

# Appendix Report

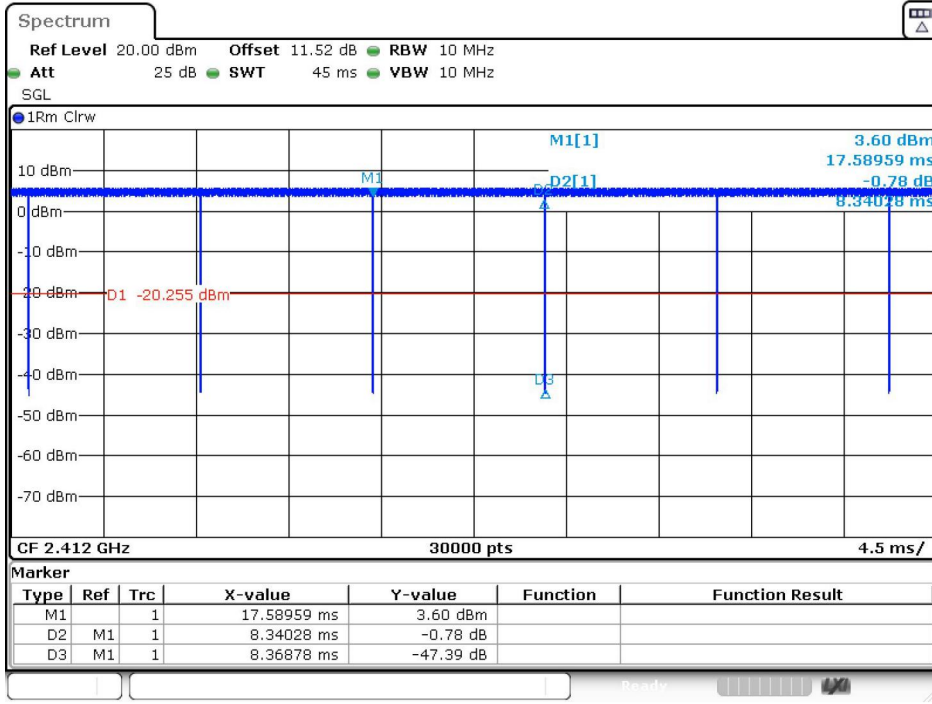
Report No.:	CISRR25010703504
Test Engineer:	Mark Fu
Supervised by:	Rory Huang

## Duty Cycle

### Test Result

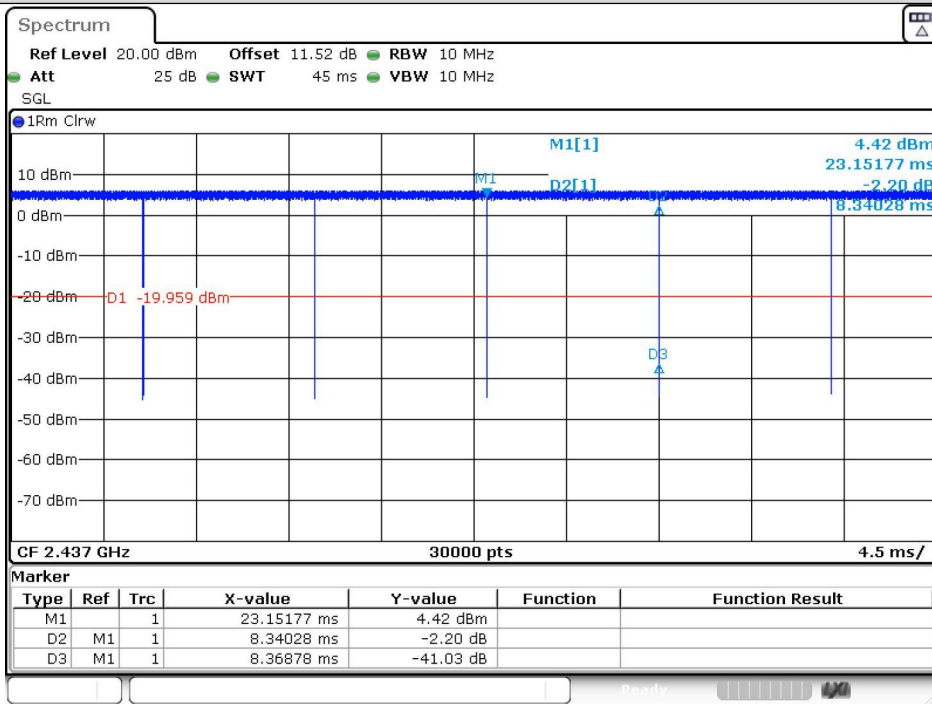
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T	
IEEE 802.11b	1	1	1	8.340	8.369	99.66	0.9966	0.0148	0.1199	
		6		8.340	8.369	99.66	0.9966	0.0148	0.1199	
		11		8.319	8.347	99.66	0.9966	0.0148	0.1202	
IEEE 802.11g		1		1.396	1.429	97.69	0.9769	0.1015	0.7163	
		6		1.396	1.429	97.69	0.9769	0.1015	0.7163	
		11		1.395	1.429	97.62	0.9762	0.1046	0.7168	
IEEE 802.11n_20		MCS 0		1	1.304	1.337	97.53	0.9753	0.1086	0.7669
				6	1.293	1.327	97.44	0.9744	0.1126	0.7734
				11	1.293	1.327	97.44	0.9744	0.1126	0.7734
IEEE 802.11n_40	3		0.650	0.684	95.00	0.9500	0.2228	1.5385		
	6		0.650	0.684	94.94	0.9494	0.2255	1.5385		
	9		0.650	0.684	95.00	0.9500	0.2228	1.5385		

### Test Graphs



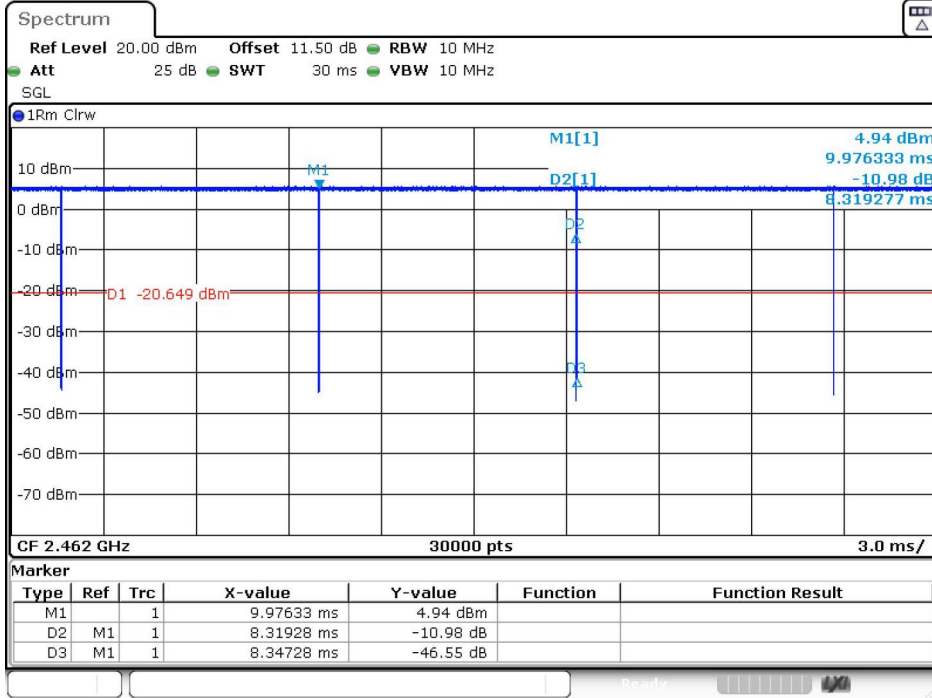
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IEEE 802.11b\_20MHz\_Channel 1



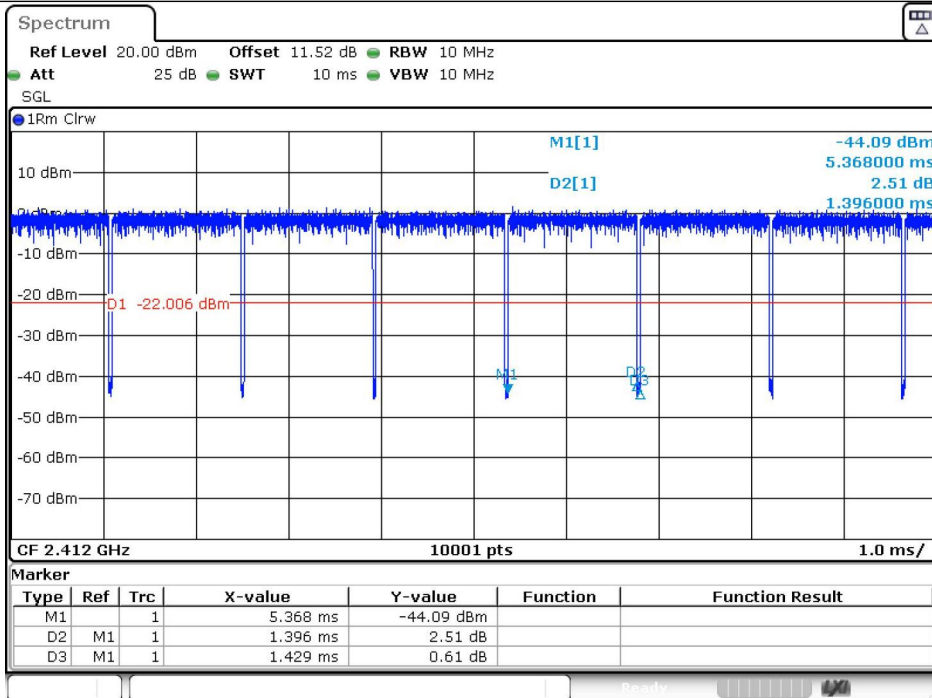
Date: 11.JAN.2025 10:08:02

IEEE 802.11b\_20MHz\_Channel 6



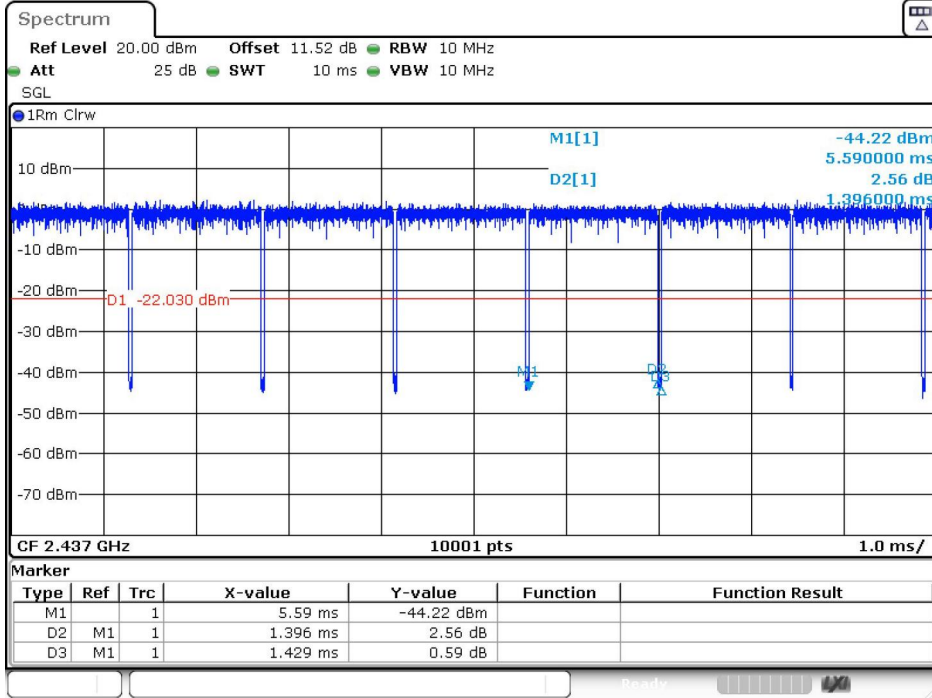
Date: 11.JAN.2025 10:11:17

IEEE 802.11b\_20MHz\_Channel 11



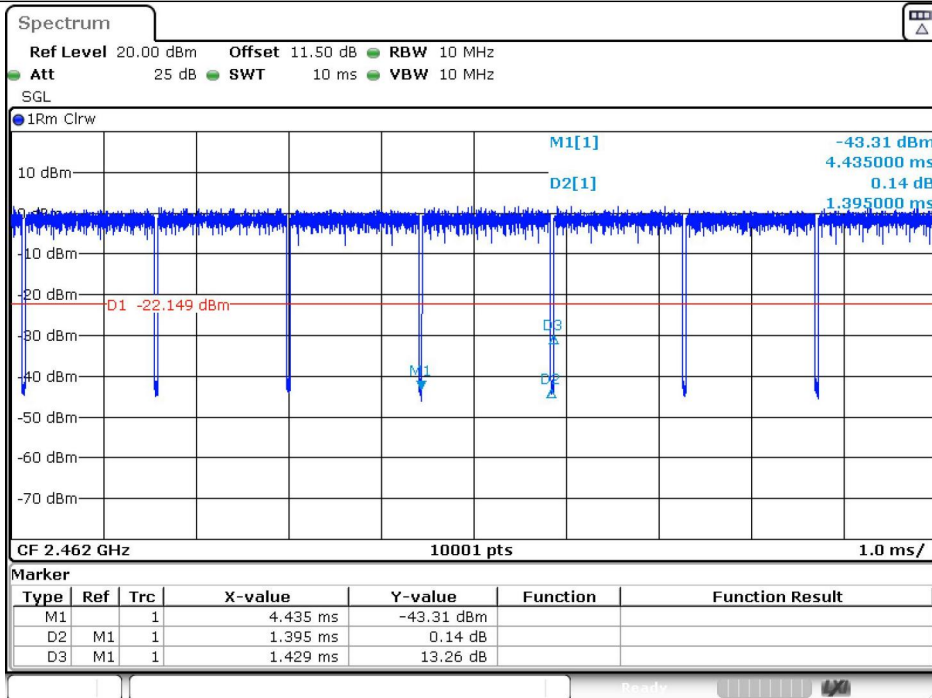
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IEEE 802.11g\_20MHz\_Channel 1



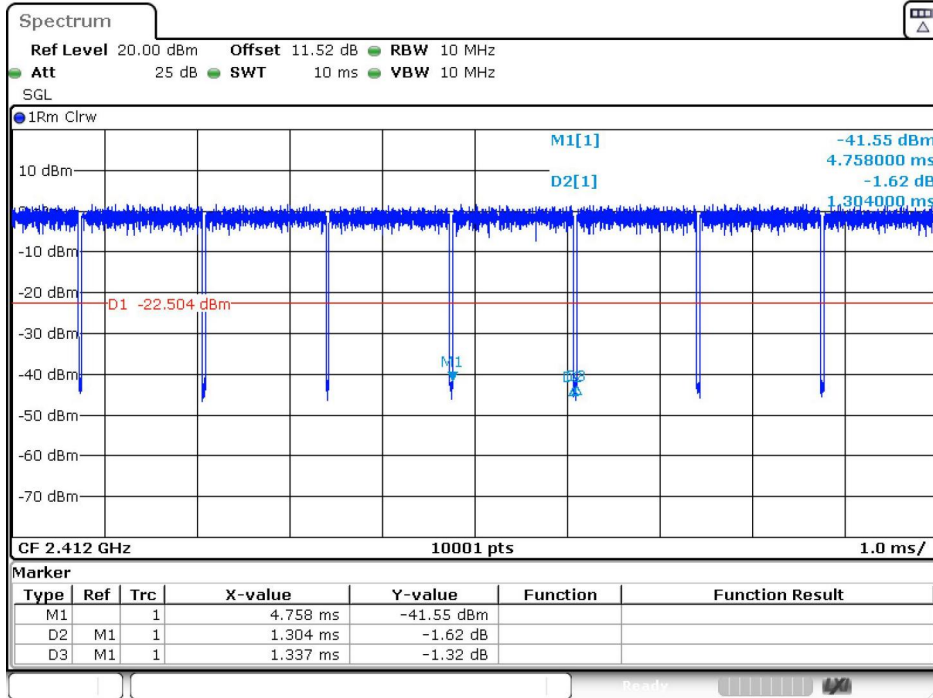
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IEEE 802.11g\_20MHz\_Channel 6



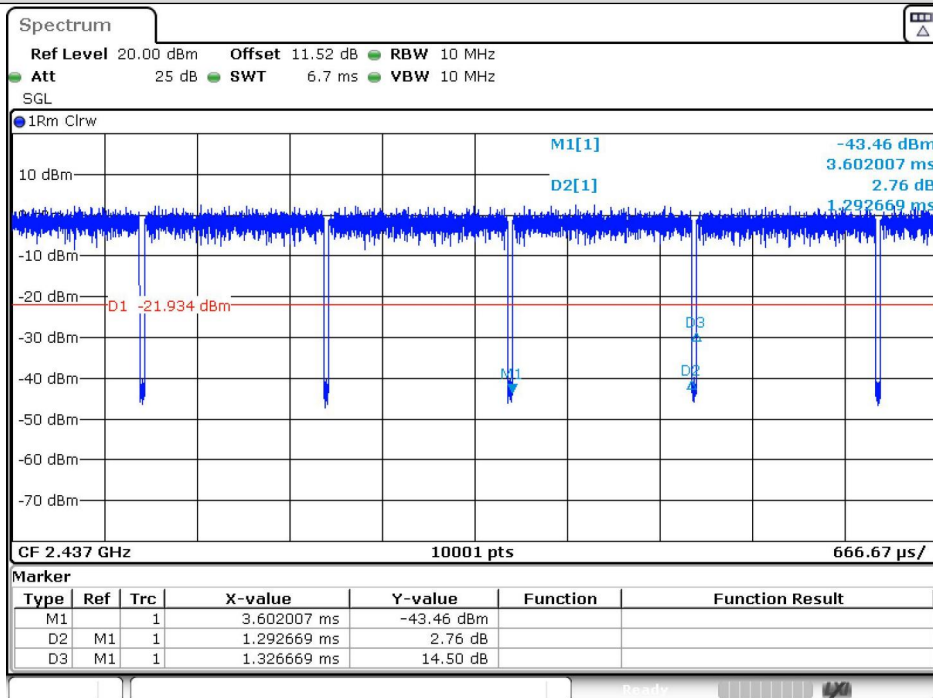
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IEEE 802.11g\_20MHz\_Channel 11



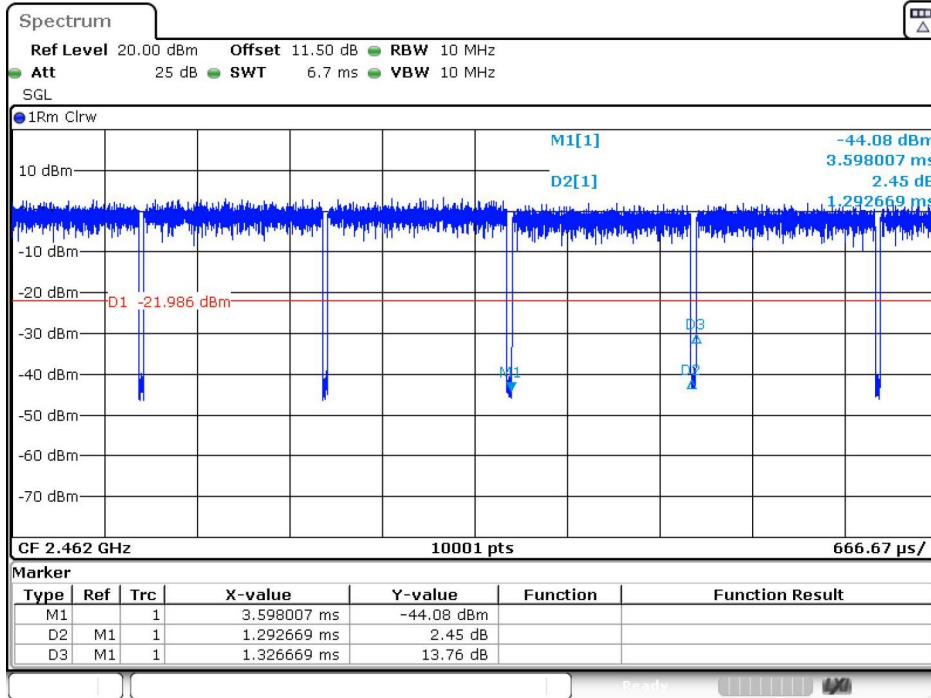
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IEEE 802.11n\_20MHz\_Channel 1



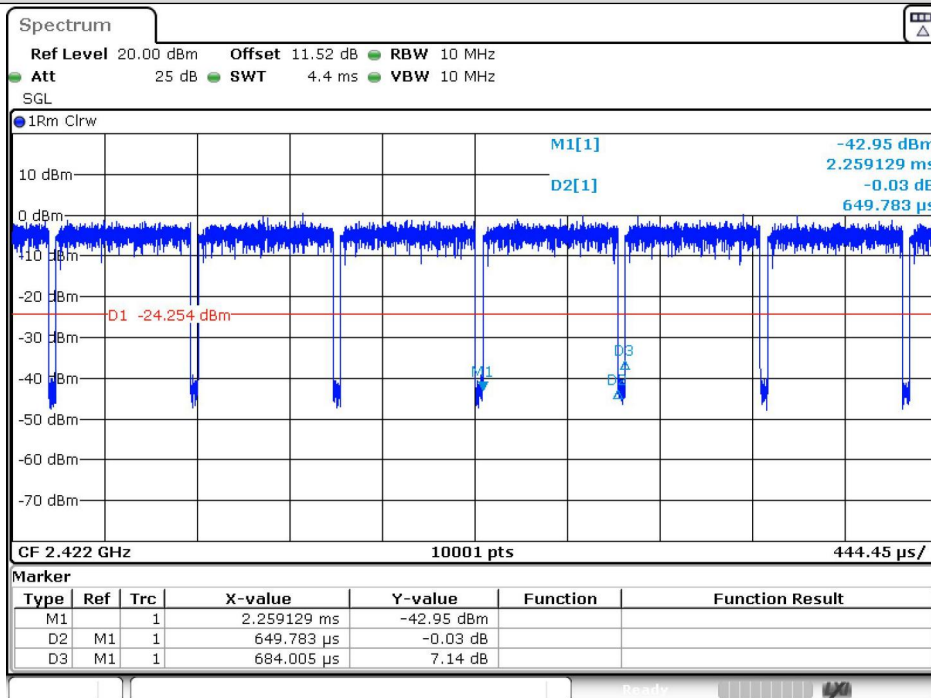
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IEEE 802.11n\_20MHz\_Channel 6



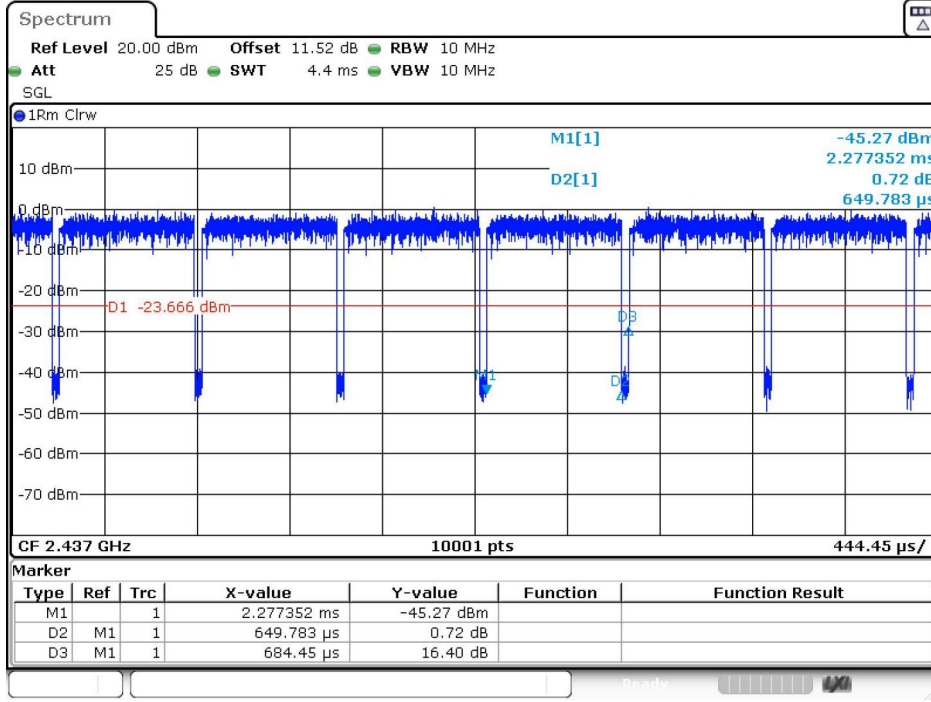
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IEEE 802.11n\_20MHz\_Channel 11



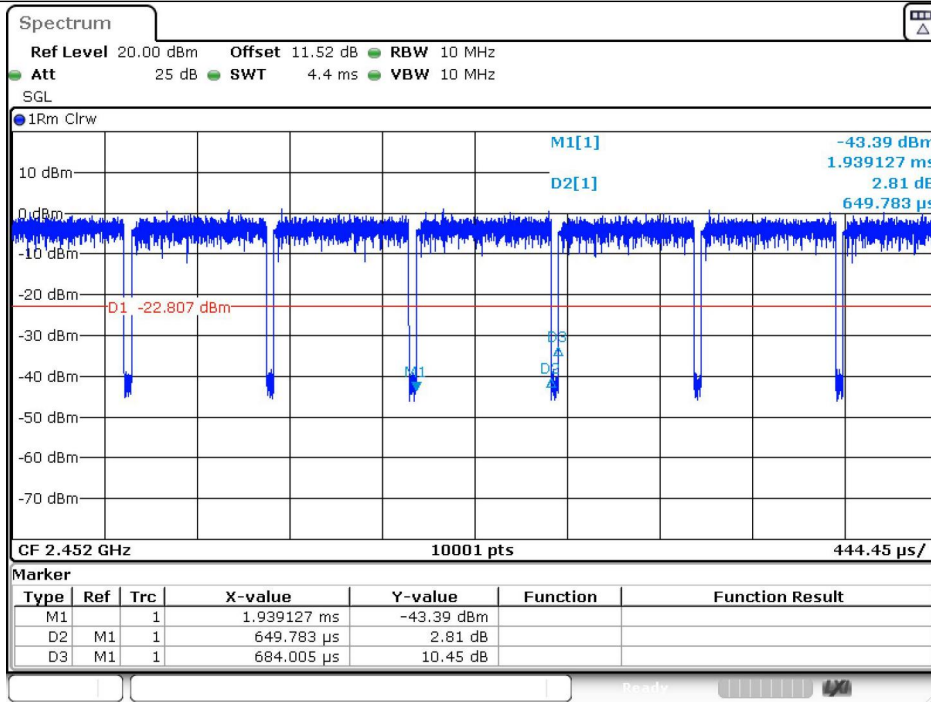
Date: 11.JAN.2025 10:42:45

IEEE 802.11n\_40MHz\_Channel 3



Date: 11.JAN.2025 10:45:38

IEEE 802.11n\_40MHz\_Channel 6



Date: 11.JAN.2025 10:48:37

IEEE 802.11n\_40MHz\_Channel 9

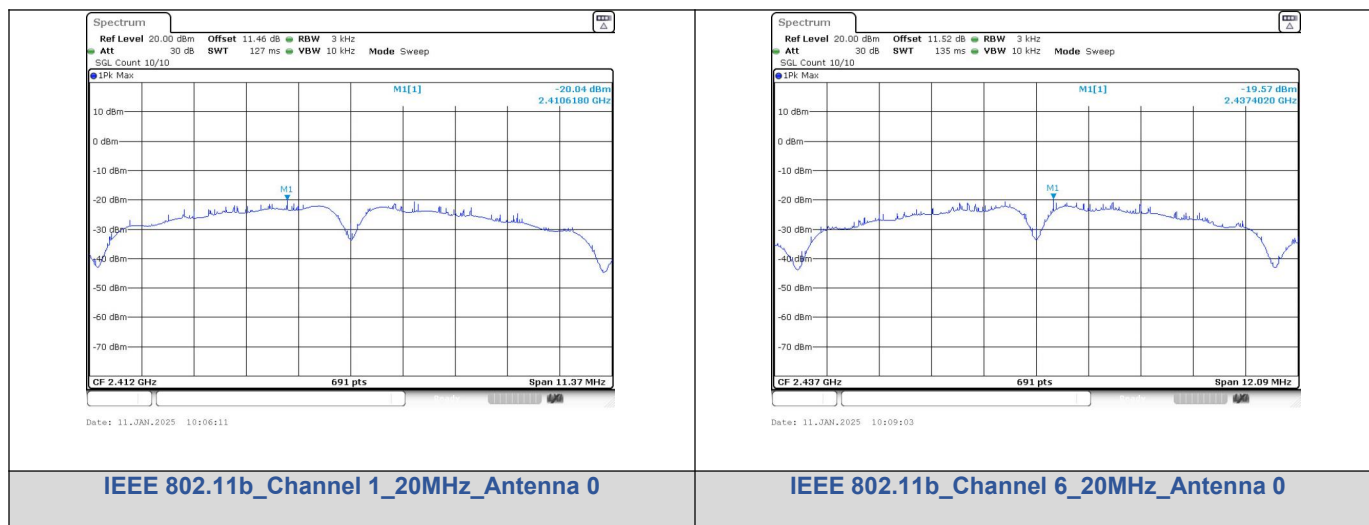


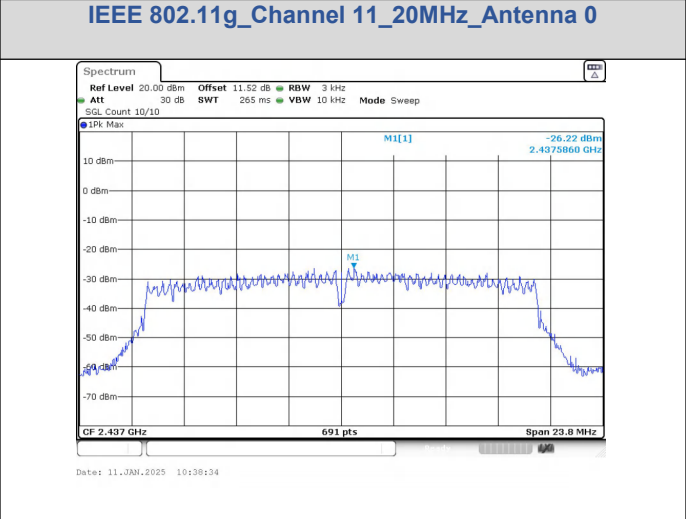
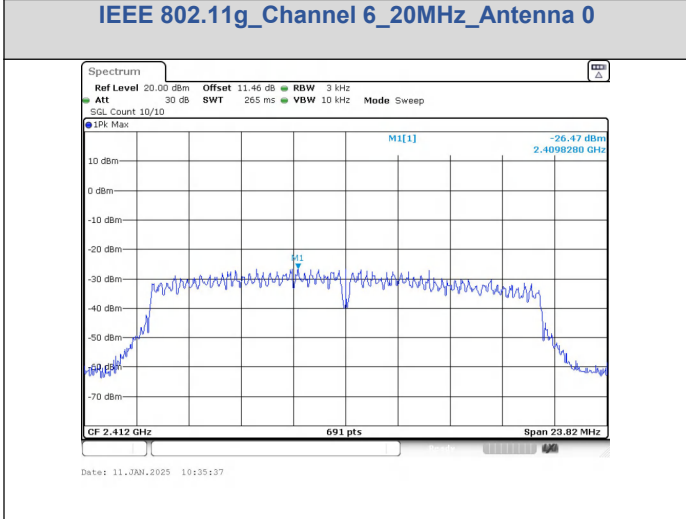
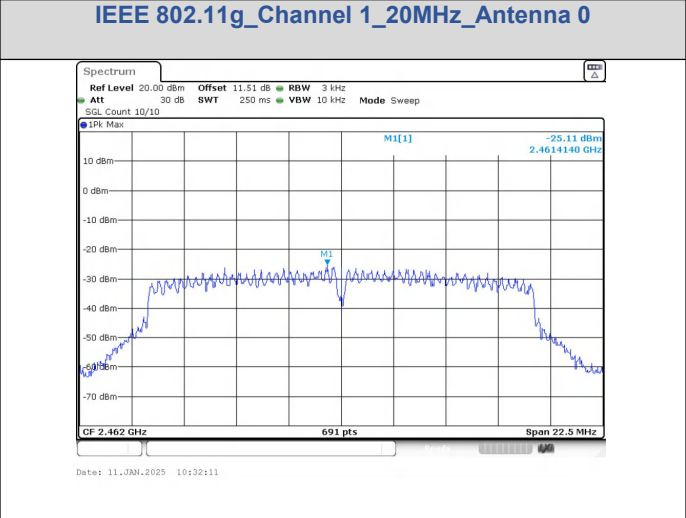
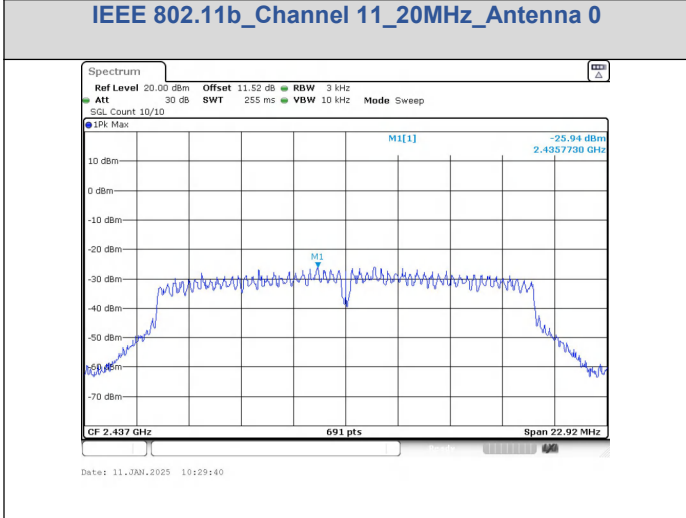
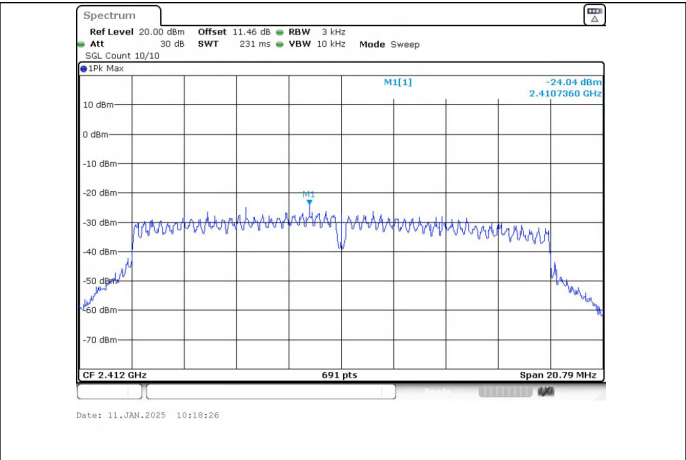
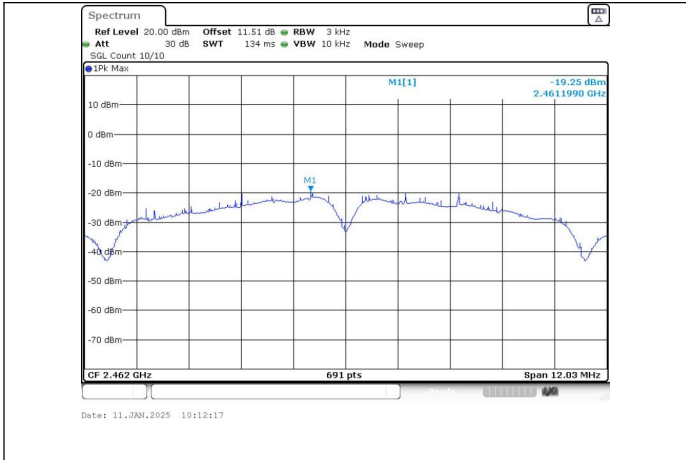
## Power Spectral Density

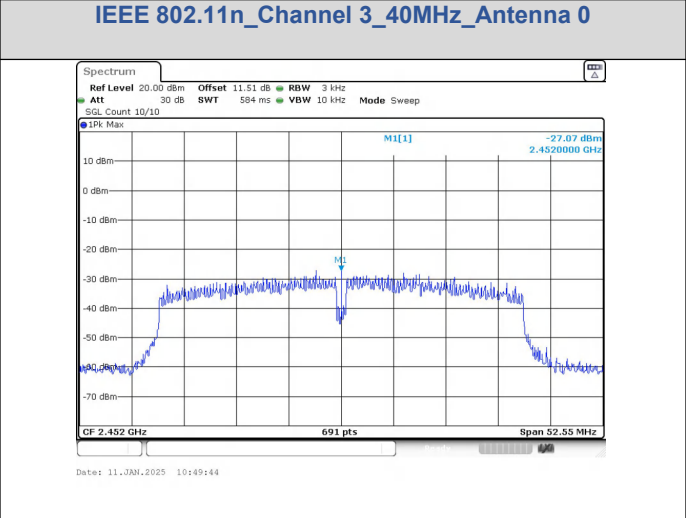
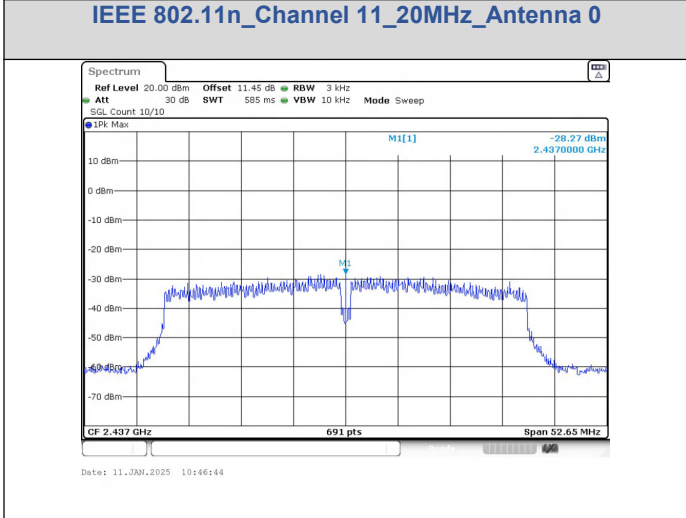
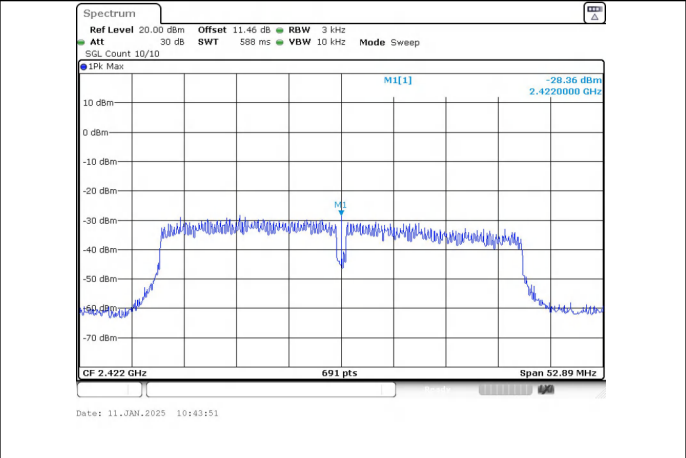
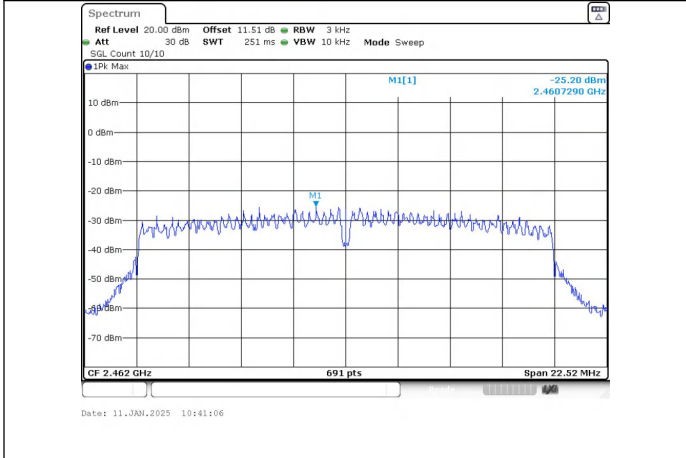
### Test Result

Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	-20.040	≤8	PASS
	6	-19.570		PASS
	11	-19.250		PASS
IEEE 802.11g	1	-24.040		PASS
	6	-25.940		PASS
	11	-25.110		PASS
IEEE 802.11n_20	1	-26.470		PASS
	6	-26.220		PASS
	11	-25.200		PASS
IEEE 802.11n_40	3	-28.360		PASS
	6	-28.270		PASS
	9	-27.070		PASS

### Test Graphs







## Conducted Output Power

### Test Result

#### Conducted Output Power

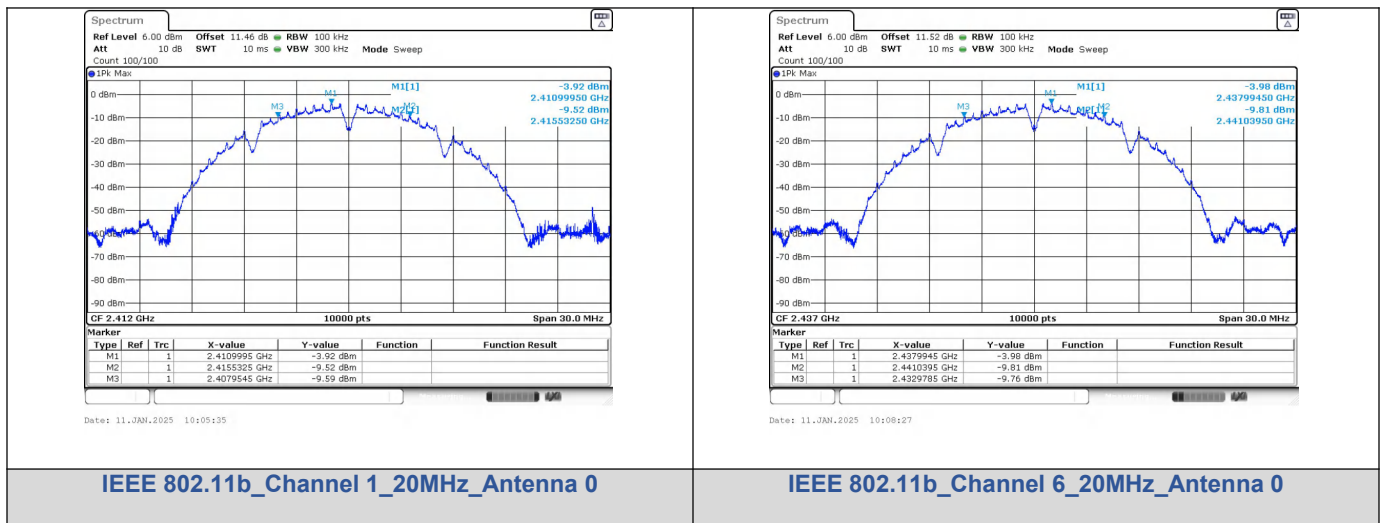
Mode	Channel	Ant. 0 (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	8.06	≤30	PASS
	6	8.37	≤30	PASS
	11	8.22	≤30	PASS
IEEE 802.11g	1	8.01	≤30	PASS
	6	8.40	≤30	PASS
	11	8.97	≤30	PASS
IEEE 802.11n_20	1	8.54	≤30	PASS
	6	8.54	≤30	PASS
	11	8.84	≤30	PASS
IEEE 802.11n_40	3	8.18	≤30	PASS
	6	8.52	≤30	PASS
	9	8.70	≤30	PASS

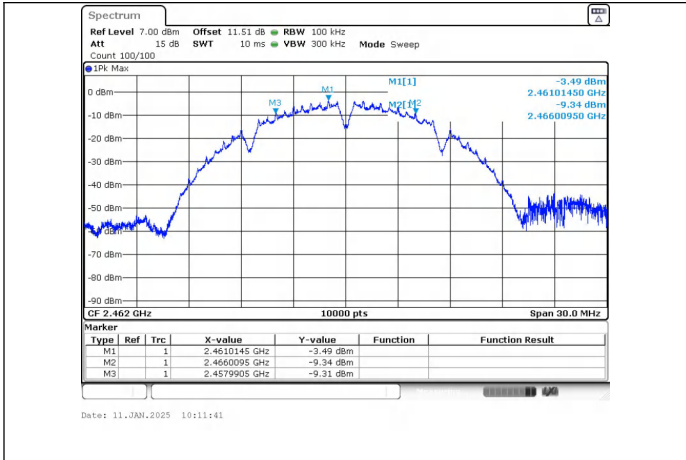
### 6dB Bandwidth

#### Test Result

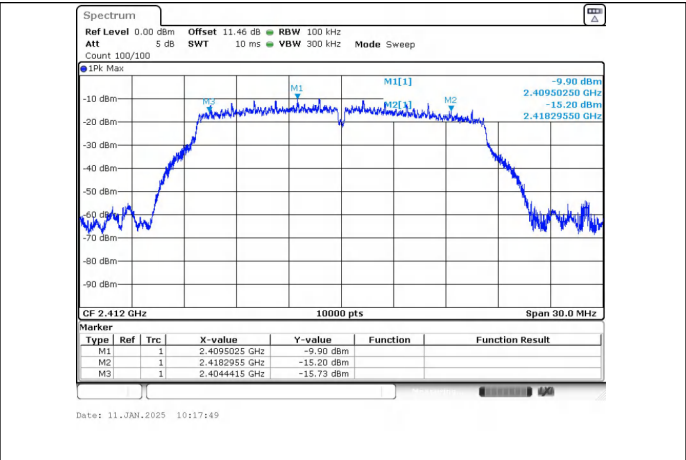
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	7.580	≥0.5	PASS
	6		2437	8.060		PASS
	11		2462	8.020		PASS
IEEE 802.11g	1		2412	13.86		PASS
	6		2437	15.28		PASS
	11		2462	15.00		PASS
IEEE 802.11n_20	1		2412	15.88		PASS
	6		2437	15.87		PASS
	11		2462	15.01		PASS
IEEE 802.11n_40	3		2422	35.26		PASS
	6		2437	35.10		PASS
	9		2452	35.03		PASS

#### Test Graphs

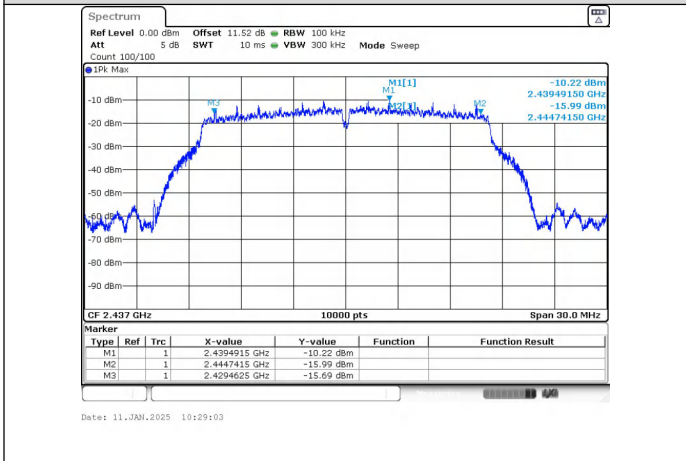




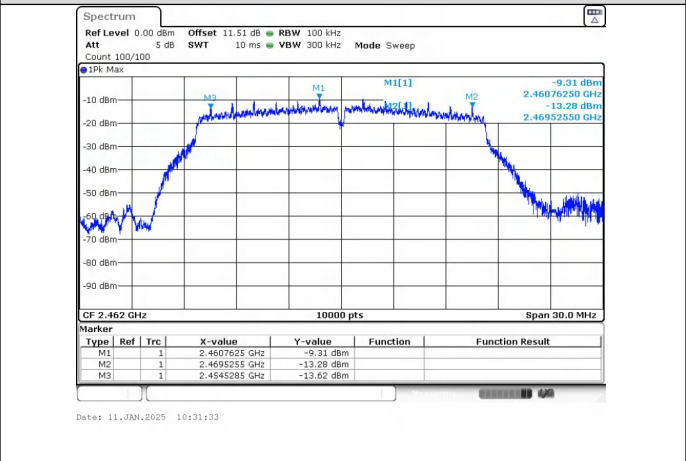
IEEE 802.11b\_Channel 11\_20MHz\_Antenna 0



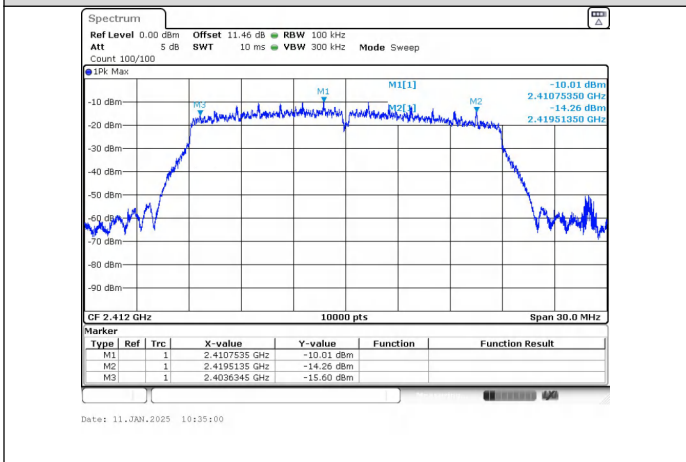
IEEE 802.11g\_Channel 1\_20MHz\_Antenna 0



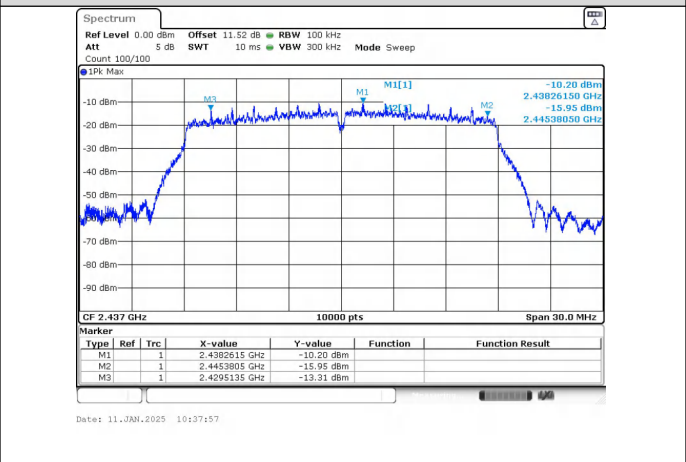
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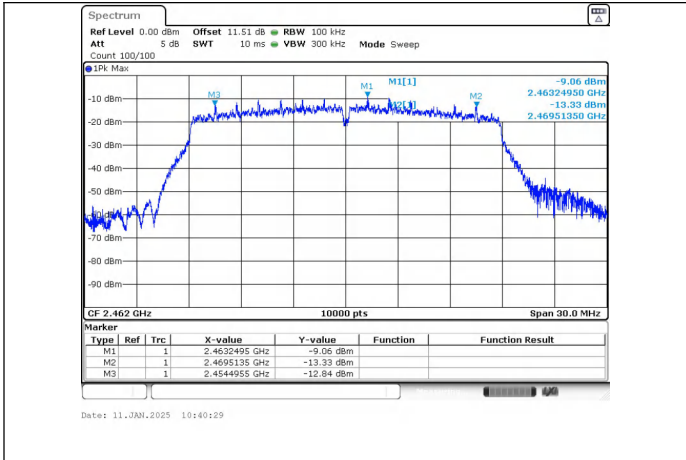
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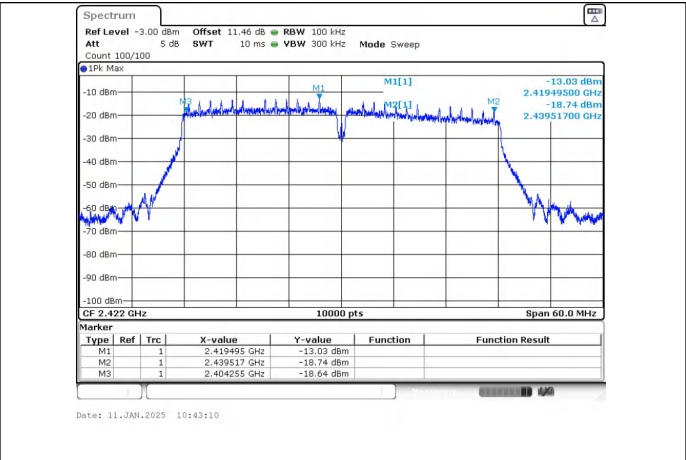
IEEE 802.11n\_Channel 1\_20MHz\_Antenna 0



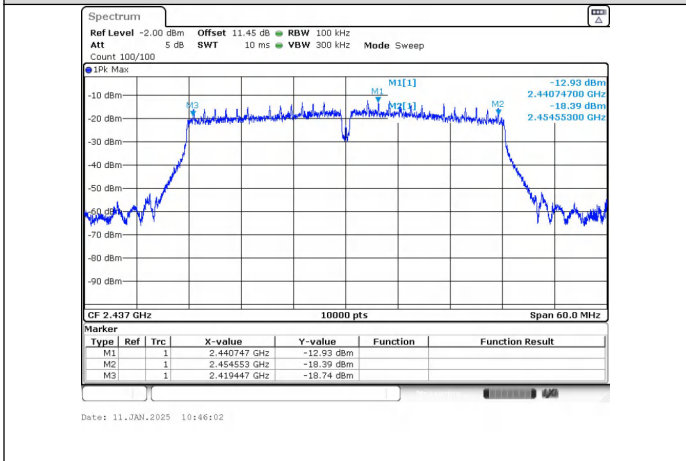
IEEE 802.11n\_Channel 6\_20MHz\_Antenna 0



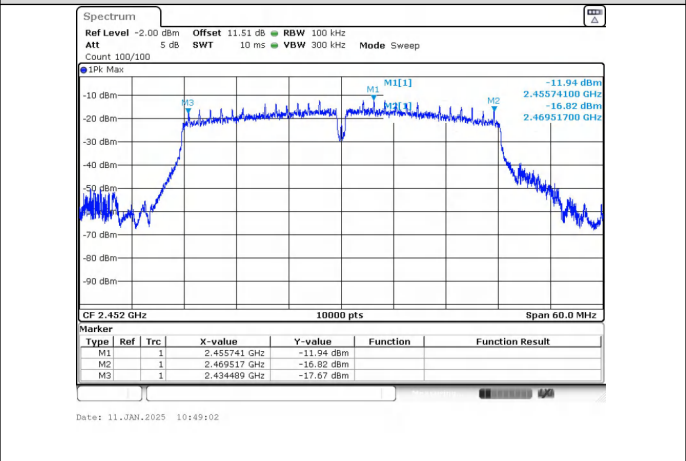
IEEE 802.11n\_Channel 11\_20MHz\_Antenna 0



IEEE 802.11n\_Channel 3\_40MHz\_Antenna 0



IEEE 802.11n\_Channel 6\_40MHz\_Antenna 0



IEEE 802.11n\_Channel 9\_40MHz\_Antenna 0

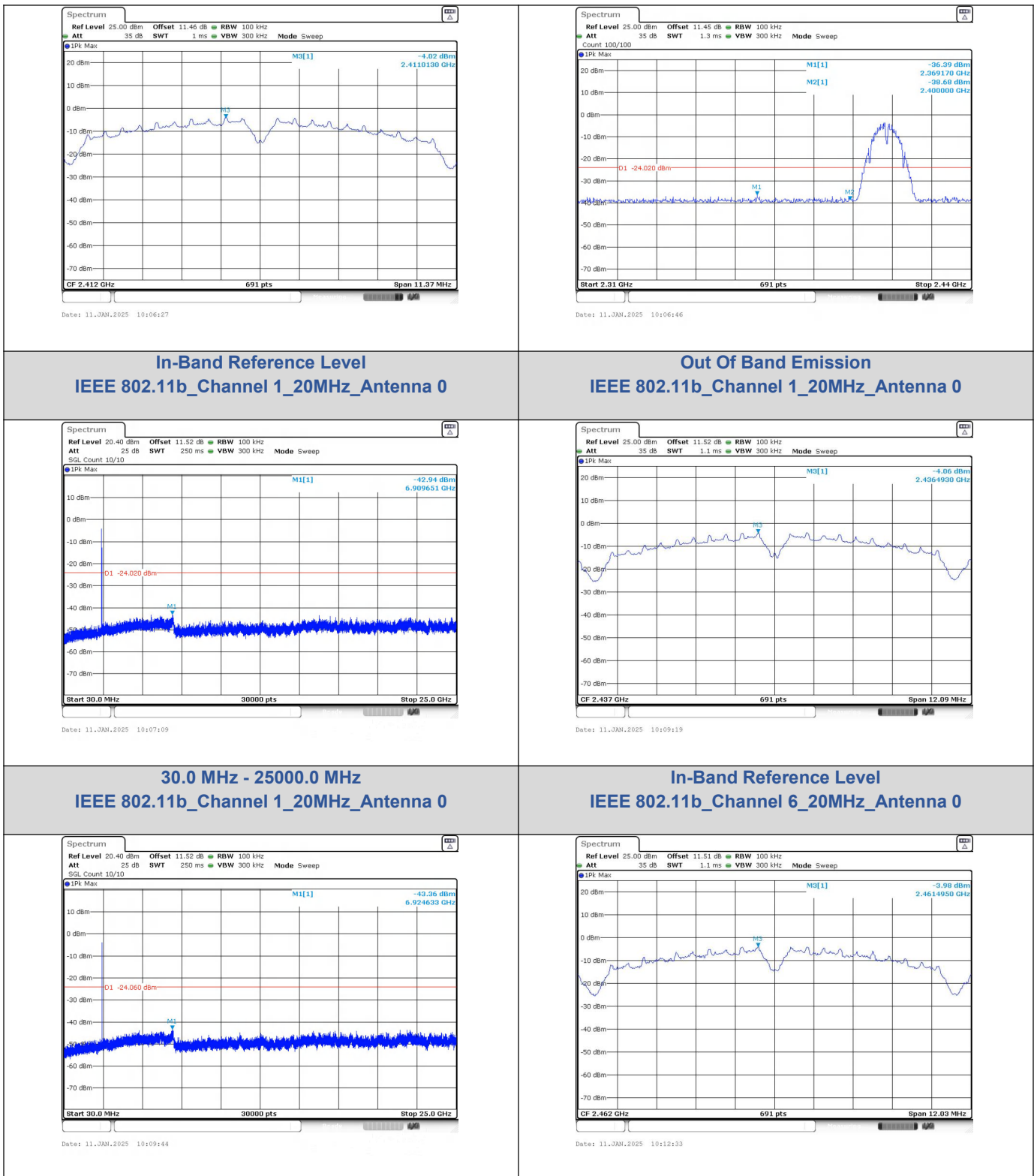
### Conducted Out Of Band Emission

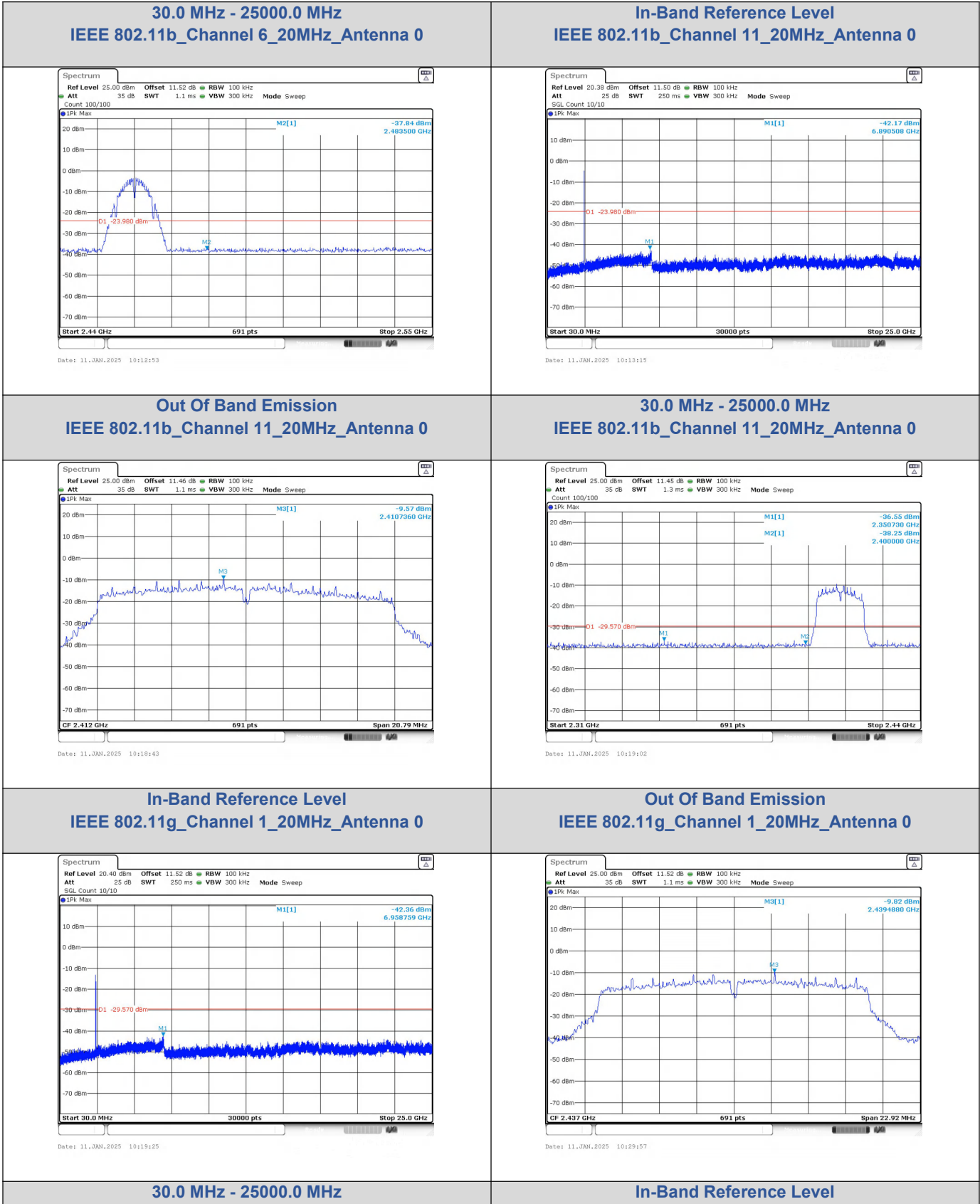
#### Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	
IEEE 802.11b	1	0	2369.17	-36.392	-24.02	-12.372	PASS	
			2400.00	-38.680	-24.02	-14.660	PASS	
			6909.70	-42.941	-24.02	-18.921	PASS	
	6		6924.63	-43.362	-24.06	-19.302	PASS	
			11	2483.50	-37.840	-23.98	-13.860	PASS
				6890.51	-42.167	-23.98	-18.187	PASS
IEEE 802.11g	1		2350.73	-36.548	-29.57	-6.978	PASS	
			2400.00	-38.250	-29.57	-8.680	PASS	
			6958.80	-42.363	-29.57	-12.793	PASS	
	6		6904.66	-43.448	-30.34	-13.108	PASS	
			11	2483.50	-38.930	-29.23	-9.700	PASS
				22114.7	-43.541	-29.23	-14.311	PASS
IEEE 802.11n_20	1		2356.75	-36.723	-29.83	-6.893	PASS	
			2400.00	-38.410	-29.83	-8.580	PASS	
			6947.10	-42.544	-29.83	-12.714	PASS	
	6		6955.43	-43.063	-30.09	-12.973	PASS	
			11	2483.50	-38.630	-29.68	-8.950	PASS
				6846.39	-42.148	-29.68	-12.468	PASS
IEEE 802.11n_40	3	2359.38	-36.246	-32.88	-3.366	PASS		
		2400.00	-38.750	-32.88	-5.870	PASS		
		20314.4	-43.795	-32.88	-10.915	PASS		
	6	19945.7	-43.489	-31.74	-11.749	PASS		
		9	2483.50	-38.550	-31.96	-6.590	PASS	
			6932.96	-43.159	-31.96	-11.199	PASS	

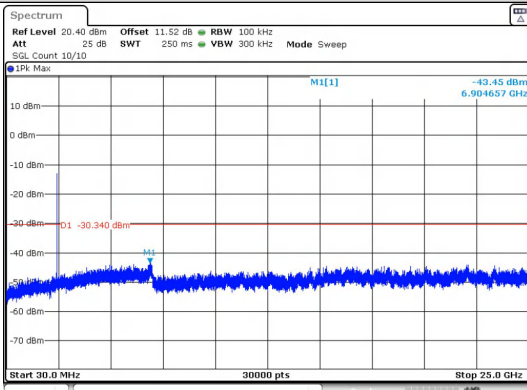


### Test Graphs



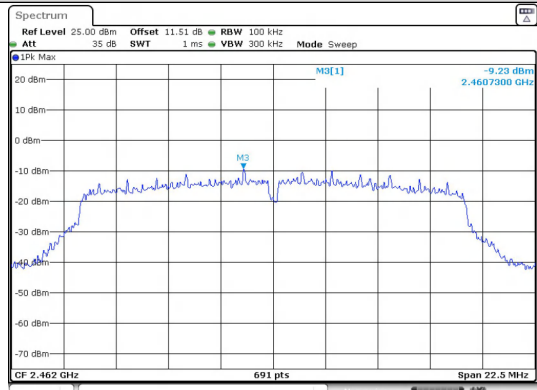


IEEE 802.11g\_Channel 1\_20MHz\_Antenna 0



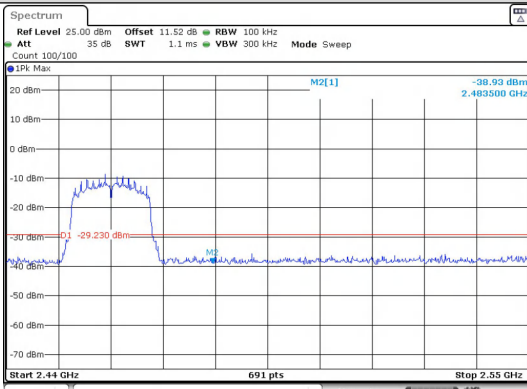
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IEEE 802.11g\_Channel 6\_20MHz\_Antenna 0



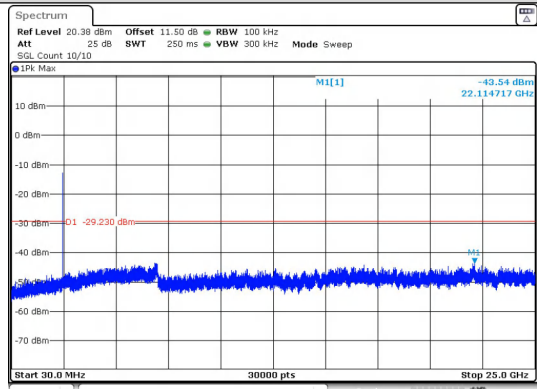
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30.0 MHz - 25000.0 MHz  
IEEE 802.11g\_Channel 6\_20MHz\_Antenna 0



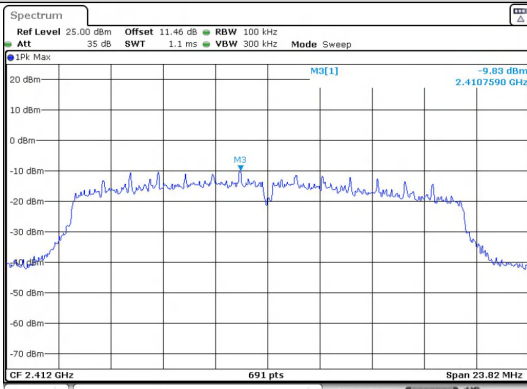
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In-Band Reference Level  
IEEE 802.11g\_Channel 11\_20MHz\_Antenna 0



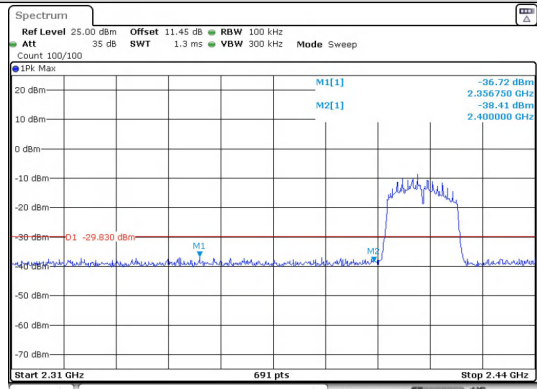
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Out Of Band Emission  
IEEE 802.11g\_Channel 11\_20MHz\_Antenna 0



Date: 11.JAN.2025 10:35:54

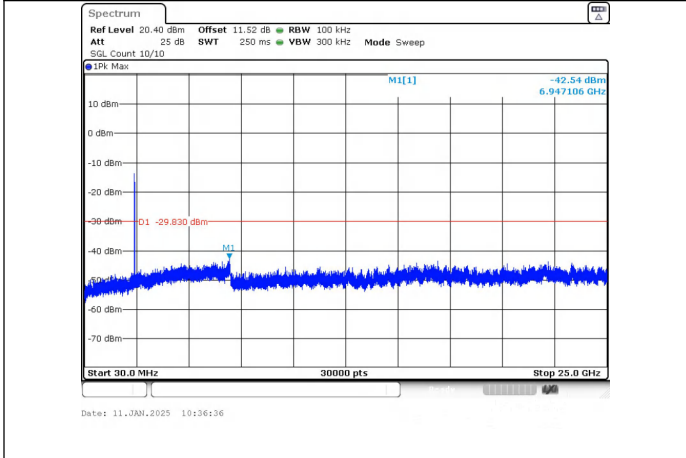
30.0 MHz - 25000.0 MHz  
IEEE 802.11g\_Channel 11\_20MHz\_Antenna 0



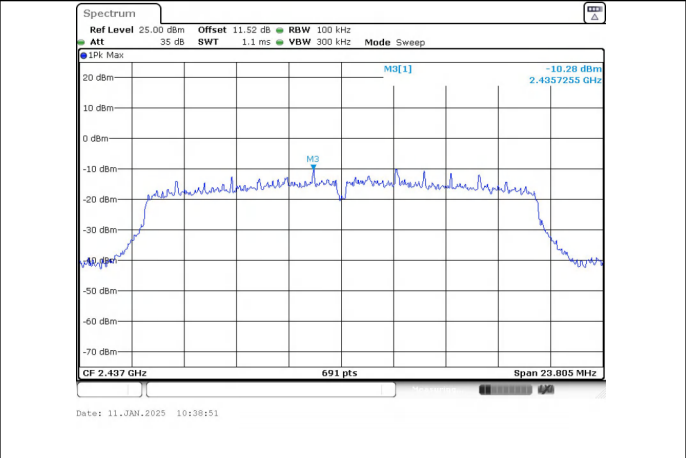
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In-Band Reference Level  
IEEE 802.11n\_Channel 1\_20MHz\_Antenna 0

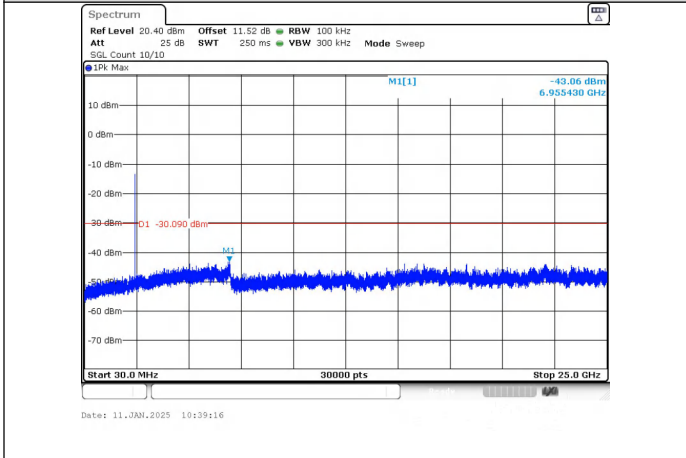
Out Of Band Emission  
IEEE 802.11n\_Channel 1\_20MHz\_Antenna 0



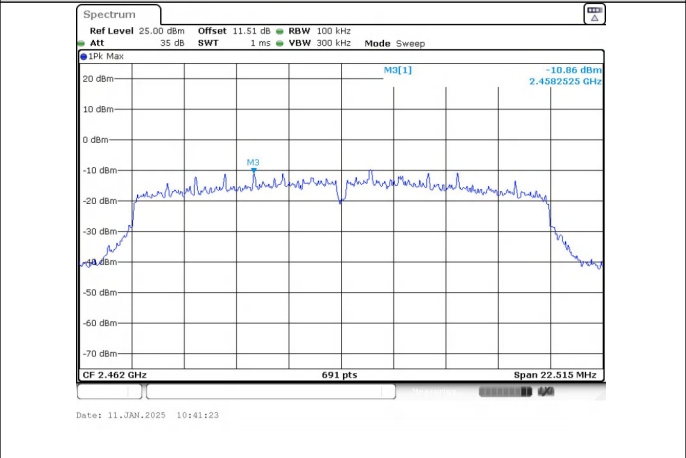
**30.0 MHz - 25000.0 MHz**  
**IEEE 802.11n\_Channel 1\_20MHz\_Antenna 0**



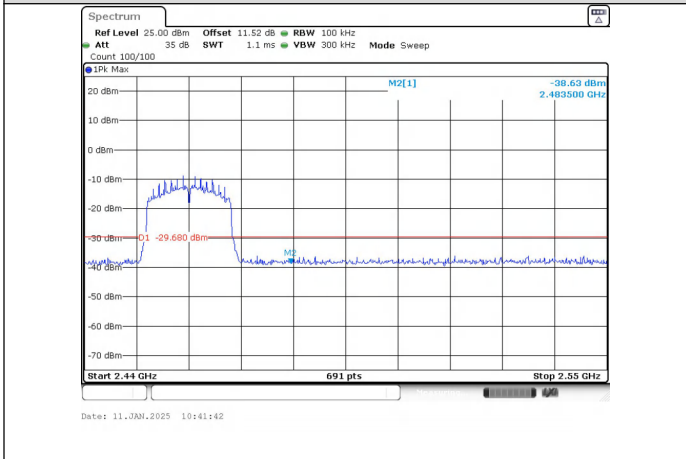
**In-Band Reference Level**  
**IEEE 802.11n\_Channel 6\_20MHz\_Antenna 0**



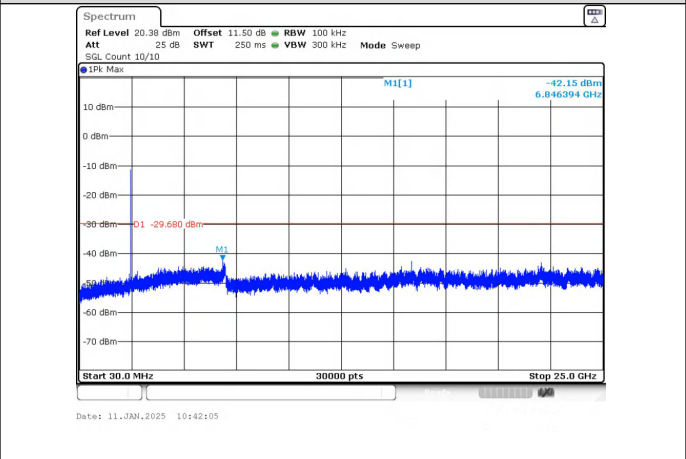
**30.0 MHz - 25000.0 MHz**  
**IEEE 802.11n\_Channel 6\_20MHz\_Antenna 0**



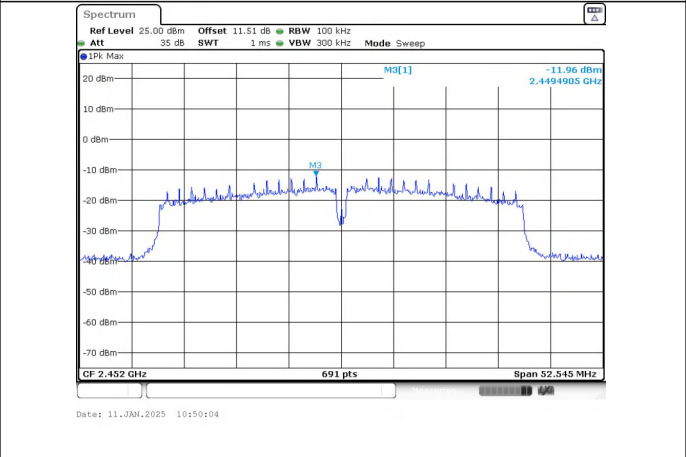
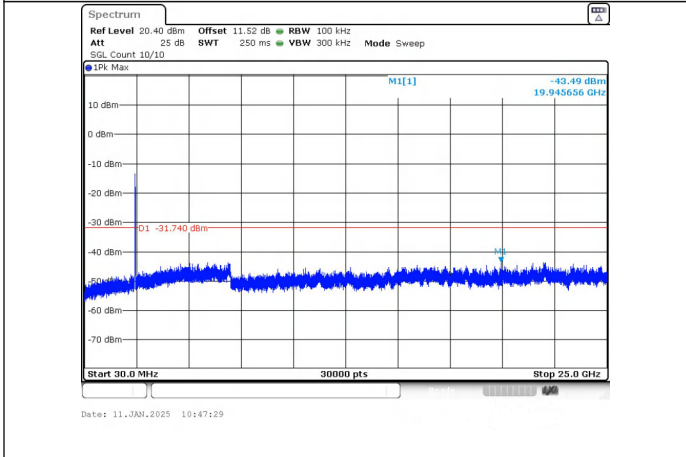
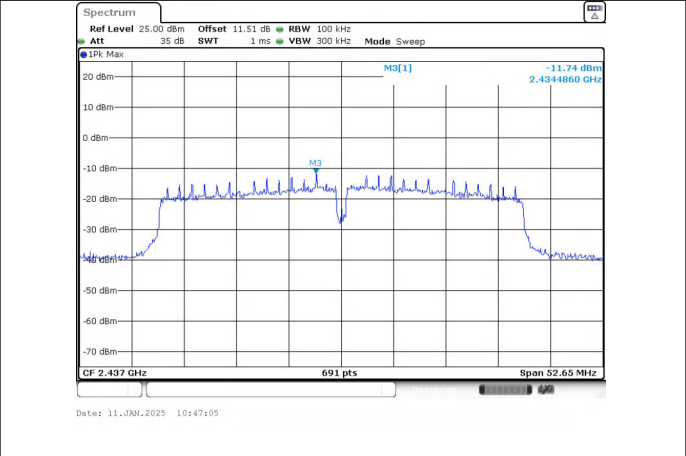
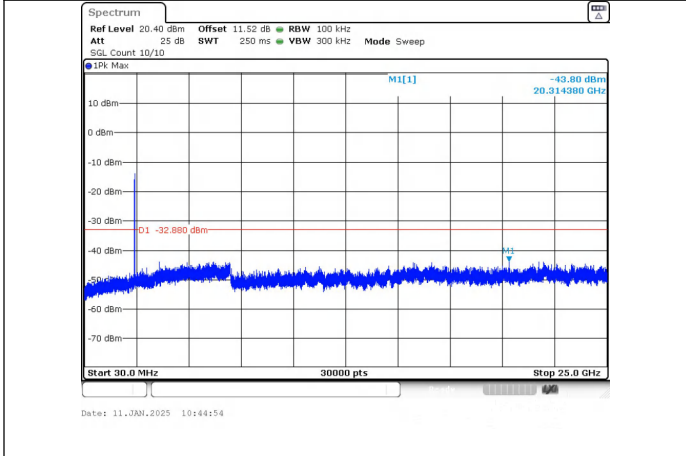
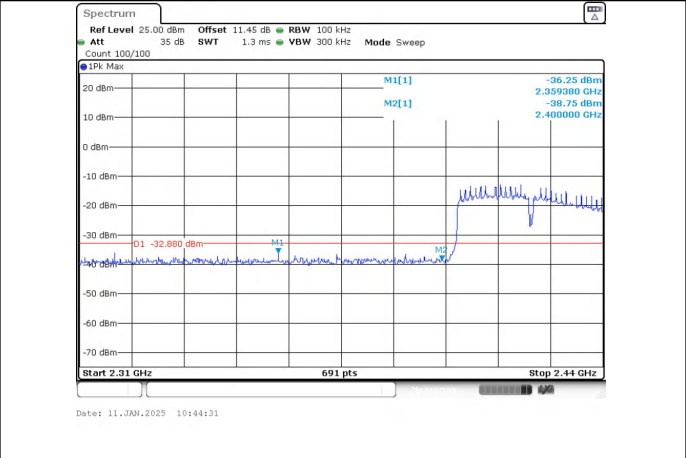
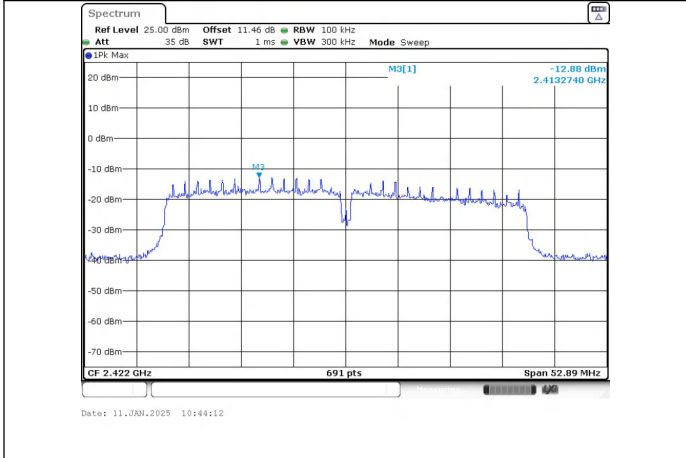
**In-Band Reference Level**  
**IEEE 802.11n\_Channel 11\_20MHz\_Antenna 0**

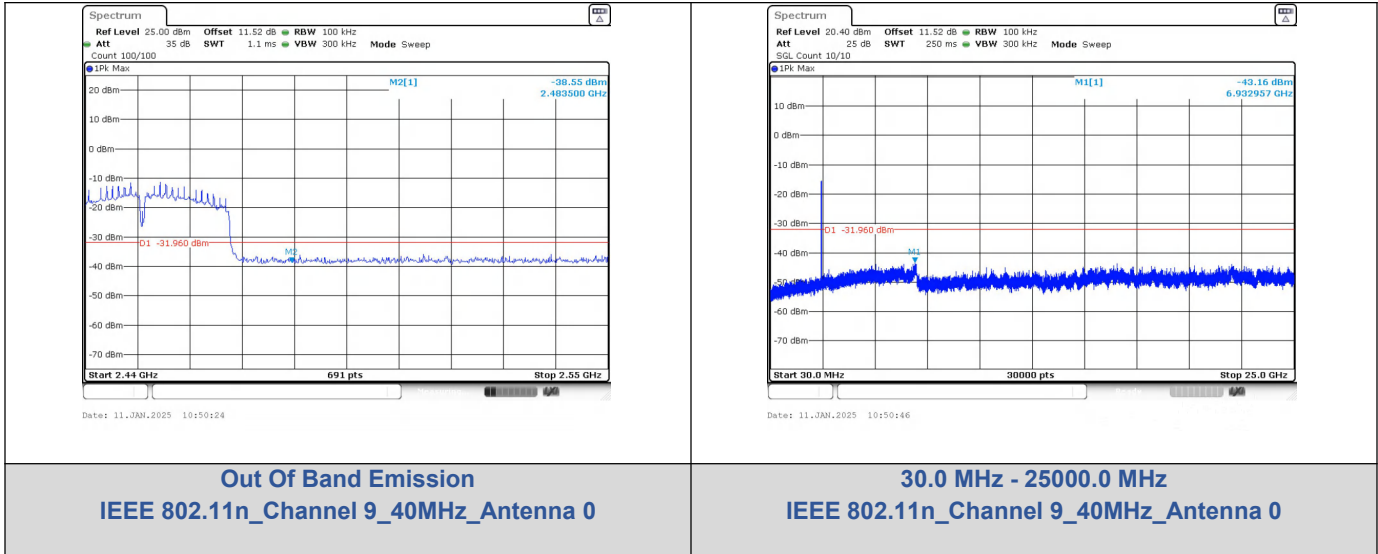


**Out Of Band Emission**  
**IEEE 802.11n\_Channel 11\_20MHz\_Antenna 0**



**30.0 MHz - 25000.0 MHz**  
**IEEE 802.11n\_Channel 11\_20MHz\_Antenna 0**





-----End of the report-----