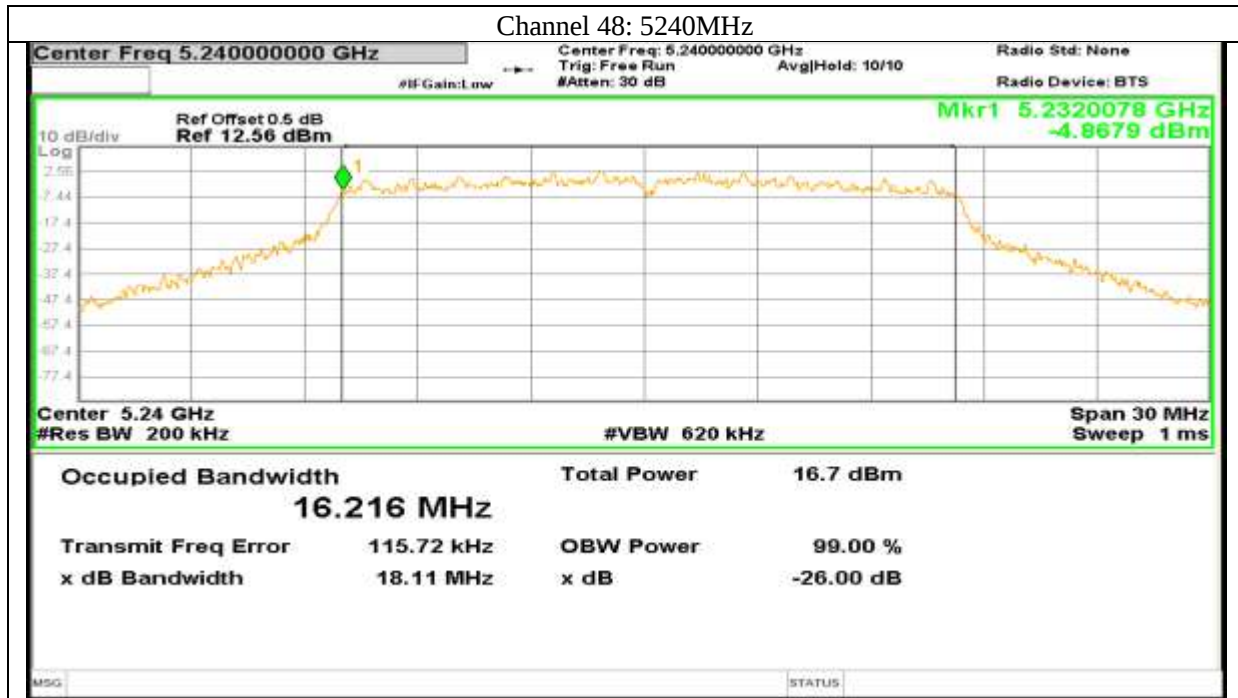
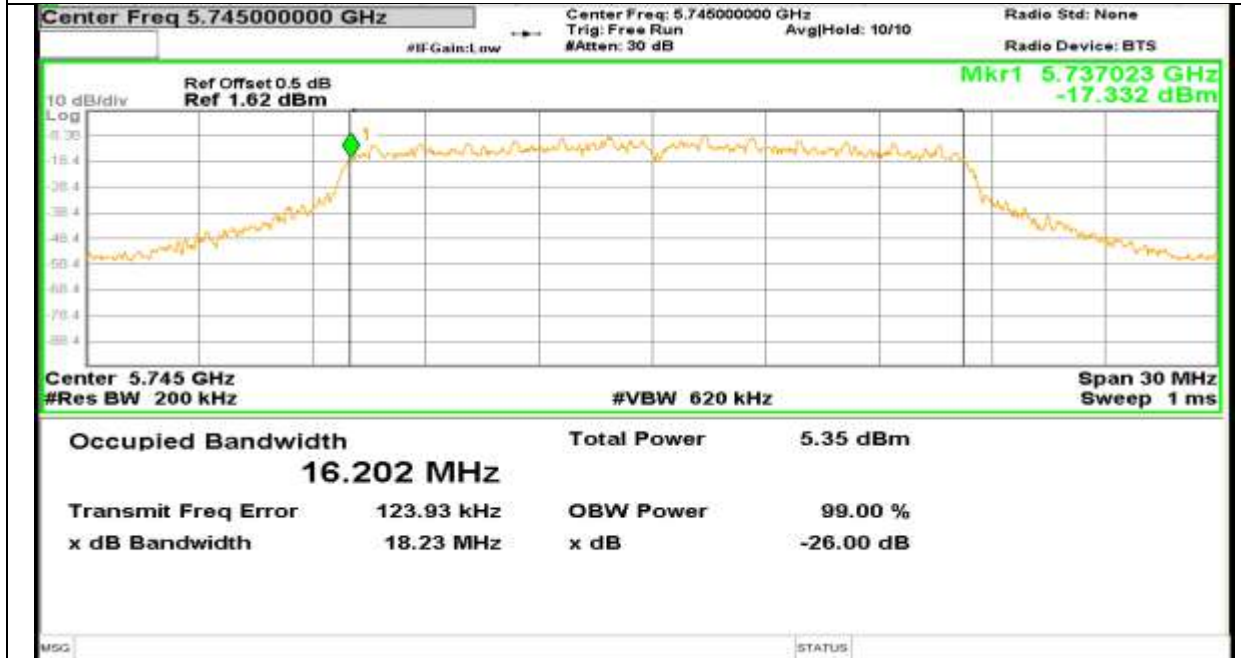




99% OBW 802.11n20

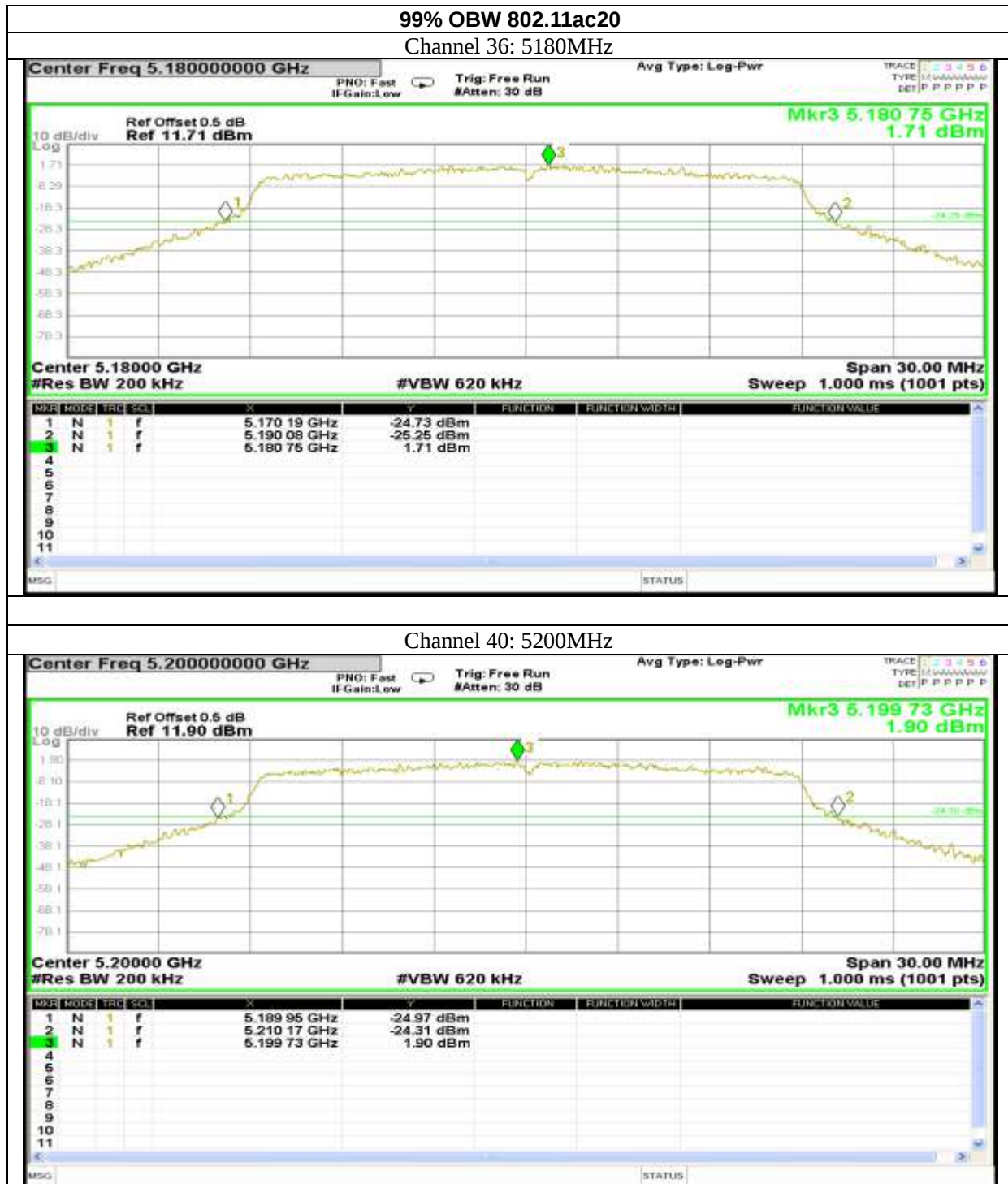
Channel 149: 5745MHz



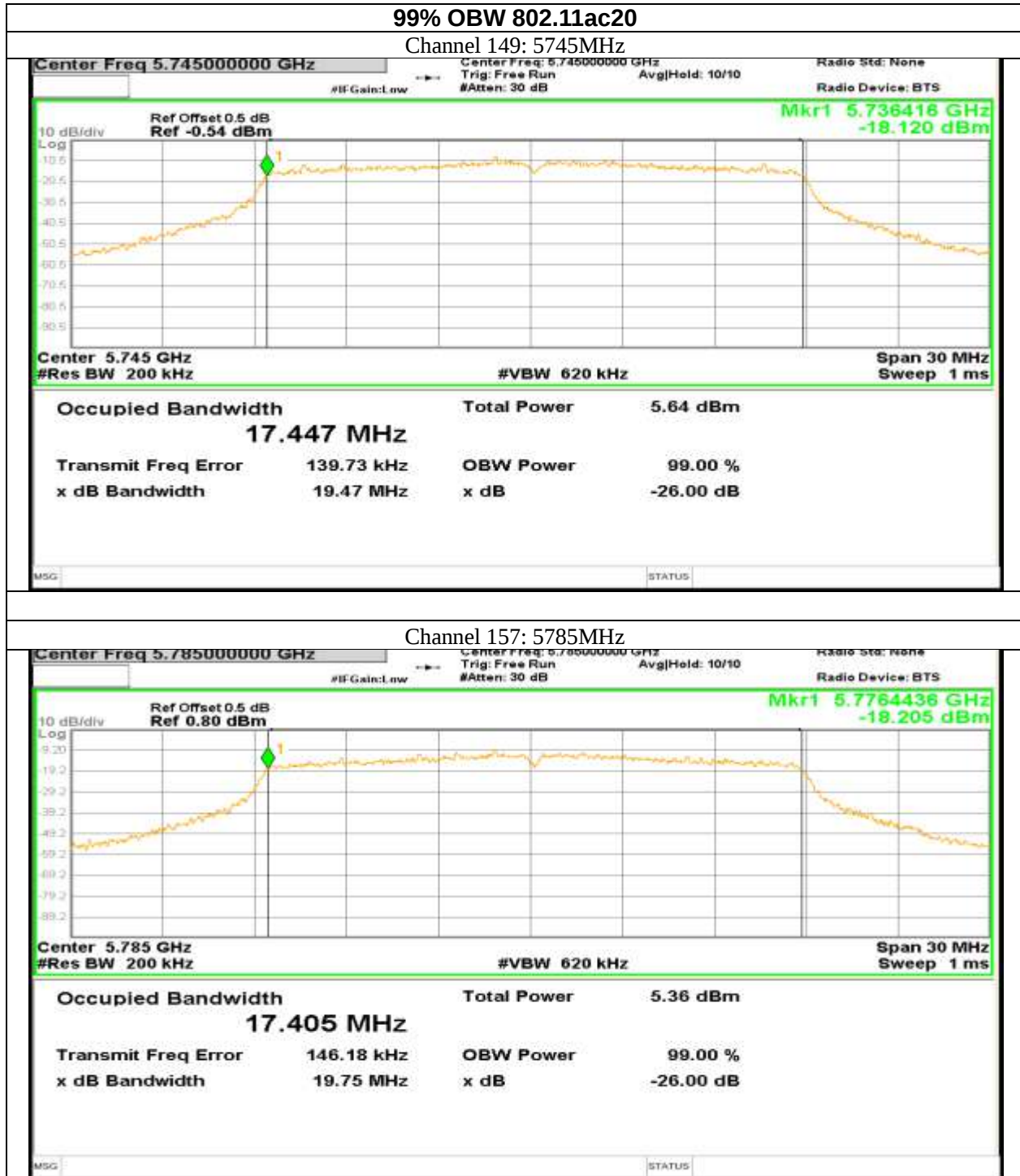
Channel 157: 5785MHz



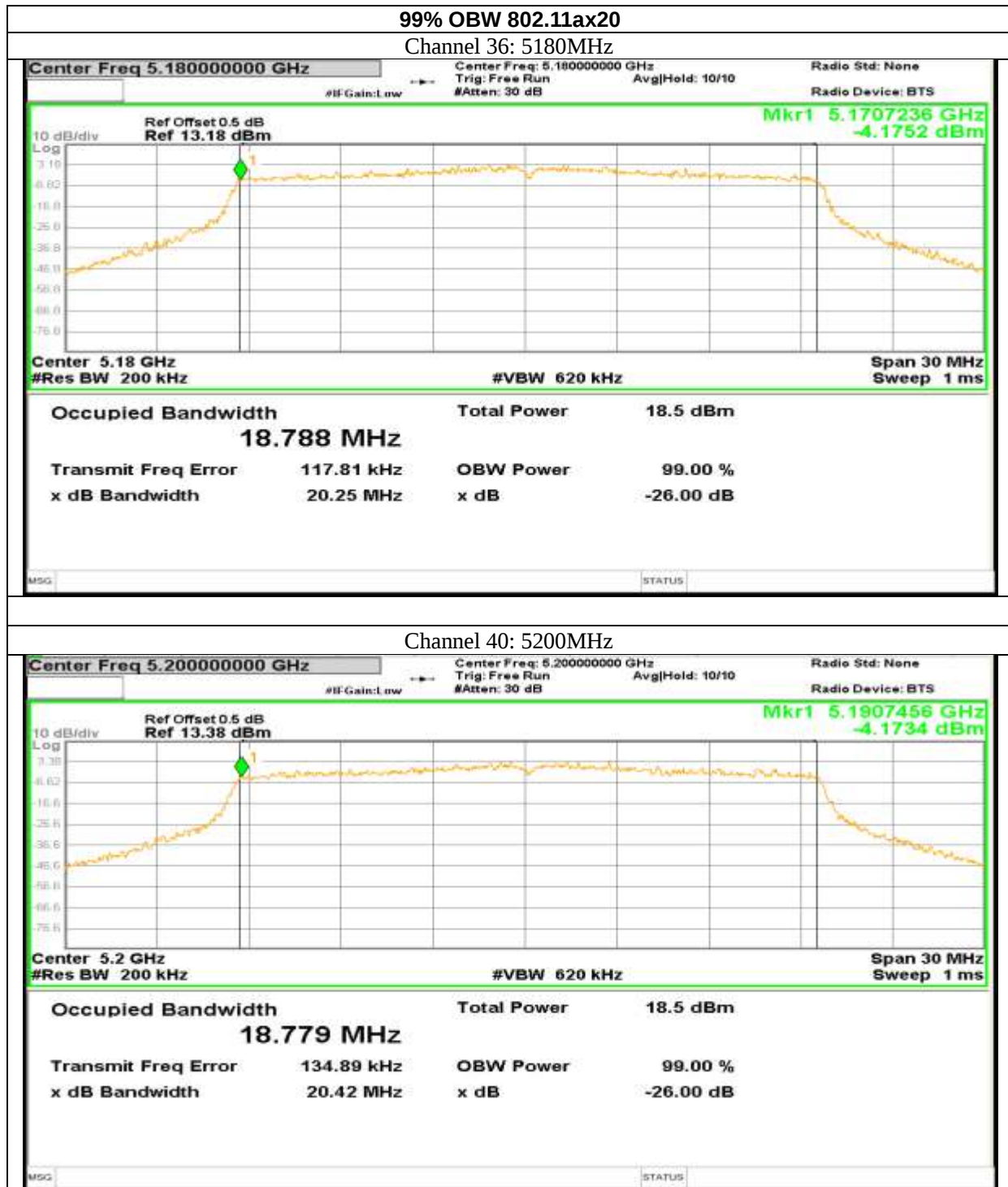


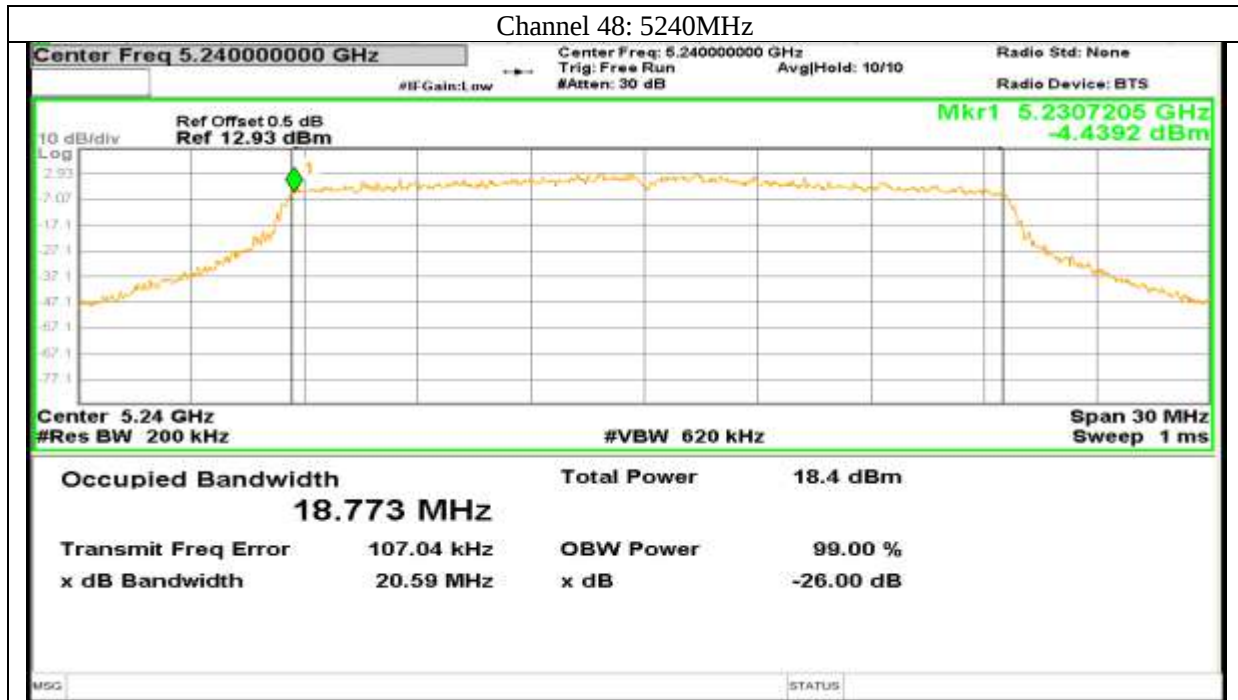


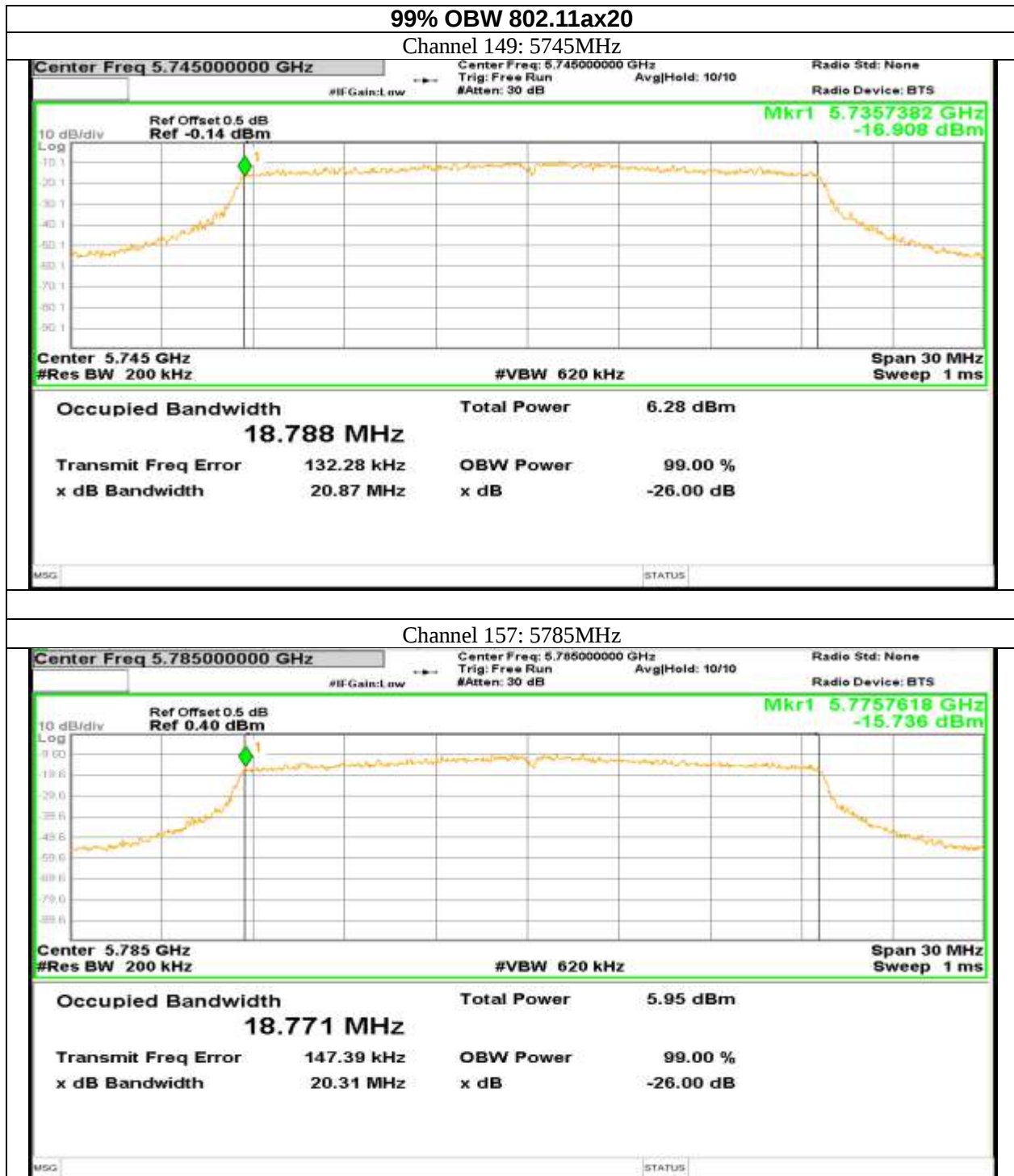


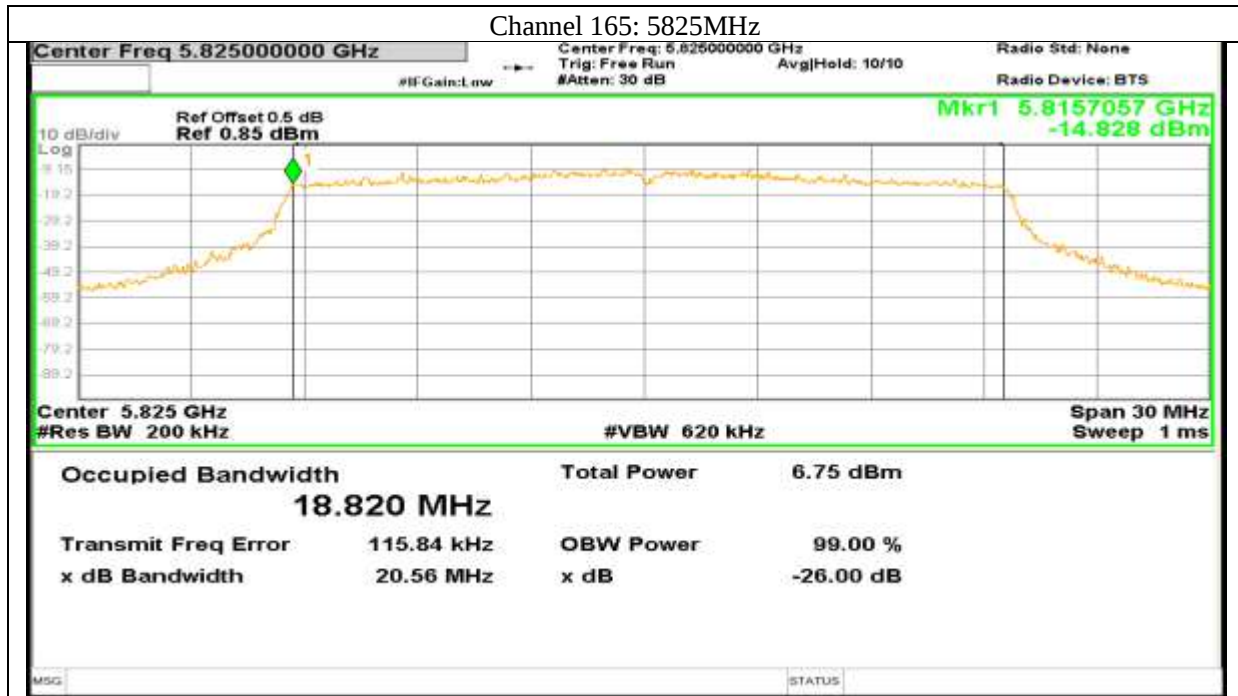


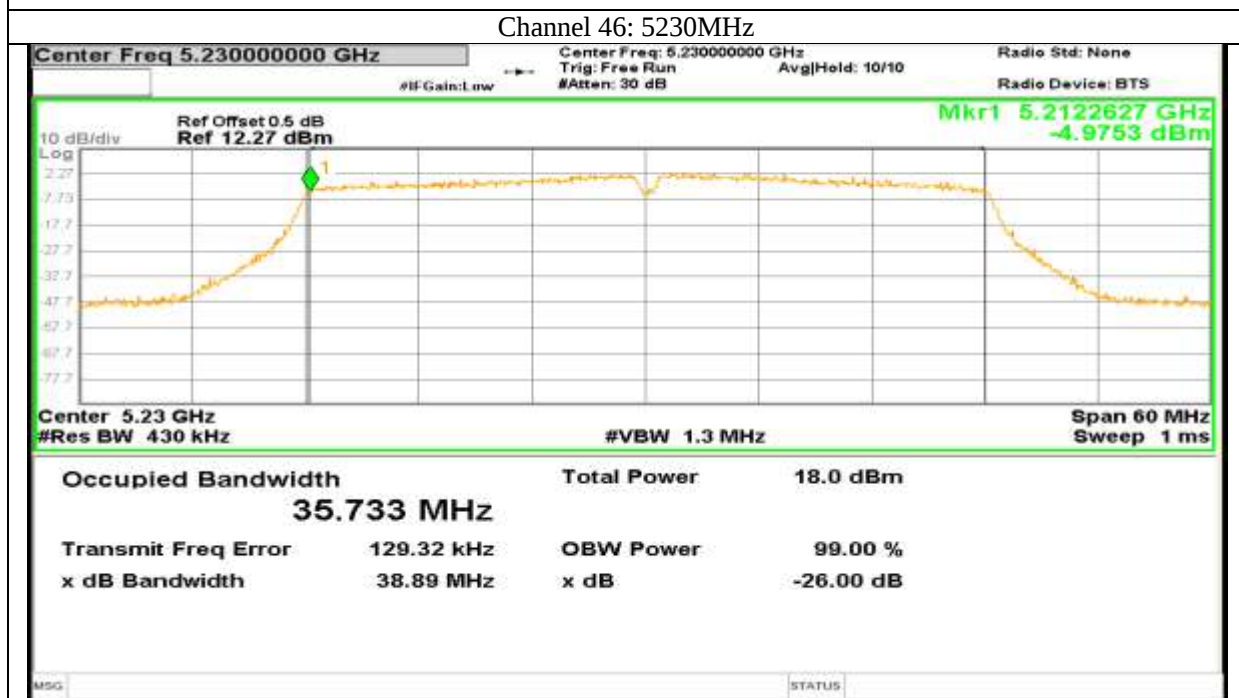
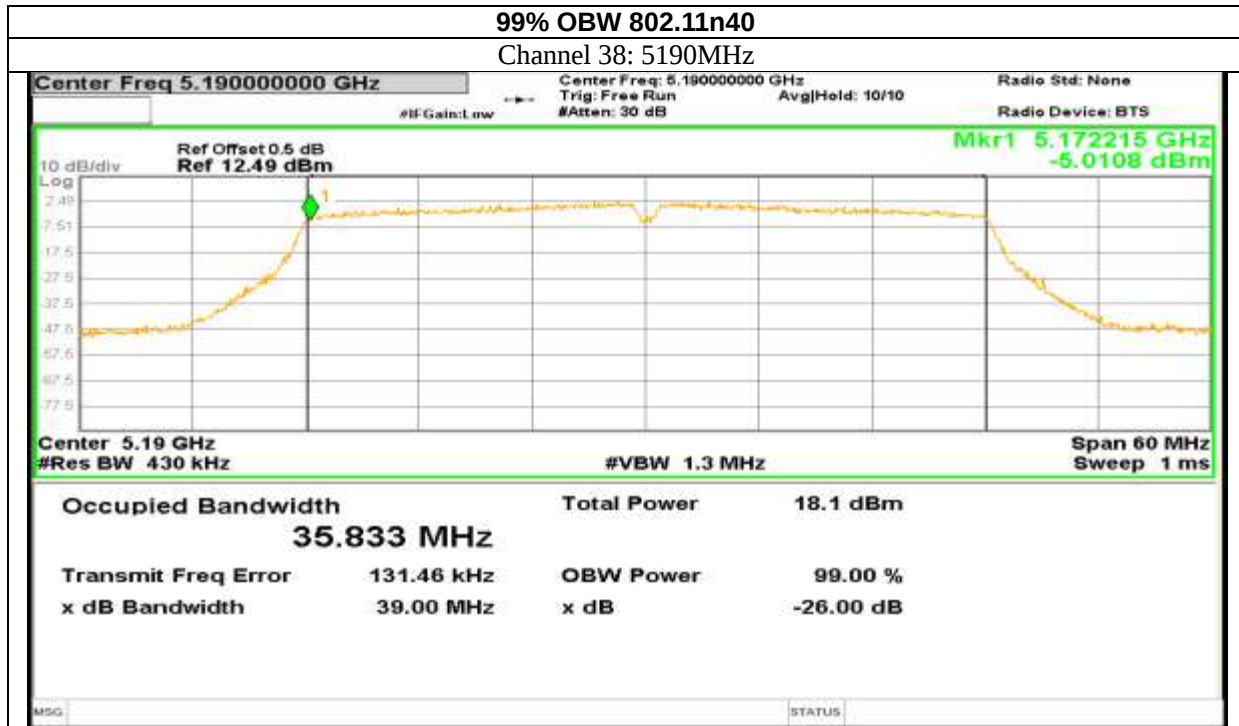


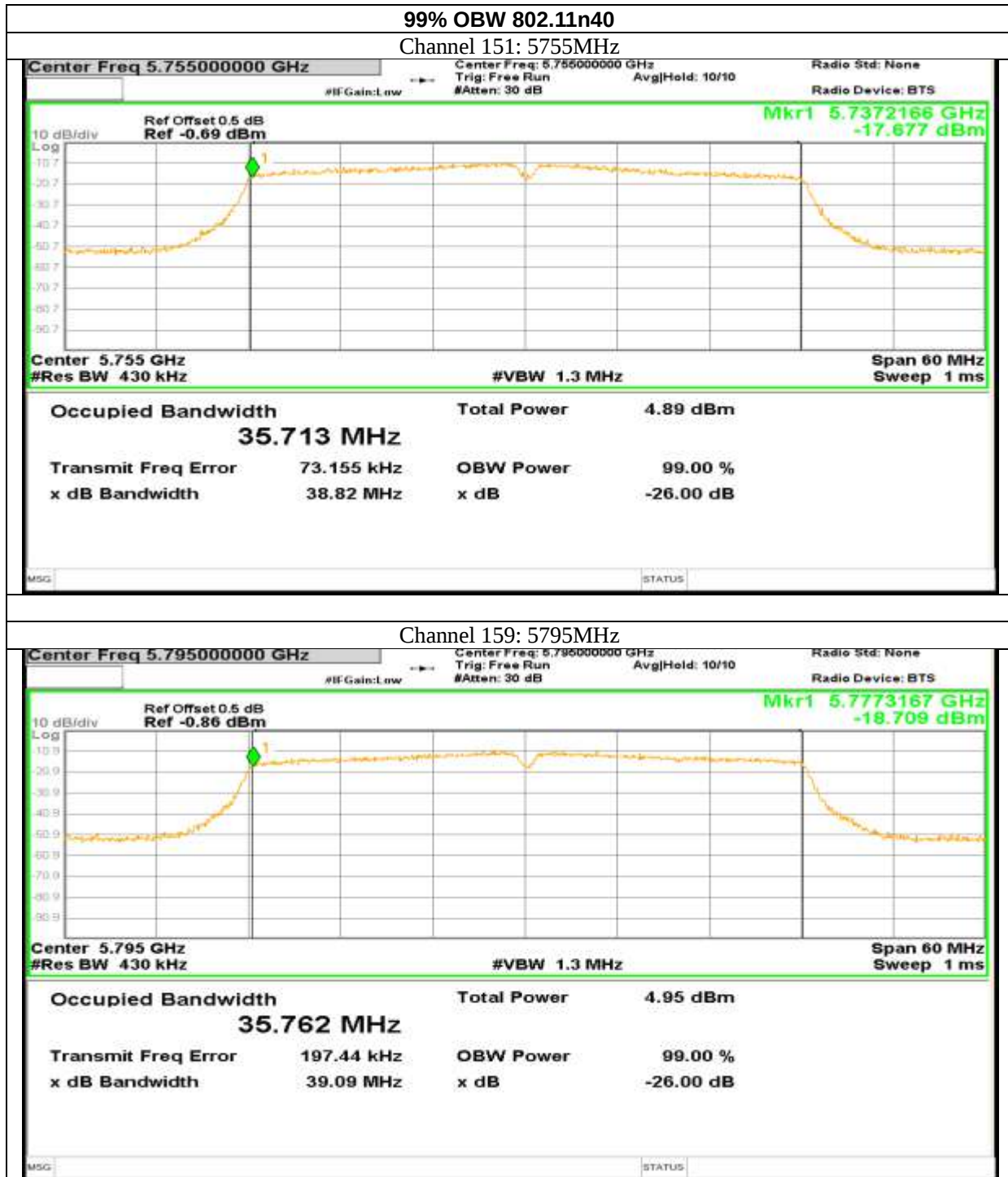


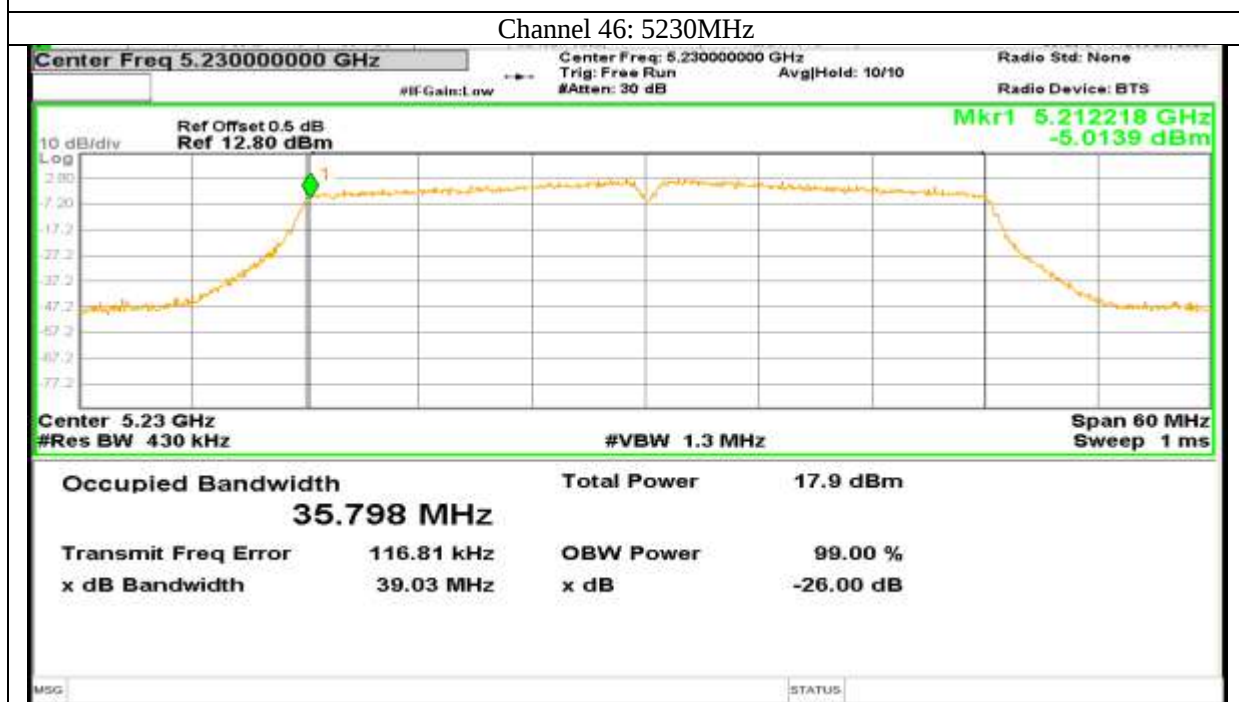






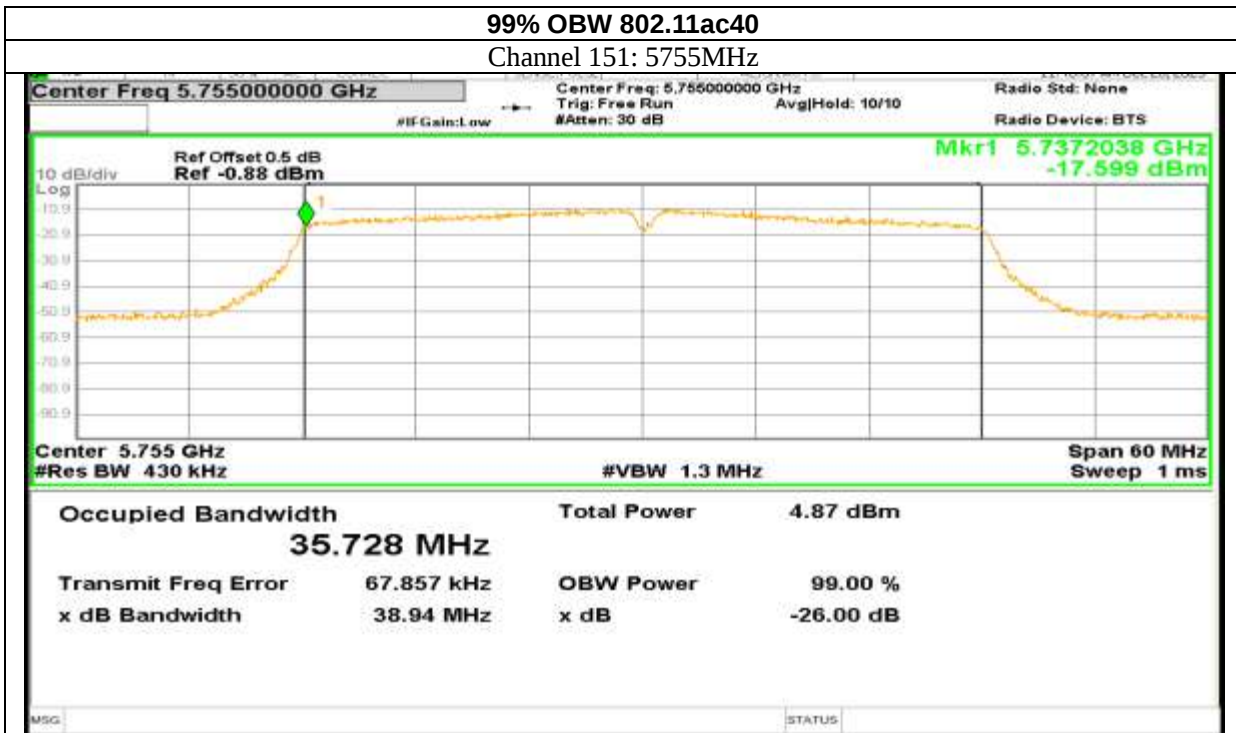






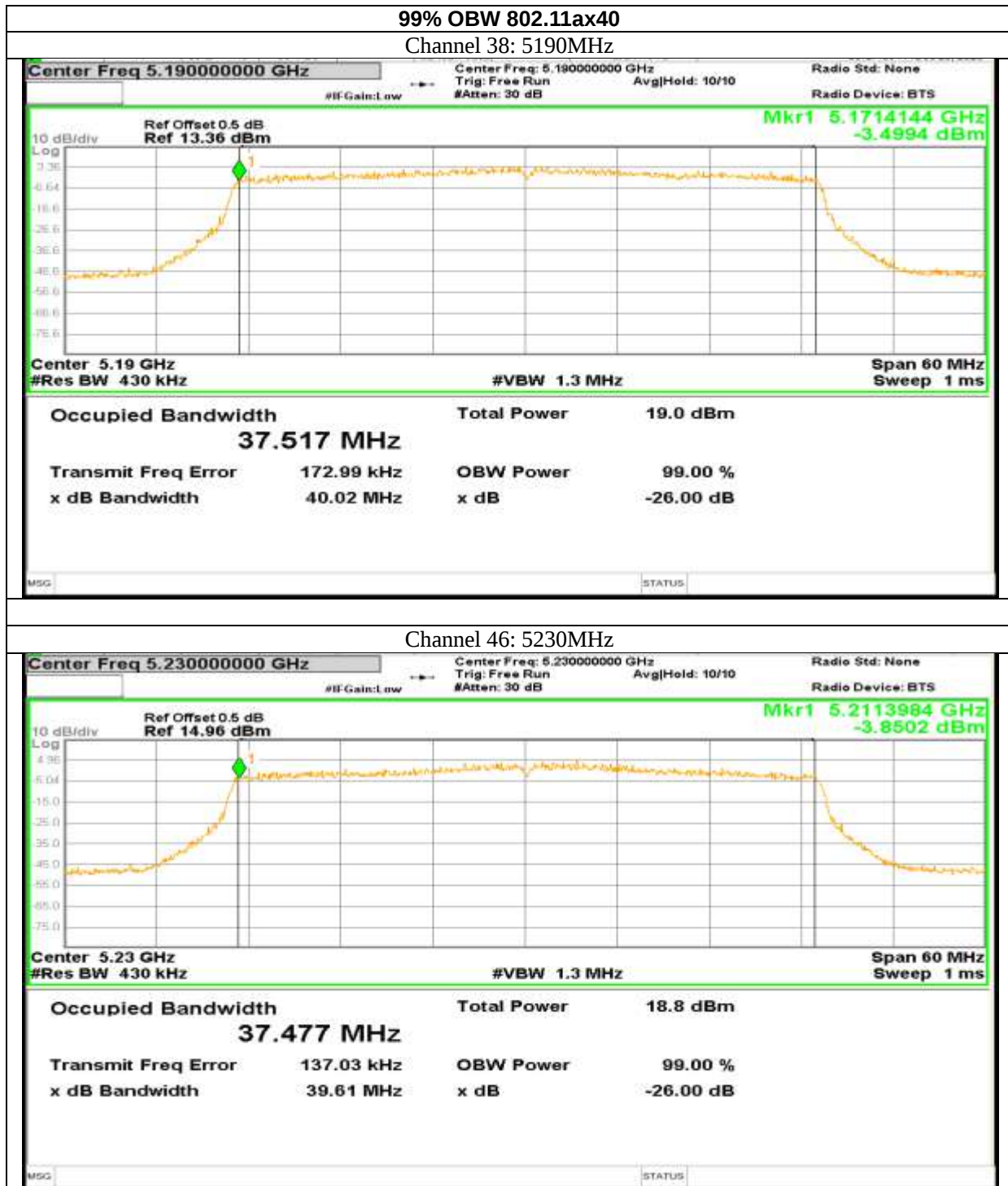
99% OBW 802.11ac40

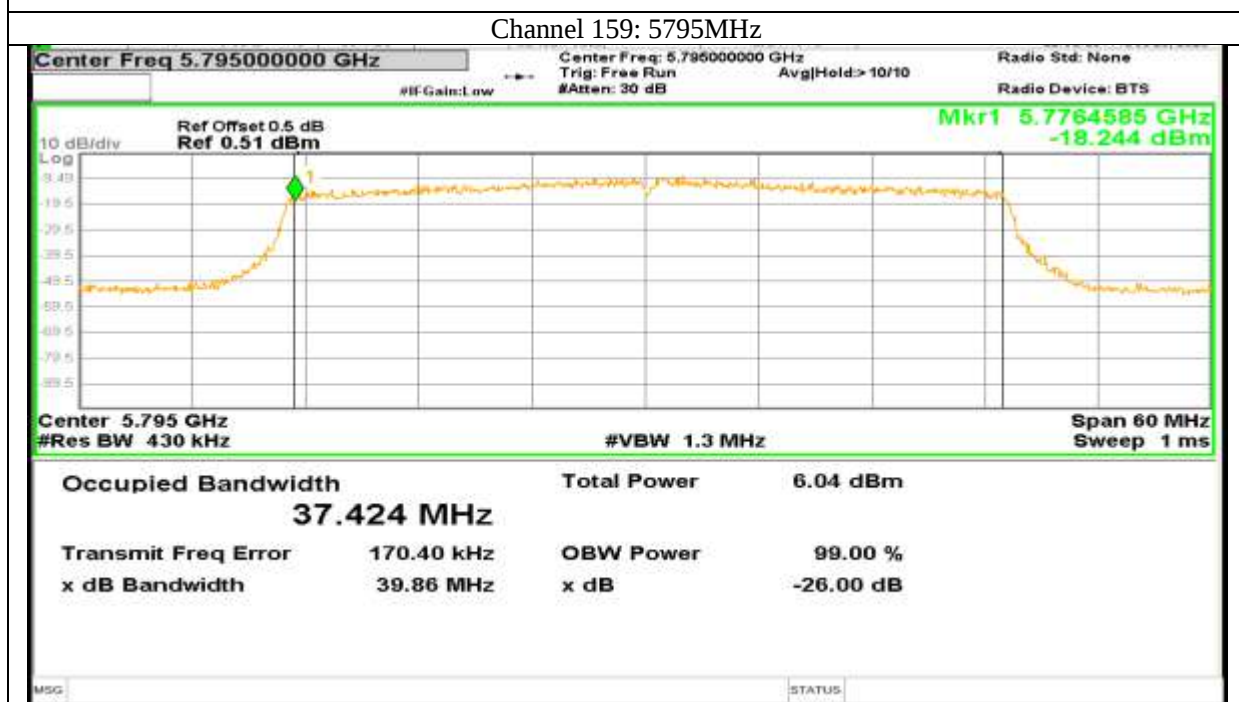
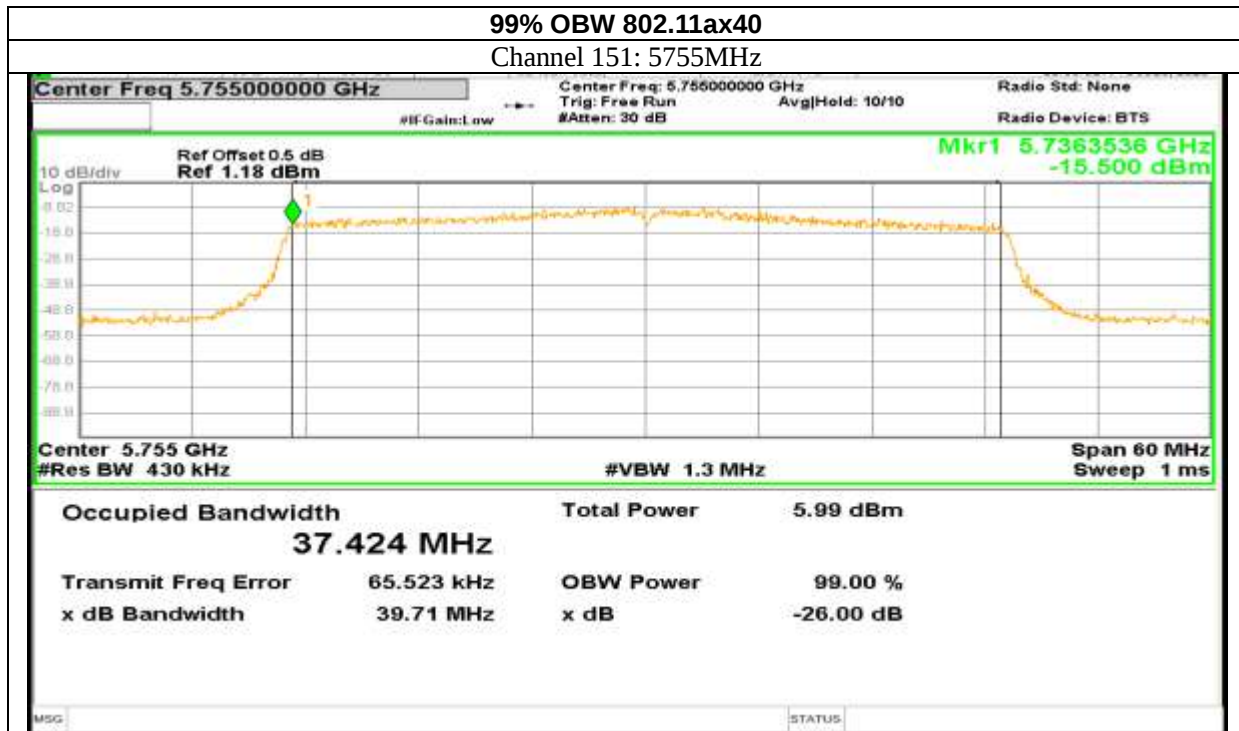
Channel 151: 5755MHz

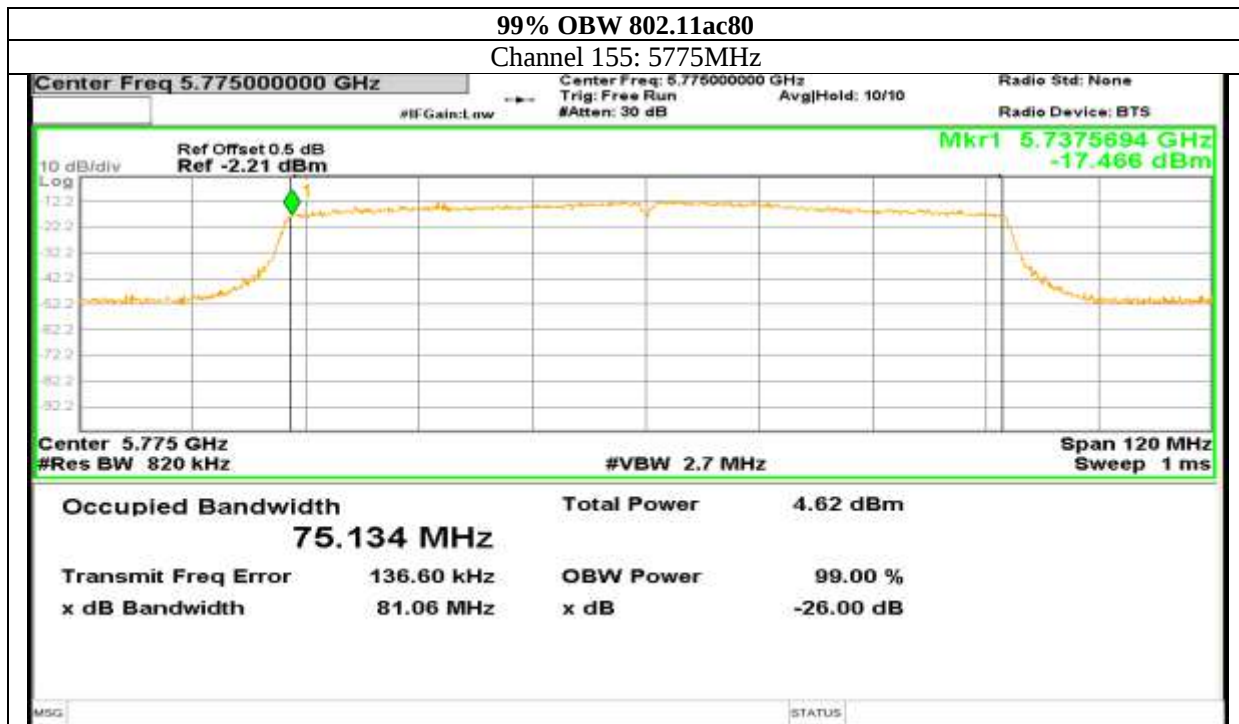
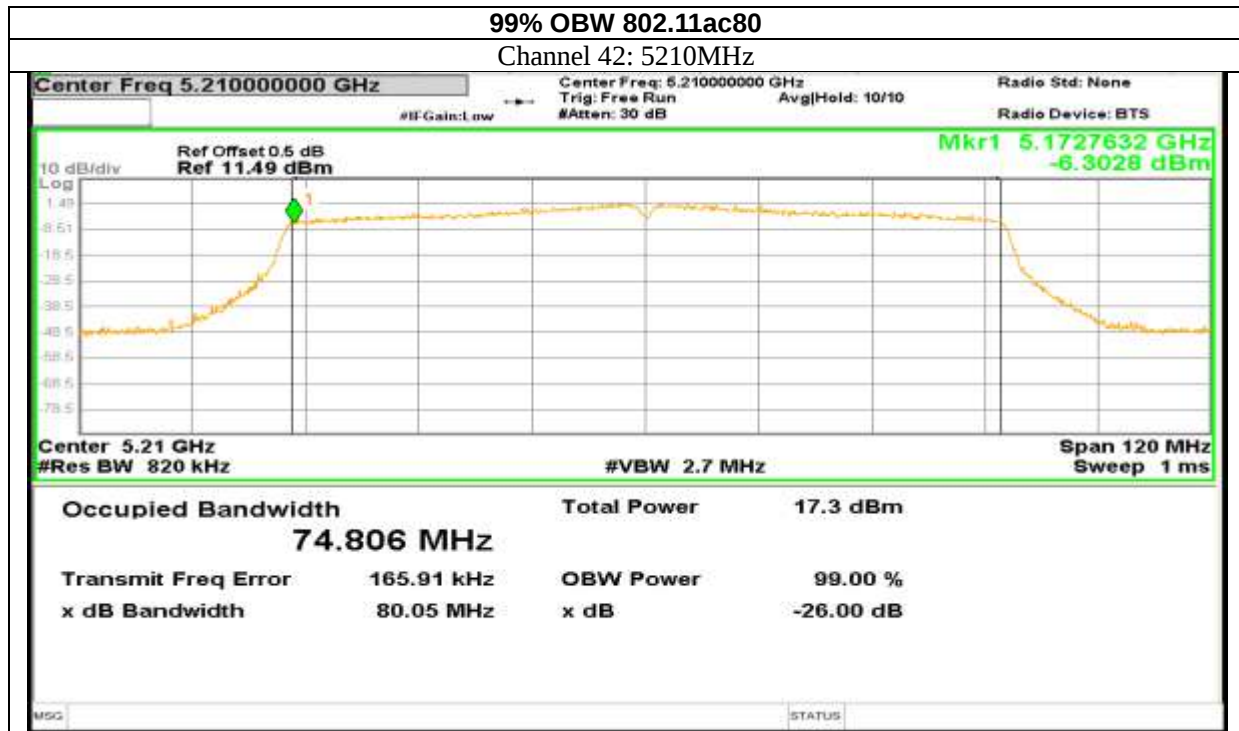


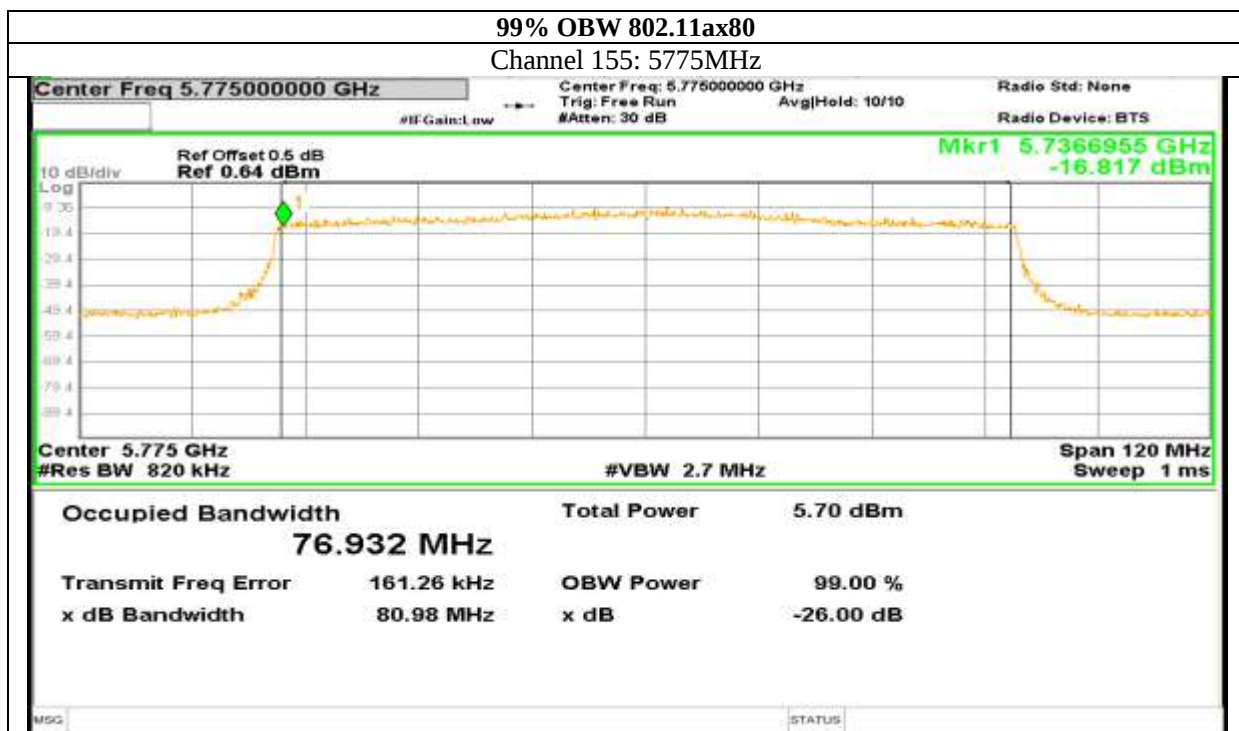
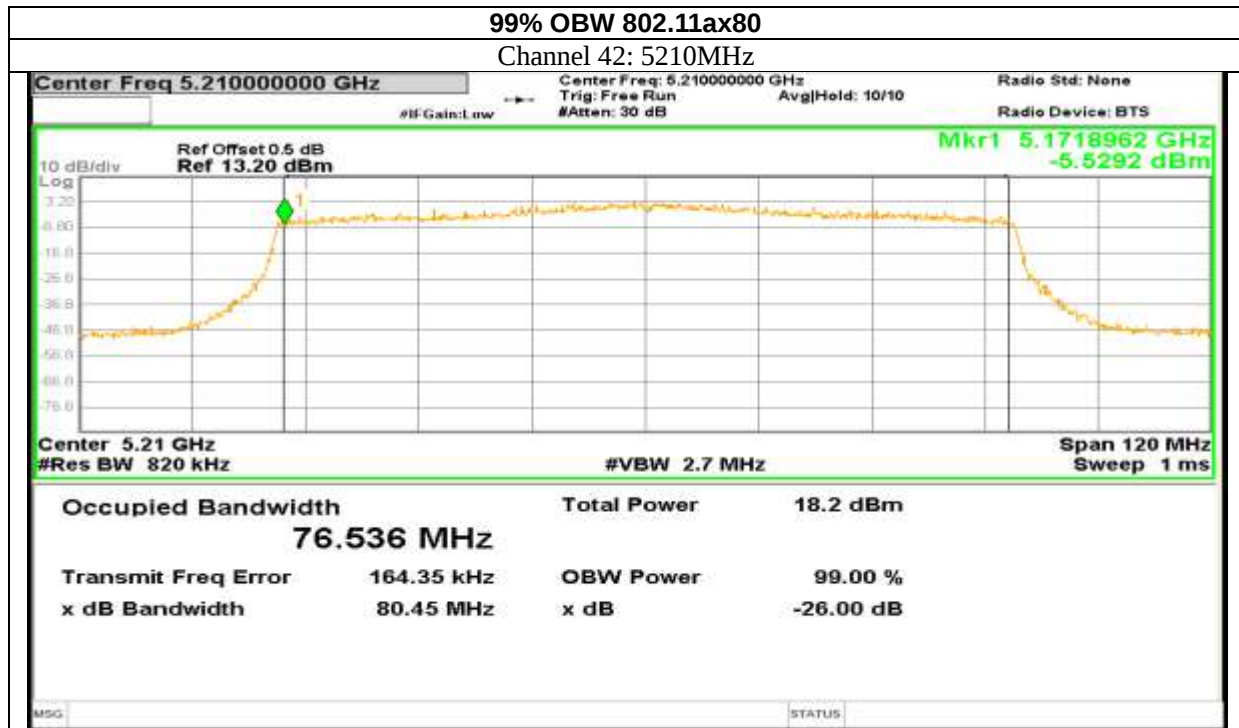
Channel 159: 5795MHz



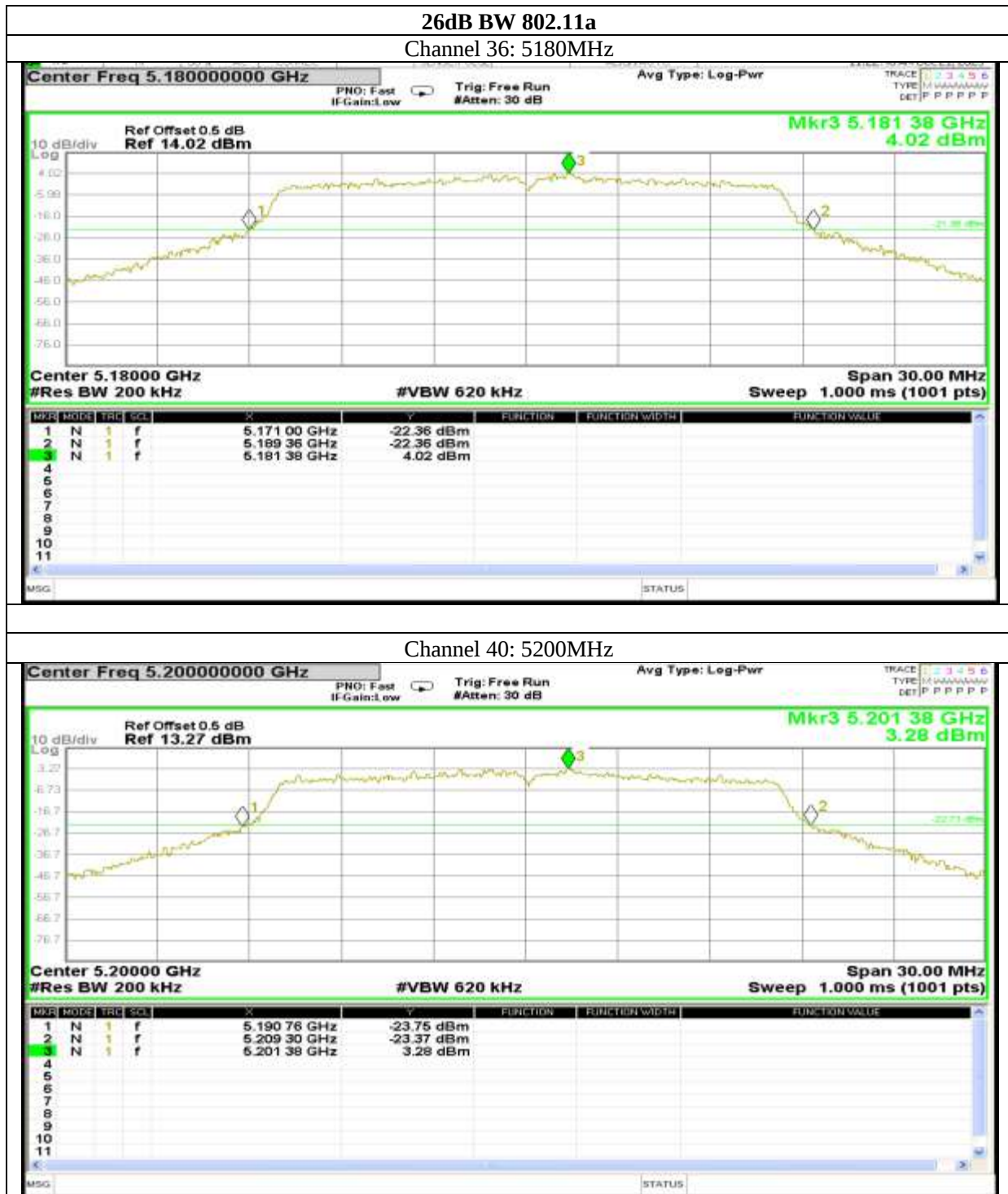


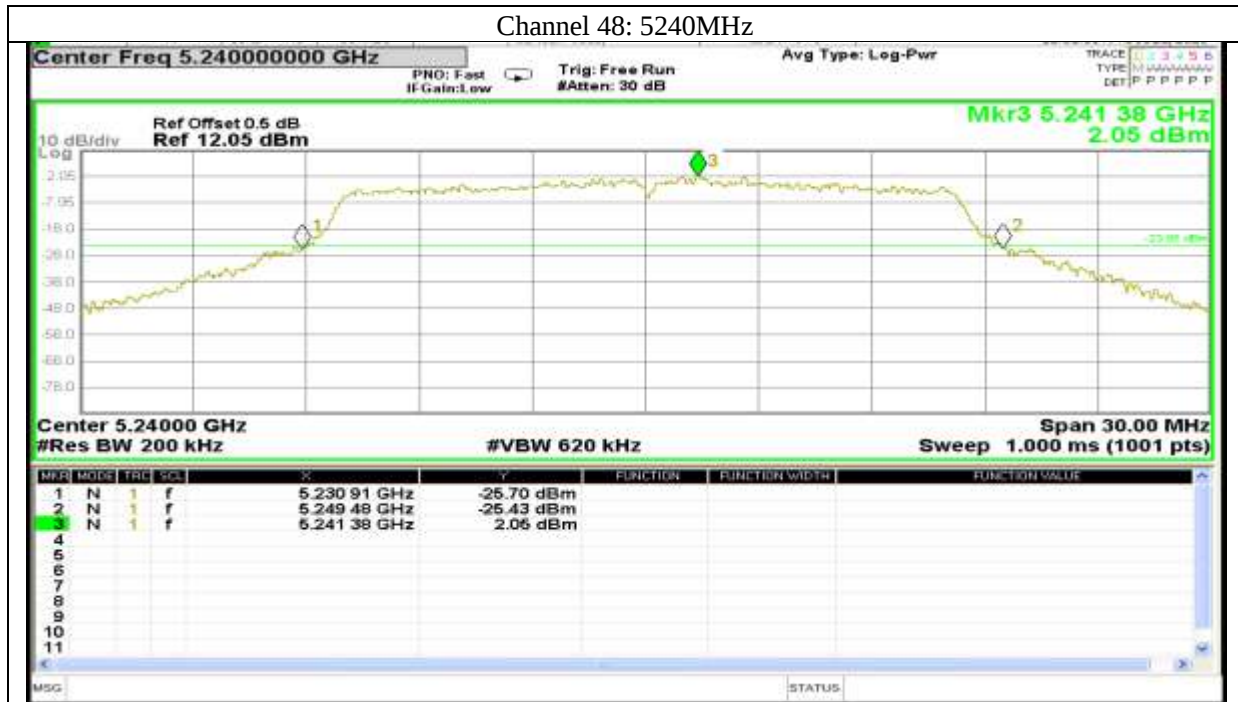


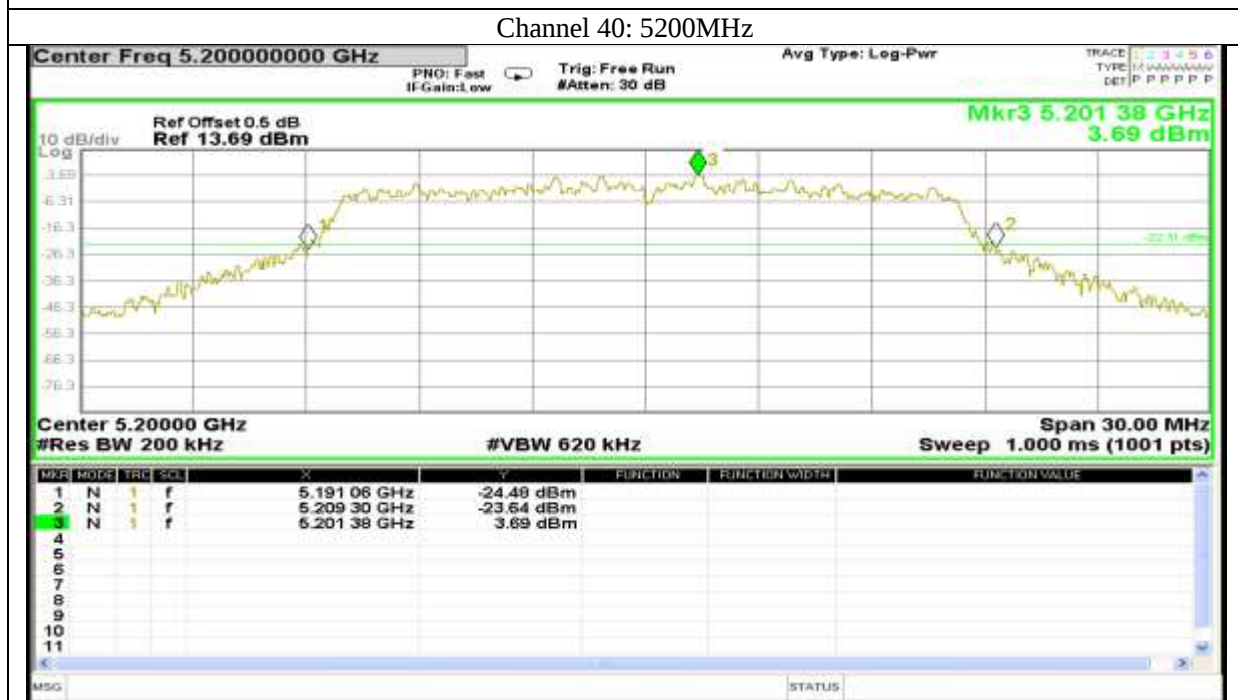


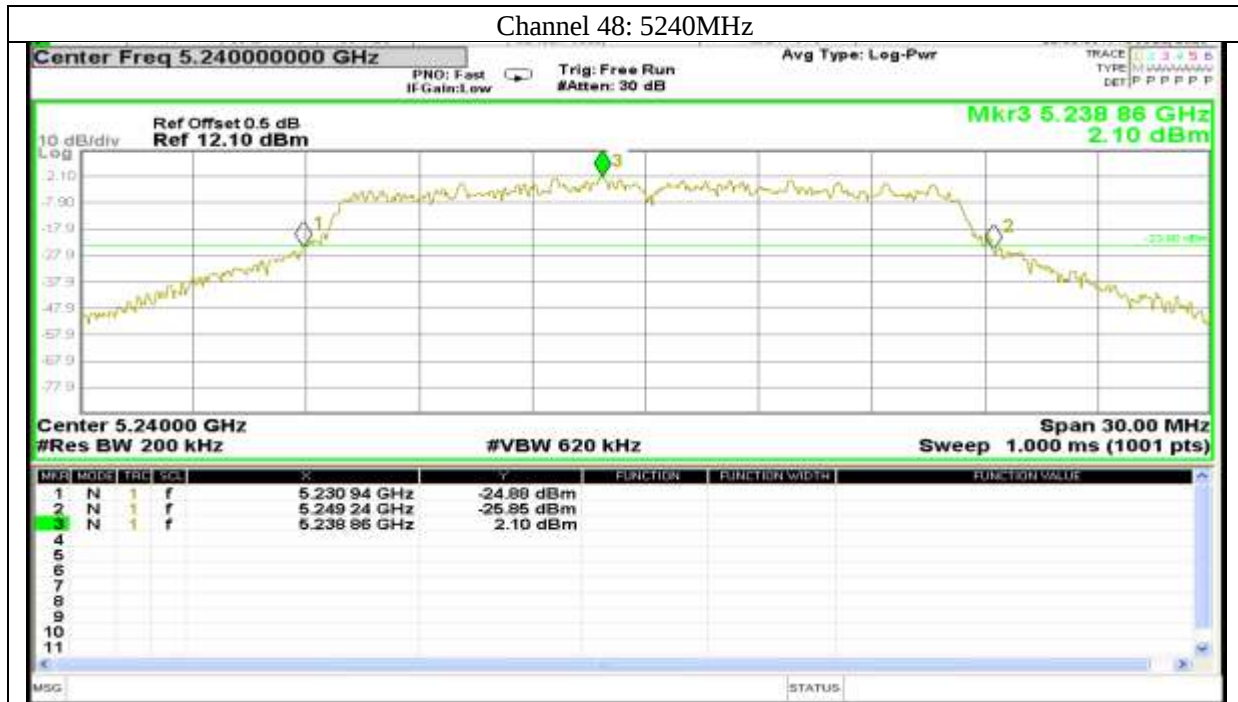


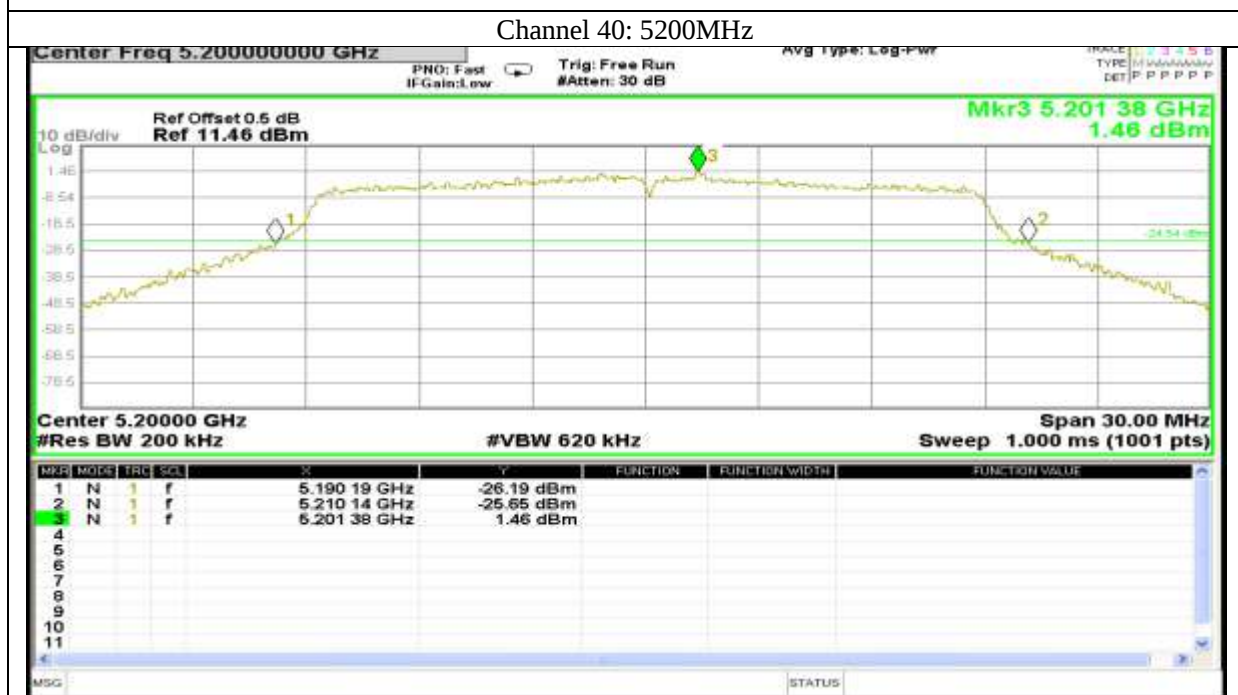
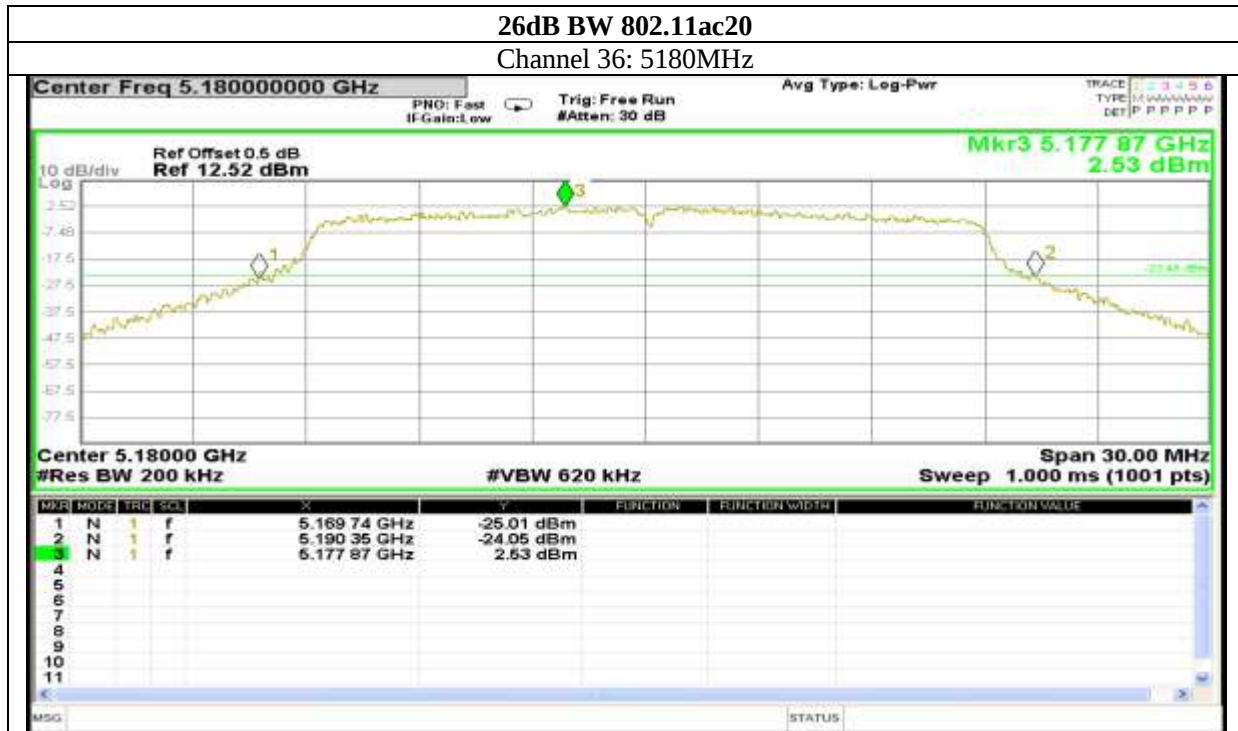
Antenna 1:

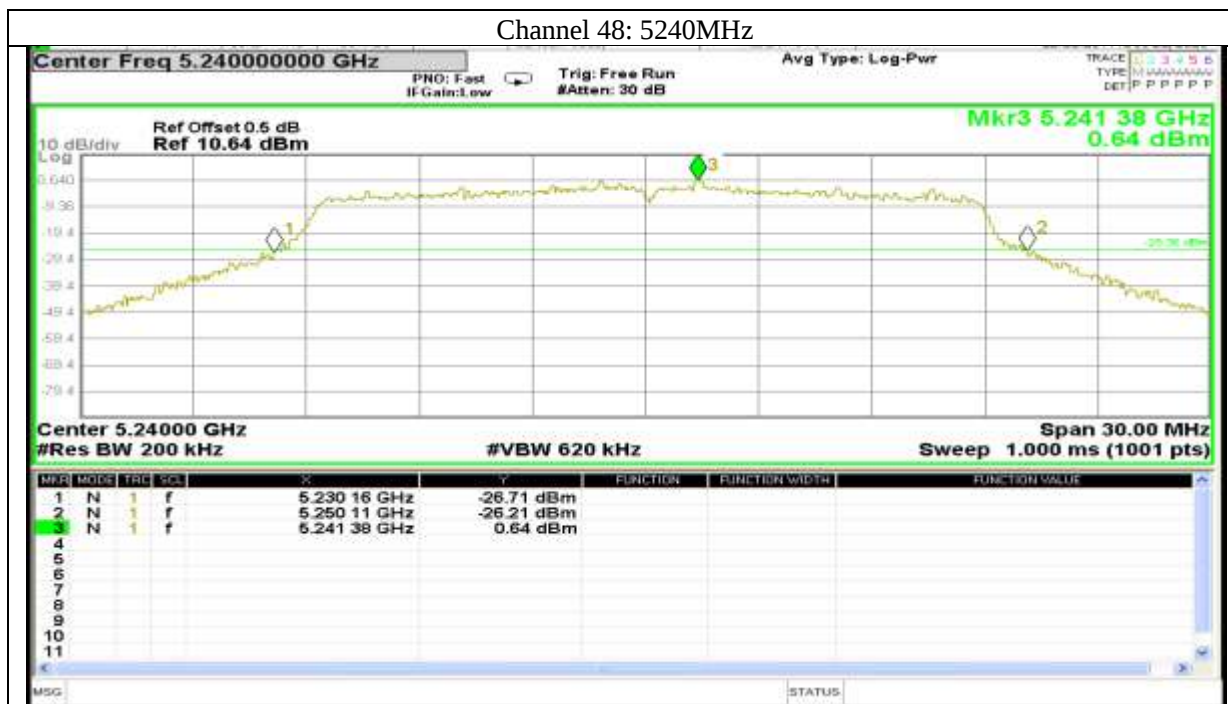


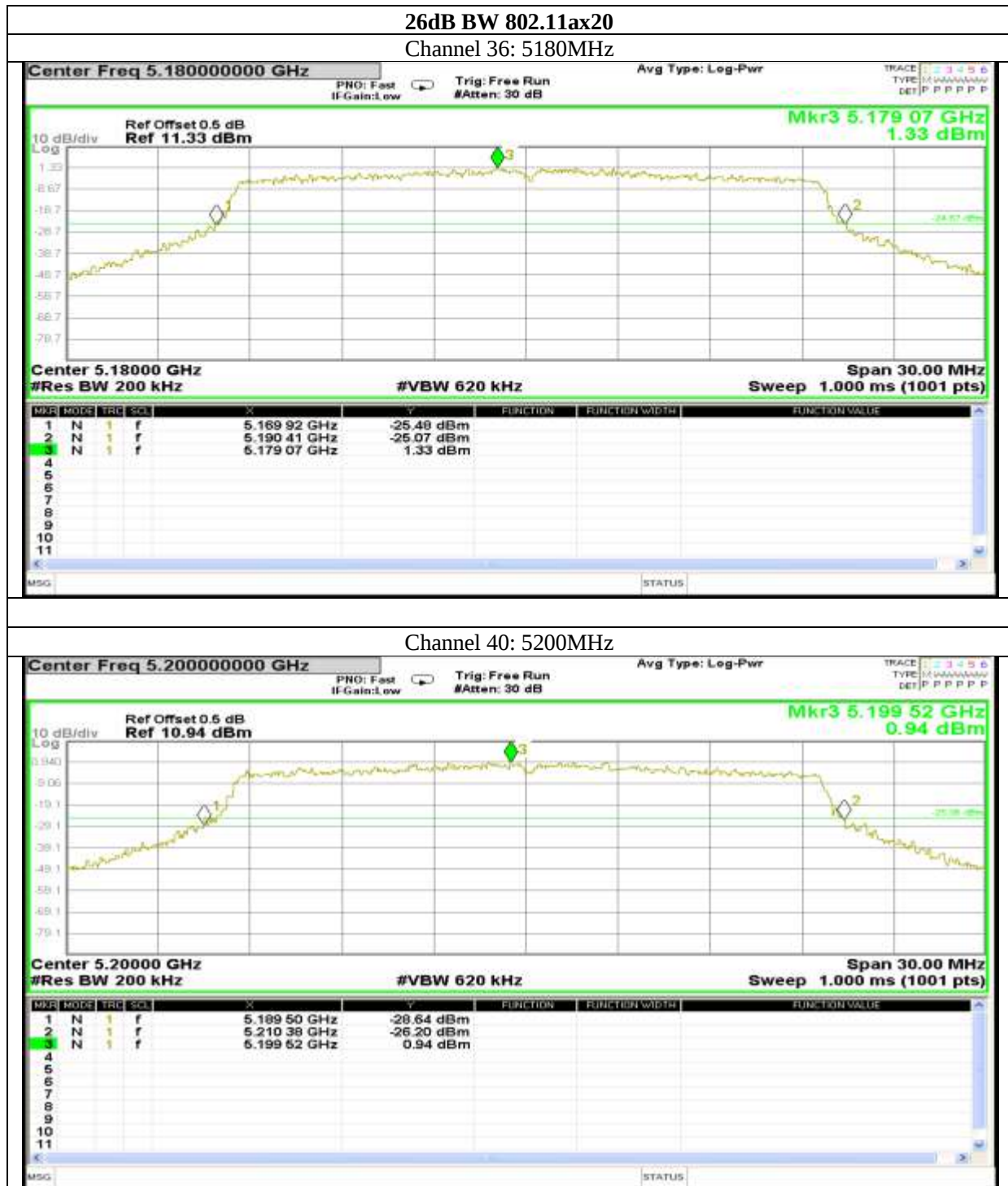


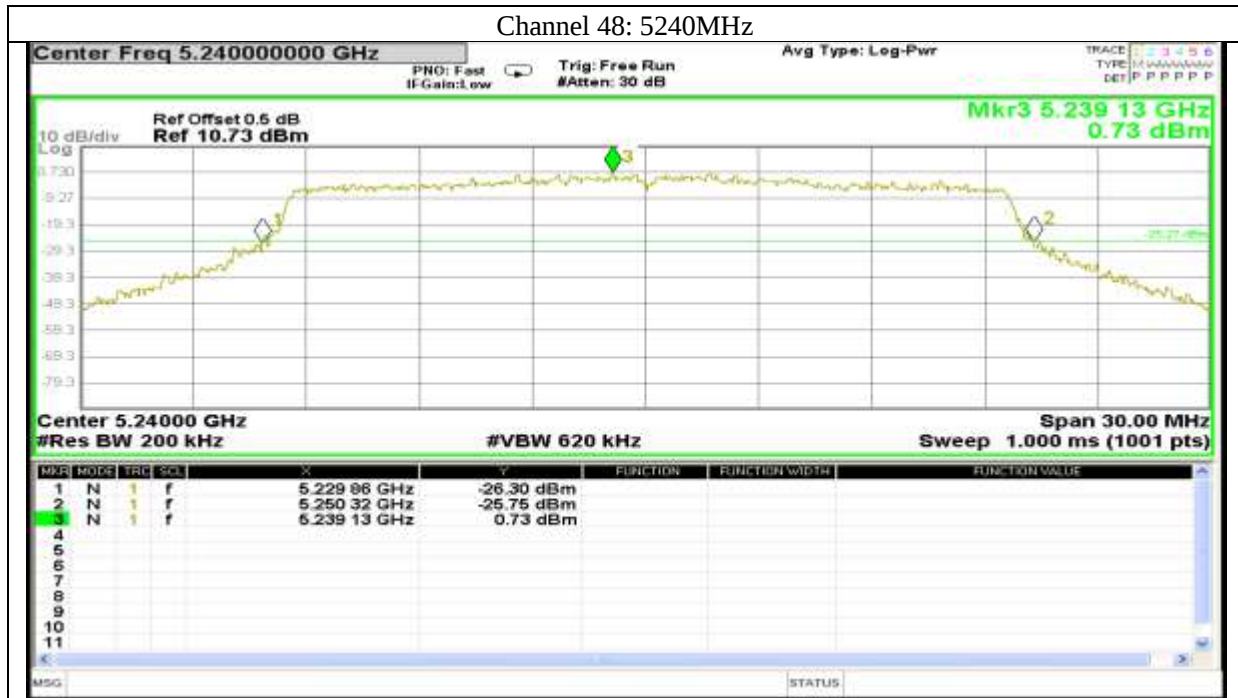


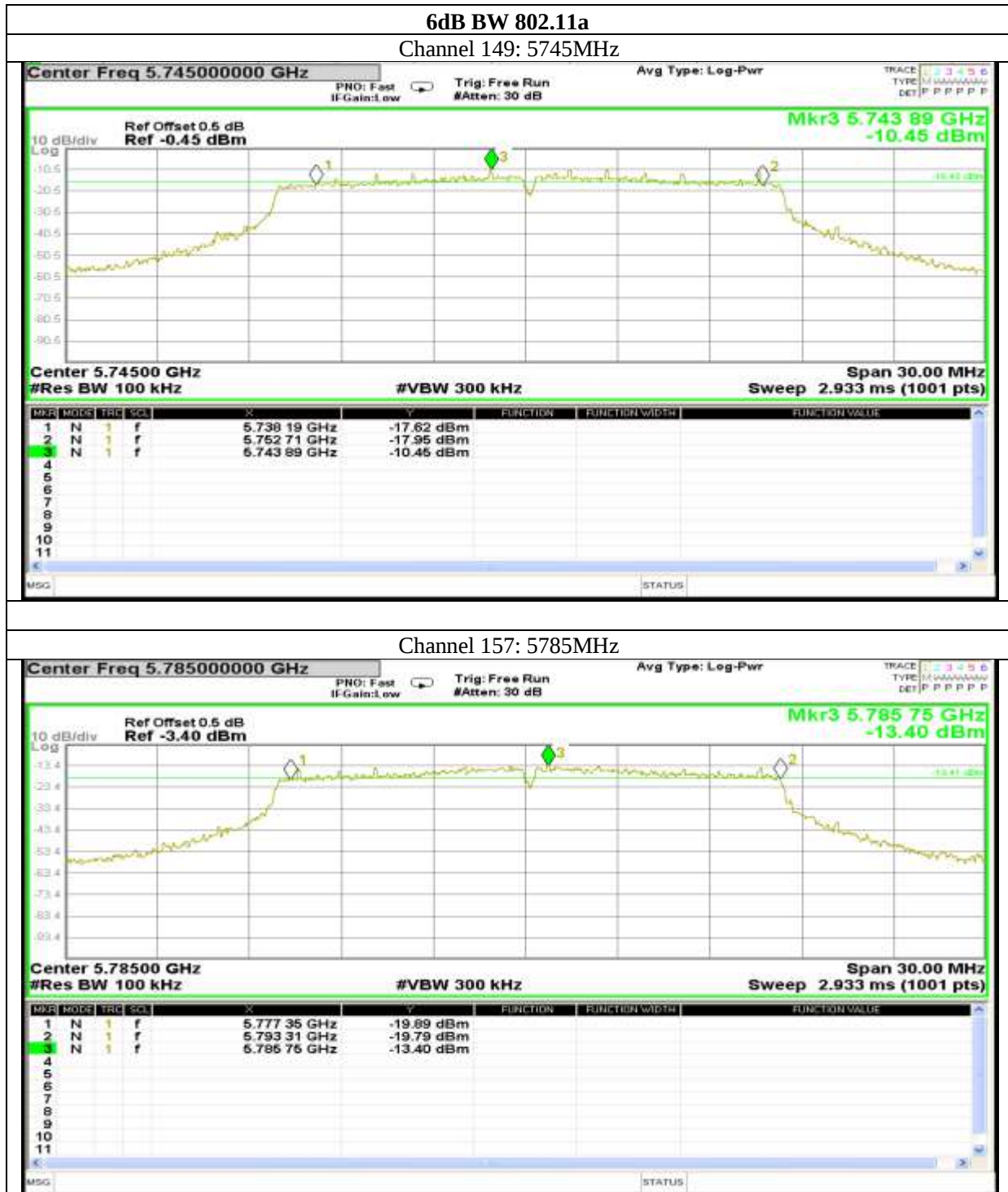


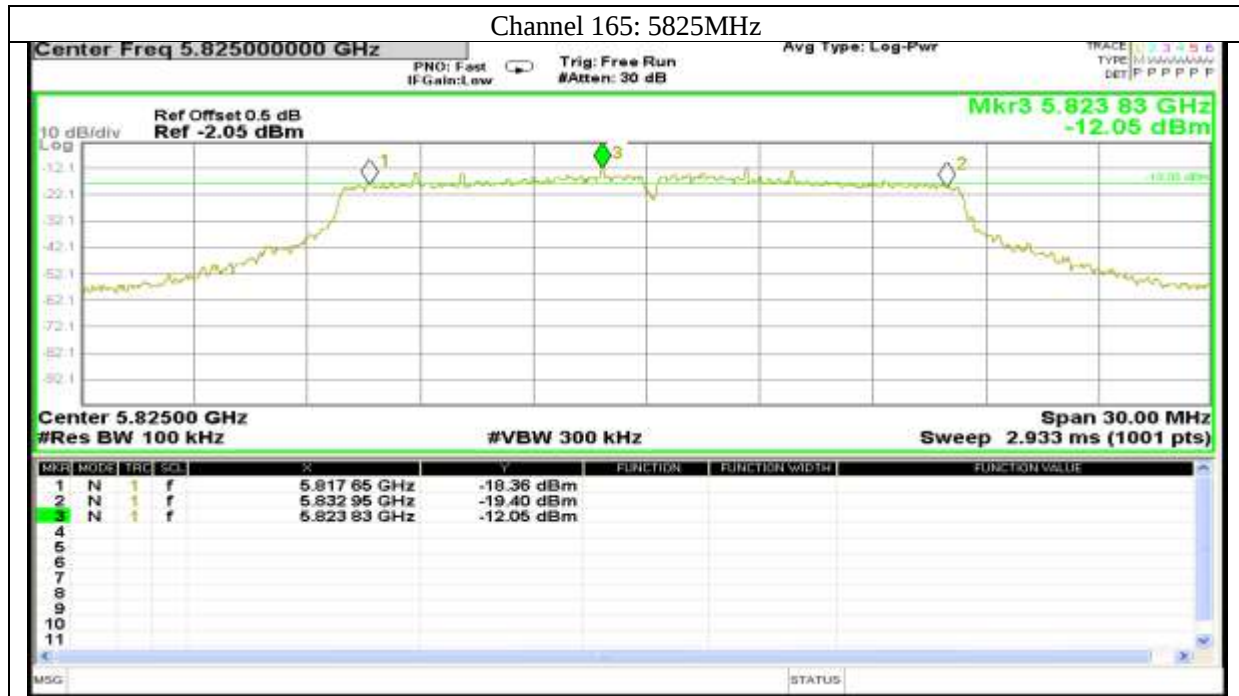




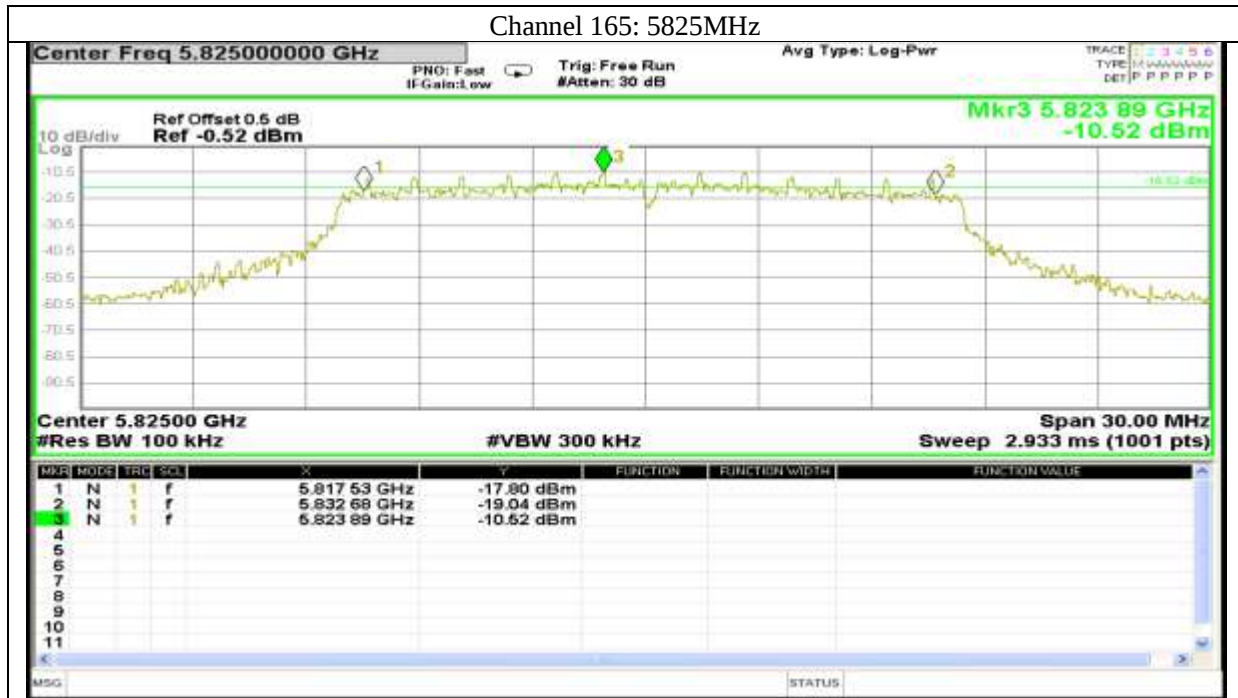


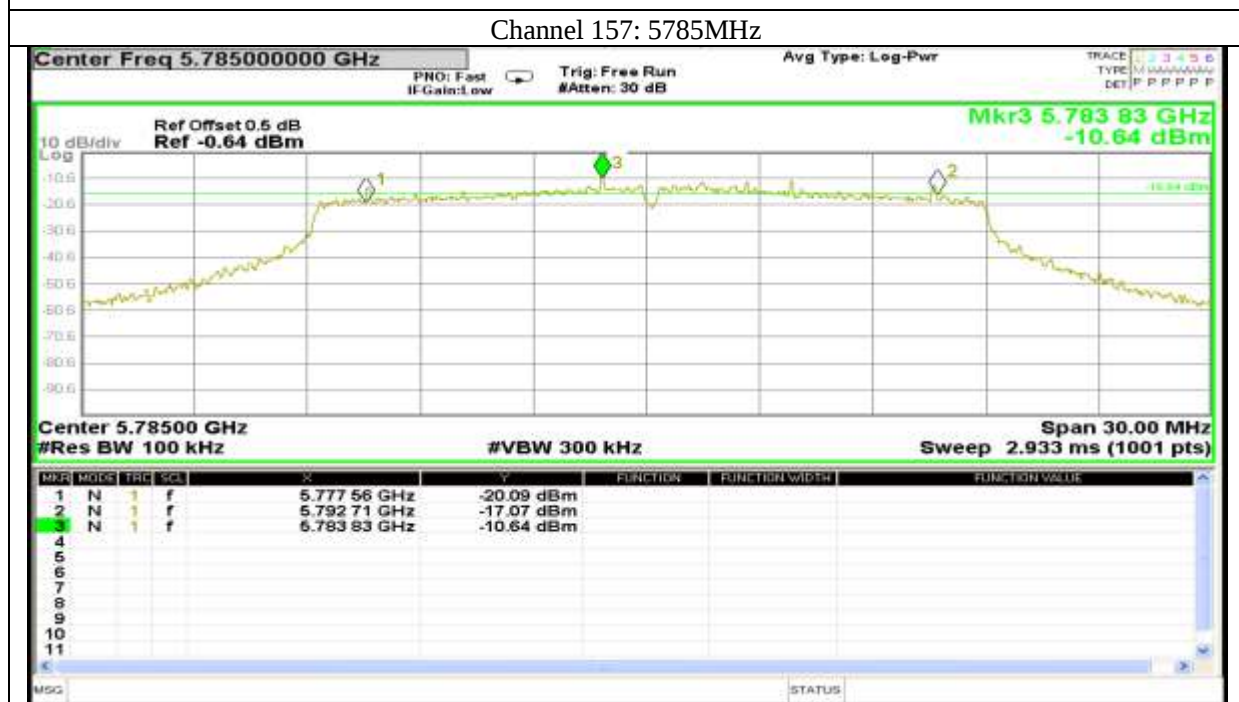
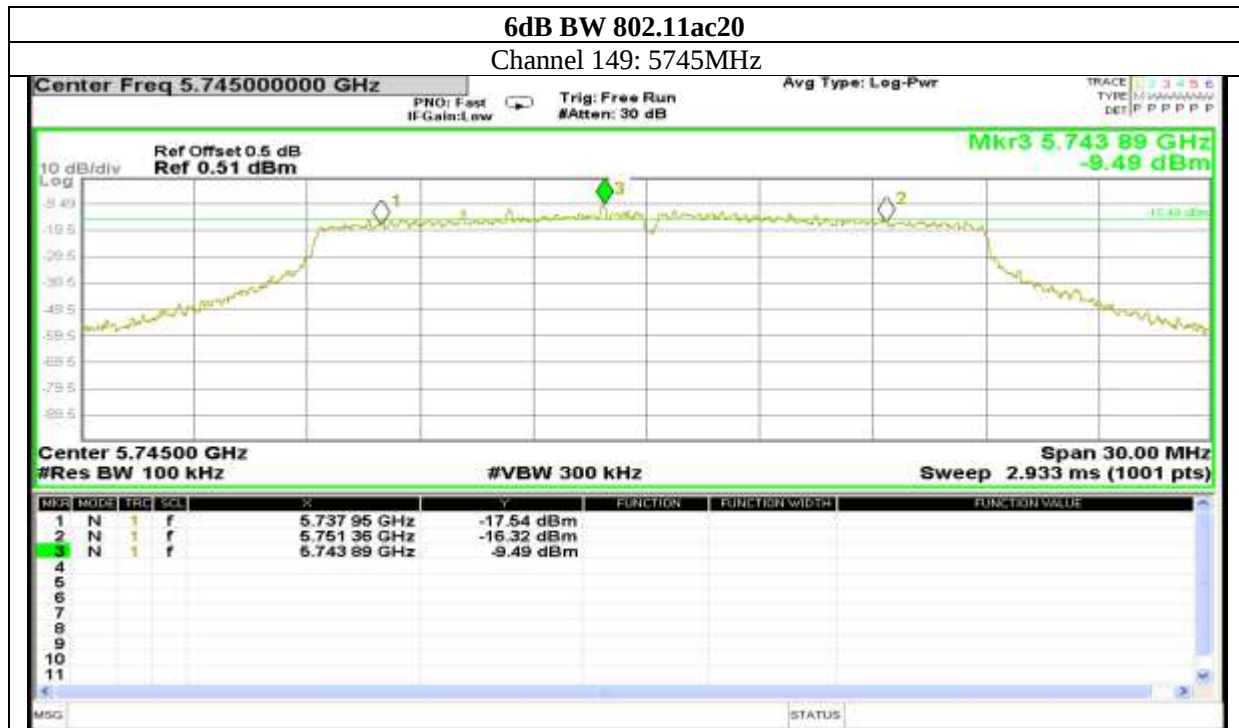


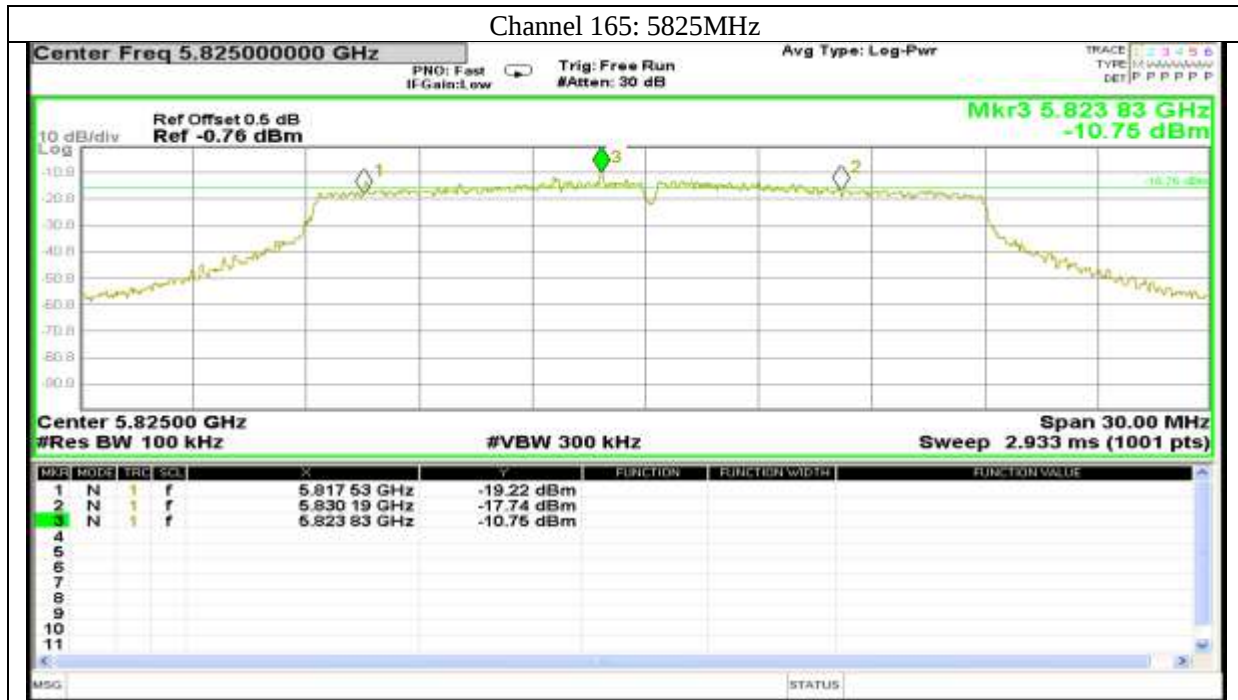




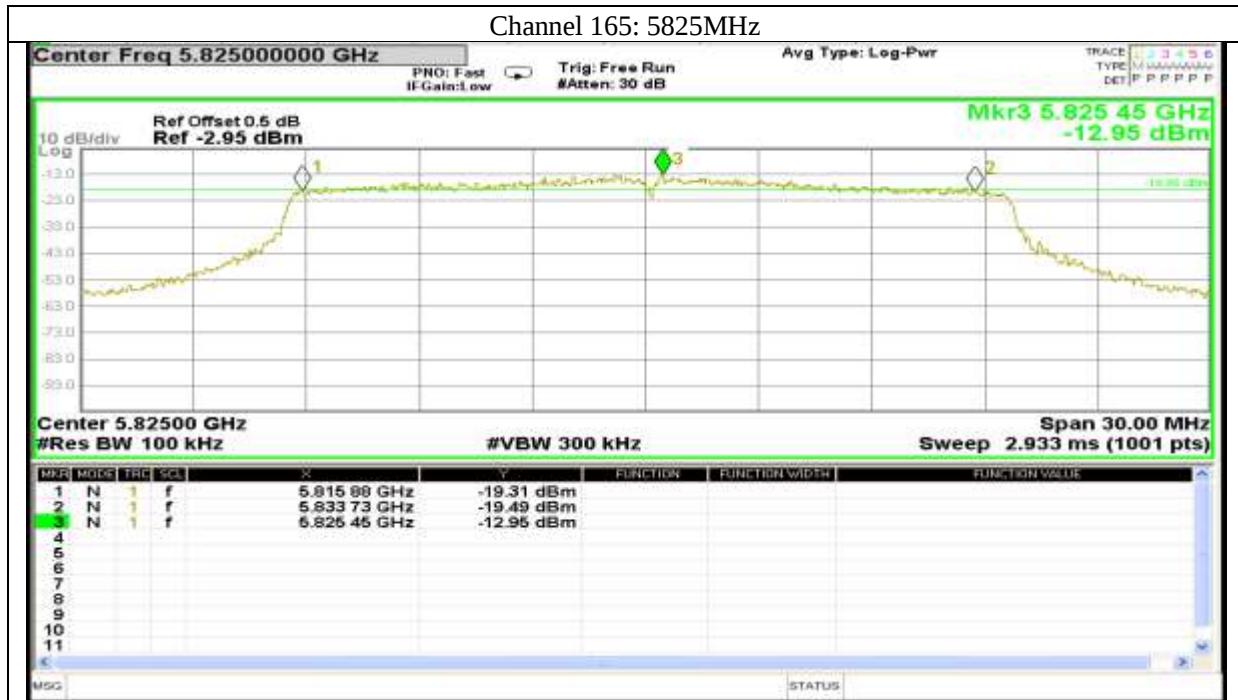


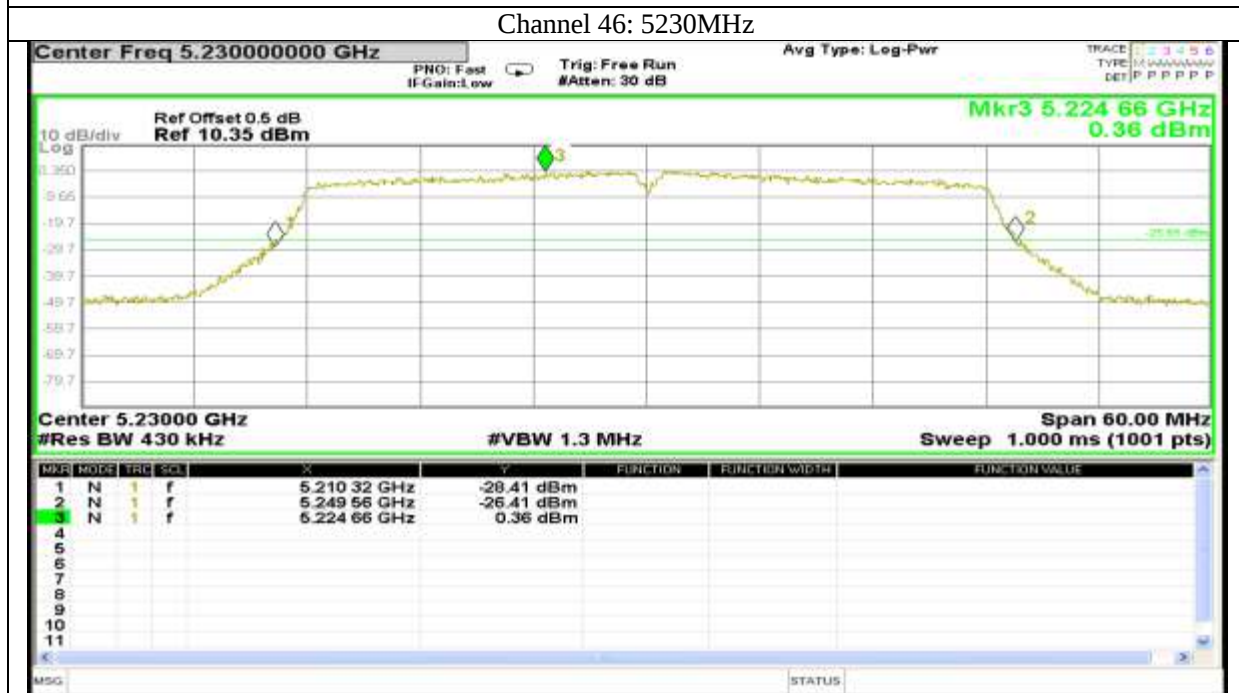
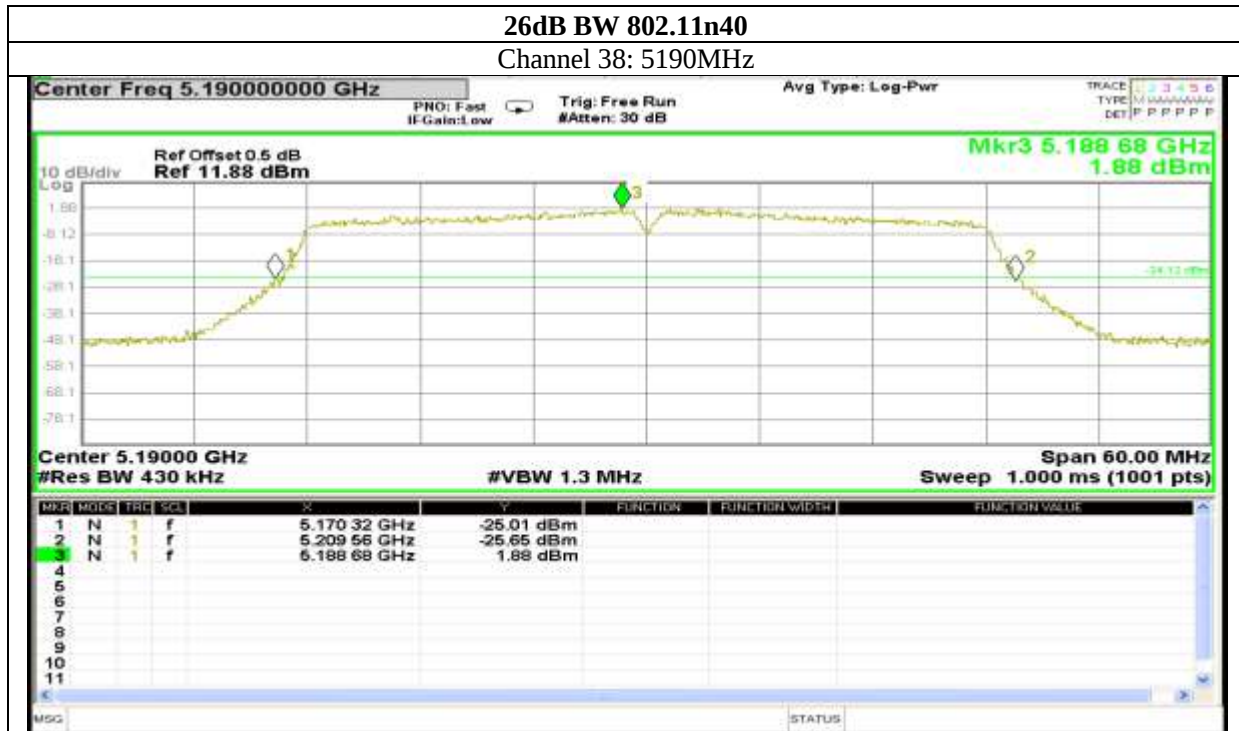


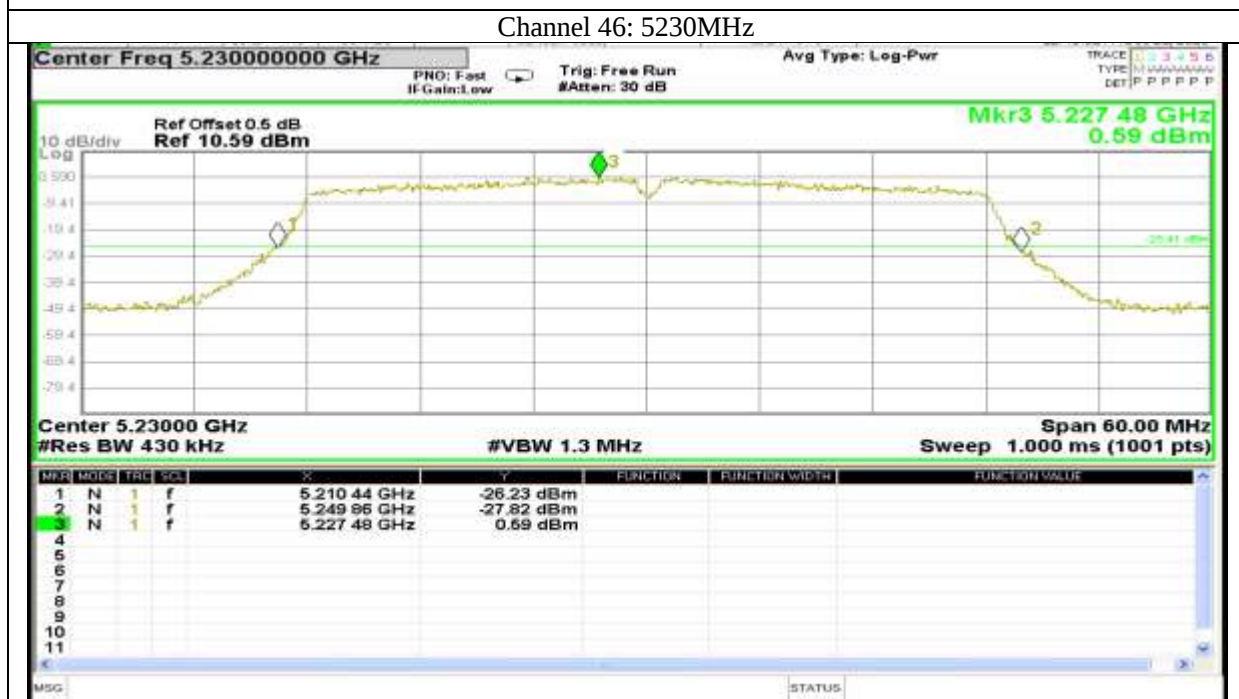




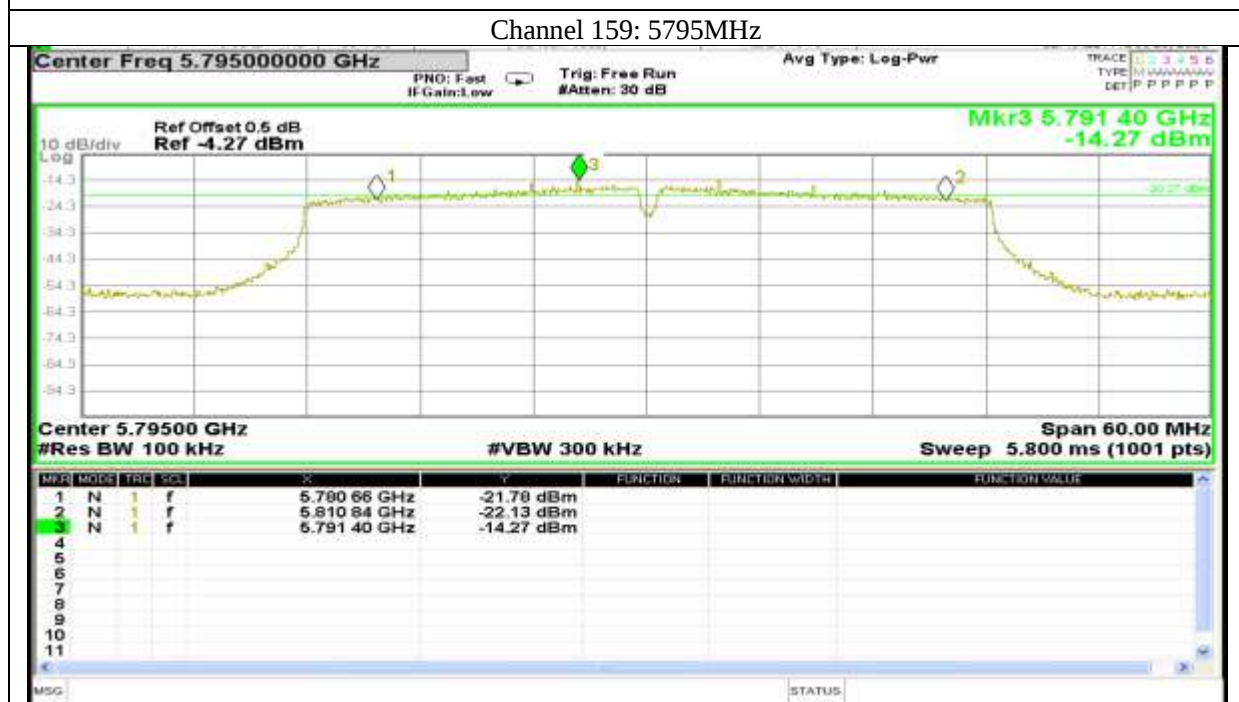


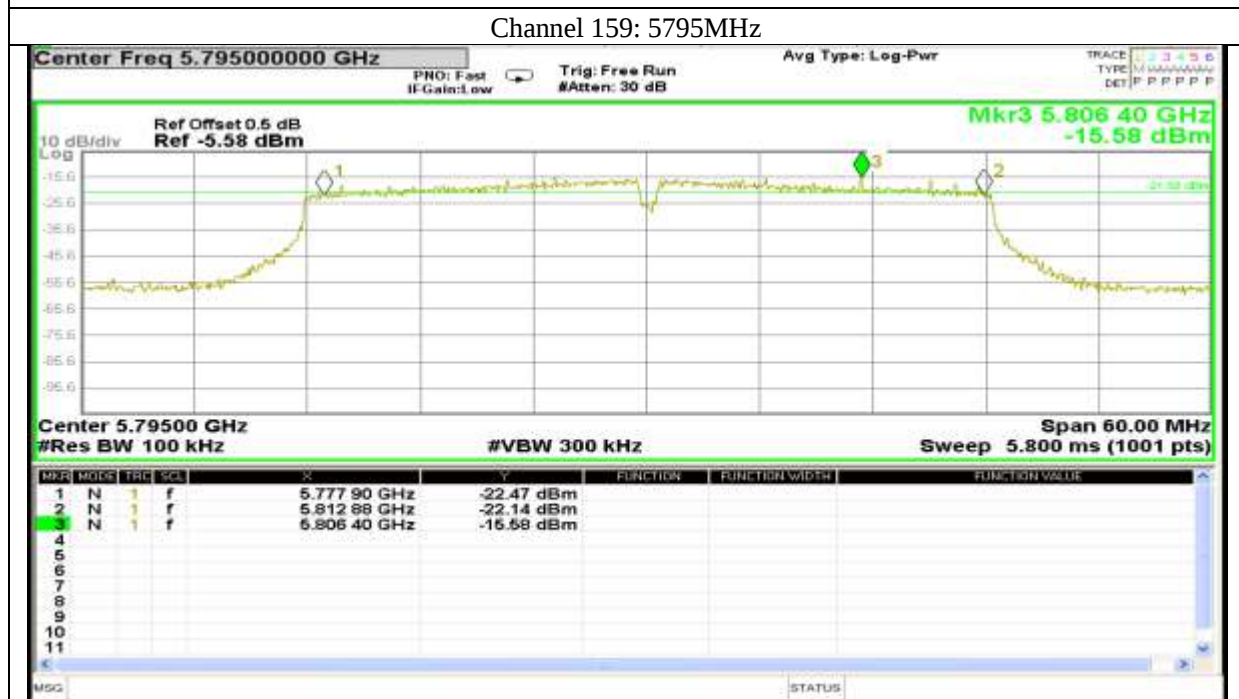
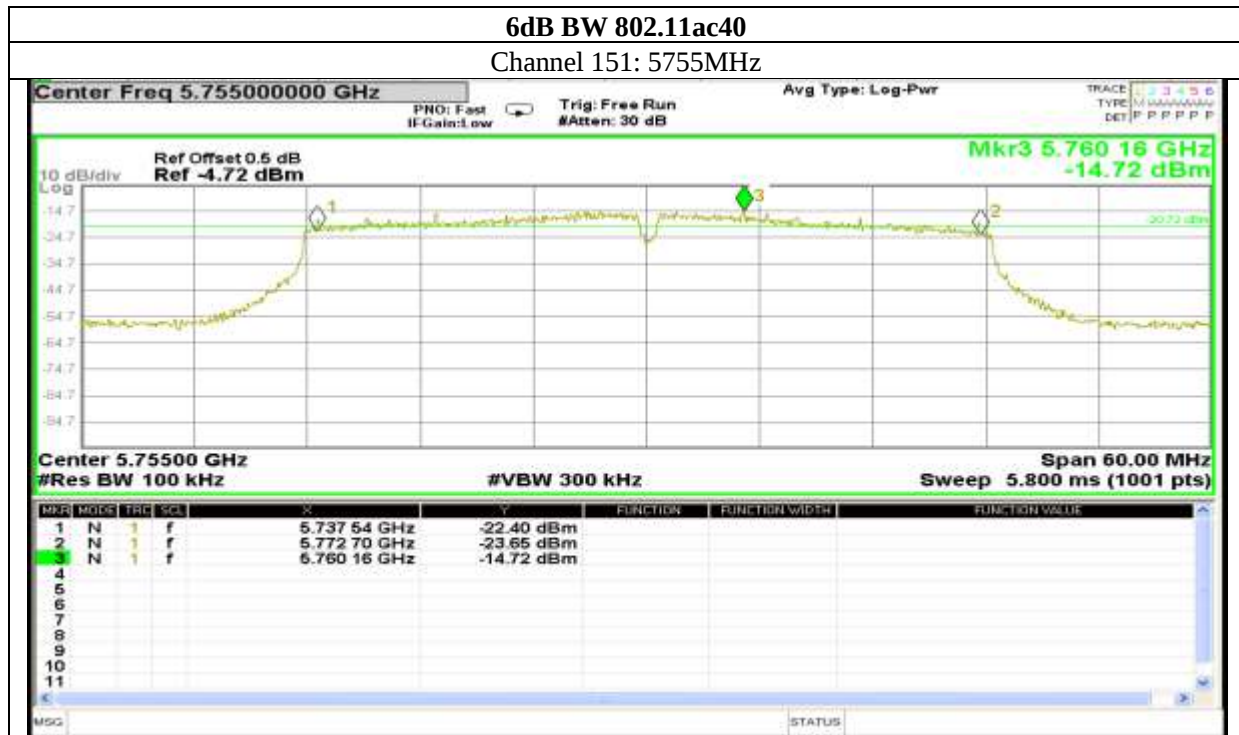


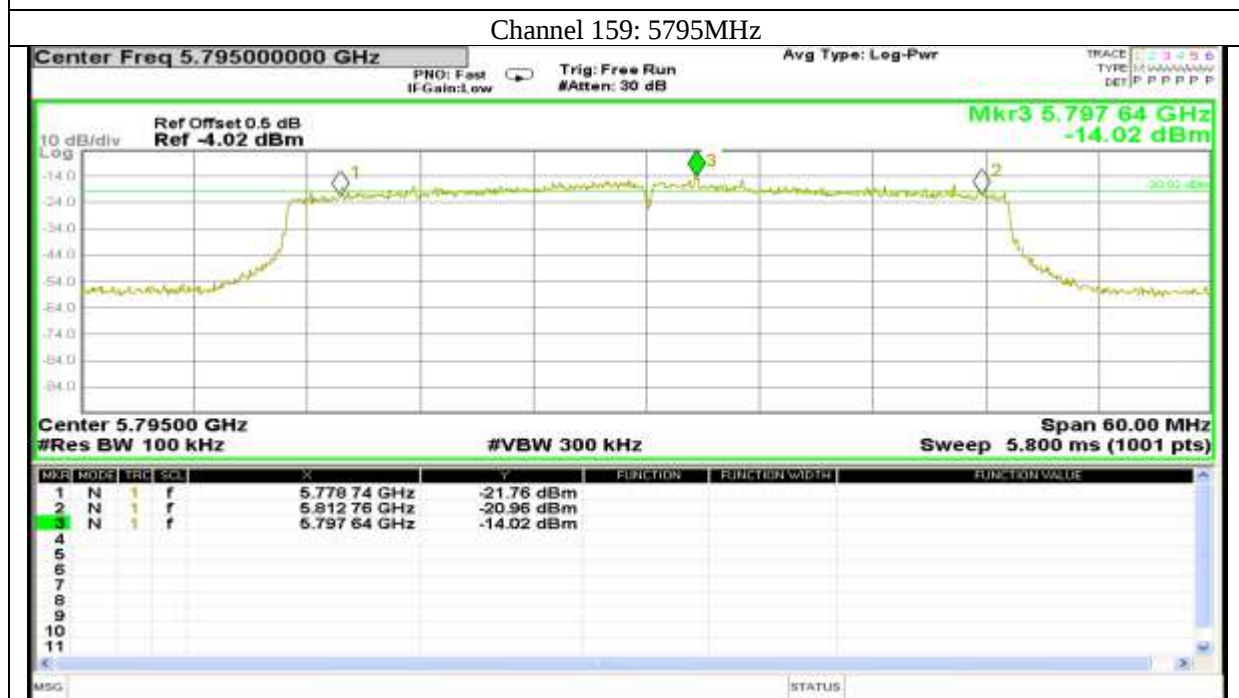
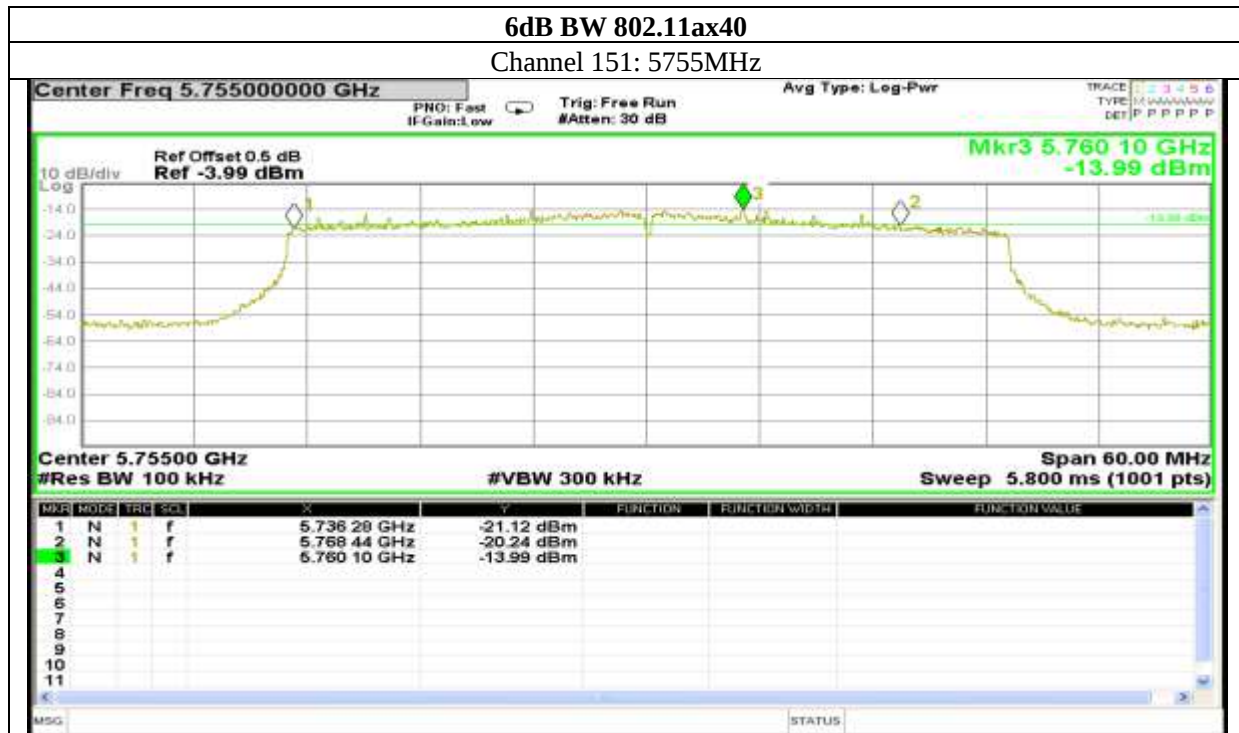


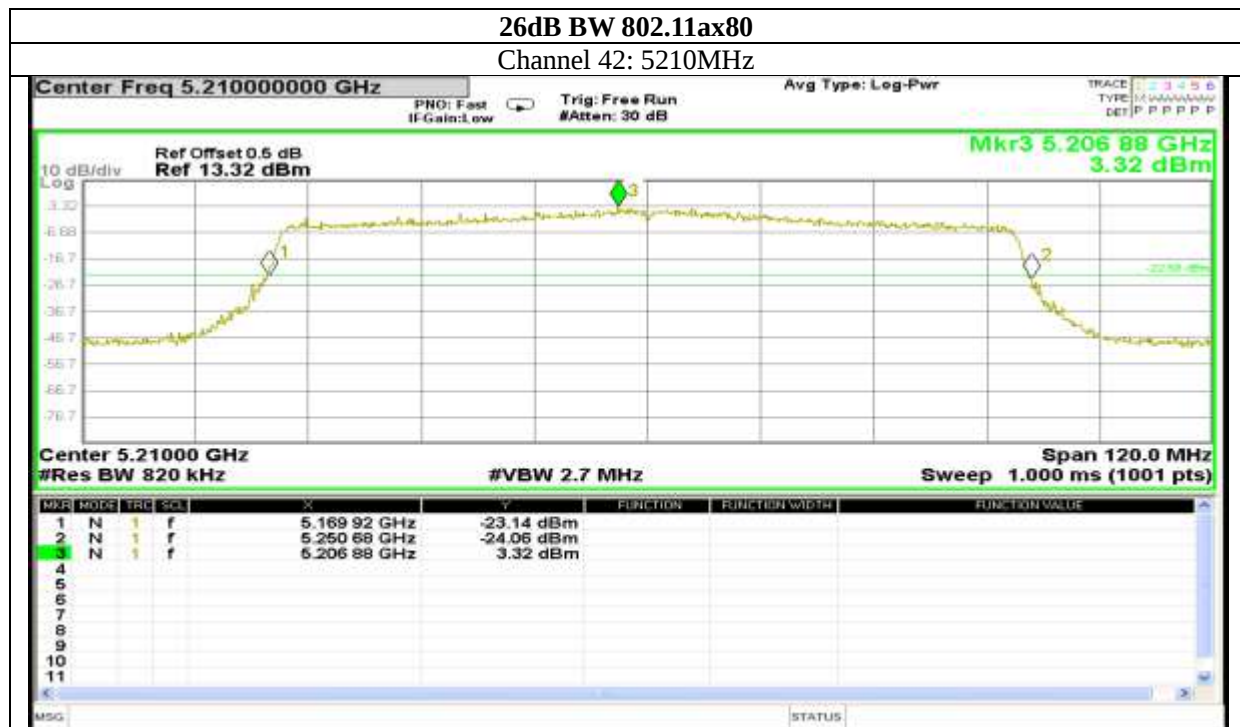
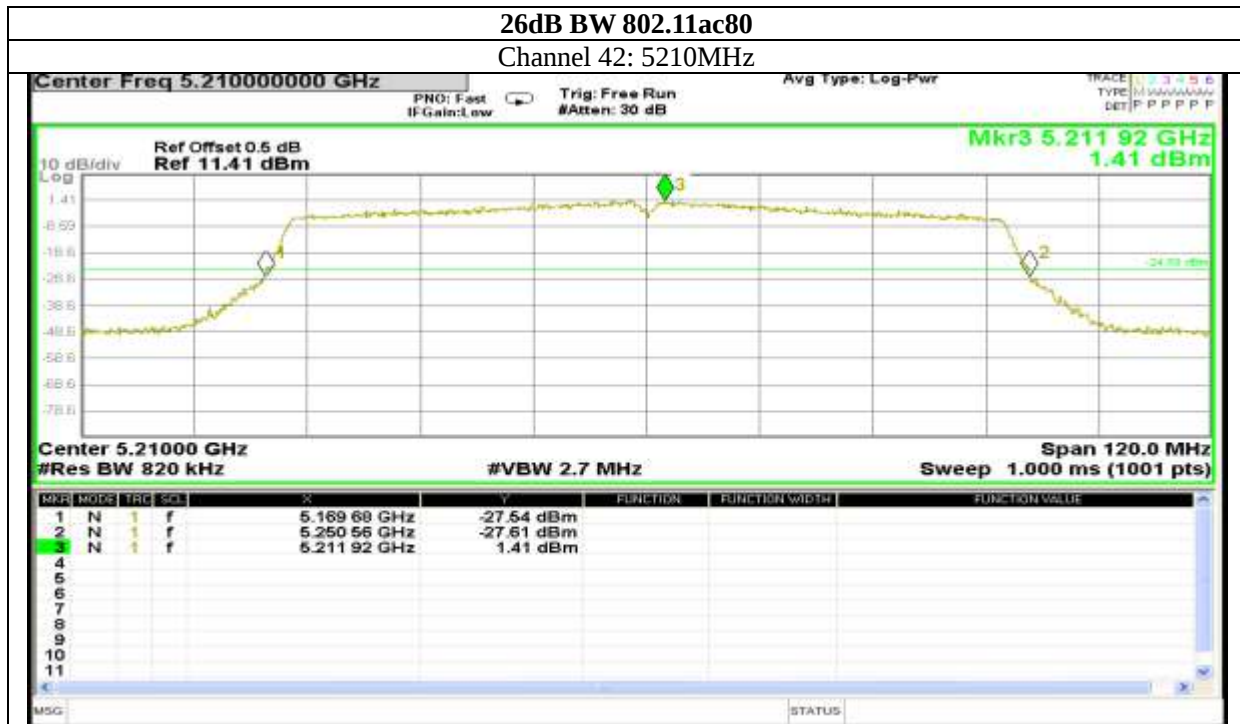


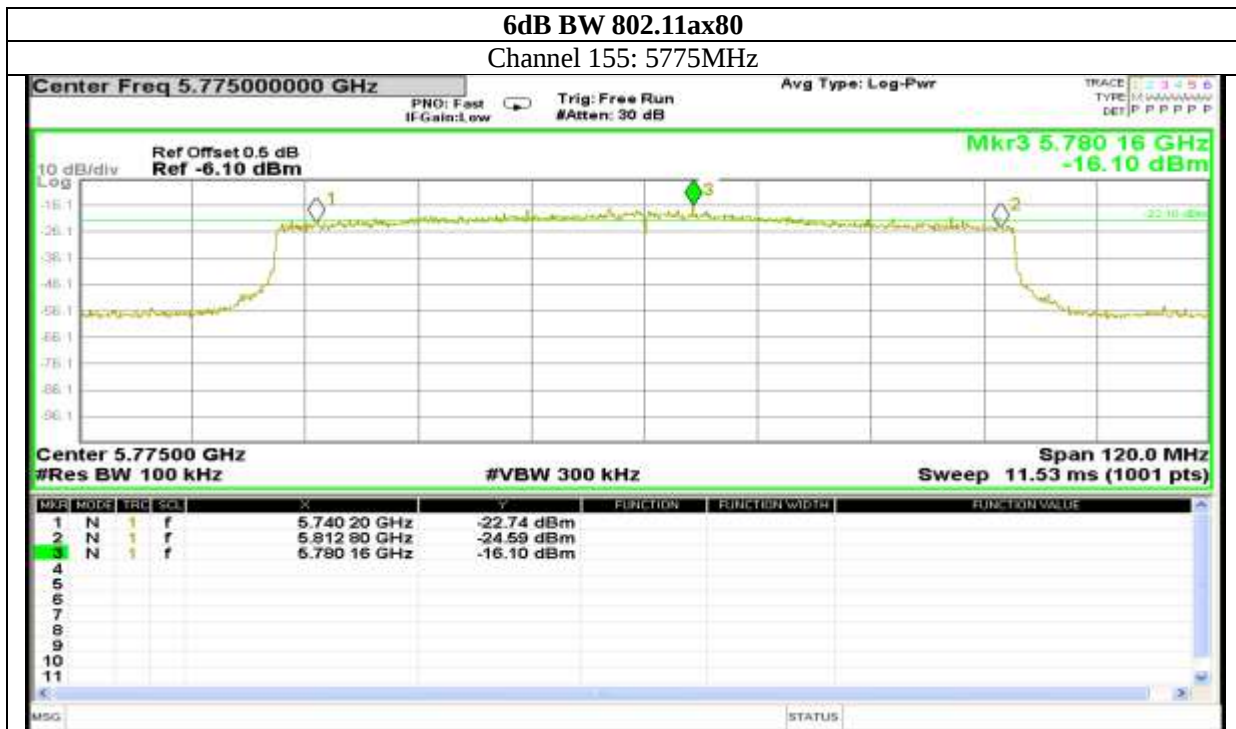
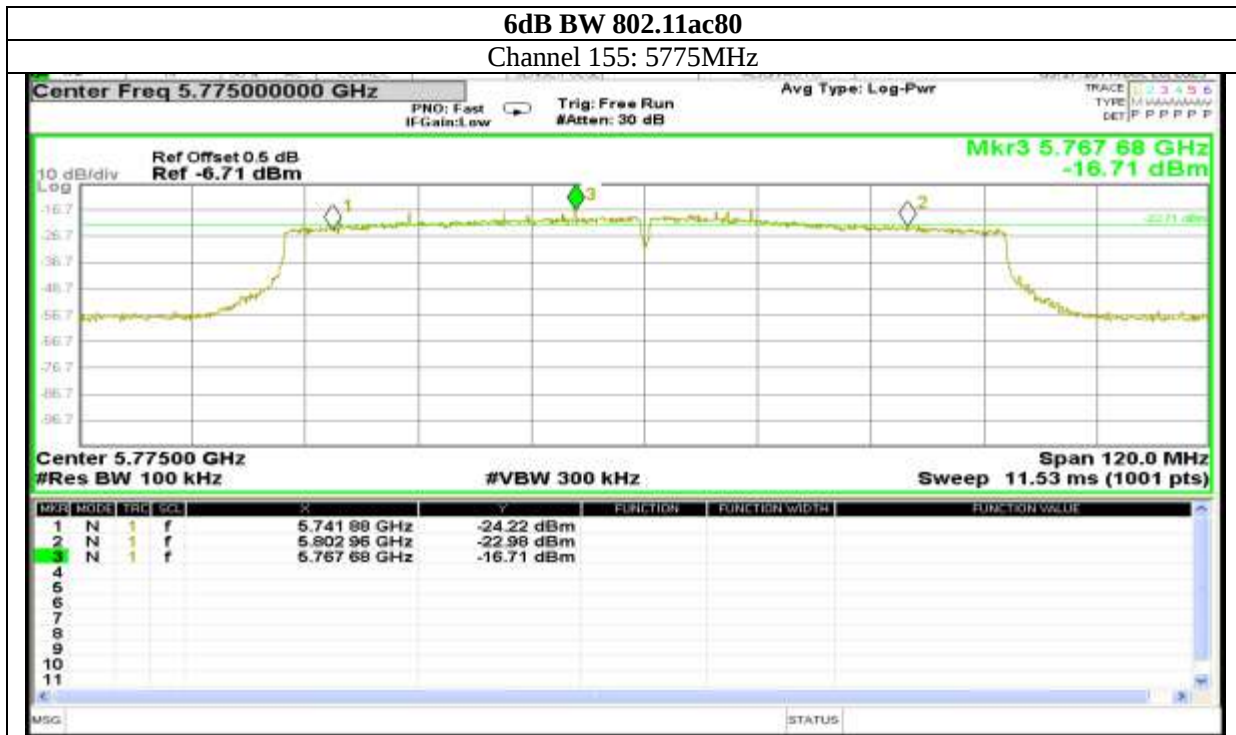


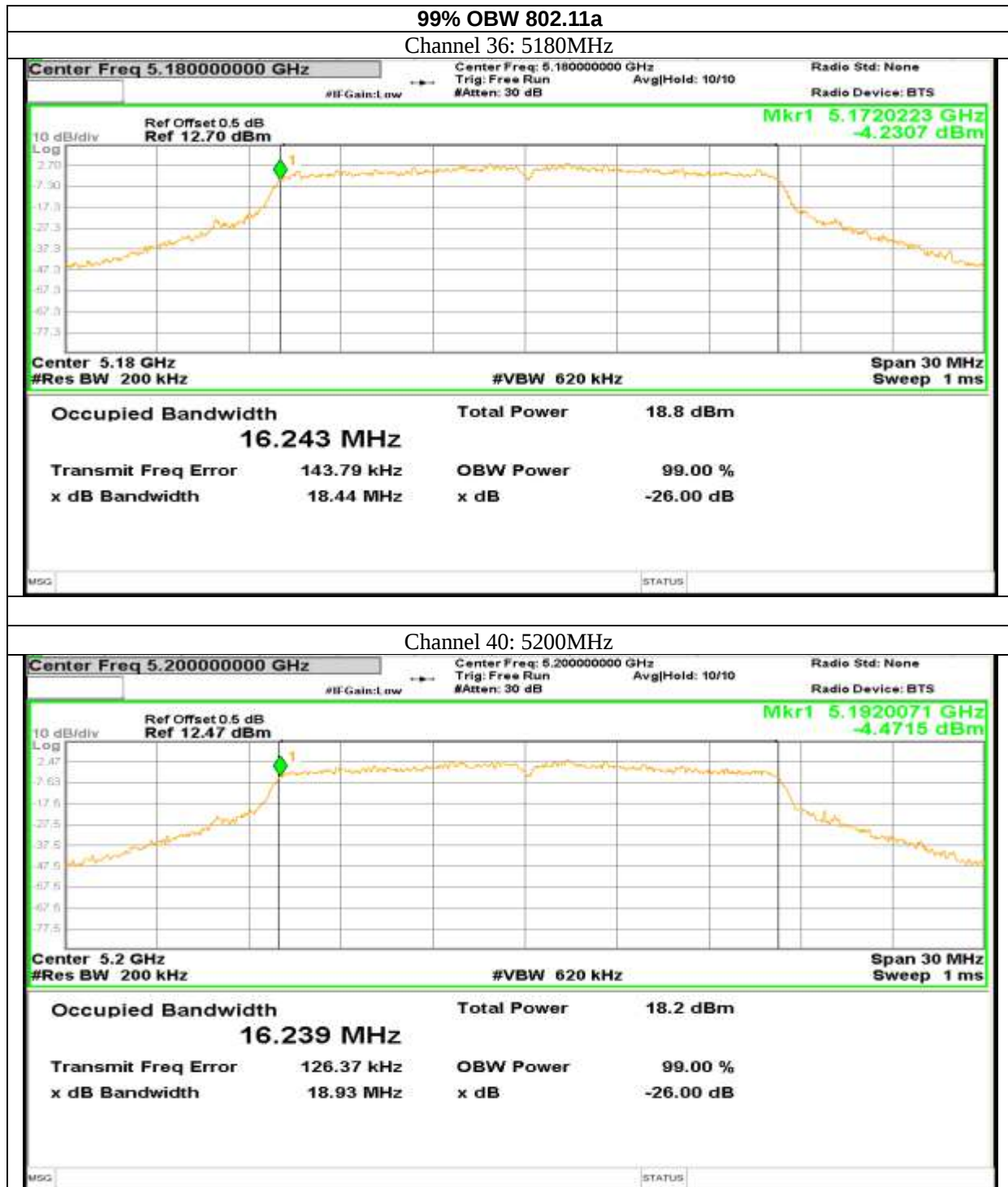


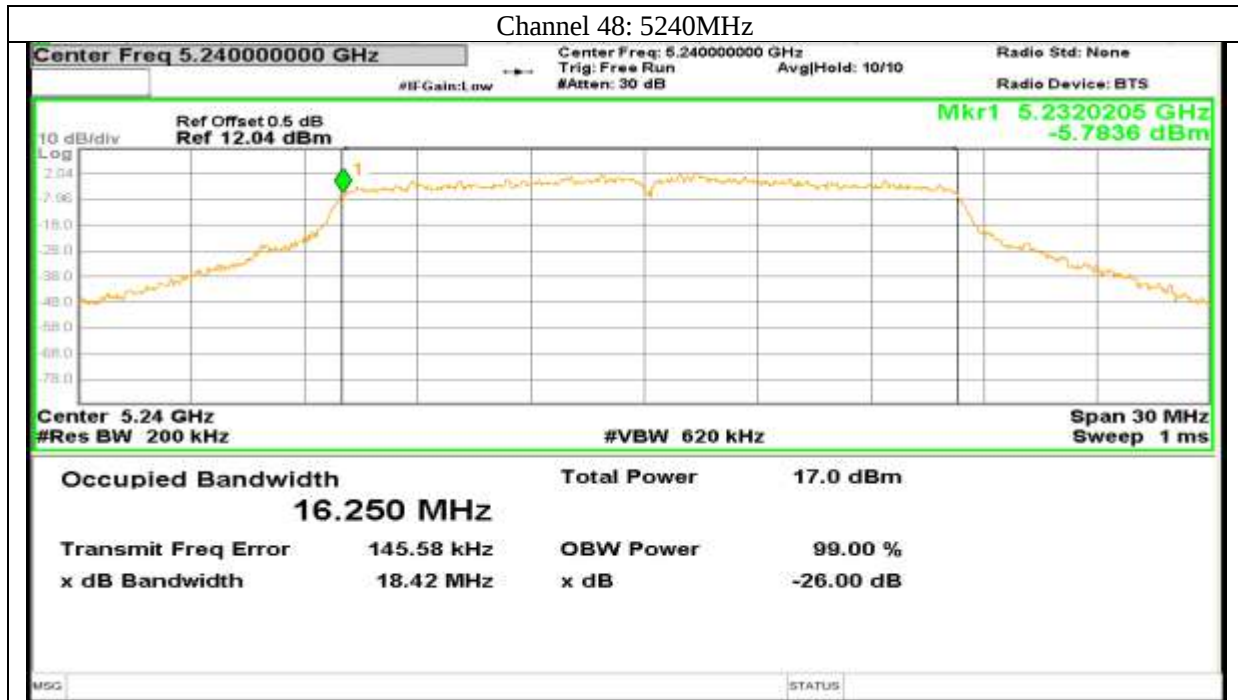


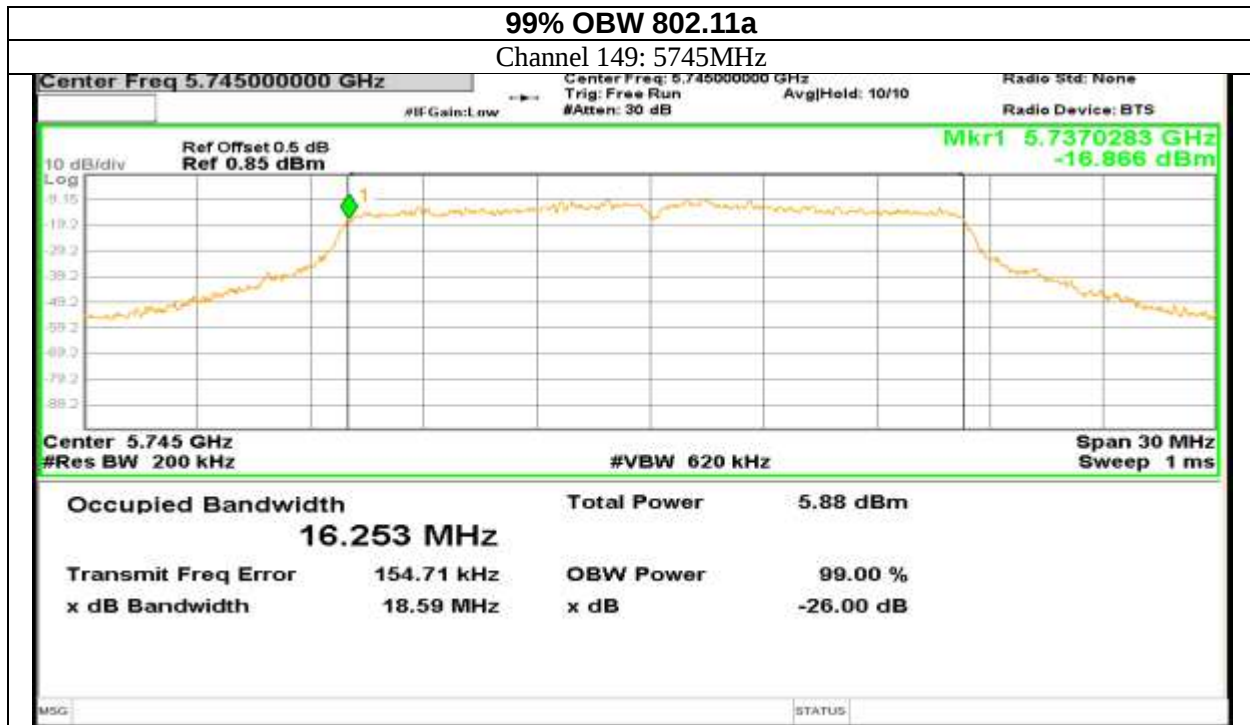




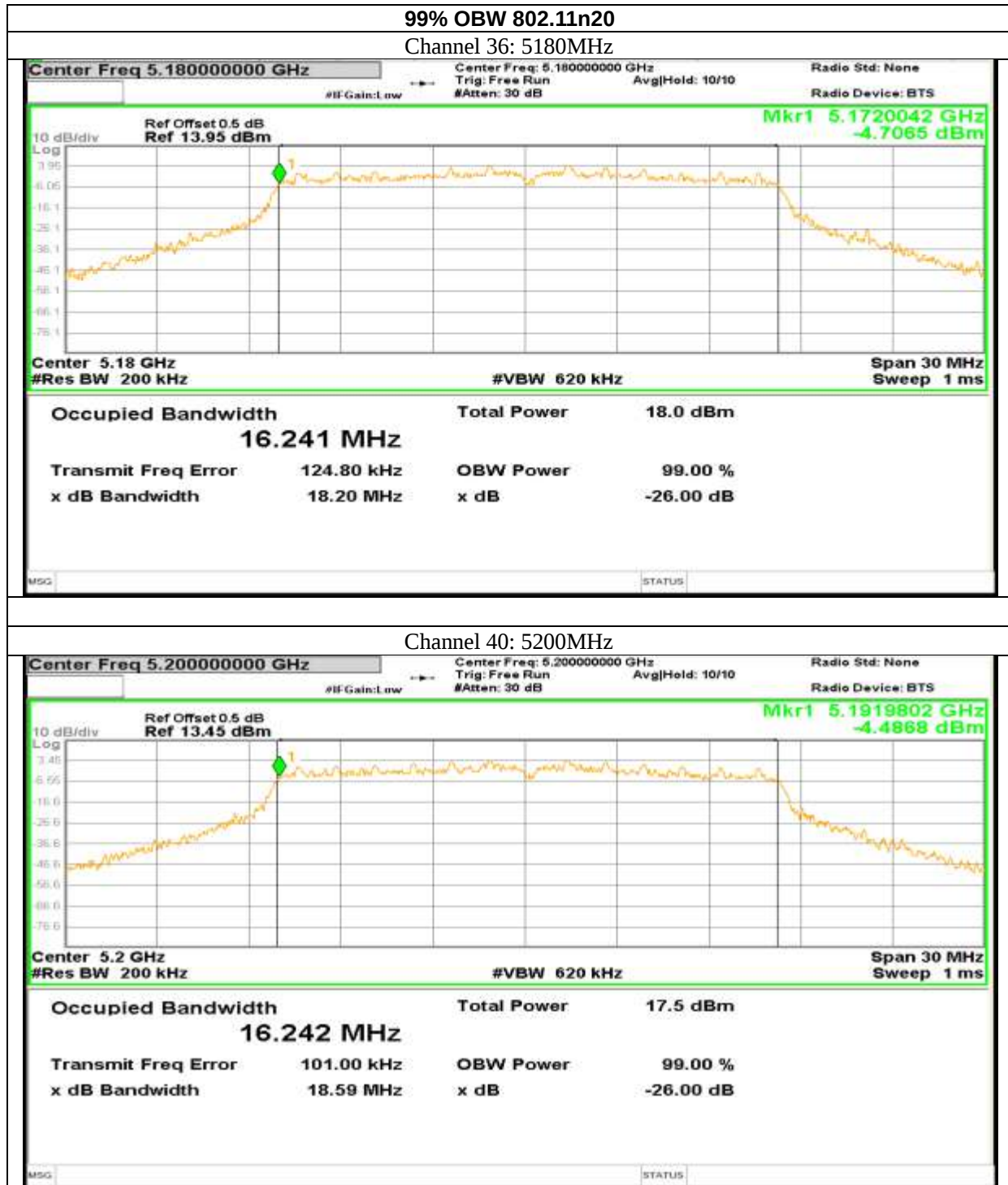


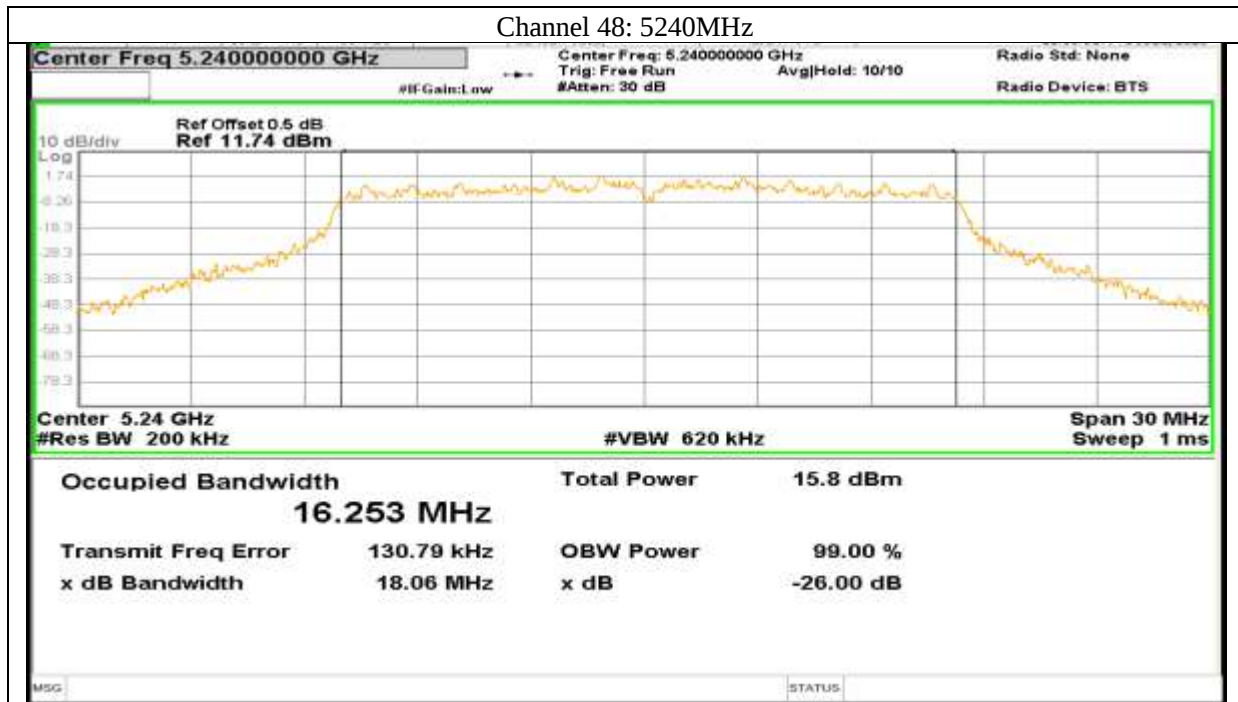






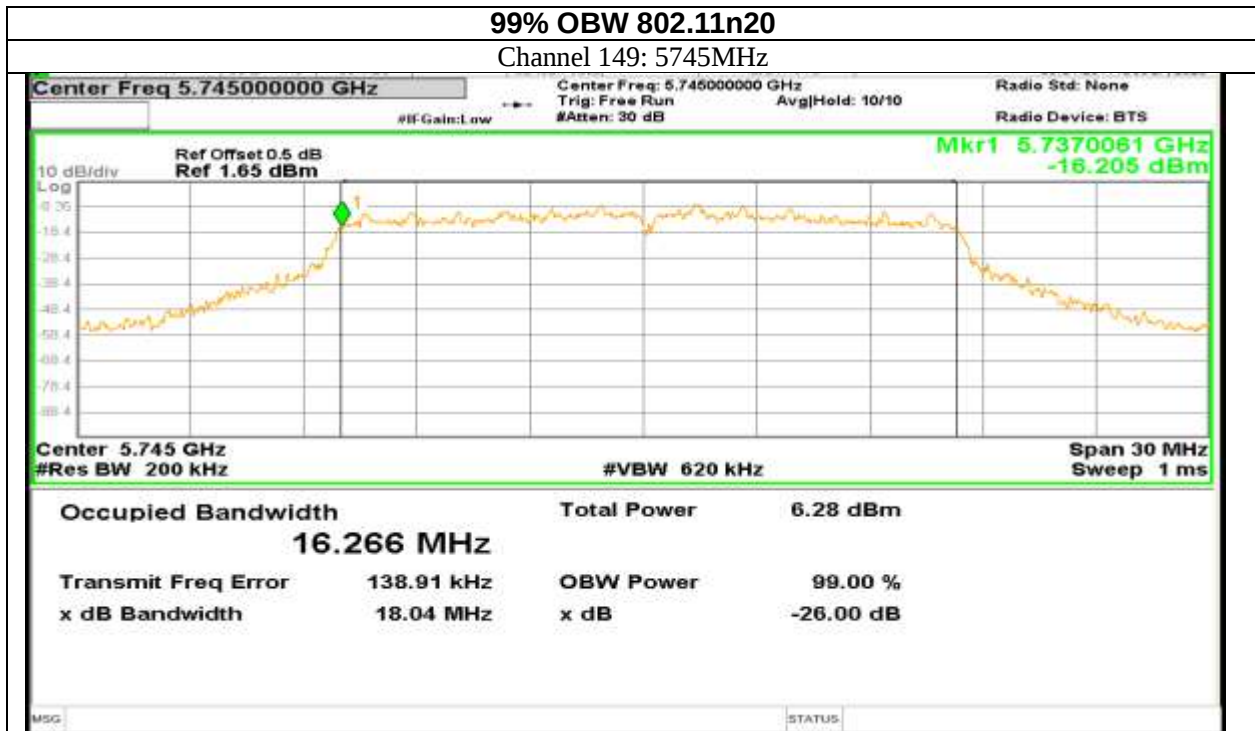






99% OBW 802.11n20

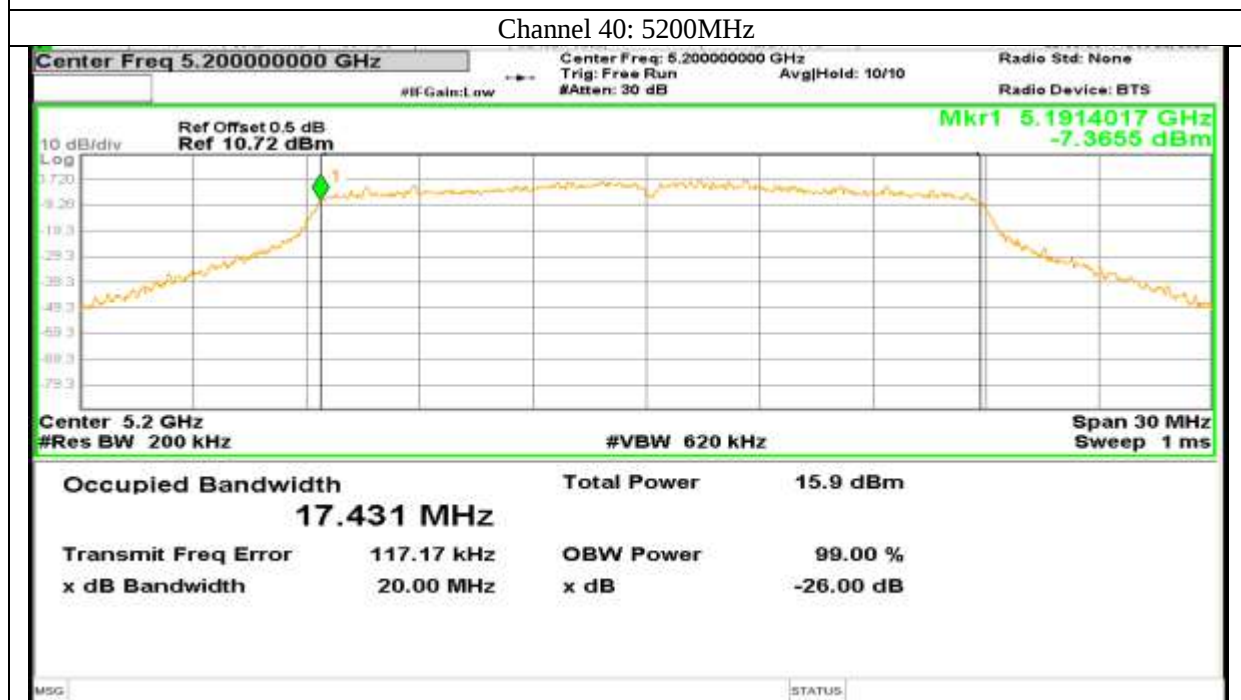
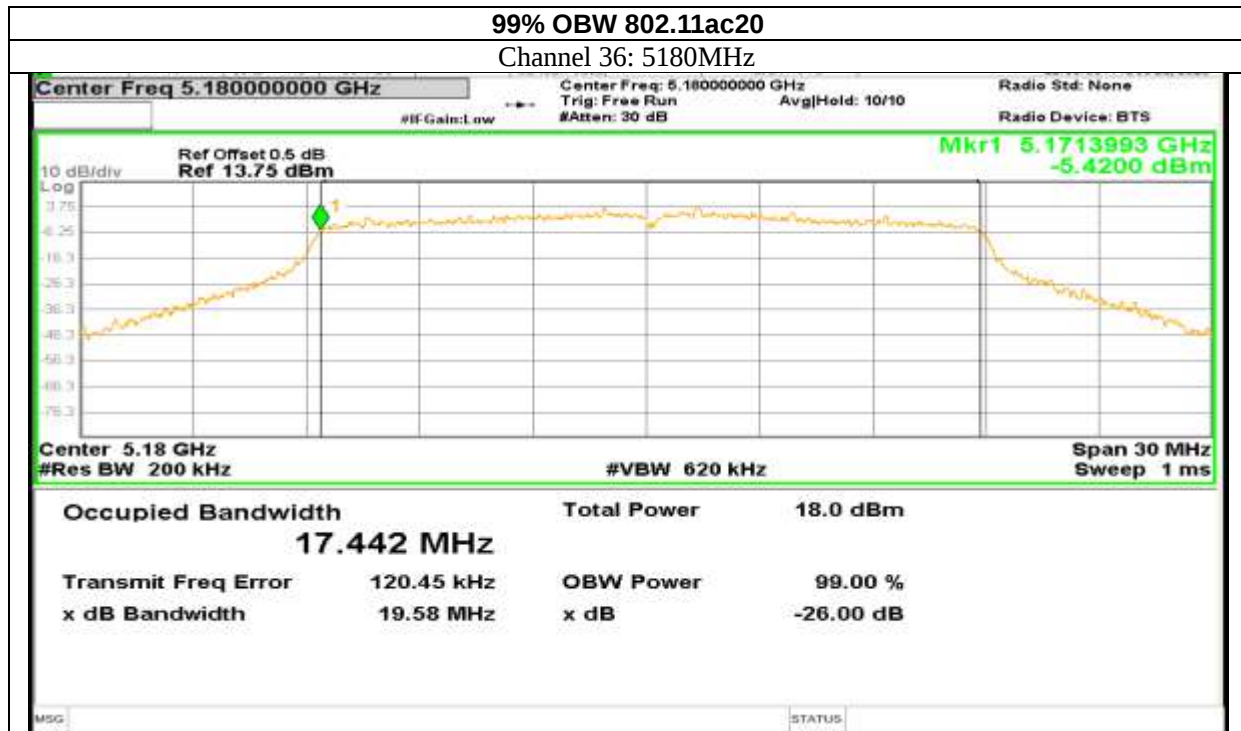
Channel 149: 5745MHz

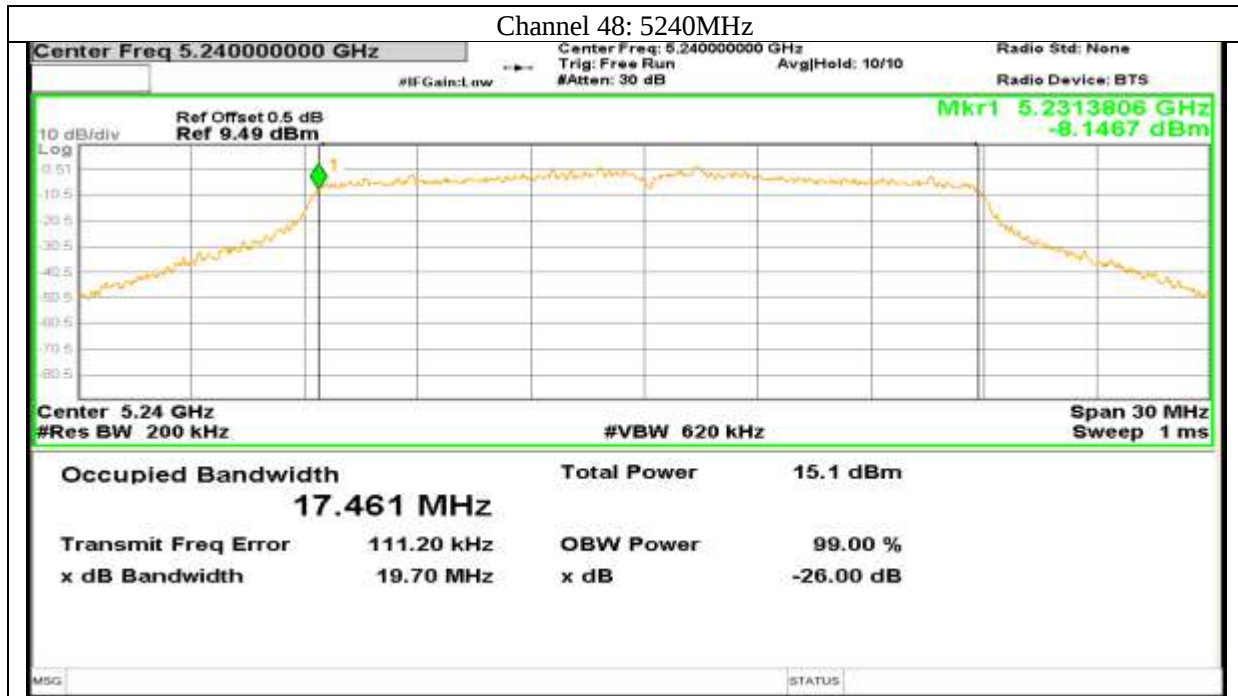


Channel 157: 5785MHz



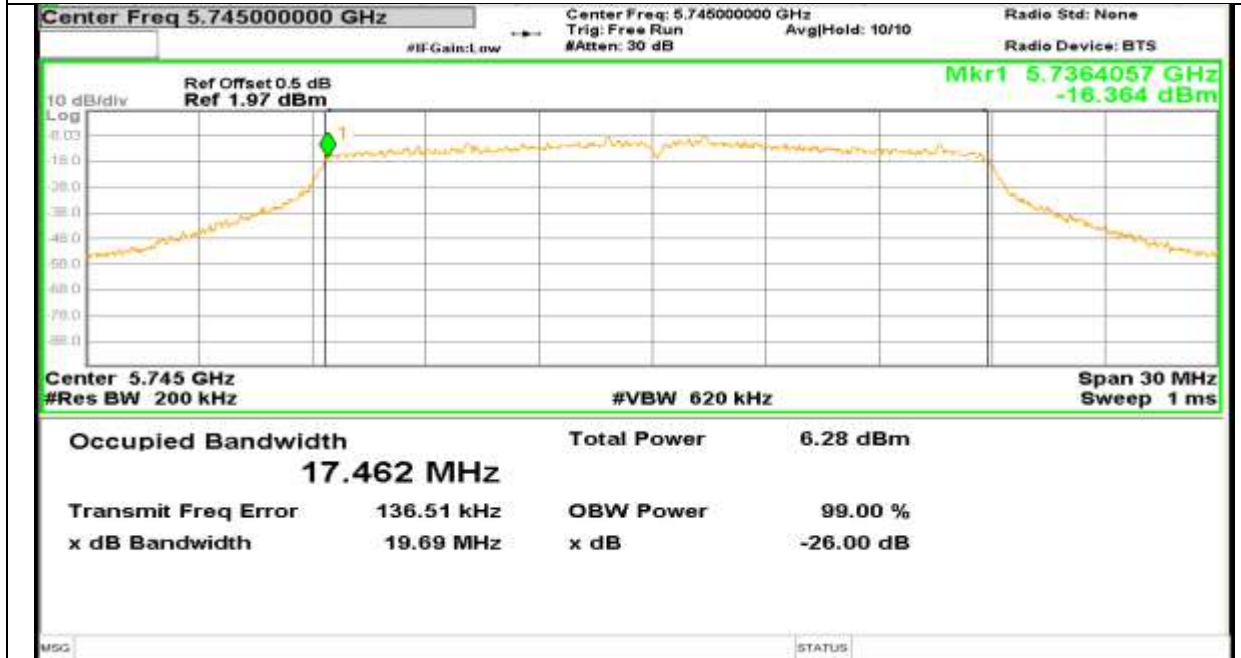




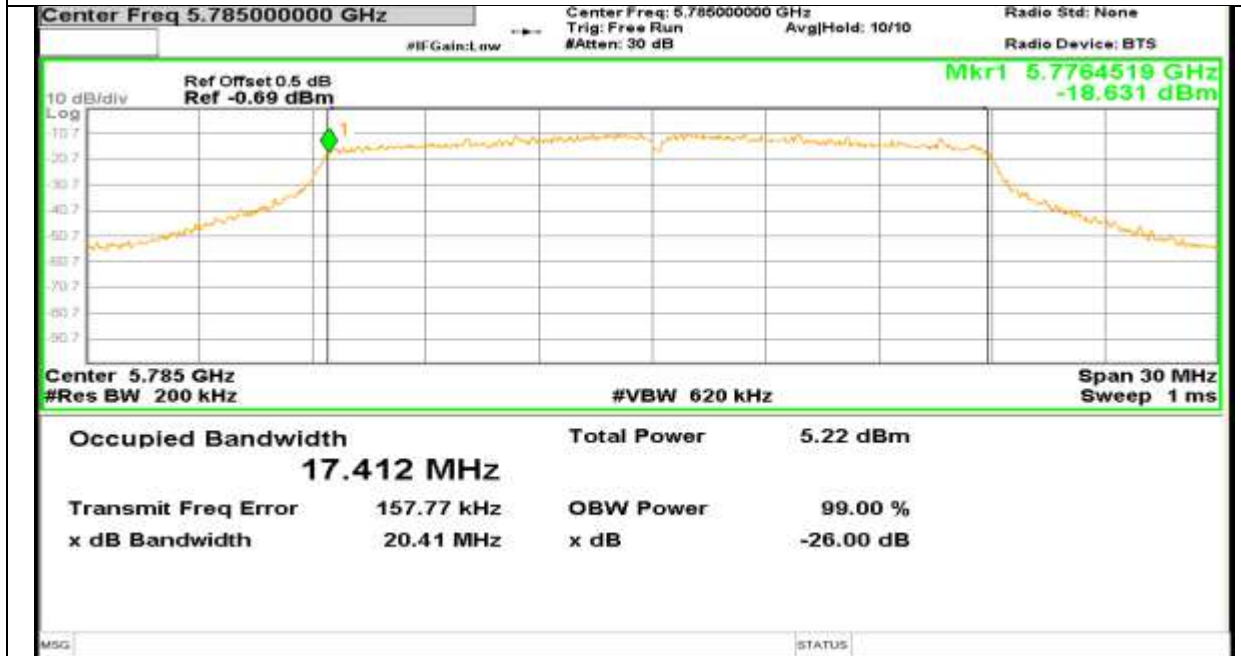


99% OBW 802.11ac20

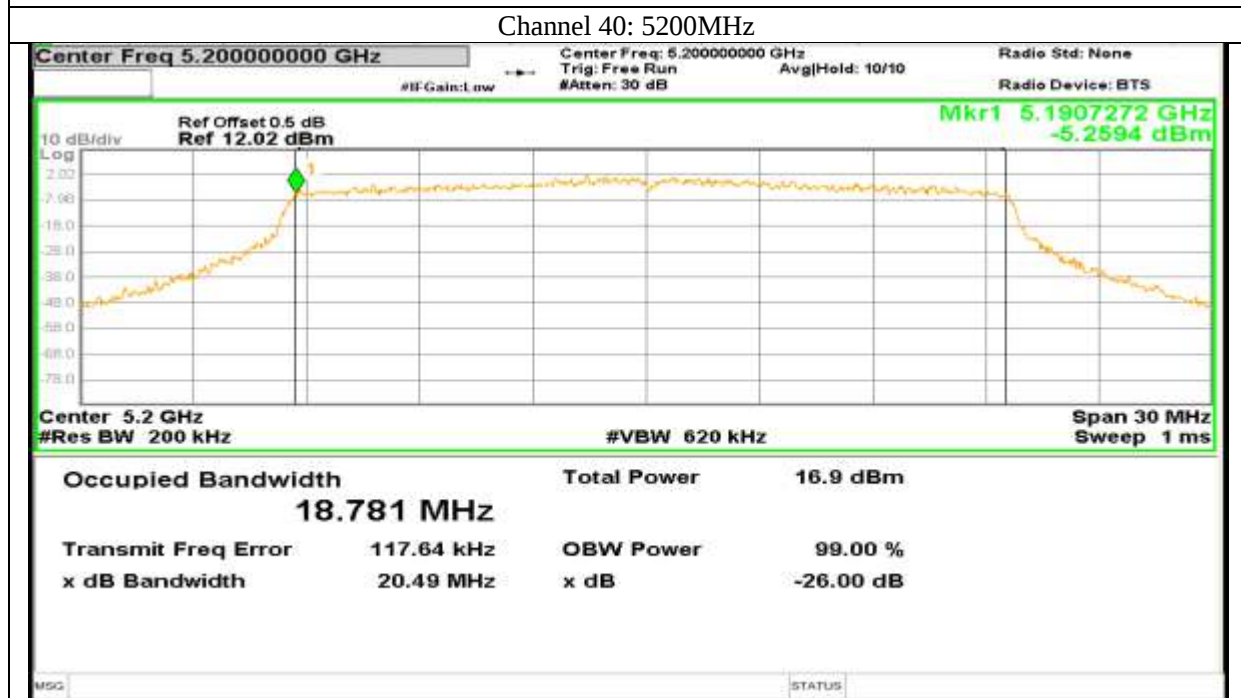
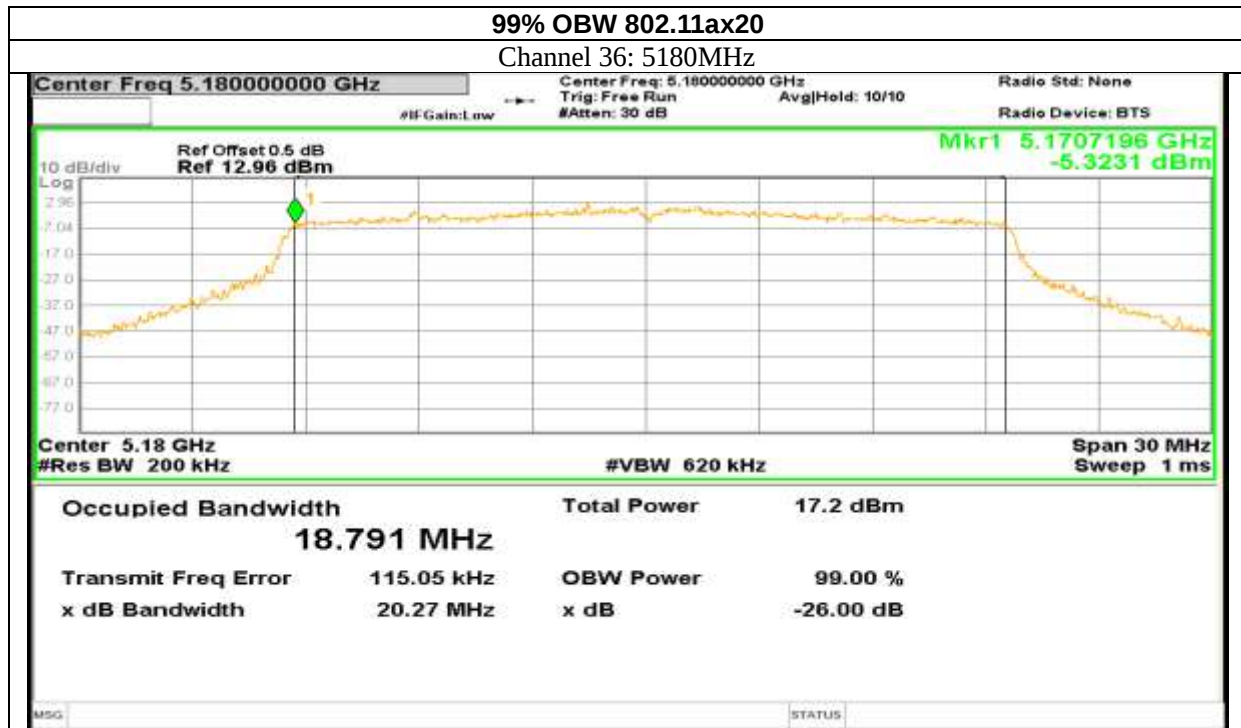
Channel 149: 5745MHz

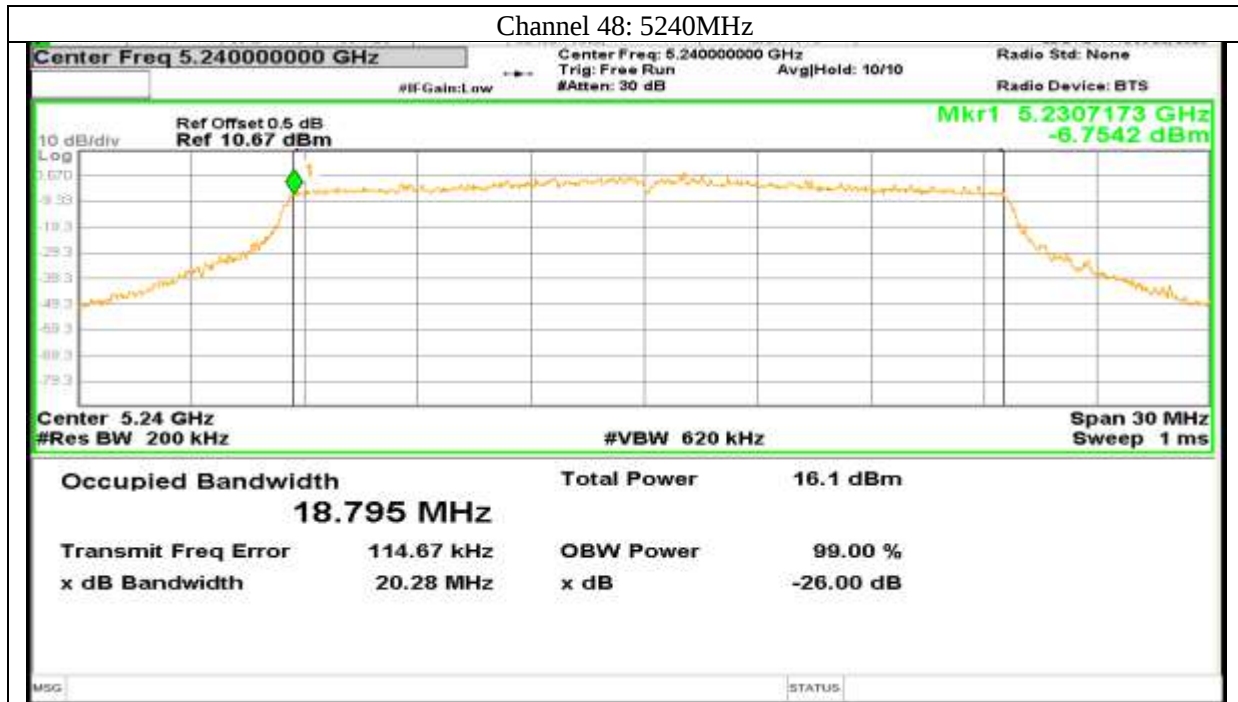


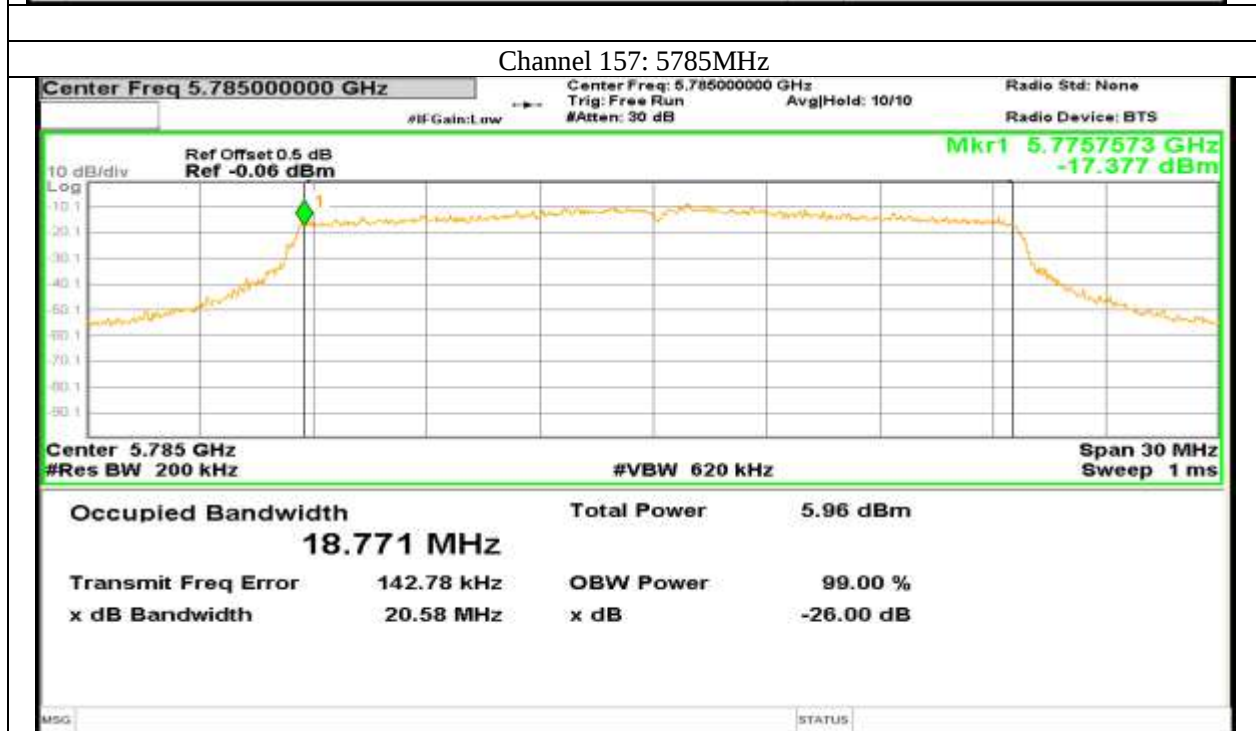
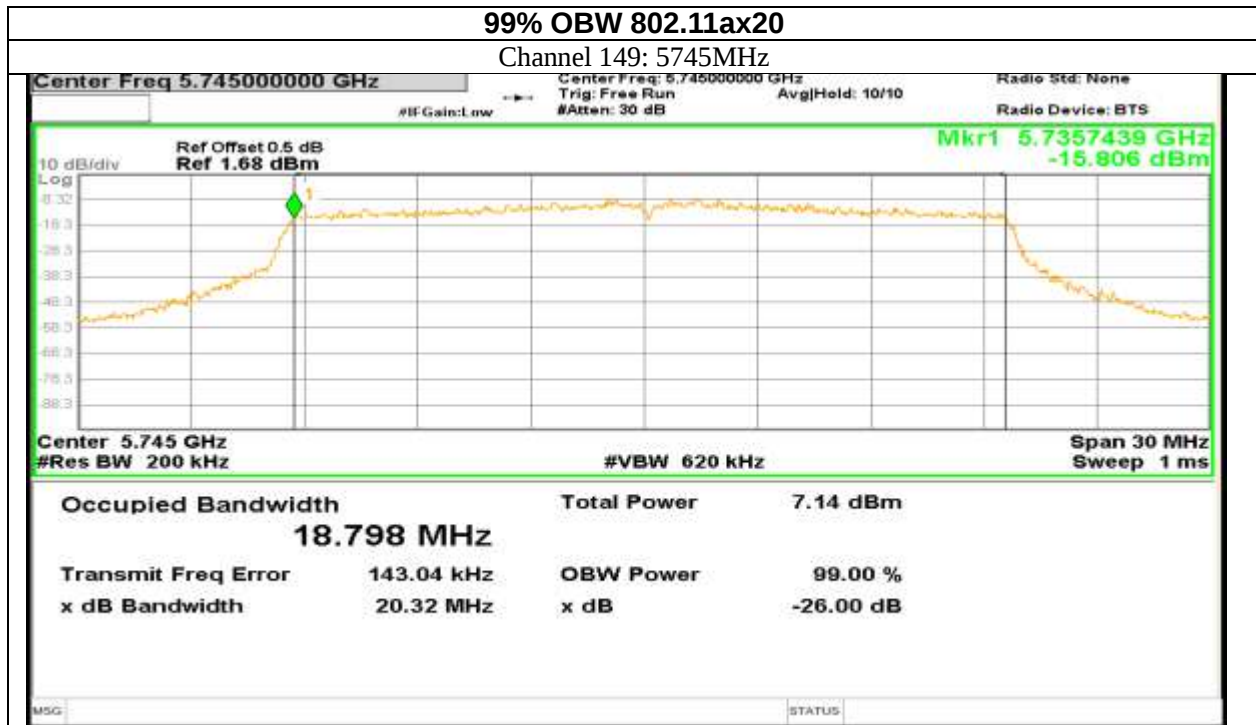
Channel 157: 5785MHz

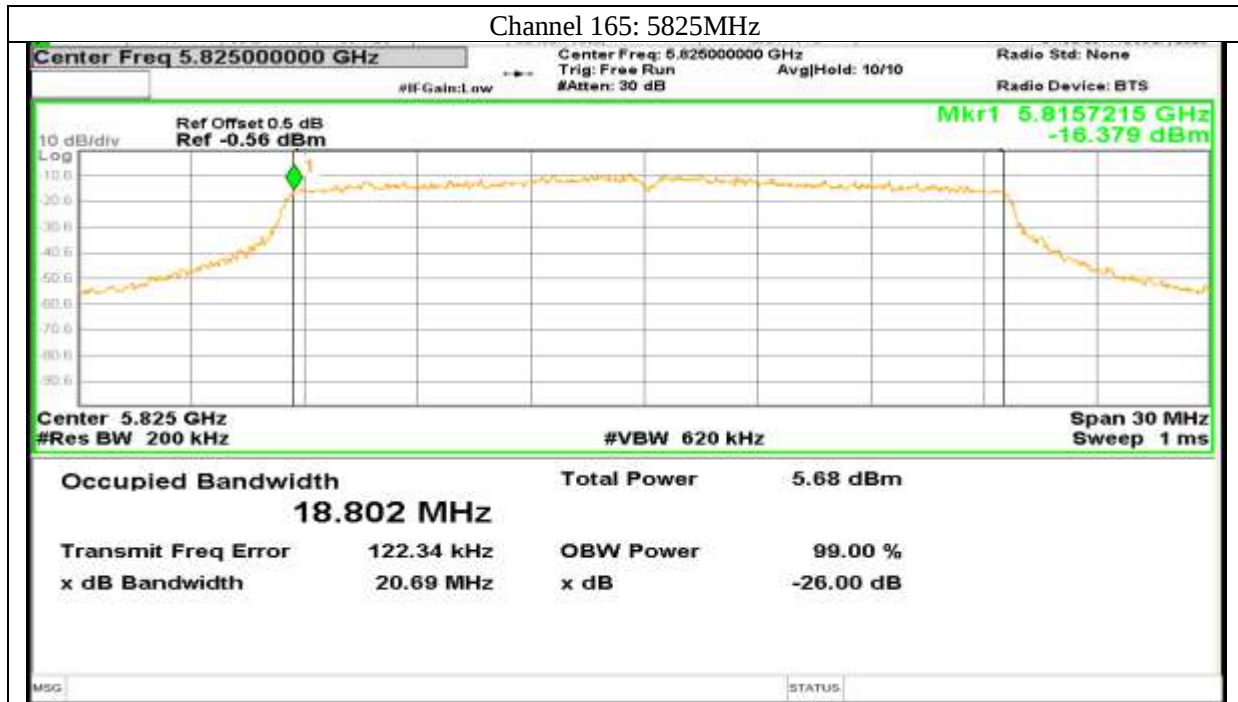


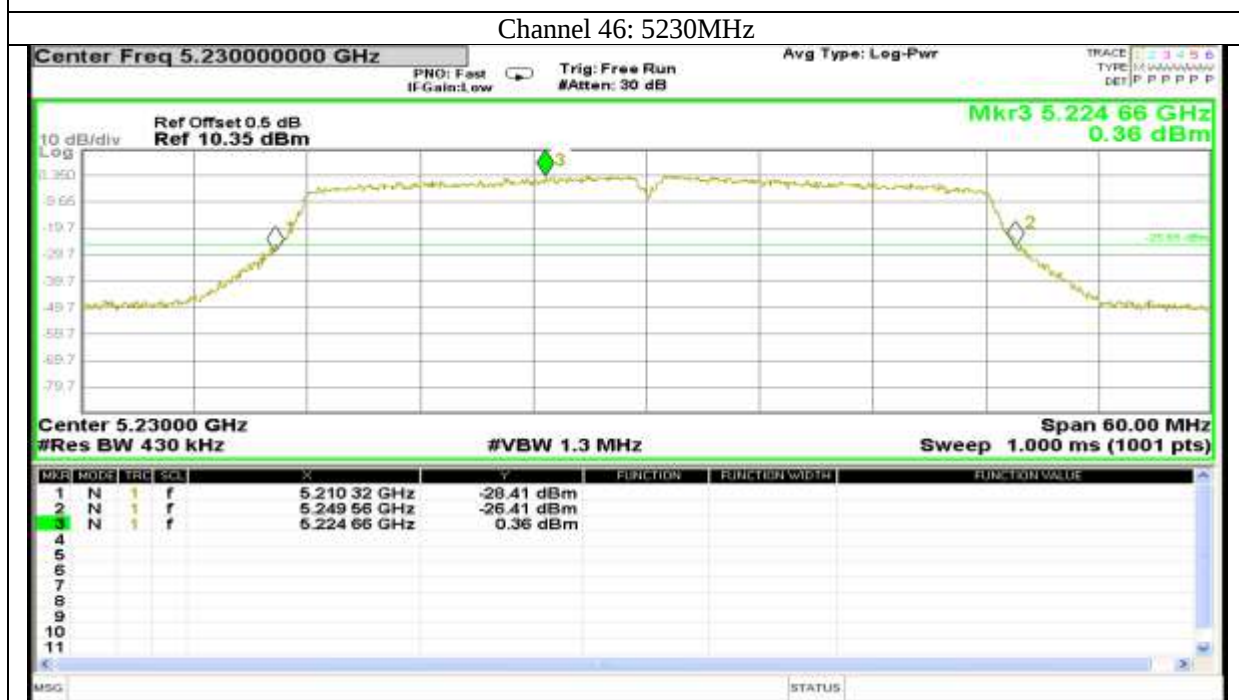




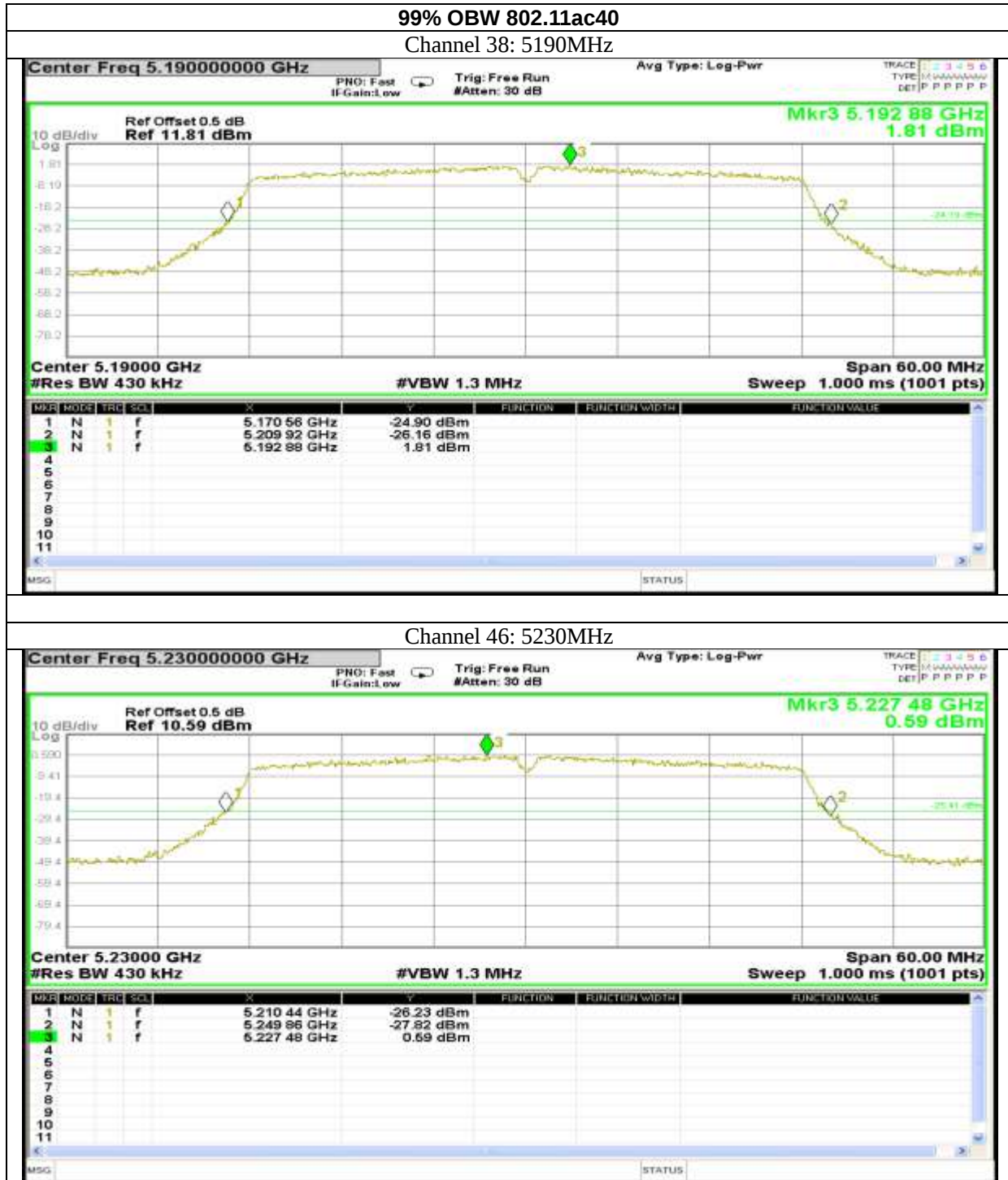


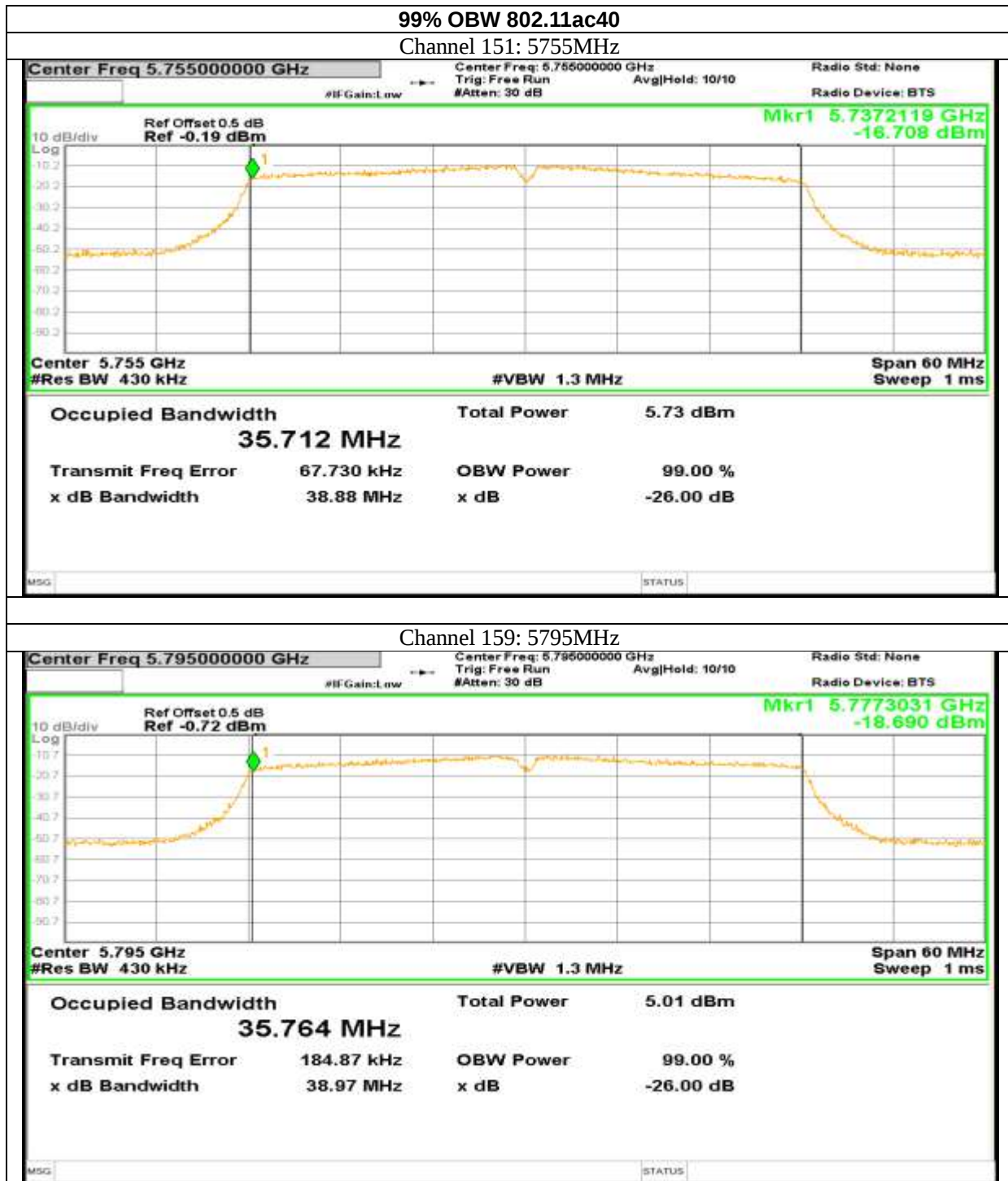


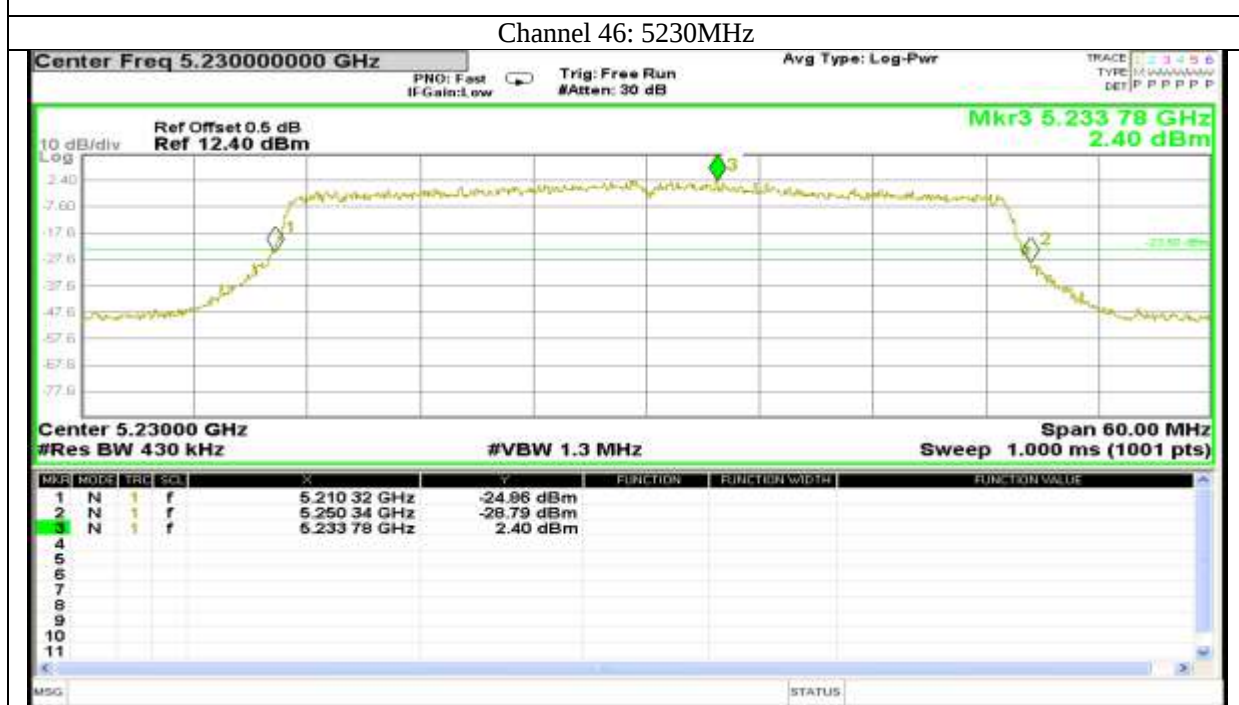
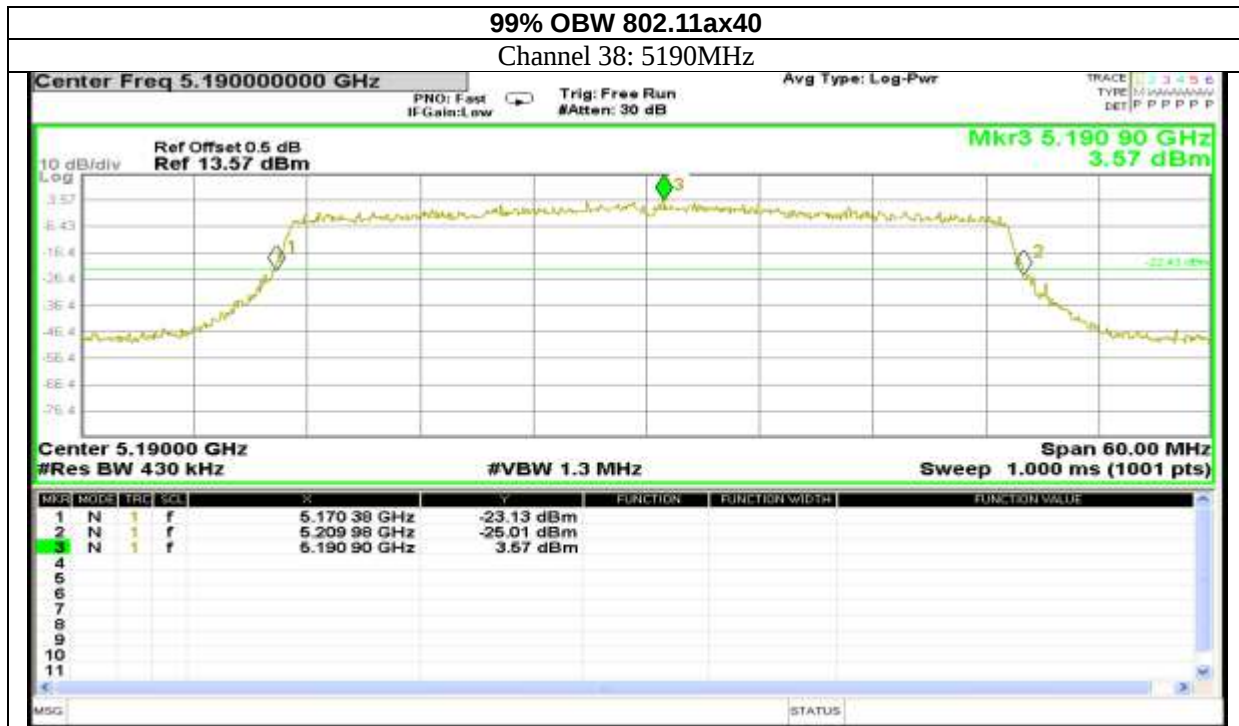


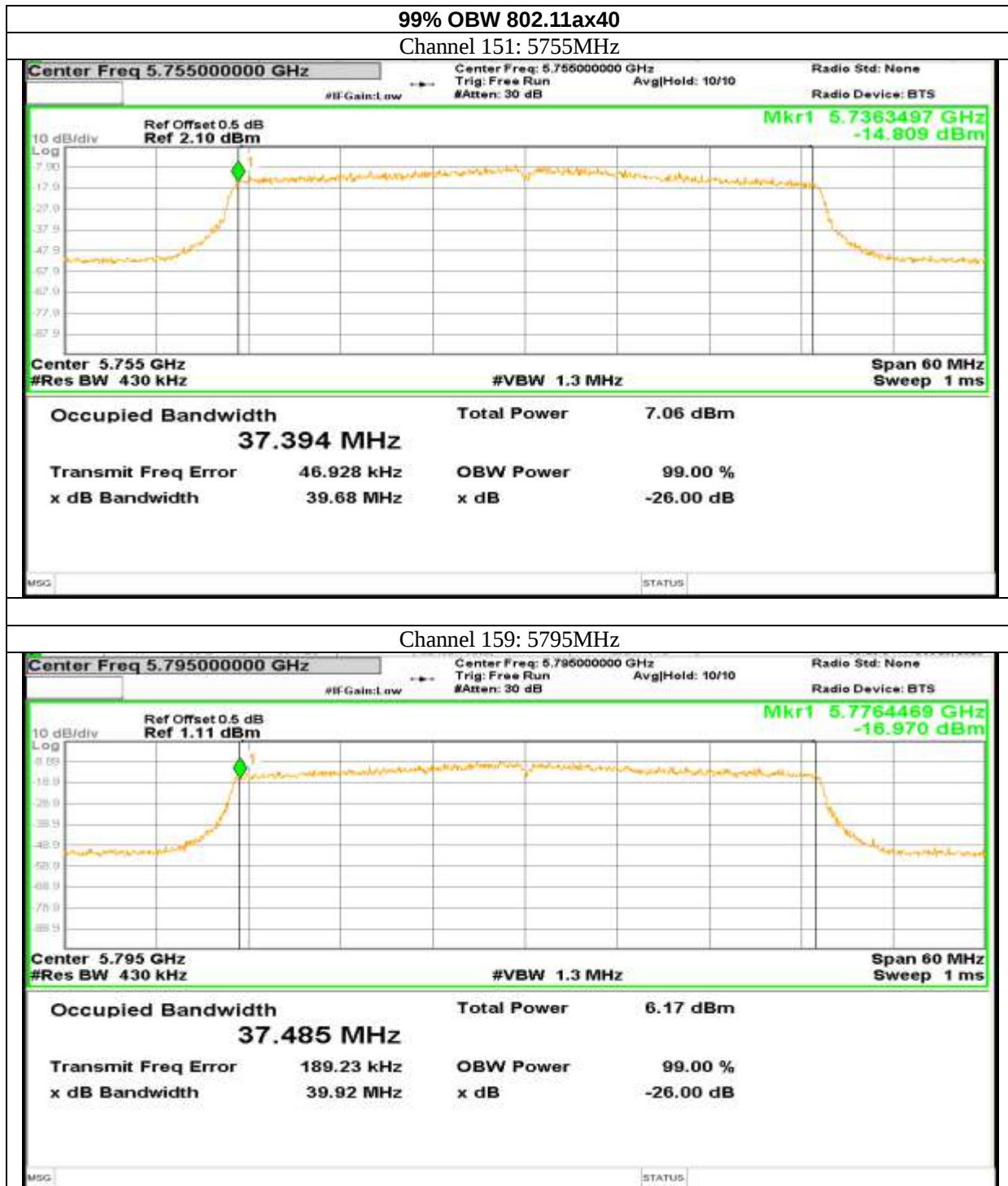


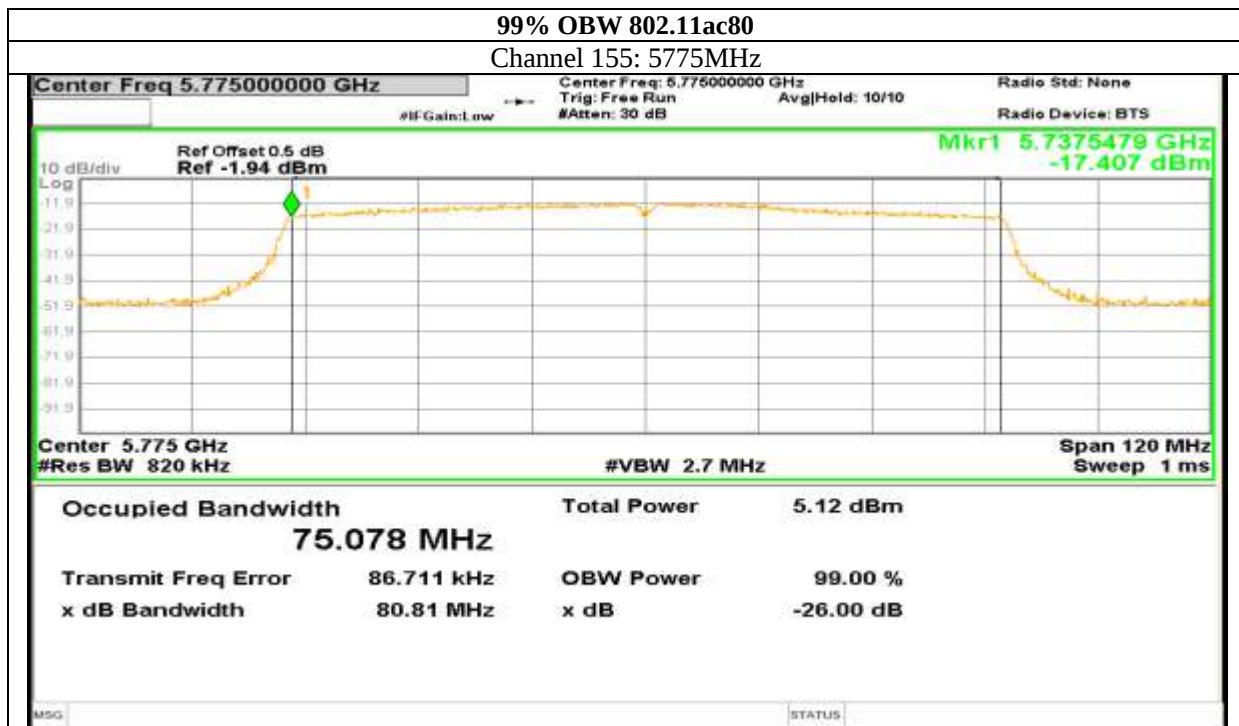


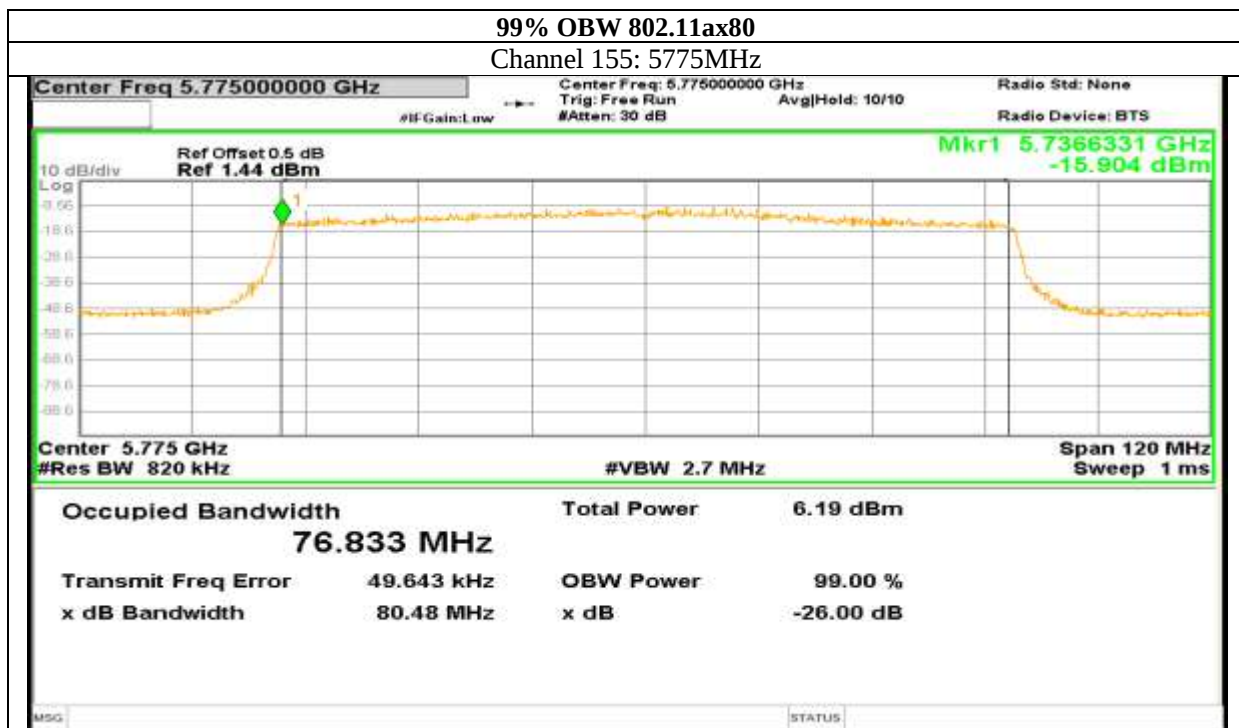




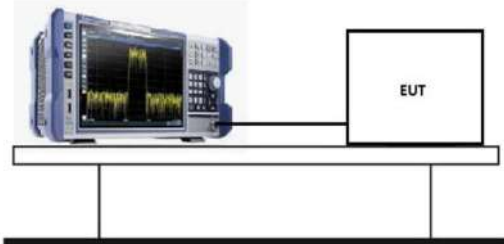








6. MAXIMUM CONDUCTED OUTPUT POWER

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.745-5.850 GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 30dBm
Test setup:	
Test procedure:	Measurement using an RF average power meter (i) Measurements may be performed using a wideband RF spectrum Analyser with a thermocouple detector or equivalent if all of the conditions listed below are satisfied a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. c) The integration period of the spectrum Analyser exceeds the repetition period of the transmitted signal by at least a factor of five. (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B). (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter. (iv) Adjust the measurement in dBm by adding $10 \log(1/x)$ where x is the duty cycle (e.g., $10 \log(1/0.25)$ if the duty cycle is 25 percent).
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 6 for details

6.1. TEST RESULT

Antenna 0:

CH. No.	Frequency (MHz)	Output Power (dBm)				Limit(dBm)	Result
		802.11a	802.11n (HT20)	802.11ac (VHT20)	802.11ax (HE20)		
36	5180.00	19.06	17.83	18.94	19.75	26	Pass
40	5200.00	18.93	17.57	18.78	19.65	26	Pass
48	5240.00	19.30	17.65	18.80	19.67	26	Pass
149	5745.00	6.43	6.32	7.04	7.65	9	Pass
157	5785.00	6.24	5.91	6.81	7.17	9	Pass
165	5825.00	6.85	6.56	7.46	7.91	9	Pass

CH. No.	Frequency (MHz)	Output Power (dBm)			Limit(dBm)	Result
		802.11n (HT40)	802.11ac (VHT40)	802.11ax (HE40)		
38	5190.00	19.77	19.81	20.11	26	Pass
46	5230.00	19.69	19.64	19.95	26	Pass
151	5755.00	6.75	6.51	7.16	9	Pass
159	5795.00	6.74	6.80	7.24	9	Pass

CH. No.	Frequency (MHz)	Output Power (dBm)		Limit(dBm)	Result
		802.11ac(VHT80)	802.11ax(HE80)		
42	5210.00	19.47	19.88	26	Pass
155	5775.00	6.85	7.56	9	Pass

Antenna 1:

CH. No.	Frequency (MHz)	Output Power (dBm)				Limit(dBm)	Result
		802.11a	802.11n (HT20)	802.11ac (VHT20)	802.11ax (HE20)		
36	5180.00	20.12	18.96	20.00	18.38	26	Pass
40	5200.00	19.54	18.30	17.26	18.17	26	Pass
48	5240.00	18.23	16.33	16.37	17.32	26	Pass
149	5745.00	7.19	7.25	7.76	8.31	9	Pass
157	5785.00	6.19	5.87	6.72	7.13	9	Pass
165	5825.00	5.67	5.79	6.44	6.98	9	Pass

CH. No.	Frequency (MHz)	Output Power (dBm)			Limit(dBm)	Result
		802.11n (HT40)	802.11ac (VHT40)	802.11ax (HE40)		
38	5190.00	18.19	18.29	18.56	26	Pass
46	5230.00	17.49	17.51	17.85	26	Pass
151	5755.00	7.58	7.47	7.92	9	Pass
159	5795.00	6.70	6.62	7.33	9	Pass

CH. No.	Frequency (MHz)	Output Power (dBm)		Limit(dBm)	Result
		802.11ac(VHT80)	802.11ax(HE80)		
42	5210.00	17.56	17.88	26	Pass
155	5775.00	7.39	7.85	9	Pass

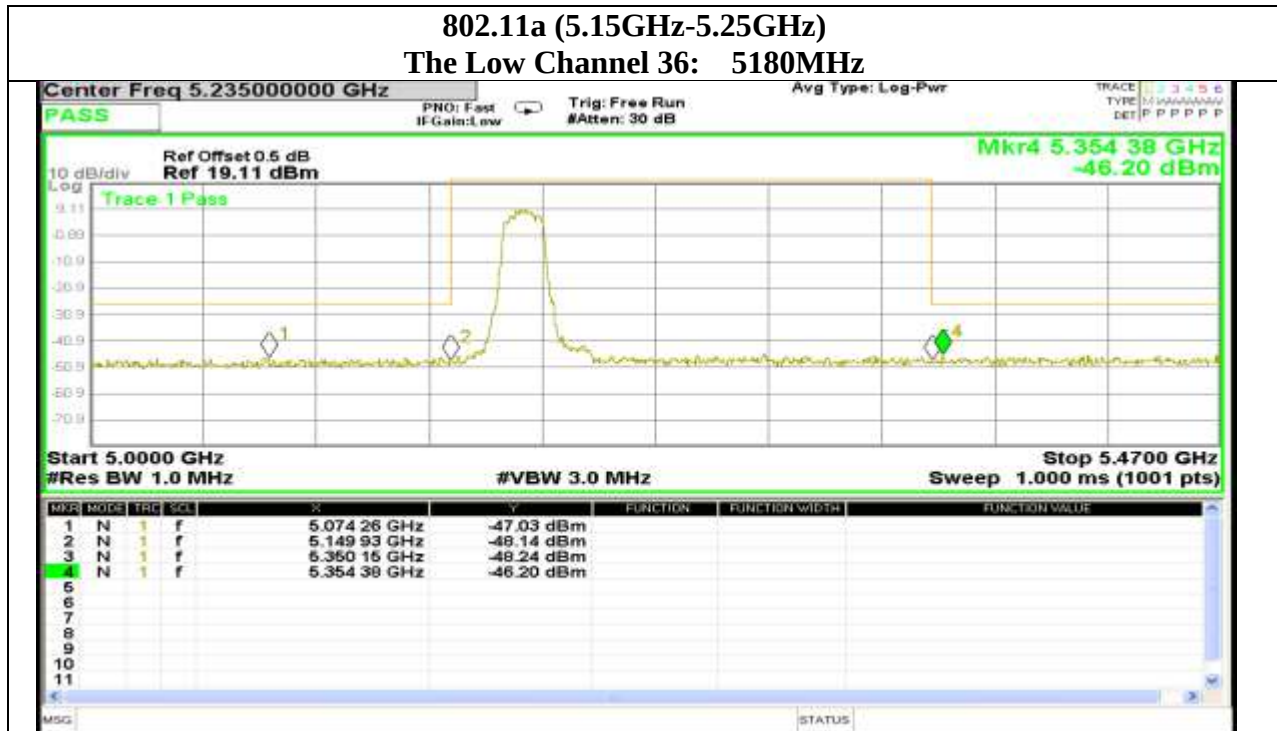
7. Band Edges Measurement

Test Requirement:	FCC Part15 E Section 15.407 and 5.205
Test Method:	ANSI C63.10:2013
Limit:	Undesirable emission limits: (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band. (3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.
Test Procedure:	a. The Transmitter output of EUT was connected to the spectrum analyzer. Equipment mode: Spectrum analyzer Detector function: Peak mode SPAN: 100MHz RBW: 1 MHz VBW: 1 MHz Sweep time= Auto. b. Using Peak Search to read the peak power of Carrier frequencies after Maximum Hold function is completed. c. Find the next peak frequency outside the operation frequency band.
Test setup:	
Test results:	Pass

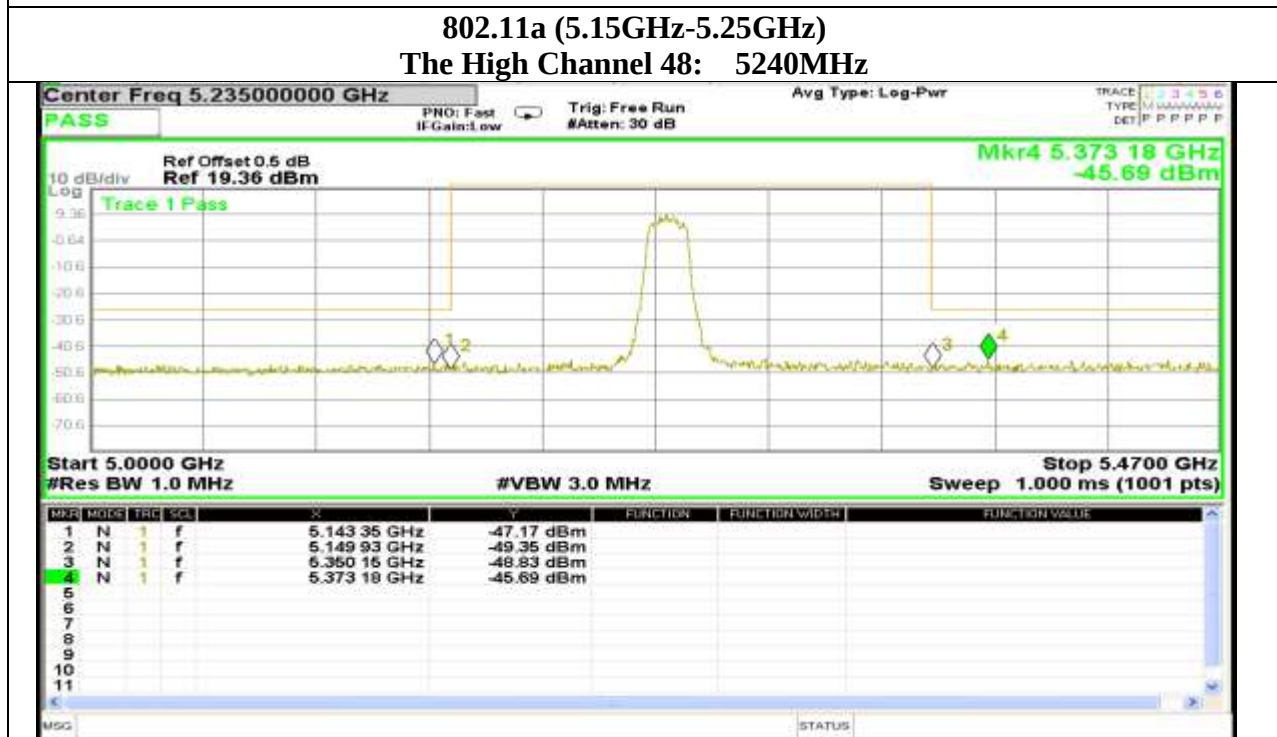
7.1. TEST RESULT

Antenna 0:

802.11a (5.15GHz-5.25GHz) The Low Channel 36: 5180MHz



802.11a (5.15GHz-5.25GHz) The High Channel 48: 5240MHz



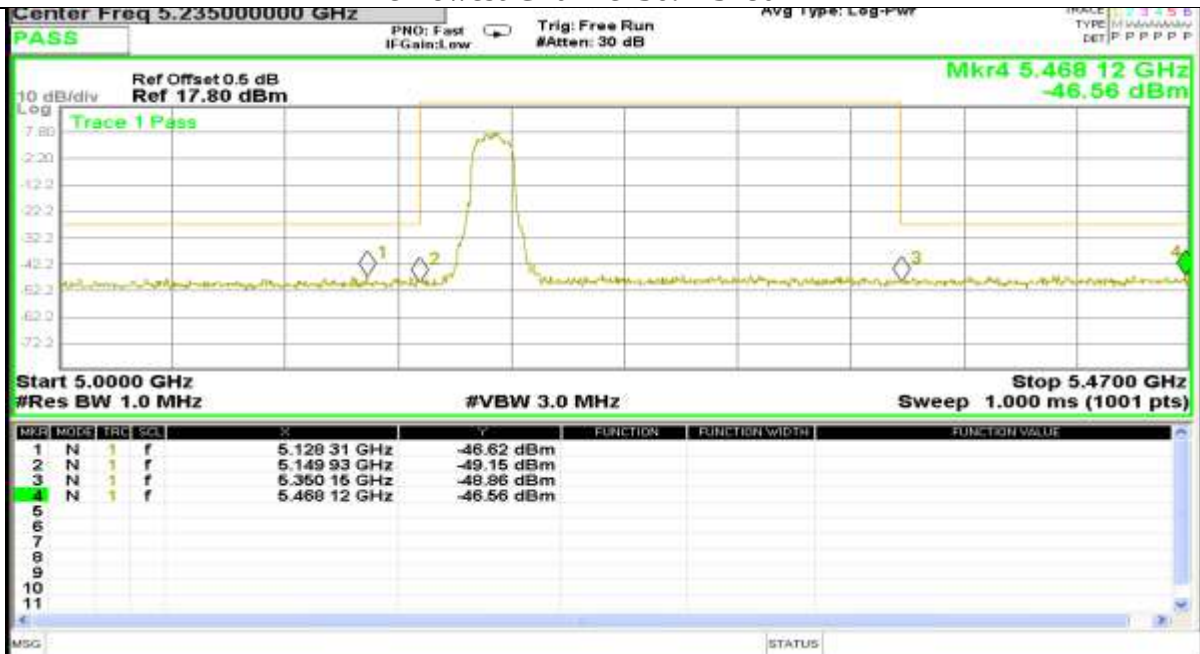
802.11a (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz



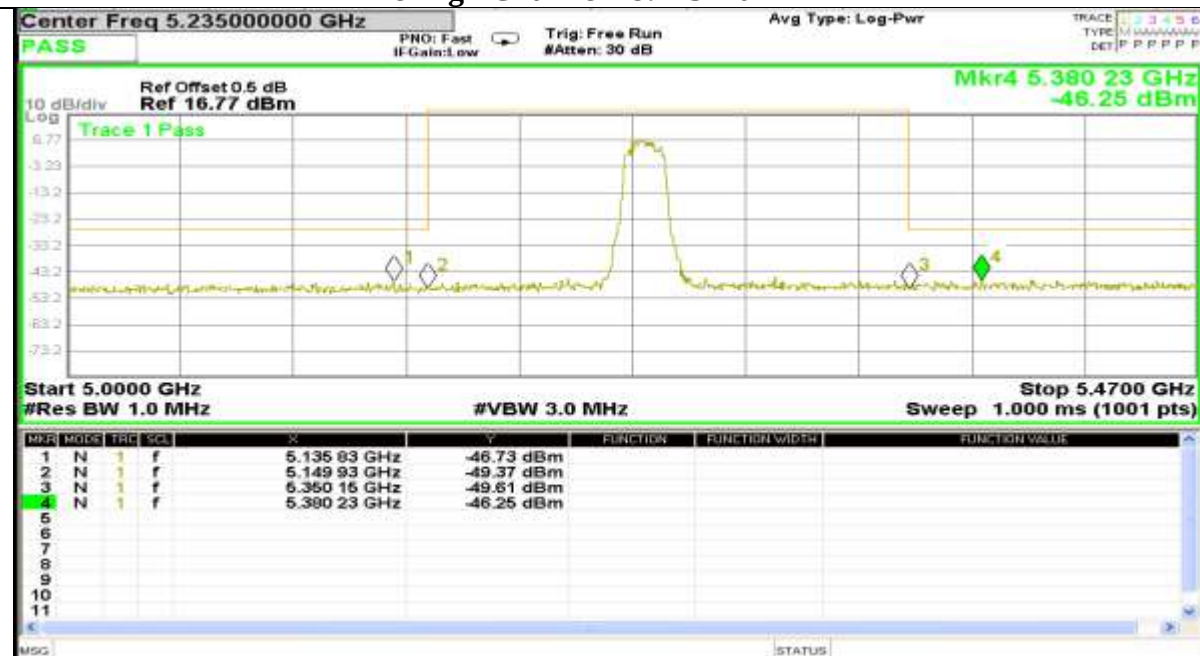
802.11a (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11n(20M) (5.15GHz-5.25GHz)
The Lowest Channel 36: 5180MHz



802.11n(20M) (5.15GHz-5.25GHz)
The High Channel 48: 5240MHz



802.11n(20M) (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz



802.11n(20M) (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11ac(20M) (5.15GHz-5.25GHz)
The Lowest Channel 36: 5180MHz



802.11ac(20M) (5.15GHz-5.25GHz)
The High Channel 48: 5240MHz



802.11ac(20M) (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz



802.11ac(20M) (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11ax(20M) (5.15GHz-5.25GHz)
The Lowest Channel 36: 5180MHz



802.11ax(20M) (5.15GHz-5.25GHz)
The High Channel 48: 5240MHz



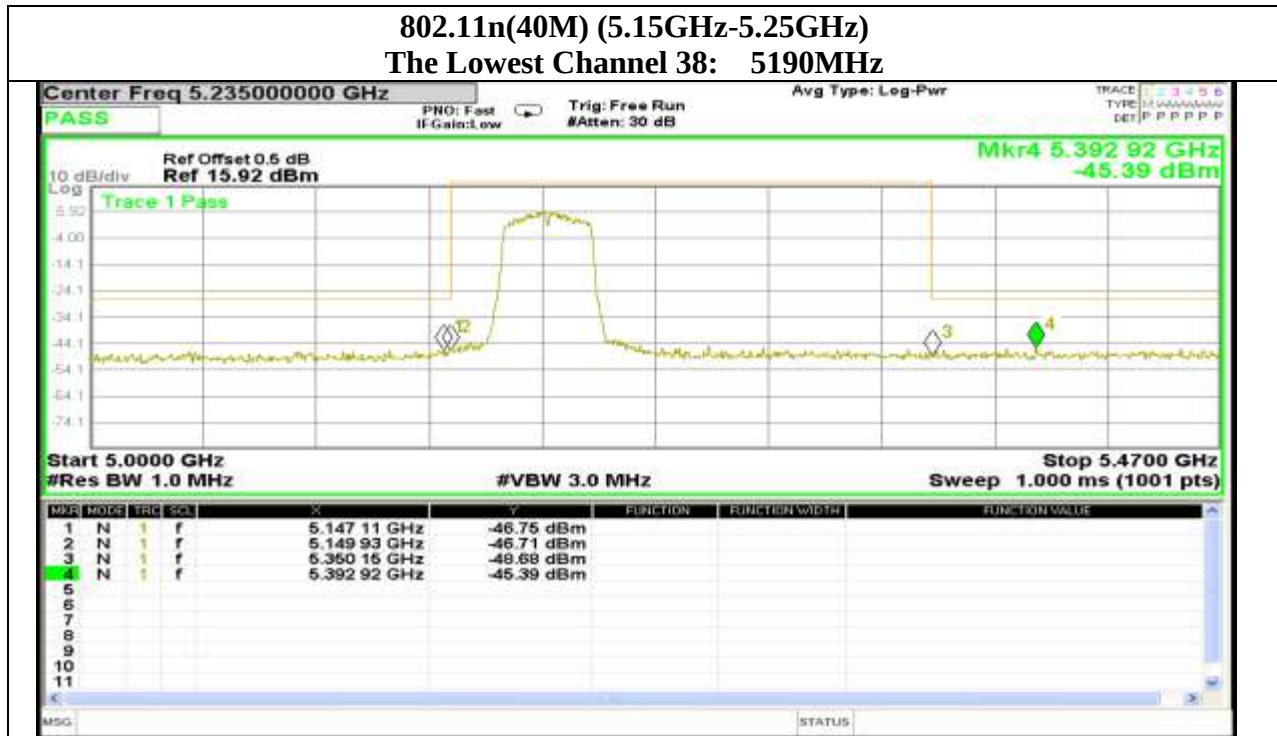
802.11ax(20M) (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz



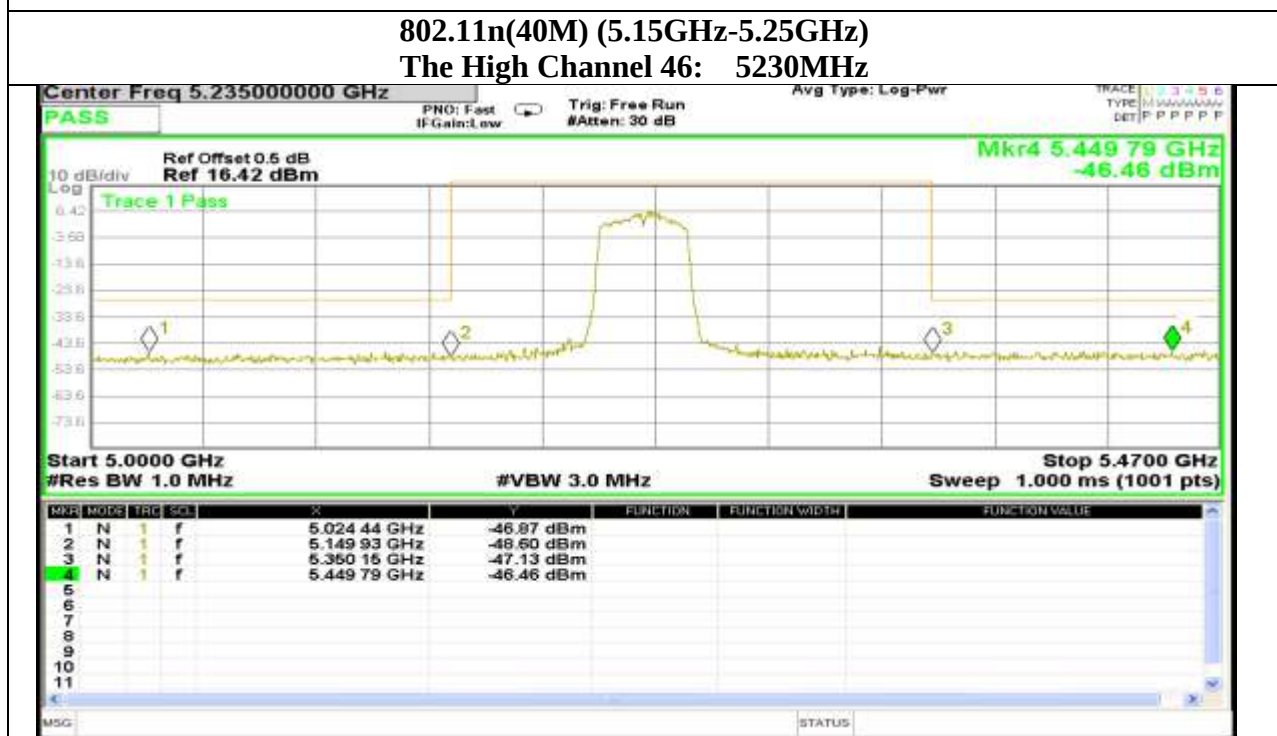
802.11ax(20M) (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11n(40M) (5.15GHz-5.25GHz)
The Lowest Channel 38: 5190MHz



802.11n(40M) (5.15GHz-5.25GHz)
The High Channel 46: 5230MHz



802.11n(40M) (5.725GHz-5.85GHz)
The Lowest Channel 151: 5755MHz



802.11n(40M) (5.725GHz-5.85GHz)
The High Channel 159: 5795MHz



802.11ac(40M) (5.15GHz-5.25GHz)
The Lowest Channel 38: 5190MHz



802.11ac(40M) (5.15GHz-5.25GHz)
The High Channel 46: 5230MHz



802.11ac(40M) (5.725GHz-5.85GHz)
The Lowest Channel 151: 5755MHz



802.11ac(40M) (5.725GHz-5.85GHz)
The High Channel 159: 5795MHz



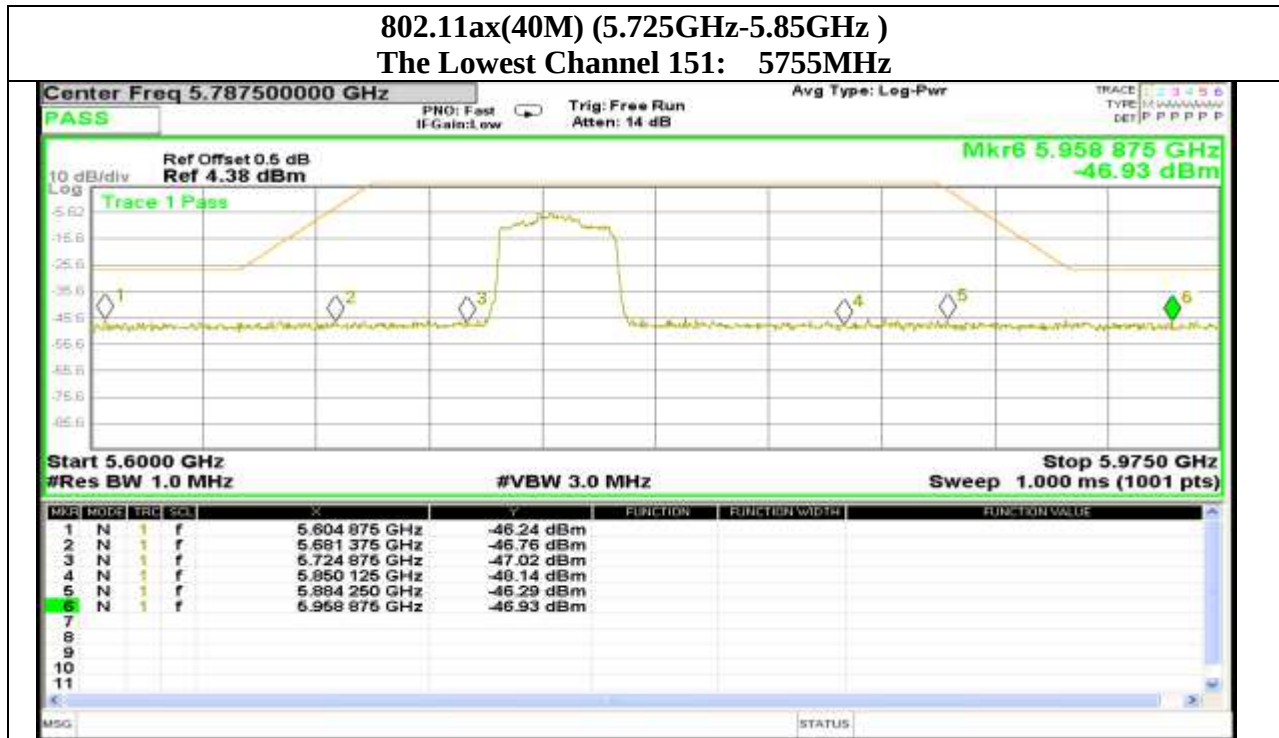
802.11ax(40M) (5.15GHz-5.25GHz)
The Lowest Channel 38: 5190MHz



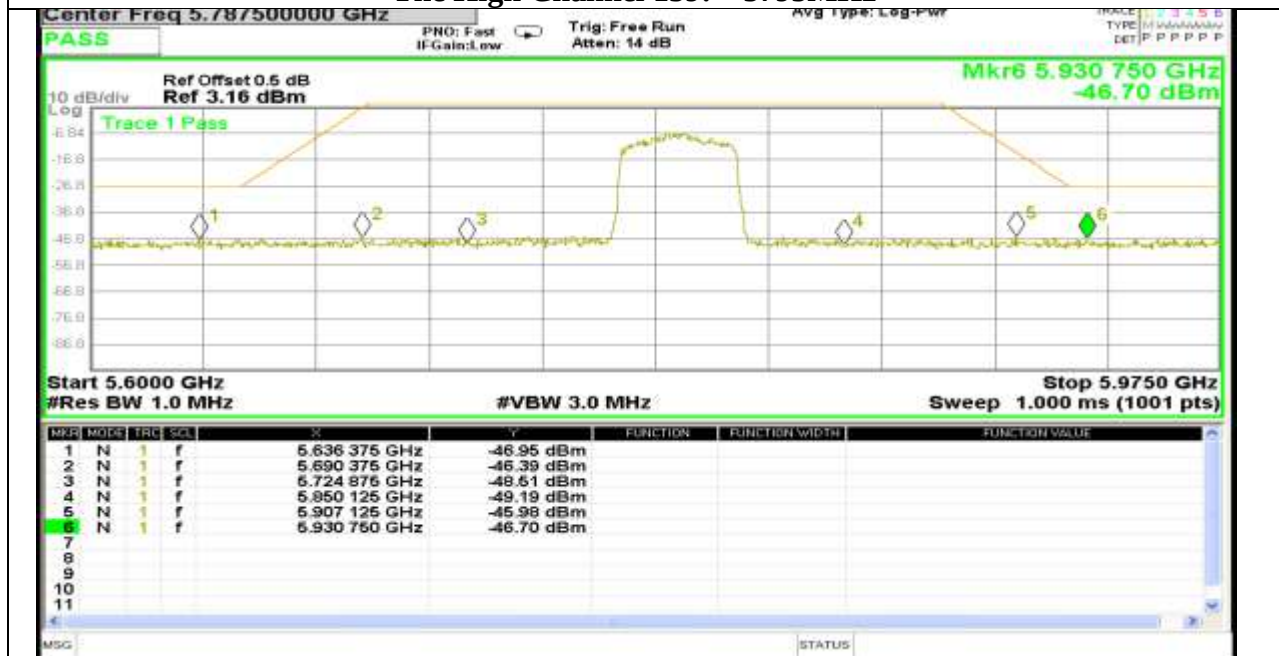
802.11ax(40M) (5.15GHz-5.25GHz)
The High Channel 46: 5230MHz



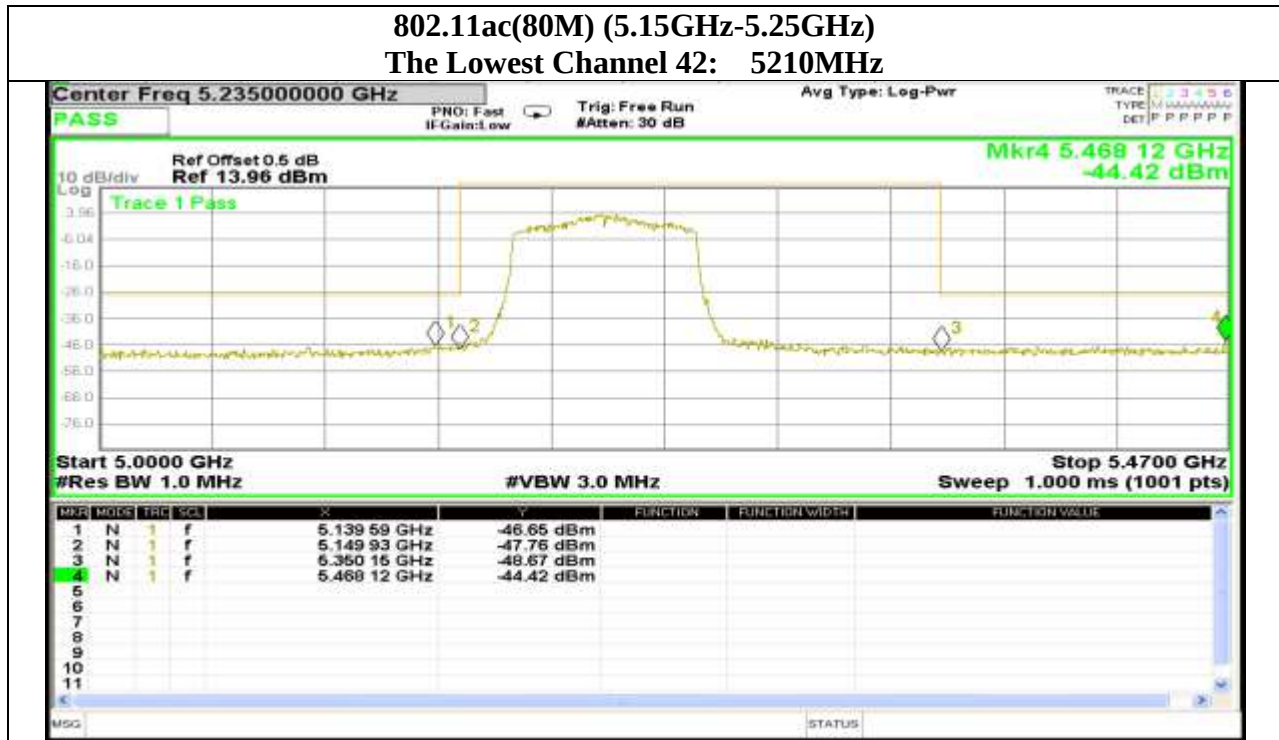
802.11ax(40M) (5.725GHz-5.85GHz)
The Lowest Channel 151: 5755MHz



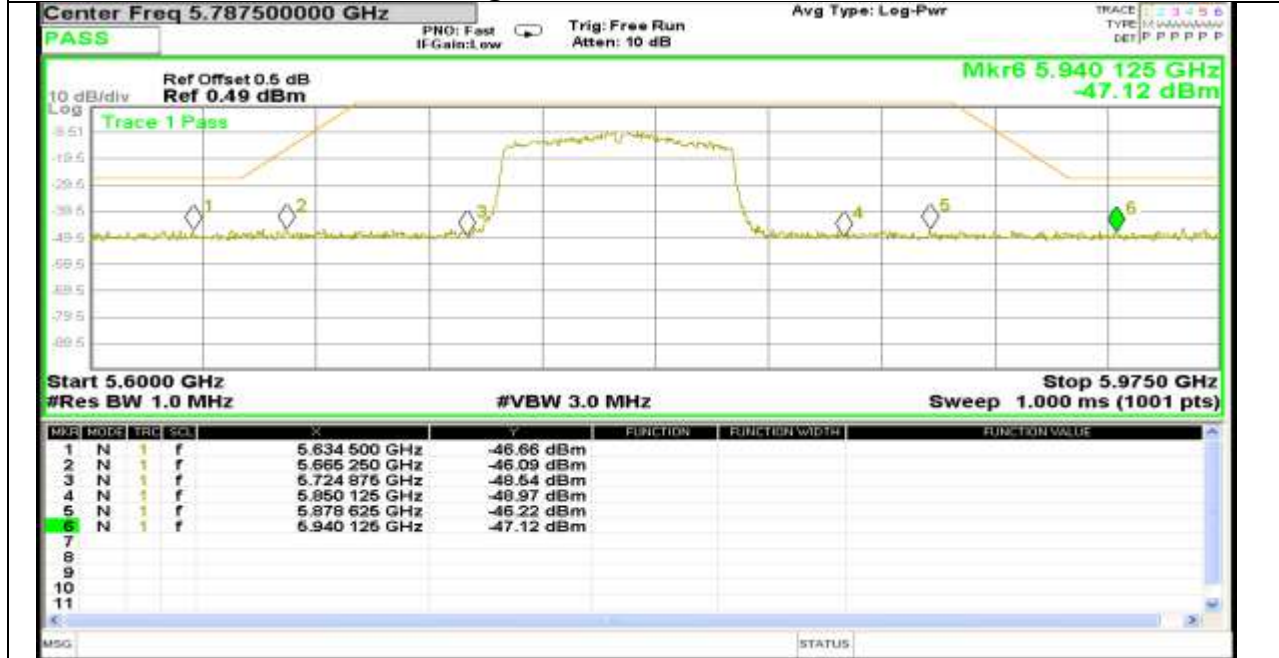
802.11ax(40M) (5.725GHz-5.85GHz)
The High Channel 159: 5795MHz



802.11ac(80M) (5.15GHz-5.25GHz)
The Lowest Channel 42: 5210MHz



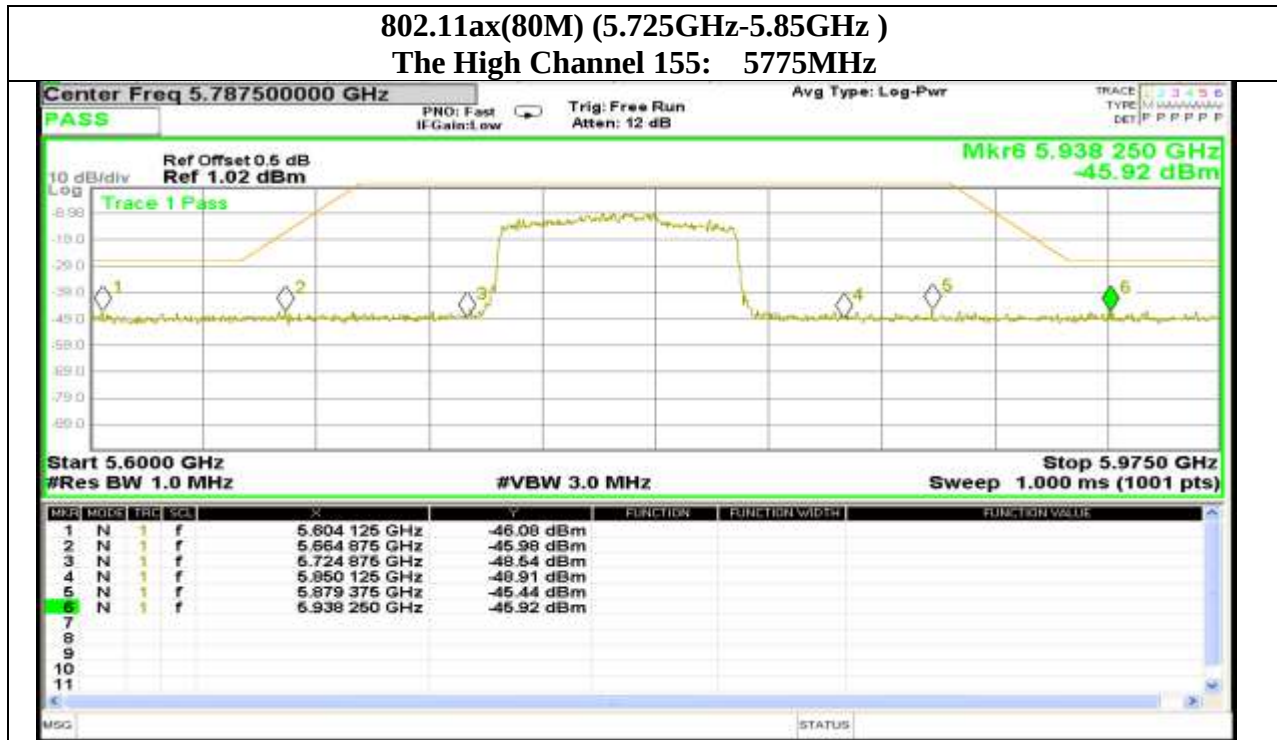
802.11ac(80M) (5.725GHz-5.85GHz)
The High Channel 155: 5775MHz



802.11ax(80M) (5.15GHz-5.25GHz)
The Lowest Channel 42: 5210MHz



802.11ax(80M) (5.725GHz-5.85GHz)
The High Channel 155: 5775MHz



Antenna 1:

**802.11a (5.15GHz-5.25GHz)
The Low Channel 36: 5180MHz**



**802.11a (5.15GHz-5.25GHz)
The High Channel 48: 5240MHz**



802.11a (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz



802.11a (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11n(20M) (5.15GHz-5.25GHz)
The Lowest Channel 36: 5180MHz



802.11n(20M) (5.15GHz-5.25GHz)
The High Channel 48: 5240MHz



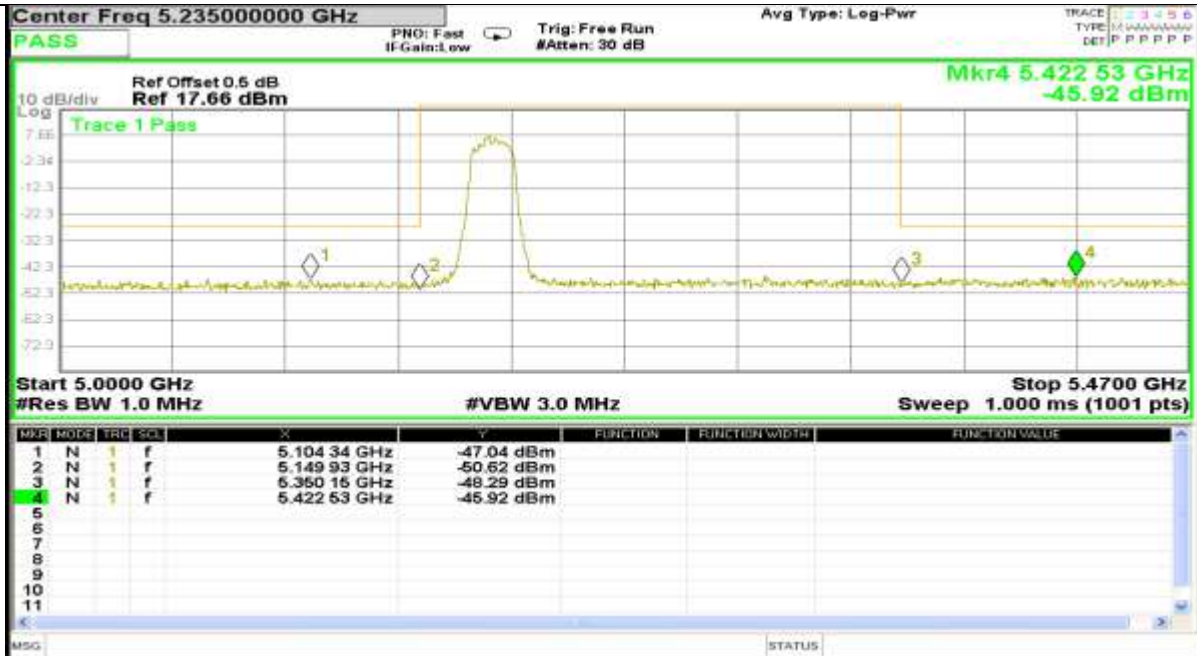
802.11n(20M) (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz



802.11n(20M) (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11ac(20M) (5.15GHz-5.25GHz)
The Lowest Channel 36: 5180MHz



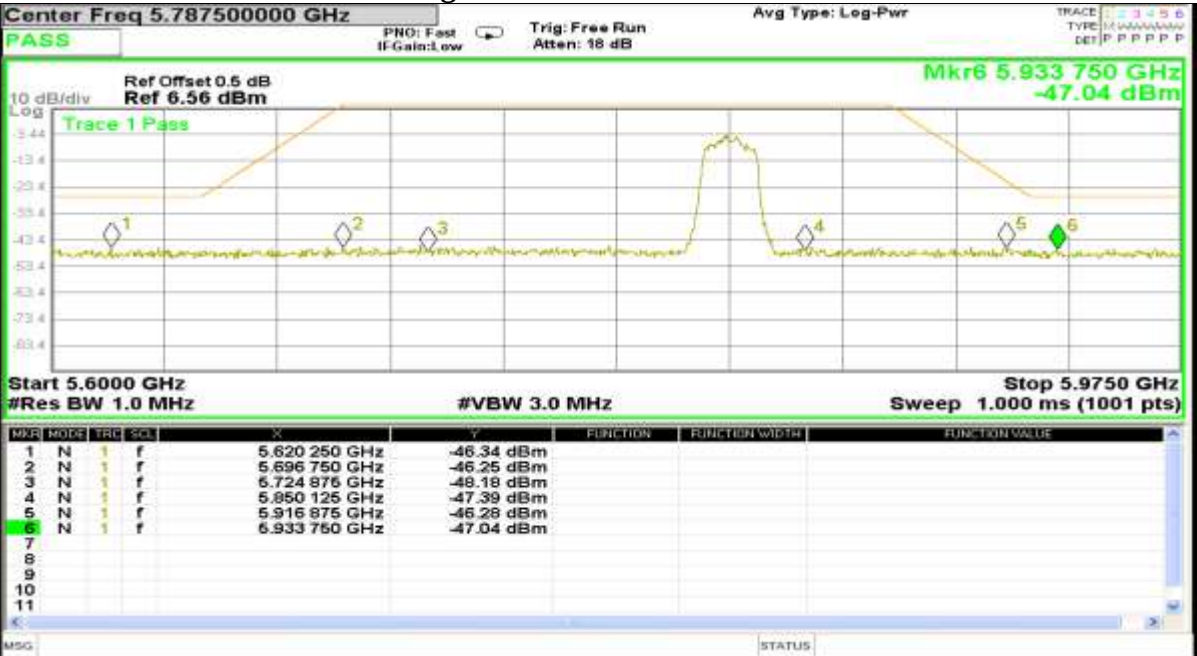
802.11ac(20M) (5.15GHz-5.25GHz)
The High Channel 48: 5240MHz



802.11ac(20M) (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz

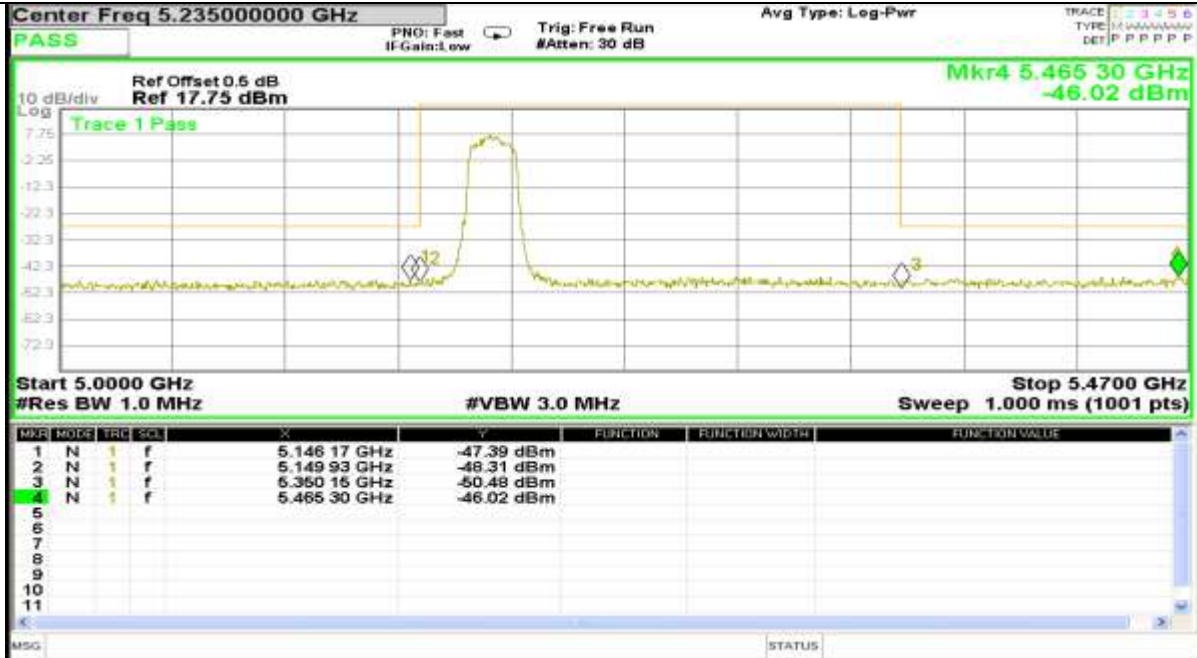


802.11ac(20M) (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11ax(20M) (5.15GHz-5.25GHz)

The Lowest Channel 36: 5180MHz

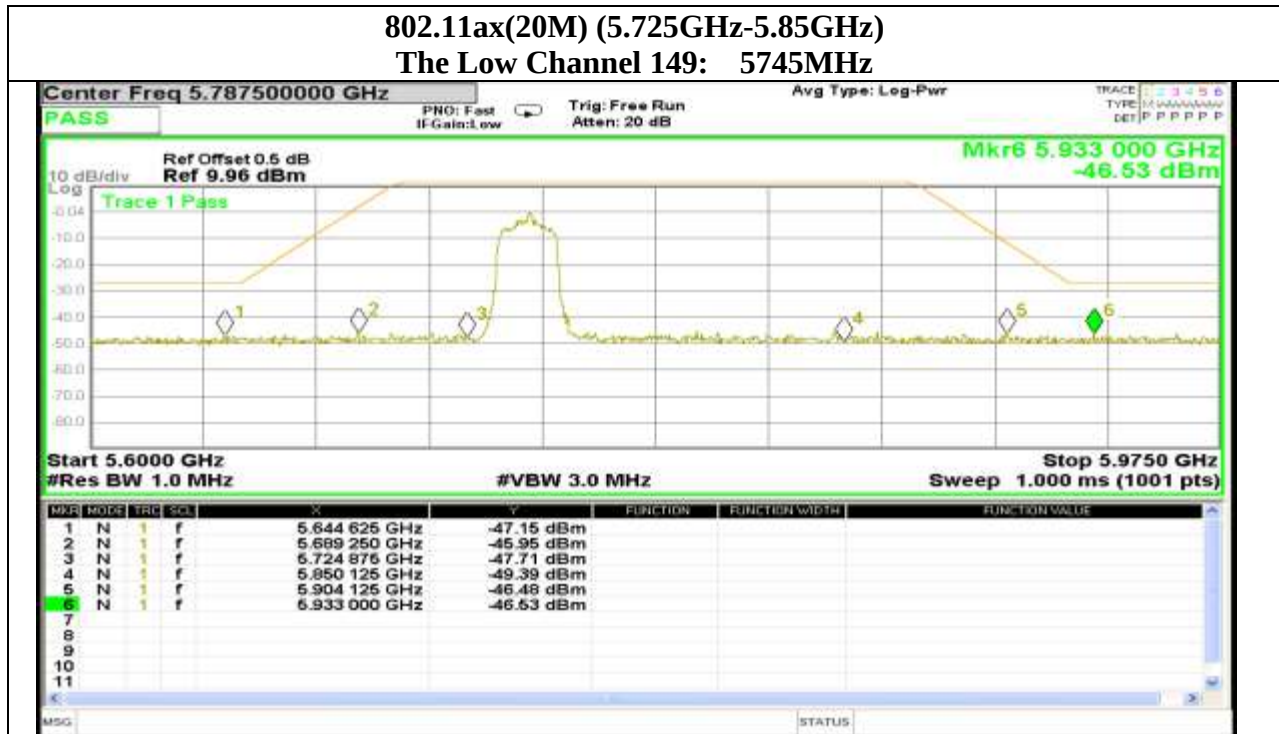


802.11ax(20M) (5.15GHz-5.25GHz)

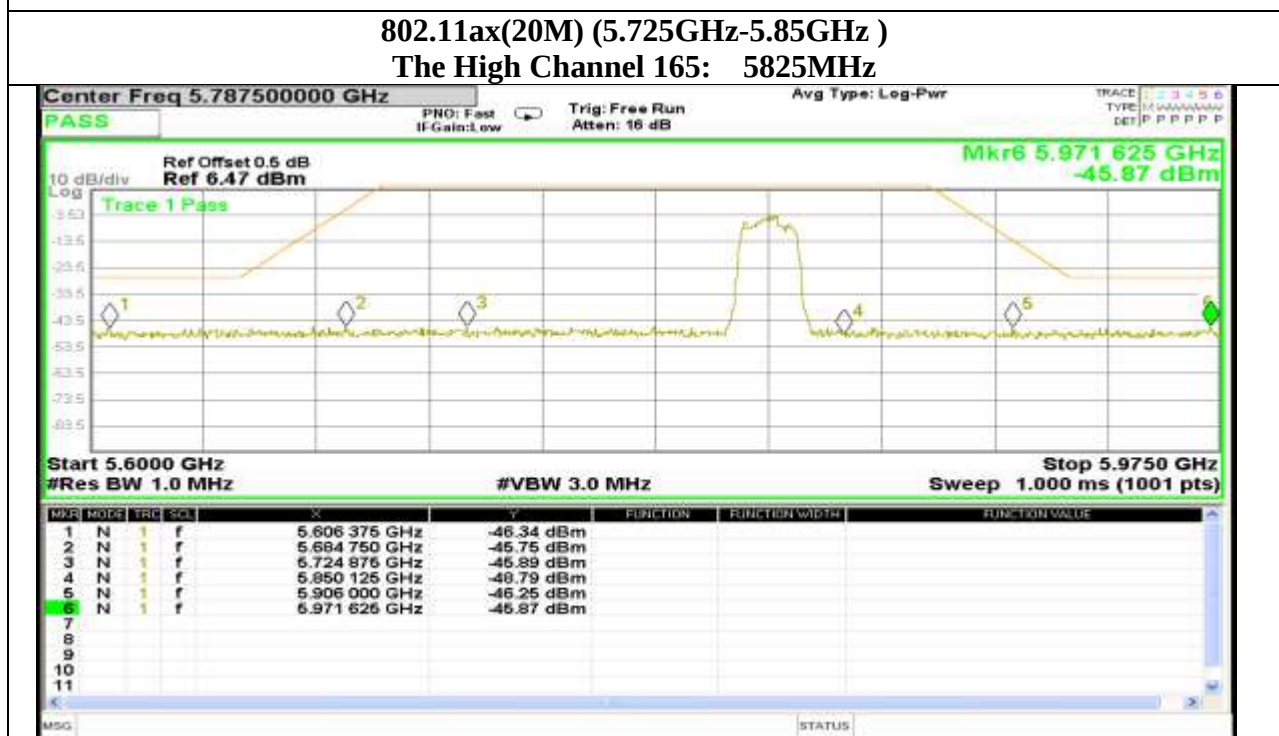
The High Channel 48: 5240MHz



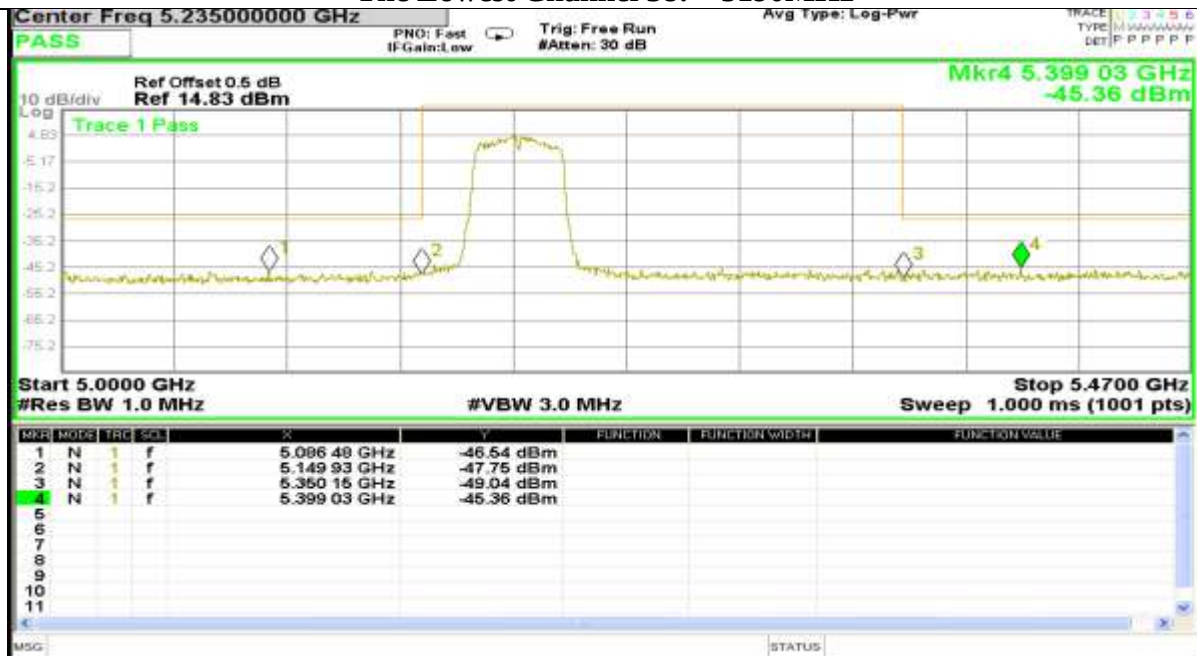
802.11ax(20M) (5.725GHz-5.85GHz)
The Low Channel 149: 5745MHz



802.11ax(20M) (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



802.11n(40M) (5.15GHz-5.25GHz)
The Lowest Channel 38: 5190MHz



802.11n(40M) (5.15GHz-5.25GHz)
The High Channel 46: 5230MHz



802.11n(40M) (5.725GHz-5.85GHz)
The Lowest Channel 151: 5755MHz



802.11n(40M) (5.725GHz-5.85GHz)
The High Channel 159: 5795MHz



802.11ac(40M) (5.15GHz-5.25GHz)
The Lowest Channel 38: 5190MHz



802.11ac(40M) (5.15GHz-5.25GHz)
The High Channel 46: 5230MHz



802.11ac(40M) (5.725GHz-5.85GHz)

The Lowest Channel 151: 5755MHz



802.11ac(40M) (5.725GHz-5.85GHz)

The High Channel 159: 5795MHz

