

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

General Description of EUT	
EUT Name:	WiFi Water Leak Sensor
Model:	W06
Sample ID:	HC-C-202601-0264-01-01#
Environmental Conditions	
Ambient Temperature:	25℃
Ambient Humidity:	45%RH
Test Power Supply:	DC 3V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202601-0264-11	

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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	8.080	2407.960	2416.040	0.5	PASS
11B	Ant1	2437	8.080	2432.920	2441.000	0.5	PASS
11B	Ant1	2462	9.040	2457.480	2466.520	0.5	PASS
11G	Ant1	2412	16.800	2403.360	2420.160	0.5	PASS
11G	Ant1	2437	16.560	2428.840	2445.400	0.5	PASS
11G	Ant1	2462	16.680	2453.440	2470.120	0.5	PASS
11N20SISO	Ant1	2412	18.280	2402.840	2421.120	0.5	PASS
11N20SISO	Ant1	2437	16.360	2428.520	2444.880	0.5	PASS
11N20SISO	Ant1	2462	18.320	2452.800	2471.120	0.5	PASS

1.2 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



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	13.828	2405.0952	2418.9232	---	---
11B	Ant1	2437	13.835	2430.0834	2443.9184	---	---
11B	Ant1	2462	13.824	2455.0803	2468.9043	---	---
11G	Ant1	2412	17.157	2403.3010	2420.4580	---	---
11G	Ant1	2437	17.019	2428.3519	2445.3709	---	---
11G	Ant1	2462	17.183	2453.4204	2470.6034	---	---
11N20SISO	Ant1	2412	18.252	2402.9093	2421.1613	---	---
11N20SISO	Ant1	2437	17.923	2428.1130	2446.0360	---	---
11N20SISO	Ant1	2462	18.172	2453.0163	2471.1883	---	---

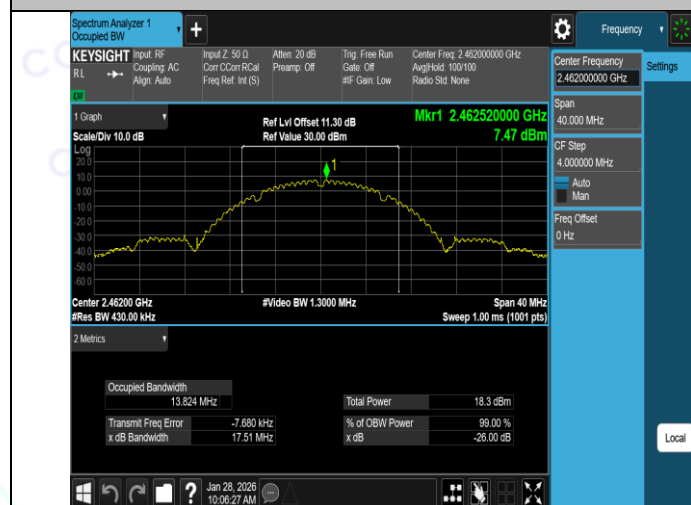
2.2 Test Graphs



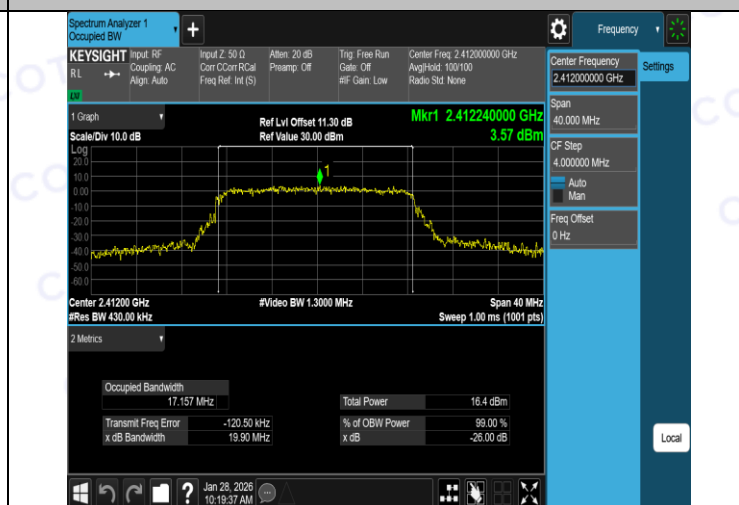
11B-Ant1-2412



11B-Ant1-2437



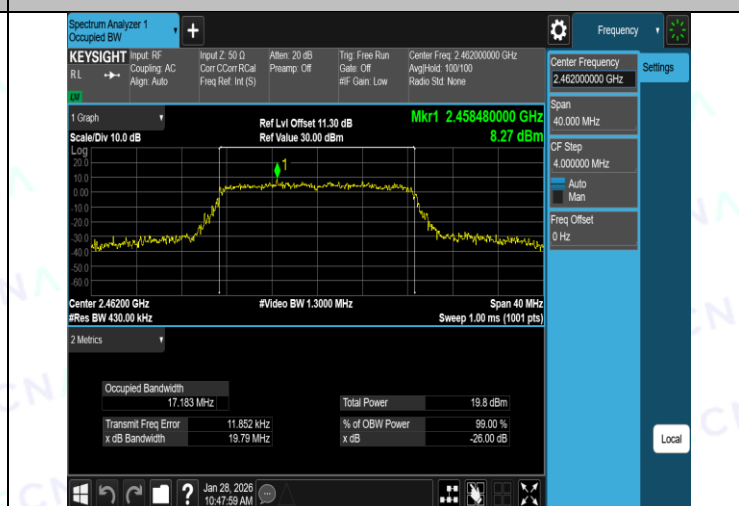
11B-Ant1-2462



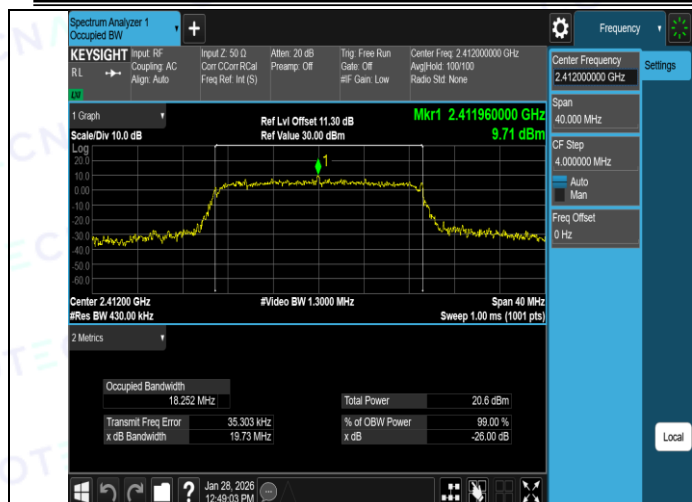
11G-Ant1-2412



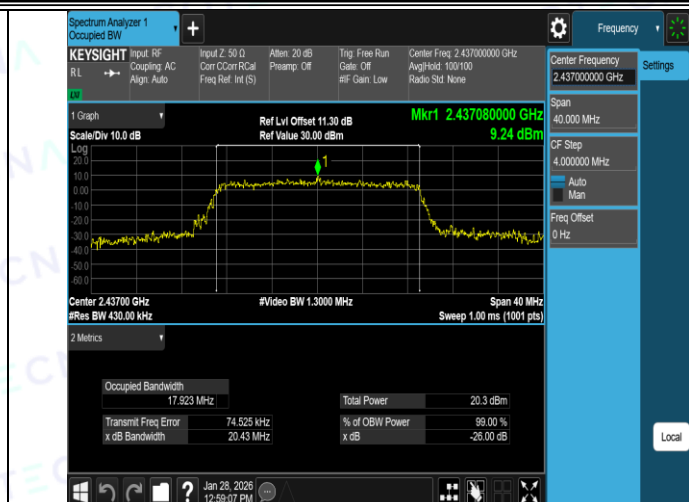
11G-Ant1-2437



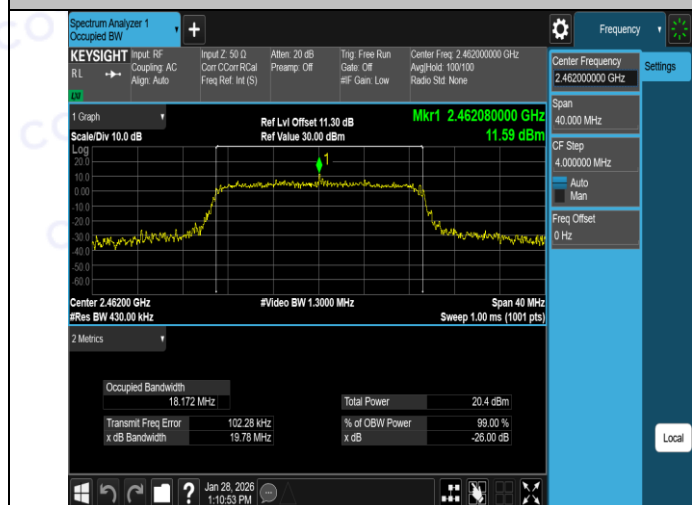
11G-Ant1-2462



11N20SISO-Ant1-2412



11N20SISO-Ant1-2437



11N20SISO-Ant1-2462

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	15.01	0.04	15.05	≤30.00	PASS
11B	Ant1	2437	15.08	0.07	15.15	≤30.00	PASS
11B	Ant1	2462	15.34	0.06	15.40	≤30.00	PASS
11G	Ant1	2412	4.88	10.08	14.96	≤30.00	PASS
11G	Ant1	2437	5.23	10.17	15.40	≤30.00	PASS
11G	Ant1	2462	5.30	10.15	15.45	≤30.00	PASS
11N20SISO	Ant1	2412	6.73	9.00	15.73	≤30.00	PASS
11N20SISO	Ant1	2437	6.66	9.08	15.74	≤30.00	PASS
11N20SISO	Ant1	2462	6.00	9.11	15.11	≤30.00	PASS

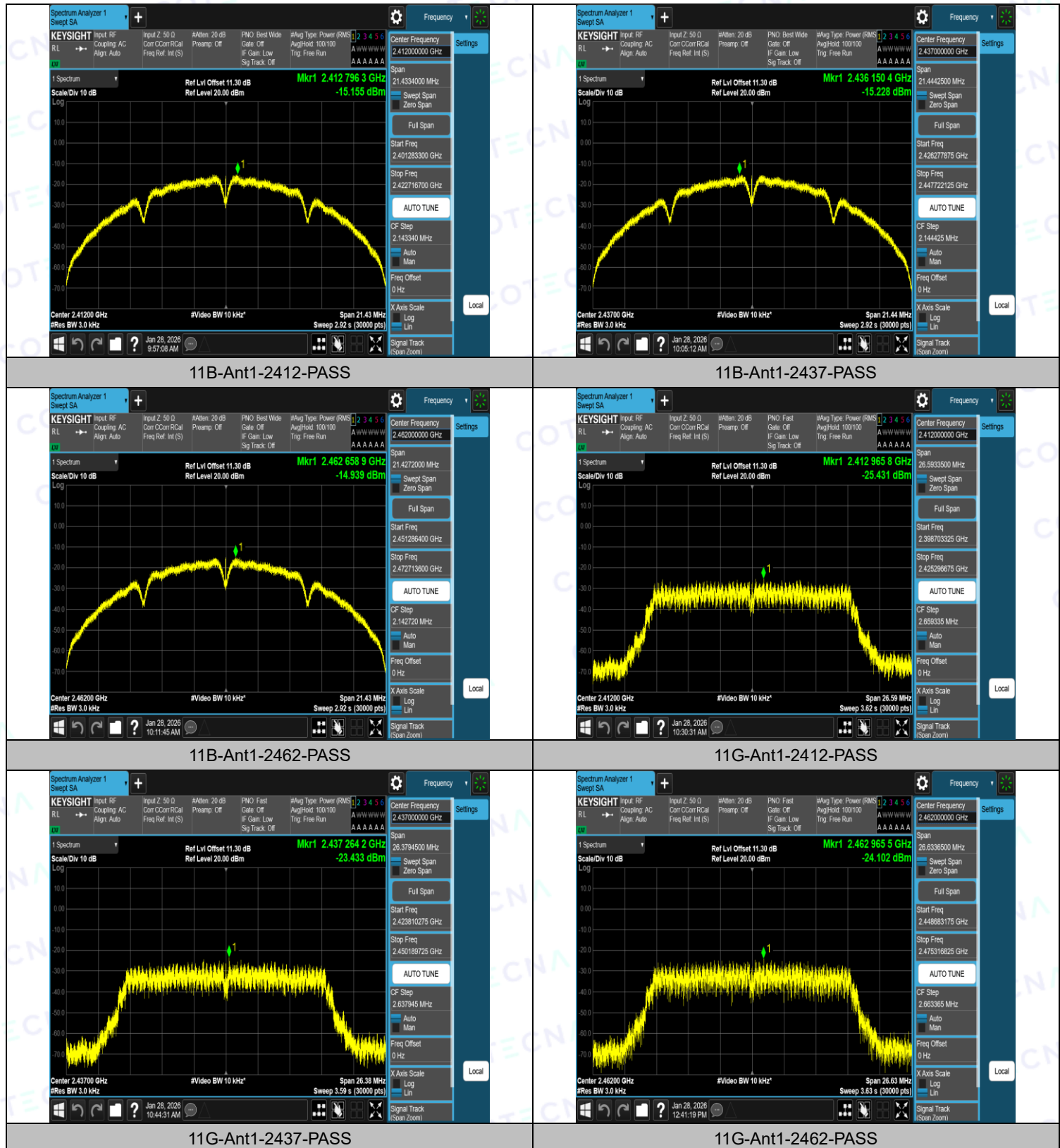
4: Maximum power spectral density

4.1 Test Result

TestMode	Ant.	Frequency[MHz]	RawData [dBm/3kHz]	DC Factor	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.16	0.04	-15.12	≤8.00	PASS
11B	Ant1	2437	-15.23	0.04	-15.19	≤8.00	PASS
11B	Ant1	2462	-14.94	0.04	-14.90	≤8.00	PASS
11G	Ant1	2412	-25.43	10.08	-15.35	≤8.00	PASS
11G	Ant1	2437	-23.43	10.08	-13.35	≤8.00	PASS
11G	Ant1	2462	-24.1	10.08	-14.02	≤8.00	PASS
11N20SISO	Ant1	2412	-21.6	9.00	-12.60	≤8.00	PASS
11N20SISO	Ant1	2437	-21.59	9.00	-12.59	≤8.00	PASS
11N20SISO	Ant1	2462	-22.09	9.00	-13.09	≤8.00	PASS

Note: RF Conducted test Offset= cable loss+ Attenuator

4.2 Test Graphs



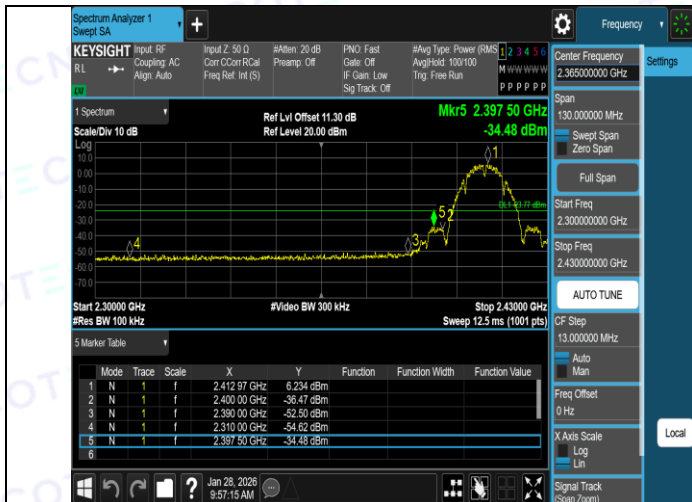


5: Band edge measurements

5.1 Test Result

TestMode	Ant.	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.23	-34.48	≤ -23.77	PASS
11B	Ant1	High	2462	6.18	-50.38	≤ -23.82	PASS
11G	Ant1	Low	2412	0.55	-35.12	≤ -29.45	PASS
11G	Ant1	High	2462	3.29	-41.61	≤ -26.71	PASS
11N20SISO	Ant1	Low	2412	3.95	-34.47	≤ -26.05	PASS
11N20SISO	Ant1	High	2462	4.51	-39.63	≤ -25.49	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

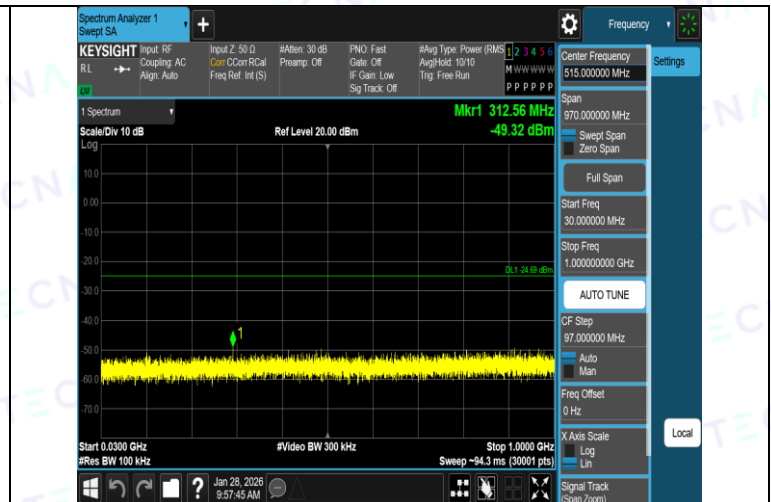
6.1 Test Result

TestMode	Ant.	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	5.31	5.31	---	PASS
11B	Ant1	2412	30~1000	5.31	-49.32	≤-24.69	PASS
11B	Ant1	2412	1000~26500	5.31	-32.88	≤-24.69	PASS
11B	Ant1	2437	0~Reference	4.96	4.96	---	PASS
11B	Ant1	2437	30~1000	4.96	-49.6	≤-25.04	PASS
11B	Ant1	2437	1000~26500	4.96	-34.17	≤-25.04	PASS
11B	Ant1	2462	0~Reference	4.50	4.50	---	PASS
11B	Ant1	2462	30~1000	4.50	-49.96	≤-25.5	PASS
11B	Ant1	2462	1000~26500	4.50	-33.72	≤-25.5	PASS
11G	Ant1	2412	0~Reference	2.30	2.30	---	PASS
11G	Ant1	2412	30~1000	2.30	-49.14	≤-27.7	PASS
11G	Ant1	2412	1000~26500	2.30	-33.6	≤-27.7	PASS
11G	Ant1	2437	0~Reference	-0.18	-0.18	---	PASS
11G	Ant1	2437	30~1000	-0.18	-49.75	≤-30.18	PASS
11G	Ant1	2437	1000~26500	-0.18	-33.31	≤-30.18	PASS
11G	Ant1	2462	0~Reference	-1.07	-1.07	---	PASS
11G	Ant1	2462	30~1000	-1.07	-49.17	≤-31.07	PASS
11G	Ant1	2462	1000~26500	-1.07	-33.48	≤-31.07	PASS
11N20SISO	Ant1	2412	0~Reference	0.10	0.10	---	PASS
11N20SISO	Ant1	2412	30~1000	0.10	-49.67	≤-29.9	PASS
11N20SISO	Ant1	2412	1000~26500	0.10	-33.7	≤-29.9	PASS
11N20SISO	Ant1	2437	0~Reference	0.03	0.03	---	PASS
11N20SISO	Ant1	2437	30~1000	0.03	-49.85	≤-29.97	PASS
11N20SISO	Ant1	2437	1000~26500	0.03	-33.63	≤-29.97	PASS
11N20SISO	Ant1	2462	0~Reference	0.78	0.78	---	PASS
11N20SISO	Ant1	2462	30~1000	0.78	-49.18	≤-29.22	PASS
11N20SISO	Ant1	2462	1000~26500	0.78	-33.34	≤-29.22	PASS

6.2 Test Graphs



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



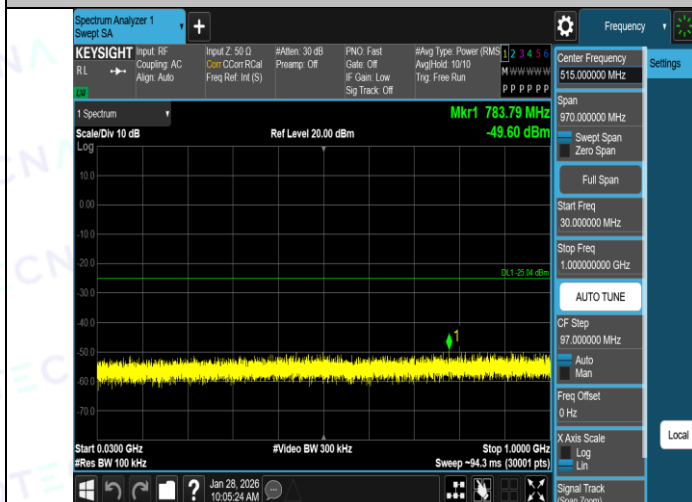
11B-Ant1-2412-30~1000-PASS



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



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



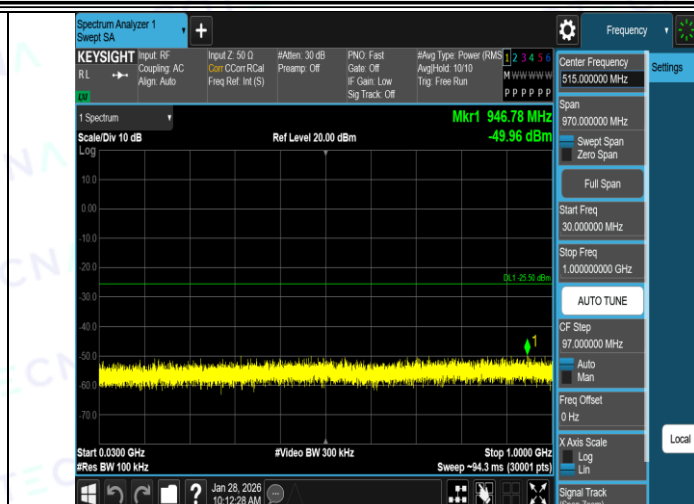
11B-Ant1-2437-30~1000-PASS



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



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



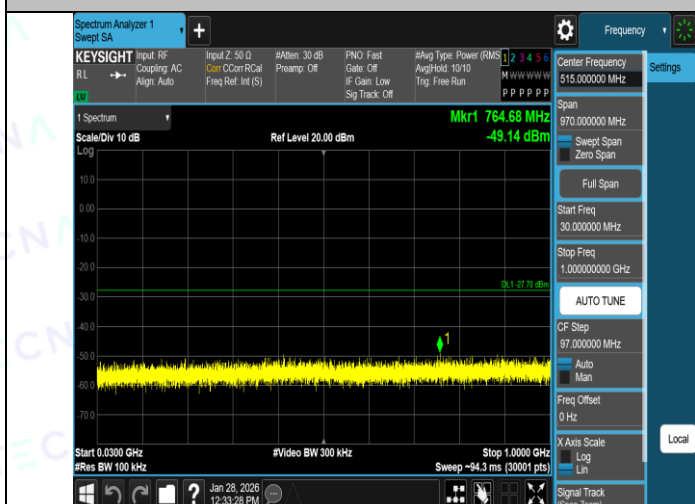
11B-Ant1-2462-30~1000-PASS



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



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



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



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