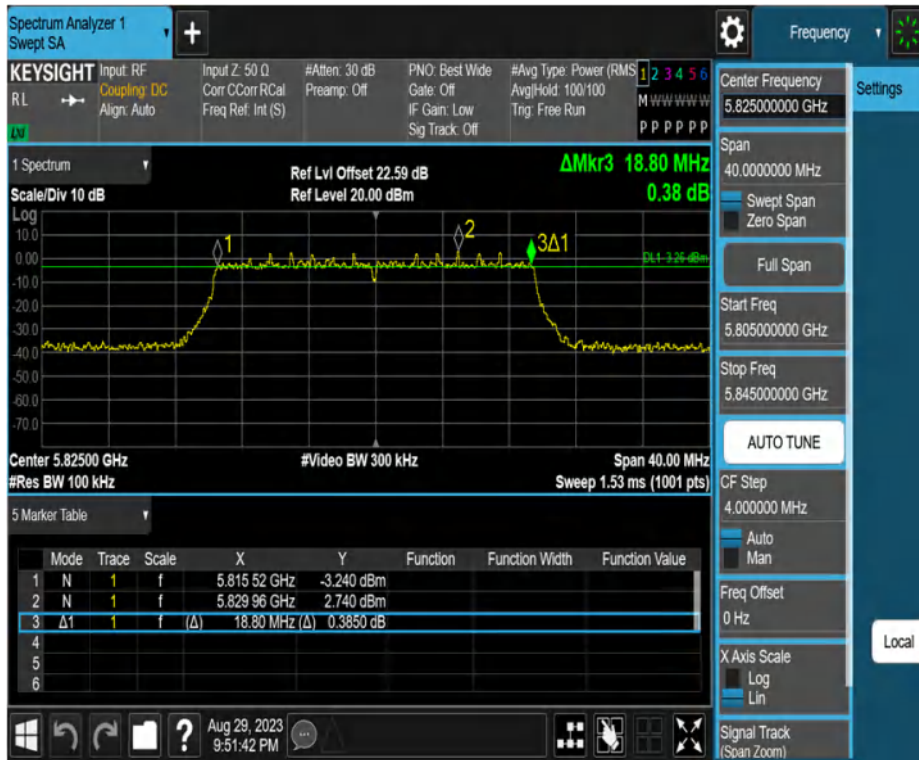


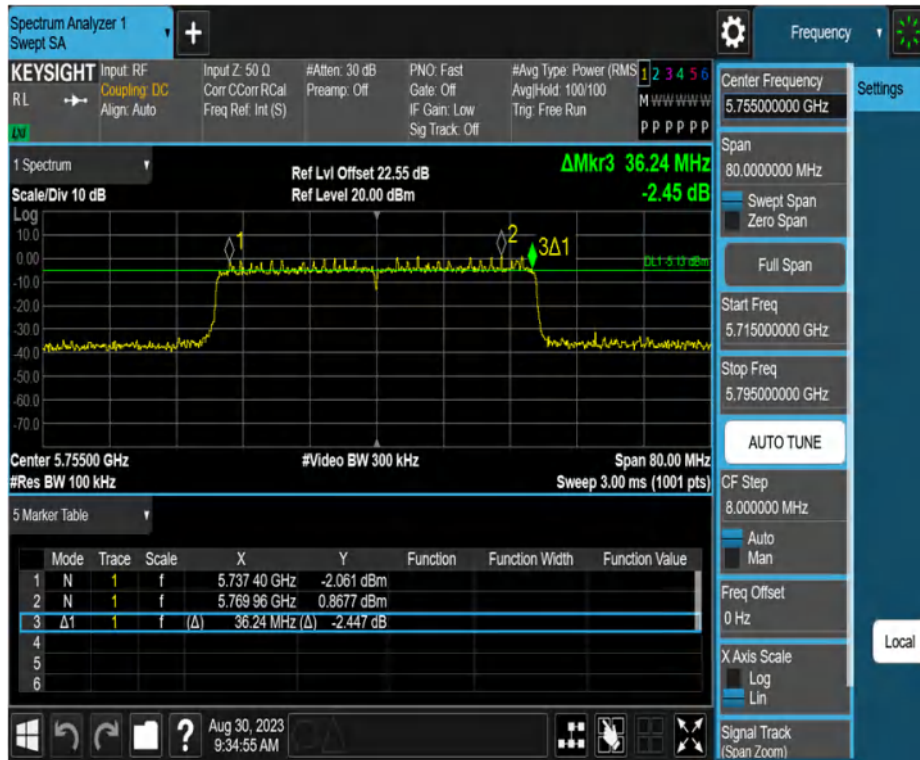
11AX20MIMO\_Ant1\_5825



11AX20MIMO\_Ant2\_5825



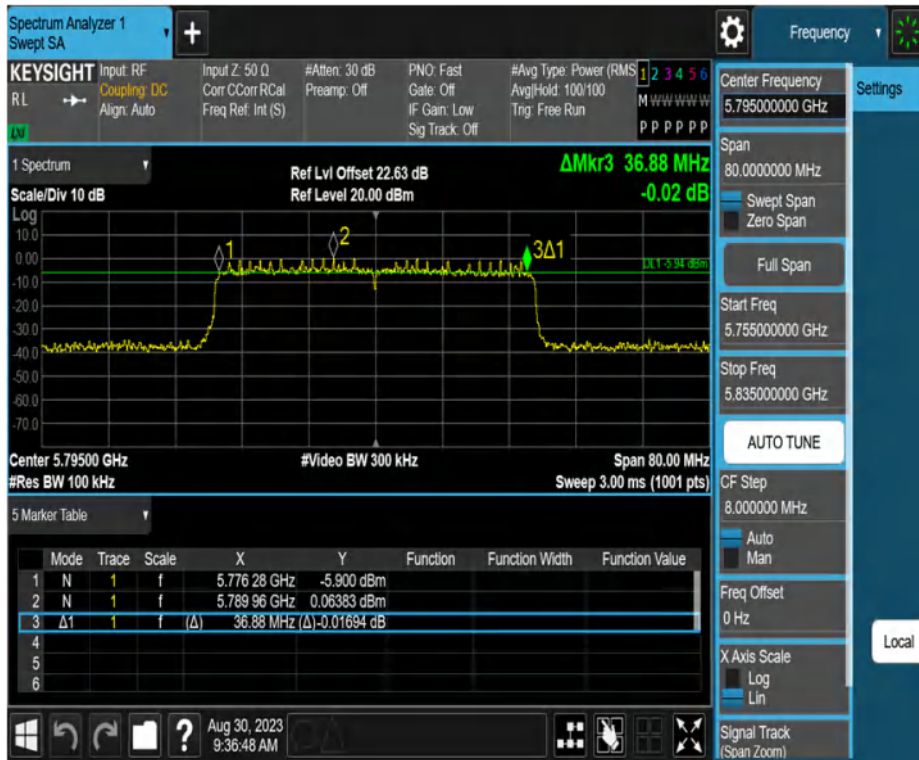
11AX40MIMO\_Ant1\_5755



11AX40MIMO\_Ant2\_5755



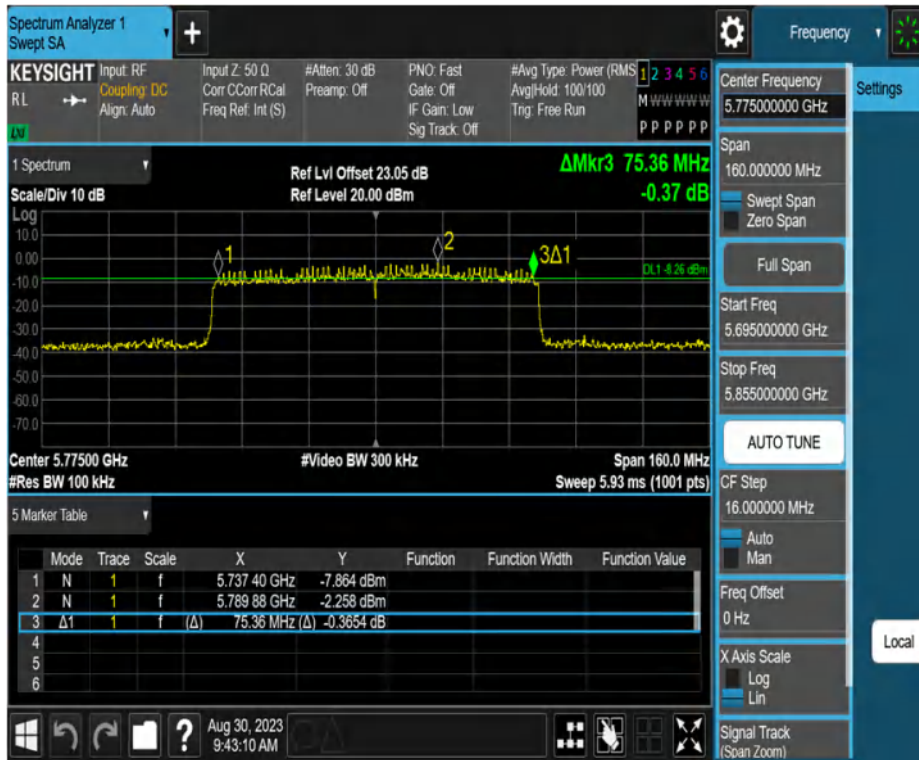
11AX40MIMO\_Ant1\_5795



11AX40MIMO\_Ant2\_5795



11AX80MIMO\_Ant1\_5775



11AX80MIMO\_Ant2\_5775



### 3.4 Conducted Output Power

#### 3.4.1 Limit

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Conducted Output Power	Master device: 1 Watt (30 dBm) Client device: 250 mW (23.98 dBm)	5150-5250
		250 mW (23.98 dBm)	5250-5350
		250 mW (23.98 dBm)	5470-5725
		1 Watt (30dBm)	5725-5850

Note:

a. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

b. 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 or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

#### 3.4.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: <input checked="" type="radio"/> :Test <input type="radio"/> :No Test	

a) The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.

b) Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

#### 3.4.3 Test Setup



### 3.4.4 Table of Parameters of Text Software Setting

No beamforming

UNII-1			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5180	5200	5240
IEEE 802.11a	32	32	32
IEEE 802.11n(HT20)	30	30	30
IEEE 802.11ac(VHT20)	34	34	34
IEEE 802.11ax(HE20)	36	36	36
Frequency (MHz)	5190	5230	
IEEE 802.11n(HT40)	40	40	
IEEE 802.11ac(VHT40)	40	40	
IEEE 802.11ax(HE40)	40	40	
Frequency (MHz)	5210		
IEEE 802.11ac(VHT80)	40		
IEEE 802.11ax(HE80)	40		

UNII-2A			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5260	5300	5320
IEEE 802.11a	46	46	46
IEEE 802.11n(HT20)	46	46	46
IEEE 802.11ac(VHT20)	46	46	46
IEEE 802.11ax(HE20)	48	48	48
Frequency (MHz)	5270	5310	
IEEE 802.11n(HT40)	52	52	
IEEE 802.11ac(VHT40)	52	52	
IEEE 802.11ax(HE40)	52	52	
Frequency (MHz)	5290		
IEEE 802.11ac(VHT80)	52		
IEEE 802.11ax(HE80)	52		
Frequency (MHz)	5250		
IEEE 802.11ax(HE160)	50		

UNII-2C			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5500	5580	5700
IEEE 802.11a	46	46	46
IEEE 802.11n(HT20)	46	46	46
IEEE 802.11ac(VHT20)	46	46	46
IEEE 802.11ax(HE20)	48	48	48
Frequency (MHz)	5510	5550	5670
IEEE 802.11n(HT40)	52	52	52
IEEE 802.11ac(VHT40)	52	52	52
IEEE 802.11ax(HE40)	52	52	52
Frequency (MHz)	5530	5610	
IEEE 802.11ac(VHT80)	52	52	
IEEE 802.11ax(HE80)	52	52	
Frequency (MHz)	5570		
IEEE 802.11ax(HE160)	60		

UNII-3			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5745	5785	5825
IEEE 802.11a	46	46	46
IEEE 802.11n(HT20)	46	46	46
IEEE 802.11ac(VHT20)	46	46	46
IEEE 802.11ax(HE20)	48	48	48
Frequency (MHz)	5755	5795	
IEEE 802.11n(HT40)	52	52	
IEEE 802.11ac(VHT40)	52	52	
IEEE 802.11ax(HE40)	52	52	
Frequency (MHz)	5775		
IEEE 802.11ac(VHT80)	56		
IEEE 802.11ax(HE80)	56		

Beamforming

UNII-1			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5180	5200	5240
IEEE 802.11a	22	22	22
IEEE 802.11n(HT20)	20	20	20
IEEE 802.11ac(VHT20)	24	24	24
IEEE 802.11ax(HE20)	26	26	26
Frequency (MHz)	5190	5230	
IEEE 802.11n(HT40)	30	30	
IEEE 802.11ac(VHT40)	30	30	
IEEE 802.11ax(HE40)	30	30	
Frequency (MHz)	5210		
IEEE 802.11ac(VHT80)	30		
IEEE 802.11ax(HE80)	30		

UNII-2A			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5260	5300	5320
IEEE 802.11a	36	36	36
IEEE 802.11n(HT20)	36	36	36
IEEE 802.11ac(VHT20)	36	36	36
IEEE 802.11ax(HE20)	38	38	38
Frequency (MHz)	5270	5310	
IEEE 802.11n(HT40)	42	42	
IEEE 802.11ac(VHT40)	42	42	
IEEE 802.11ax(HE40)	42	42	
Frequency (MHz)	5290		
IEEE 802.11ac(VHT80)	42		
IEEE 802.11ax(HE80)	42		
Frequency (MHz)	5250		
IEEE 802.11ax(HE160)	40		



UNII-2C			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5500	5580	5700
IEEE 802.11a	36	36	36
IEEE 802.11n(HT20)	36	36	36
IEEE 802.11ac(VHT20)	36	36	36
IEEE 802.11ax(HE20)	38	38	38
Frequency (MHz)	5510	5550	5670
IEEE 802.11n(HT40)	42	42	42
IEEE 802.11ac(VHT40)	42	42	42
IEEE 802.11ax(HE40)	42	42	42
Frequency (MHz)	5530	5610	
IEEE 802.11ac(VHT80)	42	42	
IEEE 802.11ax(HE80)	42	42	
Frequency (MHz)	5570		
IEEE 802.11ax(HE160)	50		

UNII-3			
Test Software Version	Test Software: accessMTool_REL_3_3_0_2		
Frequency (MHz)	5745	5785	5825
IEEE 802.11a	36	36	36
IEEE 802.11n(HT20)	36	36	36
IEEE 802.11ac(VHT20)	36	36	36
IEEE 802.11ax(HE20)	38	38	38
Frequency (MHz)	5755	5795	
IEEE 802.11n(HT40)	42	42	
IEEE 802.11ac(VHT40)	42	42	
IEEE 802.11ax(HE40)	42	42	
Frequency (MHz)	5775		
IEEE 802.11ac(VHT80)	46		
IEEE 802.11ax(HE80)	46		

### 3.4.5 The Result

No beamforming

Test Mode	Antenna	Freq(MHz)	Result [dBm]	Limit [dBm]	Verdict
11A-CDD	Ant1	5180	7.19	≤26.88	PASS
	Ant2	5180	7.80	≤26.88	PASS
	total	5180	10.52	≤26.88	PASS
	Ant1	5200	7.20	≤26.88	PASS
	Ant2	5200	7.22	≤26.88	PASS
	total	5200	10.22	≤26.88	PASS
	Ant1	5240	7.36	≤26.88	PASS
	Ant2	5240	7.49	≤26.88	PASS
	total	5240	10.44	≤26.88	PASS
	Ant1	5260	14.15	≤20.86	PASS
	Ant2	5260	14.50	≤20.86	PASS
	total	5260	17.34	≤20.86	PASS
	Ant1	5280	14.67	≤20.86	PASS
	Ant2	5280	14.62	≤20.86	PASS
	total	5280	17.66	≤20.86	PASS
	Ant1	5320	13.56	≤20.86	PASS
	Ant2	5320	14.09	≤20.86	PASS
	total	5320	16.84	≤20.86	PASS
	Ant1	5500	13.35	≤20.86	PASS
	Ant2	5500	12.97	≤20.86	PASS
	total	5500	16.17	≤20.86	PASS
	Ant1	5580	13.26	≤20.86	PASS
	Ant2	5580	13.63	≤20.86	PASS
	total	5580	16.46	≤20.86	PASS
	Ant1	5700	13.88	≤20.86	PASS
	Ant2	5700	14.51	≤20.86	PASS
	total	5700	17.22	≤20.86	PASS
	Ant1	5745	13.66	≤26.88	PASS
	Ant2	5745	14.53	≤26.88	PASS
	total	5745	17.13	≤26.88	PASS
	Ant1	5785	14.65	≤26.88	PASS
	Ant2	5785	14.05	≤26.88	PASS
	total	5785	17.37	≤26.88	PASS
Ant1	5825	13.42	≤26.88	PASS	
Ant2	5825	14.24	≤26.88	PASS	
total	5825	16.86	≤26.88	PASS	
11N20MIMO	Ant1	5180	7.24	≤26.88	PASS
	Ant2	5180	8.01	≤26.88	PASS
	total	5180	10.65	≤26.88	PASS

	Ant1	5200	7.44	≤26.88	PASS
	Ant2	5200	7.88	≤26.88	PASS
	total	5200	10.68	≤26.88	PASS
	Ant1	5240	8.18	≤26.88	PASS
	Ant2	5240	7.51	≤26.88	PASS
	total	5240	10.87	≤26.88	PASS
	Ant1	5260	13.25	≤20.86	PASS
	Ant2	5260	13.45	≤20.86	PASS
	total	5260	16.36	≤20.86	PASS
	Ant1	5280	13.37	≤20.86	PASS
	Ant2	5280	13.52	≤20.86	PASS
	total	5280	16.46	≤20.86	PASS
	Ant1	5320	13.51	≤20.86	PASS
	Ant2	5320	14.18	≤20.86	PASS
	total	5320	16.87	≤20.86	PASS
	Ant1	5500	13.02	≤20.86	PASS
	Ant2	5500	12.63	≤20.86	PASS
	total	5500	15.86	≤20.86	PASS
	Ant1	5580	13.09	≤20.86	PASS
	Ant2	5580	12.92	≤20.86	PASS
	total	5580	16.02	≤20.86	PASS
	Ant1	5700	13.63	≤20.86	PASS
	Ant2	5700	14.17	≤20.86	PASS
	total	5700	16.92	≤20.86	PASS
	Ant1	5745	13.79	≤26.88	PASS
	Ant2	5745	14.36	≤26.88	PASS
	total	5745	17.09	≤26.88	PASS
	Ant1	5785	13.56	≤26.88	PASS
	Ant2	5785	13.02	≤26.88	PASS
	total	5785	16.31	≤26.88	PASS
Ant1	5825	13.36	≤26.88	PASS	
Ant2	5825	14.20	≤26.88	PASS	
total	5825	16.81	≤26.88	PASS	
11N40MIMO	Ant1	5190	9.75	≤26.88	PASS
	Ant2	5190	10.29	≤26.88	PASS
	total	5190	13.04	≤26.88	PASS
	Ant1	5230	10.52	≤26.88	PASS
	Ant2	5230	10.17	≤26.88	PASS
	total	5230	13.36	≤26.88	PASS
	Ant1	5270	15.06	≤20.86	PASS
	Ant2	5270	15.11	≤20.86	PASS
total	5270	18.10	≤20.86	PASS	

	Ant1	5310	14.97	≤20.86	PASS
	Ant2	5310	15.30	≤20.86	PASS
	total	5310	18.15	≤20.86	PASS
	Ant1	5510	14.60	≤20.86	PASS
	Ant2	5510	14.02	≤20.86	PASS
	total	5510	17.33	≤20.86	PASS
	Ant1	5550	15.09	≤20.86	PASS
	Ant2	5550	14.82	≤20.86	PASS
	total	5550	17.97	≤20.86	PASS
	Ant1	5670	14.97	≤20.86	PASS
	Ant2	5670	15.01	≤20.86	PASS
	total	5670	18.00	≤20.86	PASS
	Ant1	5755	14.91	≤26.88	PASS
	Ant2	5755	15.57	≤26.88	PASS
	total	5755	18.26	≤26.88	PASS
	Ant1	5795	14.70	≤26.88	PASS
	Ant2	5795	14.58	≤26.88	PASS
	total	5795	17.65	≤26.88	PASS
11AC20MIMO	Ant1	5180	8.07	≤26.88	PASS
	Ant2	5180	8.33	≤26.88	PASS
	total	5180	11.21	≤26.88	PASS
	Ant1	5200	7.77	≤26.88	PASS
	Ant2	5200	8.04	≤26.88	PASS
	total	5200	10.92	≤26.88	PASS
	Ant1	5240	8.61	≤26.88	PASS
	Ant2	5240	8.02	≤26.88	PASS
	total	5240	11.34	≤26.88	PASS
	Ant1	5260	14.11	≤20.86	PASS
	Ant2	5260	14.23	≤20.86	PASS
	total	5260	17.18	≤20.86	PASS
	Ant1	5280	14.33	≤20.86	PASS
	Ant2	5280	14.20	≤20.86	PASS
	total	5280	17.28	≤20.86	PASS
	Ant1	5320	14.11	≤20.86	PASS
	Ant2	5320	14.94	≤20.86	PASS
	total	5320	17.56	≤20.86	PASS
	Ant1	5500	13.84	≤20.86	PASS
	Ant2	5500	13.44	≤20.86	PASS
	total	5500	16.65	≤20.86	PASS
Ant1	5580	13.85	≤20.86	PASS	
Ant2	5580	13.91	≤20.86	PASS	
total	5580	16.89	≤20.86	PASS	

	Ant1	5700	14.35	≤20.86	PASS
	Ant2	5700	14.82	≤20.86	PASS
	total	5700	17.60	≤20.86	PASS
	Ant1	5745	14.37	≤26.88	PASS
	Ant2	5745	15.03	≤26.88	PASS
	total	5745	17.72	≤26.88	PASS
	Ant1	5785	14.12	≤26.88	PASS
	Ant2	5785	13.78	≤26.88	PASS
	total	5785	16.96	≤26.88	PASS
	Ant1	5825	14.24	≤26.88	PASS
	Ant2	5825	14.97	≤26.88	PASS
	total	5825	17.63	≤26.88	PASS
11AC40MIMO	Ant1	5190	10.51	≤26.88	PASS
	Ant2	5190	10.99	≤26.88	PASS
	total	5190	13.77	≤26.88	PASS
	Ant1	5230	10.50	≤26.88	PASS
	Ant2	5230	10.27	≤26.88	PASS
	total	5230	13.40	≤26.88	PASS
	Ant1	5270	14.78	≤20.86	PASS
	Ant2	5270	14.75	≤20.86	PASS
	total	5270	17.78	≤20.86	PASS
	Ant1	5310	14.78	≤20.86	PASS
	Ant2	5310	15.06	≤20.86	PASS
	total	5310	17.93	≤20.86	PASS
	Ant1	5510	14.43	≤20.86	PASS
	Ant2	5510	14.21	≤20.86	PASS
	total	5510	17.33	≤20.86	PASS
	Ant1	5550	14.66	≤20.86	PASS
	Ant2	5550	14.19	≤20.86	PASS
	total	5550	17.44	≤20.86	PASS
	Ant1	5670	14.65	≤20.86	PASS
	Ant2	5670	14.77	≤20.86	PASS
	total	5670	17.72	≤20.86	PASS
	Ant1	5755	14.68	≤26.88	PASS
	Ant2	5755	15.50	≤26.88	PASS
	total	5755	18.12	≤26.88	PASS
Ant1	5795	14.46	≤26.88	PASS	
Ant2	5795	14.18	≤26.88	PASS	
total	5795	17.33	≤26.88	PASS	
11AC80MIMO	Ant1	5210	10.09	≤26.88	PASS
	Ant2	5210	9.80	≤26.88	PASS
	total	5210	12.96	≤26.88	PASS

	Ant1	5290	14.76	≤20.86	PASS
	Ant2	5290	15.14	≤20.86	PASS
	total	5290	17.96	≤20.86	PASS
	Ant1	5530	15.28	≤20.86	PASS
	Ant2	5530	15.31	≤20.86	PASS
	total	5530	18.31	≤20.86	PASS
	Ant1	5610	15.27	≤20.86	PASS
	Ant2	5610	15.12	≤20.86	PASS
	total	5610	18.21	≤20.86	PASS
	Ant1	5775	15.40	≤26.88	PASS
	Ant2	5775	15.33	≤26.88	PASS
	total	5775	18.38	≤26.88	PASS
11AX20MIMO	Ant1	5180	8.12	≤26.88	PASS
	Ant2	5180	8.42	≤26.88	PASS
	total	5180	11.28	≤26.88	PASS
	Ant1	5200	8.54	≤26.88	PASS
	Ant2	5200	8.78	≤26.88	PASS
	total	5200	11.67	≤26.88	PASS
	Ant1	5240	9.24	≤26.88	PASS
	Ant2	5240	8.62	≤26.88	PASS
	total	5240	11.95	≤26.88	PASS
	Ant1	5260	14.30	≤20.86	PASS
	Ant2	5260	14.43	≤20.86	PASS
	total	5260	17.38	≤20.86	PASS
	Ant1	5280	15.05	≤20.86	PASS
	Ant2	5280	14.82	≤20.86	PASS
	total	5280	17.95	≤20.86	PASS
	Ant1	5320	14.48	≤20.86	PASS
	Ant2	5320	15.13	≤20.86	PASS
	total	5320	17.83	≤20.86	PASS
	Ant1	5500	14.01	≤20.86	PASS
	Ant2	5500	13.69	≤20.86	PASS
	total	5500	16.86	≤20.86	PASS
	Ant1	5580	14.00	≤20.86	PASS
	Ant2	5580	14.09	≤20.86	PASS
	total	5580	17.06	≤20.86	PASS
Ant1	5700	14.57	≤20.86	PASS	
Ant2	5700	15.14	≤20.86	PASS	
total	5700	17.87	≤20.86	PASS	
Ant1	5745	14.65	≤26.88	PASS	
Ant2	5745	15.29	≤26.88	PASS	
total	5745	17.99	≤26.88	PASS	

	Ant1	5785	14.34	≤26.88	PASS
	Ant2	5785	14.01	≤26.88	PASS
	total	5785	17.19	≤26.88	PASS
	Ant1	5825	14.39	≤26.88	PASS
	Ant2	5825	15.14	≤26.88	PASS
	total	5825	17.79	≤26.88	PASS
11AX40MIMO	Ant1	5190	9.81	≤26.88	PASS
	Ant2	5190	10.22	≤26.88	PASS
	total	5190	13.03	≤26.88	PASS
	Ant1	5230	10.15	≤26.88	PASS
	Ant2	5230	9.80	≤26.88	PASS
	total	5230	12.99	≤26.88	PASS
	Ant1	5270	14.79	≤20.86	PASS
	Ant2	5270	15.18	≤20.86	PASS
	total	5270	18.00	≤20.86	PASS
	Ant1	5310	14.93	≤20.86	PASS
	Ant2	5310	15.21	≤20.86	PASS
	total	5310	18.08	≤20.86	PASS
	Ant1	5510	14.58	≤20.86	PASS
	Ant2	5510	14.51	≤20.86	PASS
	total	5510	17.56	≤20.86	PASS
	Ant1	5550	15.08	≤20.86	PASS
	Ant2	5550	14.76	≤20.86	PASS
	total	5550	17.93	≤20.86	PASS
	Ant1	5670	14.78	≤20.86	PASS
	Ant2	5670	14.86	≤20.86	PASS
	total	5670	17.83	≤20.86	PASS
	Ant1	5755	15.03	≤26.88	PASS
	Ant2	5755	15.73	≤26.88	PASS
	total	5755	<b>18.40</b>	≤26.88	PASS
Ant1	5795	14.63	≤26.88	PASS	
Ant2	5795	14.57	≤26.88	PASS	
total	5795	17.61	≤26.88	PASS	
11AX80MIMO	Ant1	5210	10.00	≤26.88	PASS
	Ant2	5210	9.82	≤26.88	PASS
	total	5210	12.92	≤26.88	PASS
	Ant1	5290	15.06	≤20.86	PASS
	Ant2	5290	15.34	≤20.86	PASS
	total	5290	18.21	≤20.86	PASS
	Ant1	5530	14.20	≤20.86	PASS
	Ant2	5530	14.29	≤20.86	PASS
total	5530	17.26	≤20.86	PASS	

	Ant1	5610	15.29	≤20.86	PASS
	Ant2	5610	15.31	≤20.86	PASS
	total	5610	18.31	≤20.86	PASS
	Ant1	5775	14.55	≤26.88	PASS
	Ant2	5775	14.54	≤26.88	PASS
	total	5775	17.56	≤26.88	PASS
11AX160MIMO	Ant1	5250_UNII-1	10.84	≤26.88	PASS
	Ant2	5250_UNII-1	10.48	≤26.88	PASS
	total	5250_UNII-1	13.67	≤26.88	PASS
	Ant1	5250_UNII-2A	12.02	≤20.86	PASS
	Ant2	5250_UNII-2A	11.75	≤20.86	PASS
	total	5250_UNII-2A	14.90	≤20.86	PASS
	Ant1	5570	14.44	≤20.86	PASS
	Ant2	5570	14.11	≤20.86	PASS
	total	5570	17.29	≤20.86	PASS

Note: The Duty Cycle Factor is compensated in the test system

For MIMO mode

Unequal antenna gains, with equal transmit powers. For antenna gains given by  $G_1, G_2, \dots, G_N$  dBi

If transmit signals are correlated, then Directional gain =  $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$  dBi

[Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

Directional gain =  $10 \log[(10^{5.86/20} + 10^{6.36/20})^2 / N_{ANT}]$  dBi=9.12 dBi



Beamforming

Test Mode	Antenna	Freq(MHz)	Result [dBm]	Limit [dBm]	Verdict
11A-CDD	Ant1	5180	4.58	≤24.38	PASS
	Ant2	5180	5.19	≤24.38	PASS
	total	5180	7.91	≤24.38	PASS
	Ant1	5200	4.66	≤24.38	PASS
	Ant2	5200	4.68	≤24.38	PASS
	total	5200	7.68	≤24.38	PASS
	Ant1	5240	4.63	≤24.38	PASS
	Ant2	5240	4.76	≤24.38	PASS
	total	5240	7.71	≤24.38	PASS
	Ant1	5260	11.57	≤18.36	PASS
	Ant2	5260	11.92	≤18.36	PASS
	total	5260	14.76	≤18.36	PASS
	Ant1	5280	11.84	≤18.36	PASS
	Ant2	5280	11.79	≤18.36	PASS
	total	5280	14.83	≤18.36	PASS
	Ant1	5320	11.04	≤18.36	PASS
	Ant2	5320	11.57	≤18.36	PASS
	total	5320	14.32	≤18.36	PASS
	Ant1	5500	10.70	≤18.36	PASS
	Ant2	5500	10.32	≤18.36	PASS
	total	5500	13.52	≤18.36	PASS
	Ant1	5580	10.69	≤18.36	PASS
	Ant2	5580	11.06	≤18.36	PASS
	total	5580	13.89	≤18.36	PASS
	Ant1	5700	11.22	≤18.36	PASS
	Ant2	5700	11.85	≤18.36	PASS
	total	5700	14.56	≤18.36	PASS
	Ant1	5745	10.85	≤24.38	PASS
	Ant2	5745	11.72	≤24.38	PASS
	total	5745	14.32	≤24.38	PASS
Ant1	5785	11.98	≤24.38	PASS	
Ant2	5785	11.38	≤24.38	PASS	
total	5785	14.70	≤24.38	PASS	
Ant1	5825	10.83	≤24.38	PASS	
Ant2	5825	11.65	≤24.38	PASS	
total	5825	14.27	≤24.38	PASS	
11N20MIMO	Ant1	5180	4.72	≤24.38	PASS
	Ant2	5180	5.49	≤24.38	PASS
	total	5180	8.13	≤24.38	PASS
	Ant1	5200	4.78	≤24.38	PASS

	Ant2	5200	5.22	≤24.38	PASS
	total	5200	8.02	≤24.38	PASS
	Ant1	5240	5.40	≤24.38	PASS
	Ant2	5240	4.73	≤24.38	PASS
	total	5240	8.09	≤24.38	PASS
	Ant1	5260	10.64	≤18.36	PASS
	Ant2	5260	10.84	≤18.36	PASS
	total	5260	13.75	≤18.36	PASS
	Ant1	5280	10.78	≤18.36	PASS
	Ant2	5280	10.93	≤18.36	PASS
	total	5280	13.87	≤18.36	PASS
	Ant1	5320	10.96	≤18.36	PASS
	Ant2	5320	11.63	≤18.36	PASS
	total	5320	14.32	≤18.36	PASS
	Ant1	5500	10.39	≤18.36	PASS
	Ant2	5500	10.00	≤18.36	PASS
	total	5500	13.23	≤18.36	PASS
	Ant1	5580	10.37	≤18.36	PASS
	Ant2	5580	10.20	≤18.36	PASS
	total	5580	13.30	≤18.36	PASS
	Ant1	5700	10.99	≤18.36	PASS
	Ant2	5700	11.53	≤18.36	PASS
	total	5700	14.28	≤18.36	PASS
	Ant1	5745	11.20	≤24.38	PASS
	Ant2	5745	11.77	≤24.38	PASS
	total	5745	14.50	≤24.38	PASS
	Ant1	5785	11.02	≤24.38	PASS
	Ant2	5785	10.48	≤24.38	PASS
	total	5785	13.77	≤24.38	PASS
	Ant1	5825	10.67	≤24.38	PASS
Ant2	5825	11.51	≤24.38	PASS	
total	5825	14.12	≤24.38	PASS	
11N40MIMO	Ant1	5190	7.17	≤24.38	PASS
	Ant2	5190	7.71	≤24.38	PASS
	total	5190	10.46	≤24.38	PASS
	Ant1	5230	7.69	≤24.38	PASS
	Ant2	5230	7.34	≤24.38	PASS
	total	5230	10.53	≤24.38	PASS
	Ant1	5270	12.54	≤18.36	PASS
	Ant2	5270	12.59	≤18.36	PASS
	total	5270	15.58	≤18.36	PASS
Ant1	5310	12.32	≤18.36	PASS	

	Ant2	5310	12.65	≤18.36	PASS
	total	5310	15.50	≤18.36	PASS
	Ant1	5510	12.03	≤18.36	PASS
	Ant2	5510	11.45	≤18.36	PASS
	total	5510	14.76	≤18.36	PASS
	Ant1	5550	12.43	≤18.36	PASS
	Ant2	5550	12.16	≤18.36	PASS
	total	5550	15.31	≤18.36	PASS
	Ant1	5670	12.16	≤18.36	PASS
	Ant2	5670	12.20	≤18.36	PASS
	total	5670	15.19	≤18.36	PASS
	Ant1	5755	12.24	≤24.38	PASS
	Ant2	5755	12.90	≤24.38	PASS
	total	5755	15.59	≤24.38	PASS
	Ant1	5795	12.11	≤24.38	PASS
	Ant2	5795	11.99	≤24.38	PASS
	total	5795	15.06	≤24.38	PASS
	11AC20MIMO	Ant1	5180	5.46	≤24.38
Ant2		5180	5.72	≤24.38	PASS
total		5180	8.60	≤24.38	PASS
Ant1		5200	5.18	≤24.38	PASS
Ant2		5200	5.45	≤24.38	PASS
total		5200	8.33	≤24.38	PASS
Ant1		5240	6.06	≤24.38	PASS
Ant2		5240	5.47	≤24.38	PASS
total		5240	8.79	≤24.38	PASS
Ant1		5260	11.48	≤18.36	PASS
Ant2		5260	11.60	≤18.36	PASS
total		5260	14.55	≤18.36	PASS
Ant1		5280	11.61	≤18.36	PASS
Ant2		5280	11.48	≤18.36	PASS
total		5280	14.56	≤18.36	PASS
Ant1		5320	11.59	≤18.36	PASS
Ant2		5320	12.42	≤18.36	PASS
total		5320	15.04	≤18.36	PASS
Ant1		5500	11.18	≤18.36	PASS
Ant2		5500	10.78	≤18.36	PASS
total		5500	13.99	≤18.36	PASS
Ant1		5580	11.07	≤18.36	PASS
Ant2		5580	11.13	≤18.36	PASS
total		5580	14.11	≤18.36	PASS
Ant1	5700	11.74	≤18.36	PASS	

	Ant2	5700	12.21	≤18.36	PASS
	total	5700	14.99	≤18.36	PASS
	Ant1	5745	11.78	≤24.38	PASS
	Ant2	5745	12.44	≤24.38	PASS
	total	5745	15.13	≤24.38	PASS
	Ant1	5785	11.57	≤24.38	PASS
	Ant2	5785	11.23	≤24.38	PASS
	total	5785	14.41	≤24.38	PASS
	Ant1	5825	11.61	≤24.38	PASS
	Ant2	5825	12.34	≤24.38	PASS
	total	5825	15.00	≤24.38	PASS
11AC40MIMO	Ant1	5190	7.85	≤24.38	PASS
	Ant2	5190	8.33	≤24.38	PASS
	total	5190	11.11	≤24.38	PASS
	Ant1	5230	7.72	≤24.38	PASS
	Ant2	5230	7.49	≤24.38	PASS
	total	5230	10.62	≤24.38	PASS
	Ant1	5270	12.17	≤18.36	PASS
	Ant2	5270	12.14	≤18.36	PASS
	total	5270	15.17	≤18.36	PASS
	Ant1	5310	12.19	≤18.36	PASS
	Ant2	5310	12.47	≤18.36	PASS
	total	5310	15.34	≤18.36	PASS
	Ant1	5510	11.88	≤18.36	PASS
	Ant2	5510	11.66	≤18.36	PASS
	total	5510	14.78	≤18.36	PASS
	Ant1	5550	12.03	≤18.36	PASS
	Ant2	5550	11.56	≤18.36	PASS
	total	5550	14.81	≤18.36	PASS
	Ant1	5670	11.93	≤18.36	PASS
	Ant2	5670	12.05	≤18.36	PASS
	total	5670	15.00	≤18.36	PASS
	Ant1	5755	12.04	≤24.38	PASS
	Ant2	5755	12.86	≤24.38	PASS
	total	5755	15.48	≤24.38	PASS
Ant1	5795	11.87	≤24.38	PASS	
Ant2	5795	11.59	≤24.38	PASS	
total	5795	14.74	≤24.38	PASS	
11AC80MIMO	Ant1	5210	7.55	≤24.38	PASS
	Ant2	5210	7.26	≤24.38	PASS
	total	5210	10.42	≤24.38	PASS
	Ant1	5290	12.03	≤18.36	PASS

	Ant2	5290	12.41	≤18.36	PASS
	total	5290	15.23	≤18.36	PASS
	Ant1	5530	12.70	≤18.36	PASS
	Ant2	5530	12.73	≤18.36	PASS
	total	5530	15.73	≤18.36	PASS
	Ant1	5610	12.44	≤18.36	PASS
	Ant2	5610	12.29	≤18.36	PASS
	total	5610	15.38	≤18.36	PASS
	Ant1	5775	12.88	≤24.38	PASS
	Ant2	5775	12.81	≤24.38	PASS
total	5775	15.86	≤24.38	PASS	
11AX20MIMO	Ant1	5180	5.46	≤24.38	PASS
	Ant2	5180	5.76	≤24.38	PASS
	total	5180	8.62	≤24.38	PASS
	Ant1	5200	5.76	≤24.38	PASS
	Ant2	5200	6.00	≤24.38	PASS
	total	5200	8.89	≤24.38	PASS
	Ant1	5240	6.63	≤24.38	PASS
	Ant2	5240	6.01	≤24.38	PASS
	total	5240	9.34	≤24.38	PASS
	Ant1	5260	11.71	≤18.36	PASS
	Ant2	5260	11.84	≤18.36	PASS
	total	5260	14.79	≤18.36	PASS
	Ant1	5280	12.50	≤18.36	PASS
	Ant2	5280	12.27	≤18.36	PASS
	total	5280	15.40	≤18.36	PASS
	Ant1	5320	11.85	≤18.36	PASS
	Ant2	5320	12.50	≤18.36	PASS
	total	5320	15.20	≤18.36	PASS
	Ant1	5500	11.29	≤18.36	PASS
	Ant2	5500	10.97	≤18.36	PASS
	total	5500	14.14	≤18.36	PASS
	Ant1	5580	11.36	≤18.36	PASS
	Ant2	5580	11.45	≤18.36	PASS
	total	5580	14.42	≤18.36	PASS
	Ant1	5700	12.03	≤18.36	PASS
	Ant2	5700	12.60	≤18.36	PASS
	total	5700	15.33	≤18.36	PASS
Ant1	5745	11.92	≤24.38	PASS	
Ant2	5745	12.56	≤24.38	PASS	
total	5745	15.26	≤24.38	PASS	
Ant1	5785	11.76	≤24.38	PASS	

	Ant2	5785	11.43	≤24.38	PASS
	total	5785	14.61	≤24.38	PASS
	Ant1	5825	11.56	≤24.38	PASS
	Ant2	5825	12.31	≤24.38	PASS
	total	5825	14.96	≤24.38	PASS
11AX40MIMO	Ant1	5190	7.29	≤24.38	PASS
	Ant2	5190	7.70	≤24.38	PASS
	total	5190	10.51	≤24.38	PASS
	Ant1	5230	7.49	≤24.38	PASS
	Ant2	5230	7.14	≤24.38	PASS
	total	5230	10.33	≤24.38	PASS
	Ant1	5270	12.01	≤18.36	PASS
	Ant2	5270	12.40	≤18.36	PASS
	total	5270	15.22	≤18.36	PASS
	Ant1	5310	12.32	≤18.36	PASS
	Ant2	5310	12.60	≤18.36	PASS
	total	5310	15.47	≤18.36	PASS
	Ant1	5510	11.99	≤18.36	PASS
	Ant2	5510	11.92	≤18.36	PASS
	total	5510	14.97	≤18.36	PASS
	Ant1	5550	12.53	≤18.36	PASS
	Ant2	5550	12.21	≤18.36	PASS
	total	5550	15.38	≤18.36	PASS
	Ant1	5670	12.15	≤18.36	PASS
	Ant2	5670	12.23	≤18.36	PASS
	total	5670	15.20	≤18.36	PASS
	Ant1	5755	12.31	≤24.38	PASS
	Ant2	5755	13.01	≤24.38	PASS
	total	5755	15.68	≤24.38	PASS
	Ant1	5795	11.99	≤24.38	PASS
	Ant2	5795	11.93	≤24.38	PASS
	total	5795	14.97	≤24.38	PASS
11AX80MIMO	Ant1	5210	7.39	≤24.38	PASS
	Ant2	5210	7.21	≤24.38	PASS
	total	5210	10.31	≤24.38	PASS
	Ant1	5290	12.52	≤18.36	PASS
	Ant2	5290	12.80	≤18.36	PASS
	total	5290	15.67	≤18.36	PASS
	Ant1	5530	11.47	≤18.36	PASS
	Ant2	5530	11.56	≤18.36	PASS
	total	5530	14.53	≤18.36	PASS
	Ant1	5610	12.71	≤18.36	PASS

	Ant2	5610	12.73	≤18.36	PASS
	total	5610	15.73	≤18.36	PASS
	Ant1	5775	11.72	≤24.38	PASS
	Ant2	5775	11.71	≤24.38	PASS
	total	5775	14.73	≤24.38	PASS
11AX160MIMO	Ant1	5250_UNII-1	8.32	≤24.38	PASS
	Ant2	5250_UNII-1	7.96	≤24.38	PASS
	total	5250_UNII-1	11.15	≤24.38	PASS
	Ant1	5250_UNII-2A	9.37	≤18.36	PASS
	Ant2	5250_UNII-2A	9.10	≤18.36	PASS
	total	5250_UNII-2A	12.25	≤18.36	PASS
	Ant1	5570	11.87	≤18.36	PASS
	Ant2	5570	11.54	≤18.36	PASS
	total	5570	14.72	≤18.36	PASS

Note: The Duty Cycle Factor is compensated in the test system

For MIMO mode

Unequal antenna gains, with equal transmit powers. For antenna gains given by  $G_1, G_2, \dots, G_N$  dBi

If transmit signals are correlated, then Directional gain =  $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$  dBi

[Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to

combine the signal levels coherently.]

Directional gain =  $10 \log[(10^{5.86/20} + 10^{6.36/20})^2 / N_{ANT}]$  dBi=9.12 dBi

Correlated chains directional gain=9.12+2.5=11.62dBi

### 3.5 Power Spectral Density

#### 3.5.1 Limit

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Power Spectral Density	Master device: 17 dBm/MHz Client device: 11 dBm/MHz	5150-5250
		11 dBm/MHz	5250-5350
		11 dBm/MHz	5470-5725
		30 dBm/500 kHz	5725-5850

Note:

- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 300kHz and VBW at 1500kHz if the spectrum analyzer does not have 500 kHz RBW. Then, add 10 log (500 kHz/300 kHz) to the measured result, i.e. 2.22 dB.
- During the test of U-NII 3 PSD, the measurement result with RBW=300kHz has been added 2.22 dB by compensating offset, offset=cable loss+duty factor+10log(500kHz/300kHz).

#### 3.5.2 Test Procedure

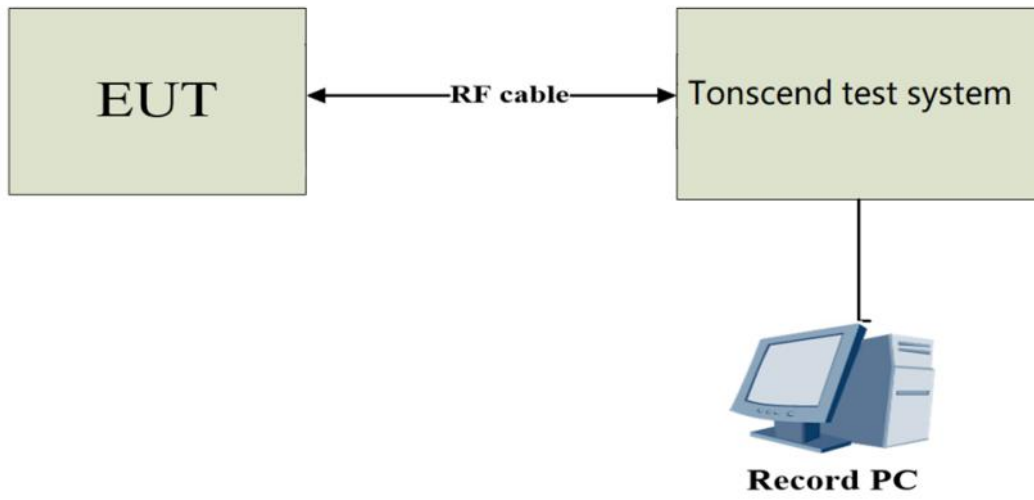
Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ●:Test    ○:No Test	

a) The EUT was directly connected to the tonscend test system and antenna output port as show in the block diagram below. Spectrum analyser settings as following:

Centre Frequency	The centre frequency of the channel under test
RBW	= 1 MHz (Band1/2/3); = 500kHz (Band4)
VBW	≥3 x RBW
Frequency span	2 x Nominal Channel Bandwidth
Detector Mode	RMS
Trace Mode	Max Hold
Sweep Time	Auto Couple



### 3.5.3 Test Setup



### 3.5.4 The Result

Test Mode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A-CDD	Ant1	5180	-3.31	≤13.88	PASS
	Ant2	5180	-2.24	≤13.88	PASS
	total	5180	0.27	≤13.88	PASS
	Ant1	5200	-2.82	≤13.88	PASS
	Ant2	5200	-2.71	≤13.88	PASS
	total	5200	0.25	≤13.88	PASS
	Ant1	5240	-4.15	≤13.88	PASS
	Ant2	5240	-2.73	≤13.88	PASS
	total	5240	-0.37	≤13.88	PASS
	Ant1	5260	4.35	≤7.88	PASS
	Ant2	5260	4.98	≤7.88	PASS
	total	5260	7.69	≤7.88	PASS
	Ant1	5280	4.57	≤7.88	PASS
	Ant2	5280	4.27	≤7.88	PASS
	total	5280	7.43	≤7.88	PASS
	Ant1	5320	3.53	≤7.88	PASS
	Ant2	5320	3.8	≤7.88	PASS
	total	5320	6.68	≤7.88	PASS
	Ant1	5500	3.38	≤7.88	PASS
	Ant2	5500	2.68	≤7.88	PASS
	total	5500	6.05	≤7.88	PASS
	Ant1	5580	2.95	≤7.88	PASS
	Ant2	5580	3.33	≤7.88	PASS
	total	5580	6.15	≤7.88	PASS
	Ant1	5700	4.66	≤7.88	PASS
	Ant2	5700	4.32	≤7.88	PASS
	total	5700	7.50	≤7.88	PASS
	Ant1	5745	0.63	≤26.88	PASS
	Ant2	5745	2.16	≤26.88	PASS
	total	5745	4.47	≤26.88	PASS
	Ant1	5785	2.05	≤26.88	PASS
	Ant2	5785	1.81	≤26.88	PASS
	total	5785	4.94	≤26.88	PASS
Ant1	5825	0.84	≤26.88	PASS	
Ant2	5825	1.72	≤26.88	PASS	
total	5825	4.31	≤26.88	PASS	
11N20MIMO	Ant1	5180	-3.05	≤13.88	PASS
	Ant2	5180	-2.47	≤13.88	PASS
	total	5180	0.26	≤13.88	PASS

	Ant1	5200	-2.94	≤13.88	PASS
	Ant2	5200	-2.65	≤13.88	PASS
	total	5200	0.22	≤13.88	PASS
	Ant1	5240	-2.43	≤13.88	PASS
	Ant2	5240	-2.49	≤13.88	PASS
	total	5240	0.55	≤13.88	PASS
	Ant1	5260	3.07	≤7.88	PASS
	Ant2	5260	3.24	≤7.88	PASS
	total	5260	6.17	≤7.88	PASS
	Ant1	5280	2.86	≤7.88	PASS
	Ant2	5280	3.31	≤7.88	PASS
	total	5280	6.10	≤7.88	PASS
	Ant1	5320	2.94	≤7.88	PASS
	Ant2	5320	4.02	≤7.88	PASS
	total	5320	6.52	≤7.88	PASS
	Ant1	5500	2.83	≤7.88	PASS
	Ant2	5500	2.57	≤7.88	PASS
	total	5500	5.71	≤7.88	PASS
	Ant1	5580	2.52	≤7.88	PASS
	Ant2	5580	2.77	≤7.88	PASS
	total	5580	5.66	≤7.88	PASS
	Ant1	5700	3.11	≤7.88	PASS
	Ant2	5700	3.81	≤7.88	PASS
	total	5700	6.48	≤7.88	PASS
	Ant1	5745	0.79	≤26.88	PASS
	Ant2	5745	2.43	≤26.88	PASS
	total	5745	4.70	≤26.88	PASS
	Ant1	5785	0.93	≤26.88	PASS
	Ant2	5785	0.57	≤26.88	PASS
	total	5785	3.76	≤26.88	PASS
Ant1	5825	0.4	≤26.88	PASS	
Ant2	5825	1.54	≤26.88	PASS	
total	5825	4.02	≤26.88	PASS	
11N40MIMO	Ant1	5190	-3.07	≤13.88	PASS
	Ant2	5190	-1.81	≤13.88	PASS
	total	5190	0.62	≤13.88	PASS
	Ant1	5230	-2.14	≤13.88	PASS
	Ant2	5230	-2.18	≤13.88	PASS
	total	5230	0.85	≤13.88	PASS
	Ant1	5270	2.64	≤7.88	PASS
	Ant2	5270	2.84	≤7.88	PASS
	total	5270	5.75	≤7.88	PASS

	Ant1	5310	1.88	≤7.88	PASS
	Ant2	5310	1.83	≤7.88	PASS
	total	5310	4.87	≤7.88	PASS
	Ant1	5510	1.16	≤7.88	PASS
	Ant2	5510	0.57	≤7.88	PASS
	total	5510	3.89	≤7.88	PASS
	Ant1	5550	2.32	≤7.88	PASS
	Ant2	5550	1.68	≤7.88	PASS
	total	5550	5.02	≤7.88	PASS
	Ant1	5670	1.2	≤7.88	PASS
	Ant2	5670	1.71	≤7.88	PASS
	total	5670	4.47	≤7.88	PASS
	Ant1	5755	-0.62	≤26.88	PASS
	Ant2	5755	0.59	≤26.88	PASS
	total	5755	3.04	≤26.88	PASS
	Ant1	5795	0.38	≤26.88	PASS
	Ant2	5795	-0.66	≤26.88	PASS
	total	5795	2.90	≤26.88	PASS
11AC20MIMO	Ant1	5180	-2.85	≤13.88	PASS
	Ant2	5180	-2.69	≤13.88	PASS
	total	5180	0.24	≤13.88	PASS
	Ant1	5200	-3.21	≤13.88	PASS
	Ant2	5200	-2.95	≤13.88	PASS
	total	5200	-0.07	≤13.88	PASS
	Ant1	5240	-2.25	≤13.88	PASS
	Ant2	5240	-2.27	≤13.88	PASS
	total	5240	0.75	≤13.88	PASS
	Ant1	5260	3.81	≤7.88	PASS
	Ant2	5260	3.28	≤7.88	PASS
	total	5260	6.56	≤7.88	PASS
	Ant1	5280	3.64	≤7.88	PASS
	Ant2	5280	3.2	≤7.88	PASS
	total	5280	6.44	≤7.88	PASS
	Ant1	5320	3.47	≤7.88	PASS
	Ant2	5320	4.31	≤7.88	PASS
	total	5320	6.92	≤7.88	PASS
	Ant1	5500	2.98	≤7.88	PASS
	Ant2	5500	2.6	≤7.88	PASS
	total	5500	5.80	≤7.88	PASS
Ant1	5580	3.27	≤7.88	PASS	
Ant2	5580	3.41	≤7.88	PASS	
total	5580	6.35	≤7.88	PASS	

	Ant1	5700	3.38	≤7.88	PASS
	Ant2	5700	4.2	≤7.88	PASS
	total	5700	6.82	≤7.88	PASS
	Ant1	5745	1.04	≤26.88	PASS
	Ant2	5745	1.62	≤26.88	PASS
	total	5745	4.35	≤26.88	PASS
	Ant1	5785	0.92	≤26.88	PASS
	Ant2	5785	0.45	≤26.88	PASS
	total	5785	3.70	≤26.88	PASS
	Ant1	5825	1.69	≤26.88	PASS
	Ant2	5825	1.66	≤26.88	PASS
	total	5825	4.69	≤26.88	PASS
11AC40MIMO	Ant1	5190	-3.12	≤13.88	PASS
	Ant2	5190	-2.87	≤13.88	PASS
	total	5190	0.02	≤13.88	PASS
	Ant1	5230	-2.64	≤13.88	PASS
	Ant2	5230	-3.1	≤13.88	PASS
	total	5230	0.15	≤13.88	PASS
	Ant1	5270	1.29	≤7.88	PASS
	Ant2	5270	1.2	≤7.88	PASS
	total	5270	4.26	≤7.88	PASS
	Ant1	5310	1.85	≤7.88	PASS
	Ant2	5310	1.13	≤7.88	PASS
	total	5310	4.52	≤7.88	PASS
	Ant1	5510	0.7	≤7.88	PASS
	Ant2	5510	0.47	≤7.88	PASS
	total	5510	3.60	≤7.88	PASS
	Ant1	5550	1.67	≤7.88	PASS
	Ant2	5550	1.03	≤7.88	PASS
	total	5550	4.37	≤7.88	PASS
	Ant1	5670	1.07	≤7.88	PASS
	Ant2	5670	0.82	≤7.88	PASS
	total	5670	3.96	≤7.88	PASS
	Ant1	5755	-0.75	≤26.88	PASS
	Ant2	5755	-0.12	≤26.88	PASS
	total	5755	2.59	≤26.88	PASS
Ant1	5795	-0.88	≤26.88	PASS	
Ant2	5795	-1.41	≤26.88	PASS	
total	5795	1.87	≤26.88	PASS	
11AC80MIMO	Ant1	5210	-2.34	≤13.88	PASS
	Ant2	5210	-2.96	≤13.88	PASS
	total	5210	0.37	≤13.88	PASS

	Ant1	5290	-0.81	≤7.88	PASS
	Ant2	5290	-0.6	≤7.88	PASS
	total	5290	2.31	≤7.88	PASS
	Ant1	5530	-1.08	≤7.88	PASS
	Ant2	5530	-1.06	≤7.88	PASS
	total	5530	1.94	≤7.88	PASS
	Ant1	5610	-1.29	≤7.88	PASS
	Ant2	5610	-1.38	≤7.88	PASS
	total	5610	1.68	≤7.88	PASS
	Ant1	5775	-2.48	≤26.88	PASS
	Ant2	5775	-3.38	≤26.88	PASS
	total	5775	0.10	≤26.88	PASS
11AX20MIMO	Ant1	5180	-3.04	≤13.88	PASS
	Ant2	5180	-2.69	≤13.88	PASS
	total	5180	0.15	≤13.88	PASS
	Ant1	5200	-2.74	≤13.88	PASS
	Ant2	5200	-2.04	≤13.88	PASS
	total	5200	0.63	≤13.88	PASS
	Ant1	5240	-2.24	≤13.88	PASS
	Ant2	5240	-2.46	≤13.88	PASS
	total	5240	0.66	≤13.88	PASS
	Ant1	5260	3.21	≤7.88	PASS
	Ant2	5260	3.55	≤7.88	PASS
	total	5260	6.39	≤7.88	PASS
	Ant1	5280	3.7	≤7.88	PASS
	Ant2	5280	3.79	≤7.88	PASS
	total	5280	6.76	≤7.88	PASS
	Ant1	5320	3.1	≤7.88	PASS
	Ant2	5320	4	≤7.88	PASS
	total	5320	6.58	≤7.88	PASS
	Ant1	5500	2.85	≤7.88	PASS
	Ant2	5500	2.52	≤7.88	PASS
	total	5500	5.70	≤7.88	PASS
	Ant1	5580	2.83	≤7.88	PASS
	Ant2	5580	3.22	≤7.88	PASS
	total	5580	6.04	≤7.88	PASS
	Ant1	5700	3.89	≤7.88	PASS
	Ant2	5700	4.13	≤7.88	PASS
	total	5700	7.02	≤7.88	PASS
Ant1	5745	1.21	≤26.88	PASS	
Ant2	5745	1.78	≤26.88	PASS	
total	5745	4.51	≤26.88	PASS	

	Ant1	5785	0.64	≤26.88	PASS
	Ant2	5785	0.26	≤26.88	PASS
	total	5785	3.46	≤26.88	PASS
	Ant1	5825	0.39	≤26.88	PASS
	Ant2	5825	1.41	≤26.88	PASS
	total	5825	3.94	≤26.88	PASS
11AX40MIMO	Ant1	5190	-2.88	≤13.88	PASS
	Ant2	5190	-2.87	≤13.88	PASS
	total	5190	0.14	≤13.88	PASS
	Ant1	5230	-2.68	≤13.88	PASS
	Ant2	5230	-3.02	≤13.88	PASS
	total	5230	0.16	≤13.88	PASS
	Ant1	5270	1.28	≤7.88	PASS
	Ant2	5270	1.13	≤7.88	PASS
	total	5270	4.22	≤7.88	PASS
	Ant1	5310	1.31	≤7.88	PASS
	Ant2	5310	1.11	≤7.88	PASS
	total	5310	4.22	≤7.88	PASS
	Ant1	5510	1.16	≤7.88	PASS
	Ant2	5510	0.42	≤7.88	PASS
	total	5510	3.82	≤7.88	PASS
	Ant1	5550	1.18	≤7.88	PASS
	Ant2	5550	0.77	≤7.88	PASS
	total	5550	3.99	≤7.88	PASS
	Ant1	5670	0.84	≤7.88	PASS
	Ant2	5670	0.93	≤7.88	PASS
	total	5670	3.90	≤7.88	PASS
	Ant1	5755	-1.39	≤26.88	PASS
	Ant2	5755	-0.58	≤26.88	PASS
	total	5755	2.04	≤26.88	PASS
Ant1	5795	-1.91	≤26.88	PASS	
Ant2	5795	-1.84	≤26.88	PASS	
total	5795	1.14	≤26.88	PASS	
11AX80MIMO	Ant1	5210	-2.54	≤13.88	PASS
	Ant2	5210	-2.89	≤13.88	PASS
	total	5210	0.30	≤13.88	PASS
	Ant1	5290	-1.1	≤7.88	PASS
	Ant2	5290	-0.71	≤7.88	PASS
	total	5290	2.11	≤7.88	PASS
	Ant1	5530	-2.15	≤7.88	PASS
	Ant2	5530	-2.35	≤7.88	PASS
	total	5530	0.76	≤7.88	PASS

	Ant1	5610	-1.59	≤7.88	PASS
	Ant2	5610	-1.1	≤7.88	PASS
	total	5610	1.67	≤7.88	PASS
	Ant1	5775	-4.41	≤26.88	PASS
	Ant2	5775	-4.79	≤26.88	PASS
	total	5775	-1.59	≤26.88	PASS
11AX160MIMO	Ant1	5250_UNII-1	-5.01	≤13.88	PASS
	Ant2	5250_UNII-1	-6.03	≤13.88	PASS
	total	5250_UNII-1	-2.48	≤13.88	PASS
	Ant1	5250_UNII-2A	-2.96	≤7.88	PASS
	Ant2	5250_UNII-2A	-2.91	≤7.88	PASS
	total	5250_UNII-2A	0.08	≤7.88	PASS
	Ant1	5570	-4.88	≤7.88	PASS
	Ant2	5570	-5.37	≤7.88	PASS
	total	5570	-2.11	≤7.88	PASS

Note: The Duty Cycle Factor is compensated in the test system  
For MIMO mode

Unequal antenna gains, with equal transmit powers. For antenna gains given by  $G_1, G_2, \dots, G_N$  dBi  
If transmit signals are correlated, then Directional gain =  $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$  dBi  
[Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

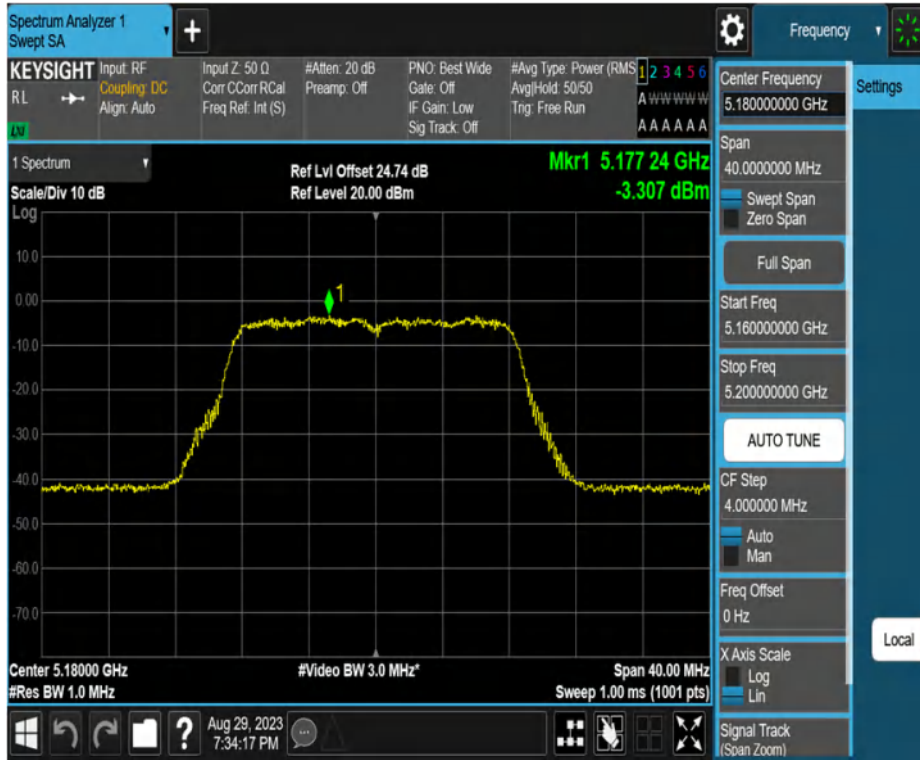
Directional gain =  $10 \log[(10^{5.86/20} + 10^{6.36/20})^2 / N_{ANT}]$  dBi=9.12 dBi

Note:

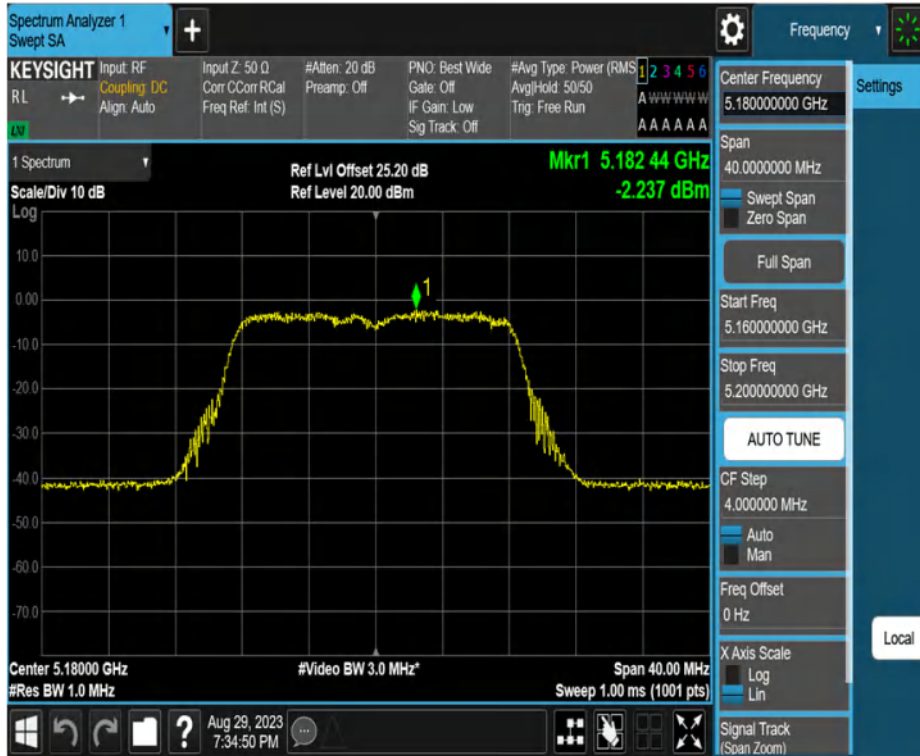
1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 300kHz and VBW at 1500kHz if the spectrum analyzer does not have 500 kHz RBW. Then, add  $10 \log(500 \text{ kHz}/300 \text{ kHz})$  to the measured result, i.e. 2.22 dB.
3. During the test of U-NII 3 PSD, the measurement result with RBW=300kHz has been added 2.22 dB by compensating offset, offset=cable loss+duty factor+ $10 \log(500 \text{ kHz}/300 \text{ kHz})$ .
4. Beamforming conducted power less than no beamforming conducted power, so only no beamforming conducted power spectral density was recorded.



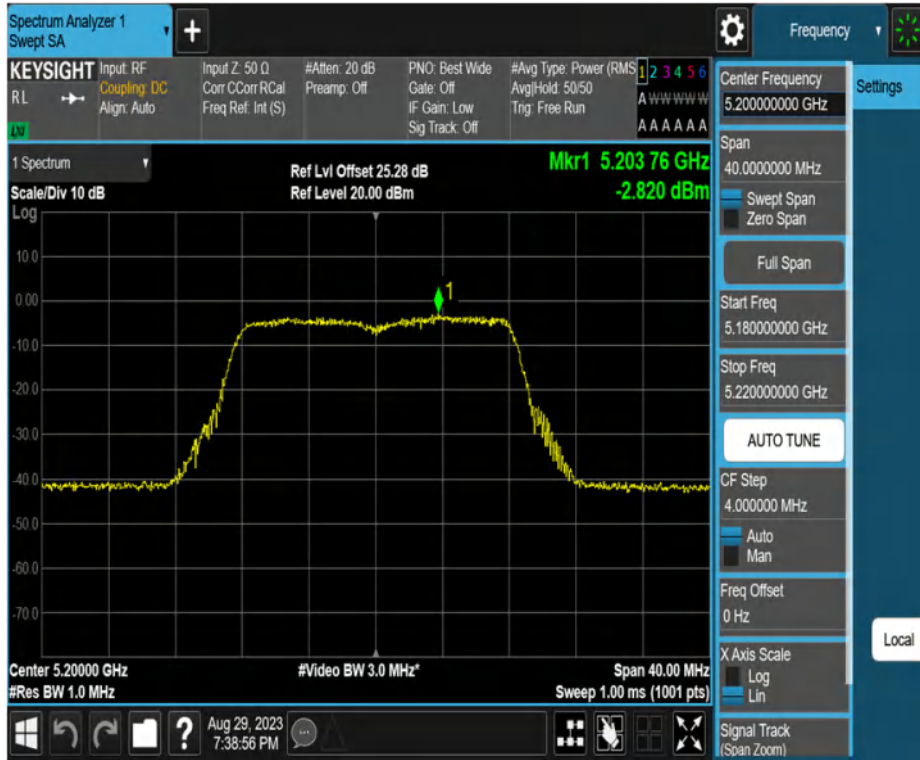
11A-CDD\_Ant1\_5180



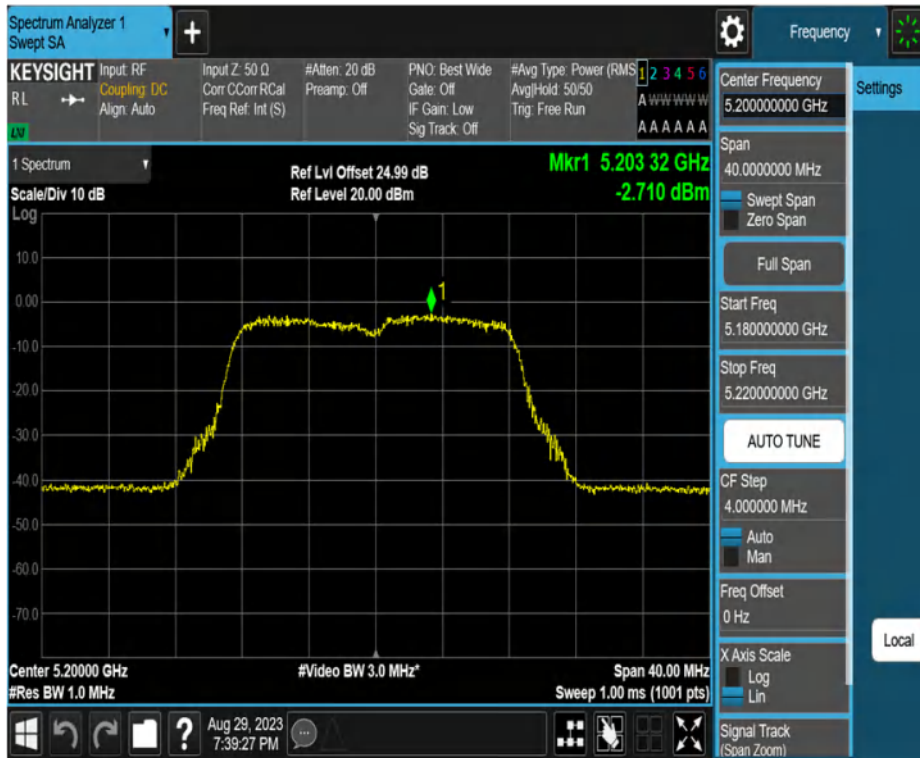
11A-CDD\_Ant2\_5180



11A-CDD\_Ant1\_5200



11A-CDD\_Ant2\_5200



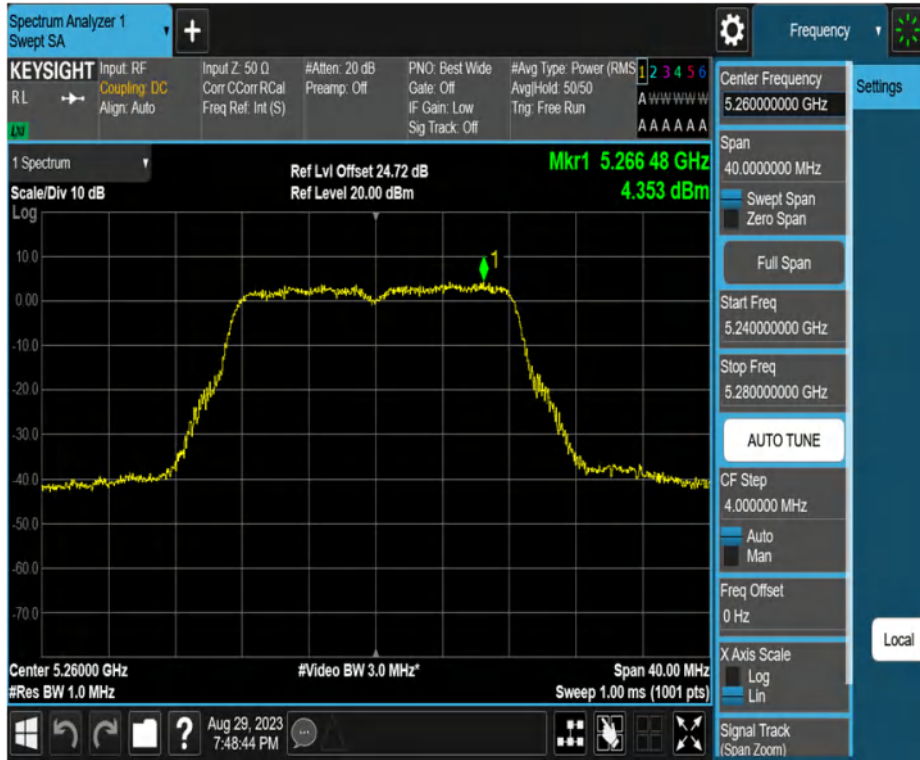
11A-CDD\_Ant1\_5240



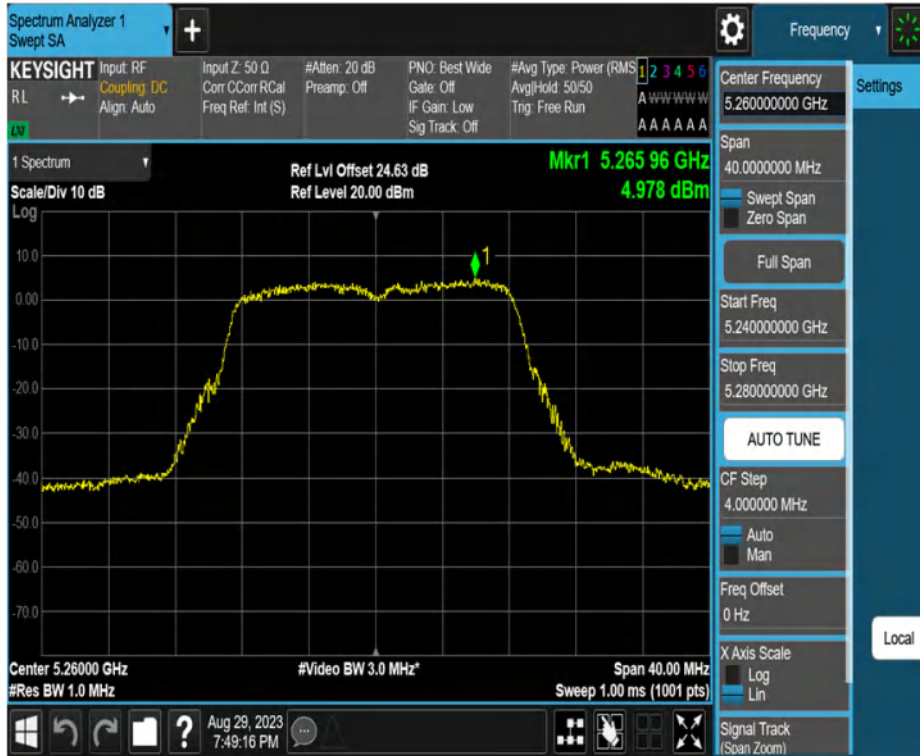
11A-CDD\_Ant2\_5240



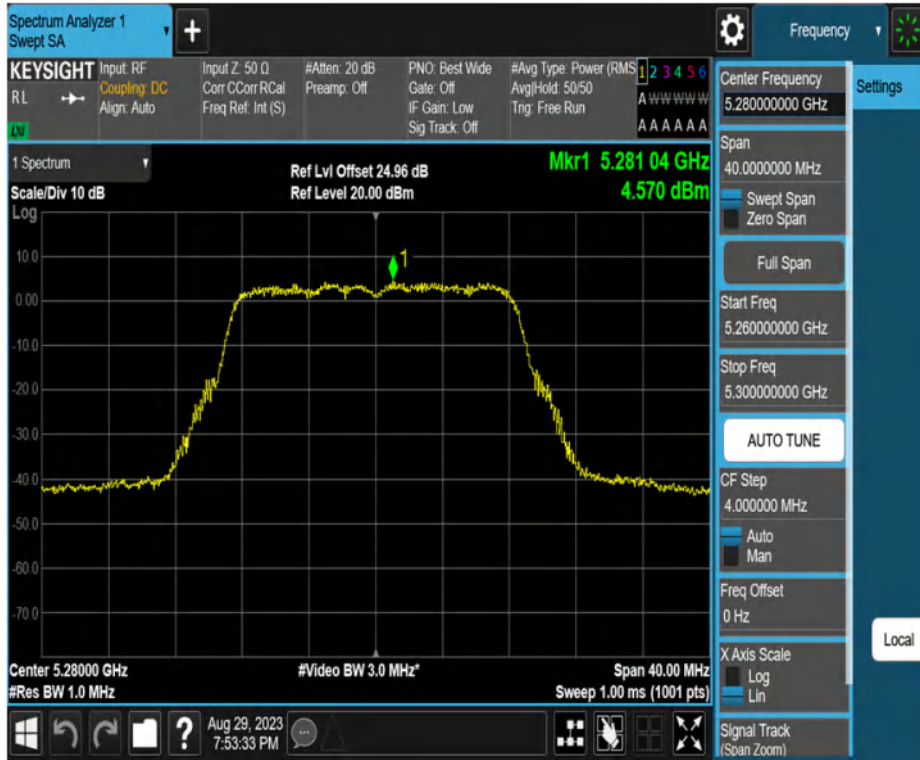
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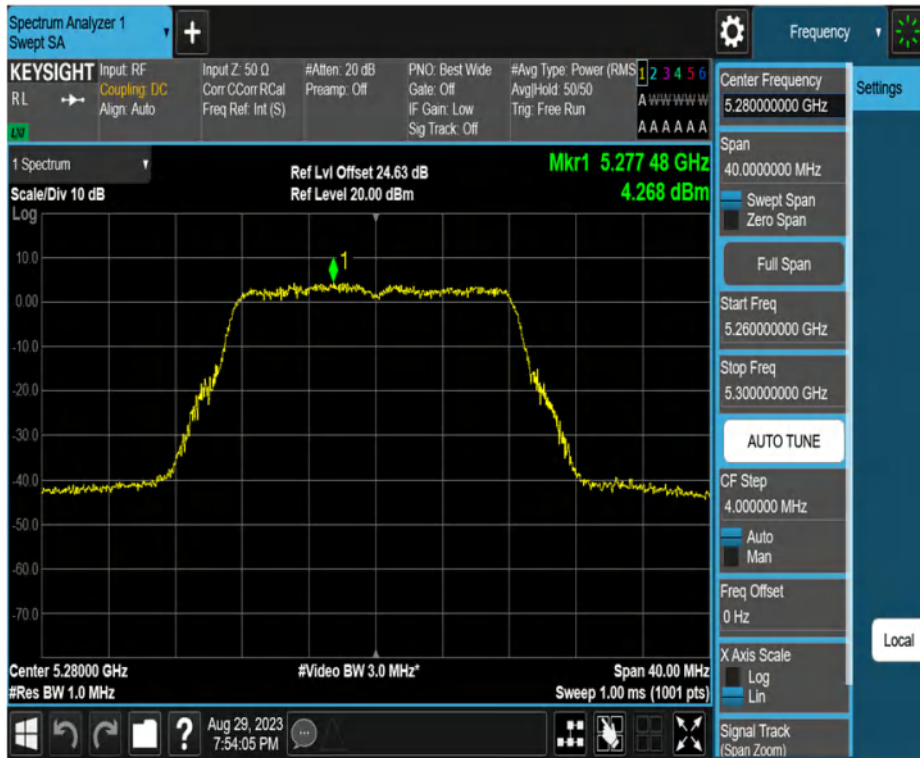
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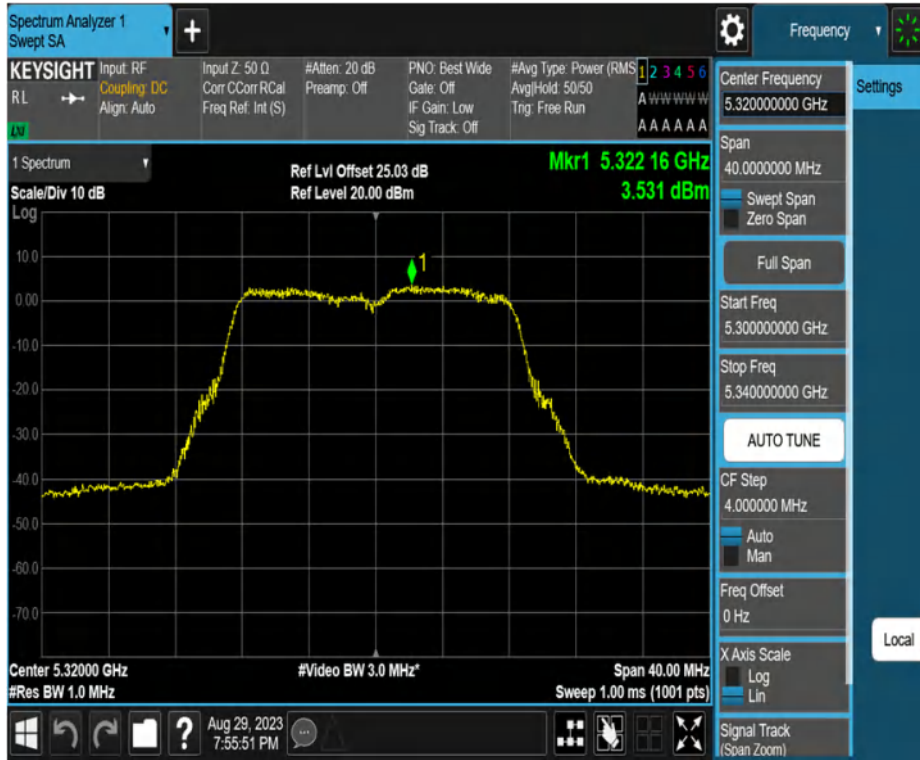
11A-CDD\_Ant1\_5280



11A-CDD\_Ant2\_5280



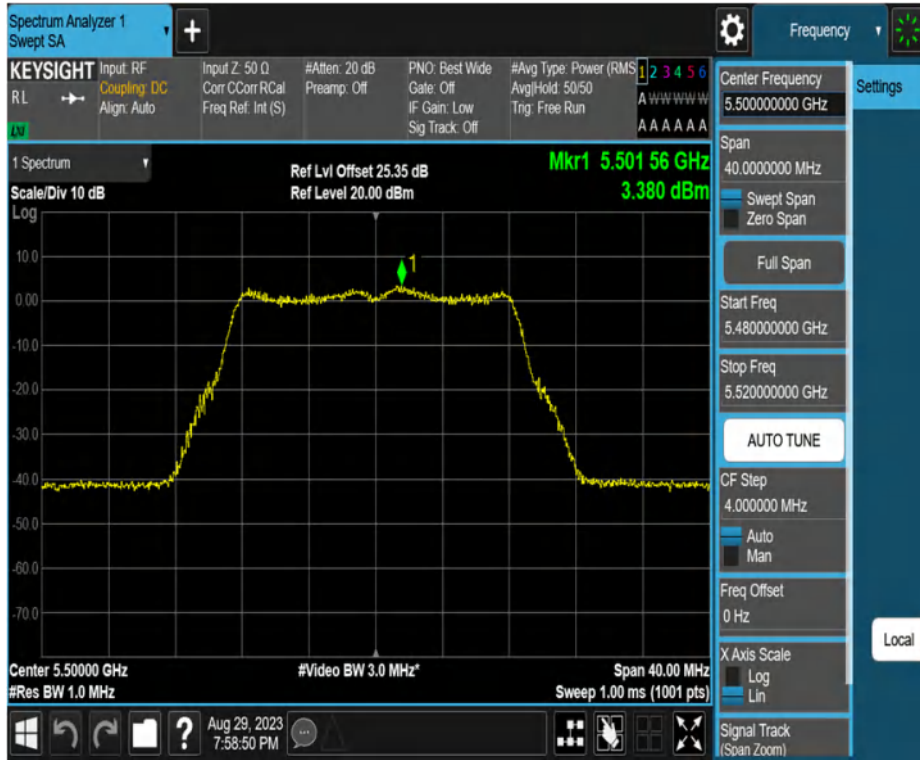
11A-CDD\_Ant1\_5320



11A-CDD\_Ant2\_5320



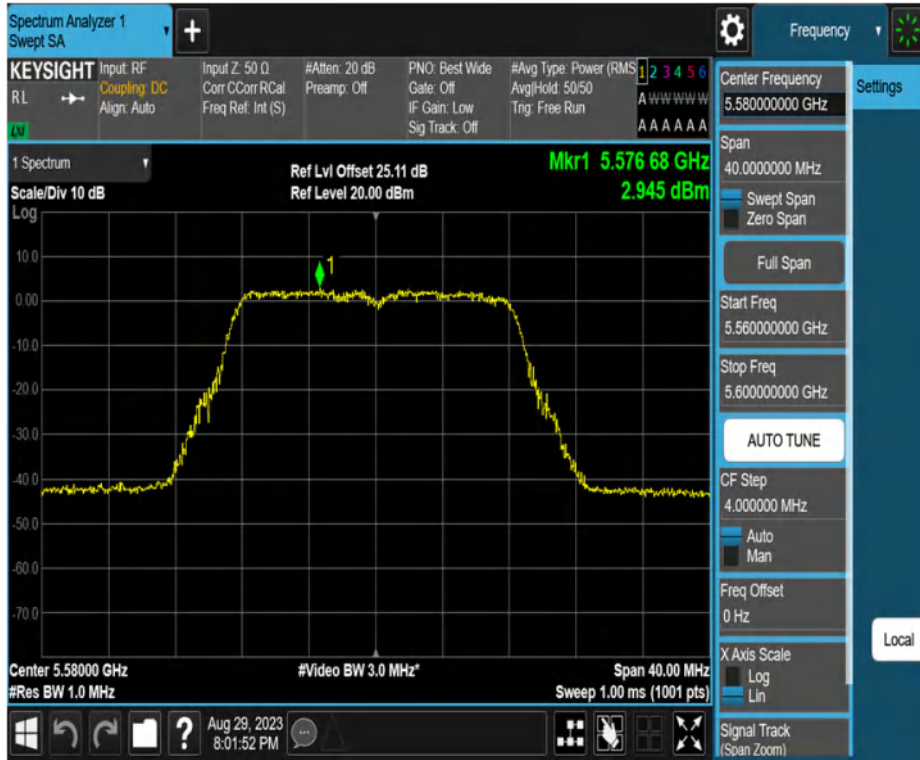
11A-CDD\_Ant1\_5500



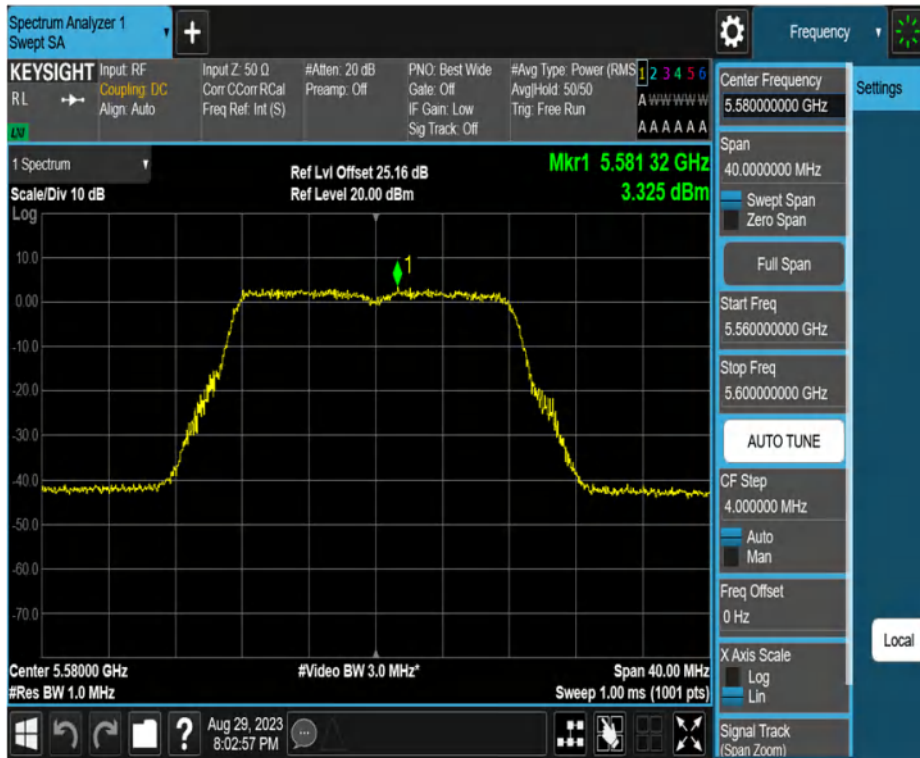
11A-CDD\_Ant2\_5500



11A-CDD\_Ant1\_5580

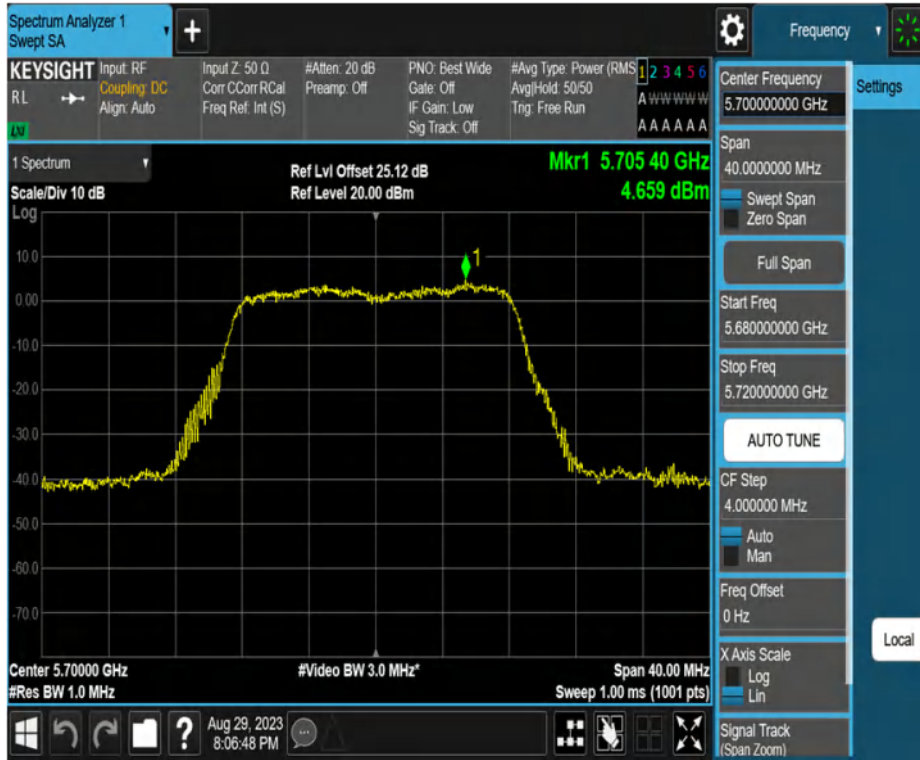


11A-CDD\_Ant2\_5580

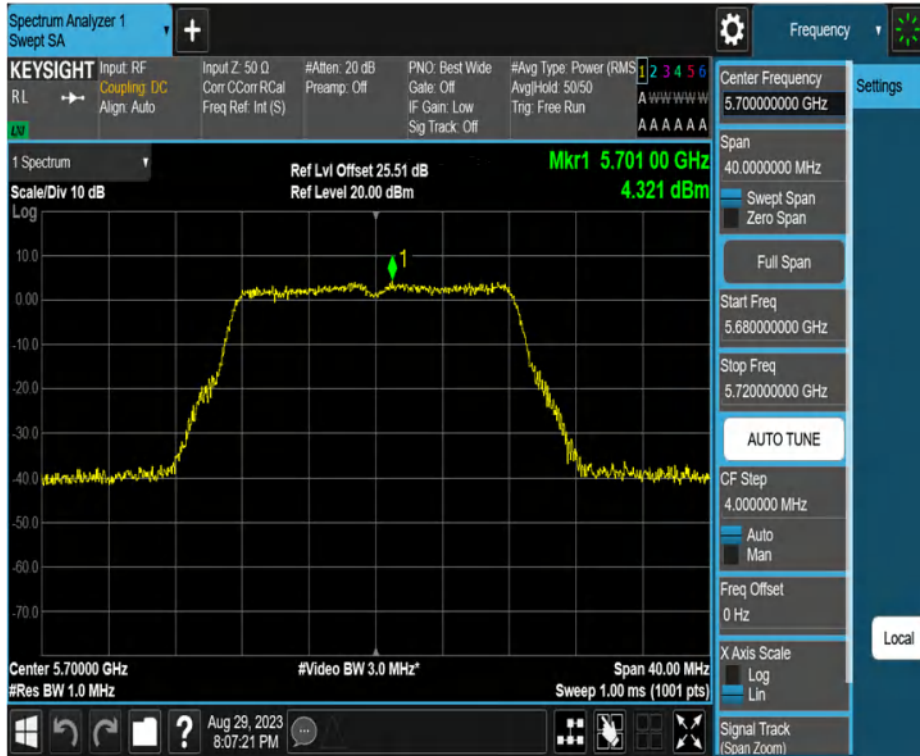




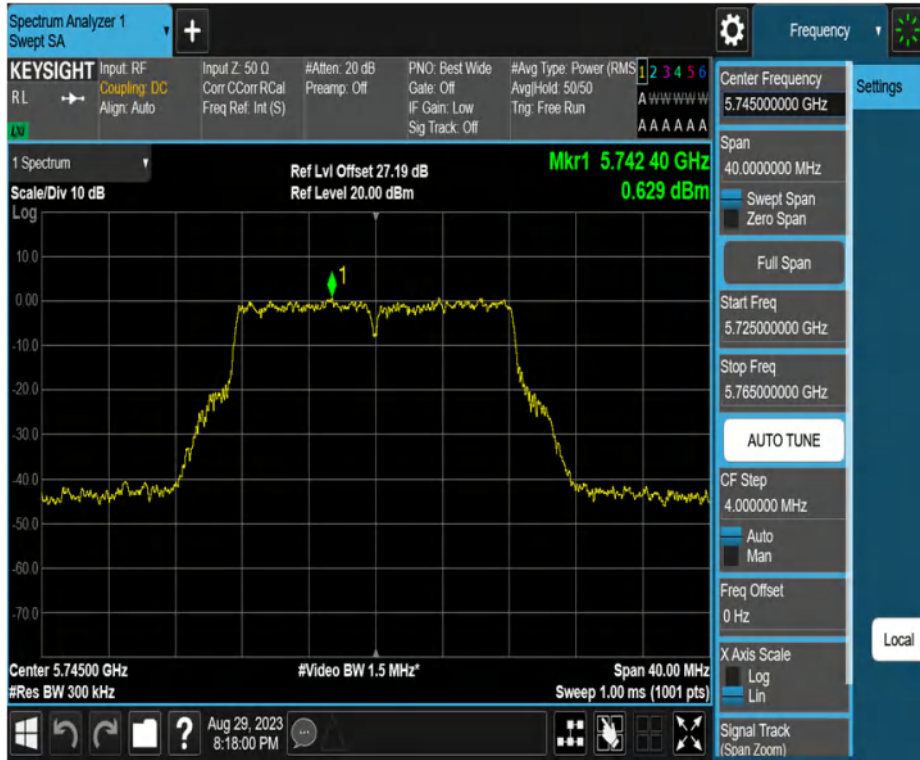
11A-CDD\_Ant1\_5700



11A-CDD\_Ant2\_5700



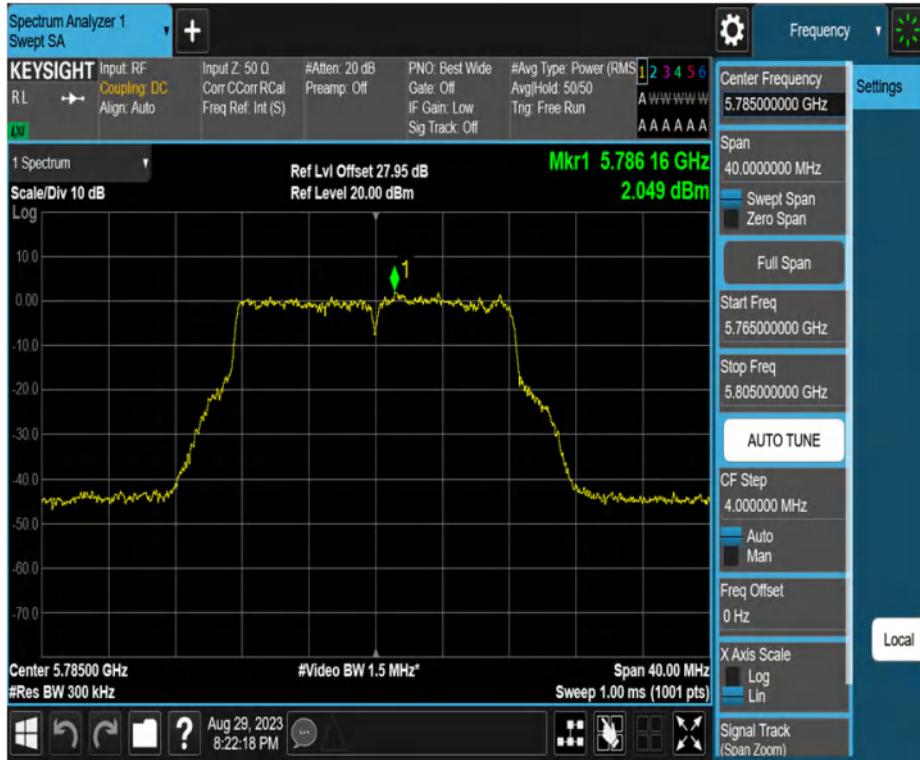
11A-CDD\_Ant1\_5745



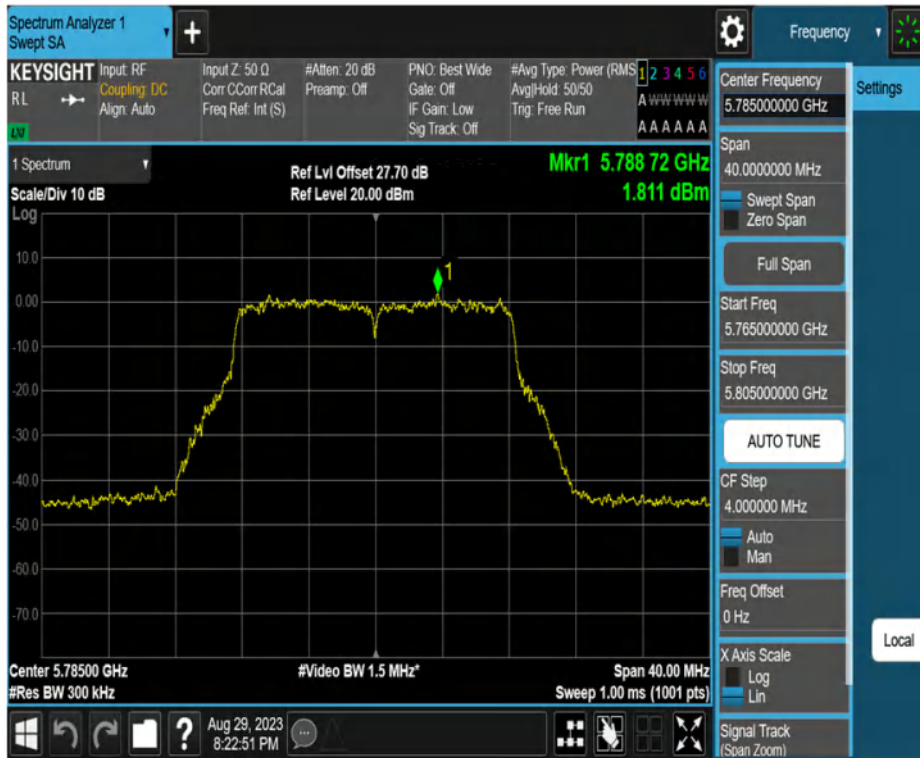
11A-CDD\_Ant2\_5745



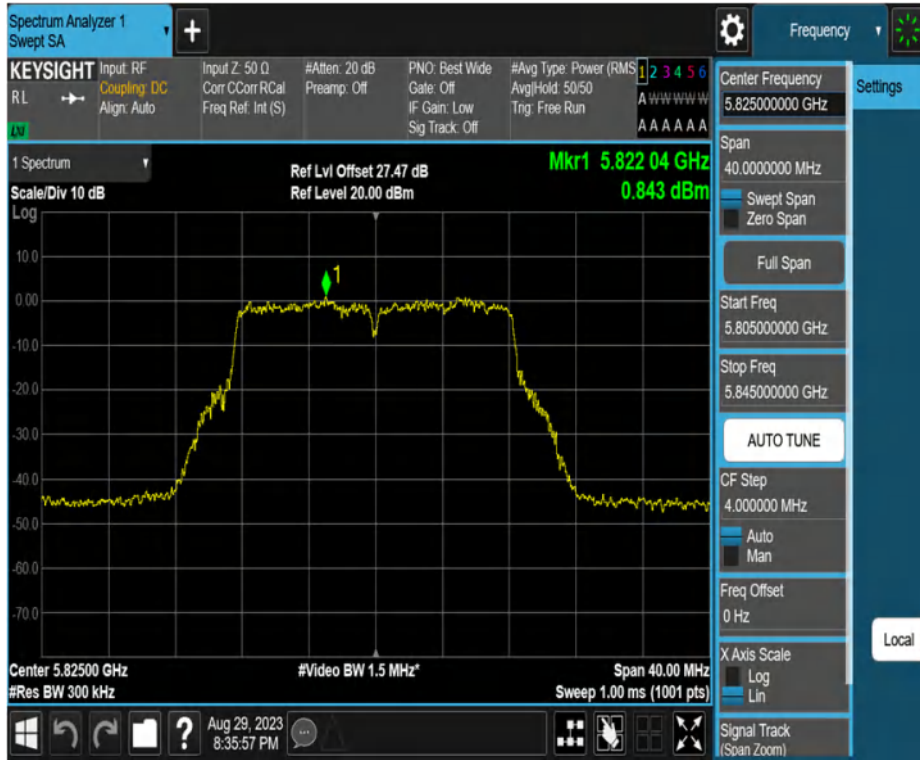
11A-CDD\_Ant1\_5785



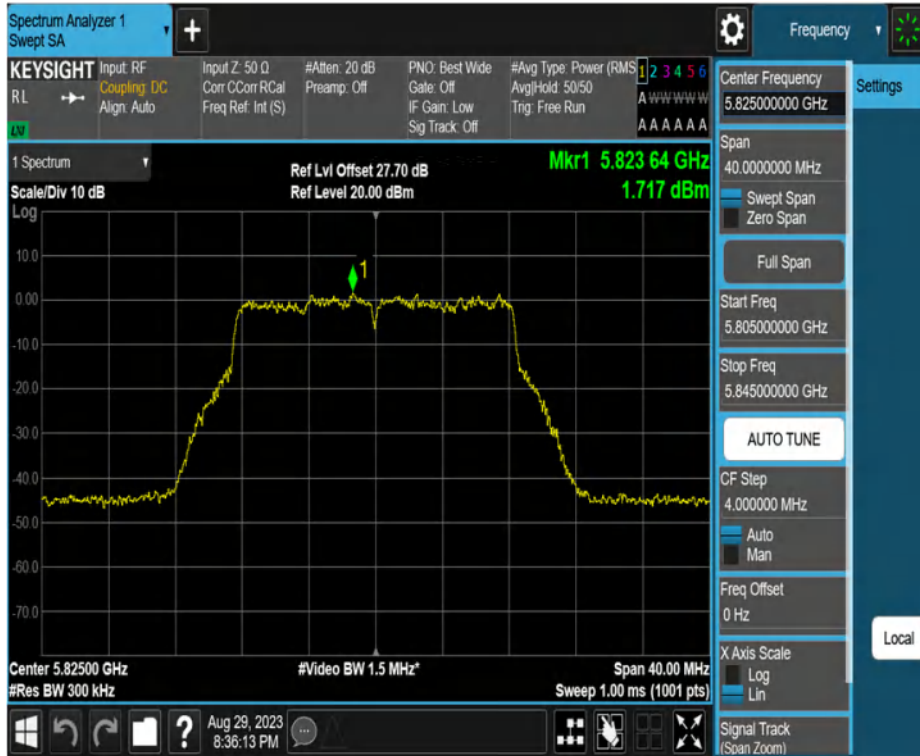
11A-CDD\_Ant2\_5785



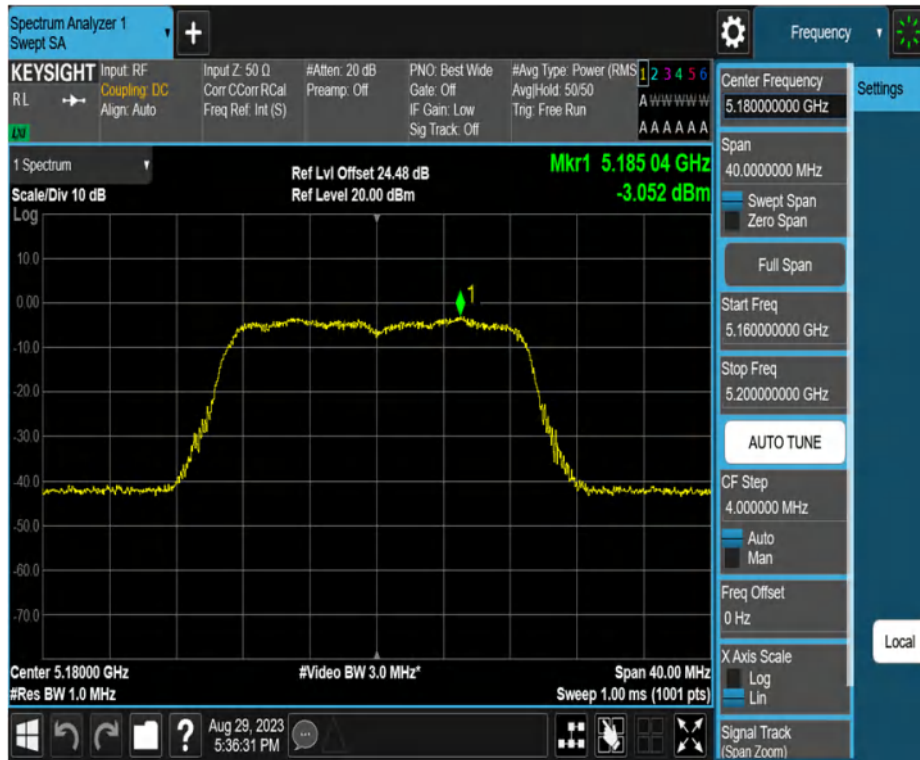
11A-CDD\_Ant1\_5825



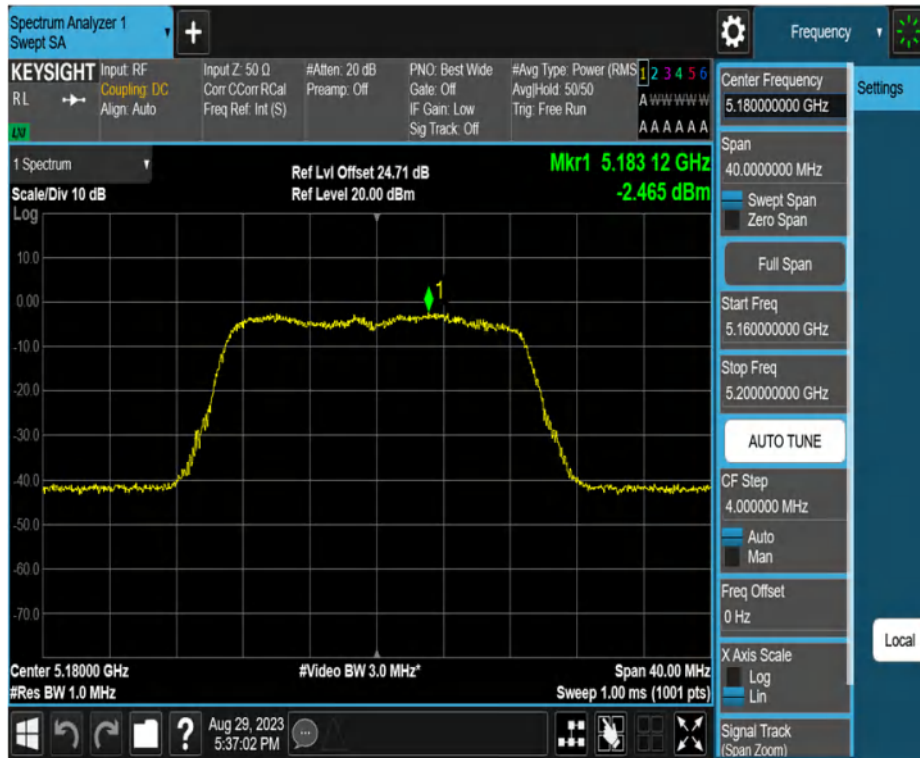
11A-CDD\_Ant2\_5825



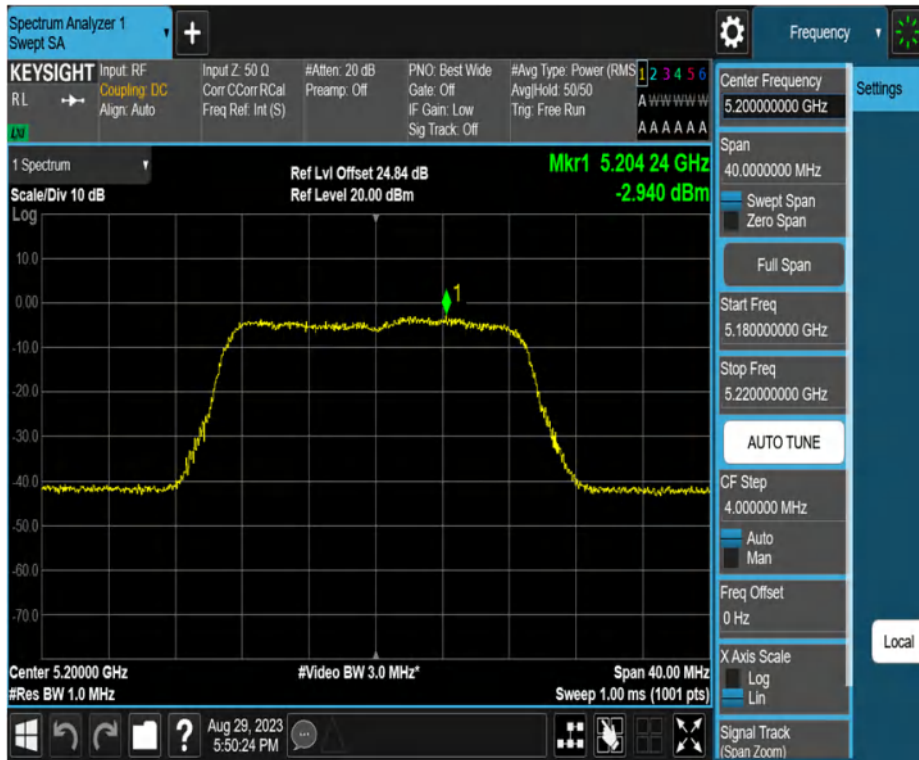
11N20MIMO\_Ant1\_5180



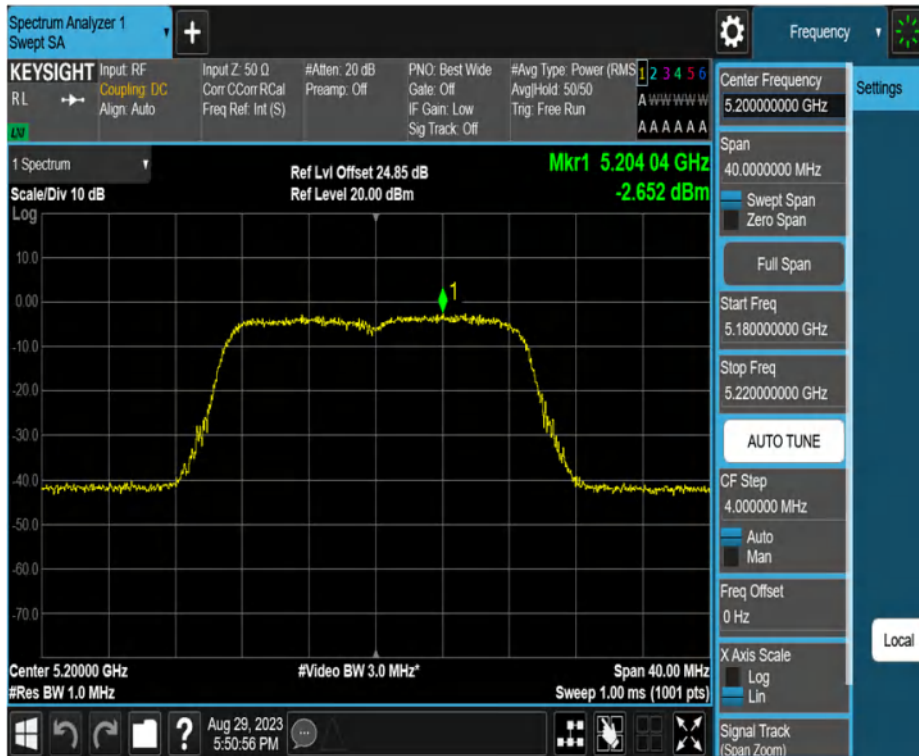
11N20MIMO\_Ant2\_5180



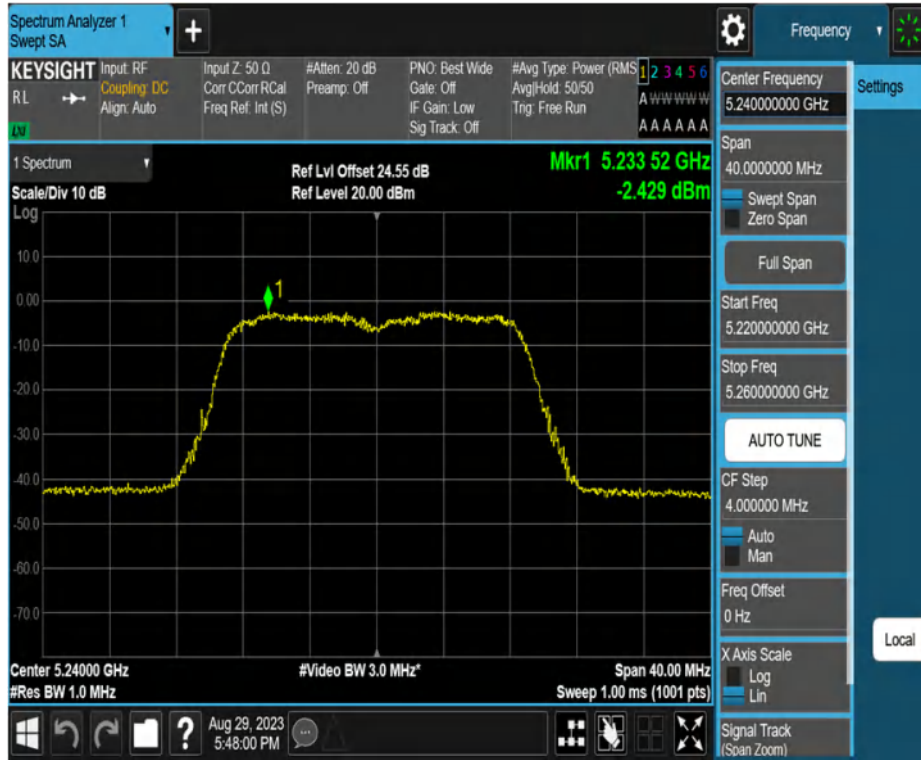
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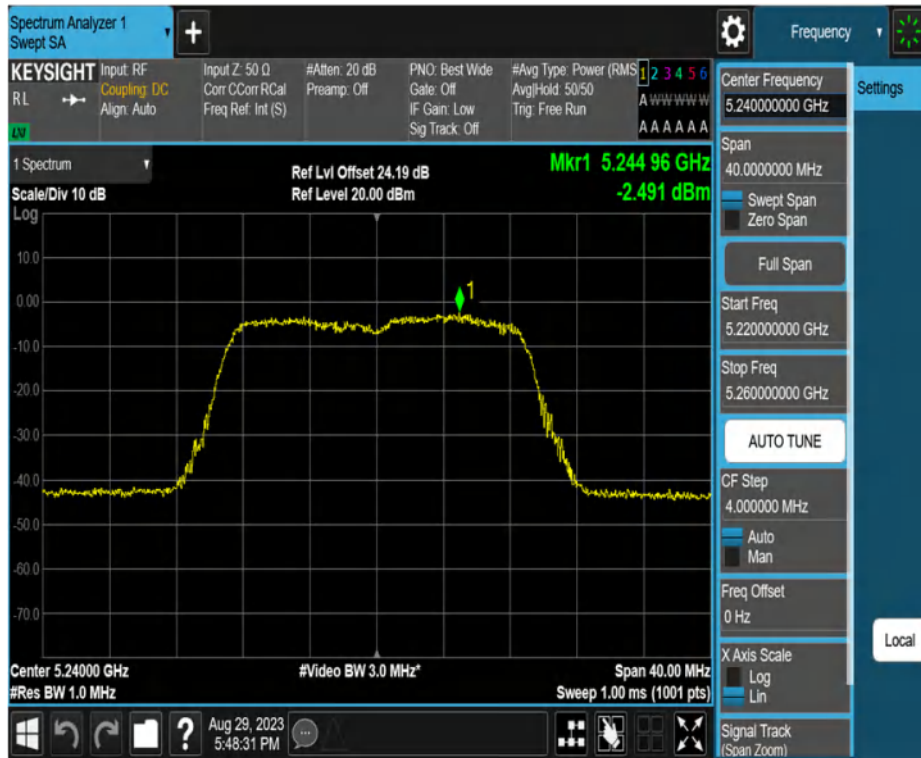
11N20MIMO\_Ant2\_5200



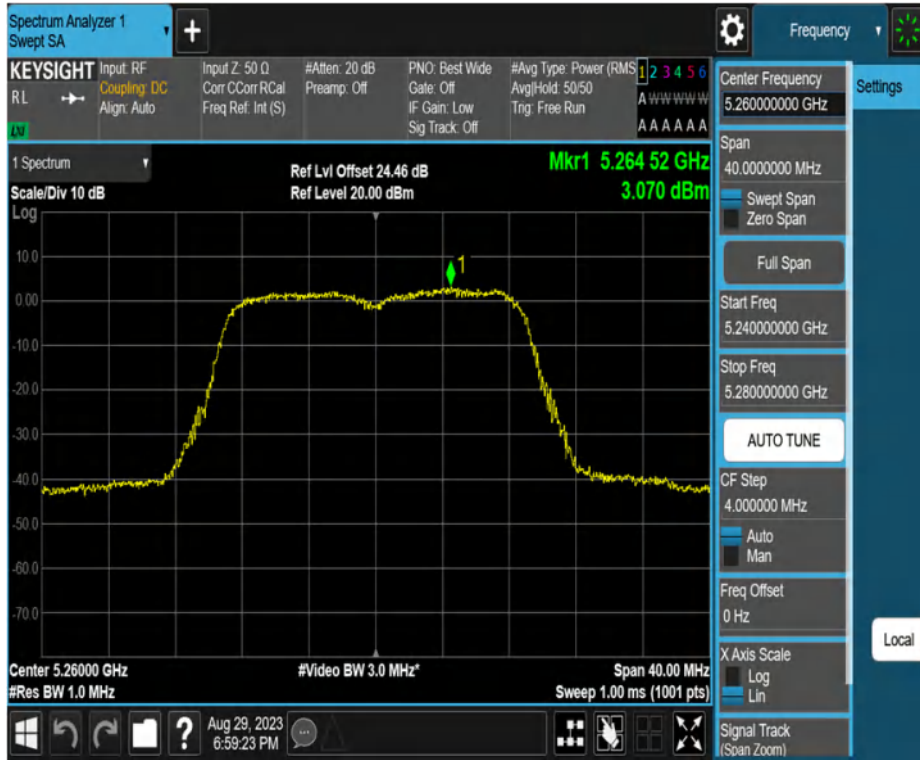
11N20MIMO\_Ant1\_5240



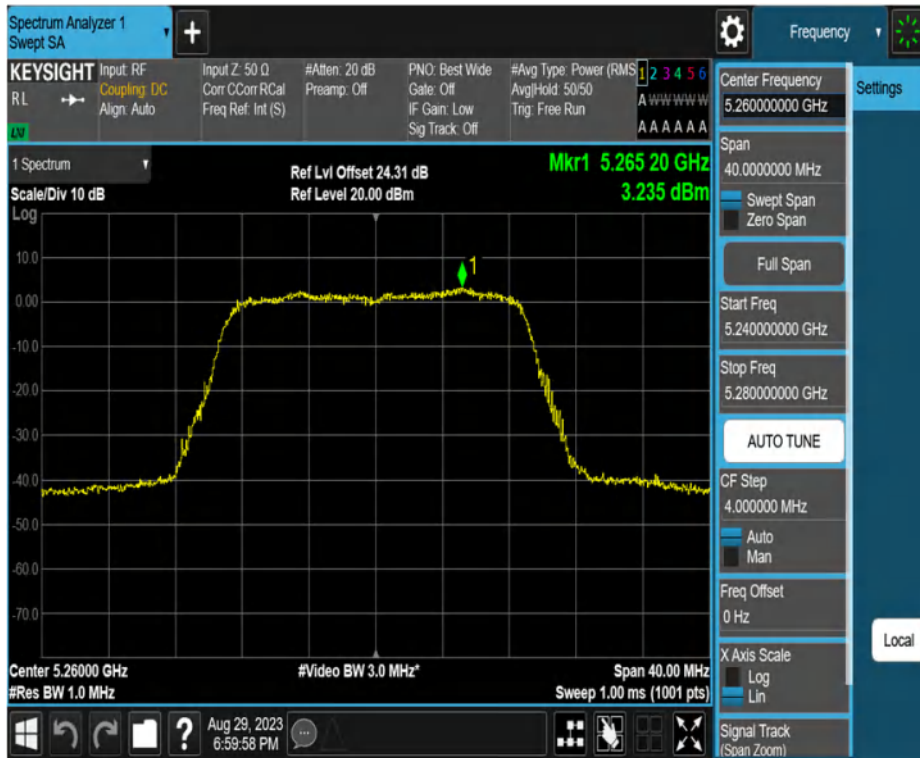
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11N20MIMO\_Ant1\_5260

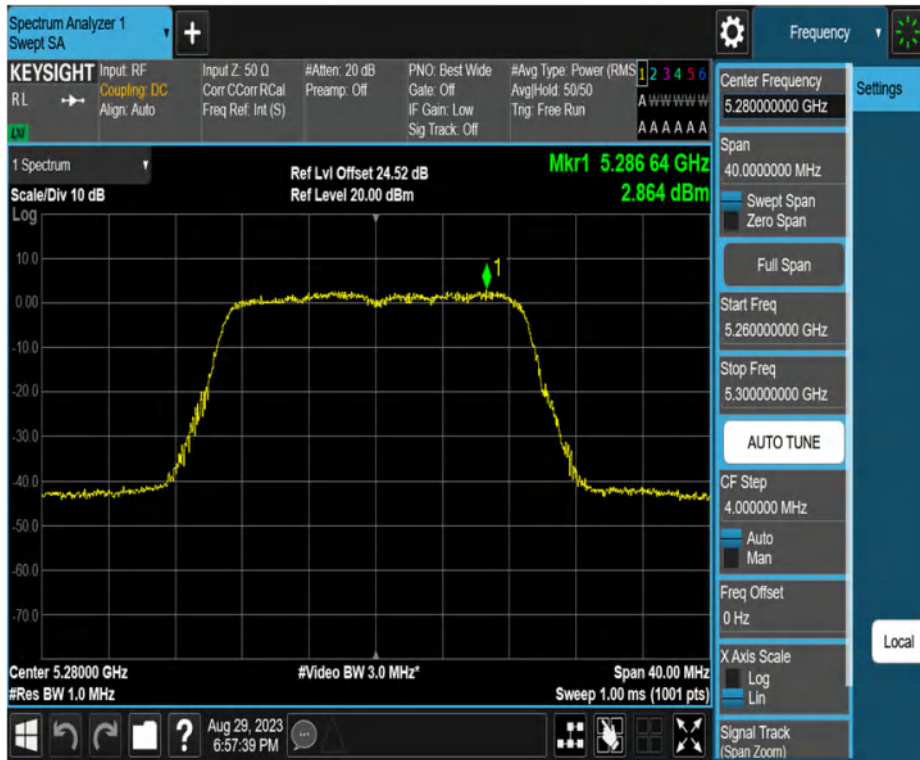


11N20MIMO\_Ant2\_5260





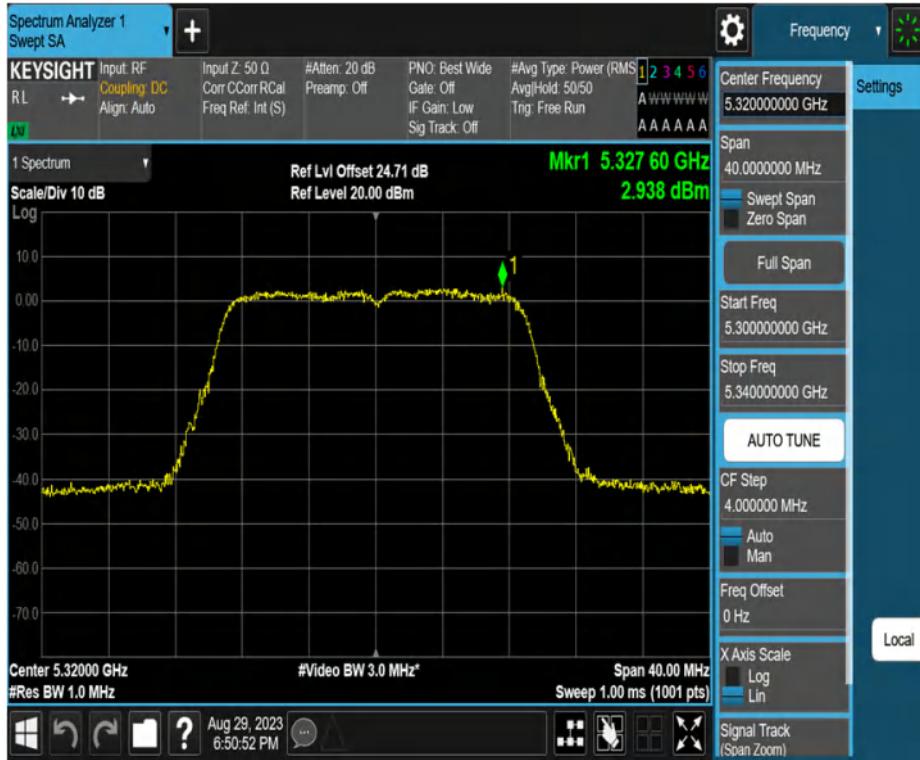
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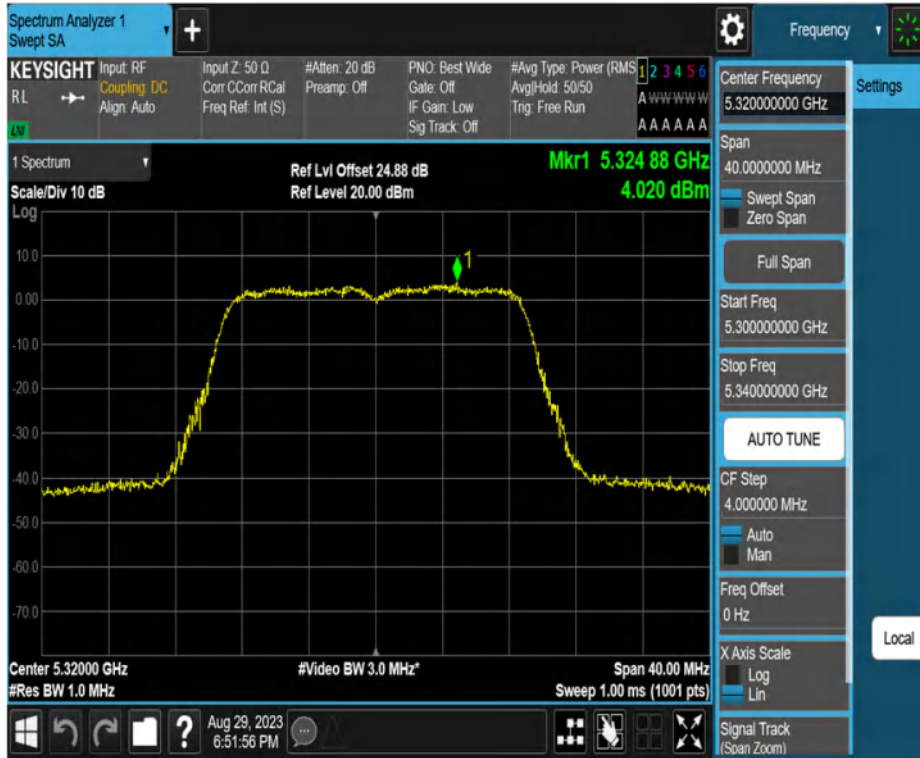
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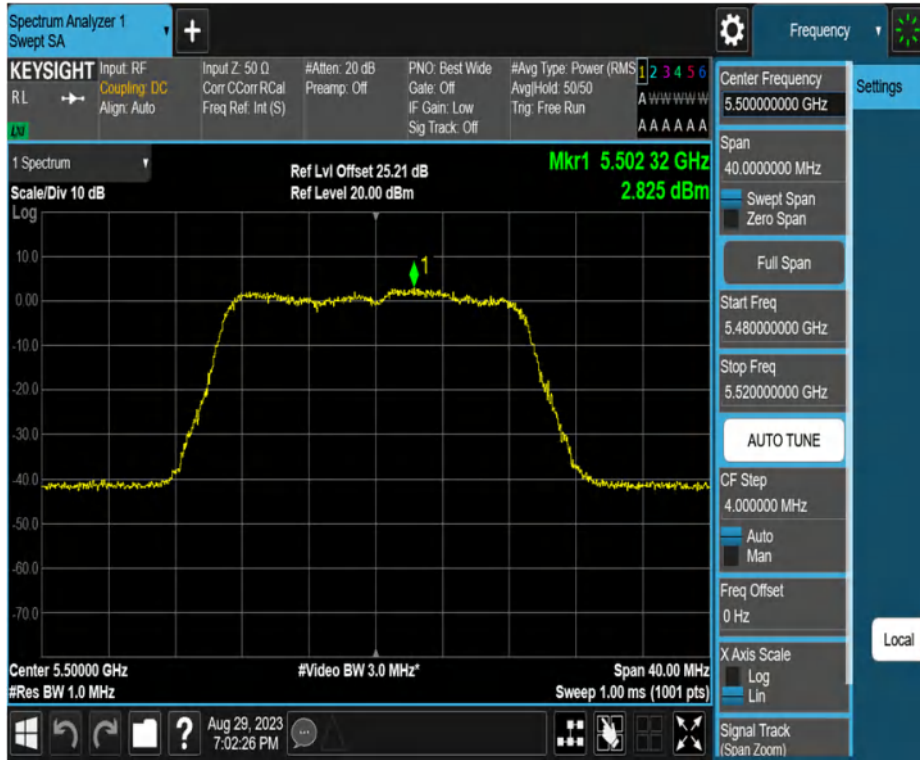
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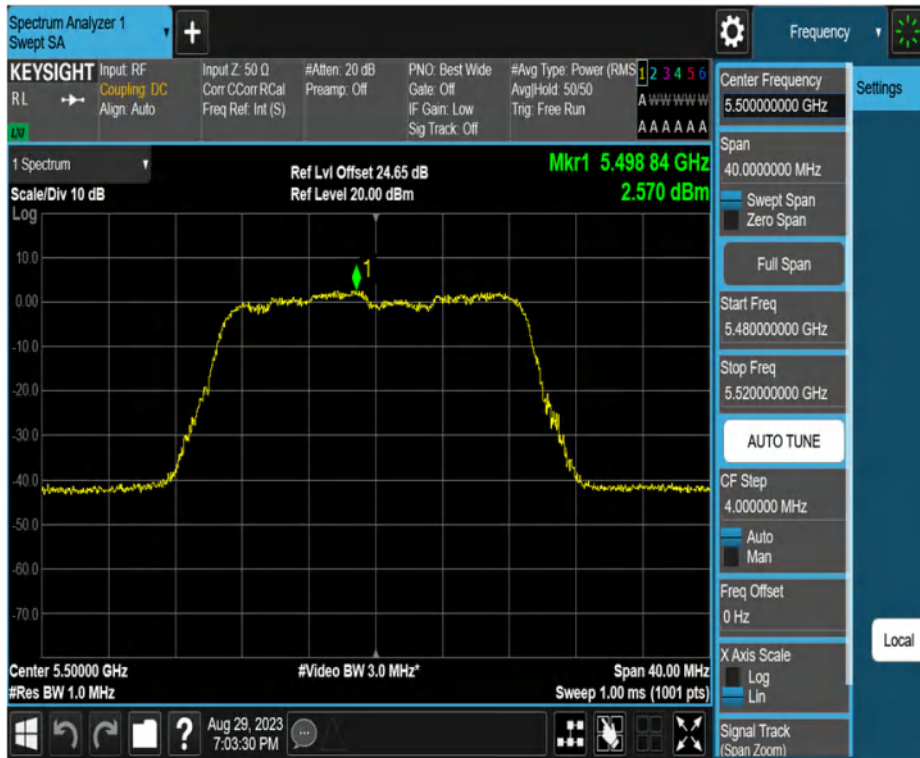
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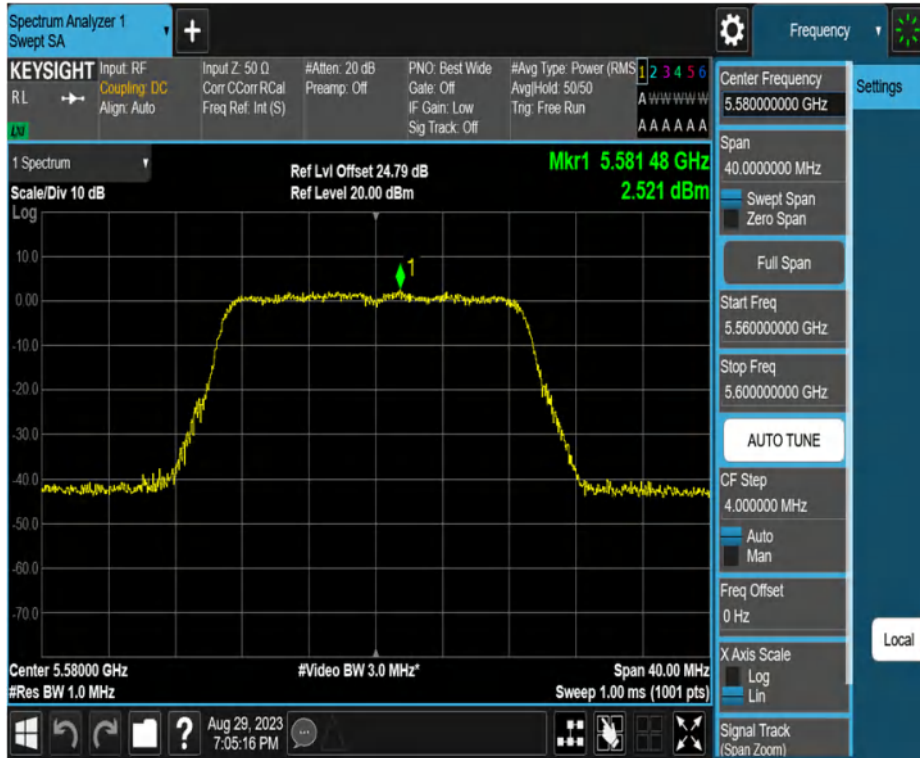
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11N20MIMO\_Ant2\_5500



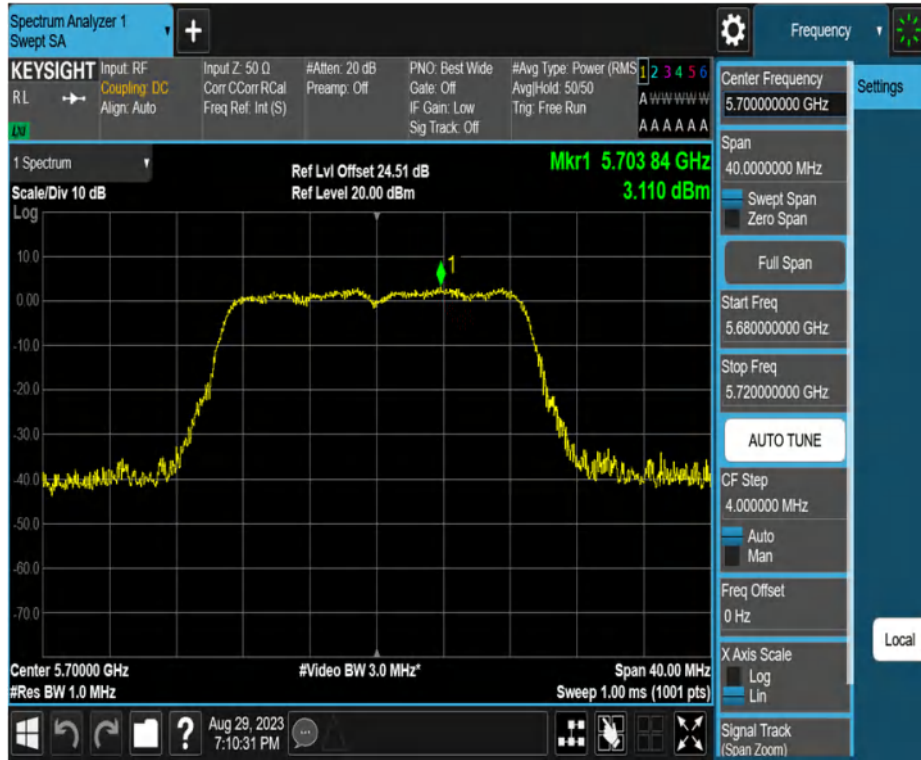
11N20MIMO\_Ant1\_5580



11N20MIMO\_Ant2\_5580



11N20MIMO\_Ant1\_5700



11N20MIMO\_Ant2\_5700



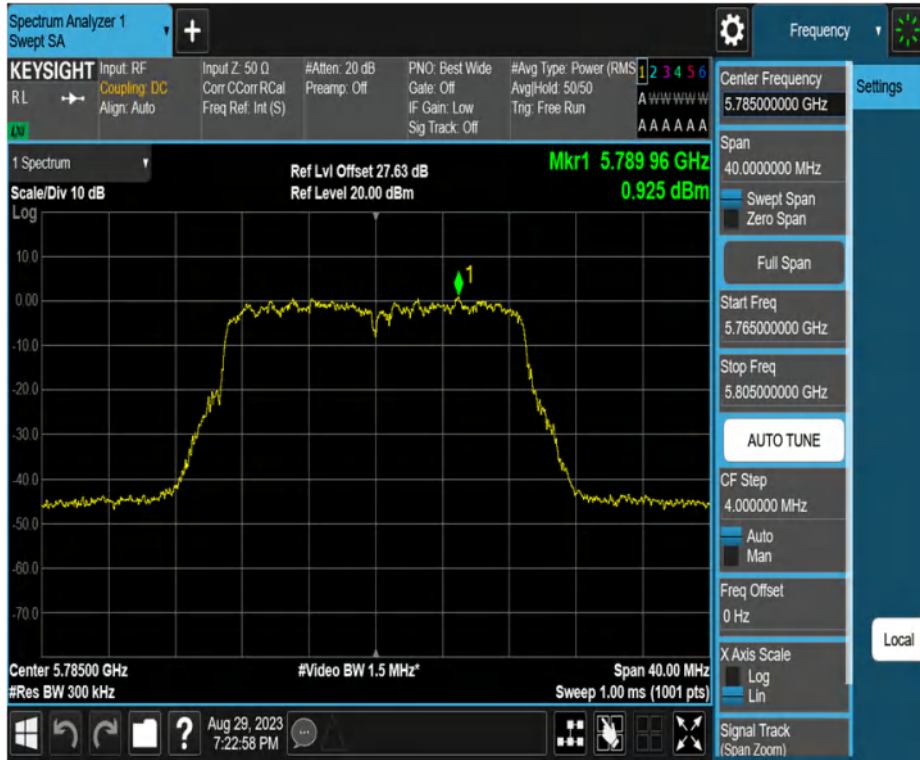
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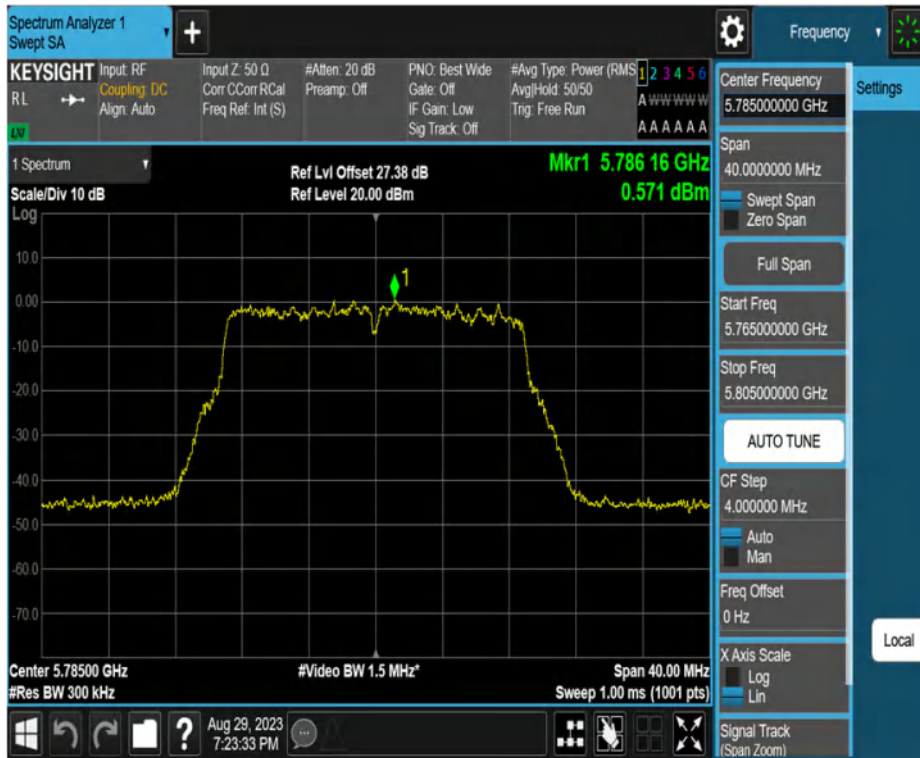
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11N20MIMO\_Ant1\_5785



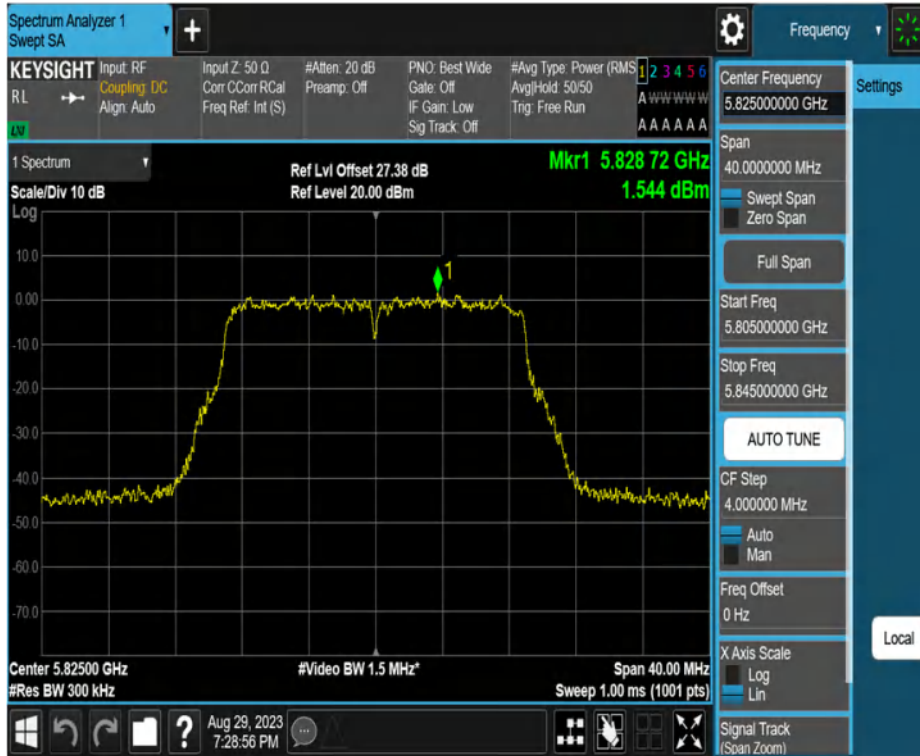
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11N20MIMO\_Ant1\_5825

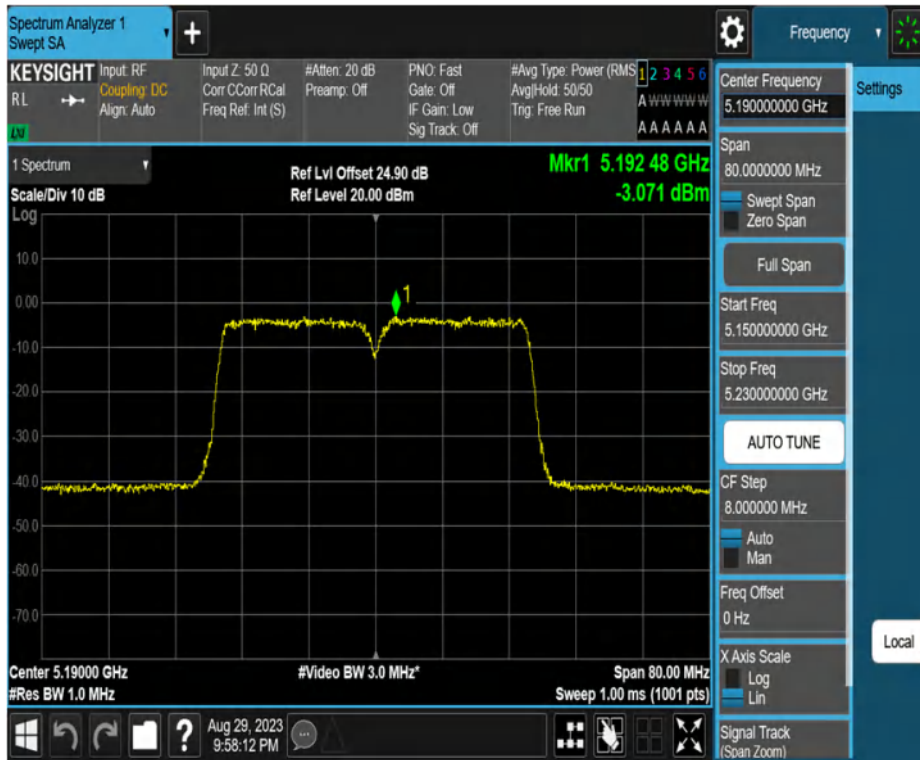


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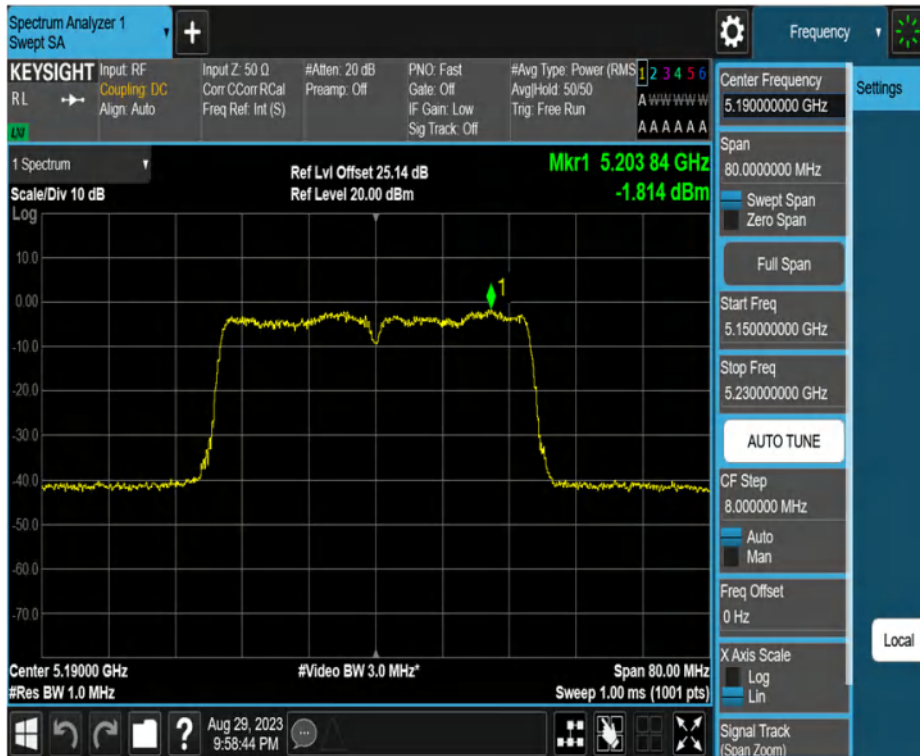




11N40MIMO\_Ant1\_5190



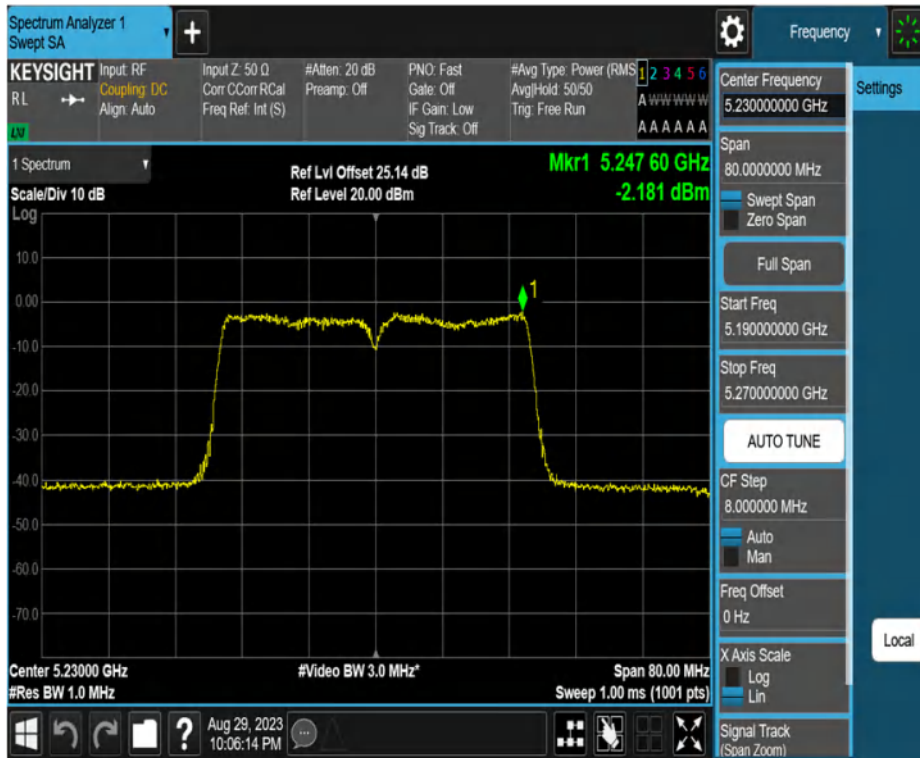
11N40MIMO\_Ant2\_5190



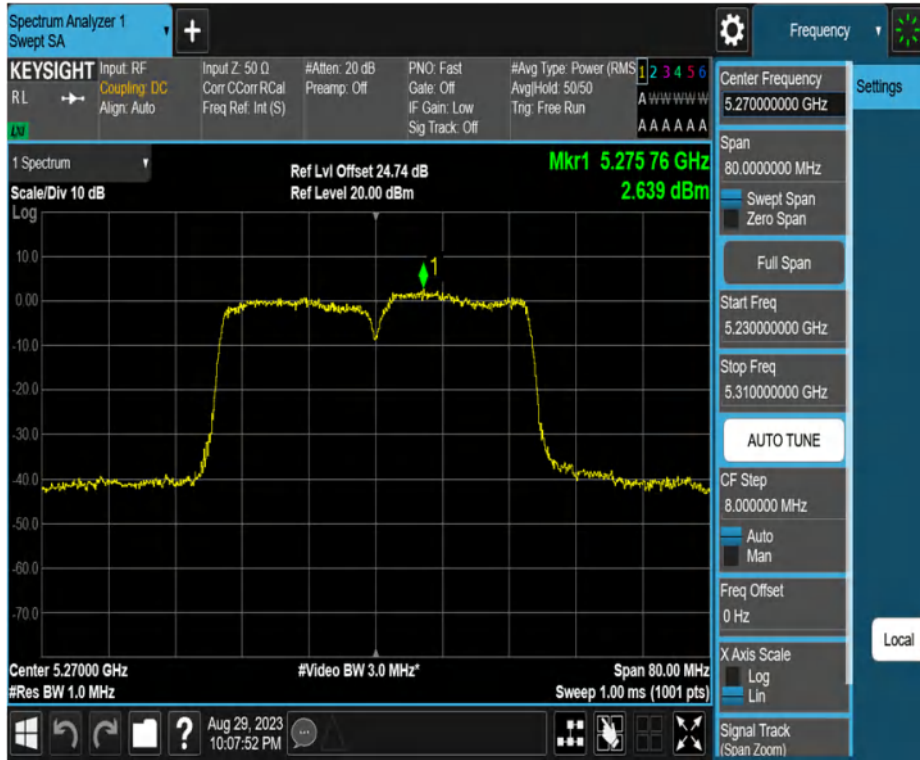
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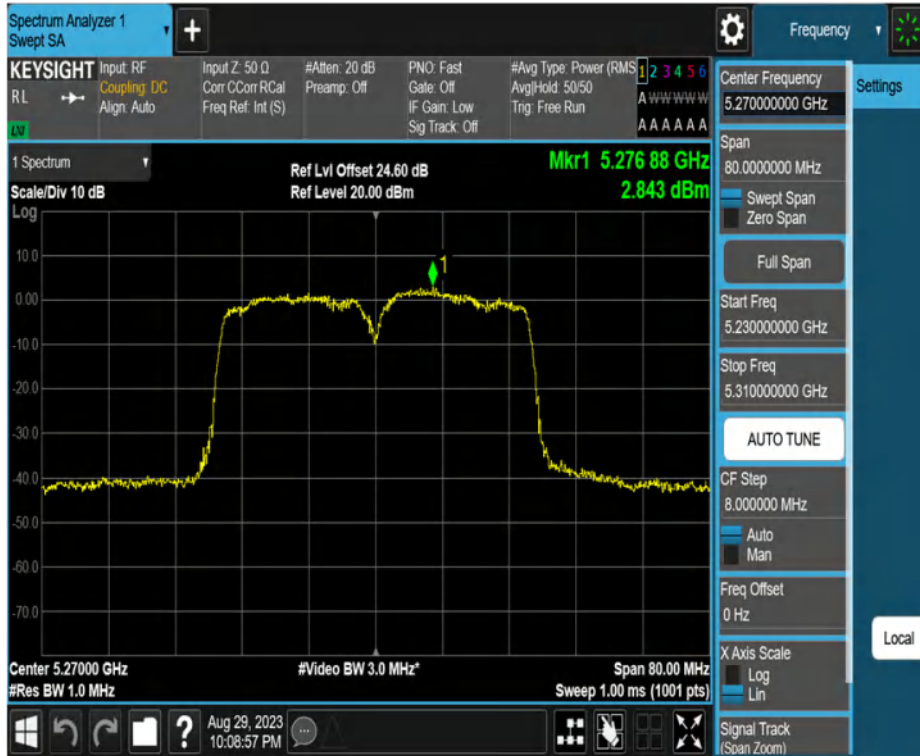
11N40MIMO\_Ant2\_5230



11N40MIMO\_Ant1\_5270



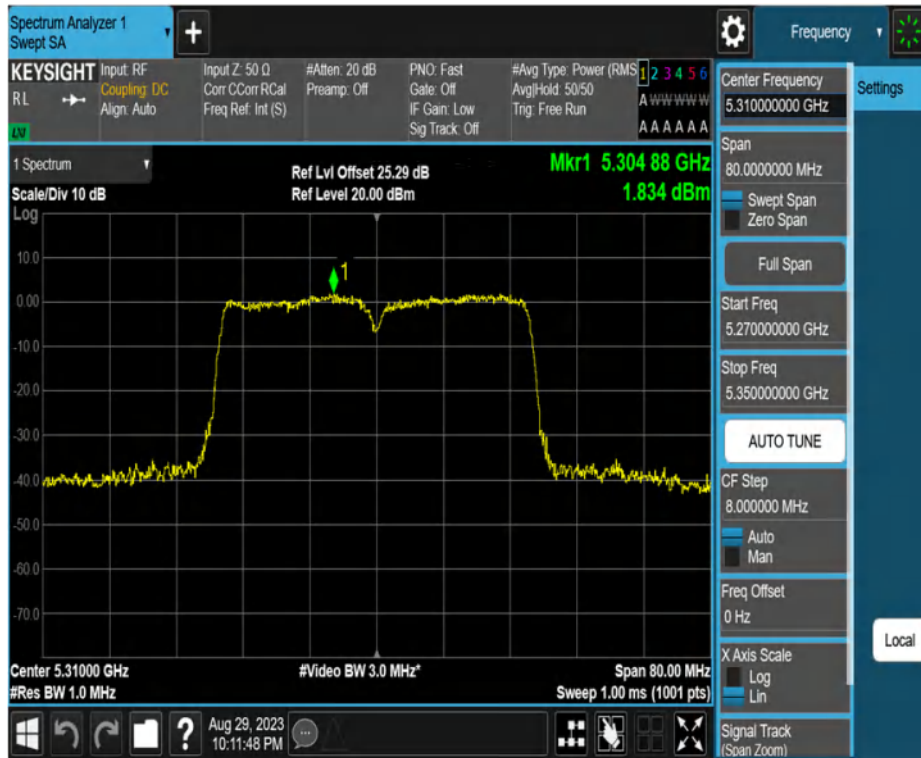
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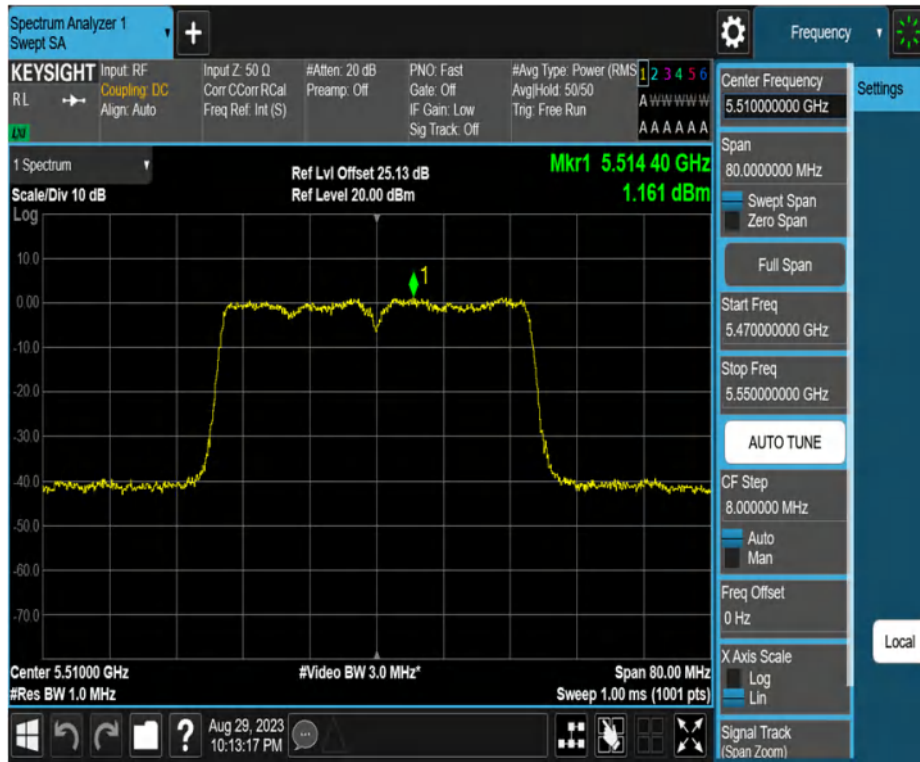
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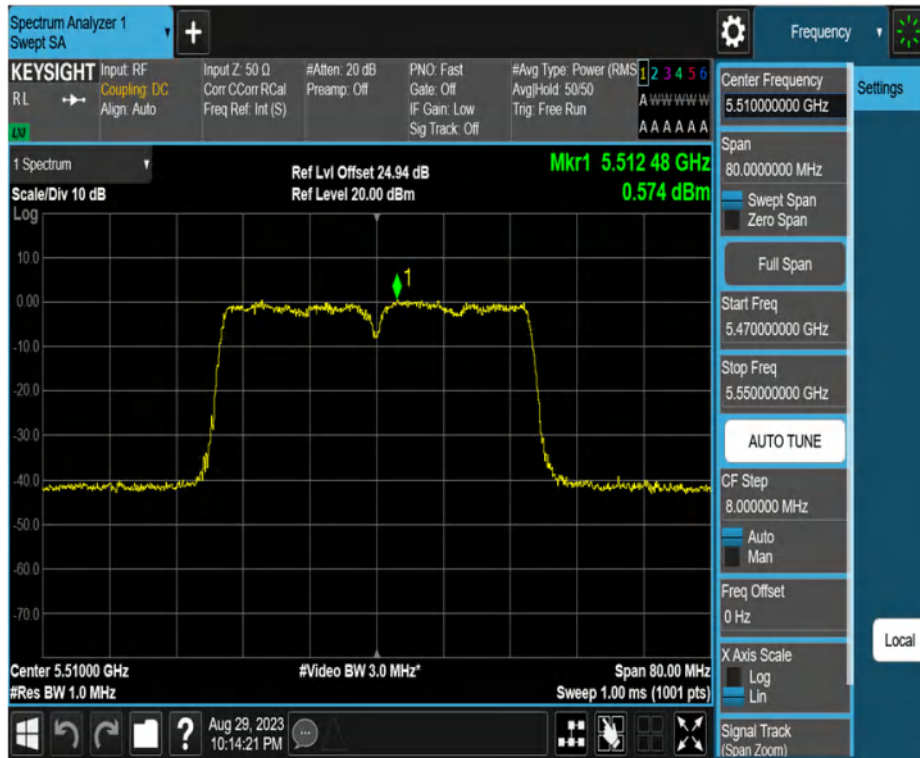
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11N40MIMO\_Ant1\_5510



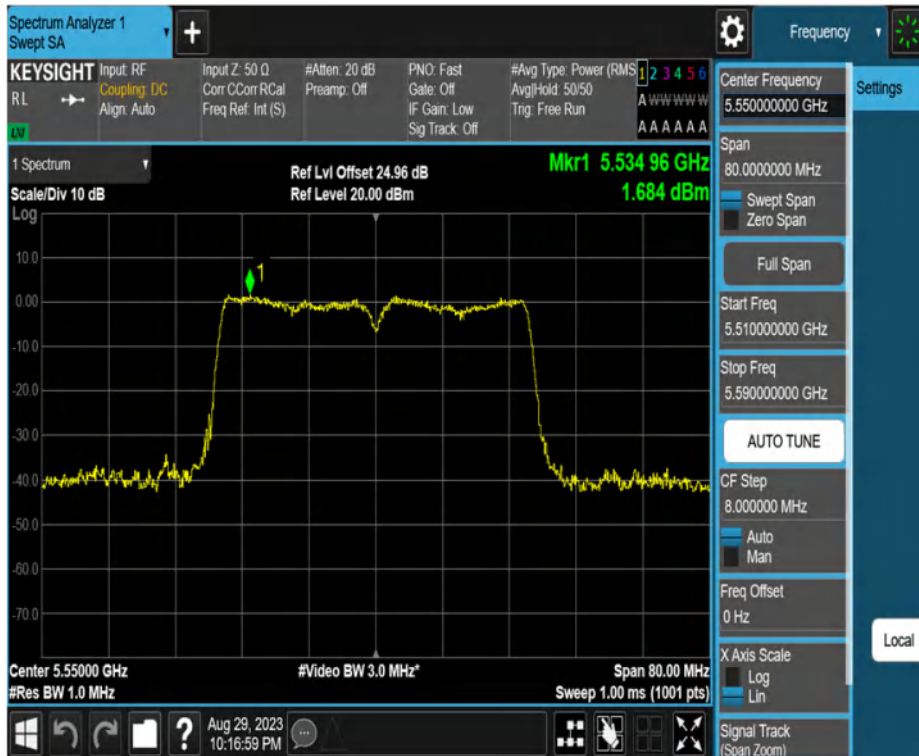
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11N40MIMO\_Ant1\_5550



11N40MIMO\_Ant2\_5550



11N40MIMO\_Ant1\_5670



11N40MIMO\_Ant2\_5670



11N40MIMO\_Ant1\_5755

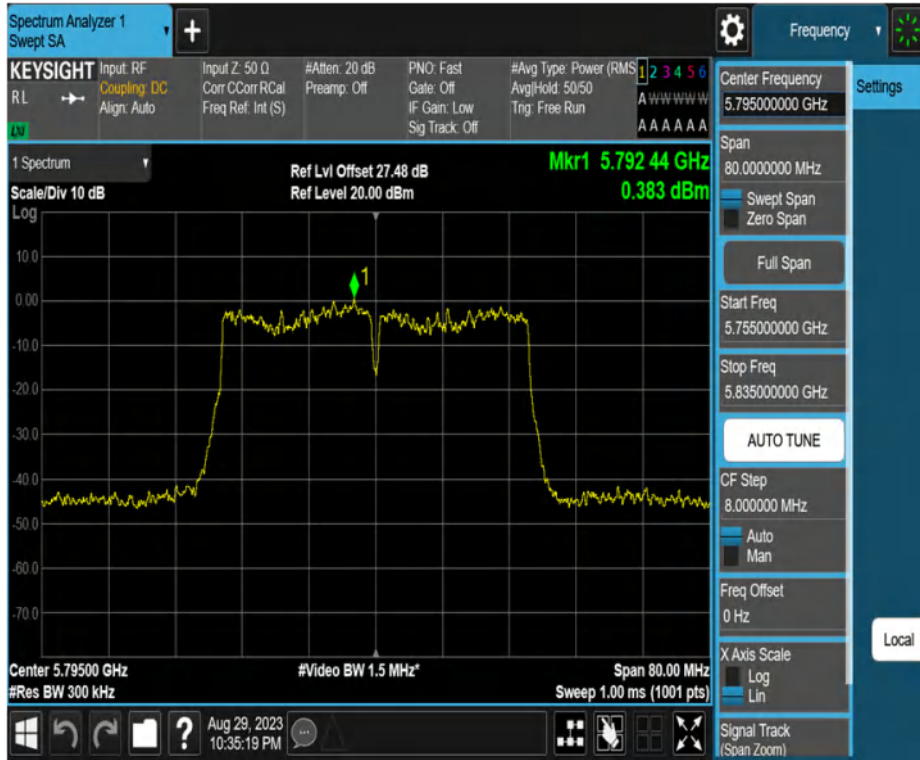


11N40MIMO\_Ant2\_5755

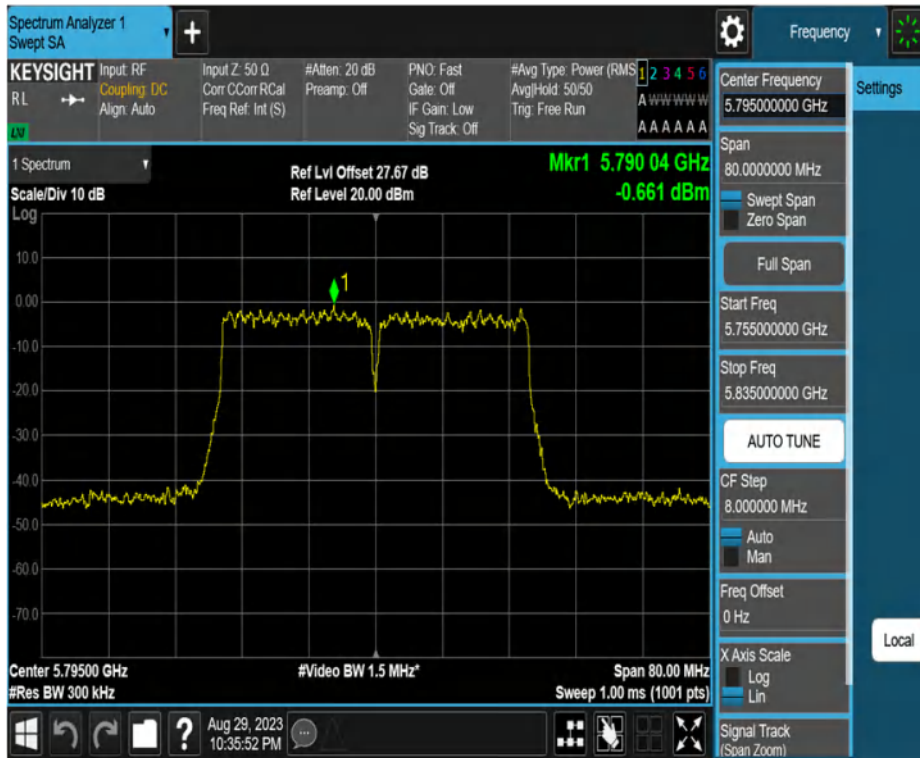




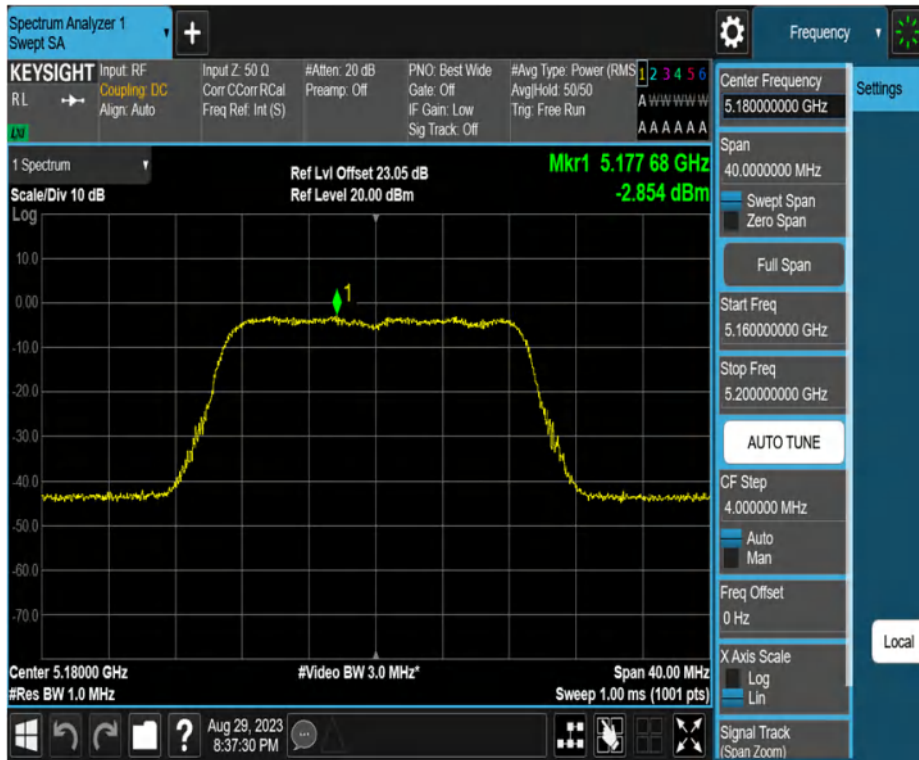
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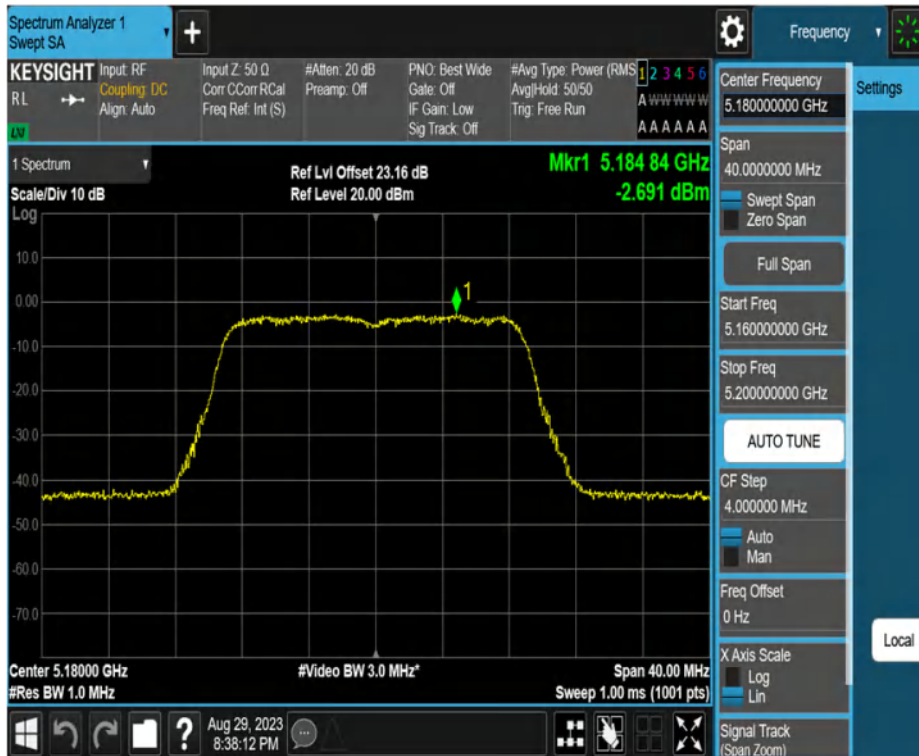
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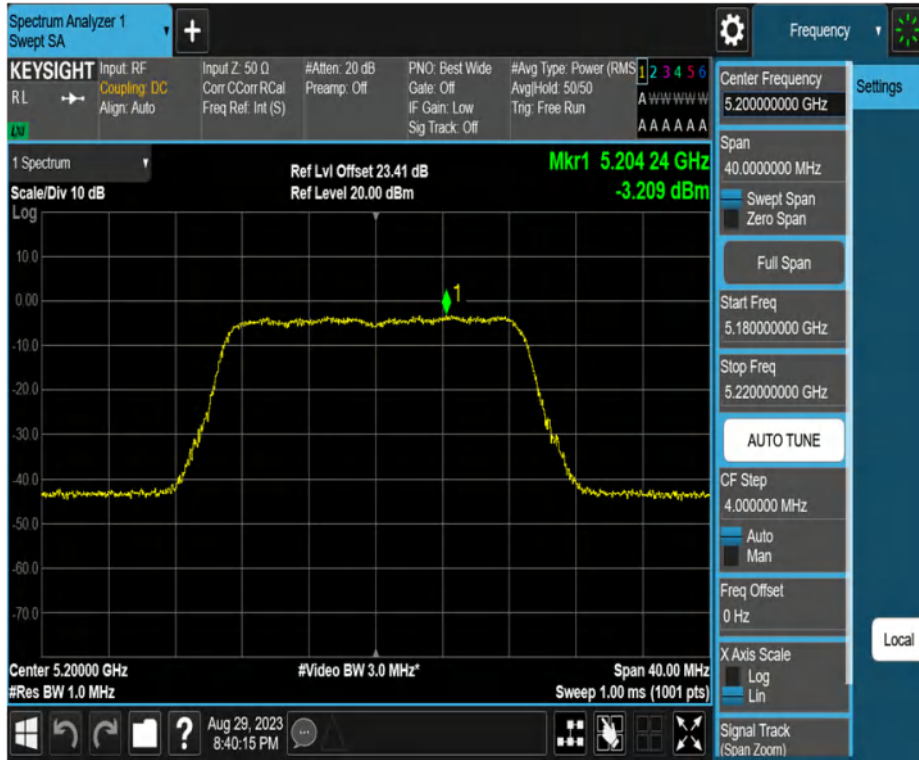
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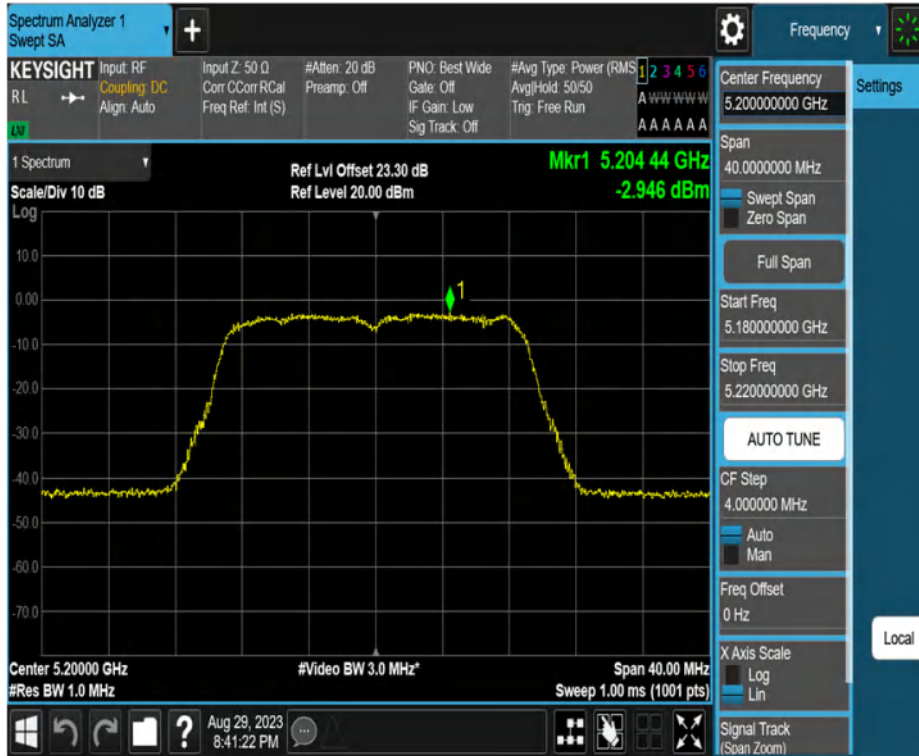
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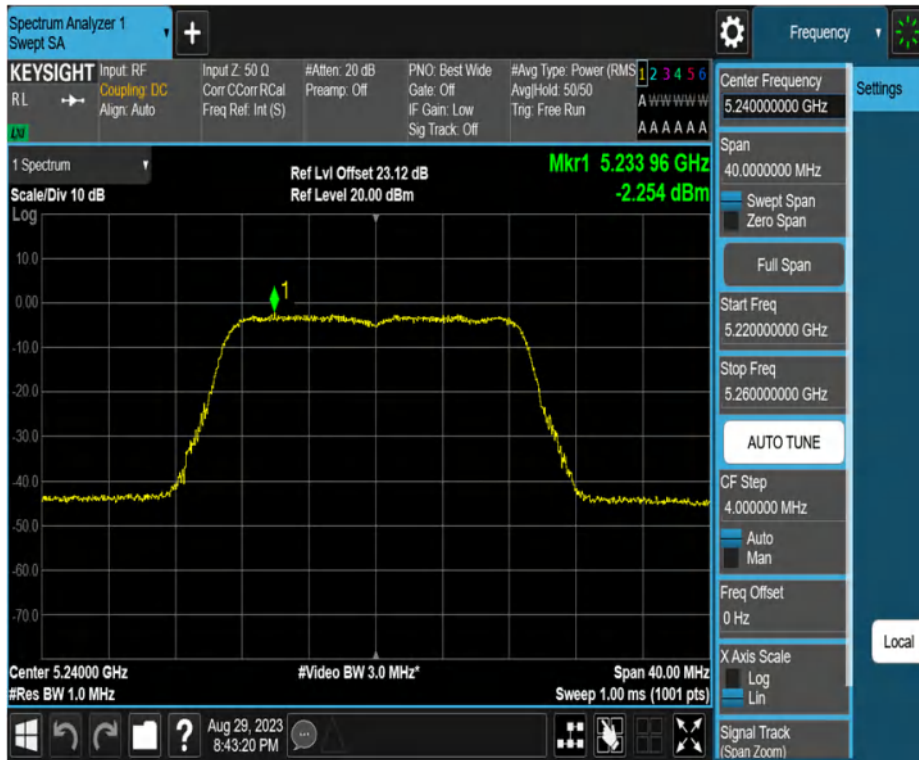
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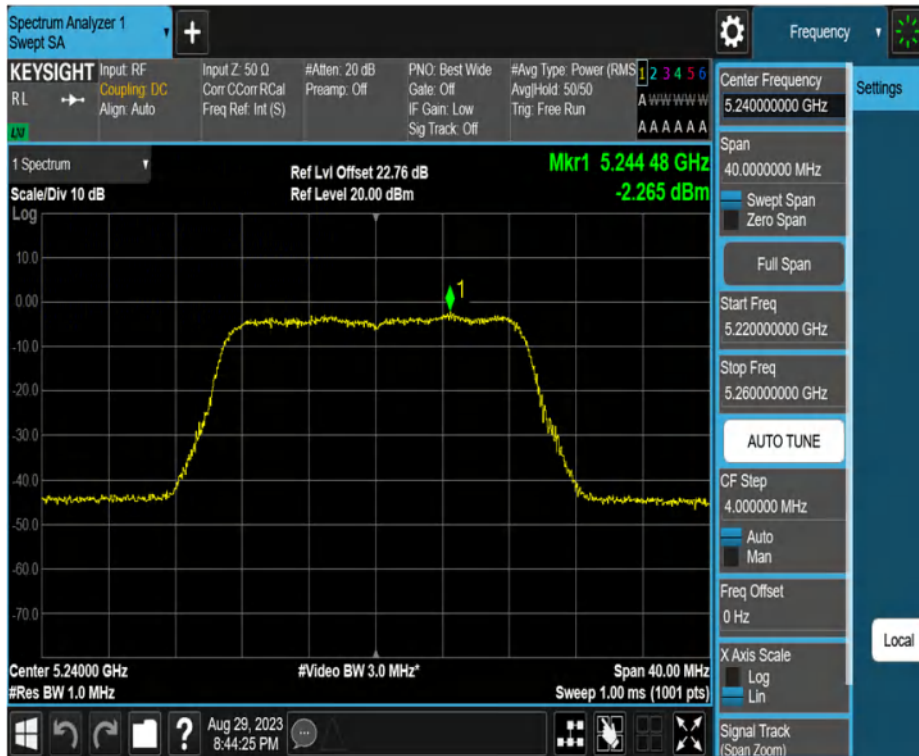
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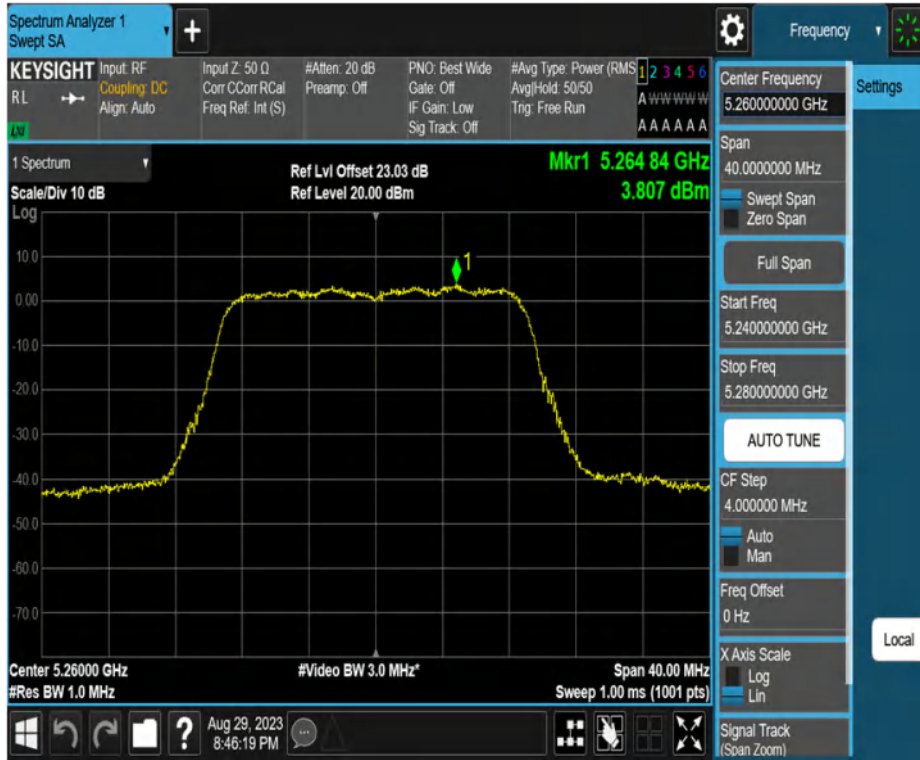
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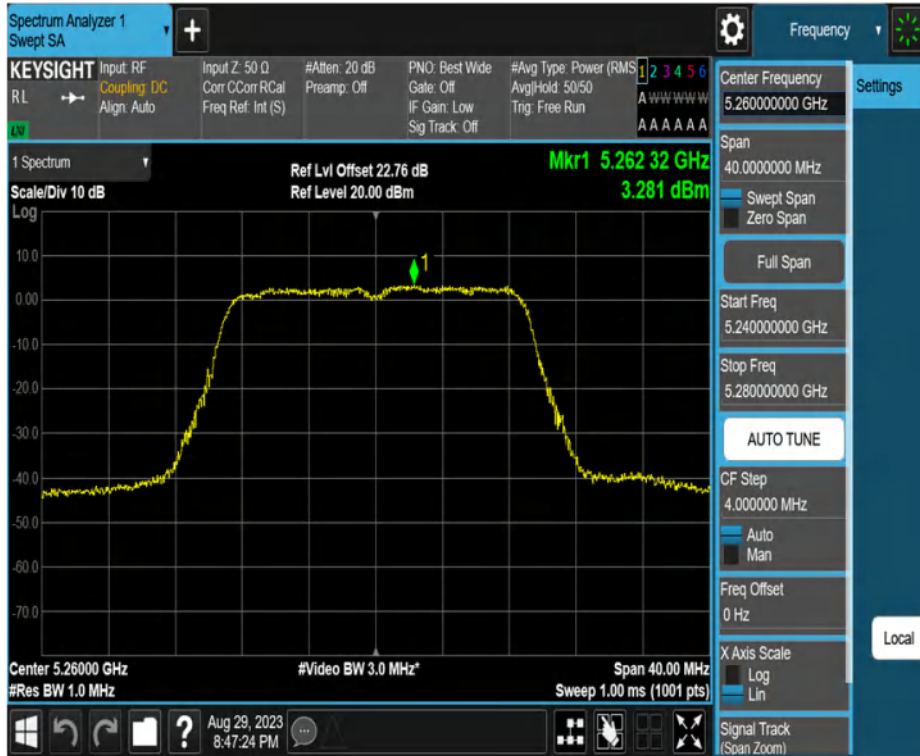
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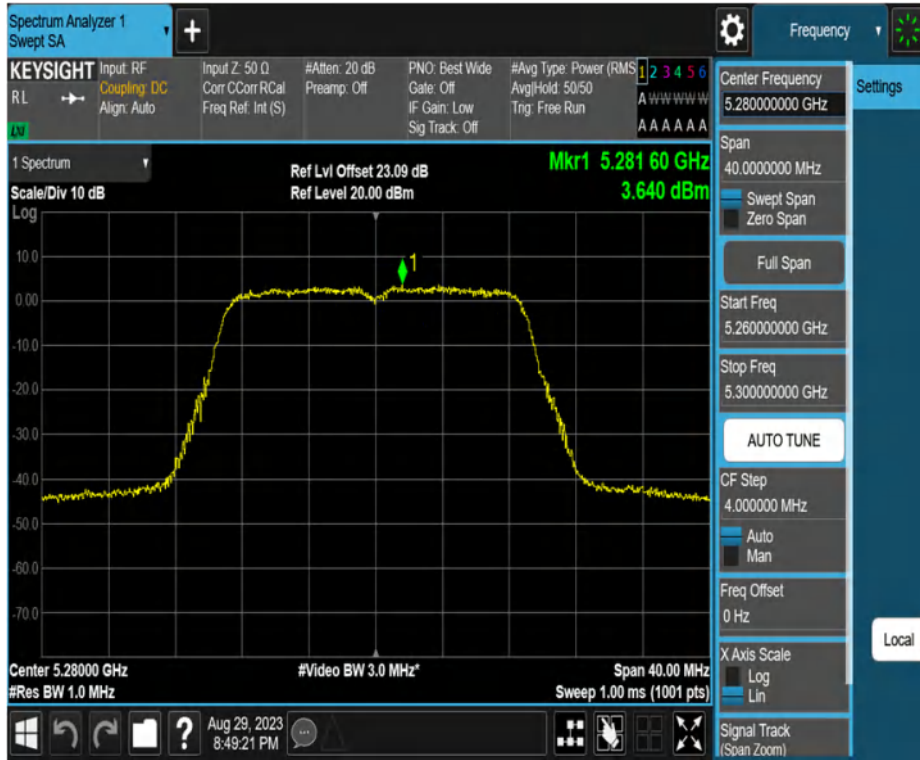
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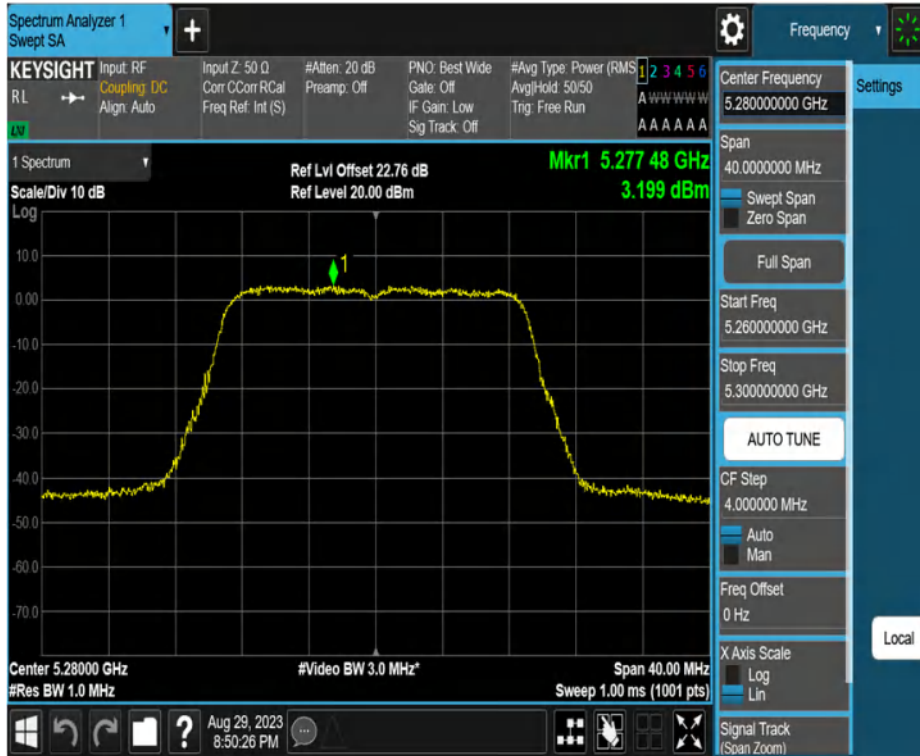
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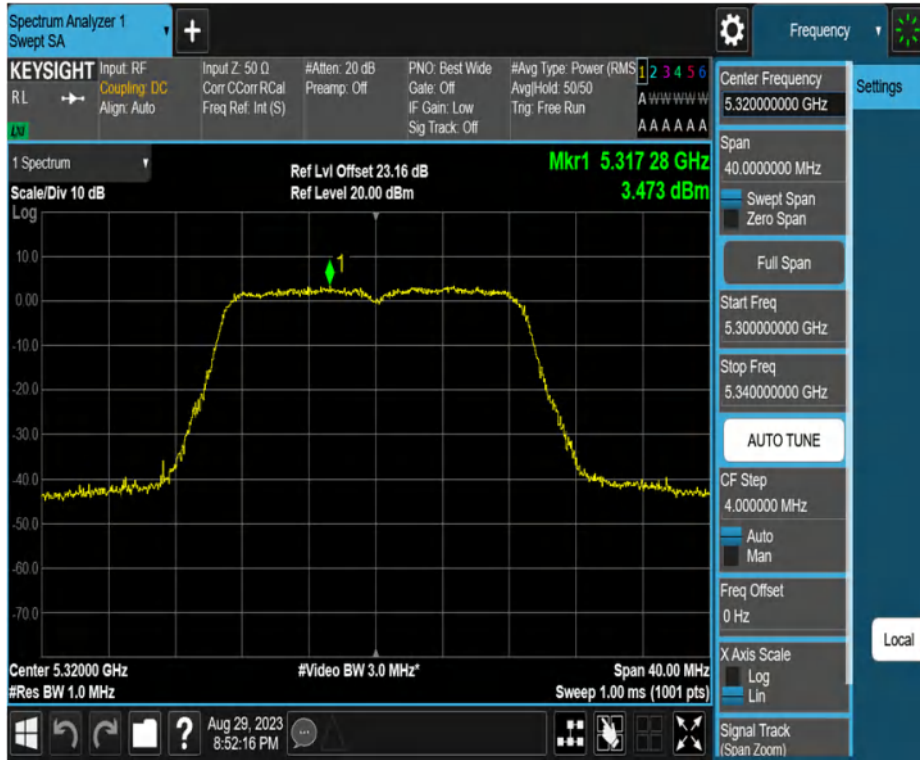
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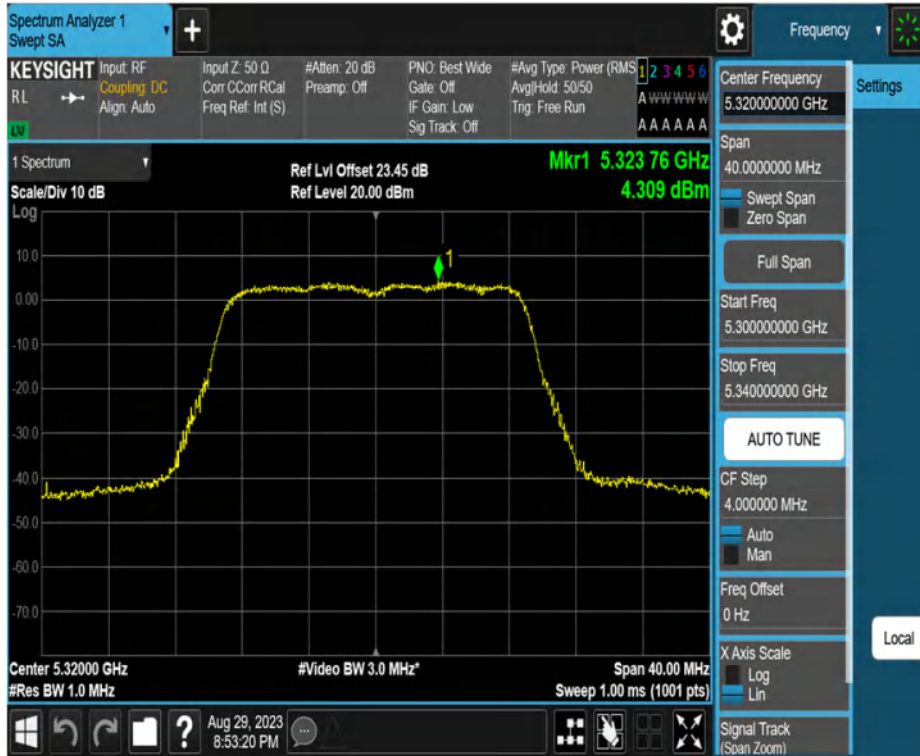
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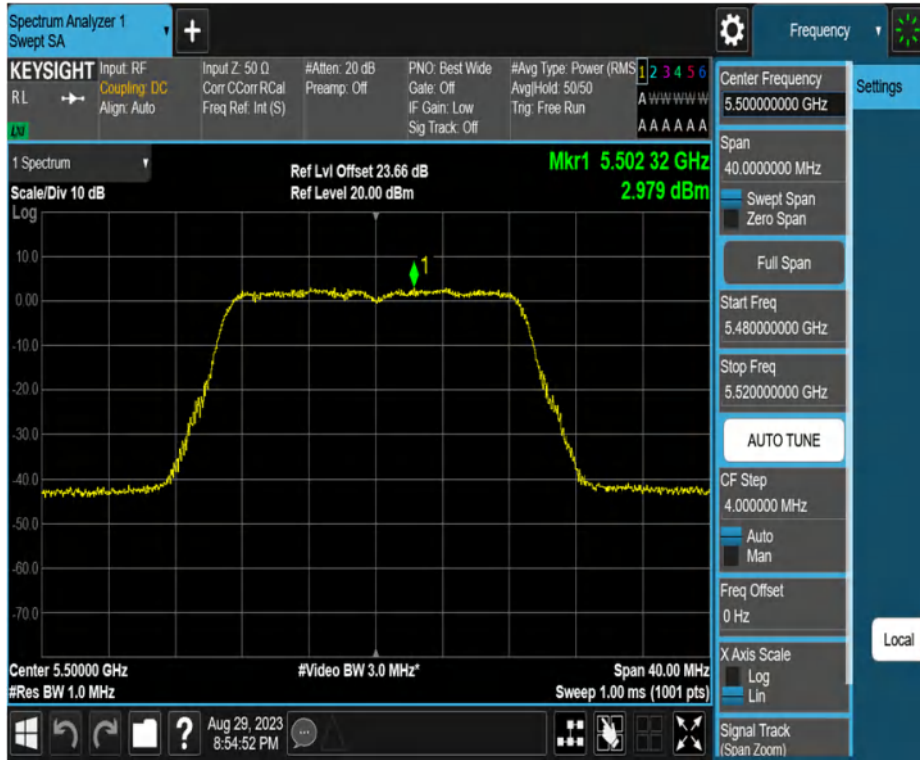
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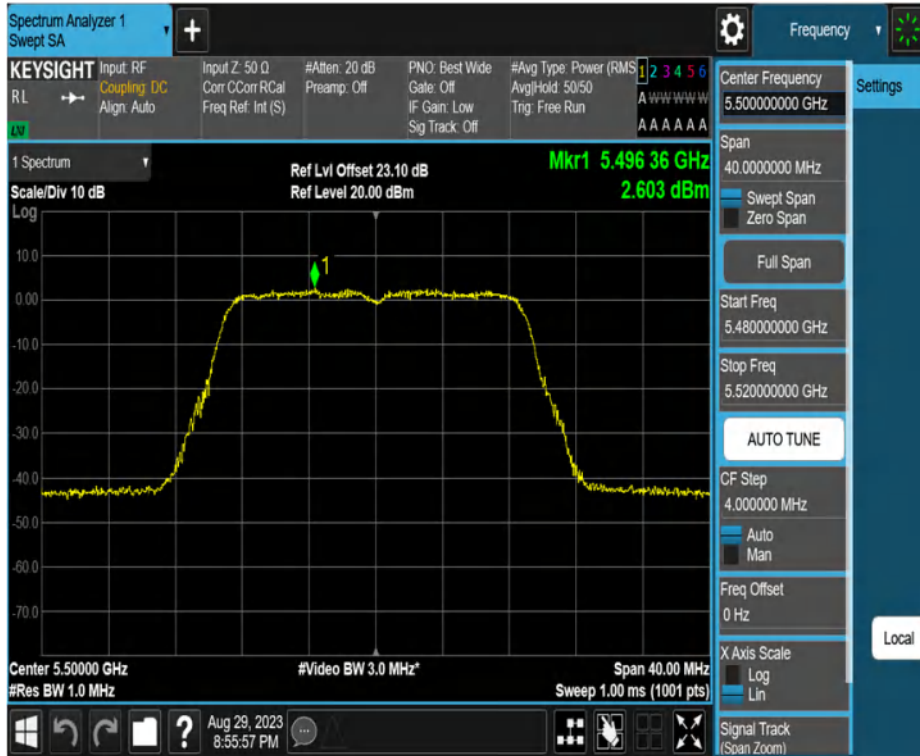
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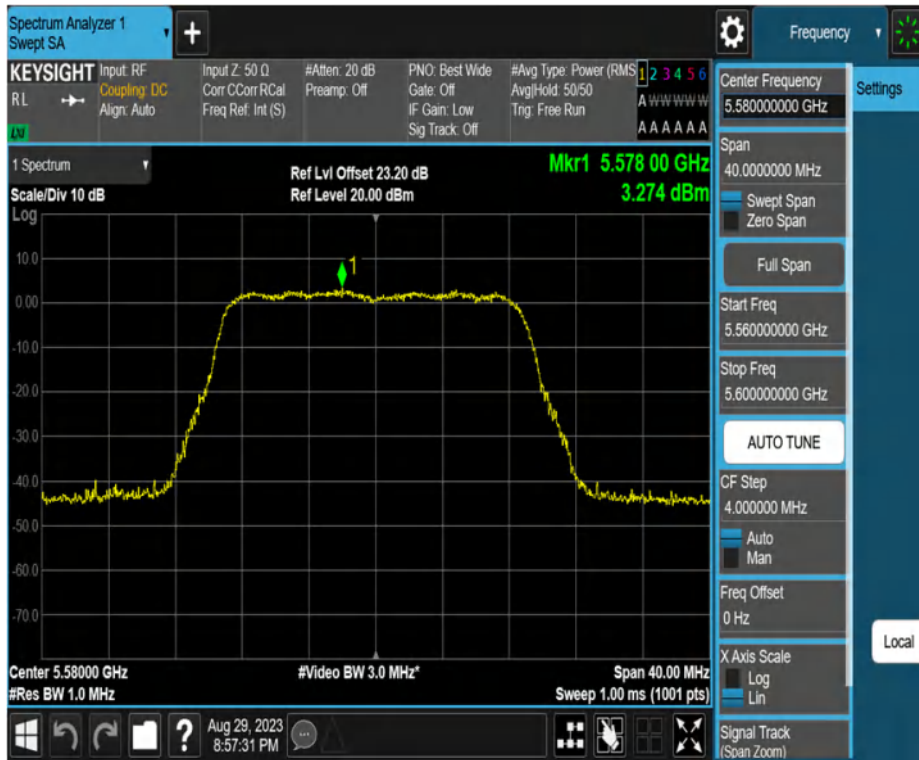


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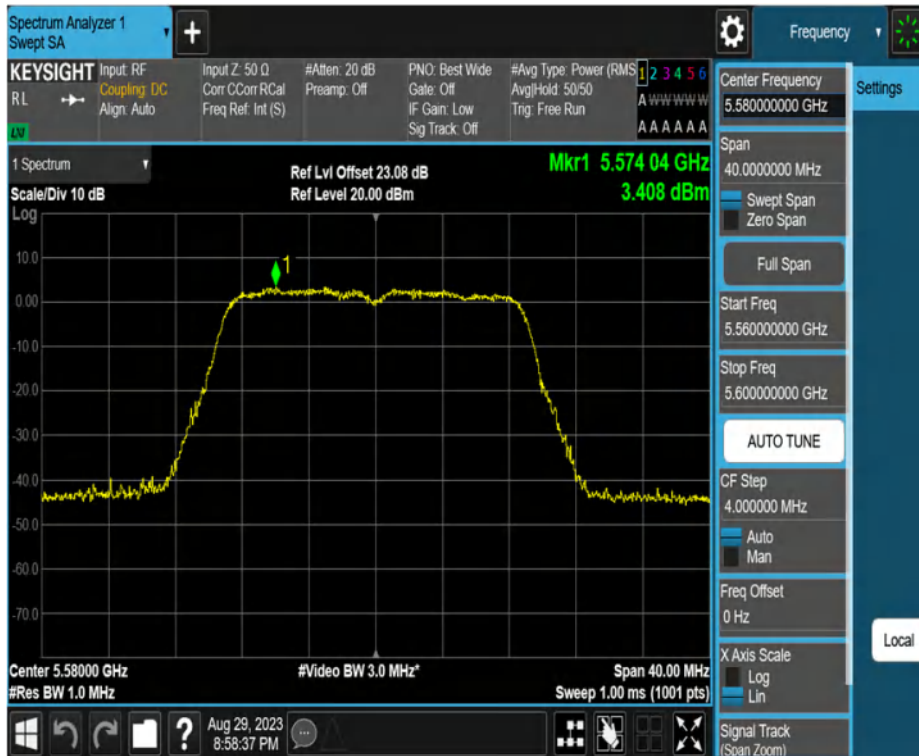




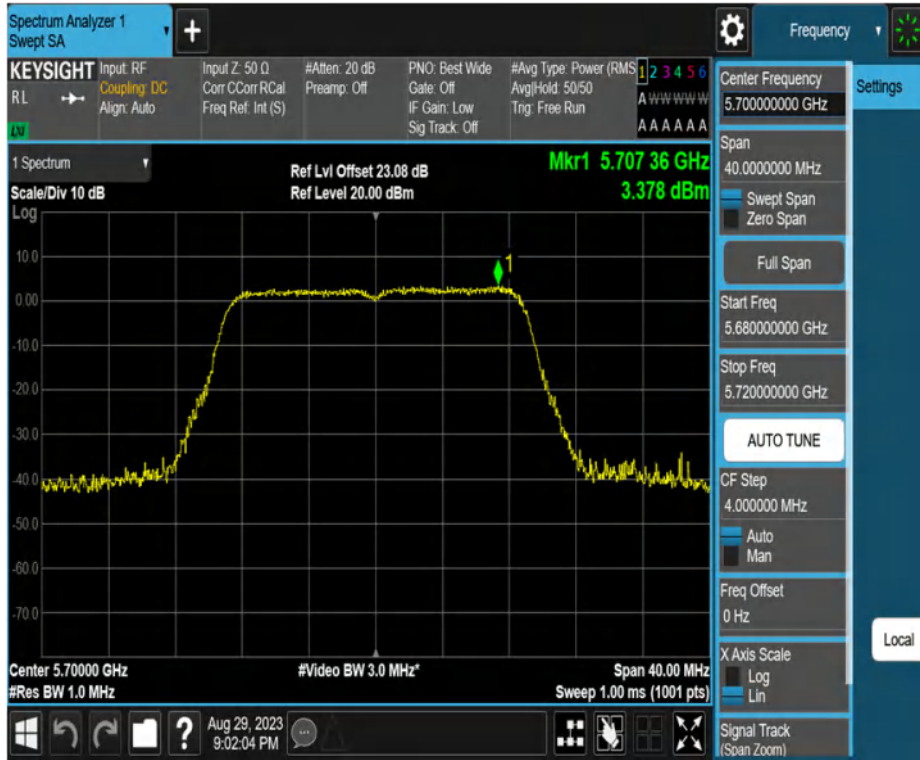
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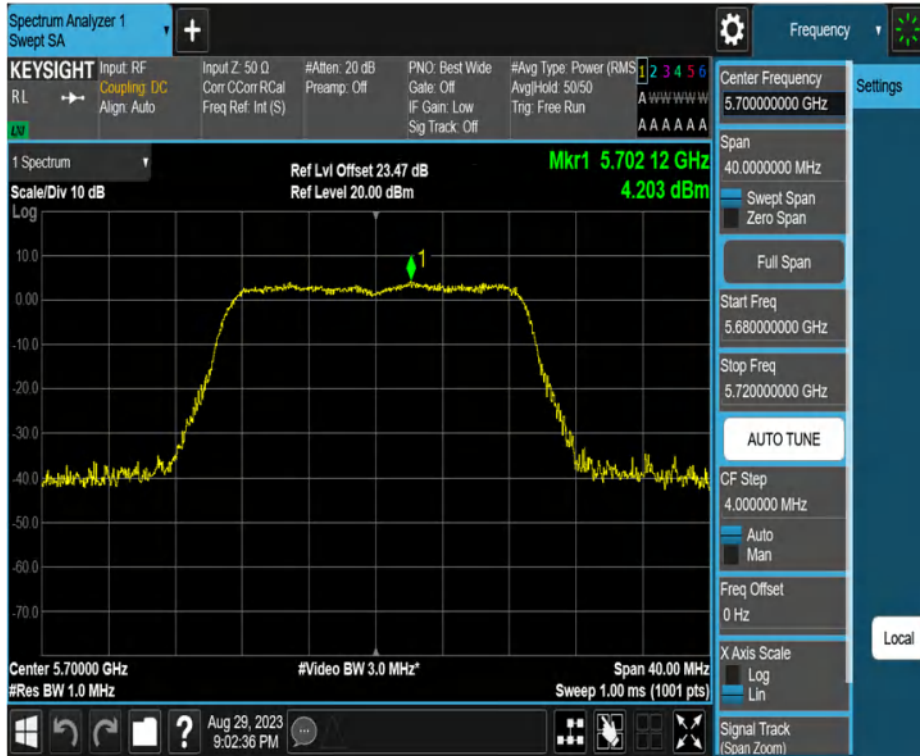
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11AC20MIMO\_Ant1\_5700



11AC20MIMO\_Ant2\_5700



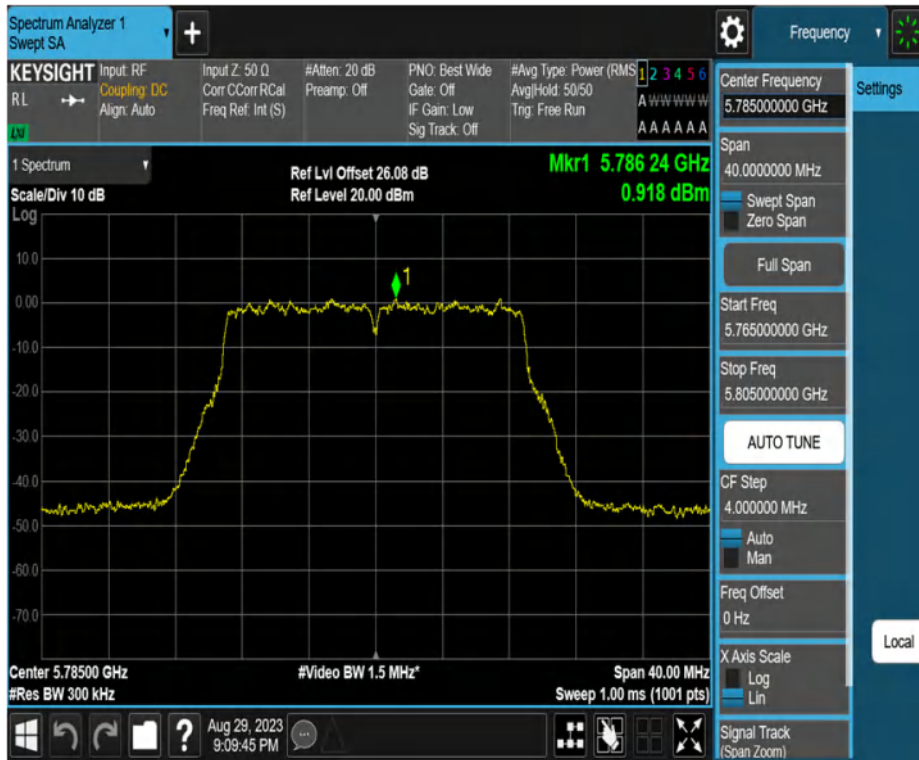
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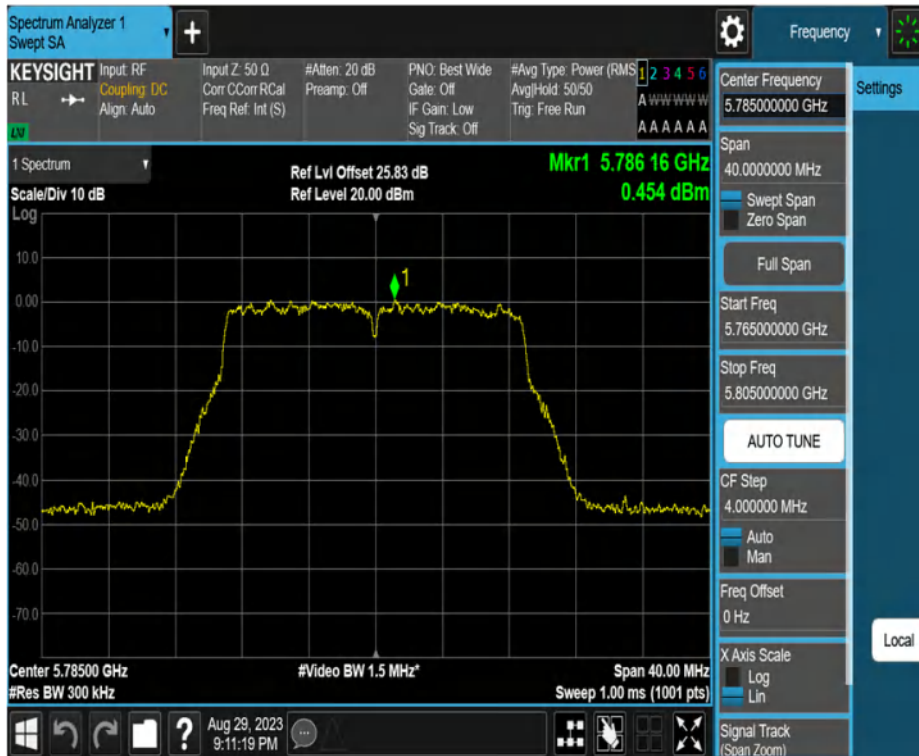
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11AC20MIMO\_Ant1\_5785



11AC20MIMO\_Ant2\_5785



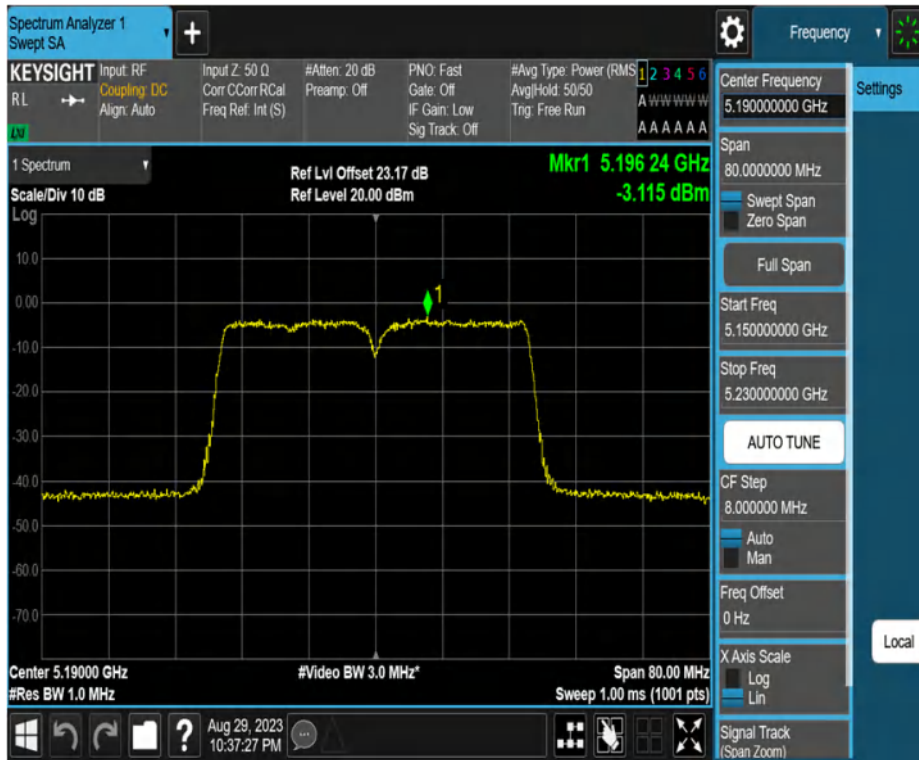
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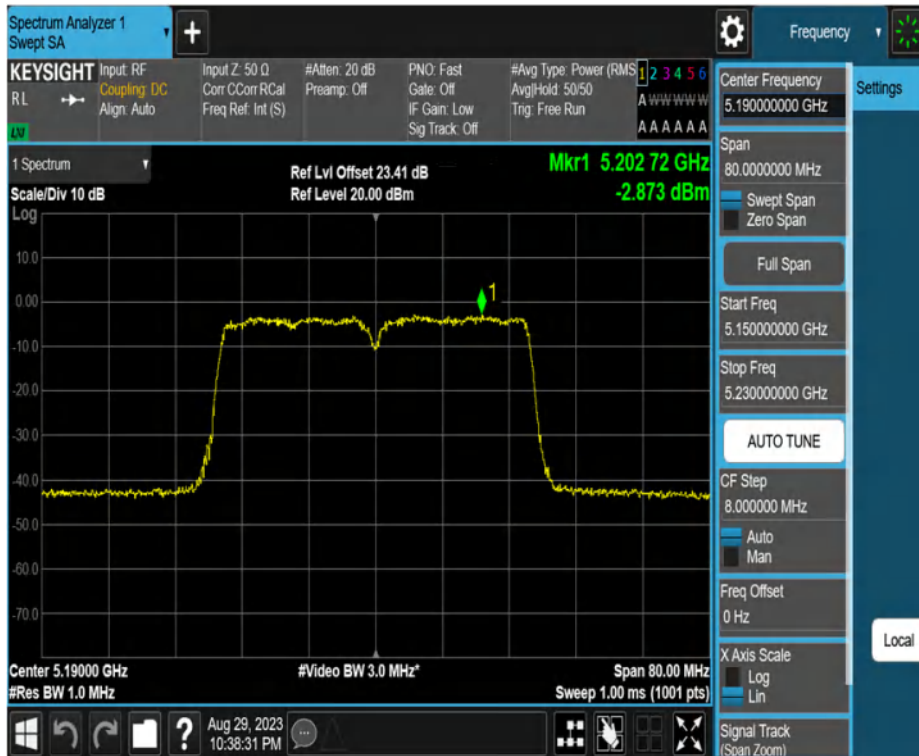
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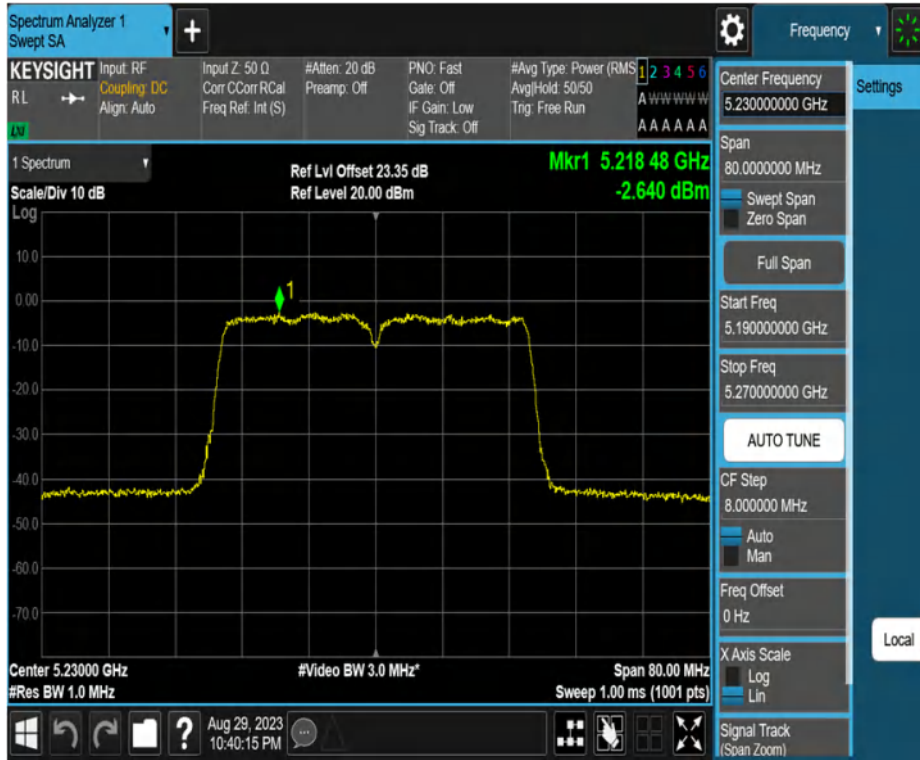
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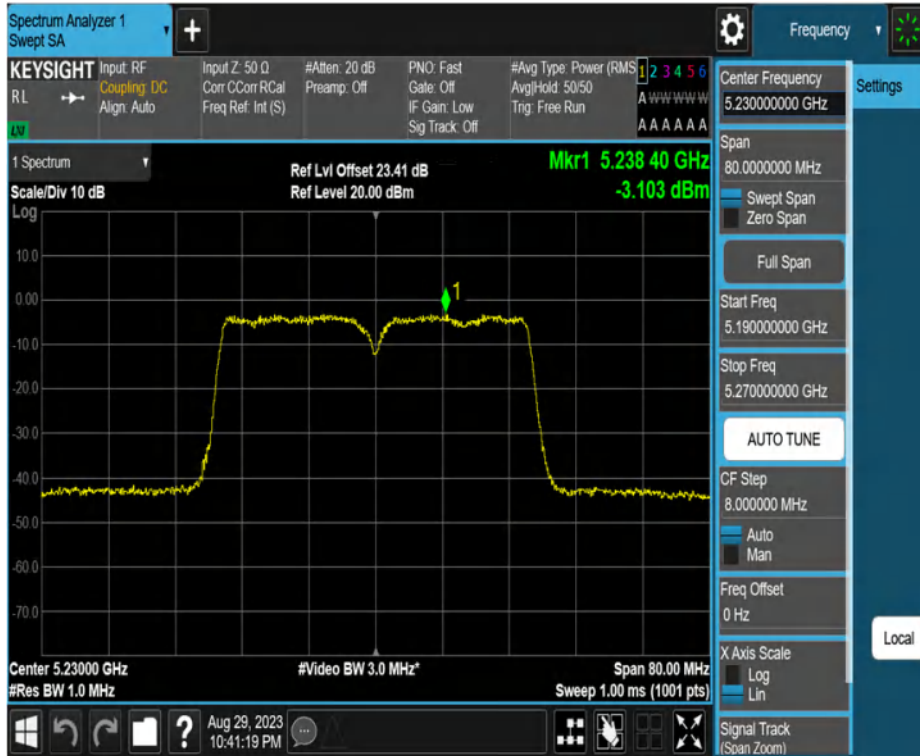
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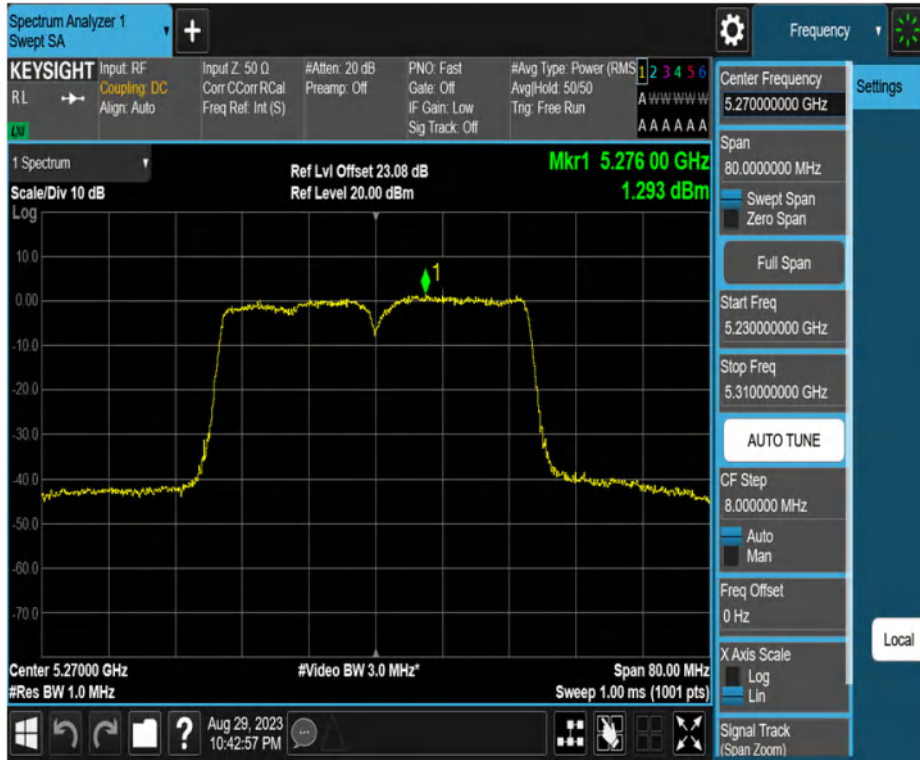
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11AC40MIMO\_Ant2\_5230



11AC40MIMO\_Ant1\_5270



11AC40MIMO\_Ant2\_5270

