



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Smart phone

Test Model: Smooth 6.0

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan





C.1 DTS Bandwidth

Test Result

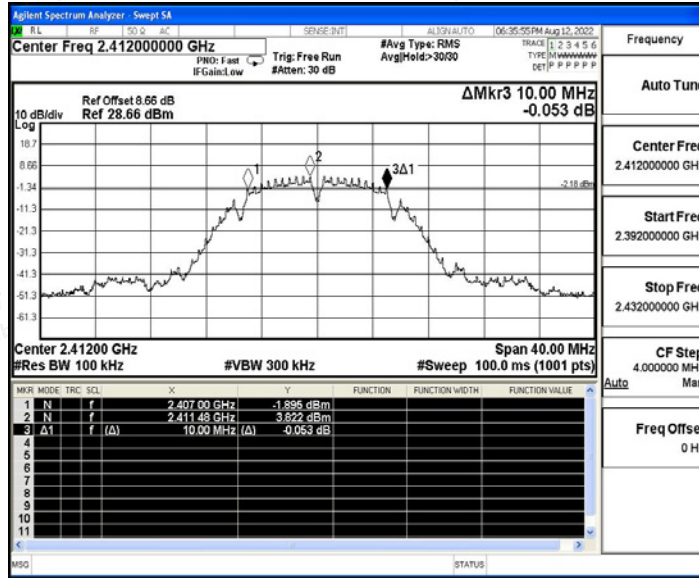
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.000	2407.000	2417.000	0.5	PASS
		2437	9.080	2432.440	2441.520	0.5	PASS
		2462	9.520	2457.480	2467.000	0.5	PASS
11G	Ant1	2412	16.320	2403.840	2420.160	0.5	PASS
		2437	16.320	2428.840	2445.160	0.5	PASS
		2462	16.360	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	17.560	2453.200	2470.760	0.5	PASS



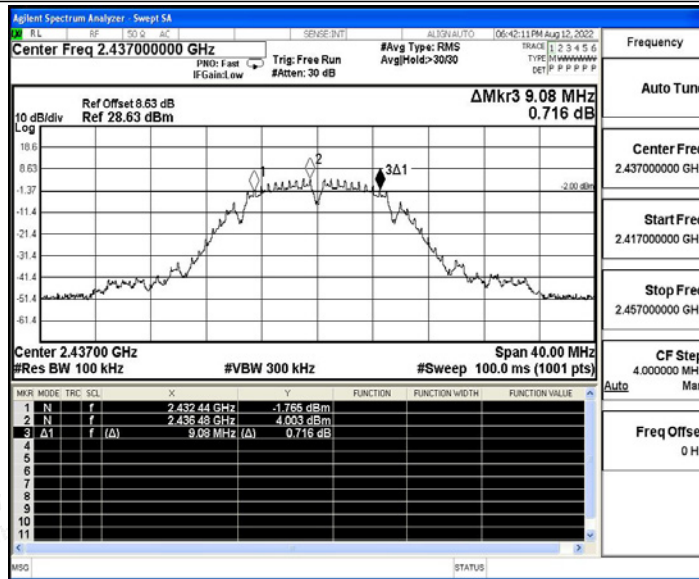


Test Graphs

11B_Ant1_2412

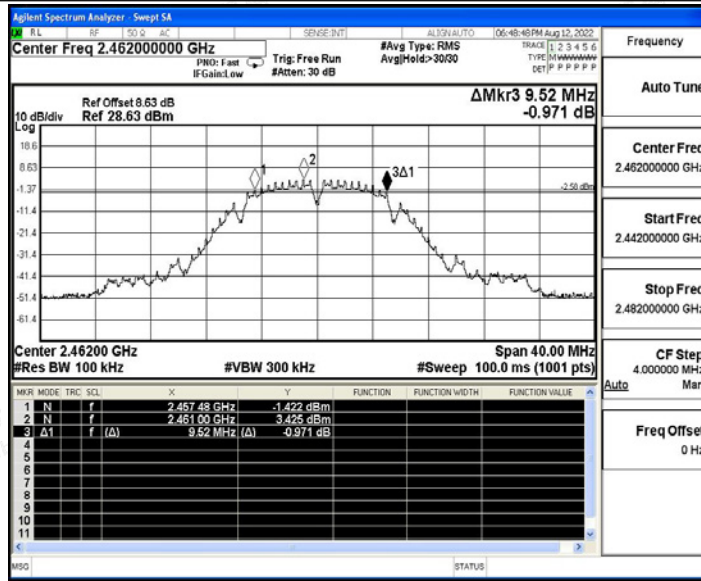


11B_Ant1_2437

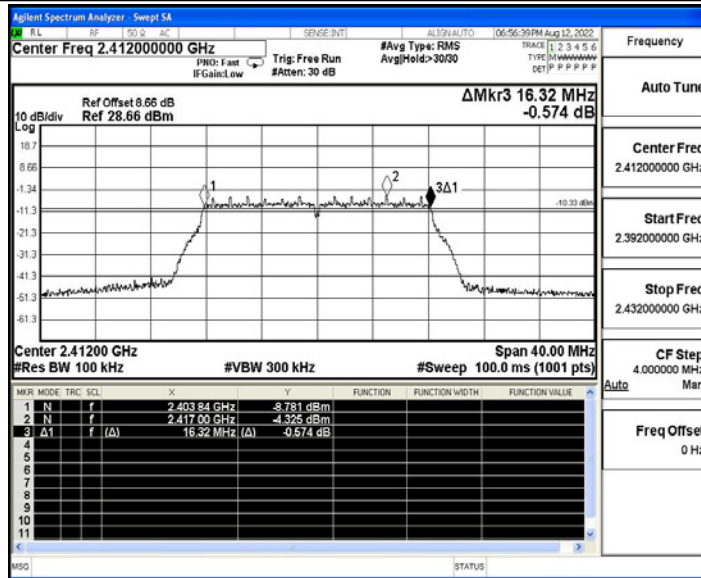


11B_Ant1_2462



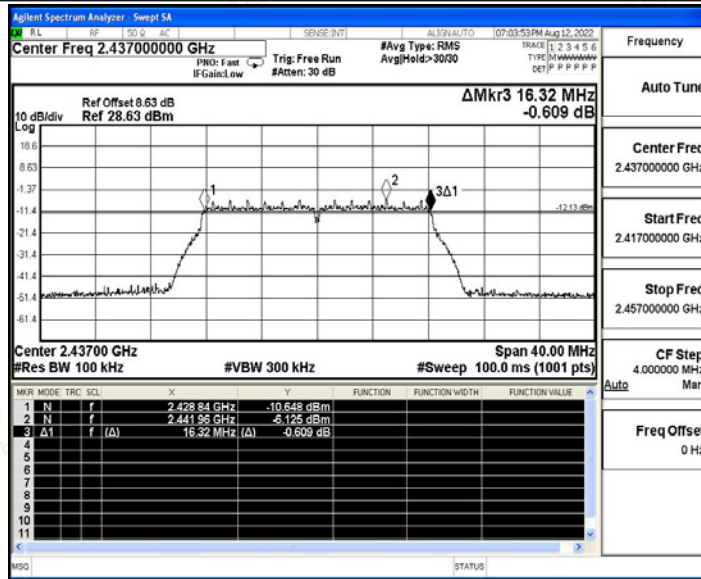


11G_Ant1_2412

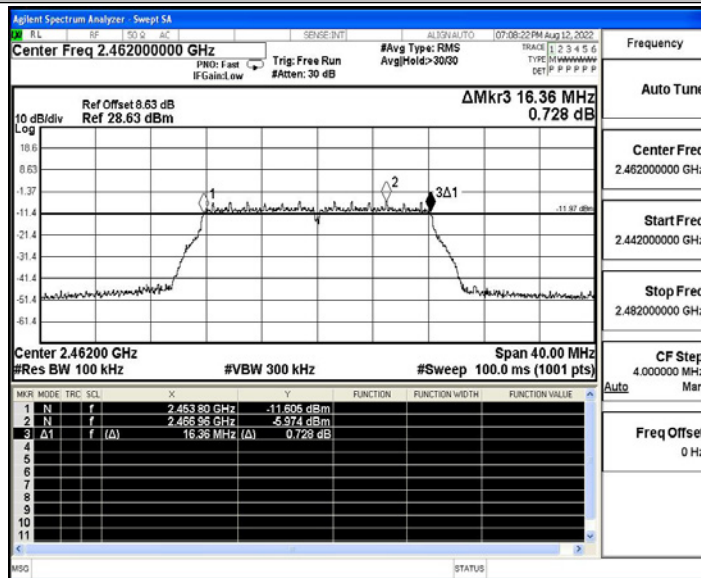


11G_Ant1_2437



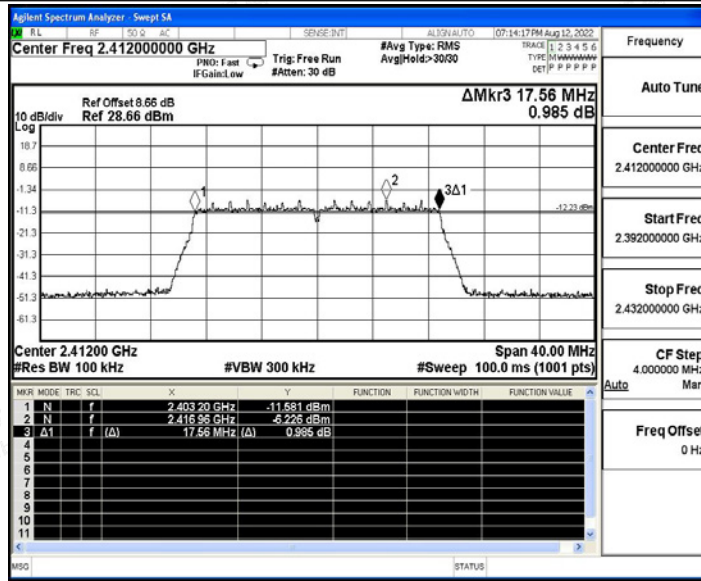


11G_Ant1_2462

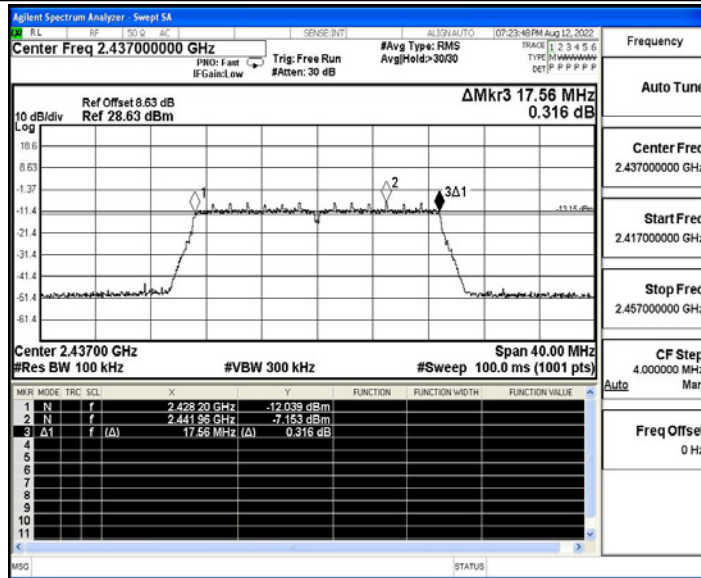


11N20SISO_Ant1_2412



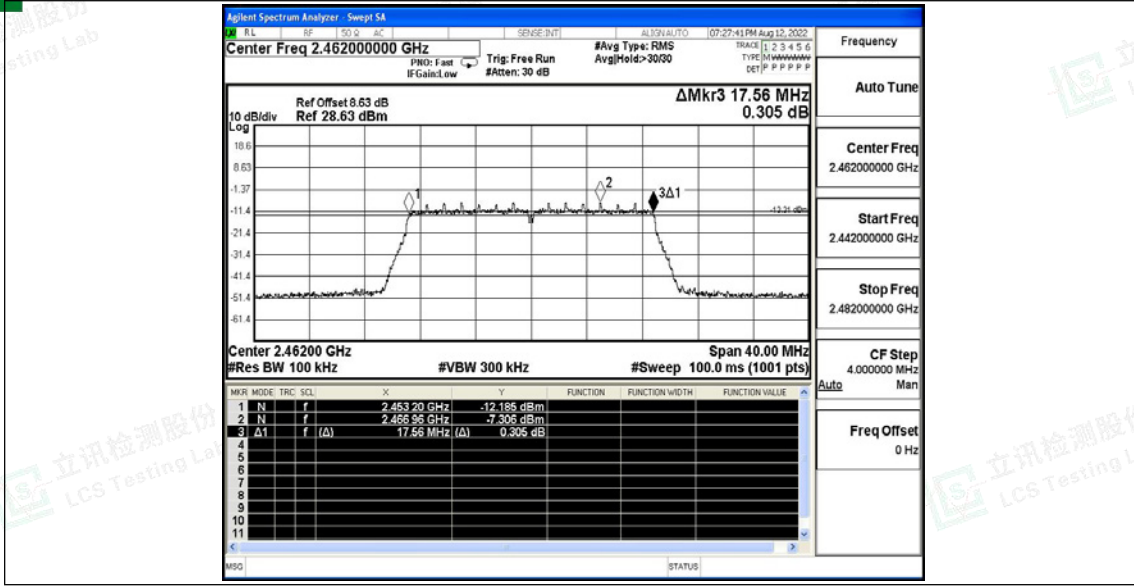


11N20SISO_Ant1_2437



11N20SISO_Ant1_2462







C.2 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	15.75	≤30.00	PASS
		2437	15.56	≤30.00	PASS
		2462	15.12	≤30.00	PASS
11G	Ant1	2412	14.33	≤30.00	PASS
		2437	13.83	≤30.00	PASS
		2462	13.74	≤30.00	PASS
11N20SISO	Ant1	2412	13.34	≤30.00	PASS
		2437	12.43	≤30.00	PASS
		2462	12.24	≤30.00	PASS





C.3 Maximum power spectral density

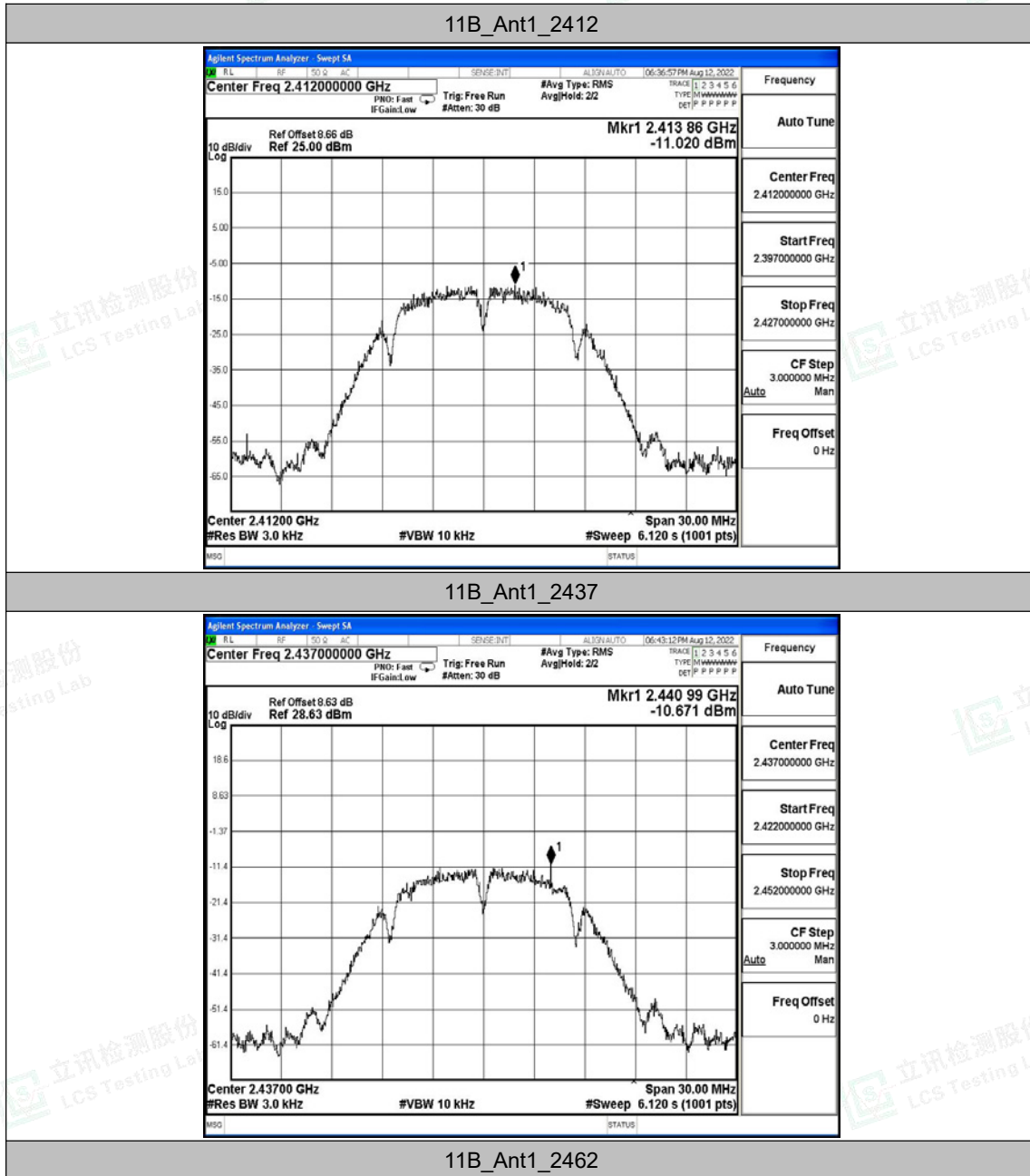
Test Result

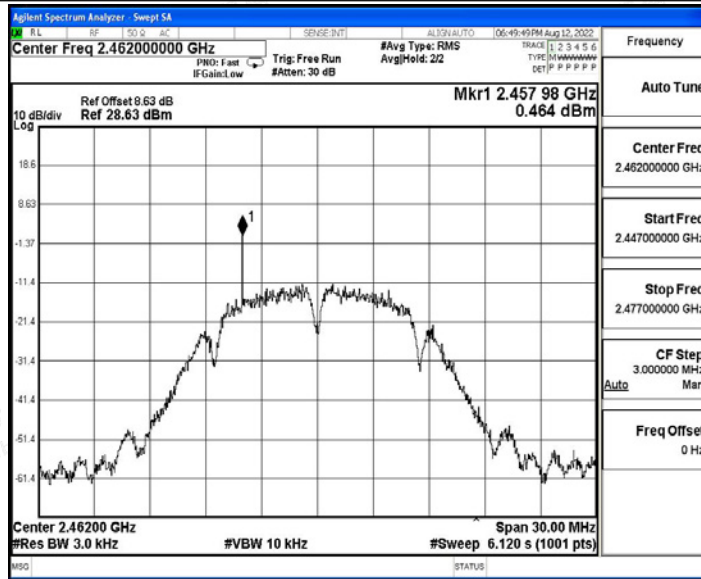
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.02	≤8.00	PASS
		2437	-10.67	≤8.00	PASS
		2462	0.46	≤8.00	PASS
11G	Ant1	2412	-19.59	≤8.00	PASS
		2437	-19.8	≤8.00	PASS
		2462	-19.8	≤8.00	PASS
11N20SISO	Ant1	2412	-19.81	≤8.00	PASS
		2437	-21.29	≤8.00	PASS
		2462	-19.31	≤8.00	PASS



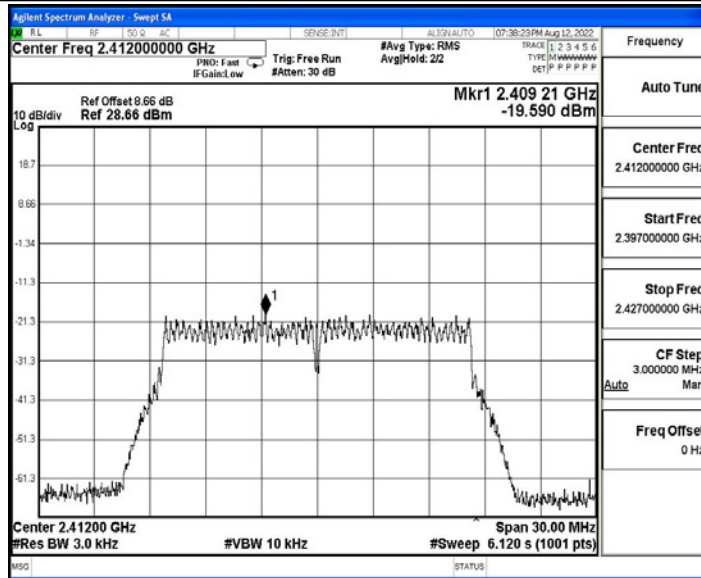


Test Graphs



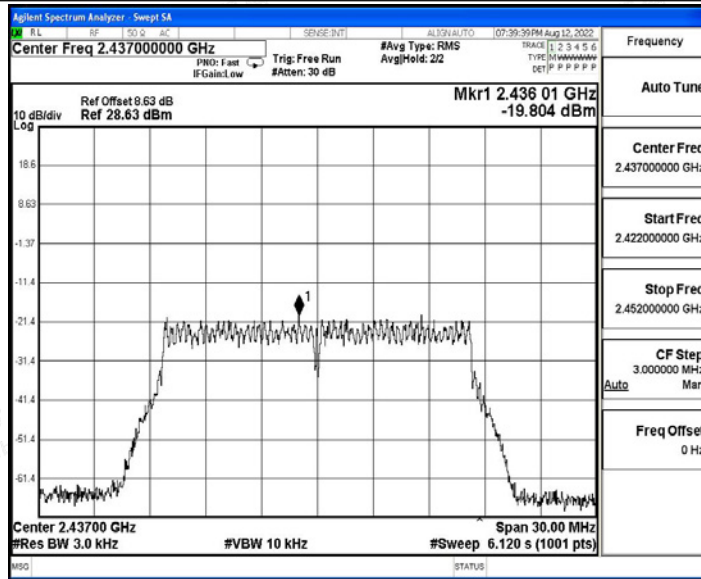


11G_Ant1_2412

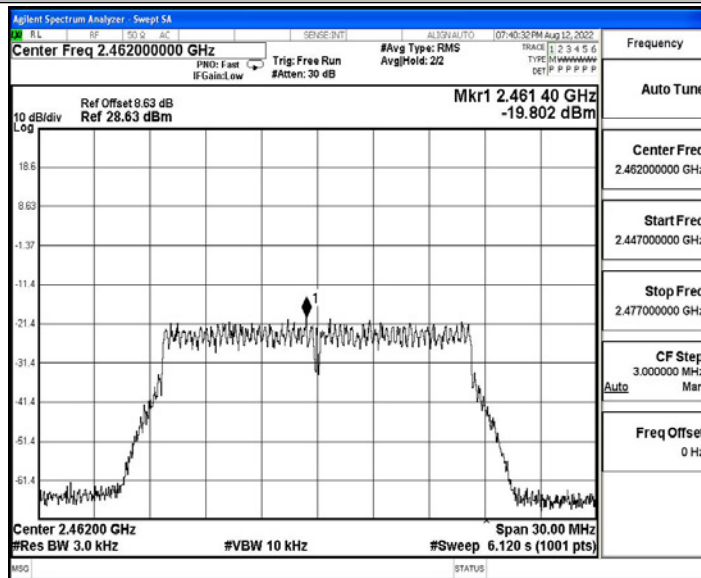


11G_Ant1_2437



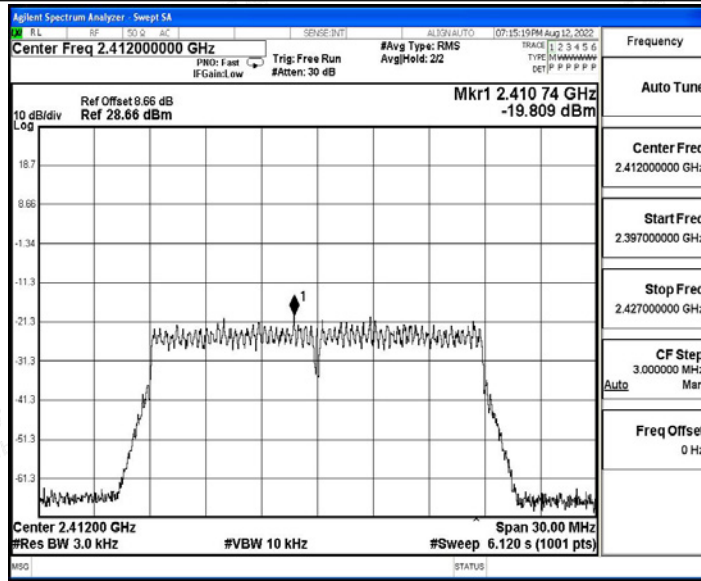


11G_Ant1_2462

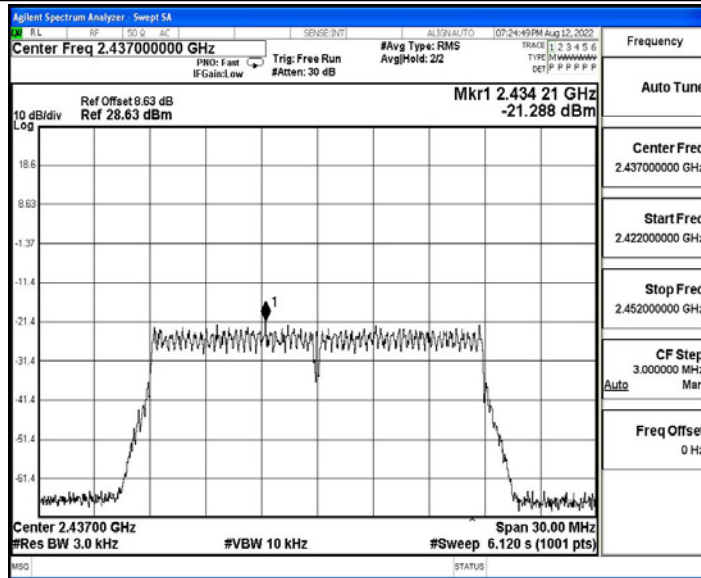


11N20SISO_Ant1_2412



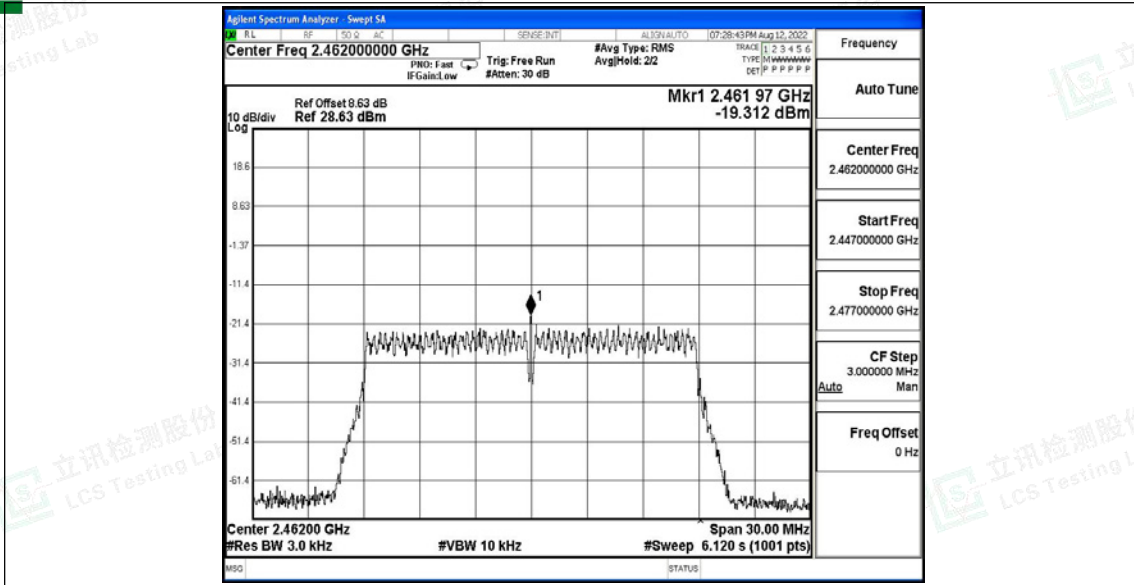


11N20SISO_Ant1_2437



11N20SISO_Ant1_2462







C.4 Band edge measurements

Test Result

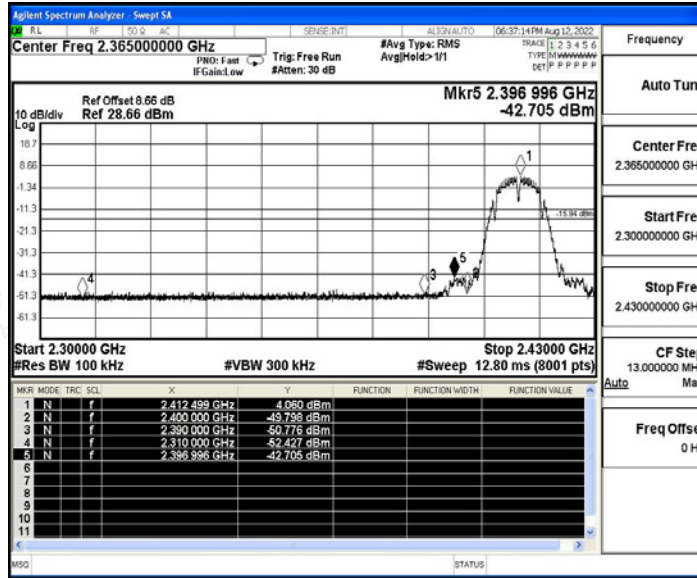
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.06	-42.71	≤-15.94	PASS
		High	2462	3.51	-47.27	≤-16.49	PASS
11G	Ant1	Low	2412	-3.94	-44.17	≤-23.94	PASS
		High	2462	-5.63	-47.31	≤-25.63	PASS
11N20SISO	Ant1	Low	2412	-5.74	-47.76	≤-25.74	PASS
		High	2462	-7.07	-47.18	≤-27.07	PASS



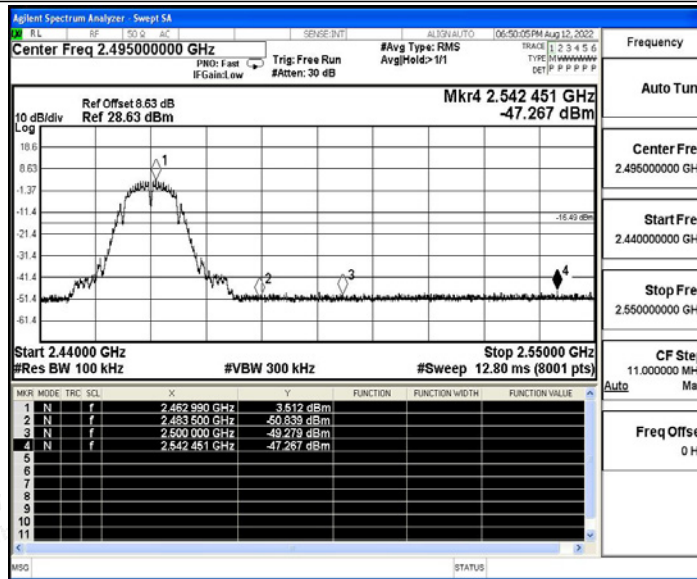


Test Graphs

11B_Ant1_Low_2412

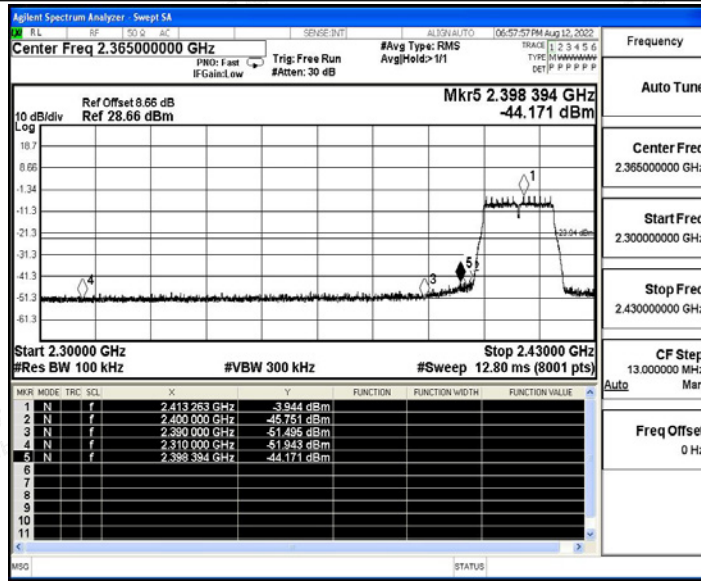


11B_Ant1_High_2462

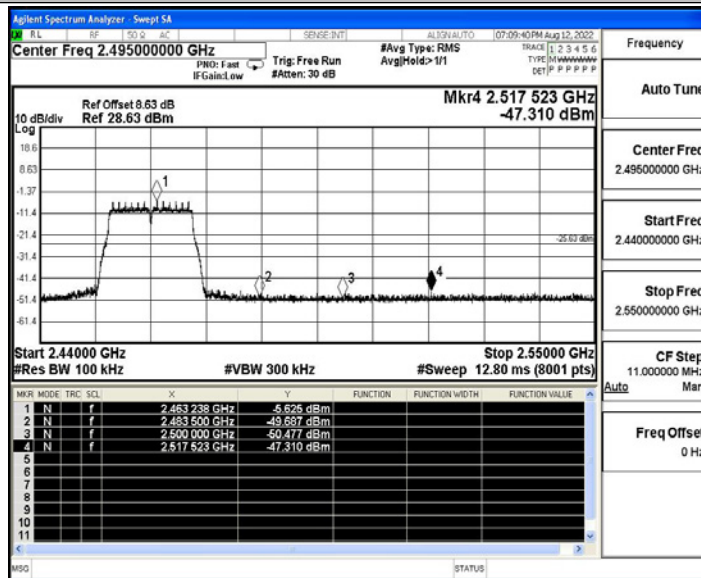


11G_Ant1_Low_2412



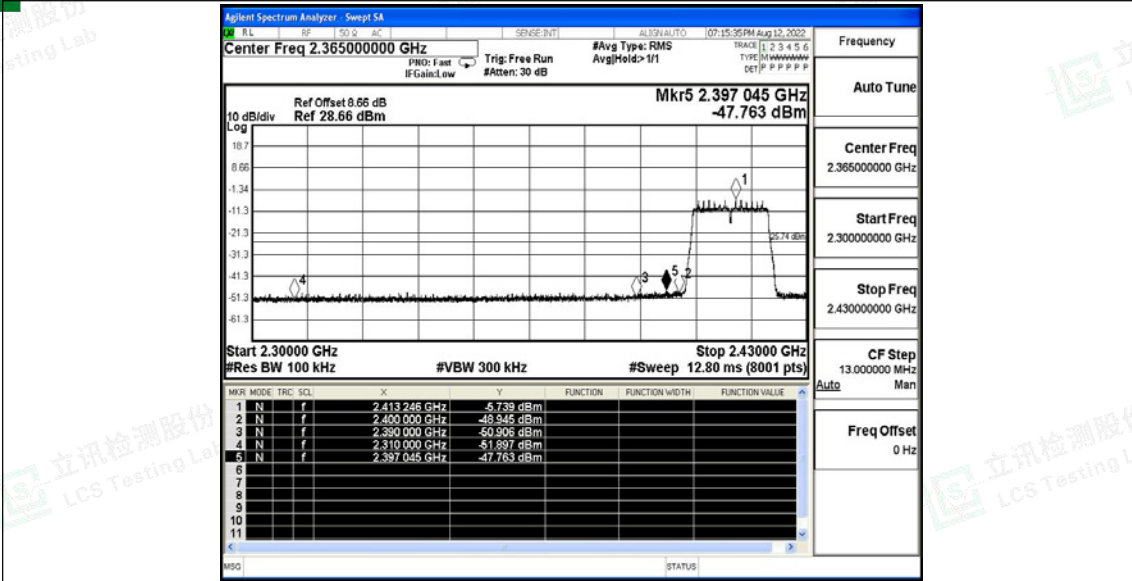


11G_Ant1_High_2462

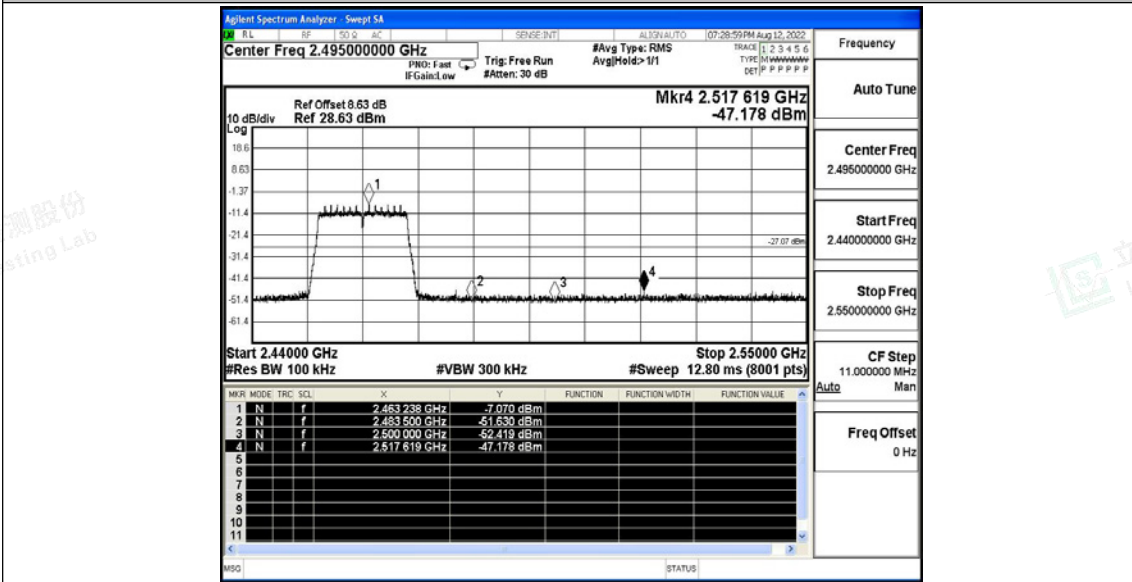


11N20SISO_Ant1_Low_2412





11N20SISO_Ant1_High_2462





C.5 Conducted Spurious Emission

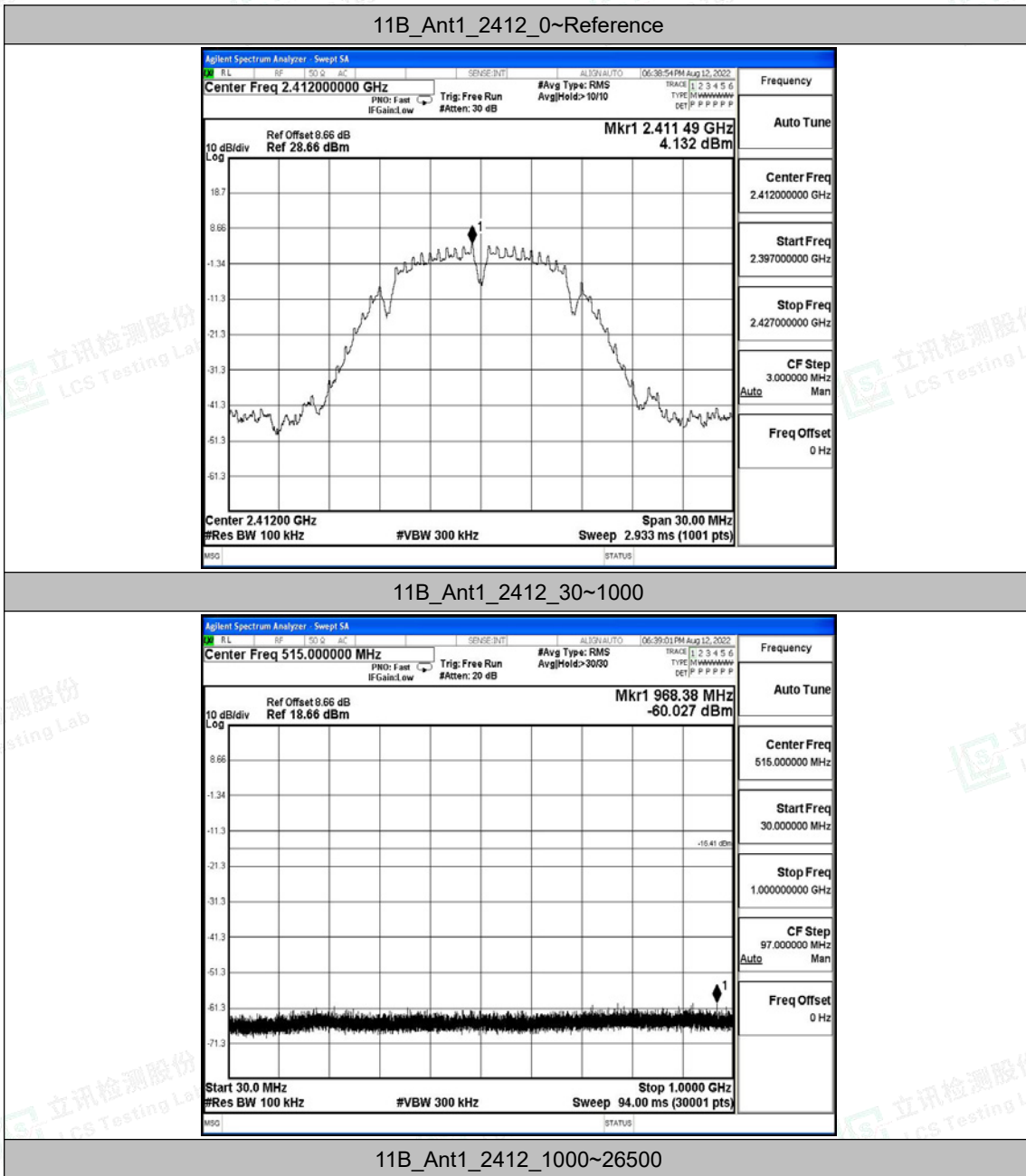
Test Result

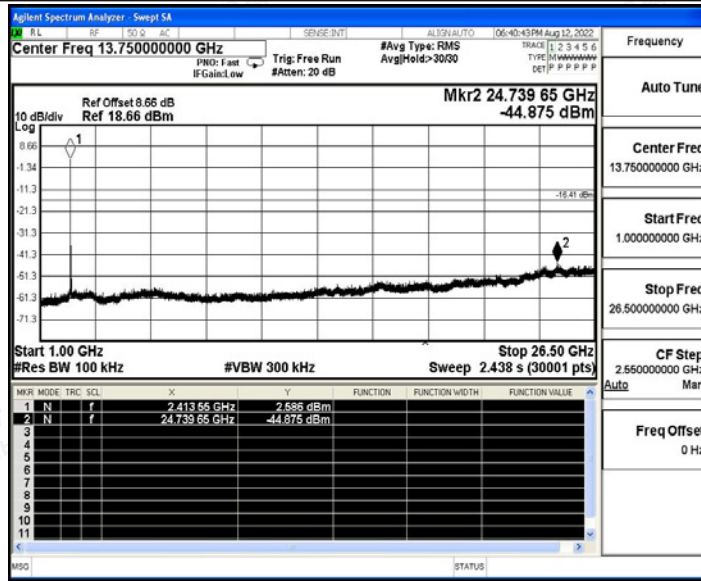
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	3.59	3.59	---	PASS
			30~1000	3.59	-60.03	≤-16.41	PASS
			1000~26500	3.59	-44.88	≤-16.41	PASS
		2437	Reference	3.92	3.92	---	PASS
			30~1000	3.92	-60.32	≤-16.08	PASS
			1000~26500	3.92	-46.25	≤-16.08	PASS
		2462	Reference	3.14	3.14	---	PASS
			30~1000	3.14	-60.1	≤-16.86	PASS
			1000~26500	3.14	-45.32	≤-16.86	PASS
11G	Ant1	2412	Reference	-3.95	-3.95	---	PASS
			30~1000	-3.95	-60.68	≤-23.95	PASS
			1000~26500	-3.95	-45.35	≤-23.95	PASS
		2437	Reference	-5.54	-5.54	---	PASS
			30~1000	-5.54	-60.44	≤-25.54	PASS
			1000~26500	-5.54	-45.56	≤-25.54	PASS
		2462	Reference	-5.75	-5.75	---	PASS
			30~1000	-5.75	-60.64	≤-25.75	PASS
			1000~26500	-5.75	-46.26	≤-25.75	PASS
11N20SISO	Ant1	2412	Reference	-5.82	-5.82	---	PASS
			30~1000	-5.82	-59.83	≤-25.82	PASS
			1000~26500	-5.82	-46.26	≤-25.82	PASS
		2437	Reference	-7.05	-7.05	---	PASS
			30~1000	-7.05	-59.16	≤-27.05	PASS
			1000~26500	-7.05	-45.72	≤-27.05	PASS
		2462	Reference	-6.93	-6.93	---	PASS
			30~1000	-6.93	-61.22	≤-26.93	PASS
			1000~26500	-6.93	-45.78	≤-26.93	PASS



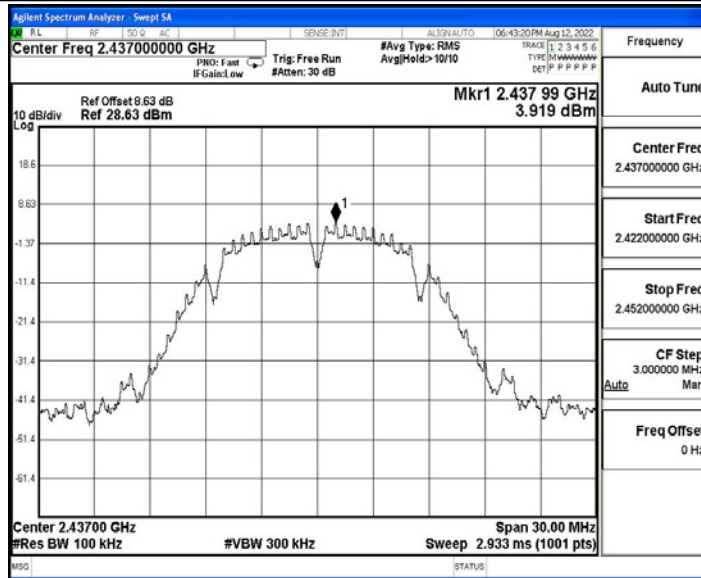


Test Graphs



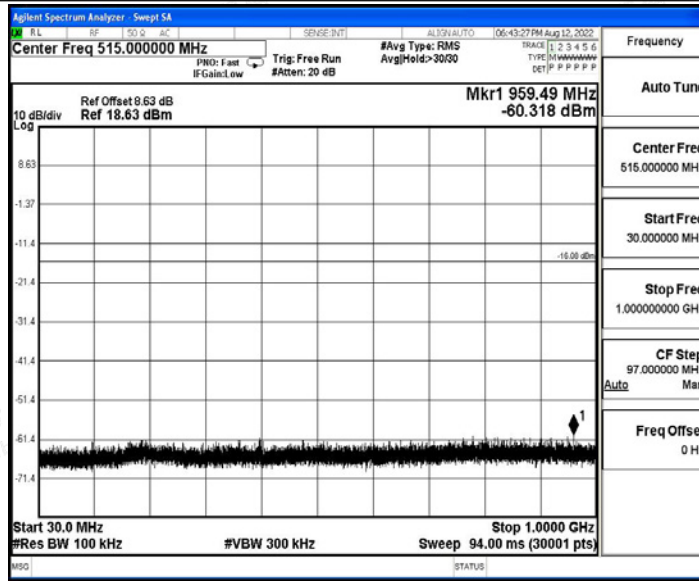


11B_Ant1_2437_0~Reference

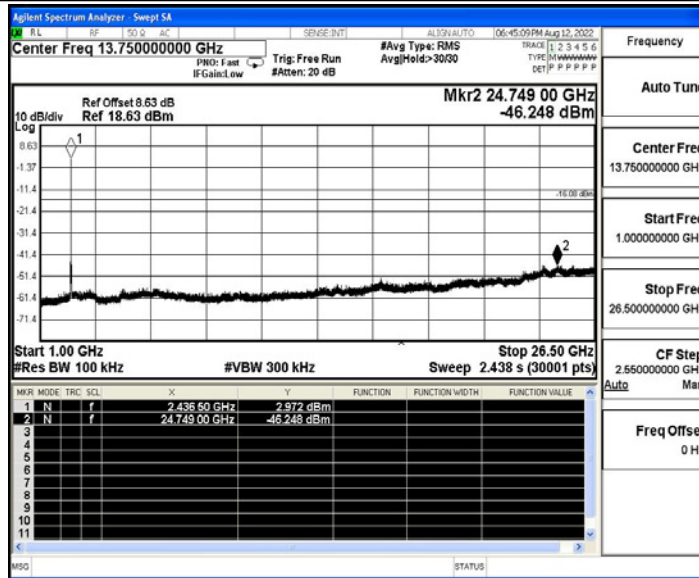


11B_Ant1_2437_30~1000



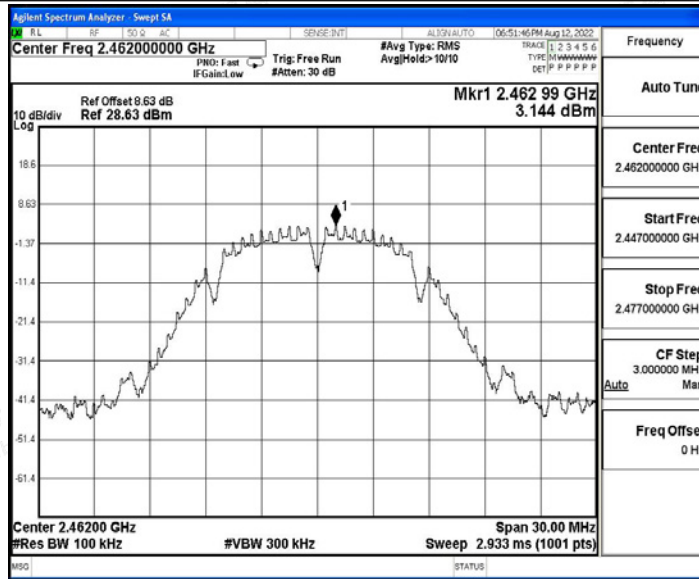


11B_Ant1_2437_1000~26500

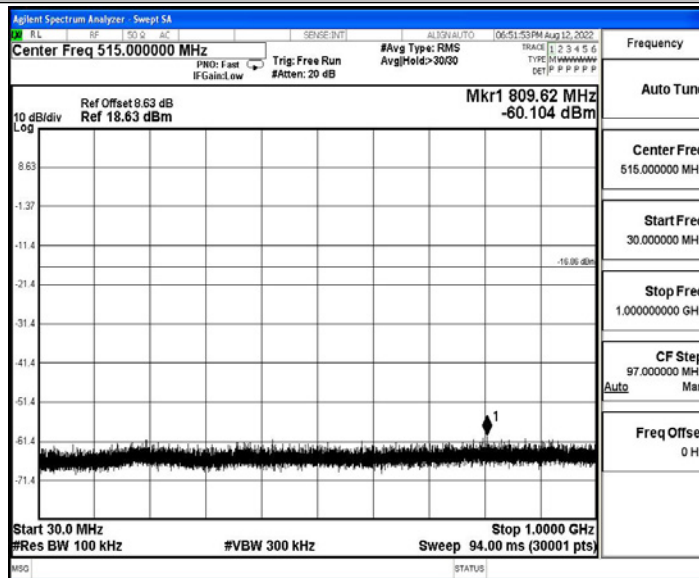


11B_Ant1_2462_0~Reference



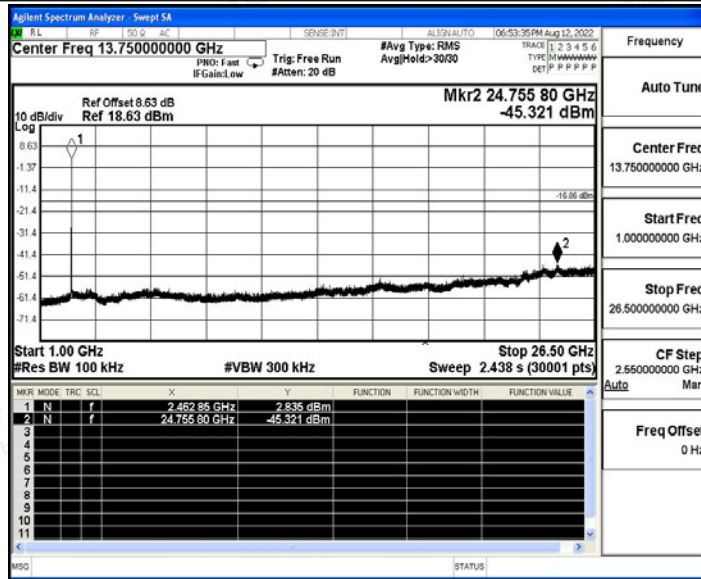


11B_Ant1_2462_30~1000

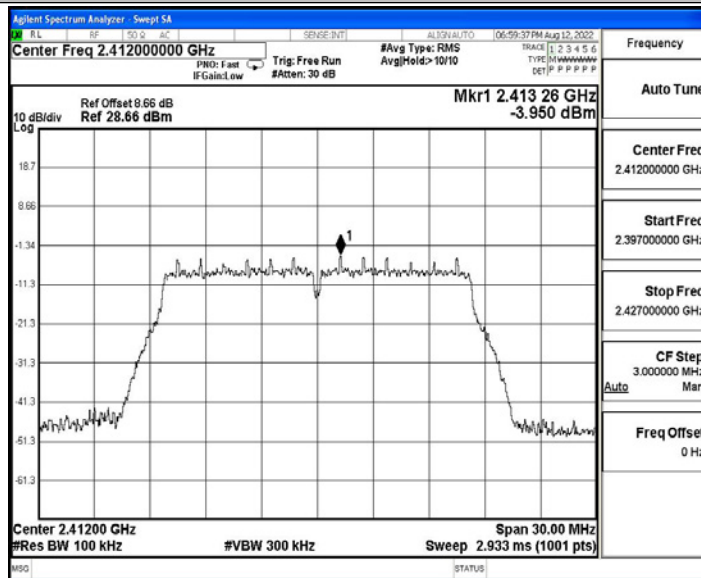


11B_Ant1_2462_1000~26500



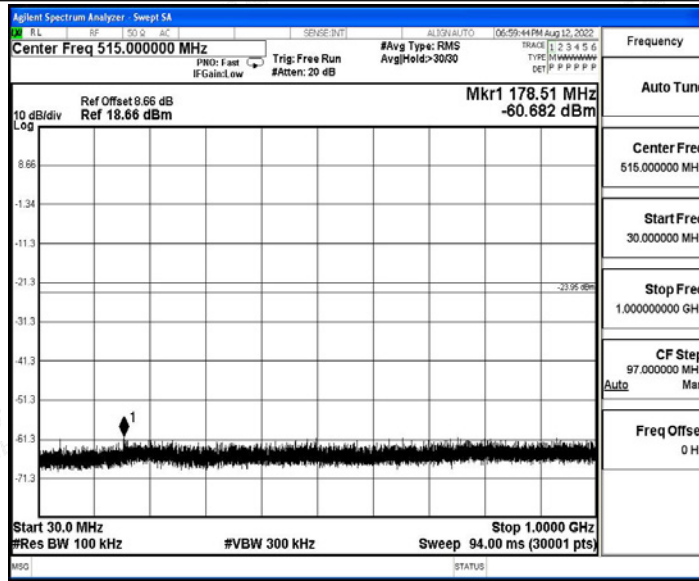


11G_Ant1_2412_0~Reference

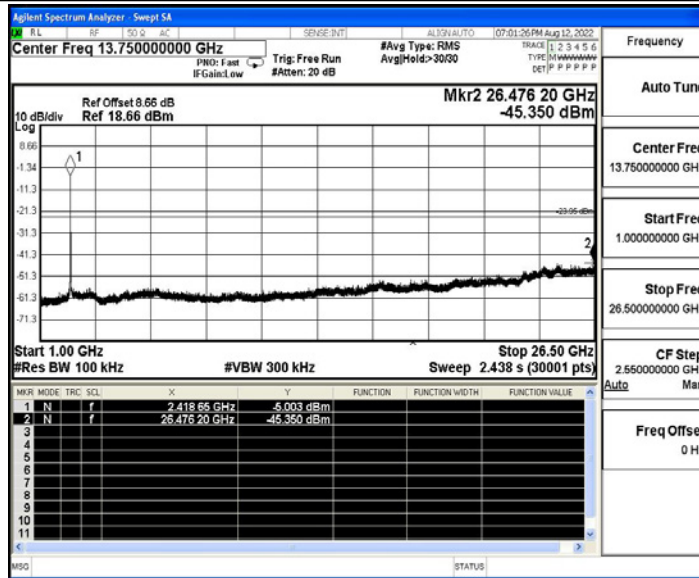


11G_Ant1_2412_30~1000



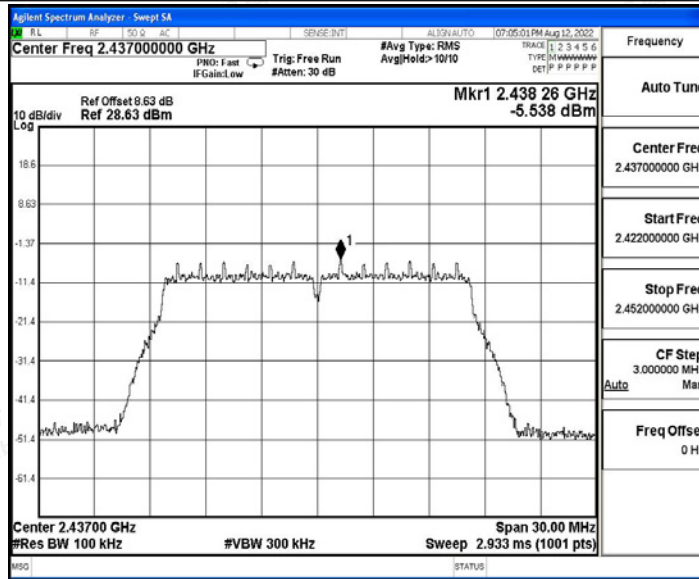


11G_Ant1_2412_1000~26500

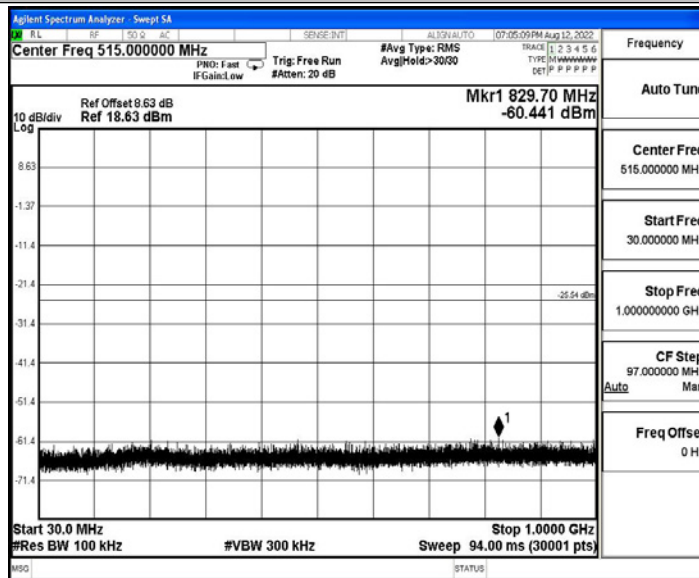


11G_Ant1_2437_0~Reference



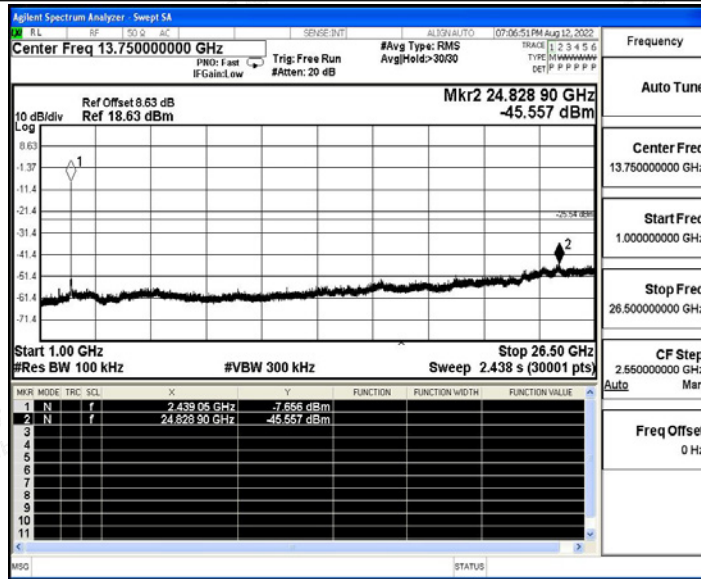


11G_Ant1_2437_30~1000

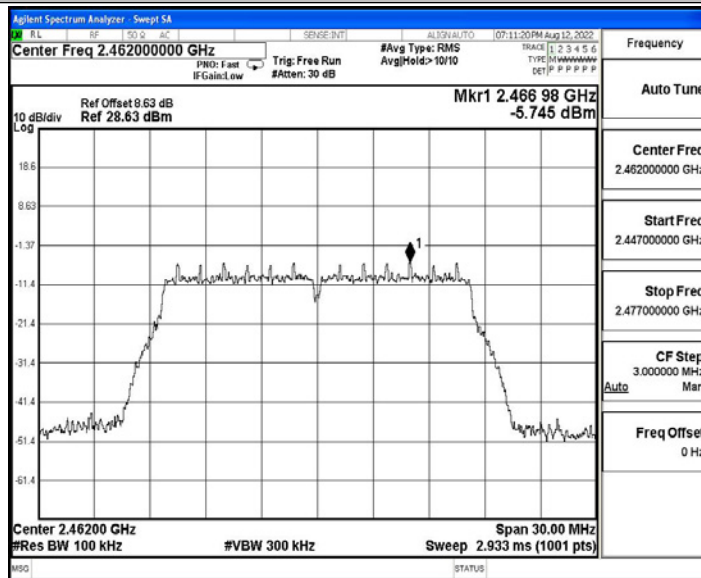


11G_Ant1_2437_1000~26500



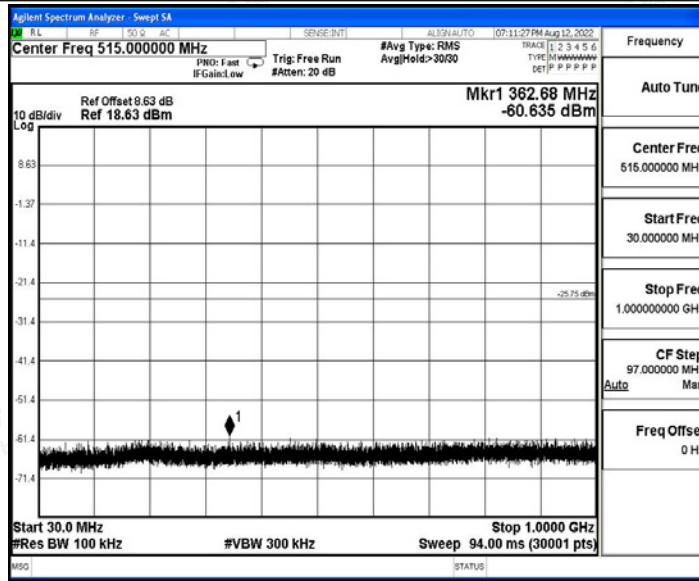


11G_Ant1_2462_0~Reference

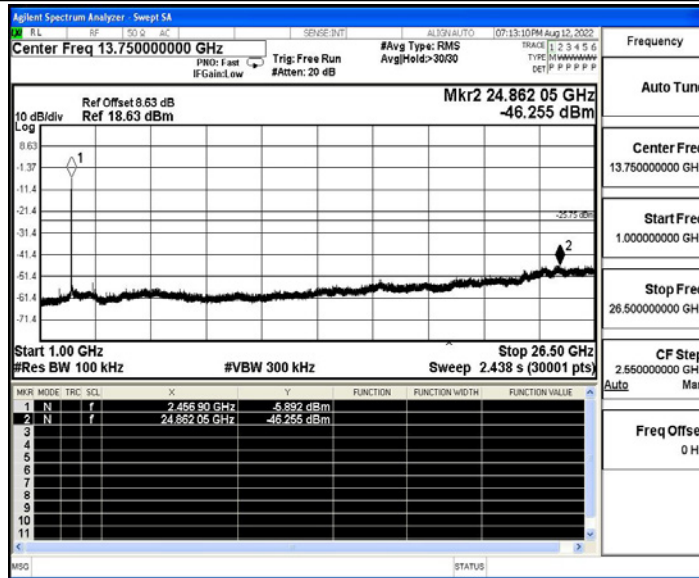


11G_Ant1_2462_30~1000



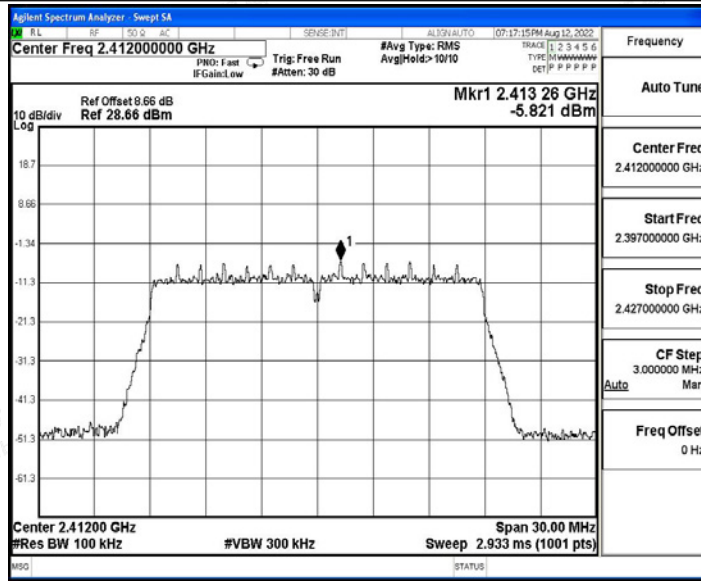


11G_Ant1_2462_1000~26500

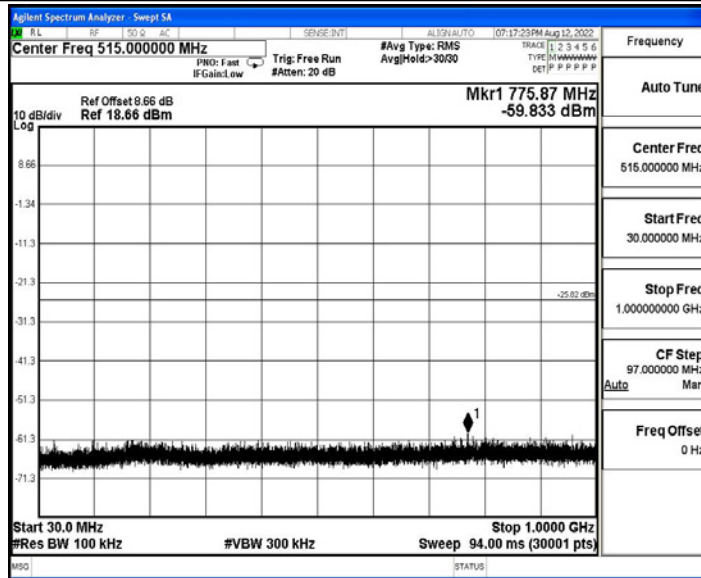


11N20SISO_Ant1_2412_0~Reference



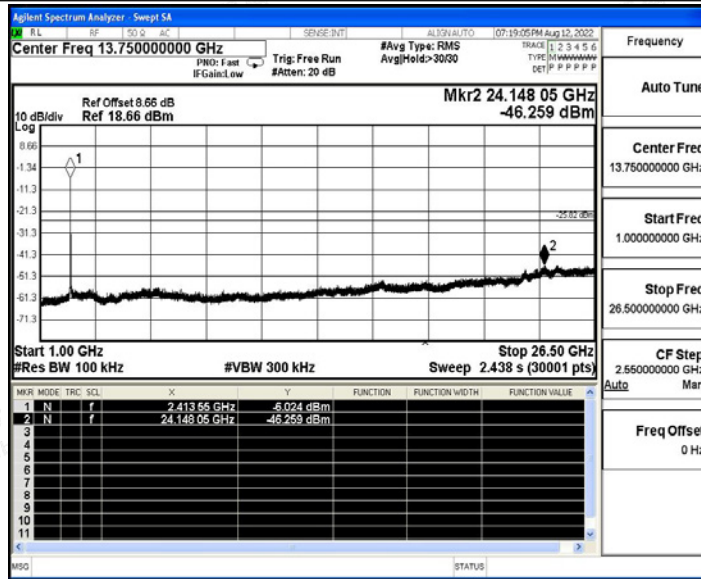


11N20SISO_Ant1_2412_30~1000

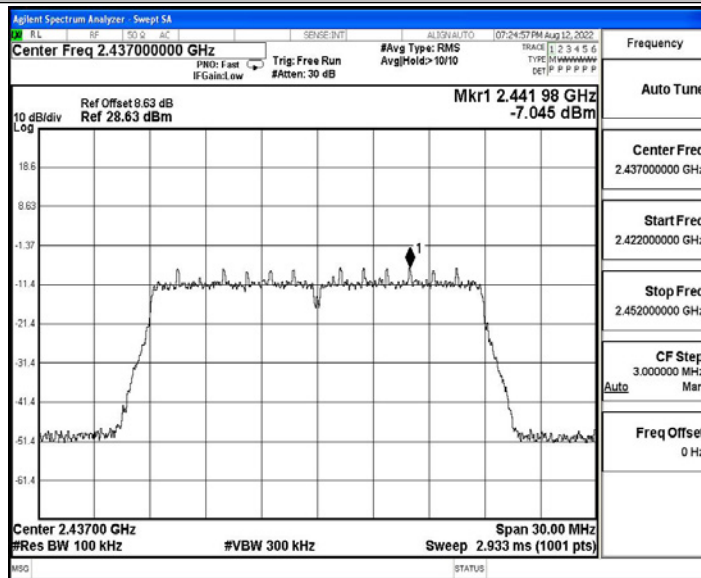


11N20SISO_Ant1_2412_1000~26500



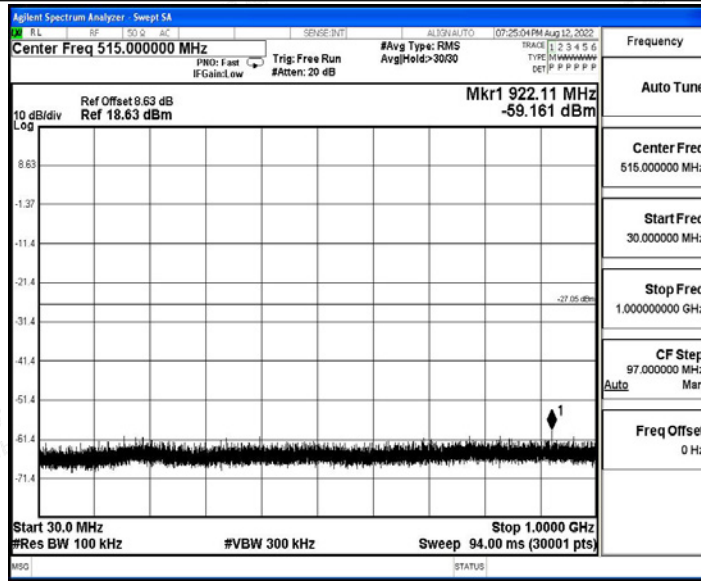


11N20SISO_Ant1_2437_0~Reference

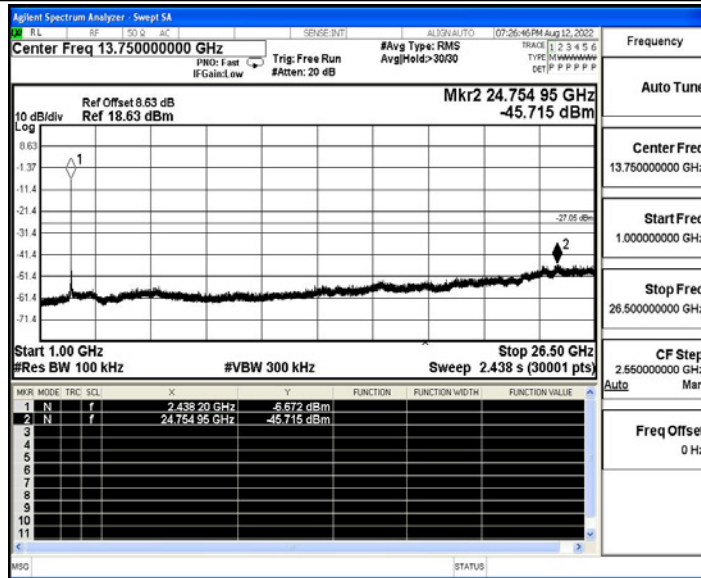


11N20SISO_Ant1_2437_30~1000



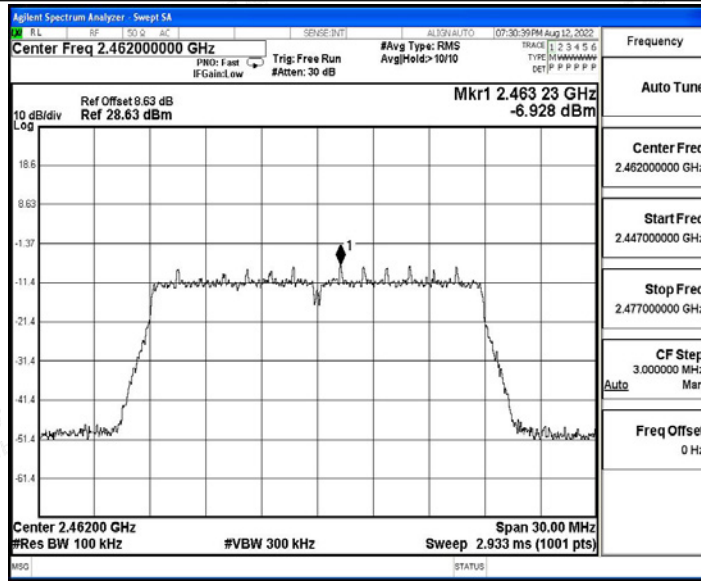


11N20SISO_Ant1_2437_1000~26500

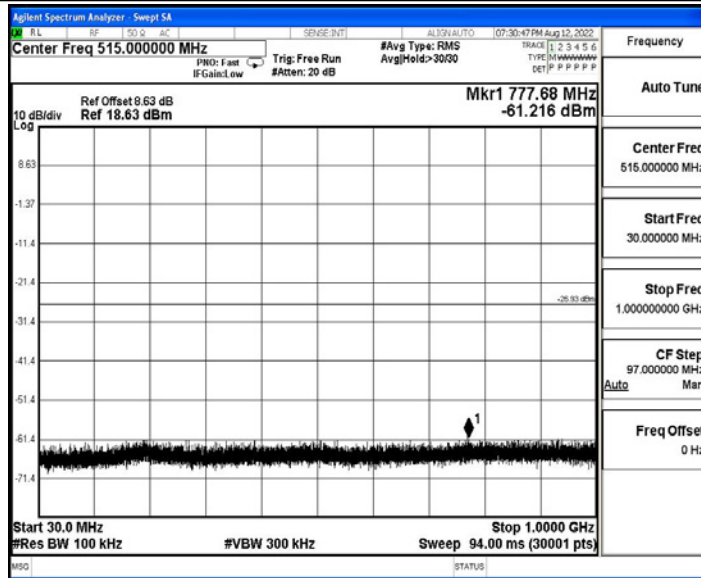


11N20SISO_Ant1_2462_0~Reference



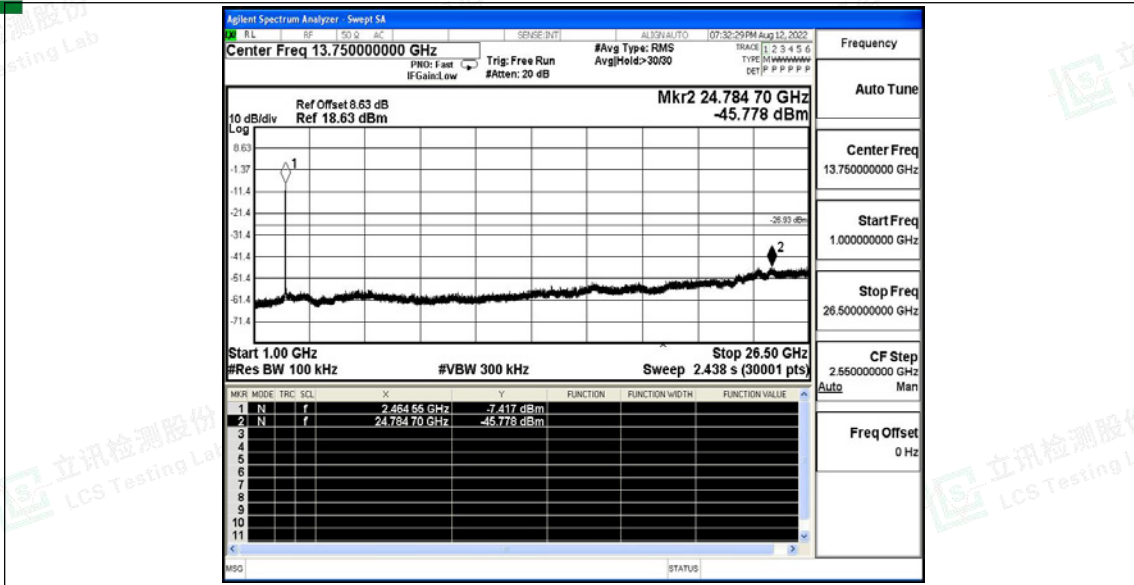


11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500







C.6 Duty Cycle

Test Result

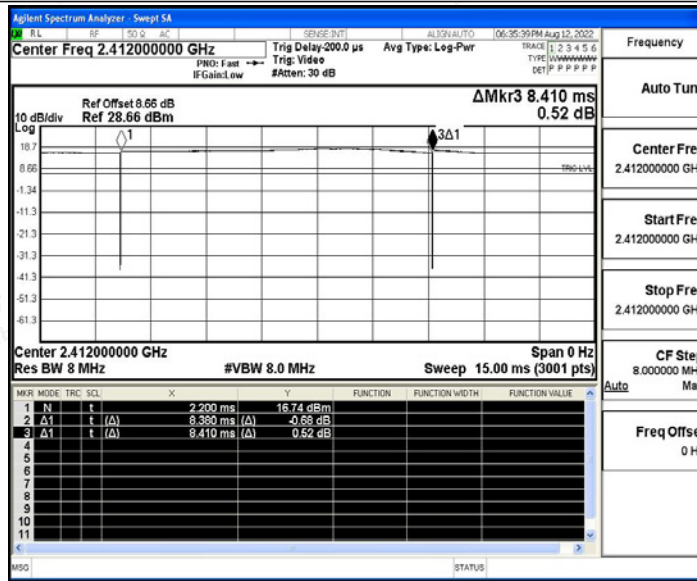
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T	Limit	Verdict
11B	Ant1	2412	8.38	8.41	99.64	0.12	---	---
		2437	8.38	8.41	99.64	0.12	---	---
		2462	8.38	8.41	99.64	0.12	---	---
11G	Ant1	2412	1.39	1.43	97.20	0.72	---	---
		2437	1.39	1.43	97.20	0.72	---	---
		2462	1.39	1.43	97.20	0.72	---	---
11N20SIS O	Ant1	2412	1.30	1.34	97.01	0.77	---	---
		2437	1.30	1.34	97.01	0.77	---	---
		2462	1.30	1.34	97.01	0.77	---	---



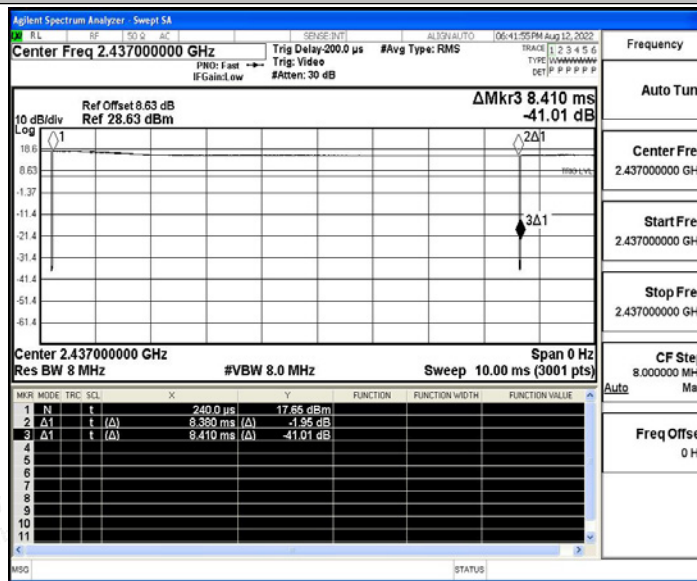


Test Graphs

11B_Ant1_2412

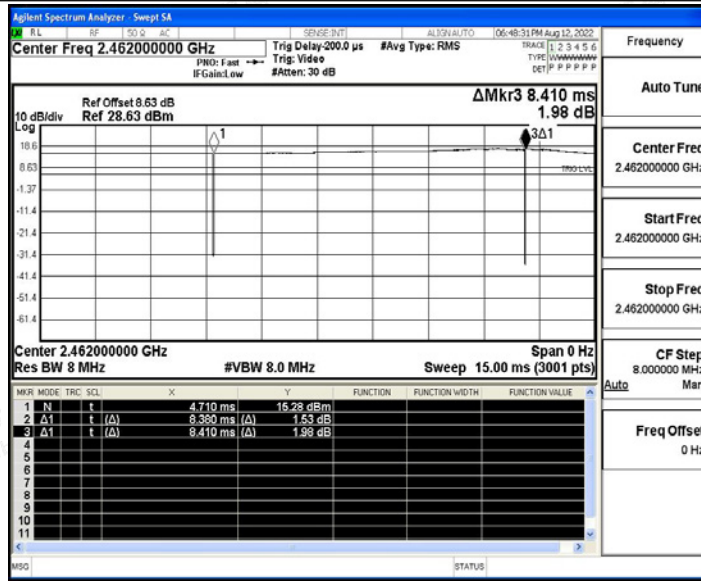


11B_Ant1_2437

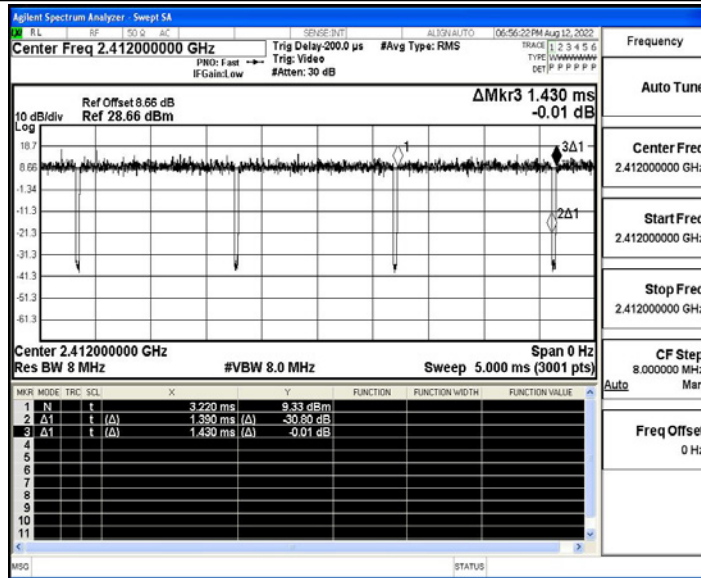


11B_Ant1_2462



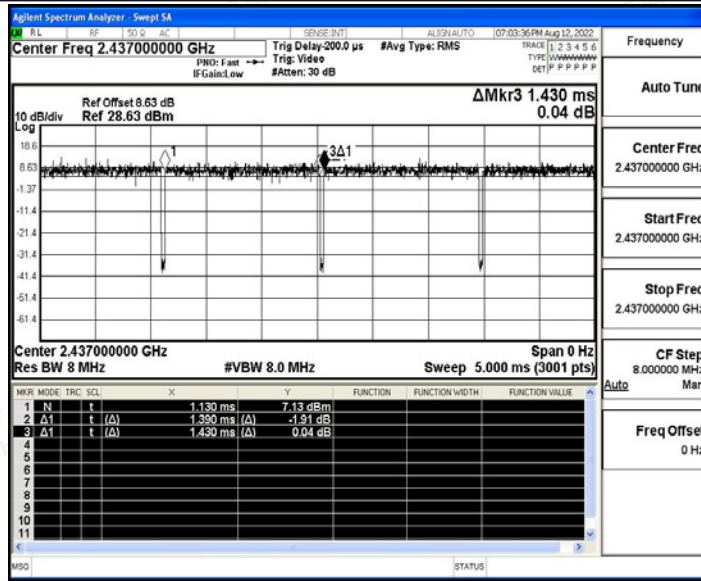


11G_Ant1_2412

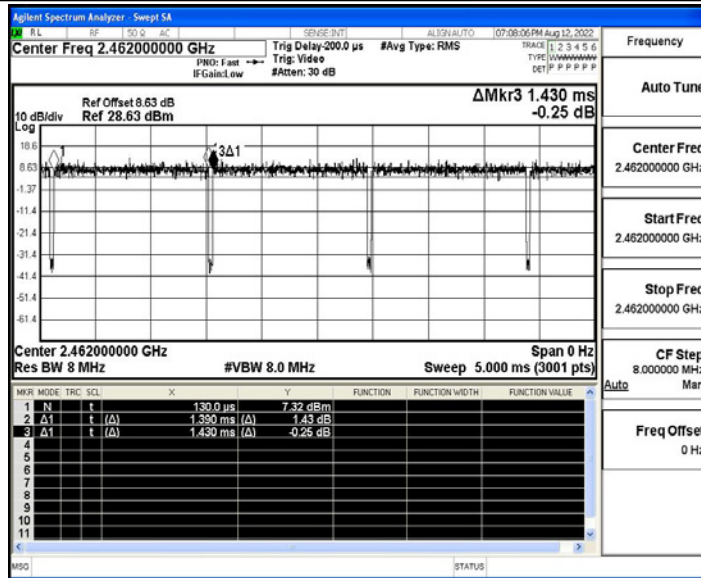


11G_Ant1_2437



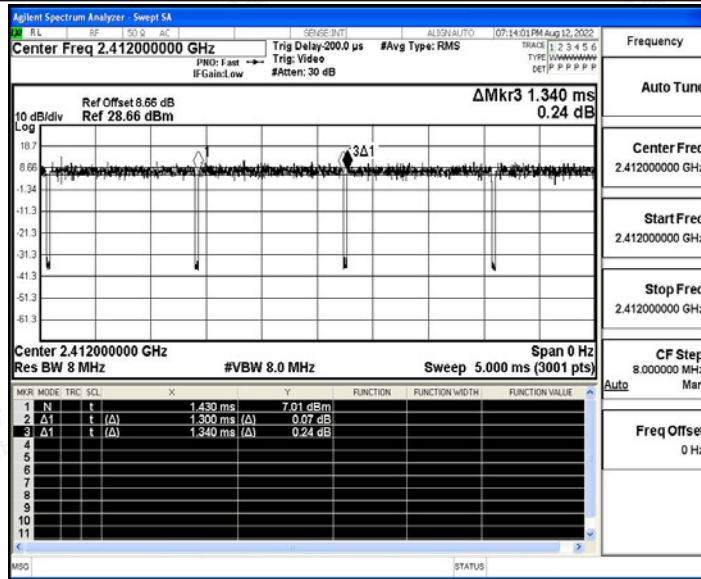


11G_Ant1_2462

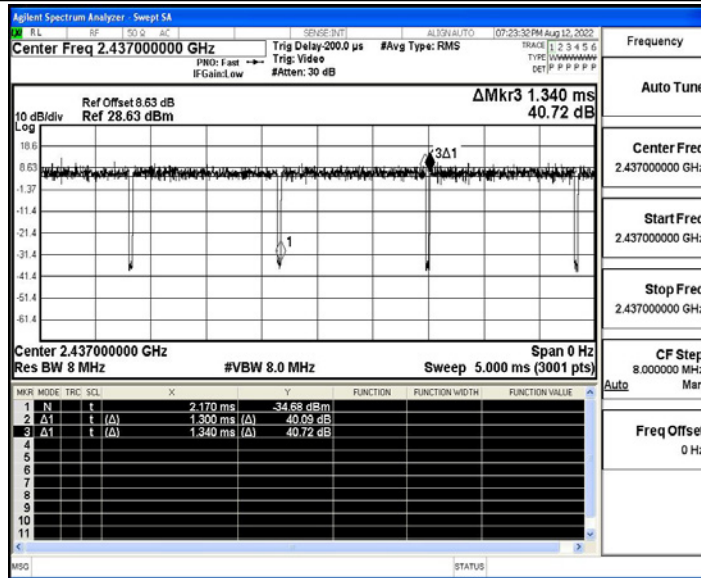


11N20SISO_Ant1_2412



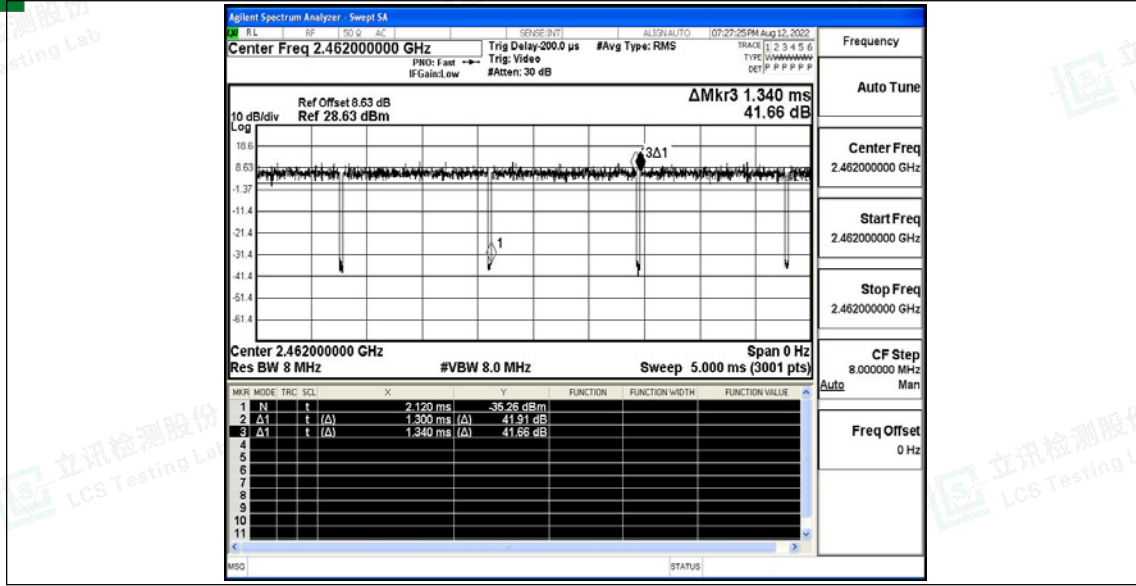


11N20SISO_Ant1_2437



11N20SISO_Ant1_2462







C.7 Emissions in Restricted Bands

Test Result

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	-58.45	≤-41.20	36.75	≤54	PASS
				AV	2389.960	-54.8	≤-41.20	40.40	≤54	PASS
				AV	2390.000	-54.8	≤-41.20	40.40	≤54	PASS
				Peak	2310.000	-47.95	≤-21.20	47.25	≤74	PASS
				Peak	2389.960	-44.32	≤-21.20	50.88	≤74	PASS
				Peak	2390.000	-44.32	≤-21.20	50.88	≤74	PASS
		High	2462	AV	2483.500	-54.26	≤-41.20	40.94	≤54	PASS
				AV	2483.560	-54.29	≤-41.20	40.91	≤54	PASS
				AV	2500.000	-56.87	≤-41.20	38.33	≤54	PASS
				Peak	2483.500	-44.4	≤-21.20	50.80	≤74	PASS
				Peak	2487.190	-43.68	≤-21.20	51.52	≤74	PASS
				Peak	2500.000	-46.45	≤-21.20	48.75	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-57.58	≤-41.20	37.62	≤54	PASS
				AV	2389.960	-52.14	≤-41.20	43.06	≤54	PASS
				AV	2390.000	-52.14	≤-41.20	43.06	≤54	PASS
				Peak	2310.000	-47.54	≤-21.20	47.66	≤74	PASS
				Peak	2389.960	-38.57	≤-21.20	56.63	≤74	PASS
				Peak	2390.000	-38.57	≤-21.20	56.63	≤74	PASS
		High	2462	AV	2483.500	-53.46	≤-41.20	41.74	≤54	PASS
				AV	2483.560	-53.41	≤-41.20	41.79	≤54	PASS
				AV	2500.000	-55.15	≤-41.20	40.05	≤54	PASS
				Peak	2483.500	-39.32	≤-21.20	55.88	≤74	PASS
				Peak	2483.780	-38.16	≤-21.20	57.04	≤74	PASS
				Peak	2500.000	-44.27	≤-21.20	50.93	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-57.78	≤-41.20	37.42	≤54	PASS
				AV	2389.700	-54.1	≤-41.20	41.10	≤54	PASS
				AV	2390.000	-54.2	≤-41.20	41.00	≤54	PASS
				Peak	2310.000	-47.73	≤-21.20	47.47	≤74	PASS
				Peak	2389.830	-40.34	≤-21.20	54.86	≤74	PASS
				Peak	2390.000	-41.41	≤-21.20	53.79	≤74	PASS
		High	2462	AV	2483.500	-54.05	≤-41.20	41.15	≤54	PASS
				AV	2483.560	-54.03	≤-41.20	41.17	≤54	PASS
				AV	2500.000	-55.5	≤-41.20	39.70	≤54	PASS
				Peak	2483.500	-42.45	≤-21.20	52.75	≤74	PASS
				Peak	2484.440	-40.94	≤-21.20	54.26	≤74	PASS



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 Scan code to check authenticity



			Peak	2500.000	-44.99	≤-21.20	50.21	≤74	PASS
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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.

