



Appendix J: Test Data for E-UTRA Band 13

Product Name: Smartphone

Test Model: ZG65 Pro

Environmental Conditions

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





J.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	24.14	PASS
Band13	5MHz	16QAM	23205	1RB#0	23.26	PASS
Band13	5MHz	QPSK	23205	1RB#12	24.21	PASS
Band13	5MHz	16QAM	23205	1RB#12	23.28	PASS
Band13	5MHz	QPSK	23205	1RB#24	24.18	PASS
Band13	5MHz	16QAM	23205	1RB#24	23.14	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.96	PASS
Band13	5MHz	16QAM	23205	12RB#0	22.44	PASS
Band13	5MHz	QPSK	23205	12RB#6	23.00	PASS
Band13	5MHz	16QAM	23205	12RB#6	22.44	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.94	PASS
Band13	5MHz	16QAM	23205	12RB#13	22.35	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.98	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.46	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.89	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.63	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.85	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.64	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.78	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.63	PASS
Band13	5MHz	QPSK	23230	12RB#0	23.00	PASS
Band13	5MHz	16QAM	23230	12RB#0	22.38	PASS
Band13	5MHz	QPSK	23230	12RB#6	23.03	PASS
Band13	5MHz	16QAM	23230	12RB#6	22.35	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.95	PASS
Band13	5MHz	16QAM	23230	12RB#13	22.35	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.95	PASS
Band13	5MHz	16QAM	23230	25RB#0	22.32	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.52	PASS
Band13	5MHz	16QAM	23255	1RB#0	23.53	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.52	PASS
Band13	5MHz	16QAM	23255	1RB#12	23.42	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.30	PASS
Band13	5MHz	16QAM	23255	1RB#24	23.14	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.93	PASS
Band13	5MHz	16QAM	23255	12RB#0	22.38	PASS



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 Scan code to check authenticity



Band13	5MHz	QPSK	23255	12RB#6	22.93	PASS
Band13	5MHz	16QAM	23255	12RB#6	22.23	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.79	PASS
Band13	5MHz	16QAM	23255	12RB#13	22.12	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.88	PASS
Band13	5MHz	16QAM	23255	25RB#0	22.02	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.39	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.82	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.32	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.64	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.98	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.47	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.37	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.81	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.37	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.84	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.36	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.73	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.56	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.88	PASS



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Scan code to check authenticity



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

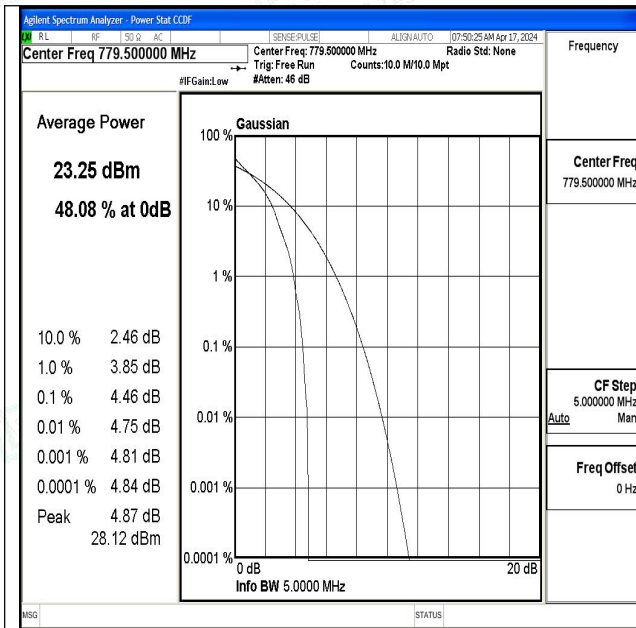
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	4.46	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.07	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.36	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.94	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	4.39	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	4.90	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.38	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.01	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.63	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.13	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.35	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.97	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	4.32	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	4.94	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.35	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.98	13	PASS

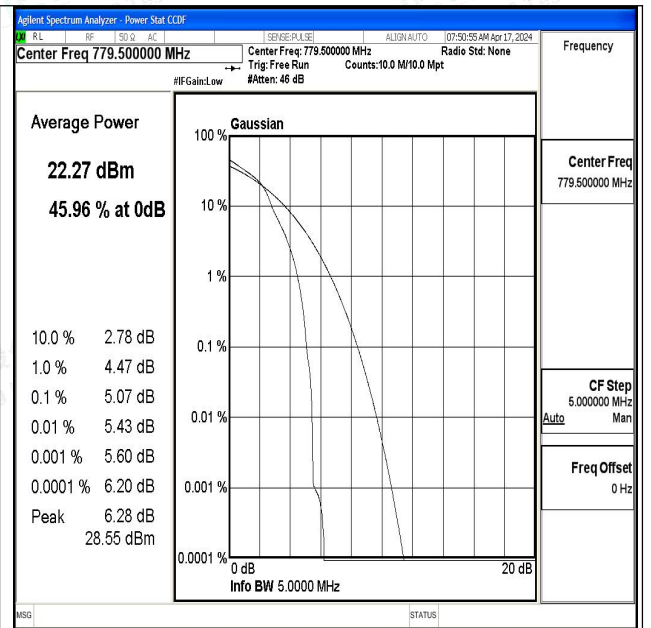




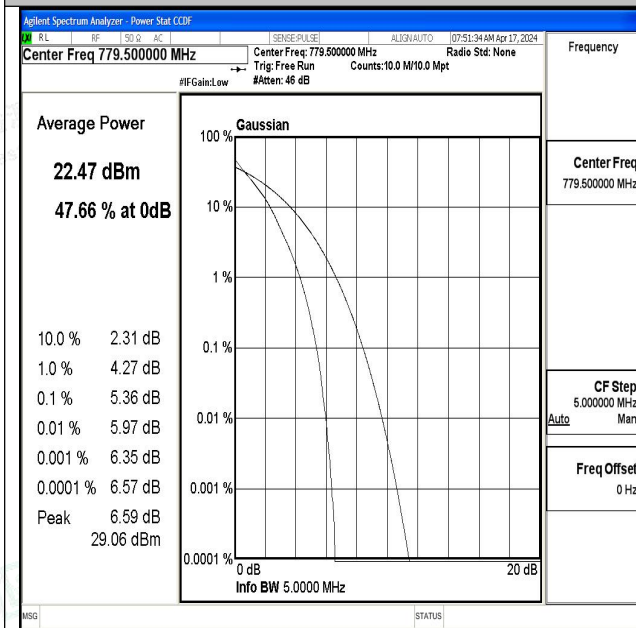
Test Graphs



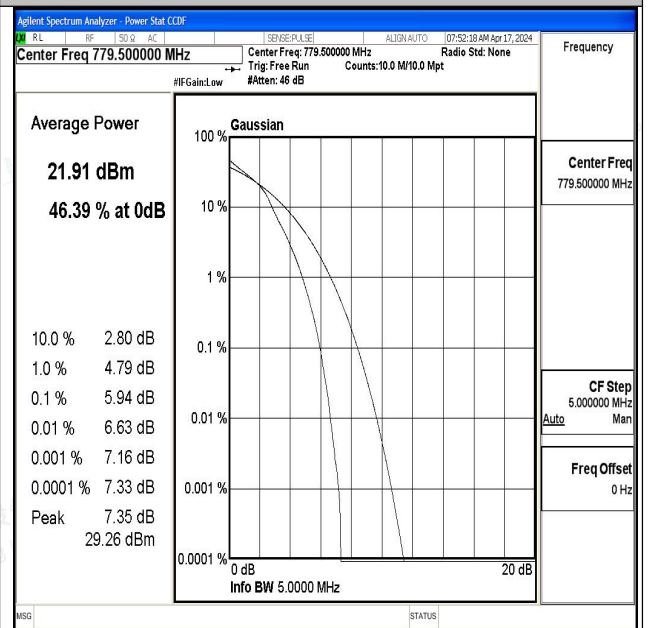
Band13-5MHz-QPSK-23205-1RB#0-PASS



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

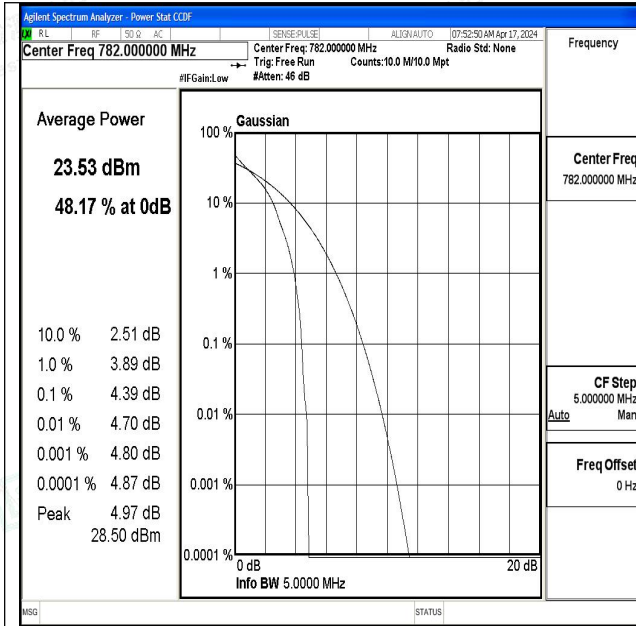


Band13-5MHz-QPSK-23205-25RB#0-PASS

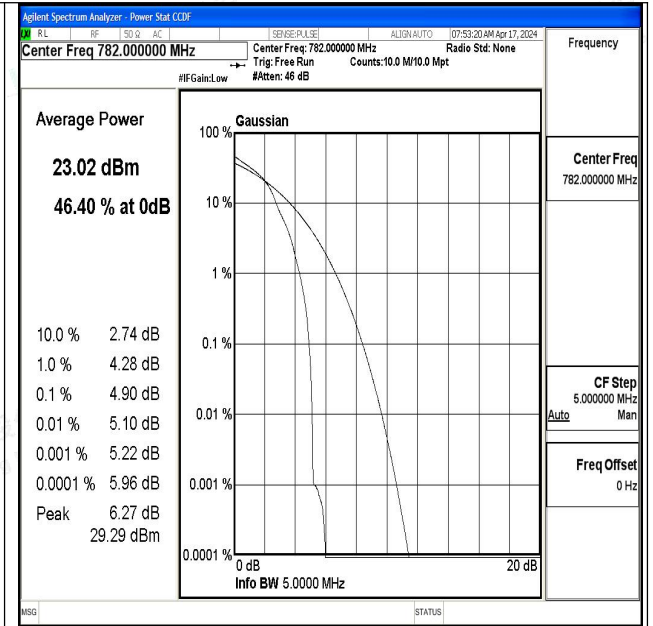


Band13-5MHz-16QAM-23205-25RB#0-PASS

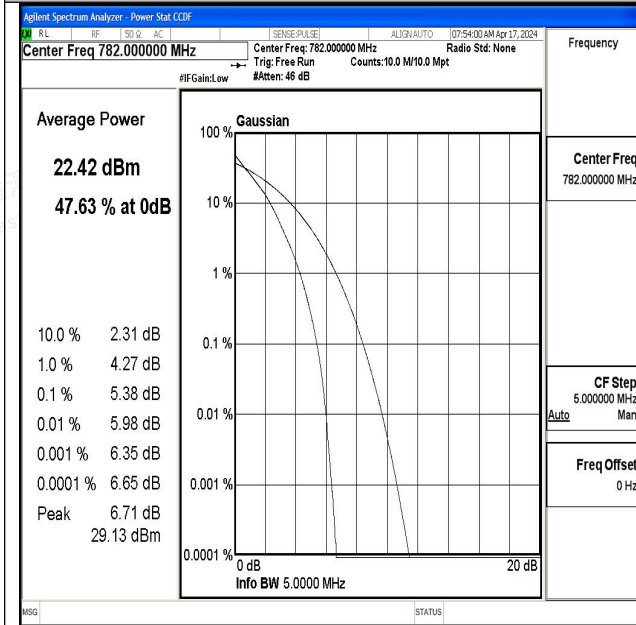




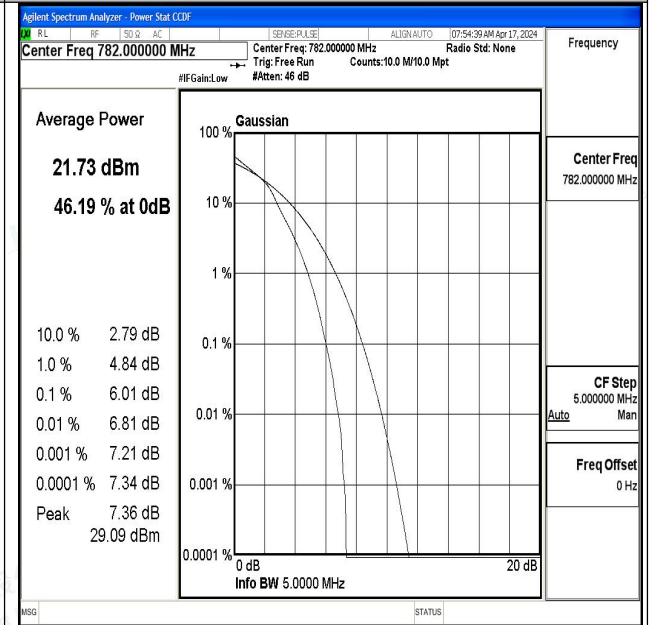
Band13-5MHz-QPSK-23230-1RB#0-PASS



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

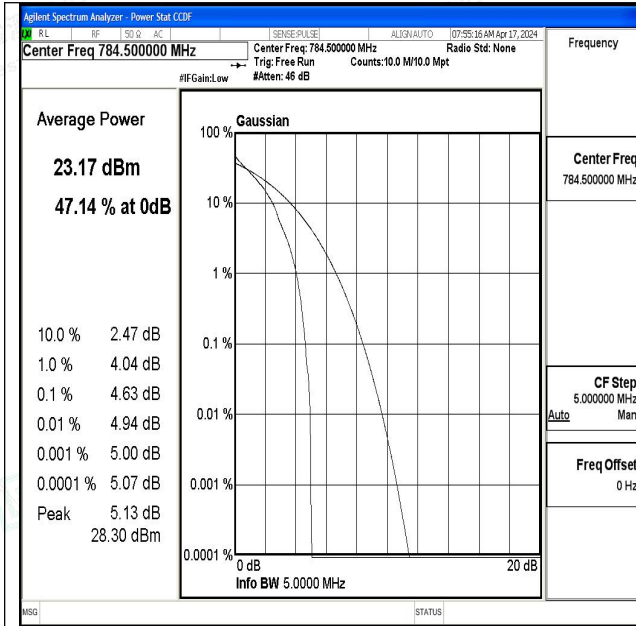


Band13-5MHz-QPSK-23230-25RB#0-PASS

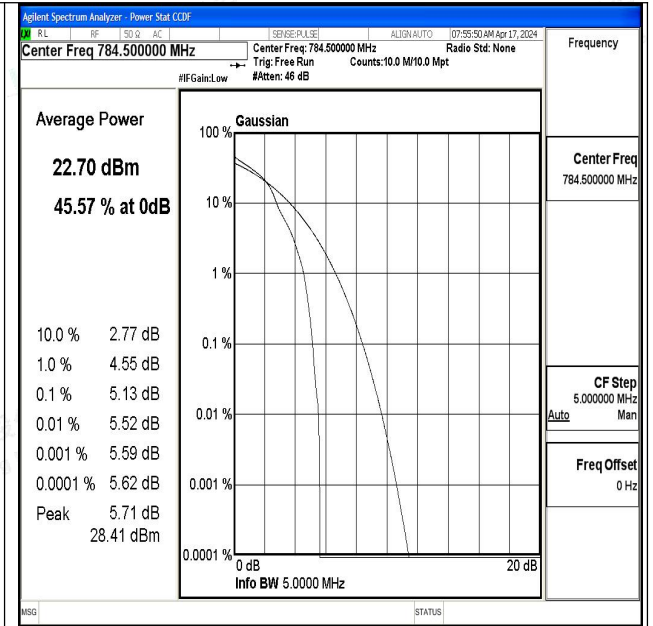


Band13-5MHz-16QAM-23230-25RB#0-PASS

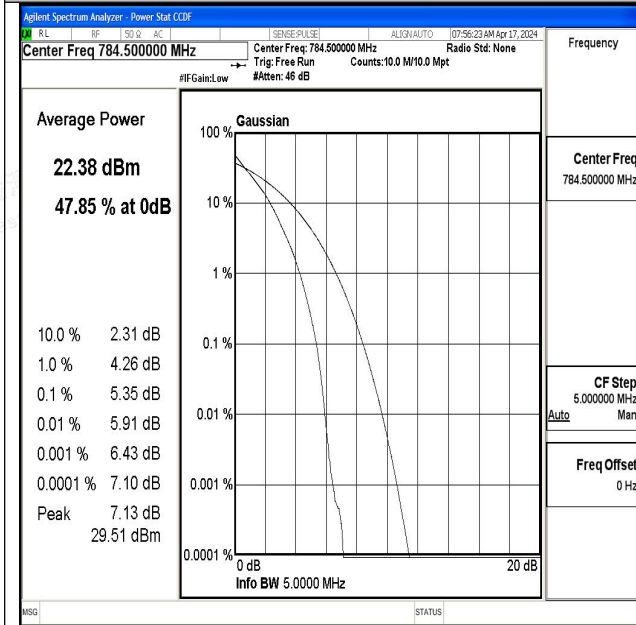




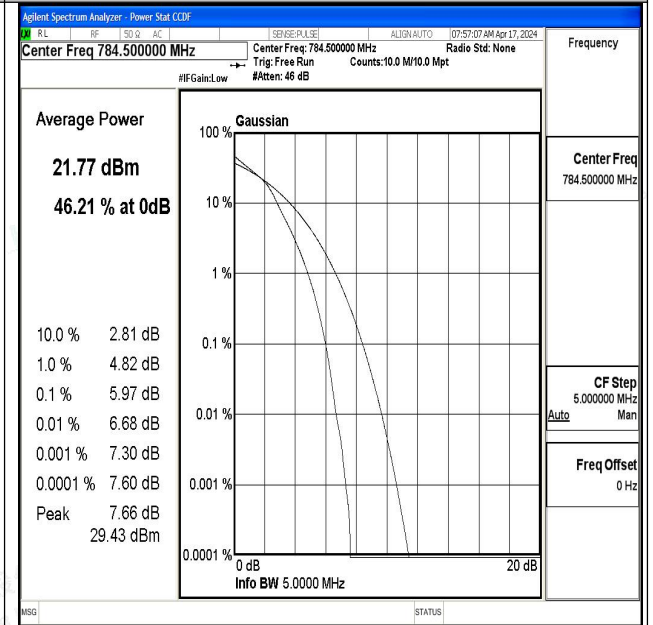
Band13-5MHz-QPSK-23255-1RB#0-PASS



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

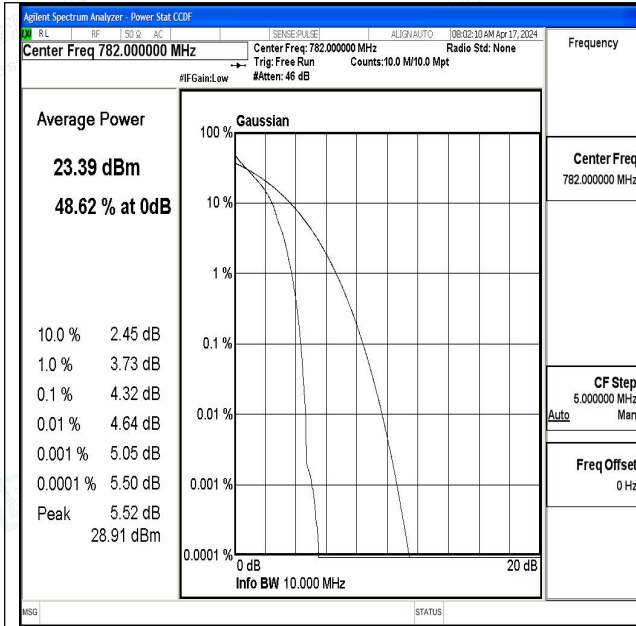


Band13-5MHz-QPSK-23255-25RB#0-PASS

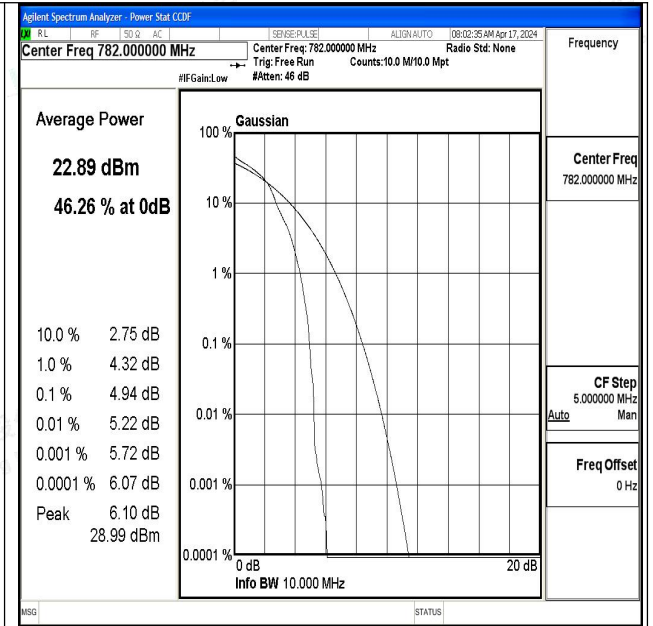


Band13-5MHz-16QAM-23255-25RB#0-PASS

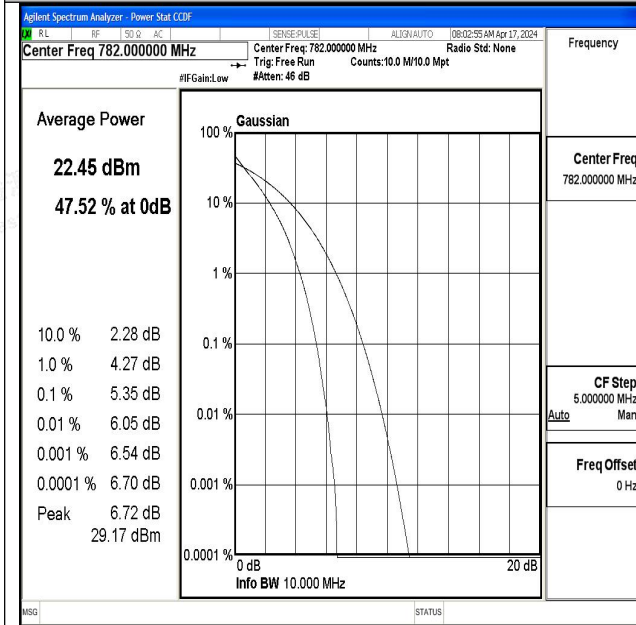




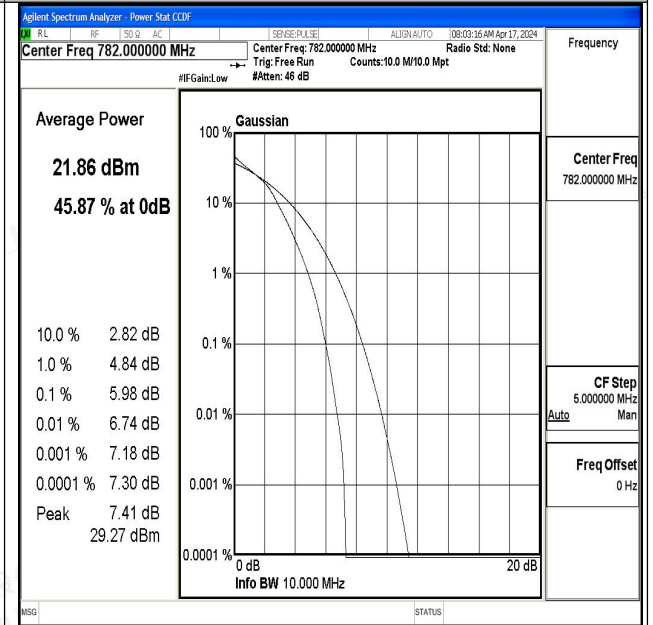
Band13-10MHz-QPSK-23230-1RB#0-PASS



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



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



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





J.3 26dB Bandwidth and Occupied Bandwidth

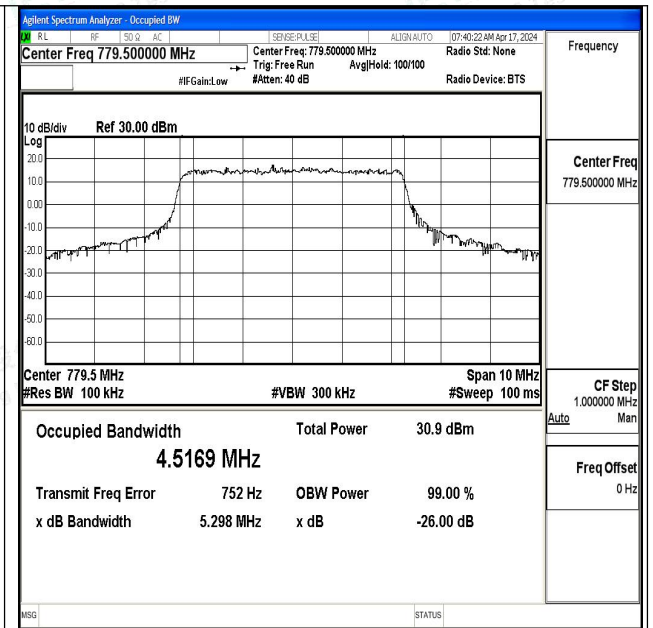
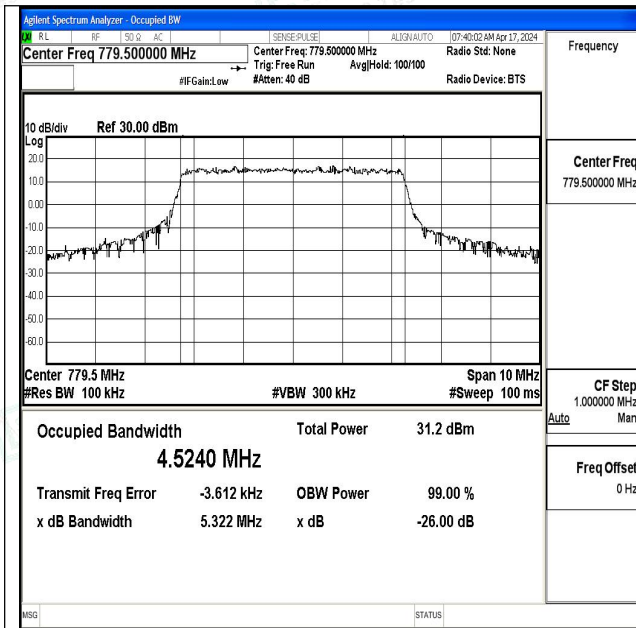
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5240	5.322	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5169	5.298	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5104	5.392	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5292	5.450	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5157	5.050	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5364	5.363	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9887	10.03	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9757	10.11	PASS



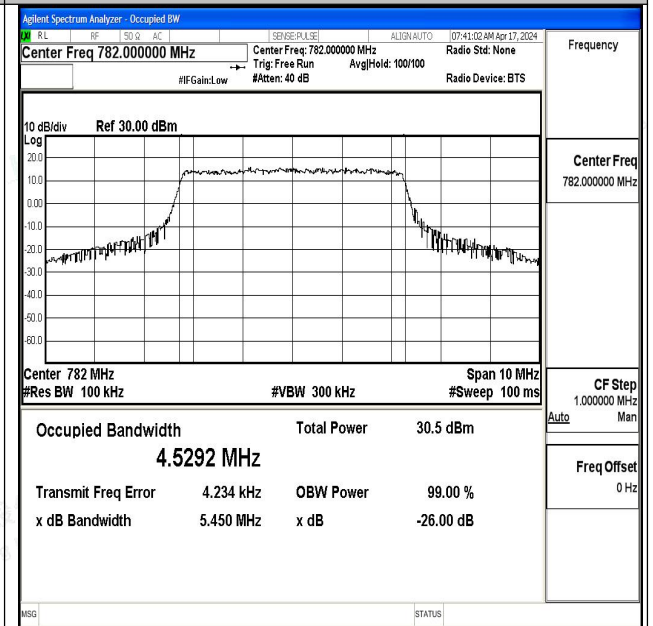
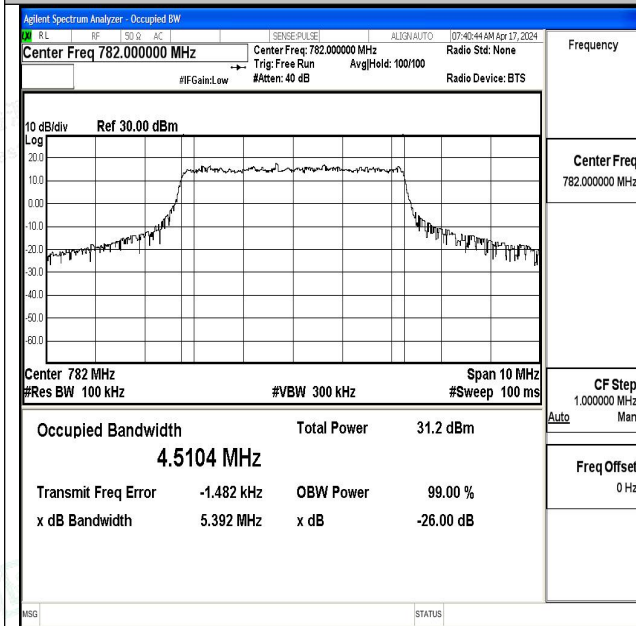


Test Graphs



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

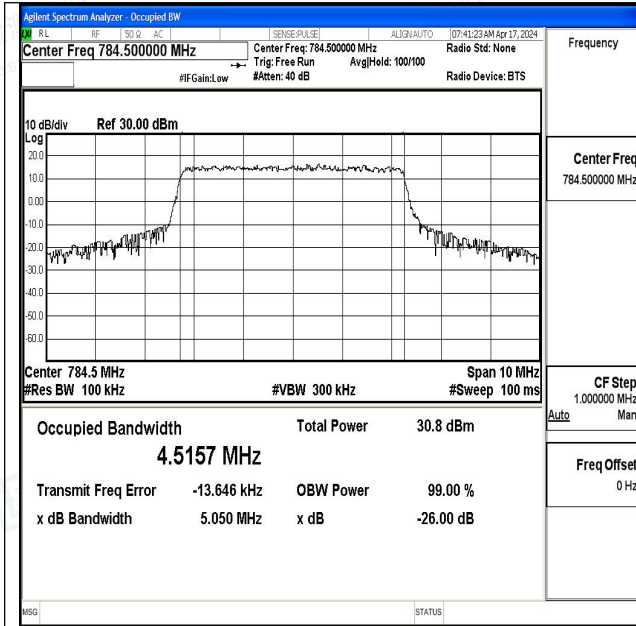
Band13-5MHz-16QAM-23205-25RB#0-PASS



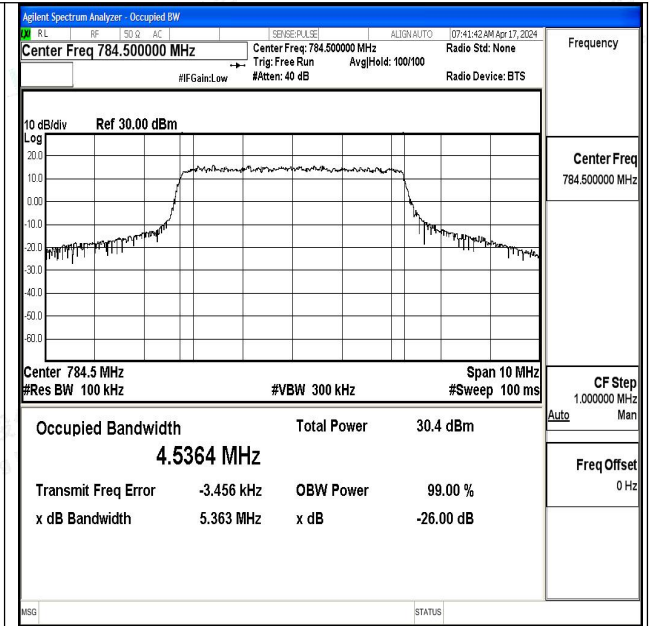
Band13-5MHz-QPSK-23230-25RB#0-PASS

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

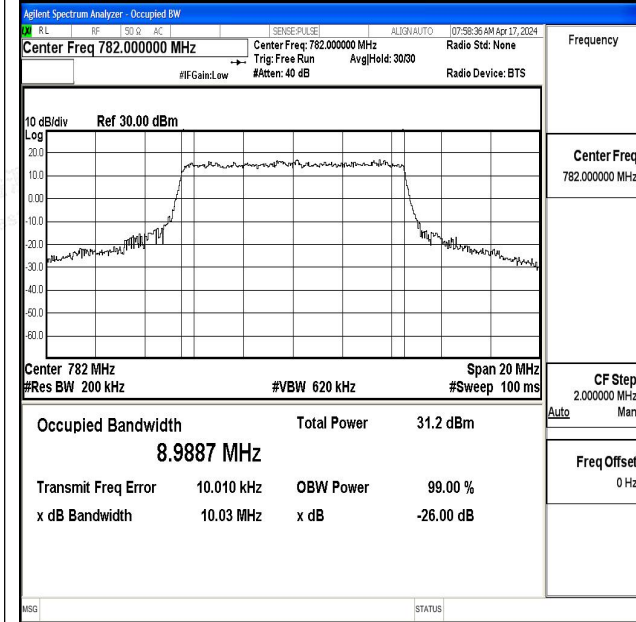




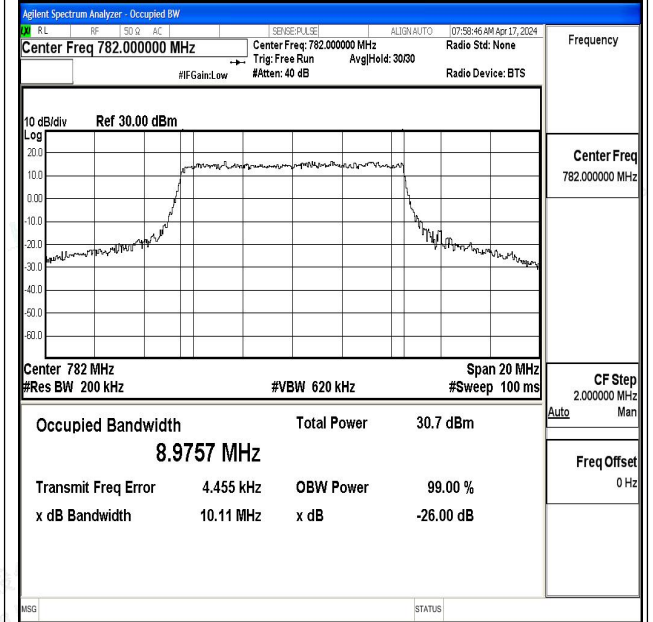
Band13-5MHz-QPSK-23255-25RB#0-PASS



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



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



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



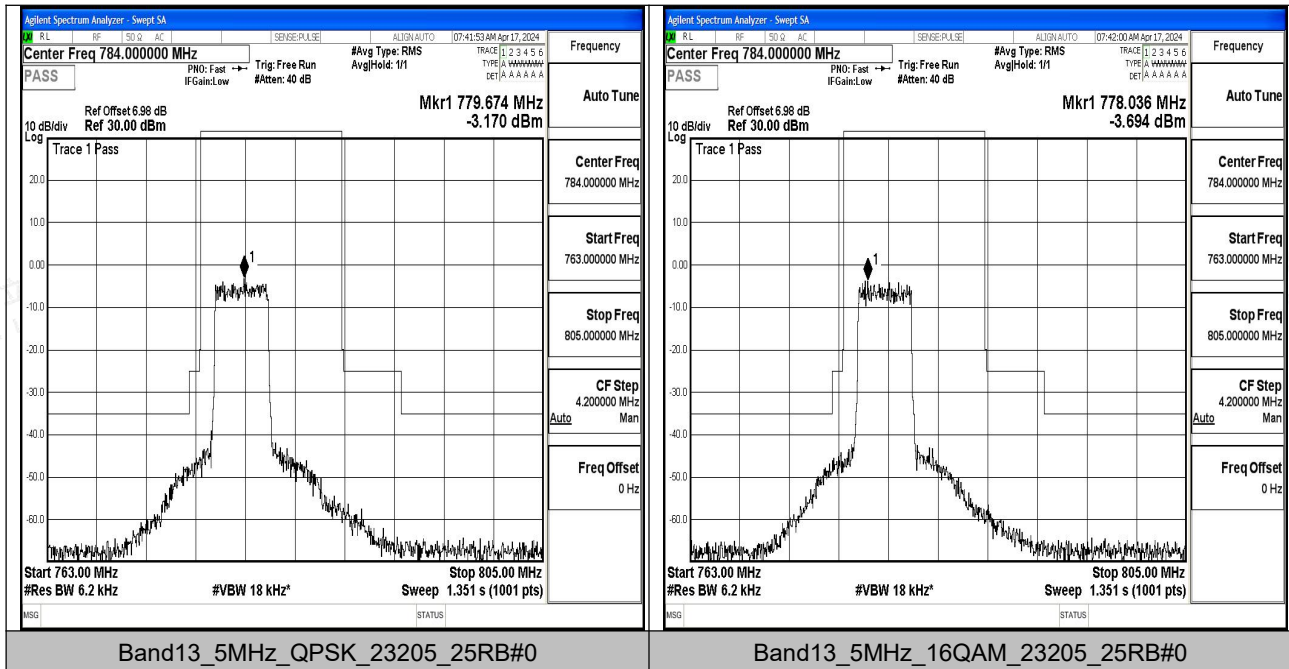


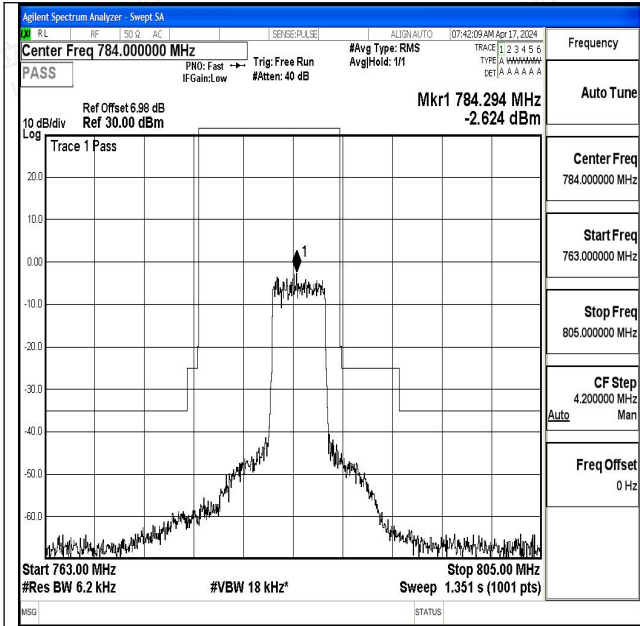
J.4 Band Edge

Test Result

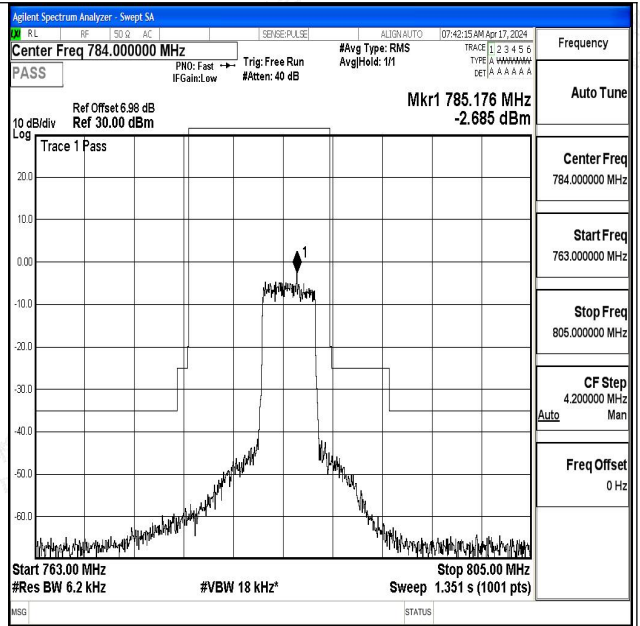
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	-47.55	PASS
Band13	5MHz	16QAM	23205	25RB#0	-46.90	PASS
Band13	5MHz	QPSK	23255	25RB#0	-46.21	PASS
Band13	5MHz	16QAM	23255	25RB#0	-45.75	PASS
Band13	10MHz	QPSK	23230	50RB#0	-47.81	PASS
Band13	10MHz	16QAM	23230	50RB#0	-48.32	PASS

Test Graphs

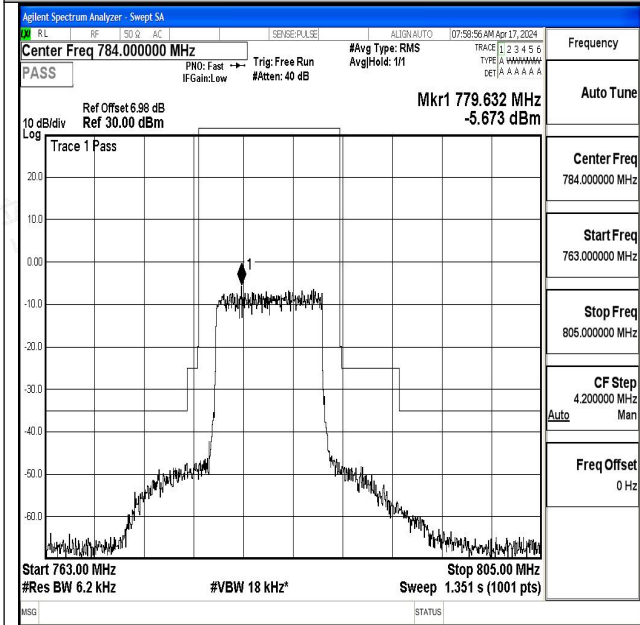




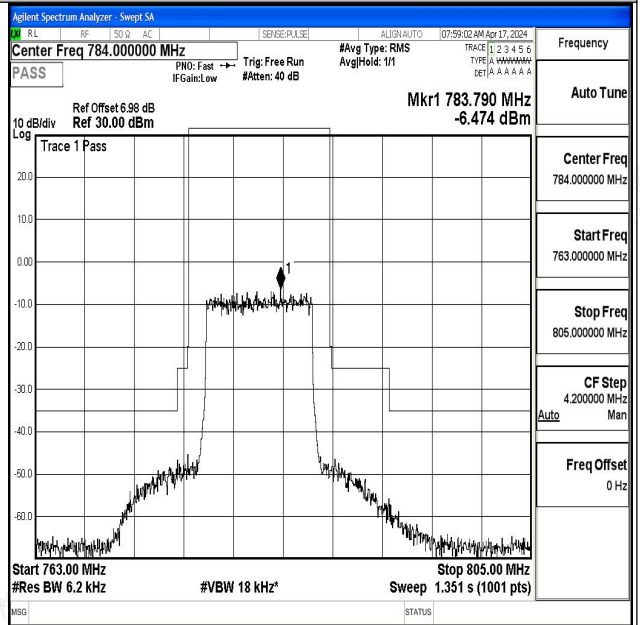
Band13_5MHz_QPSK_23255_25RB#0



Band13_5MHz_16QAM_23255_25RB#0



Band13_10MHz_QPSK_23230_50RB#0



Band13_10MHz_16QAM_23230_50RB#0





J.5 Conducted Spurious Emission

Test Result

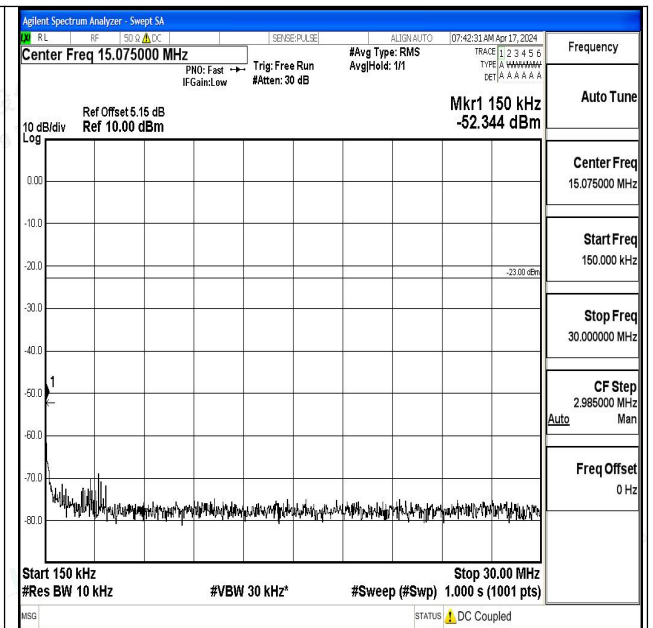
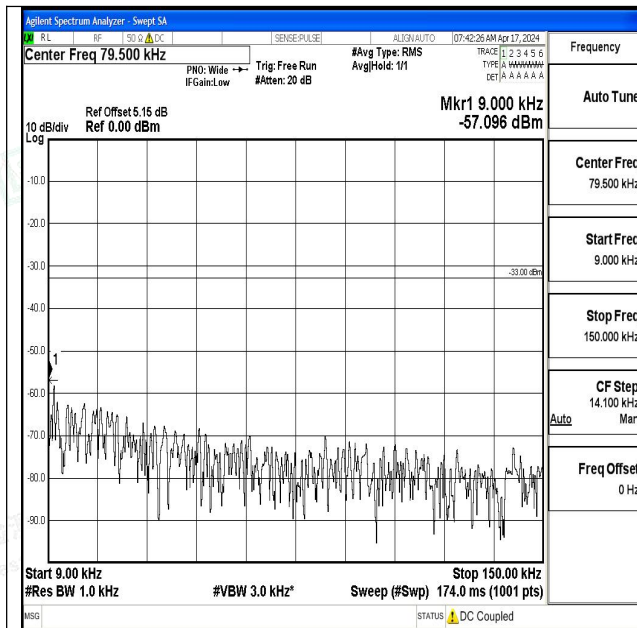
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	0.009~0.15	-57.10	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-52.34	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-60.80	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-42.93	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-44.03	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-55.79	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-50.66	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-60.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-43.61	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-43.84	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-59.47	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-53.42	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-61.69	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-43.33	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-44.21	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-57.03	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-54.53	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-61.81	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-44.00	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-44.09	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-57.28	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-52.29	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-60.67	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-43.87	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-43.57	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-55.85	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-51.12	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-62.25	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-43.33	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-43.64	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-58.11	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-51.81	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-62.02	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-44.20	PASS
Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-44.04	PASS





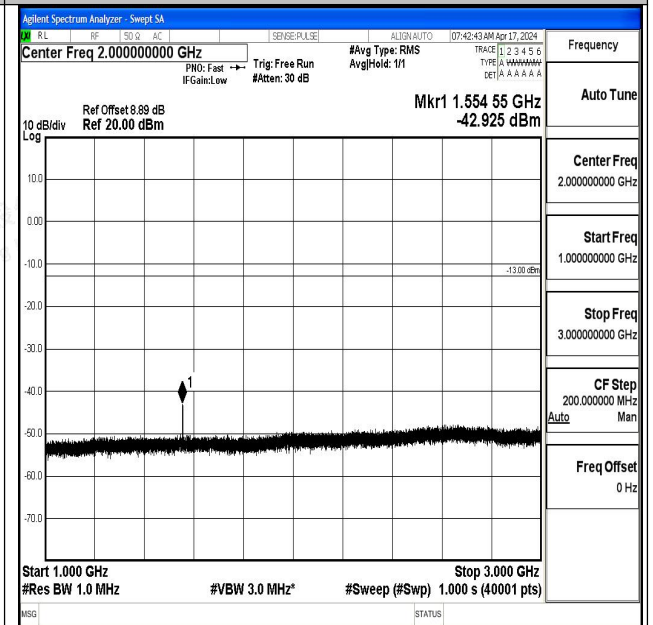
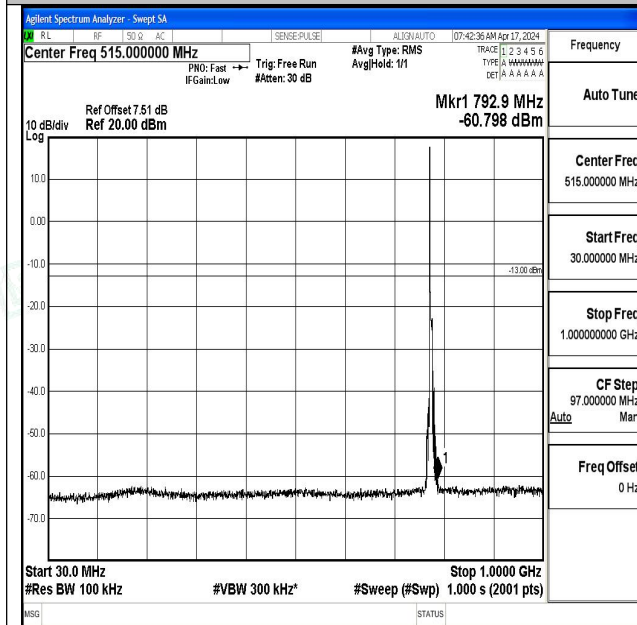
Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-57.54	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-53.43	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-62.05	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-43.28	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-44.18	PASS

Test Graphs



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

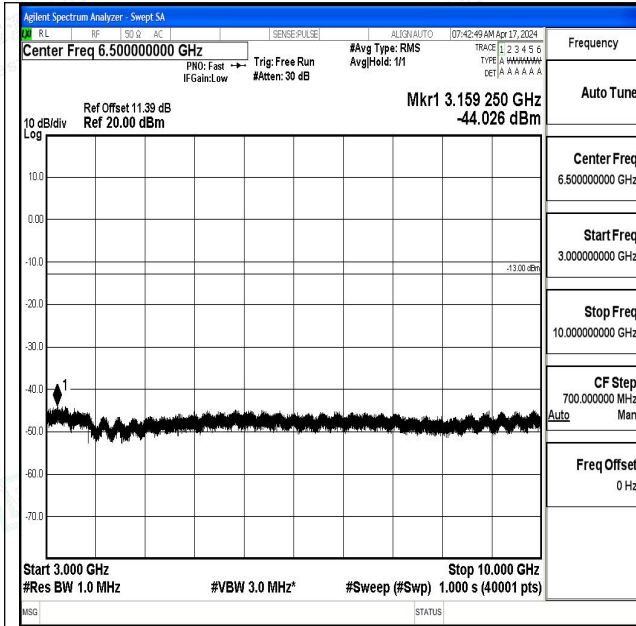
Band13_5MHz_QPSK_23205_1RB#0_0.15~30_0.15~30



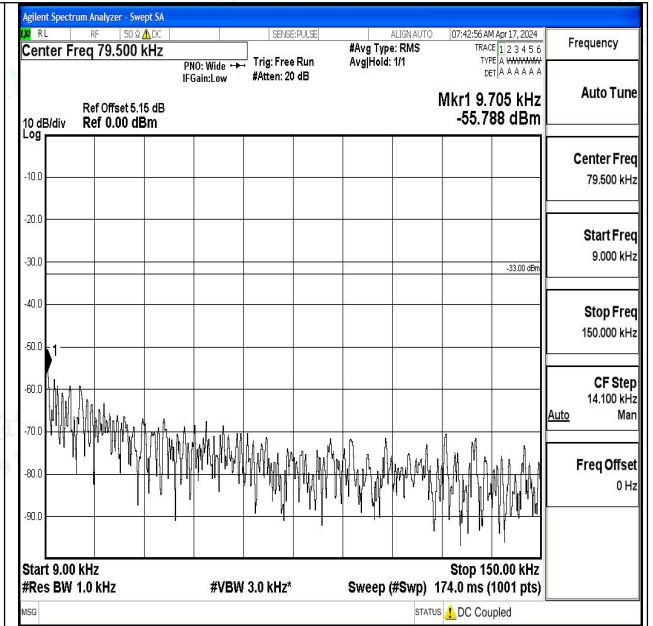
Band13_5MHz_QPSK_23205_1RB#0_30~1000_30~1000

Band13_5MHz_QPSK_23205_1RB#0_1000~3000_1000

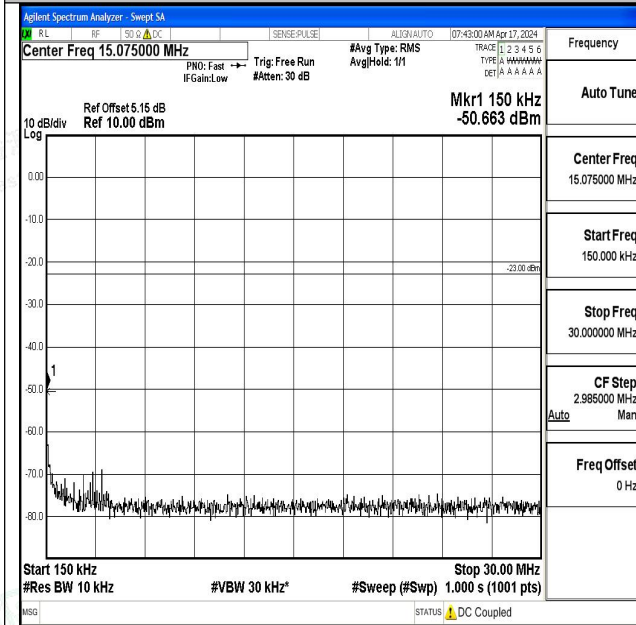




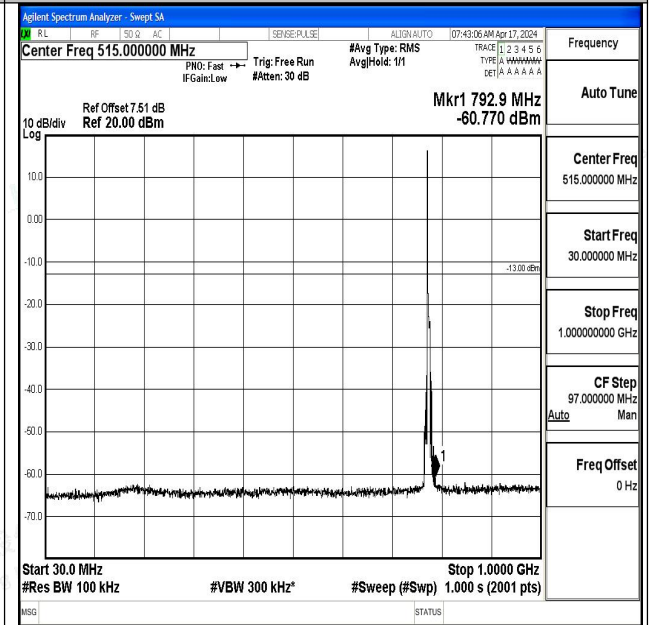
Band13_5MHz_QPSK_23205_1RB#0_3000~10000_300
0~10000



Band13_5MHz_16QAM_23205_1RB#0_0.009~0.15_0.0
09~0.15

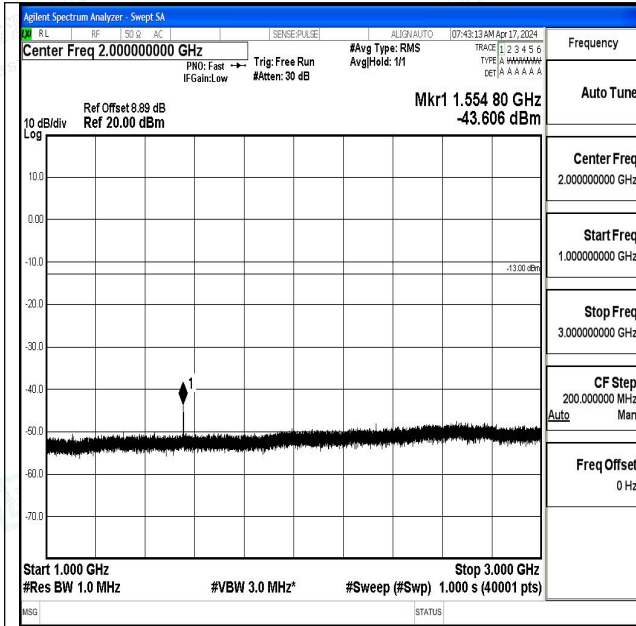


Band13_5MHz_16QAM_23205_1RB#0_0.15~30_0.15~3
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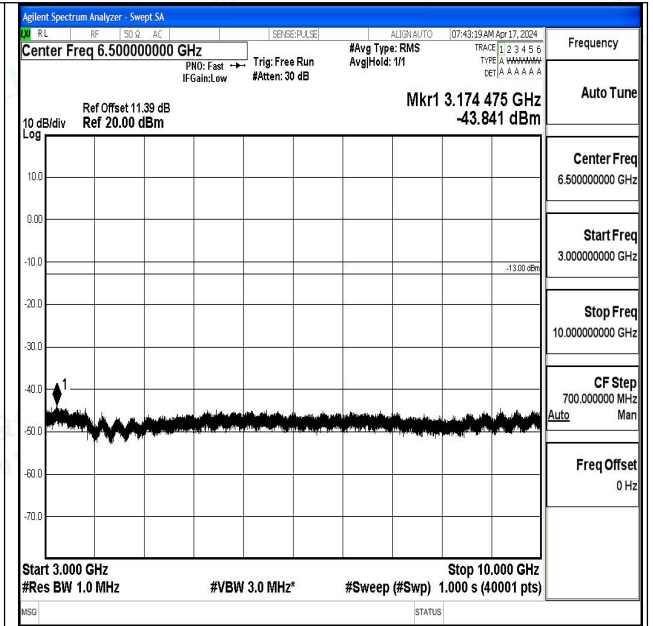


Band13_5MHz_16QAM_23205_1RB#0_30~1000_30~10
00

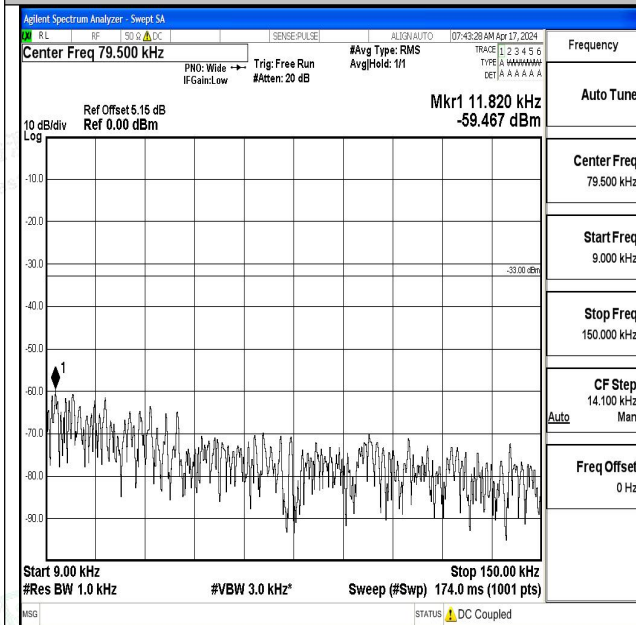




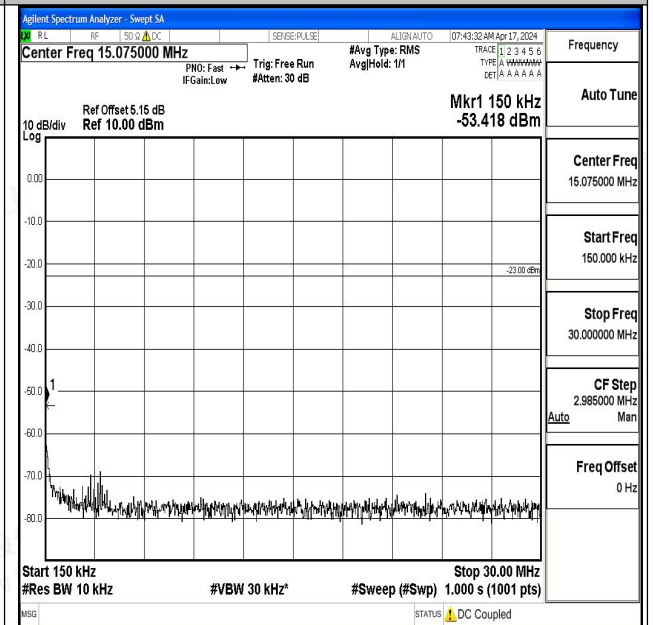
Band13_5MHz_16QAM_23205_1RB#0_1000~3000_100
0~3000



Band13_5MHz_16QAM_23205_1RB#0_3000~10000_30
00~10000



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

