

LTE Test Data-BAND 13

General Description of EUT	
Product Name:	4G Battery Camera
Test Model:	CQ3
Sample ID:	HC-C-202404-0112-04-01
Environmental Conditions	
Temperature:	22.0℃-25℃
Relative Humidity:	43%-55%
Test Voltage:	DC 5V
Test Engineer:	Mike Yan
Note: For a more detailed features description, please refer to the report TBR-C-202404-0112-41. The report only show the worst case data.	

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1: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.44	PASS
Band13	5MHz	QPSK	23205	1RB#12	22.94	PASS
Band13	5MHz	QPSK	23205	1RB#24	22.22	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.05	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.00	PASS
Band13	5MHz	QPSK	23205	12RB#13	21.53	PASS
Band13	5MHz	QPSK	23205	25RB#0	21.78	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.80	PASS
Band13	5MHz	QPSK	23230	1RB#12	22.22	PASS
Band13	5MHz	QPSK	23230	1RB#24	21.99	PASS
Band13	5MHz	QPSK	23230	12RB#0	21.47	PASS
Band13	5MHz	QPSK	23230	12RB#6	21.47	PASS
Band13	5MHz	QPSK	23230	12RB#13	21.21	PASS
Band13	5MHz	QPSK	23230	25RB#0	21.32	PASS
Band13	5MHz	QPSK	23255	1RB#0	22.45	PASS
Band13	5MHz	QPSK	23255	1RB#12	22.33	PASS
Band13	5MHz	QPSK	23255	1RB#24	22.65	PASS
Band13	5MHz	QPSK	23255	12RB#0	21.29	PASS
Band13	5MHz	QPSK	23255	12RB#6	21.31	PASS
Band13	5MHz	QPSK	23255	12RB#13	21.39	PASS
Band13	5MHz	QPSK	23255	25RB#0	21.31	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.19	PASS
Band13	5MHz	16QAM	23205	1RB#12	21.77	PASS
Band13	5MHz	16QAM	23205	1RB#24	21.06	PASS
Band13	5MHz	16QAM	23205	12RB#0	21.18	PASS
Band13	5MHz	16QAM	23205	12RB#6	21.12	PASS
Band13	5MHz	16QAM	23205	12RB#13	20.68	PASS
Band13	5MHz	16QAM	23205	25RB#0	20.91	PASS
Band13	5MHz	16QAM	23230	1RB#0	21.64	PASS
Band13	5MHz	16QAM	23230	1RB#12	21.02	PASS
Band13	5MHz	16QAM	23230	1RB#24	20.91	PASS
Band13	5MHz	16QAM	23230	12RB#0	20.60	PASS
Band13	5MHz	16QAM	23230	12RB#6	20.58	PASS
Band13	5MHz	16QAM	23230	12RB#13	20.33	PASS
Band13	5MHz	16QAM	23230	25RB#0	20.32	PASS
Band13	5MHz	16QAM	23255	1RB#0	21.66	PASS
Band13	5MHz	16QAM	23255	1RB#12	21.43	PASS
Band13	5MHz	16QAM	23255	1RB#24	21.82	PASS
Band13	5MHz	16QAM	23255	12RB#0	20.54	PASS
Band13	5MHz	16QAM	23255	12RB#6	20.53	PASS
Band13	5MHz	16QAM	23255	12RB#13	20.60	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.54	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.32	PASS
Band13	10MHz	QPSK	23230	1RB#24	22.48	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.50	PASS
Band13	10MHz	QPSK	23230	25RB#0	21.99	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.00	PASS
Band13	10MHz	QPSK	23230	25RB#25	21.46	PASS
Band13	10MHz	QPSK	23230	50RB#0	21.74	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.23	PASS
Band13	10MHz	16QAM	23230	1RB#24	21.42	PASS
Band13	10MHz	16QAM	23230	1RB#49	21.56	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.07	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.04	PASS
Band13	10MHz	16QAM	23230	25RB#25	20.55	PASS

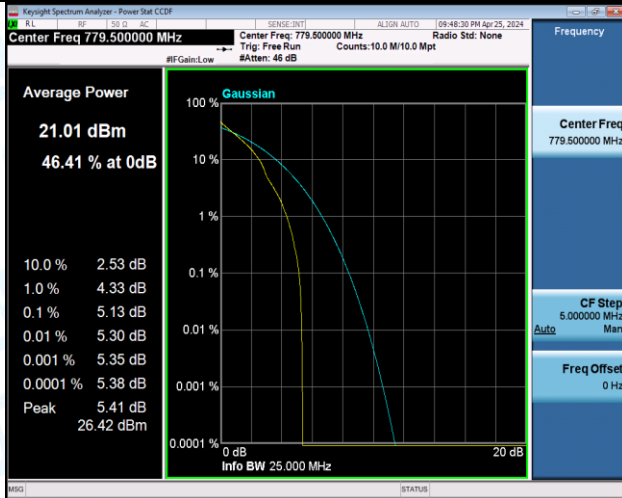
2: Peak-to-Average Ratio(CCDF)

Test Result

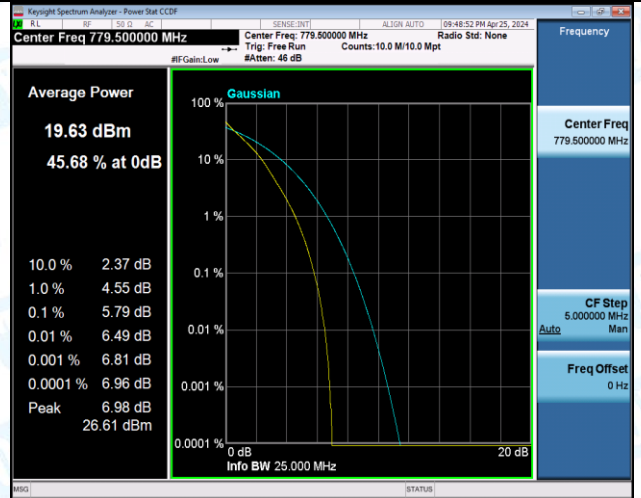
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	5.13	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.79	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	5.42	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.80	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	5.23	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.82	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.92	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.43	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	6.18	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.39	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	6.43	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.56	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	5.09	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.75	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	6.08	13	PASS
Band13	10MHz	16QAM	23230	27RB#0	6.52	13	PASS

Test Graphs

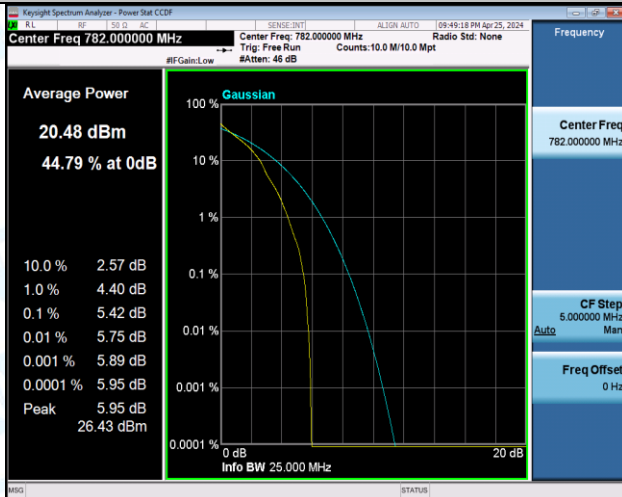
Band13-5MHz-QPSK-23205-1RB#0-PASS



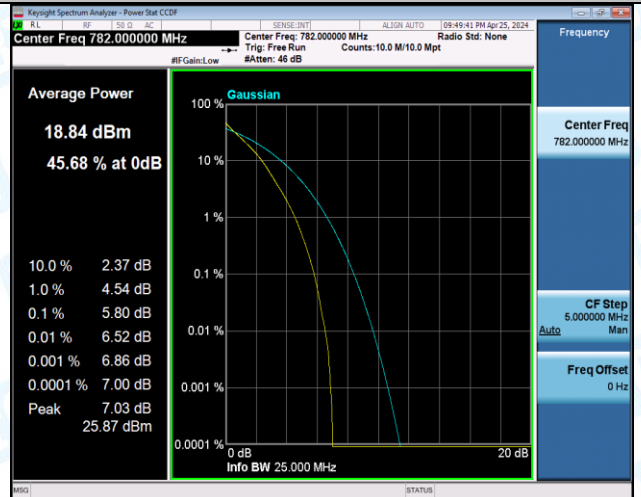
Band13-5MHz-QPSK-23205-25RB#0-PASS



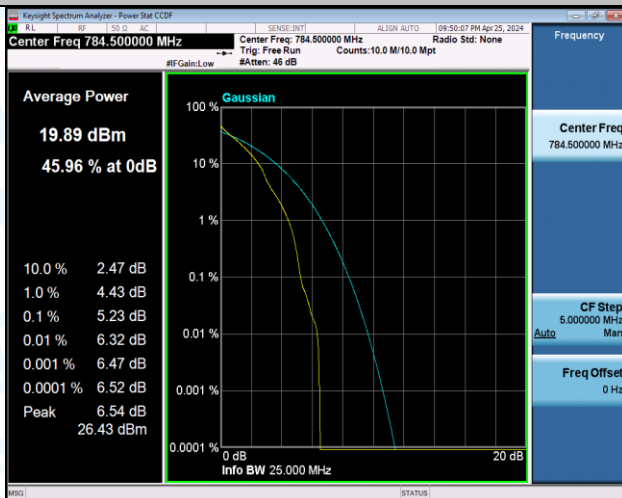
Band13-5MHz-QPSK-23230-1RB#0-PASS



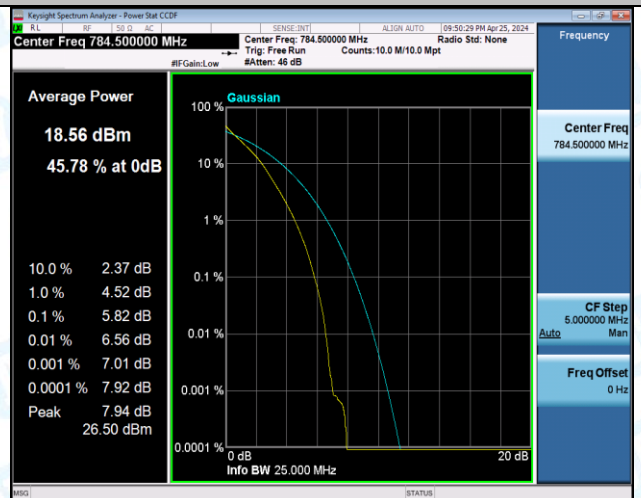
Band13-5MHz-QPSK-23230-25RB#0-PASS



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

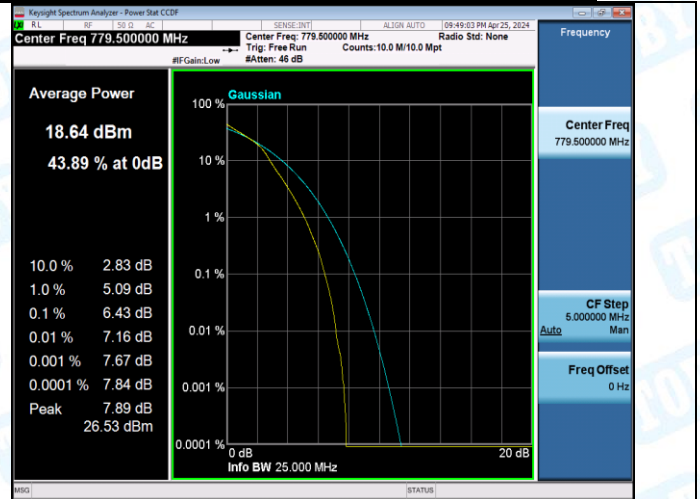
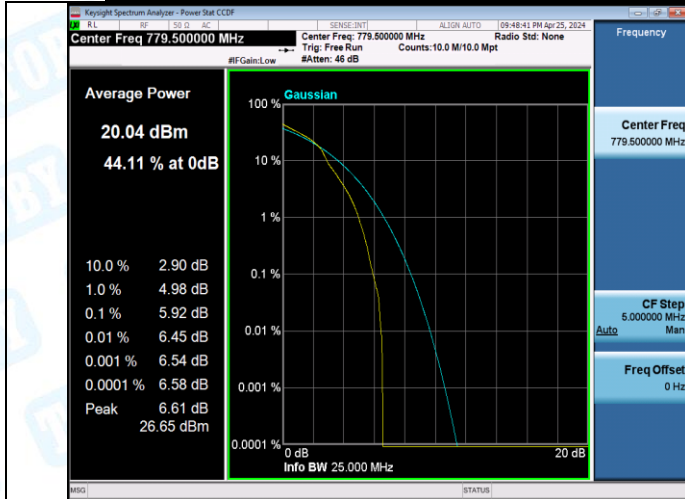


Band13-5MHz-QPSK-23255-25RB#0-PASS



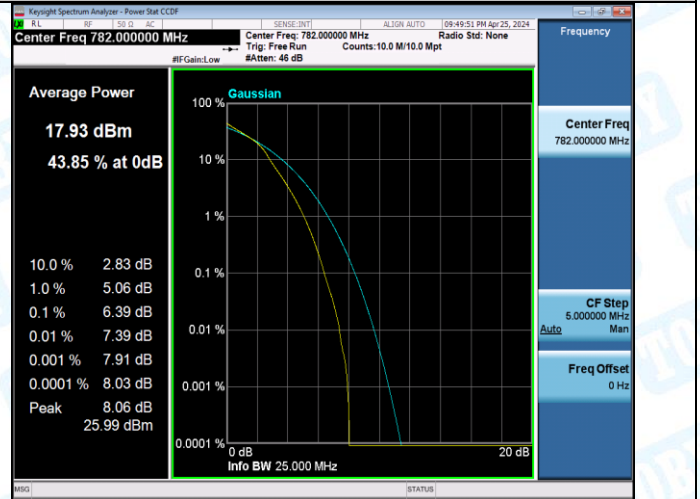
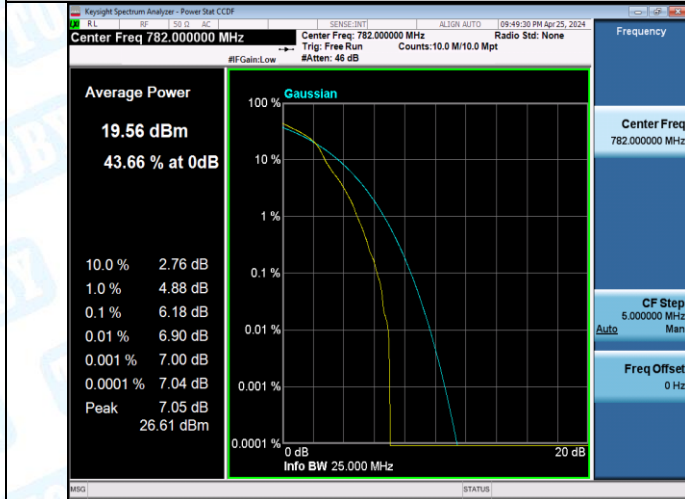
Band13-5MHz-16QAM-23205-1RB#0-PASS

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



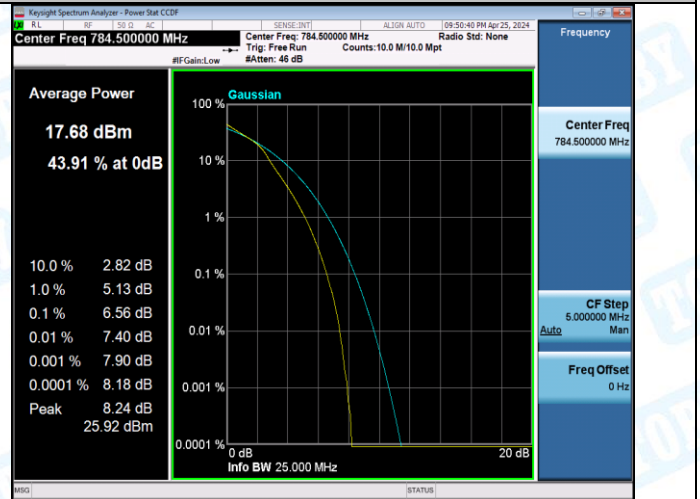
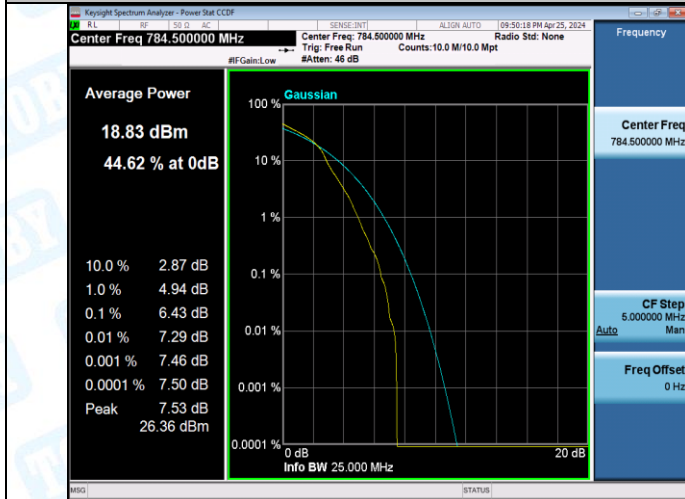
Band13-5MHz-16QAM-23230-1RB#0-PASS

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



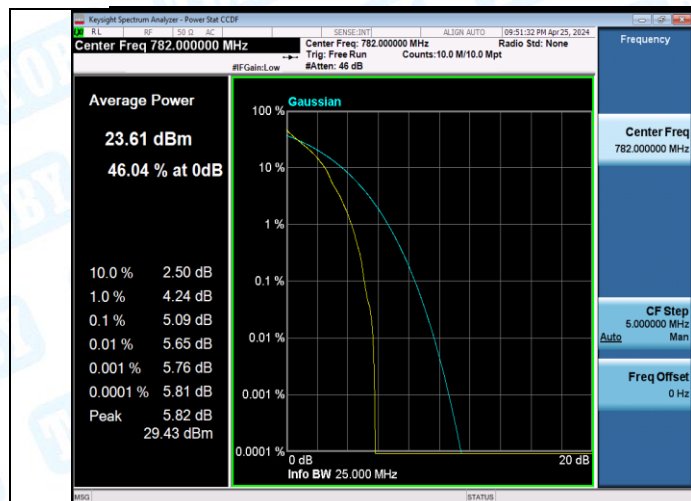
Band13-5MHz-16QAM-23255-1RB#0-PASS

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

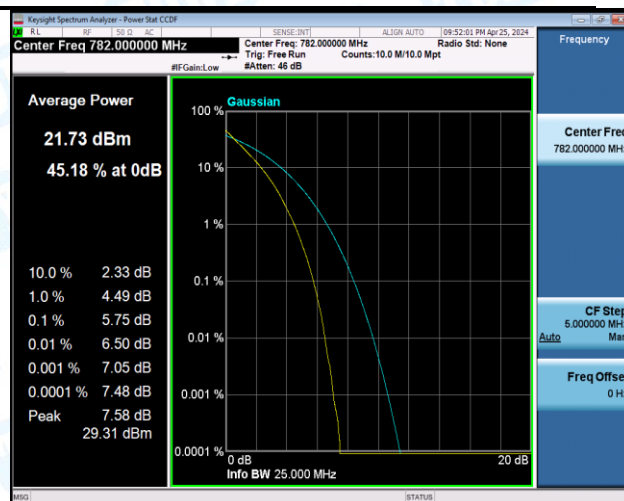


Band13-10MHz-QPSK-23230-1RB#0-PASS

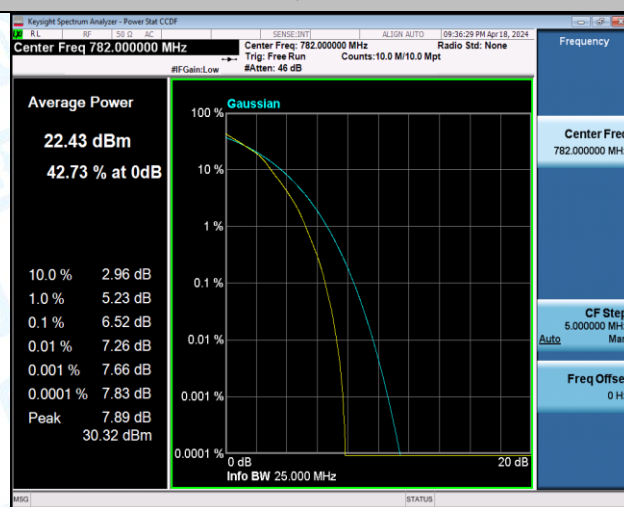
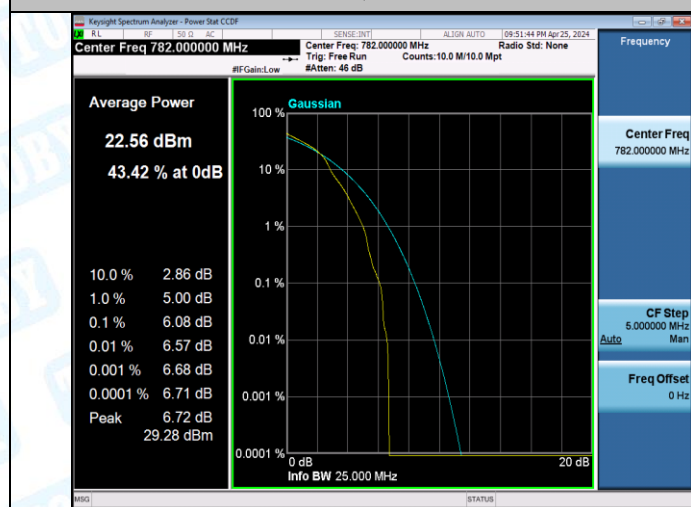
Band13-10MHz-QPSK-23230-50RB#0-PASS



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



Band13-10MHz-16QAM-23230-27RB#0-PASS



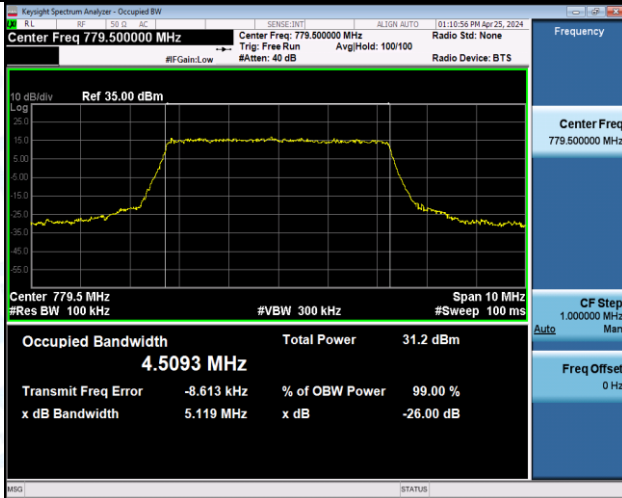
3: 26dB Bandwidth and Occupied Bandwidth

Test Result

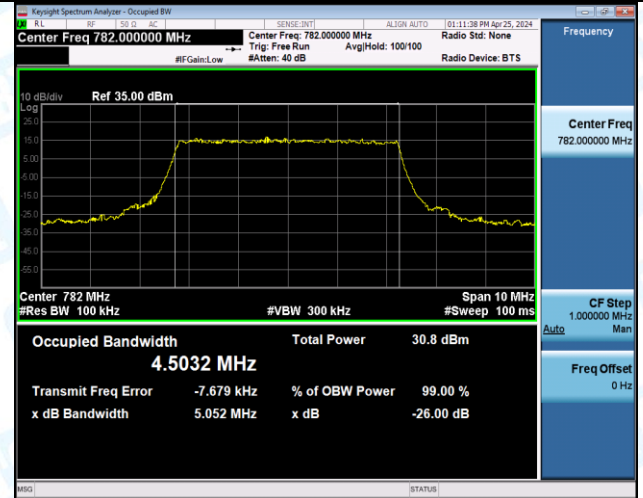
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5093	5.119	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5032	5.052	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5074	5.108	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5037	5.084	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5020	5.084	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5099	5.071	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9905	10.12	PASS
Band13	10MHz	16QAM	23230	27RB#0	5.0027	6.138	PASS

Test Graphs

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



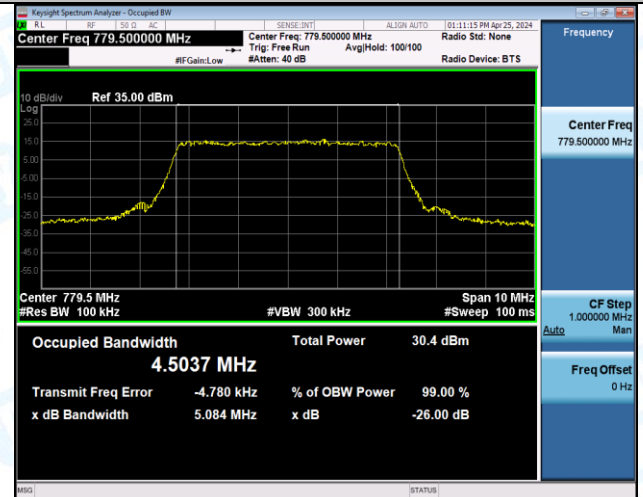
Band13-5MHz-QPSK-23230-25RB#0-PASS



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



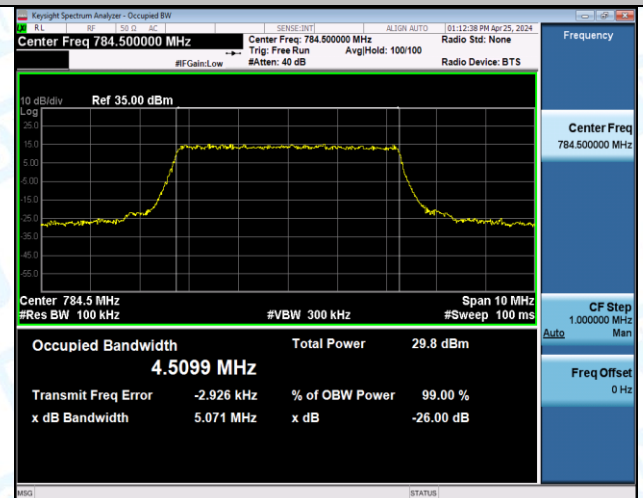
Band13-5MHz-16QAM-23205-25RB#0-PASS



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

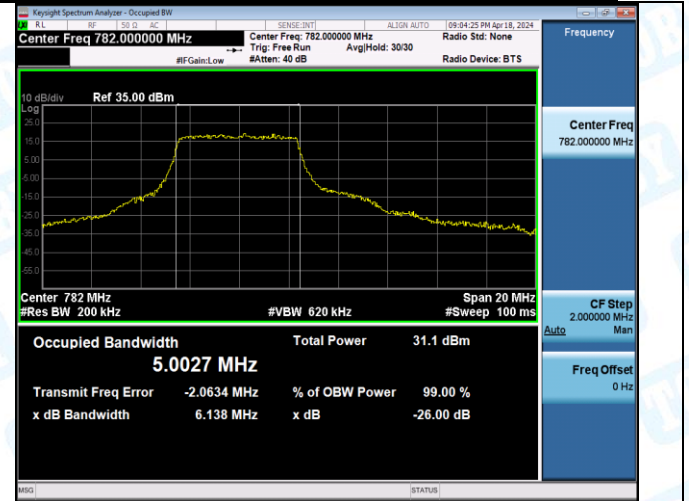
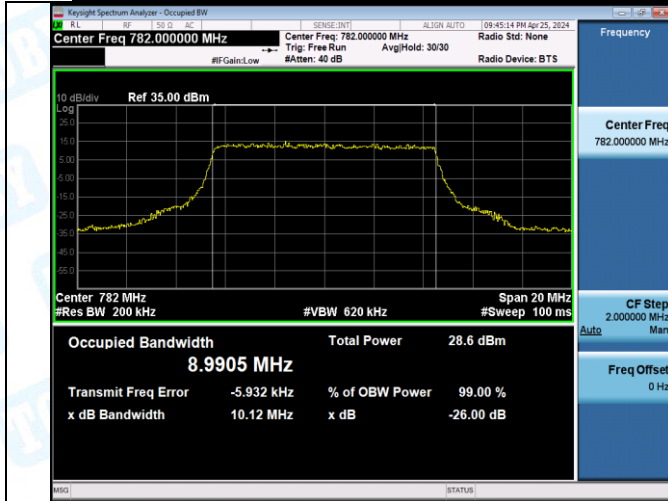


Band13-5MHz-16QAM-23255-25RB#0-PASS



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

Band13-10MHz-16QAM-23230-27RB#0-PASS

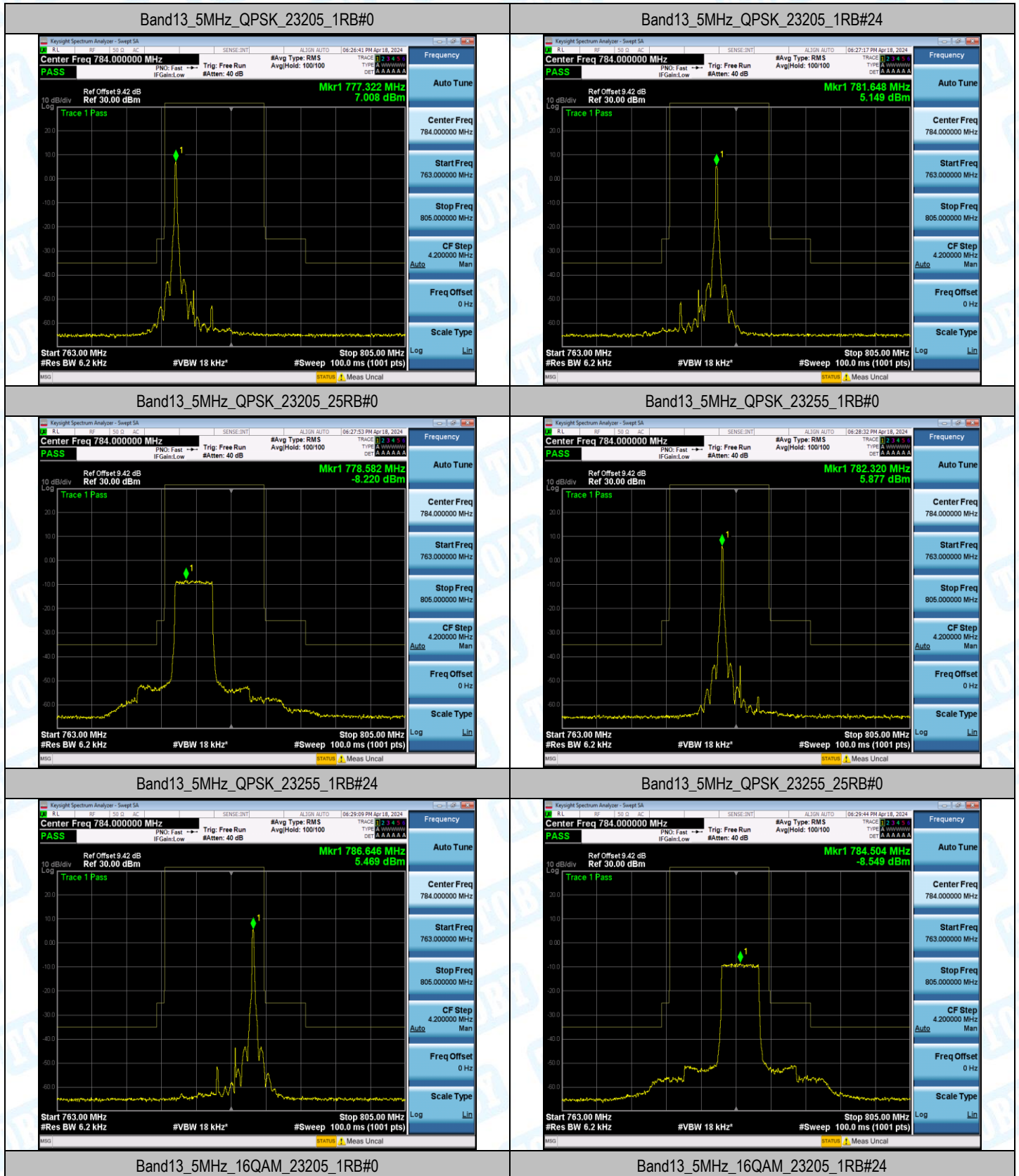


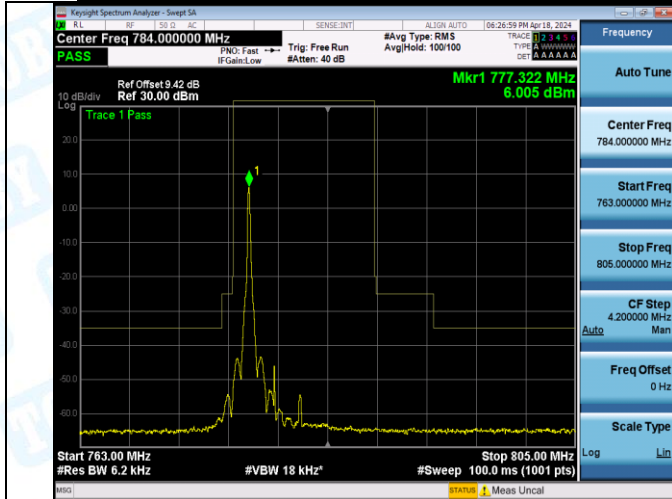
4: Band Edge

Test Result

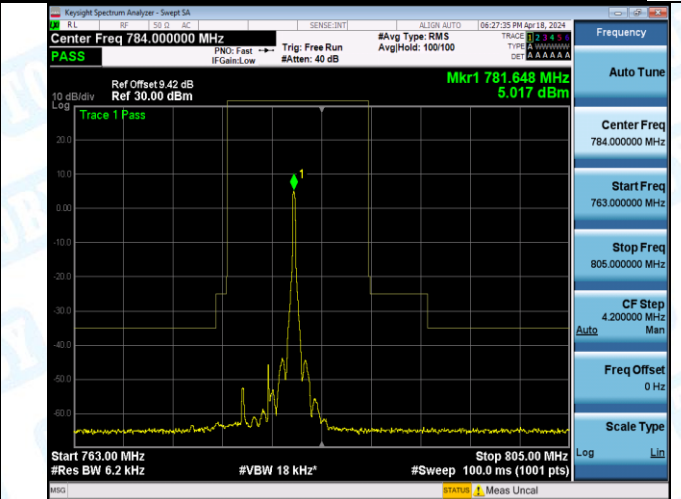
Band	Bandwidth	Modulation	Channel	RB Configuration	Level_dBm	Margin	Verdict
Band13	5MHz	QPSK	23205	1RB#0	-60.34	25.34	PASS
Band13	5MHz	QPSK	23205	1RB#24	-63.34	28.34	PASS
Band13	5MHz	QPSK	23205	25RB#0	-51.75	16.75	PASS
Band13	5MHz	QPSK	23255	1RB#0	-63.80	28.80	PASS
Band13	5MHz	QPSK	23255	1RB#24	-54.10	29.00	PASS
Band13	5MHz	QPSK	23255	25RB#0	-55.92	20.92	PASS
Band13	5MHz	16QAM	23205	1RB#0	-61.18	26.18	PASS
Band13	5MHz	16QAM	23205	1RB#24	-63.35	28.35	PASS
Band13	5MHz	16QAM	23205	25RB#0	-51.58	16.58	PASS
Band13	5MHz	16QAM	23255	1RB#0	-63.93	28.93	PASS
Band13	5MHz	16QAM	23255	1RB#24	-64.08	29.08	PASS
Band13	5MHz	16QAM	23255	25RB#0	-56.41	21.41	PASS
Band13	10MHz	QPSK	23230	1RB#0	-51.49	16.49	PASS
Band13	10MHz	QPSK	23230	1RB#49	-49.62	24.52	PASS
Band13	10MHz	QPSK	23230	50RB#0	-53.44	18.44	PASS
Band13	10MHz	16QAM	23230	1RB#0	-52.07	17.07	PASS
Band13	10MHz	16QAM	23230	1RB#49	-50.38	25.28	PASS

Test Graphs

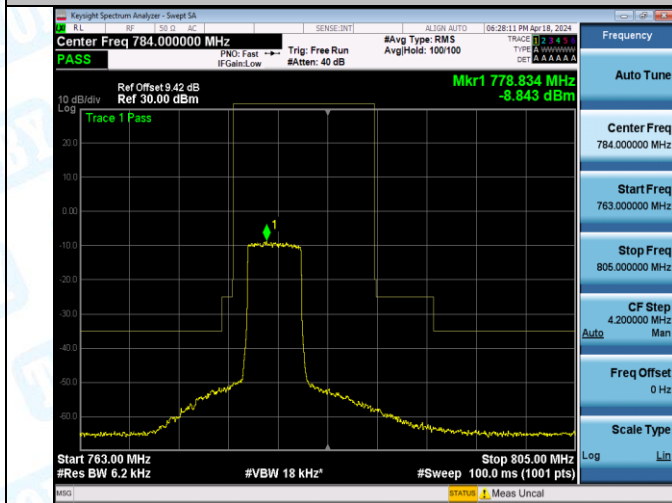




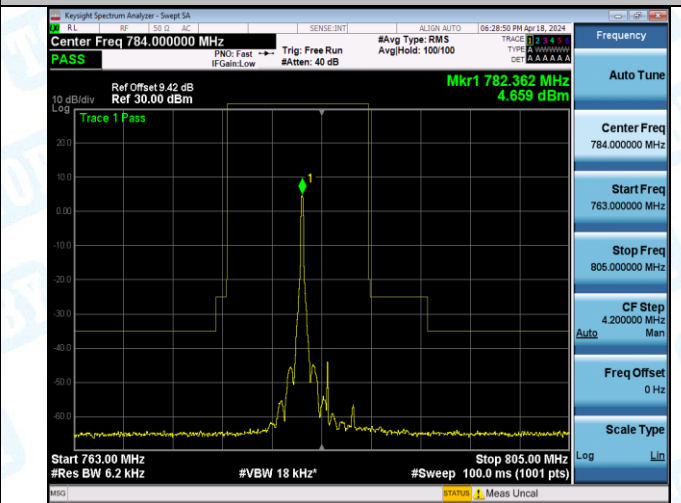
Band13_5MHz_16QAM_23205_25RB#0



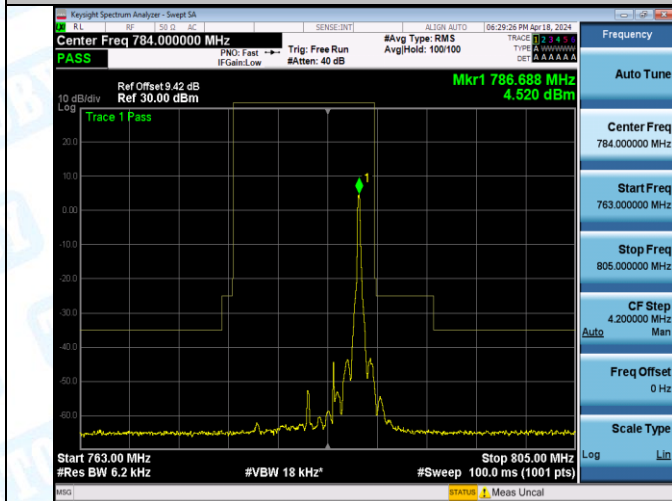
Band13_5MHz_16QAM_23255_1RB#0



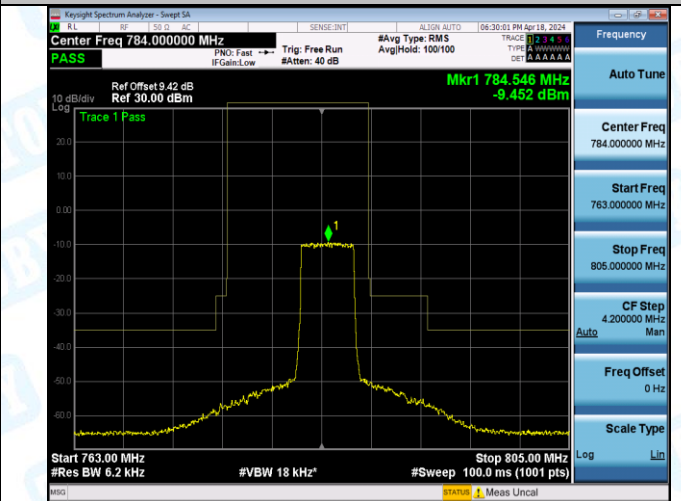
Band13_5MHz_16QAM_23255_1RB#24



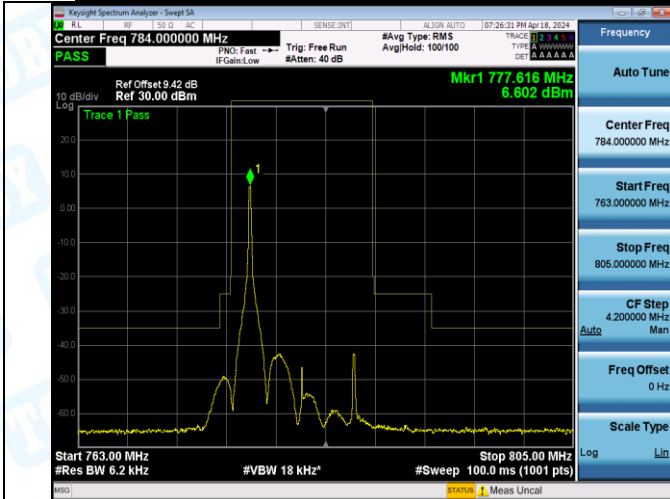
Band13_5MHz_16QAM_23255_25RB#0



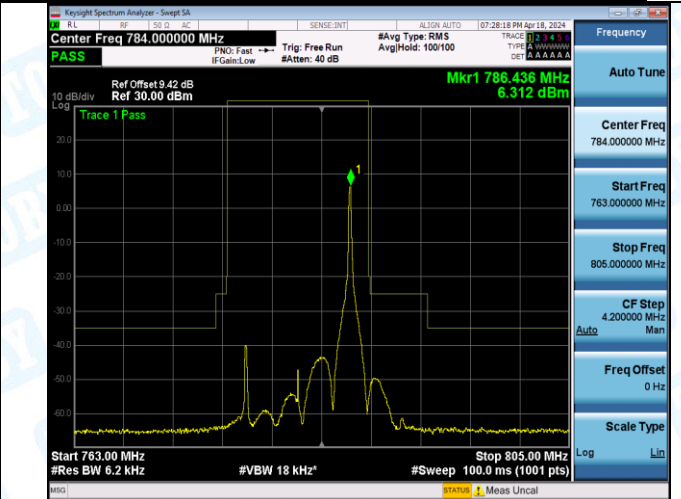
Band13_10MHz_QPSK_23230_1RB#0



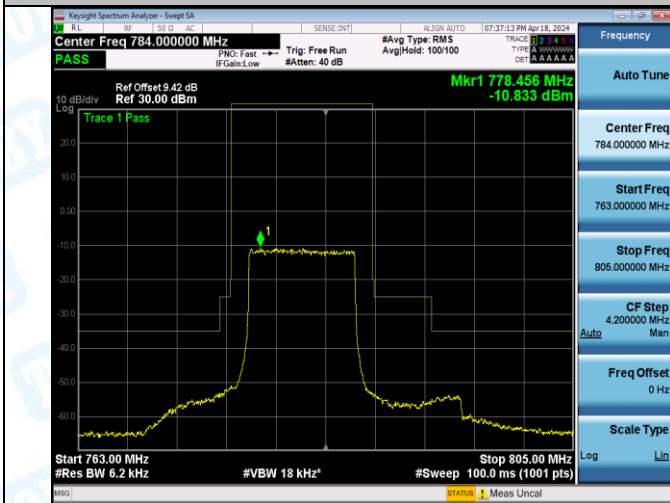
Band13_10MHz_QPSK_23230_1RB#49



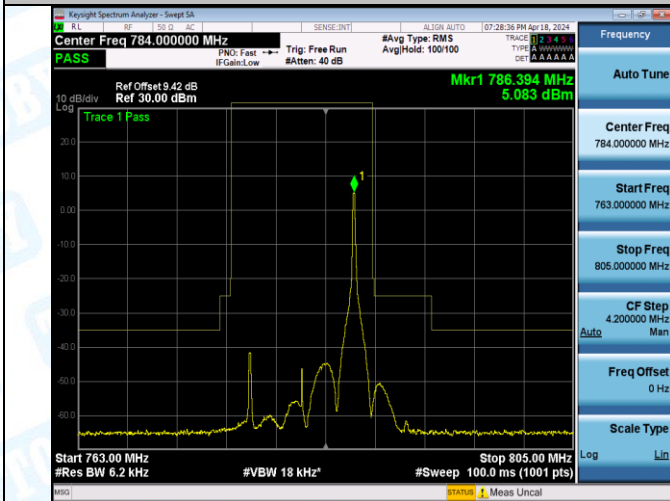
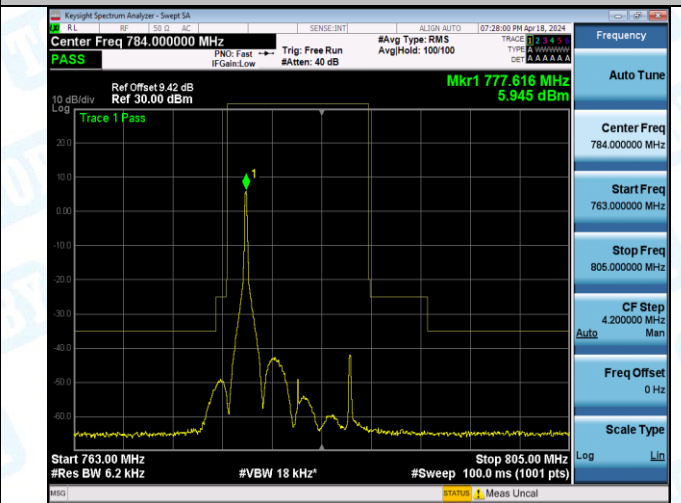
Band13_10MHz_QPSK_23230_50RB#0



Band13_10MHz_16QAM_23230_1RB#0



Band13_10MHz_16QAM_23230_1RB#49



5: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Frequency	Value(dBm)	Limit (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	0.009~0.15	0.01	-65.70	-33.0	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	0.15	-50.47	-23.0	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	894.27	-59.68	-13.0	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	2641.75	-42.29	-13.0	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	7378.85	-35.51	-13.0	PASS
Band13	5MHz	QPSK	23205	1RB#24	0.009~0.15	0.01	-63.29	-33.0	PASS
Band13	5MHz	QPSK	23205	1RB#24	0.15~30	0.15	-49.68	-23.0	PASS
Band13	5MHz	QPSK	23205	1RB#24	30~1000	838.50	-60.01	-13.0	PASS
Band13	5MHz	QPSK	23205	1RB#24	1000~3000	2675.40	-43.19	-13.0	PASS
Band13	5MHz	QPSK	23205	1RB#24	3000~10000	7357.68	-35.08	-13.0	PASS
Band13	5MHz	QPSK	23205	25RB#0	0.009~0.15	0.01	-62.74	-33.0	PASS
Band13	5MHz	QPSK	23205	25RB#0	0.15~30	0.15	-49.69	-23.0	PASS
Band13	5MHz	QPSK	23205	25RB#0	30~1000	909.31	-59.63	-13.0	PASS
Band13	5MHz	QPSK	23205	25RB#0	1000~3000	2636.00	-43.08	-13.0	PASS
Band13	5MHz	QPSK	23205	25RB#0	3000~10000	7351.55	-34.97	-13.0	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	0.01	-64.21	-33.0	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	0.15	-50.06	-23.0	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	939.38	-59.48	-13.0	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	2985.55	-43.25	-13.0	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	7310.78	-35.56	-13.0	PASS
Band13	5MHz	QPSK	23230	1RB#24	0.009~0.15	0.01	-65.43	-33.0	PASS
Band13	5MHz	QPSK	23230	1RB#24	0.15~30	0.15	-49.02	-23.0	PASS
Band13	5MHz	QPSK	23230	1RB#24	30~1000	807.94	-59.58	-13.0	PASS
Band13	5MHz	QPSK	23230	1RB#24	1000~3000	2689.55	-42.68	-13.0	PASS
Band13	5MHz	QPSK	23230	1RB#24	3000~10000	7363.10	-35.36	-13.0	PASS
Band13	5MHz	QPSK	23230	25RB#0	0.009~0.15	0.01	-65.85	-33.0	PASS
Band13	5MHz	QPSK	23230	25RB#0	0.15~30	0.15	-49.69	-23.0	PASS
Band13	5MHz	QPSK	23230	25RB#0	30~1000	795.33	-50.81	-13.0	PASS
Band13	5MHz	QPSK	23230	25RB#0	1000~3000	2652.85	-43.06	-13.0	PASS
Band13	5MHz	QPSK	23230	25RB#0	3000~10000	7361.18	-34.98	-13.0	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	0.01	-64.35	-33.0	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	0.15	-50.84	-23.0	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	883.60	-59.87	-13.0	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	2665.70	-43.12	-13.0	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	7366.08	-35.28	-13.0	PASS
Band13	5MHz	QPSK	23255	1RB#24	0.009~0.15	0.01	-65.29	-33.0	PASS
Band13	5MHz	QPSK	23255	1RB#24	0.15~30	0.15	-50.15	-23.0	PASS
Band13	5MHz	QPSK	23255	1RB#24	30~1000	936.95	-59.25	-13.0	PASS
Band13	5MHz	QPSK	23255	1RB#24	1000~3000	2645.00	-42.82	-13.0	PASS
Band13	5MHz	QPSK	23255	1RB#24	3000~10000	7348.75	-34.96	-13.0	PASS
Band13	5MHz	QPSK	23255	25RB#0	0.009~0.15	0.01	-66.55	-33.0	PASS
Band13	5MHz	QPSK	23255	25RB#0	0.15~30	0.18	-52.86	-23.0	PASS
Band13	5MHz	QPSK	23255	25RB#0	30~1000	663.90	-59.86	-13.0	PASS
Band13	5MHz	QPSK	23255	25RB#0	1000~3000	2667.95	-43.41	-13.0	PASS
Band13	5MHz	QPSK	23255	25RB#0	3000~10000	7375.00	-35.38	-13.0	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	0.01	-63.13	-33.0	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	0.15	-49.71	-23.0	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	919.98	-59.82	-13.0	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	2637.60	-43.06	-13.0	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	7407.73	-35.40	-13.0	PASS
Band13	5MHz	16QAM	23205	1RB#24	0.009~0.15	0.01	-64.38	-33.0	PASS
Band13	5MHz	16QAM	23205	1RB#24	0.15~30	0.15	-50.04	-23.0	PASS
Band13	5MHz	16QAM	23205	1RB#24	30~1000	990.79	-59.68	-13.0	PASS
Band13	5MHz	16QAM	23205	1RB#24	1000~3000	2661.90	-43.26	-13.0	PASS
Band13	5MHz	16QAM	23205	1RB#24	3000~10000	7446.75	-35.19	-13.0	PASS
Band13	5MHz	16QAM	23205	25RB#0	0.009~0.15	0.01	-62.09	-33.0	PASS
Band13	5MHz	16QAM	23205	25RB#0	0.15~30	0.15	-49.40	-23.0	PASS
Band13	5MHz	16QAM	23205	25RB#0	30~1000	872.45	-59.58	-13.0	PASS
Band13	5MHz	16QAM	23205	25RB#0	1000~3000	2650.00	-43.25	-13.0	PASS
Band13	5MHz	16QAM	23205	25RB#0	3000~10000	7367.65	-35.17	-13.0	PASS