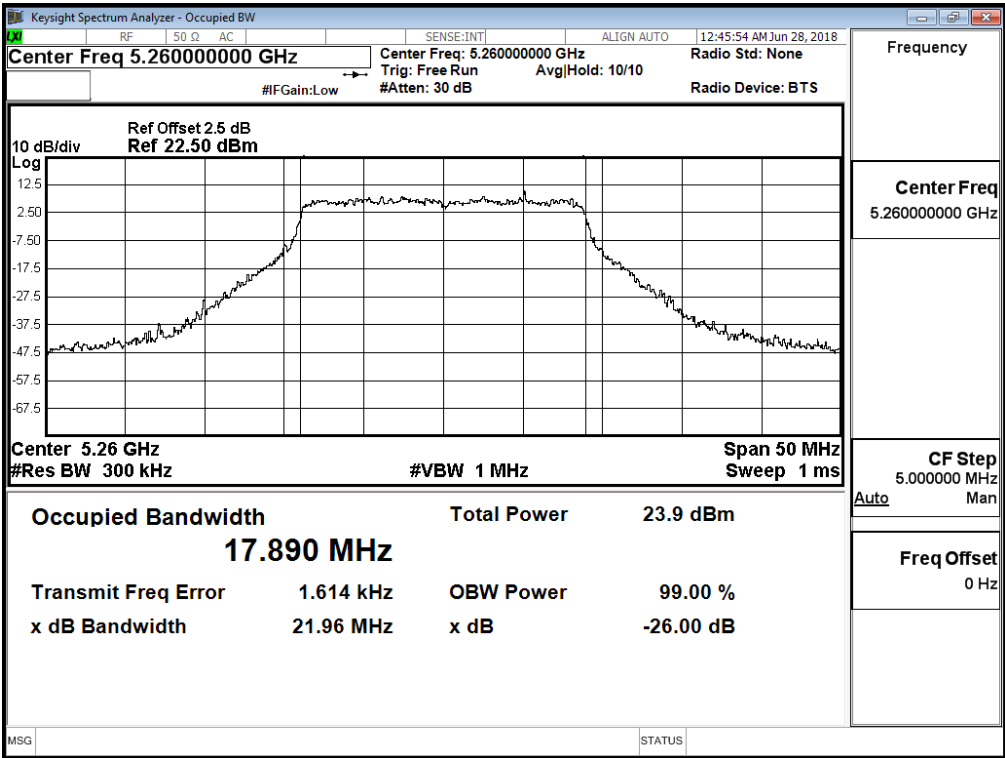
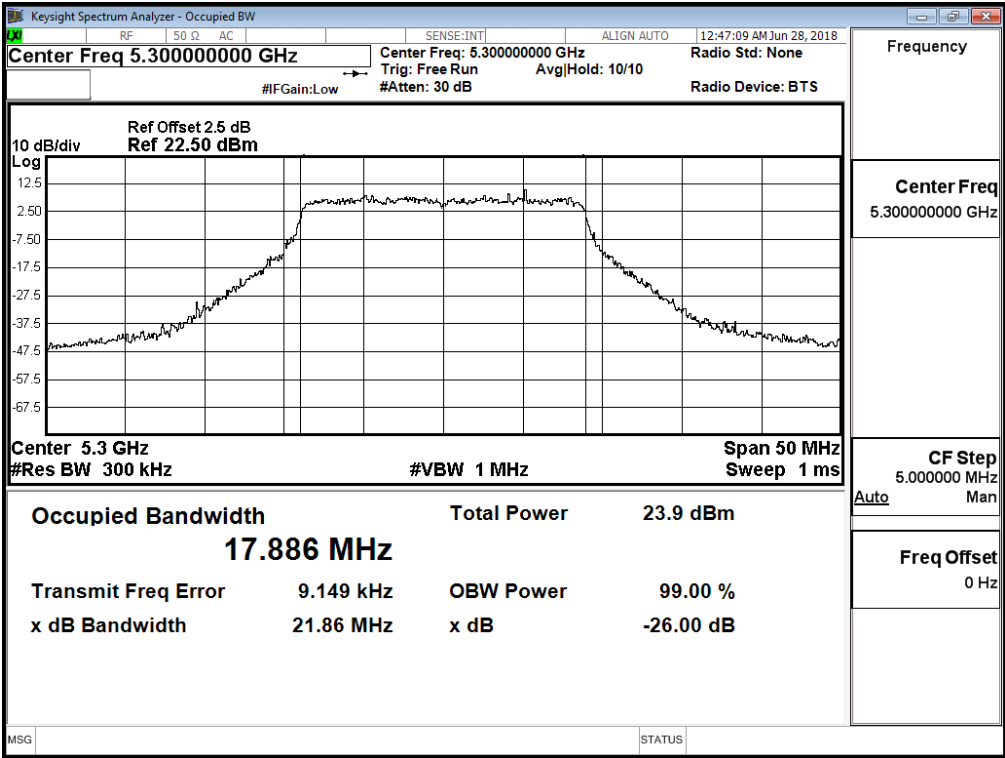


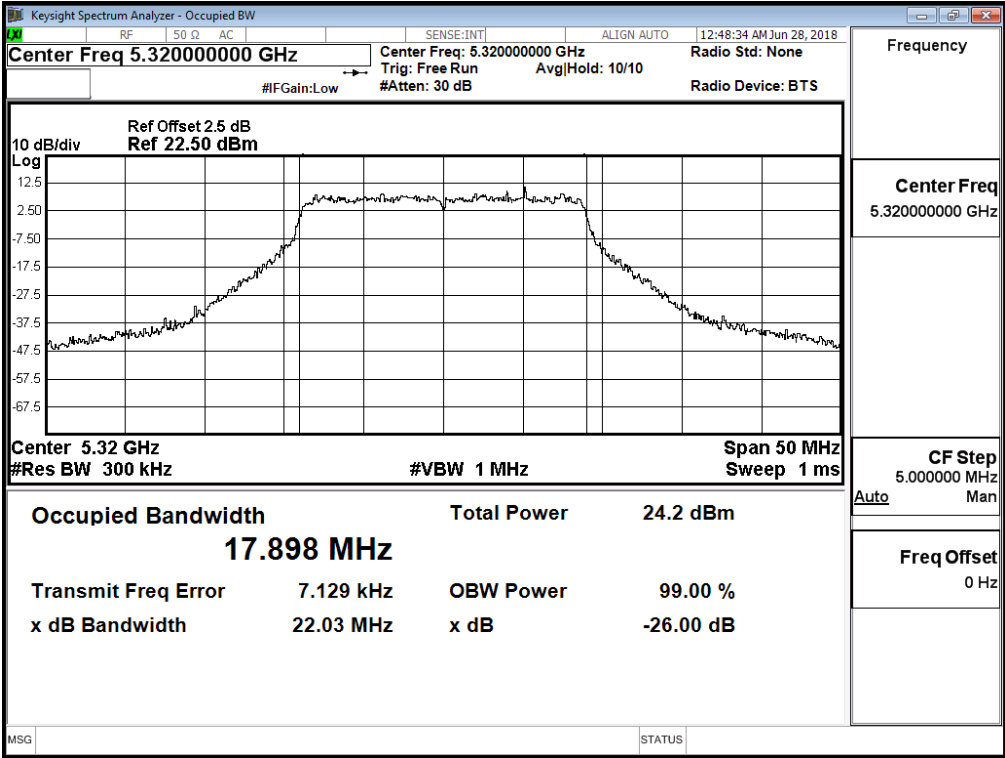
99% Bandwidth:
Channel 52 -Chain A



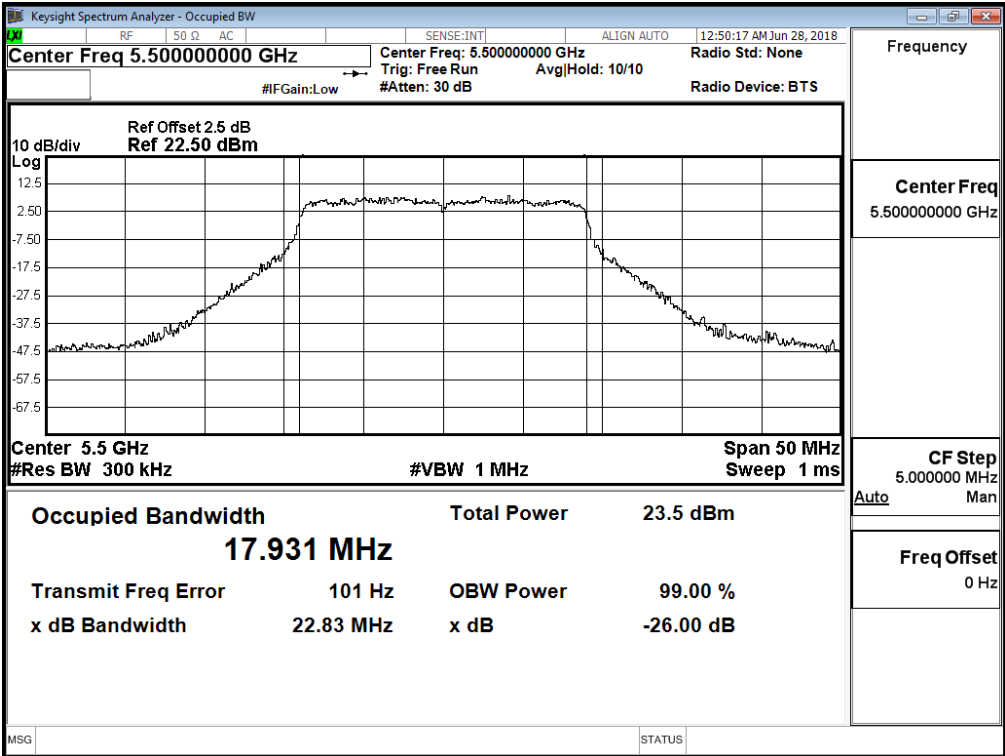
Channel 60 -Chain A



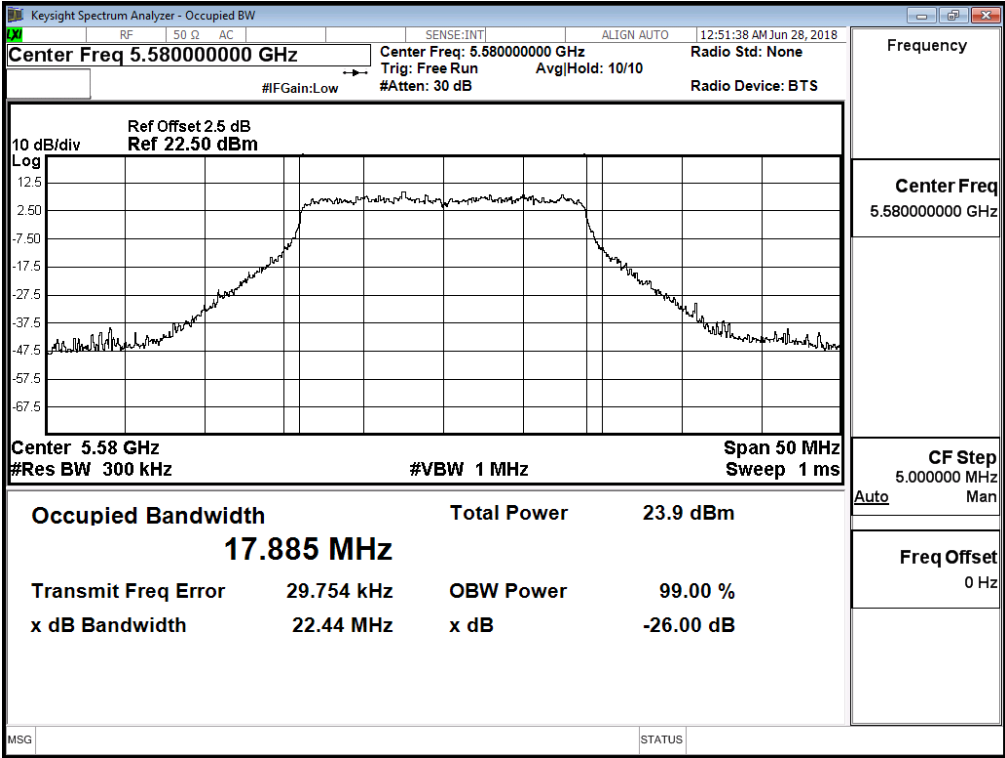
Channel 64 -Chain A



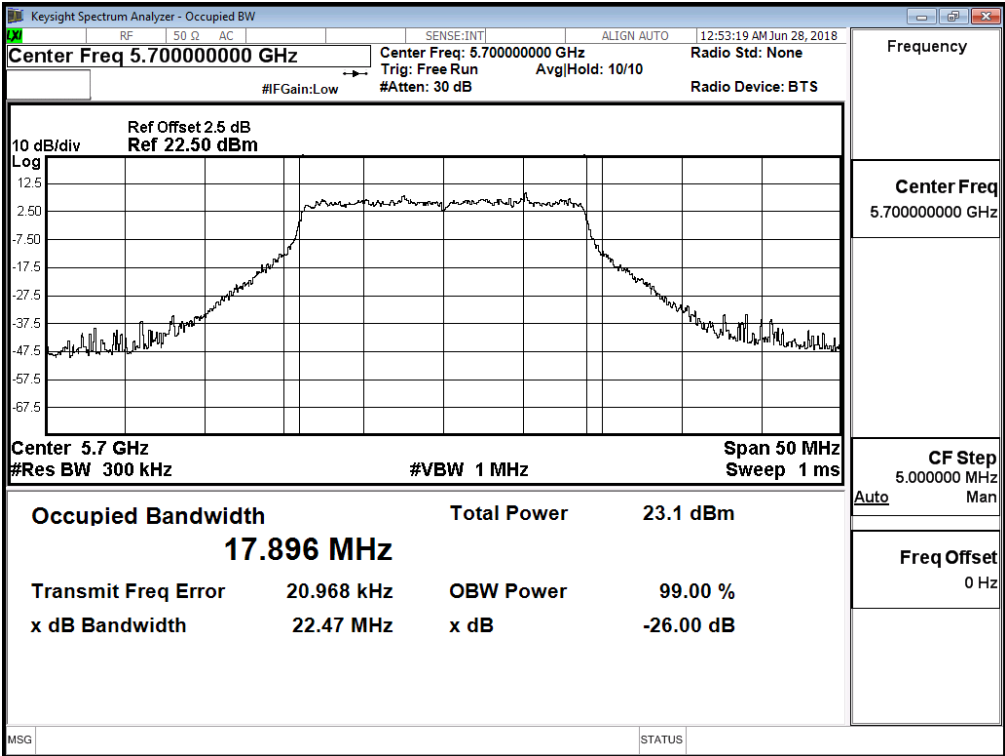
Channel 100 -Chain A



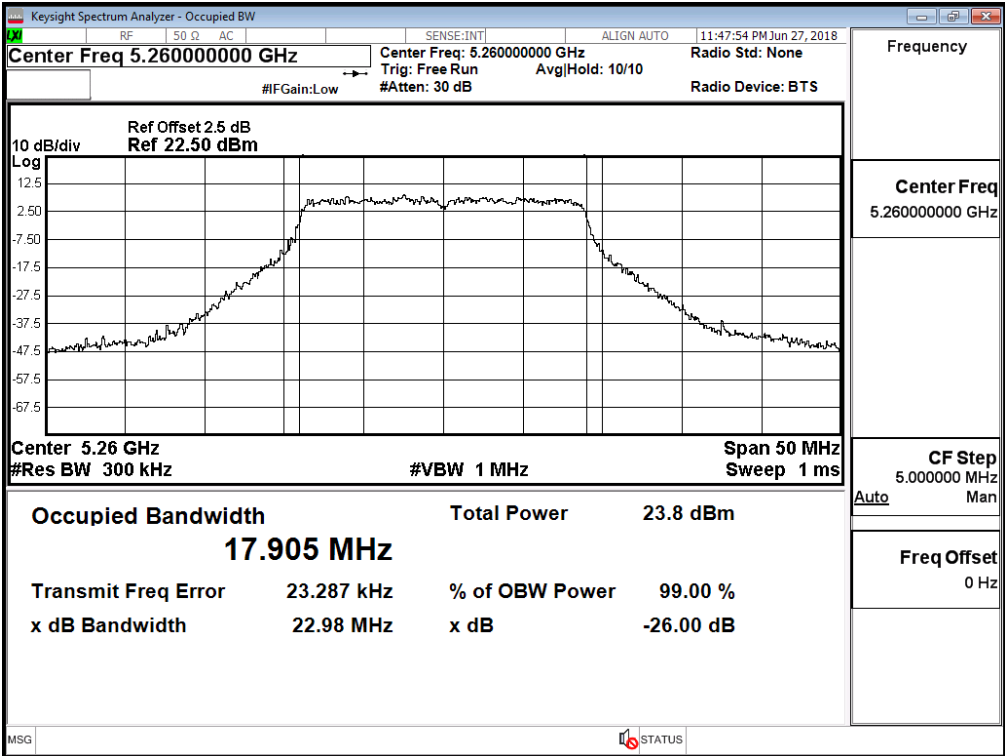
Channel 116 -Chain A



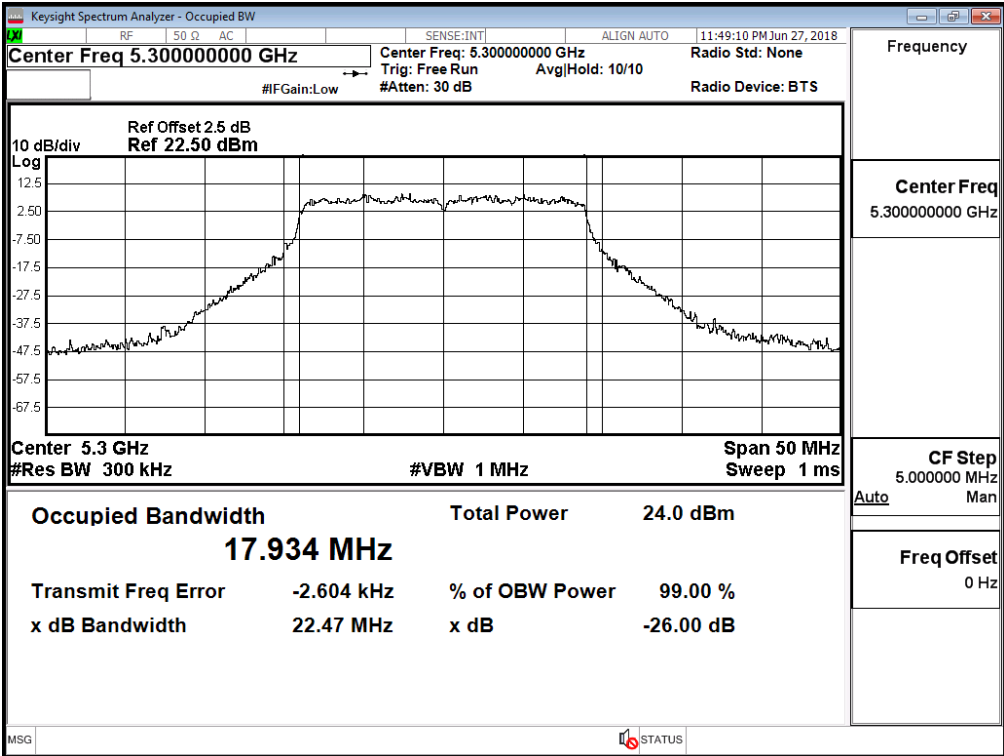
Channel 140 -Chain A



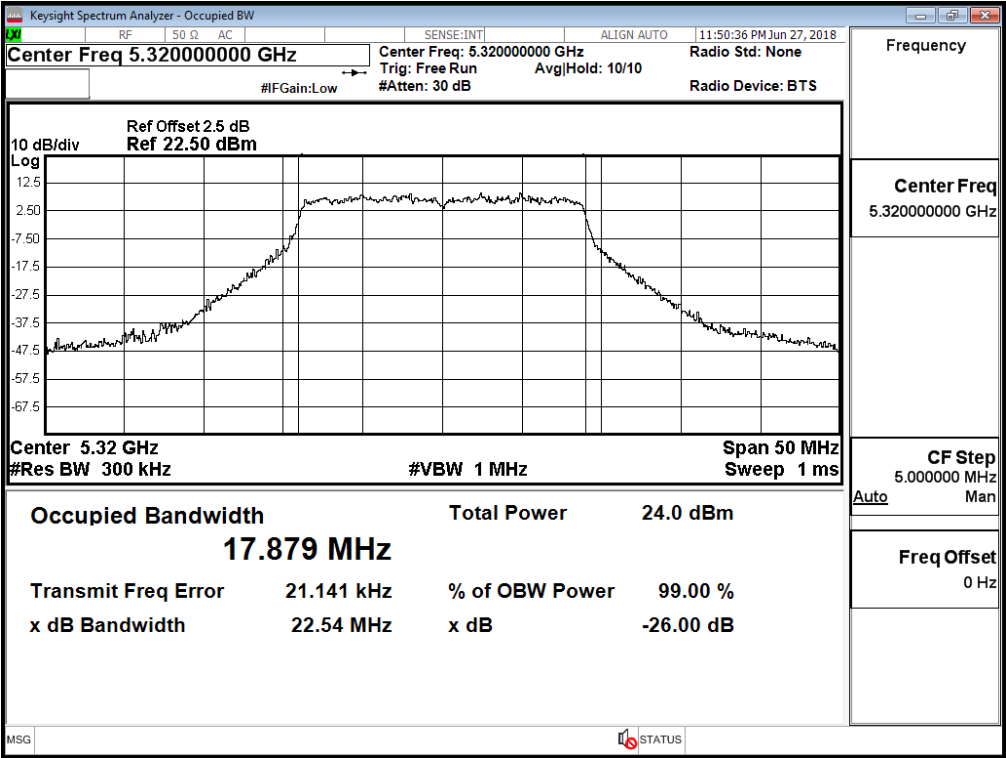
99% Bandwidth:
Channel 52 -Chain B



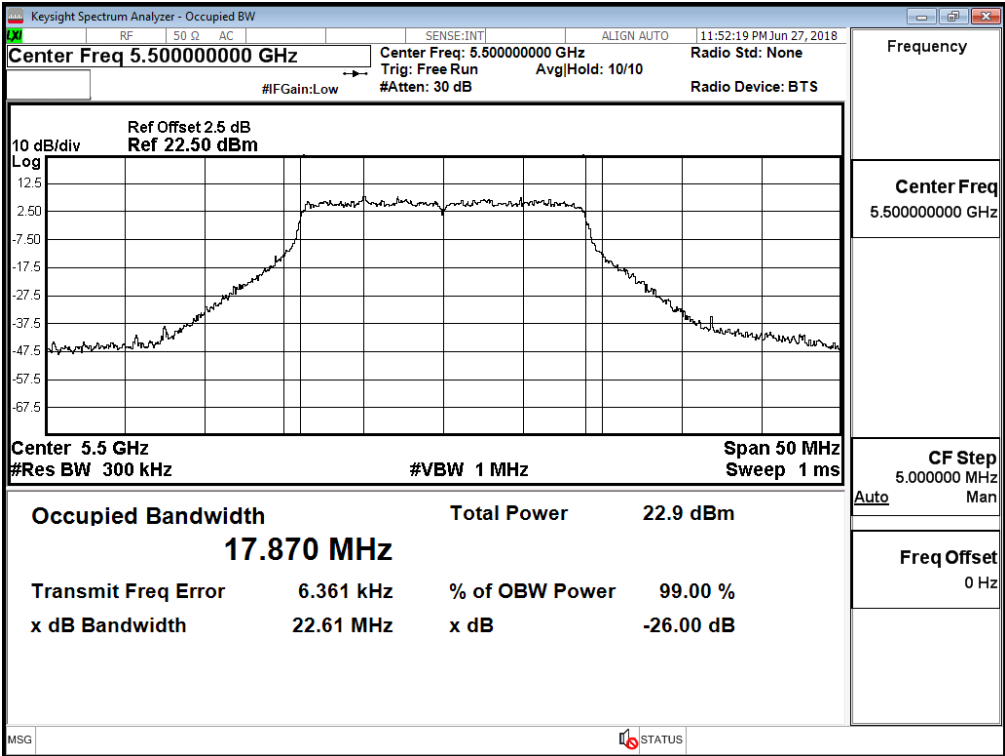
Channel 60 -Chain B



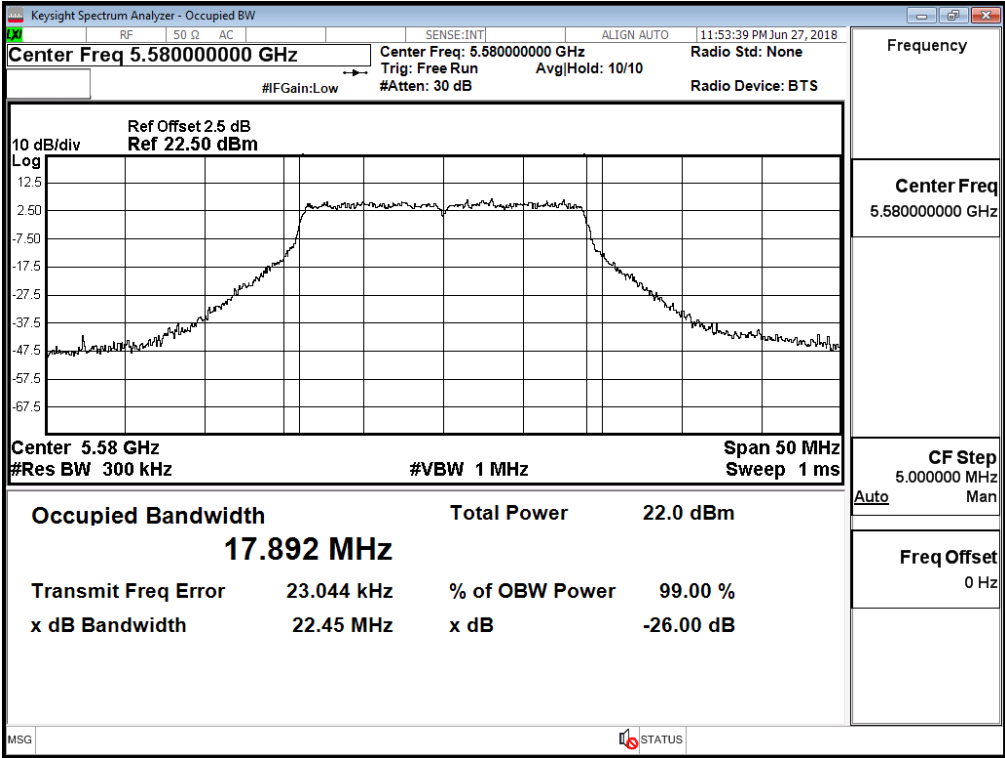
Channel 64 -Chain B



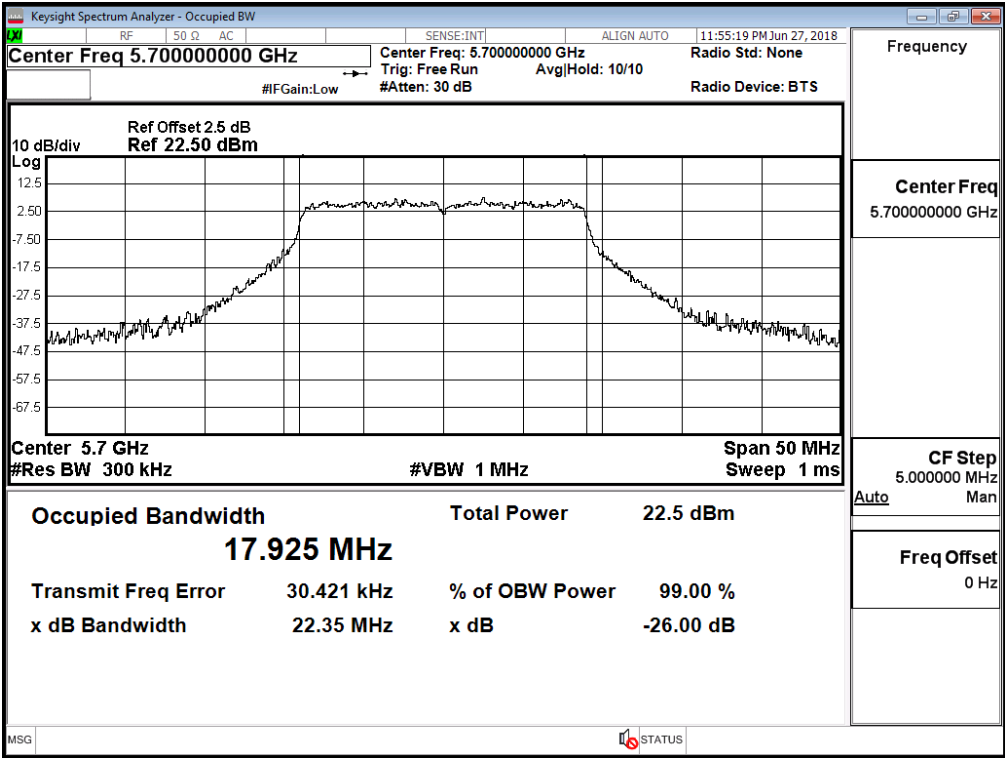
Channel 100 -Chain B



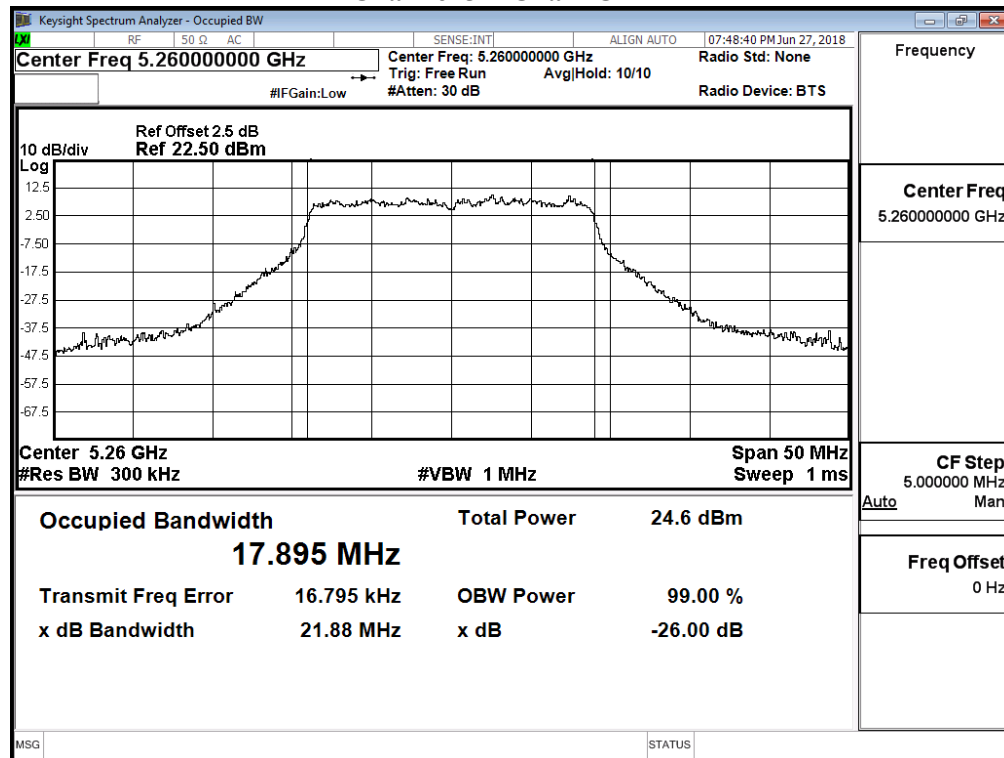
Channel 116 -Chain B



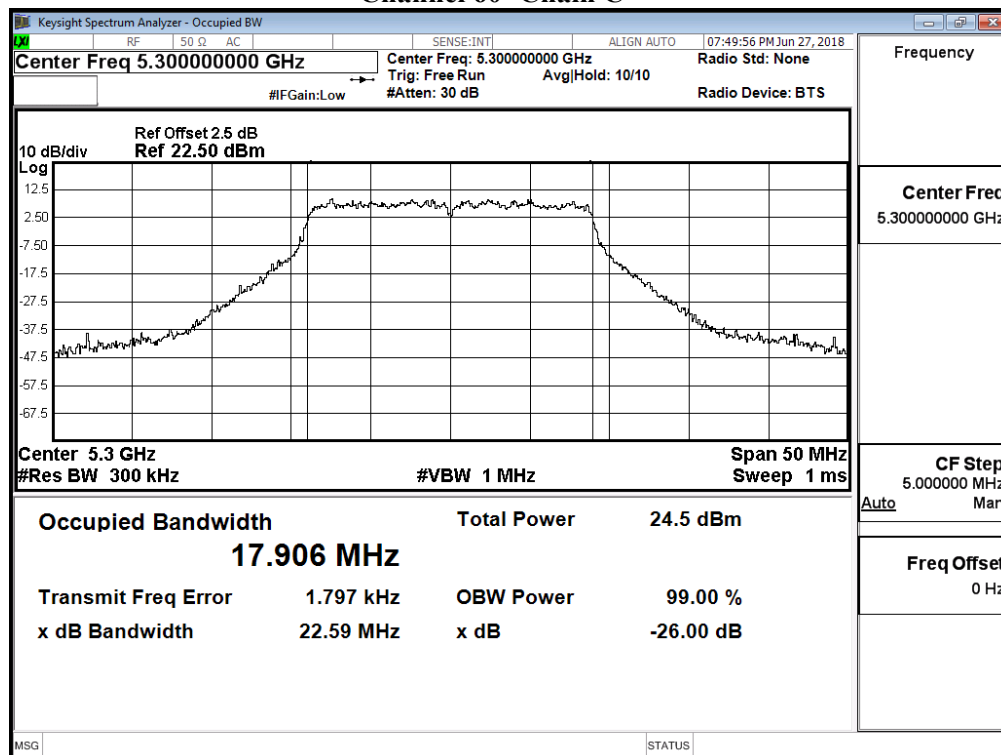
Channel 140 -Chain B



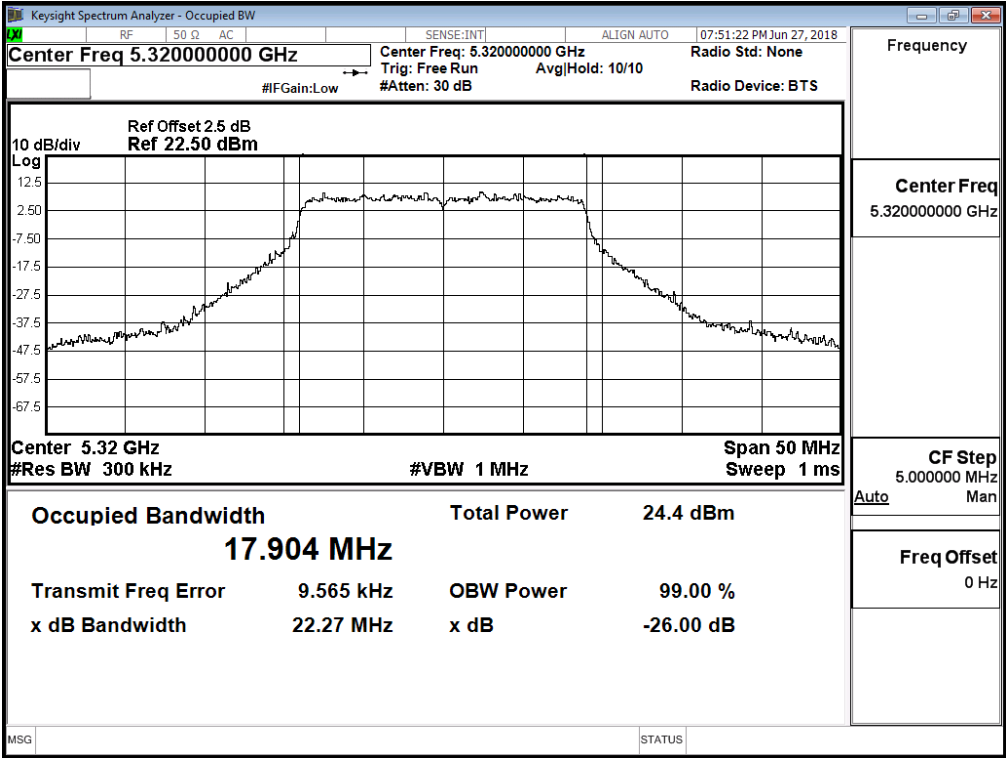
**99% Bandwidth:
Channel 52 -Chain C**



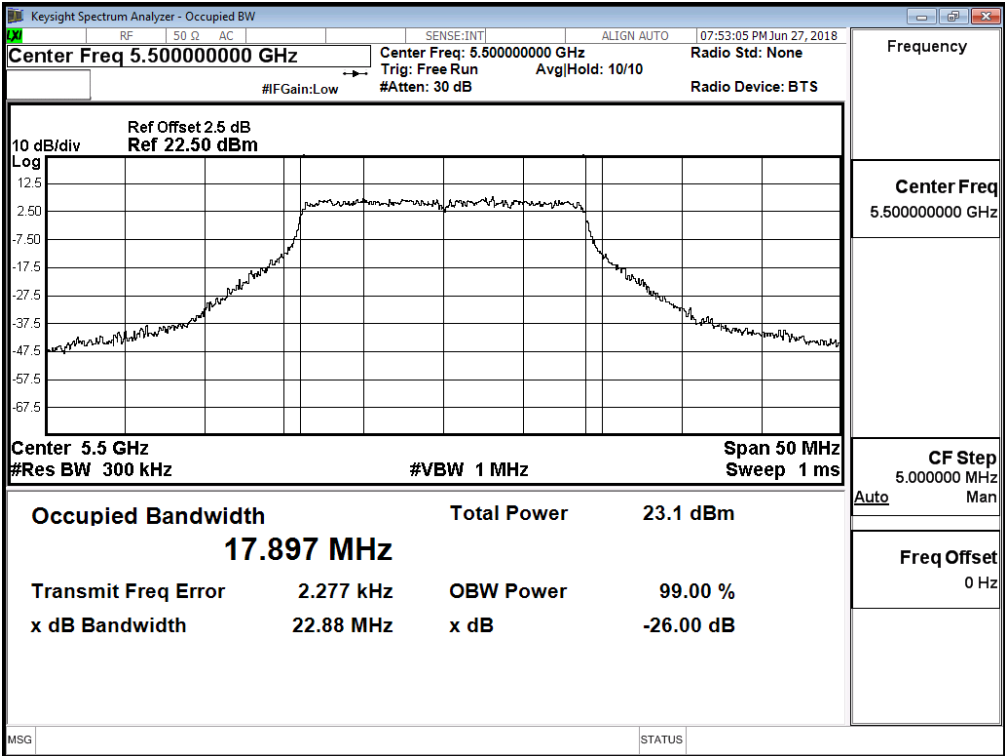
Channel 60 -Chain C



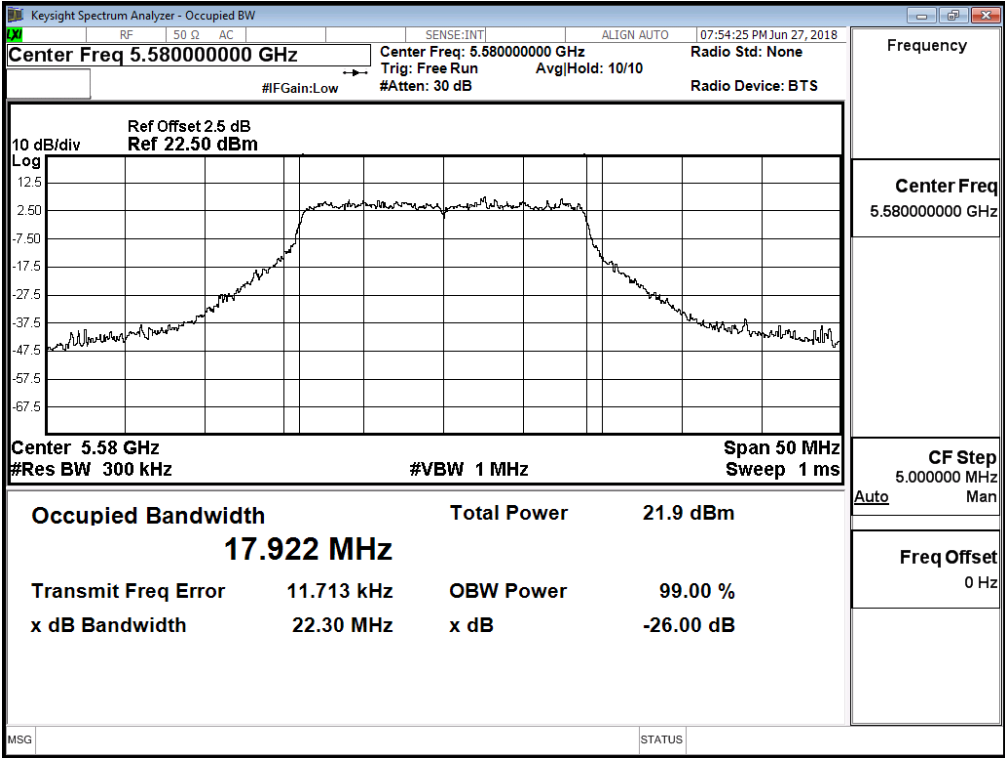
Channel 64 -Chain C



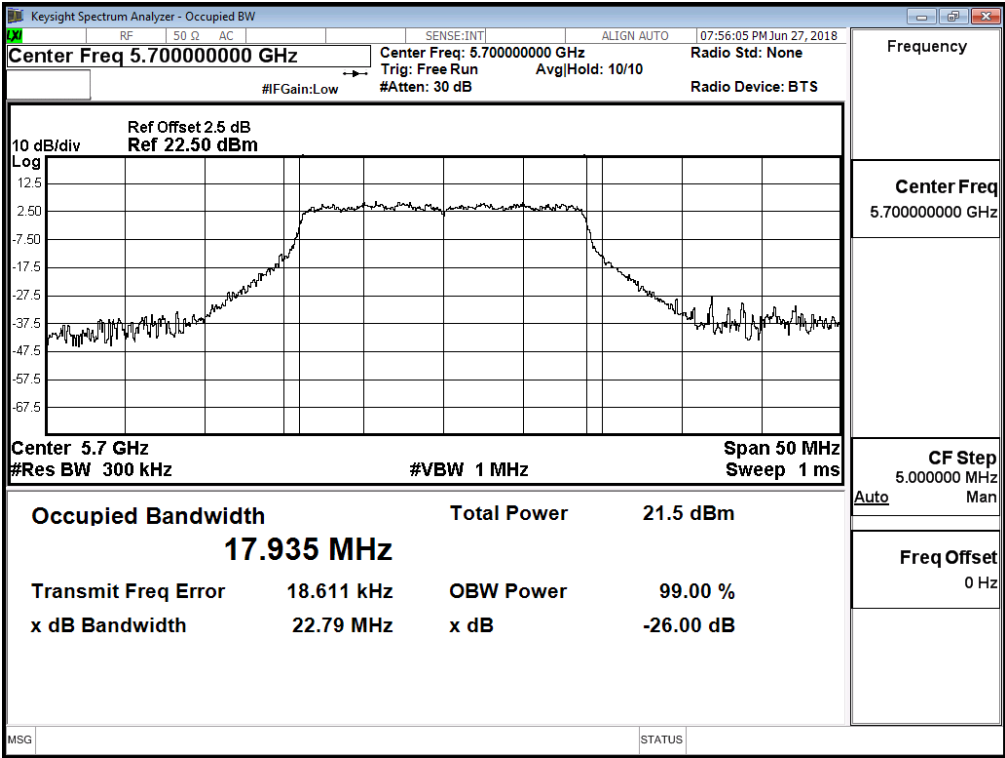
Channel 100 -Chain C



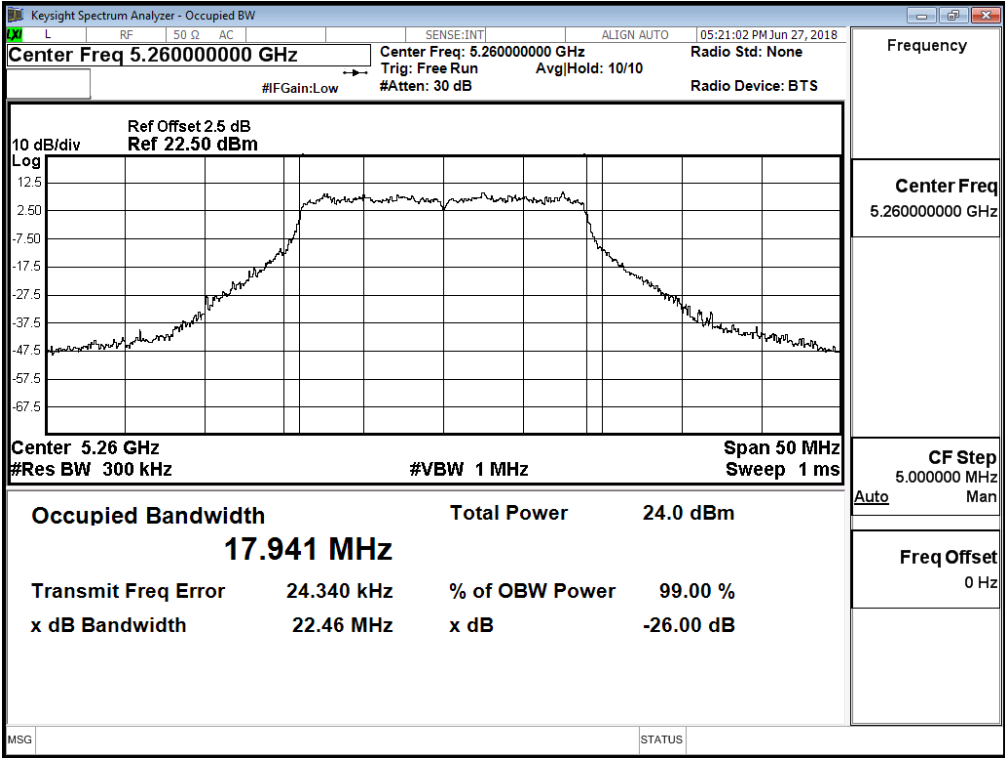
Channel 116 -Chain C



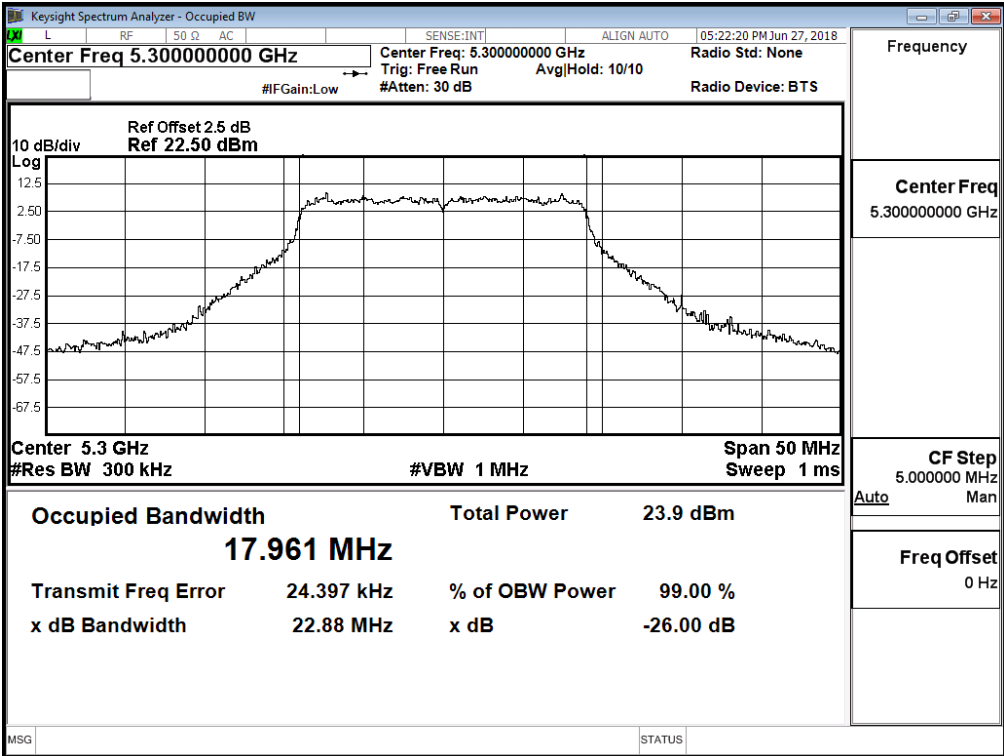
Channel 140 -Chain C



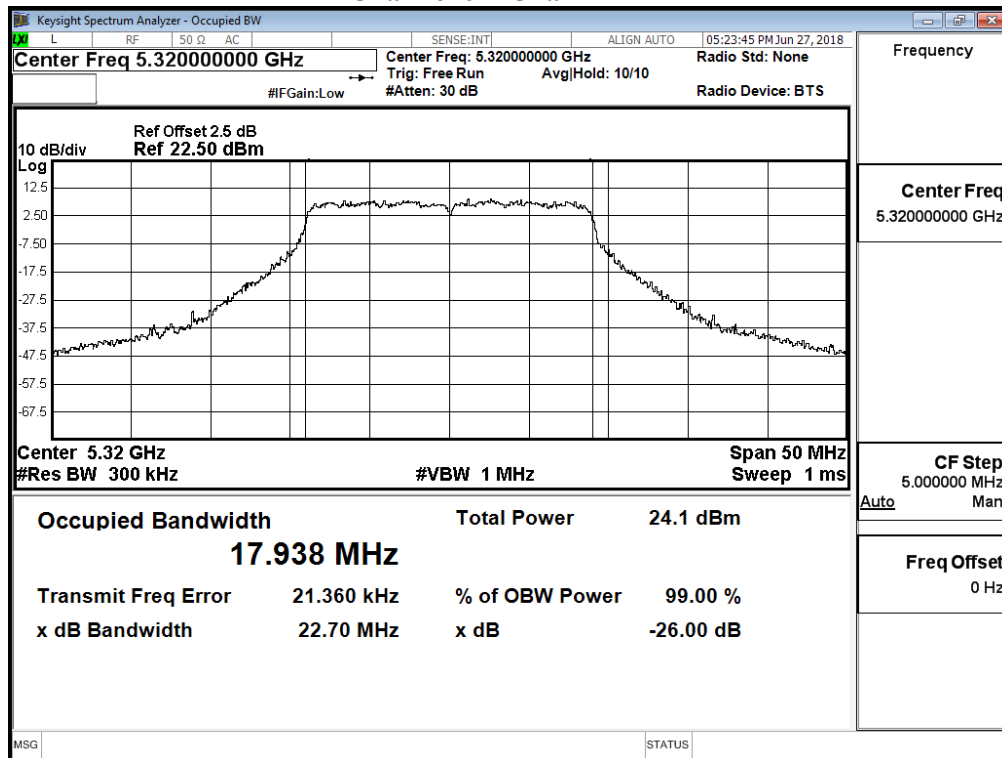
99% Bandwidth:
Channel 52 -Chain D



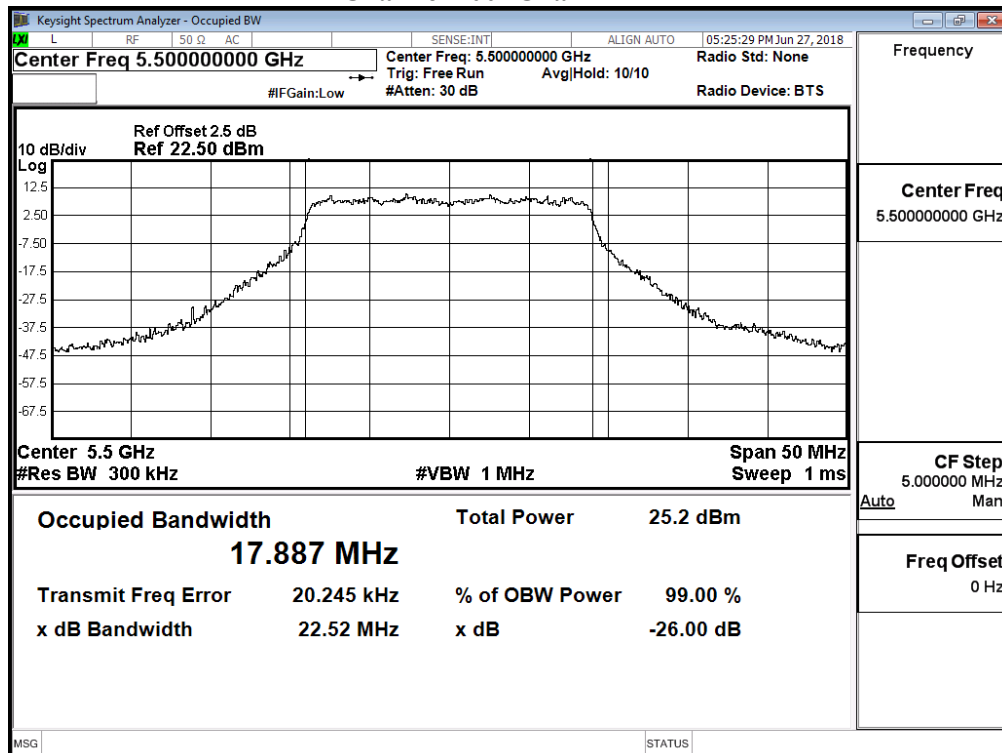
Channel 60 -Chain D



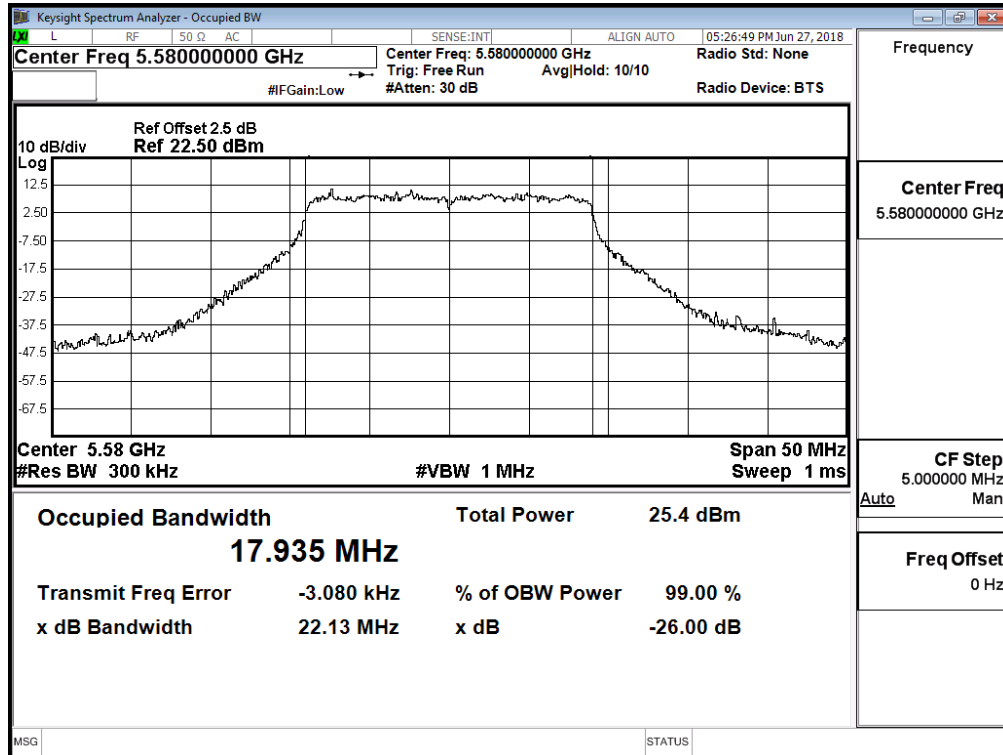
Channel 64 -Chain D



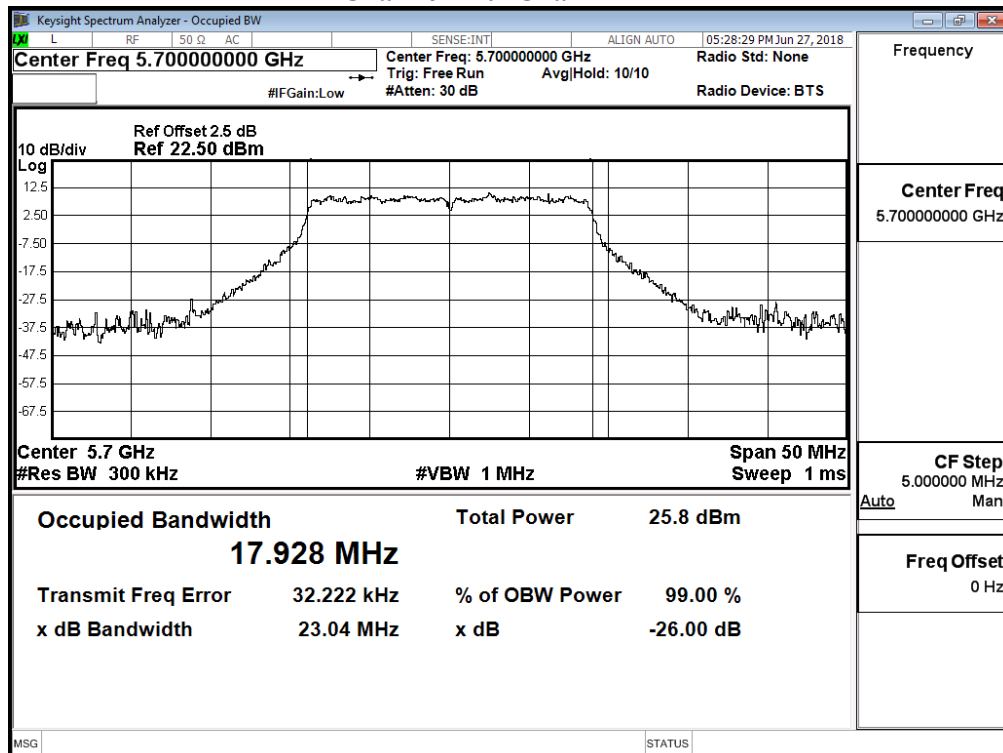
Channel 100 -Chain D



Channel 116 -Chain D



Channel 140 -Chain D



Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Maximum conducted output power
 Test Site : No.3 OATS
 Test Date : 2018/07/20
 Test Mode : Mode 3: Transmit (802.11n-40BW 60Mbps) (Antenna No.17)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		30	60	90	120	180	240	270	300	
		Measurement Level (dBm)								
38	5190	16.17	--	--	--	--	--	--	--	<22dBm
46	5230	16.01	15.95	15.87	15.81	15.74	15.68	15.62	15.56	<22dBm
54	5270	16.04	--	--	--	--	--	--	--	<22dBm
62	5310	15.34	15.25	15.15	15.08	14.98	14.88	14.8	14.71	<22dBm
102	5510	15.53	--	--	--	--	--	--	--	<22dBm
110	5550	15.75	15.66	15.6	15.52	15.43	15.33	15.26	15.18	<22dBm
134	5670	15.24	--	--	--	--	--	--	--	<22dBm
151	5755	18.09	--	--	--	--	--	--	--	<28dBm
159	5795	18.89	18.82	18.76	18.67	18.57	18.51	18.46	18.36	<28dBm

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)								Required Limit
		30	60	90	120	180	240	270	300	
		Measurement Level (dBm)								
38	5190	15.38	--	--	--	--	--	--	--	<22dBm
46	5230	15.33	15.24	15.19	15.09	15.03	14.96	14.86	14.76	<22dBm
54	5270	15.71	--	--	--	--	--	--	--	<22dBm
62	5310	15.54	15.47	15.4	15.3	15.21	15.16	15.08	14.98	<22dBm
102	5510	15.55	--	--	--	--	--	--	--	<22dBm
110	5550	15.68	15.61	15.54	15.48	15.41	15.33	15.27	15.22	<22dBm
134	5670	15.73	--	--	--	--	--	--	--	<22dBm
151	5755	18.61	--	--	--	--	--	--	--	<28dBm
159	5795	19.13	19.07	18.98	18.91	18.84	18.78	18.7	18.62	<28dBm

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)								Required Limit
		30	60	90	120	180	240	270	300	
		Measurement Level (dBm)								
38	5190	16.53	--	--	--	--	--	--	--	<22dBm
46	5230	16.41	16.31	16.23	16.14	16.05	15.95	15.85	15.77	<22dBm
54	5270	16.61	--	--	--	--	--	--	--	<22dBm
62	5310	16.21	16.13	16.07	16.01	15.93	15.88	15.83	15.77	<22dBm
102	5510	15.84	--	--	--	--	--	--	--	<22dBm
110	5550	16.11	16.06	15.97	15.91	15.81	15.73	15.63	15.57	<22dBm
134	5670	16.47	--	--	--	--	--	--	--	<22dBm
151	5755	18.57	--	--	--	--	--	--	--	<28dBm
159	5795	19.07	18.99	18.93	18.84	18.74	18.69	18.63	18.58	<28dBm

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

CHAIN D

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		30	60	90	120	180	240	270	300	
		Measurement Level (dBm)								
38	5190	15.44	--	--	--	--	--	--	--	<22dBm
46	5230	15.48	15.42	15.32	15.24	15.15	15.07	15.02	14.95	<22dBm
54	5270	15.4	--	--	--	--	--	--	--	<22dBm
62	5310	15.03	14.96	14.87	14.77	14.69	14.63	14.54	14.47	<22dBm
102	5510	15.47	--	--	--	--	--	--	--	<22dBm
110	5550	15.97	15.87	15.78	15.71	15.64	15.59	15.54	15.47	<22dBm
134	5670	16.01	--	--	--	--	--	--	--	<22dBm
151	5755	18.59	--	--	--	--	--	--	--	<28dBm
159	5795	19.28	19.2	19.11	19.05	19	18.94	18.87	18.8	<28dBm

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

**Maximum conducted output power Measurement:
(CHAIN A+ B+C+D)**

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
38	5190	--	16.17	15.38	16.53	15.44	21.93	22	--	Pass
46	5230	--	16.01	15.33	16.41	15.48	21.85	22	--	Pass
54	5270	36.372	16.04	15.71	16.61	15.40	21.98	22	26.61	Pass
62	5310	36.379	15.34	15.54	16.21	15.03	21.57	22	26.61	Pass
102	5510	36.415	15.53	15.55	15.84	15.47	21.62	22	26.61	Pass
110	5550	36.444	15.75	15.68	16.11	15.97	21.90	22	26.62	Pass
134	5670	36.411	15.24	15.73	16.47	16.01	21.91	22	26.61	Pass
151	5755	--	18.09	18.61	18.57	18.59	24.49	28	--	Pass
159	5795	--	18.89	19.13	19.07	19.28	25.12	28	--	Pass

Note:

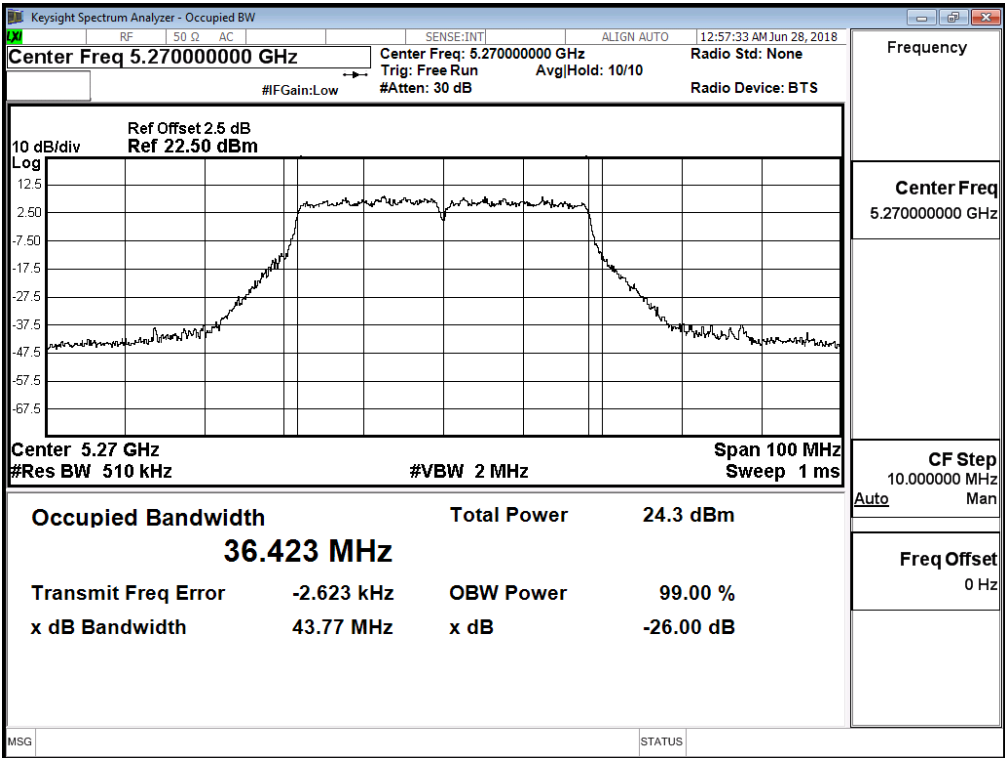
1. Output Power (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW) + Chain D (mW))
2. 26 dB Bandwidth is the bandwidth of chain A, chain B, chain C or chain D whichever is less bandwidth, output power limitation is more stringent.

**Maximum conducted output power Measurement with Transmit power Control (TPC)
(CHAIN A+ B+C+D)**

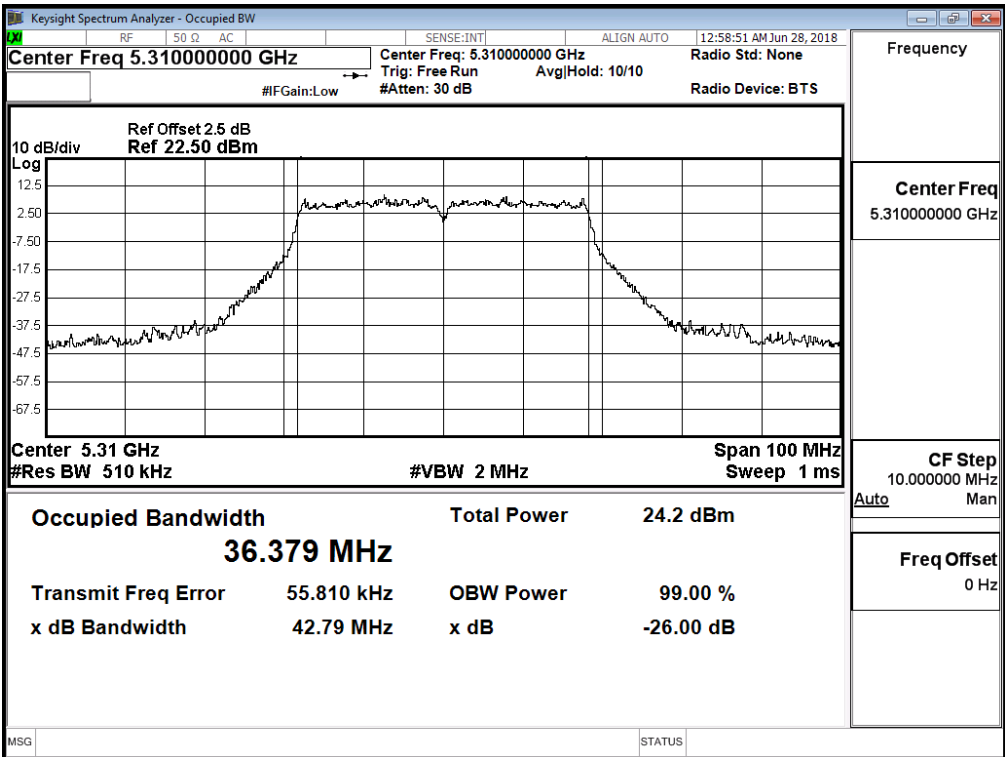
Channel No	Frequency Range (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Result
54	5270	9.91	9.60	10.39	9.18	15.81	Pass
62	5310	9.11	9.31	9.98	8.80	15.34	Pass
102	5510	9.18	9.27	9.54	9.16	15.31	Pass
110	5550	9.42	9.39	9.76	9.75	15.60	Pass
134	5670	9.02	9.50	10.28	9.88	15.72	Pass

99% Bandwidth:

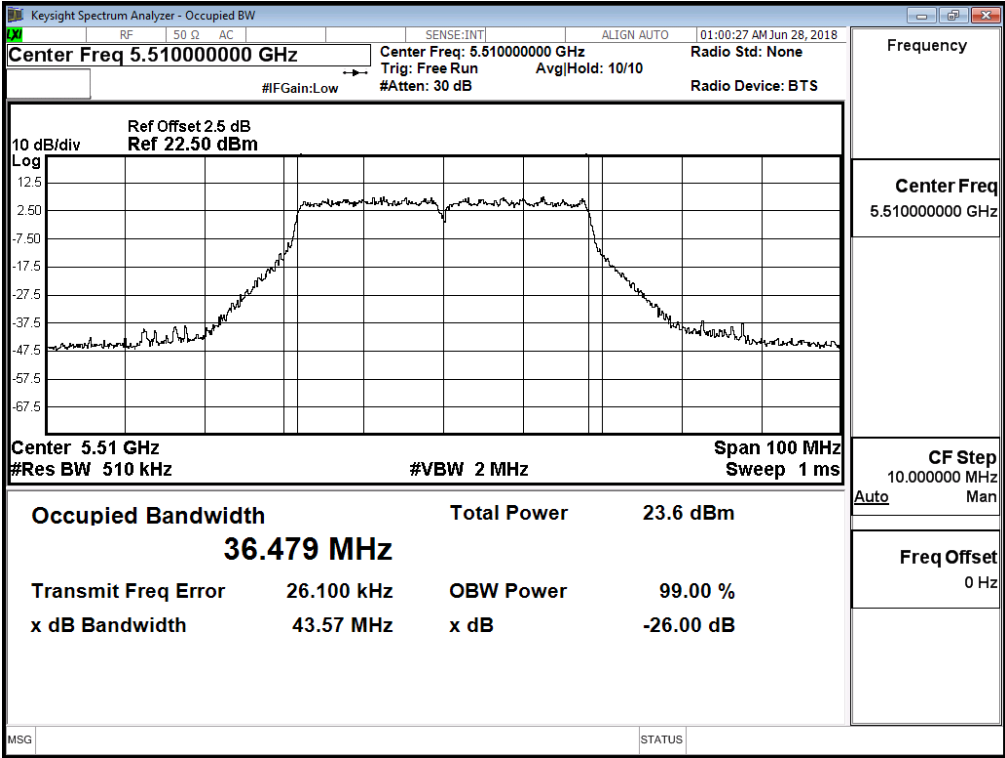
Channel 54 – Chain A



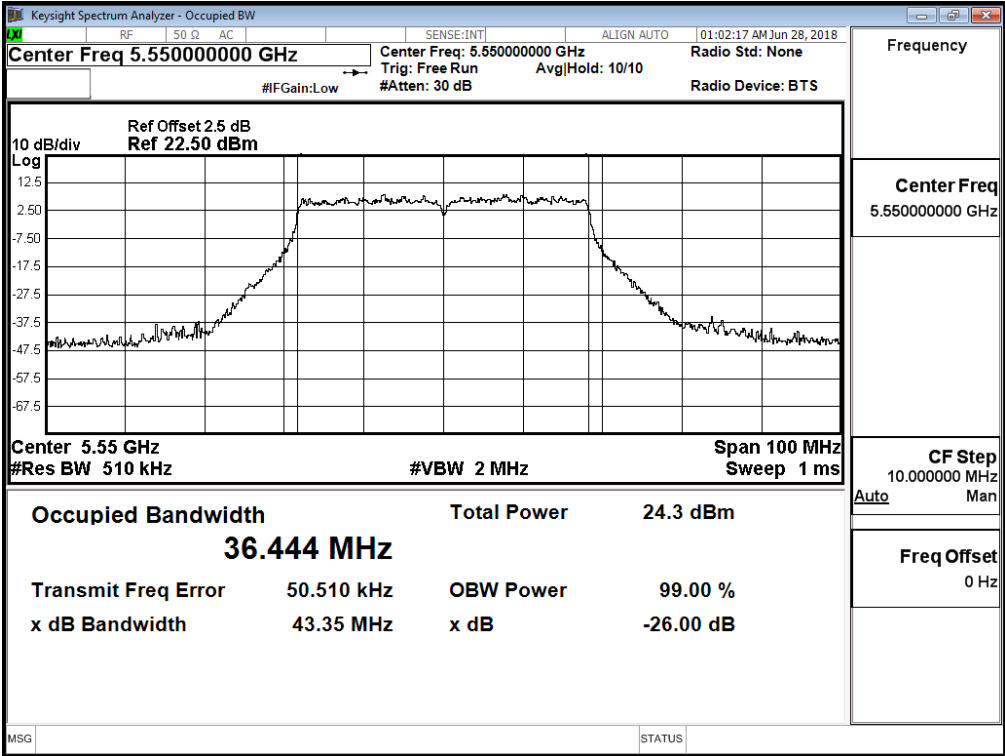
Channel 62 – Chain A



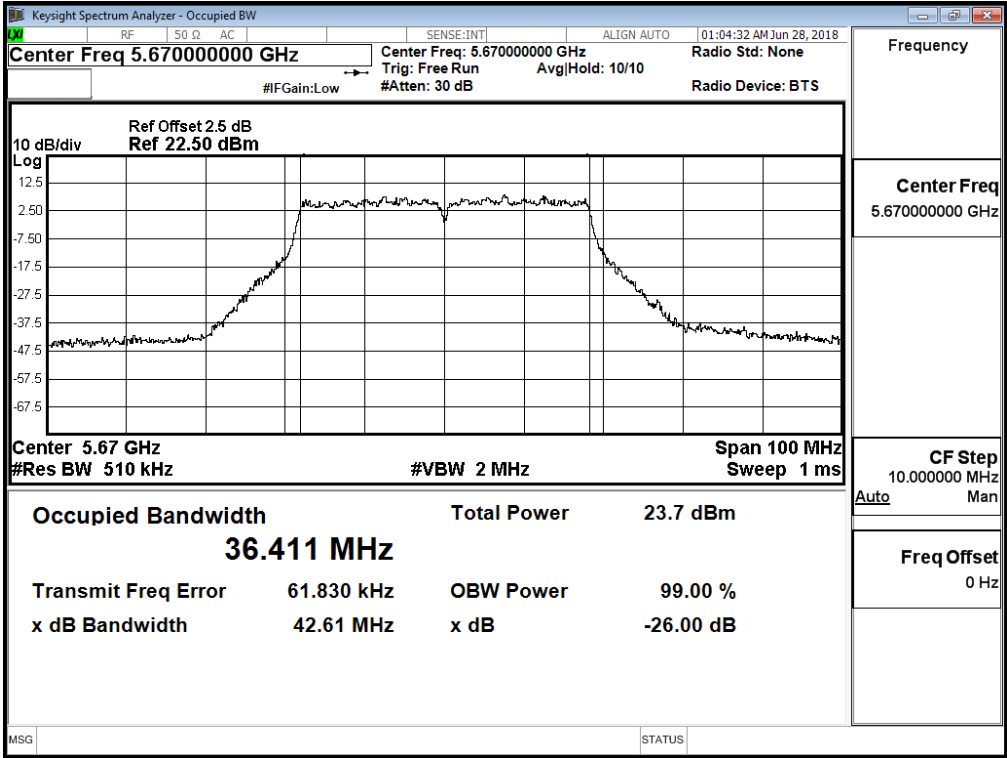
Channel 102 – Chain A



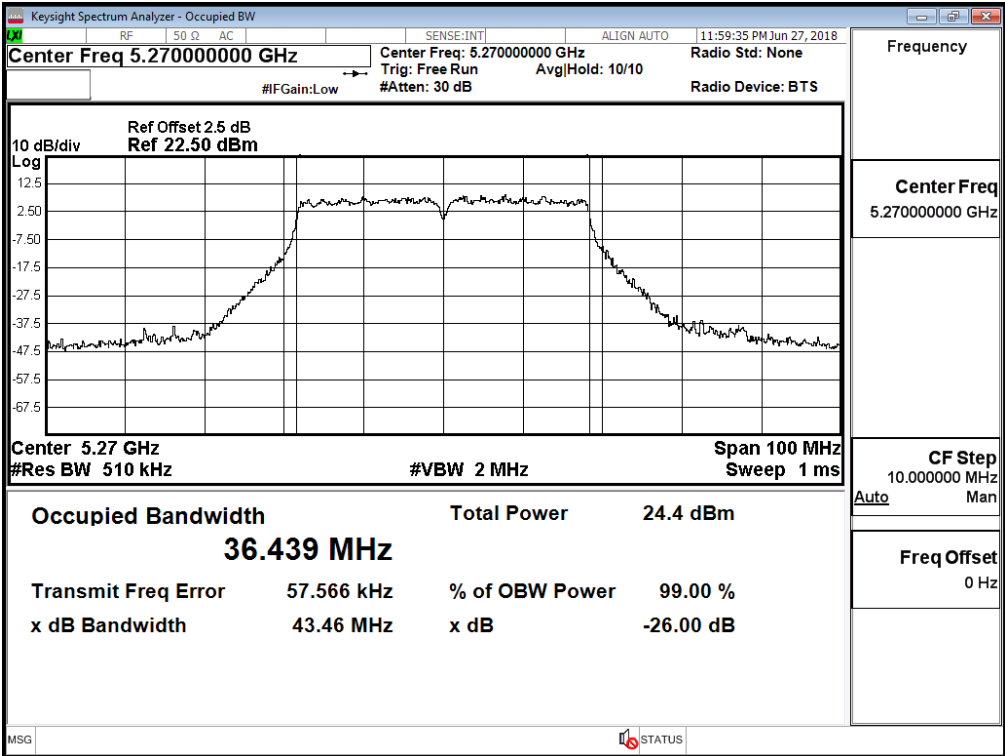
Channel 110 – Chain A



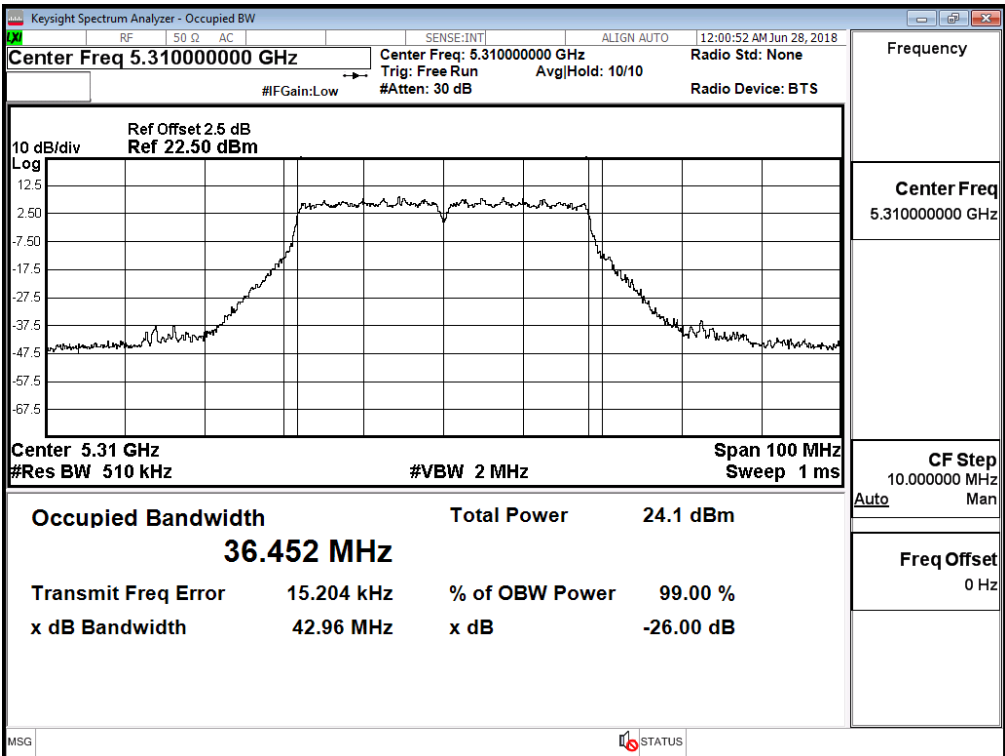
Channel 134 – Chain A



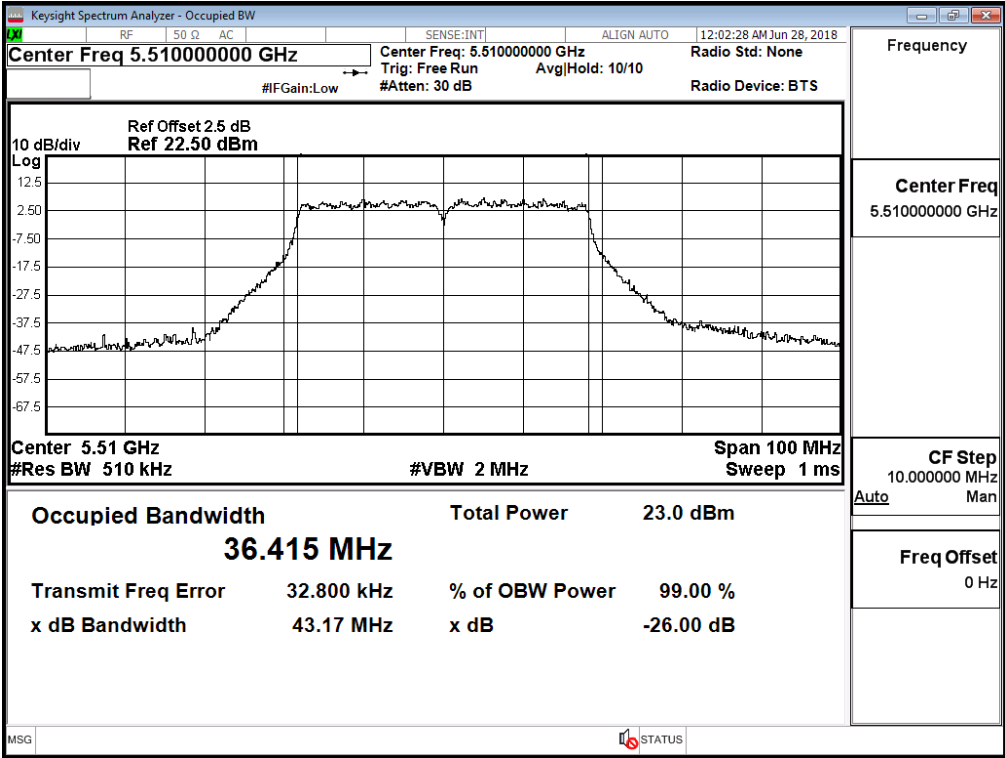
99% Bandwidth:
Channel 54 – Chain B



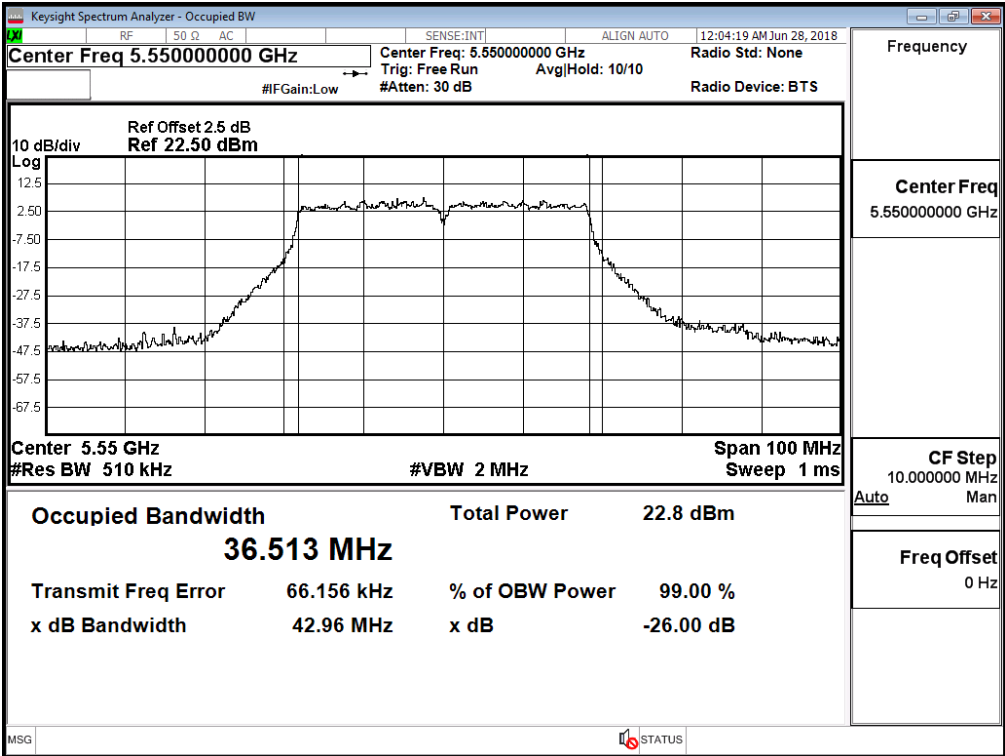
Channel 62 – Chain B



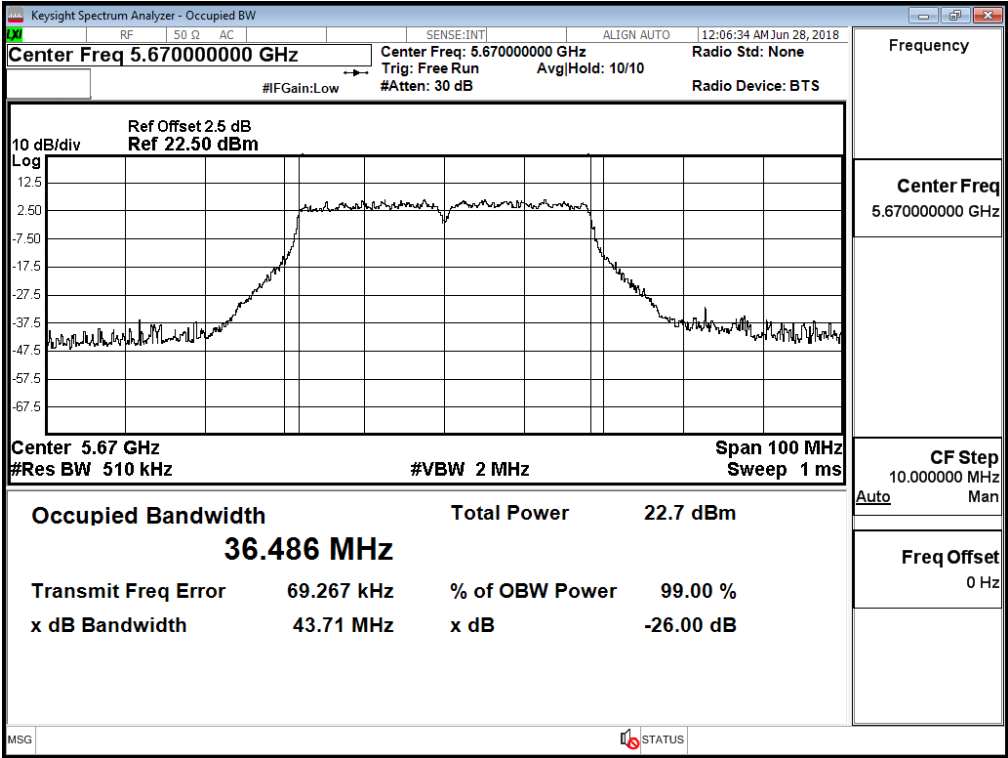
Channel 102 – Chain B



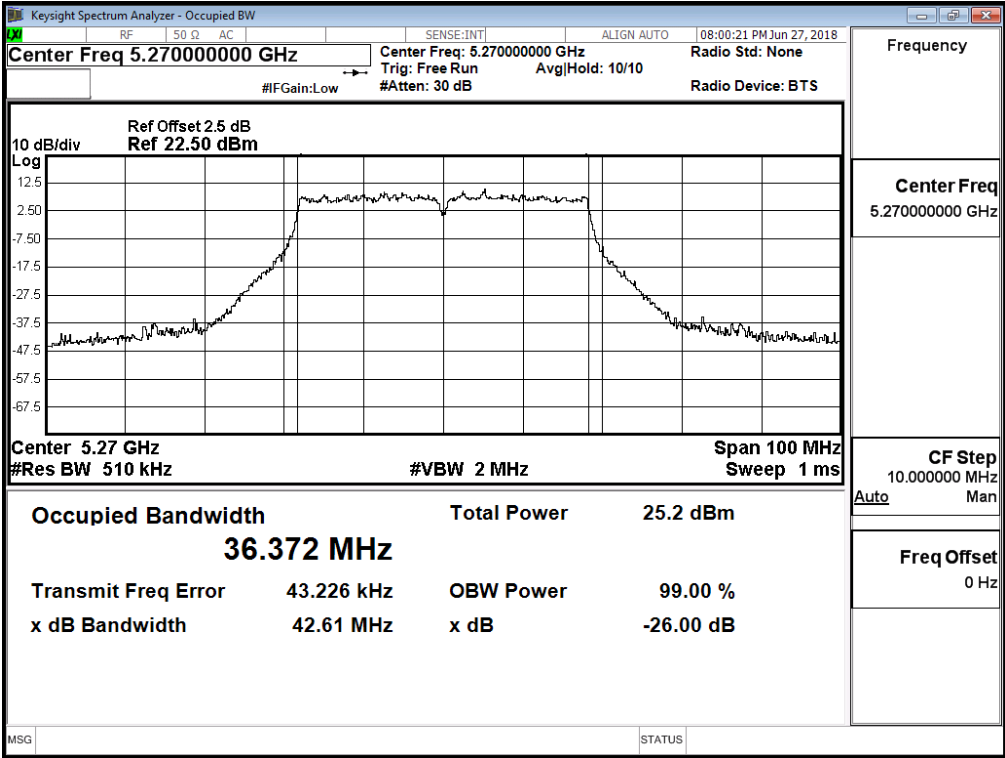
Channel 110 – Chain B



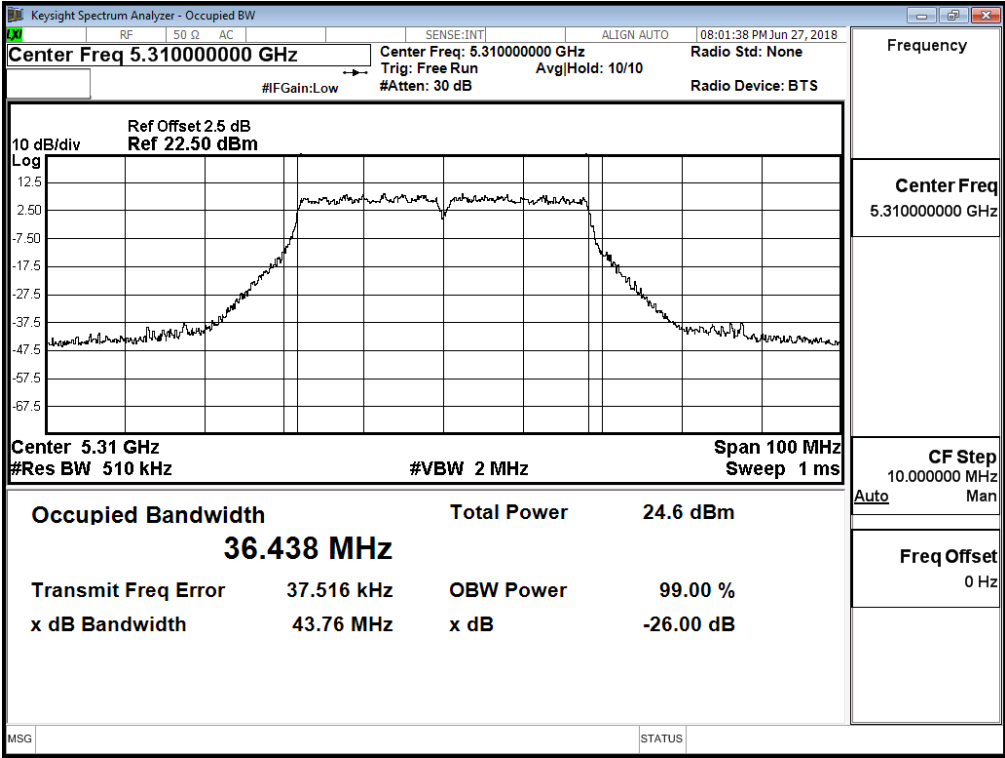
Channel 134 – Chain B



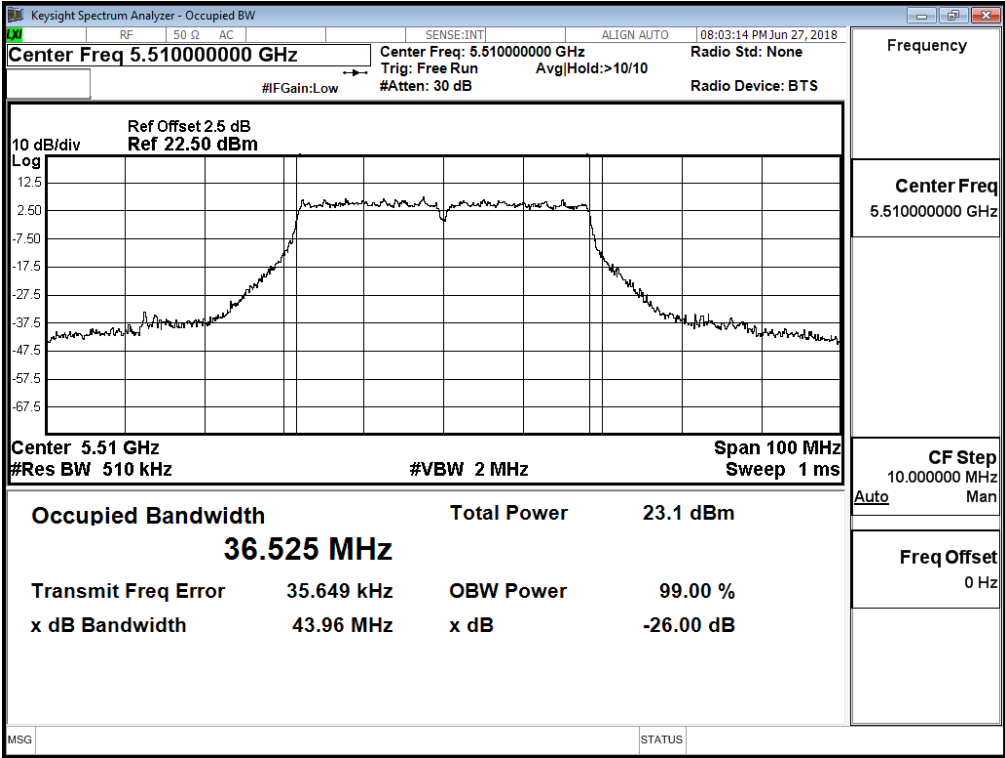
99% Bandwidth:
Channel 54 – Chain C



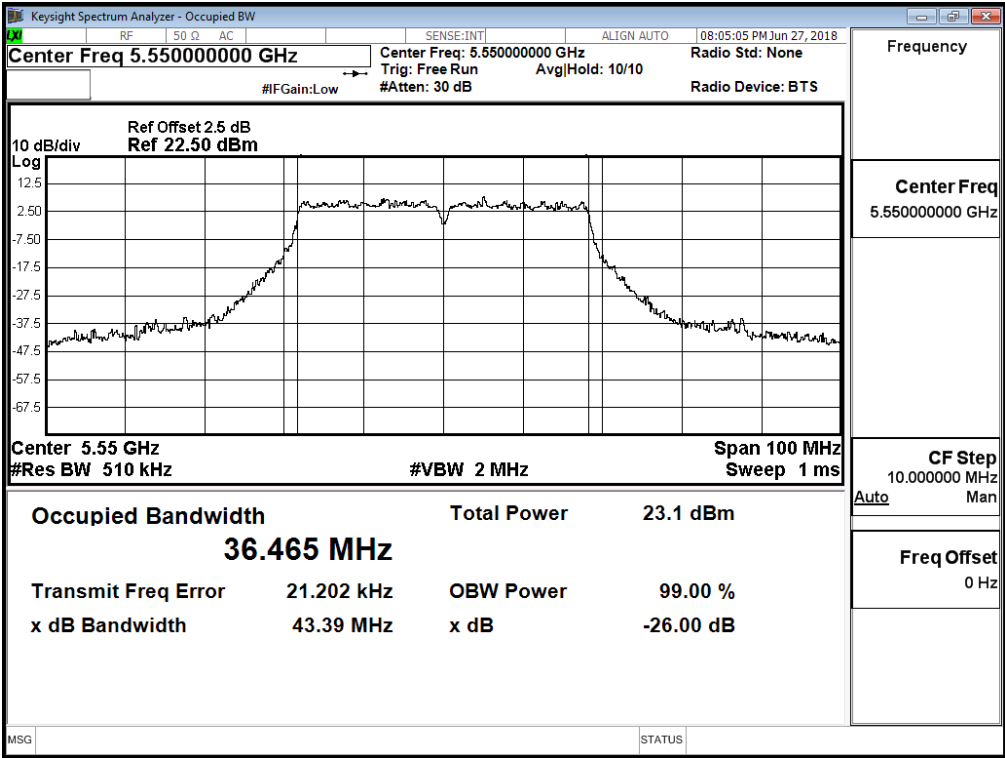
Channel 62 – Chain C



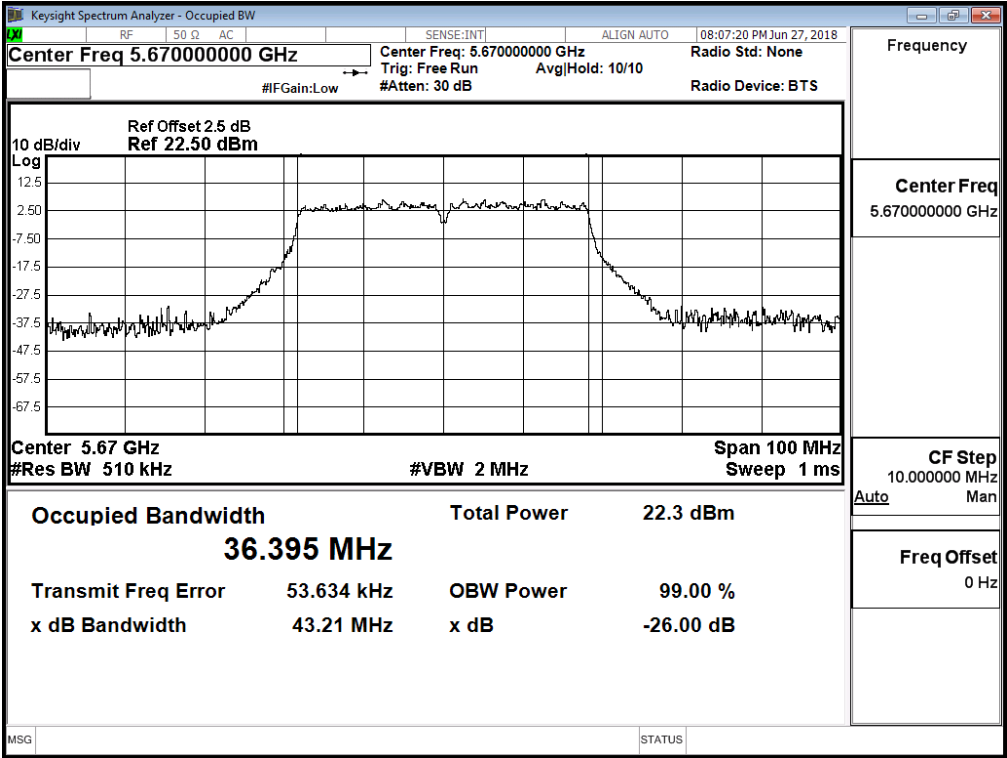
Channel 102 – Chain C



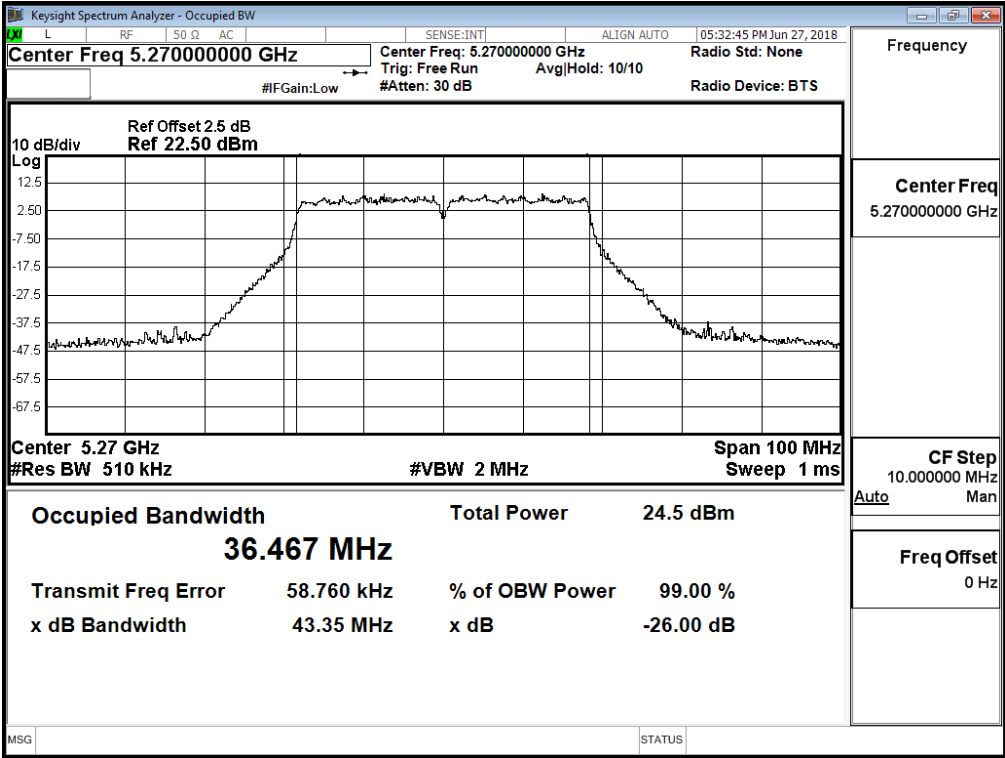
Channel 110 – Chain C



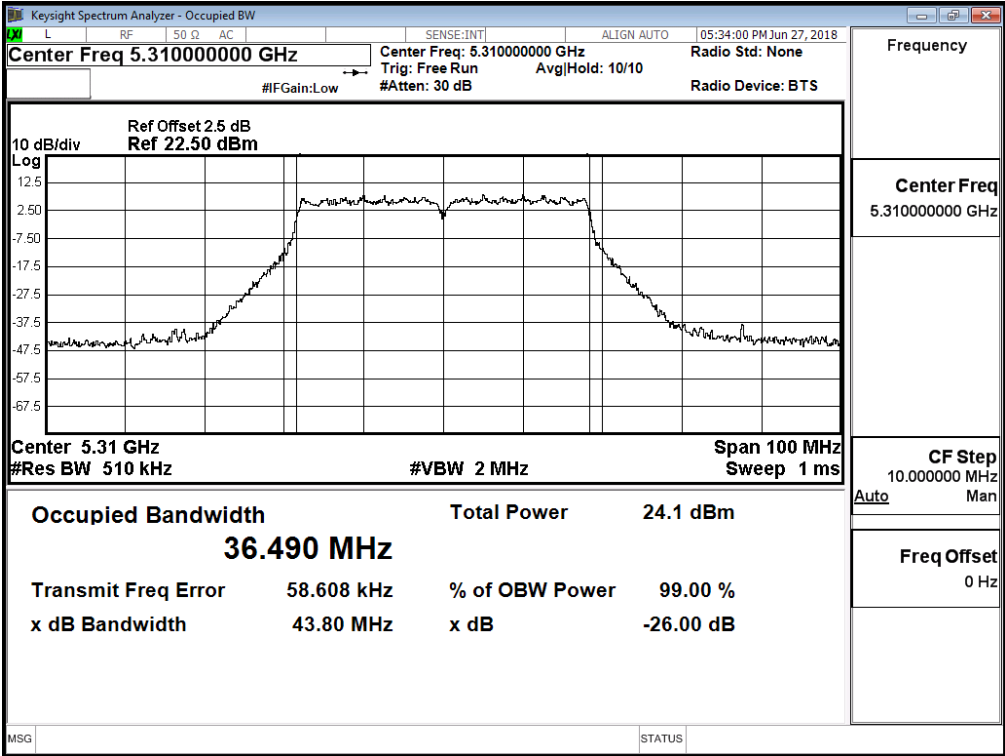
Channel 134 – Chain C



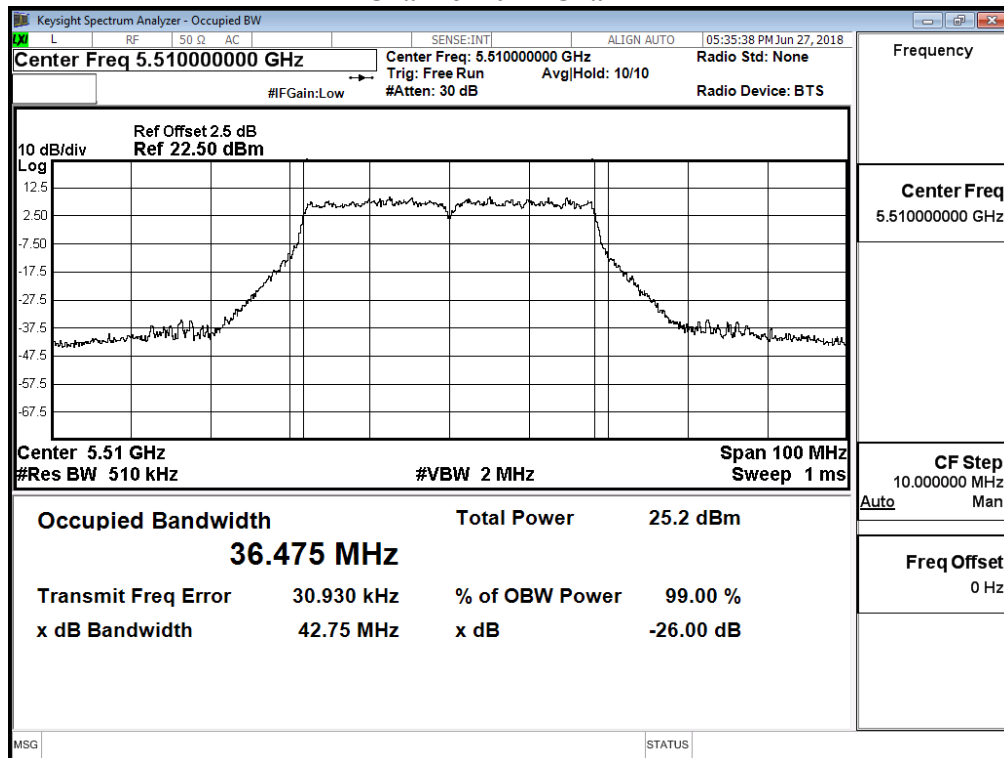
99% Bandwidth:
Channel 54 – Chain D



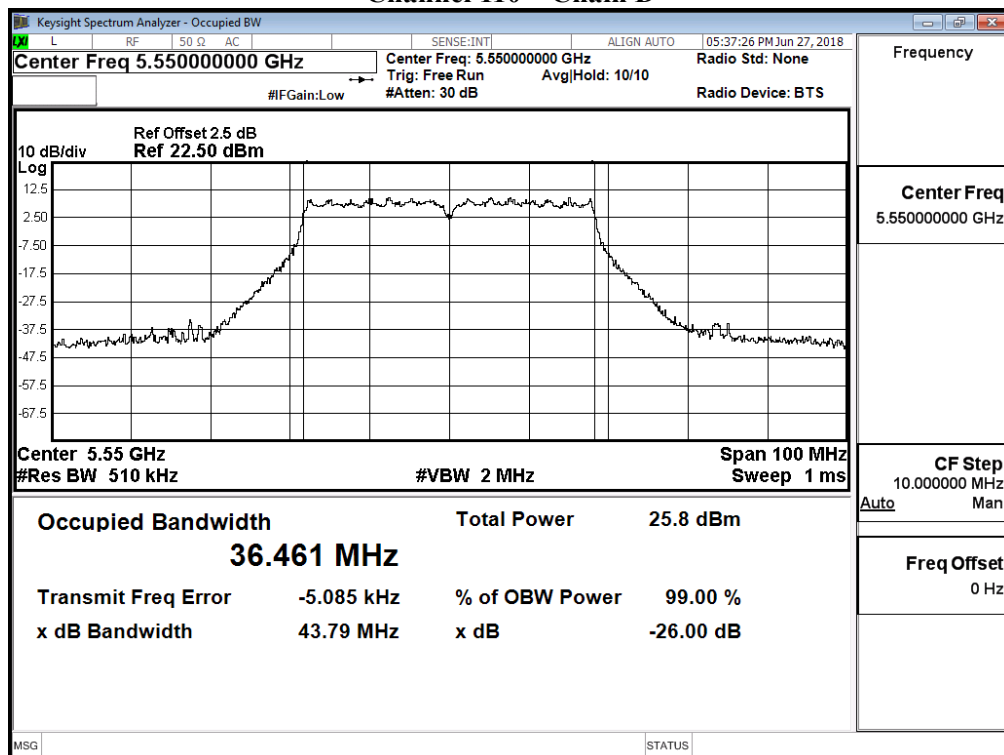
Channel 62 – Chain D



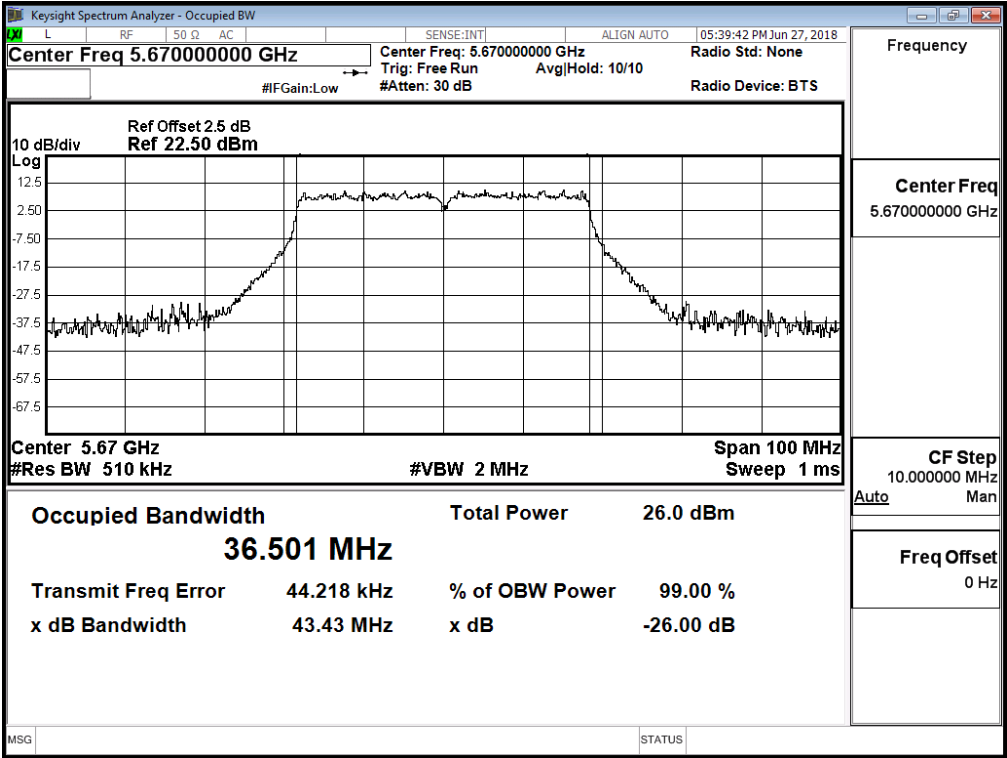
Channel 102 – Chain D



Channel 110 – Chain D



Channel 134 – Chain D



Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Maximum conducted output power
 Test Site : No.3 OATS
 Test Date : 2018/08/11
 Test Mode : Mode 4: Transmit (802.11ac-20BW-28.8Mbps) (Antenna No.17)

Chain A

Cable loss=1dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	Data Rate (Mbps)									Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	
		Measurement Level (dBm)									
144 (Band3)	5720	11.81	11.74	11.65	11.58	11.53	11.45	11.38	11.29	11.21	<22dBm
144 (Band4)	5720	6.01	5.95	5.88	5.82	5.77	5.69	5.61	5.56	5.5	<28dBm

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)									Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	
		Measurement Level (dBm)									
144 (Band3)	5720	11.75	11.66	11.58	11.53	11.47	11.38	11.32	11.24	11.15	<22dBm
144 (Band4)	5720	6.05	5.97	5.91	5.81	5.73	5.63	5.55	5.48	5.39	<28dBm

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)									Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	
		Measurement Level (dBm)									
144 (Band3)	5720	11.88	11.83	11.77	11.71	11.65	11.6	11.53	11.47	11.38	<22dBm
144 (Band4)	5720	6.03	5.95	5.88	5.78	5.72	5.66	5.6	5.53	5.45	<28dBm

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

Chain D

Cable loss=1dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	Data Rate (Mbps)									Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	
		Measurement Level (dBm)									
144 (Band3)	5720	11.79	11.71	11.61	11.54	11.47	11.39	11.3	11.25	11.18	<22dBm
144 (Band4)	5720	6.02	5.96	5.91	5.83	5.75	5.7	5.62	5.56	5.49	<28dBm

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

Maximum conducted output power Measurement:**(CHAIN A+ B+C+D)**

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
144(Band3)	5720	13.928	11.810	11.750	11.880	11.790	17.82	22	20.44	Pass
144(Band4)	5720	--	6.010	6.050	6.030	6.020	12.05	28	--	Pass

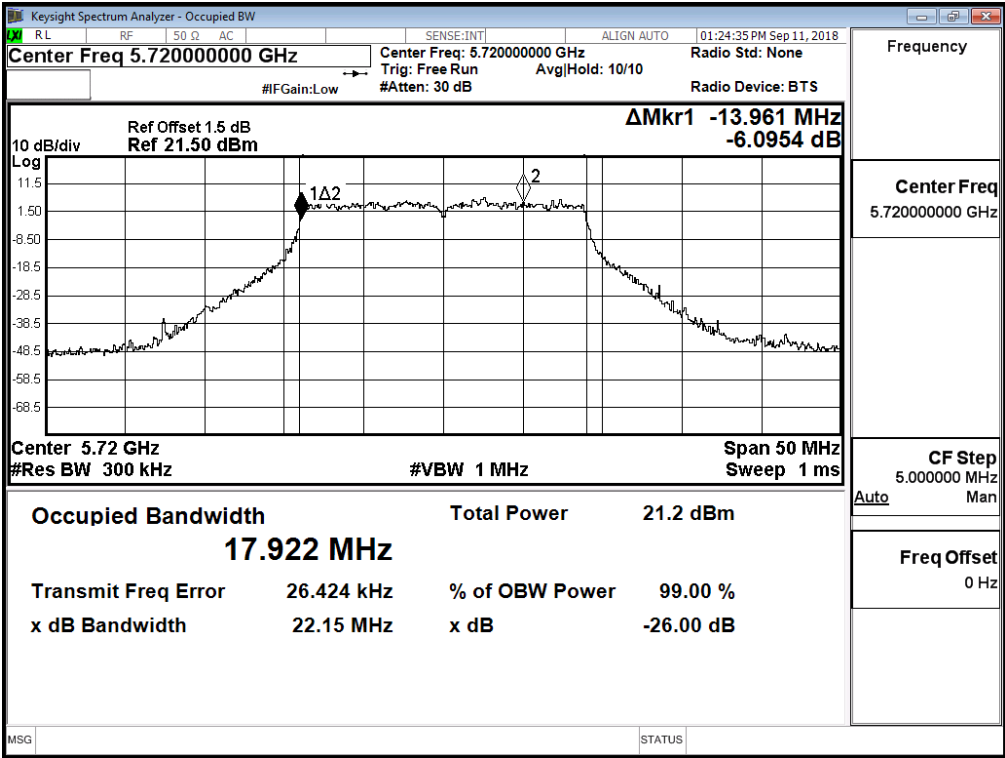
Note:

1. Output Power (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW) + Chain D (mW))
2. 26 dB Bandwidth is the bandwidth of chain A, chain B, chain C or chain D whichever is less bandwidth, output power limitation is more stringent.

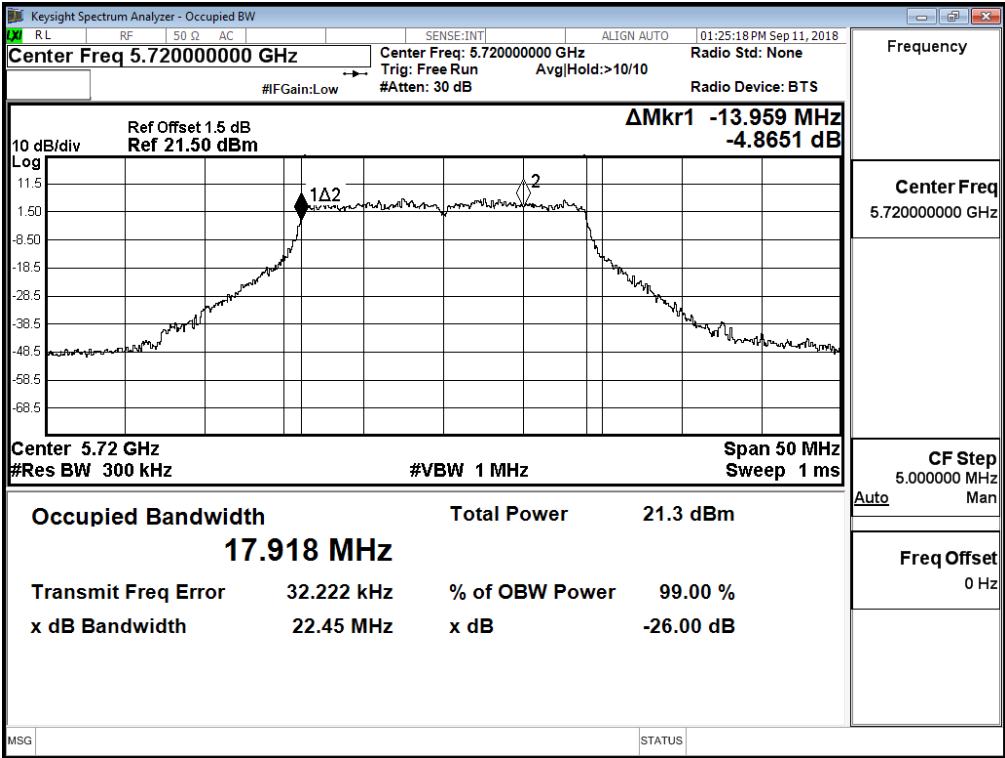
Maximum conducted output power Measurement with Transmit power Control (TPC)**(CHAIN A+ B+C+D)**

Channel No	Frequency Range (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Result
144(Band3)	5720	5.560	5.620	5.580	5.440	11.62	Pass

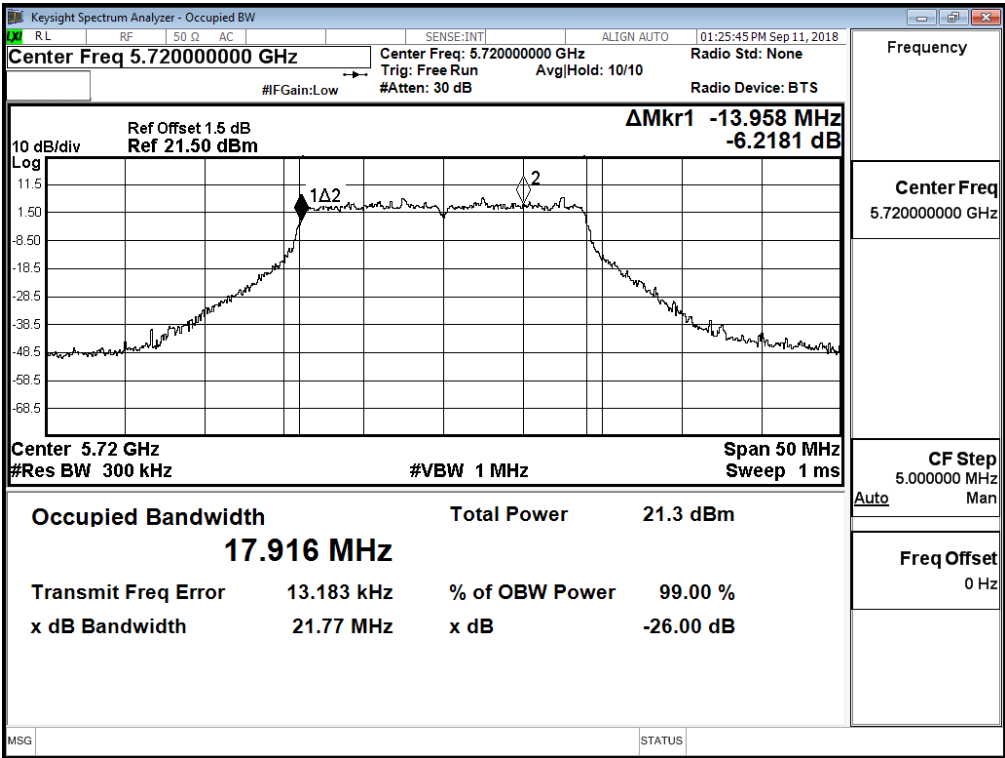
99% Bandwidth:
Channel 144 – Chain A



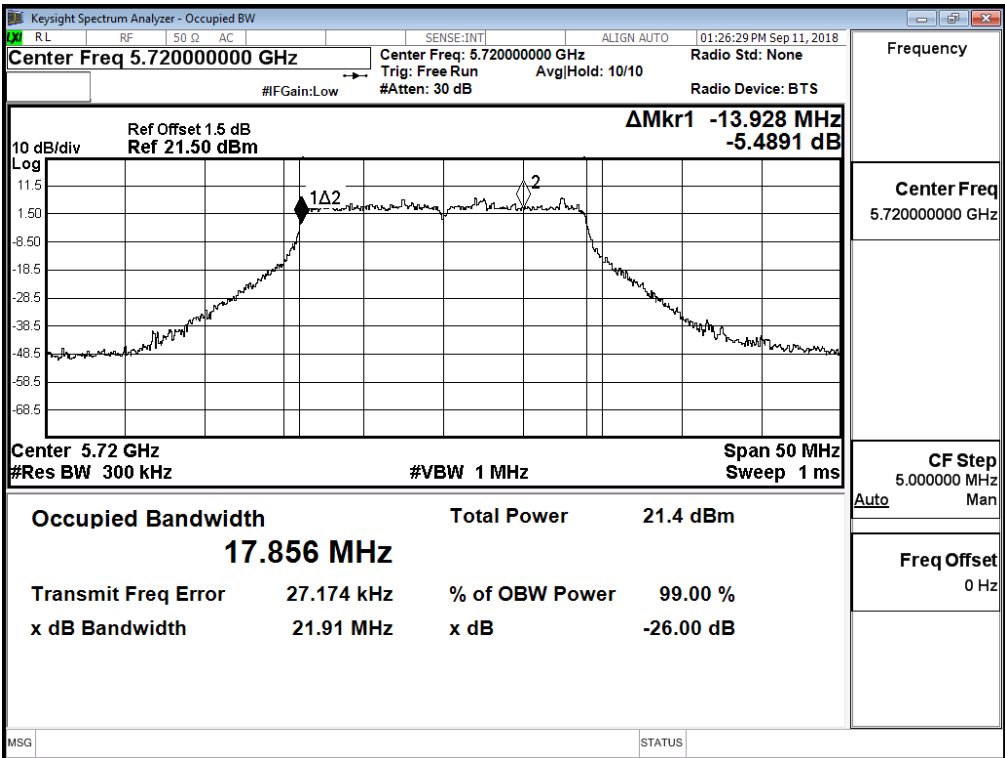
99% Bandwidth:
Channel 144 – Chain B



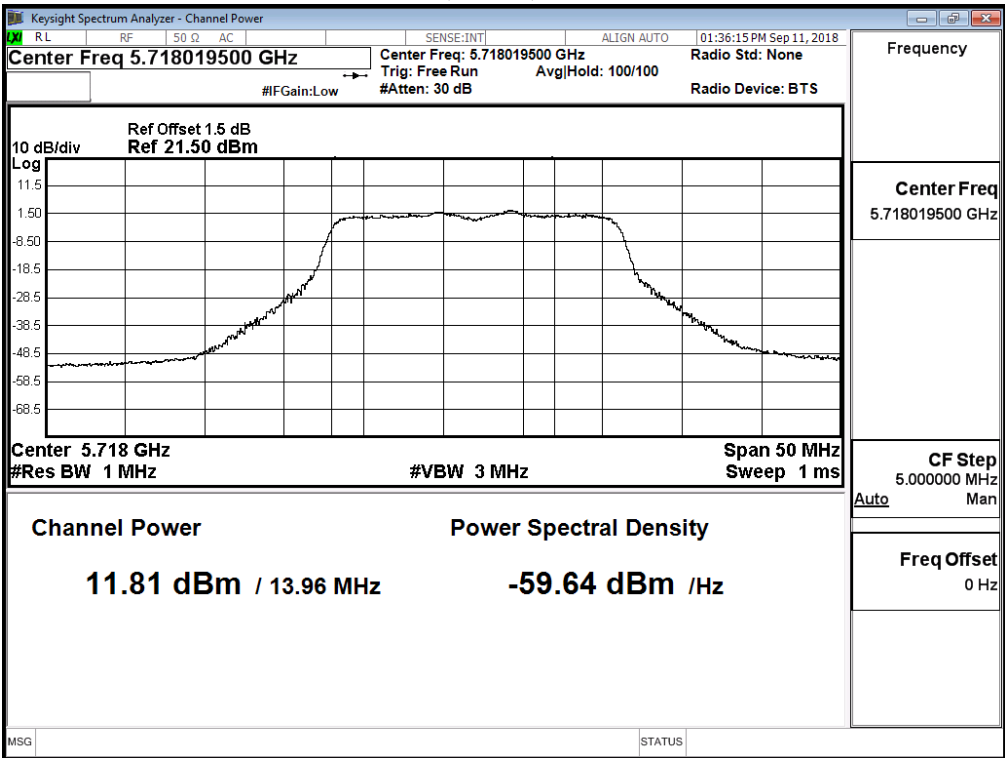
99% Bandwidth:
Channel 144 – Chain C



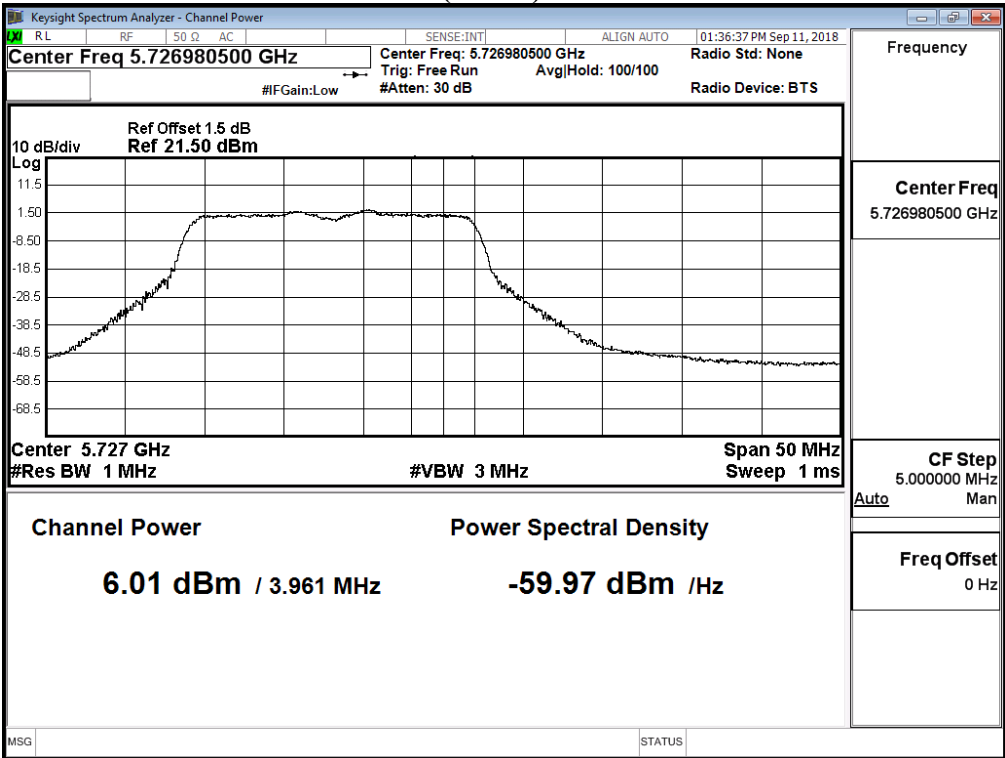
99% Bandwidth:
Channel 144 – Chain D



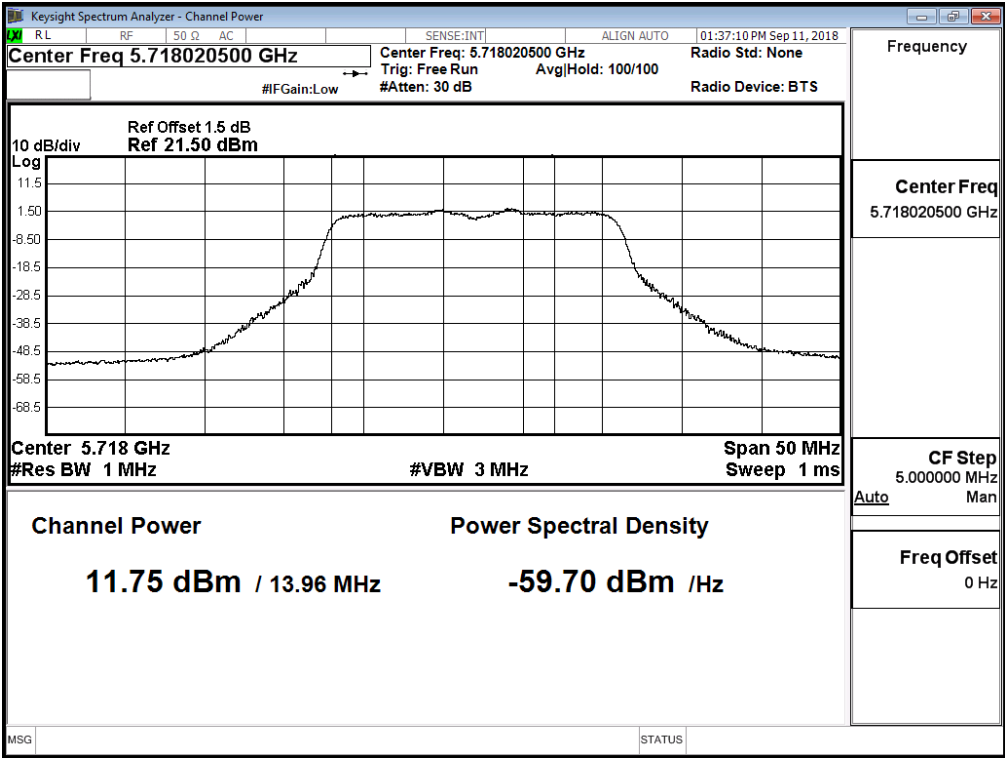
Maximum conducted output power:
Channel 144 (Band3) – Chain A



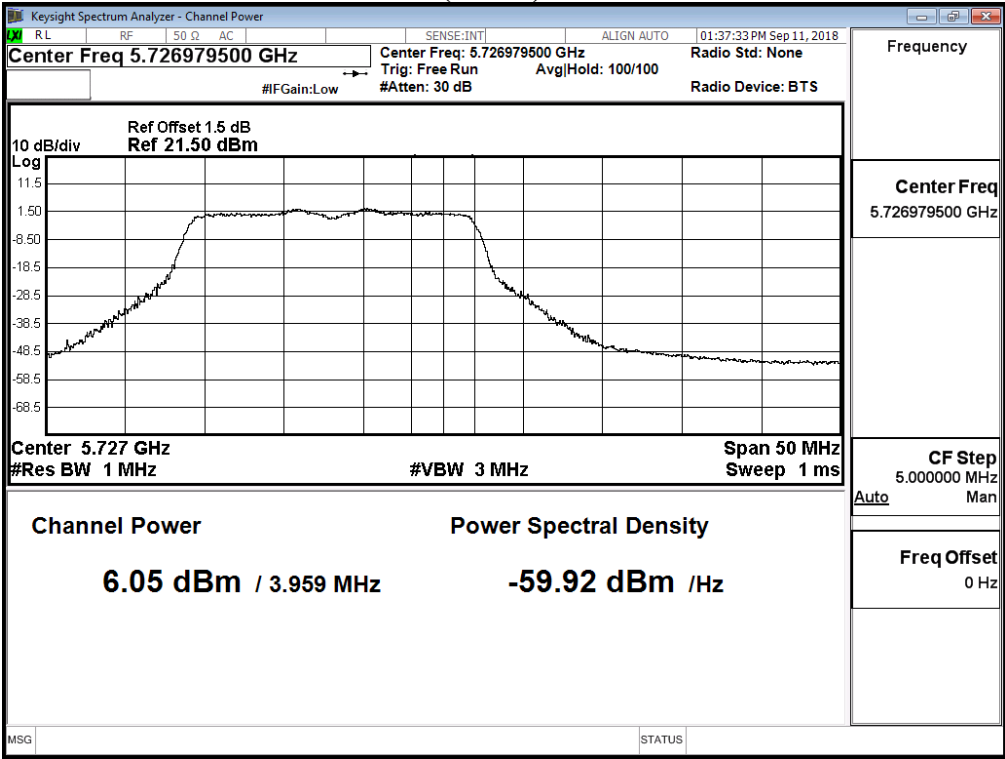
Channel 144 (Band4) – Chain A

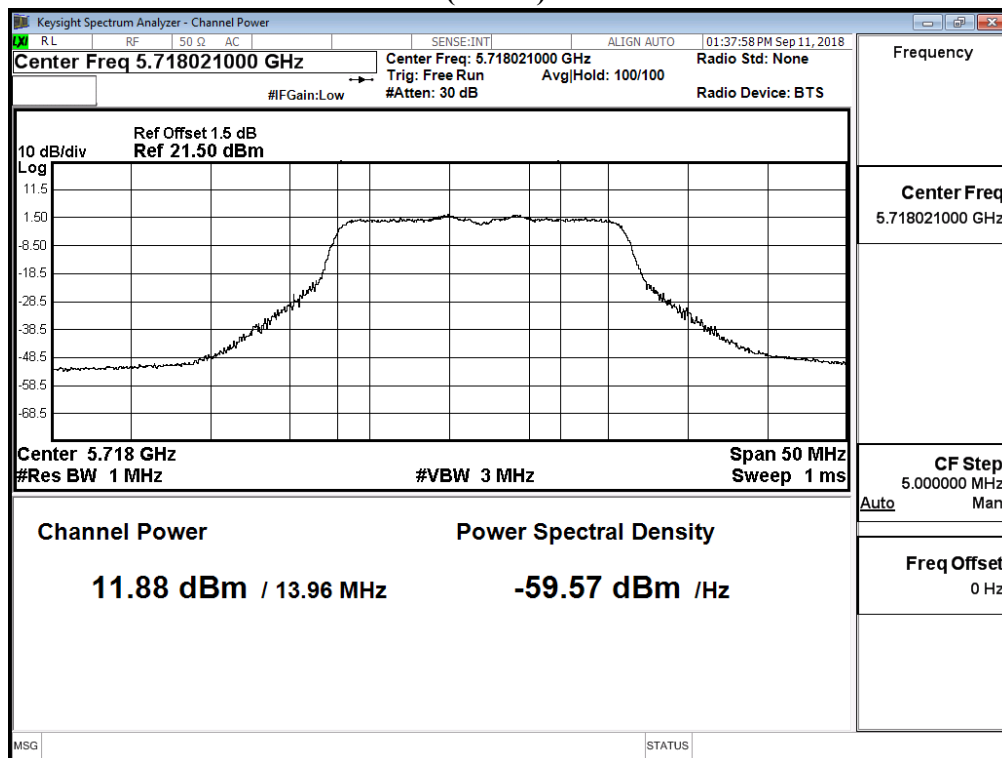
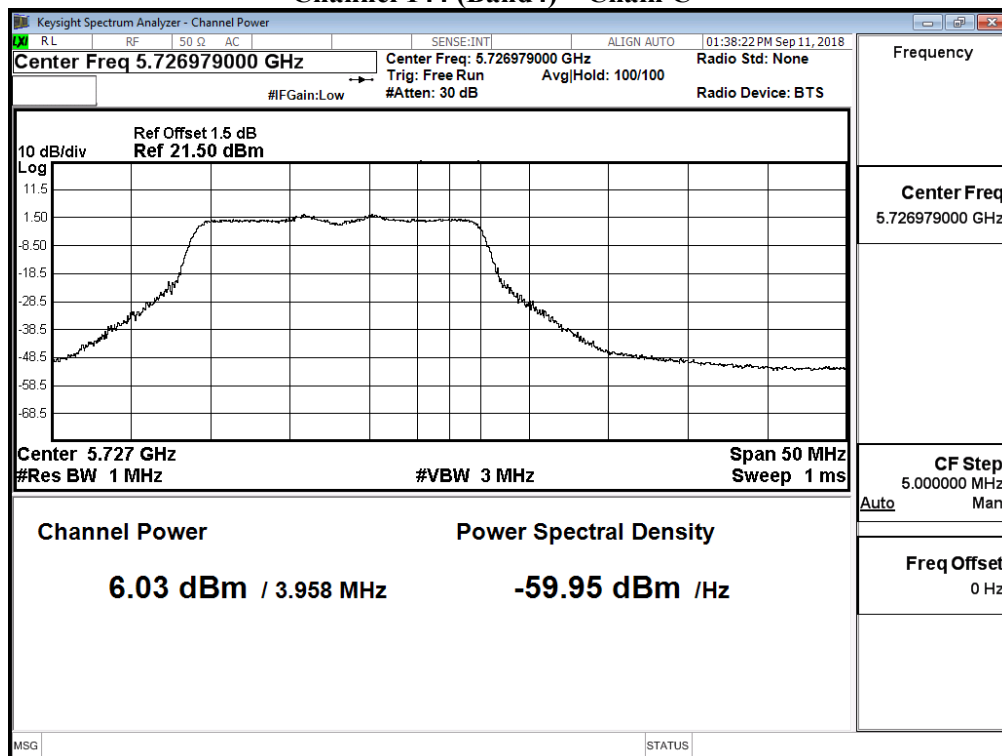


Maximum conducted output power:
Channel 144 (Band3) – Chain B

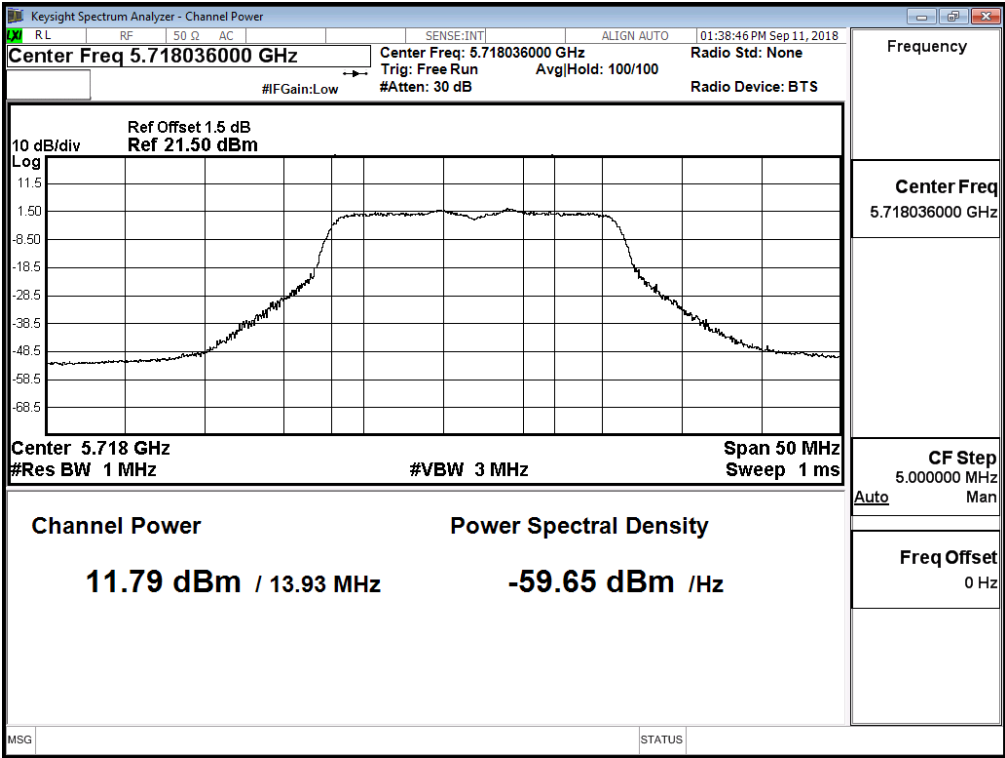


Channel 144 (Band4) – Chain B

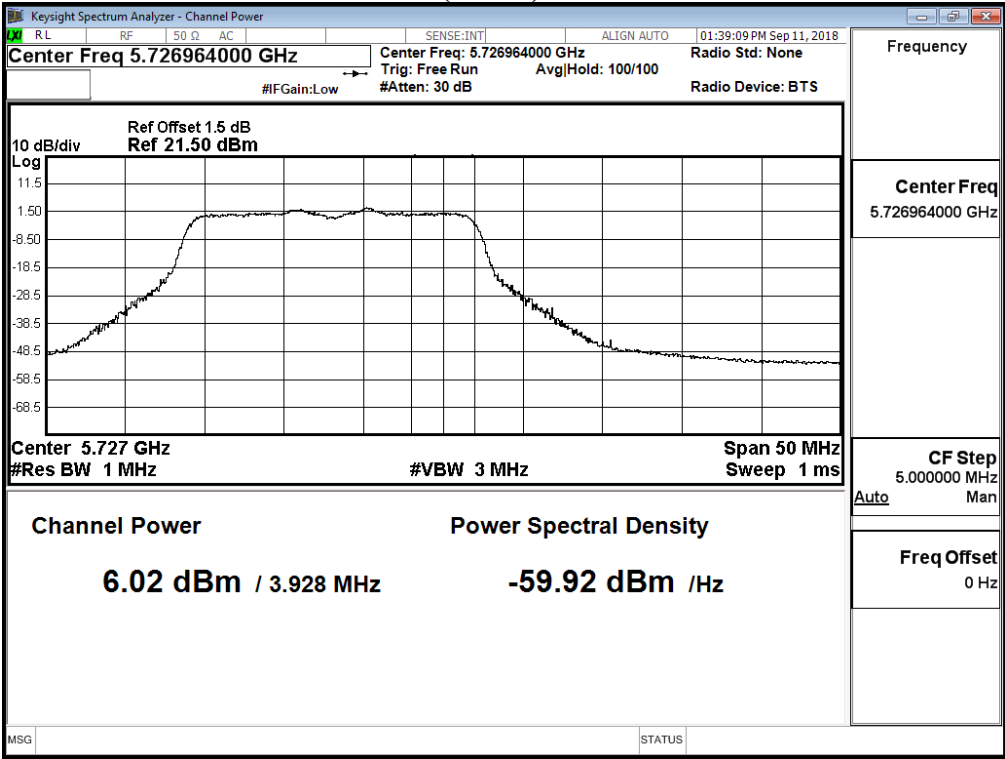


Maximum conducted output power:**Channel 144 (Band3) – Chain C****Channel 144 (Band4) – Chain C**

Maximum conducted output power:
Channel 144 (Band3) – Chain D



Channel 144 (Band4) – Chain D



Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Maximum conducted output power
 Test Site : No.3 OATS
 Test Date : 2018/08/11
 Test Mode : Mode 5: Transmit (802.11ac-40BW-60Mbps) (Antenna No.17)

Chain A

Cable loss=1dB		Maximum conducted output power										
Channel No	Frequency (MHz)	Data Rate (Mbps)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
142F(Band3)	5710	15.11	15.02	14.95	14.88	14.79	14.7	14.65	14.6	14.55	14.45	<22dBm
142F(Band4)	5710	4.76	4.69	4.59	4.49	4.44	4.37	4.29	4.24	4.16	4.06	<28dBm

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)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
142F(Band3)	5710	15.15	15.08	15.02	14.93	14.84	14.74	14.66	14.6	14.5	14.4	<22dBm
142F(Band4)	5710	4.67	4.57	4.49	4.43	4.34	4.26	4.2	4.13	4.03	3.98	<28dBm

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)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
142F(Band3)	5710	15.18	15.11	15.03	14.96	14.9	14.84	14.75	14.67	14.59	14.52	<22dBm
142F(Band4)	5710	4.75	4.66	4.61	4.54	4.49	4.41	4.32	4.26	4.19	4.1	<28dBm

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

Chain D

Cable loss=1dB		Maximum conducted output power										
Channel No	Frequency (MHz)	Data Rate (Mbps)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
142F(Band3)	5710	15.1	15	14.91	14.84	14.78	14.68	14.62	14.56	14.48	14.42	<22dBm
142F(Band4)	5710	4.76	4.66	4.6	4.52	4.45	4.38	4.32	4.25	4.18	4.11	<28dBm

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

Maximum conducted output power Measurement:**(CHAIN A+ B+C+D)**

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
142F(Band3)	5710	33.204	15.110	15.150	15.18	15.10	21.16	22	24.21	Pass
142F(Band4)	5710	--	4.760	4.670	4.75	4.76	10.76	28	--	Pass

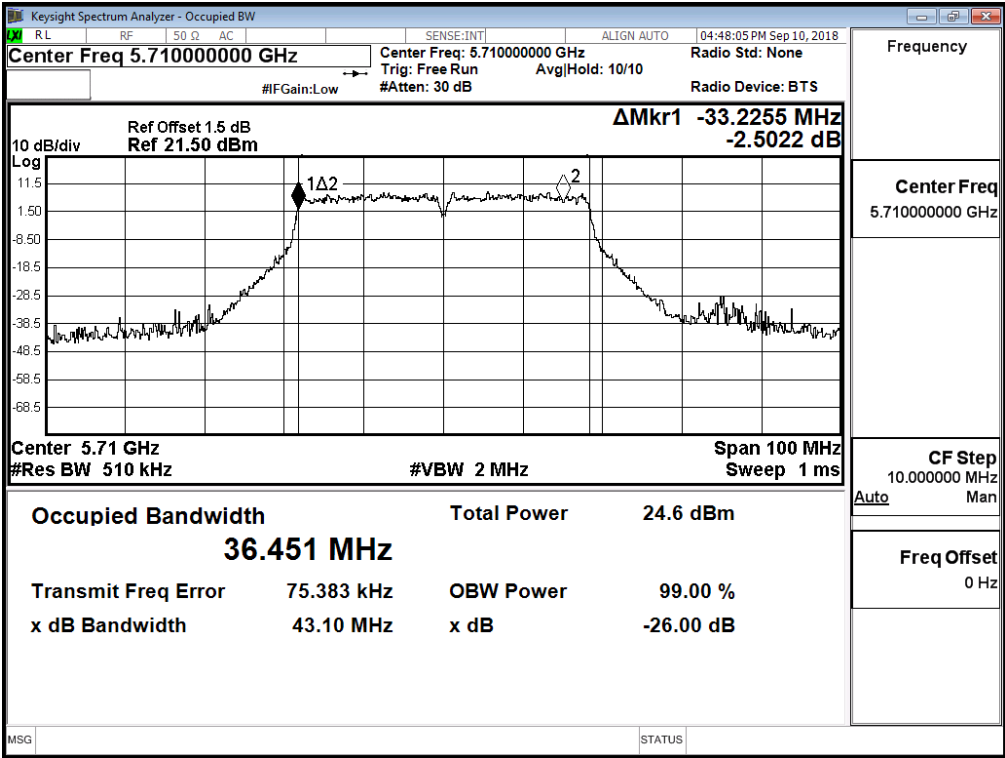
Note:

1. Output Power (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW) + Chain D (mW))
2. 26 dB Bandwidth is the bandwidth of chain A, chain B, chain C or chain D whichever is less bandwidth, output power limitation is more stringent.

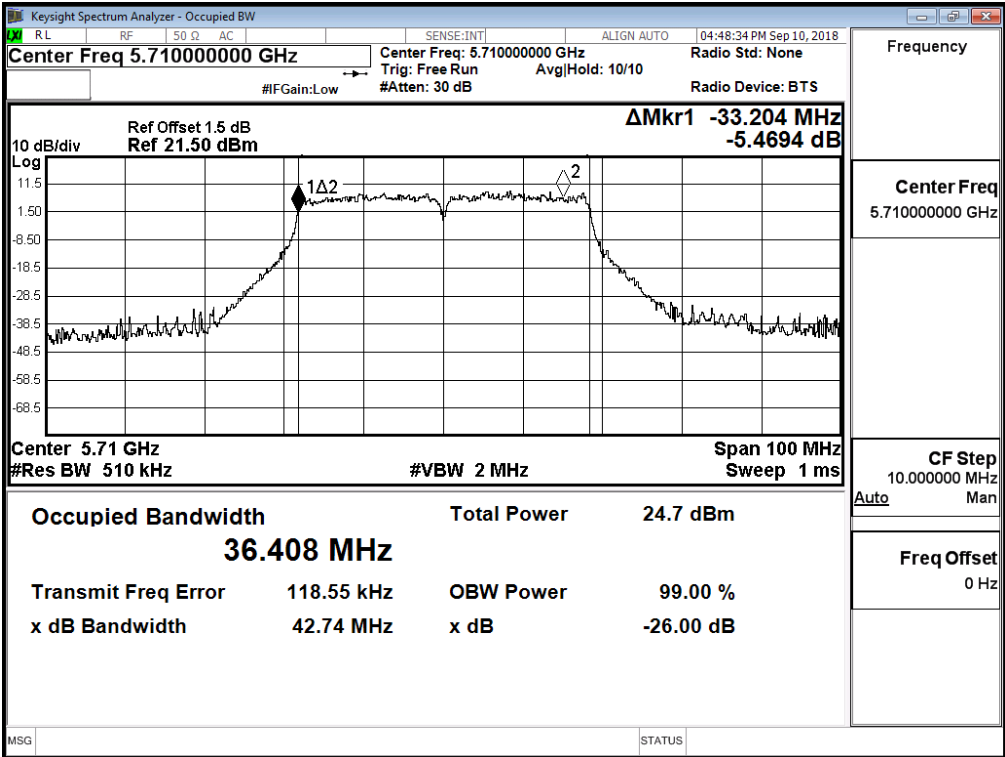
Maximum conducted output power Measurement with Transmit power Control (TPC)**(CHAIN A+ B+C+D)**

Channel No	Frequency Range (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Result
142(Band3)	5710	8.880	8.930	8.96	8.77	14.91	Pass

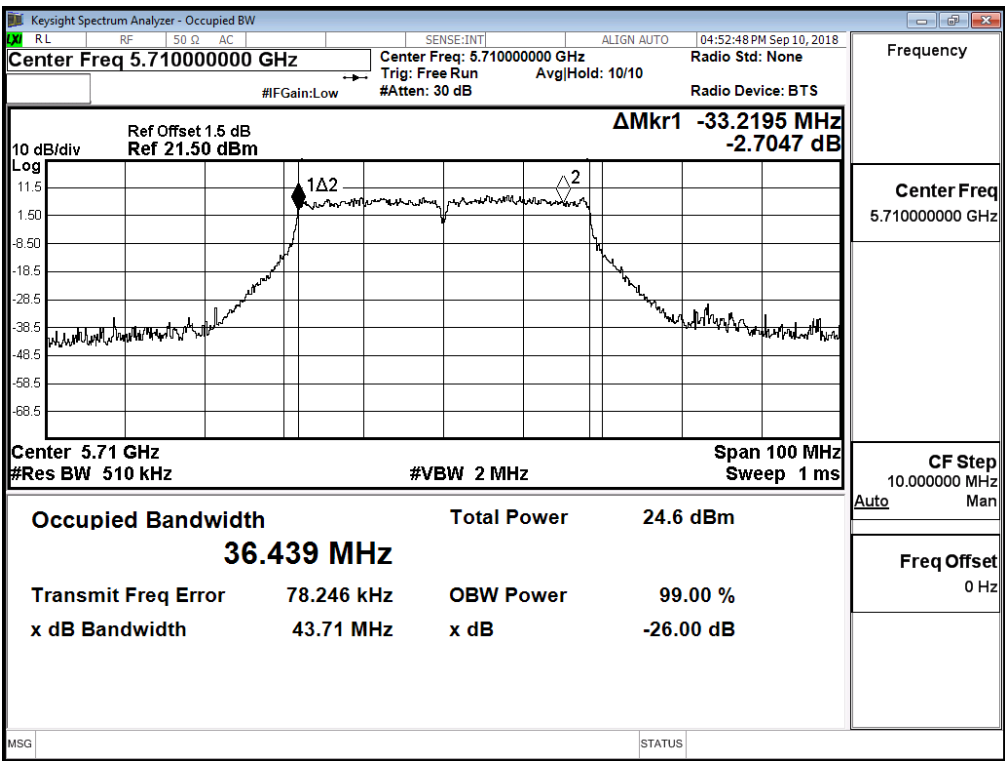
99% Bandwidth:
Channel 142 – Chain A



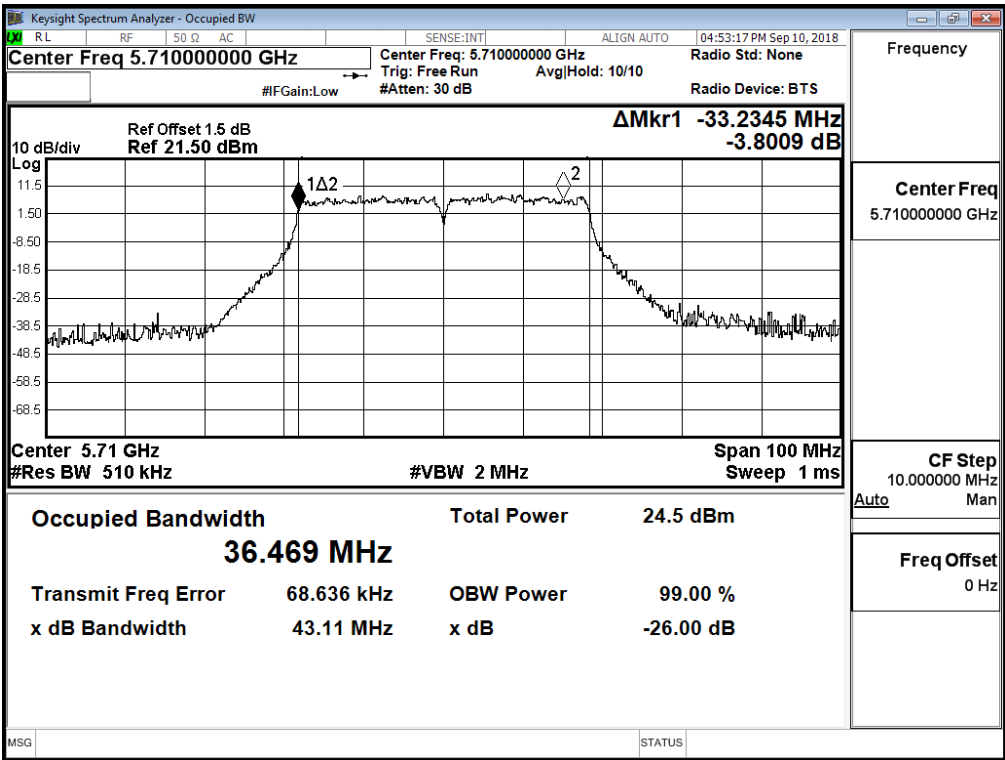
99% Bandwidth:
Channel 142 – Chain B

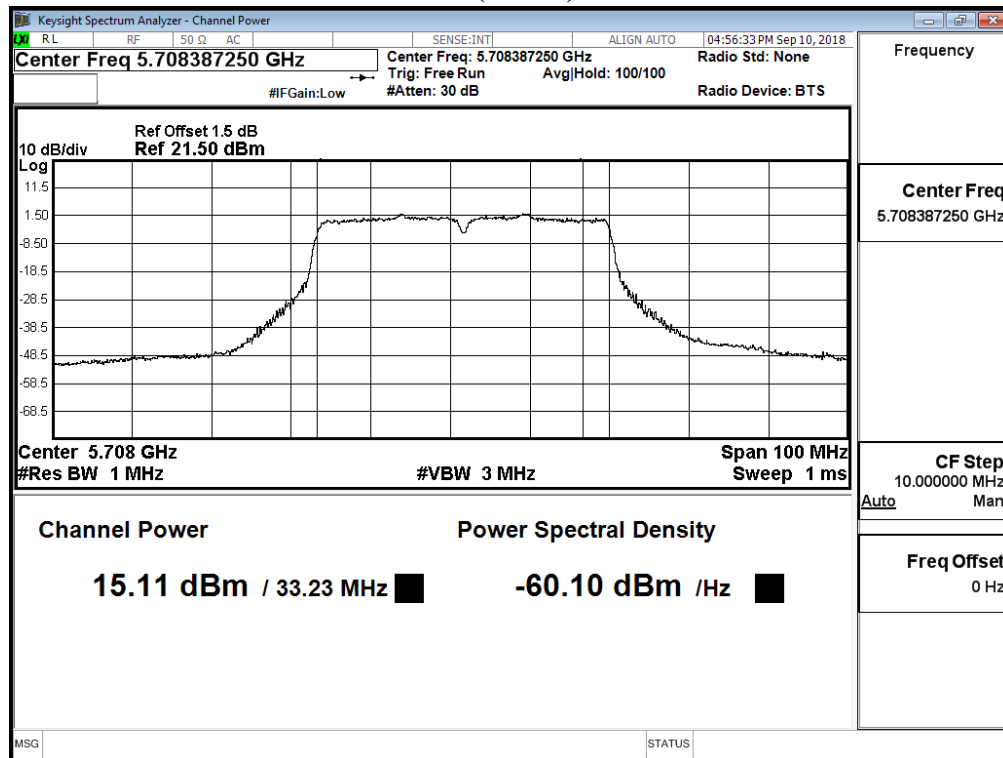
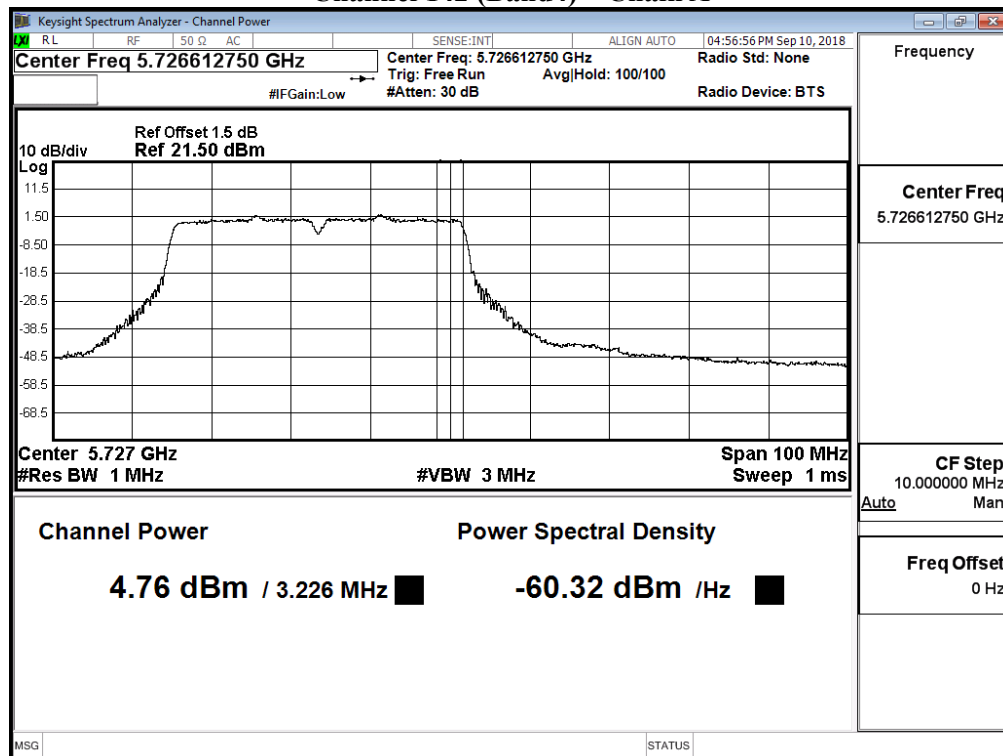


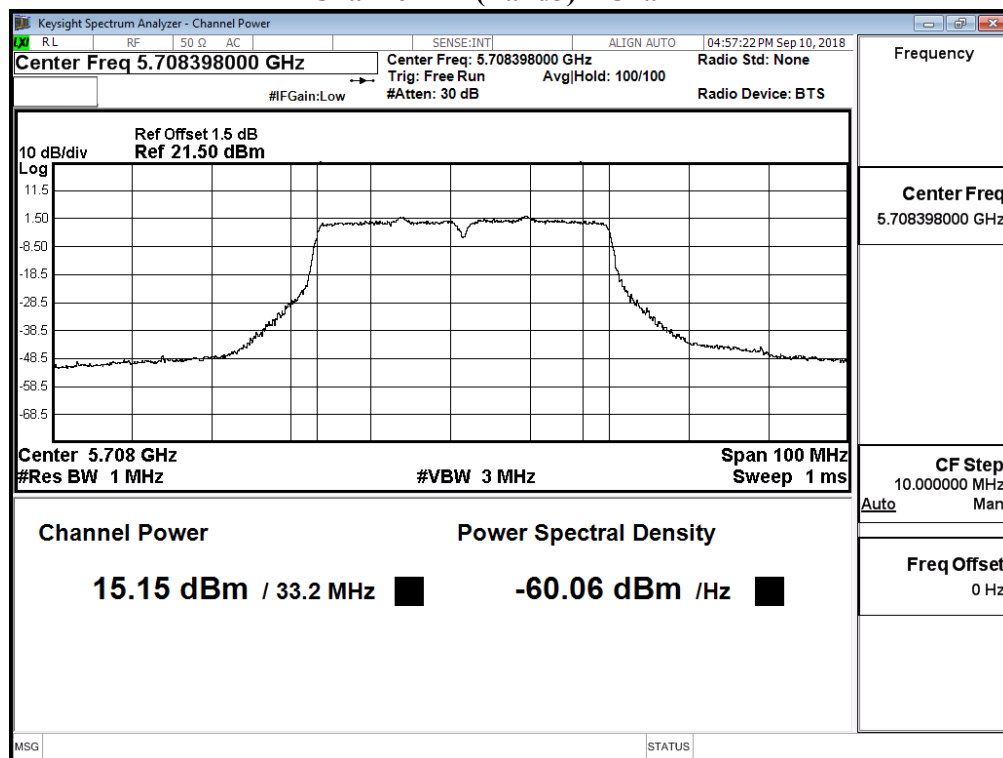
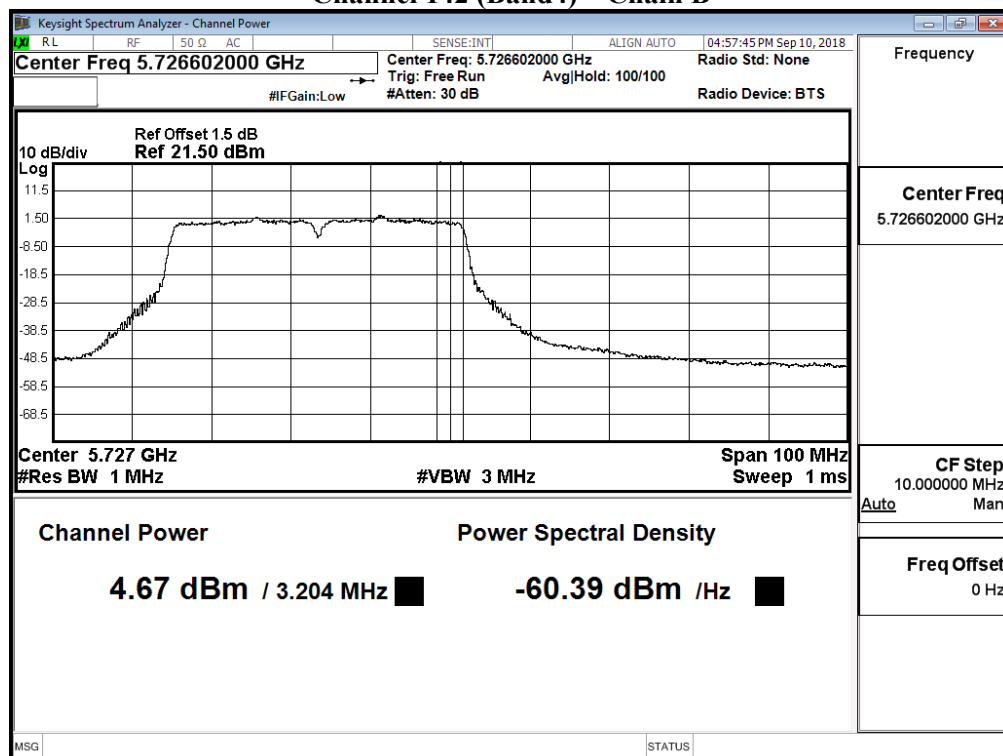
99% Bandwidth:
Channel 142 – Chain C



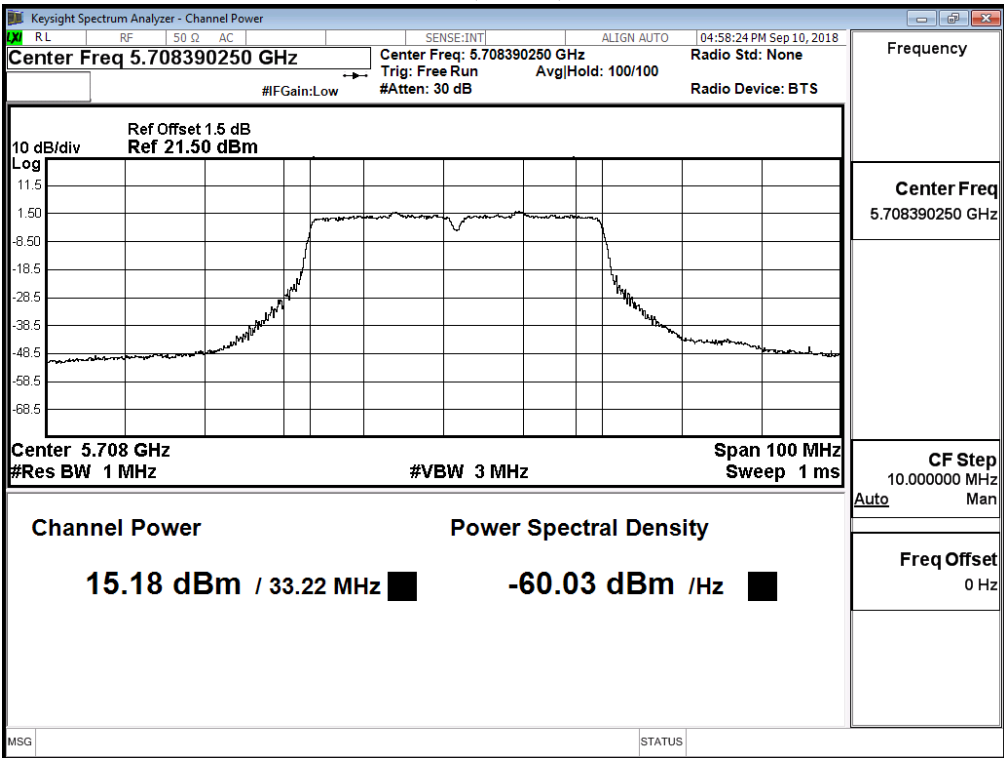
99% Bandwidth:
Channel 142 – Chain D



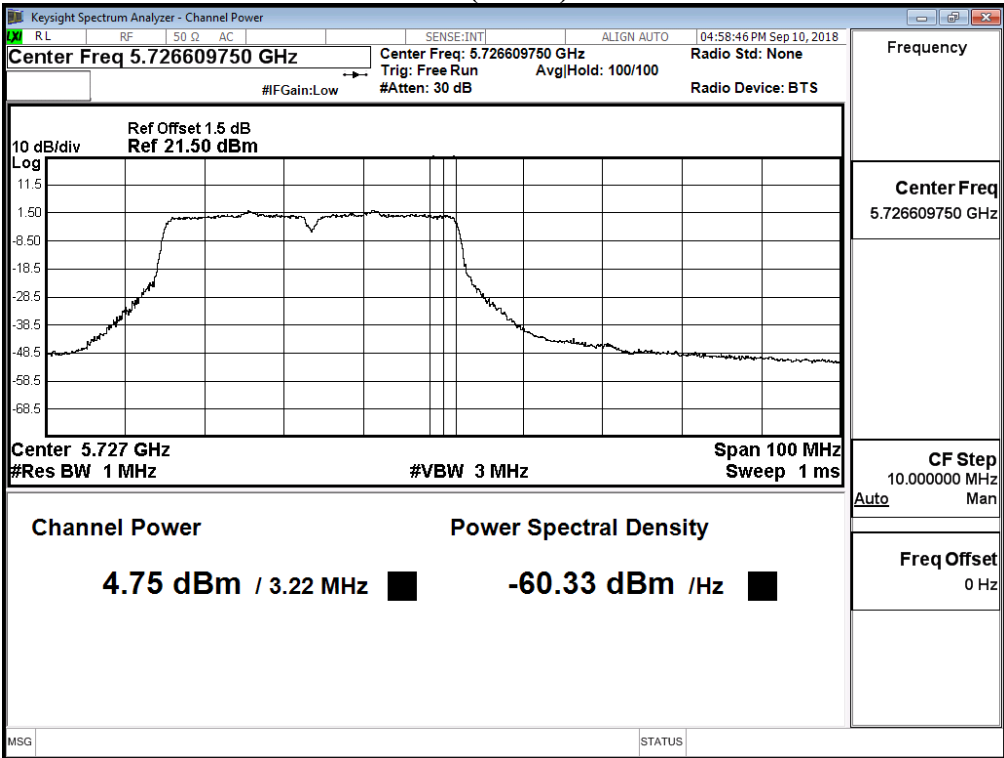
Maximum conducted output power:**Channel 142 (Band3) – Chain A****Channel 142 (Band4) – Chain A**

Maximum conducted output power:**Channel 142 (Band3) – Chain B****Channel 142 (Band4) – Chain B**

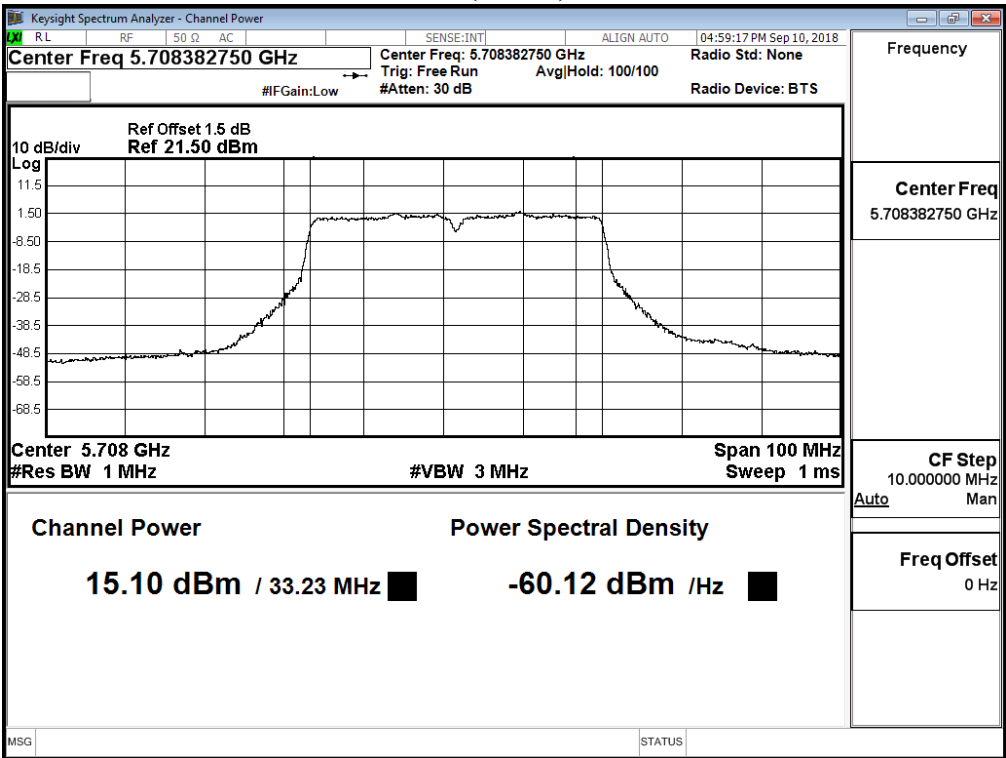
Maximum conducted output power:
Channel 142 (Band3) – Chain C



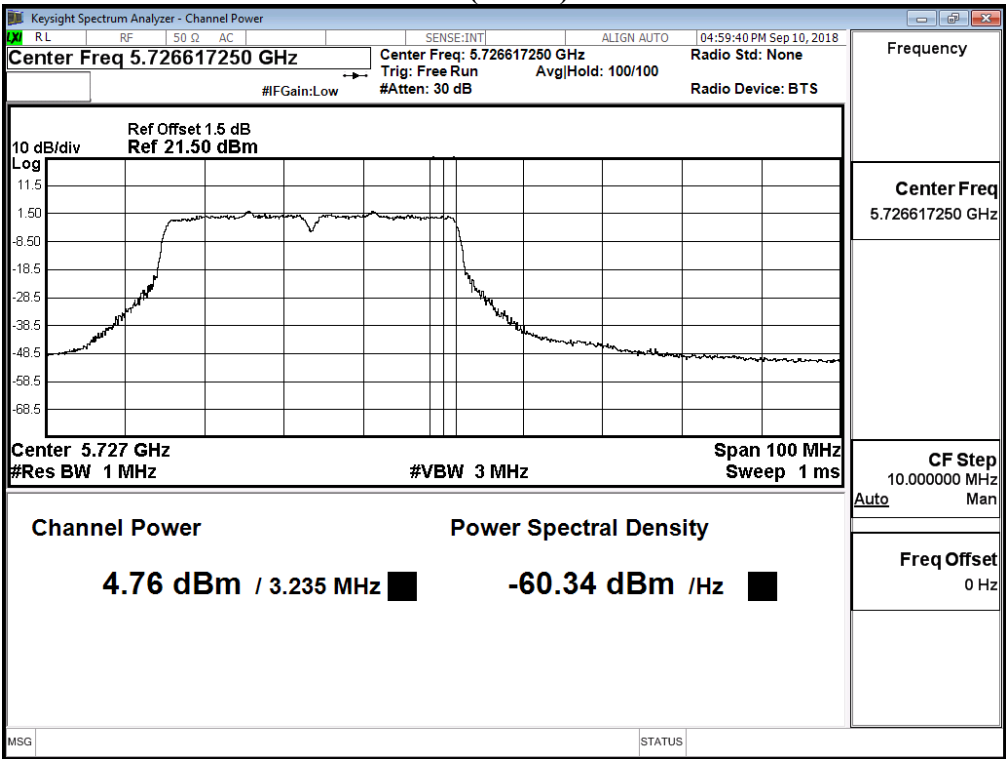
Channel 142 (Band4) – Chain C



Maximum conducted output power:
Channel 142 (Band3) – Chain D



Channel 142 (Band4) – Chain D



Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Maximum conducted output power
 Test Site : No.3 OATS
 Test Mode : Mode 6: Transmit (802.11ac-80BW-130Mbps) (Antenna No.17)

Chain A

Cable loss=1dB		Maximum conducted output power										
Channel No	Frequency (MHz)	Data Rate (Mbps)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
42	5210	15.79	15.72	15.64	15.55	15.48	15.39	15.34	15.28	15.22	15.14	<22dBm
58	5290	15.77	15.7	15.6	15.52	15.47	15.38	15.31	15.22	15.15	15.09	<22dBm
106	5530	15.83	--	--	--	--	--	--	--	--	--	<22dBm
122	5610	15.28	15.22	15.12	15.02	14.97	14.89	14.81	14.72	14.62	14.52	<22dBm
138(Band3)	5690	14.06	--	--	--	--	--	--	--	--	--	<22dBm
138(Band4)	5690	0.67	--	--	--	--	--	--	--	--	--	<28dBm
155	5775	17.82	17.75	17.7	17.63	17.56	17.48	17.38	17.30	17.24	17.15	<28dBm

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)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
42	5210	15.24	15.18	15.09	15.03	14.98	14.89	14.83	14.78	14.69	14.62	<22dBm
58	5290	15.66	15.57	15.47	15.41	15.33	15.26	15.16	15.10	15.02	14.92	<22dBm
106	5530	15.65	--	--	--	--	--	--	--	--	--	<22dBm
122	5610	15.27	15.2	15.12	15.03	14.94	14.85	14.76	14.68	14.61	14.51	<22dBm
138(Band3)	5690	16.55	--	--	--	--	--	--	--	--	--	<22dBm
138(Band4)	5690	3.53	--	--	--	--	--	--	--	--	--	<28dBm
155	5775	18.31	18.26	18.17	18.07	18.00	17.94	17.86	17.77	17.70	17.63	<28dBm

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)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
42	5210	16.58	16.52	16.47	16.37	16.29	16.21	16.16	16.11	16.01	15.95	<22dBm
58	5290	16.4	16.3	16.22	16.15	16.06	16.00	15.94	15.84	15.74	15.69	<22dBm
106	5530	15.84	--	--	--	--	--	--	--	--	--	<22dBm
122	5610	16.25	16.19	16.13	16.04	15.94	15.89	15.84	15.74	15.65	15.55	<22dBm
138(Band3)	5690	14.82	--	--	--	--	--	--	--	--	--	<22dBm
138(Band4)	5690	0.45	--	--	--	--	--	--	--	--	--	<28dBm
155	5775	18.25	18.19	18.1	18.03	17.96	17.90	17.81	17.72	17.64	17.56	<28dBm

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

Chain D

Cable loss=1dB		Maximum conducted output power										
Channel No	Frequency (MHz)	Data Rate (Mbps)										Required Limit
		VTH0	VTH1	VTH2	VTH3	VTH4	VTH5	VTH6	VTH7	VTH8	VTH9	
42	5210	15.45	15.36	15.29	15.22	15.17	15.12	15.02	14.97	14.91	14.83	<22dBm
58	5290	15.39	15.31	15.23	15.18	15.13	15.08	14.98	14.92	14.87	14.78	<22dBm
106	5530	15.51	--	--	--	--	--	--	--	--	--	<22dBm
122	5610	15.92	15.84	15.74	15.66	15.57	15.47	15.37	15.29	15.23	15.17	<22dBm
138(Band3)	5690	16.89	--	--	--	--	--	--	--	--	--	<22dBm
138(Band4)	5690	2.65	--	--	--	--	--	--	--	--	--	<28dBm
155	5775	18.27	18.2	18.14	18.08	17.98	17.90	17.80	17.70	17.62	17.55	<28dBm

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

Maximum conducted output power Measurement

(CHAIN A+ B+C+D)

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
42	5210	--	15.790	15.240	16.580	15.450	21.82	22	--	Pass
58	5290	75.571	15.770	15.660	16.400	15.390	21.84	22	27.78	Pass
106	5530	75.782	15.830	15.650	15.840	15.510	21.73	22	27.80	Pass
122	5610	75.751	15.280	15.270	16.250	15.920	21.72	22	27.79	Pass
138	5690	72.893	14.060	16.550	14.820	16.890	21.76	22	27.63	Pass
138ac80(Band4)	5690	2.893	0.670	3.530	0.450	2.650	8.04	28	27.78	Pass
155	5775	--	17.820	18.310	18.250	18.270	24.19	28	--	Pass

Note:

1. Output Power (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW) + Chain D (mW))
2. 26 dB Bandwidth is the bandwidth of chain A, chain B, chain C or chain D whichever is less bandwidth, output power limitation is more stringent.

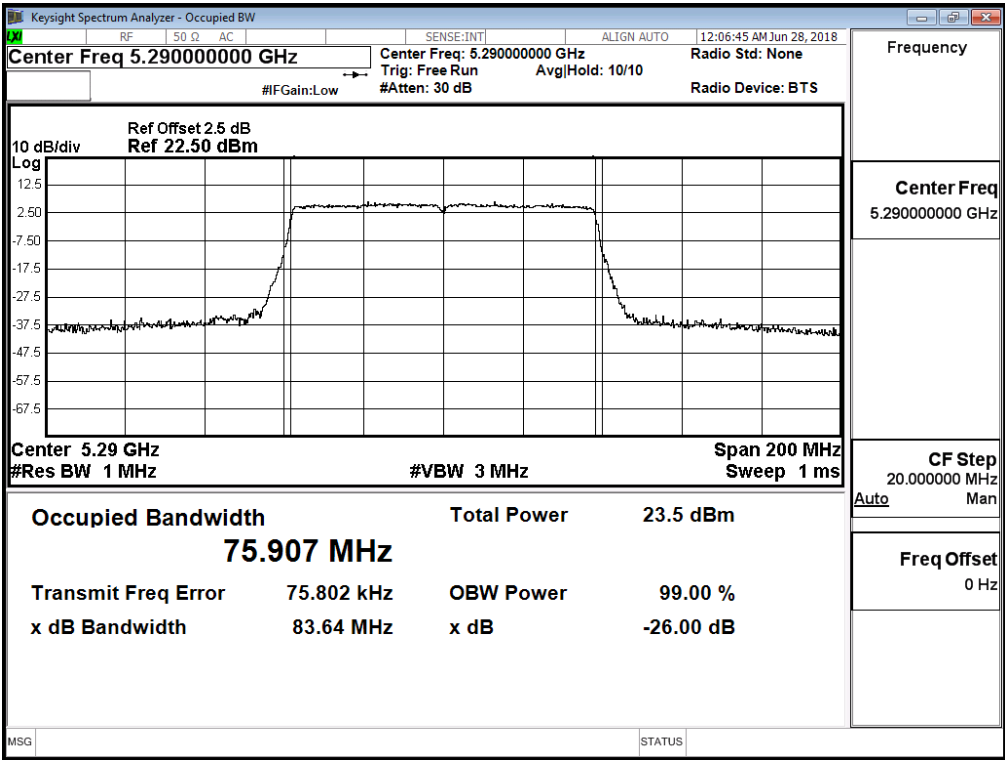
Maximum conducted output power Measurement with Transmit power Control (TPC)

(CHAIN A+ B+C+D)

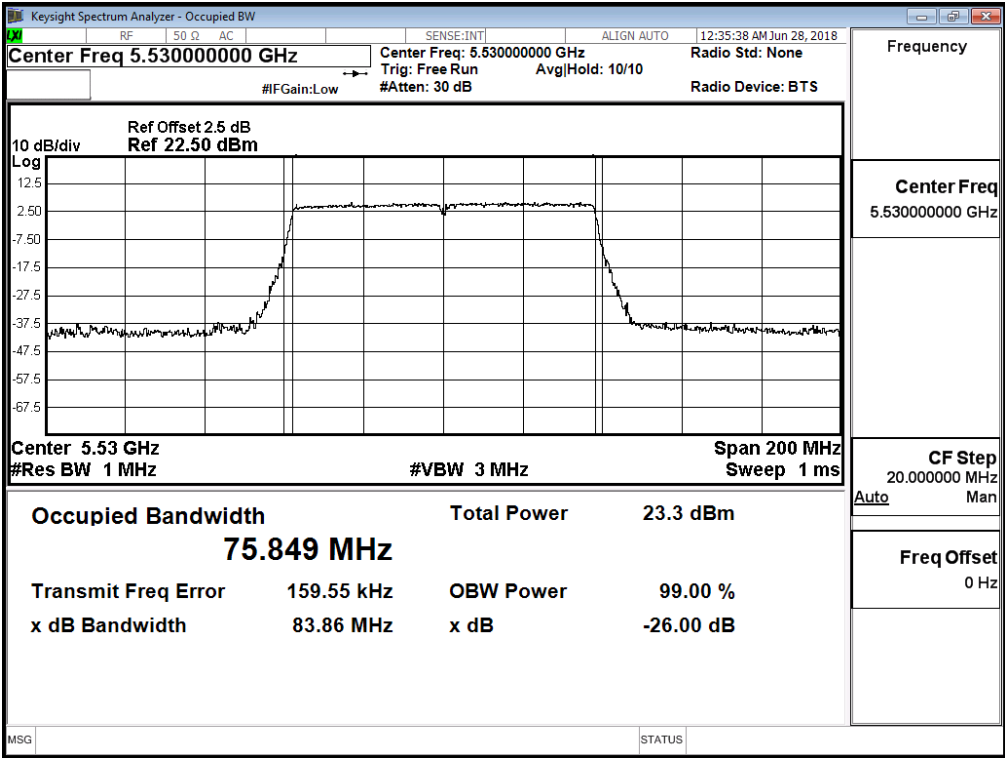
Channel No	Frequency Range (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Result
58	5290	9.660	9.430	10.290	9.180	15.68	Pass
106	5530	9.500	9.320	9.540	9.320	15.44	Pass
122	5610	9.000	8.950	9.960	9.720	15.45	Pass
138	5690	7.840	10.330	8.440	10.590	15.48	Pass

99% Bandwidth:

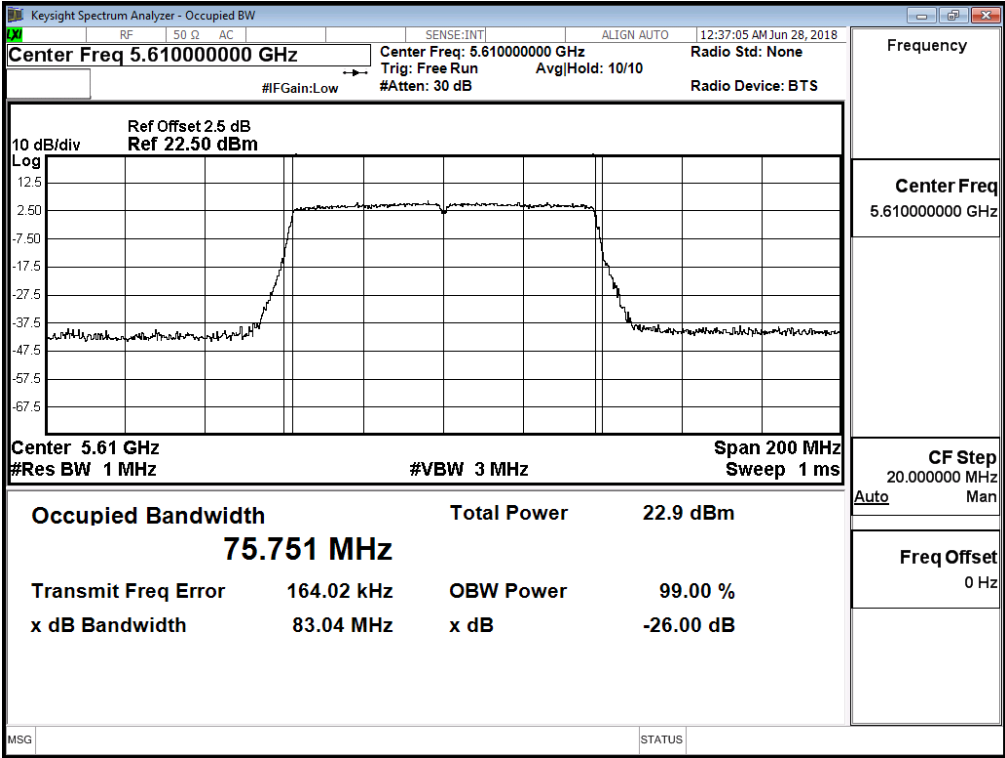
Channel 58 – Chain A



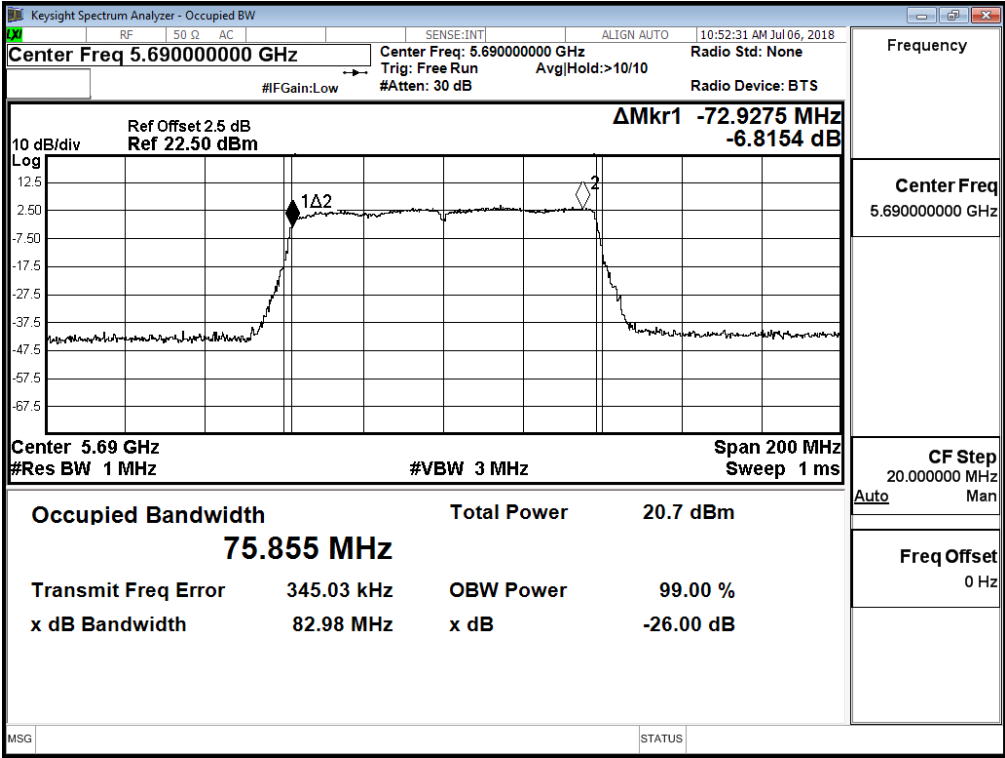
Channel 106 – Chain A



Channel 122 – Chain A

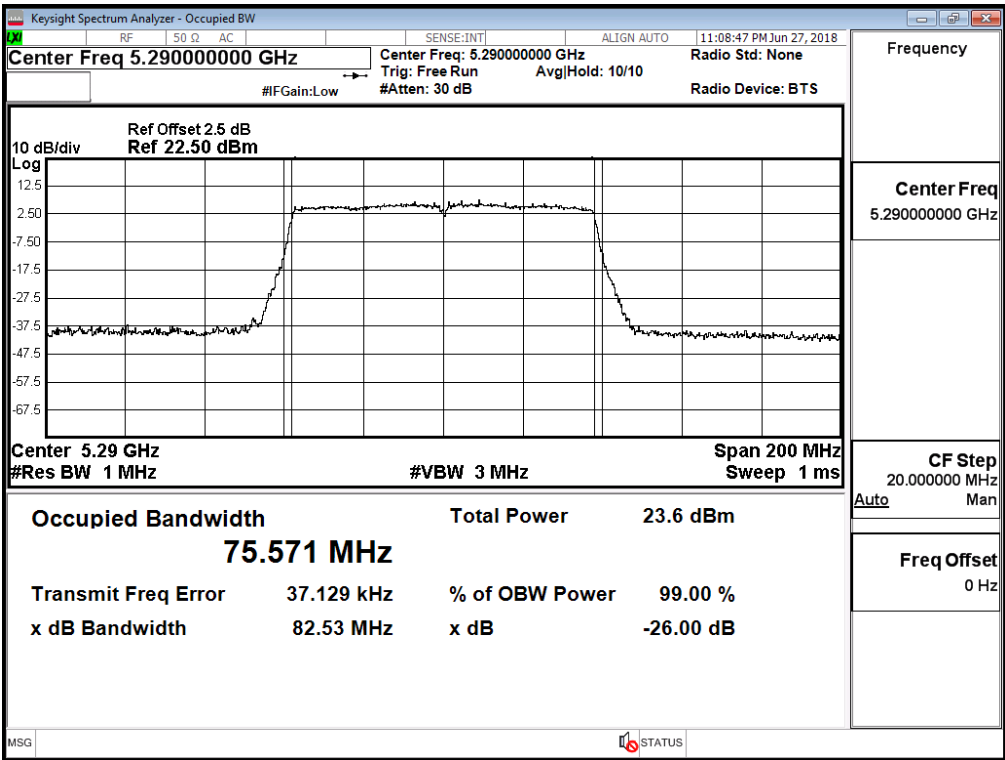


Channel 138 – Chain A

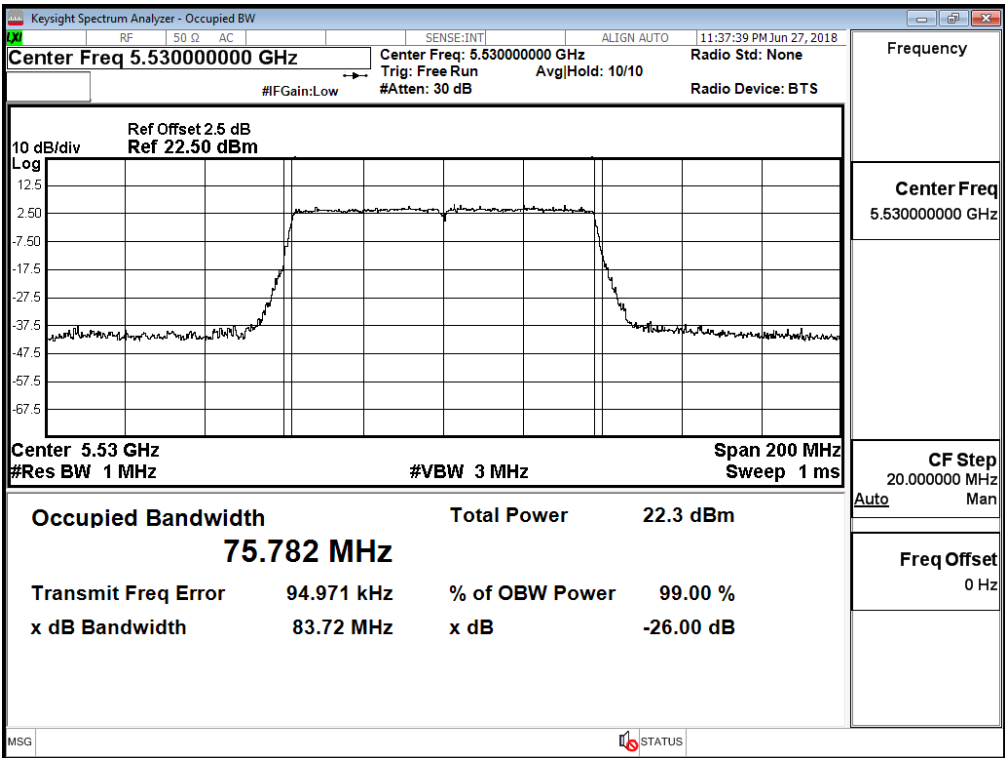


99% Bandwidth:

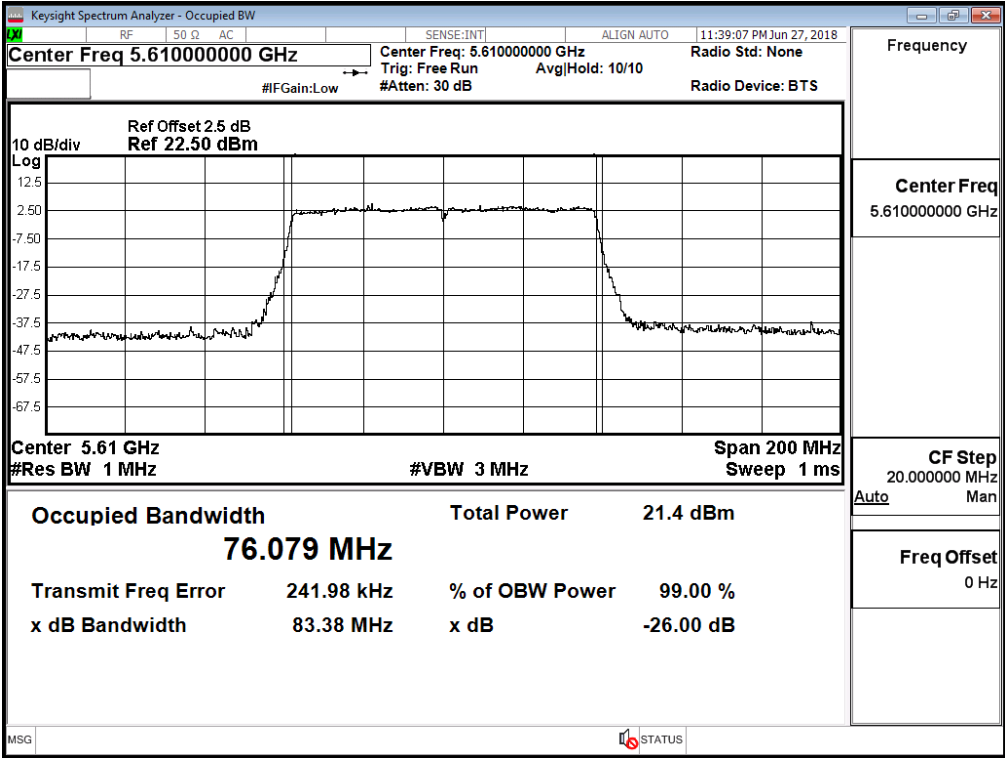
Channel 58 – Chain B



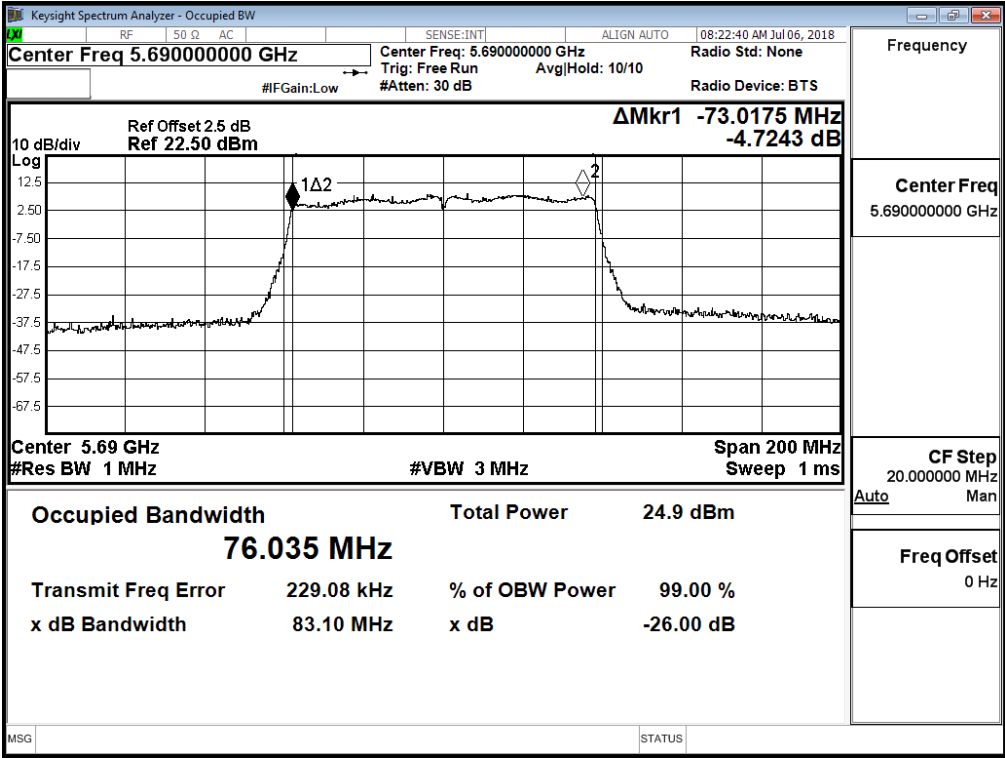
Channel 106 – Chain B



Channel 122 – Chain B

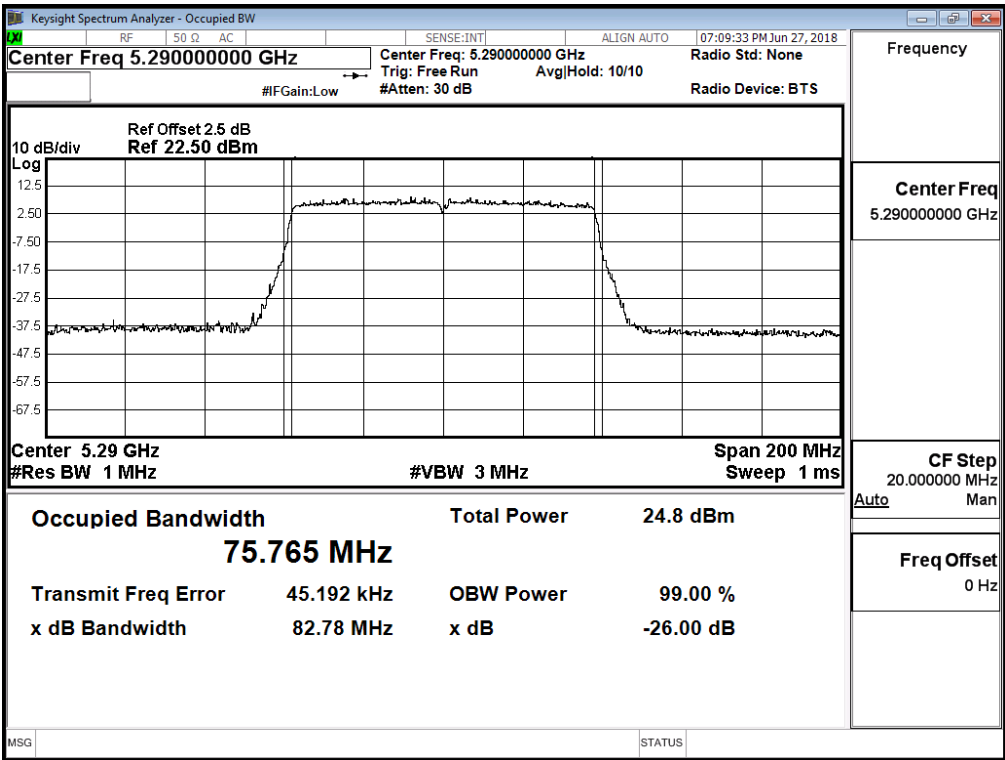


Channel 138 – Chain B

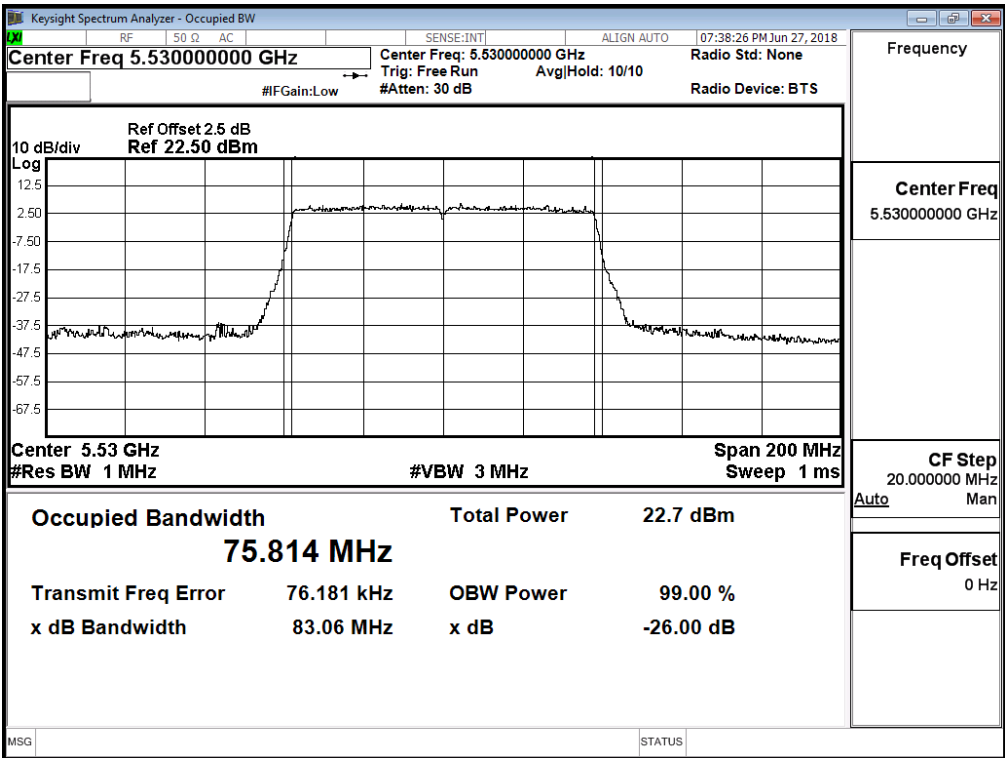


99% Bandwidth:

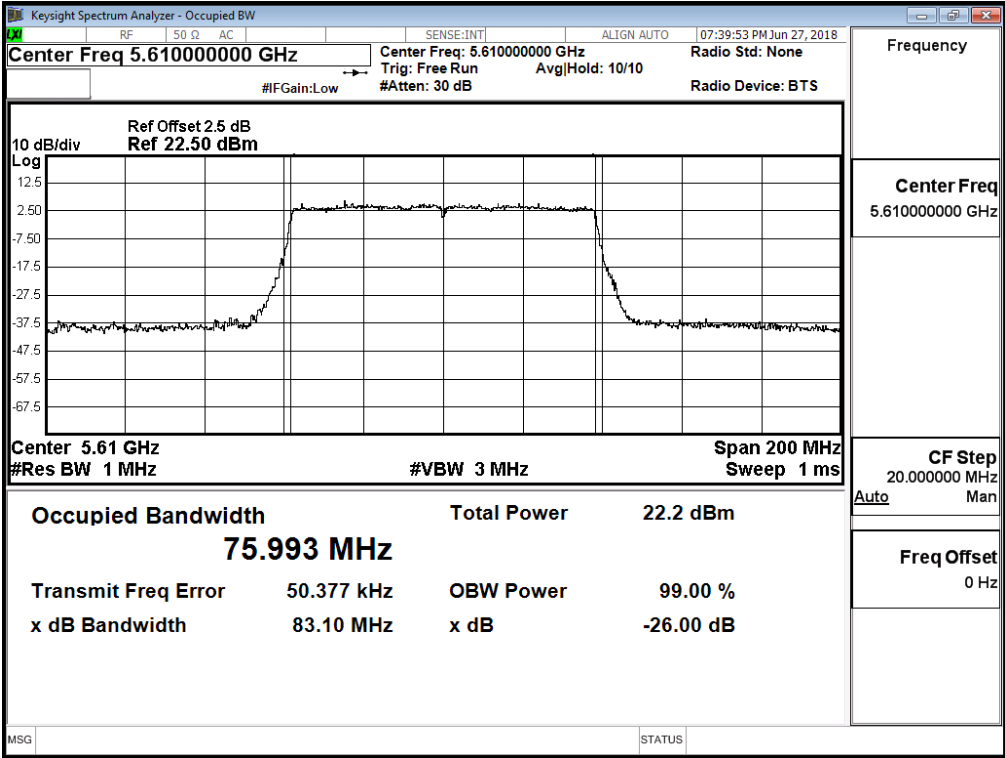
Channel 58 – Chain C



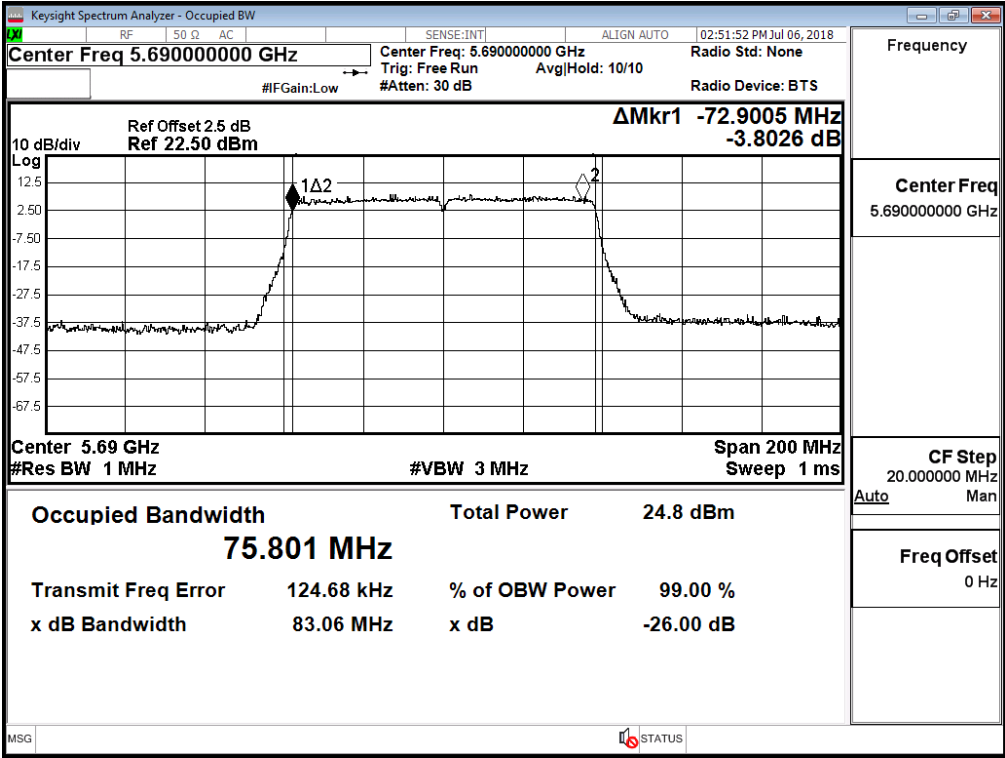
Channel 106 – Chain C



Channel 122 – Chain C

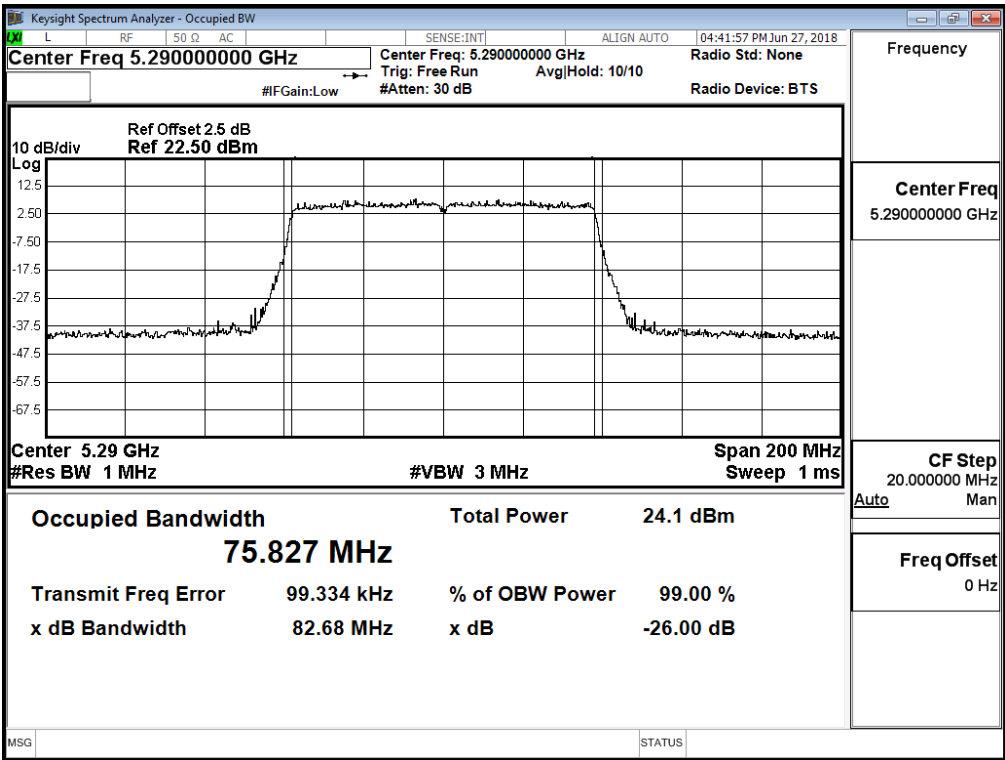


Channel 138 – Chain C

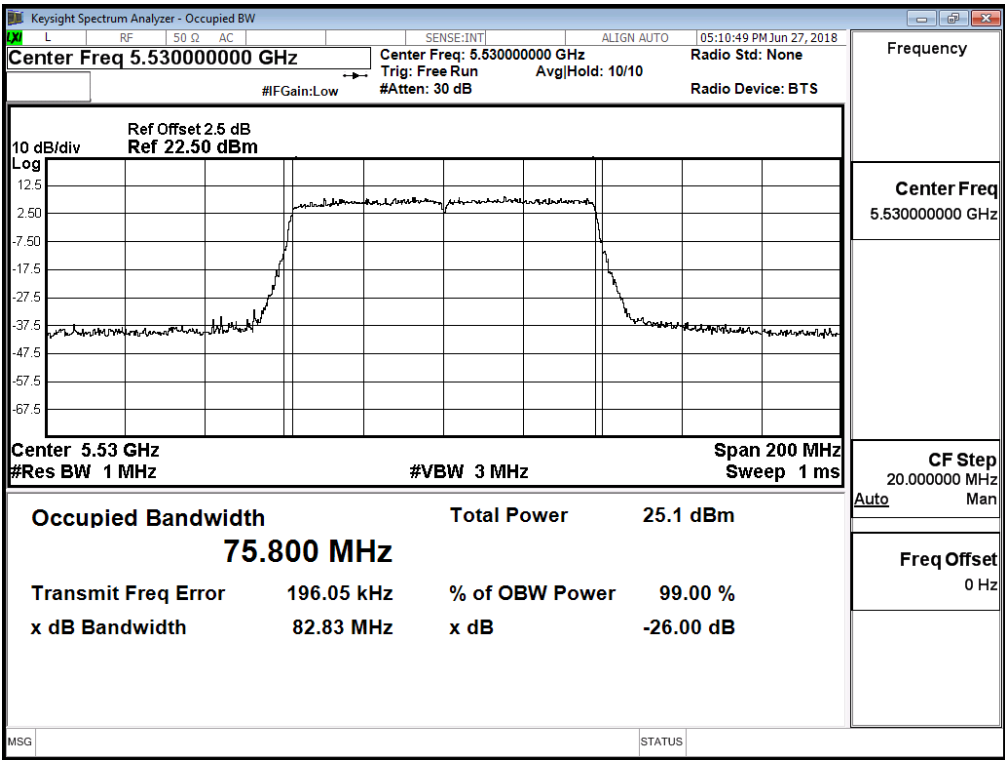


99% Bandwidth:

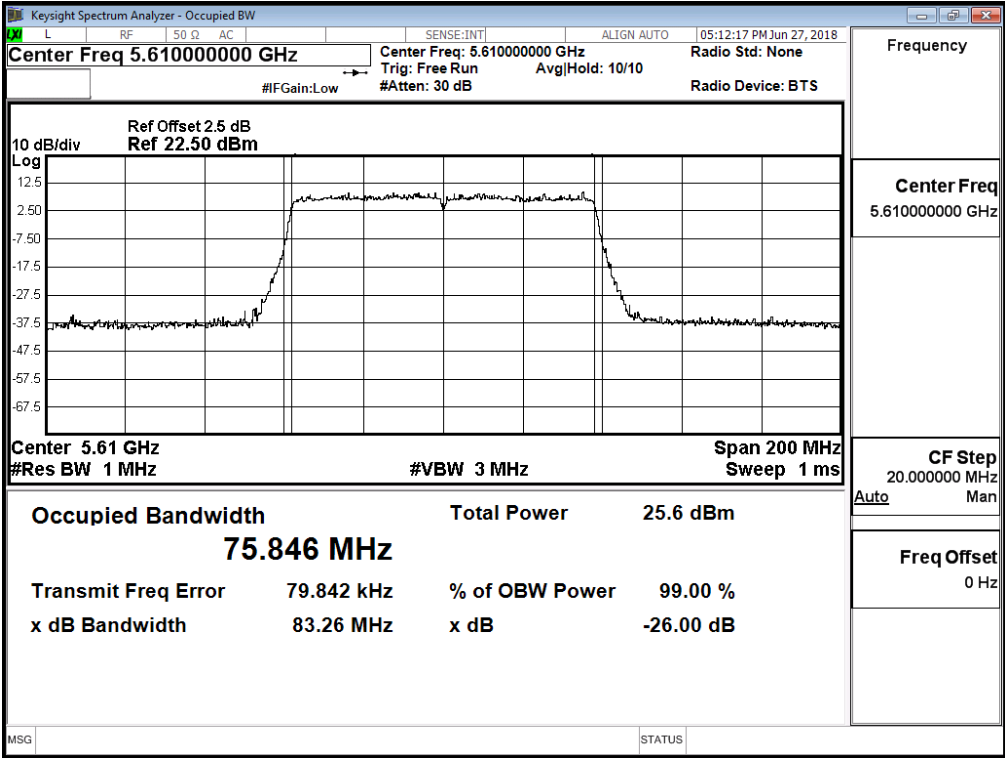
Channel 58 – Chain D



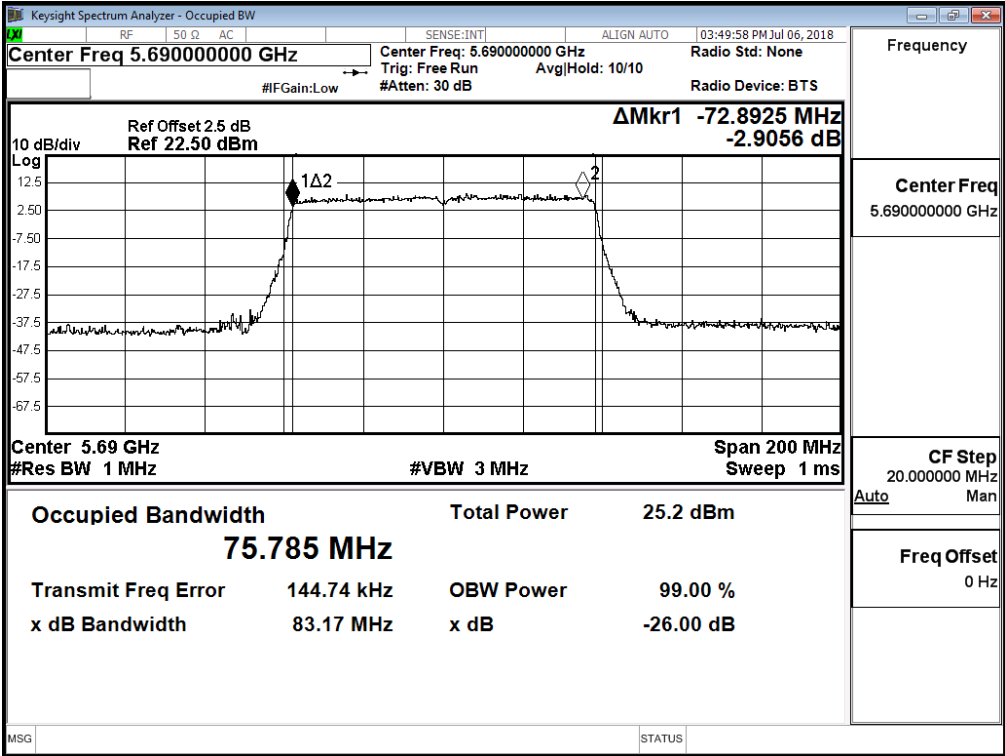
Channel 106 – Chain D



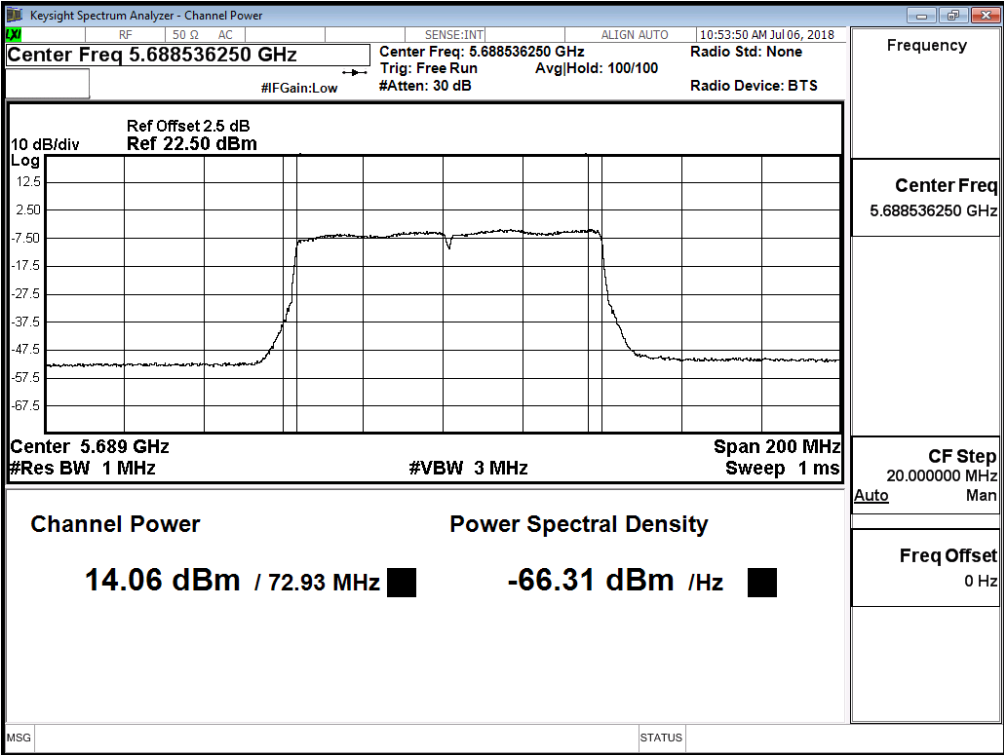
Channel 122 – Chain D



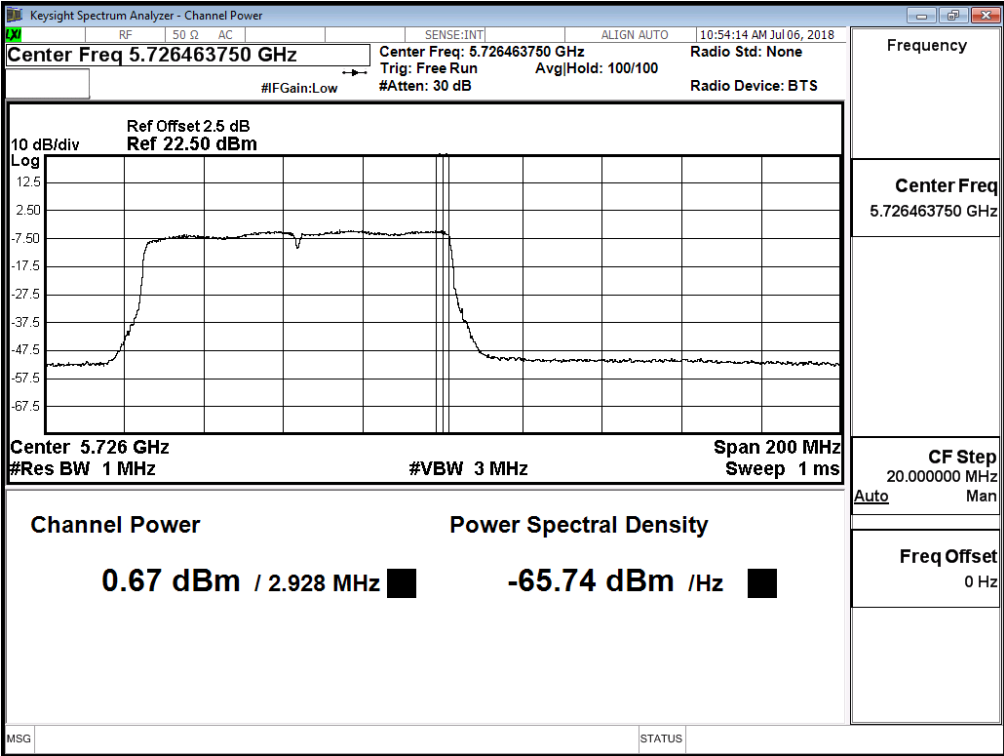
Channel 138 – Chain D



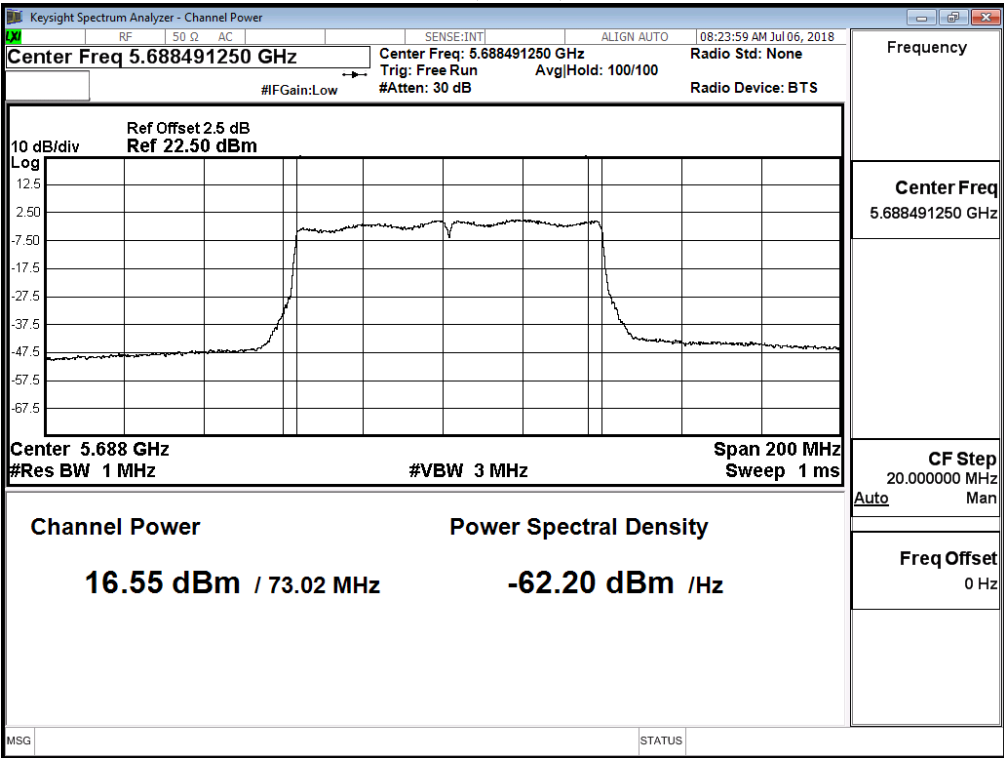
Maximum conducted output power:
Channel 138 (Band3) – Chain A



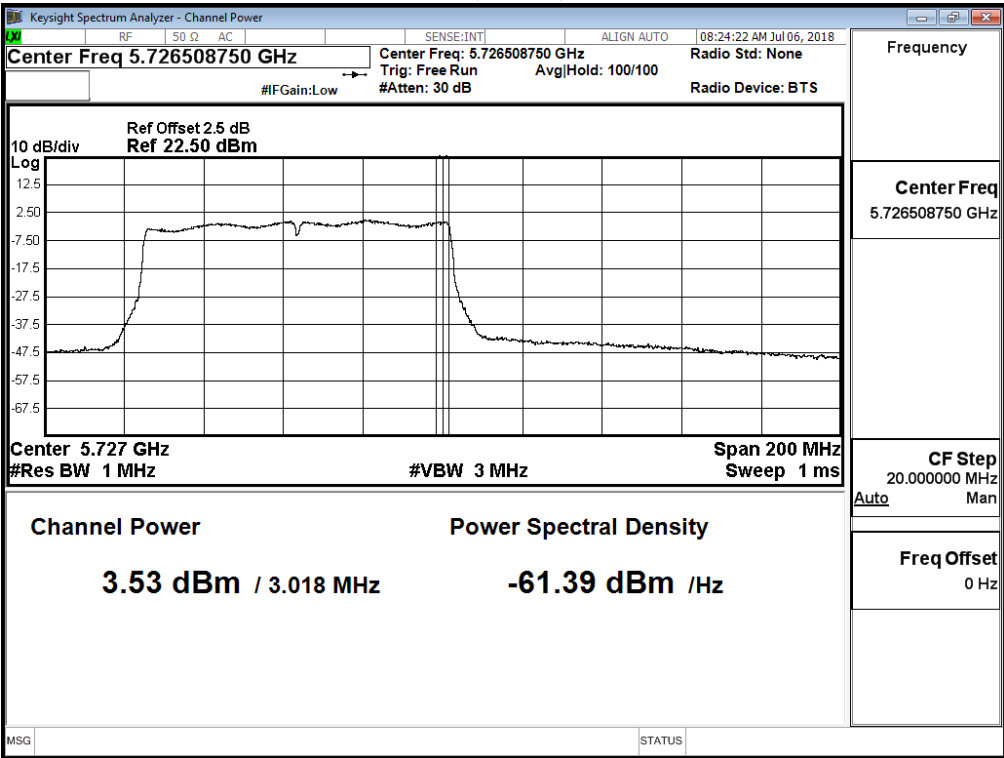
Maximum conducted output power:
Channel 138 (Band4) – Chain A

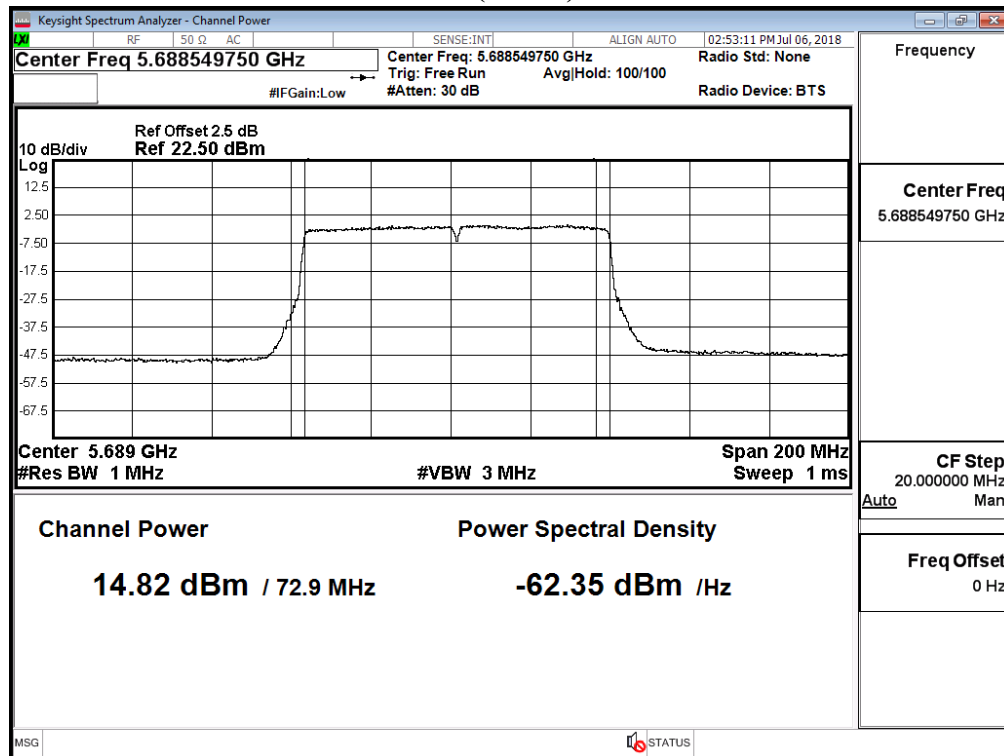
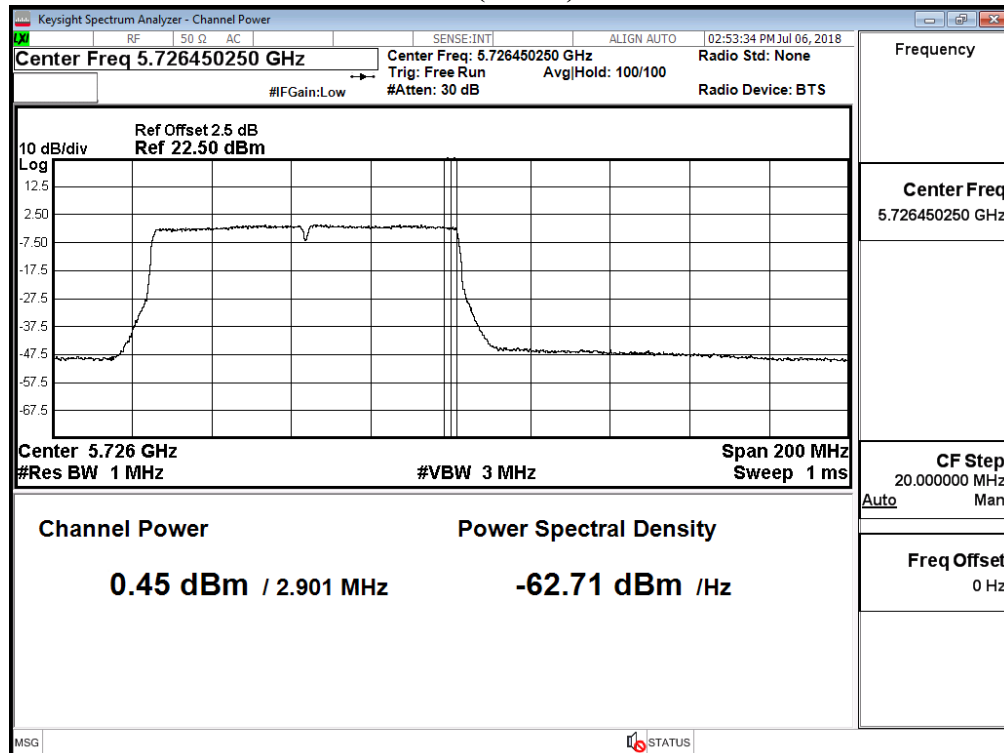


Maximum conducted output power:
Channel 138 (Band3) – Chain B

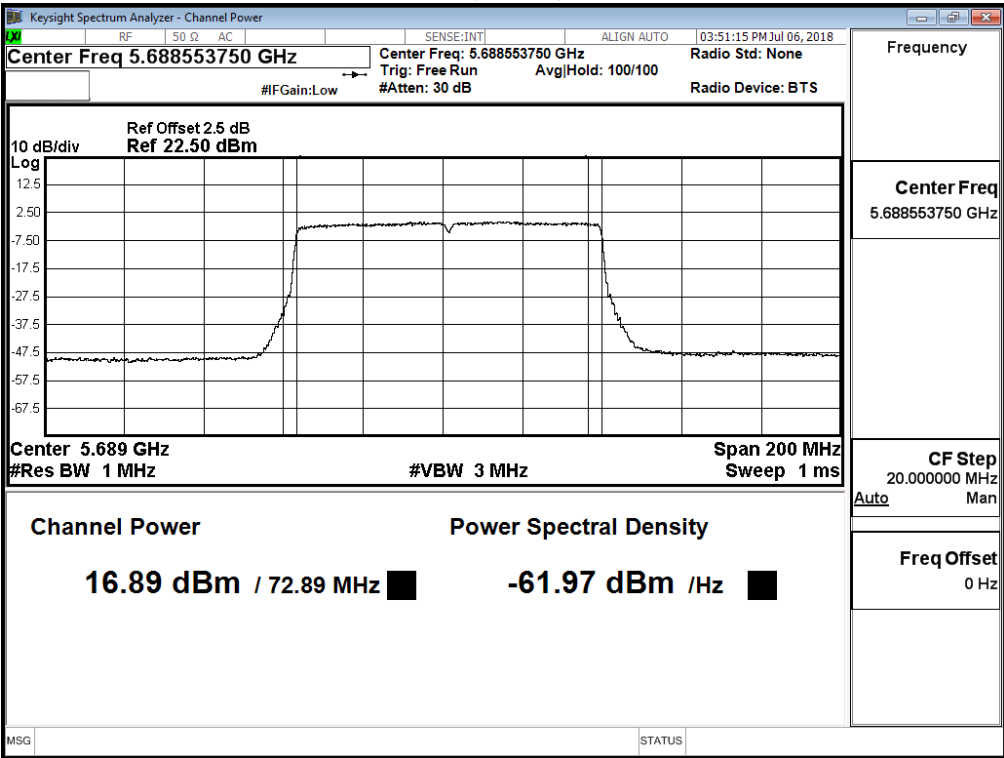


Maximum conducted output power:
Channel 138 (Band4) – Chain B

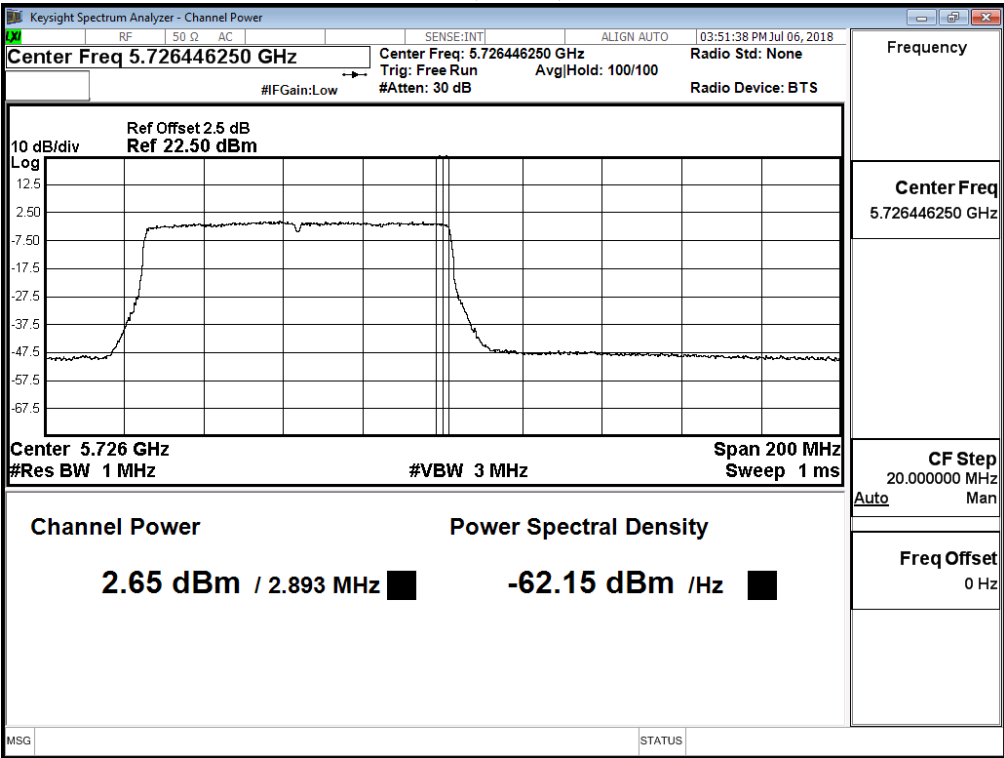


Maximum conducted output power:**Channel 138 (Band3) – Chain C****Maximum conducted output power:****Channel 138 (Band4) – Chain C**

Maximum conducted output power:
Channel 138 (Band3) – Chain D



Maximum conducted output power:
Channel 138 (Band4) – Chain D



Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Maximum conducted output power
 Test Site : No.3 OATS
 Test Date : 2018/07/20
 Test Mode : Mode 1: Transmit (802.11a-6Mbps) (Antenna No.18)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		6	9	12	18	24	36	48	54	
		Measurement Level (dBm)								
36	5180	11.95	--	--	--	--	--	--	--	<15dBm
44	5220	12.88	12.79	12.71	12.66	12.57	12.51	12.41	12.32	<15dBm
48	5240	12.95	--	--	--	--	--	--	--	<15dBm
52	5260	11.86	--	--	--	--	--	--	--	<15dBm
60	5300	12.22	12.16	12.1	12.01	11.92	11.85	11.79	11.7	<15dBm
64	5320	12.57	--	--	--	--	--	--	--	<15dBm
100	5500	13.35	--	--	--	--	--	--	--	<15dBm
116	5580	13.88	13.8	13.7	13.6	13.55	13.49	13.42	13.32	<15dBm
140	5700	12.89	--	--	--	--	--	--	--	<15dBm
149	5745	20.31	--	--	--	--	--	--	--	<30dBm
157	5785	20.28	20.18	20.1	20.05	19.99	19.93	19.85	19.76	<30dBm
165	5825	20.51	--	--	--	--	--	--	--	<30dBm

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)								Required Limit
		6	9	12	18	24	36	48	54	
		Measurement Level (dBm)								
36	5180	11.9	--	--	--	--	--	--	--	<15dBm
44	5220	12.79	12.74	12.66	12.58	12.49	12.4	12.31	12.24	<15dBm
48	5240	12.88	--	--	--	--	--	--	--	<15dBm
52	5260	11.8	--	--	--	--	--	--	--	<15dBm
60	5300	12.15	12.09	12.04	11.99	11.93	11.84	11.76	11.71	<15dBm
64	5320	12.5	--	--	--	--	--	--	--	<15dBm
100	5500	13.26	--	--	--	--	--	--	--	<15dBm
116	5580	13.79	13.71	13.62	13.53	13.48	13.39	13.32	13.23	<15dBm
140	5700	12.81	--	--	--	--	--	--	--	<15dBm
149	5745	20.22	--	--	--	--	--	--	--	<30dBm
157	5785	20.19	20.14	20.09	20.03	19.94	19.85	19.75	19.68	<30dBm
165	5825	20.42	--	--	--	--	--	--	--	<30dBm

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)								Required Limit
		6	9	12	18	24	36	48	54	
		Measurement Level (dBm)								
36	5180	11.85	--	--	--	--	--	--	--	<15dBm
44	5220	12.8	12.73	12.66	12.59	12.49	12.39	12.3	12.24	<15dBm
48	5240	12.87	--	--	--	--	--	--	--	<15dBm
52	5260	11.8	--	--	--	--	--	--	--	<15dBm
60	5300	12.14	12.08	12.01	11.95	11.88	11.83	11.78	11.7	<15dBm
64	5320	12.49	--	--	--	--	--	--	--	<15dBm
100	5500	13.27	--	--	--	--	--	--	--	<15dBm
116	5580	13.79	13.74	13.69	13.59	13.52	13.43	13.38	13.28	<15dBm
140	5700	12.82	--	--	--	--	--	--	--	<15dBm
149	5745	20.22	--	--	--	--	--	--	--	<30dBm
157	5785	20.19	20.09	20.02	19.94	19.84	19.77	19.7	19.63	<30dBm
165	5825	20.44	--	--	--	--	--	--	--	<30dBm

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

CHAIN D

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		6	9	12	18	24	36	48	54	
		Measurement Level (dBm)								
36	5180	11.87	--	--	--	--	--	--	--	<15dBm
44	5220	12.78	12.73	12.65	12.59	12.53	12.47	12.41	12.35	<15dBm
48	5240	12.85	--	--	--	--	--	--	--	<15dBm
52	5260	11.8	--	--	--	--	--	--	--	<15dBm
60	5300	12.12	12.07	11.98	11.91	11.84	11.76	11.71	11.66	<15dBm
64	5320	12.52	--	--	--	--	--	--	--	<15dBm
100	5500	13.26	--	--	--	--	--	--	--	<15dBm
116	5580	13.81	13.71	13.65	13.6	13.54	13.48	13.38	13.3	<15dBm
140	5700	12.84	--	--	--	--	--	--	--	<15dBm
149	5745	20.26	--	--	--	--	--	--	--	<30dBm
157	5785	20.18	20.12	20.03	19.94	19.85	19.75	19.69	19.62	<30dBm
165	5825	20.44	--	--	--	--	--	--	--	<30dBm

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

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
36	5180	--	11.95	--	--	--	11.95	15	--	Pass
44	5220	--	12.88	--	--	--	12.88	15	--	Pass
48	5240	--	12.95	--	--	--	12.95	15	--	Pass
52	5260	16.471	11.86	--	--	--	11.86	15	14.17	Pass
60	5300	16.479	12.22	--	--	--	12.22	15	14.17	Pass
64	5320	16.495	12.57	--	--	--	12.57	15	14.17	Pass
100	5500	16.484	13.35	--	--	--	13.35	15	14.17	Pass
116	5580	16.502	13.88	--	--	--	13.88	15	14.18	Pass
140	5700	16.481	12.89	--	--	--	12.89	15	14.17	Pass
149	5745	--	20.31	--	--	--	20.31	30	--	Pass
157	5785	--	20.28	--	--	--	20.28	30	--	Pass
165	5825	--	20.51	--	--	--	20.51	30	--	Pass

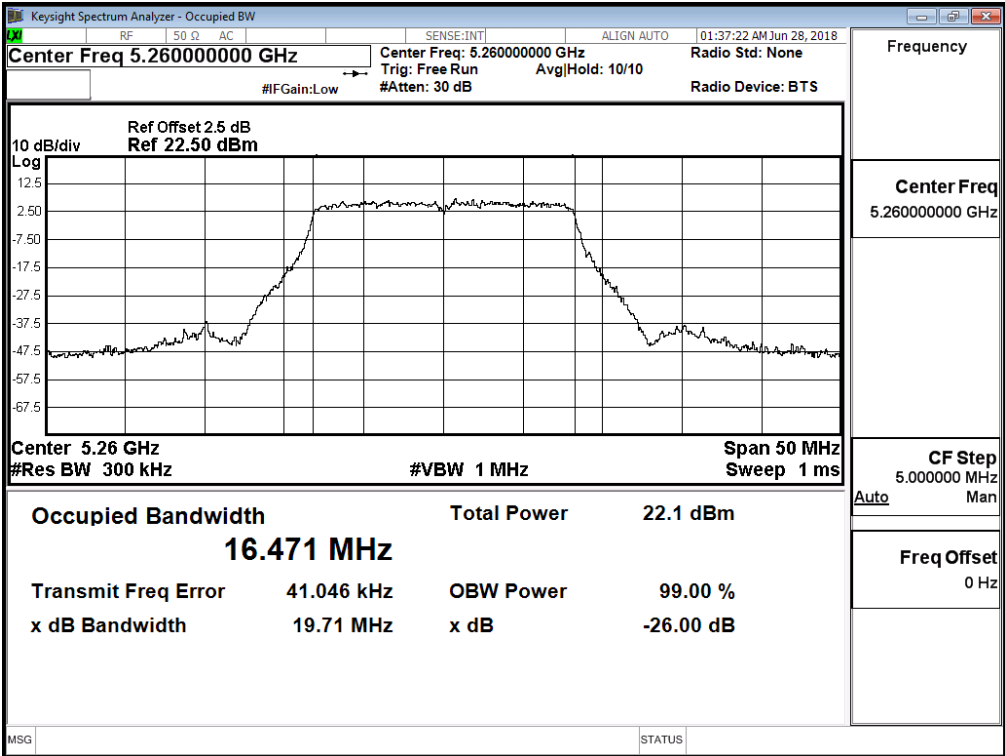
Note:

1. Power Output Value = Reading value on average power meter + cable loss
2. 26 dB Bandwidth is the bandwidth of chain A, chain B, chain C or chain D whichever is less bandwidth, output power limitation is more stringent.
3. Band 5.725-5.85 GHz, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information

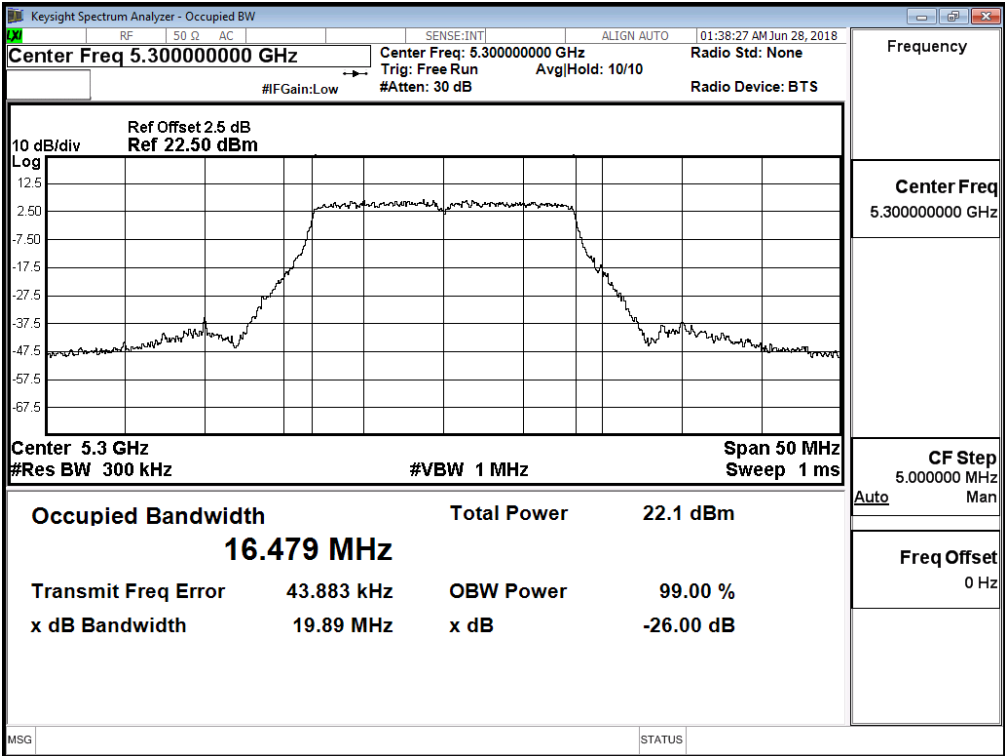
Maximum conducted output power Measurement with Transmit power Control (TPC)

Channel No	Frequency Range (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Result
52	5260	5.58	--	--	--	5.58	Pass
60	5300	6.06	--	--	--	6.06	Pass
64	5320	6.24	--	--	--	6.24	Pass
100	5500	7.06	--	--	--	7.06	Pass
116	5580	7.67	--	--	--	7.67	Pass
140	5700	6.60	--	--	--	6.60	Pass

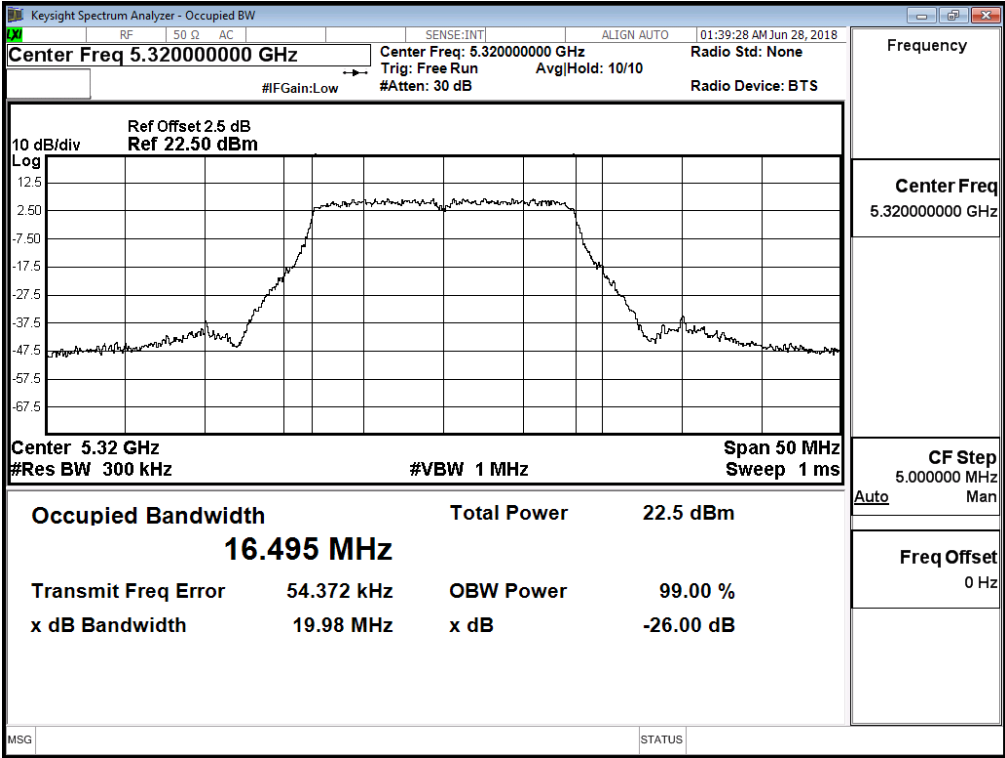
99% Bandwidth:
Channel 52:



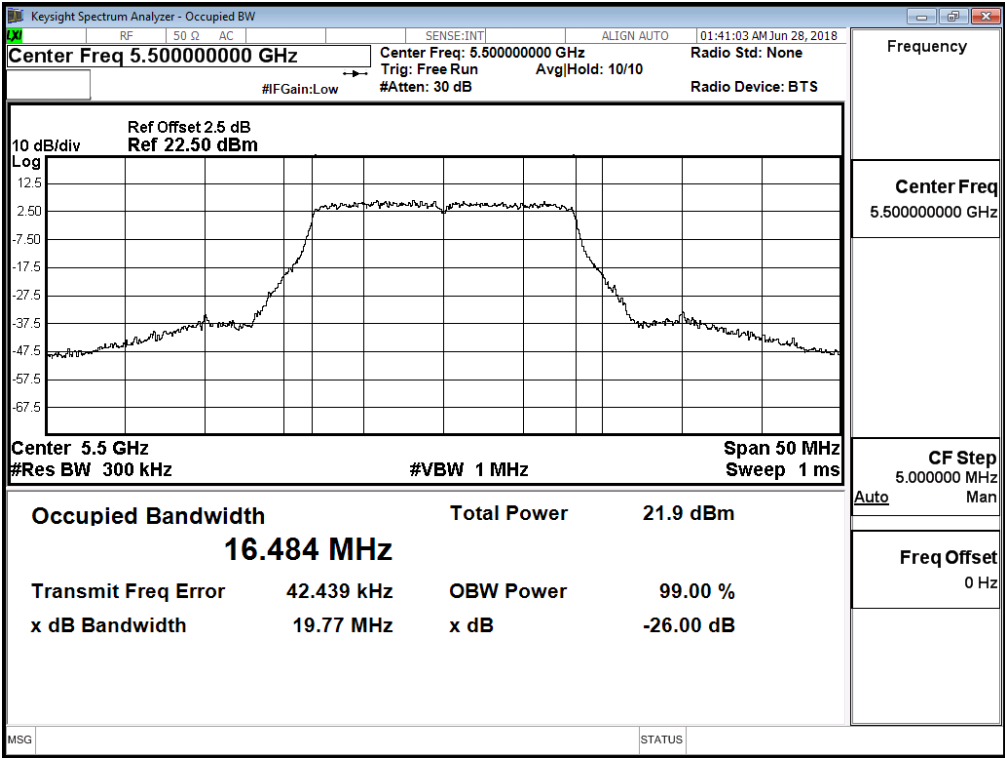
Channel 60:



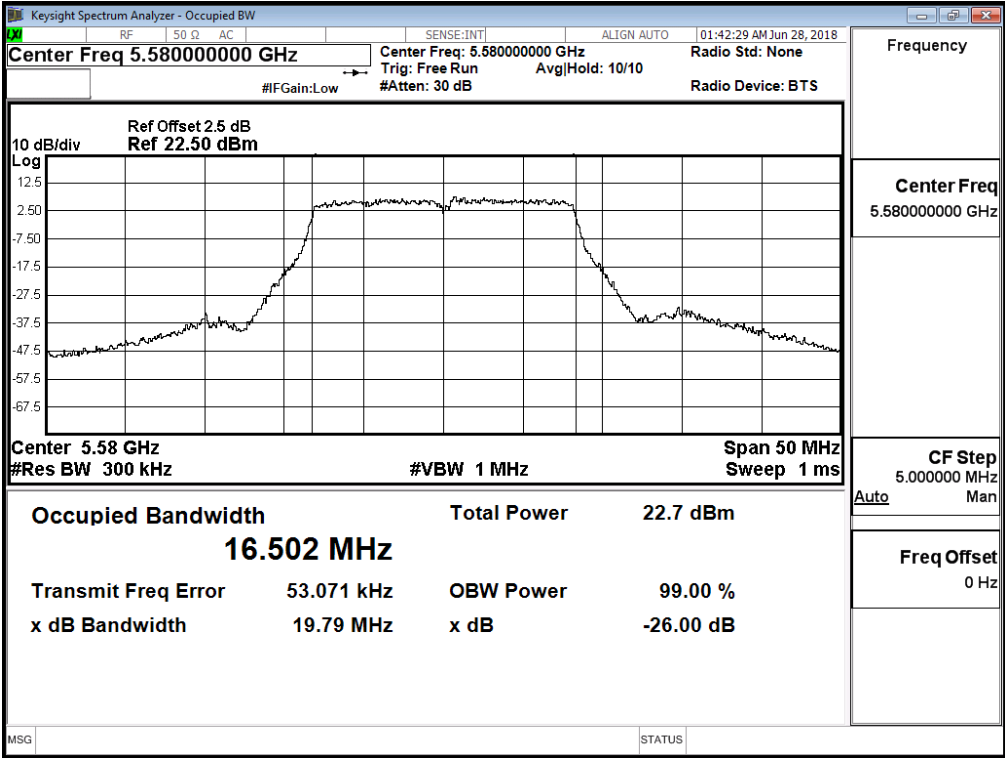
Channel 64:



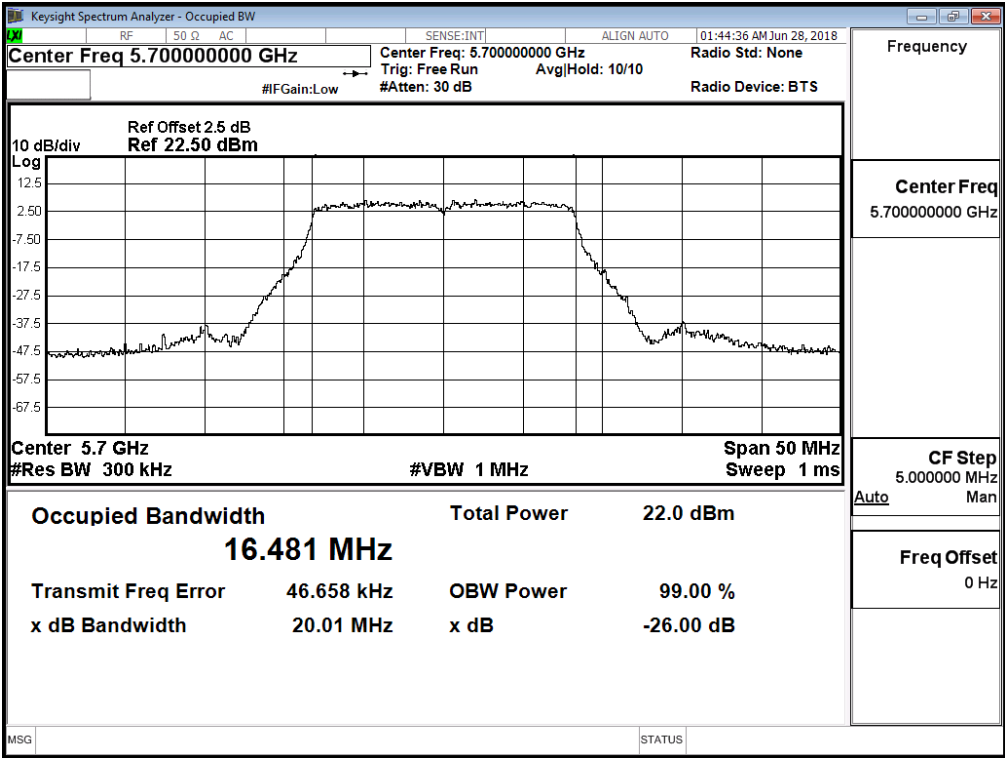
Channel 100:



Channel 116:



Channel 140:



Product : MOXA IEEE 802.11a/n/ac 4*4 module
 Test Item : Maximum conducted output power
 Test Site : No.3 OATS
 Test Date : 2018/07/20
 Test Mode : Mode 2: Transmit (802.11n-20BW 28.8Mbps) (Antenna No.18)

CHAIN A

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	
		Measurement Level (dBm)								
36	5180	5.98	--	--	--	--	--	--	--	<15dBm
44	5220	6.01	5.91	5.84	5.75	5.65	5.56	5.46	5.36	<15dBm
48	5240	6.18	--	--	--	--	--	--	--	<15dBm
52	5260	5.49	--	--	--	--	--	--	--	<15dBm
60	5300	5.88	5.79	5.69	5.61	5.56	5.47	5.41	5.36	<15dBm
64	5320	5.61	--	--	--	--	--	--	--	<15dBm
100	5500	5.77	--	--	--	--	--	--	--	<15dBm
116	5580	5.56	5.47	5.4	5.31	5.25	5.16	5.07	4.98	<15dBm
140	5700	5.17	--	--	--	--	--	--	--	<15dBm
149	5745	18.61	--	--	--	--	--	--	--	<30dBm
157	5785	18.24	18.15	18.07	18.02	17.97	17.88	17.8	17.74	<30dBm
165	5825	18.47	--	--	--	--	--	--	--	<30dBm

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)								Required Limit
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	
		Measurement Level (dBm)								
36	5180	7.08	--	--	--	--	--	--	--	<15dBm
44	5220	6.64	6.54	6.49	6.4	6.35	6.28	6.21	6.14	<15dBm
48	5240	6.51	--	--	--	--	--	--	--	<15dBm
52	5260	6.04	--	--	--	--	--	--	--	<15dBm
60	5300	5.94	5.88	5.79	5.73	5.67	5.6	5.52	5.42	<15dBm
64	5320	7.01	--	--	--	--	--	--	--	<15dBm
100	5500	6.81	--	--	--	--	--	--	--	<15dBm
116	5580	5.76	5.68	5.6	5.53	5.48	5.4	5.34	5.27	<15dBm
140	5700	6.83	--	--	--	--	--	--	--	<15dBm
149	5745	20.29	--	--	--	--	--	--	--	<30dBm
157	5785	20.08	20.01	19.95	19.89	19.82	19.76	19.71	19.66	<30dBm
165	5825	19.89	--	--	--	--	--	--	--	<30dBm

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)								Required Limit
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	
		Measurement Level (dBm)								
36	5180	7.37	--	--	--	--	--	--	--	<15dBm
44	5220	6.69	6.64	6.57	6.52	6.47	6.41	6.34	6.25	<15dBm
48	5240	6.88	--	--	--	--	--	--	--	<15dBm
52	5260	6.35	--	--	--	--	--	--	--	<15dBm
60	5300	6.93	6.88	6.8	6.75	6.69	6.6	6.51	6.42	<15dBm
64	5320	6.98	--	--	--	--	--	--	--	<15dBm
100	5500	6.71	--	--	--	--	--	--	--	<15dBm
116	5580	6.64	6.58	6.51	6.45	6.38	6.3	6.25	6.18	<15dBm
140	5700	6.33	--	--	--	--	--	--	--	<15dBm
149	5745	19.88	--	--	--	--	--	--	--	<30dBm
157	5785	20.04	19.98	19.92	19.87	19.79	19.71	19.62	19.53	<30dBm
165	5825	19.73	--	--	--	--	--	--	--	<30dBm

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

CHAIN D

Cable loss=1dB		Maximum conducted output power								
Channel No.	Frequency (MHz)	Data Rate (Mbps)								Required Limit
		14.4	28.9	43.3	57.8	86.7	115.6	130	144.4	
		Measurement Level (dBm)								
36	5180	6.15	--	--	--	--	--	--	--	<15dBm
44	5220	5.95	5.9	5.82	5.75	5.68	5.61	5.51	5.43	<15dBm
48	5240	5.95	--	--	--	--	--	--	--	<15dBm
52	5260	5.22	--	--	--	--	--	--	--	<15dBm
60	5300	5.9	5.81	5.73	5.65	5.6	5.54	5.47	5.39	<15dBm
64	5320	5.94	--	--	--	--	--	--	--	<15dBm
100	5500	6.27	--	--	--	--	--	--	--	<15dBm
116	5580	6.36	6.27	6.22	6.14	6.06	6	5.94	5.87	<15dBm
140	5700	6.25	--	--	--	--	--	--	--	<15dBm
149	5745	19.32	--	--	--	--	--	--	--	<30dBm
157	5785	19.82	19.77	19.67	19.61	19.53	19.47	19.39	19.34	<30dBm
165	5825	19.72	--	--	--	--	--	--	--	<30dBm

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

**Maximum conducted output power Measurement:
(CHAIN A+ B+C+D)**

Channel No	Frequency Range (MHz)	99% Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
36	5180	--	5.98	7.08	7.37	6.15	12.71	15	--	Pass
44	5220	--	6.01	6.64	6.69	5.95	12.36	15	--	Pass
48	5240	--	6.18	6.51	6.88	5.95	12.41	15	--	Pass
52	5260	17.911	5.49	6.04	6.35	5.22	11.82	15	14.53	Pass
60	5300	17.873	5.88	5.94	6.93	5.90	12.21	15	14.52	Pass
64	5320	17.901	5.61	7.01	6.98	5.94	12.45	15	14.53	Pass
100	5500	17.882	5.77	6.81	6.71	6.27	12.43	15	14.52	Pass
116	5580	17.892	5.56	5.76	6.64	6.36	12.12	15	14.53	Pass
140	5700	17.914	5.17	6.83	6.33	6.25	12.21	15	14.53	Pass
149	5745	--	18.61	20.29	19.88	19.32	25.59	30	--	Pass
157	5785	--	18.24	20.08	20.04	19.82	25.63	30	--	Pass
165	5825	--	18.47	19.89	19.73	19.72	25.51	30	--	Pass

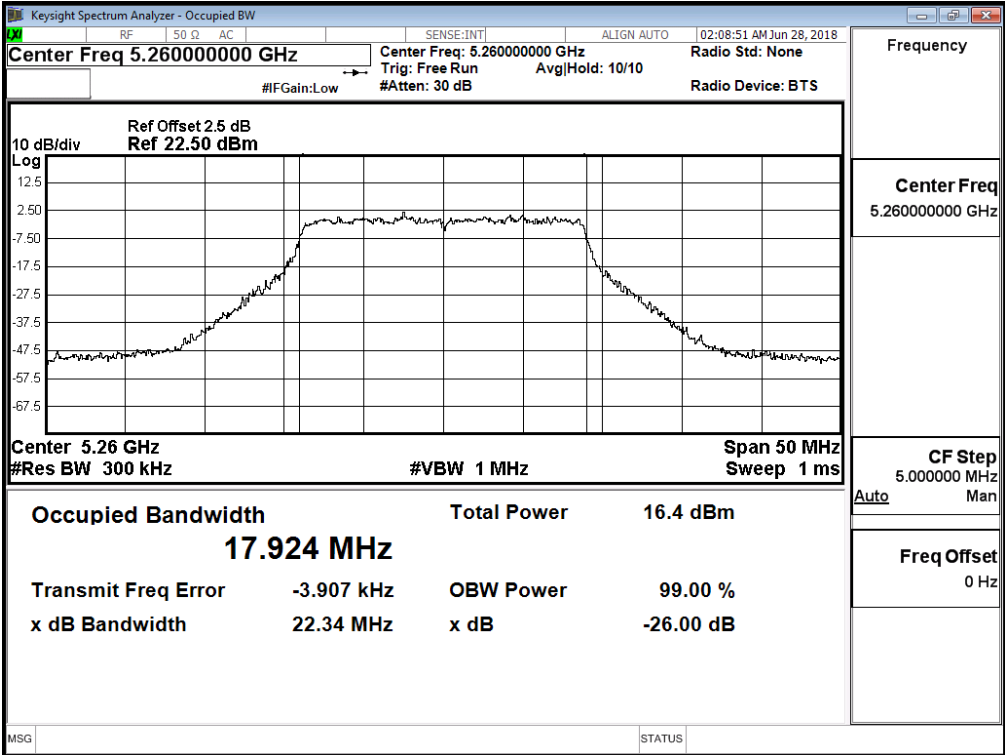
Note:

- Output Power (dBm) = 10*LOG (Chain A (mW)+ Chain B (mW) + Chain C (mW) + Chain D (mW))
- 26 dB Bandwidth is the bandwidth of chain A, chain B, chain C or chain D whichever is less bandwidth, output power limitation is more stringent.
- Band 5.725-5.85 GHz, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information

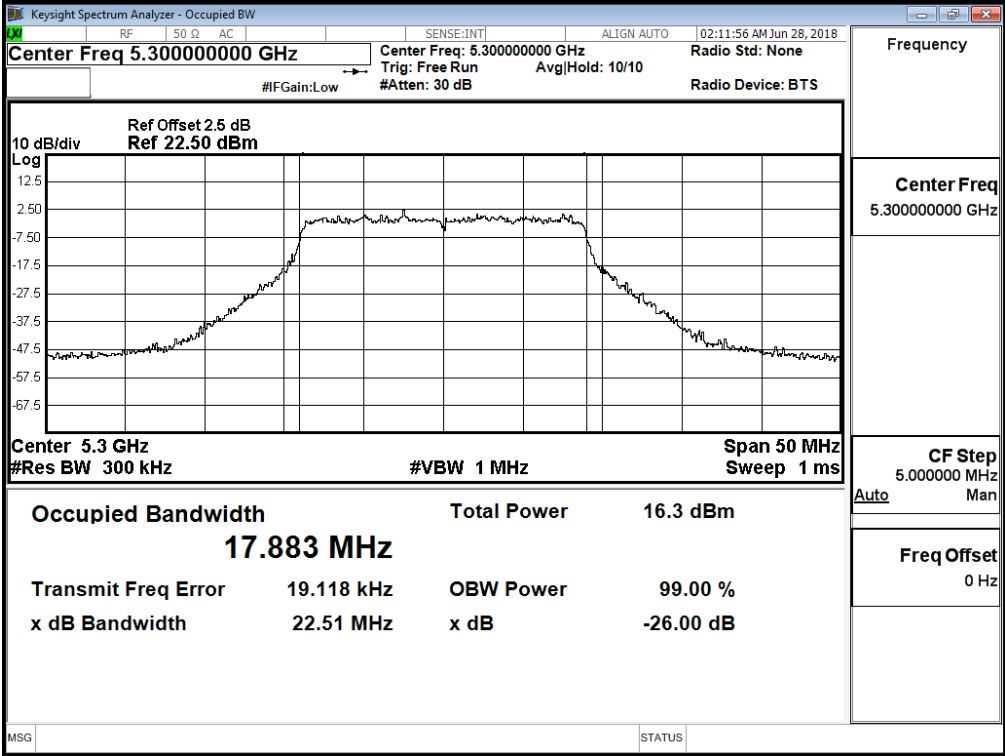
Maximum conducted output power Measurement with Transmit power Control (TPC)
(CHAIN A+ B+C+D)

Channel No	Frequency Range (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Result
52	5260	-0.74	-0.18	0.24	-1.01	5.63	Pass
60	5300	-0.34	-0.40	0.59	-0.43	5.90	Pass
64	5320	-0.77	0.88	0.68	-0.17	6.23	Pass
100	5500	-0.36	0.62	0.49	-0.11	6.20	Pass
116	5580	-0.67	-0.46	0.51	0.14	5.93	Pass
140	5700	-1.16	0.56	0.11	-0.08	5.92	Pass

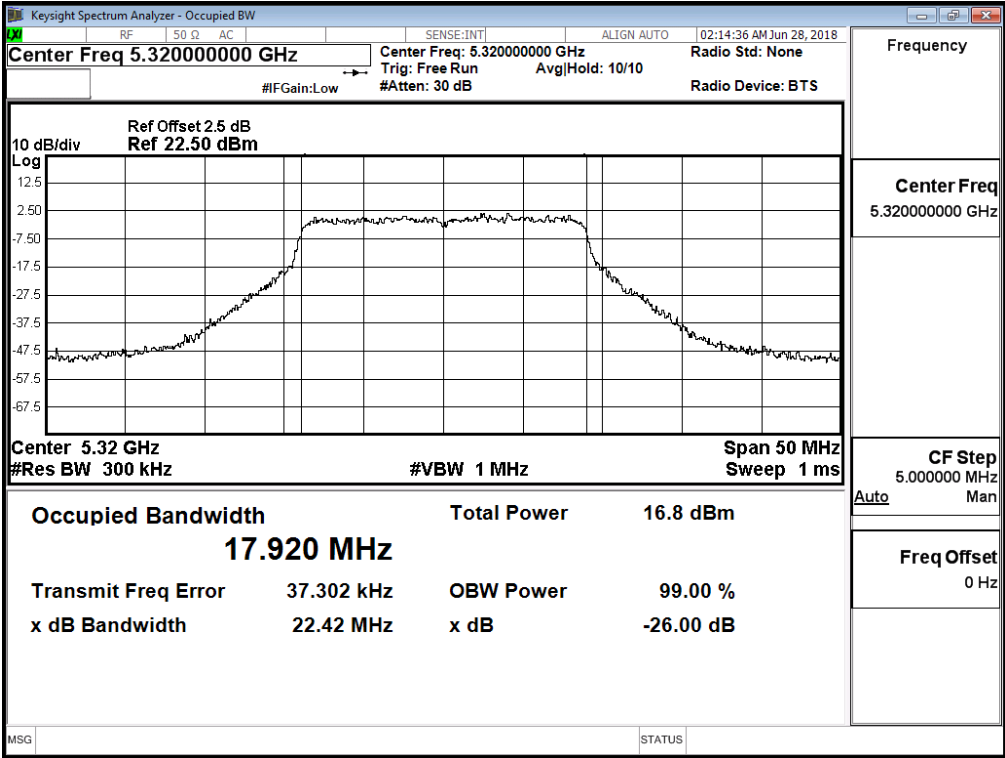
99% Bandwidth:
Channel 52 -Chain A



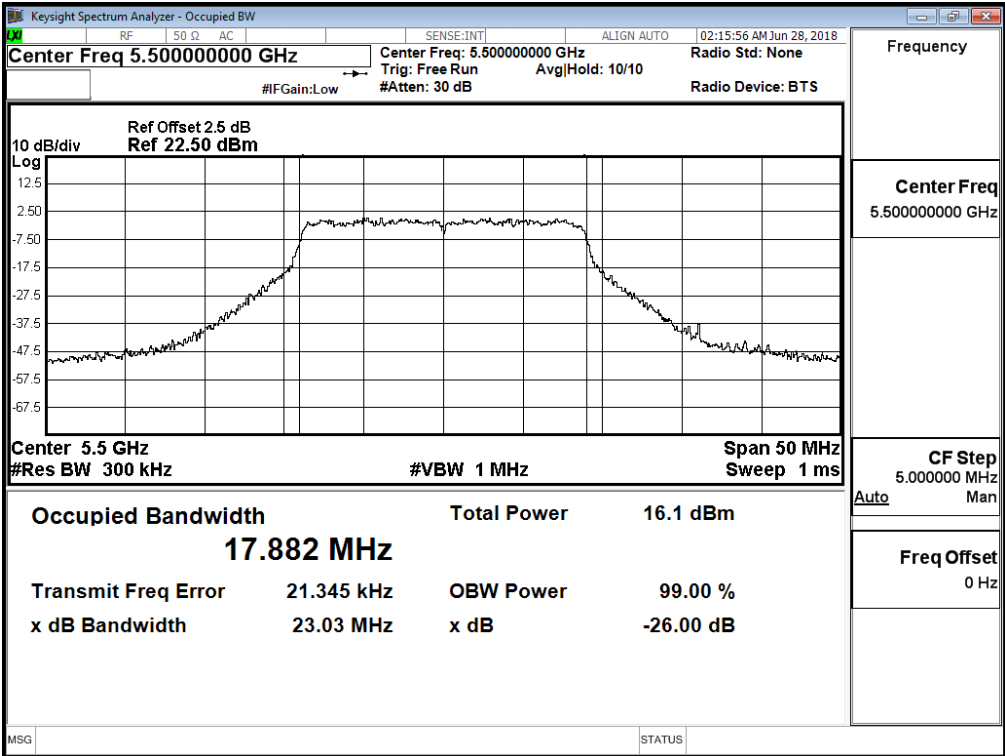
Channel 60 -Chain A



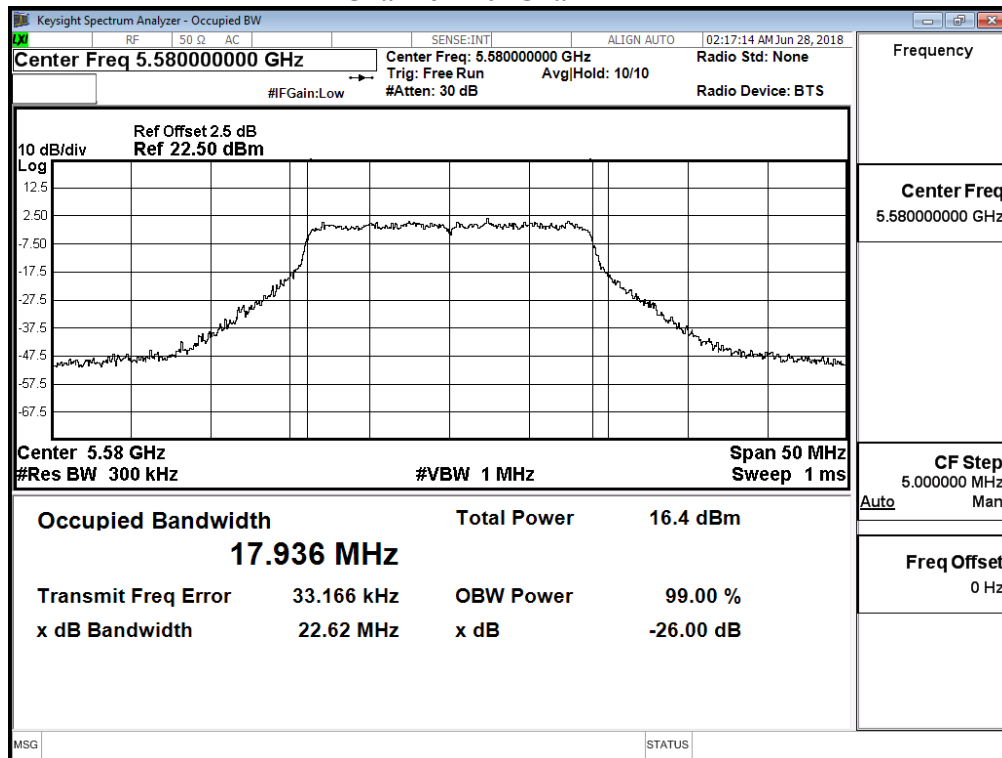
Channel 64 -Chain A



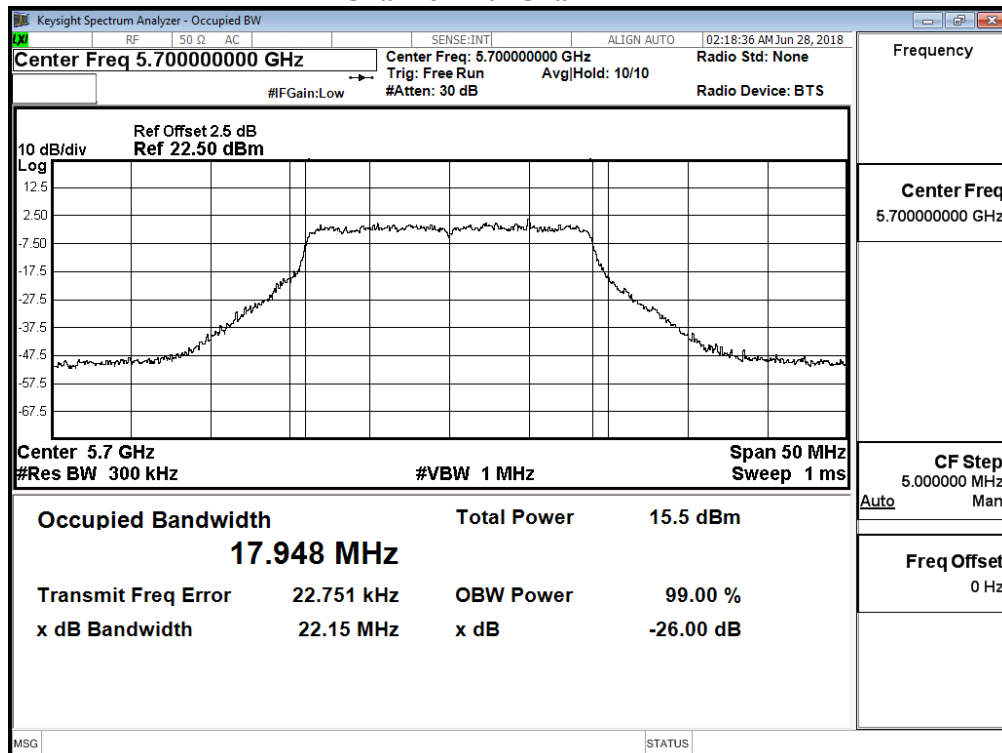
Channel 100 -Chain A



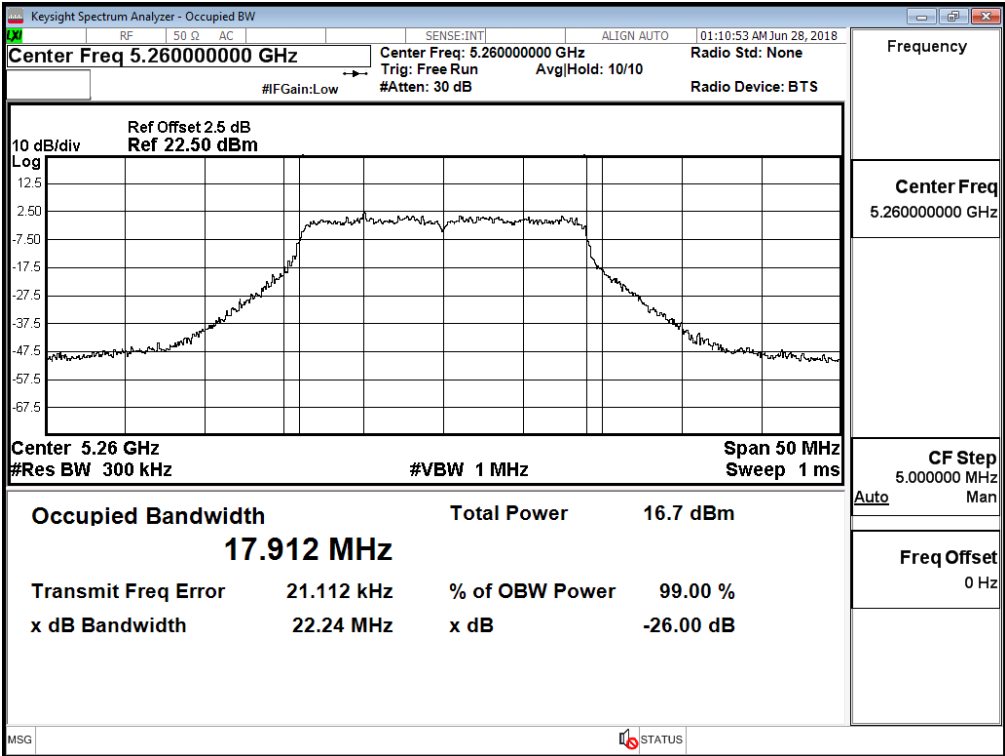
Channel 116 -Chain A



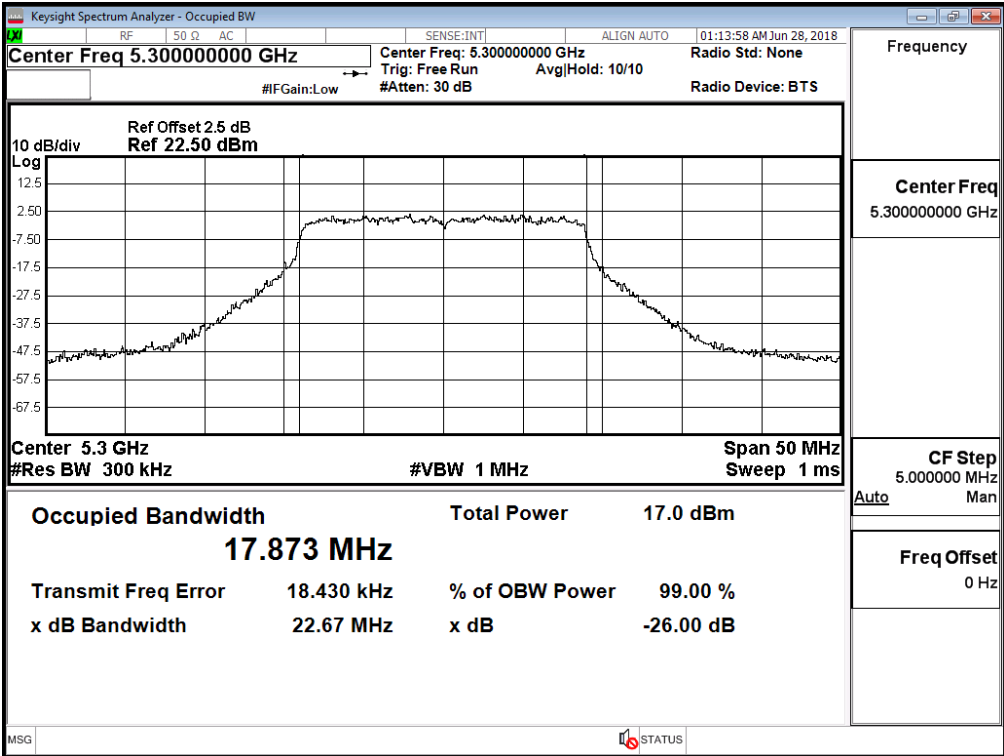
Channel 140 -Chain A



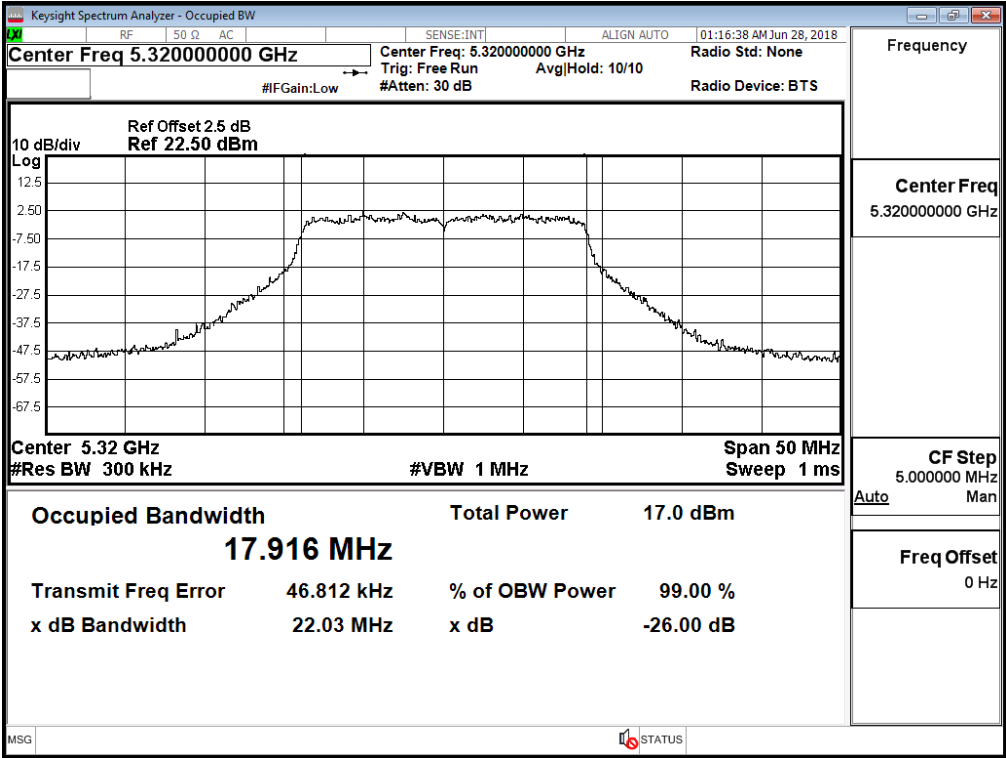
99% Bandwidth:
Channel 52 -Chain B



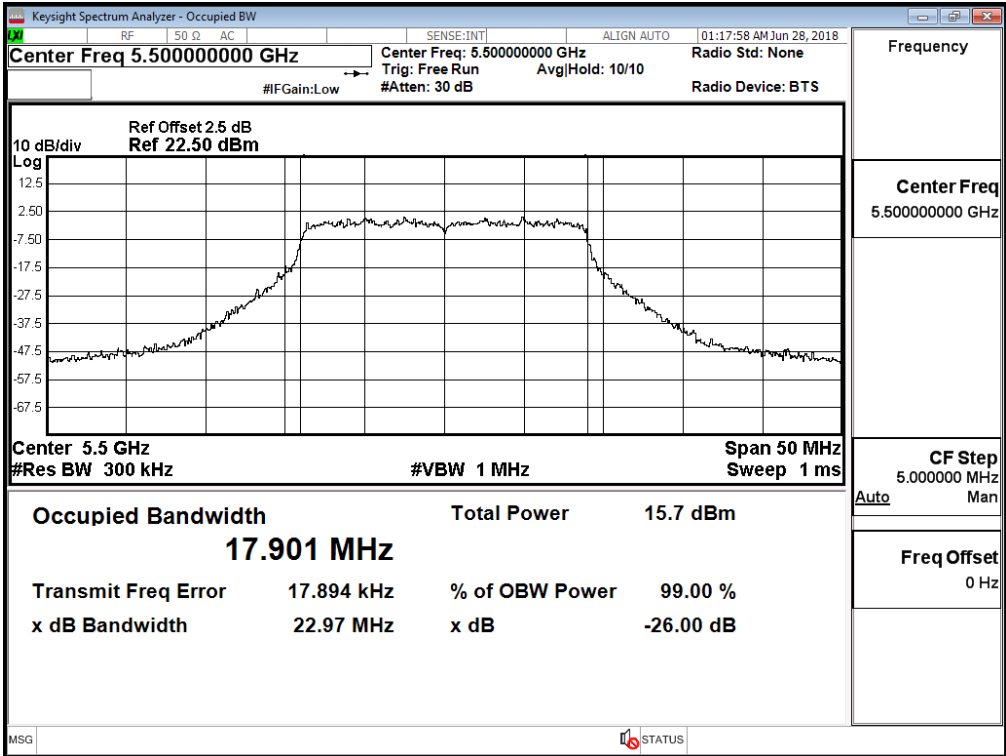
Channel 60 -Chain B



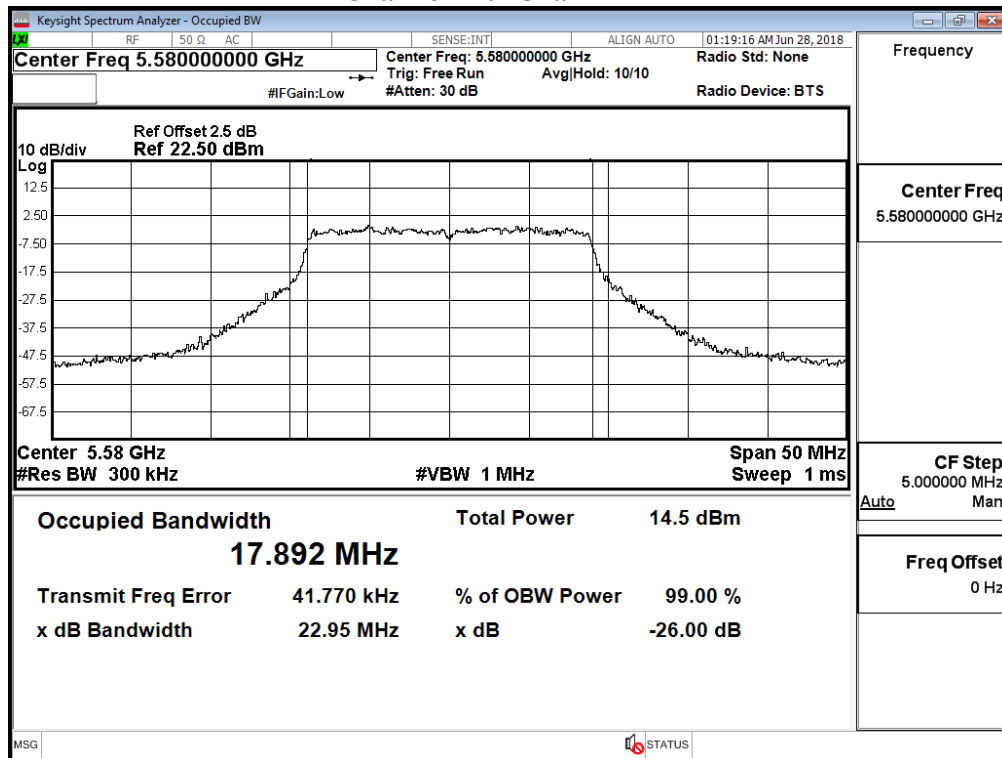
Channel 64 -Chain B



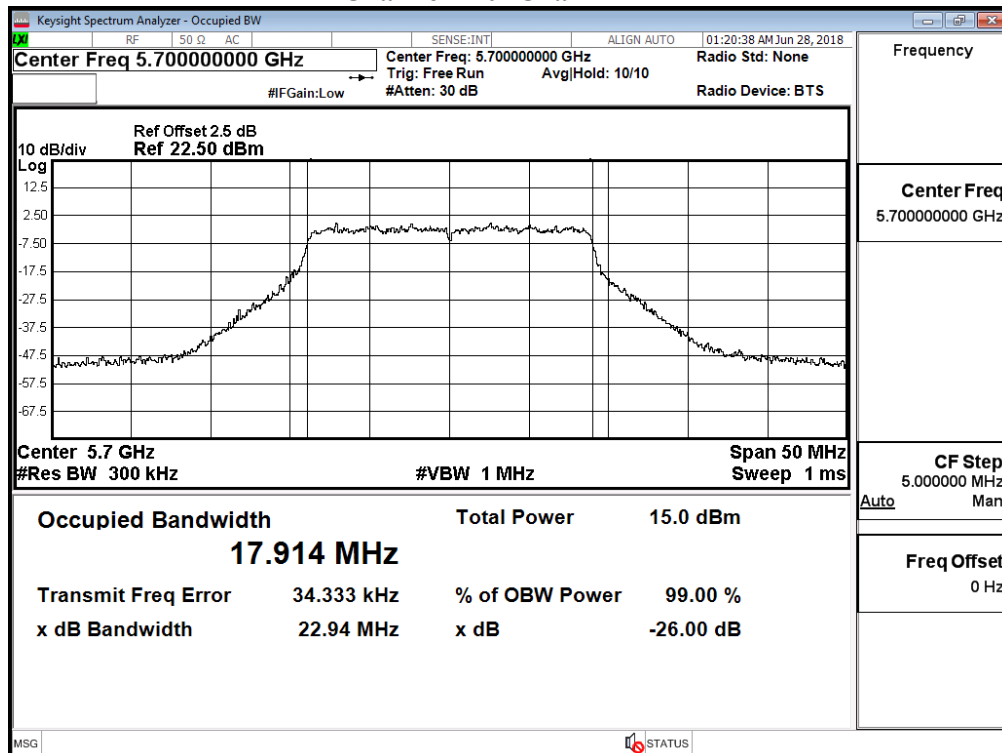
Channel 100 -Chain B



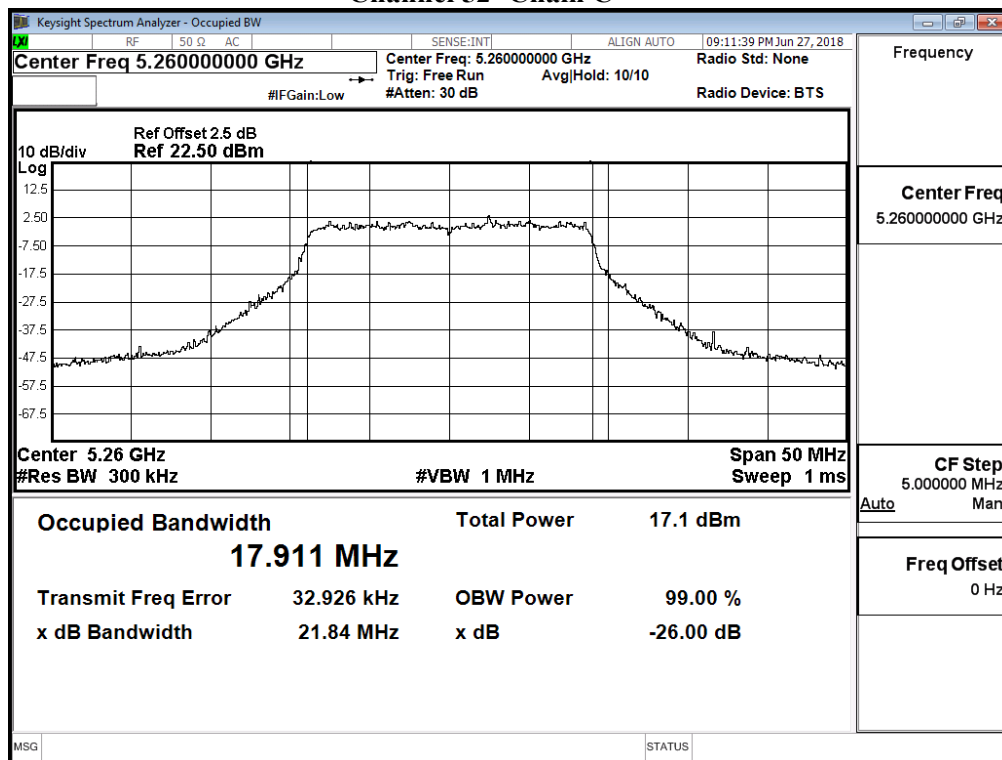
Channel 116 -Chain B



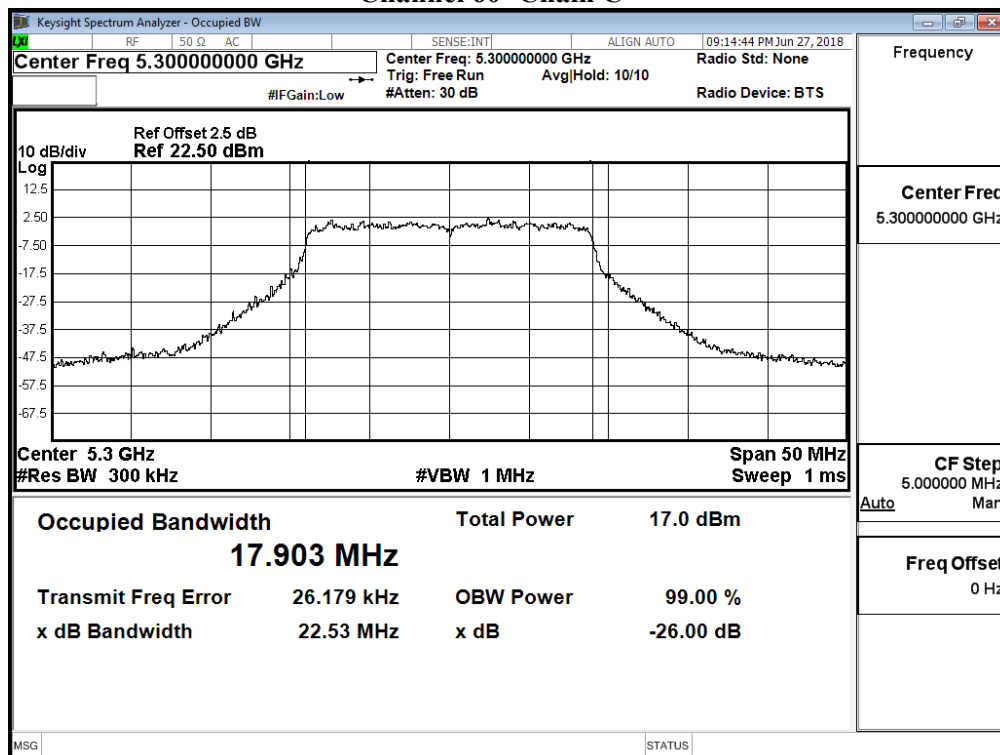
Channel 140 -Chain B



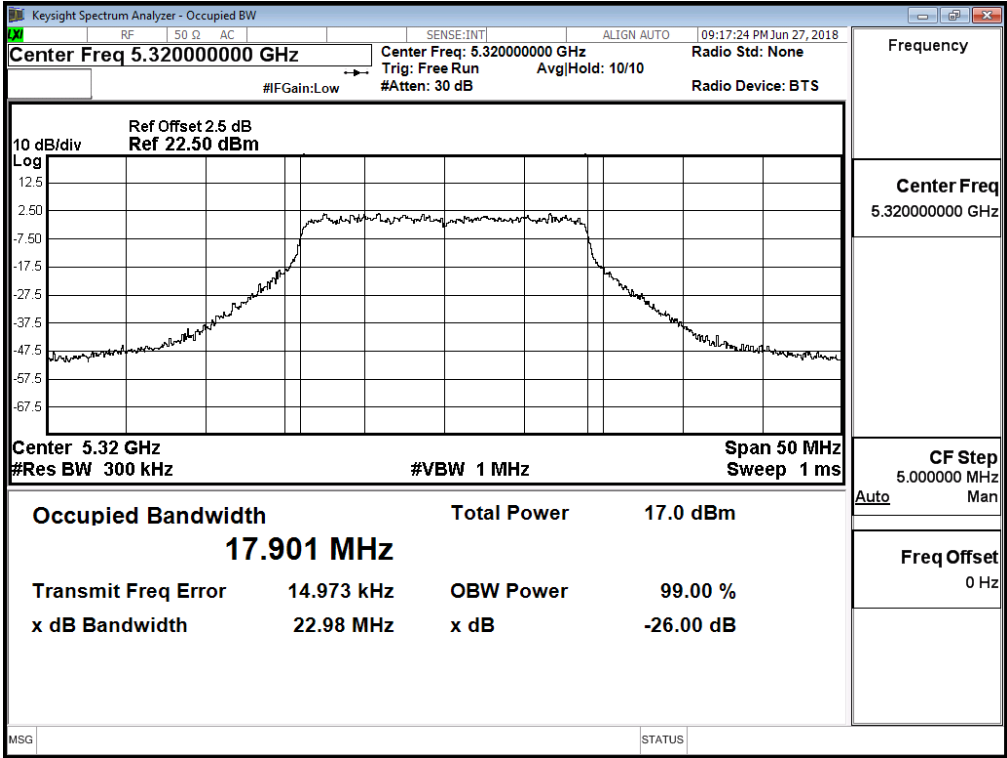
99% Bandwidth:
Channel 52 -Chain C



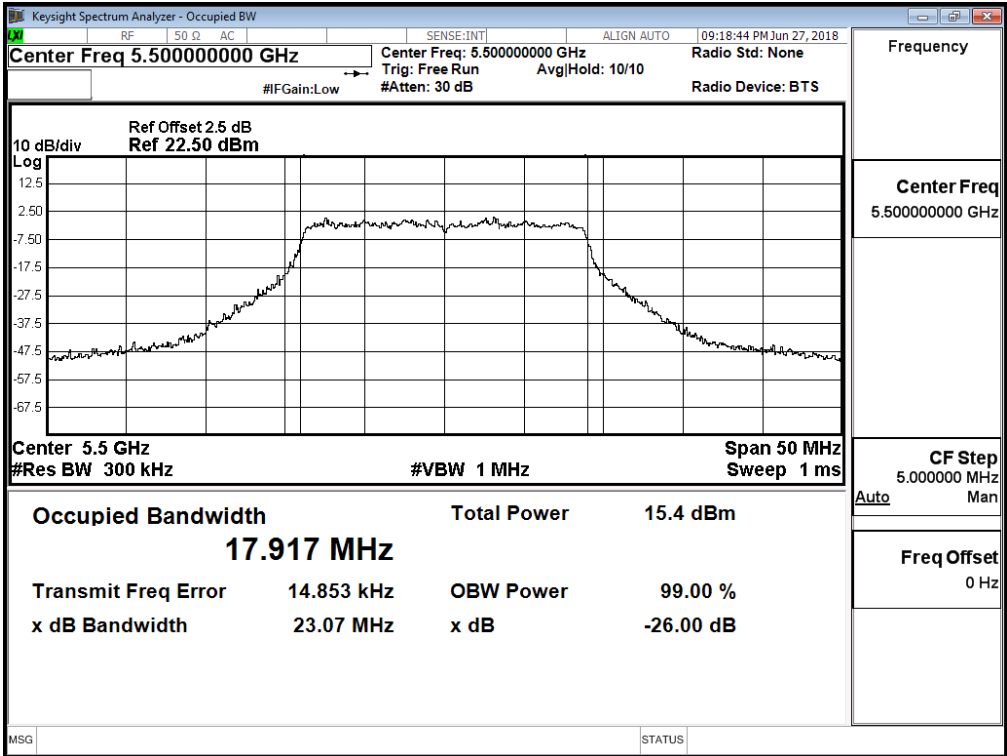
Channel 60 -Chain C



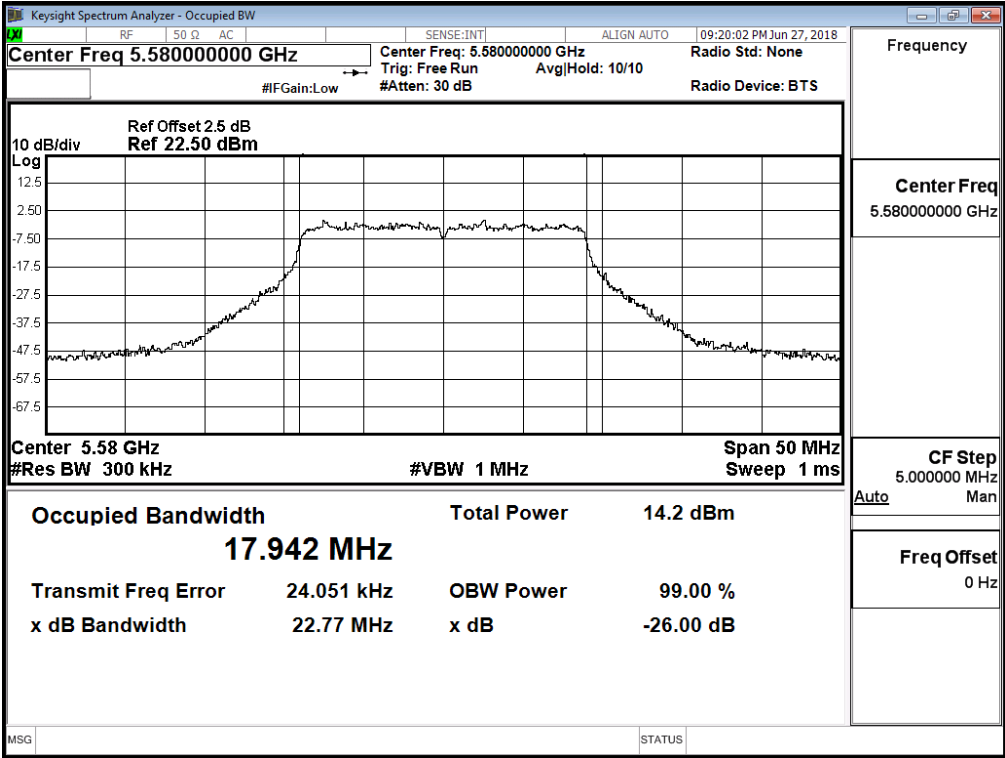
Channel 64 -Chain C



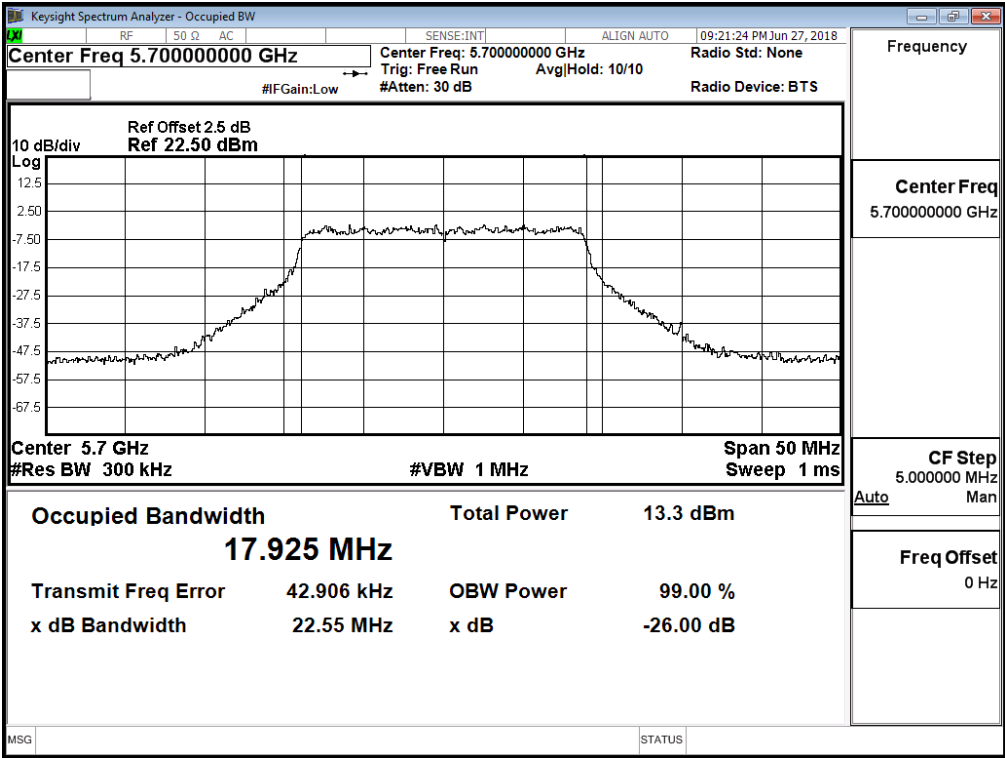
Channel 100 -Chain C



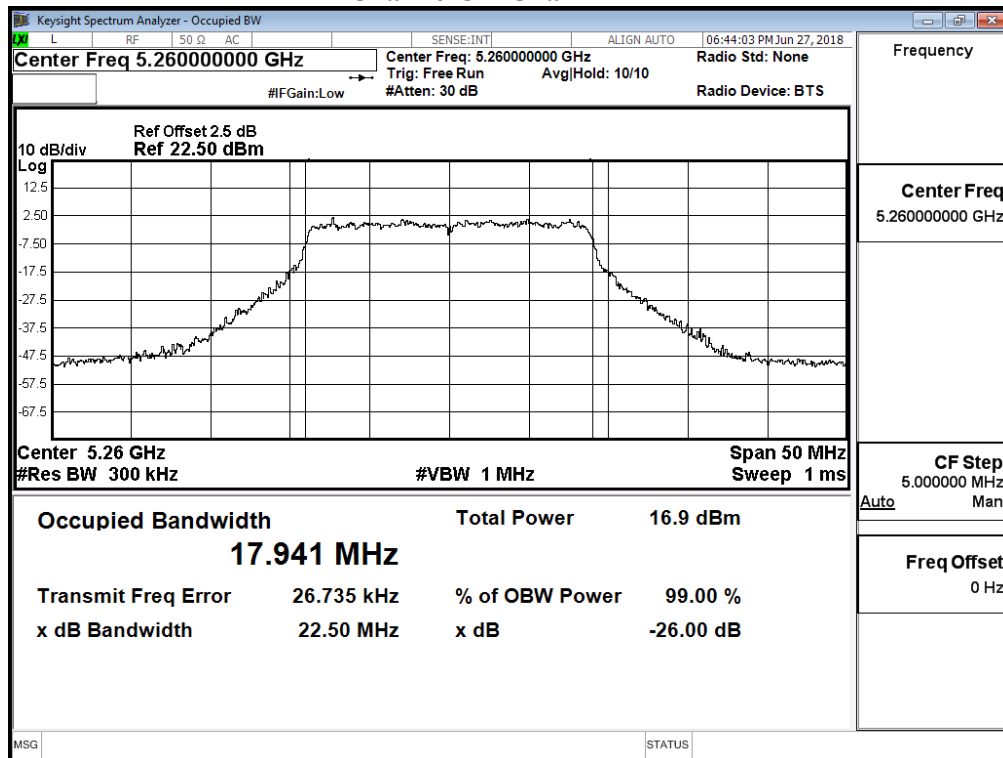
Channel 116 -Chain C



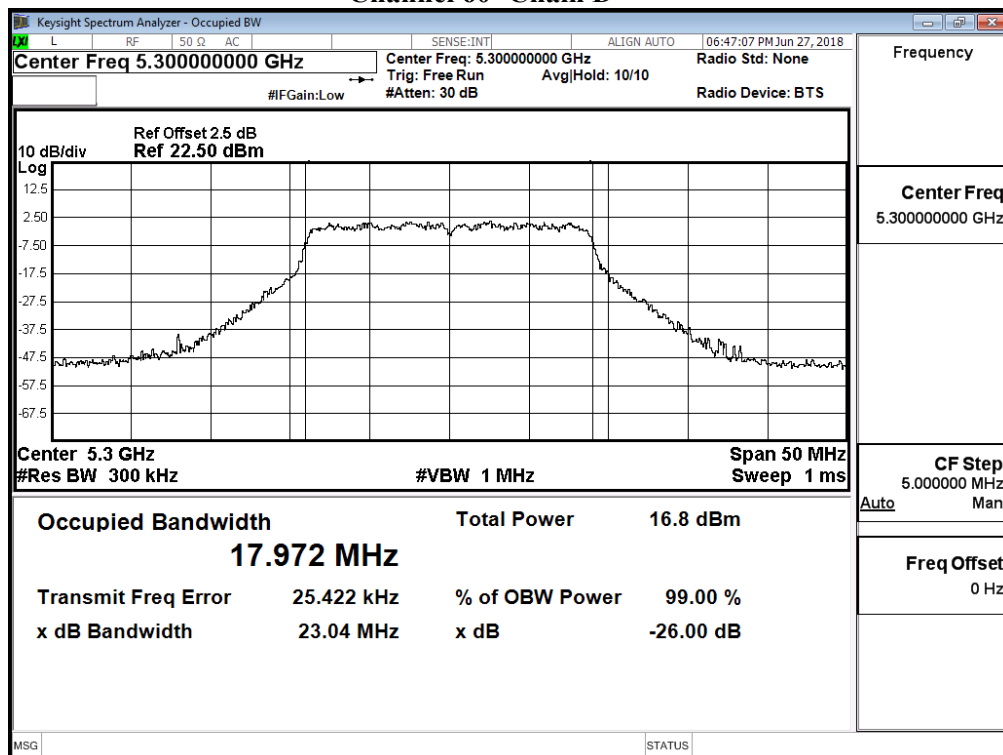
Channel 140 -Chain C



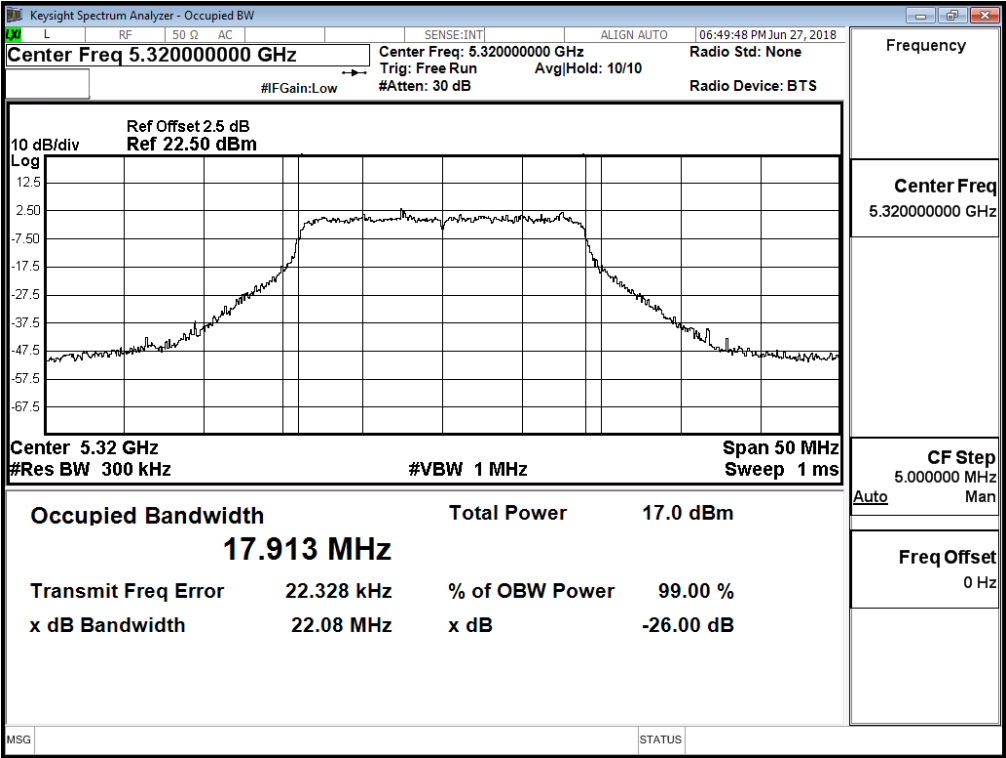
**99% Bandwidth:
Channel 52 -Chain D**



Channel 60 -Chain D



Channel 64 -Chain D



Channel 100 -Chain D

