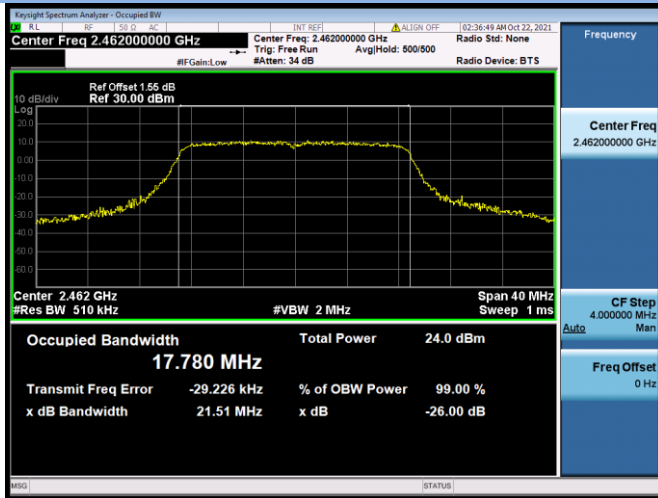


802.11n-20 MHz CHANNEL 11



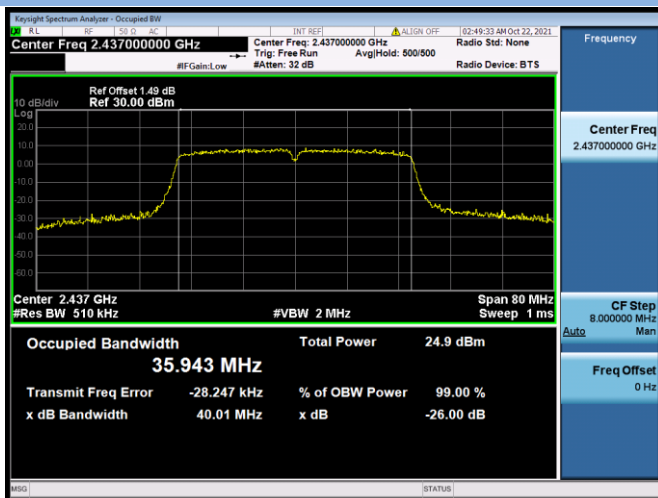
802.11n-40 MHz CHANNEL 3



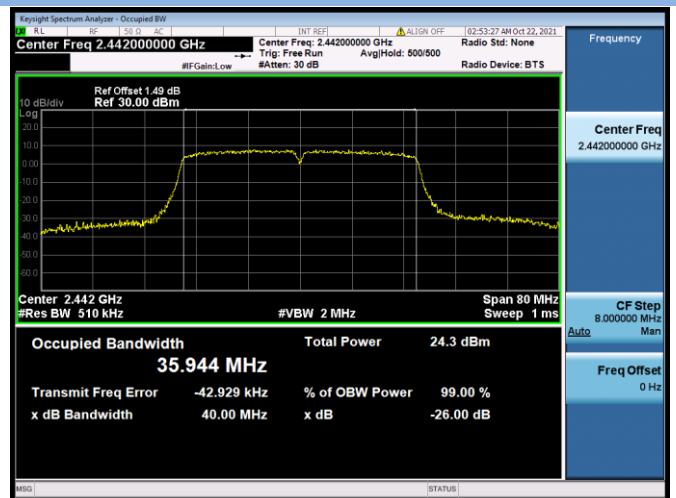
802.11n-40 MHz CHANNEL 4



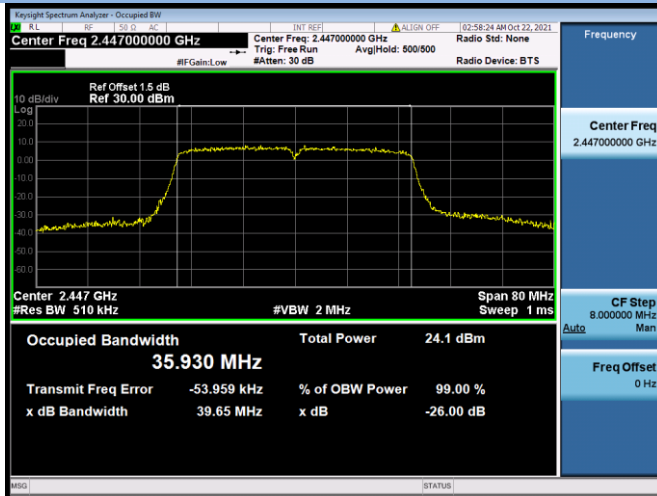
802.11n-40 MHz CHANNEL 6



802.11n-40 MHz CHANNEL 7



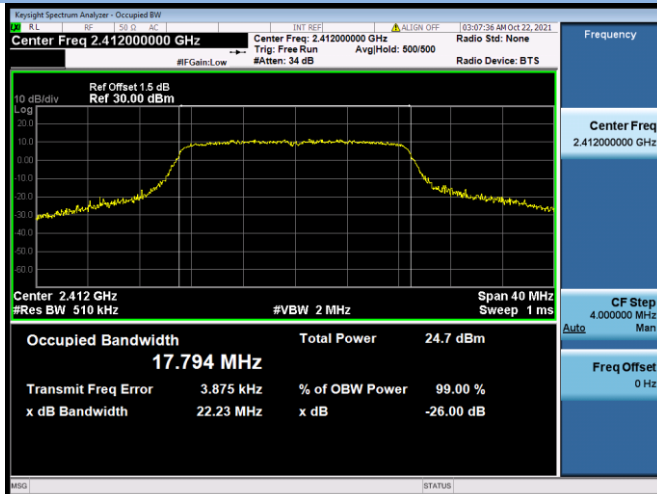
802.11n-40 MHz CHANNEL 8



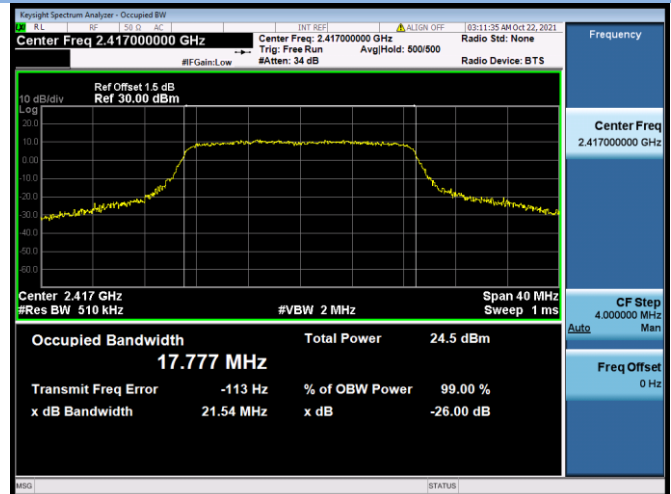
802.11n-40 MHz CHANNEL 9



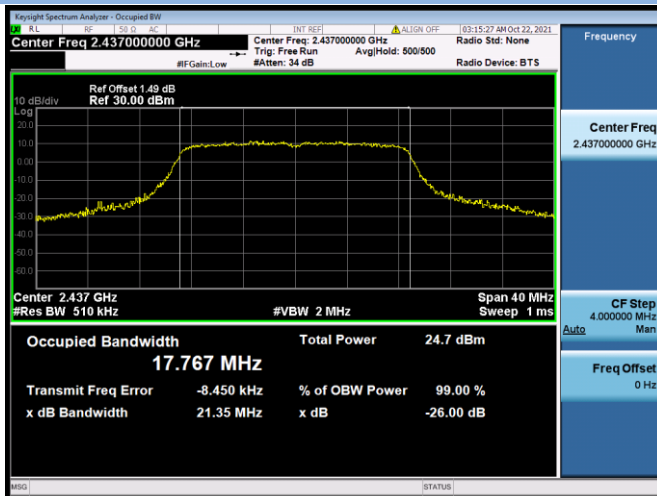
802.11ac-20 MHz CHANNEL 1



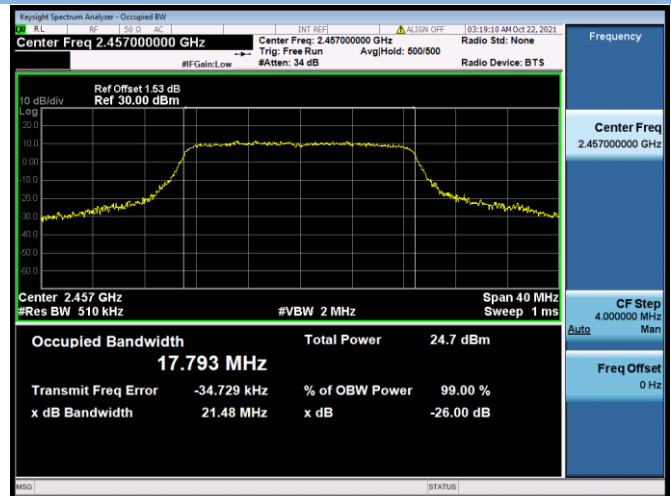
802.11ac-20 MHz CHANNEL 2



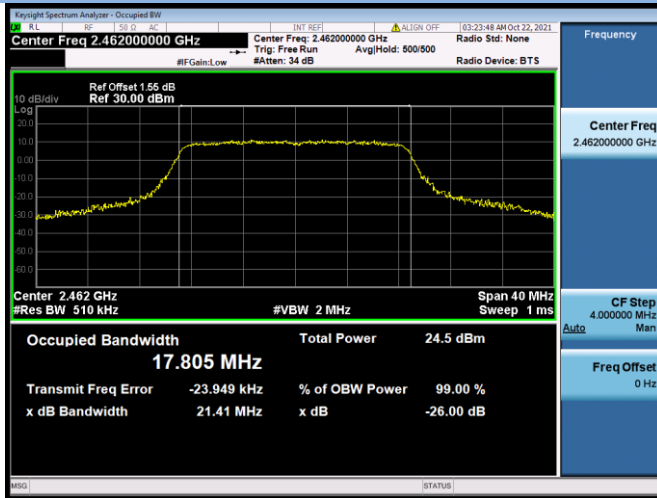
802.11ac-20 MHz CHANNEL 6



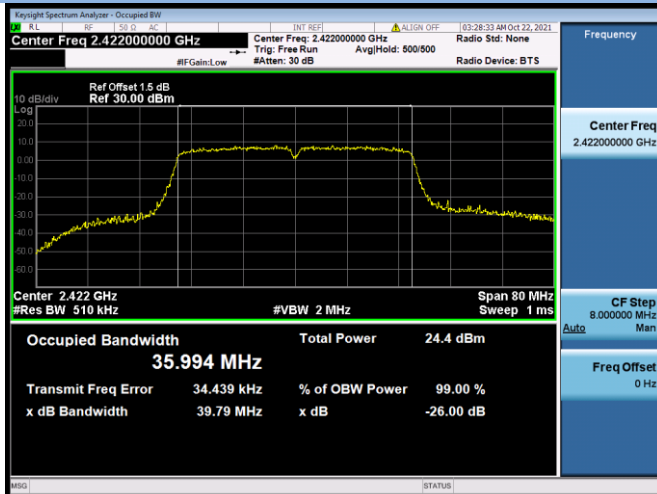
802.11ac-20 MHz CHANNEL 10



802.11ac-20 MHz CHANNEL 11



802.11ac-40 MHz CHANNEL 3



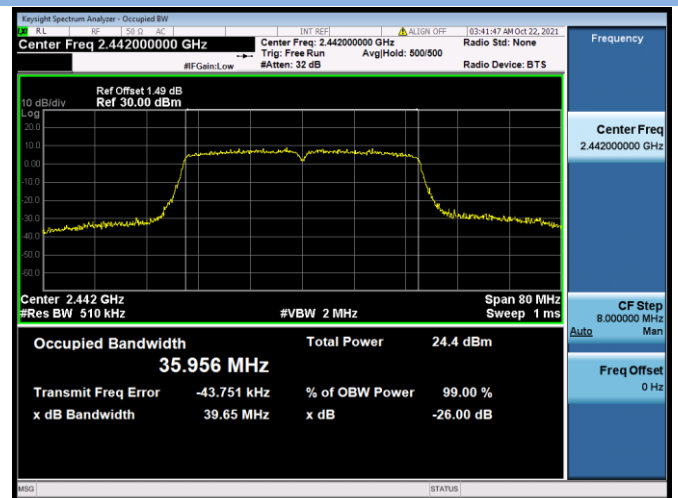
802.11ac-40 MHz CHANNEL 4



802.11ac-40 MHz CHANNEL 6



802.11ac-40 MHz CHANNEL 7



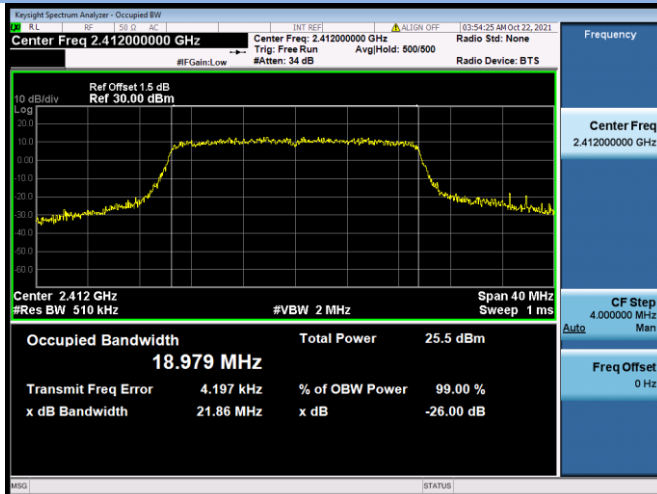
802.11ac-40 MHz CHANNEL 8



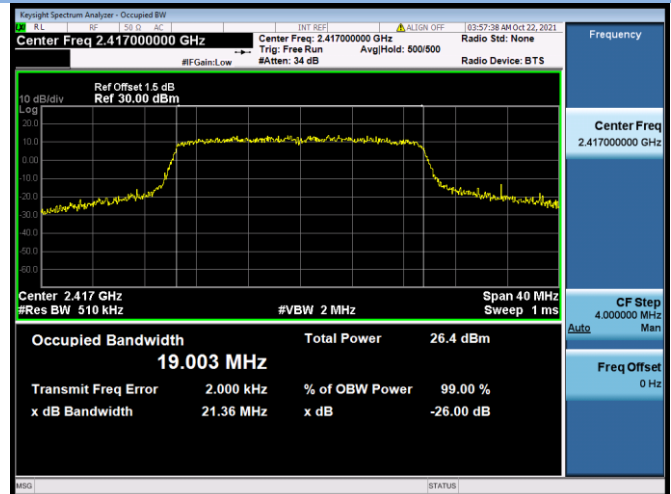
802.11ac-40 MHz CHANNEL 9



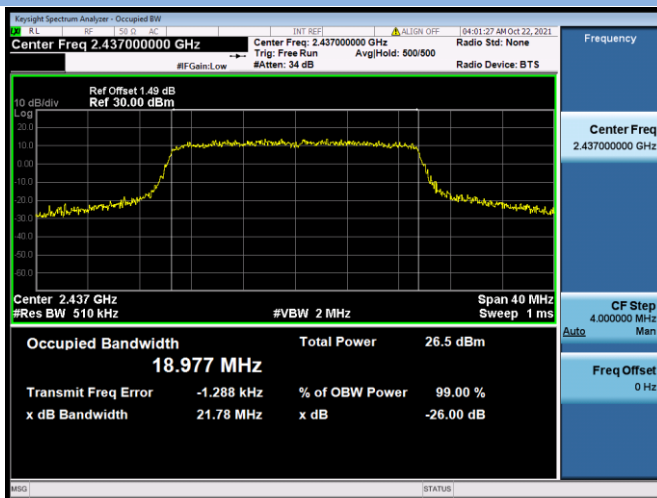
802.11ax-20 MHz CHANNEL 1



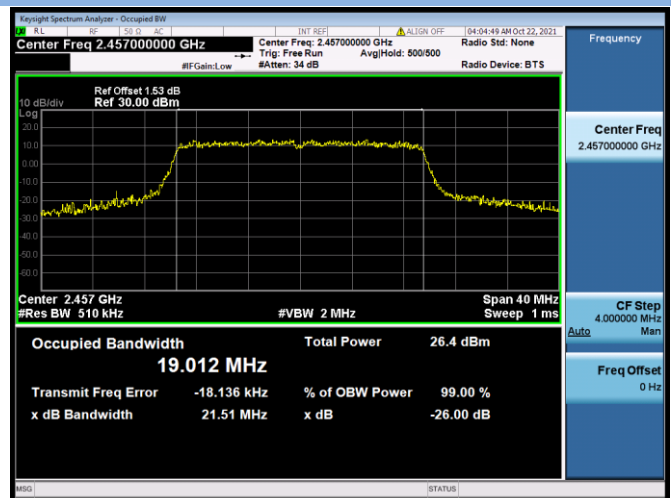
802.11ax-20 MHz CHANNEL 2



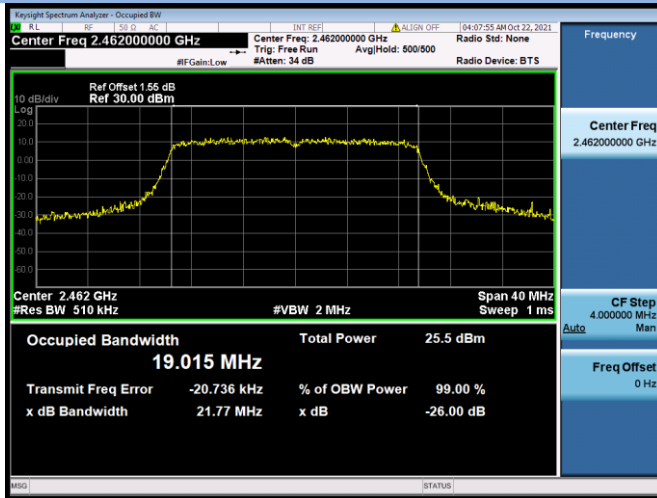
802.11ax-20 MHz CHANNEL 6



802.11ax-20 MHz CHANNEL 10



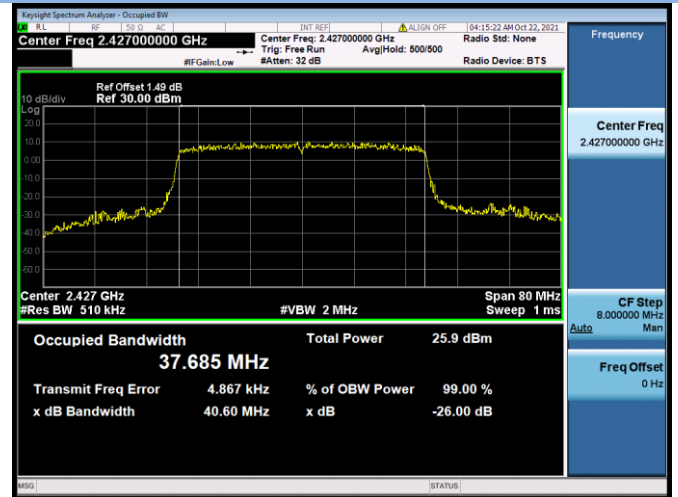
802.11ax-20 MHz CHANNEL 11



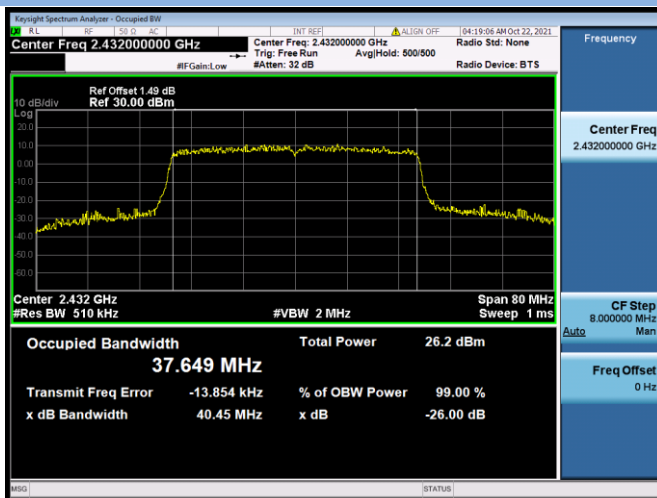
802.11ax-40 MHz CHANNEL 3



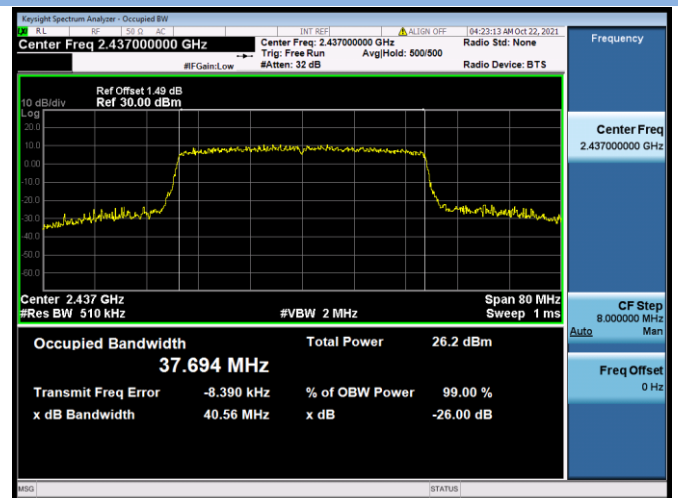
802.11ax-40 MHz CHANNEL 4



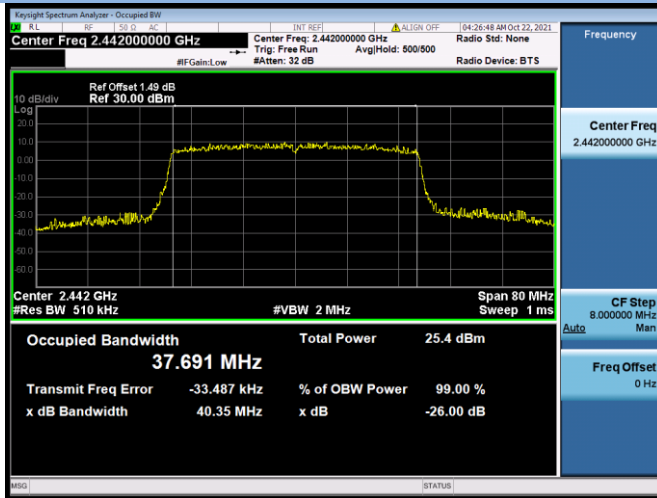
802.11ax-40 MHz CHANNEL 5



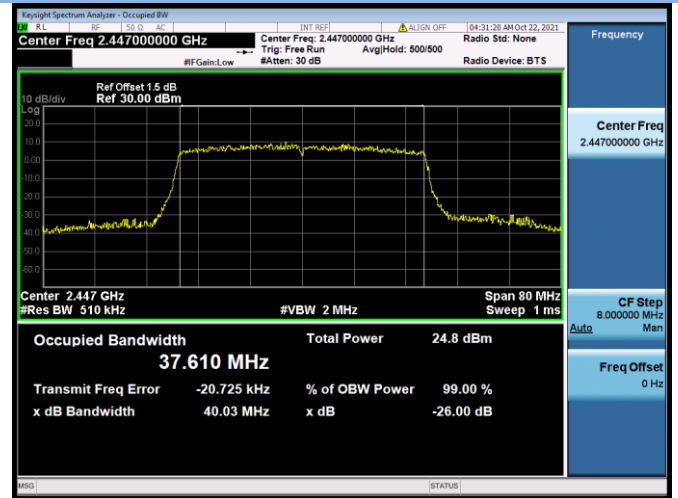
802.11ax-40 MHz CHANNEL 6



802.11ax-40 MHz CHANNEL 7



802.11ax-40 MHz CHANNEL 8



802.11ax-40 MHz CHANNEL 9



A.3 Conducted Spurious Emissions

Test Data

Main Antenna

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.20	6.69	-13.31	Pass
6	-48.09	7.06	-12.94	Pass
11	-48.12	6.65	-13.35	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-47.24	5.37	-14.63	Pass
2	-48.61	5.82	-14.18	Pass
6	-47.99	5.96	-14.04	Pass
11	-48.48	5.82	-14.18	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.25	4.87	-15.13	Pass
2	-47.64	5.70	-14.30	Pass
6	-48.87	6.09	-13.91	Pass
10	-47.14	5.62	-14.38	Pass
11	-48.05	5.30	-14.70	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.24	1.17	-18.83	Pass
4	-47.61	2.95	-17.05	Pass
6	-48.07	2.90	-17.10	Pass
7	-47.80	1.52	-18.48	Pass
8	-46.62	1.43	-18.57	Pass
9	-49.12	0.97	-19.03	Pass

802.11ac-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-47.60	4.90	-15.10	Pass
2	-49.02	5.85	-14.15	Pass
6	-47.84	5.11	-14.89	Pass
10	-48.61	5.57	-14.43	Pass
11	-48.25	4.90	-15.10	Pass

802.11ac-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-49.09	2.31	-17.70	Pass
4	-48.04	2.54	-17.46	Pass
6	-48.30	2.69	-17.31	Pass
7	-48.37	2.38	-17.62	Pass
8	-48.48	0.96	-19.04	Pass
9	-48.56	0.26	-19.74	Pass

802.11ax-20MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-49.11	4.15	-15.85	Pass
2	-46.27	5.54	-14.46	Pass
6	-47.71	5.16	-14.84	Pass
10	-48.20	4.25	-15.75	Pass
11	-49.31	3.98	-16.02	Pass

802.11ax-40MHz(su) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.72	0.74	-19.26	Pass
4	-46.79	1.20	-18.80	Pass
5	-48.41	2.28	-17.72	Pass
6	-48.86	1.65	-18.35	Pass
7	-49.65	1.25	-18.75	Pass
8	-48.36	0.57	-19.43	Pass
9	-48.12	0.10	-19.90	Pass

Aux. Antenna
802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-49.30	7.83	-12.17	Pass
6	-46.77	7.87	-12.13	Pass
11	-47.12	7.61	-12.39	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.87	6.70	-13.30	Pass
2	-47.62	6.67	-13.33	Pass
6	-48.55	5.72	-14.28	Pass
11	-48.67	6.65	-13.35	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.85	5.35	-14.65	Pass
2	-48.49	6.28	-13.72	Pass
6	-48.16	6.03	-13.97	Pass
10	-47.95	6.43	-13.57	Pass
11	-49.31	6.33	-13.67	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.08	2.66	-17.34	Pass
4	-48.88	3.01	-16.99	Pass
6	-48.49	3.60	-16.40	Pass
7	-48.23	3.34	-16.66	Pass
8	-46.15	3.07	-16.93	Pass
9	-48.10	1.49	-18.51	Pass

802.11ac-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-47.41	5.28	-14.72	Pass
2	-48.91	6.38	-13.62	Pass
6	-49.33	6.34	-13.66	Pass
10	-49.40	6.90	-13.10	Pass
11	-49.22	6.62	-13.38	Pass

802.11ac-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.23	3.63	-16.37	Pass
4	-47.95	3.90	-16.10	Pass
6	-48.97	3.39	-16.61	Pass
7	-49.35	3.09	-16.91	Pass
8	-46.23	1.26	-18.74	Pass
9	-49.35	1.76	-18.24	Pass

802.11ax-20MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-47.71	5.29	-14.71	Pass
2	-46.47	6.05	-13.95	Pass
6	-49.09	7.19	-12.81	Pass
10	-48.64	6.80	-13.20	Pass
11	-48.40	5.14	-14.86	Pass

802.11ax-40MHz(su) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.06	1.28	-18.72	Pass
4	-48.06	3.30	-16.70	Pass
5	-49.13	3.72	-16.28	Pass
6	-48.29	3.89	-16.11	Pass
7	-48.09	1.41	-18.59	Pass
8	-46.64	2.19	-17.81	Pass
9	-48.95	0.79	-19.21	Pass

MIMO-Main Antenna
802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.48	6.38	-13.62	Pass
6	-46.30	6.89	-13.11	Pass
11	-49.05	6.08	-13.92	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.41	5.42	-14.58	Pass
2	-48.89	5.76	-14.24	Pass
6	-48.18	6.09	-13.91	Pass
11	-48.75	4.93	-15.07	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-47.25	3.77	-16.23	Pass
2	-49.19	4.98	-15.02	Pass
6	-49.34	6.00	-14.01	Pass
10	-48.90	5.15	-14.85	Pass
11	-48.38	5.07	-14.93	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-47.78	1.20	-18.80	Pass
4	-48.36	3.08	-16.92	Pass
6	-48.35	3.86	-16.14	Pass
7	-48.11	1.99	-18.01	Pass
8	-48.01	1.66	-18.34	Pass
9	-48.56	0.10	-19.91	Pass

802.11ac-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.42	5.13	-14.87	Pass
2	-48.50	5.91	-14.09	Pass
6	-48.50	5.97	-14.03	Pass
10	-48.16	5.90	-14.10	Pass
11	-47.86	5.21	-14.79	Pass

802.11ac-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.31	0.73	-19.27	Pass
4	-47.40	3.18	-16.82	Pass
6	-47.78	2.94	-17.06	Pass
7	-48.68	0.87	-19.13	Pass
8	-49.07	0.75	-19.25	Pass
9	-49.10	-1.64	-21.64	Pass

802.11ax-20MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.69	2.89	-17.11	Pass
2	-47.72	5.96	-14.04	Pass
6	-48.52	5.32	-14.68	Pass
10	-48.86	4.87	-15.13	Pass
11	-46.38	3.32	-16.68	Pass

802.11ax-40MHz(su) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.61	0.66	-19.34	Pass
4	-48.89	1.68	-18.32	Pass
5	-48.15	2.37	-17.63	Pass
6	-47.47	2.86	-17.14	Pass
7	-48.83	0.57	-19.43	Pass
8	-48.63	1.20	-18.80	Pass
9	-49.19	-2.50	-22.50	Pass

MIMO-Aux. Antenna
802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.76	7.56	-12.44	Pass
6	-46.59	7.59	-12.42	Pass
11	-48.96	8.59	-11.41	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-49.03	6.45	-13.55	Pass
2	-48.12	6.40	-13.60	Pass
6	-48.11	7.12	-12.88	Pass
11	-47.59	6.89	-13.11	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.22	5.55	-14.45	Pass
2	-48.94	7.01	-12.99	Pass
6	-48.02	6.65	-13.35	Pass
10	-48.11	5.64	-14.36	Pass
11	-47.79	6.36	-13.64	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-48.57	1.23	-18.77	Pass
4	-48.93	3.38	-16.62	Pass
6	-49.19	3.40	-16.60	Pass
7	-48.83	1.39	-18.61	Pass
8	-47.27	2.45	-17.55	Pass
9	-49.48	-0.52	-20.52	Pass

802.11ac-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-48.99	5.76	-14.24	Pass
2	-47.76	5.96	-14.04	Pass
6	-48.36	6.00	-14.00	Pass
10	-49.08	6.54	-13.46	Pass
11	-46.66	5.27	-14.73	Pass

802.11ac-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-46.57	1.33	-18.67	Pass
4	-49.05	3.90	-16.10	Pass
6	-47.62	3.77	-16.23	Pass
7	-47.42	1.89	-18.11	Pass
8	-47.88	2.33	-17.67	Pass
9	-48.34	0.61	-19.39	Pass

802.11ax-20MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
1	-49.01	4.13	-15.87	Pass
2	-47.78	6.89	-13.11	Pass
6	-48.23	6.59	-13.41	Pass
10	-48.76	6.88	-13.12	Pass
11	-48.31	5.09	-14.91	Pass

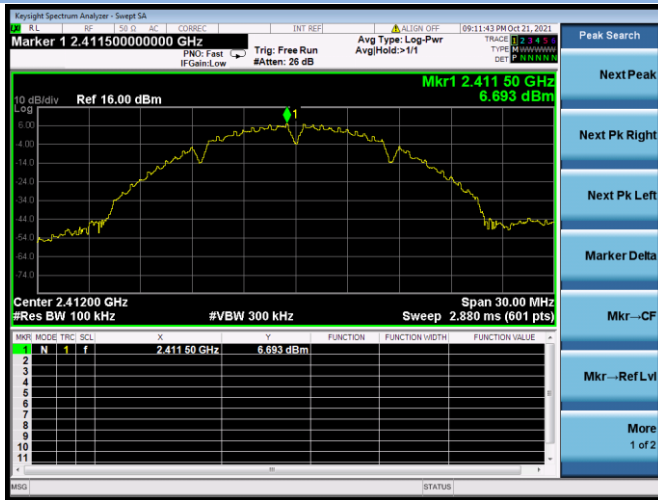
802.11ax-40MHz(su) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
3	-49.18	1.45	-18.55	Pass
4	-48.49	2.90	-17.10	Pass
5	-47.71	3.10	-16.90	Pass
6	-49.17	3.01	-16.99	Pass
7	-48.06	1.57	-18.43	Pass
8	-48.39	2.86	-17.14	Pass
9	-48.33	0.23	-19.77	Pass

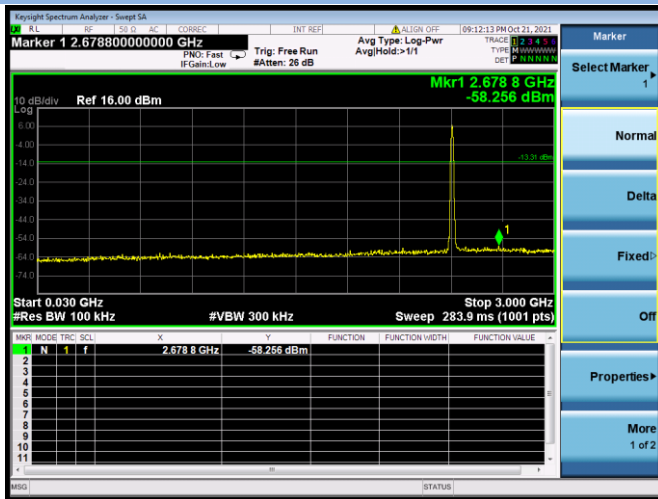
Test Plots

Main Antenna

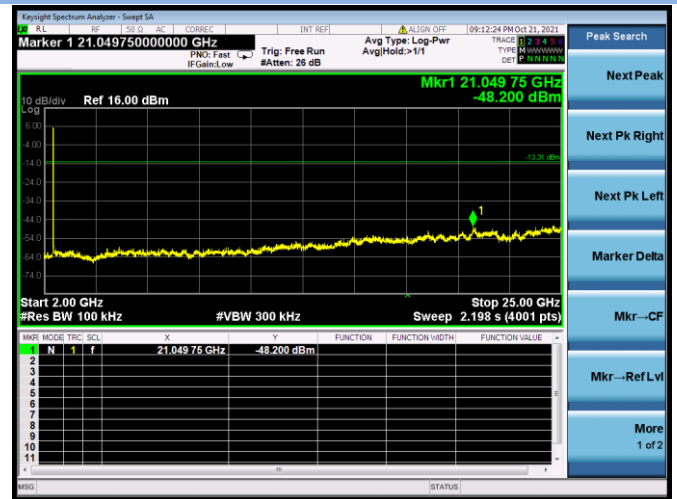
802.11b CHANNEL 1 CARRIER LEVEL



802.11b CHANNEL 1, SPURIOUS 30 MHz ~ 3 GHz



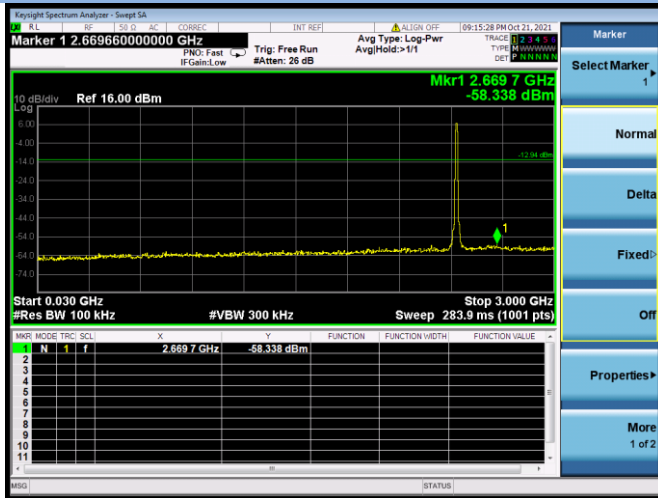
802.11b CHANNEL 1, SPURIOUS 2 GHz ~ 25 GHz



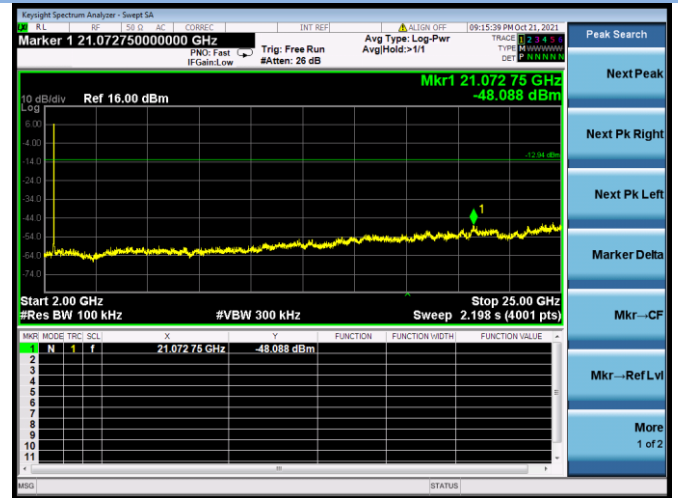
802.11b CHANNEL 6 CARRIER LEVEL



802.11b CHANNEL 6, SPURIOUS 30 MHz ~ 3 GHz



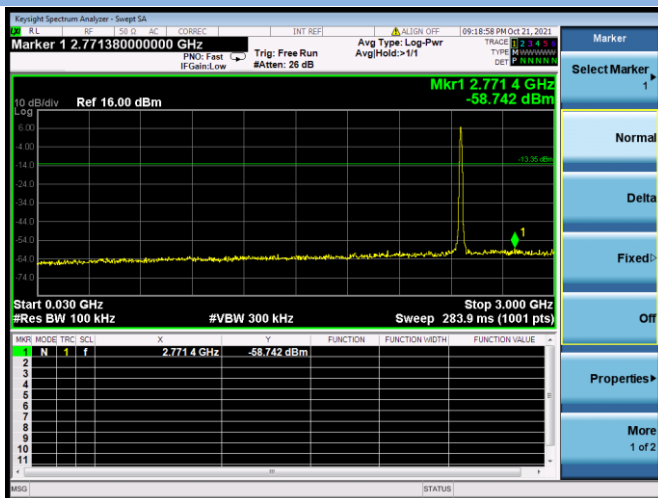
802.11b CHANNEL 6, SPURIOUS 2 GHz ~ 25 GHz



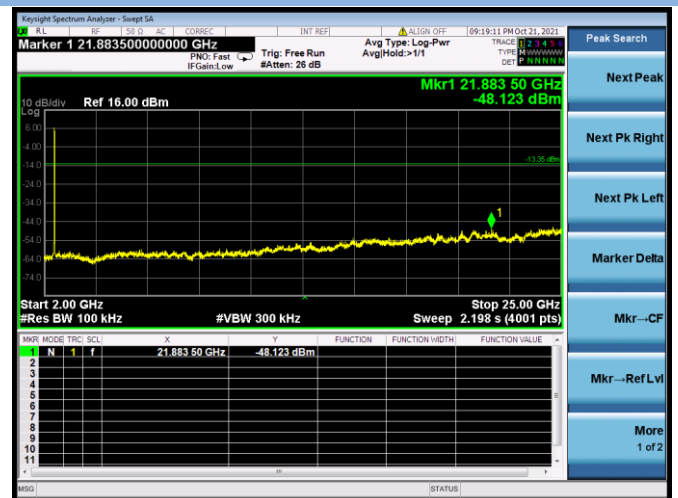
802.11b CHANNEL 11 CARRIER LEVEL



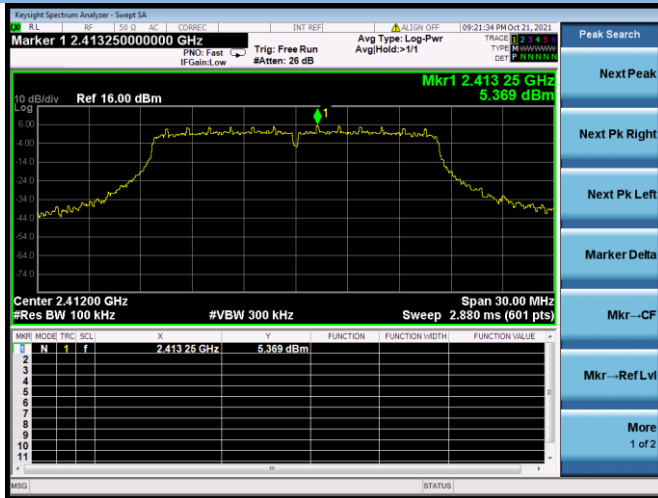
802.11b CHANNEL 11, SPURIOUS 30 MHz ~ 3 GHz



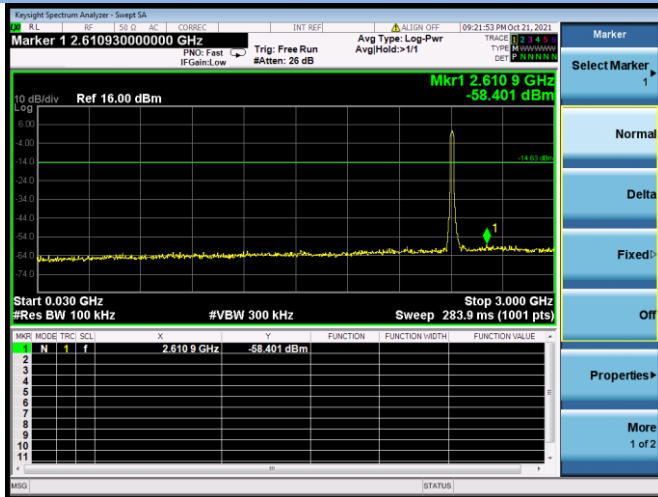
802.11b CHANNEL 11, SPURIOUS 2 GHz ~ 25 GHz



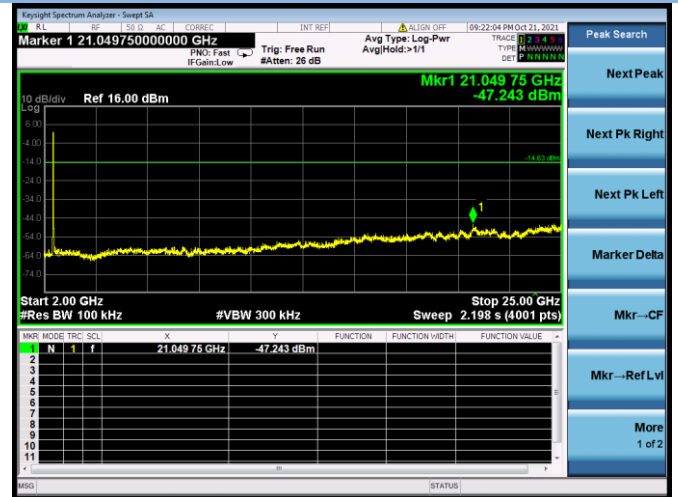
802.11g CHANNEL 1 CARRIER LEVEL



802.11g CHANNEL 1, SPURIOUS 30 MHz ~ 3 GHz



802.11g CHANNEL 1, SPURIOUS 2 GHz ~ 25 GHz



802.11g CHANNEL 2 CARRIER LEVEL

