



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Night Vision

Test Model: YSY-02

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan



A.1 6dB Bandwidth

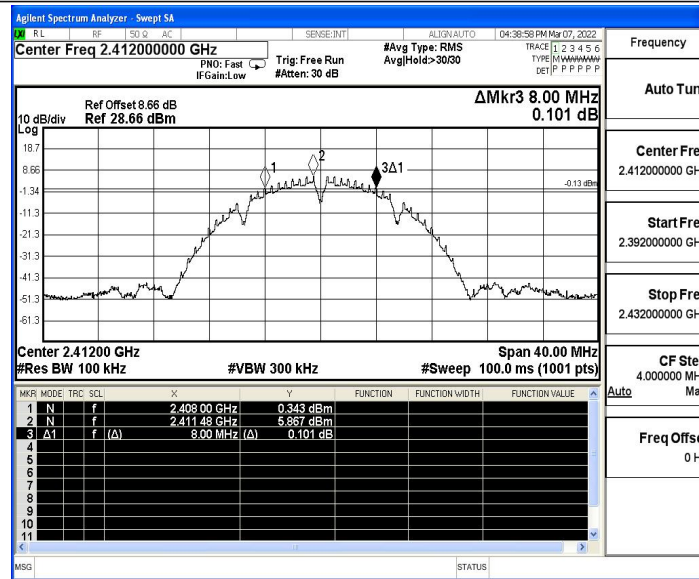
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.000	2408.000	2416.000	0.5	PASS
		2437	8.080	2432.960	2441.040	0.5	PASS
		2462	8.000	2458.000	2466.000	0.5	PASS
11G	Ant1	2412	15.120	2404.440	2419.560	0.5	PASS
		2437	15.440	2429.440	2444.880	0.5	PASS
		2462	15.120	2454.440	2469.560	0.5	PASS
11N20SISO	Ant1	2412	15.120	2404.440	2419.560	0.5	PASS
		2437	15.520	2429.240	2444.760	0.5	PASS
		2462	15.120	2454.440	2469.560	0.5	PASS

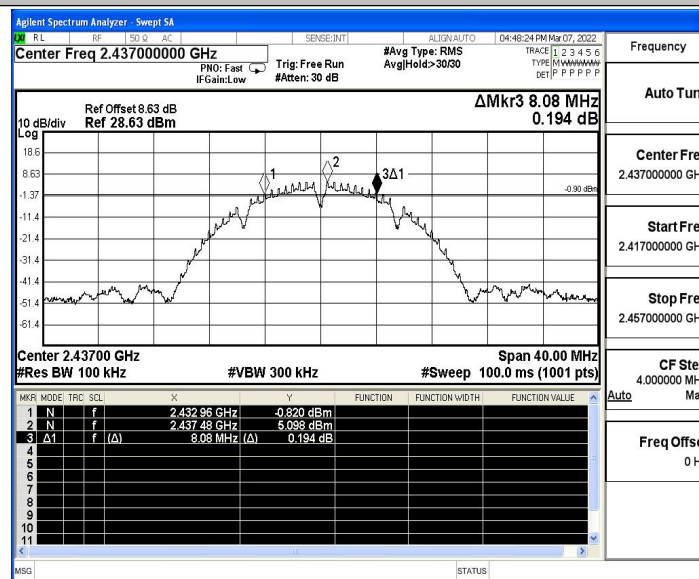


Test Graphs

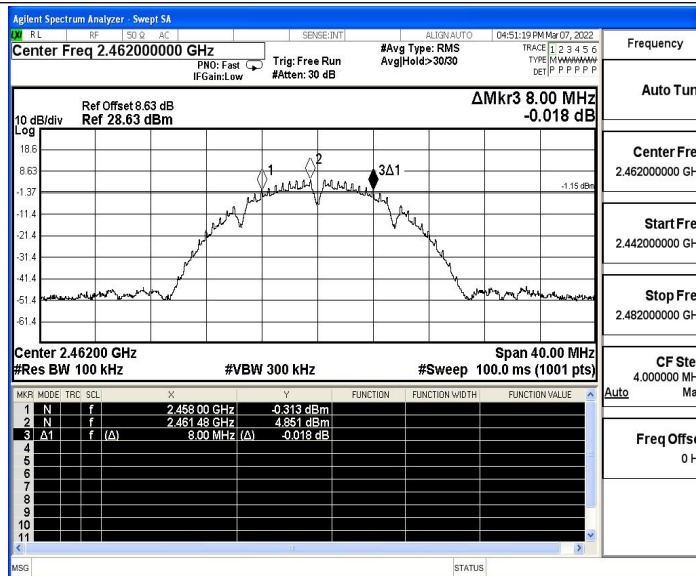
11B_Ant1_2412



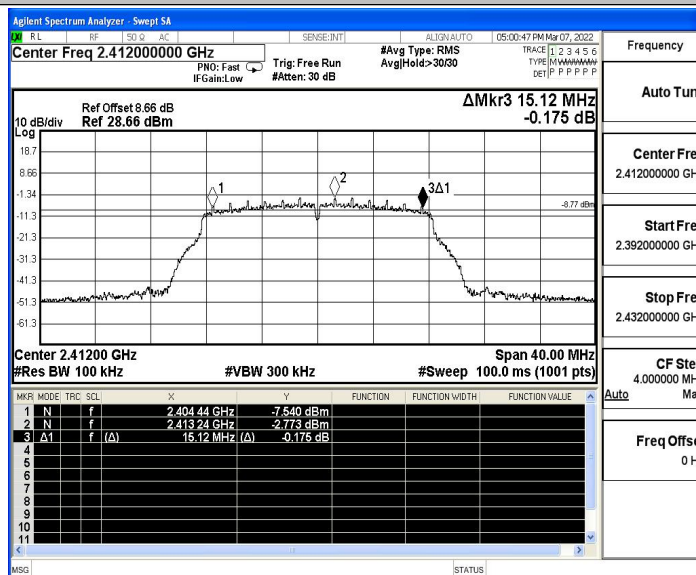
11B_Ant1_2437



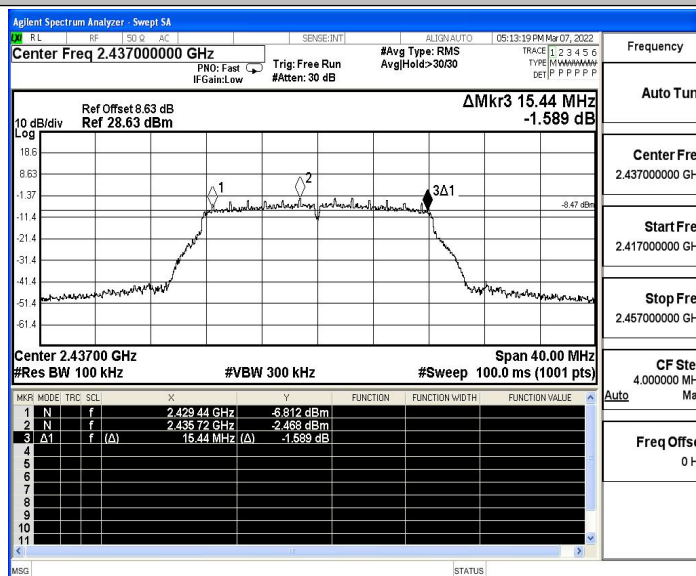
11B_Ant1_2462



11G_Ant1_2412

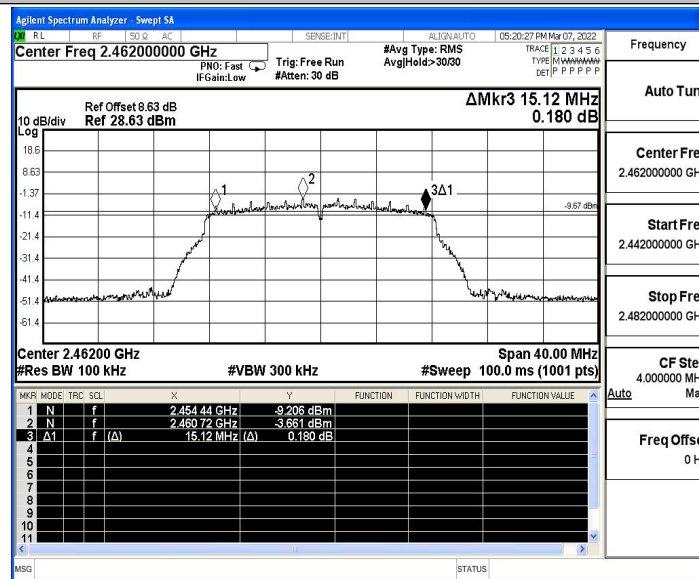


11G_Ant1_2437

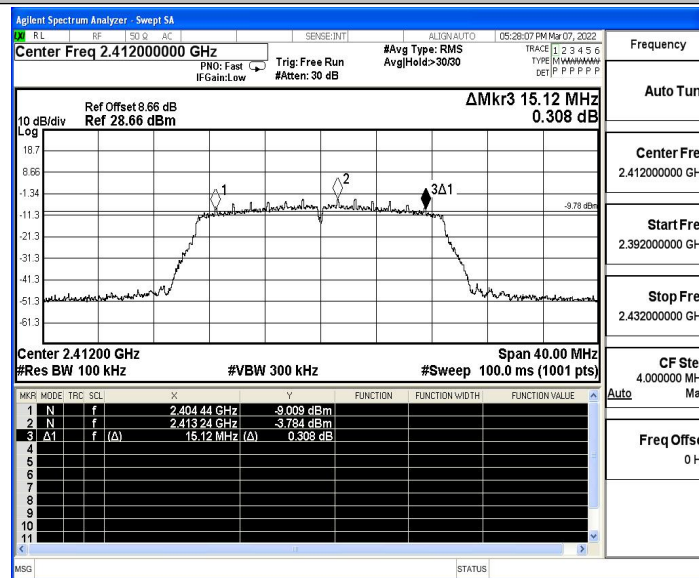




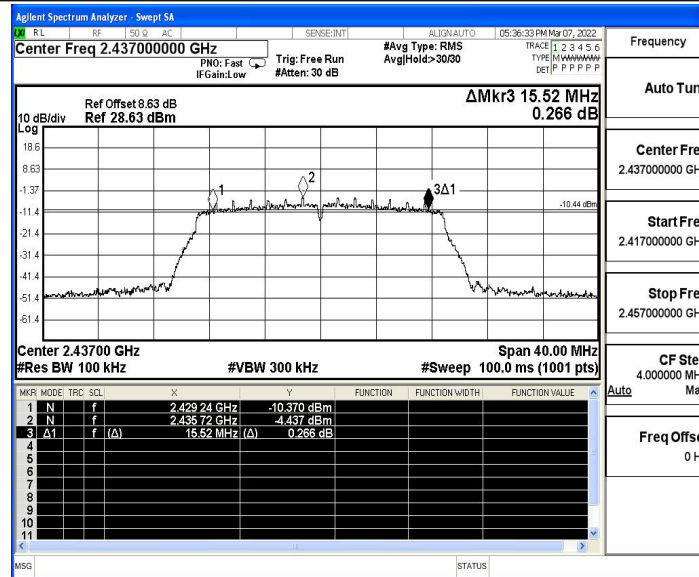
11G_Ant1_2462



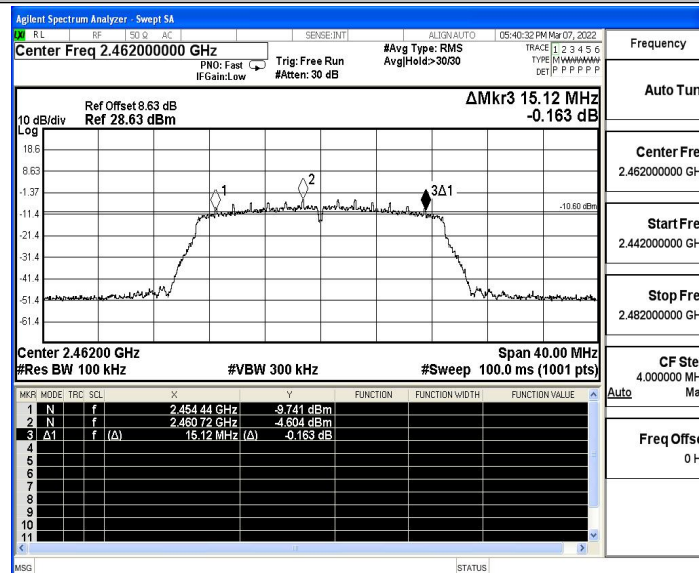
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462





A.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	8.73	≤30.00	PASS
		2437	8.11	≤30.00	PASS
		2462	8.68	≤30.00	PASS
11G	Ant1	2412	7.85	≤30.00	PASS
		2437	7.33	≤30.00	PASS
		2462	7.91	≤30.00	PASS
11N20SISO	Ant1	2412	7.75	≤30.00	PASS
		2437	7.31	≤30.00	PASS
		2462	7.81	≤30.00	PASS



A.3 Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.35	≤8.00	PASS
		2437	-9.3	≤8.00	PASS
		2462	-9.82	≤8.00	PASS
11G	Ant1	2412	-17.07	≤8.00	PASS
		2437	-17.03	≤8.00	PASS
		2462	-18.36	≤8.00	PASS
11N20SISO	Ant1	2412	-18.64	≤8.00	PASS
		2437	-18.17	≤8.00	PASS
		2462	-19.17	≤8.00	PASS



11B_Ant1_2412

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.412000000 GHz

Ref Offset 8.66 dB
Ref 25.00 dBm

Mkr1 2.412 496 GHz
-8.349 dBm

10 dB/div
Log

Center 2.412000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
#Sweep 6.120 s (1001 pts)

Span 16.00 MHz

Frequency

Auto Tune

Center Freq
2.412000000 GHz

Start Freq
2.404000000 GHz

Stop Freq
2.420000000 GHz

CF Step
1.600000 MHz

Freq Offset
0 Hz

11B_Ant1_2437

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.437000000 GHz

Ref Offset 8.63 dB
Ref 28.63 dBm

Mkr1 2.437 808 GHz
-9.297 dBm

10 dB/div
Log

Center 2.437000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
#Sweep 6.120 s (1001 pts)

Span 16.16 MHz

Frequency

Auto Tune

Center Freq
2.437000000 GHz

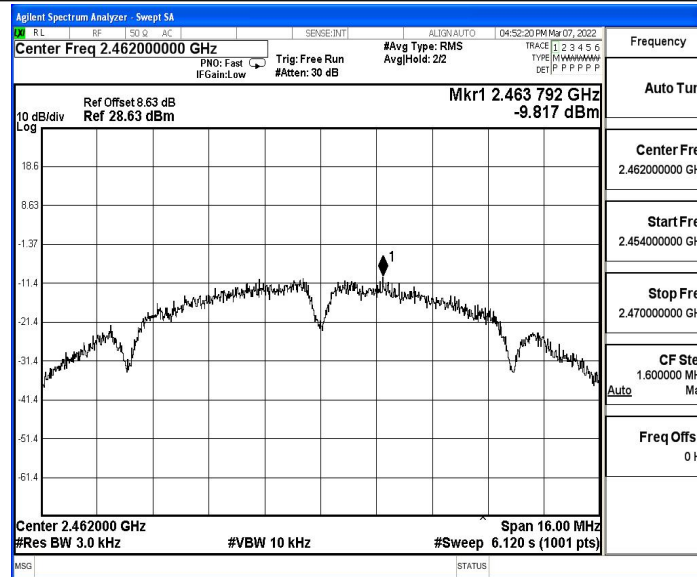
Start Freq
2.428920000 GHz

Stop Freq
2.445080000 GHz

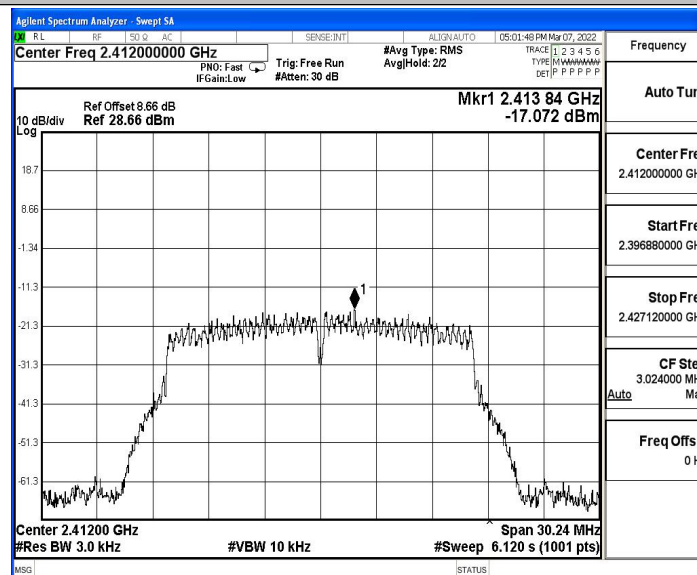
CF Step
1.616000 MHz

Freq Offset
0 Hz

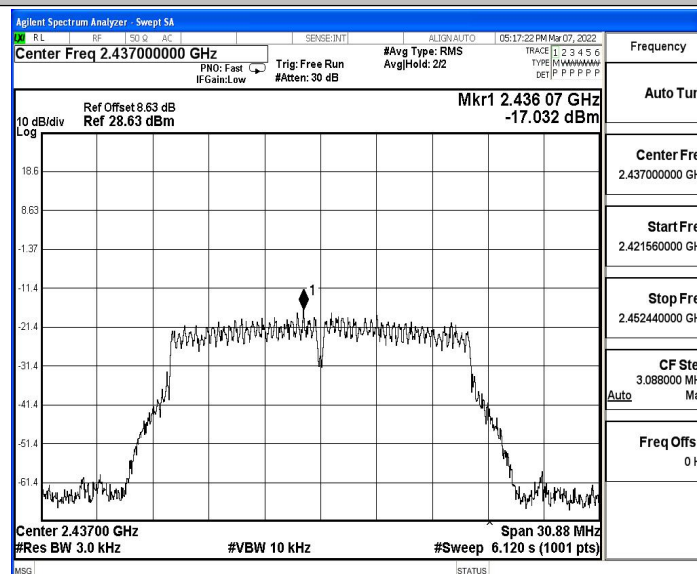
11B_Ant1_2462



11G_Ant1_2412

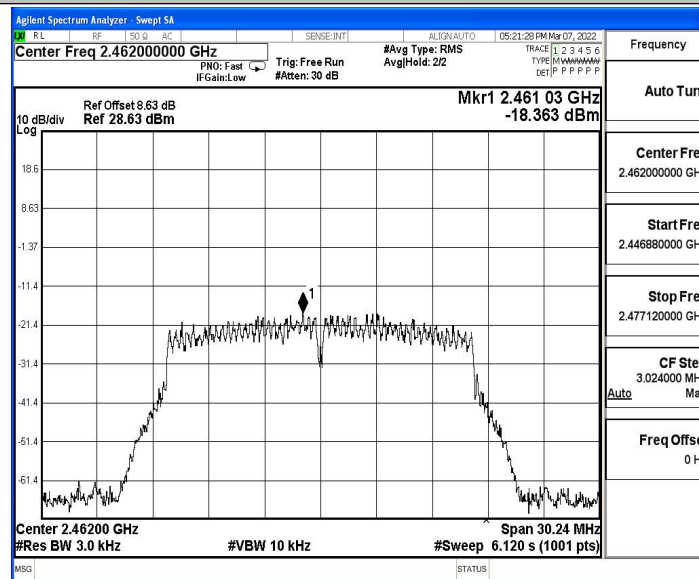


11G_Ant1_2437

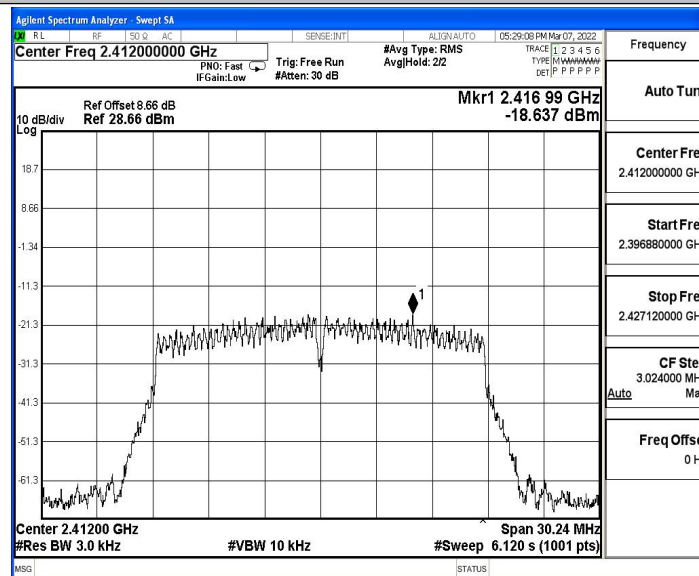




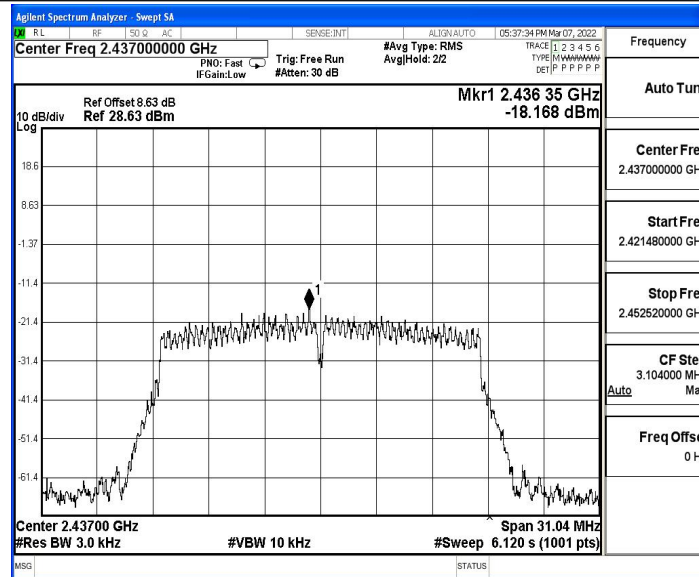
11G_Ant1_2462



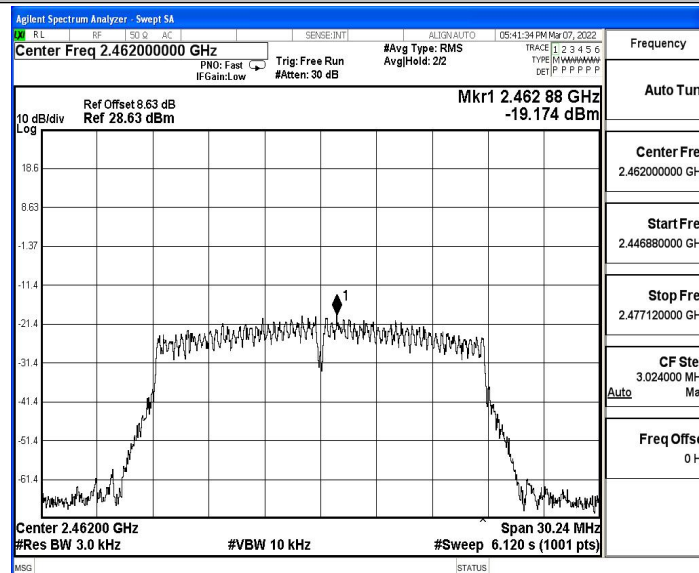
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462





A.4 Band edge measurements

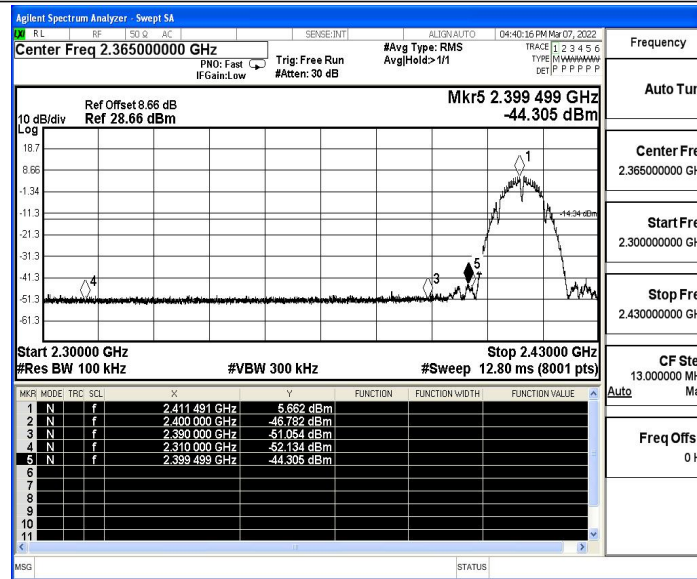
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.66	-44.31	≤ -14.34	PASS
		High	2462	4.70	-48.04	≤ -15.3	PASS
11G	Ant1	Low	2412	-2.18	-44.79	≤ -22.18	PASS
		High	2462	-3.19	-48.09	≤ -23.19	PASS
11N20SISO	Ant1	Low	2412	-3.15	-46.42	≤ -23.15	PASS
		High	2462	-4.56	-48.1	≤ -24.56	PASS

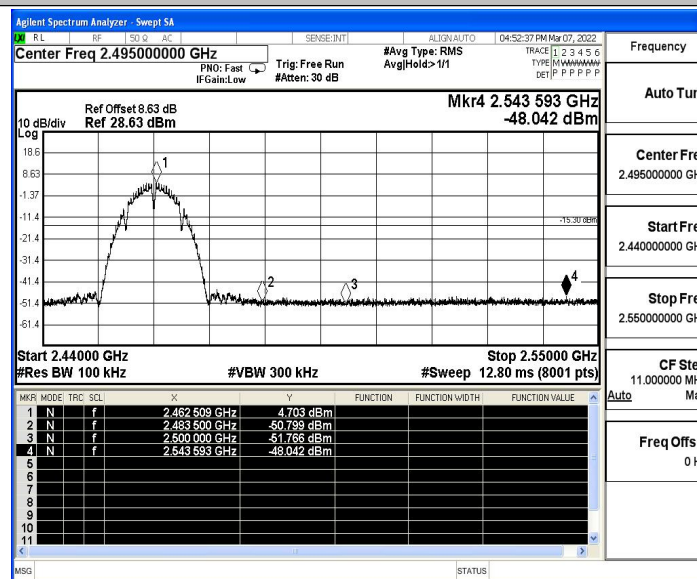


Test Graphs

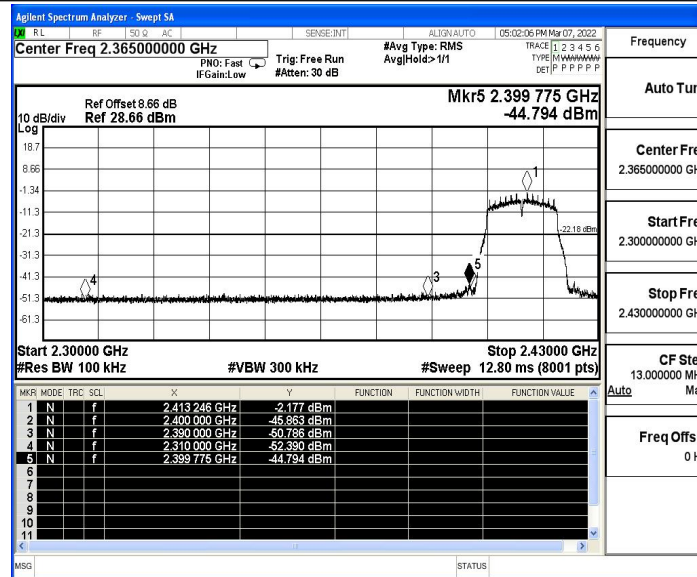
11B_Ant1_Low_2412



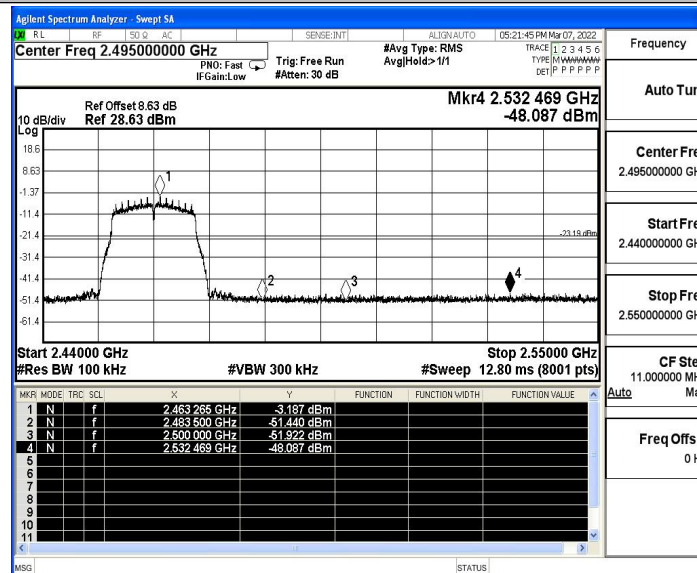
11B_Ant1_High_2462



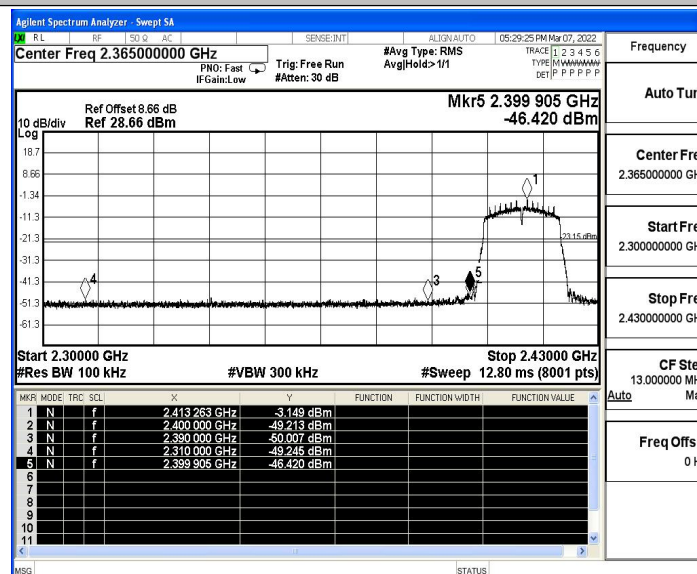
11G_Ant1_Low_2412



11G_Ant1_High_2462

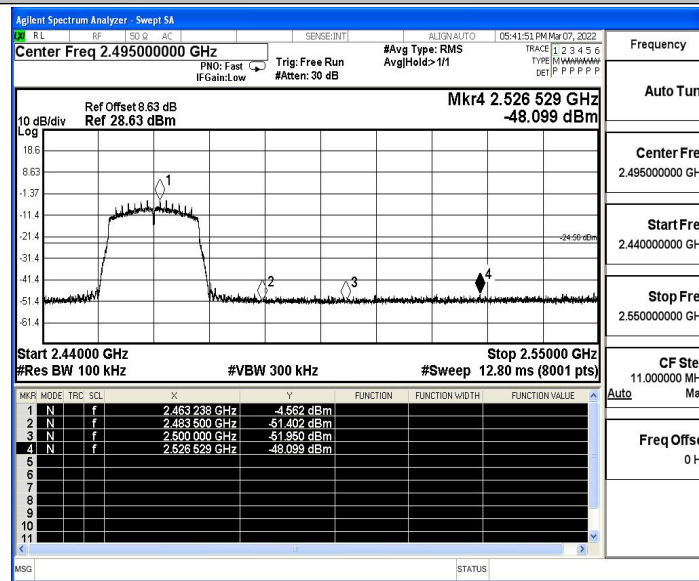


11N20SISO_Ant1_Low_2412





11N20SISO_Ant1_High_2462





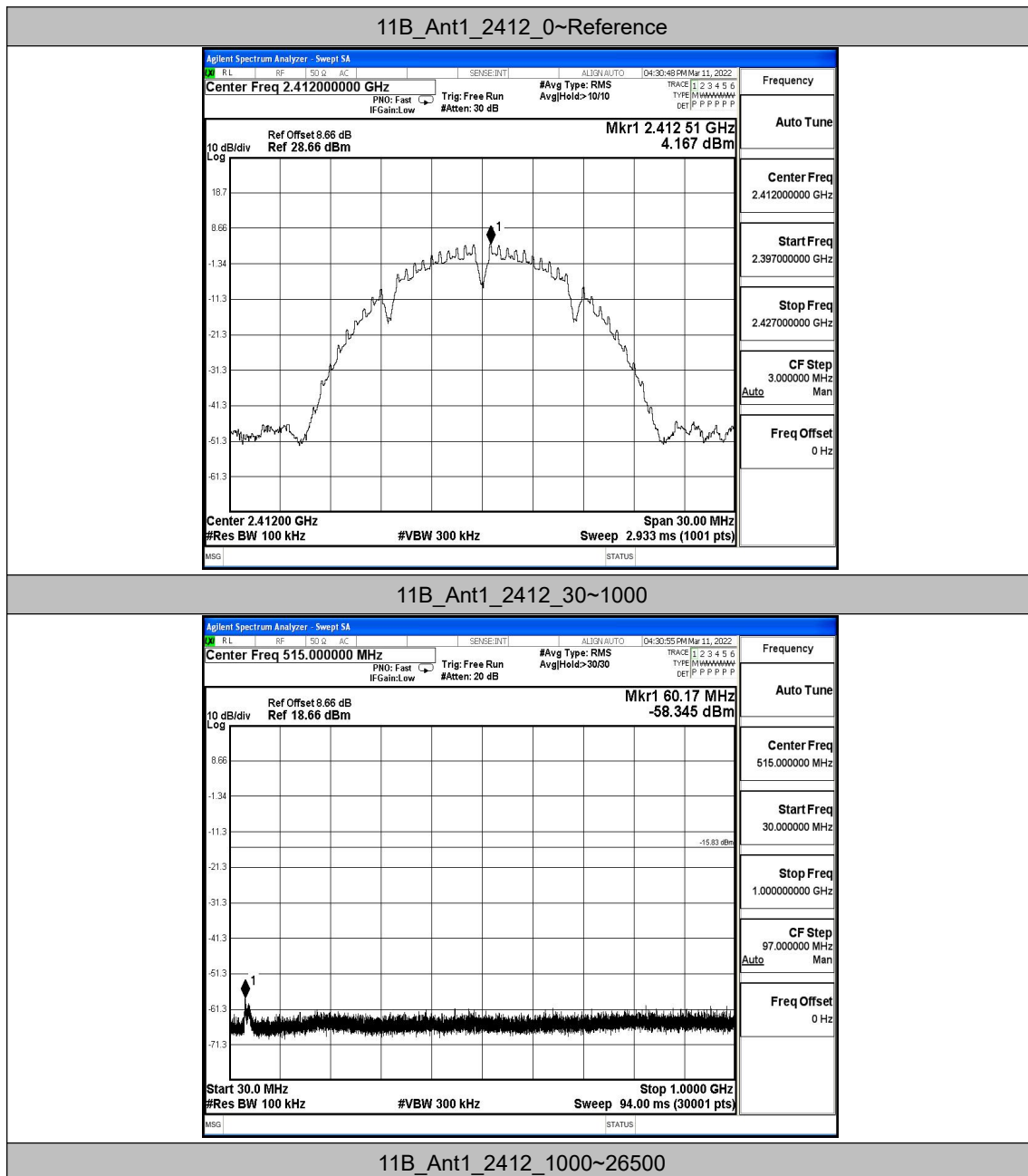
A.5 Conducted Spurious Emission

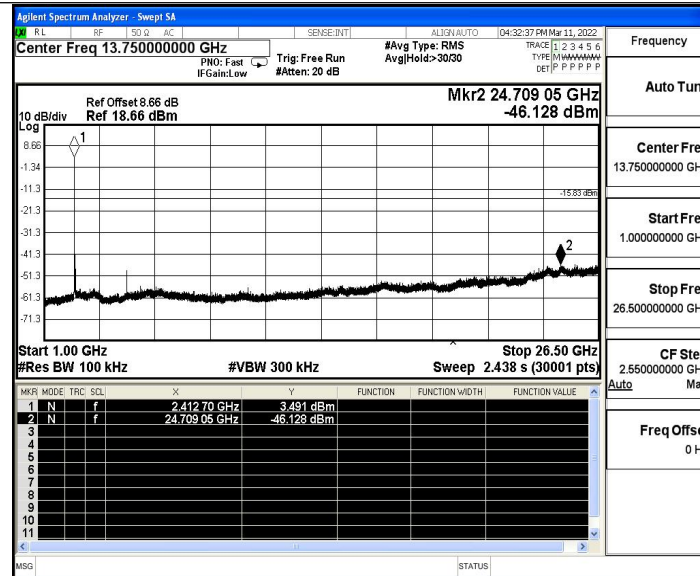
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.17	4.17	---	PASS
			30~1000	4.17	-59.47	≤-15.83	PASS
			1000~26500	4.17	-46.13	≤-15.83	PASS
		2437	Reference	4.56	4.56	---	PASS
			30~1000	4.56	-58.68	≤-15.44	PASS
			1000~26500	4.56	-46.65	≤-15.44	PASS
		2462	Reference	3.99	3.99	---	PASS
			30~1000	3.99	-56.5	≤-16.01	PASS
			1000~26500	3.99	-45.98	≤-16.01	PASS
11G	Ant1	2412	Reference	-2.11	-2.11	---	PASS
			30~1000	-2.11	-47.4	≤-22.11	PASS
			1000~26500	-2.11	-45.97	≤-22.11	PASS
		2437	Reference	-3.49	-3.49	---	PASS
			30~1000	-3.49	-53.25	≤-23.49	PASS
			1000~26500	-3.49	-45.76	≤-23.49	PASS
		2462	Reference	-3.00	-3.00	---	PASS
			30~1000	-3.00	-50.47	≤-23	PASS
			1000~26500	-3.00	-46.56	≤-23	PASS
11N20SISO	Ant1	2412	Reference	-3.45	-3.45	---	PASS
			30~1000	-3.45	-40.42	≤-23.45	PASS
			1000~26500	-3.45	-45.94	≤-23.45	PASS
		2437	Reference	-4.11	-4.11	---	PASS
			30~1000	-4.11	-54.72	≤-24.11	PASS
			1000~26500	-4.11	-46.47	≤-24.11	PASS
		2462	Reference	-4.10	-4.10	---	PASS
			30~1000	-4.10	-55.41	≤-24.1	PASS
			1000~26500	-4.10	-46.14	≤-24.1	PASS

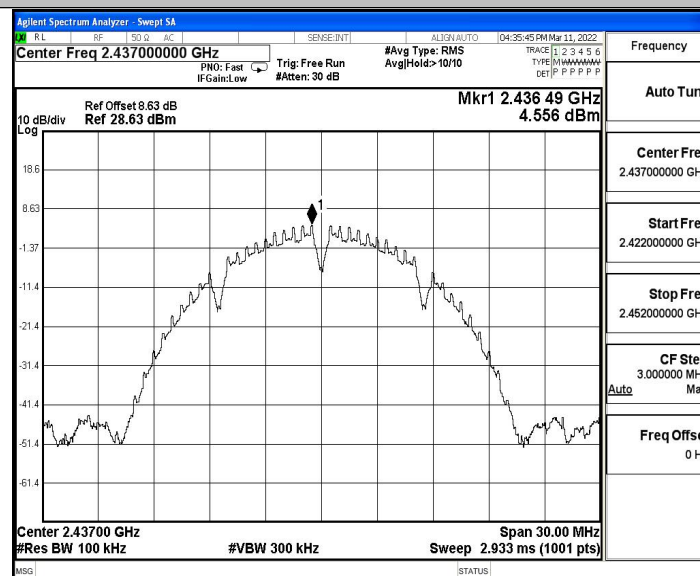


Test Graphs

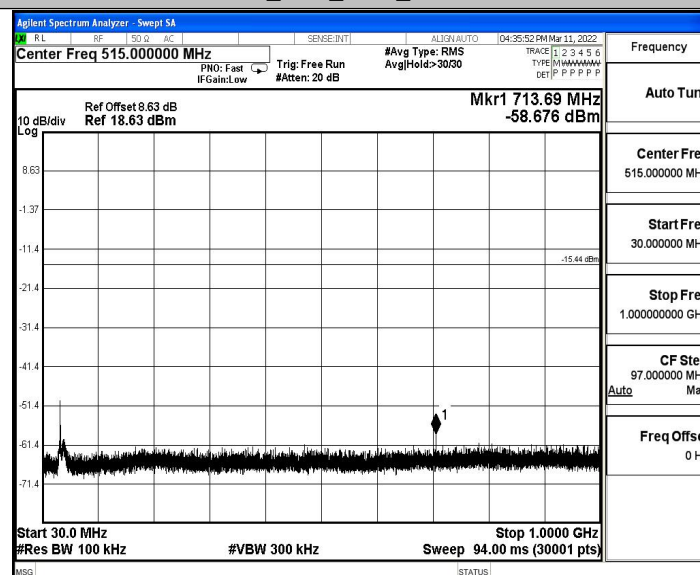




11B_Ant1_2437_0~Reference

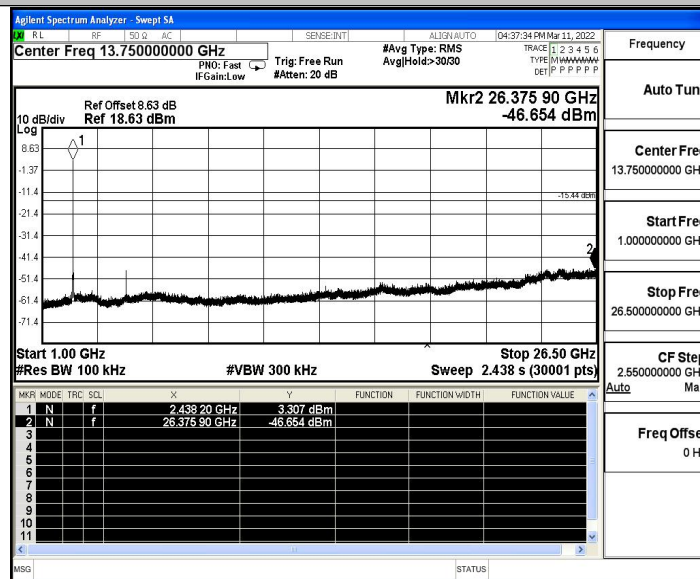


11B_Ant1_2437_30~1000

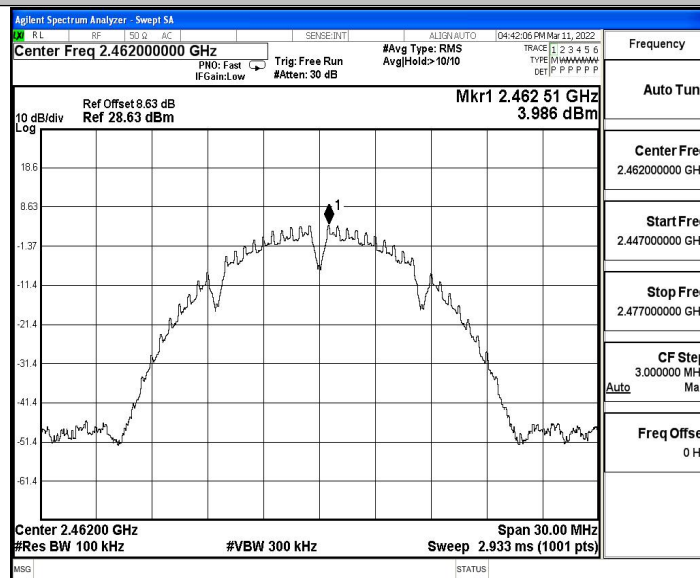




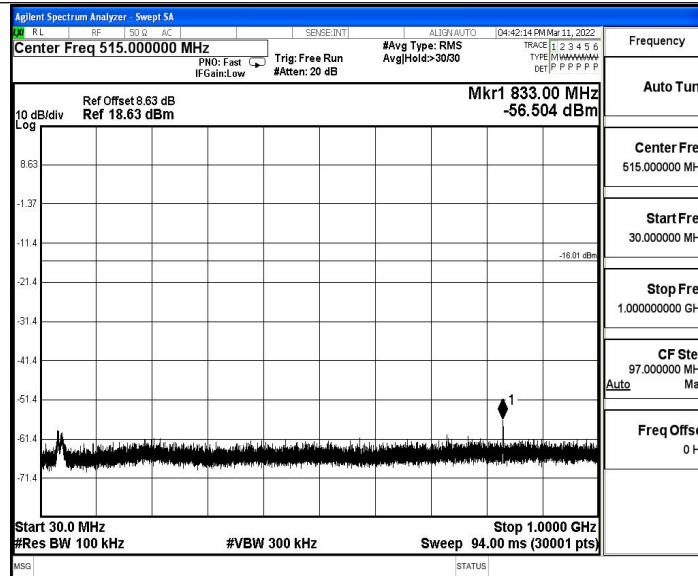
11B_Ant1_2437_1000~26500



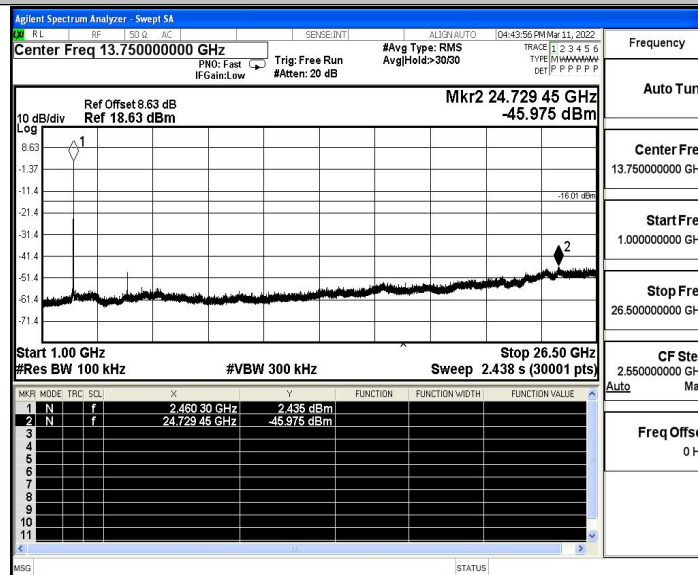
11B_Ant1_2462_0~Reference



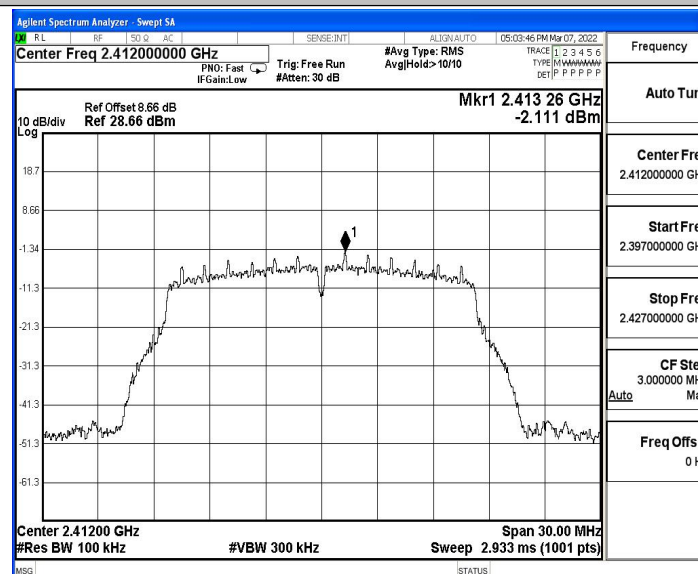
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500

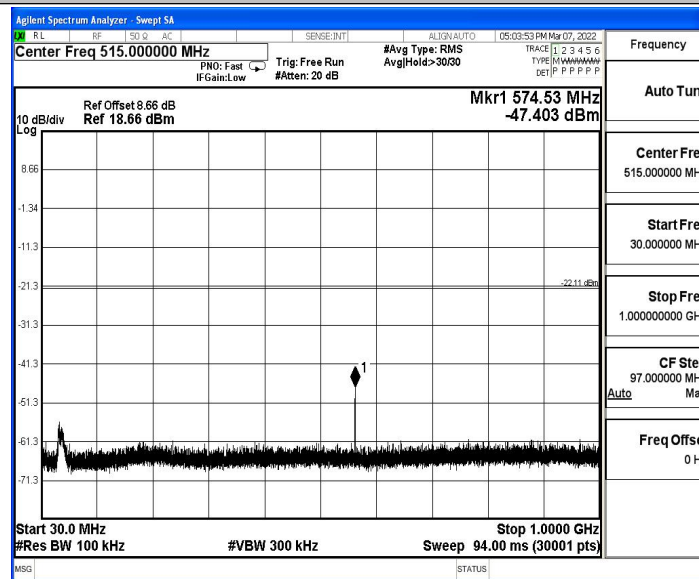


11G_Ant1_2412_0~Reference

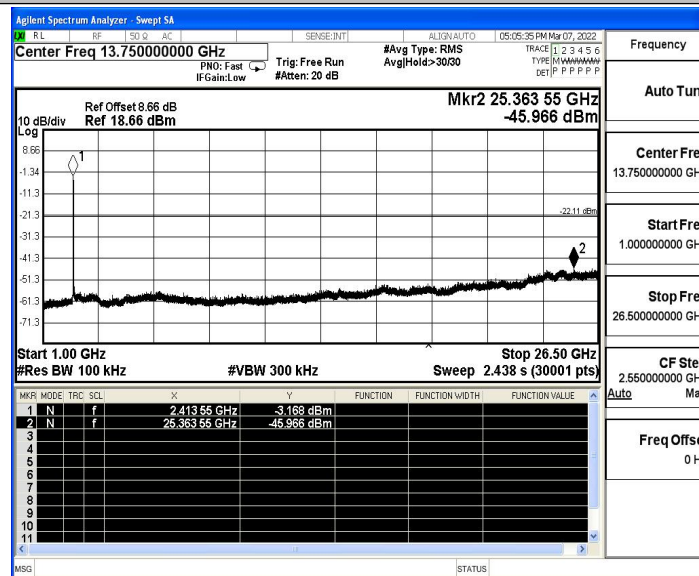




11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference