



26dB Bandwidth Band 2-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

CH62





26dB Bandwidth Band 2-ANT B
Modulation Type: 802.11ax HE20 CH52



Modulation Type: 802.11ax HE40 CH54



Modulation Type: 802.11ax HE20 CH60



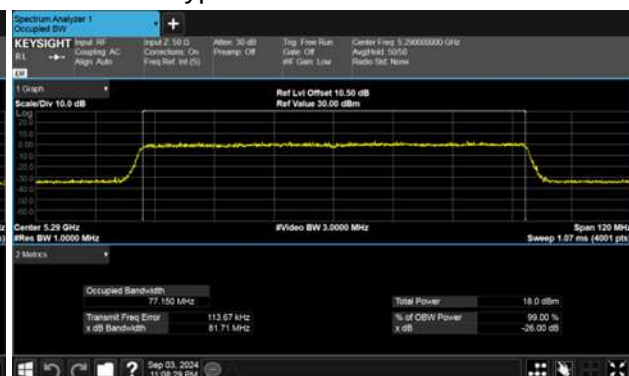
Modulation Type: 802.11ax HE40 CH62



Modulation Type: 802.11ax HE20 CH64



Modulation Type: 802.11ax HE80 CH58





26dB Bandwidth Band 3-ANT B
Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



CH120



CH120



CH140



CH140





26dB Bandwidth Band 3-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106

CH118



CH122



CH134





26dB Bandwidth Band 3-ANT B
Modulation Type: 802.11ax HE20 CH100



Modulation Type: 802.11ax HE40 CH102



Modulation Type: 802.11ax HE20 CH120



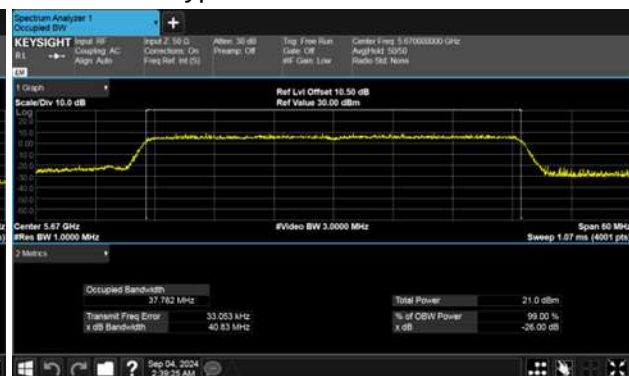
Modulation Type: 802.11ax HE40 CH118



Modulation Type: 802.11ax HE20 CH140



Modulation Type: 802.11ax HE40 CH134





26dB Bandwidth Band 3-ANT B
Modulation Type: 802.11ax HE80 CH106



Modulation Type: 802.11ax HE80 CH122





26dB Bandwidth -ANT A

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



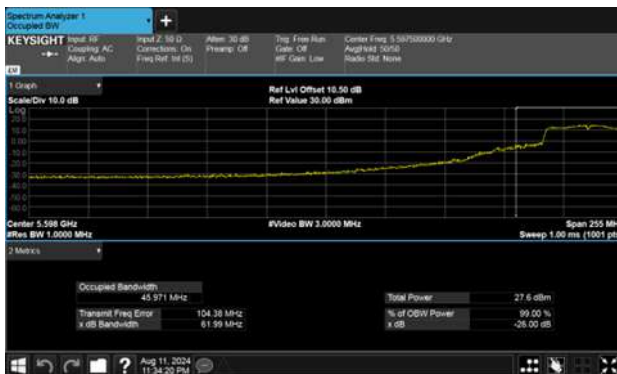
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



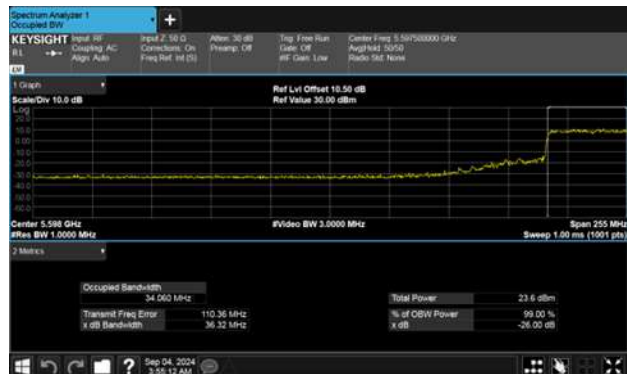
Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142





26dB Bandwidth -ANT A

Within 5470-5725MHz Band, Straddle Channel

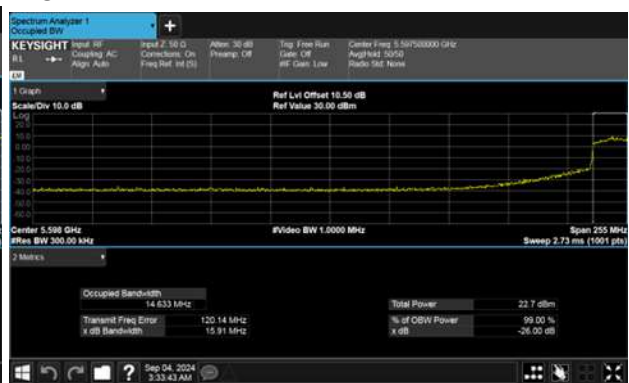
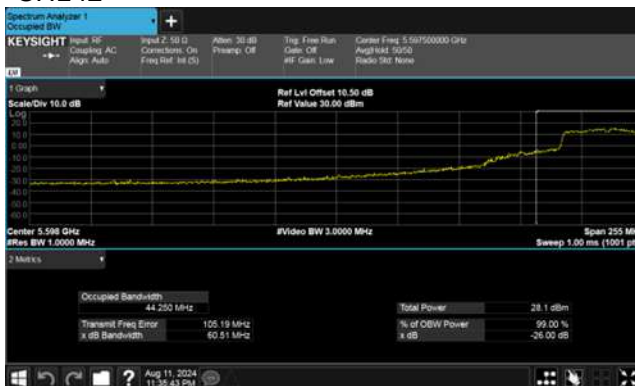
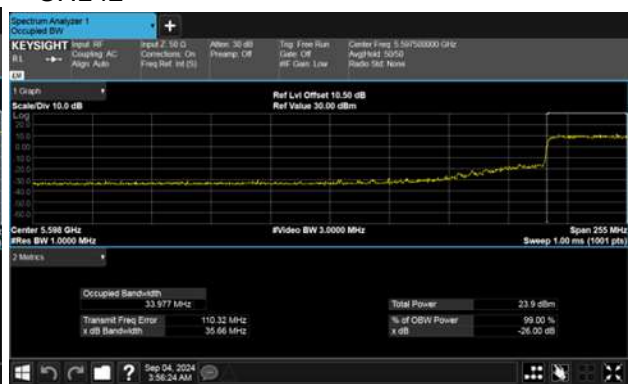
Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





26dB Bandwidth -ANT B

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142



26dB Bandwidth -ANT B

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





99% Bandwidth Band 1-ANT A
Modulation Type: 802.11a (6Mbps)
CH36



802.11ac VHT20 (6.5Mbps)
CH36



CH40



CH40



CH48



CH48





99% Bandwidth Band 1-ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42

CH46





99% Bandwidth Band 1-ANT A
Modulation Type: 802.11ax HE20 CH36



Modulation Type: 802.11ax HE40 CH38



Modulation Type: 802.11ax HE20 CH40



Modulation Type: 802.11ax HE40 CH46



Modulation Type: 802.11ax HE20 CH48



Modulation Type: 802.11ax HE80 CH42





99% Bandwidth Band 2-ANT A
Modulation Type: 802.11a (6Mbps)
CH52



802.11ac VHT20 (6.5Mbps)
CH52



CH60



CH60



CH64



CH64





99% Bandwidth Band 2-ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

CH62





99% Bandwidth Band 2-ANT A
Modulation Type: 802.11ax HE20 CH52



Modulation Type: 802.11ax HE40 CH54



Modulation Type: 802.11ax HE20 CH60



Modulation Type: 802.11ax HE40 CH62



Modulation Type: 802.11ax HE20 CH64



Modulation Type: 802.11ax HE80 CH58





99% Bandwidth Band 3-ANT A
Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



CH120



CH120



CH140



CH140





99% Bandwidth Band 3-ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106

CH118



CH122



CH134





99% Bandwidth Band 3-ANT A
Modulation Type: 802.11ax HE20 CH100



Modulation Type: 802.11ax HE40 CH102



Modulation Type: 802.11ax HE20 CH120



Modulation Type: 802.11ax HE40 CH118



Modulation Type: 802.11ax HE20 CH140



Modulation Type: 802.11ax HE40 CH134





99% Bandwidth Band 3-ANT A
Modulation Type: 802.11ax HE80 CH106



Modulation Type: 802.11ax HE80 CH122





99% Bandwidth Band 1-ANT B
Modulation Type: 802.11a (6Mbps)
CH36



802.11ac VHT20 (6.5Mbps)
CH36



CH40



CH40



CH48



CH48





99% Bandwidth Band 1-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42

CH46





99% Bandwidth Band 1-ANT B
Modulation Type: 802.11ax HE20 CH36



Modulation Type: 802.11ax HE40 CH38



Modulation Type: 802.11ax HE20 CH40



Modulation Type: 802.11ax HE40 CH46



Modulation Type: 802.11ax HE20 CH48



Modulation Type: 802.11ax HE80 CH42





99% Bandwidth Band 2-ANT B
Modulation Type: 802.11a (6Mbps)
CH52



802.11ac VHT20 (6.5Mbps)
CH52



CH60



CH60



CH64



CH64





99% Bandwidth Band 2-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

CH62





99% Bandwidth Band 2-ANT B
Modulation Type: 802.11ax HE20 CH52



Modulation Type: 802.11ax HE40 CH54



Modulation Type: 802.11ax HE20 CH60



Modulation Type: 802.11ax HE40 CH62



Modulation Type: 802.11ax HE20 CH64



Modulation Type: 802.11ax HE80 CH58





99% Bandwidth Band 3-ANT B
Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



CH120



CH120



CH140



CH140





99% Bandwidth Band 3-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106

CH118



CH122



CH134





99% Bandwidth Band 3-ANT B
Modulation Type: 802.11ax HE20 CH100



Modulation Type: 802.11ax HE40 CH102



Modulation Type: 802.11ax HE20 CH120



Modulation Type: 802.11ax HE40 CH118



Modulation Type: 802.11ax HE20 CH140



Modulation Type: 802.11ax HE40 CH134





99% Bandwidth Band 3-ANT B
Modulation Type: 802.11ax HE80 CH106



Modulation Type: 802.11ax HE80 CH122





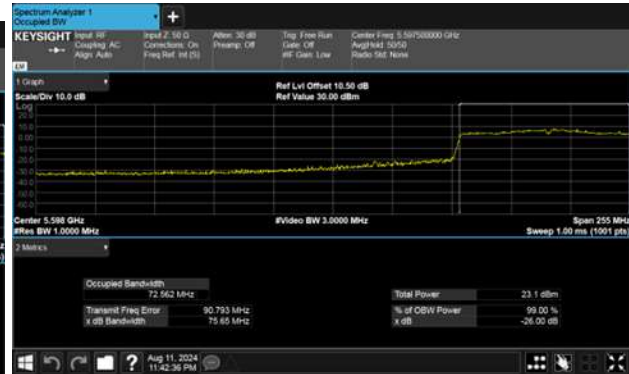
99% Bandwidth -ANT A

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



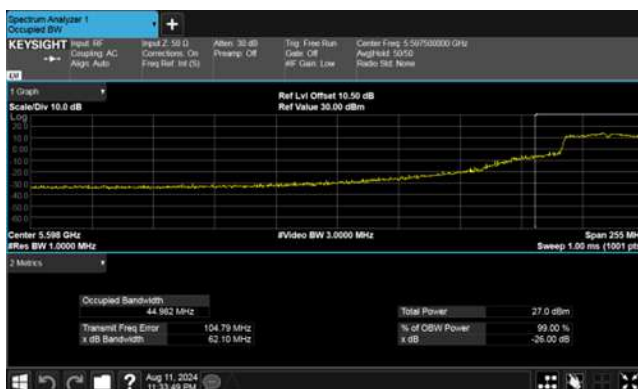
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142





99% Bandwidth -ANT A

Within 5470-5725MHz Band, Straddle Channel

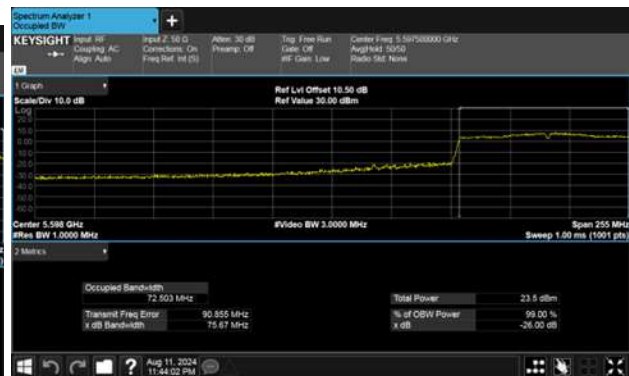
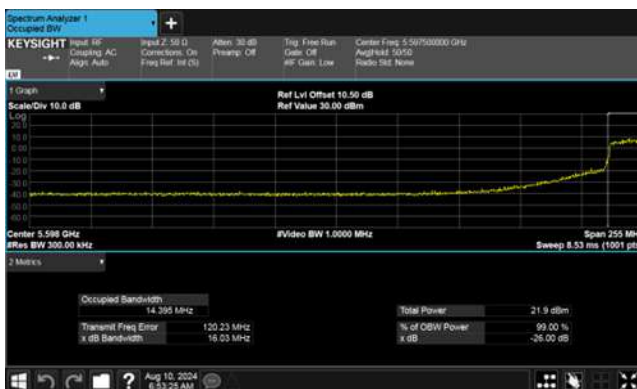
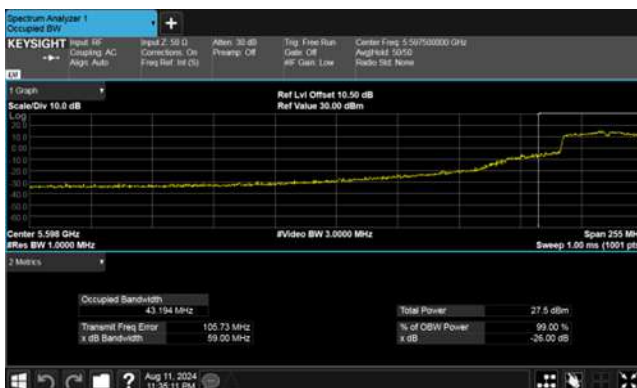
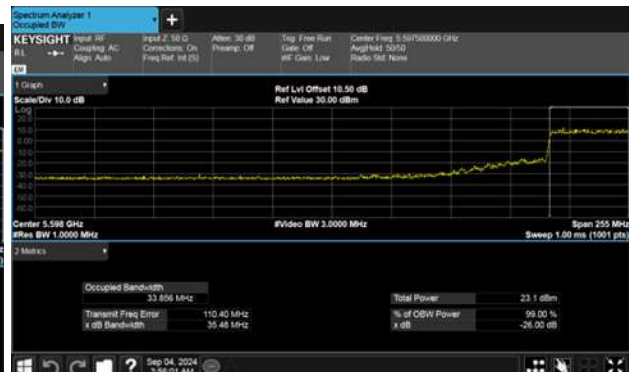
Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





99% Bandwidth -ANT B

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142



99% Bandwidth -ANT B

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





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.

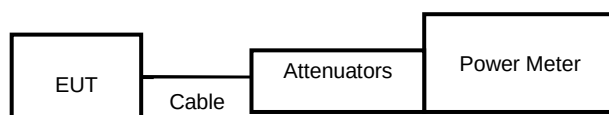


Frequency Band		Limit
☒	5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, 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.

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	11	36	5180	11.21	11.68	14.46	27.936	24.00
11a	6 Mbps	14	40	5200	14.76	14.38	17.58	57.338	24.00
11a	6 Mbps	16	48	5240	16.37	16.44	19.42	87.407	24.00
11ac VHT20	NSS1-MCS0	14	36	5180	14.80	14.24	17.54	56.746	24.00
11ac VHT20	NSS1-MCS0	14	40	5200	14.23	14.76	17.51	56.408	24.00
11ac VHT20	NSS1-MCS0	16	48	5240	16.37	16.12	19.26	84.277	24.00
11ac VHT40	NSS1-MCS0	13	38	5190	12.89	12.83	15.87	38.640	24.00
11ac VHT40	NSS1-MCS0	14	46	5230	14.15	14.07	17.12	51.529	24.00
11ac VHT80	NSS1-MCS0	11	42	5210	10.76	11.32	14.06	25.464	24.00
11ax HE20	NSS1-MCS0	11	36	5180	11.19	11.56	14.39	27.474	24.00
11ax HE20	NSS1-MCS0	16	40	5200	16.56	16.32	19.45	88.145	24.00
11ax HE20	NSS1-MCS0	16	48	5240	16.52	16.61	19.58	90.689	24.00
11ax HE40	NSS1-MCS0	11	38	5190	10.82	11.42	14.14	25.946	24.00
11ax HE40	NSS1-MCS0	19	46	5230	20.47	19.59	23.06	202.421	24.00
11ax HE80	NSS1-MCS0	10	42	5210	9.74	10.42	13.10	20.434	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	16	52	5260	16.46	16.14	19.31	85.374	24.00
11a	6 Mbps	15	60	5300	15.30	15.21	18.27	67.074	24.00
11a	6 Mbps	12	64	5320	11.91	12.47	15.21	33.184	24.00
11ac VHT20	NSS1-MCS0	16	52	5260	16.23	16.12	19.19	82.902	24.00
11ac VHT20	NSS1-MCS0	16	60	5300	15.89	15.65	18.78	75.543	24.00
11ac VHT20	NSS1-MCS0	14	64	5320	14.20	14.35	17.29	53.530	24.00
11ac VHT40	NSS1-MCS0	16	54	5270	14.16	14.08	17.13	51.647	24.00
11ac VHT40	NSS1-MCS0	12	62	5310	10.97	11.81	14.42	27.673	24.00
11ac VHT80	NSS1-MCS0	11	58	5290	9.75	10.89	13.37	21.715	24.00
11ax HE20	NSS1-MCS0	16	52	5260	16.11	16.02	19.08	80.826	24.00
11ax HE20	NSS1-MCS0	16	60	5300	15.92	16.41	19.18	82.836	24.00
11ax HE20	NSS1-MCS0	11	64	5320	10.71	11.26	14.00	25.142	24.00
11ax HE40	NSS1-MCS0	18	54	5270	18.15	18.20	21.19	131.382	24.00
11ax HE40	NSS1-MCS0	11	62	5310	10.27	11.08	13.70	23.465	24.00
11ax HE80	NSS1-MCS0	9	58	5290	7.50	9.09	11.38	13.733	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	8	100	5500	7.04	7.67	10.38	10.906	24.00
11a	6 Mbps	16	120	5600	15.89	15.70	18.81	75.969	24.00
11a	6 Mbps	9	140	5700	7.50	7.10	10.31	10.752	24.00
11ac VHT20	NSS1-MCS0	11	100	5500	10.85	11.28	14.08	25.590	24.00
11ac VHT20	NSS1-MCS0	17	120	5600	16.79	16.35	19.59	90.905	24.00
11ac VHT20	NSS1-MCS0	12	140	5700	12.48	11.94	15.23	33.333	24.00
11ac VHT40	NSS1-MCS0	10	102	5510	8.84	9.53	12.21	16.630	24.00
11ac VHT40	NSS1-MCS0	19	118	5590	18.72	18.95	21.85	152.997	24.00
11ac VHT40	NSS1-MCS0	14	134	5670	13.41	13.63	16.53	44.996	24.00
11ac VHT80	NSS1-MCS0	11	106	5530	10.39	10.97	13.70	23.442	24.00
11ac VHT80	NSS1-MCS0	13	122	5610	12.69	12.61	15.66	36.817	24.00
11ax HE20	NSS1-MCS0	8	100	5500	6.95	7.79	10.40	10.966	24.00
11ax HE20	NSS1-MCS0	16	120	5600	15.77	15.94	18.87	77.022	24.00
11ax HE20	NSS1-MCS0	10	140	5700	9.99	9.94	12.98	19.840	24.00
11ax HE40	NSS1-MCS0	8	102	5510	5.35	7.01	9.27	8.451	24.00
11ax HE40	NSS1-MCS0	20	118	5590	19.71	19.73	22.73	187.513	24.00
11ax HE40	NSS1-MCS0	12	134	5670	11.43	11.67	14.56	28.589	24.00
11ax HE80	NSS1-MCS0	9	106	5530	7.94	9.02	11.52	14.203	24.00
11ax HE80	NSS1-MCS0	12	122	5610	11.72	11.93	14.84	30.455	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	20	149	5745	19.15	19.78	22.49	177.285	30.00
11a	6 Mbps	20	157	5785	19.13	20.34	22.79	189.990	30.00
11a	6 Mbps	19	165	5825	17.98	19.07	21.57	143.529	30.00
11ac VHT20	NSS1-MCS0	20	149	5745	19.06	20.39	22.79	189.933	30.00
11ac VHT20	NSS1-MCS0	20	157	5785	19.13	20.42	22.83	192.000	30.00
11ac VHT20	NSS1-MCS0	20	165	5825	18.96	20.25	22.66	184.630	30.00
11ac VHT40	NSS1-MCS0	18	151	5755	17.49	18.92	21.27	134.088	30.00
11ac VHT40	NSS1-MCS0	18	159	5795	17.38	18.80	21.16	130.559	30.00
11ac VHT80	NSS1-MCS0	15	155	5775	14.43	15.79	18.17	65.665	30.00
11ax HE20	NSS1-MCS0	20	149	5745	19.02	20.13	22.62	182.838	30.00
11ax HE20	NSS1-MCS0	20	157	5785	19.16	20.05	22.64	183.572	30.00
11ax HE20	NSS1-MCS0	20	165	5825	19.00	20.11	22.60	181.998	30.00
11ax HE40	NSS1-MCS0	20	151	5755	19.87	20.81	23.38	217.555	30.00
11ax HE40	NSS1-MCS0	20	159	5795	19.60	20.73	23.21	209.505	30.00
11ax HE80	NSS1-MCS0	13	155	5775	12.55	13.69	16.17	41.377	30.00



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					
17	11a	6M	5720	15.64	15.00	18.34	0.28	72.813	18.62	23.14
21	11ac VHT20	NSS1-MCS0	5720	15.27	14.72	18.01	0.30	67.827	18.31	23.31
20	11ac VHT40	NSS1-MCS0	5710	18.43	18.43	21.44	0.58	159.232	22.02	24.00
16	11ac VHT80	NSS1-MCS0	5690	14.05	14.10	17.09	1.12	66.151	18.21	24.00
17	11ax HE20	NSS1-MCS0	5720	12.20	12.19	15.21	0.37	36.102	15.58	22.97
20	11ax HE40	NSS1-MCS0	5710	18.72	18.53	21.64	0.70	171.251	22.34	24.00
13	11ax HE80	NSS1-MCS0	5690	11.56	11.41	14.50	1.25	37.549	15.75	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					
17	11a	6M	5720	8.17	7.51	10.86	0.28	13.010	11.14	30.00
21	11ac VHT20	NSS1-MCS0	5720	8.38	7.80	11.11	0.30	13.836	11.41	30.00
20	11ac VHT40	NSS1-MCS0	5710	7.46	7.38	10.43	0.58	12.620	11.01	30.00
16	11ac VHT80	NSS1-MCS0	5690	-0.79	-0.30	2.47	1.12	2.287	3.59	30.00
17	11ax HE20	NSS1-MCS0	5720	5.20	5.20	8.21	0.37	7.212	8.58	30.00
20	11ax HE40	NSS1-MCS0	5710	9.25	9.04	12.16	0.70	19.304	12.86	30.00
13	11ax HE80	NSS1-MCS0	5690	-1.63	-1.24	1.58	1.25	1.919	2.83	30.00

Channel	Setting	Modulation Type	Data Rate	Frequency (MHz)	Avg Power Output (dBm)		Total Power
					ANT A	ANT B	(dBm)
Meter power (for full power)							
Ch144	17	11a	6 Mbps	5720MHz	16.82	15.85	19.37
Ch144	17	11ax HE20	NSS1-MCS0	5720MHz	16.77	16.42	19.61
Ch142	20	11ax HE40	NSS1-MCS0	5710MHz	19.52	20.11	22.84
Ch138	13	11ax HE80	NSS1-MCS0	5690MHz	12.74	12.95	15.86

Note: Power Meter Average power is for reference only.



Within 5470-5725MHz Band, Straddle Channel-ANT A

Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



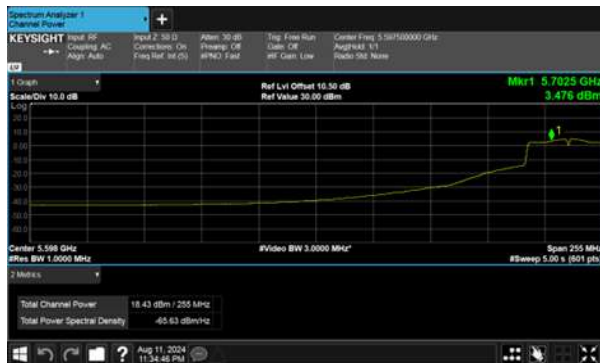
802.11ac VHT20 (6.5Mbps)
CH144



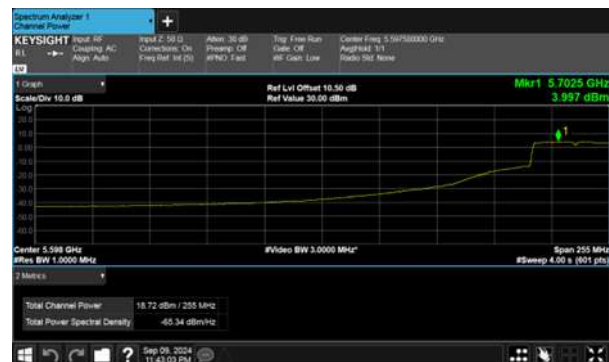
Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142



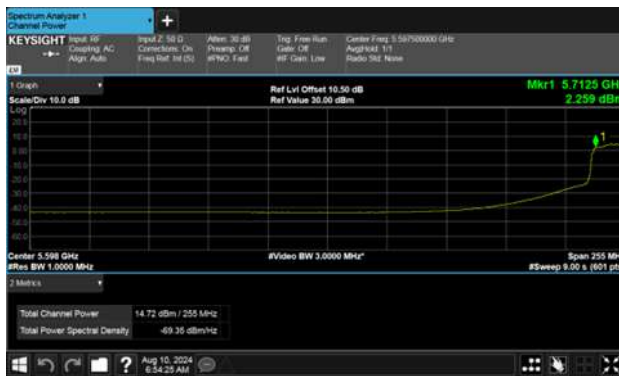
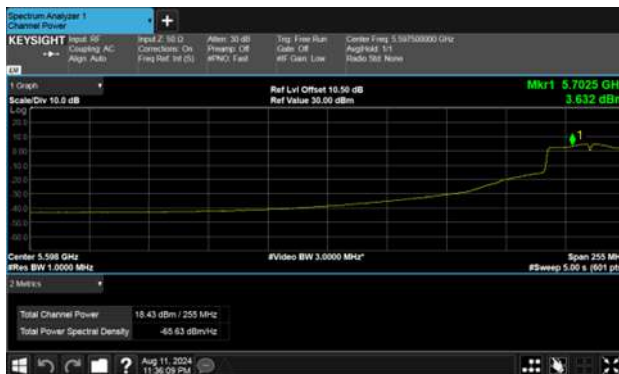
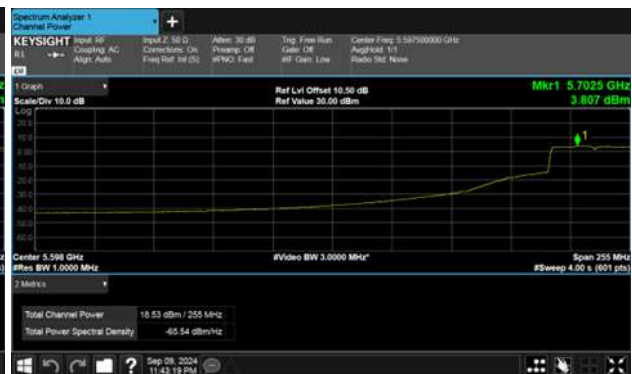


Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





Within 5470-5725MHz Band, Straddle Channel-ANT B

Modulation Type: 802.11a (6Mbps)
CH144Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138802.11ac VHT20 (6.5Mbps)
CH144Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142



Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





Extends across 5725MHz band, Straddle Channel -ANT A
Modulation Type: 802.11a (6Mbps)
CH144

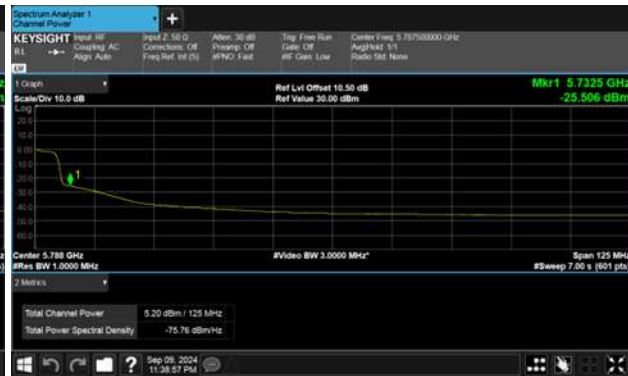
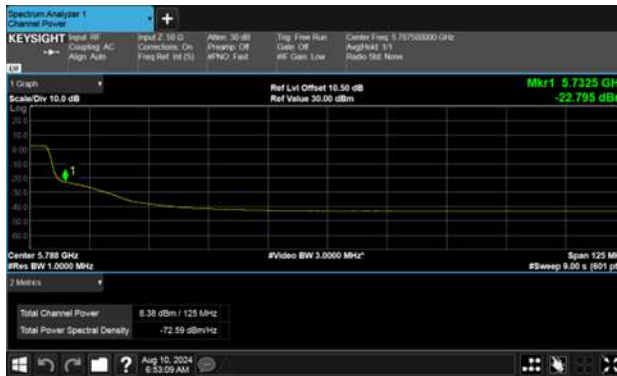
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



802.11ac VHT20 (6.5Mbps)
CH144

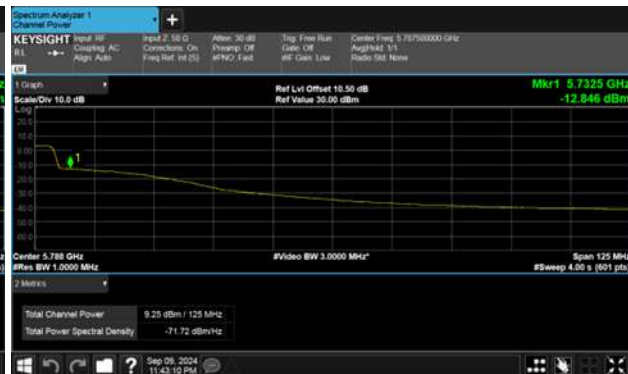
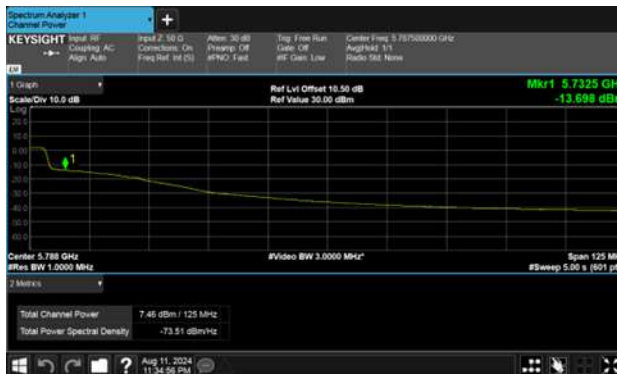


Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142

Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142





Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





Extends across 5725MHz band, Straddle Channel -ANT B
Modulation Type: 802.11a (6Mbps)
CH144

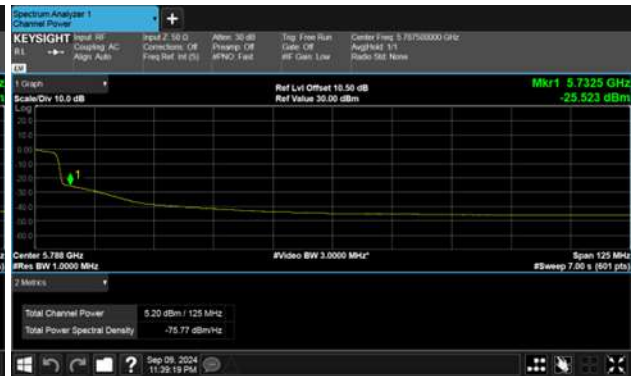
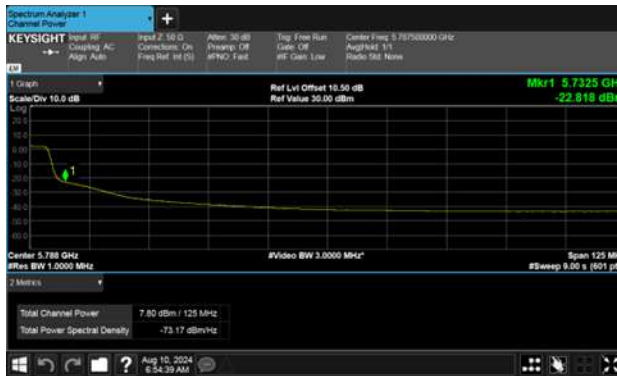
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



802.11ac VHT20 (6.5Mbps)
CH144

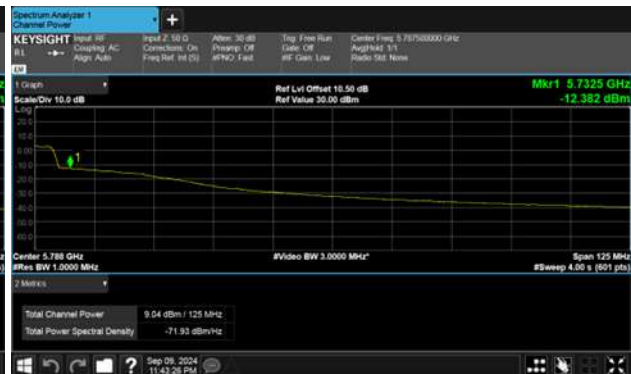
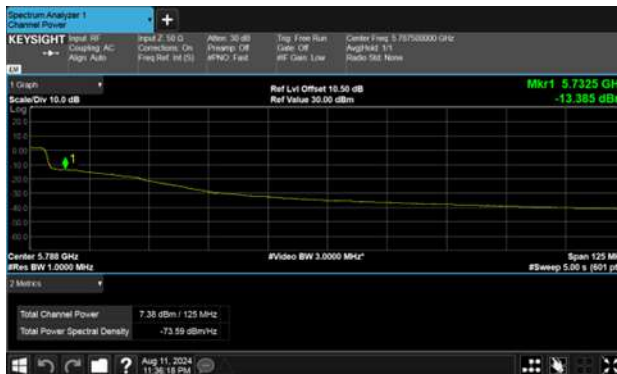


Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142

Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142





Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





11. Power Spectral Density

11.1. Test Limit

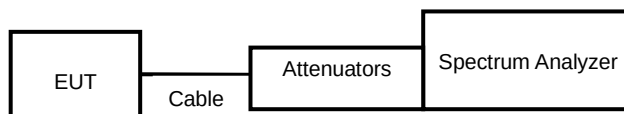
PSD:

Frequency Band		Limit
☒	5.15~5.25GHz	
	Operating Mode	
☐	Outdoor access point	17 dBm/MHz
☐	Indoor access point	17 dBm/MHz
☐	Fixed point-to-point access points	17 dBm/MHz
☒	Mobile and portable client devices	11 dBm/MHz
☒	5.725~5.85 GHz	11 dBm/MHz
☒	5.470-5.725 GHz	11 dBm/MHz
☒	5.725~5.85 GHz	30 dBm/500kHz

11.2. Test Procedure

Reference to KDB789033 D02 General UNII Test Procedures New Rules v02r01

11.3. Test Setup Layout





11.4. Test Result and Data

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	36	5180	0.48	0.77	3.64	0.28	3.92	8.99
11a	40	5200	3.66	3.49	6.58	0.28	6.86	8.99
11a	48	5240	5.59	5.33	8.47	0.28	8.75	8.99
11ac VHT20	36	5180	3.31	3.10	6.22	0.30	6.52	8.99
11ac VHT20	40	5200	3.34	3.42	6.39	0.30	6.69	8.99
11ac VHT20	48	5240	5.48	4.94	8.23	0.30	8.53	8.99
11ac VHT40	38	5190	-1.37	-1.42	1.61	0.58	2.19	8.99
11ac VHT40	46	5230	-0.23	-0.34	2.73	0.58	3.31	8.99
11ac VHT80	42	5210	-7.07	-6.53	-3.78	1.12	-2.66	8.99
11ax HE20	36	5180	0.05	0.26	3.17	0.37	3.54	8.99
11ax HE20	40	5200	5.57	5.28	8.44	0.37	8.81	8.99
11ax HE20	48	5240	5.48	5.15	8.33	0.37	8.70	8.99
11ax HE40	38	5190	-4.93	-4.53	-1.71	0.70	-1.01	8.99
11ax HE40	46	5230	4.70	3.75	7.26	0.70	7.96	8.99
11ax HE80	42	5210	-10.32	-9.39	-6.82	1.25	-5.57	8.99

In the 5.3G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	52	5260	5.29	5.24	8.28	0.28	8.56	8.99
11a	60	5300	4.09	3.94	7.03	0.28	7.31	8.99
11a	64	5320	0.96	1.03	4.01	0.28	4.29	8.99
11ac VHT20	52	5260	4.76	4.73	7.75	0.30	8.05	8.99
11ac VHT20	60	5300	4.92	4.54	7.74	0.30	8.04	8.99
11ac VHT20	64	5320	2.64	2.68	5.67	0.30	5.97	8.99
11ac VHT40	54	5270	1.49	1.53	4.52	0.58	5.10	8.99
11ac VHT40	62	5310	-3.24	-2.75	0.02	0.58	0.60	8.99
11ac VHT80	58	5290	-7.99	-7.22	-4.58	1.12	-3.46	8.99
11ax HE20	52	5260	4.97	4.87	7.93	0.37	8.30	8.99
11ax HE20	60	5300	4.94	4.62	7.79	0.37	8.16	8.99
11ax HE20	64	5320	-0.56	-0.01	2.73	0.37	3.10	8.99
11ax HE40	54	5270	2.56	2.26	5.42	0.70	6.12	8.99
11ax HE40	62	5310	-5.68	-4.81	-2.21	0.70	-1.51	8.99
11ax HE80	58	5290	-11.86	-10.08	-7.87	1.25	-6.62	8.99



In the 5.5G Band

Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	100	5500	-3.74	-3.22	-0.46	0.28	-0.18	8.99
11a	120	5600	5.26	4.84	8.07	0.28	8.35	8.99
11a	140	5700	-3.78	-3.93	-0.84	0.28	-0.56	8.99
11a	144	5720	5.85	5.33	8.61	0.28	8.89	8.99
11ac VHT20	100	5500	-0.21	0.10	2.96	0.30	3.26	8.99
11ac VHT20	120	5600	5.73	5.29	8.52	0.30	8.82	8.99
11ac VHT20	140	5700	0.87	0.46	3.68	0.30	3.98	8.99
11ac VHT20	144	5720	5.28	4.80	8.06	0.58	8.64	8.99
11ac VHT40	102	5510	-5.58	-4.57	-2.03	0.58	-1.45	8.99
11ac VHT40	118	5590	4.34	4.31	7.33	0.58	7.91	8.99
11ac VHT40	134	5670	-1.13	-0.49	2.21	0.58	2.79	8.99
11ac VHT40	142	5710	5.15	5.10	8.14	0.58	8.72	8.99
11ac VHT80	106	5530	-7.38	-6.71	-4.02	1.12	-2.90	8.99
11ac VHT80	122	5610	-4.93	-5.05	-1.98	1.12	-0.86	8.99
11ac VHT80	138	5690	-2.32	-2.25	0.73	1.12	1.85	8.99
11ax HE20	100	5500	-3.83	-3.17	-0.47	0.37	-0.10	8.99
11ax HE20	120	5600	4.96	4.57	7.78	0.37	8.15	8.99
11ax HE20	140	5700	-1.12	-1.28	1.81	0.37	2.18	8.99
11ax HE20	144	5720	5.64	5.07	8.38	0.37	8.75	8.99
11ax HE40	102	5510	-9.98	-8.58	-6.22	0.70	-5.52	8.99
11ax HE40	118	5590	4.09	4.12	7.12	0.70	7.82	8.99
11ax HE40	134	5670	-4.20	-3.79	-0.98	0.70	-0.28	8.99
11ax HE40	142	5710	4.08	3.97	7.04	0.70	7.74	8.99
11ax HE80	106	5530	-10.91	-10.02	-7.43	1.25	-6.18	8.99
11ax HE80	122	5610	-6.89	-6.78	-3.82	1.25	-2.57	8.99
11ax HE80	138	5690	-6.19	-6.09	-3.13	1.25	-1.88	8.99

In the 5.8G Band

Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	10log(500KHz/RBW) CF (dB)	Total Corr'd PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
			ANT A	ANT B					
11a	149	5745	8.16	8.91	11.56	0.28	-3.01	8.83	27.99
11a	157	5785	7.89	9.21	11.61	0.28	-3.01	8.88	27.99
11a	165	5825	6.66	8.04	10.41	0.28	-3.01	7.68	27.99
11ac VHT20	149	5745	7.86	8.51	11.21	0.30	-3.01	8.50	27.99
11ac VHT20	157	5785	7.50	8.82	11.22	0.30	-3.01	8.51	27.99
11ac VHT20	165	5825	7.21	8.69	11.02	0.30	-3.01	8.31	27.99
11ac VHT40	151	5755	2.90	4.12	6.56	0.58	-3.01	4.13	27.99
11ac VHT40	159	5795	2.83	4.46	6.73	0.58	-3.01	4.30	27.99
11ac VHT80	155	5775	-3.50	-2.53	0.02	1.12	-3.01	-1.87	27.99
11ax HE20	149	5745	7.94	8.79	11.39	0.37	-3.01	8.75	27.99
11ax HE20	157	5785	7.82	9.02	11.47	0.37	-3.01	8.83	27.99
11ax HE20	165	5825	7.33	8.81	11.14	0.37	-3.01	8.50	27.99
11ax HE40	151	5755	3.56	4.75	7.21	0.70	-3.01	4.89	27.99
11ax HE40	159	5795	3.48	5.00	7.31	0.70	-3.01	5.00	27.99
11ax HE80	155	5775	-6.78	-5.50	-3.08	1.25	-3.01	-4.85	27.99



Band 1-ANT A

Modulation Type: 802.11a (6Mbps)
CH36802.11ac VHT20 (6.5Mbps)
CH36

CH40



CH40



CH48



CH48



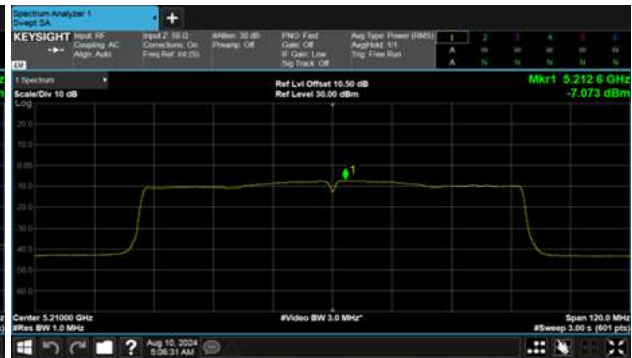


Band 1-ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



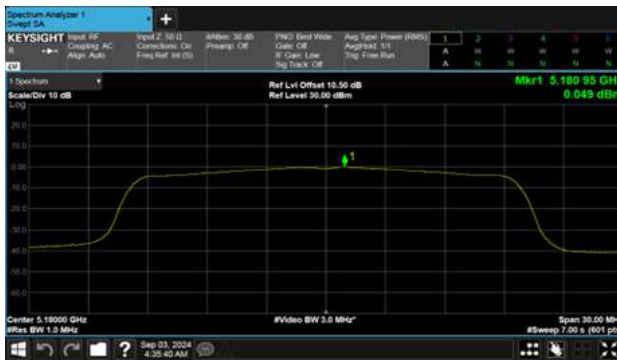
CH46



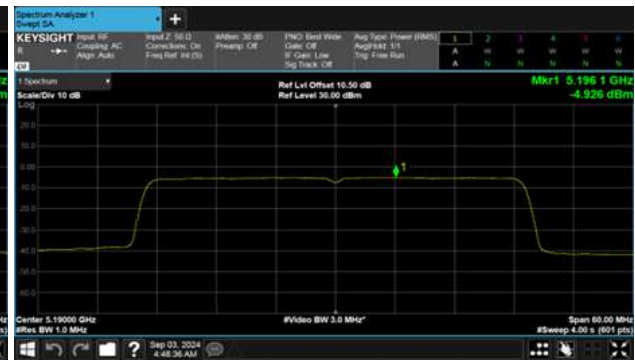


Band 1-ANT A

Modulation Type: 802.11ax HE20 CH36



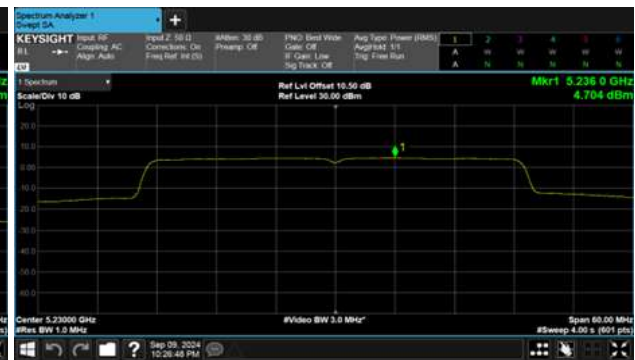
Modulation Type: 802.11ax HE40 CH38



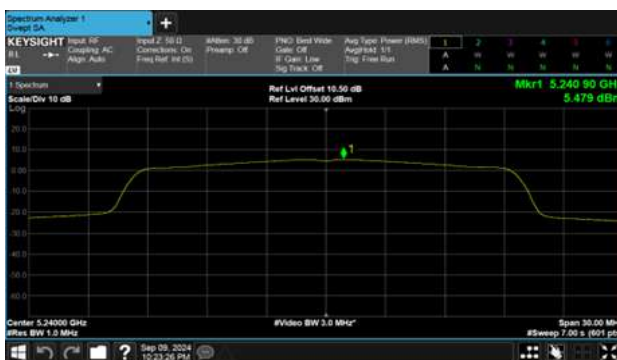
Modulation Type: 802.11ax HE20 CH40



Modulation Type: 802.11ax HE40 CH46



Modulation Type: 802.11ax HE20 CH48



Modulation Type: 802.11ax HE80 CH42





Band 2-ANT A

Modulation Type: 802.11a (6Mbps)

CH52



802.11ac VHT20 (6.5Mbps)

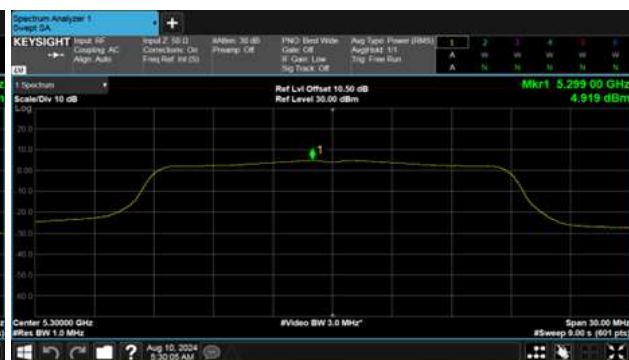
CH52



CH60



CH60



CH64



CH64

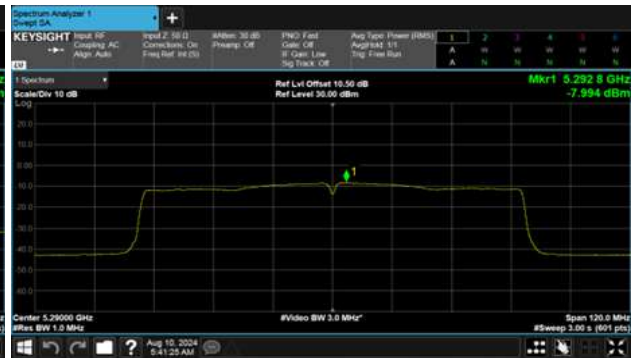




Band 2-ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62



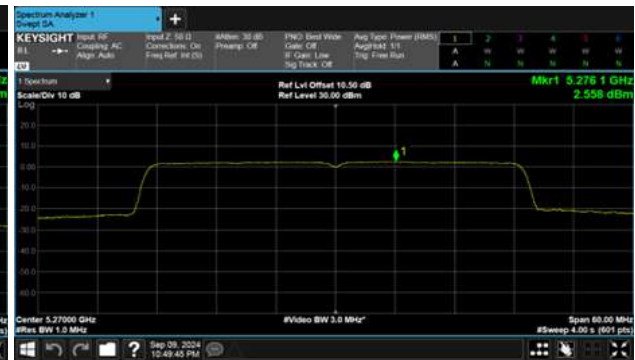


Band 2-ANT A

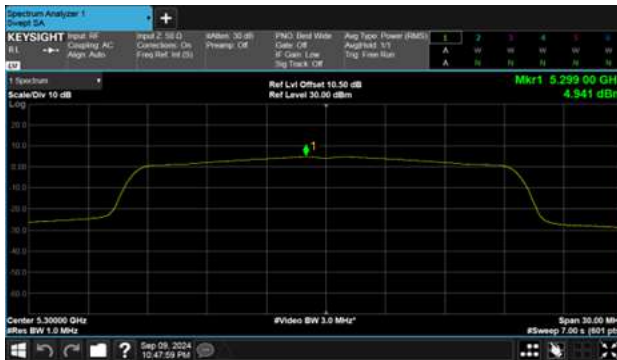
Modulation Type: 802.11ax HE20 CH52



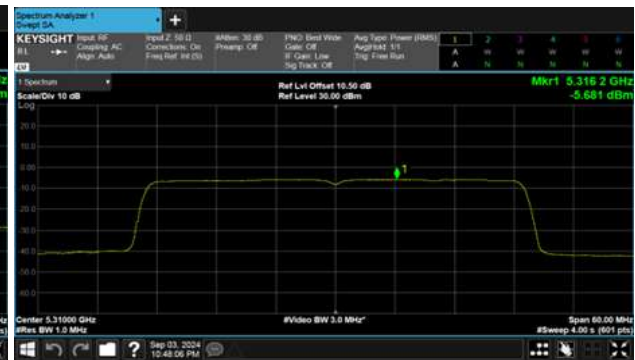
Modulation Type: 802.11ax HE40 CH54



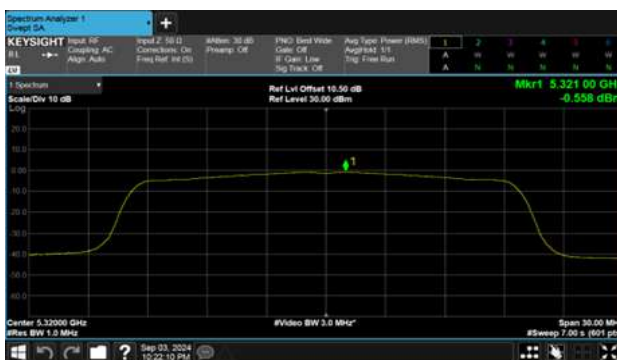
Modulation Type: 802.11ax HE20 CH60



Modulation Type: 802.11ax HE40 CH62



Modulation Type: 802.11ax HE20 CH64

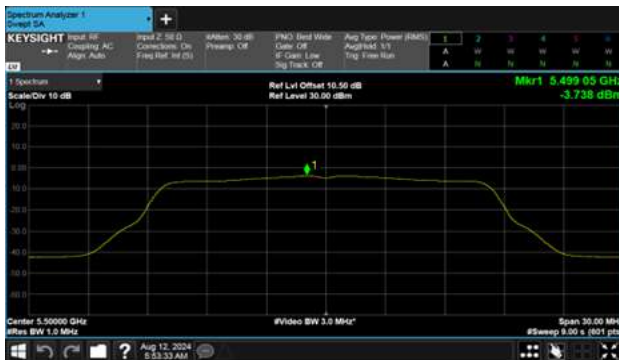


Modulation Type: 802.11ax HE80 CH58

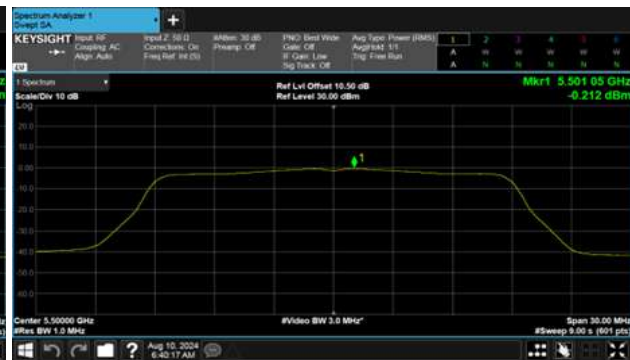




Band 3-ANT A
Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



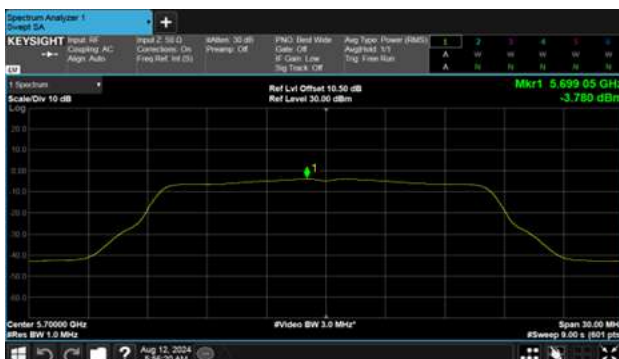
CH120



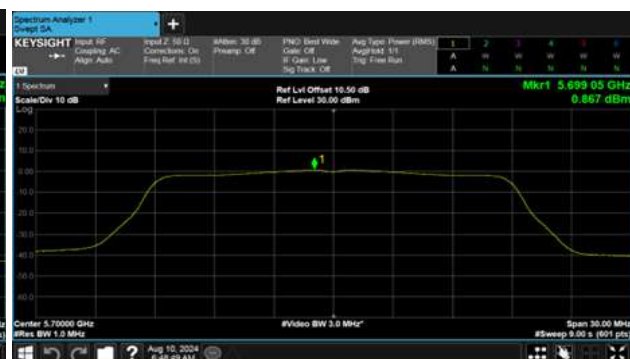
CH120



CH140

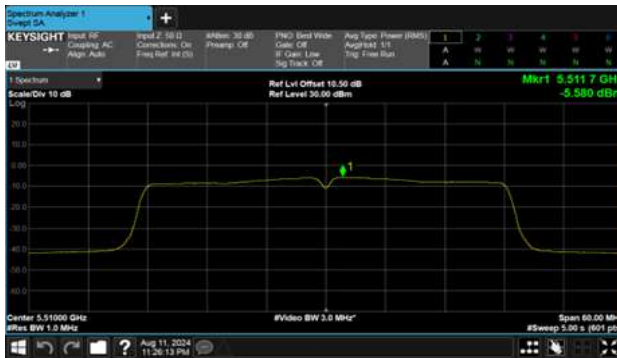


CH140





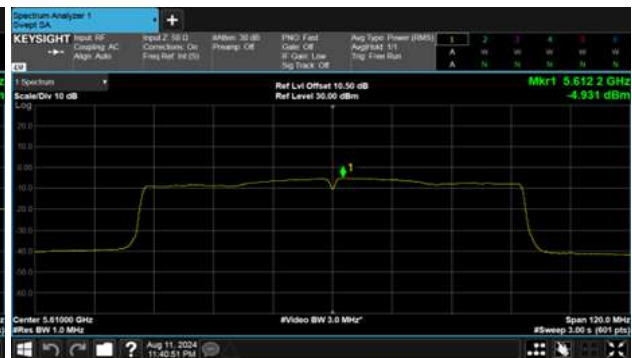
Band 3-ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106

CH118



CH122



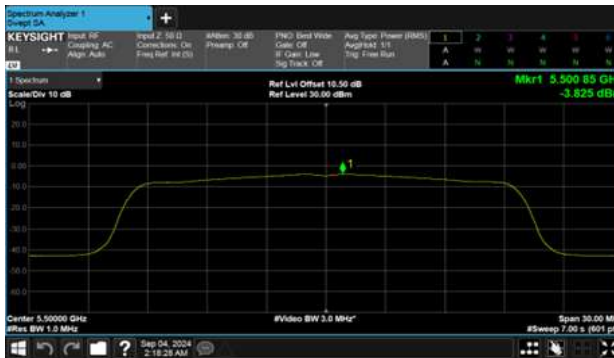
CH134



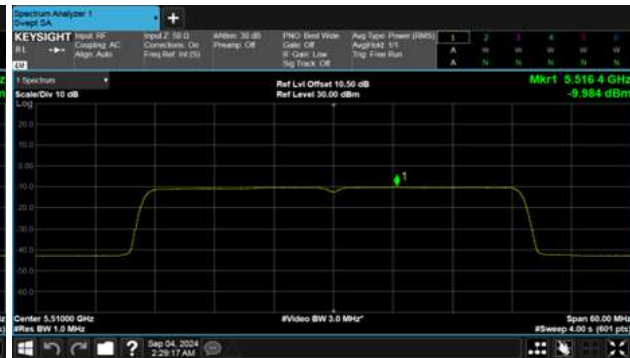


Band 3-ANT A

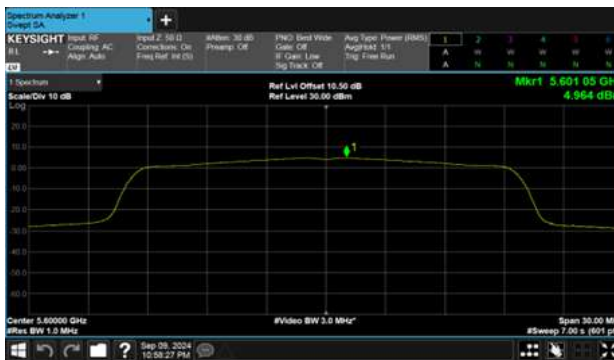
Modulation Type: 802.11ax HE20 CH100



Modulation Type: 802.11ax HE40 CH102



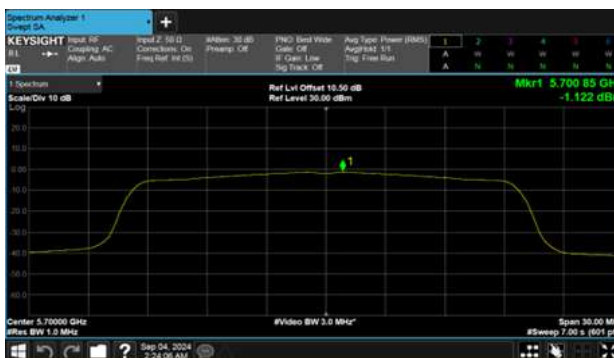
Modulation Type: 802.11ax HE20 CH120



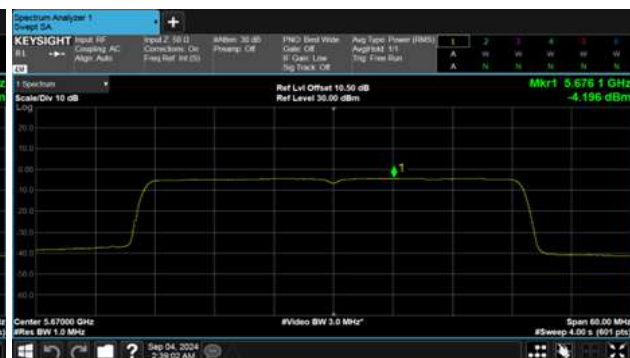
Modulation Type: 802.11ax HE40 CH118



Modulation Type: 802.11ax HE20 CH140



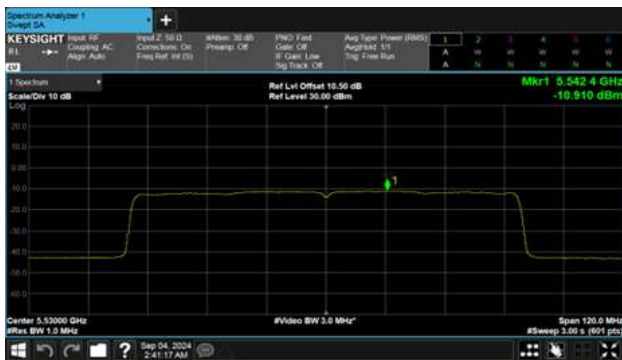
Modulation Type: 802.11ax HE40 CH134



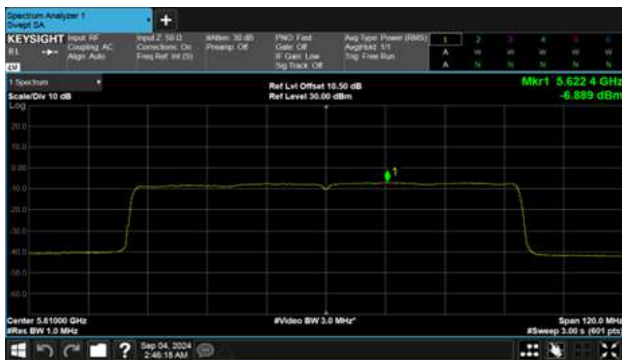


Band 3-ANT A

Modulation Type: 802.11ax HE80 CH106



Modulation Type: 802.11ax HE80 CH122





Band 4-ANT A

Modulation Type: 802.11a (6Mbps)
CH149



Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH149



CH157



CH157



CH165



CH165

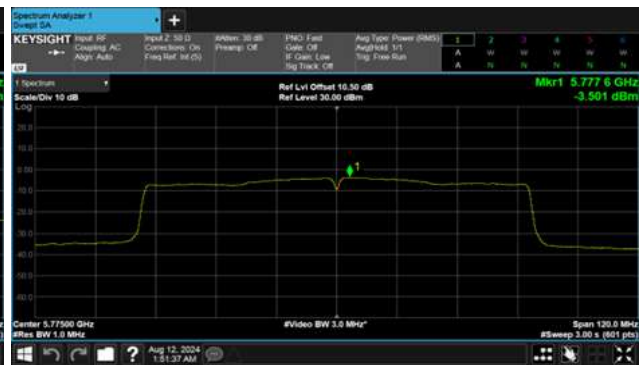




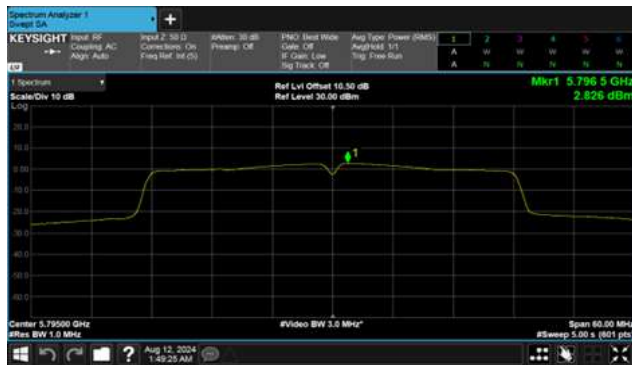
ANT A

Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151

Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155



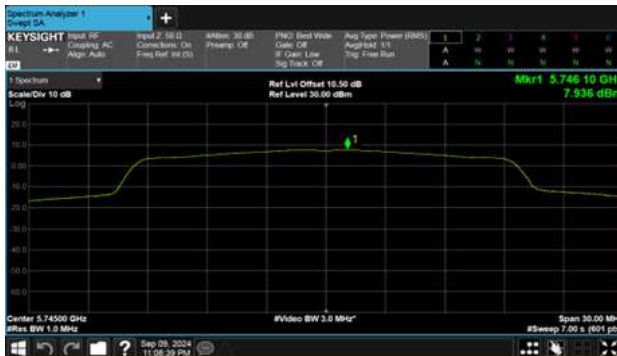
CH159





ANT A

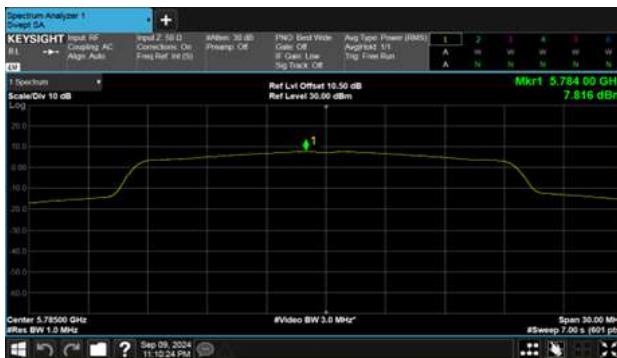
Modulation Type: 802.11ax HE20 CH149



Modulation Type: 802.11ax HE40 CH151



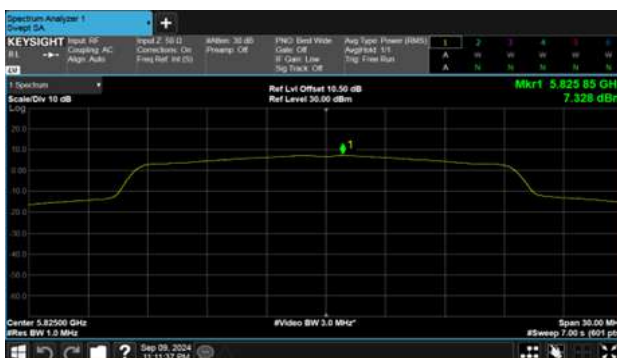
Modulation Type: 802.11ax HE20 CH157



Modulation Type: 802.11ax HE40 CH159



Modulation Type: 802.11ax HE20 CH165



Modulation Type: 802.11ax HE80 CH155





Straddle Channel-ANT A
Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH144

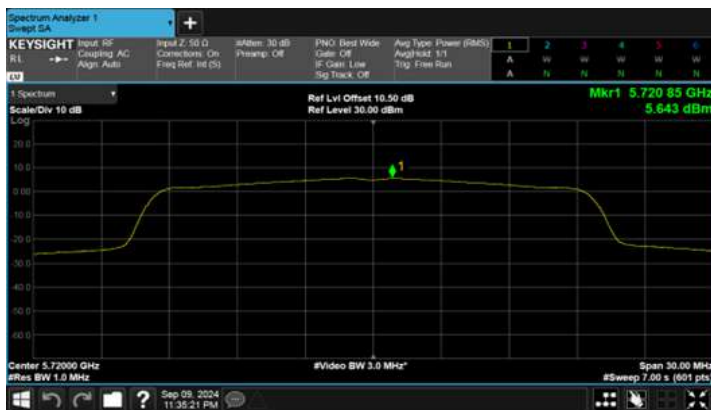


Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH142

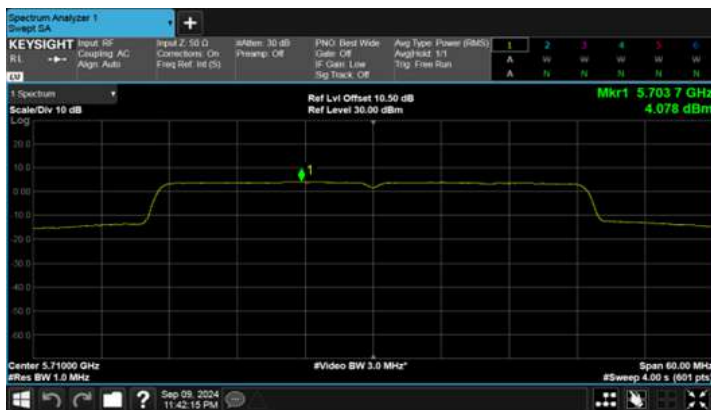




Straddle Channel-ANT A
Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144



Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142



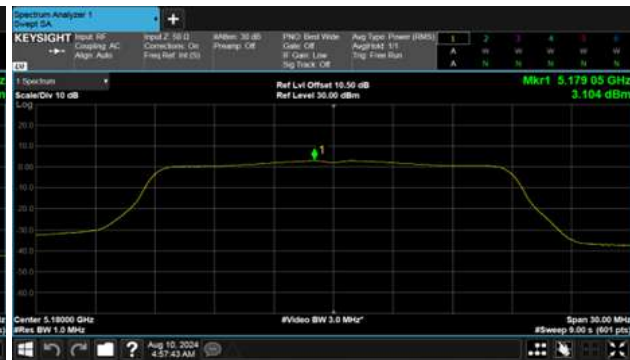
Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138





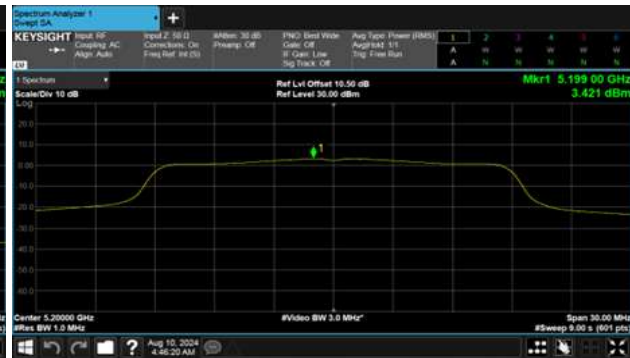
Band 1-ANT B
Modulation Type: 802.11a (6Mbps)
CH36

802.11ac VHT20 (6.5Mbps)
CH36



CH40

CH40



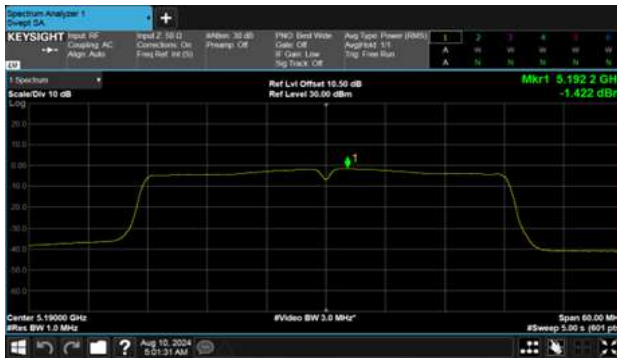
CH48

CH48





Band 1-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42

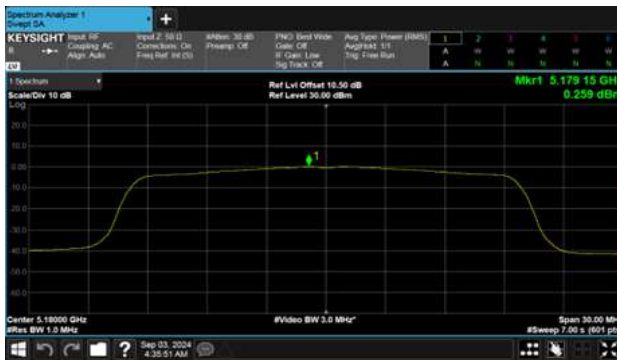
CH46



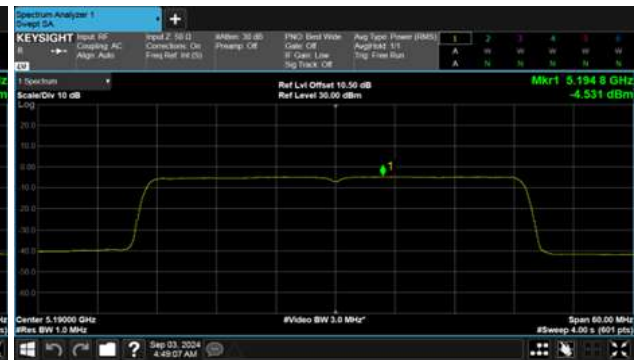


Band 1-ANT B

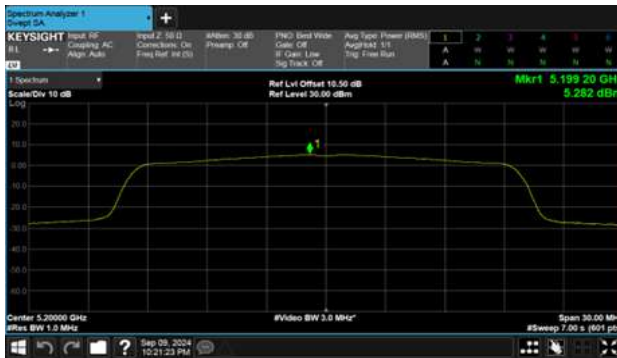
Modulation Type: 802.11ax HE20 CH36



Modulation Type: 802.11ax HE40 CH38



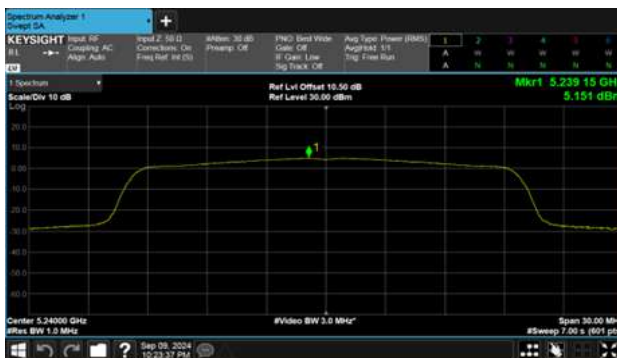
Modulation Type: 802.11ax HE20 CH40



Modulation Type: 802.11ax HE40 CH46



Modulation Type: 802.11ax HE20 CH48

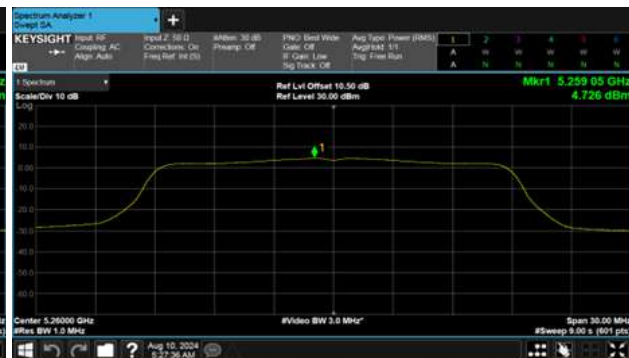


Modulation Type: 802.11ax HE80 CH42





802.11ac VHT20 (6.5Mbps)
CH52



CH60



CH60



CH64

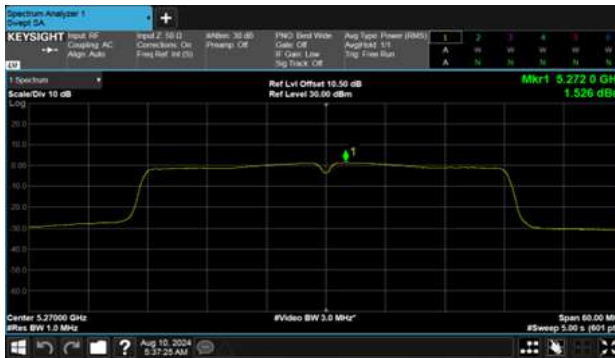


CH64





Band 2-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

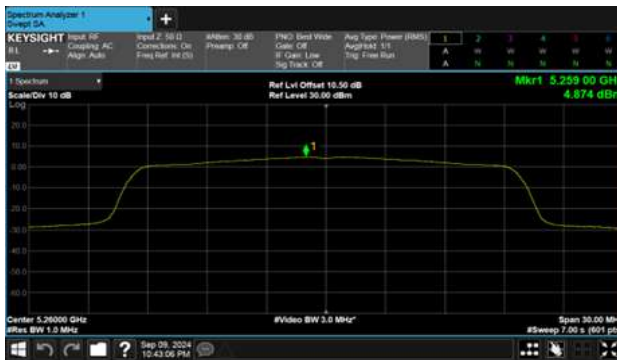
CH62





Band 2-ANT B

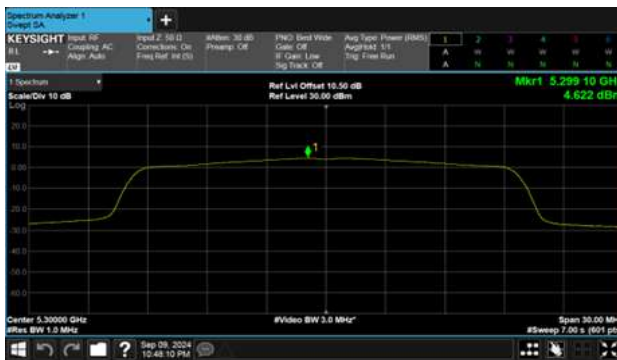
Modulation Type: 802.11ax HE20 CH52



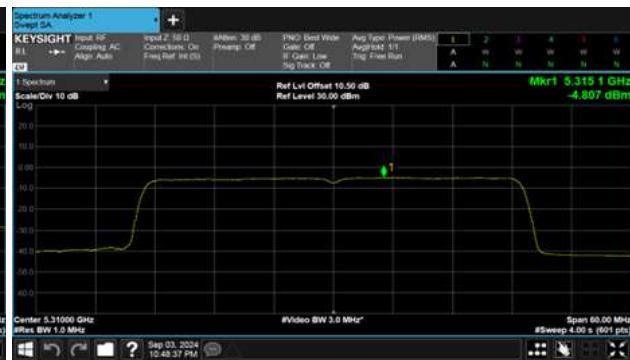
Modulation Type: 802.11ax HE40 CH54



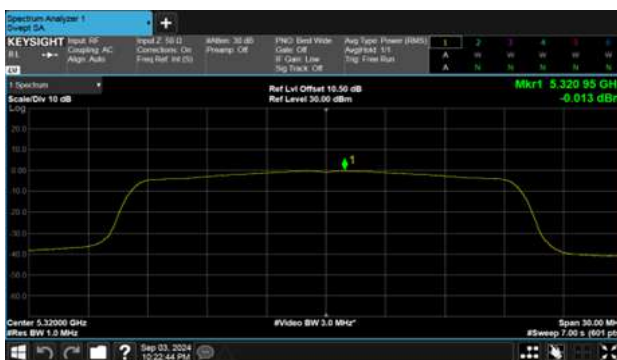
Modulation Type: 802.11ax HE20 CH60



Modulation Type: 802.11ax HE40 CH62



Modulation Type: 802.11ax HE20 CH64



Modulation Type: 802.11ax HE80 CH58

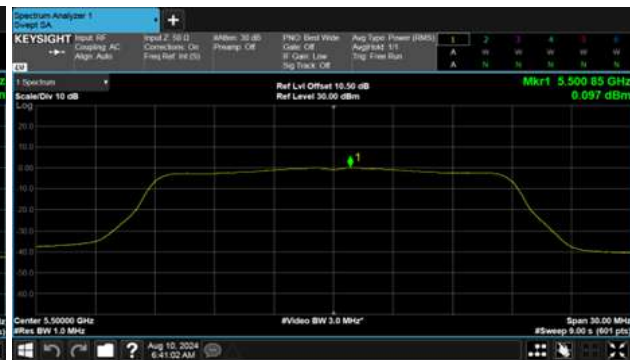




Band 3-ANT B
Modulation Type: 802.11a (6Mbps)
CH100



802.11ac VHT20 (6.5Mbps)
CH100



CH120



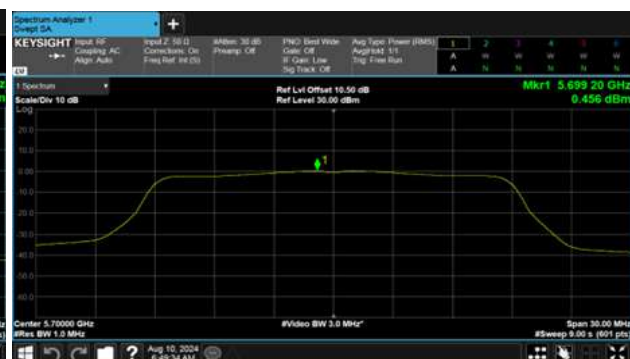
CH120



CH140

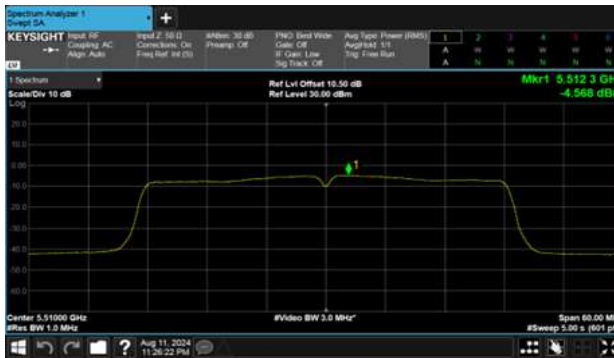


CH140





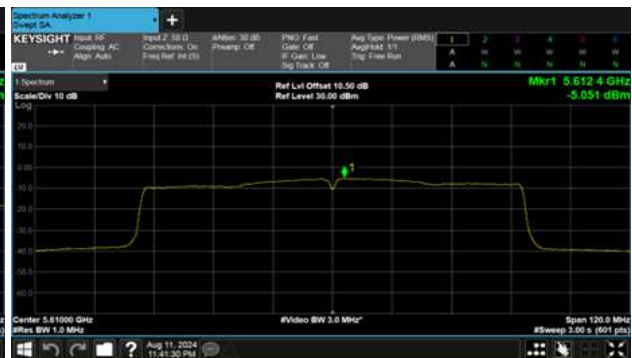
Band 3-ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106

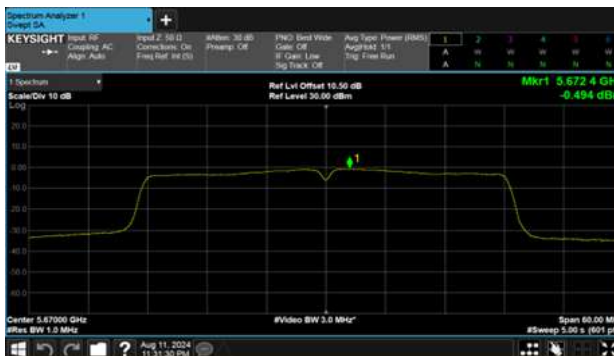
CH118



CH122



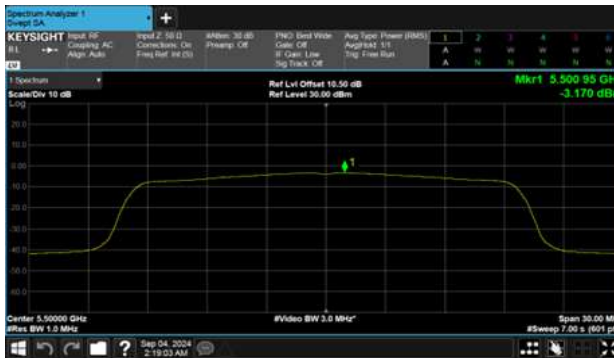
CH134



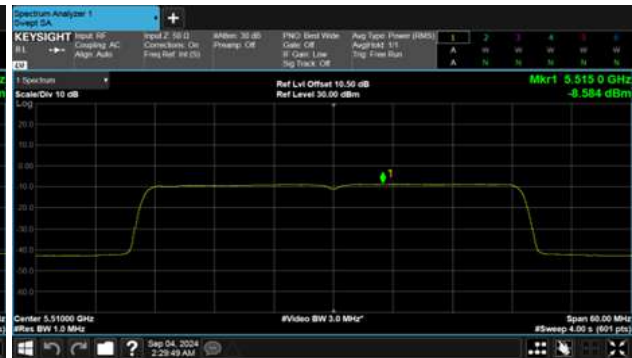


Band 3-ANT B

Modulation Type: 802.11ax HE20 CH100



Modulation Type: 802.11ax HE40 CH102



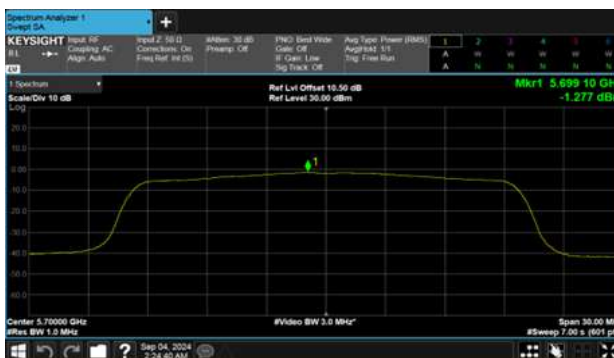
Modulation Type: 802.11ax HE20 CH120



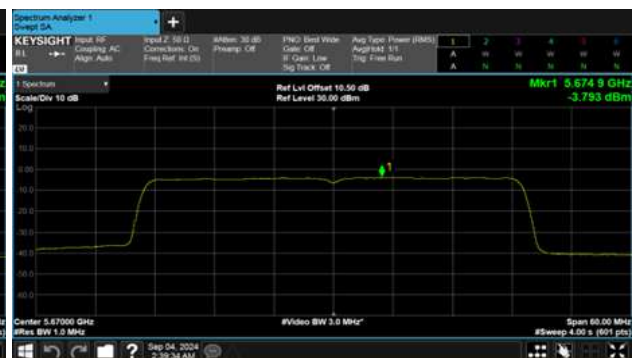
Modulation Type: 802.11ax HE40 CH118



Modulation Type: 802.11ax HE20 CH140



Modulation Type: 802.11ax HE40 CH134





Band 3-ANT B

Modulation Type: 802.11ax HE80 CH106



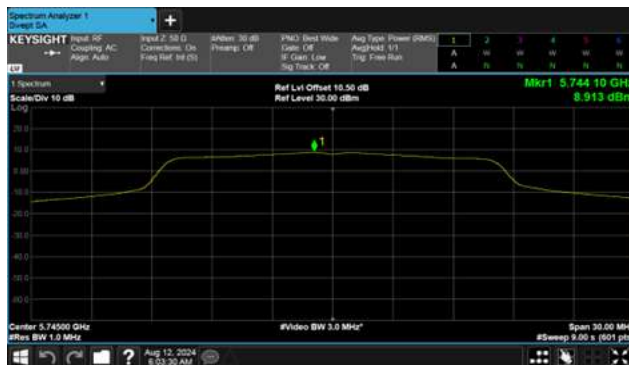
Modulation Type: 802.11ax HE80 CH122





Band 4-ANT B

Modulation Type: 802.11a (6Mbps)
CH149



Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH149



CH157



CH157



CH165



CH165

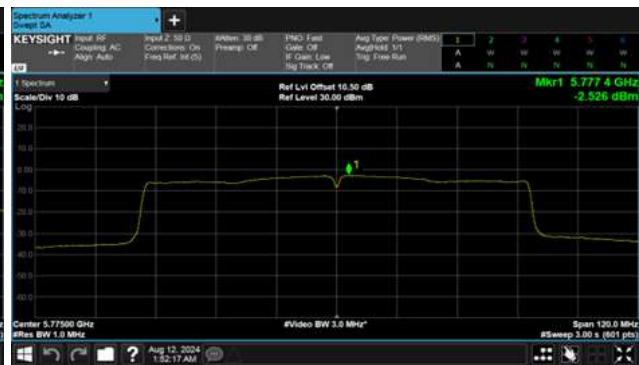
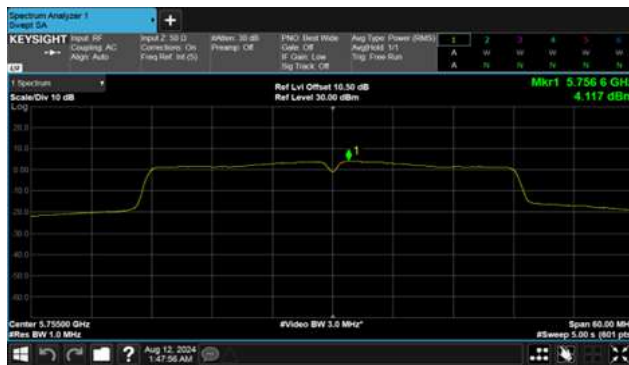




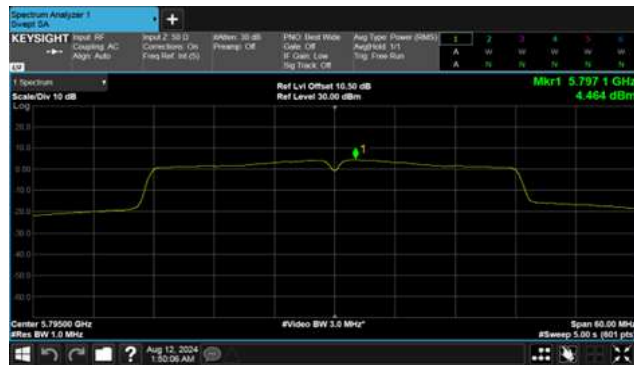
ANT B

Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151

Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155



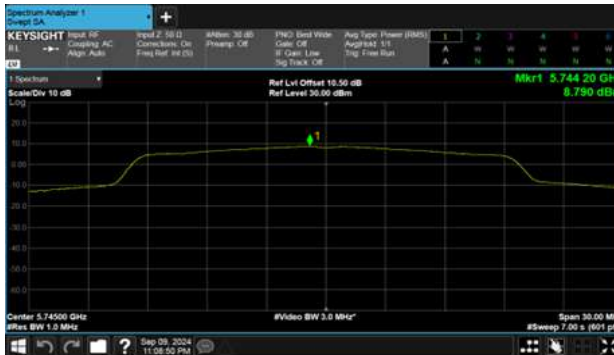
CH159





ANT B

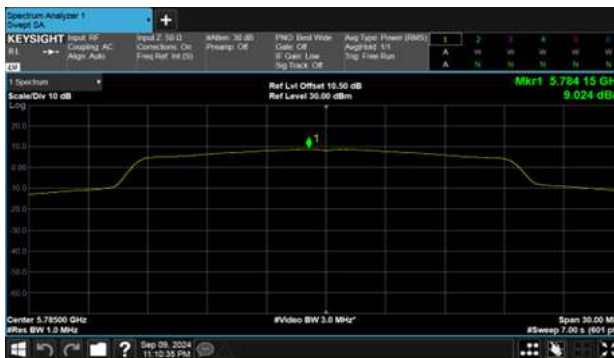
Modulation Type: 802.11ax HE20 CH149



Modulation Type: 802.11ax HE40 CH151



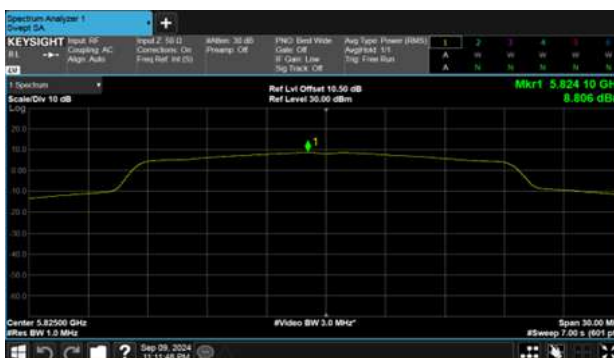
Modulation Type: 802.11ax HE20 CH157



Modulation Type: 802.11ax HE40 CH159



Modulation Type: 802.11ax HE20 CH165



Modulation Type: 802.11ax HE80 CH155





Straddle Channel-ANT B
Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac, VHT20 (6.5Mbps)
CH144

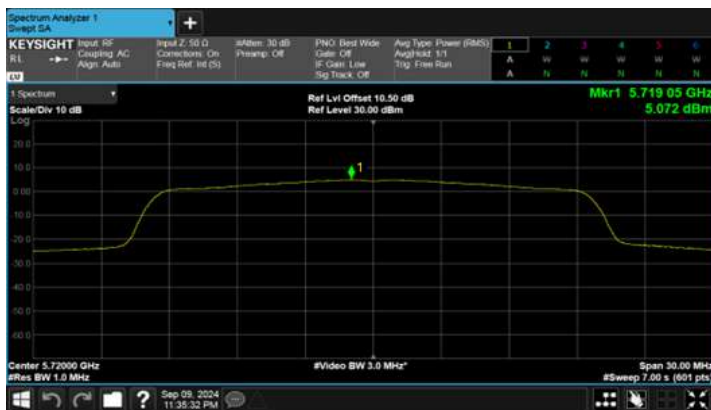


Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH142





Straddle Channel-ANT B
Modulation Type: 802.11ax HE20 (7.3Mbps)
CH144



Modulation Type: 802.11ax HE40 (14.6Mbps)
CH142



Modulation Type: 802.11ax HE80 (30.6Mbps)
CH138

