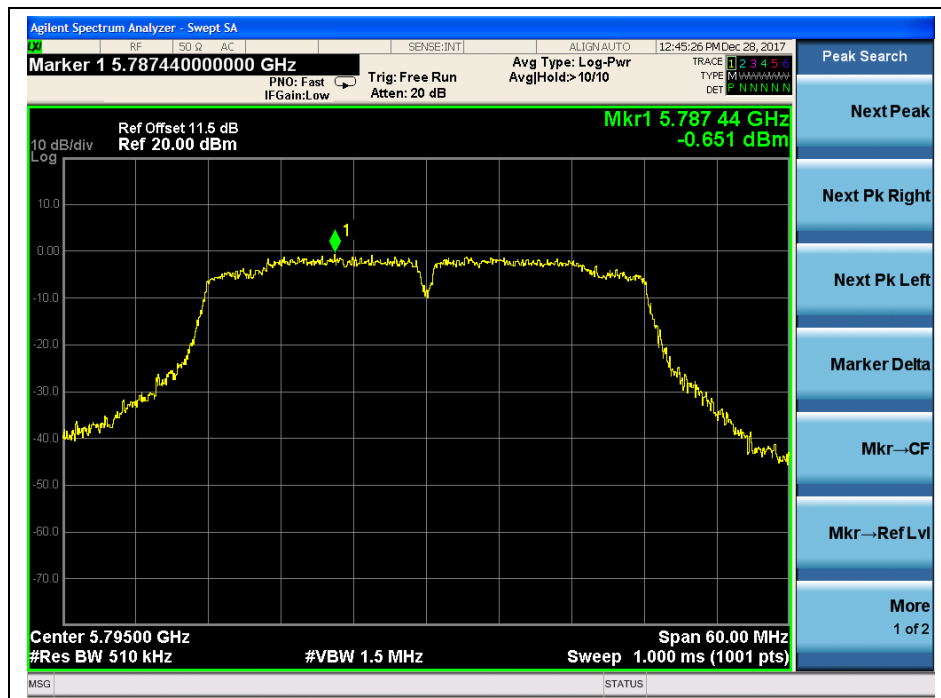
(Channel 126, 5630 MHz, 802.11n (HT40))



(Channel 142, 5670MHz, 802.11n (HT40))



(Channel 151, 5755 MHz, 802.11n (HT40))



(Channel 159, 5795MHz, 802.11n (HT40))

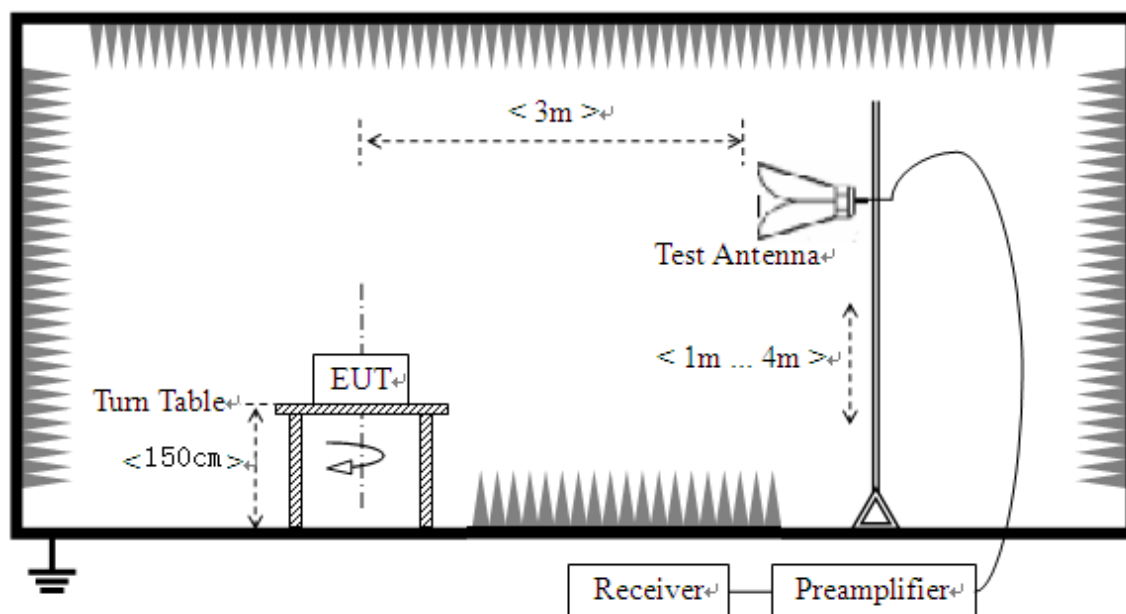
2.5. Restricted Frequency Bands

2.5.1. Requirement

According to FCC section 15.407(b)(7), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

2.5.2. Test Description

A. Test Setup



The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

KDB 789033 Section H) 3)5)6(d)) was used in order to prove compliance

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.



2.5.3. Test Result

The lowest and highest channels are tested to verify Restricted Frequency Bands.

The measurement results are obtained as below:

$$E [\text{dB}\mu\text{V/m}] = U_R + A_T + A_{\text{Factor}} [\text{dB}]; A_T = L_{\text{Cable loss}} [\text{dB}] - G_{\text{preamp}} [\text{dB}]$$

A_T : Total correction Factor except Antenna; U_R : Receiver Reading

G_{preamp} : Preamplifier Gain; A_{Factor} : Antenna Factor at 3m

Note: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (vertical) was recorded in this test report.

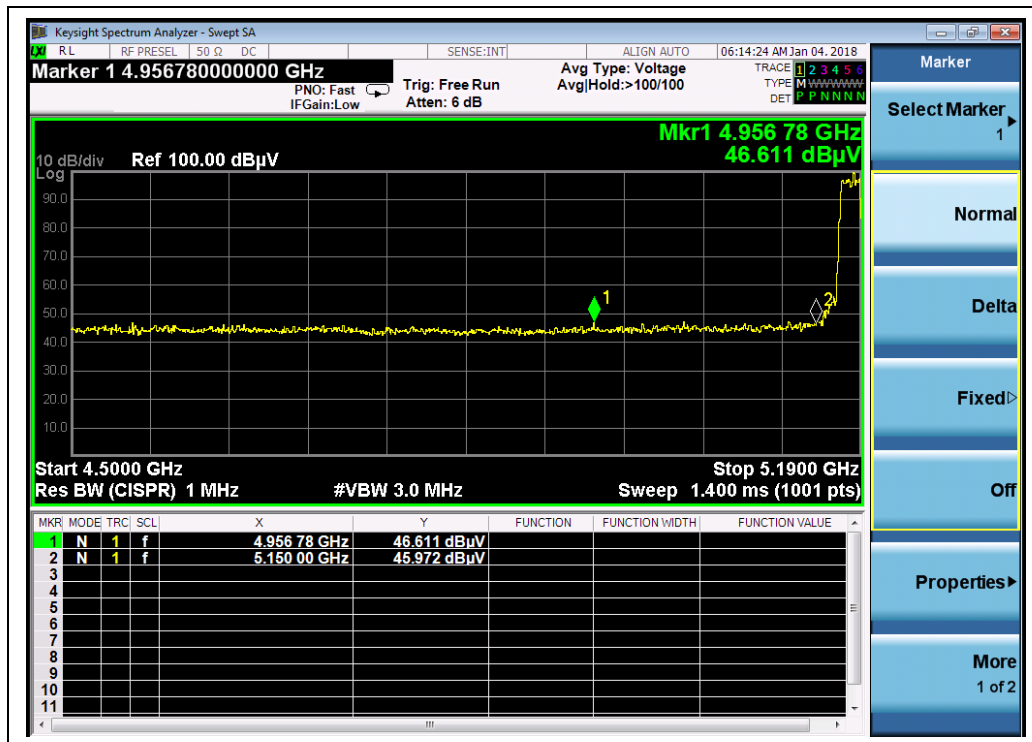
802.11a Test mode

A. Test Verdict:

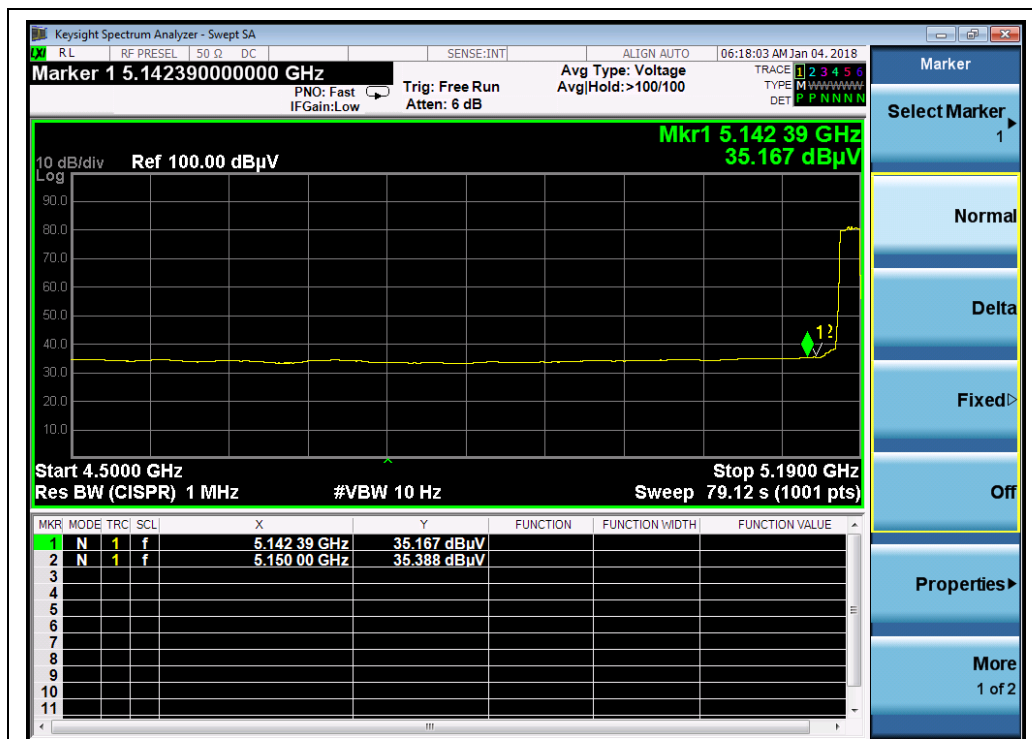
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBuV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
36	4956.78	PK	46.61	-50.65	32.11	28.07	74	Pass
36	5142.39	AV	35.17	-50.65	32.11	16.63	54	Pass
64	5383.84	PK	45.09	-50.65	32.11	26.55	74	Pass
64	5372.64	AV	33.51	-50.65	32.11	14.97	54	Pass
100	5465.50	PK	46.13	-50.65	32.11	27.59	74	Pass
100	5470.00	AV	34.72	-50.65	32.11	16.18	54	Pass
140	5785.80	PK	46.67	-50.65	32.11	28.13	74	Pass
140	5785.80	AV	34.40	-50.65	32.11	15.86	54	Pass



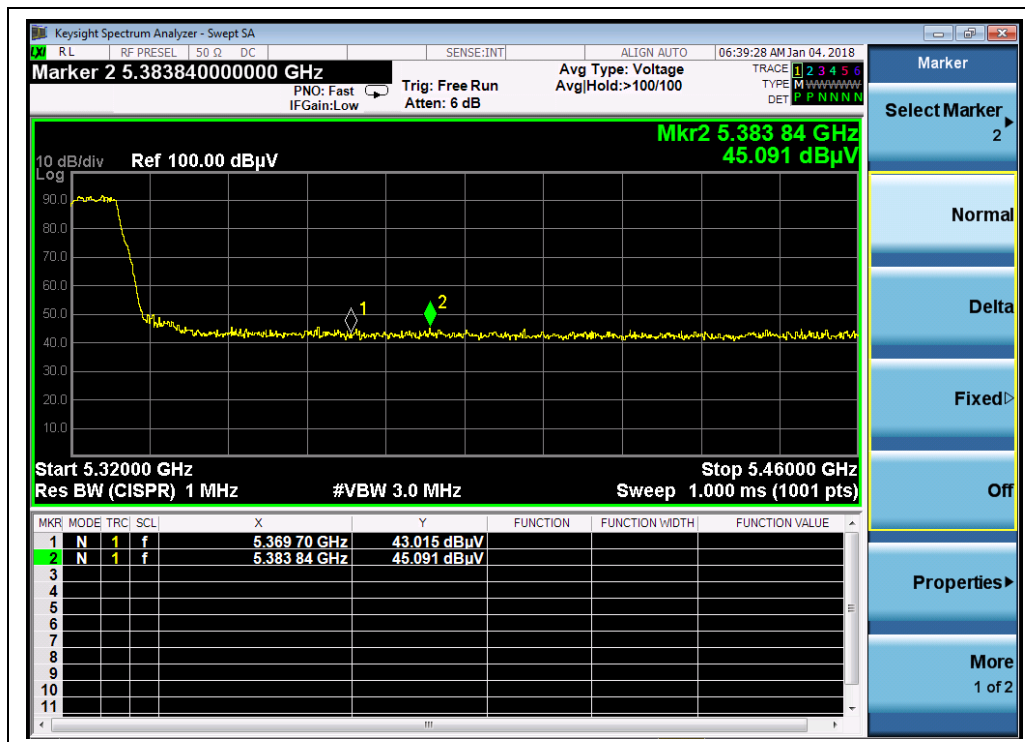
B. Test Plots:



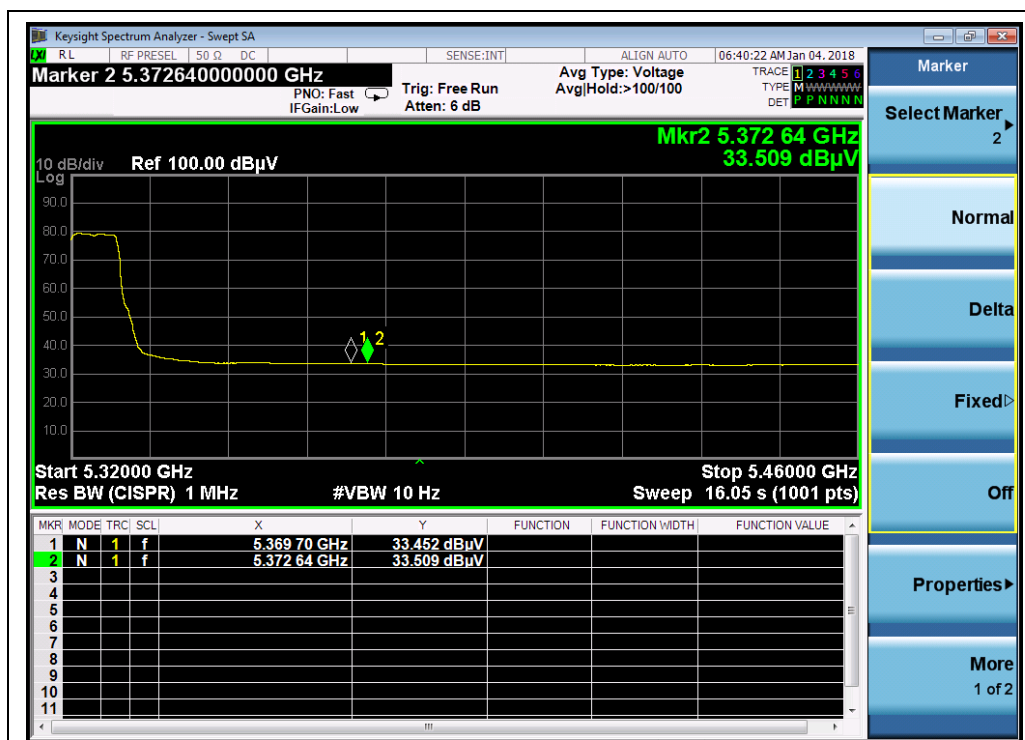
(Channel 36, PEAK, 802.11a)



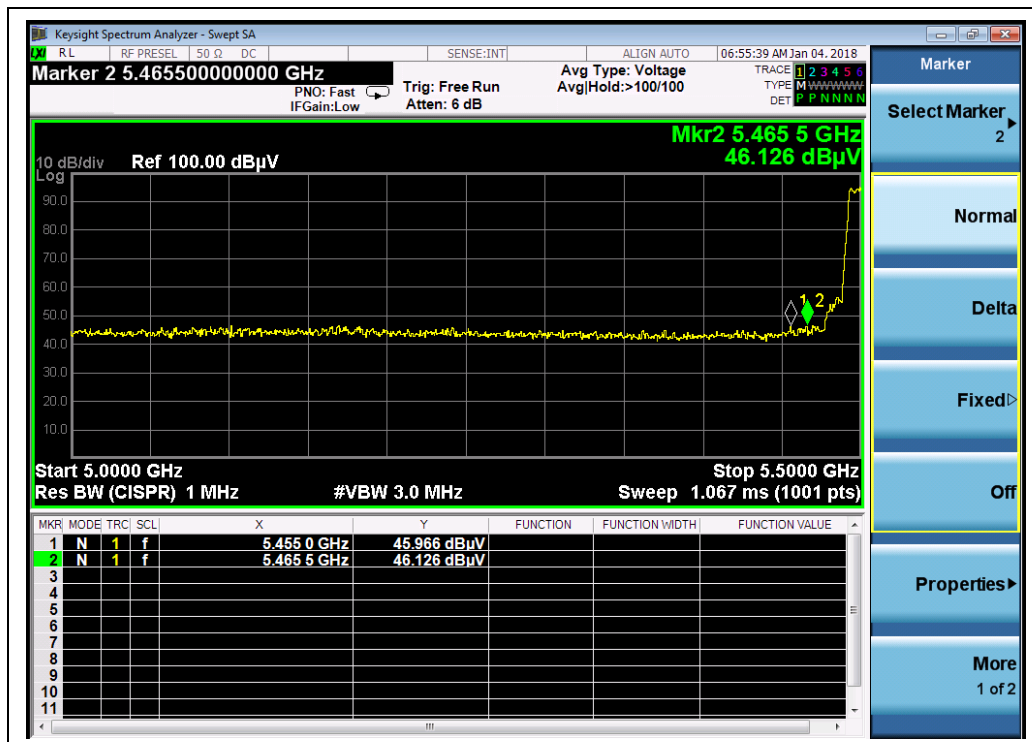
(Channel 36, AVG, 802.11a)



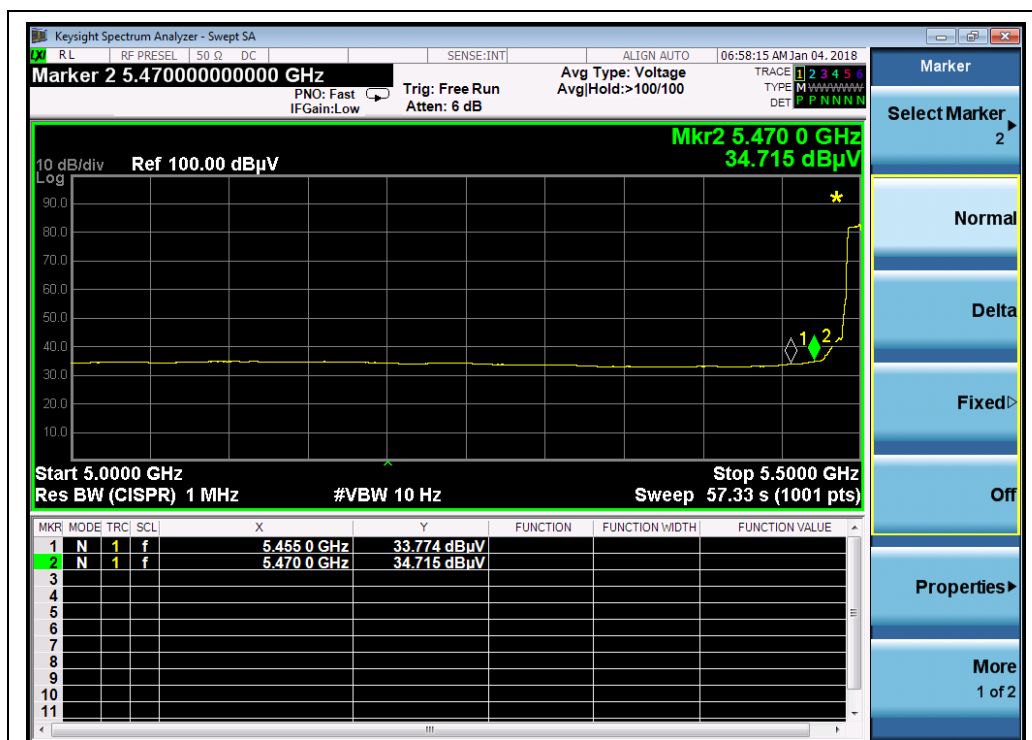
(Channel 64, PEAK, 802.11a)



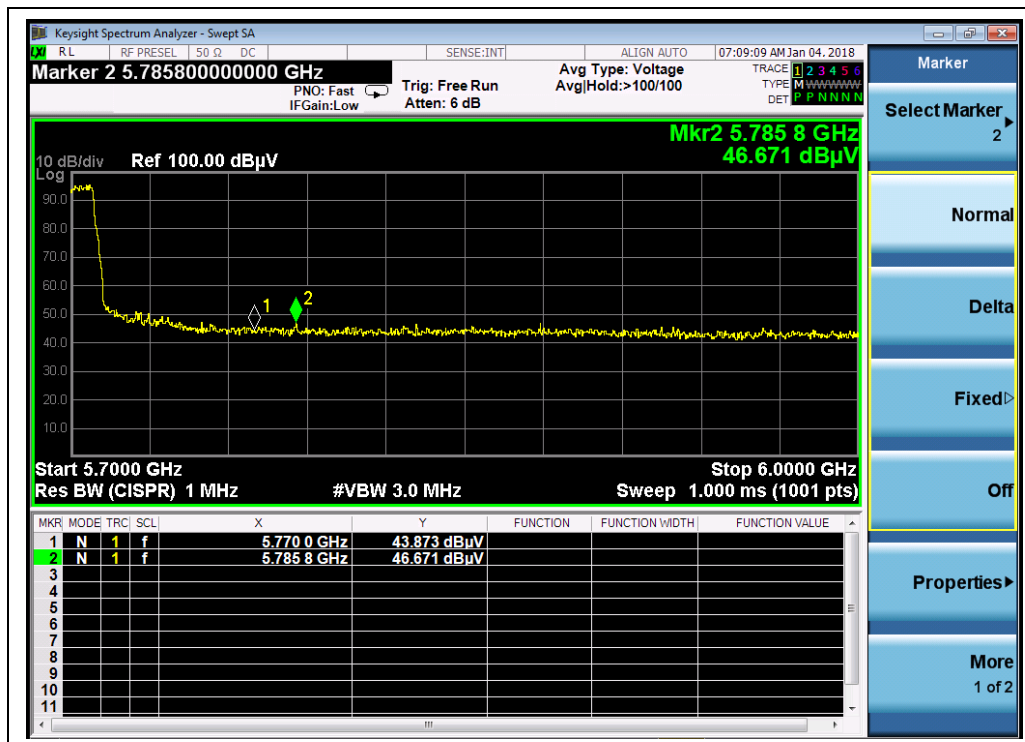
(Channel 64, AVG, 802.11a)



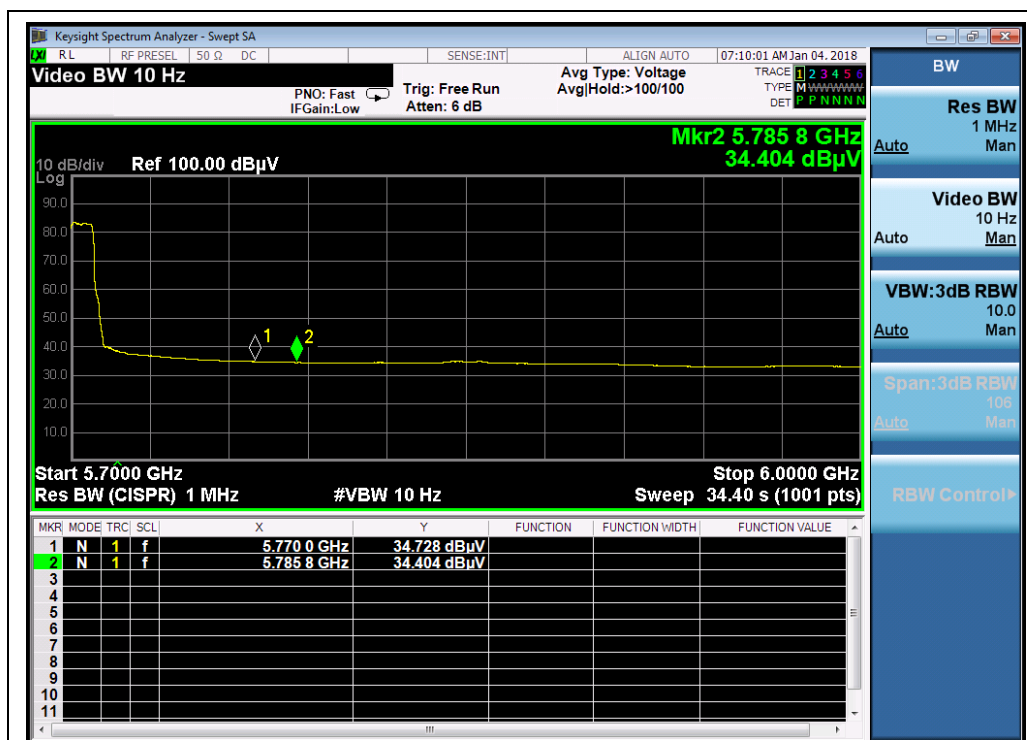
(Channel 100, PEAK, 802.11a)



(Channel 100, AVG, 802.11a)



(Channel 140, PEAK, 802.11a)



(Channel 140, AVG, 802.11a)

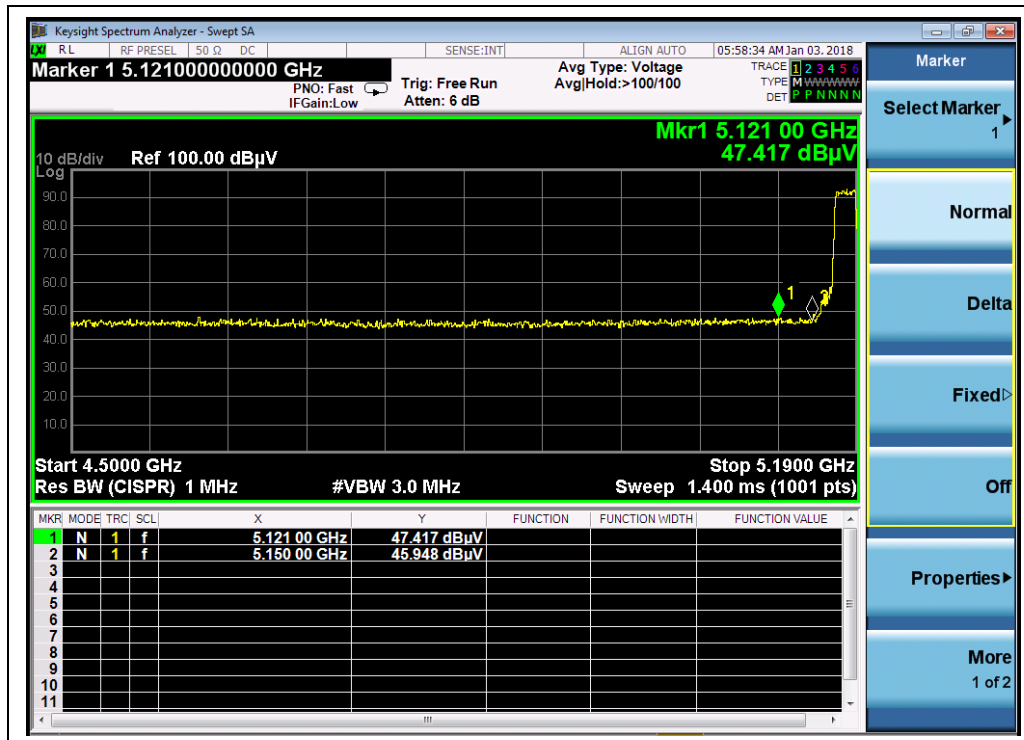


802.11n (HT20) Test mode

A. Test Verdict:

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBuV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
36	5121.00	PK	47.42	-50.65	32.11	28.88	74	Pass
36	5145.84	AV	36.08	-50.65	32.11	17.54	54	Pass
64	5371.80	PK	48.85	-50.65	32.11	30.31	74	Pass
64	5374.04	AV	32.86	-50.65	32.11	14.32	54	Pass
100	5444.50	PK	45.74	-50.65	32.11	27.20	74	Pass
100	5453.50	AV	32.85	-50.65	32.11	14.31	54	Pass
140	5770.80	PK	47.83	-50.65	32.11	29.29	74	Pass
140	5767.80	AV	34.17	-50.65	32.11	15.63	54	Pass

B. Test Plots:



(Channel 36, PEAK, 802.11n (HT20))