



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Tablet
Trade Mark: HYUNDAI
Test Model: 7GB1

Environmental Conditions

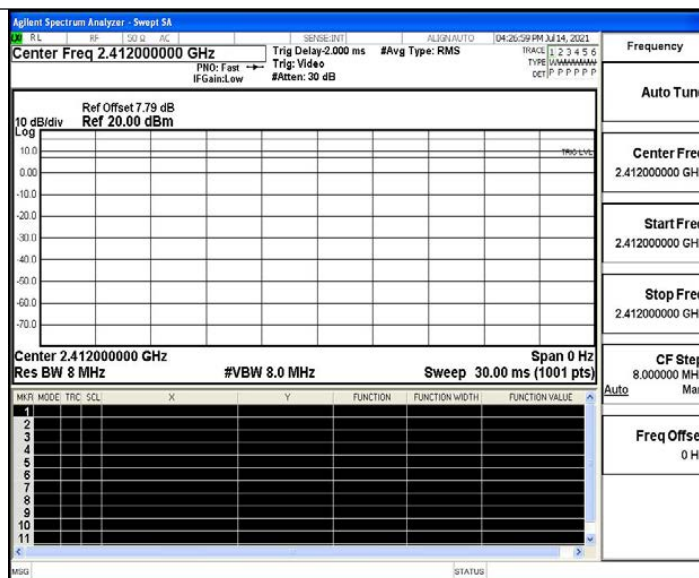
Temperature:	21.5° C
Relative Humidity:	52.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Ken He
Supervised by:	Li Huan

C.1 Duty Cycle

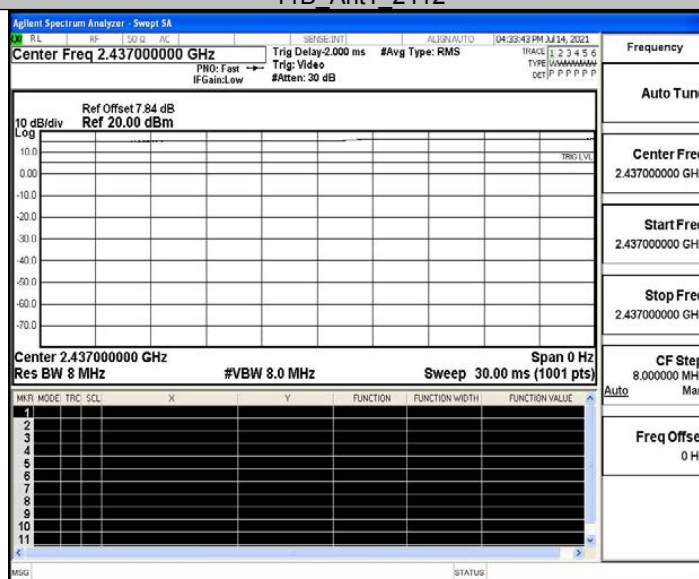
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11B	Ant1	2412	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2462	30.00	30.00	100.00	---	PASS
11G	Ant1	2412	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2462	30.00	30.00	100.00	---	PASS
11N20SISO	Ant1	2412	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2462	30.00	30.00	100.00	---	PASS
11N40SISO	Ant1	2422	30.00	30.00	100.00	---	PASS
		2437	30.00	30.00	100.00	---	PASS
		2452	30.00	30.00	100.00	---	PASS



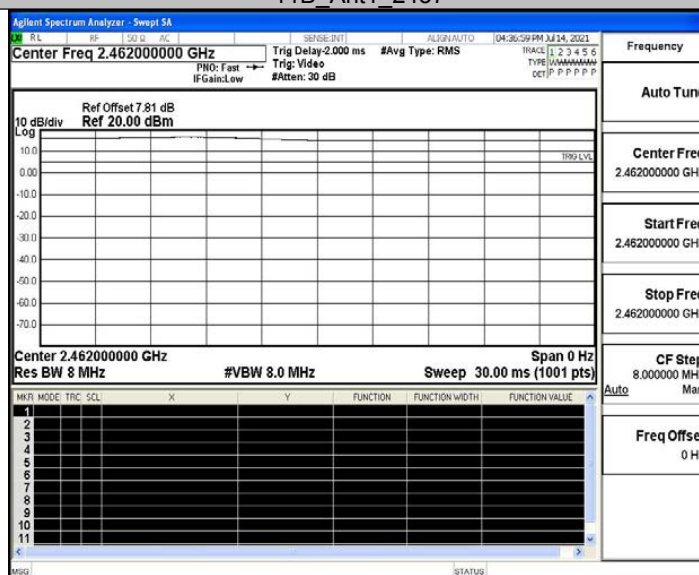
Test Graphs



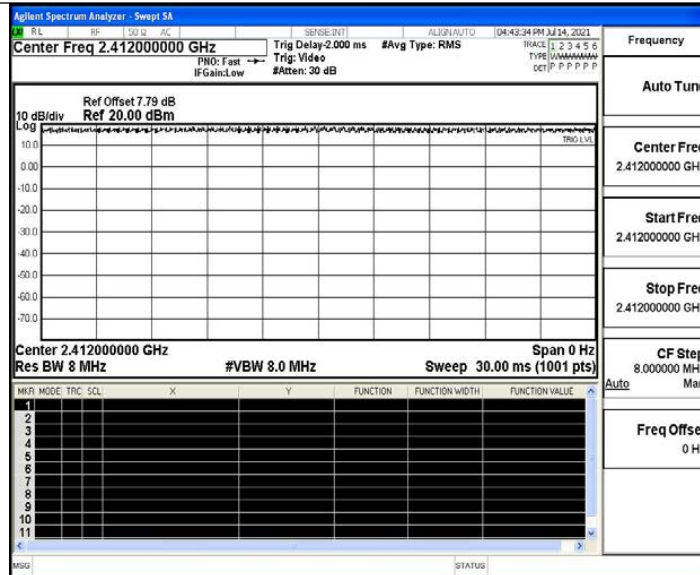
11B_Ant1_2412



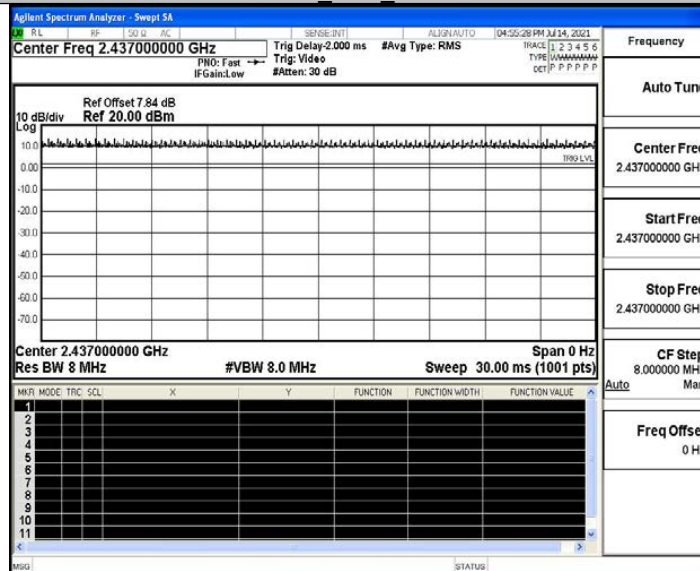
11B_Ant1_2437



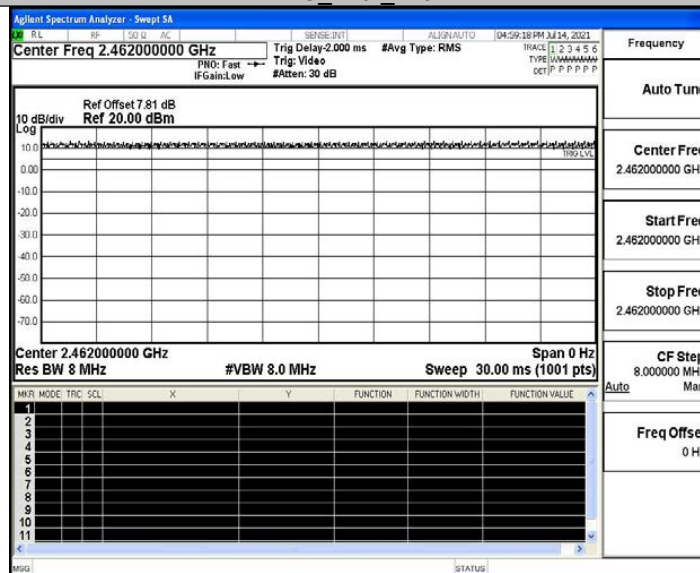
11B_Ant1_2462



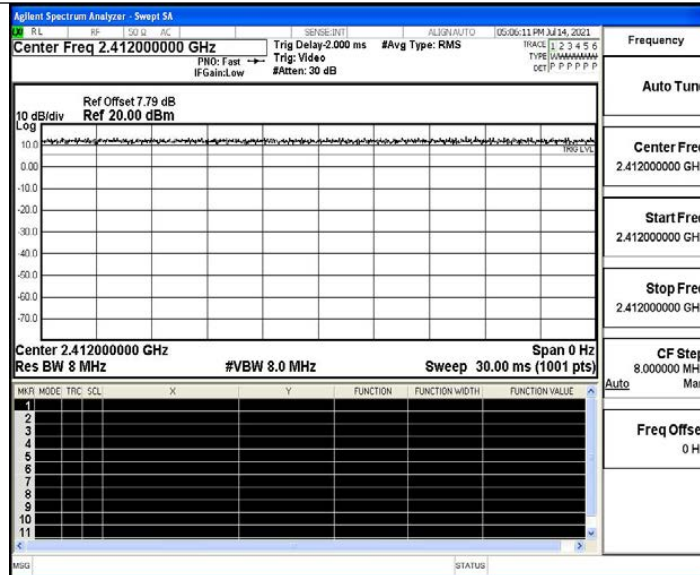
11G_Ant1_2412



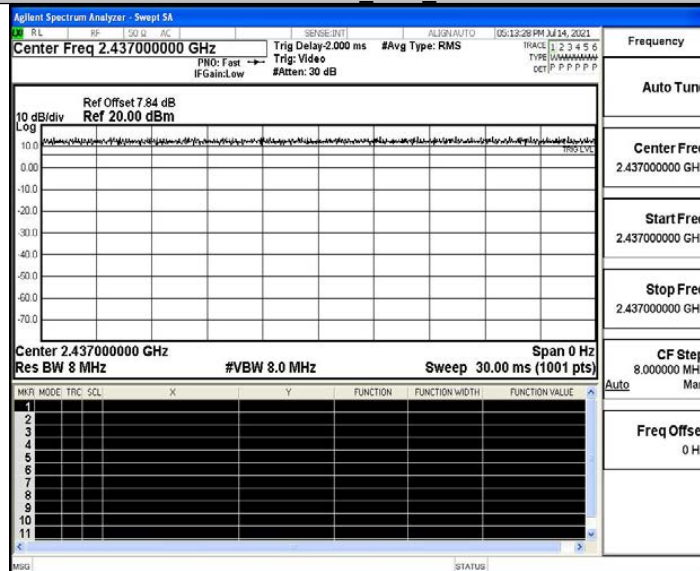
11G_Ant1_2437



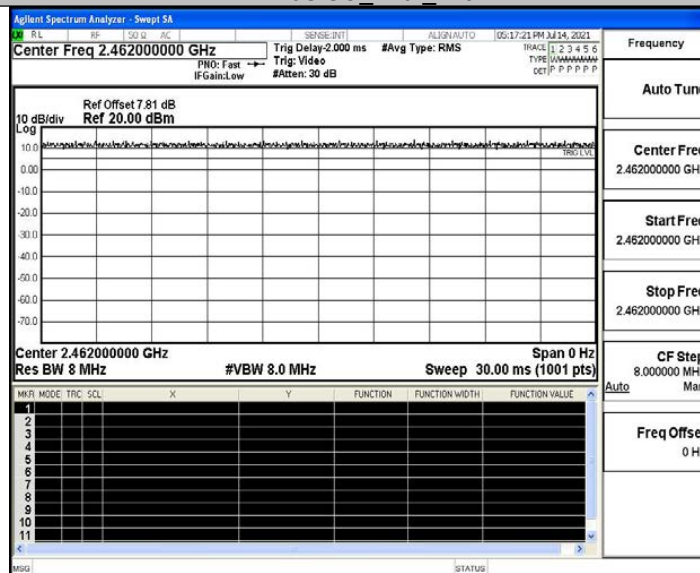
11G_Ant1_2462



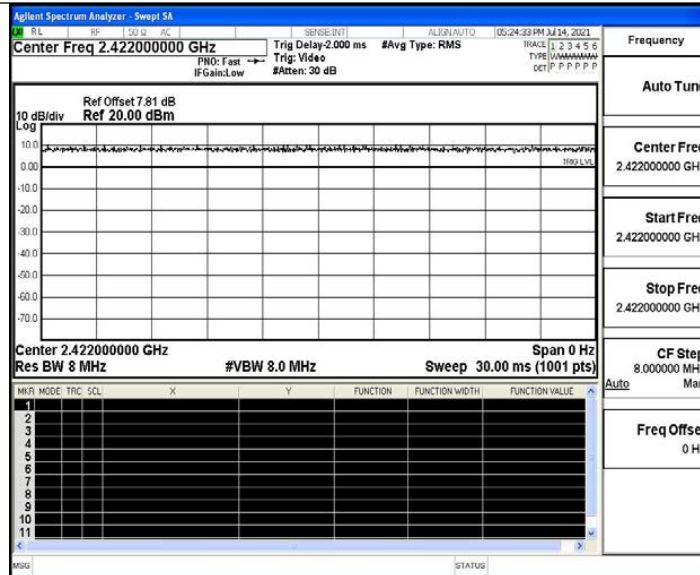
11N20SISO_Ant1_2412



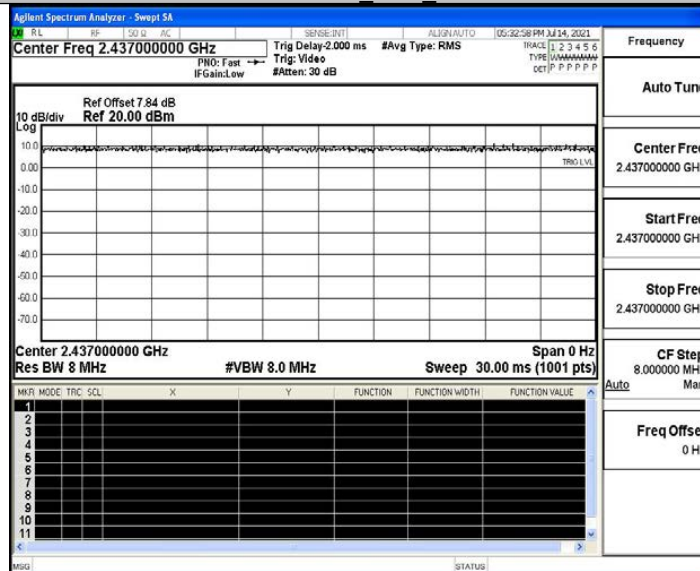
11N20SISO_Ant1_2437



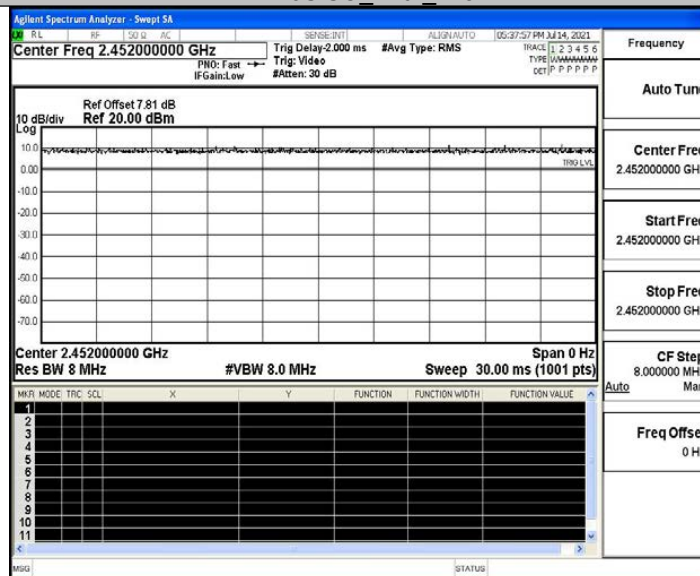
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



C.2 Maximum Conducted Output Power

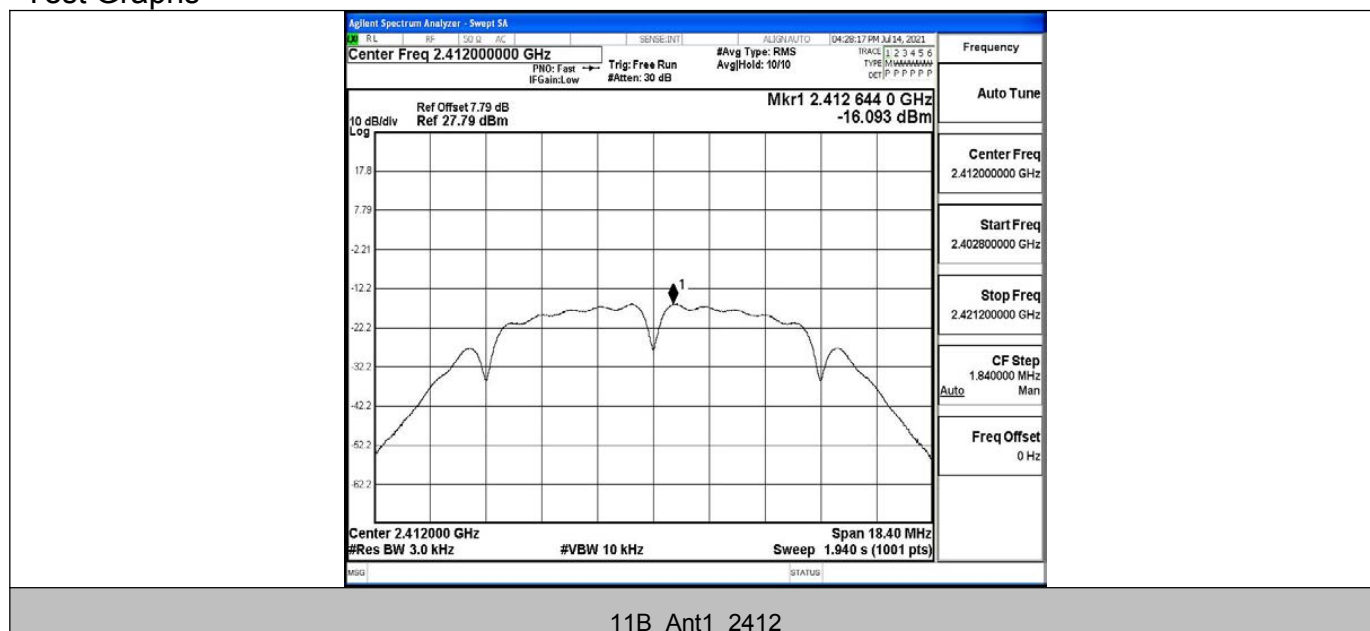
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.04	≤30	PASS
		2437	14.52	≤30	PASS
		2462	14.33	≤30	PASS
11G	Ant1	2412	13.89	≤30	PASS
		2437	13.23	≤30	PASS
		2462	13.51	≤30	PASS
11N20SISO	Ant1	2412	14.31	≤30	PASS
		2437	14.44	≤30	PASS
		2462	13.82	≤30	PASS
11N40SISO	Ant1	2422	14.18	≤30	PASS
		2437	14.25	≤30	PASS
		2452	14.04	≤30	PASS

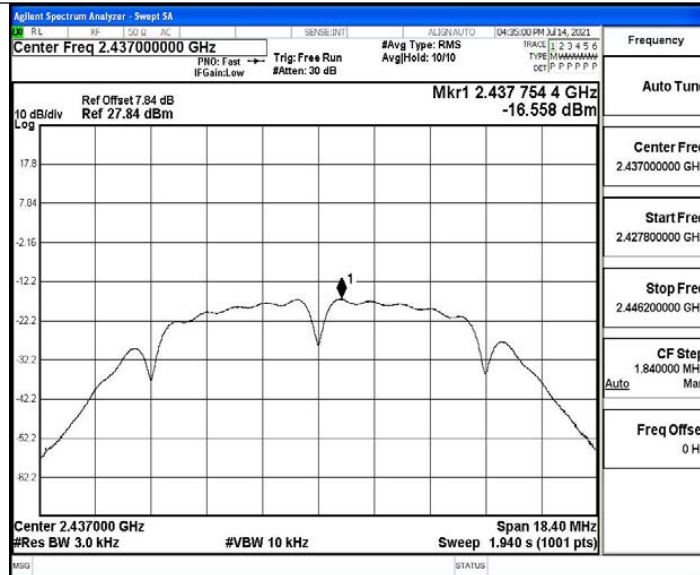


C.3 Maximum Power Spectral Density

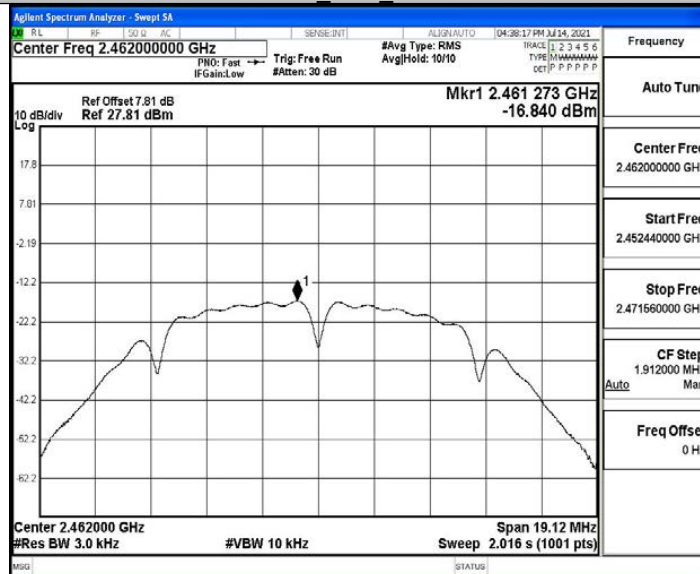
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-16.09	≤8	PASS
		2437	-16.56	≤8	PASS
		2462	-16.84	≤8	PASS
11G	Ant1	2412	-20.08	≤8	PASS
		2437	-21.72	≤8	PASS
		2462	-20.35	≤8	PASS
11N20SISO	Ant1	2412	-19.98	≤8	PASS
		2437	-19.83	≤8	PASS
		2462	-20.2	≤8	PASS
11N40SISO	Ant1	2422	-21.79	≤8	PASS
		2437	-21.42	≤8	PASS
		2452	-22.11	≤8	PASS

Test Graphs

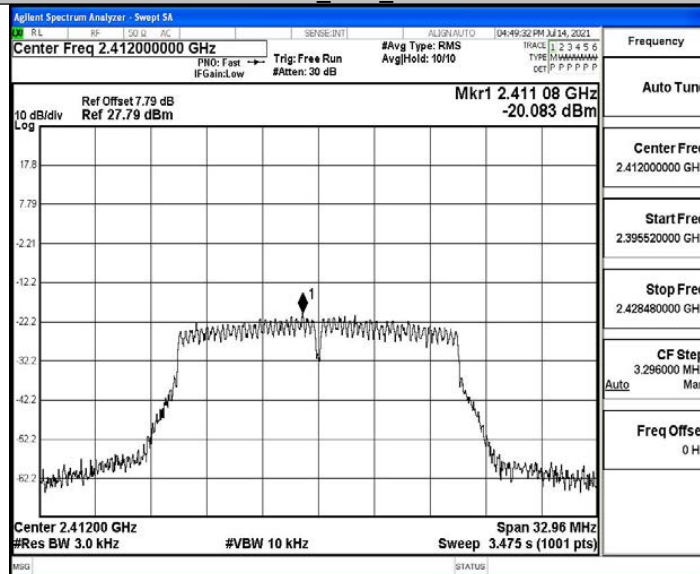




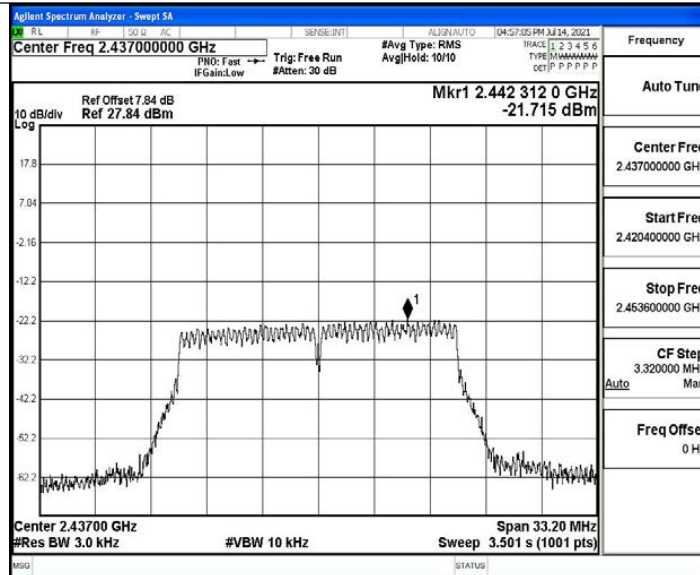
11B_Ant1_2437



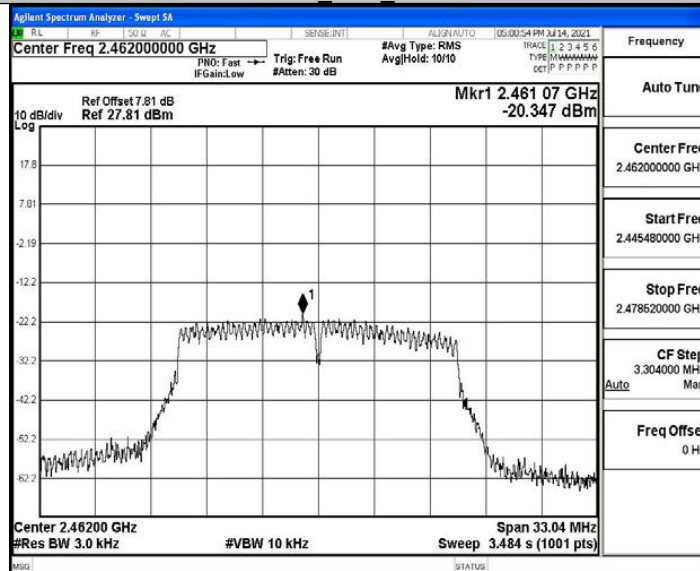
11B_Ant1_2462



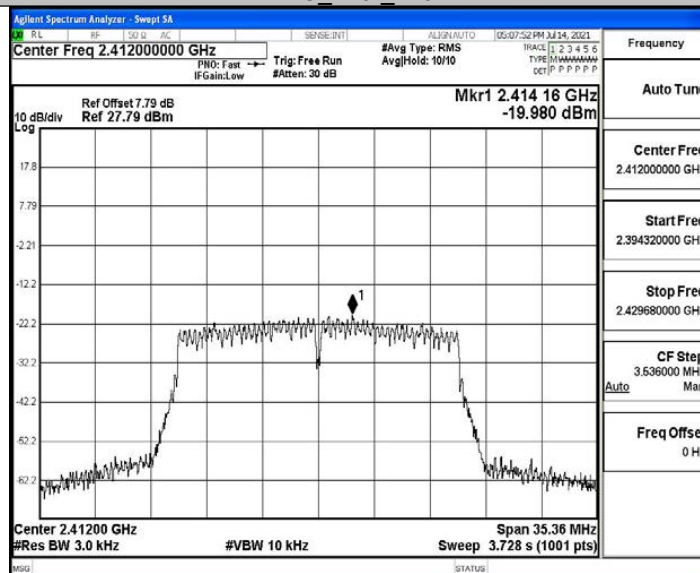
11G_Ant1_2412



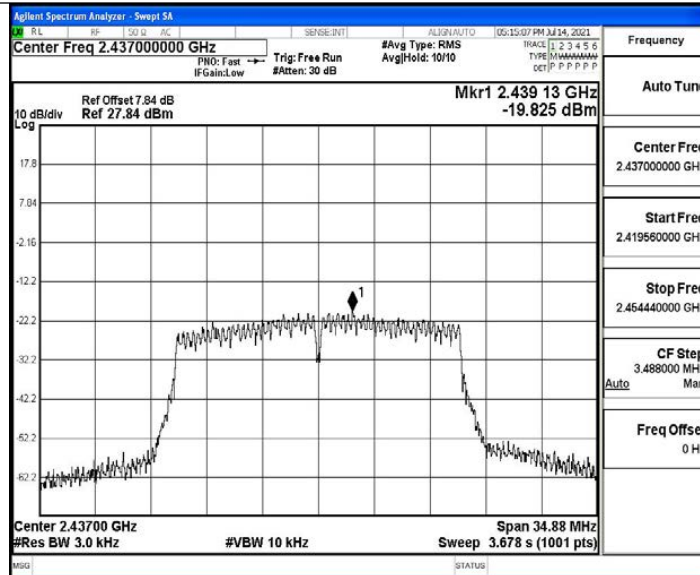
11G_Ant1_2437



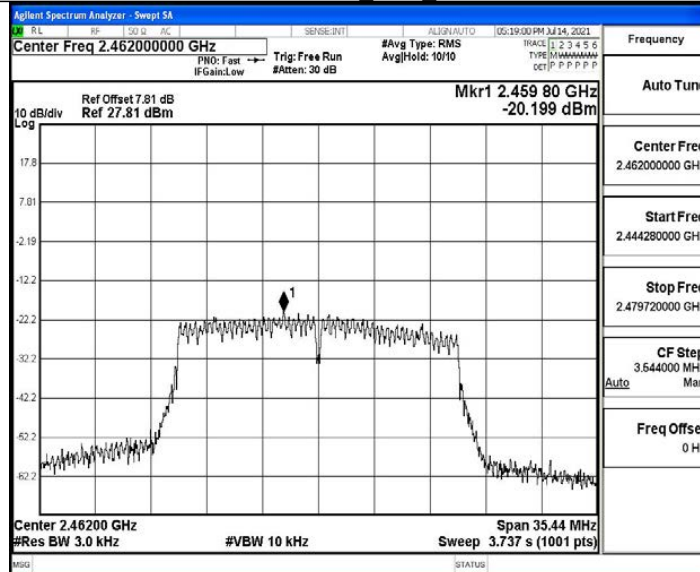
11G_Ant1_2462



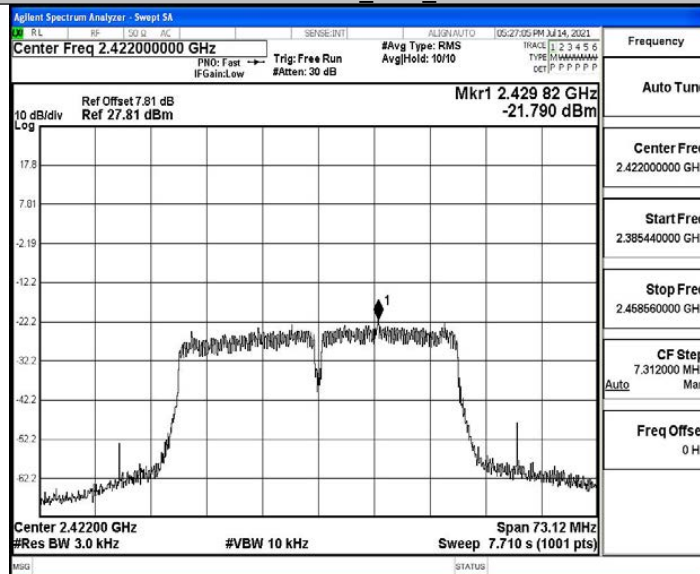
11N20SISO_Ant1_2412



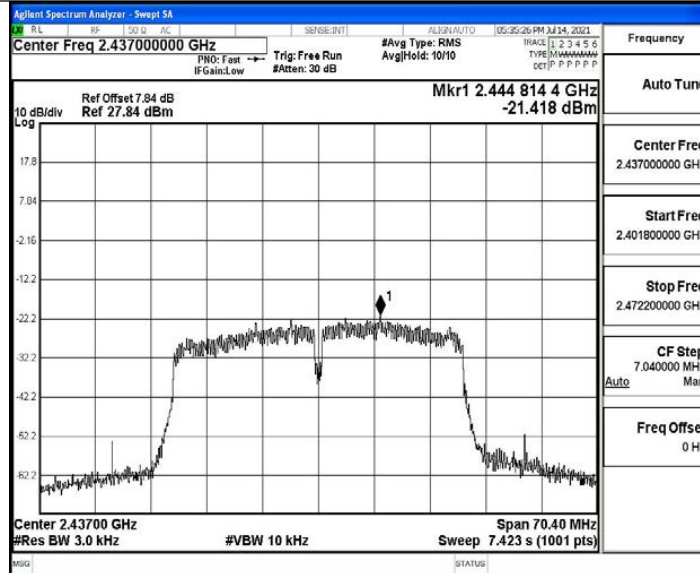
11N20SISO_Ant1_2437



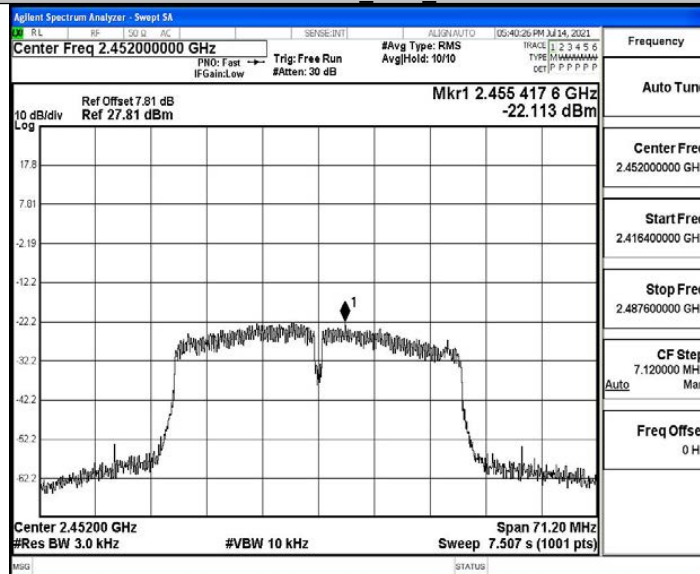
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.200	2407.400	2416.600	0.5	PASS
		2437	9.200	2432.400	2441.600	0.5	PASS
		2462	9.560	2457.000	2466.560	0.5	PASS
11G	Ant1	2412	16.480	2403.760	2420.240	0.5	PASS
		2437	16.600	2428.720	2445.320	0.5	PASS
		2462	16.520	2453.680	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.680	2403.160	2420.840	0.5	PASS
		2437	17.440	2428.440	2445.880	0.5	PASS
		2462	17.720	2453.080	2470.800	0.5	PASS
11N40SISO	Ant1	2422	36.560	2403.760	2440.320	0.5	PASS
		2437	35.200	2420.040	2455.240	0.5	PASS
		2452	35.600	2434.000	2469.600	0.5	PASS

Agilent Spectrum Analyzer - Sweep 5A

Center Freq 2.412000000 GHz

Ref Offset 7.79 dB

Ref 30.00 dBm

Trig: Free Run

#Atten: 40 dB

#Avg Type: RMS

Avg Hold: 100/100

Span 40.00 MHz

Sweep 3.867 ms (1001 pts)

Frequency

Auto Tune

Center Freq 2.412000000 GHz

Start Freq 2.392000000 GHz

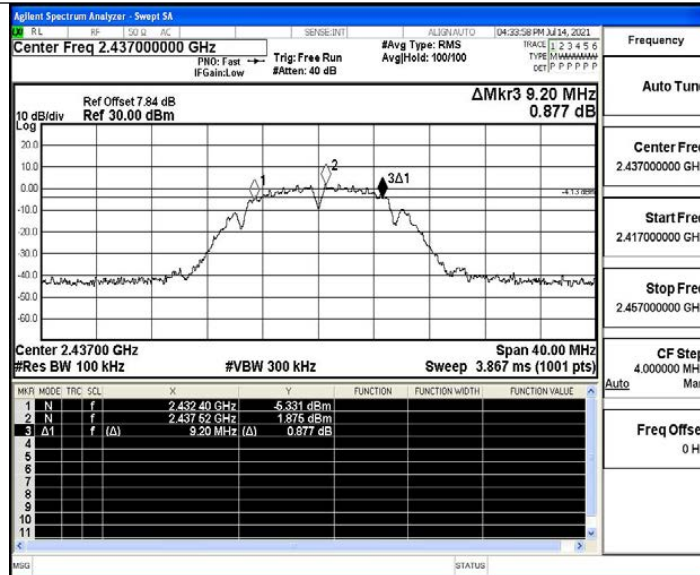
Stop Freq 2.432000000 GHz

CF Step 4.000000 MHz

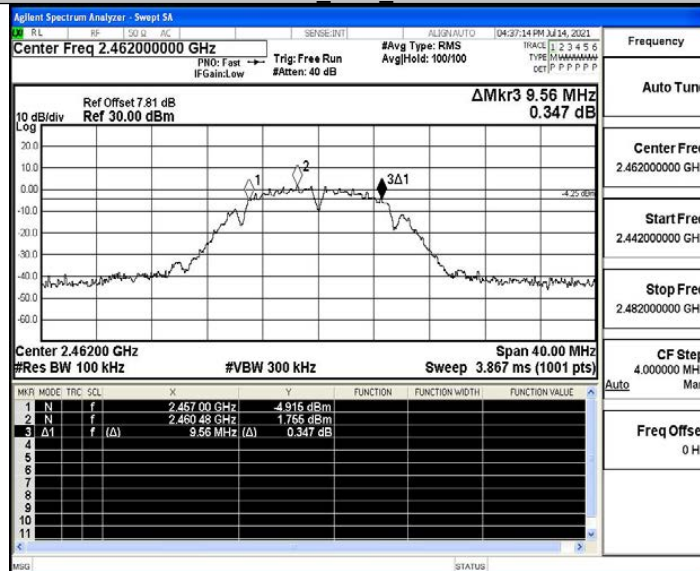
Auto Man

Freq Offset 0 Hz

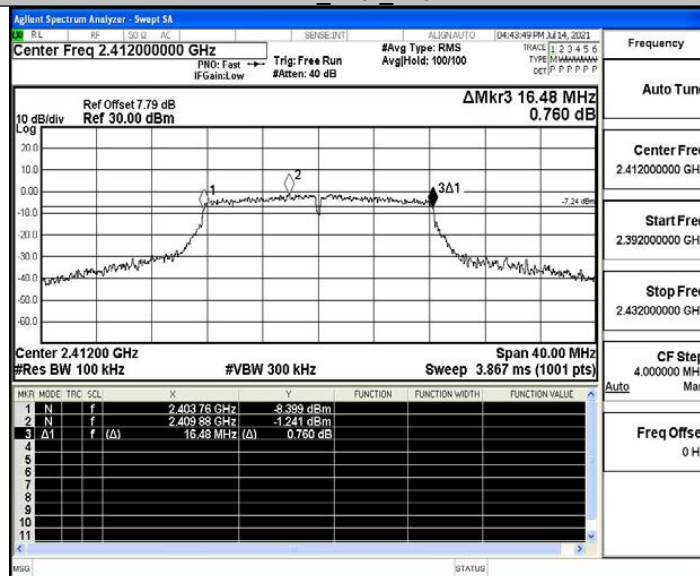
MkR	Mode	TRC	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.407 40 GHz	-3.912 dBm			
2	N	f		2.411 48 GHz	-2.381 dBm			
3	A1	f	(Δ)	9.20 MHz (Δ)	-0.460 dB			
4								
5								
6								
7								
8								
9								
10								
11								



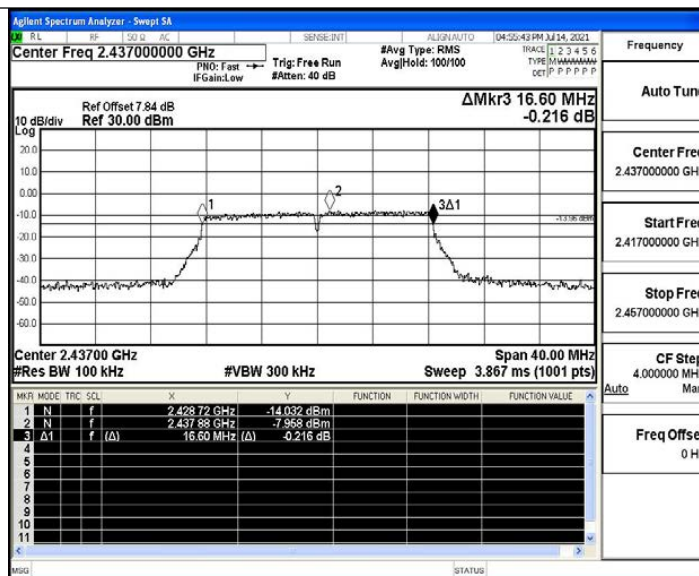
11B_Ant1_2437



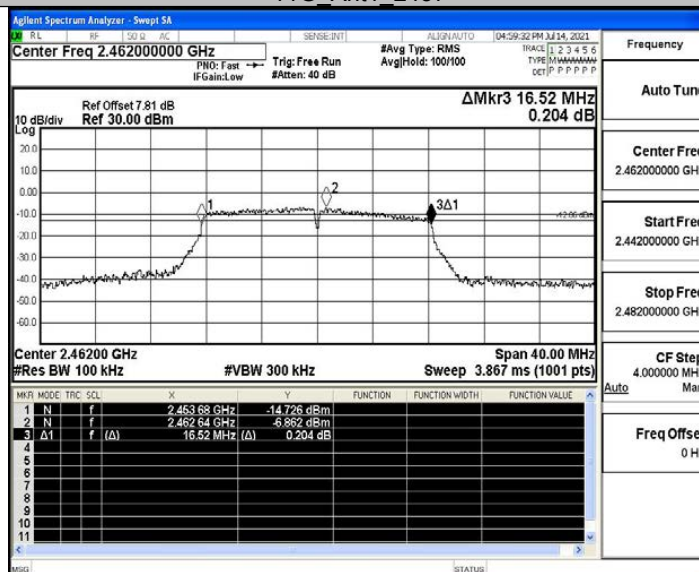
11B_Ant1_2462



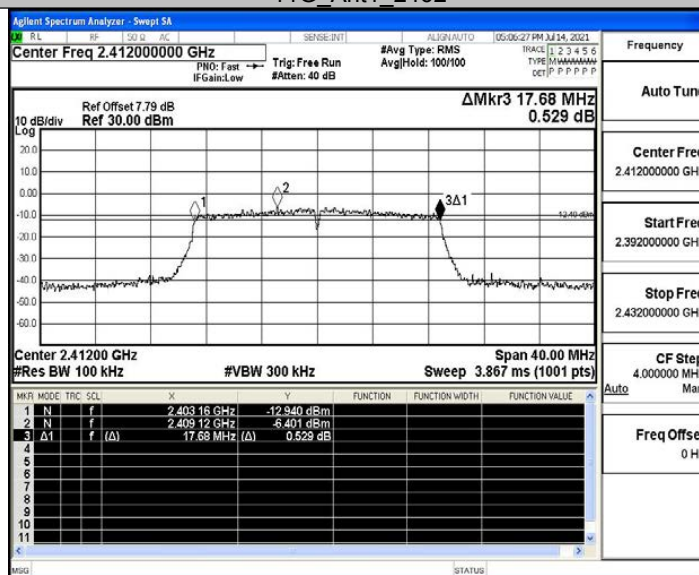
11G_Ant1_2412



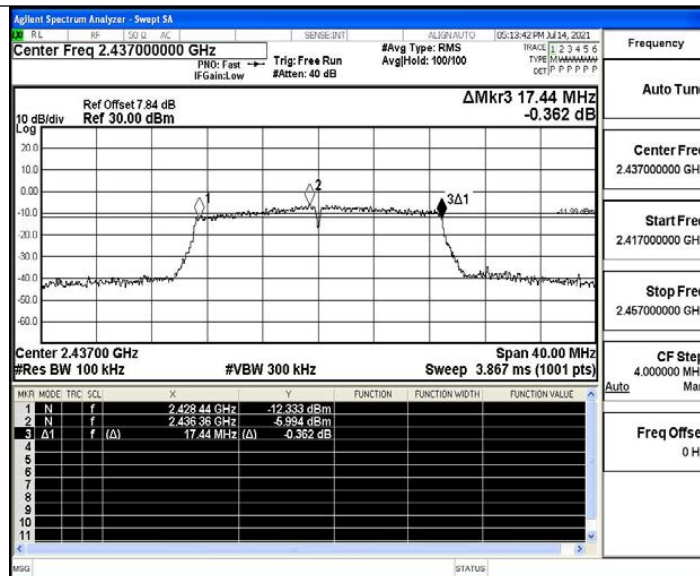
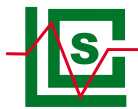
11G_Ant1_2437



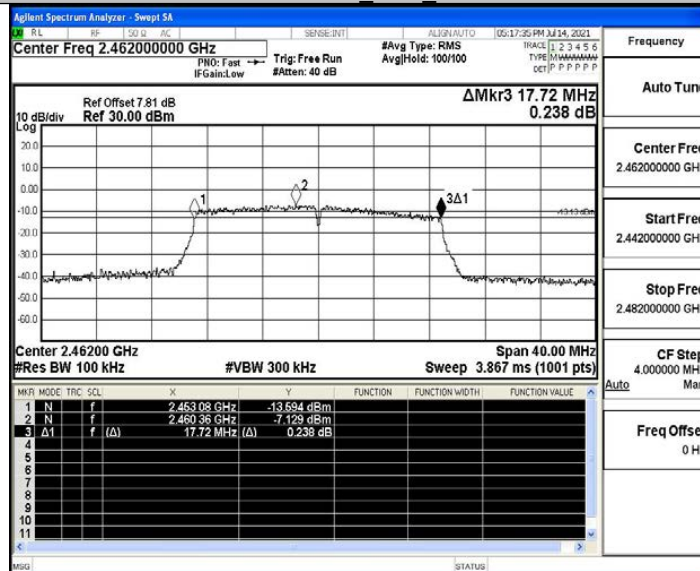
11G_Ant1_2462



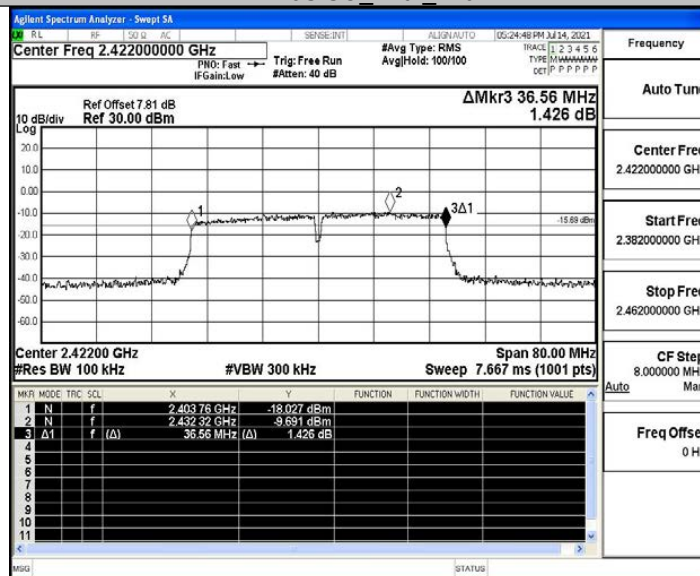
11N20SISO_Ant1_2412



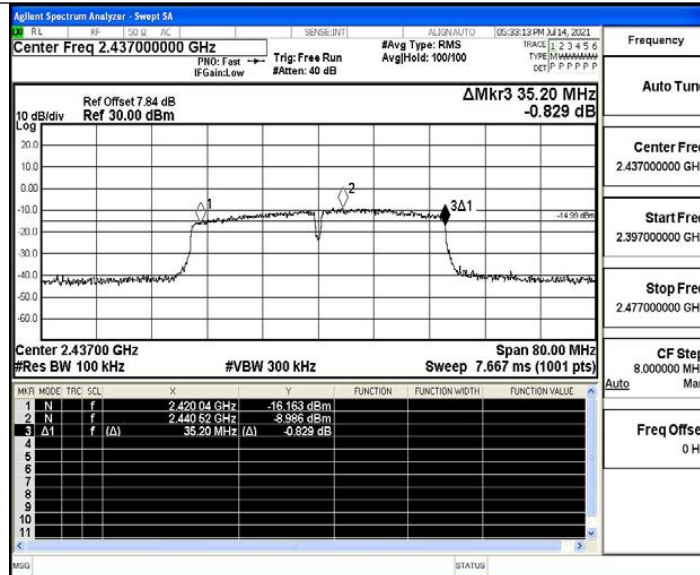
11N20SISO_Ant1_2437



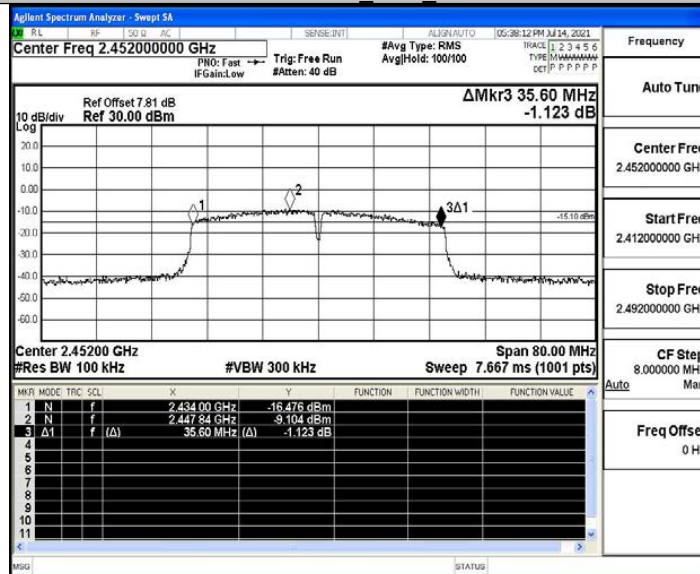
11N20SISO_Ant1_2462



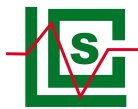
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



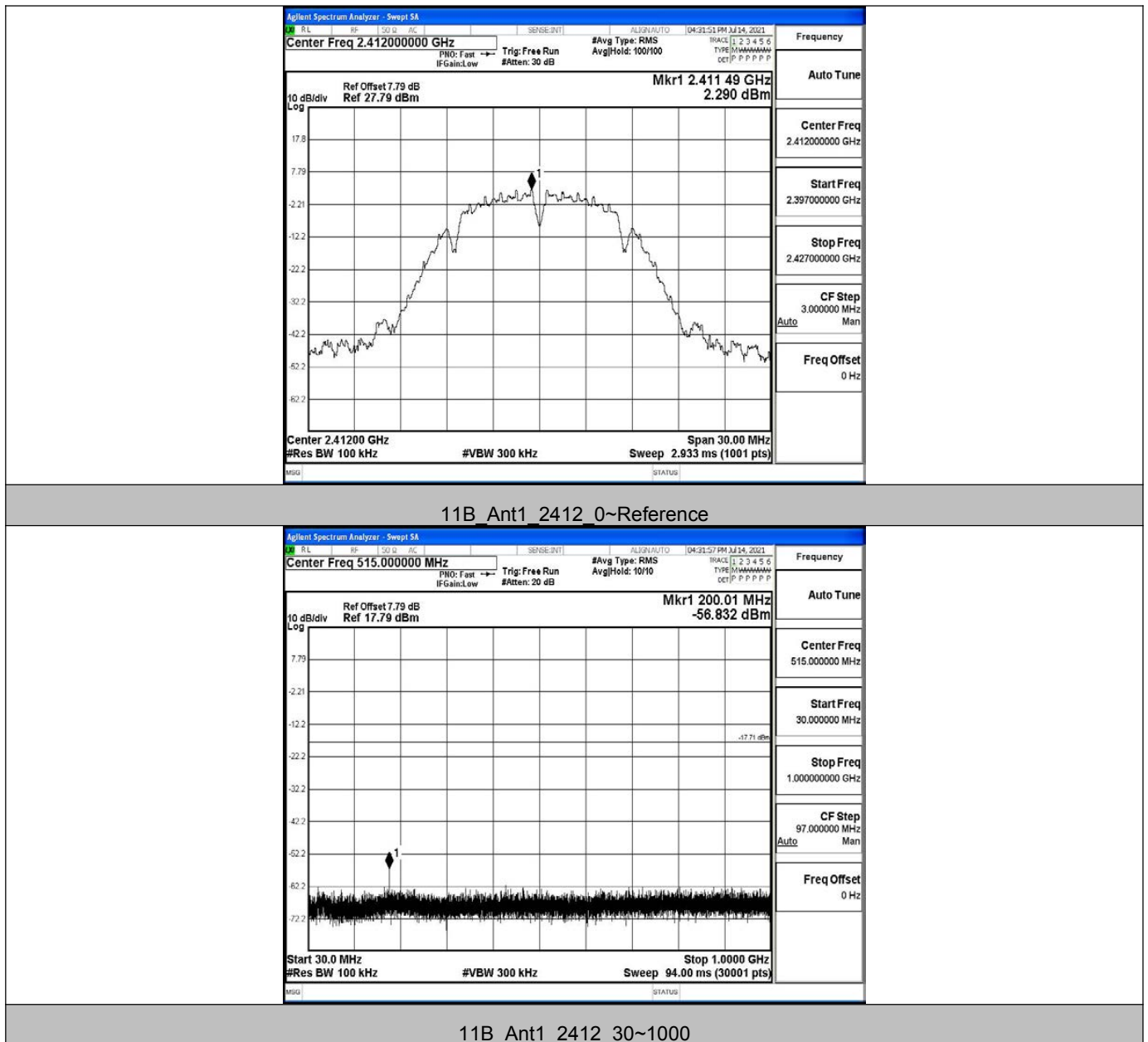
C.5 RF Conducted Spurious Emissions

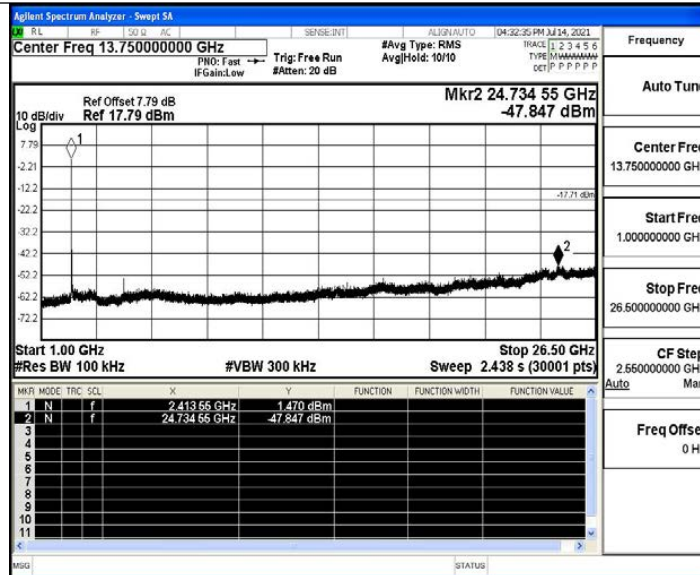
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.29	2.29	---	PASS
			30~1000	2.29	-56.83	≤ -17.71	PASS
			1000~26500	2.29	-47.85	≤ -17.71	PASS
		2437	Reference	1.86	1.86	---	PASS
			30~1000	1.86	-56.19	≤ -18.15	PASS
			1000~26500	1.86	-47.98	≤ -18.15	PASS
		2462	Reference	1.70	1.70	---	PASS
			30~1000	1.70	-56.34	≤ -18.3	PASS
			1000~26500	1.70	-47.03	≤ -18.3	PASS
11G	Ant1	2412	Reference	-6.61	-6.61	---	PASS
			30~1000	-6.61	-60.87	≤ -26.61	PASS
			1000~26500	-6.61	-47.54	≤ -26.61	PASS
		2437	Reference	-7.98	-7.98	---	PASS
			30~1000	-7.98	-61.5	≤ -27.98	PASS
			1000~26500	-7.98	-47.83	≤ -27.98	PASS
		2462	Reference	-6.80	-6.80	---	PASS
			30~1000	-6.80	-61.26	≤ -26.8	PASS
			1000~26500	-6.80	-47.27	≤ -26.8	PASS
11N20SISO	Ant1	2412	Reference	-6.61	-6.61	---	PASS
			30~1000	-6.61	-61.75	≤ -26.61	PASS
			1000~26500	-6.61	-47.35	≤ -26.61	PASS
		2437	Reference	-6.32	-6.32	---	PASS
			30~1000	-6.32	-62.22	≤ -26.32	PASS
			1000~26500	-6.32	-47.18	≤ -26.32	PASS
		2462	Reference	-6.73	-6.73	---	PASS
			30~1000	-6.73	-61.29	≤ -26.73	PASS
			1000~26500	-6.73	-48	≤ -26.73	PASS
11N40SISO	Ant1	2422	Reference	-9.68	-9.68	---	PASS
			30~1000	-9.68	-61.56	≤ -29.68	PASS
			1000~26500	-9.68	-47.34	≤ -29.68	PASS
		2437	Reference	-8.97	-8.97	---	PASS
			30~1000	-8.97	-61.2	≤ -28.97	PASS
			1000~26500	-8.97	-47.6	≤ -28.97	PASS
		2452	Reference	-9.29	-9.29	---	PASS



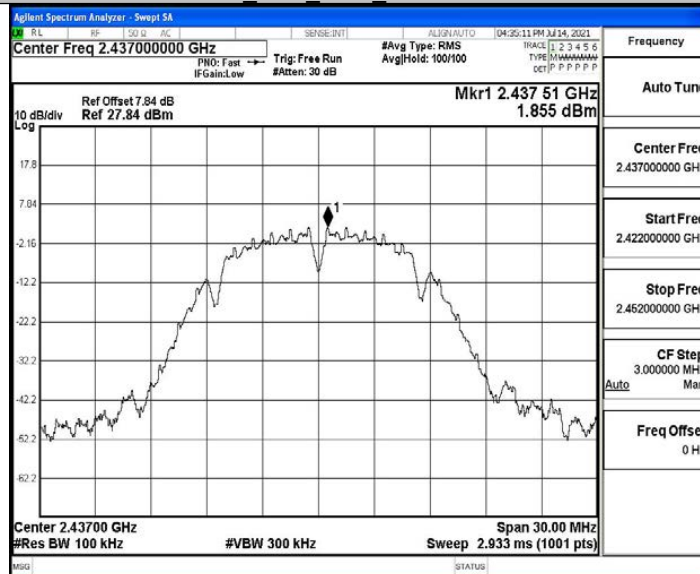
			30~1000	-9.29	-61.09	≤-29.29	PASS
			1000~26500	-9.29	-46.12	≤-29.29	PASS

Test Graphs

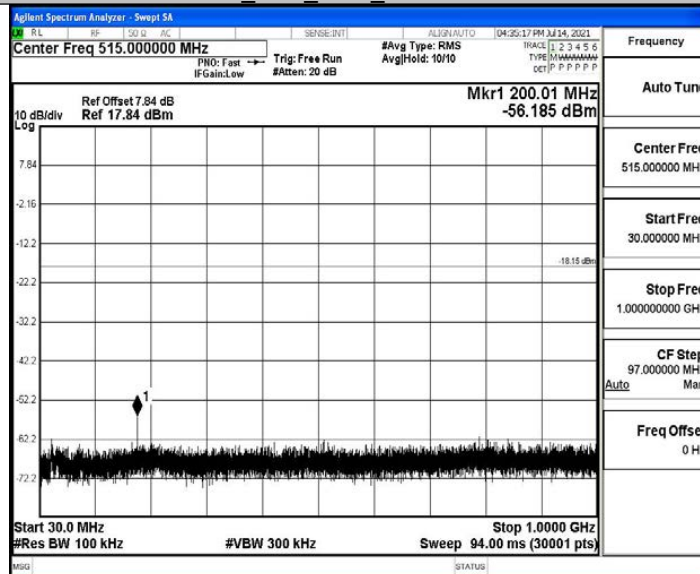




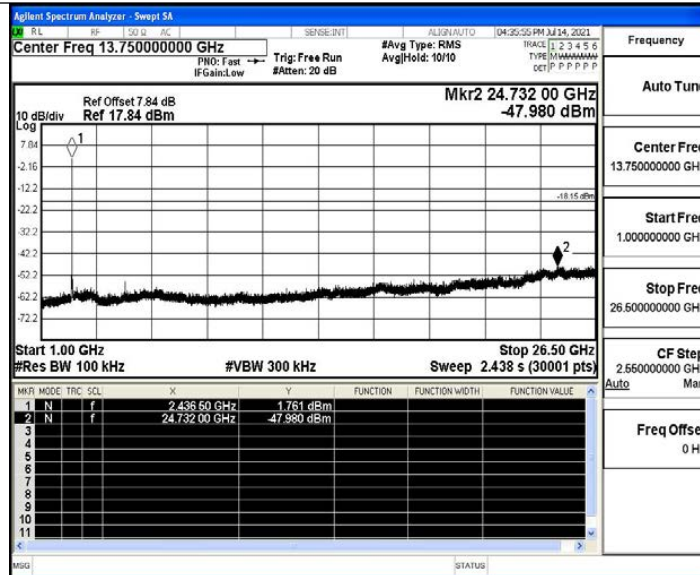
11B_Ant1_2412_1000~26500



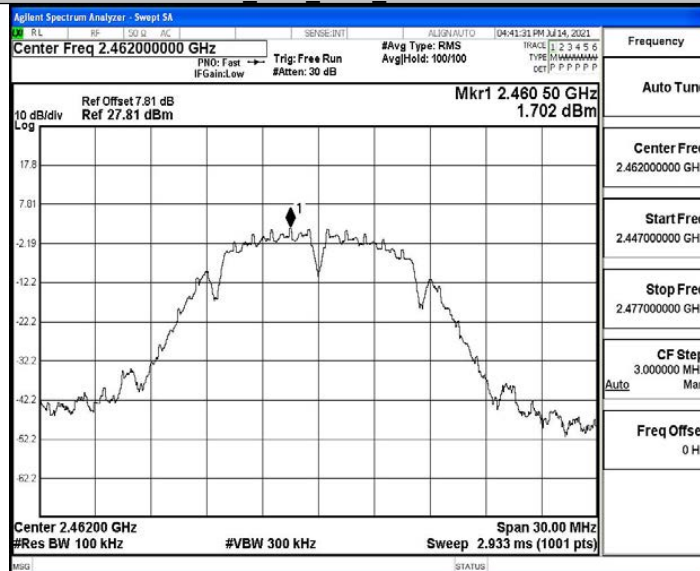
11B_Ant1_2437_0~Reference



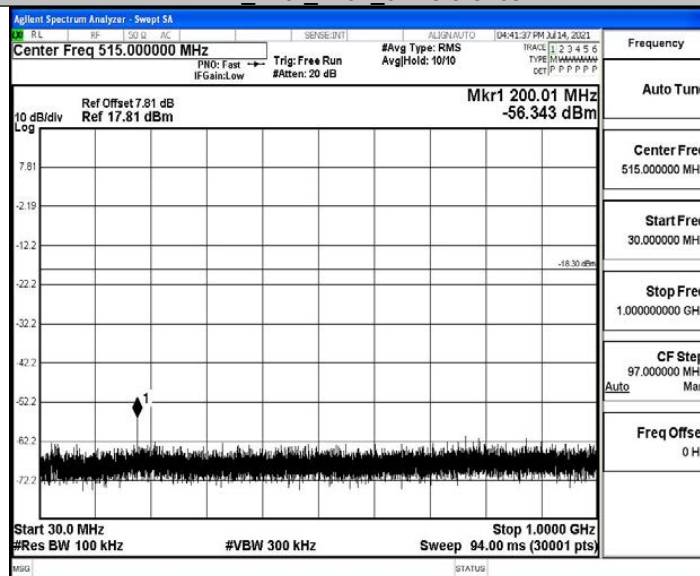
11B_Ant1_2437_30~1000



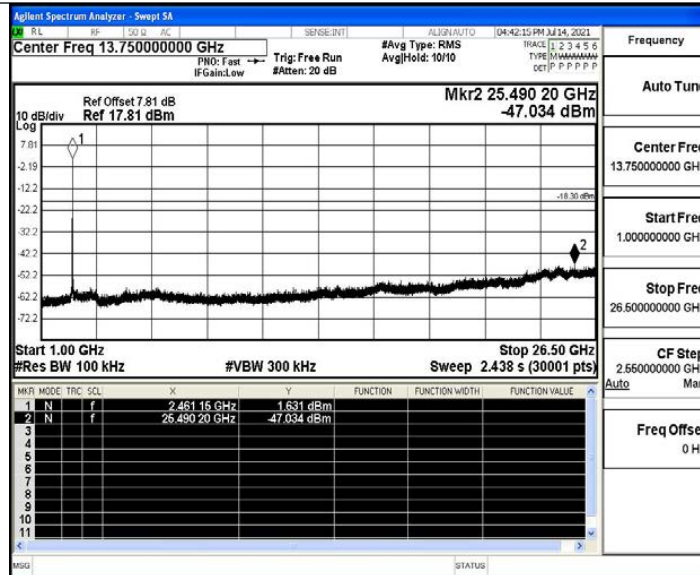
11B_Ant1_2437_1000~26500



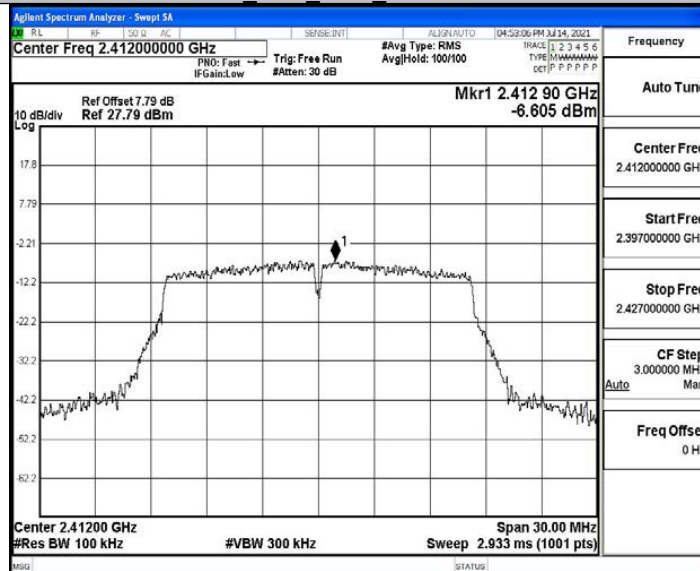
11B_Ant1_2462_0~Reference



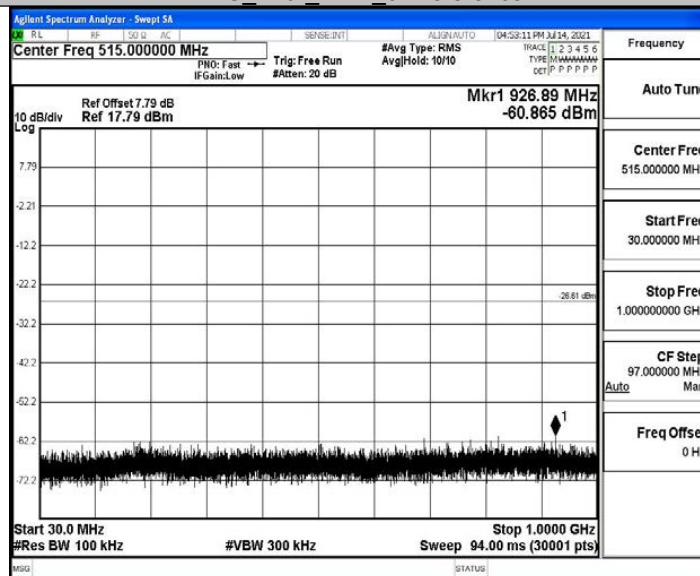
11B_Ant1_2462_30~1000



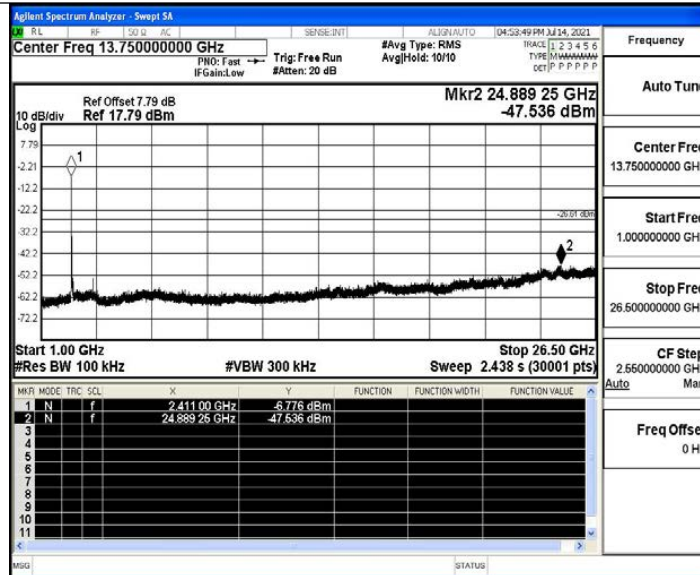
11B_Ant1_2462_1000~26500



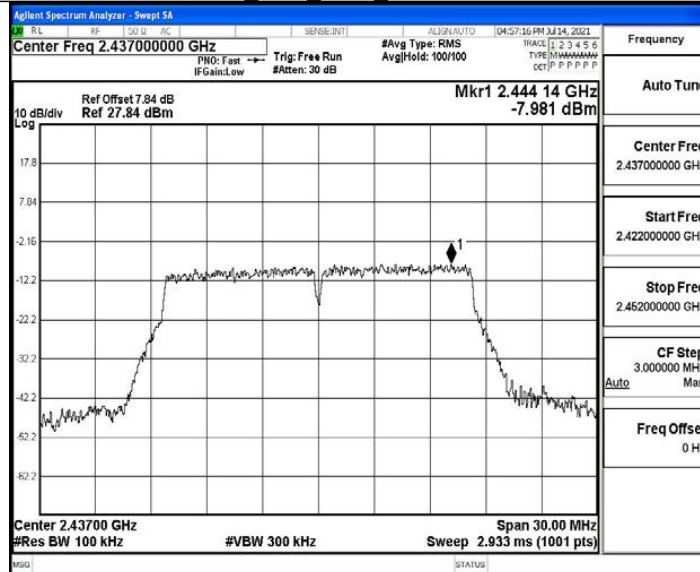
11G_Ant1_2412_0~Reference



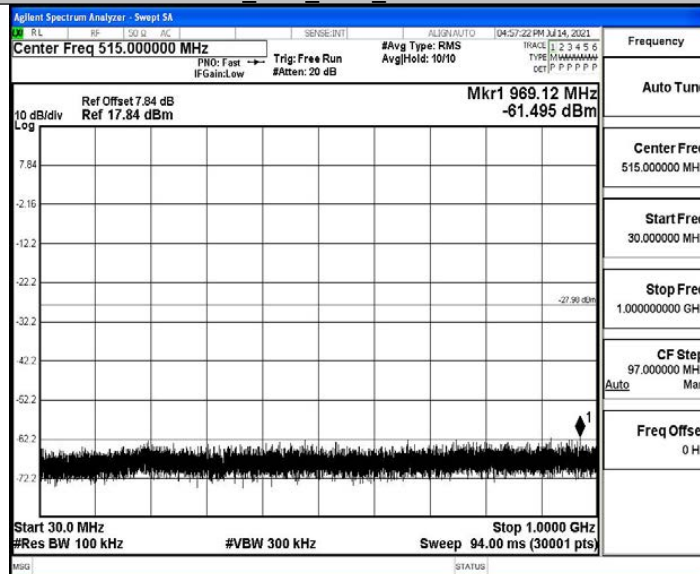
11G_Ant1_2412_30~1000



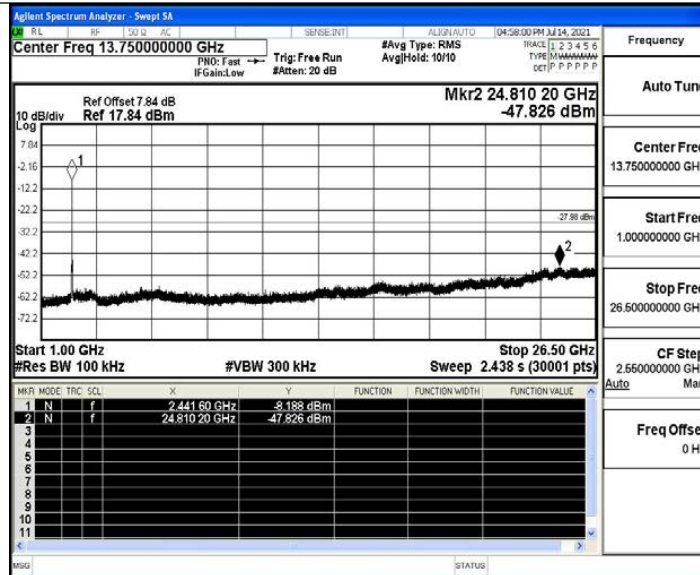
11G_Ant1_2412_1000~26500



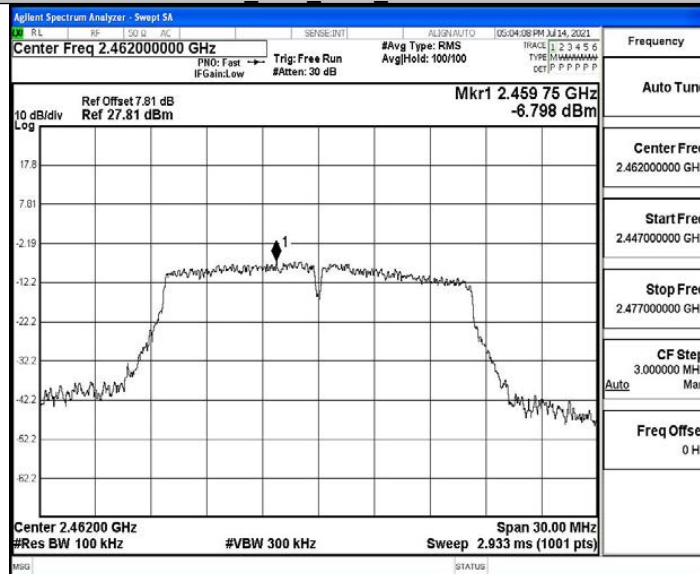
11G_Ant1_2437_0~Reference



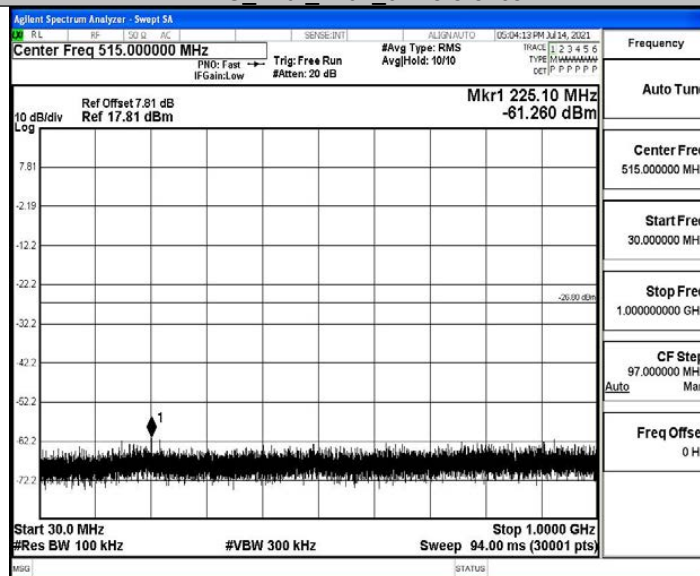
11G_Ant1_2437_30~1000



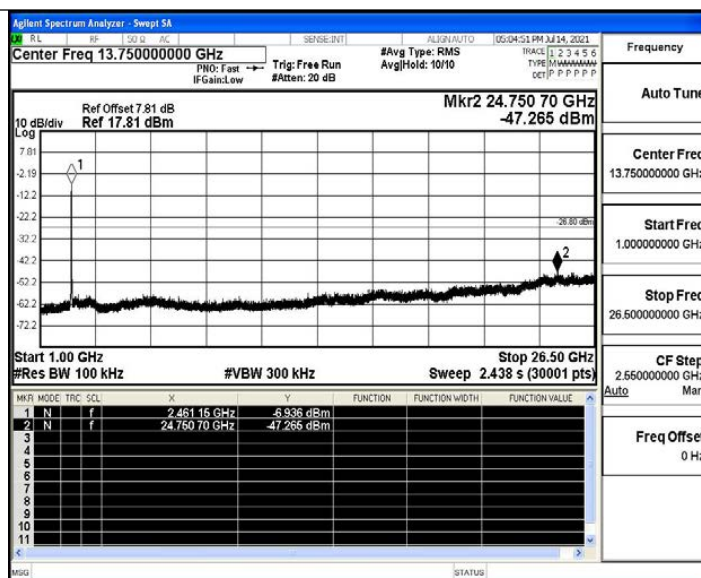
11G_Ant1_2437_1000~26500



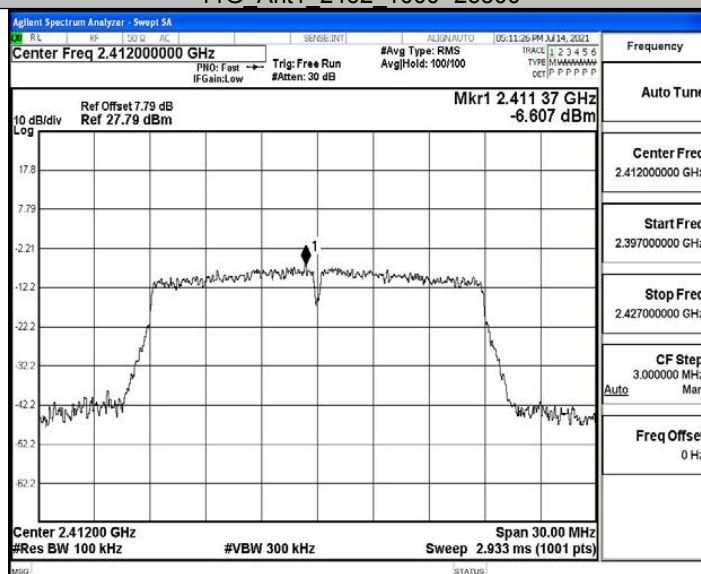
11G_Ant1_2462_0~Reference



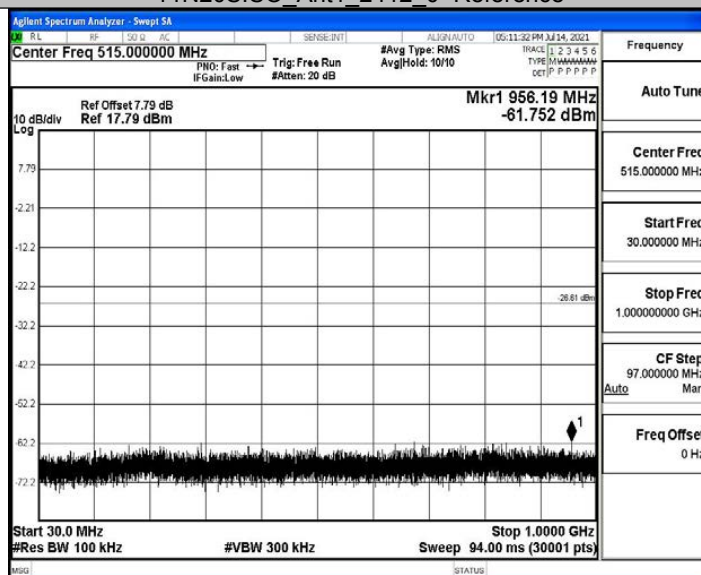
11G_Ant1_2462_30~1000



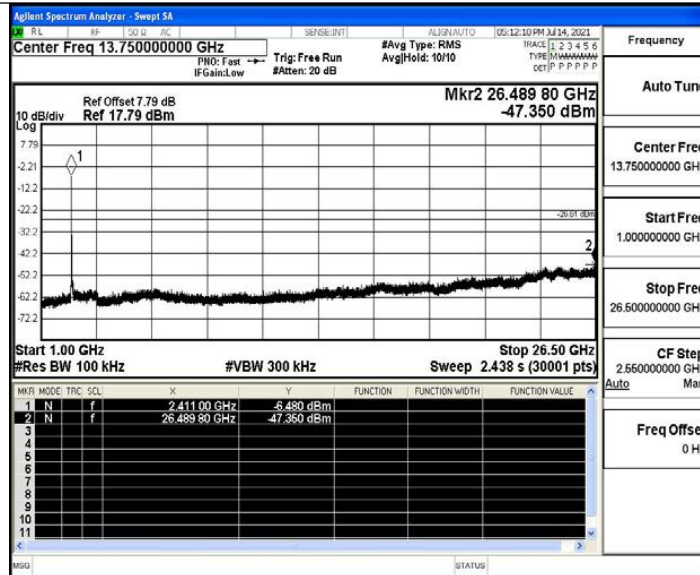
11G_Ant1_2462_1000~26500



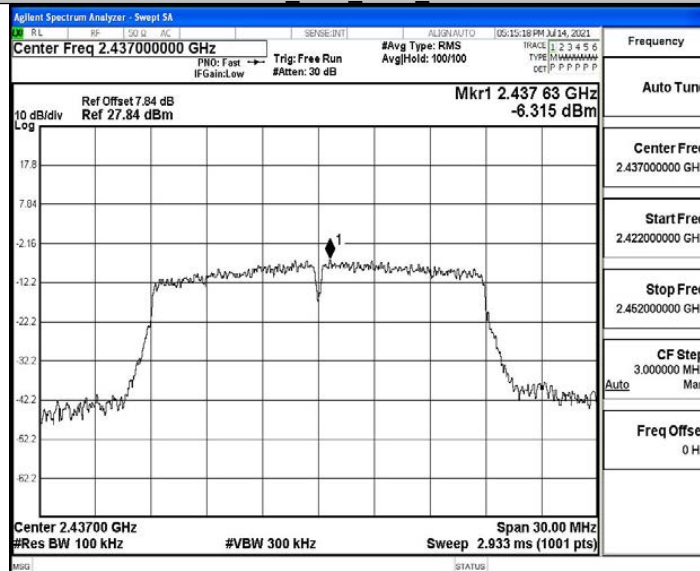
11N20SISO_Ant1_2412_0~Reference



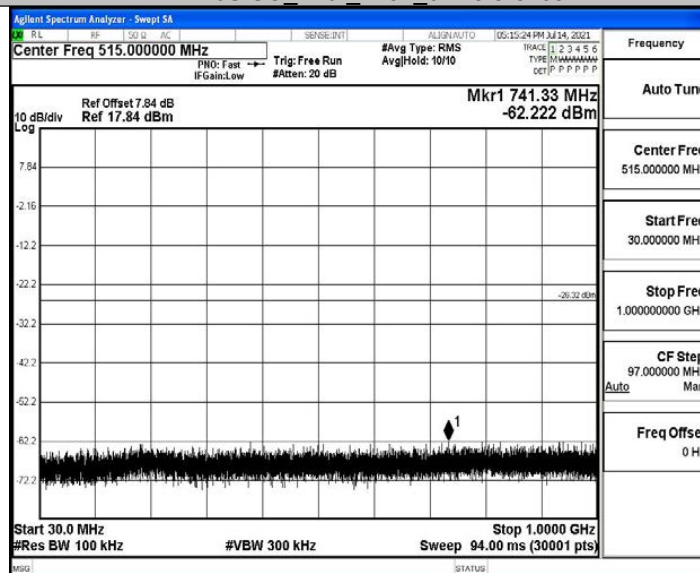
11N20SISO_Ant1_2412_30~1000



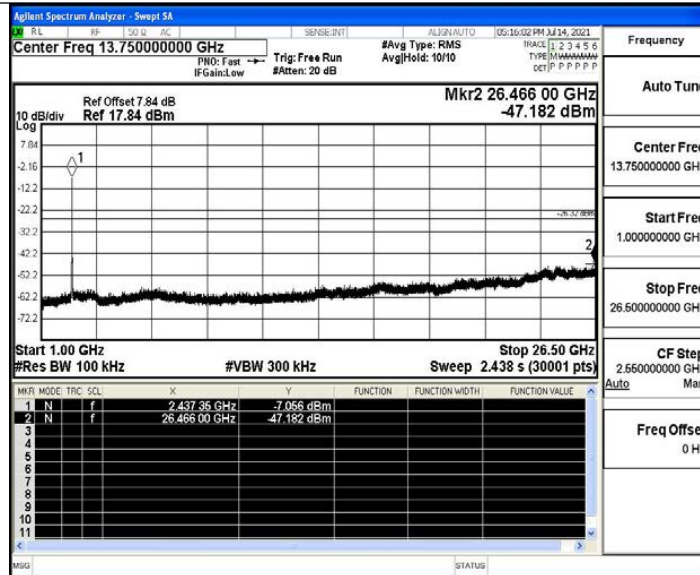
11N20SISO_Ant1_2412_1000~26500



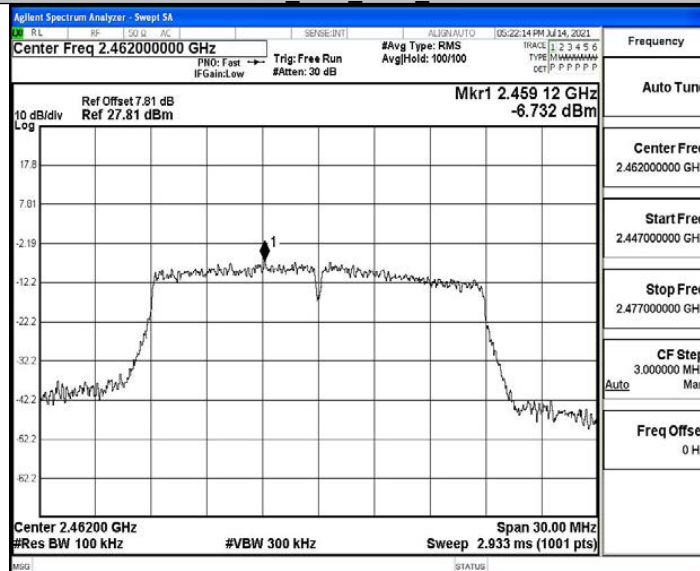
11N20SISO_Ant1_2437_0~Reference



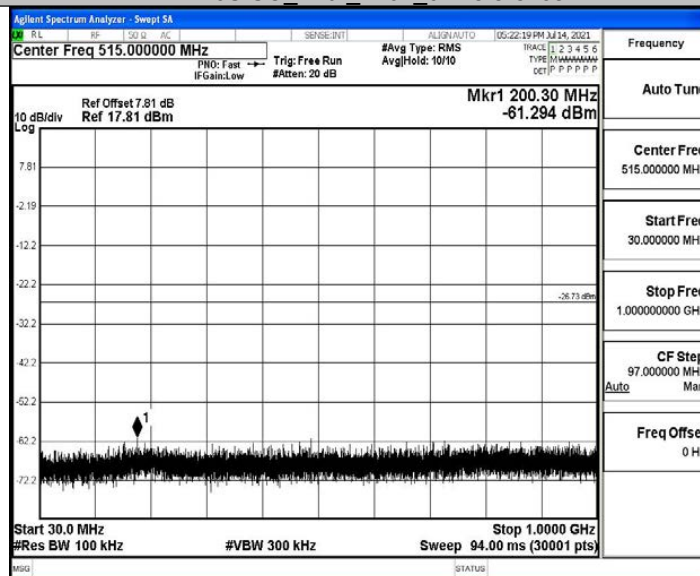
11N20SISO_Ant1_2437_30~1000



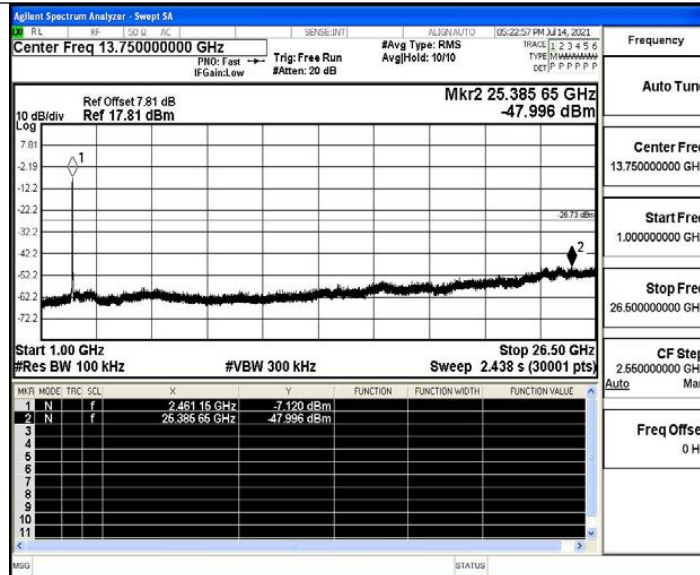
11N20SISO_Ant1_2437_1000~26500



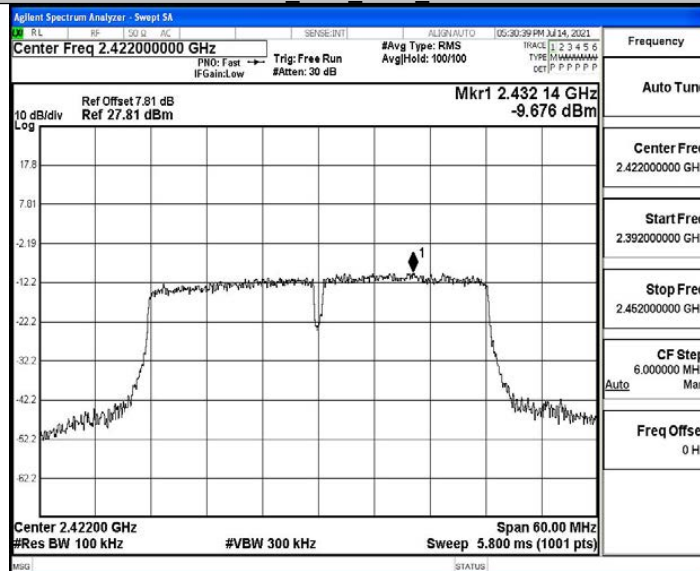
11N20SISO_Ant1_2462_0~Reference



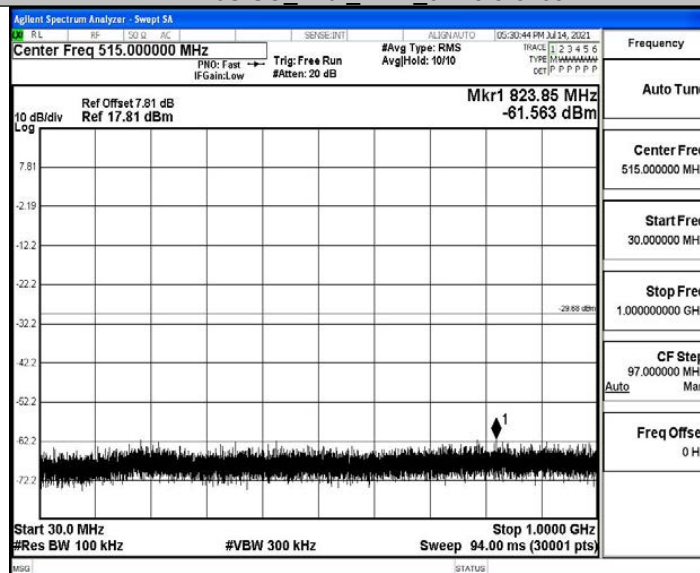
11N20SISO_Ant1_2462_30~1000



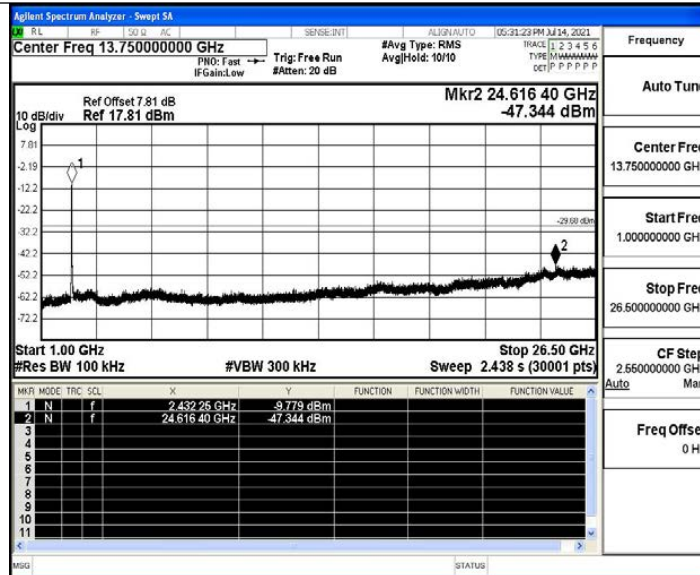
11N20SISO_Ant1_2462_1000~26500



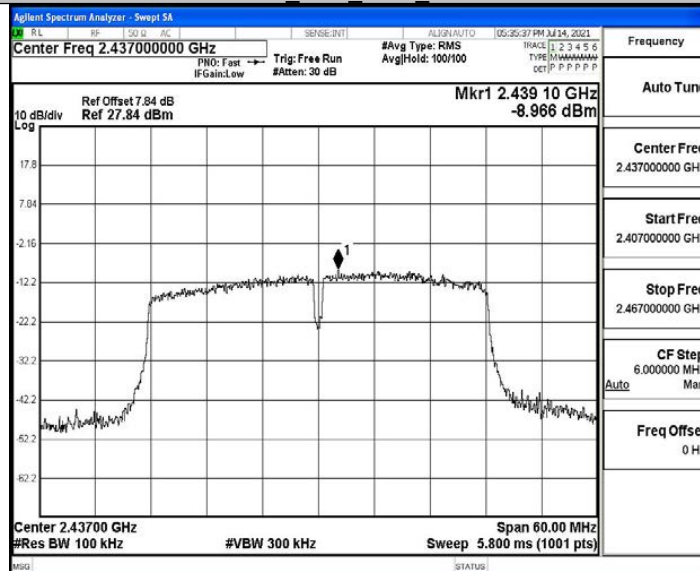
11N40SISO_Ant1_2422_0~Reference



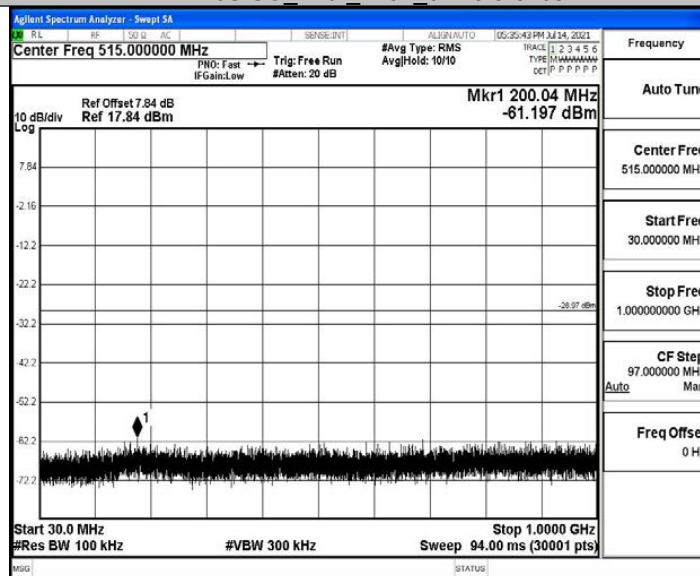
11N40SISO_Ant1_2422_30~1000



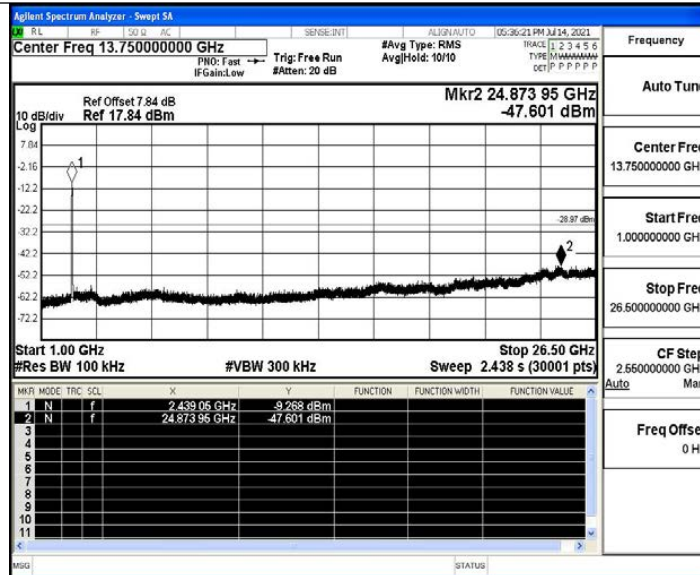
11N40SISO_Ant1_2422_1000~26500



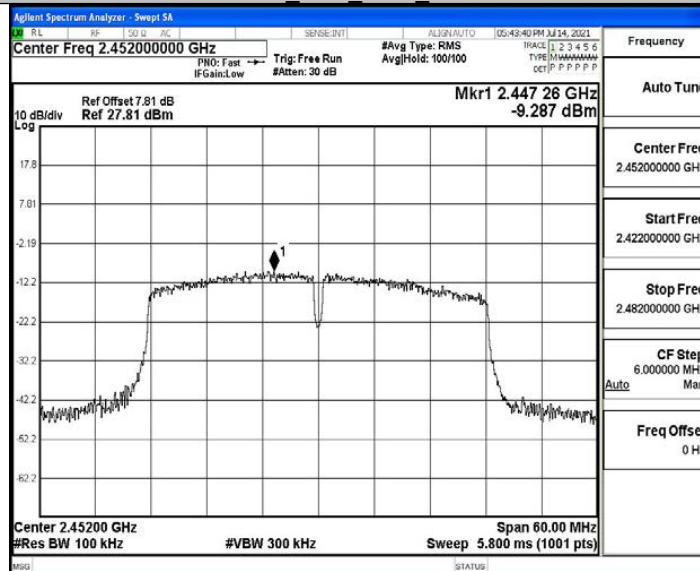
11N40SISO_Ant1_2437_0~Reference



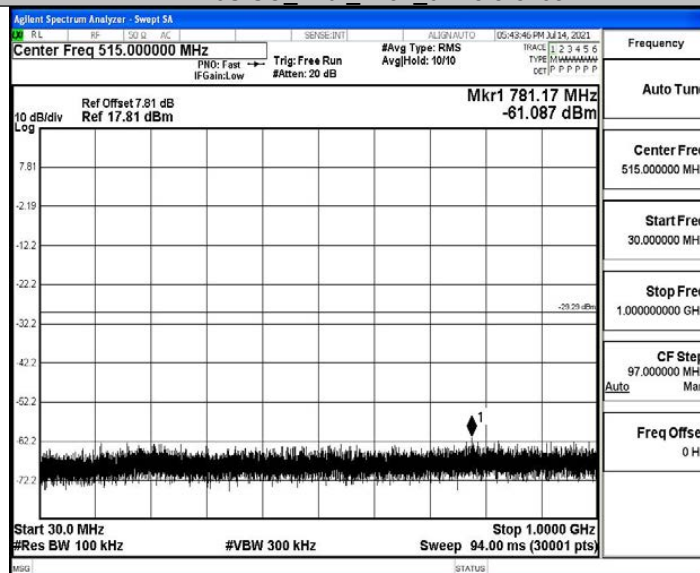
11N40SISO_Ant1_2437_30~1000



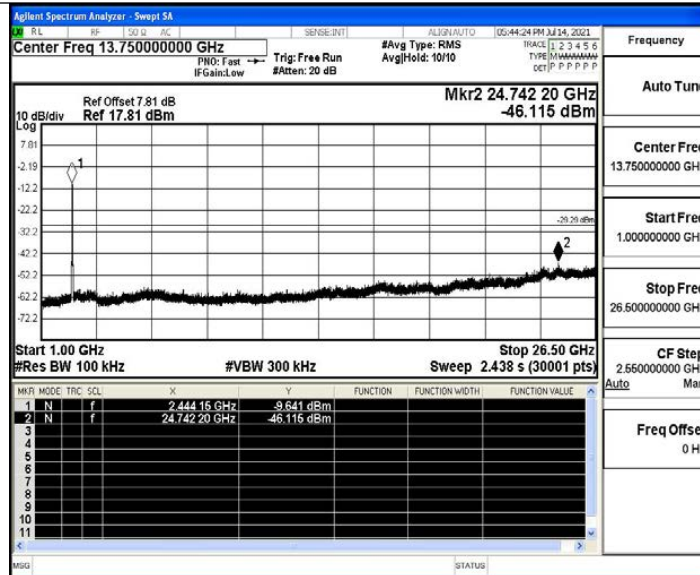
11N40SISO_Ant1_2437_1000~26500



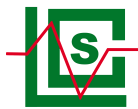
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



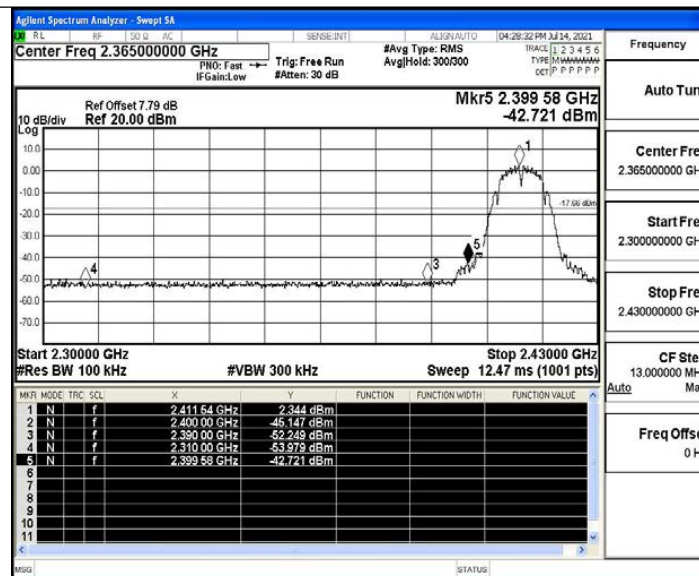
11N40SISO_Ant1_2452_1000~26500



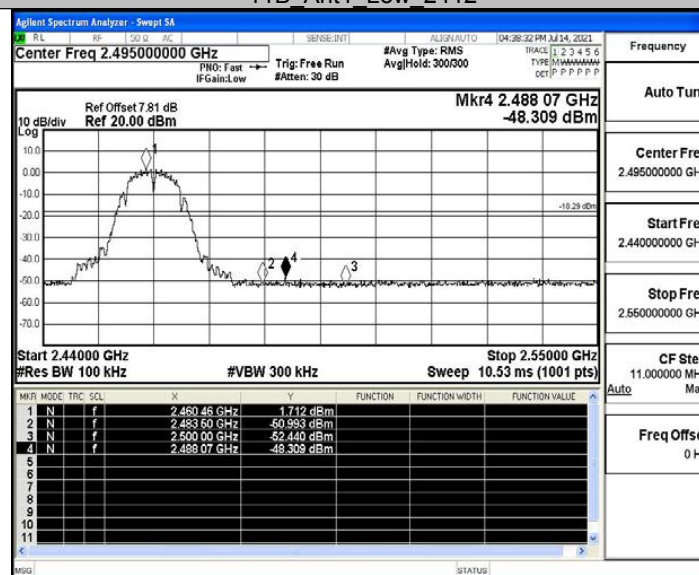
C.6 Band-edge for RF Conducted Emissions

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.34	-42.72	≤-17.66	PASS
		High	2462	1.71	-48.31	≤-18.29	PASS
11G	Ant1	Low	2412	-6.56	-38.92	≤-26.56	PASS
		High	2462	-6.79	-46.97	≤-26.79	PASS
11N20SISO	Ant1	Low	2412	-6.50	-40.35	≤-26.5	PASS
		High	2462	-6.33	-46.59	≤-26.33	PASS
11N40SISO	Ant1	Low	2422	-9.71	-43.77	≤-29.71	PASS
		High	2452	-9.22	-44.2	≤-29.22	PASS

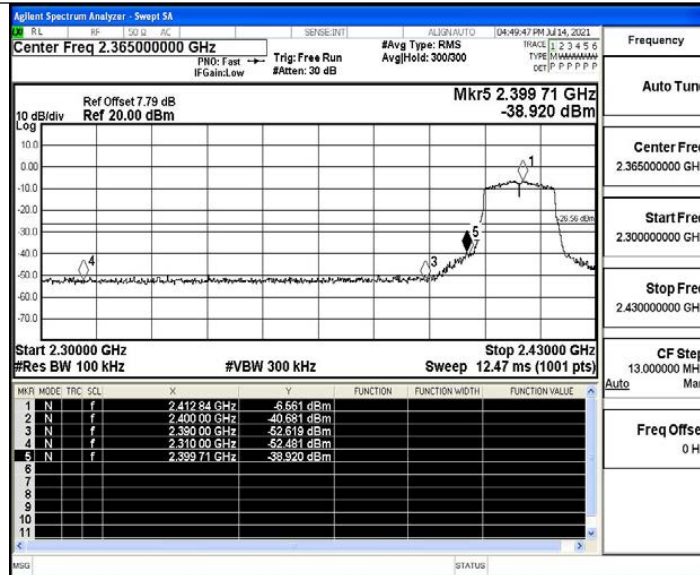
Test Graphs



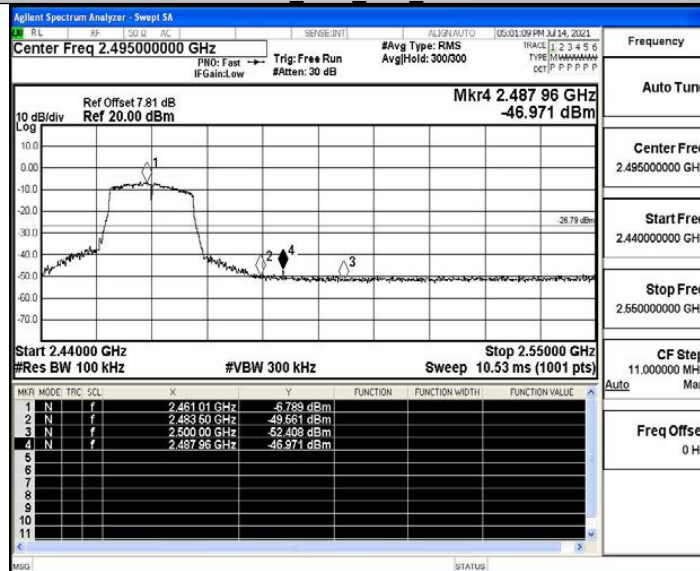
11B_Ant1_Low_2412



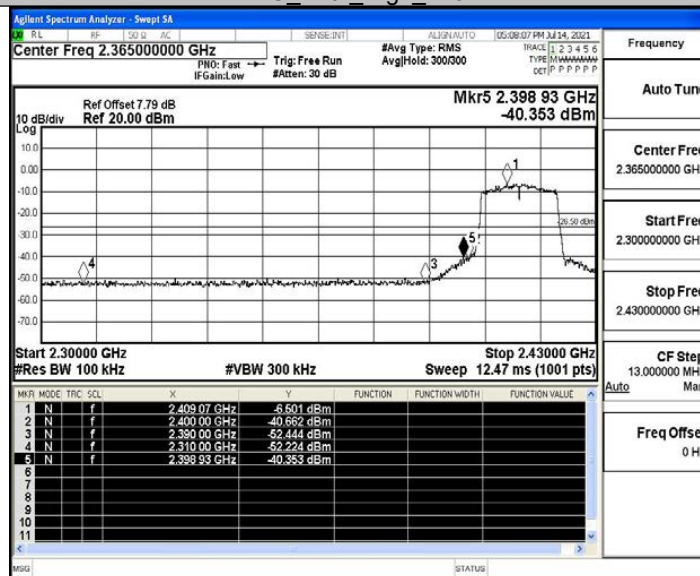
11B_Ant1_High_2462



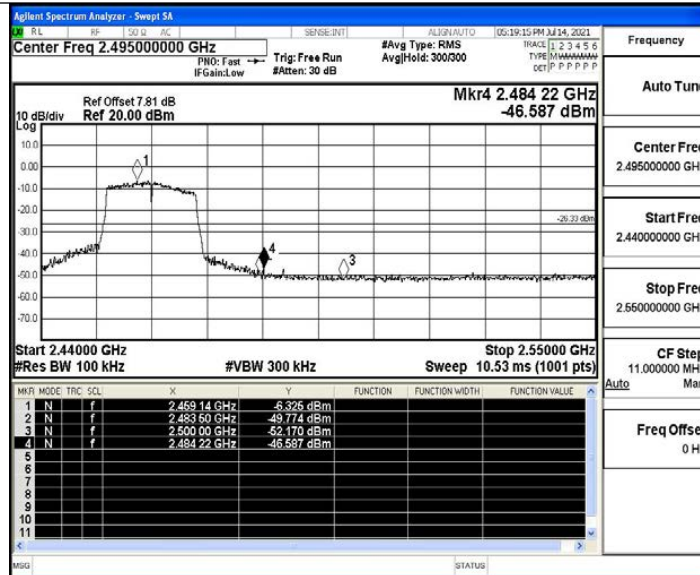
11G Ant1 Low 2412



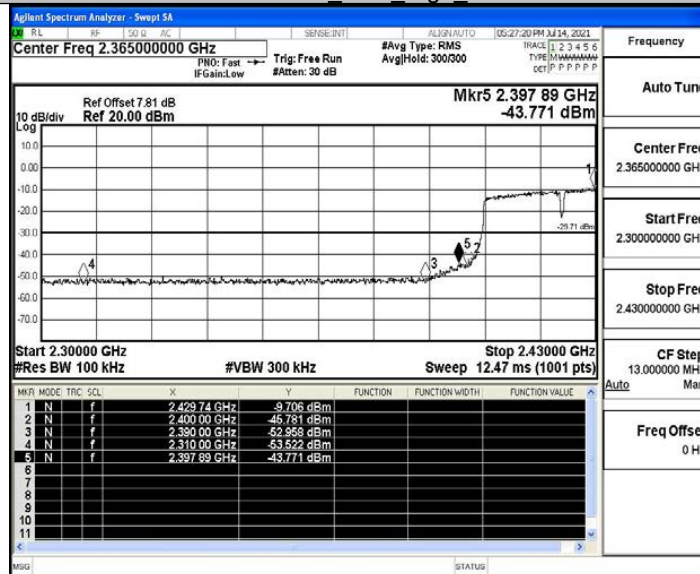
11G_Ant1_High_2462



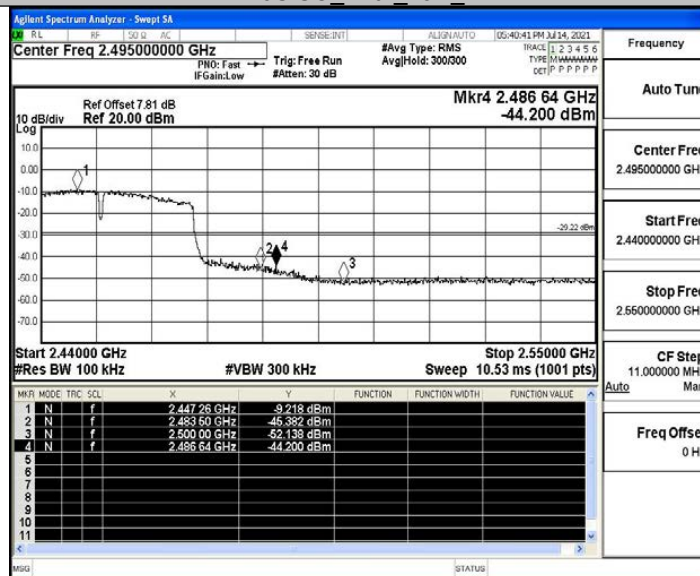
11N20SISO_Ant1_Low_2412



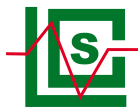
11N20SISO Ant1 High 2462



11N40SISO Ant1 Low 2422



11N40SISO Ant1 High 2452



C.7 Emissions in Restricted Bands

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.4	≤-41.20	47.83	≤54	PASS
				AV	2389.960	-48.99	≤-41.20	48.24	≤54	PASS
				AV	2390.000	-48.99	≤-41.20	48.24	≤54	PASS
				Peak	2310.000	-45.36	≤-21.20	51.87	≤74	PASS
				Peak	2345.630	-40.24	≤-21.20	56.99	≤74	PASS
				Peak	2390.000	-45.95	≤-21.20	51.28	≤74	PASS
		High	2462	AV	2483.500	-48	≤-41.20	49.23	≤54	PASS
				AV	2487.960	-47.32	≤-41.20	49.91	≤54	PASS
				AV	2500.000	-48.42	≤-41.20	48.81	≤54	PASS
				Peak	2483.500	-43.89	≤-21.20	53.34	≤74	PASS
				Peak	2487.740	-38.77	≤-21.20	58.46	≤74	PASS
				Peak	2500.000	-43.3	≤-21.20	53.93	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-49.43	≤-41.20	47.80	≤54	PASS
				AV	2389.960	-48.78	≤-41.20	48.45	≤54	PASS
				AV	2390.000	-48.78	≤-41.20	48.45	≤54	PASS
				Peak	2310.000	-46.99	≤-21.20	50.24	≤74	PASS
				Peak	2378.390	-38.32	≤-21.20	58.91	≤74	PASS
				Peak	2390.000	-44	≤-21.20	53.23	≤74	PASS
		High	2462	AV	2483.500	-47.09	≤-41.20	50.14	≤54	PASS
				AV	2487.960	-46.05	≤-41.20	51.18	≤54	PASS
				AV	2500.000	-48.42	≤-41.20	48.81	≤54	PASS
				Peak	2483.500	-40.38	≤-21.20	56.85	≤74	PASS
				Peak	2486.970	-38.42	≤-21.20	58.81	≤74	PASS
				Peak	2500.000	-43.17	≤-21.20	54.06	≤74	PASS
11N20SI SO	Ant1	Low	2412	AV	2310.000	-49.42	≤-41.20	47.81	≤54	PASS
				AV	2389.960	-48.58	≤-41.20	48.65	≤54	PASS
				AV	2390.000	-48.58	≤-41.20	48.65	≤54	PASS
				Peak	2310.000	-45.71	≤-21.20	51.52	≤74	PASS
				Peak	2385.540	-39.44	≤-21.20	57.79	≤74	PASS
				Peak	2390.000	-41.86	≤-21.20	55.37	≤74	PASS
		High	2462	AV	2483.500	-46.5	≤-41.20	50.73	≤54	PASS
				AV	2487.960	-45.99	≤-41.20	51.24	≤54	PASS
				AV	2500.000	-48.44	≤-41.20	48.79	≤54	PASS



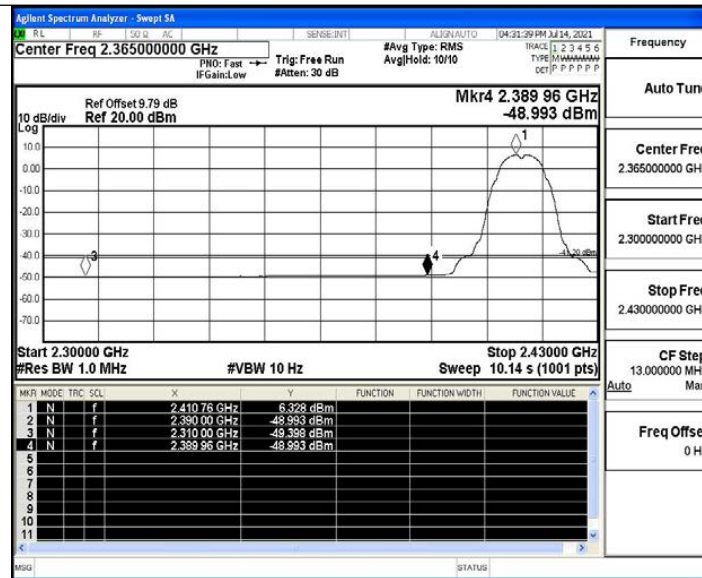
				Peak	2483.500	-42.88	≤ -21.20	54.35	≤ 74	PASS
				Peak	2484.770	-37.92	≤ -21.20	59.31	≤ 74	PASS
				Peak	2500.000	-44.09	≤ -21.20	53.14	≤ 74	PASS
11N40SI SO	Ant1	Low	2422	AV	2310.000	-49.4	≤ -41.20	47.83	≤ 54	PASS
				AV	2389.960	-48.18	≤ -41.20	49.05	≤ 54	PASS
				AV	2390.000	-48.18	≤ -41.20	49.05	≤ 54	PASS
				Peak	2310.000	-44.8	≤ -21.20	52.43	≤ 74	PASS
				Peak	2321.450	-38.93	≤ -21.20	58.30	≤ 74	PASS
				Peak	2390.000	-39.55	≤ -21.20	57.68	≤ 74	PASS
		High	2452	AV	2483.500	-42.59	≤ -41.20	54.64	≤ 54	PASS
				AV	2483.560	-42.63	≤ -41.20	54.60	≤ 54	PASS
				AV	2500.000	-48.51	≤ -41.20	48.72	≤ 54	PASS
				Peak	2483.500	-35.1	≤ -21.20	62.13	≤ 74	PASS
				Peak	2484.220	-34.39	≤ -21.20	62.84	≤ 74	PASS
				Peak	2500.000	-41.01	≤ -21.20	56.22	≤ 74	PASS

Note:

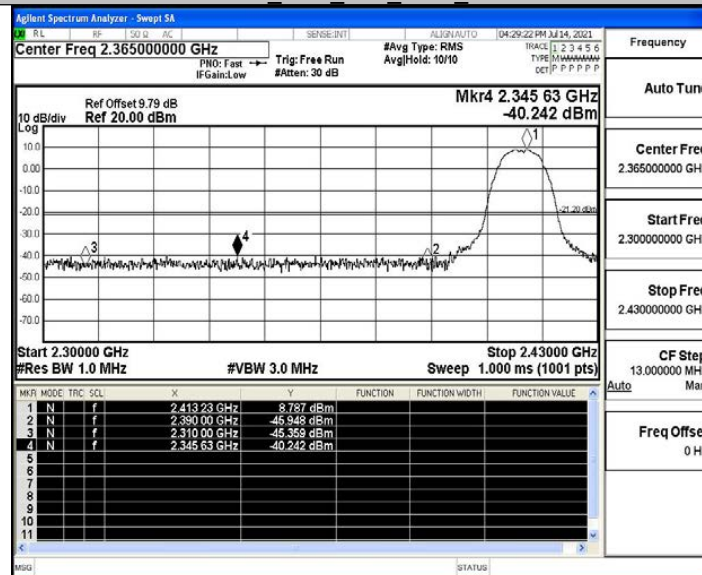
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



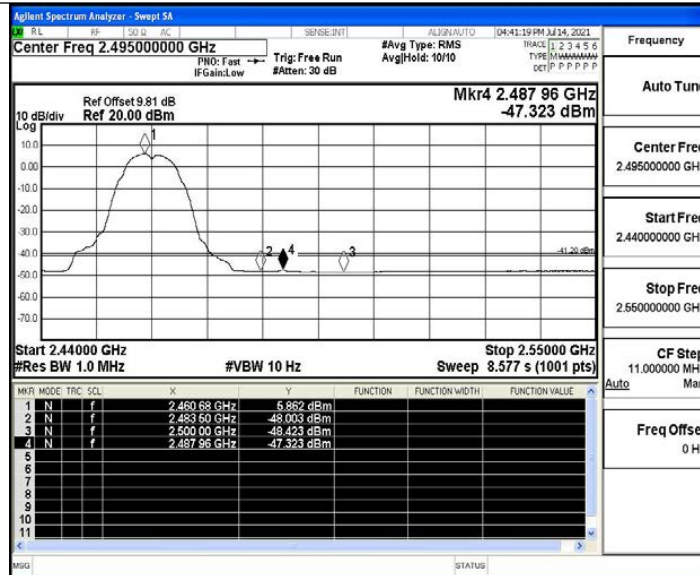
Test Graphs



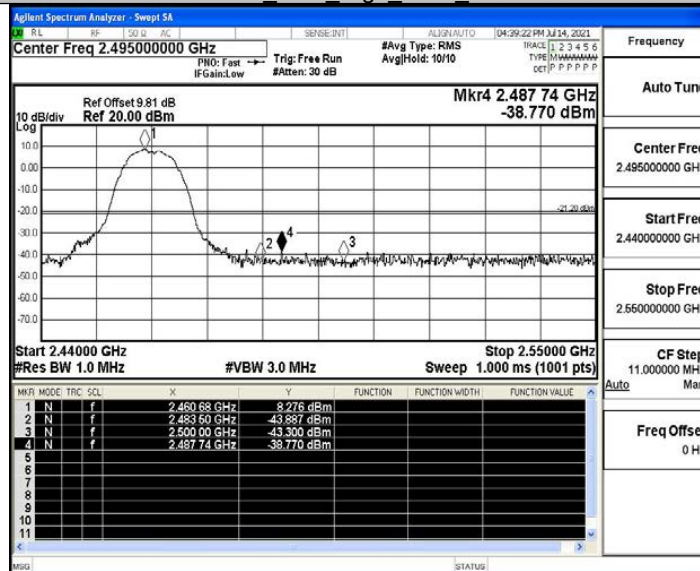
11B_Ant1_Low_2412_AV



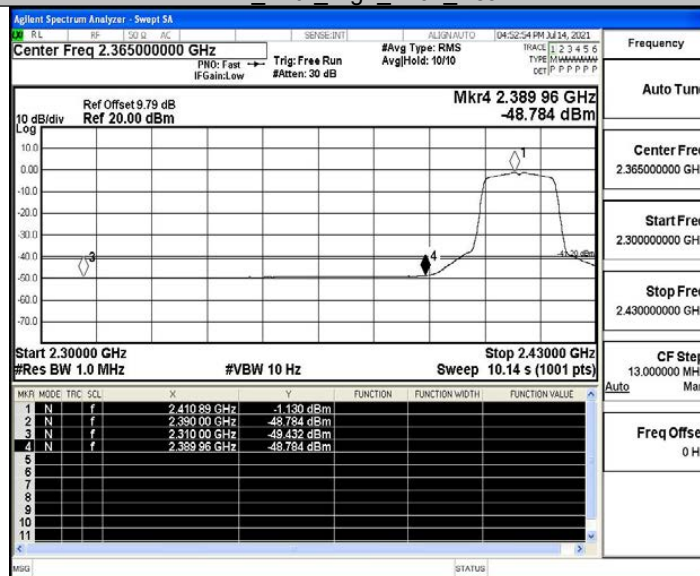
11B_Ant1_Low_2412_Peak



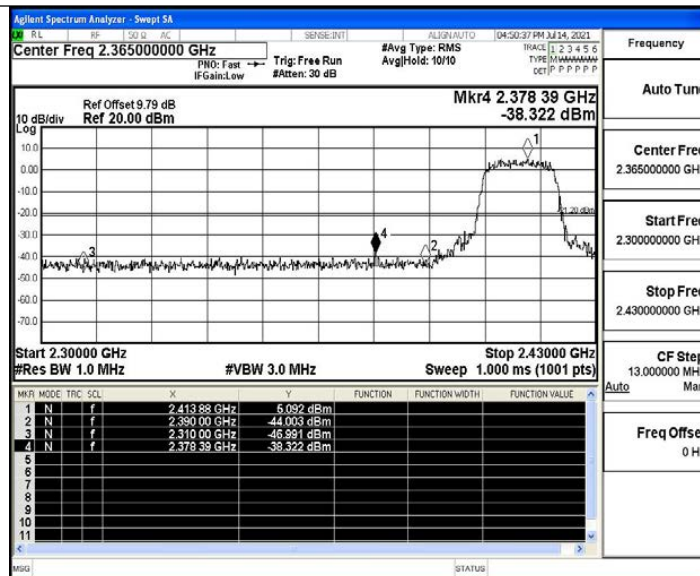
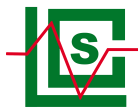
11B Ant1 High 2462 AV



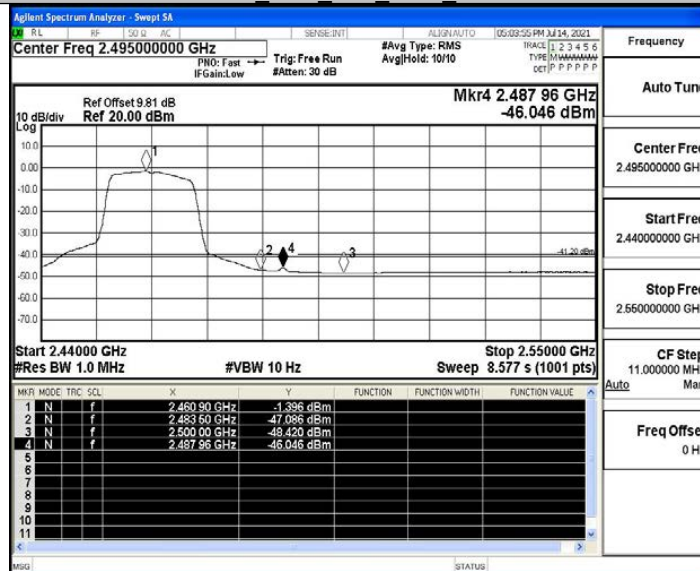
11B Ant1_High_2462_Peak



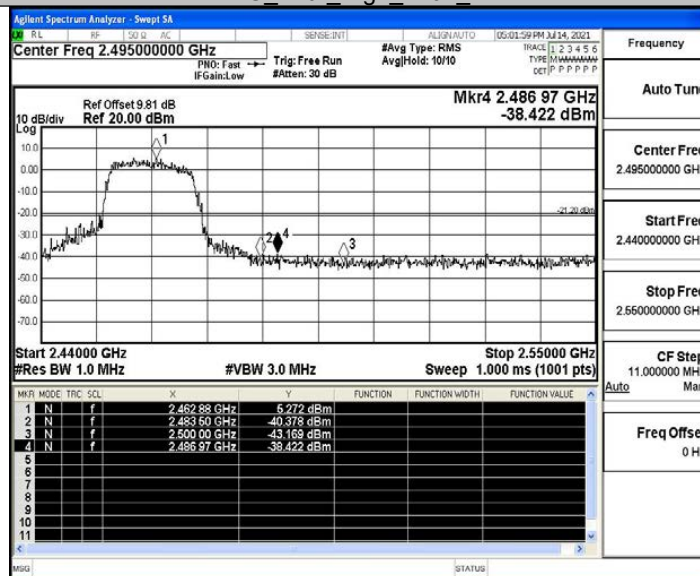
11G Ant1 Low 2412 AV



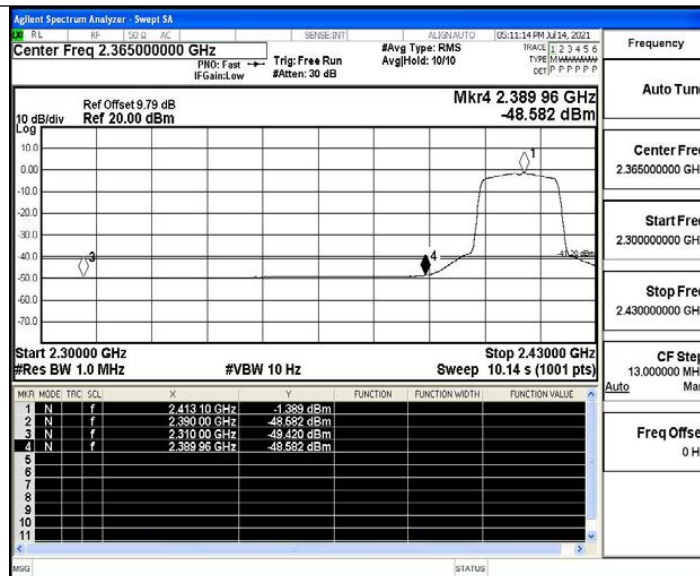
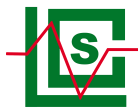
11G Ant1 Low 2412 Peak



11G_Ant1_High_2462_AV



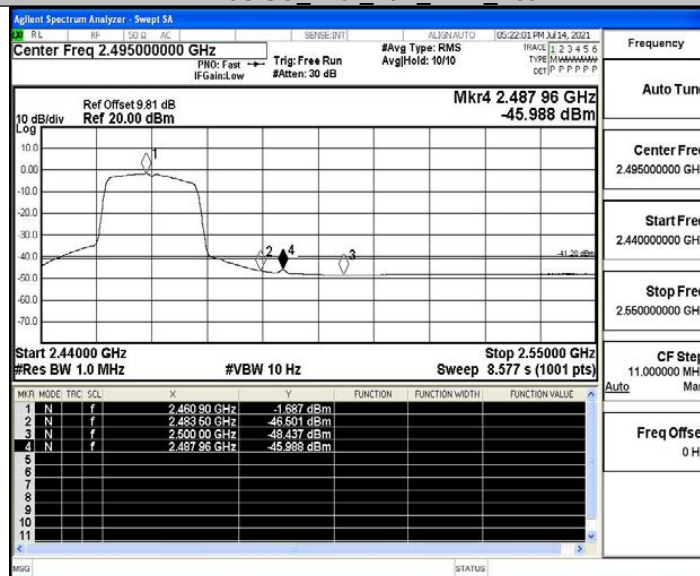
11G_Ant1_High_2462_Peak



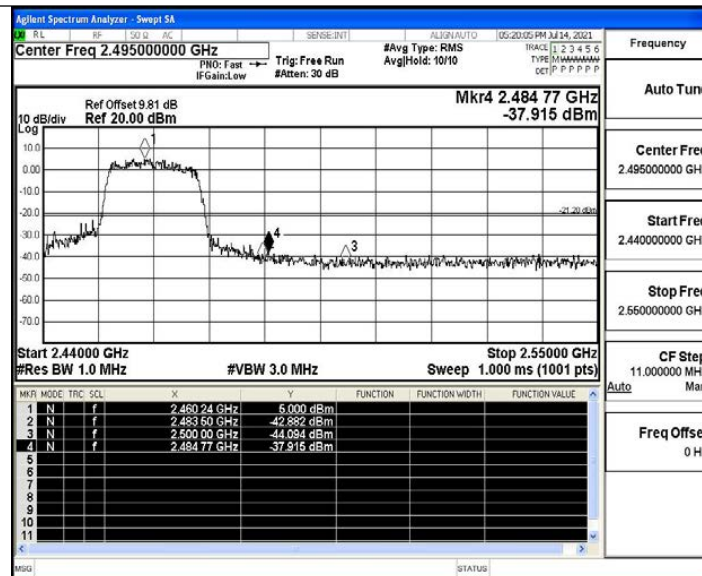
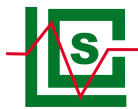
11N20SISO_Ant1_Low_2412_AV



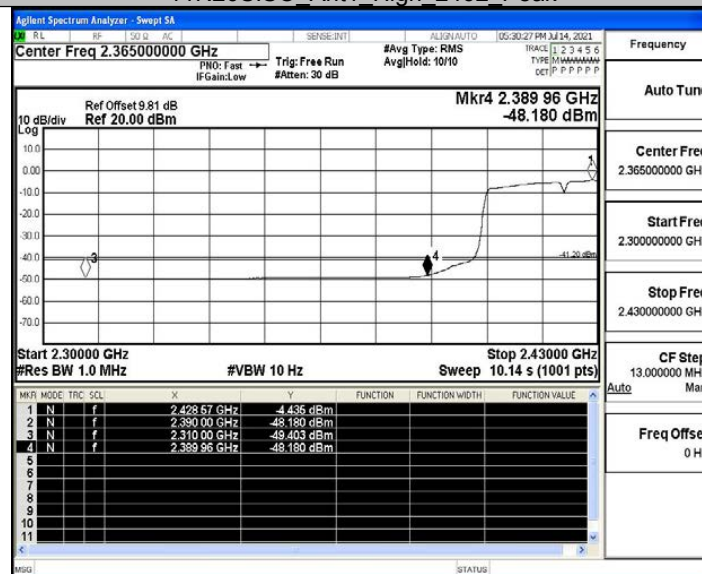
11N20SISO_Ant1_Low_2412_Peak



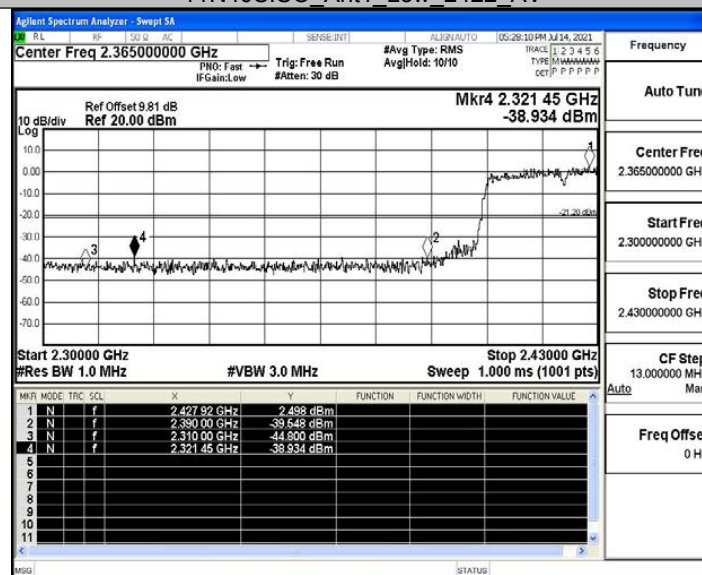
11N20SISO_Ant1_High_2462_AV



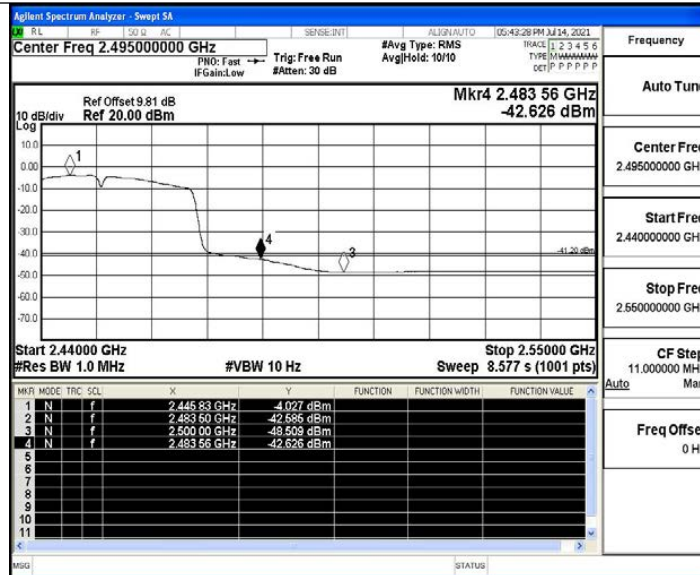
11N20SISO Ant1 High 2462 Peak



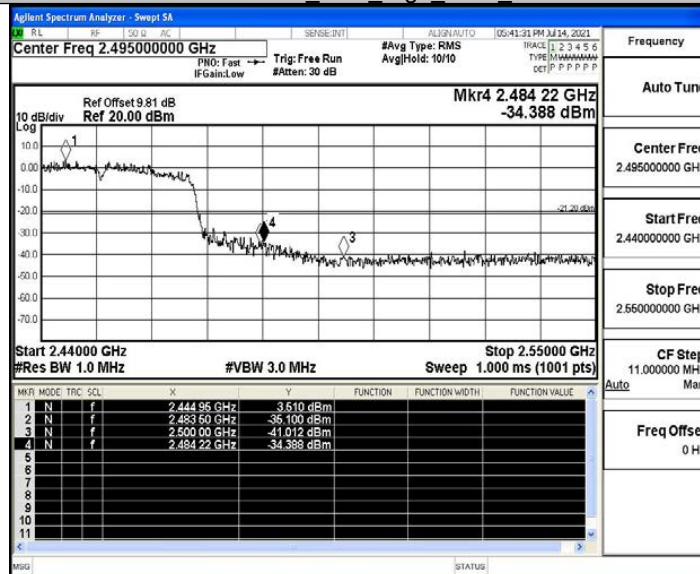
11N40SISO Ant1 Low 2422 AV



11N40SISO Ant1 Low 2422 Peak



11N40SISO_Ant1_High_2452_AV



11N40SISO_Ant1_High_2452_Peak