

Appendix for LTE Band 7

Applicant: UCLOUDLINK (SINGAPORE) PTE.LTD

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

Product Name: LTE Module

Model: GLMM24A01

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1. Appendix A: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.83	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.11	PASS
Band7	5MHz	QPSK	20775	1RB#12	21.91	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.47	PASS
Band7	5MHz	QPSK	20775	1RB#24	21.79	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.11	PASS
Band7	5MHz	QPSK	20775	12RB#0	21.70	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.68	PASS
Band7	5MHz	QPSK	20775	12RB#6	21.65	PASS
Band7	5MHz	16QAM	20775	12RB#6	21.72	PASS
Band7	5MHz	QPSK	20775	12RB#13	20.91	PASS
Band7	5MHz	16QAM	20775	12RB#13	20.87	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.24	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.40	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.70	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.86	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.18	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.34	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.10	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.24	PASS
Band7	5MHz	QPSK	21100	12RB#0	22.82	PASS
Band7	5MHz	16QAM	21100	12RB#0	22.85	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.75	PASS
Band7	5MHz	16QAM	21100	12RB#6	22.78	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.39	PASS
Band7	5MHz	16QAM	21100	12RB#13	22.39	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.64	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.77	PASS
Band7	5MHz	QPSK	21425	1RB#0	21.94	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.08	PASS
Band7	5MHz	QPSK	21425	1RB#12	21.94	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.04	PASS
Band7	5MHz	QPSK	21425	1RB#24	21.77	PASS
Band7	5MHz	16QAM	21425	1RB#24	22.83	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.30	PASS
Band7	5MHz	16QAM	21425	12RB#0	22.30	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.29	PASS

Band7	5MHz	16QAM	21425	12RB#6	22.28	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.15	PASS
Band7	5MHz	16QAM	21425	12RB#13	22.15	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.21	PASS
Band7	5MHz	16QAM	21425	25RB#0	22.31	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.80	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.76	PASS
Band7	10MHz	QPSK	20800	1RB#24	21.99	PASS
Band7	10MHz	16QAM	20800	1RB#24	21.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	21.06	PASS
Band7	10MHz	16QAM	20800	1RB#49	20.02	PASS
Band7	10MHz	QPSK	20800	25RB#0	21.34	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.32	PASS
Band7	10MHz	QPSK	20800	25RB#12	21.30	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.28	PASS
Band7	10MHz	QPSK	20800	25RB#25	20.60	PASS
Band7	10MHz	16QAM	20800	25RB#25	20.58	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.03	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.13	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.38	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.29	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.61	PASS
Band7	10MHz	QPSK	21100	1RB#49	22.71	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.95	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.10	PASS
Band7	10MHz	16QAM	21100	25RB#0	22.09	PASS
Band7	10MHz	QPSK	21100	25RB#12	22.08	PASS
Band7	10MHz	16QAM	21100	25RB#12	22.09	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.43	PASS
Band7	10MHz	16QAM	21100	25RB#25	22.41	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.81	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.39	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.19	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.92	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.98	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.82	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.77	PASS
Band7	10MHz	QPSK	21400	25RB#0	22.12	PASS
Band7	10MHz	16QAM	21400	25RB#0	22.04	PASS
Band7	10MHz	QPSK	21400	25RB#12	22.02	PASS
Band7	10MHz	16QAM	21400	25RB#12	22.10	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.30	PASS
Band7	10MHz	16QAM	21400	25RB#25	22.31	PASS

Band7	10MHz	QPSK	21400	50RB#0	22.26	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.70	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.73	PASS
Band7	15MHz	QPSK	20825	1RB#38	21.36	PASS
Band7	15MHz	16QAM	20825	1RB#38	20.39	PASS
Band7	15MHz	QPSK	20825	1RB#74	21.32	PASS
Band7	15MHz	16QAM	20825	1RB#74	20.33	PASS
Band7	15MHz	QPSK	20825	38RB#0	20.71	PASS
Band7	15MHz	16QAM	20825	38RB#0	20.67	PASS
Band7	15MHz	QPSK	20825	38RB#18	20.76	PASS
Band7	15MHz	16QAM	20825	38RB#18	20.73	PASS
Band7	15MHz	QPSK	20825	38RB#37	20.71	PASS
Band7	15MHz	16QAM	20825	38RB#37	20.71	PASS
Band7	15MHz	QPSK	20825	75RB#0	20.69	PASS
Band7	15MHz	QPSK	21100	1RB#0	21.95	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.10	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.30	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.70	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.14	PASS
Band7	15MHz	16QAM	21100	1RB#74	21.38	PASS
Band7	15MHz	QPSK	21100	38RB#0	22.65	PASS
Band7	15MHz	16QAM	21100	38RB#0	22.62	PASS
Band7	15MHz	QPSK	21100	38RB#18	22.61	PASS
Band7	15MHz	16QAM	21100	38RB#18	22.69	PASS
Band7	15MHz	QPSK	21100	38RB#37	22.68	PASS
Band7	15MHz	16QAM	21100	38RB#37	22.66	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.66	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.25	PASS
Band7	15MHz	16QAM	21375	1RB#0	21.05	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.77	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.71	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.72	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.76	PASS
Band7	15MHz	QPSK	21375	38RB#0	22.76	PASS
Band7	15MHz	16QAM	21375	38RB#0	22.67	PASS
Band7	15MHz	QPSK	21375	38RB#18	22.74	PASS
Band7	15MHz	16QAM	21375	38RB#18	22.71	PASS
Band7	15MHz	QPSK	21375	38RB#37	22.68	PASS
Band7	15MHz	16QAM	21375	38RB#37	22.76	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.75	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.05	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	21.42	PASS

Band7	20MHz	16QAM	20850	1RB#49	20.45	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.63	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.57	PASS
Band7	20MHz	QPSK	20850	50RB#0	20.94	PASS
Band7	20MHz	16QAM	20850	50RB#0	20.85	PASS
Band7	20MHz	QPSK	20850	50RB#25	20.81	PASS
Band7	20MHz	16QAM	20850	50RB#25	20.86	PASS
Band7	20MHz	QPSK	20850	50RB#50	20.88	PASS
Band7	20MHz	16QAM	20850	50RB#50	20.85	PASS
Band7	20MHz	QPSK	20850	100RB#0	20.89	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.09	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.06	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.31	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.48	PASS
Band7	20MHz	QPSK	21100	1RB#99	21.93	PASS
Band7	20MHz	16QAM	21100	1RB#99	20.91	PASS
Band7	20MHz	QPSK	21100	50RB#0	22.23	PASS
Band7	20MHz	16QAM	21100	50RB#0	22.22	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.20	PASS
Band7	20MHz	16QAM	21100	50RB#25	22.20	PASS
Band7	20MHz	QPSK	21100	50RB#50	21.99	PASS
Band7	20MHz	16QAM	21100	50RB#50	21.95	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.68	PASS
Band7	20MHz	QPSK	21350	1RB#0	21.71	PASS
Band7	20MHz	16QAM	21350	1RB#0	20.52	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.54	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.99	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.97	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.28	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.24	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.16	PASS
Band7	20MHz	QPSK	21350	50RB#25	21.22	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.15	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.25	PASS
Band7	20MHz	16QAM	21350	50RB#50	22.26	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.46	PASS

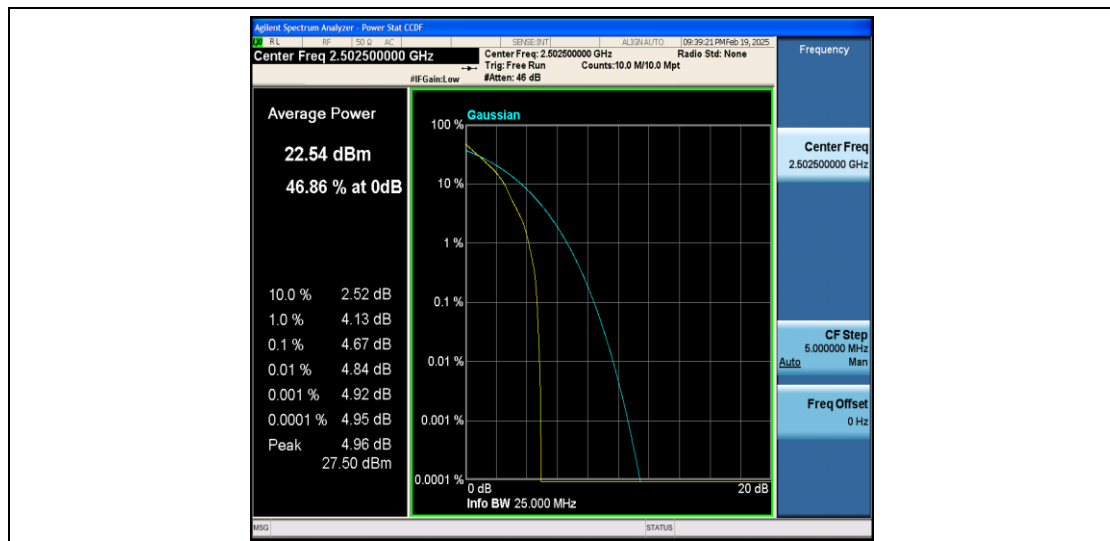
2. Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

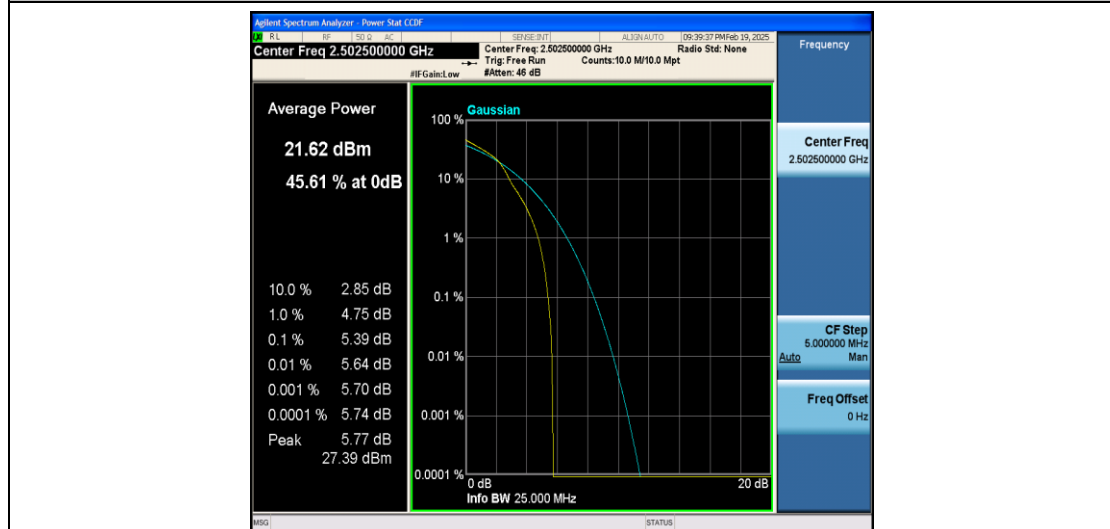
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	4.67	13	PASS
Band7	5MHz	16QAM	20775	1RB#0	5.39	13	PASS
Band7	5MHz	QPSK	20775	25RB#0	5.43	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	6.17	13	PASS
Band7	5MHz	QPSK	21100	1RB#0	3.84	13	PASS
Band7	5MHz	16QAM	21100	1RB#0	4.57	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.67	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	5.49	13	PASS
Band7	5MHz	QPSK	21425	1RB#0	2.58	13	PASS
Band7	5MHz	16QAM	21425	1RB#0	3.42	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	3.56	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.43	13	PASS
Band7	10MHz	QPSK	20800	1RB#0	4.84	13	PASS
Band7	10MHz	16QAM	20800	1RB#0	5.63	13	PASS
Band7	10MHz	QPSK	21100	1RB#0	3.29	13	PASS
Band7	10MHz	16QAM	21100	1RB#0	4.21	13	PASS
Band7	10MHz	QPSK	21400	1RB#0	3.26	13	PASS
Band7	10MHz	16QAM	21400	1RB#0	4.16	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	5.50	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	4.70	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	3.61	13	PASS
Band7	15MHz	QPSK	20825	1RB#0	4.61	13	PASS
Band7	15MHz	16QAM	20825	1RB#0	5.41	13	PASS
Band7	15MHz	QPSK	21100	1RB#0	3.44	13	PASS
Band7	15MHz	16QAM	21100	1RB#0	4.45	13	PASS
Band7	15MHz	QPSK	21375	1RB#0	5.18	13	PASS
Band7	15MHz	16QAM	21375	1RB#0	6.14	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.43	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.01	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	4.87	13	PASS
Band7	20MHz	QPSK	20850	1RB#0	4.39	13	PASS
Band7	20MHz	16QAM	20850	1RB#0	5.22	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	3.39	13	PASS
Band7	20MHz	16QAM	21100	1RB#0	4.33	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	5.36	13	PASS
Band7	20MHz	16QAM	21350	1RB#0	6.06	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.36	13	PASS

Band7	20MHz	QPSK	21100	100RB#0	5.00	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.23	13	PASS

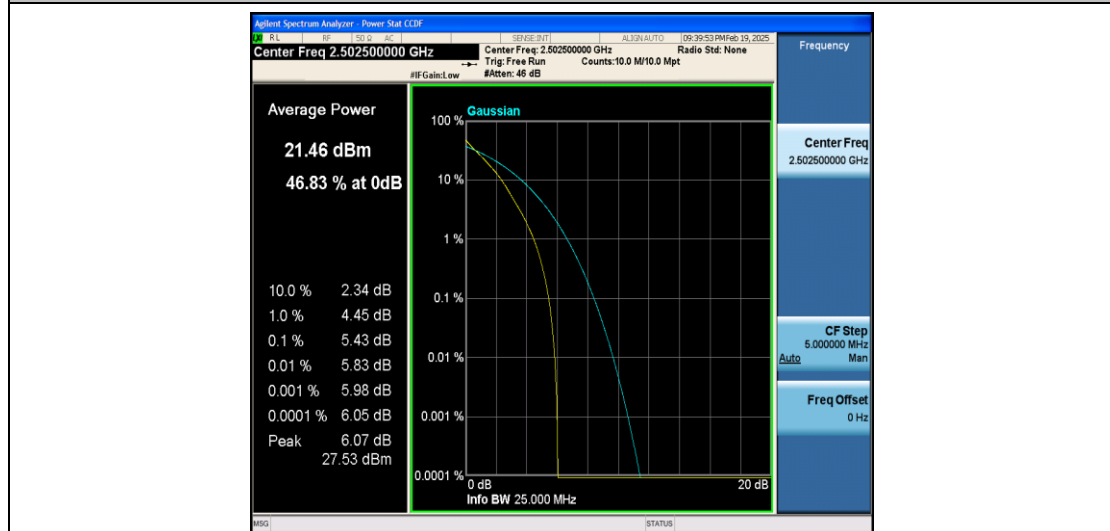
Test Graphs



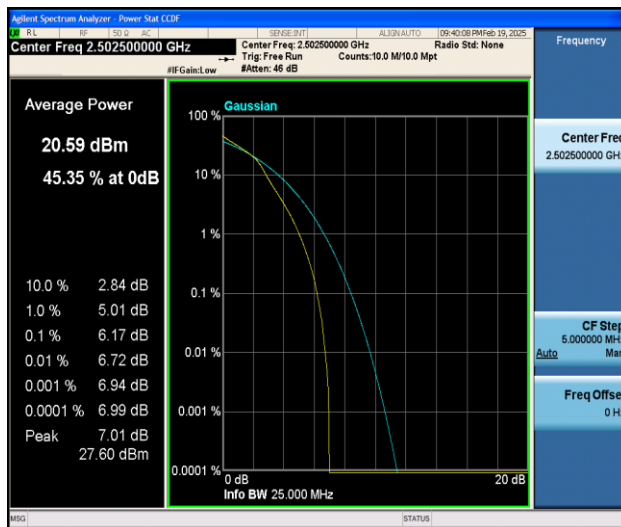
Band7-5MHz-QPSK-20775-1RB#0-PASS



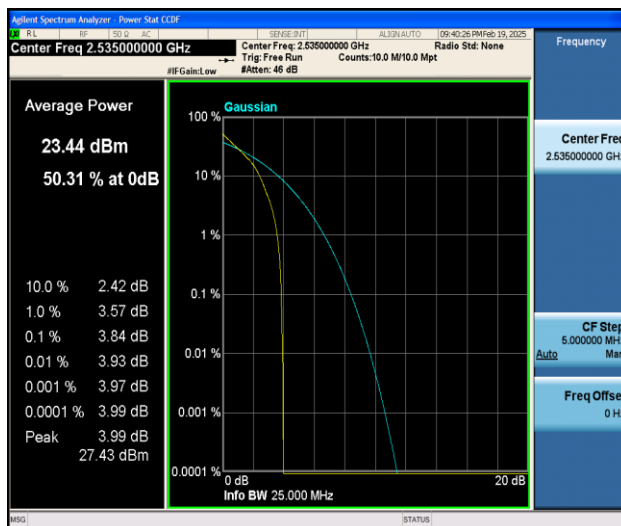
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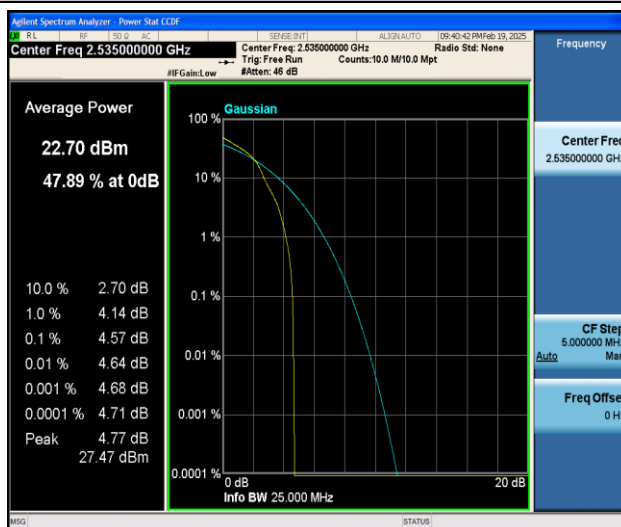
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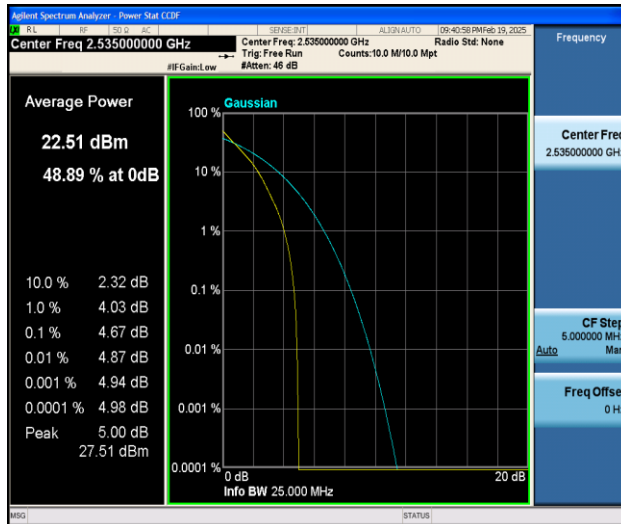
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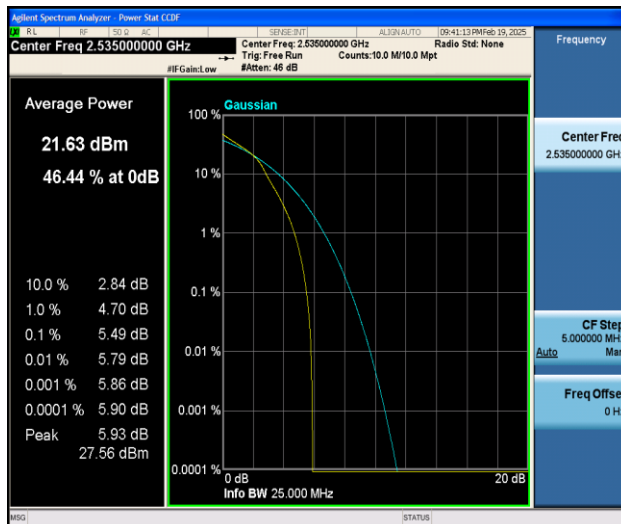
Band7-5MHz-QPSK-21100-1RB#0-PASS



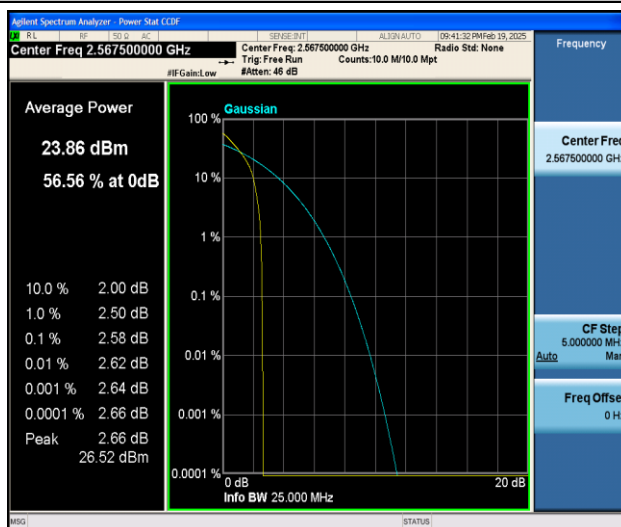
Band7-5MHz-16QAM-21100-1RB#0-PASS



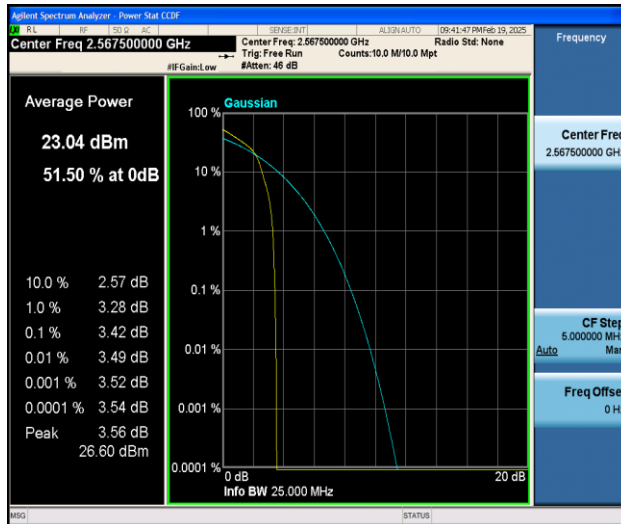
Band7-5MHz-QPSK-21100-25RB#0-PASS



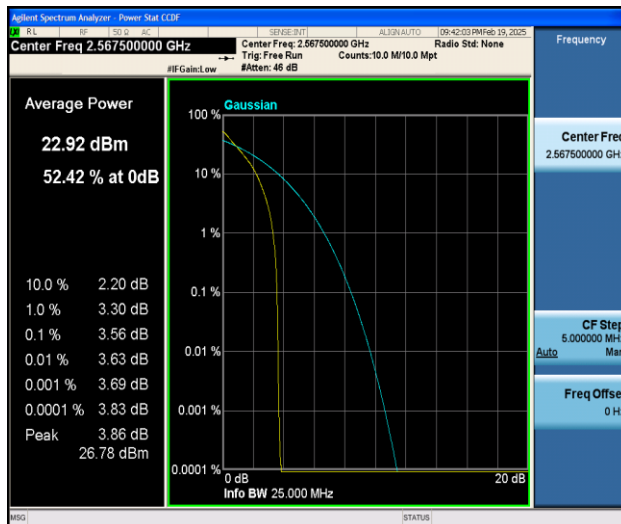
Band7-5MHz-16QAM-21100-25RB#0-PASS



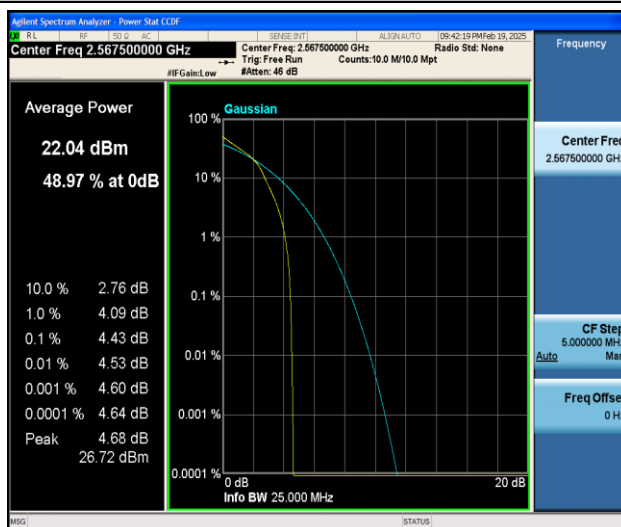
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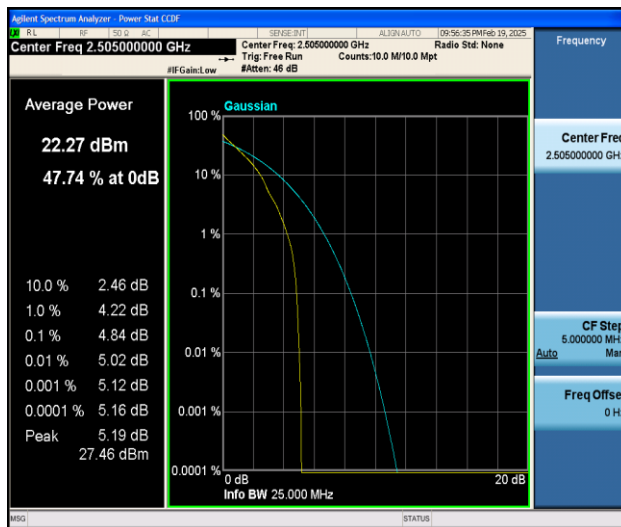
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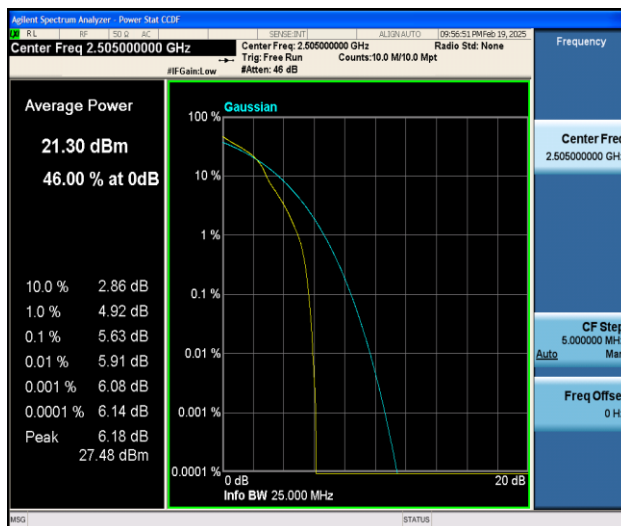
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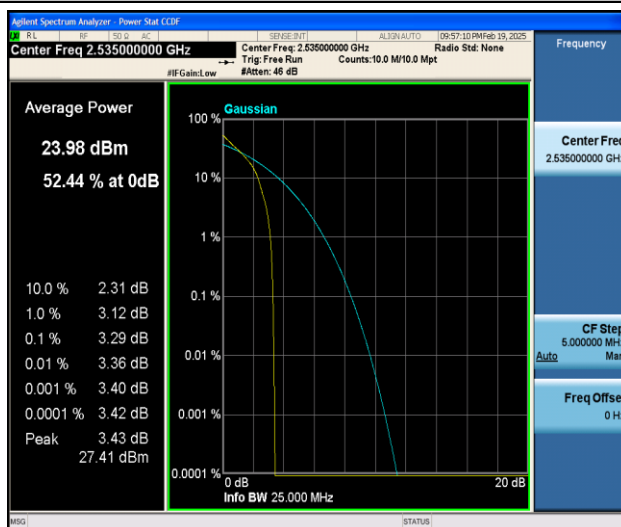
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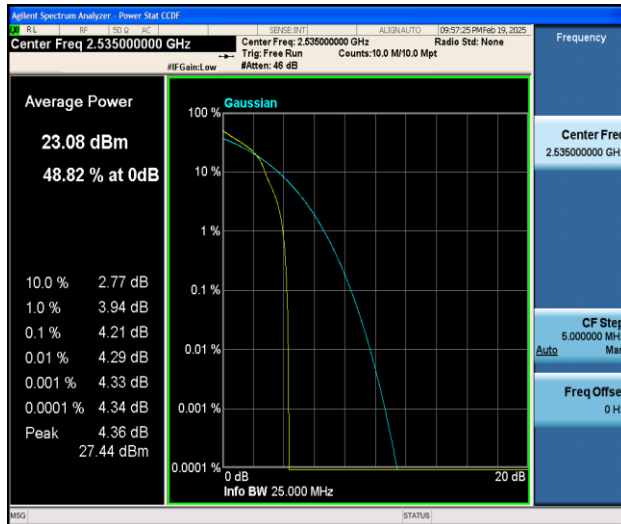
Band7-10MHz-QPSK-20800-1RB#0-PASS



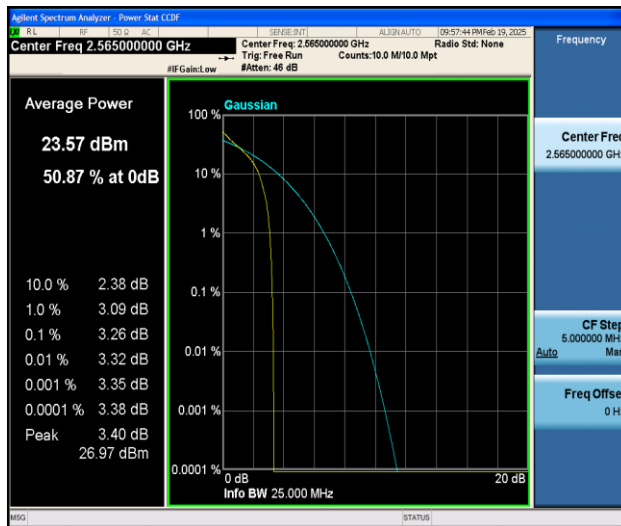
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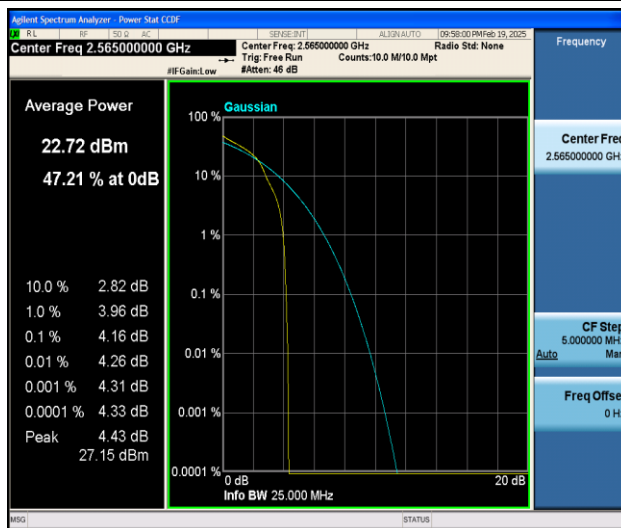
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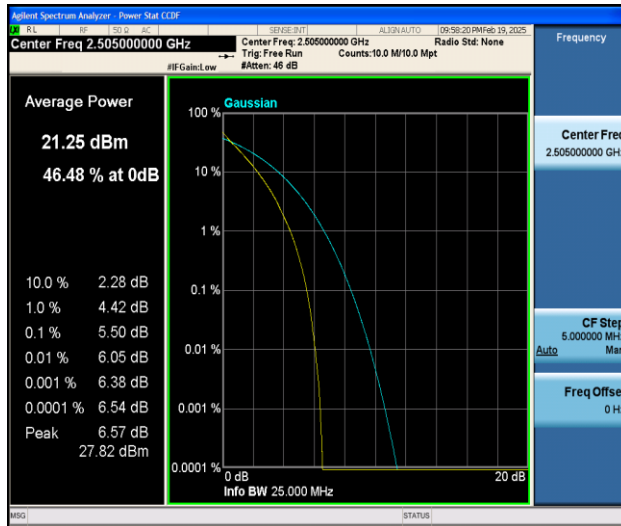
Band7-10MHz-16QAM-21100-1RB#0-PASS



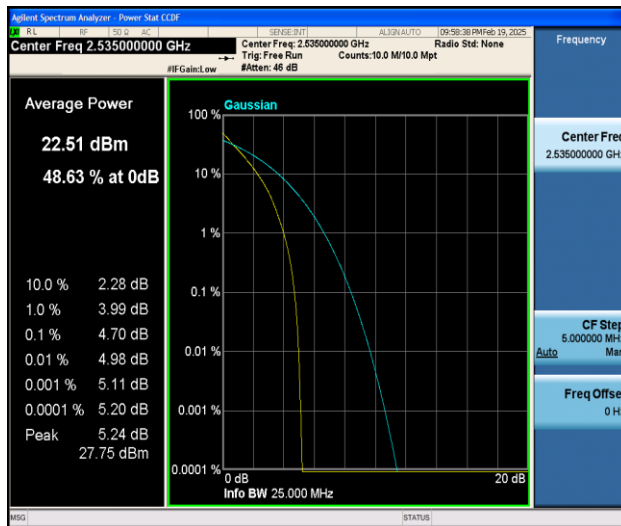
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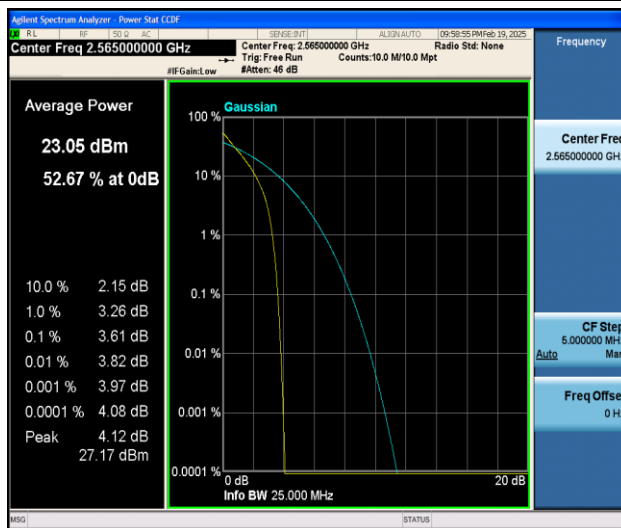
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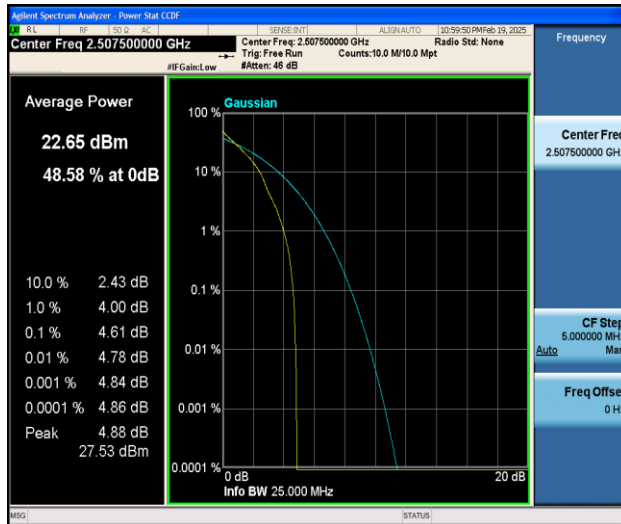
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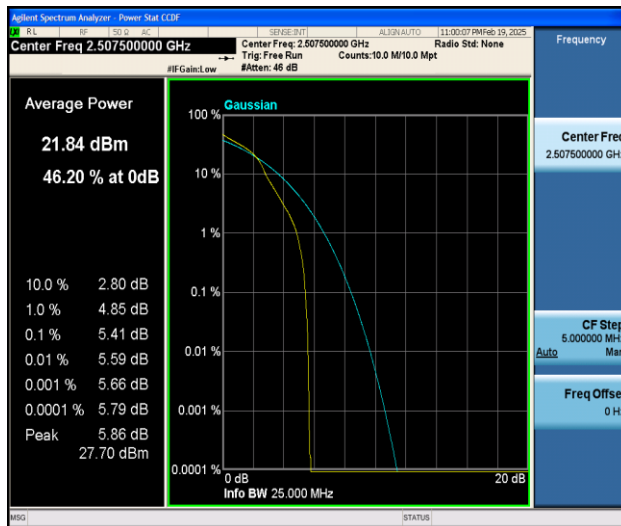
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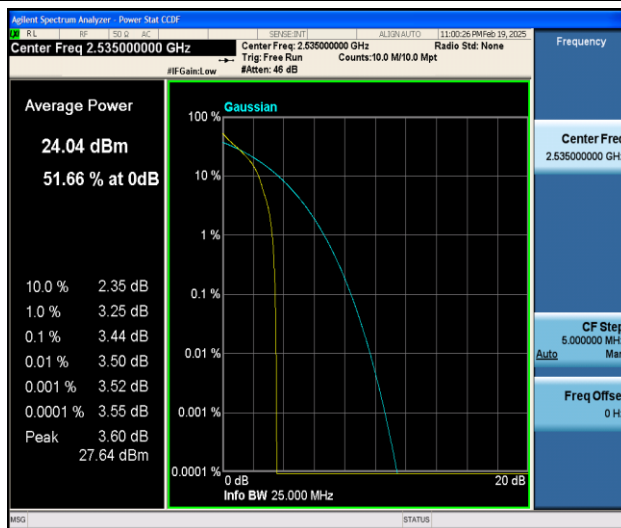
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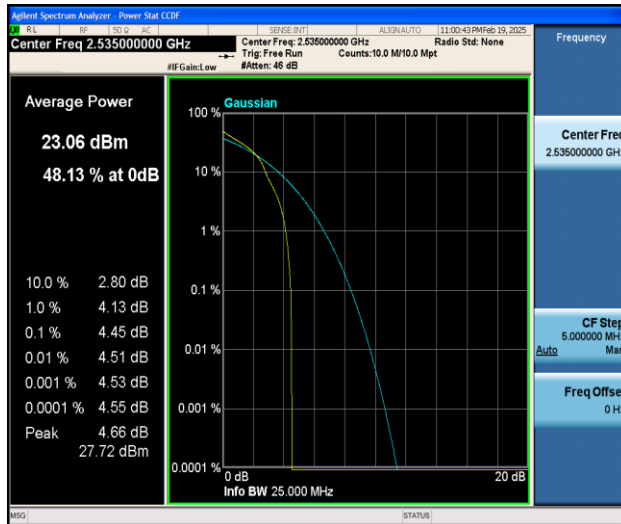
Band7-15MHz-QPSK-20825-1RB#0-PASS



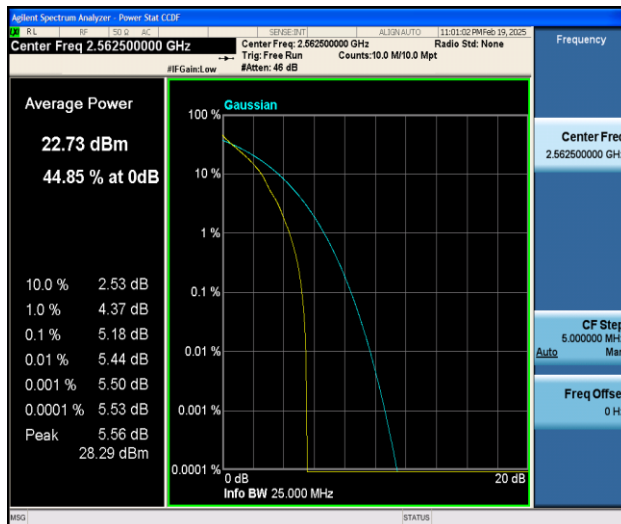
Band7-15MHz-16QAM-20825-1RB#0-PASS



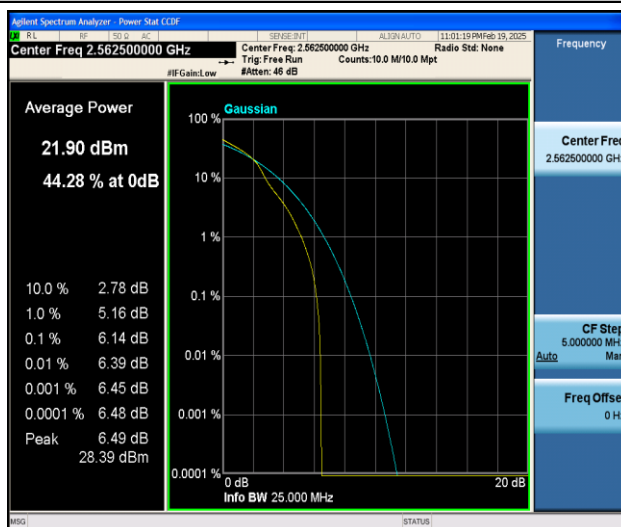
Band7-15MHz-QPSK-21100-1RB#0-PASS



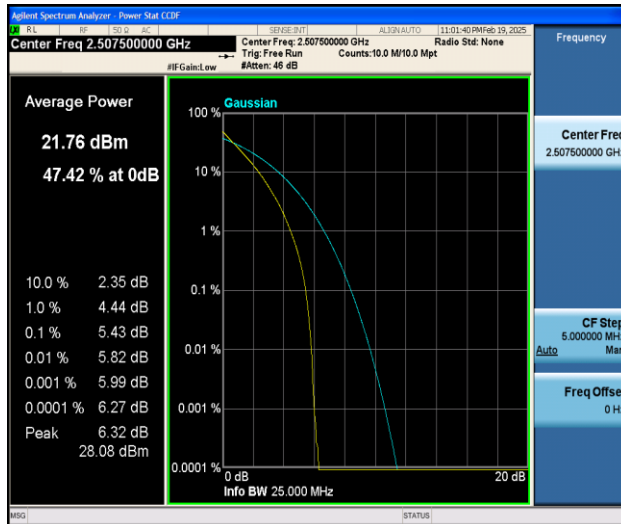
Band7-15MHz-16QAM-21100-1RB#0-PASS



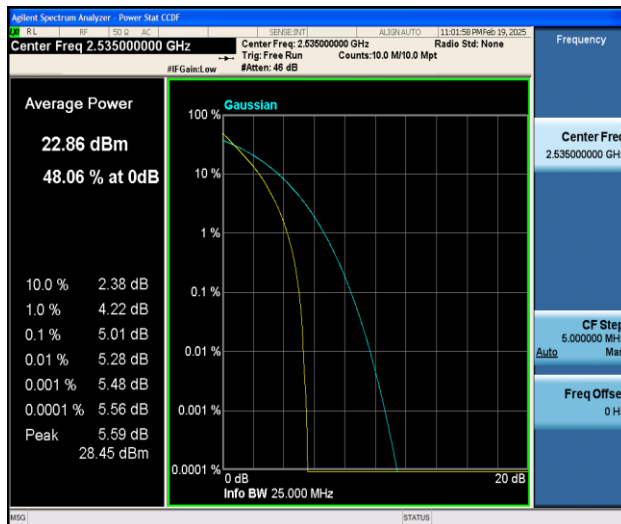
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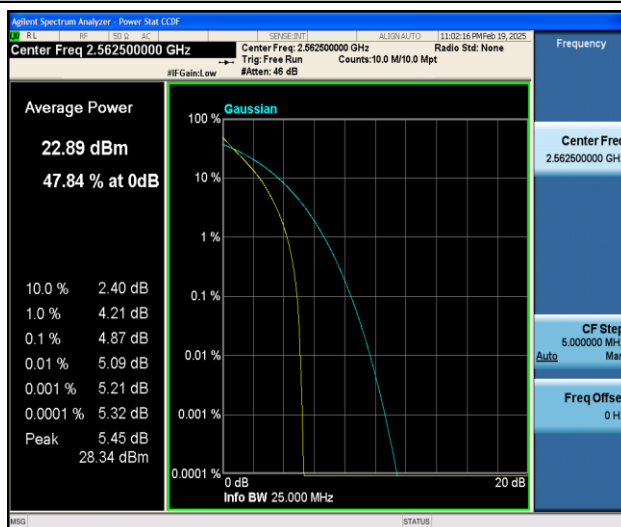
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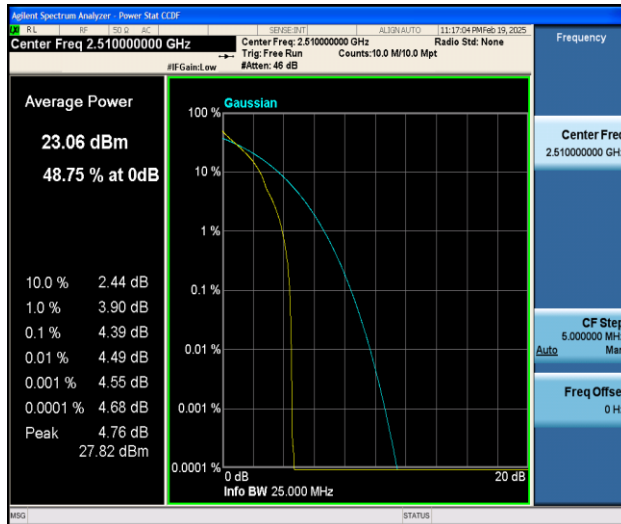
Band7-15MHz-QPSK-20825-75RB#0-PASS



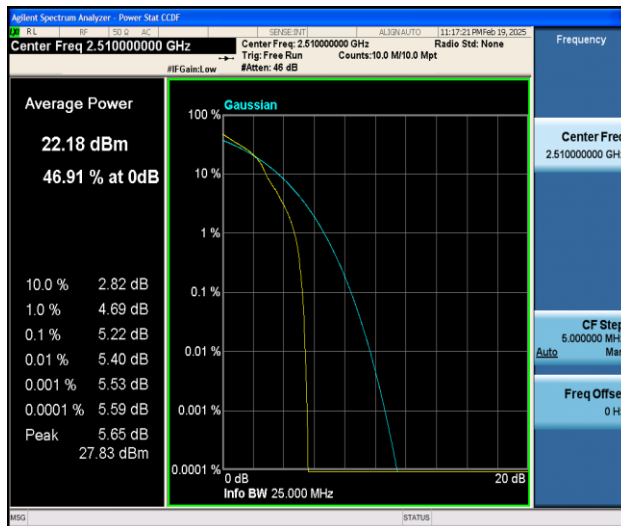
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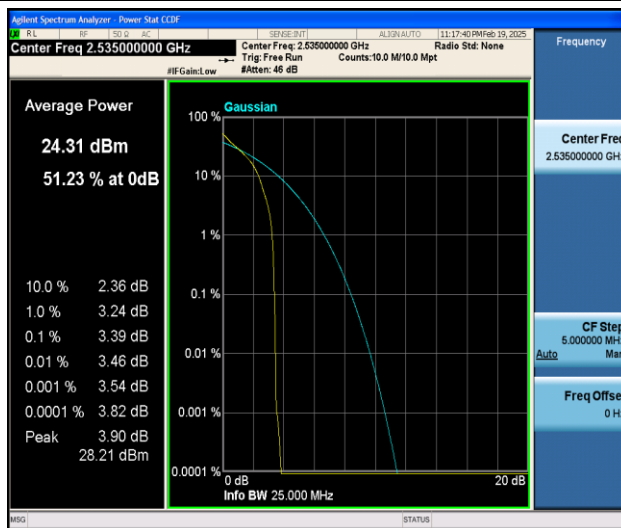
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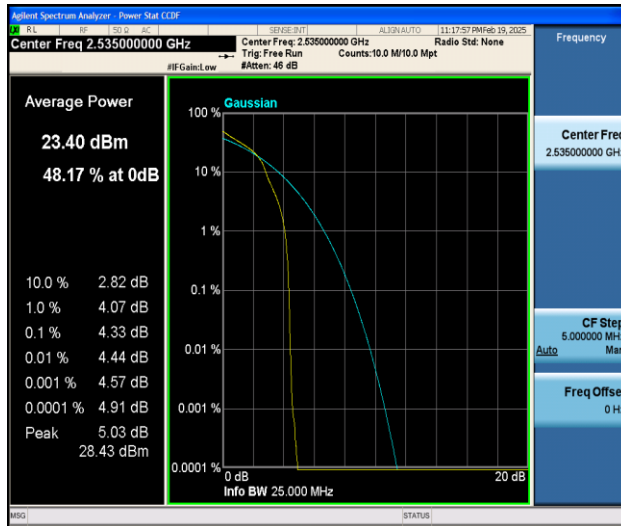
Band7-20MHz-QPSK-20850-1RB#0-PASS



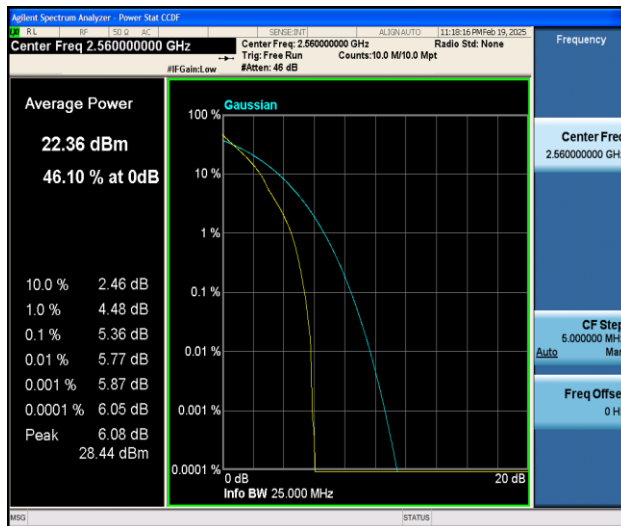
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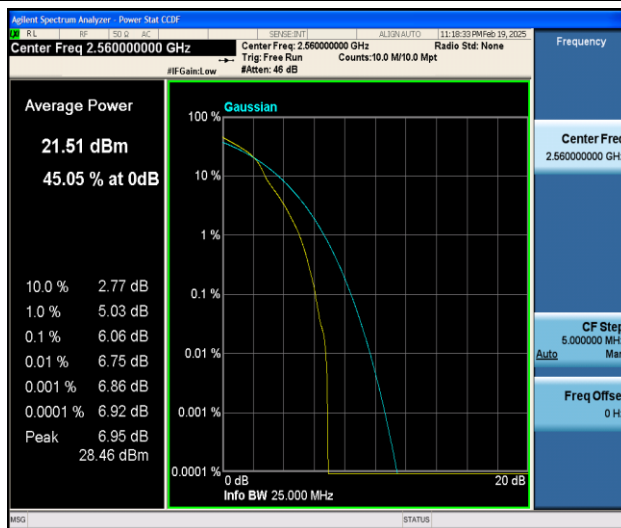
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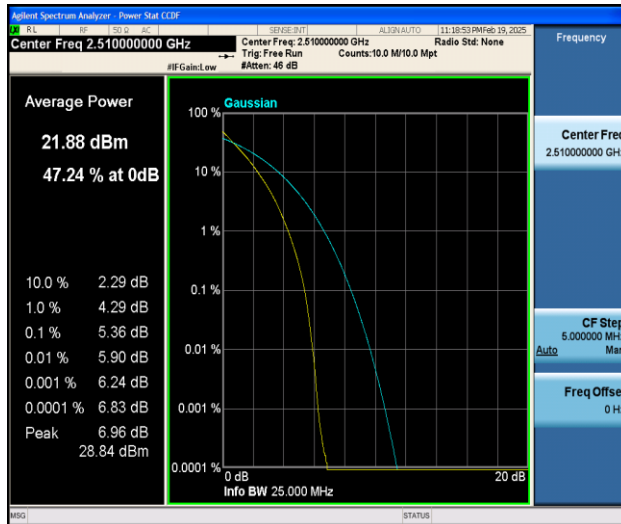
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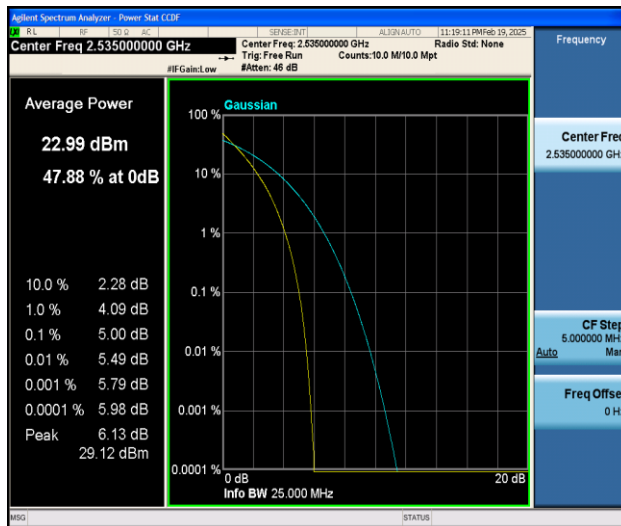
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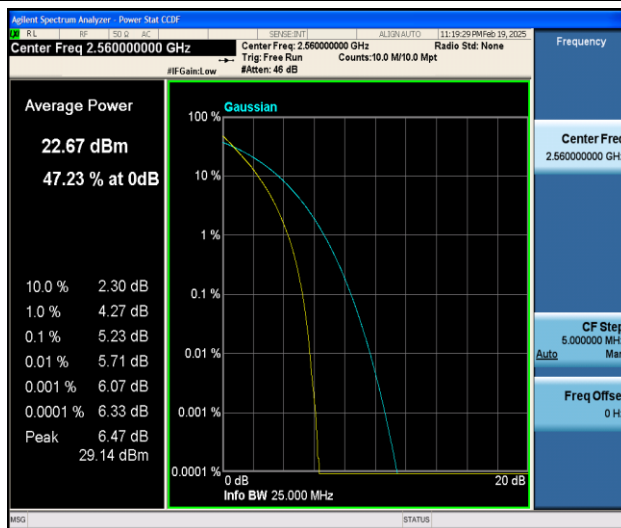
Band7-20MHz-16QAM-21350-1RB#0-PASS



Band7-20MHz-QPSK-20850-100RB#0-PASS



Band7-20MHz-QPSK-21100-100RB#0-PASS



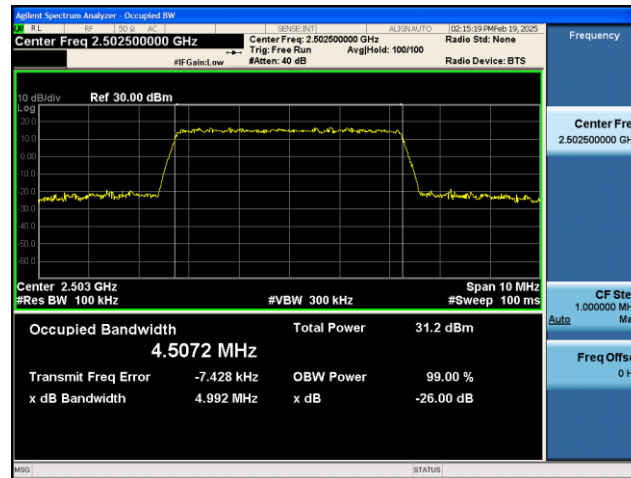
Band7-20MHz-QPSK-21350-100RB#0-PASS

3. Appendix C: 26dB Bandwidth and Occupied Bandwidth

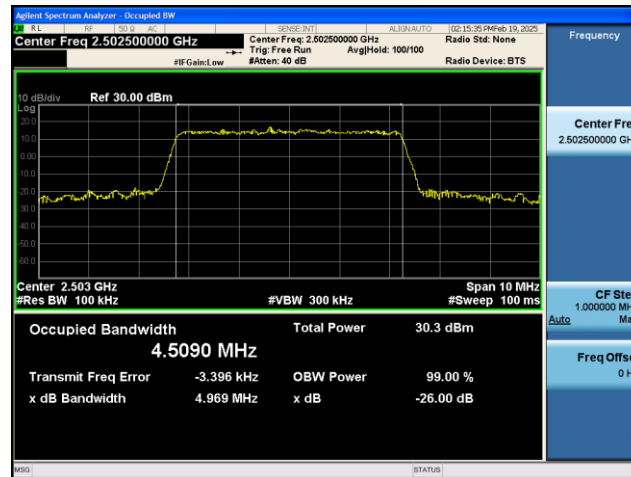
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.5072	4.992	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.5090	4.969	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.5044	4.977	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5189	4.997	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.5118	4.985	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.5309	4.985	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9870	9.841	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9812	9.910	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9707	9.959	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.539	15.15	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.502	15.11	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.464	15.11	PASS
Band7	20MHz	QPSK	20850	100RB#0	18.018	19.61	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.972	19.55	PASS
Band7	20MHz	QPSK	21350	100RB#0	18.003	19.55	PASS

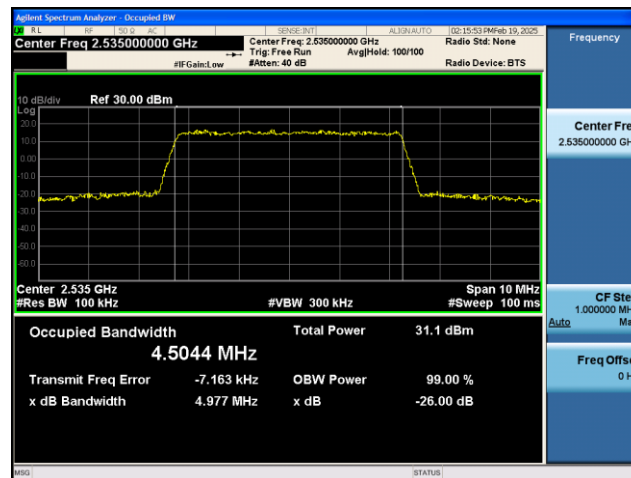
Test Graphs



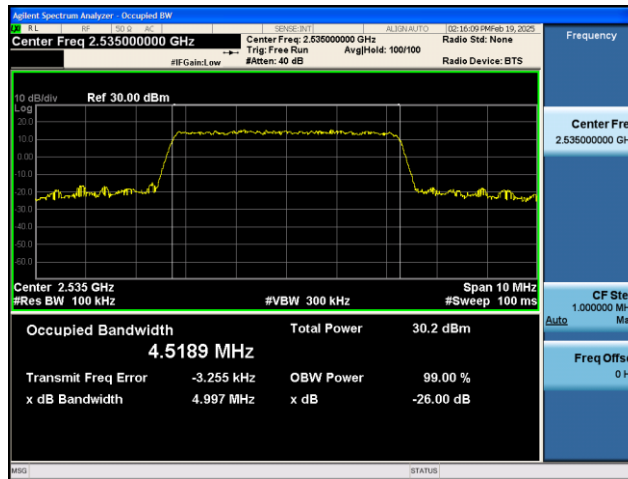
Band7-5MHz-QPSK-20775-25RB#0-PASS



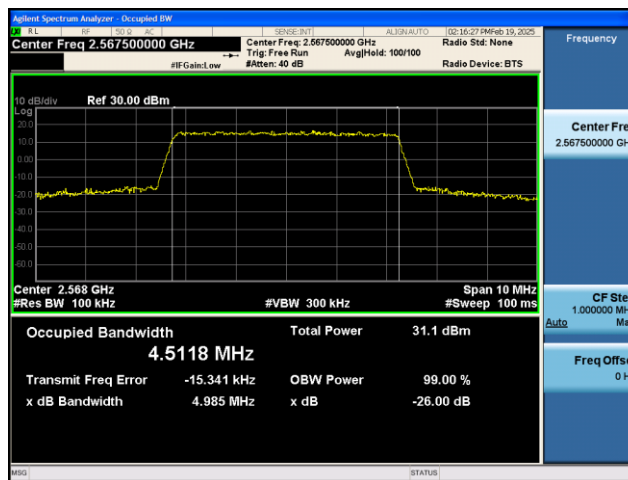
Band7-5MHz-16QAM-20775-25RB#0-PASS



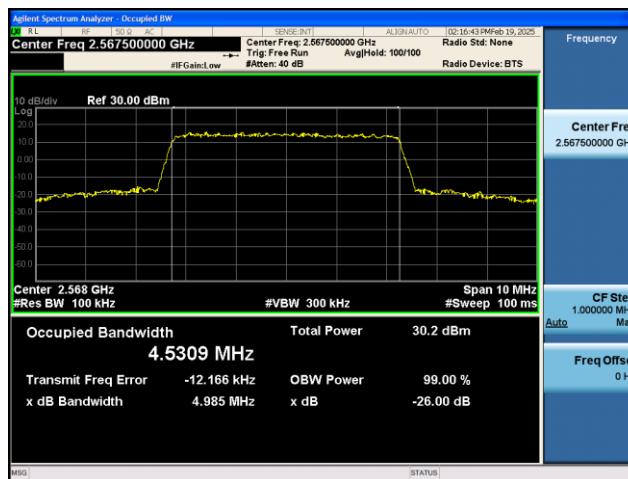
Band7-5MHz-QPSK-21100-25RB#0-PASS



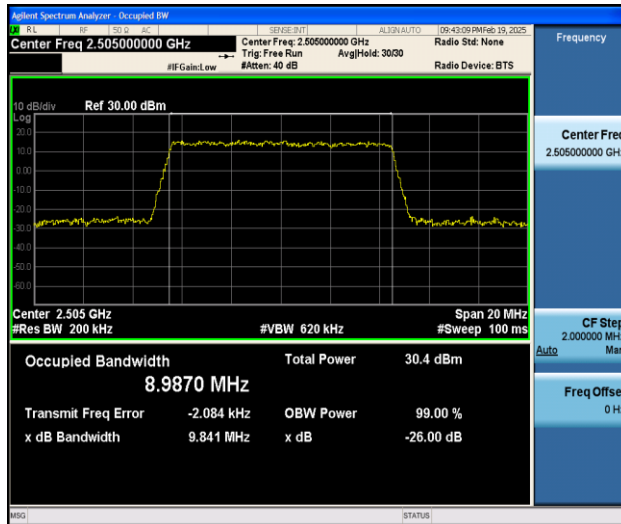
Band7-5MHz-16QAM-21100-25RB#0-PASS



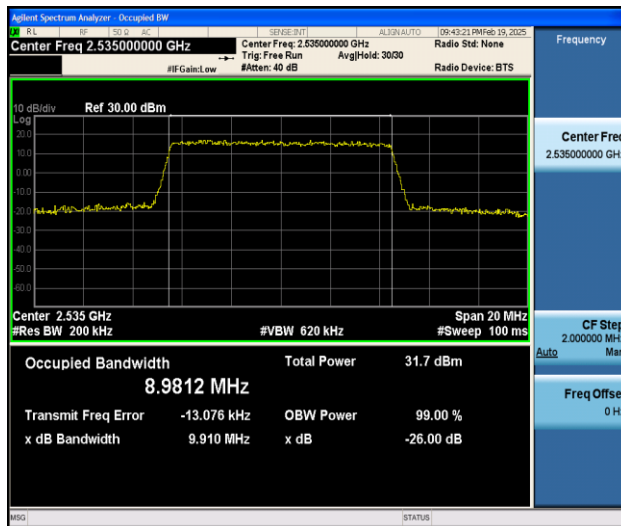
Band7-5MHz-QPSK-21425-25RB#0-PASS



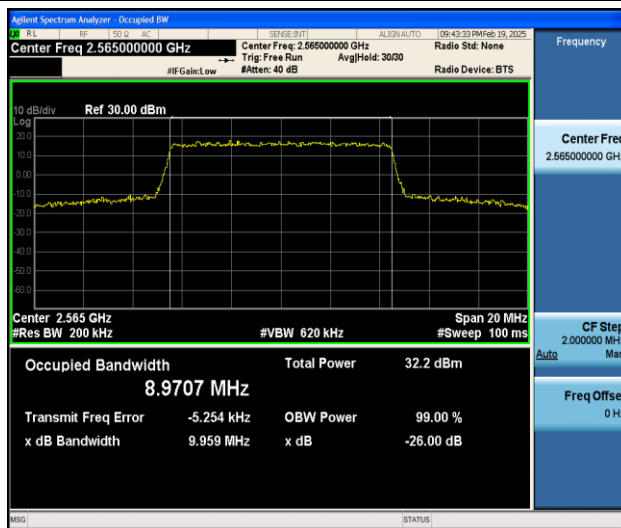
Band7-5MHz-16QAM-21425-25RB#0-PASS



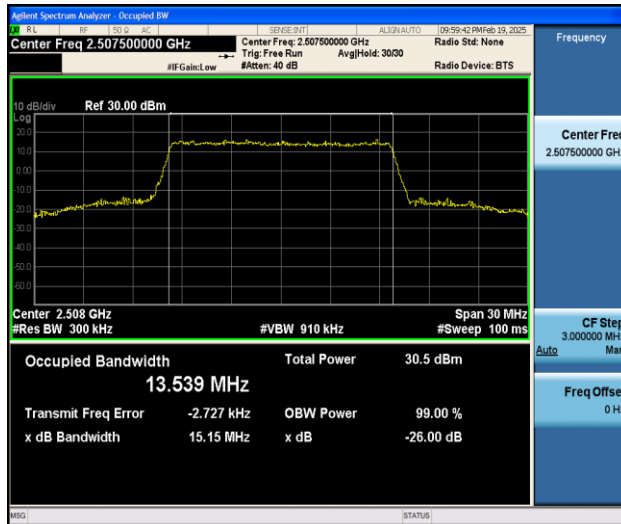
Band7-10MHz-QPSK-20800-50RB#0-PASS



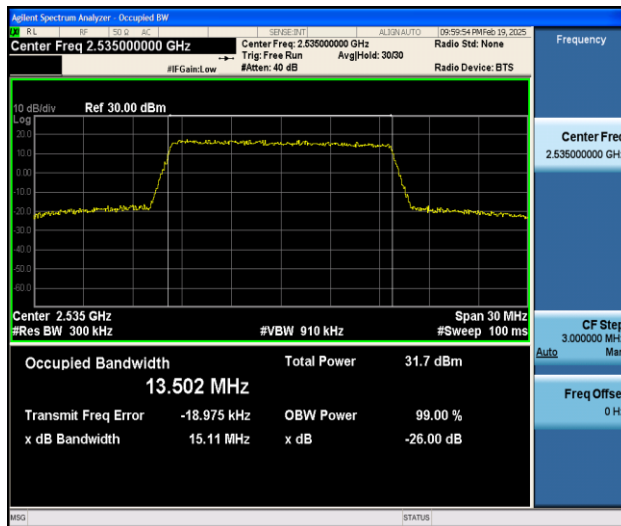
Band7-10MHz-QPSK-21100-50RB#0-PASS



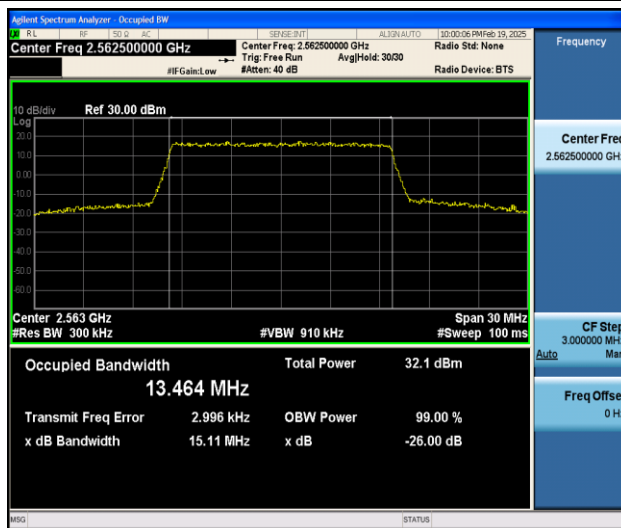
Band7-10MHz-QPSK-21400-50RB#0-PASS



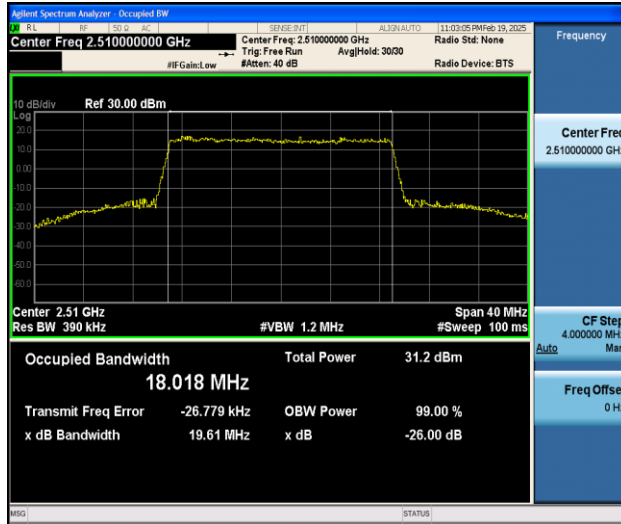
Band7-15MHz-QPSK-20825-75RB#0-PASS



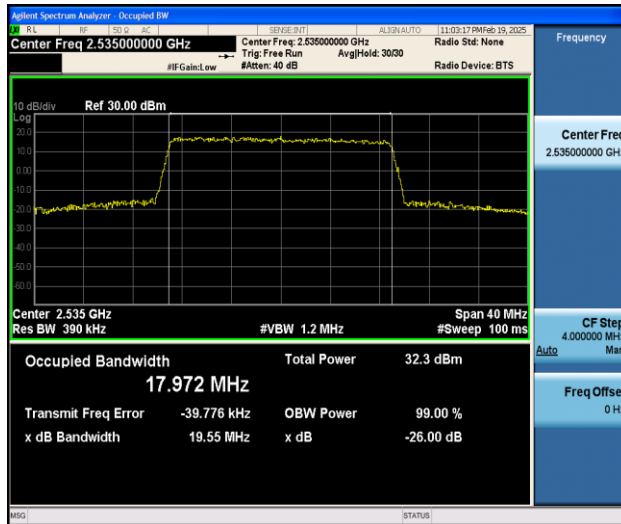
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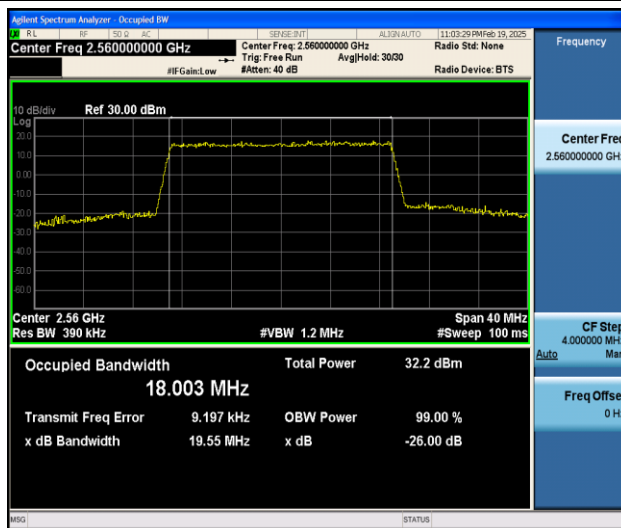
Band7-15MHz-QPSK-21375-75RB#0-PASS



Band7-20MHz-QPSK-20850-100RB#0-PASS



Band7-20MHz-QPSK-21100-100RB#0-PASS



Band7-20MHz-QPSK-21350-100RB#0-PASS