Appendix K: Test Data for E-UTRA Band 13

Product Name: SFO1

Test Model: SFO1

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng

K.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	24.01	PASS
Band13	5MHz	16QAM	23205	1RB#0	23.00	PASS
Band13	5MHz	QPSK	23205	1RB#12	24.07	PASS
Band13	5MHz	16QAM	23205	1RB#12	23.12	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.97	PASS
Band13	5MHz	16QAM	23205	1RB#24	23.08	PASS
Band13	5MHz	QPSK	23205	12RB#0	23.13	PASS
Band13	5MHz	16QAM	23205	12RB#0	22.36	PASS
Band13	5MHz	QPSK	23205	12RB#6	23.08	PASS
Band13	5MHz	16QAM	23205	12RB#6	22.48	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.99	PASS
Band13	5MHz	16QAM	23205	12RB#13	22.45	PASS
Band13	5MHz	QPSK	23205	25RB#0	23.10	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.33	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.74	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.89	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.71	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.94	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.53	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.81	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.99	PASS
Band13	5MHz	16QAM	23230	12RB#0	22.21	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.96	PASS
Band13	5MHz	16QAM	23230	12RB#6	22.29	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.96	PASS
Band13	5MHz	16QAM	23230	12RB#13	22.17	PASS
Band13	5MHz	QPSK	23230	25RB#0	23.02	PASS
Band13	5MHz	16QAM	23230	25RB#0	22.36	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.84	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.58	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.70	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.41	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.51	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.28	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.86	PASS
Band13	5MHz	16QAM	23255	12RB#0	22.26	PASS

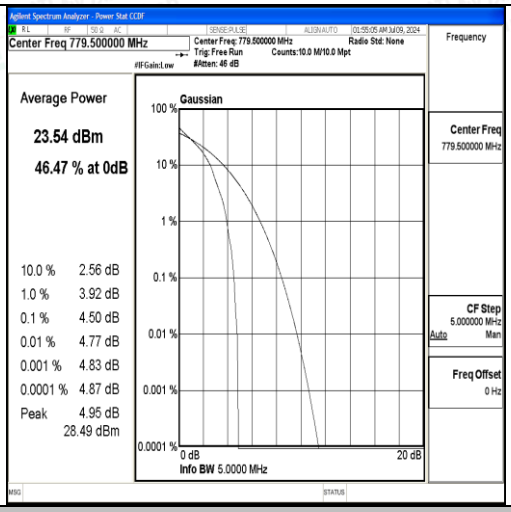
Band13	5MHz	QPSK	23255	12RB#6	22.89	PASS
Band13	5MHz	16QAM	23255	12RB#6	22.26	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.85	PASS
Band13	5MHz	16QAM	23255	12RB#13	22.15	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.88	PASS
Band13	5MHz	16QAM	23255	25RB#0	22.20	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.28	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.81	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.37	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.64	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.09	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.45	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.57	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.81	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.66	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.93	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.30	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.77	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.51	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.83	PASS

K.2 Peak-to-Average Ratio(CCDF)

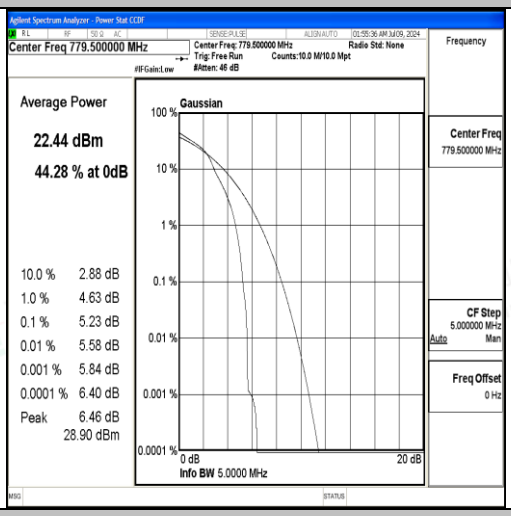
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	4.50	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.23	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.50	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.13	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	4.78	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.35	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.52	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.18	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.73	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.29	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.50	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.14	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	4.52	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	5.19	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.49	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.16	13	PASS

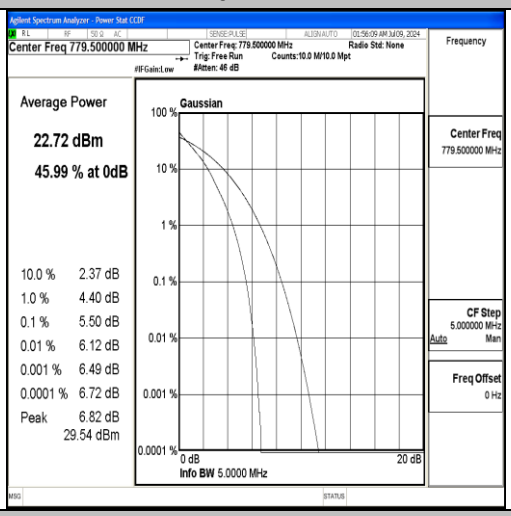
Test Graphs



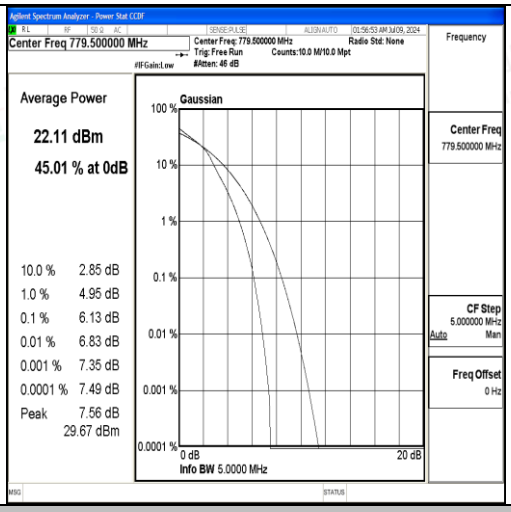
Band13-5MHz-QPSK-23205-1RB#0-PASS



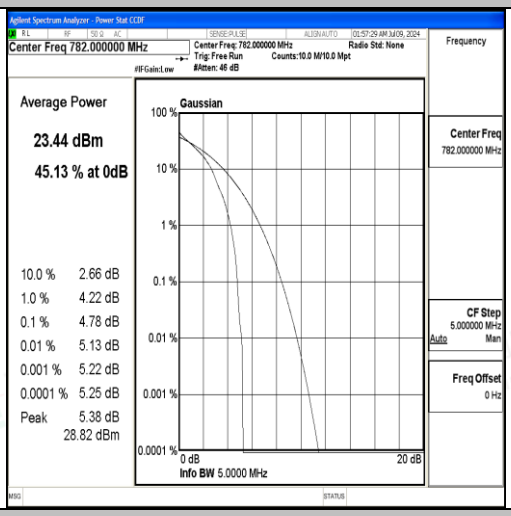
Band13-5MHz-16QAM-23205-1RB#0-PASS



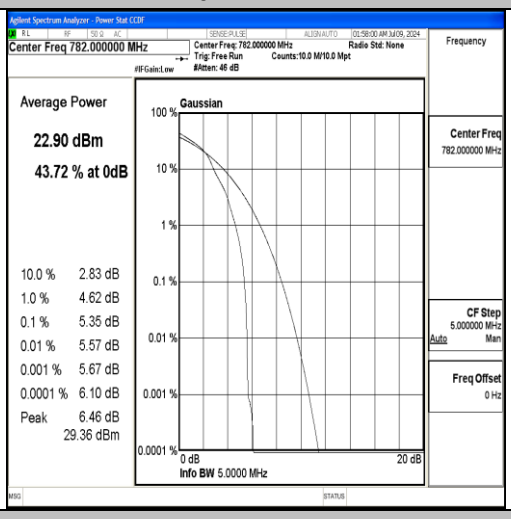
Band13-5MHz-QPSK-23205-25RB#0-PASS



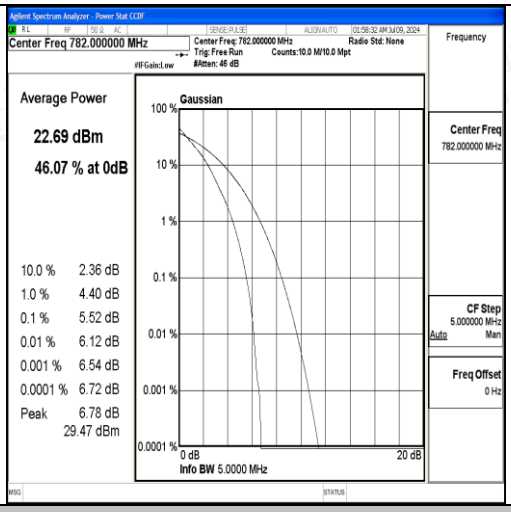
Band13-5MHz-16QAM-23205-25RB#0-PASS



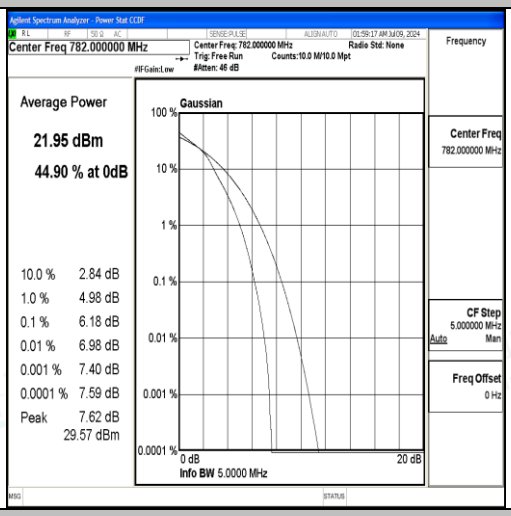
Band13-5MHz-QPSK-23230-1RB#0-PASS



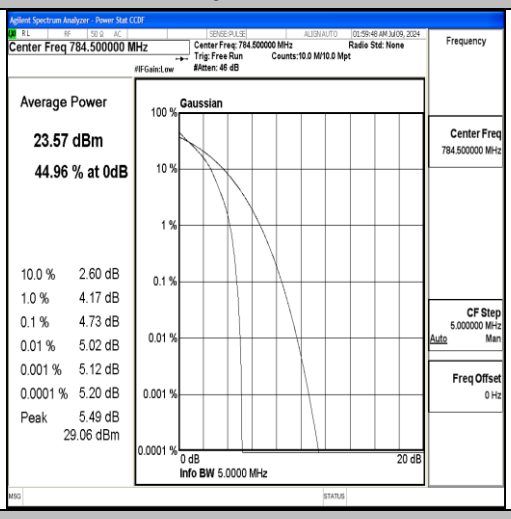
Band13-5MHz-16QAM-23230-1RB#0-PASS



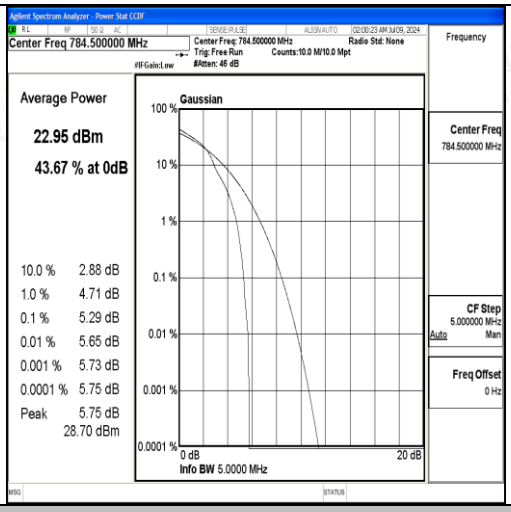
Band13-5MHz-QPSK-23230-25RB#0-PASS



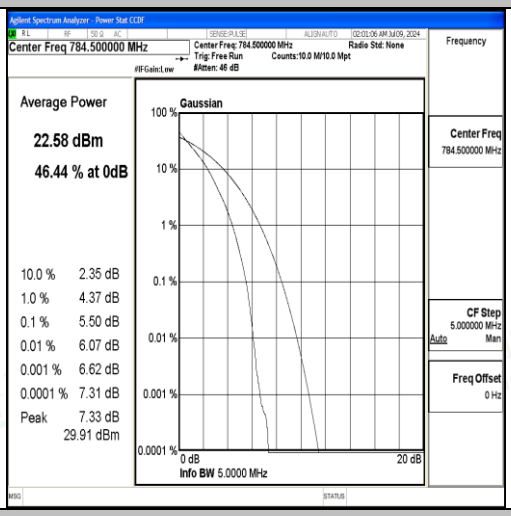
Band13-5MHz-16QAM-23230-25RB#0-PASS



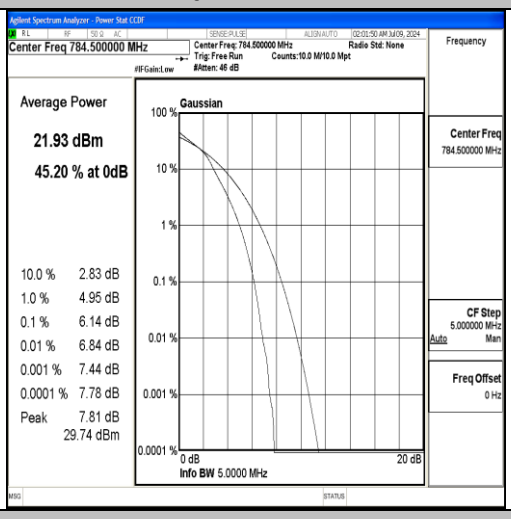
Band13-5MHz-QPSK-23255-1RB#0-PASS



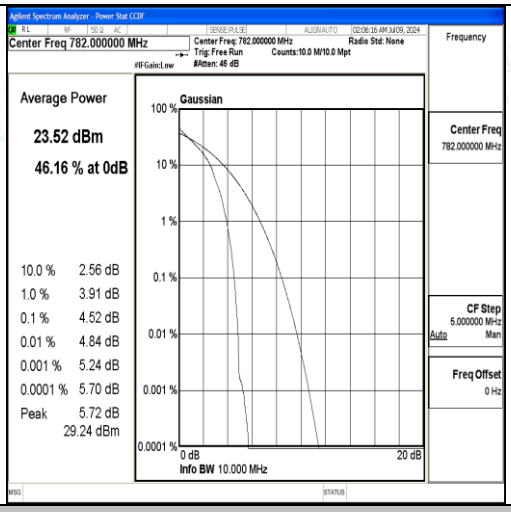
Band13-5MHz-16QAM-23255-1RB#0-PASS



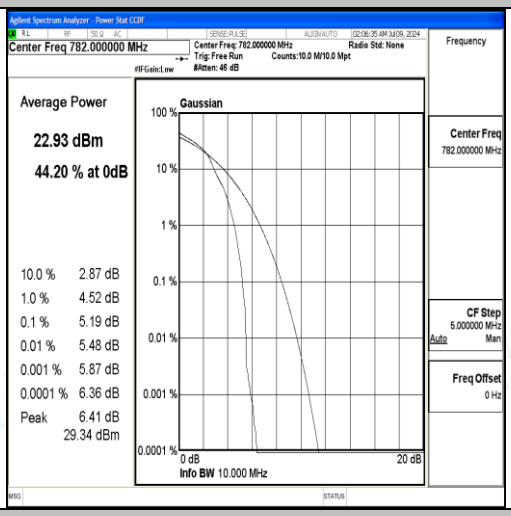
Band13-5MHz-QPSK-23255-25RB#0-PASS



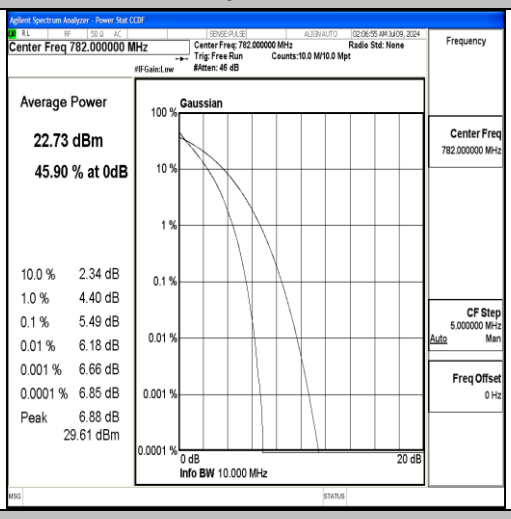
Band13-5MHz-16QAM-23255-25RB#0-PASS



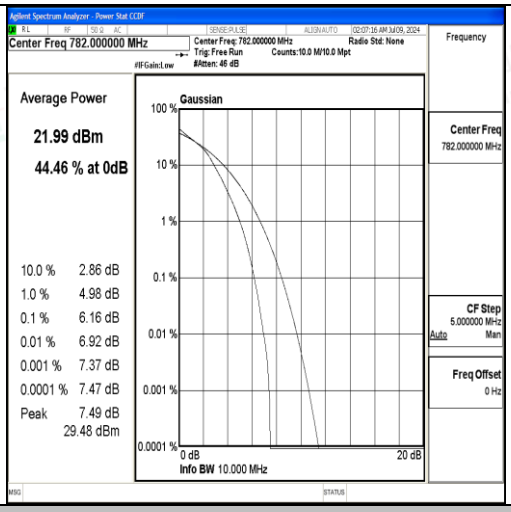
Band13-10MHz-QPSK-23230-1RB#0-PASS



Band13-10MHz-16QAM-23230-1RB#0-PASS



Band13-10MHz-QPSK-23230-50RB#0-PASS



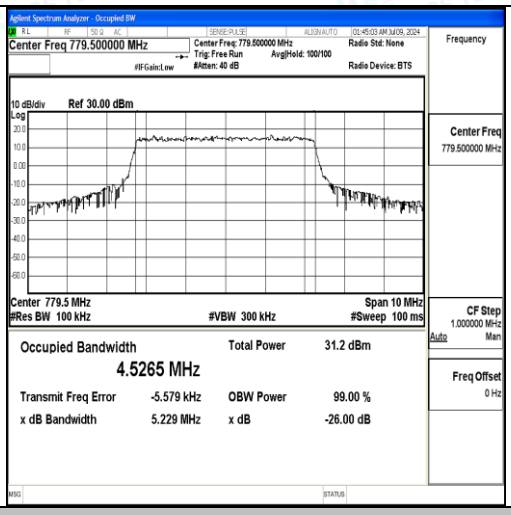
Band13-10MHz-16QAM-23230-50RB#0-PASS

K.3 26dB Bandwidth and Occupied Bandwidth

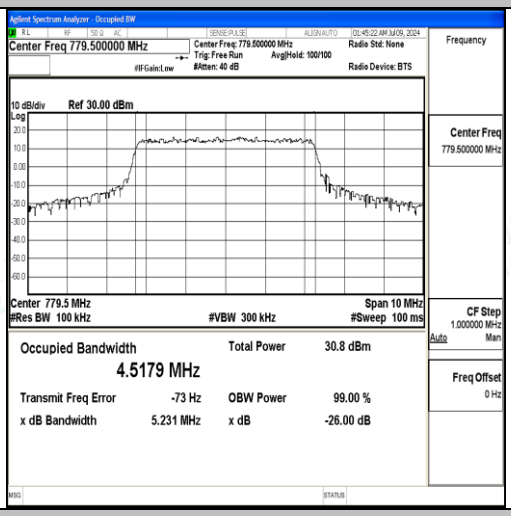
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5265	5.229	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5179	5.231	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5168	5.431	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5290	5.357	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5144	5.136	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5512	5.357	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9929	10.09	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9879	10.18	PASS

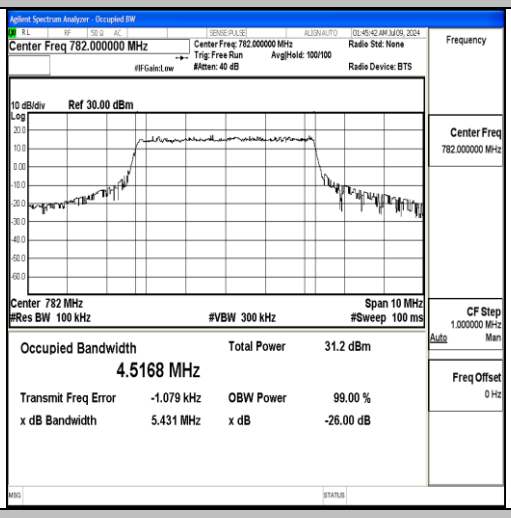
Test Graphs



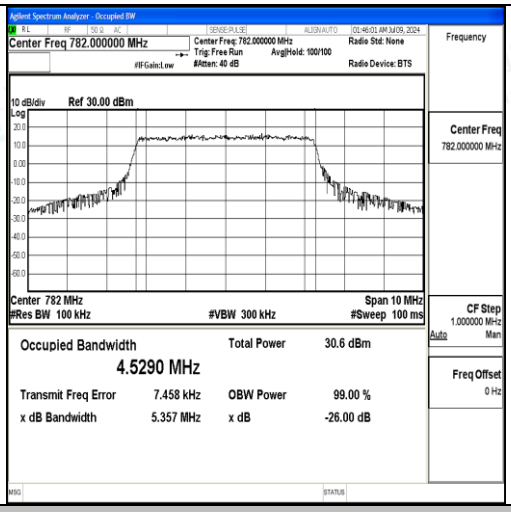
Band13-5MHz-QPSK-23205-25RB#0-PASS



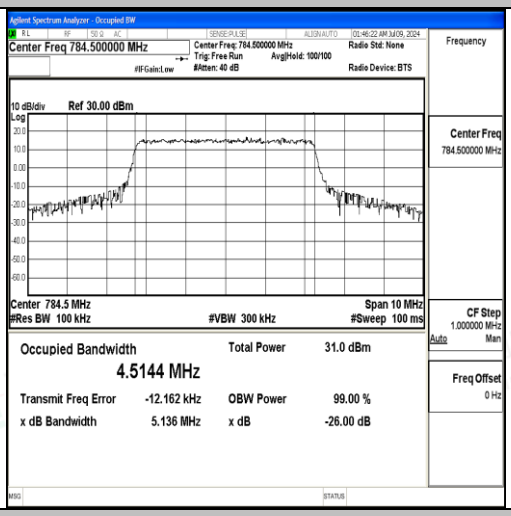
Band13-5MHz-16QAM-23205-25RB#0-PASS



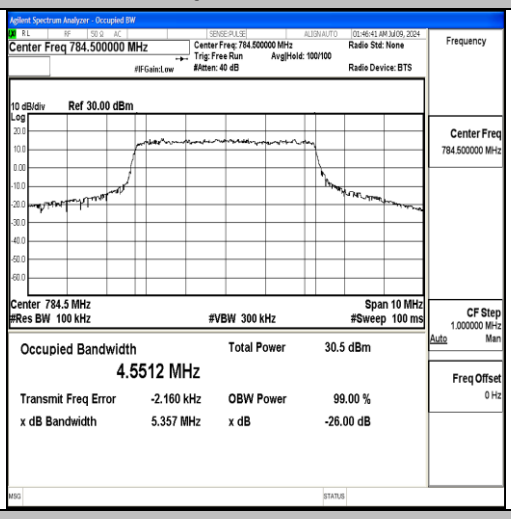
Band13-5MHz-QPSK-23230-25RB#0-PASS



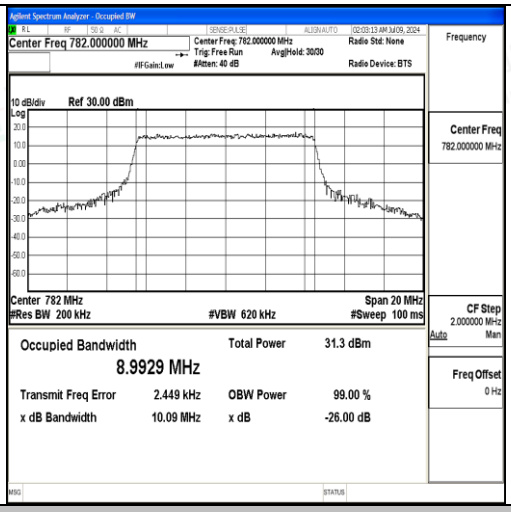
Band13-5MHz-16QAM-23230-25RB#0-PASS



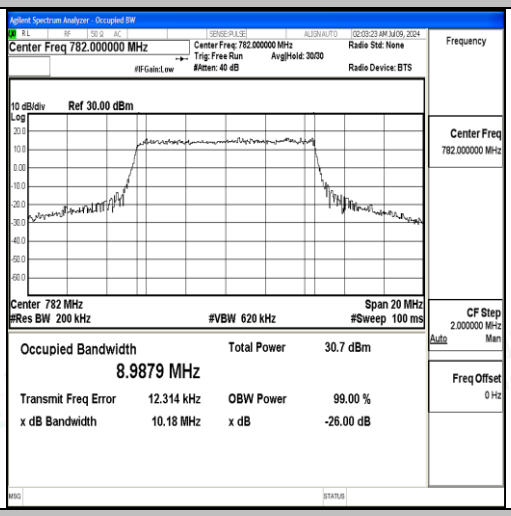
Band13-5MHz-QPSK-23255-25RB#0-PASS



Band13-5MHz-16QAM-23255-25RB#0-PASS



Band13-10MHz-QPSK-23230-50RB#0-PASS



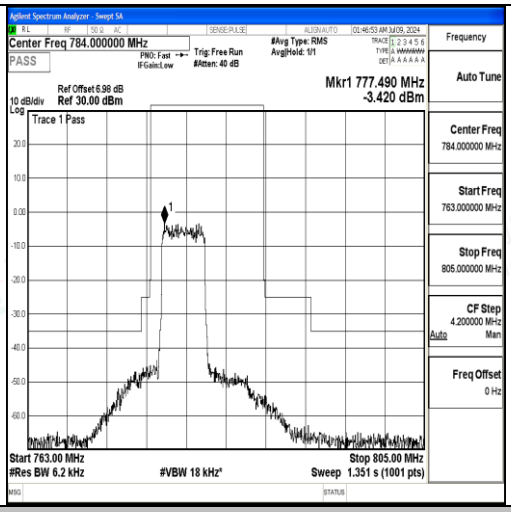
Band13-10MHz-16QAM-23230-50RB#0-PASS

K.4 Band Edge

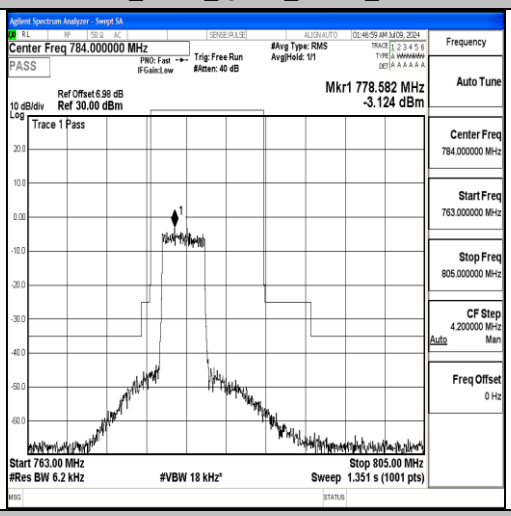
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Peak Frenquency	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	774.38	-46.96	PASS
Band13	5MHz	16QAM	23205	25RB#0	774.55	-46.94	PASS
Band13	5MHz	QPSK	23255	25RB#0	774.26	-57.29	PASS
Band13	5MHz	16QAM	23255	25RB#0	788.41	-47.99	PASS
Band13	10MHz	QPSK	23230	50RB#0	773.71	-49.14	PASS
Band13	10MHz	16QAM	23230	50RB#0	773.67	-49.42	PASS

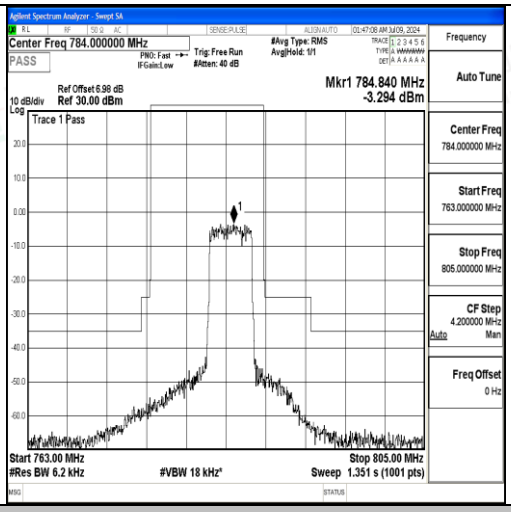
Test Graphs



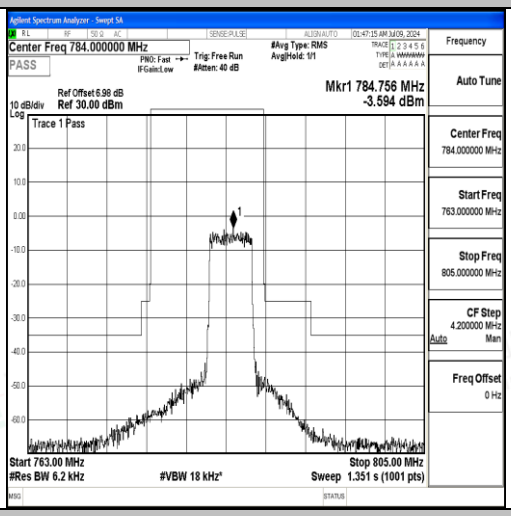
Band13_5MHz_QPSK_23205_25RB#0



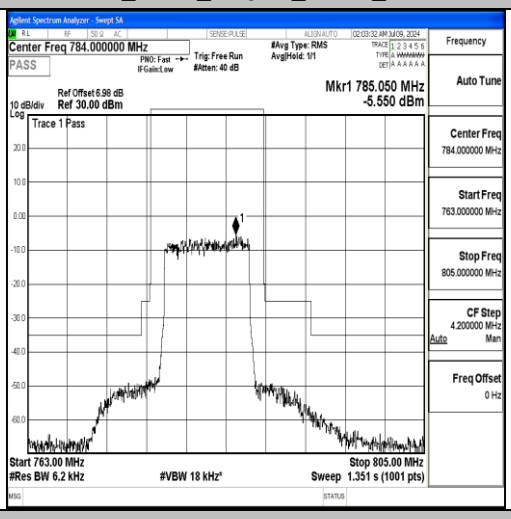
Band13_5MHz_16QAM_23205_25RB#0



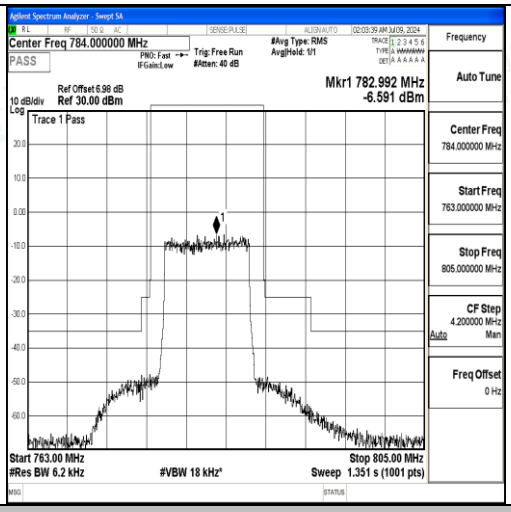
Band13_5MHz_QPSK_23255_25RB#0



Band13_5MHz_16QAM_23255_25RB#0



Band13_10MHz_QPSK_23230_50RB#0



Band13_10MHz_16QAM_23230_50RB#0

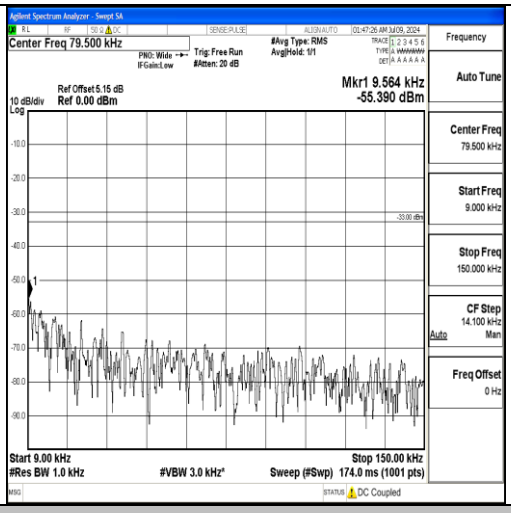
K.5 Conducted Spurious Emission

Test Result

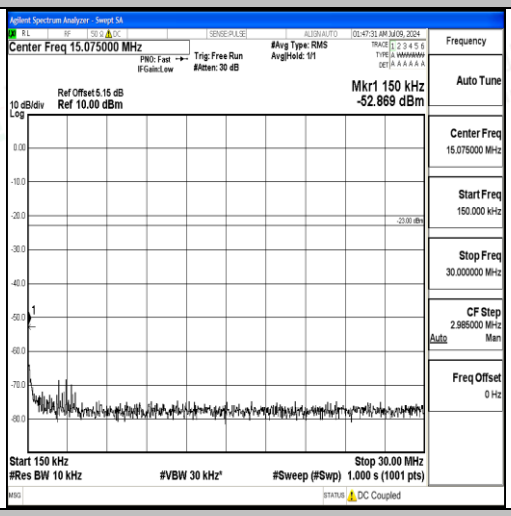
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	0.009~0.15	-55.39	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-52.87	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-62.56	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-43.79	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-43.65	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-58.91	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-52.11	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-60.34	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-43.03	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-43.92	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-57.61	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-54.75	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-62.95	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-41.69	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-43.88	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-56.56	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-52.48	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-62.55	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-43.29	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-44.05	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-58.54	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-52.31	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-62.08	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-43.35	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-44.13	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-58.02	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-51.07	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-62.07	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-42.35	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-44.00	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-60.41	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-51.12	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-62.73	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-42.22	PASS
Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-43.88	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-57.51	PASS

Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-52.76	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-62.51	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-41.99	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-43.94	PASS

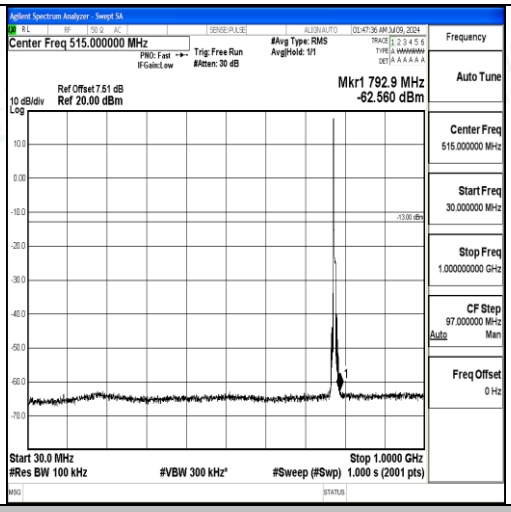
Test Graphs



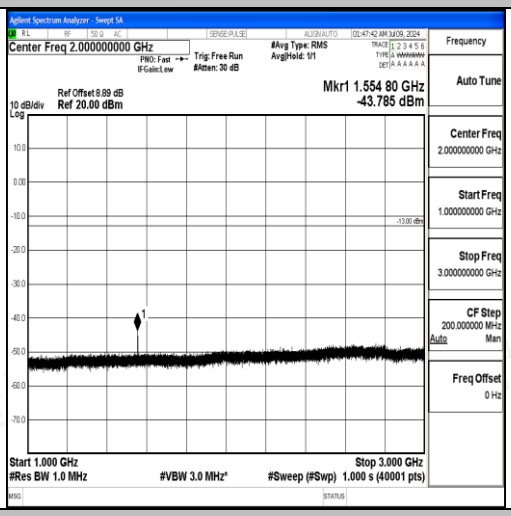
Band13_5MHz_QPSK_23205_1RB#0_0.009~0.15_0.009~0.15



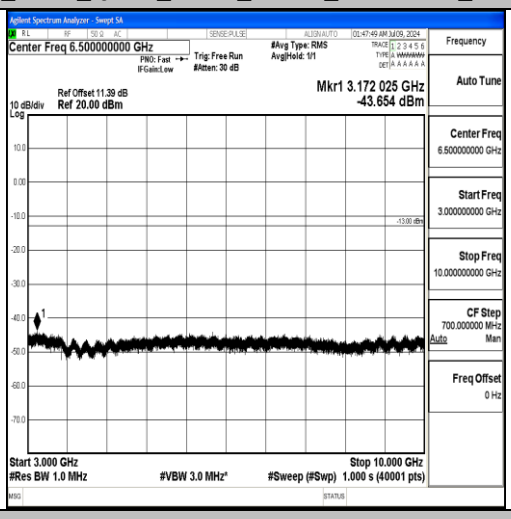
Band13_5MHz_QPSK_23205_1RB#0_0.15~30_0.15~30



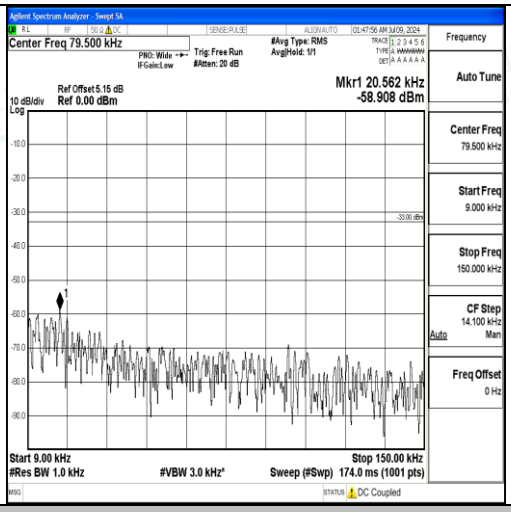
Band13_5MHz_QPSK_23205_1RB#0_30~1000_30~1000



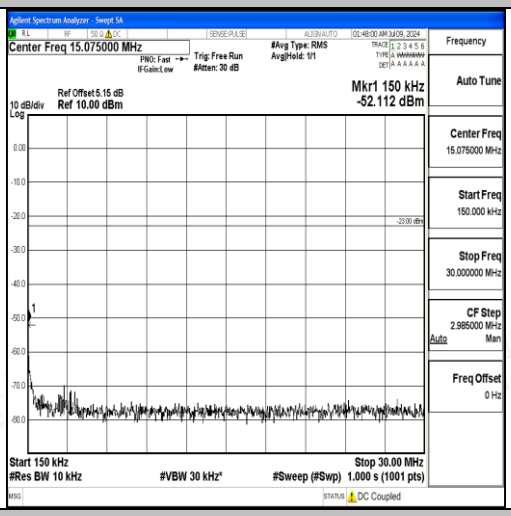
Band13_5MHz_QPSK_23205_1RB#0_1000~3000_1000~3000



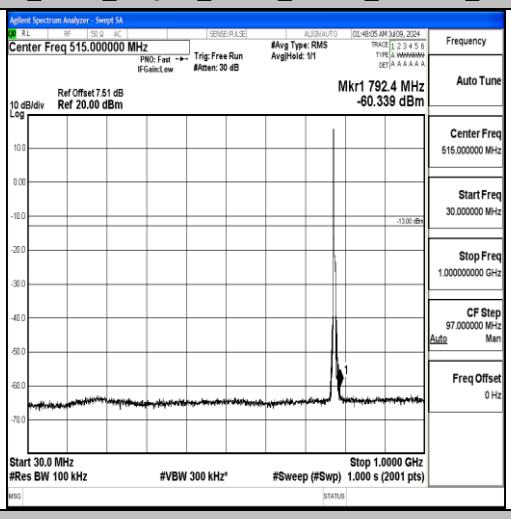
Band13_5MHz_QPSK_23205_1RB#0_3000~10000_3000~10000



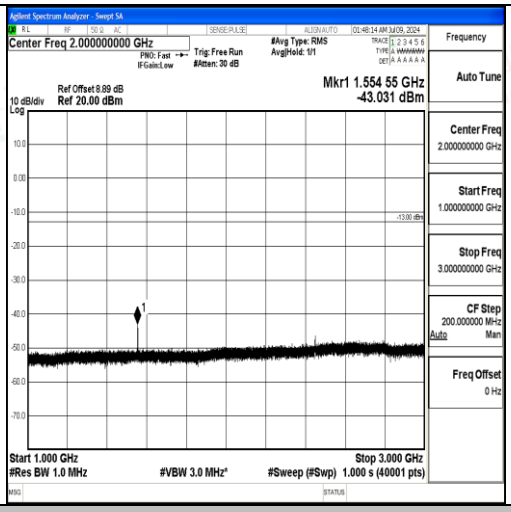
Band13_5MHz_16QAM_23205_1RB#0_0.009~0.15_0.009~0.15



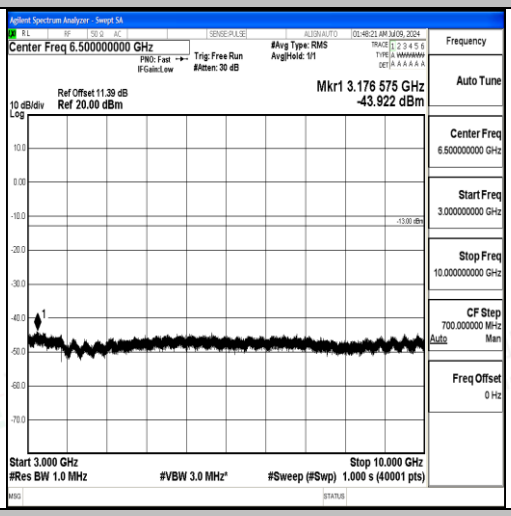
Band13_5MHz_16QAM_23205_1RB#0_0.15~30_0.15~30



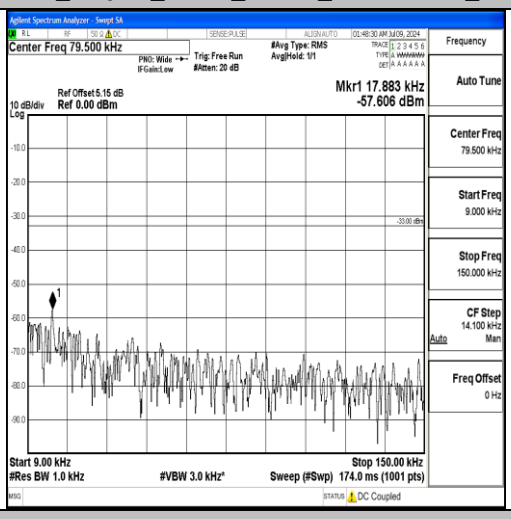
Band13_5MHz_16QAM_23205_1RB#0_30~1000_30~1000



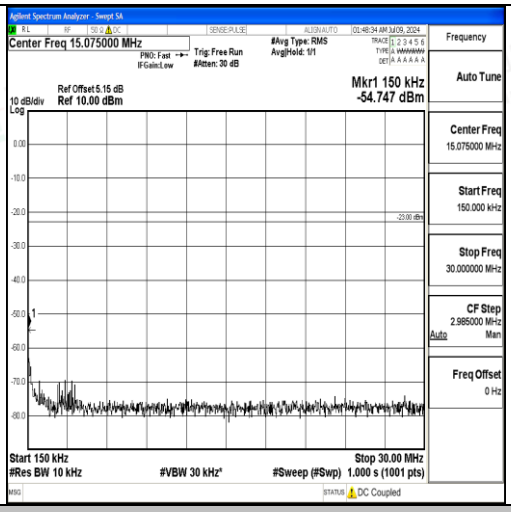
Band13_5MHz_16QAM_23205_1RB#0_1000~3000_1000~3000



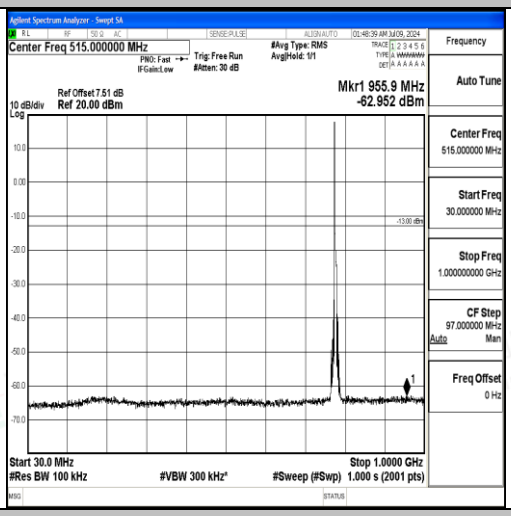
Band13_5MHz_16QAM_23205_1RB#0_3000~10000_3000~10000



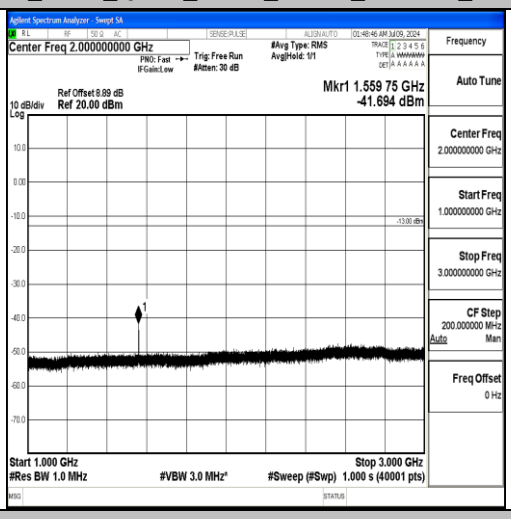
Band13_5MHz_QPSK_23230_1RB#0_0.009~0.15_0.009~0.15



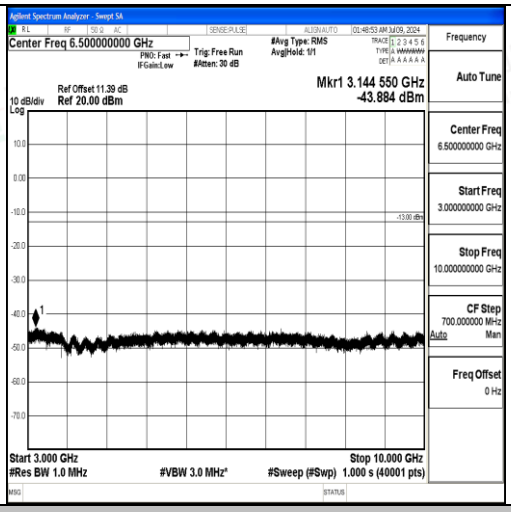
Band13_5MHz_QPSK_23230_1RB#0_0.15~30_0.15~30



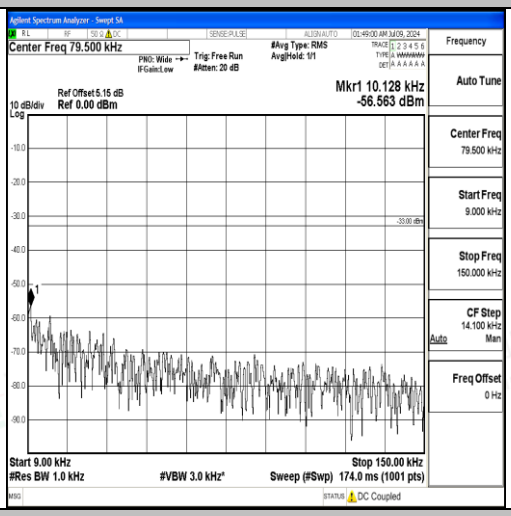
Band13_5MHz_QPSK_23230_1RB#0_30~1000_30~1000



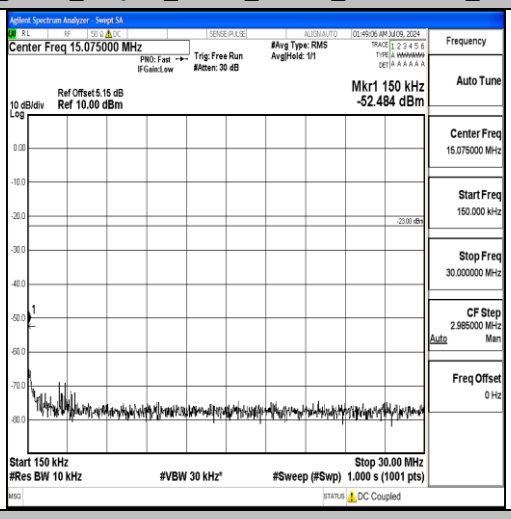
Band13_5MHz_QPSK_23230_1RB#0_1000~3000_1000~3000



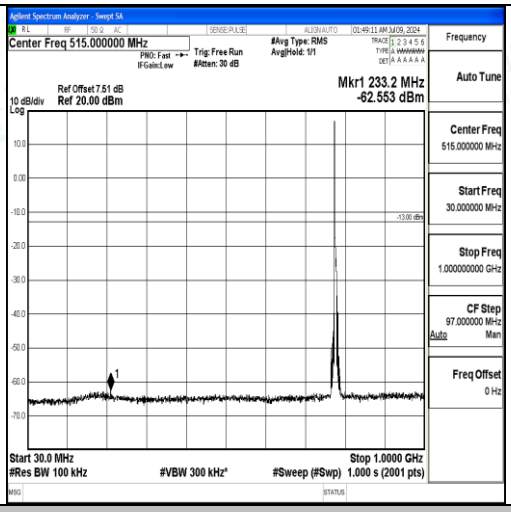
Band13_5MHz_QPSK_23230_1RB#0_3000~10000_3000~10000



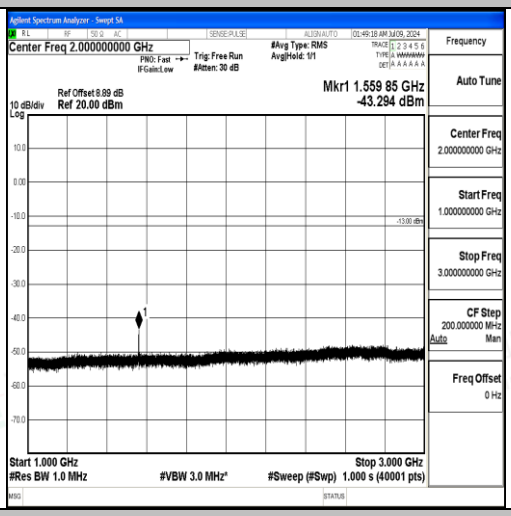
Band13_5MHz_16QAM_23230_1RB#0_0.009~0.15_0.009~0.15



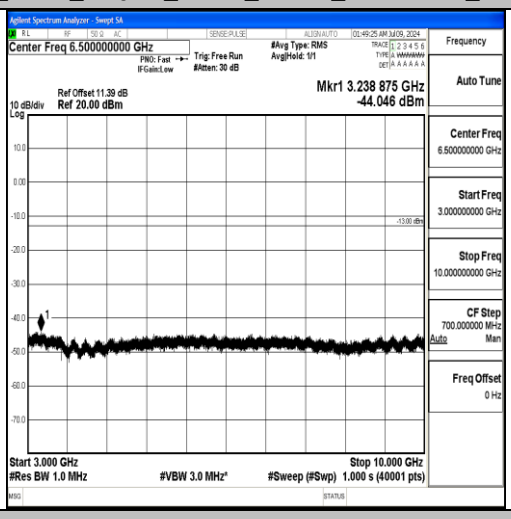
Band13_5MHz_16QAM_23230_1RB#0_0.15~30_0.15~30



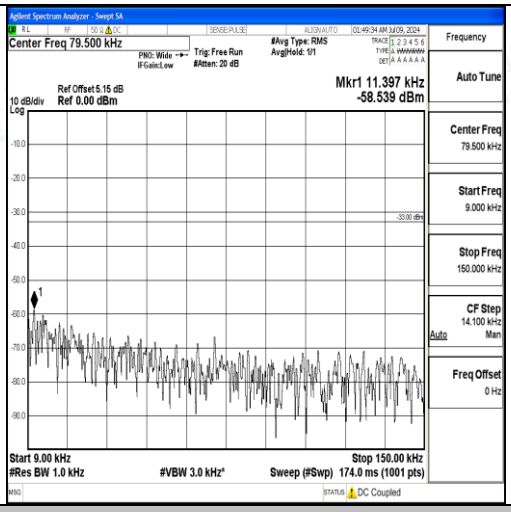
Band13_5MHz_16QAM_23230_1RB#0_30~1000_30~1000



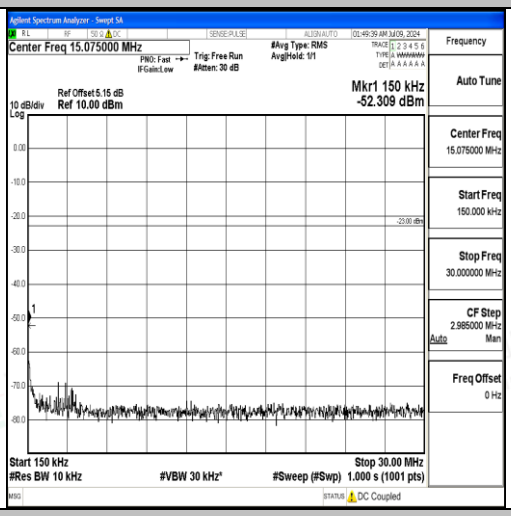
Band13_5MHz_16QAM_23230_1RB#0_1000~3000_1000~3000



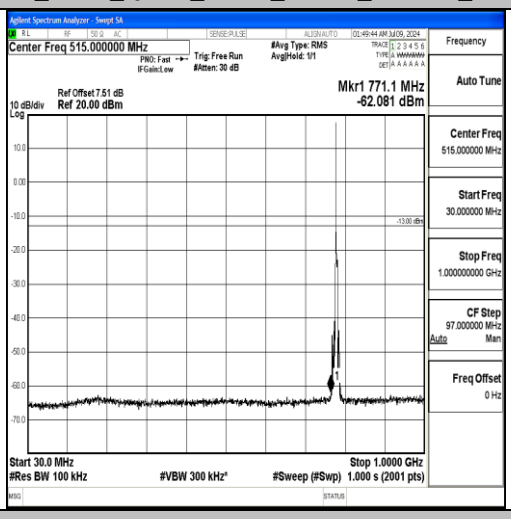
Band13_5MHz_16QAM_23230_1RB#0_3000~10000_3000~10000



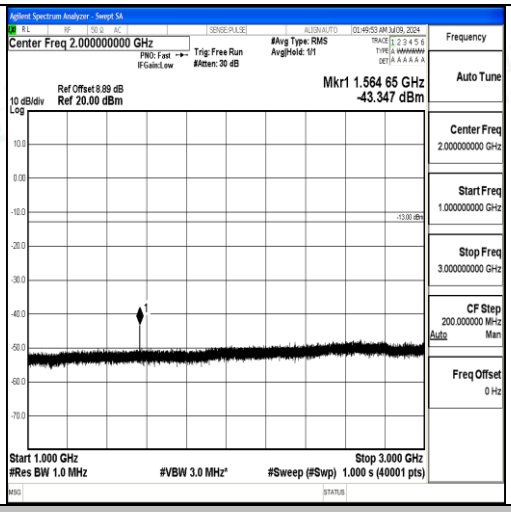
Band13_5MHz_QPSK_23255_1RB#0_0.009~0.15_0.009~0.15



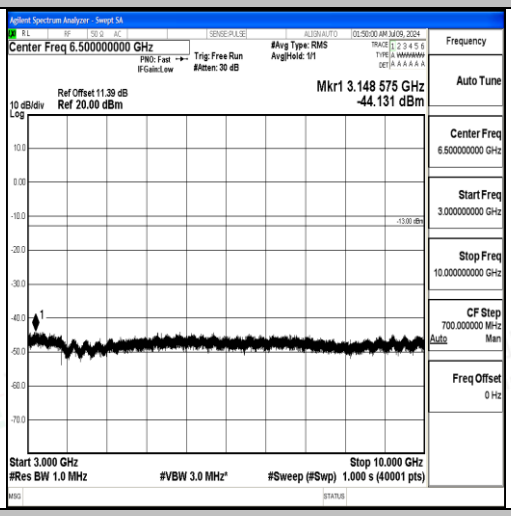
Band13_5MHz_QPSK_23255_1RB#0_0.15~30_0.15~30



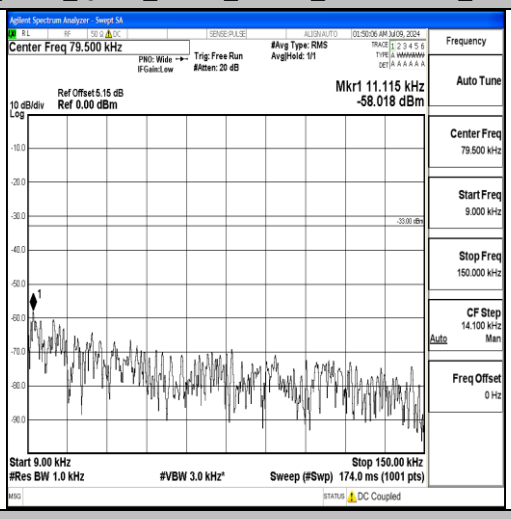
Band13_5MHz_QPSK_23255_1RB#0_30~1000_30~1000



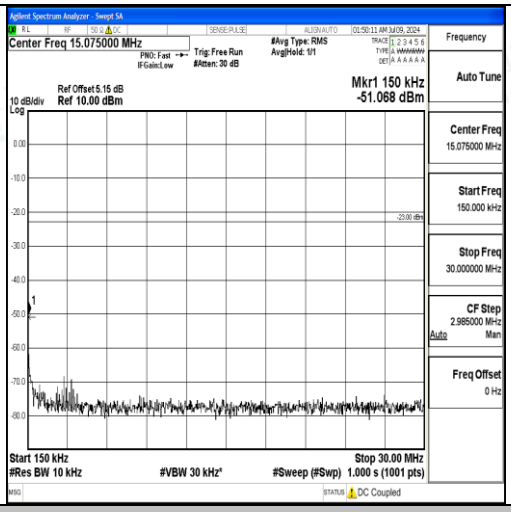
Band13_5MHz_QPSK_23255_1RB#0_1000~3000_1000~3000



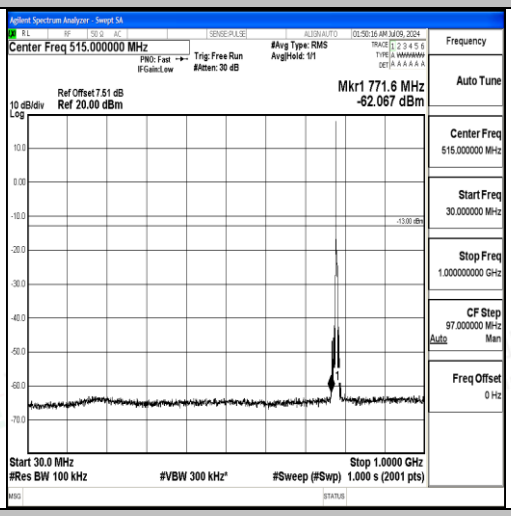
Band13_5MHz_QPSK_23255_1RB#0_3000~10000_3000~10000



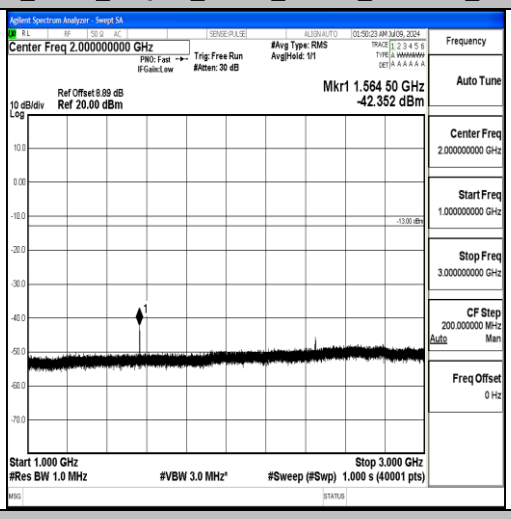
Band13_5MHz_16QAM_23255_1RB#0_0.009~0.15_0.009~0.15



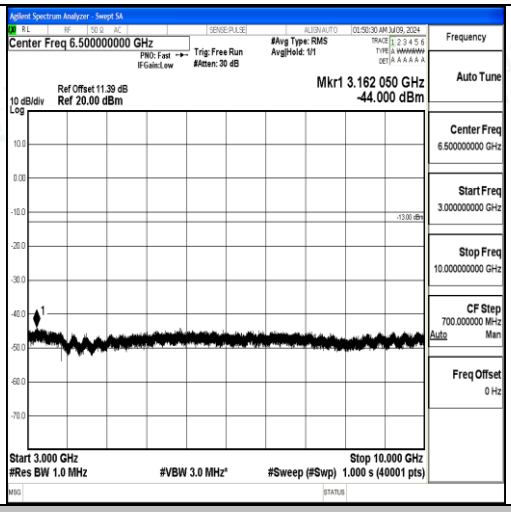
Band13_5MHz_16QAM_23255_1RB#0_0.15~30_0.15~30



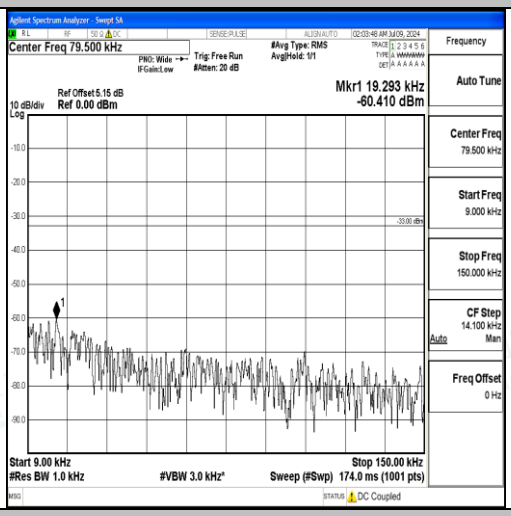
Band13_5MHz_16QAM_23255_1RB#0_30~1000_30~1000



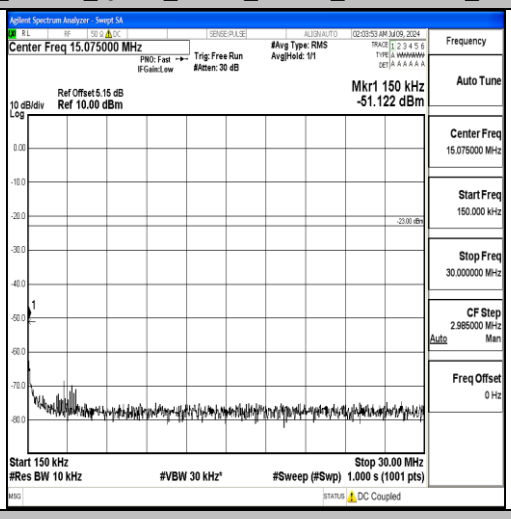
Band13_5MHz_16QAM_23255_1RB#0_1000~3000_1000~3000



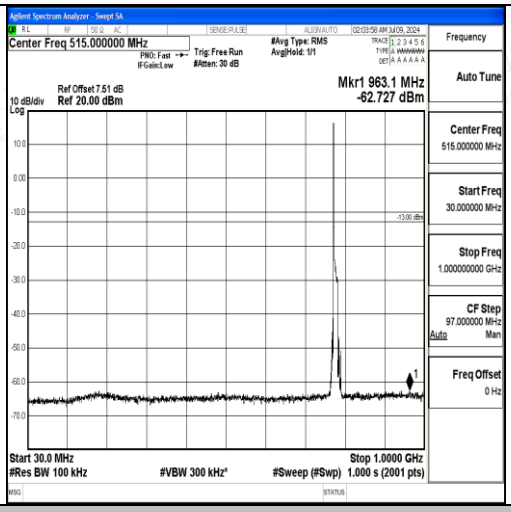
Band13_5MHz_16QAM_23255_1RB#0_3000~10000_3000~10000



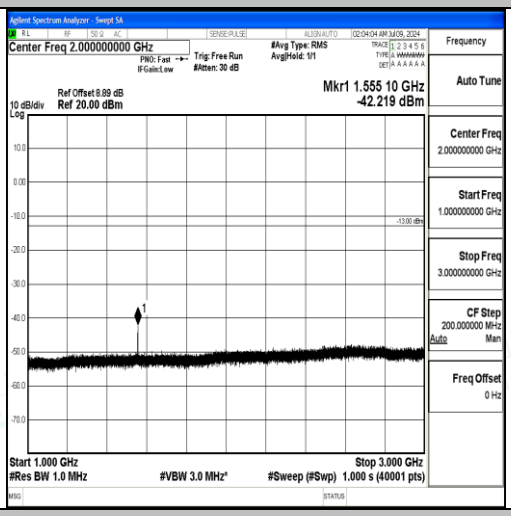
Band13_10MHz_QPSK_23230_1RB#0_0.009~0.15_0.009~0.15



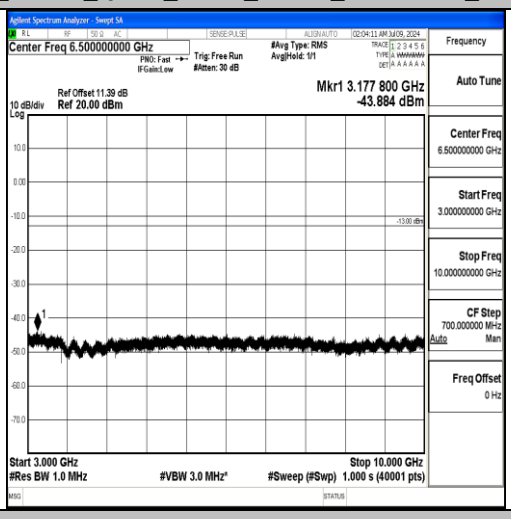
Band13_10MHz_QPSK_23230_1RB#0_0.15~30_0.15~30



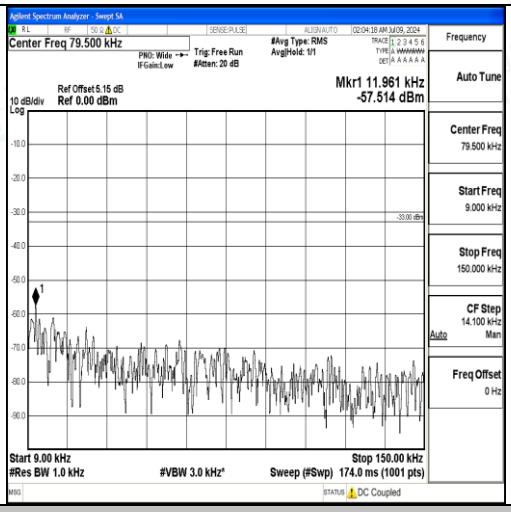
Band13_10MHz_QPSK_23230_1RB#0_30~1000_30~1000



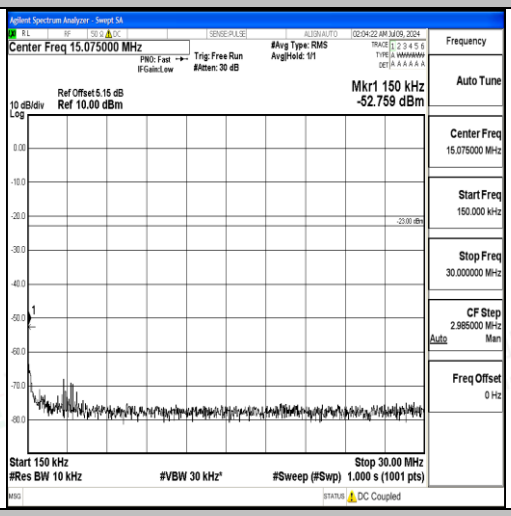
Band13_10MHz_QPSK_23230_1RB#0_1000~3000_1000~3000



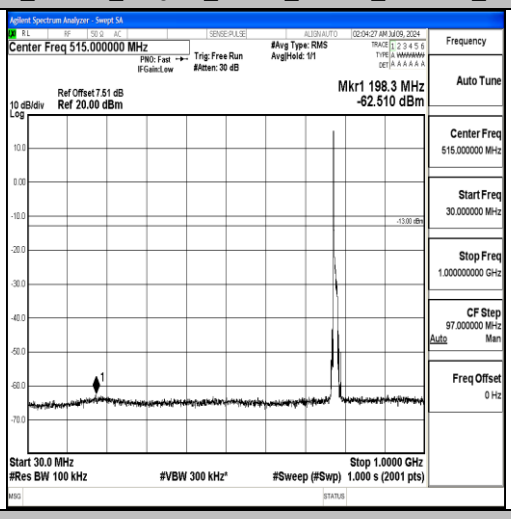
Band13_10MHz_QPSK_23230_1RB#0_3000~10000_3000~10000



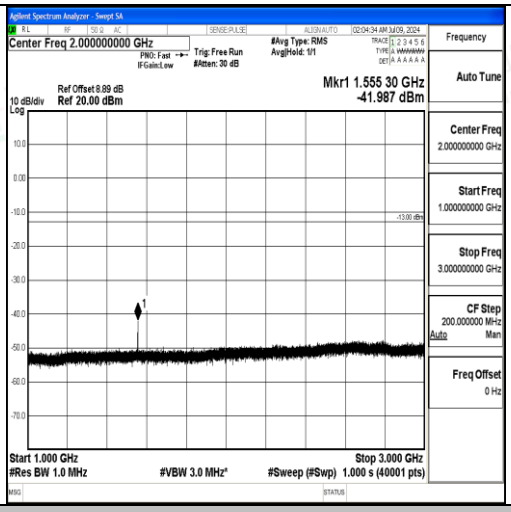
Band13_10MHz_16QAM_23230_1RB#0_0.009~0.15_0.009~0.15



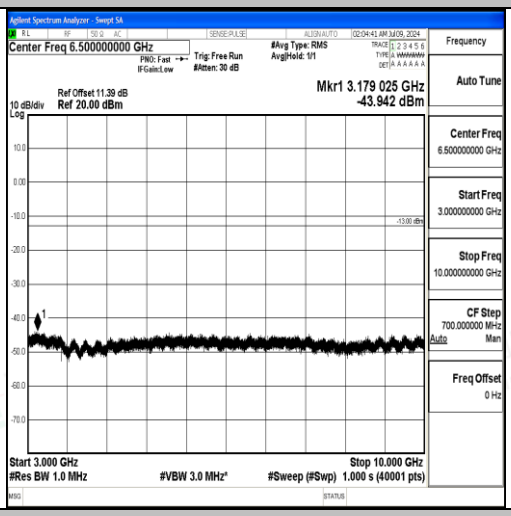
Band13_10MHz_16QAM_23230_1RB#0_0.15~30_0.15~30



Band13_10MHz_16QAM_23230_1RB#0_30~1000_30~1000



Band13_10MHz_16QAM_23230_1RB#0_1000~3000_1000~3000



Band13_10MHz_16QAM_23230_1RB#0_3000~10000_3000~10000