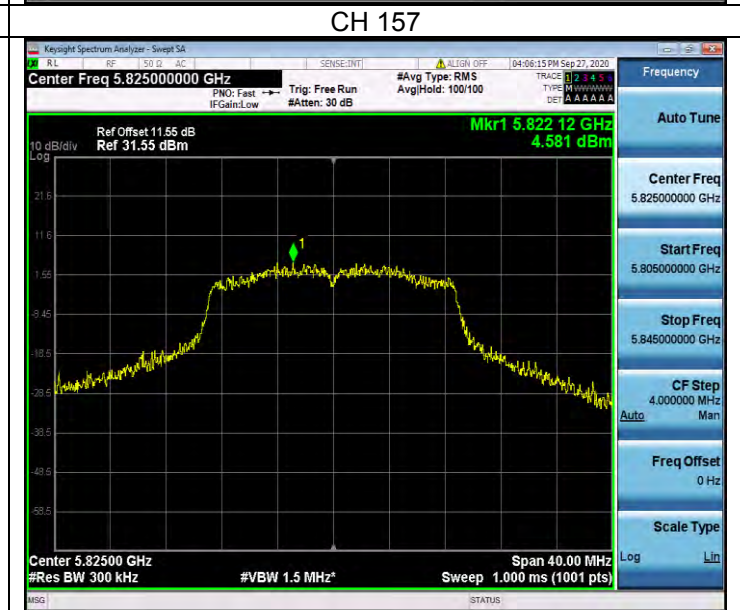
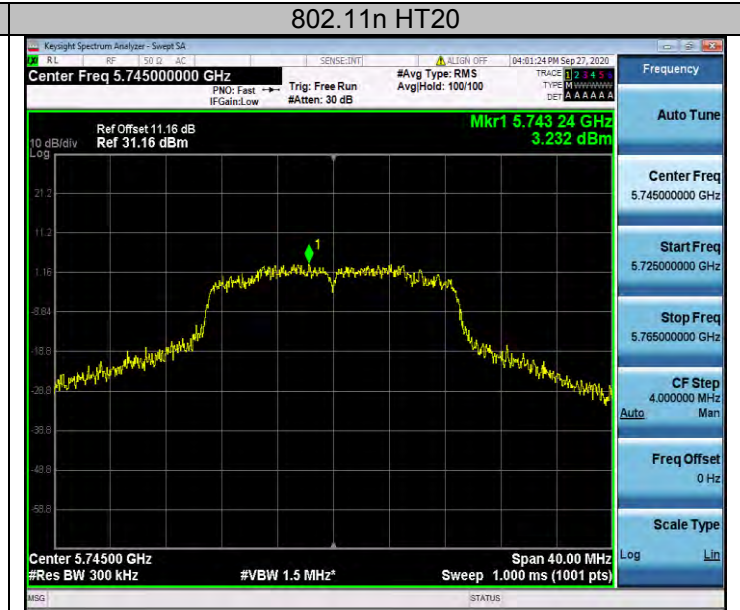
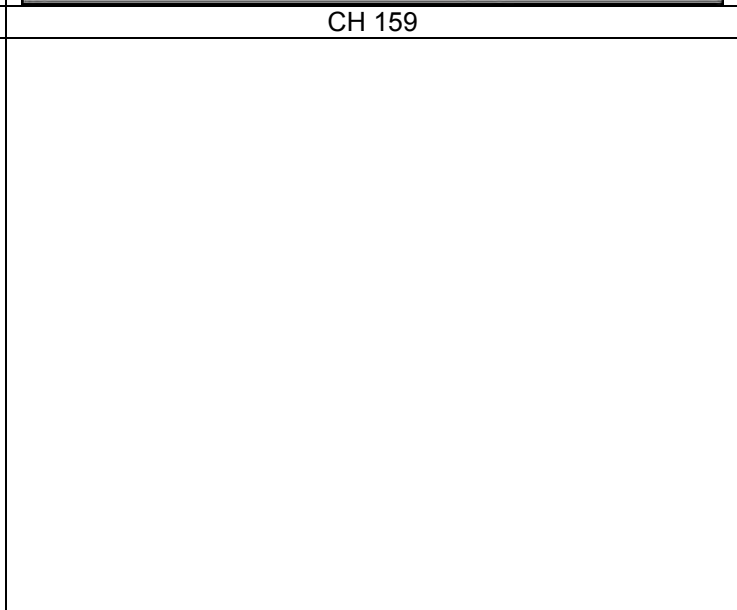
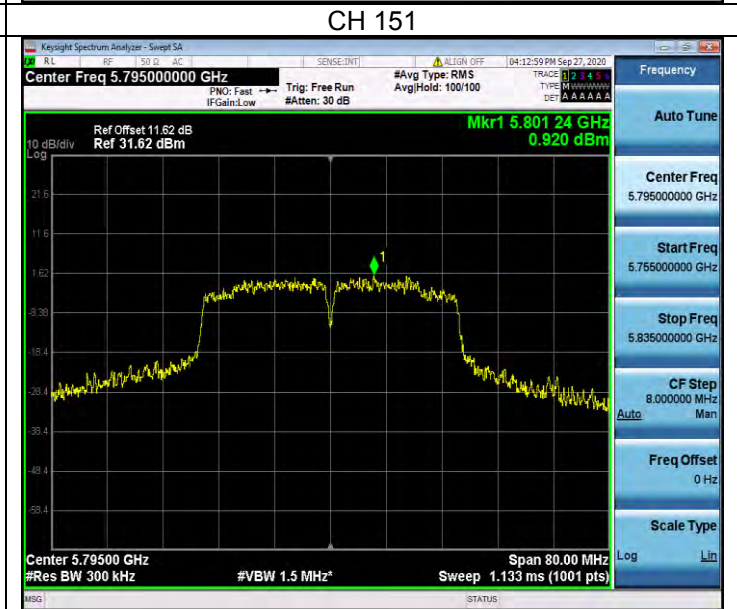
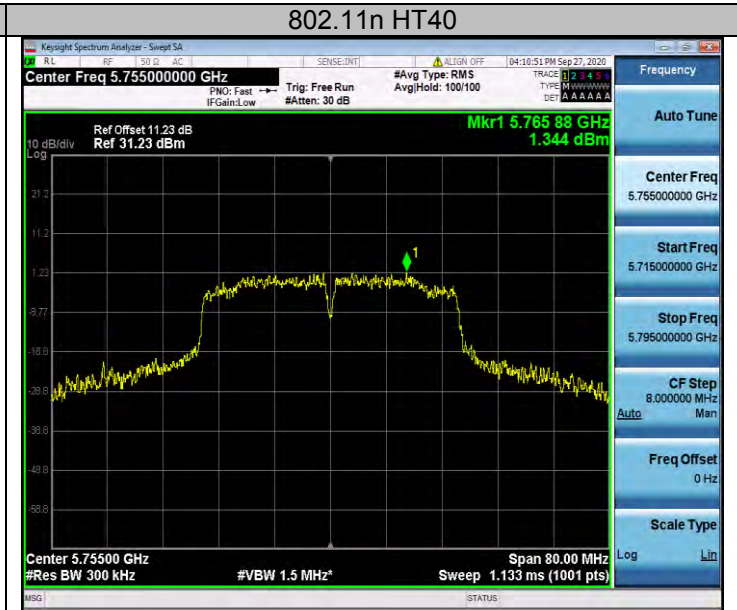


5725-5850MHz:



CH 165

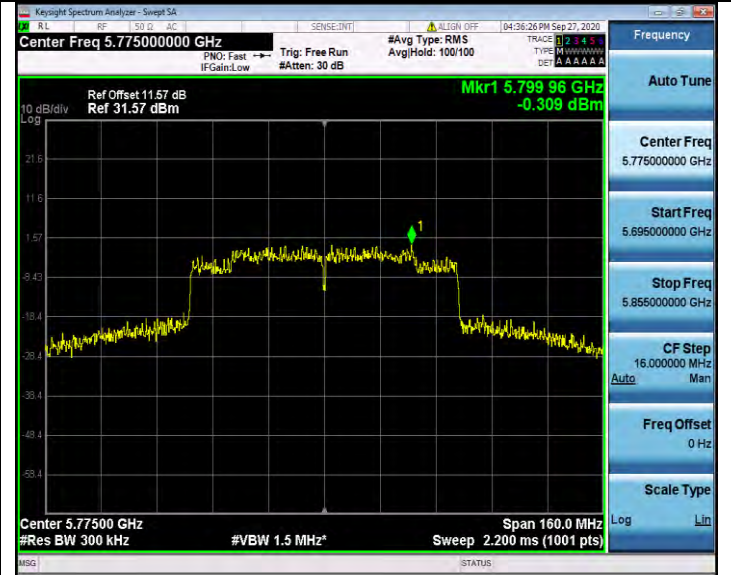
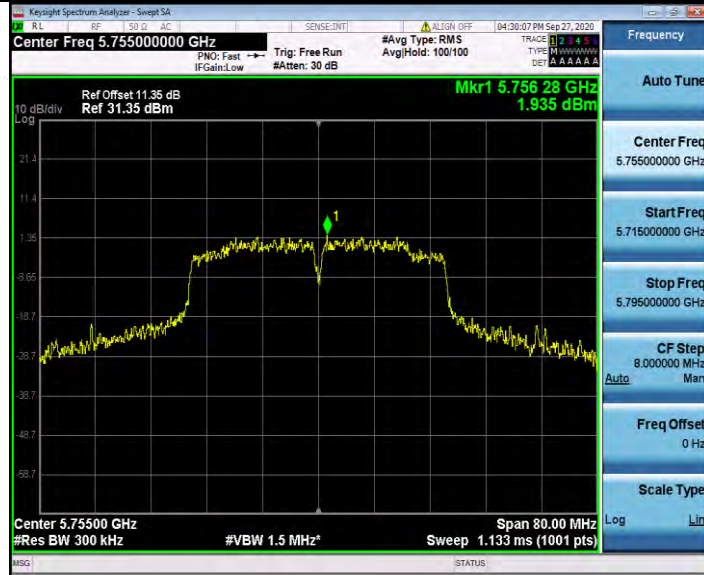
CH 165



CH 165

802.11ac40

802.11ac80



CH 151

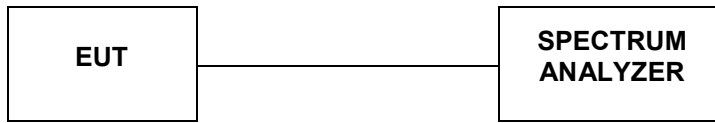
CH 155



CH 159

4.6. 6dB Bandwidth

TEST CONFIGURATION



TEST PROCEDURE

According to KDB789033 D02 General U-NII Test Procedures New Rules v02r01 for one of the following procedures may be used for section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a. Set RBW = 100 kHz.
- b. Set the video bandwidth (VBW) $\geq 3 \times$ RBW
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. Sweep = auto couple.
- f. Allow the trace to stabilize
- g. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

LIMIT

For Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz

TEST RESULTS

Temperature	23.6°C	Humidity	55.7%
Test Engineer	Moon Tan	Configurations	IEEE 802.11a/n/ac

Antenna 0:

Type	Channel	99%Bandwidth (MHz)	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11a	149	17.722	16.360	≥500	Pass
	157	17.627	15.160		
	165	17.300	15.760		
802.11nHT20	149	19.347	15.200	≥500	Pass
	157	18.659	15.200		
	165	18.534	15.160		
802.11ac20	149	18.629	35.280	≥500	Pass
	157	18.351	35.280		
	165	18.409	15.160		
802.11n40	151	37.372	15.760	≥500	Pass
	159	36.868	15.200		
802.11ac40	151	36.665	35.200	≥500	Pass
	159	36.580	35.200		
802.11ac80	155	86.840	72.960	≥500	Pass

Antenna 1:

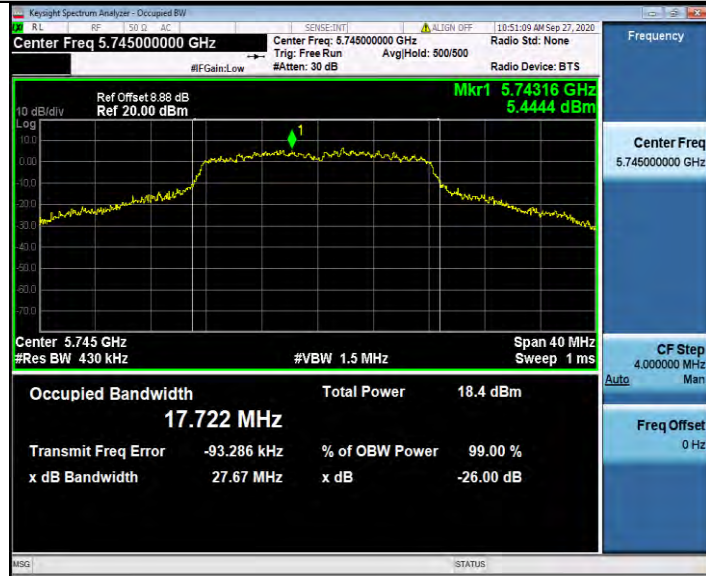
Type	Channel	99%Bandwidth (MHz)	6dB Bandwidth (MHz)	Limit (KHz)	Result
802.11a	149	18.566	15.160	≥500	Pass
	157	17.800	15.200		
	165	18.405	15.400		
802.11nHT20	149	19.311	13.920	≥500	Pass
	157	18.820	15.160		
	165	18.780	15.120		
802.11ac20	149	19.181	35.280	≥500	Pass
	157	18.824	35.200		
	165	18.922	15.200		
802.11n40	151	37.275	15.200	≥500	Pass
	159	37.101	15.200		
802.11ac40	151	37.299	35.200	≥500	Pass
	159	37.072	35.280		
802.11ac80	155	86.357	75.360	≥500	Pass

Antenna 0:

99%Bandwidth

802.11a

802.11n HT20



CH149

CH149



CH157

CH157



CH165

CH165

99%Bandwidth

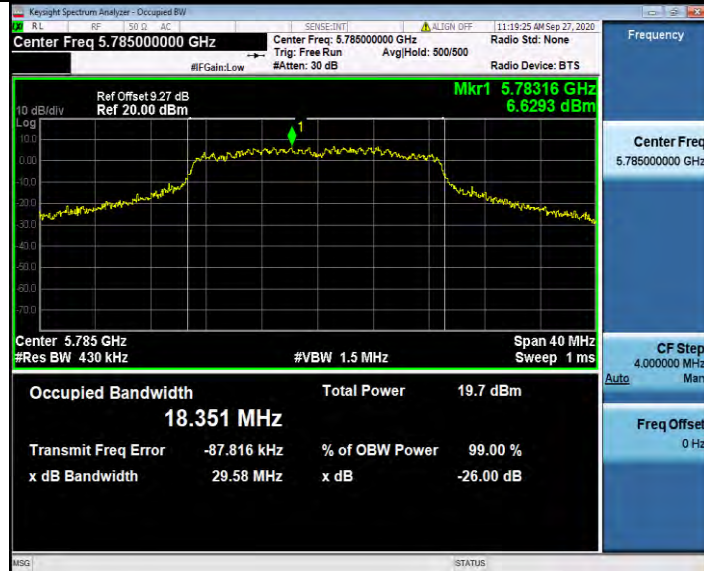
802.11ac20

802.11n HT40



CH149

CH151

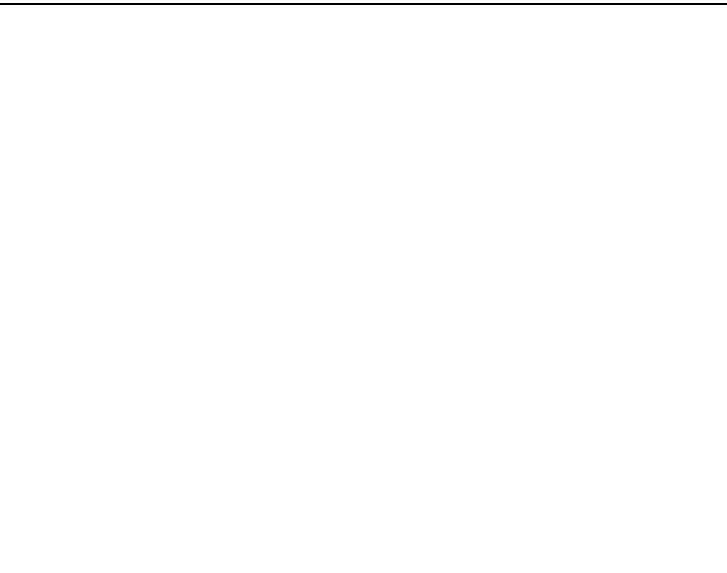


CH157

CH159



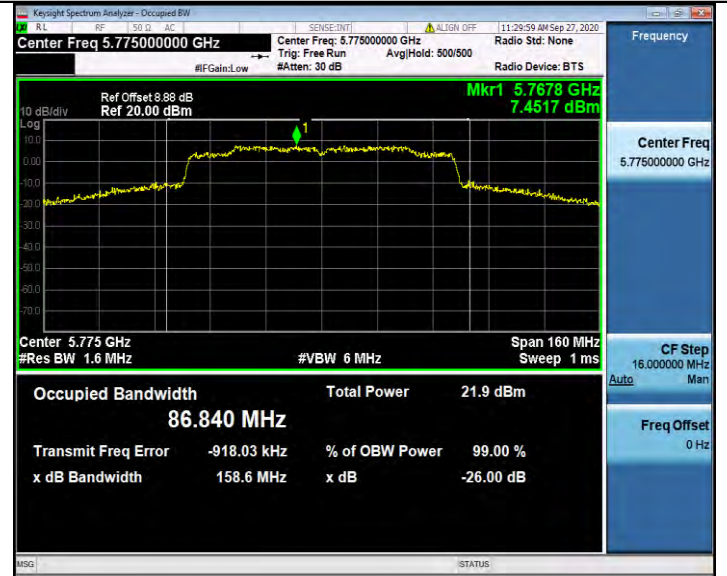
CH165



99%Bandwidth

802.11ac40

802.11ac80



CH151

CH155



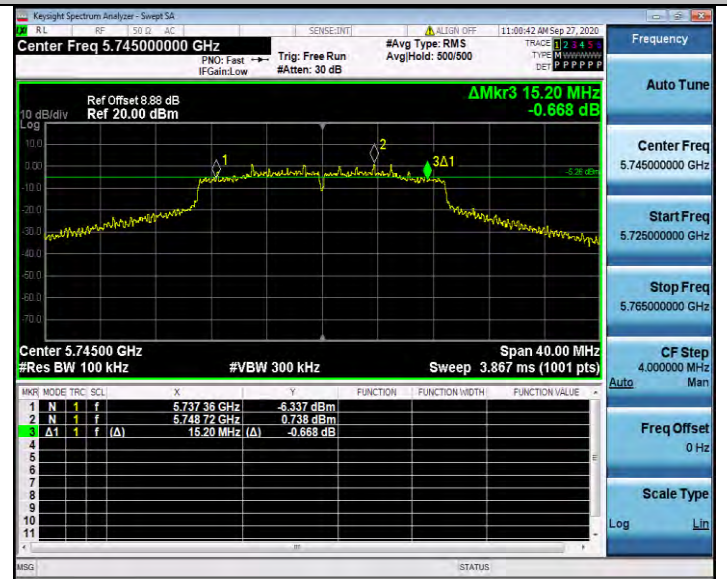
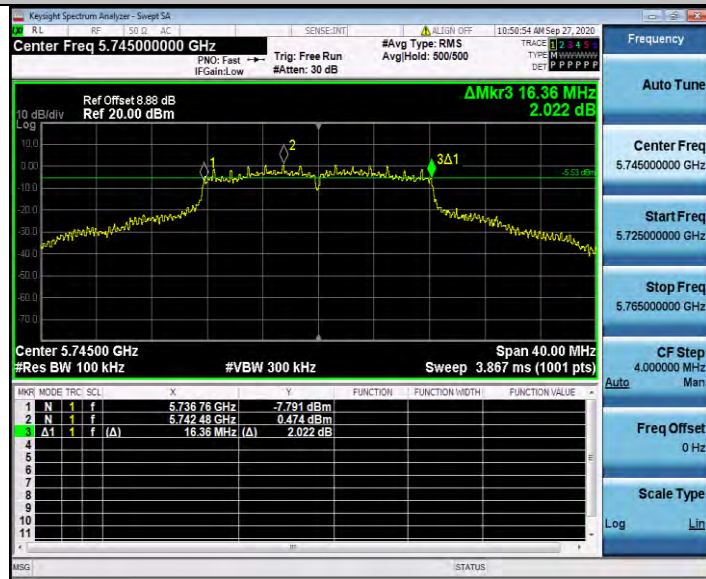
CH159



6dB Bandwidth

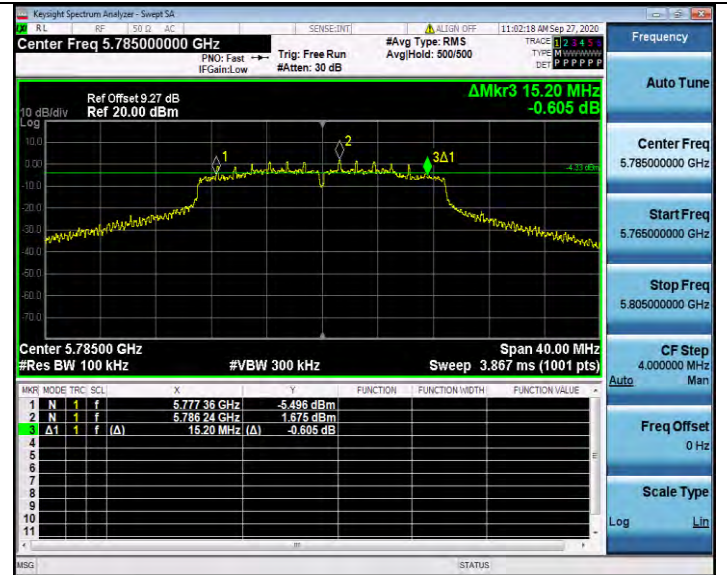
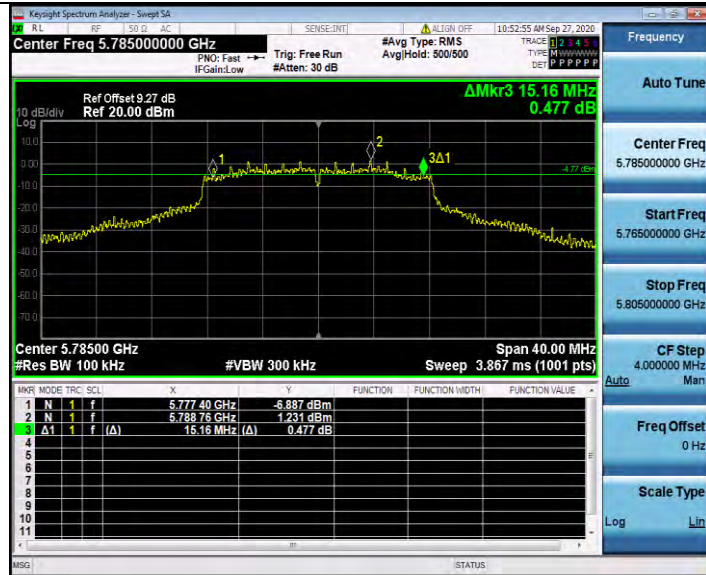
802.11a

802.11n HT20



CH149

CH149



CH157

CH157



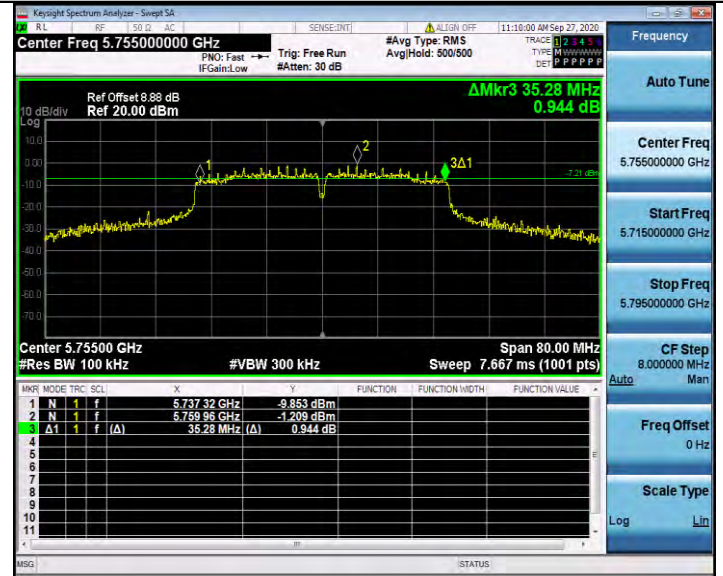
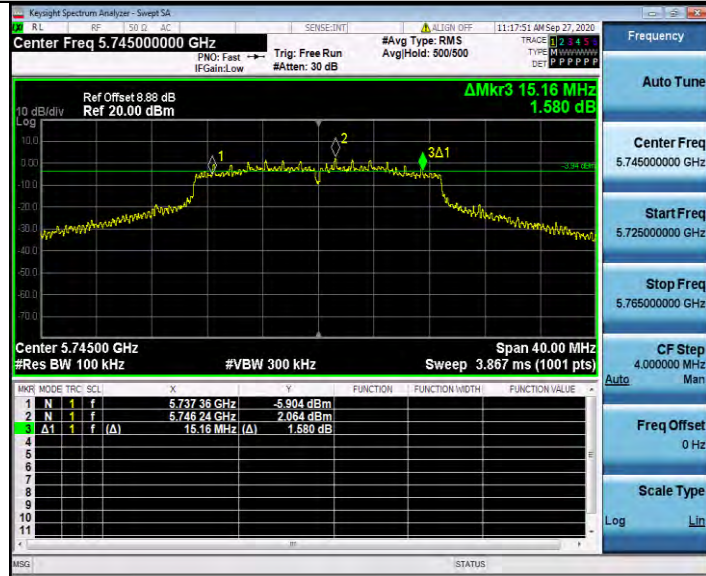
CH165

CH165

6dB Bandwidth

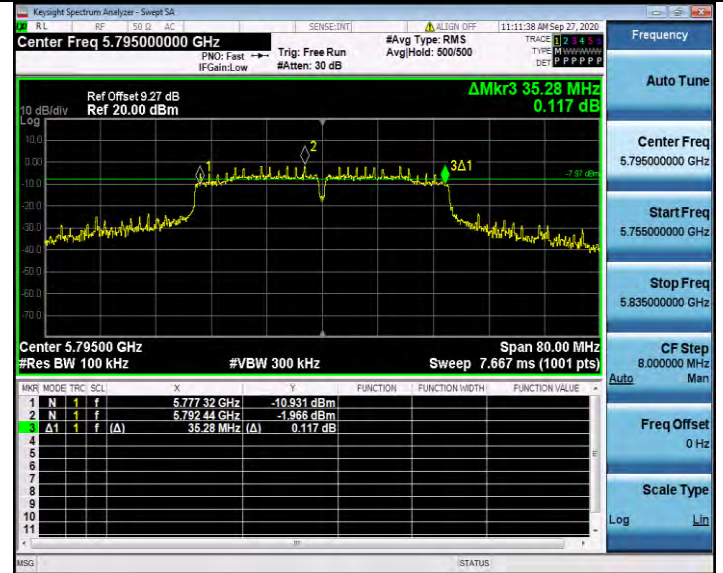
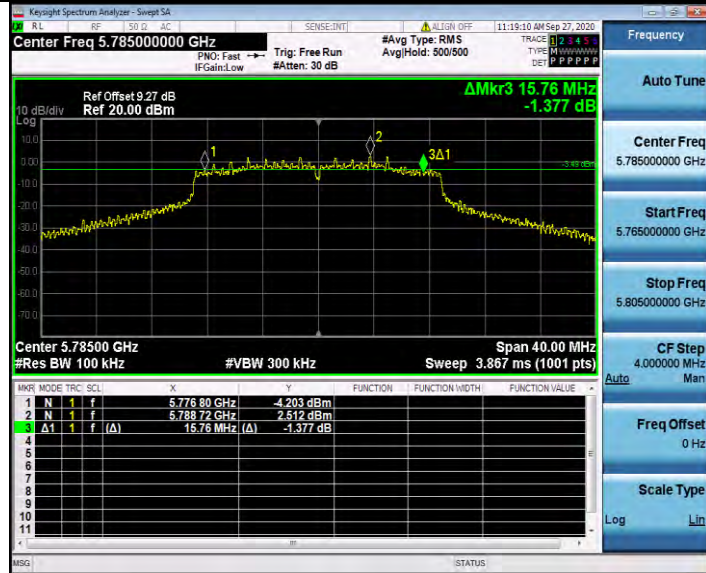
802.11ac20

802.11n HT40



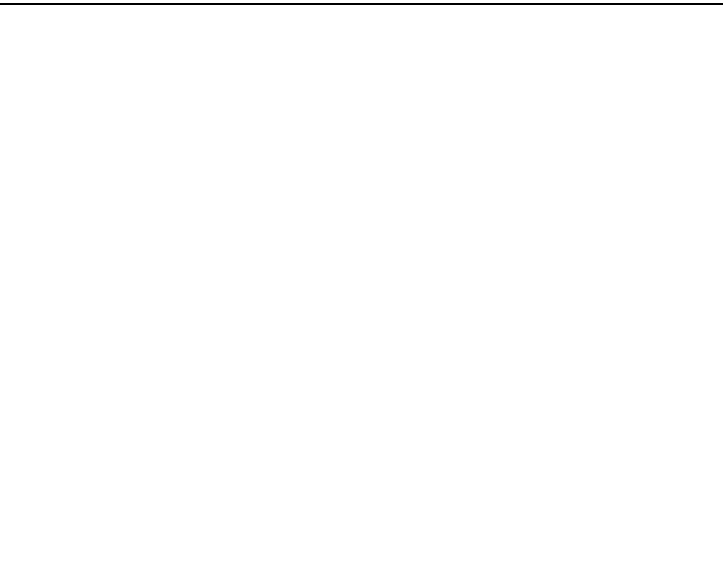
CH149

CH151



CH157

CH159

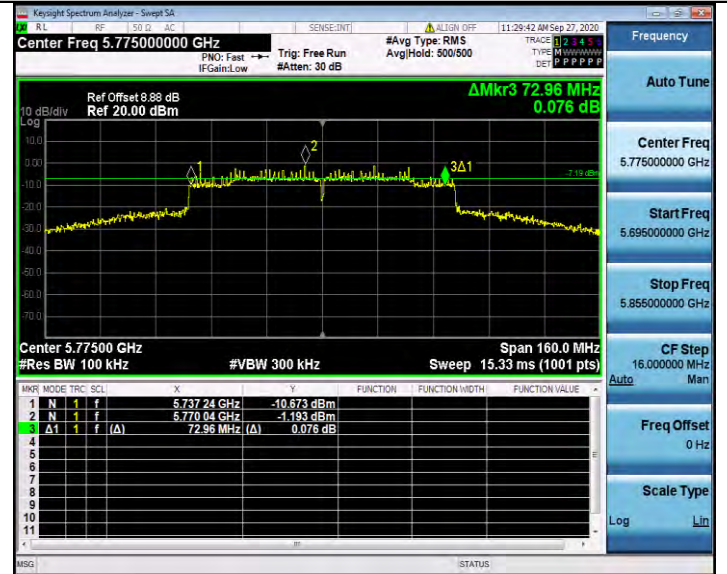
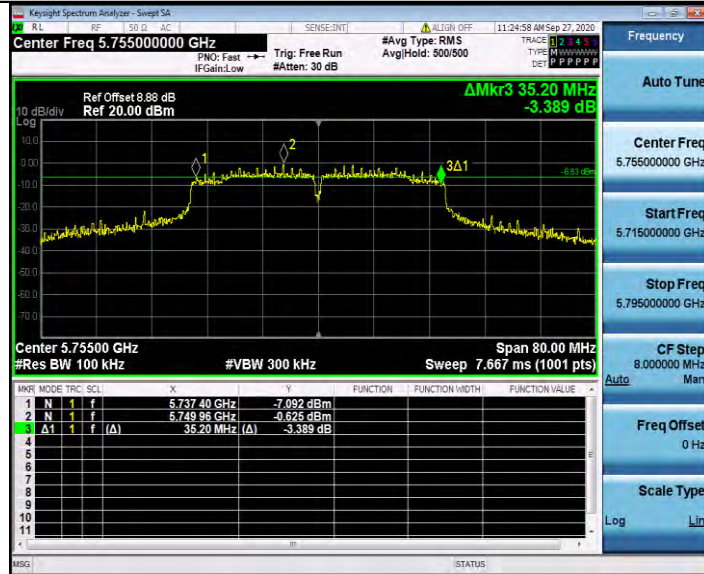


CH165

6dB Bandwidth

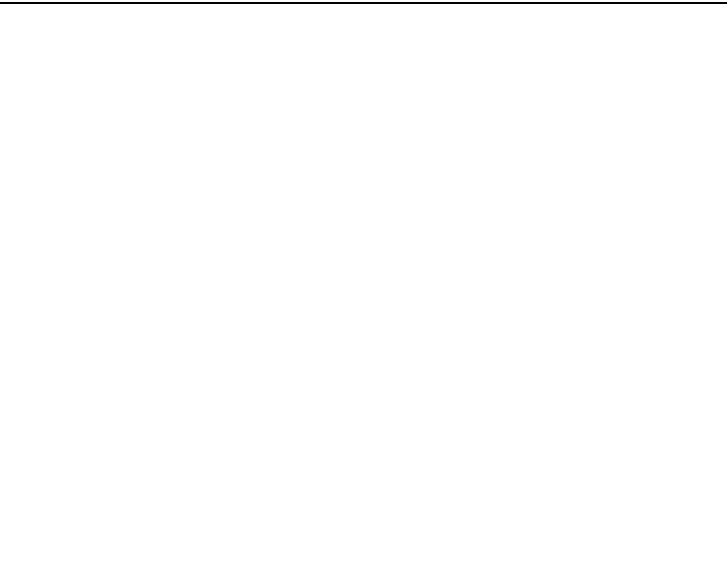
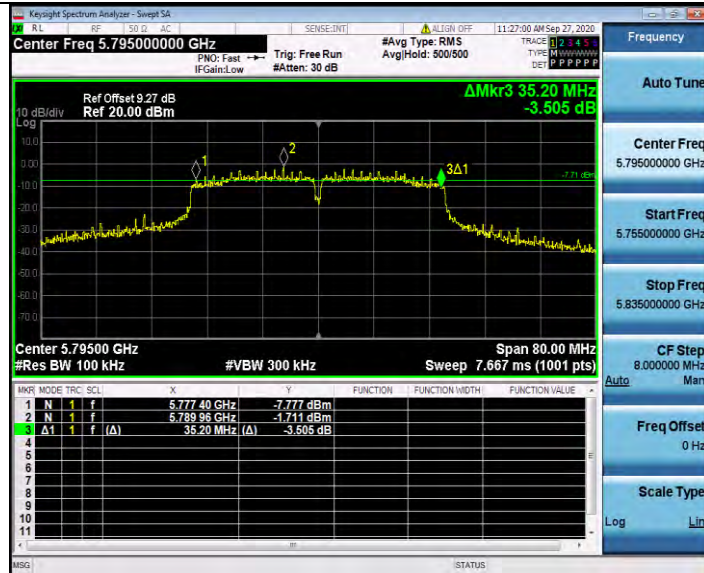
802.11ac40

802.11ac80



CH151

CH155



CH159

Antenna 1:

99%Bandwidth

802.11a

802.11n HT20



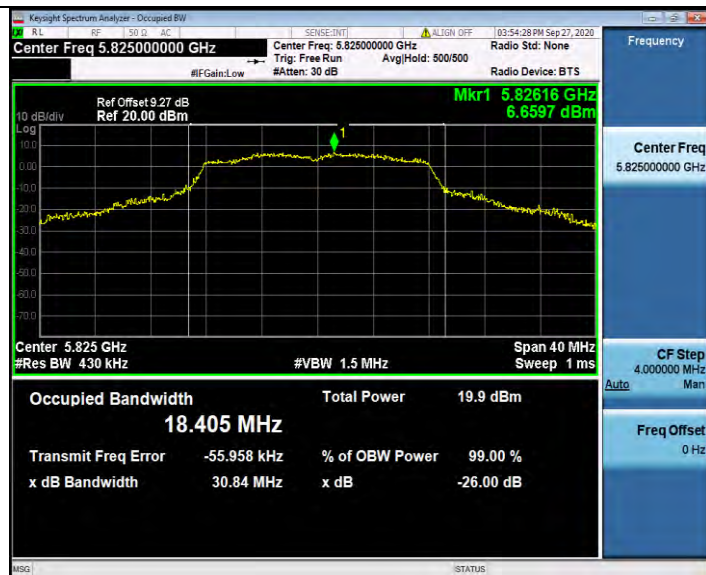
CH149

CH149



CH157

CH157



CH165

CH165

99%Bandwidth

802.11ac20

802.11n HT40



CH149

CH151

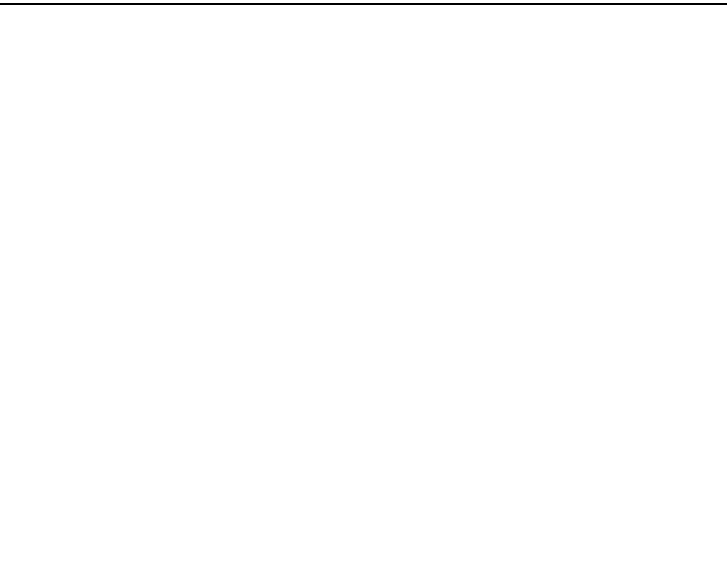


CH157

CH159



CH165



99%Bandwidth

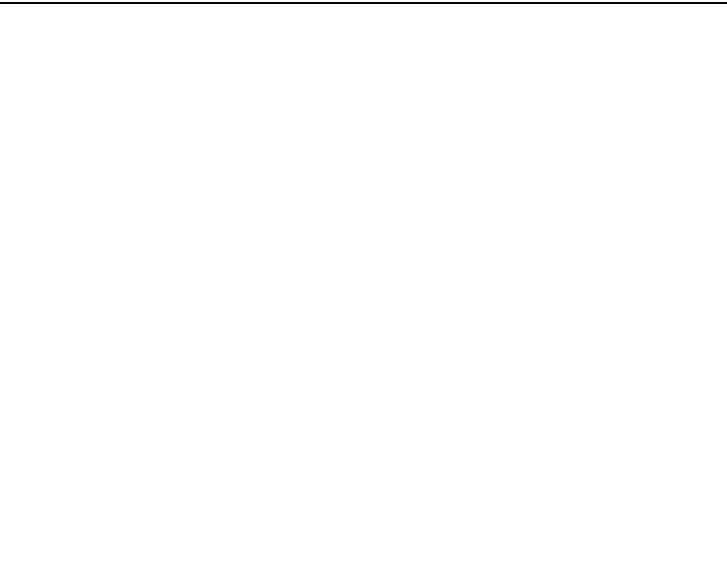
802.11ac40

802.11ac80



CH151

CH155



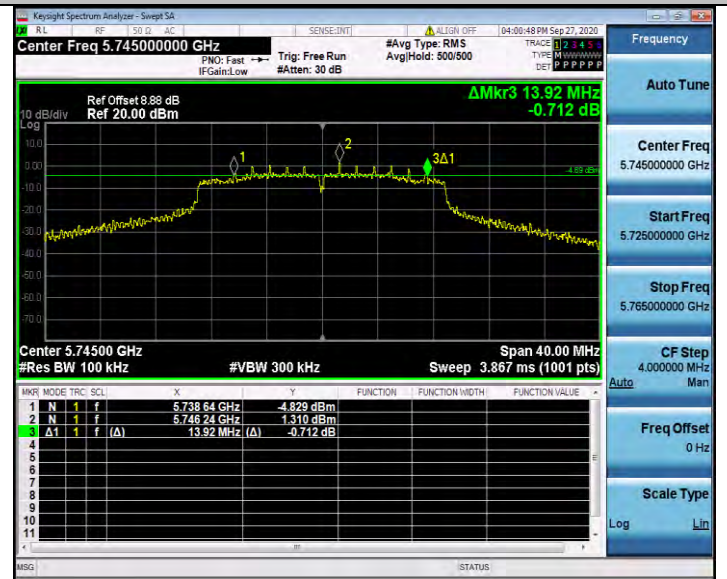
CH159



6dB Bandwidth

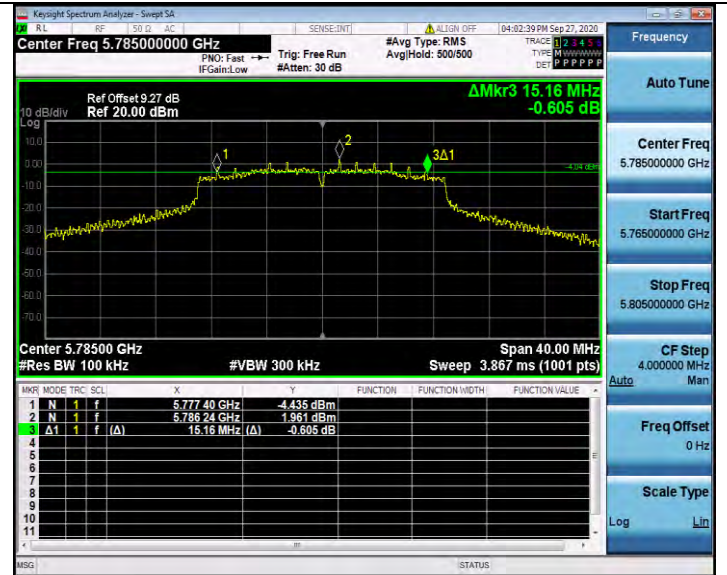
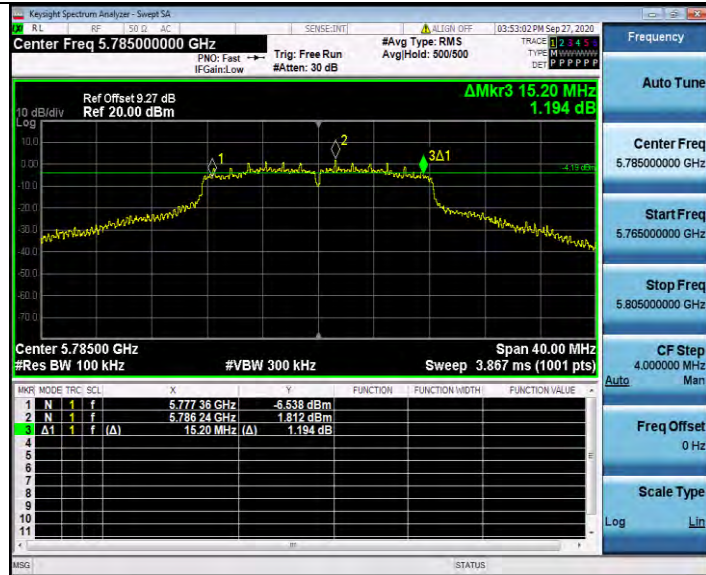
802.11a

802.11n HT20



CH149

CH149



CH157

CH157



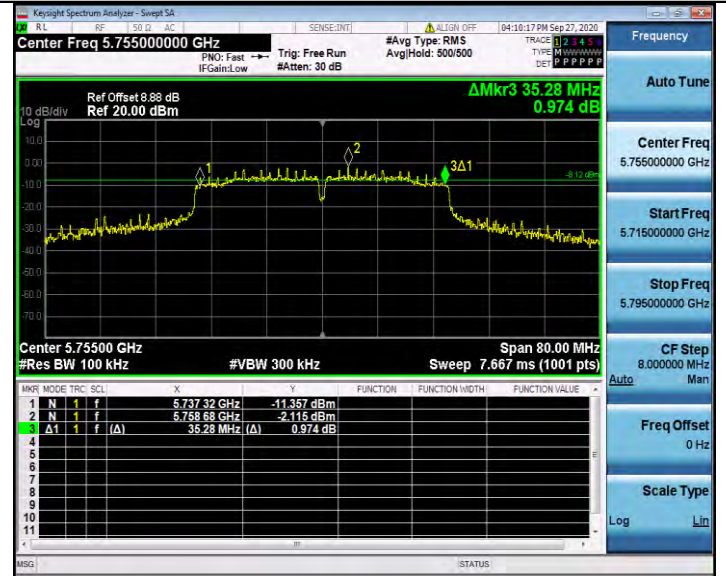
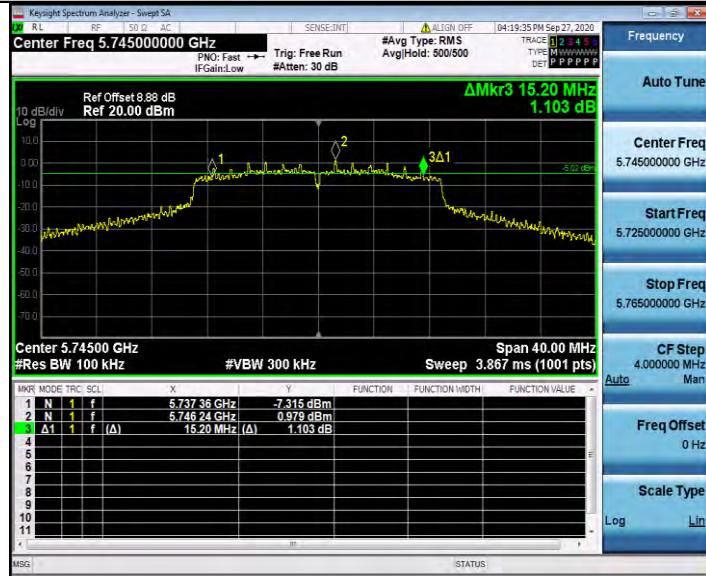
CH165

CH165

6dB Bandwidth

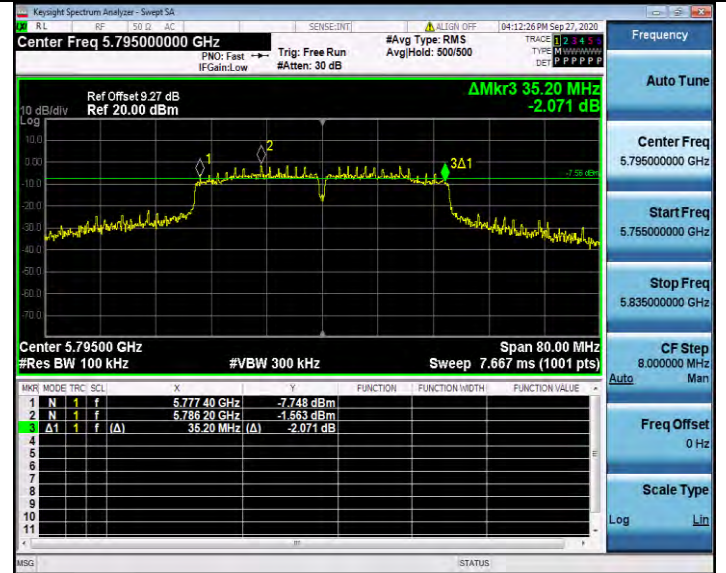
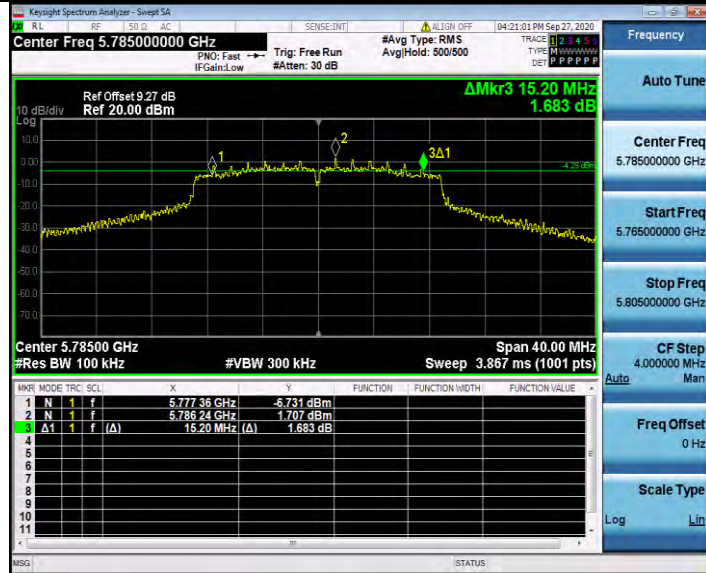
802.11ac20

802.11n HT40



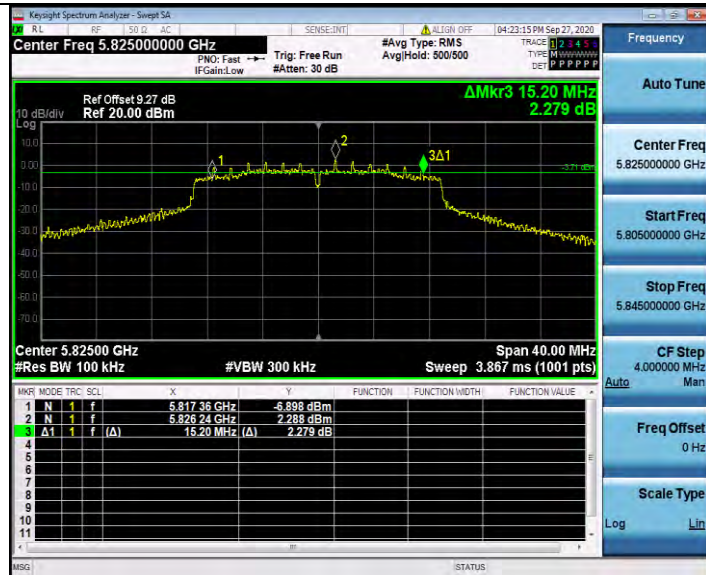
CH149

CH151



CH157

CH159

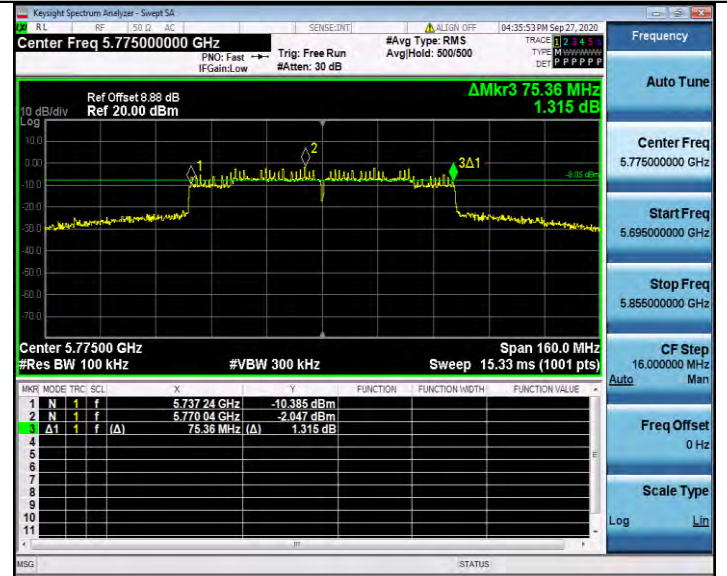
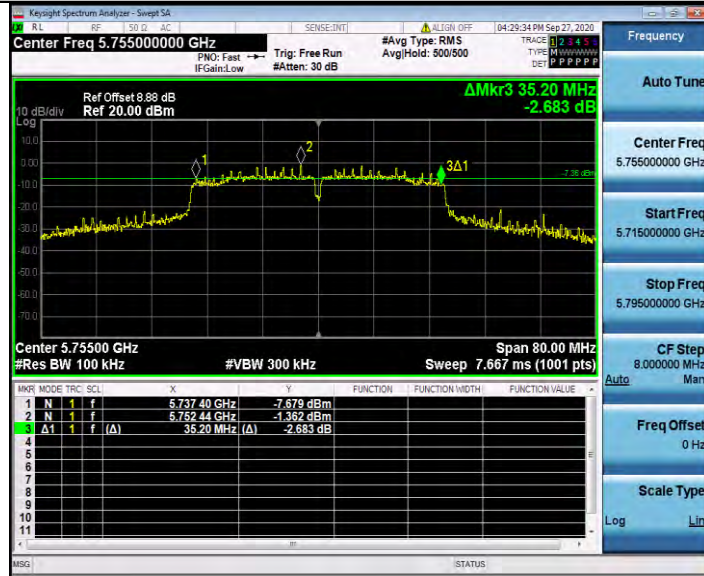


CH165

6dB Bandwidth

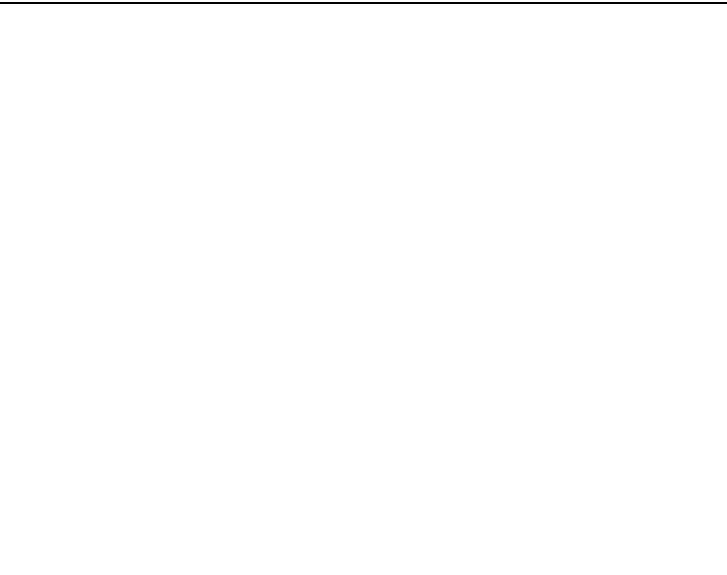
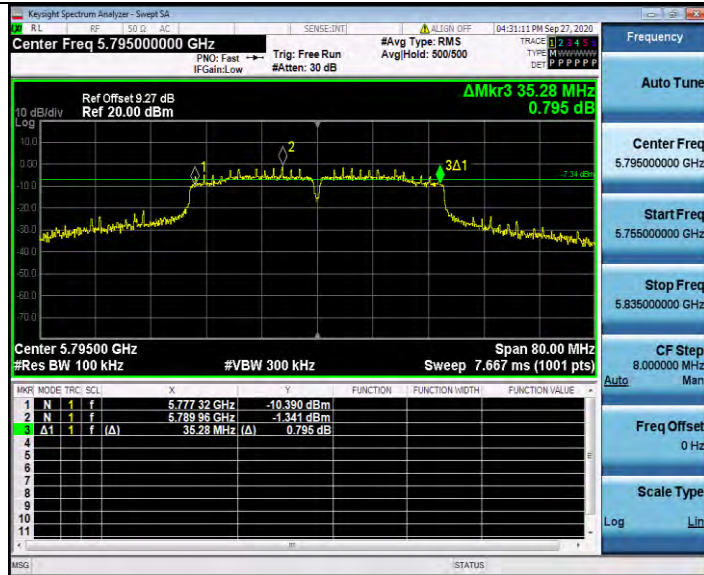
802.11ac40

802.11ac80



CH151

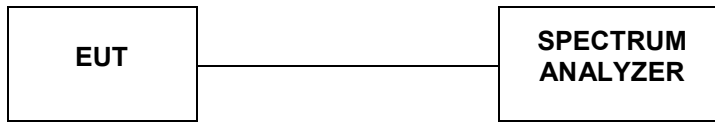
CH155



CH159

4.7. 26dBc Bandwidth

TEST CONFIGURATION



TEST PROCEDURE

According to KDB789033 D02 General U-NII Test Procedures New Rules v02r01 for one of the following procedures may be used for Emission Bandwidth (EBW) measurement:

- a. Set RBW = 220 kHz/430 kHz /820 kHz (approximately 1% of the emission bandwidth).
- b. Set the video bandwidth (VBW) = 3* RBW)
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. Sweep = auto couple.
- f. Allow the trace to stabilize
- g. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

LIMIT

No Limits for 26dBc Bandwidth

TEST RESULTS

Temperature	23.6°C	Humidity	55.7%
Test Engineer	Moon Tan	Configurations	IEEE 802.11a/n/ac

Antenna 0:

Type	Channel	99%Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (KHz)	Result
802.11a	36	19.662	33.040	-	Pass
	40	20.336	31.520		
	48	20.054	33.560		
802.11nHT20	36	20.561	34.040	-	Pass
	40	22.281	37.440		
	48	21.234	35.600		
802.11ac20	36	21.390	76.560	-	Pass
	40	21.018	77.200		
	48	20.528	31.640		
802.11n40	38	41.602	33.800	-	Pass
	46	39.325	34.360		
802.11ac40	38	37.883	75.120	-	Pass
	46	38.860	69.760		
802.11ac80	42	78.363	150.080	-	Pass

Antenna 1:

Type	Channel	99%Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (KHz)	Result
802.11a	36	22.184	29.280	-	Pass
	40	22.061	34.440		
	48	21.072	32.640		
802.11nHT20	36	24.202	36.840	-	Pass
	40	23.949	36.800		
	48	21.680	35.160		
802.11ac20	36	23.647	78.160	-	Pass
	40	21.503	76.400		
	48	21.991	36.080		
802.11n40	38	44.239	35.200	-	Pass
	46	39.190	35.360		
802.11ac40	38	43.627	77.760	-	Pass
	46	41.629	76.720		
802.11ac80	42	82.385	159.680	-	Pass

Antenna 0:

99%Bandwidth

802.11a

802.11n HT20



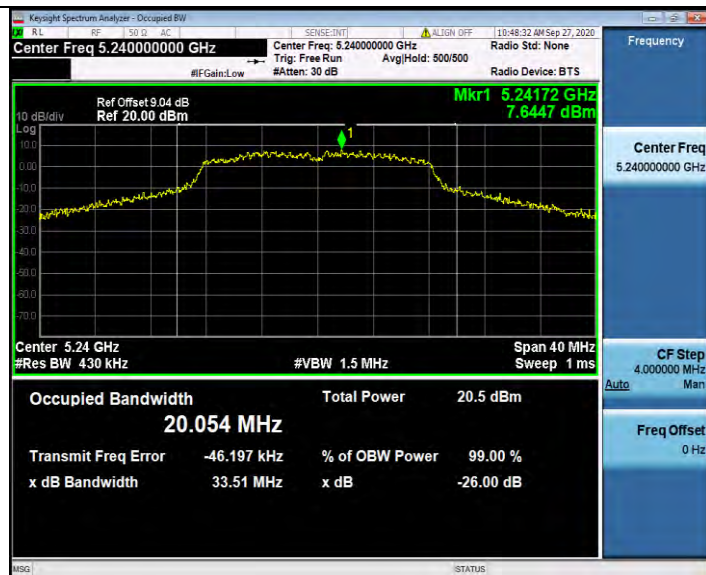
CH36

CH36



CH40

CH40



CH48

CH48

99%Bandwidth

802.11ac20

802.11n HT40



CH36

CH38

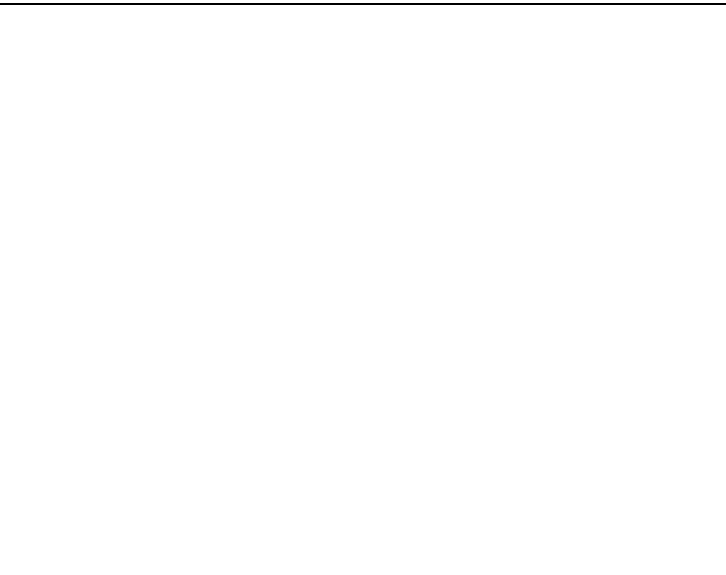


CH40

CH46



CH48



99%Bandwidth

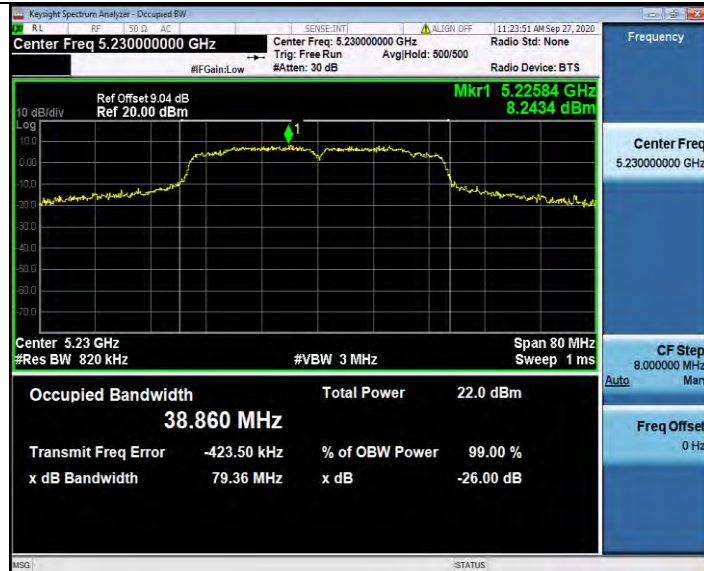
802.11ac40

802.11ac80



CH38

CH42



CH46

