

AV-Ant 1+2 with CDD:

Band I AV Limit = $54 \text{ dBuV/m} - 95.2 - 10 \lg(2 \times) - 8.5 (\text{Directional Gain}) - 0.17 (\text{cable loss}) = -53 \text{ dBm}$
 5180 MHz by 802.11a:



5320 MHz by 802.11a:



5500MHz by 802.11a:



5180MHz by 802.11n(20MHz):



5320MHz by 802.11n(20MHz):



5500MHz by 802.11n(20MHz):



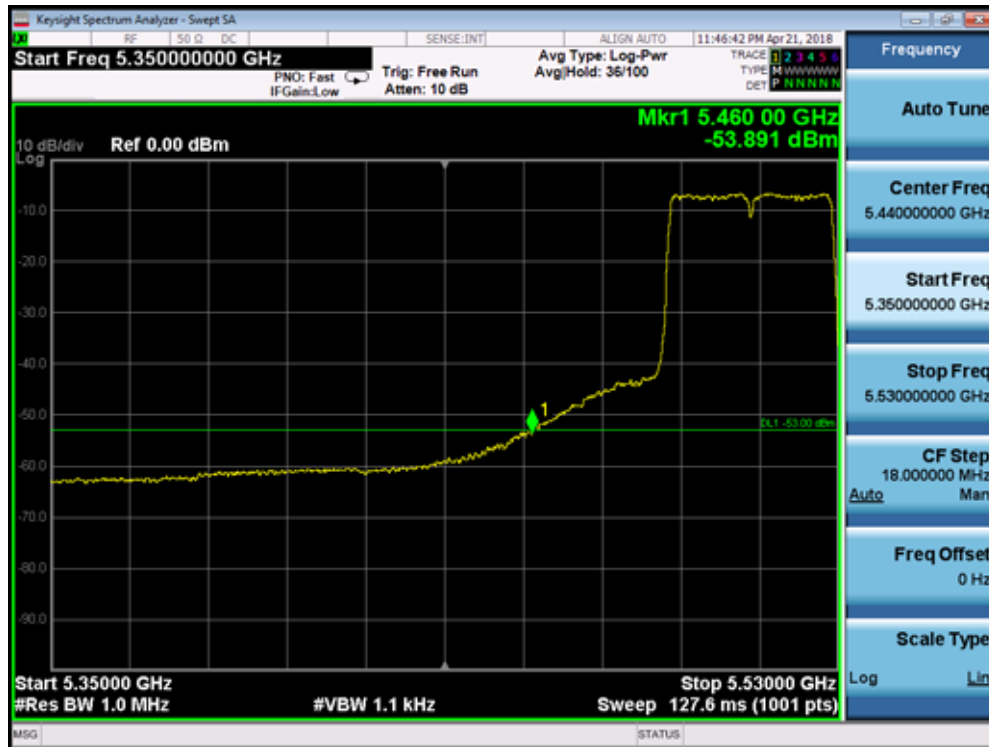
5190MHz by 802.11n(40MHz):



5310MHz by 802.11n(40MHz):



5510MHz by 802.11n(40MHz):



5180MHz by 802.11ac(20MHz):



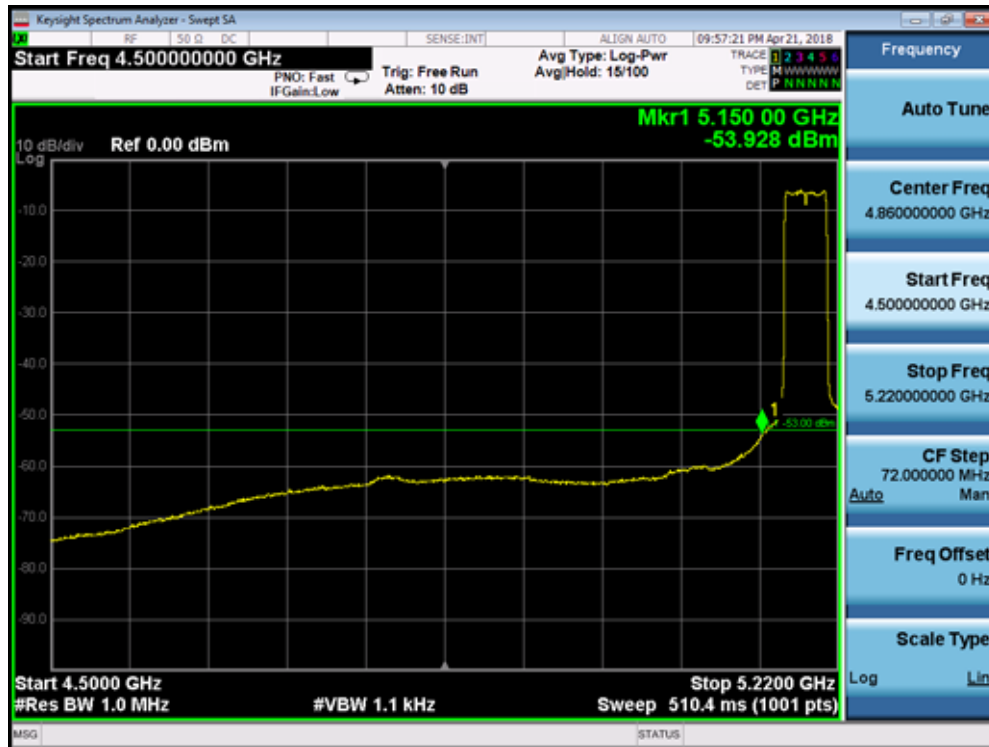
5320MHz by 802.11ac(20MHz):



5500MHz by 802.11ac(20MHz):



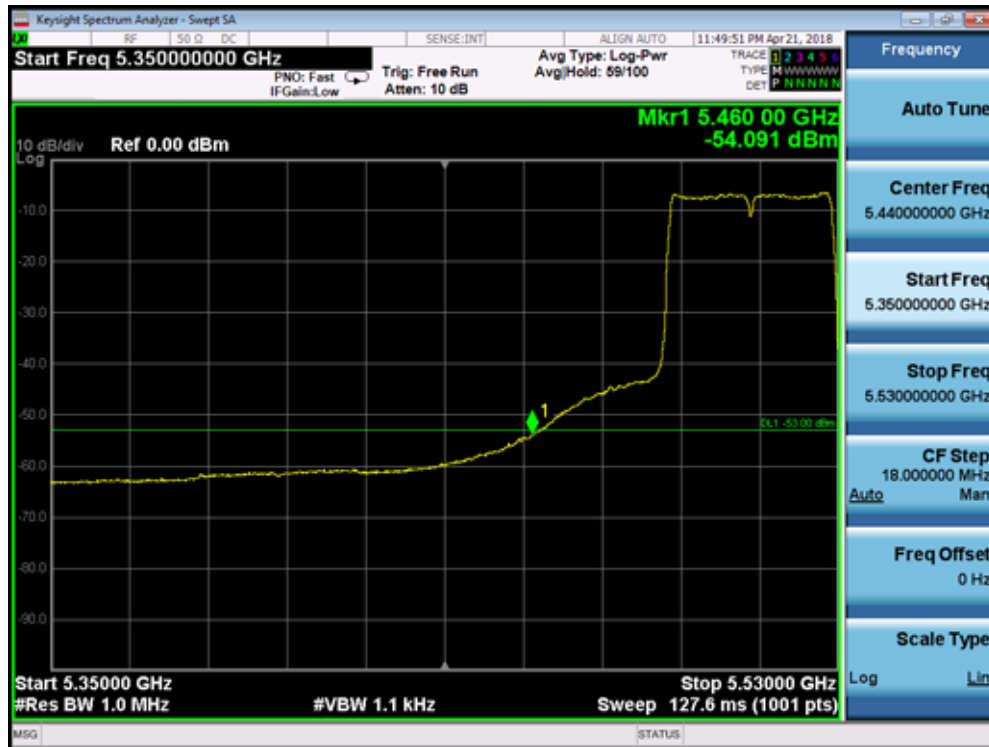
5190MHz by 802.11ac(40MHz):



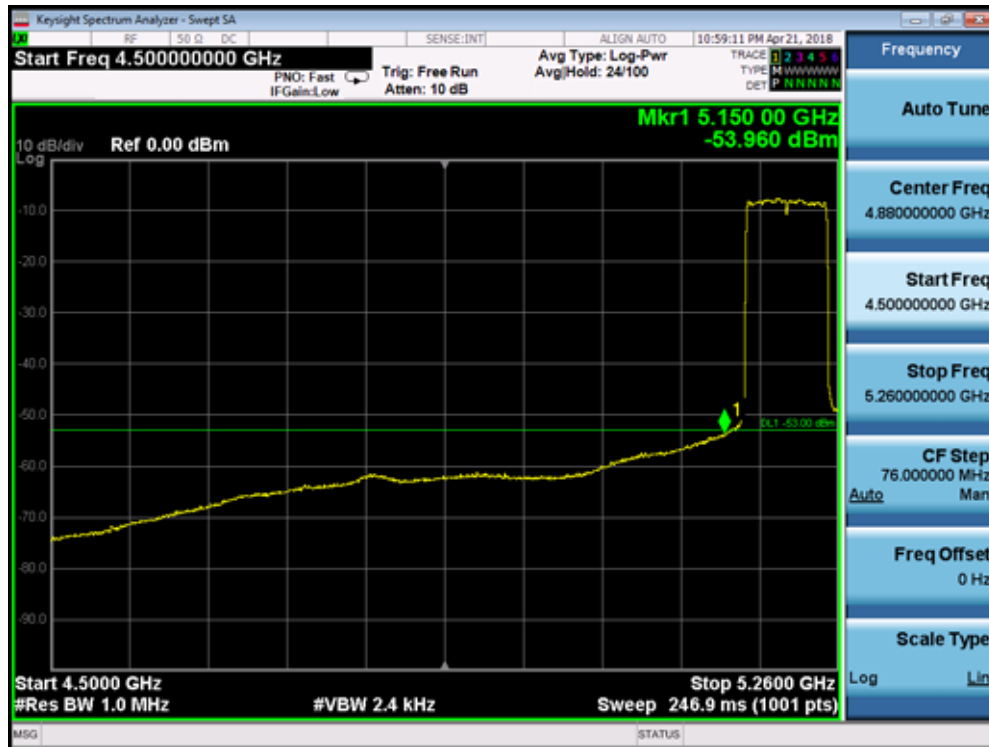
5310MHz by 802.11ac(40MHz):



5510MHz by 802.11ac(40MHz):



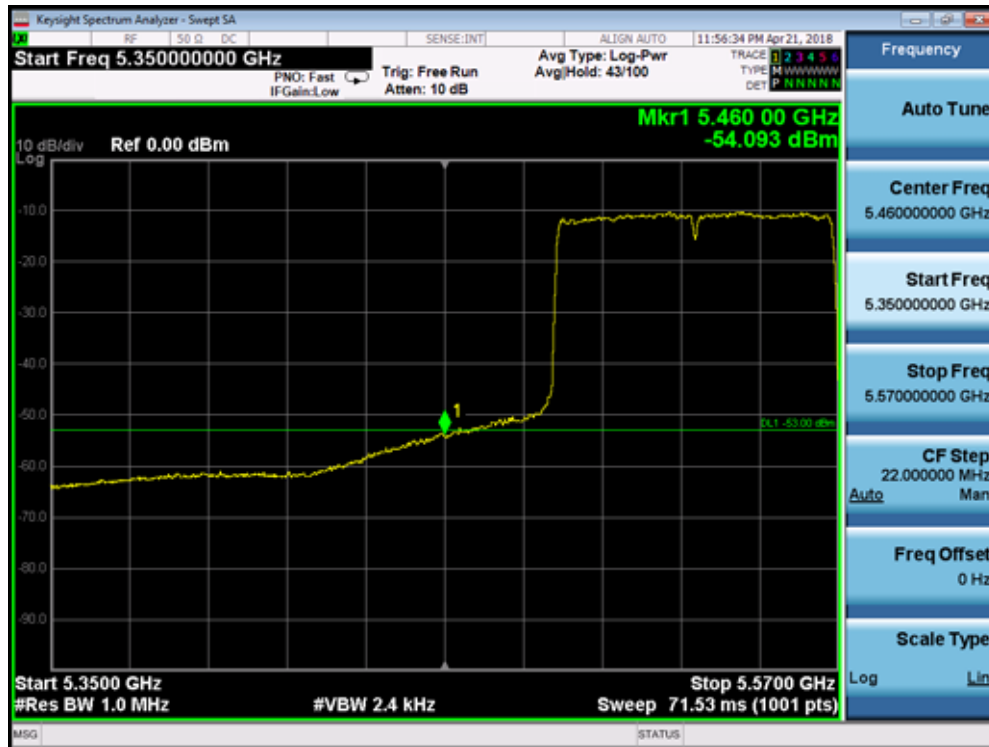
5210MHz by 802.11ac(80MHz):



5290MHz by 802.11ac(80MHz):



5530MHz by 802.11ac(80MHz):



5180MHz by 802.11ax(20MHz):



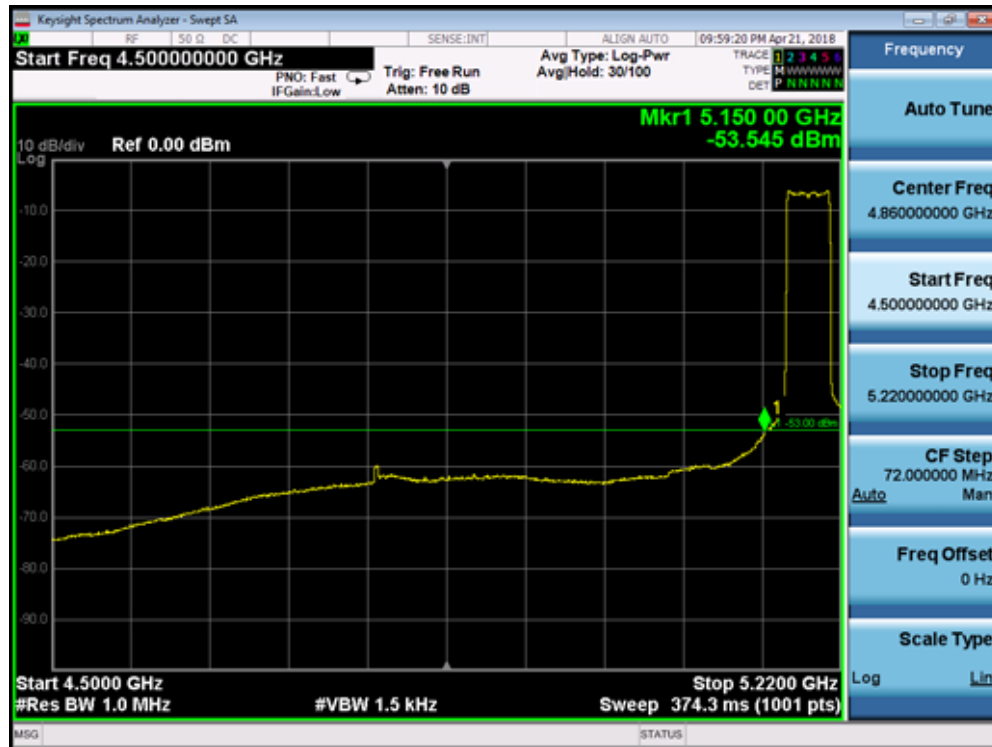
5320MHz by 802.11ax(20MHz):



5500MHz by 802.11ax(20MHz):



5190MHz by 802.11ax(40MHz):



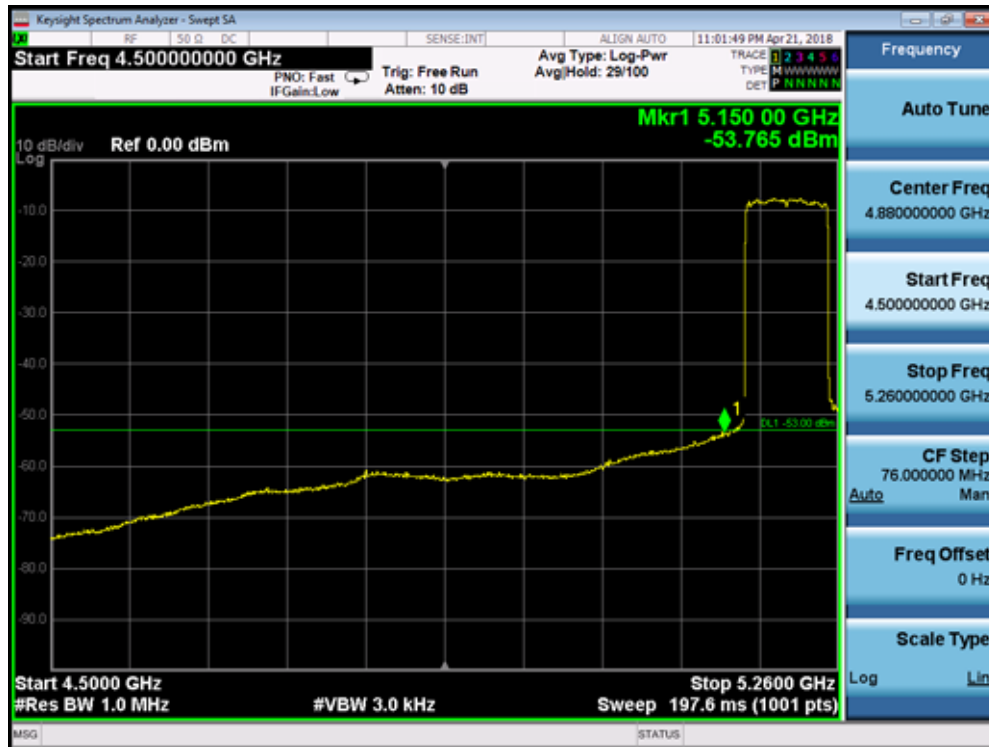
5310MHz by 802.11ax(40MHz):



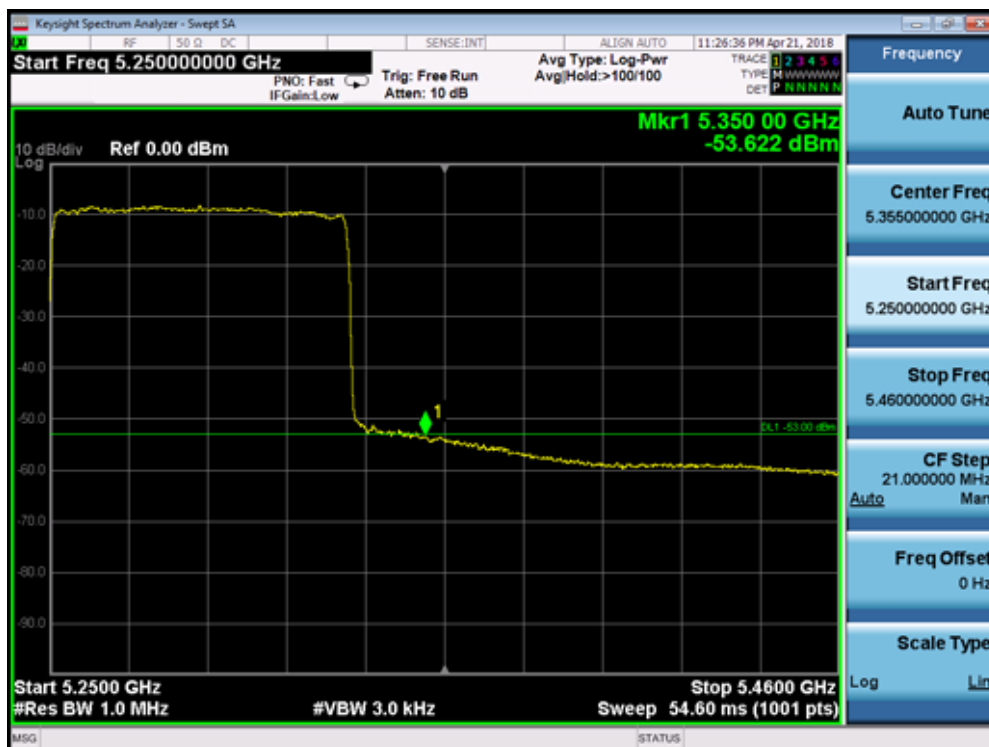
5510MHz by 802.11ax(40MHz):



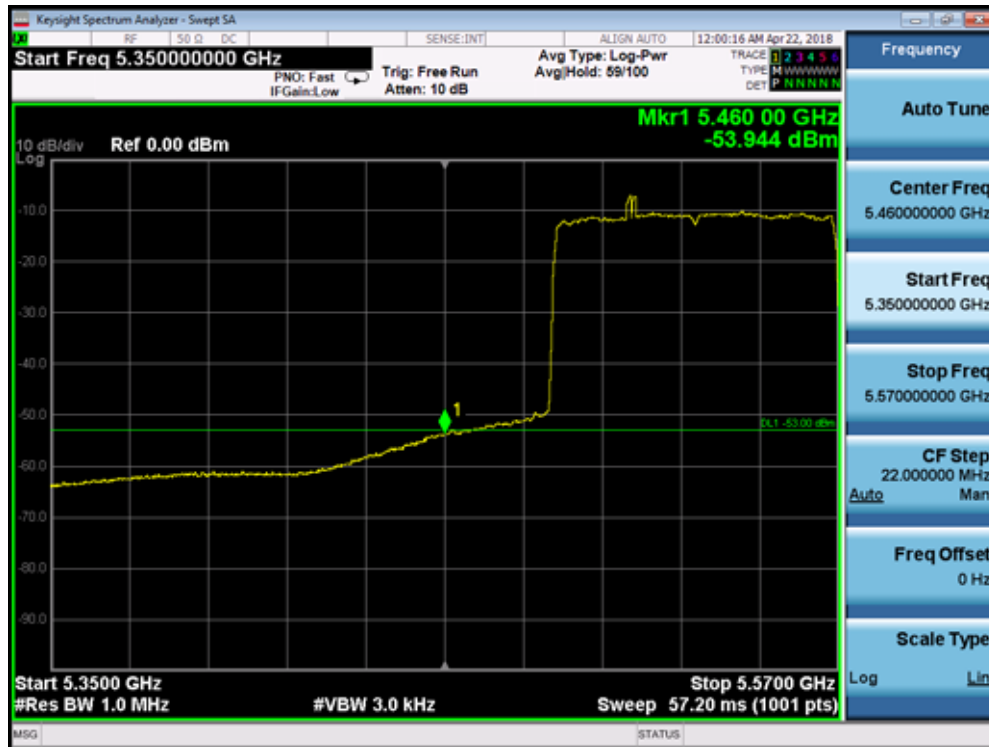
5210MHz by 802.11ax(80MHz):



5290MHz by 802.11ax(80MHz):



5530MHz by 802.11ax(80MHz):



5250MHz by 802.11ax(160MHz):

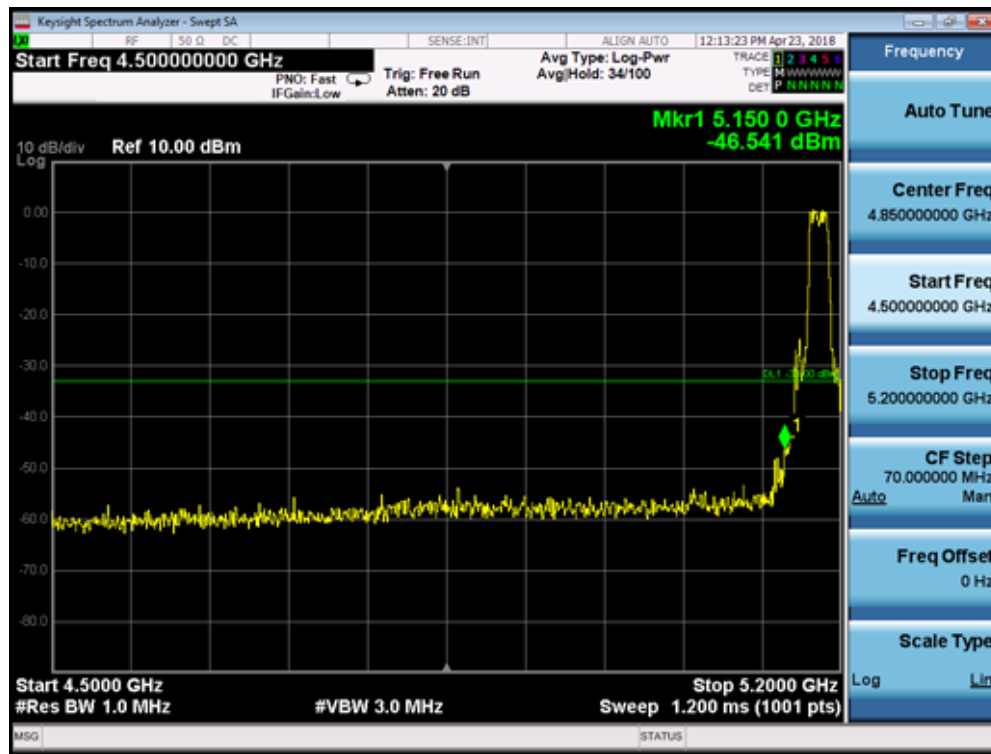


5570MHz by 802.11ax(160MHz):

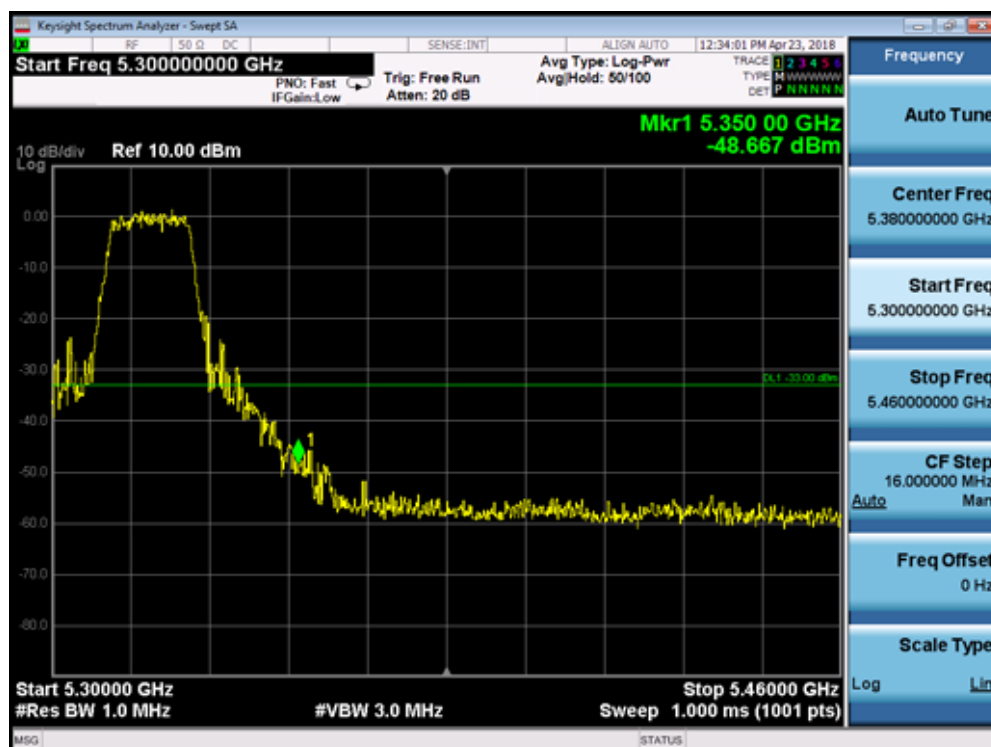


PK-Ant 1+2 with CDD:

Band I PK Limit=74 dBuV/m-95.2-10lg2(2tx)-8.5(Directional Gain)-0.17(cable loss)=-33dbm
5180MHz by 802.11a:



5320MHz by 802.11a:



5500MHz by 802.11a:



5745MHz by 802.11a:



[illegible]

Keysight Spectrum Analyzer - Sweep SA

RF 50 Ω DC SENSE.INT ALIGN AUTO 05:48:17 PM Apr 23, 2018

Start Freq 5.60000000 GHz Avg Type: Log-Pwr
PNO: Fast IF Gain Low Trig: Free Run #Atten: 30 dB
PASS DET P NNNN

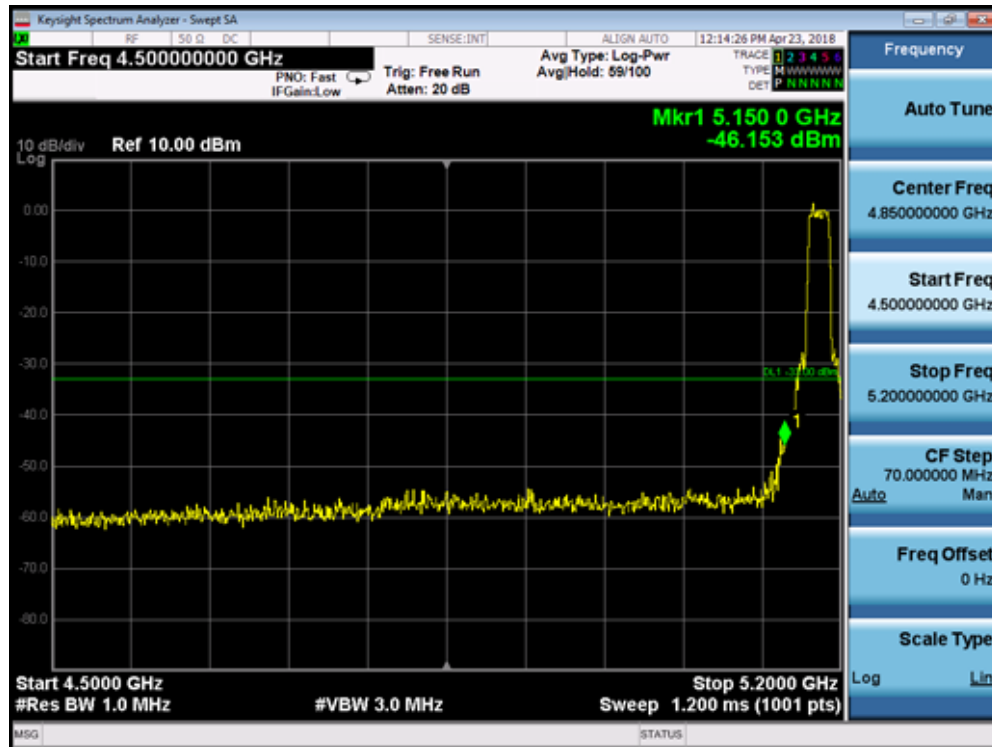
The spectrum plot shows frequency from 5.6000 GHz to 5.9750 GHz. The y-axis is logarithmic power density from -77.0 dBm/div to +10 dB/div. A yellow trace labeled "Trace 1 Pass" shows a noisy baseline around -47 dBm with a sharp peak reaching approximately -44.7 dBm at 5.92963 GHz.

Mkr	Freq	Power
1	5.82594 GHz	-12.142 dBm
2	5.92963 GHz	-44.691 dBm

#Res BW 1.0 MHz #VBW 3.0 MHz Stop 5.9750 GHz
Sweep 1.067 ms (2001 pts)

MKR MODE TRC SCF	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1 N 1 f	5.82594 GHz	-12.142 dBm			
2 N 1 f	5.92963 GHz	-44.691 dBm			
3					
4					
5					
6					
7					
8					
9					
10					
11					

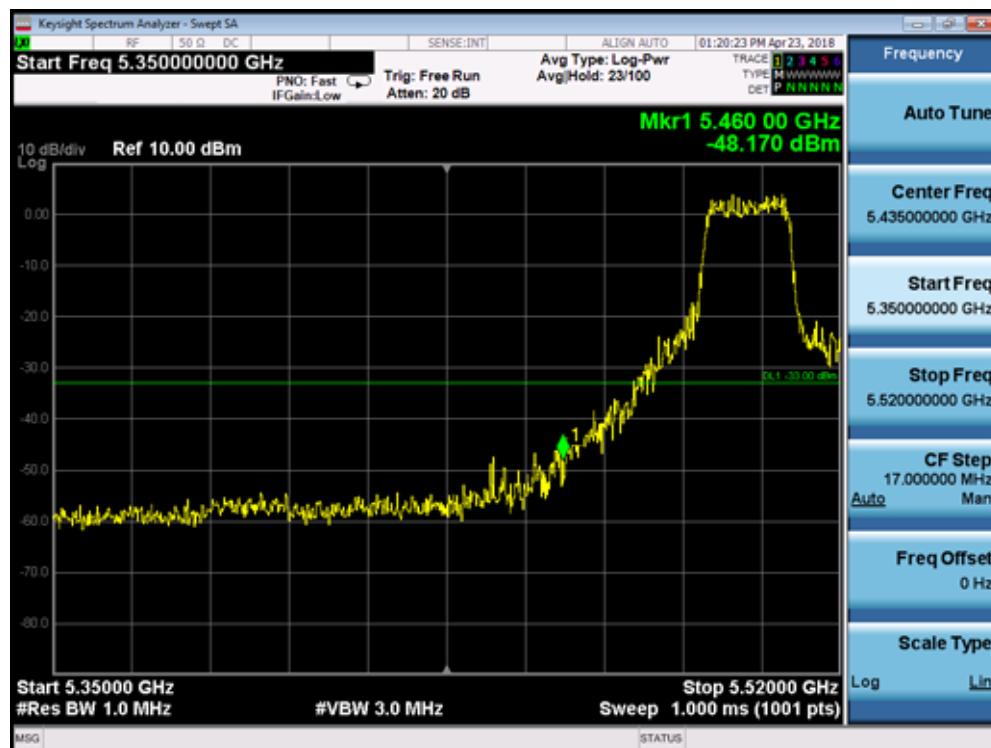
5180MHz by 802.11n(20MHz):



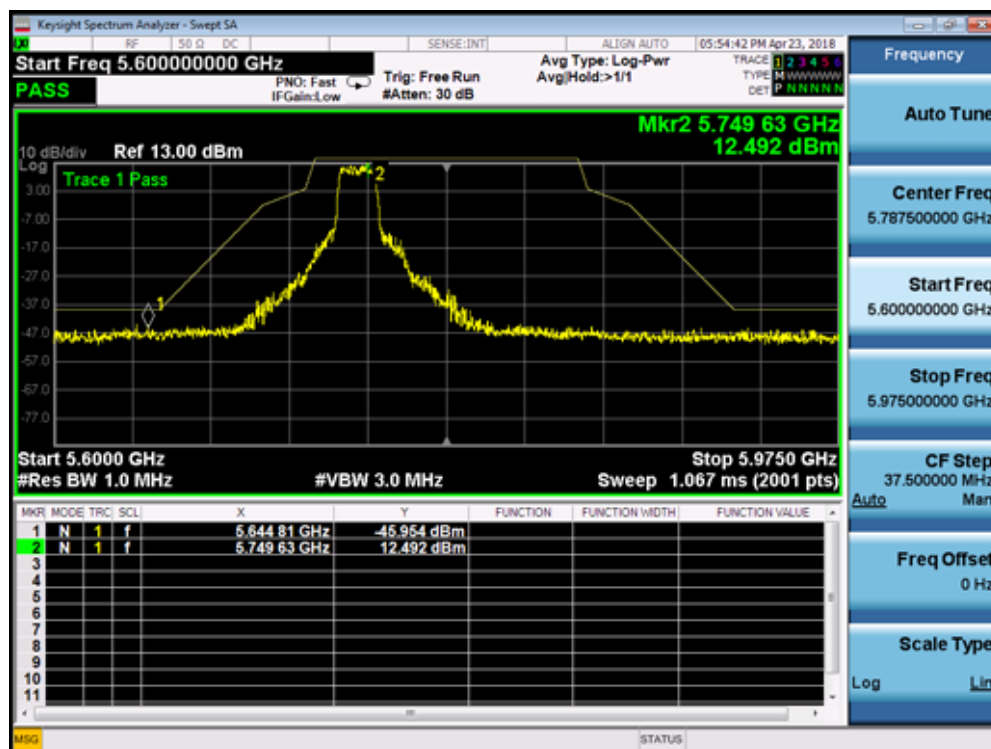
5320MHz by 802.11n(20MHz):



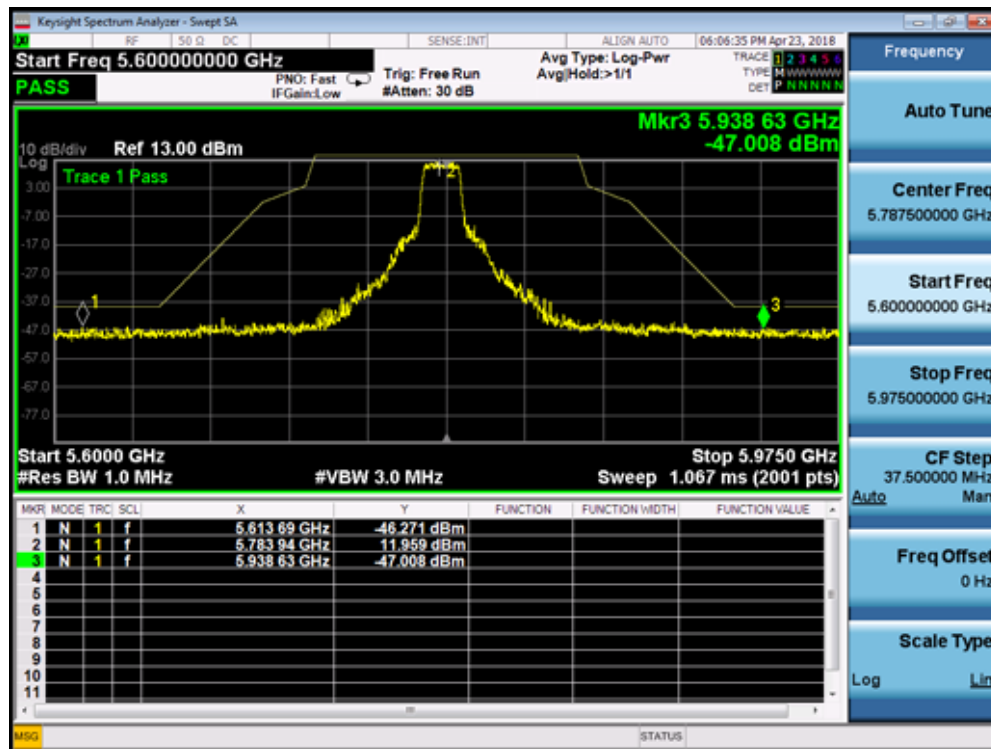
5500MHz by 802.11n(20MHz):



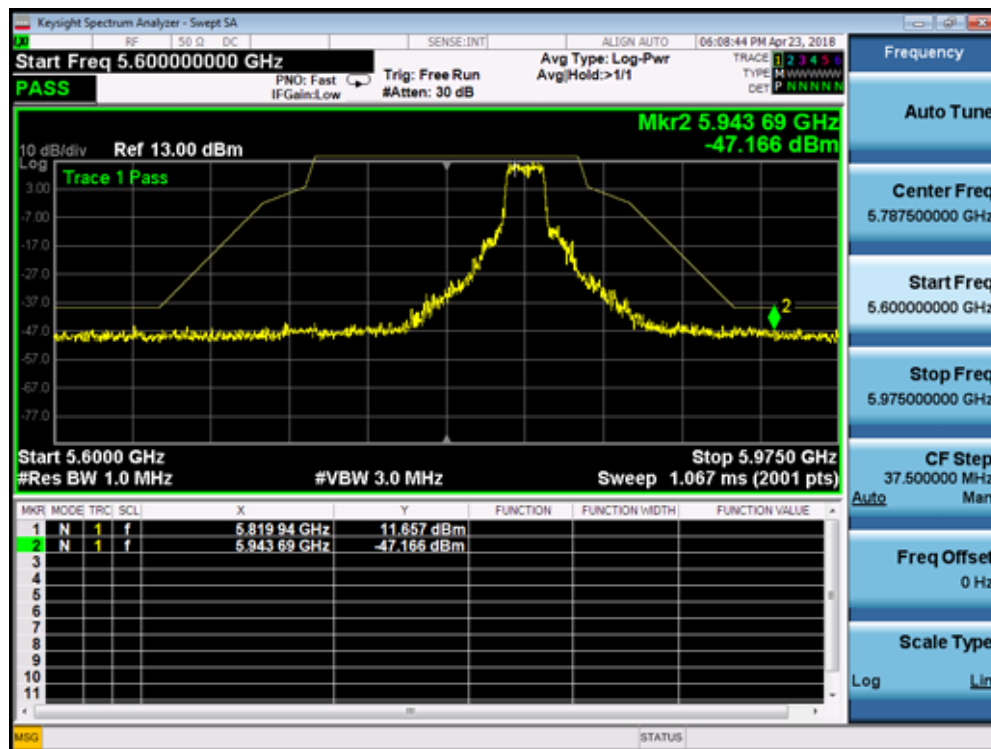
5745MHz by 802.11n(20MHz):



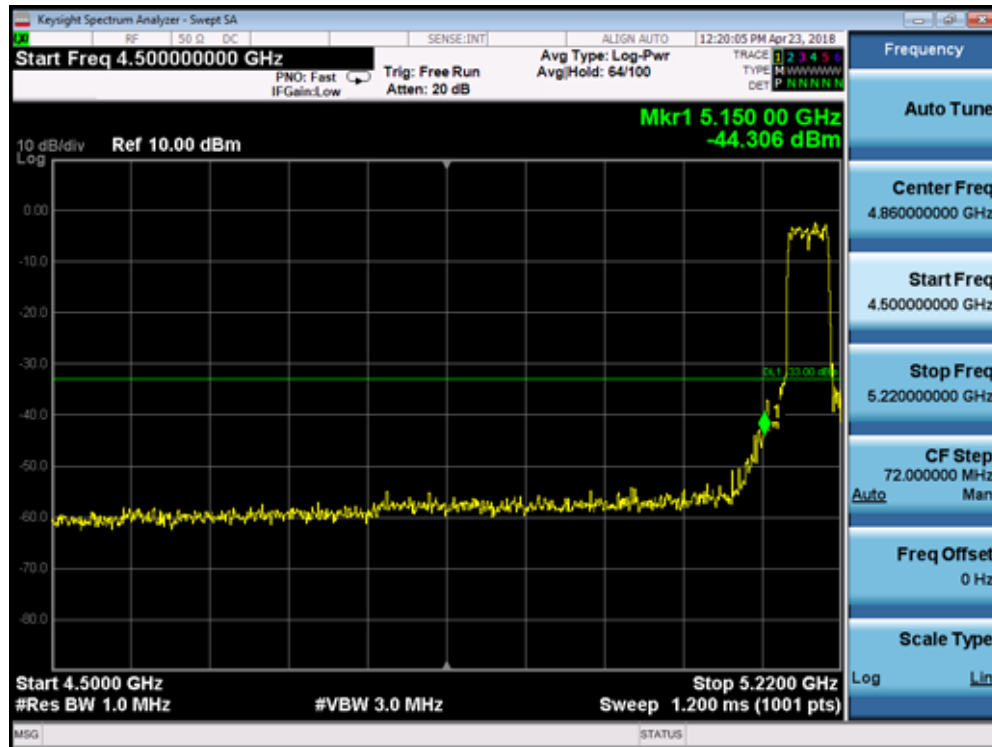
5785MHz by 802.11n(20MHz):



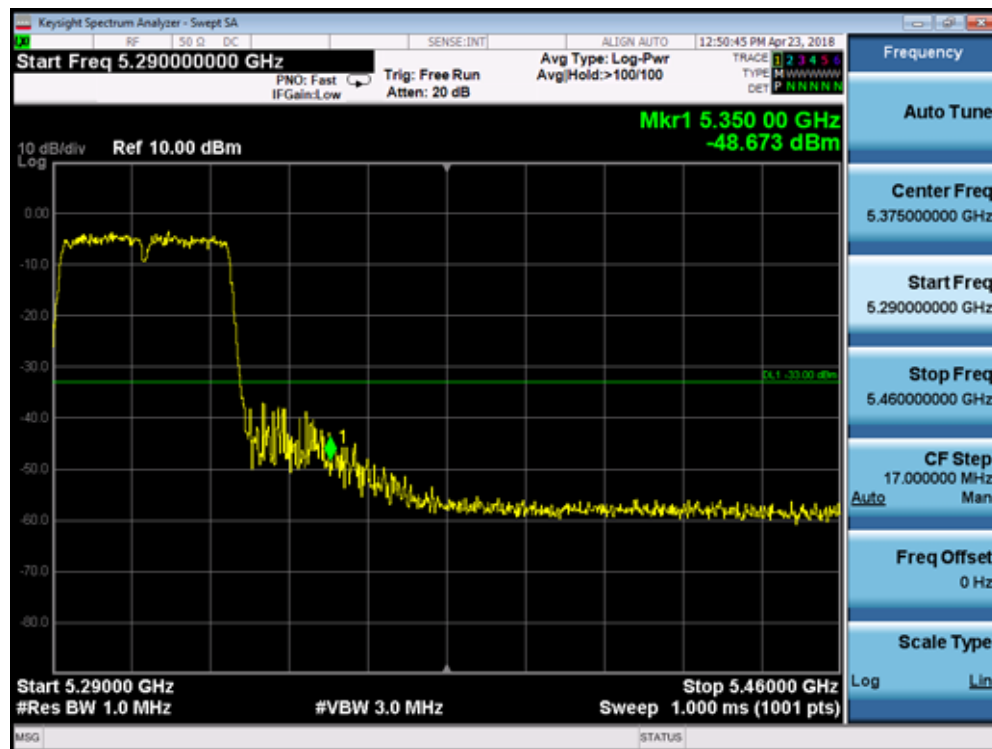
5825MHz by 802.11n(20MHz):



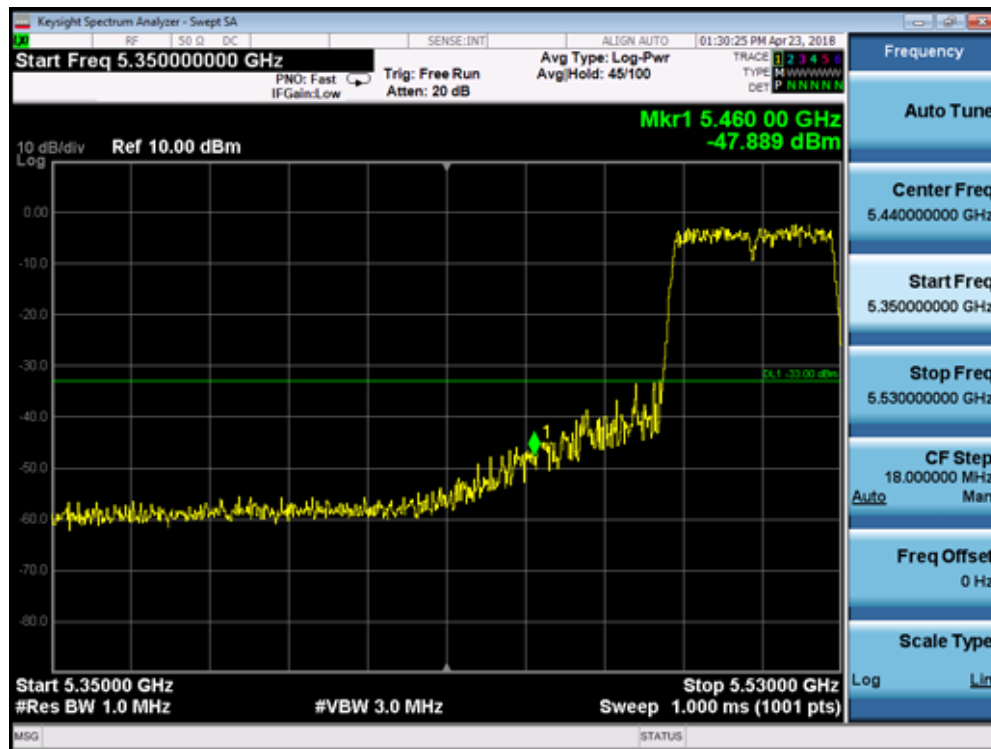
5190MHz by 802.11n(40MHz):



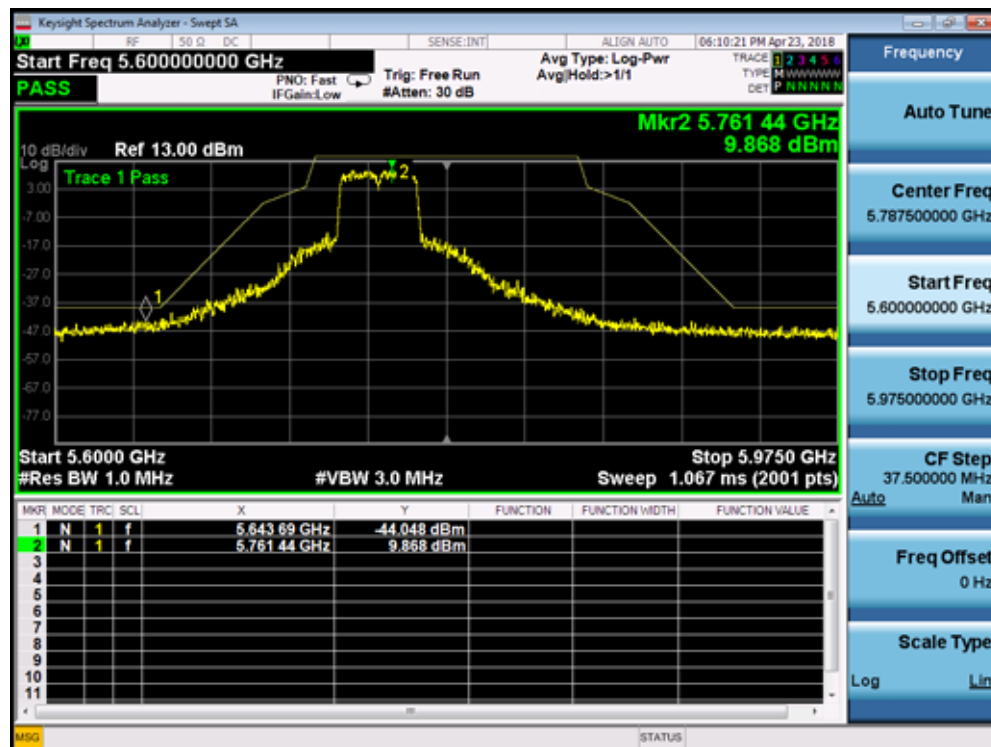
5310MHz by 802.11n(40MHz):



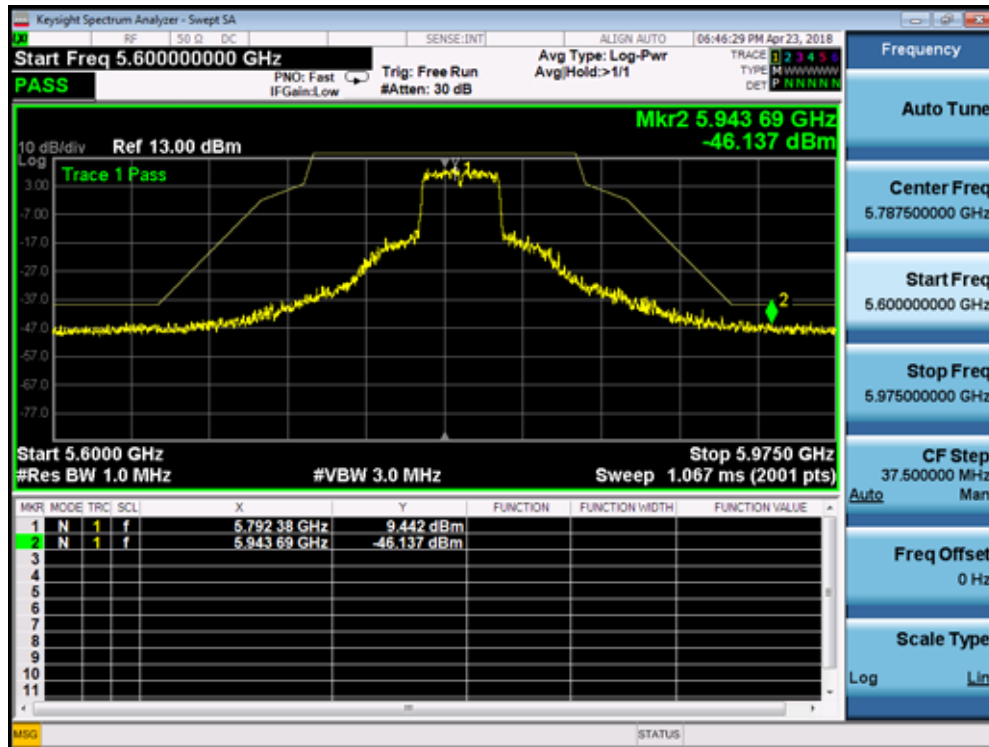
5510MHz by 802.11n(40MHz):



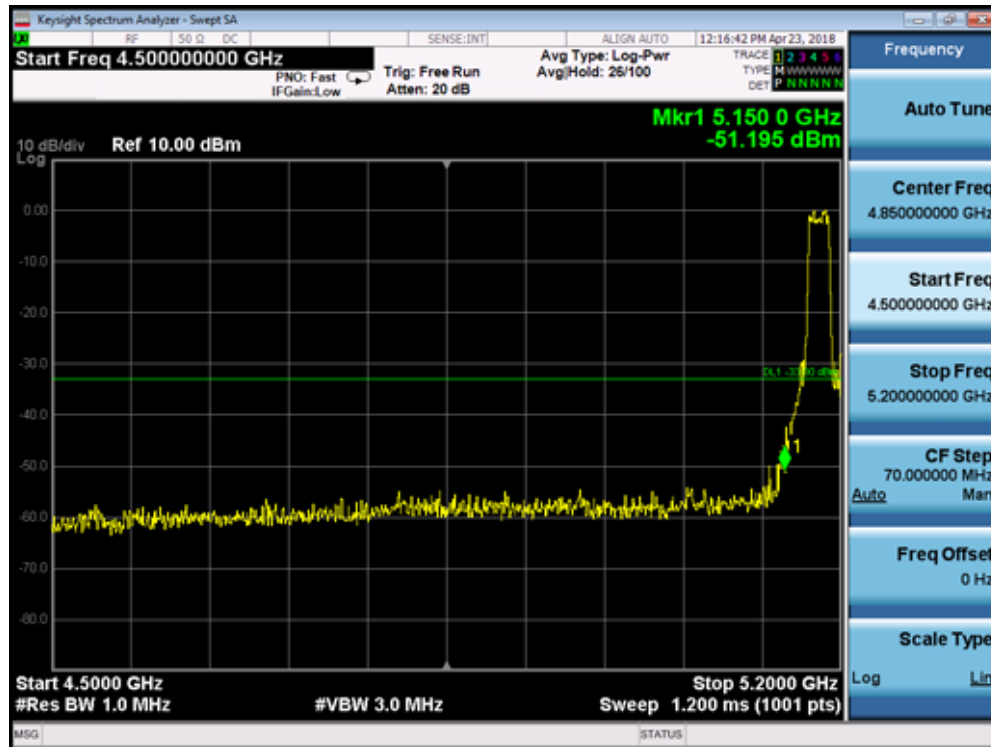
5755MHz by 802.11n(40MHz):



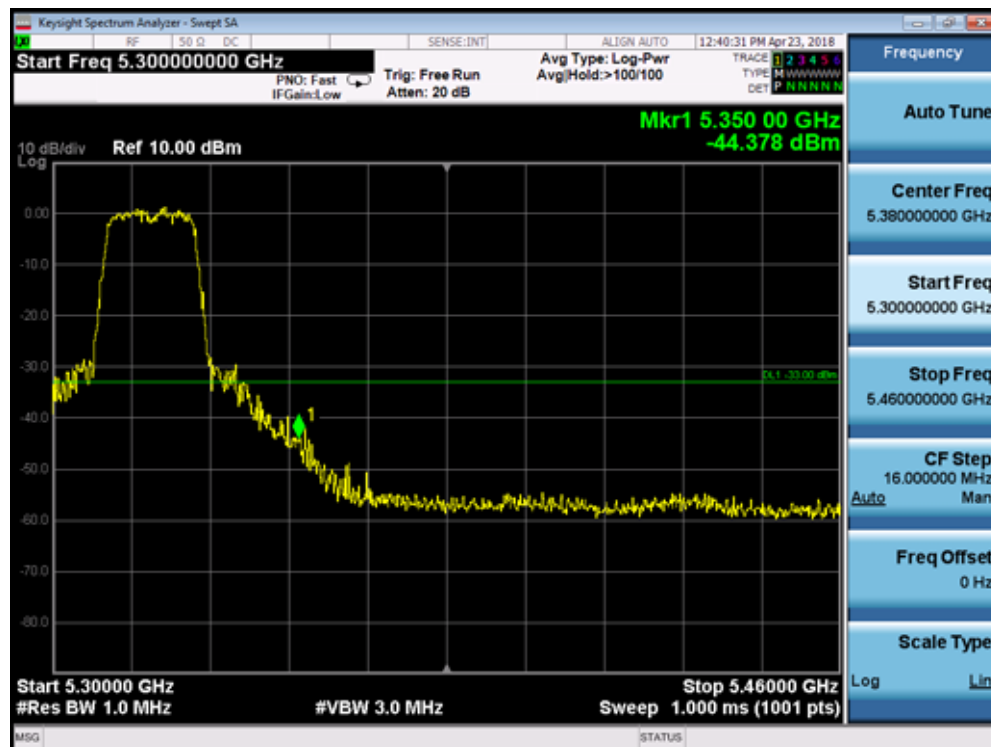
5795MHz by 802.11n(40MHz):



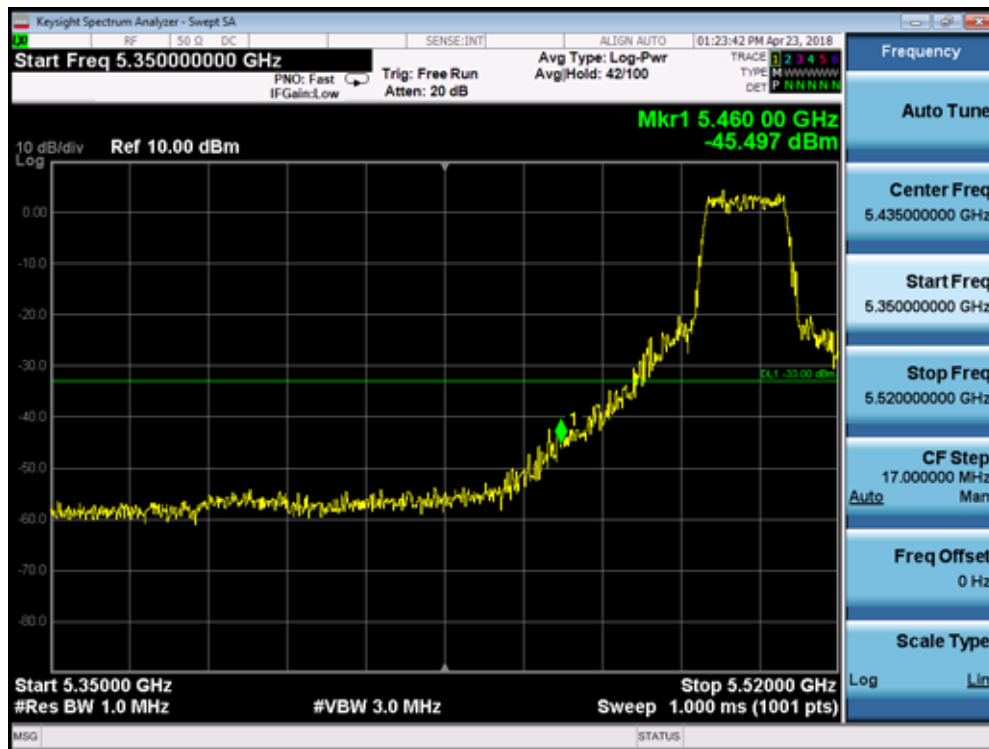
5180MHz by 802.11ac(20MHz):



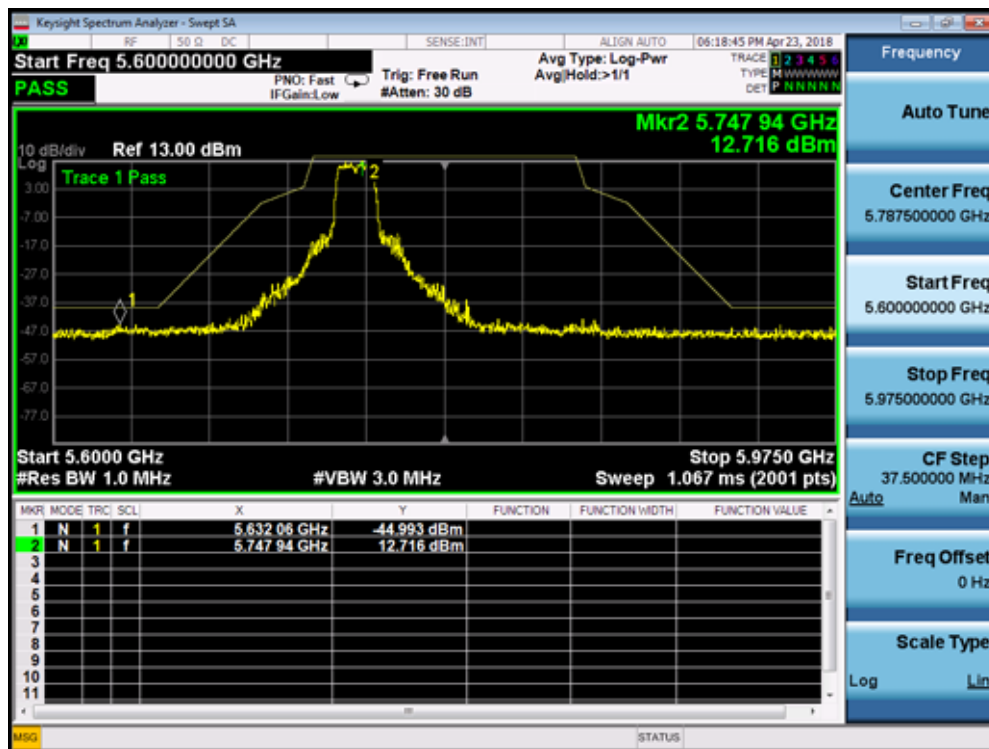
5320MHz by 802.11ac(20MHz):



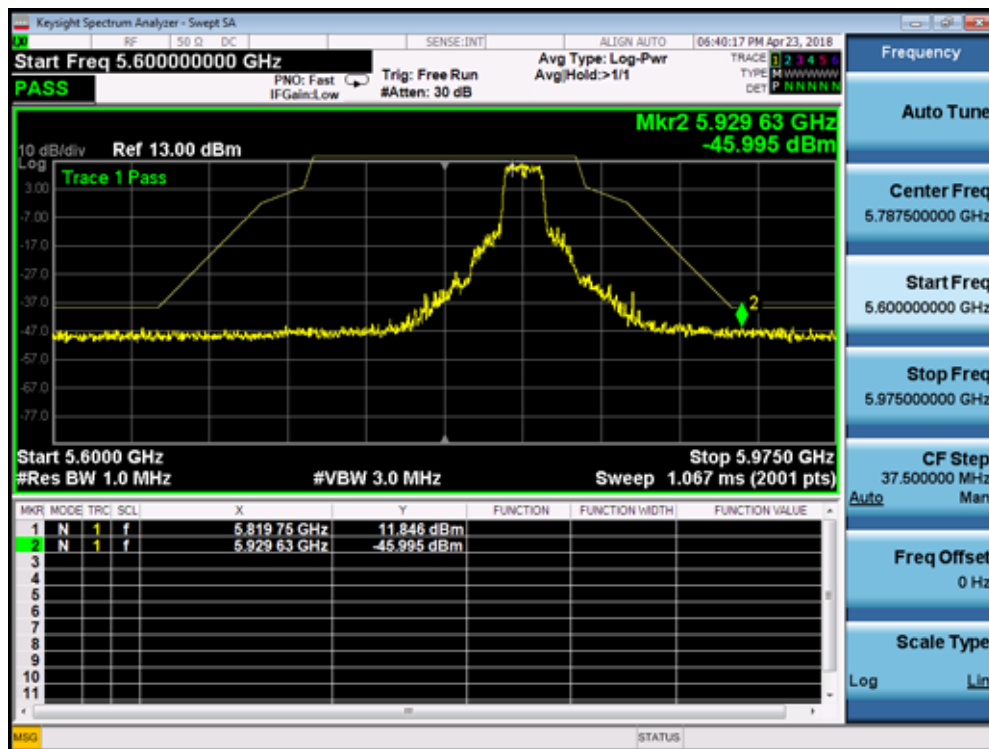
5500MHz by 802.11ac(20MHz):



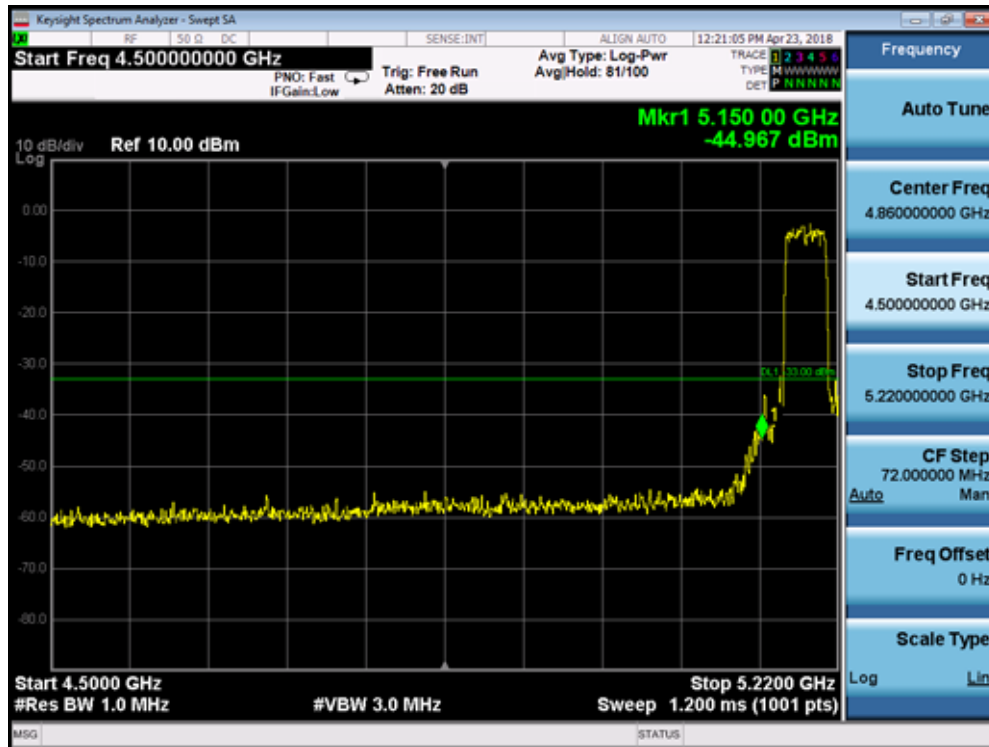
5745MHz by 802.11ac(20MHz):



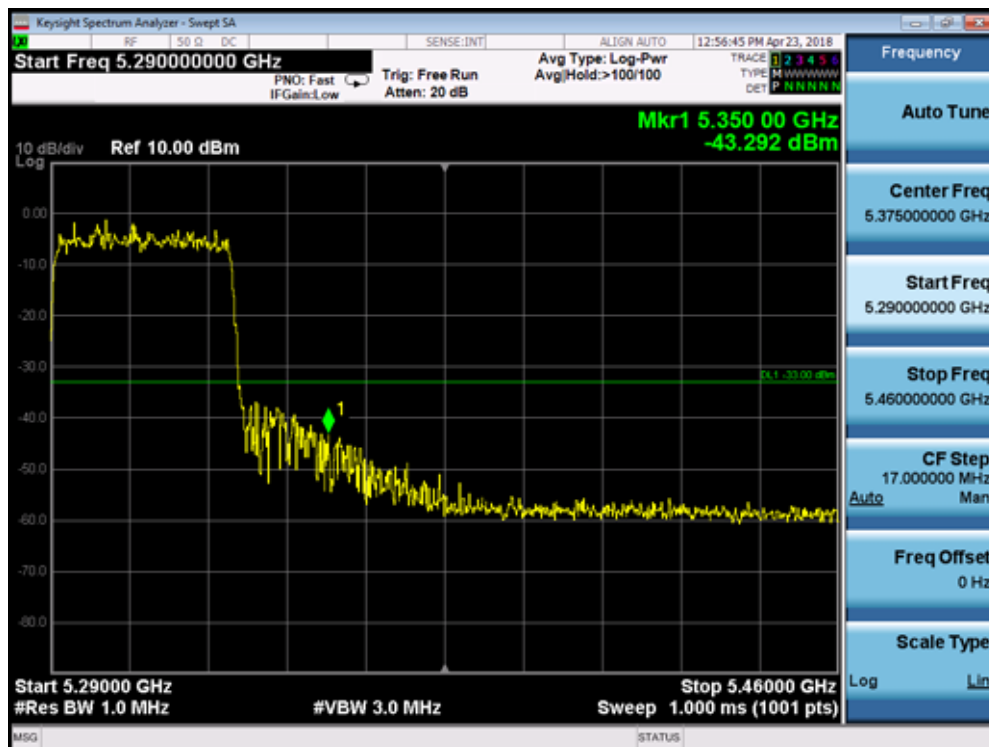
5825MHz by 802.11ac(20MHz):



5190MHz by 802.11ac(40MHz):



5310MHz by 802.11ac(40MHz):



Keysight Spectrum Analyzer - Swept SA

Start Freq 5.350000000 GHz

PNO: Fast IF Gain: Low

Trig: Free Run

Atten: 20 dB

Avg Type: Log-Pwr

Avg Hold: 62/100

TRACE 1 2 3 4 5 6

TYPE M W W W W W W W

DET P N N N N N

Frequency

Auto Tune

Center Freq 5.440000000 GHz

Start Freq 5.350000000 GHz

Stop Freq 5.530000000 GHz

CF Step 18.000000 MHz

Auto Man

Freq Offset 0 Hz

Scale Type Log Lin

10 dB/div

Ref 10.00 dBm

Mkr1 5.460 00 GHz

-44.045 dBm

74.1 -33.00 dBm

Start 5.35000 GHz

Stop 5.53000 GHz

#Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 1.000 ms (1001 pts)

MSG STATUS

Keysight Spectrum Analyzer - Swept SA

RF 50 Ω DC SENSE.INT ALIGN AUTO 06:44:56 PM Apr 23, 2018

Start Freq 5.60000000 GHz

PNO: Fast IF Gain Low Trig: Free Run Avg Type: Log-Pwr Avg Hold > 1/1

PASS

TYPE M W A V I N N DET P N N N N N

Mkr1 5.641 06 GHz -45.222 dBm

Trace 1 Pass

Ref 13.00 dBm

Start 5.6000 GHz Stop 5.9750 GHz
#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.067 ms (2001 pts)

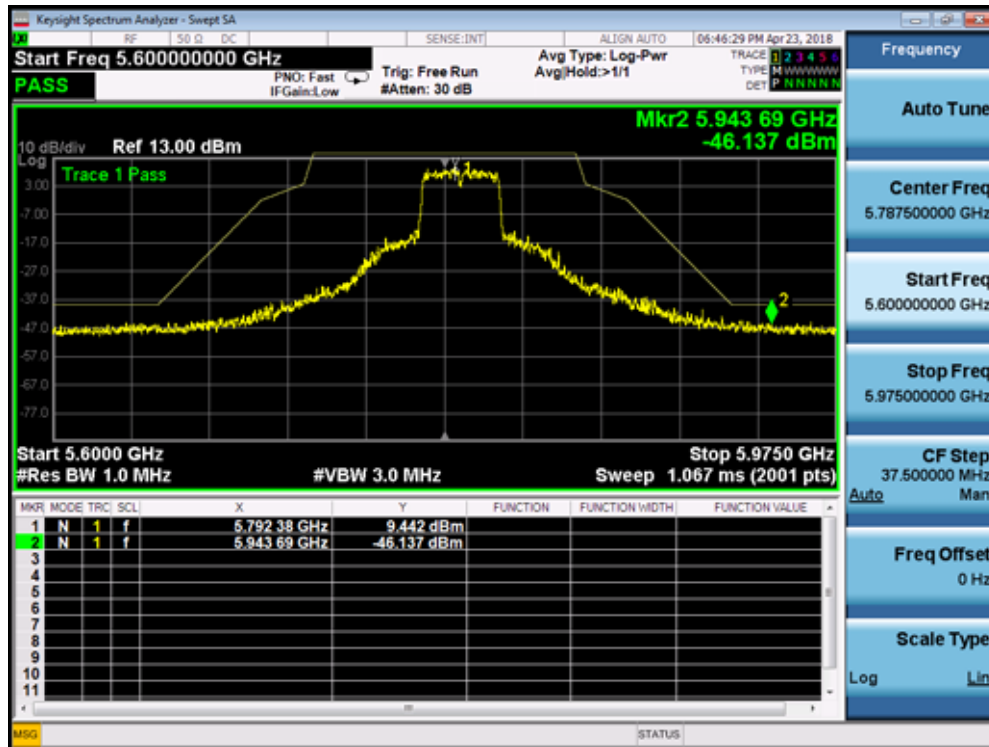
MKR MODE TRC SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1 N 1 f	5.641 06 GHz	-45.222 dBm			
2 N 1 f	5.740 63 GHz	8.544 dBm			

Frequency Auto Tune Center Freq 5.787500000 GHz Start Freq 5.600000000 GHz Stop Freq 5.975000000 GHz CF Step 37.500000 MHz Man

Freq Offset 0 Hz

Scale Type Lin Log

5795MHz by 802.11ac(40MHz):



5210MHz by 802.11ac(80MHz):



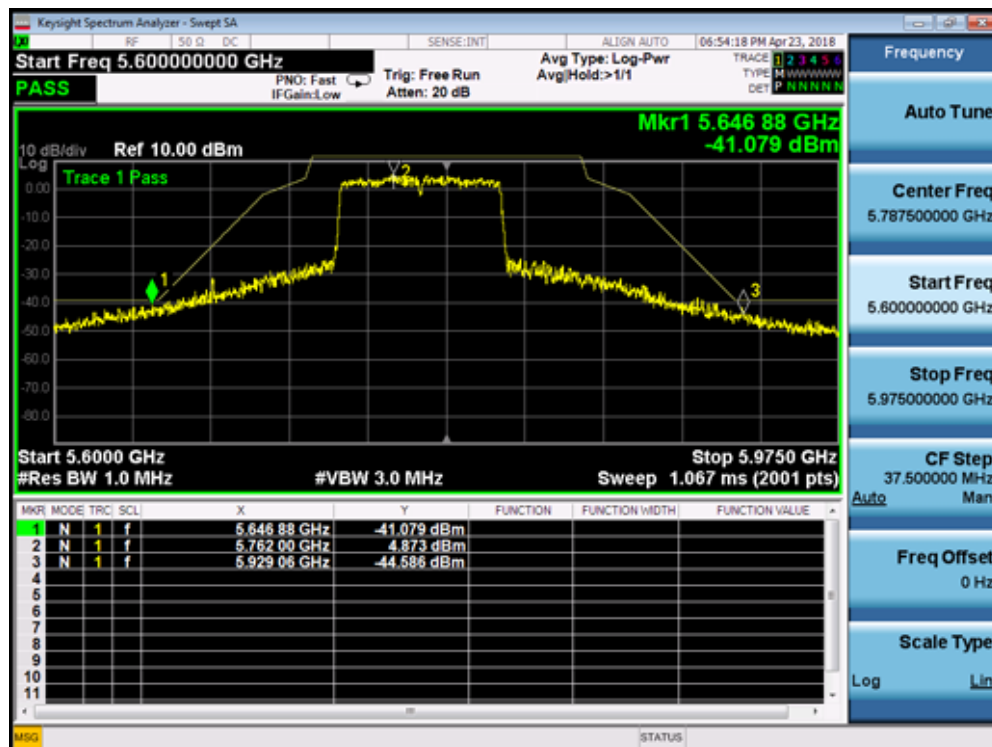
5290MHz by 802.11ac(80MHz):



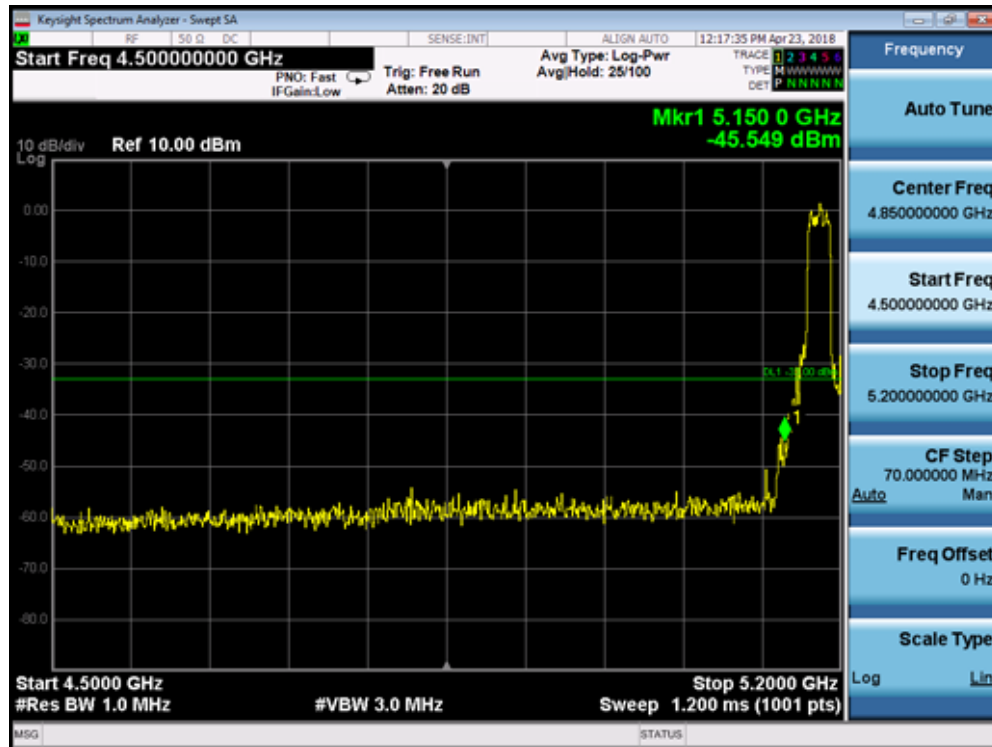
5530MHz by 802.11ac(80MHz):



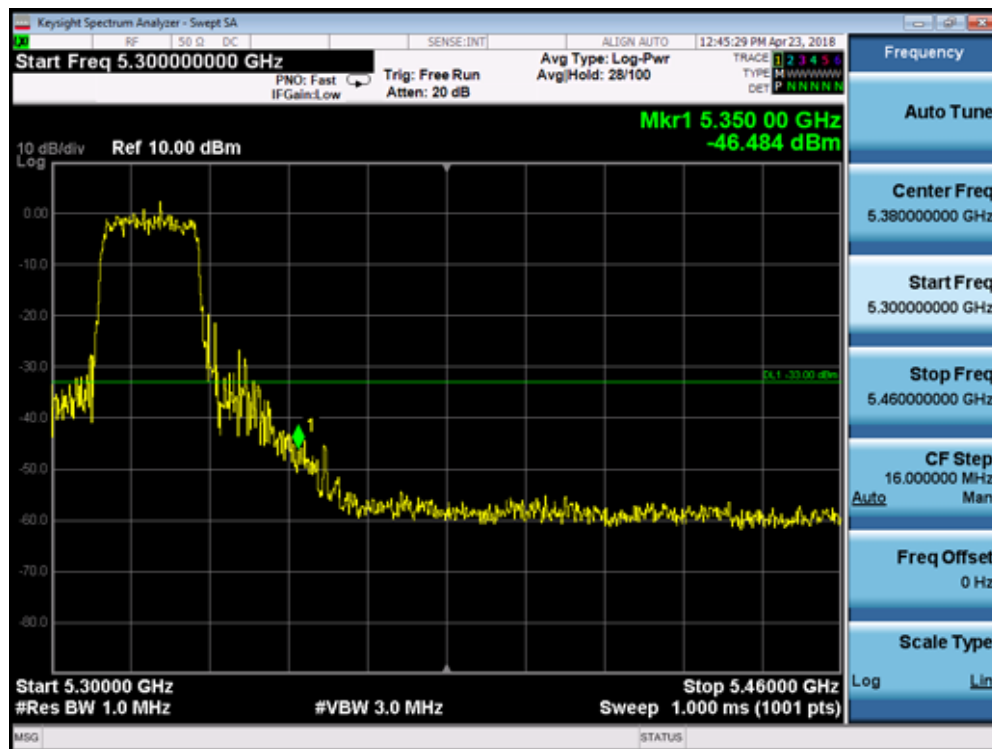
5775MHz by 802.11ac(80MHz):



5180MHz by 802.11ax(20MHz):



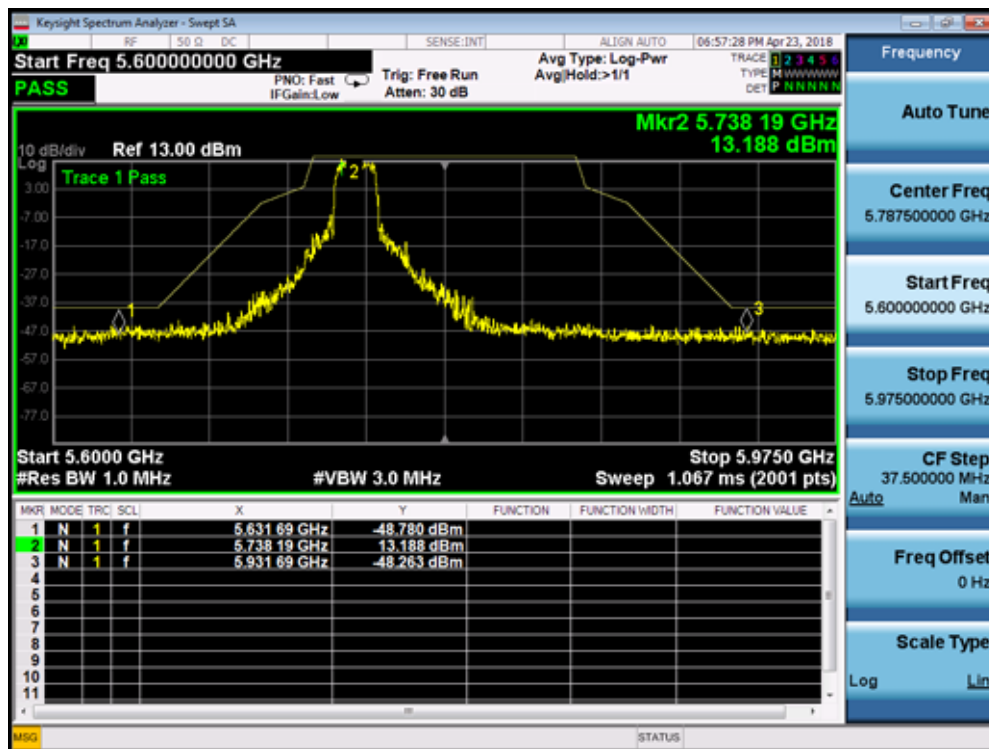
5320MHz by 802.11ax(20MHz):



5500MHz by 802.11ax(20MHz):



5745MHz by 802.11ax(20MHz):

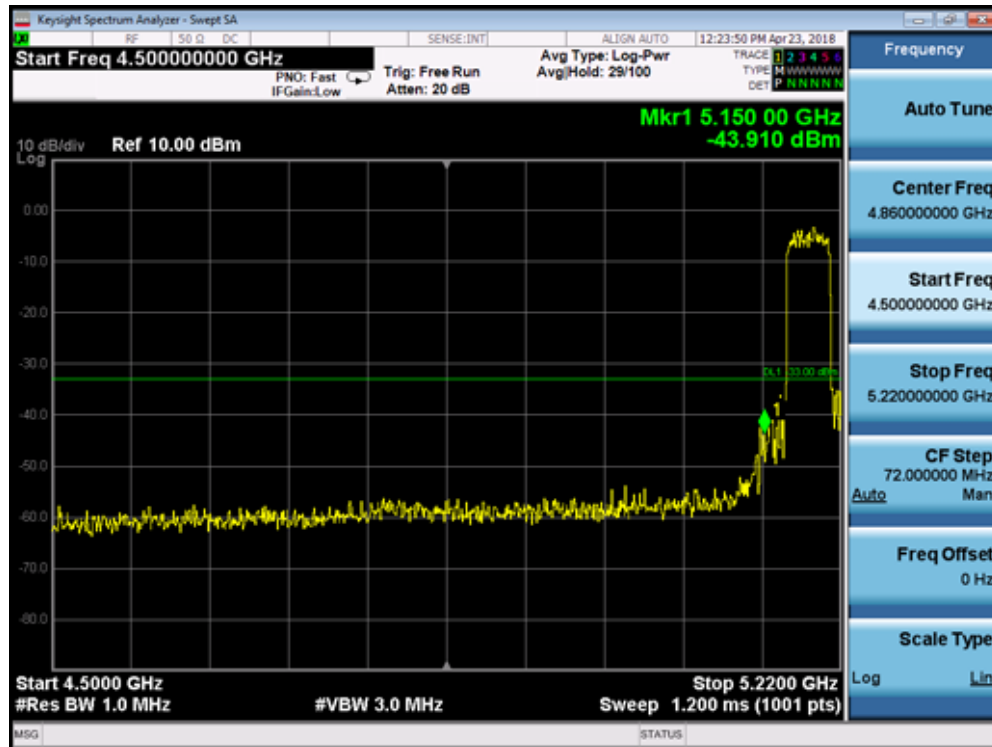


The screenshot displays the Keysight Spectrum Analyzer interface. The main plot shows a swept spectrum from 5.6000 GHz to 5.9750 GHz. A prominent peak is visible at 5.92925 GHz, labeled as Mkr3. The peak power level is -47.173 dBm. The reference level is set to 13.00 dBm. The resolution bandwidth (RBW) is 1 MHz, and the sweep time is 1.067 ms.

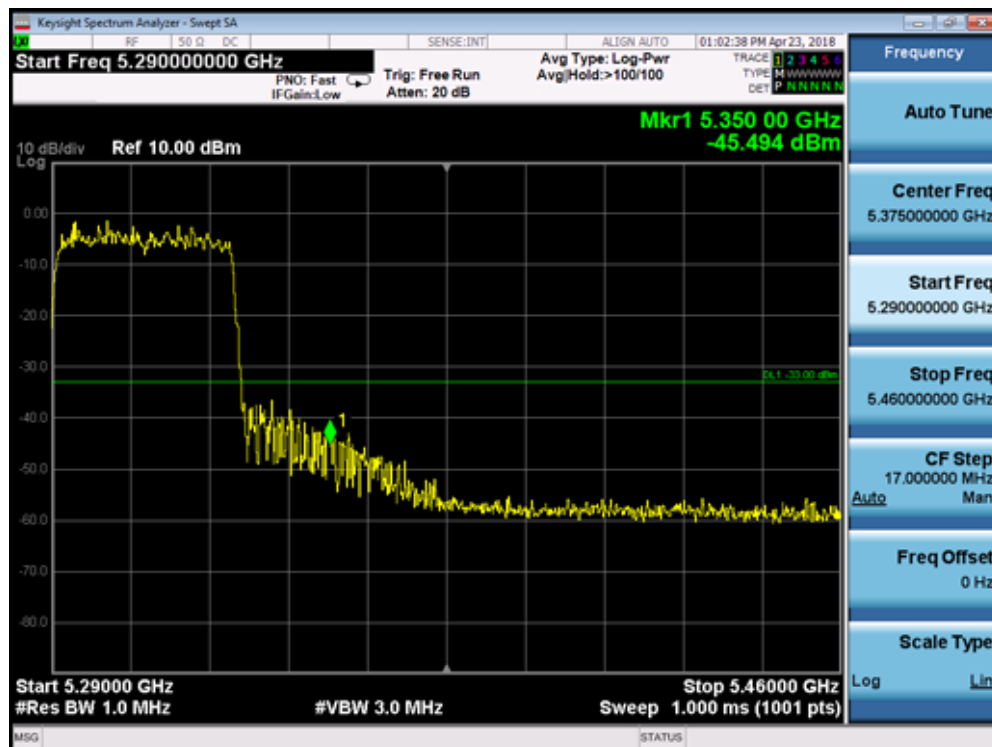
Mkri	Mode	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.64238 GHz	-46.617 dBm			
2	N	1	f	5.78956 GHz	12.489 dBm			
3	N	1	f	5.92925 GHz	-47.173 dBm			

[illegible]

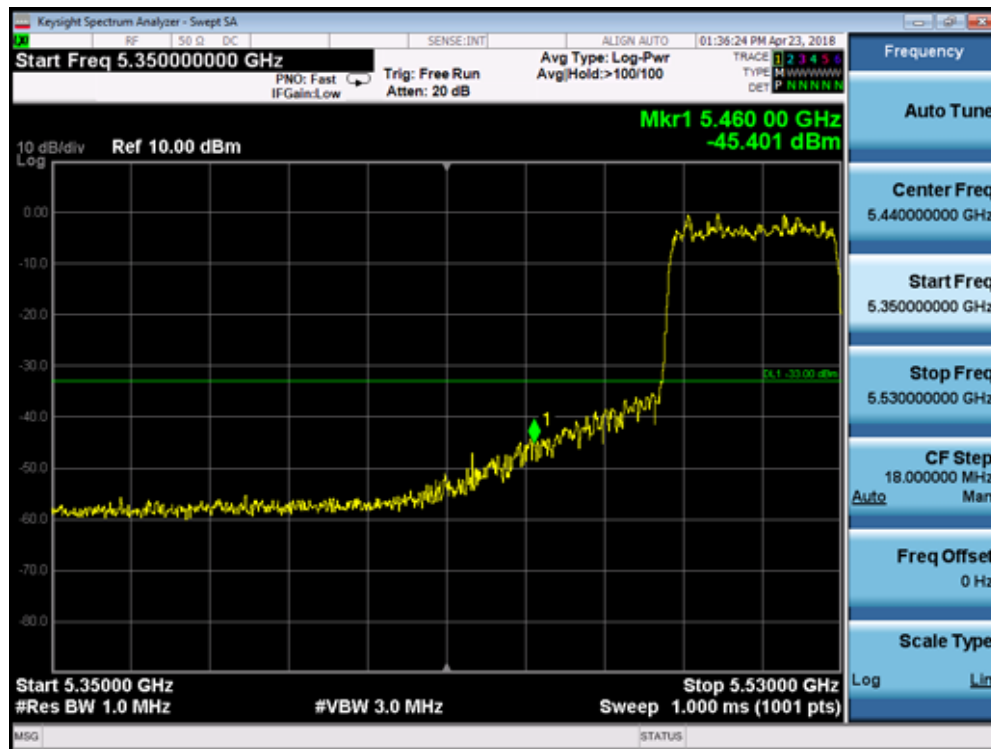
5190MHz by 802.11ax(40MHz):



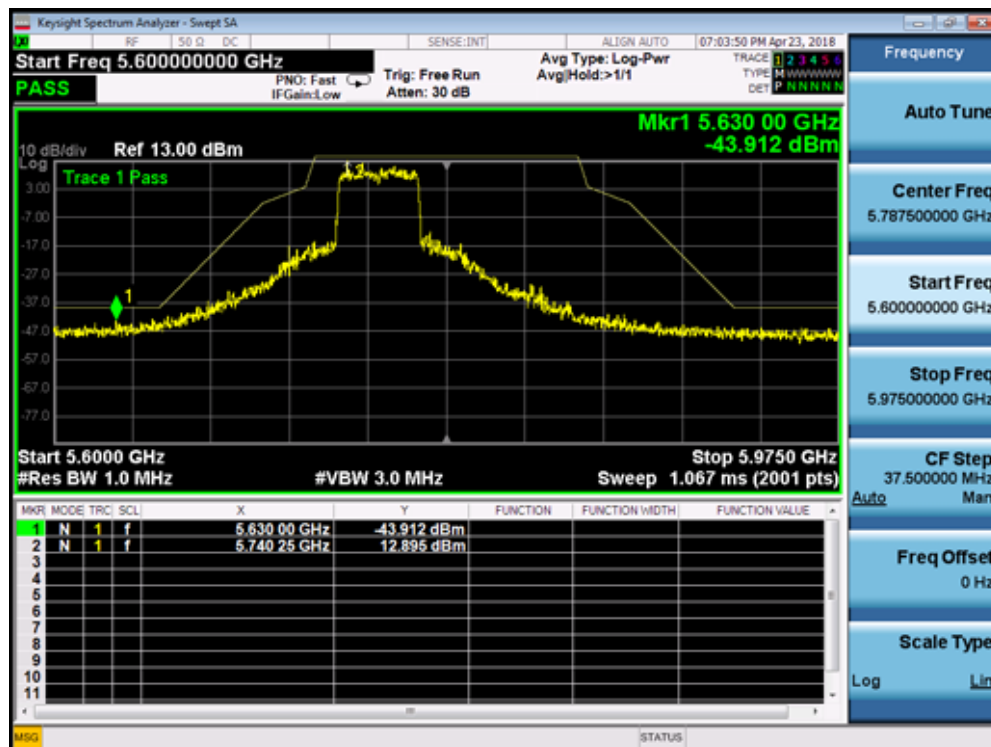
5310MHz by 802.11ax(40MHz):



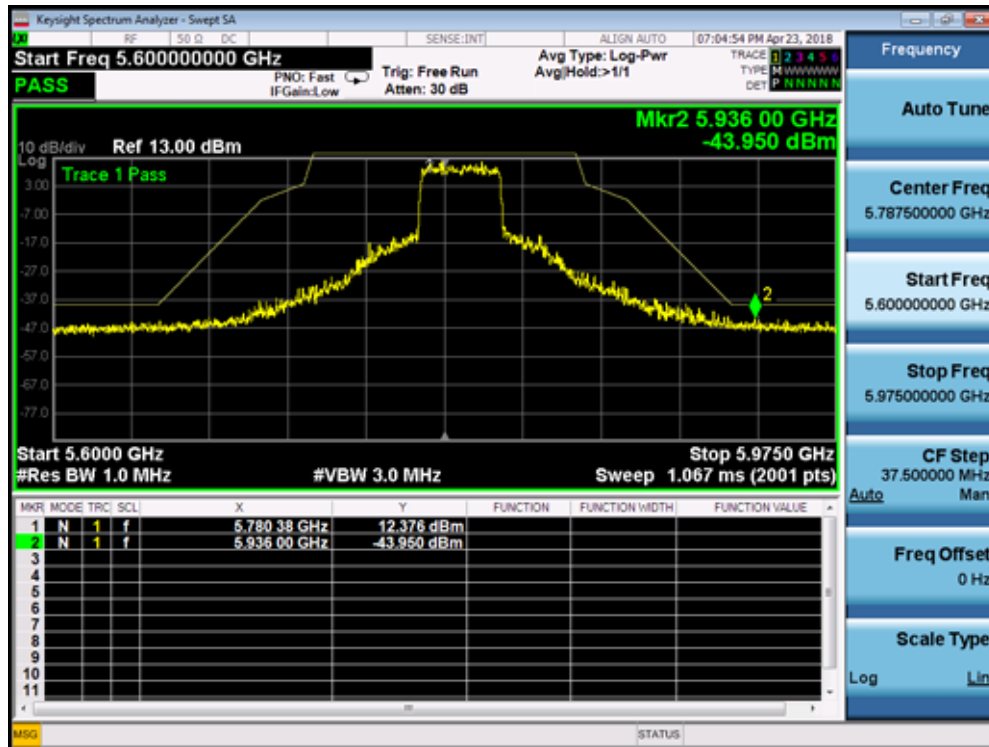
5510MHz by 802.11ax(40MHz):



5755MHz by 802.11ax(40MHz):



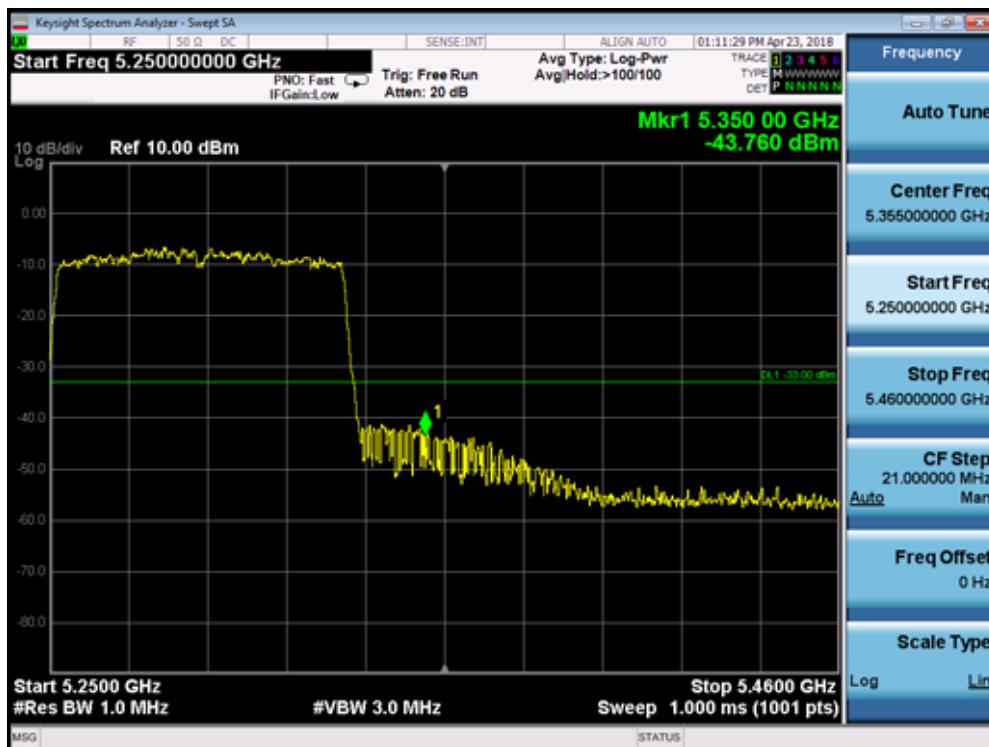
5795MHz by 802.11ax(40MHz):



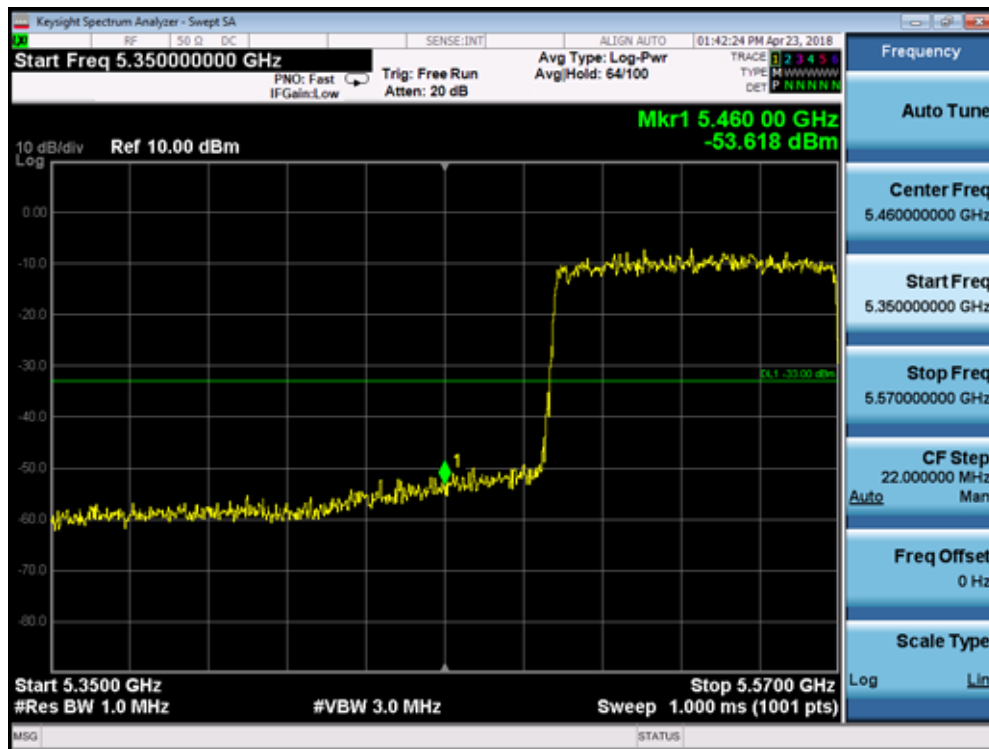
5210MHz by 802.11ax(80MHz):



5290MHz by 802.11ax(80MHz):



5530MHz by 802.11ax(80MHz):



5775MHz by 802.11ax(80MHz):



5250MHz by 802.11ax(160MHz):



5570MHz by 802.11ax(160MHz):



AV-Ant 0+1+2+3 with CDD:

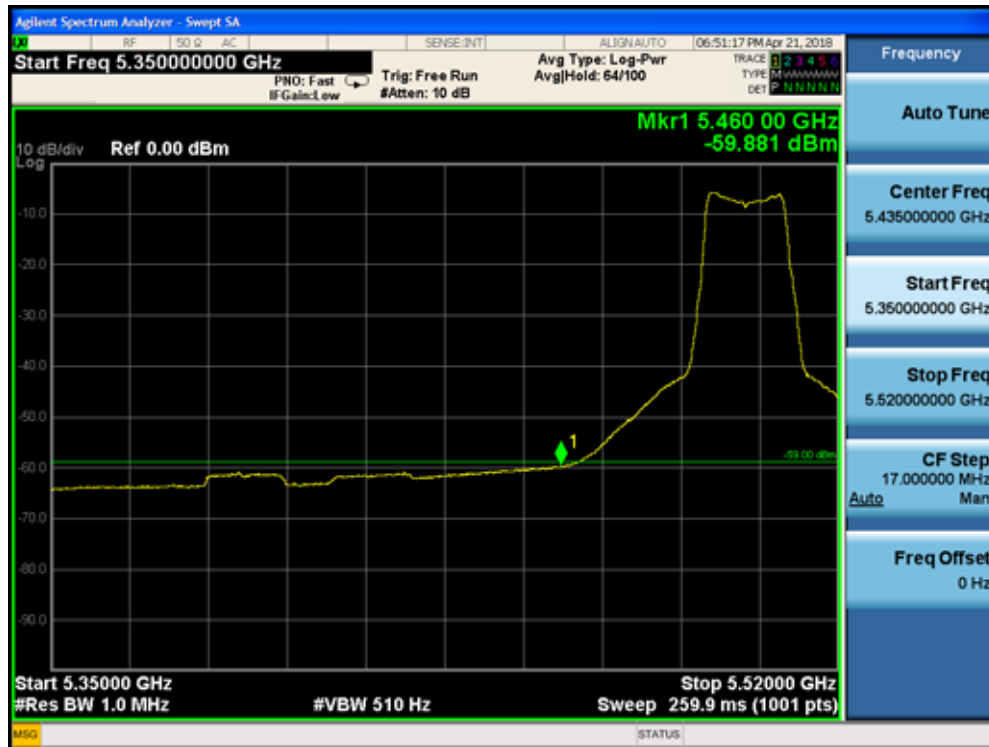
Band I AV Limit=54 dBuV/m-95.2-10lg4(4tx)-11.03(Directional Gain)-0.7(cable loss)=-59dbm
5180MHz by 802.11a:



5320MHz by 802.11a:



5500MHz by 802.11a:



5180MHz by 802.11n(20MHz):



5320MHz by 802.11n(20MHz):



5500MHz by 802.11n(20MHz):



5190MHz by 802.11n(40MHz):



5310MHz by 802.11n(40MHz):

