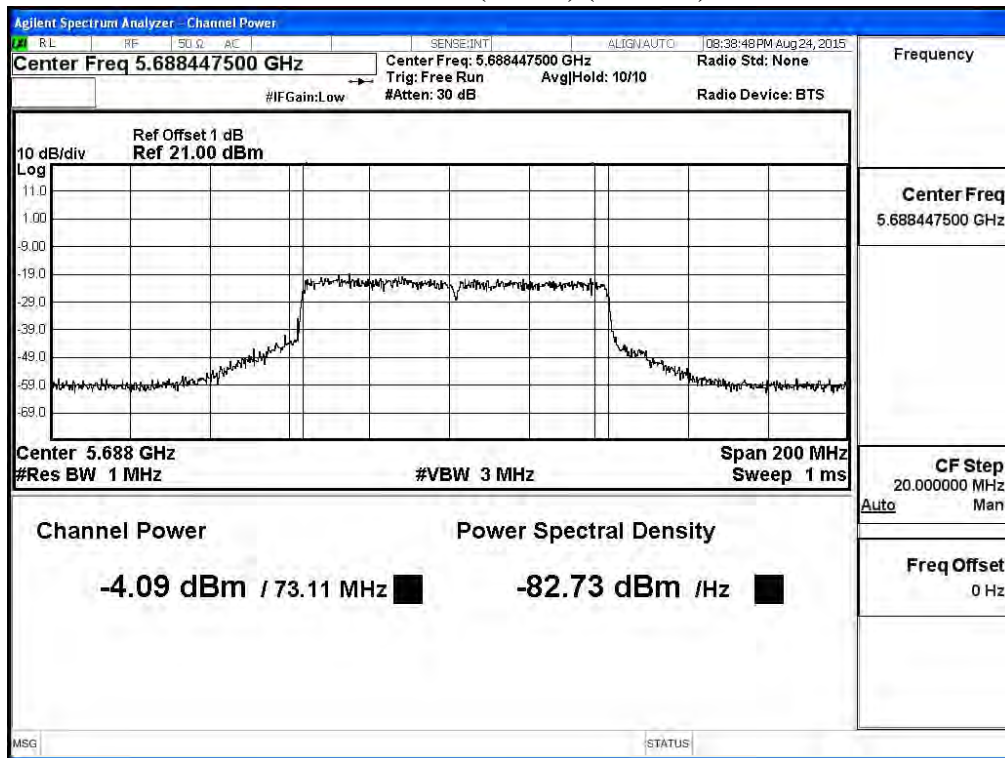
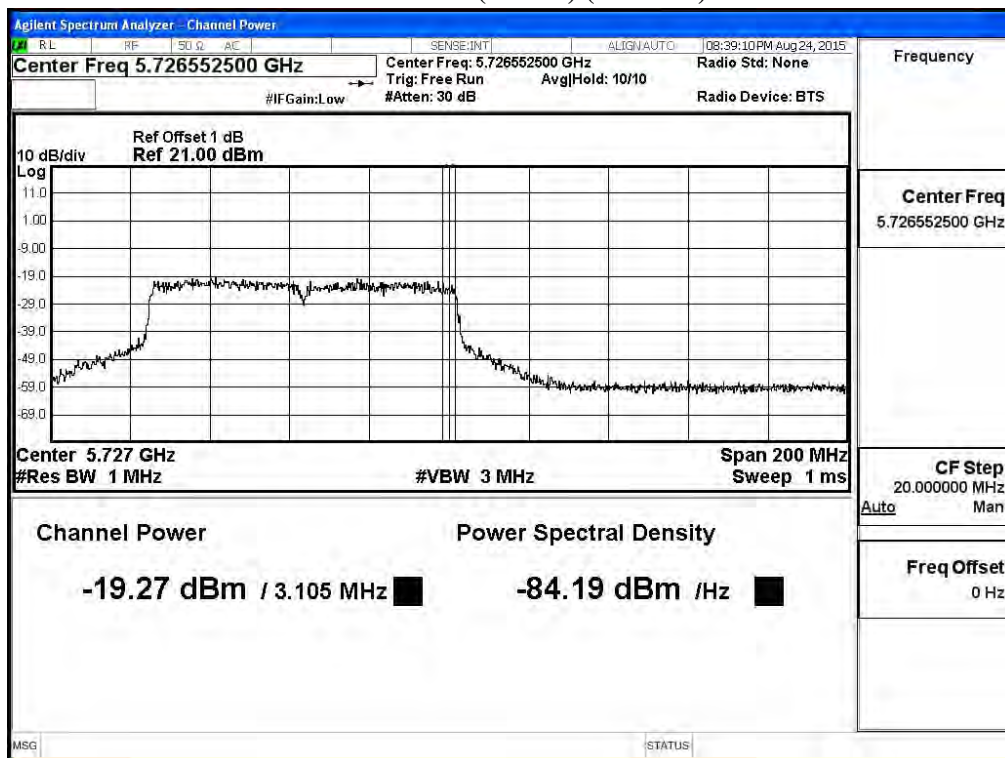


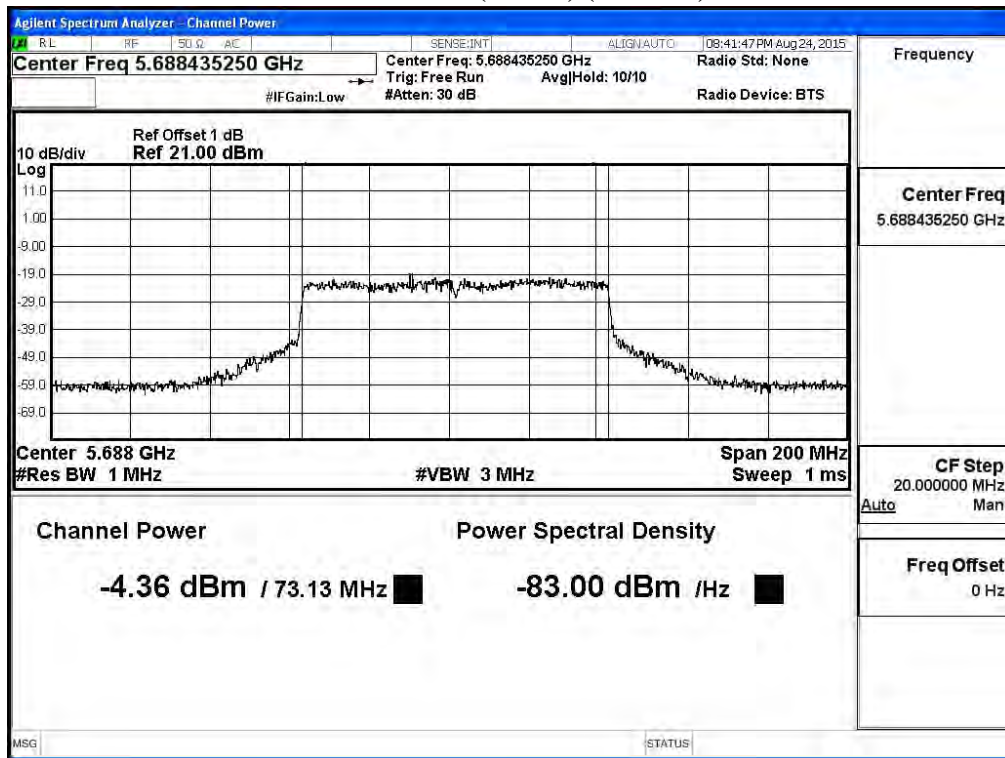
### Channel 138 (Band3) (Chain A)



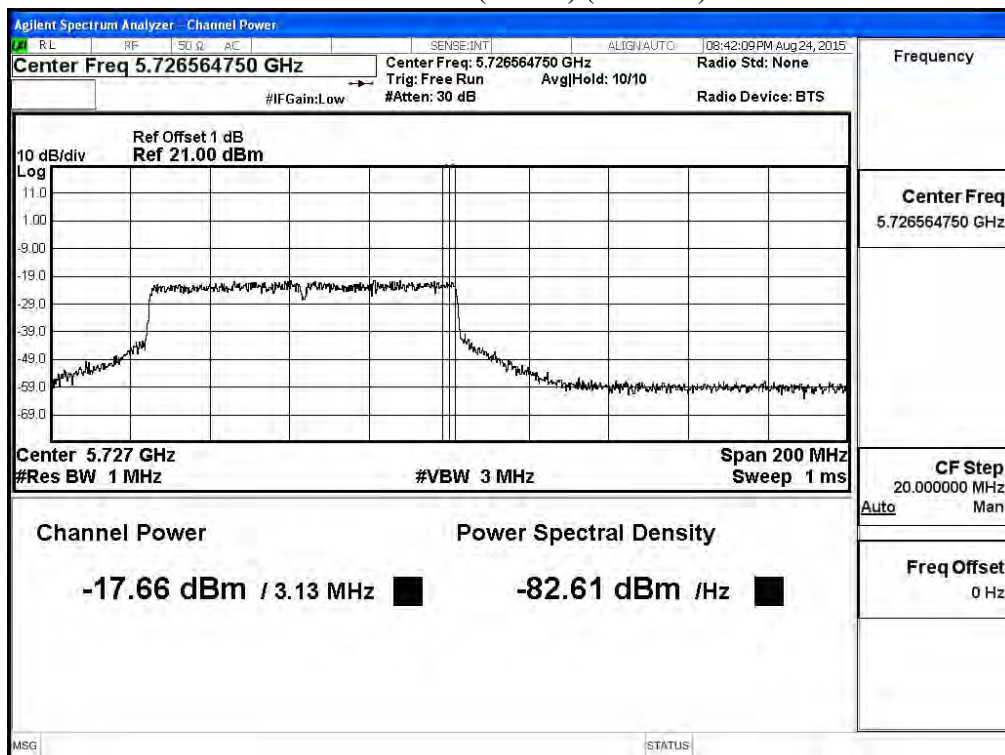
### Channel 138 (Band4) (Chain A)



### Channel 138 (Band3) (Chain B)



### Channel 138 (Band4) (Chain B)



Product : 802.11 ac PCIe Module  
 Test Item : Maximum conducted output power  
 Test Site : No.3 OATS  
 Test Mode : Mode 25: Transmit (802.11a-6Mbps)(Sector Antenna)

**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	-0.35	-0.52	-0.7	-0.84	-1.02	-1.1	-1.17	-1.21
60	5300	-1.08	--	--	--	--	--	--	--
64	5320	-0.95	--	--	--	--	--	--	--
100	5500	4.49	4.35	4.21	4.09	3.92	3.84	3.77	3.7
116	5580	3.92	--	--	--	--	--	--	--
140	5700	3.16	--	--	--	--	--	--	--

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)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	-1.08	-1.24	-1.35	-1.49	-1.55	-1.64	-1.78	-1.84
60	5300	-2.12	--	--	--	--	--	--	--
64	5320	-2.14	--	--	--	--	--	--	--
100	5500	-1.38	--	--	--	--	--	--	--
116	5580	-0.82	--	--	--	--	--	--	--
140	5700	4.21	4.13	4	3.94	3.89	3.71	3.57	3.34

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

**Maximum conducted output power measurement:**

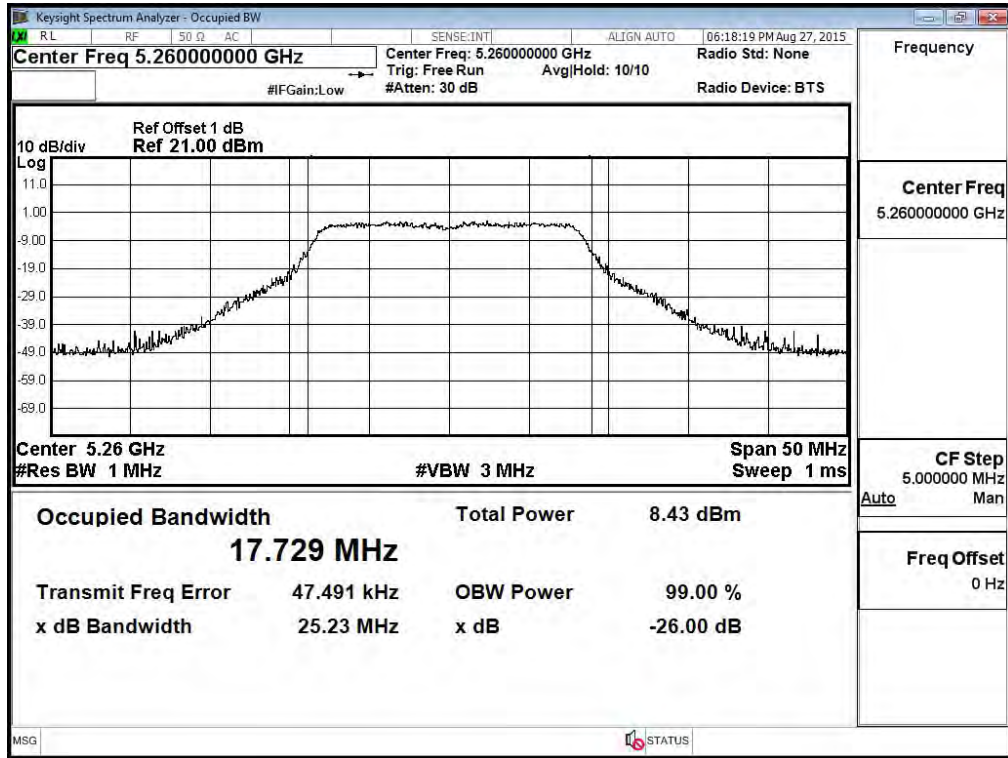
**CHAIN A+B**

Channel Number	Frequency (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Total Power (dBm)	Output power Limit	
						(dBm)	dBm+10log(BW)
52	5260	17.572	-0.35	-1.08	2.31	10	23.45
60	5300	17.535	-1.08	-2.12	1.44	10	23.44
64	5320	17.597	-0.95	-2.14	1.51	10	23.45
100	5500	17.709	4.49	-1.38	5.49	10	23.48
116	5580	17.653	3.92	-0.82	5.18	10	23.47
140	5700	17.556	3.16	4.21	6.73	10	23.44

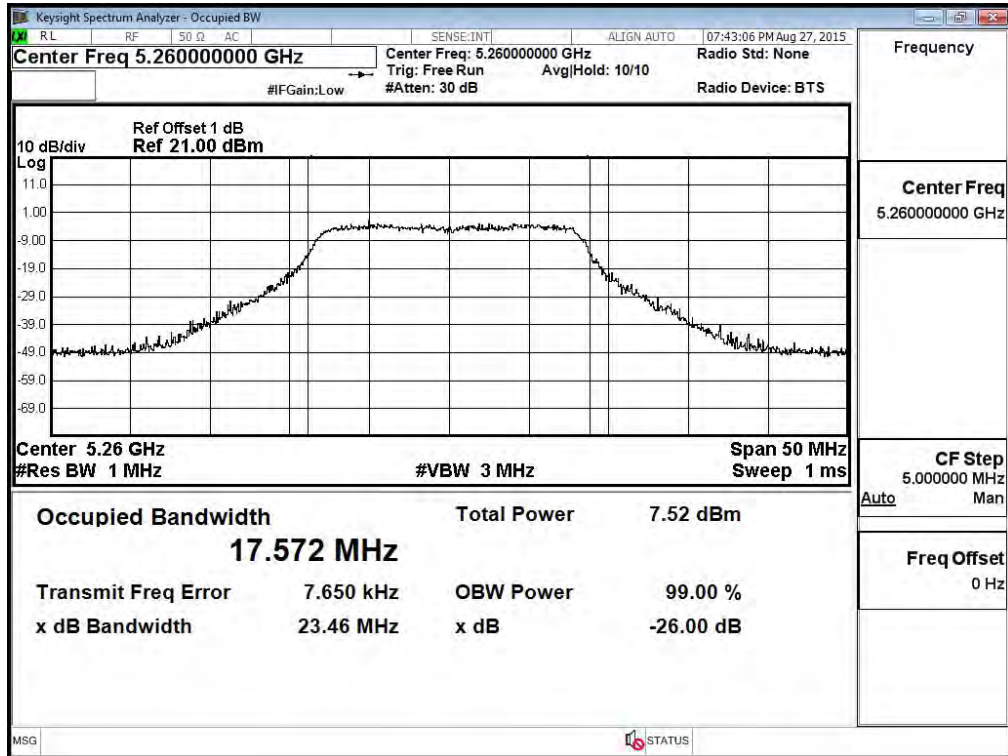
Note:

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)).
3. 99% Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

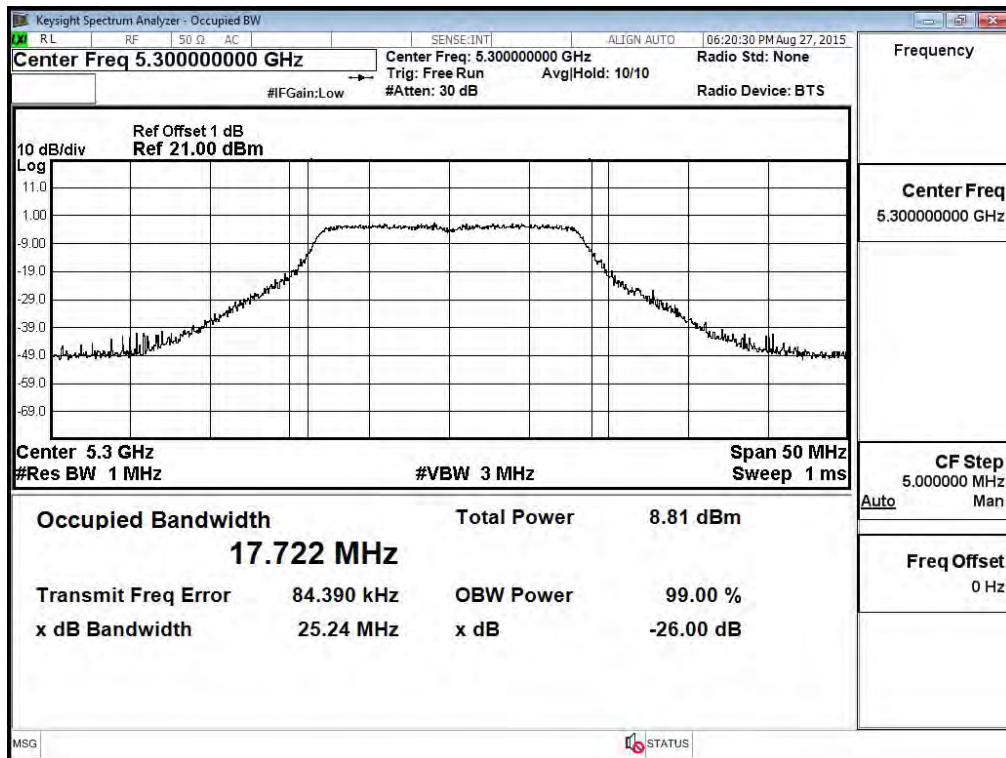
**99% Occupied Bandwidth:  
Channel 52: Chain A**



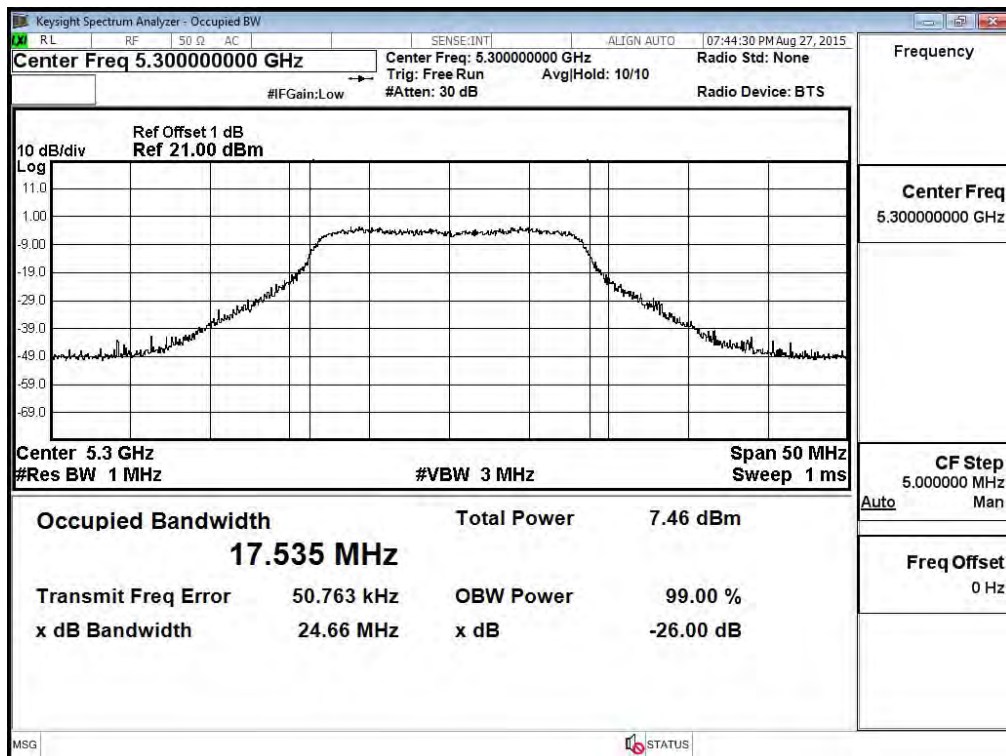
**Channel 52: Chain B**



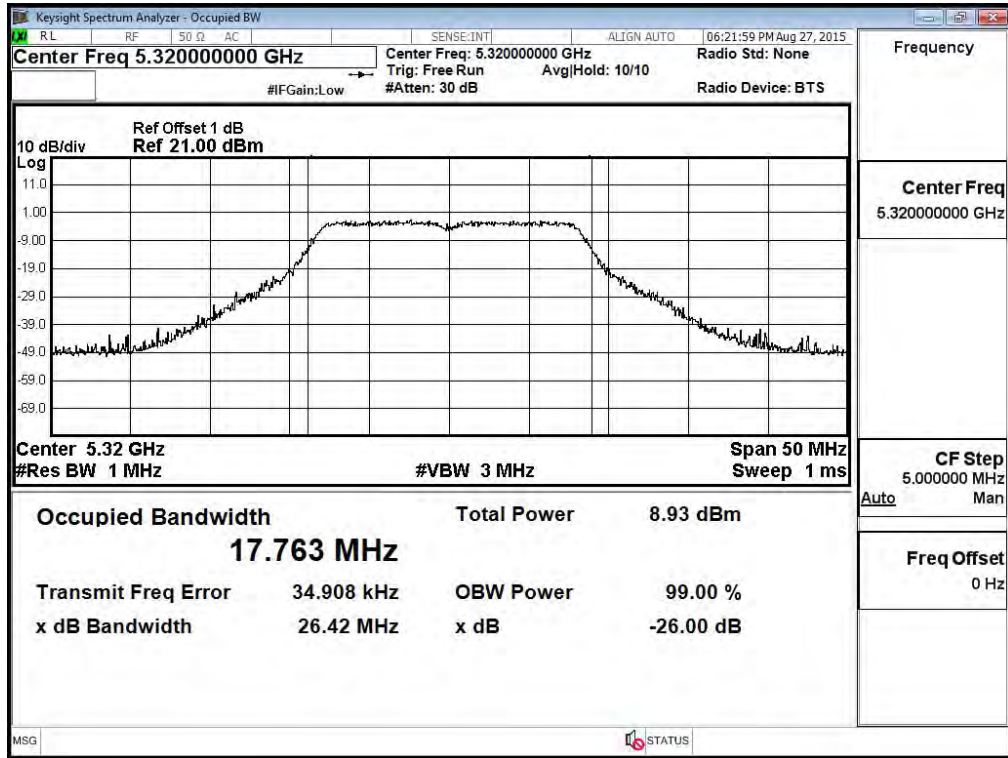
### Channel 60: Chain A



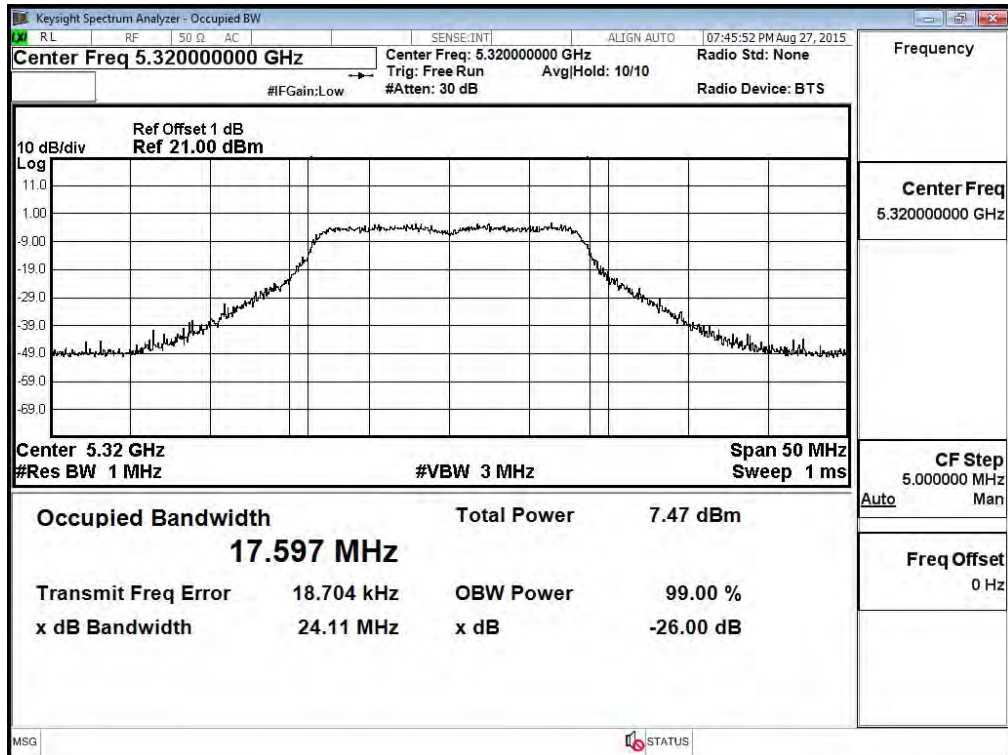
### Channel 60: Chain B



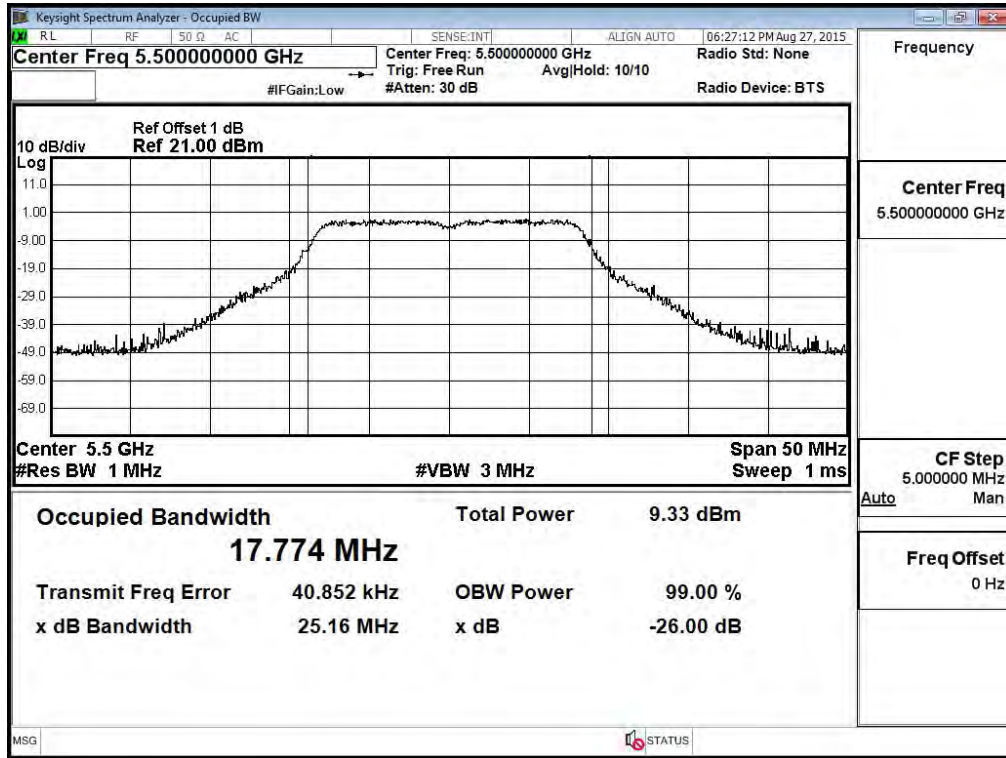
**Channel 64: Chain A**



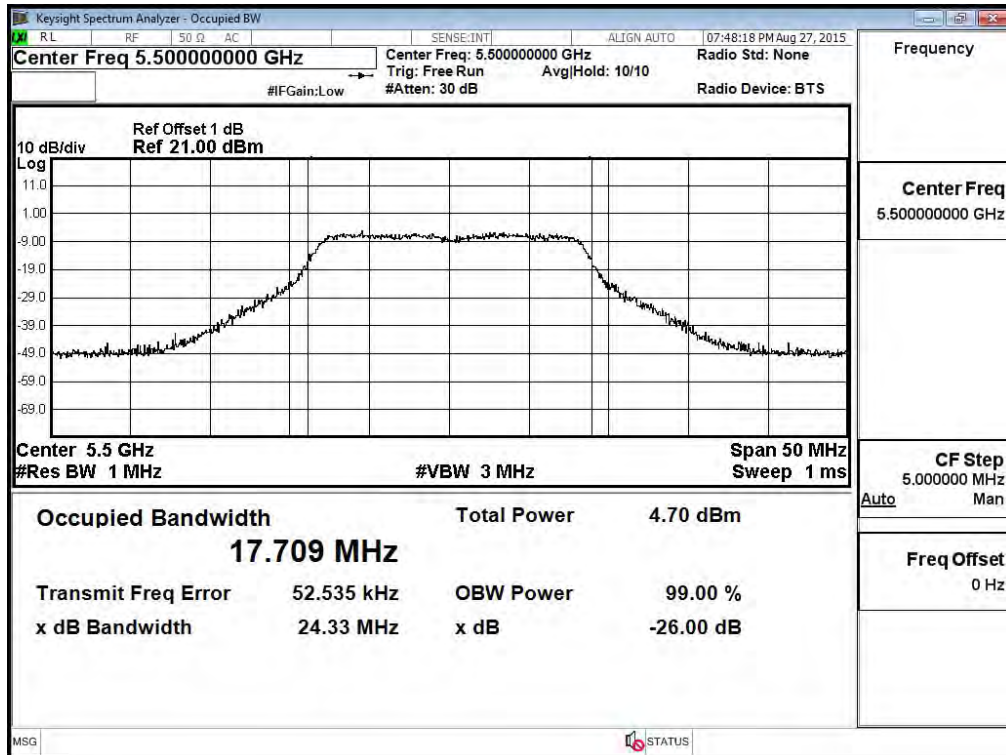
**Channel 64: Chain B**



### Channel 100: Chain A

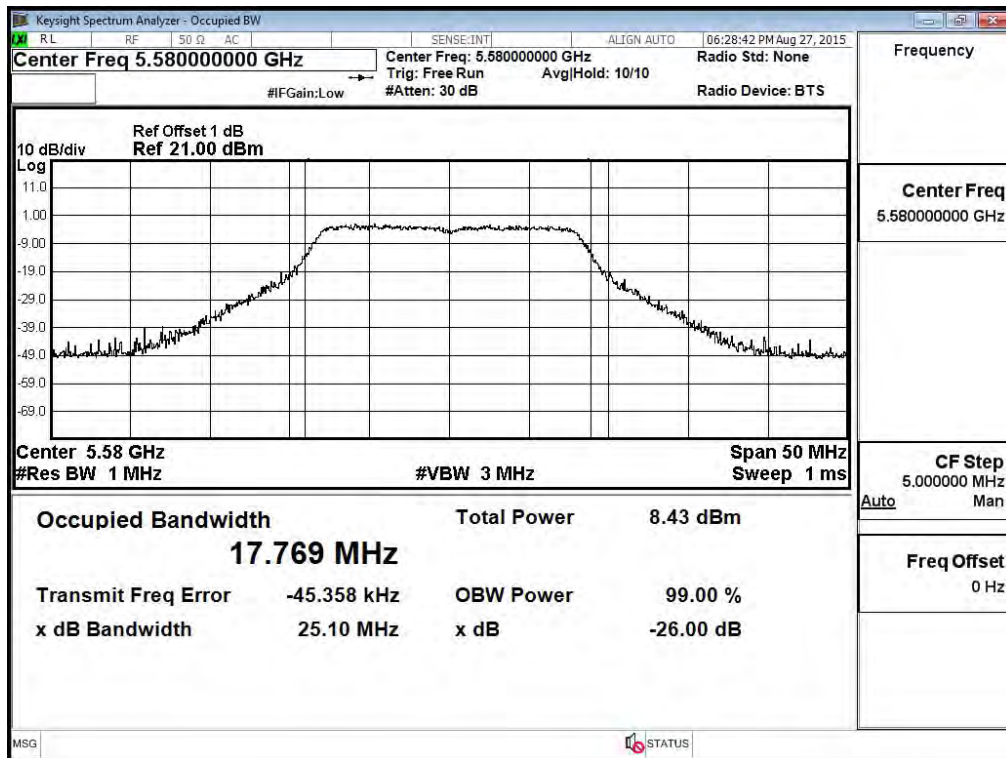


### Channel 100: Chain B

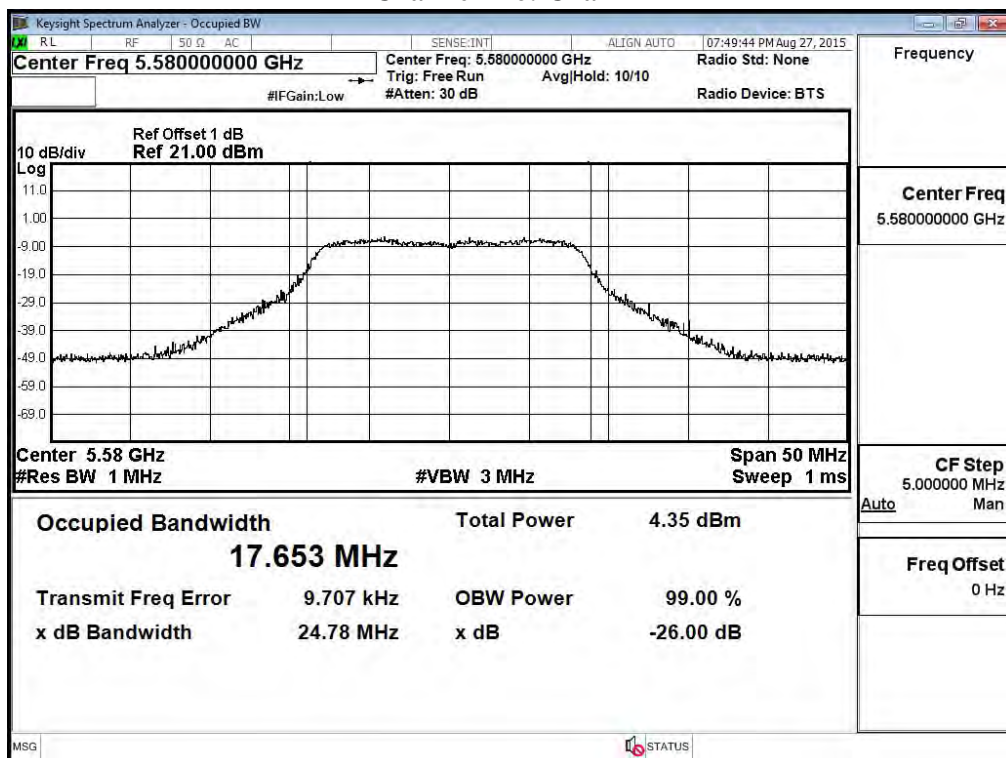




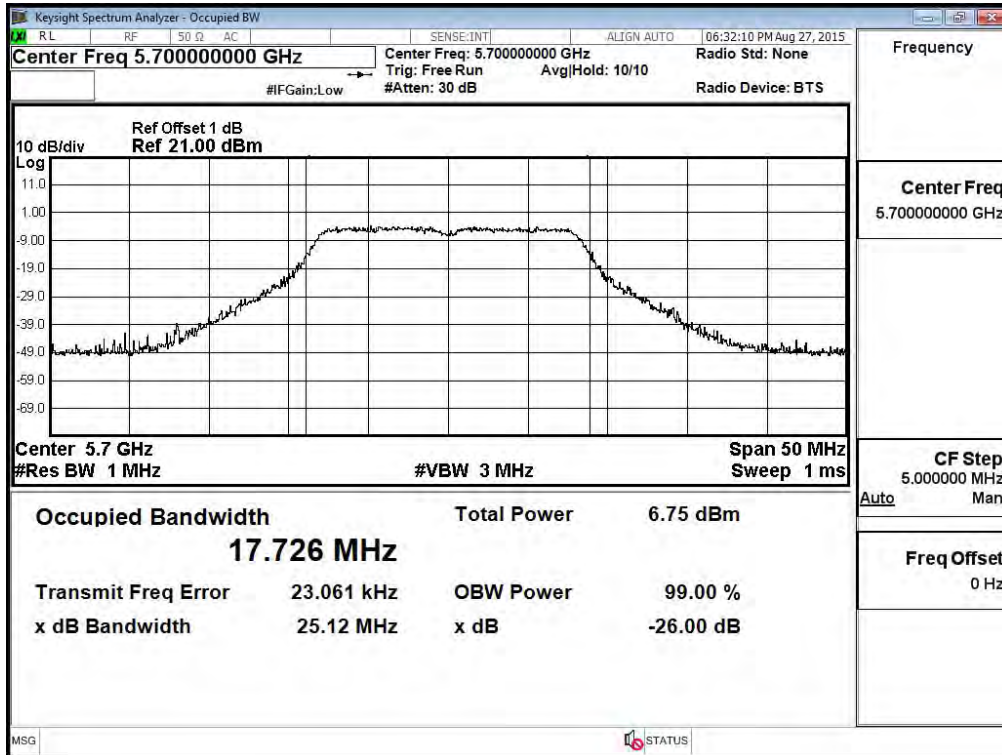
### Channel 116: Chain A



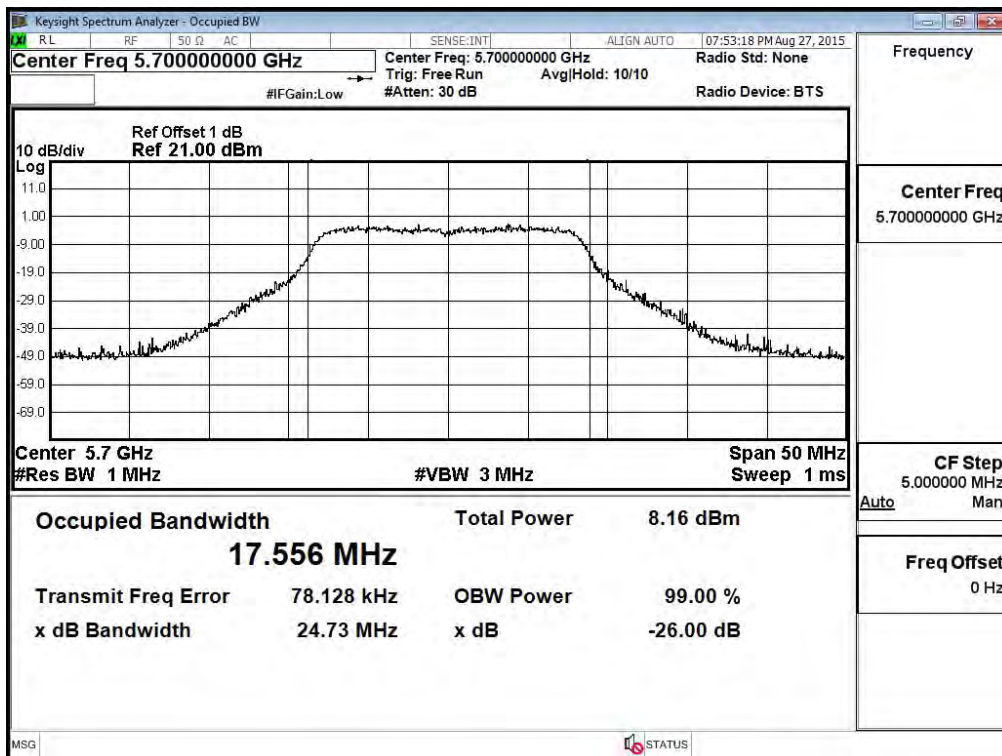
### Channel 116: Chain B



### Channel 140: Chain A



### Channel 140: Chain B



Product : 802.11 ac PCIe Module  
 Test Item : Maximum conducted output power  
 Test Site : No.3 OATS  
 Test Mode : Mode 26: Transmit (802.11n-20BW 14.4Mbps)(Sector Antenna)

**CHAIN A**

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4
		Measurement Level (dBm)							
52	5260	-0.39	-0.53	-0.66	-0.77	-0.89	-0.98	-1.05	-1.17
60	5300	-1.1	--	--	--	--	--	--	--
64	5320	-0.92	--	--	--	--	--	--	--
100	5500	4.35	--	--	--	--	--	--	--
116	5580	4.65	4.53	4.4	4.31	4.2	4.08	3.97	3.89
140	5700	1.06	--	--	--	--	--	--	--

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)							
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4
		Measurement Level (dBm)							
52	5260	-1.11	-1.24	-1.37	-1.49	-1.55	-1.67	-1.73	-1.89
60	5300	-2.05	--	--	--	--	--	--	--
64	5320	-2.23	--	--	--	--	--	--	--
100	5500	-1.42	--	--	--	--	--	--	--
116	5580	0.27	--	--	--	--	--	--	--
140	5700	1.54	1.42	1.19	1.11	1.04	0.92	0.8	0.72

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

**Maximum conducted output power measurement:**

**CHAIN A+B**

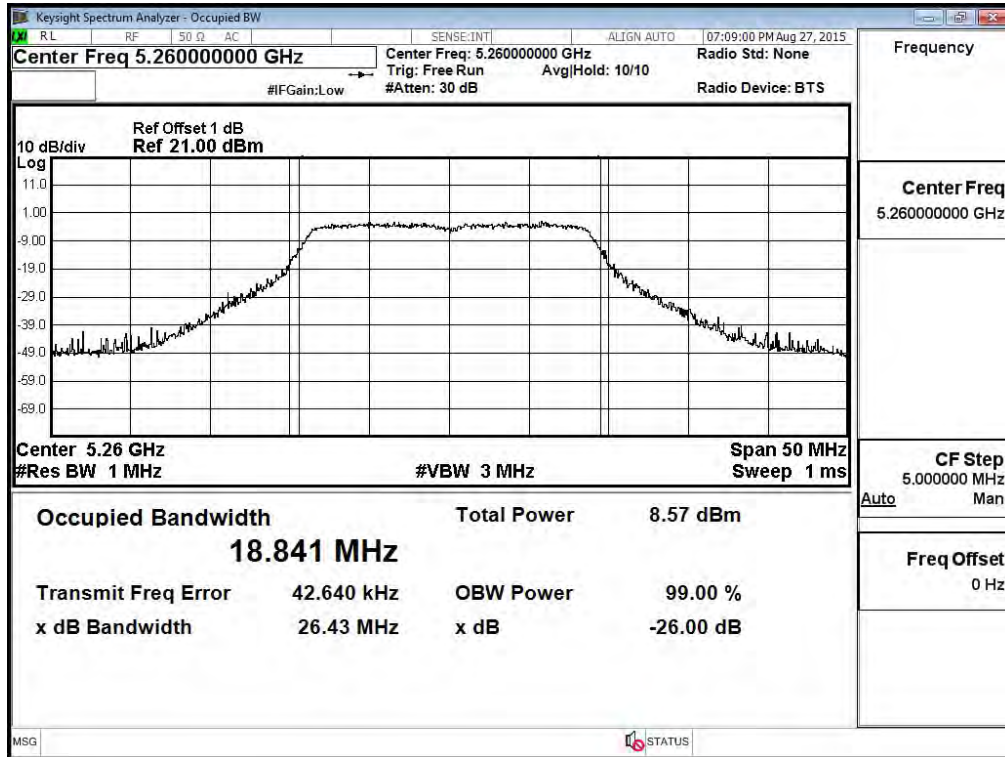
Channel Number	Frequency (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Total Power (dBm)	Output power Limit	
						(dBm)	dBm+10log(BW)
52	5260	18.799	-0.39	-1.11	2.28	10	23.74
60	5300	18.636	-1.10	-2.05	1.46	10	23.70
64	5320	18.815	-0.92	-2.23	1.48	10	23.75
100	5500	18.768	4.35	-1.42	5.37	10	23.73
116	5580	18.674	4.65	0.27	6.00	10	23.71
140	5700	18.649	1.06	1.54	4.32	10	23.71

Note:

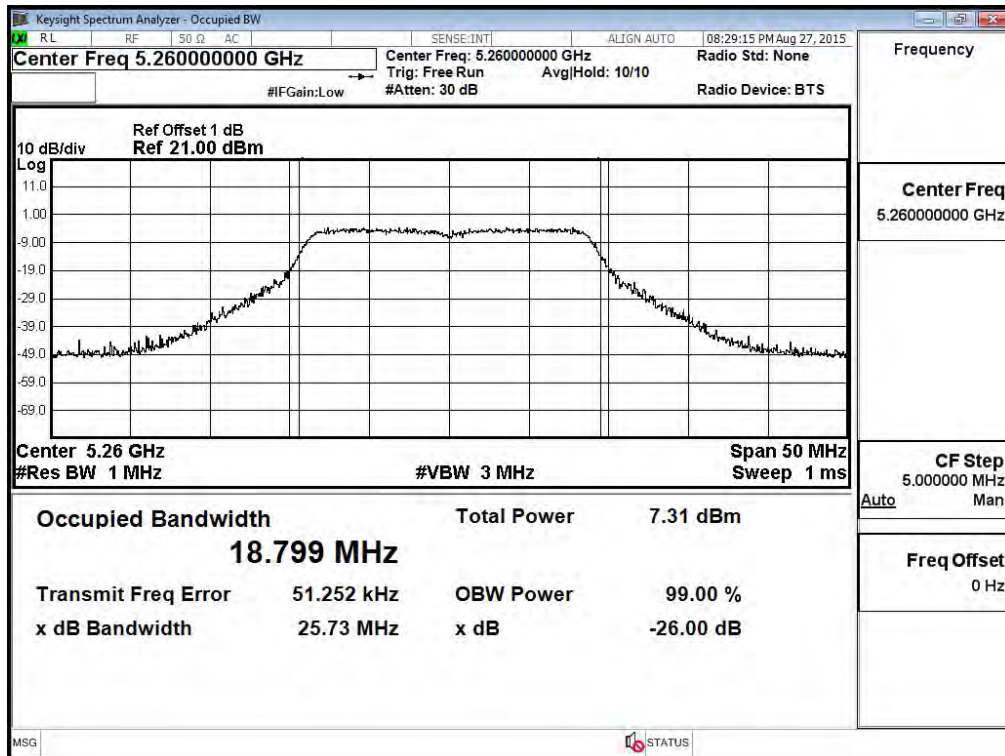
1. Power Output Value = Reading value on average power meter + cable loss.
2. Output Power (dBm) = 10LOG (Chain A Power (mW) + Chain B Power (mW)).
3. 99% Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

**99% Occupied Bandwidth:**

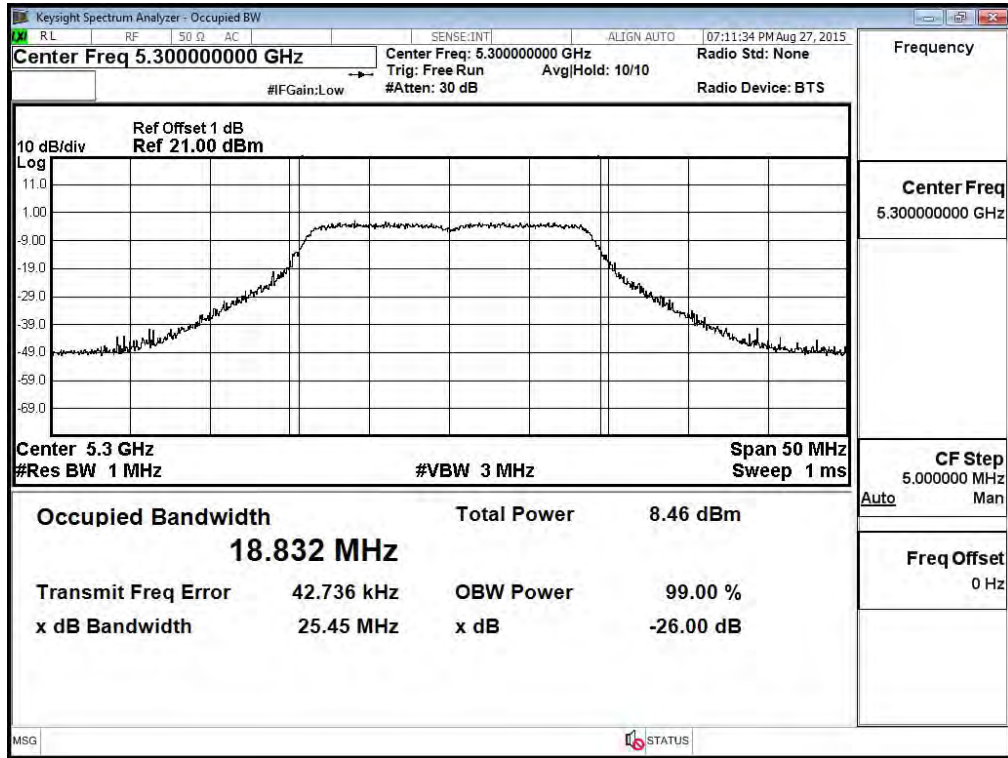
**Channel 52: Chain A**



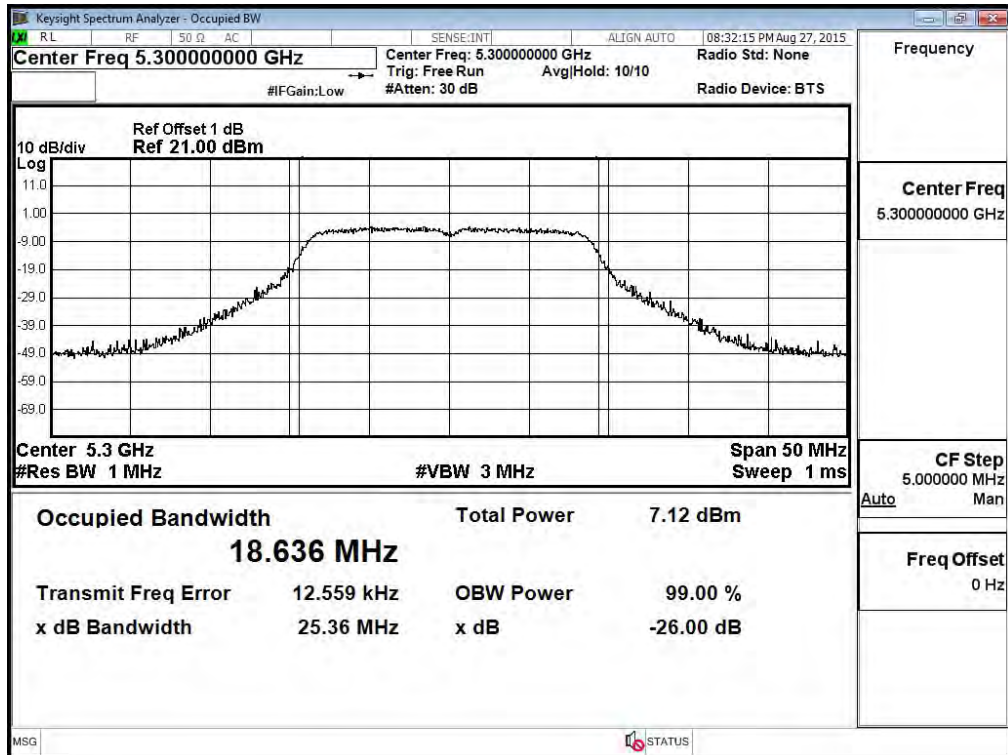
**Channel 52: Chain B**



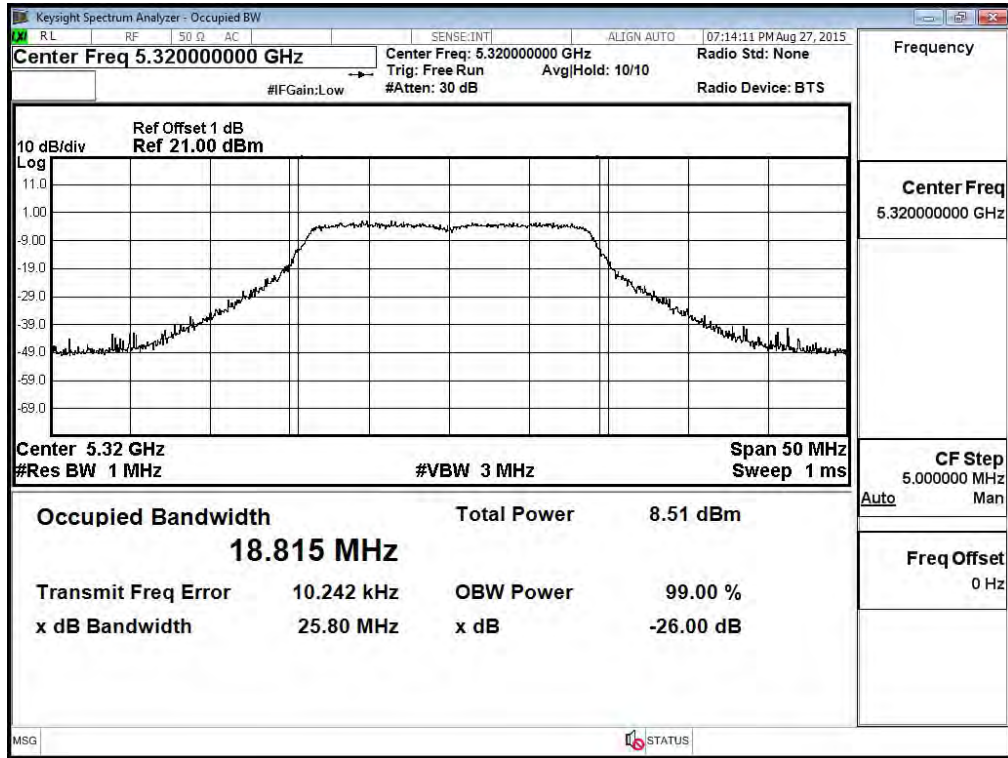
### Channel 60: Chain A



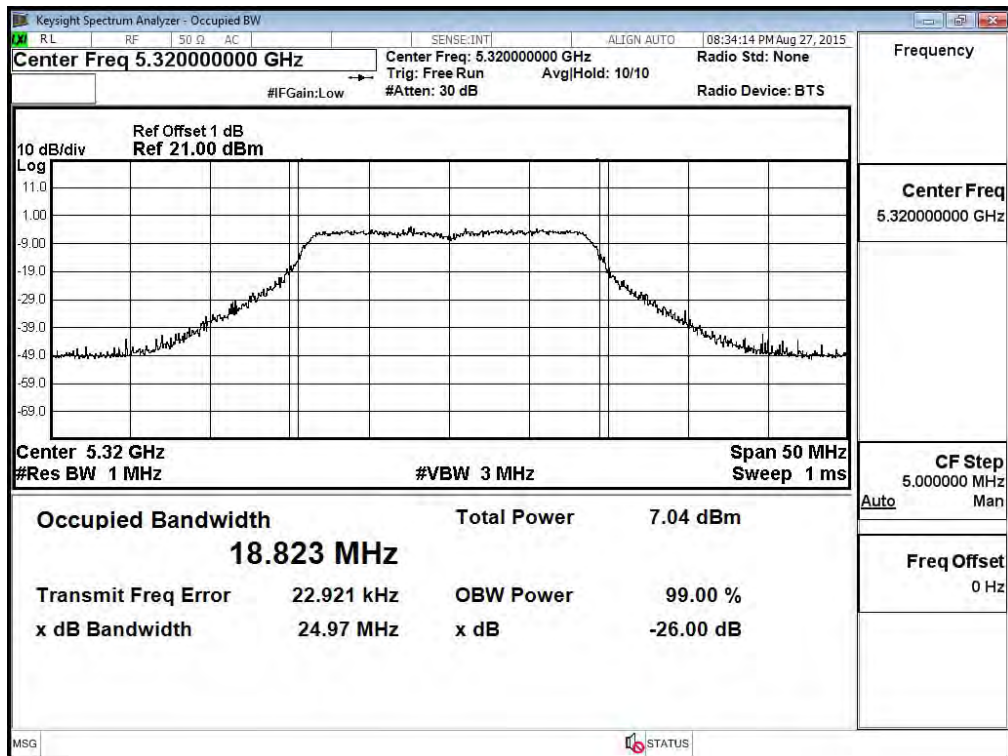
### Channel 60: Chain B



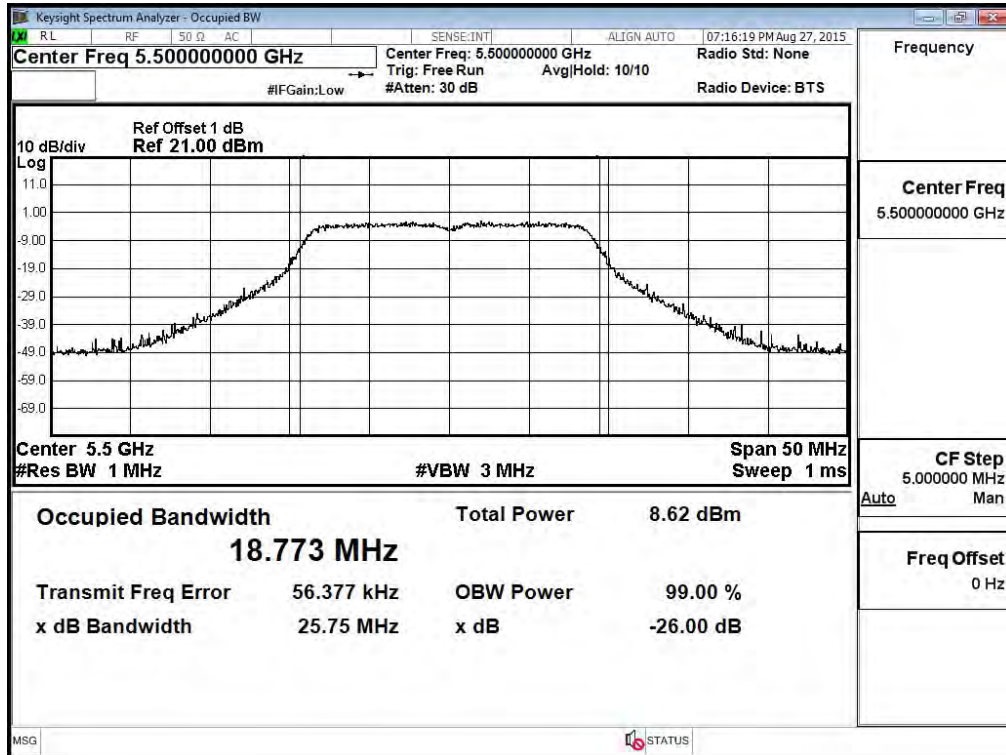
**Channel 64: Chain A**



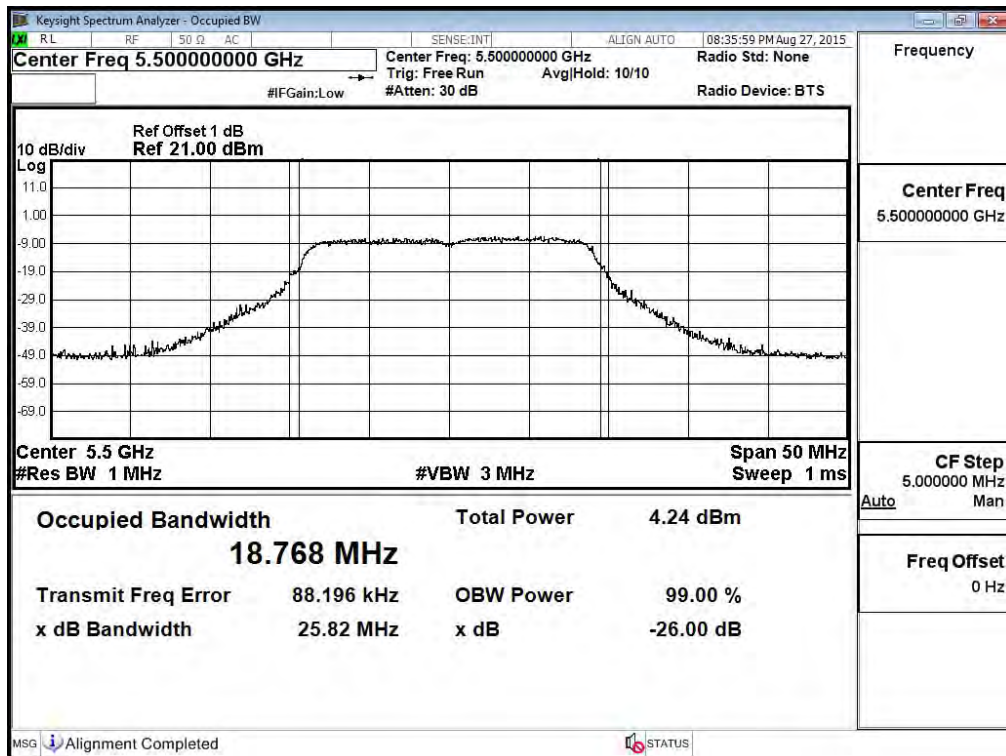
**Channel 64: Chain B**



### Channel 100: Chain A

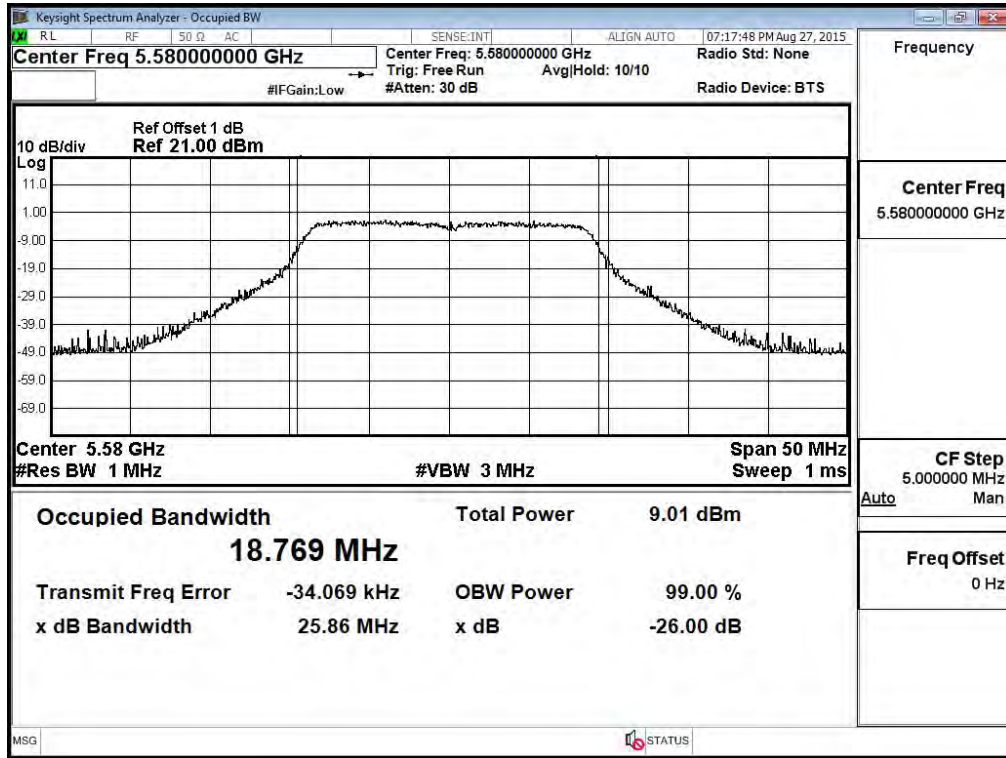


### Channel 100: Chain B

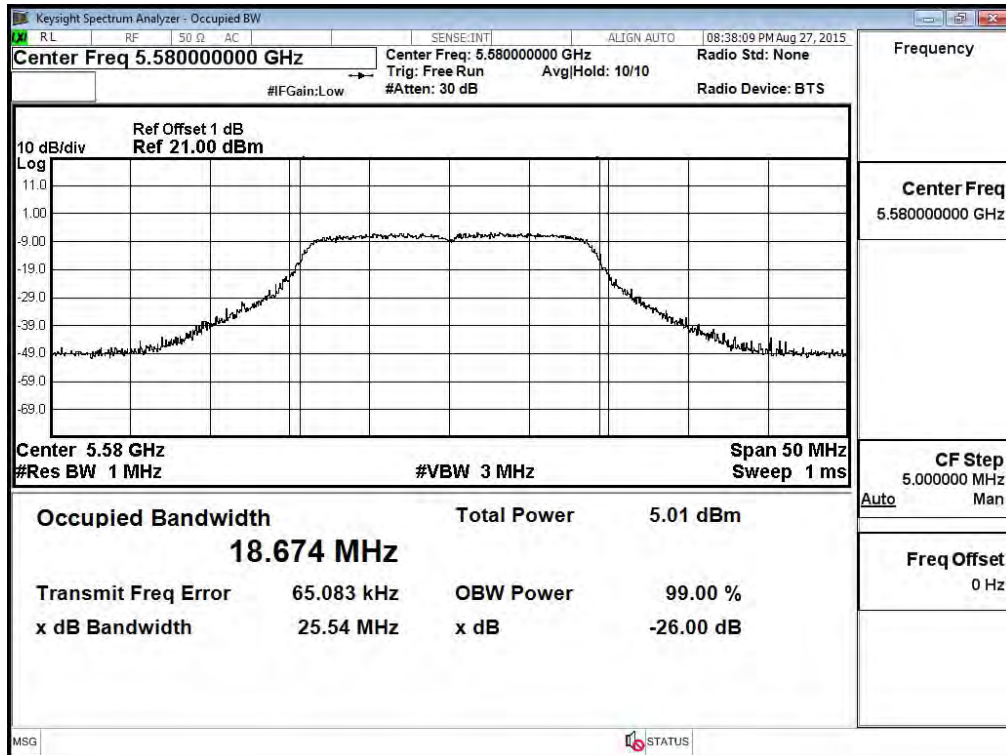




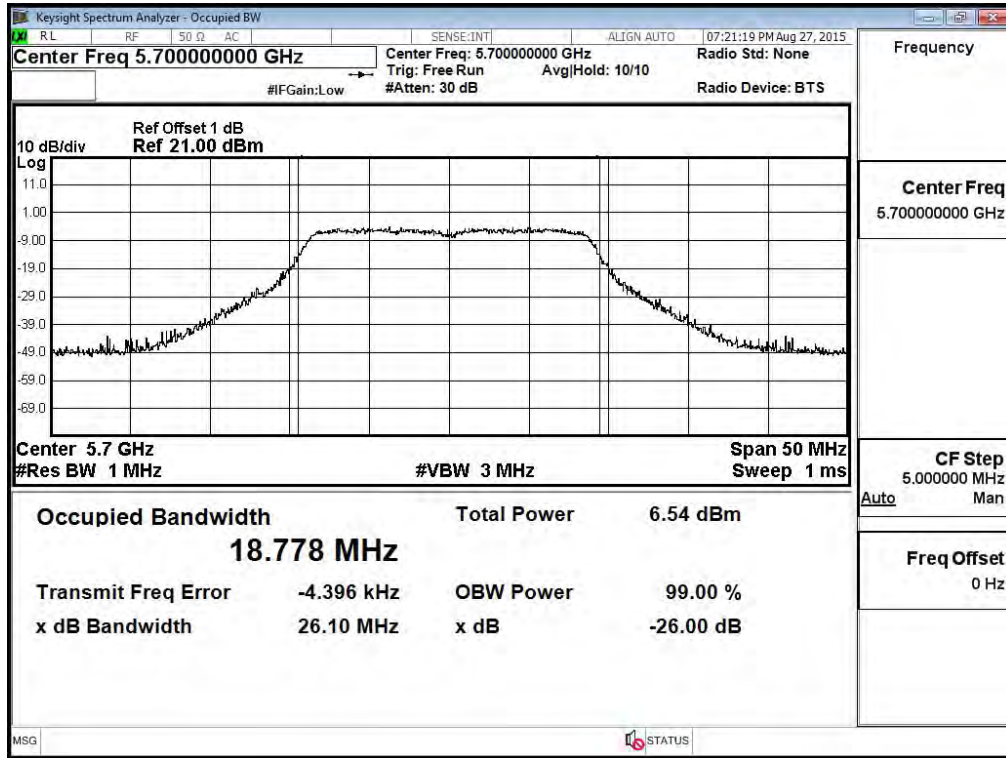
### Channel 116: Chain A



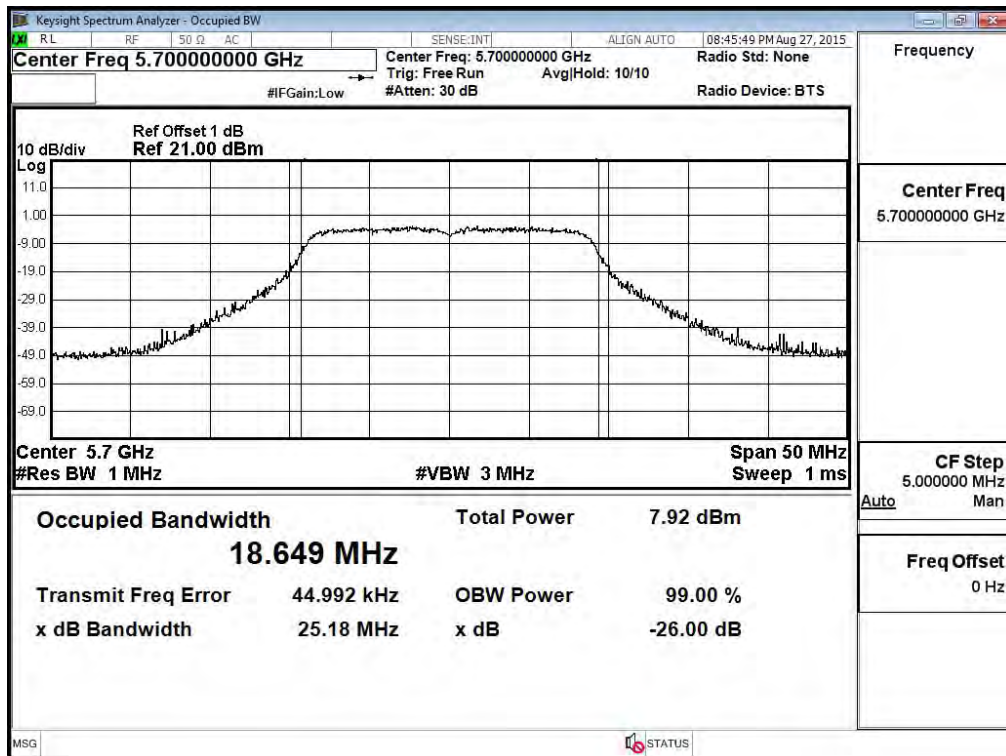
### Channel 116: Chain B



### Channel 140: Chain A



### Channel 140: Chain B



Product : 802.11 ac PCIe Module  
 Test Item : Maximum conducted output power  
 Test Site : No.3 OATS  
 Test Mode : Mode 27: Transmit (802.11n-40BW 30Mbps)(Sector Antenna)

**CHAIN A**

Cable loss=1dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	Data Rate (Mbps)							
		30	60	90	120	180	240	270	300
		Measurement Level (dBm)							
54	5270	2.04	--	--	--	--	--	--	--
62	5310	2.23	2.11	1.99	1.88	1.73	1.61	1.48	1.39
102	5510	4.02	--	--	--	--	--	--	--
110	5550	3.96	--	--	--	--	--	--	--
134	5670	4.61	4.51	4.45	4.3	4.17	4.03	3.91	3.8

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)							
		30	60	90	120	180	240	270	300
		Measurement Level (dBm)							
54	5270	1.47	--	--	--	--	--	--	--
62	5310	1.48	1.39	1.32	1.19	0.93	0.78	0.7	0.62
102	5510	-1.88	--	--	--	--	--	--	--
110	5550	-1.71	--	--	--	--	--	--	--
134	5670	4.12	4.03	3.95	3.78	3.7	3.62	3.51	3.4

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

**Maximum conducted output power measurement:**

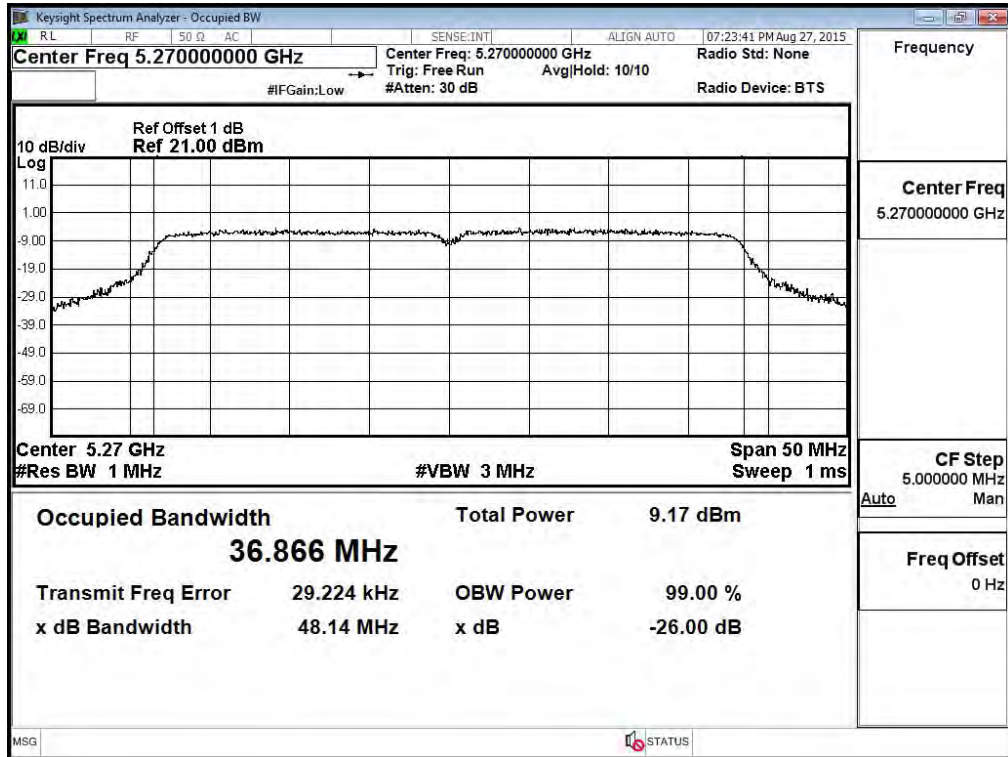
**CHAIN A+B**

Channel Number	Frequency (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Total Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
54	5270	36.794	2.04	1.47	4.77	10	26.66
62	5310	36.821	2.23	1.48	4.88	10	26.66
102	5510	36.883	4.02	-1.88	5.01	10	26.67
110	5550	36.912	3.96	-1.71	5.00	10	26.67
134	5670	36.897	4.61	4.12	7.38	10	26.67

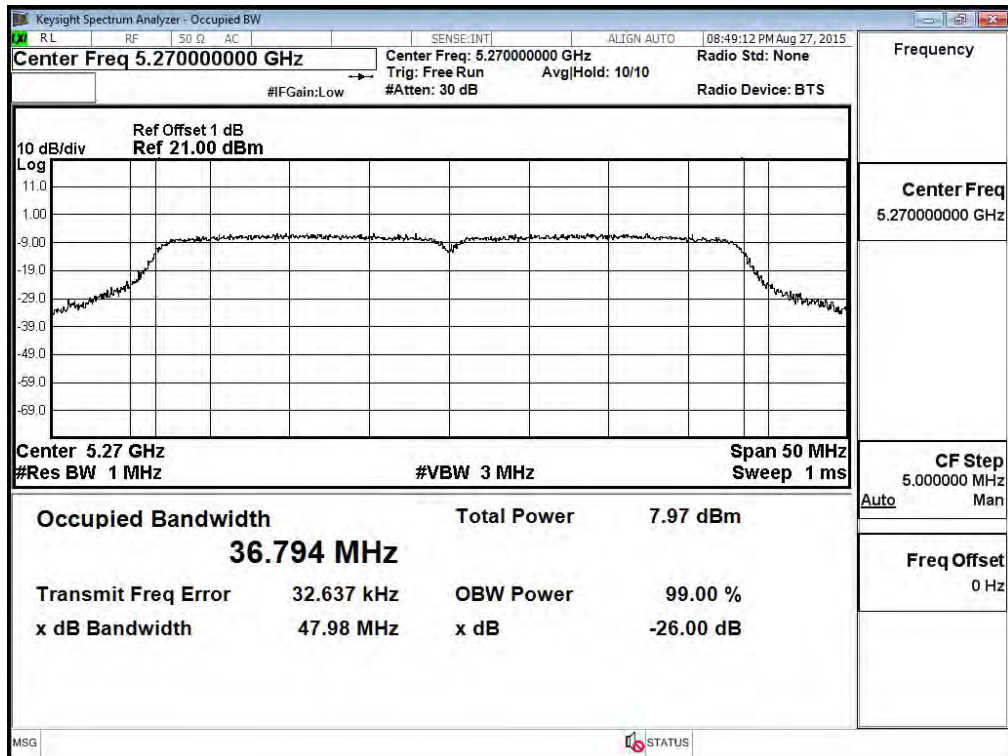
Note:

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)).
3. 99% Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

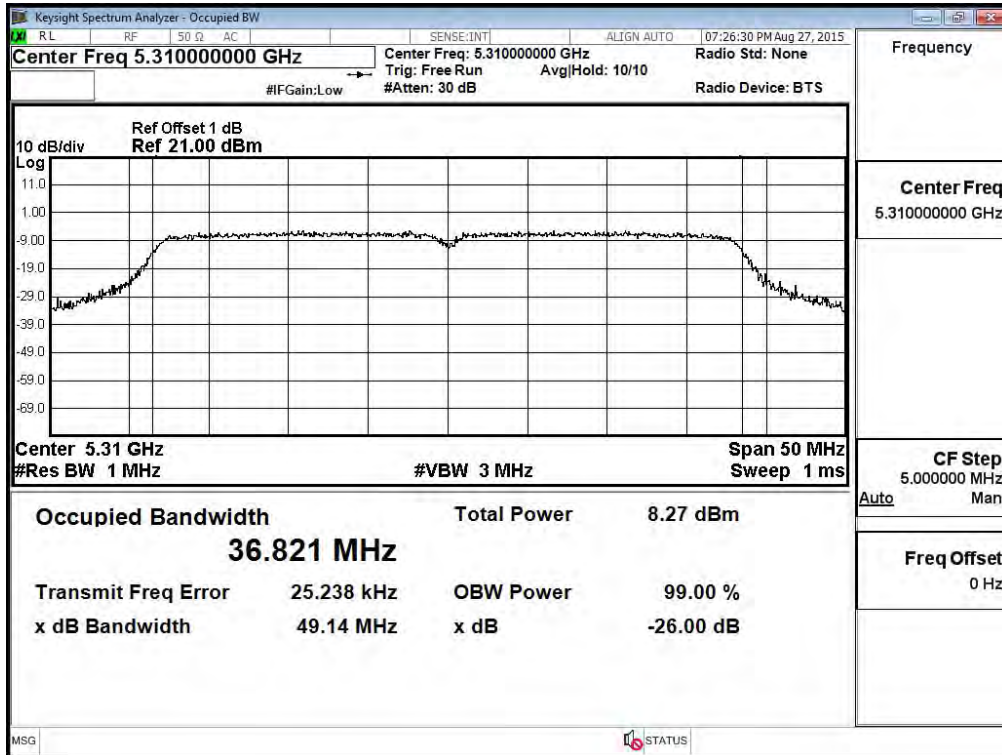
**99% Occupied Bandwidth:  
Channel 54: Chain A**



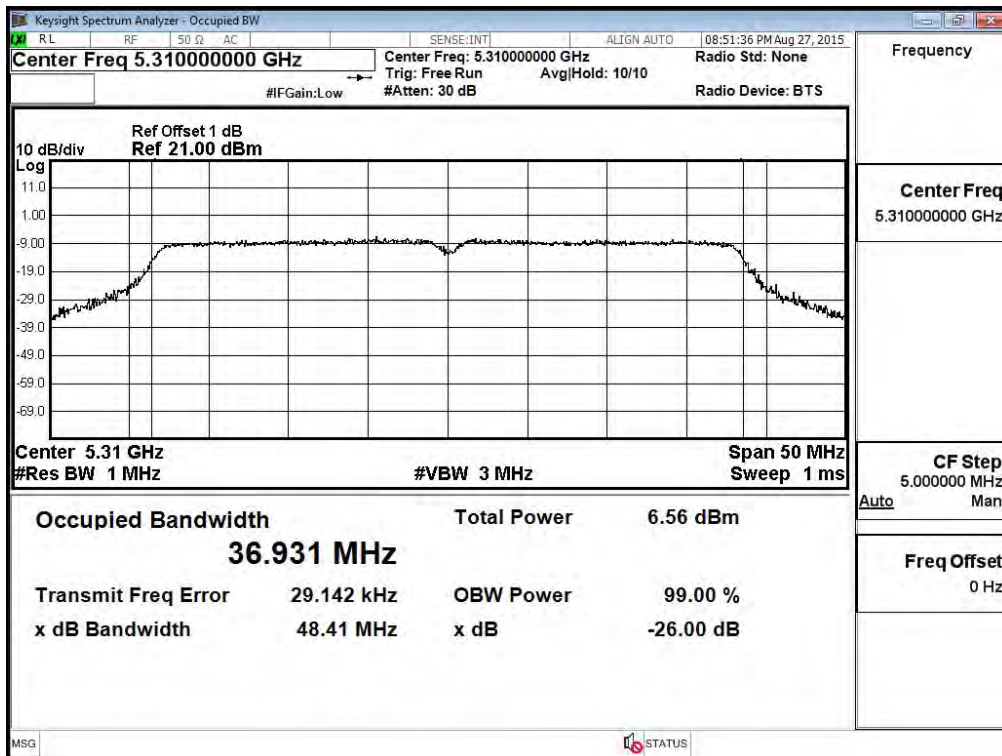
**Channel 54: Chain B**



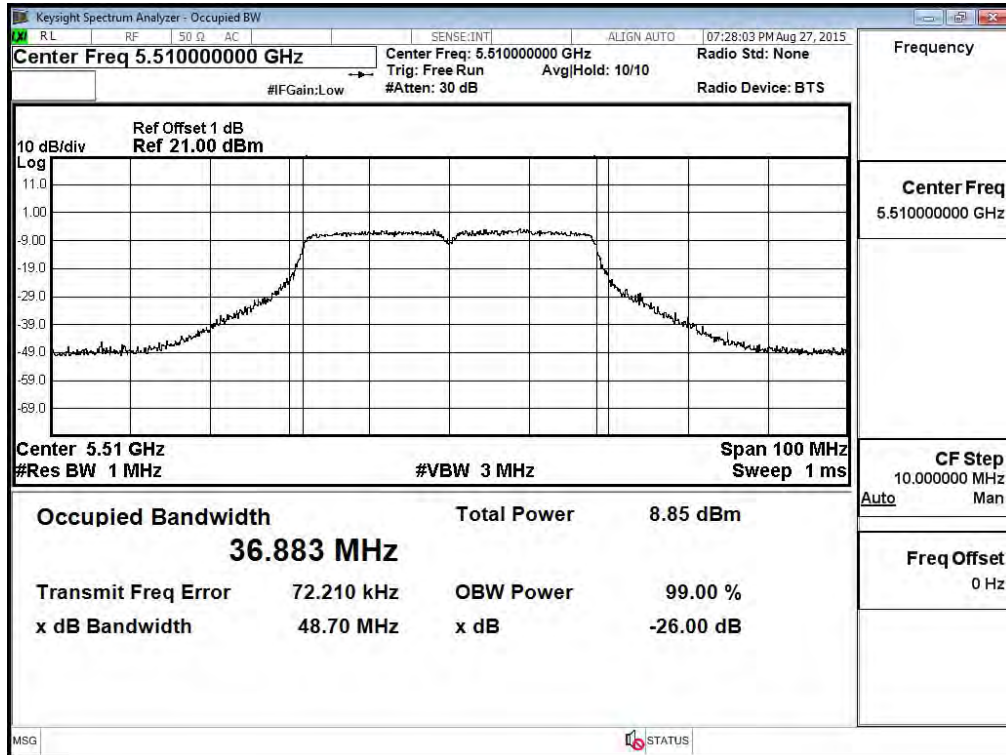
Channel 62: Chain A



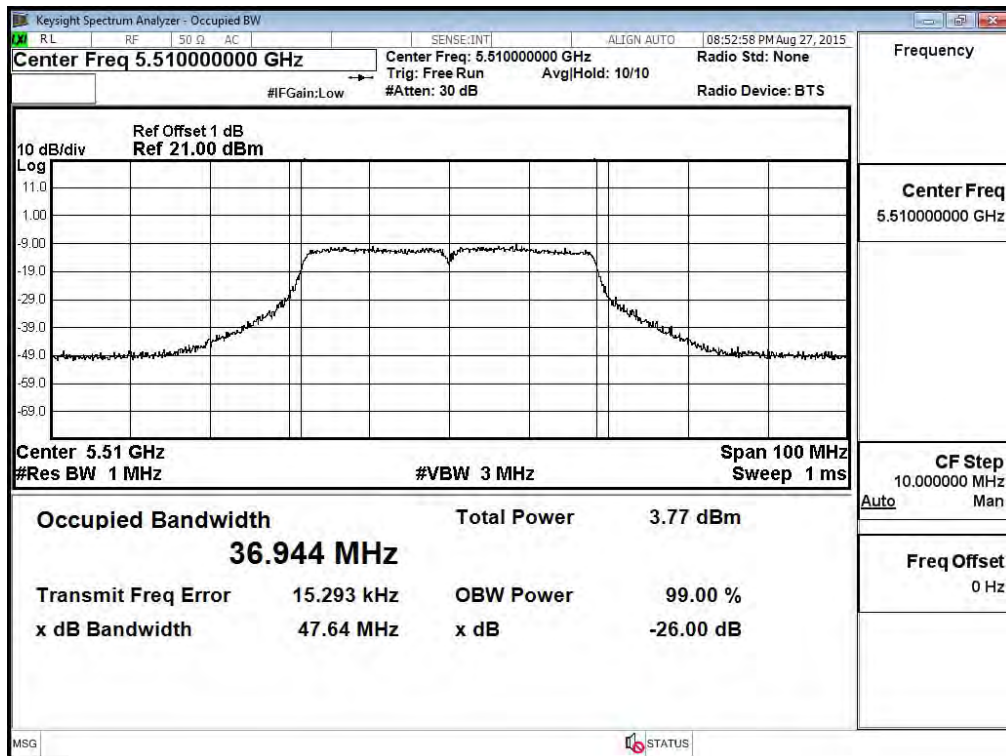
Channel 62: Chain B



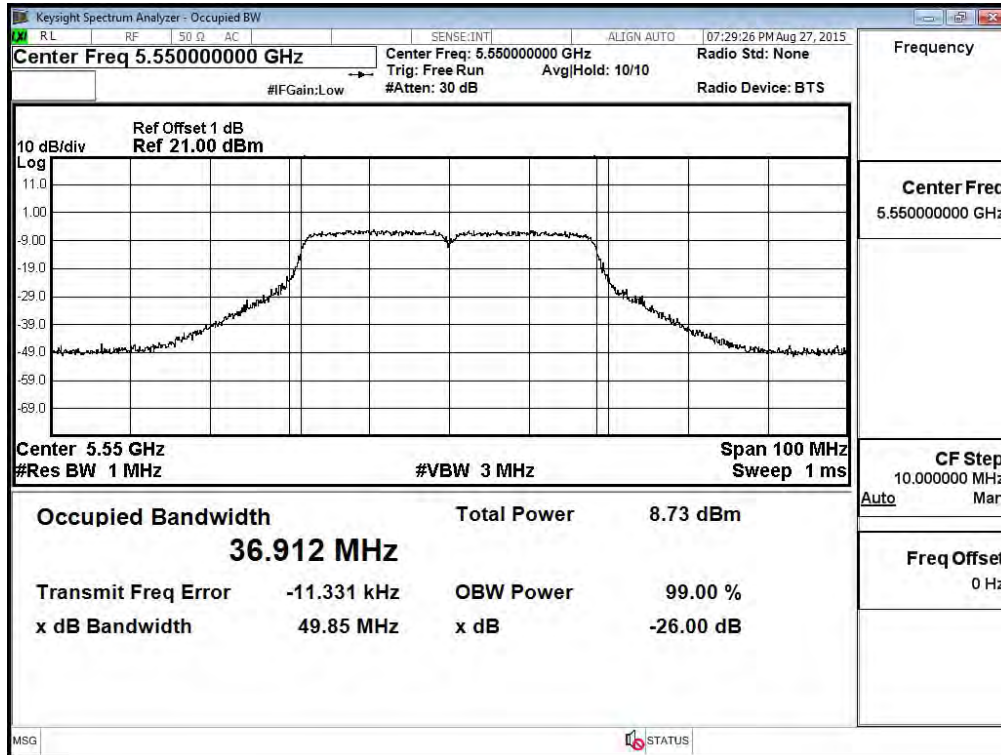
### Channel 102: Chain A



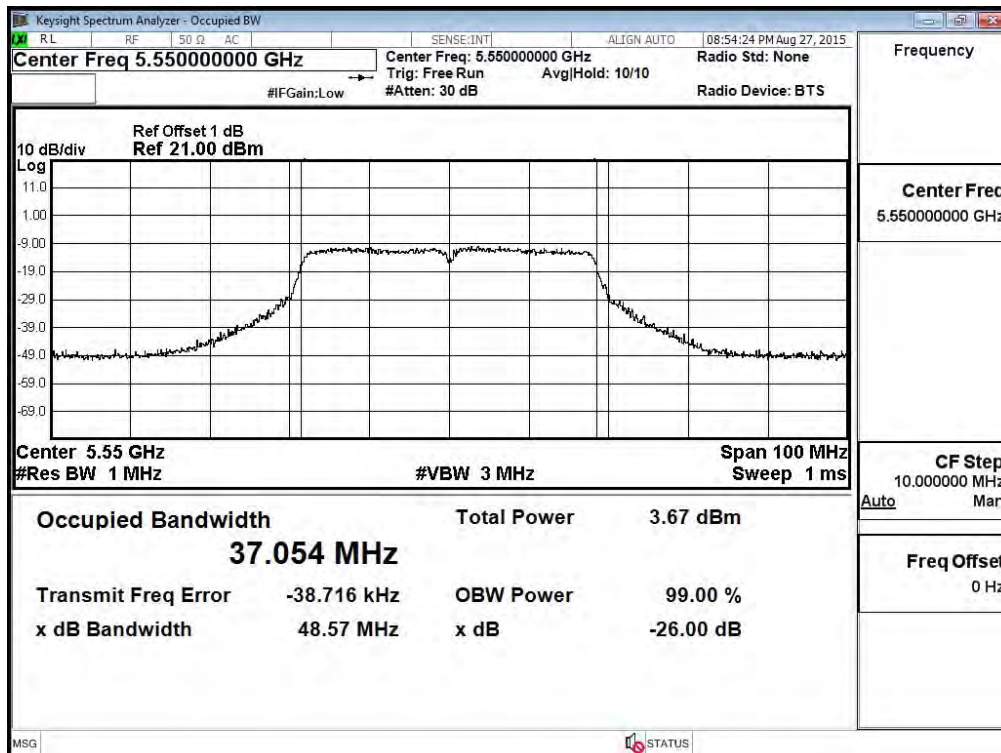
### Channel 102: Chain B



### Channel 110: Chain A

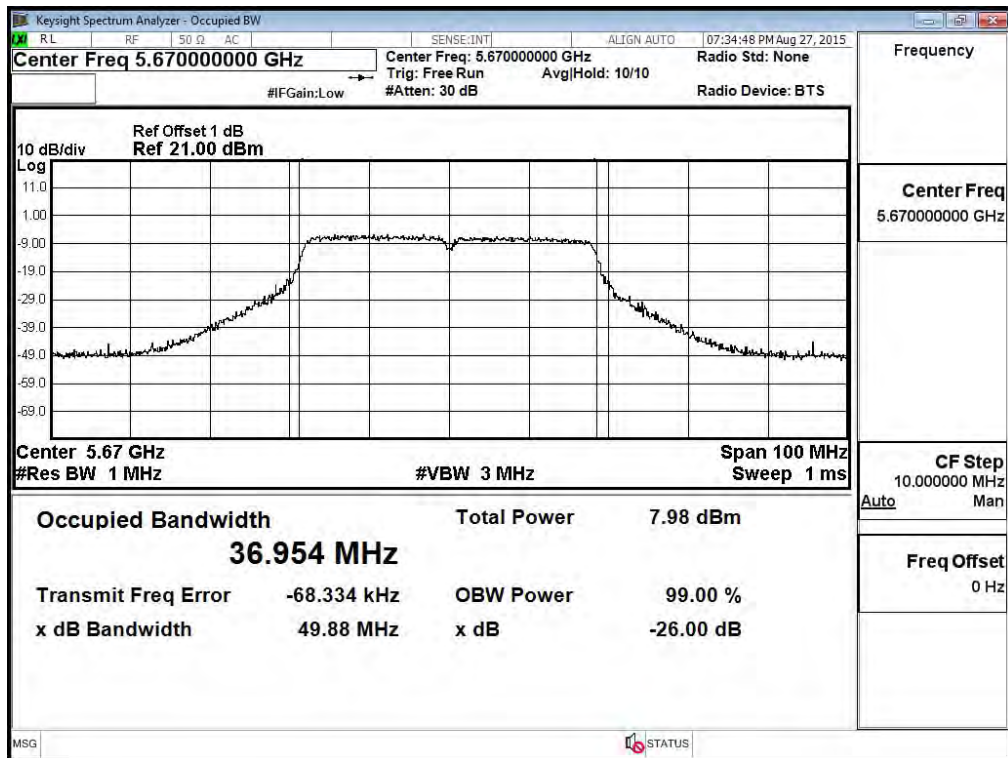


### Channel 110: Chain B

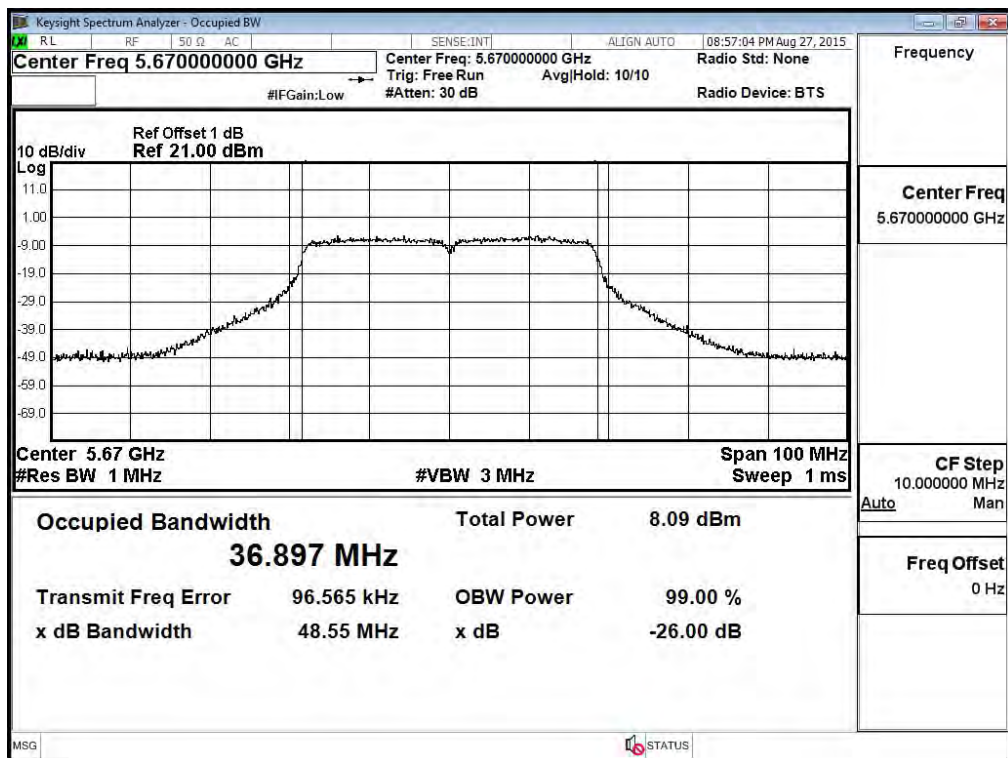




### Channel 134: Chain A



### Channel 134: Chain B



Product : 802.11 ac PCIe Module  
 Test Item : Maximum conducted output power  
 Test Site : No.3 OATS  
 Test Mode : Mode 28: Transmit (802.11ac-20BW-14.4Mbps)(Sector Antenna)

**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
		Measurement Level (dBm)								
144 (Band3)	5720	-0.54	-0.6	-0.71	-0.86	-0.93	-1.1	-1.17	-1.23	-1.31
144 (Band4)	5720	-5.98	-6.02	-6.17	-6.25	-6.38	-6.49	-6.57	-6.66	-6.74

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
		Measurement Level (dBm)								
144 (Band3)	5720	1.25	1.16	1.08	1.01	0.87	0.78	0.67	0.54	0.49
144 (Band4)	5720	-4.57	-4.65	-4.78	-4.85	-4.97	-5.06	-5.21	-5.3	-5.41

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

**Maximum conducted output power Measurement:**

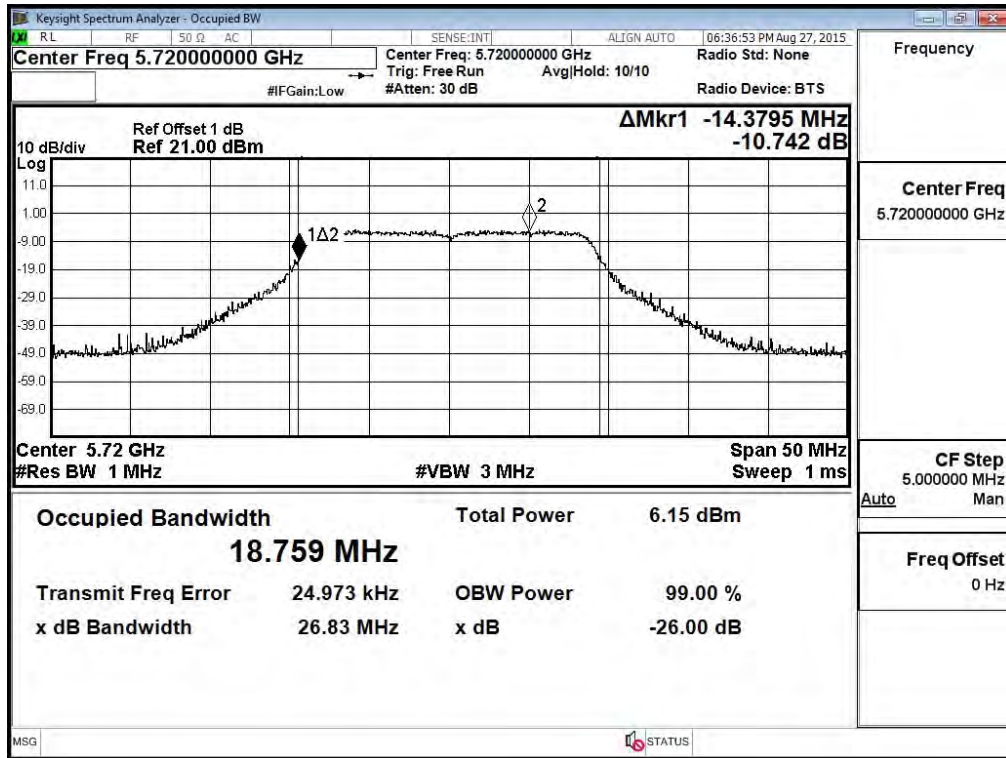
**CHAIN A+B**

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit		Result
						(dBm)	dBm+10log(BW)	
144(Band3)	5720	14.318	-0.54	1.25	3.46	10	22.56	Pass
144(Band4)	5720	4.318	-5.98	-4.57	-2.21	30	17.35	Pass

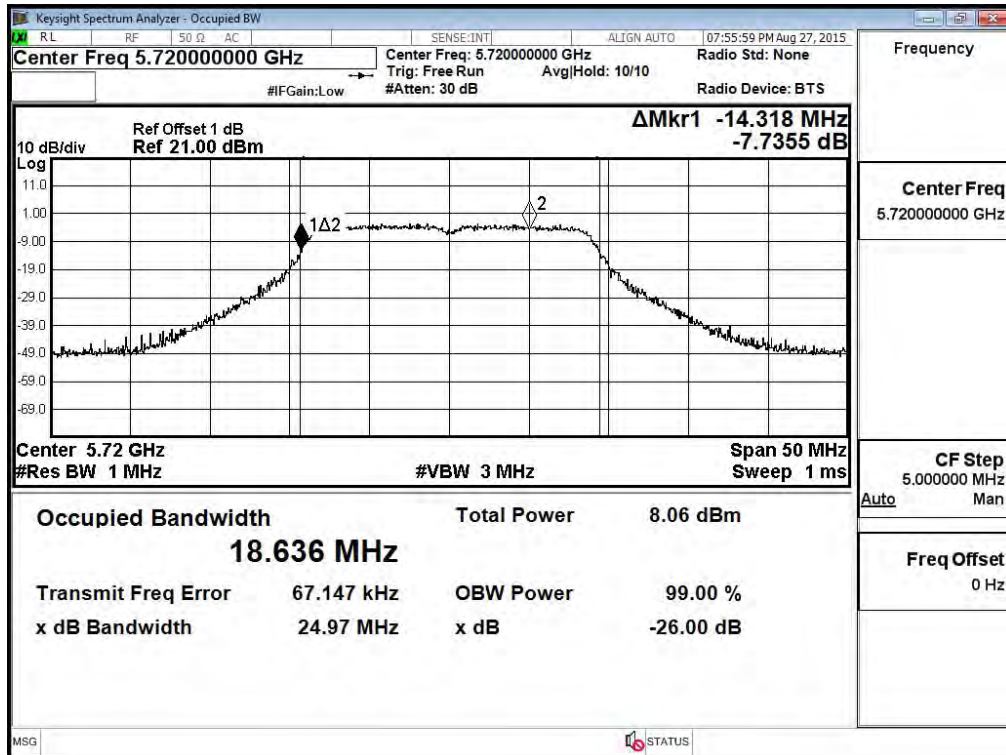
Note:

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)).
3. 99% Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

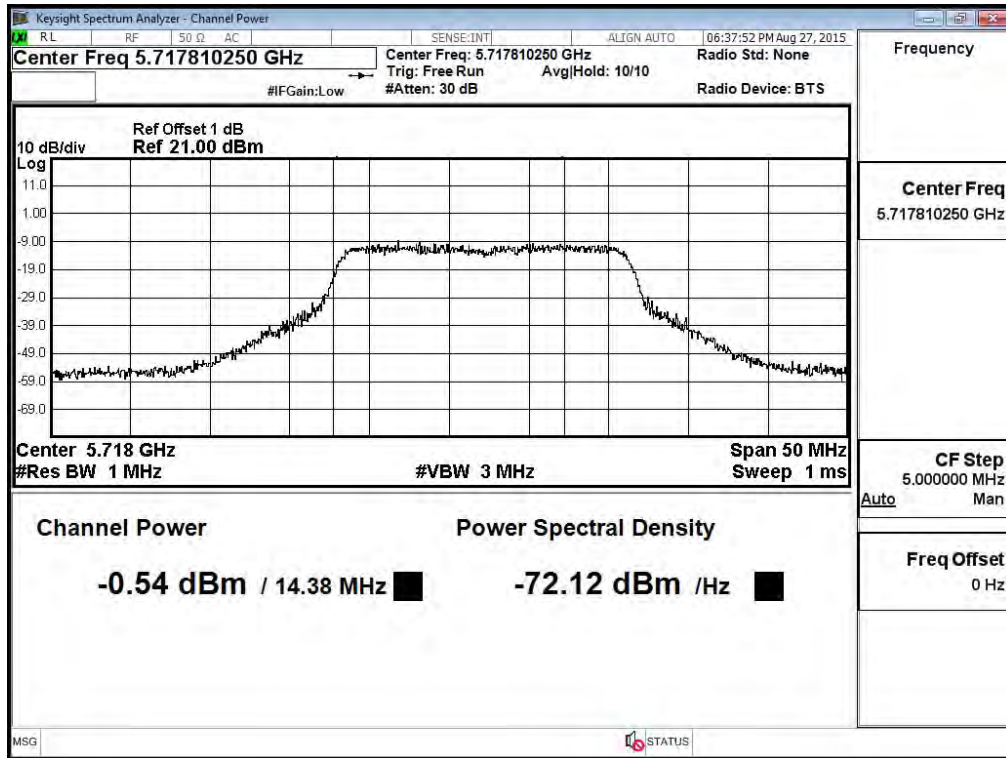
**99% Occupied Bandwidth:  
Channel 144: Chain A**



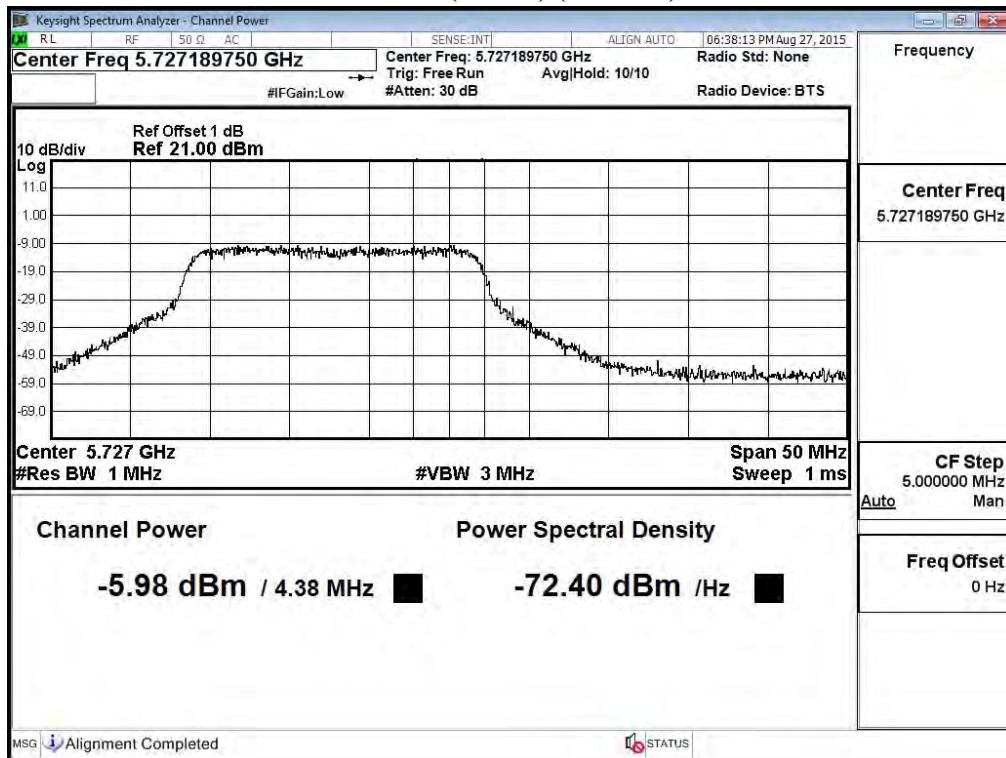
**Channel 144: Chain B**



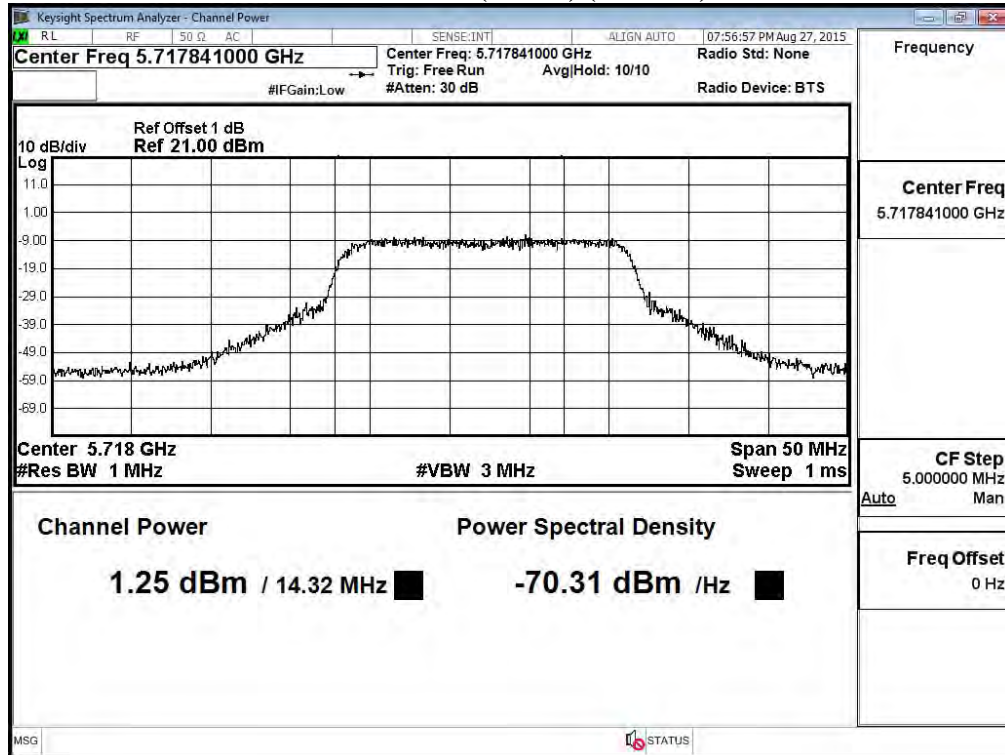
**Maximum conducted output power:  
Channel 144 (Band3) (Chain A)**



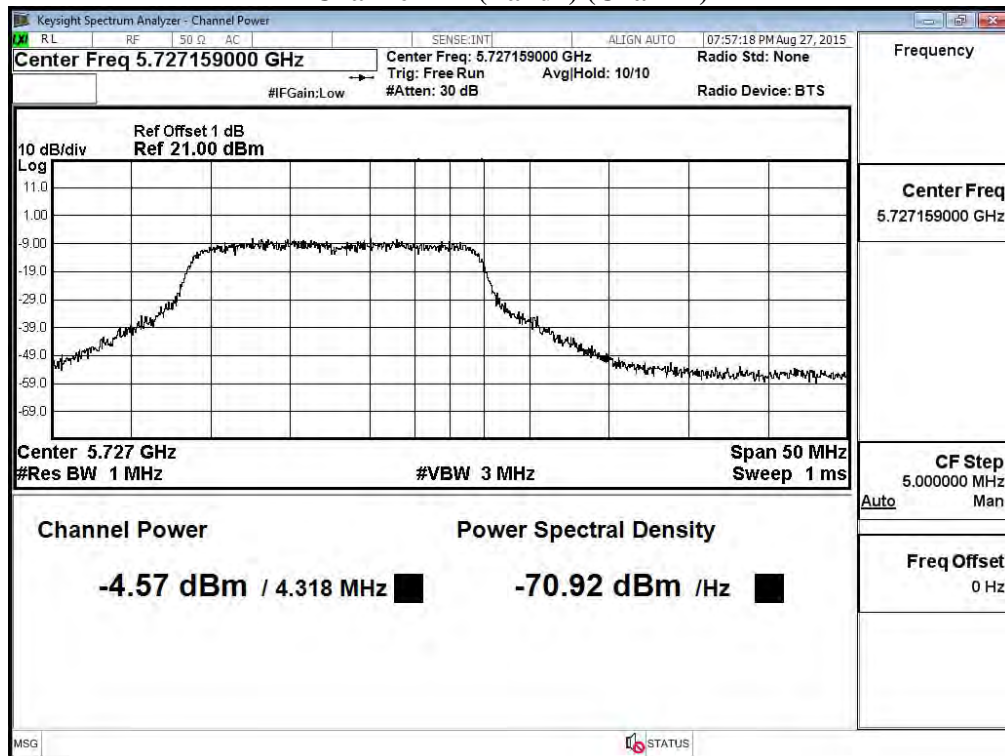
**Channel 144 (Band3) (Chain A)**



### Channel 144 (Band4) (Chain B)



### Channel 144 (Band4) (Chain B)



Product : 802.11 ac PCIe Module  
 Test Item : Maximum conducted output power  
 Test Site : No.3 OATS  
 Test Mode : Mode 29: Transmit (802.11ac-40BW-30Mbps)(Sector Antenna)

**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
		Measurement Level (dBm)								
142F(Band3)	5710	1.05	0.97	0.88	0.75	0.64	0.51	0.45	0.39	0.3
142F(Band4)	5710	-9.95	-10.05	-10.17	-10.24	-10.33	-10.42	-10.56	-10.63	-10.69

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
		Measurement Level (dBm)								
142F(Band3)	5710	2.16	2.08	1.96	1.84	1.76	1.68	1.6	1.53	1.45
142F(Band4)	5710	-7.6	-7.67	-7.82	-7.95	-8.01	-8.14	-8.21	-8.27	-8.32

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

**Maximum conducted output power Measurement:**

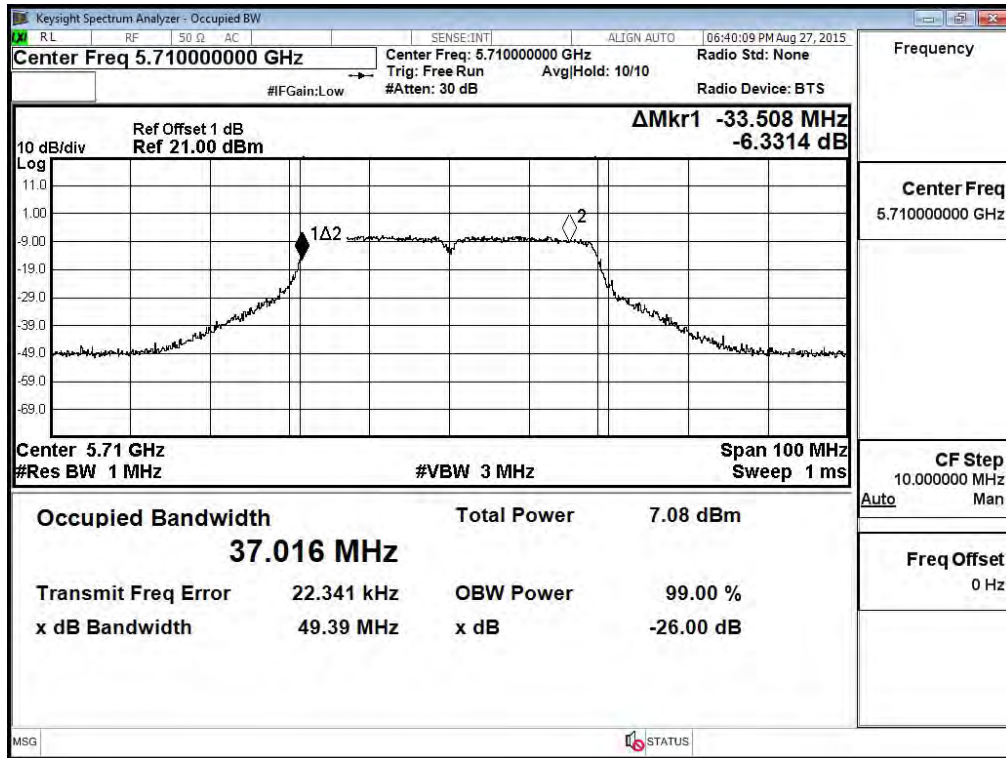
**CHAIN A+B**

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit		Result
						(dBm)	dBm+10log(BW)	
142F(Band3)	5710	33.497	1.05	2.16	4.65	10	26.25	Pass
142F(Band4)	5710	3.497	-9.95	-7.60	-5.61	30	16.44	Pass

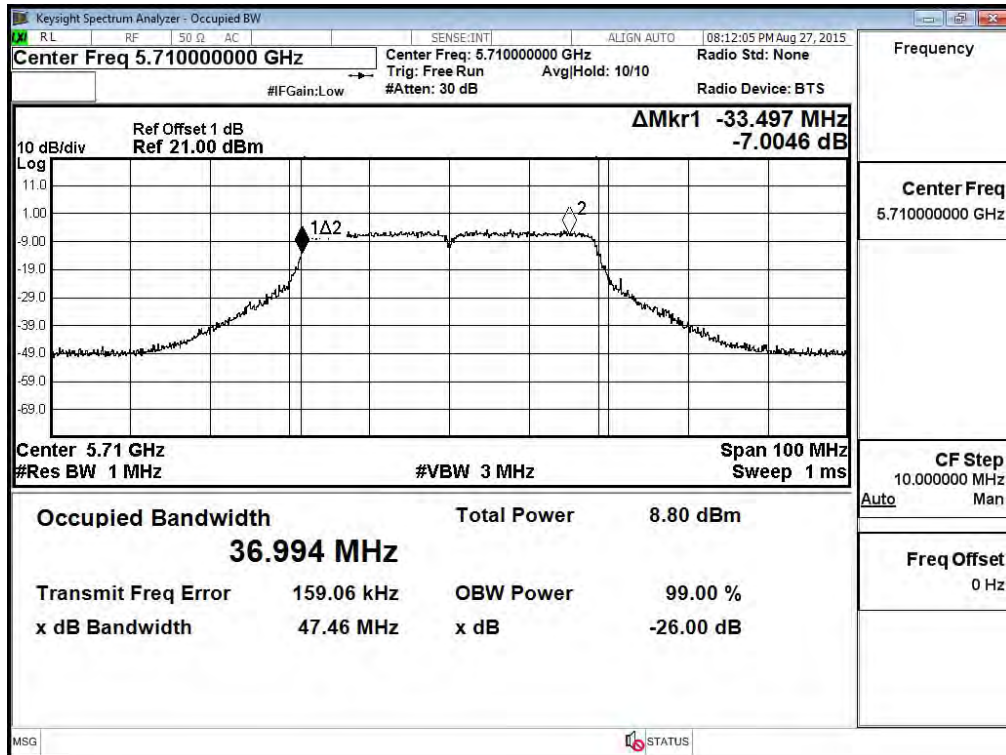
Note:

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)).
3. 99% Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

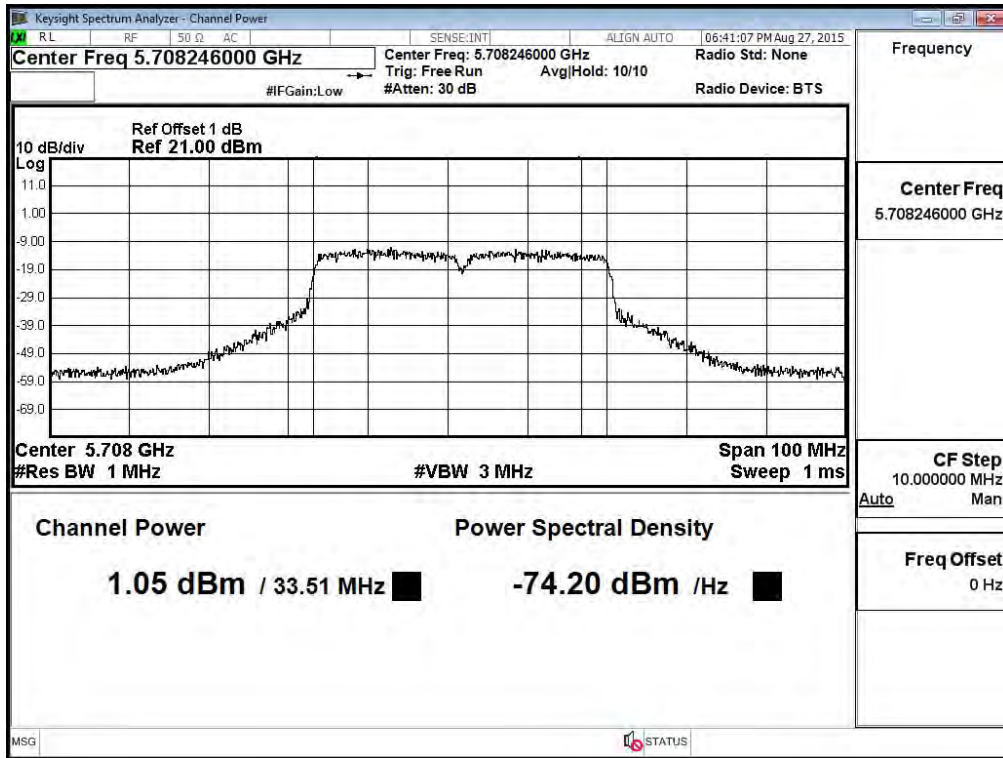
**99% Occupied Bandwidth:  
Channel 142: Chain A**



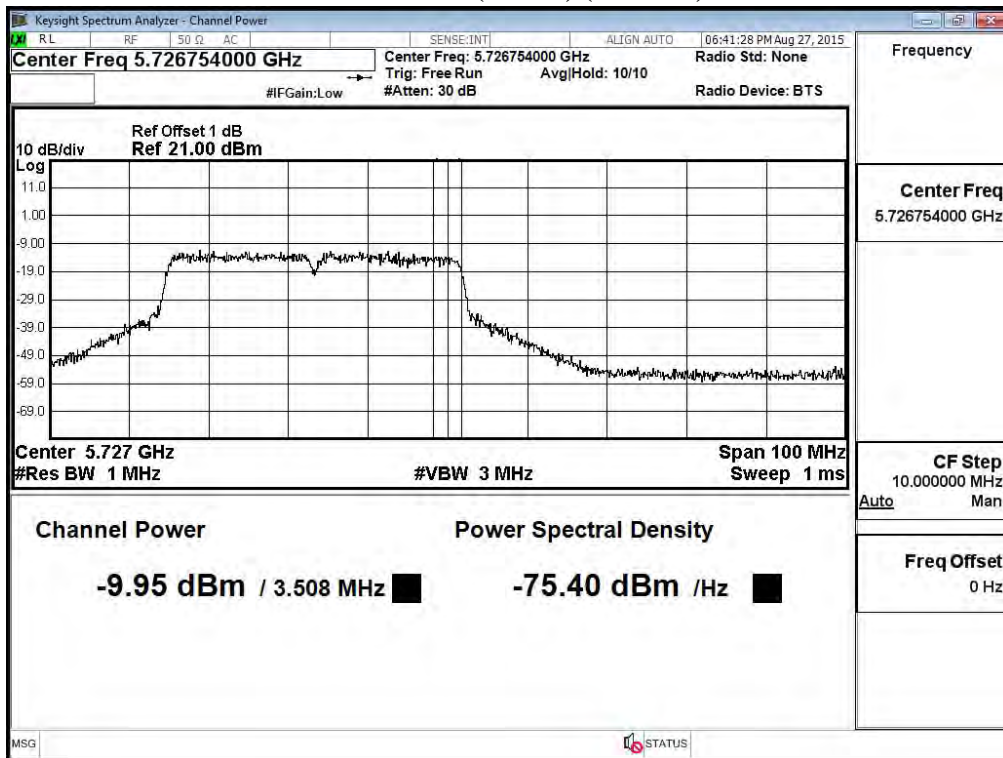
**Channel 142: Chain B**



**Maximum conducted output power:  
Channel 142 (Band3) (Chain A)**

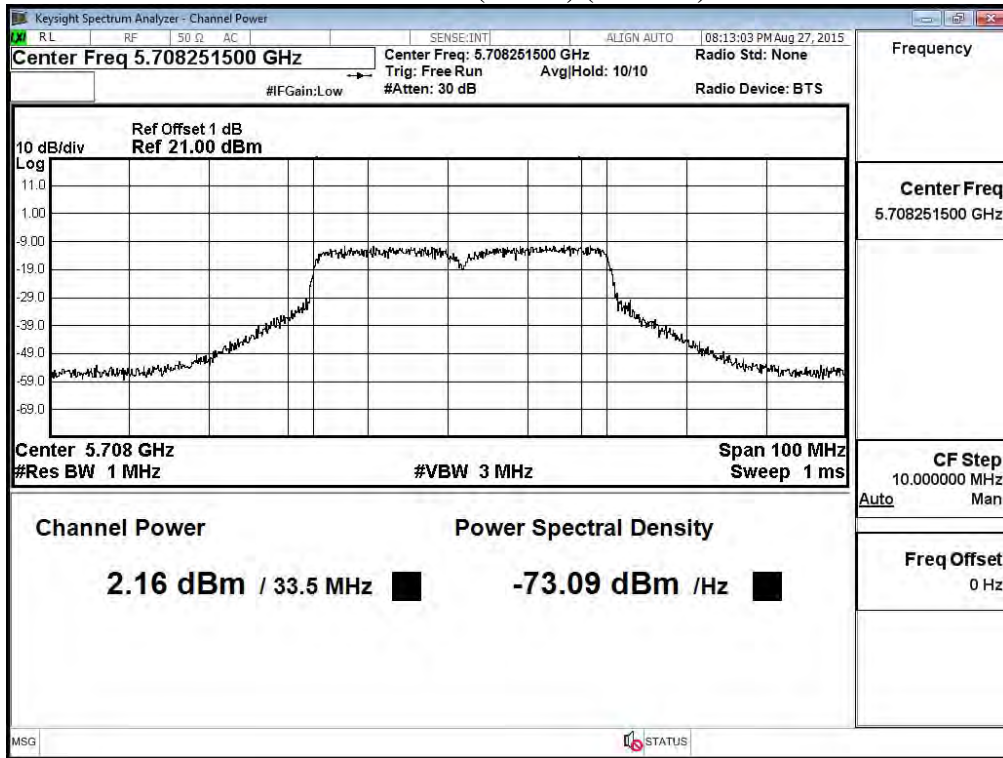


**Channel 142 (Band4) (Chain A)**

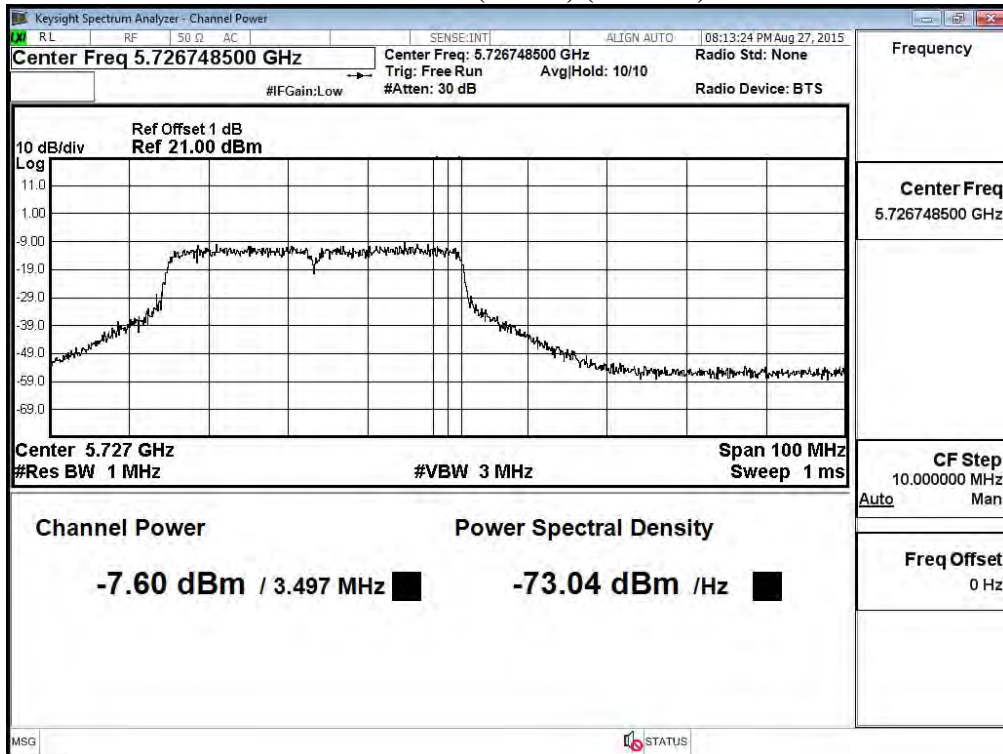




**Channel 142 (Band3) (Chain B)**



**Channel 142 (Band4) (Chain B)**



Product : 802.11 ac PCIe Module  
 Test Item : Maximum conducted output power  
 Test Site : No.3 OATS  
 Test Mode : Mode 30: Transmit (802.11ac-80BW-65Mbps)(Sector Antenna)

**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	3.01	2.94	2.83	2.76	2.67	2.61	2.49	2.38	2.3	2.18
106	5530	1.49	1.41	1.29	1.2	1.12	1.08	0.97	0.83	0.77	0.66
122	5610	2.57	2.49	2.37	2.28	2.2	2.16	2.05	1.91	1.85	1.74
138(Band3)	5690	2.07	2	1.93	1.88	1.79	1.74	1.66	1.56	1.43	1.3
138(Band4)	5690	-14.84	-14.93	-15	-15.11	-15.23	-15.29	-15.36	-15.44	-15.52	-15.63

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	1.56	1.48	1.37	1.3	1.23	1.08	1	0.91	0.82	0.74
106	5530	-2.57	-2.65	-2.74	-2.85	-2.93	-3.02	-3.11	-3.26	-3.3	-3.36
122	5610	-0.53	-0.61	-0.73	-0.82	-0.9	-0.94	-1.05	-1.19	-1.25	-1.36
138(Band3)	5690	2.85	2.78	2.7	2.62	2.53	2.44	2.38	2.26	2.16	2.05
138(Band4)	5690	-11.36	-11.45	-11.51	-11.59	-11.65	-11.72	-11.81	-11.9	-12.04	-12.18

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

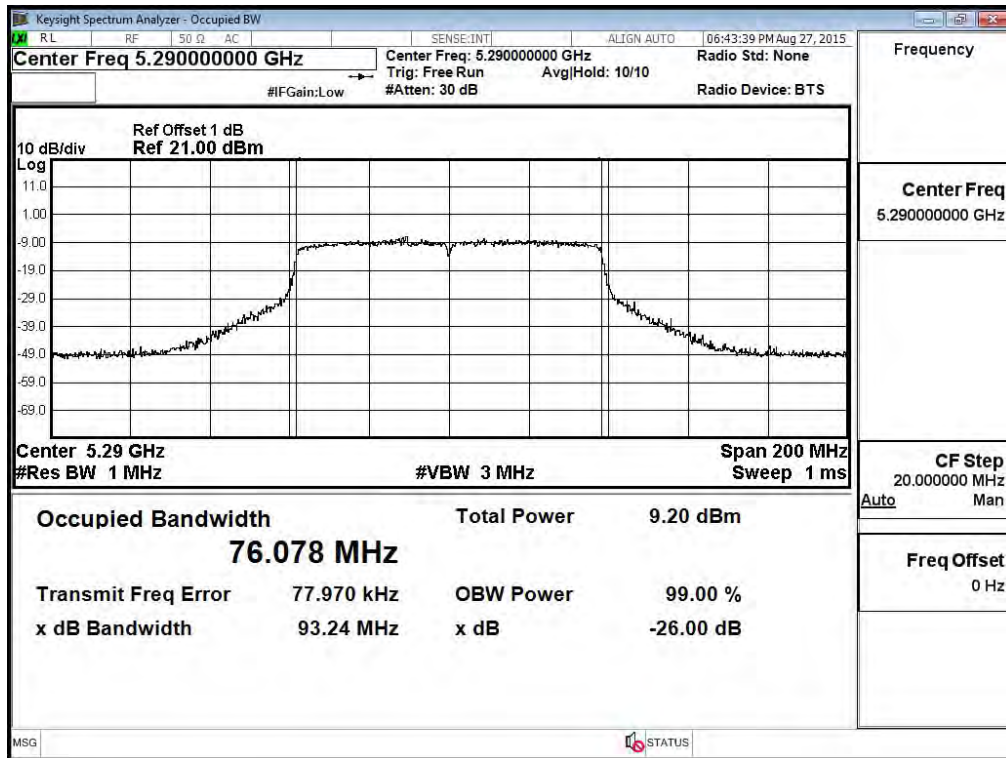
**Maximum conducted output power Measurement:  
CHAIN A+B**

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Output Power (dBm)	Output Power Limit		Result
						(dBm)	dBm+10log(BW)	
58	5290	76.078	3.01	1.56	5.36	10	29.81	Pass
106	5530	75.760	1.49	-2.57	2.93	10	29.79	Pass
122	5610	75.945	2.57	-0.53	4.30	10	2.980	Pass
138(Band3)	5690	73.021	2.07	2.85	5.49	10	29.63	Pass
138(Band4)	5690	3.022	-14.84	-11.36	-9.75	30	21.80	Pass

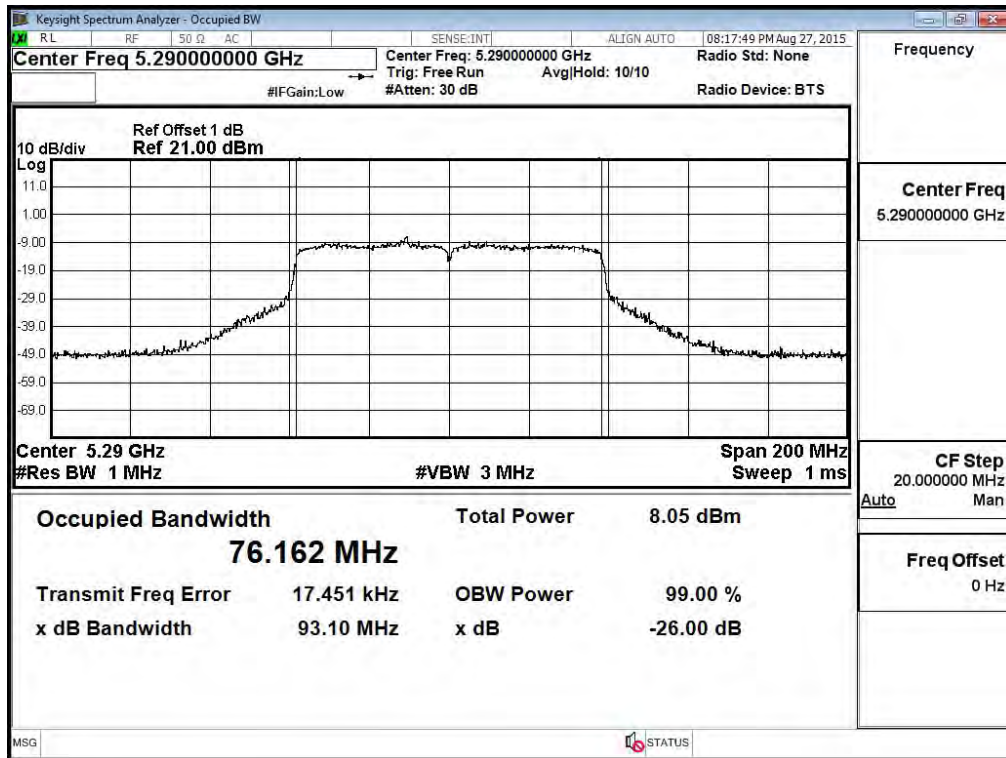
Note:

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)).
3. 99% Bandwidth is the bandwidth of chain A or chain B whichever is less bandwidth, output power limitation is more stringent.

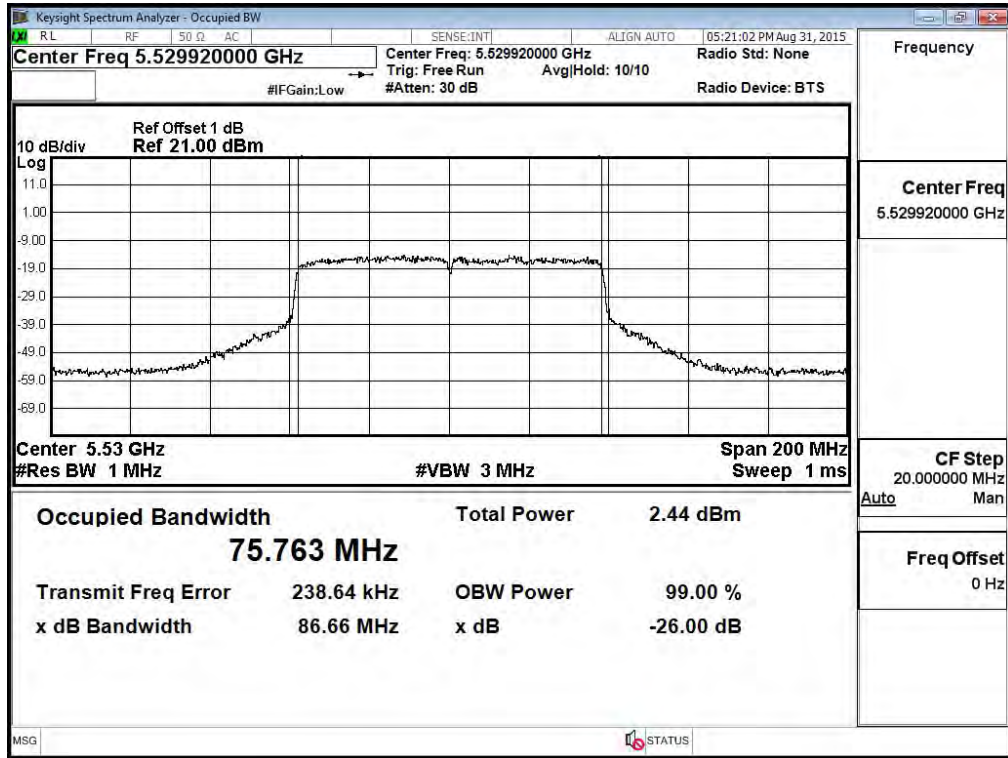
**99% Occupied Bandwidth:  
Channel 58: Chain A**



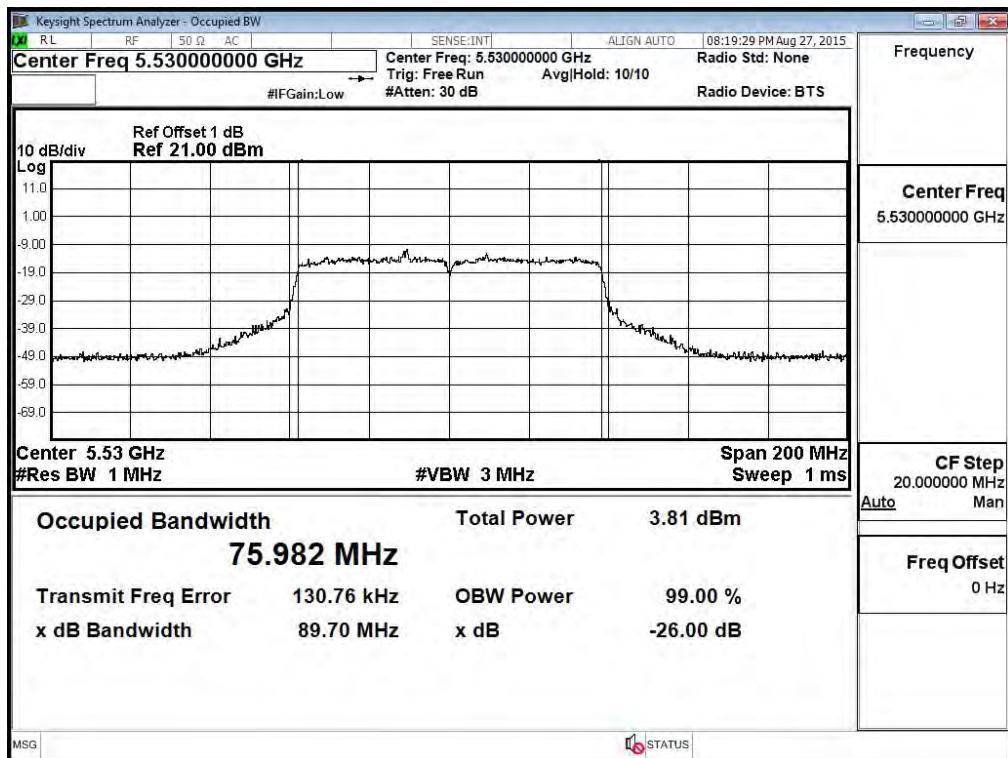
**Channel 58: Chain B**



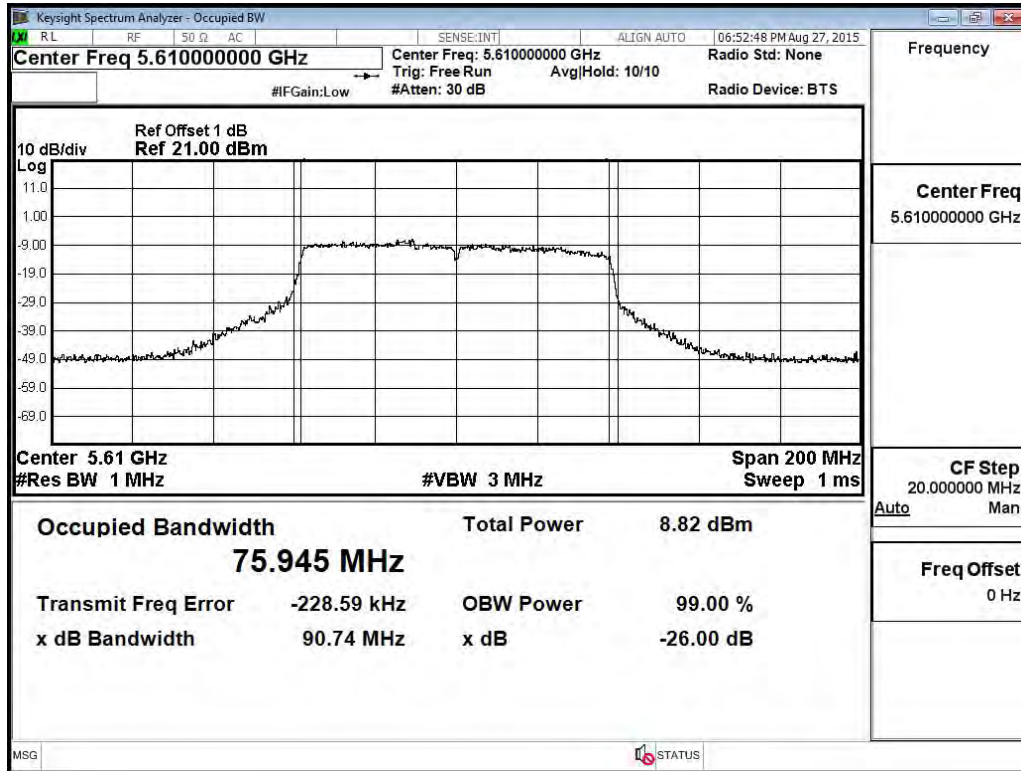
**Channel 106: Chain A**



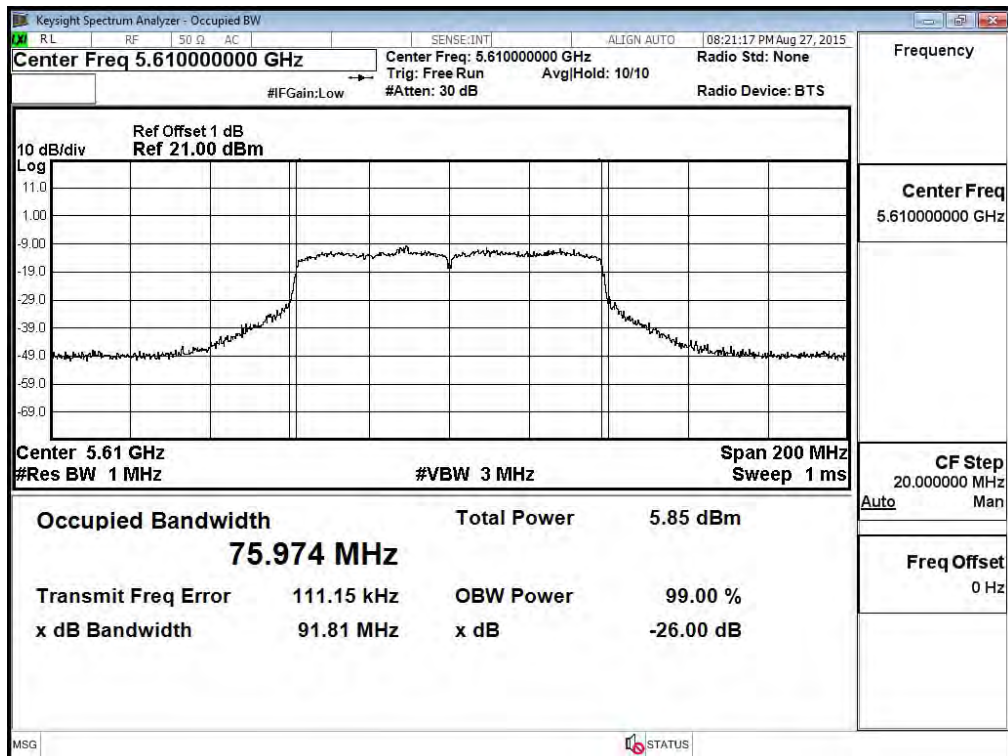
**Channel 106: Chain B**



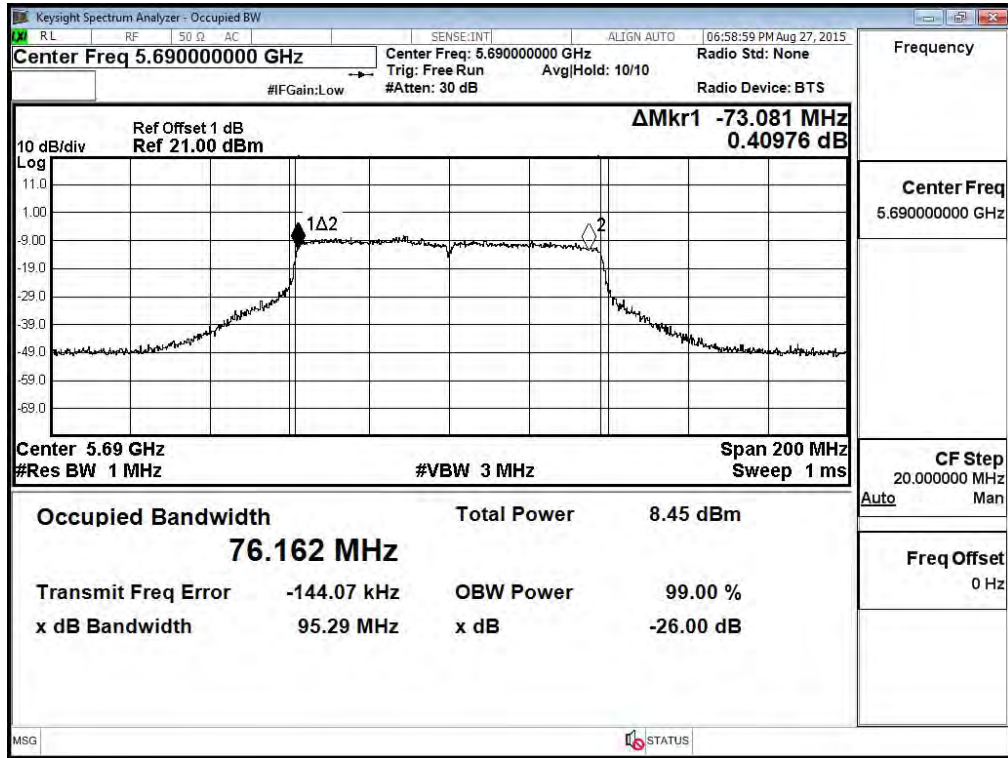
### Channel 122: Chain A



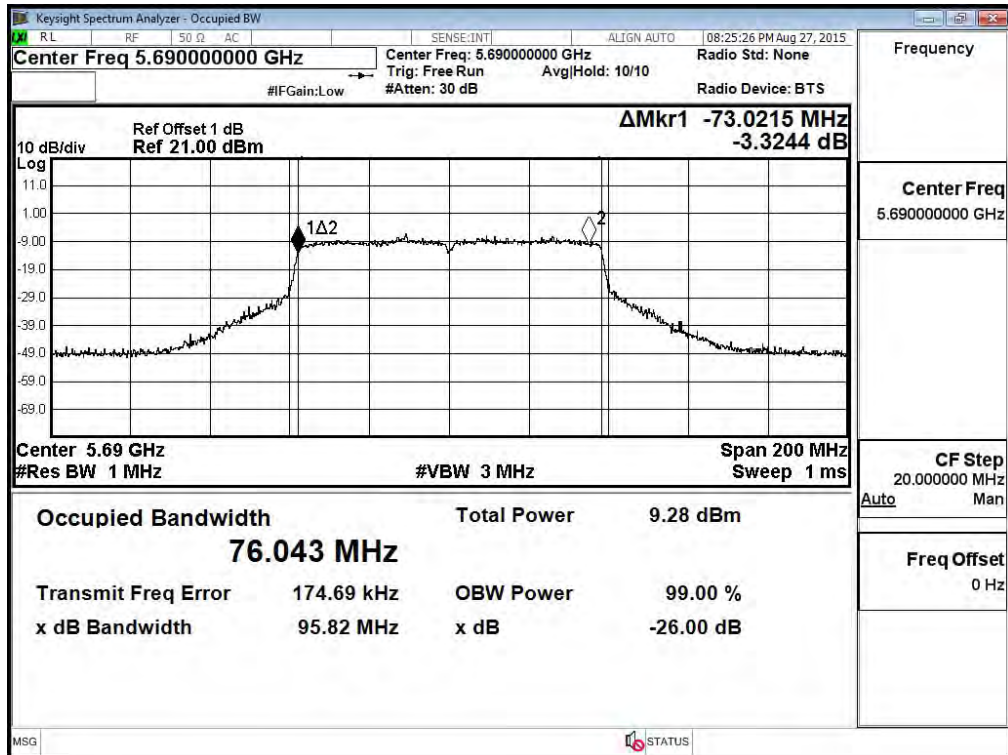
### Channel 122: Chain B



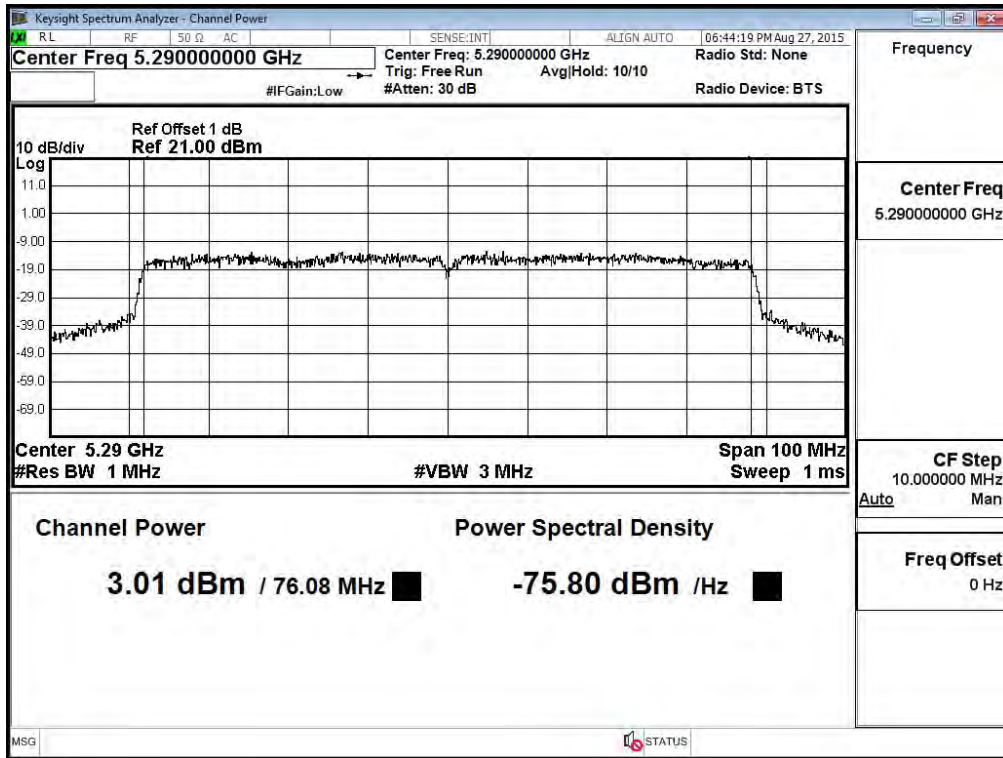
### Channel 138: Chain A



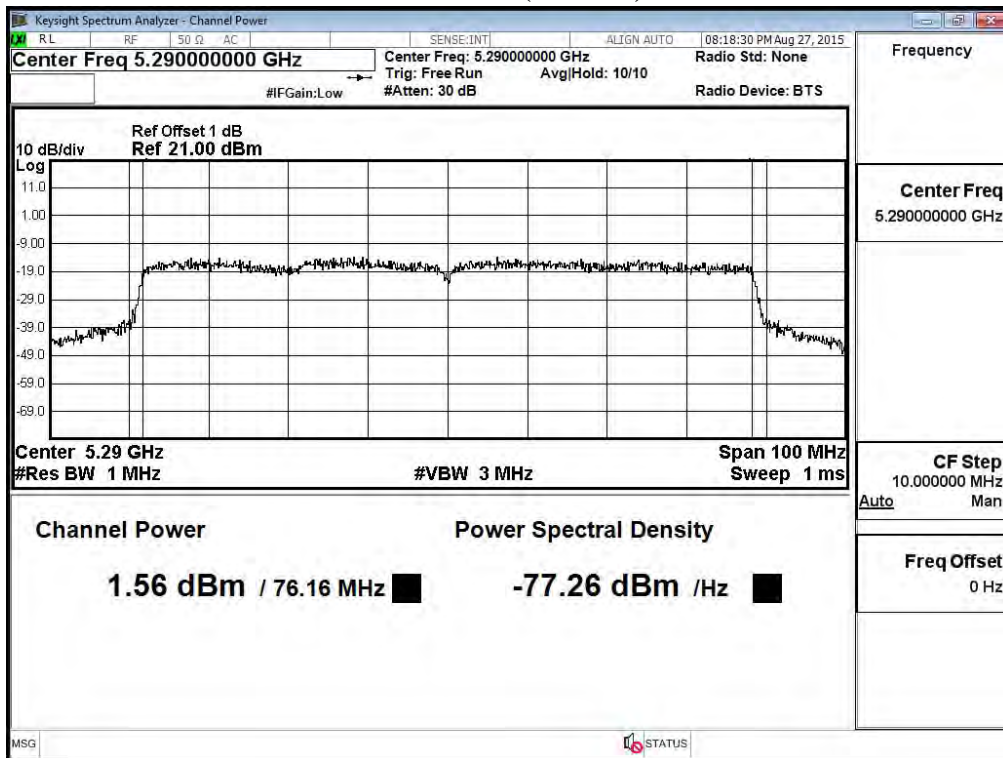
### Channel 138: Chain B



**Maximum conducted output power:  
Channel 58 (Chain A)**

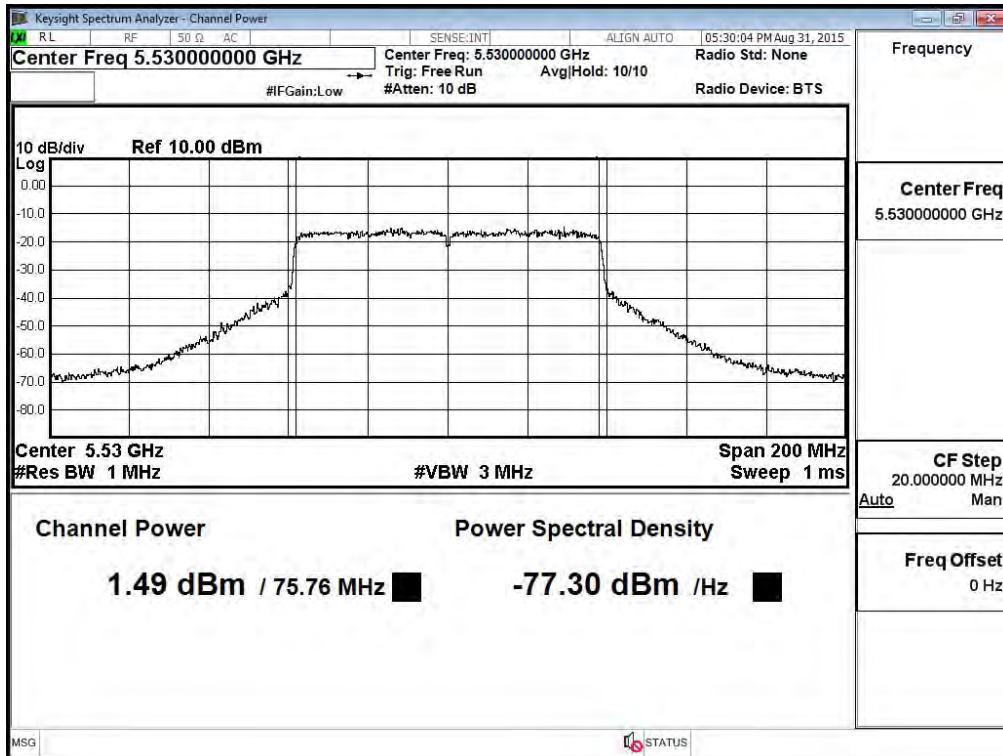


**Channel 58 (Chain B)**

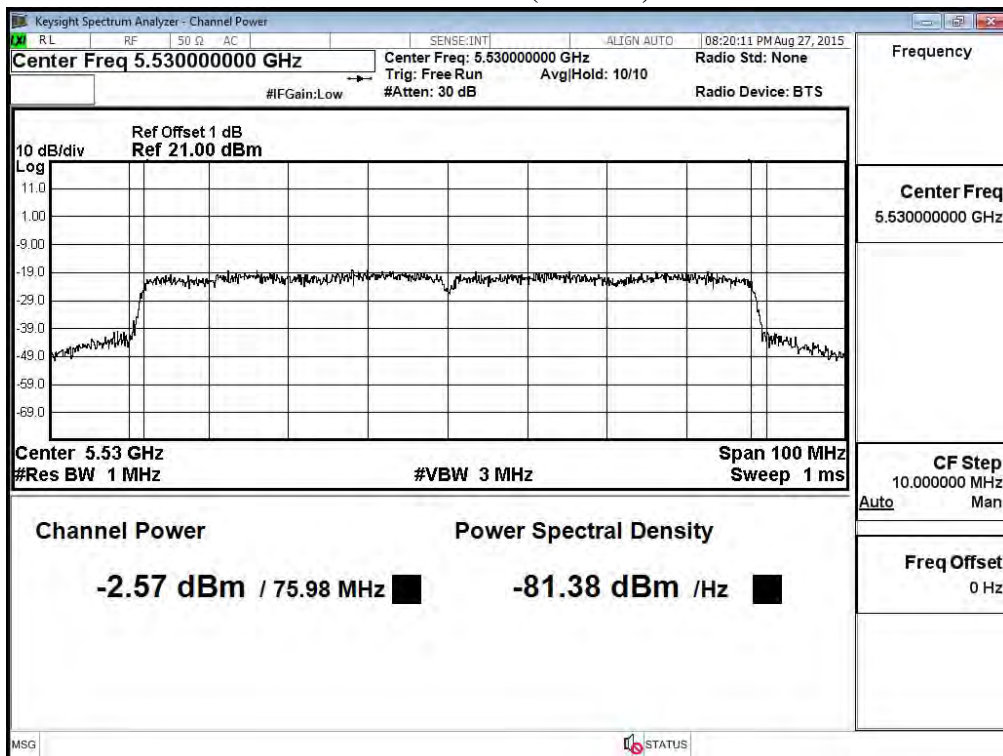




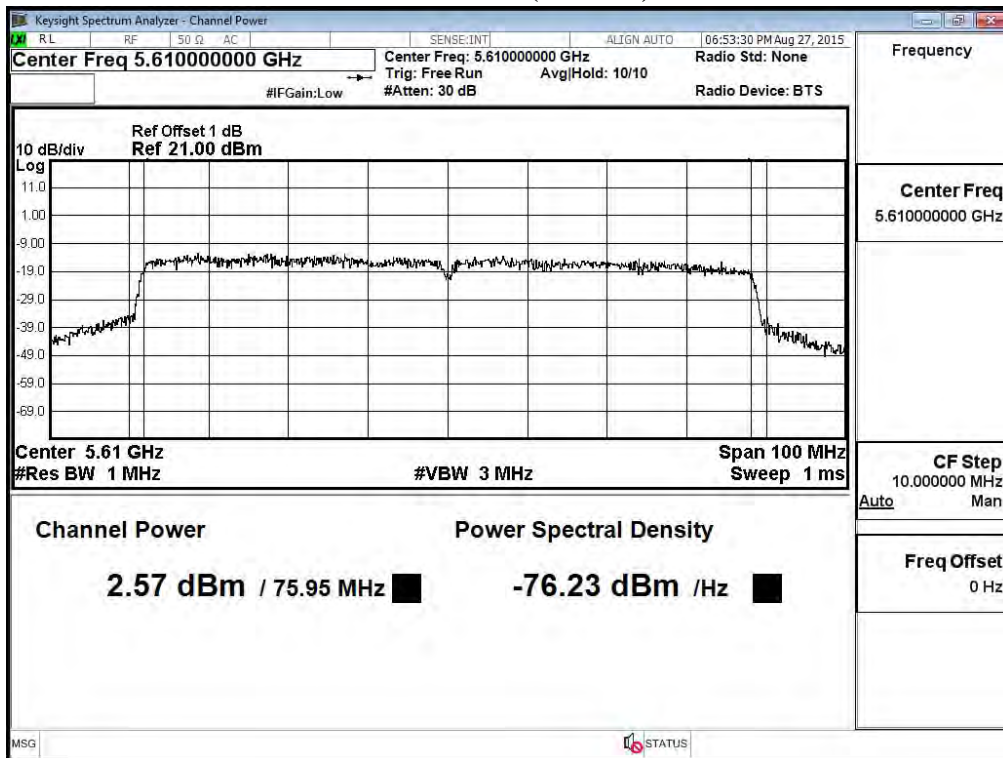
### Channel 106 (Chain A)



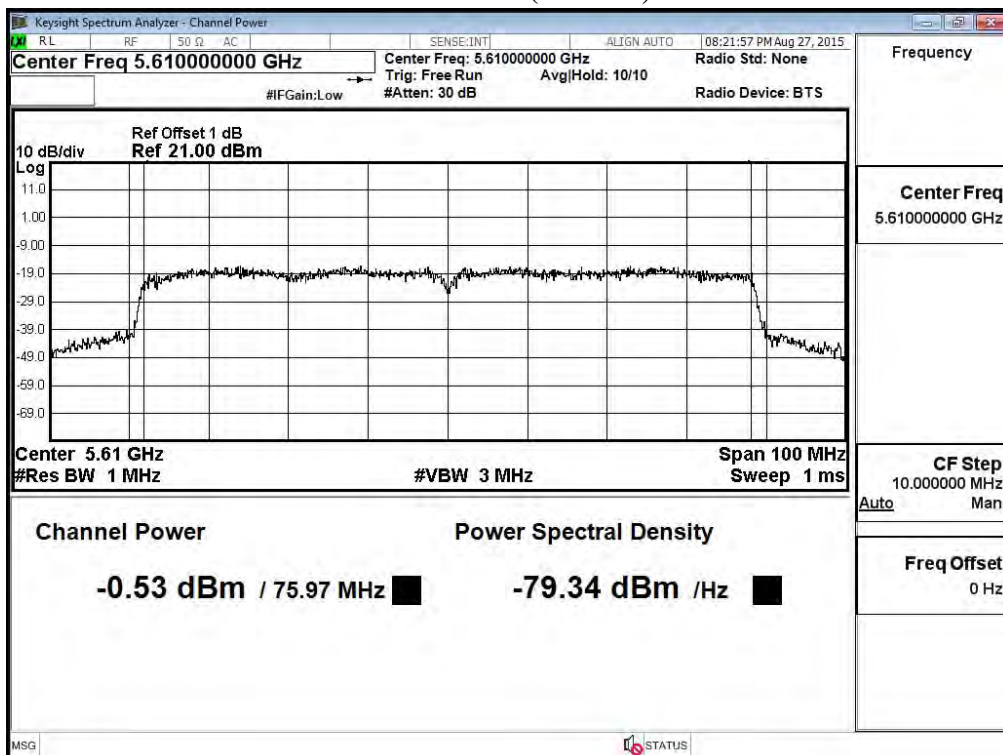
### Channel 106 (Chain B)



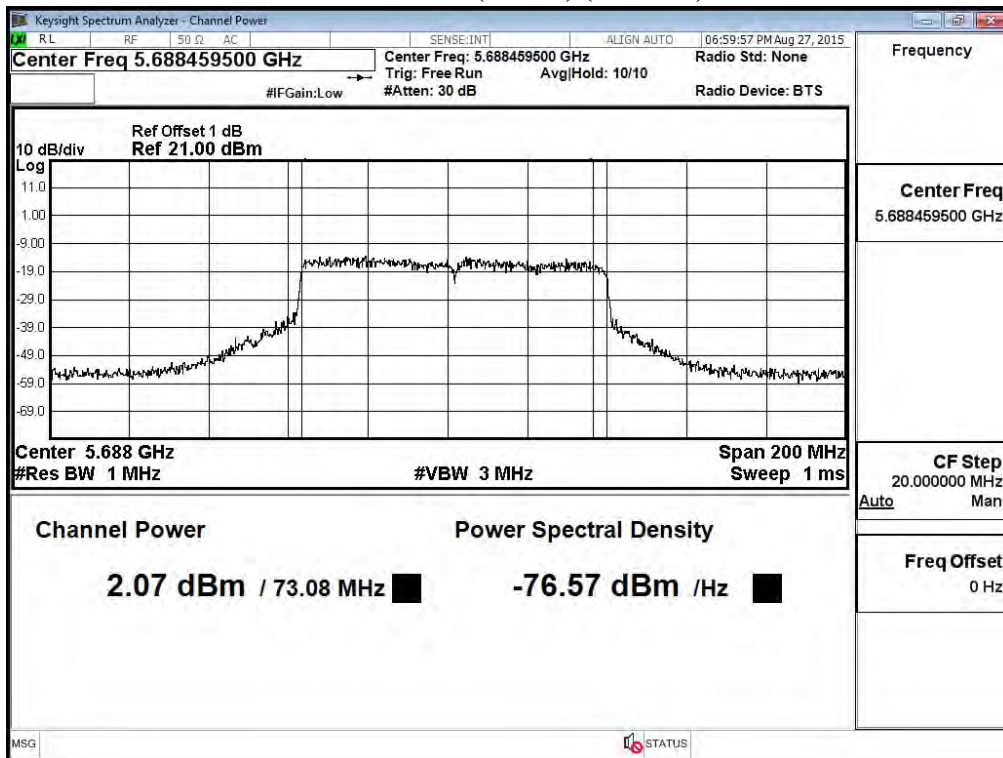
### Channel 122 (Chain A)



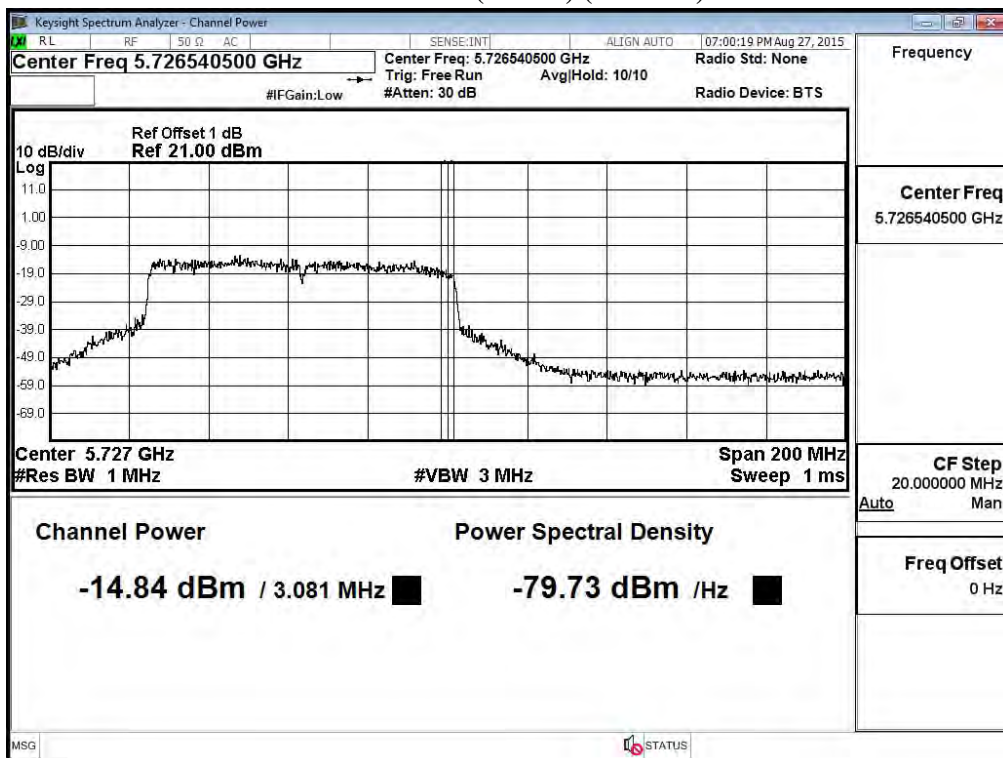
### Channel 122 (Chain B)



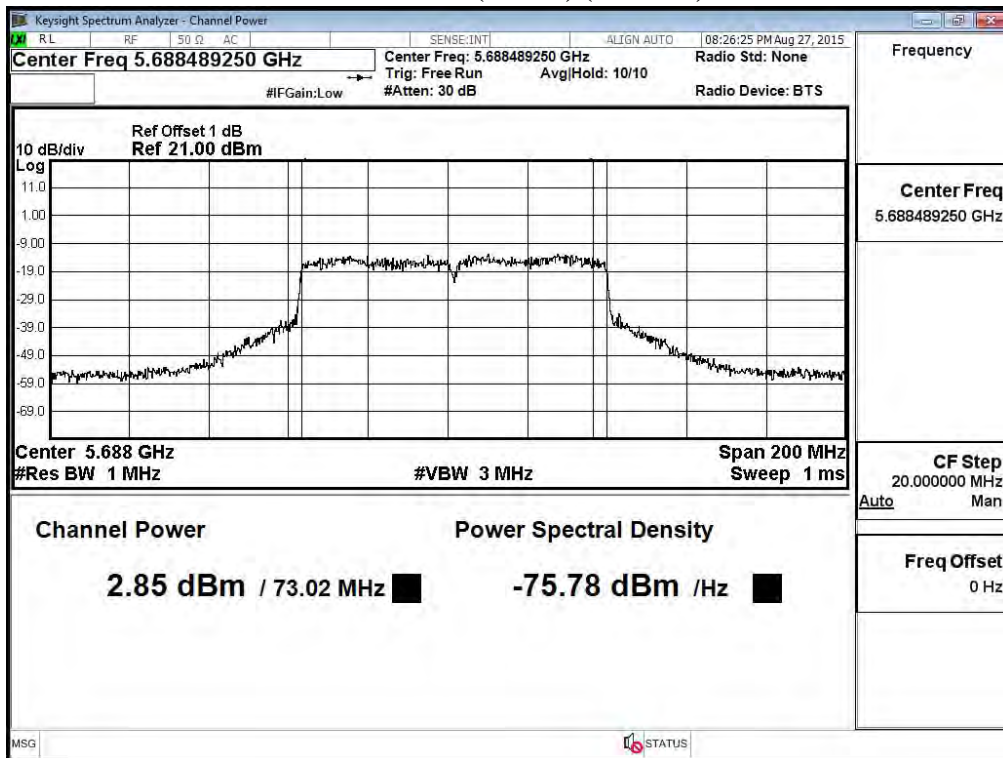
### Channel 138 (Band3) (Chain A)



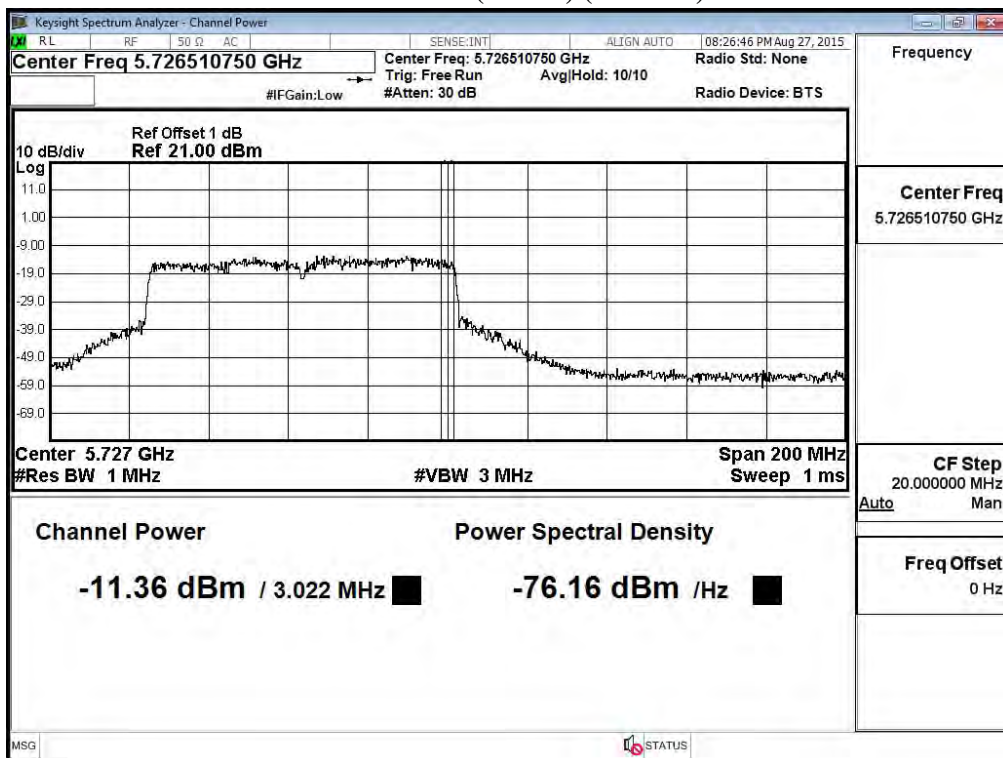
### Channel 138 (Band4) (Chain A)



### Channel 138 (Band3) (Chain B)



### Channel 138 (Band4) (Chain B)



## 4. Peak Power Spectral Density

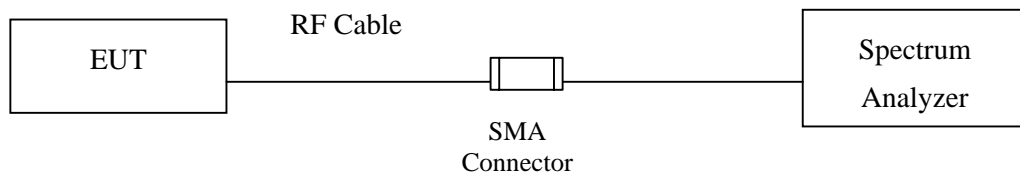
### 4.1. Test Equipment

	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 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.

#### **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**

± 1.27 dB

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

Product : 802.11 ac PCIe Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmit (802.11 a-6Mbps)(Dipole Antenna)

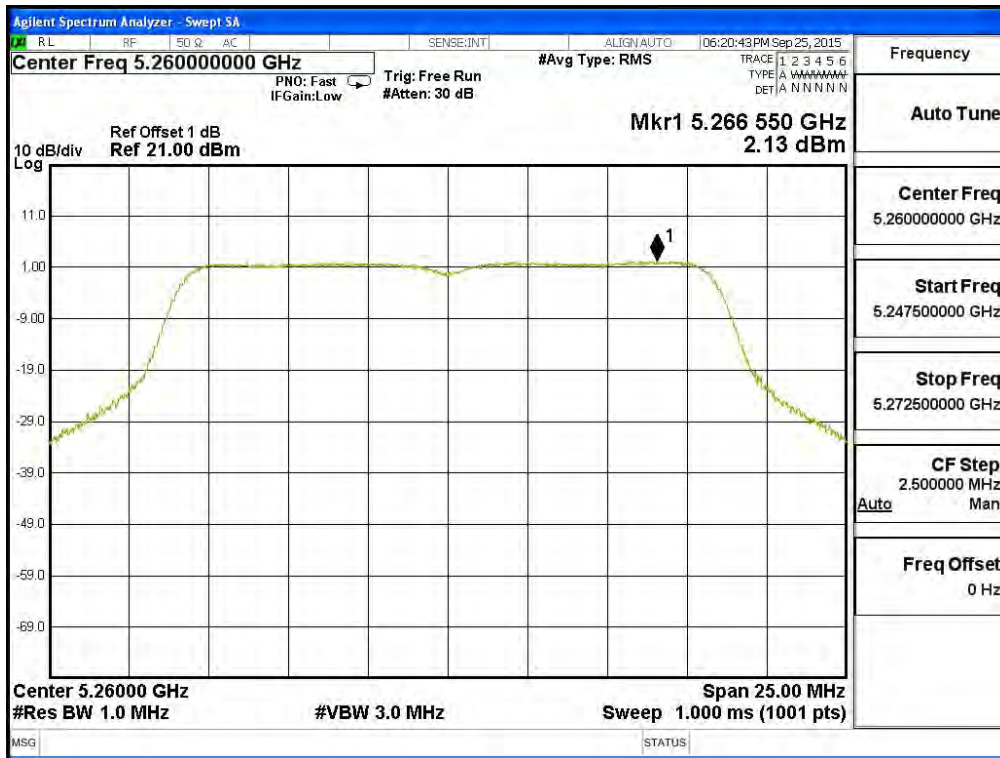
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Required Limit (dBm)	Result
52	5260	A	2.132	5.142	<11	Pass
		B	1.849	4.859	<11	Pass
60	5300	A	2.743	5.753	<11	Pass
		B	2.076	5.086	<11	Pass
64	5320	A	3.090	6.100	<11	Pass
		B	2.280	5.290	<11	Pass
100	5500	A	-1.769	1.241	<11	Pass
		B	-4.205	-1.195	<11	Pass
116	5580	A	7.452	10.462	<11	Pass
		B	7.062	10.072	<11	Pass
140	5700	A	-1.489	1.521	<11	Pass
		B	0.952	3.962	<11	Pass

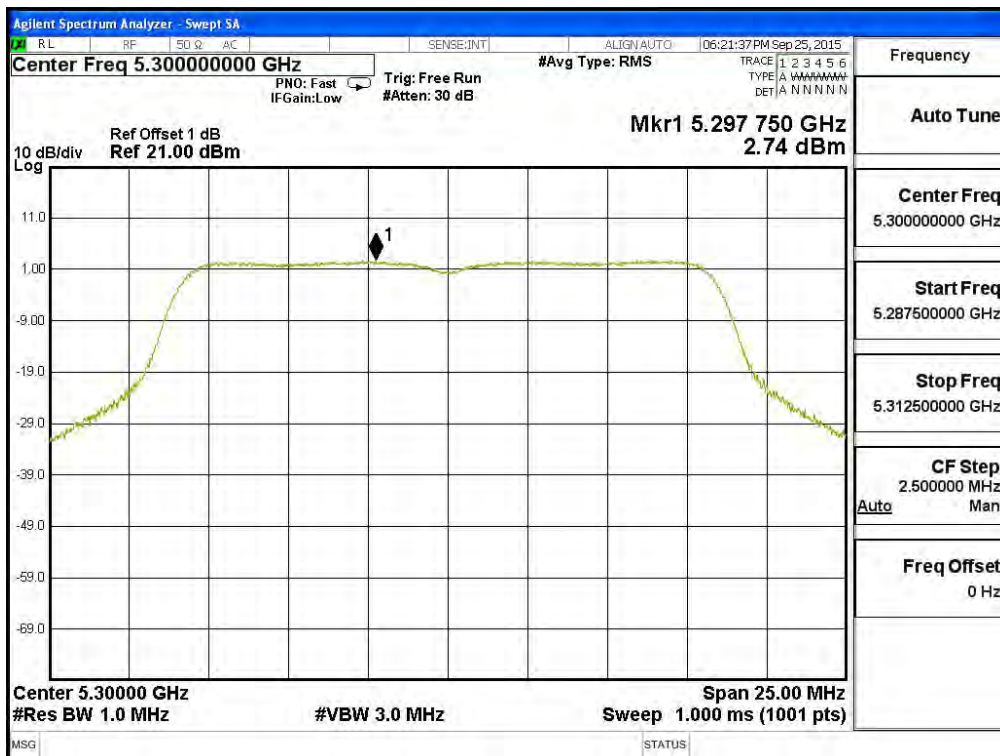
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 2$  (two antennas).

**Channel 52: (Chain A)**

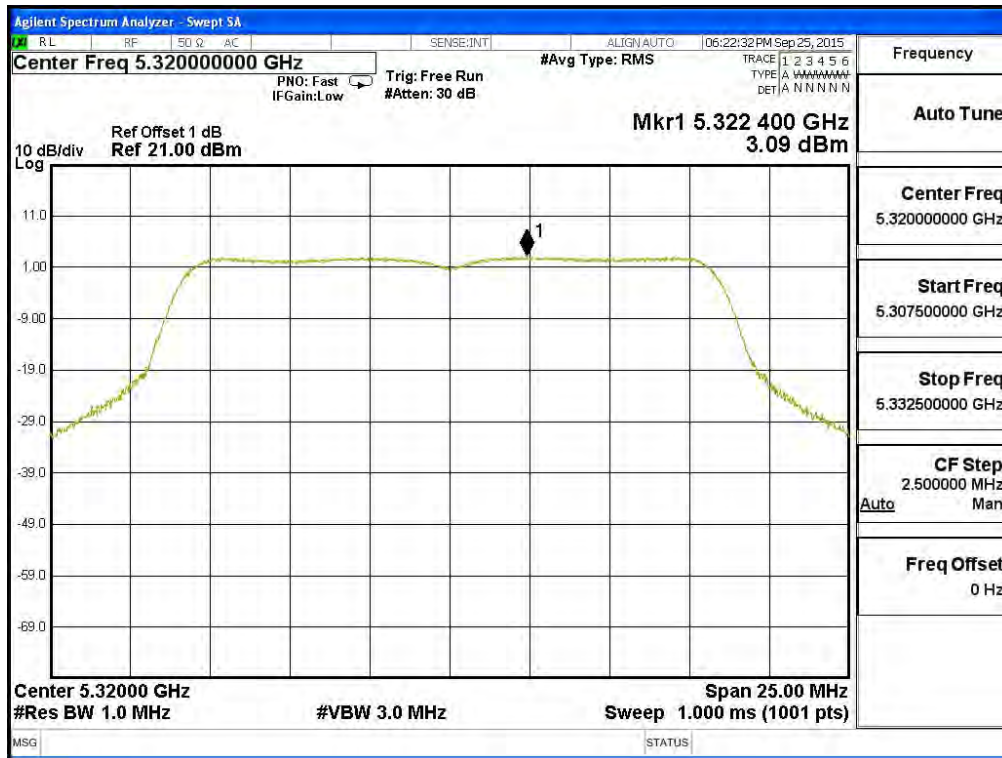


**Channel 60: (Chain A)**





### Channel 64: (Chain A)



### Channel 100: (Chain A)



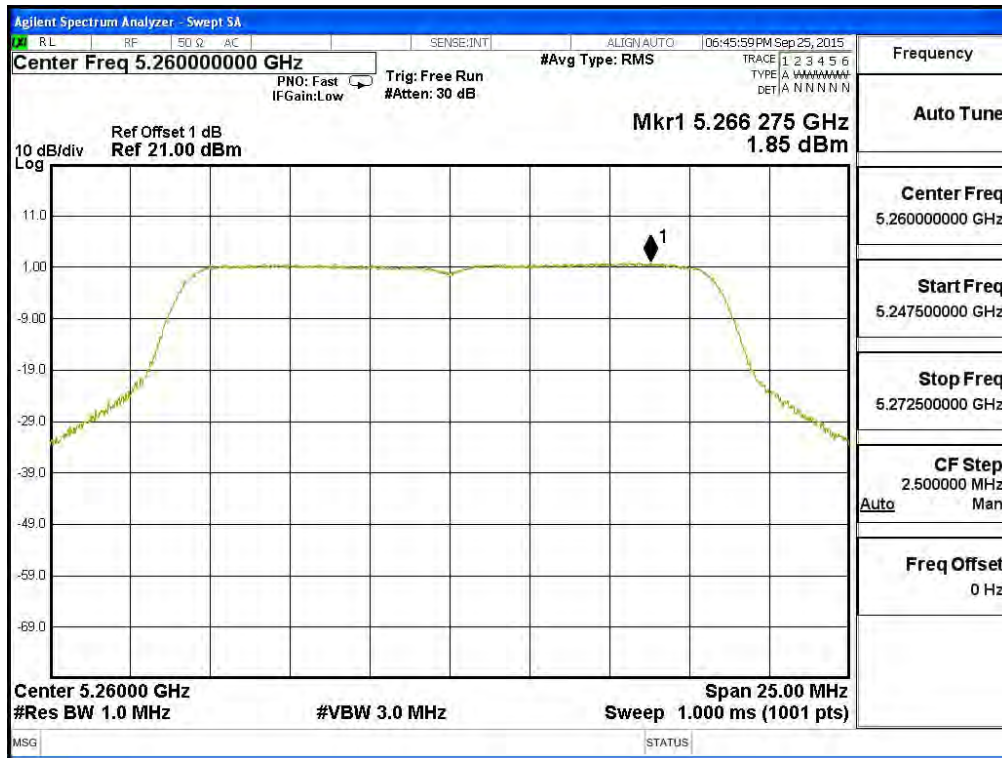
**Channel 116: (Chain A)**



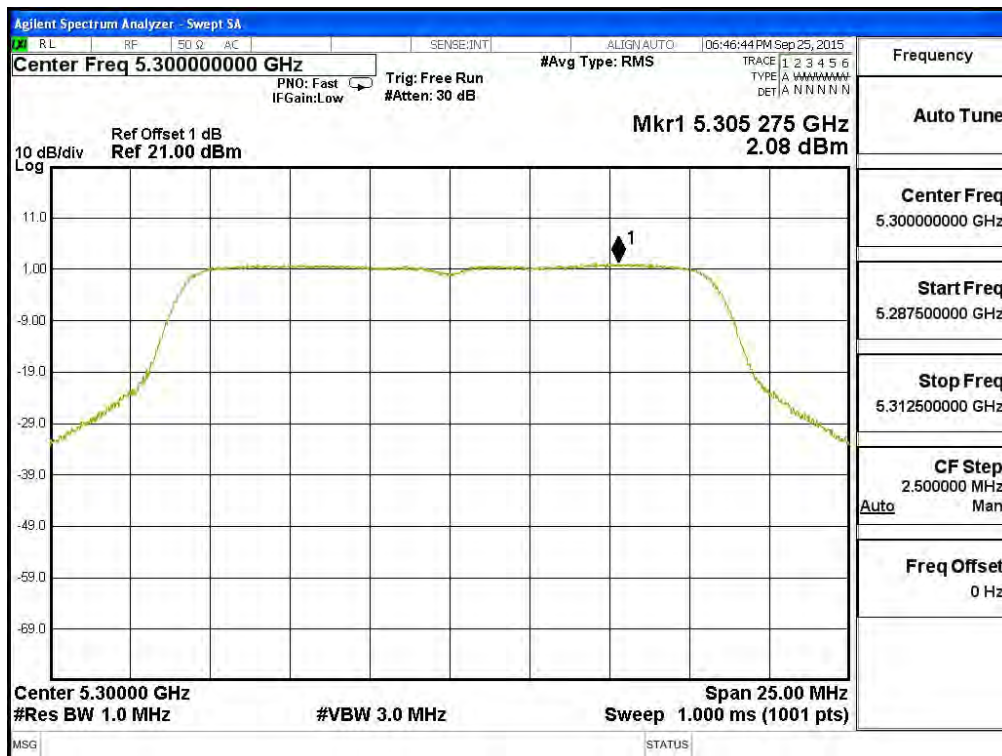
**Channel 140: (Chain A)**



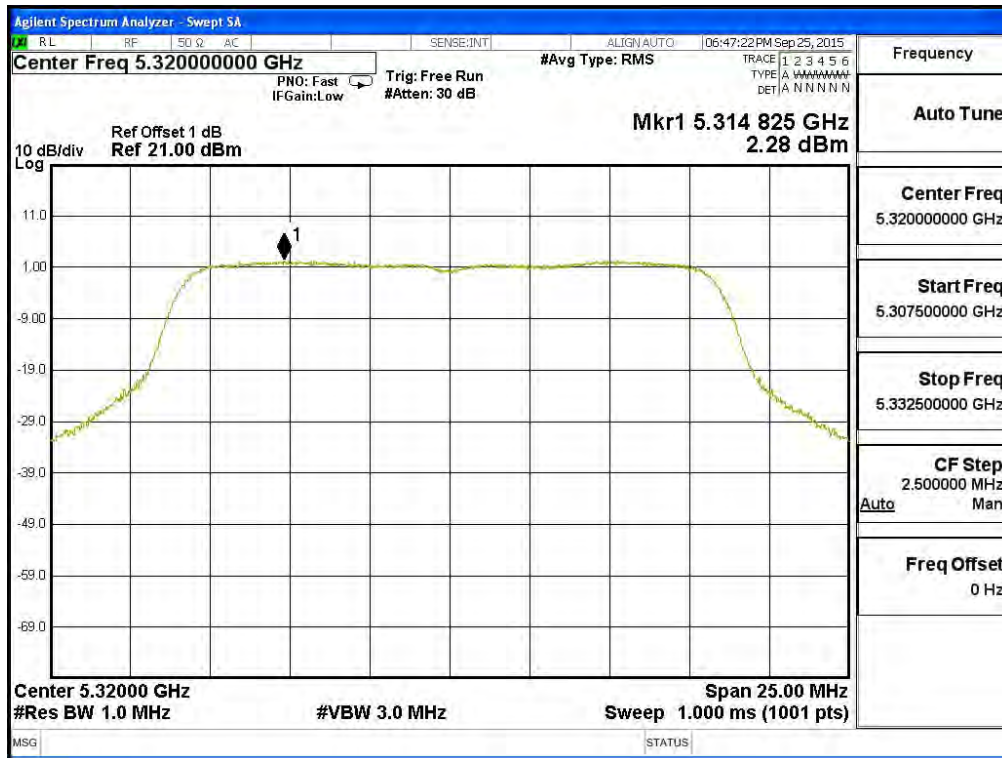
### Channel 52: (Chain B)



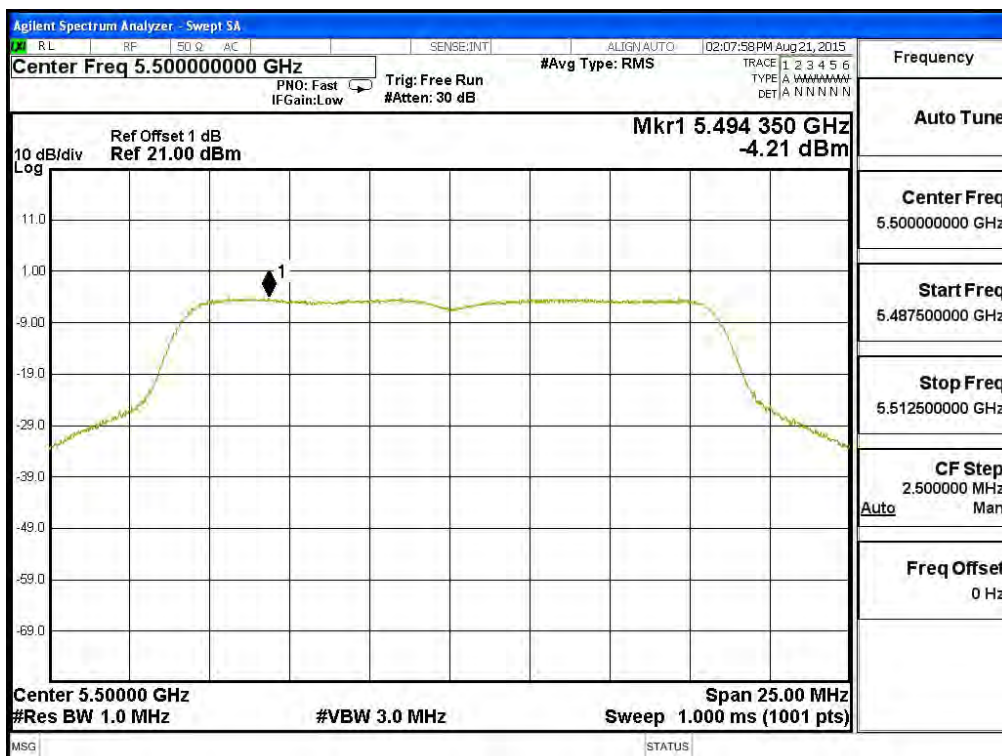
### Channel 60: (Chain B)



**Channel 64: (Chain B)**



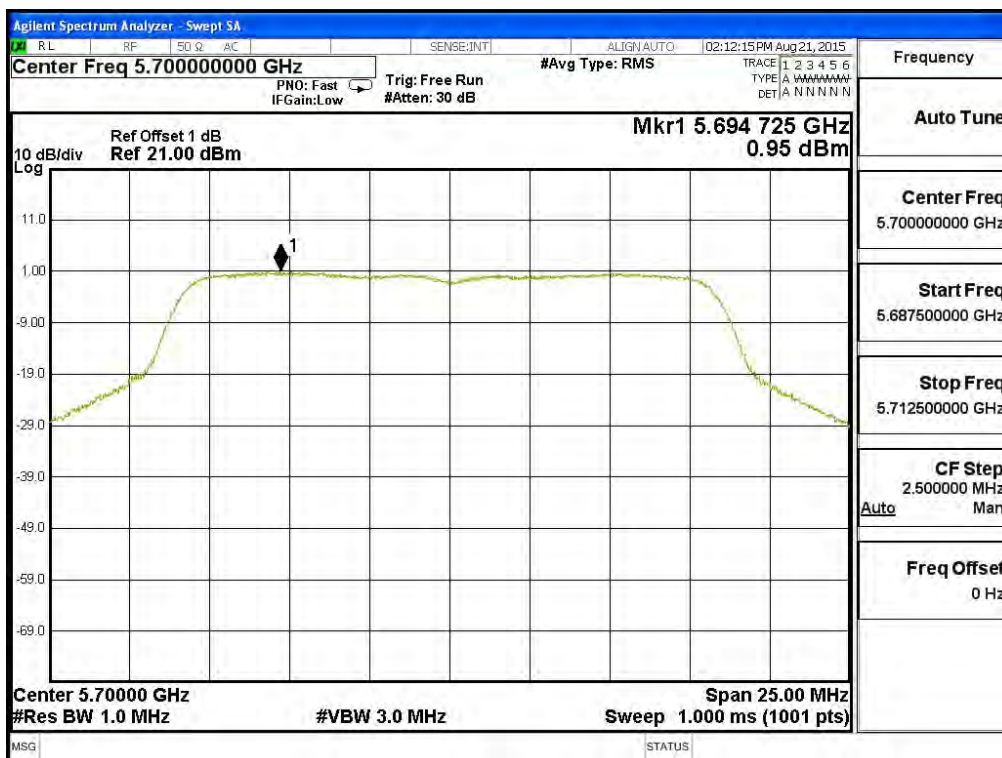
**Channel 100: (Chain B)**



**Channel 116: (Chain B)**



**Channel 140: (Chain B)**



Product : 802.11 ac PCIe Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmit (802.11n-20BW 14.4Mbps)(Dipole Antenna)

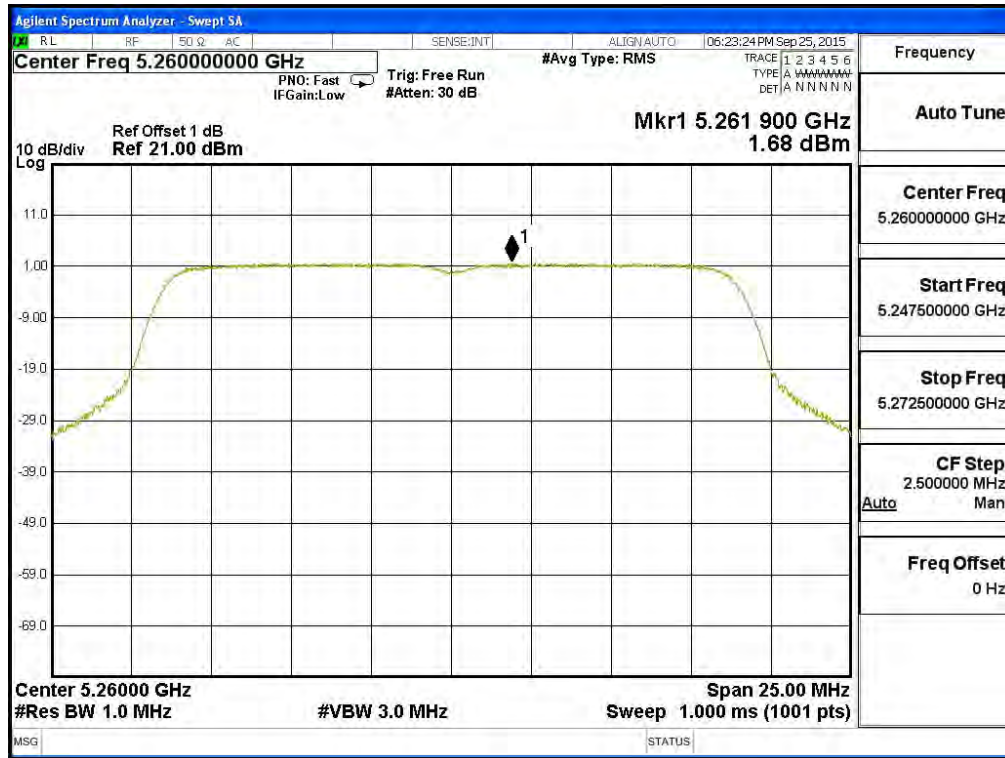
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Required Limit (dBm)	Result
52	5260	A	1.678	4.688	<11	Pass
		B	1.545	4.555	<11	Pass
60	5300	A	2.283	5.293	<11	Pass
		B	2.092	5.102	<11	Pass
64	5320	A	2.800	5.810	<11	Pass
		B	1.878	4.888	<11	Pass
100	5500	A	-2.075	0.935	<11	Pass
		B	-4.389	-1.379	<11	Pass
116	5580	A	7.184	10.194	<11	Pass
		B	6.566	9.576	<11	Pass
140	5700	A	-2.033	0.977	<11	Pass
		B	0.840	3.850	<11	Pass

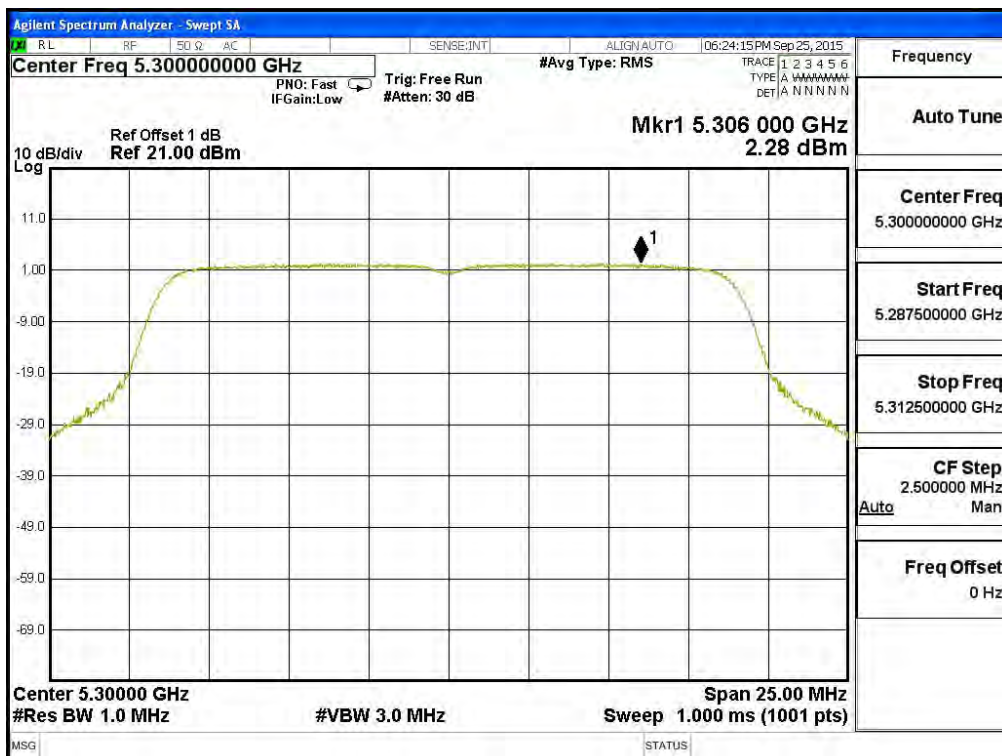
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 2$  (two antennas).

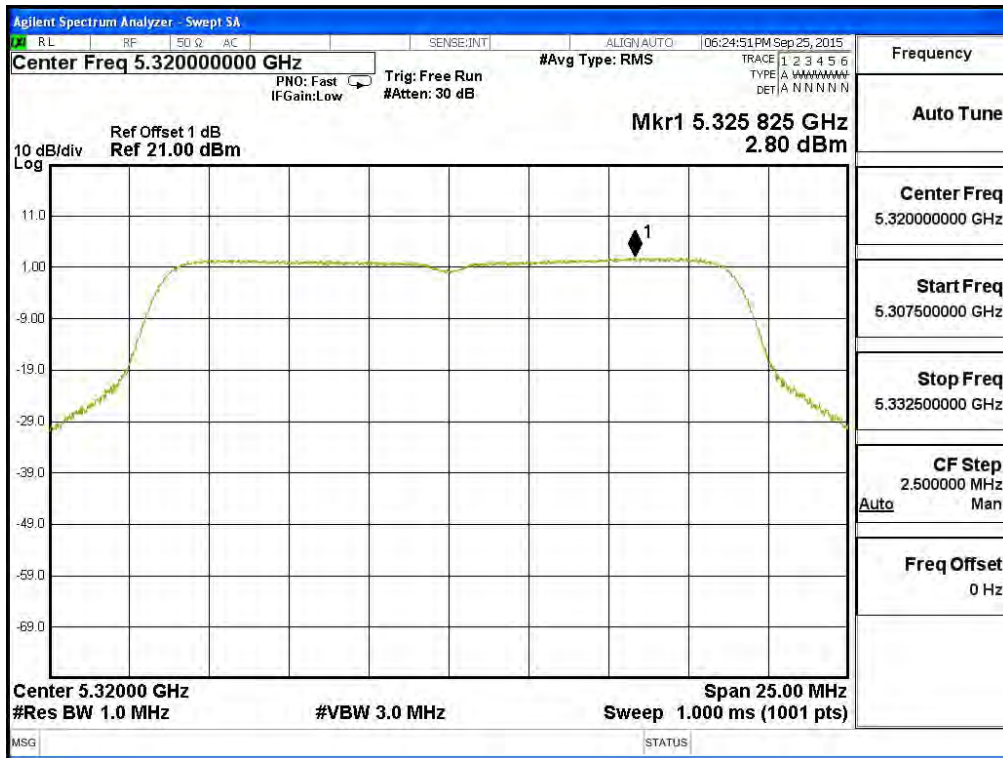
### Channel 52: (Chain A)



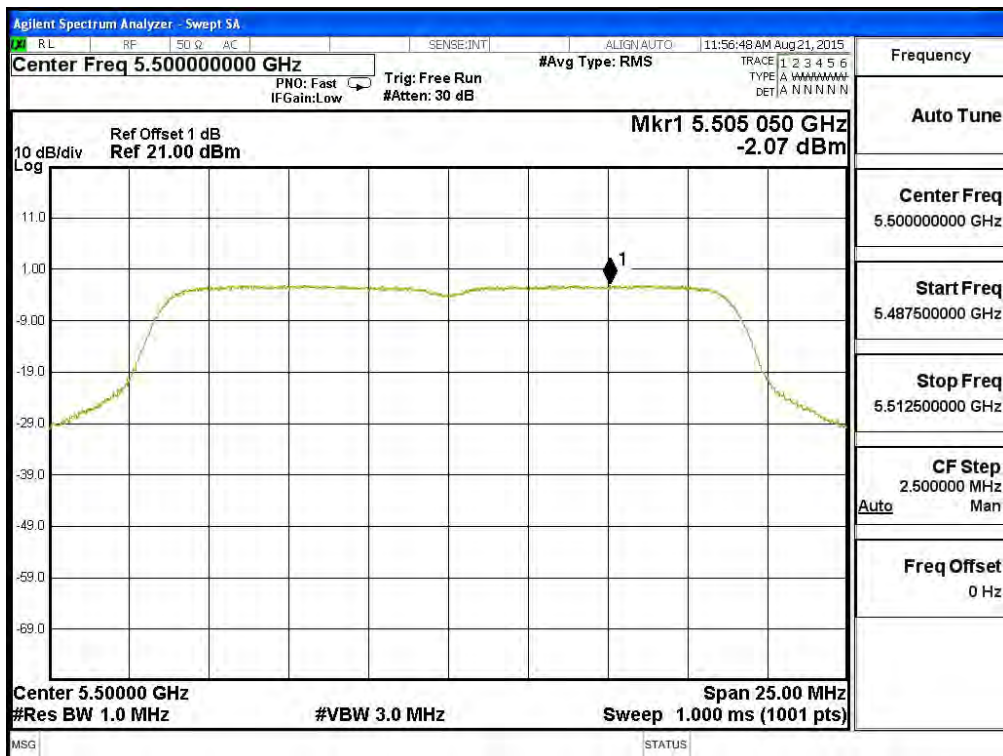
### Channel 60: (Chain A)



### Channel 64: (Chain A)



### Channel 100: (Chain A)

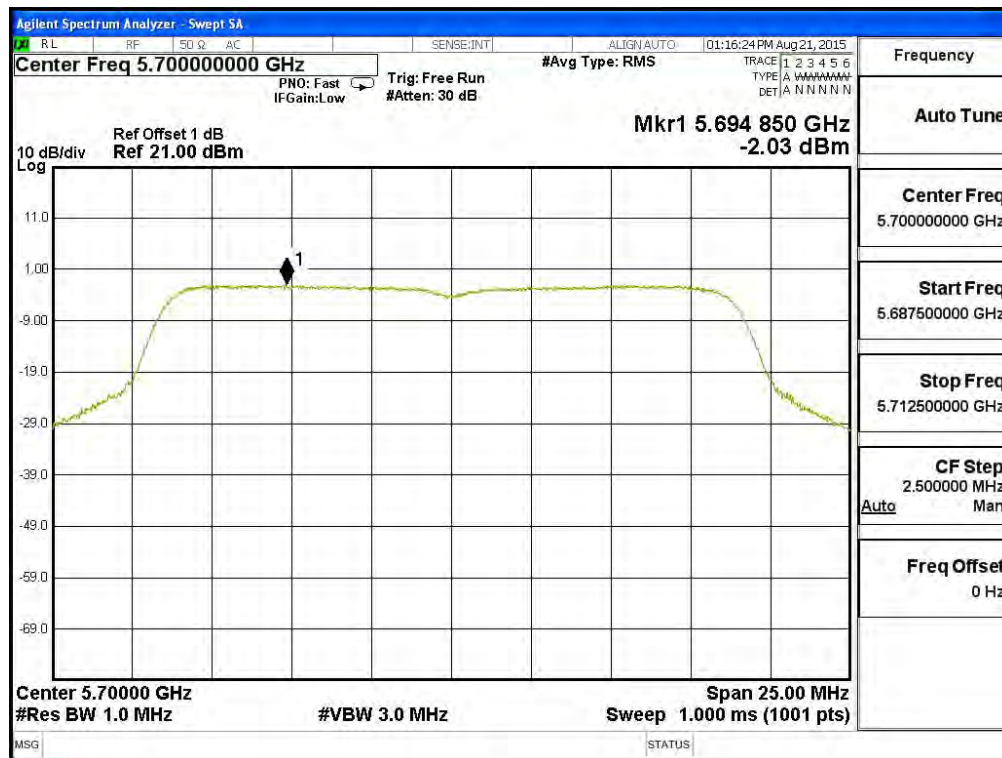




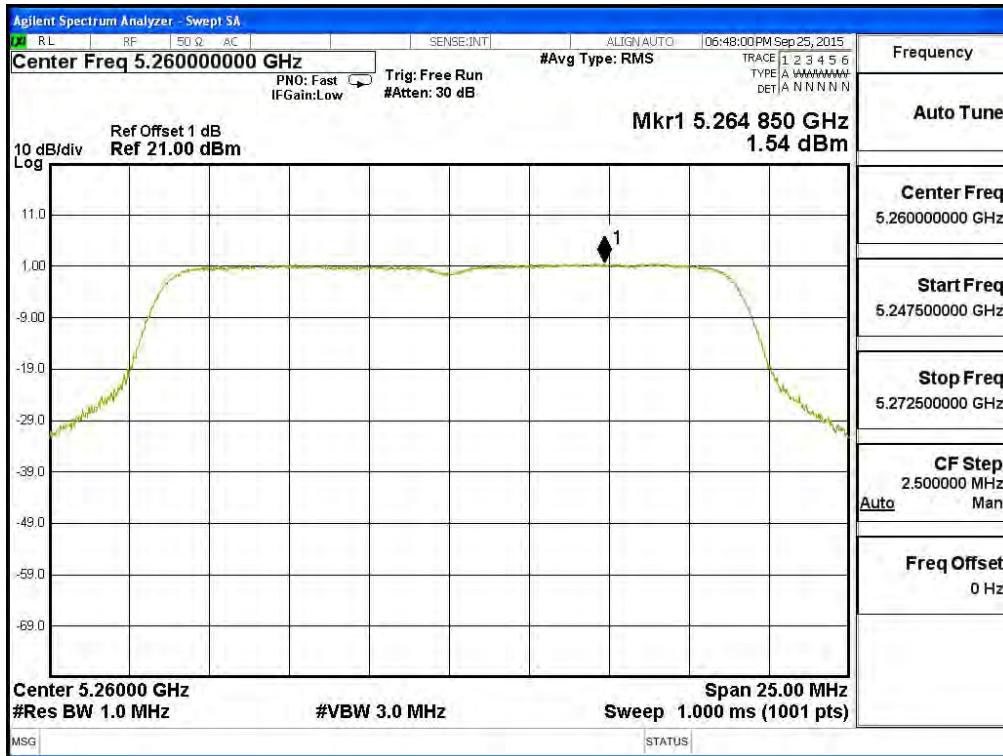
### Channel 116: (Chain A)



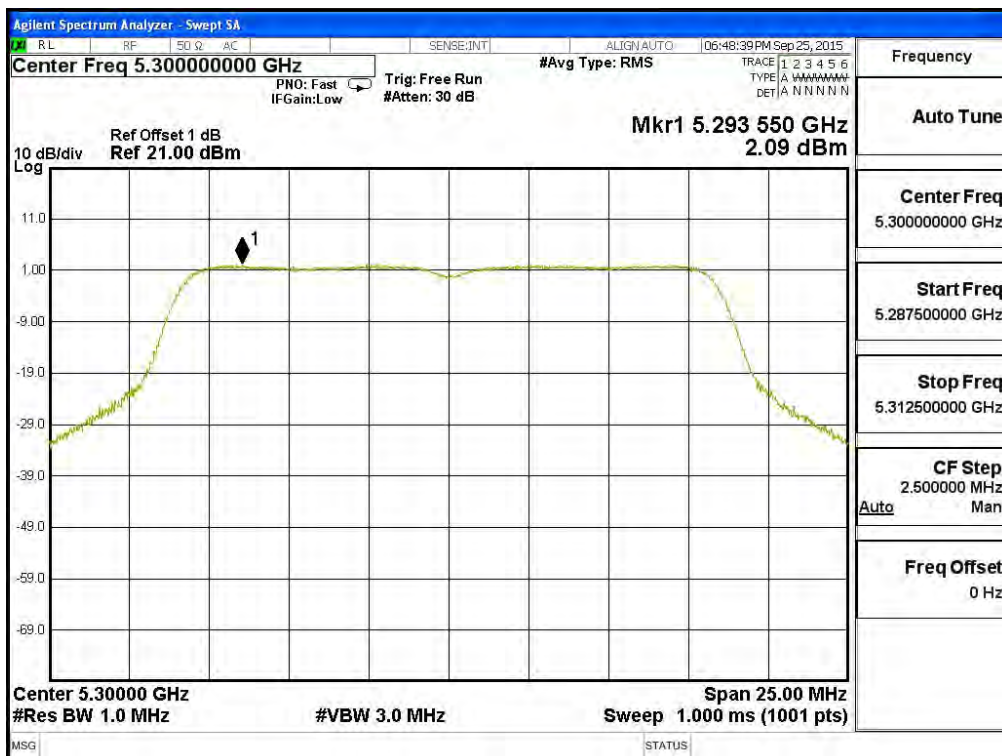
### Channel 140: (Chain A)



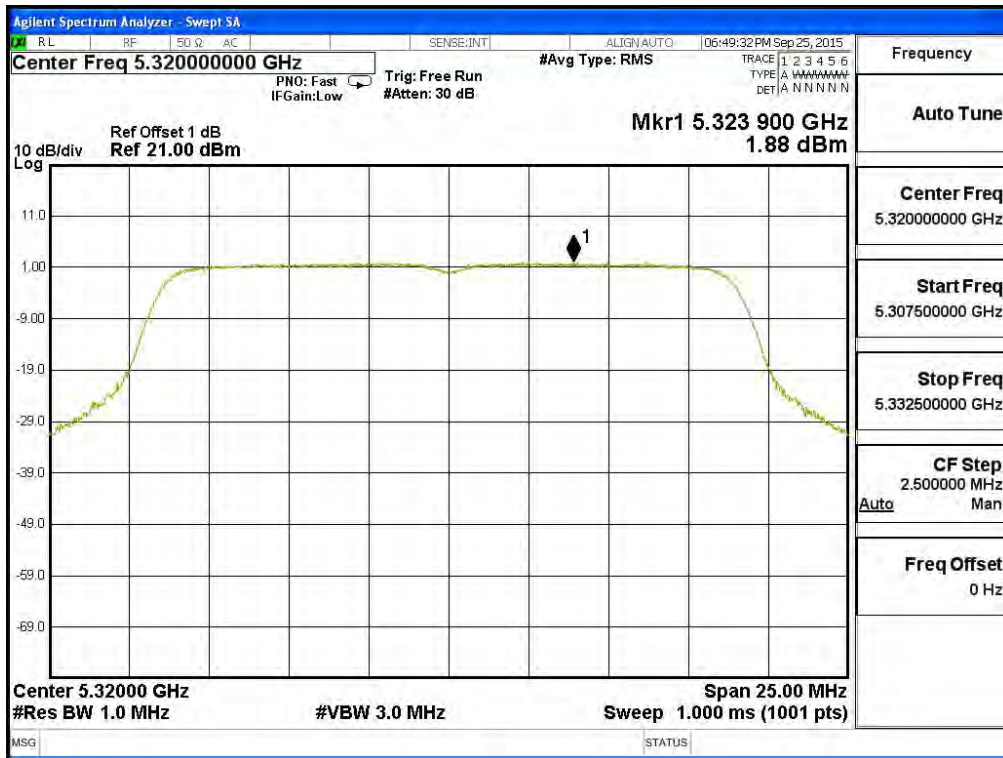
### Channel 52: (Chain B)



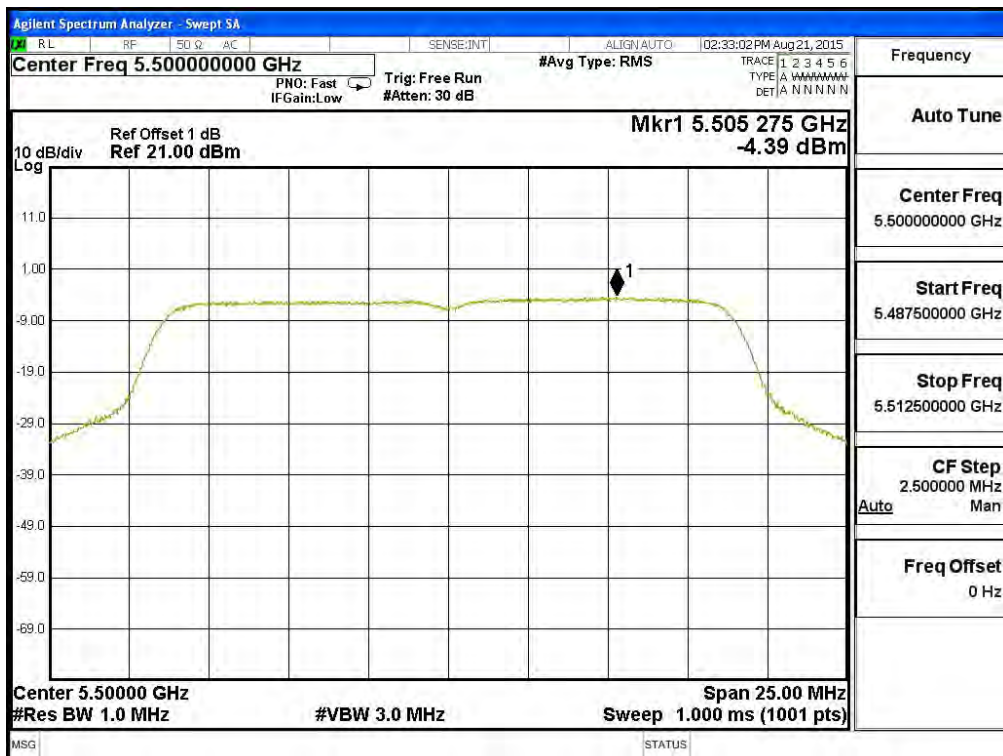
### Channel 60: (Chain B)



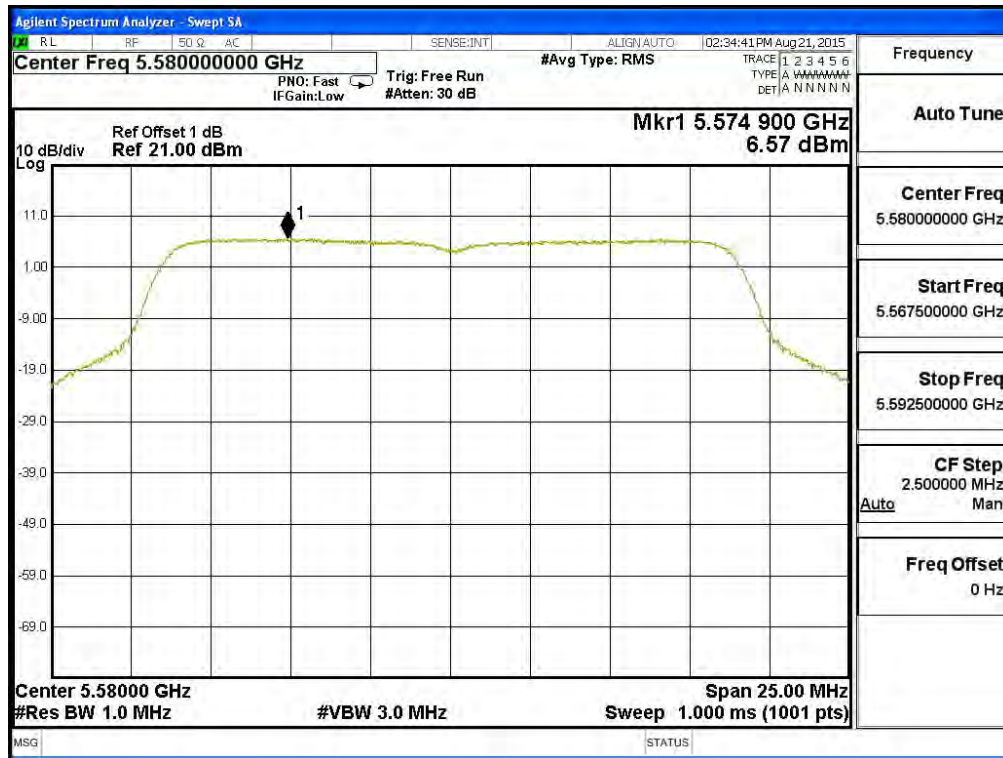
### Channel 64: (Chain B)



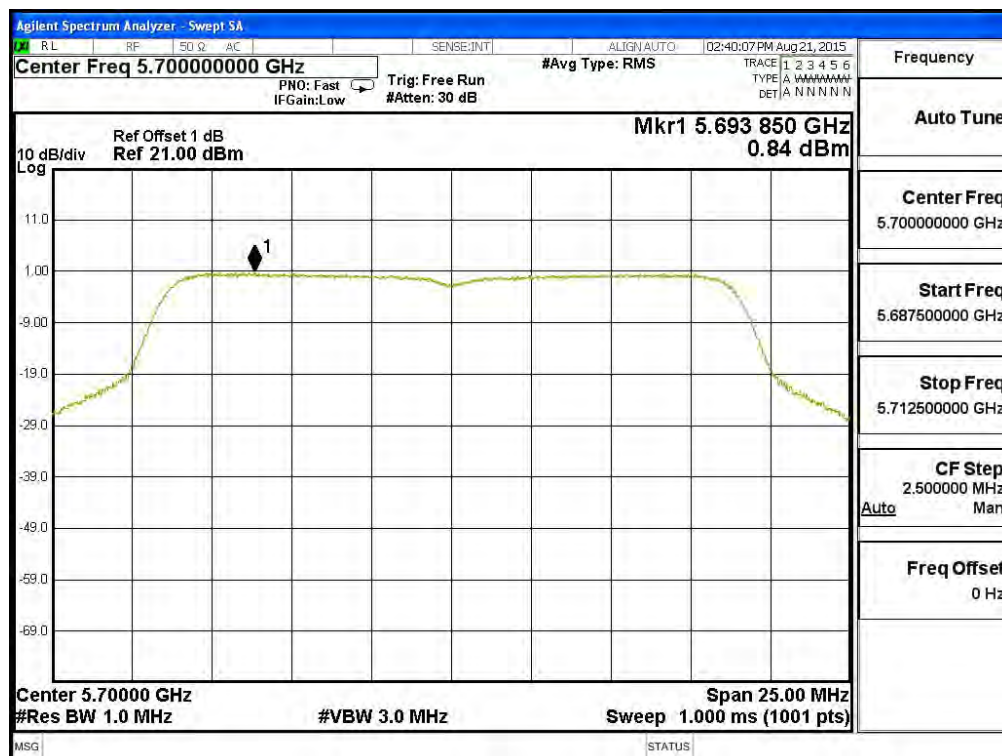
### Channel 100: (Chain B)



### Channel 116: (Chain B)



### Channel 140: (Chain B)



Product : 802.11 ac PCIe Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 3: Transmit (802.11n-40BW 30Mbps)(Dipole Antenna)

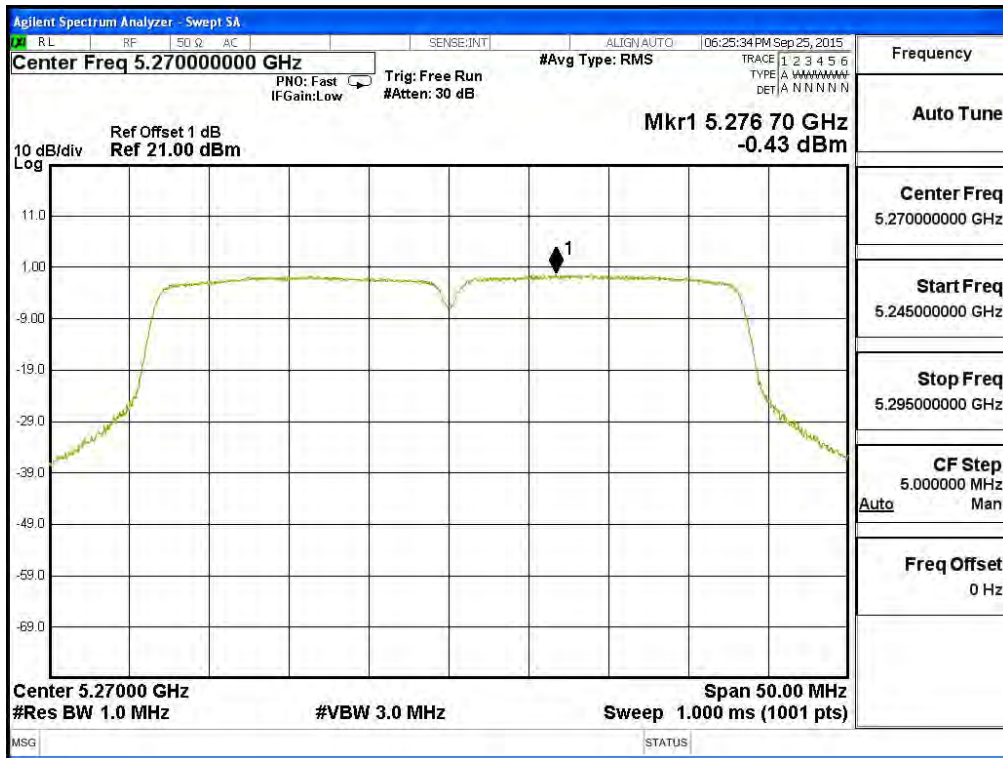
**5250~5350MHz, 5470-5600 MHz and 5650-5725 MHz**

Channel Number	Frequency (MHz)	Chain	PPSD/MHz (dBm)	Total PPSD/MHz (dBm)	Required Limit (dBm)	Result
54	5270	A	-0.429	2.581	<11	Pass
		B	-0.817	2.193	<11	Pass
62	5310	A	-0.087	2.923	<11	Pass
		B	-0.825	2.185	<11	Pass
102	5510	A	-5.593	-2.583	<11	Pass
		B	-7.791	-4.781	<11	Pass
110	5550	A	7.280	10.290	<11	Pass
		B	5.726	8.736	<11	Pass
134	5670	A	-1.580	1.430	<11	Pass
		B	0.420	3.430	<11	Pass

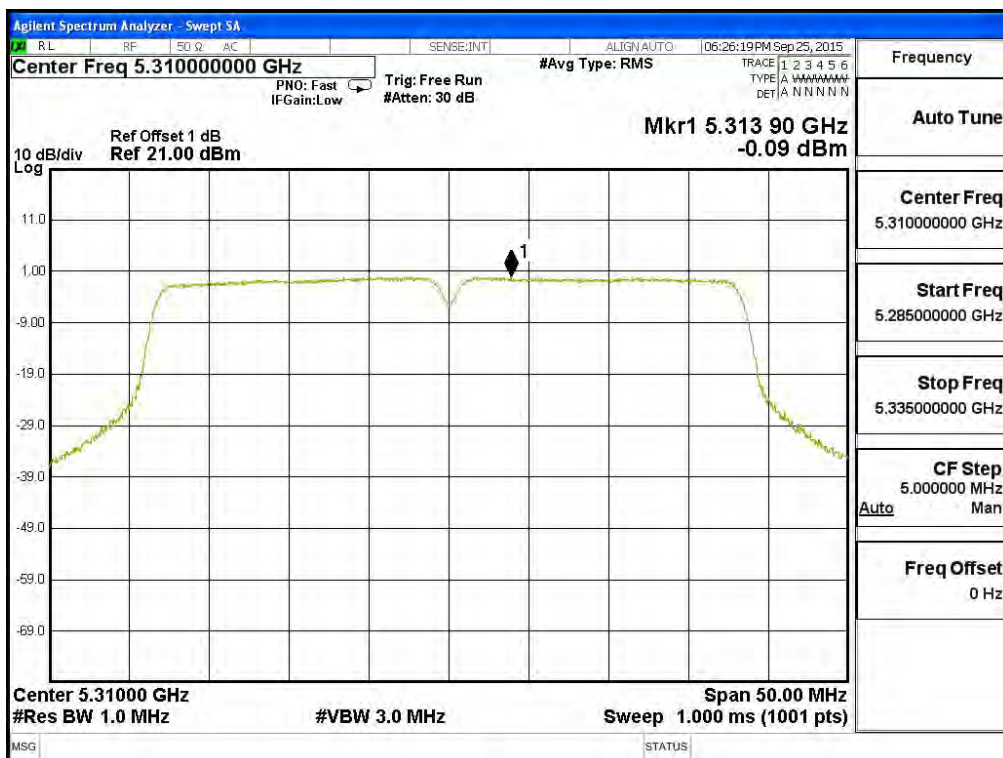
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 2$  (two antennas).

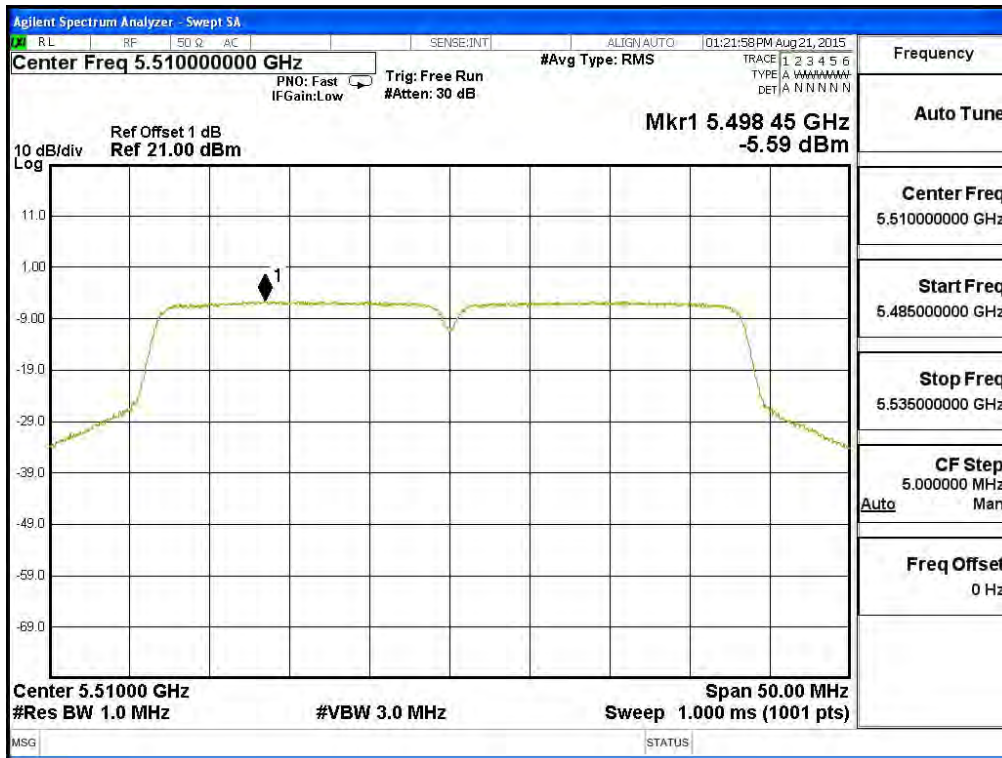
### Channel 54: (Chain A)



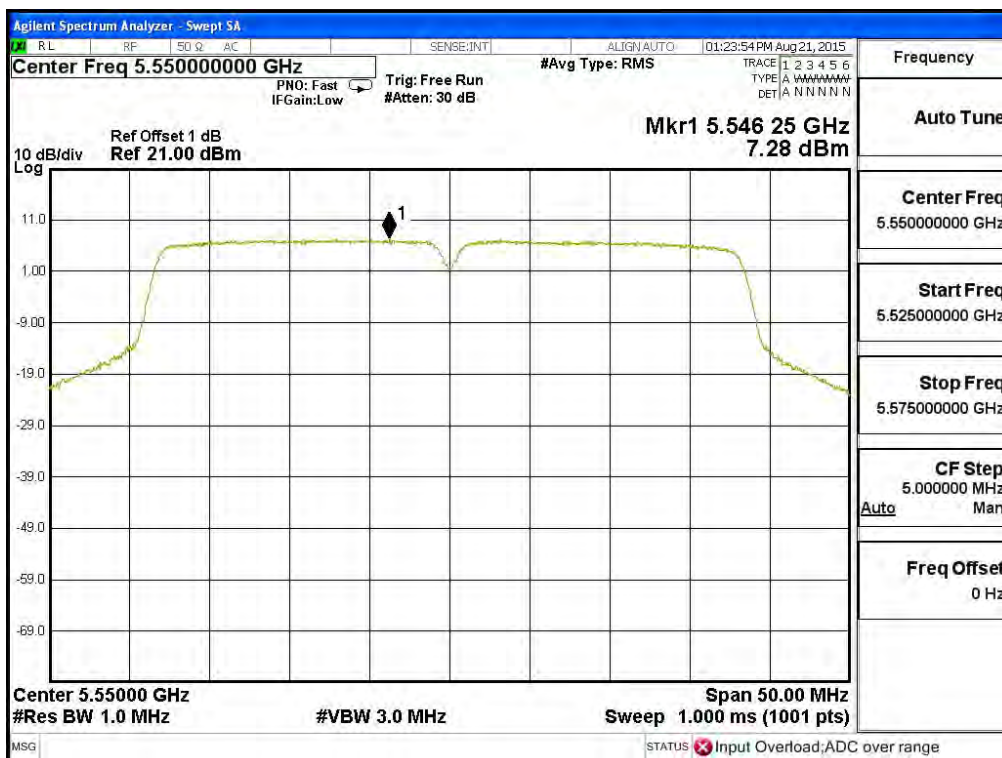
### Channel 62: (Chain A)



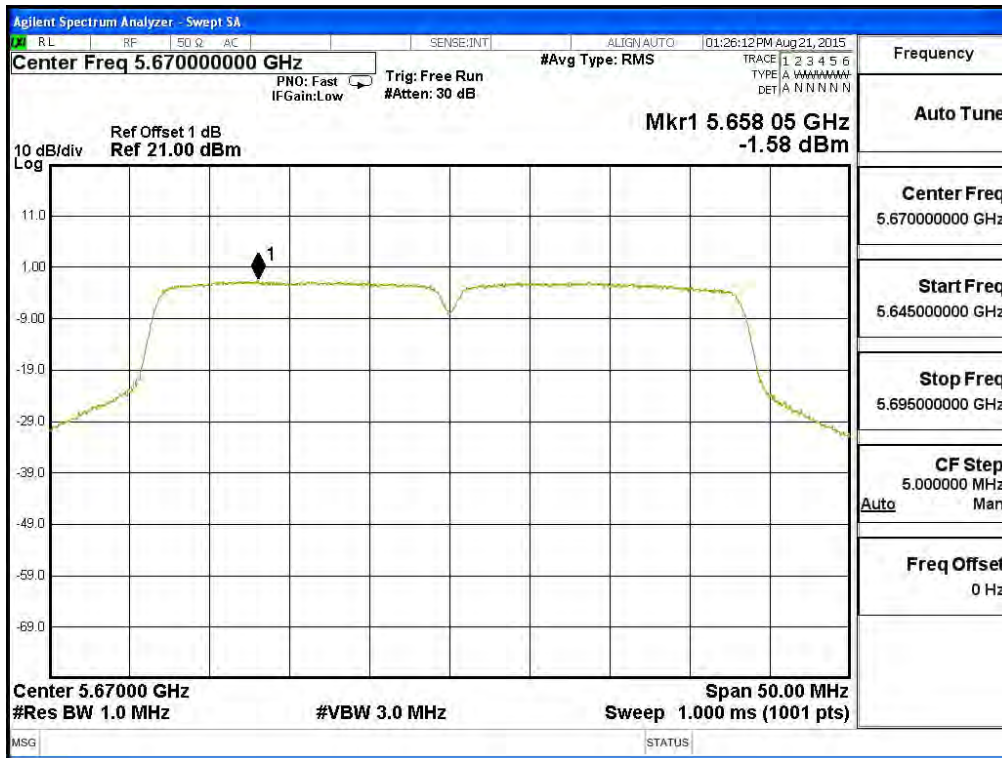
**Channel 102: (Chain A)**



**Channel 110: (Chain A)**

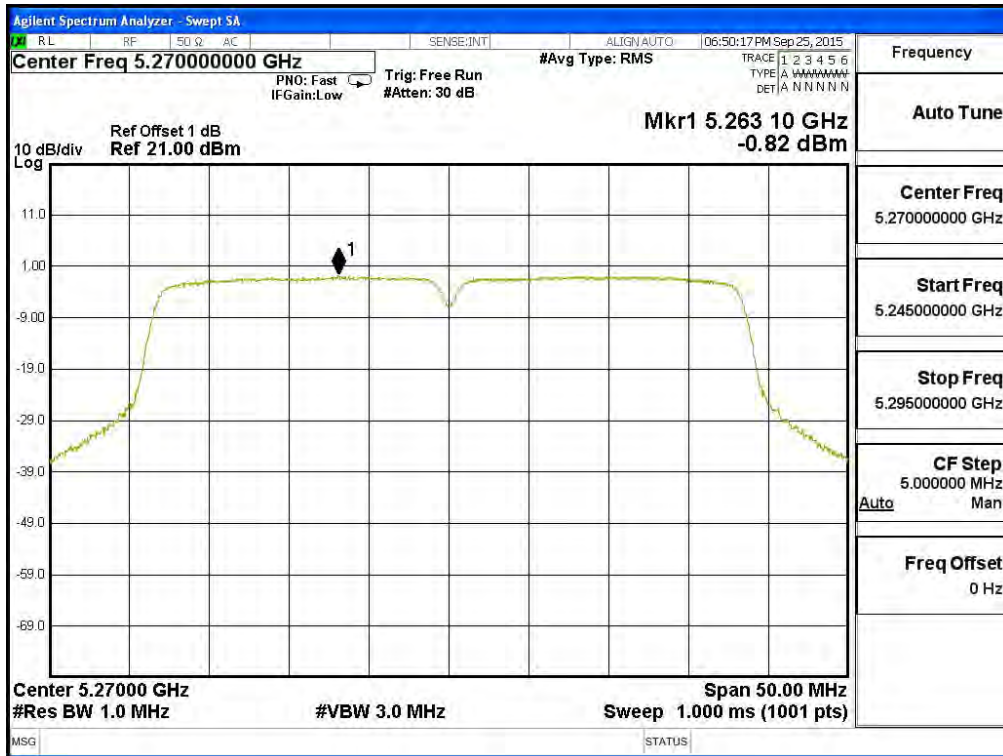


**Channel 134: (Chain A)**

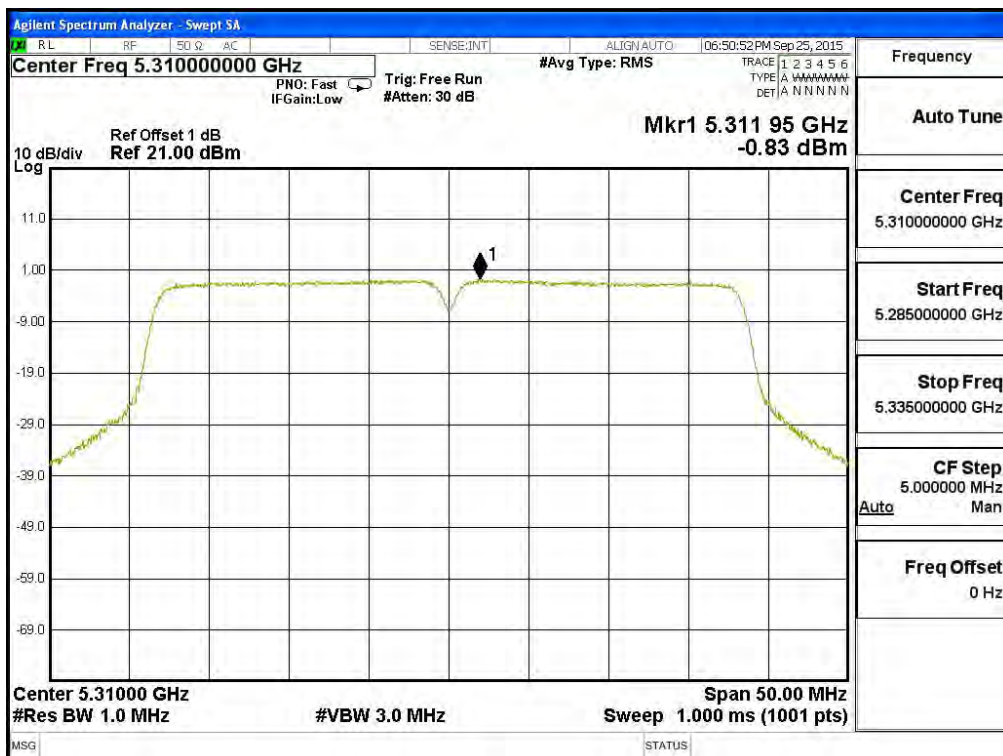




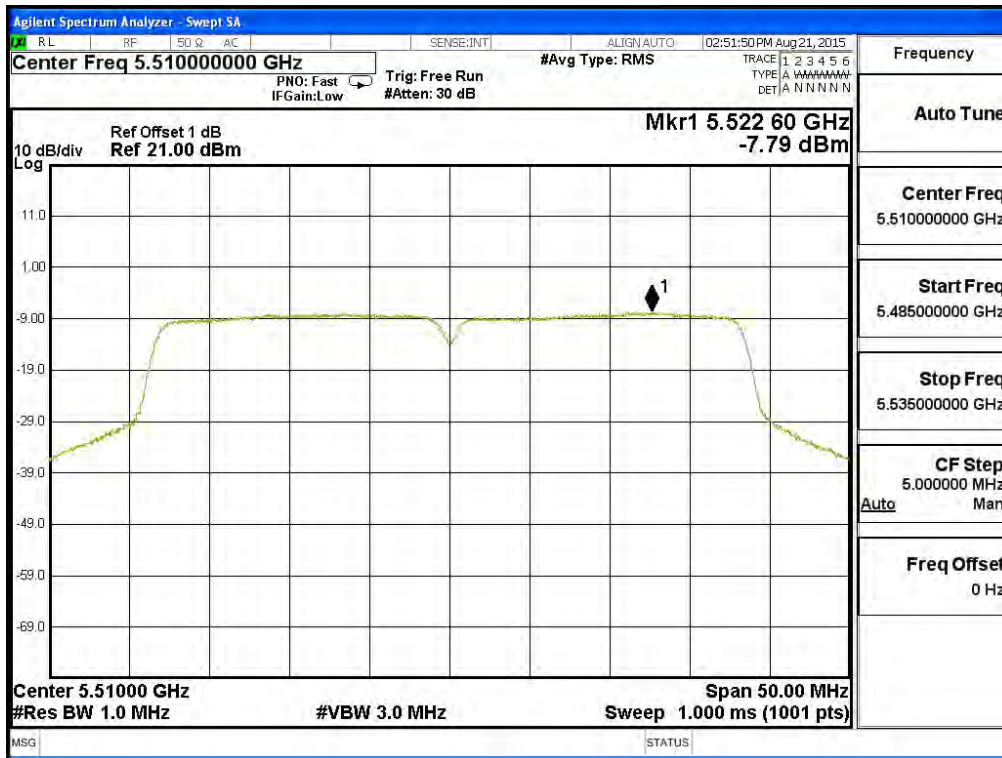
**Channel 54: (Chain B)**



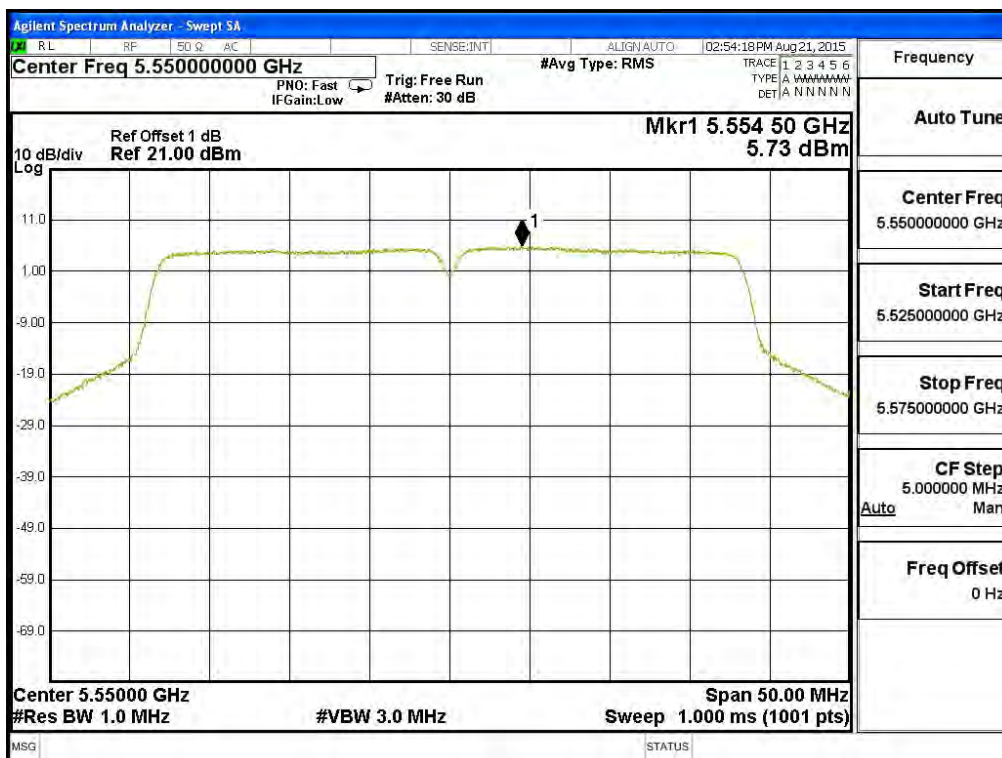
**Channel 62: (Chain B)**



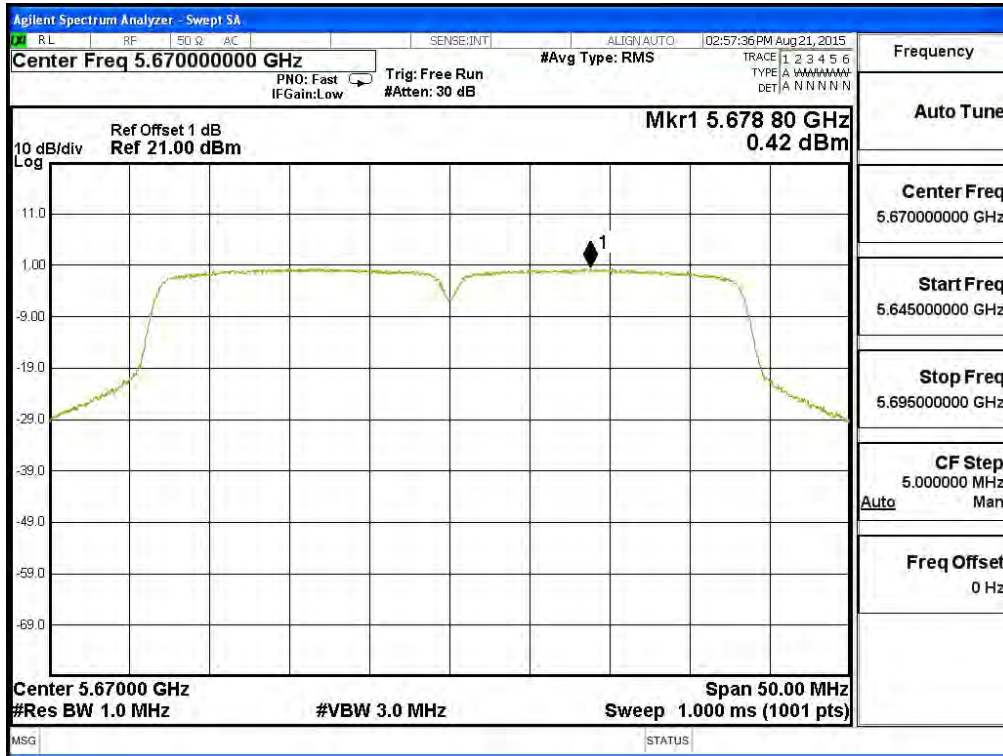
**Channel 102: (Chain B)**



**Channel 110: (Chain B)**



**Channel 134: (Chain B)**



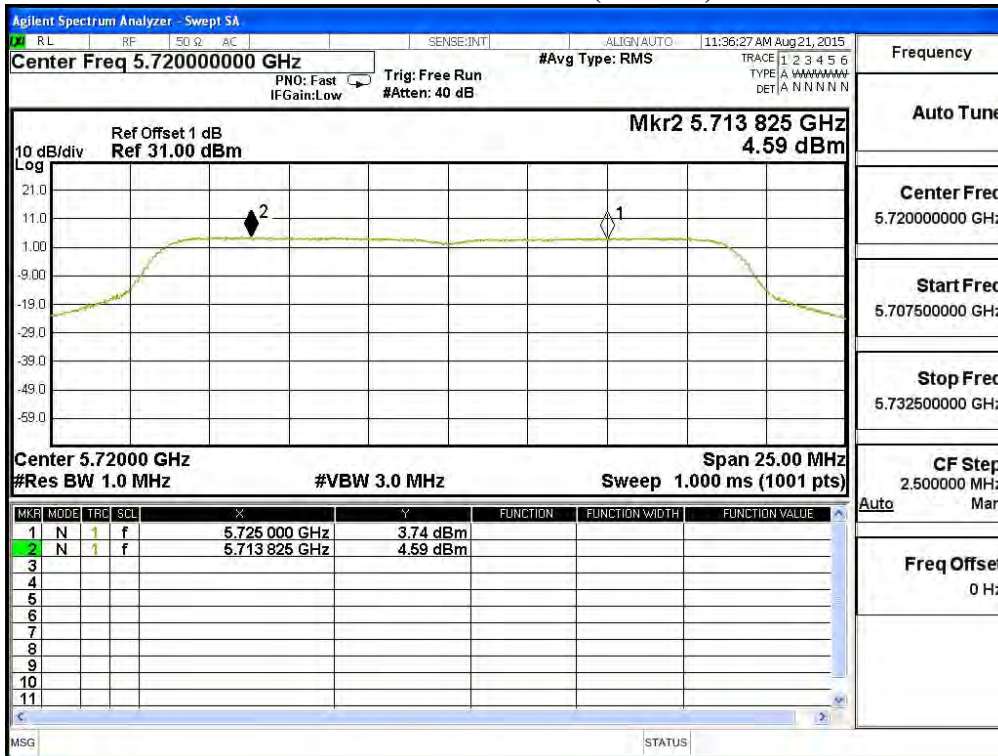
Product : 802.11 ac PCIe Module  
 Test Item : Peak Power Spectral Density  
 Test Site : No.3 OATS  
 Test Mode : Mode 4: Transmit (802.11ac-20BW-14.4Mbps)(Dipole Antenna)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
144	5720(Band3)	A	4.590	--	7.600	<11	Pass
		B	7.490	--	10.500	<11	Pass
144	5720(Band4)	A	-4.430	6.980	5.560	<30	Pass
		B	-2.270	6.980	7.720	<30	Pass

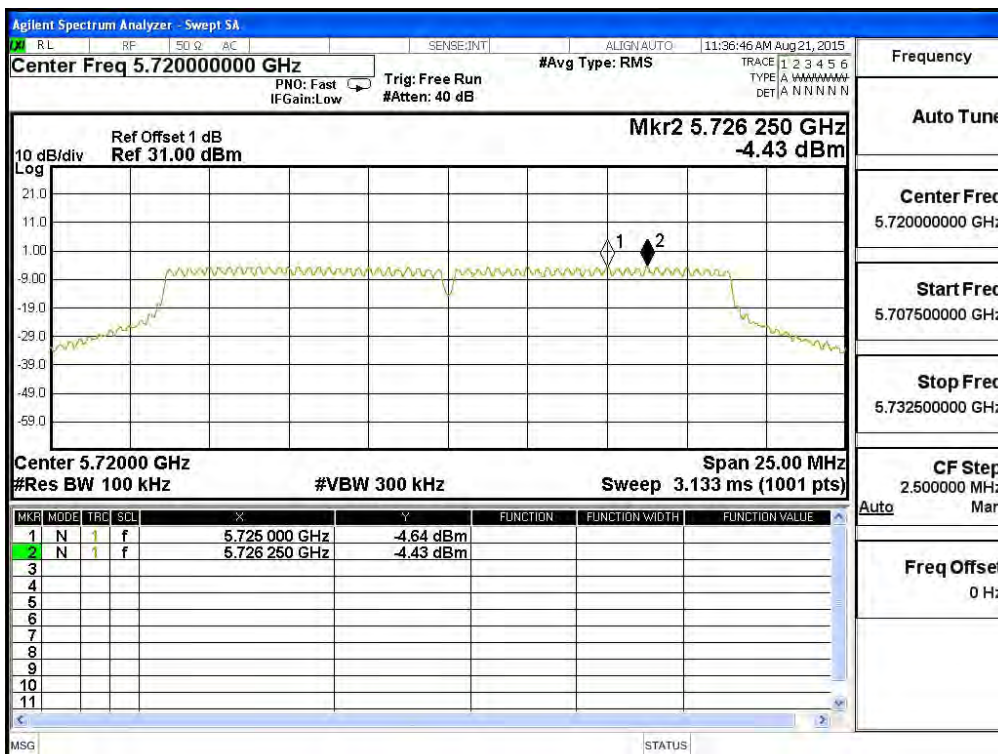
Note: 1.The quantity  $10 \cdot \log 2$  (two antennas) is added to the spectrum peak value according to document 662911 D01.

2.Total PPSD Value = PPSD/MHz value +  $10 \cdot \log 2$  (two antennas) + BWCF.

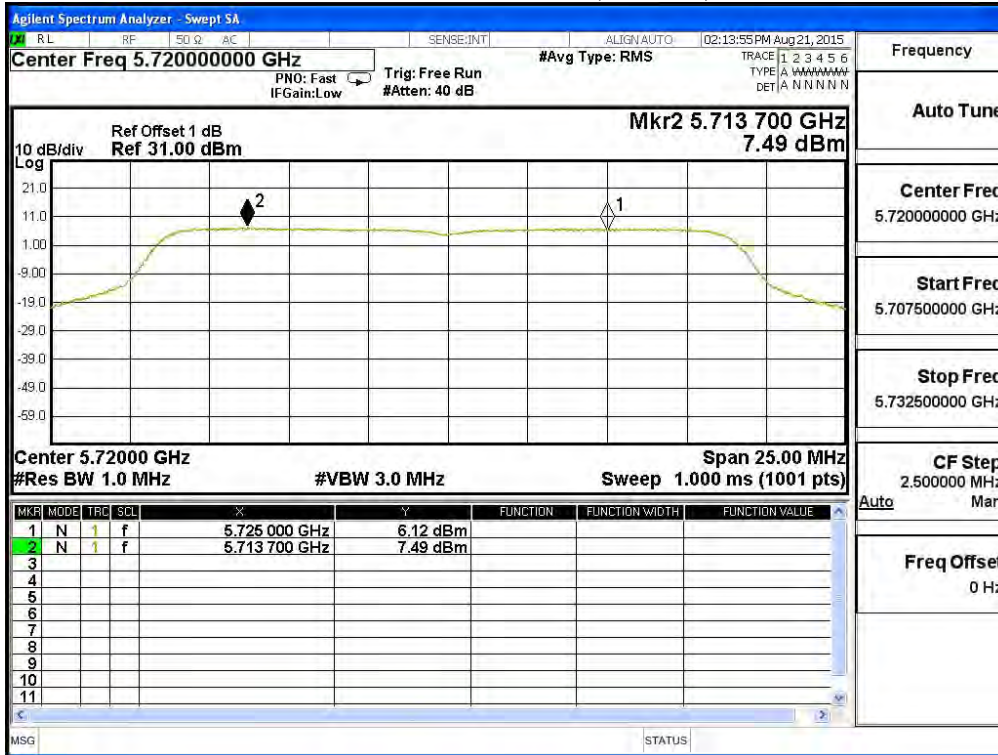
**Channel 144: (Chain A)**



**Channel 144: (Chain A)**



### Channel 144: (Chain B)



### Channel 144: (Chain B)

