

Appendix for LTE Band 41

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
Band41	5MHz	QPSK	39675	1RB#0	22.07	PASS
Band41	5MHz	16QAM	39675	1RB#0	22.20	PASS
Band41	5MHz	QPSK	39675	1RB#12	22.11	PASS
Band41	5MHz	16QAM	39675	1RB#12	22.29	PASS
Band41	5MHz	QPSK	39675	1RB#24	22.15	PASS
Band41	5MHz	16QAM	39675	1RB#24	22.33	PASS
Band41	5MHz	QPSK	39675	12RB#0	22.49	PASS
Band41	5MHz	16QAM	39675	12RB#0	22.48	PASS
Band41	5MHz	QPSK	39675	12RB#6	22.46	PASS
Band41	5MHz	16QAM	39675	12RB#6	22.45	PASS
Band41	5MHz	QPSK	39675	12RB#13	22.45	PASS
Band41	5MHz	16QAM	39675	12RB#13	22.44	PASS
Band41	5MHz	QPSK	39675	25RB#0	22.43	PASS
Band41	5MHz	16QAM	39675	25RB#0	22.52	PASS
Band41	5MHz	QPSK	40620	1RB#0	22.11	PASS
Band41	5MHz	16QAM	40620	1RB#0	22.28	PASS
Band41	5MHz	QPSK	40620	1RB#12	22.89	PASS
Band41	5MHz	16QAM	40620	1RB#12	22.01	PASS
Band41	5MHz	QPSK	40620	1RB#24	22.93	PASS
Band41	5MHz	16QAM	40620	1RB#24	21.99	PASS
Band41	5MHz	QPSK	40620	12RB#0	22.05	PASS
Band41	5MHz	16QAM	40620	12RB#0	22.05	PASS
Band41	5MHz	QPSK	40620	12RB#6	22.06	PASS
Band41	5MHz	16QAM	40620	12RB#6	22.07	PASS
Band41	5MHz	QPSK	40620	12RB#13	22.07	PASS
Band41	5MHz	16QAM	40620	12RB#13	22.07	PASS
Band41	5MHz	QPSK	40620	25RB#0	22.08	PASS
Band41	5MHz	16QAM	40620	25RB#0	21.11	PASS
Band41	5MHz	QPSK	41565	1RB#0	22.76	PASS
Band41	5MHz	16QAM	41565	1RB#0	21.66	PASS
Band41	5MHz	QPSK	41565	1RB#12	22.76	PASS
Band41	5MHz	16QAM	41565	1RB#12	21.82	PASS
Band41	5MHz	QPSK	41565	1RB#24	22.90	PASS
Band41	5MHz	16QAM	41565	1RB#24	21.85	PASS
Band41	5MHz	QPSK	41565	12RB#0	21.92	PASS
Band41	5MHz	16QAM	41565	12RB#0	21.93	PASS
Band41	5MHz	QPSK	41565	12RB#6	21.93	PASS

Band41	5MHz	16QAM	41565	12RB#6	21.93	PASS
Band41	5MHz	QPSK	41565	12RB#13	21.92	PASS
Band41	5MHz	16QAM	41565	12RB#13	21.92	PASS
Band41	5MHz	QPSK	41565	25RB#0	21.92	PASS
Band41	5MHz	16QAM	41565	25RB#0	20.99	PASS
Band41	10MHz	QPSK	39700	1RB#0	22.93	PASS
Band41	10MHz	16QAM	39700	1RB#0	22.74	PASS
Band41	10MHz	QPSK	39700	1RB#24	22.18	PASS
Band41	10MHz	16QAM	39700	1RB#24	22.02	PASS
Band41	10MHz	QPSK	39700	1RB#49	22.18	PASS
Band41	10MHz	16QAM	39700	1RB#49	23.02	PASS
Band41	10MHz	QPSK	39700	25RB#0	22.26	PASS
Band41	10MHz	16QAM	39700	25RB#0	22.24	PASS
Band41	10MHz	QPSK	39700	25RB#12	22.23	PASS
Band41	10MHz	16QAM	39700	25RB#12	22.23	PASS
Band41	10MHz	QPSK	39700	25RB#25	22.52	PASS
Band41	10MHz	16QAM	39700	25RB#25	22.50	PASS
Band41	10MHz	QPSK	40620	1RB#0	22.20	PASS
Band41	10MHz	16QAM	40620	1RB#0	22.50	PASS
Band41	10MHz	QPSK	40620	1RB#24	22.80	PASS
Band41	10MHz	16QAM	40620	1RB#24	22.15	PASS
Band41	10MHz	QPSK	40620	1RB#49	22.73	PASS
Band41	10MHz	16QAM	40620	1RB#49	21.91	PASS
Band41	10MHz	QPSK	40620	25RB#0	22.18	PASS
Band41	10MHz	16QAM	40620	25RB#0	22.25	PASS
Band41	10MHz	QPSK	40620	25RB#12	22.24	PASS
Band41	10MHz	16QAM	40620	25RB#12	22.20	PASS
Band41	10MHz	QPSK	40620	25RB#25	22.13	PASS
Band41	10MHz	16QAM	40620	25RB#25	22.22	PASS
Band41	10MHz	QPSK	41540	1RB#0	22.89	PASS
Band41	10MHz	16QAM	41540	1RB#0	21.61	PASS
Band41	10MHz	QPSK	41540	1RB#24	22.89	PASS
Band41	10MHz	16QAM	41540	1RB#24	21.66	PASS
Band41	10MHz	QPSK	41540	1RB#49	22.89	PASS
Band41	10MHz	16QAM	41540	1RB#49	21.66	PASS
Band41	10MHz	QPSK	41540	25RB#0	22.07	PASS
Band41	10MHz	16QAM	41540	25RB#0	22.05	PASS
Band41	10MHz	QPSK	41540	25RB#12	22.05	PASS
Band41	10MHz	16QAM	41540	25RB#12	22.05	PASS
Band41	10MHz	QPSK	41540	25RB#25	22.08	PASS
Band41	10MHz	16QAM	41540	25RB#25	22.07	PASS
Band41	10MHz	QPSK	39700	50RB#0	22.36	PASS
Band41	10MHz	QPSK	40620	50RB#0	22.09	PASS

Band41	10MHz	QPSK	41540	50RB#0	21.94	PASS
Band41	15MHz	QPSK	39725	1RB#0	22.56	PASS
Band41	15MHz	16QAM	39725	1RB#0	22.84	PASS
Band41	15MHz	QPSK	39725	1RB#38	22.85	PASS
Band41	15MHz	16QAM	39725	1RB#38	22.40	PASS
Band41	15MHz	QPSK	39725	1RB#74	22.58	PASS
Band41	15MHz	16QAM	39725	1RB#74	22.82	PASS
Band41	15MHz	QPSK	39725	38RB#0	22.13	PASS
Band41	15MHz	16QAM	39725	38RB#0	22.10	PASS
Band41	15MHz	QPSK	39725	38RB#18	23.07	PASS
Band41	15MHz	16QAM	39725	38RB#18	23.05	PASS
Band41	15MHz	QPSK	39725	38RB#37	23.04	PASS
Band41	15MHz	16QAM	39725	38RB#37	23.07	PASS
Band41	15MHz	QPSK	40620	1RB#0	22.25	PASS
Band41	15MHz	16QAM	40620	1RB#0	22.30	PASS
Band41	15MHz	QPSK	40620	1RB#38	22.70	PASS
Band41	15MHz	16QAM	40620	1RB#38	21.68	PASS
Band41	15MHz	QPSK	40620	1RB#74	22.36	PASS
Band41	15MHz	16QAM	40620	1RB#74	21.29	PASS
Band41	15MHz	QPSK	40620	38RB#0	21.87	PASS
Band41	15MHz	16QAM	40620	38RB#0	21.87	PASS
Band41	15MHz	QPSK	40620	38RB#18	21.85	PASS
Band41	15MHz	16QAM	40620	38RB#18	21.86	PASS
Band41	15MHz	QPSK	40620	38RB#37	21.90	PASS
Band41	15MHz	16QAM	40620	38RB#37	21.95	PASS
Band41	15MHz	QPSK	41515	1RB#0	22.96	PASS
Band41	15MHz	16QAM	41515	1RB#0	22.13	PASS
Band41	15MHz	QPSK	41515	1RB#38	22.91	PASS
Band41	15MHz	16QAM	41515	1RB#38	22.13	PASS
Band41	15MHz	QPSK	41515	1RB#74	22.80	PASS
Band41	15MHz	16QAM	41515	1RB#74	22.02	PASS
Band41	15MHz	QPSK	41515	38RB#0	21.99	PASS
Band41	15MHz	16QAM	41515	38RB#0	21.96	PASS
Band41	15MHz	QPSK	41515	38RB#18	22.07	PASS
Band41	15MHz	16QAM	41515	38RB#18	22.05	PASS
Band41	15MHz	QPSK	41515	38RB#37	22.05	PASS
Band41	15MHz	16QAM	41515	38RB#37	22.06	PASS
Band41	15MHz	QPSK	39725	75RB#0	22.22	PASS
Band41	15MHz	QPSK	40620	75RB#0	22.02	PASS
Band41	15MHz	QPSK	41515	75RB#0	22.08	PASS
Band41	20MHz	QPSK	39750	1RB#0	23.09	PASS
Band41	20MHz	16QAM	39750	1RB#0	22.26	PASS
Band41	20MHz	QPSK	39750	1RB#49	23.01	PASS

Band41	20MHz	16QAM	39750	1RB#49	22.21	PASS
Band41	20MHz	QPSK	39750	1RB#99	21.93	PASS
Band41	20MHz	16QAM	39750	1RB#99	21.28	PASS
Band41	20MHz	QPSK	39750	50RB#0	22.30	PASS
Band41	20MHz	QPSK	39750	50RB#25	22.70	PASS
Band41	20MHz	16QAM	39750	50RB#25	22.72	PASS
Band41	20MHz	QPSK	39750	50RB#50	22.64	PASS
Band41	20MHz	16QAM	39750	50RB#50	22.00	PASS
Band41	20MHz	QPSK	40620	1RB#0	22.16	PASS
Band41	20MHz	16QAM	40620	1RB#0	22.23	PASS
Band41	20MHz	QPSK	40620	1RB#49	22.54	PASS
Band41	20MHz	16QAM	40620	1RB#49	21.57	PASS
Band41	20MHz	QPSK	40620	1RB#99	21.96	PASS
Band41	20MHz	16QAM	40620	1RB#99	21.00	PASS
Band41	20MHz	QPSK	40620	50RB#0	21.71	PASS
Band41	20MHz	16QAM	40620	50RB#0	22.01	PASS
Band41	20MHz	QPSK	40620	50RB#25	21.84	PASS
Band41	20MHz	16QAM	40620	50RB#25	21.93	PASS
Band41	20MHz	QPSK	40620	50RB#50	21.52	PASS
Band41	20MHz	16QAM	40620	50RB#50	22.05	PASS
Band41	20MHz	QPSK	41490	1RB#0	22.95	PASS
Band41	20MHz	16QAM	41490	1RB#0	22.02	PASS
Band41	20MHz	QPSK	41490	1RB#49	22.49	PASS
Band41	20MHz	16QAM	41490	1RB#49	21.66	PASS
Band41	20MHz	QPSK	41490	1RB#99	22.42	PASS
Band41	20MHz	16QAM	41490	1RB#99	21.55	PASS
Band41	20MHz	QPSK	41490	50RB#0	21.68	PASS
Band41	20MHz	16QAM	41490	50RB#0	21.82	PASS
Band41	20MHz	QPSK	41490	50RB#25	21.77	PASS
Band41	20MHz	16QAM	41490	50RB#25	21.83	PASS
Band41	20MHz	QPSK	41490	50RB#50	21.75	PASS
Band41	20MHz	16QAM	41490	50RB#50	22.10	PASS
Band41	20MHz	QPSK	39750	100RB#0	22.72	PASS
Band41	20MHz	QPSK	40620	100RB#0	21.72	PASS
Band41	20MHz	QPSK	41490	100RB#0	21.58	PASS

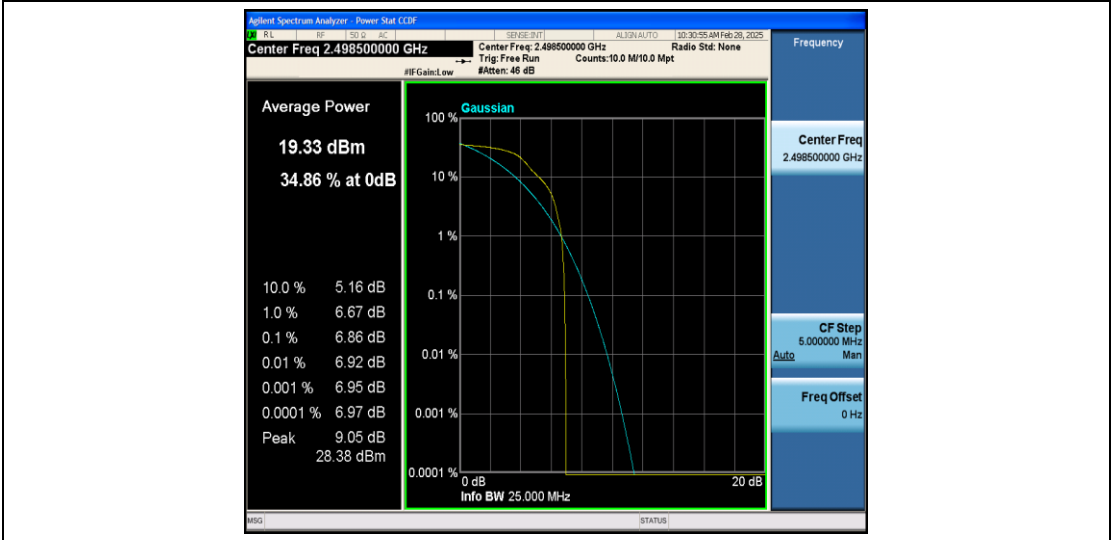
2. Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

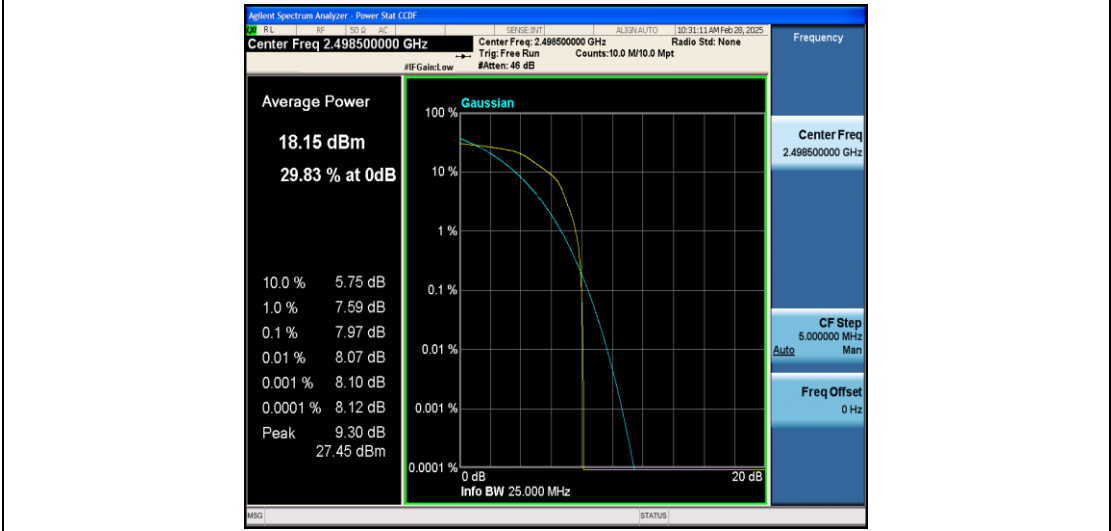
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	6.86	13	PASS
Band41	5MHz	16QAM	39675	1RB#0	7.97	13	PASS
Band41	5MHz	QPSK	39675	25RB#0	7.46	13	PASS
Band41	5MHz	16QAM	39675	25RB#0	8.53	13	PASS
Band41	5MHz	QPSK	40620	1RB#0	7.92	13	PASS
Band41	5MHz	16QAM	40620	1RB#0	8.89	13	PASS
Band41	5MHz	QPSK	40620	25RB#0	8.99	13	PASS
Band41	5MHz	16QAM	40620	25RB#0	9.54	13	PASS
Band41	5MHz	QPSK	41565	1RB#0	9.02	13	PASS
Band41	5MHz	16QAM	41565	1RB#0	10.06	13	PASS
Band41	5MHz	QPSK	41565	25RB#0	9.72	13	PASS
Band41	5MHz	16QAM	41565	25RB#0	10.48	13	PASS
Band41	10MHz	QPSK	39700	1RB#0	6.62	13	PASS
Band41	10MHz	16QAM	39700	1RB#0	7.38	13	PASS
Band41	10MHz	QPSK	40620	1RB#0	7.63	13	PASS
Band41	10MHz	16QAM	40620	1RB#0	8.27	13	PASS
Band41	10MHz	QPSK	41540	1RB#0	8.83	13	PASS
Band41	10MHz	16QAM	41540	1RB#0	9.43	13	PASS
Band41	10MHz	QPSK	39700	50RB#0	6.87	13	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.36	13	PASS
Band41	10MHz	QPSK	41540	50RB#0	9.17	13	PASS
Band41	15MHz	QPSK	39725	1RB#0	7.17	13	PASS
Band41	15MHz	16QAM	39725	1RB#0	8.01	13	PASS
Band41	15MHz	QPSK	40620	1RB#0	7.42	13	PASS
Band41	15MHz	16QAM	40620	1RB#0	8.31	13	PASS
Band41	15MHz	QPSK	41515	1RB#0	9.50	13	PASS
Band41	15MHz	16QAM	41515	1RB#0	9.96	13	PASS
Band41	15MHz	QPSK	39725	75RB#0	8.72	13	PASS
Band41	15MHz	QPSK	40620	75RB#0	8.86	13	PASS
Band41	15MHz	QPSK	41515	75RB#0	9.68	13	PASS
Band41	20MHz	QPSK	39750	1RB#0	7.15	13	PASS
Band41	20MHz	16QAM	39750	1RB#0	7.74	13	PASS
Band41	20MHz	QPSK	40620	1RB#0	7.87	13	PASS
Band41	20MHz	16QAM	40620	1RB#0	8.18	13	PASS
Band41	20MHz	QPSK	41490	1RB#0	9.44	13	PASS
Band41	20MHz	16QAM	41490	1RB#0	9.79	13	PASS

Band41	20MHz	QPSK	39750	100RB#0	8.17	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	8.79	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	9.09	13	PASS

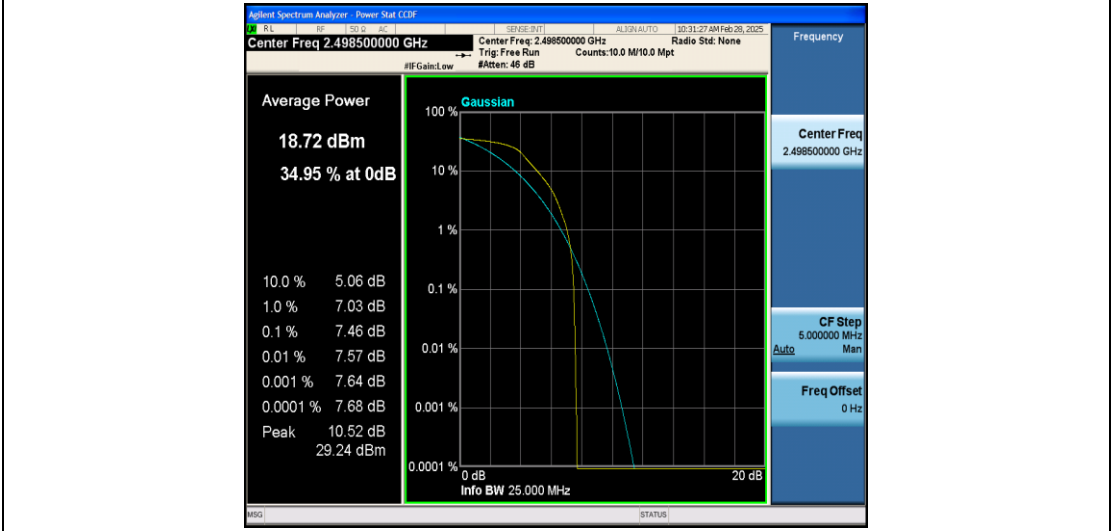
Test Graphs



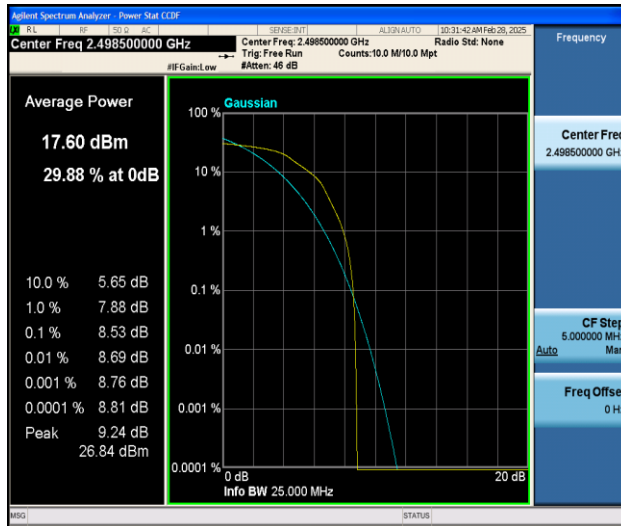
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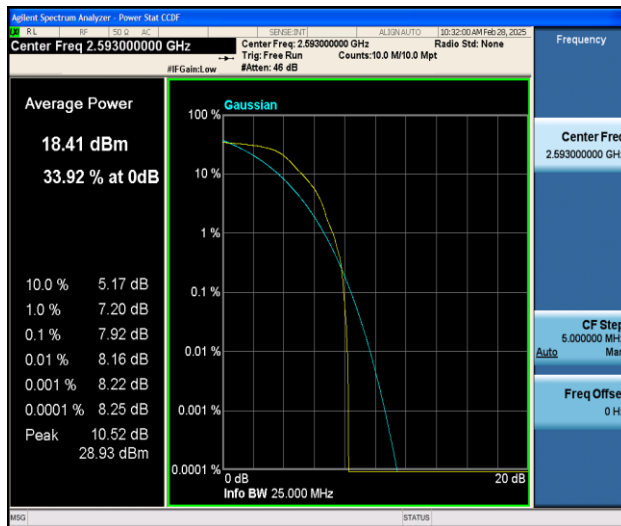
Band41-5MHz-16QAM-39675-1RB#0-PASS



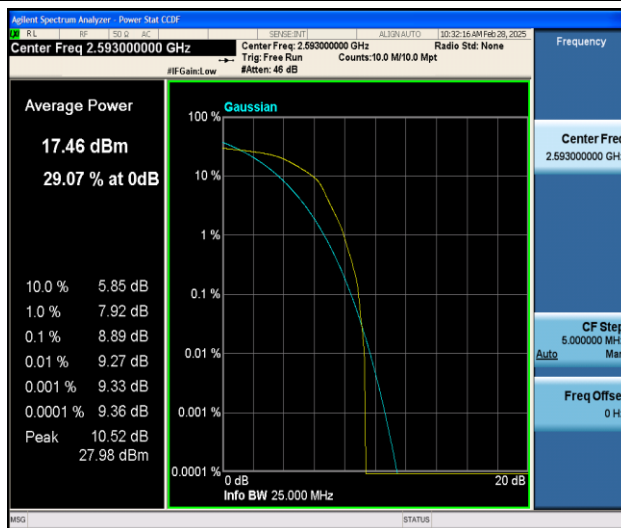
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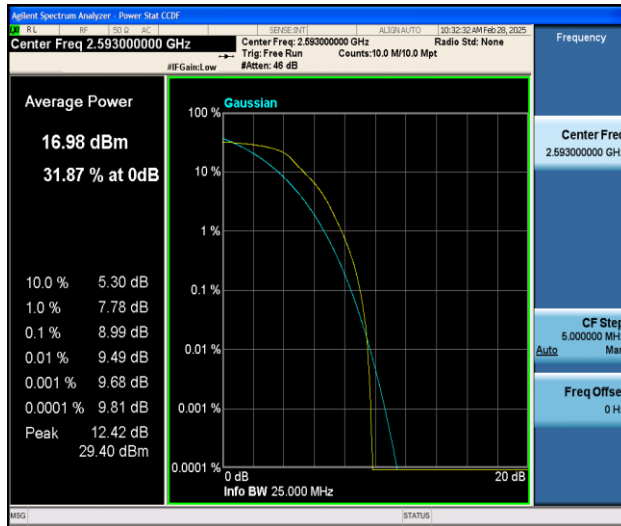
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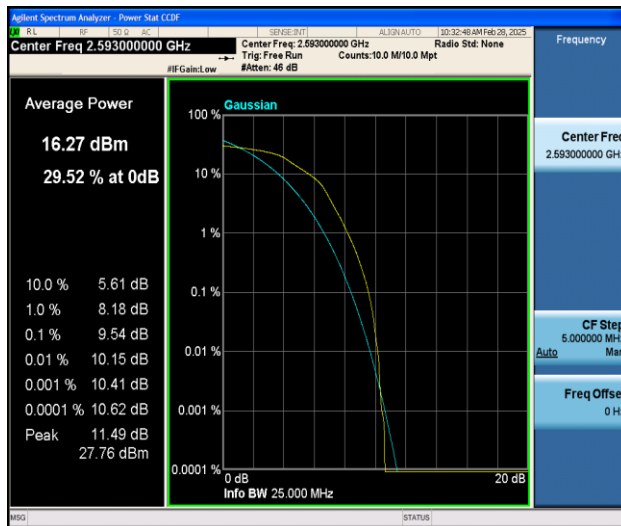
Band41-5MHz-QPSK-40620-1RB#0-PASS



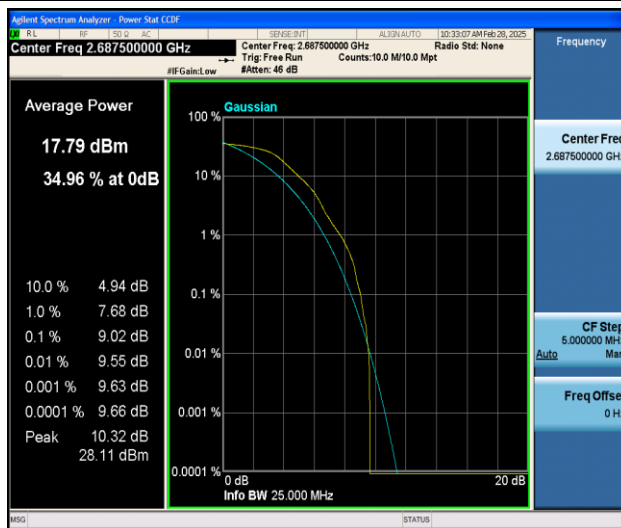
Band41-5MHz-16QAM-40620-1RB#0-PASS



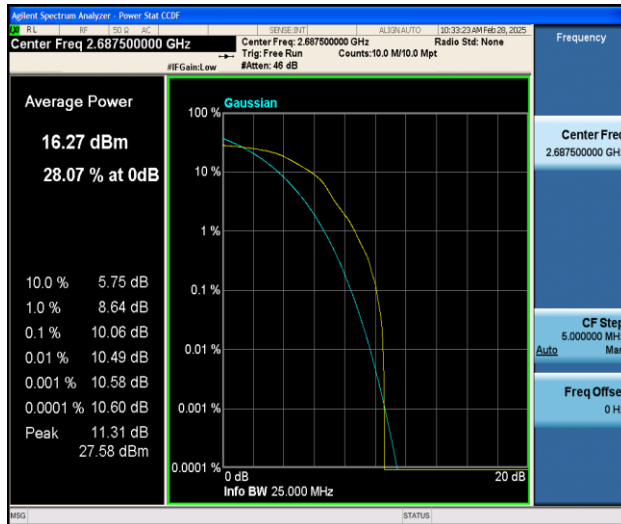
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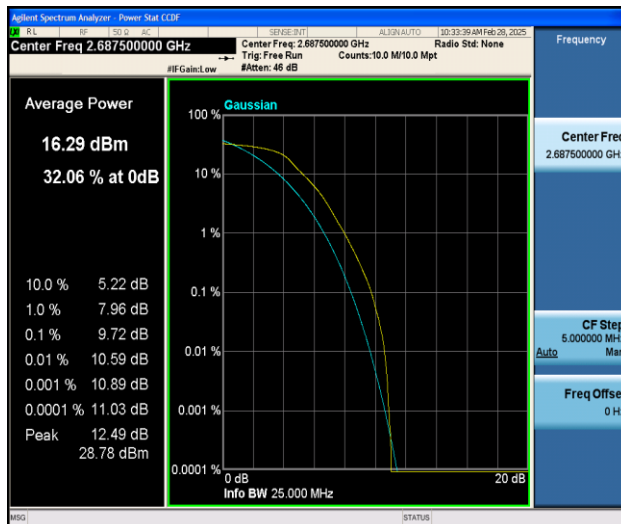
Band41-5MHz-16QAM-40620-25RB#0-PASS



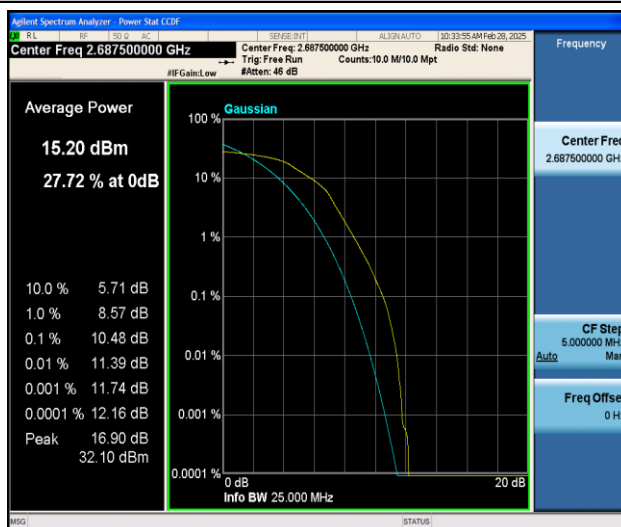
Band41-5MHz-QPSK-41565-1RB#0-PASS



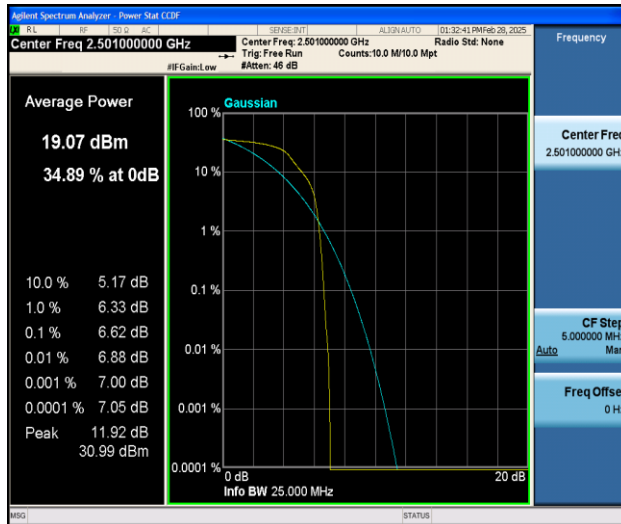
Band41-5MHz-16QAM-41565-1RB#0-PASS



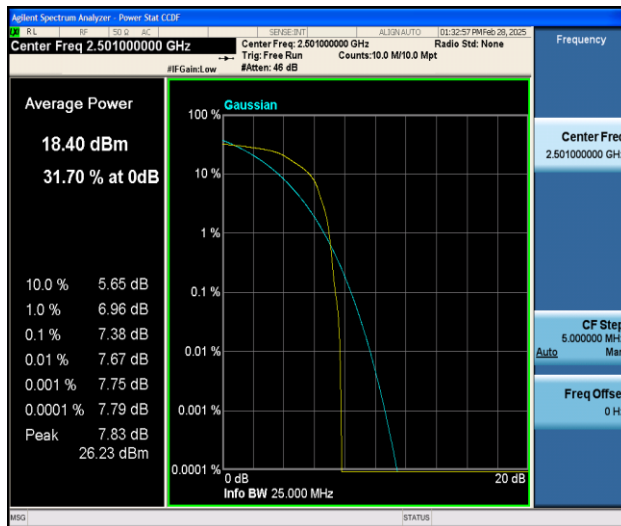
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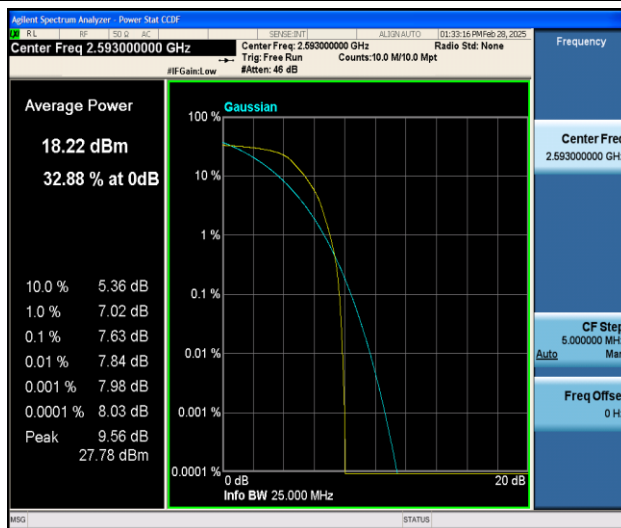
Band41-5MHz-16QAM-41565-25RB#0-PASS



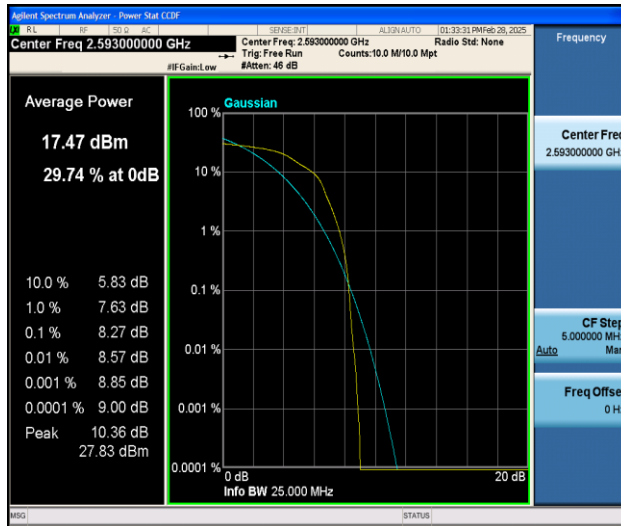
Band41-10MHz-QPSK-39700-1RB#0-PASS



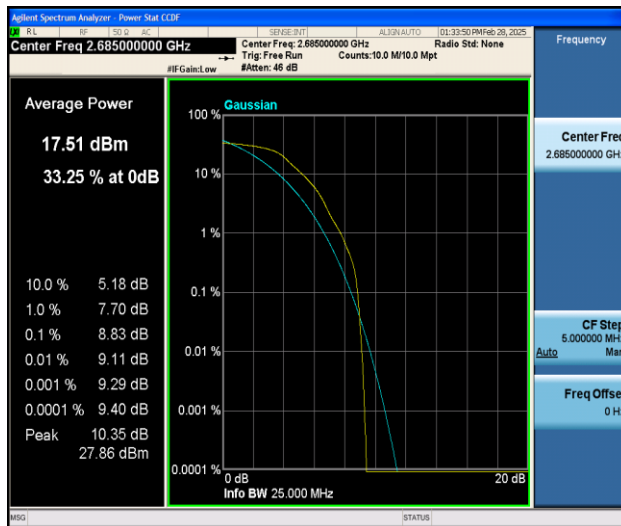
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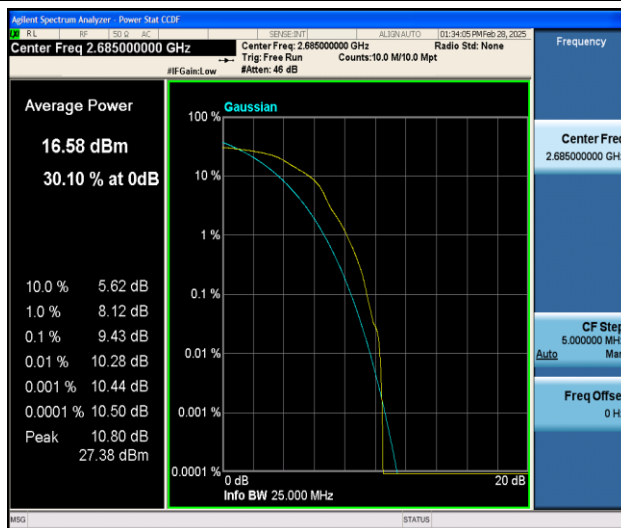
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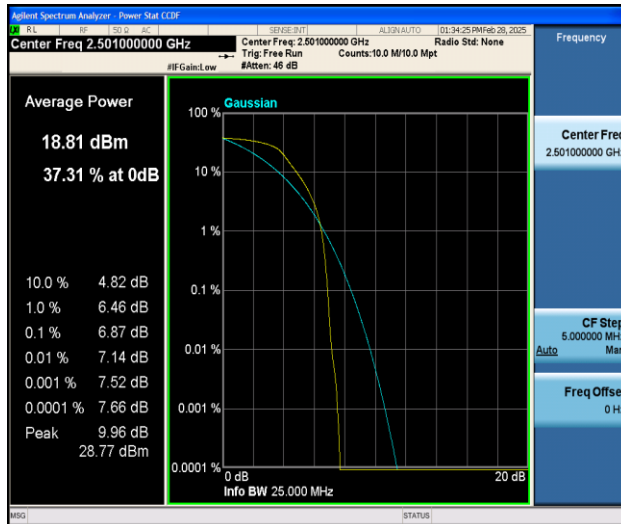
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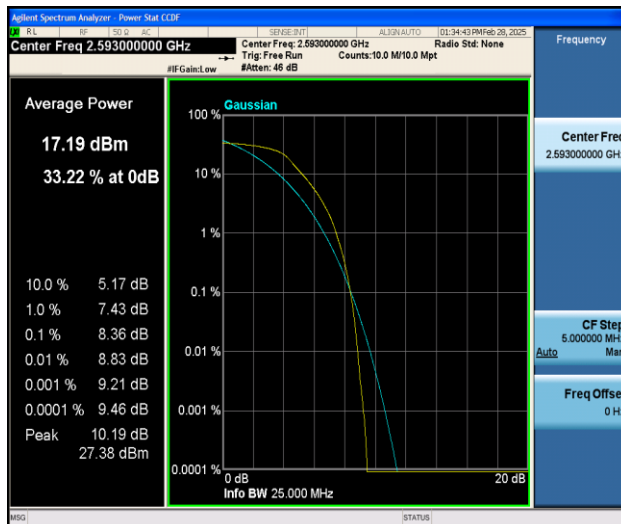
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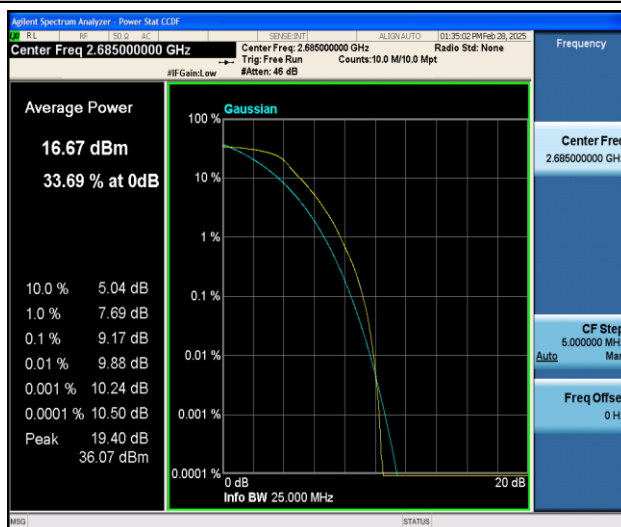
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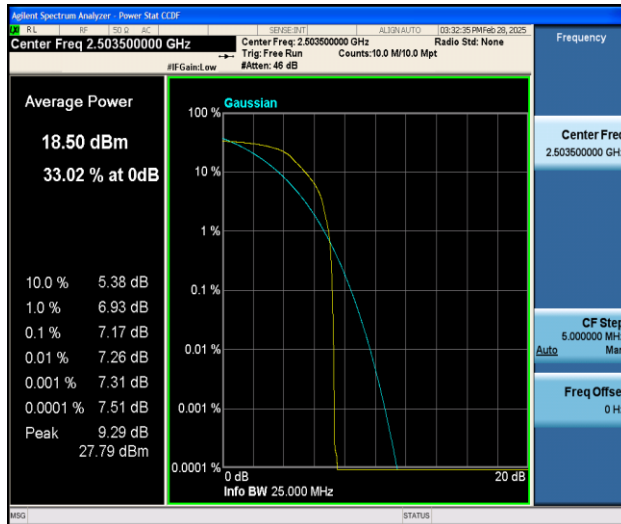
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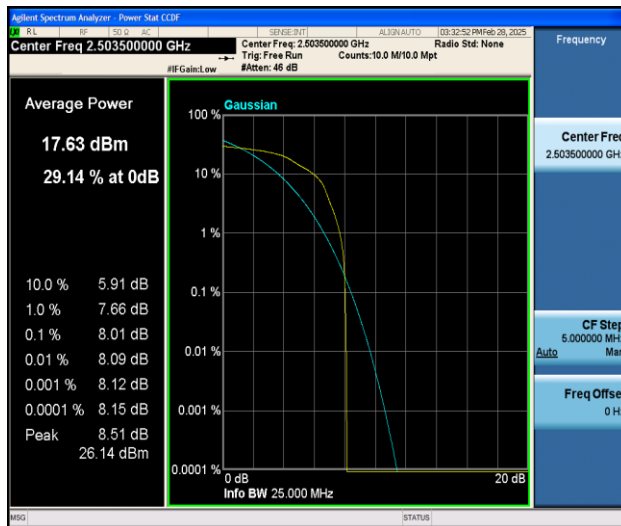
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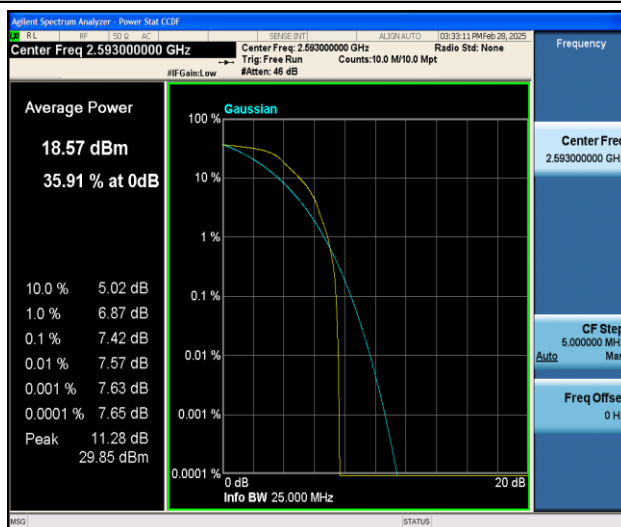
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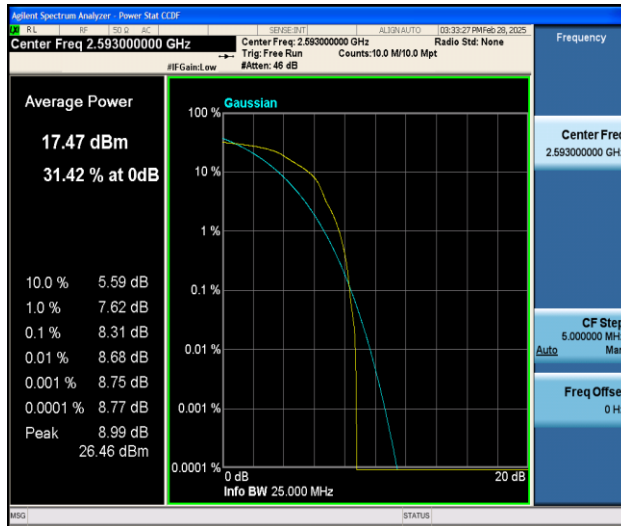
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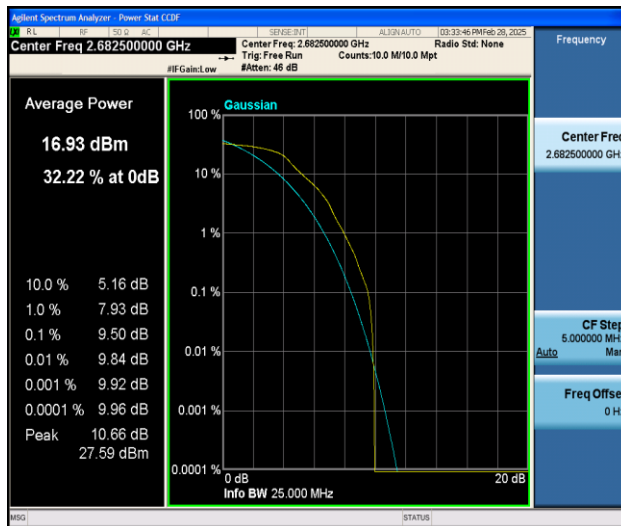
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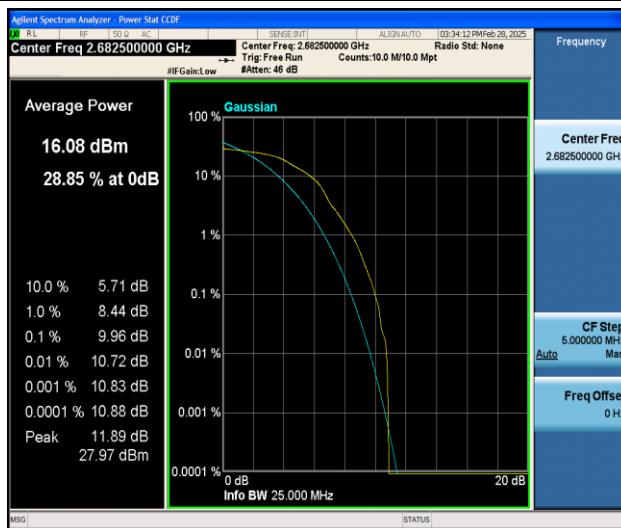
Band41-15MHz-QPSK-40620-1RB#0-PASS



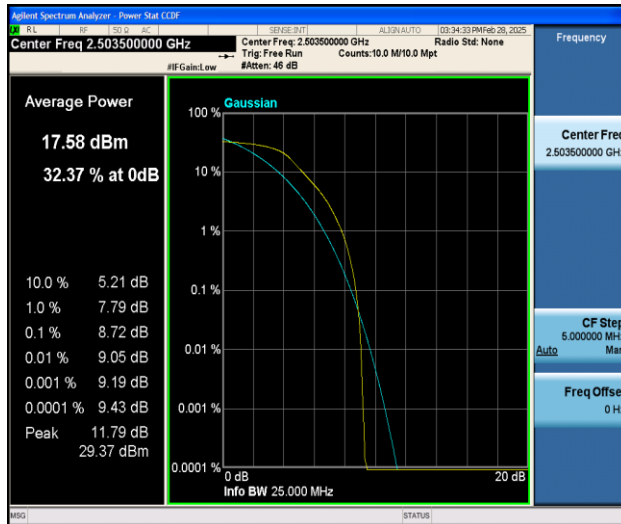
Band41-15MHz-16QAM-40620-1RB#0-PASS



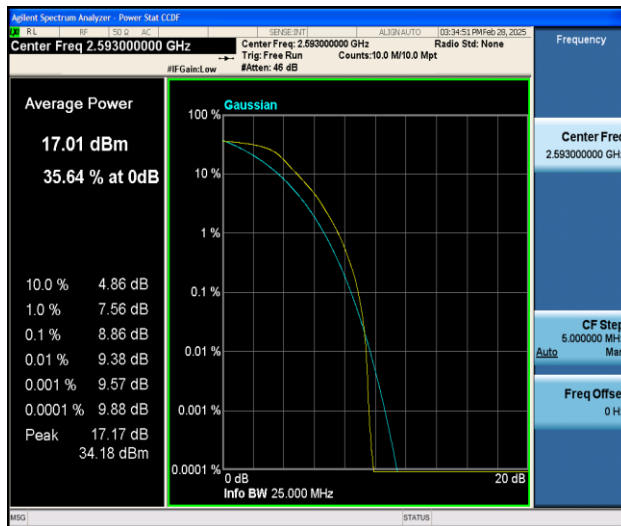
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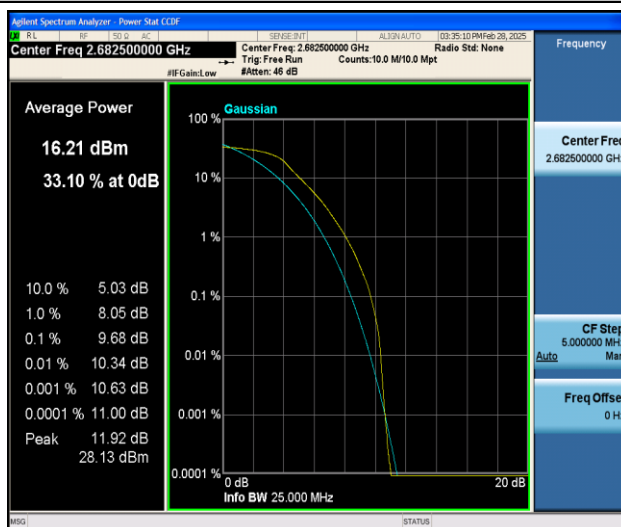
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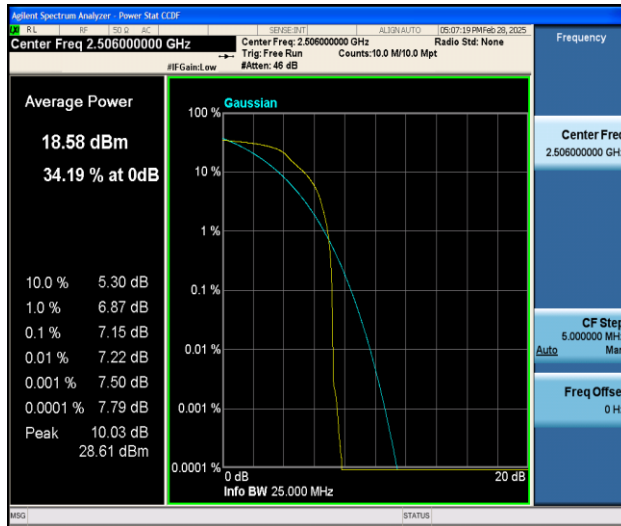
Band41-15MHz-QPSK-39725-75RB#0-PASS



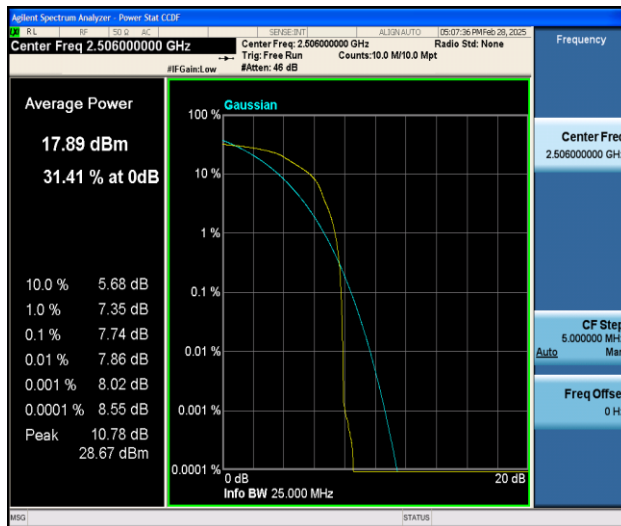
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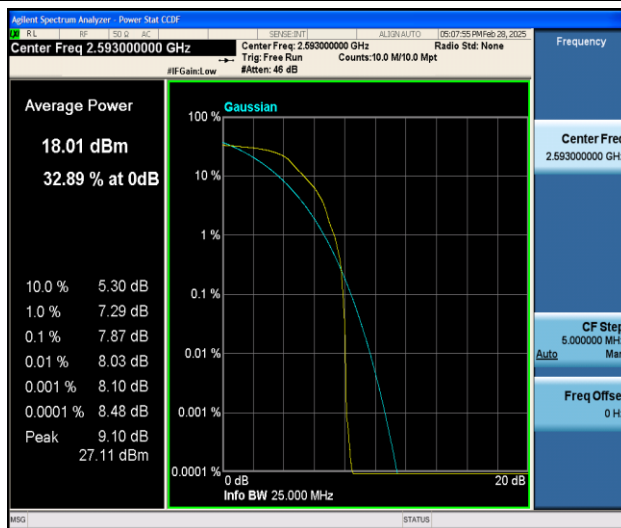
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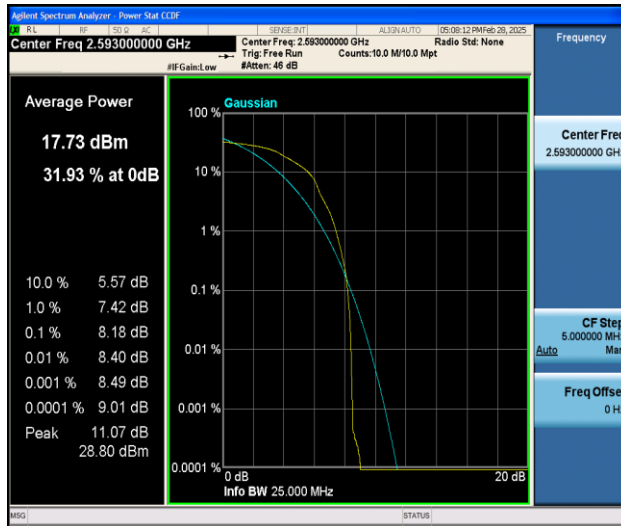
Band41-20MHz-QPSK-39750-1RB#0-PASS



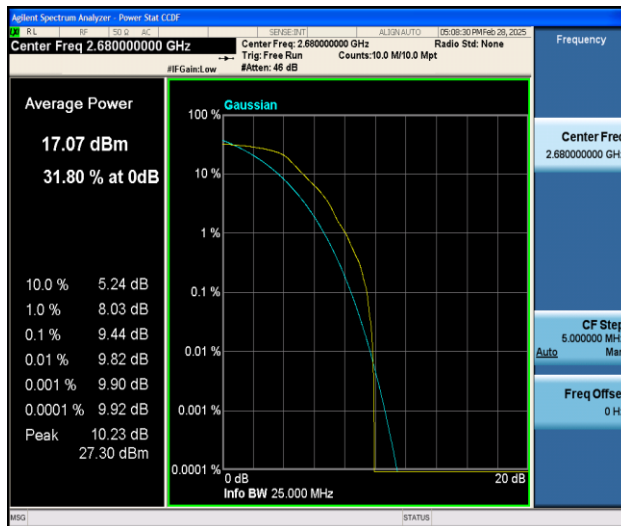
Band41-20MHz-16QAM-39750-1RB#0-PASS



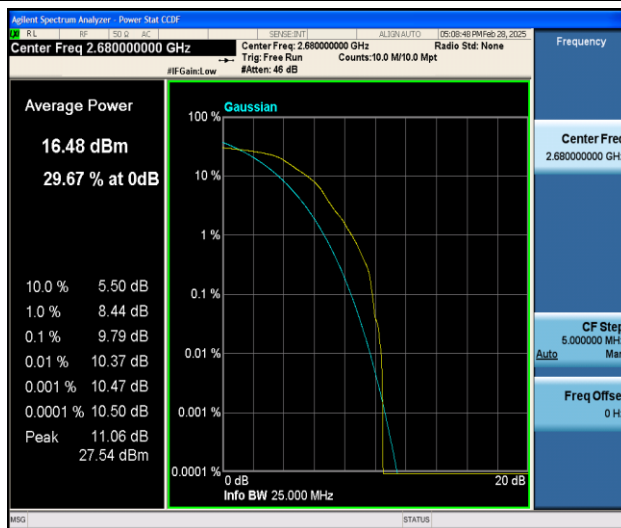
Band41-20MHz-QPSK-40620-1RB#0-PASS



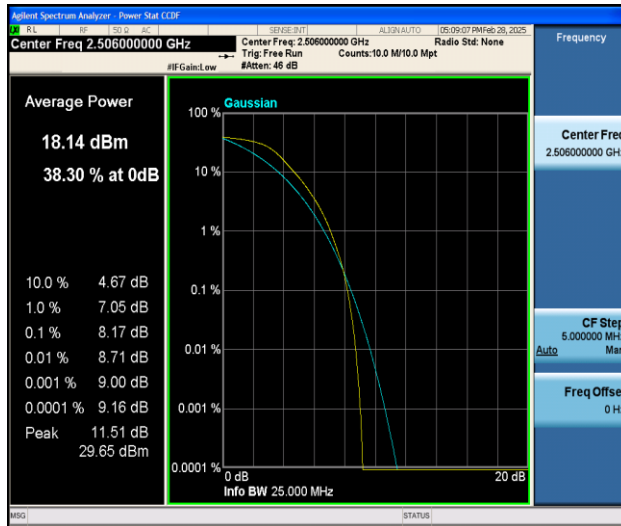
Band41-20MHz-16QAM-40620-1RB#0-PASS



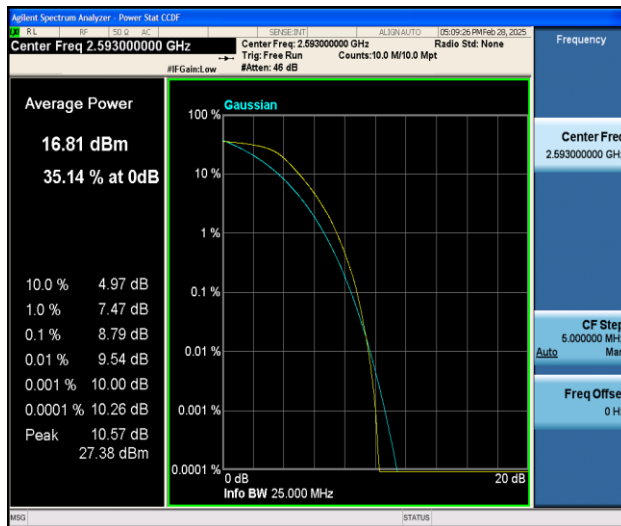
Band41-20MHz-QPSK-41490-1RB#0-PASS



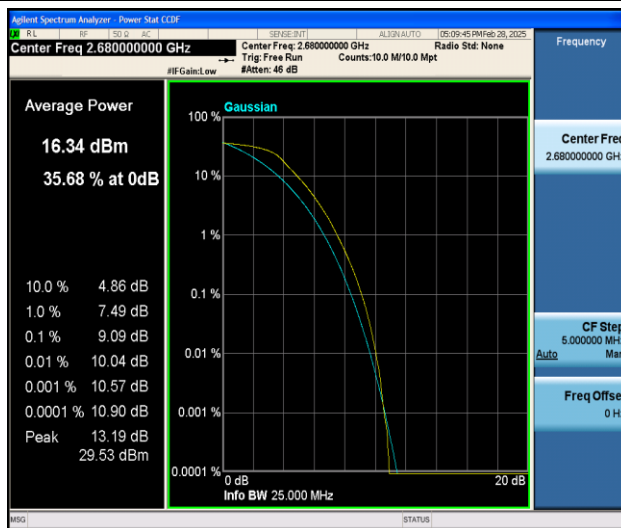
Band41-20MHz-16QAM-41490-1RB#0-PASS



Band41-20MHz-QPSK-39750-100RB#0-PASS



Band41-20MHz-QPSK-40620-100RB#0-PASS



Band41-20MHz-QPSK-41490-100RB#0-PASS

3. Appendix C: 26dB Bandwidth and Occupied Bandwidth

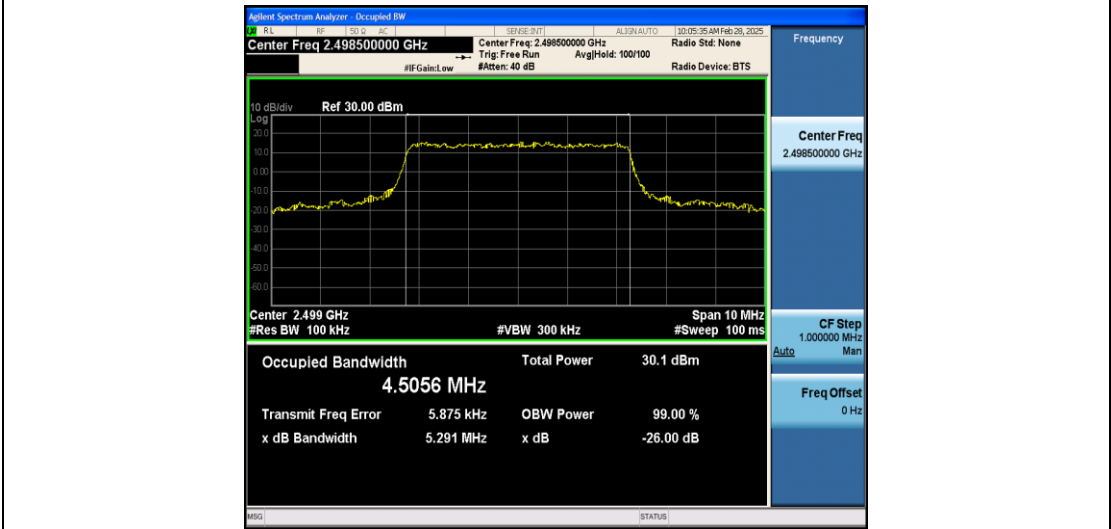
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.4967	5.133	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.5056	5.291	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.4965	5.068	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.4799	5.040	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.4832	5.038	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4764	5.022	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9787	9.874	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.9535	9.789	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9895	9.892	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.530	15.11	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.463	15.13	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.439	15.04	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.963	19.47	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.917	19.69	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.958	19.69	PASS

Test Graphs



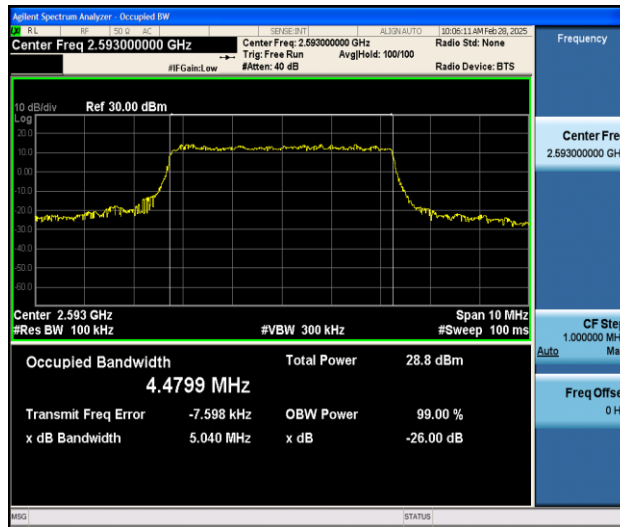
Band41-5MHz-QPSK-39675-25RB#0-PASS



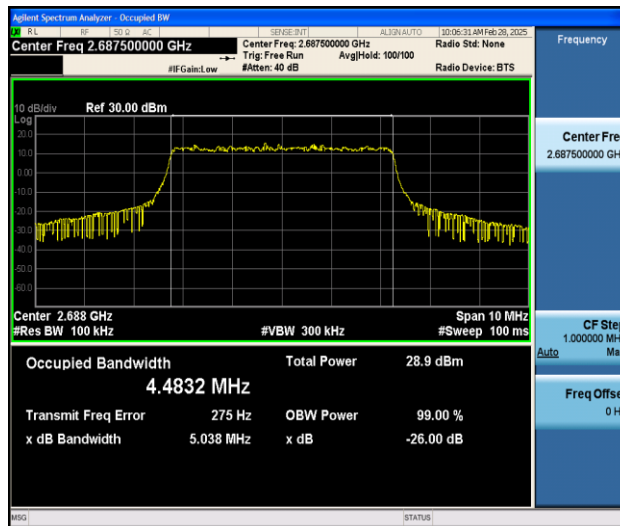
Band41-5MHz-16QAM-39675-25RB#0-PASS



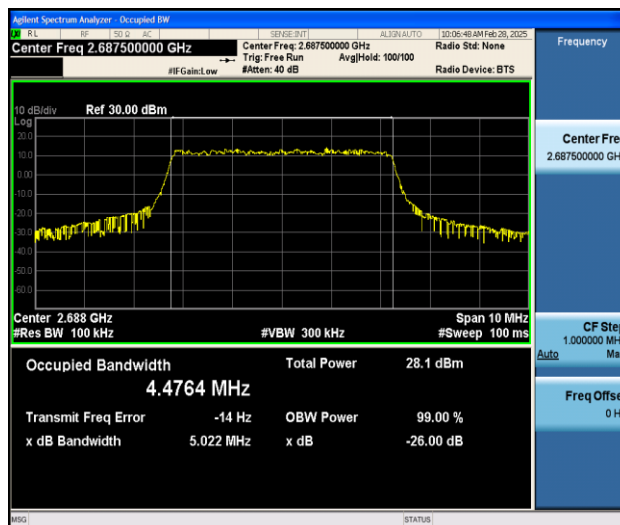
Band41-5MHz-QPSK-40620-25RB#0-PASS



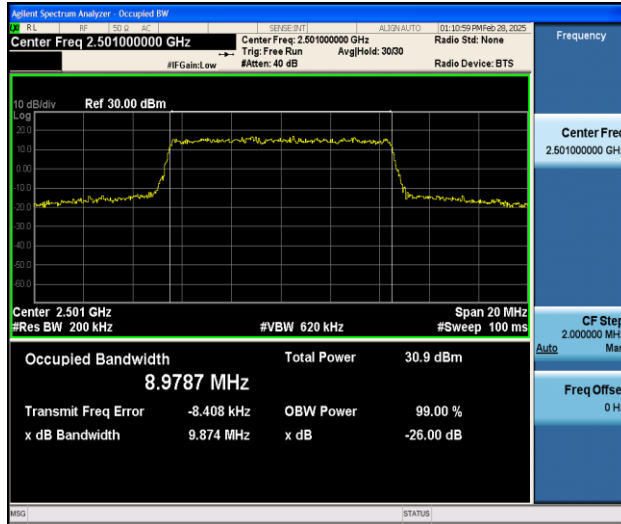
Band41-5MHz-16QAM-40620-25RB#0-PASS



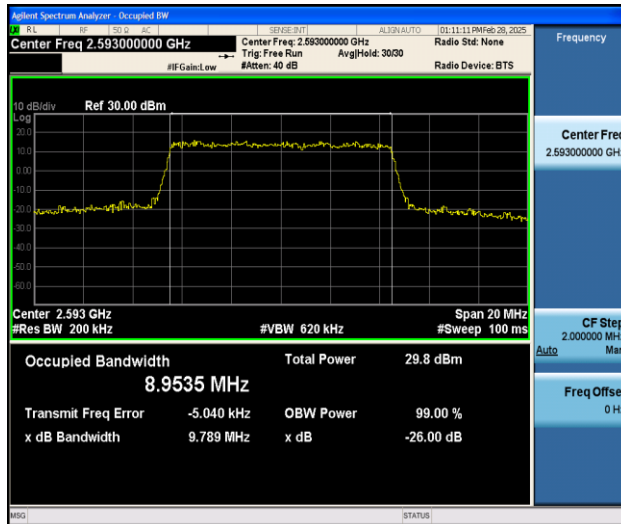
Band41-5MHz-QPSK-41565-25RB#0-PASS



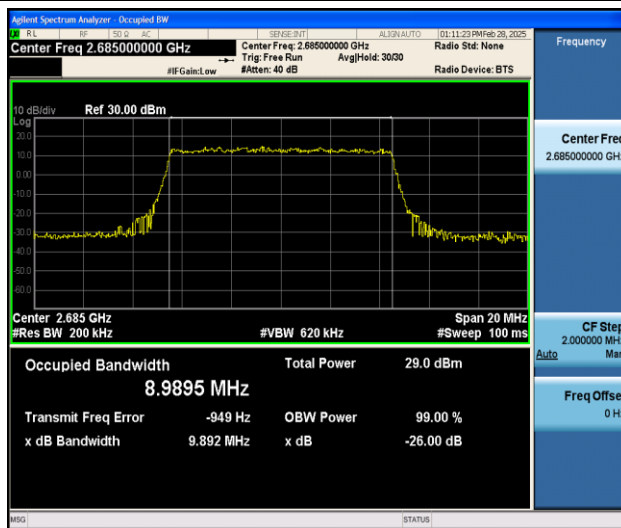
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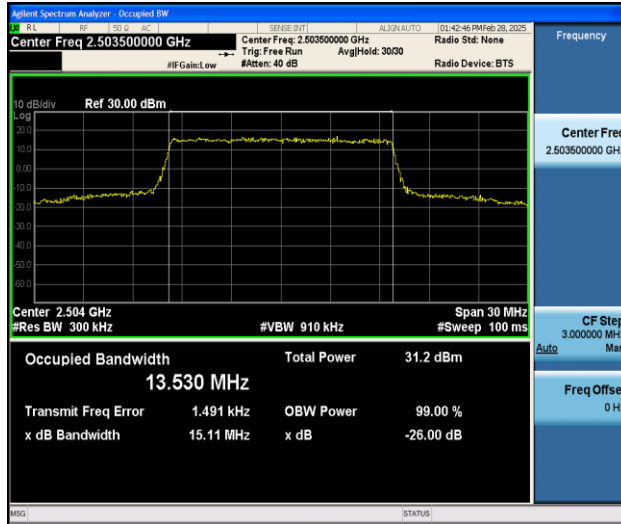
Band41-10MHz-QPSK-39700-50RB#0-PASS



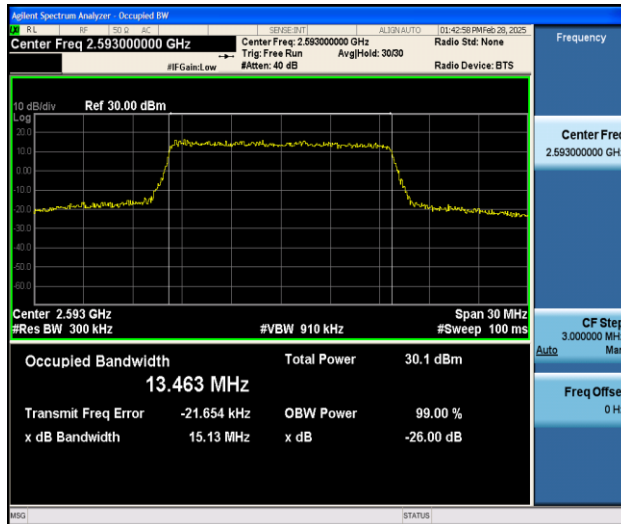
Band41-10MHz-QPSK-40620-50RB#0-PASS



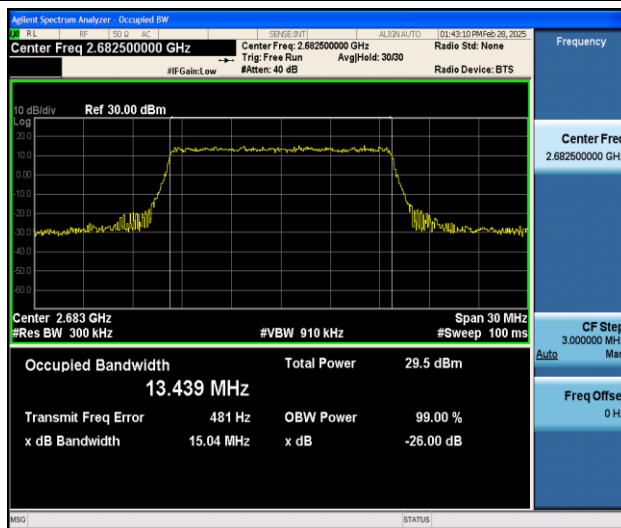
Band41-10MHz-QPSK-41540-50RB#0-PASS



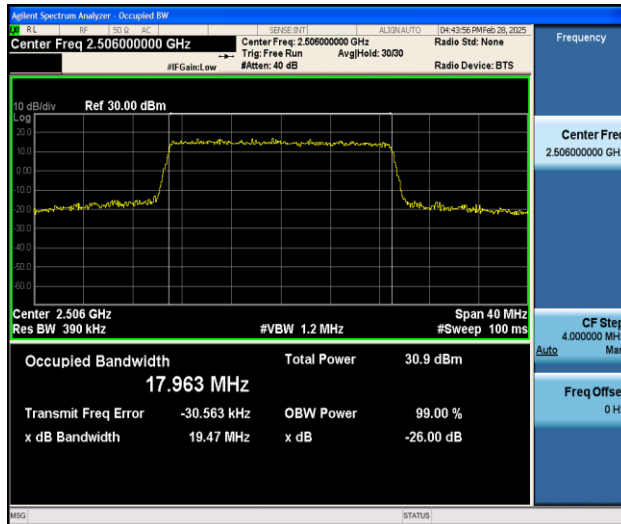
Band41-15MHz-QPSK-39725-75RB#0-PASS



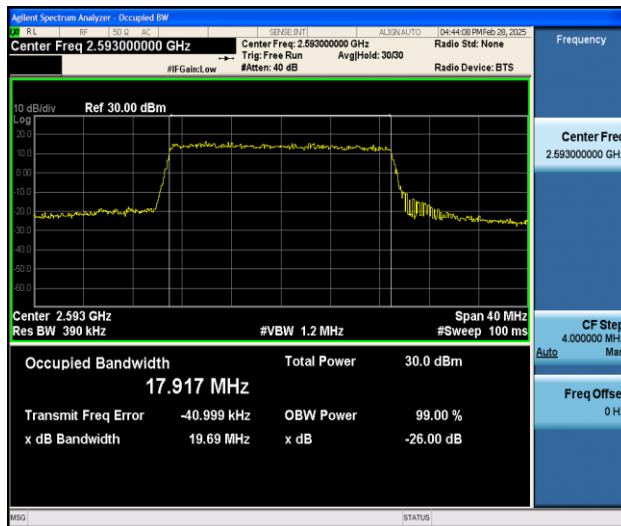
Band41-15MHz-QPSK-40620-75RB#0-PASS



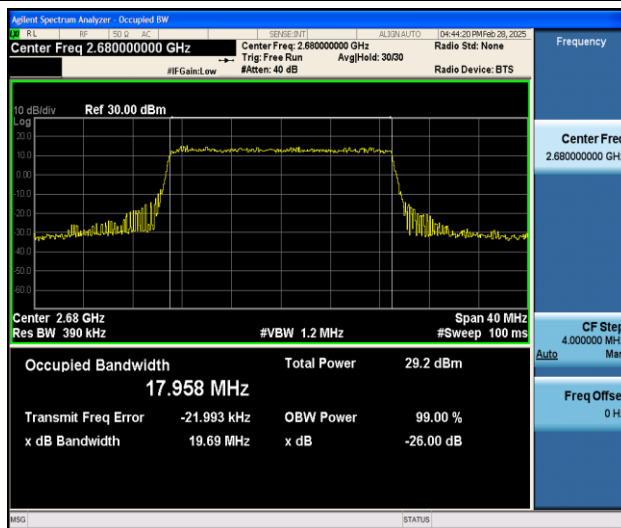
Band41-15MHz-QPSK-41515-75RB#0-PASS



Band41-20MHz-QPSK-39750-100RB#0-PASS



Band41-20MHz-QPSK-40620-100RB#0-PASS



Band41-20MHz-QPSK-41490-100RB#0-PASS