LTE-Cat M1 Band2 Test Data

General Description of EUT	
Product Name:	SILO-HW-CELL
Test Model:	SILO-FILL-CELL
Sample No.:	HC-C-202312-0122-01-01-2#
Standard:	**47 CFR Part 2, 24(E)** **RSS-Gen Issue 5** **RSS-133 Issue 7**
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 4.5V
Test Engineer:	Rick.chen
Note: For a more detailed features description, please refer to the report **TBR-C-202312-0122-66.** The report only show the worst casa data.	

Contents

LTE-Cat M1 Band2 Test Data 1
1: Conducted Output Power Data for M1 3
Test Result 3
2: Peak-to-Average Ratio(CCDF) for M1 6
Test Result 6
Test Graphs 8
3: 26dB Bandwidth and Occupied Bandwidth for M1 20
Test Result 20
Test Graphs 21
4: Band Edge for M1 27
Test Result 27
Test Graphs 28
5: Conducted Spurious Emission for M1 36
Test Result 36
Test Graphs 39
6: Frequency Stability for M1 64
Test Result 64

1: Conducted Output Power Data for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	Limit	Verdict
Band2	1.4MHz	QPSK	18607	1	0	Low	18.21	33	PASS
Band2	1.4MHz	16QAM	18607	1	0	Low	18.20	33	PASS
Band2	1.4MHz	QPSK	18607	1	5	Low	18.19	33	PASS
Band2	1.4MHz	16QAM	18607	1	5	Low	18.19	33	PASS
Band2	1.4MHz	QPSK	18607	6	0	Low	18.19	33	PASS
Band2	1.4MHz	16QAM	18607	6	0	Low	18.19	33	PASS
Band2	1.4MHz	QPSK	18900	1	0	Low	18.54	33	PASS
Band2	1.4MHz	16QAM	18900	1	0	Low	18.53	33	PASS
Band2	1.4MHz	QPSK	18900	1	5	Low	18.53	33	PASS
Band2	1.4MHz	16QAM	18900	1	5	Low	18.52	33	PASS
Band2	1.4MHz	QPSK	18900	6	0	Low	18.52	33	PASS
Band2	1.4MHz	16QAM	18900	6	0	Low	18.52	33	PASS
Band2	1.4MHz	QPSK	19193	1	0	High	18.41	33	PASS
Band2	1.4MHz	16QAM	19193	1	0	High	18.56	33	PASS
Band2	1.4MHz	QPSK	19193	1	5	High	18.77	33	PASS
Band2	1.4MHz	16QAM	19193	1	5	High	18.63	33	PASS
Band2	1.4MHz	QPSK	19193	6	0	High	18.63	33	PASS
Band2	1.4MHz	16QAM	19193	6	0	High	18.62	33	PASS
Band2	3MHz	QPSK	18615	1	0	Low	18.22	33	PASS
Band2	3MHz	16QAM	18615	1	0	Low	18.23	33	PASS
Band2	3MHz	QPSK	18615	1	5	Low	18.23	33	PASS
Band2	3MHz	16QAM	18615	1	5	Low	18.23	33	PASS
Band2	3MHz	QPSK	18615	6	0	Low	18.23	33	PASS
Band2	3MHz	16QAM	18615	6	0	Low	18.13	33	PASS
Band2	3MHz	QPSK	18900	1	0	Low	18.37	33	PASS
Band2	3MHz	16QAM	18900	1	0	Low	18.44	33	PASS
Band2	3MHz	QPSK	18900	1	5	Low	18.42	33	PASS
Band2	3MHz	16QAM	18900	1	5	Low	18.43	33	PASS
Band2	3MHz	QPSK	18900	6	0	Low	18.43	33	PASS
Band2	3MHz	16QAM	18900	6	0	Low	18.42	33	PASS
Band2	3MHz	QPSK	19185	1	0	High	18.56	33	PASS
Band2	3MHz	16QAM	19185	1	0	High	18.55	33	PASS
Band2	3MHz	QPSK	19185	1	5	High	18.54	33	PASS
Band2	3MHz	16QAM	19185	1	5	High	18.55	33	PASS
Band2	3MHz	QPSK	19185	6	0	High	18.54	33	PASS
Band2	3MHz	16QAM	19185	6	0	High	18.54	33	PASS
Band2	5MHz	QPSK	18625	1	0	Low	19.15	33	PASS
Band2	5MHz	16QAM	18625	1	0	Low	19.19	33	PASS
Band2	5MHz	QPSK	18625	1	5	Low	19.15	33	PASS
Band2	5MHz	16QAM	18625	1	5	Low	19.15	33	PASS
Band2	5MHz	QPSK	18625	6	0	Low	19.14	33	PASS
Band2	5MHz	16QAM	18625	6	0	Low	19.14	33	PASS
Band2	5MHz	QPSK	18900	1	0	Low	19.21	33	PASS
Band2	5MHz	16QAM	18900	1	0	Low	19.25	33	PASS
Band2	5MHz	QPSK	18900	1	5	Low	19.25	33	PASS
Band2	5MHz	16QAM	18900	1	5	Low	19.25	33	PASS
Band2	5MHz	QPSK	18900	6	0	Low	19.25	33	PASS
Band2	5MHz	16QAM	18900	6	0	Low	19.25	33	PASS
Band2	5MHz	QPSK	19175	1	0	High	19.38	33	PASS
Band2	5MHz	16QAM	19175	1	0	High	19.45	33	PASS

Band2	5MHz	QPSK	19175	1	5	High	19.45	33	PASS
Band2	5MHz	16QAM	19175	1	5	High	19.45	33	PASS
Band2	5MHz	QPSK	19175	6	0	High	19.45	33	PASS
Band2	5MHz	16QAM	19175	6	0	High	19.45	33	PASS
Band2	10MHz	QPSK	18650	1	0	Low	19.06	33	PASS
Band2	10MHz	16QAM	18650	1	0	Low	19.06	33	PASS
Band2	10MHz	QPSK	18650	1	5	Low	19.14	33	PASS
Band2	10MHz	16QAM	18650	1	5	Low	18.96	33	PASS
Band2	10MHz	QPSK	18650	6	0	Low	19.06	33	PASS
Band2	10MHz	16QAM	18650	6	0	Low	19.06	33	PASS
Band2	10MHz	QPSK	18900	1	0	Low	19.07	33	PASS
Band2	10MHz	16QAM	18900	1	0	Low	19.16	33	PASS
Band2	10MHz	QPSK	18900	1	5	Low	19.15	33	PASS
Band2	10MHz	16QAM	18900	1	5	Low	19.15	33	PASS
Band2	10MHz	QPSK	18900	6	0	Low	19.15	33	PASS
Band2	10MHz	16QAM	18900	6	0	Low	19.15	33	PASS
Band2	10MHz	QPSK	19150	1	0	High	19.40	33	PASS
Band2	10MHz	16QAM	19150	1	0	High	19.46	33	PASS
Band2	10MHz	QPSK	19150	1	5	High	19.46	33	PASS
Band2	10MHz	16QAM	19150	1	5	High	19.37	33	PASS
Band2	10MHz	QPSK	19150	6	0	High	19.37	33	PASS
Band2	10MHz	16QAM	19150	6	0	High	19.37	33	PASS
Band2	15MHz	QPSK	18675	1	0	Low	20.23	33	PASS
Band2	15MHz	16QAM	18675	1	0	Low	20.21	33	PASS
Band2	15MHz	QPSK	18675	1	5	Low	20.20	33	PASS
Band2	15MHz	16QAM	18675	1	5	Low	20.20	33	PASS
Band2	15MHz	QPSK	18675	6	0	Low	20.20	33	PASS
Band2	15MHz	16QAM	18675	6	0	Low	20.20	33	PASS
Band2	15MHz	QPSK	18900	1	0	Low	20.47	33	PASS
Band2	15MHz	16QAM	18900	1	0	Low	20.51	33	PASS
Band2	15MHz	QPSK	18900	1	5	Low	20.52	33	PASS
Band2	15MHz	16QAM	18900	1	5	Low	20.52	33	PASS
Band2	15MHz	QPSK	18900	6	0	Low	20.51	33	PASS
Band2	15MHz	16QAM	18900	6	0	Low	20.51	33	PASS
Band2	15MHz	QPSK	19125	1	0	High	20.57	33	PASS
Band2	15MHz	16QAM	19125	1	0	High	20.66	33	PASS
Band2	15MHz	QPSK	19125	1	5	High	20.65	33	PASS
Band2	15MHz	16QAM	19125	1	5	High	20.66	33	PASS
Band2	15MHz	QPSK	19125	6	0	High	20.66	33	PASS
Band2	15MHz	16QAM	19125	6	0	High	20.66	33	PASS
Band2	20MHz	QPSK	18700	1	0	Low	20.23	33	PASS
Band2	20MHz	16QAM	18700	1	0	Low	20.23	33	PASS
Band2	20MHz	QPSK	18700	1	5	Low	20.23	33	PASS
Band2	20MHz	16QAM	18700	1	5	Low	20.23	33	PASS
Band2	20MHz	QPSK	18700	6	0	Low	20.23	33	PASS
Band2	20MHz	16QAM	18700	6	0	Low	20.23	33	PASS
Band2	20MHz	QPSK	18900	1	0	Low	20.32	33	PASS
Band2	20MHz	16QAM	18900	1	0	Low	20.57	33	PASS
Band2	20MHz	QPSK	18900	1	5	Low	20.57	33	PASS
Band2	20MHz	16QAM	18900	1	5	Low	20.57	33	PASS
Band2	20MHz	QPSK	18900	6	0	Low	20.57	33	PASS
Band2	20MHz	16QAM	18900	6	0	Low	20.57	33	PASS
Band2	20MHz	QPSK	19100	1	0	High	20.72	33	PASS
Band2	20MHz	16QAM	19100	1	0	High	20.70	33	PASS
Band2	20MHz	QPSK	19100	1	5	High	20.71	33	PASS
Band2	20MHz	16QAM	19100	1	5	High	20.70	33	PASS
Band2	20MHz	QPSK	19100	6	0	High	20.71	33	PASS

Band2	20MHz	16QAM	19100	6	0	High	20.71	33	PASS

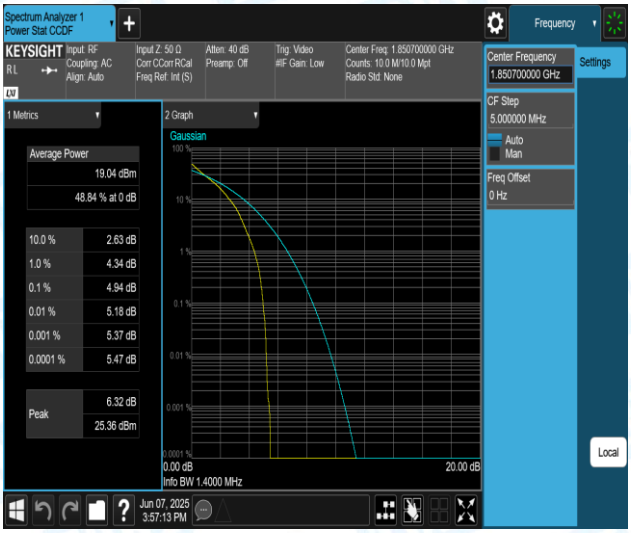
2: Peak-to-Average Ratio(CCDF) for M1

Test Result

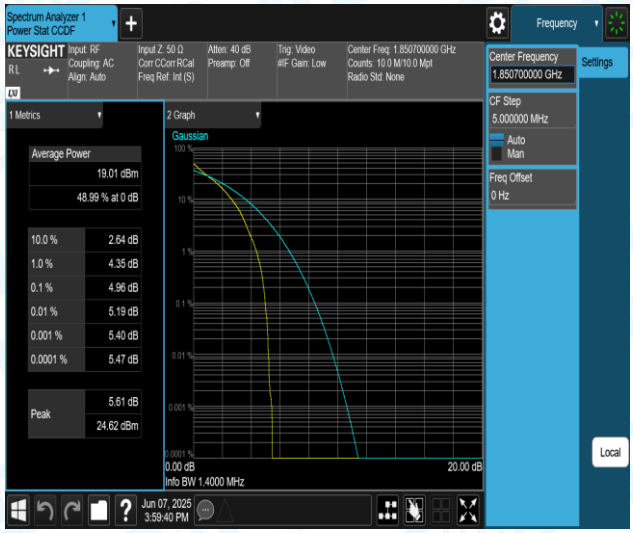
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band2	1.4MHz	18607	QPSK	1	0	Low	4.94	<=13	PASS
Band2	1.4MHz	18607	16QAM	1	0	Low	4.96	<=13	PASS
Band2	1.4MHz	18607	QPSK	6	0	Low	4.94	<=13	PASS
Band2	1.4MHz	18607	16QAM	6	0	Low	4.95	<=13	PASS
Band2	1.4MHz	18900	QPSK	1	0	Low	5.10	<=13	PASS
Band2	1.4MHz	18900	16QAM	1	0	Low	5.09	<=13	PASS
Band2	1.4MHz	18900	QPSK	6	0	Low	5.09	<=13	PASS
Band2	1.4MHz	18900	16QAM	6	0	Low	5.10	<=13	PASS
Band2	1.4MHz	19193	QPSK	1	0	High	4.84	<=13	PASS
Band2	1.4MHz	19193	16QAM	1	0	High	4.84	<=13	PASS
Band2	1.4MHz	19193	QPSK	6	0	High	4.83	<=13	PASS
Band2	1.4MHz	19193	16QAM	6	0	High	4.84	<=13	PASS
Band2	3MHz	18615	QPSK	1	0	Low	5.05	<=13	PASS
Band2	3MHz	18615	16QAM	1	0	Low	5.03	<=13	PASS
Band2	3MHz	18615	QPSK	6	0	Low	5.05	<=13	PASS
Band2	3MHz	18615	16QAM	6	0	Low	5.03	<=13	PASS
Band2	3MHz	18900	QPSK	1	0	Low	4.85	<=13	PASS
Band2	3MHz	18900	16QAM	1	0	Low	4.86	<=13	PASS
Band2	3MHz	18900	QPSK	6	0	Low	4.86	<=13	PASS
Band2	3MHz	18900	16QAM	6	0	Low	4.85	<=13	PASS
Band2	3MHz	19185	QPSK	1	0	High	5.04	<=13	PASS
Band2	3MHz	19185	16QAM	1	0	High	5.06	<=13	PASS
Band2	3MHz	19185	QPSK	6	0	High	5.04	<=13	PASS
Band2	3MHz	19185	16QAM	6	0	High	5.03	<=13	PASS
Band2	5MHz	18625	QPSK	1	0	Low	4.48	<=13	PASS
Band2	5MHz	18625	16QAM	1	0	Low	4.47	<=13	PASS
Band2	5MHz	18625	QPSK	6	0	Low	4.48	<=13	PASS
Band2	5MHz	18625	16QAM	6	0	Low	4.47	<=13	PASS
Band2	5MHz	18900	QPSK	1	0	Low	4.50	<=13	PASS
Band2	5MHz	18900	16QAM	1	0	Low	4.51	<=13	PASS
Band2	5MHz	18900	QPSK	6	0	Low	4.52	<=13	PASS
Band2	5MHz	18900	16QAM	6	0	Low	4.52	<=13	PASS
Band2	5MHz	19175	QPSK	1	0	High	4.67	<=13	PASS
Band2	5MHz	19175	16QAM	1	0	High	4.64	<=13	PASS
Band2	5MHz	19175	QPSK	6	0	High	4.62	<=13	PASS
Band2	5MHz	19175	16QAM	6	0	High	4.65	<=13	PASS
Band2	10MHz	18650	QPSK	1	0	Low	4.45	<=13	PASS
Band2	10MHz	18650	16QAM	1	0	Low	4.45	<=13	PASS
Band2	10MHz	18650	QPSK	6	0	Low	4.49	<=13	PASS
Band2	10MHz	18650	16QAM	6	0	Low	4.40	<=13	PASS
Band2	10MHz	18900	QPSK	1	0	Low	4.46	<=13	PASS
Band2	10MHz	18900	16QAM	1	0	Low	4.45	<=13	PASS
Band2	10MHz	18900	QPSK	6	0	Low	4.42	<=13	PASS
Band2	10MHz	18900	16QAM	6	0	Low	4.47	<=13	PASS
Band2	10MHz	19150	QPSK	1	0	High	4.51	<=13	PASS
Band2	10MHz	19150	16QAM	1	0	High	4.53	<=13	PASS
Band2	10MHz	19150	QPSK	6	0	High	4.53	<=13	PASS
Band2	10MHz	19150	16QAM	6	0	High	4.58	<=13	PASS
Band2	15MHz	18675	QPSK	1	0	Low	3.85	<=13	PASS
Band2	15MHz	18675	16QAM	1	0	Low	3.81	<=13	PASS

Band2	15MHz	18675	QPSK	6	0	Low	3.79	<=13	PASS
Band2	15MHz	18675	16QAM	6	0	Low	3.88	<=13	PASS
Band2	15MHz	18900	QPSK	1	0	Low	3.79	<=13	PASS
Band2	15MHz	18900	16QAM	1	0	Low	3.85	<=13	PASS
Band2	15MHz	18900	QPSK	6	0	Low	3.83	<=13	PASS
Band2	15MHz	18900	16QAM	6	0	Low	3.92	<=13	PASS
Band2	15MHz	19125	QPSK	1	0	High	3.92	<=13	PASS
Band2	15MHz	19125	16QAM	1	0	High	3.92	<=13	PASS
Band2	15MHz	19125	QPSK	6	0	High	3.87	<=13	PASS
Band2	15MHz	19125	16QAM	6	0	High	3.92	<=13	PASS
Band2	20MHz	18700	QPSK	1	0	Low	4.01	<=13	PASS
Band2	20MHz	18700	16QAM	1	0	Low	3.93	<=13	PASS
Band2	20MHz	18700	QPSK	6	0	Low	3.93	<=13	PASS
Band2	20MHz	18700	16QAM	6	0	Low	3.91	<=13	PASS
Band2	20MHz	18900	QPSK	1	0	Low	3.87	<=13	PASS
Band2	20MHz	18900	16QAM	1	0	Low	3.93	<=13	PASS
Band2	20MHz	18900	QPSK	6	0	Low	3.95	<=13	PASS
Band2	20MHz	18900	16QAM	6	0	Low	3.83	<=13	PASS
Band2	20MHz	19100	QPSK	1	0	High	3.95	<=13	PASS
Band2	20MHz	19100	16QAM	1	0	High	4.02	<=13	PASS
Band2	20MHz	19100	QPSK	6	0	High	4.01	<=13	PASS
Band2	20MHz	19100	16QAM	6	0	High	4.07	<=13	PASS

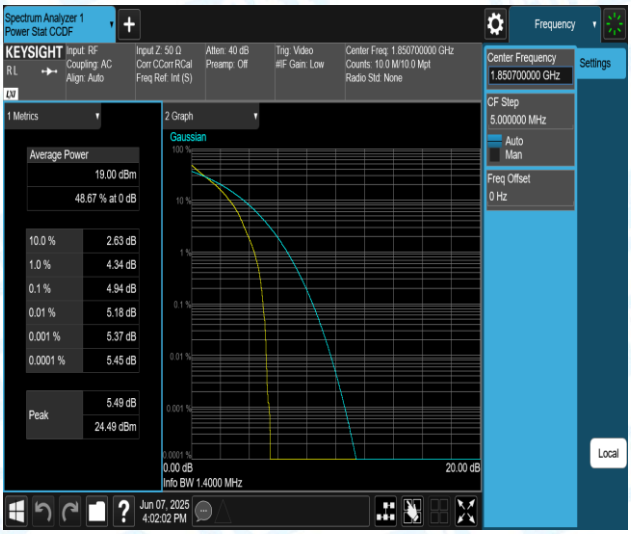
Test Graphs



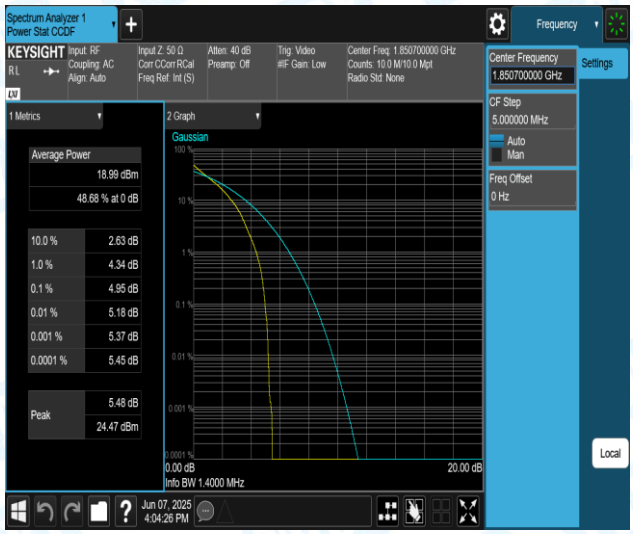
Band2-1.4MHz-QPSK-18607-PASS



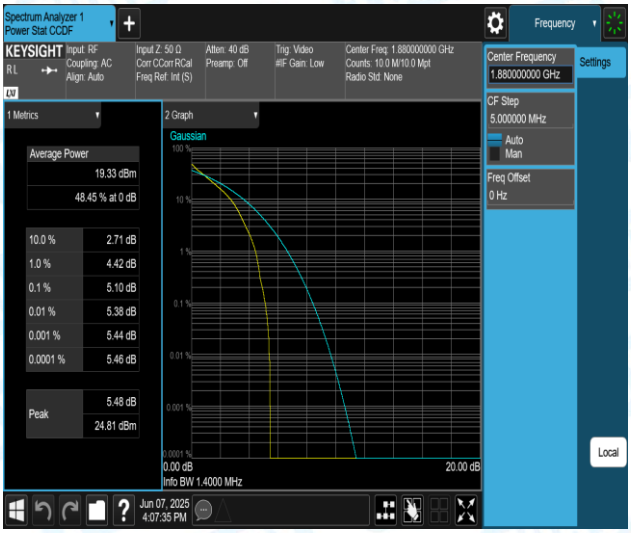
Band2-1.4MHz-16QAM-18607-PASS



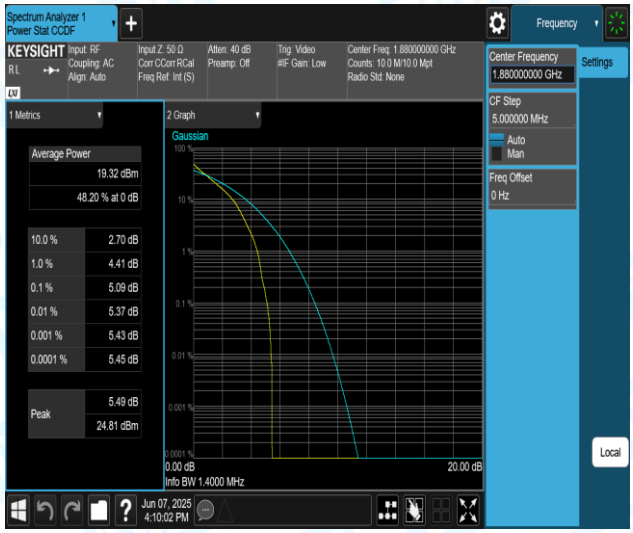
Band2-1.4MHz-QPSK-18607-PASS



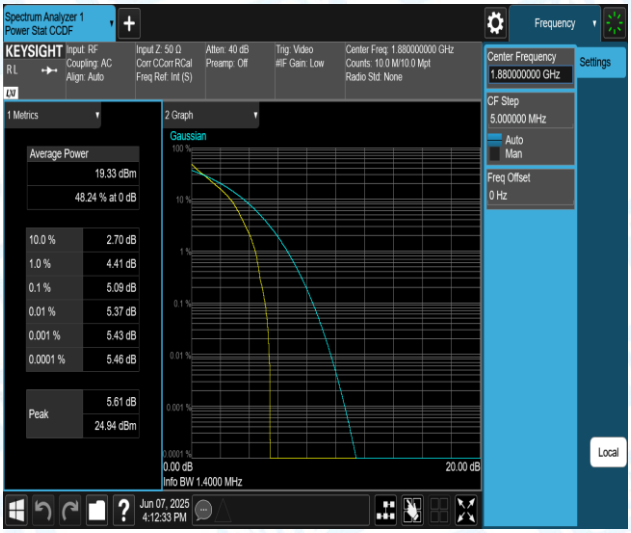
Band2-1.4MHz-16QAM-18607-PASS



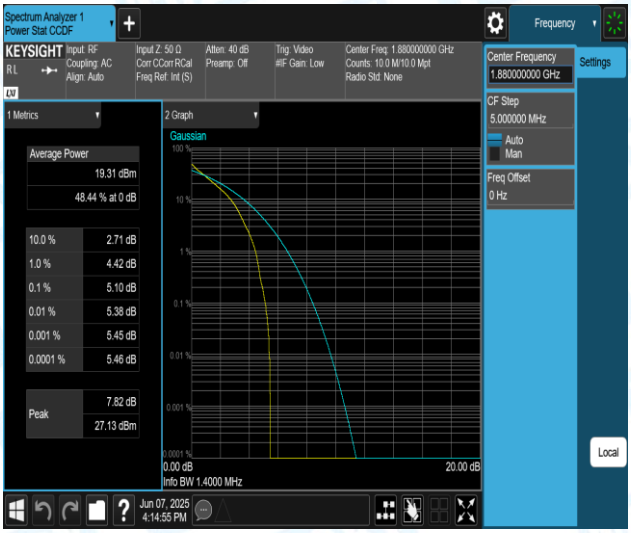
Band2-1.4MHz-QPSK-18900-PASS



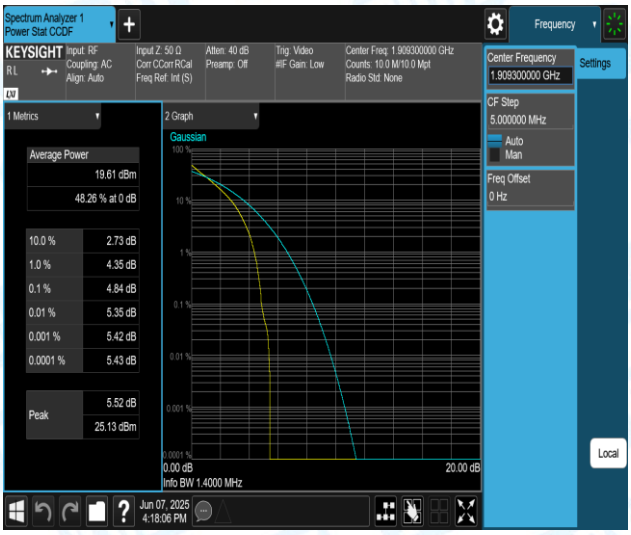
Band2-1.4MHz-16QAM-18900-PASS



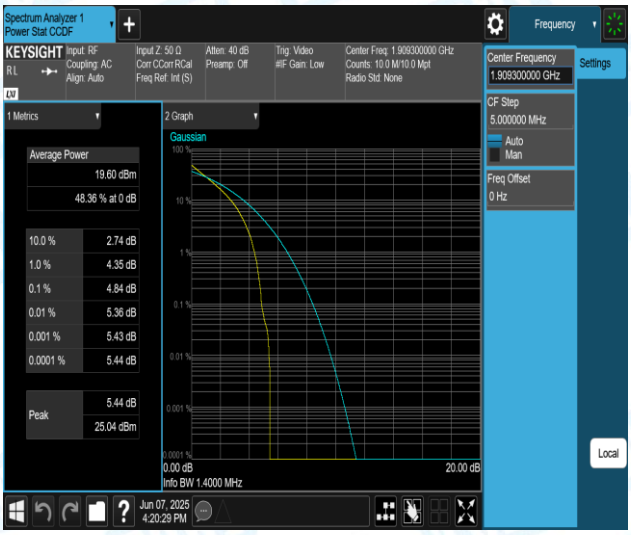
Band2-1.4MHz-QPSK-18900-PASS



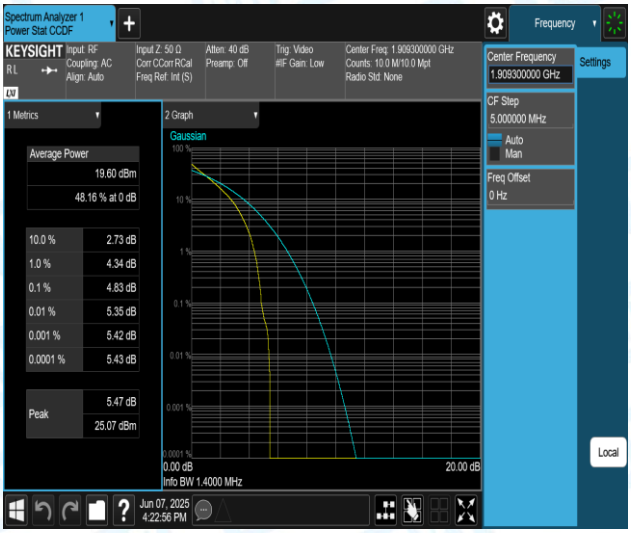
Band2-1.4MHz-16QAM-18900-PASS



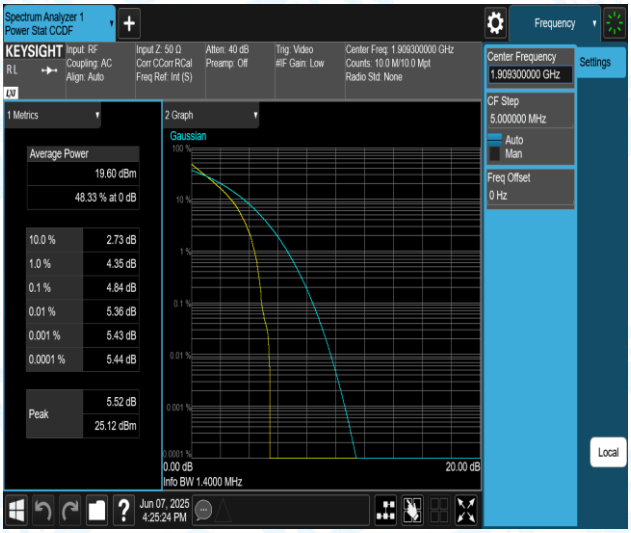
Band2-1.4MHz-QPSK-19193-PASS



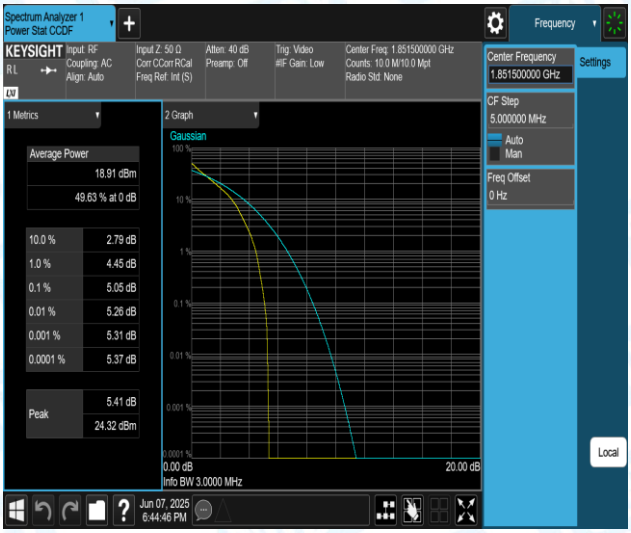
Band2-1.4MHz-16QAM-19193-PASS



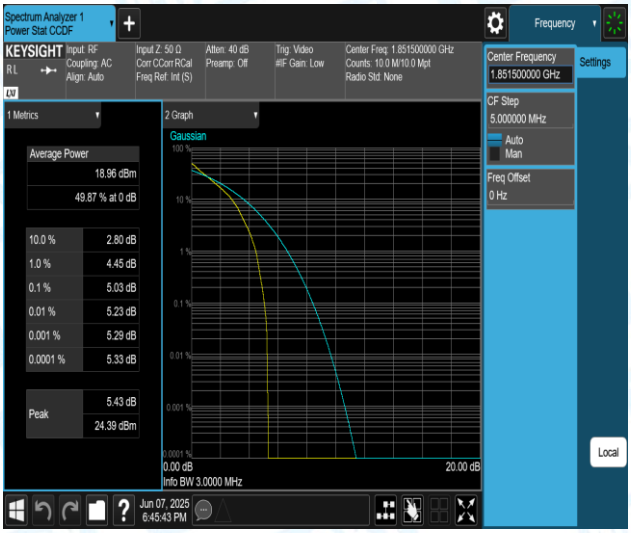
Band2-1.4MHz-QPSK-19193-PASS



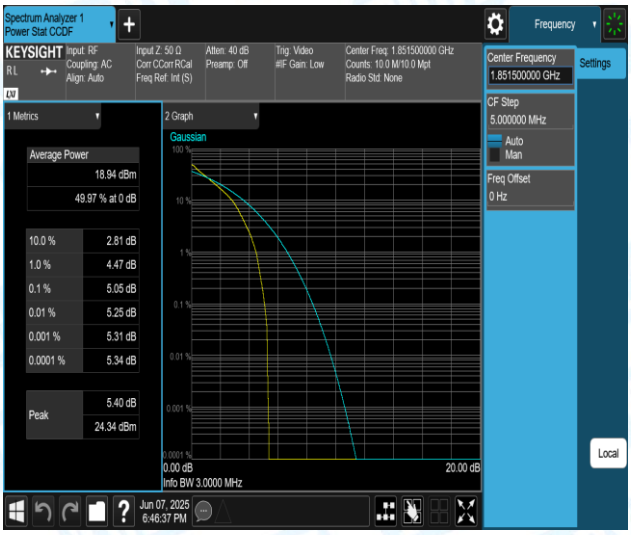
Band2-1.4MHz-16QAM-19193-PASS



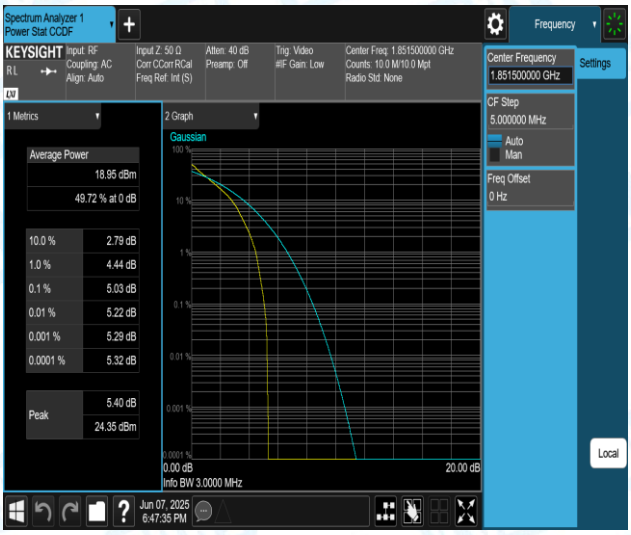
Band2-3MHz-QPSK-18615-PASS



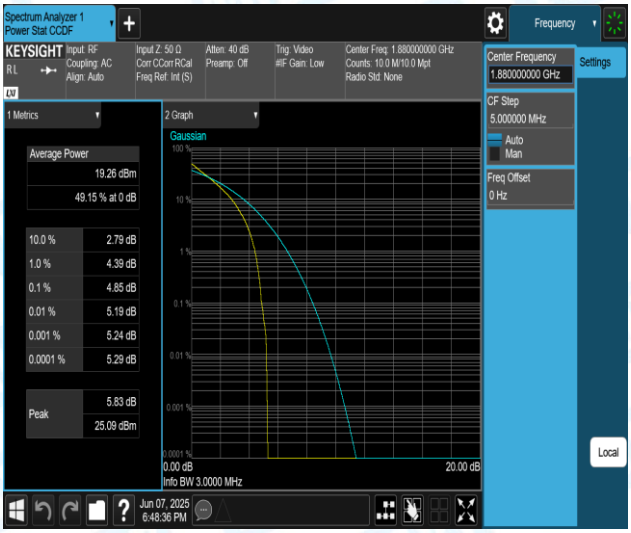
Band2-3MHz-16QAM-18615-PASS



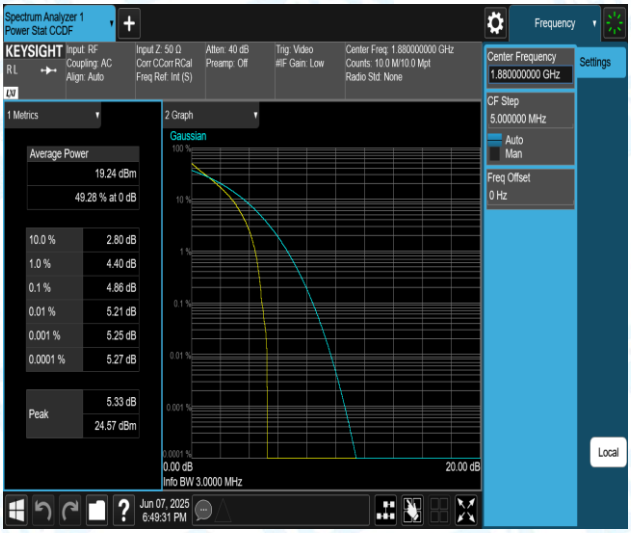
Band2-3MHz-QPSK-18615-PASS



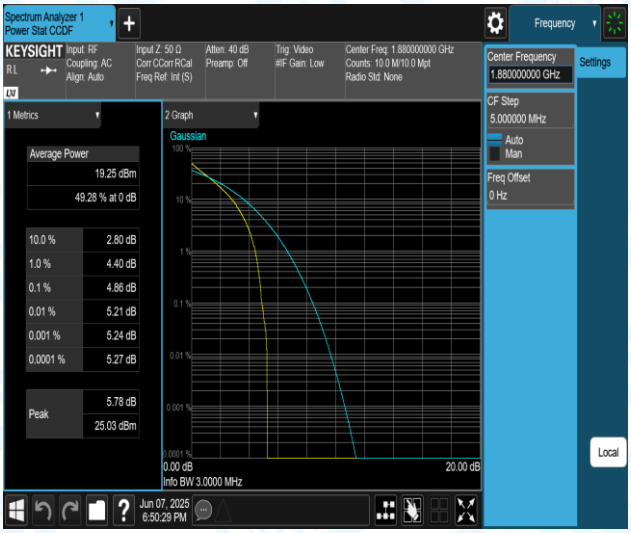
Band2-3MHz-16QAM-18615-PASS



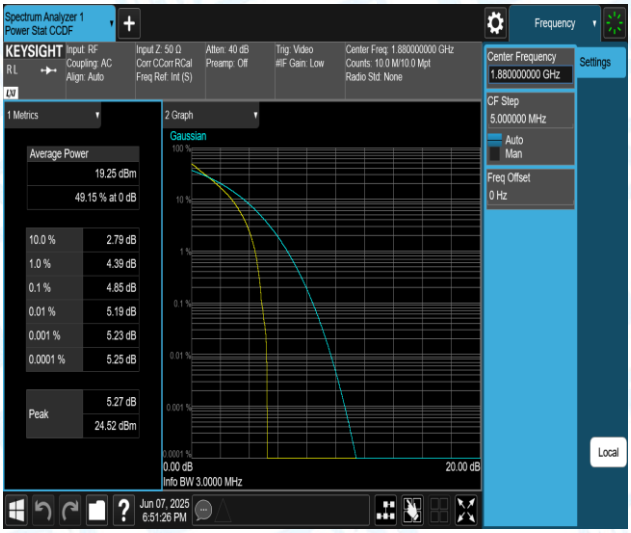
Band2-3MHz-QPSK-18900-PASS



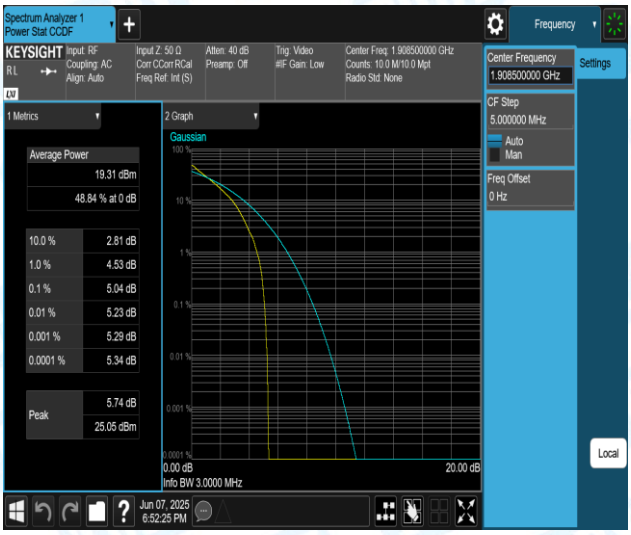
Band2-3MHz-16QAM-18900-PASS



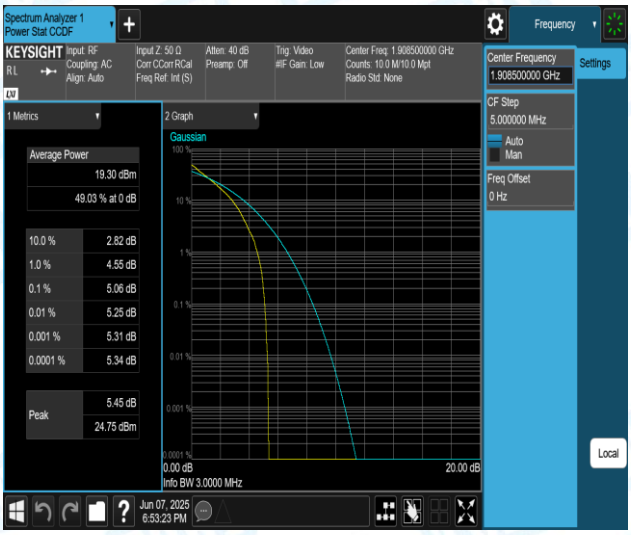
B a n d 2 - 3 M H z - Q P S K - 1 8 9 0 0 - P A S S



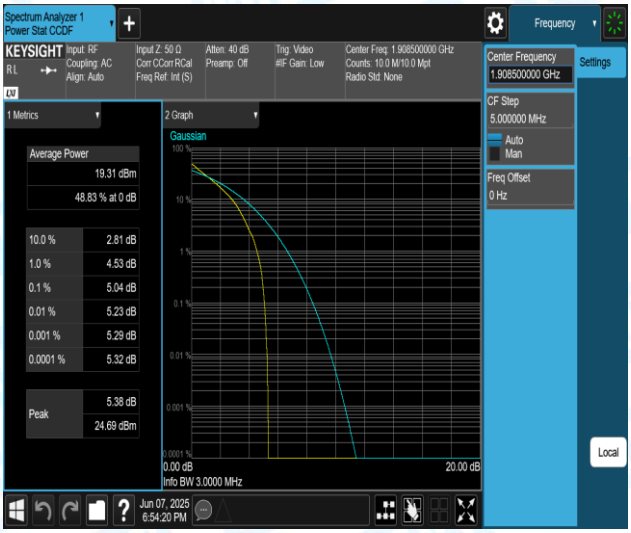
B a n d 2 - 3 M H z - 1 6 Q A M - 1 8 9 0 0 - P A S S



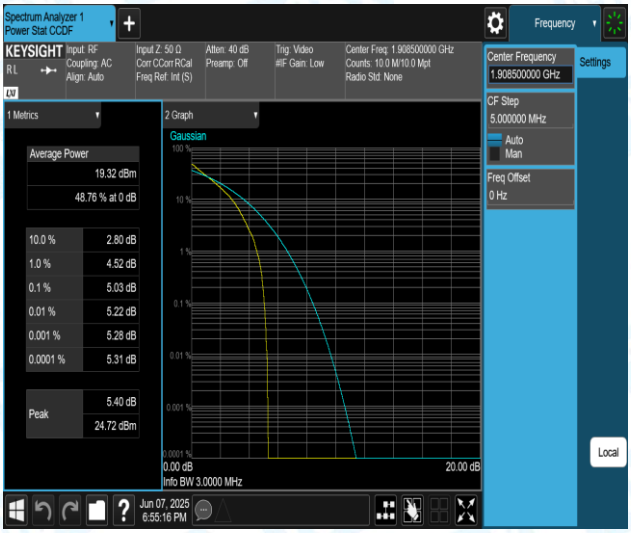
B a n d 2 - 3 M H z - Q P S K - 1 9 1 8 5 - P A S S



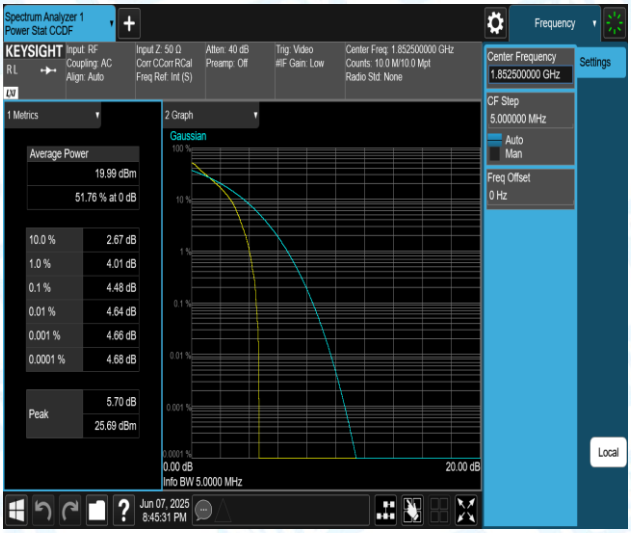
B a n d 2 - 3 M H z - 1 6 Q A M - 1 9 1 8 5 - P A S S



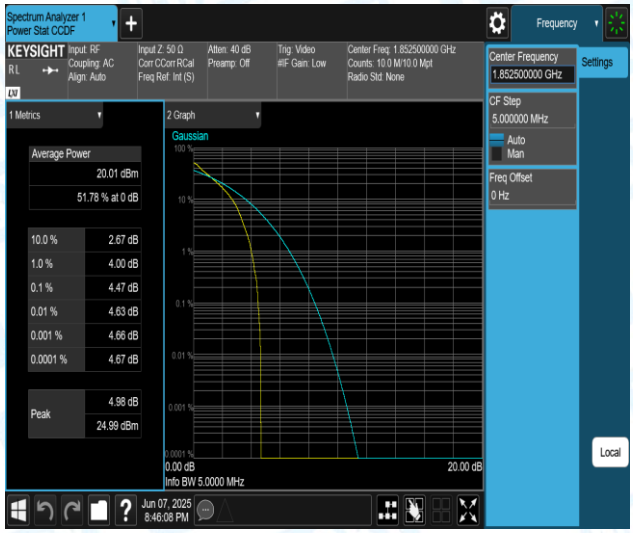
B a n d 2 - 3 M H z - Q P S K - 1 9 1 8 5 - P A S S



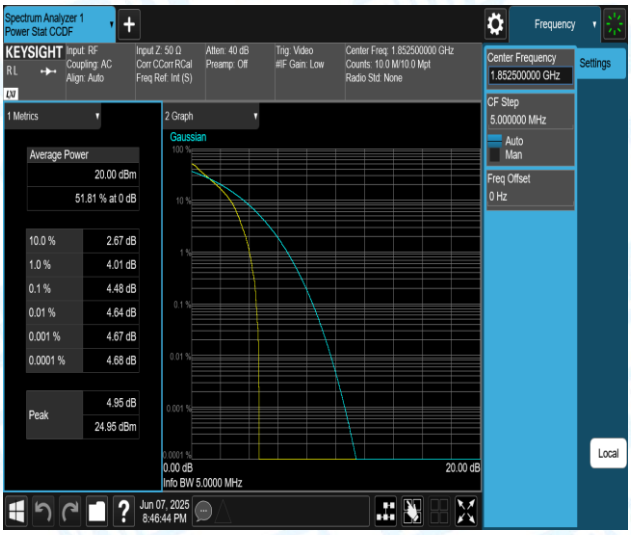
B a n d 2 - 3 M H z - 1 6 Q A M - 1 9 1 8 5 - P A S S



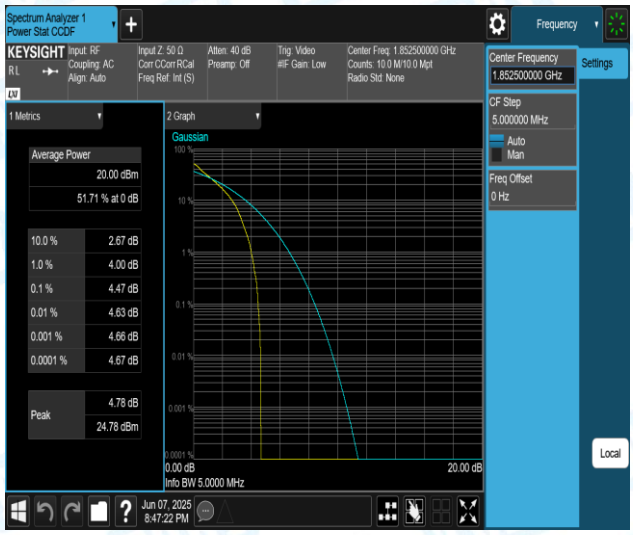
Band2-5MHz-QPSK-18625-PASS



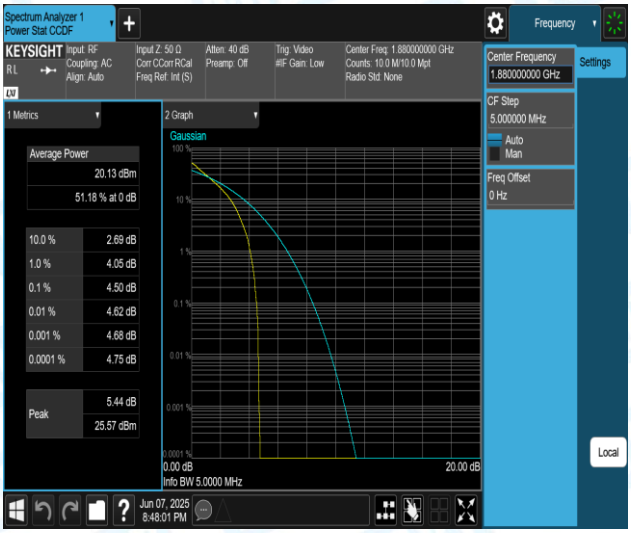
Band2-5MHz-16QAM-18625-PASS



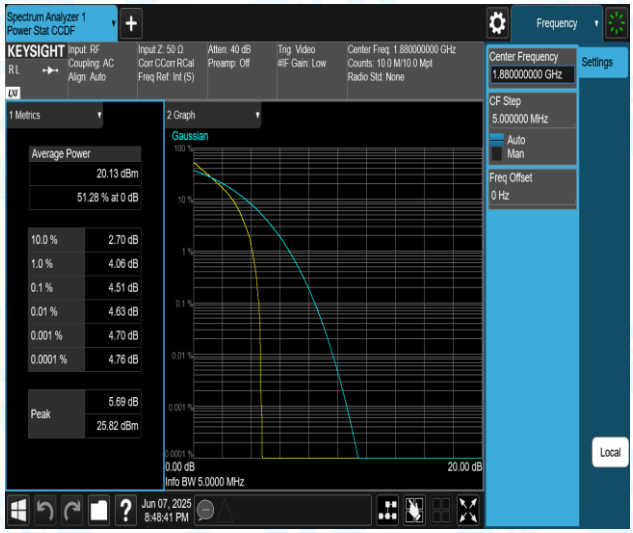
Band2-5MHz-QPSK-18625-PASS



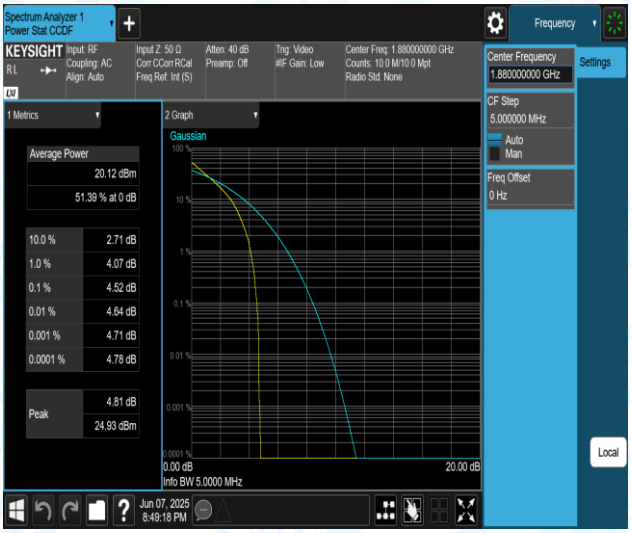
Band2-5MHz-16QAM-18625-PASS



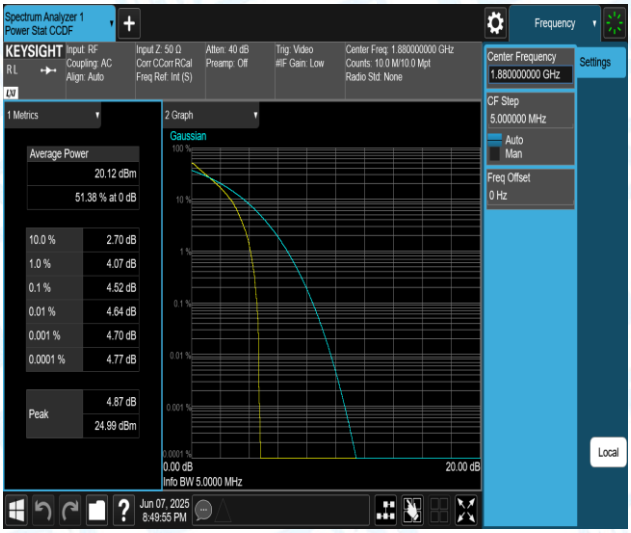
Band2-5MHz-QPSK-18900-PASS



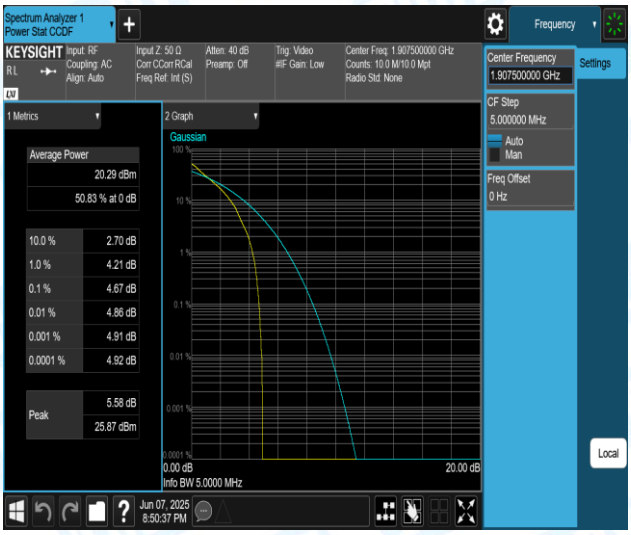
Band2-5MHz-16QAM-18900-PASS



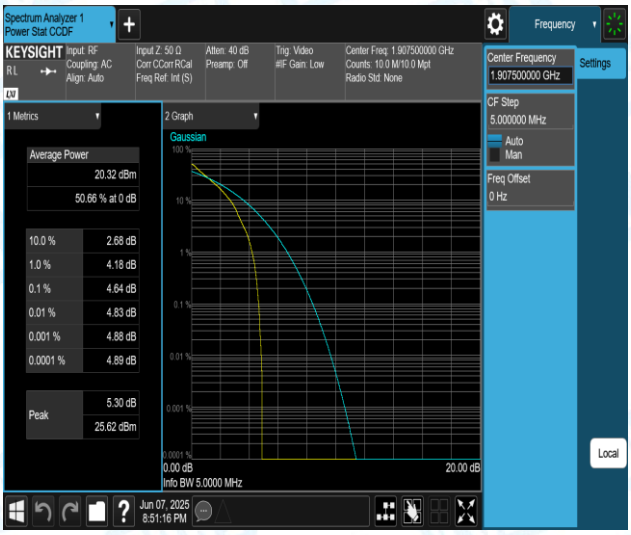
B a n d 2 - 5 M H z - Q P S K - 1 8 9 0 0 - P A S S



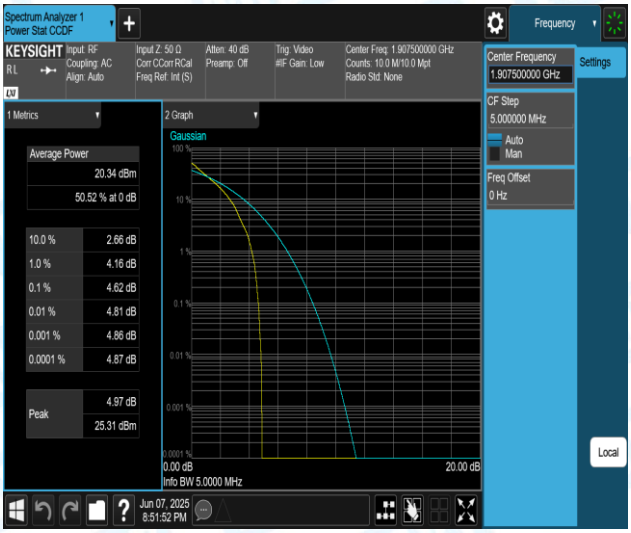
B a n d 2 - 5 M H z - 1 6 Q A M - 1 8 9 0 0 - P A S S



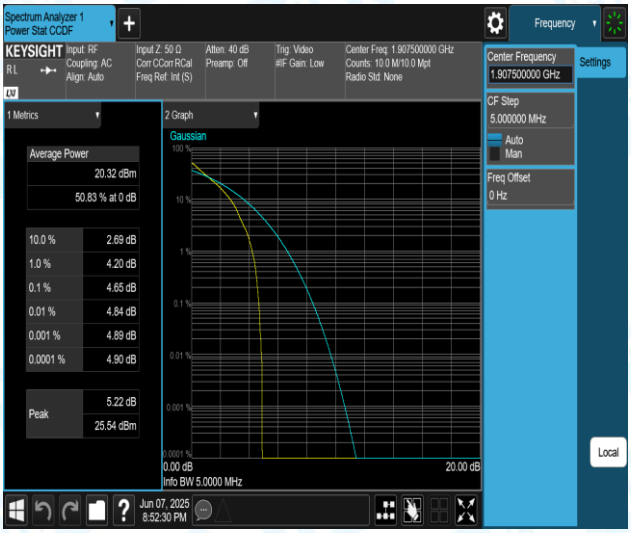
B a n d 2 - 5 M H z - Q P S K - 1 9 1 7 5 - P A S S



B a n d 2 - 5 M H z - 1 6 Q A M - 1 9 1 7 5 - P A S S



B a n d 2 - 5 M H z - Q P S K - 1 9 1 7 5 - P A S S



B a n d 2 - 5 M H z - 1 6 Q A M - 1 9 1 7 5 - P A S S