Appendix I: Test Data for E-UTRA Band 5

Product Name: Smart Phone

Test Model: HPPL67A

Environmental Conditions

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

I.1 Conducted Power Output DataTest Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	23.66	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	23.52	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.78	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	23.40	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.66	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	23.46	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.55	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	23.10	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.55	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.71	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.65	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.77	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.90	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	22.33	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.42	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	23.39	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.36	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	23.35	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.38	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	23.95	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.60	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.92	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.64	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.94	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.67	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.93	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.70	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	22.50	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.23	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	23.04	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	22.93	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.83	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.39	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	22.15	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.21	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	22.83	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.23	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.83	PASS

Band5	1.4MHz	QPSK	20643	3RB#3	22.77	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.52	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.64	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	22.13	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.39	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.76	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.40	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.79	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.16	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.62	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.76	PASS
Band5	3MHz	16QAM	20415	8RB#0	22.19	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.48	PASS
Band5	3MHz	16QAM	20415	8RB#4	22.19	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.90	PASS
Band5	3MHz	16QAM	20415	8RB#7	22.20	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.50	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.82	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.22	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.07	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.52	PASS
Band5	3MHz	16QAM	20525	1RB#8	22.11	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.42	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.20	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.52	PASS
Band5	3MHz	16QAM	20525	8RB#0	22.17	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.53	PASS
Band5	3MHz	16QAM	20525	8RB#4	22.14	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.63	PASS
Band5	3MHz	16QAM	20525	8RB#7	22.27	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.52	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.89	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.24	PASS
Band5	3MHz	16QAM	20635	1RB#0	23.49	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.21	PASS
Band5	3MHz	16QAM	20635	1RB#8	23.36	PASS
Band5	3MHz	QPSK	20635	1RB#14	22.25	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.07	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.38	PASS
Band5	3MHz	16QAM	20635	8RB#0	22.07	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.46	PASS
Band5	3MHz	16QAM	20635	8RB#4	22.12	PASS

Band5	3MHz	QPSK	20635	8RB#7	22.49	PASS
Band5	3MHz	16QAM	20635	8RB#7	22.06	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.55	PASS
Band5	3MHz	16QAM	20635	15RB#0	22.07	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.44	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.18	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.41	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.21	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.43	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.24	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.40	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.95	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.53	PASS
Band5	5MHz	16QAM	20425	12RB#6	21.85	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.47	PASS
Band5	5MHz	16QAM	20425	12RB#13	21.96	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.48	PASS
Band5	5MHz	16QAM	20425	25RB#0	22.04	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.20	PASS
Band5	5MHz	16QAM	20525	1RB#0	23.28	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.19	PASS
Band5	5MHz	16QAM	20525	1RB#12	23.26	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.18	PASS
Band5	5MHz	16QAM	20525	1RB#24	23.25	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.46	PASS
Band5	5MHz	16QAM	20525	12RB#0	22.19	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.43	PASS
Band5	5MHz	16QAM	20525	12RB#6	22.20	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.42	PASS
Band5	5MHz	16QAM	20525	12RB#13	21.83	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.55	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.82	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.37	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.83	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.29	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.73	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.81	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.42	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.74	PASS
Band5	5MHz	16QAM	20625	12RB#0	22.11	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.69	PASS
Band5	5MHz	16QAM	20625	12RB#6	22.13	PASS

Band5	5MHz	QPSK	20625	12RB#13	22.70	PASS
Band5	5MHz	16QAM	20625	12RB#13	22.04	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.52	PASS
Band5	5MHz	16QAM	20625	25RB#0	22.12	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.33	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.88	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.35	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.80	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.28	PASS
Band5	10MHz	16QAM	20450	1RB#49	22.87	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.53	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.99	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.49	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.96	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.23	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.84	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.59	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.94	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.38	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.92	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.47	PASS
Band5	10MHz	16QAM	20525	1RB#24	23.03	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.48	PASS
Band5	10MHz	16QAM	20525	1RB#49	23.04	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.57	PASS
Band5	10MHz	16QAM	20525	25RB#0	22.09	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.54	PASS
Band5	10MHz	16QAM	20525	25RB#12	22.04	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.58	PASS
Band5	10MHz	16QAM	20525	25RB#25	22.08	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.56	PASS
Band5	10MHz	16QAM	20525	50RB#0	22.05	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.51	PASS
Band5	10MHz	16QAM	20600	1RB#0	23.46	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.43	PASS
Band5	10MHz	16QAM	20600	1RB#24	23.41	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.02	PASS
Band5	10MHz	16QAM	20600	1RB#49	22.62	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.56	PASS
Band5	10MHz	16QAM	20600	25RB#0	22.25	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.59	PASS
Band5	10MHz	16QAM	20600	25RB#12	22.10	PASS

Band5	10MHz	QPSK	20600	25RB#25	22.64	PASS
Band5	10MHz	16QAM	20600	25RB#25	22.20	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.63	PASS
Band5	10MHz	16QAM	20600	50RB#0	22.15	PASS

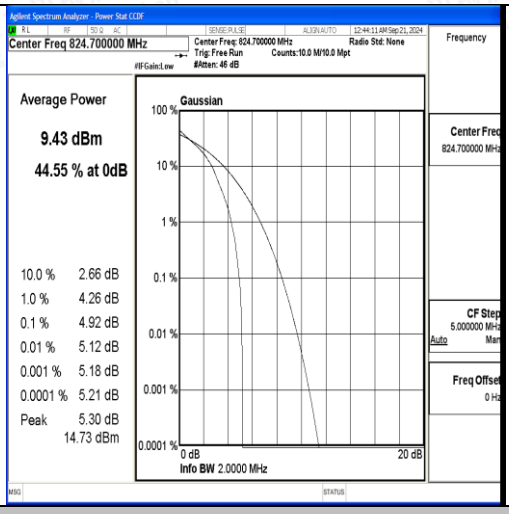
I.2 Peak-to-Average Ratio(CCDF)

Test Result

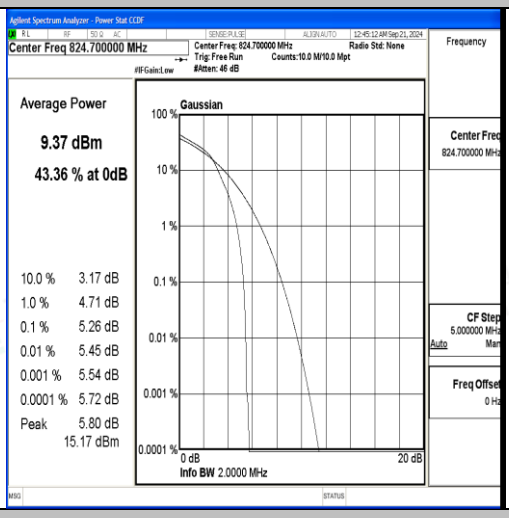
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	4.92	13	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	5.26	13	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	5.77	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	6.37	13	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	5.02	13	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	5.89	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	5.73	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	6.36	13	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	3.72	13	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	3.56	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	4.36	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	5.02	13	PASS
Band5	3MHz	QPSK	20415	1RB#0	5.02	13	PASS
Band5	3MHz	16QAM	20415	1RB#0	5.65	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	5.84	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	6.52	13	PASS
Band5	3MHz	QPSK	20525	1RB#0	5.06	13	PASS
Band5	3MHz	16QAM	20525	1RB#0	5.69	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	5.79	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	6.44	13	PASS
Band5	3MHz	QPSK	20635	1RB#0	3.69	13	PASS
Band5	3MHz	16QAM	20635	1RB#0	3.72	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	4.69	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	5.30	13	PASS
Band5	5MHz	QPSK	20425	1RB#0	5.15	13	PASS
Band5	5MHz	16QAM	20425	1RB#0	5.88	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.78	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	6.40	13	PASS
Band5	5MHz	QPSK	20525	1RB#0	5.18	13	PASS
Band5	5MHz	16QAM	20525	1RB#0	5.58	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	5.71	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	6.35	13	PASS
Band5	5MHz	QPSK	20625	1RB#0	4.46	13	PASS
Band5	5MHz	16QAM	20625	1RB#0	4.85	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	5.26	13	PASS

Band5	5MHz	16QAM	20625	25RB#0	5.87	13	PASS
Band5	10MHz	QPSK	20450	1RB#0	5.14	13	PASS
Band5	10MHz	16QAM	20450	1RB#0	5.63	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.60	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.28	13	PASS
Band5	10MHz	QPSK	20525	1RB#0	4.78	13	PASS
Band5	10MHz	16QAM	20525	1RB#0	5.76	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.65	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.34	13	PASS
Band5	10MHz	QPSK	20600	1RB#0	4.75	13	PASS
Band5	10MHz	16QAM	20600	1RB#0	5.29	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.29	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.01	13	PASS

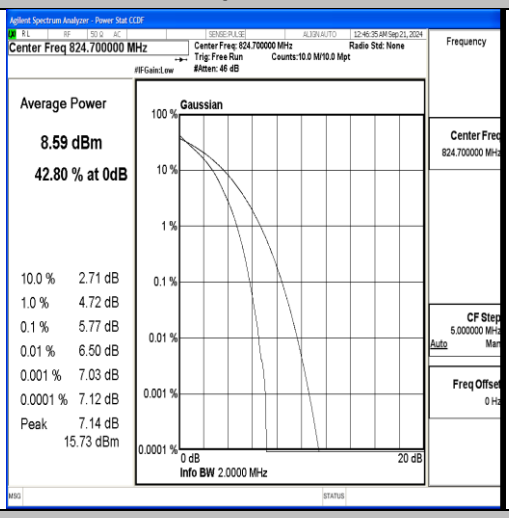
Test Graphs



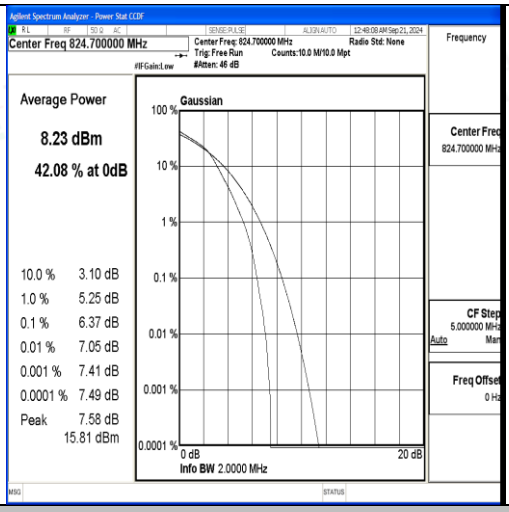
Band5-1.4MHz-QPSK-20407-1RB#0-PASS



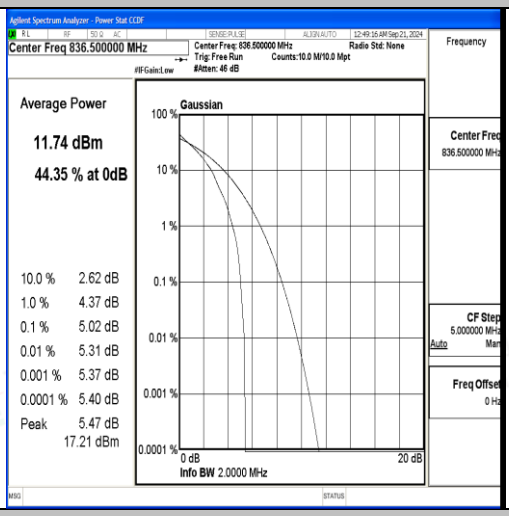
Band5-1.4MHz-16QAM-20407-1RB#0-PASS



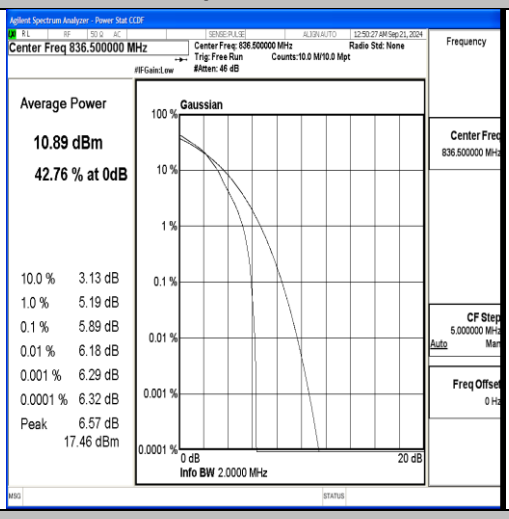
Band5-1.4MHz-QPSK-20407-6RB#0-PASS



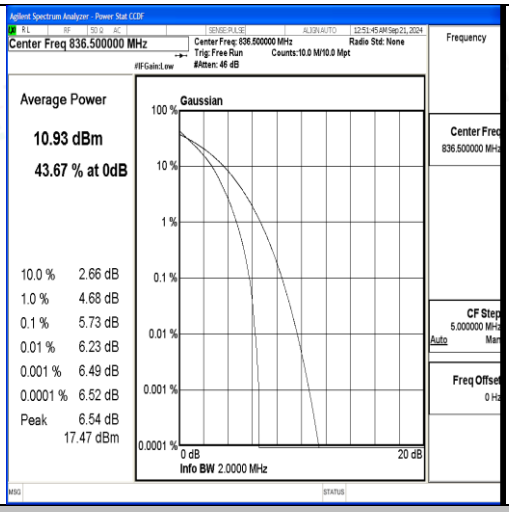
Band5-1.4MHz-16QAM-20407-6RB#0-PASS



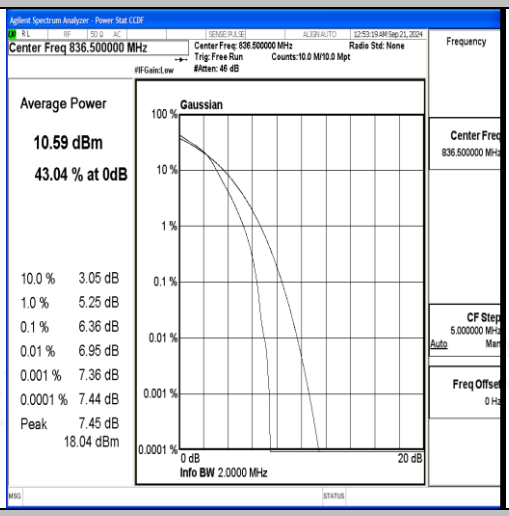
Band5-1.4MHz-QPSK-20525-1RB#0-PASS



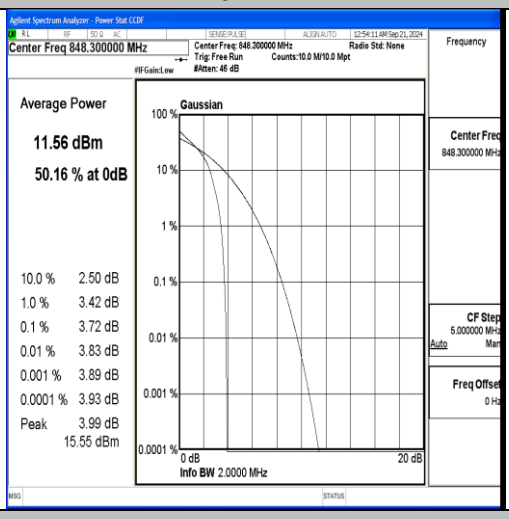
Band5-1.4MHz-16QAM-20525-1RB#0-PASS



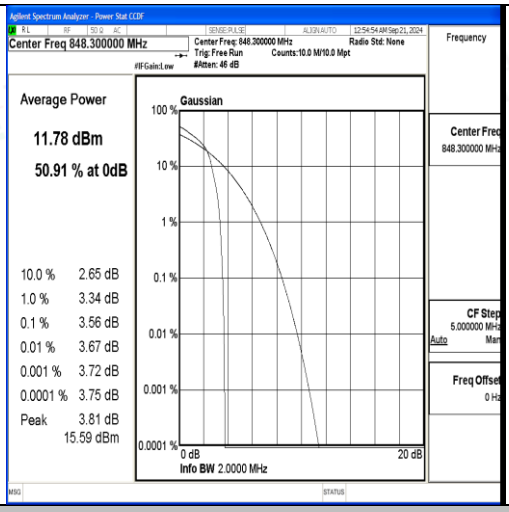
Band5-1.4MHz-QPSK-20525-6RB#0-PASS



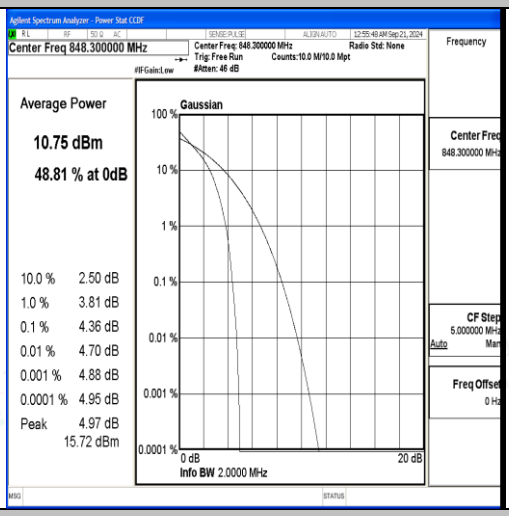
Band5-1.4MHz-16QAM-20525-6RB#0-PASS



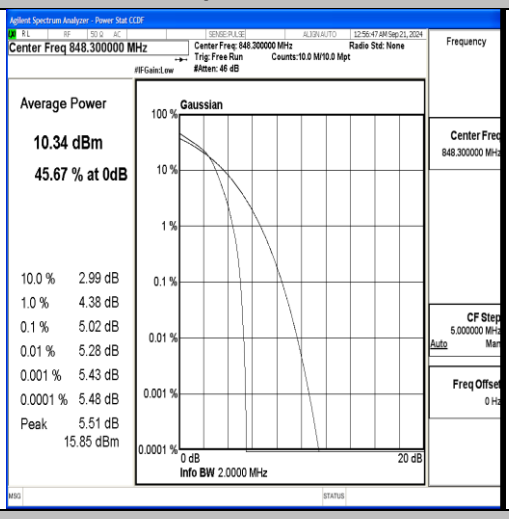
Band5-1.4MHz-QPSK-20643-1RB#0-PASS



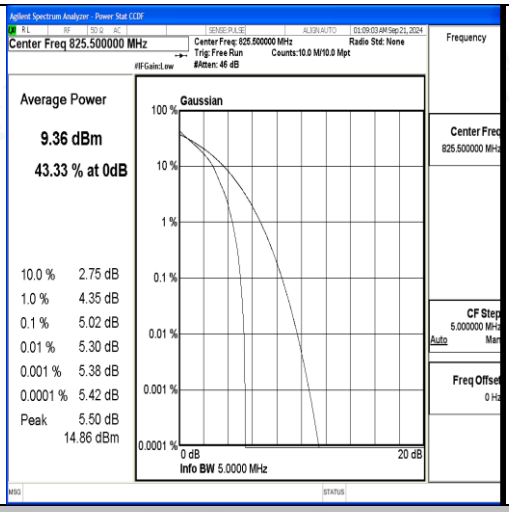
Band5-1.4MHz-16QAM-20643-1RB#0-PASS



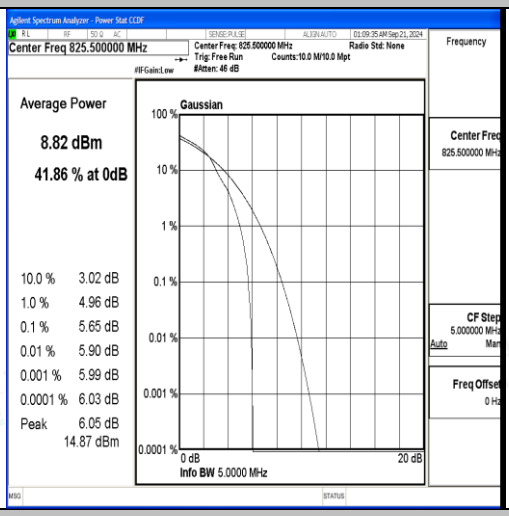
Band5-1.4MHz-QPSK-20643-6RB#0-PASS



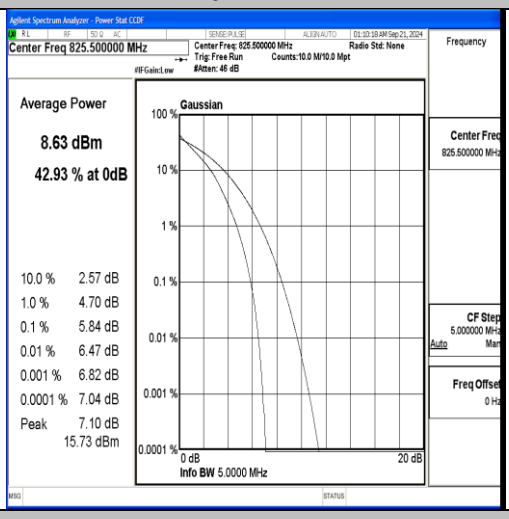
Band5-1.4MHz-16QAM-20643-6RB#0-PASS



Band5-3MHz-QPSK-20415-1RB#0-PASS



Band5-3MHz-16QAM-20415-1RB#0-PASS



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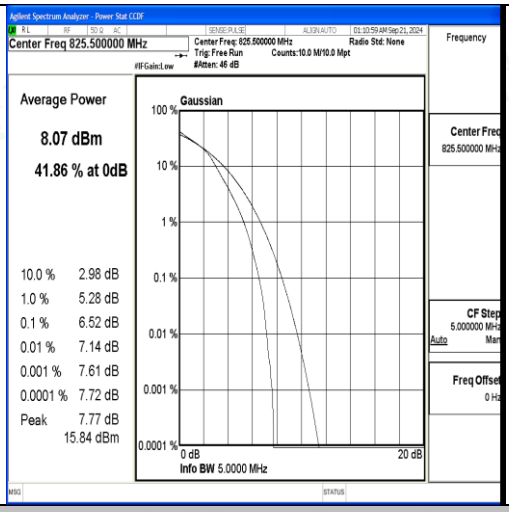

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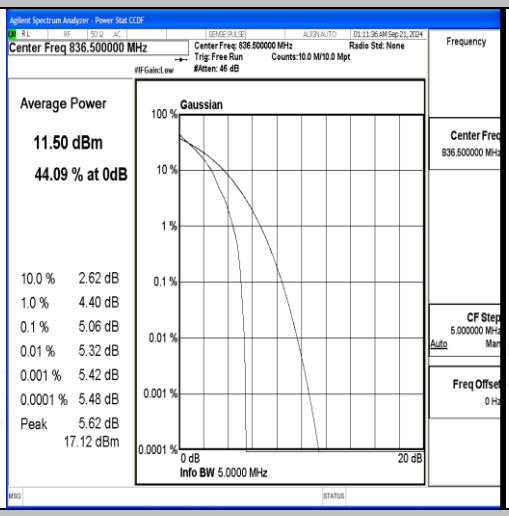
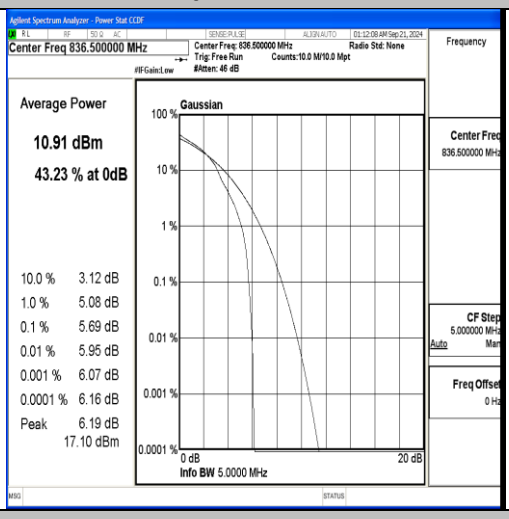
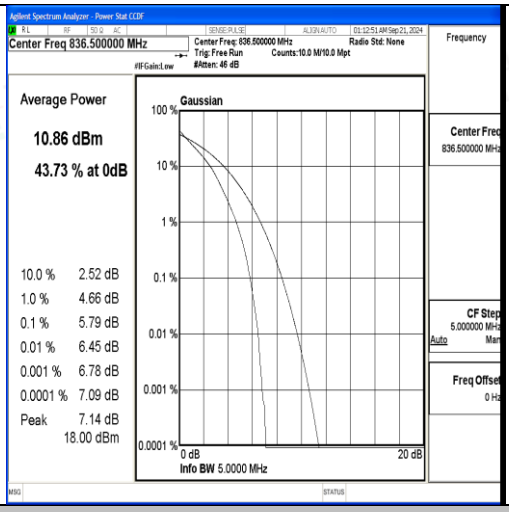


Band5-3MHz-QPSK-20525-1RB#0-PASS



Band5-3MHz-16QAM-20525-1RB#0-PASS



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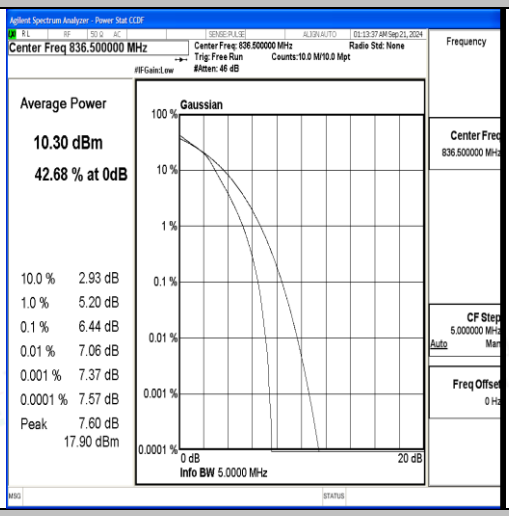
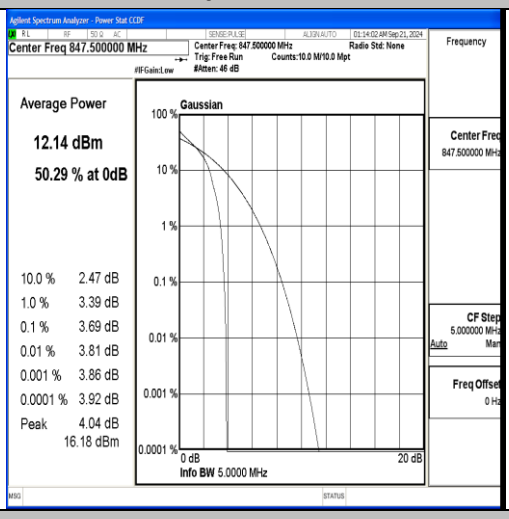
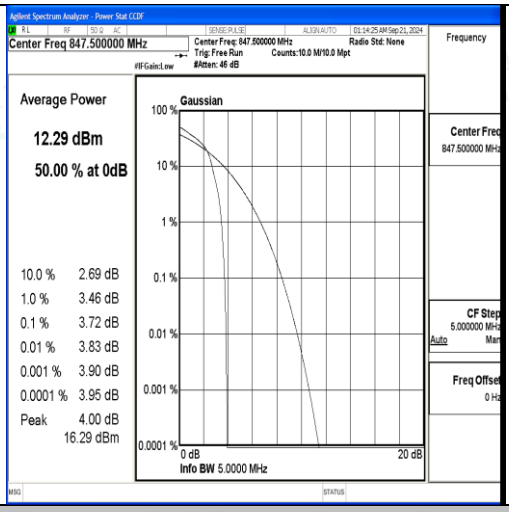


Band5-3MHz-16QAM-20525-15RB#0-PASS



Band5-3MHz-QPSK-20635-1RB#0-PASS



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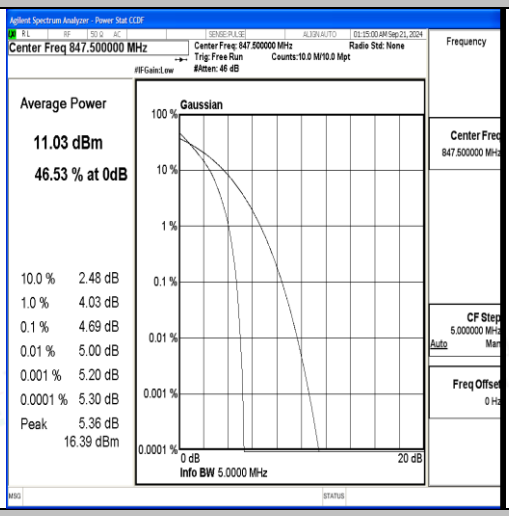

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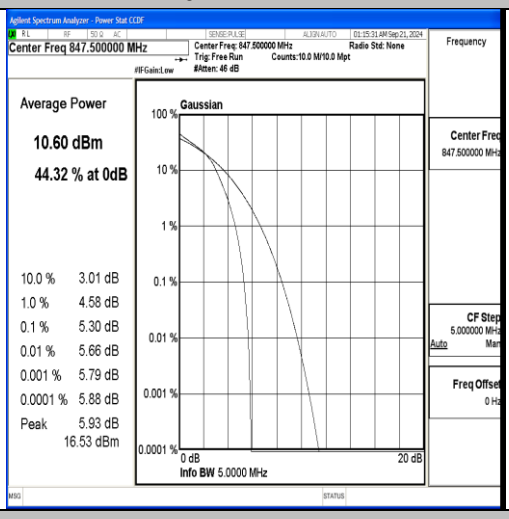

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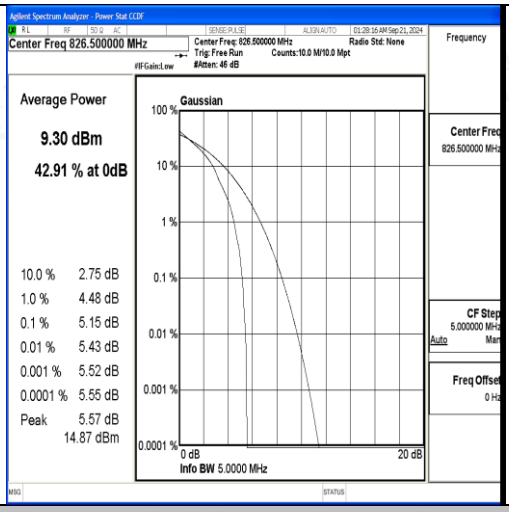
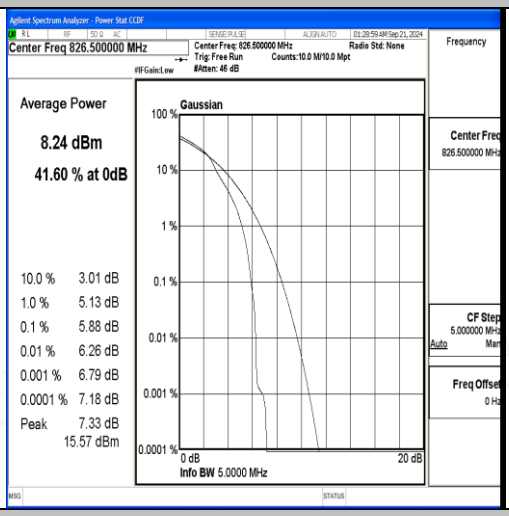


Band5-5MHz-QPSK-20425-1RB#0-PASS



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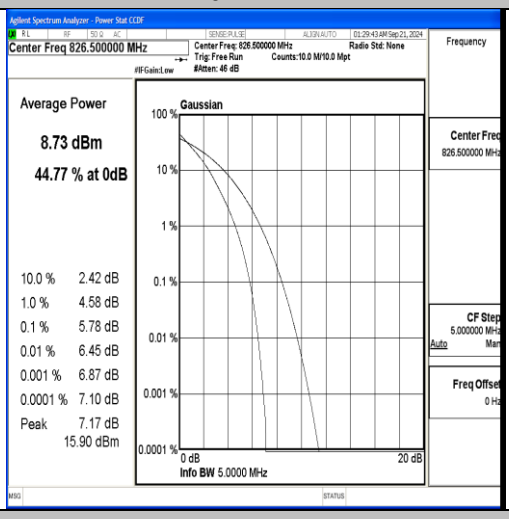
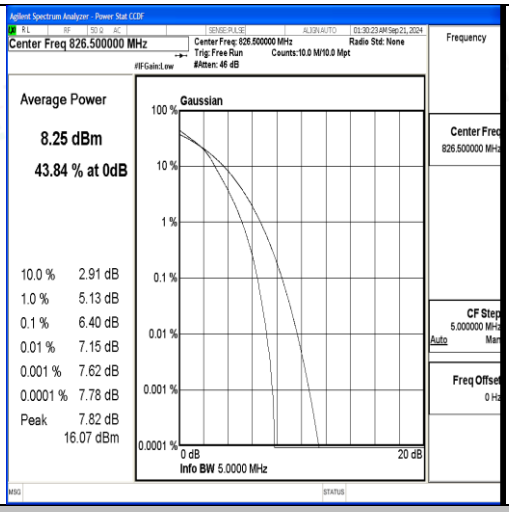
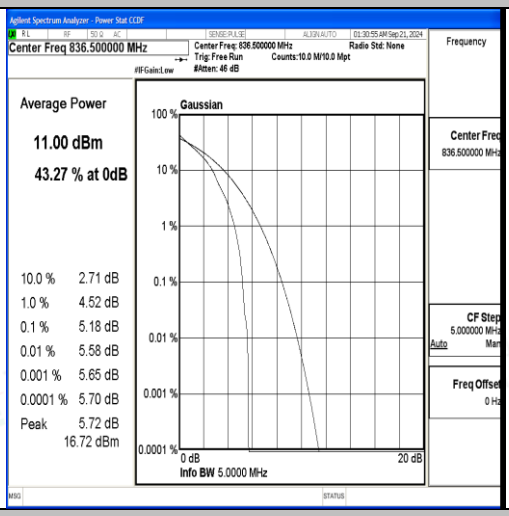


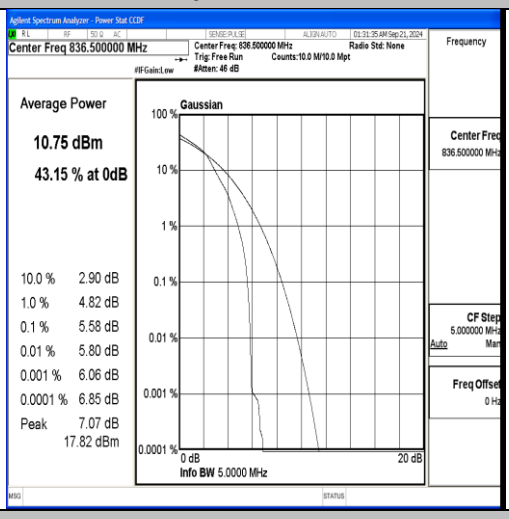
Band5-5MHz-QPSK-20425-25RB#0-PASS



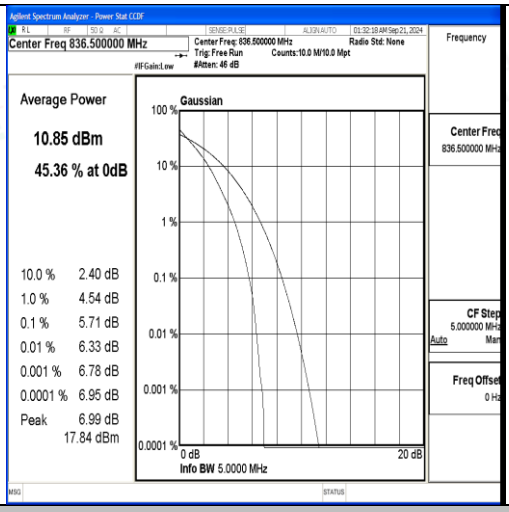
Band5-5MHz-16QAM-20425-25RB#0-PASS



Band5-5MHz-QPSK-20525-1RB#0-PASS



Band5-5MHz-16QAM-20525-1RB#0-PASS



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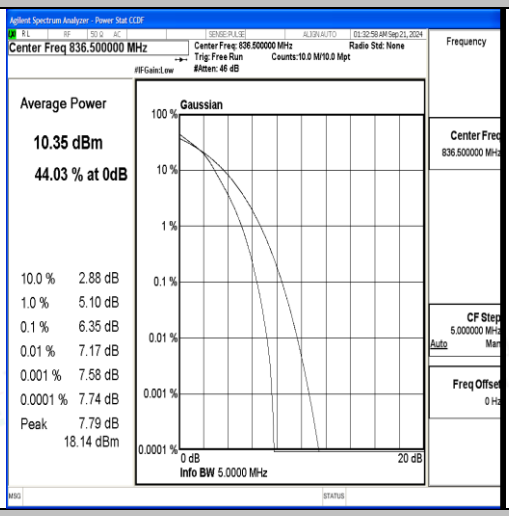

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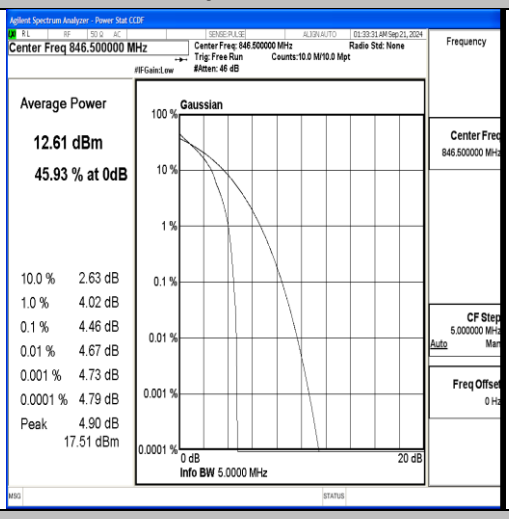

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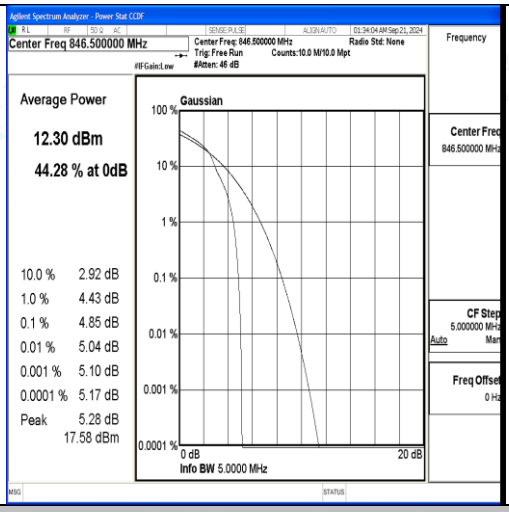

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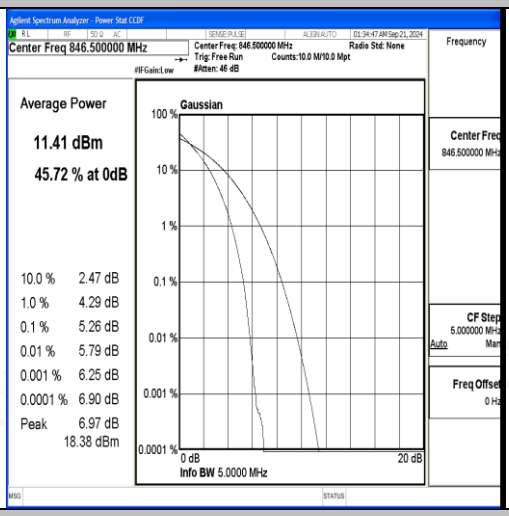

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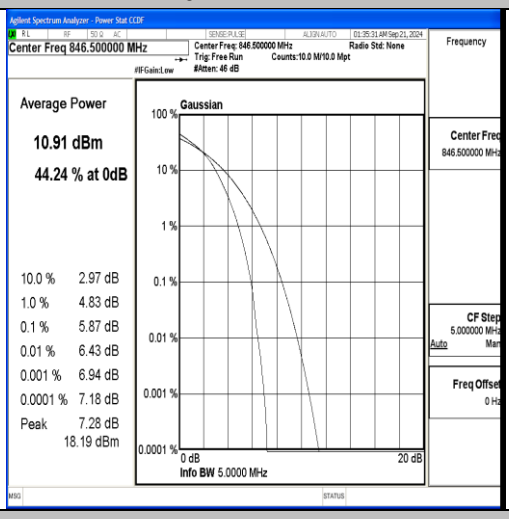

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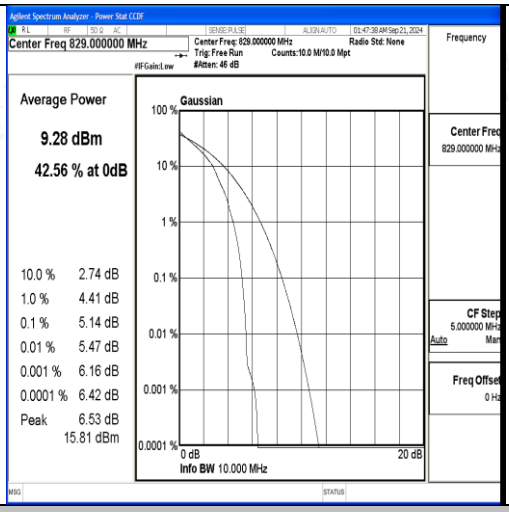
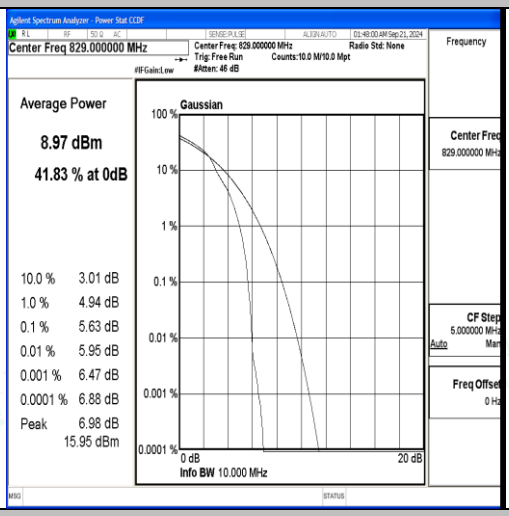
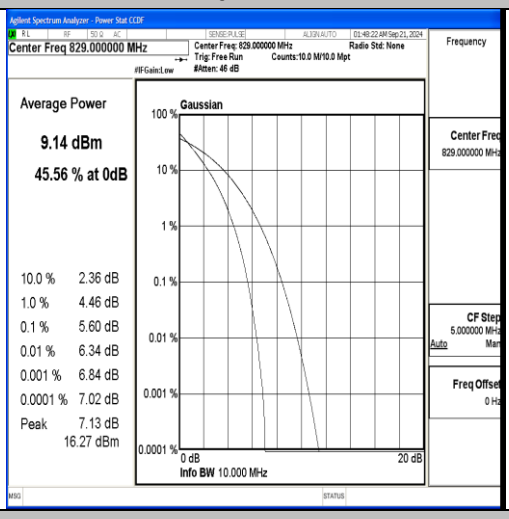


Band5-10MHz-QPSK-20450-1RB#0-PASS



Band5-10MHz-16QAM-20450-1RB#0-PASS



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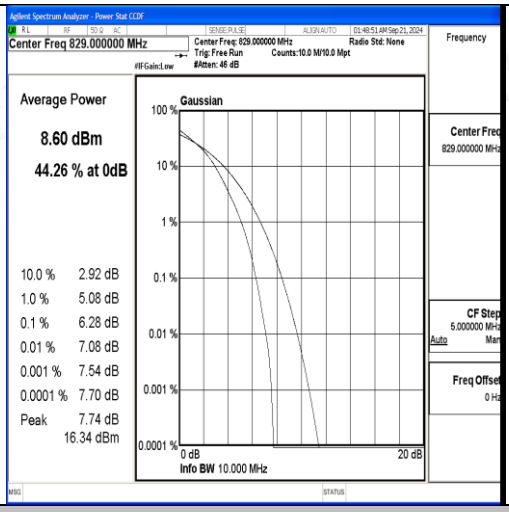

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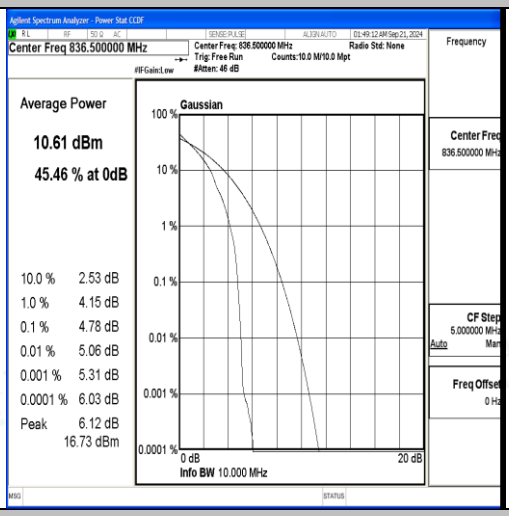
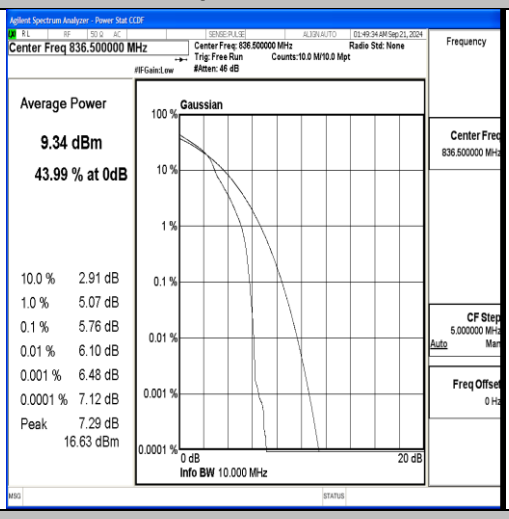


Band5-10MHz-QPSK-20525-1RB#0-PASS



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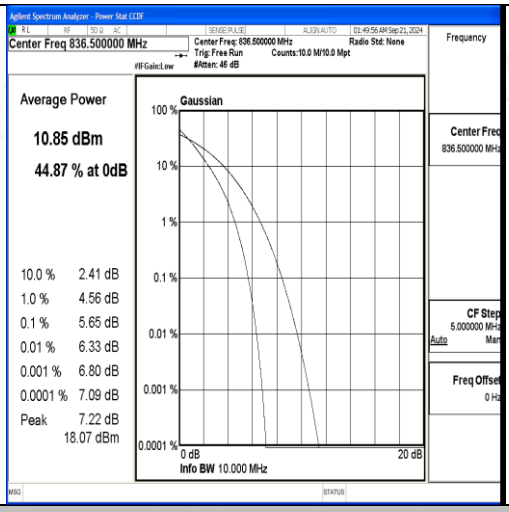

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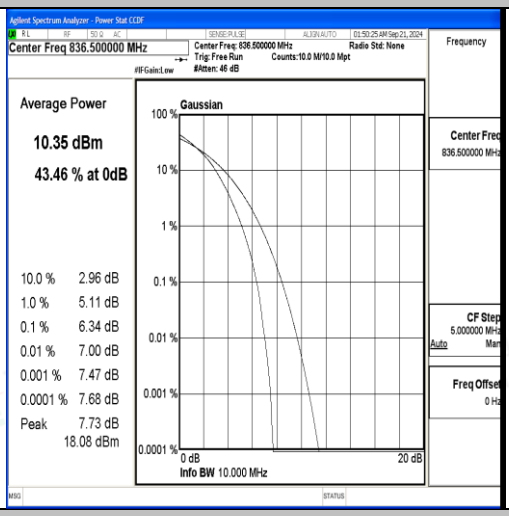
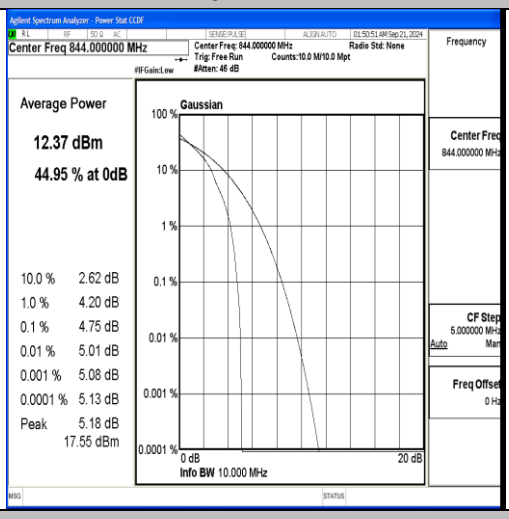
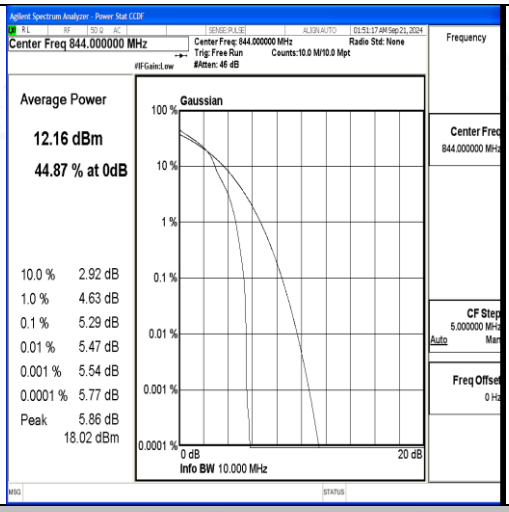


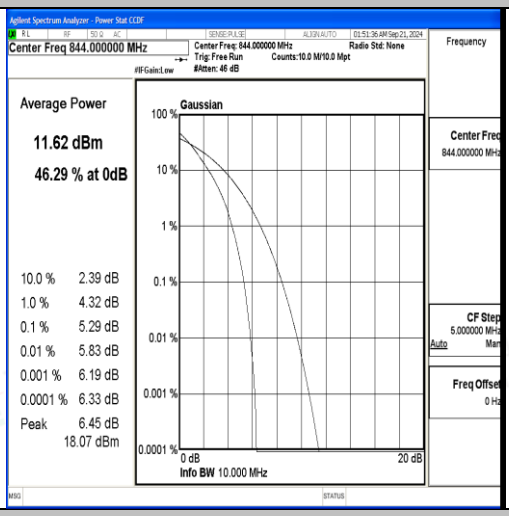
Band5-10MHz-16QAM-20525-50RB#0-PASS



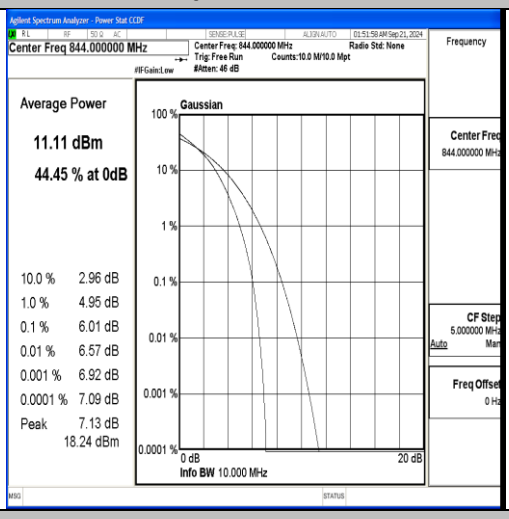
Band5-10MHz-QPSK-20600-1RB#0-PASS



Band5-10MHz-16QAM-20600-1RB#0-PASS



Band5-10MHz-QPSK-20600-50RB#0-PASS



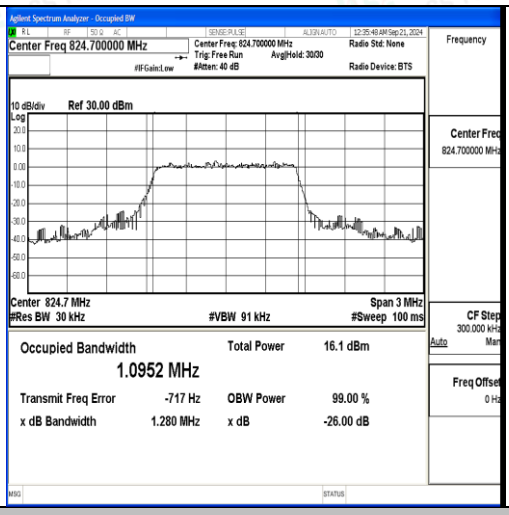
Band5-10MHz-16QAM-20600-50RB#0-PASS

I.3 26dB Bandwidth and Occupied Bandwidth

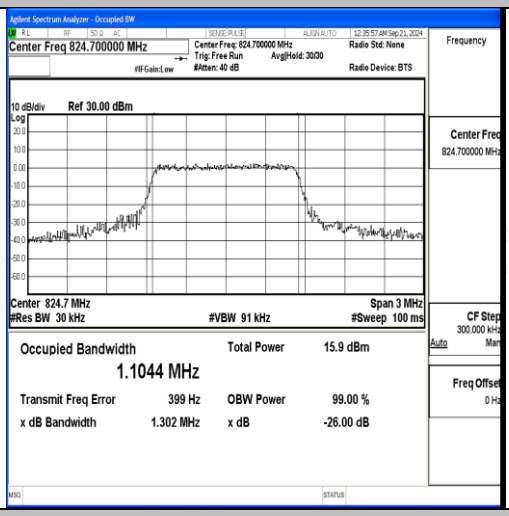
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.0952	1.280	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.1044	1.302	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.1020	1.301	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.1044	1.397	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.1012	1.291	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.0965	1.359	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.7113	3.147	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.6996	3.086	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.7078	3.152	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.7135	3.214	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.7067	3.054	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.7138	3.282	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.5154	5.228	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.5225	5.297	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.5141	5.445	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.5336	5.401	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.5206	5.235	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.5269	5.255	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9710	9.978	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.9668	10.01	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.9928	10.11	PASS
Band5	10MHz	16QAM	20525	50RB#0	9.0132	10.30	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.9458	9.975	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.9749	9.878	PASS

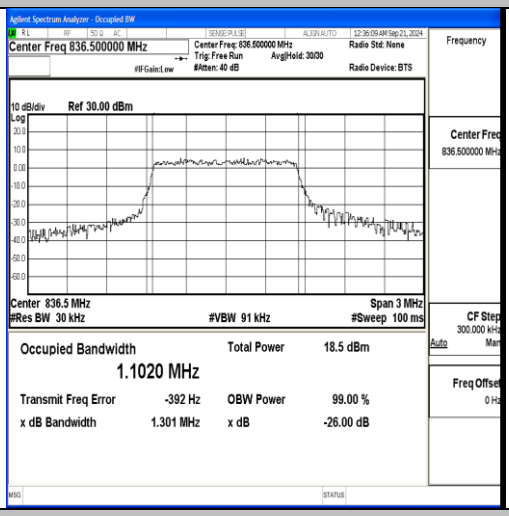
Test Graphs



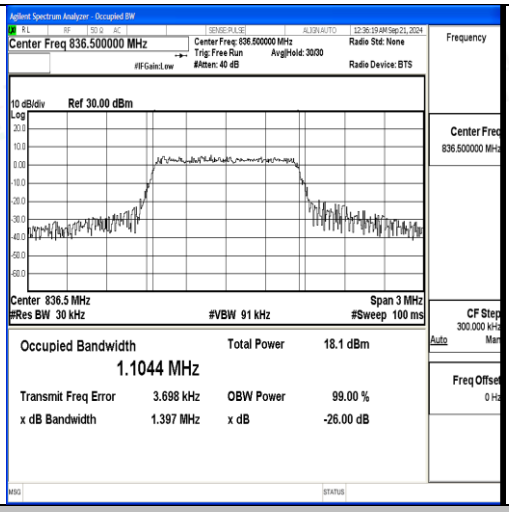
Band5-1.4MHz-QPSK-20407-6RB#0-PASS



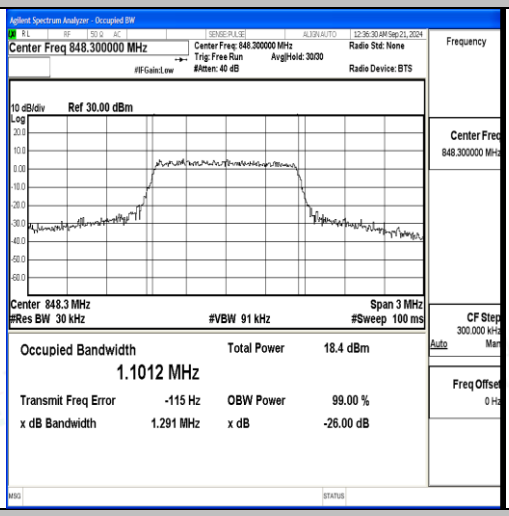
Band5-1.4MHz-16QAM-20407-6RB#0-PASS



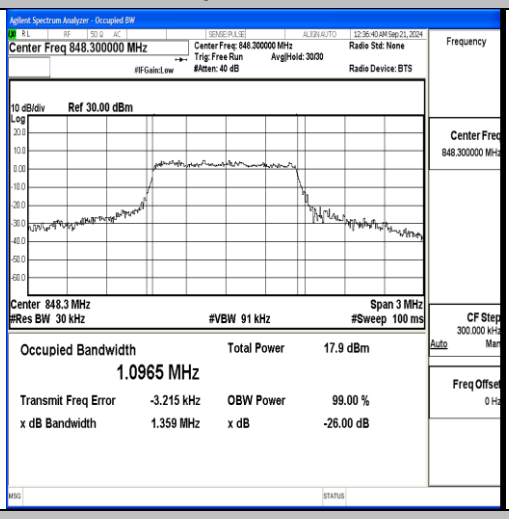
Band5-1.4MHz-QPSK-20525-6RB#0-PASS



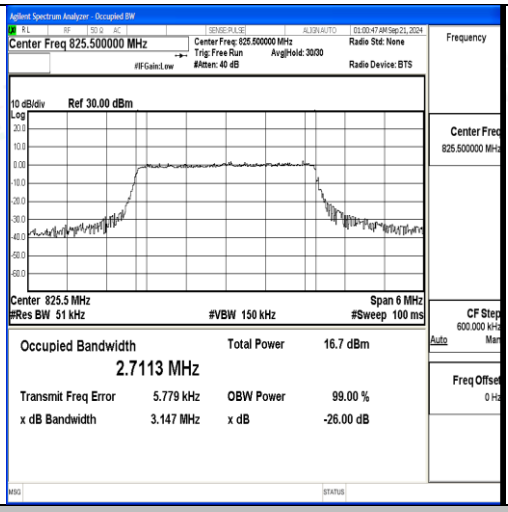
Band5-1.4MHz-16QAM-20525-6RB#0-PASS



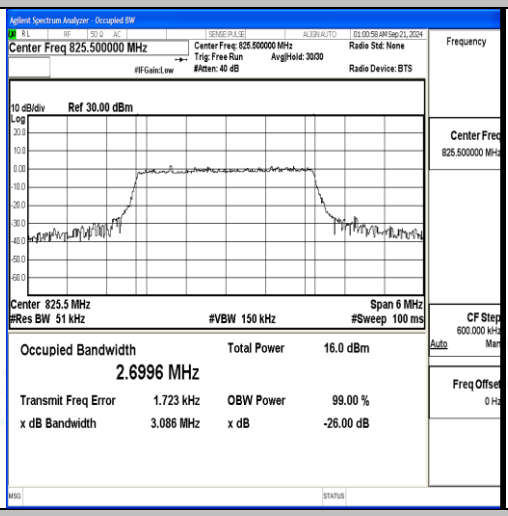
Band5-1.4MHz-QPSK-20643-6RB#0-PASS



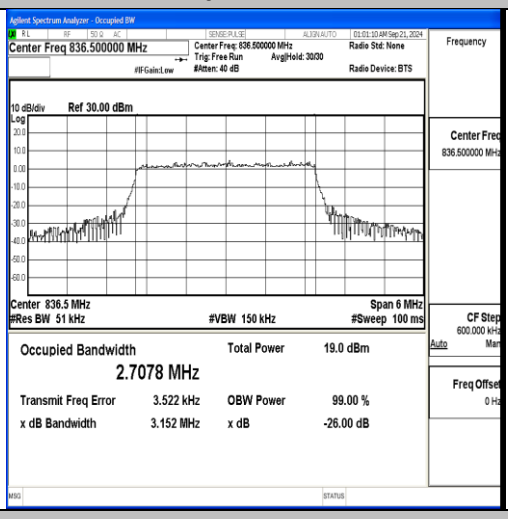
Band5-1.4MHz-16QAM-20643-6RB#0-PASS



Band5-3MHz-QPSK-20415-15RB#0-PASS



Band5-3MHz-16QAM-20415-15RB#0-PASS



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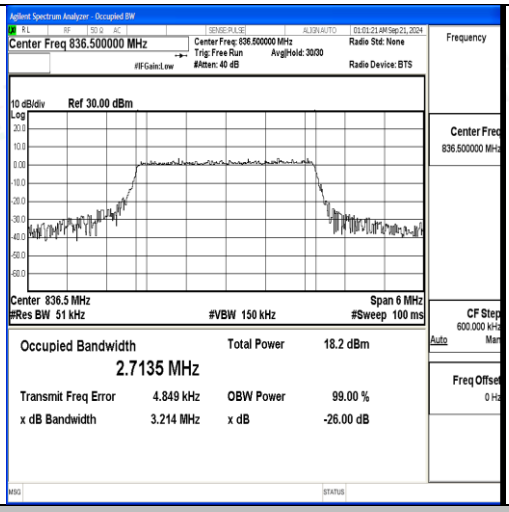
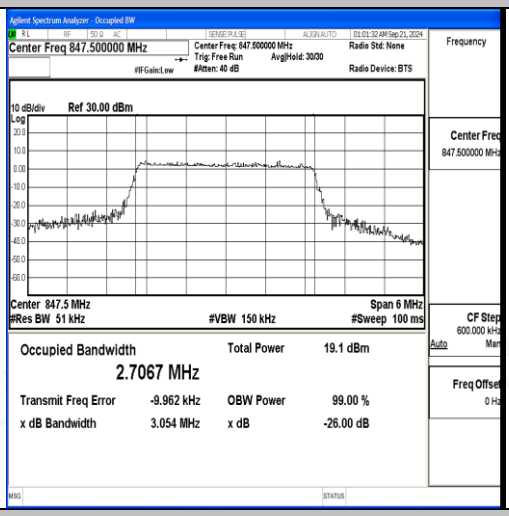


Band5-3MHz-16QAM-20525-15RB#0-PASS



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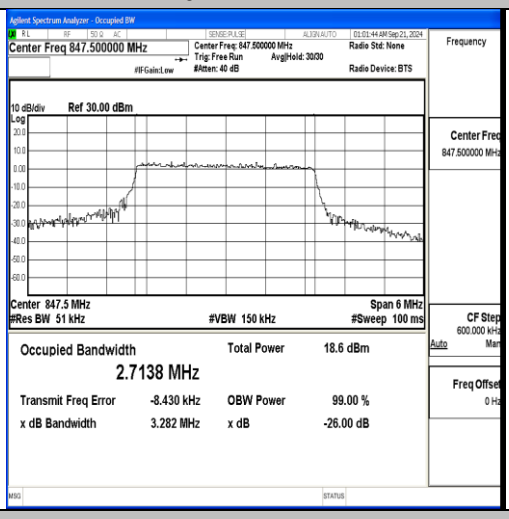

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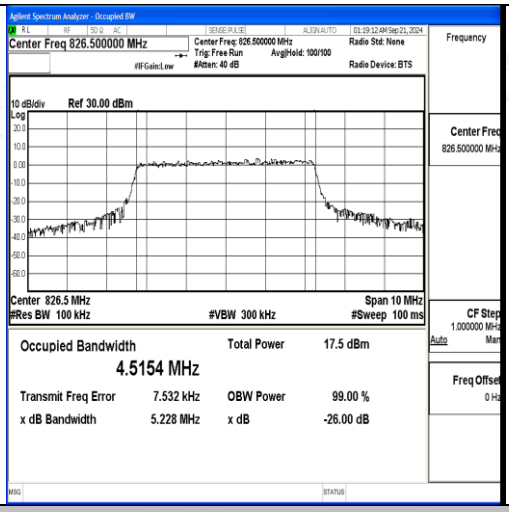

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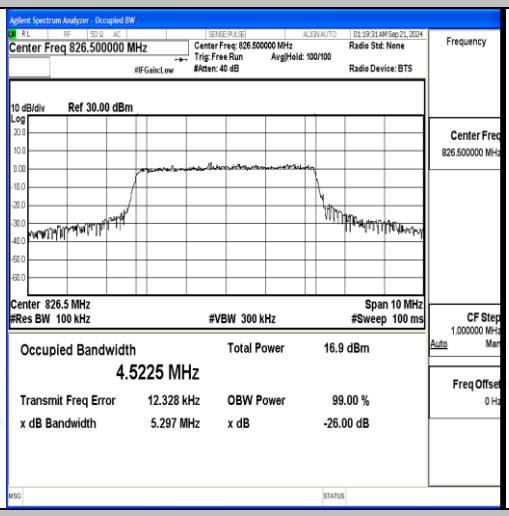

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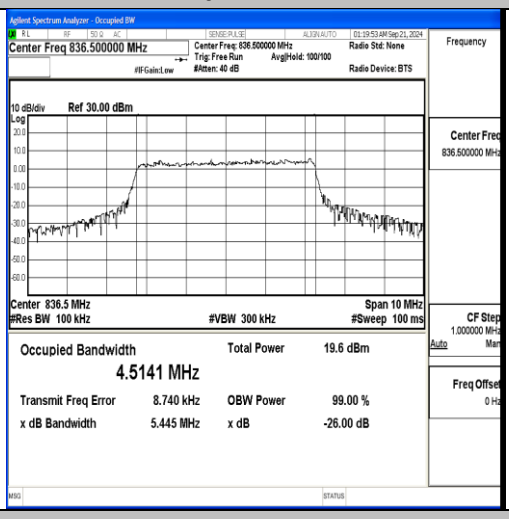

Band5-5MHz-QPSK-20525-25RB#0-PASS