Appendix B

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Hunting Camera

Test Model: NDL-W10

Environmental Conditions

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

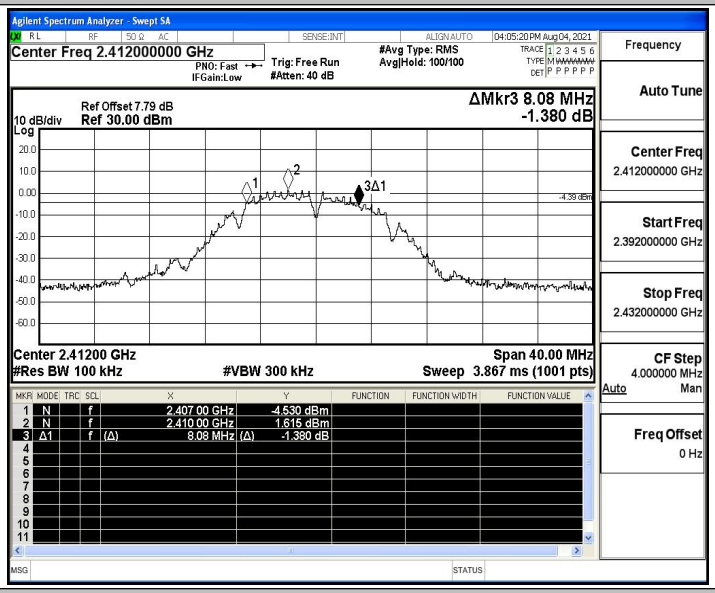
B.1 DTS Bandwidth

Test Result

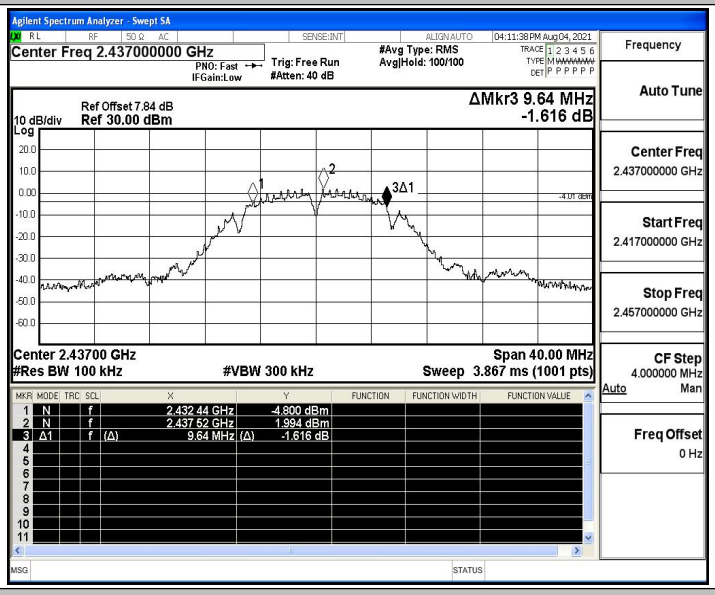
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.080	2407.000	2415.080	0.5	PASS
		2437	9.640	2432.440	2442.080	0.5	PASS
		2462	8.080	2457.440	2465.520	0.5	PASS
11G	Ant1	2412	11.280	2404.480	2415.760	0.5	PASS
		2437	14.560	2430.640	2445.200	0.5	PASS
		2462	10.920	2456.120	2467.040	0.5	PASS
11N20SISO	Ant1	2412	13.000	2404.080	2417.080	0.5	PASS
		2437	17.680	2428.200	2445.880	0.5	PASS
		2462	13.920	2454.400	2468.320	0.5	PASS
11N40SISO	Ant1	2422	20.640	2404.000	2424.640	0.5	PASS
		2437	34.640	2420.600	2455.240	0.5	PASS
		2452	21.520	2446.880	2468.400	0.5	PASS

Test Graphs

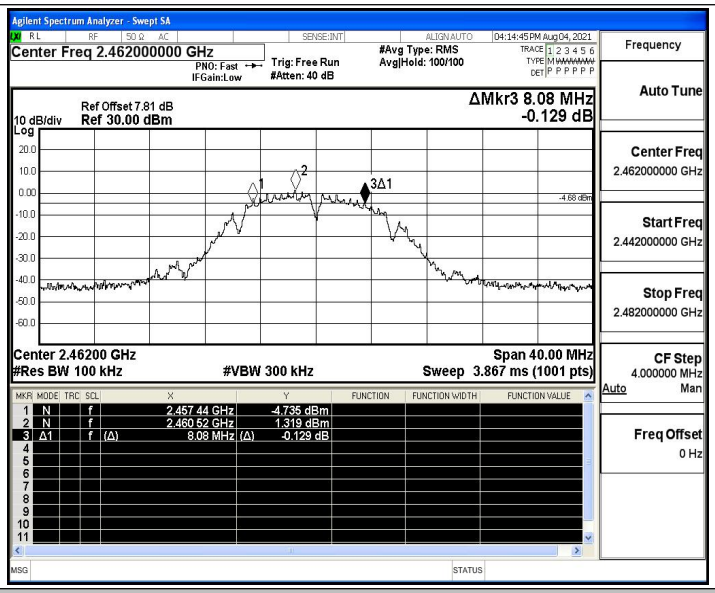
11B_Ant1_2412



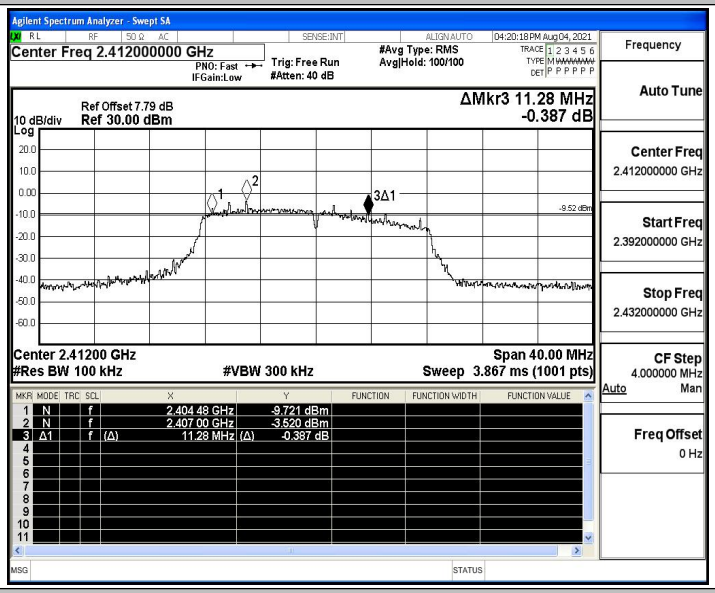
11B_Ant1_2437



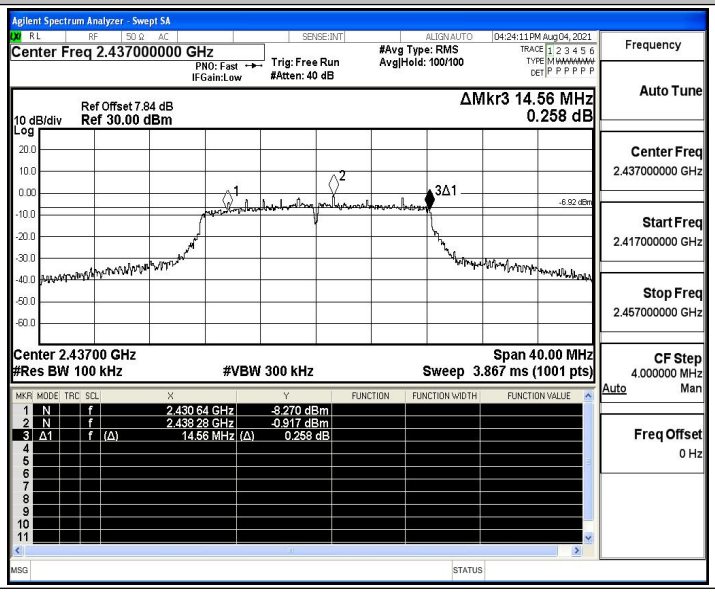
11B_Ant1_2462



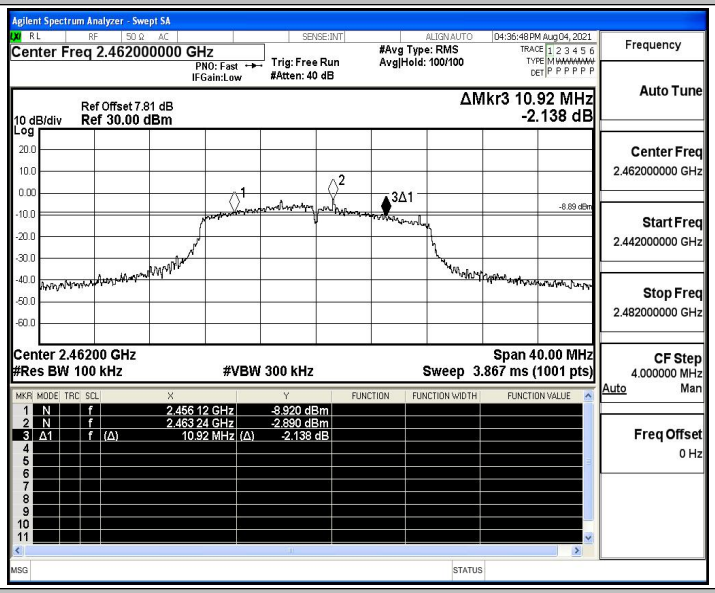
11G_Ant1_2412



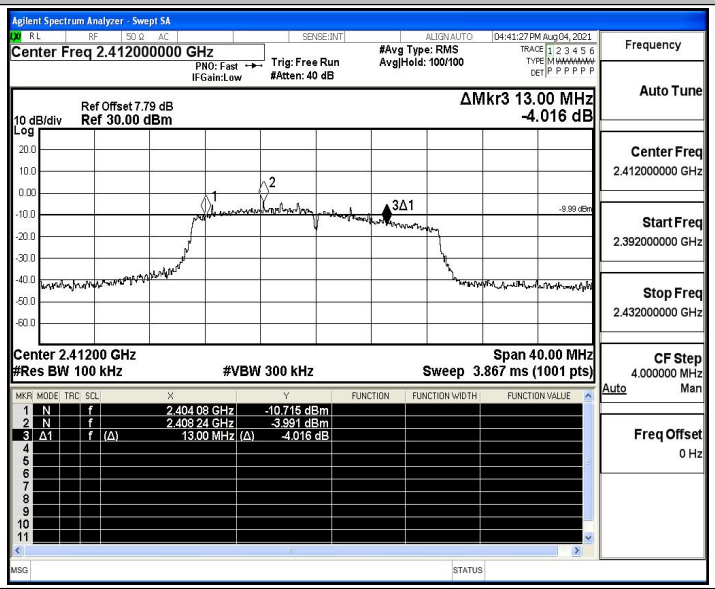
11G_Ant1_2437



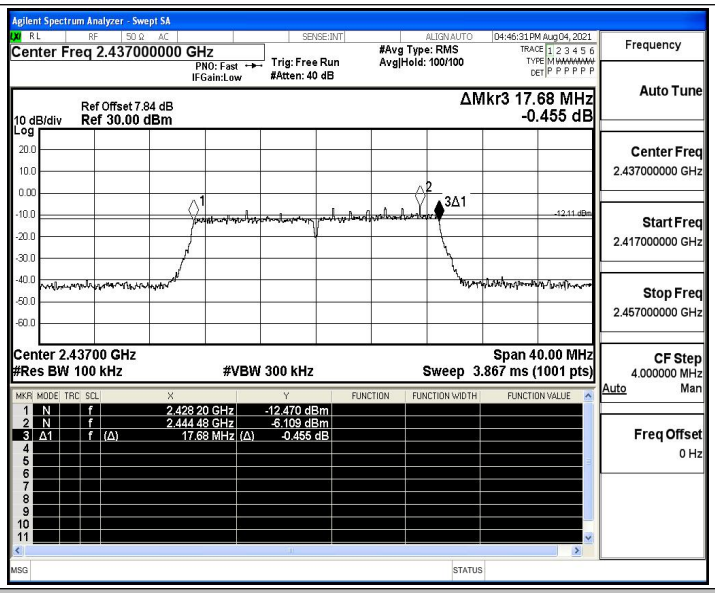
11G_Ant1_2462



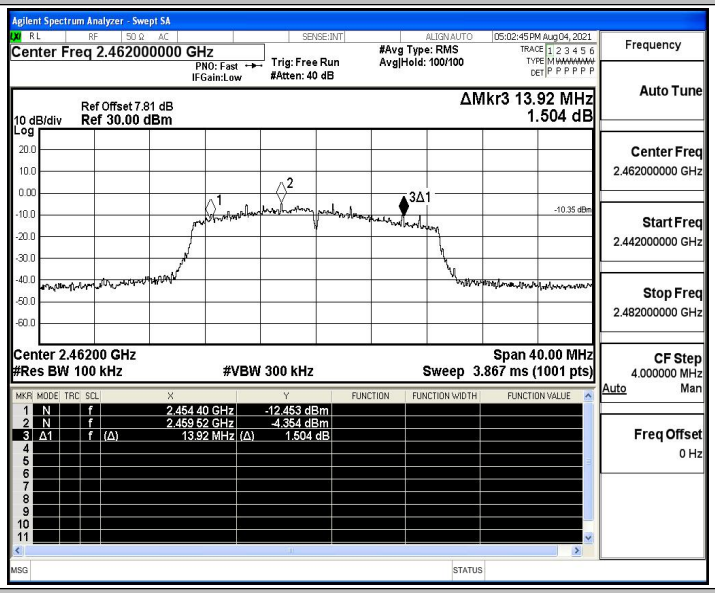
11N20SISO_Ant1_2412



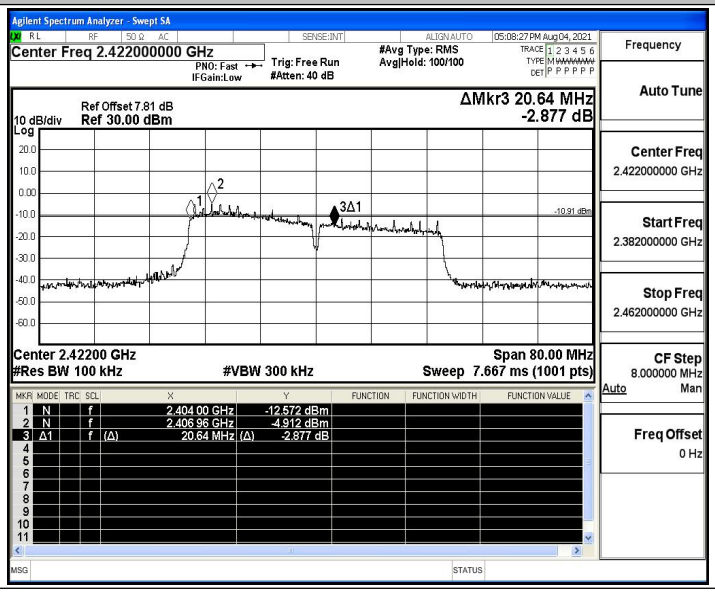
11N20SISO_Ant1_2437



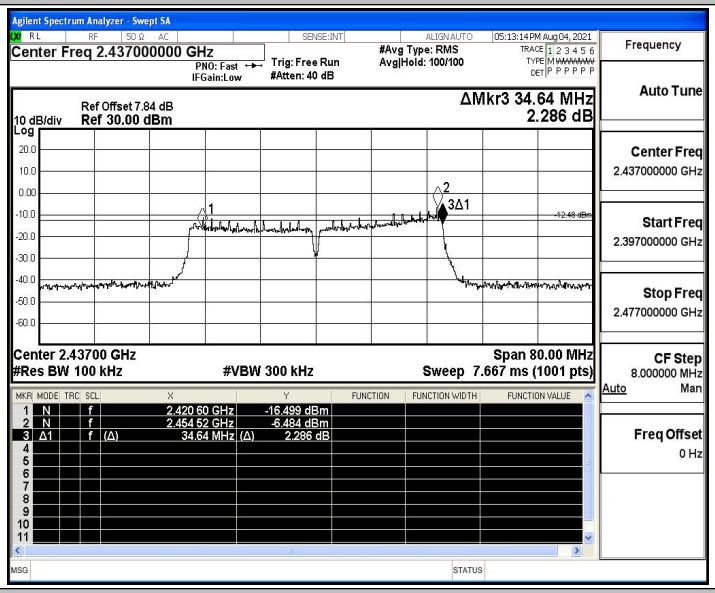
11N20SISO_Ant1_2462



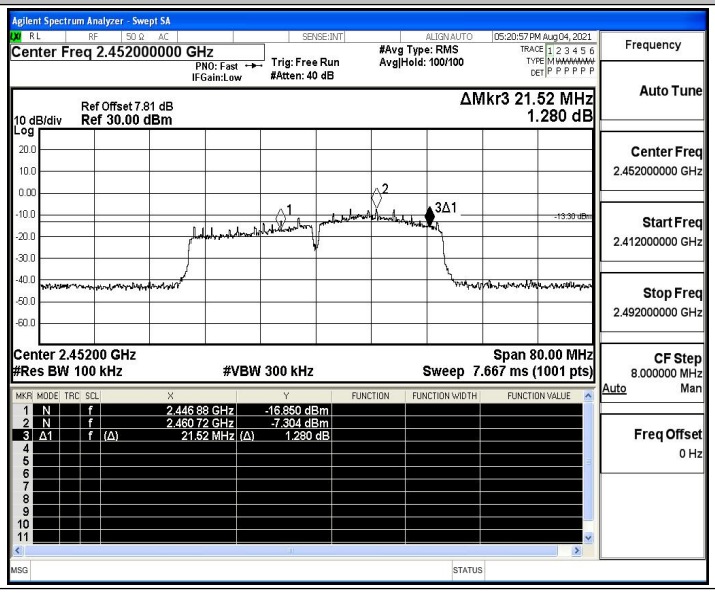
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



B.3 Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	8.38	≤30	PASS
		2437	8.29	≤30	PASS
		2462	8.24	≤30	PASS
11G	Ant1	2412	7.96	≤30	PASS
		2437	7.85	≤30	PASS
		2462	7.81	≤30	PASS
11N20SISO	Ant1	2412	7.63	≤30	PASS
		2437	7.57	≤30	PASS
		2462	7.52	≤30	PASS
11N40SISO	Ant1	2422	7.40	≤30	PASS
		2437	7.38	≤30	PASS
		2452	7.32	≤30	PASS

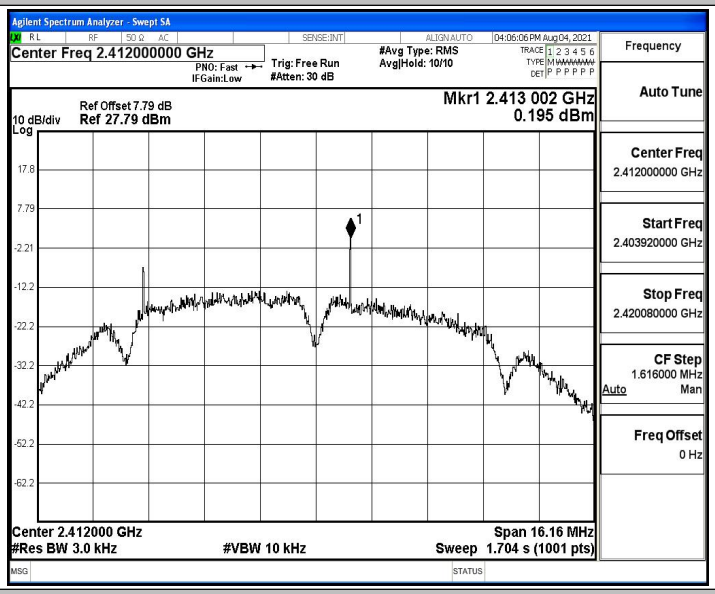
B.4 Maximum power spectral density

Test Result

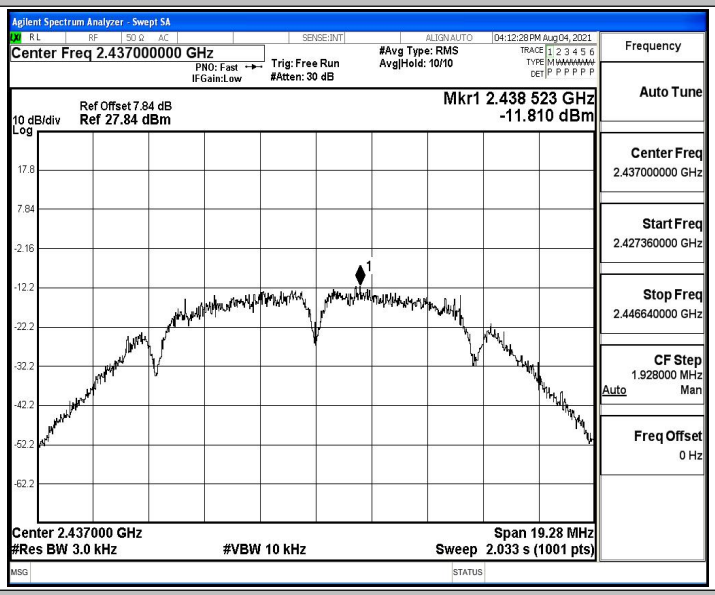
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	0.2	≤8	PASS
		2437	-11.81	≤8	PASS
		2462	-12.95	≤8	PASS
11G	Ant1	2412	-17.96	≤8	PASS
		2437	-14.98	≤8	PASS
		2462	-18.9	≤8	PASS
11N20SISO	Ant1	2412	-18.61	≤8	PASS
		2437	-20.74	≤8	PASS
		2462	-20.75	≤8	PASS
11N40SISO	Ant1	2422	-19.52	≤8	PASS
		2437	-21.07	≤8	PASS
		2452	-21.65	≤8	PASS

Test Graphs

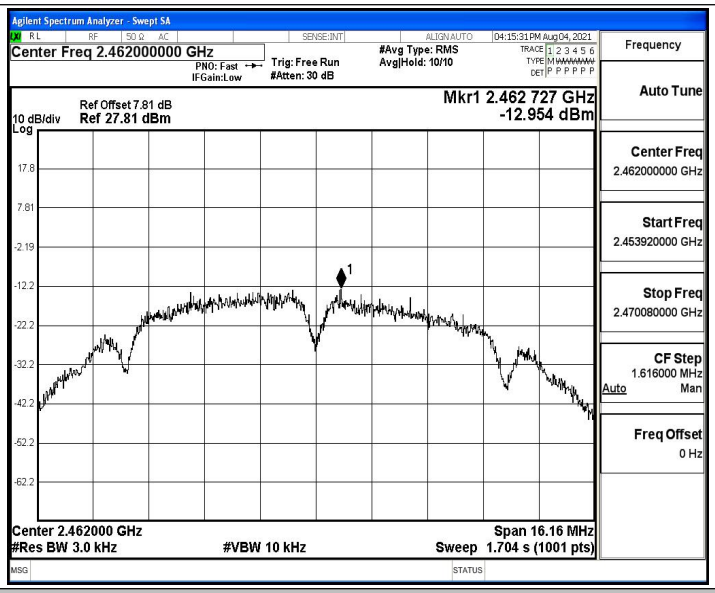
11B_Ant1_2412



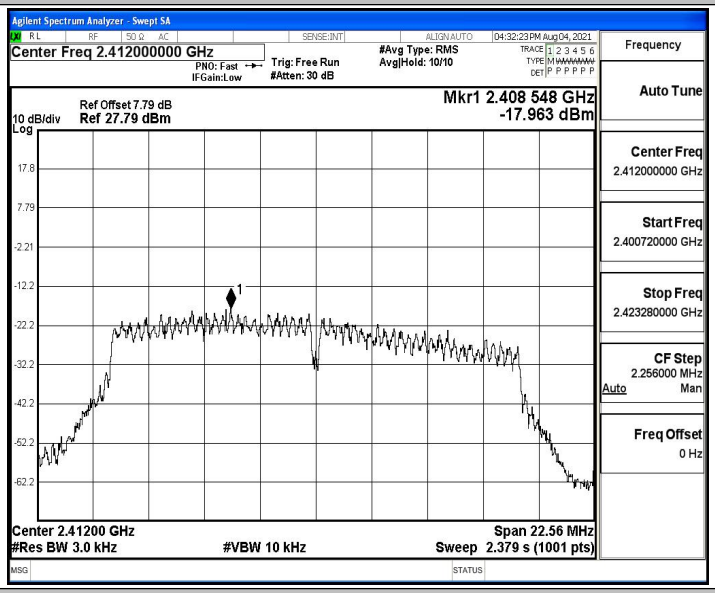
11B_Ant1_2437



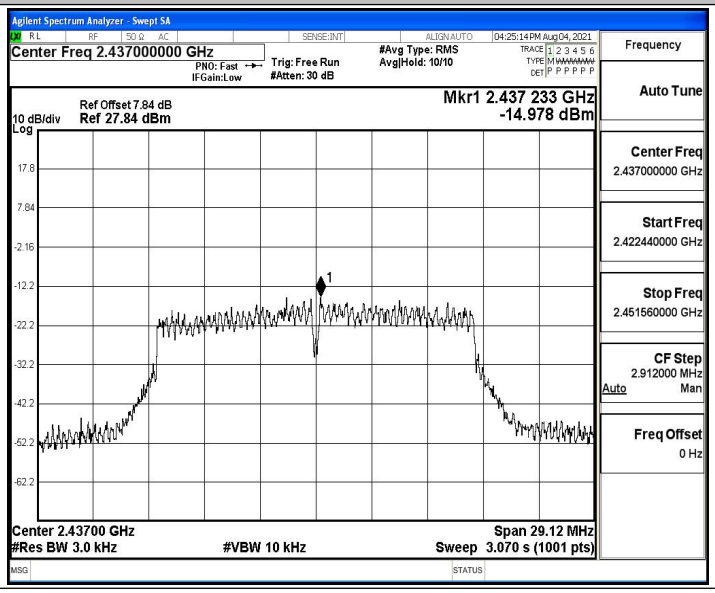
11B_Ant1_2462



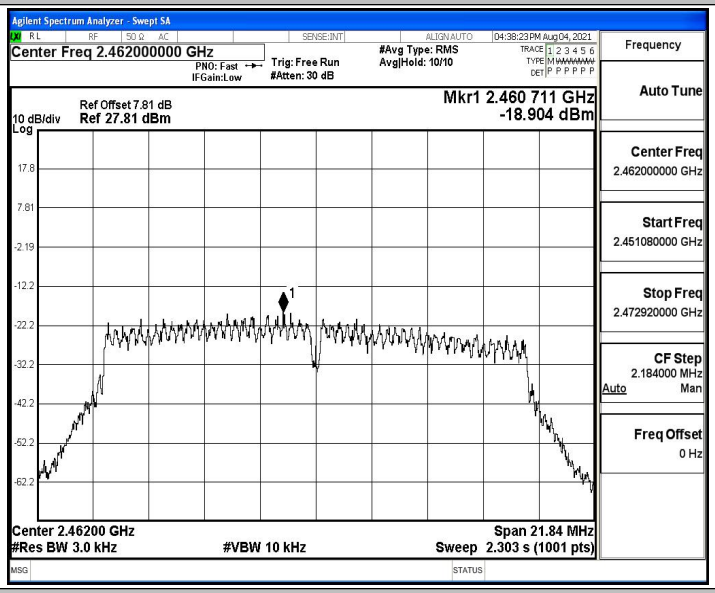
11G_Ant1_2412



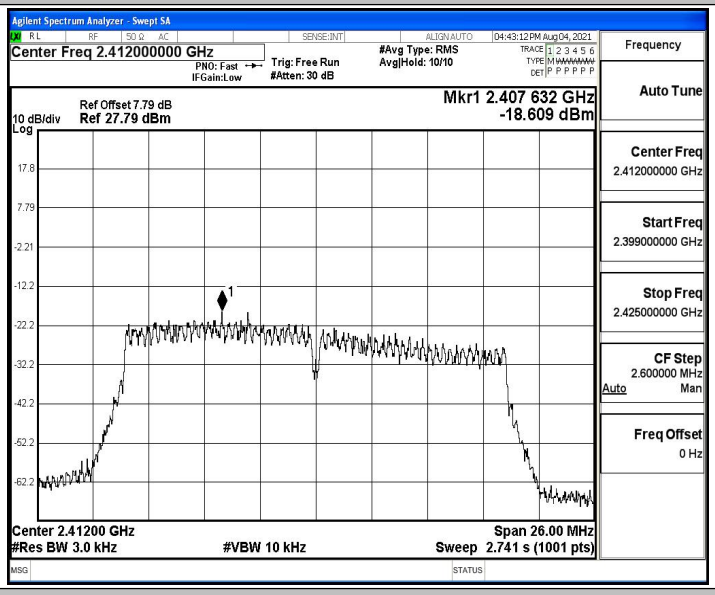
11G_Ant1_2437



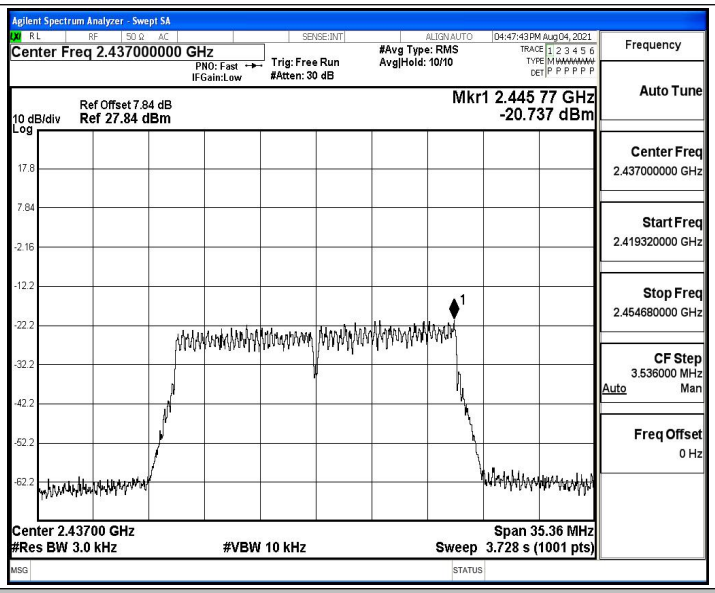
11G_Ant1_2462



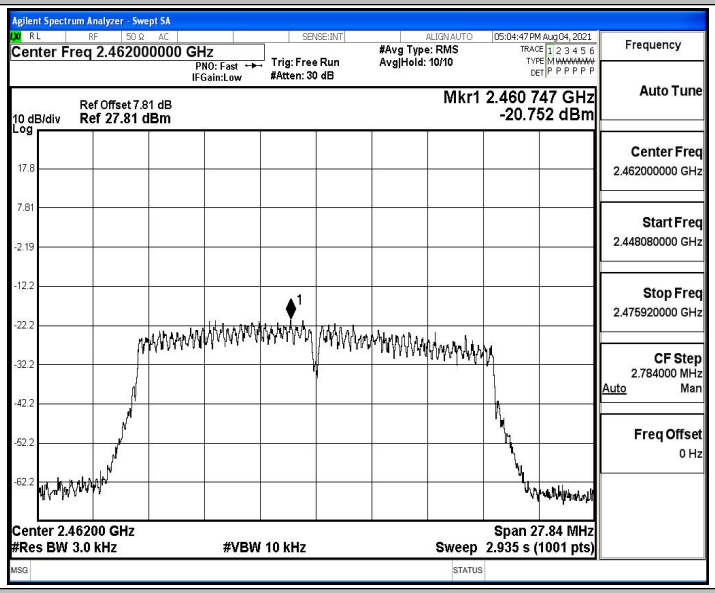
11N20SISO_Ant1_2412



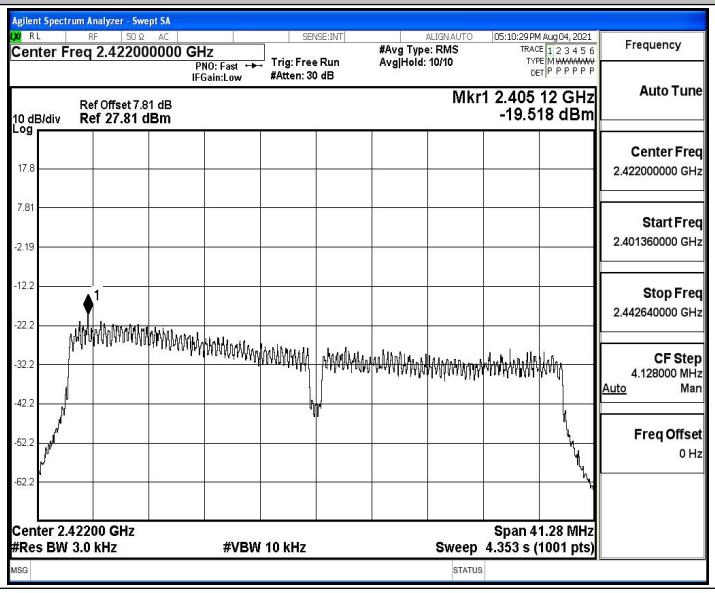
11N20SISO_Ant1_2437



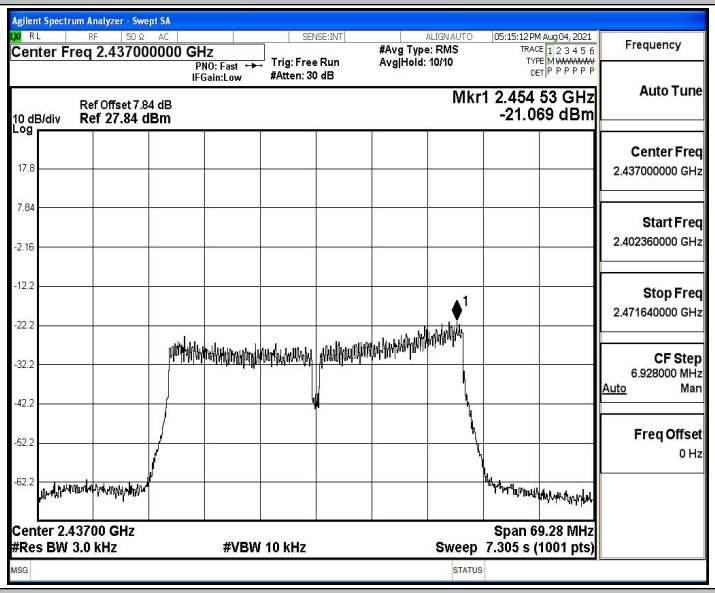
11N20SISO_Ant1_2462



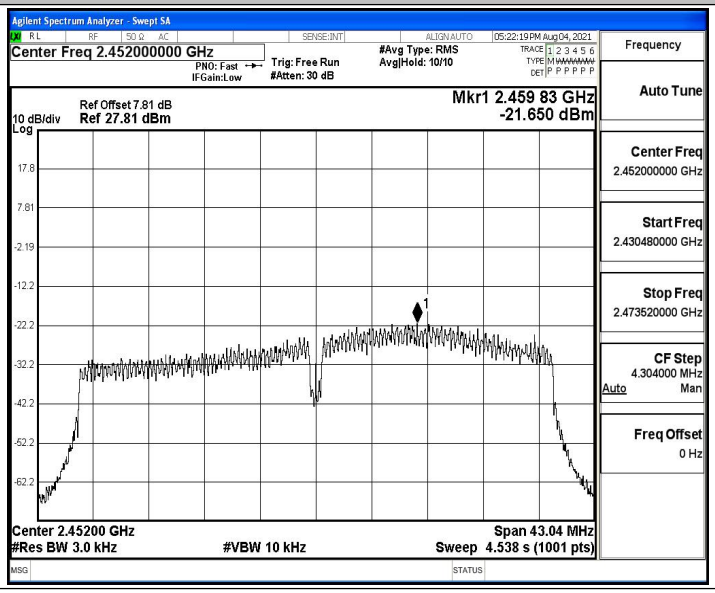
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



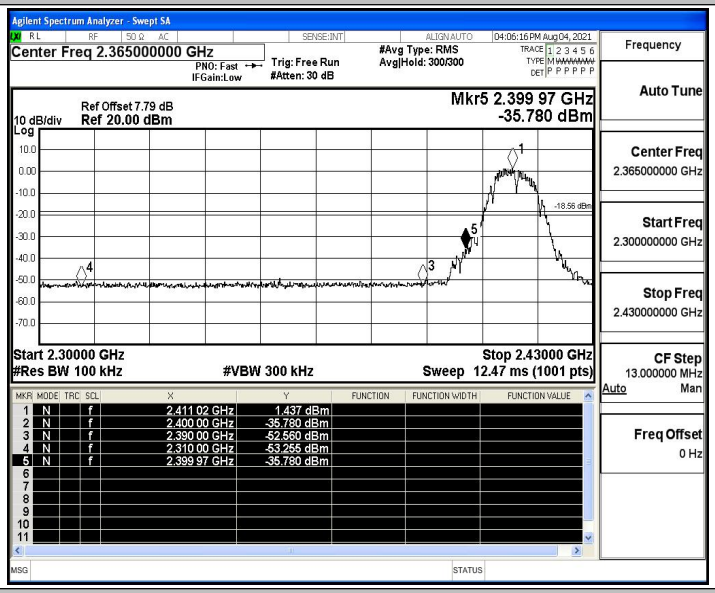
B.5 Band edge measurements

Test Result

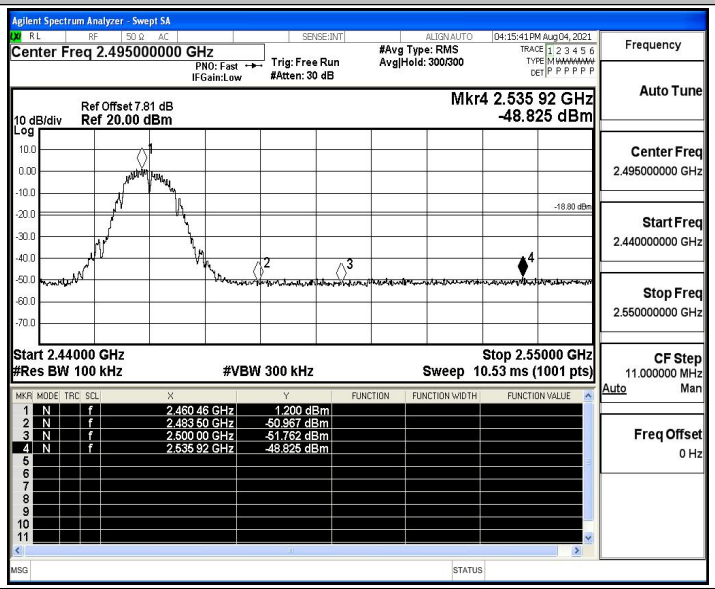
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	1.44	-35.78	≤-18.56	PASS
		High	2462	1.20	-48.83	≤-18.8	PASS
11G	Ant1	Low	2412	-4.07	-37.06	≤-24.07	PASS
		High	2462	-5.34	-48.78	≤-25.34	PASS
11N20SISO	Ant1	Low	2412	-5.42	-41.49	≤-25.42	PASS
		High	2462	-6.25	-49	≤-26.25	PASS
11N40SISO	Ant1	Low	2422	-6.17	-42.58	≤-26.17	PASS
		High	2452	-7.03	-46.19	≤-27.03	PASS

Test Graphs

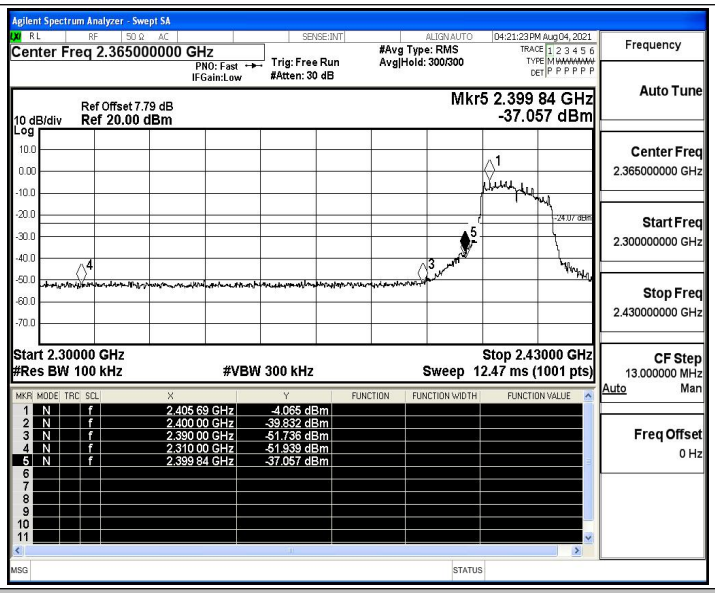
11B_Ant1_Low_2412



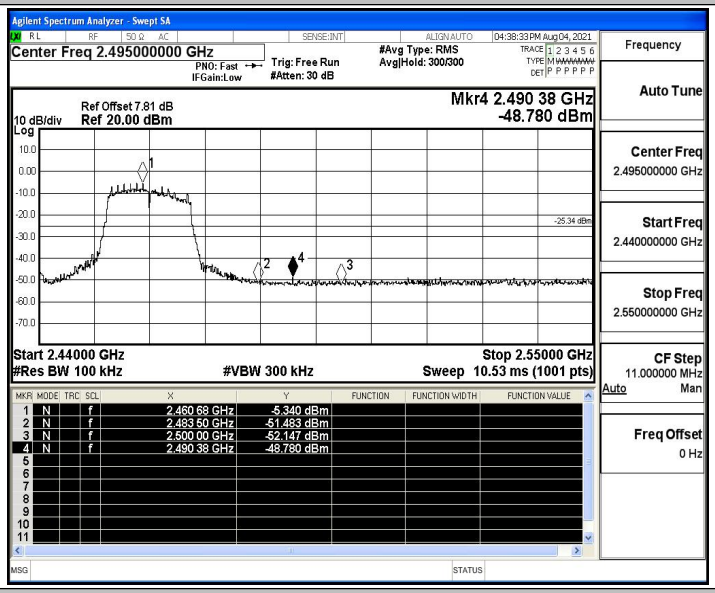
11B_Ant1_High_2462



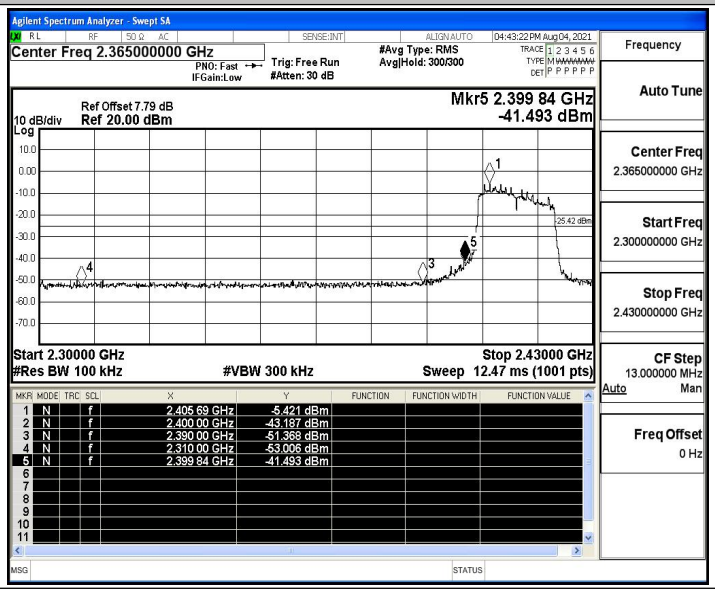
11G_Ant1_Low_2412



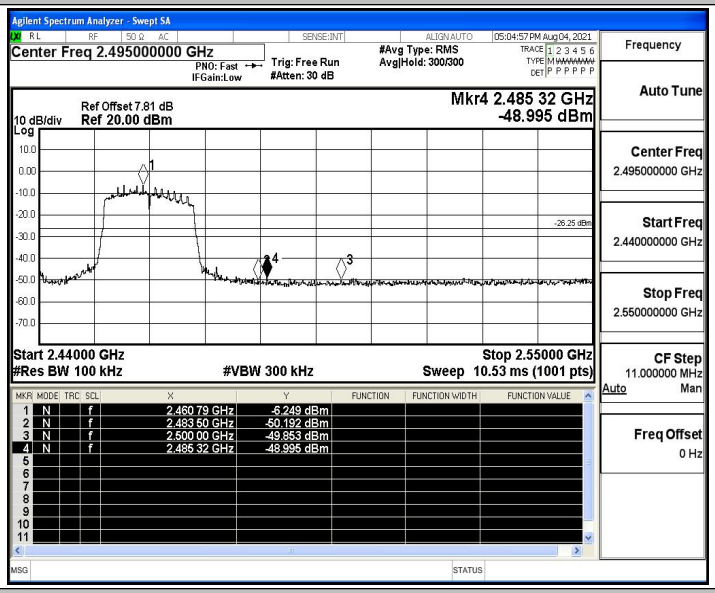
11G_Ant1_High_2462



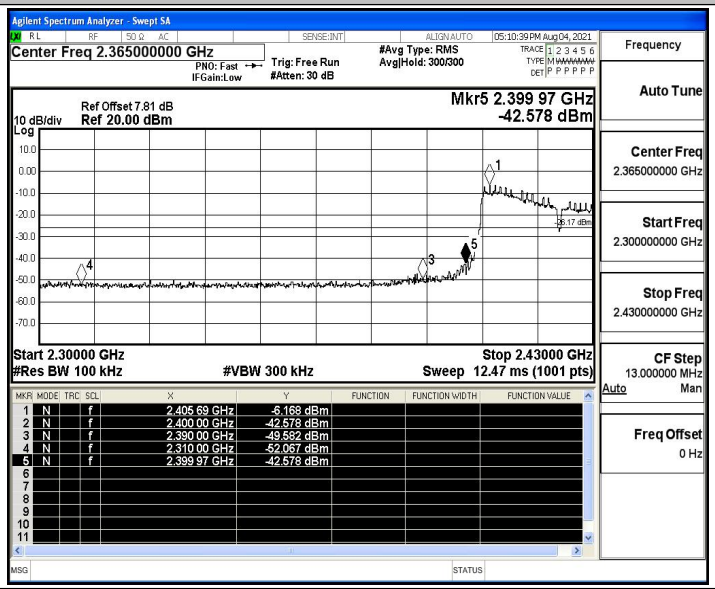
11N20SISO_Ant1_Low_2412



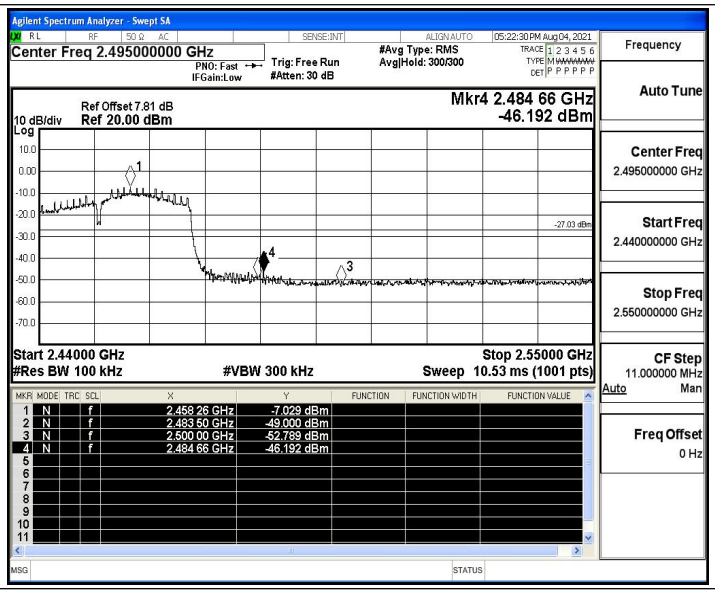
11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.495000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 300/300
05:22:30 PM Aug 04, 2021
Ref Offset 7.81 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr4 2.484 66 GHz
-46.192 dBm
-27.03 dBm
Start 2.44000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.55000 GHz
Sweep 10.53 ms (1001 pts)
1 N f 2.458 26 GHz -7.029 dBm
2 N f 2.483 50 GHz -49.000 dBm
3 N f 2.500 00 GHz -52.789 dBm
4 N f 2.484 66 GHz -46.192 dBm
Frequency
Auto Tune
Center Freq
2.495000000 GHz
Start Freq
2.440000000 GHz
Stop Freq
2.550000000 GHz
CF Step
11.000000 MHz
Auto
Man
Freq Offset
0 Hz

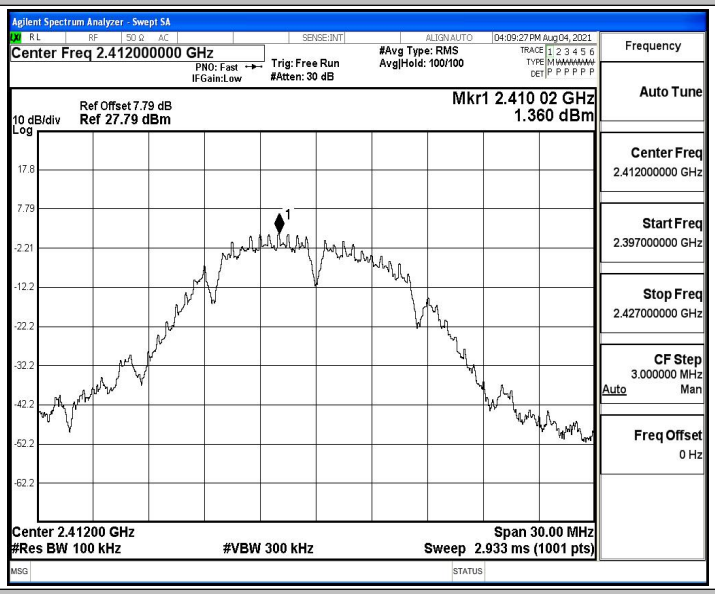
B.6 Conducted Spurious Emission

Test Result

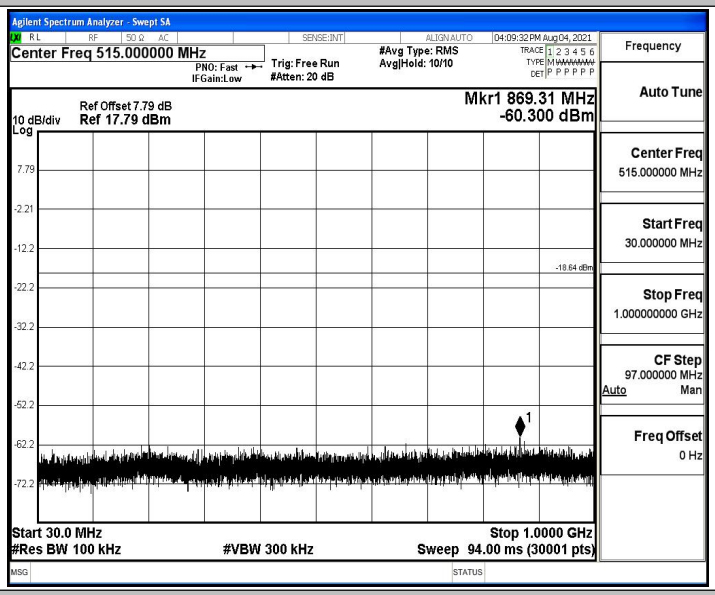
TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	1.36	1.36	---	PASS
			30~1000	1.36	-60.3	≤-18.64	PASS
			1000~26500	1.36	-46.93	≤-18.64	PASS
		2437	Reference	2.11	2.11	---	PASS
			30~1000	2.11	-61.56	≤-17.9	PASS
			1000~26500	2.11	-47.05	≤-17.9	PASS
		2462	Reference	0.39	0.39	---	PASS
			30~1000	0.39	-61.62	≤-19.62	PASS
			1000~26500	0.39	-46.87	≤-19.62	PASS
11G	Ant1	2412	Reference	-4.06	-4.06	---	PASS
			30~1000	-4.06	-61.09	≤-24.06	PASS
			1000~26500	-4.06	-47.25	≤-24.06	PASS
		2437	Reference	-1.59	-1.59	---	PASS
			30~1000	-1.59	-61.84	≤-21.59	PASS
			1000~26500	-1.59	-47.61	≤-21.59	PASS
		2462	Reference	-5.48	-5.48	---	PASS
			30~1000	-5.48	-61.67	≤-25.48	PASS
			1000~26500	-5.48	-47.48	≤-25.48	PASS
11N20SISO	Ant1	2412	Reference	-5.23	-5.23	---	PASS
			30~1000	-5.23	-62.12	≤-25.23	PASS
			1000~26500	-5.23	-47.29	≤-25.23	PASS
		2437	Reference	-6.88	-6.88	---	PASS
			30~1000	-6.88	-61.99	≤-26.88	PASS
			1000~26500	-6.88	-46.18	≤-26.88	PASS
		2462	Reference	-6.72	-6.72	---	PASS
			30~1000	-6.72	-61.54	≤-26.72	PASS
			1000~26500	-6.72	-47.33	≤-26.72	PASS
11N40SISO	Ant1	2422	Reference	-7.05	-7.05	---	PASS
			30~1000	-7.05	-60.93	≤-27.05	PASS
			1000~26500	-7.05	-46.72	≤-27.05	PASS
		2437	Reference	-6.48	-6.48	---	PASS
			30~1000	-6.48	-61.64	≤-26.48	PASS
			1000~26500	-6.48	-46.67	≤-26.48	PASS
		2452	Reference	-7.32	-7.32	---	PASS
			30~1000	-7.32	-61.94	≤-27.32	PASS
			1000~26500	-7.32	-47.45	≤-27.32	PASS

Test Graphs

11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500