



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Aeye-P4

Test Model: JBV-ME20301A

Environmental Conditions

Temperature:	21.1 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Monkey Li
Supervised by:	Li Huan



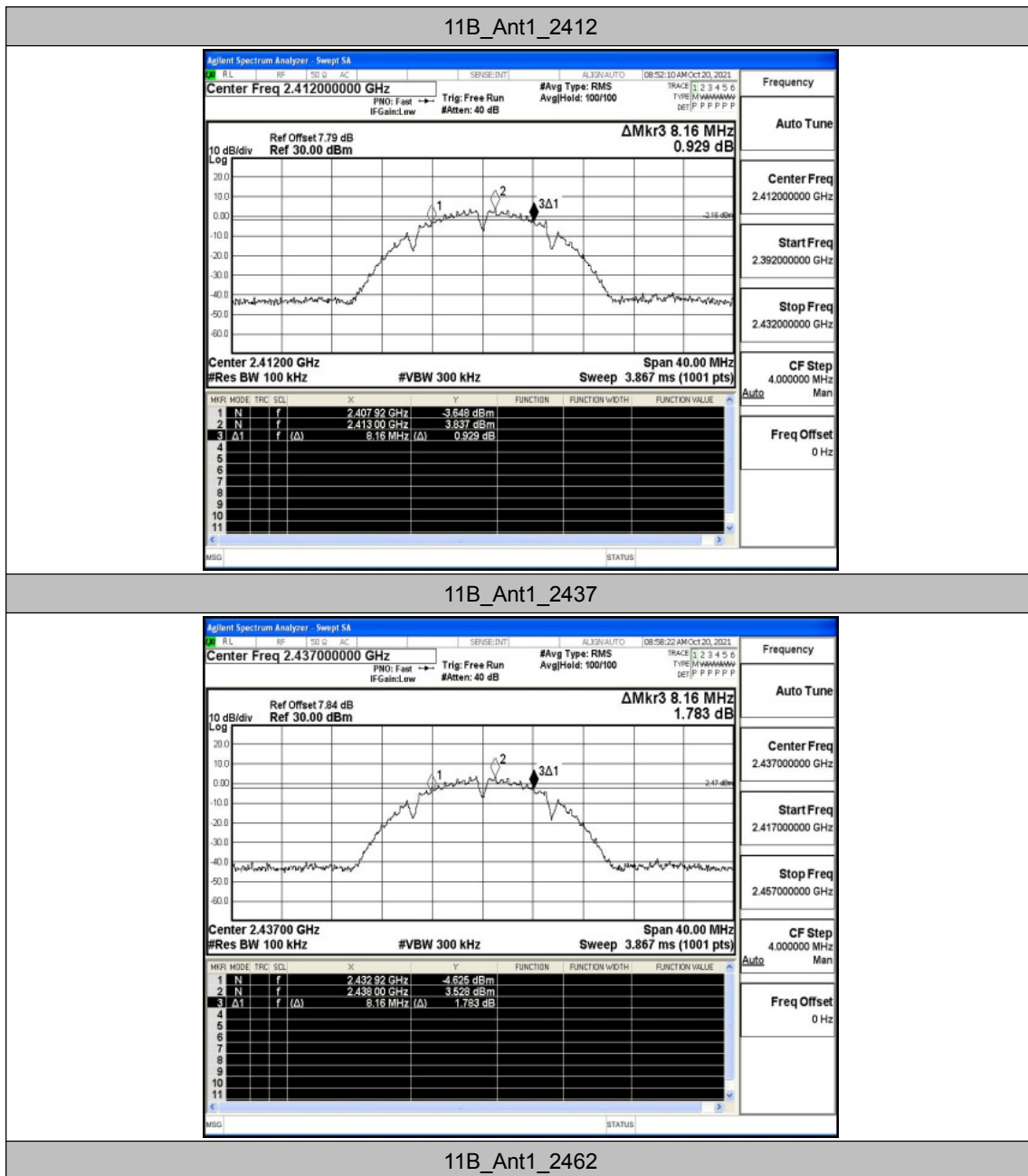
C.1 6dB Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.160	2407.920	2416.080	0.5	PASS
		2437	8.160	2432.920	2441.080	0.5	PASS
		2462	8.160	2457.920	2466.080	0.5	PASS
11G	Ant1	2412	15.720	2404.240	2419.960	0.5	PASS
		2437	15.120	2429.440	2444.560	0.5	PASS
		2462	15.760	2454.200	2469.960	0.5	PASS
11N20SISO	Ant1	2412	15.160	2404.440	2419.600	0.5	PASS
		2437	15.160	2429.440	2444.600	0.5	PASS
		2462	16.320	2454.120	2470.440	0.5	PASS
11N40SISO	Ant1	2422	35.280	2404.400	2439.680	0.5	PASS
		2437	35.280	2419.400	2454.680	0.5	PASS
		2452	35.200	2434.480	2469.680	0.5	PASS

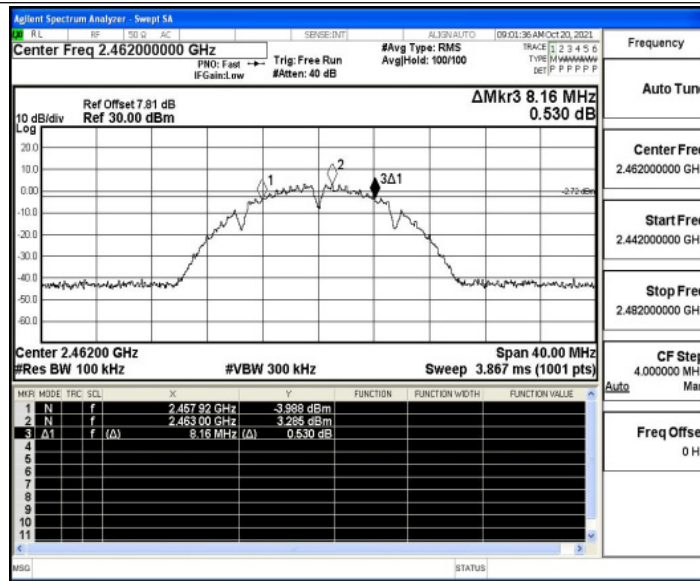


Test Graphs

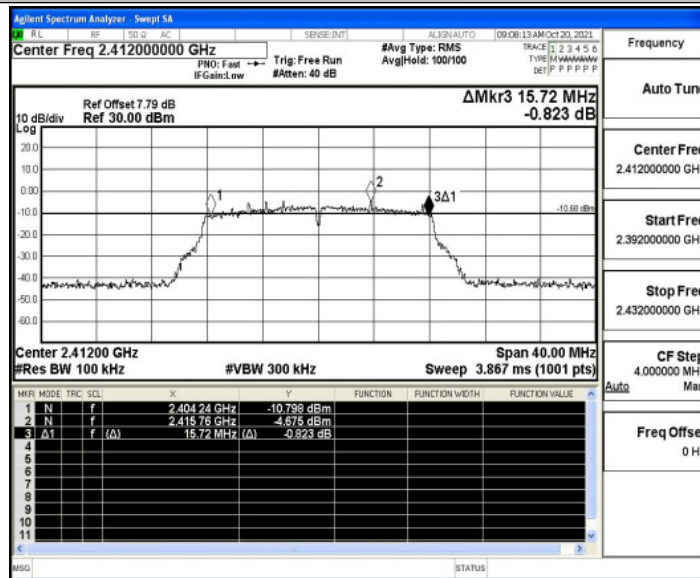

11B_Ant1_2437

Center Freq 2.43700000 GHz	Frequency
Ref Offset 7.84 dB	Auto Tune
Ref 30.00 dBm	Center Freq 2.437000000 GHz
ΔMkr3 8.16 MHz	Start Freq 2.417000000 GHz
1.783 dB	Stop Freq 2.457000000 GHz
Center 2.43700 GHz	CF Step 4.000000 MHz
#Res BW 100 kHz	Auto Man
#VBW 300 kHz	Freq Offset 0 Hz
Span 40.00 MHz	
Sweep 3.867 ms (1001 pts)	

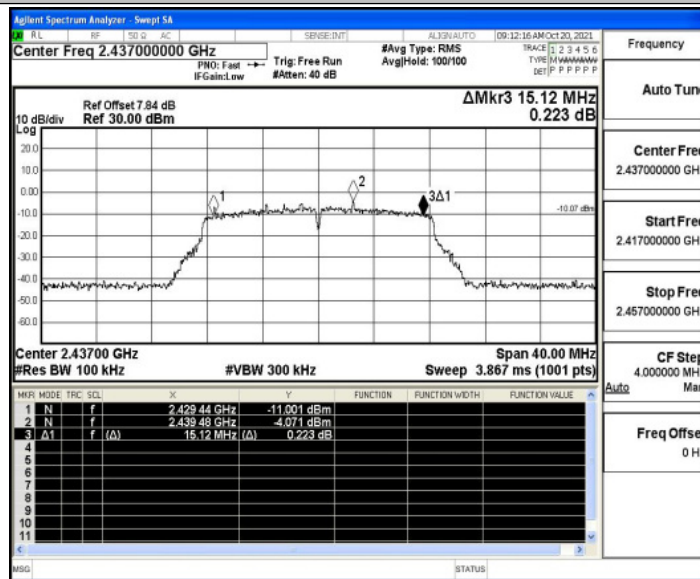
11B_Ant1_2462



11G_Ant1_2412

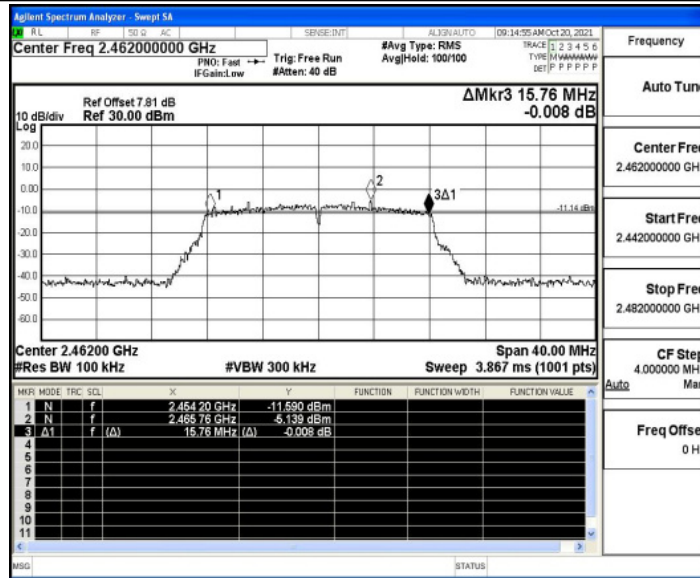


11G_Ant1_2437

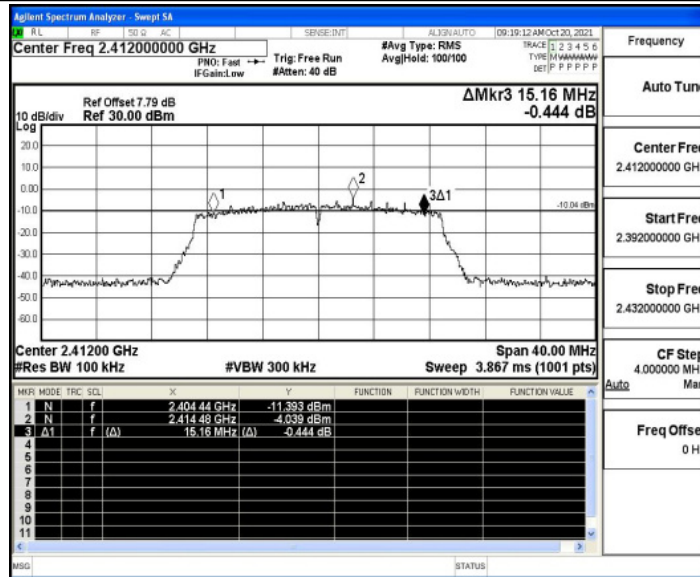




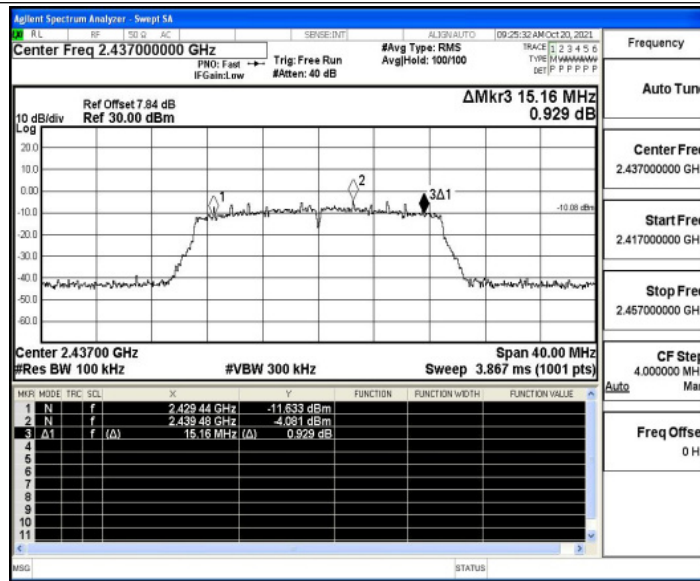
11G_Ant1_2462



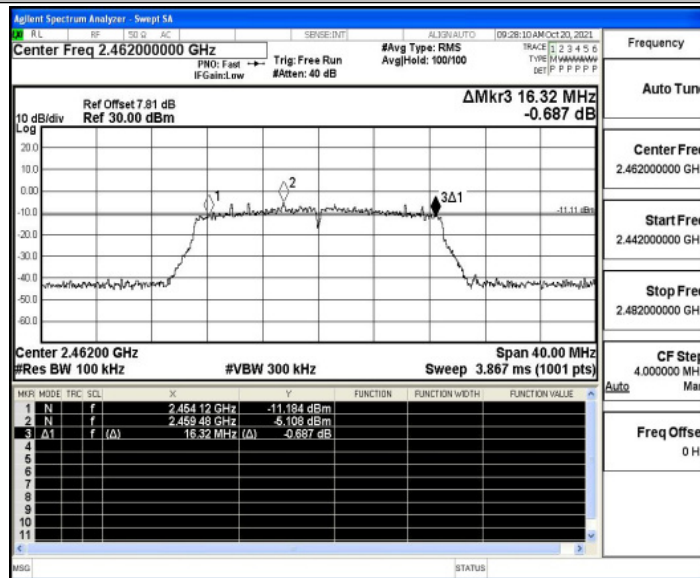
11N20SISO_Ant1_2412



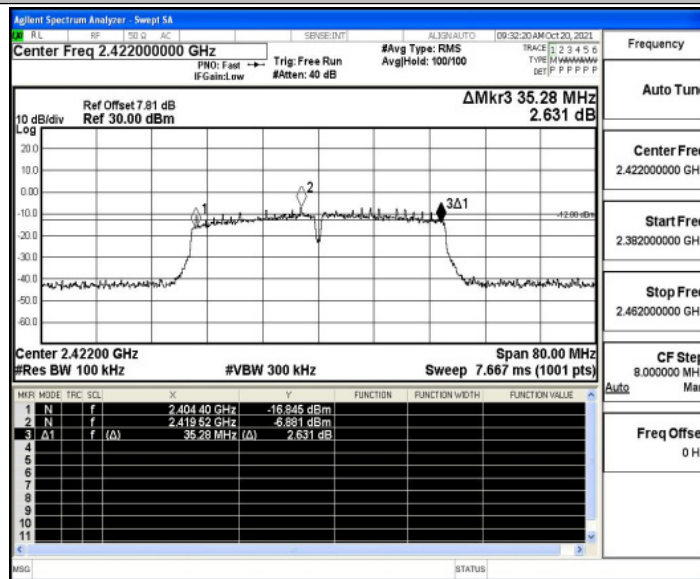
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

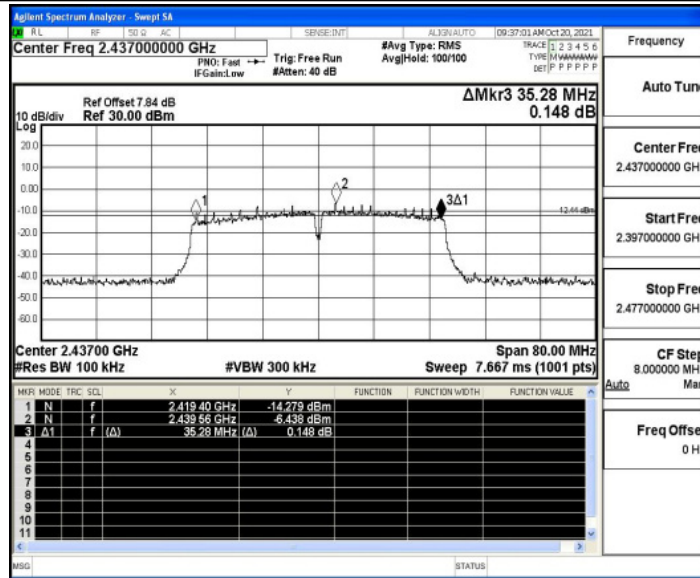


11N40SISO_Ant1_2422

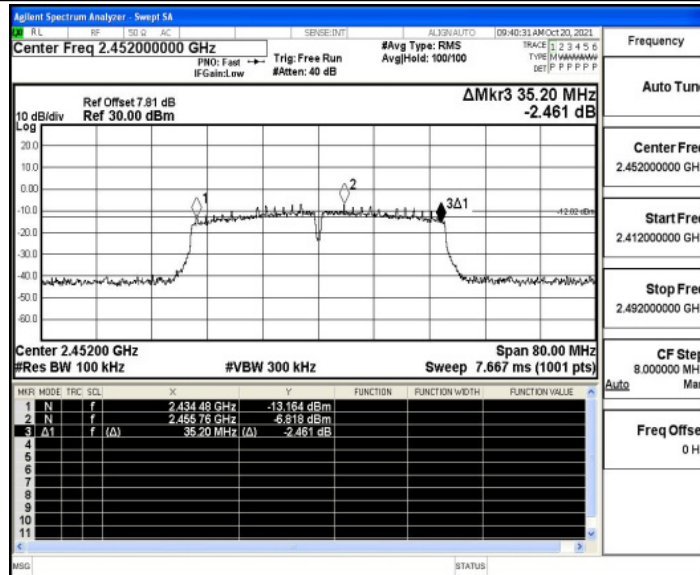




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





C.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.15	≤30	PASS
		2437	15.84	≤30	PASS
		2462	15.65	≤30	PASS
11G	Ant1	2412	13.97	≤30	PASS
		2437	13.88	≤30	PASS
		2462	13.70	≤30	PASS
11N20SISO	Ant1	2412	14.13	≤30	PASS
		2437	14.00	≤30	PASS
		2462	13.89	≤30	PASS
11N40SISO	Ant1	2422	13.90	≤30	PASS
		2437	13.81	≤30	PASS
		2452	13.74	≤30	PASS



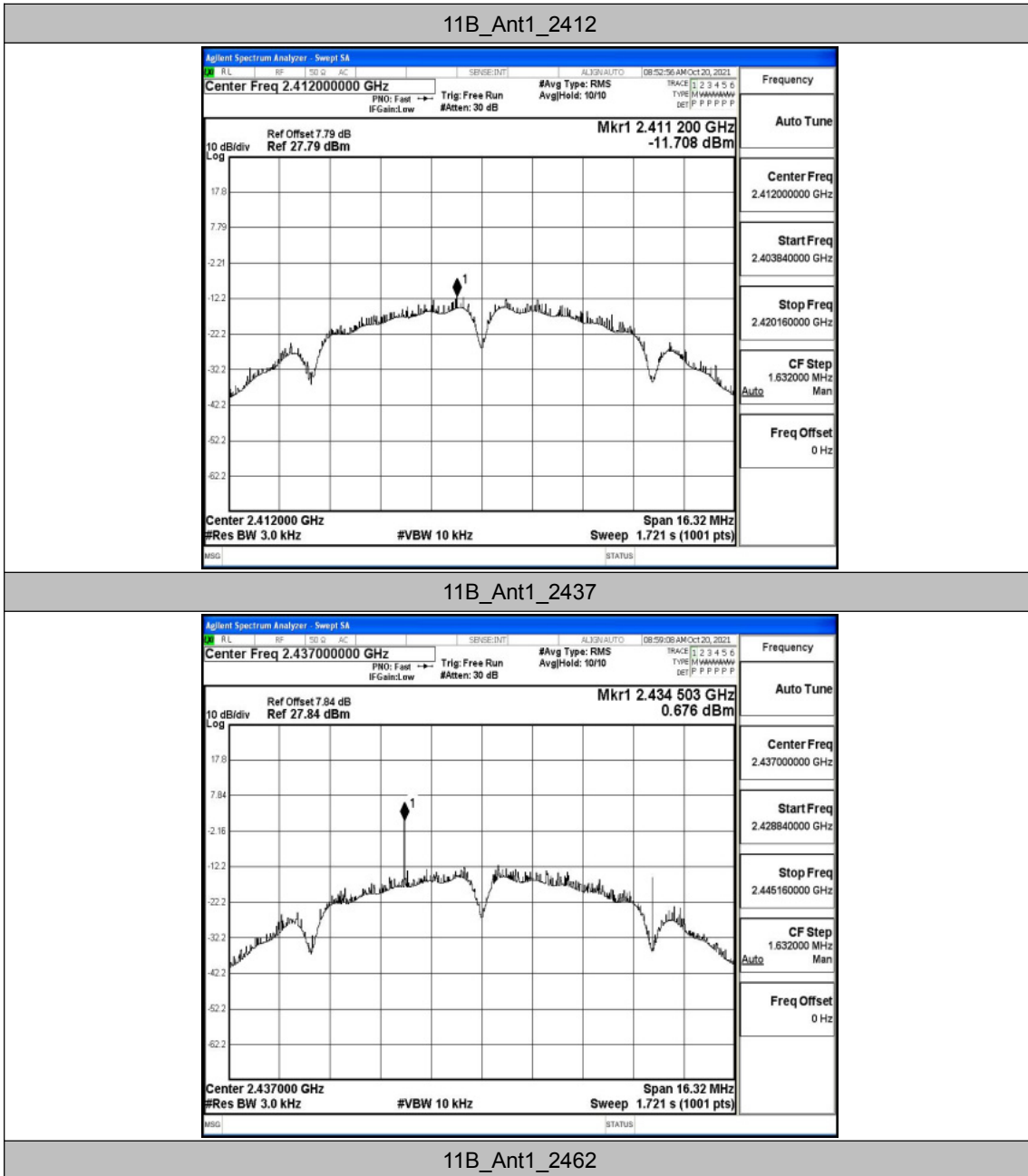
C.3 Maximum power spectral density

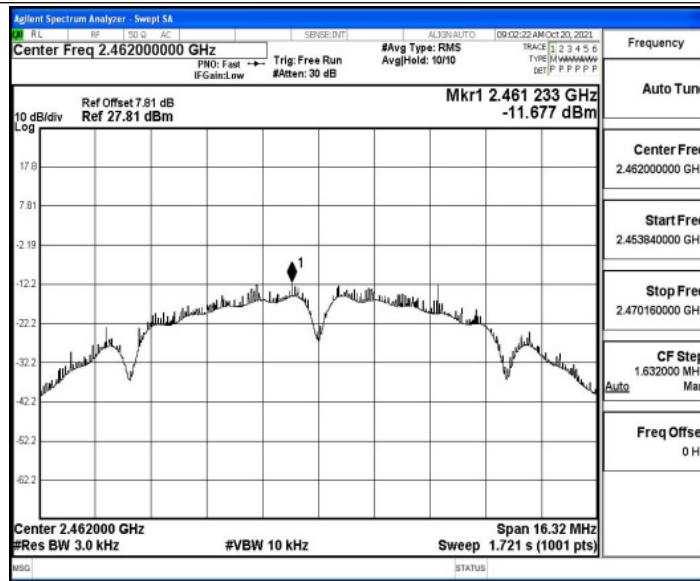
Test Result

TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.71	≤8	PASS
		2437	0.68	≤8	PASS
		2462	-11.68	≤8	PASS
11G	Ant1	2412	-18.16	≤8	PASS
		2437	-18.87	≤8	PASS
		2462	-20.15	≤8	PASS
11N20SISO	Ant1	2412	-18.22	≤8	PASS
		2437	-18.83	≤8	PASS
		2462	-19.44	≤8	PASS
11N40SISO	Ant1	2422	-21.13	≤8	PASS
		2437	-21.63	≤8	PASS
		2452	-21.46	≤8	PASS

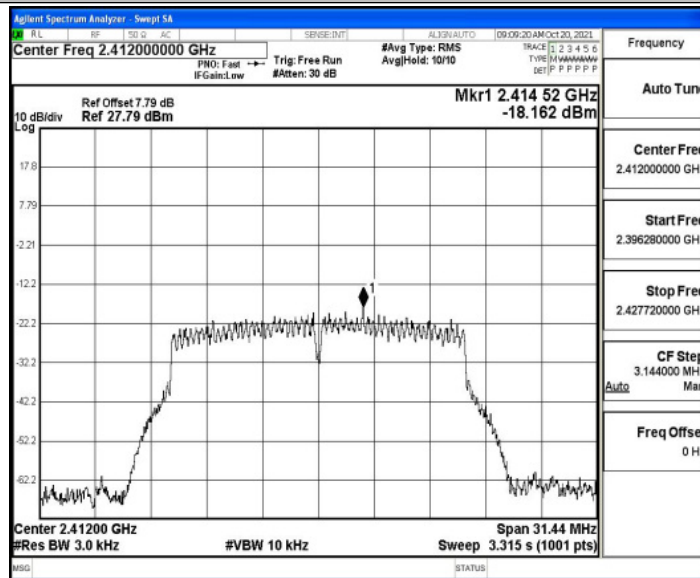


Test Graphs

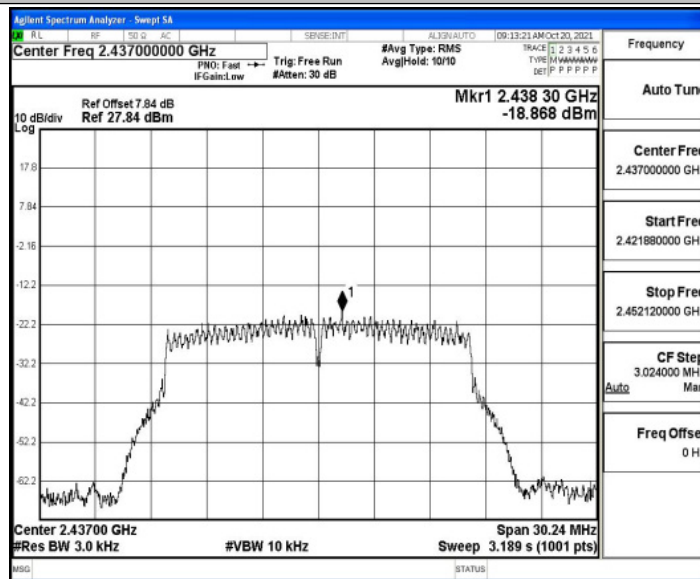




11G_Ant1_2412

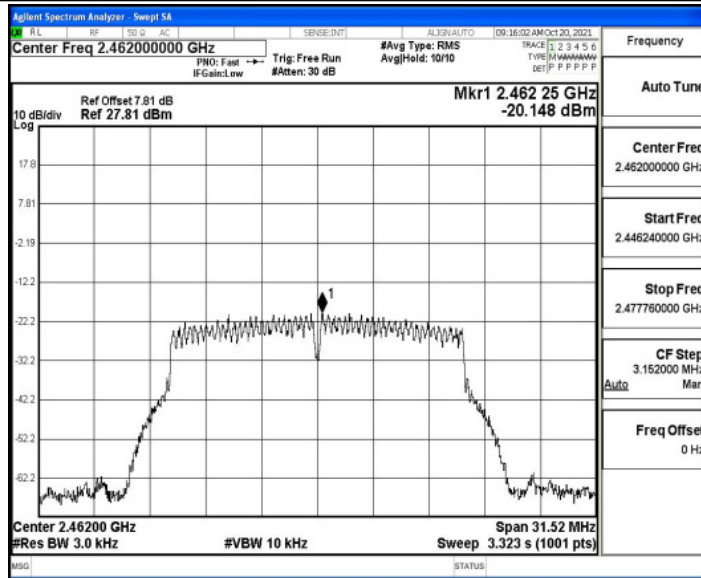


11G_Ant1_2437

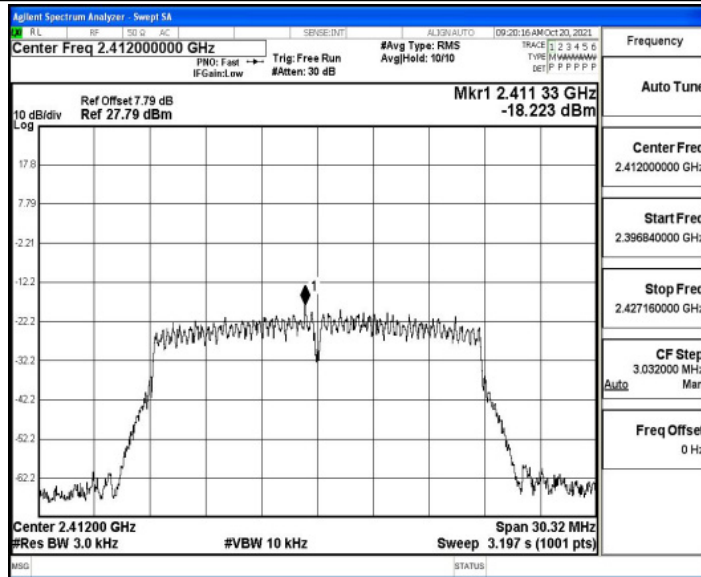




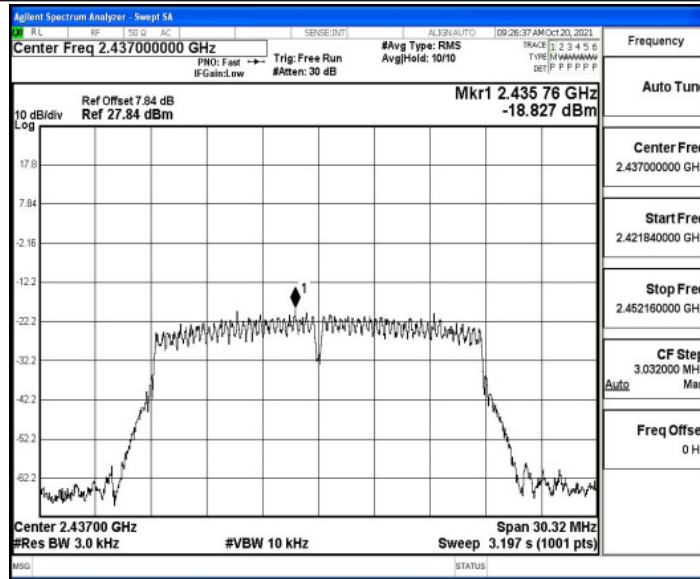
11G_Ant1_2462



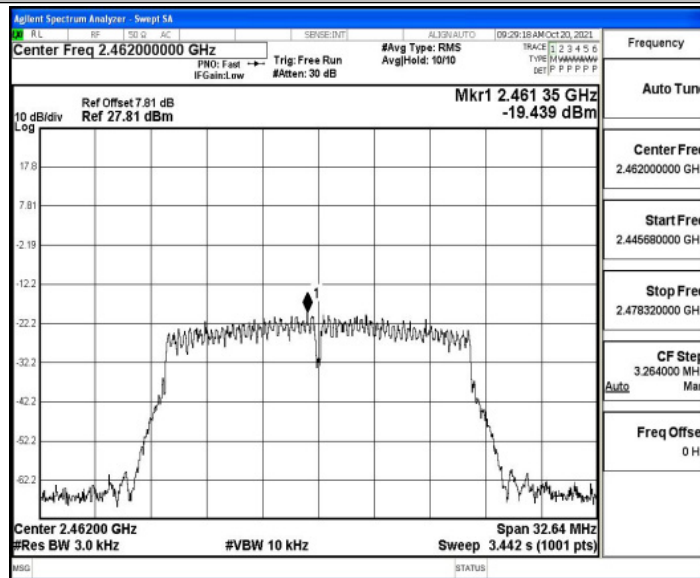
11N20SISO_Ant1_2412



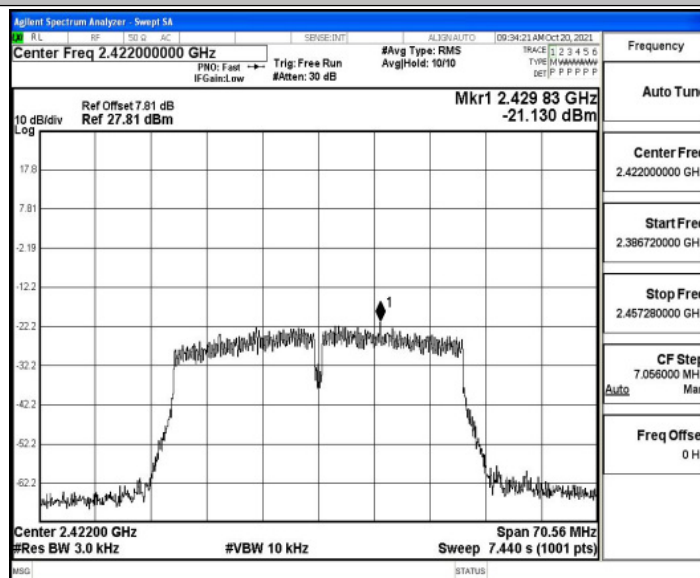
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

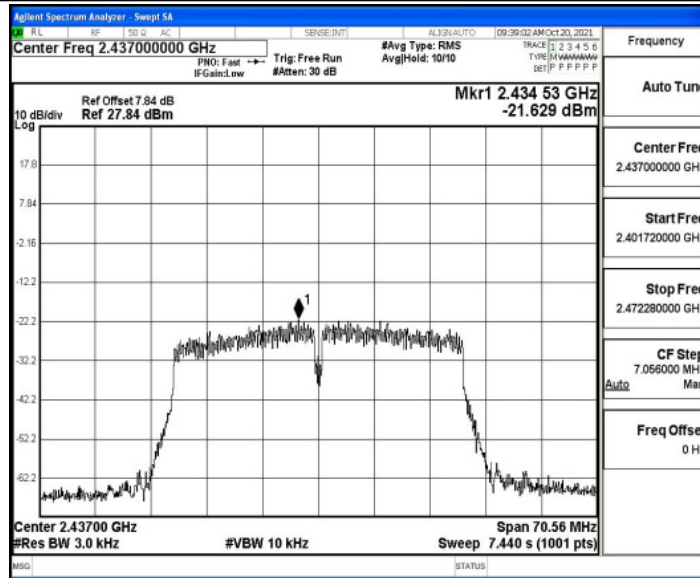


11N40SISO_Ant1_2422

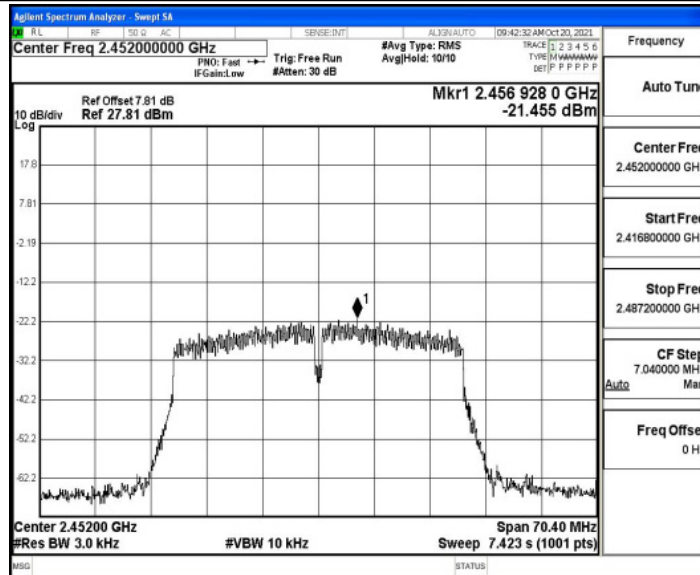




11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





C.4 Band edge measurements

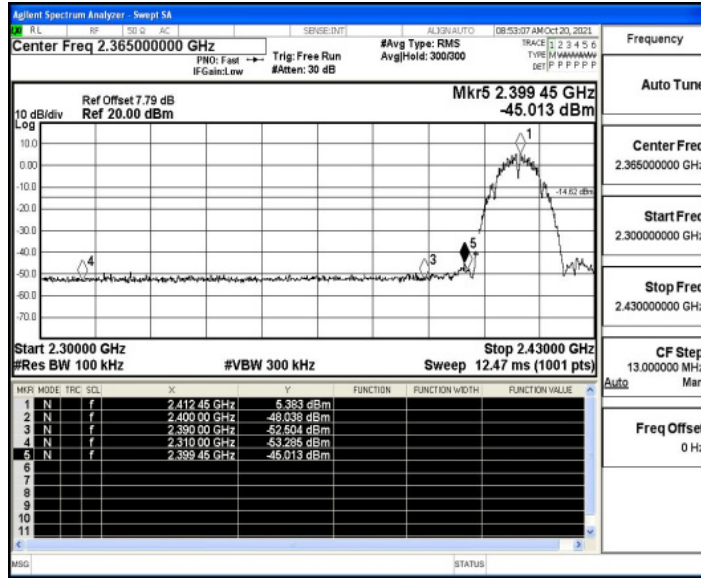
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.38	-45.01	≤-14.62	PASS
		High	2462	4.93	-48.92	≤-15.07	PASS
11G	Ant1	Low	2412	-4.04	-46.92	≤-24.04	PASS
		High	2462	-3.36	-48.58	≤-23.36	PASS
11N20SISO	Ant1	Low	2412	-4.10	-46.83	≤-24.1	PASS
		High	2462	-3.97	-49.04	≤-23.97	PASS
11N40SISO	Ant1	Low	2422	-6.44	-44.47	≤-26.44	PASS
		High	2452	-6.56	-48.38	≤-26.56	PASS

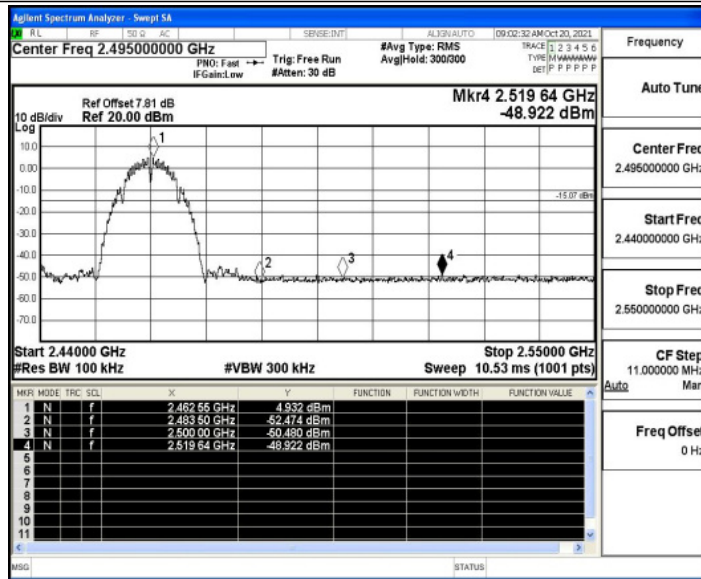


Test Graphs

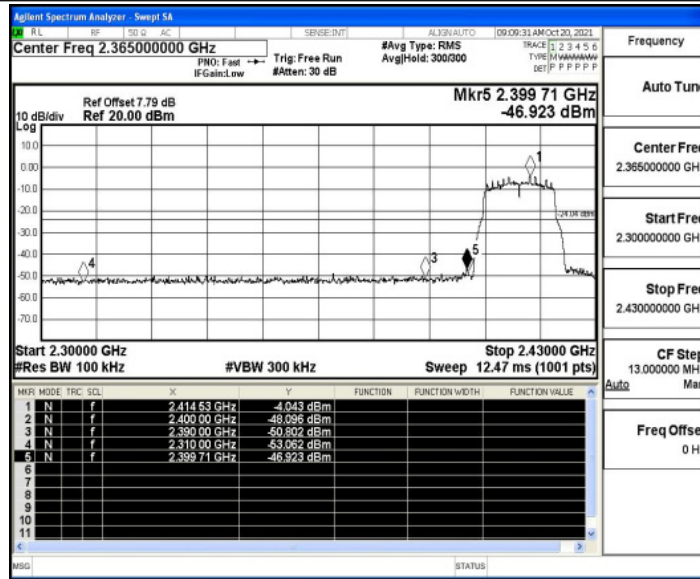
11B_Ant1_Low_2412



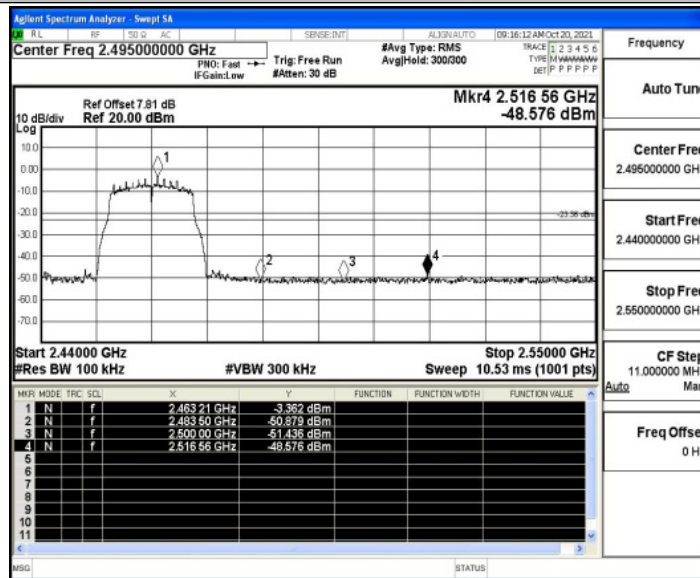
11B_Ant1_High_2462



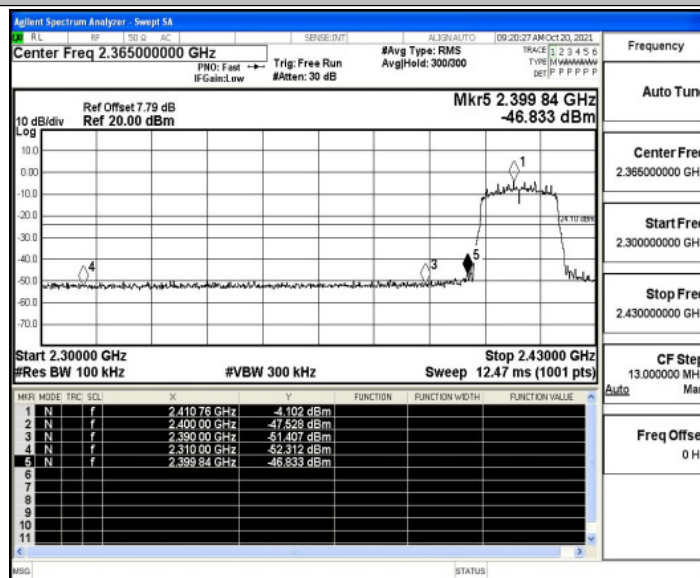
11G_Ant1_Low_2412



11G_Ant1_High_2462

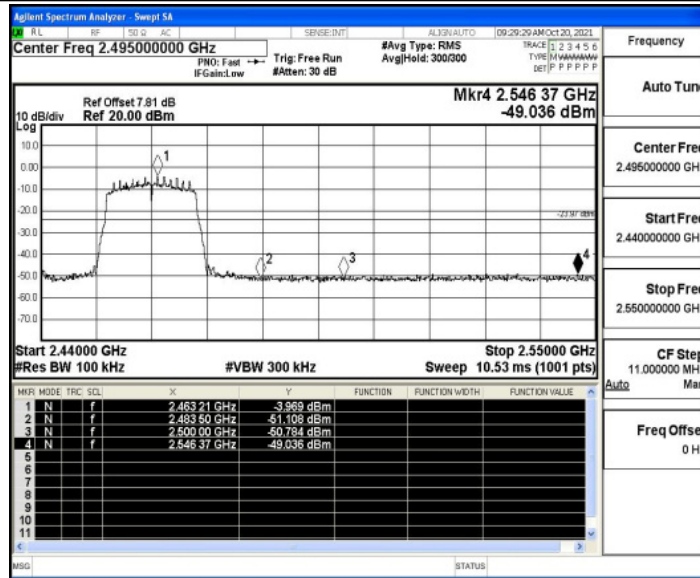


11N20SISO_Ant1_Low_2412

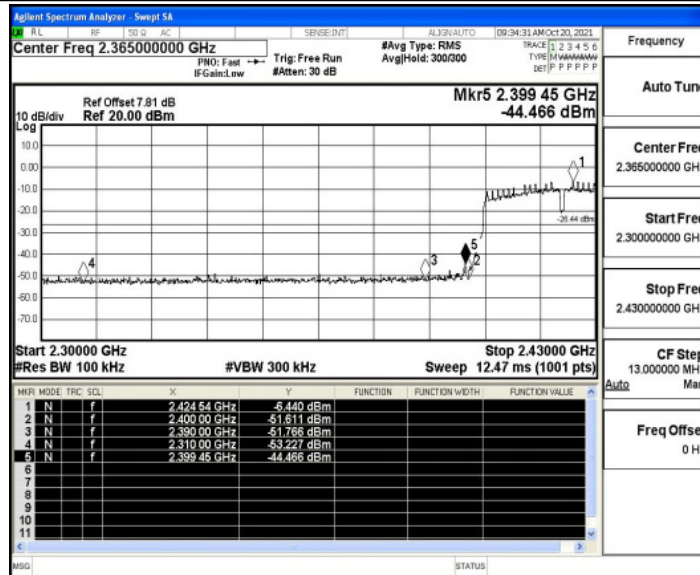




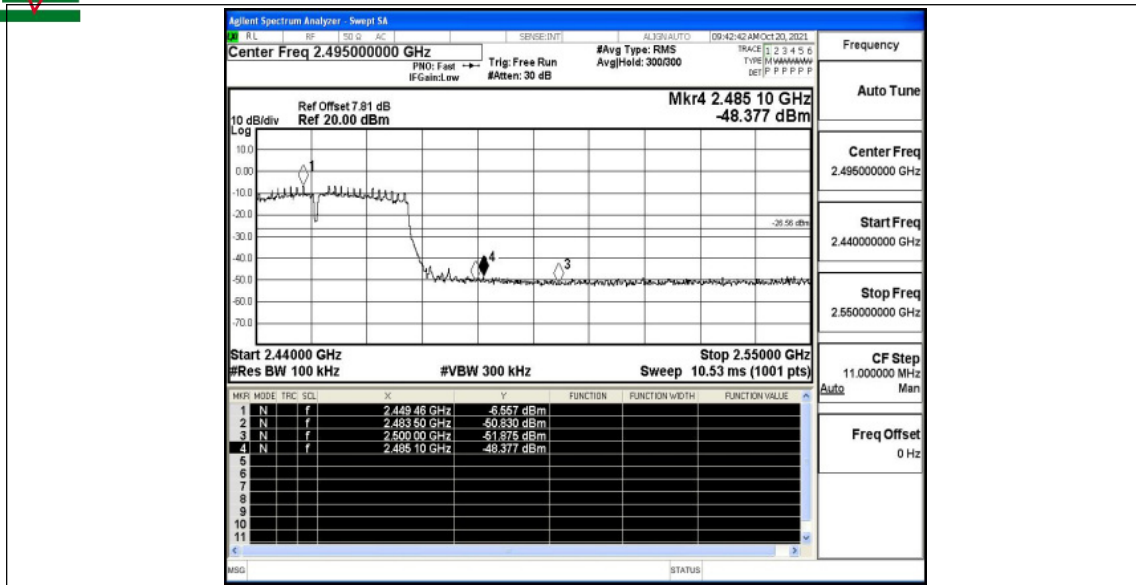
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





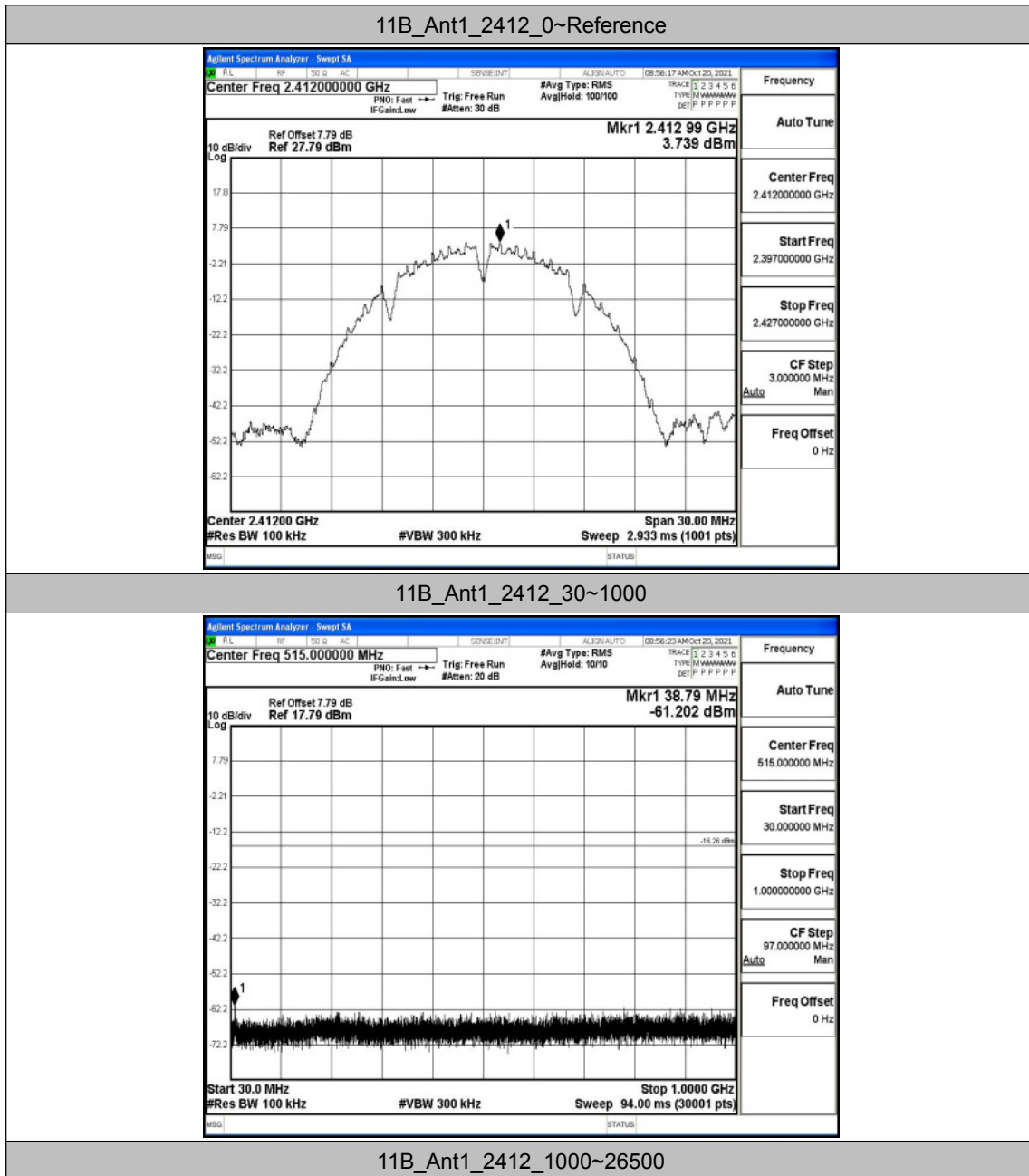
C.5 Conducted Spurious Emission

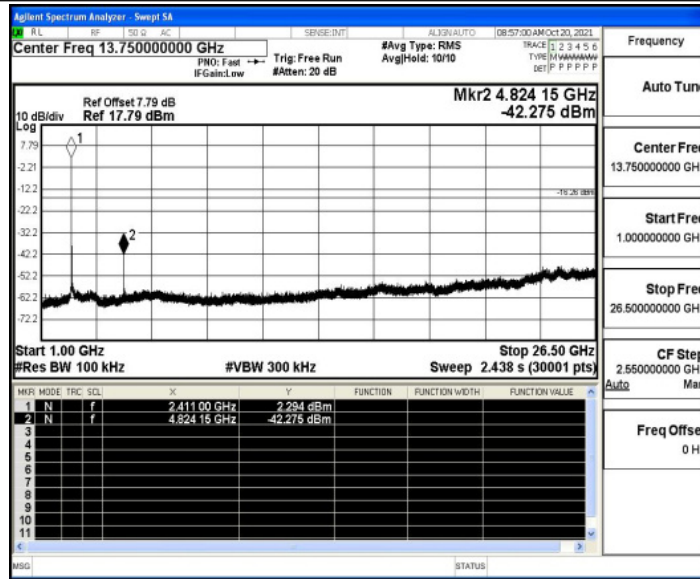
Test Result

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.74	3.74	---	PASS
			30~1000	3.74	-61.2	≤-16.26	PASS
			1000~26500	3.74	-42.28	≤-16.26	PASS
		2437	Reference	5.05	5.05	---	PASS
			30~1000	5.05	-59.7	≤-14.95	PASS
			1000~26500	5.05	-44.57	≤-14.95	PASS
		2462	Reference	3.27	3.27	---	PASS
			30~1000	3.27	-59.88	≤-16.73	PASS
			1000~26500	3.27	-45.8	≤-16.73	PASS
11G	Ant1	2412	Reference	-3.84	-3.84	---	PASS
			30~1000	-3.84	-60.1	≤-23.84	PASS
			1000~26500	-3.84	-47.35	≤-23.84	PASS
		2437	Reference	-4.38	-4.38	---	PASS
			30~1000	-4.38	-59.62	≤-24.38	PASS
			1000~26500	-4.38	-47.5	≤-24.38	PASS
		2462	Reference	-3.76	-3.76	---	PASS
			30~1000	-3.76	-59.35	≤-23.76	PASS
			1000~26500	-3.76	-47.25	≤-23.76	PASS
11N20SISO	Ant1	2412	Reference	-4.37	-4.37	---	PASS
			30~1000	-4.37	-59.86	≤-24.37	PASS
			1000~26500	-4.37	-47.09	≤-24.37	PASS
		2437	Reference	-4.09	-4.09	---	PASS
			30~1000	-4.09	-60.37	≤-24.09	PASS
			1000~26500	-4.09	-47.54	≤-24.09	PASS
		2462	Reference	-4.15	-4.15	---	PASS
			30~1000	-4.15	-58.82	≤-24.15	PASS
			1000~26500	-4.15	-47.47	≤-24.15	PASS
11N40SISO	Ant1	2422	Reference	-6.39	-6.39	---	PASS
			30~1000	-6.39	-59.76	≤-26.39	PASS
			1000~26500	-6.39	-47.54	≤-26.39	PASS
		2437	Reference	-6.54	-6.54	---	PASS
			30~1000	-6.54	-60.86	≤-26.54	PASS
			1000~26500	-6.54	-46.9	≤-26.54	PASS
		2452	Reference	-6.65	-6.65	---	PASS
			30~1000	-6.65	-59.01	≤-26.65	PASS
			1000~26500	-6.65	-46.86	≤-26.65	PASS

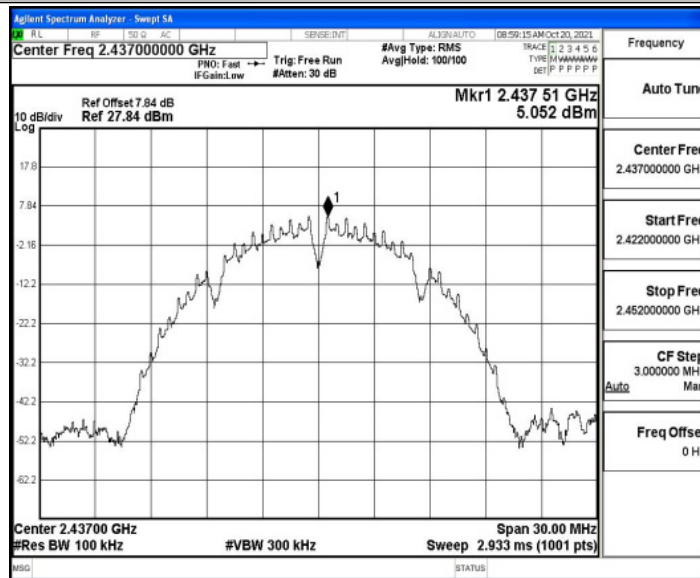


Test Graphs

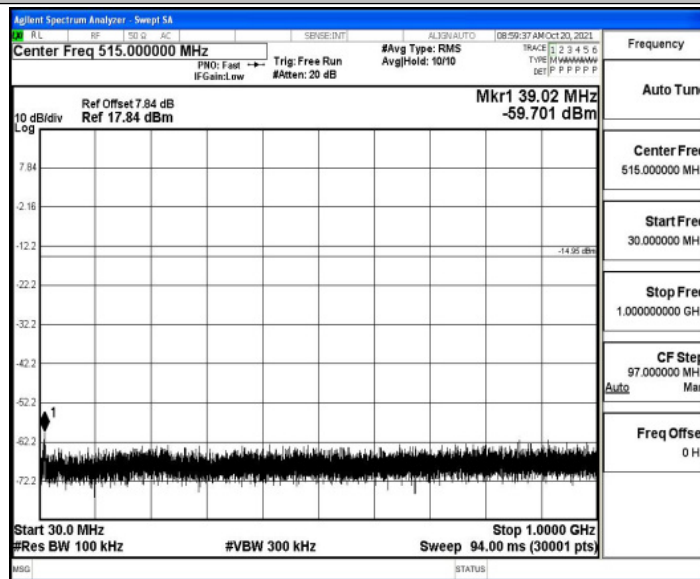




11B_Ant1_2437_0~Reference

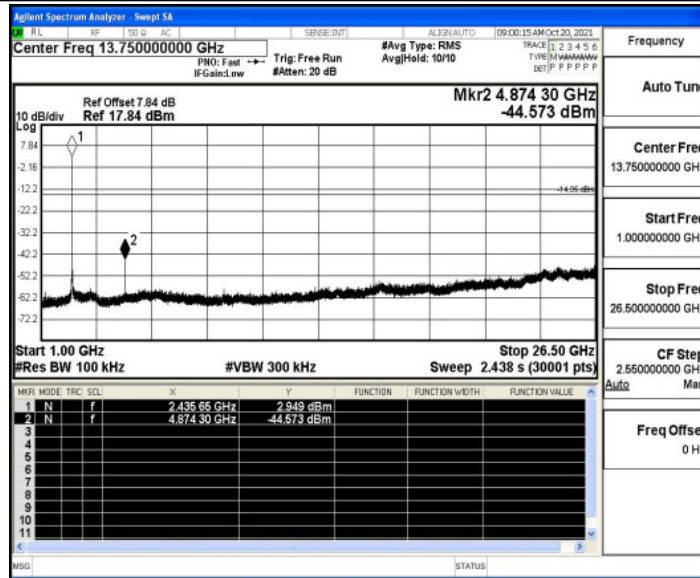


11B_Ant1_2437_30~1000

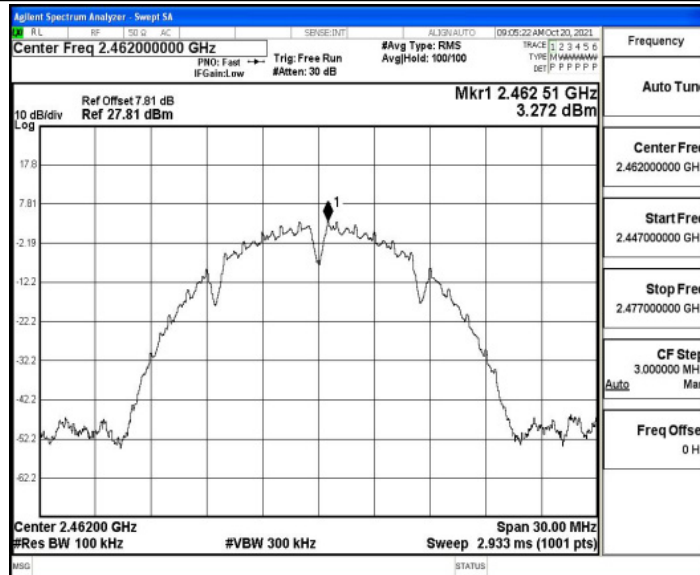




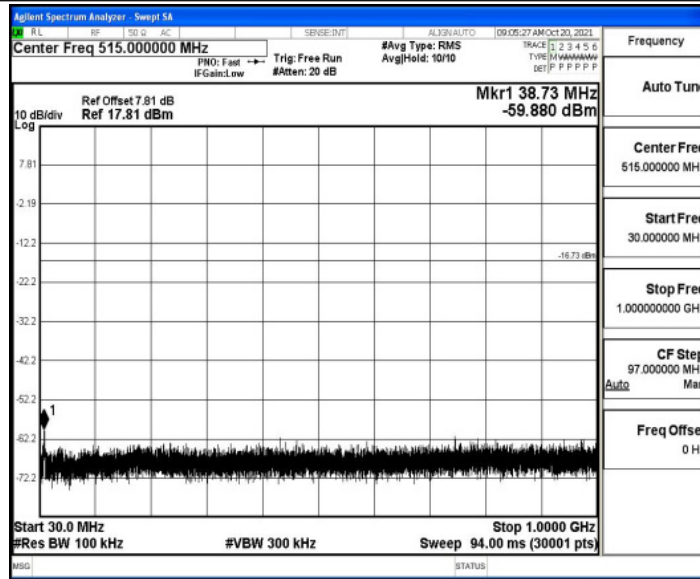
11B_Ant1_2437_1000~26500



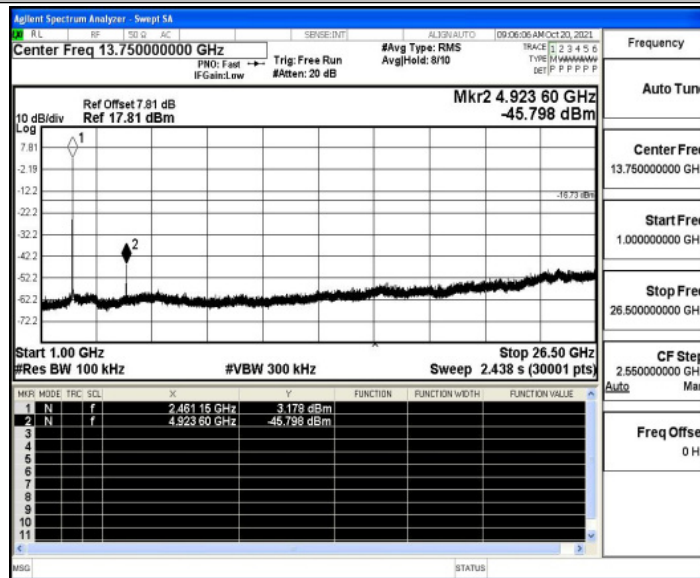
11B_Ant1_2462_0~Reference



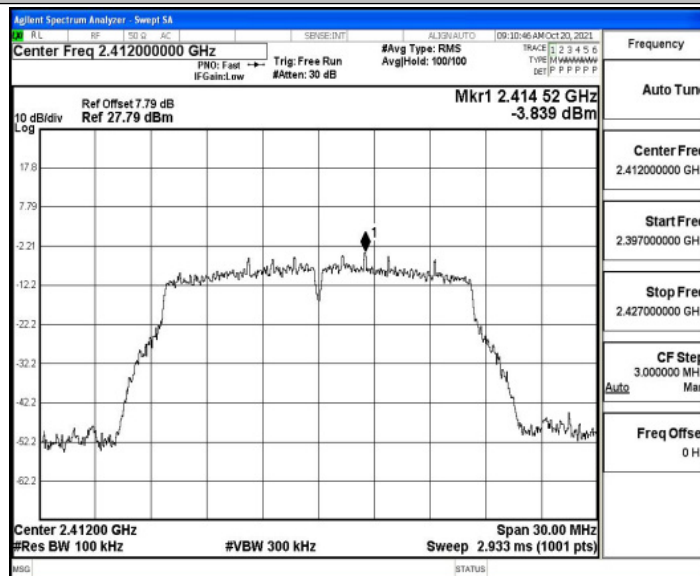
11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500

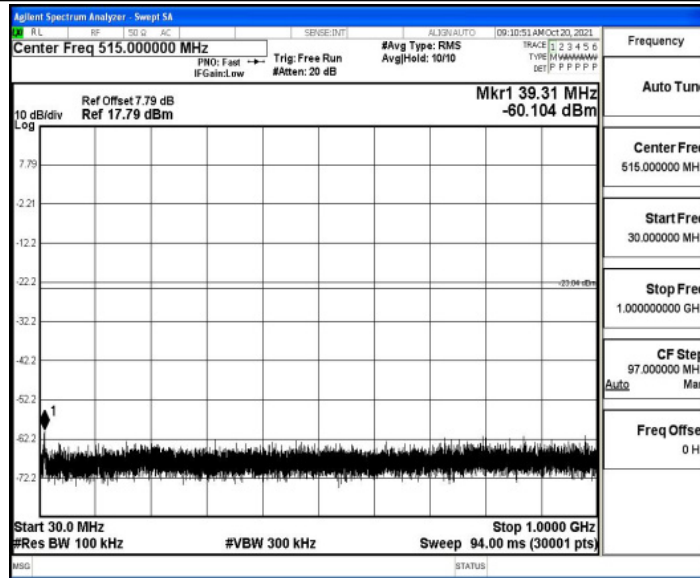


11G_Ant1_2412_0~Reference

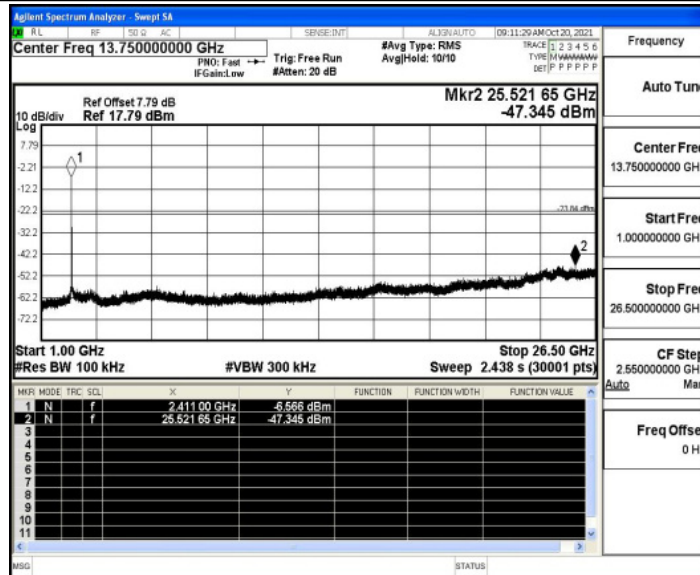




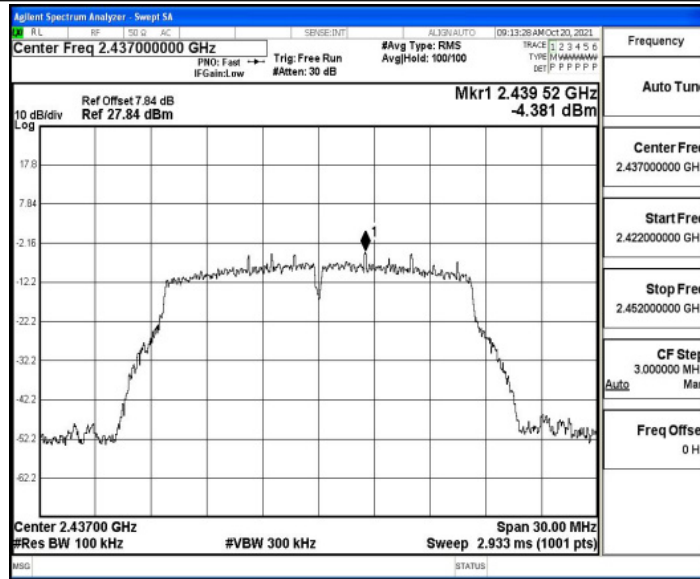
11G_Ant1_2412_30~1000



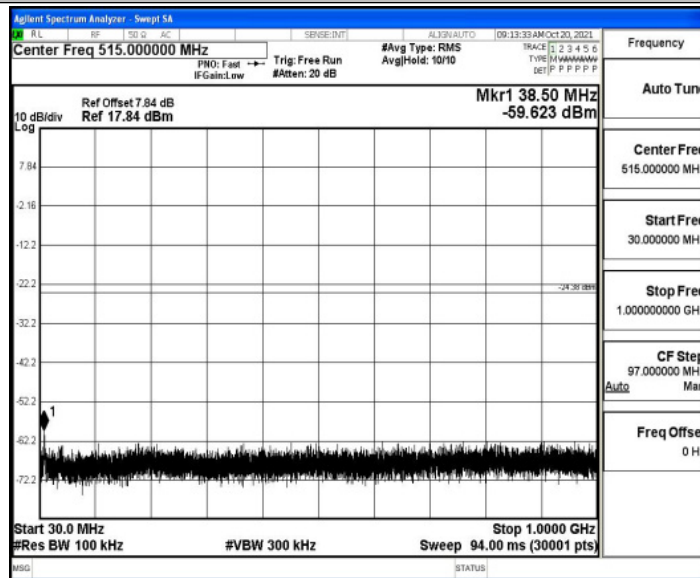
11G_Ant1_2412_1000~26500



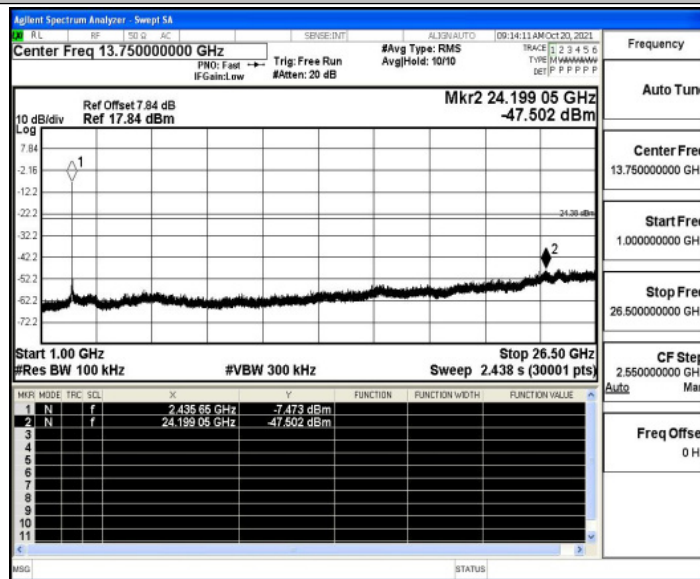
11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000

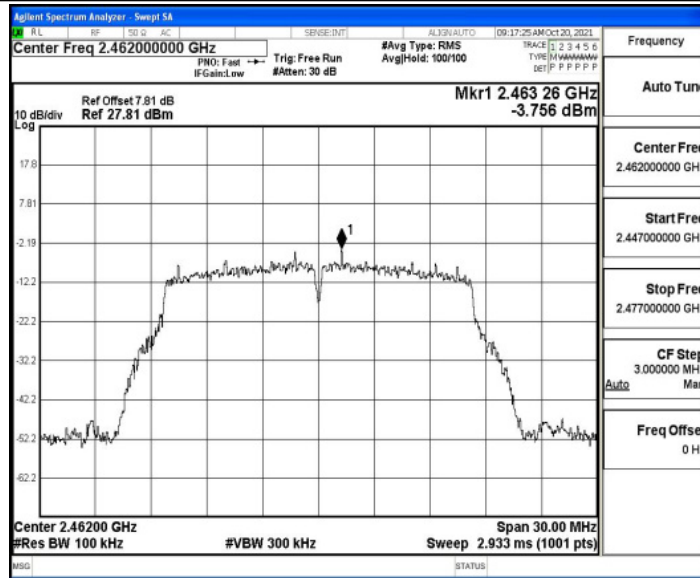


11G_Ant1_2437_1000~26500

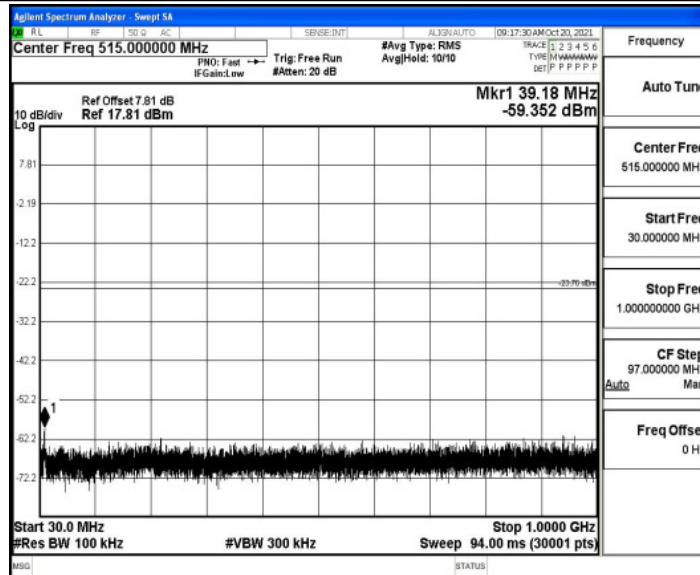




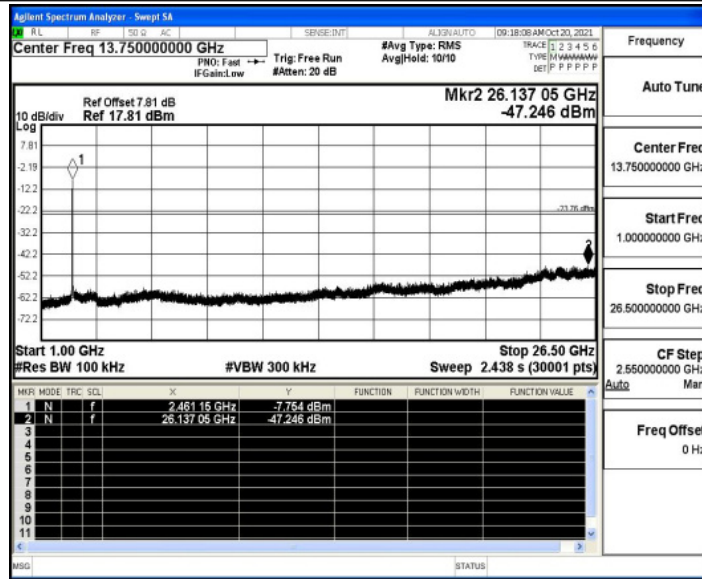
11G_Ant1_2462_0~Reference



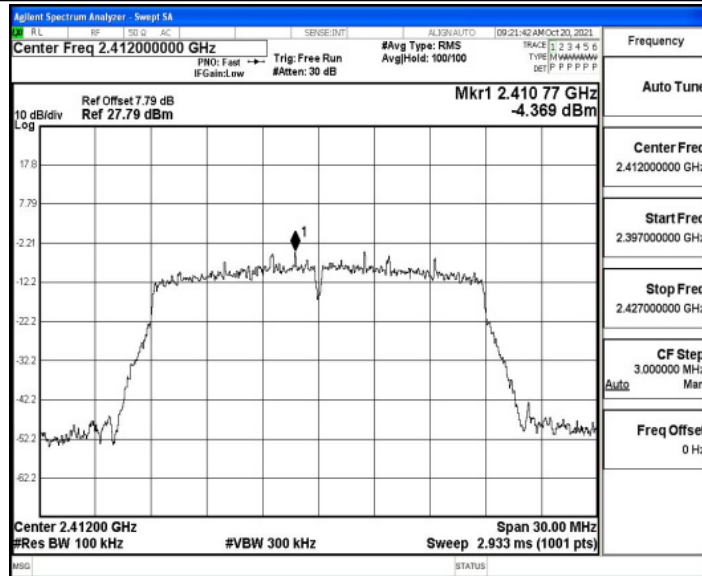
11G_Ant1_2462_30~1000



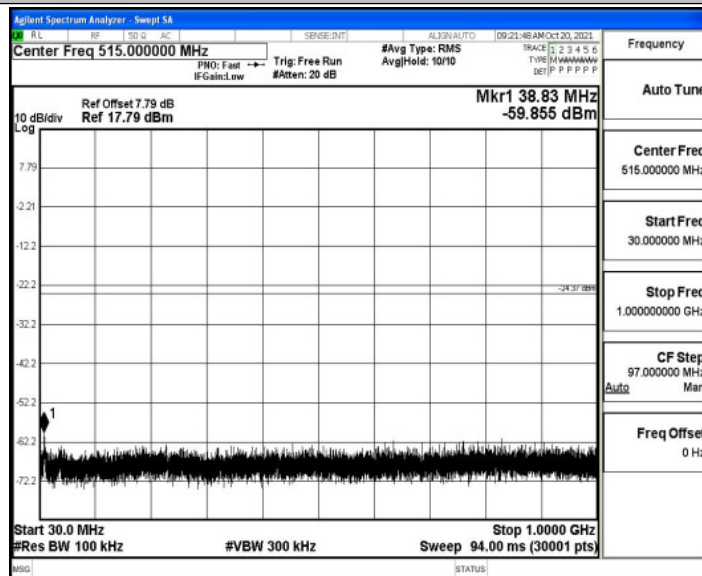
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference

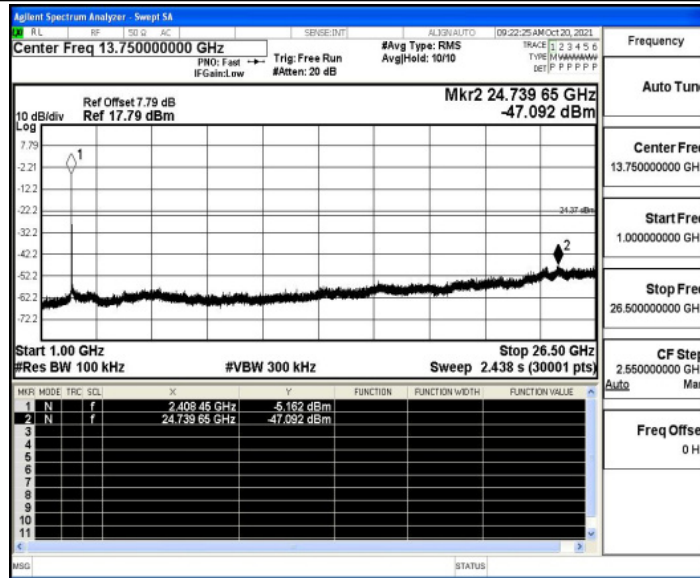


11N20SISO_Ant1_2412_30~1000

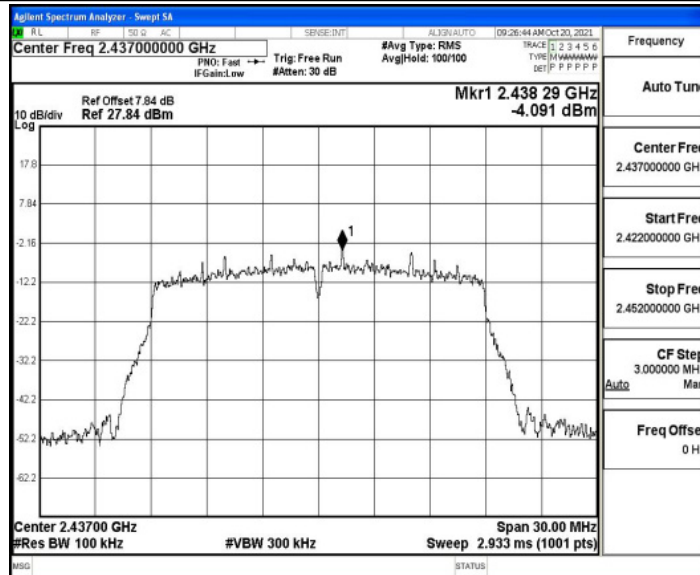




11N20SISO_Ant1_2412_1000~26500



11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000