

802.11ax-20 MHz(SU) LOW CHANNEL



802.11ax-20 MHz(SU) MIDDLE CHANNEL



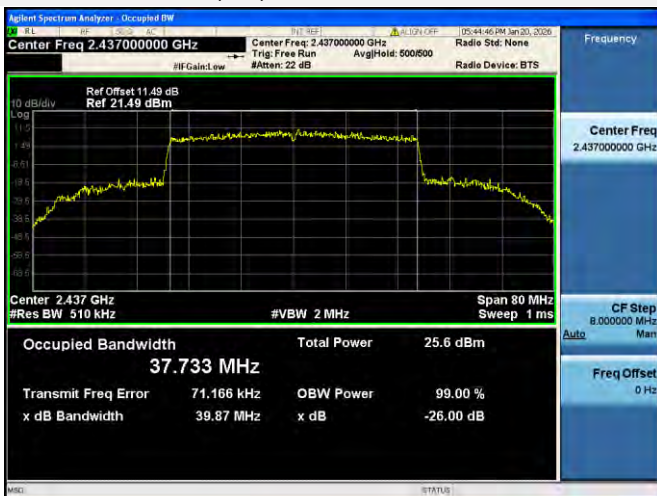
802.11ax-20 MHz(SU) HIGH CHANNEL



802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL



802.11ax-40 MHz(SU) HIGH CHANNEL



A.3 Conducted Spurious Emissions

Note ¹: All the configurations were pre tested, only the worst configuration has been reported in this report.

Note ²: All antenna were pre tested, but only the worst case has been reported in this report.

SISO-ANT7

Test Data

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-35.27	8.63	-11.37	Pass
Middle	-32.92	7.49	-12.51	Pass
High	-34.33	8.72	-11.29	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.51	5.15	-14.85	Pass
Middle	-33.47	5.28	-14.72	Pass
High	-33.11	5.53	-14.47	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-34.32	6.44	-13.57	Pass
Middle	-33.37	6.10	-13.90	Pass
High	-32.57	6.55	-13.45	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.34	3.31	-16.69	Pass
Middle	-35.83	2.89	-17.11	Pass
High	-34.49	3.86	-16.15	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.92	5.74	-14.26	Pass
Middle	-36.22	6.14	-13.86	Pass
High	-36.50	6.46	-13.54	Pass

802.11ax-40 MHz(SU) Mode:

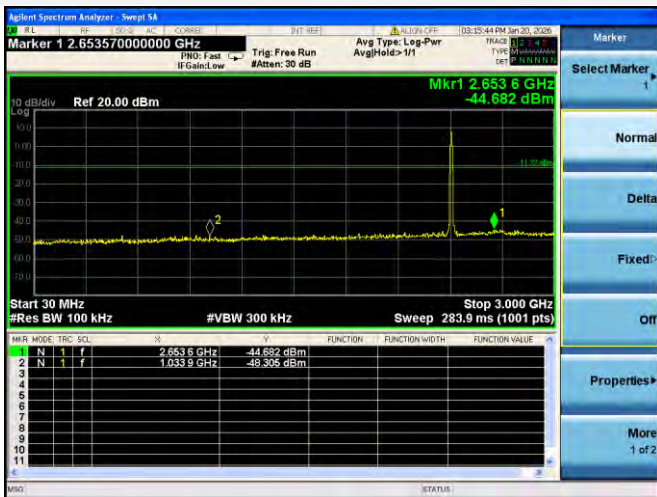
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.21	3.53	-16.47	Pass
Middle	-33.70	3.52	-16.48	Pass
High	-34.26	3.74	-16.26	Pass

Test Plots

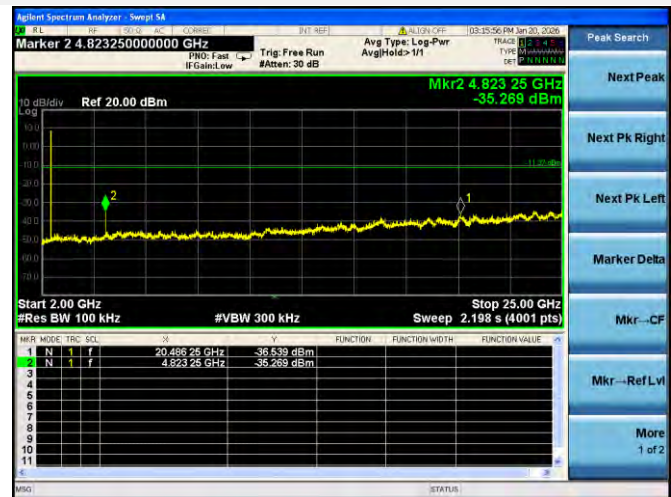
802.11b LOW CHANNEL CARRIER LEVEL



802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



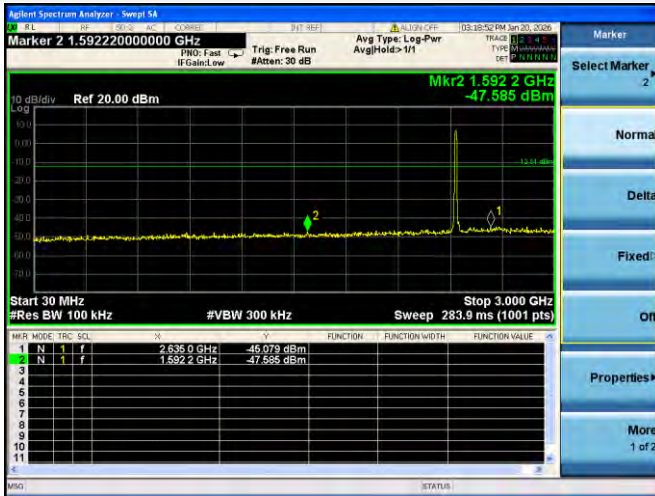
802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11b MIDDLE CHANNEL CARRIER LEVEL



802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



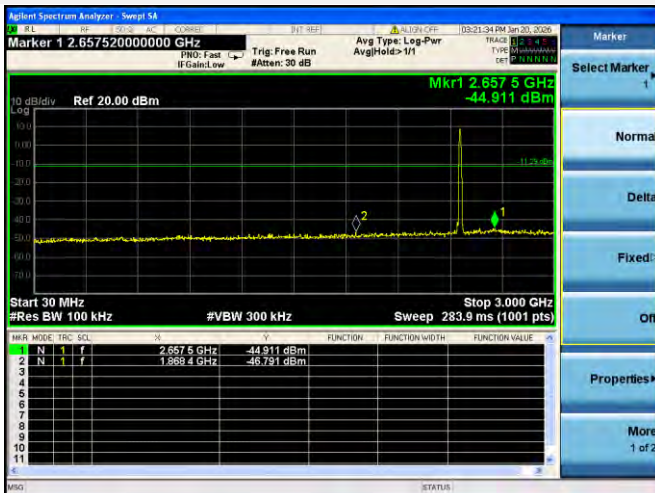
802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



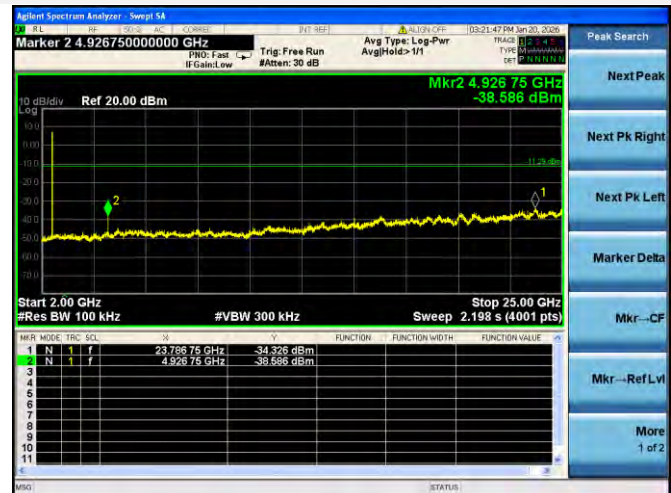
802.11b HIGH CHANNEL CARRIER LEVEL



802.11b HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



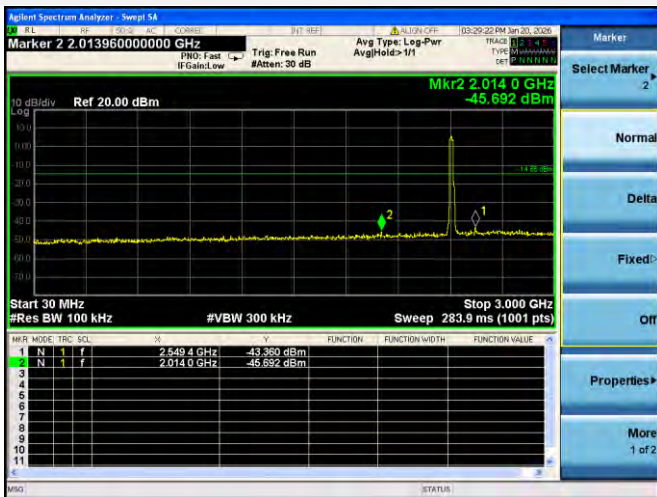
802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11g LOW CHANNEL CARRIER LEVEL



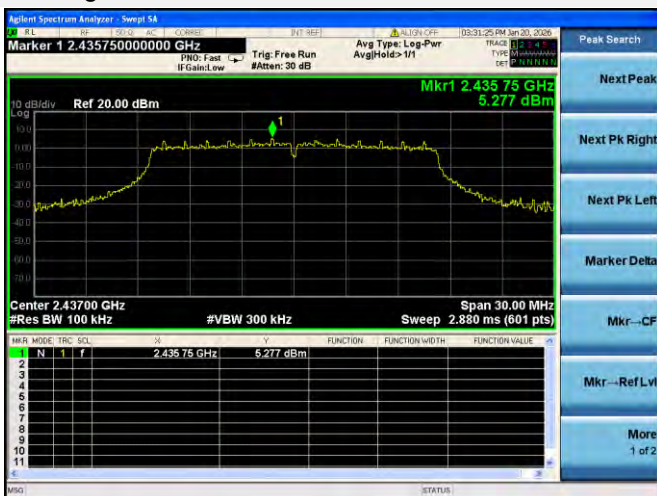
802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



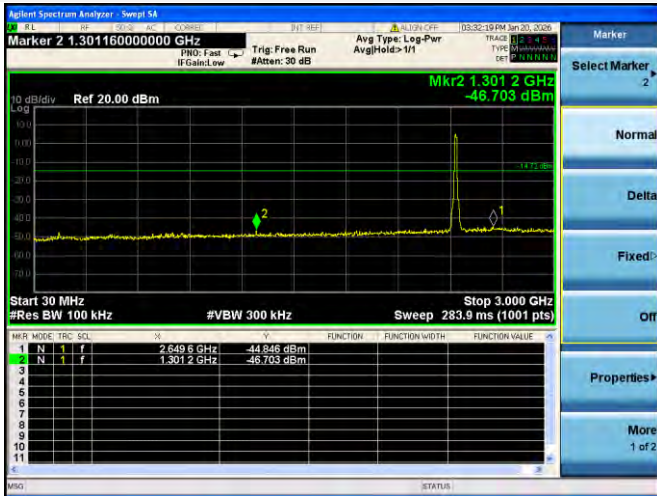
802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11g MIDDLE CHANNEL CARRIER LEVEL



802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



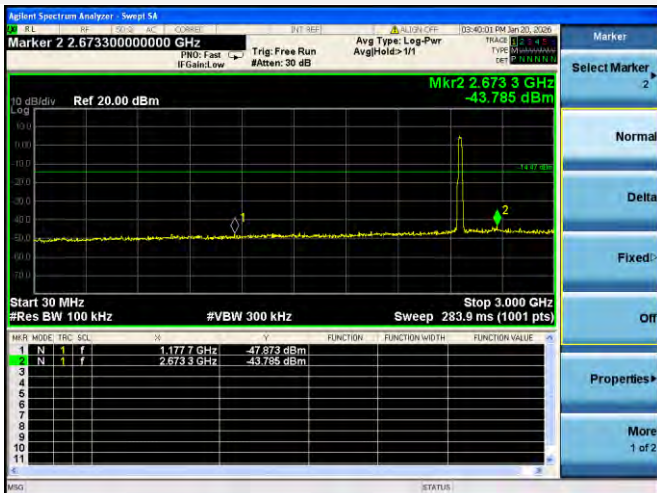
802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



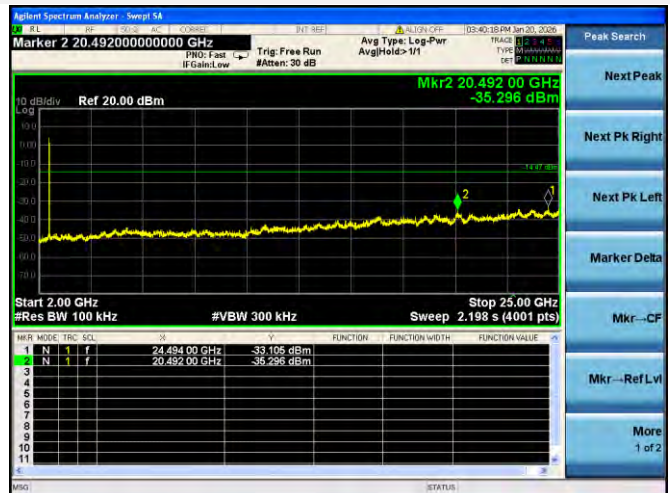
802.11g HIGH CHANNEL CARRIER LEVEL



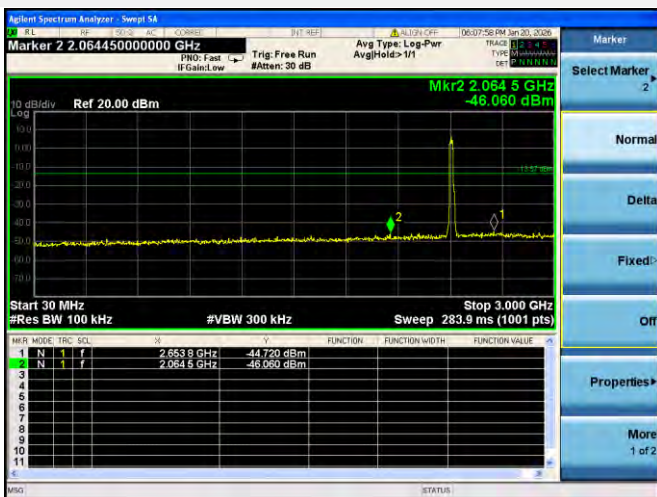
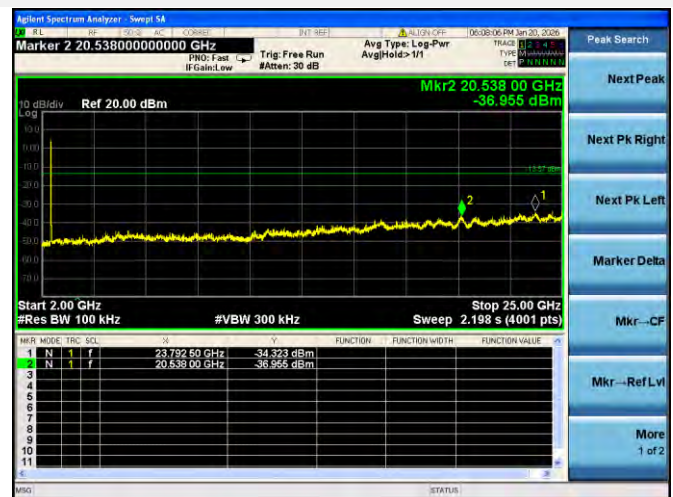
802.11g HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



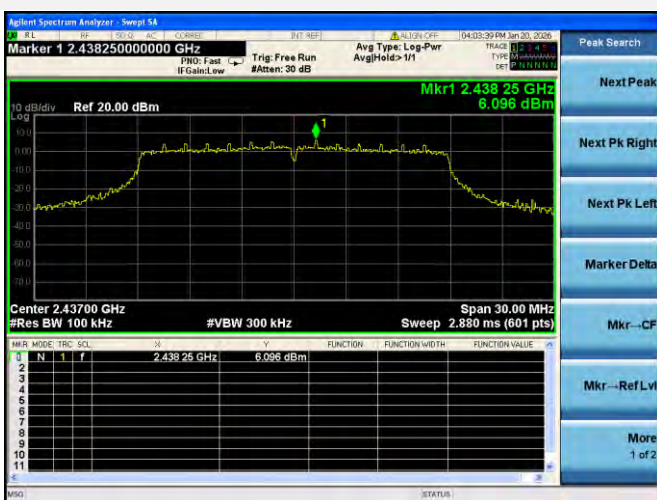
802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



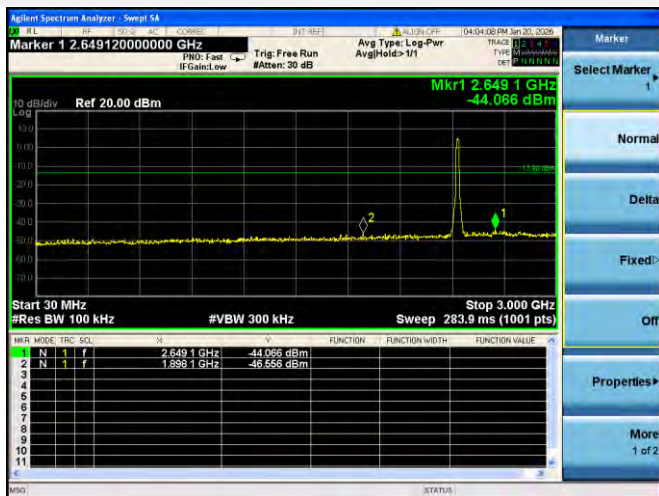
802.11n-20 MHz LOW CHANNEL CARRIER LEVEL

802.11n-20 MHz LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11n-20 MHz LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

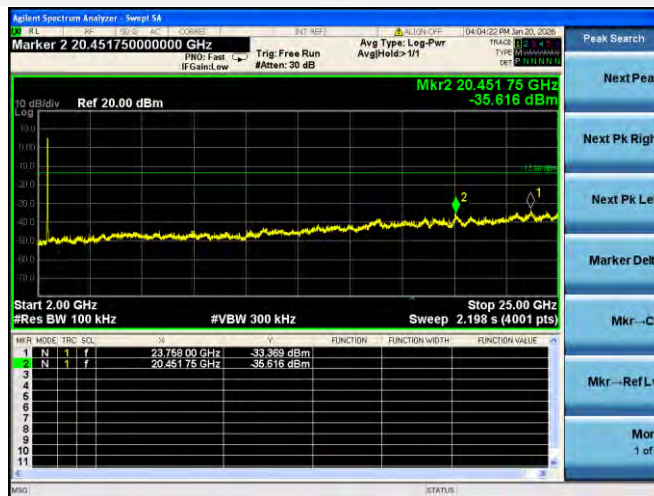
802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL



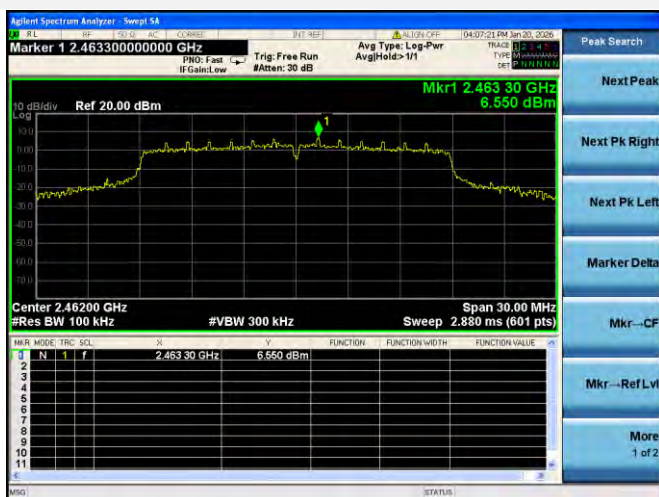
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



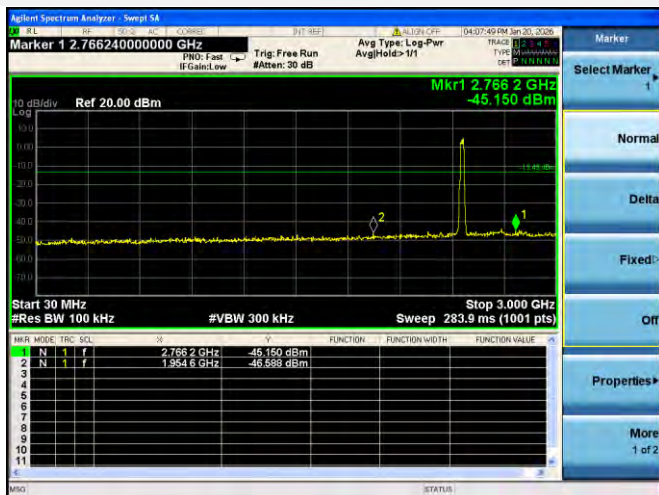
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



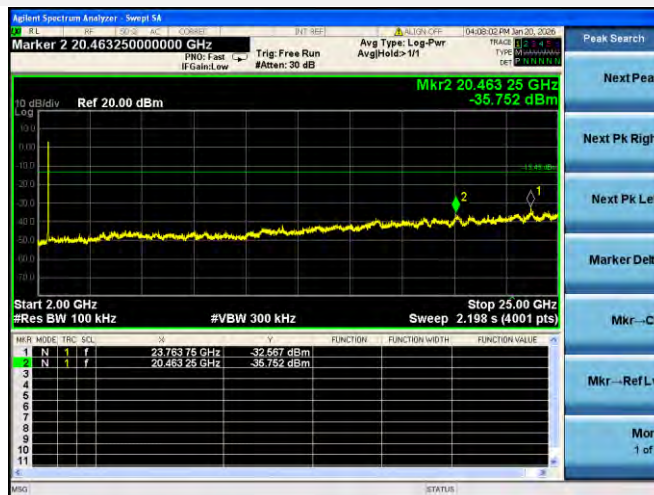
802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



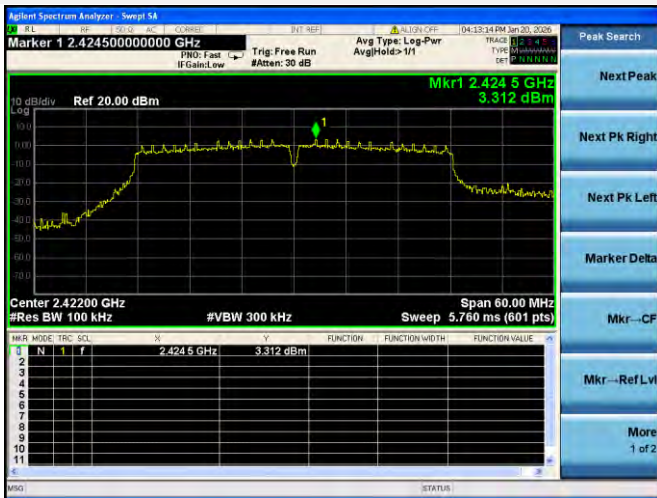
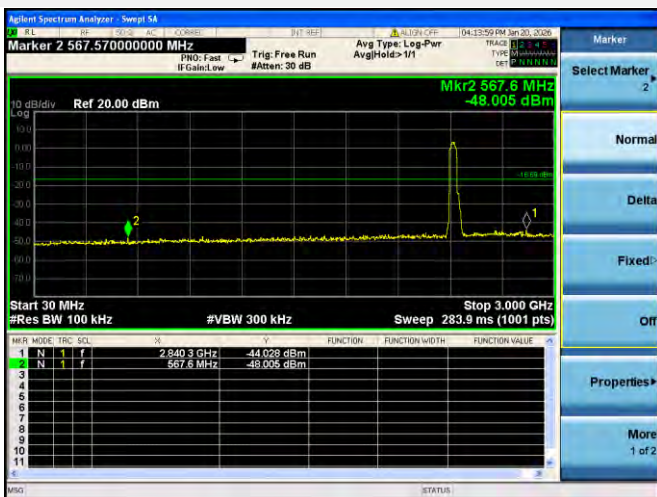
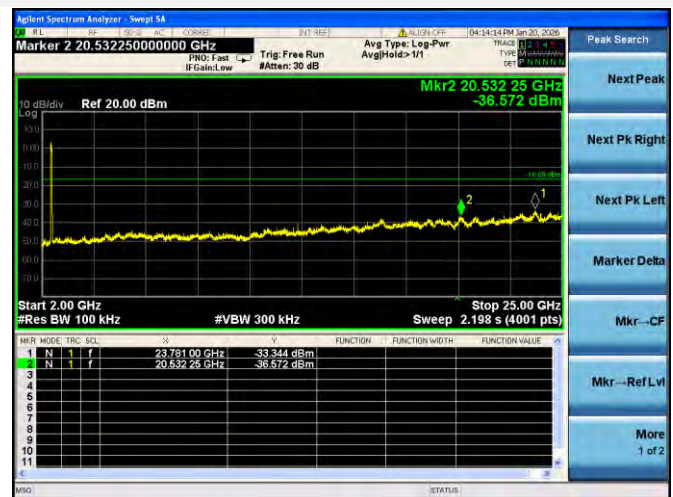
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



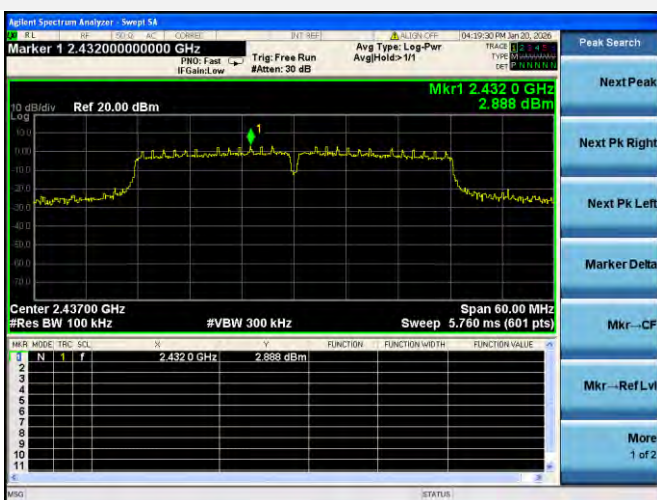
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



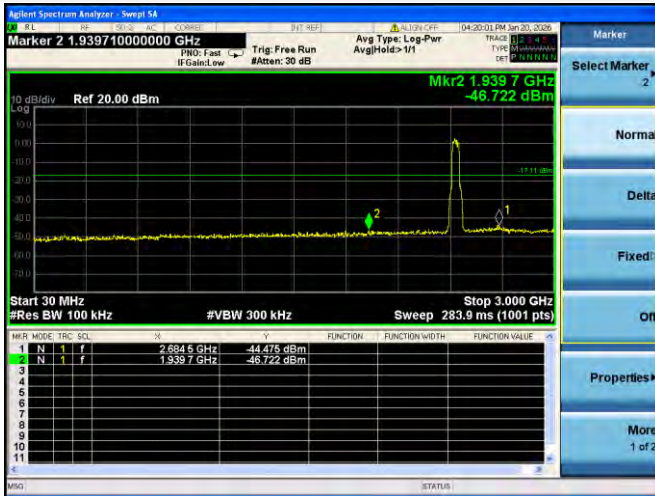
802.11n-40 MHz LOW CHANNEL CARRIER LEVEL

802.11n-40 MHz LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11n-40 MHz LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

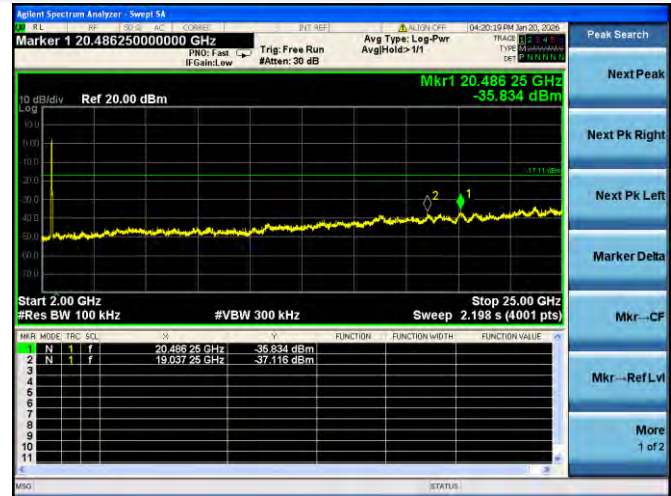
802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL



802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



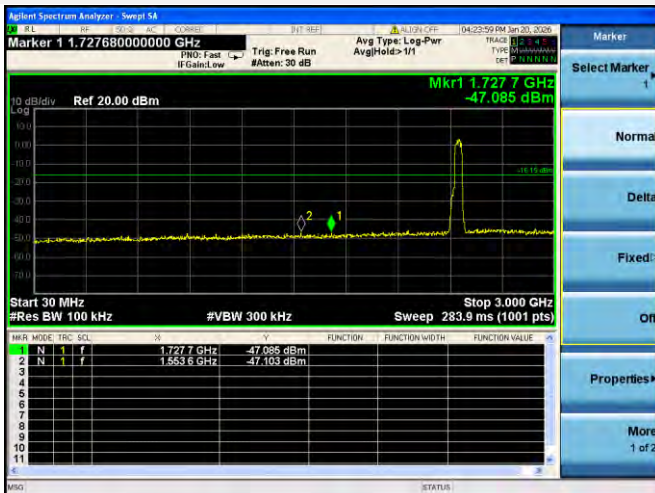
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



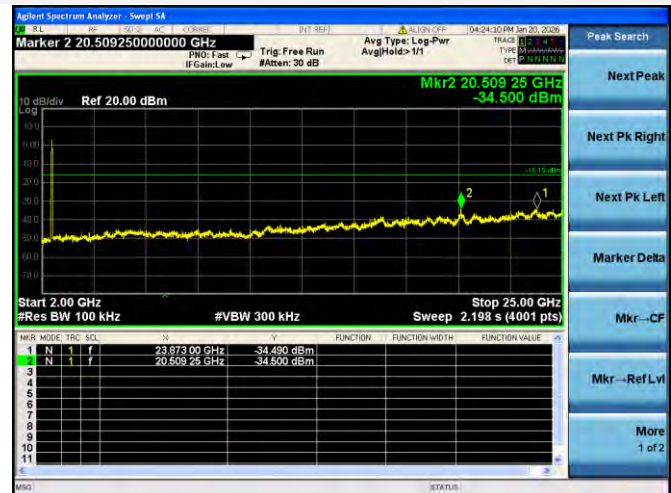
802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



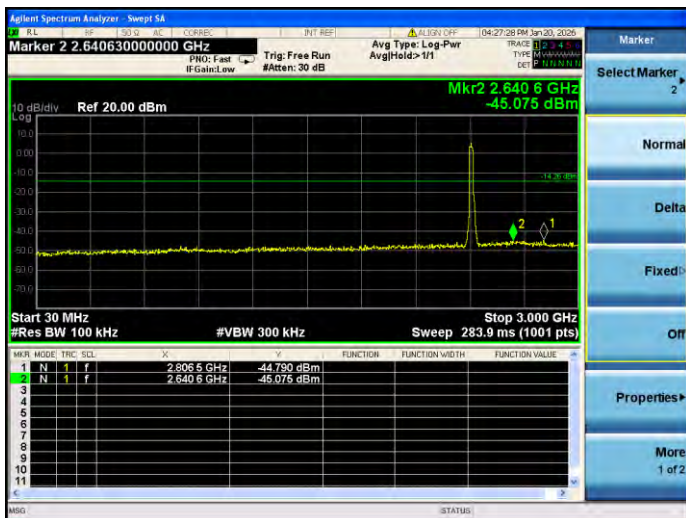
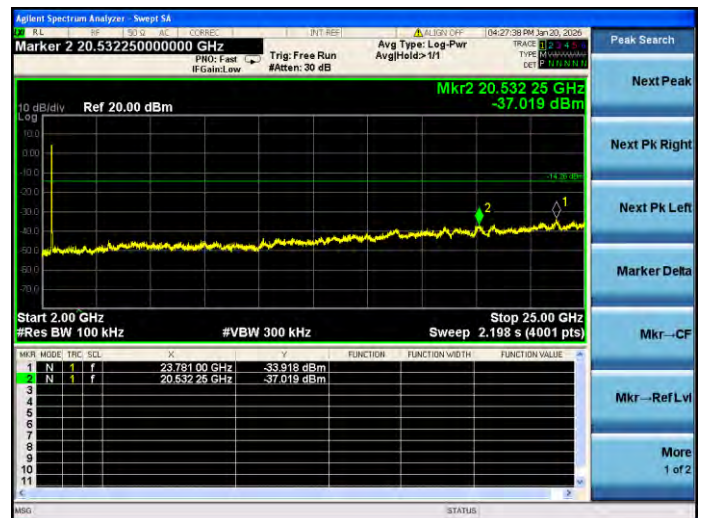
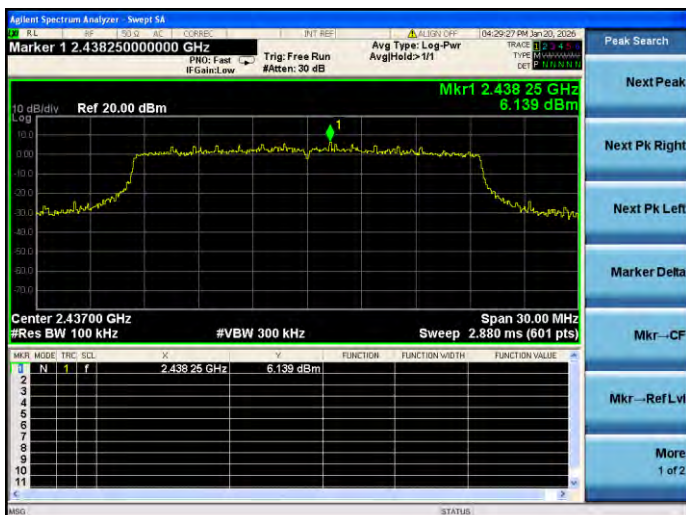
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



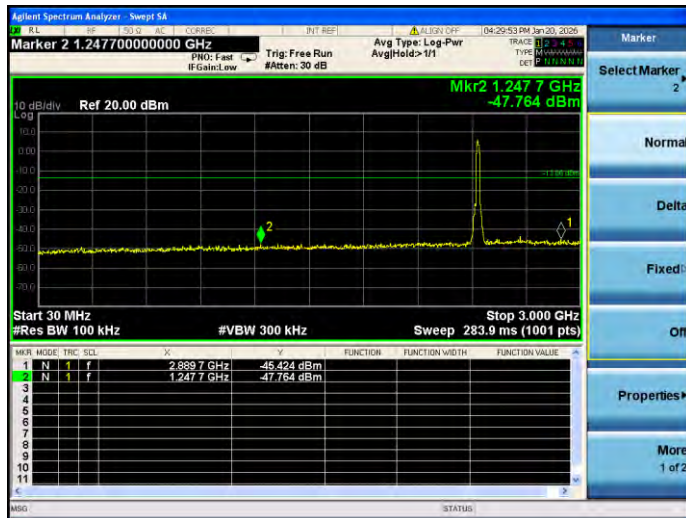
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-20 MHz(SU) LOW CHANNEL CARRIER LEVEL

802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz802.11ax-20 MHz(SU) MIDDLE CHANNEL CARRIER
LEVEL

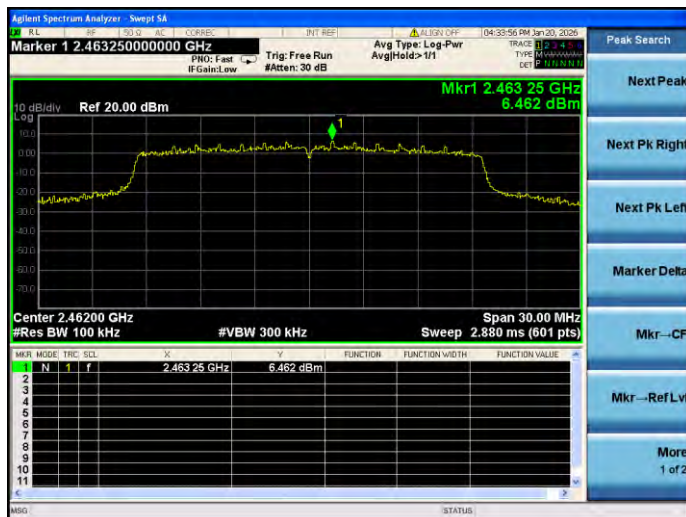
802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



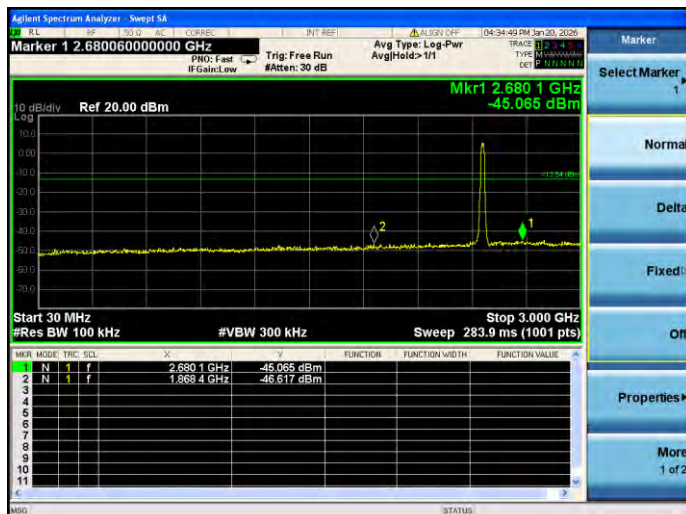
802.11ax-20 MHz(SU) HIGH CHANNEL CARRIER LEVEL



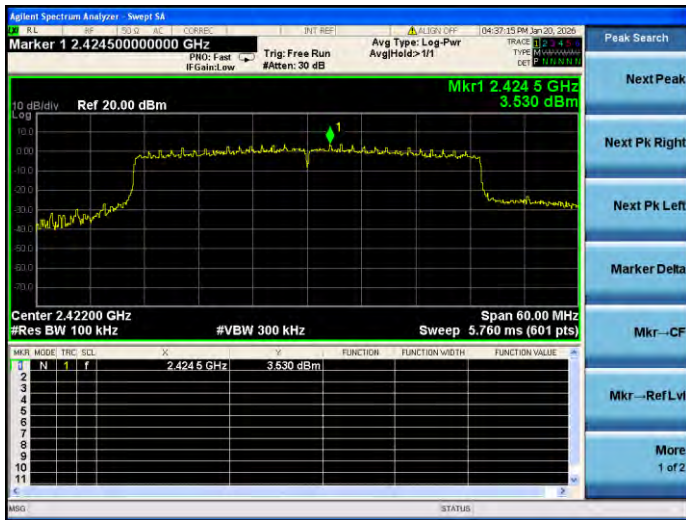
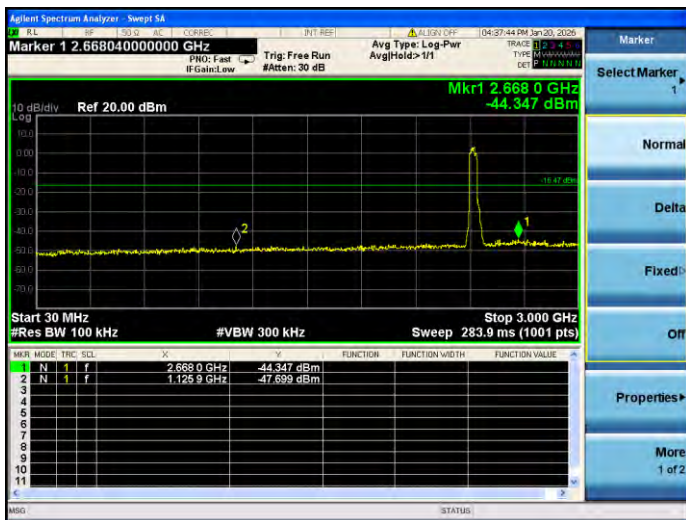
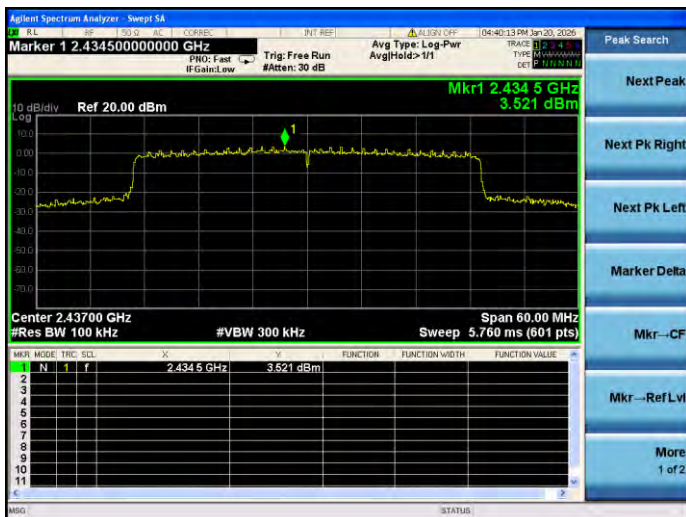
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



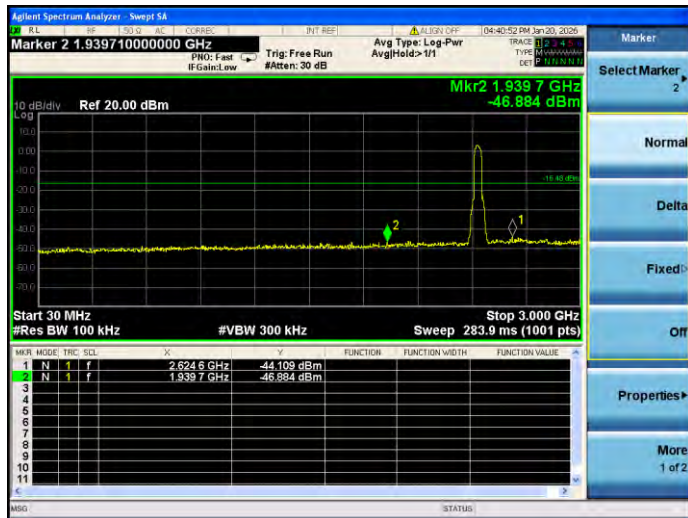
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



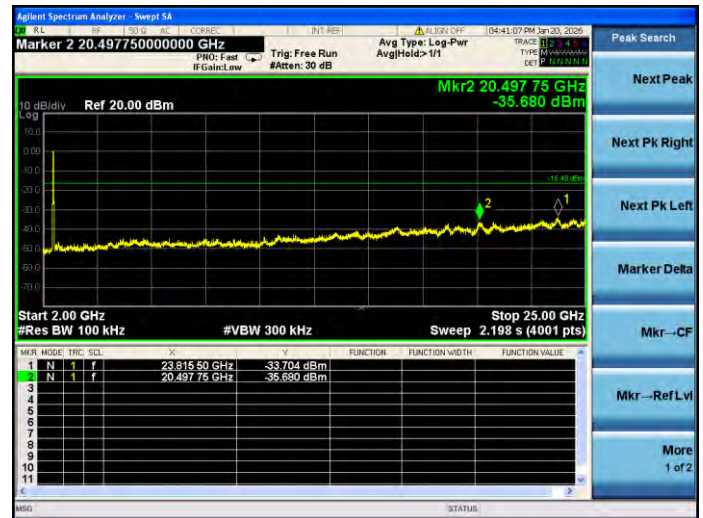
802.11ax-40 MHz(SU) LOW CHANNEL CARRIER LEVEL

802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz802.11ax-40 MHz(SU) MIDDLE CHANNEL CARRIER
LEVEL

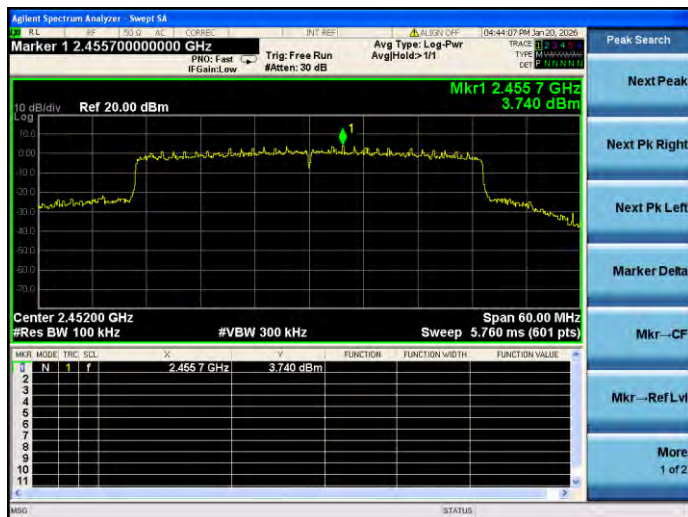
802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



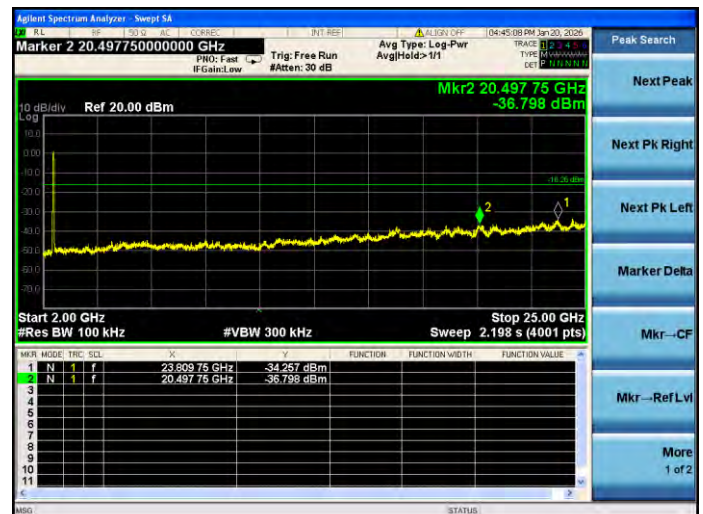
802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



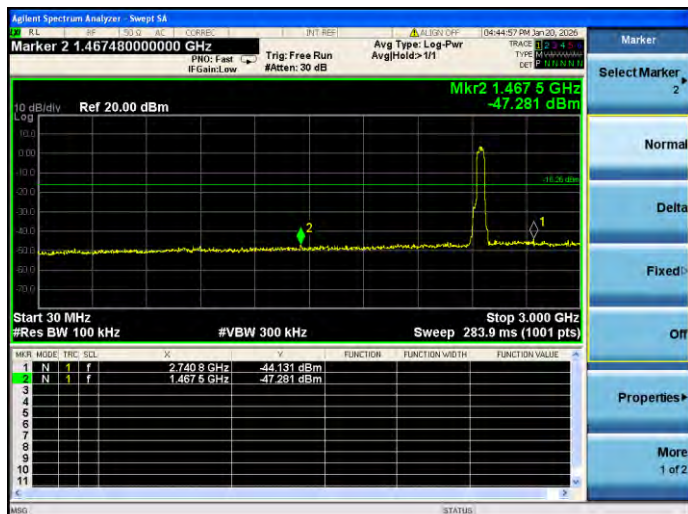
802.11ax-40 MHz(SU) HIGH CHANNEL CARRIER LEVEL



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



SISO-ANT9Test Data

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.47	8.43	-11.57	Pass
Middle	-37.19	7.94	-12.06	Pass
High	-33.73	8.41	-11.59	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.53	6.19	-13.81	Pass
Middle	-34.53	6.07	-13.93	Pass
High	-35.02	5.38	-14.63	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.81	6.28	-13.72	Pass
Middle	-31.57	6.11	-13.90	Pass
High	-33.62	6.58	-13.42	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-34.33	3.44	-16.56	Pass
Middle	-34.07	3.47	-16.53	Pass
High	-35.95	3.06	-16.94	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-34.64	6.40	-13.60	Pass
Middle	-32.38	6.66	-13.34	Pass
High	-33.87	6.23	-13.77	Pass

802.11ax-40 MHz(SU) Mode:

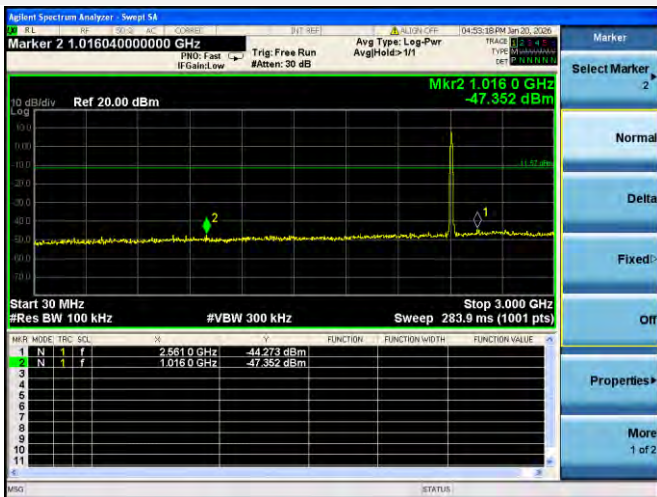
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.73	3.09	-16.91	Pass
Middle	-33.05	3.74	-16.26	Pass
High	-34.41	2.95	-17.05	Pass

Test Plots

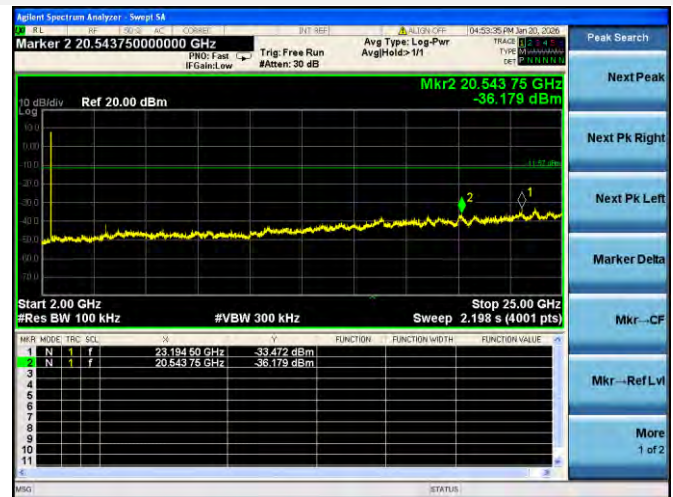
802.11b LOW CHANNEL CARRIER LEVEL



802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



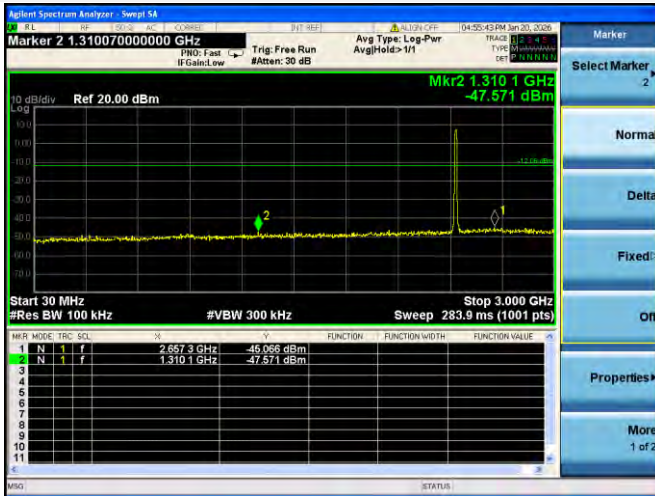
802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



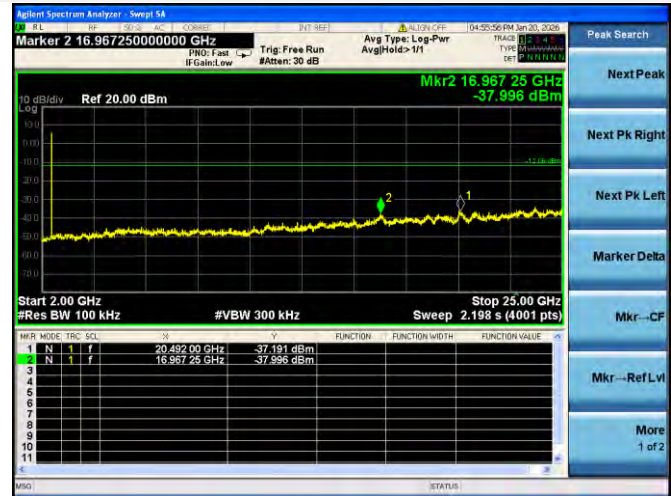
802.11b MIDDLE CHANNEL CARRIER LEVEL



802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



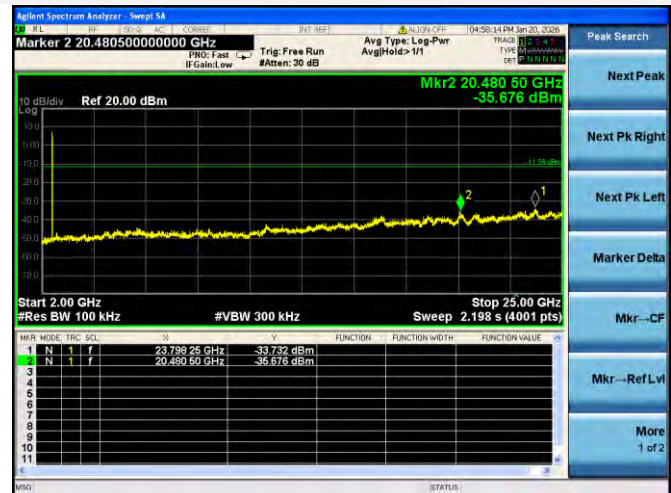
802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



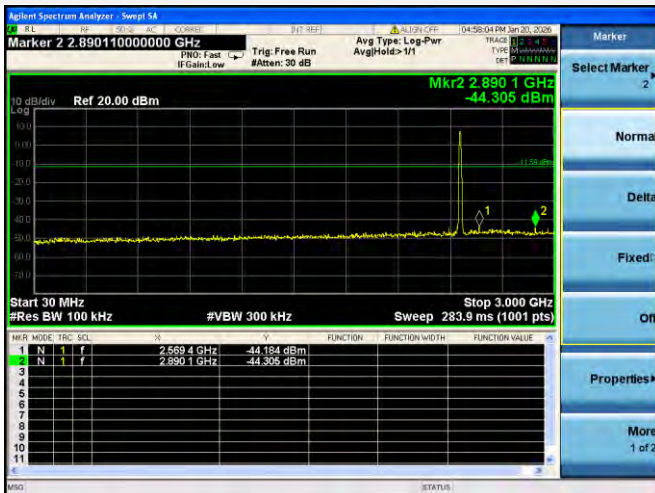
802.11b HIGH CHANNEL CARRIER LEVEL



802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



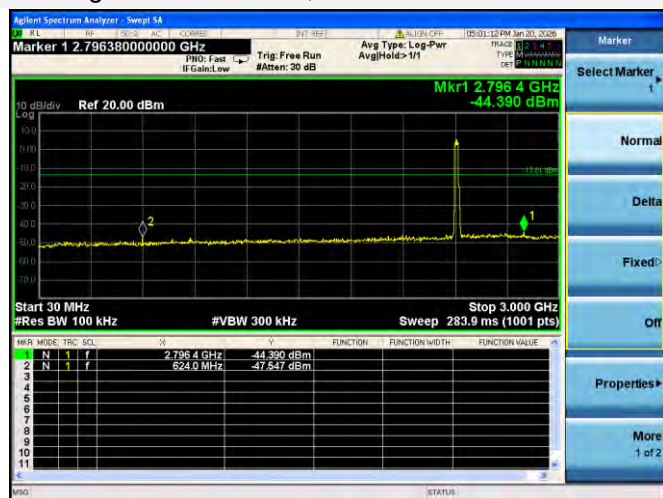
802.11b HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



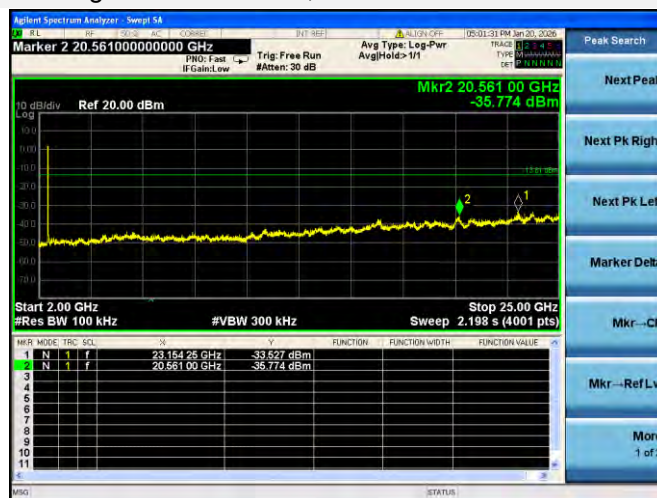
802.11g LOW CHANNEL CARRIER LEVEL



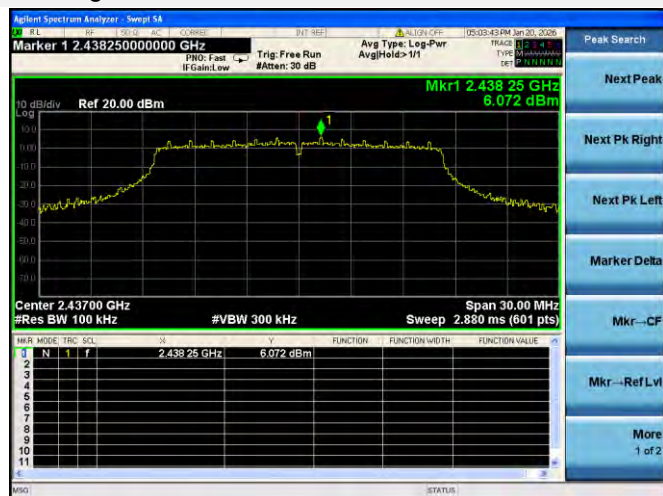
802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



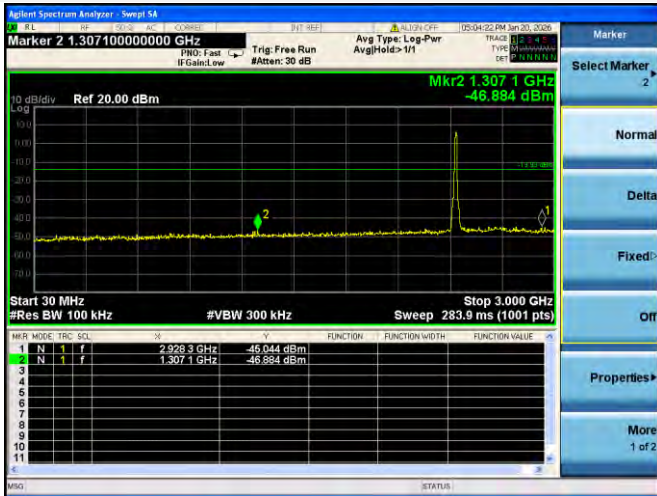
802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



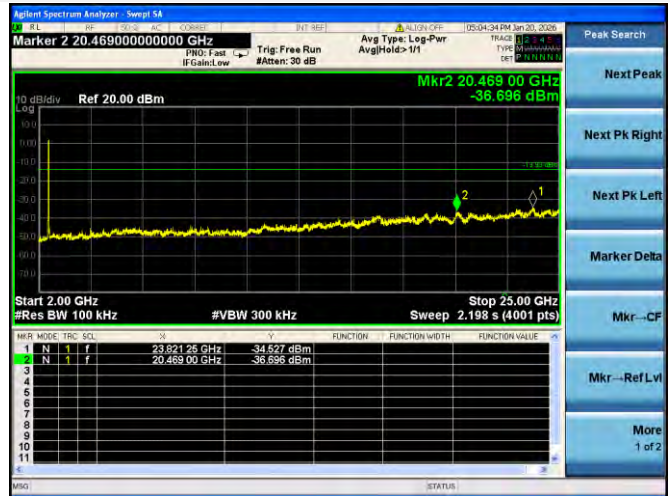
802.11g MIDDLE CHANNEL CARRIER LEVEL



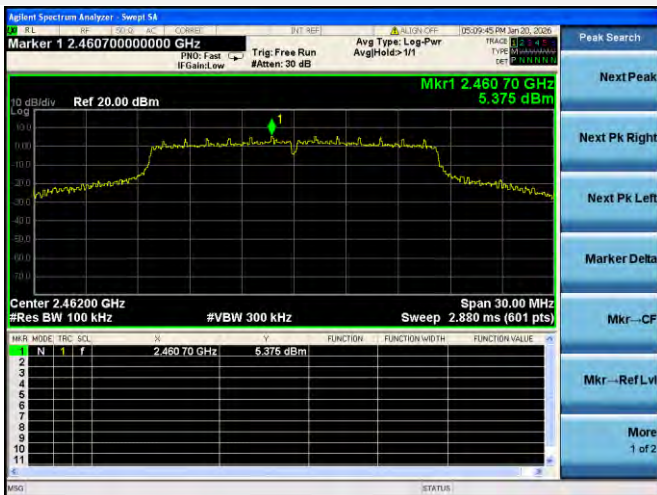
802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



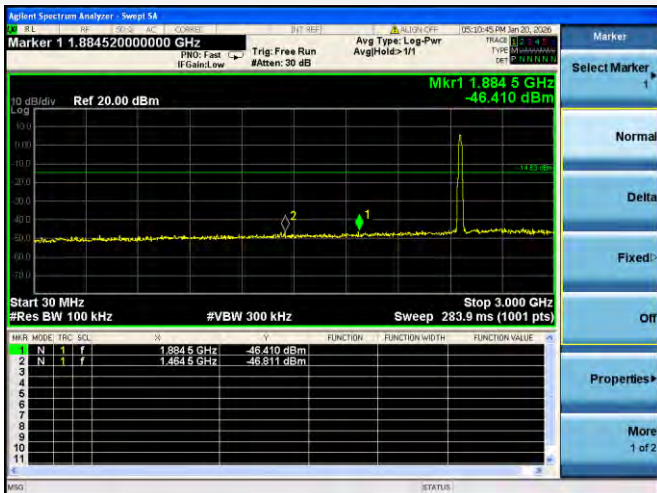
802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



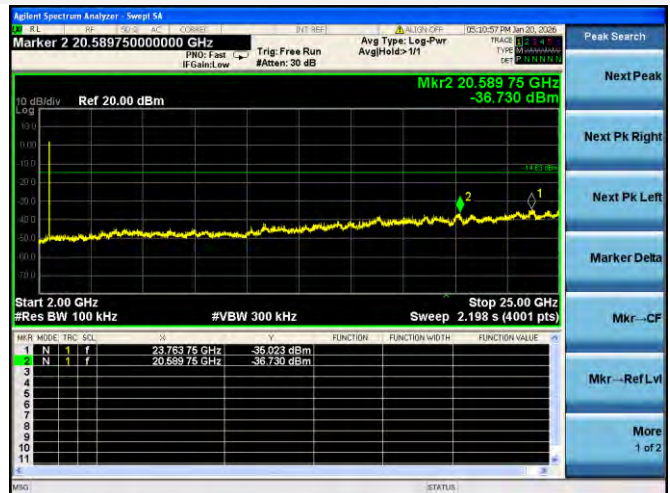
802.11g HIGH CHANNEL CARRIER LEVEL



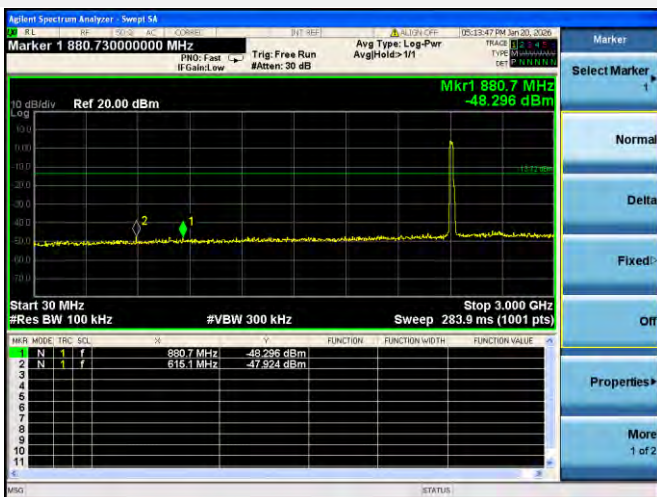
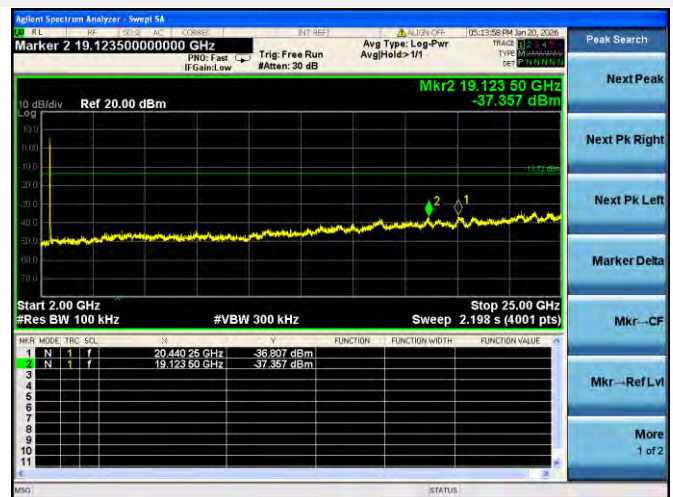
802.11g HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



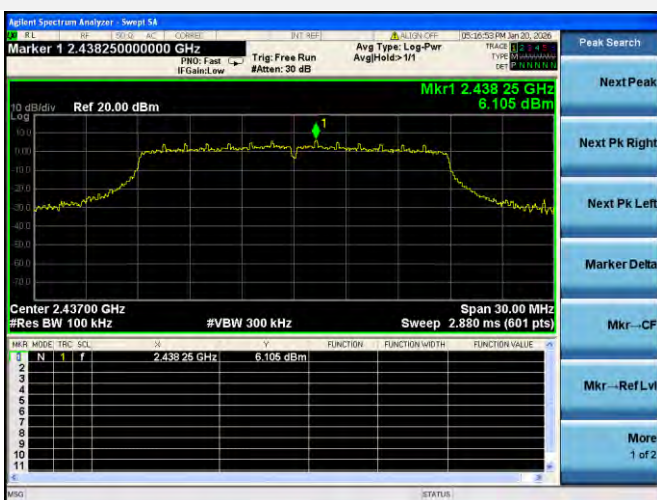
802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



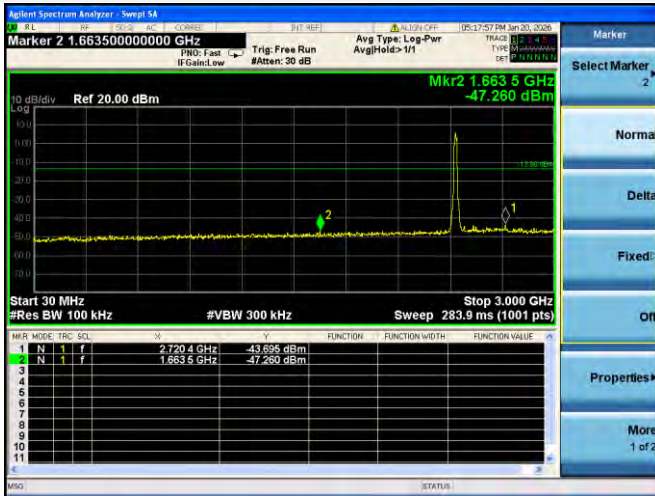
802.11n-20 MHz LOW CHANNEL CARRIER LEVEL

802.11n-20 MHz LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11n-20 MHz LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL



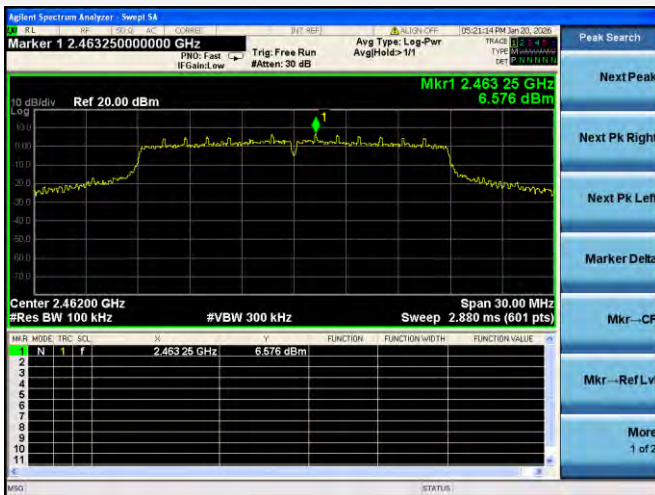
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



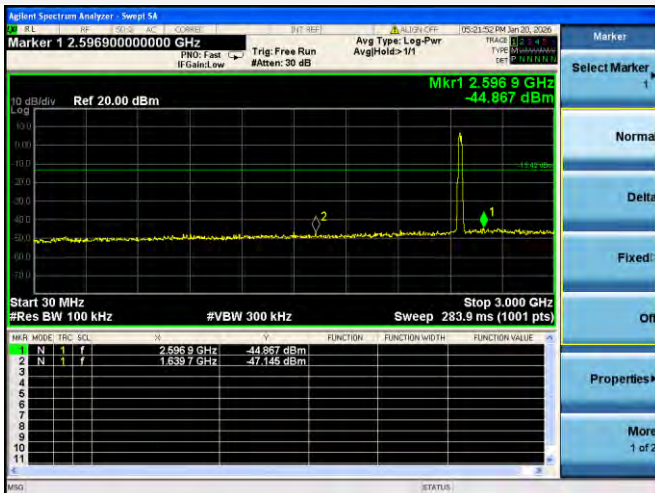
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



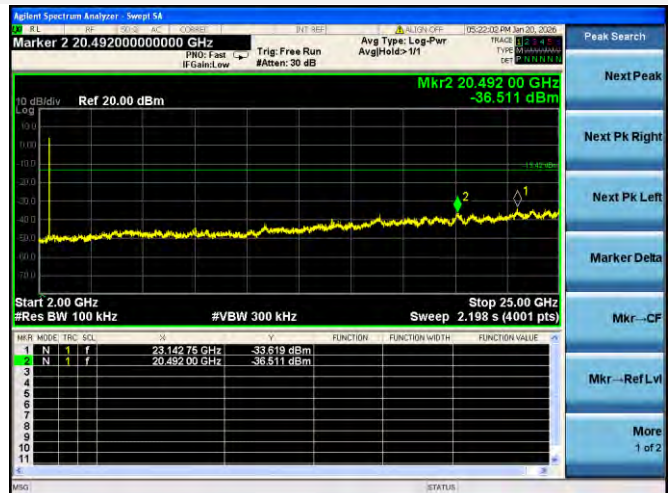
802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



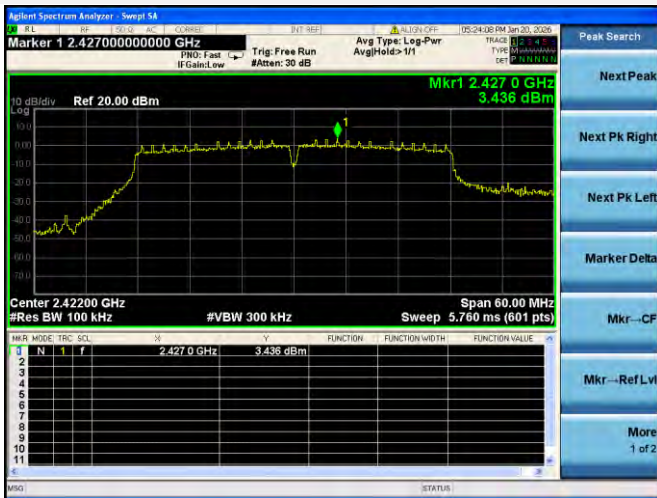
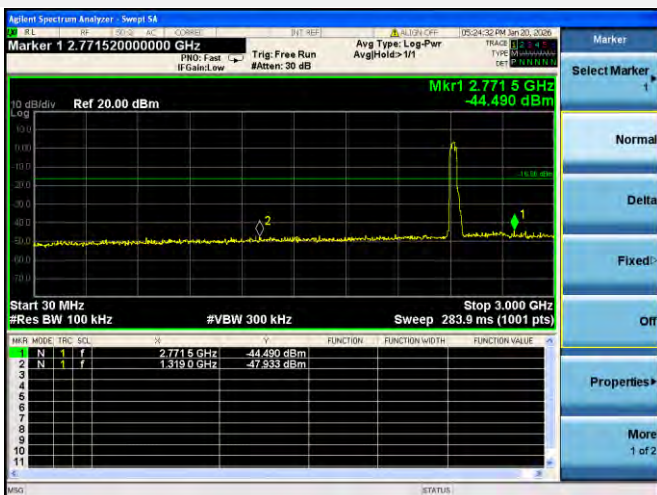
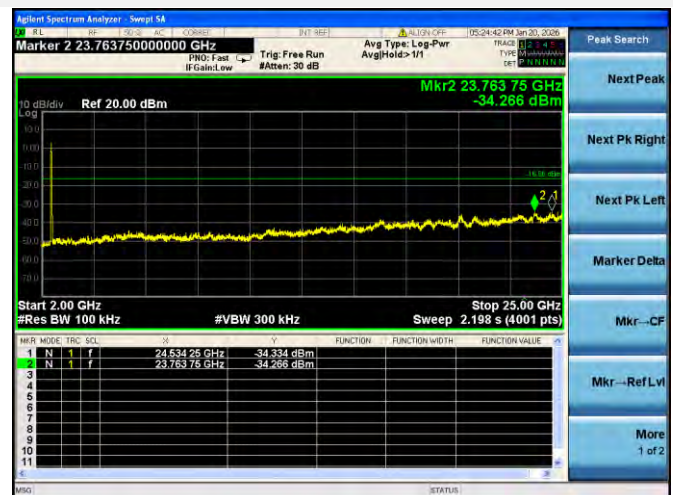
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



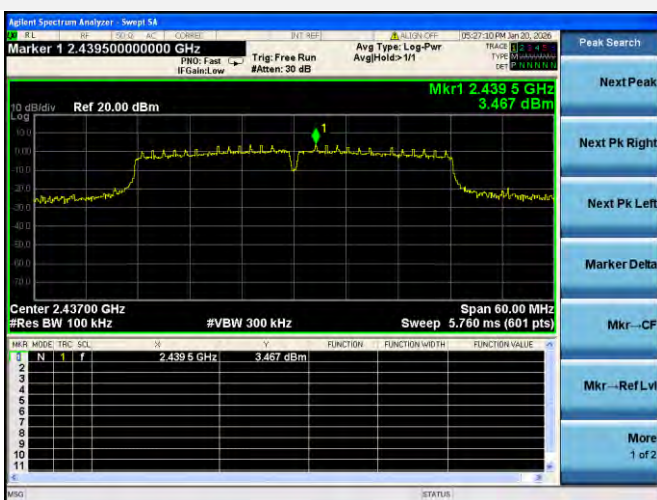
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



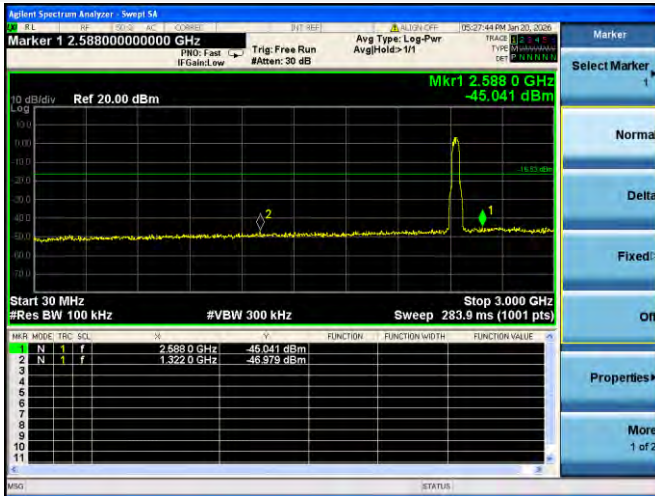
802.11n-40 MHz LOW CHANNEL CARRIER LEVEL

802.11n-40 MHz LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11n-40 MHz LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

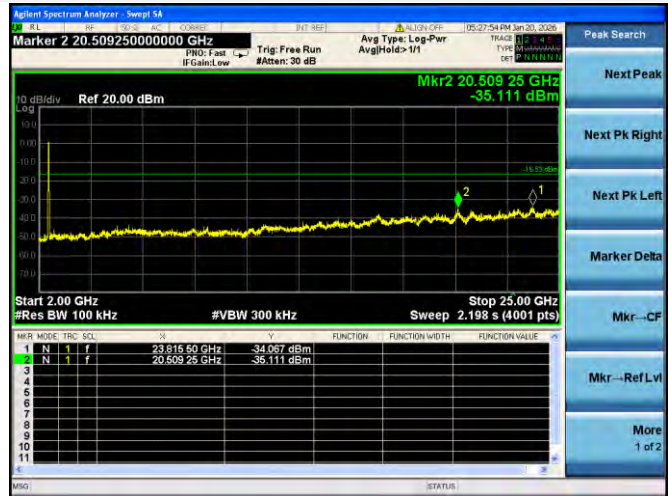
802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL



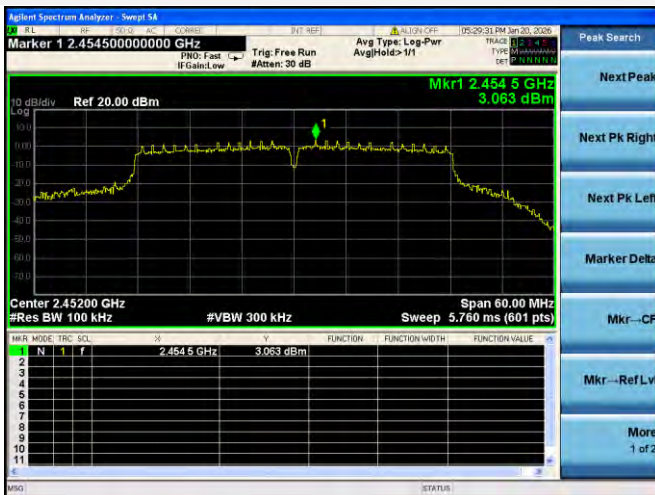
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



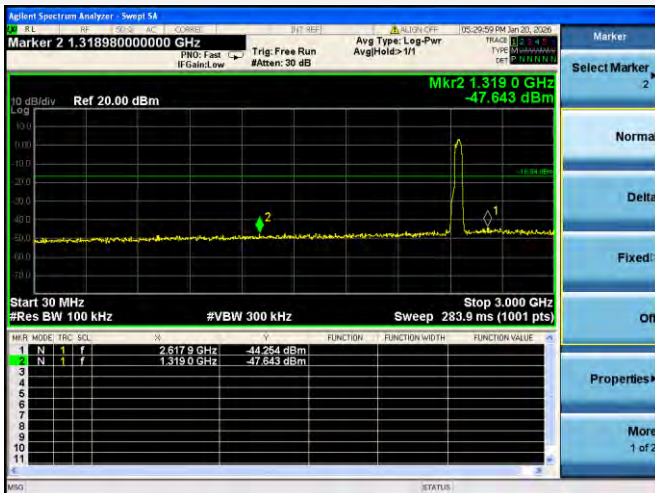
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



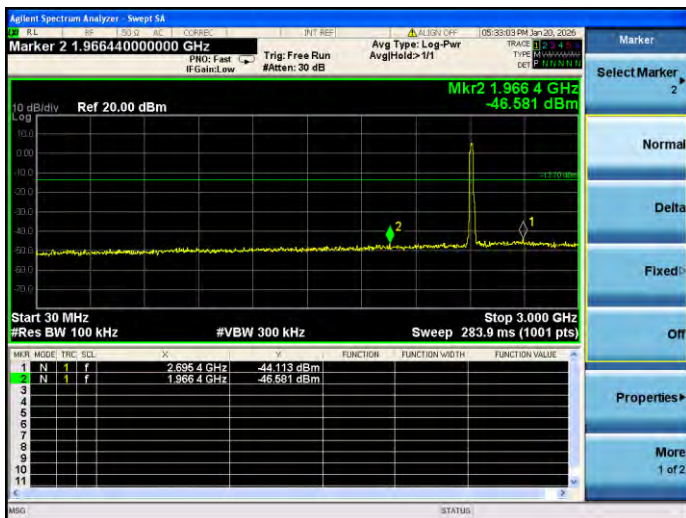
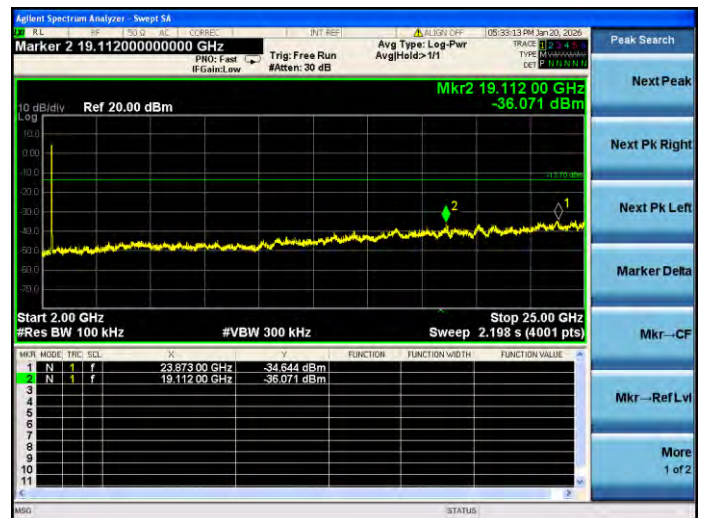
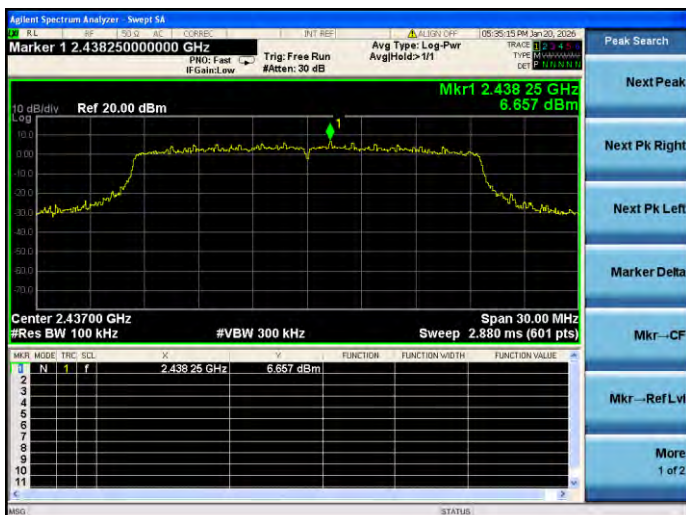
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



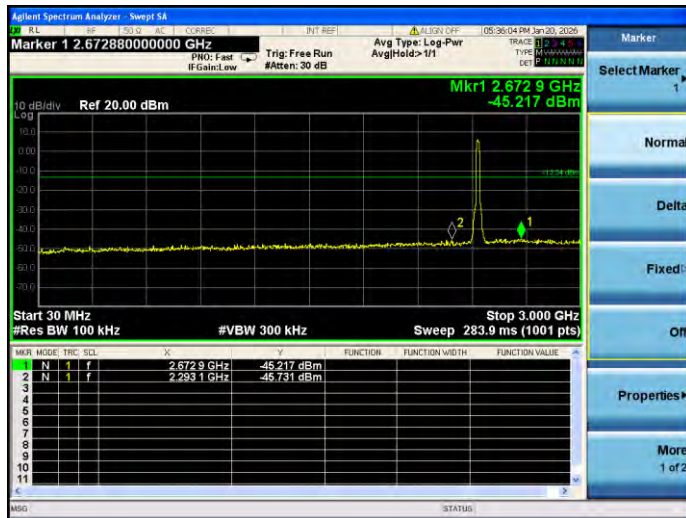
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



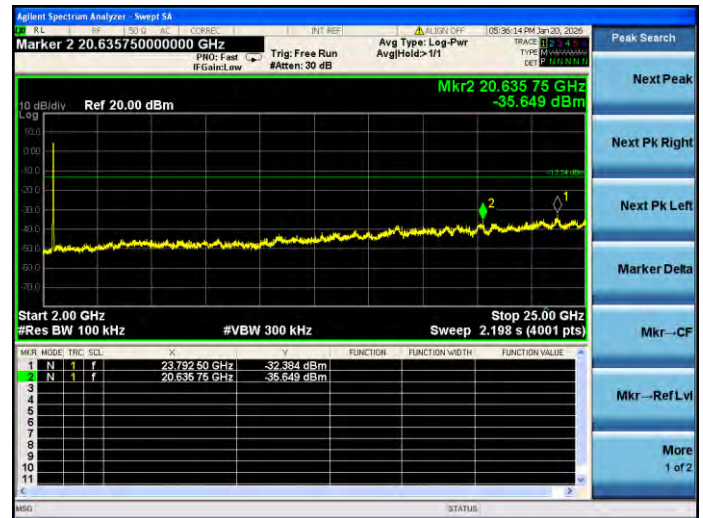
802.11ax-20 MHz(SU) LOW CHANNEL CARRIER LEVEL

802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz802.11ax-20 MHz(SU) MIDDLE CHANNEL CARRIER
LEVEL

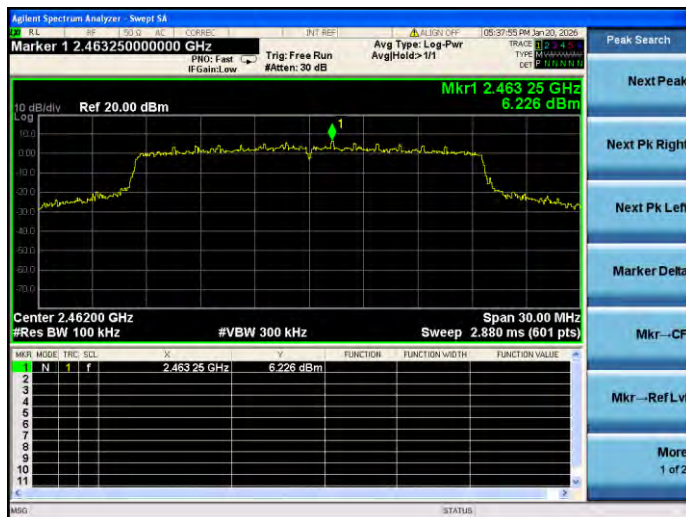
802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



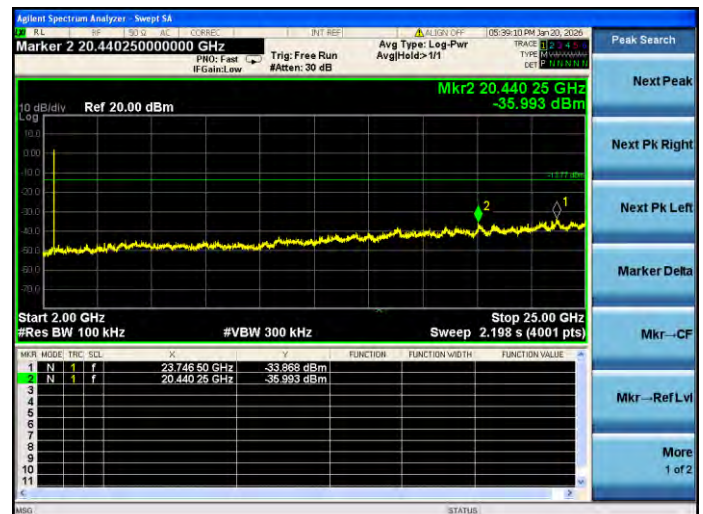
802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



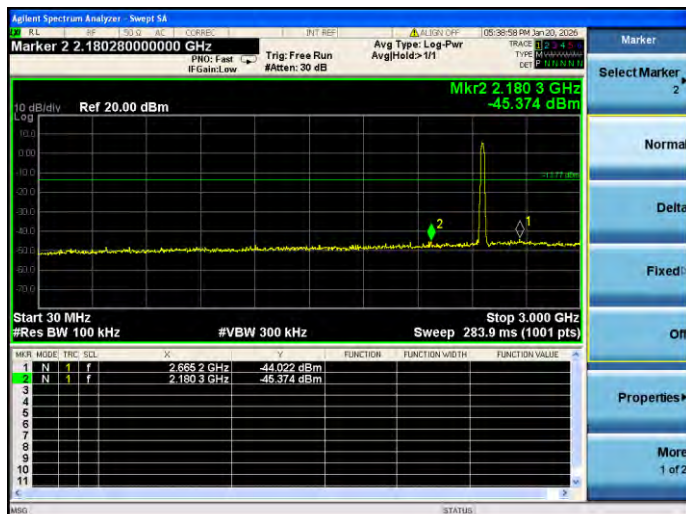
802.11ax-20 MHz(SU) HIGH CHANNEL CARRIER LEVEL



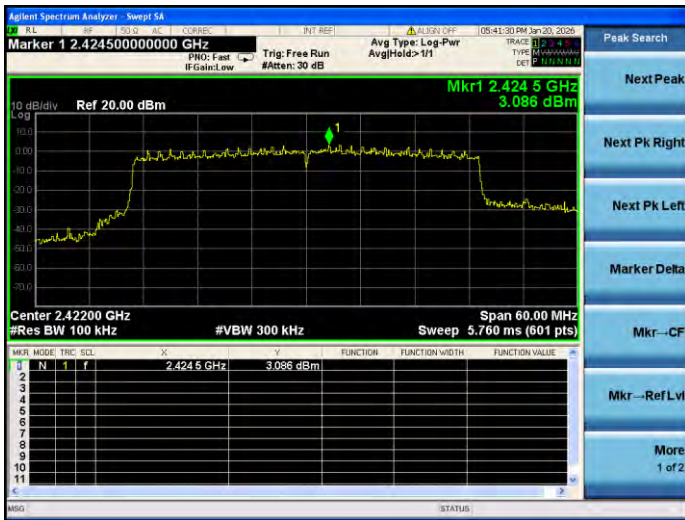
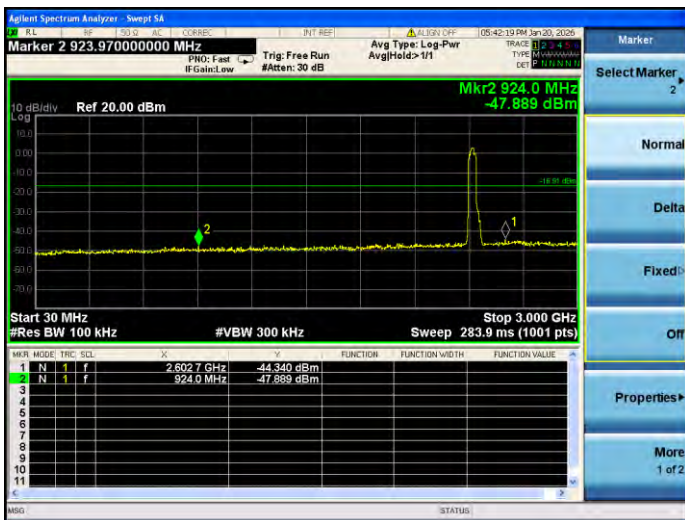
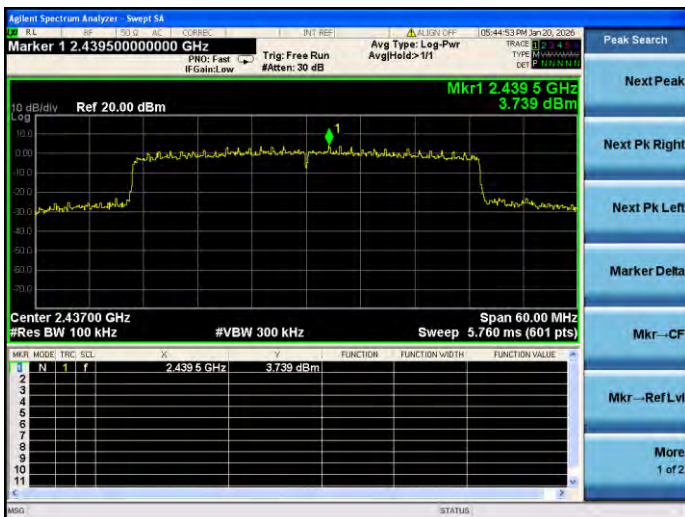
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



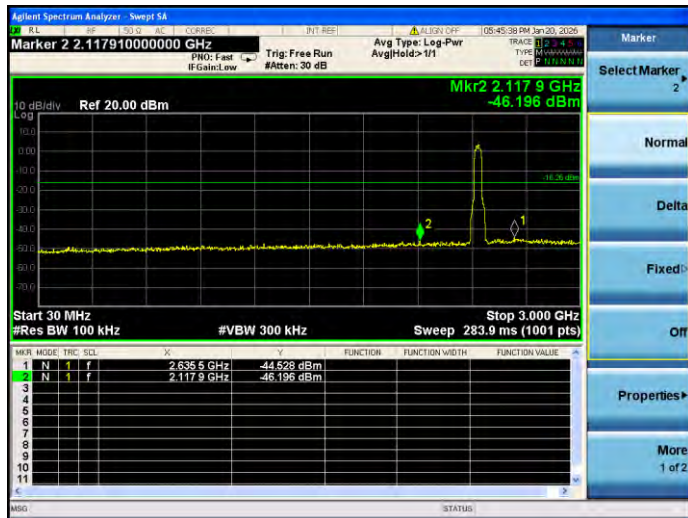
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



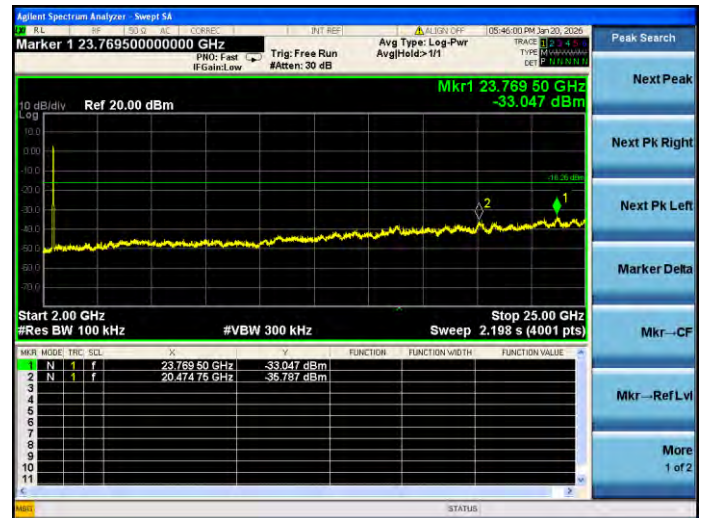
802.11ax-40 MHz(SU) LOW CHANNEL CARRIER LEVEL

802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz802.11ax-40 MHz(SU) MIDDLE CHANNEL CARRIER
LEVEL

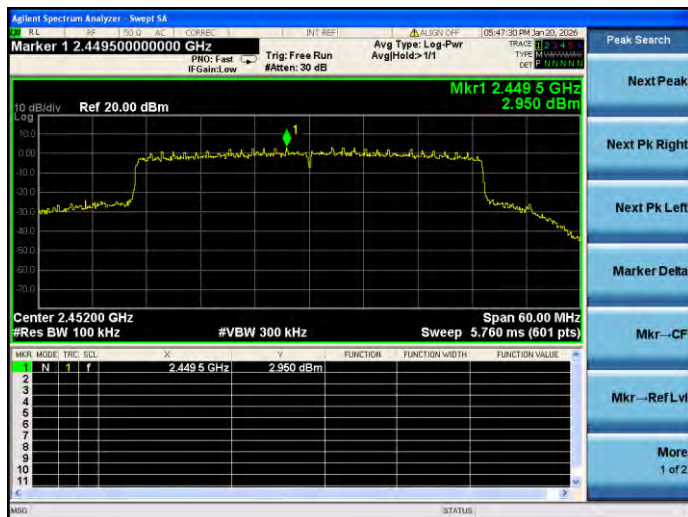
802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



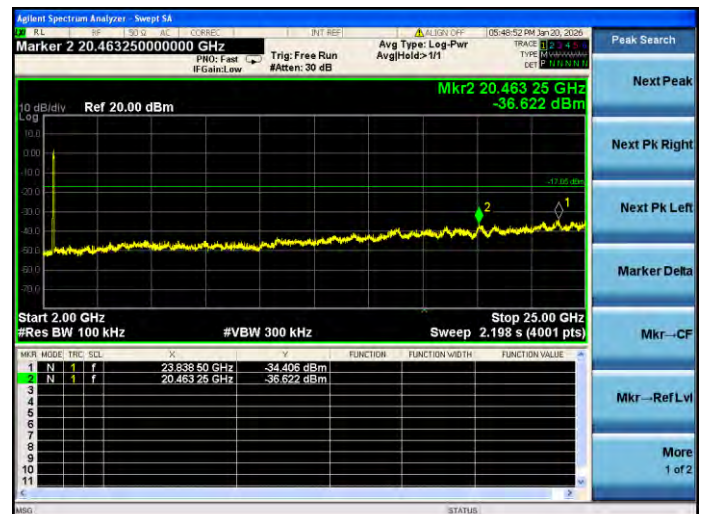
802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



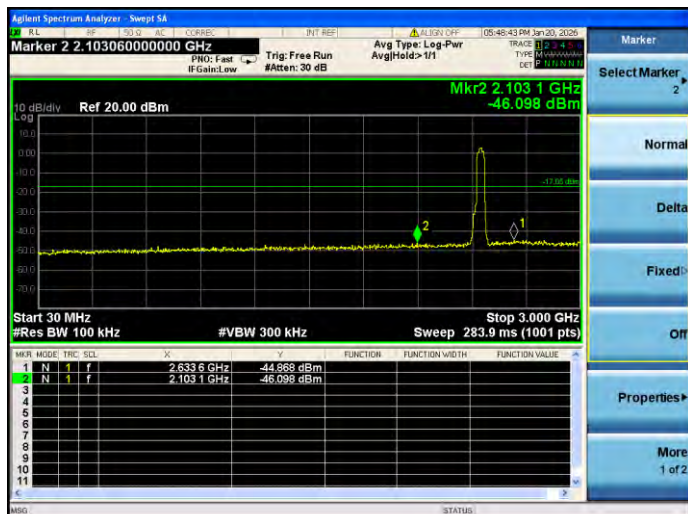
802.11ax-40 MHz(SU) HIGH CHANNEL CARRIER LEVEL



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



A.4 Band Edge (Authorized-band band-edge)

Note¹: The 99% OBW of the fundamental emission is without 2 MHz of the authorized band.

Note²: All the configurations were pre tested, only the worst configuration has been reported in this report.

Note³: All antenna were pre tested, but only the worst case has been reported in this report.

SISO-ANT7

Test Data

802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-41.26	8.63	-11.37	Pass
High Channel	-48.87	8.72	-11.29	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-34.22	5.15	-14.85	Pass
High Channel	-45.09	5.53	-14.47	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-34.22	6.44	-13.57	Pass
High Channel	-44.34	6.55	-13.45	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.19	3.31	-16.69	Pass
High Channel	-38.95	3.86	-16.15	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.78	5.74	-14.26	Pass
High Channel	-40.69	6.46	-13.54	Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-25.85	3.53	-16.47	Pass
High Channel	-37.18	3.74	-16.26	Pass

Test Plots

802.11b LOW CHANNEL, CARRIER LEVEL



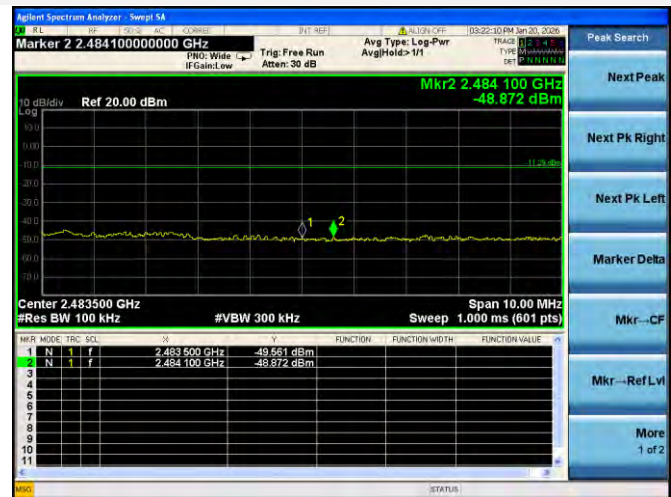
802.11b LOW CHANNEL, BAND EDGE



802.11b HIGH CHANNEL, CARRIER LEVEL



802.11b HIGH CHANNEL, BAND EDGE



802.11g LOW CHANNEL, CARRIER LEVEL



802.11g LOW CHANNEL, BAND EDGE



802.11g HIGH CHANNEL, CARRIER LEVEL



802.11g HIGH CHANNEL, BAND EDGE



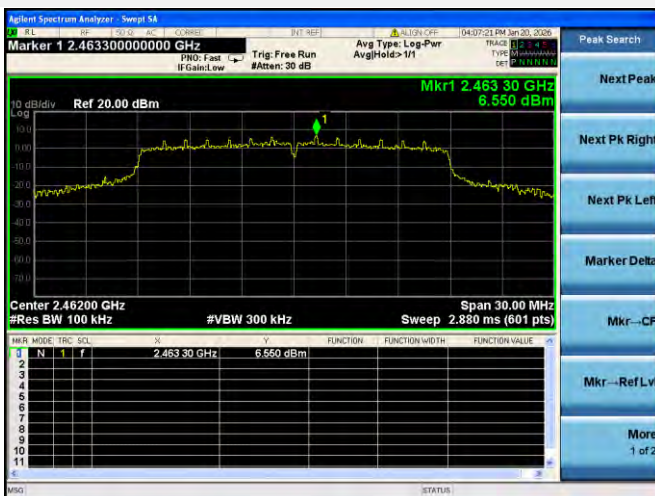
802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL



802.11n-20 MHz LOW CHANNEL, BAND EDGE



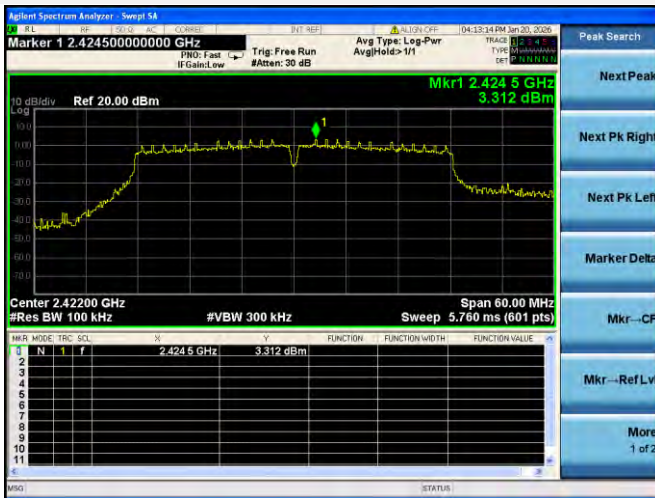
802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, BAND EDGE



802.11n-40 MHz LOW CHANNEL, CARRIER LEVEL



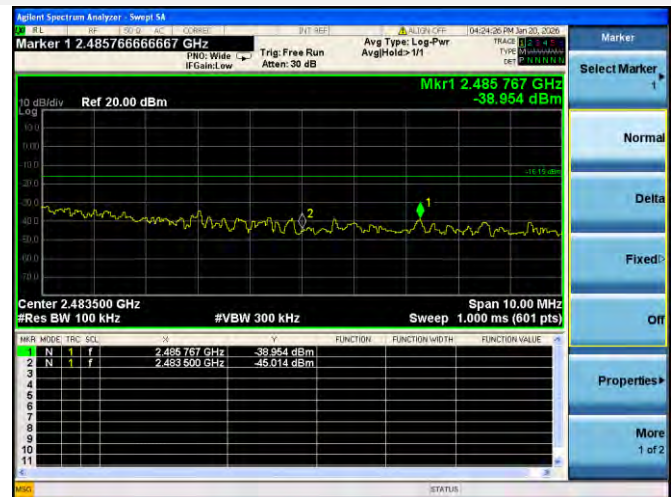
802.11n-40 MHz LOW CHANNEL, BAND EDGE



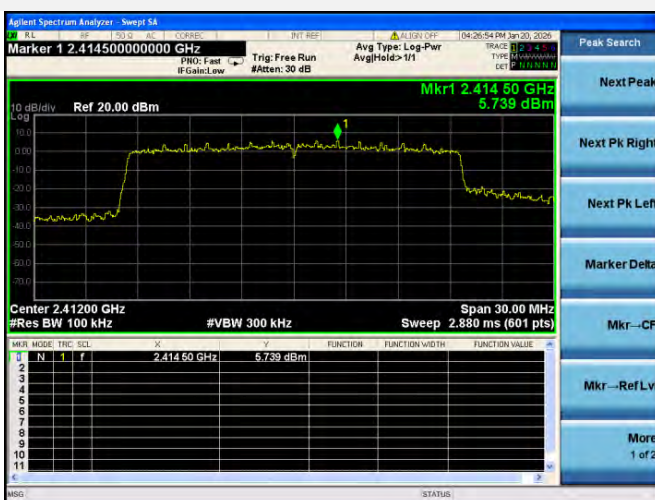
802.11n-40 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-40 MHz HIGH CHANNEL, BAND EDGE



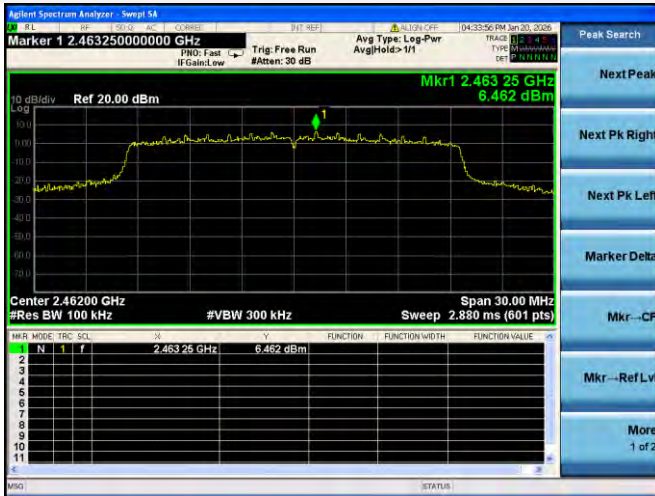
802.11ax-20 MHz(SU) LOW CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) LOW CHANNEL, BAND EDGE



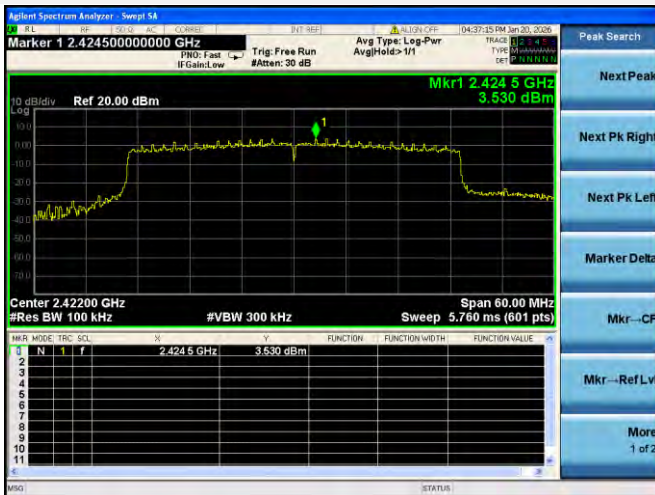
802.11ax-20 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) HIGH CHANNEL, BAND EDGE



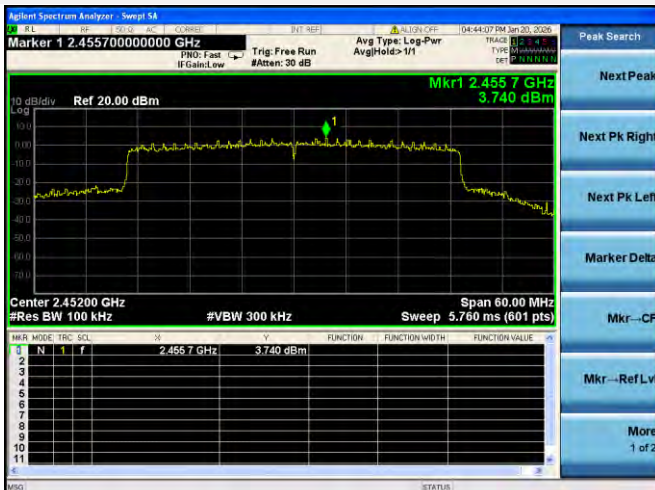
802.11ax-40 MHz(SU) LOW CHANNEL, CARRIER LEVEL



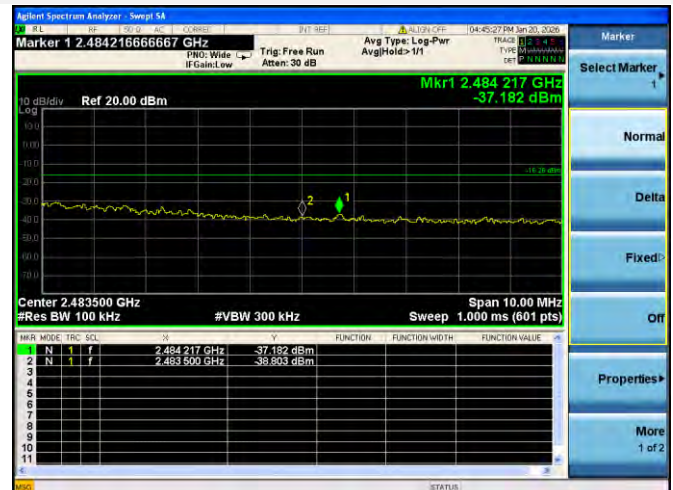
802.11ax-40 MHz(SU) LOW CHANNEL, BAND EDGE



802.11ax-40 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-40 MHz(SU) HIGH CHANNEL, BAND EDGE



SISO-ANT9Test Data

802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-42.60	8.43	-11.57	Pass
High Channel	-47.88	8.41	-11.59	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-38.16	6.19	-13.81	Pass
High Channel	-46.91	5.38	-14.63	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-36.23	6.28	-13.72	Pass
High Channel	-46.78	6.58	-13.42	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.82	3.44	-16.56	Pass
High Channel	-43.10	3.06	-16.94	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-37.56	6.40	-13.60	Pass
High Channel	-45.97	6.23	-13.77	Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-34.57	3.09	-16.91	Pass
High Channel	-43.75	2.95	-17.05	Pass

Test Plots

802.11b LOW CHANNEL, CARRIER LEVEL



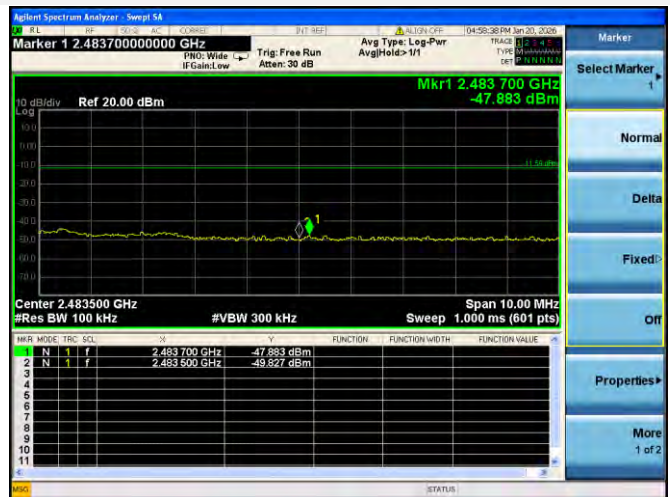
802.11b LOW CHANNEL, BAND EDGE



802.11b HIGH CHANNEL, CARRIER LEVEL



802.11b HIGH CHANNEL, BAND EDGE



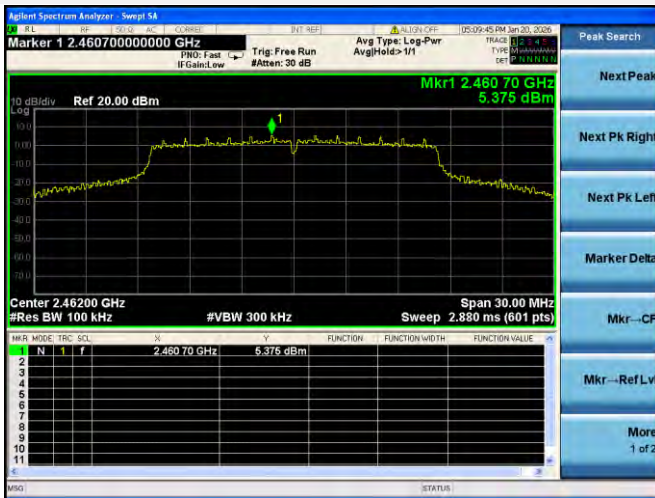
802.11g LOW CHANNEL, CARRIER LEVEL



802.11g LOW CHANNEL, BAND EDGE



802.11g HIGH CHANNEL, CARRIER LEVEL



802.11g HIGH CHANNEL, BAND EDGE



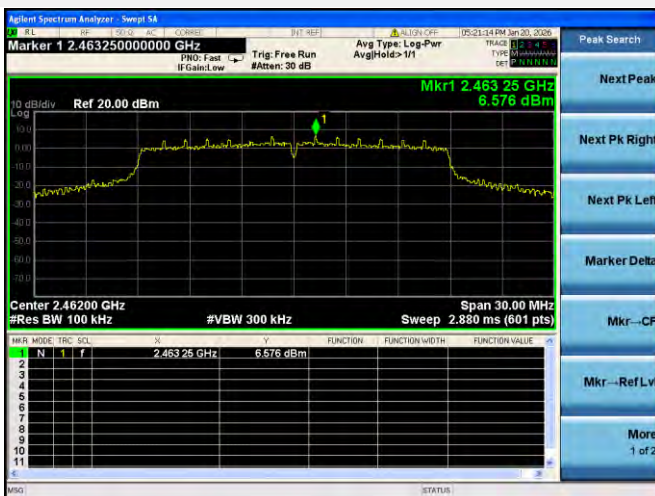
802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL



802.11n-20 MHz LOW CHANNEL, BAND EDGE



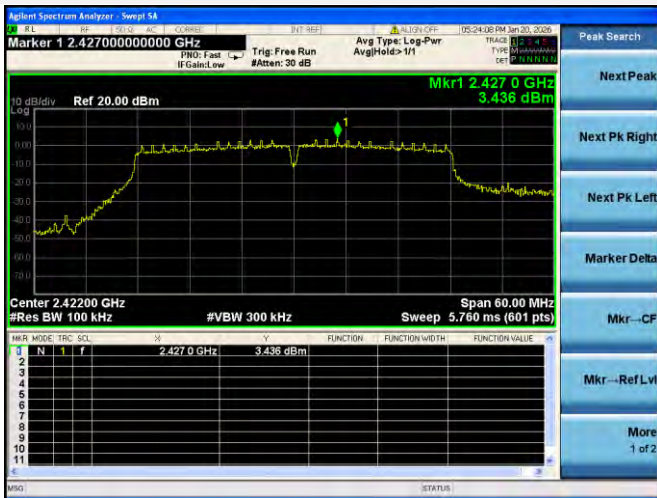
802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, BAND EDGE



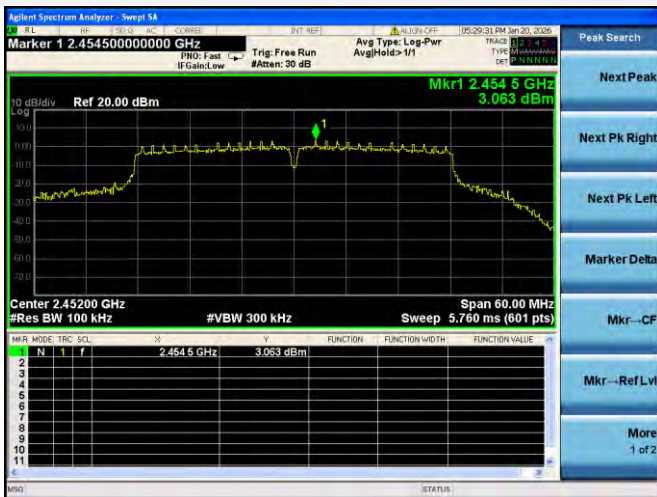
802.11n-40 MHz LOW CHANNEL, CARRIER LEVEL



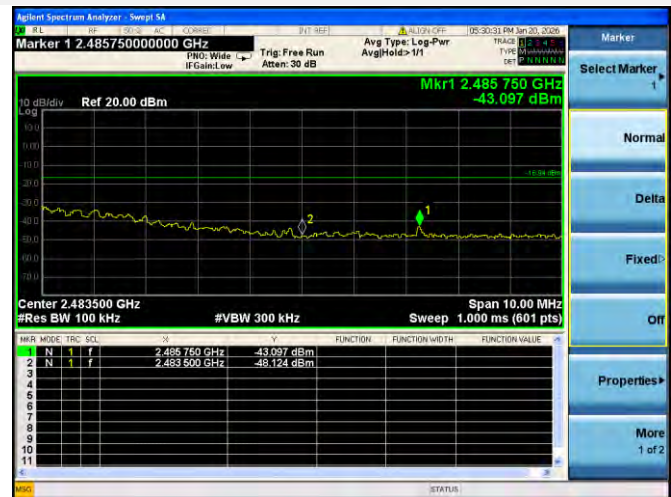
802.11n-40 MHz LOW CHANNEL, BAND EDGE



802.11n-40 MHz HIGH CHANNEL, CARRIER LEVEL



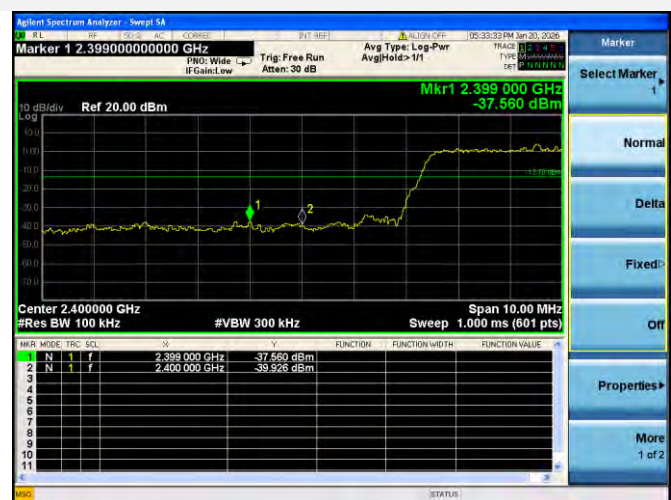
802.11n-40 MHz HIGH CHANNEL, BAND EDGE



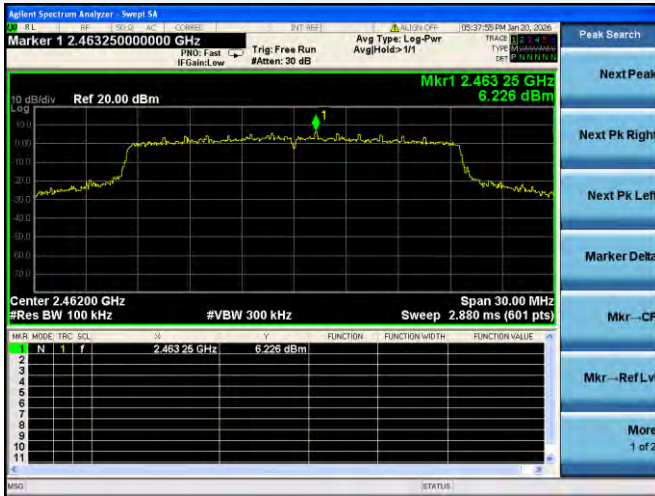
802.11ax-20 MHz(SU) LOW CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) LOW CHANNEL, BAND EDGE



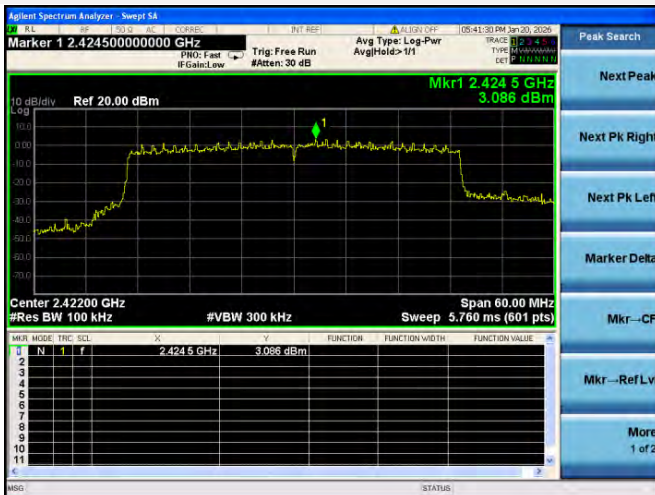
802.11ax-20 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) HIGH CHANNEL, BAND EDGE



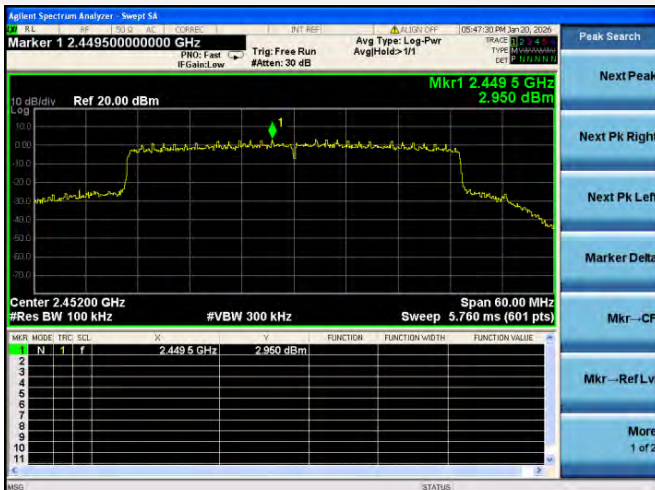
802.11ax-40 MHz(SU) LOW CHANNEL, CARRIER LEVEL



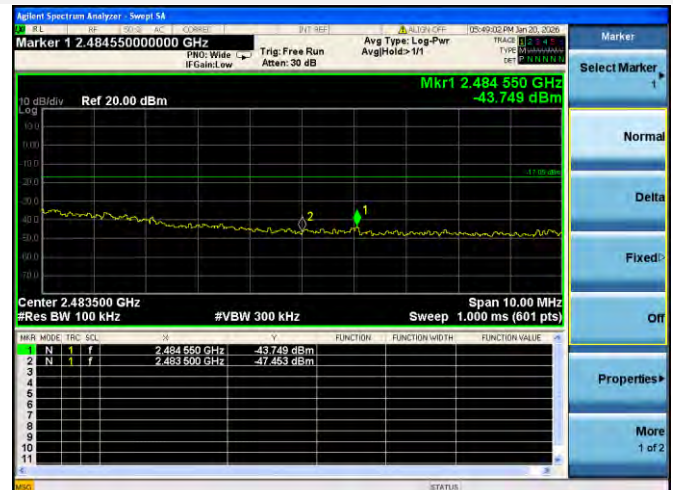
802.11ax-40 MHz(SU) LOW CHANNEL, BAND EDGE



802.11ax-40 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-40 MHz(SU) HIGH CHANNEL, BAND EDGE



A.5 Conducted Emissions

Note ¹: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

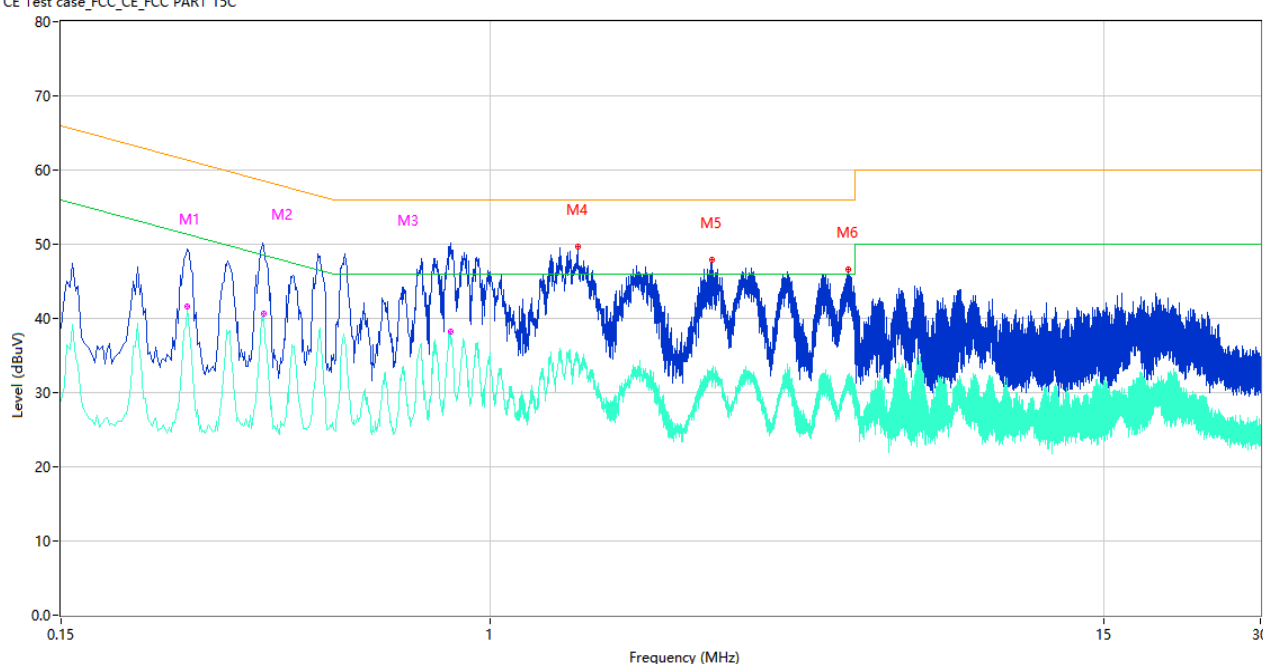
Note ²: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

Note ³: Results (dBuV) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

Test Data and Plots

PHASE L

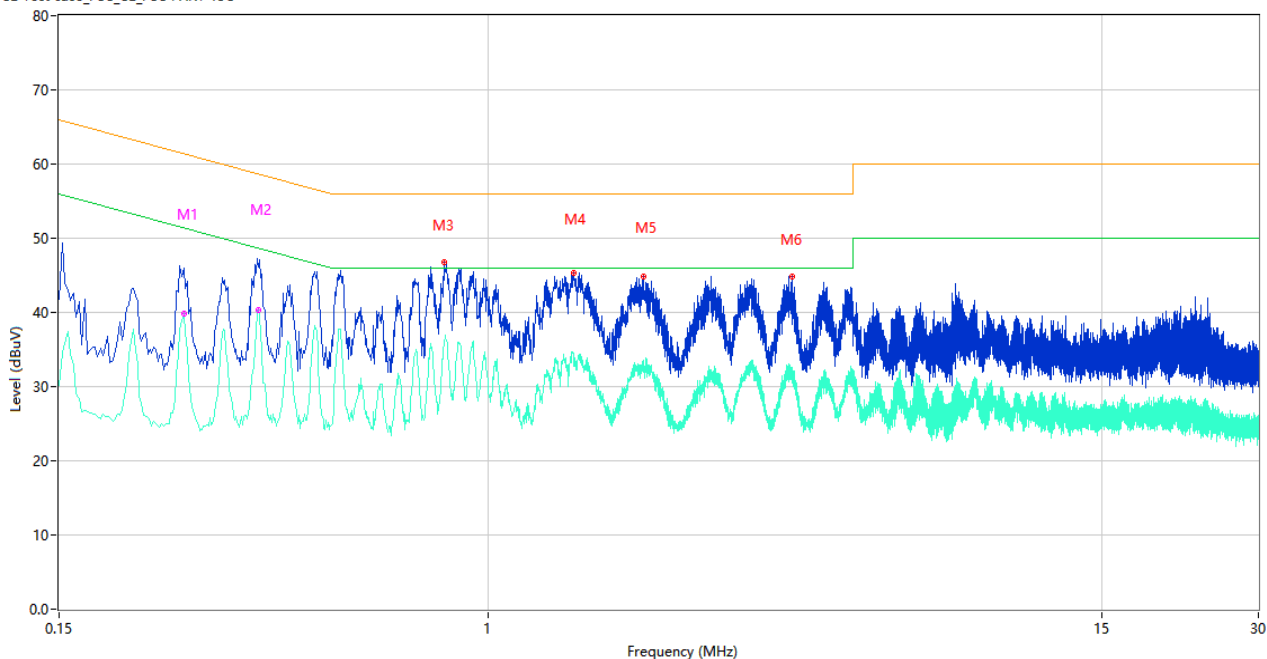
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.262	49.32	9.82	61.37	12.05	Peak	L	Pass
1**	0.262	41.54	9.82	51.37	9.83	AV	L	Pass
2	0.368	49.86	10.74	58.55	8.69	Peak	L	Pass
2**	0.368	40.62	10.74	48.55	7.93	AV	L	Pass
3	0.840	50.18	10.66	56.00	5.82	Peak	L	Pass
3**	0.840	38.22	10.66	46.00	7.78	AV	L	Pass
4	1.472	49.72	10.21	56.00	6.28	Peak	L	Pass
4**	1.472	35.06	10.21	46.00	10.94	AV	L	Pass
5	2.664	47.98	10.20	56.00	8.02	Peak	L	Pass
5**	2.664	33.25	10.20	46.00	12.75	AV	L	Pass
6	4.866	46.69	10.28	56.00	9.31	Peak	L	Pass
6**	4.866	32.48	10.28	46.00	13.52	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.260	45.91	9.82	61.43	15.52	Peak	N	Pass
1**	0.260	39.82	9.82	51.43	11.61	AV	N	Pass
2	0.362	46.18	10.77	58.68	12.50	Peak	N	Pass
2**	0.362	40.33	10.77	48.68	8.35	AV	N	Pass
3	0.824	46.81	10.63	56.00	9.19	Peak	N	Pass
3**	0.824	35.84	10.63	46.00	10.16	AV	N	Pass
4	1.454	45.36	10.13	56.00	10.64	Peak	N	Pass
4**	1.454	34.19	10.13	46.00	11.81	AV	N	Pass
5	1.982	44.81	10.25	56.00	11.19	Peak	N	Pass
5**	1.982	33.48	10.25	46.00	12.52	AV	N	Pass
6	3.826	44.86	10.36	56.00	11.14	Peak	N	Pass
6**	3.826	31.98	10.36	46.00	14.02	AV	N	Pass

A.6 Radiated Emission

Note¹: The symbol of “--” in the table which means not application.

Note²: For the test data above 1 GHz, According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

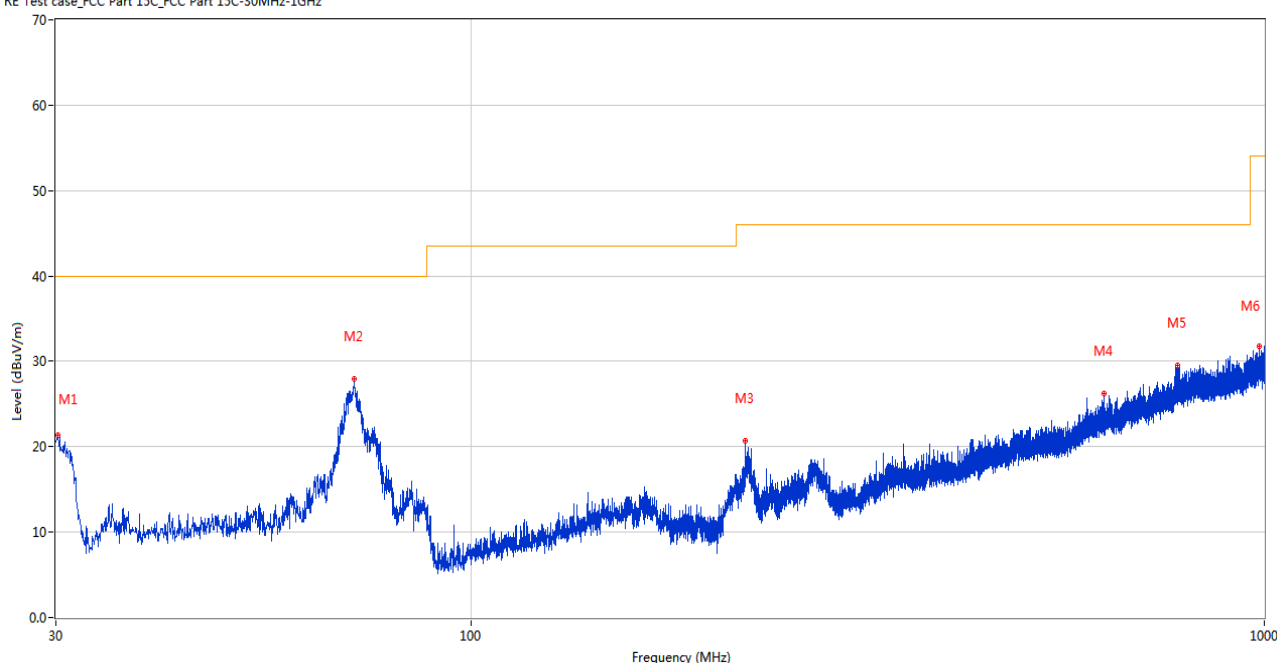
Note³: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note⁴: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

Test Data and Plots

30 MHz to 1 GHz, ANT H

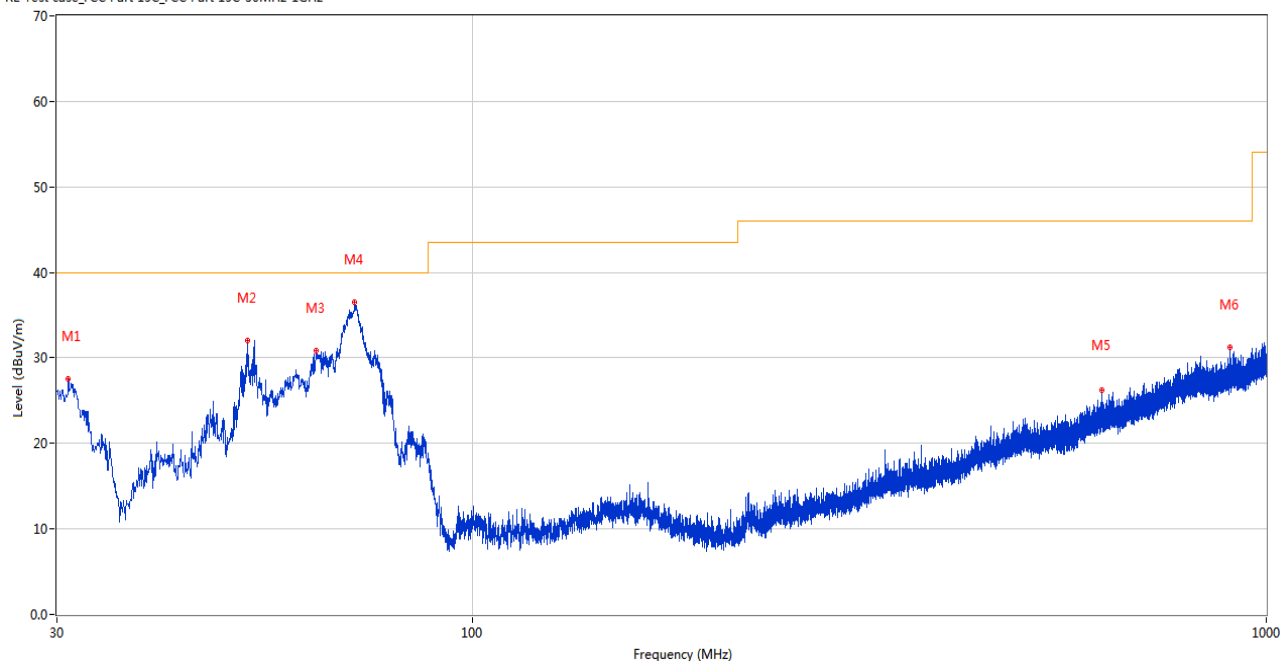
RE Test case_FCC Part 15C_FCC Part 15C-30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	30.194	21.38	-27.08	40.0	18.62	Peak	302.00	100	Horizontal	Pass
2	71.370	27.96	-27.39	40.0	12.04	Peak	6.00	100	Horizontal	Pass
3	221.866	20.71	-26.94	46.0	25.29	Peak	128.00	100	Horizontal	Pass
4	628.781	26.18	-13.48	46.0	19.82	Peak	214.00	100	Horizontal	Pass
5	778.646	29.59	-10.11	46.0	16.41	Peak	287.00	100	Horizontal	Pass
6	986.517	31.79	-7.79	54.0	22.21	Peak	0.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC Part 15C-30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	31.018	27.52	-27.03	40.0	12.48	Peak	6.00	100	Vertical	Pass
2	52.164	32.05	-25.10	40.0	7.95	Peak	232.00	100	Vertical	Pass
3	63.659	30.88	-26.37	40.0	9.12	Peak	146.00	100	Vertical	Pass
4	71.176	36.58	-27.36	40.0	3.42	Peak	259.00	100	Vertical	Pass
5	621.554	26.21	-13.55	46.0	19.79	Peak	13.00	100	Vertical	Pass
6	899.605	31.29	-9.19	46.0	14.71	Peak	348.00	100	Vertical	Pass

Note ¹: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note ²: The spurious above 18G is noise only, do not show on the report.

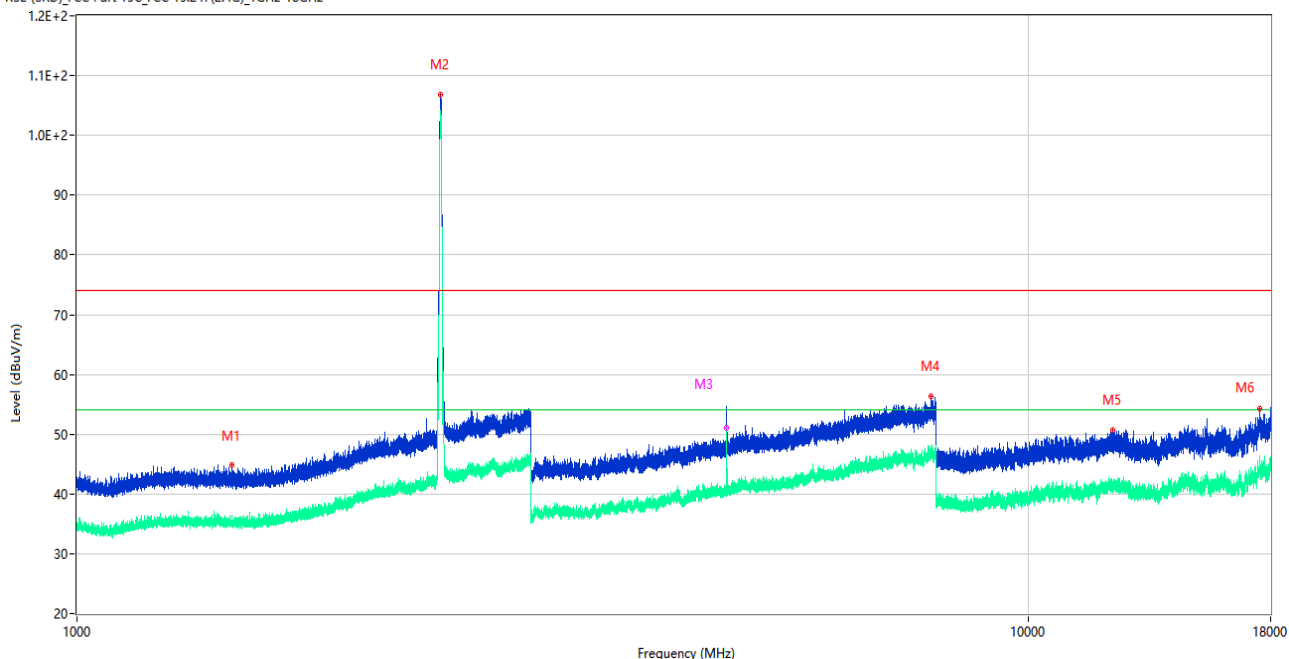
Note ³: All antenna were pre tested, but only the worst case has been reported in this report.

Note ⁴: All the configurations were pre tested, only the worst configuration has been reported in this report.

MIMO

1 GHz to 18 GHz, ANT H 802.11b Low Channel

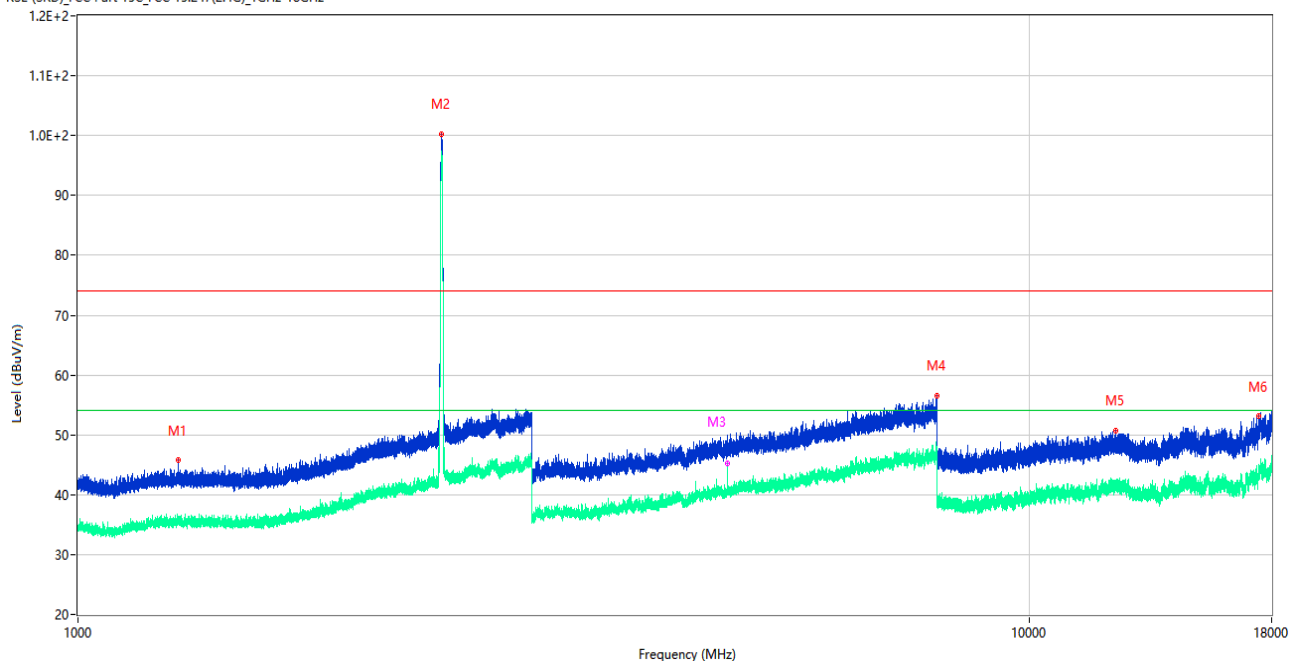
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1454.400	44.84	74.0	29.16	Peak	42.00	200	Horizontal	Pass
1**	1454.400	35.70	54.0	18.30	AV	42.00	200	Horizontal	Pass
2	2413.200	106.89	74.0	-32.89	Peak	124.00	150	Horizontal	N/A
2**	2413.200	104.09	54.0	-50.09	AV	124.00	150	Horizontal	N/A
3	4824.250	54.43	74.0	19.57	Peak	251.00	150	Horizontal	Pass
3**	4824.250	50.93	54.0	3.07	AV	251.00	150	Horizontal	Pass
4	7906.750	56.35	74.0	17.65	Peak	88.00	400	Horizontal	Pass
4**	7906.750	46.68	54.0	7.32	AV	88.00	400	Horizontal	Pass
5	12293.763	50.71	74.0	23.29	Peak	135.00	300	Horizontal	Pass
5**	12293.763	41.46	54.0	12.54	AV	135.00	300	Horizontal	Pass
6	17531.963	54.24	74.0	19.76	Peak	259.00	150	Horizontal	Pass
6**	17531.963	45.74	54.0	8.26	AV	259.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b Low Channel

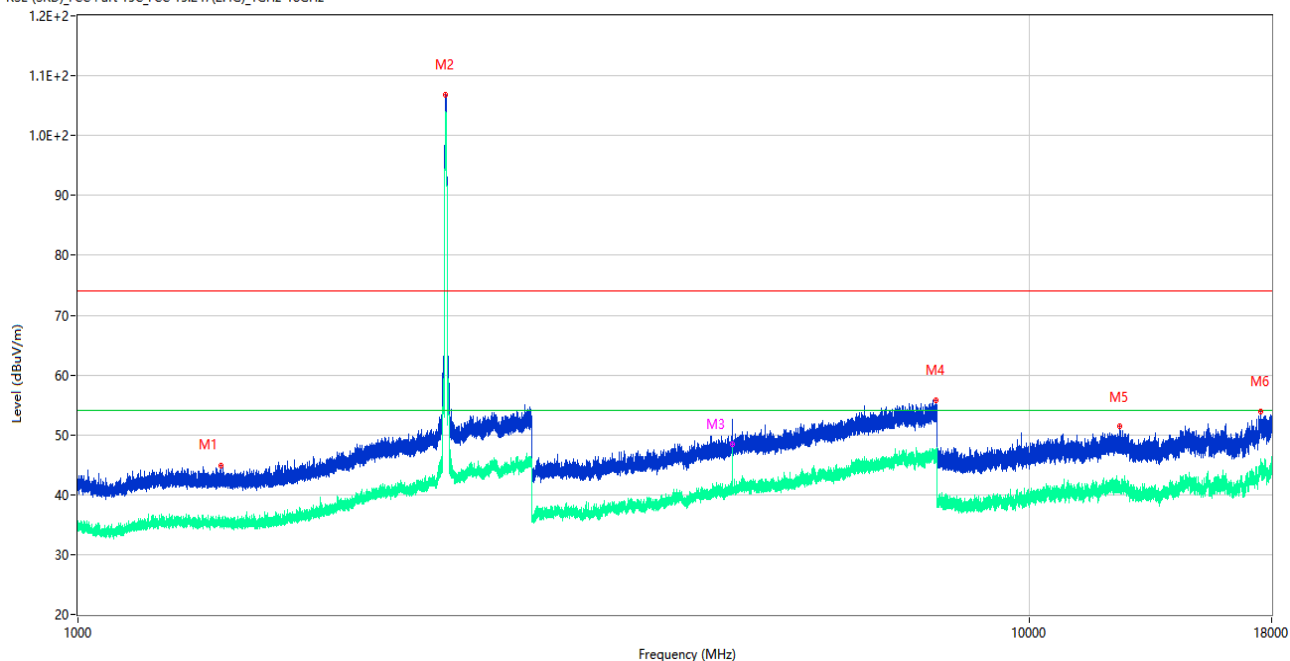
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1274.700	45.77	74.0	28.23	Peak	353.00	200	Vertical	Pass
1**	1274.700	35.44	54.0	18.56	AV	353.00	200	Vertical	Pass
2	2413.100	100.28	74.0	-26.28	Peak	207.00	150	Vertical	N/A
2**	2413.100	97.46	54.0	-43.46	AV	207.00	150	Vertical	N/A
3	4824.250	49.88	74.0	24.12	Peak	86.00	150	Vertical	Pass
3**	4824.250	45.27	54.0	8.73	AV	86.00	150	Vertical	Pass
4	7996.750	56.58	74.0	17.42	Peak	7.00	100	Vertical	Pass
4**	7996.750	47.31	54.0	6.69	AV	7.00	100	Vertical	Pass
5	12332.951	50.76	74.0	23.24	Peak	86.00	200	Vertical	Pass
5**	12332.951	41.00	54.0	13.00	AV	86.00	200	Vertical	Pass
6	17457.150	53.12	74.0	20.88	Peak	190.00	400	Vertical	Pass
6**	17457.150	43.93	54.0	10.07	AV	190.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11b Middle Channel

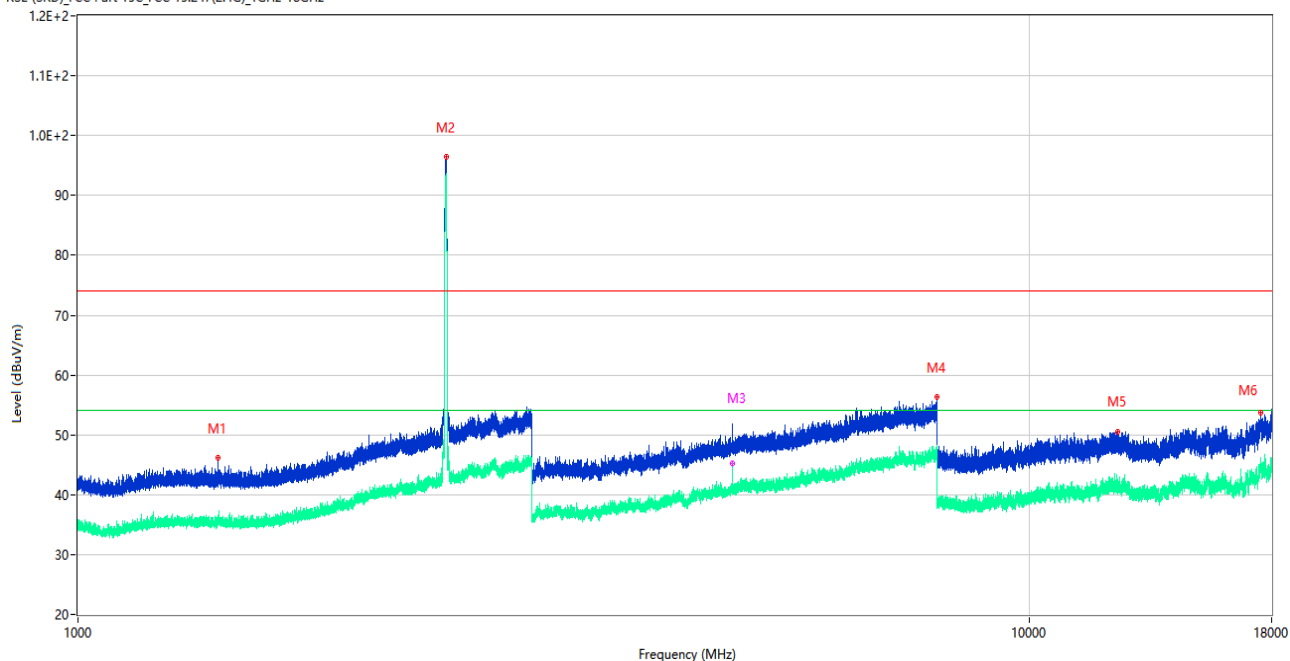
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1414.300	44.80	74.0	29.20	Peak	252.00	400	Horizontal	Pass
1**	1414.300	34.91	54.0	19.09	AV	252.00	400	Horizontal	Pass
2	2435.800	106.81	74.0	-32.81	Peak	117.00	100	Horizontal	N/A
2**	2435.800	103.87	54.0	-49.87	AV	117.00	100	Horizontal	N/A
3	4874.250	51.10	74.0	22.90	Peak	201.00	150	Horizontal	Pass
3**	4874.250	48.37	54.0	5.63	AV	201.00	150	Horizontal	Pass
4	7988.000	55.79	74.0	18.21	Peak	242.00	100	Horizontal	Pass
4**	7988.000	46.69	54.0	7.31	AV	242.00	100	Horizontal	Pass
5	12446.238	51.42	74.0	22.58	Peak	311.00	400	Horizontal	Pass
5**	12446.238	41.06	54.0	12.94	AV	311.00	400	Horizontal	Pass
6	17531.963	53.95	74.0	20.05	Peak	186.00	150	Horizontal	Pass
6**	17531.963	45.01	54.0	8.99	AV	186.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b Middle Channel

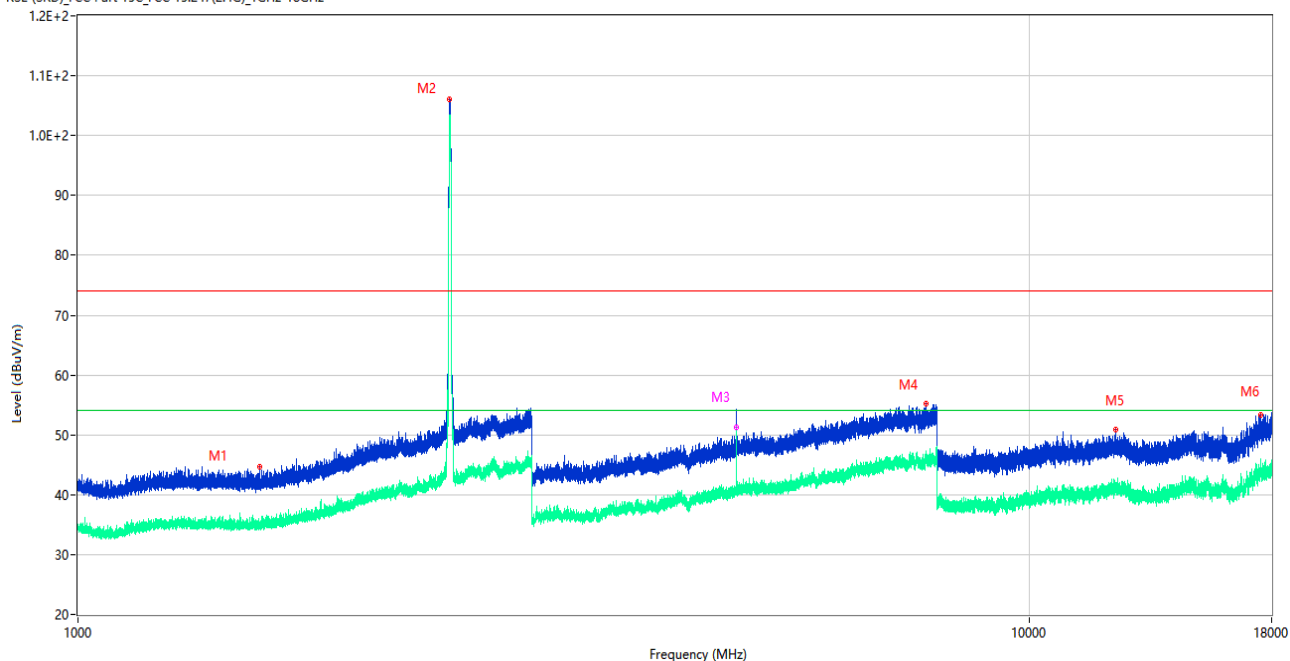
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1405.300	46.16	74.0	27.84	Peak	6.00	300	Vertical	Pass
1**	1405.300	35.59	54.0	18.41	AV	6.00	300	Vertical	Pass
2	2438.300	96.44	74.0	-22.44	Peak	117.00	200	Vertical	N/A
2**	2438.300	93.58	54.0	-39.58	AV	117.00	200	Vertical	N/A
3	4874.250	50.00	74.0	24.00	Peak	10.00	150	Vertical	Pass
3**	4874.250	45.19	54.0	8.81	AV	10.00	150	Vertical	Pass
4	7997.000	56.33	74.0	17.67	Peak	16.00	200	Vertical	Pass
4**	7997.000	47.94	54.0	6.06	AV	16.00	200	Vertical	Pass
5	12387.338	50.52	74.0	23.48	Peak	340.00	300	Vertical	Pass
5**	12387.338	41.74	54.0	12.26	AV	340.00	300	Vertical	Pass
6	17531.175	53.77	74.0	20.23	Peak	287.00	150	Vertical	Pass
6**	17531.175	45.64	54.0	8.36	AV	287.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11b High Channel

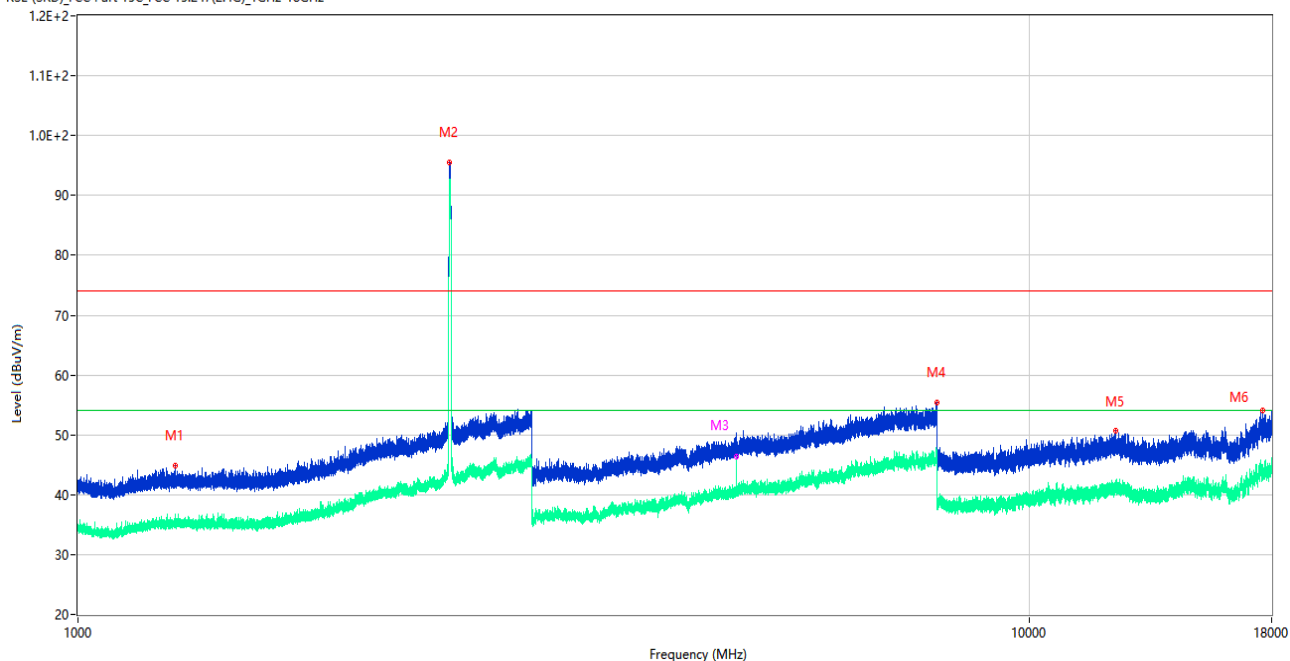
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1553.000	44.69	74.0	29.31	Peak	156.00	300	Horizontal	Pass
1**	1553.000	35.13	54.0	18.87	AV	156.00	300	Horizontal	Pass
2	2460.800	106.14	74.0	-32.14	Peak	102.00	100	Horizontal	N/A
2**	2460.800	103.23	54.0	-49.23	AV	102.00	100	Horizontal	N/A
3	4924.000	54.16	74.0	19.84	Peak	235.00	150	Horizontal	Pass
3**	4924.000	50.98	54.0	3.02	AV	235.00	150	Horizontal	Pass
4	7790.250	55.26	74.0	18.74	Peak	164.00	100	Horizontal	Pass
4**	7790.250	46.37	54.0	7.63	AV	164.00	100	Horizontal	Pass
5	12331.050	50.85	74.0	23.15	Peak	121.00	200	Horizontal	Pass
5**	12331.050	40.59	54.0	13.41	AV	121.00	200	Horizontal	Pass
6	17531.699	53.36	74.0	20.64	Peak	254.00	150	Horizontal	Pass
6**	17531.699	44.70	54.0	9.30	AV	254.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b High Channel

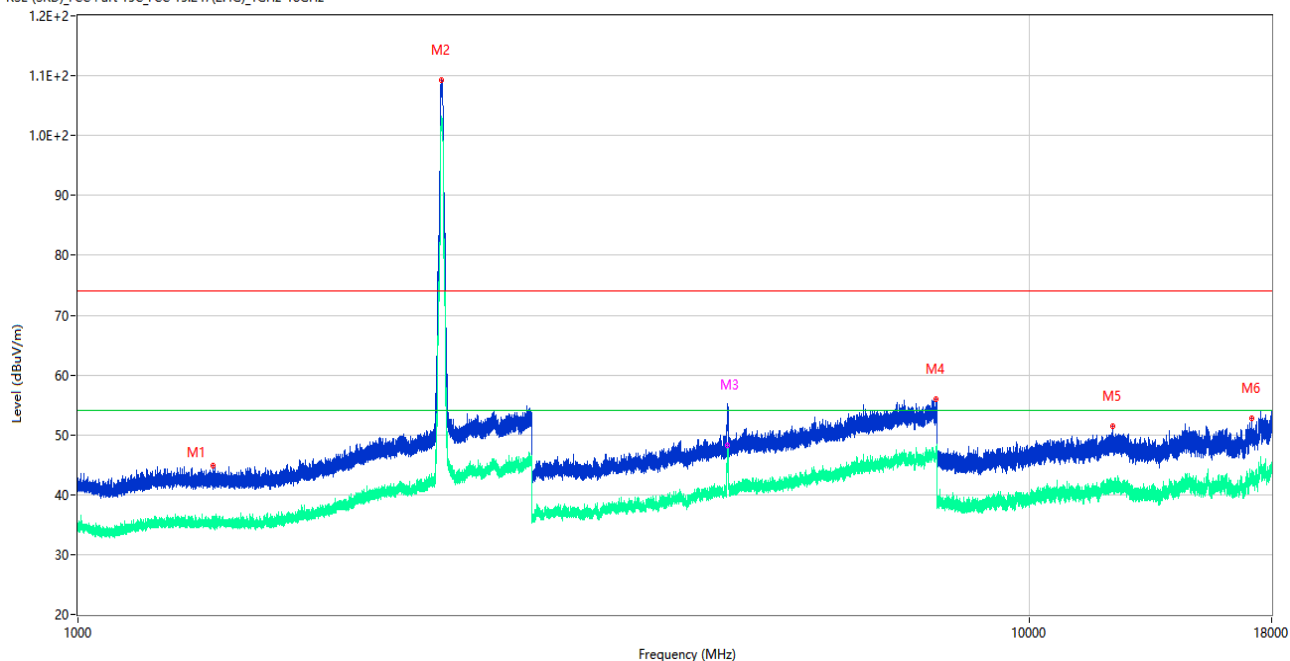
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1266.600	44.85	74.0	29.15	Peak	358.00	300	Vertical	Pass
1**	1266.600	34.76	54.0	19.24	AV	358.00	300	Vertical	Pass
2	2460.800	95.54	74.0	-21.54	Peak	336.00	200	Vertical	N/A
2**	2460.800	92.65	54.0	-38.65	AV	336.00	200	Vertical	N/A
3	4924.250	50.38	74.0	23.62	Peak	245.00	150	Vertical	Pass
3**	4924.250	46.46	54.0	7.54	AV	245.00	150	Vertical	Pass
4	7999.250	55.44	74.0	18.56	Peak	0.00	200	Vertical	Pass
4**	7999.250	47.56	54.0	6.44	AV	0.00	200	Vertical	Pass
5	12344.588	50.66	74.0	23.34	Peak	46.00	400	Vertical	Pass
5**	12344.588	40.79	54.0	13.21	AV	46.00	400	Vertical	Pass
6	17631.187	54.07	74.0	19.93	Peak	166.00	150	Vertical	Pass
6**	17631.187	44.28	54.0	9.72	AV	166.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g Low Channel

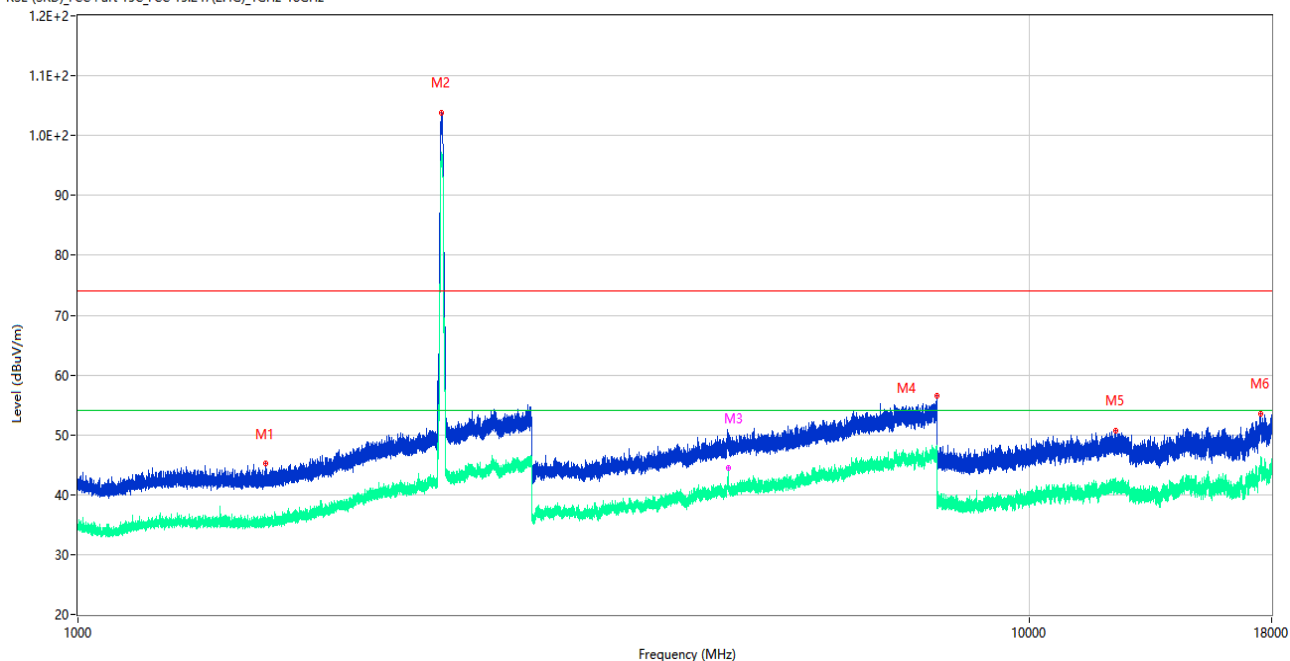
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1388.500	44.91	74.0	29.09	Peak	328.00	400	Horizontal	Pass
1**	1388.500	35.42	54.0	18.58	AV	328.00	400	Horizontal	Pass
2	2413.400	109.28	74.0	-35.28	Peak	126.00	200	Horizontal	N/A
2**	2413.400	102.62	54.0	-48.62	AV	126.00	200	Horizontal	N/A
3	4823.500	52.43	74.0	21.57	Peak	242.00	150	Horizontal	Pass
3**	4823.500	48.26	54.0	5.74	AV	242.00	150	Horizontal	Pass
4	7987.250	55.99	74.0	18.01	Peak	1.00	100	Horizontal	Pass
4**	7987.250	47.67	54.0	6.33	AV	1.00	100	Horizontal	Pass
5	12241.275	51.50	74.0	22.50	Peak	357.00	100	Horizontal	Pass
5**	12241.275	40.67	54.0	13.33	AV	357.00	100	Horizontal	Pass
6	17143.463	52.83	74.0	21.17	Peak	45.00	400	Horizontal	Pass
6**	17143.463	42.76	54.0	11.24	AV	45.00	400	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g Low Channel

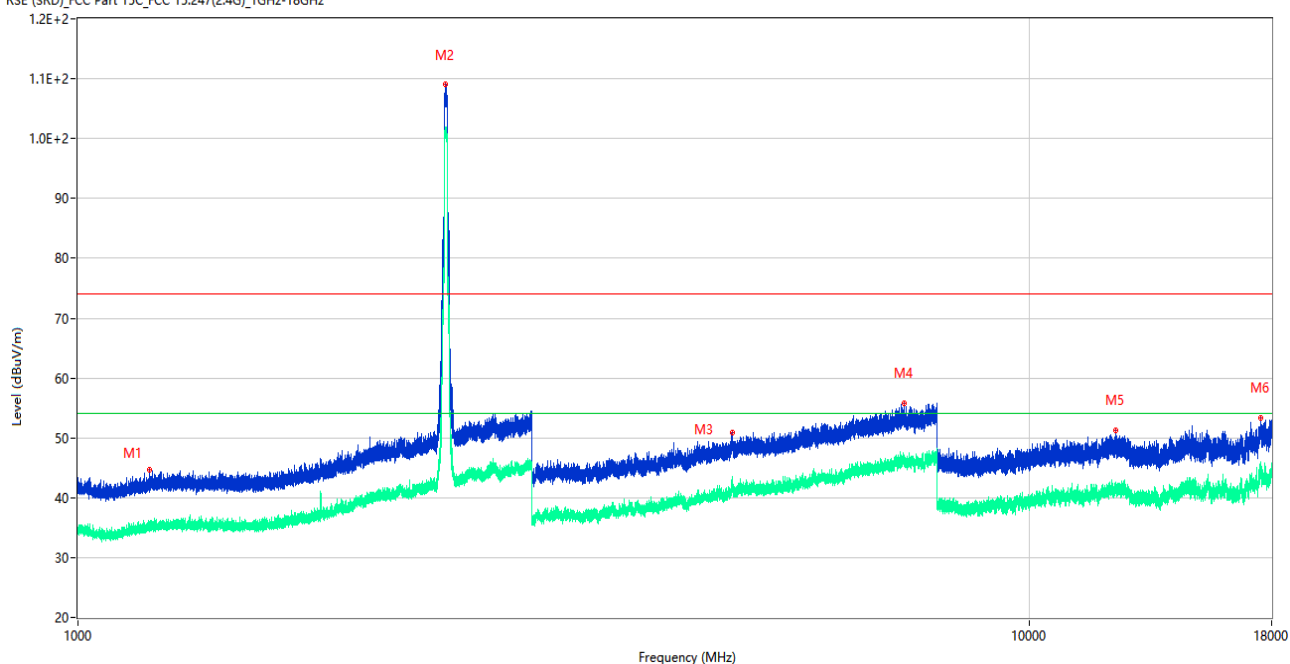
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1574.500	45.19	74.0	28.81	Peak	254.00	200	Vertical	Pass
1**	1574.500	35.69	54.0	18.31	AV	254.00	200	Vertical	Pass
2	2413.400	103.83	74.0	-29.83	Peak	163.00	200	Vertical	N/A
2**	2413.400	96.33	54.0	-42.33	AV	163.00	200	Vertical	N/A
3	4826.750	49.15	74.0	24.85	Peak	1.00	150	Vertical	Pass
3**	4826.750	44.41	54.0	9.59	AV	1.00	150	Vertical	Pass
4	7996.250	56.47	74.0	17.53	Peak	104.00	400	Vertical	Pass
4**	7996.250	48.16	54.0	5.84	AV	104.00	400	Vertical	Pass
5	12332.000	50.75	74.0	23.25	Peak	241.00	400	Vertical	Pass
5**	12332.000	41.43	54.0	12.57	AV	241.00	400	Vertical	Pass
6	17531.437	53.53	74.0	20.47	Peak	339.00	150	Vertical	Pass
6**	17531.437	44.56	54.0	9.44	AV	339.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g Middle Channel

RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1188.300	44.59	74.0	29.41	Peak	0.00	400	Horizontal	Pass
1**	1188.300	35.25	54.0	18.75	AV	0.00	400	Horizontal	Pass
2	2435.500	109.05	74.0	-35.05	Peak	127.00	150	Horizontal	N/A
2**	2435.500	100.86	54.0	-46.86	AV	127.00	150	Horizontal	N/A
3	4873.250	50.86	74.0	23.14	Peak	208.00	200	Horizontal	Pass
3**	4873.250	41.64	54.0	12.36	AV	208.00	200	Horizontal	Pass
4	7388.250	55.82	74.0	18.18	Peak	45.00	400	Horizontal	Pass
4**	7388.250	46.71	54.0	7.29	AV	45.00	400	Horizontal	Pass
5	12344.112	51.28	74.0	22.72	Peak	205.00	300	Horizontal	Pass
5**	12344.112	41.40	54.0	12.60	AV	205.00	300	Horizontal	Pass
6	17534.325	53.33	74.0	20.67	Peak	354.00	150	Horizontal	Pass
6**	17534.325	44.87	54.0	9.13	AV	354.00	150	Horizontal	Pass