

Appendix for LTE Band 13

Applicant: UCLOUDLINK (SINGAPORE) PTE.LTD

**Address: 80 ROBINSON ROAD #02-00
SINGAPORE(068898)**

Product Name: 4G Wireless Data Terminal

Model: GLMX24A01

TABLE OF CONTENTS

APPENDIX A: CONDUCTED POWER OUTPUT DATA.....	3
APPENDIX B: PEAK-TO-AVERAGE RATIO(CCDF).....	5
APPENDIX C: 26DB BANDWIDTH AND OCCUPIED BANDWIDTH	12
APPENDIX D: BAND EDGE	16
APPENDIX E: CONDUCTED SPURIOUS EMISSION.....	23
APPENDIX F: FREQUENCY STABILITY	38

Appendix A: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#12	24.07	PASS
Band13	5MHz	16QAM	23205	1RB#12	23.27	PASS
Band13	5MHz	QPSK	23205	1RB#24	24.19	PASS
Band13	5MHz	QPSK	23205	1RB#0	23.80	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.90	PASS
Band13	5MHz	16QAM	23205	1RB#24	23.29	PASS
Band13	5MHz	QPSK	23205	12RB#0	23.54	PASS
Band13	5MHz	16QAM	23205	12RB#0	23.49	PASS
Band13	5MHz	QPSK	23205	12RB#6	23.61	PASS
Band13	5MHz	16QAM	23205	12RB#6	23.57	PASS
Band13	5MHz	QPSK	23205	12RB#13	23.39	PASS
Band13	5MHz	16QAM	23205	12RB#13	23.54	PASS
Band13	5MHz	QPSK	23205	25RB#0	23.51	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.33	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.98	PASS
Band13	5MHz	16QAM	23230	1RB#0	23.02	PASS
Band13	5MHz	QPSK	23230	1RB#12	24.08	PASS
Band13	5MHz	16QAM	23230	1RB#12	23.13	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.95	PASS
Band13	5MHz	16QAM	23230	1RB#24	23.06	PASS
Band13	5MHz	QPSK	23230	12RB#0	23.43	PASS
Band13	5MHz	16QAM	23230	12RB#0	23.44	PASS
Band13	5MHz	QPSK	23230	12RB#6	23.42	PASS
Band13	5MHz	16QAM	23230	12RB#6	23.42	PASS
Band13	5MHz	QPSK	23230	12RB#13	23.56	PASS
Band13	5MHz	16QAM	23230	12RB#13	23.40	PASS
Band13	5MHz	QPSK	23230	25RB#0	23.53	PASS
Band13	5MHz	16QAM	23230	25RB#0	22.42	PASS
Band13	5MHz	QPSK	23255	1RB#0	24.02	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.80	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.93	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.79	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.99	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.83	PASS
Band13	5MHz	QPSK	23255	12RB#0	23.40	PASS
Band13	5MHz	16QAM	23255	12RB#0	23.38	PASS
Band13	5MHz	QPSK	23255	12RB#6	23.37	PASS
Band13	5MHz	16QAM	23255	12RB#6	23.35	PASS

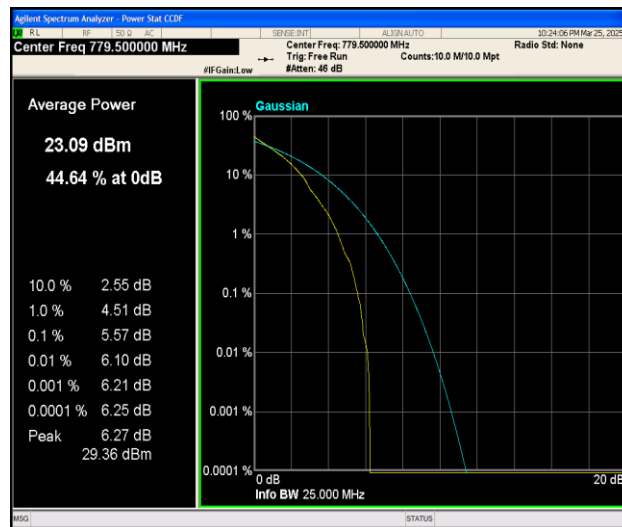
Band13	5MHz	QPSK	23255	12RB#13	23.49	PASS
Band13	5MHz	16QAM	23255	12RB#13	23.49	PASS
Band13	5MHz	QPSK	23255	25RB#0	23.41	PASS
Band13	5MHz	16QAM	23255	25RB#0	22.60	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.99	PASS
Band13	10MHz	16QAM	23230	1RB#0	23.50	PASS
Band13	10MHz	QPSK	23230	1RB#24	24.02	PASS
Band13	10MHz	16QAM	23230	1RB#24	23.56	PASS
Band13	10MHz	QPSK	23230	1RB#49	24.03	PASS
Band13	10MHz	16QAM	23230	1RB#49	23.48	PASS
Band13	10MHz	QPSK	23230	25RB#0	23.46	PASS
Band13	10MHz	16QAM	23230	25RB#0	23.49	PASS
Band13	10MHz	QPSK	23230	25RB#12	23.49	PASS
Band13	10MHz	16QAM	23230	25RB#12	23.51	PASS
Band13	10MHz	QPSK	23230	25RB#25	23.52	PASS
Band13	10MHz	16QAM	23230	25RB#25	23.61	PASS
Band13	10MHz	QPSK	23230	50RB#0	23.52	PASS
Band13	10MHz	16QAM	23230	50RB#0	22.45	PASS

Appendix B: Peak-to-Average Ratio(CCDF)

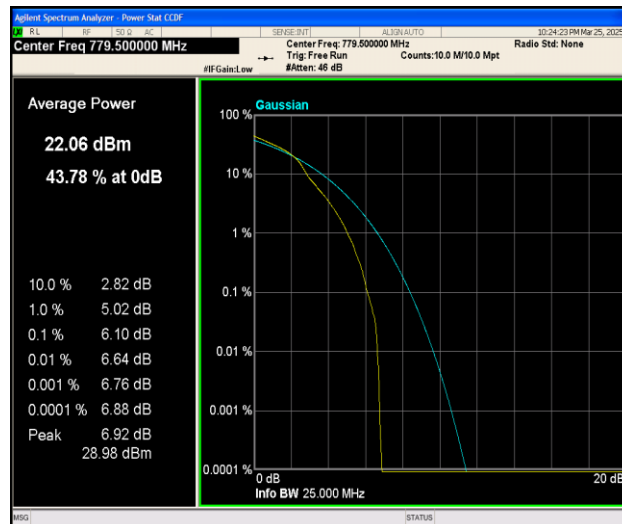
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	5.57	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	6.10	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.74	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.41	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	5.53	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	6.12	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.85	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.53	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	5.37	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.94	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.88	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.54	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	5.55	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	6.41	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.93	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.59	13	PASS

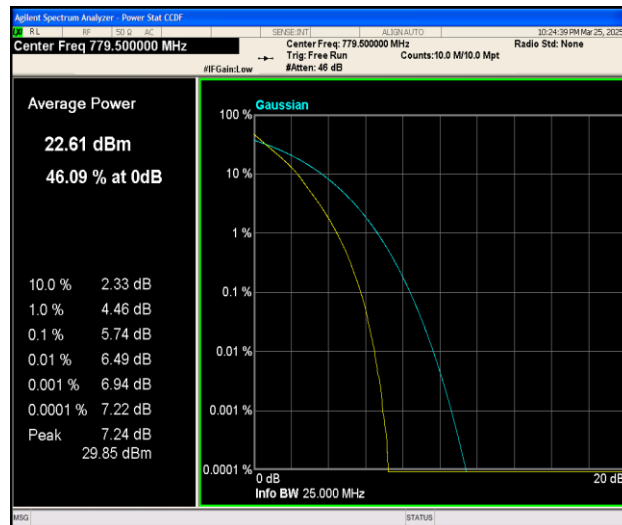
Test Graphs



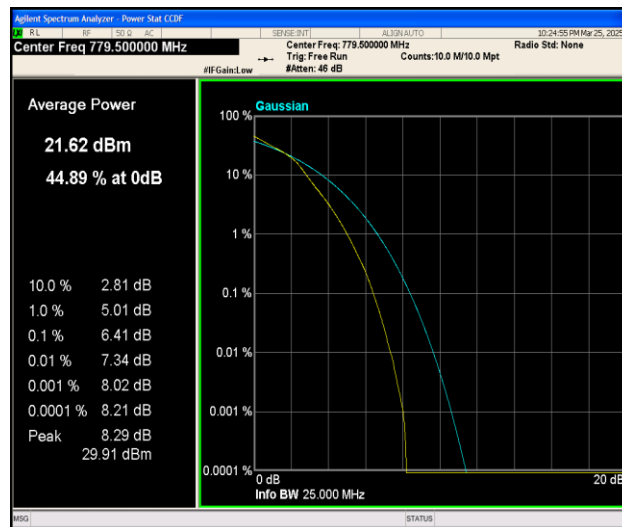
Band13-5MHz-QPSK-23205-1RB#0-PASS



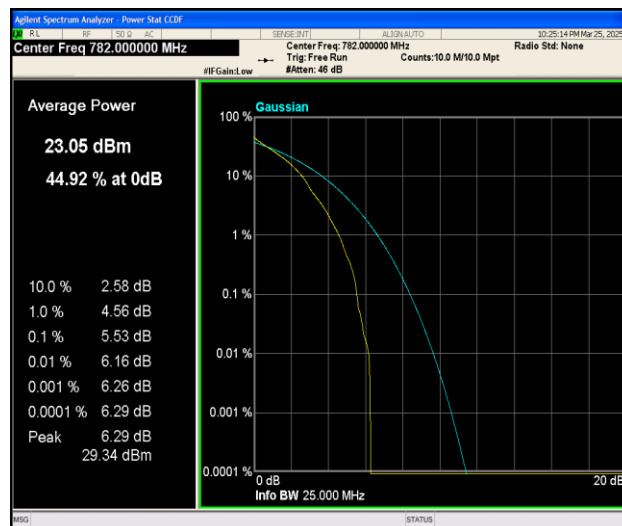
Band13-5MHz-16QAM-23205-1RB#0-PASS



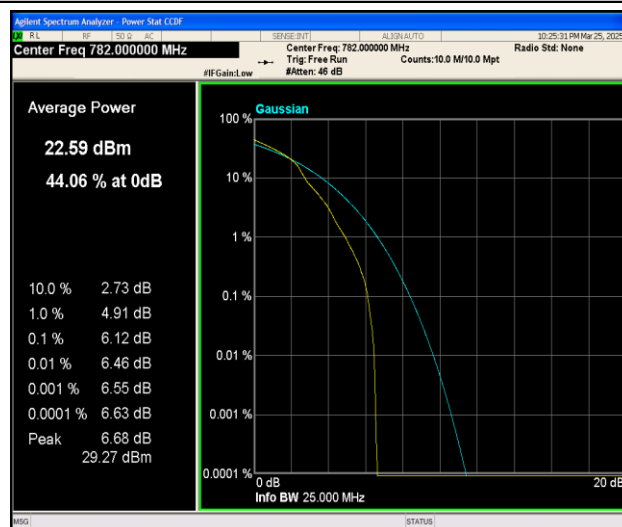
Band13-5MHz-QPSK-23205-25RB#0-PASS



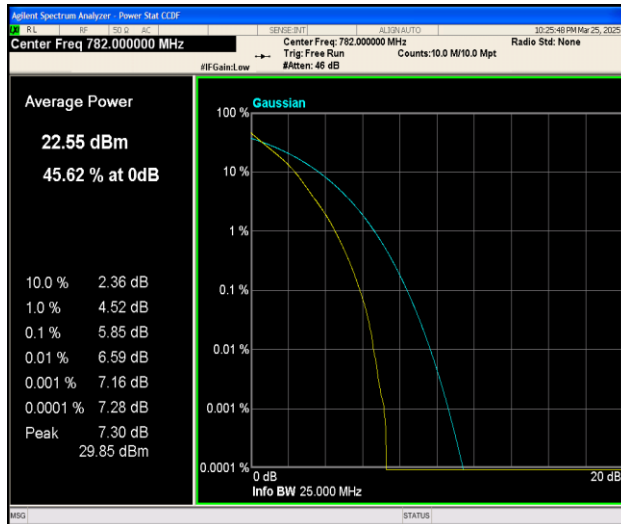
Band13-5MHz-16QAM-23205-25RB#0-PASS



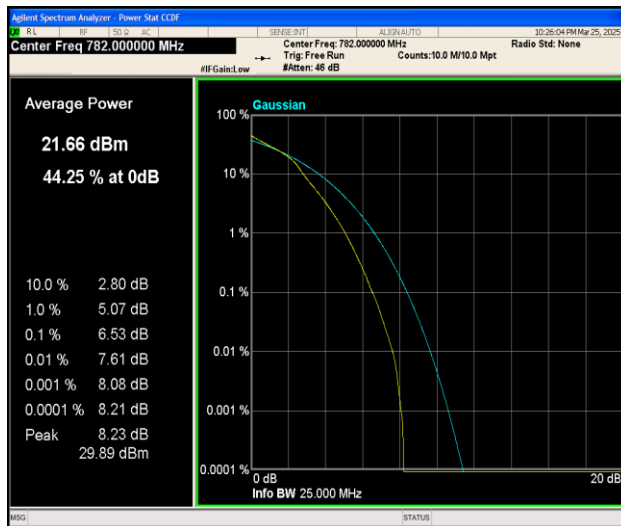
Band13-5MHz-QPSK-23230-1RB#0-PASS



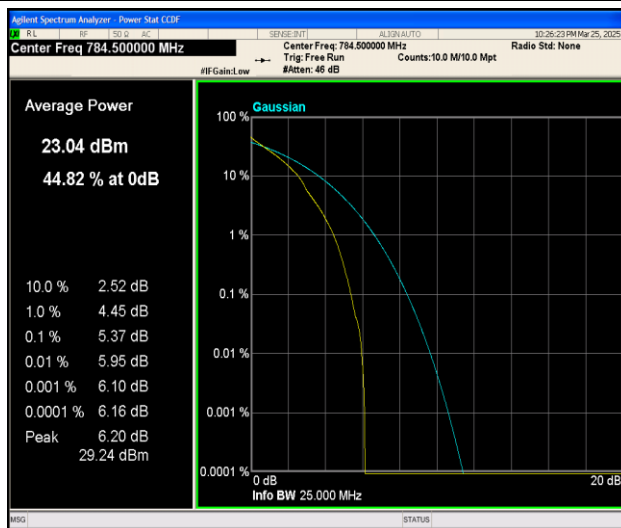
Band13-5MHz-16QAM-23230-1RB#0-PASS



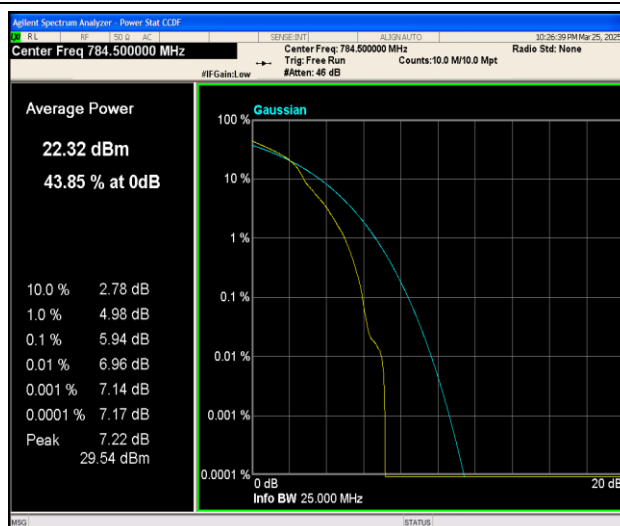
Band13-5MHz-QPSK-23230-25RB#0-PASS



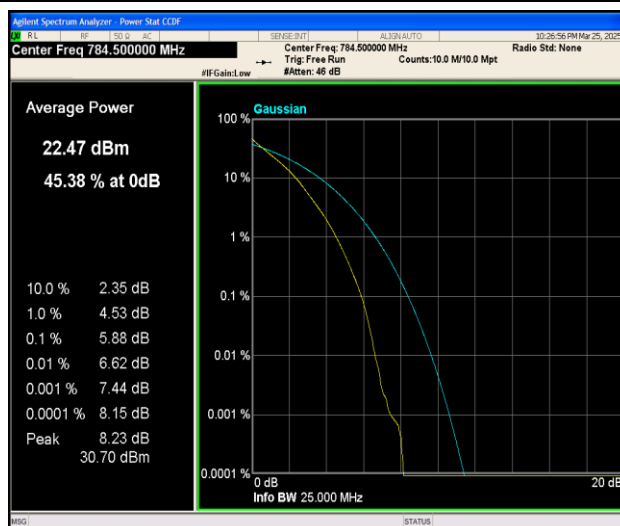
Band13-5MHz-16QAM-23230-25RB#0-PASS



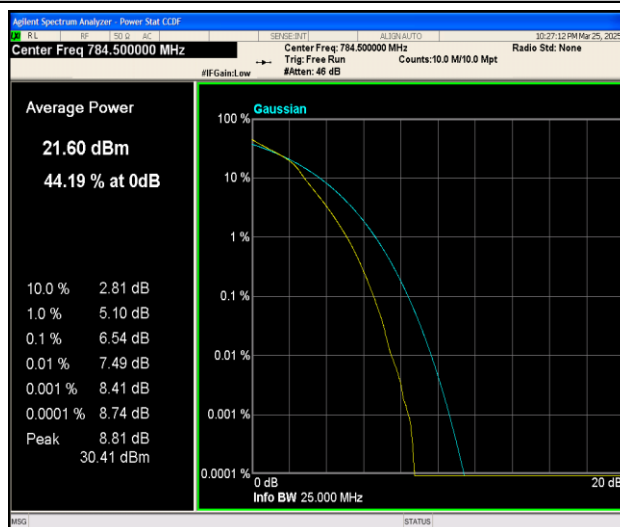
Band13-5MHz-QPSK-23255-1RB#0-PASS



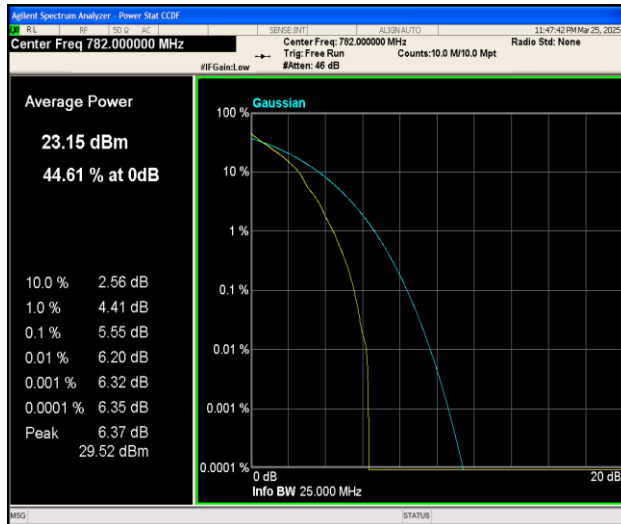
Band13-5MHz-16QAM-23255-1RB#0-PASS



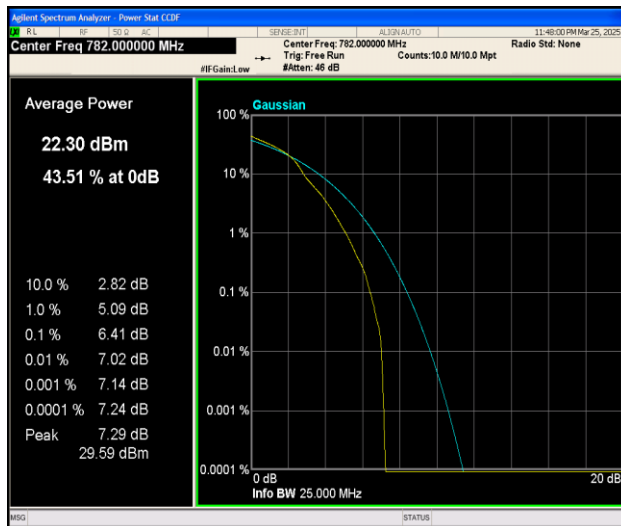
Band13-5MHz-QPSK-23255-25RB#0-PASS



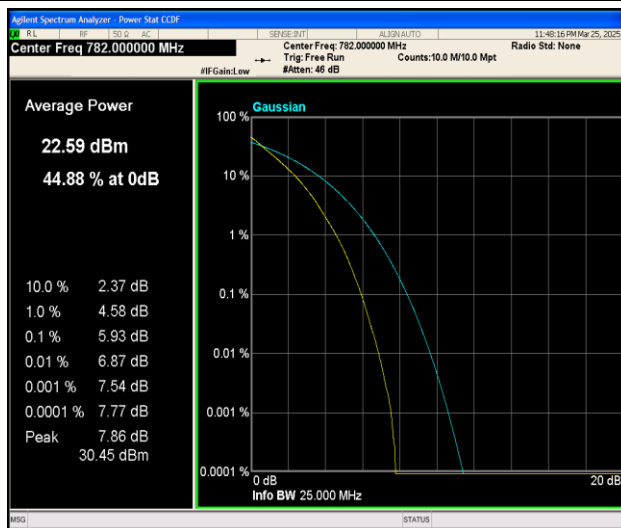
Band13-5MHz-16QAM-23255-25RB#0-PASS



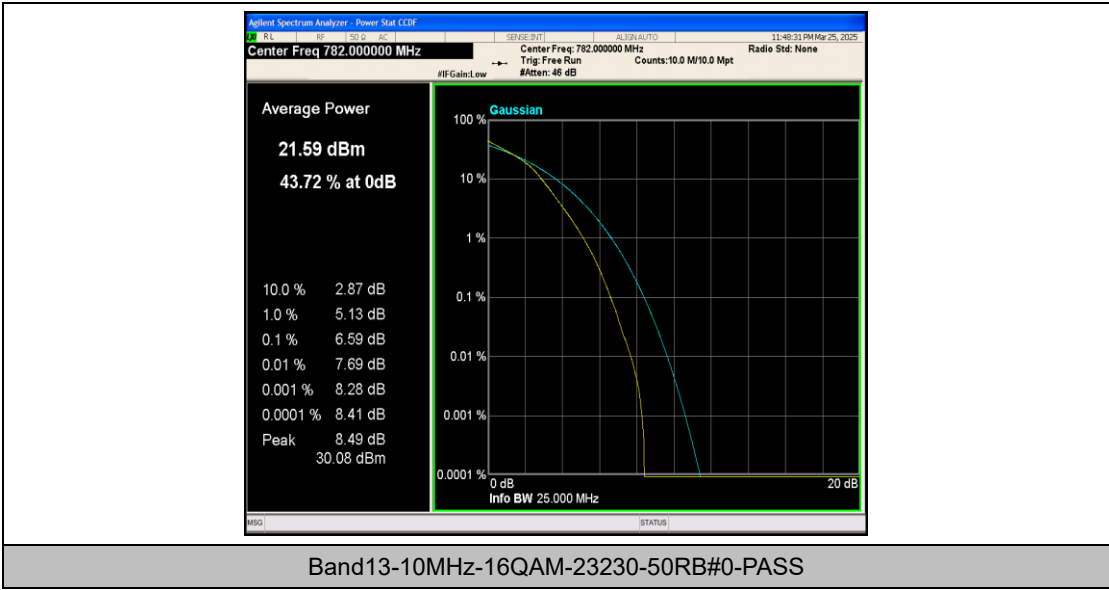
Band13-10MHz-QPSK-23230-1RB#0-PASS



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



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

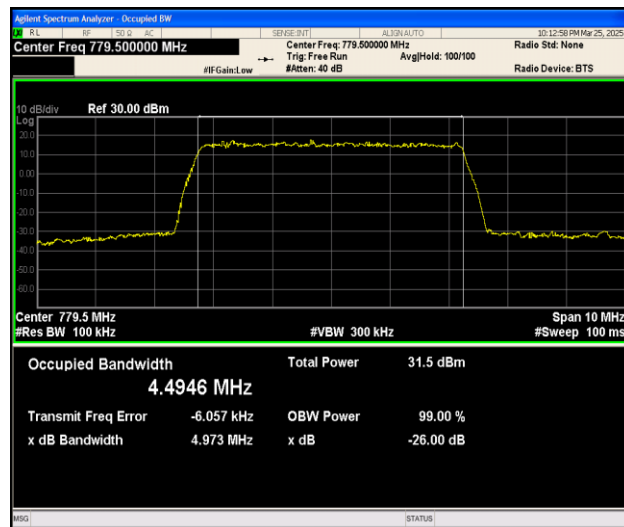


Appendix C: 26dB Bandwidth and Occupied Bandwidth

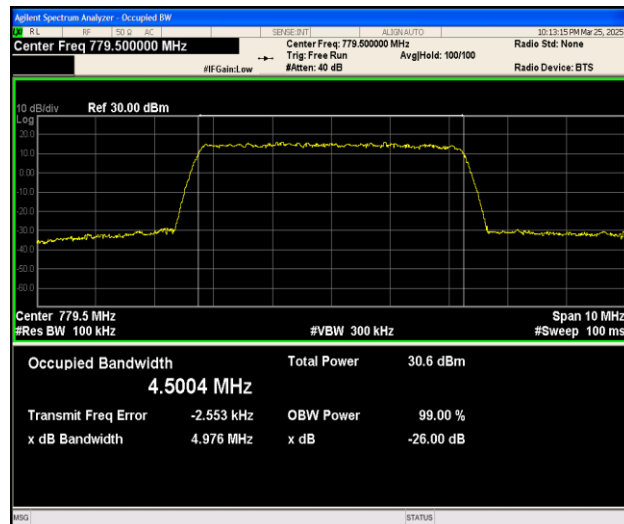
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.4946	4.973	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5004	4.976	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5136	4.998	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5265	5.004	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5091	4.974	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5072	4.970	PASS
Band13	10MHz	QPSK	23230	50RB#0	9.0204	9.876	PASS
Band13	10MHz	16QAM	23230	50RB#0	9.0019	9.924	PASS

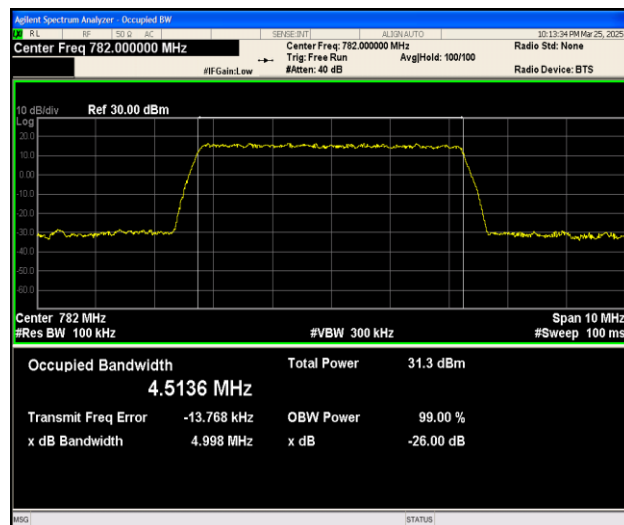
Test Graphs



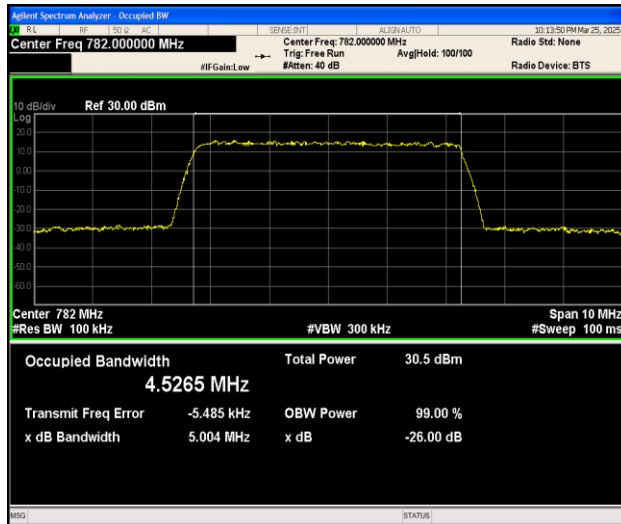
Band13-5MHz-QPSK-23205-25RB#0-PASS



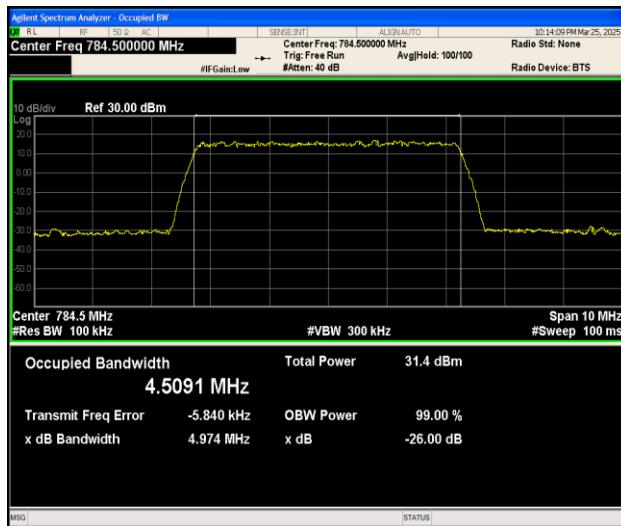
Band13-5MHz-16QAM-23205-25RB#0-PASS



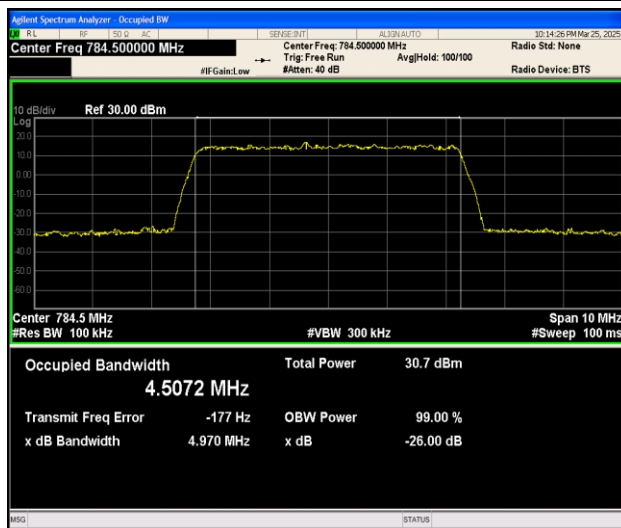
Band13-5MHz-QPSK-23230-25RB#0-PASS



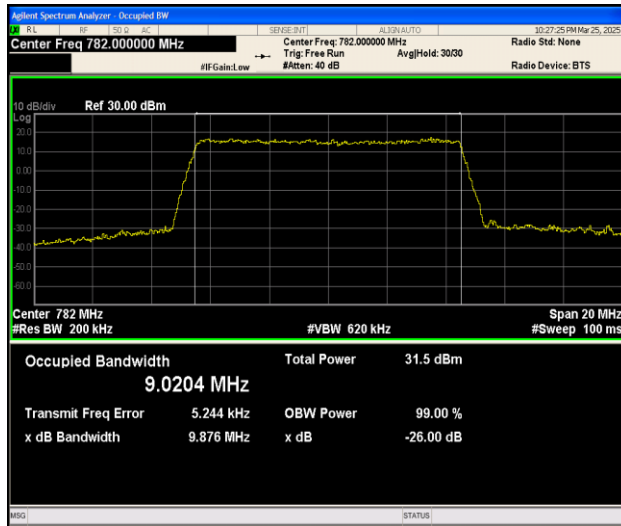
Band13-5MHz-16QAM-23230-25RB#0-PASS



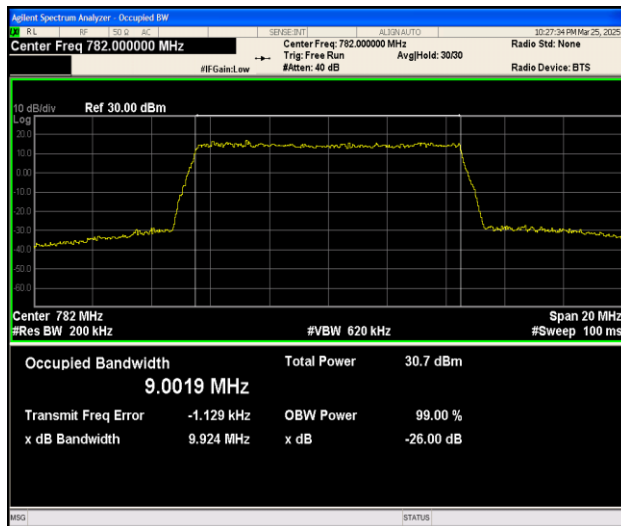
Band13-5MHz-QPSK-23255-25RB#0-PASS



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



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



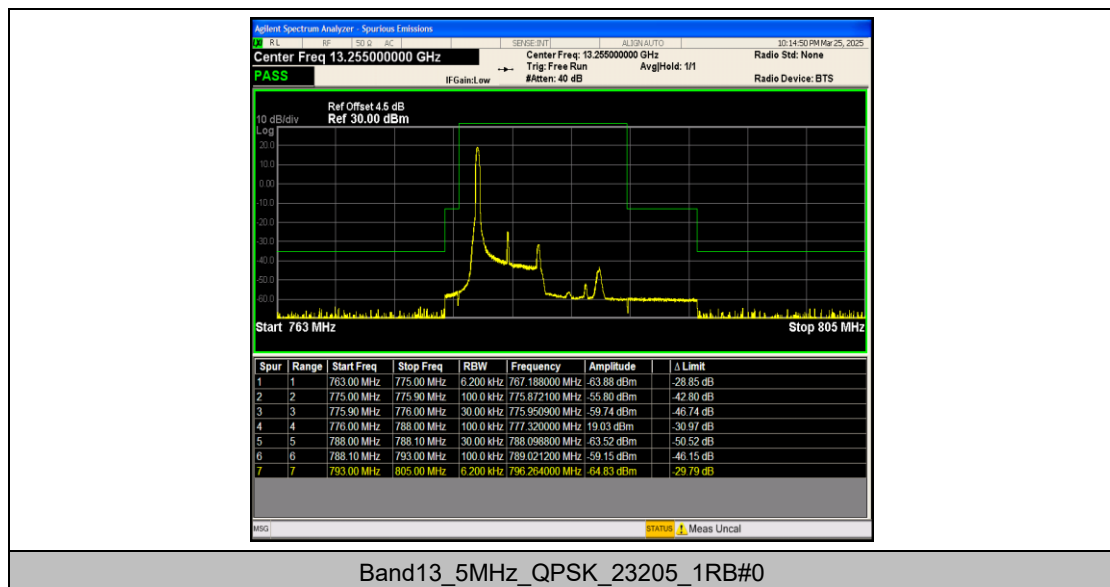
Band13-10MHz-16QAM-23230-50RB#0-PASS

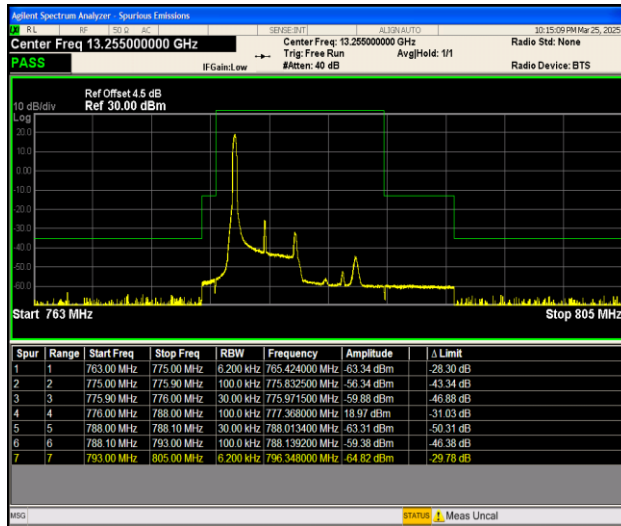
Appendix D: Band Edge

Test Result

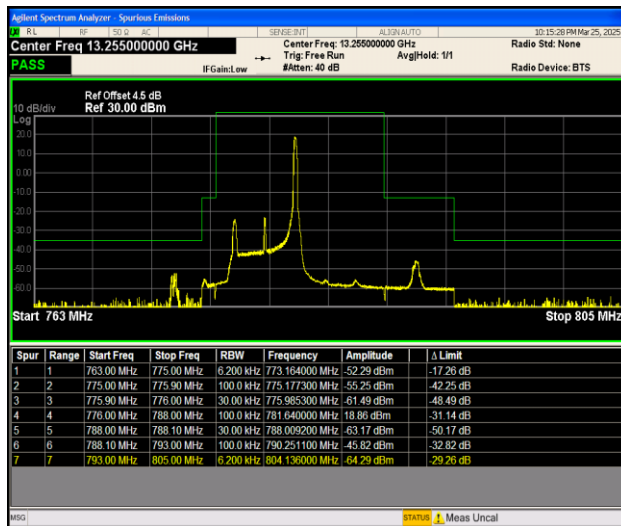
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	-63.88	PASS
Band13	5MHz	16QAM	23205	1RB#0	-63.34	PASS
Band13	5MHz	QPSK	23205	1RB#24	-52.29	PASS
Band13	5MHz	16QAM	23205	1RB#24	-51.86	PASS
Band13	5MHz	QPSK	23205	25RB#0	-55.21	PASS
Band13	5MHz	16QAM	23205	25RB#0	-54.59	PASS
Band13	5MHz	QPSK	23255	1RB#0	-54.24	PASS
Band13	5MHz	16QAM	23255	1RB#0	-54.49	PASS
Band13	5MHz	QPSK	23255	1RB#24	-56.02	PASS
Band13	5MHz	16QAM	23255	1RB#24	-57.71	PASS
Band13	5MHz	QPSK	23255	25RB#0	-54.71	PASS
Band13	5MHz	16QAM	23255	25RB#0	-59.53	PASS
Band13	10MHz	QPSK	23230	1RB#0	-56.00	PASS
Band13	10MHz	16QAM	23230	1RB#0	-58.43	PASS
Band13	10MHz	QPSK	23230	1RB#49	-60.42	PASS
Band13	10MHz	16QAM	23230	1RB#49	-62.00	PASS
Band13	10MHz	QPSK	23230	50RB#0	-53.12	PASS
Band13	10MHz	16QAM	23230	50RB#0	-54.21	PASS

Test Graphs

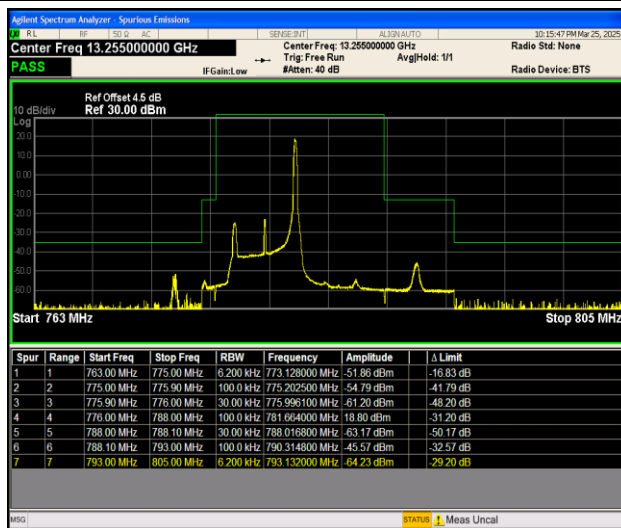




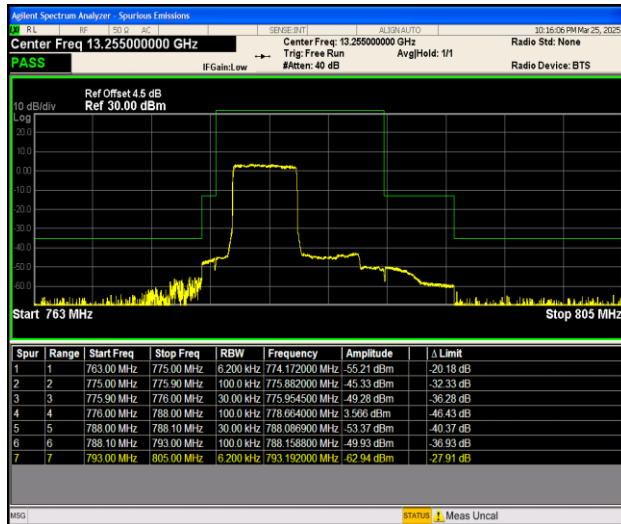
Band13_5MHz_16QAM_23205_1RB#0



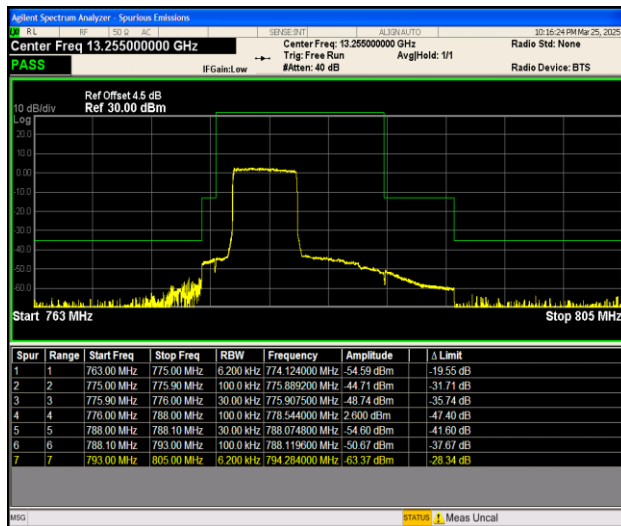
Band13_5MHz_QPSK_23205_1RB#24



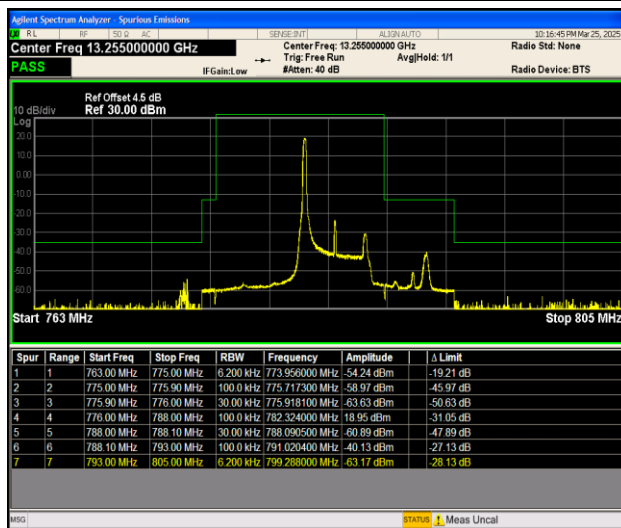
Band13_5MHz_16QAM_23205_1RB#24



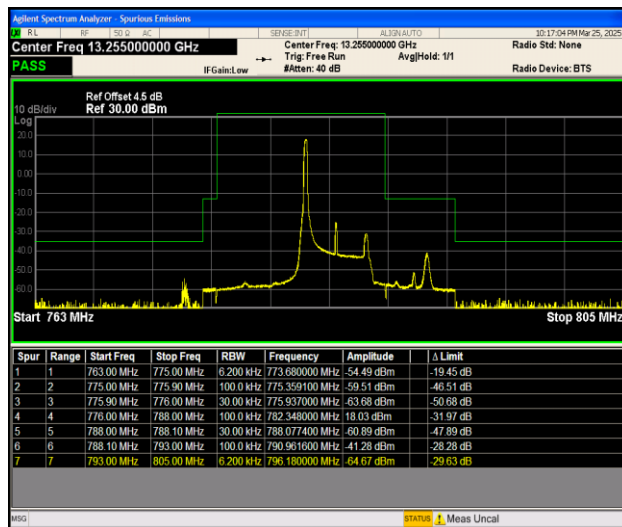
Band13_5MHz_QPSK_23205_25RB#0



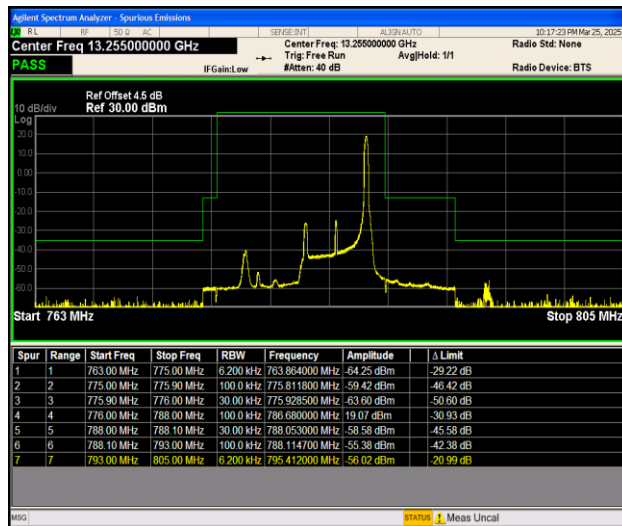
Band13_5MHz_16QAM_23205_25RB#0



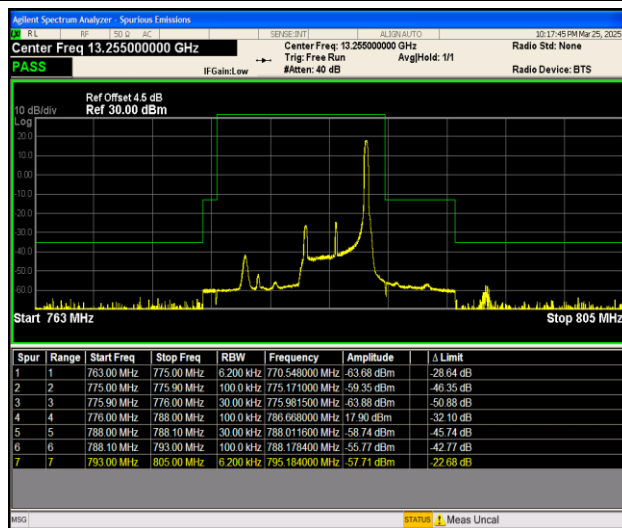
Band13_5MHz_QPSK_23255_1RB#0



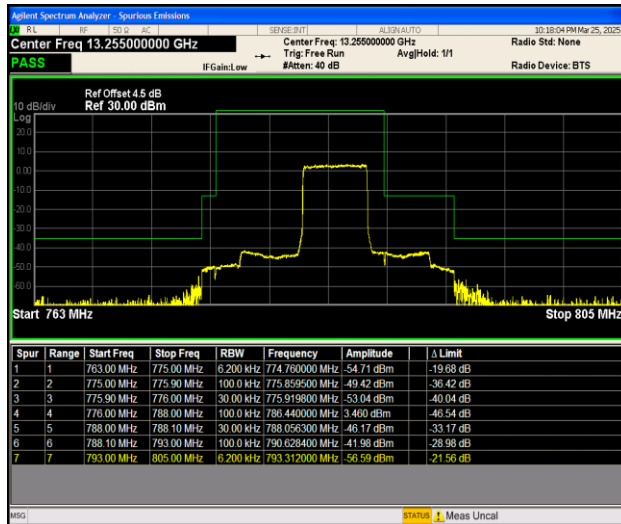
Band13_5MHz_16QAM_23255_1RB#0



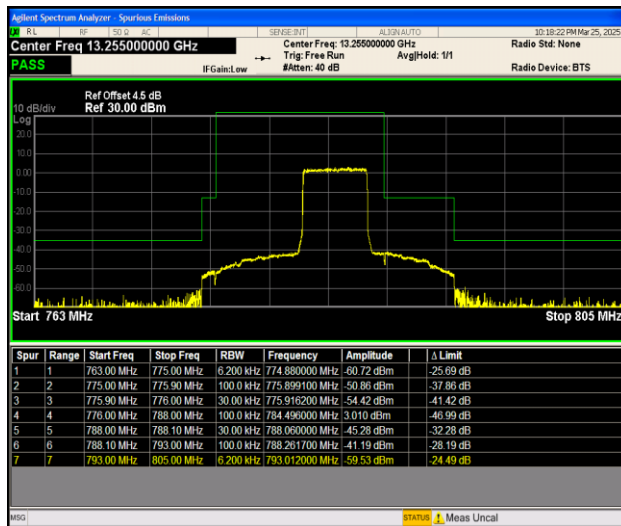
Band13_5MHz_QPSK_23255_1RB#24



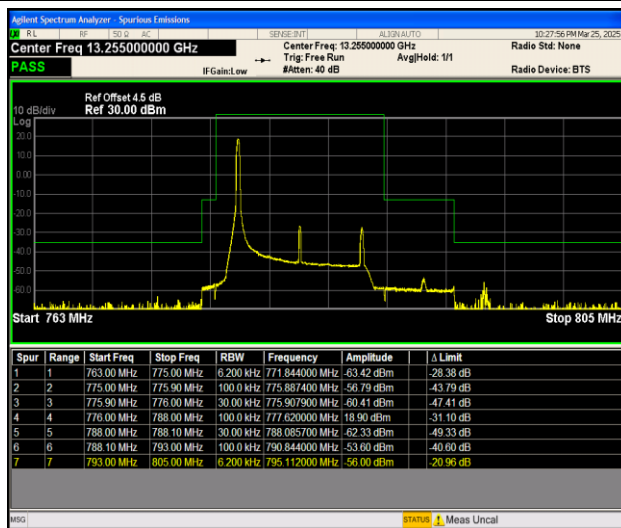
Band13_5MHz_16QAM_23255_1RB#24



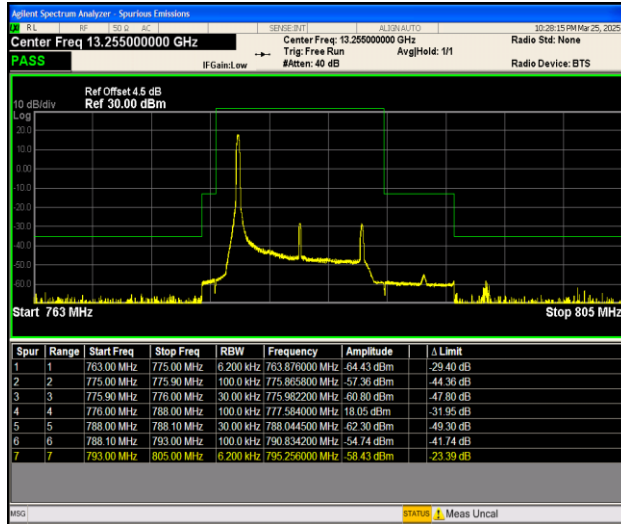
Band13_5MHz_QPSK_23255_25RB#0



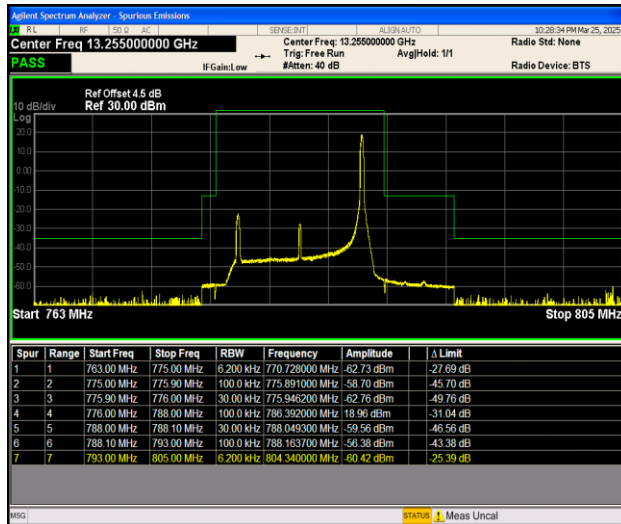
Band13_5MHz_16QAM_23255_25RB#0



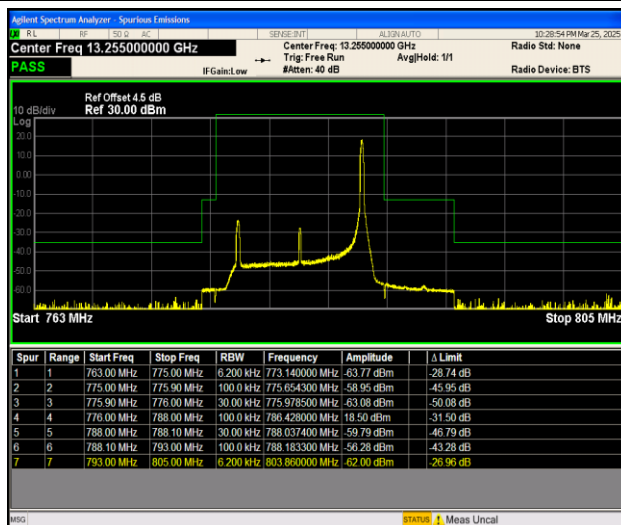
Band13_10MHz_QPSK_23230_1RB#0



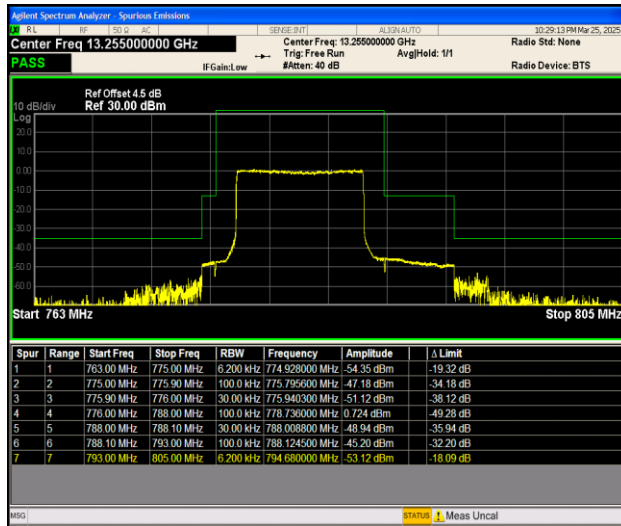
Band13_10MHz_16QAM_23230_1RB#0



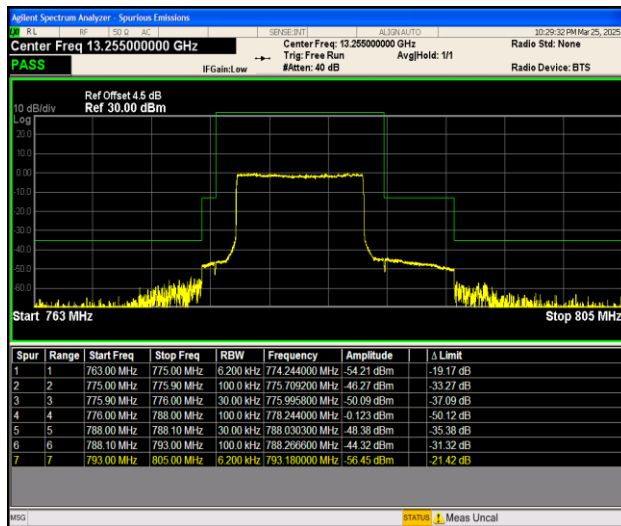
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Band13_10MHz_16QAM_23230_1RB#49



Band13_10MHz_QPSK_23230_50RB#0



Band13_10MHz_16QAM_23230_50RB#0