

FCC LTE-Cat M1 Band5 Test Data

General Description of EUT	
Product Name:	Elevate Telematic Unit
Test Model:	p5
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Yan zhen ming
Note: For a more detailed features description, please refer to the report TBR-C-202307-0089-21 . The report only show the worst case data.	

Contents

FCC LTE-Cat M1 Band5 Test Data	1
1. Conducted Power Output Data for M1	3
Test Result	3
2. Peak-to-Average Ratio(CCDF) for M1	5
Test Result	5
Test Graphs	7
3. 26dB Bandwidth and Occupied Bandwidth for M1	15
Test Result	15
Test Graphs	16
4. Band Edge for M1	20
Test Result	20
Test Graphs	21
5. Conducted Spurious Emission for M1	27
Test Result	27
Test Graphs	30
6. Frequency Stability for M1	46
Test Result	46

1. Conducted Power Output Data for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	Limit	Verdict
Band5	1.4MHz	QPSK	20407	1	0	Low	21.04	38.45	PASS
Band5	1.4MHz	QPSK	20407	1	5	Low	21.26	38.45	PASS
Band5	1.4MHz	QPSK	20407	6	0	Low	19.03	38.45	PASS
Band5	1.4MHz	QPSK	20525	1	0	Low	21.24	38.45	PASS
Band5	1.4MHz	QPSK	20525	1	5	Low	21.47	38.45	PASS
Band5	1.4MHz	QPSK	20525	6	0	Low	19.24	38.45	PASS
Band5	1.4MHz	QPSK	20643	1	0	High	21.01	38.45	PASS
Band5	1.4MHz	QPSK	20643	1	5	High	21.16	38.45	PASS
Band5	1.4MHz	QPSK	20643	6	0	High	18.93	38.45	PASS
Band5	1.4MHz	16QAM	20407	1	0	Low	19.88	38.45	PASS
Band5	1.4MHz	16QAM	20407	1	5	Low	19.73	38.45	PASS
Band5	1.4MHz	16QAM	20407	6	0	Low	19.03	38.45	PASS
Band5	1.4MHz	16QAM	20525	1	0	Low	20.03	38.45	PASS
Band5	1.4MHz	16QAM	20525	1	5	Low	20.37	38.45	PASS
Band5	1.4MHz	16QAM	20525	6	0	Low	19.23	38.45	PASS
Band5	1.4MHz	16QAM	20643	1	0	High	19.98	38.45	PASS
Band5	1.4MHz	16QAM	20643	1	5	High	19.91	38.45	PASS
Band5	1.4MHz	16QAM	20643	6	0	High	18.98	38.45	PASS
Band5	3MHz	QPSK	20415	1	0	Low	21.10	38.45	PASS
Band5	3MHz	QPSK	20415	1	5	Low	21.26	38.45	PASS
Band5	3MHz	QPSK	20415	6	0	Low	19.10	38.45	PASS
Band5	3MHz	QPSK	20525	1	0	Low	21.26	38.45	PASS
Band5	3MHz	QPSK	20525	1	5	Low	21.45	38.45	PASS
Band5	3MHz	QPSK	20525	6	0	Low	19.33	38.45	PASS
Band5	3MHz	QPSK	20635	1	0	High	20.99	38.45	PASS
Band5	3MHz	QPSK	20635	1	5	High	21.15	38.45	PASS
Band5	3MHz	QPSK	20635	6	0	High	19.00	38.45	PASS
Band5	3MHz	16QAM	20415	1	0	Low	20.10	38.45	PASS
Band5	3MHz	16QAM	20415	1	5	Low	20.25	38.45	PASS
Band5	3MHz	16QAM	20415	6	0	Low	19.03	38.45	PASS
Band5	3MHz	16QAM	20525	1	0	Low	20.03	38.45	PASS
Band5	3MHz	16QAM	20525	1	5	Low	20.28	38.45	PASS
Band5	3MHz	16QAM	20525	6	0	Low	19.32	38.45	PASS
Band5	3MHz	16QAM	20635	1	0	High	19.95	38.45	PASS
Band5	3MHz	16QAM	20635	1	5	High	20.14	38.45	PASS
Band5	3MHz	16QAM	20635	6	0	High	18.99	38.45	PASS
Band5	5MHz	QPSK	20425	1	0	Low	20.86	38.45	PASS
Band5	5MHz	QPSK	20425	1	5	Low	21.08	38.45	PASS
Band5	5MHz	QPSK	20425	6	0	Low	19.94	38.45	PASS

Band5	5MHz	QPSK	20525	1	0	Low	21.28	38.45	PASS
Band5	5MHz	QPSK	20525	1	5	Low	21.37	38.45	PASS
Band5	5MHz	QPSK	20525	6	0	Low	20.34	38.45	PASS
Band5	5MHz	QPSK	20625	1	0	High	20.93	38.45	PASS
Band5	5MHz	QPSK	20625	1	5	High	21.08	38.45	PASS
Band5	5MHz	QPSK	20625	6	0	High	19.85	38.45	PASS
Band5	5MHz	16QAM	20425	1	0	Low	21.02	38.45	PASS
Band5	5MHz	16QAM	20425	1	5	Low	20.98	38.45	PASS
Band5	5MHz	16QAM	20425	6	0	Low	19.94	38.45	PASS
Band5	5MHz	16QAM	20525	1	0	Low	20.78	38.45	PASS
Band5	5MHz	16QAM	20525	1	5	Low	20.95	38.45	PASS
Band5	5MHz	16QAM	20525	6	0	Low	20.13	38.45	PASS
Band5	5MHz	16QAM	20625	1	0	High	20.78	38.45	PASS
Band5	5MHz	16QAM	20625	1	5	High	20.76	38.45	PASS
Band5	5MHz	16QAM	20625	6	0	High	19.85	38.45	PASS
Band5	10MHz	QPSK	20450	1	0	Low	21.06	38.45	PASS
Band5	10MHz	QPSK	20450	1	5	Low	21.05	38.45	PASS
Band5	10MHz	QPSK	20450	6	0	Low	19.96	38.45	PASS
Band5	10MHz	QPSK	20525	1	0	Low	21.27	38.45	PASS
Band5	10MHz	QPSK	20525	1	5	Low	21.49	38.45	PASS
Band5	10MHz	QPSK	20525	6	0	Low	20.42	38.45	PASS
Band5	10MHz	QPSK	20600	1	0	High	20.91	38.45	PASS
Band5	10MHz	QPSK	20600	1	5	High	20.98	38.45	PASS
Band5	10MHz	QPSK	20600	6	0	High	19.88	38.45	PASS
Band5	10MHz	16QAM	20450	1	0	Low	20.87	38.45	PASS
Band5	10MHz	16QAM	20450	1	5	Low	20.96	38.45	PASS
Band5	10MHz	16QAM	20450	6	0	Low	19.96	38.45	PASS
Band5	10MHz	16QAM	20525	1	0	Low	20.89	38.45	PASS
Band5	10MHz	16QAM	20525	1	5	Low	20.97	38.45	PASS
Band5	10MHz	16QAM	20525	6	0	Low	20.44	38.45	PASS
Band5	10MHz	16QAM	20600	1	0	High	20.78	38.45	PASS
Band5	10MHz	16QAM	20600	1	5	High	20.78	38.45	PASS
Band5	10MHz	16QAM	20600	6	0	High	19.88	38.45	PASS

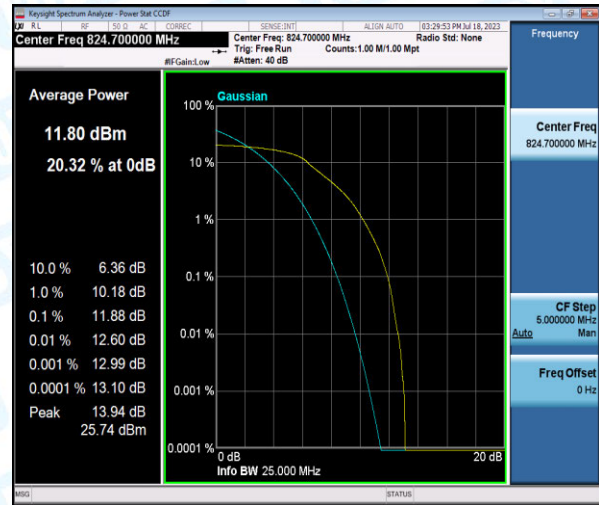
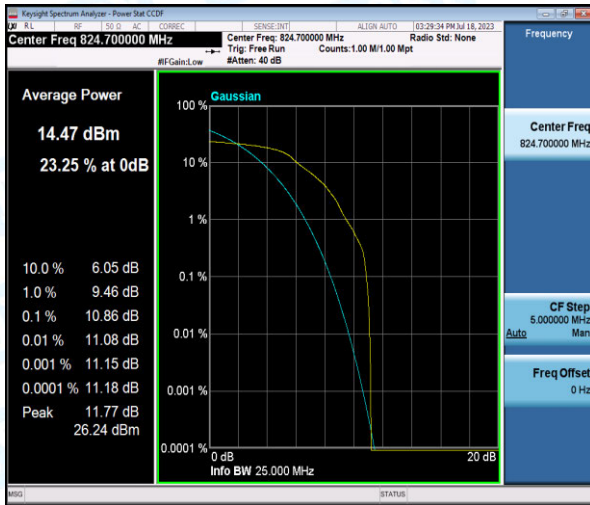
2. Peak-to-Average Ratio(CCDF) for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band5	1.4MHz	20407	QPSK	1	0	Low	10.86	<=13	PASS
Band5	1.4MHz	20407	QPSK	6	0	Low	11.88	<=13	PASS
Band5	1.4MHz	20525	QPSK	1	0	Low	8.51	<=13	PASS
Band5	1.4MHz	20525	QPSK	6	0	Low	8.56	<=13	PASS
Band5	1.4MHz	20643	QPSK	1	0	High	10.49	<=13	PASS
Band5	1.4MHz	20643	QPSK	6	0	High	11.23	<=13	PASS
Band5	1.4MHz	20407	16QAM	1	0	Low	10.12	<=13	PASS
Band5	1.4MHz	20407	16QAM	6	0	Low	10.64	<=13	PASS
Band5	1.4MHz	20525	16QAM	1	0	Low	8.55	<=13	PASS
Band5	1.4MHz	20525	16QAM	6	0	Low	8.53	<=13	PASS
Band5	1.4MHz	20643	16QAM	1	0	High	11.37	<=13	PASS
Band5	1.4MHz	20643	16QAM	6	0	High	8.78	<=13	PASS
Band5	3MHz	20415	QPSK	1	0	Low	11.75	<=13	PASS
Band5	3MHz	20415	QPSK	6	0	Low	10.41	<=13	PASS
Band5	3MHz	20525	QPSK	1	0	Low	8.57	<=13	PASS
Band5	3MHz	20525	QPSK	6	0	Low	8.65	<=13	PASS
Band5	3MHz	20635	QPSK	1	0	High	10.33	<=13	PASS
Band5	3MHz	20635	QPSK	6	0	High	12.16	<=13	PASS
Band5	3MHz	20415	16QAM	1	0	Low	12.24	<=13	PASS
Band5	3MHz	20415	16QAM	6	0	Low	10.74	<=13	PASS
Band5	3MHz	20525	16QAM	1	0	Low	8.69	<=13	PASS
Band5	3MHz	20525	16QAM	6	0	Low	8.62	<=13	PASS
Band5	3MHz	20635	16QAM	1	0	High	10.98	<=13	PASS
Band5	3MHz	20635	16QAM	6	0	High	10.42	<=13	PASS
Band5	5MHz	20425	QPSK	1	0	Low	10.84	<=13	PASS
Band5	5MHz	20425	QPSK	6	0	Low	9.17	<=13	PASS
Band5	5MHz	20525	QPSK	1	0	Low	9.71	<=13	PASS
Band5	5MHz	20525	QPSK	6	0	Low	10.89	<=13	PASS
Band5	5MHz	20625	QPSK	1	0	High	11.37	<=13	PASS
Band5	5MHz	20625	QPSK	6	0	High	9.42	<=13	PASS
Band5	5MHz	20425	16QAM	1	0	Low	10.95	<=13	PASS
Band5	5MHz	20425	16QAM	6	0	Low	10.82	<=13	PASS
Band5	5MHz	20525	16QAM	1	0	Low	12.90	<=13	PASS
Band5	5MHz	20525	16QAM	6	0	Low	9.98	<=13	PASS
Band5	5MHz	20625	16QAM	1	0	High	10.98	<=13	PASS
Band5	5MHz	20625	16QAM	6	0	High	12.04	<=13	PASS
Band5	10MHz	20450	QPSK	1	0	Low	9.88	<=13	PASS
Band5	10MHz	20450	QPSK	6	0	Low	10.22	<=13	PASS
Band5	10MHz	20525	QPSK	1	0	Low	10.04	<=13	PASS

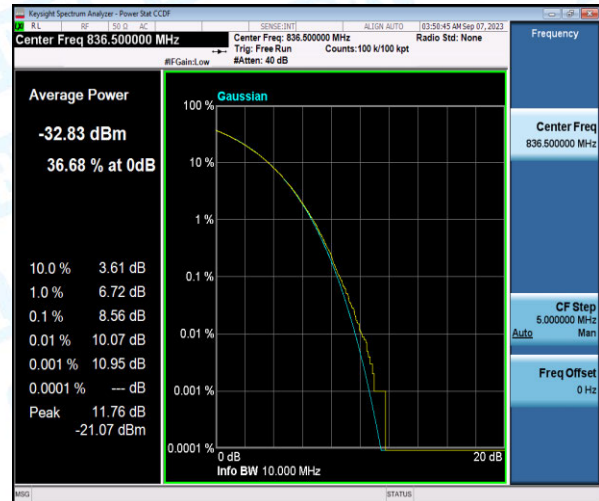
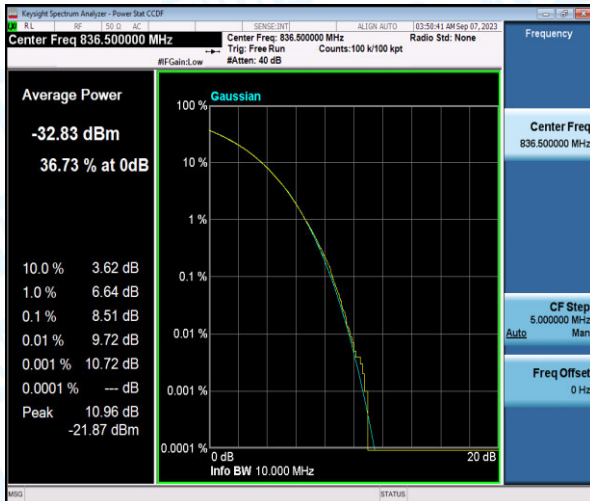
Band5	10MHz	20525	QPSK	6	0	Low	10.47	<=13	PASS
Band5	10MHz	20600	QPSK	1	0	High	9.78	<=13	PASS
Band5	10MHz	20600	QPSK	6	0	High	9.35	<=13	PASS
Band5	10MHz	20450	16QAM	1	0	Low	12.31	<=13	PASS
Band5	10MHz	20450	16QAM	6	0	Low	9.94	<=13	PASS
Band5	10MHz	20525	16QAM	1	0	Low	11.58	<=13	PASS
Band5	10MHz	20525	16QAM	6	0	Low	9.02	<=13	PASS
Band5	10MHz	20600	16QAM	1	0	High	11.05	<=13	PASS
Band5	10MHz	20600	16QAM	6	0	High	9.74	<=13	PASS

Test Graphs



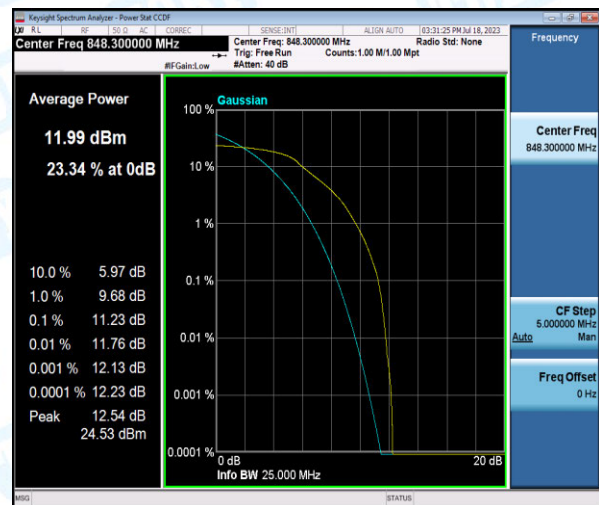
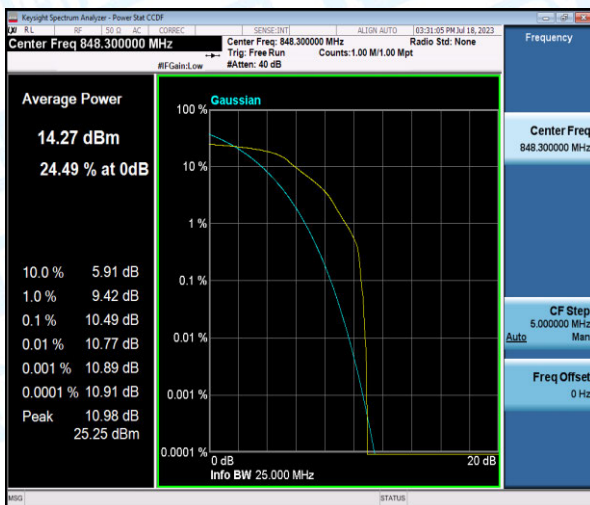
Band5-1.4MHz-QPSK-20407-1-0-Low-10.86-<=13-PASS

Band5-1.4MHz-QPSK-20407-6-0-Low-11.88-<=13-PASS



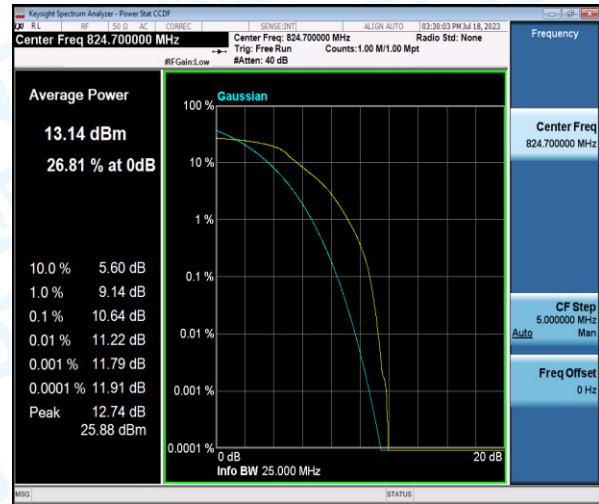
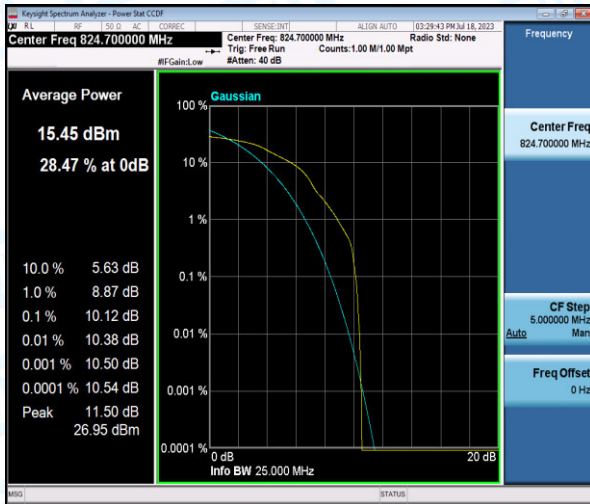
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Band5-1.4MHz-QPSK-20525-6-0-Low-8.56-<=13-PASS



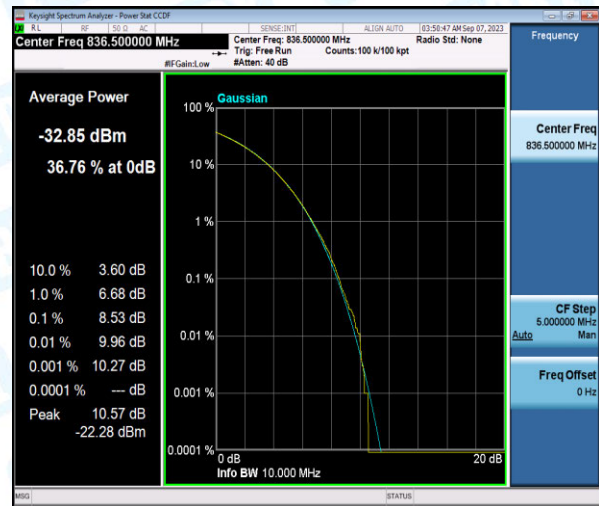
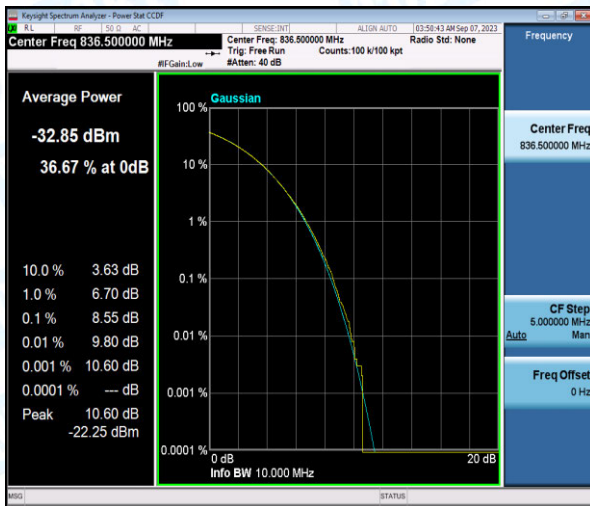
Band5-1.4MHz-QPSK-20643-1-0-High-10.49-<=13-PASS

Band5-1.4MHz-QPSK-20643-6-0-High-11.23-<=13-PASS



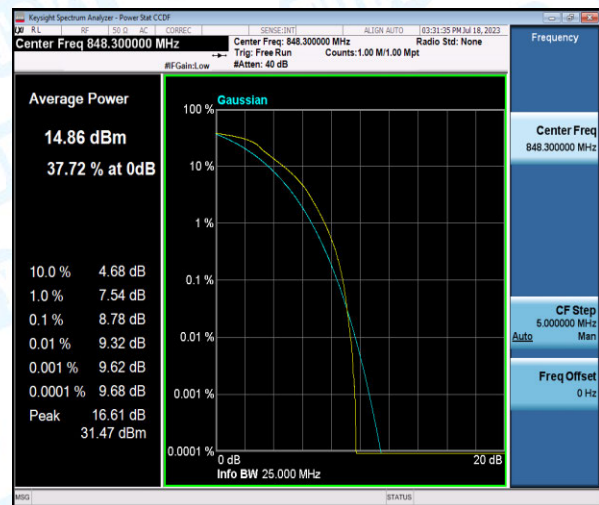
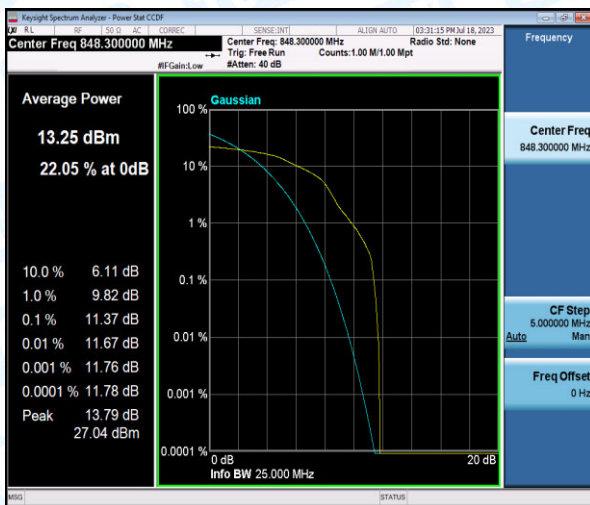
Band5-1.4MHz-16QAM-20407-1-0-Low-10.12-<=13-PASS

Band5-1.4MHz-16QAM-20407-6-0-Low-10.64-<=13-PASS



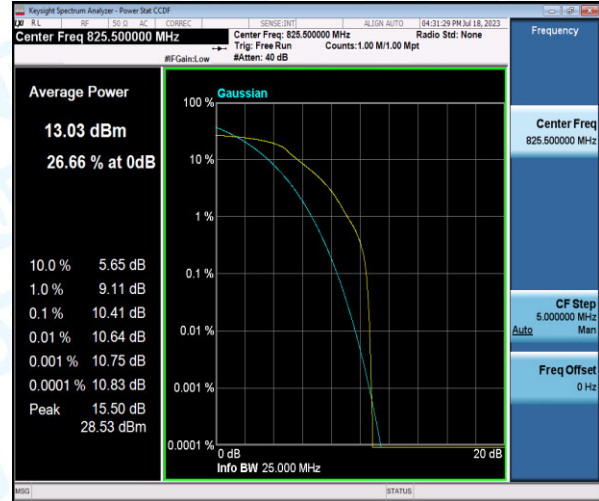
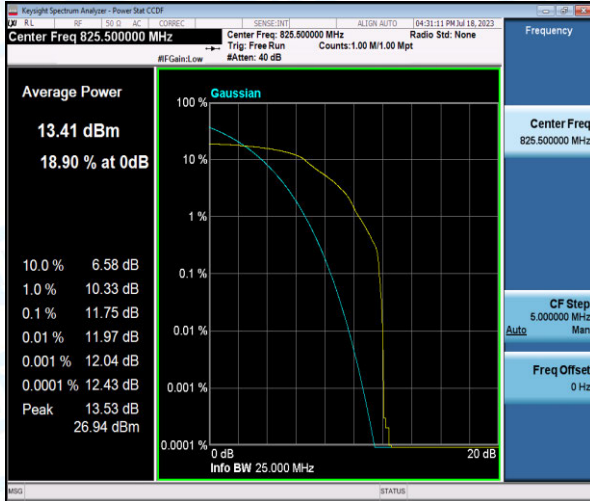
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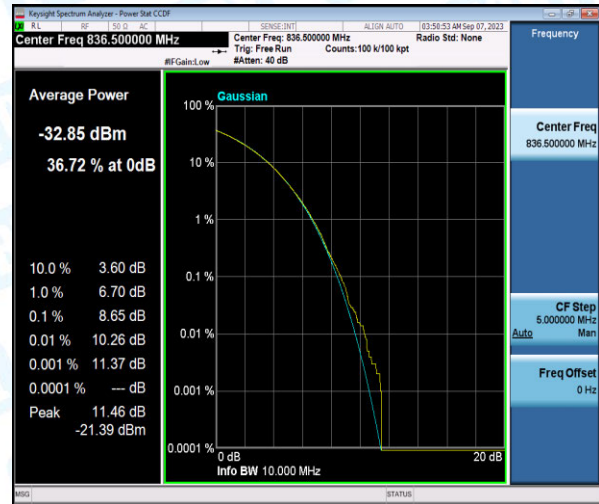
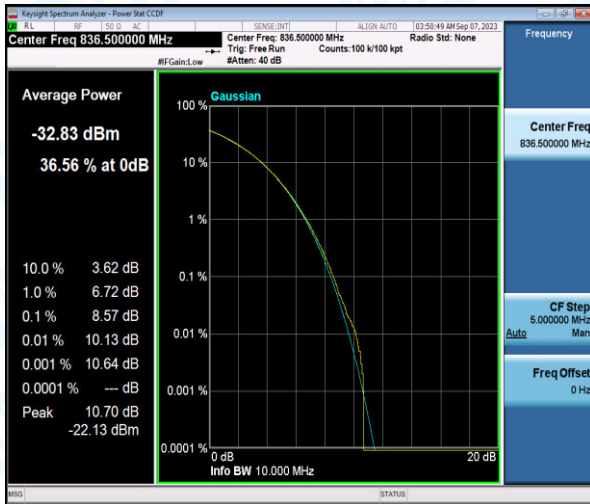
Band5-1.4MHz-16QAM-20643-1-0-High-11.37-<=13-PASS

Band5-1.4MHz-16QAM-20643-6-0-High-8.78-<=13-PASS



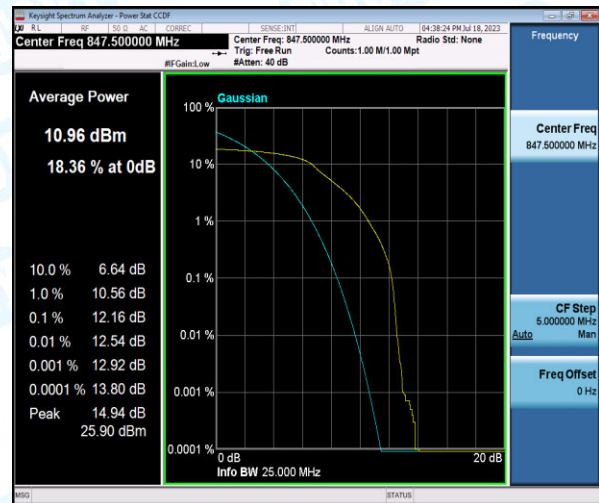
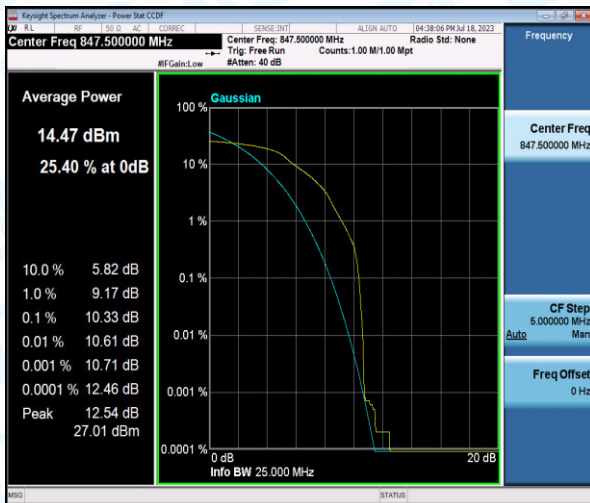
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Band5-3MHz-QPSK-20415-6-0-Low-10.41-<=13-PASS



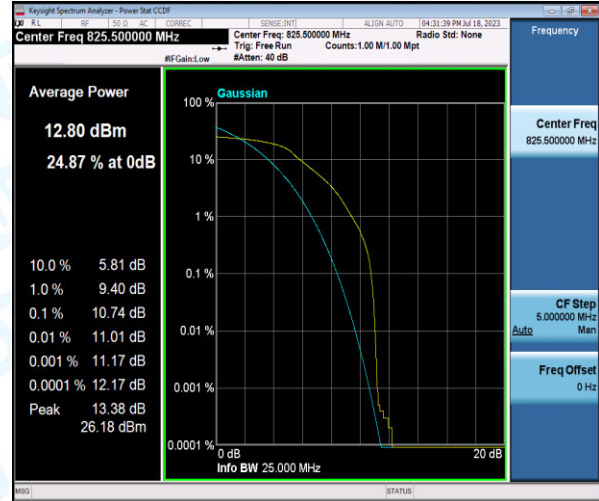
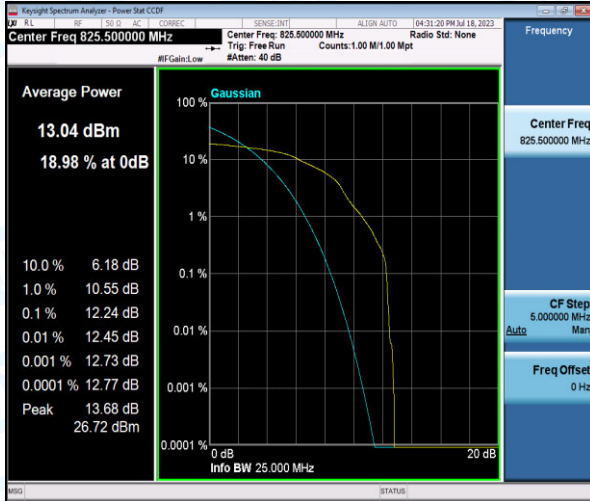
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Band5-3MHz-QPSK-20525-6-0-Low-8.65-<=13-PASS



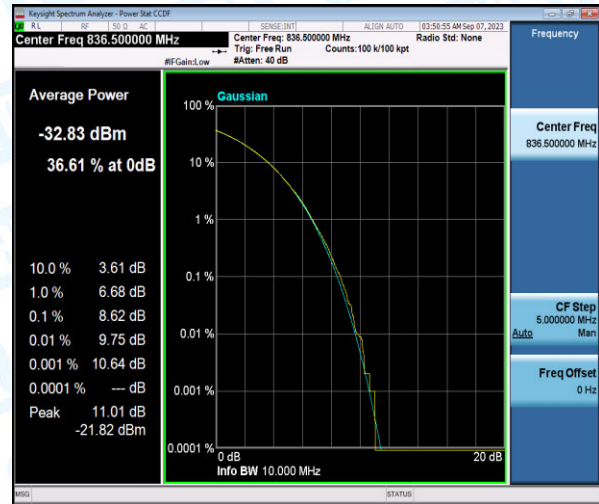
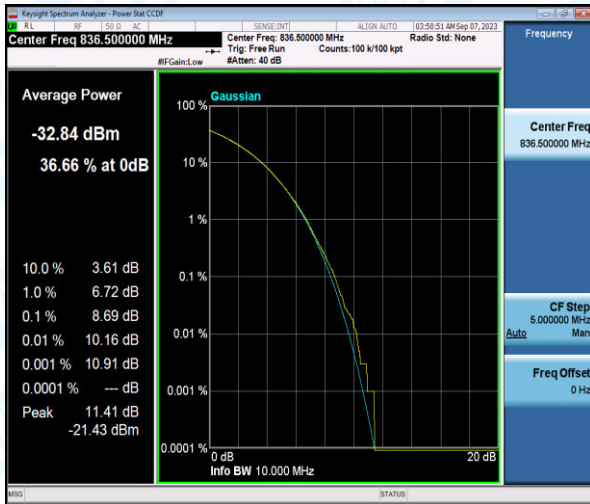
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Band5-3MHz-QPSK-20635-6-0-High-12.16-<=13-PASS



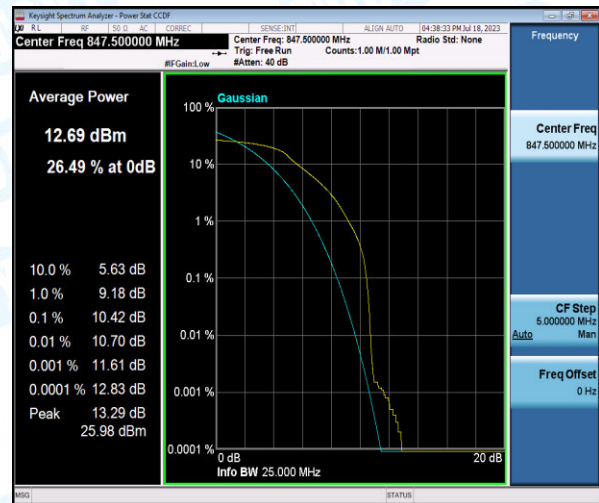
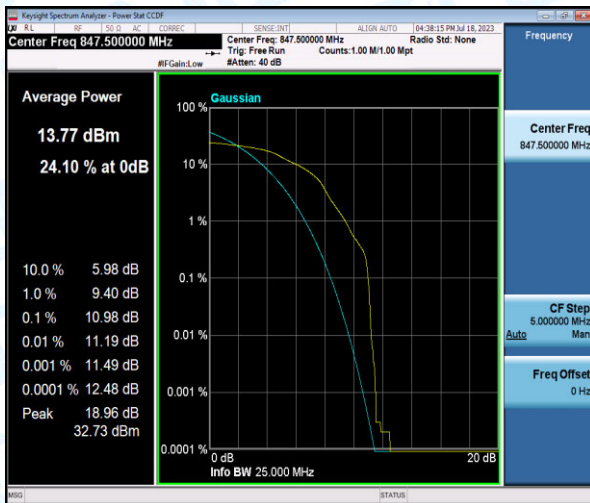
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Band5-3MHz-16QAM-20415-6-0-Low-10.74-<=13-PASS



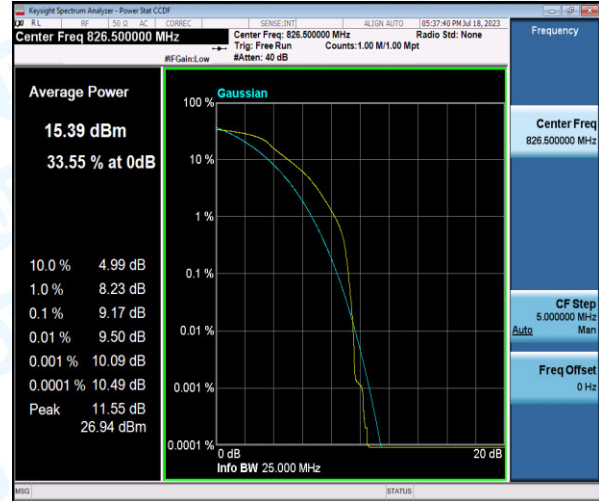
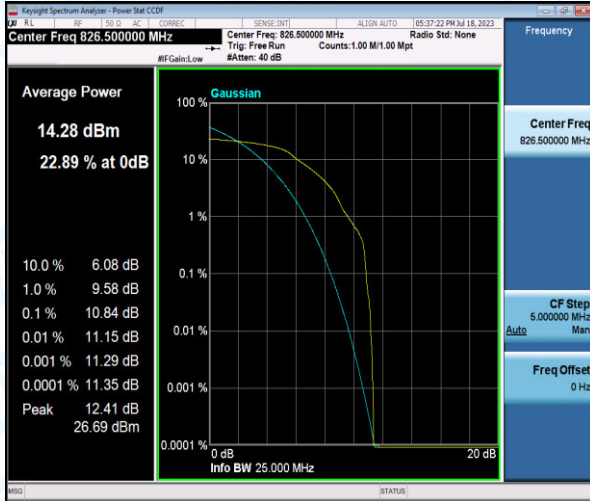
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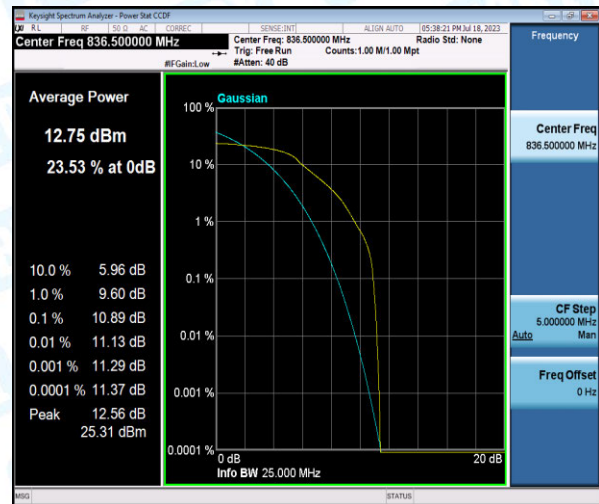
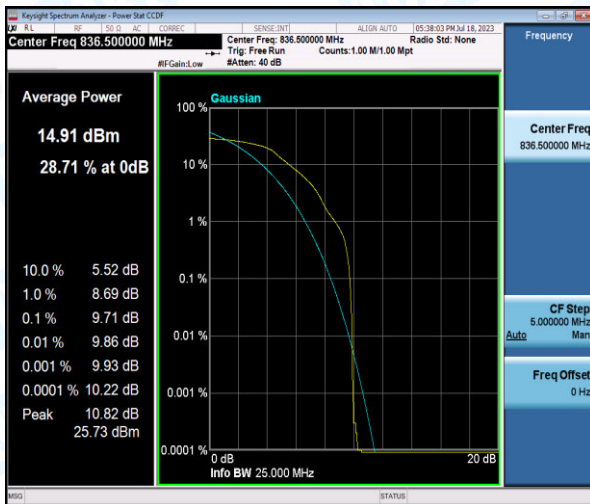
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Band5-3MHz-16QAM-20635-6-0-High-10.42-<=13-PASS



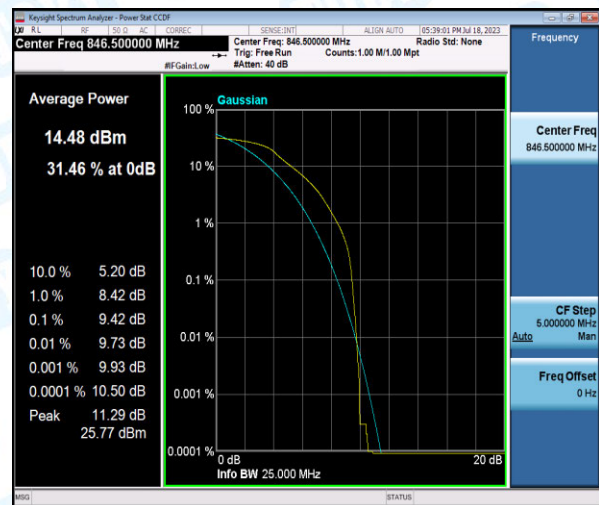
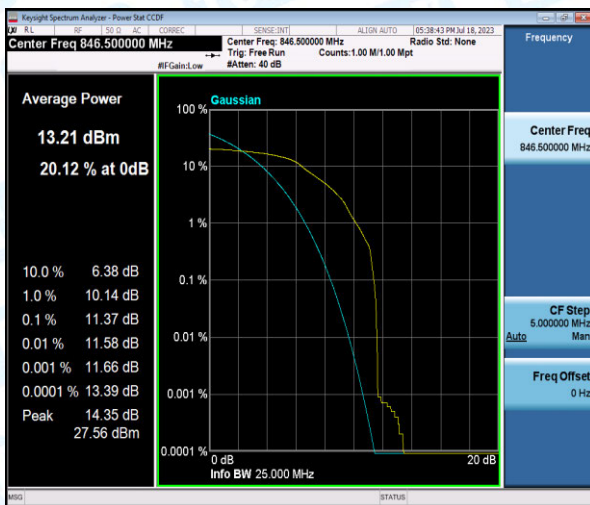
Band5-5MHz-QPSK-20425-1-0-Low-10.84-<=13-PASS

Band5-5MHz-QPSK-20425-6-0-Low-9.17-<=13-PASS



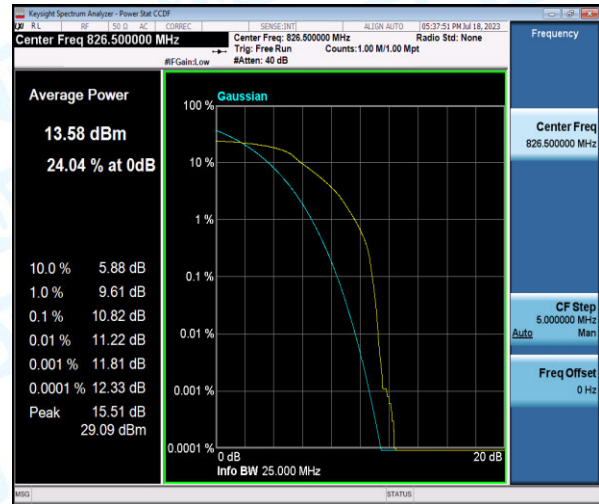
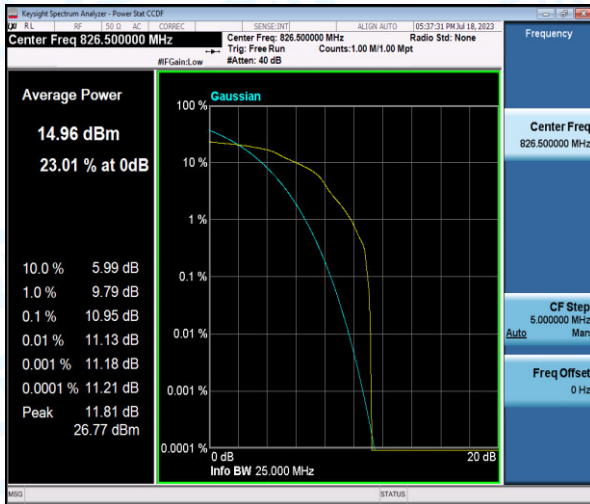
Band5-5MHz-QPSK-20525-1-0-Low-9.71-<=13-PASS

Band5-5MHz-QPSK-20525-6-0-Low-10.89-<=13-PASS



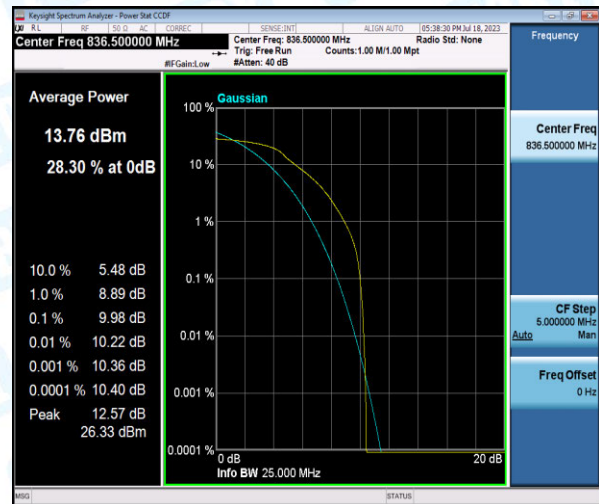
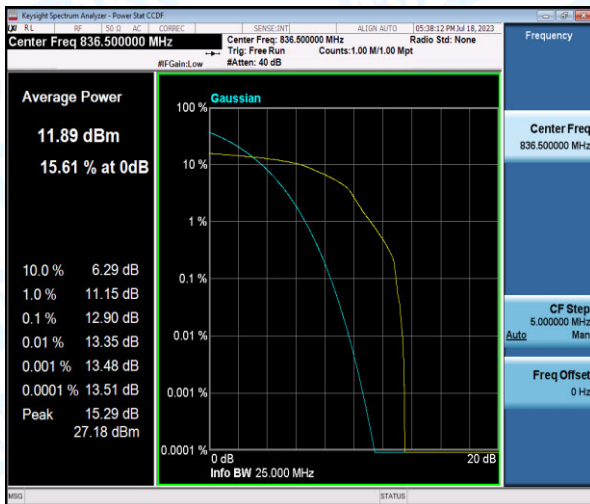
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Band5-5MHz-QPSK-20625-6-0-High-9.42-<=13-PASS



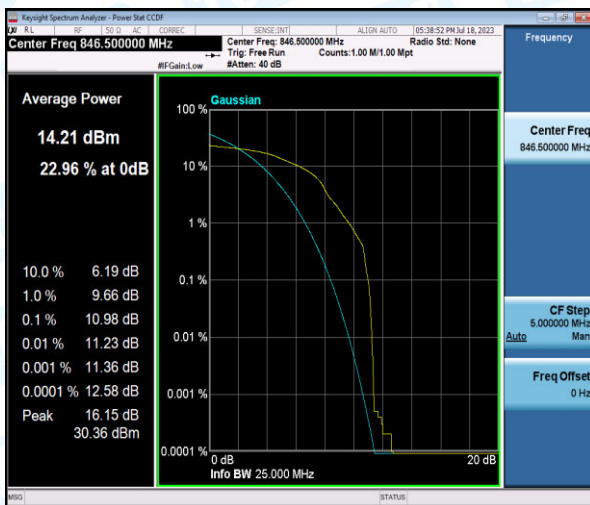
Band5-5MHz-16QAM-20425-1-0-Low-10.95-<=13-PASS

Band5-5MHz-16QAM-20425-6-0-Low-10.82-<=13-PASS



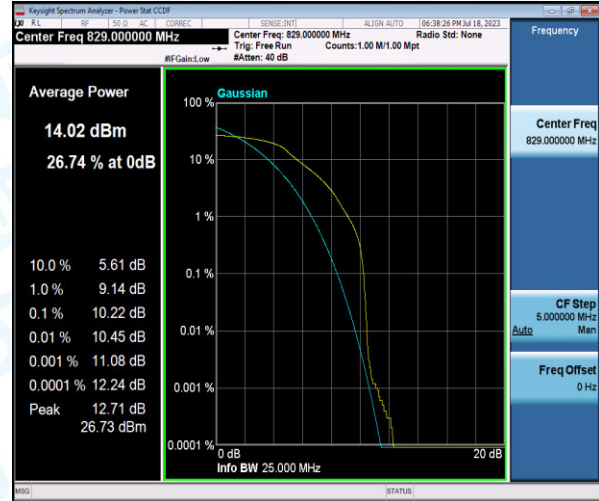
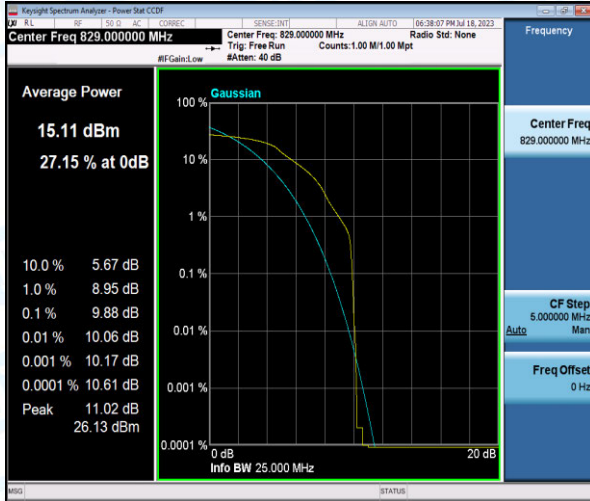
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Band5-5MHz-16QAM-20525-6-0-Low-9.98-<=13-PASS



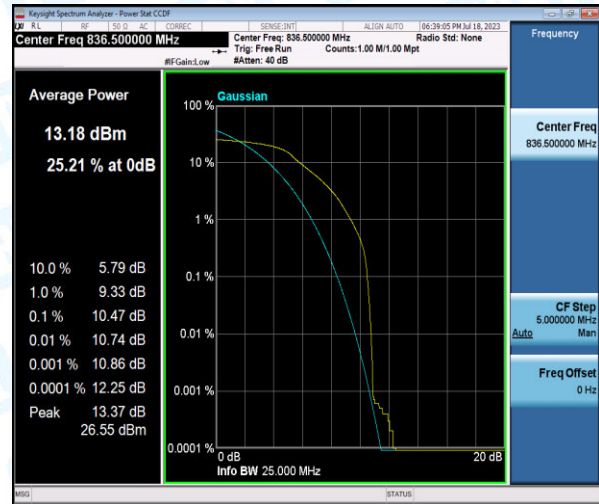
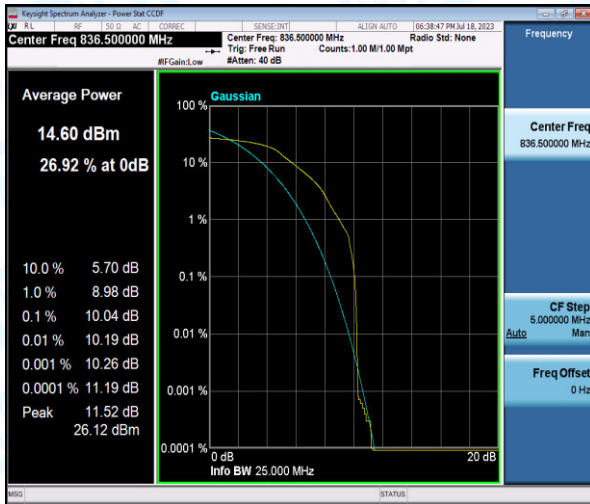
Band5-5MHz-16QAM-20625-1-0-High-10.98-<=13-PASS

Band5-5MHz-16QAM-20625-6-0-High-12.04-<=13-PASS



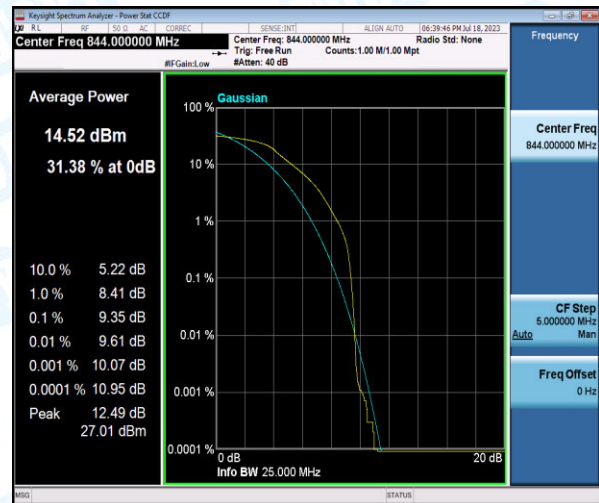
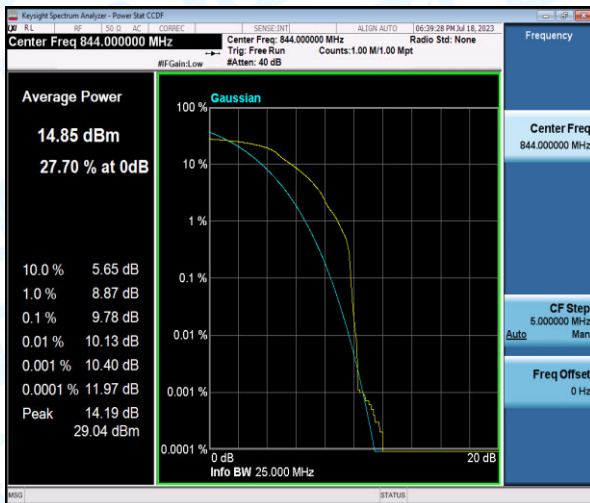
Band5-10MHz-QPSK-20450-1-0-Low-9.88-<=13-PASS

Band5-10MHz-QPSK-20450-6-0-Low-10.22-<=13-PASS



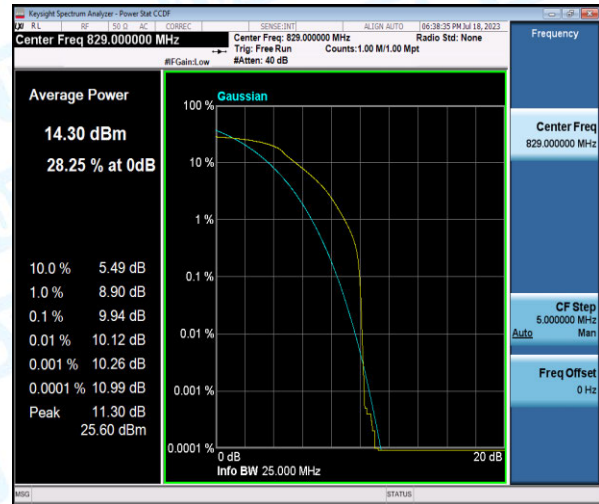
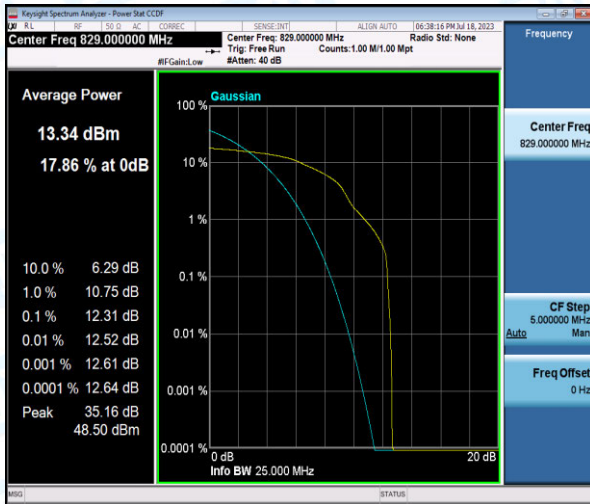
Band5-10MHz-QPSK-20525-1-0-Low-10.04-<=13-PASS

Band5-10MHz-QPSK-20525-6-0-Low-10.47-<=13-PASS



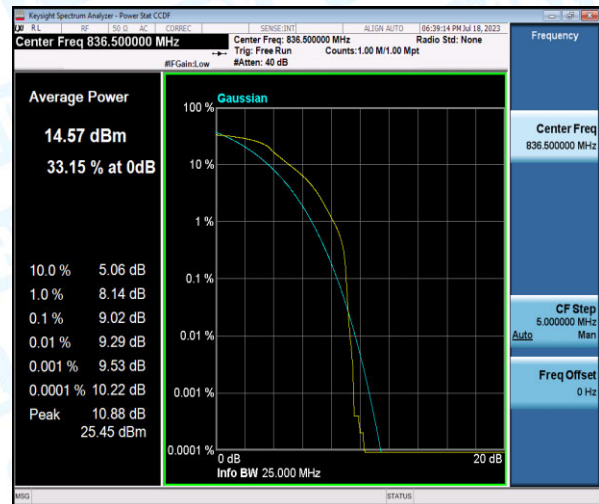
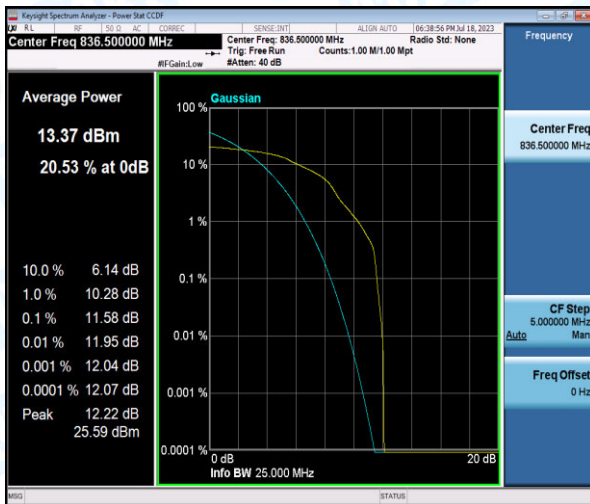
Band5-10MHz-QPSK-20600-1-0-High-9.78-<=13-PASS

Band5-10MHz-QPSK-20600-6-0-High-9.35-<=13-PASS



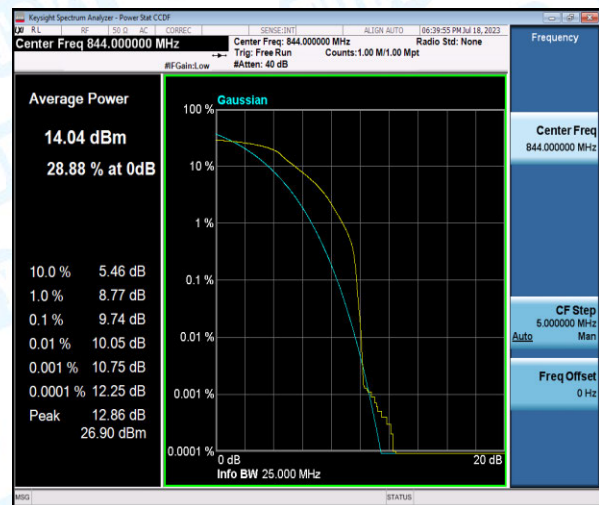
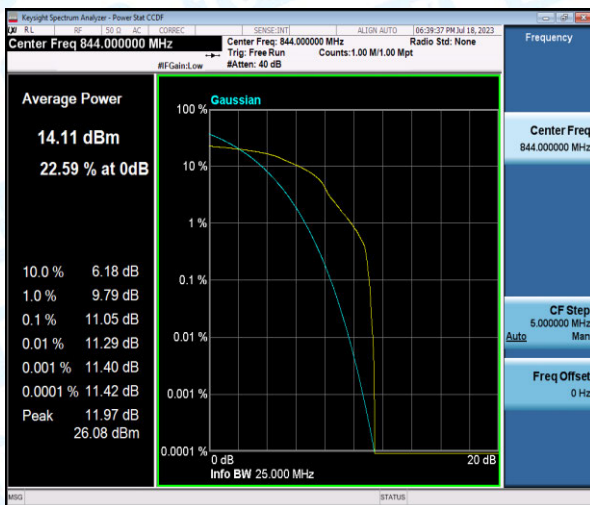
Band5-10MHz-16QAM-20450-1-0-Low-12.31-<=13-PASS

Band5-10MHz-16QAM-20450-6-0-Low-9.94-<=13-PASS



Band5-10MHz-16QAM-20525-1-0-Low-11.58-<=13-PASS

Band5-10MHz-16QAM-20525-6-0-Low-9.02-<=13-PASS



Band5-10MHz-16QAM-20600-1-0-High-11.05-<=13-PASS

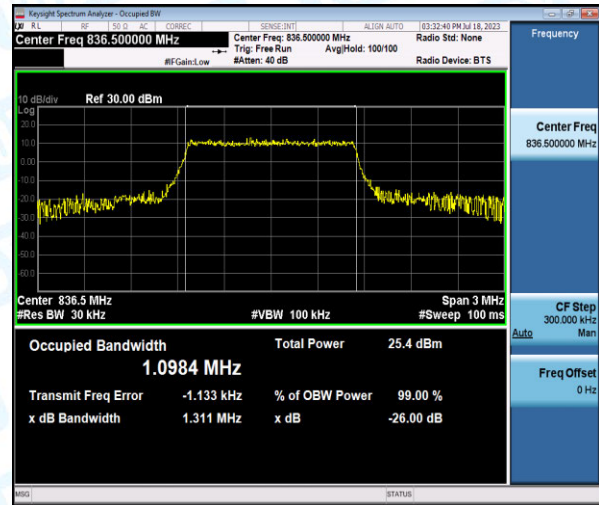
Band5-10MHz-16QAM-20600-6-0-High-9.74-<=13-PASS

3. 26dB Bandwidth and Occupied Bandwidth for M1

Test Result

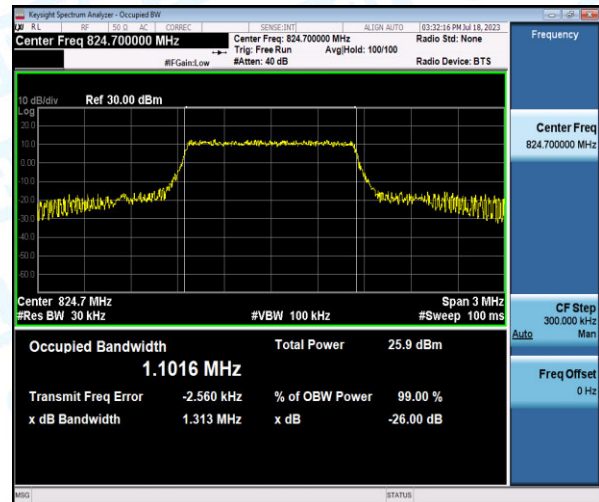
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	20407	QPSK	6	0	Low	1.1001	1.314	PASS
Band5	1.4MHz	20525	QPSK	6	0	Low	1.0984	1.311	PASS
Band5	1.4MHz	20643	QPSK	6	0	High	1.1014	1.412	PASS
Band5	1.4MHz	20407	16QAM	6	0	Low	1.1016	1.313	PASS
Band5	1.4MHz	20525	16QAM	6	0	Low	1.0982	1.305	PASS
Band5	1.4MHz	20643	16QAM	6	0	High	1.0983	1.321	PASS
Band5	3MHz	20415	QPSK	6	0	Low	1.1751	2.642	PASS
Band5	3MHz	20525	QPSK	6	0	Low	1.1729	2.239	PASS
Band5	3MHz	20635	QPSK	6	0	High	1.1786	2.592	PASS
Band5	3MHz	20415	16QAM	6	0	Low	1.1836	2.098	PASS
Band5	3MHz	20525	16QAM	6	0	Low	1.1774	2.601	PASS
Band5	3MHz	20635	16QAM	6	0	High	1.1741	2.359	PASS
Band5	5MHz	20425	QPSK	6	0	Low	1.3805	3.361	PASS
Band5	5MHz	20525	QPSK	6	0	Low	1.3582	3.089	PASS
Band5	5MHz	20625	QPSK	6	0	High	1.3726	3.294	PASS
Band5	5MHz	20425	16QAM	6	0	Low	1.3616	3.341	PASS
Band5	5MHz	20525	16QAM	6	0	Low	1.3944	3.425	PASS
Band5	5MHz	20625	16QAM	6	0	High	1.3816	3.501	PASS
Band5	10MHz	20450	QPSK	6	0	Low	2.3393	4.312	PASS
Band5	10MHz	20525	QPSK	6	0	Low	2.4158	4.519	PASS
Band5	10MHz	20600	QPSK	6	0	High	2.4005	4.408	PASS
Band5	10MHz	20450	16QAM	6	0	Low	2.3309	4.665	PASS
Band5	10MHz	20525	16QAM	6	0	Low	2.2589	4.593	PASS
Band5	10MHz	20600	16QAM	6	0	High	2.4778	4.306	PASS

Test Graphs



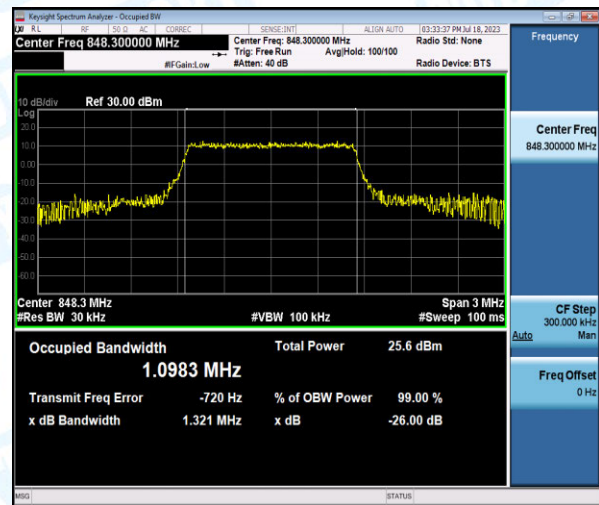
Band5-1.4MHz-QPSK-20407-6-0-Low-1.1001-1.314-PASS

Band5-1.4MHz-QPSK-20525-6-0-Low-1.0984-1.311-PASS



Band5-1.4MHz-QPSK-20643-6-0-High-1.1014-1.412-PASS

Band5-1.4MHz-16QAM-20407-6-0-Low-1.1016-1.313-PASS



Band5-1.4MHz-16QAM-20525-6-0-Low-1.0982-1.305-PASS

Band5-1.4MHz-16QAM-20643-6-0-High-1.0983-1.321-PASS