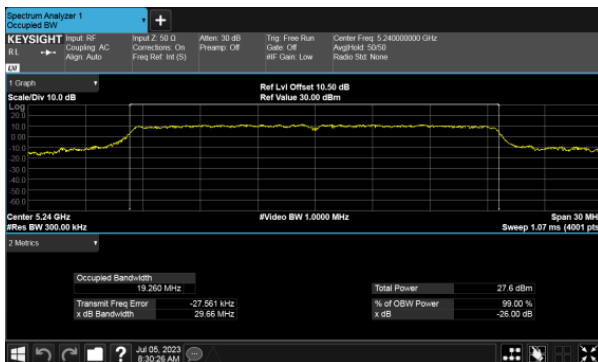
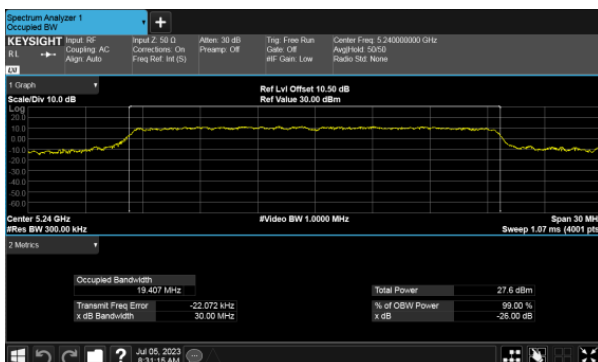




26dB Bandwidth
Modulation Type: 802.11ax HE20 CH48
ANT A



ANT B

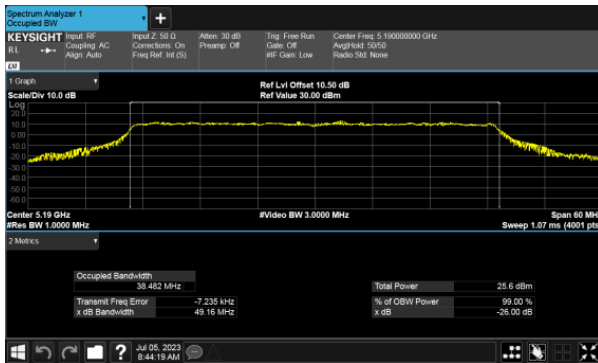




26dB Bandwidth

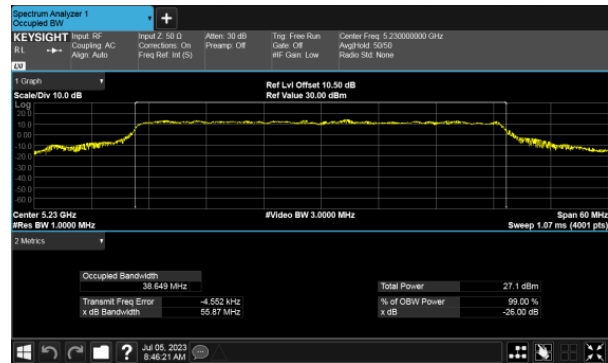
Modulation Type: 802.11ax HE40 CH38

ANT A

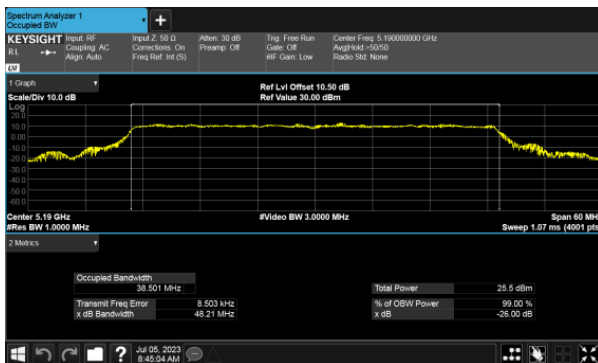


Modulation Type: 802.11ax HE40 CH46

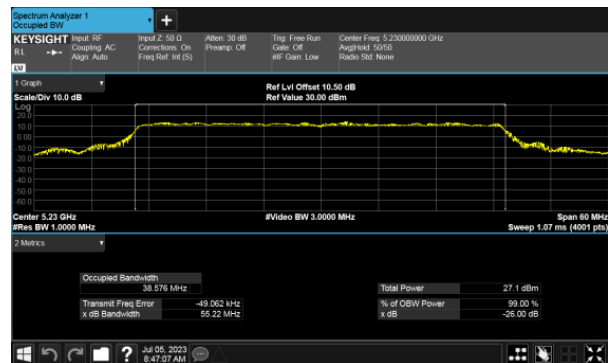
ANT A



ANT B

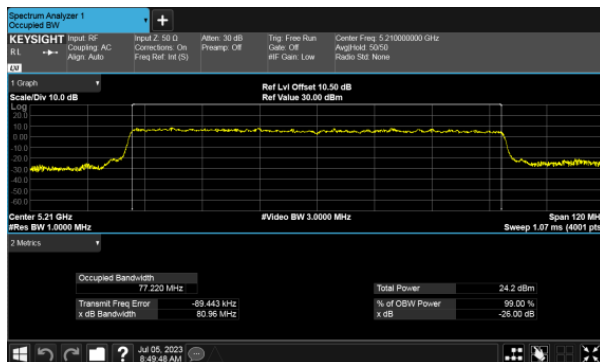


ANT B

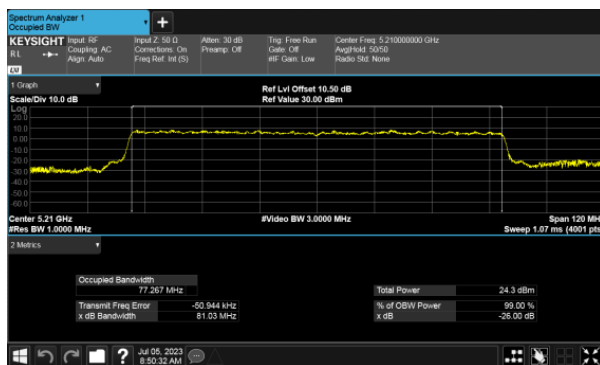




26dB Bandwidth
Modulation Type: 802.11ax HE80 CH42
ANT A



ANT B





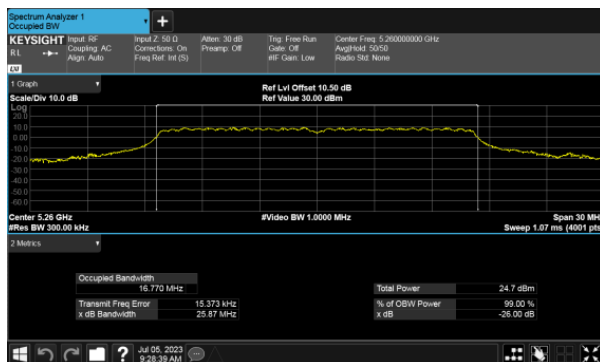
26dB Bandwidth Band 2
Modulation Type: 802.11a CH52
ANT A



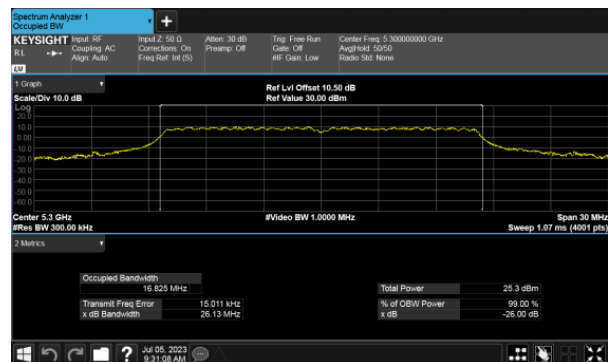
Modulation Type: 802.11a CH60
ANT A



ANT B

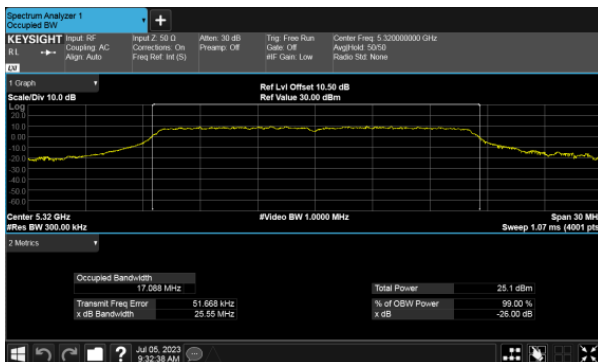


ANT B

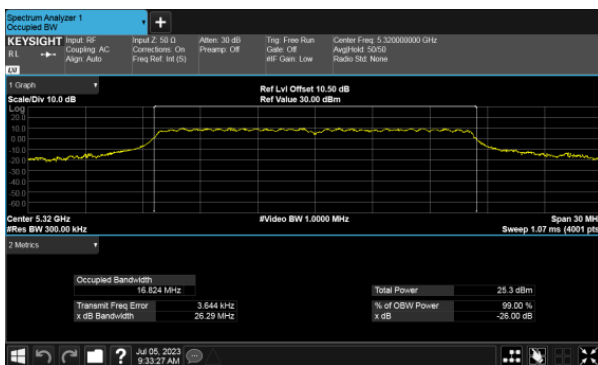




26dB Bandwidth
Modulation Type: 802.11a CH64
ANT A

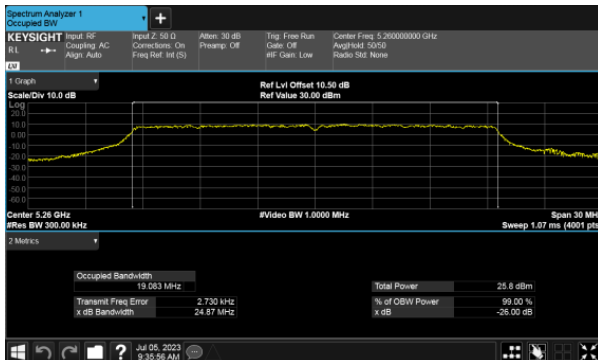


ANT B

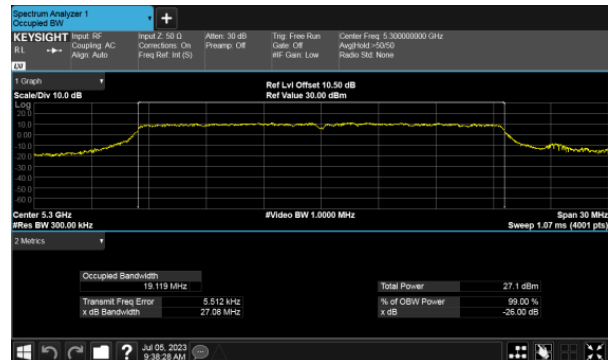




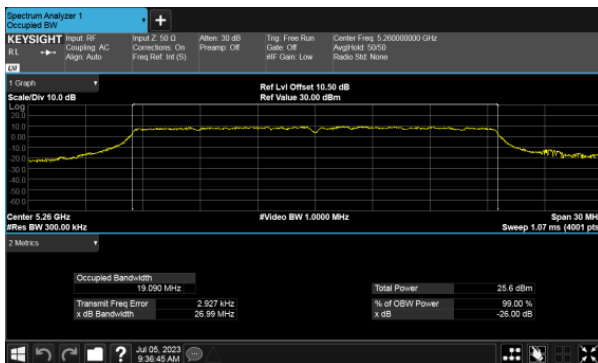
26dB Bandwidth
Modulation Type: 802.11ax HE20 CH52
ANT A



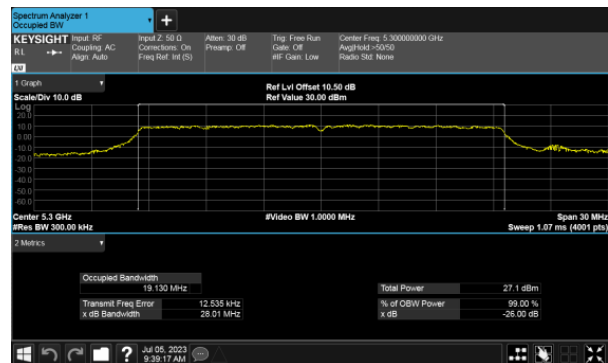
Modulation Type: 802.11ax HE20 CH60
ANT A



ANT B

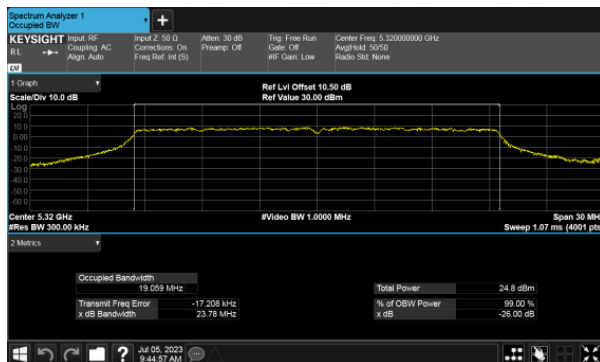


ANT B

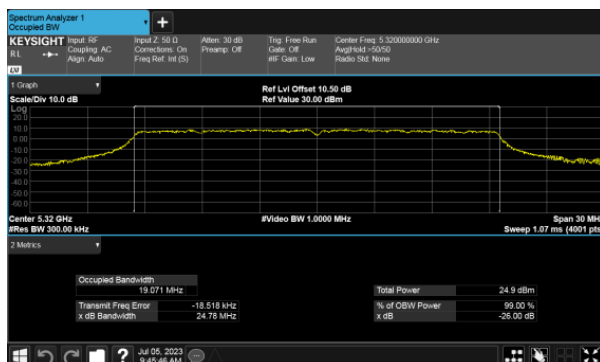




26dB Bandwidth
Modulation Type: 802.11ax HE20 CH64
ANT A

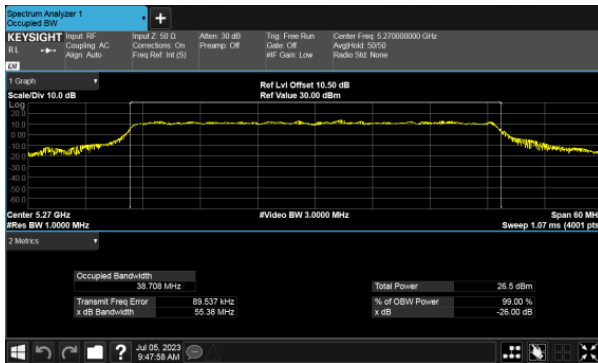


ANT B

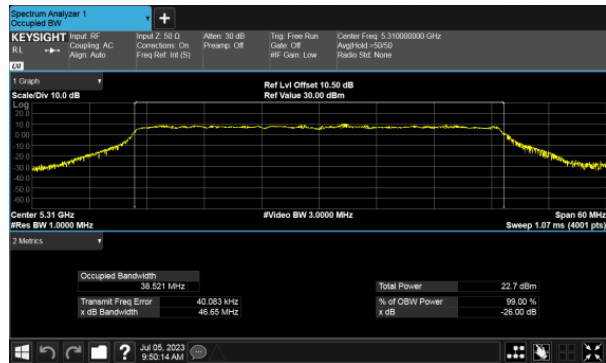




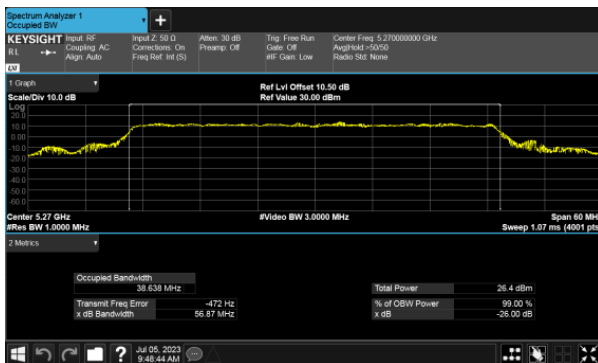
26dB Bandwidth
Modulation Type: 802.11ax HE40 CH54
ANT A



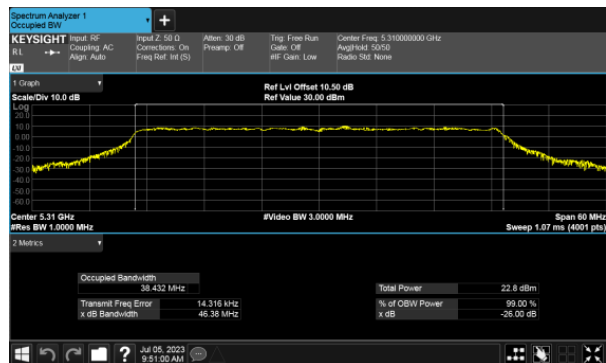
Modulation Type: 802.11ax HE40 CH62
ANT A



ANT B

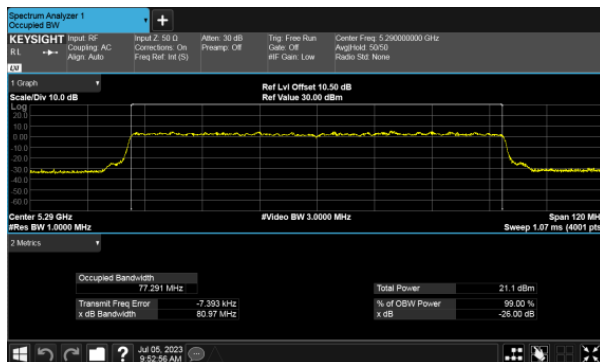


ANT B

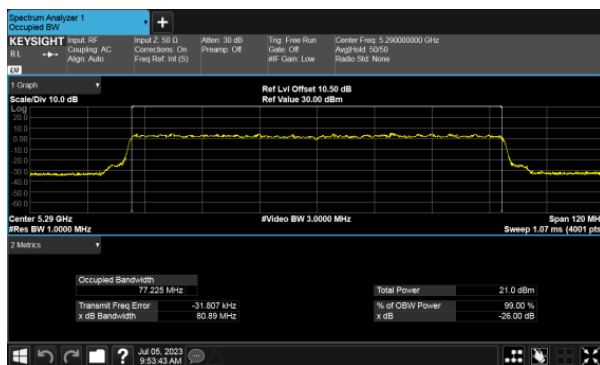




26dB Bandwidth
Modulation Type: 802.11ax HE80 CH58
ANT A

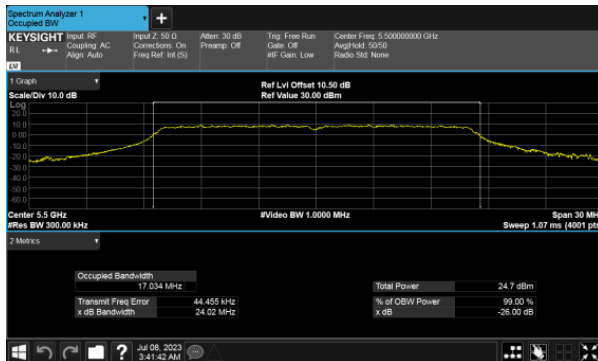


ANT B





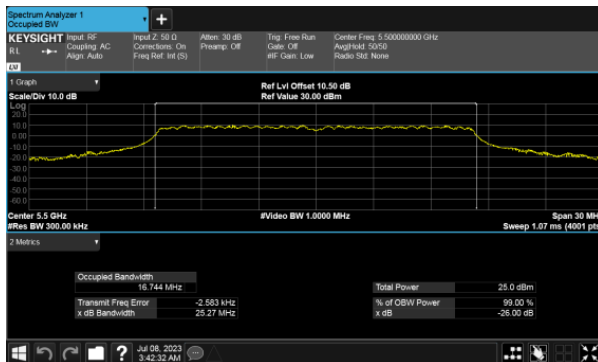
26dB Bandwidth Band 3
Modulation Type: 802.11a CH100
ANT A



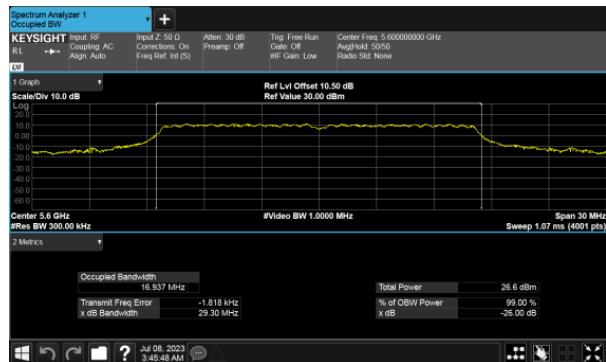
Modulation Type: 802.11a CH120
ANT A



ANT B

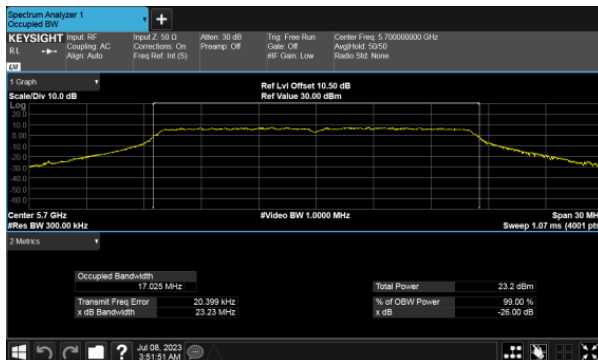


ANT B

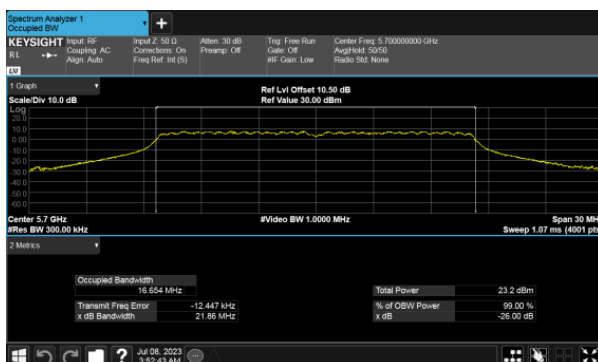




26dB Bandwidth
Modulation Type: 802.11a CH140
ANT A



ANT B

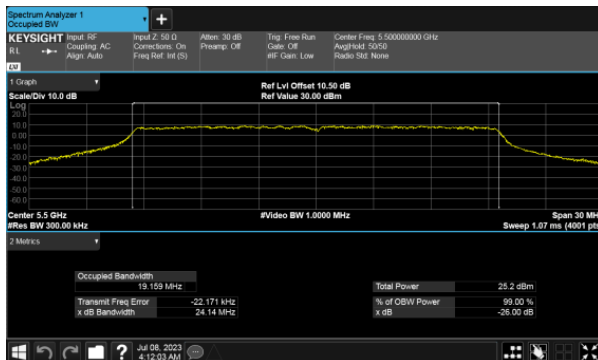




26dB Bandwidth

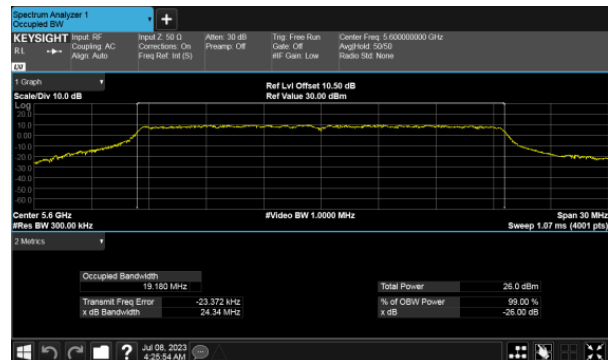
Modulation Type: 802.11ax HE20 CH100

ANT A

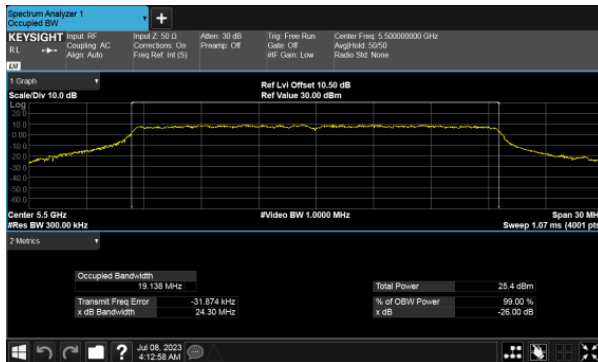


Modulation Type: 802.11ax HE20 CH120

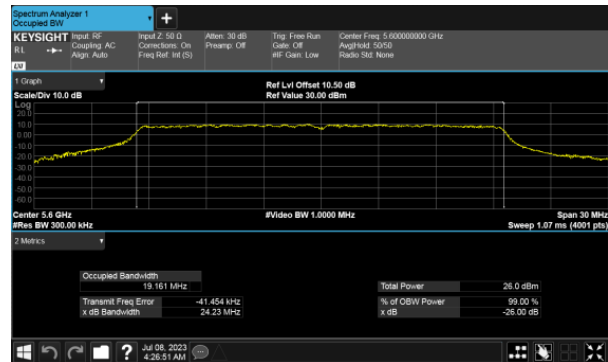
ANT A



ANT B

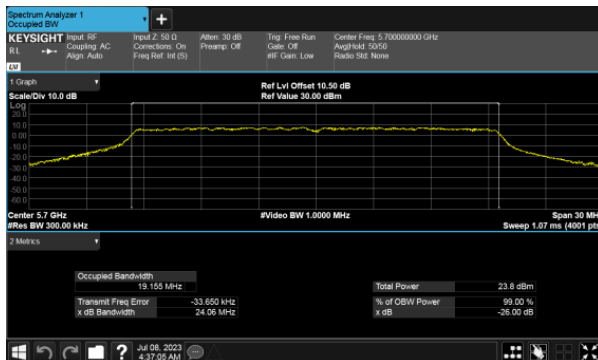


ANT B

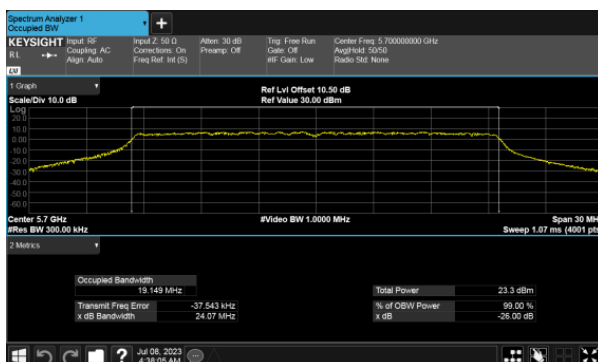




26dB Bandwidth
Modulation Type: 802.11ax HE20 CH140
ANT A

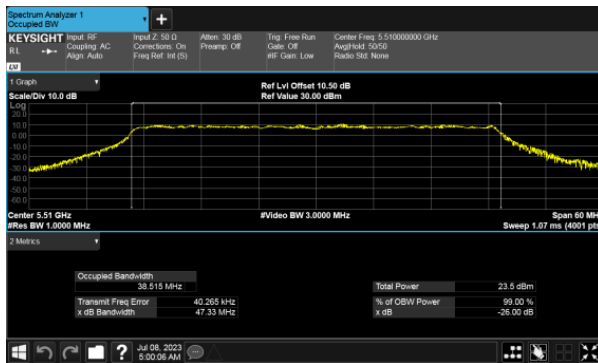
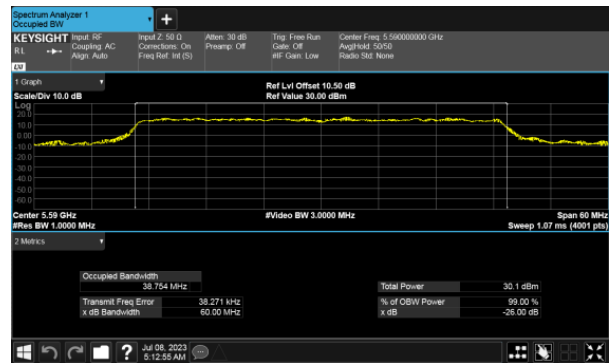


ANT B

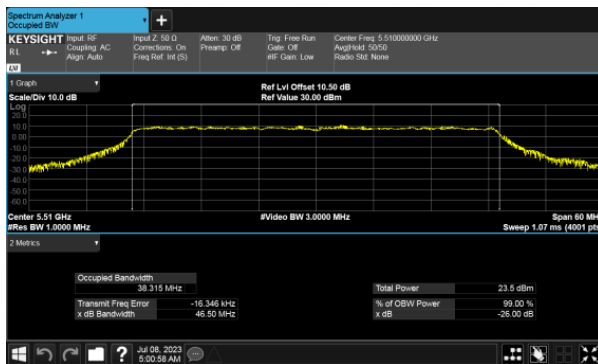




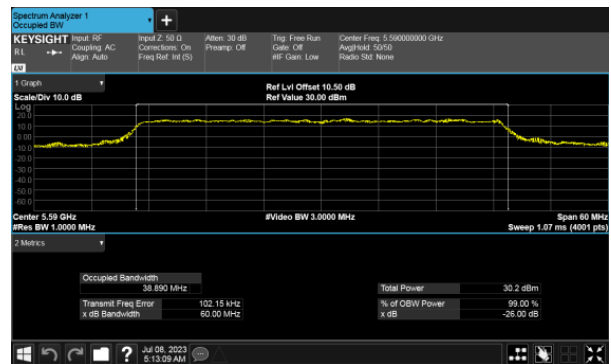
26dB Bandwidth

Modulation Type: 802.11ax HE40 CH102
ANT AModulation Type: 802.11ax HE40 CH118
ANT A

ANT B

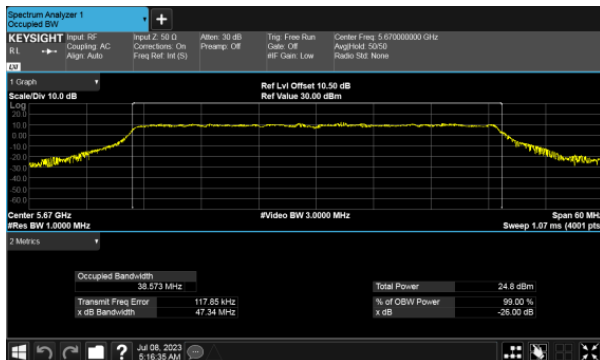


ANT B

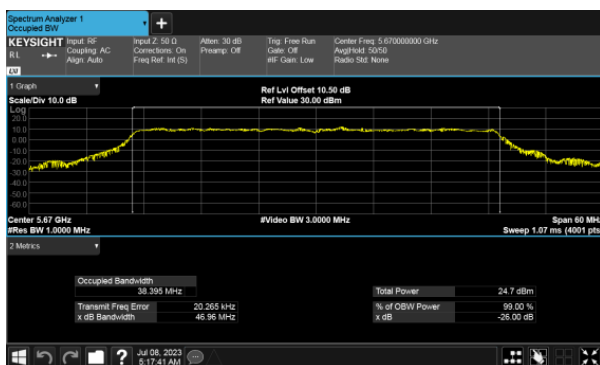




26dB Bandwidth
Modulation Type: 802.11ax HE40 CH134
ANT A



ANT B

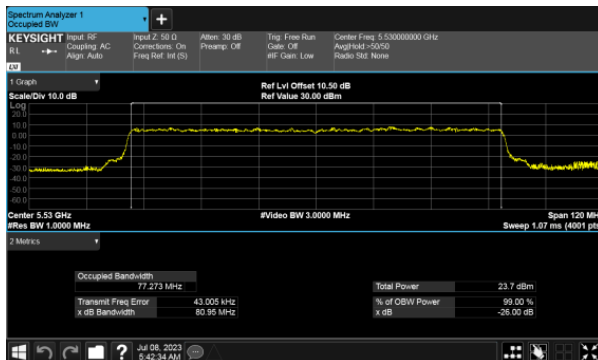




26dB Bandwidth

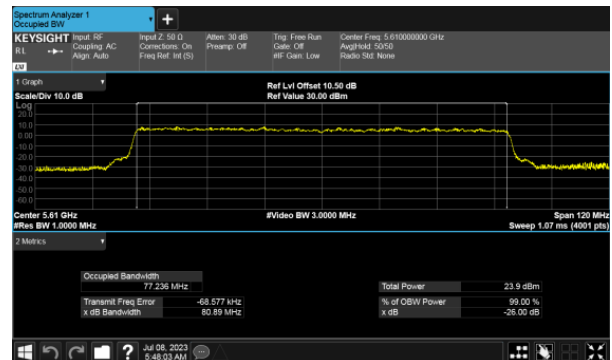
Modulation Type: 802.11ax HE80 CH106

ANT A

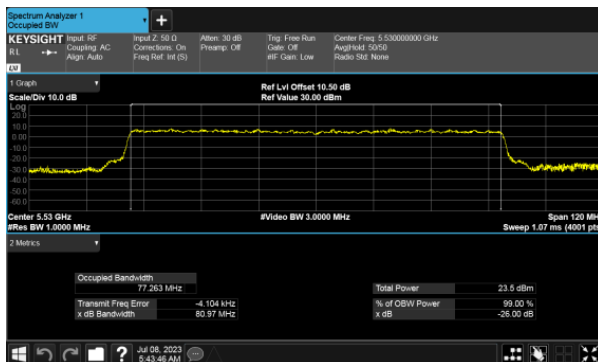


Modulation Type: 802.11ax HE80 CH122

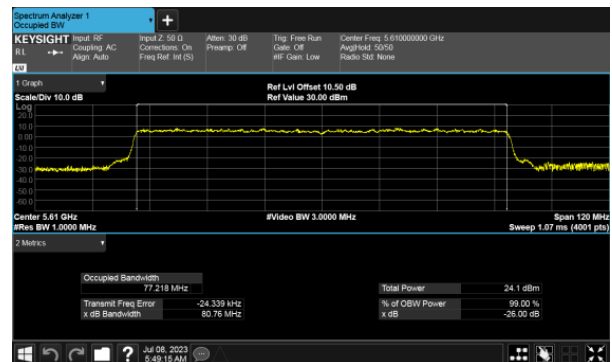
ANT A



ANT B



ANT B

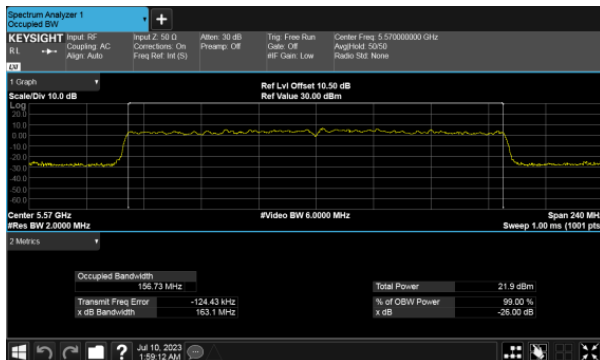




26dB Bandwidth

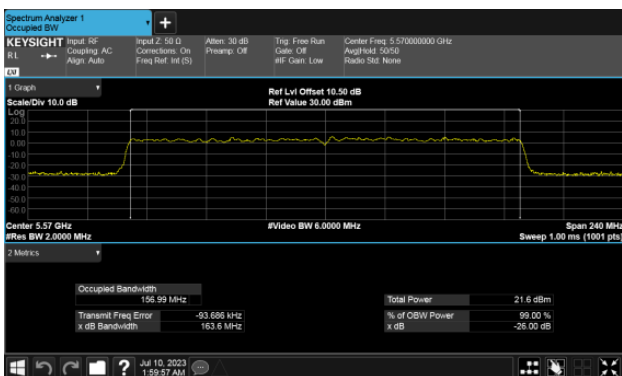
Modulation Type: 802.11ax HE160 CH114

ANT A



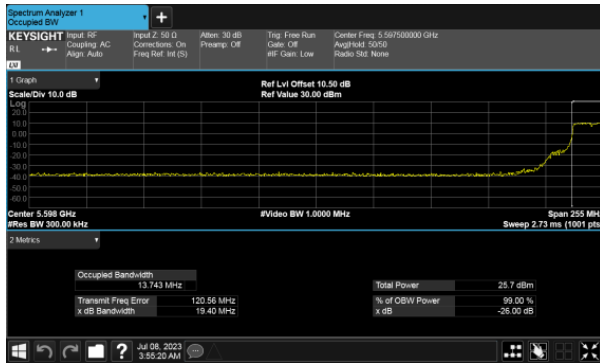
Modulation Type: 802.11ax HE160 CH114

ANT B

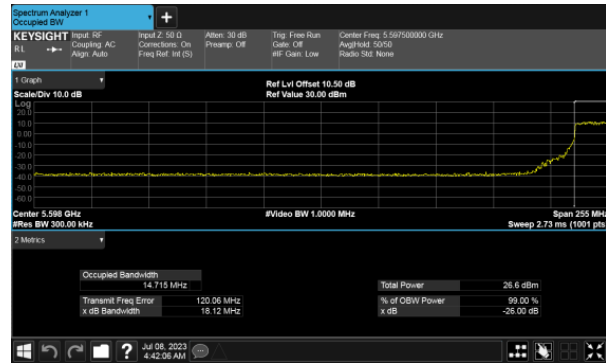




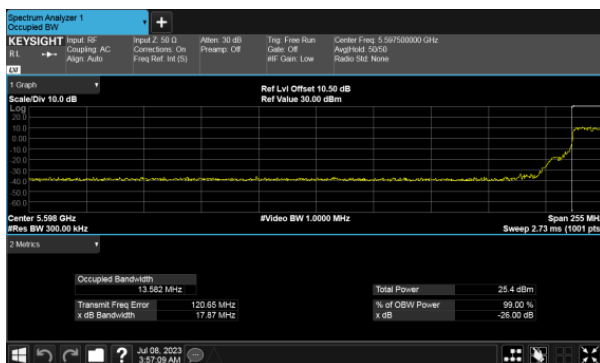
26dB Bandwidth
Within 5470-5725MHz Band, Straddle Channel
Modulation Type: 802.11a CH144
ANT A



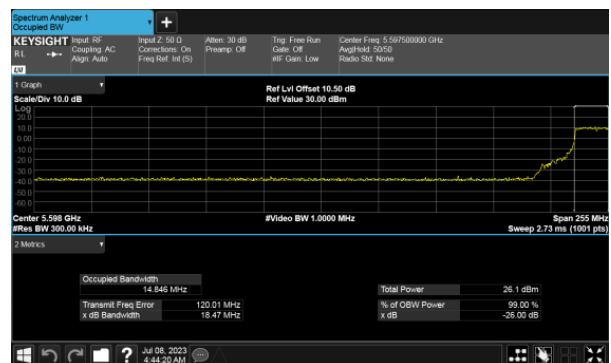
Modulation Type: 802.11ax HE20 CH144
ANT A



ANT B



ANT B



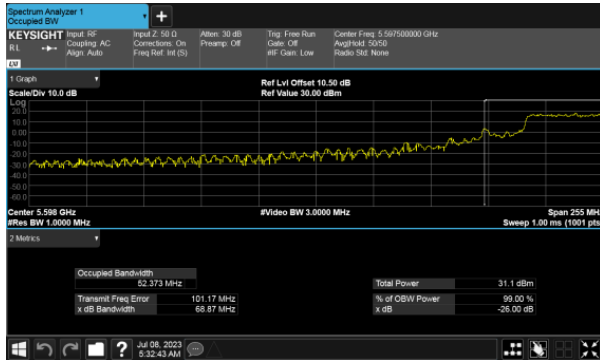


26dB Bandwidth

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11ax HE40 CH142

ANT A



Modulation Type: 802.11ax HE80 CH138

ANT A



ANT B

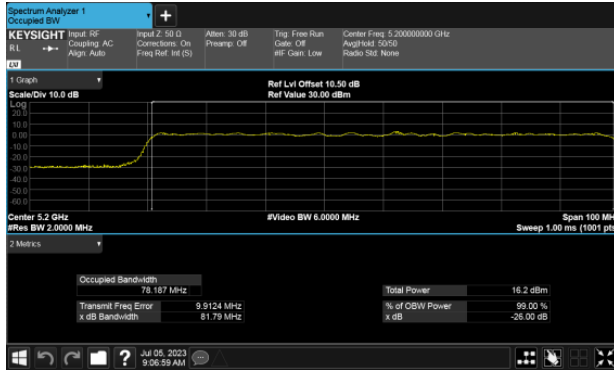


ANT B

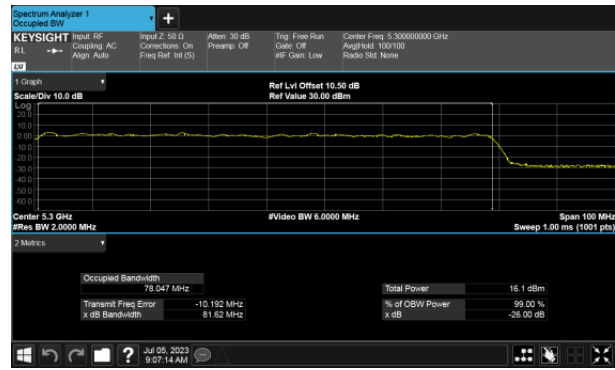




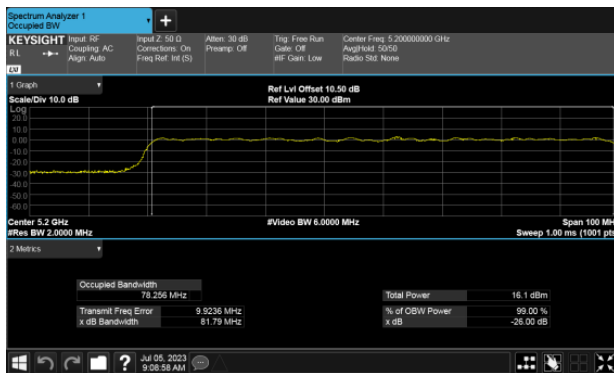
26dB Bandwidth
Within 5150-5250MHz band
Modulation Type: 802.11ax HE160 CH50
ANT A



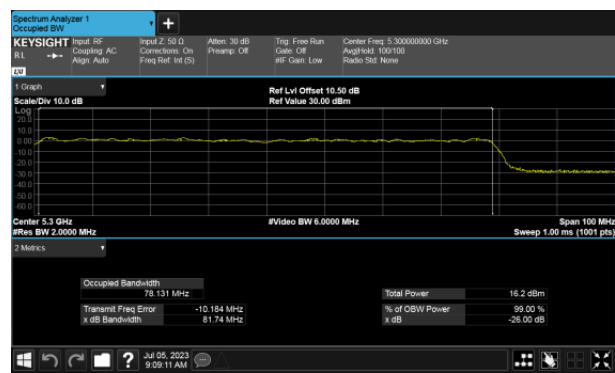
Extends across 5250MHz band
Modulation Type: 802.11ax HE160 CH50
ANT A



ANT B



ANT B

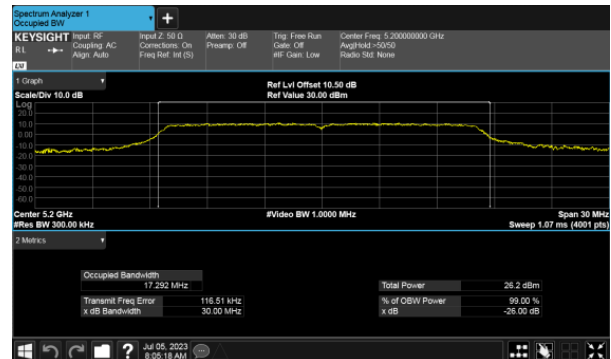




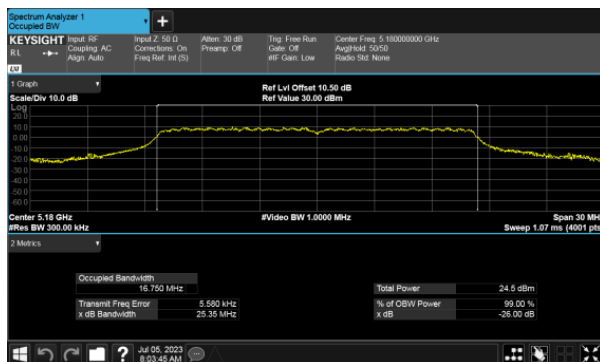
99% Bandwidth Band 1
Modulation Type: 802.11a CH36
ANT A



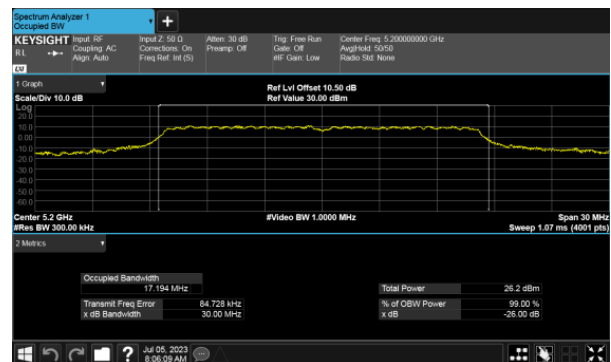
Modulation Type: 802.11a CH40
ANT A



ANT B

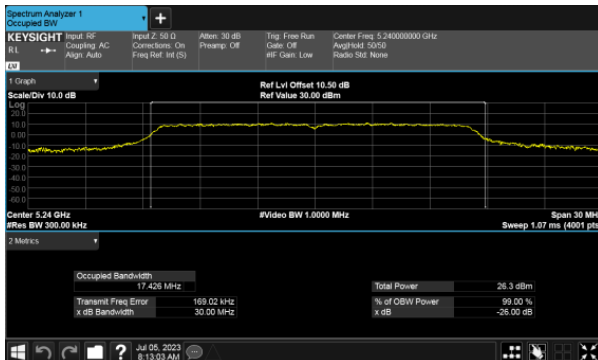


ANT B

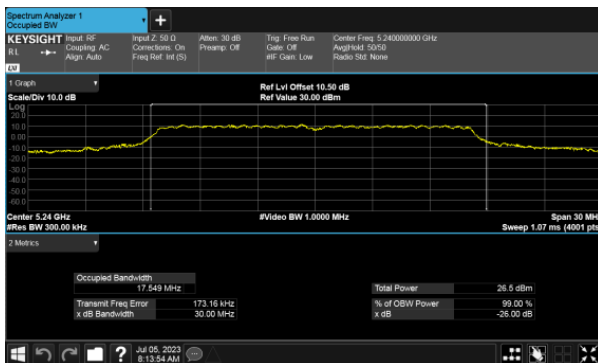




99% Bandwidth
Modulation Type: 802.11a CH48
ANT A

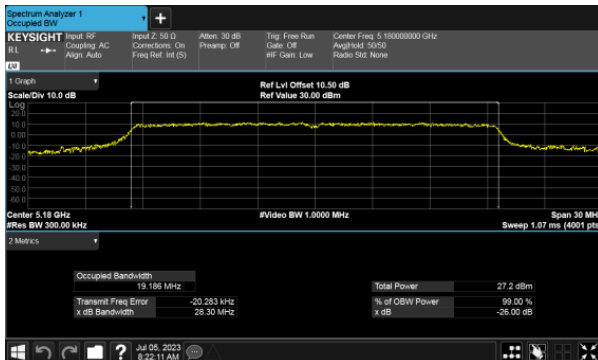


ANT B

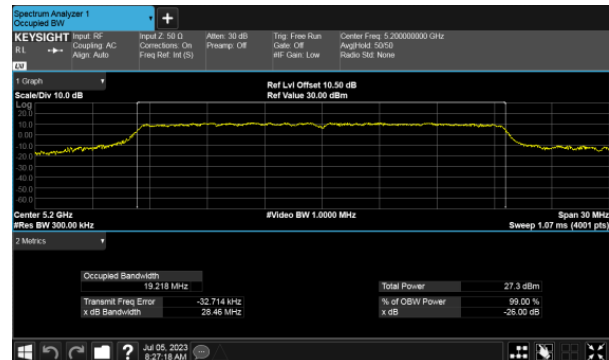




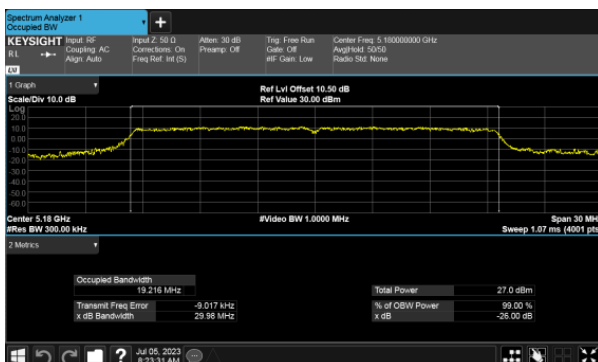
99% Bandwidth
Modulation Type: 802.11ax HE20 CH36
ANT A



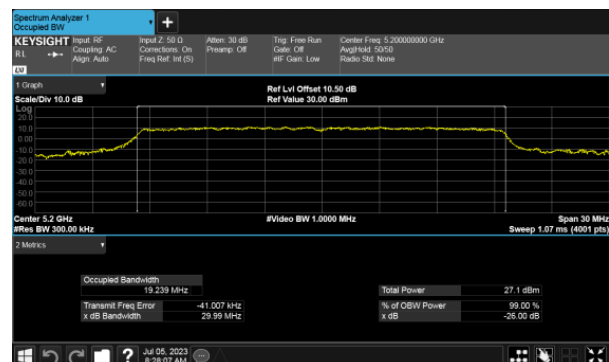
Modulation Type: 802.11ax HE20 CH40
ANT A



ANT B

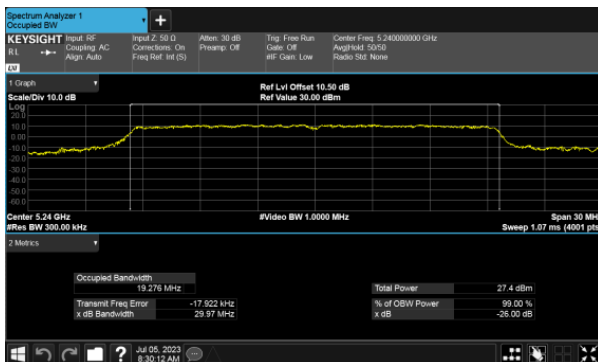


ANT B

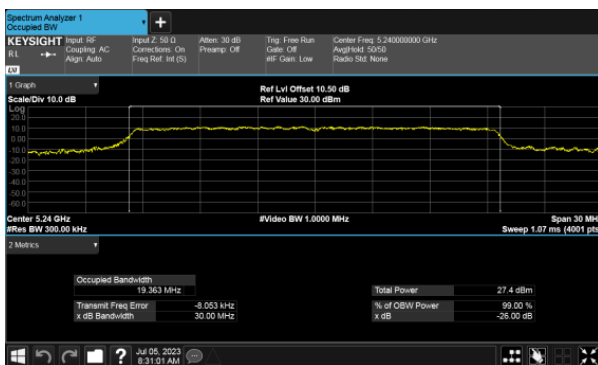




99% Bandwidth
Modulation Type: 802.11ax HE20 CH48
ANT A



ANT B

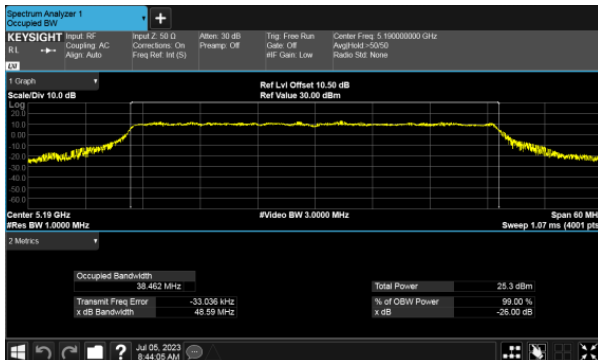




99% Bandwidth

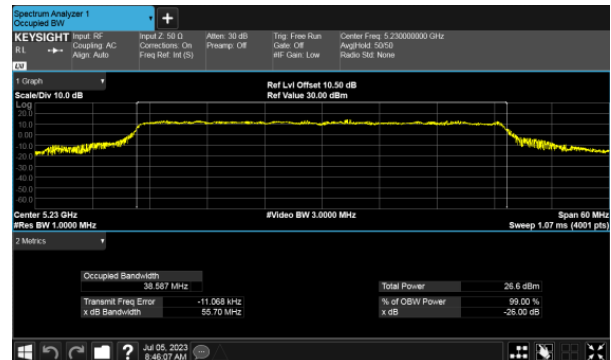
Modulation Type: 802.11ax HE40 CH38

ANT A

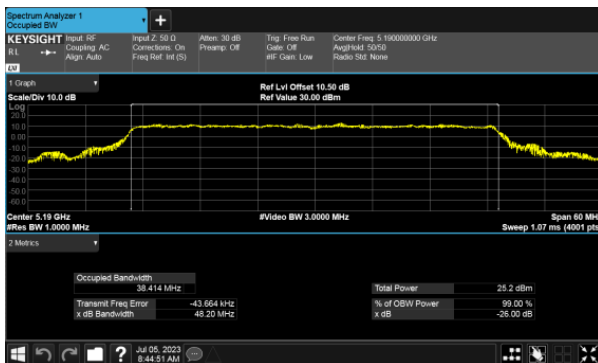


Modulation Type: 802.11ax HE40 CH46

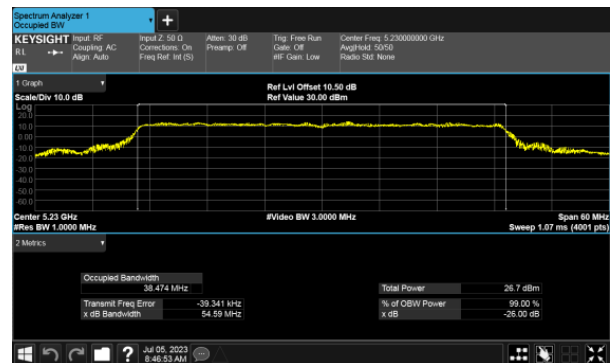
ANT A



ANT B

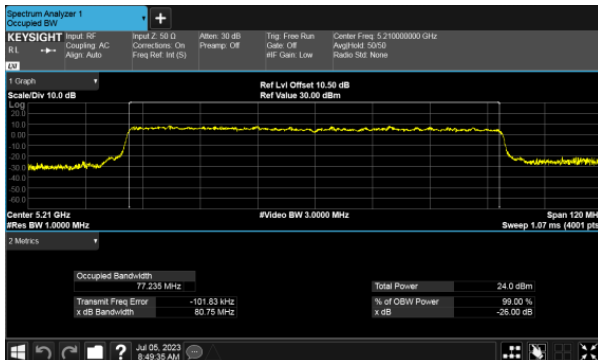


ANT B

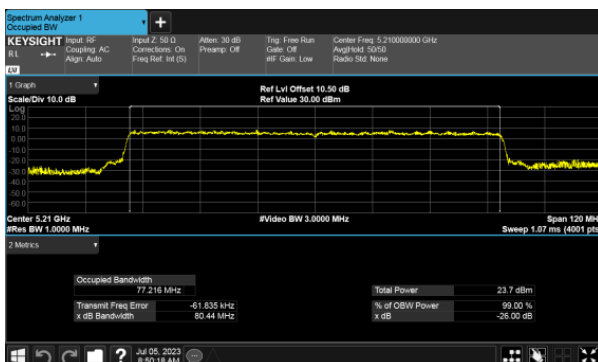




99% Bandwidth
Modulation Type: 802.11ax HE80 CH42
ANT A



ANT B

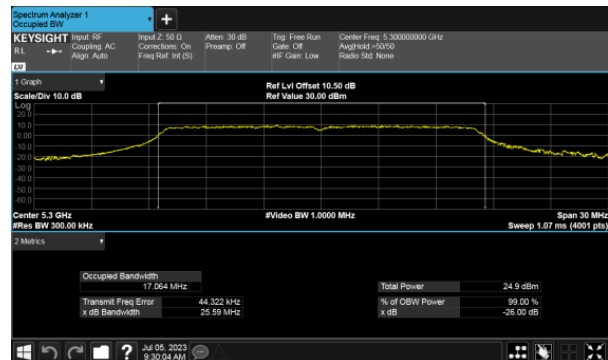




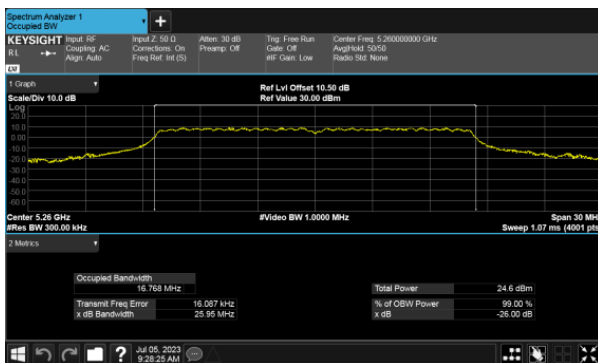
99% Bandwidth Band 2
Modulation Type: 802.11a CH52
ANT A



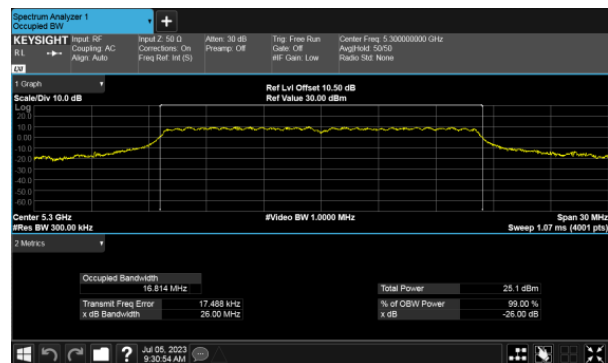
Modulation Type: 802.11a CH60
ANT A



ANT B

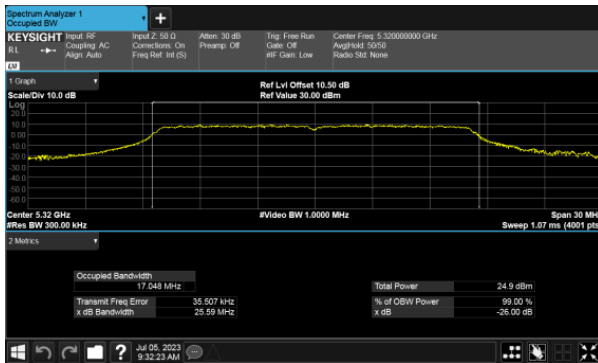


ANT B

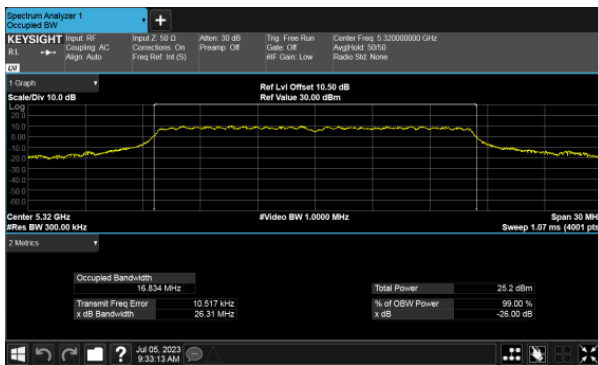




99% Bandwidth
Modulation Type: 802.11a CH64
ANT A



ANT B

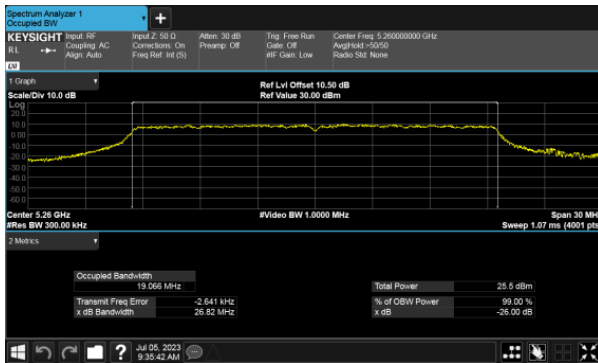




99% Bandwidth

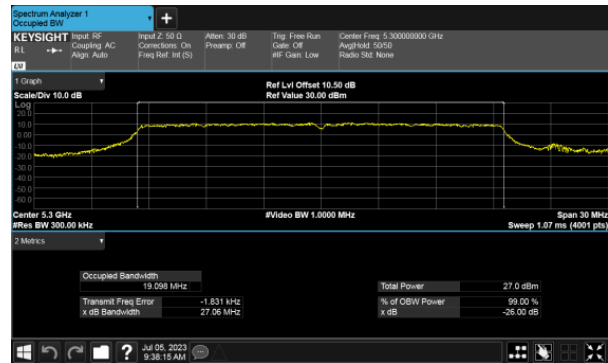
Modulation Type: 802.11ax HE20 CH52

ANT A

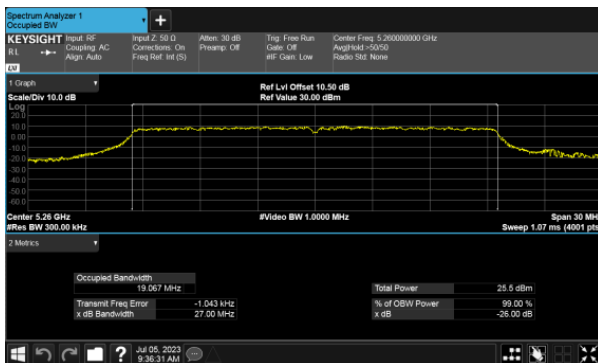


Modulation Type: 802.11ax HE20 CH60

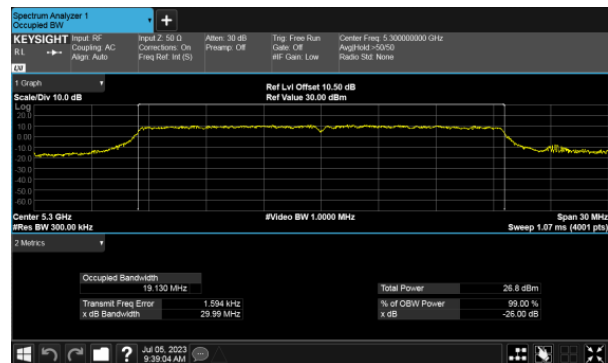
ANT A



ANT B

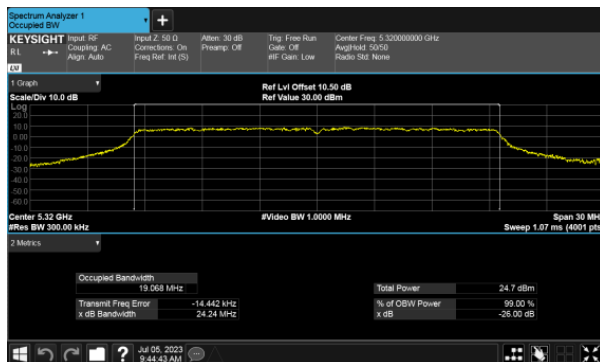


ANT B

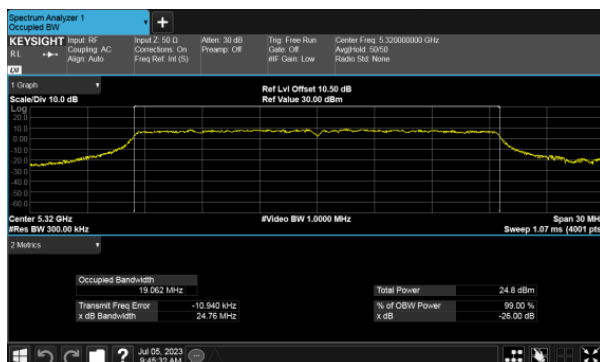




99% Bandwidth
Modulation Type: 802.11ax HE20 CH64
ANT A



ANT B

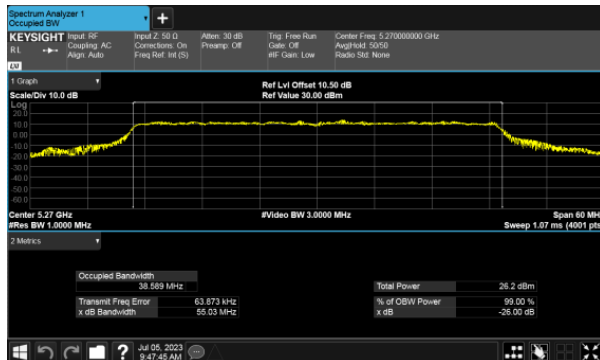




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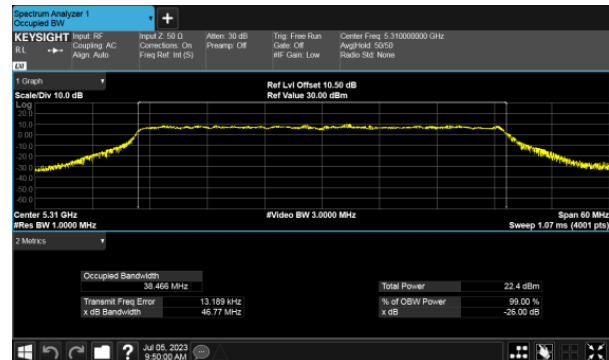
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ANT A

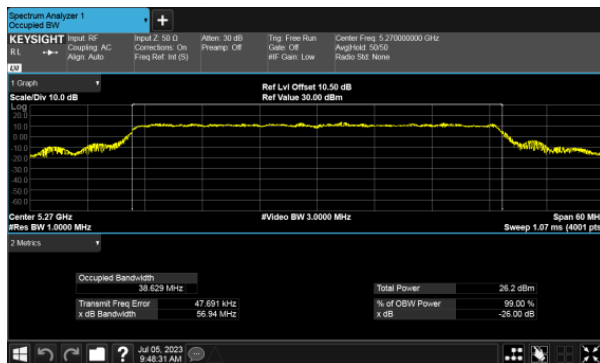


Modulation Type: 802.11ax HE40 CH62

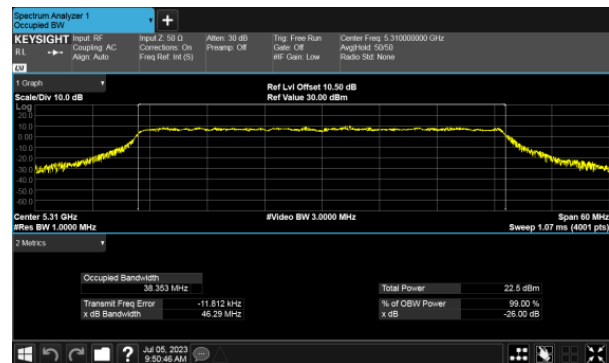
ANT A



ANT B

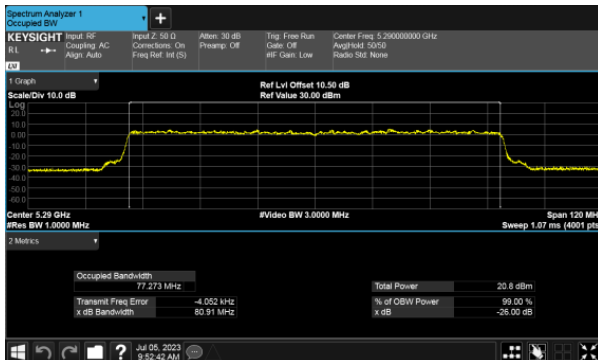


ANT B

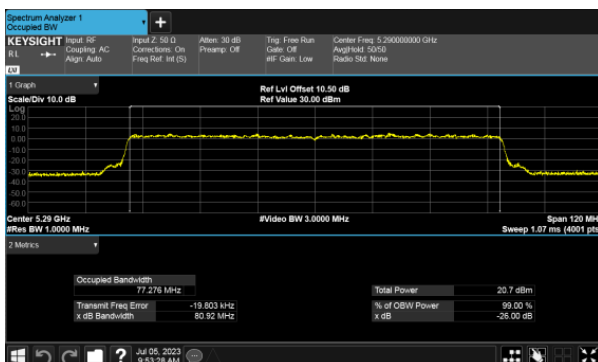




99% Bandwidth
Modulation Type: 802.11ax HE80 CH58
ANT A

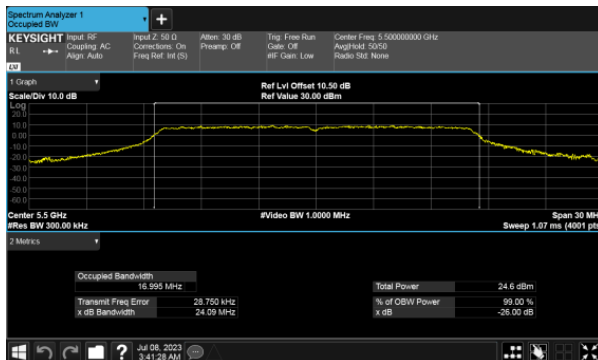


ANT B

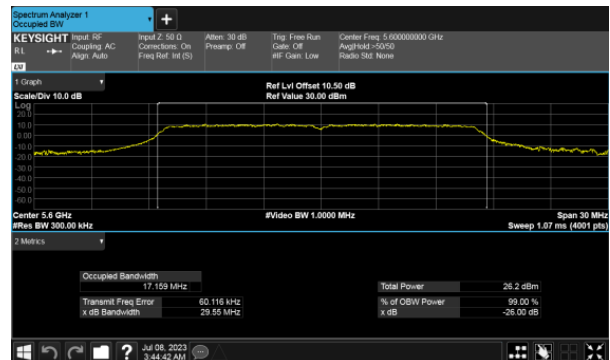




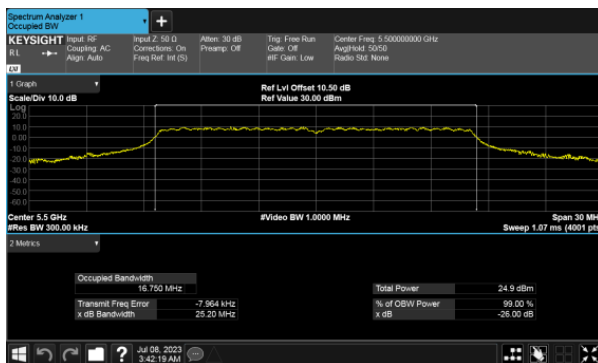
99% Bandwidth Band 3
Modulation Type: 802.11a CH100
ANT A



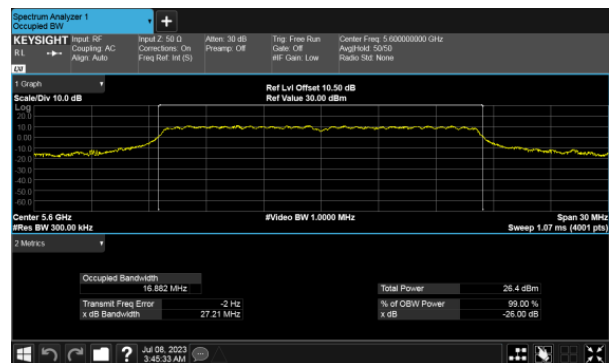
Modulation Type: 802.11a CH120
ANT A



ANT B

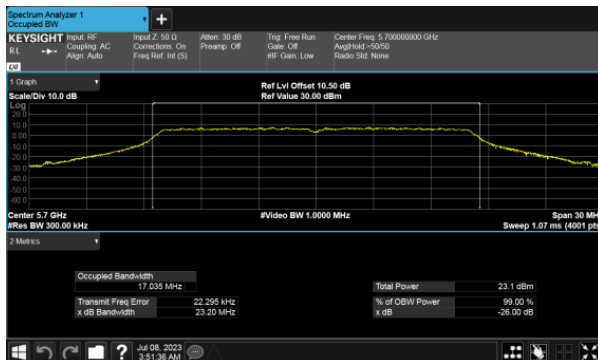


ANT B

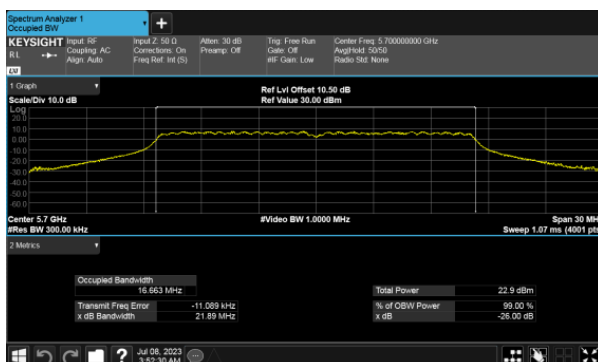




99% Bandwidth
Modulation Type: 802.11a CH140
ANT A



ANT B

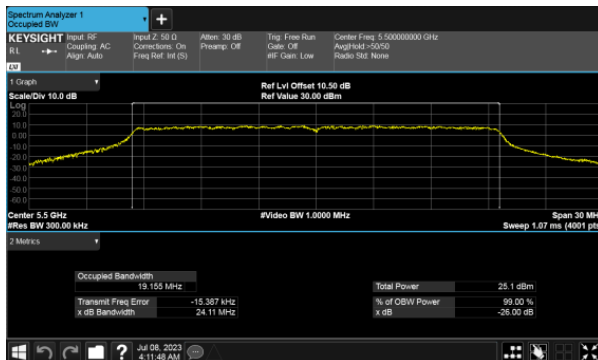




99% Bandwidth

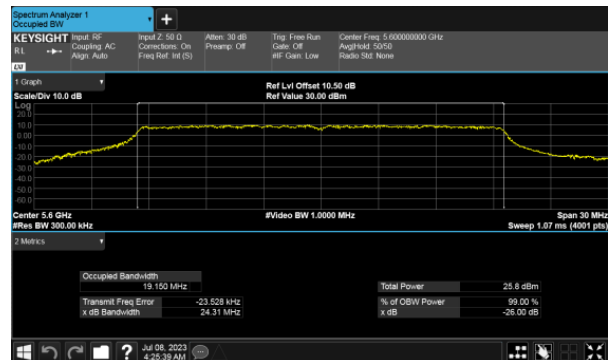
Modulation Type: 802.11ax HE20 CH100

ANT A

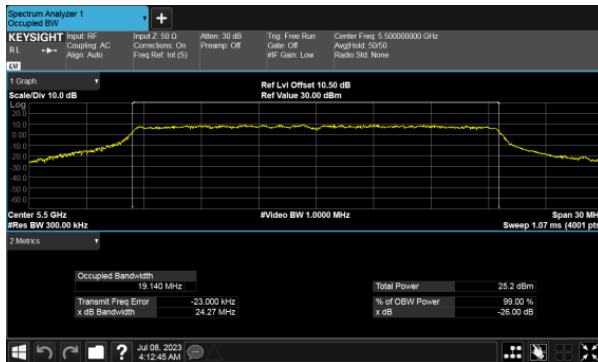


Modulation Type: 802.11ax HE20 CH120

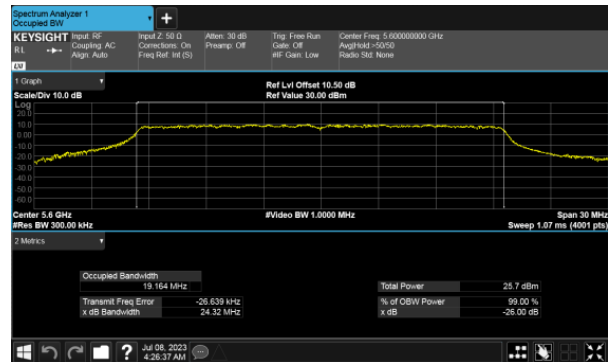
ANT A



ANT B

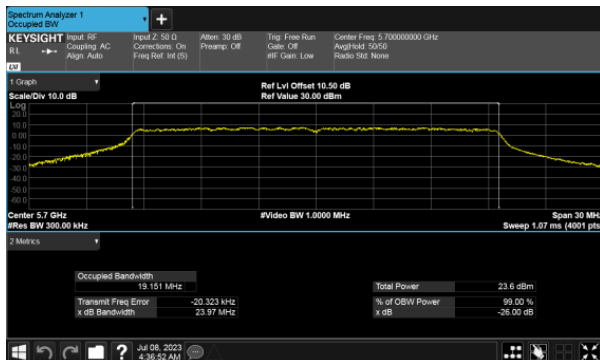


ANT B

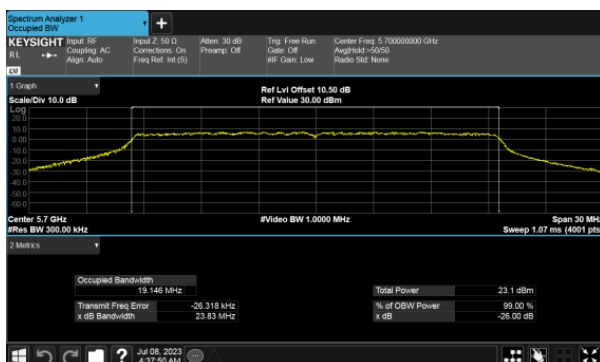




99% Bandwidth
Modulation Type: 802.11ax HE20 CH140
ANT A

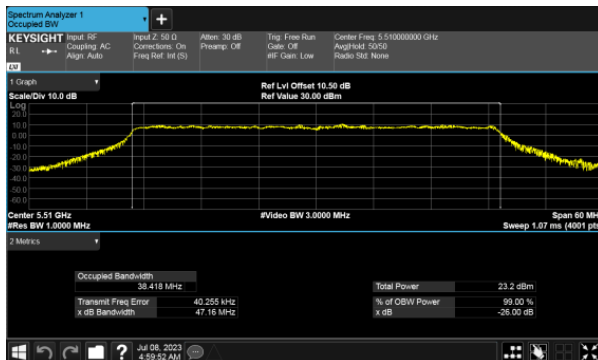
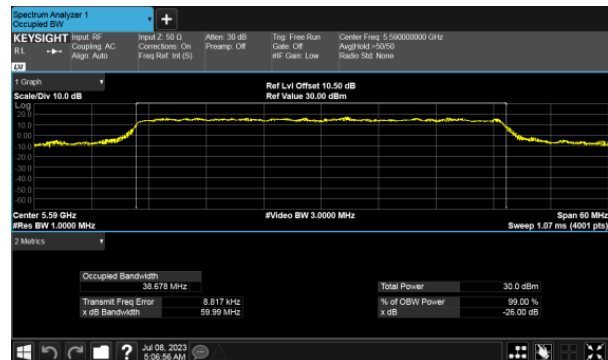


ANT B

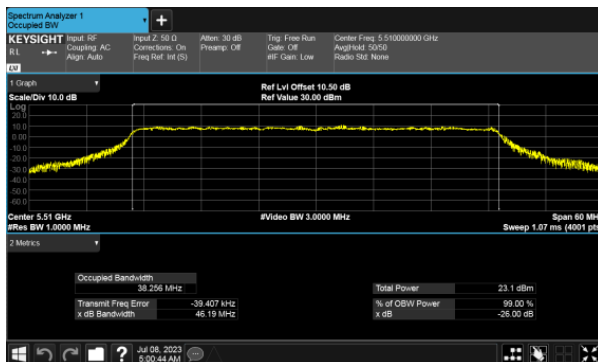




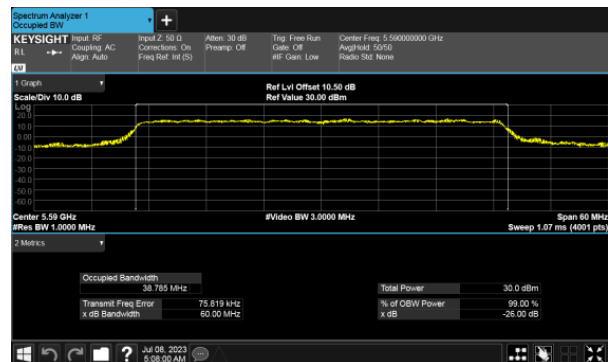
99% Bandwidth

Modulation Type: 802.11ax HE40 CH102
ANT AModulation Type: 802.11ax HE40 CH118
ANT A

ANT B

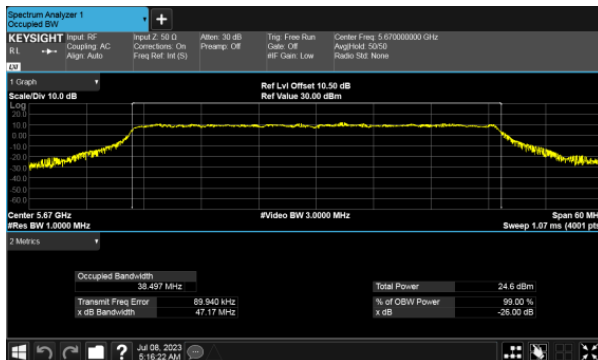


ANT B

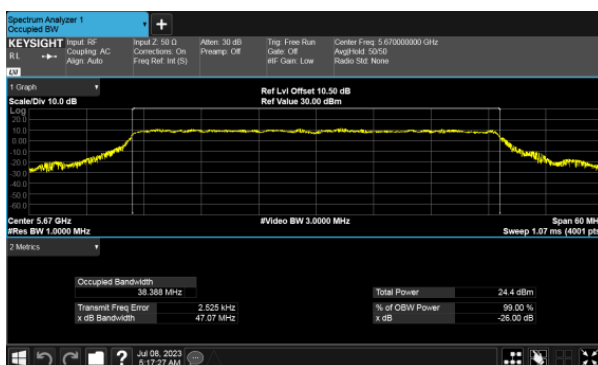




99% Bandwidth
Modulation Type: 802.11ax HE40 CH134
ANT A



ANT B

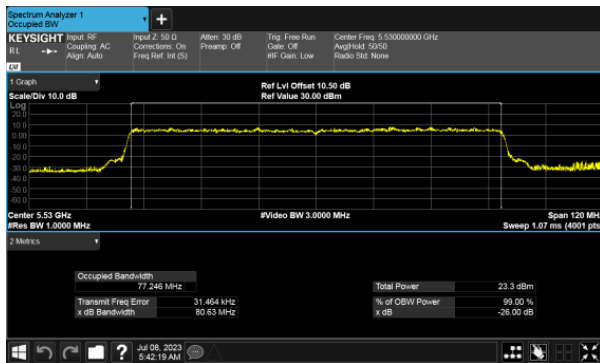




99% Bandwidth

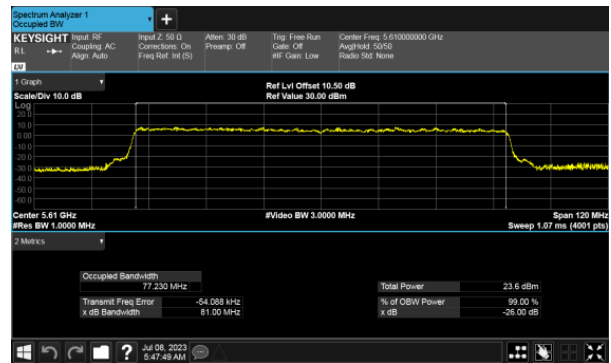
Modulation Type: 802.11ax HE80 CH106

ANT A

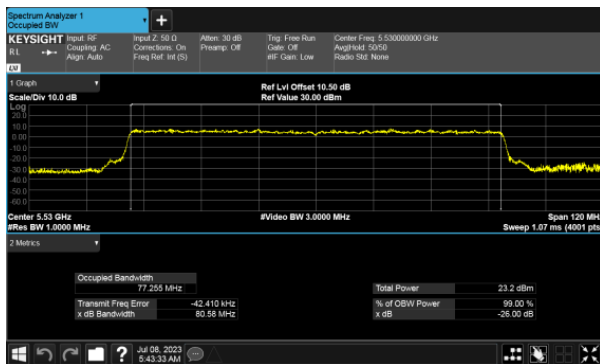


Modulation Type: 802.11ax HE80 CH122

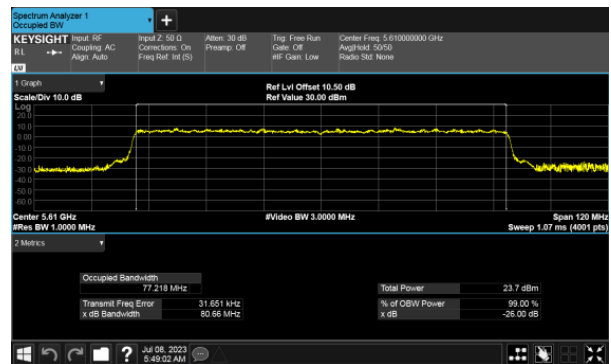
ANT A



ANT B



ANT B

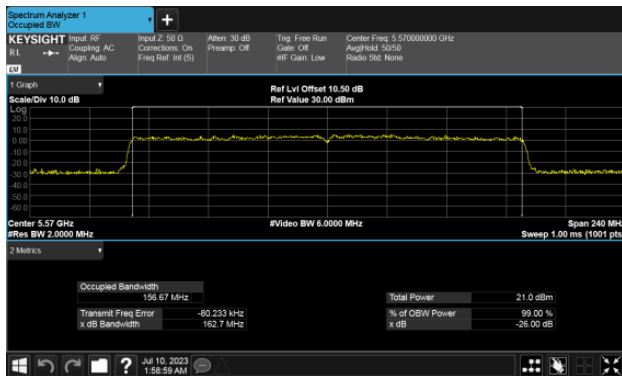




99% Bandwidth

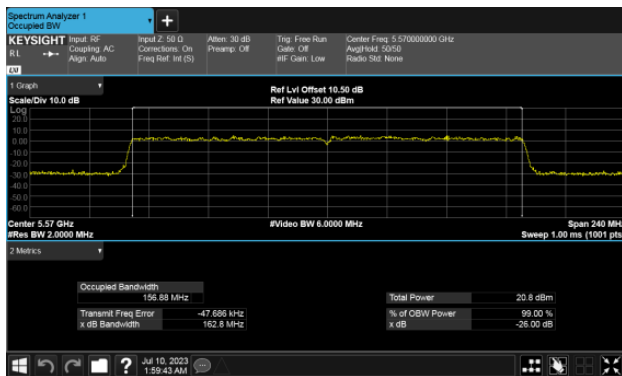
Modulation Type: 802.11ax HE160 CH114

ANT A



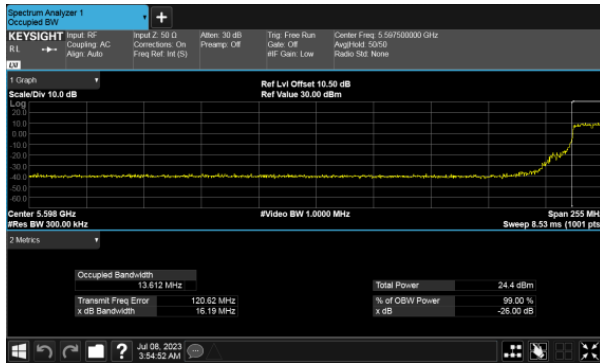
Modulation Type: 802.11ax HE160 CH114

ANT B

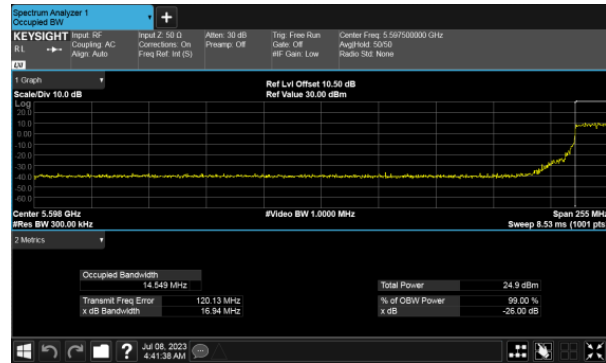




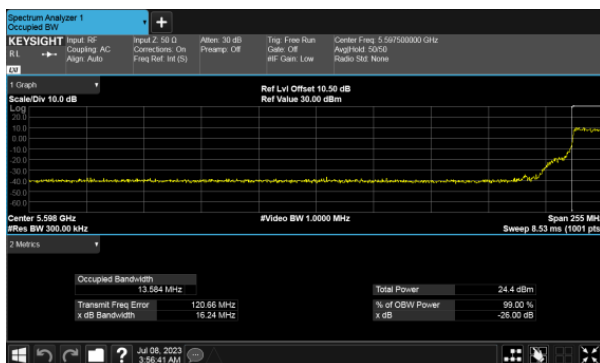
99% Bandwidth
Within 5470-5725MHz Band, Straddle Channel
Modulation Type: 802.11a CH144
ANT A



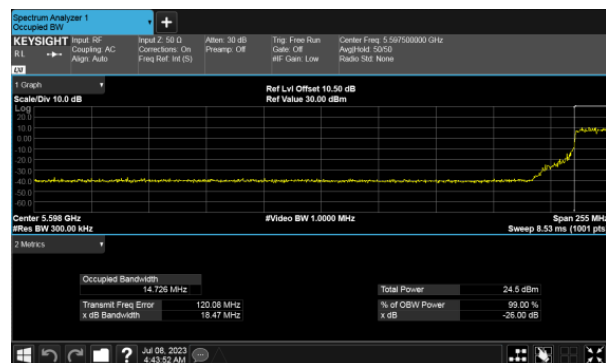
Modulation Type: 802.11ax HE20 CH144
ANT A



ANT B



ANT B



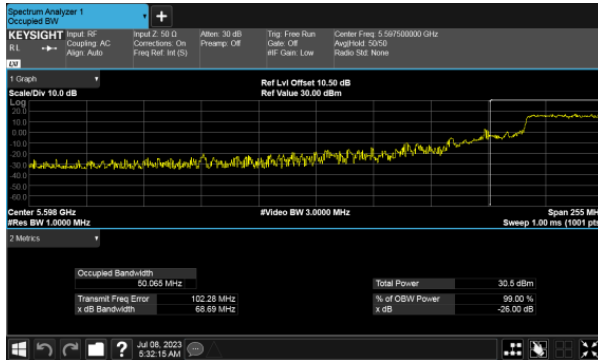


99% Bandwidth

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11ax HE40 CH142

ANT A

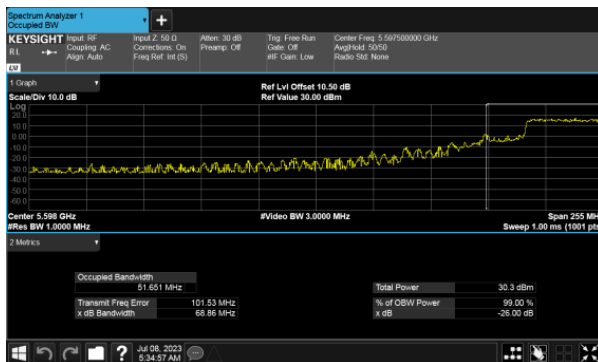


Modulation Type: 802.11ax HE80 CH138

ANT A



ANT B

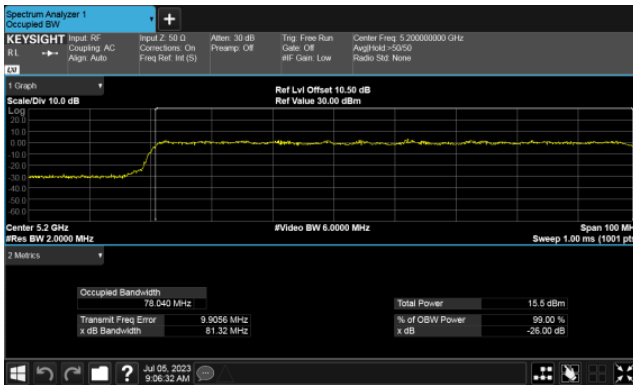


ANT B

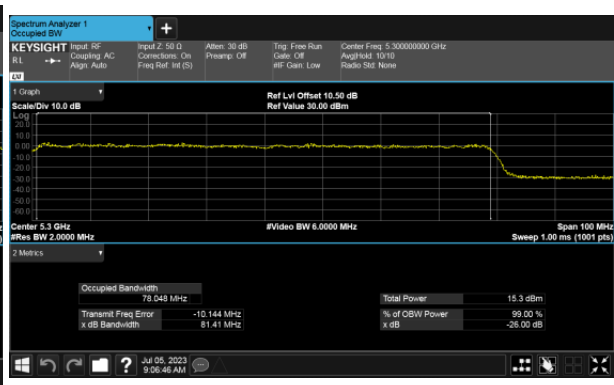




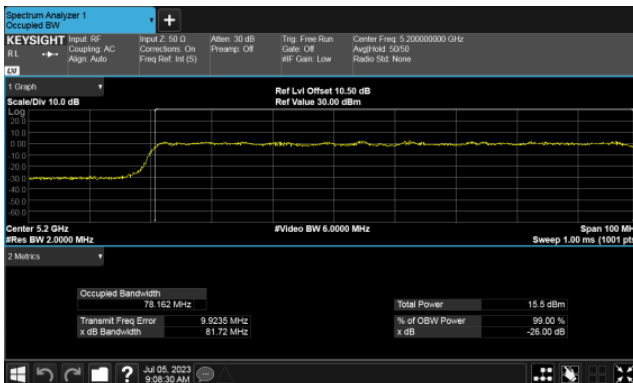
99% Bandwidth
Within 5150-5250MHz band
Modulation Type: 802.11ax HE160 CH50
ANT A



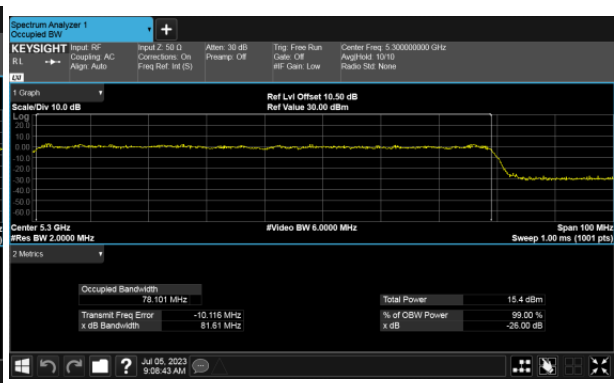
Extends across 5250MHz band
Modulation Type: 802.11ax HE160 CH50
ANT A



ANT B



ANT B





10. Average Power

10.1. Test Limit

Output Power:

Frequency Band		Limit
☒	5.15~5.25GHz	
	Operating Mode	
☐	Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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. The maximum e.i.r.p. at any elevation angle above 30degrees as measured from the horizon must not exceed 125 mW (21 dBm).
☐	Indoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.
☐	Fixed point-to-point access points	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.
☒	client devices	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.



Frequency Band		Limit
☒	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. 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.
☒	5.470-5.725 GHz	
☒	5.725~5.85 GHz	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). 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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

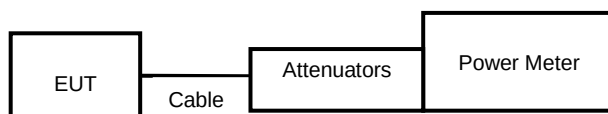
10.2.Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 12.3

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.5 dB (including 10 dB pad and 0.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

10.3.Test Setup Layout





10.4. Test Result and Data

In the 5.2G Band

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	14	36	5180	13.23	13.85	16.56	45.304	24.00
11a	6 Mbps	14	40	5200	13.09	13.82	16.48	44.469	24.00
11a	6 Mbps	14	48	5240	13.67	14.08	16.89	48.867	24.00
11ax HE20	NSS1-MCS0	14	36	5180	13.18	13.87	16.55	45.175	24.00
11ax HE20	NSS1-MCS0	14	40	5200	13.14	13.79	16.49	44.539	24.00
11ax HE20	NSS1-MCS0	14	48	5240	13.52	14.24	16.91	49.037	24.00
11ax HE40	NSS1-MCS0	14	38	5190	13.25	13.89	16.59	45.626	24.00
11ax HE40	NSS1-MCS0	14	46	5230	13.71	14.15	16.95	49.498	24.00
11ax HE80	NSS1-MCS0	14	42	5210	13.81	14.09	16.96	49.688	24.00

In the 5.3G Band

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	14	52	5260	13.65	13.11	16.40	43.638	24.00
11a	6 Mbps	14	60	5300	14.38	13.84	17.13	51.626	24.00
11a	6 Mbps	14	64	5320	13.64	14.32	17.00	50.160	24.00
11ax HE20	NSS1-MCS0	14	52	5260	13.62	13.21	16.43	43.956	24.00
11ax HE20	NSS1-MCS0	14	60	5300	14.31	14.36	17.35	54.267	24.00
11ax HE20	NSS1-MCS0	14	64	5320	13.71	14.33	17.04	50.598	24.00
11ax HE40	NSS1-MCS0	14	54	5270	13.59	13.21	16.41	43.797	24.00
11ax HE40	NSS1-MCS0	14	62	5310	14.47	13.62	17.08	51.004	24.00
11ax HE80	NSS1-MCS0	13	58	5290	12.82	13.15	16.00	39.796	24.00



In the 5.5G Band

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	13.5	100	5500	13.81	13.26	16.55	45.227	24.00
11a	6 Mbps	13.5	120	5600	14.13	13.47	16.82	48.115	24.00
11a	6 Mbps	13.5	140	5700	13.41	13.09	16.26	42.298	24.00
11ax HE20	NSS1-MCS0	13.5	100	5500	13.10	13.82	16.49	44.516	24.00
11ax HE20	NSS1-MCS0	13.5	120	5600	14.03	13.66	16.86	48.520	24.00
11ax HE20	NSS1-MCS0	13.5	140	5700	13.38	13.05	16.23	41.961	24.00
11ax HE40	NSS1-MCS0	13.5	102	5510	13.71	14.03	16.88	48.789	24.00
11ax HE40	NSS1-MCS0	13.5	118	5590	13.65	14.05	16.86	48.584	24.00
11ax HE40	NSS1-MCS0	13.5	134	5670	13.35	13.19	16.28	42.472	24.00
11ax HE80	NSS1-MCS0	13.5	106	5530	13.76	13.41	16.60	45.696	24.00
11ax HE80	NSS1-MCS0	13.5	122	5610	13.88	13.44	16.68	46.514	24.00
11ax HE160	NSS1-MCS0	12	114	5570	12.27	11.59	14.95	31.287	24.00

In the 5.8G Band

Modulation Type	Data Rate	Conducted Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	14	149	5745	13.84	14.39	17.13	51.689	30.00
11a	6 Mbps	14	157	5785	13.41	13.73	16.58	45.533	30.00
11a	6 Mbps	14	165	5825	13.53	13.47	16.51	44.775	30.00
11ax HE20	NSS1-MCS0	14	149	5745	13.92	14.36	17.16	51.950	30.00
11ax HE20	NSS1-MCS0	14	157	5785	13.49	13.61	16.56	45.297	30.00
11ax HE20	NSS1-MCS0	14	165	5825	13.48	13.37	16.44	44.011	30.00
11ax HE40	NSS1-MCS0	14	151	5755	14.09	14.41	17.26	53.251	30.00
11ax HE40	NSS1-MCS0	14	159	5795	13.59	13.67	16.64	46.137	30.00
11ax HE80	NSS1-MCS0	14	155	5775	13.92	14.13	17.04	50.543	30.00



FCC Maximum Conducted Output Power (Within 5150-5250MHz band) RF Output Power(dBm)										
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
				ANT A	ANT B					
9.5	11ax HE160	NSS1-MCS0	5250	-1.44	-1.05	1.77	8.50	10.641	10.27	24.00

FCC Maximum Conducted Output Power (Extends across 5250MHz band) RF Output Power(dBm)										
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
				ANT A	ANT B					
9.5	11ax HE160	NSS1-MCS0	5250	-1.27	-1.54	1.61	8.50	10.250	10.11	24.00

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Avg Power Output (dBm)		Total Power
					ANT A	ANT B	(dBm)
Meter power (for full power)							
11ax HE160	NSS1-MCS0	9.5	50	5250	10.59	9.47	13.08

Note: Power Meter Average power is for reference only.



FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)										
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
				ANT A	ANT B					
13.5	11a	6M	5720	10.58	9.93	13.28	2.80	40.527	16.08	23.52
13.5	11ax HE20	NSS1-MCS0	5720	9.73	9.72	12.74	3.14	38.684	15.88	23.58
13.5	11ax HE40	NSS1-MCS0	5710	5.94	5.95	8.96	4.77	23.579	13.73	24.00
13.5	11ax HE80	NSS1-MCS0	5690	7.10	7.18	10.15	6.74	48.871	16.89	24.00

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)										
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
				ANT A	ANT B					
13.5	11a	6M	5720	4.25	3.54	6.92	2.80	9.375	9.72	30.00
13.5	11ax HE20	NSS1-MCS0	5720	4.32	4.22	7.28	3.14	11.017	10.42	30.00
13.5	11ax HE40	NSS1-MCS0	5710	-3.39	-3.36	-0.36	4.77	2.758	4.41	30.00
13.5	11ax HE80	NSS1-MCS0	5690	-6.03	-5.45	-2.72	6.74	2.523	4.02	30.00

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Avg Power Output (dBm)		Total Power
					ANT A	ANT B	(dBm)
Meter power (for full power)							
11a	6 Mbps	13.5	Ch144	5720MHz	13.11	13.39	16.26
11ax HE20	NSS1-MCS0	13.5	Ch144	5720MHz	13.1	13.3	16.21
11ax HE40	NSS1-MCS0	13.5	Ch142	5710MHz	13.08	13.33	16.22
11ax HE80	NSS1-MCS0	13.5	Ch138	5690MHz	13.28	13.32	16.31

Note: Power Meter Average power is for reference only.