

# FCC Test Report

## (Class II Permissive Change)

Product Name	802.11ac Dual Band Access Point
Model No.	WK-2, WK-2-B,WK-2-C, WK-2-CB
FCC ID.	SLY-WK2X33

Applicant	Pakedge Device and Software Inc.
Address	3847 Breakwater Avenue, Hayward, CA 94545

Date of Receipt	Oct. 08, 2015
Issued Date	Nov. 12, 2015
Report No.	15A0120R-RFUSP05V00
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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# Test Report

Issued Date: Nov. 12, 2015

Report No.: 15A0120R-RFUSP05V00



Product Name	802.11ac Dual Band Access Point
Applicant	Pakedge Device and Software Inc.
Address	3847 Breakwater Avenue, Hayward, CA 94545
Manufacturer	Pakedge Device and Software Inc.
Factory	Lite-On Network Communication (Dongguan) Limited
Model No.	WK-2, WK-2-B, WK-2-C, WK-2-CB
FCC ID.	SLY-WK2X33
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	Pakedge
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2014 ANSI C63.4: 2014, ANSI C63.10: 2013 789033 D02 General UNII Test Procedures New Rules v01
Test Result	Complied

Documented By

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Approved By

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## 1. GENERAL INFORMATION

### 1.1. EUT Description

Product Name	802.11ac Dual Band Access Point
Trade Name	Pakedge
FCC ID.	SLY-WK2X33
Model No.	WK-2, WK-2-B, WK-2-C, WK-2-CB
Frequency Range	802.11a/n-20MHz: 5260-5320MHz, 5500-5700MHz 802.11n-40MHz: 5270-5310MHz, 5510-5670MHz 802.11ac-80MHz: 5290MHz, 5530-5610MHz
Number of Channels	802.11a/n-20MHz: 15, n-40MHz: 7 802.11ac-80MHz: 3
Data Rate	802.11a: 6-54Mbps, 802.11n: up to 450Mbps 802.11ac-80MHz: up to 1300MHz
Type of Modulation	802.11a/n: OFDM, BPSK, QPSK, 16QAM, 64QAM, 256QAM
Channel Control	Auto
Antenna Type	PIFA Antenna
Antenna Gain	Refer to the table "Antenna List"
LAN Cable	Non-Shielded, 2.0m
Power Adapter	MFR: Asian, M/N: WA-24Q12FU Input: AC 100-240V, 50-60Hzm 0.7A Output: DV 12V, 2A Cable Out: Non-Shielded, 1.8m

#### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1.	Lite-On	30100006566D (5G-1) 30100006716D (5G-2) 30100007386D (5G-3)	PIFA Antenna	5.6dBi for 5.250-5.350GHz 5.2dBi for 5.470-5.725GHz

Note: The antenna of EUT is conform to FCC 15.203

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 52:	5260 MHz	Channel 56:	5280 MHz	Channel 60:	5300 MHz	Channel 64:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 120:	5600 MHz	Channel 124:	5620 MHz	Channel 128:	5640 MHz
Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz		

802.11n-40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 54:	5270 MHz	Channel 62:	5310 MHz	Channel 102:	5510 MHz	Channel 110:	5550 MHz
Channel 118:	5590 MHz	Channel 126:	5630 MHz	Channel 134:	5670 MHz		

802.11ac-80MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 58:	5290 MHz	Channel 106:	5530 MHz	Channel 122:	5610 MHz

Note:

1. This device is an 802.11ac Dual Band Access Point with a built-in 802.11a/n/ac WLAN transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. At result of pretests, module supports three-channel transmission. (802.11 a/b/g/n/ac is chain A+ chain B +chain C).
4. The different of the each model is shown as below:

Model Number	Description
WK-2	White
WK-2-B	Black
WK-2-C	Circular case, White
WK-2-CB	Circular case, Black

5. This is requesting a Class II permissive change for FCC ID: SLY-WK2X33. Originally granted on 10/16/2015.  
The differences are listed as below:
  - Add the frequency band from 5.25GHz~5.35GHz, 5.47GHz~5.725GHz by software.  
This change can't be made by end user.
  - All other hardware is identical with original granted.
6. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11a is 6Mbps 、802.11n-20BW is 21.7Mbps 、802.11n-40BW is 45Mbps and 802.11ac(80M-BW) is 97.5 Mbps)
7. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.
8. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit (802.11a-6Mbps) Mode 2: Transmit (802.11n-20BW 21.7Mbps) Mode 3: Transmit (802.11n-40BW 45Mbps) Mode 4: Transmit (802.11ac-80BW-97.5Mbps)
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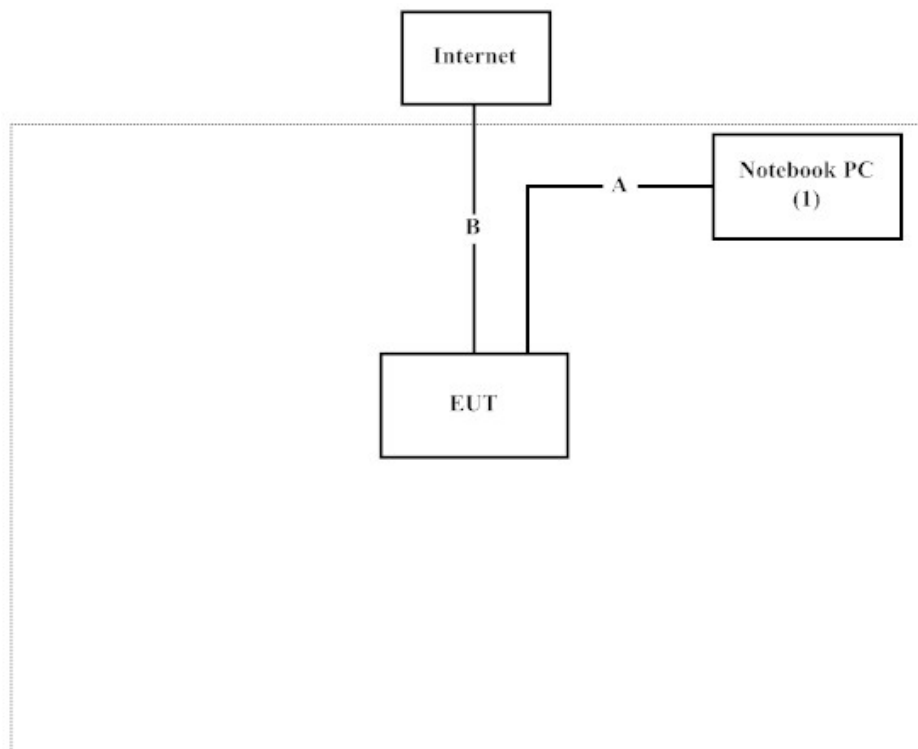
### 1.3. Tested System Details

List of support equipment and cables used during testing:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	PPT	N/A
				Non-Shielded, 0.8m

Signal Cable Type	Signal cable Description
A	LAN Cable
B	LAN Cable
	Non-Shielded, 1.8m

### 1.4. Configuration of tested System



### 1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute software “ART2-GUI (v2.3)” on the EUT.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press “OK” to start the continuous Transmit.
- (5) Verify that the EUT works properly.



## 1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories test site and management system can be downloaded from Quietek Corporation's Web Site : <http://www.quietek.com/chinese/about/certificates.aspx?bval=5>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>

Site Description: File on  
Federal Communications Commission  
FCC Engineering Laboratory  
7435 Oakland Mills Road  
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Registration Number: 92195

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E-Mail : [service@quietek.com](mailto:service@quietek.com)

FCC Accreditation Number: TW1014

## 2. Conducted Emission

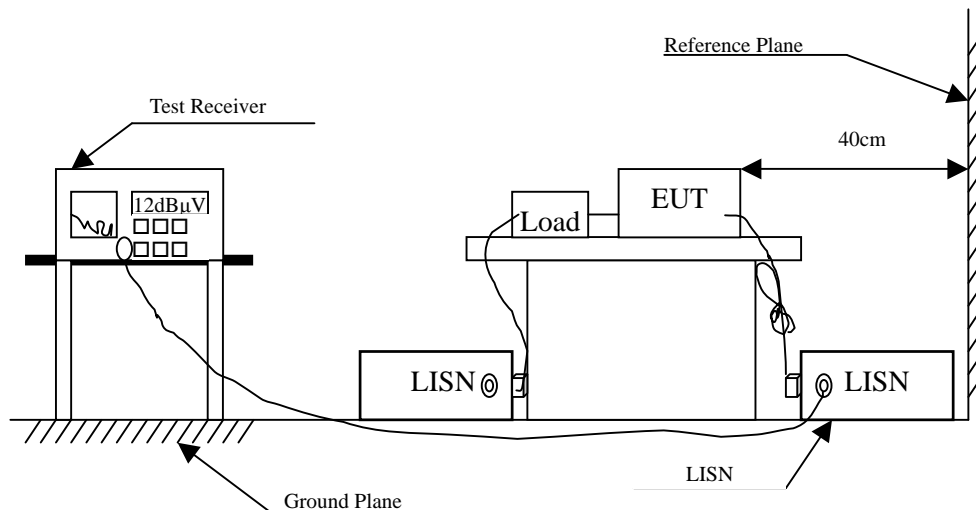
### 2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2015	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2015	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2015	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar., 2015	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2015	
	No.1 Shielded Room				

Note:

1. All equipment is calibrated once a year or as required by manufacturer.
2. All equipment is calibrated to traceable calibration procedures.
3. The test instruments marked by "X" are used to measure the final test results.

### 2.2. Test Setup



### 2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBμV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks : In the above table, the tighter limit applies at the band edges.

### 2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

The EUT was setup to ANSI C63.4, 2014; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

### 2.5. Uncertainty


± 2.99%

## 2.6. Test Result of Conducted Emission

Product : 802.11ac Dual Band Access Point  
Test Item : Conducted Emission Test  
Power Line : Line 1  
Test Mode : Mode 4: Transmit (802.11ac-80BW-97.5Mbps) (5290MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
<b>LINE 1</b>					
<b>Quasi-Peak</b>					
0.166	9.760	22.070	31.830	-33.713	65.543
0.287	9.761	26.780	36.541	-25.545	62.086
0.306	9.763	29.130	38.893	-22.650	61.543
0.689	9.793	9.000	18.793	-37.207	56.000
1.361	9.844	4.820	14.664	-41.336	56.000
3.470	9.953	13.960	23.913	-32.087	56.000
<b>Average</b>					
0.166	9.760	10.300	20.060	-35.483	55.543
0.287	9.761	24.550	34.311	-17.775	52.086
0.306	9.763	29.120	38.883	-12.660	51.543
0.689	9.793	7.110	16.903	-29.097	46.000
1.361	9.844	1.180	11.024	-34.976	46.000
3.470	9.953	9.420	19.373	-26.627	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11ac Dual Band Access Point  
Test Item : Conducted Emission Test  
Power Line : Line 2  
Test Mode : Mode 4: Transmit (802.11ac-80BW-97.5Mbps) (5290MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
<b>LINE 2</b>					
<b>Quasi-Peak</b>					
0.173	9.758	24.430	34.188	-31.155	65.343
0.306	9.763	28.760	38.523	-23.020	61.543
0.322	9.764	18.720	28.484	-32.602	61.086
0.525	9.780	10.450	20.230	-35.770	56.000
1.541	9.868	4.550	14.418	-41.582	56.000
3.630	9.956	14.860	24.816	-31.184	56.000
<b>Average</b>					
0.173	9.758	13.770	23.528	-31.815	55.343
0.306	9.763	28.540	38.303	-13.240	51.543
0.322	9.764	12.070	21.834	-29.252	51.086
0.525	9.780	8.910	18.690	-27.310	46.000
1.541	9.868	-0.500	9.368	-36.632	46.000
3.630	9.956	9.510	19.466	-26.534	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11ac Dual Band Access Point  
Test Item : Conducted Emission Test  
Power Line : Line 1  
Test Mode : Mode 4: Transmit (802.11ac-80BW-97.5Mbps) (5530MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV	dB	dBμV
<b>LINE 1</b>					
<b>Quasi-Peak</b>					
0.189	9.754	19.580	29.334	-35.552	64.886
0.283	9.761	27.410	37.171	-25.029	62.200
0.302	9.763	28.390	38.153	-23.504	61.657
0.326	9.764	20.320	30.084	-30.887	60.971
0.654	9.790	10.180	19.970	-36.030	56.000
3.677	9.957	15.030	24.987	-31.013	56.000
<b>Average</b>					
0.189	9.754	15.900	25.654	-29.232	54.886
0.283	9.761	27.400	37.161	-15.039	52.200
0.302	9.763	27.200	36.963	-14.694	51.657
0.326	9.764	17.510	27.274	-23.697	50.971
0.654	9.790	7.830	17.620	-28.380	46.000
3.677	9.957	10.930	20.887	-25.113	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : 802.11ac Dual Band Access Point  
Test Item : Conducted Emission Test  
Power Line : Line 2-Dipole  
Test Mode : Mode 4: Transmit (802.11ac-80BW-97.5Mbps) (5530MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBμV	dBμV	dB	dBμV
<b>LINE 2</b>					
<b>Quasi-Peak</b>					
0.177	9.757	22.790	32.547	-32.682	65.229
0.283	9.761	26.390	36.151	-26.049	62.200
0.306	9.763	29.130	38.893	-22.650	61.543
0.459	9.775	10.430	20.205	-36.966	57.171
0.845	9.805	8.040	17.845	-38.155	56.000
3.740	9.958	13.770	23.728	-32.272	56.000
<b>Average</b>					
0.177	9.757	10.620	20.377	-34.852	55.229
0.283	9.761	26.310	36.071	-16.129	52.200
0.306	9.763	29.120	38.883	-12.660	51.543
0.459	9.775	7.860	17.635	-29.536	47.171
0.845	9.805	6.250	16.055	-29.945	46.000
3.740	9.958	5.320	15.278	-30.722	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

### 3. Maximun conducted output power

#### 3.1. Test Equipment

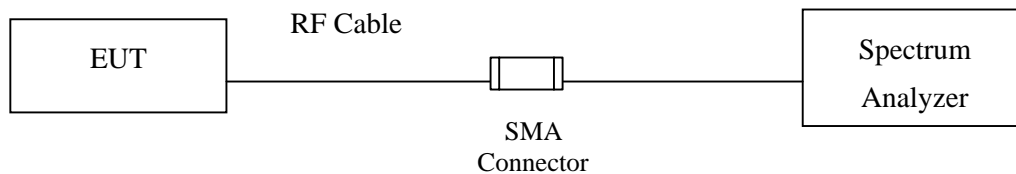
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2015
X	Power Sensor	Anritsu	MA2411B/0738448	Jun., 2015
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015

Note:

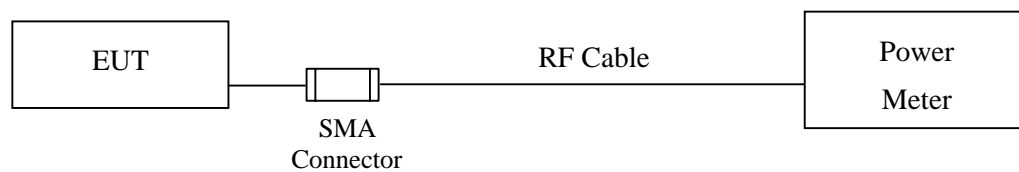
1. All equipment is calibrated once a year or as required by manufacturer.
2. All equipment is calibrated to traceable calibration procedures.
3. The test instruments marked with "X" are used to measure the final test results.

#### 3.2. Test Setup

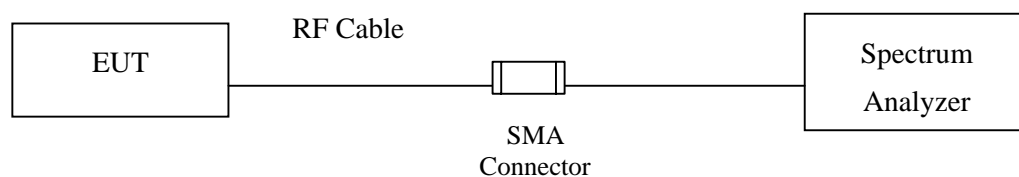
##### 99% Occupied Bandwidth



##### Conduction Power Measurement (for 802.11an)



##### Conduction Power Measurement (for 802.11ac)





### 3.3. Limits

#### 3.3.1. For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W, provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition. 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.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable 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. In addition. 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.

#### 3.3.2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$ , where B is the 99% emission bandwidth in megahertz. 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.

#### 3.3.3. For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any

corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### 3.4. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater than the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an ( $BW \leq 40\text{MHz}$ ) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter)

Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)

802.11ac ( $BW=80\text{MHz}$ ) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D01 section F) procedure is used for measurements.

### 3.5. Uncertainty

$\pm 1.27 \text{ dB}$

### 3.6. Test Result of Maximum conducted output power

Product : 802.11ac Dual Band Access Point  
Test Item : Maximum conducted output power  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

#### CHAIN A

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	17.49	--	--	--	--	--	--	--
60	5300	17.43	17.36	17.29	17.22	17.15	17.08	17.01	16.94
64	5320	17.38	--	--	--	--	--	--	--
100	5500	17.47	--	--	--	--	--	--	--
116	5580	17.52	17.48	17.44	17.4	17.36	17.32	17.28	17.24
140	5700	17.83	--	--	--	--	--	--	--

#### CHAIN B

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	17.77	--	--	--	--	--	--	--
60	5300	17.52	17.44	17.36	17.28	17.2	17.12	17.04	16.96
64	5320	17.47	--	--	--	--	--	--	--
100	5500	17.17	--	--	--	--	--	--	--
116	5580	17.15	17.09	17.03	16.97	16.91	16.85	16.79	16.73
140	5700	17.59	--	--	--	--	--	--	--

#### CHAIN C

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	17.69	--	--	--	--	--	--	--
60	5300	17.66	17.53	17.4	17.27	17.14	17.01	16.88	16.75
64	5320	17.35	--	--	--	--	--	--	--
100	5500	17.52	--	--	--	--	--	--	--
116	5580	17.25	17.18	17.11	17.04	16.97	16.9	16.83	16.76
140	5700	17.37	--	--	--	--	--	--	--

Note: 1.Maximum conducted output power Value =Reading value on average power meter + cable loss

**Maximum conducted output power measurement:  
CHAIN A+B+C (High Power):**

Channel No	Frequency Range	99% Bandwidth	Chain A Power	Chain B Power	Chain C Power	Output Power	Output Power Limit	
	(MHz)	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	dBm+10log(BW)
52	5260	17.590	17.49	17.77	17.69	22.42	24	23.45
60	5300	17.564	17.43	17.52	17.66	22.31	24	23.45
64	5320	17.610	17.38	17.47	17.35	22.17	24	23.46
100	5500	17.585	17.47	17.17	17.52	22.16	24	23.38
116	5580	17.643	17.52	17.15	17.25	22.08	24	23.40
140	5700	17.597	17.83	17.59	17.37	22.37	24	23.38

Note:

1. Power Output Value = Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW) + Chain C Power (mW)).
3. 99% Bandwidth is the bandwidth of chain A or chain B or chain C whichever is less bandwidth, output power limitation is more stringent.

**CHAIN A+B+C (Low power):**

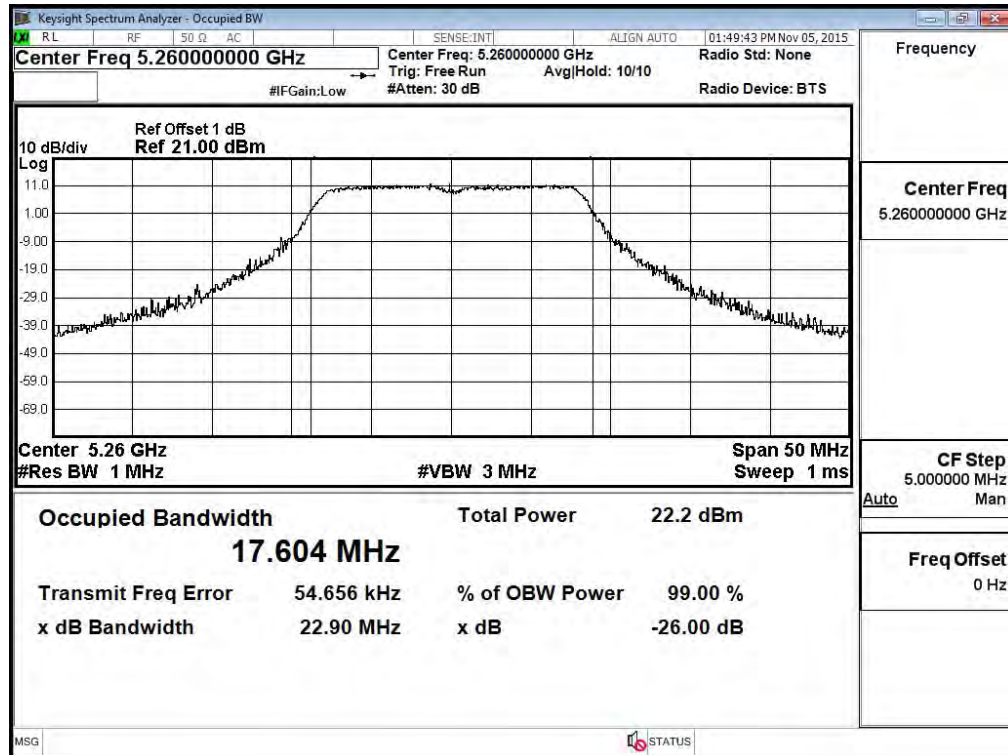
Channel Number	Frequency	Chain A Power	Chain B Power	Chain C Power	Output Power	Antenna Gain	EIRP	EIRP Limit
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
52	5260	10.43	10.68	10.54	15.32	5.60	20.92	24
60	5300	10.39	10.48	10.53	15.24	5.60	20.84	24
64	5320	10.30	10.39	10.19	15.07	5.60	20.67	24
100	5500	10.38	10.14	10.35	15.06	5.20	20.26	24
116	5580	10.49	10.08	10.21	15.03	5.20	20.23	24
140	5700	10.72	10.57	10.29	15.30	5.20	20.50	24

Note:

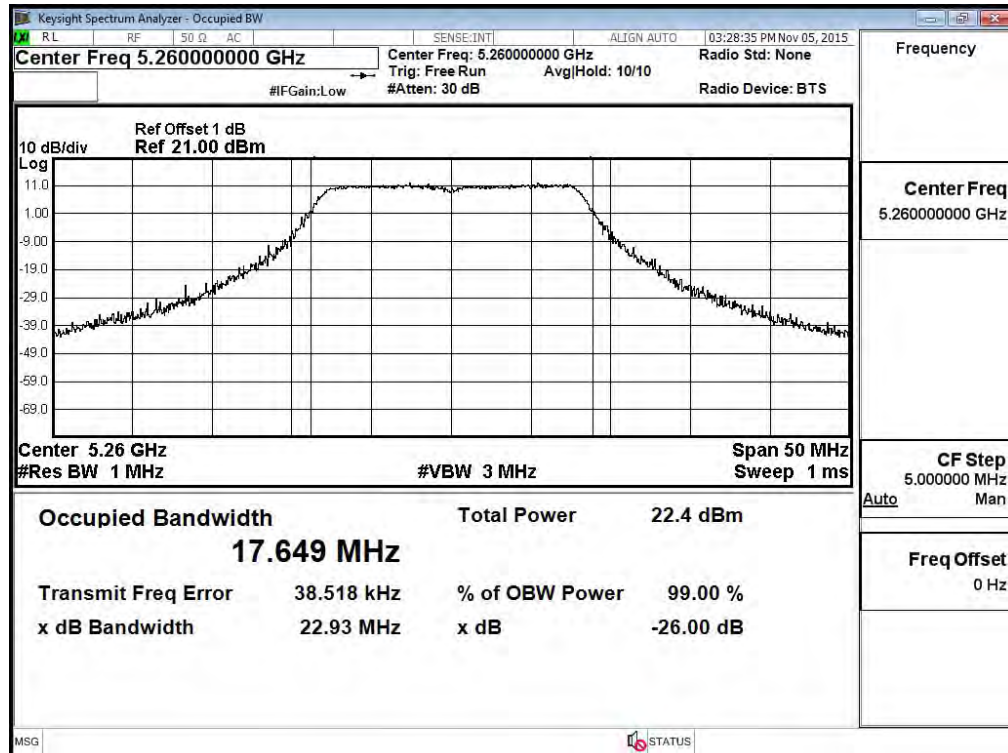
1. Power Output Value = Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW) + Chain C Power (mW)).
3. The EUT employ a TPC mechanism and the device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

## 99% Occupied Bandwidth:

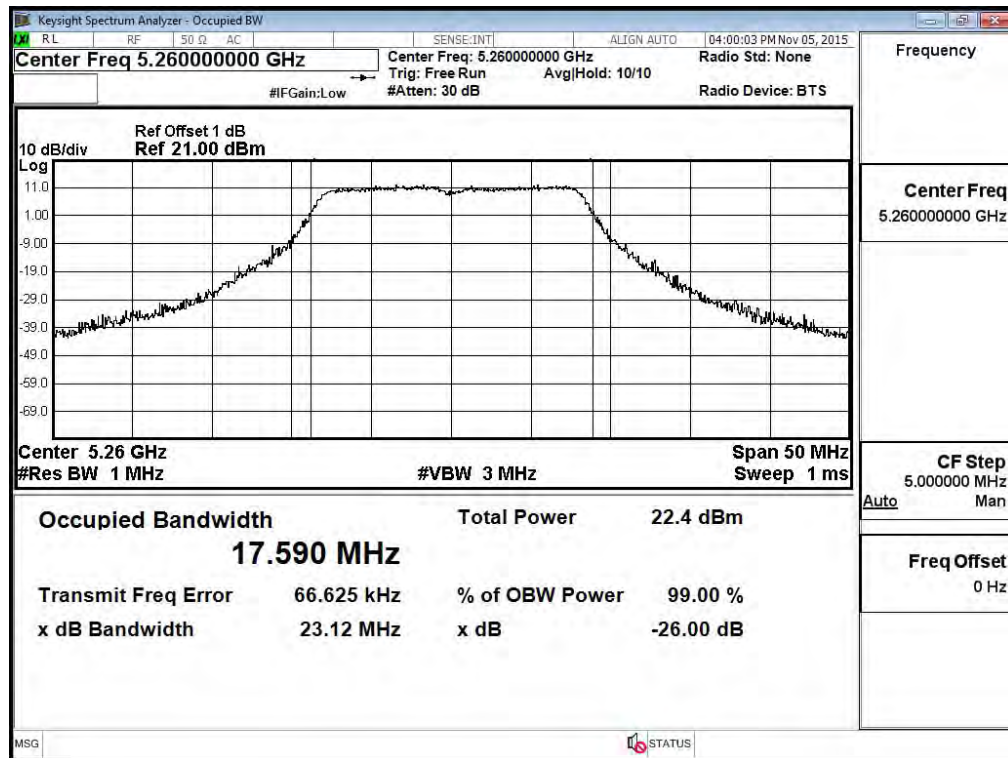
### Channel 52: Chain A



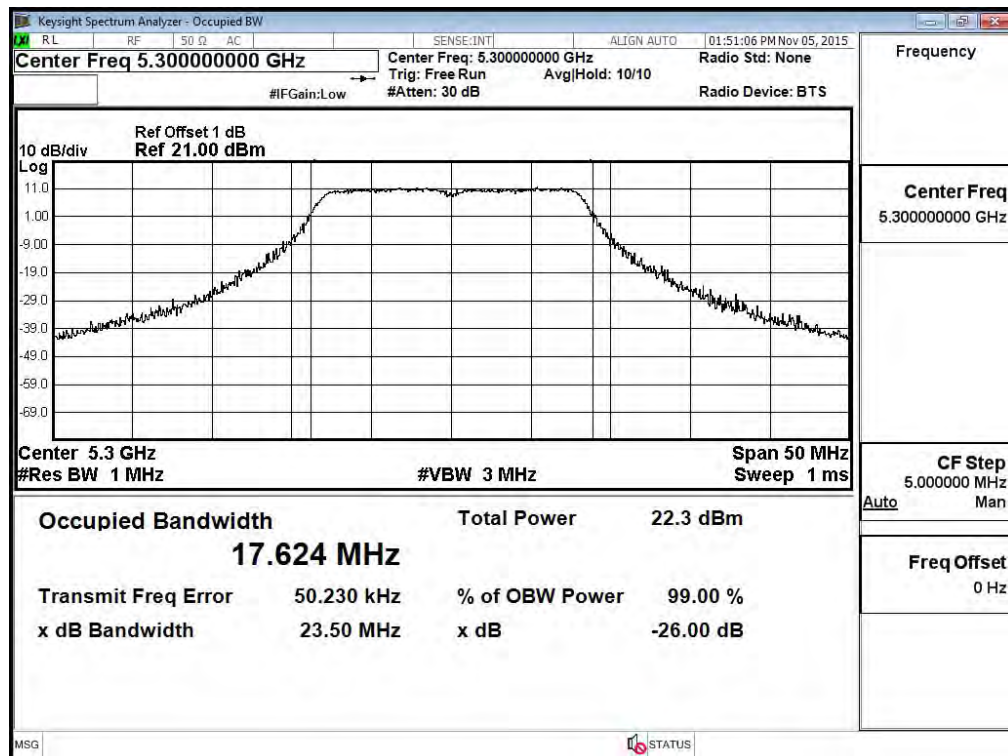
### Channel 52: Chain B



### Channel 52: Chain C

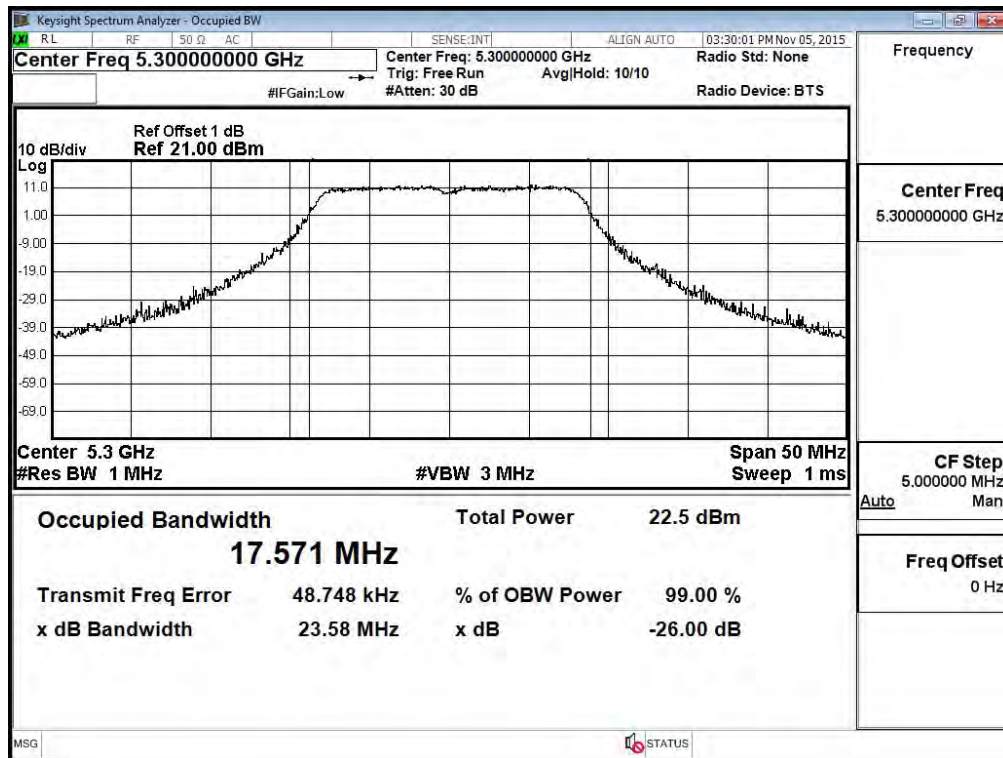


### Channel 60: Chain A

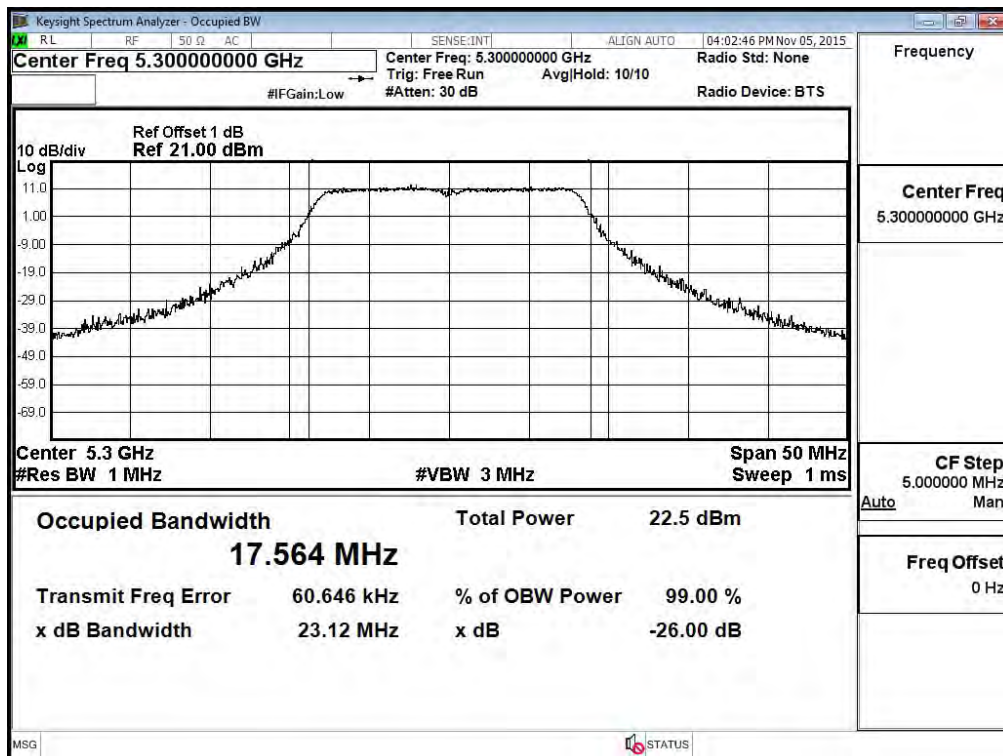




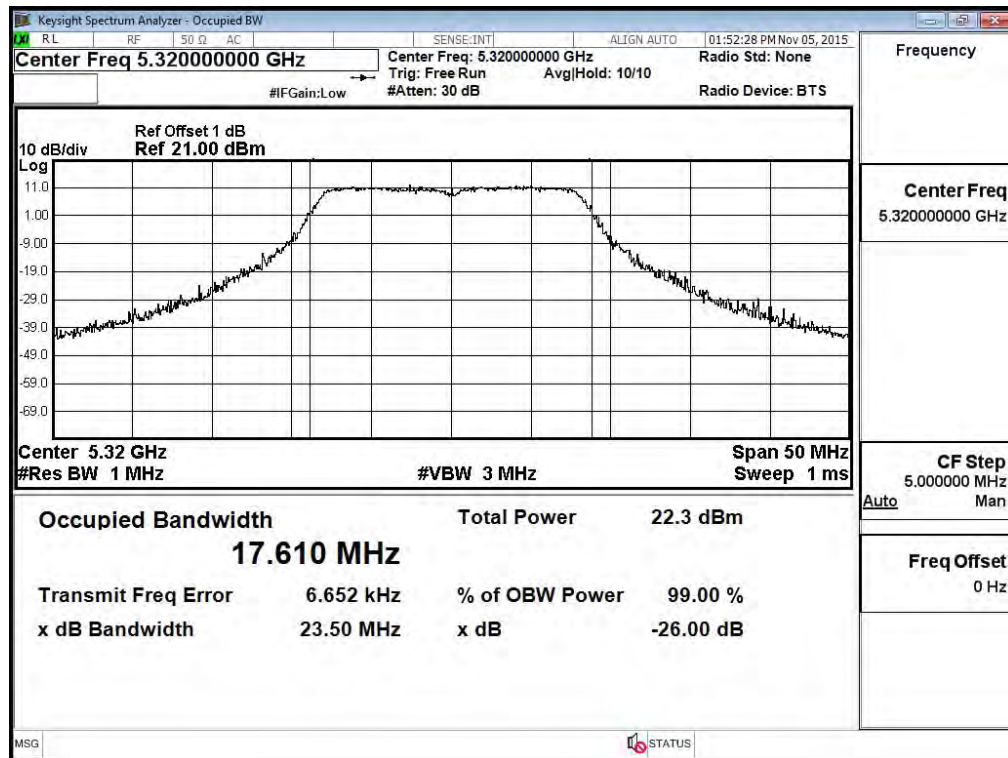
### Channel 60: Chain B



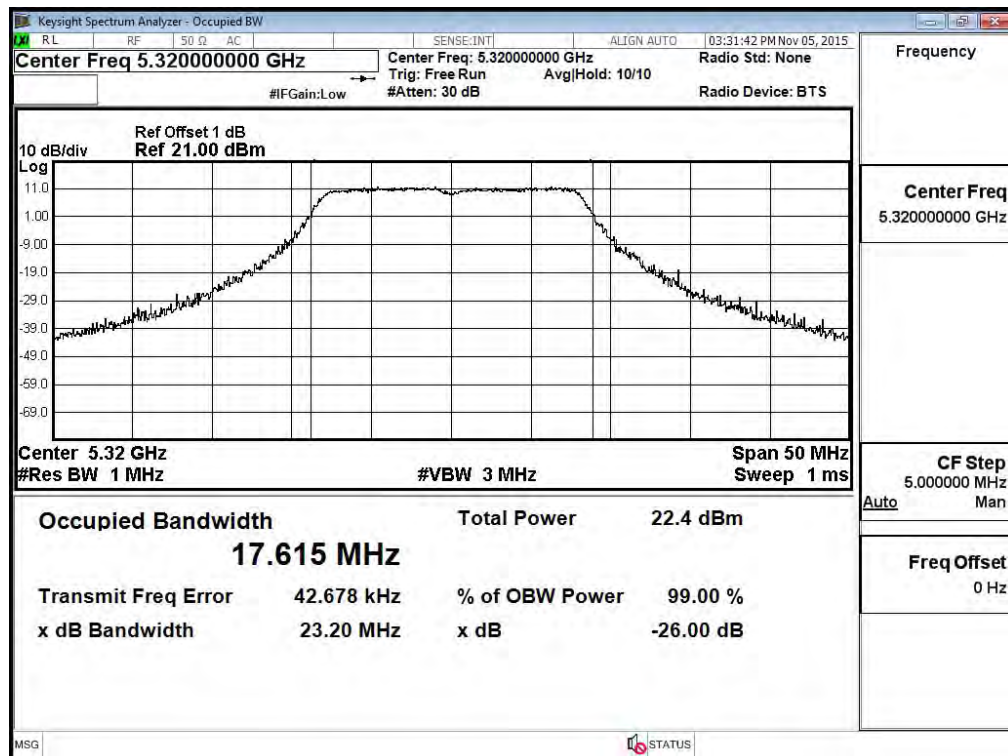
### Channel 60: Chain C



### Channel 64: Chain A

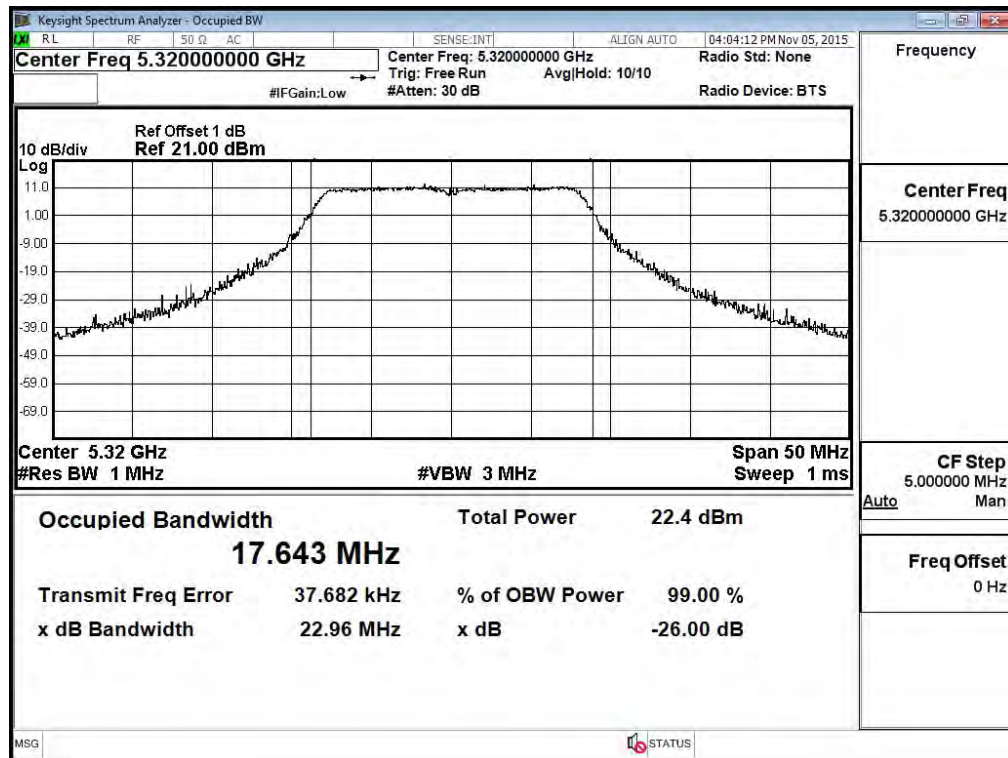


### Channel 64: Chain B

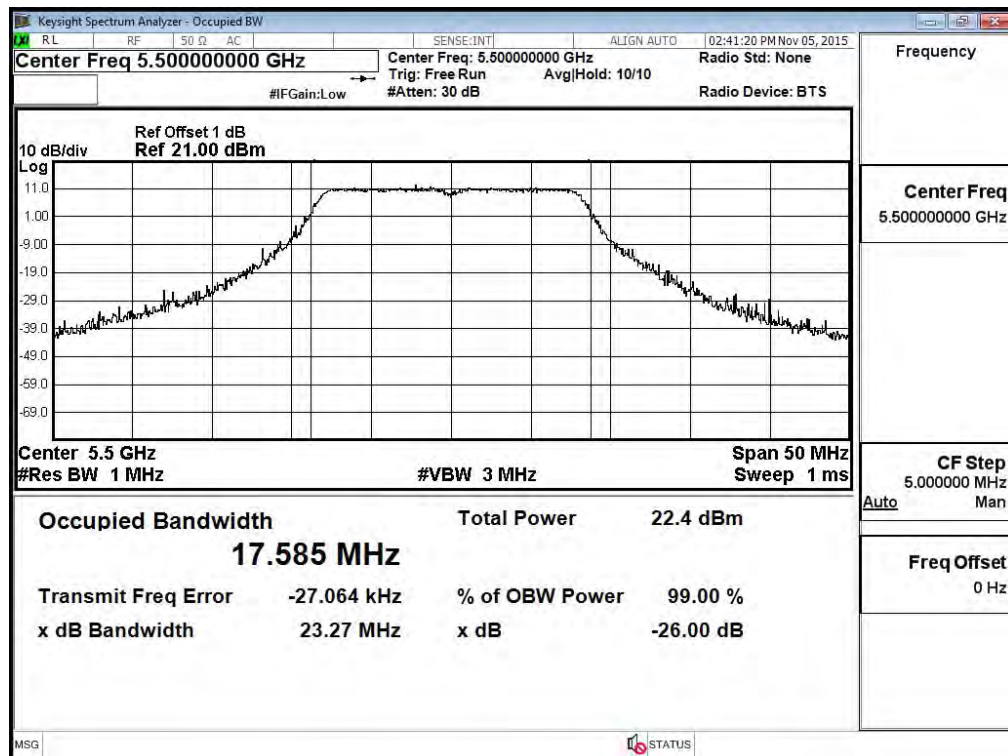




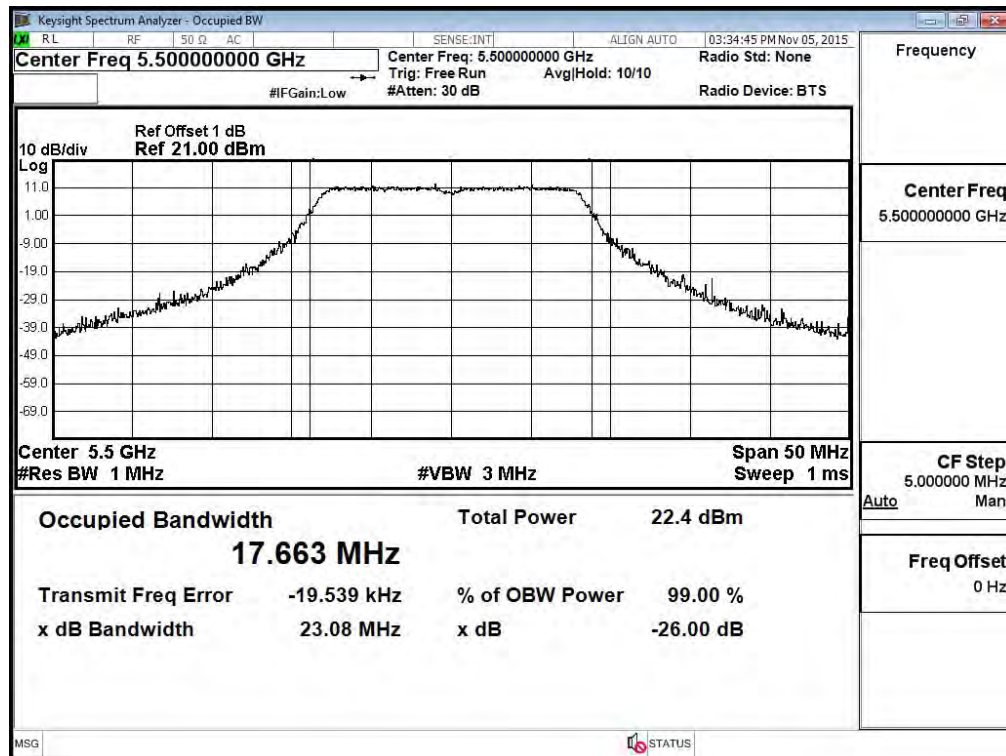
### Channel 64: Chain C



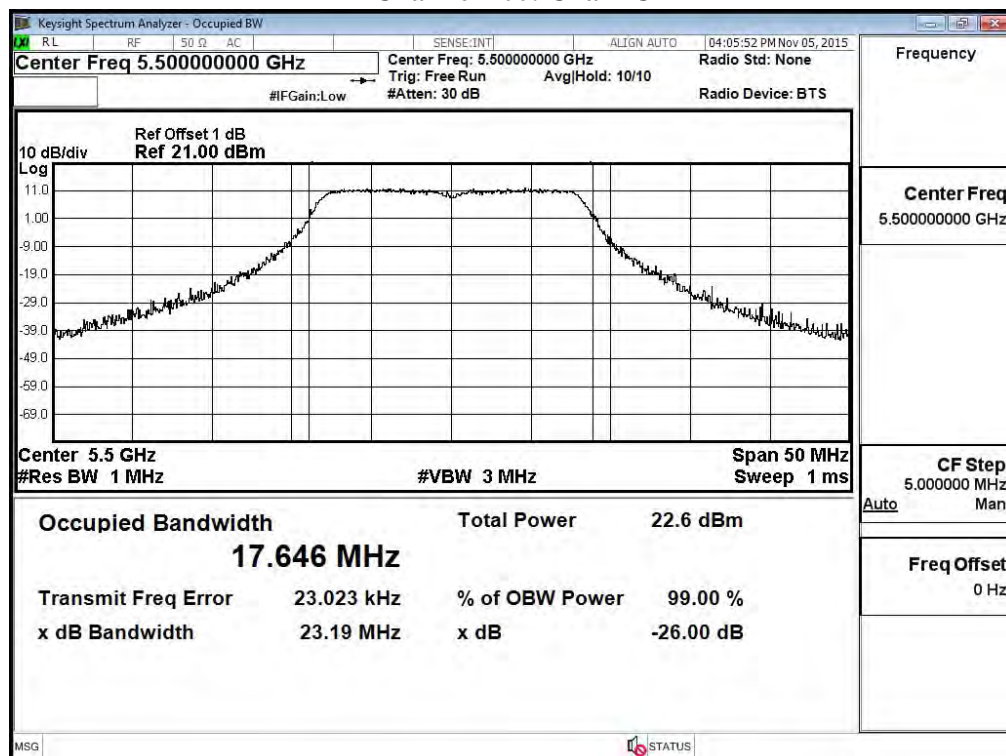
### Channel 100: Chain A



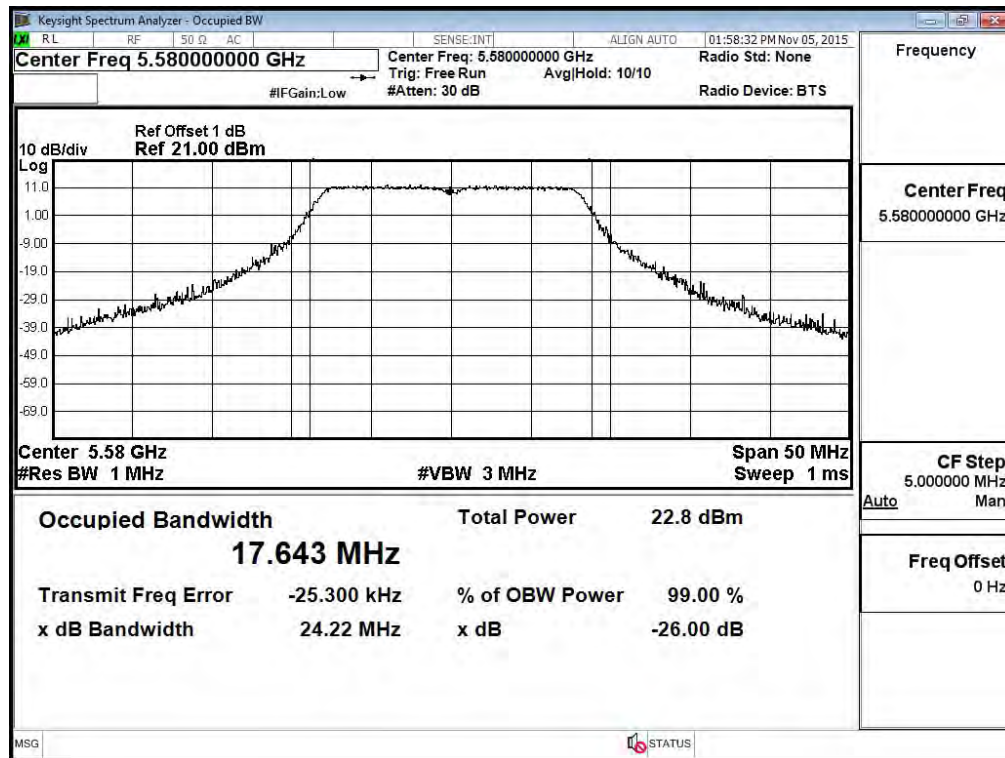
### Channel 100: Chain B



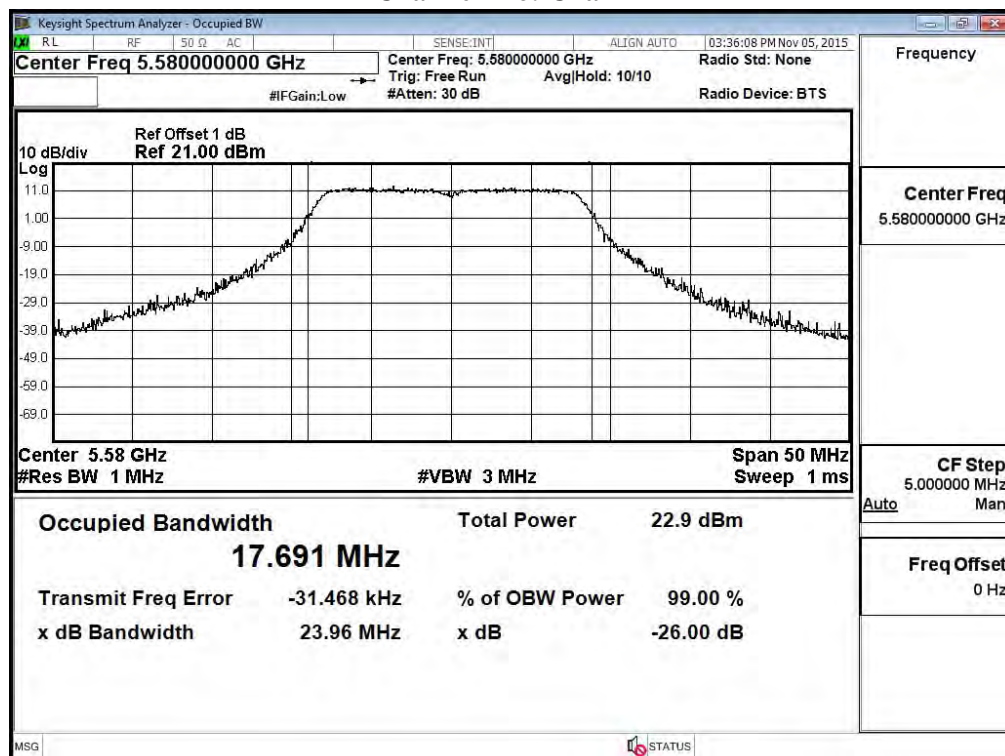
### Channel 100: Chain C



### Channel 116: Chain A

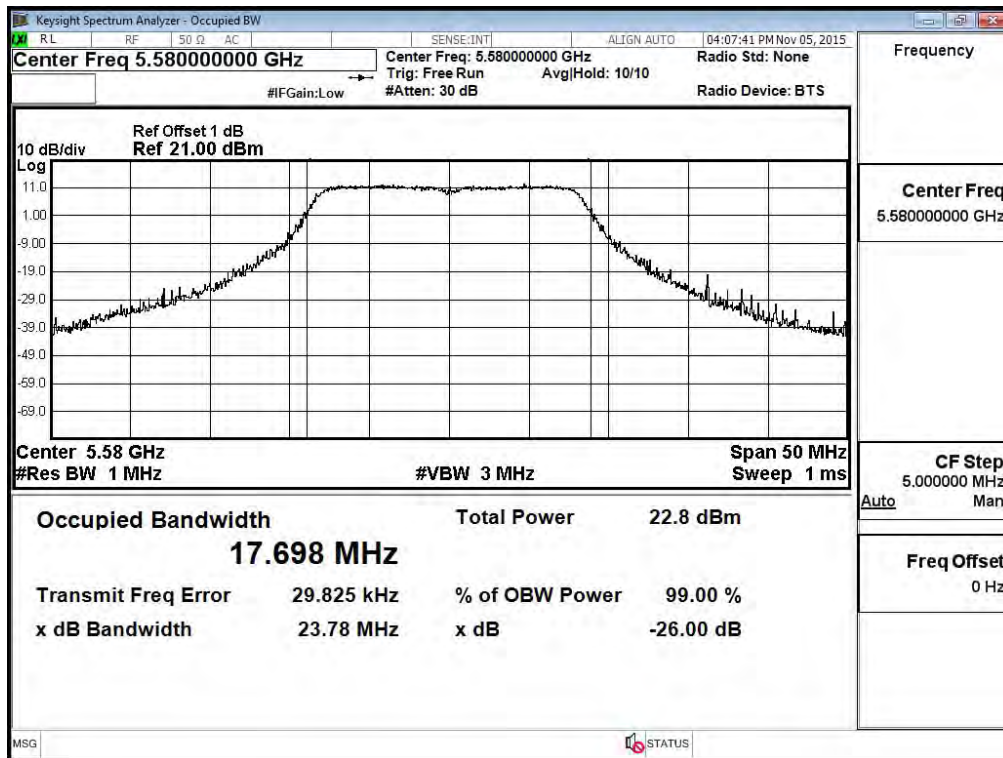


### Channel 116: Chain B

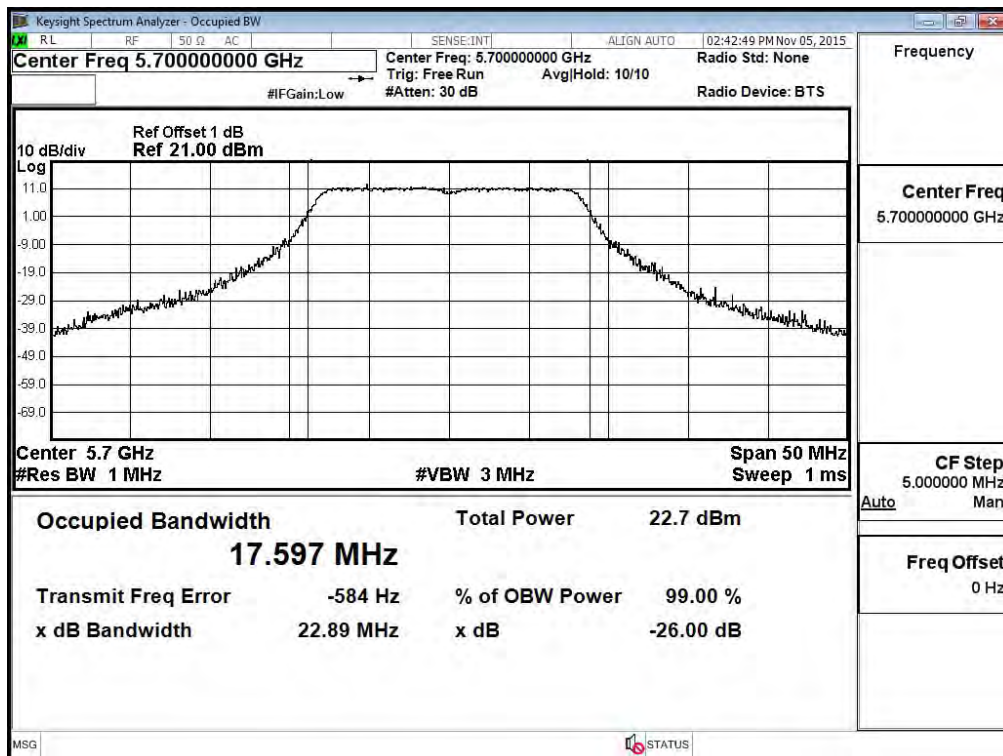




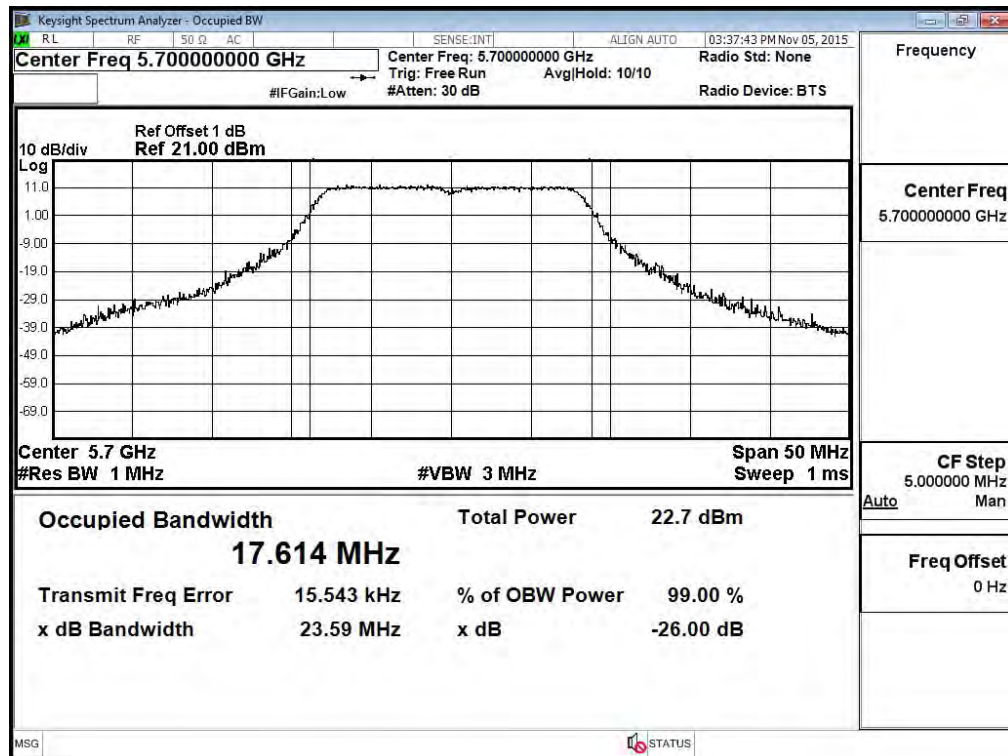
### Channel 116: Chain C



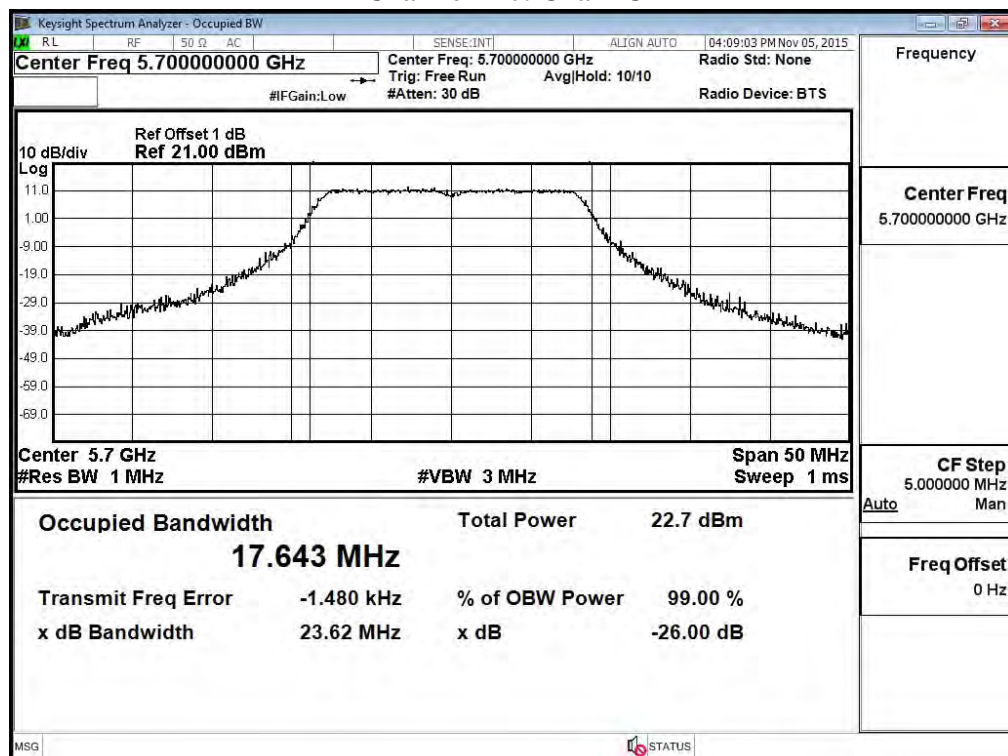
### Channel 140: Chain A



### Channel 140: Chain B



### Channel 140: Chain C



Product : 802.11ac Dual Band Access Point  
Test Item : Maximum conducted output power  
Test Site : No.3 OATS  
Test Mode : Mode 2: Transmit (802.11n-20BW 21.7Mbps)

#### CHAIN A

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		21.7	43.3	65	86.7	130.7	173.3	195	216.7
		Measurement Level (dBm)							
52	5260	17.46	--	--	--	--	--	--	--
60	5300	17.42	17.35	17.28	17.21	17.14	17.07	17	16.93
64	5320	17.88	--	--	--	--	--	--	--
100	5500	17.98	--	--	--	--	--	--	--
116	5580	18.06	17.98	17.9	17.82	17.74	17.66	17.58	17.5
140	5700	18.05	--	--	--	--	--	--	--

Note: 1.Maximum conducted output power Value =Reading value on average power meter + cable loss

#### CHAIN B

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		21.7	43.3	65	86.7	130.7	173.3	195	216.7
		Measurement Level (dBm)							
52	5260	17.74	--	--	--	--	--	--	--
60	5300	17.42	17.33	17.24	17.15	17.06	16.97	16.88	16.79
64	5320	17.87	--	--	--	--	--	--	--
100	5500	17.55	--	--	--	--	--	--	--
116	5580	18.03	17.98	17.93	17.88	17.83	17.78	17.73	17.68
140	5700	17.95	--	--	--	--	--	--	--

Note: 1.Maximum conducted output power Value =Reading value on average power meter + cable loss

#### CHAIN C

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		21.7	43.3	65	86.7	130.7	173.3	195	216.7
		Measurement Level (dBm)							
52	5260	17.44	--	--	--	--	--	--	--
60	5300	17.45	17.39	17.33	17.27	17.21	17.15	17.09	17.03
64	5320	17.75	--	--	--	--	--	--	--
100	5500	17.53	--	--	--	--	--	--	--
116	5580	17.77	17.69	17.61	17.53	17.45	17.37	17.29	17.21
140	5700	17.99	--	--	--	--	--	--	--

Note: 1.Maximum conducted output power Value =Reading value on average power meter + cable loss

### Maximum conducted output power measurement:

#### CHAIN A+B+C (High power):

Channel No	Frequency Range	99% Bandwidth	Chain A Power	Chain B Power	Chain C Power	Output Power	Output Power Limit	
	(MHz)	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	dBm+10log(BW)
52	5260	18.678	17.46	17.74	17.44	22.32	24	23.71
60	5300	18.638	17.42	17.42	17.45	22.20	24	23.70
64	5320	18.696	17.88	17.87	17.75	22.60	24	23.72
100	5500	18.613	17.98	17.55	17.53	22.46	24	23.63
116	5580	18.667	18.06	18.03	17.77	22.73	24	23.64
140	5700	18.613	18.05	17.95	17.99	22.77	24	23.63

Note:

1. Power Output Value = Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW) + Chain C Power (mW)).
3. 99% Bandwidth is the bandwidth of chain A or chain B or chain C whichever is less bandwidth, output power limitation is more stringent.

#### CHAIN A+B+C (Low power):

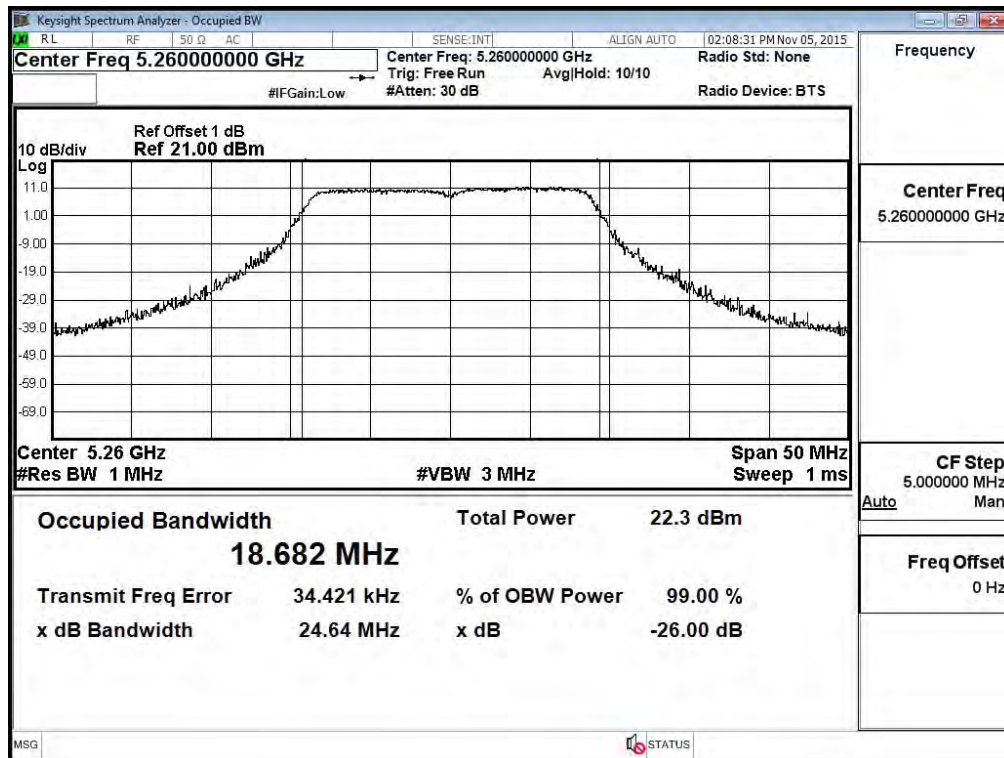
Channel Number	Frequency	Chain A Power	Chain B Power	Chain C Power	Output Power	Antenna Gain	EIRP	EIRP Limit
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
52	5260	10.32	10.66	10.32	15.21	5.60	20.81	24
60	5300	10.31	10.37	10.41	15.13	5.60	20.73	24
64	5320	10.70	10.83	10.69	15.51	5.60	21.11	24
100	5500	10.84	10.49	10.46	15.37	5.20	20.57	24
116	5580	10.90	11.00	10.69	15.64	5.20	20.84	24
140	5700	10.96	10.87	10.97	15.70	5.20	20.90	24

Note:

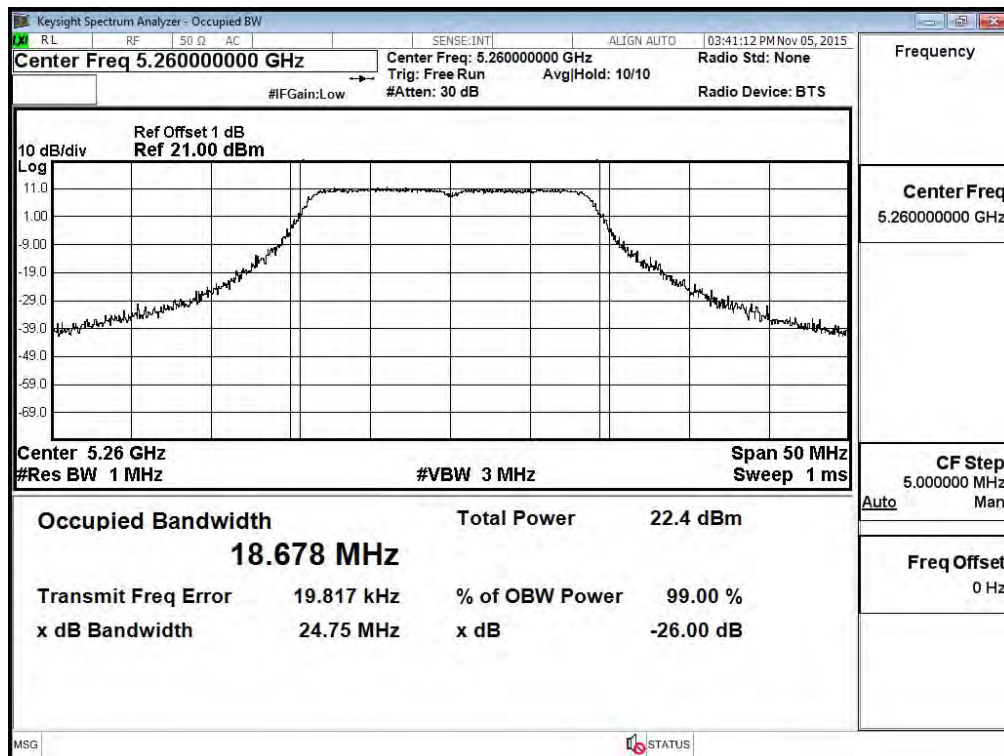
1. Power Output Value = Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW) + Chain C Power (mW)).
3. The EUT employ a TPC mechanism and the device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

### 99% Occupied Bandwidth:

#### Channel 52: Chain A

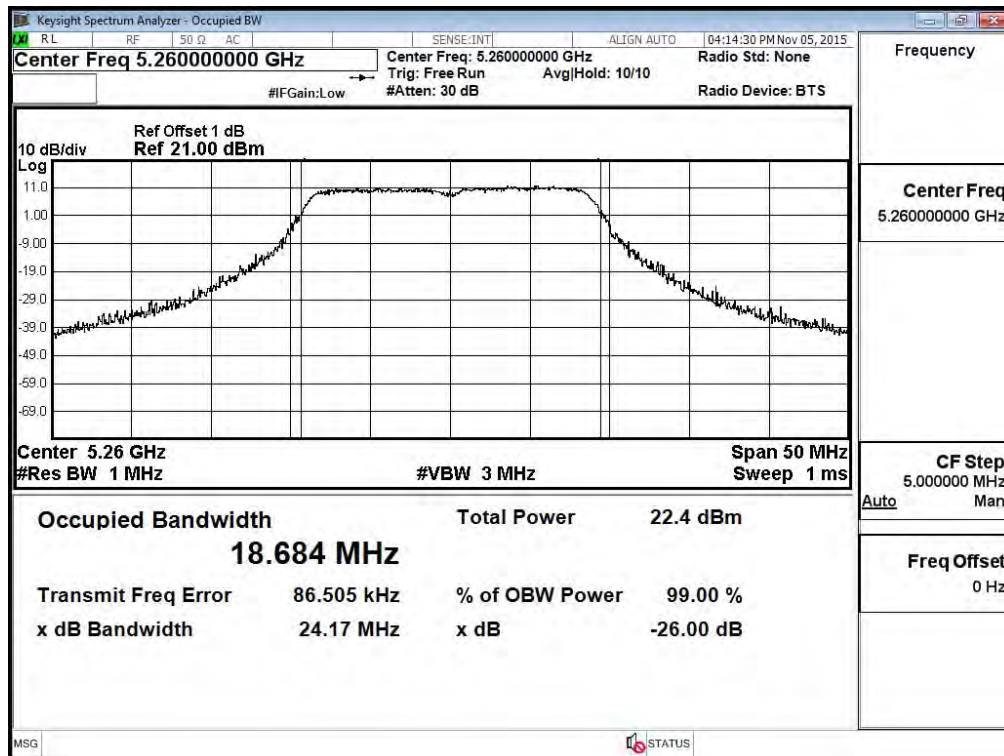


#### Channel 52: Chain B

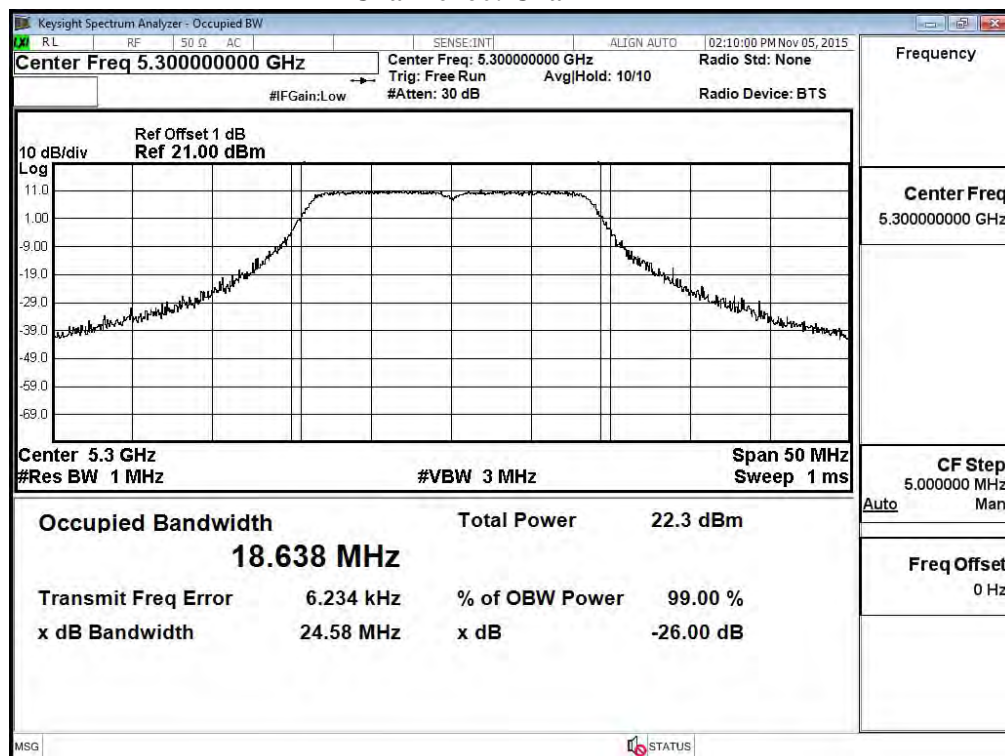




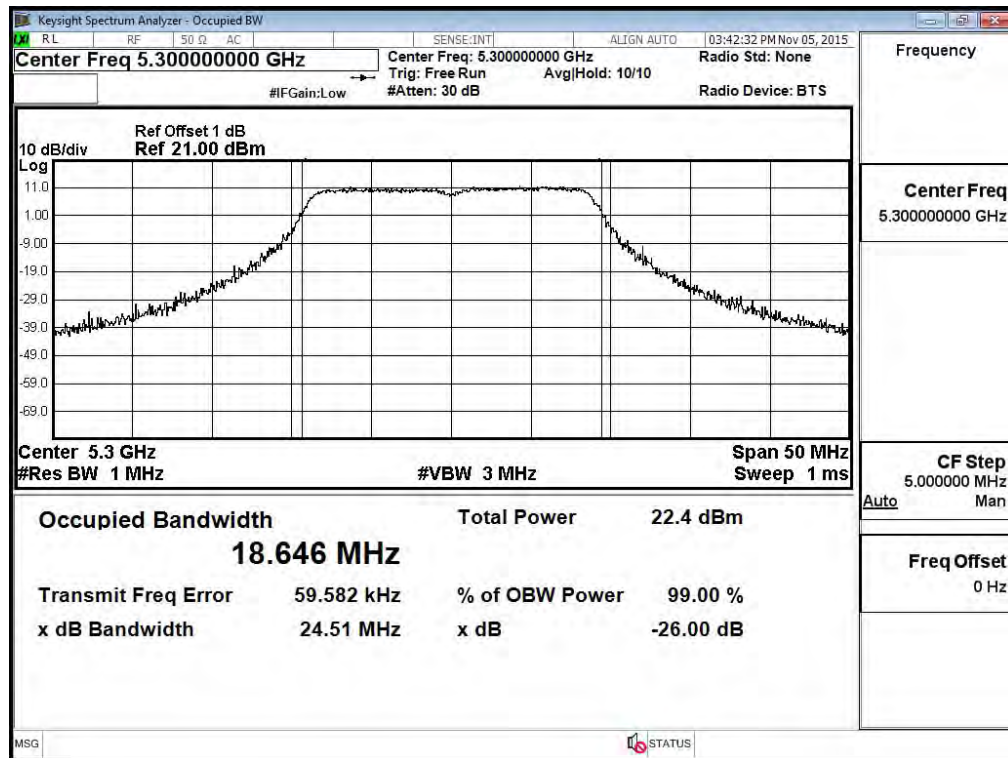
### Channel 52: Chain C



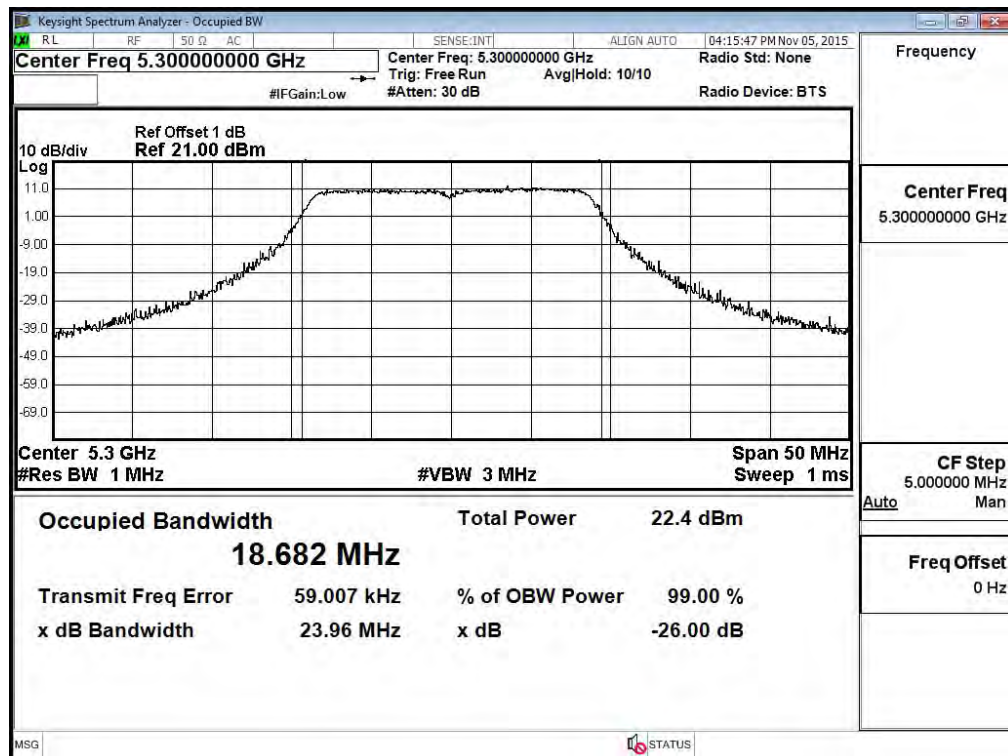
### Channel 60: Chain A



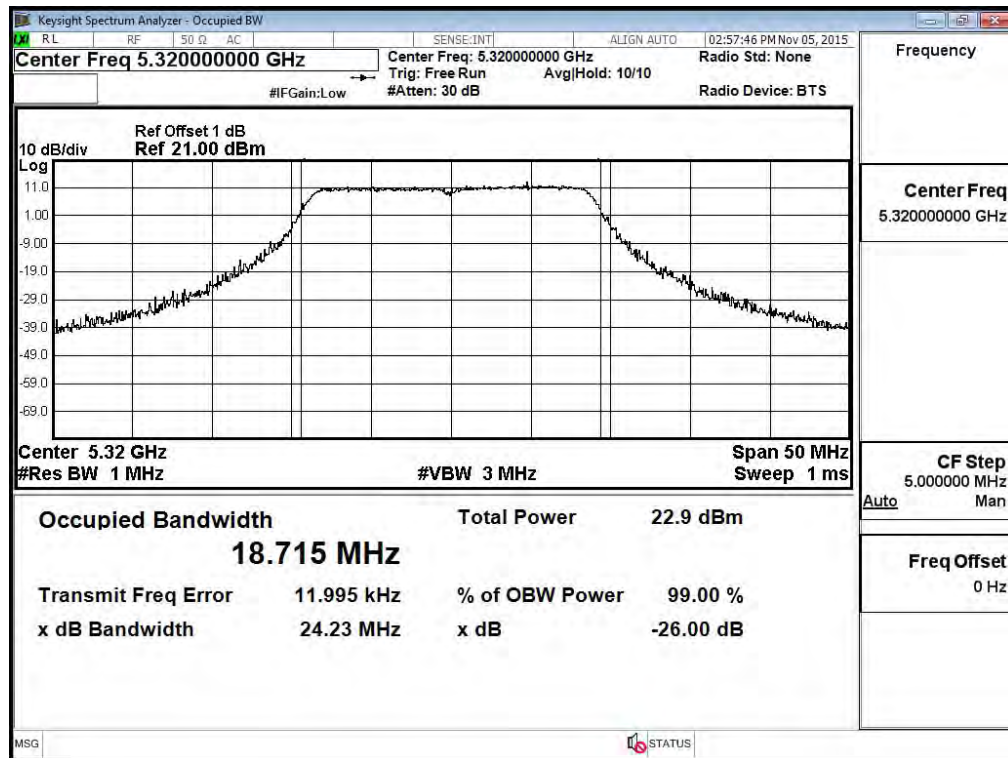
### Channel 60: Chain B



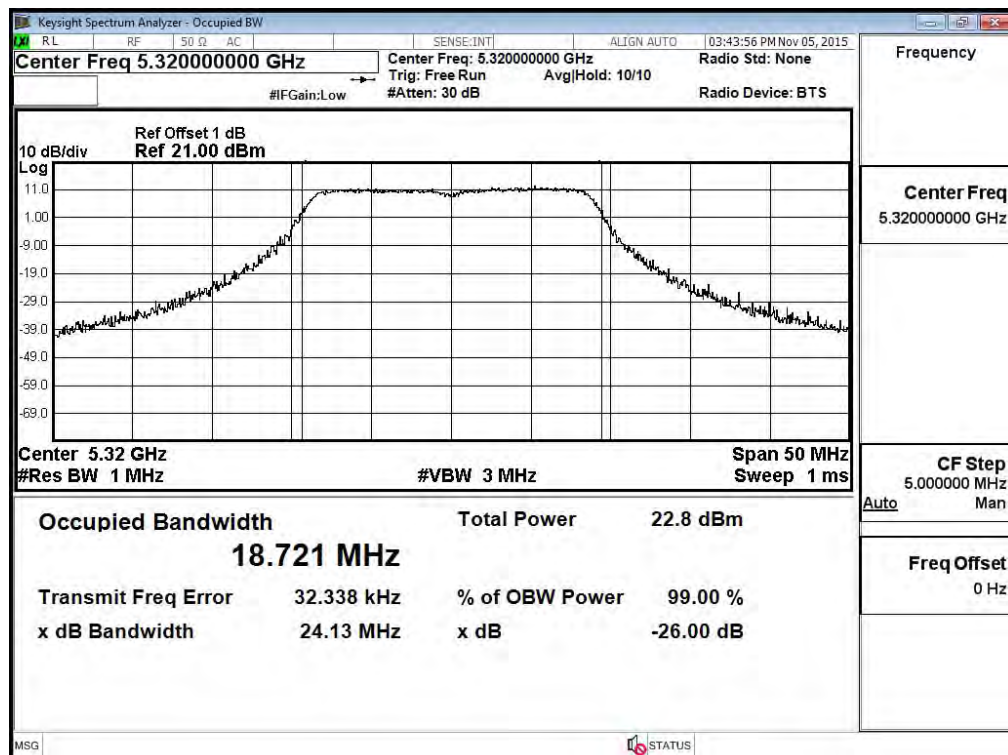
### Channel 60: Chain C



### Channel 64: Chain A

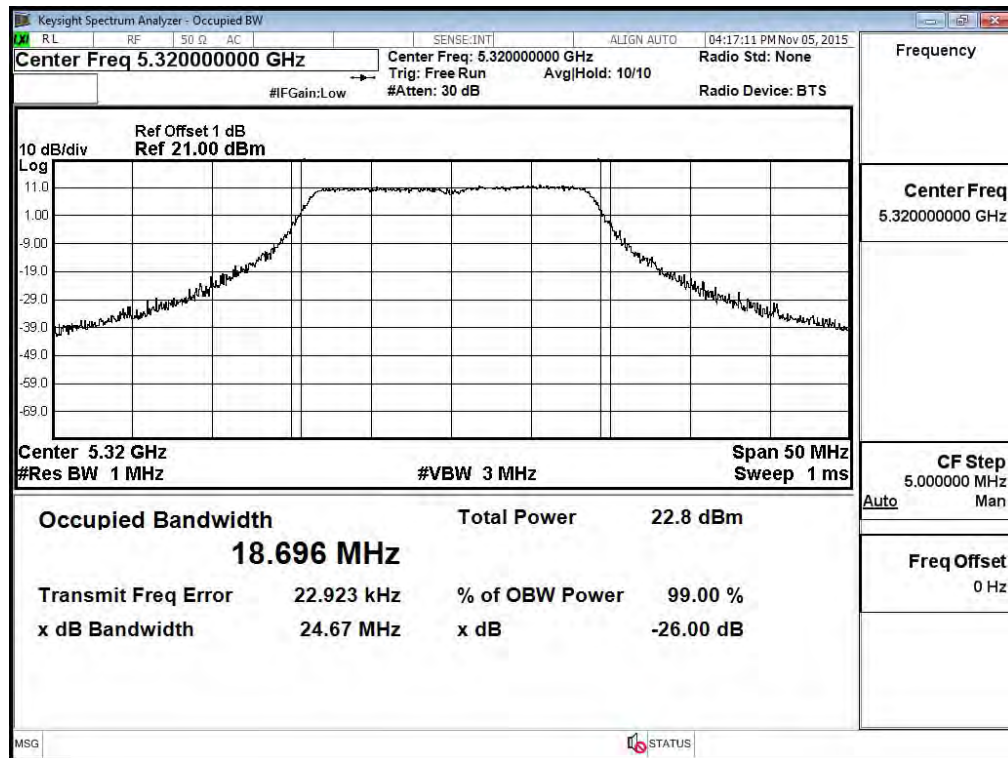


### Channel 64: Chain B

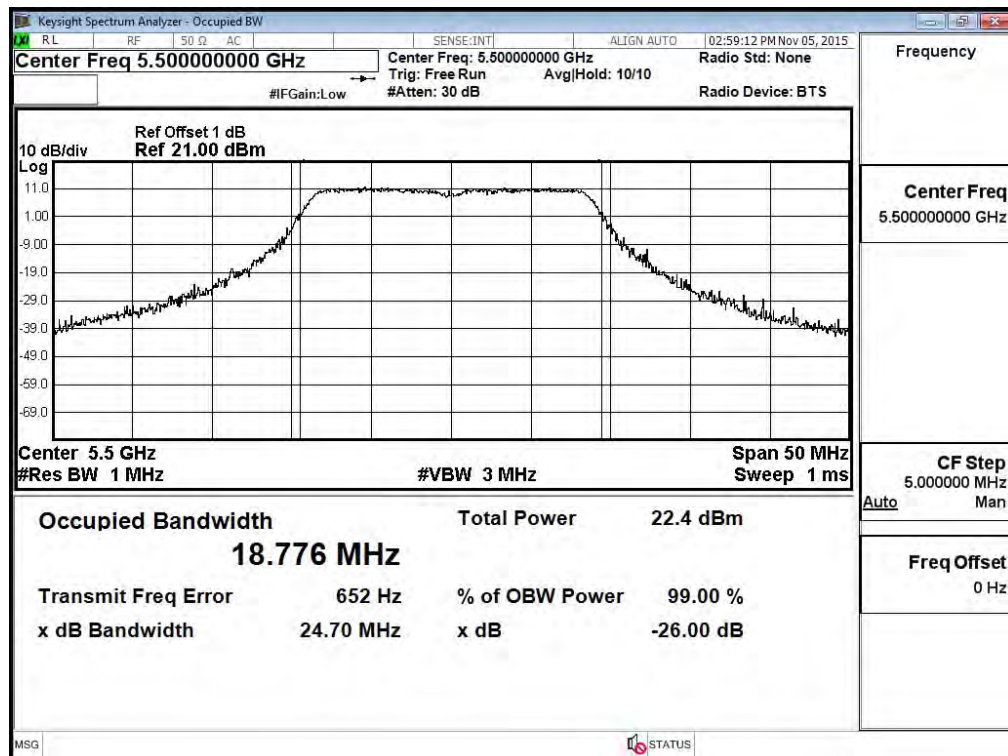




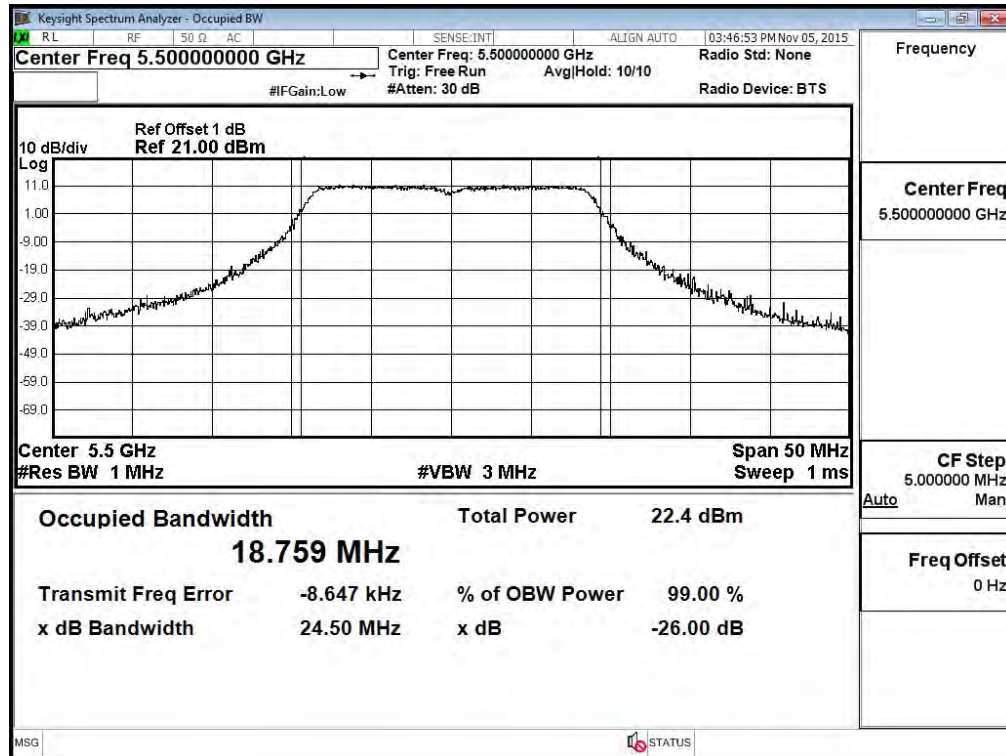
### Channel 64: Chain C



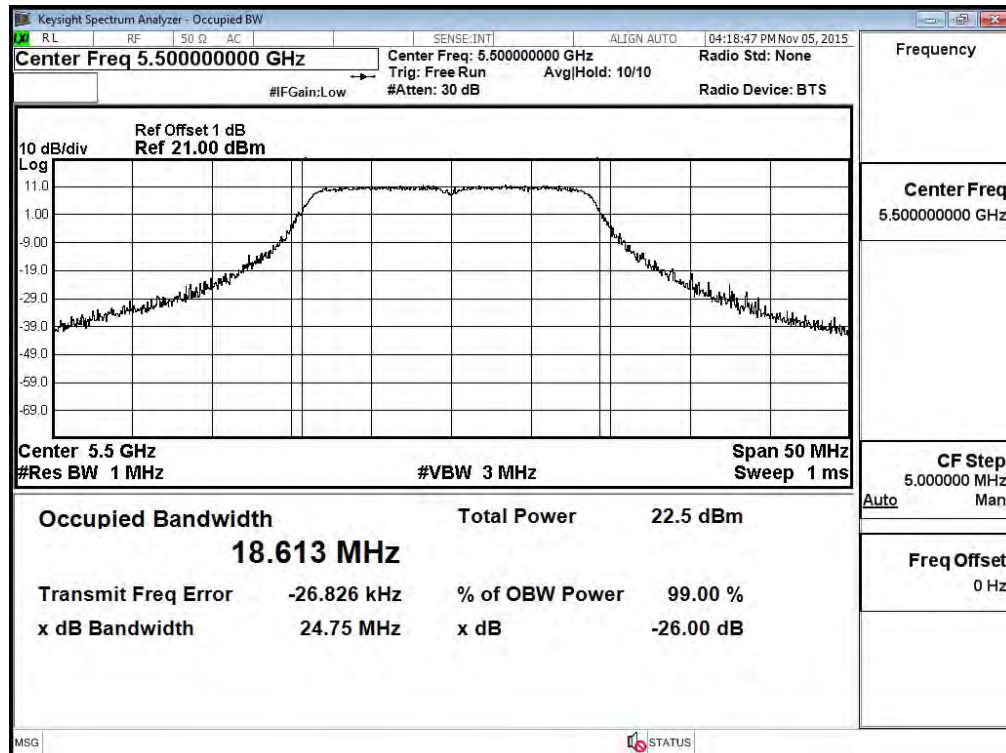
### Channel 100: Chain A



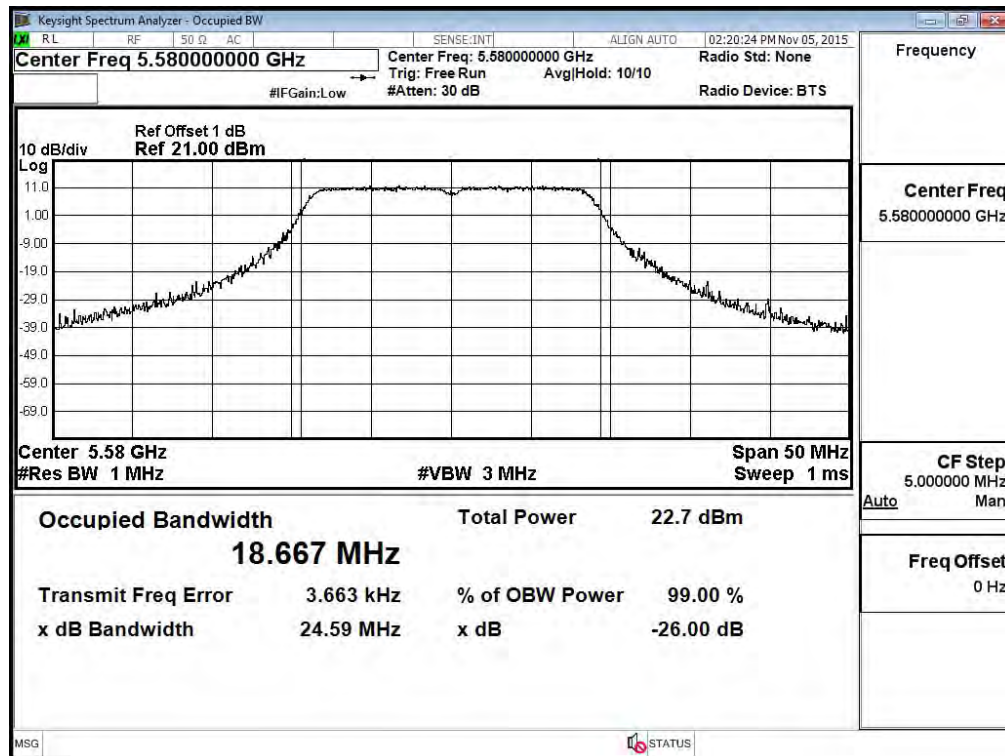
### Channel 100: Chain B



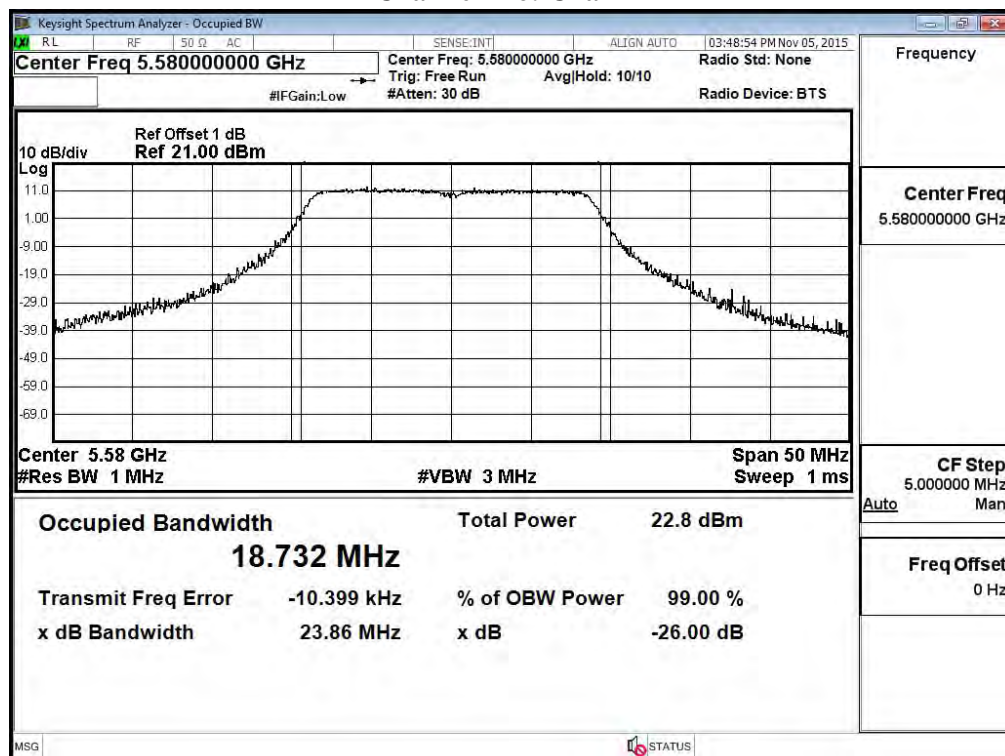
### Channel 100: Chain C



### Channel 116: Chain A

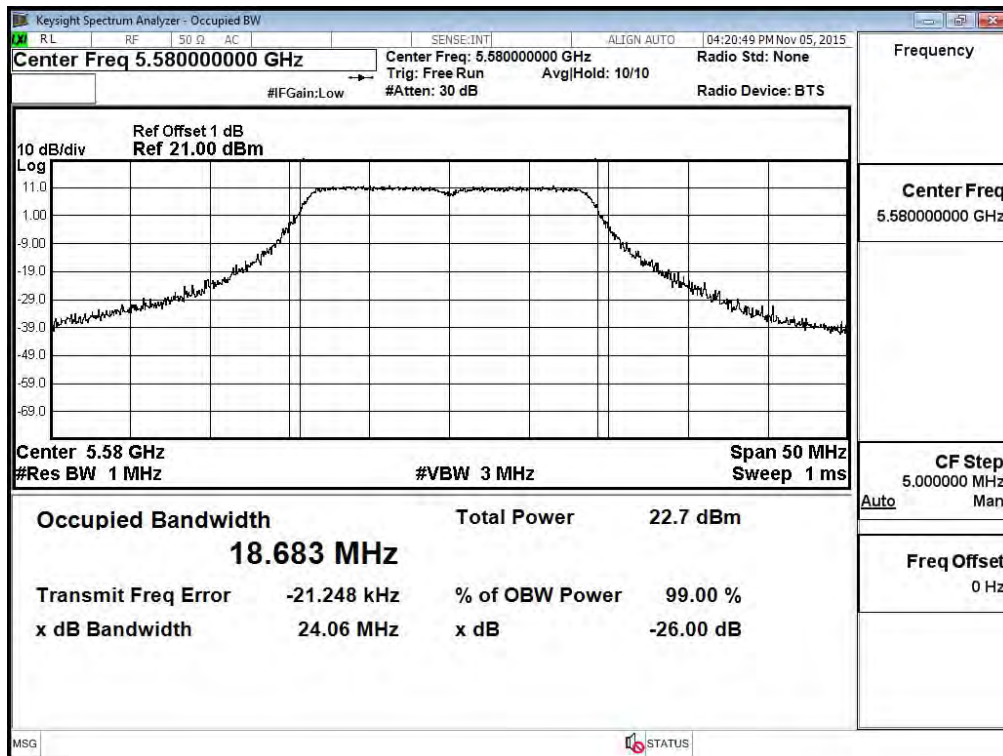


### Channel 116: Chain B

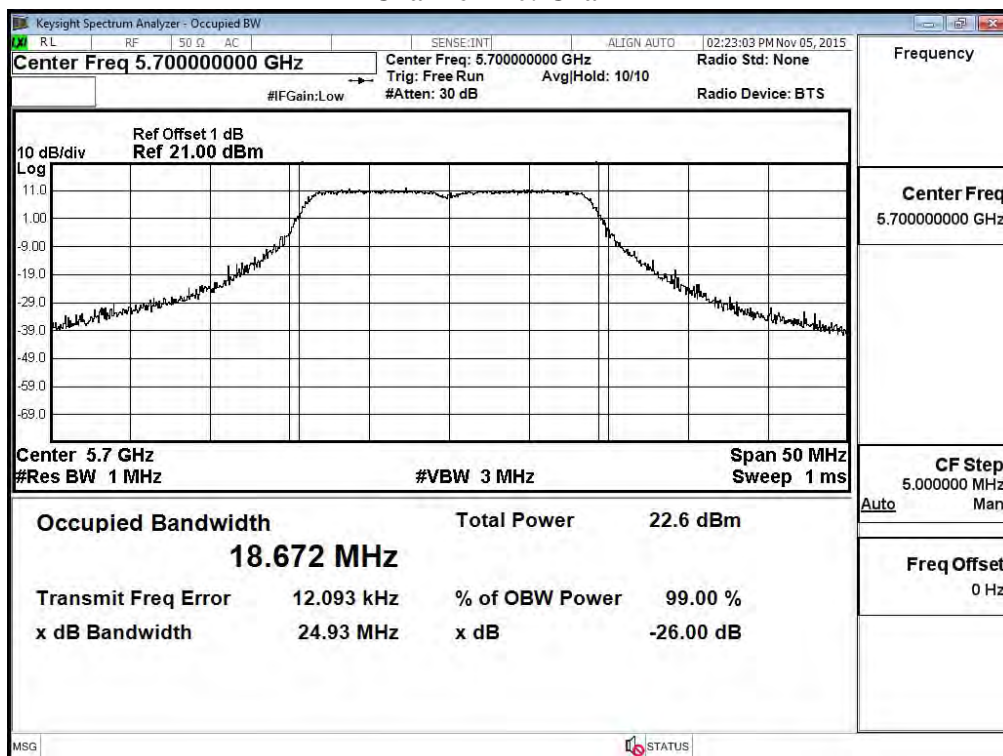




### Channel 116: Chain C

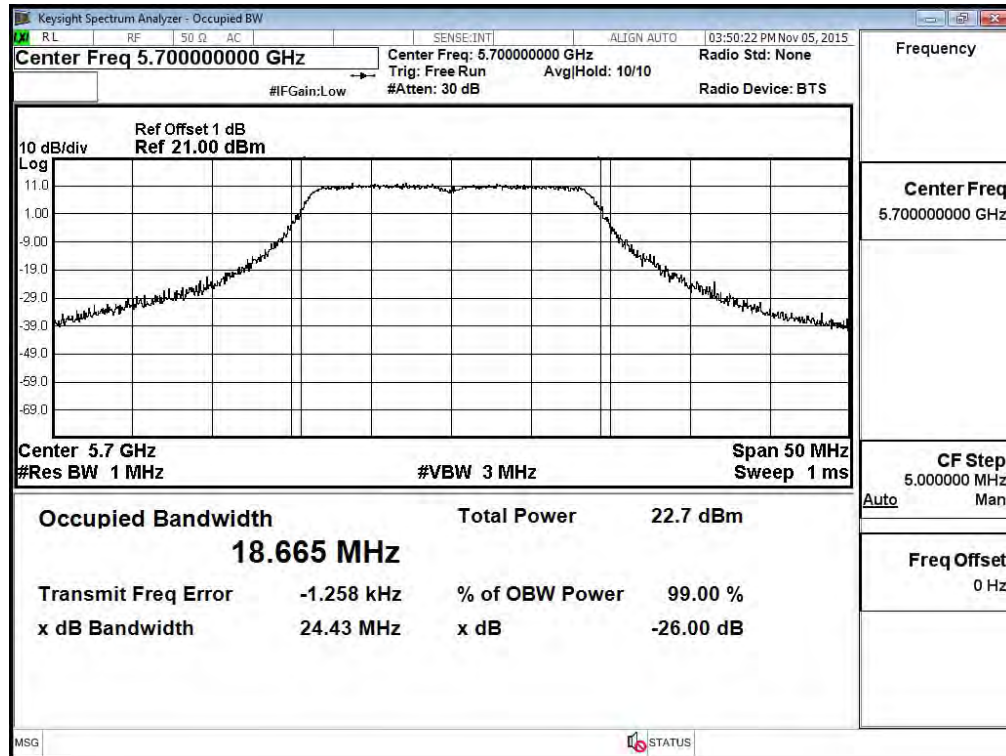


### Channel 140: Chain A

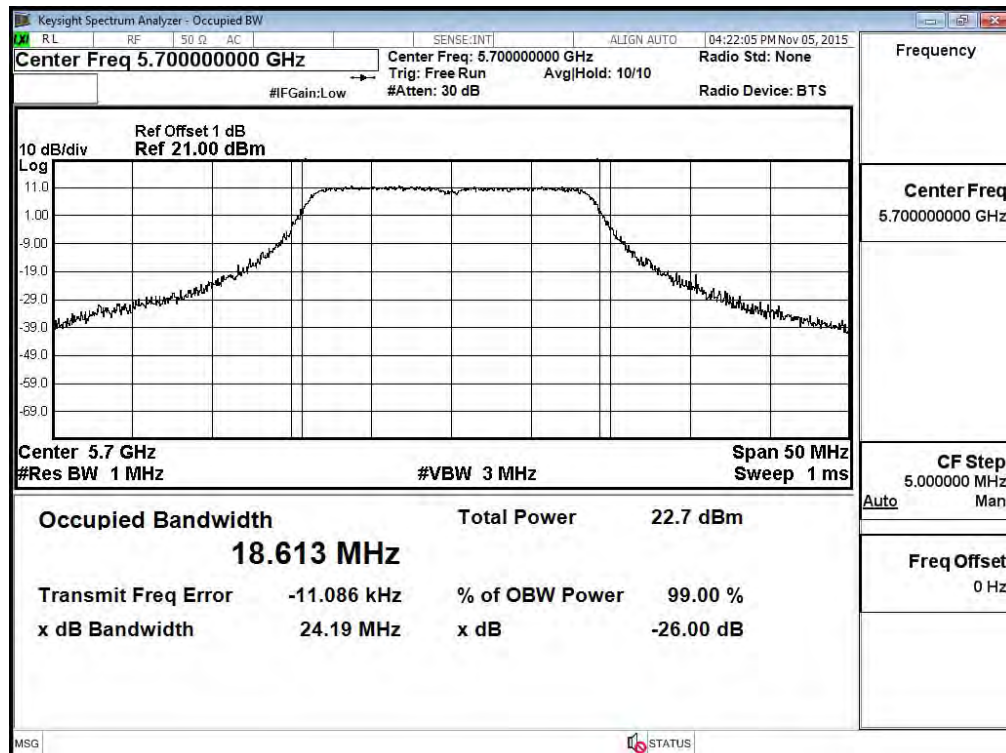




### Channel 140: Chain B



### Channel 140: Chain C



Product : 802.11ac Dual Band Access Point  
Test Item : Maximum conducted output power  
Test Site : No.3 OATS  
Test Mode : Mode 3: Transmit (802.11n-40BW 45Mbps)

#### CHAIN A

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		45	90	135	180	270	360	405	450
		Measurement Level (dBm)							
54	5270	18.89	--	--	--	--	--	--	--
62	5310	16.88	16.79	16.7	16.61	16.52	16.43	16.34	16.25
102	5510	16.89	--	--	--	--	--	--	--
110	5550	18.71	18.66	18.61	18.56	18.51	18.46	18.41	18.36
134	5670	18.33	--	--	--	--	--	--	--

Note: 1.Maximum conducted output power Value =Reading value on average power meter + cable loss

#### CHAIN B

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		45	90	135	180	270	360	405	450
		Measurement Level (dBm)							
54	5270	19.03	--	--	--	--	--	--	--
62	5310	17.33	17.28	17.23	17.18	17.13	17.08	17.03	16.98
102	5510	17.11	--	--	--	--	--	--	--
110	5550	18.77	18.69	18.61	18.53	18.45	18.37	18.29	18.21
134	5670	18.46	--	--	--	--	--	--	--

Note: 1.Maximum conducted output power Value =Reading value on average power meter + cable loss

#### CHAIN C

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		45	90	135	180	270	360	405	450
		Measurement Level (dBm)							
54	5270	18.72	--	--	--	--	--	--	--
62	5310	16.87	16.81	16.75	16.69	16.63	16.57	16.51	16.45
102	5510	17.08	--	--	--	--	--	--	--
110	5550	18.14	18.05	17.96	17.87	17.78	17.69	17.6	17.51
134	5670	18.13	--	--	--	--	--	--	--

Note: 1.Maximum conducted output power Value =Reading value on average power meter + cable loss

**Maximum conducted output power measurement:**

**CHAIN A+B+C (High power):**

Channel No	Frequency	99%	Chain A	Chain B	Chain C	Output	Output Power Limit	
	Range	Bandwidth	Power	Power	Power	Power	(dBm)	dBm+10log(BW)
	(MHz)	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)		
54	5270	36.644	18.89	19.03	18.72	23.65	24	26.64
62	5310	36.712	16.88	17.33	16.87	21.80	24	26.65
102	5510	36.758	16.89	17.11	17.08	21.80	24	26.58
110	5550	36.729	18.71	18.77	18.14	23.32	24	26.58
134	5670	36.760	18.33	18.46	18.13	23.08	24	26.58

Note:

1. Power Output Value =Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW)+ Chain C Power (mW)).
3. 99% Bandwidth is the bandwidth of chain A or chain B or chain C whichever is less bandwidth, output power limitation is more stringent.

**CHAIN A+B+C (Low power):**

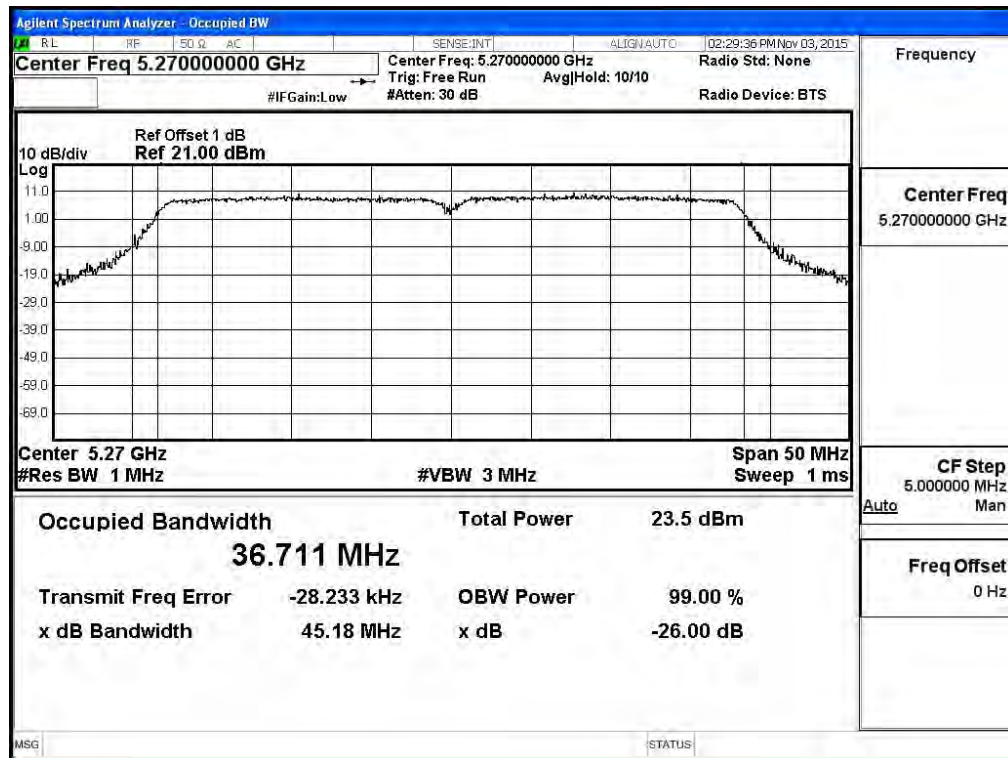
Channel Number	Frequency	Chain A Power	Chain B Power	Chain C Power	Output Power	Antenna Gain	EIRP	EIRP Limit
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
54	5270	11.73	11.98	11.57	16.53	5.60	22.13	24
62	5310	9.76	10.26	9.73	14.69	5.60	20.29	24
102	5510	9.73	9.96	9.96	14.66	5.20	19.86	24
110	5550	11.54	11.71	11.06	16.22	5.20	21.42	24
134	5670	11.18	11.38	11.04	15.97	5.20	21.17	24

Note:

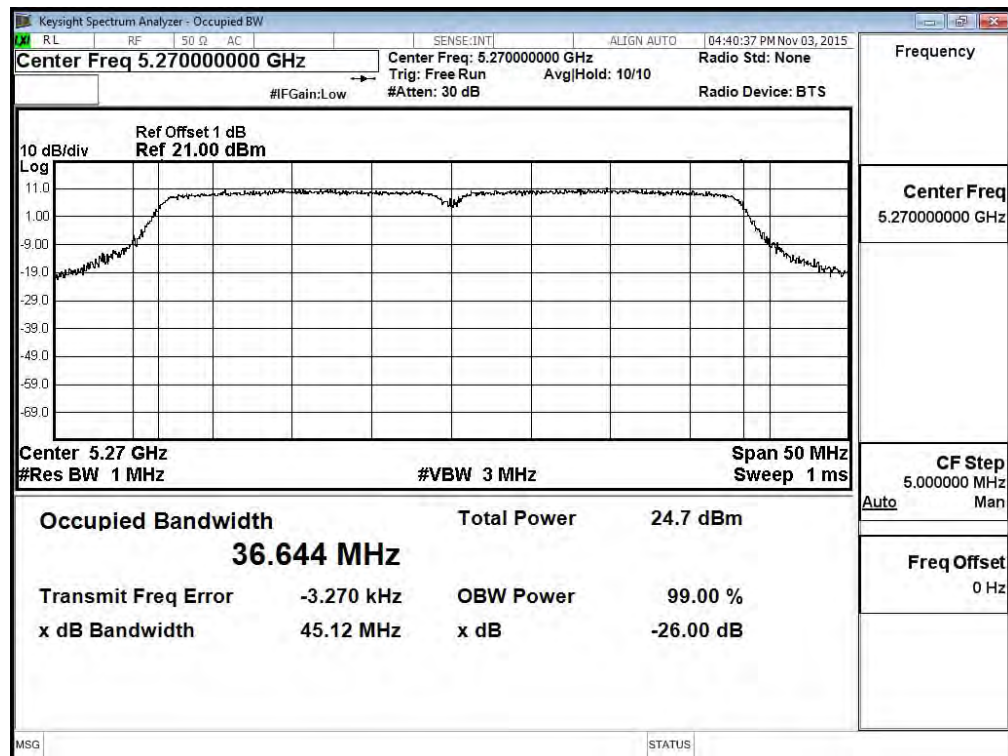
1. Power Output Value =Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW) + Chain C Power (mW)).
3. The EUT employ a TPC mechanism and the device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

### 99% Occupied Bandwidth:

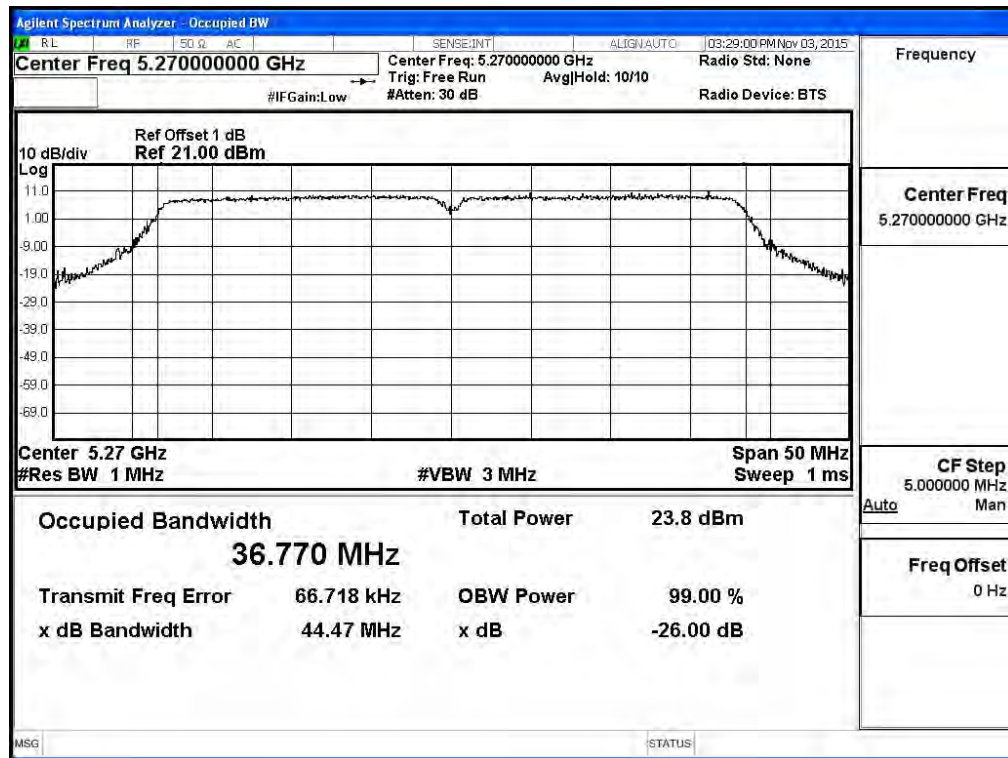
#### Channel 54: Chain A



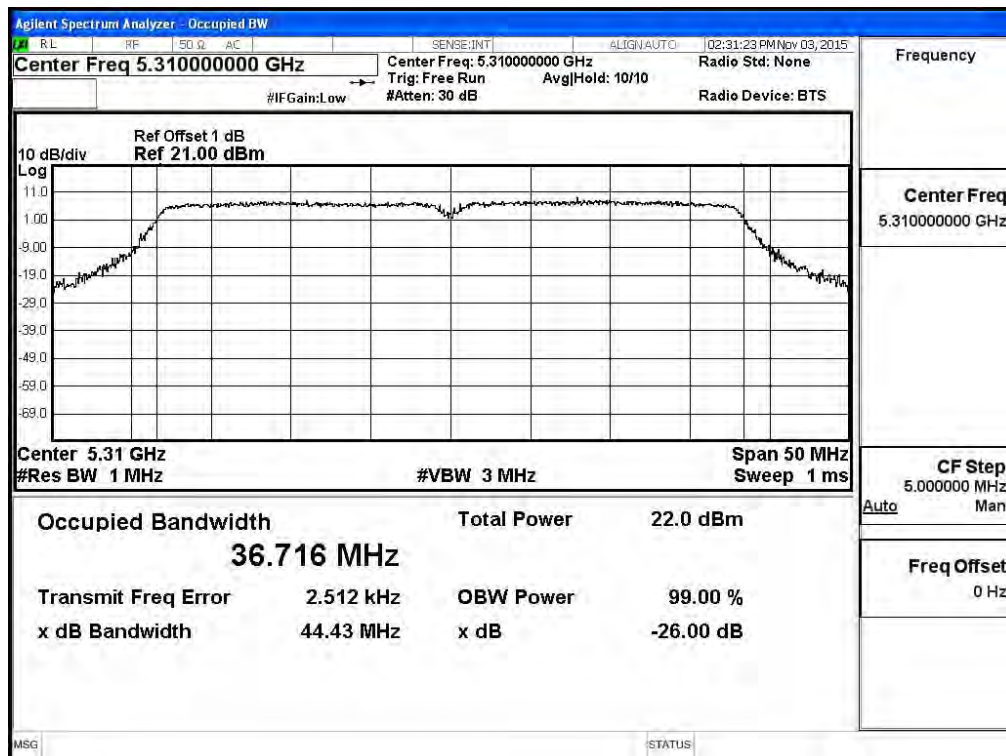
#### Channel 54: Chain B



### Channel 54: Chain C

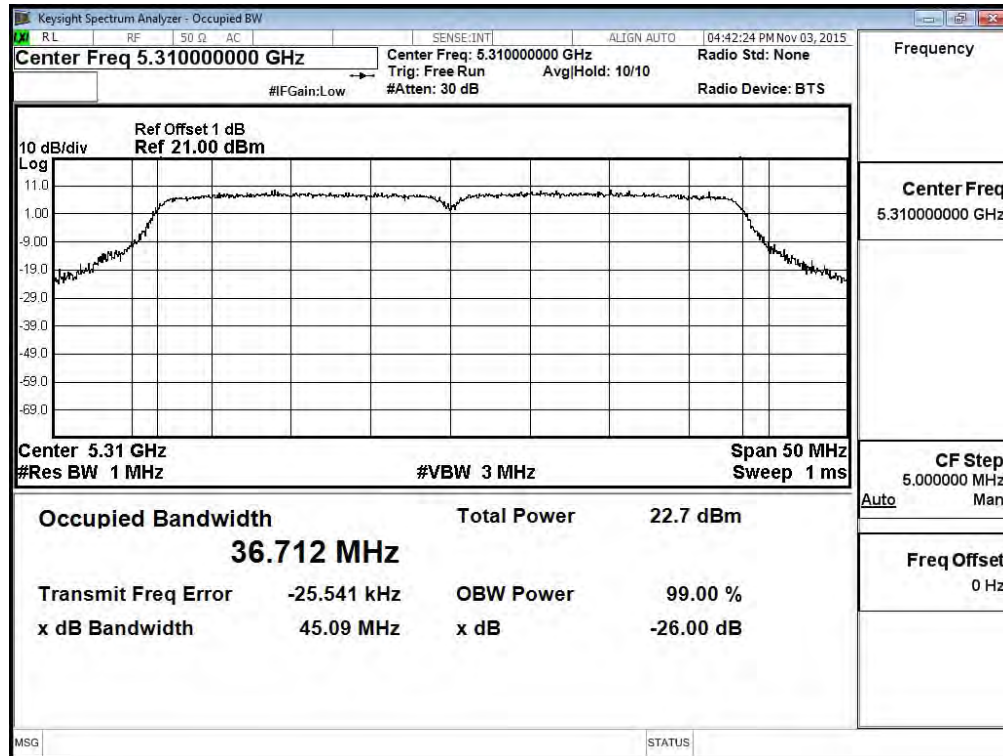


### Channel 62: Chain A

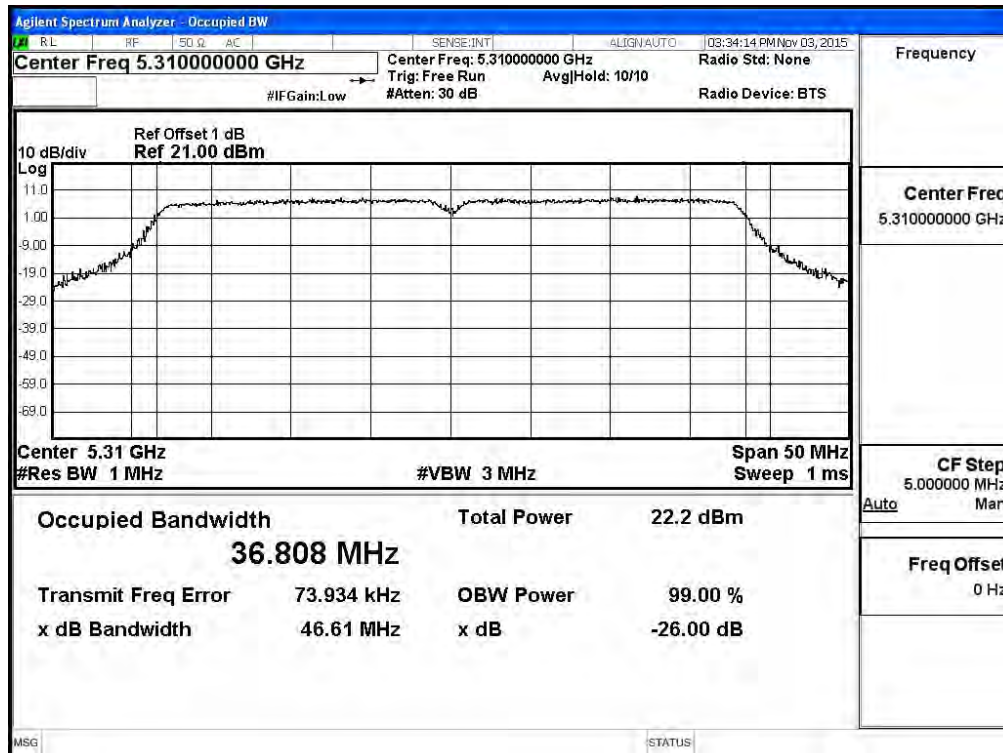




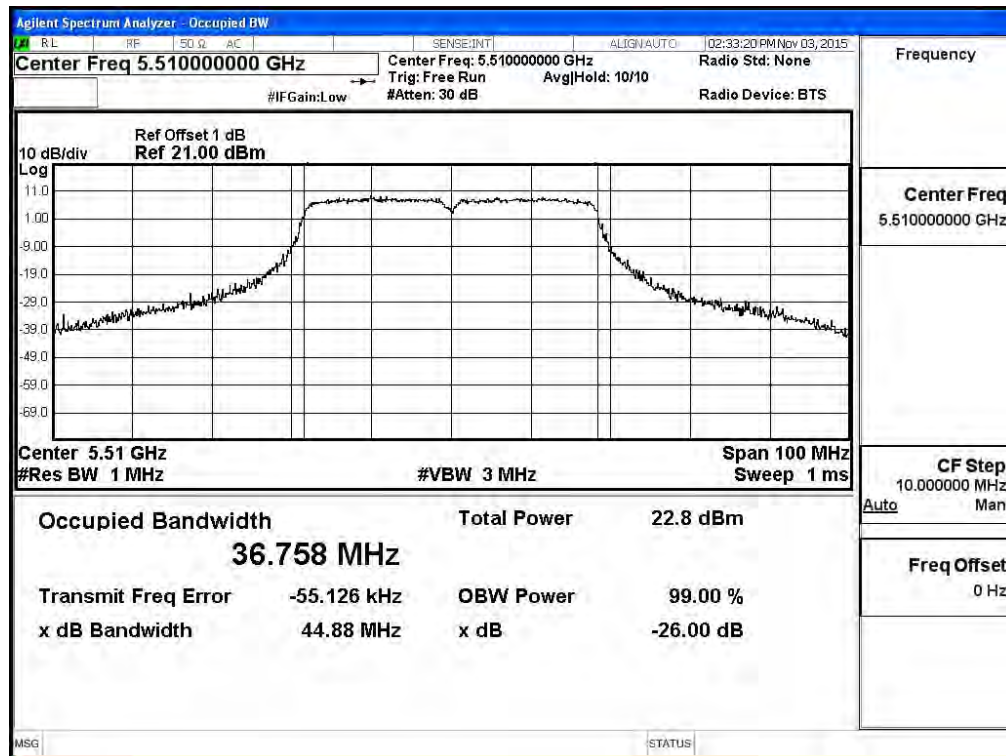
### Channel 62: Chain B



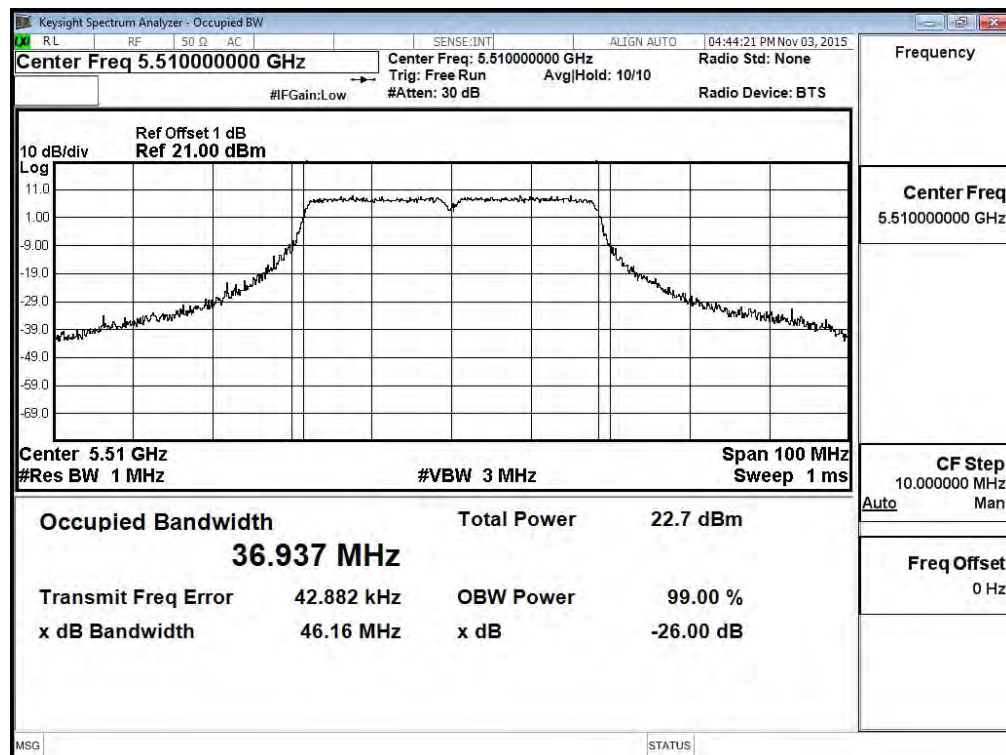
### Channel 62: Chain C



### Channel 102: Chain A

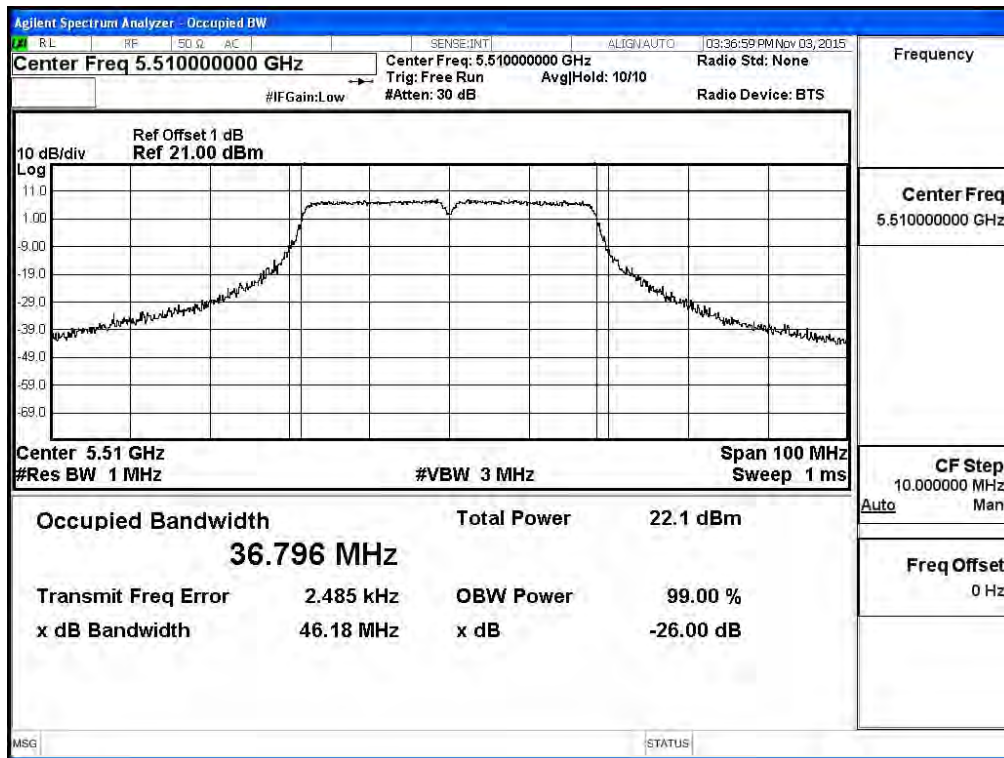


### Channel 102: Chain B

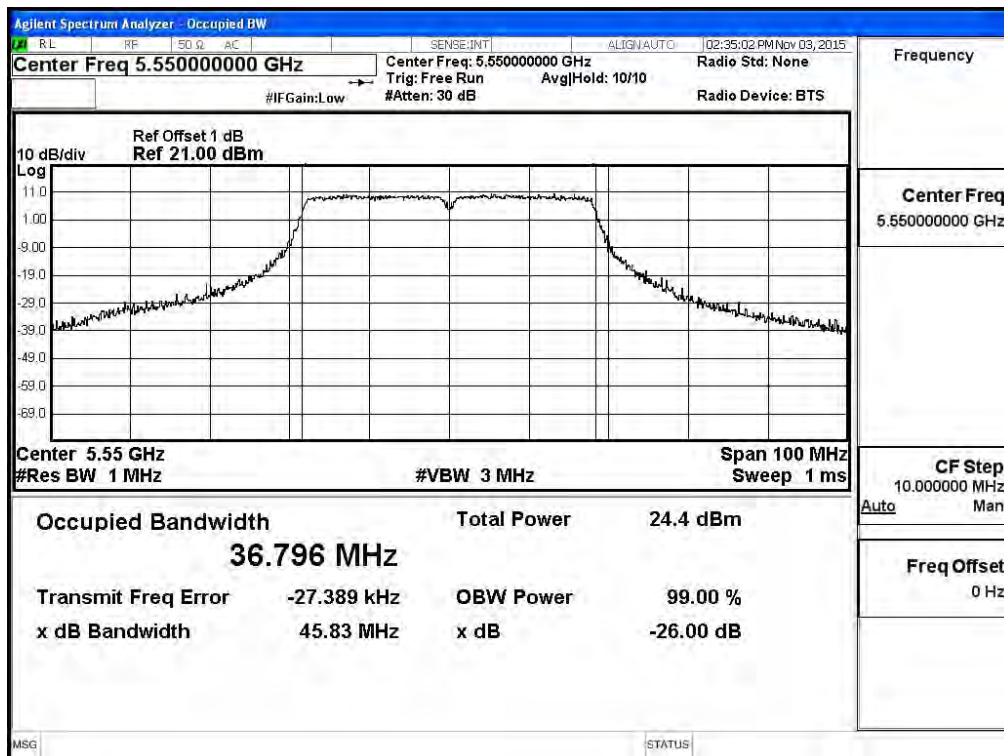




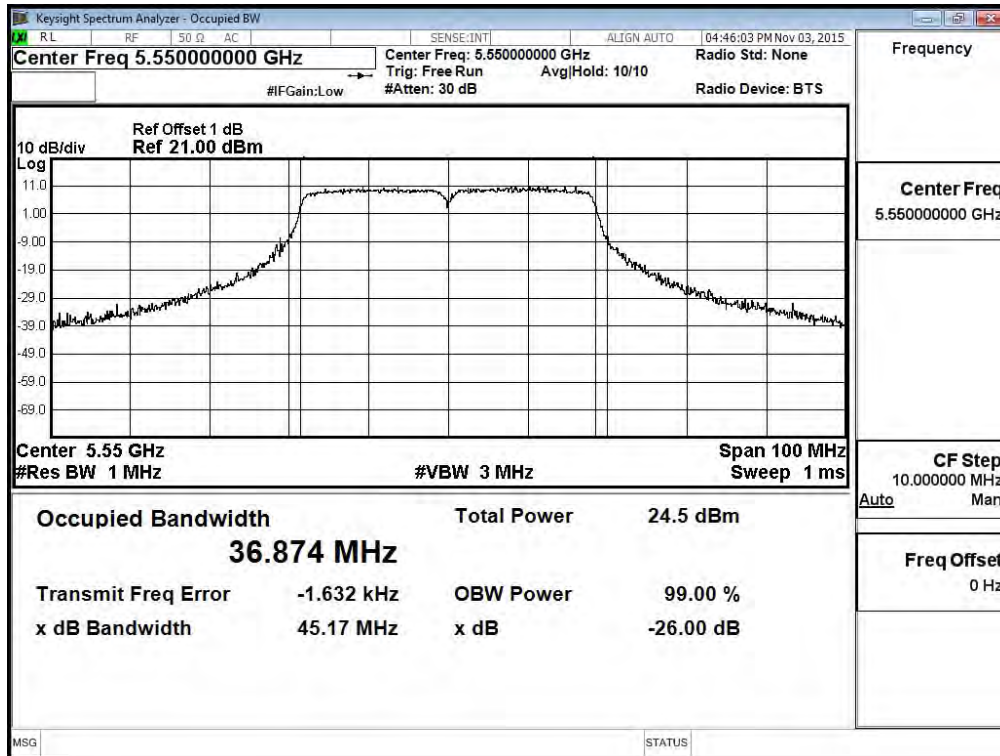
### Channel 102: Chain C



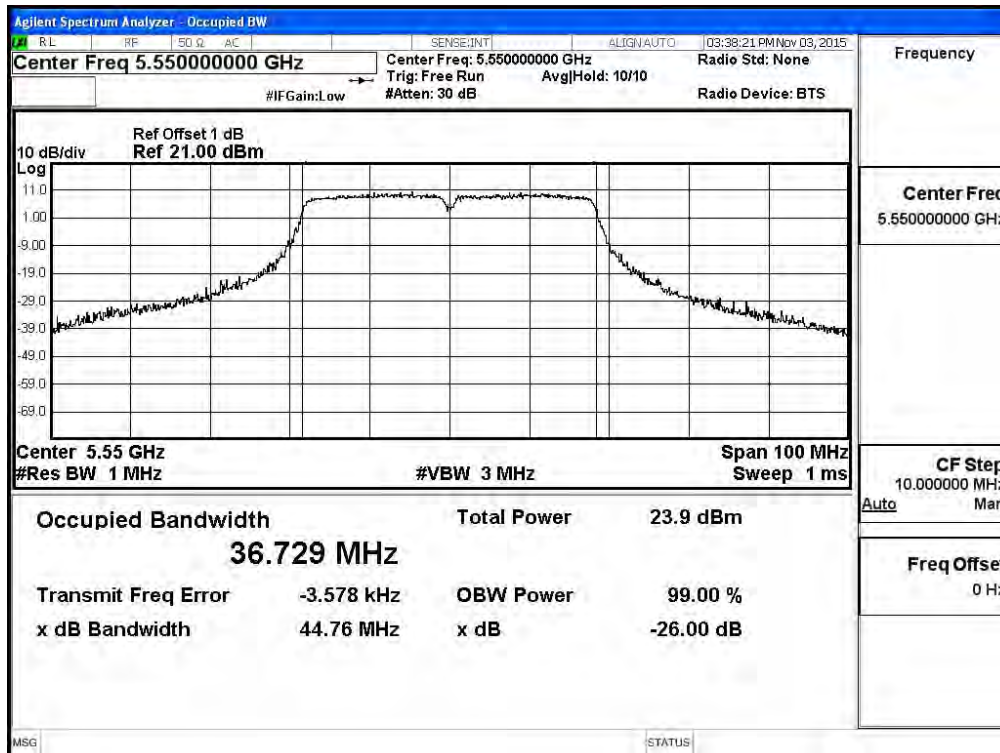
### Channel 110: Chain A



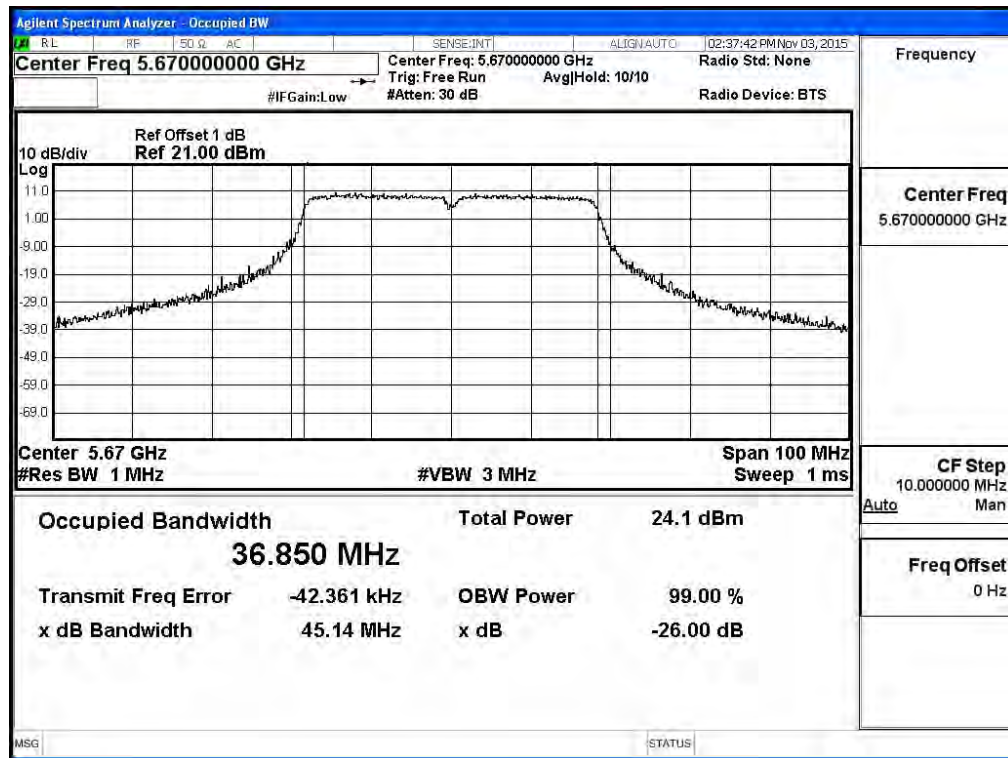
### Channel 110: Chain B



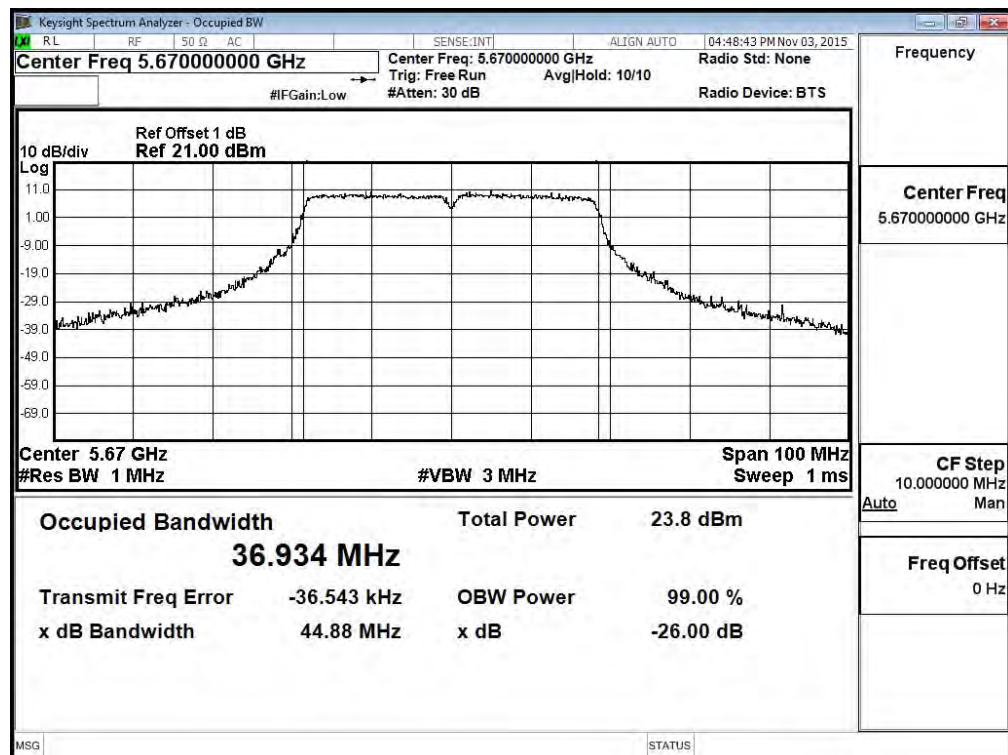
### Channel 110: Chain C



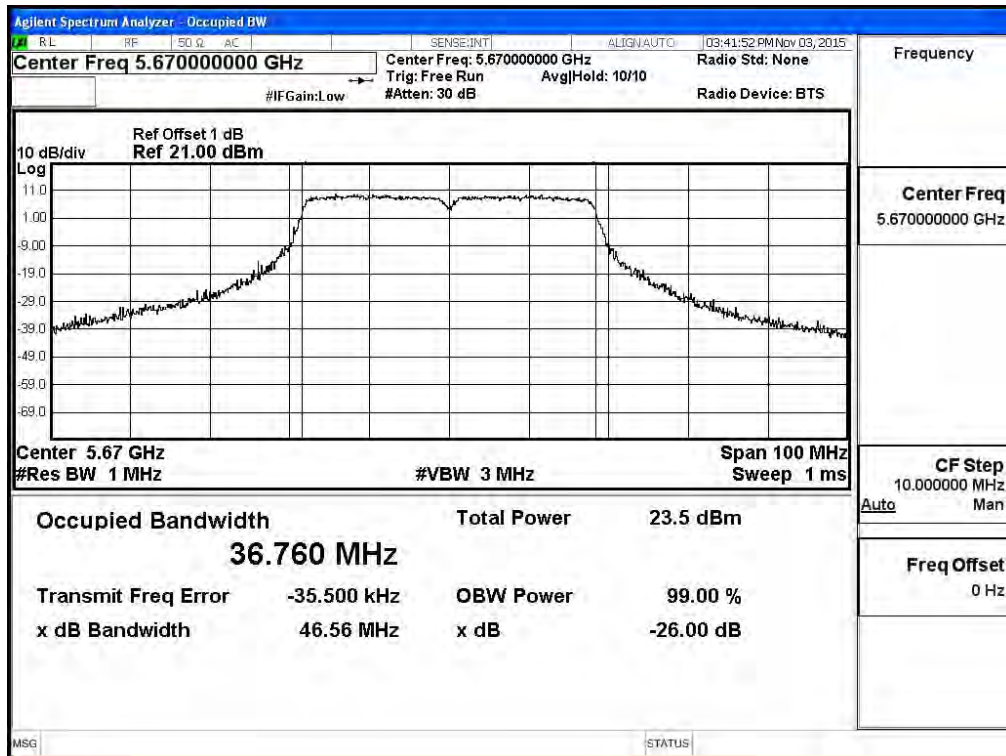
### Channel 134: Chain A



### Channel 134: Chain B



### Channel 134: Chain C





Product : 802.11ac Dual Band Access Point  
Test Item : Maximum conducted output power  
Test Site : No.3 OATS  
Test Mode : Mode 4: Transmit (802.11ac-80BW-97.5Mbps)

#### Chain A

Cable loss=1dB		Maximum conducted output power									
Channel No	Frequency (MHz)	Data Rate (Mbps)									
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9
58	5290	13.62	13.55	13.48	13.41	13.35	13.24	13.16	13.05	12.98	12.89
106	5530	11.35	--	--	--	--	--	--	--	--	--
122	5610	18.05	17.97	17.86	17.74	17.66	17.58	17.46	17.35	17.24	17.16

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

#### Chain B

Cable loss=1dB		Maximum conducted output power									
Channel No	Frequency (MHz)	Data Rate (Mbps)									
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9
58	5290	14.43	12.16	12.03	11.92	11.77	11.64	11.55	11.38	11.21	11.12
106	5530	11.56	--	--	--	--	--	--	--	--	--
122	5610	17.97	15.34	15.28	15.14	15.06	14.94	14.81	14.74	14.67	14.6

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

#### Chain C

Cable loss=1dB		Maximum conducted output power									
Channel No	Frequency (MHz)	Data Rate (Mbps)									
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9
58	5290	13.72	12.16	12.03	11.92	11.77	11.64	11.55	11.38	11.21	11.04
106	5530	11.75	--	--	--	--	--	--	--	--	--
122	5610	17.62	14.02	13.87	13.75	13.57	13.42	13.24	13.12	13.05	12.88

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

**Maximum conducted output power Measurement:**

**CHAIN A+B+C (High power):**

Channel No	Frequency	99%	Chain A	Chain B	Chain C	Output	Output Power Limit		Result
	Range	Bandwidth	Power	Power	Power	Power	(dBm)	dBm+10log(BW)	
	(MHz)	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)		
58	5290	75.895	13.62	14.43	13.72	18.71	24	29.80	Pass
106	5530	75.940	11.35	11.56	11.75	16.33	24	29.80	Pass
122	5610	75.957	18.05	17.97	17.62	22.66	24	29.81	Pass

Note:

1. Power Output Value =Reading value on average power meter + cable loss
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW)+ Chain C Power (mW))
3. 99% Bandwidth is the bandwidth of chain A or chain B or chain C whichever is less bandwidth, output power limitation is more stringent.

**CHAIN A+B+C (Low power):**

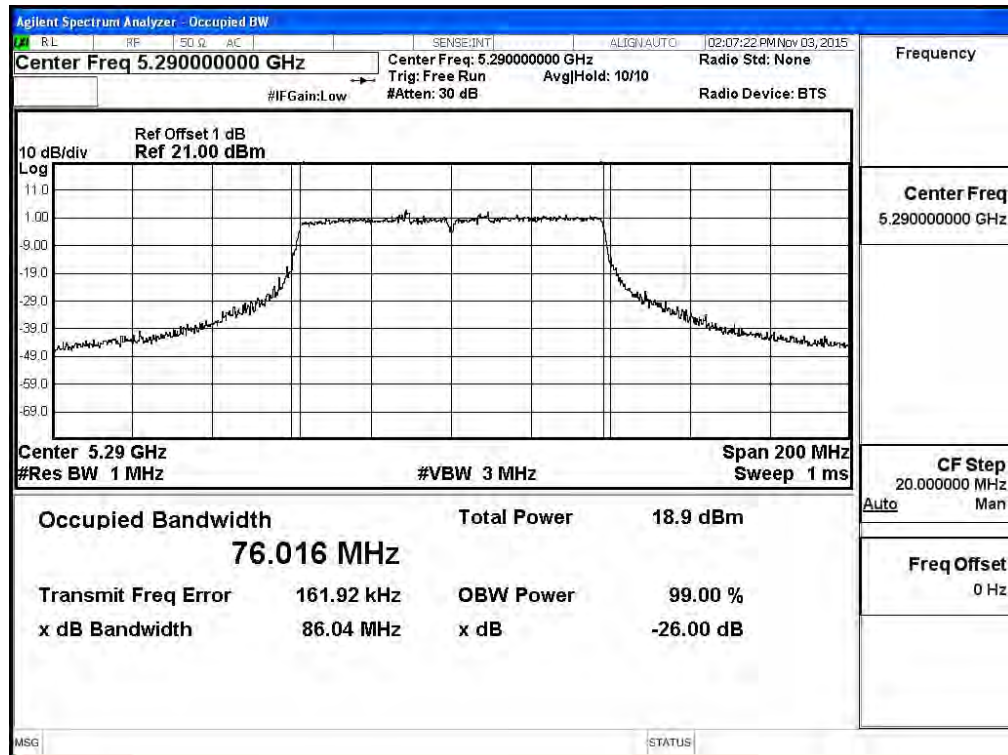
Channel Number	Frequency	Chain A Power	Chain B Power	Chain C Power	Output Power	Antenna Gain	EIRP	EIRP Limit
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
58	5290	6.56	7.38	6.68	11.66	5.60	17.26	24
106	5530	4.28	4.45	4.68	9.24	5.20	14.44	24
122	5610	10.87	10.49	10.81	15.50	5.20	20.70	24

Note:

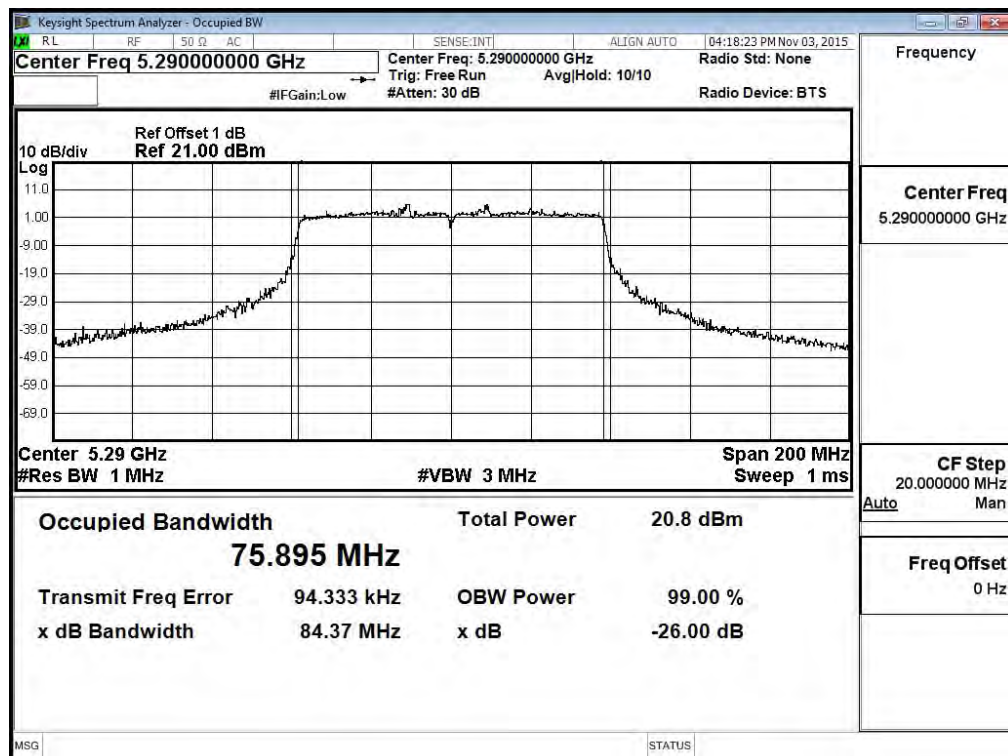
1. Power Output Value =Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW) + Chain C Power (mW)).
3. The EUT employ a TPC mechanism and the device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

### 99% Occupied Bandwidth:

#### Channel 58: Chain A

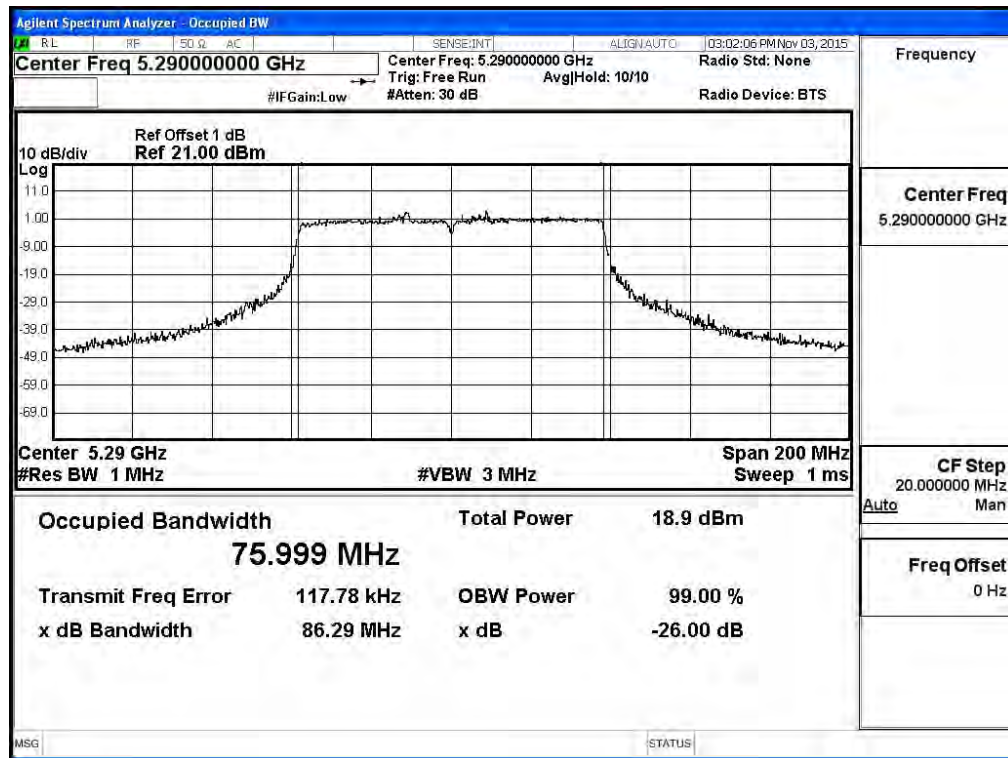


#### Channel 58: Chain B

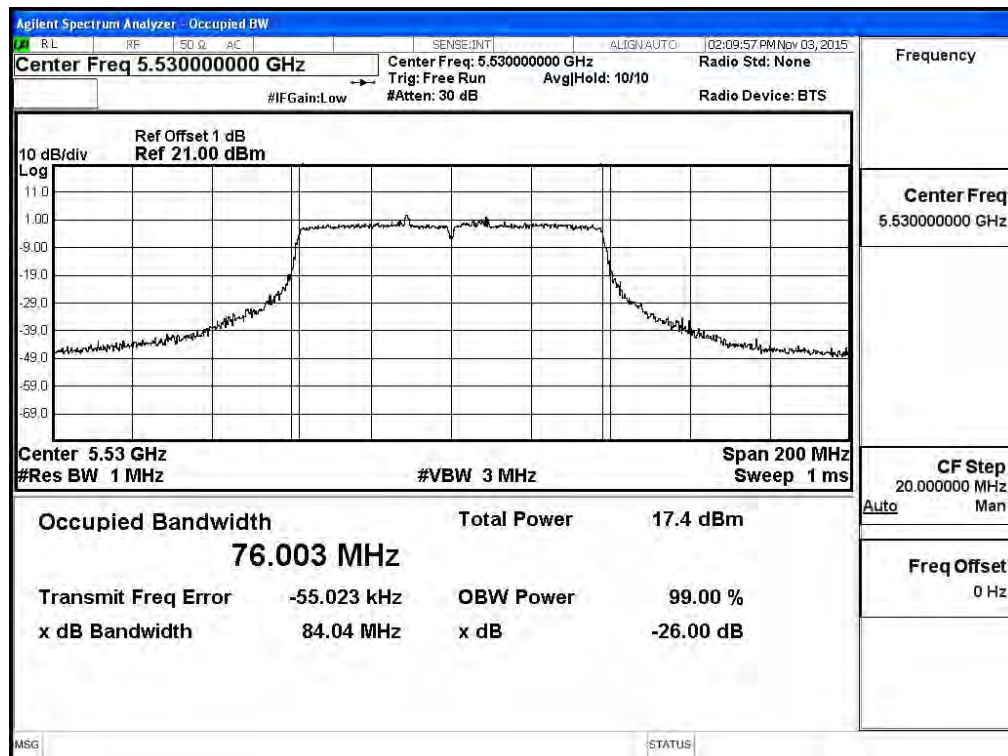




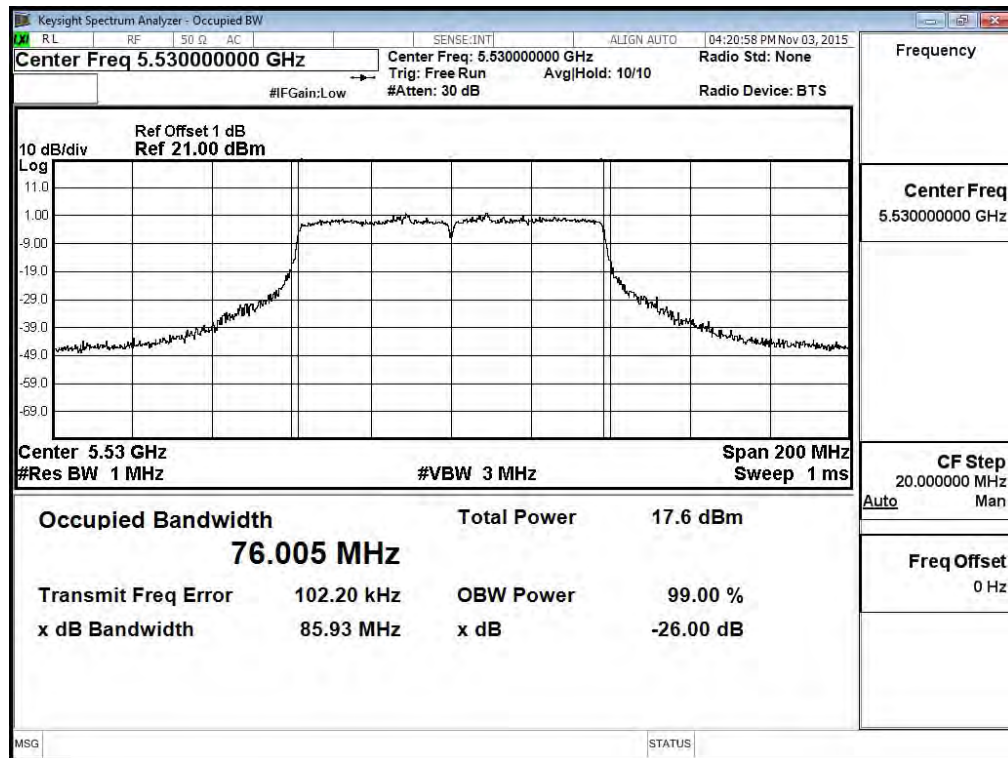
### Channel 58: Chain C



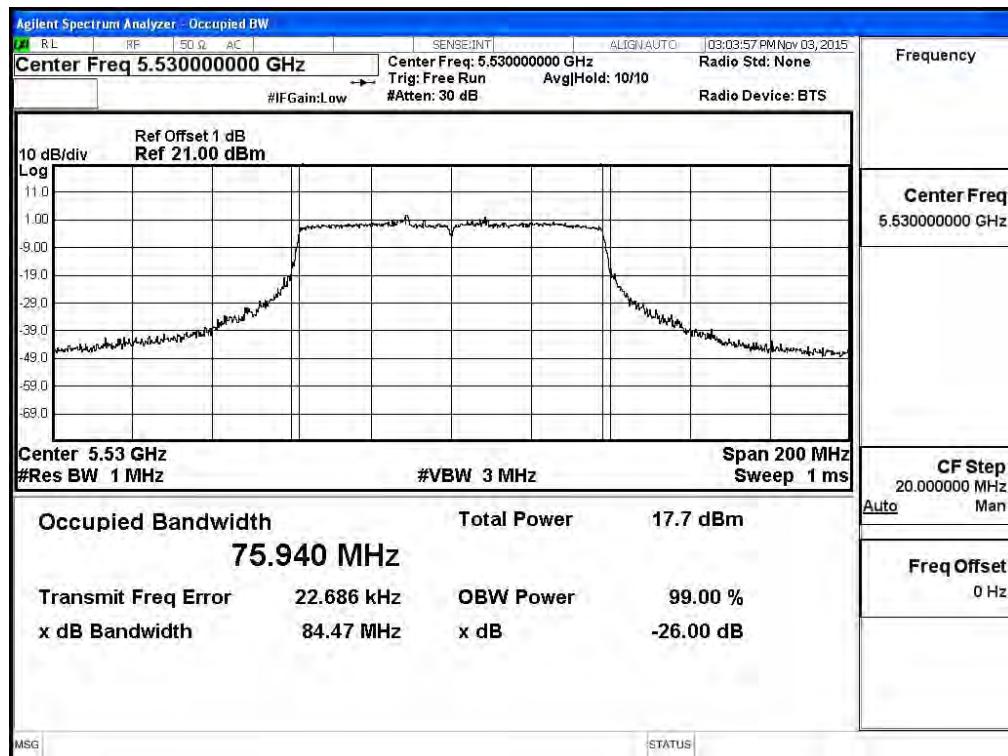
### Channel 106: Chain A



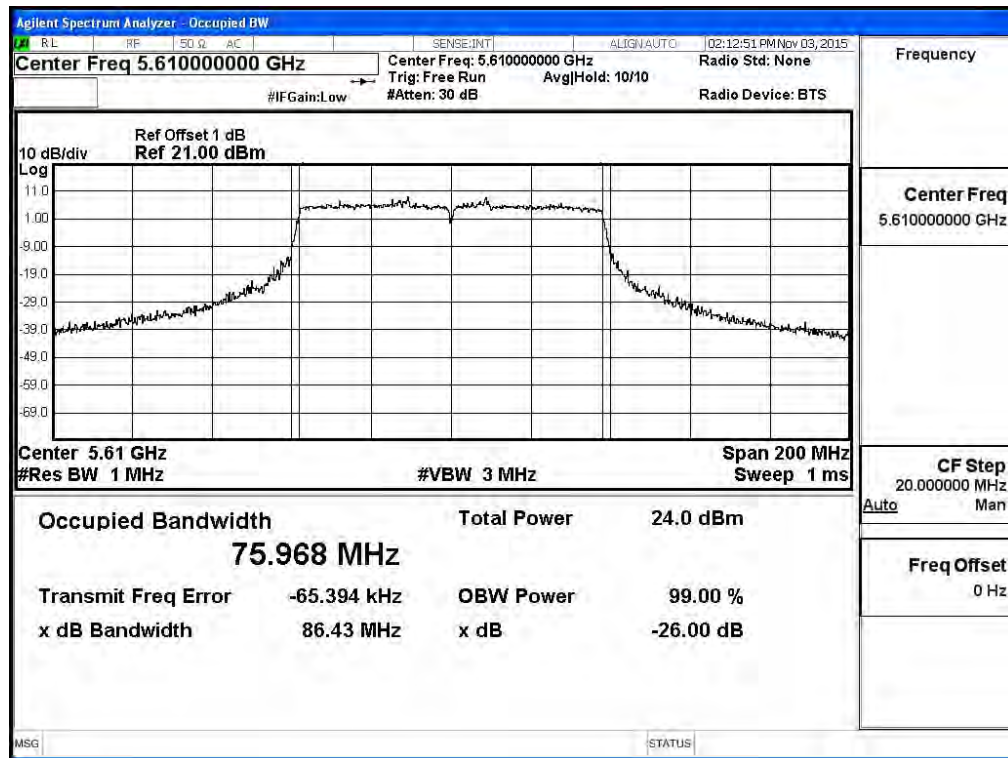
### Channel 106: Chain B



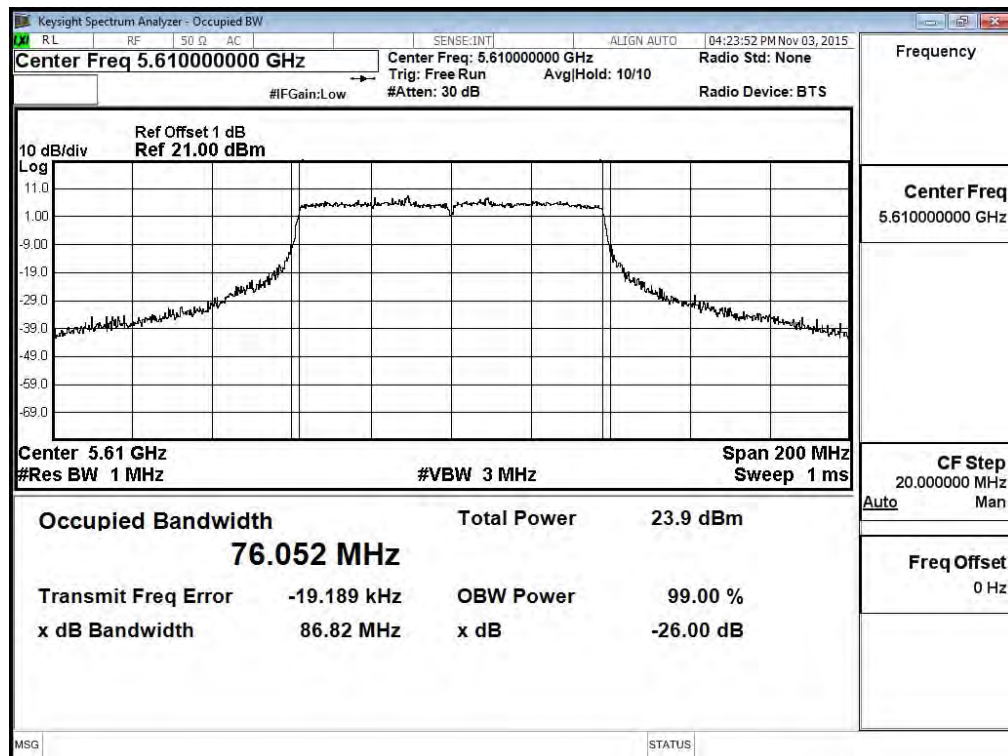
### Channel 106: Chain C



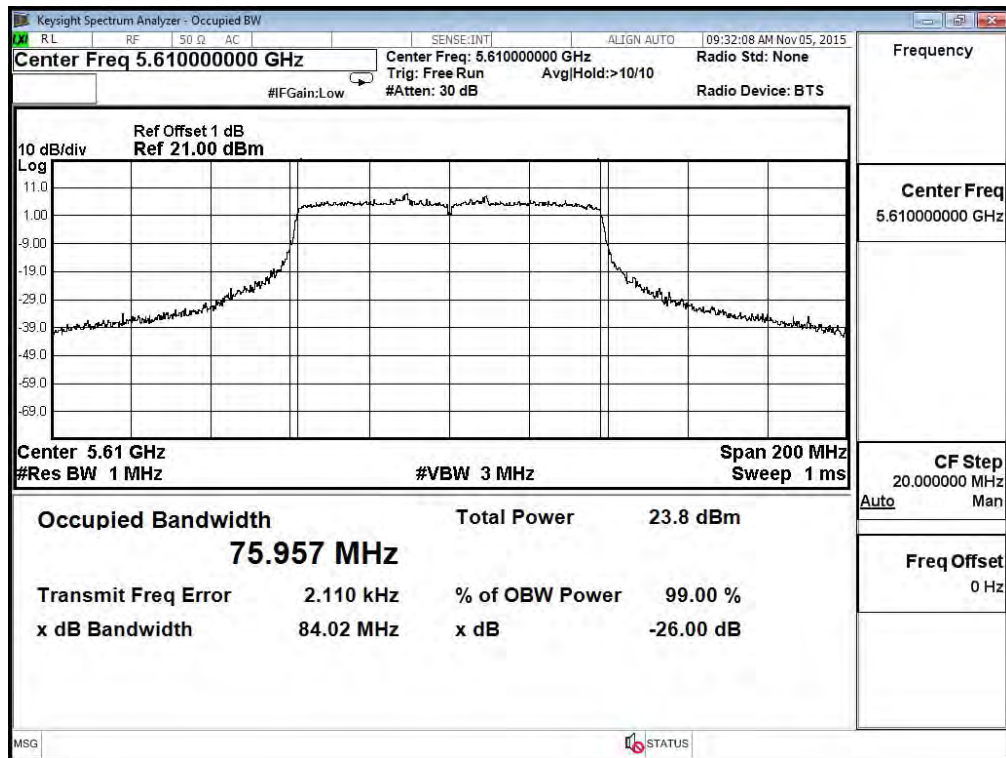
### Channel 122: Chain A



### Channel 122: Chain B

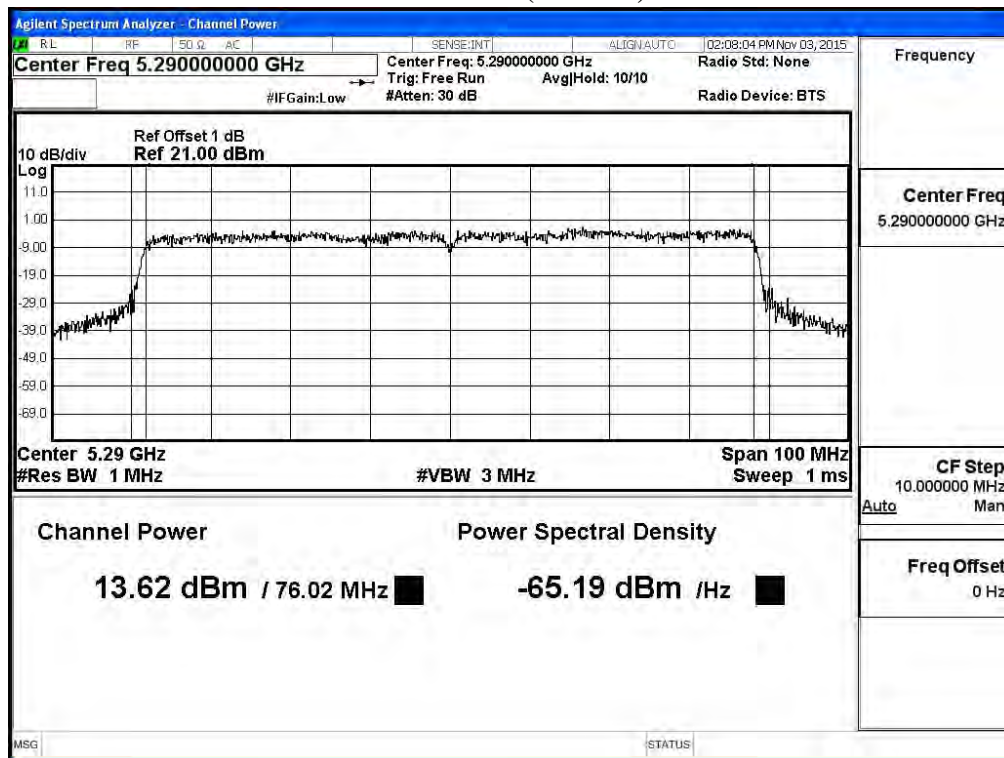


### Channel 122: Chain C

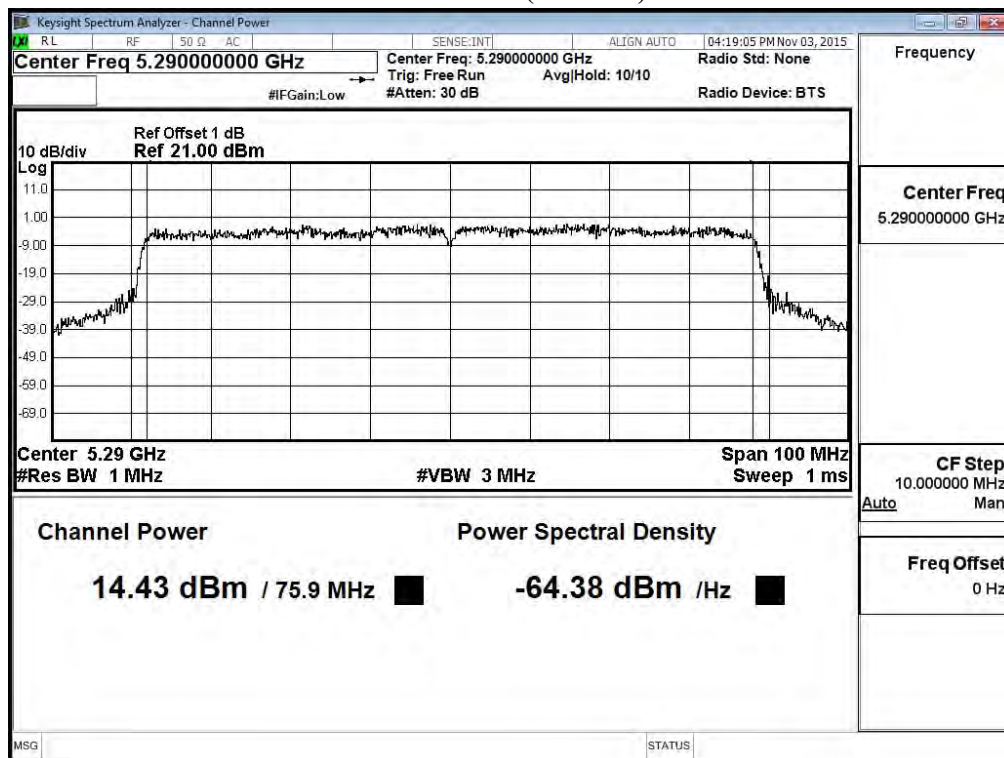




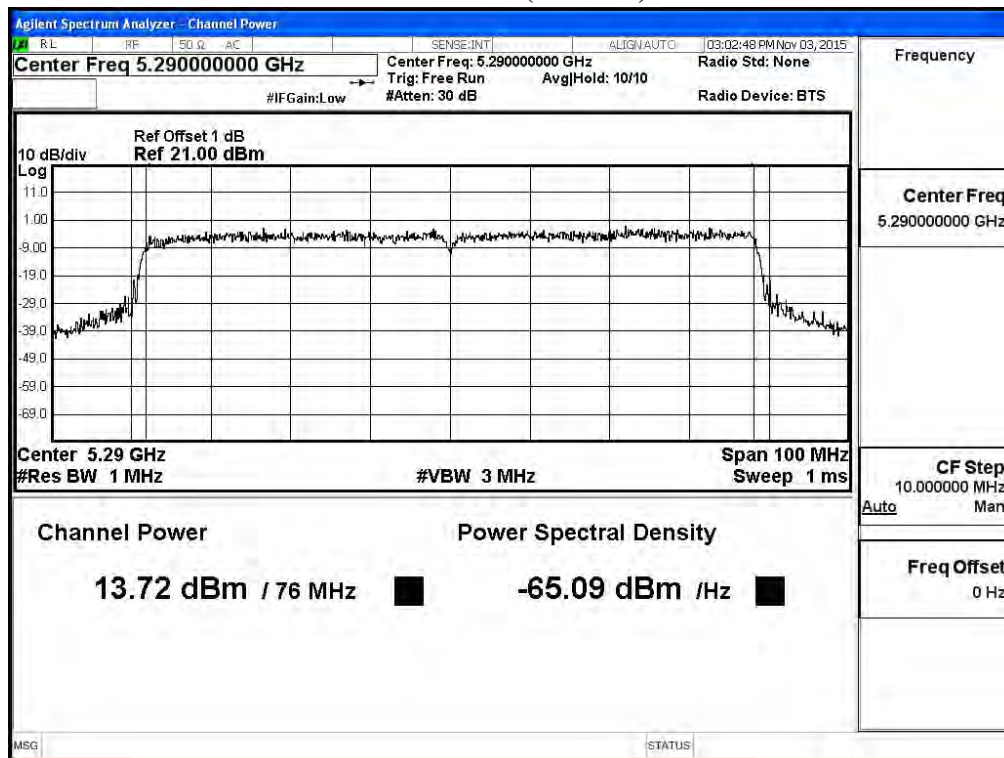
Maximum conducted output power:  
 Channel 58 (Chain A)



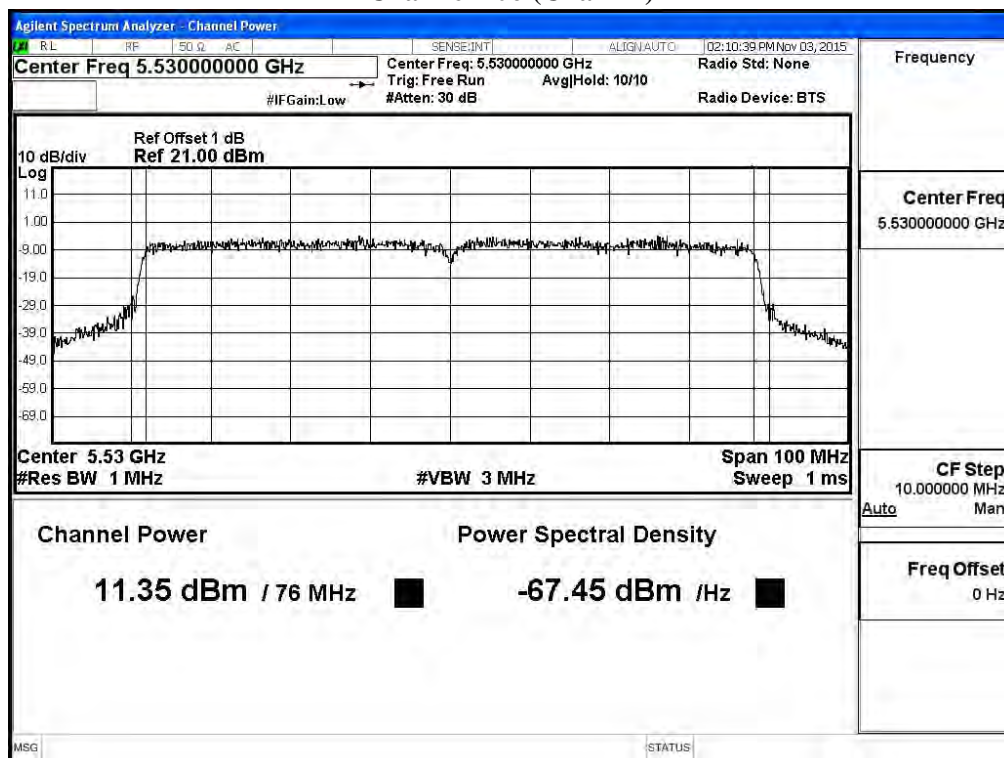
Channel 58 (Chain B)



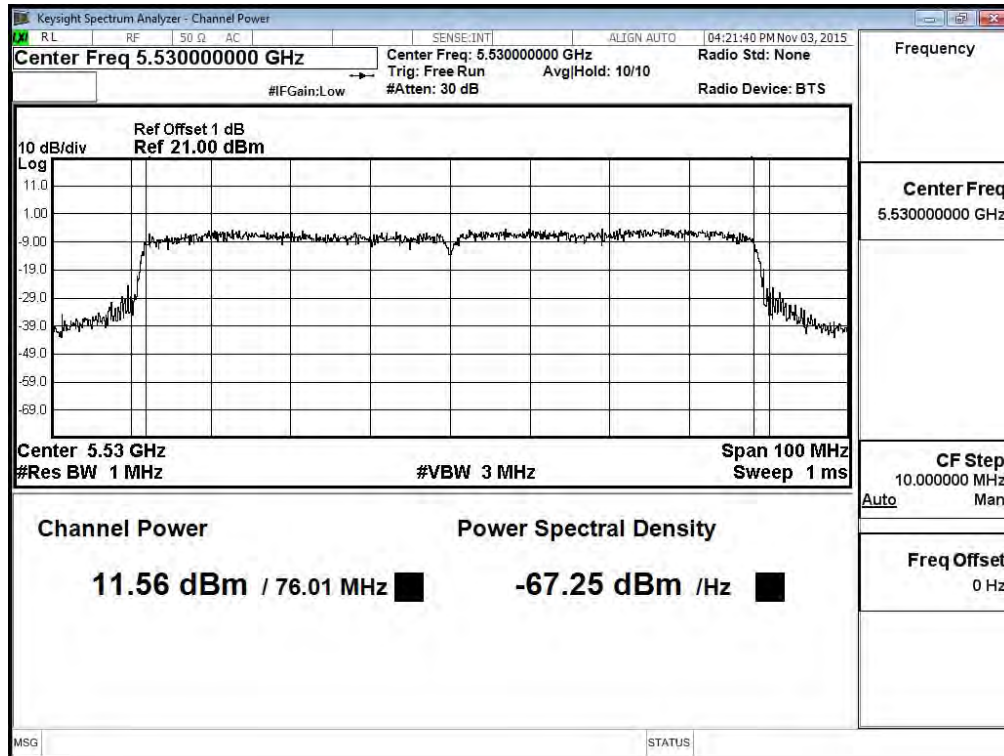
### Channel 58 (Chain C)



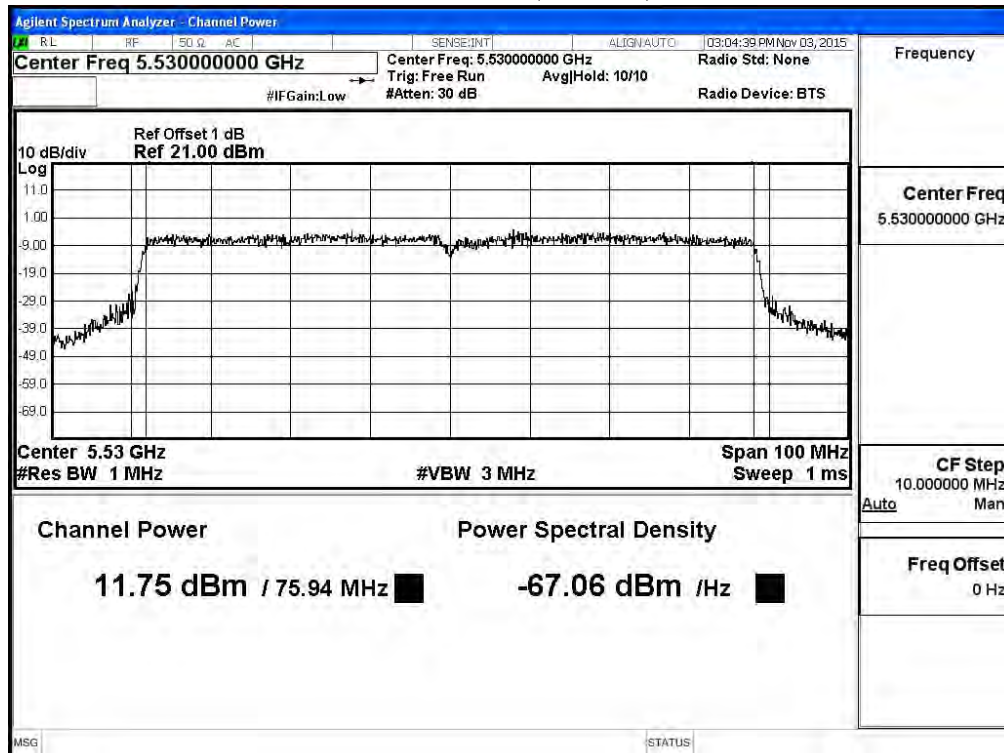
### Channel 106 (Chain A)



### Channel 106 (Chain B)

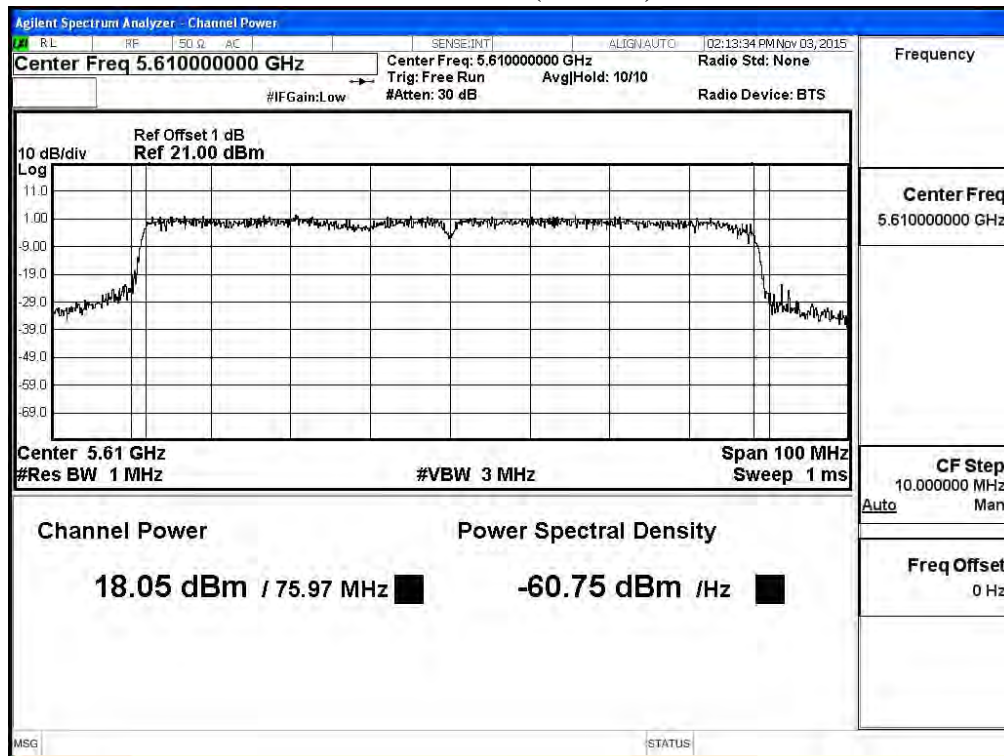


### Channel 106 (Chain C)

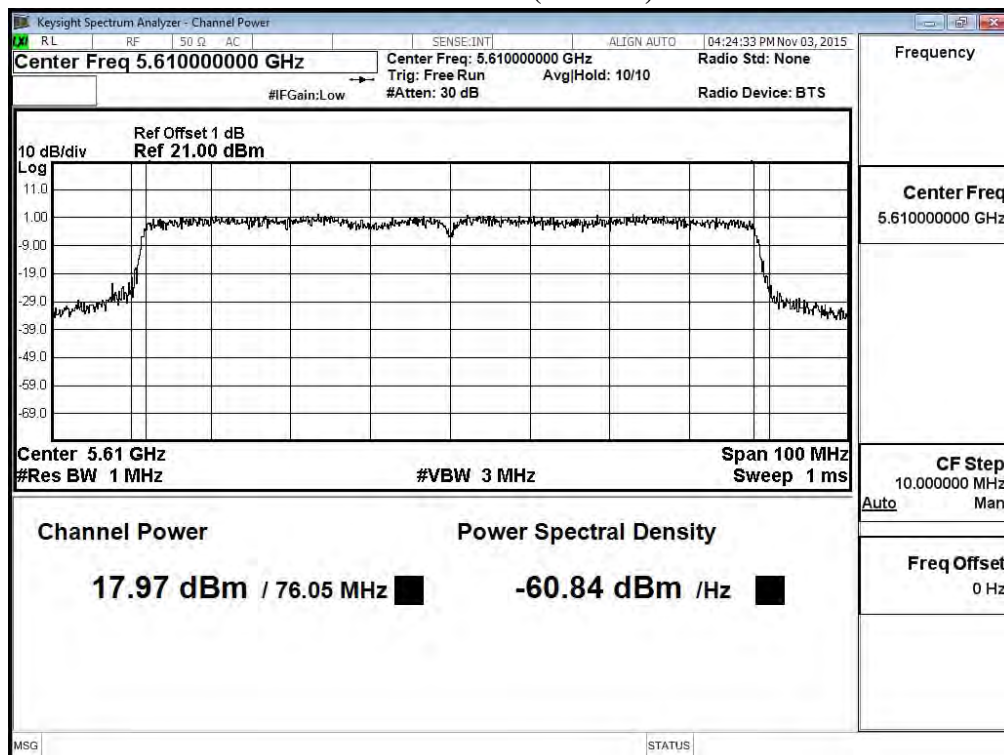




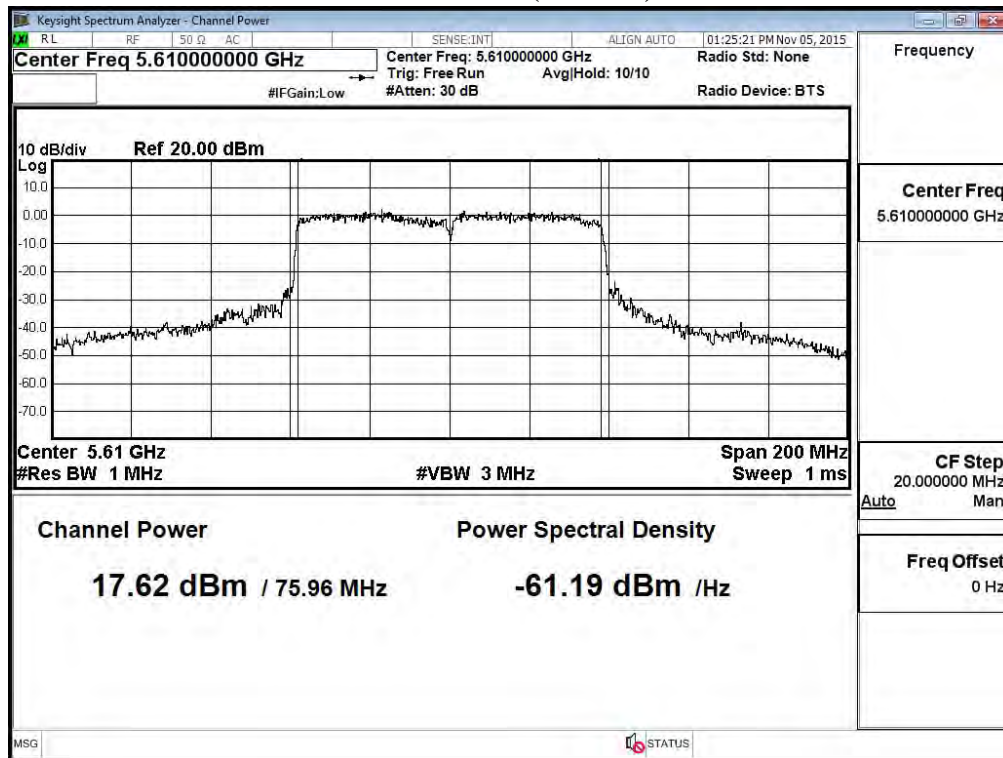
### Channel 122 (Chain A)



### Channel 122 (Chain B)



### Channel 122 (Chain C)



## 4. Peak Power Spectral Density

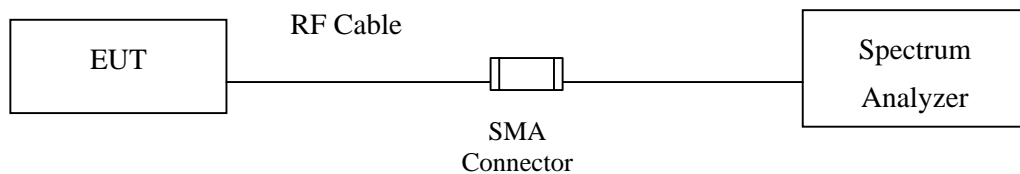
### 4.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2015
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2015
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2015

Note:

1. All equipment is calibrated once a year or as required by manufacturer.
2. All equipment is calibrated to traceable calibration procedures.
3. The test instruments marked with "X" are used to measure the final test results.

### 4.2. Test Setup



### 4.3. Limits

(1) For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the

equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations. (iv) For mobile and portable 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 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

#### 4.4. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth Correctionion factor (BWCF) where  $BWCF = 10\log(500\text{ kHz}/100\text{ kHz}) = 6.98\text{ dB}$ .

#### 4.5. Uncertainty

$\pm 1.27\text{ dB}$

#### 4.6. Test Result of Peak Power Spectral Density

Product : 802.11ac Dual Band Access Point  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 1: Transmit (802.11a-6Mbps)

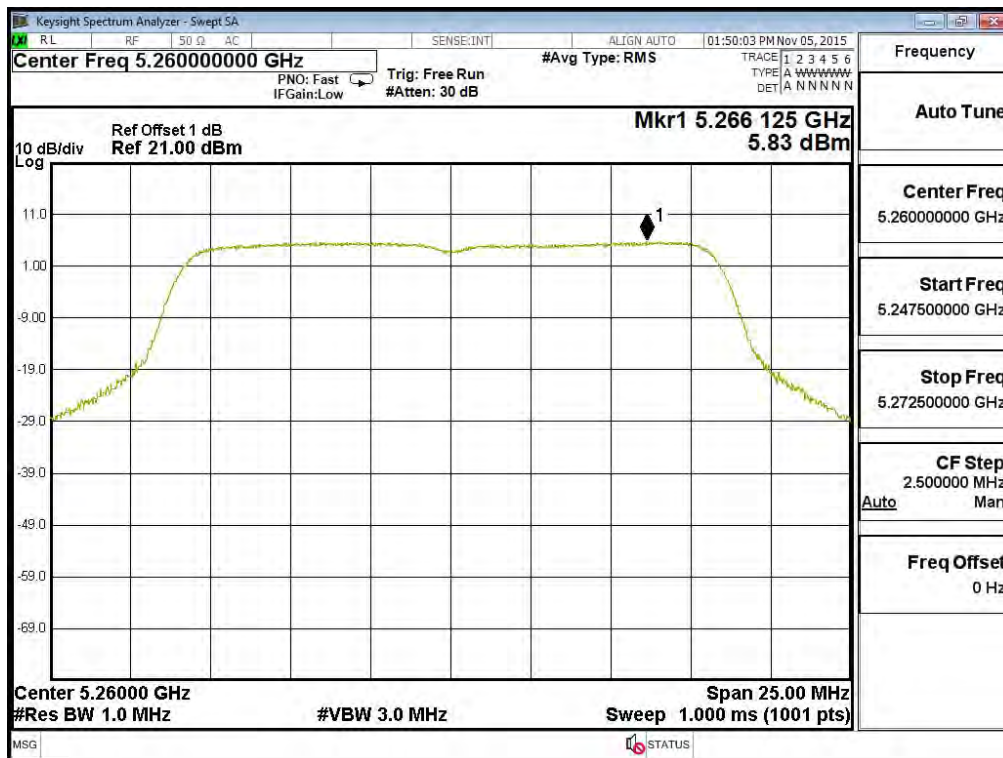
##### 5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Required Limit (dBm)	Result
52	5260	A	5.830	10.601	<11	Pass
		B	6.210	10.981	<11	Pass
		C	6.010	10.781	<11	Pass
60	5300	A	5.890	10.661	<11	Pass
		B	5.800	10.571	<11	Pass
		C	5.960	10.731	<11	Pass
64	5320	A	5.910	10.681	<11	Pass
		B	5.890	10.661	<11	Pass
		C	5.940	10.711	<11	Pass
100	5500	A	5.780	10.551	<11	Pass
		B	5.840	10.611	<11	Pass
		C	6.120	10.891	<11	Pass
116	5580	A	6.220	10.991	<11	Pass
		B	6.185	10.956	<11	Pass
		C	6.086	10.857	<11	Pass
140	5700	A	6.030	10.801	<11	Pass
		B	6.000	10.771	<11	Pass
		C	6.050	10.821	<11	Pass

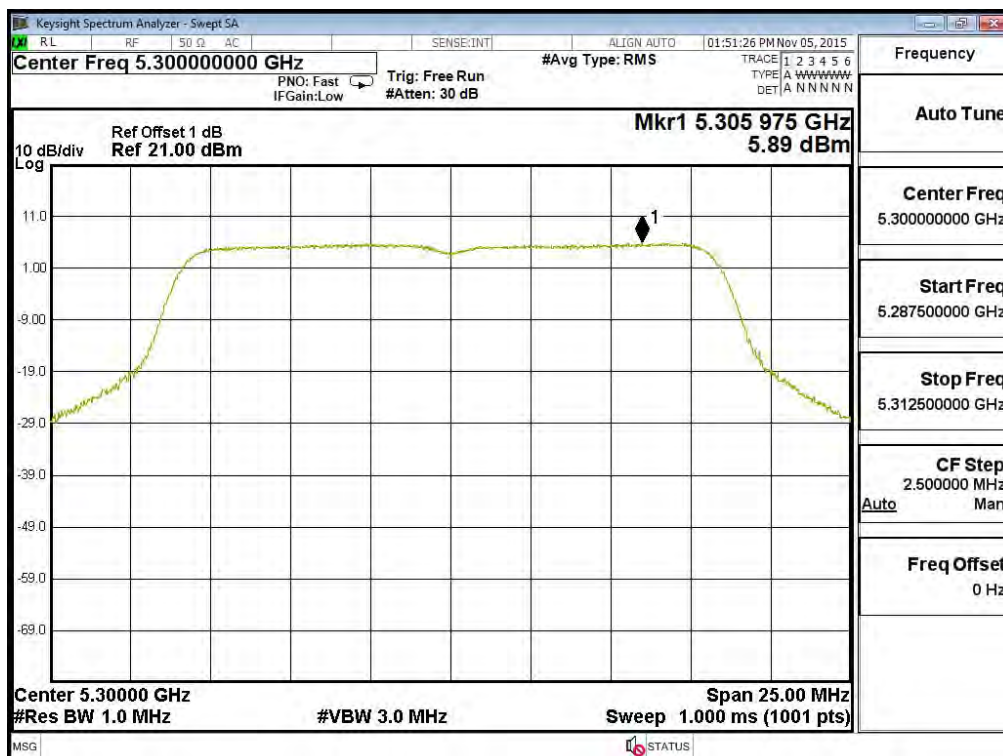
Note: 1.The quantity  $10 \cdot \log 3$  (three antennas) is added to the spectrum peak value according to document 662911 D01.  
2.Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 3$  (three antennas).



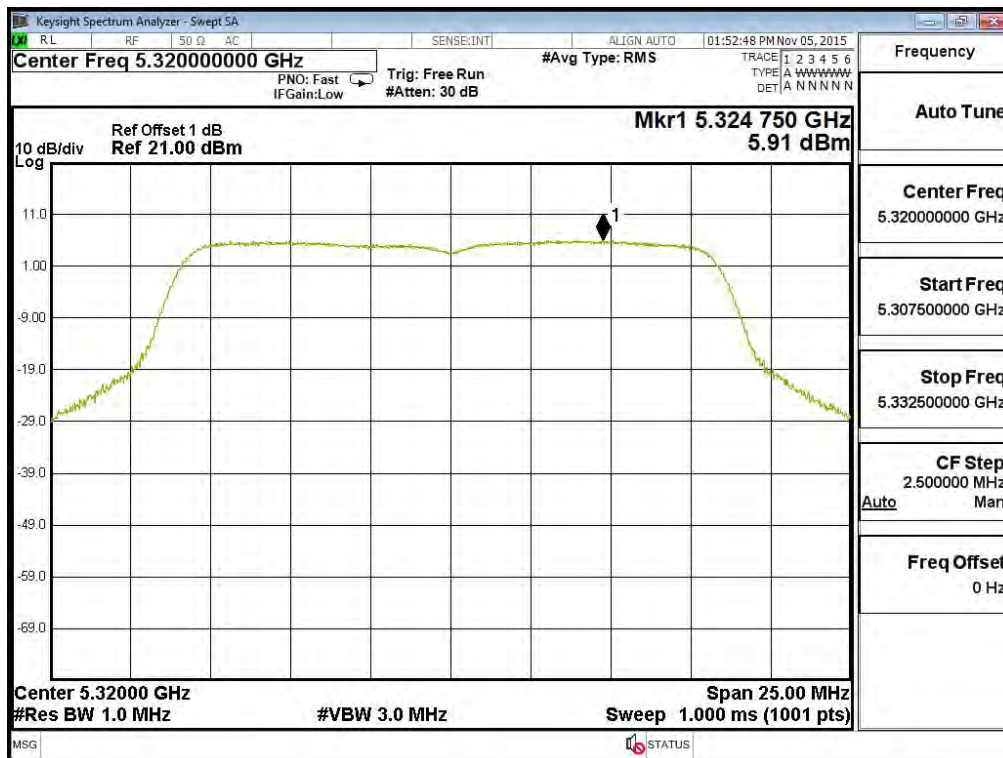
### Channel 52: (Chain A)



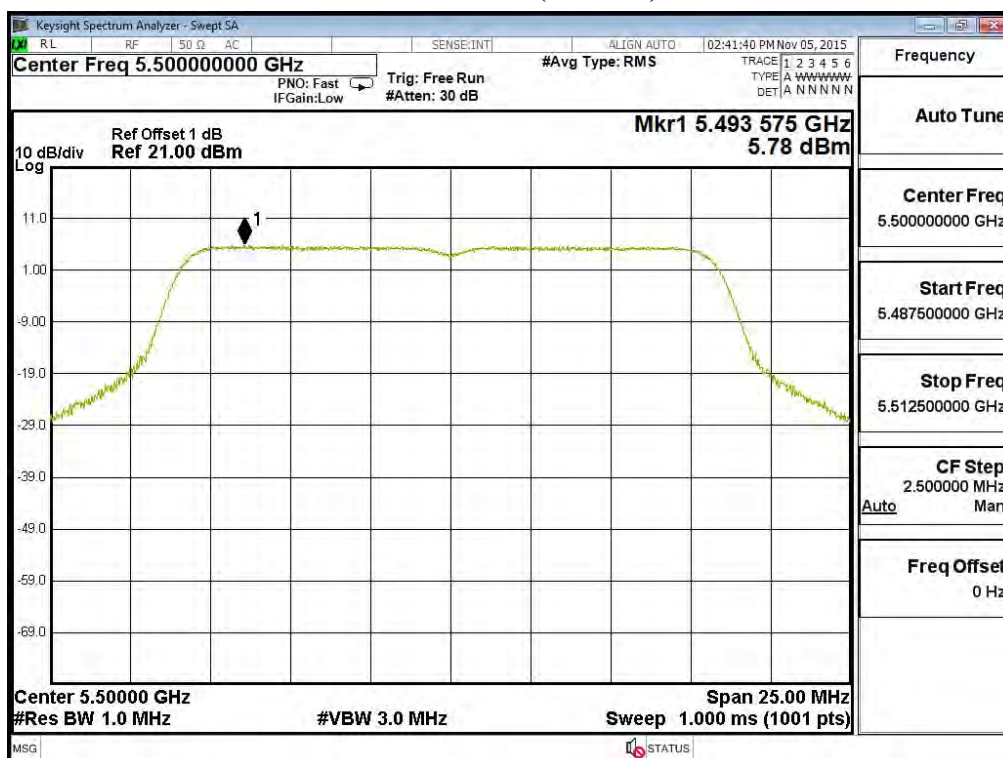
### Channel 60: (Chain A)



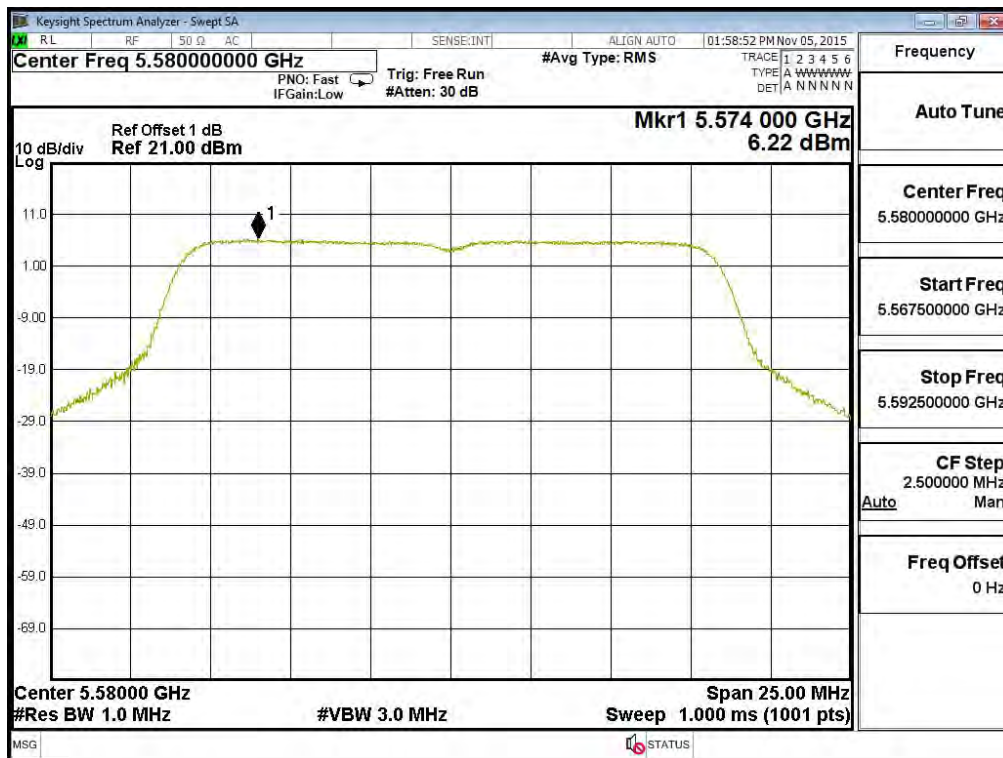
### Channel 64: (Chain A)



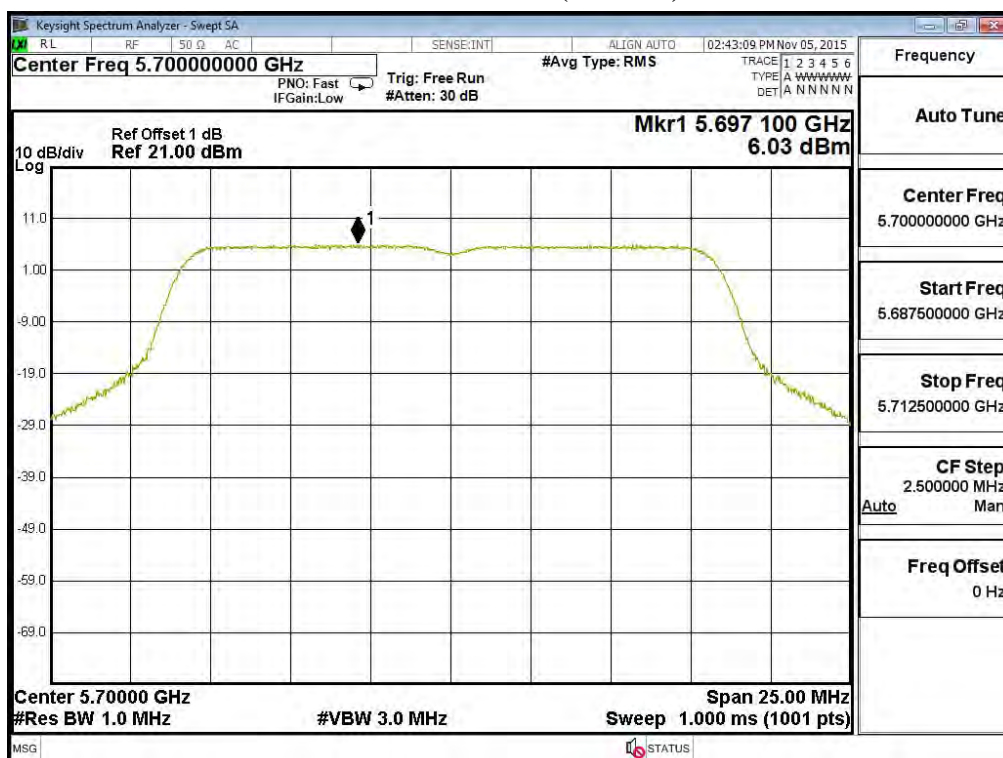
### Channel 100: (Chain A)



### Channel 116: (Chain A)

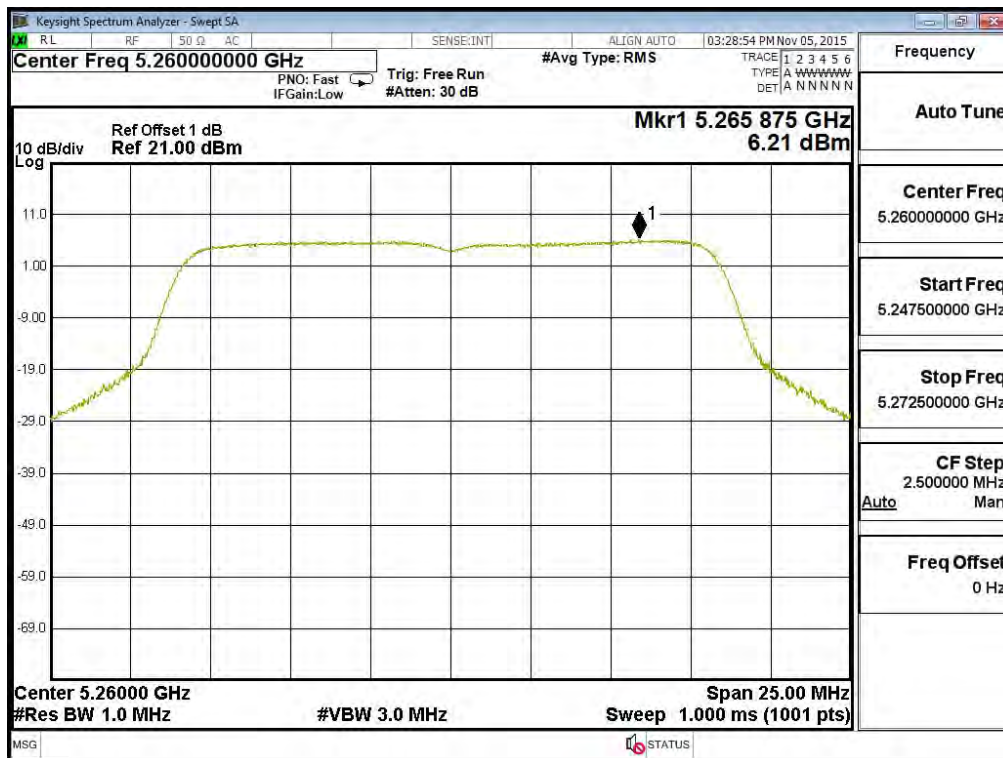


### Channel 140: (Chain A)

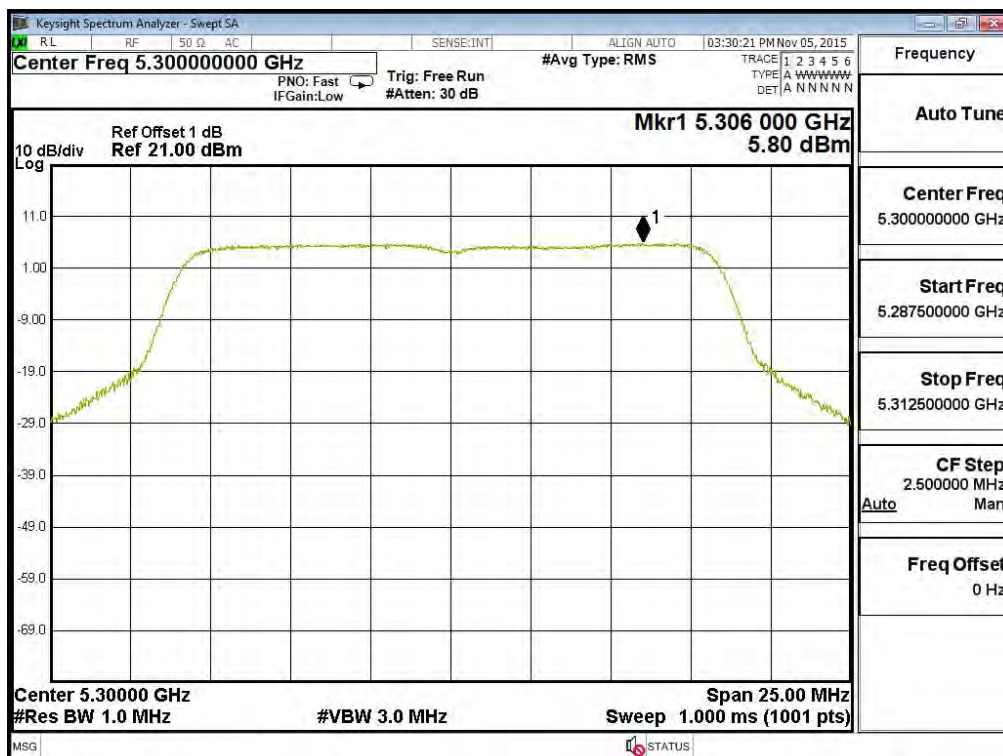




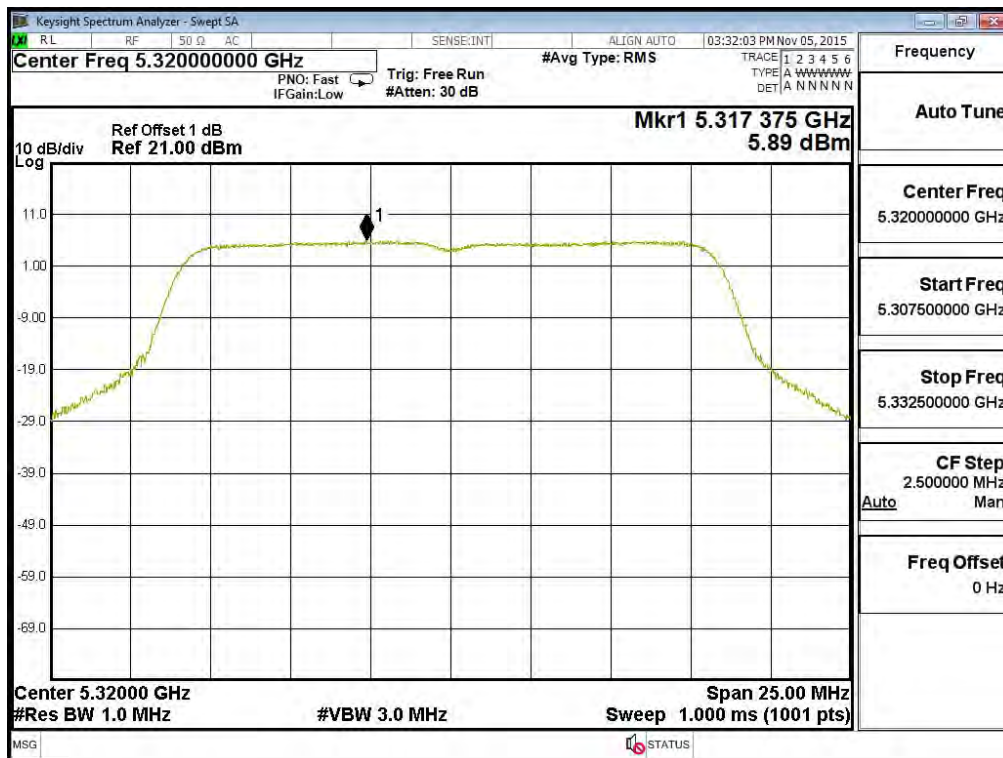
### Channel 52: (Chain B)



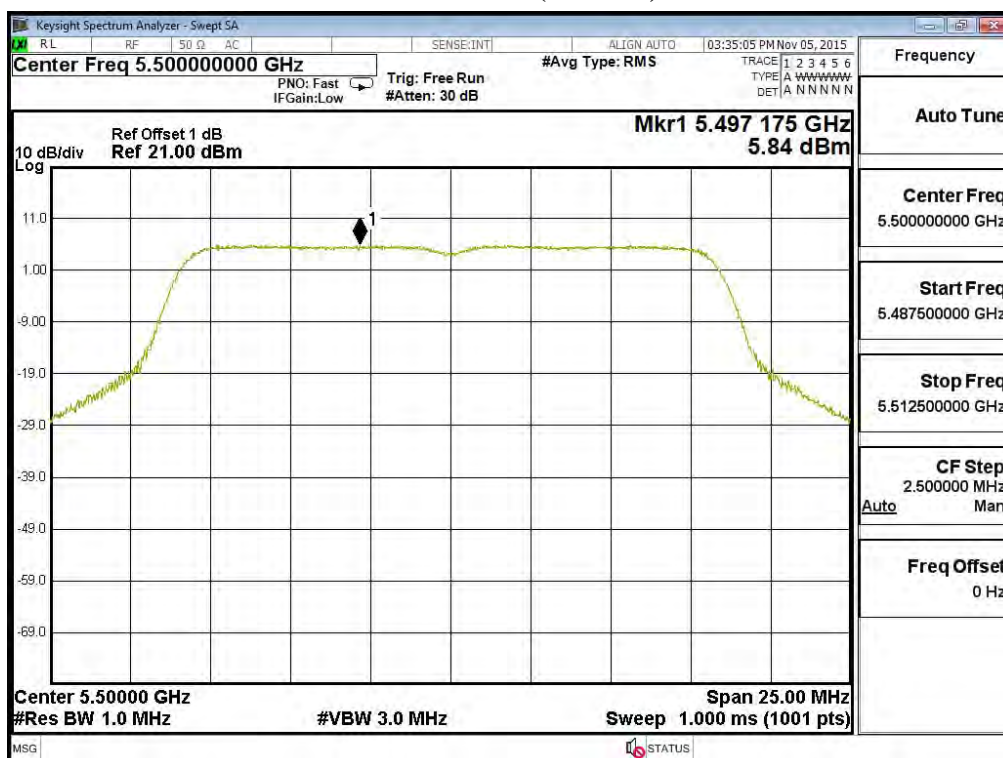
### Channel 60: (Chain B)



### Channel 64: (Chain B)

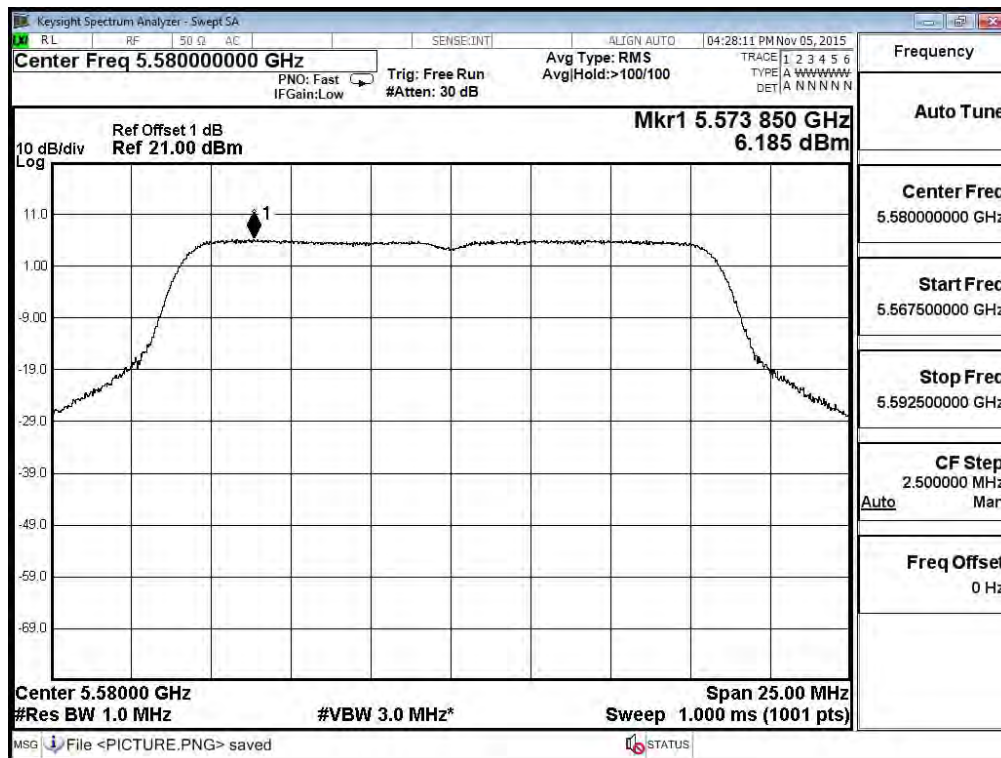


### Channel 100: (Chain B)

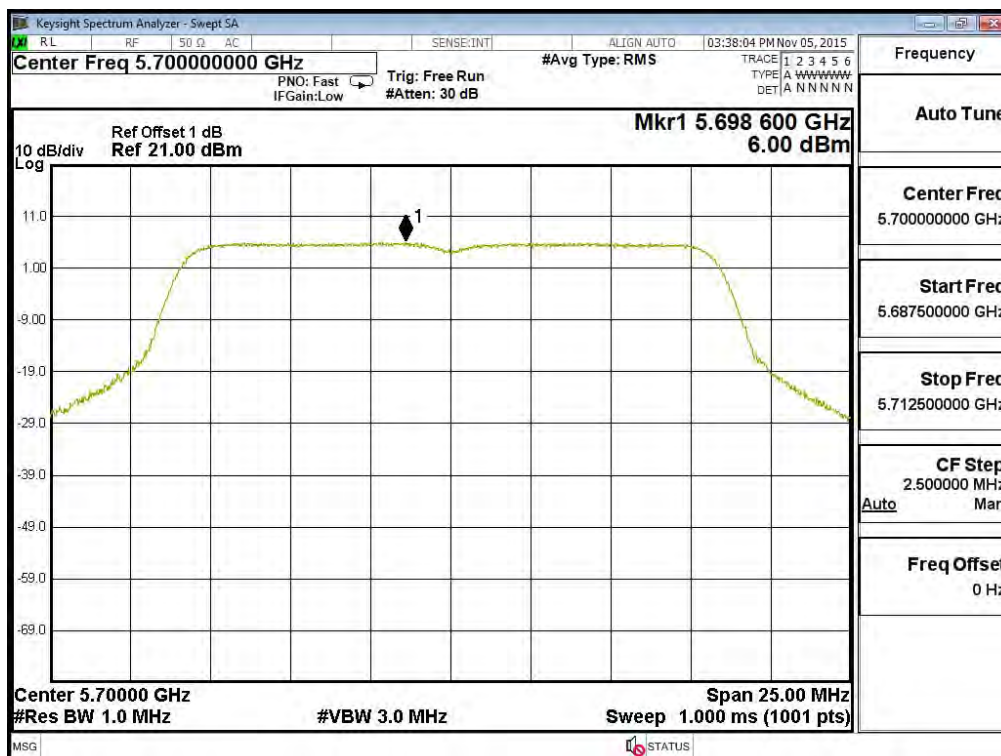




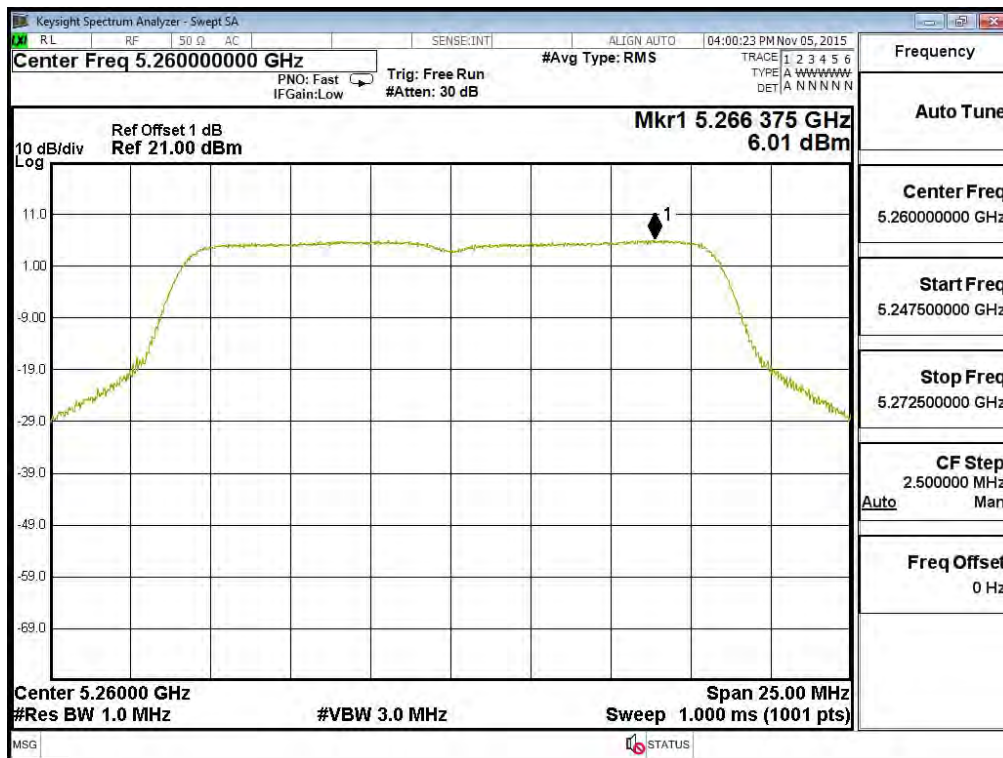
### Channel 116: (Chain B)



### Channel 140: (Chain B)



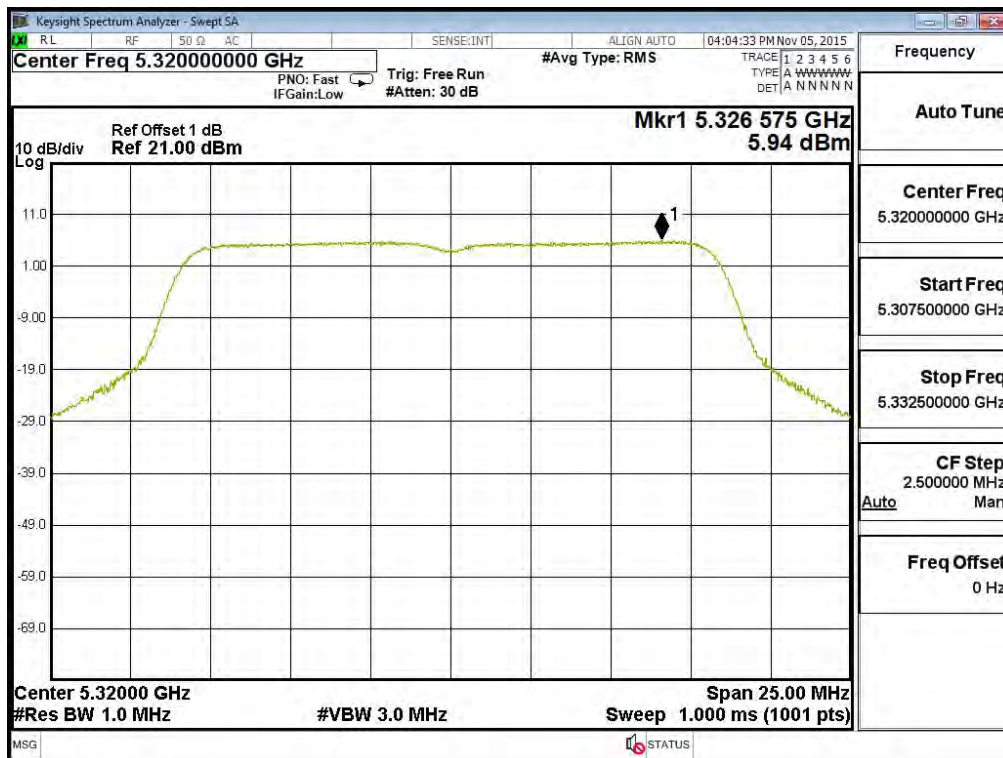
### Channel 52: (Chain C)



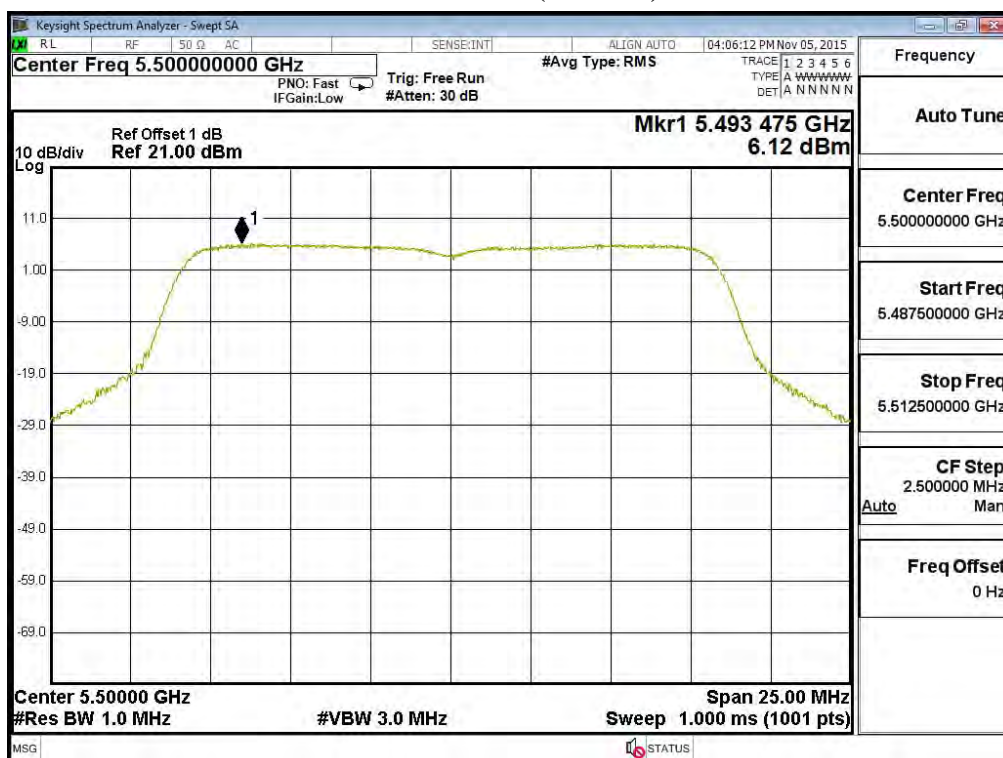
### Channel 60: (Chain C)



### Channel 64: (Chain C)

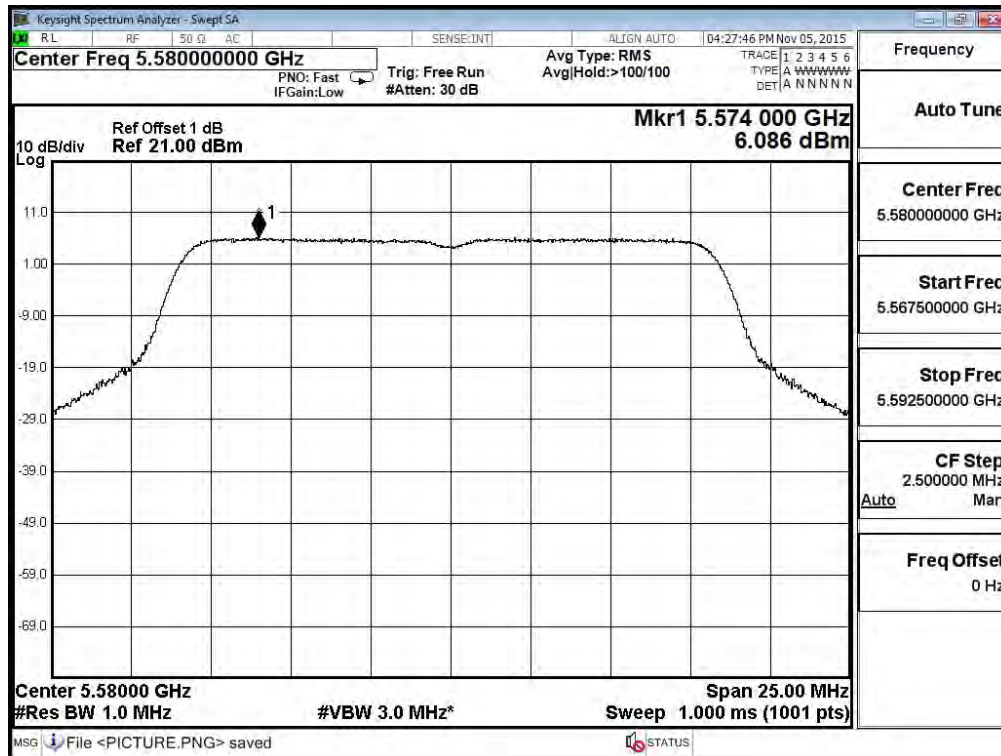


### Channel 100: (Chain C)

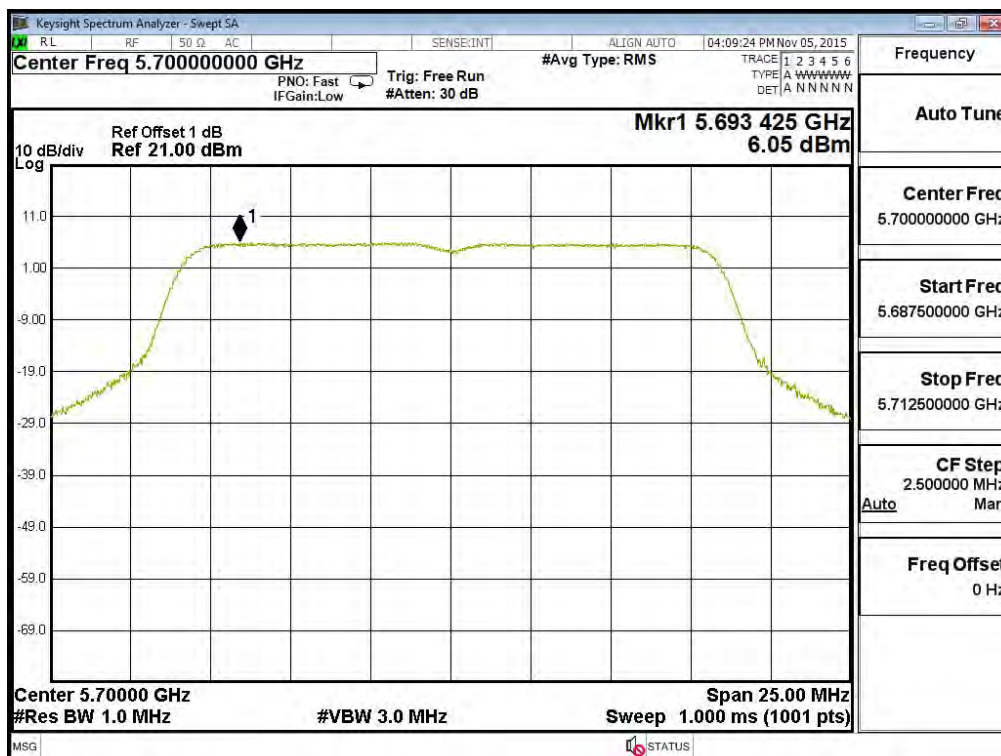




### Channel 116: (Chain C)



### Channel 140: (Chain C)



Product : 802.11ac Dual Band Access Point  
Test Item : Peak Power Spectral Density  
Test Site : No.3 OATS  
Test Mode : Mode 2: Transmit (802.11n-20BW 21.7Mbps)

**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

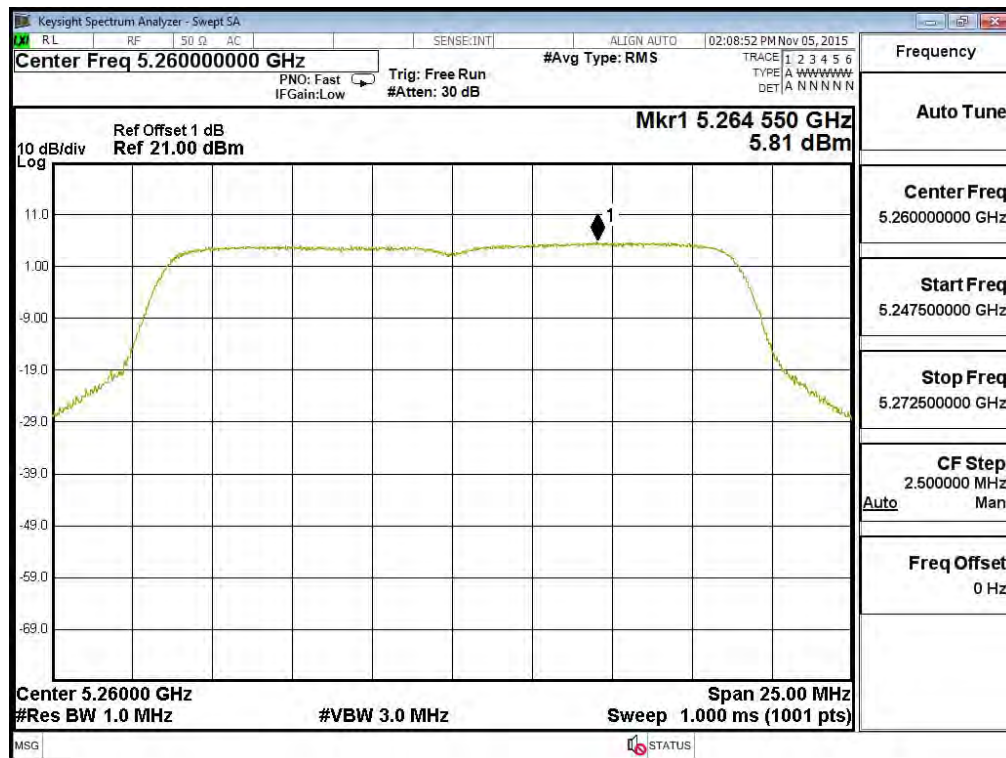
Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSP/MHz (dBm)	Required Limit (dBm)	Result
52	5260	A	5.810	10.581	<11	Pass
		B	5.590	10.361	<11	Pass
		C	5.880	10.651	<11	Pass
60	5300	A	5.320	10.091	<11	Pass
		B	5.660	10.431	<11	Pass
		C	5.700	10.471	<11	Pass
64	5320	A	6.060	10.831	<11	Pass
		B	5.979	10.750	<11	Pass
		C	6.124	10.895	<11	Pass
100	5500	A	5.780	10.551	<11	Pass
		B	5.620	10.391	<11	Pass
		C	5.600	10.371	<11	Pass
116	5580	A	5.850	10.621	<11	Pass
		B	5.930	10.701	<11	Pass
		C	6.070	10.841	<11	Pass
140	5700	A	5.510	10.281	<11	Pass
		B	5.650	10.421	<11	Pass
		C	5.870	10.641	<11	Pass

Note: 1.The quantity  $10 \cdot \log 3$  (three antennas) is added to the spectrum peak value according to document 662911 D01.

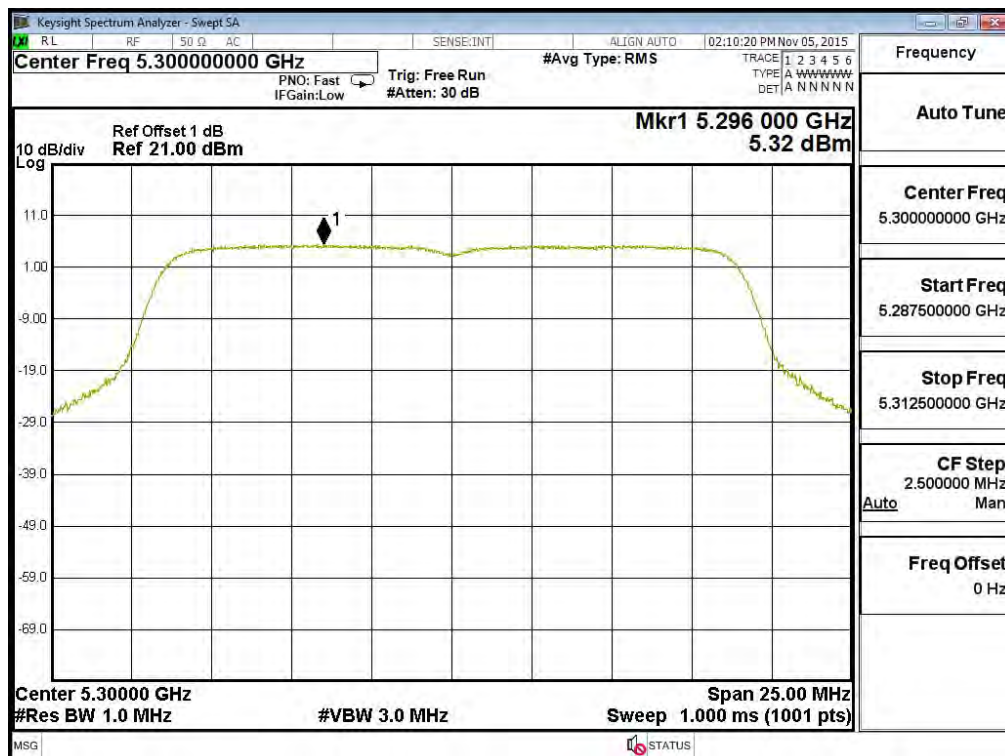
2.Total PPSP Value = PPSP/MHz value +  $10 \cdot \log 3$  (three antennas).



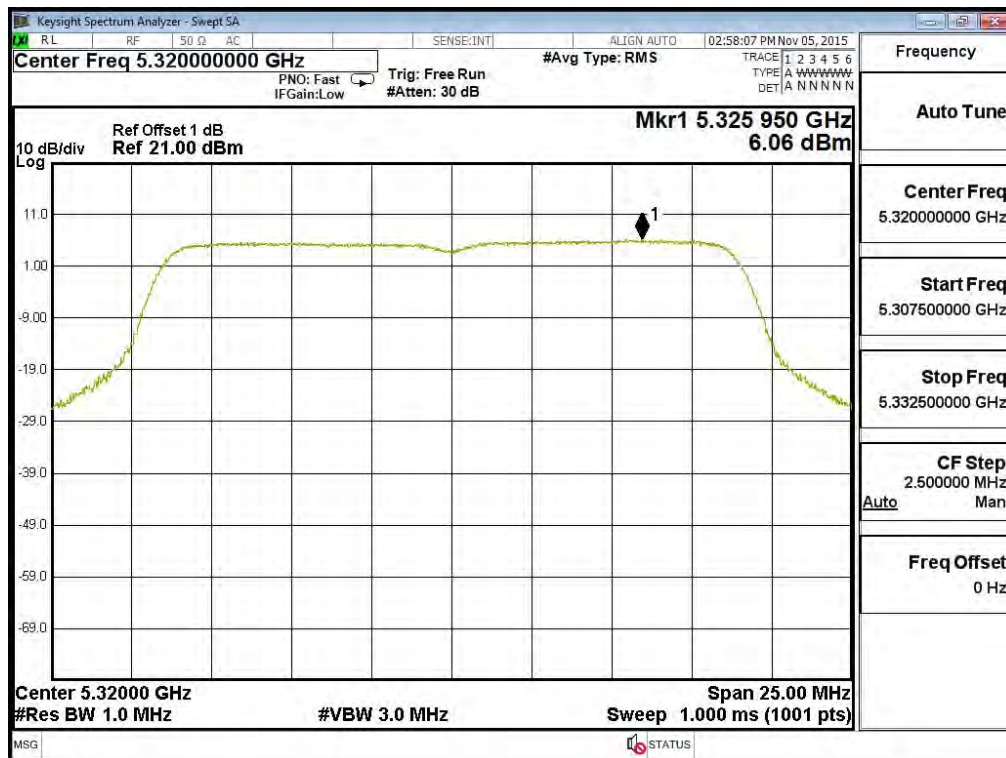
### Channel 52: (Chain A)



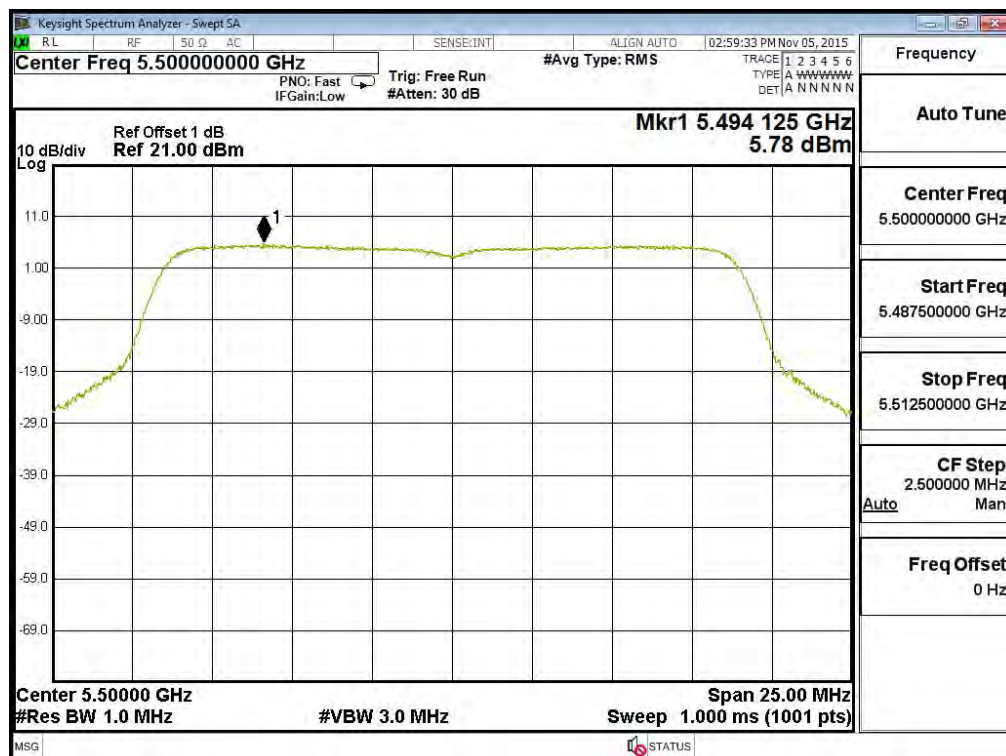
### Channel 60: (Chain A)



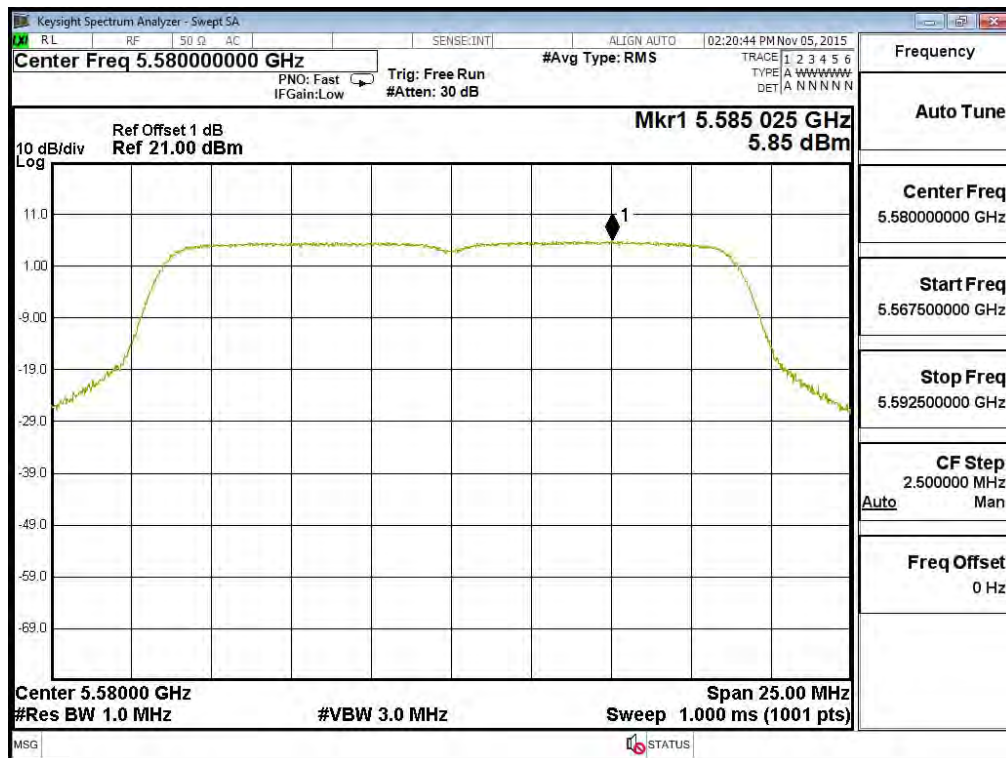
### Channel 64: (Chain A)



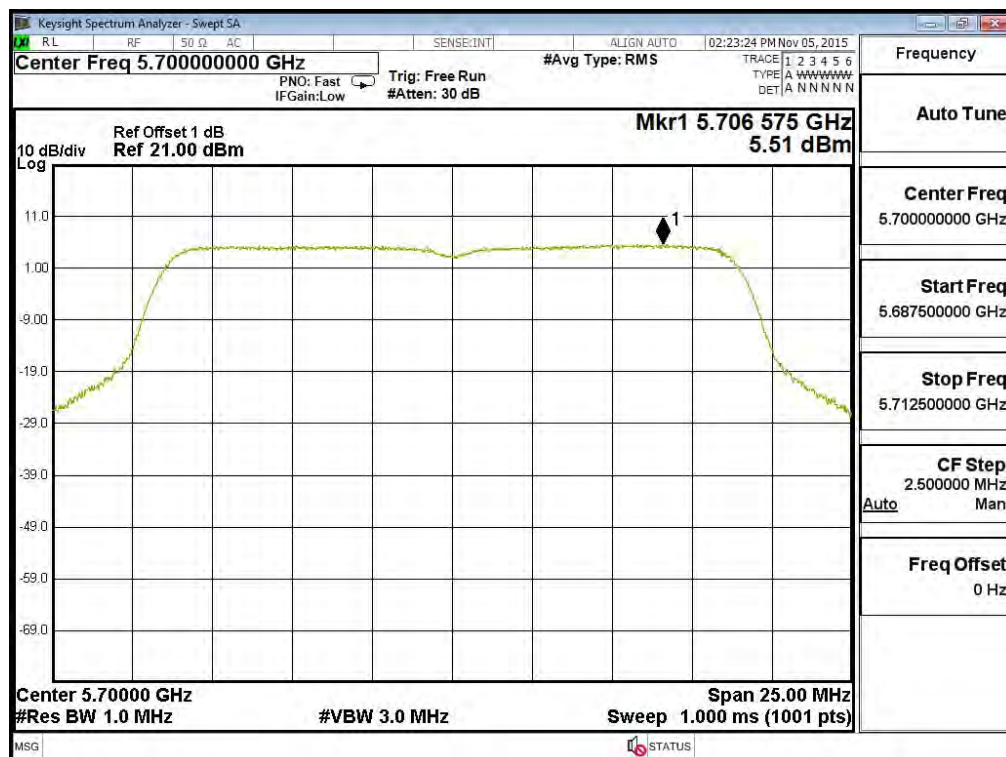
### Channel 100: (Chain A)



### Channel 116: (Chain A)

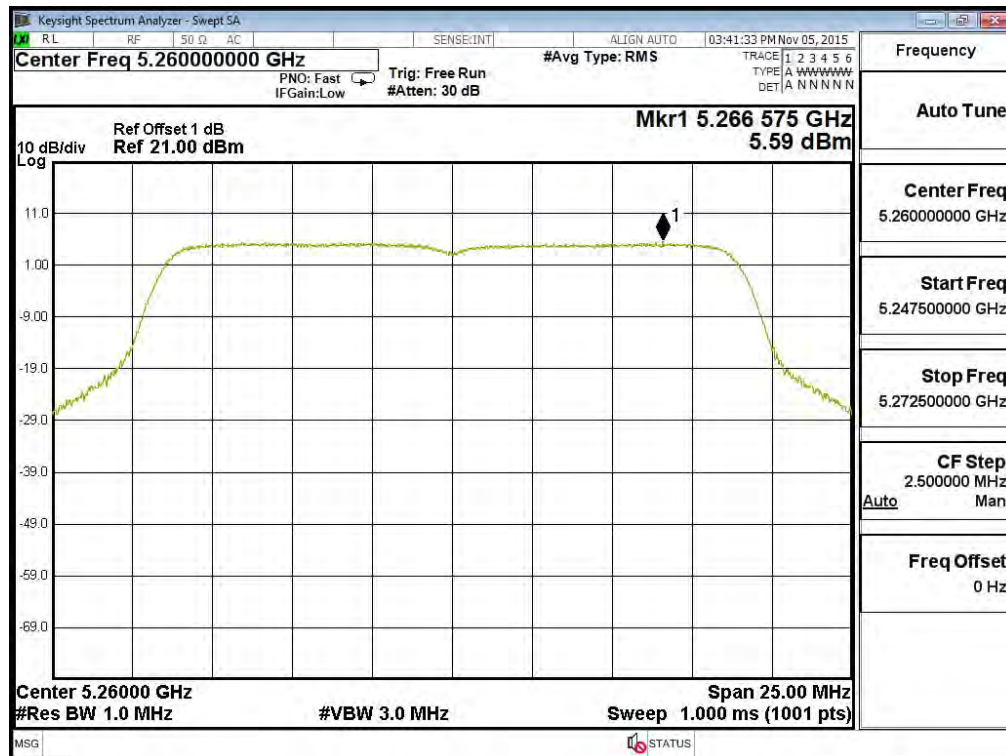


### Channel 140: (Chain A)

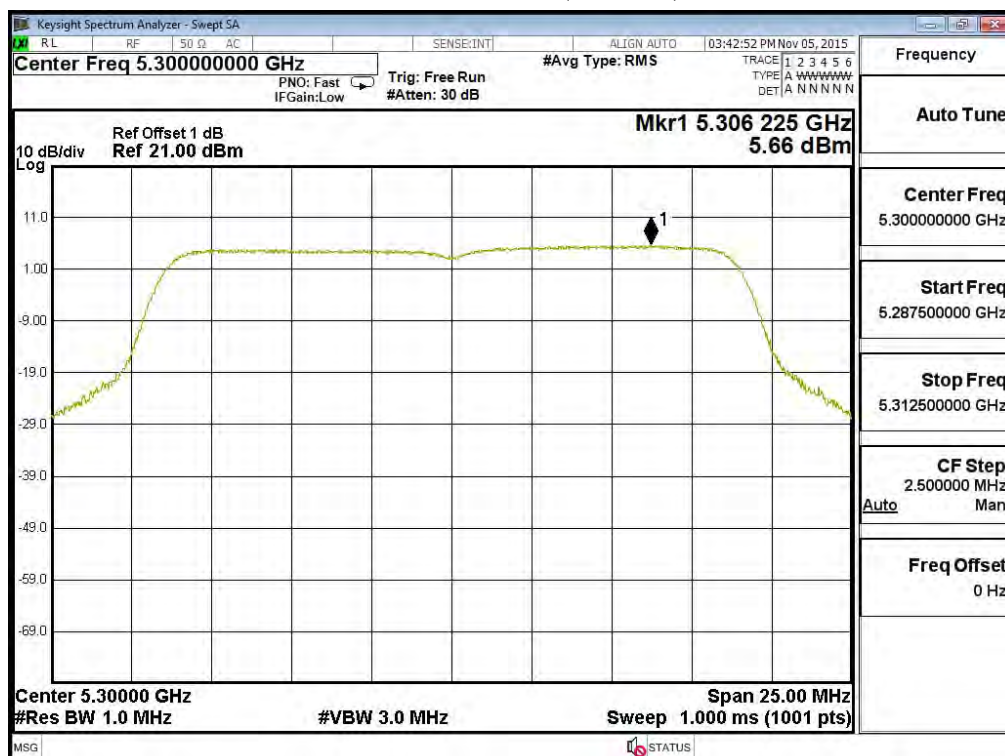




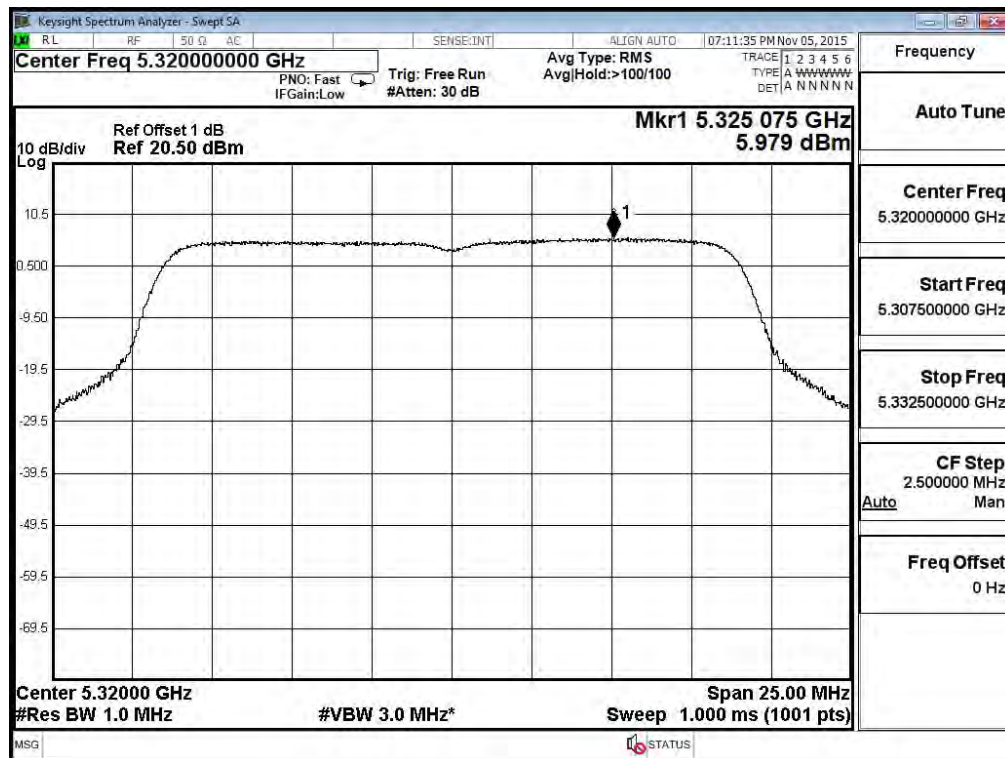
### Channel 52: (Chain B)



### Channel 60: (Chain B)



### Channel 64: (Chain B)



### Channel 100: (Chain B)

