

ANT1

Conducted Output Power

Test Result

Conducted Output Power

Mode	Channel	Ant. 1 (dBm)	Total (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	13.78	N/A	≤30	PASS
	6	15.74	N/A	≤30	PASS
	11	14.04	N/A	≤30	PASS
IEEE 802.11g	1	14.94	N/A	≤30	PASS
	6	15.47	N/A	≤30	PASS
	11	14.34	N/A	≤30	PASS
IEEE 802.11n_20	1	14.21	N/A	≤30	PASS
	6	15.88	N/A	≤30	PASS
	11	14.48	N/A	≤30	PASS
IEEE 802.11n_40	3	14.49	N/A	≤30	PASS
	6	15.94	N/A	≤30	PASS
	9	14.02	N/A	≤30	PASS

ANT2

Conducted Output Power

Test Result

Conducted Output Power

Mode	Channel	Ant. 2 (dBm)	Total (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	11.81	N/A	≤30	PASS
	6	12.53	N/A	≤30	PASS
	11	12.15	N/A	≤30	PASS
IEEE 802.11g	1	14.83	N/A	≤30	PASS
	6	15.55	N/A	≤30	PASS
	11	15.24	N/A	≤30	PASS
IEEE 802.11n_20	1	14.92	N/A	≤30	PASS
	6	15.64	N/A	≤30	PASS
	11	15.24	N/A	≤30	PASS
IEEE 802.11n_40	3	15.11	N/A	≤30	PASS
	6	15.64	N/A	≤30	PASS
	9	14.75	N/A	≤30	PASS

MIMO

Mode	Channel	Ant. 1 (dBm)	Ant. 2 (dBm)	MIMO (dBm)	Limit (dBm)	
IEEE 802.11n_20	1	14.21	14.92	17.59	≤30	
	6	15.88	15.64	18.77	≤30	
	11	14.48	15.24	17.89	≤30	
IEEE 802.11n_40	3	14.49	15.11	17.82	≤30	
	6	15.94	15.64	18.80	≤30	
	9	14.02	14.75	17.41	≤30	



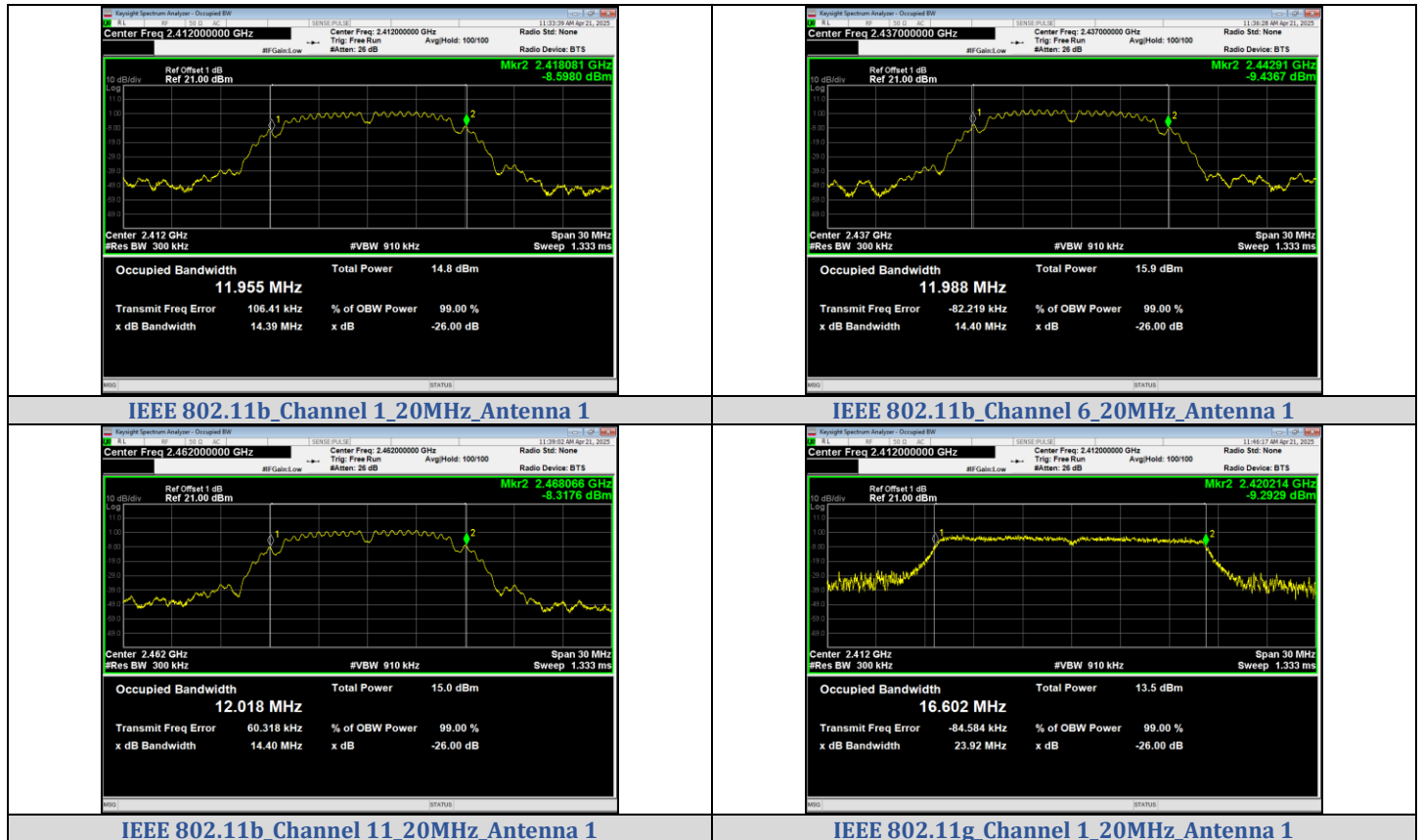
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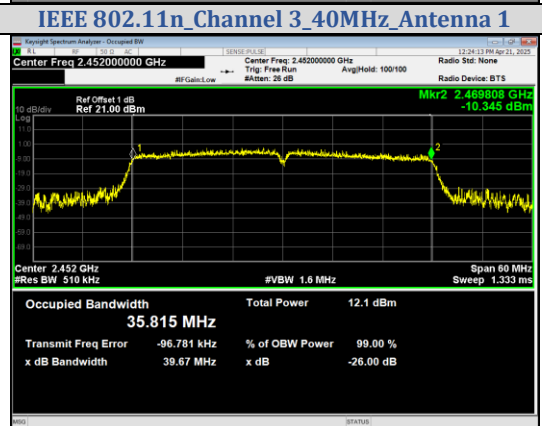
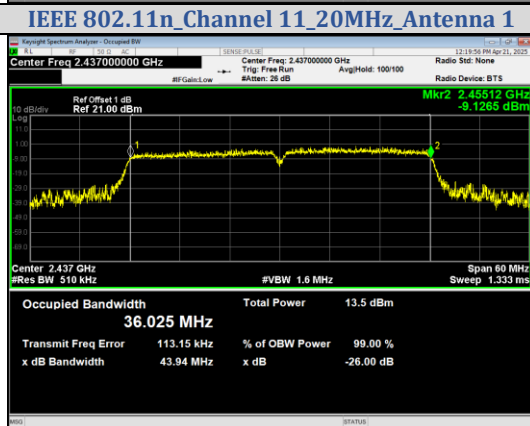
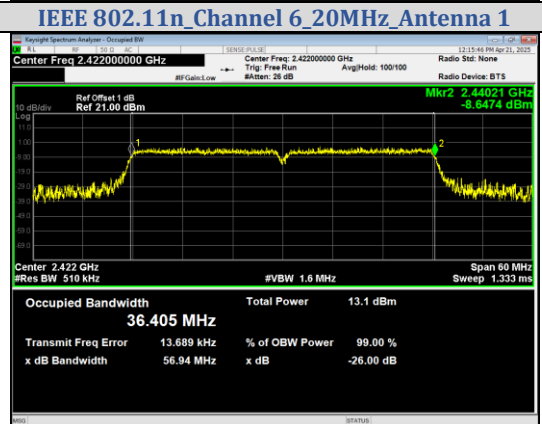
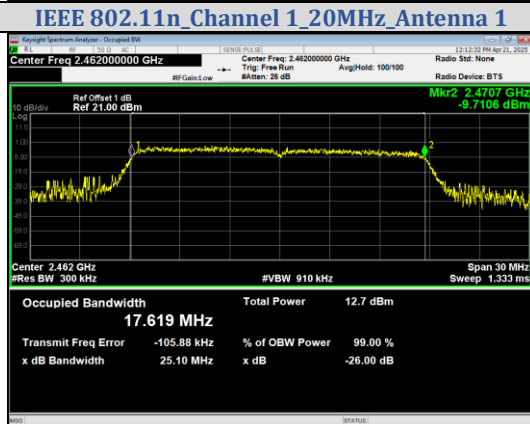
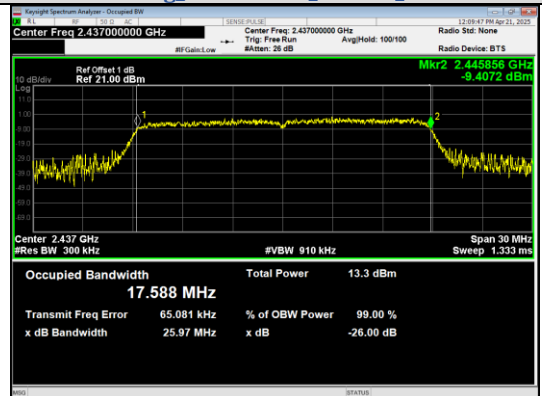
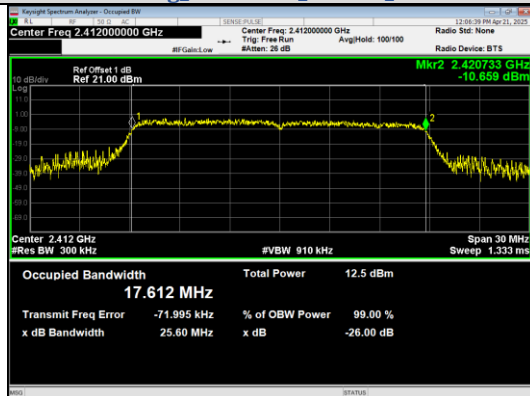
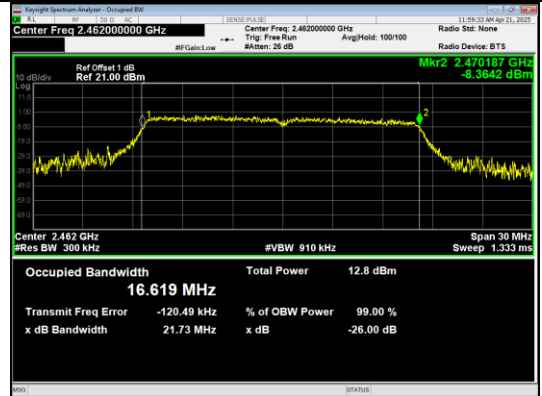
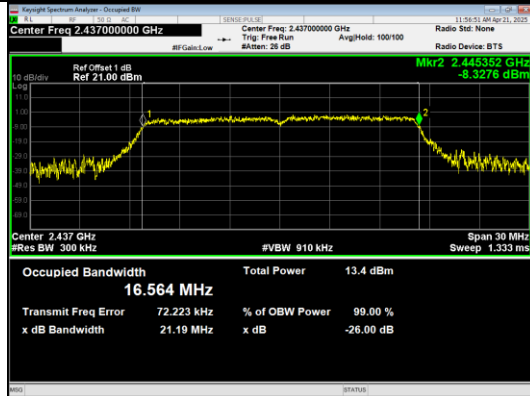
99% Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	2412	11.955
	6	2437	11.988
	11	2462	12.018
IEEE 802.11g	1	2412	16.602
	6	2437	16.564
	11	2462	16.619
IEEE 802.11n_20	1	2412	17.612
	6	2437	17.588
	11	2462	17.619
IEEE 802.11n_40	3	2422	36.405
	6	2437	36.025
	9	2452	35.815

Test Graphs





IEEE 802.11n Channel 6 40MHz Antenna 1

IEEE 802.11n Channel 9 40MHz Antenna 1

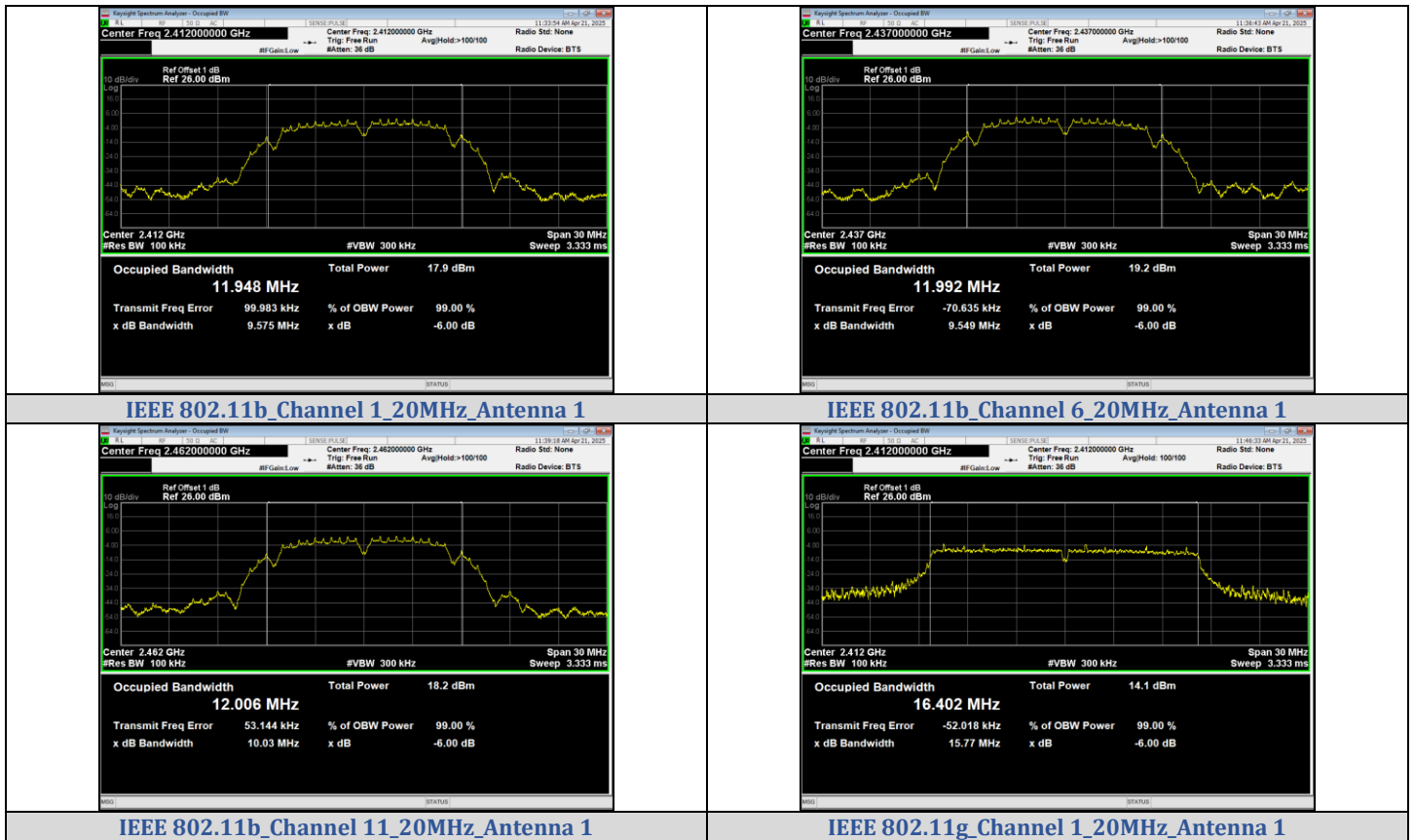


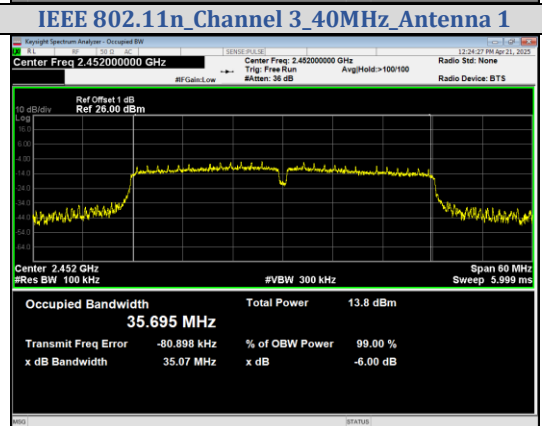
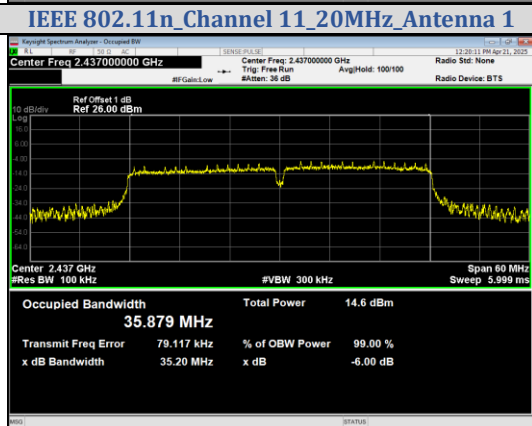
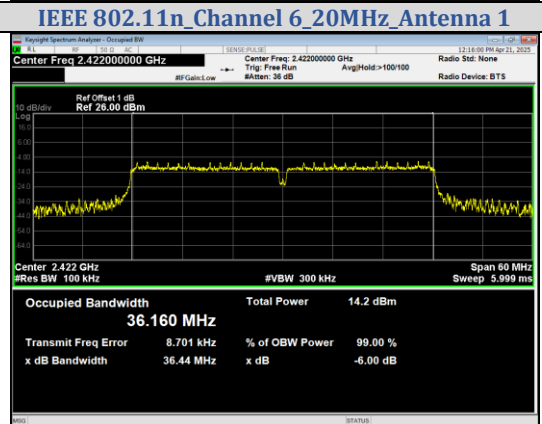
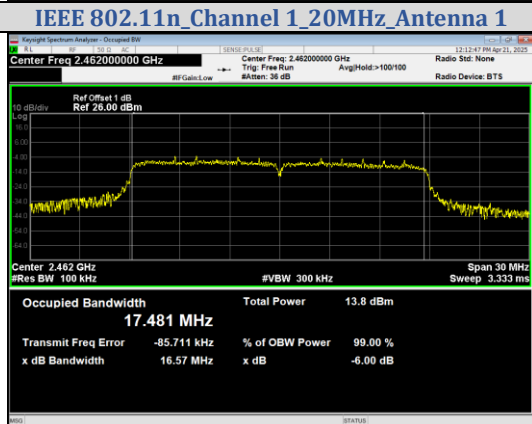
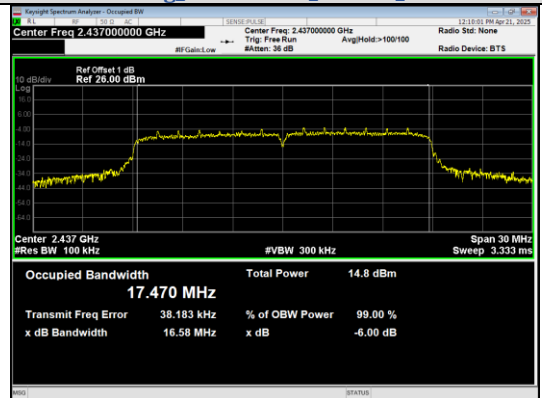
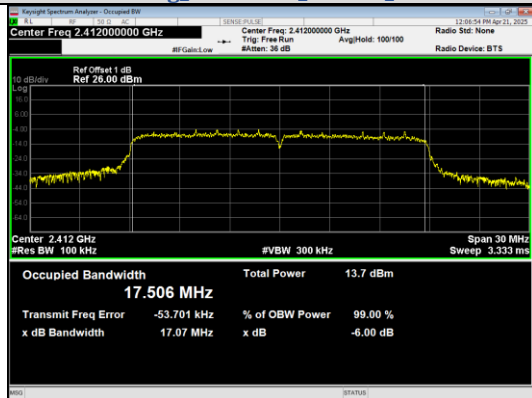
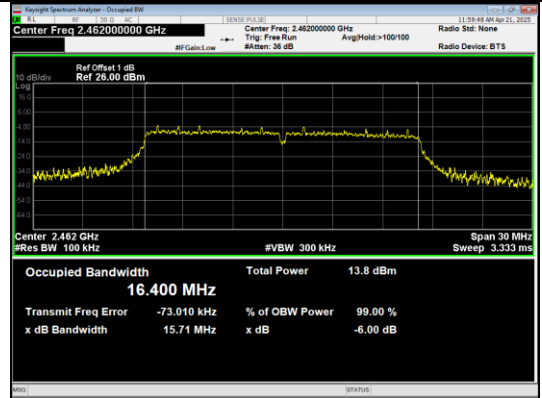
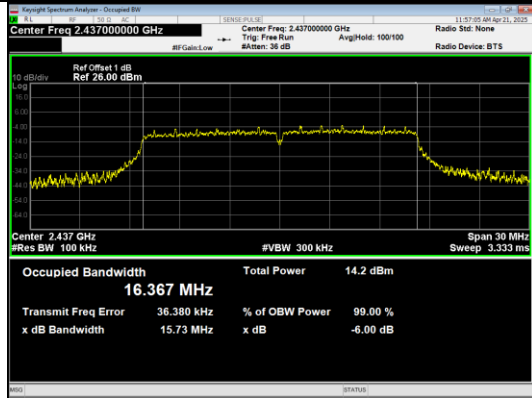
6dB Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	2412	9.575	≥0.5	PASS
	6	2437	9.549		PASS
	11	2462	10.03		PASS
IEEE 802.11g	1	2412	15.77		PASS
	6	2437	15.73		PASS
	11	2462	15.71		PASS
IEEE 802.11n_20	1	2412	17.07		PASS
	6	2437	16.58		PASS
	11	2462	16.57		PASS
IEEE 802.11n_40	3	2422	36.44		PASS
	6	2437	35.20		PASS
	9	2452	35.07		PASS

Test Graphs





IEEE 802.11n Channel 6 40MHz Antenna 1

IEEE 802.11n Channel 9 40MHz Antenna 1



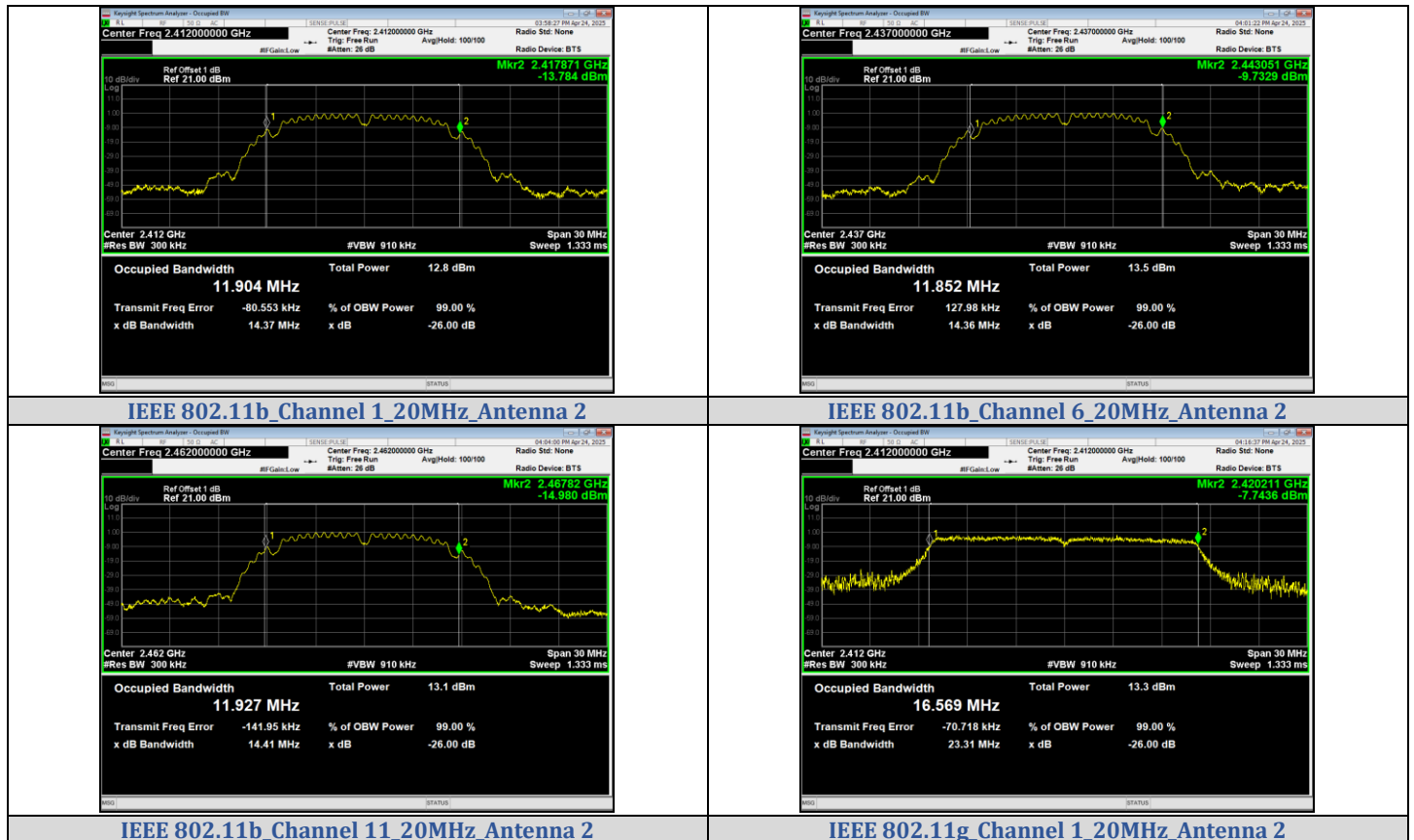
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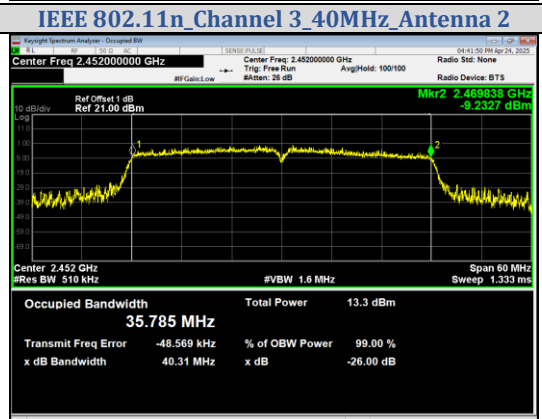
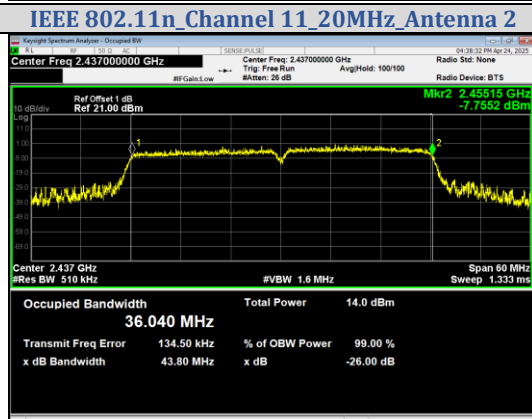
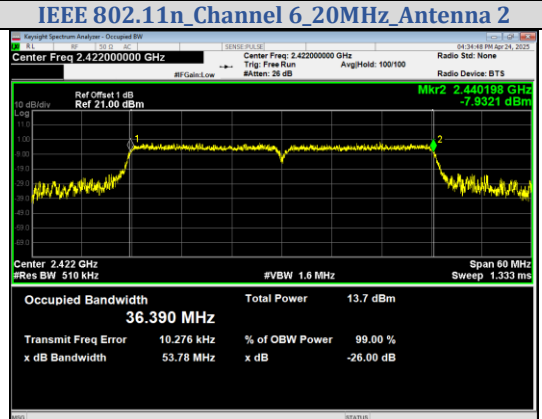
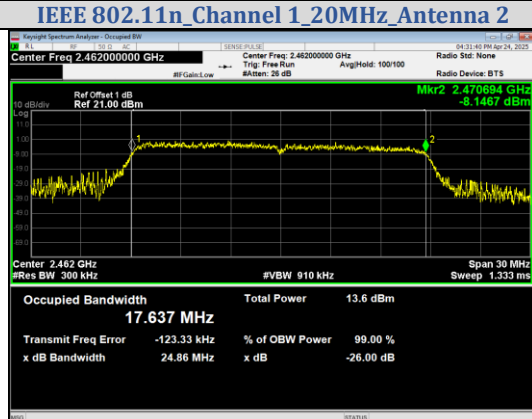
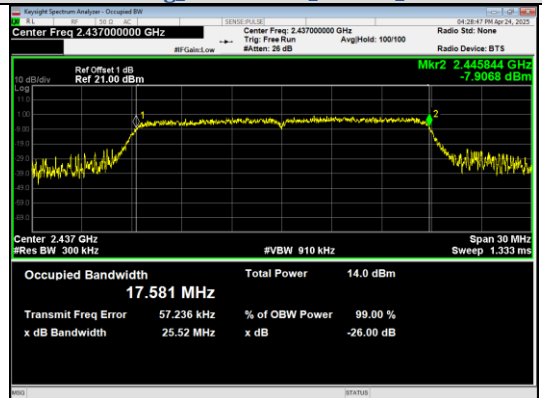
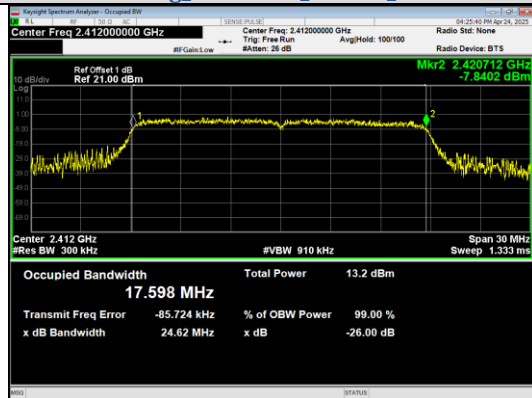
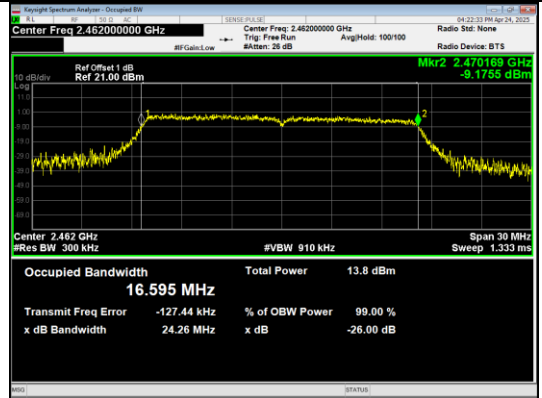
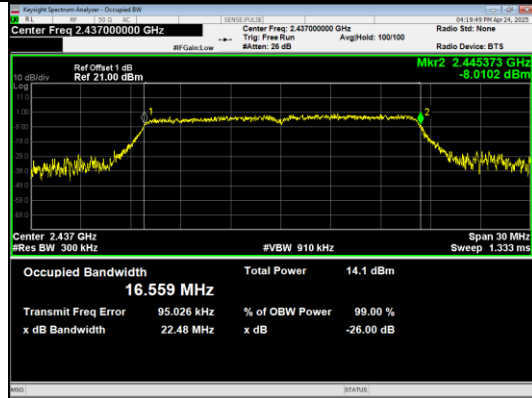
99% Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	2412	11.904
	6	2437	11.852
	11	2462	11.927
IEEE 802.11g	1	2412	16.569
	6	2437	16.559
	11	2462	16.595
IEEE 802.11n_20	1	2412	17.598
	6	2437	17.581
	11	2462	17.637
IEEE 802.11n_40	3	2422	36.390
	6	2437	36.040
	9	2452	35.785

Test Graphs





IEEE 802.11n Channel 6_40MHz_Antenna 2

IEEE 802.11n Channel 9_40MHz_Antenna 2

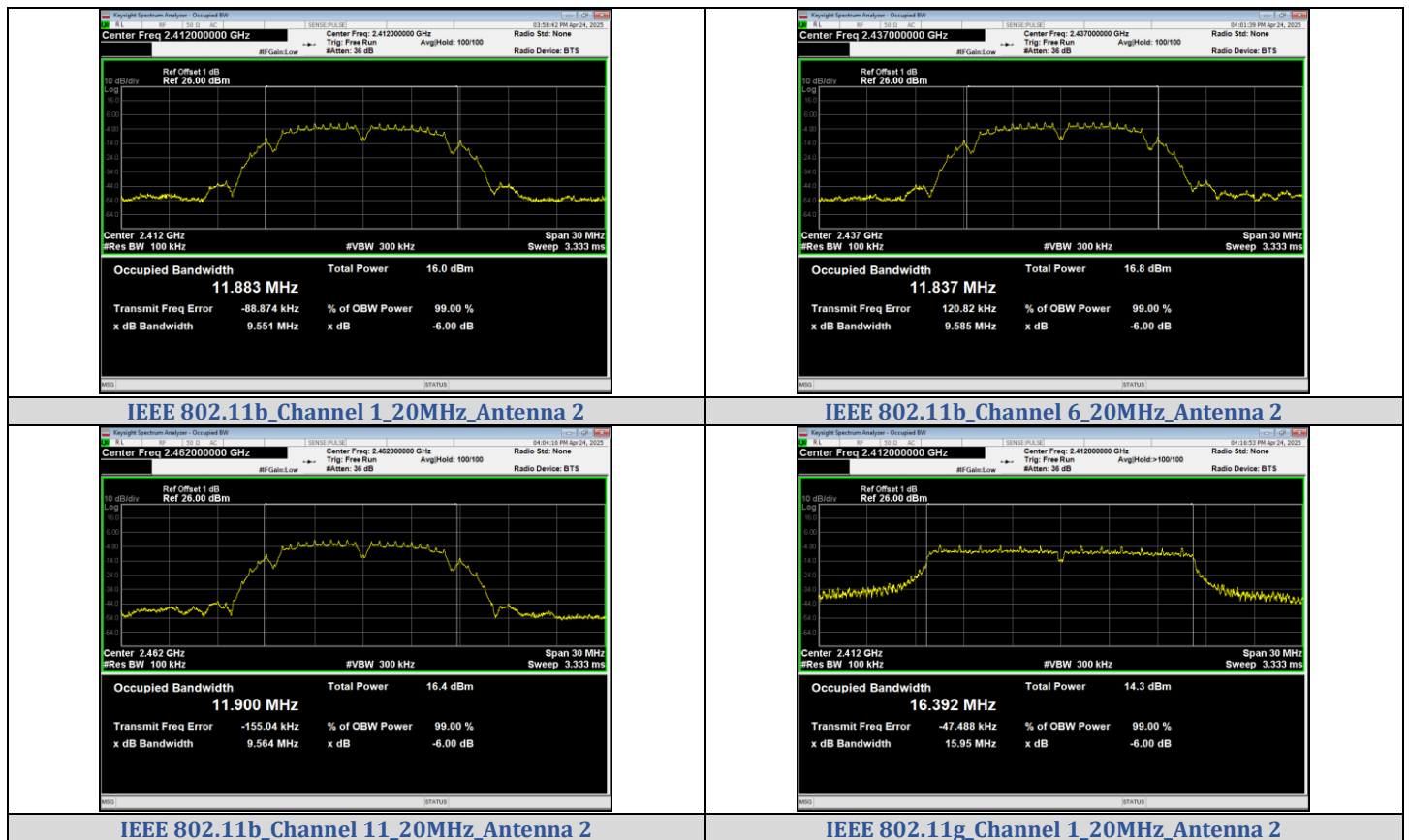


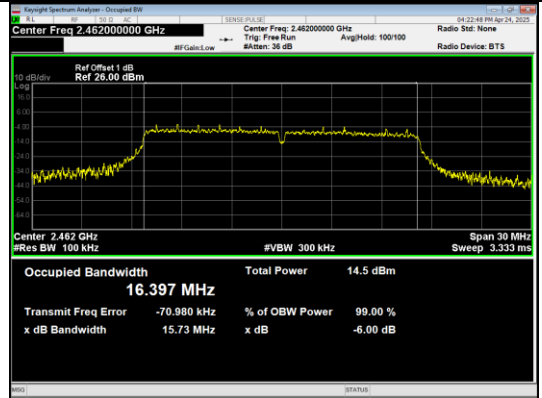
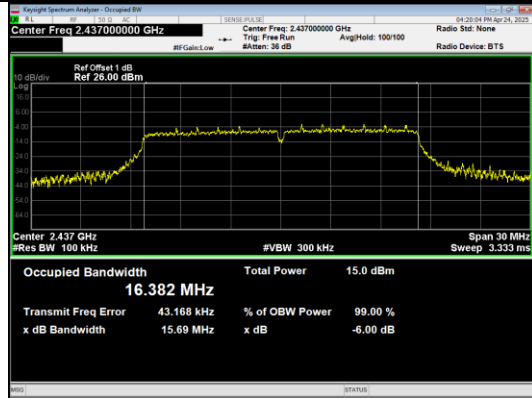
6dB Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	2412	9.551	≥0.5	PASS
	6	2437	9.585		PASS
	11	2462	9.564		PASS
IEEE 802.11g	1	2412	15.95		PASS
	6	2437	15.69		PASS
	11	2462	15.73		PASS
IEEE 802.11n_20	1	2412	16.98		PASS
	6	2437	16.39		PASS
	11	2462	16.18		PASS
IEEE 802.11n_40	3	2422	36.42		PASS
	6	2437	35.31		PASS
	9	2452	35.08		PASS

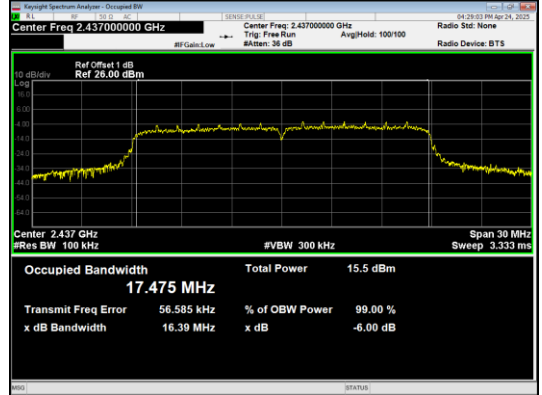
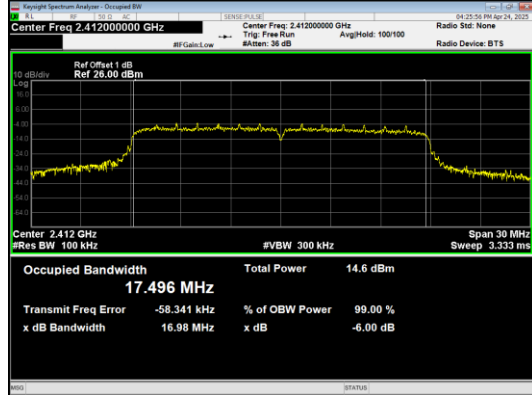
Test Graphs





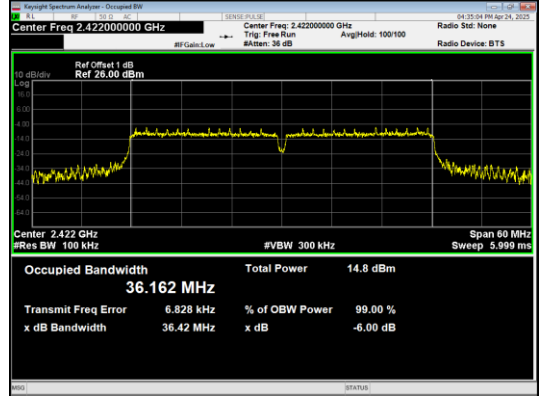
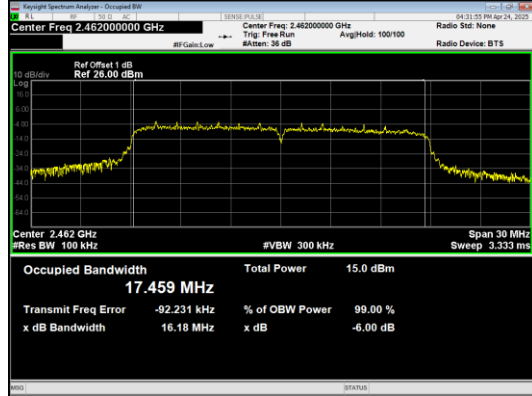
IEEE 802.11g_Channel 6_20MHz_Antenna 2

IEEE 802.11g_Channel 11_20MHz_Antenna 2



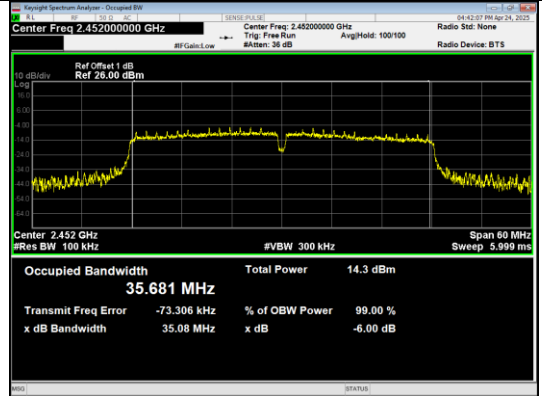
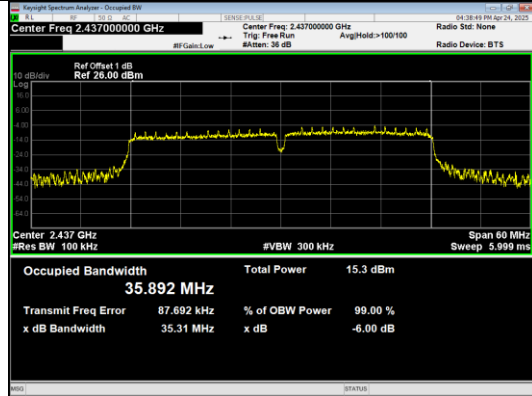
IEEE 802.11n_Channel 1_20MHz_Antenna 2

IEEE 802.11n_Channel 6_20MHz_Antenna 2



IEEE 802.11n_Channel 11_20MHz_Antenna 2

IEEE 802.11n_Channel 3_40MHz_Antenna 2



IEEE 802.11n_Channel 6_40MHz_Antenna 2

IEEE 802.11n_Channel 9_40MHz_Antenna 2

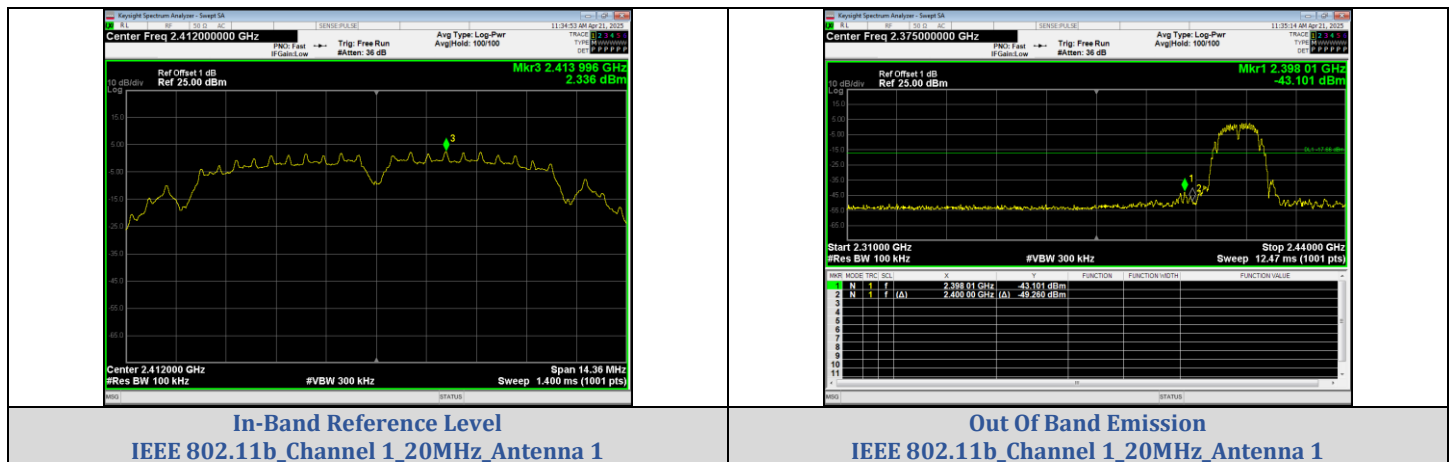
ANT1

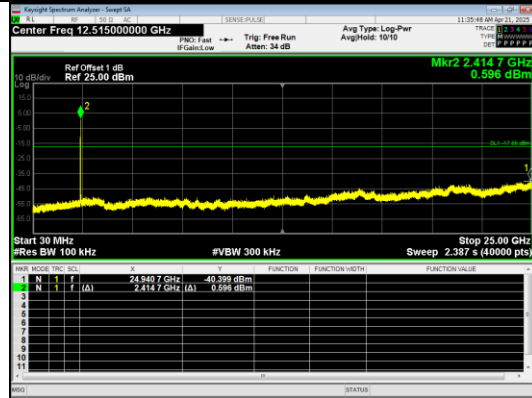
Conducted Out Of Band Emission

Test Result

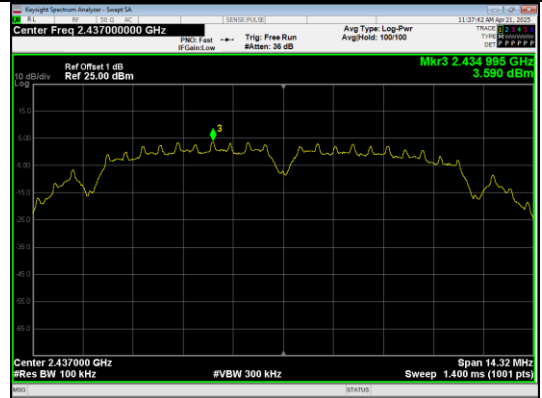
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	2398.01	-43.101	-17.66	-25.441	PASS
		2400.00	-49.260	-17.66	-31.600	PASS
		24940.7	-40.399	-17.66	-22.739	PASS
	6	24977.5	-39.867	-16.41	-23.457	PASS
		2483.50	-53.018	-17.53	-35.488	PASS
IEEE 802.11g	1	24993.1	-39.174	-17.53	-21.644	PASS
		2398.79	-33.125	-22.88	-10.245	PASS
		2400.00	-34.080	-22.88	-11.200	PASS
	6	24433.2	-39.767	-22.88	-16.887	PASS
		24999.4	-39.569	-22.7	-16.869	PASS
IEEE 802.11n_20	1	2483.50	-49.360	-23.09	-26.270	PASS
		24924.5	-40.348	-23.09	-17.258	PASS
		2400.00	-32.408	-24.04	-8.368	PASS
	6	25000.0	-39.340	-24.04	-15.300	PASS
		24883.9	-40.281	-22.67	-17.611	PASS
IEEE 802.11n_40	11	2483.50	-47.226	-23.04	-24.186	PASS
		24900.7	-39.791	-23.04	-16.752	PASS
		2397.49	-31.812	-26.62	-5.192	PASS
	3	2400.00	-35.817	-26.62	-9.197	PASS
		24994.4	-39.331	-26.62	-12.711	PASS
		24960.0	-39.352	-25.11	-14.242	PASS
IEEE 802.11n_40	9	2483.50	-44.200	-25.87	-18.330	PASS
		24955.7	-39.497	-25.87	-13.627	PASS

Test Graphs

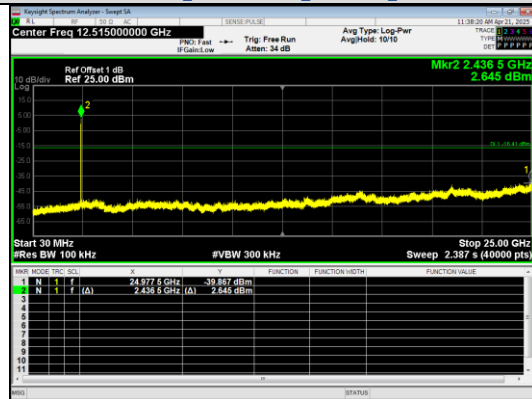




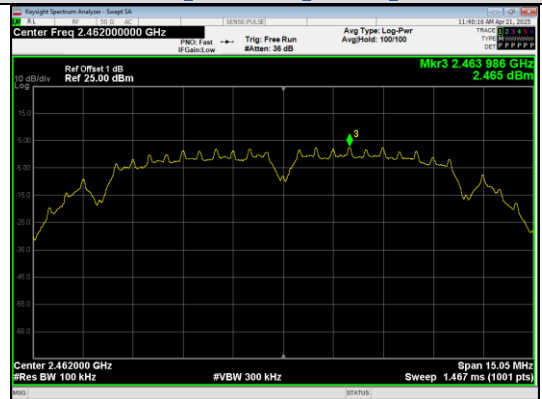
30.0 MHz - 25000.0 MHz
IEEE 802.11b Channel 1_20MHz_Antenna 1



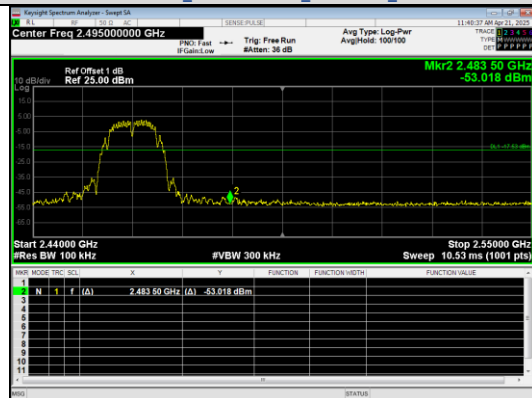
In-Band Reference Level
IEEE 802.11b Channel 6_20MHz_Antenna 1



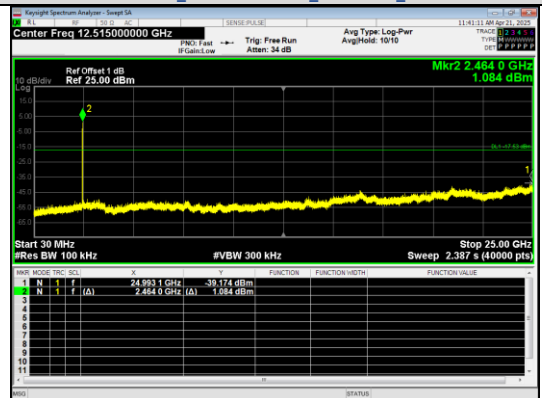
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IEEE 802.11b Channel 6_20MHz_Antenna 1



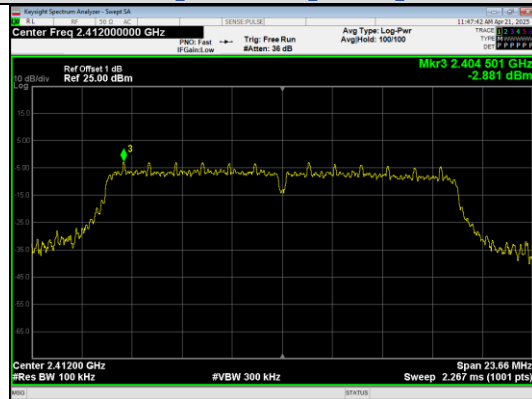
In-Band Reference Level
IEEE 802.11b Channel 11_20MHz_Antenna 1



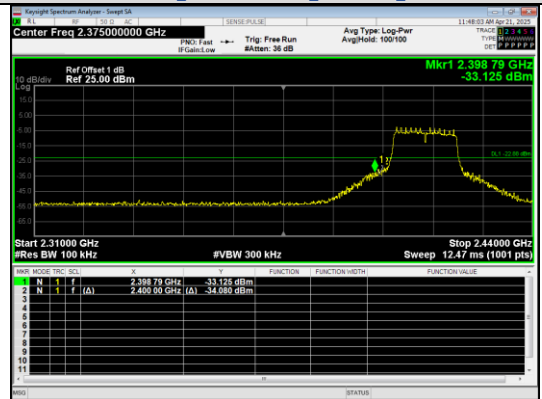
Out Of Band Emission
IEEE 802.11b Channel 11_20MHz_Antenna 1



30.0 MHz - 25000.0 MHz
IEEE 802.11b Channel 11_20MHz_Antenna 1

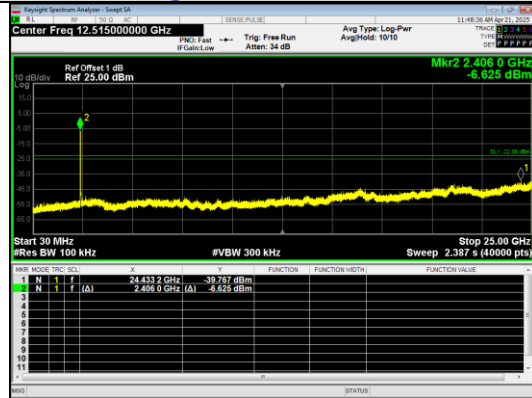


In-Band Reference Level

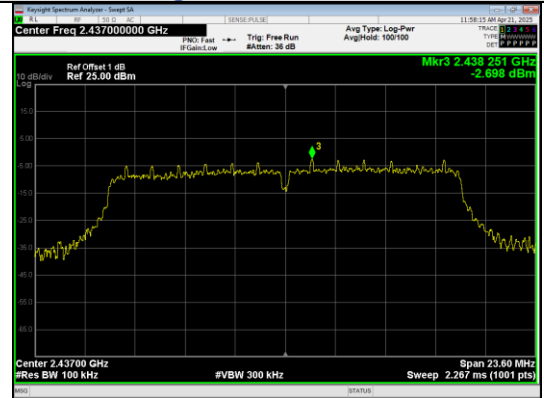


Out Of Band Emission

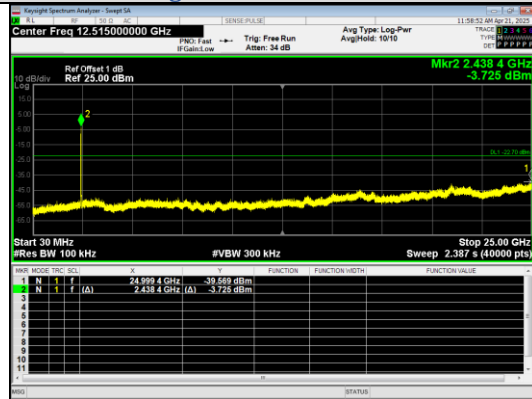
IEEE 802.11g_Channel 1_20MHz_Antenna 1



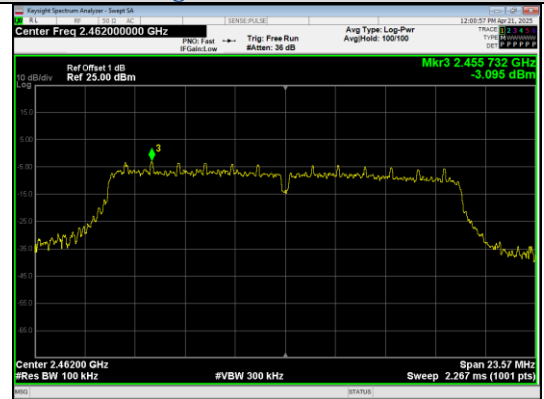
IEEE 802.11g_Channel 1_20MHz_Antenna 1



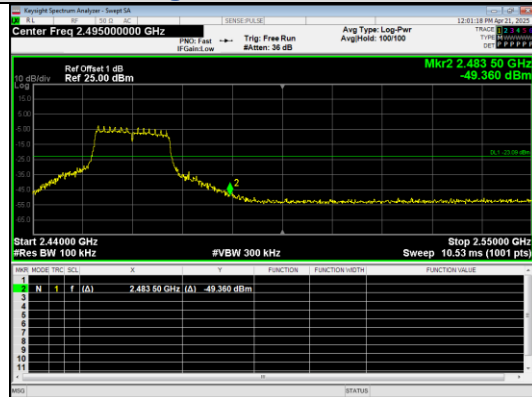
30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 1_20MHz_Antenna 1



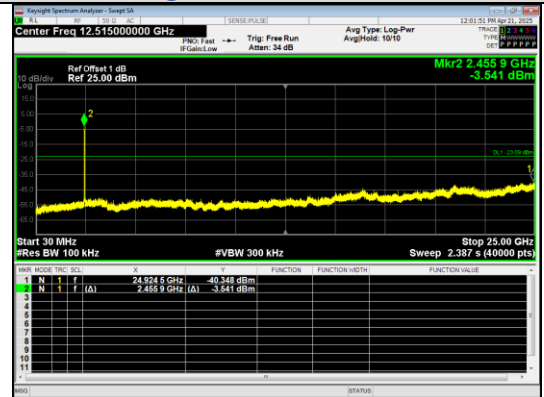
In-Band Reference Level IEEE 802.11g_Channel 6_20MHz_Antenna 1



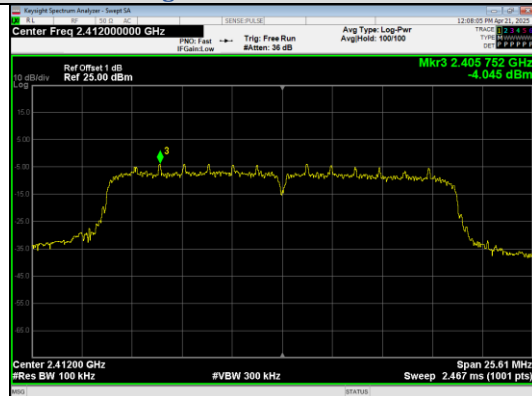
30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 6_20MHz_Antenna 1



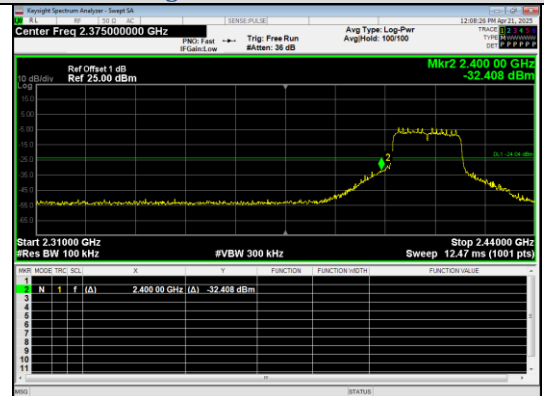
In-Band Reference Level IEEE 802.11g_Channel 11_20MHz_Antenna 1



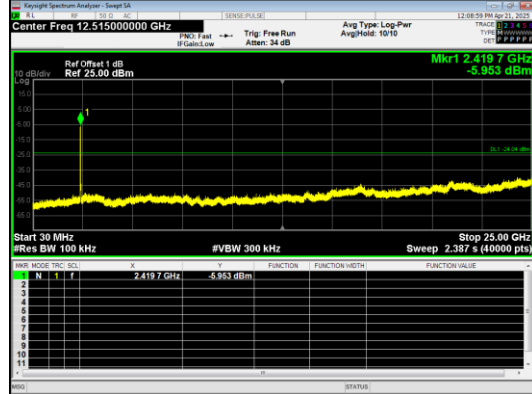
Out Of Band Emission IEEE 802.11g_Channel 11_20MHz_Antenna 1



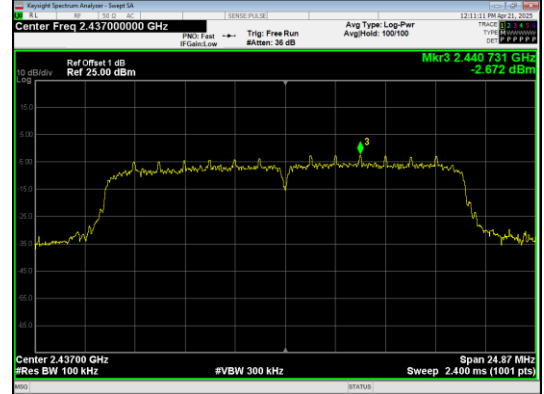
30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 11_20MHz_Antenna 1



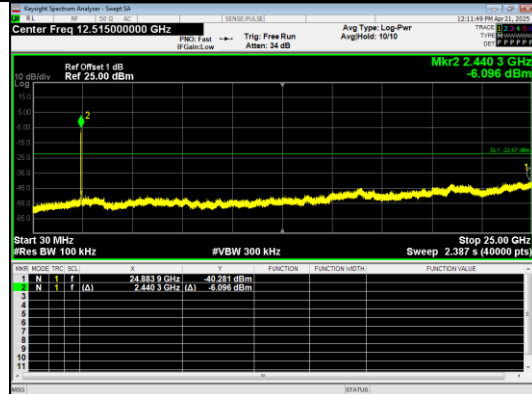
In-Band Reference Level IEEE 802.11n_Channel 1_20MHz_Antenna 1



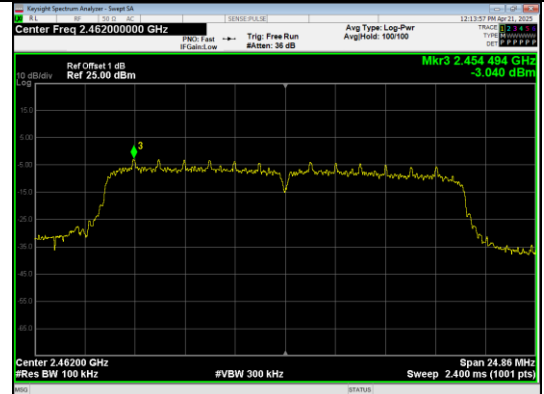
Out Of Band Emission IEEE 802.11n_Channel 1_20MHz_Antenna 1



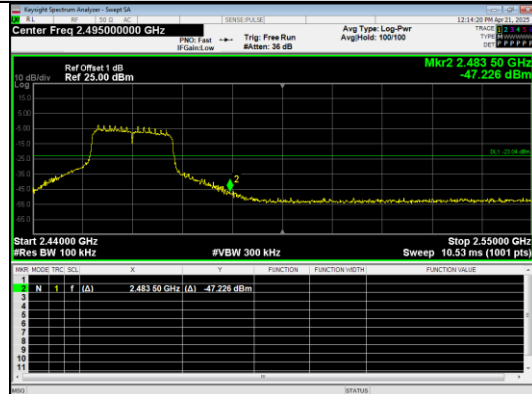
30.0 MHz - 25000.0 MHz IEEE 802.11n_Channel 1_20MHz_Antenna 1



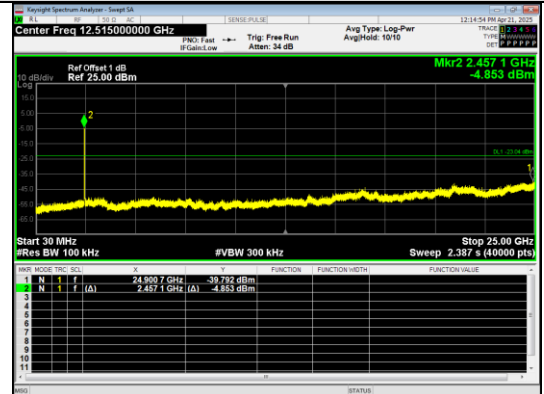
In-Band Reference Level IEEE 802.11n_Channel 6_20MHz_Antenna 1



30.0 MHz - 25000.0 MHz IEEE 802.11n_Channel 6_20MHz_Antenna 1

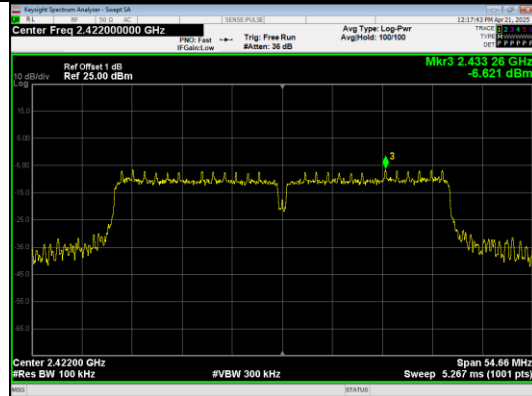


In-Band Reference Level IEEE 802.11n_Channel 11_20MHz_Antenna 1

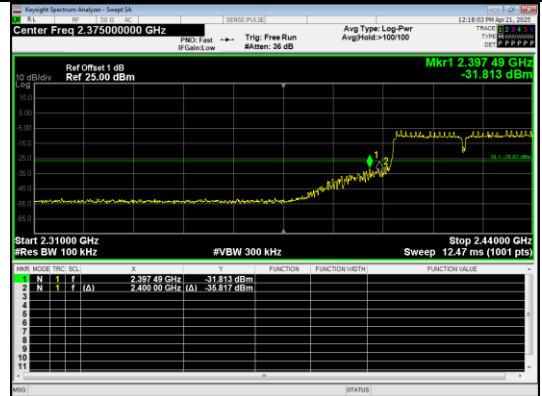


Out Of Band Emission IEEE 802.11n_Channel 11_20MHz_Antenna 1

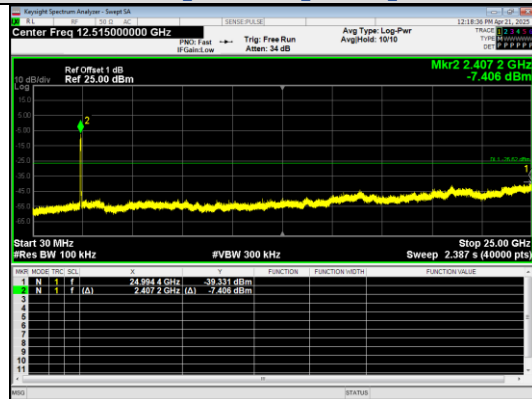
30.0 MHz - 25000.0 MHz IEEE 802.11n_Channel 11_20MHz_Antenna 1



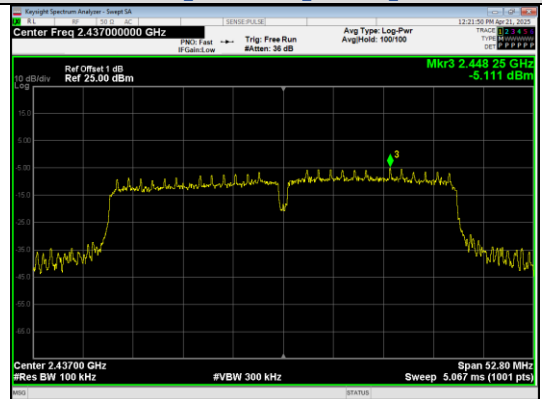
In-Band Reference Level
IEEE 802.11n Channel 3_40MHz_Antenna 1



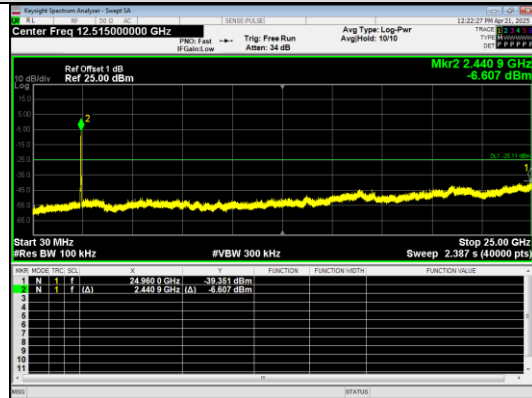
Out Of Band Emission
IEEE 802.11n Channel 3_40MHz_Antenna 1



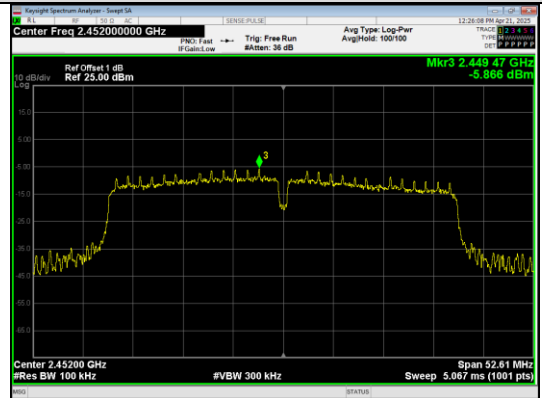
30.0 MHz - 25000.0 MHz
IEEE 802.11n Channel 3_40MHz_Antenna 1



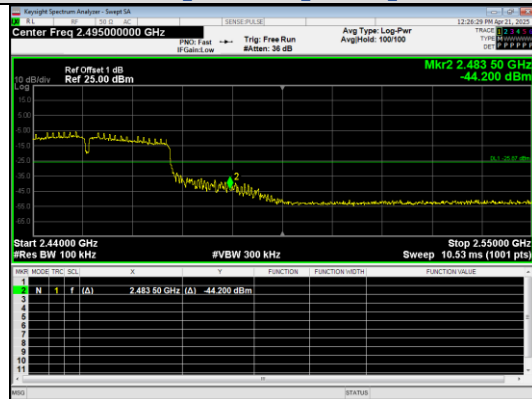
In-Band Reference Level
IEEE 802.11n Channel 6_40MHz_Antenna 1



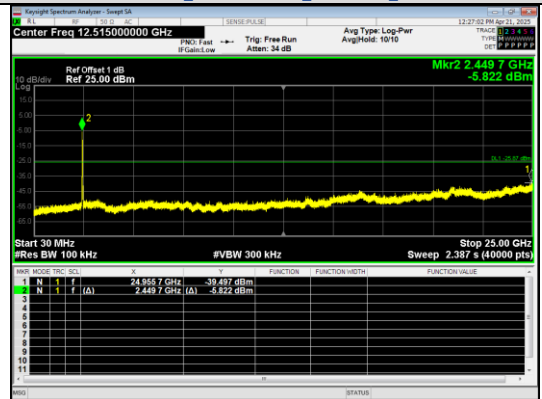
30.0 MHz - 25000.0 MHz
IEEE 802.11n Channel 6_40MHz_Antenna 1



In-Band Reference Level
IEEE 802.11n Channel 9_40MHz_Antenna 1



Out Of Band Emission



30.0 MHz - 25000.0 MHz

IEEE 802.11n_Channel 9_40MHz_Antenna 1

IEEE 802.11n_Channel 9_40MHz_Antenna 1

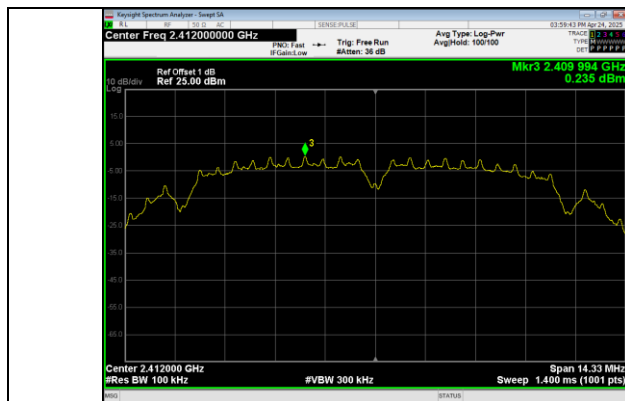
ANT2

Conducted Out Of Band Emission

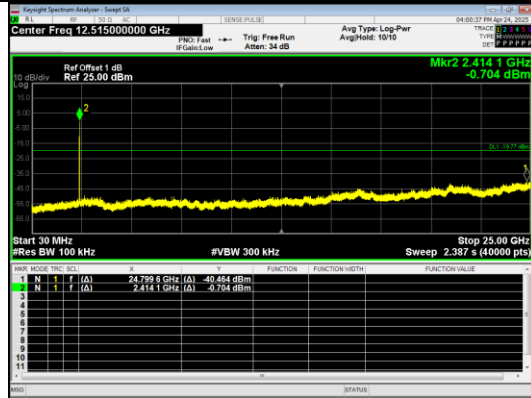
Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	2398.01	-49.340	-19.77	-29.570	PASS
		2400.00	-50.143	-19.77	-30.373	PASS
		24799.6	-40.464	-19.77	-20.694	PASS
	6	24995.6	-40.102	-18.86	-21.242	PASS
		2483.50	-52.978	-19.2	-33.778	PASS
IEEE 802.11g	1	24929.5	-39.930	-19.2	-20.730	PASS
		2398.27	-32.763	-23.22	-9.543	PASS
		2400.00	-33.666	-23.22	-10.446	PASS
	6	24970.0	-39.487	-23.22	-16.267	PASS
		24973.8	-39.899	-22.07	-17.829	PASS
IEEE 802.11n_20	1	2483.50	-48.569	-21.87	-26.699	PASS
		24862.0	-40.244	-21.87	-18.374	PASS
		2397.88	-31.905	-23.16	-8.745	PASS
	6	2400.00	-32.107	-23.16	-8.947	PASS
		24387.0	-39.858	-23.16	-16.698	PASS
IEEE 802.11n_40	3	24988.8	-39.301	-21.97	-17.331	PASS
		2483.50	-46.598	-21.86	-24.738	PASS
		24373.9	-40.624	-21.86	-18.764	PASS
	6	2397.62	-31.593	-25.92	-5.673	PASS
		2400.00	-35.054	-25.92	-9.134	PASS
IEEE 802.11n_40	9	24729.7	-40.467	-25.92	-14.547	PASS
		24978.2	-40.387	-24.81	-15.577	PASS
		2483.50	-43.297	-25.04	-18.257	PASS
	9	24959.4	-40.014	-25.04	-14.974	PASS
						PASS

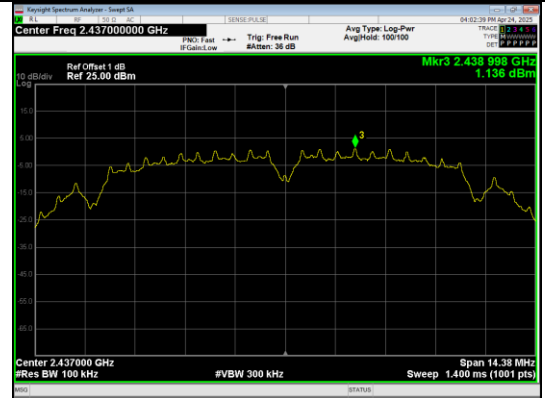
Test Graphs


In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 2

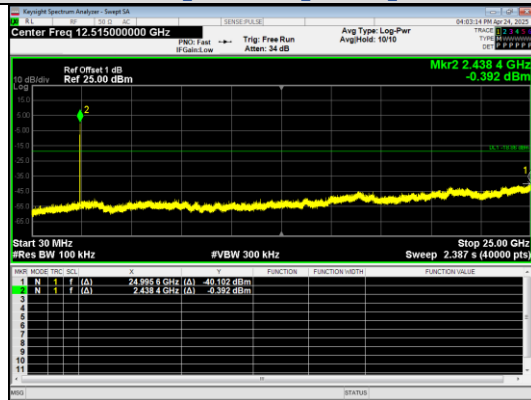
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 2



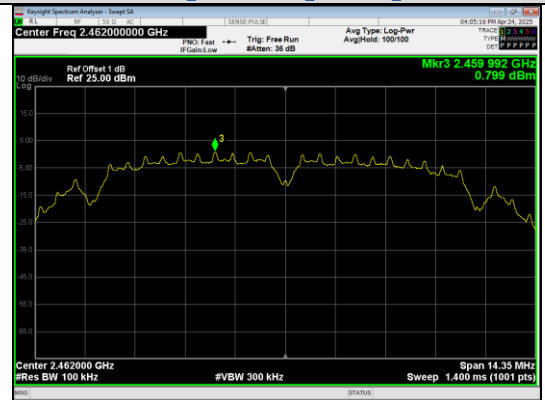
30.0 MHz - 25000.0 MHz
IEEE 802.11b Channel 1 20MHz_Antenna 2



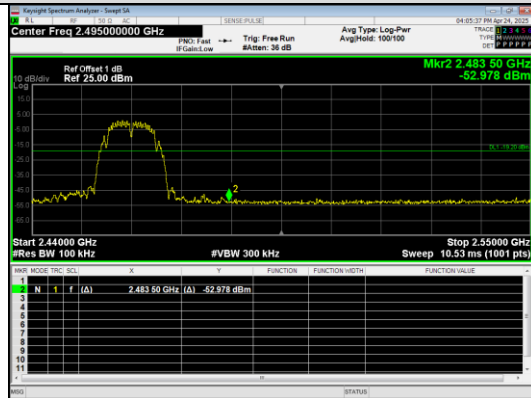
In-Band Reference Level
IEEE 802.11b Channel 6 20MHz_Antenna 2



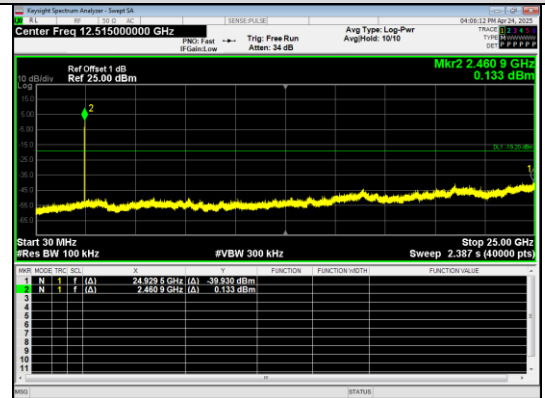
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 2



In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 2



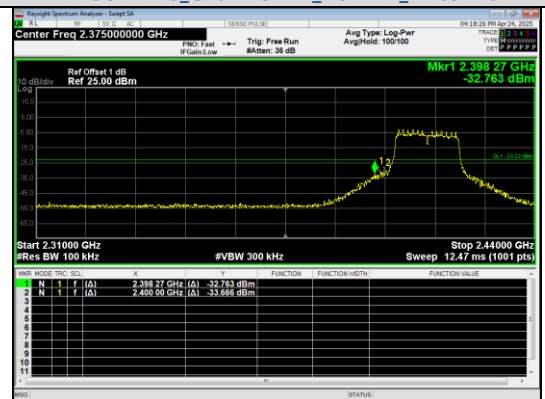
Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 2



30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 2

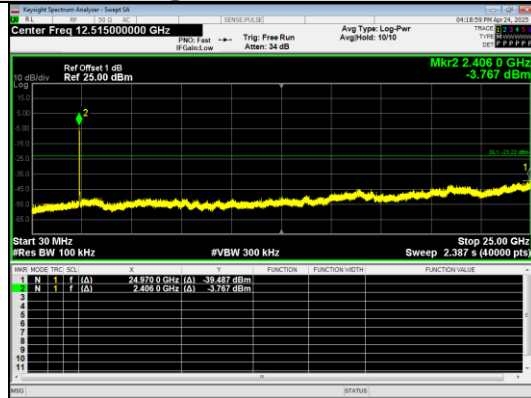


In-Band Reference Level

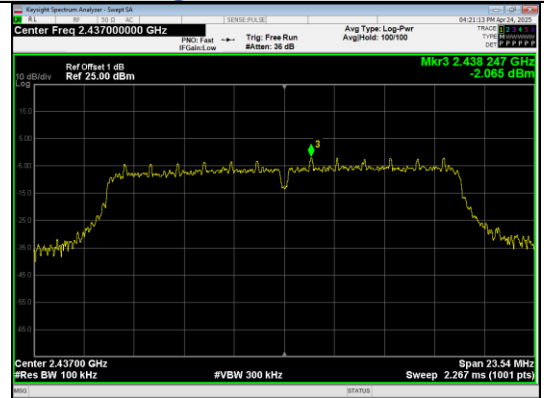


Out Of Band Emission

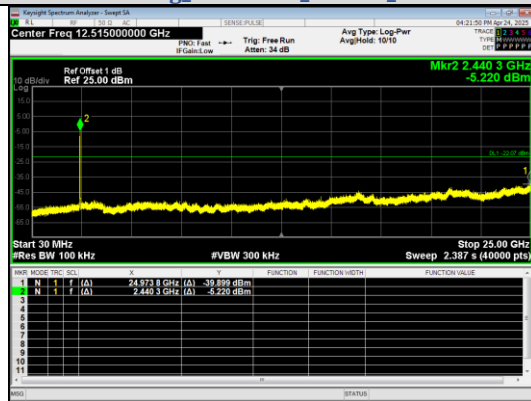
IEEE 802.11g_Channel 1_20MHz_Antenna 2



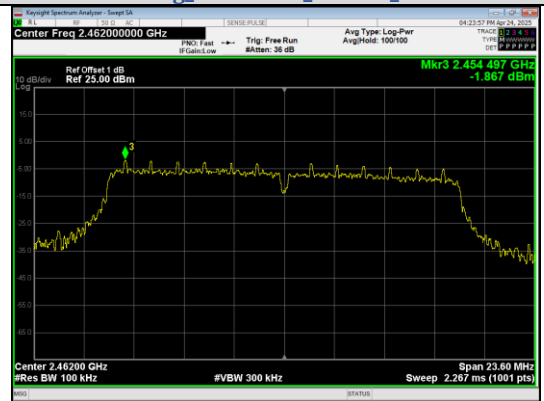
IEEE 802.11g_Channel 1_20MHz_Antenna 2



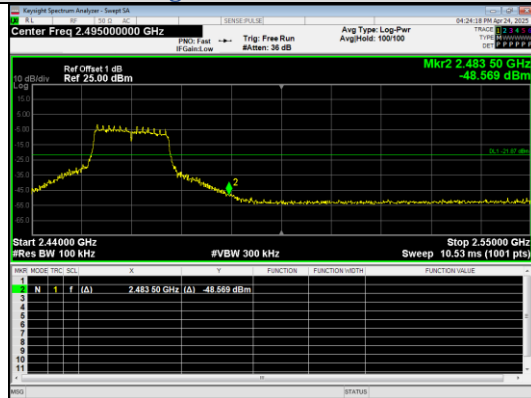
30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 1_20MHz_Antenna 2



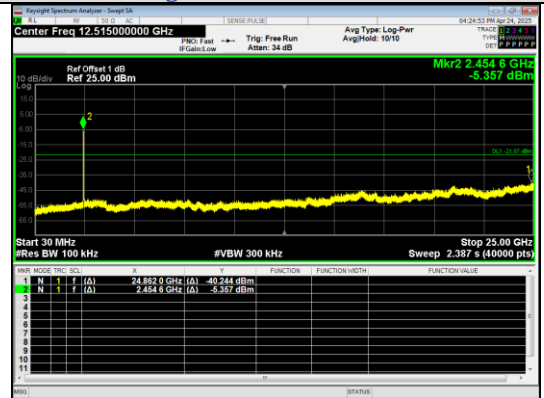
In-Band Reference Level IEEE 802.11g_Channel 6_20MHz_Antenna 2



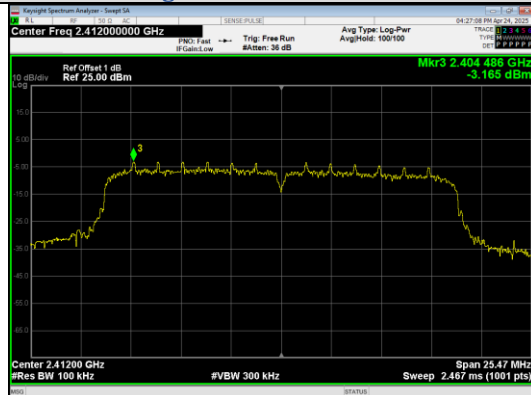
30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 6_20MHz_Antenna 2



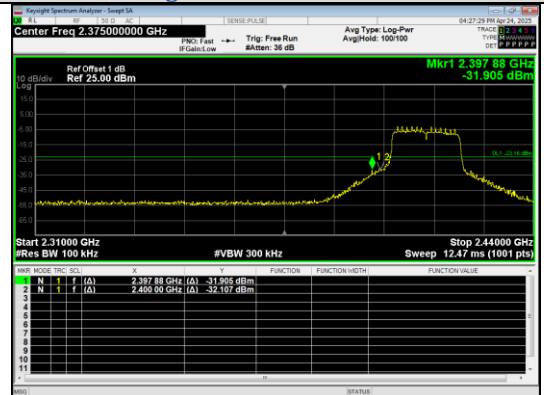
In-Band Reference Level IEEE 802.11g_Channel 11_20MHz_Antenna 2



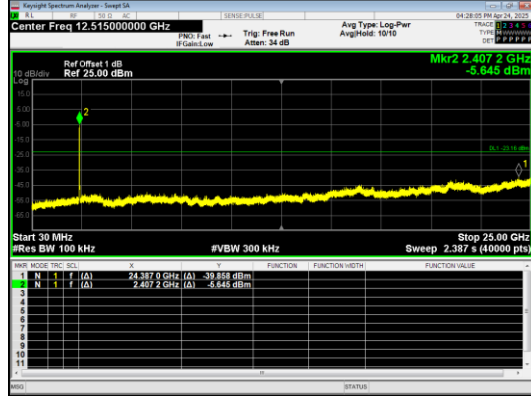
Out Of Band Emission IEEE 802.11g_Channel 11_20MHz_Antenna 2



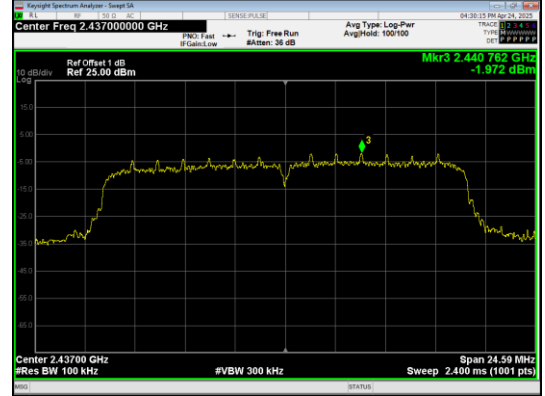
30.0 MHz - 25000.0 MHz IEEE 802.11g_Channel 11_20MHz_Antenna 2



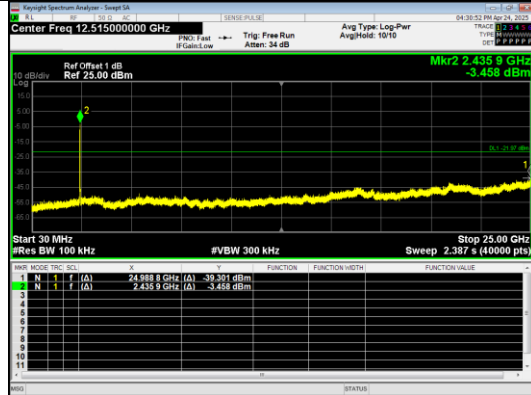
In-Band Reference Level IEEE 802.11n_Channel 1_20MHz_Antenna 2



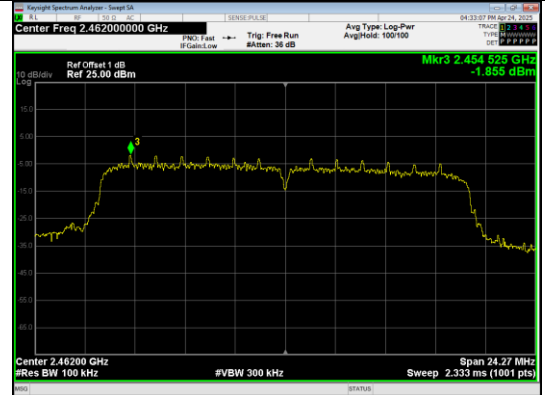
Out Of Band Emission IEEE 802.11n_Channel 1_20MHz_Antenna 2



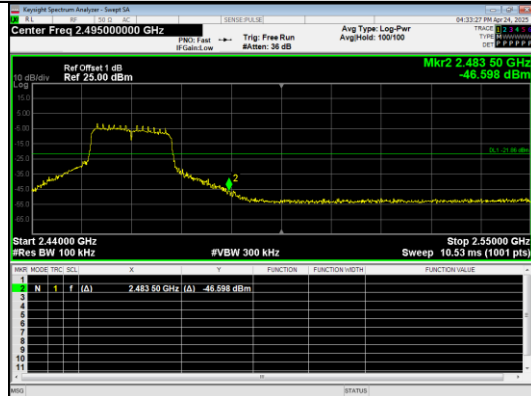
30.0 MHz - 25000.0 MHz IEEE 802.11n_Channel 1_20MHz_Antenna 2



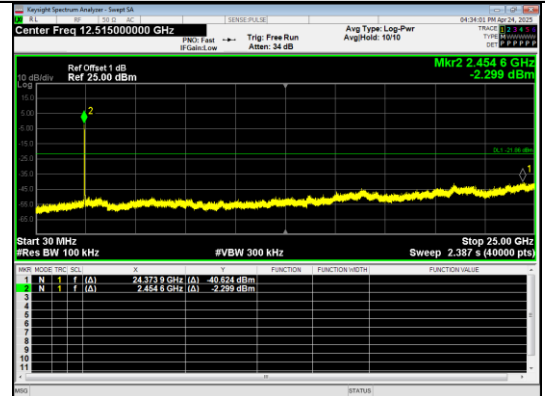
In-Band Reference Level IEEE 802.11n_Channel 6_20MHz_Antenna 2



30.0 MHz - 25000.0 MHz IEEE 802.11n_Channel 6_20MHz_Antenna 2

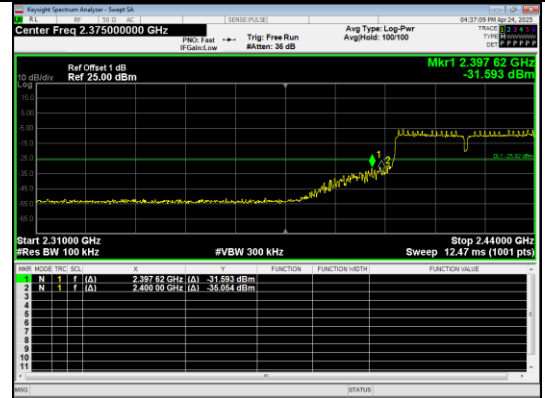
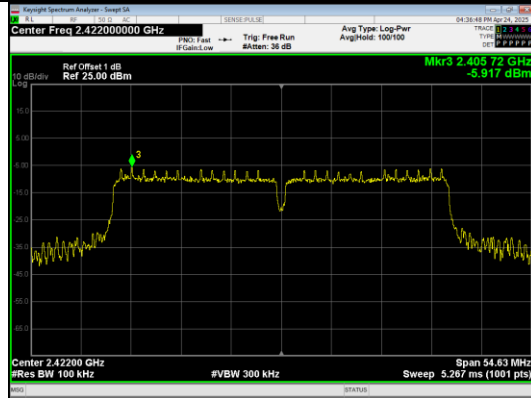


In-Band Reference Level IEEE 802.11n_Channel 11_20MHz_Antenna 2



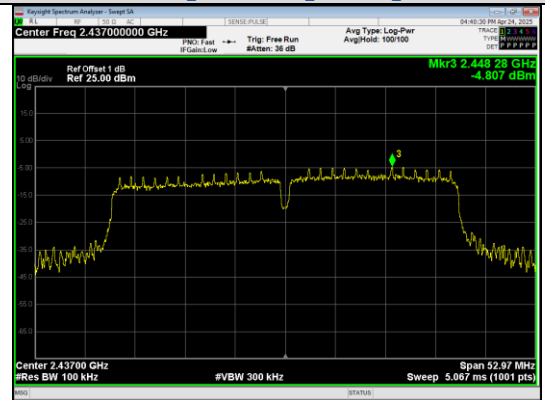
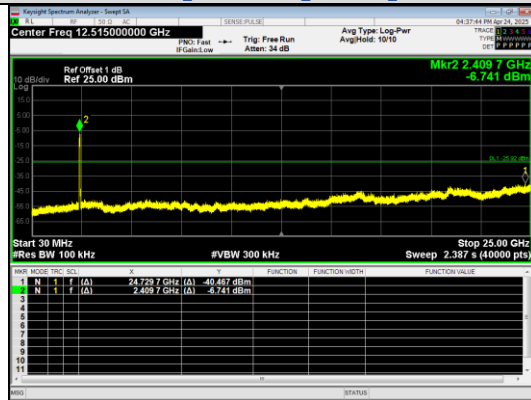
Out Of Band Emission IEEE 802.11n_Channel 11_20MHz_Antenna 2

30.0 MHz - 25000.0 MHz IEEE 802.11n_Channel 11_20MHz_Antenna 2



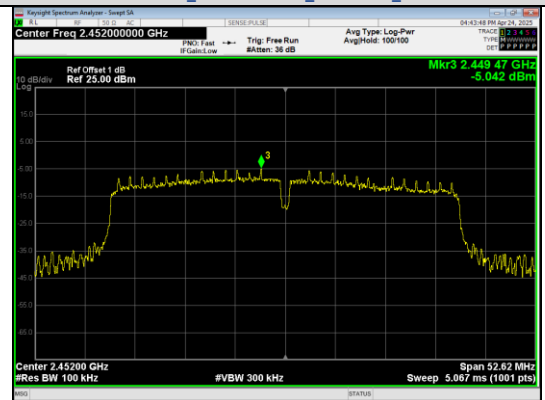
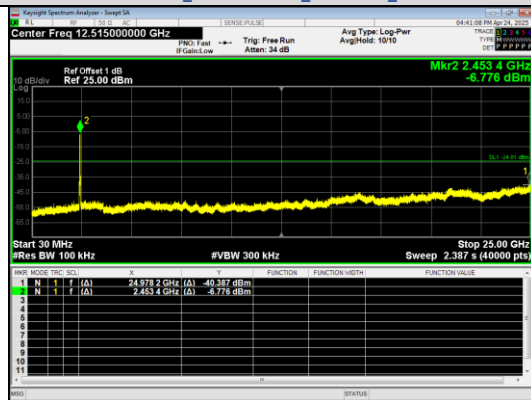
In-Band Reference Level
IEEE 802.11n Channel 3_40MHz_Antenna 2

Out Of Band Emission
IEEE 802.11n Channel 3_40MHz_Antenna 2



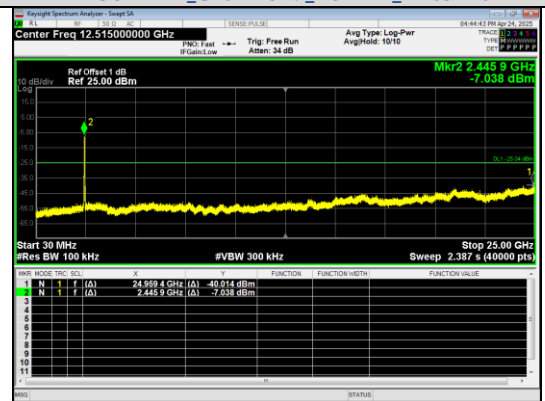
30.0 MHz - 25000.0 MHz
IEEE 802.11n Channel 3_40MHz_Antenna 2

In-Band Reference Level
IEEE 802.11n Channel 6_40MHz_Antenna 2



30.0 MHz - 25000.0 MHz
IEEE 802.11n Channel 6_40MHz_Antenna 2

In-Band Reference Level
IEEE 802.11n Channel 9_40MHz_Antenna 2



Out Of Band Emission

30.0 MHz - 25000.0 MHz



IEEE 802.11n_Channel 9_40MHz_Antenna 2	IEEE 802.11n_Channel 9_40MHz_Antenna 2
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ANT1

Duty Cycle

Test Result

Mode	Data rates	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11b	1	1	8.385	8.567	97.87	0.9787	0.0935	0.1193
		6	8.385	8.640	97.05	0.9705	0.13	0.1193
		11	8.384	8.567	97.86	0.9786	0.0939	0.1193
IEEE 802.11g	1	1	1.396	1.564	89.26	0.8926	0.4934	0.7163
		6	1.396	1.672	83.49	0.8349	0.7837	0.7163
		11	1.396	1.573	88.75	0.8875	0.5183	0.7163
IEEE 802.11n_20	MCS 0	1	1.177	1.355	86.86	0.8686	0.6118	0.8496
		6	1.177	1.346	87.44	0.8744	0.5829	0.8496
		11	1.177	1.346	87.48	0.8748	0.5809	0.8496
IEEE 802.11n_40	MCS 0	3	0.589	0.793	74.25	0.7425	1.293	1.6978
		6	0.589	0.757	77.78	0.7778	1.0913	1.6978
		9	0.589	0.758	77.74	0.7774	1.0936	1.6978

Test Graphs

