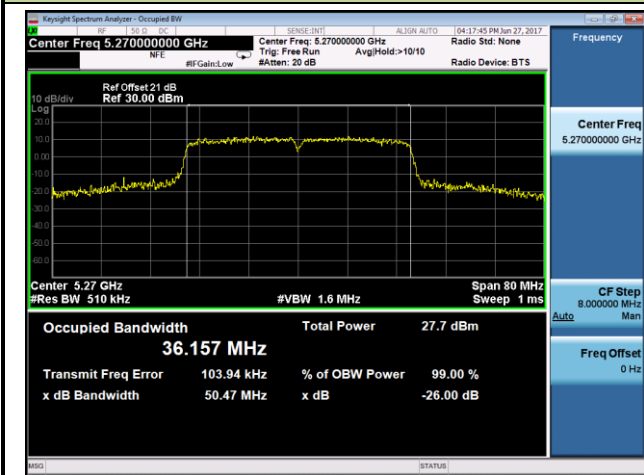
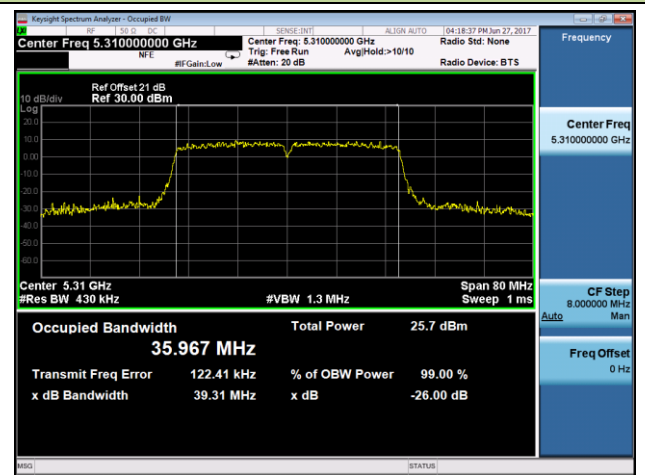
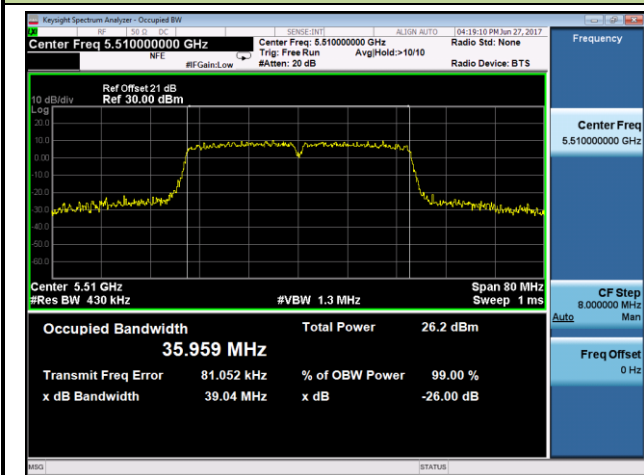
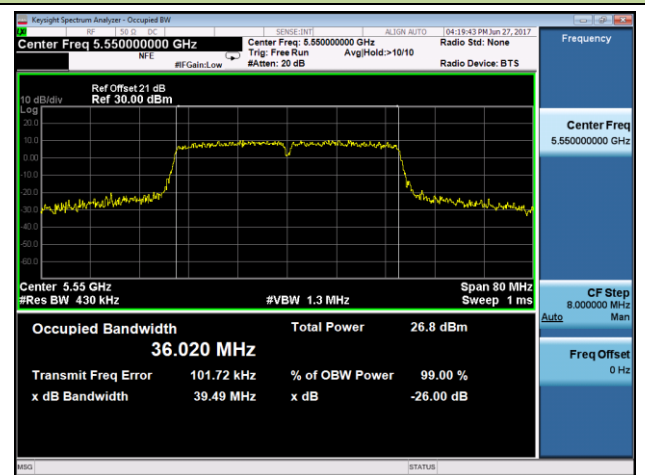
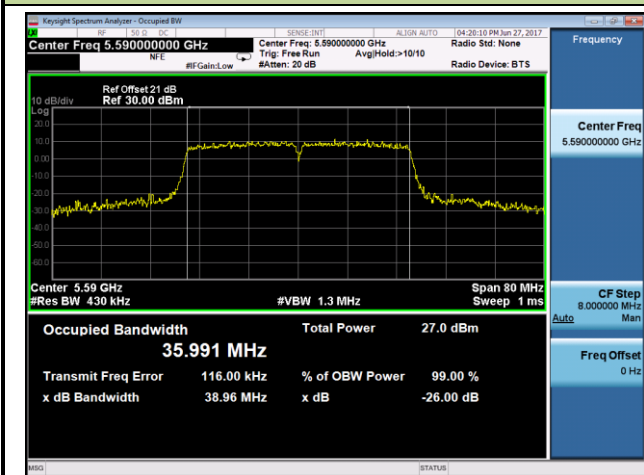
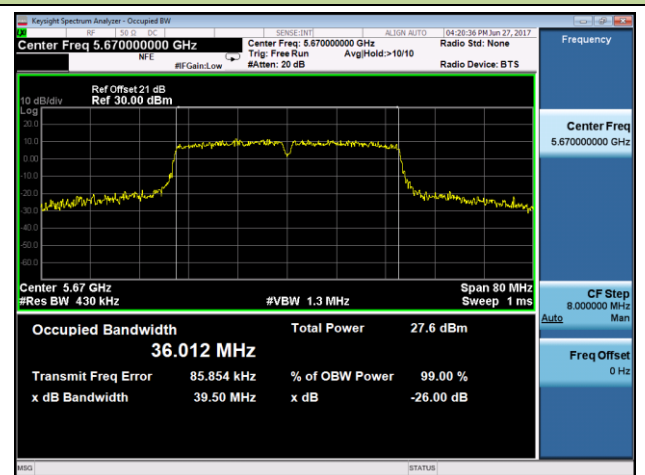
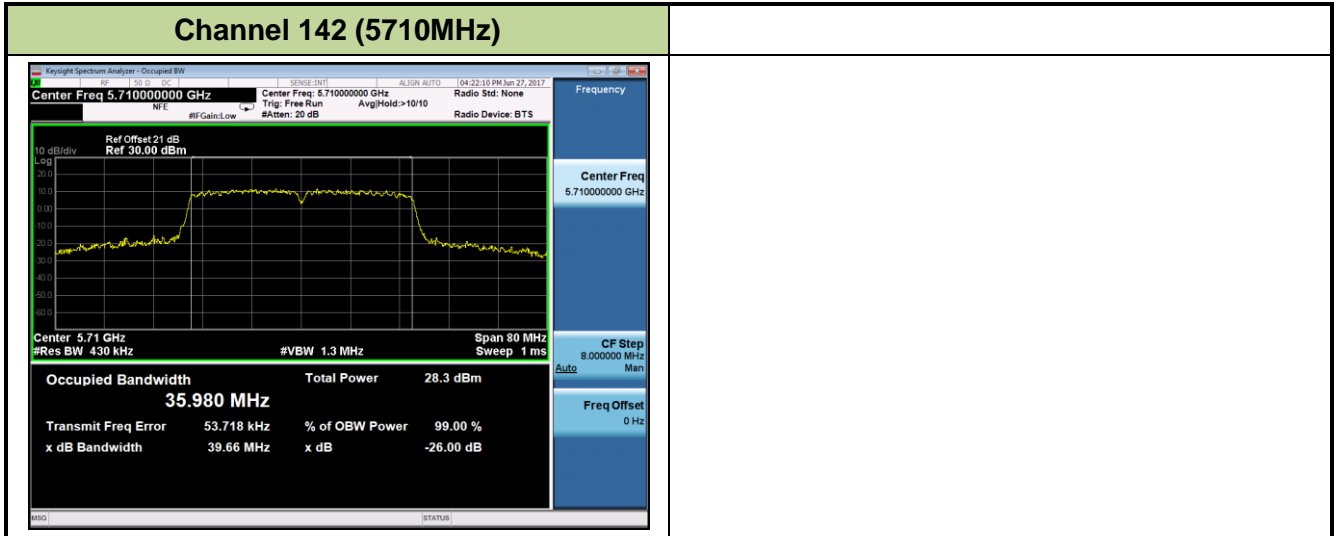
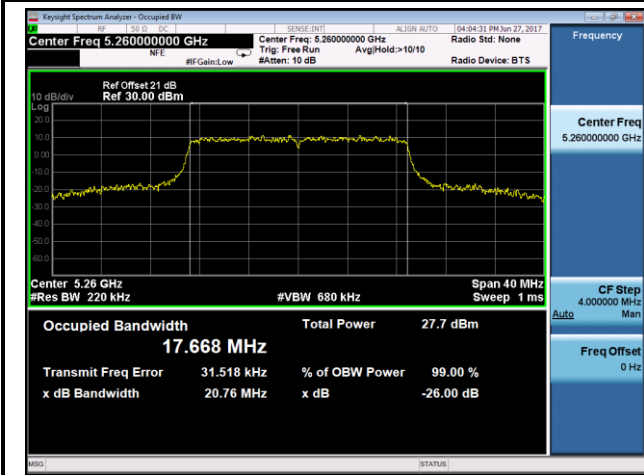
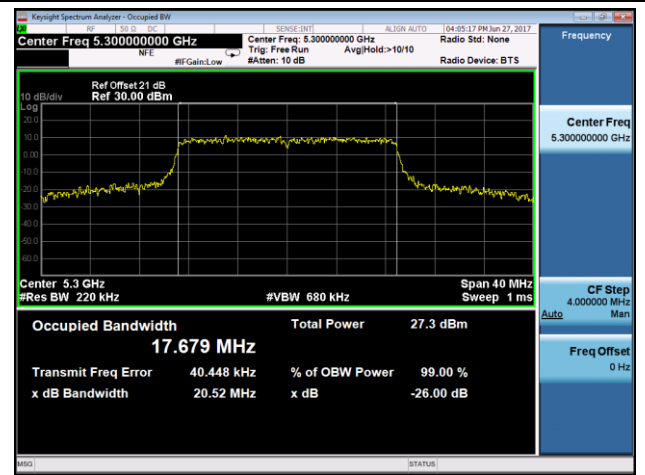
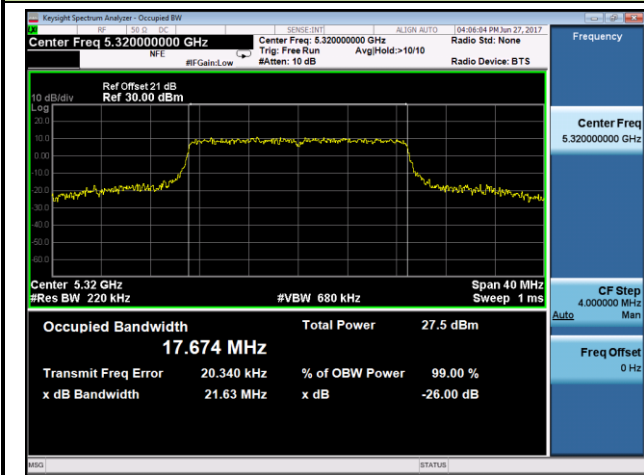
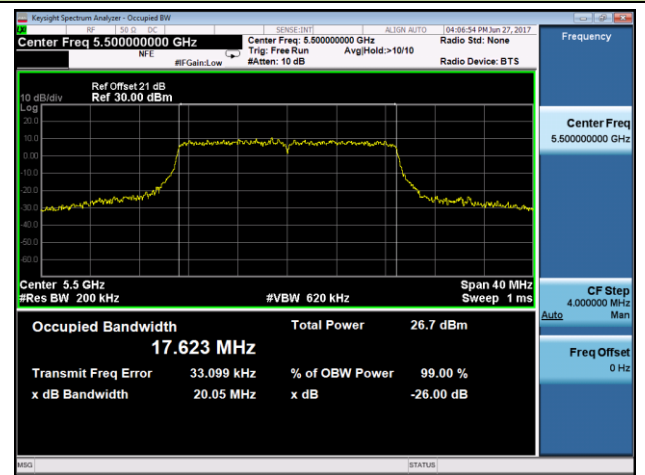
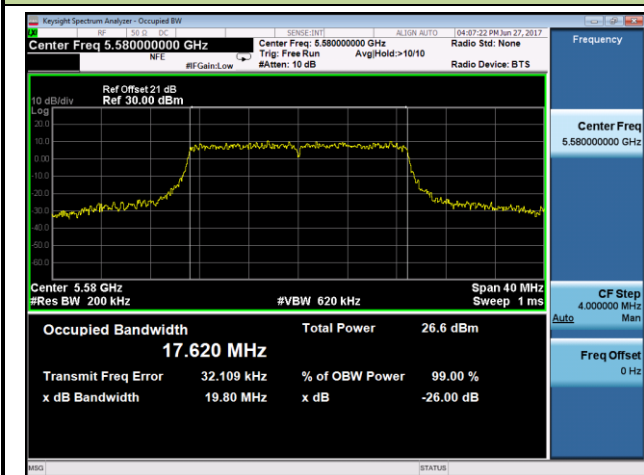
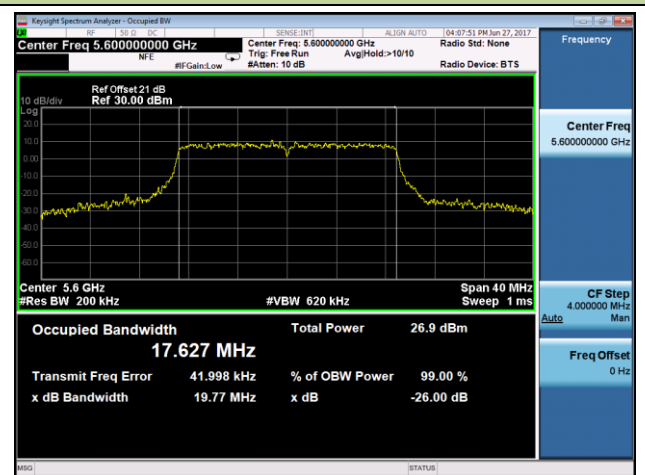
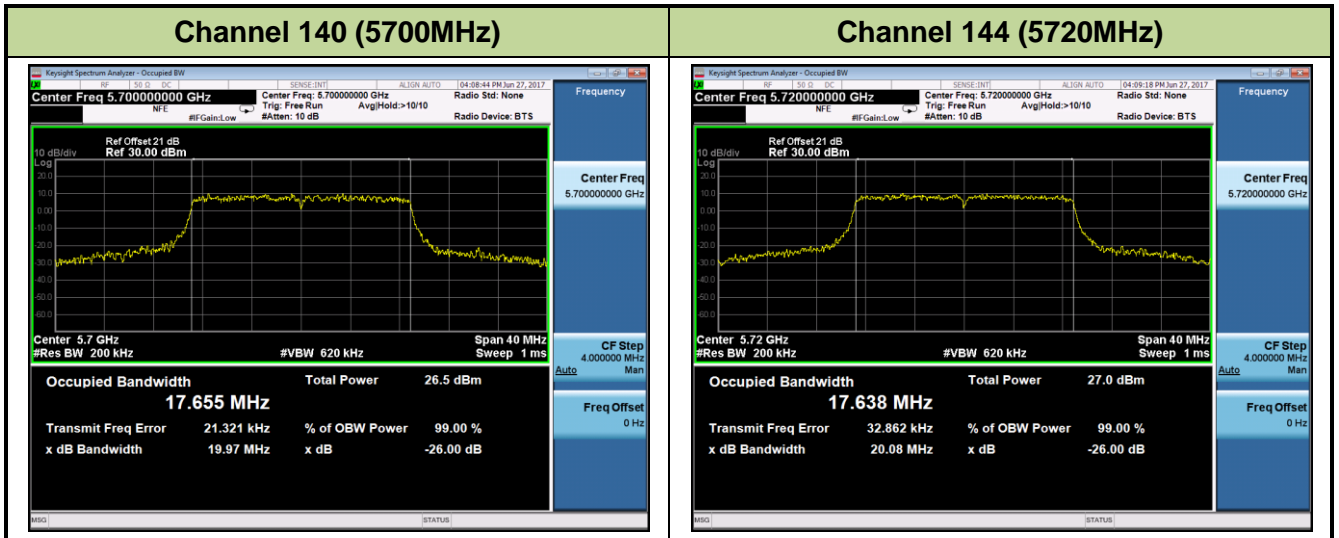


802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 2
Channel 54 (5270MHz)

Channel 62 (5310MHz)

Channel 102 (5510MHz)

Channel 110 (5550MHz)

Channel 118 (5590MHz)

Channel 134 (5670MHz)


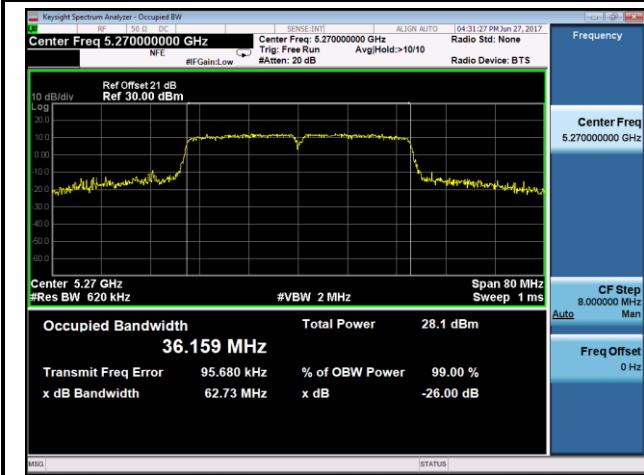


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 2
Channel 52 (5260MHz)

Channel 60 (5300MHz)

Channel 64 (5320MHz)

Channel 100 (5500MHz)

Channel 116 (5580MHz)

Channel 120 (5600MHz)


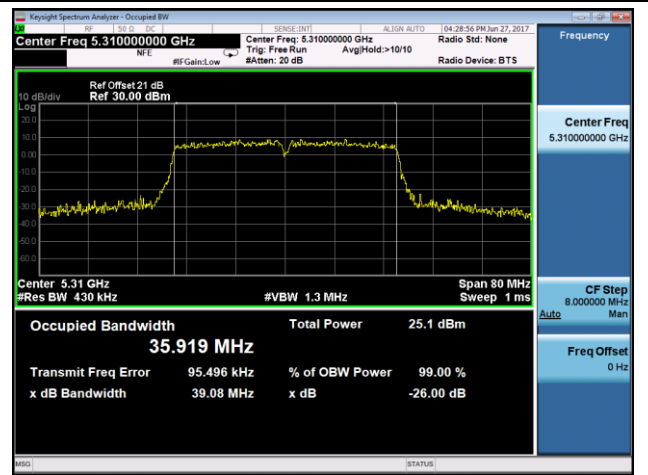


802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 2

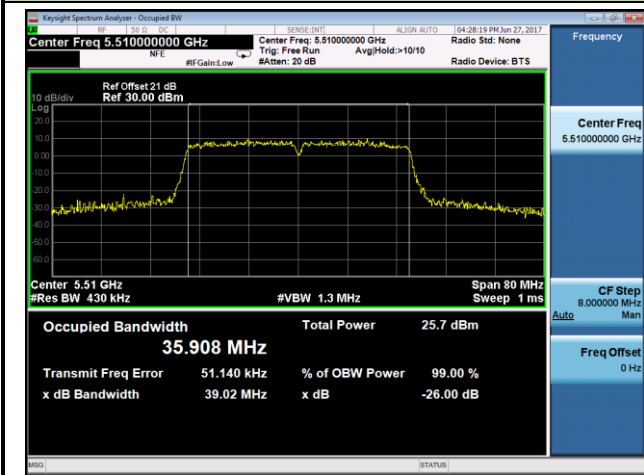
Channel 54 (5270MHz)



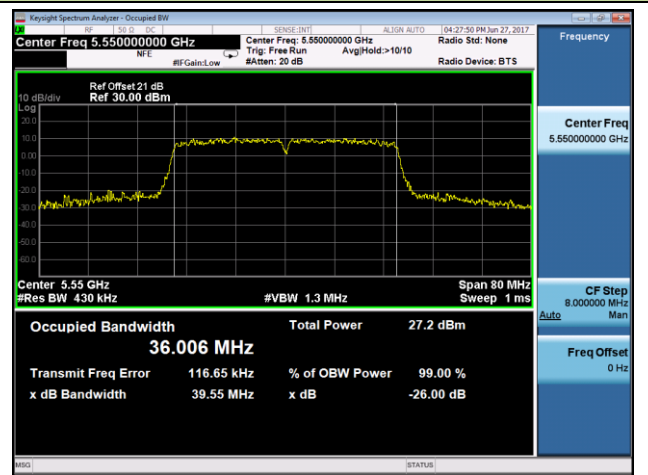
Channel 62 (5310MHz)



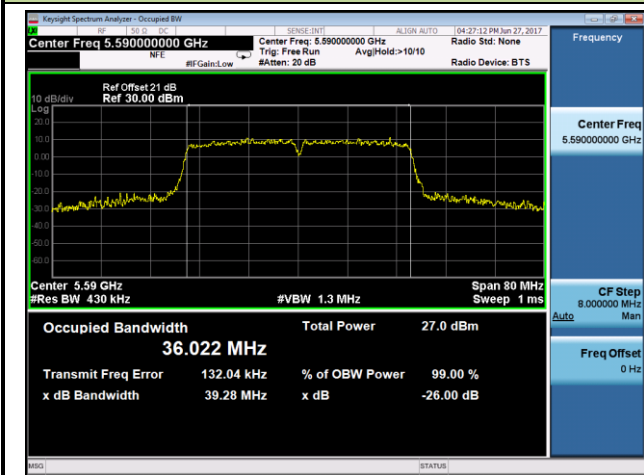
Channel 102 (5510MHz)



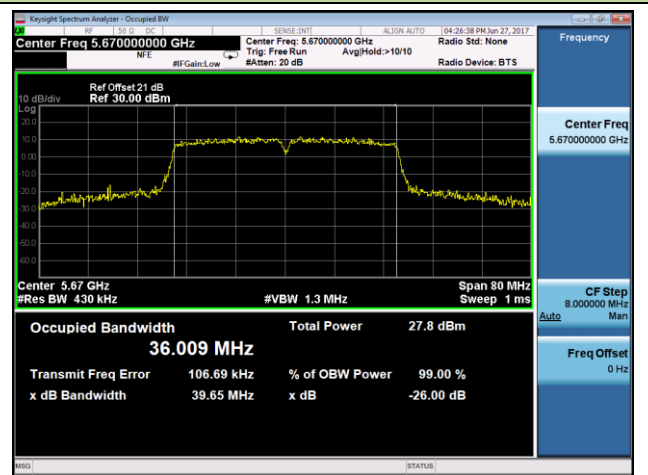
Channel 110 (5550MHz)

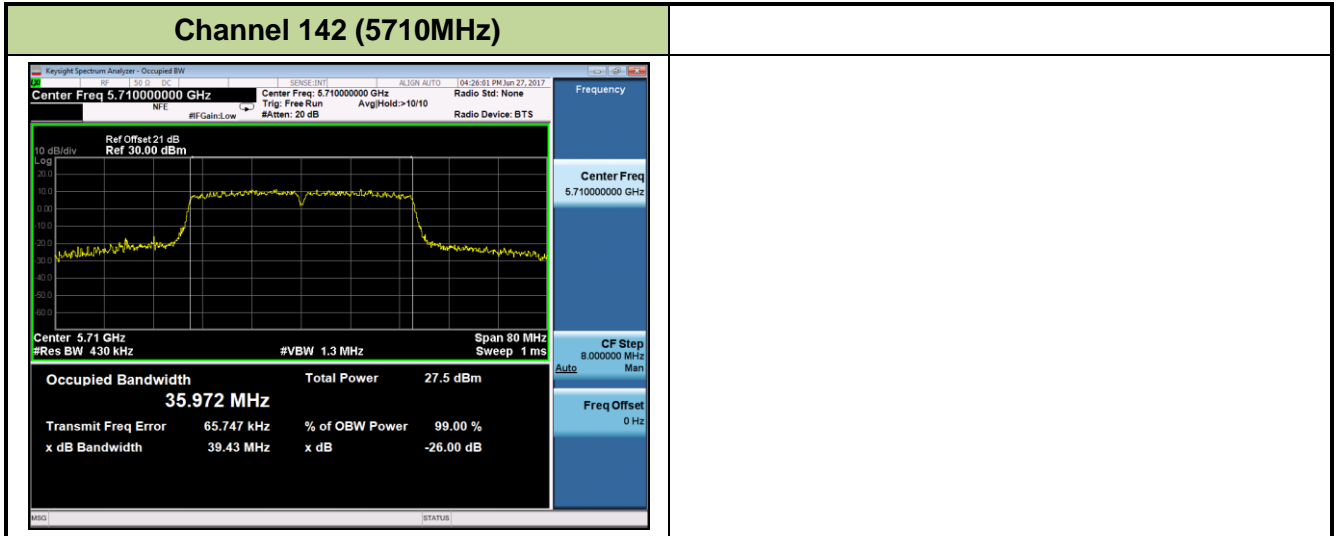


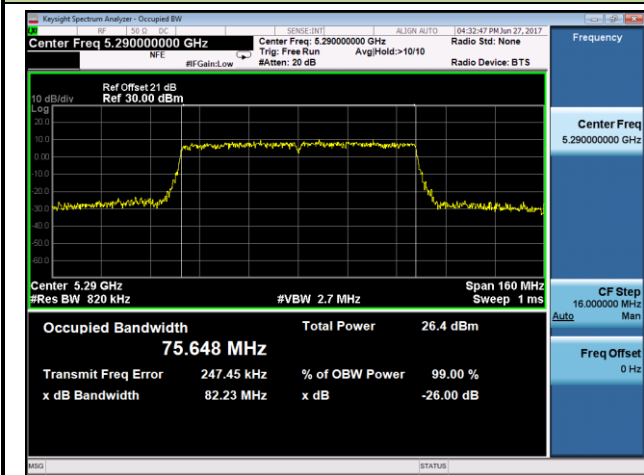
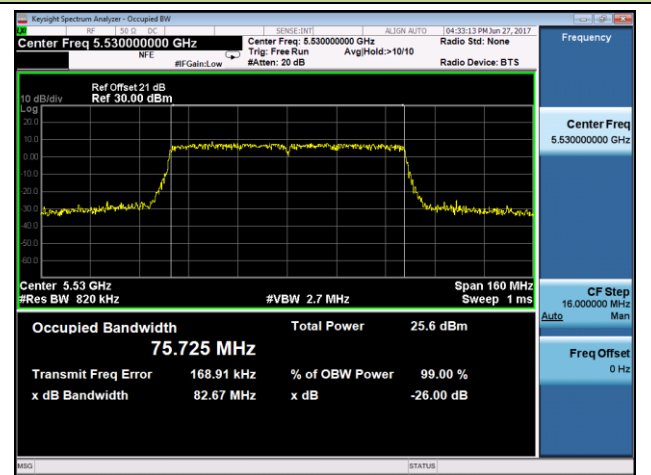
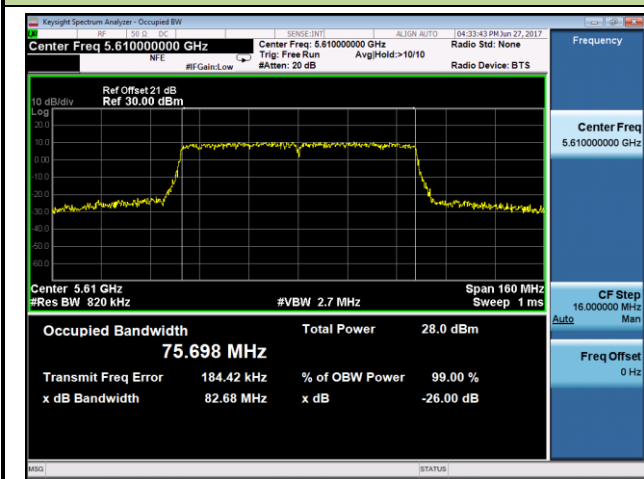
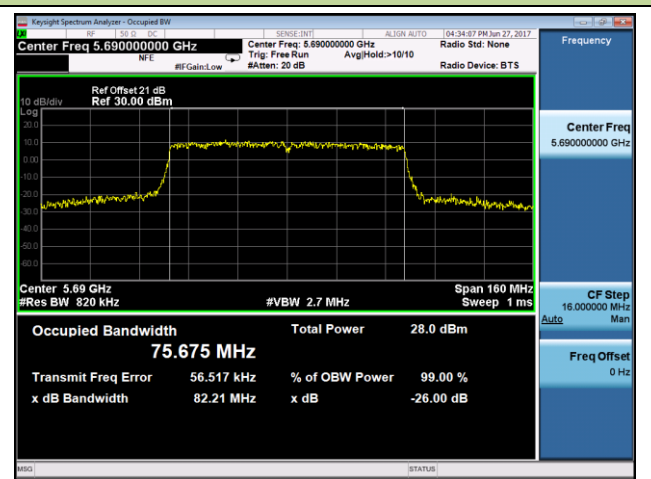
Channel 118 (5590MHz)

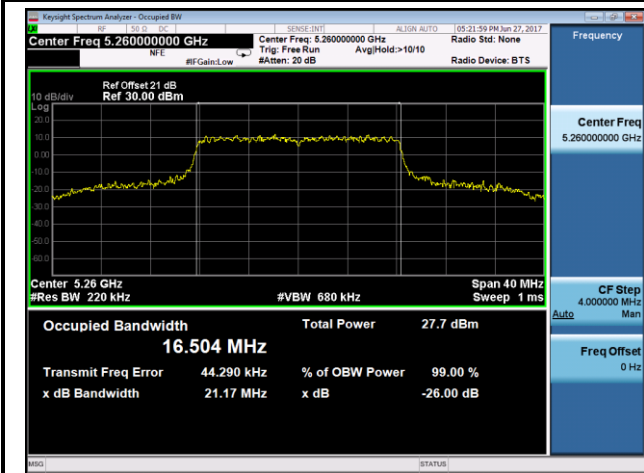
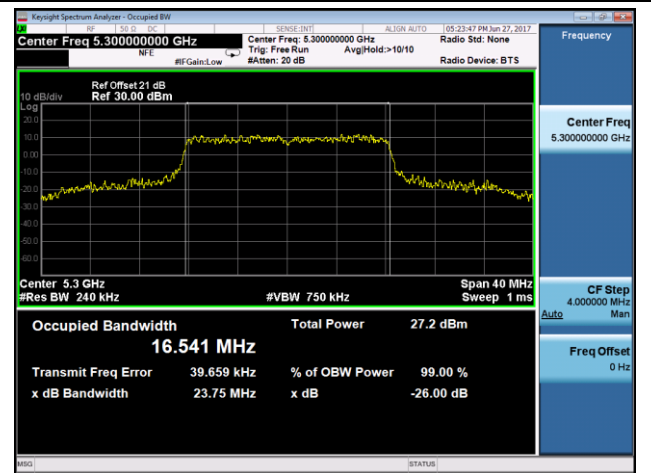
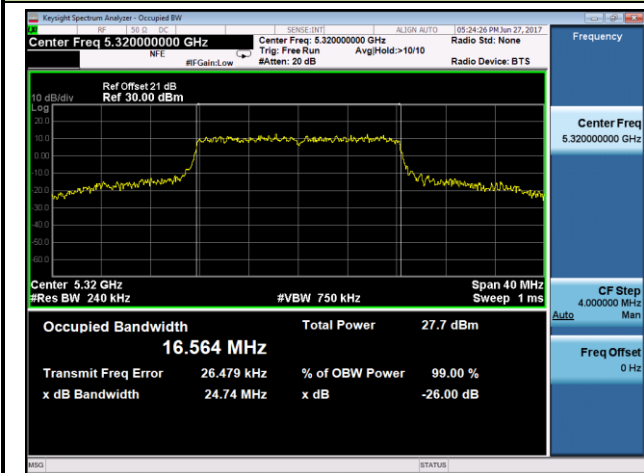
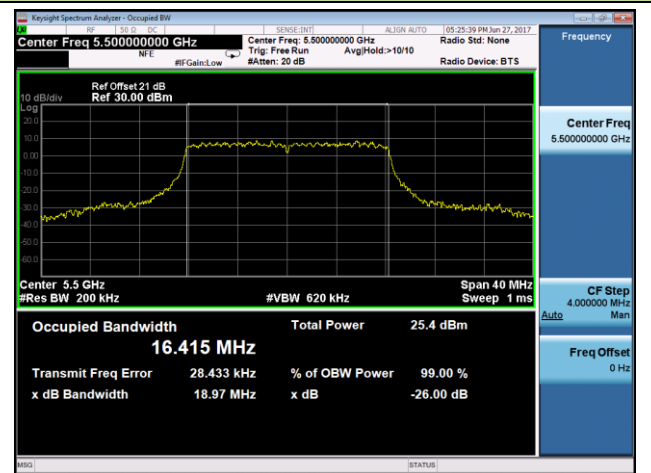
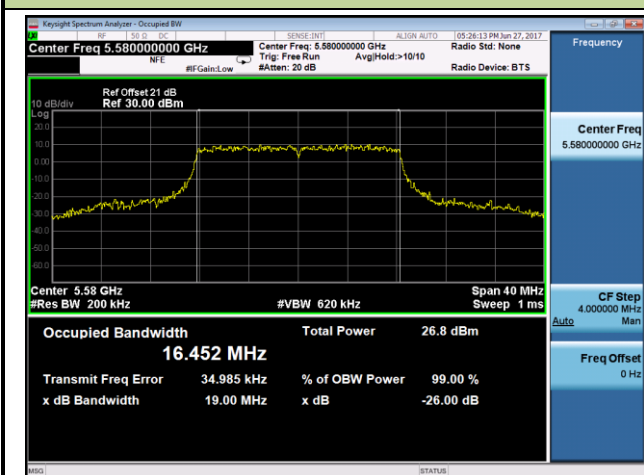
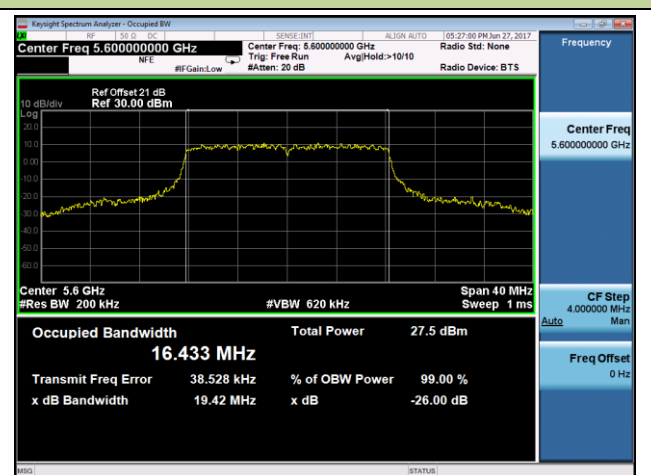


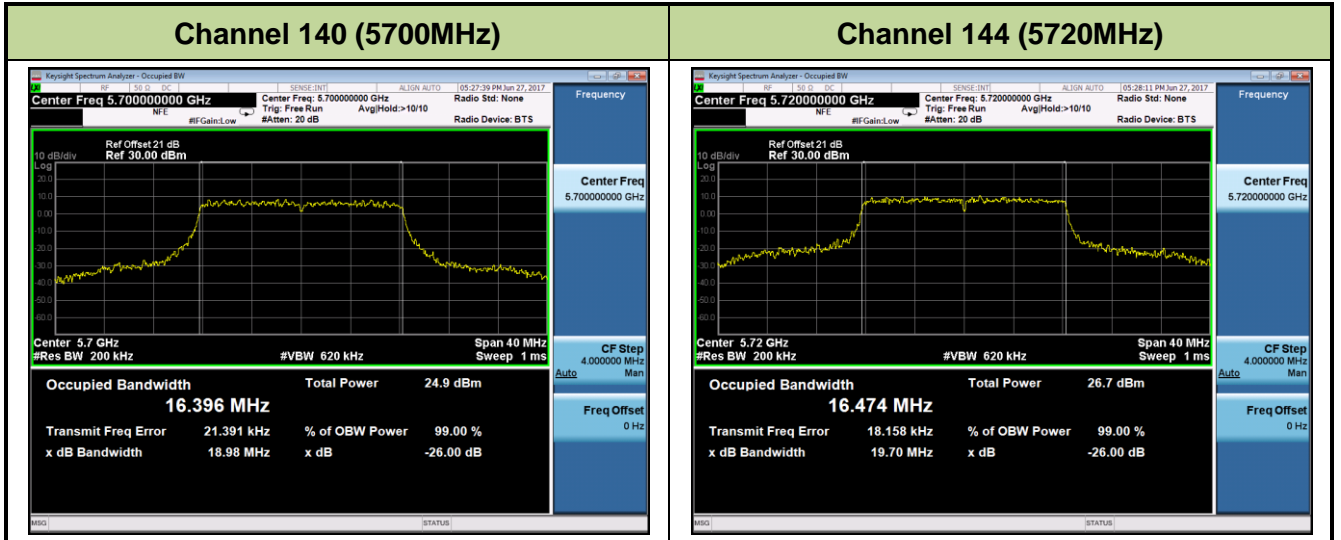
Channel 134 (5670MHz)

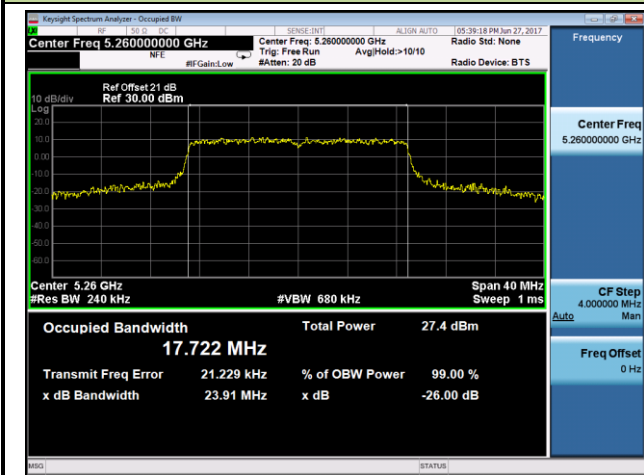
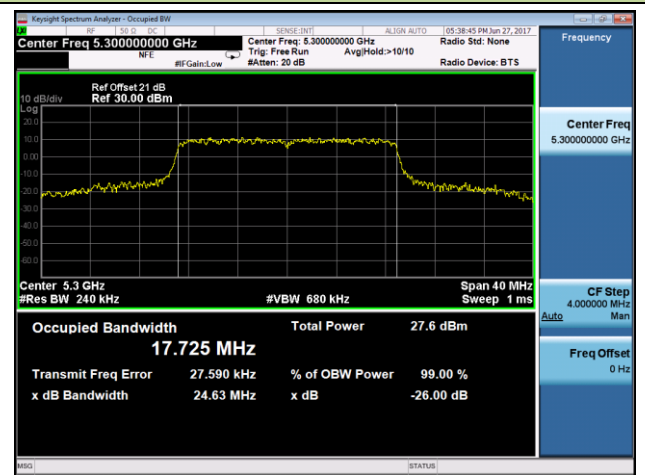
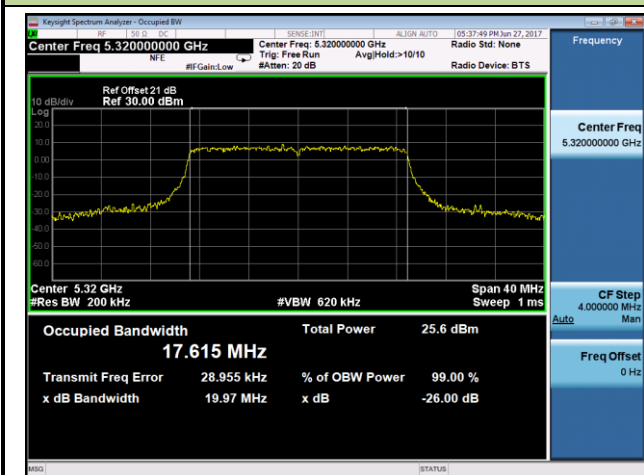
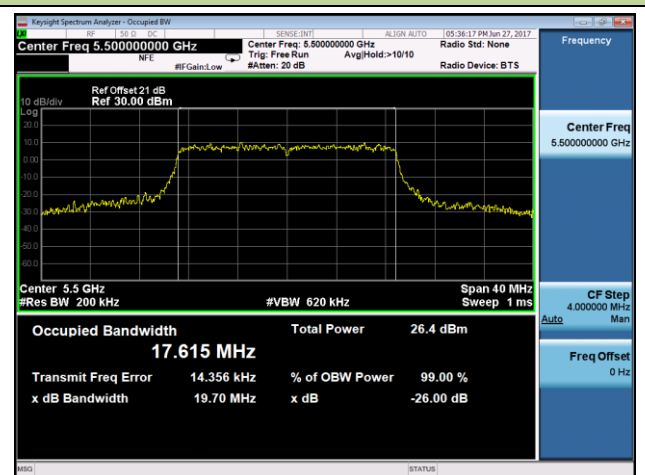
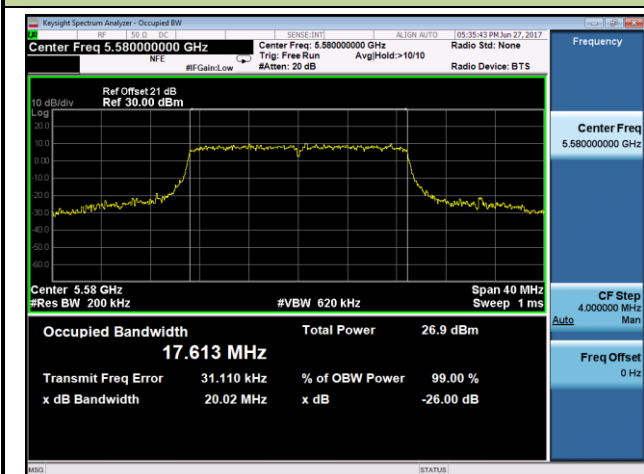
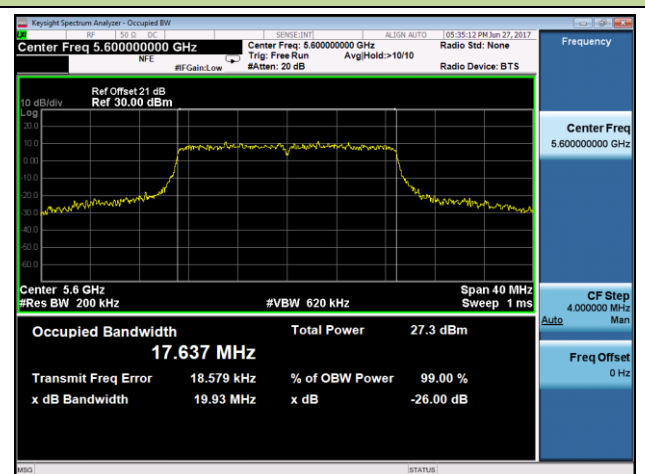


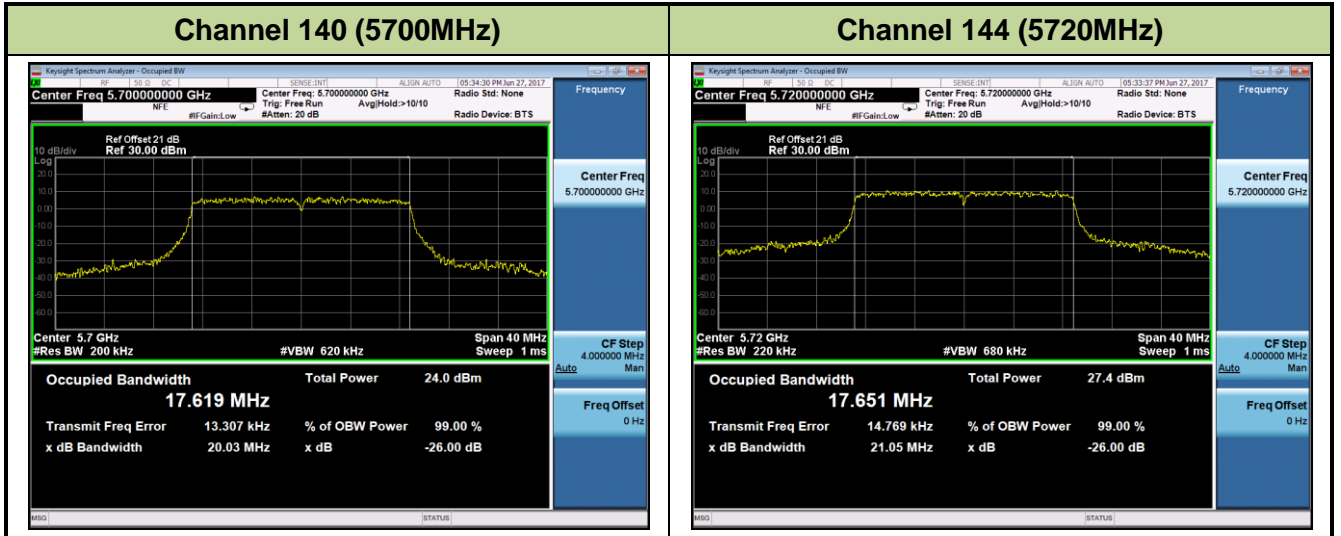


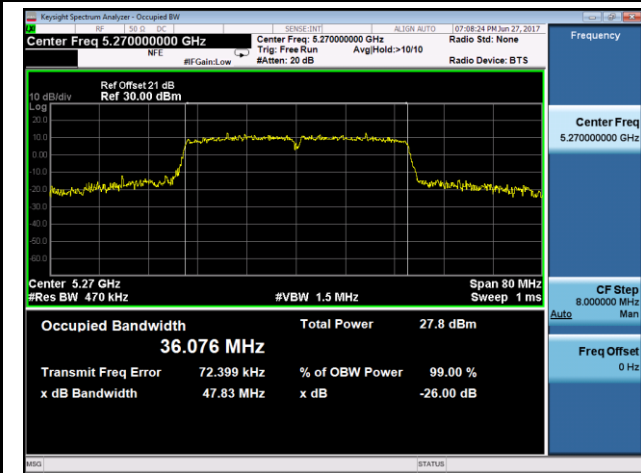
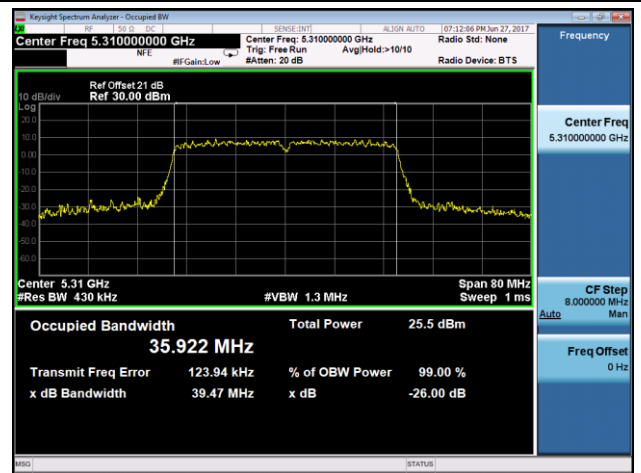
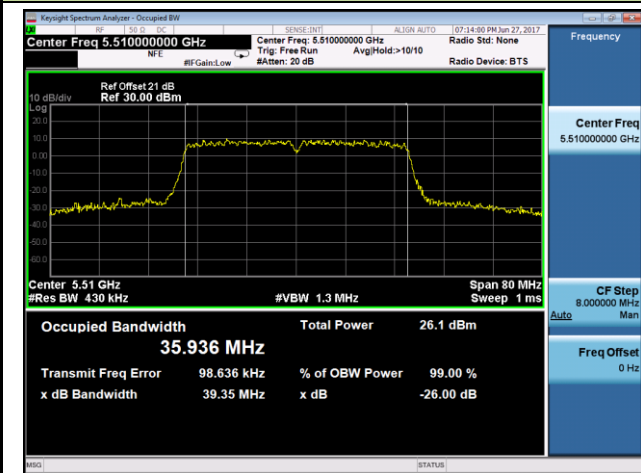
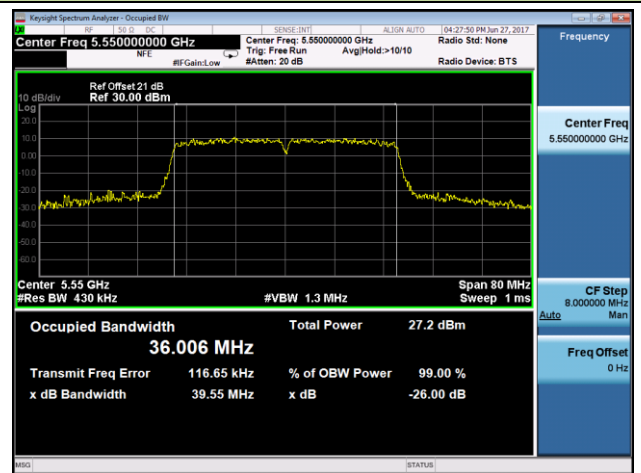
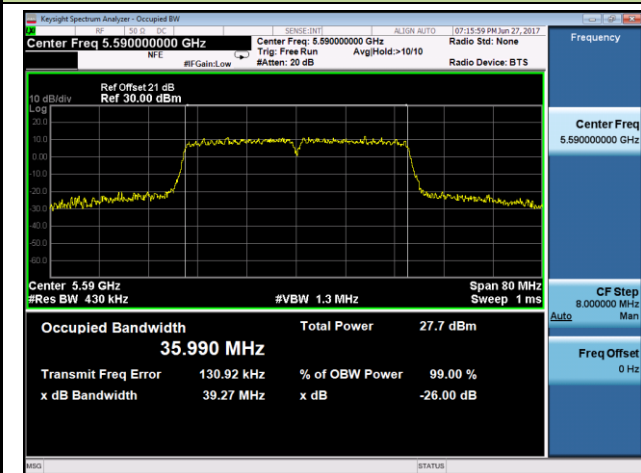
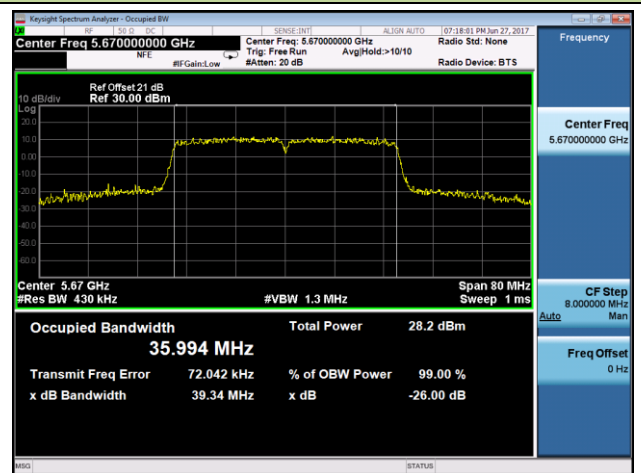
802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 2
Channel 58 (5290MHz)

Channel 106 (5530MHz)

Channel 122 (5610MHz)

Channel 138 (5690MHz)


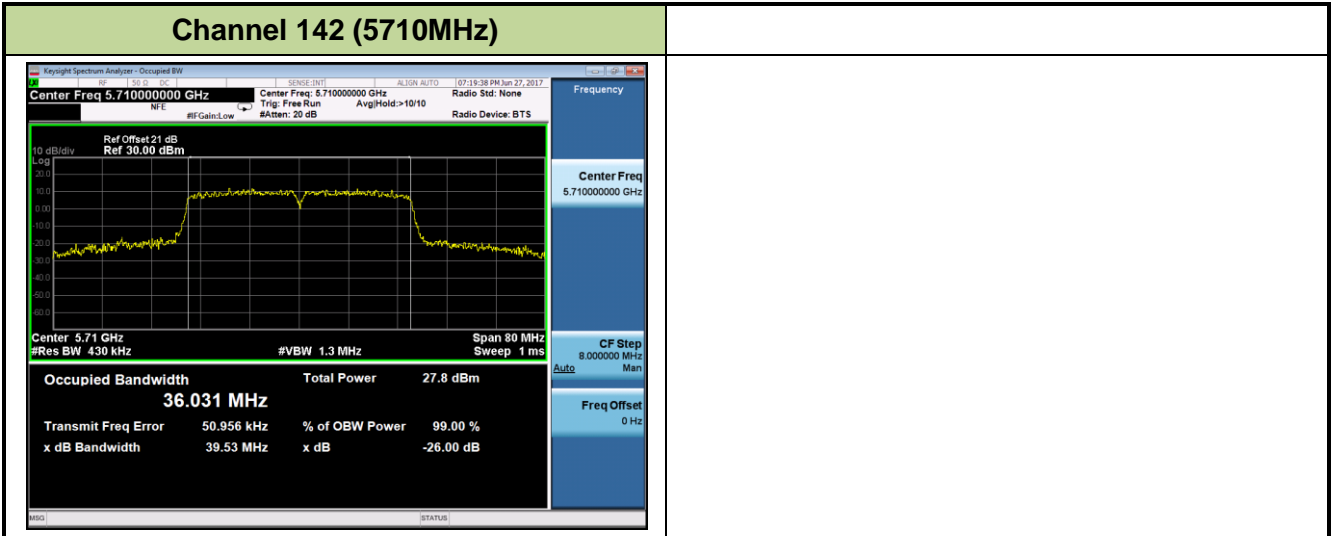
802.11a 26dB Bandwidth & 99% Bandwidth - Ant 2 / Ant 1 + 2
Channel 52 (5260MHz)

Channel 60 (5300MHz)

Channel 64 (5320MHz)

Channel 100 (5500MHz)

Channel 116 (5580MHz)

Channel 100 (5600MHz)


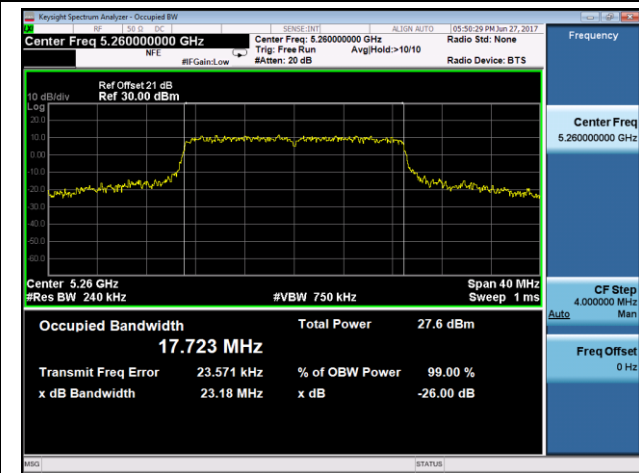
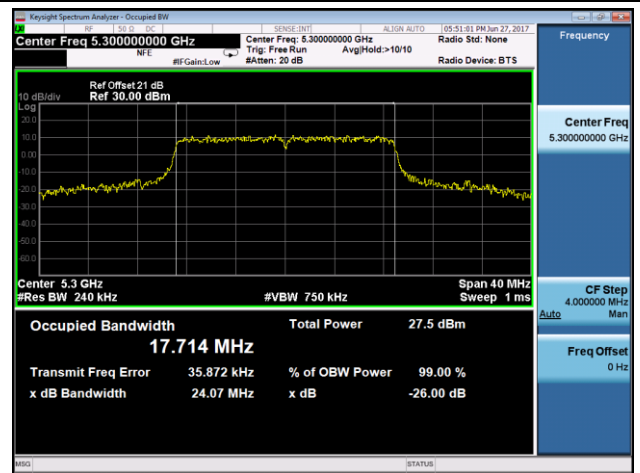
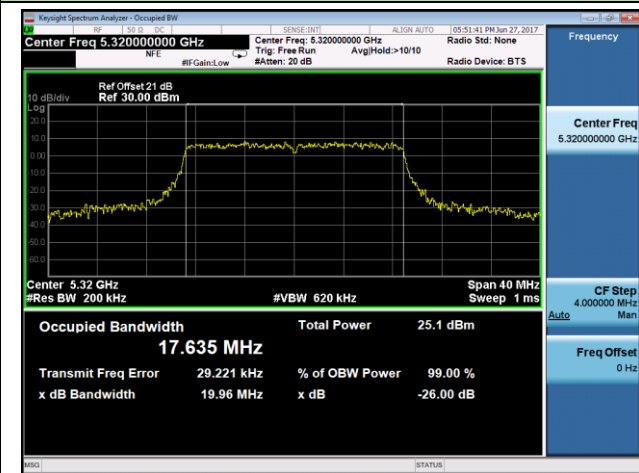
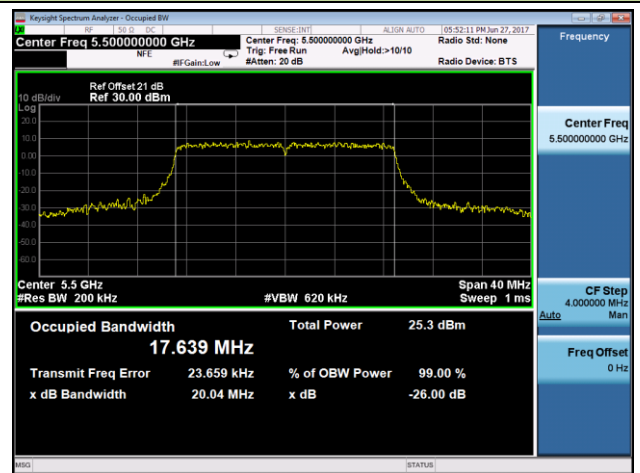
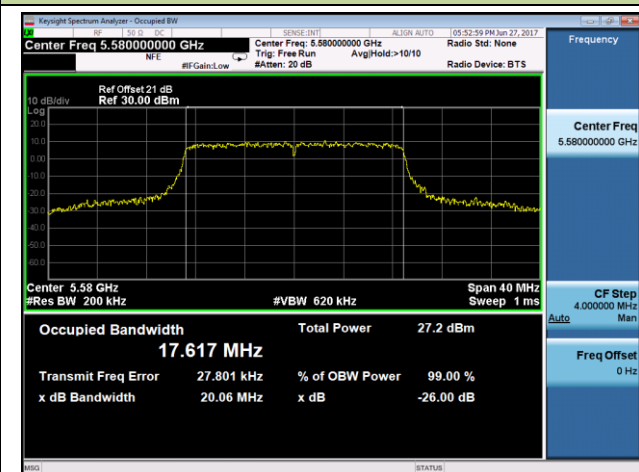
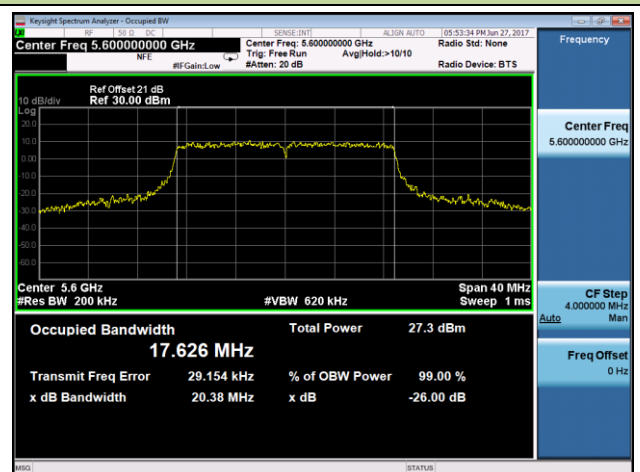


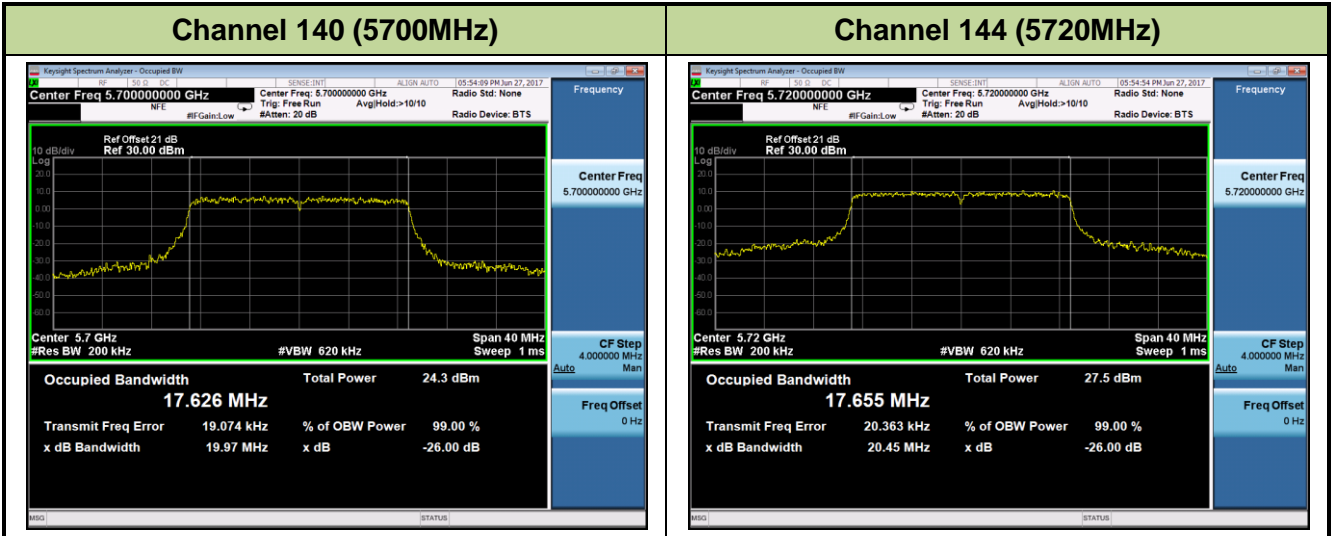
802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 2 / Ant 1 + 2
Channel 52 (5260MHz)

Channel 60 (5300MHz)

Channel 64 (5320MHz)

Channel 100 (5500MHz)

Channel 116 (5580MHz)

Channel 120 (5600MHz)


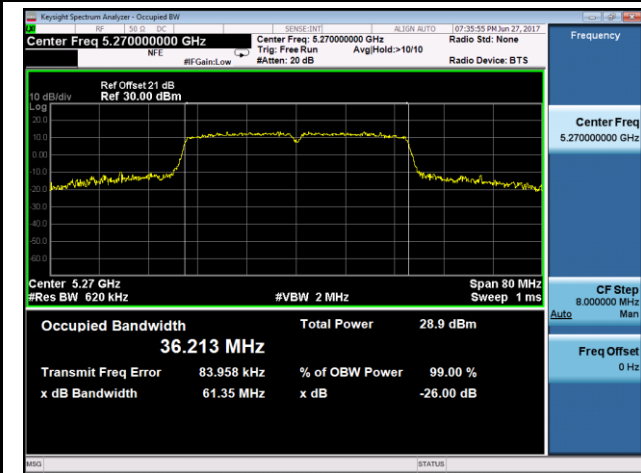
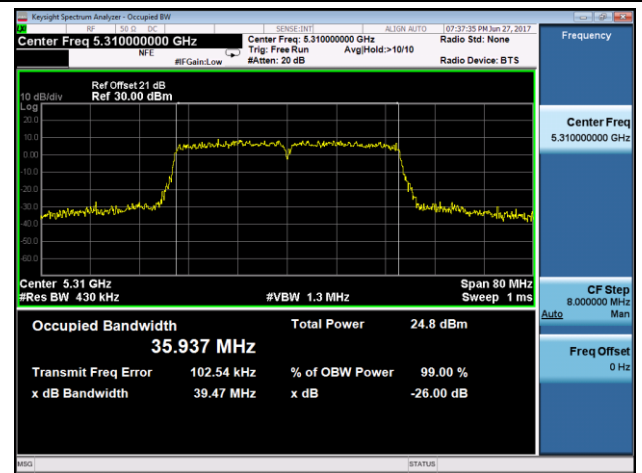
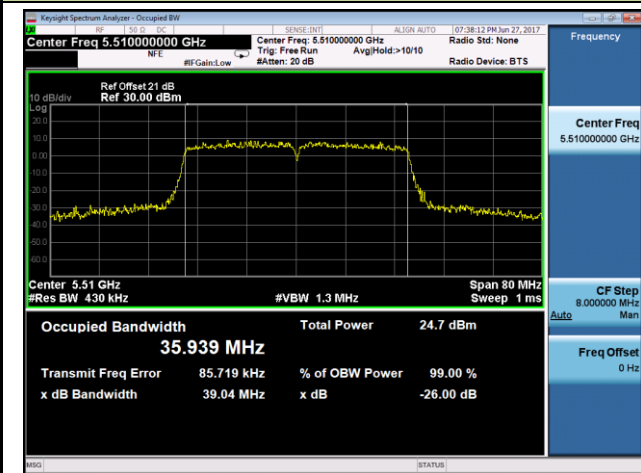
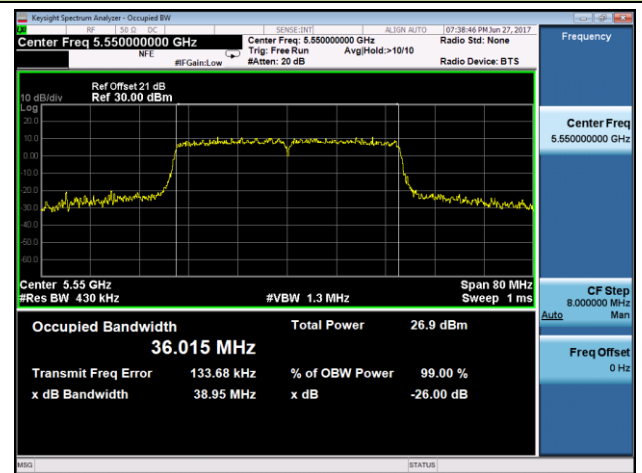
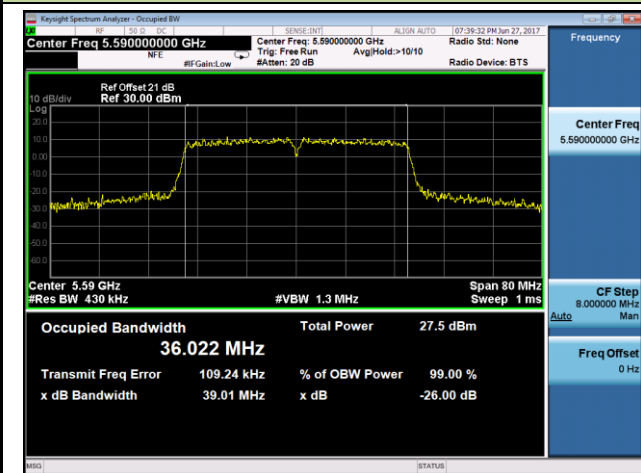


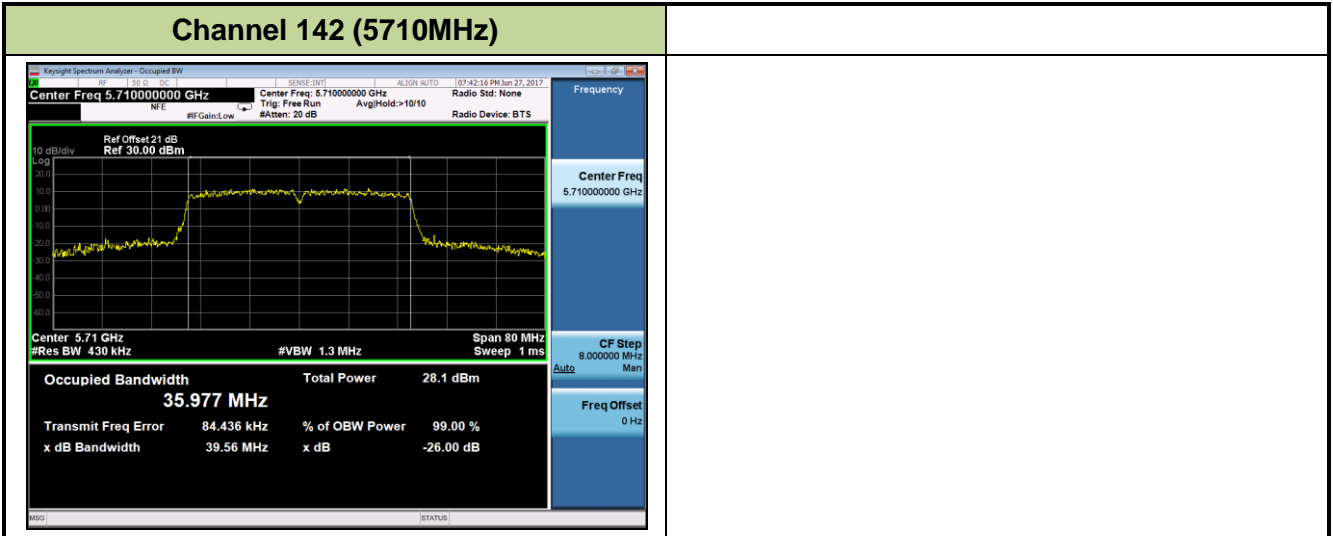
802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 2 / Ant 1 + 2
Channel 54 (5270MHz)

Channel 62 (5310MHz)

Channel 102 (5510MHz)

Channel 110 (5550MHz)

Channel 118 (5590MHz)

Channel 134 (5670MHz)


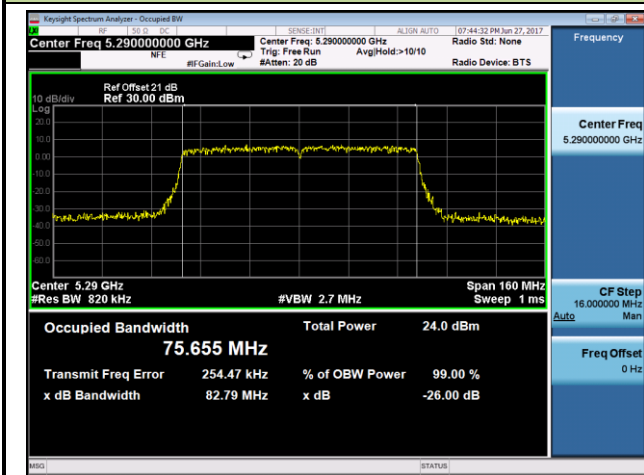
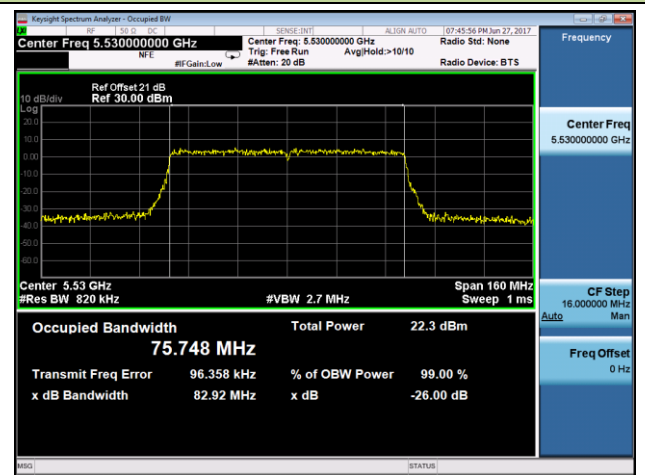
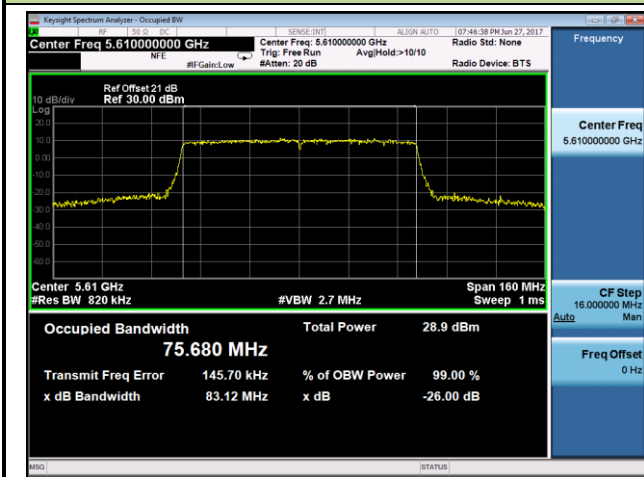
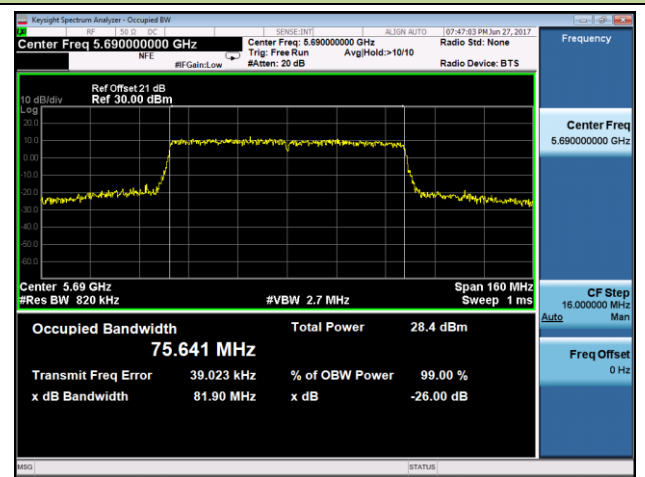


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth - Ant 2 / Ant 1 + 2
Channel 52 (5260MHz)

Channel 60 (5300MHz)

Channel 64 (5320MHz)

Channel 100 (5500MHz)

Channel 116 (5580MHz)

Channel 120 (5600MHz)




802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth - Ant 2 / Ant 1 + 2
Channel 54 (5270MHz)

Channel 62 (5310MHz)

Channel 102 (5510MHz)

Channel 110 (5550MHz)

Channel 118 (5590MHz)

Channel 134 (5670MHz)

802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 2 / Ant 1 + 2
Channel 58 (5290MHz)

Channel 106 (5530MHz)

Channel 122 (5610MHz)

Channel 138 (5690MHz)


7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

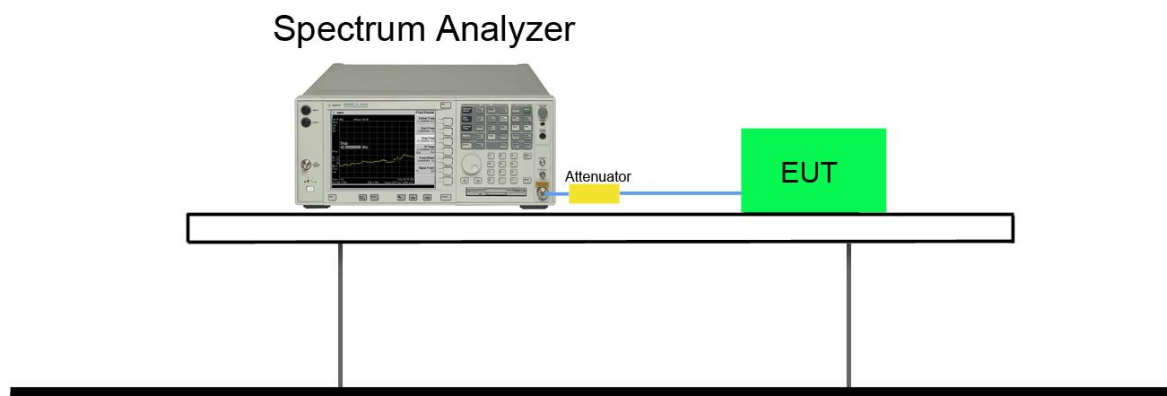
7.3.2. Test Procedure used

KDB 789033 D02v01r04 - Section C.2

7.3.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. $VBW \geq 3 \times RBW$.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3.4. Test Setup



7.3.5. Test Result

Not Applicable with DFS Bands.

7.4. Output Power Measurement

7.4.1. Test Limit

For FCC

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (23.98dBm) or 11dBm +10 log (26dB BW).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

For IC

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed 250 mW (23.98dBm) or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W (30dBm) or $17 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

7.4.2. Test Procedure Used

KDB 789033D02v01r04- Section E)3)b) Method PM-G

7.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.4.4. Test Setup



7.4.5. Test Result

Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	24°C
Test Engineer	Kevin Ker	Relative Humidity	59%
Test Site	SR2	Test Date	2017/08/02
Test Item	FCC Output Power		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)	Limit (dBm)	Result
Ant 1						
11a	6Mbps	52	5260	21.52	≤ 23.98	Pass
11a	6Mbps	60	5300	21.92	≤ 23.98	Pass
11a	6Mbps	64	5320	22.05	≤ 23.98	Pass
11a	6Mbps	100	5500	21.03	≤ 23.98	Pass
11a	6Mbps	120	5600	21.01	≤ 23.98	Pass
11a	6Mbps	140	5700	19.78	≤ 23.98	Pass
11a	6Mbps	144	5720	21.33	≤ 23.98	Pass
11n-HT20	MCS0	52	5260	21.65	≤ 23.98	Pass
11n-HT20	MCS0	60	5300	21.97	≤ 23.98	Pass
11n-HT20	MCS0	64	5320	21.63	≤ 23.98	Pass
11n-HT20	MCS0	100	5500	20.78	≤ 23.98	Pass
11n-HT20	MCS0	120	5600	21.00	≤ 23.98	Pass
11n-HT20	MCS0	140	5700	19.80	≤ 23.98	Pass
11n-HT20	MCS0	144	5720	21.30	≤ 23.98	Pass
11n-HT40	MCS0	54	5270	21.88	≤ 23.98	Pass
11n-HT40	MCS0	62	5310	19.48	≤ 23.98	Pass
11n-HT40	MCS0	102	5510	19.95	≤ 23.98	Pass
11n-HT40	MCS0	118	5590	21.37	≤ 23.98	Pass
11n-HT40	MCS0	134	5670	21.39	≤ 23.98	Pass
11n-HT40	MCS0	142	5710	21.27	≤ 23.98	Pass



Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)	Limit (dBm)	Result
Ant 1						
11ac-VHT20	MCS0	52	5260	21.62	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	21.98	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	21.62	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	21.25	≤ 23.98	Pass
11ac-VHT20	MCS0	120	5600	21.02	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	21.35	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	21.15	≤ 23.98	Pass
11ac-VHT40	MCS0	54	5270	21.94	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	19.50	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	19.27	≤ 23.98	Pass
11ac-VHT40	MCS0	118	5590	21.31	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	20.61	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	21.45	≤ 23.98	Pass
11ac-VHT80	MCS0	58	5290	18.89	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	18.59	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	20.75	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	21.97	≤ 23.98	Pass



Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Average Power (dBm)	Limit (dBm)	Result
Ant 2						
11a	6Mbps	52	5260	21.03	≤ 23.98	Pass
11a	6Mbps	60	5300	21.54	≤ 23.98	Pass
11a	6Mbps	64	5320	21.23	≤ 23.98	Pass
11a	6Mbps	100	5500	21.04	≤ 23.98	Pass
11a	6Mbps	120	5600	20.78	≤ 23.98	Pass
11a	6Mbps	140	5700	21.24	≤ 23.98	Pass
11a	6Mbps	144	5720	20.84	≤ 23.98	Pass
11n-HT20	MCS0	52	5260	21.95	≤ 23.98	Pass
11n-HT20	MCS0	60	5300	21.78	≤ 23.98	Pass
11n-HT20	MCS0	64	5320	21.87	≤ 23.98	Pass
11n-HT20	MCS0	100	5500	21.03	≤ 23.98	Pass
11n-HT20	MCS0	120	5600	21.34	≤ 23.98	Pass
11n-HT20	MCS0	140	5700	21.52	≤ 23.98	Pass
11n-HT20	MCS0	144	5720	21.25	≤ 23.98	Pass
11n-HT40	MCS0	54	5270	22.52	≤ 23.98	Pass
11n-HT40	MCS0	62	5310	20.40	≤ 23.98	Pass
11n-HT40	MCS0	102	5510	21.28	≤ 23.98	Pass
11n-HT40	MCS0	118	5590	22.04	≤ 23.98	Pass
11n-HT40	MCS0	134	5670	22.35	≤ 23.98	Pass
11n-HT40	MCS0	142	5710	22.20	≤ 23.98	Pass
11ac-VHT20	MCS0	52	5260	21.97	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	21.89	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	21.98	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	21.02	≤ 23.98	Pass
11ac-VHT20	MCS0	120	5600	20.89	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	21.54	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	21.46	≤ 23.98	Pass