



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Nexi-7

Test Model: Nexi-7

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Jack Cheng





C.1 DTS Bandwidth

Test Result

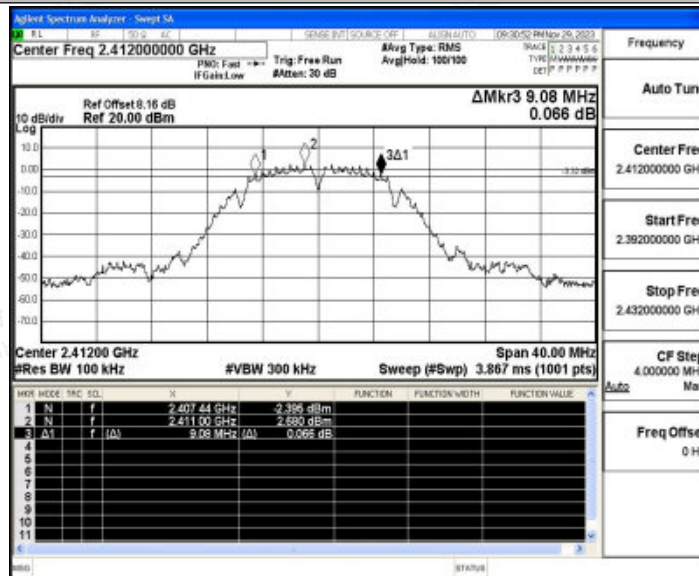
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.080	2407.440	2416.520	0.5	PASS
		2437	9.080	2432.440	2441.520	0.5	PASS
		2462	9.080	2457.440	2466.520	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.360	2428.800	2445.160	0.5	PASS
		2462	16.360	2453.800	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.200	2420.760	0.5	PASS
		2437	17.560	2428.200	2445.760	0.5	PASS
		2462	17.520	2453.240	2470.760	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.240	2439.840	0.5	PASS
		2437	36.320	2418.840	2455.160	0.5	PASS
		2452	35.680	2434.160	2469.840	0.5	PASS



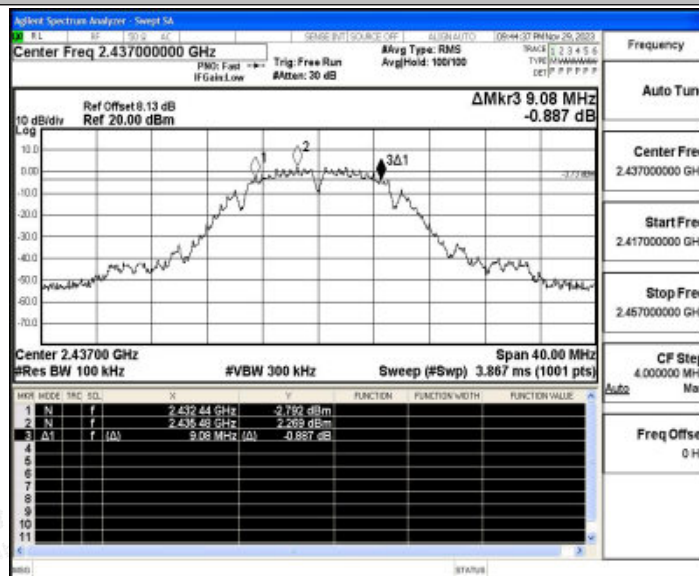


Test Graphs

11B_Ant1_2412

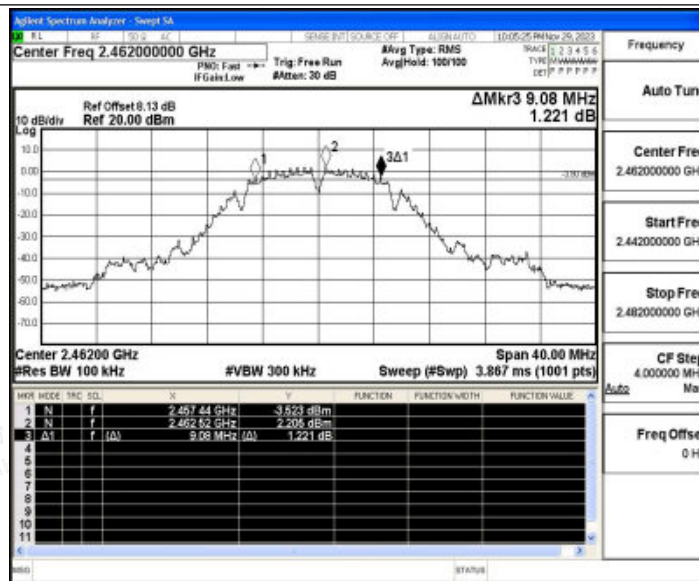


11B_Ant1_2437

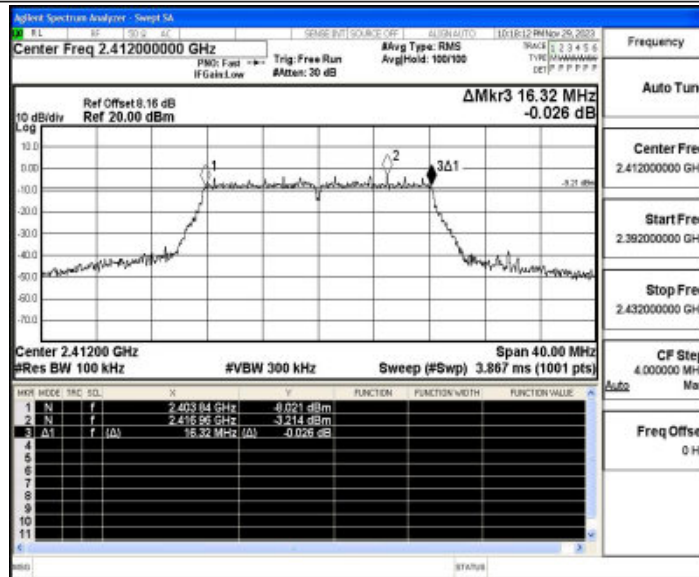


11B_Ant1_2462



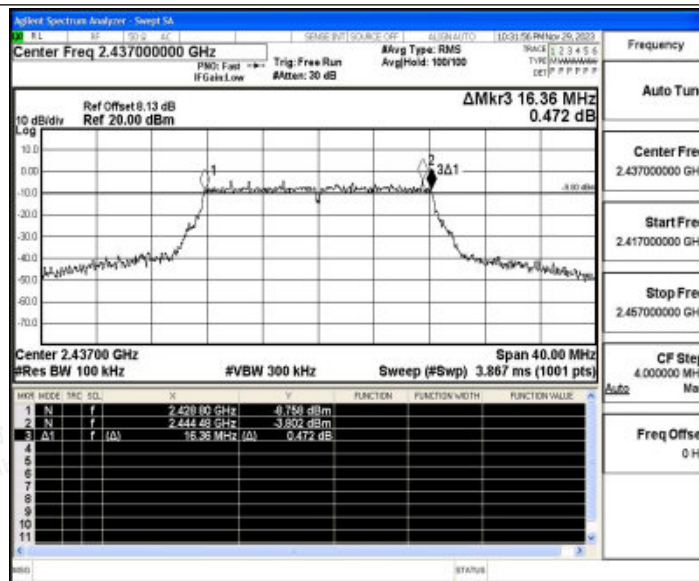


11G_Ant1_2412

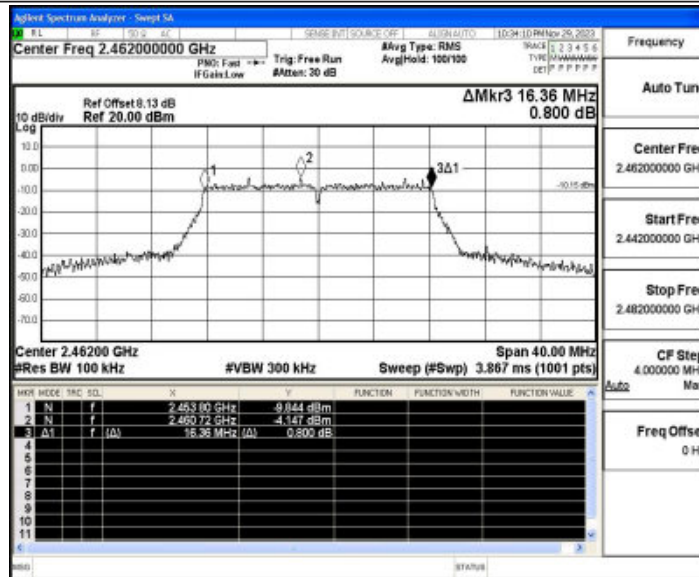


11G_Ant1_2437



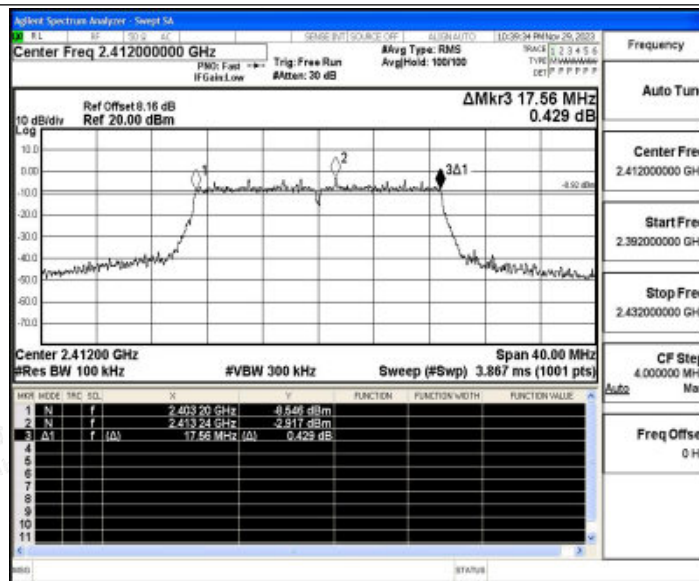


11G_Ant1_2462

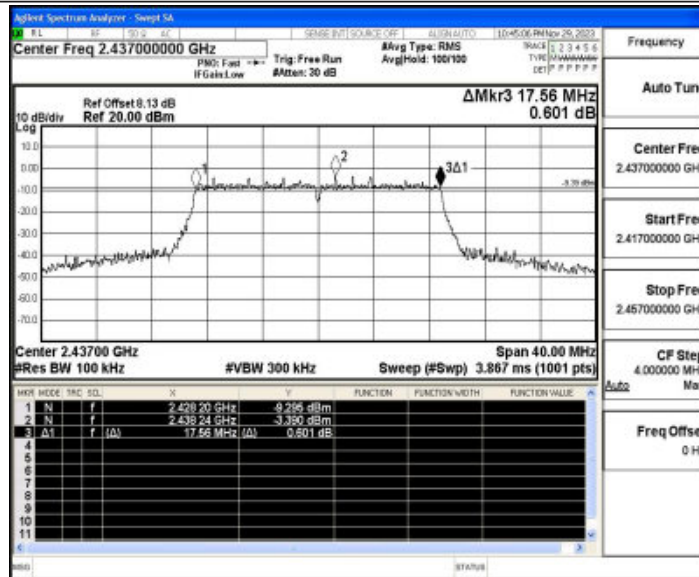


11N20SISO_Ant1_2412



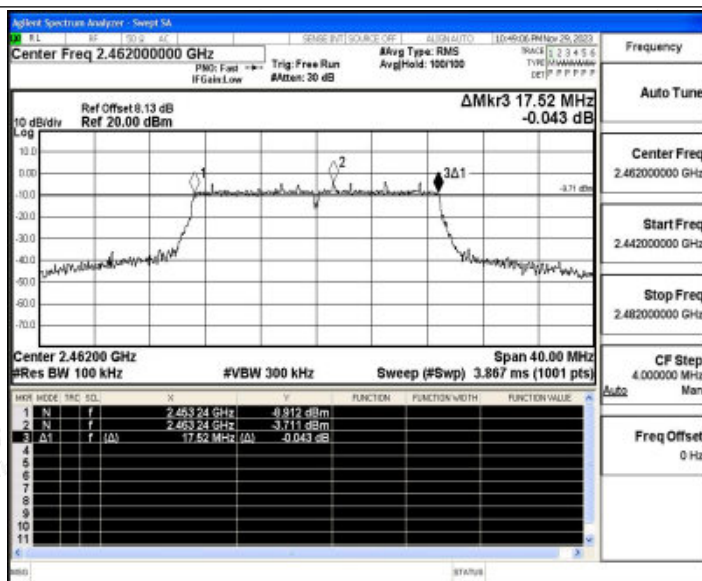


11N20SISO_Ant1_2437

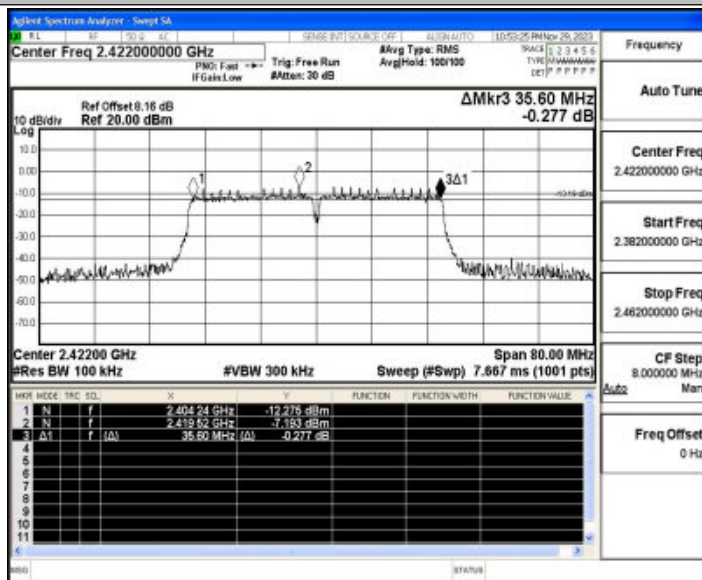


11N20SISO_Ant1_2462



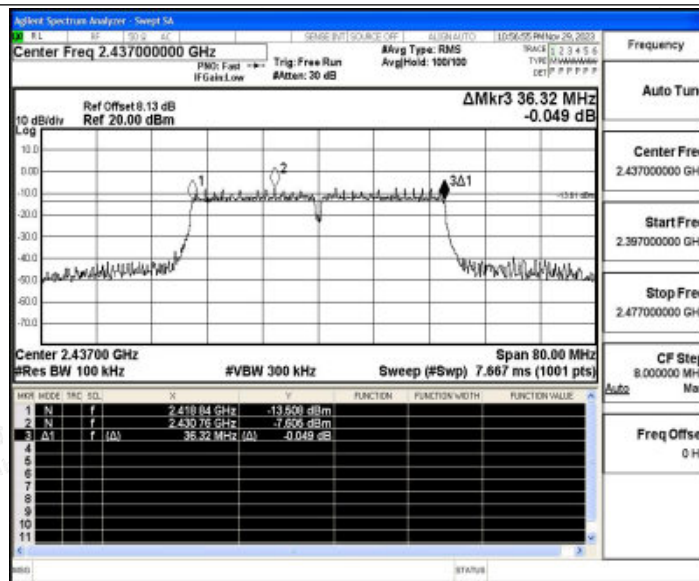


11N40SISO_Ant1_2422

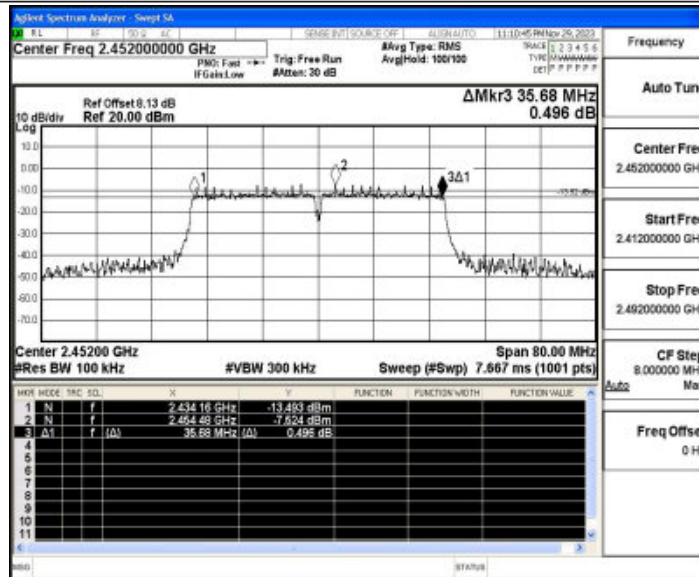


11N40SISO_Ant1_2437





11N40SISO_Ant1_2452





C.2 Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.48	30	Pass
NVNT	b	2437	Ant1	14.68	30	Pass
NVNT	b	2462	Ant1	14.56	30	Pass
NVNT	g	2412	Ant1	14.56	30	Pass
NVNT	g	2437	Ant1	14.7	30	Pass
NVNT	g	2462	Ant1	14.64	30	Pass
NVNT	n20	2412	Ant1	14.44	30	Pass
NVNT	n20	2437	Ant1	13.74	30	Pass
NVNT	n20	2462	Ant1	13.56	30	Pass
NVNT	n40	2422	Ant1	13.34	30	Pass
NVNT	n40	2437	Ant1	13.53	30	Pass
NVNT	n40	2452	Ant1	13.66	30	Pass





C.3 Maximum Power Spectral Density Level

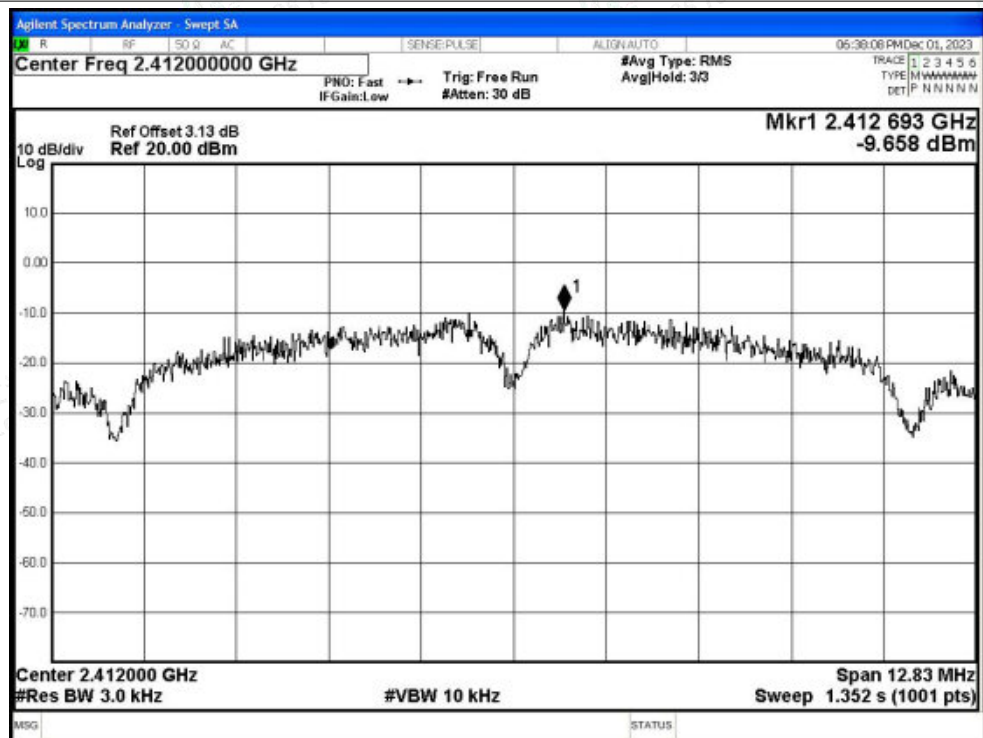
Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-9.66	8	Pass
NVNT	b	2437	Ant1	-8.42	8	Pass
NVNT	b	2462	Ant1	-8.97	8	Pass
NVNT	g	2412	Ant1	-14.09	8	Pass
NVNT	g	2437	Ant1	-14.39	8	Pass
NVNT	g	2462	Ant1	-13.77	8	Pass
NVNT	n20	2412	Ant1	-15.57	8	Pass
NVNT	n20	2437	Ant1	-14.69	8	Pass
NVNT	n20	2462	Ant1	-15.67	8	Pass
NVNT	n40	2422	Ant1	-18.48	8	Pass
NVNT	n40	2437	Ant1	-15.1	8	Pass
NVNT	n40	2452	Ant1	-14.22	8	Pass



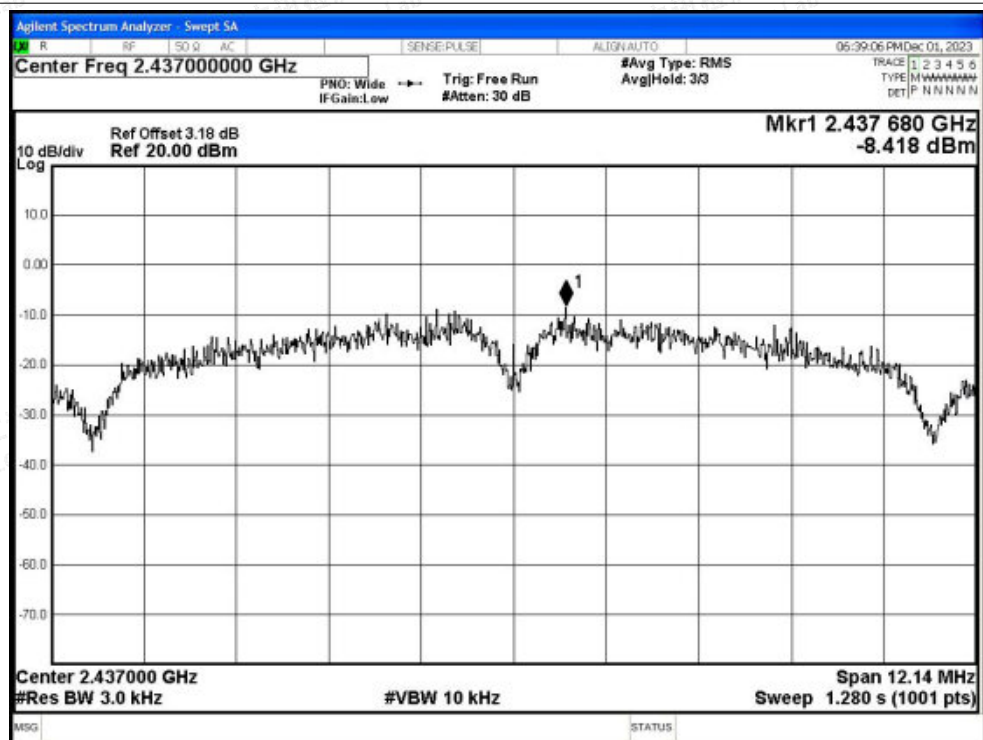


Test Graphs

PSD NVNT b 2412MHz Ant1

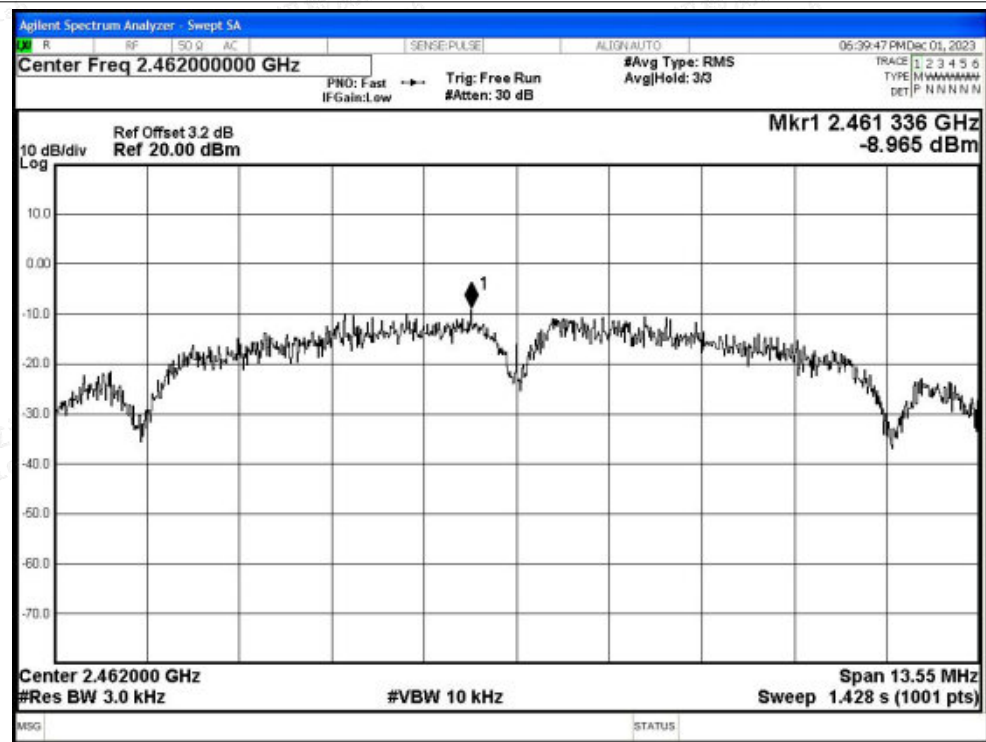


PSD NVNT b 2437MHz Ant1

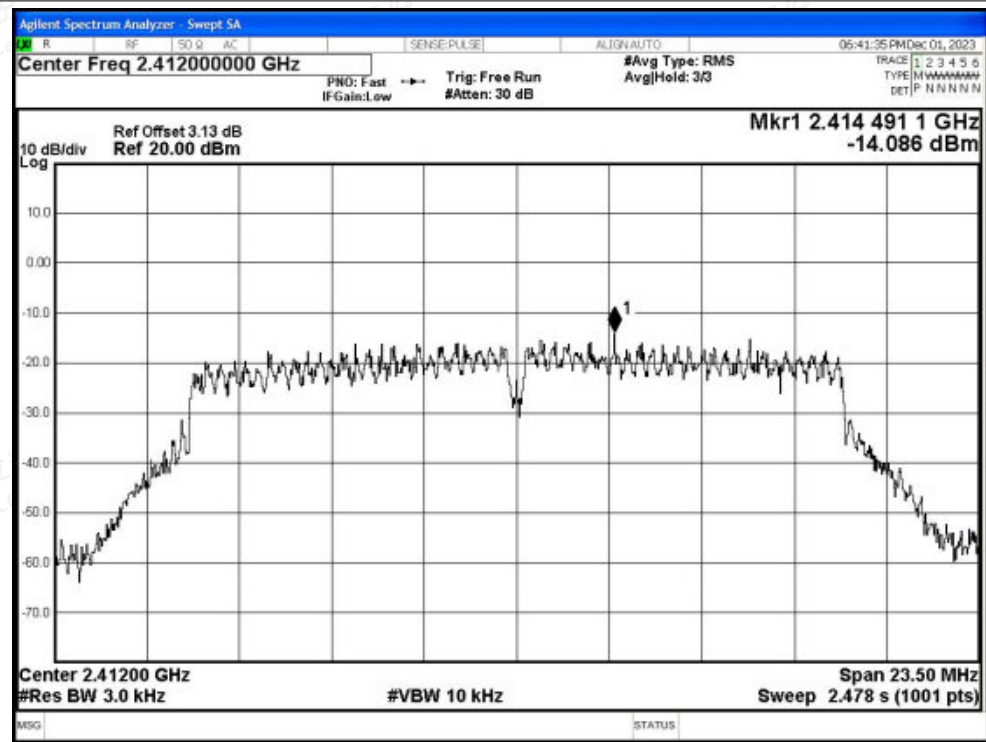




PSD NVNT b 2462MHz Ant1

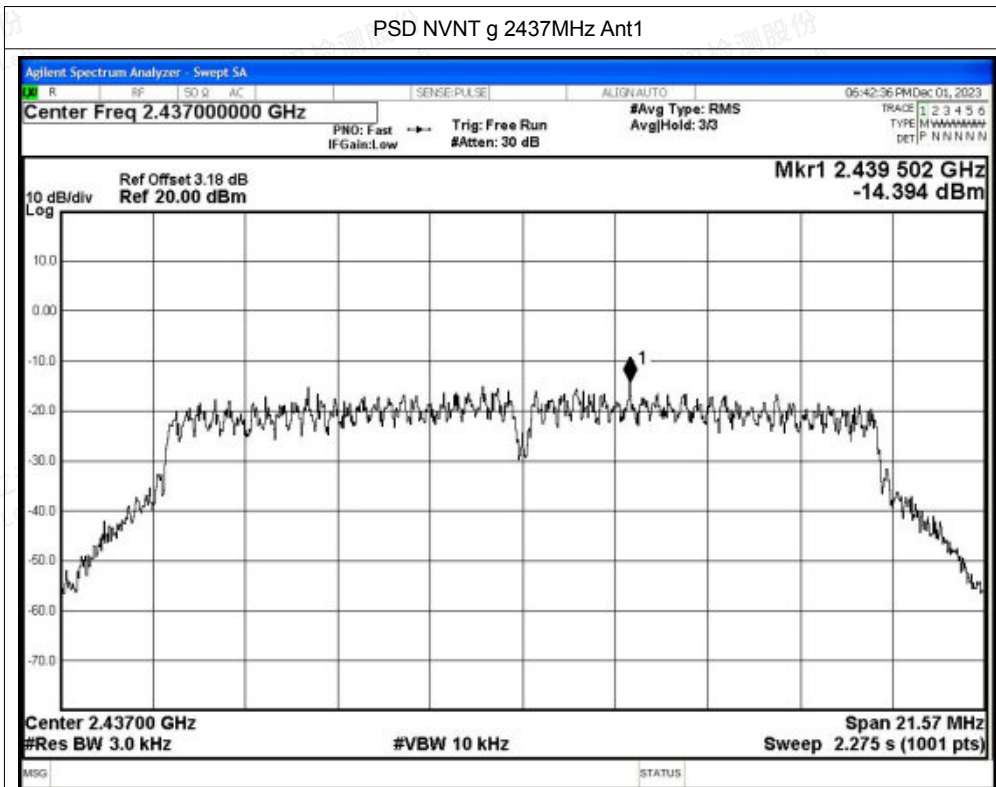


PSD NVNT g 2412MHz Ant1

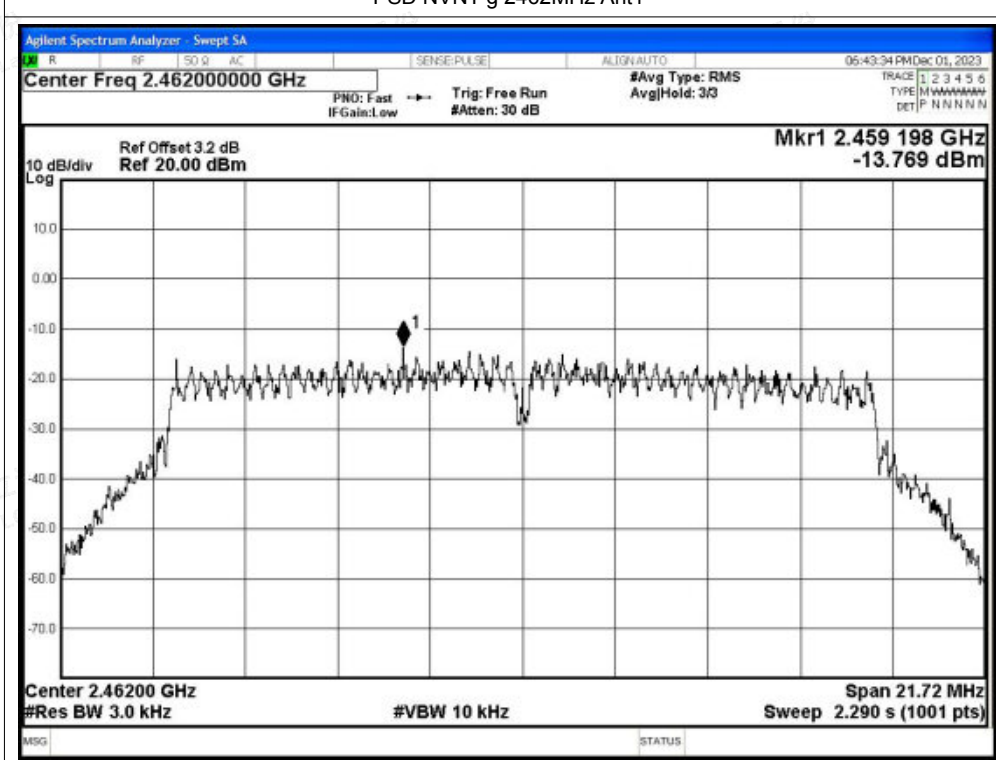




PSD NVNT g 2437MHz Ant1

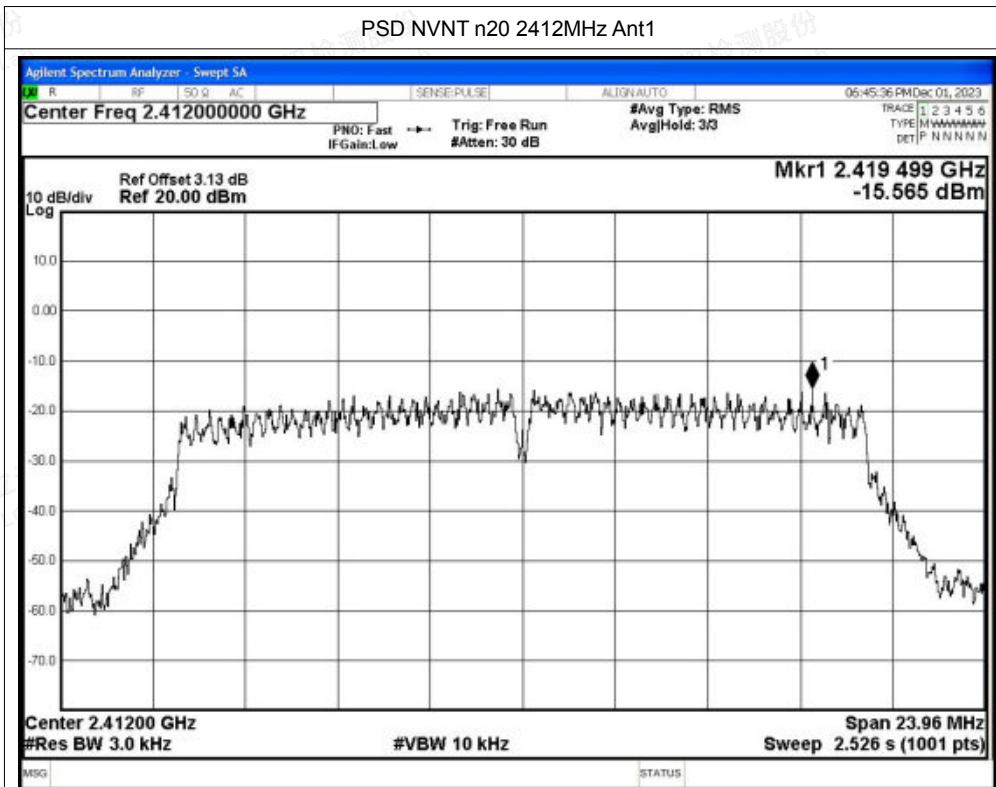


PSD NVNT g 2462MHz Ant1

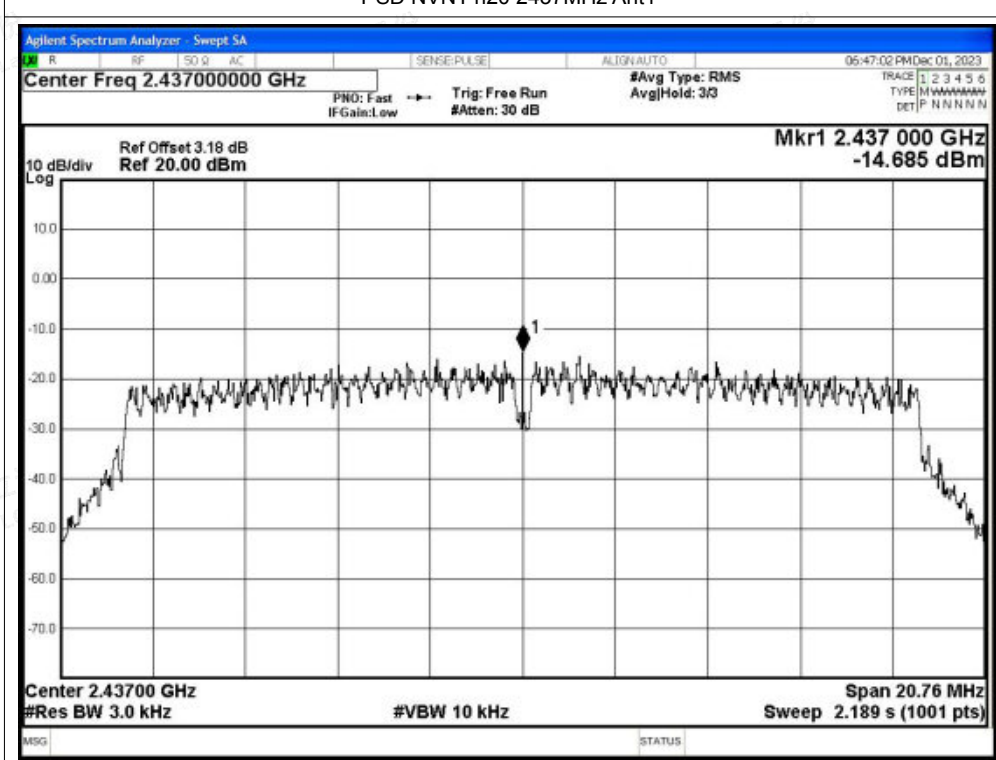




PSD NVNT n20 2412MHz Ant1

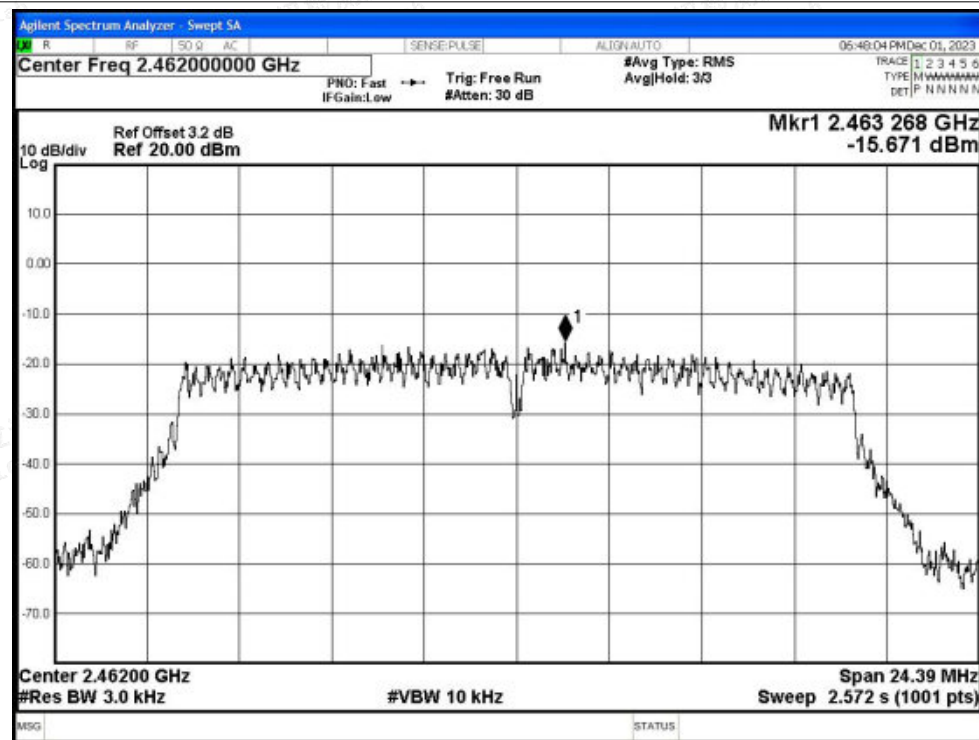


PSD NVNT n20 2437MHz Ant1

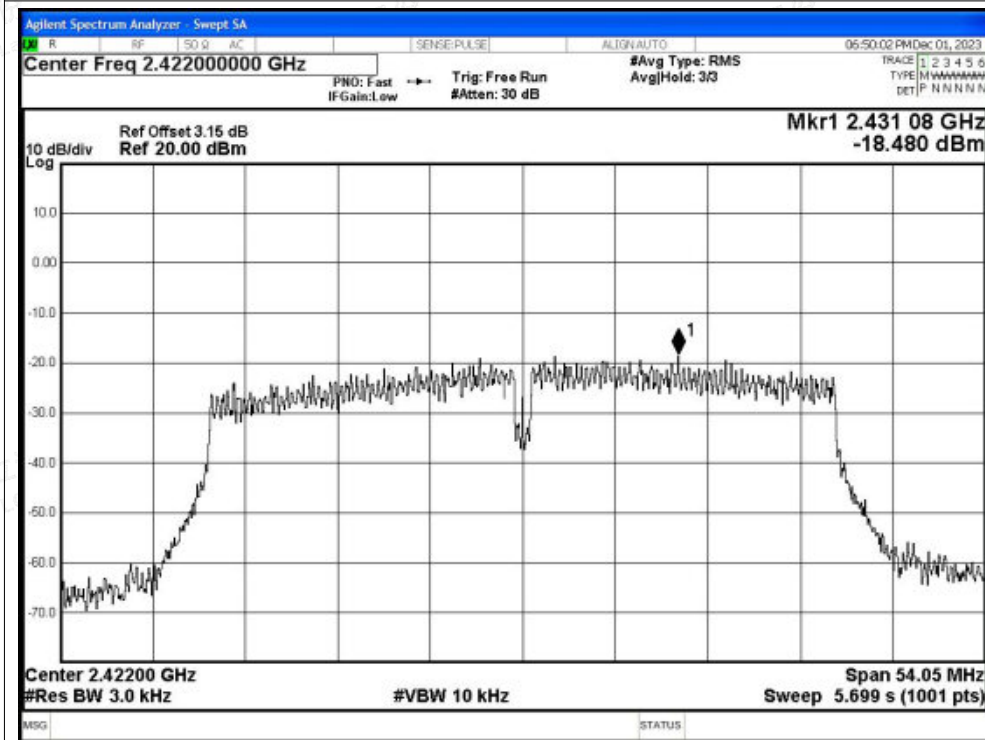




PSD NVNT n20 2462MHz Ant1

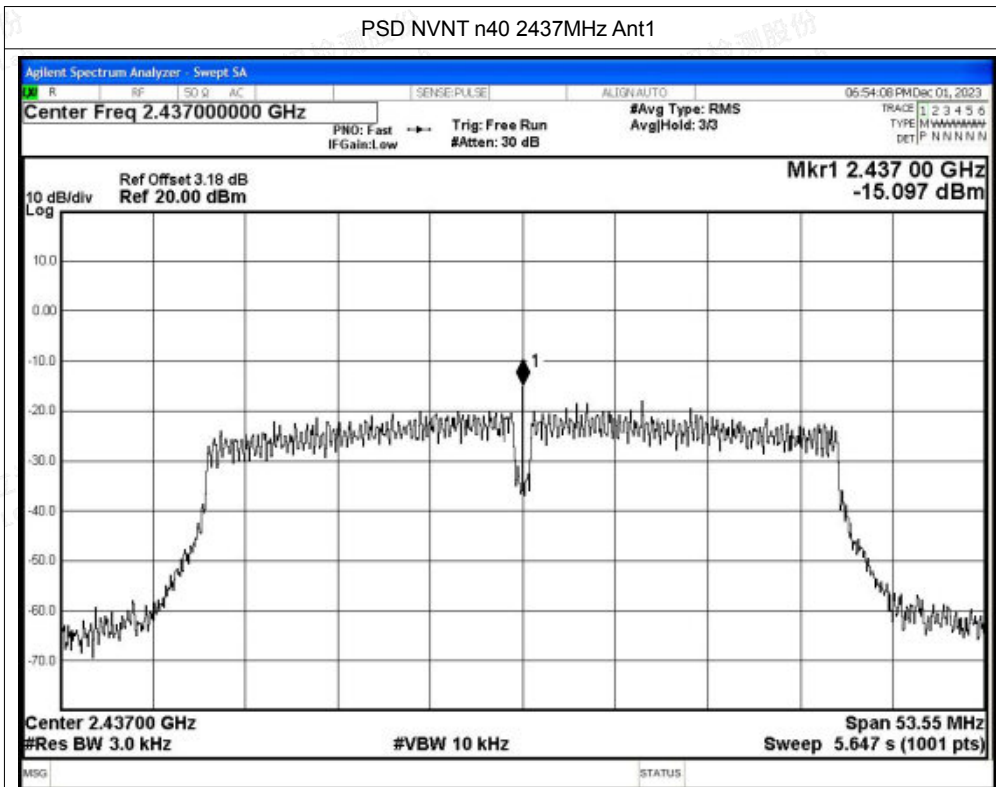


PSD NVNT n40 2422MHz Ant1

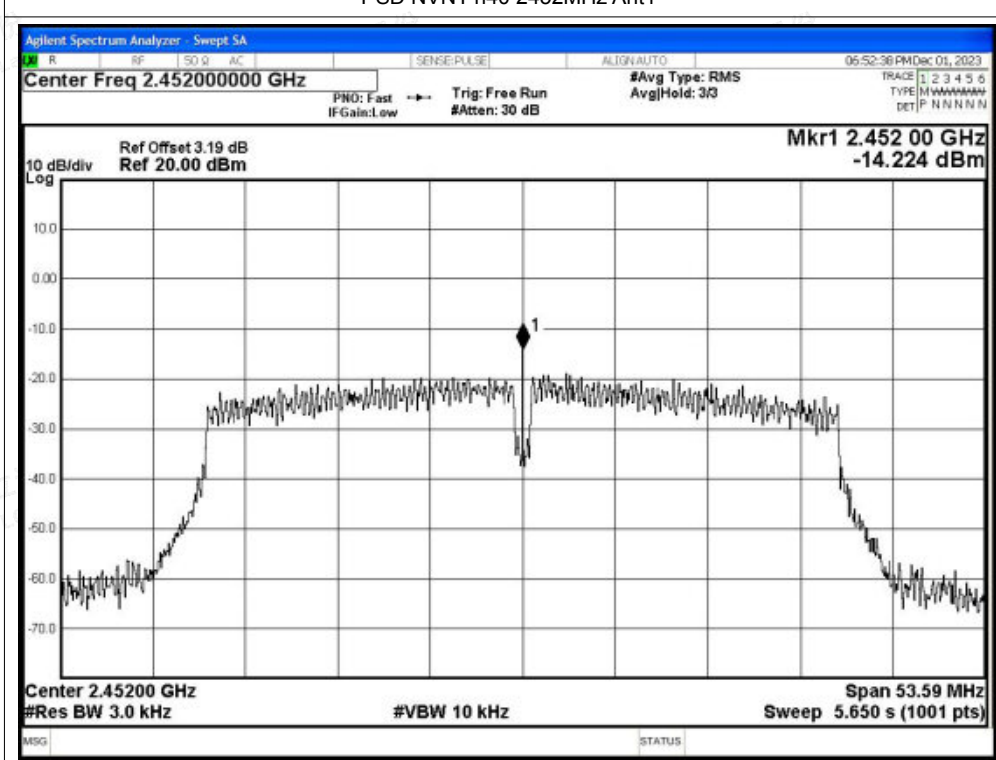




PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1





C.4 Band edge measurements

Test Result

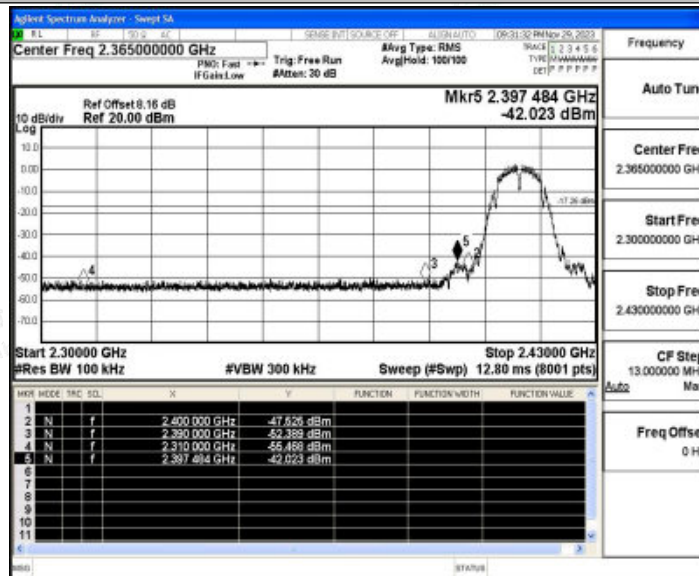
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.74	-42.02	≤ -17.26	PASS
		High	2462	1.96	-49.82	≤ -18.04	PASS
11G	Ant1	Low	2412	-3.49	-40.4	≤ -23.49	PASS
		High	2462	-4.12	-47.67	≤ -24.12	PASS
11N20SISO	Ant1	Low	2412	-3.34	-38.66	≤ -23.34	PASS
		High	2462	-4.06	-46.4	≤ -24.06	PASS
11N40SISO	Ant1	Low	2422	-6.94	-41.08	≤ -26.94	PASS
		High	2452	-7.56	-41.37	≤ -27.56	PASS



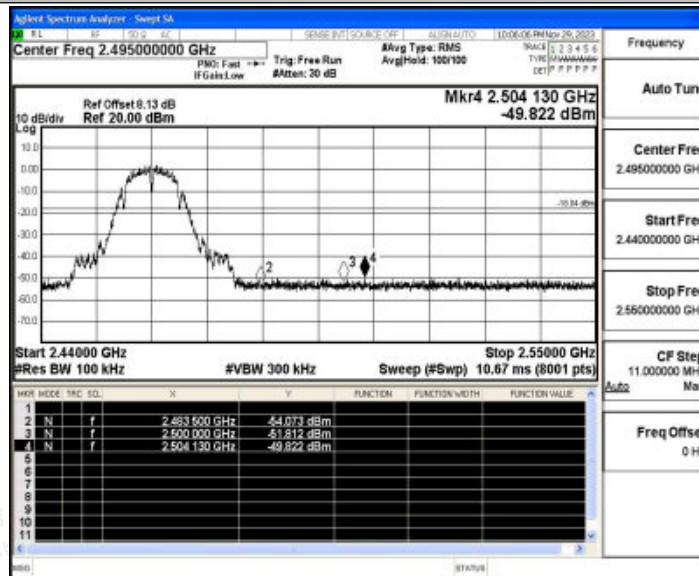


Test Graphs

11B_Ant1_Low_2412

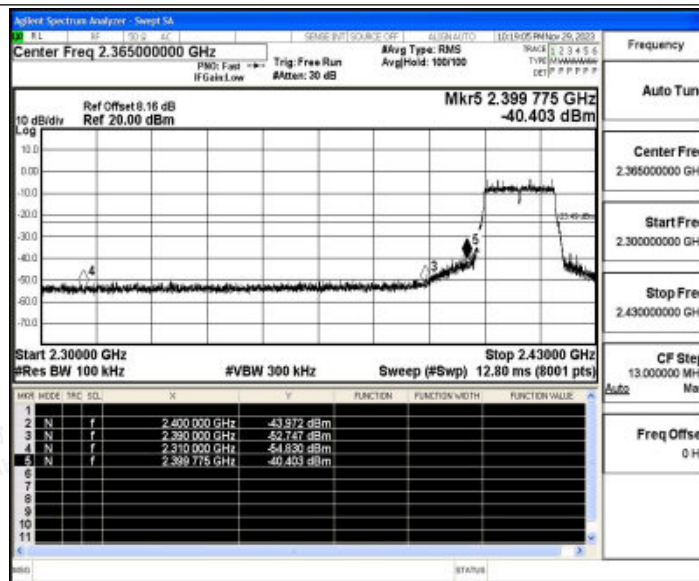


11B_Ant1_High_2462

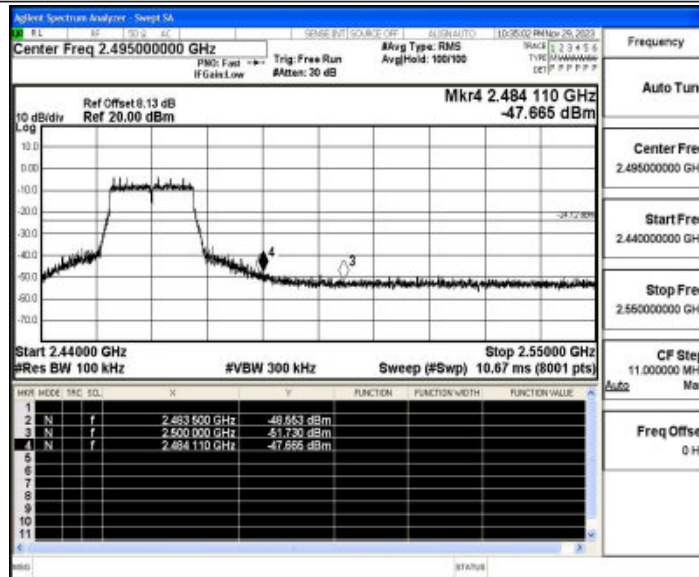


11G_Ant1_Low_2412



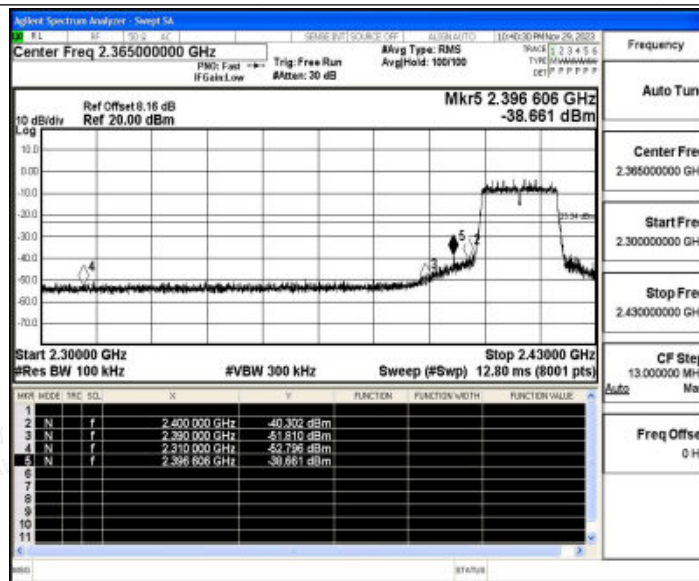


11G_Ant1_High_2462

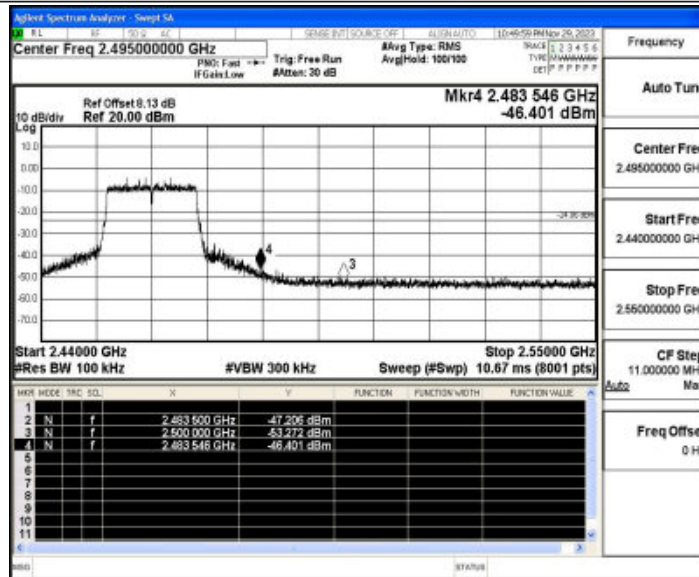


11N20SISO_Ant1_Low_2412



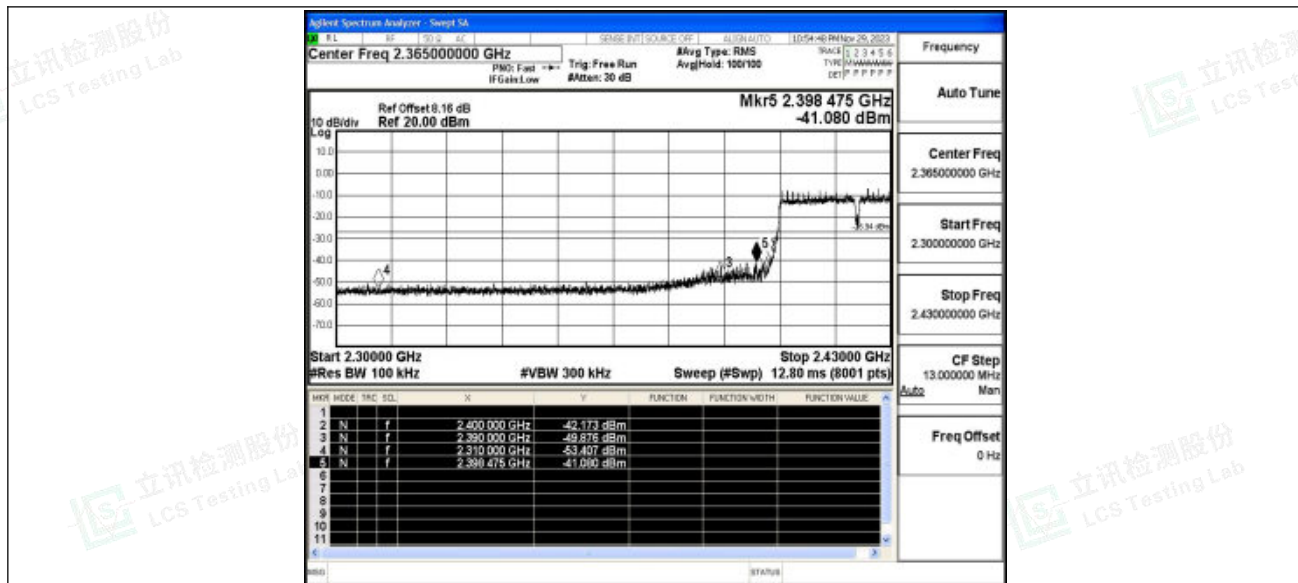


11N20SISO_Ant1_High_2462

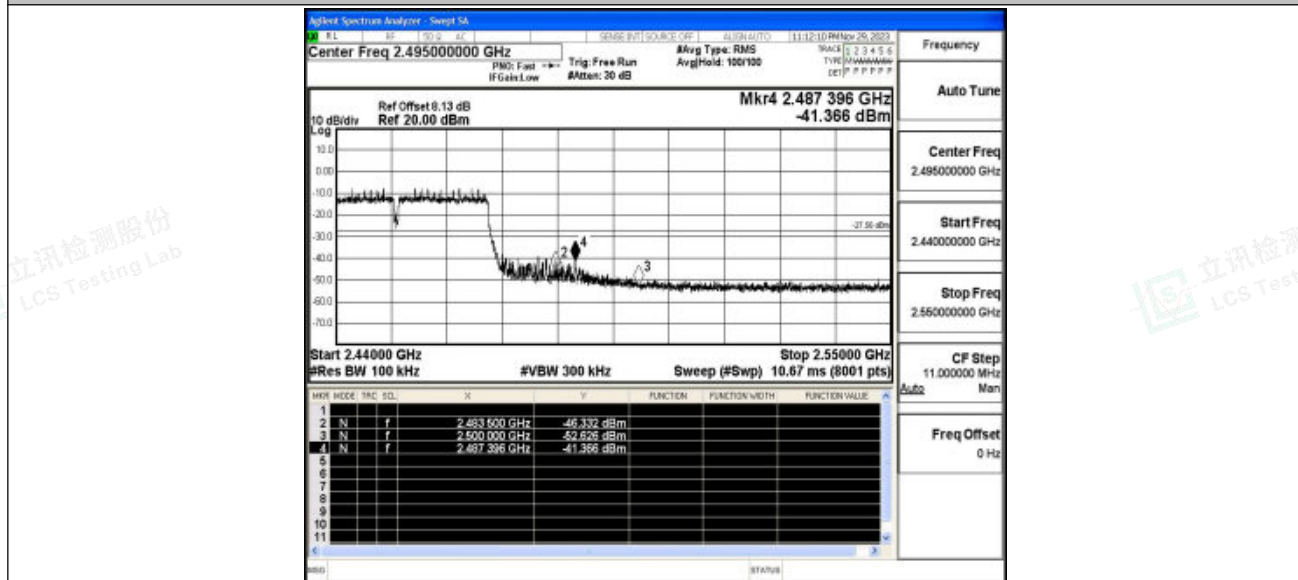


11N40SISO_Ant1_Low_2422





11N40SISO_Ant1_High_2452





C.5 Conducted Spurious Emission

TestMode	Antenna	Freq(MHz)	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	2.74	-61.27	≤-17.26	PASS
			1000~26500	2.74	-49.17	≤-17.26	PASS
		2437	30~1000	1.99	-61.39	≤-18.01	PASS
			1000~26500	1.99	-48.17	≤-18.01	PASS
		2462	30~1000	1.96	-61.33	≤-18.04	PASS
			1000~26500	1.96	-49.3	≤-18.04	PASS
11G	Ant1	2412	30~1000	-3.49	-61.58	≤-23.49	PASS
			1000~26500	-3.49	-49.02	≤-23.49	PASS
		2437	30~1000	-3.15	-61.65	≤-23.15	PASS
			1000~26500	-3.15	-49.02	≤-23.15	PASS
		2462	30~1000	-4.12	-61.82	≤-24.12	PASS
			1000~26500	-4.12	-49.24	≤-24.12	PASS
11N20SISO	Ant1	2412	30~1000	-3.34	-60.54	≤-23.34	PASS
			1000~26500	-3.34	-48.21	≤-23.34	PASS
		2437	30~1000	-3.20	-61.41	≤-23.2	PASS
			1000~26500	-3.20	-48.68	≤-23.2	PASS
		2462	30~1000	-4.06	-61.98	≤-24.06	PASS
			1000~26500	-4.06	-49.06	≤-24.06	PASS
11N40SISO	Ant1	2422	30~1000	-6.94	-61.76	≤-26.94	PASS
			1000~26500	-6.94	-48.68	≤-26.94	PASS
		2437	30~1000	-7.54	-61.67	≤-27.54	PASS
			1000~26500	-7.54	-49.01	≤-27.54	PASS
		2452	30~1000	-7.56	-61.06	≤-27.56	PASS
			1000~26500	-7.56	-47.87	≤-27.56	PASS





Reference level measurement

Test Result

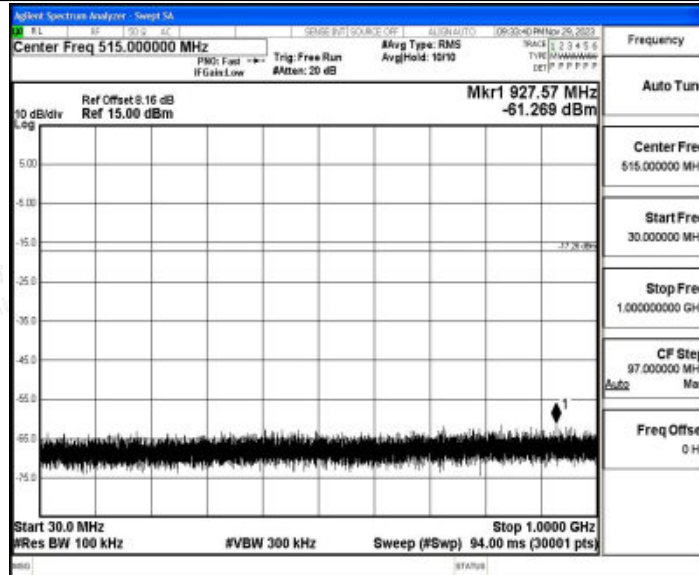
TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2412.49	2.74
		2437	2435.50	1.99
		2462	2460.49	1.96
11G	Ant1	2412	2410.73	-3.49
		2437	2438.25	-3.15
		2462	2460.72	-4.12
11N20SISO	Ant1	2412	2416.98	-3.34
		2437	2438.26	-3.20
		2462	2464.50	-4.06
11N40SISO	Ant1	2422	2419.49	-6.94
		2437	2439.45	-7.54
		2452	2454.46	-7.56



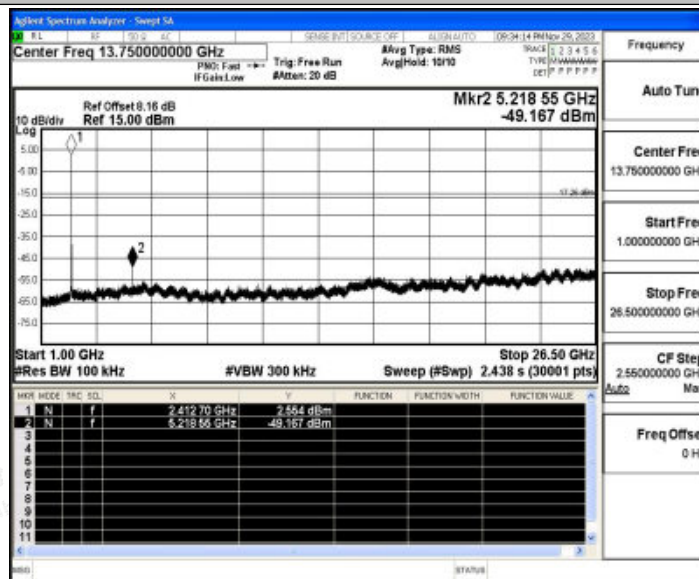


Test Graphs

11B_Ant1_2412_30~1000

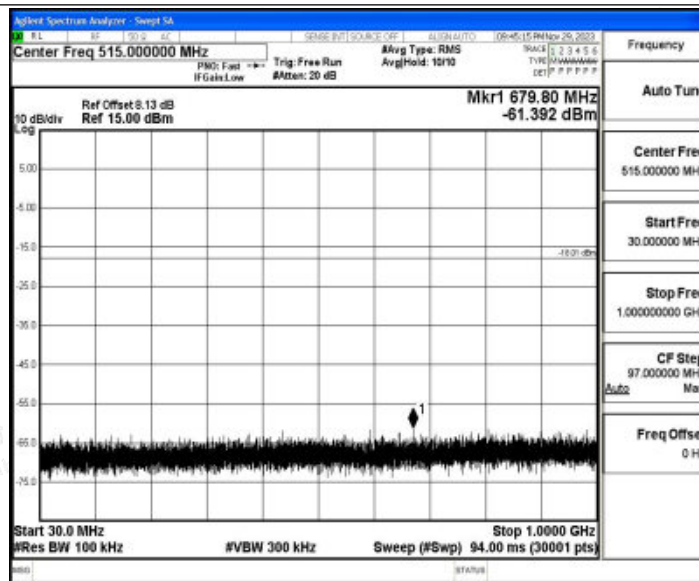


11B_Ant1_2412_1000~26500

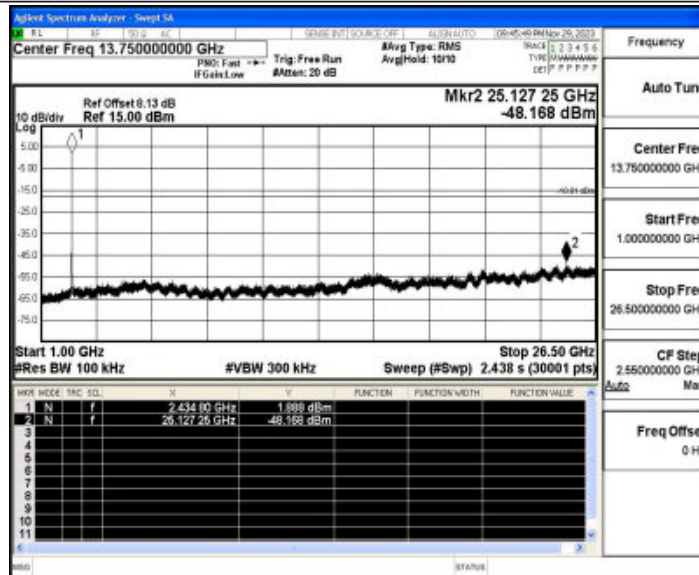


11B_Ant1_2437_30~1000



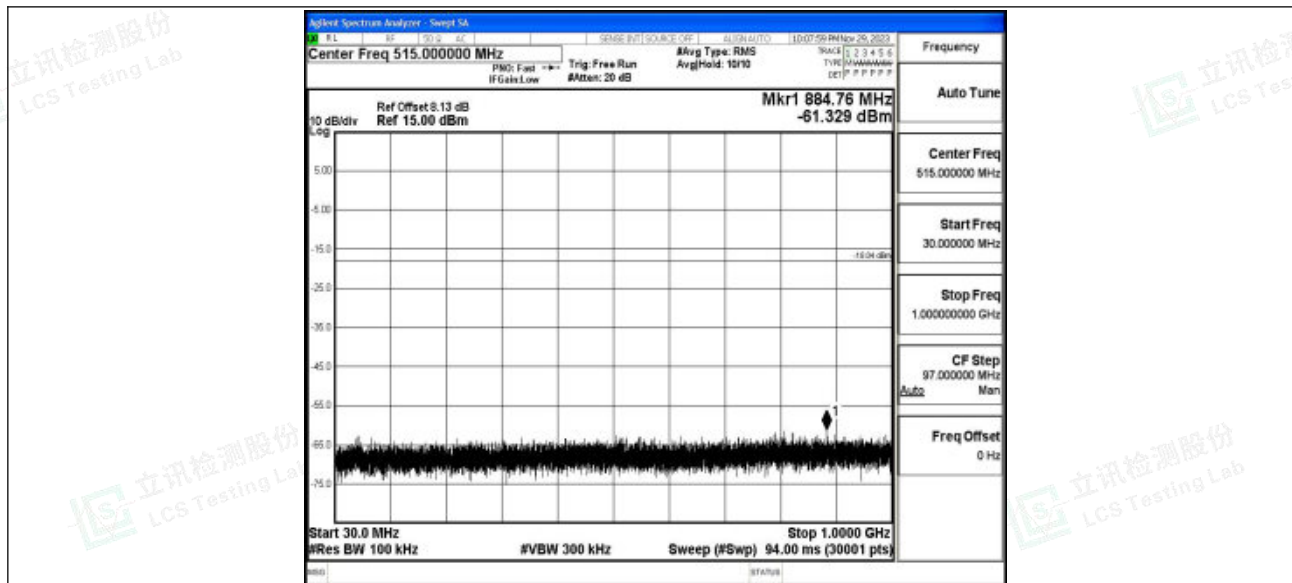


11B_Ant1_2437_1000~26500

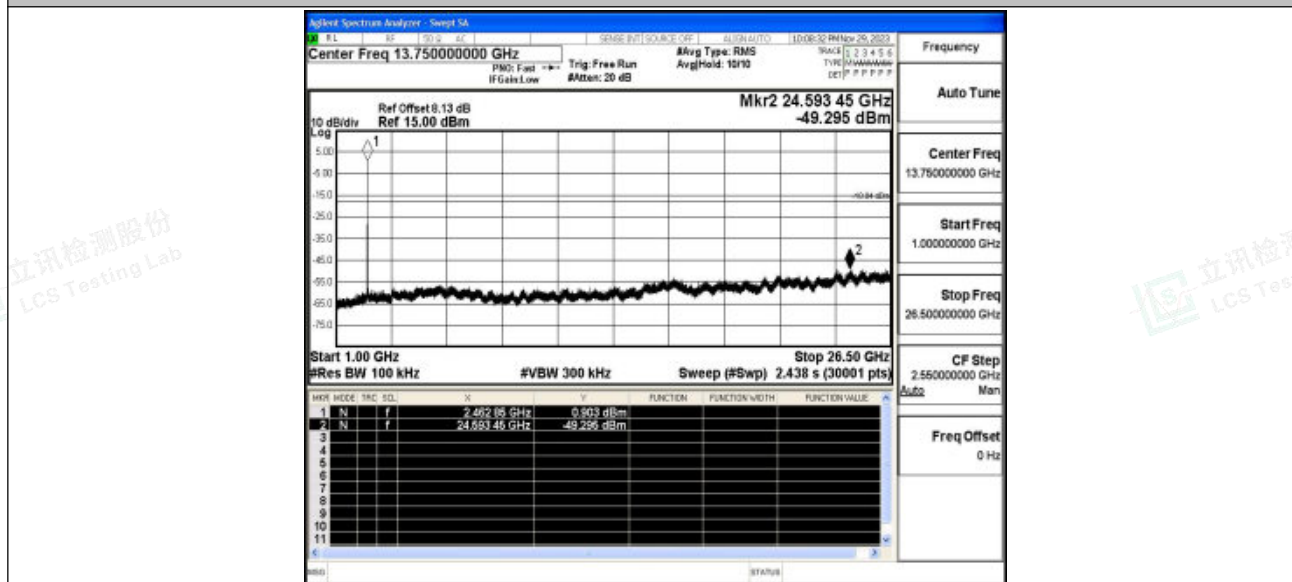


11B_Ant1_2462_30~1000



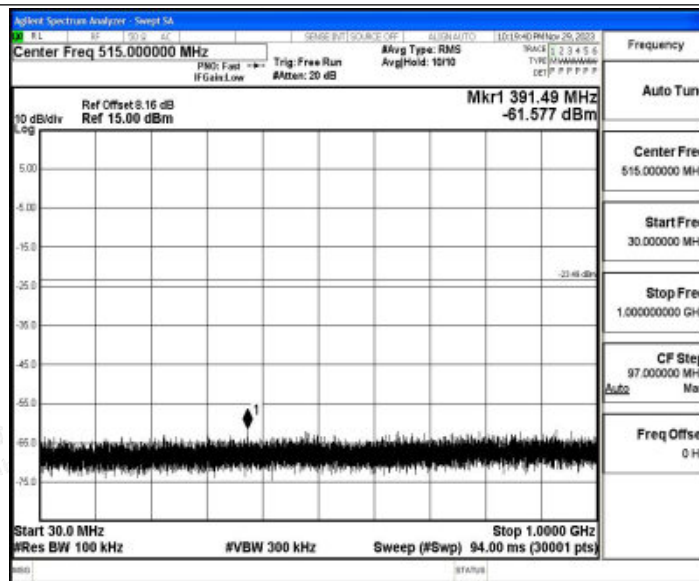


11B_Ant1_2462_1000~26500

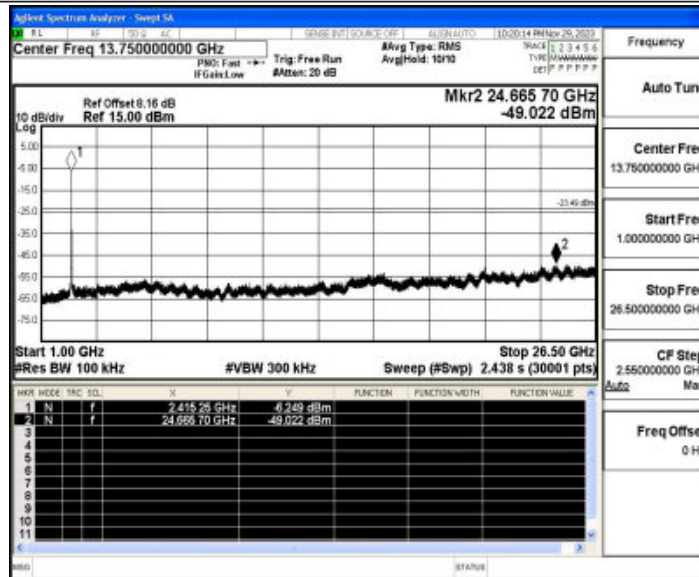


11G_Ant1_2412_30~1000



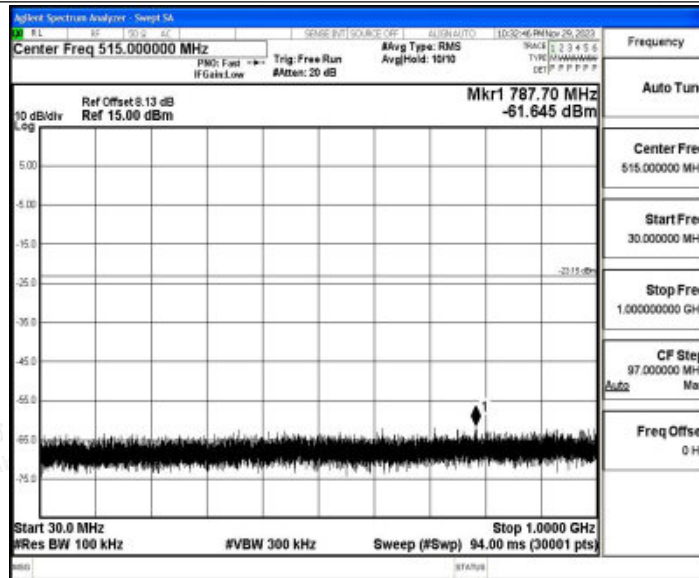


11G_Ant1_2412_1000~26500

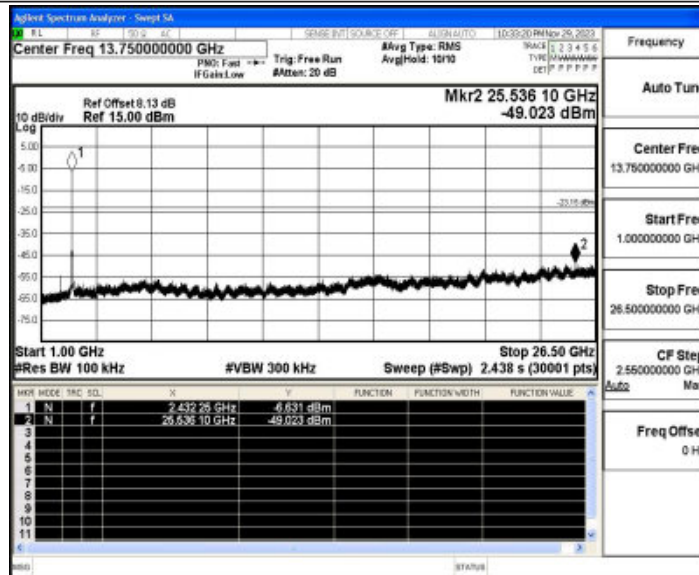


11G_Ant1_2437_30~1000



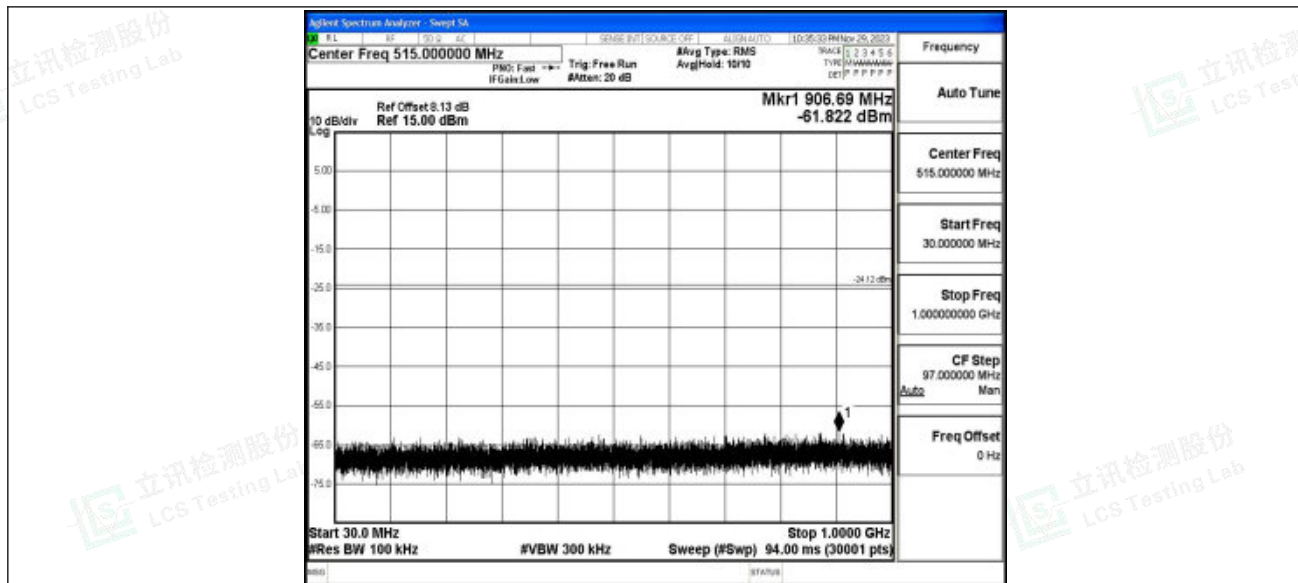


11G_Ant1_2437_1000~26500

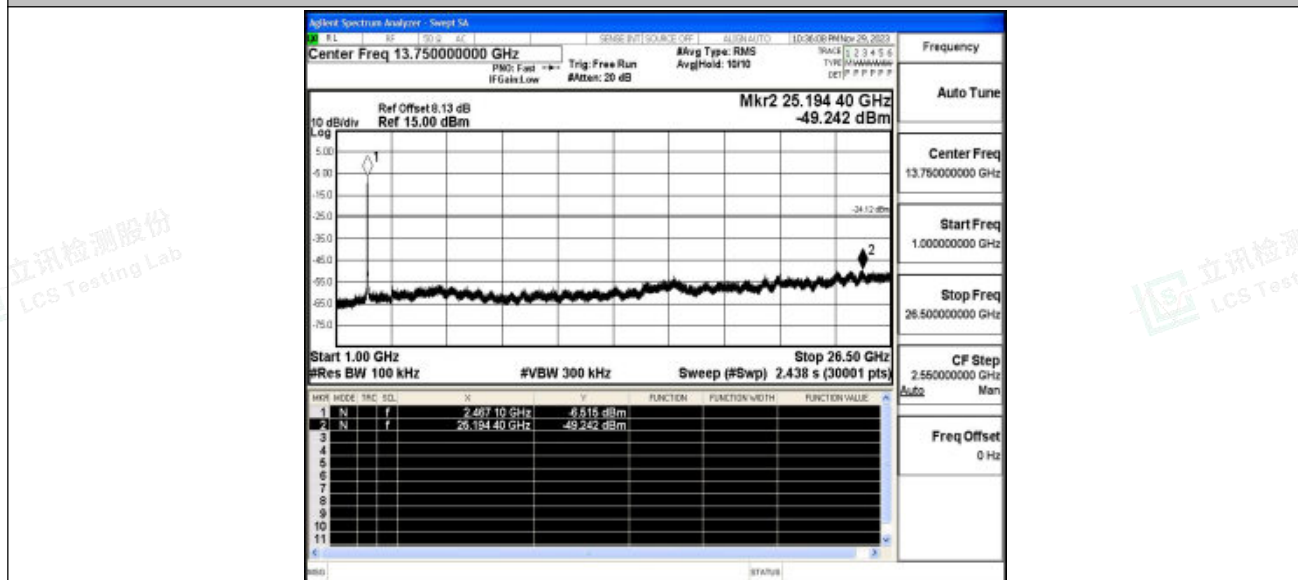


11G_Ant1_2462_30~1000



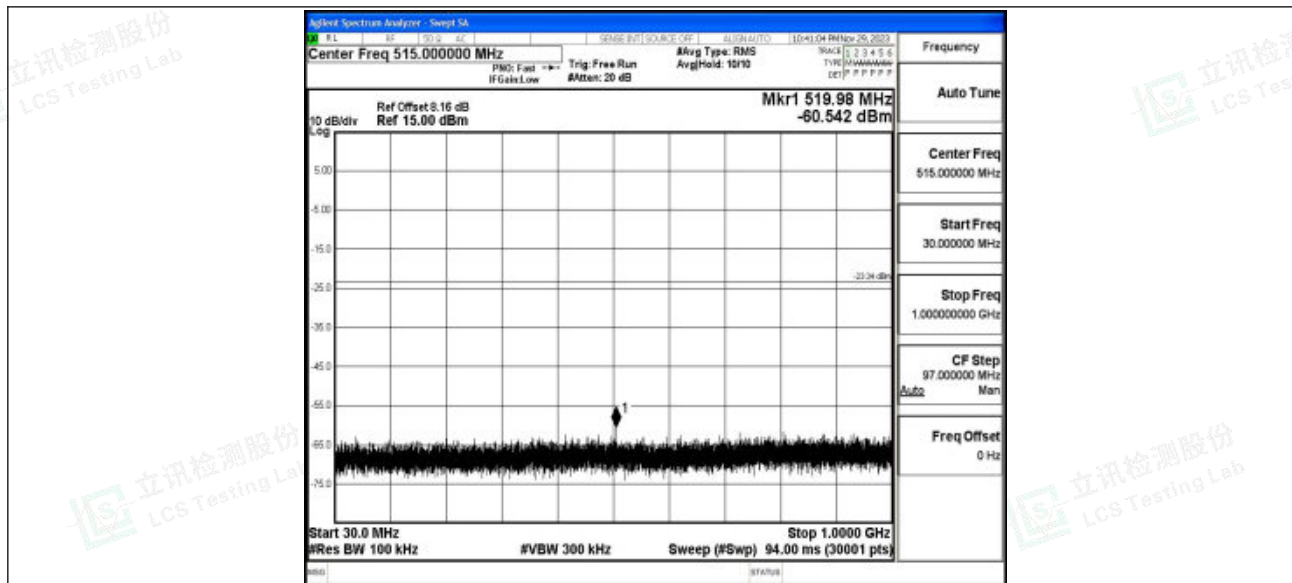


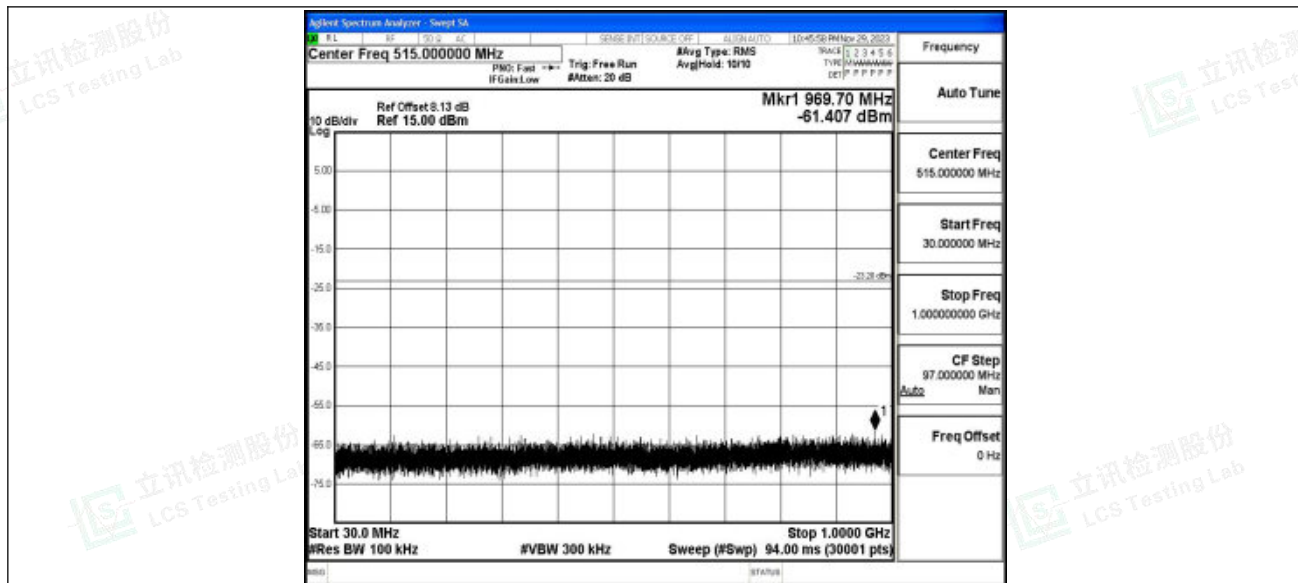
11G_Ant1_2462_1000~26500



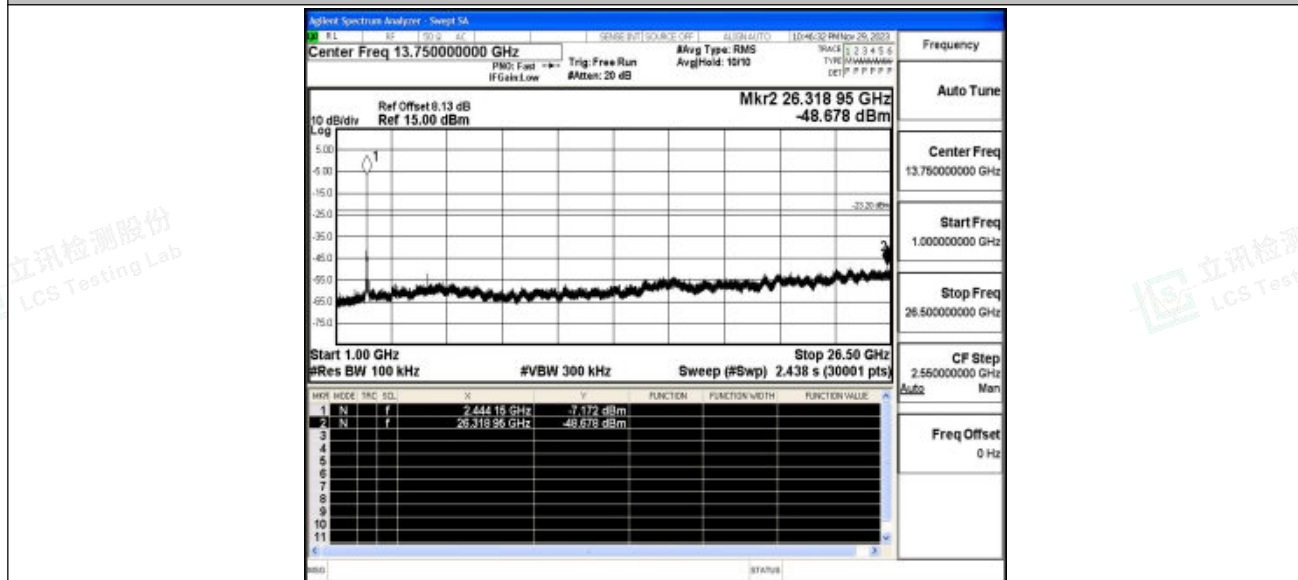
11N20SISO_Ant1_2412_30~1000





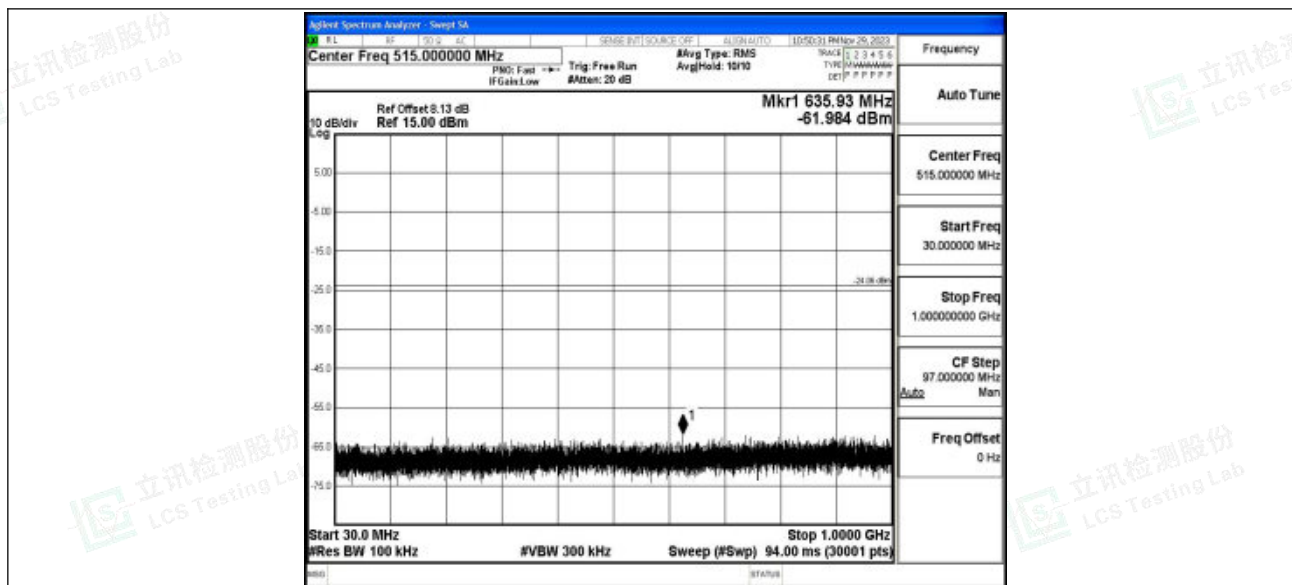


11N20SISO_Ant1_2437_1000~26500

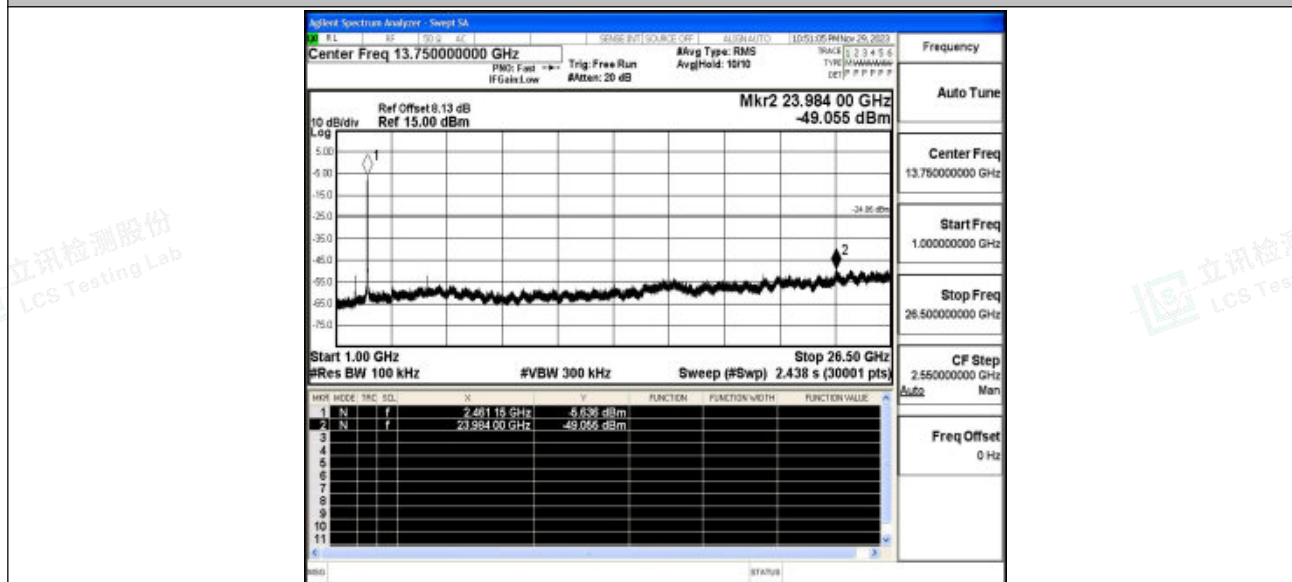


11N20SISO_Ant1_2462_30~1000



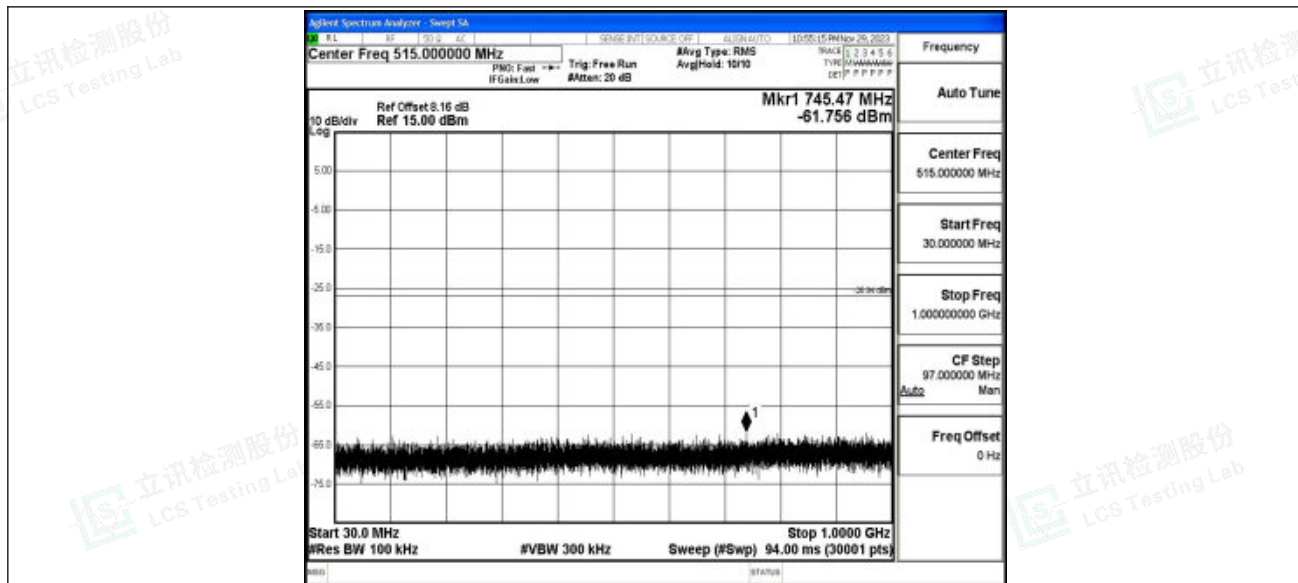


11N20SISO_Ant1_2462_1000~26500

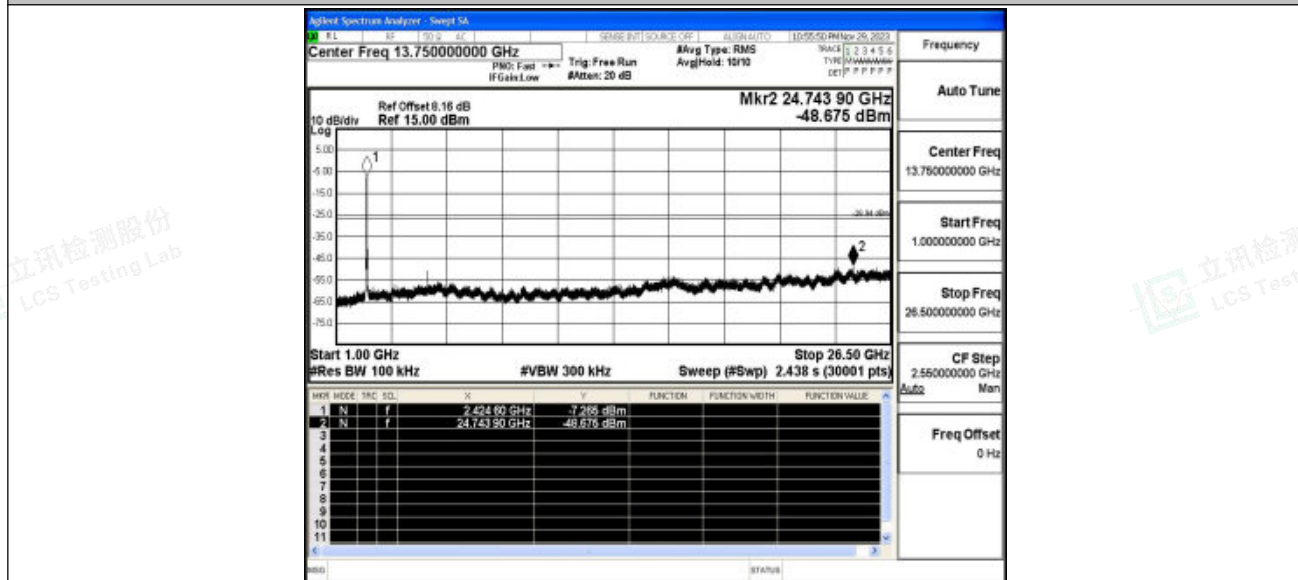


11N40SISO_Ant1_2422_30~1000



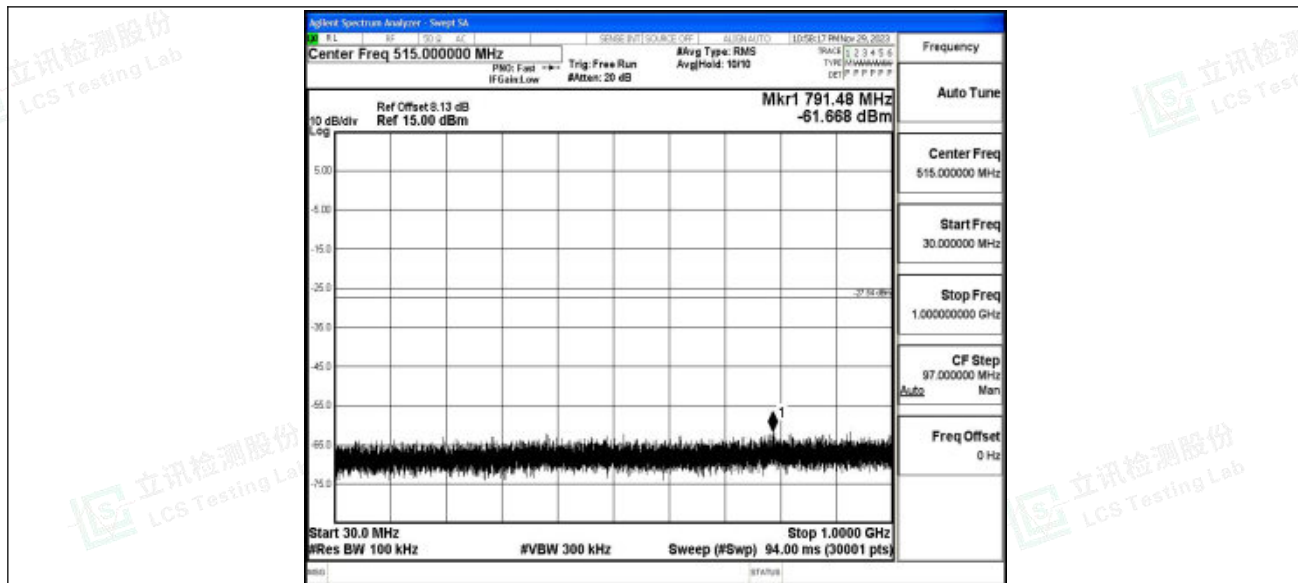


11N40SISO_Ant1_2422_1000~26500

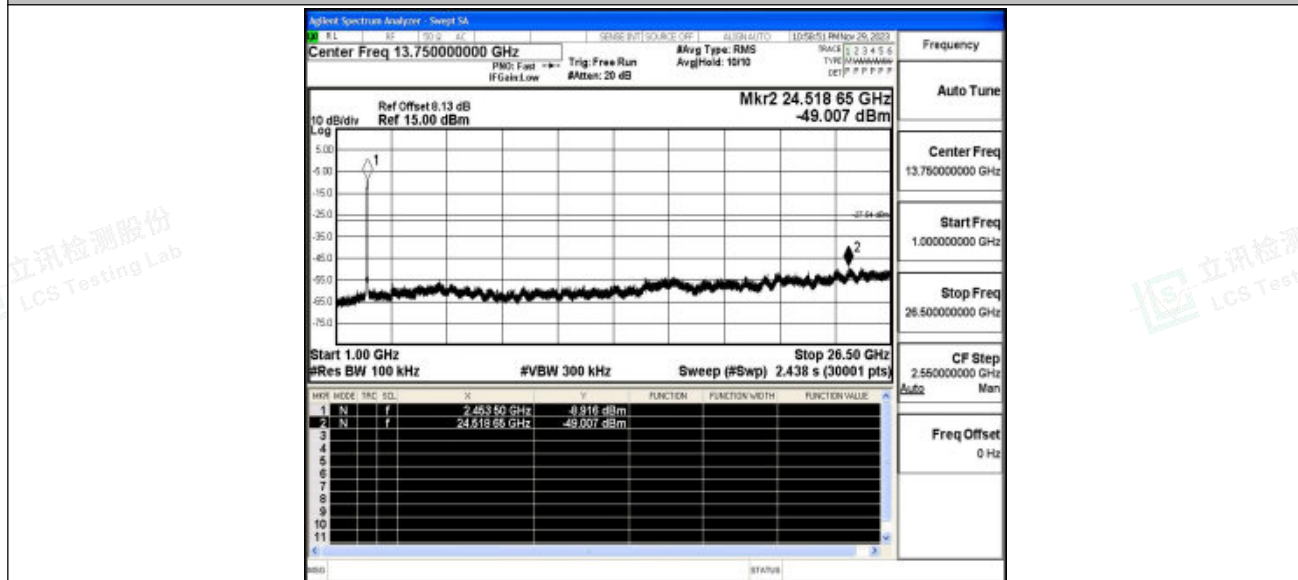


11N40SISO_Ant1_2437_30~1000



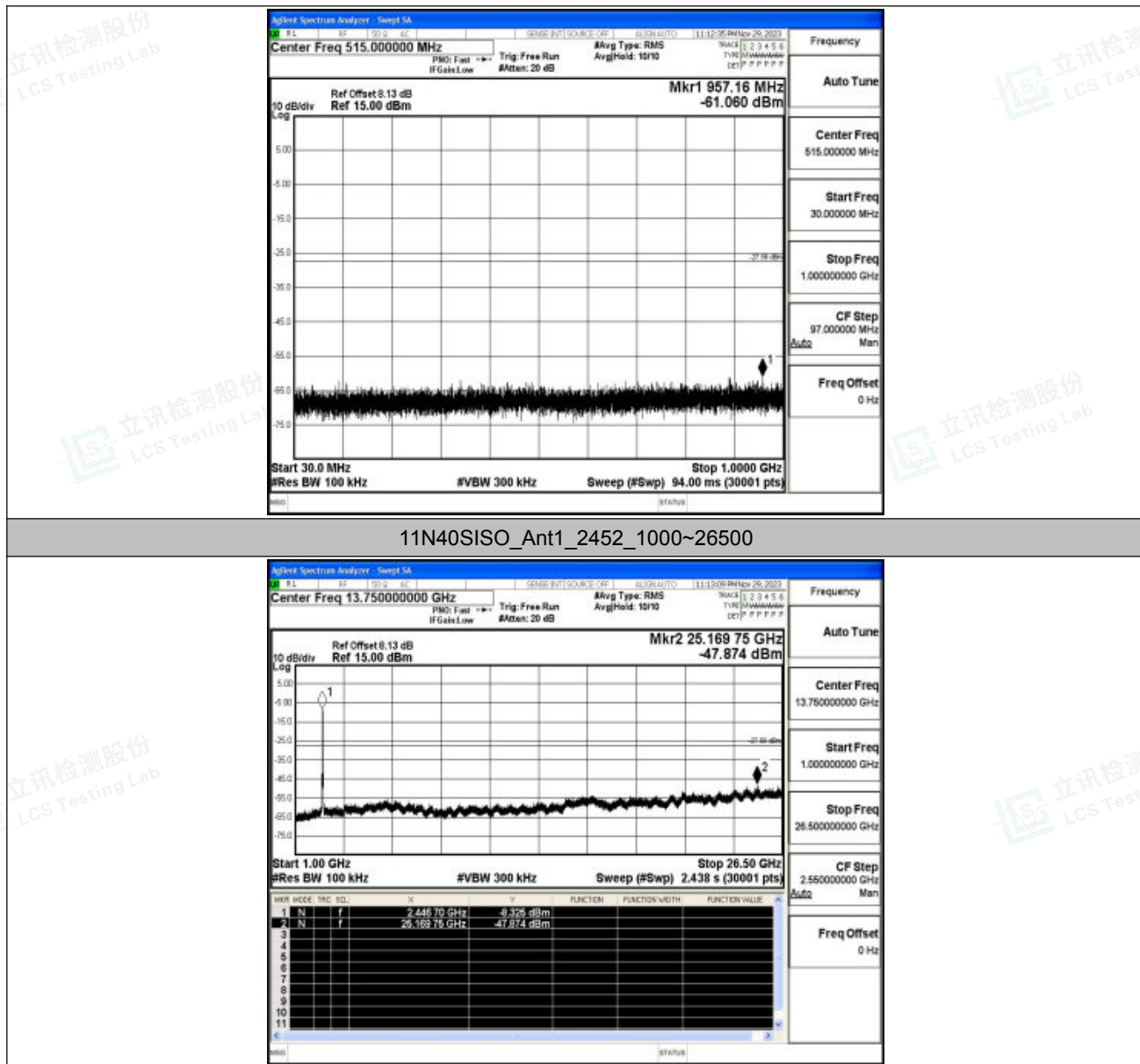


11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_30~1000

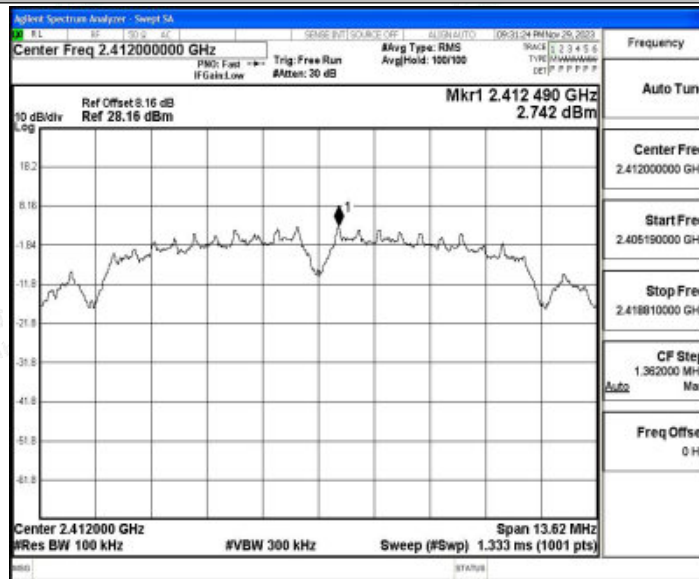




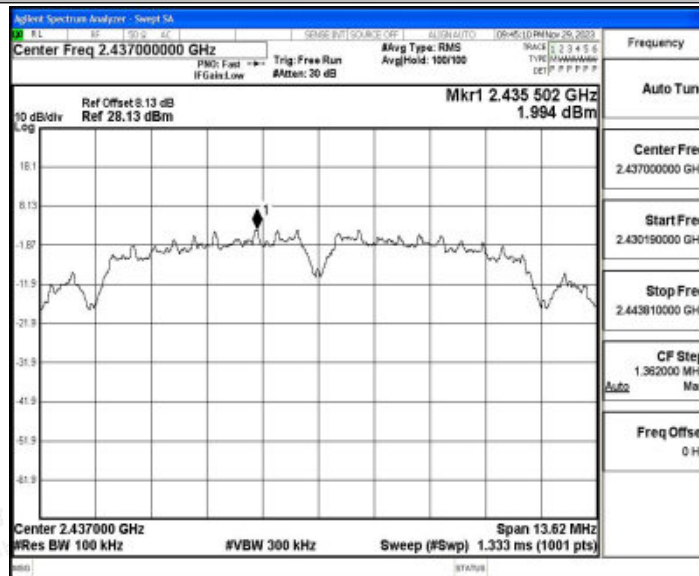


Test Graphs

11B_Ant1_2412

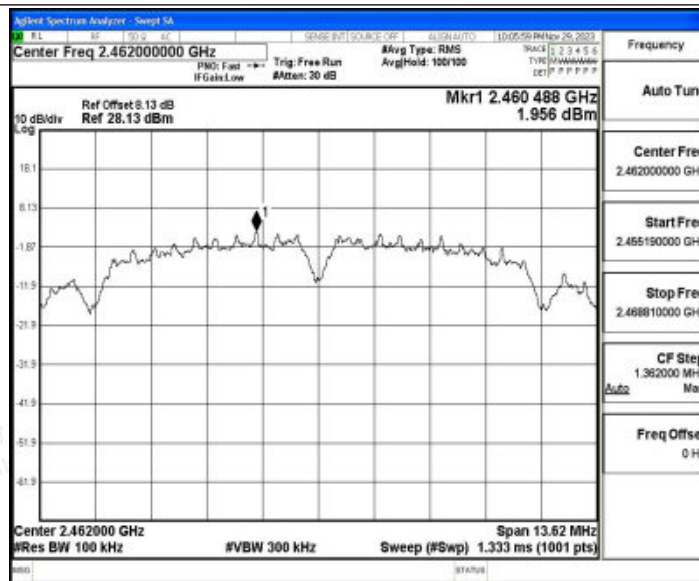


11B_Ant1_2437

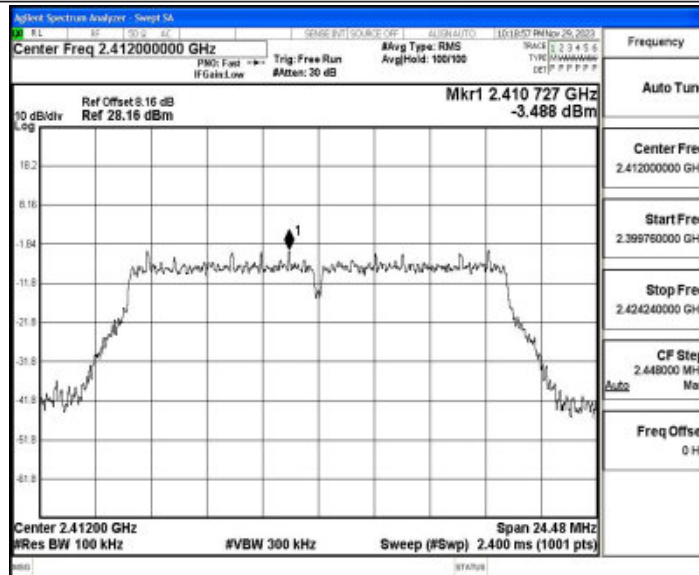


11B_Ant1_2462



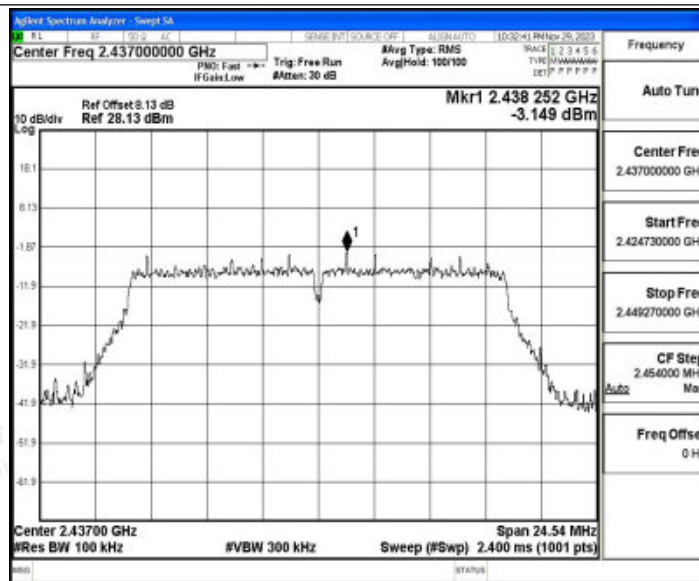


11G_Ant1_2412

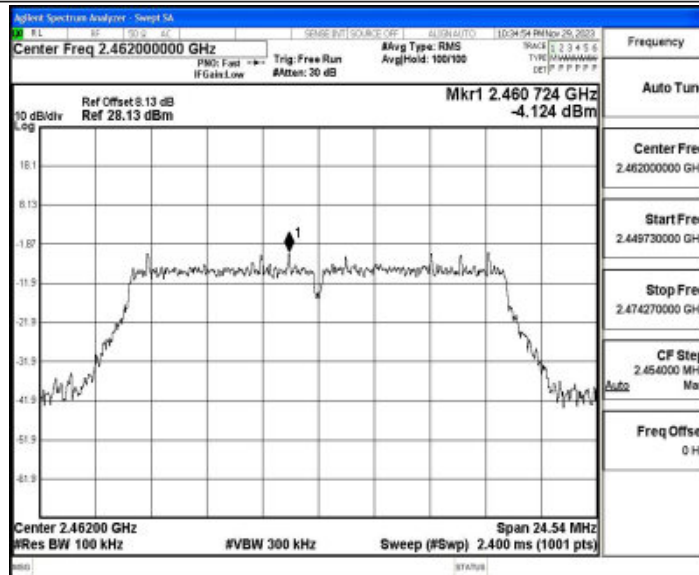


11G_Ant1_2437



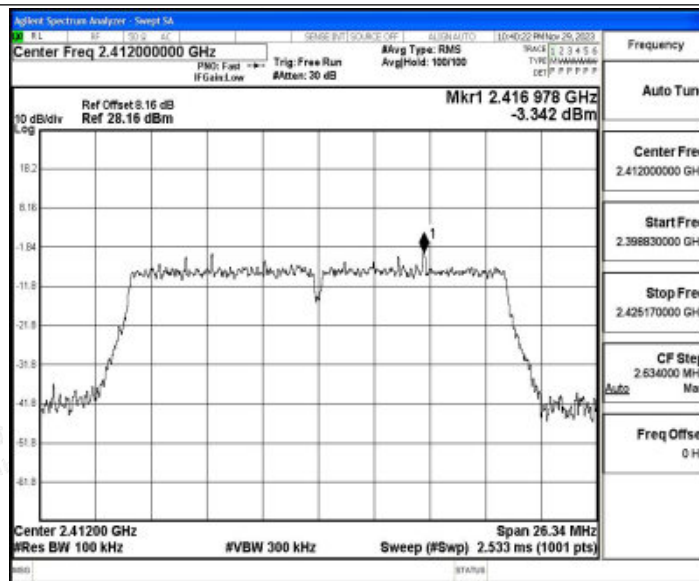


11G_Ant1_2462

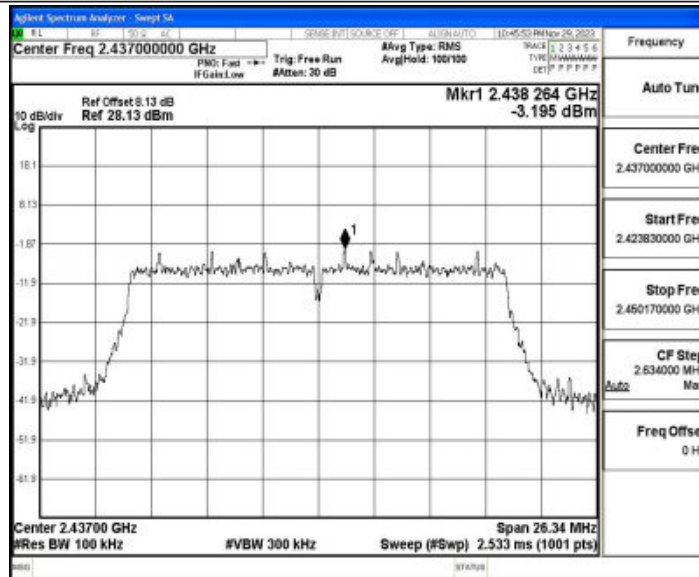


11N20SISO_Ant1_2412



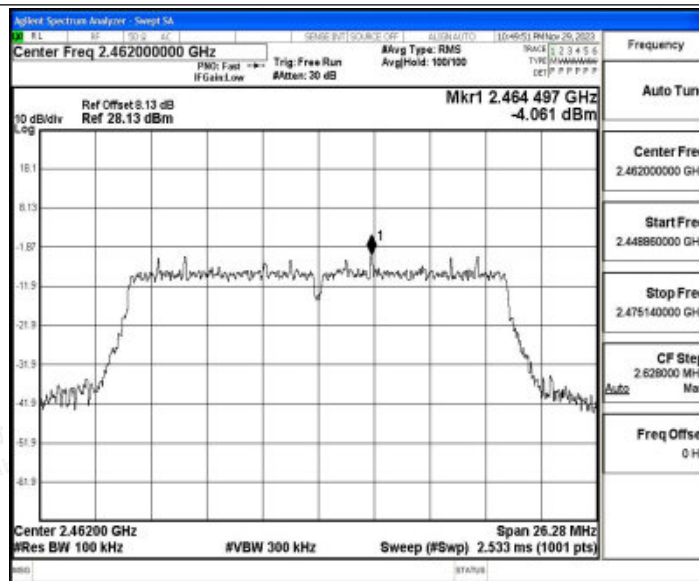


11N20SISO_Ant1_2437

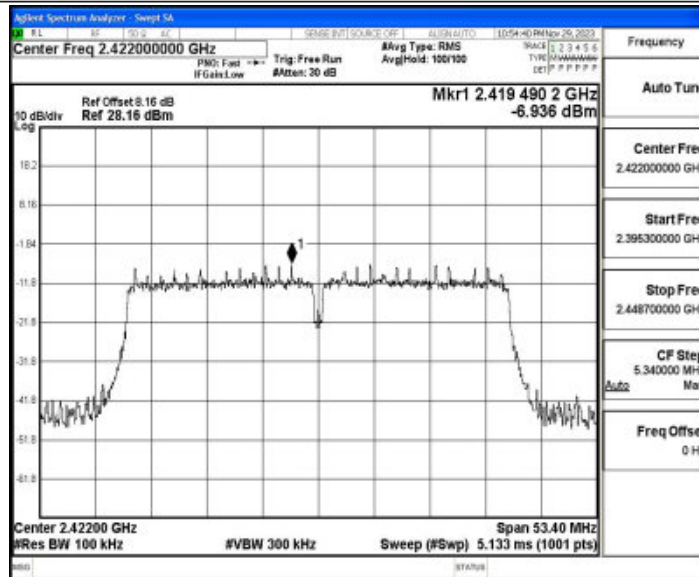


11N20SISO_Ant1_2462



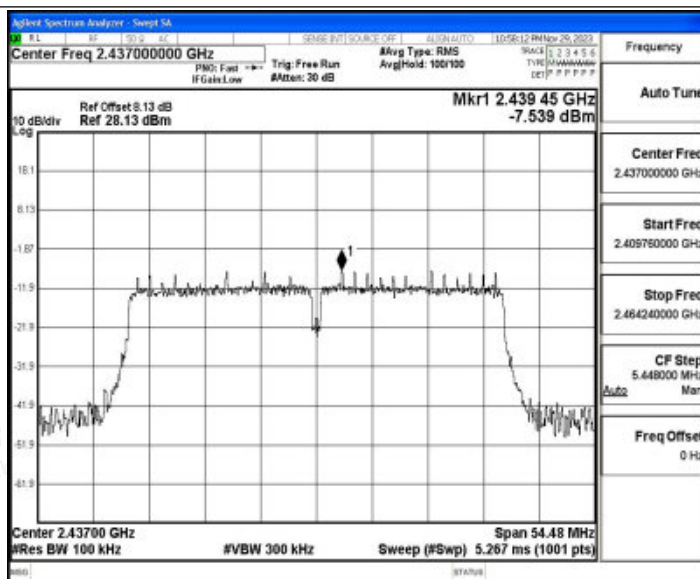


11N40SISO_Ant1_2422

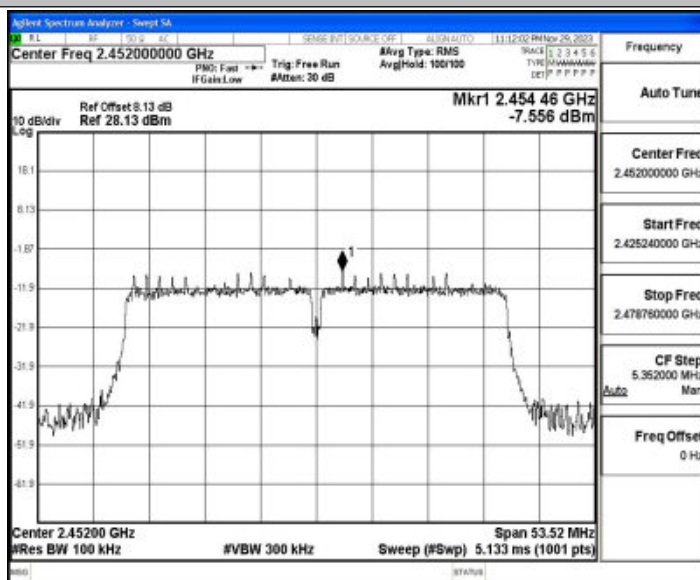


11N40SISO_Ant1_2437





11N40SISO Ant1 2452





C.6 Duty Cycle

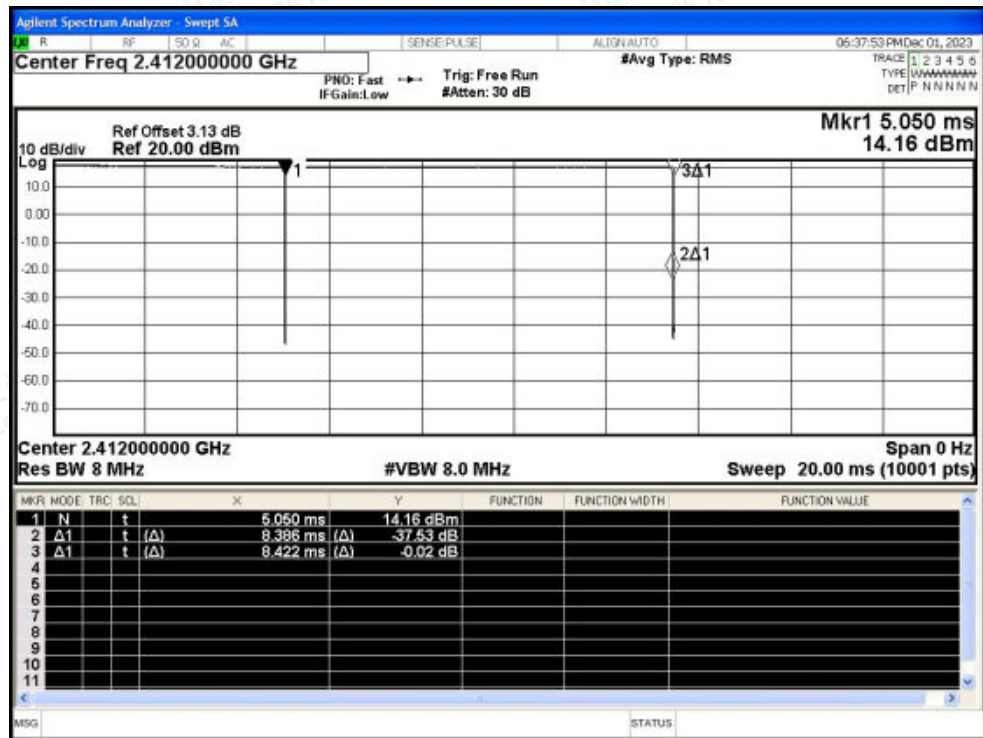
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.57	0	0.12
NVNT	b	2437	Ant1	99.57	0	0.12
NVNT	b	2462	Ant1	99.57	0	0.12
NVNT	g	2412	Ant1	97.08	0.13	0.72
NVNT	g	2437	Ant1	97.08	0.13	0.72
NVNT	g	2462	Ant1	96.94	0.13	0.72
NVNT	n20	2412	Ant1	96.73	0.14	0.77
NVNT	n20	2437	Ant1	96.73	0.14	0.77
NVNT	n20	2462	Ant1	96.73	0.14	0.77
NVNT	n40	2422	Ant1	93.64	0.29	1.54
NVNT	n40	2437	Ant1	93.93	0.27	1.54
NVNT	n40	2452	Ant1	93.93	0.27	1.54



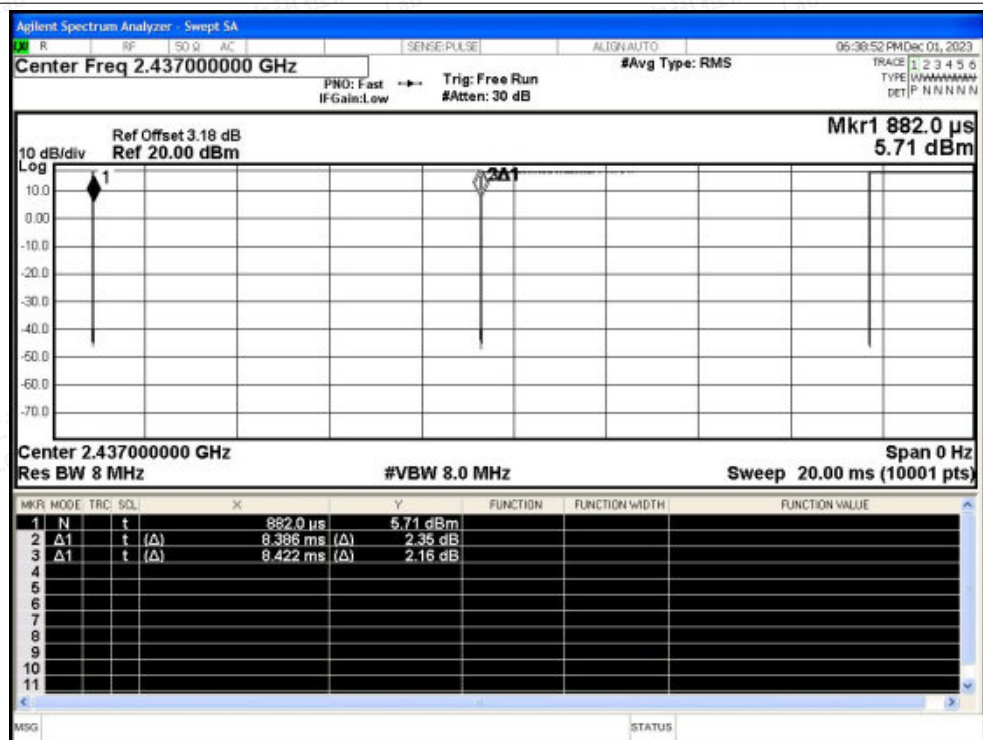


Test Graphs

Duty Cycle NVNT b 2412MHz Ant1

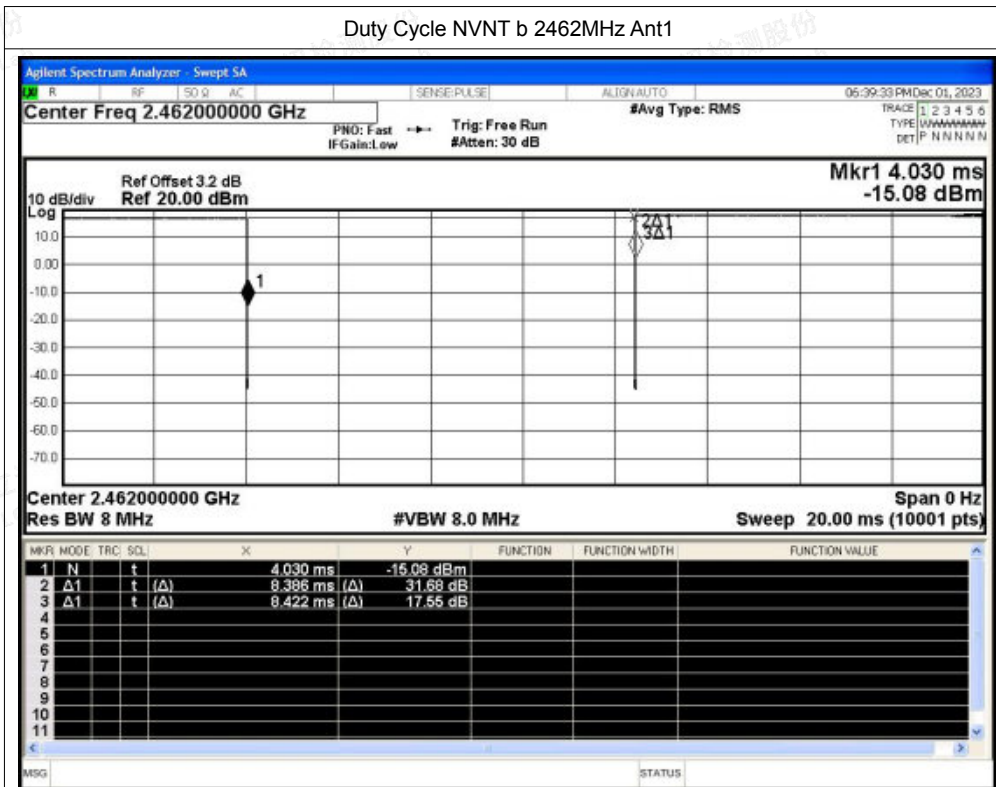


Duty Cycle NVNT b 2437MHz Ant1

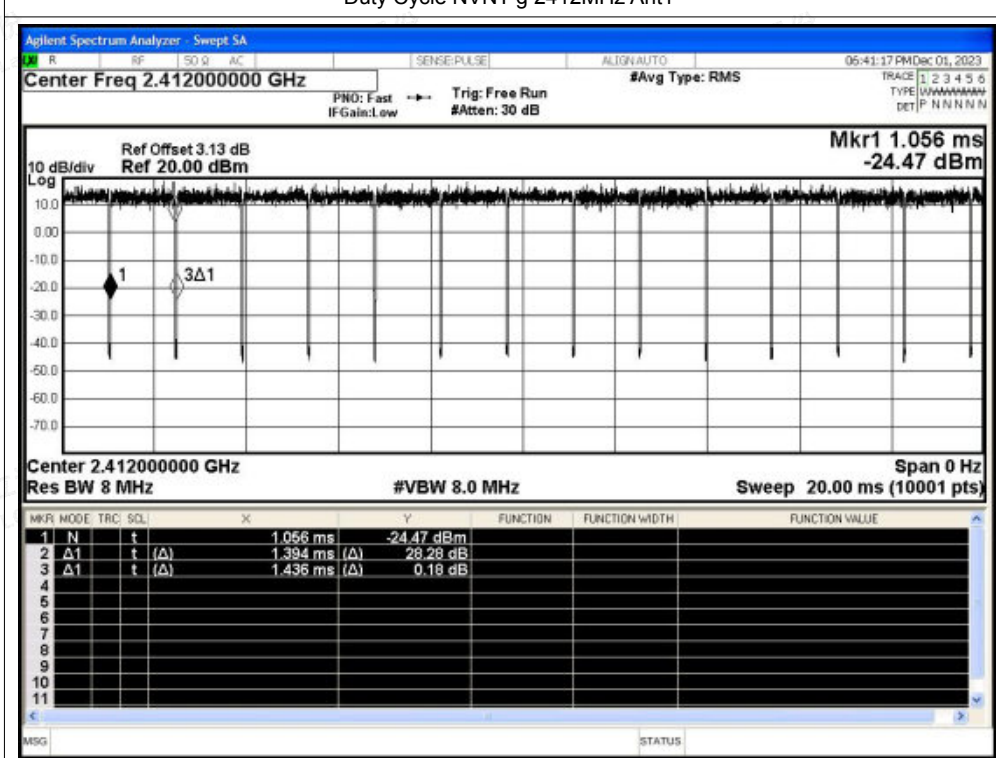




Duty Cycle NVNT b 2462MHz Ant1

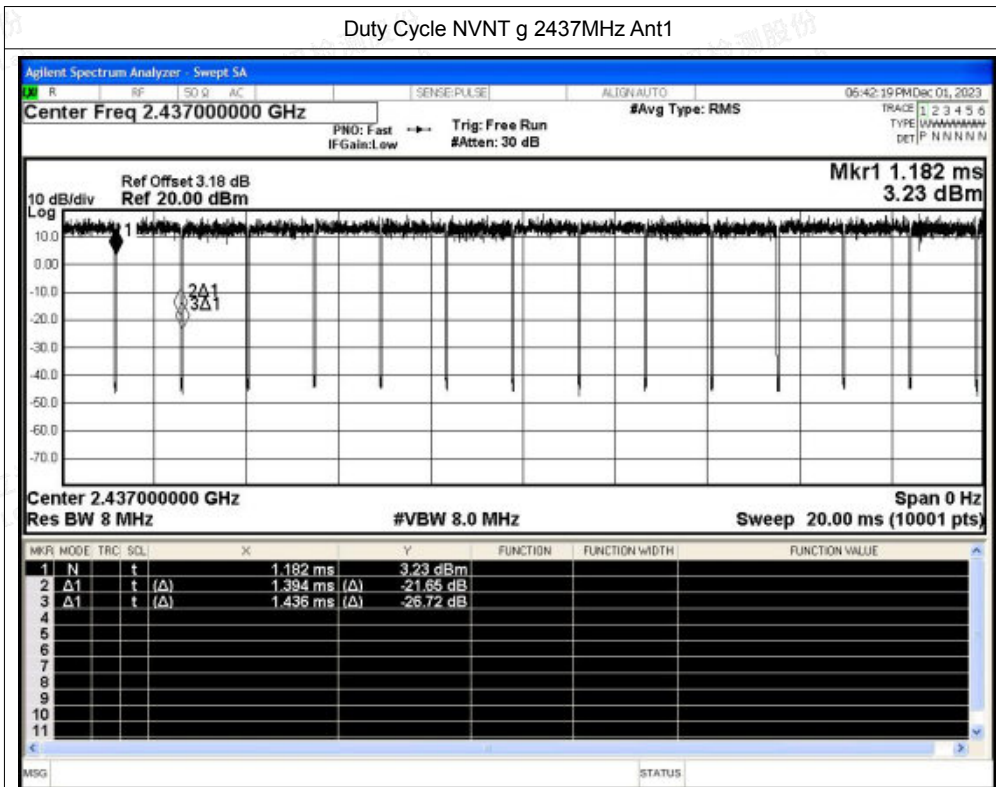


Duty Cycle NVNT g 2412MHz Ant1

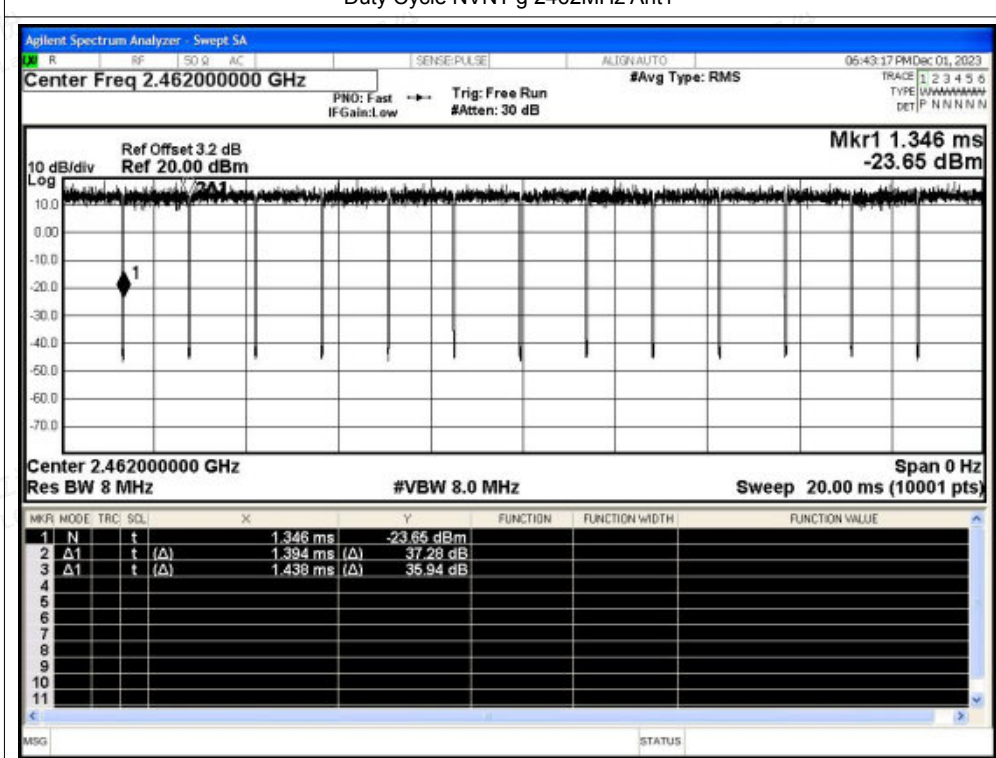




Duty Cycle NVNT g 2437MHz Ant1

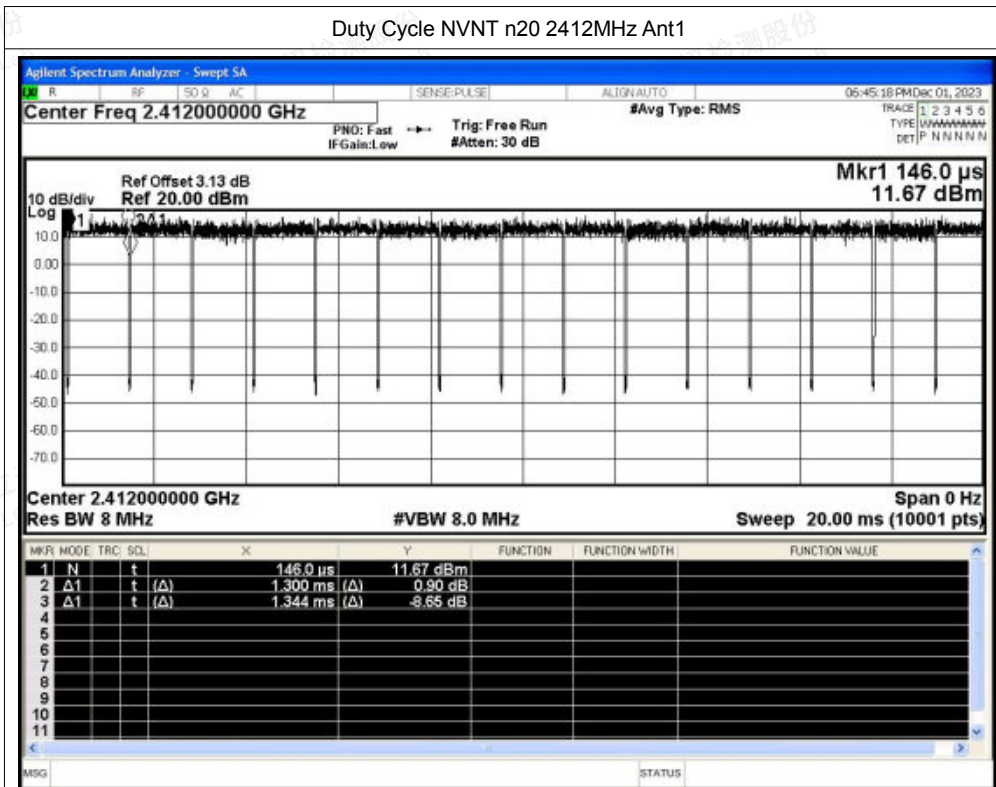


Duty Cycle NVNT g 2462MHz Ant1

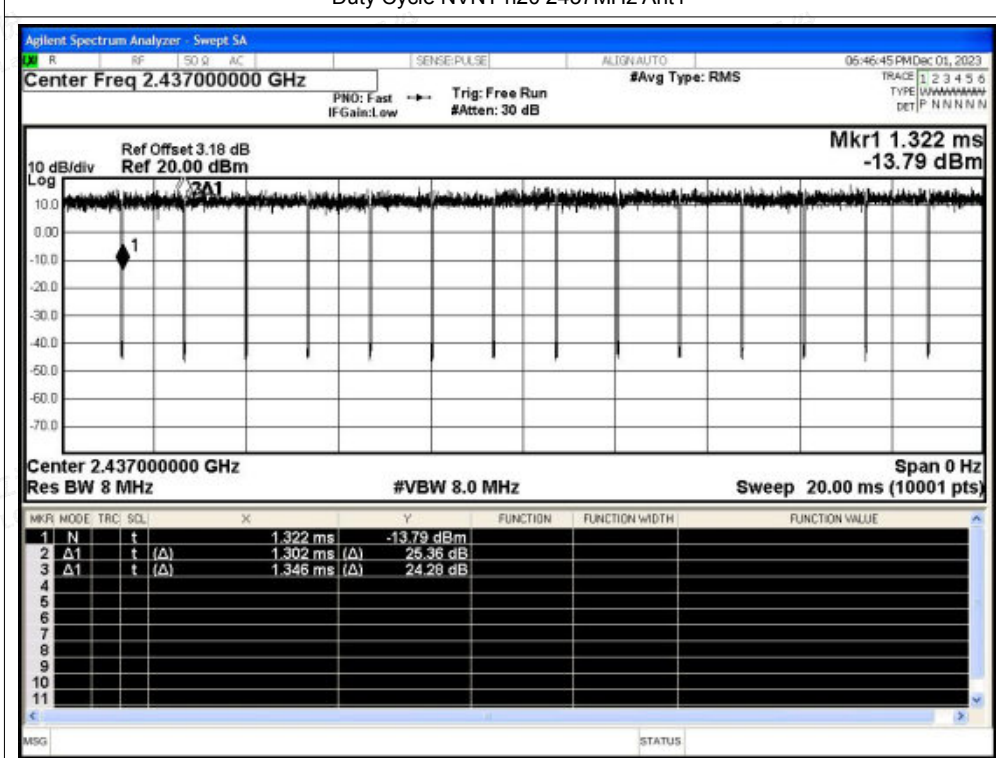




Duty Cycle NVNT n20 2412MHz Ant1

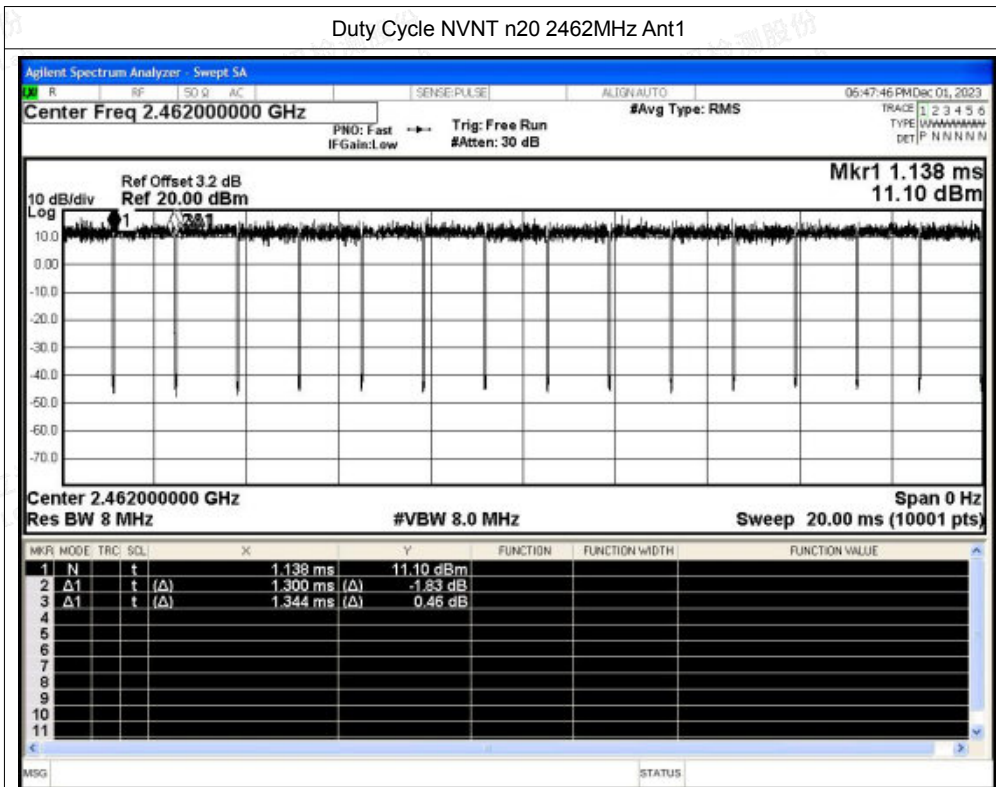


Duty Cycle NVNT n20 2437MHz Ant1

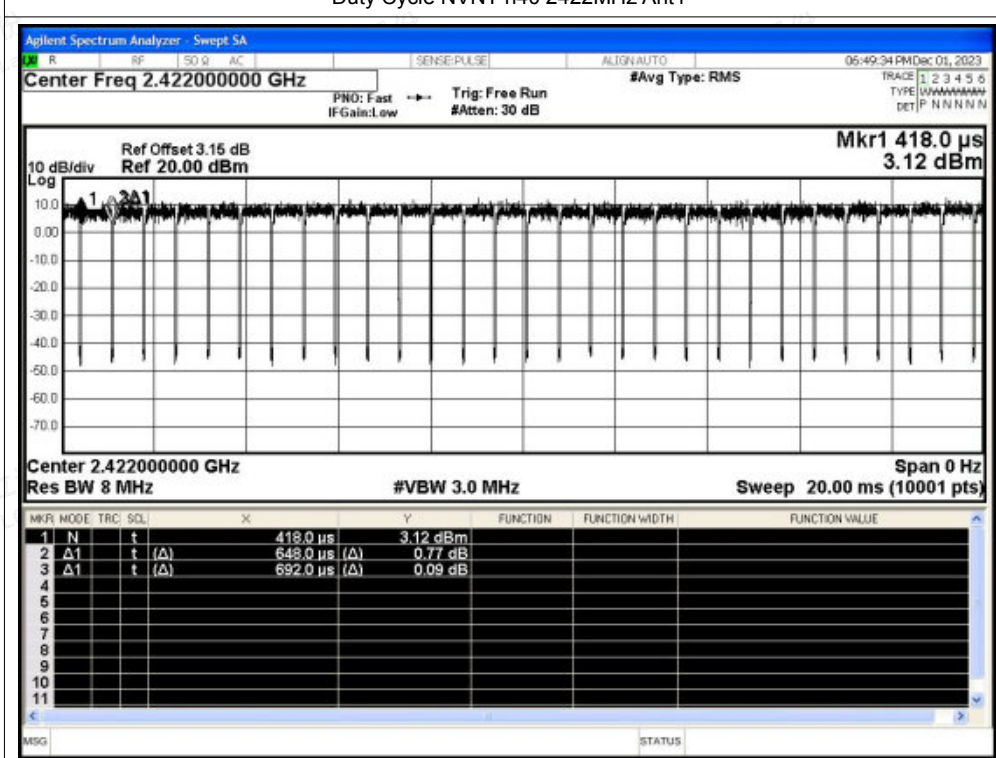




Duty Cycle NVNT n20 2462MHz Ant1

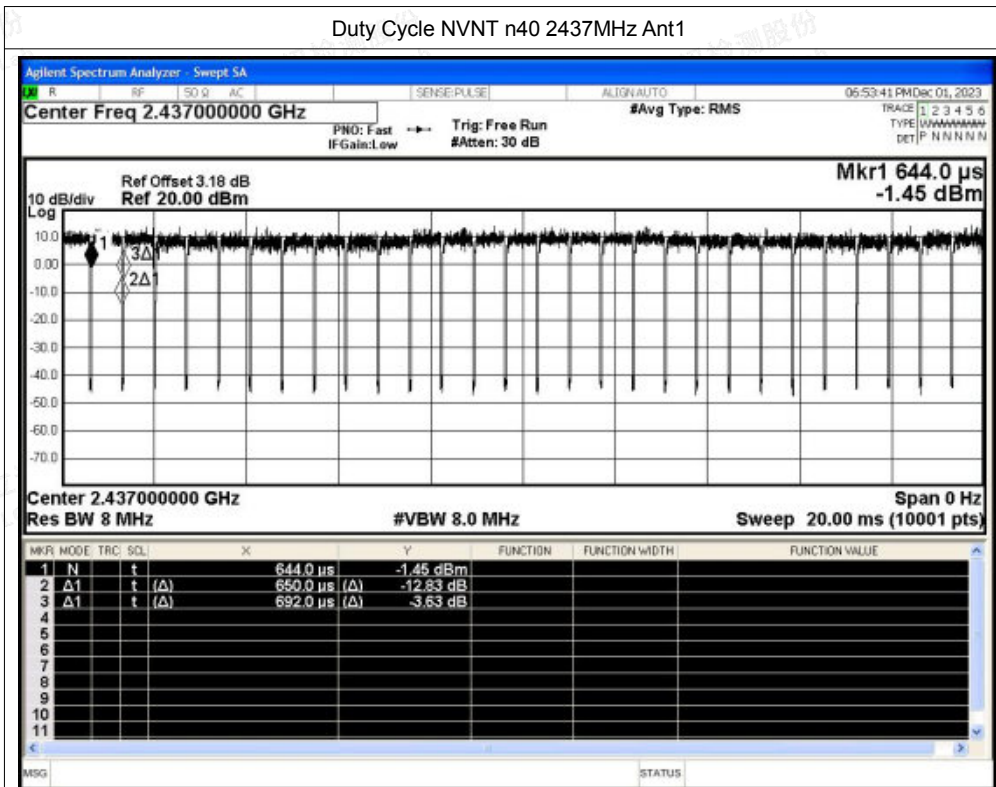


Duty Cycle NVNT n40 2422MHz Ant1

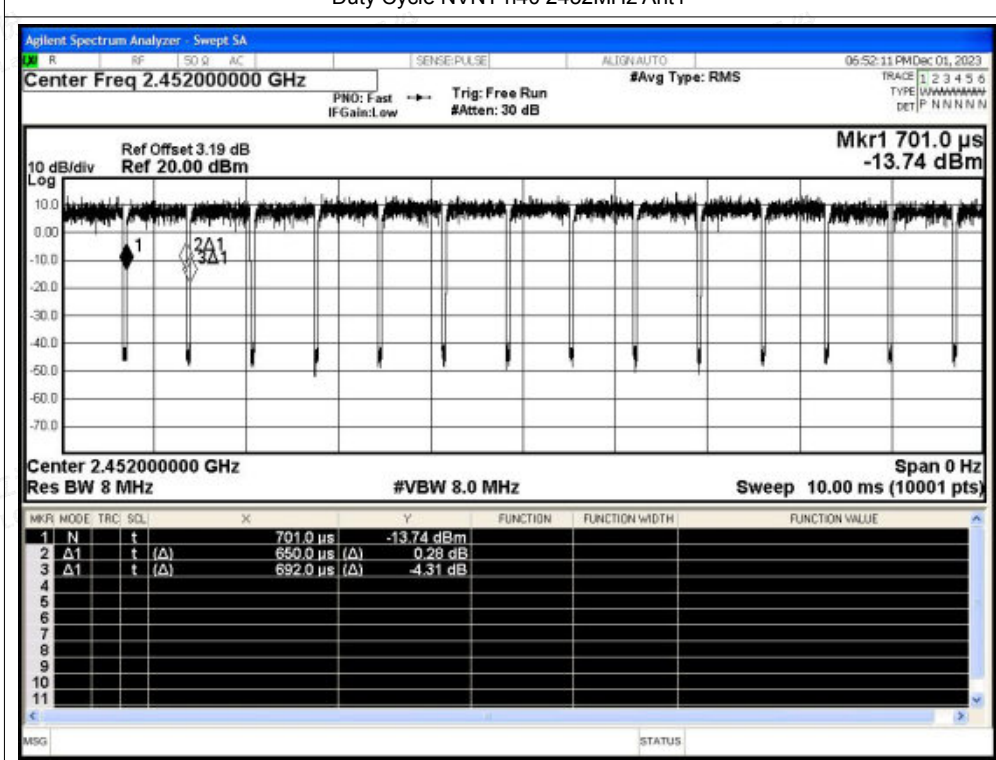




Duty Cycle NVNT n40 2437MHz Ant1



Duty Cycle NVNT n40 2452MHz Ant1





C.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-50.32	2	46.94	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-56.81	2	40.45	Average	54	Pass
NVNT	b	2412	Ant1	2384.88	-45.81	2	51.45	Peak	74	Pass
NVNT	b	2412	Ant1	2387.22	-55.24	2	42.02	Average	54	Pass
NVNT	b	2412	Ant1	2390	-47.57	2	49.69	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-55.31	2	41.95	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-47.54	2	49.72	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-54.96	2	42.3	Average	54	Pass
NVNT	b	2462	Ant1	2493.587	-45.37	2	51.89	Peak	74	Pass
NVNT	b	2462	Ant1	2483.517	-54.96	2	42.3	Average	54	Pass
NVNT	b	2462	Ant1	2500	-48.37	2	48.89	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-55.45	2	41.81	Average	54	Pass
NVNT	g	2412	Ant1	2310	-49.59	2	47.67	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-56.4	2	40.86	Average	54	Pass
NVNT	g	2412	Ant1	2386.167	-36.45	2	60.81	Peak	74	Pass
NVNT	g	2412	Ant1	2389.794	-51.31	2	45.95	Average	54	Pass
NVNT	g	2412	Ant1	2390	-41.89	2	55.37	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-51.49	2	45.77	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-43.28	2	53.98	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-51.59	2	45.67	Average	54	Pass
NVNT	g	2462	Ant1	2484.1	-41.73	2	55.53	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-51.59	2	45.67	Average	54	Pass
NVNT	g	2462	Ant1	2500	-45.67	2	51.59	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-54.51	2	42.75	Average	54	Pass
NVNT	n20	2412	Ant1	2310	-50.59	2	46.67	Peak	74	Pass
NVNT	n20	2412	Ant1	2310	-56.37	2	40.89	Average	54	Pass
NVNT	n20	2412	Ant1	2388.741	-29.77	2	67.49	Peak	74	Pass
NVNT	n20	2412	Ant1	2389.911	-48.74	2	48.52	Average	54	Pass
NVNT	n20	2412	Ant1	2390	-41.18	2	56.08	Peak	74	Pass
NVNT	n20	2412	Ant1	2390	-49.07	2	48.19	Average	54	Pass
NVNT	n20	2462	Ant1	2483.5	-44.67	2	52.59	Peak	74	Pass
NVNT	n20	2462	Ant1	2483.5	-51.03	2	46.23	Average	54	Pass
NVNT	n20	2462	Ant1	2484.789	-41.04	2	56.22	Peak	74	Pass
NVNT	n20	2462	Ant1	2483.57	-50.89	2	46.37	Average	54	Pass
NVNT	n20	2462	Ant1	2500	-46.19	2	51.07	Peak	74	Pass
NVNT	n20	2462	Ant1	2500	-54.5	2	42.76	Average	54	Pass
NVNT	n40	2422	Ant1	2310	-49.38	2	47.88	Peak	74	Pass
NVNT	n40	2422	Ant1	2310	-56.28	2	40.98	Average	54	Pass





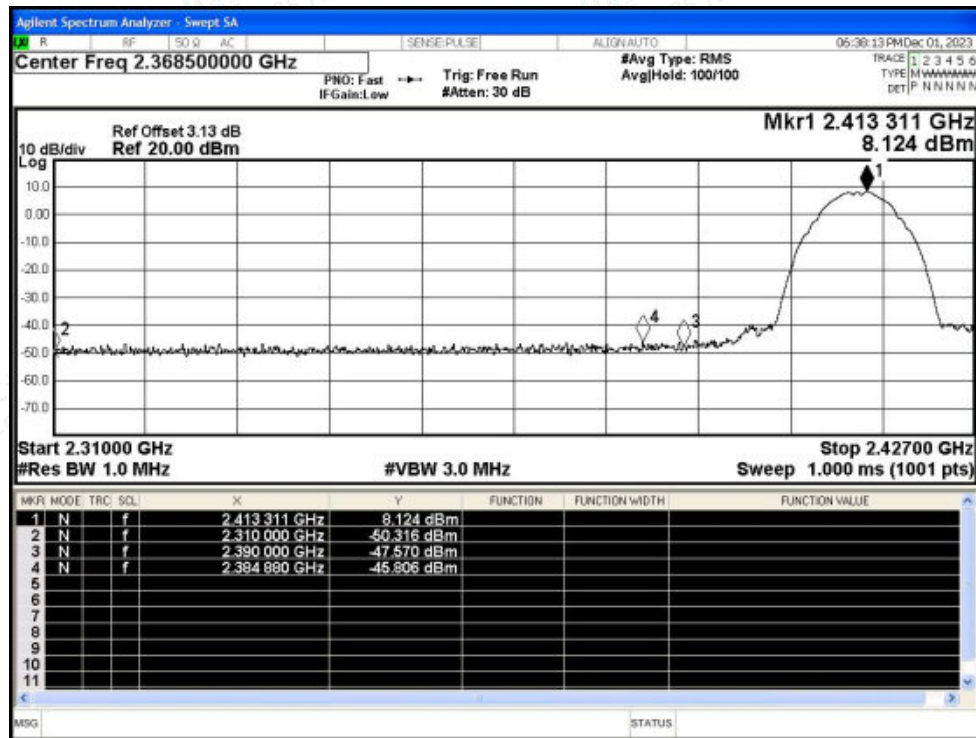
NVNT	n40	2422	Ant1	2386.538	-30.31	2	66.95	Peak	74	Pass
NVNT	n40	2422	Ant1	2389.804	-47.66	2	49.6	Average	54	Pass
NVNT	n40	2422	Ant1	2390	-38.95	2	58.31	Peak	74	Pass
NVNT	n40	2422	Ant1	2390	-47.79	2	49.47	Average	54	Pass
NVNT	n40	2452	Ant1	2483.5	-35.83	2	61.43	Peak	74	Pass
NVNT	n40	2452	Ant1	2483.5	-44.88	2	52.38	Average	54	Pass
NVNT	n40	2452	Ant1	2484.946	-26.64	2	70.62	Peak	74	Pass
NVNT	n40	2452	Ant1	2484.088	-44.83	2	52.43	Average	54	Pass
NVNT	n40	2452	Ant1	2500	-48.7	2	48.56	Peak	74	Pass
NVNT	n40	2452	Ant1	2500	-54.11	2	43.15	Average	54	Pass



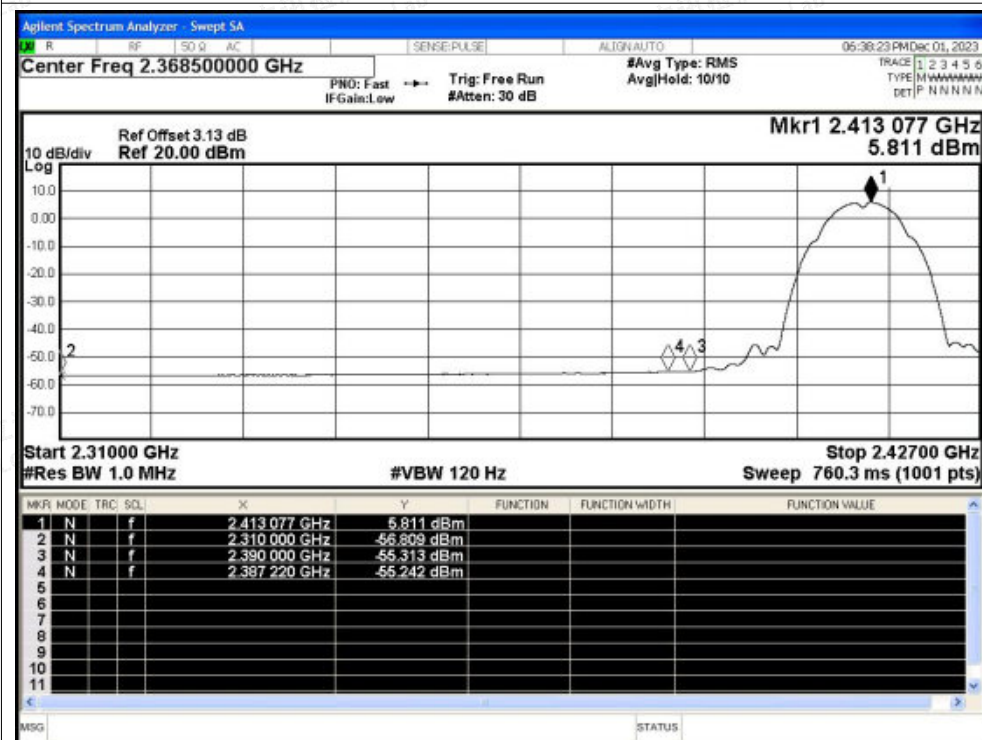


Test Graphs

Restrict Band NVNT b 2412MHz Ant1 Peak

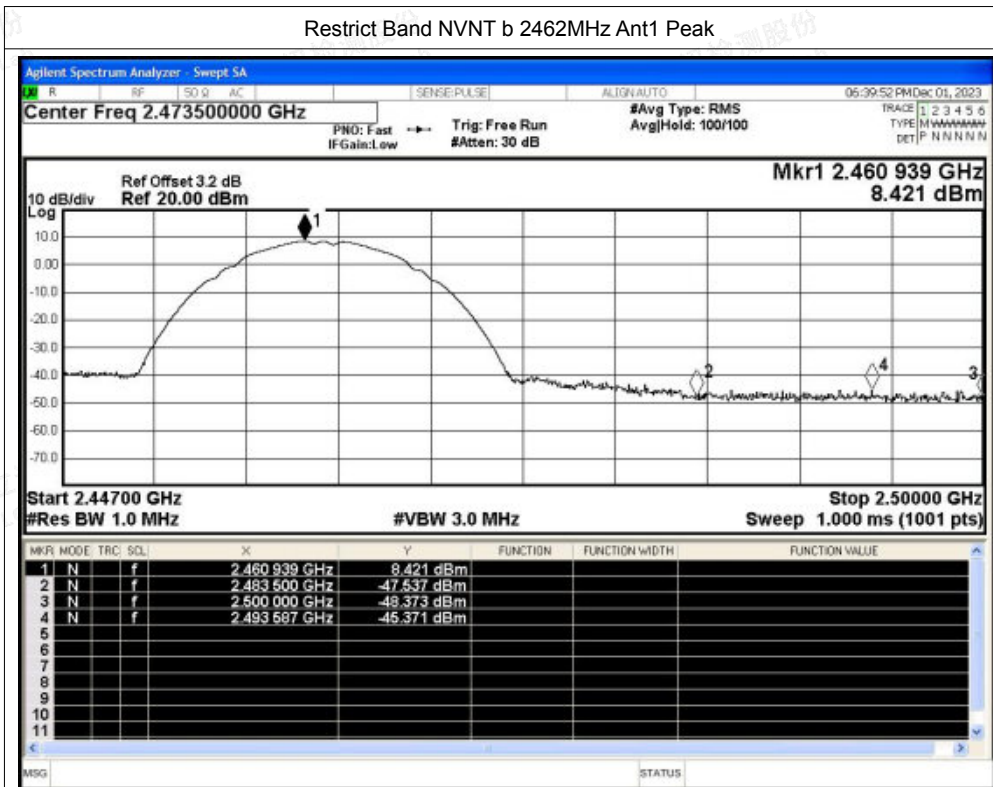


Restrict Band NVNT b 2412MHz Ant1 Average

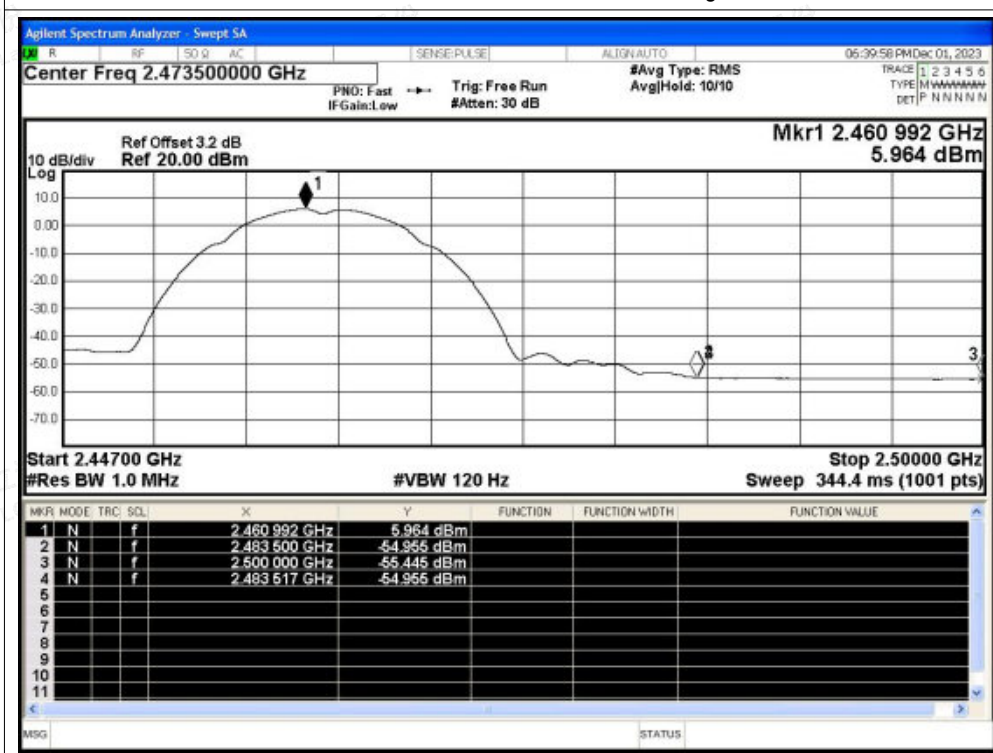




Restrict Band NVNT b 2462MHz Ant1 Peak

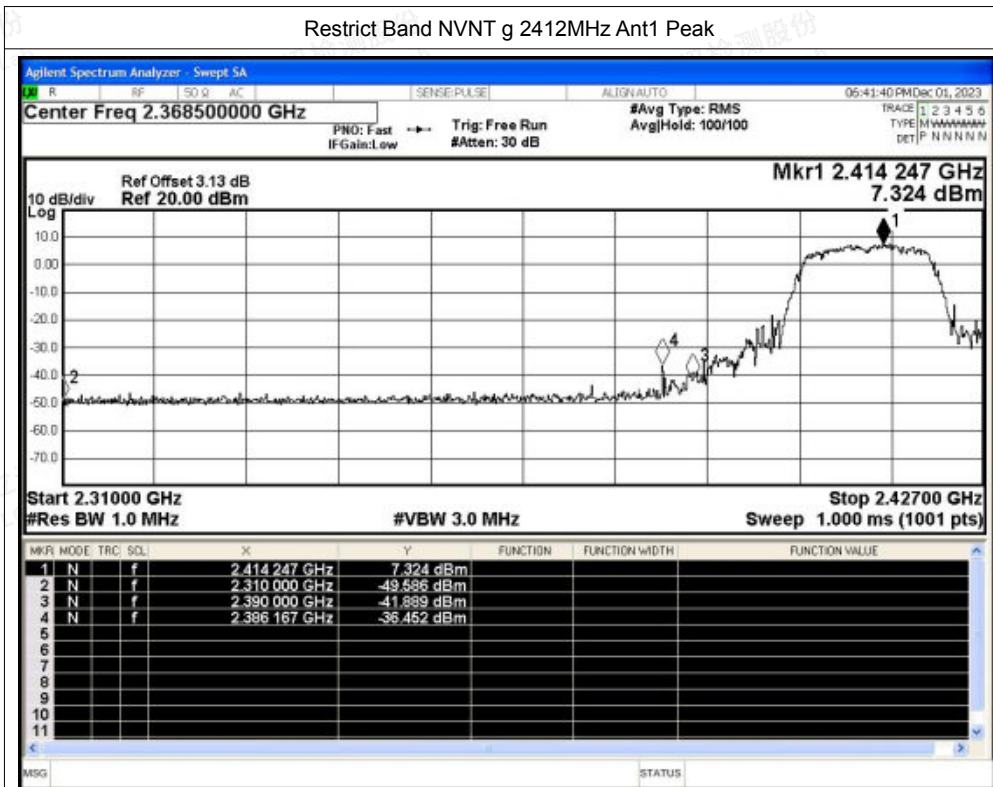


Restrict Band NVNT b 2462MHz Ant1 Average

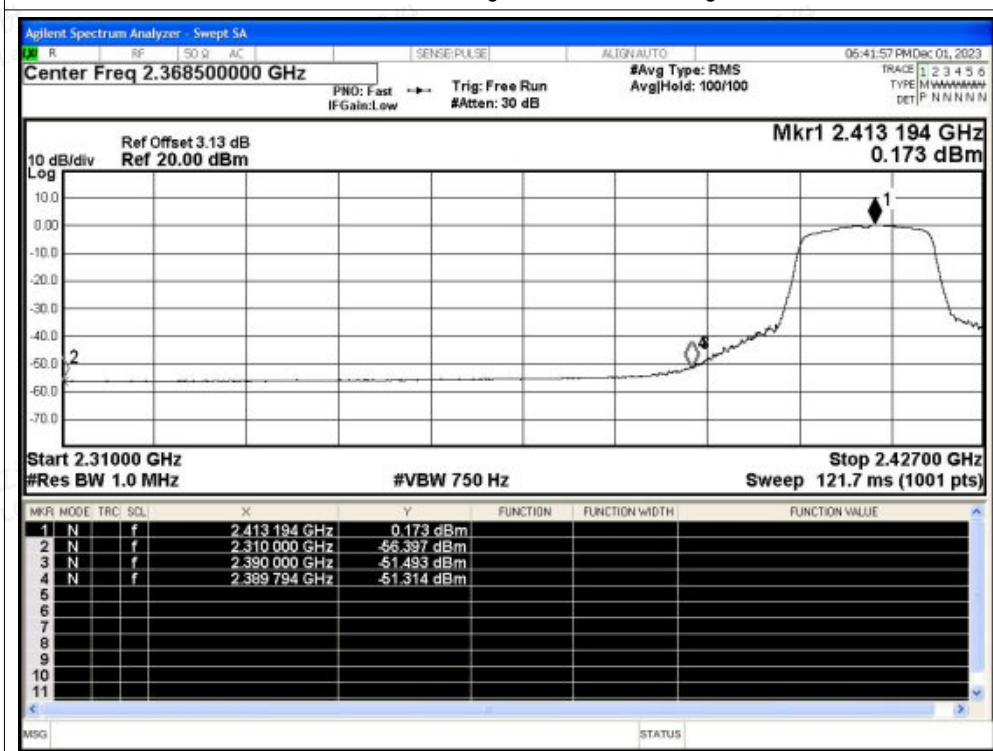




Restrict Band NVNT g 2412MHz Ant1 Peak



Restrict Band NVNT g 2412MHz Ant1 Average



Shenzhen LCS Compliance Testing Laboratory Ltd.

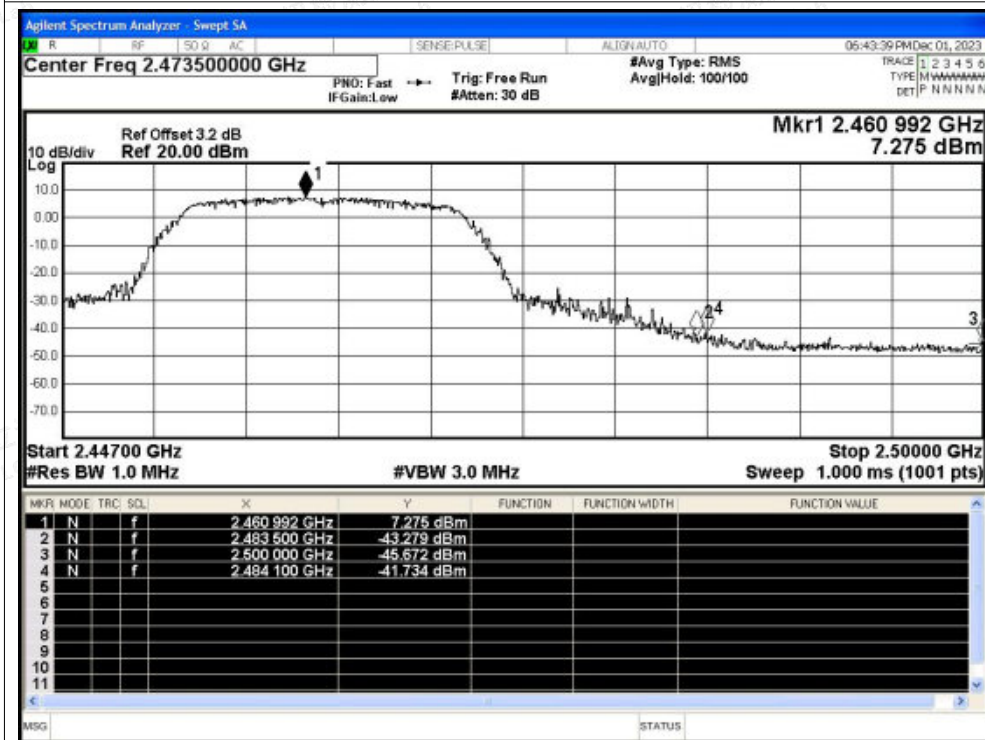
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

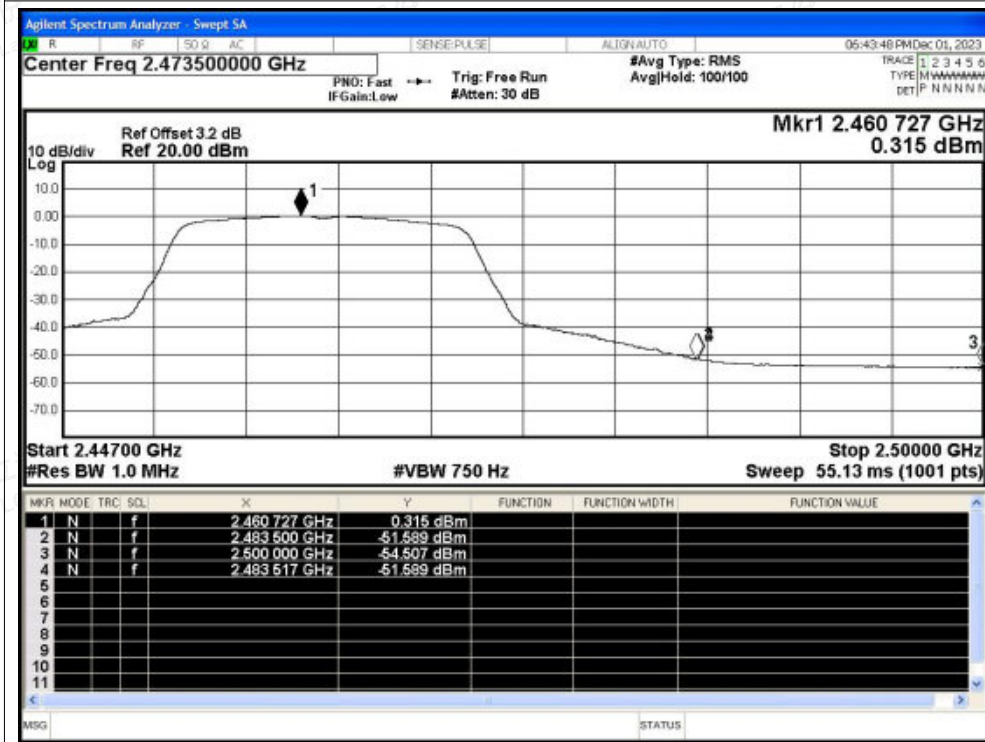
Scan code to check authenticity



Restrict Band NVNT g 2462MHz Ant1 Peak

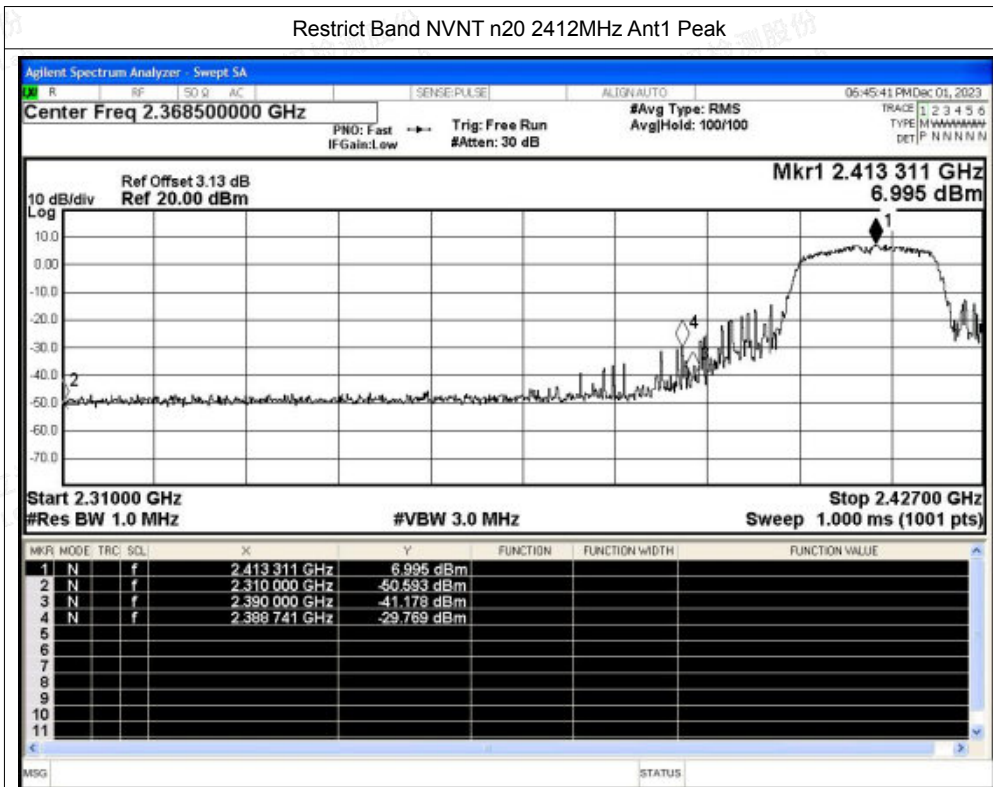


Restrict Band NVNT g 2462MHz Ant1 Average

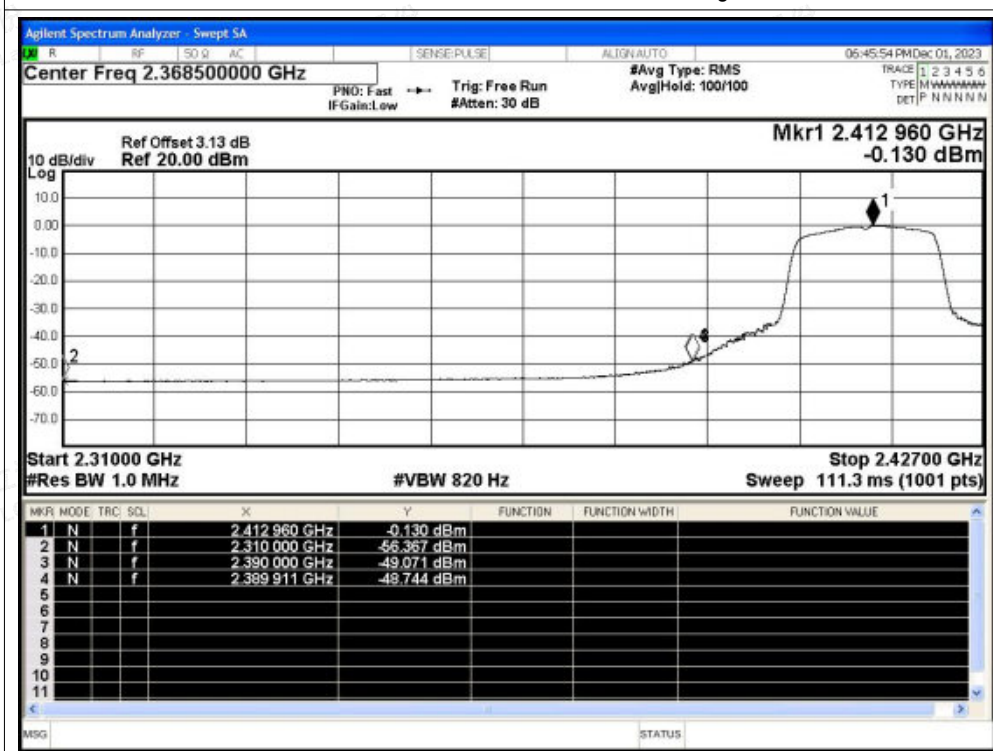




Restrict Band NVNT n20 2412MHz Ant1 Peak

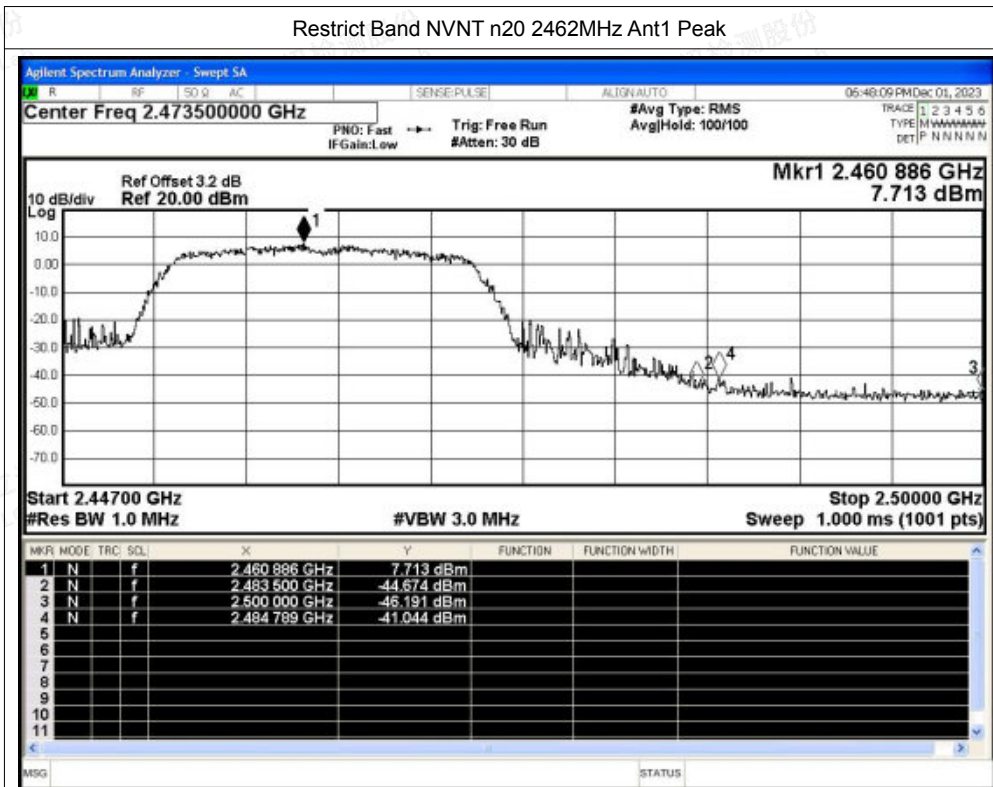


Restrict Band NVNT n20 2412MHz Ant1 Average

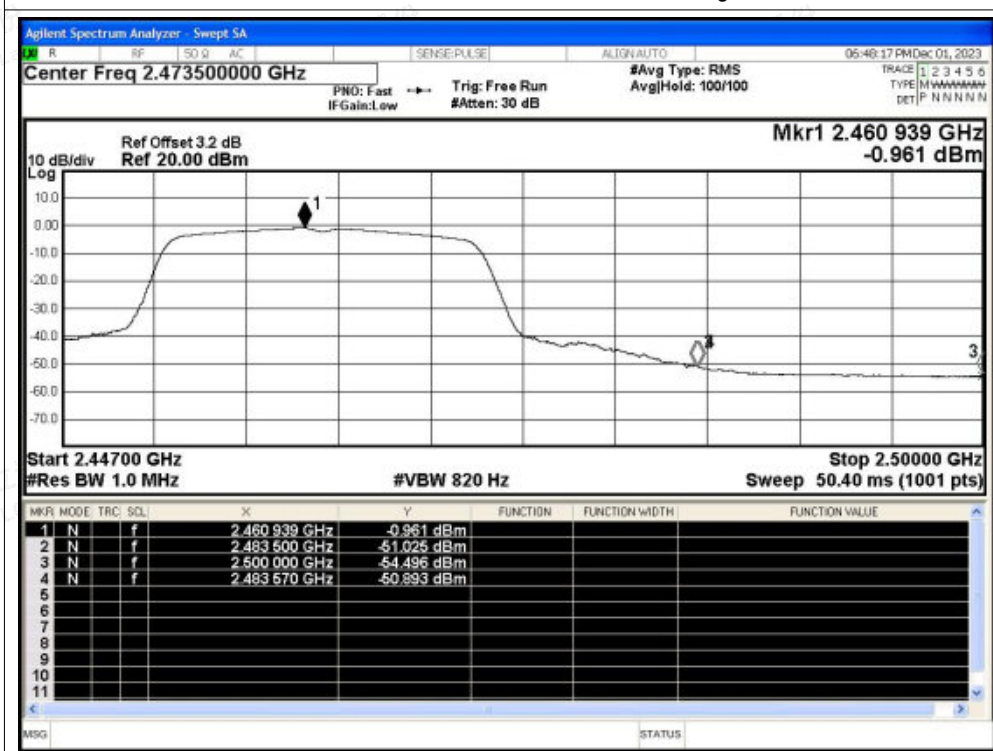




Restrict Band NVNT n20 2462MHz Ant1 Peak

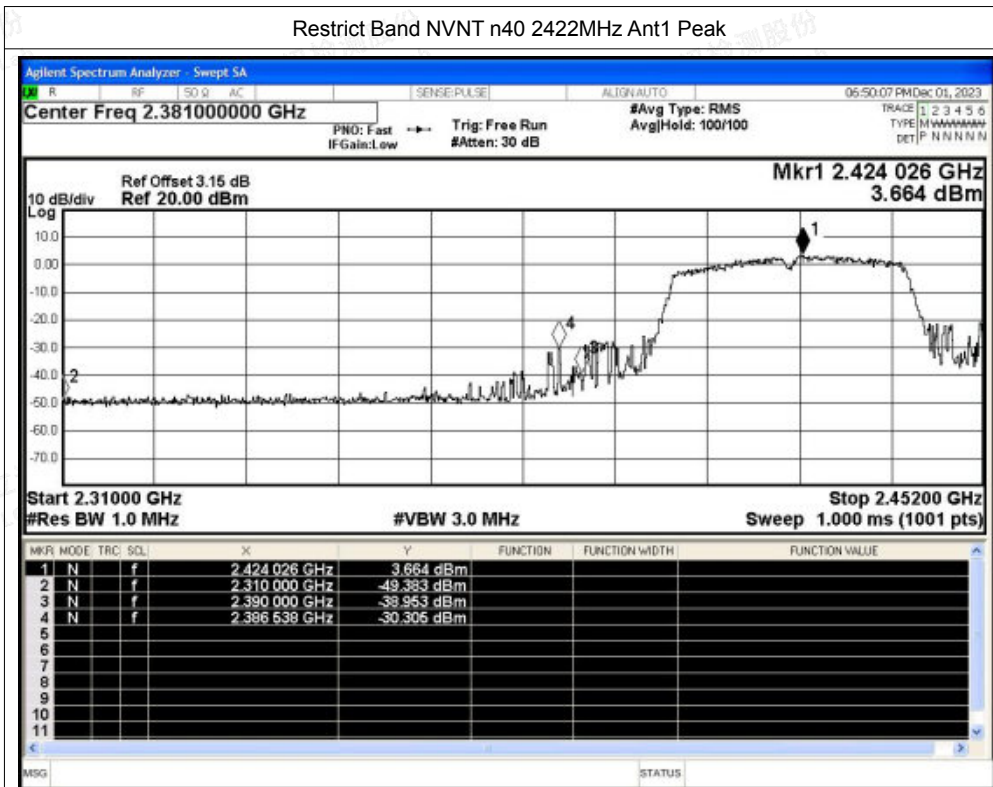


Restrict Band NVNT n20 2462MHz Ant1 Average

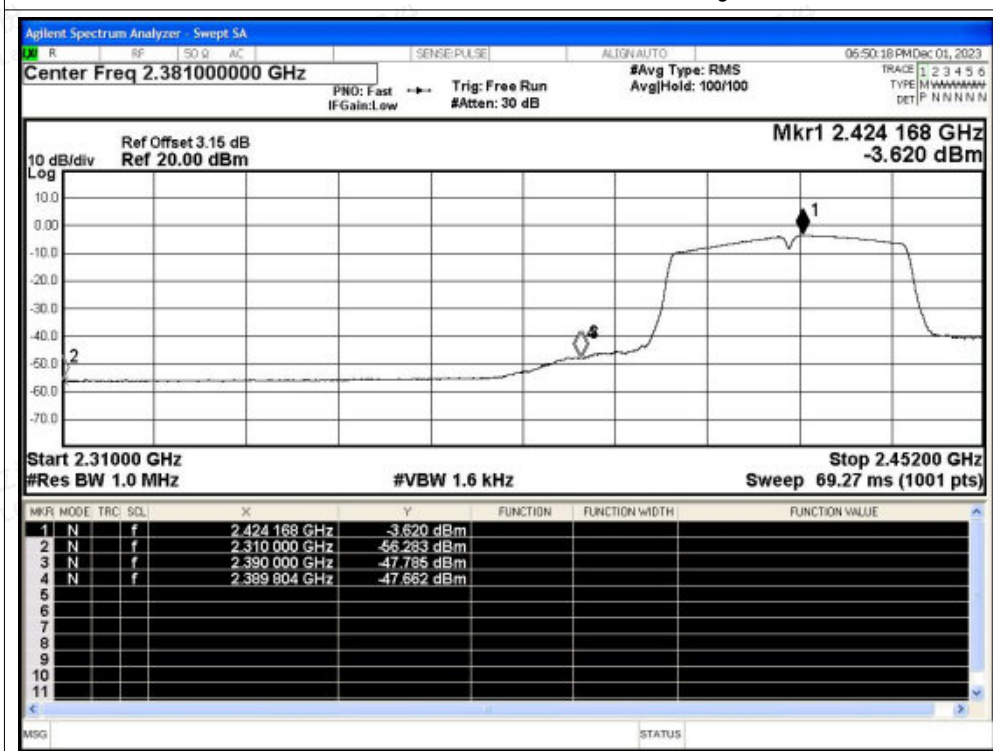




Restrict Band NVNT n40 2422MHz Ant1 Peak

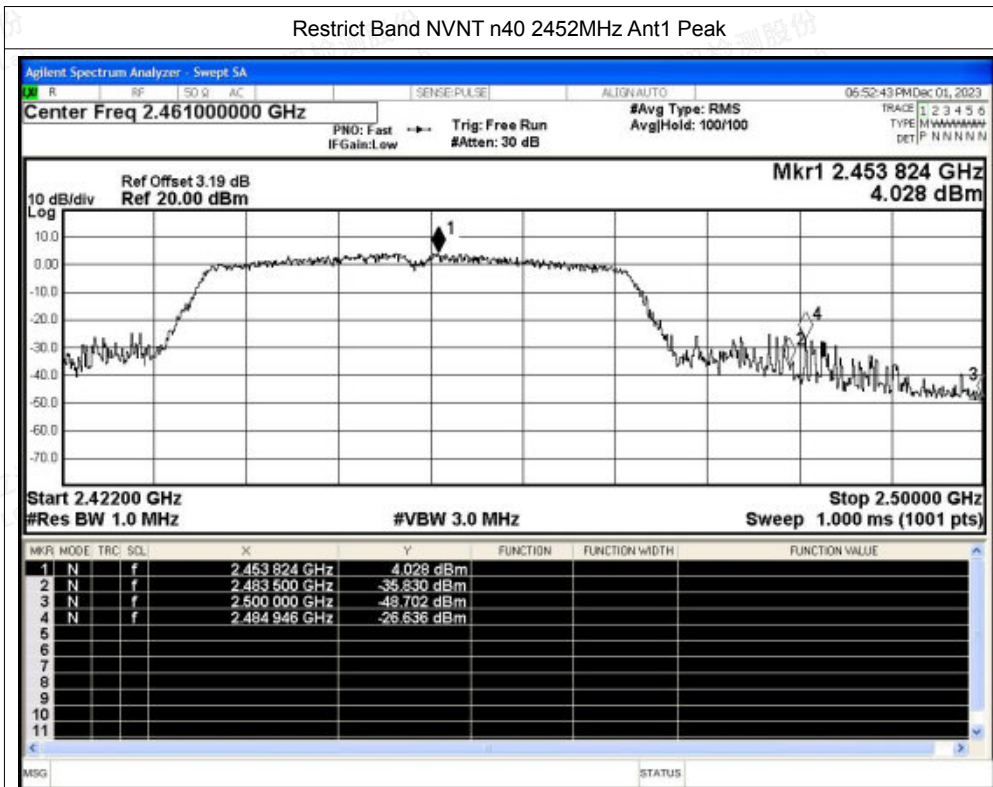


Restrict Band NVNT n40 2422MHz Ant1 Average





Restrict Band NVNT n40 2452MHz Ant1 Peak



Restrict Band NVNT n40 2452MHz Ant1 Average

