

RF Test Data for 2.4G Wi-Fi (Conducted Measurements)

General Description of EUT	
EUT Name:	POS System
Model:	ODS-156
Sample ID:	HC-C-202512-0041-01-01#
Test Standard:	FCC Part 15.247
Environmental Conditions	
Ambient Temperature:	25℃
Ambient Humidity:	45%RH
Test Power Supply:	AC 120V/60Hz
Test Engineer:	Gold Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202512-0041-22.	

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1: DTS Bandwidth

1.1 Test Result

TestMode	Ant.	Frequency [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.200	2406.960	2417.160	0.5	PASS
11B	Ant1	2437	10.160	2432.000	2442.160	0.5	PASS
11B	Ant1	2462	10.160	2456.960	2467.120	0.5	PASS
11G	Ant1	2412	16.400	2403.840	2420.240	0.5	PASS
11G	Ant1	2437	16.440	2428.840	2445.280	0.5	PASS
11G	Ant1	2462	16.360	2453.880	2470.240	0.5	PASS
11N20SISO	Ant1	2412	17.520	2403.280	2420.800	0.5	PASS
11N20SISO	Ant1	2437	17.520	2428.280	2445.800	0.5	PASS
11N20SISO	Ant1	2462	17.560	2453.280	2470.840	0.5	PASS
11N40SISO	Ant1	2422	35.920	2404.080	2440.000	0.5	PASS
11N40SISO	Ant1	2437	36.080	2419.080	2455.160	0.5	PASS
11N40SISO	Ant1	2452	36.240	2433.920	2470.160	0.5	PASS



11N20SISO-Ant1-2412-PASS



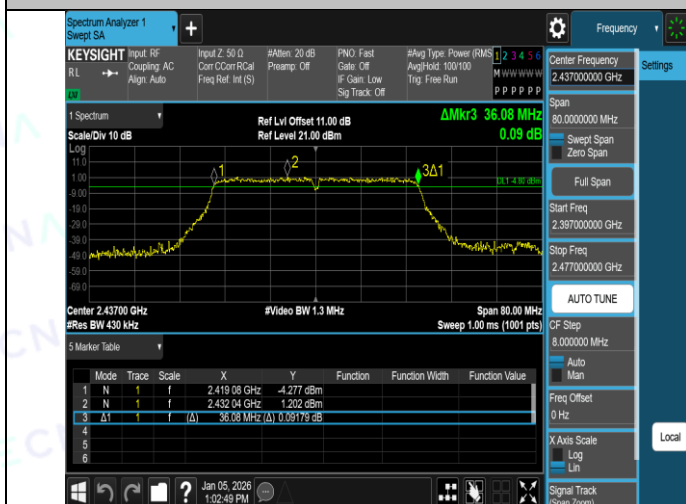
11N20SISO-Ant1-2437-PASS



11N20SISO-Ant1-2462-PASS



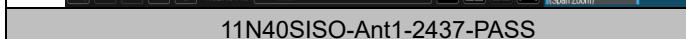
11N20SISO-Ant1-2437-PASS



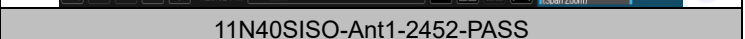
11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS

2: Occupied Channel Bandwidth

2.1 Test Result

TestMode	Ant.	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.995	2404.5434	2419.5384	---	---
11B	Ant1	2437	14.977	2429.5382	2444.5152	---	---
11B	Ant1	2462	14.970	2454.5371	2469.5071	---	---
11G	Ant1	2412	16.886	2403.5562	2420.4422	---	---
11G	Ant1	2437	16.955	2428.5782	2445.5332	---	---
11G	Ant1	2462	16.920	2453.5988	2470.5188	---	---
11N20SISO	Ant1	2412	17.857	2403.1444	2421.0014	---	---
11N20SISO	Ant1	2437	17.925	2428.0865	2446.0115	---	---
11N20SISO	Ant1	2462	17.881	2453.1166	2470.9976	---	---
11N40SISO	Ant1	2422	36.334	2403.9237	2440.2577	---	---
11N40SISO	Ant1	2437	36.279	2419.0390	2455.3180	---	---
11N40SISO	Ant1	2452	36.293	2433.9451	2470.2381	---	---

2.2 Test Graphs



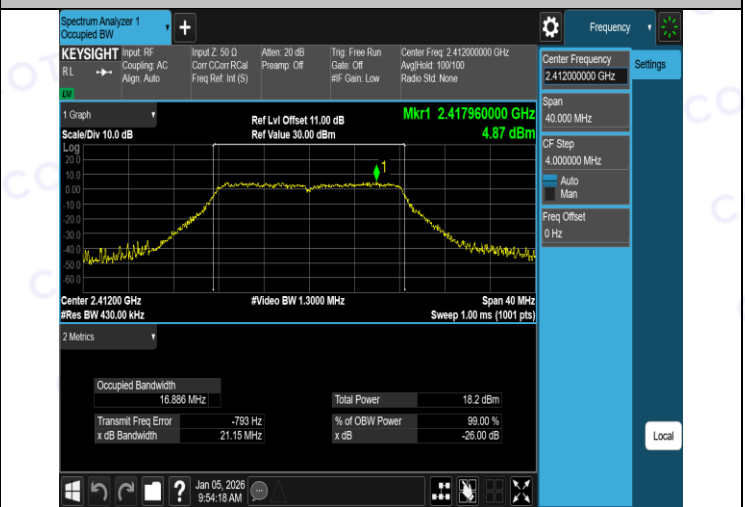
11B-Ant1-2412



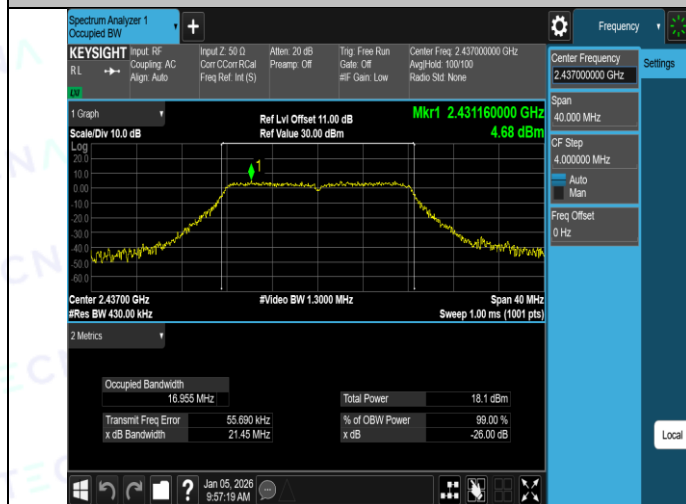
11B-Ant1-2437



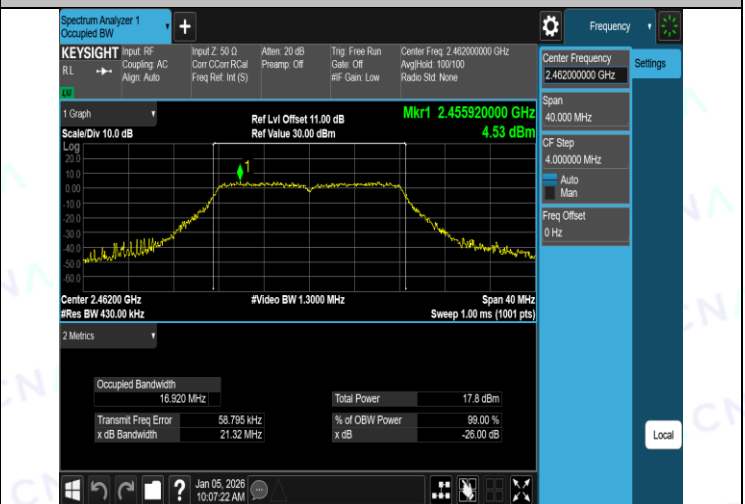
11B-Ant1-2462



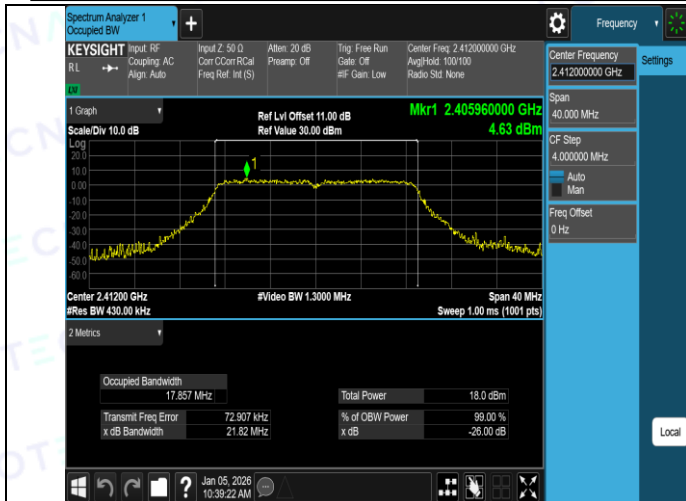
11G-Ant1-2412



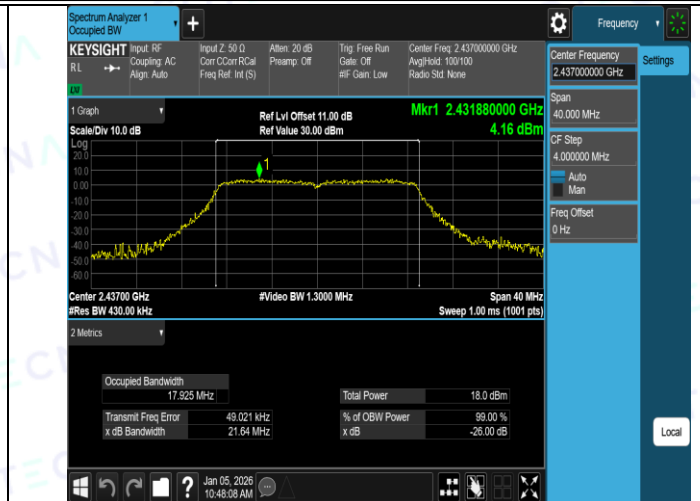
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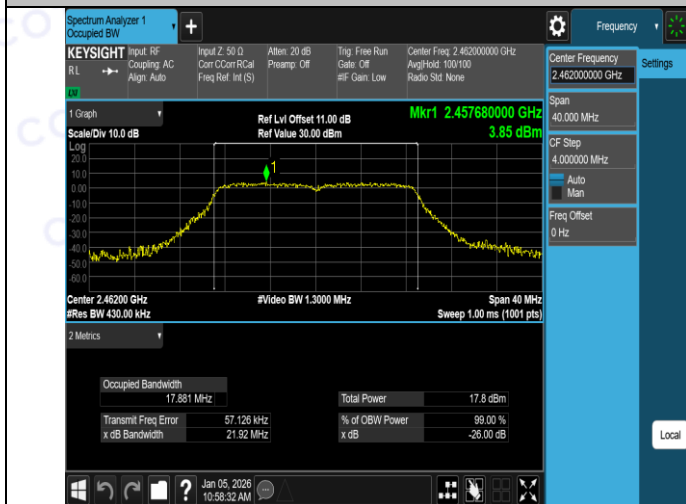
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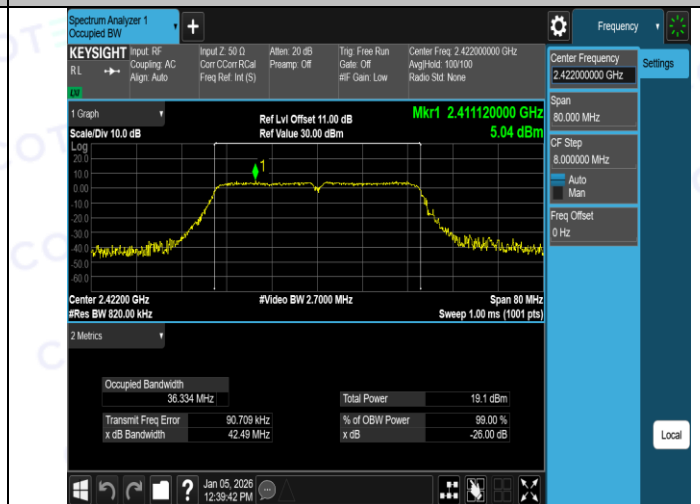
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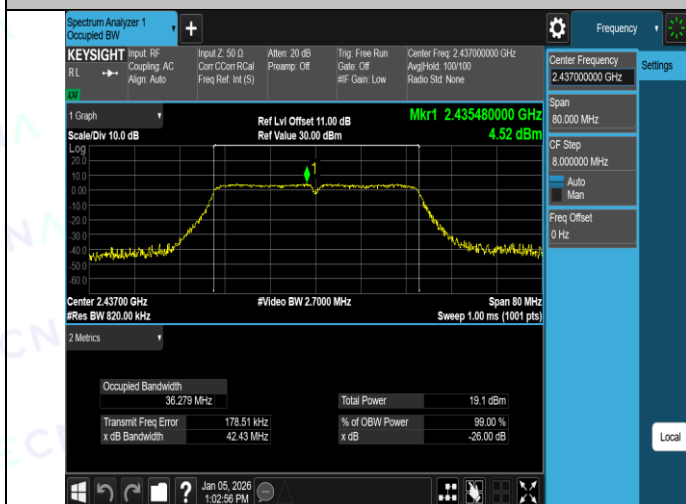
11N20SISO-Ant1-2437



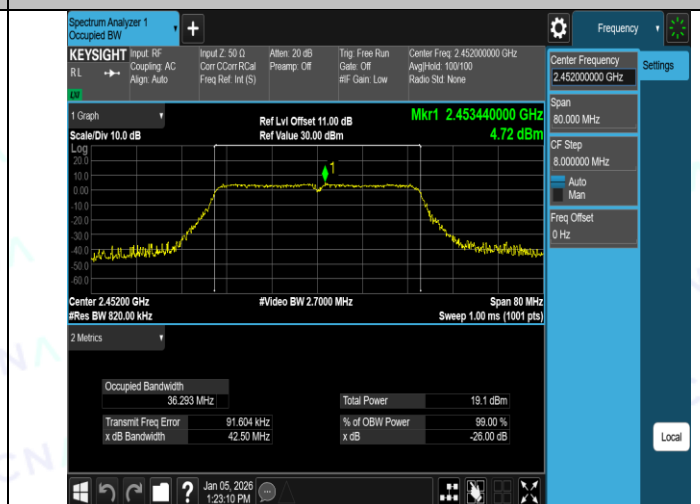
11N20SISO-Ant1-2462



11N40SISO-Ant1-2422



11N40SISO-Ant1-2437



11N40SISO-Ant1-2452

3: Maximum conducted output power

3.1 Test Result Average

Test Mode	Ant.	Frequency [MHz]	Raw Power [dBm]	DC Factor	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	16.14	0.02	16.16	≤30.00	PASS
11B	Ant1	2437	16.26	0.02	16.28	≤30.00	PASS
11B	Ant1	2462	16.05	0.02	16.07	≤30.00	PASS
11G	Ant1	2412	11.92	0.19	12.11	≤30.00	PASS
11G	Ant1	2437	11.94	0.19	12.13	≤30.00	PASS
11G	Ant1	2462	11.68	0.19	11.87	≤30.00	PASS
11N20SISO	Ant1	2412	11.73	0.26	11.99	≤30.00	PASS
11N20SISO	Ant1	2437	11.85	0.26	12.11	≤30.00	PASS
11N20SISO	Ant1	2462	11.57	0.26	11.83	≤30.00	PASS
11N40SISO	Ant1	2422	11.73	0.32	12.05	≤30.00	PASS
11N40SISO	Ant1	2437	11.85	0.32	12.17	≤30.00	PASS
11N40SISO	Ant1	2452	11.77	0.32	12.09	≤30.00	PASS

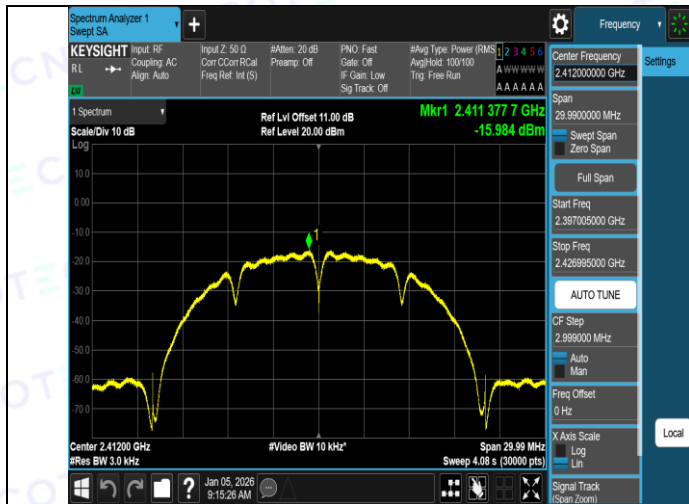
4: Maximum power spectral density

4.1 Test Result

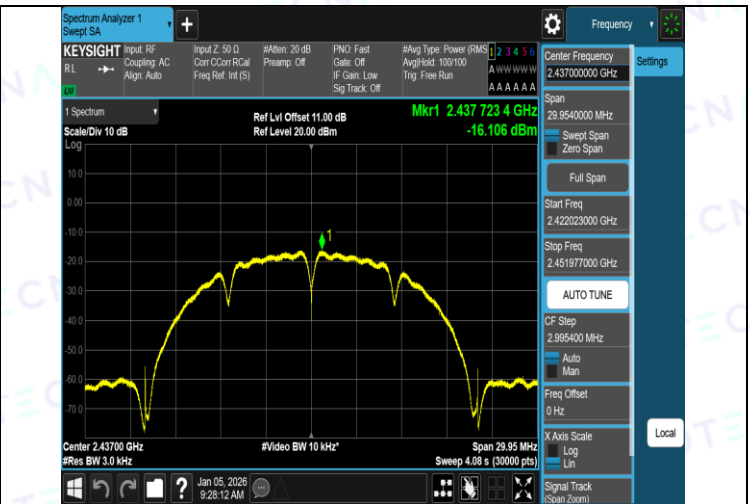
TestMode	Ant.	Frequency[MHz]	RawData [dBm/3kHz]	DC Factor	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.98	0.02	-15.96	≤8.00	PASS
11B	Ant1	2437	-16.11	0.02	-16.09	≤8.00	PASS
11B	Ant1	2462	-16.19	0.02	-16.17	≤8.00	PASS
11G	Ant1	2412	-22.08	0.19	-21.89	≤8.00	PASS
11G	Ant1	2437	-20.16	0.19	-19.97	≤8.00	PASS
11G	Ant1	2462	-19.94	0.19	-19.75	≤8.00	PASS
11N20SISO	Ant1	2412	-20.46	0.26	-20.2	≤8.00	PASS
11N20SISO	Ant1	2437	-19.97	0.26	-19.71	≤8.00	PASS
11N20SISO	Ant1	2462	-19.76	0.26	-19.5	≤8.00	PASS
11N40SISO	Ant1	2422	-21.09	0.32	-20.77	≤8.00	PASS
11N40SISO	Ant1	2437	-22.02	0.32	-21.7	≤8.00	PASS
11N40SISO	Ant1	2452	-21.4	0.32	-21.08	≤8.00	PASS

Note: RF Conducted test Offset= cable loss+ Attenuator

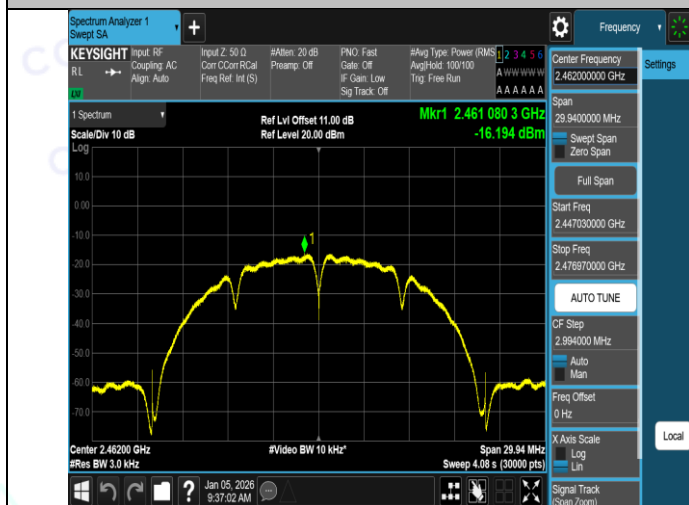
4.2 Test Graphs



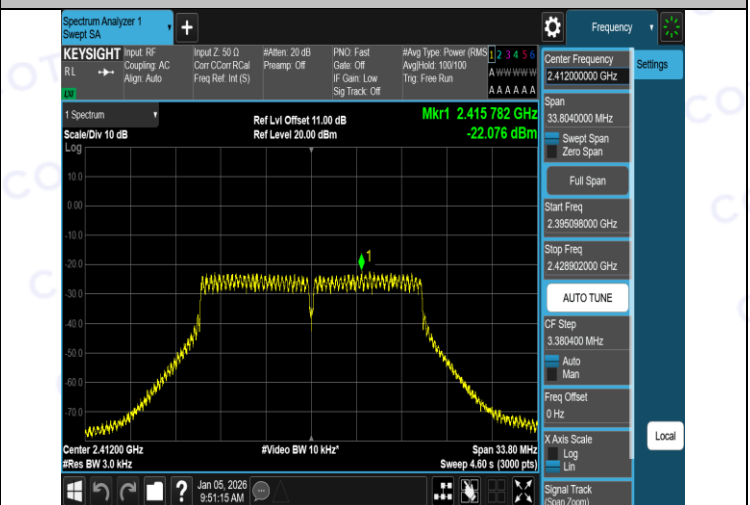
11B-Ant1-2412-PASS



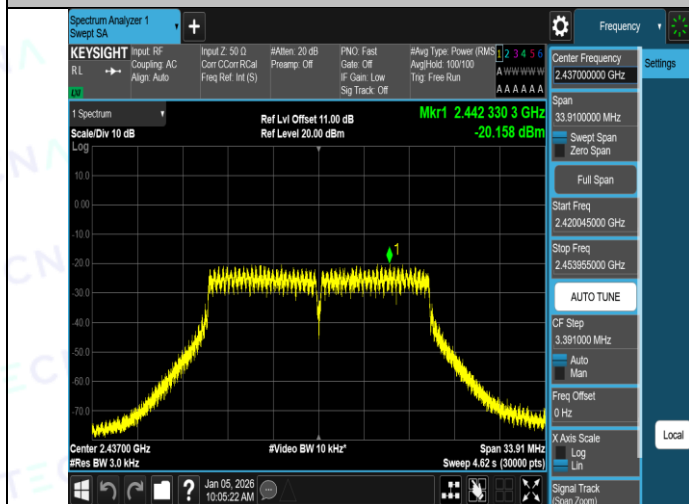
11B-Ant1-2437-PASS



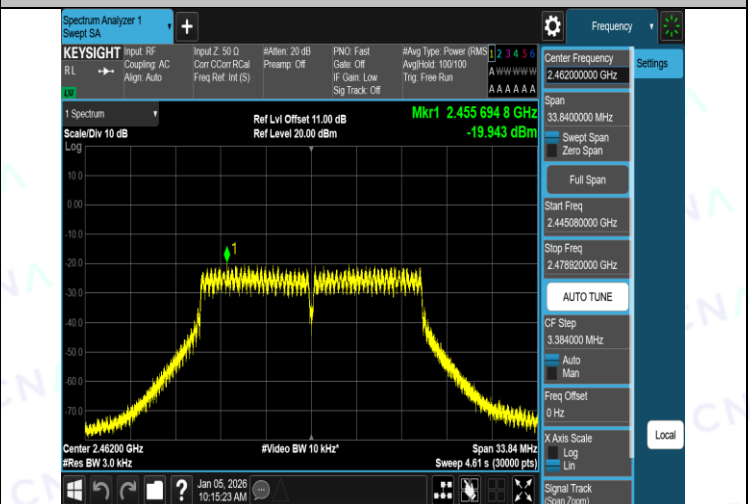
11B-Ant1-2462-PASS



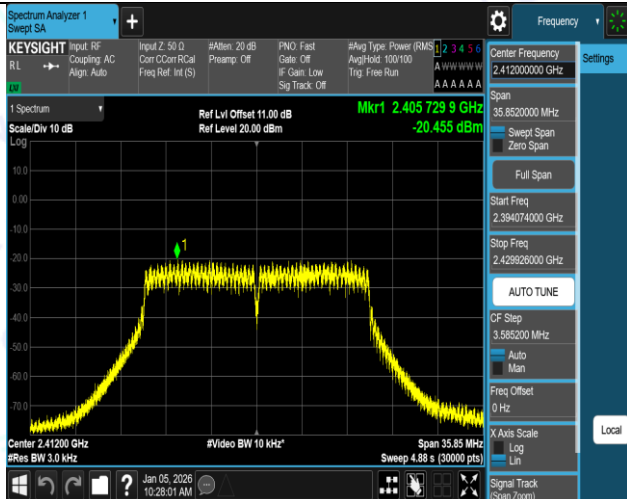
11G-Ant1-2412-PASS



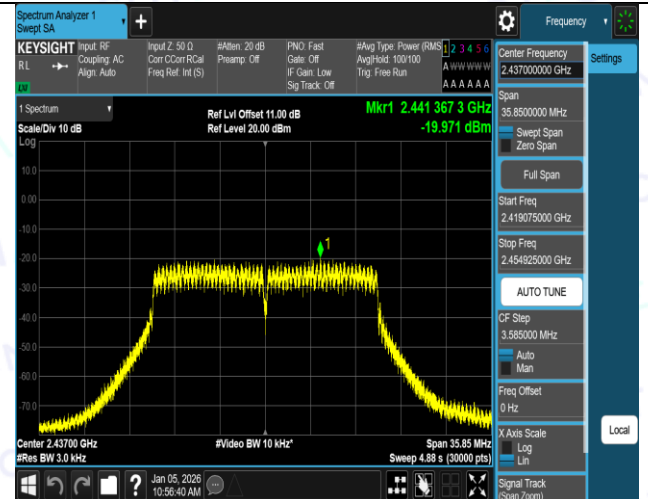
11G-Ant1-2437-PASS



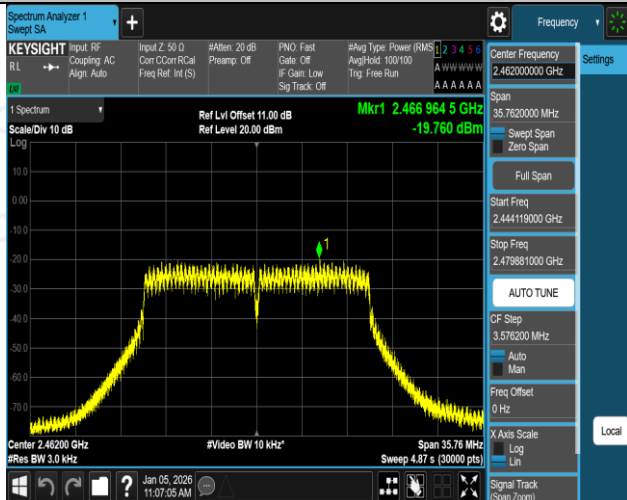
11G-Ant1-2462-PASS



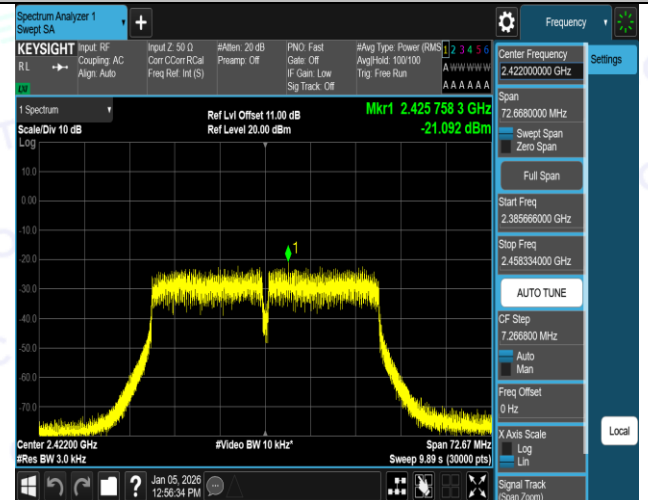
11N20SISO-Ant1-2412-PASS



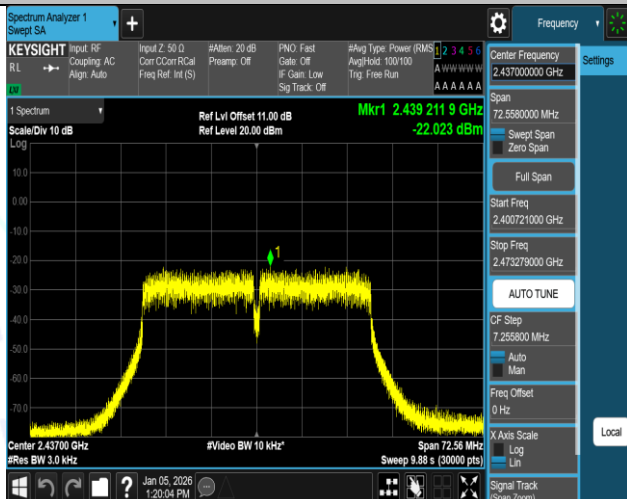
11N20SISO-Ant1-2437-PASS



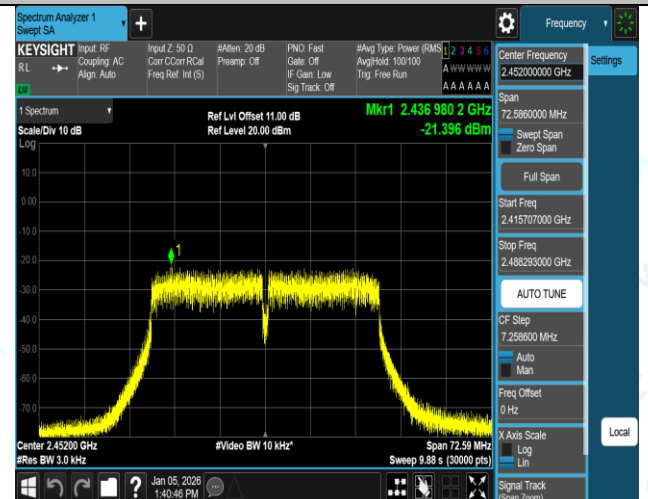
11N20SISO-Ant1-2462-PASS



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



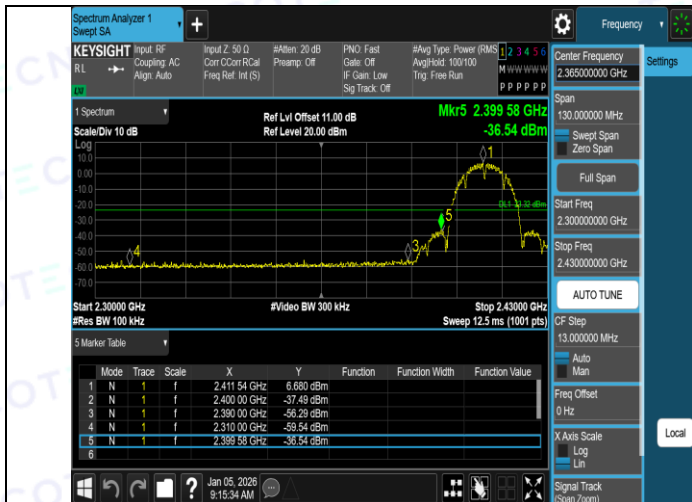
11N40SISO-Ant1-2452-PASS

5: Band edge measurements

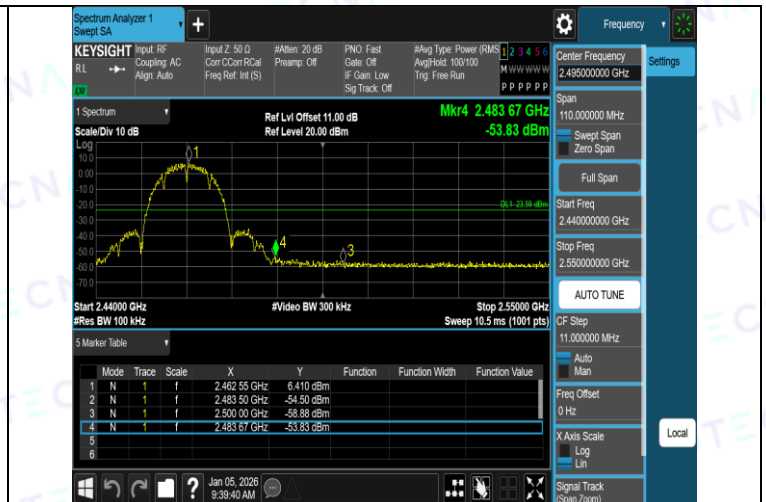
5.1 Test Result

TestMode	Ant.	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.68	-36.54	≤ -23.32	PASS
11B	Ant1	High	2462	6.41	-53.83	≤ -23.59	PASS
11G	Ant1	Low	2412	1.03	-37.93	≤ -28.97	PASS
11G	Ant1	High	2462	0.23	-52.7	≤ -29.77	PASS
11N20SISO	Ant1	Low	2412	0.70	-38.75	≤ -29.3	PASS
11N20SISO	Ant1	High	2462	0.59	-51.75	≤ -29.41	PASS
11N40SISO	Ant1	Low	2422	-1.83	-40.25	≤ -31.83	PASS
11N40SISO	Ant1	High	2452	-2.20	-46.89	≤ -32.2	PASS

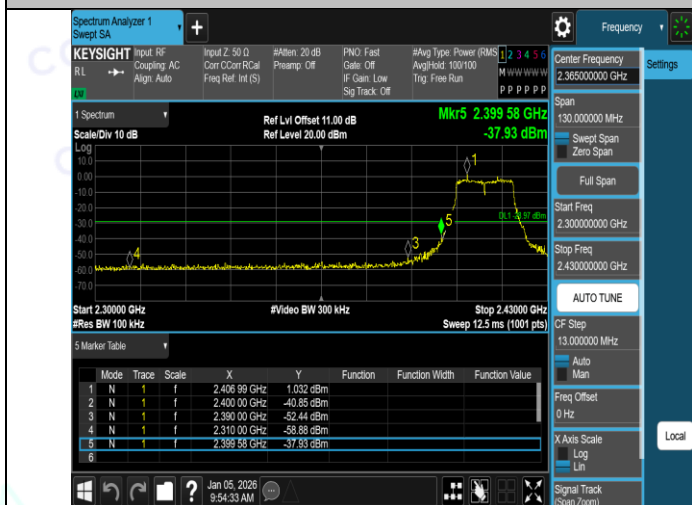
5.2 Test Graphs



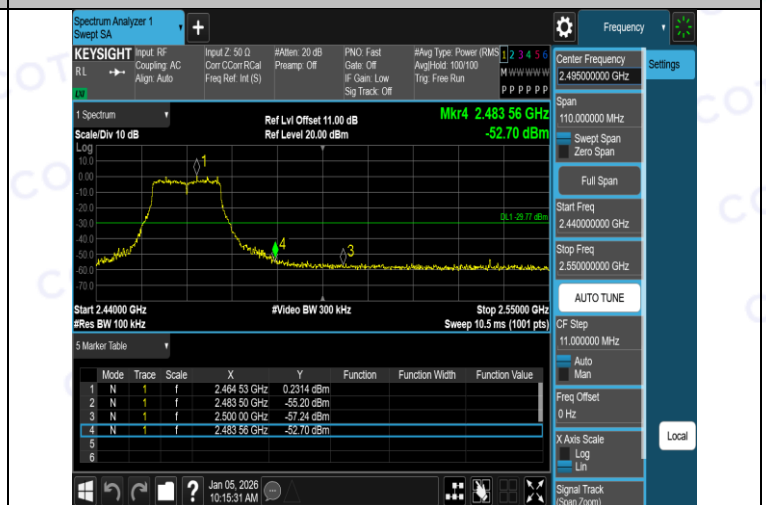
11B-Ant1-2412-PASS



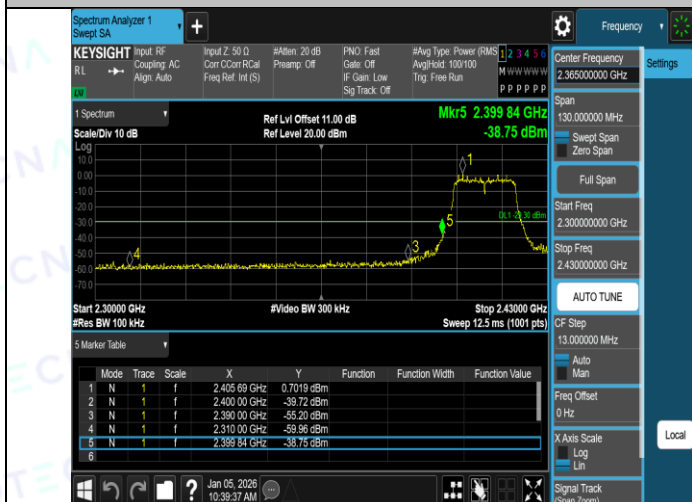
11B-Ant1-2462-PASS



11G-Ant1-2412-PASS



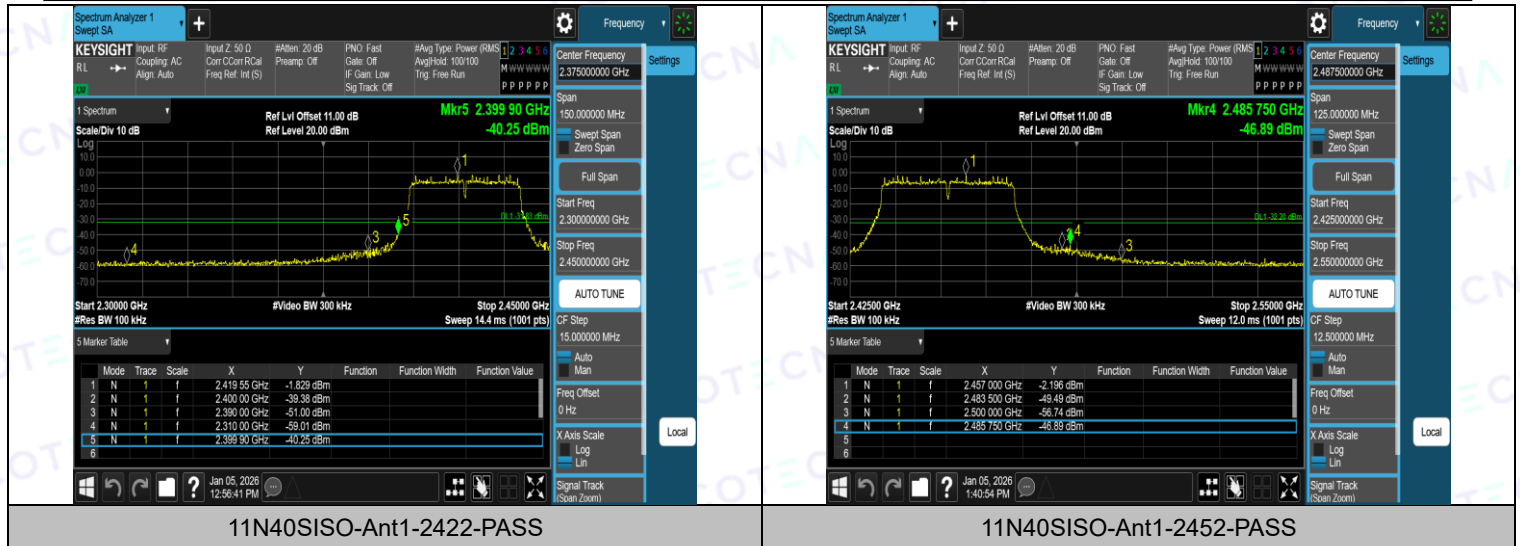
11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2462-PASS

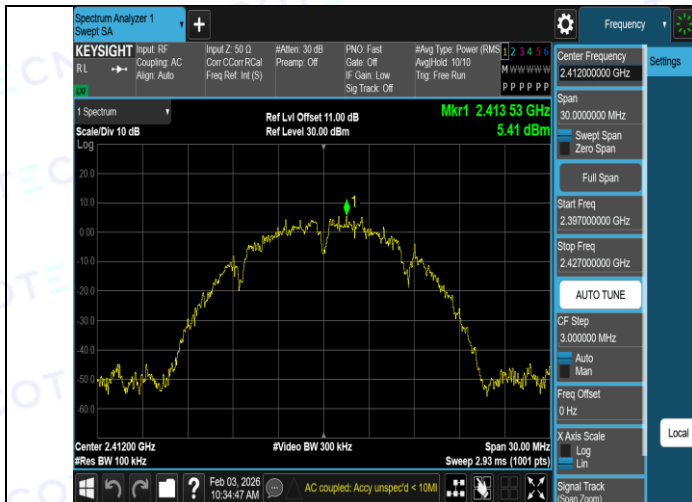


6: Conducted Spurious Emission

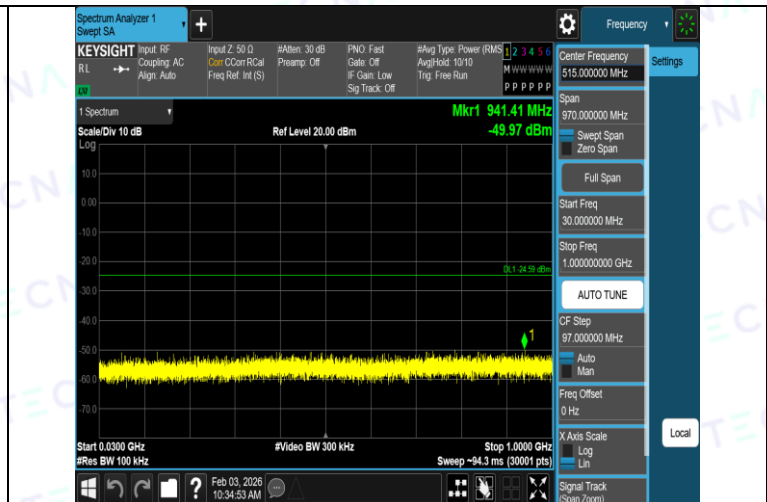
6.1 Test Result

TestMode	Ant.	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	5.41	5.41	---	PASS
11B	Ant1	2412	30~1000	5.41	-49.97	≤-24.59	PASS
11B	Ant1	2412	1000~26500	5.41	-34.07	≤-24.59	PASS
11B	Ant1	2437	0~Reference	6.55	6.55	---	PASS
11B	Ant1	2437	30~1000	6.55	-49.97	≤-23.45	PASS
11B	Ant1	2437	1000~26500	6.55	-33.2	≤-23.45	PASS
11B	Ant1	2462	0~Reference	4.94	4.94	---	PASS
11B	Ant1	2462	30~1000	4.94	-50.34	≤-25.06	PASS
11B	Ant1	2462	1000~26500	4.94	-33.3	≤-25.06	PASS
11G	Ant1	2412	0~Reference	-1.27	-1.27	---	PASS
11G	Ant1	2412	30~1000	-1.27	-59.11	≤-31.27	PASS
11G	Ant1	2412	1000~26500	-1.27	-43.62	≤-31.27	PASS
11G	Ant1	2437	0~Reference	-0.44	-0.44	---	PASS
11G	Ant1	2437	30~1000	-0.44	-58.93	≤-30.44	PASS
11G	Ant1	2437	1000~26500	-0.44	-43.59	≤-30.44	PASS
11G	Ant1	2462	0~Reference	-1.06	-1.06	---	PASS
11G	Ant1	2462	30~1000	-1.06	-58.97	≤-31.06	PASS
11G	Ant1	2462	1000~26500	-1.06	-43.7	≤-31.06	PASS
11N20SISO	Ant1	2412	0~Reference	-2.84	-2.84	---	PASS
11N20SISO	Ant1	2412	30~1000	-2.84	-60.09	≤-32.84	PASS
11N20SISO	Ant1	2412	1000~26500	-2.84	-43.31	≤-32.84	PASS
11N20SISO	Ant1	2437	0~Reference	-0.67	-0.67	---	PASS
11N20SISO	Ant1	2437	30~1000	-0.67	-59.74	≤-30.67	PASS
11N20SISO	Ant1	2437	1000~26500	-0.67	-42.76	≤-30.67	PASS
11N20SISO	Ant1	2462	0~Reference	-1.29	-1.29	---	PASS
11N20SISO	Ant1	2462	30~1000	-1.29	-59.24	≤-31.29	PASS
11N20SISO	Ant1	2462	1000~26500	-1.29	-43.72	≤-31.29	PASS
11N40SISO	Ant1	2422	0~Reference	-1.82	-1.82	---	PASS
11N40SISO	Ant1	2422	30~1000	-1.82	-59.22	≤-31.82	PASS
11N40SISO	Ant1	2422	1000~26500	-1.82	-43.05	≤-31.82	PASS
11N40SISO	Ant1	2437	0~Reference	-2.36	-2.36	---	PASS
11N40SISO	Ant1	2437	30~1000	-2.36	-50.05	≤-32.36	PASS
11N40SISO	Ant1	2437	1000~26500	-2.36	-34.38	≤-32.36	PASS
11N40SISO	Ant1	2452	0~Reference	-2.73	-2.73	---	PASS
11N40SISO	Ant1	2452	30~1000	-2.73	-49.6	≤-32.73	PASS
11N40SISO	Ant1	2452	1000~26500	-2.73	-33.42	≤-32.73	PASS

6.2 Test Graphs



11B-Ant1-2412-0~Reference-PASS



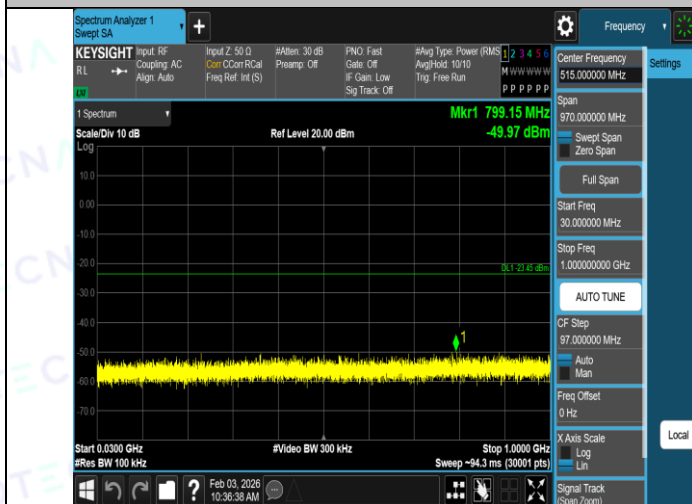
11B-Ant1-2412-30~1000-PASS



11B-Ant1-2412-1000~26500-PASS



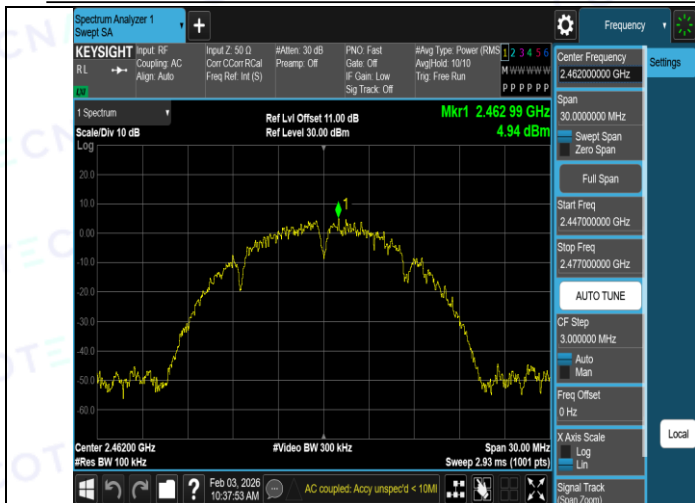
11B-Ant1-2437-0~Reference-PASS



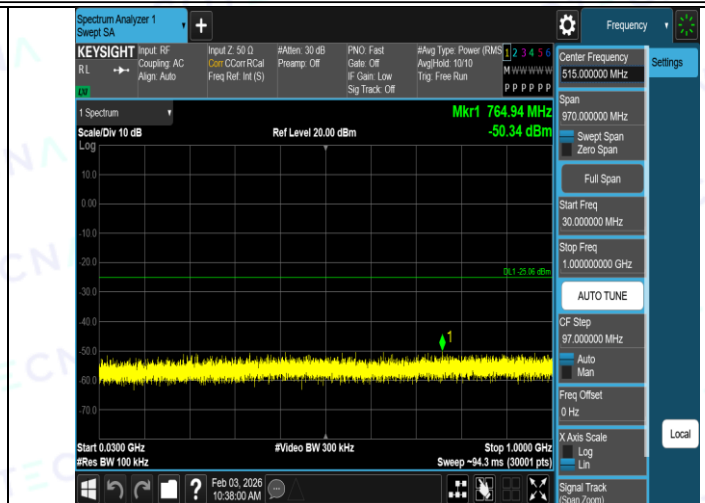
11B-Ant1-2437-30~1000-PASS



11B-Ant1-2437-1000~26500-PASS



11B-Ant1-2462-0~Reference-PASS



11B-Ant1-2462-30~1000-PASS



11B-Ant1-2462-1000~26500-PASS



11G-Ant1-2412-0~Reference-PASS



11G-Ant1-2412-30~1000-PASS



11G-Ant1-2412-1000~26500-PASS