LTE-Cat M1 Band4 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, 27** **RSS-Gen Issue 5** **RSS-139 Issue 4**
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.	

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1: Conducted Output Power Data for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	Limit	Verdict
Band4	1.4MHz	QPSK	19957	1	0	Low	18.68	30	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	18.68	30	PASS
Band4	1.4MHz	QPSK	19957	1	5	Low	18.68	30	PASS
Band4	1.4MHz	16QAM	19957	1	5	Low	18.68	30	PASS
Band4	1.4MHz	QPSK	19957	6	0	Low	18.68	30	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	18.67	30	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	18.33	30	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	18.44	30	PASS
Band4	1.4MHz	QPSK	20175	1	5	Low	18.35	30	PASS
Band4	1.4MHz	16QAM	20175	1	5	Low	18.34	30	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	18.42	30	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	18.41	30	PASS
Band4	1.4MHz	QPSK	20393	1	0	High	18.72	30	PASS
Band4	1.4MHz	16QAM	20393	1	0	High	18.67	30	PASS
Band4	1.4MHz	QPSK	20393	1	5	High	18.78	30	PASS
Band4	1.4MHz	16QAM	20393	1	5	High	18.76	30	PASS
Band4	1.4MHz	QPSK	20393	6	0	High	18.76	30	PASS
Band4	1.4MHz	16QAM	20393	6	0	High	18.75	30	PASS
Band4	3MHz	QPSK	19965	1	0	Low	18.75	30	PASS
Band4	3MHz	16QAM	19965	1	0	Low	18.75	30	PASS
Band4	3MHz	QPSK	19965	1	5	Low	18.75	30	PASS
Band4	3MHz	16QAM	19965	1	5	Low	18.75	30	PASS
Band4	3MHz	QPSK	19965	6	0	Low	18.75	30	PASS
Band4	3MHz	16QAM	19965	6	0	Low	18.75	30	PASS
Band4	3MHz	QPSK	20175	1	0	Low	18.33	30	PASS
Band4	3MHz	16QAM	20175	1	0	Low	18.36	30	PASS
Band4	3MHz	QPSK	20175	1	5	Low	18.42	30	PASS
Band4	3MHz	16QAM	20175	1	5	Low	18.42	30	PASS
Band4	3MHz	QPSK	20175	6	0	Low	18.41	30	PASS
Band4	3MHz	16QAM	20175	6	0	Low	18.41	30	PASS
Band4	3MHz	QPSK	20385	1	0	High	18.80	30	PASS
Band4	3MHz	16QAM	20385	1	0	High	18.76	30	PASS
Band4	3MHz	QPSK	20385	1	5	High	18.77	30	PASS
Band4	3MHz	16QAM	20385	1	5	High	18.77	30	PASS
Band4	3MHz	QPSK	20385	6	0	High	18.76	30	PASS
Band4	3MHz	16QAM	20385	6	0	High	18.75	30	PASS
Band4	5MHz	QPSK	19975	1	0	Low	19.78	30	PASS
Band4	5MHz	16QAM	19975	1	0	Low	19.77	30	PASS
Band4	5MHz	QPSK	19975	1	5	Low	19.77	30	PASS
Band4	5MHz	16QAM	19975	1	5	Low	19.77	30	PASS
Band4	5MHz	QPSK	19975	6	0	Low	19.76	30	PASS
Band4	5MHz	16QAM	19975	6	0	Low	19.77	30	PASS
Band4	5MHz	QPSK	20175	1	0	Low	19.49	30	PASS
Band4	5MHz	16QAM	20175	1	0	Low	19.45	30	PASS
Band4	5MHz	QPSK	20175	1	5	Low	19.44	30	PASS
Band4	5MHz	16QAM	20175	1	5	Low	19.44	30	PASS
Band4	5MHz	QPSK	20175	6	0	Low	19.44	30	PASS
Band4	5MHz	16QAM	20175	6	0	Low	19.53	30	PASS
Band4	5MHz	QPSK	20375	1	0	High	19.71	30	PASS
Band4	5MHz	16QAM	20375	1	0	High	19.77	30	PASS
Band4	5MHz	QPSK	20375	1	5	High	19.85	30	PASS
Band4	5MHz	16QAM	20375	1	5	High	19.84	30	PASS
Band4	5MHz	QPSK	20375	6	0	High	19.83	30	PASS
Band4	5MHz	16QAM	20375	6	0	High	19.83	30	PASS
Band4	10MHz	QPSK	20000	1	0	Low	19.70	30	PASS
Band4	10MHz	16QAM	20000	1	0	Low	19.70	30	PASS
Band4	10MHz	QPSK	20000	1	5	Low	19.70	30	PASS
Band4	10MHz	16QAM	20000	1	5	Low	19.70	30	PASS
Band4	10MHz	QPSK	20000	6	0	Low	19.70	30	PASS
Band4	10MHz	16QAM	20000	6	0	Low	19.69	30	PASS

Band4	10MHz	QPSK	20175	1	0	Low	19.34	30	PASS
Band4	10MHz	16QAM	20175	1	0	Low	19.50	30	PASS
Band4	10MHz	QPSK	20175	1	5	Low	19.50	30	PASS
Band4	10MHz	16QAM	20175	1	5	Low	19.50	30	PASS
Band4	10MHz	QPSK	20175	6	0	Low	19.49	30	PASS
Band4	10MHz	16QAM	20175	6	0	Low	19.49	30	PASS
Band4	10MHz	QPSK	20350	1	0	High	19.75	30	PASS
Band4	10MHz	16QAM	20350	1	0	High	19.84	30	PASS
Band4	10MHz	QPSK	20350	1	5	High	19.84	30	PASS
Band4	10MHz	16QAM	20350	1	5	High	19.83	30	PASS
Band4	10MHz	QPSK	20350	6	0	High	19.84	30	PASS
Band4	10MHz	16QAM	20350	6	0	High	19.84	30	PASS
Band4	15MHz	QPSK	20025	1	0	Low	20.95	30	PASS
Band4	15MHz	16QAM	20025	1	0	Low	20.96	30	PASS
Band4	15MHz	QPSK	20025	1	5	Low	20.96	30	PASS
Band4	15MHz	16QAM	20025	1	5	Low	20.88	30	PASS
Band4	15MHz	QPSK	20025	6	0	Low	20.96	30	PASS
Band4	15MHz	16QAM	20025	6	0	Low	20.96	30	PASS
Band4	15MHz	QPSK	20175	1	0	Low	20.61	30	PASS
Band4	15MHz	16QAM	20175	1	0	Low	20.67	30	PASS
Band4	15MHz	QPSK	20175	1	5	Low	20.74	30	PASS
Band4	15MHz	16QAM	20175	1	5	Low	20.74	30	PASS
Band4	15MHz	QPSK	20175	6	0	Low	20.67	30	PASS
Band4	15MHz	16QAM	20175	6	0	Low	20.74	30	PASS
Band4	15MHz	QPSK	20325	1	0	High	21.01	30	PASS
Band4	15MHz	16QAM	20325	1	0	High	20.98	30	PASS
Band4	15MHz	QPSK	20325	1	5	High	20.98	30	PASS
Band4	15MHz	16QAM	20325	1	5	High	20.98	30	PASS
Band4	15MHz	QPSK	20325	6	0	High	20.98	30	PASS
Band4	15MHz	16QAM	20325	6	0	High	20.97	30	PASS
Band4	20MHz	QPSK	20050	1	0	Low	20.84	30	PASS
Band4	20MHz	16QAM	20050	1	0	Low	20.83	30	PASS
Band4	20MHz	QPSK	20050	1	5	Low	20.84	30	PASS
Band4	20MHz	16QAM	20050	1	5	Low	20.84	30	PASS
Band4	20MHz	QPSK	20050	6	0	Low	20.84	30	PASS
Band4	20MHz	16QAM	20050	6	0	Low	20.84	30	PASS
Band4	20MHz	QPSK	20175	1	0	Low	20.63	30	PASS
Band4	20MHz	16QAM	20175	1	0	Low	20.75	30	PASS
Band4	20MHz	QPSK	20175	1	5	Low	20.68	30	PASS
Band4	20MHz	16QAM	20175	1	5	Low	20.68	30	PASS
Band4	20MHz	QPSK	20175	6	0	Low	20.68	30	PASS
Band4	20MHz	16QAM	20175	6	0	Low	20.68	30	PASS
Band4	20MHz	QPSK	20300	1	0	High	21.01	30	PASS
Band4	20MHz	16QAM	20300	1	0	High	20.89	30	PASS
Band4	20MHz	QPSK	20300	1	5	High	20.89	30	PASS
Band4	20MHz	16QAM	20300	1	5	High	20.89	30	PASS
Band4	20MHz	QPSK	20300	6	0	High	20.89	30	PASS
Band4	20MHz	16QAM	20300	6	0	High	20.88	30	PASS

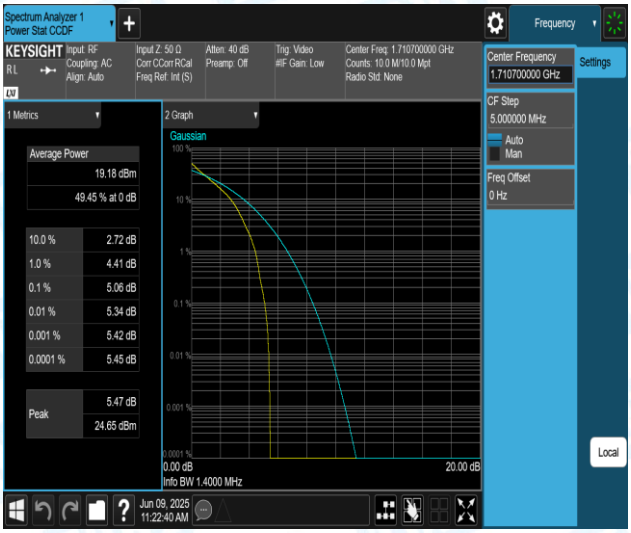
2: Peak-to-Average Ratio(CCDF) for M1

Test Result

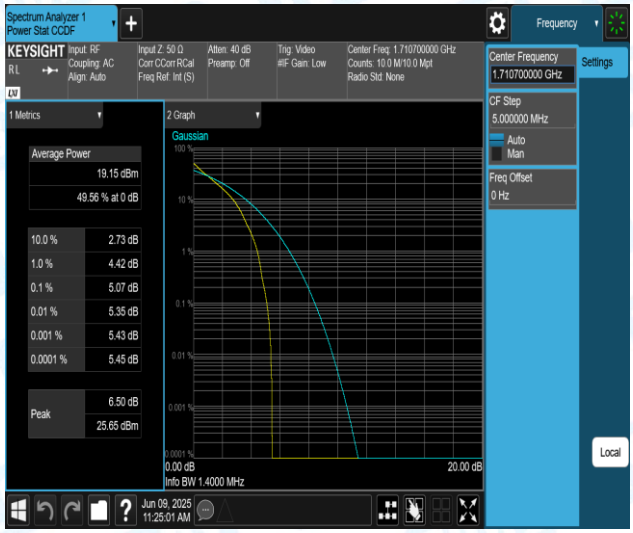
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	19957	QPSK	1	0	Low	5.06	<=13	PASS
Band4	1.4MHz	19957	16QAM	1	0	Low	5.07	<=13	PASS
Band4	1.4MHz	19957	QPSK	6	0	Low	5.06	<=13	PASS
Band4	1.4MHz	19957	16QAM	6	0	Low	5.09	<=13	PASS
Band4	1.4MHz	20175	QPSK	1	0	Low	4.94	<=13	PASS
Band4	1.4MHz	20175	16QAM	1	0	Low	4.89	<=13	PASS
Band4	1.4MHz	20175	QPSK	6	0	Low	4.88	<=13	PASS
Band4	1.4MHz	20175	16QAM	6	0	Low	4.93	<=13	PASS
Band4	1.4MHz	20393	QPSK	1	0	High	5.02	<=13	PASS
Band4	1.4MHz	20393	16QAM	1	0	High	5.01	<=13	PASS
Band4	1.4MHz	20393	QPSK	6	0	High	5.03	<=13	PASS
Band4	1.4MHz	20393	16QAM	6	0	High	5.01	<=13	PASS
Band4	3MHz	19965	QPSK	1	0	Low	4.97	<=13	PASS
Band4	3MHz	19965	16QAM	1	0	Low	4.89	<=13	PASS
Band4	3MHz	19965	QPSK	6	0	Low	4.88	<=13	PASS
Band4	3MHz	19965	16QAM	6	0	Low	4.92	<=13	PASS
Band4	3MHz	20175	QPSK	1	0	Low	4.84	<=13	PASS
Band4	3MHz	20175	16QAM	1	0	Low	4.83	<=13	PASS
Band4	3MHz	20175	QPSK	6	0	Low	4.83	<=13	PASS
Band4	3MHz	20175	16QAM	6	0	Low	4.85	<=13	PASS
Band4	3MHz	20385	QPSK	1	0	High	4.93	<=13	PASS
Band4	3MHz	20385	16QAM	1	0	High	4.92	<=13	PASS
Band4	3MHz	20385	QPSK	6	0	High	4.91	<=13	PASS
Band4	3MHz	20385	16QAM	6	0	High	4.92	<=13	PASS
Band4	5MHz	19975	QPSK	1	0	Low	4.44	<=13	PASS
Band4	5MHz	19975	16QAM	1	0	Low	4.45	<=13	PASS
Band4	5MHz	19975	QPSK	6	0	Low	4.46	<=13	PASS
Band4	5MHz	19975	16QAM	6	0	Low	4.44	<=13	PASS
Band4	5MHz	20175	QPSK	1	0	Low	4.49	<=13	PASS
Band4	5MHz	20175	16QAM	1	0	Low	4.49	<=13	PASS
Band4	5MHz	20175	QPSK	6	0	Low	4.48	<=13	PASS
Band4	5MHz	20175	16QAM	6	0	Low	4.52	<=13	PASS
Band4	5MHz	20375	QPSK	1	0	High	4.46	<=13	PASS
Band4	5MHz	20375	16QAM	1	0	High	4.45	<=13	PASS
Band4	5MHz	20375	QPSK	6	0	High	4.46	<=13	PASS
Band4	5MHz	20375	16QAM	6	0	High	4.45	<=13	PASS
Band4	10MHz	20000	QPSK	1	0	Low	4.48	<=13	PASS
Band4	10MHz	20000	16QAM	1	0	Low	4.51	<=13	PASS
Band4	10MHz	20000	QPSK	6	0	Low	4.49	<=13	PASS
Band4	10MHz	20000	16QAM	6	0	Low	4.55	<=13	PASS
Band4	10MHz	20175	QPSK	1	0	Low	4.49	<=13	PASS
Band4	10MHz	20175	16QAM	1	0	Low	4.49	<=13	PASS
Band4	10MHz	20175	QPSK	6	0	Low	4.51	<=13	PASS
Band4	10MHz	20175	16QAM	6	0	Low	4.50	<=13	PASS
Band4	10MHz	20350	QPSK	1	0	High	4.41	<=13	PASS
Band4	10MHz	20350	16QAM	1	0	High	4.36	<=13	PASS
Band4	10MHz	20350	QPSK	6	0	High	4.38	<=13	PASS
Band4	10MHz	20350	16QAM	6	0	High	4.36	<=13	PASS
Band4	15MHz	20025	QPSK	1	0	Low	3.84	<=13	PASS
Band4	15MHz	20025	16QAM	1	0	Low	3.80	<=13	PASS

Band4	15MHz	20025	QPSK	6	0	Low	3.78	<=13	PASS
Band4	15MHz	20025	16QAM	6	0	Low	3.80	<=13	PASS
Band4	15MHz	20175	QPSK	1	0	Low	3.90	<=13	PASS
Band4	15MHz	20175	16QAM	1	0	Low	3.92	<=13	PASS
Band4	15MHz	20175	QPSK	6	0	Low	3.90	<=13	PASS
Band4	15MHz	20175	16QAM	6	0	Low	3.98	<=13	PASS
Band4	15MHz	20325	QPSK	1	0	High	3.76	<=13	PASS
Band4	15MHz	20325	16QAM	1	0	High	3.77	<=13	PASS
Band4	15MHz	20325	QPSK	6	0	High	3.71	<=13	PASS
Band4	15MHz	20325	16QAM	6	0	High	3.72	<=13	PASS
Band4	20MHz	20050	QPSK	1	0	Low	3.96	<=13	PASS
Band4	20MHz	20050	16QAM	1	0	Low	3.94	<=13	PASS
Band4	20MHz	20050	QPSK	6	0	Low	3.94	<=13	PASS
Band4	20MHz	20050	16QAM	6	0	Low	3.97	<=13	PASS
Band4	20MHz	20175	QPSK	1	0	Low	3.92	<=13	PASS
Band4	20MHz	20175	16QAM	1	0	Low	3.85	<=13	PASS
Band4	20MHz	20175	QPSK	6	0	Low	3.78	<=13	PASS
Band4	20MHz	20175	16QAM	6	0	Low	3.82	<=13	PASS
Band4	20MHz	20300	QPSK	1	0	High	3.82	<=13	PASS
Band4	20MHz	20300	16QAM	1	0	High	3.76	<=13	PASS
Band4	20MHz	20300	QPSK	6	0	High	3.75	<=13	PASS
Band4	20MHz	20300	16QAM	6	0	High	3.78	<=13	PASS

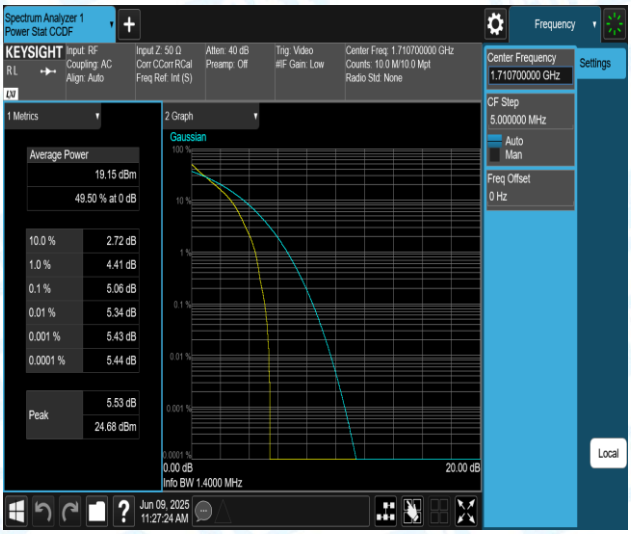
Test Graphs



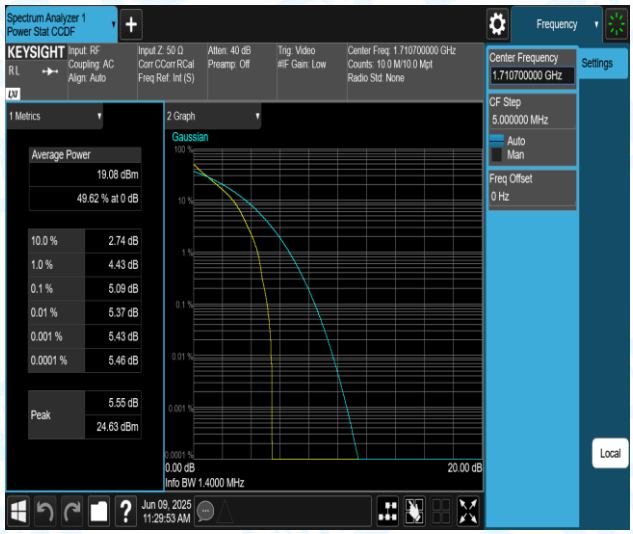
Band4-1.4MHz-QPSK-19957-PASS



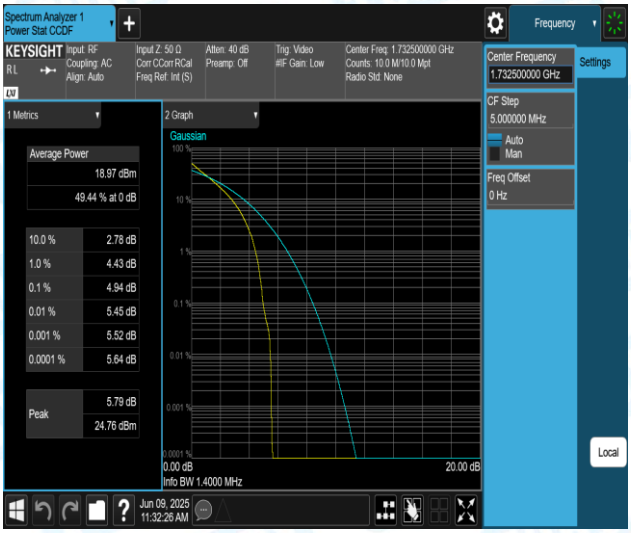
Band4-1.4MHz-16QAM-19957-PASS



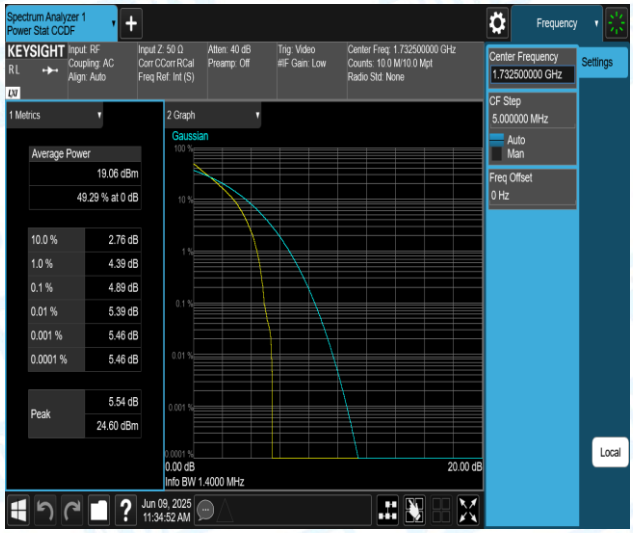
Band4-1.4MHz-QPSK-19957-PASS



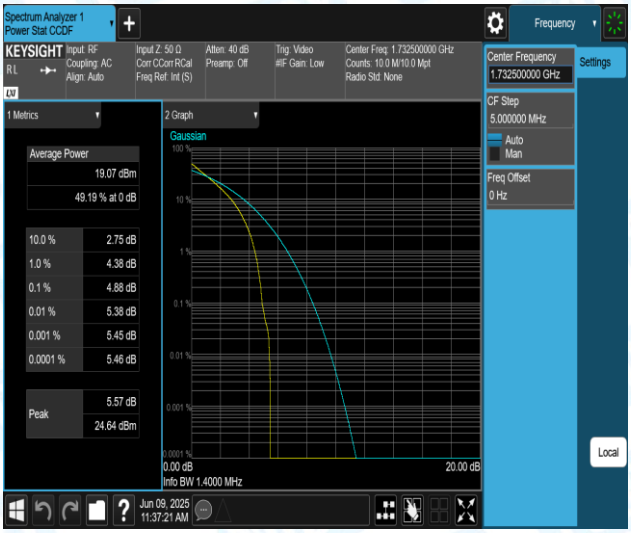
Band4-1.4MHz-16QAM-19957-PASS



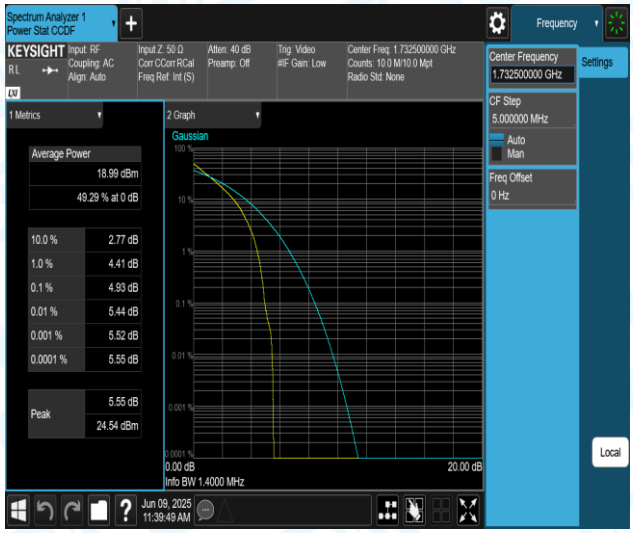
Band4-1.4MHz-QPSK-20175-PASS



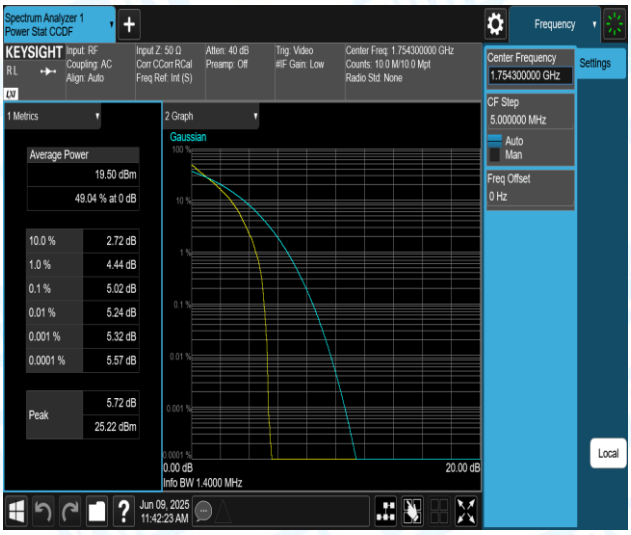
Band4-1.4MHz-16QAM-20175-PASS



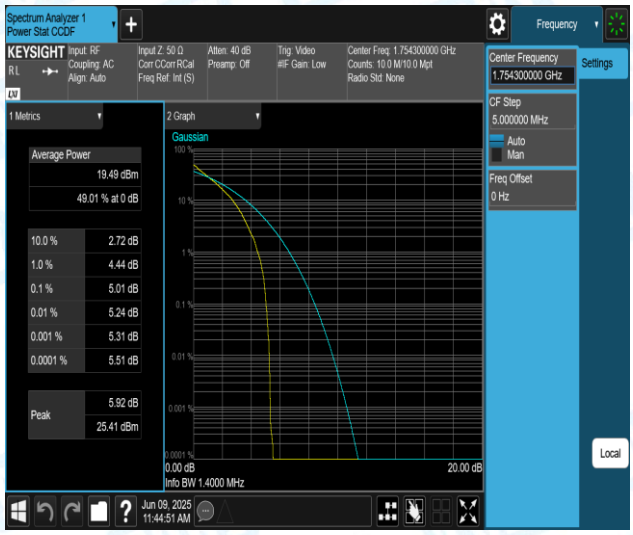
Band4-1.4MHz-QPSK-20175-PASS



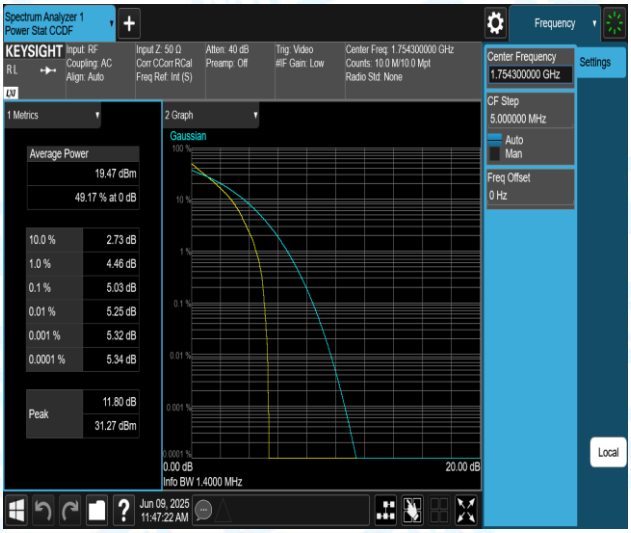
Band4-1.4MHz-16QAM-20175-PASS



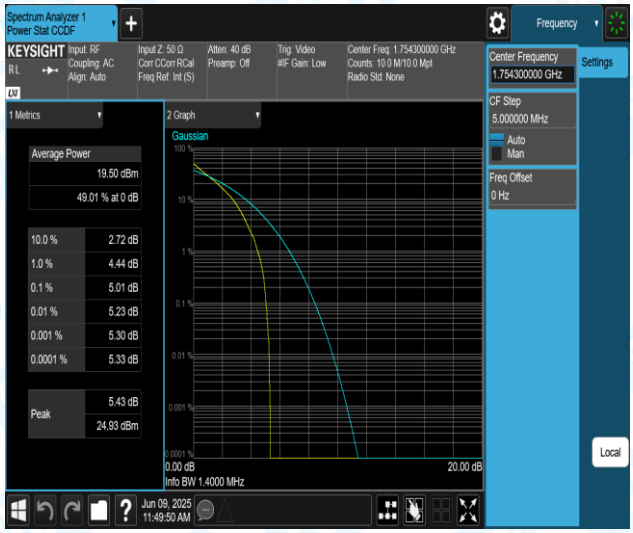
Band4-1.4MHz-QPSK-20393-PASS



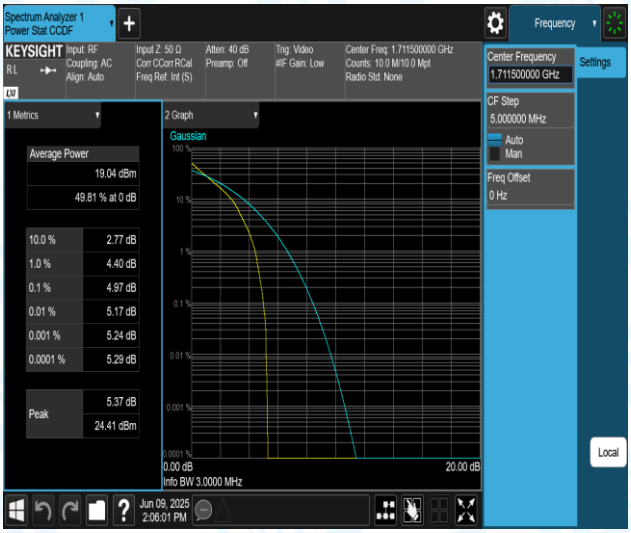
Band4-1.4MHz-16QAM-20393-PASS



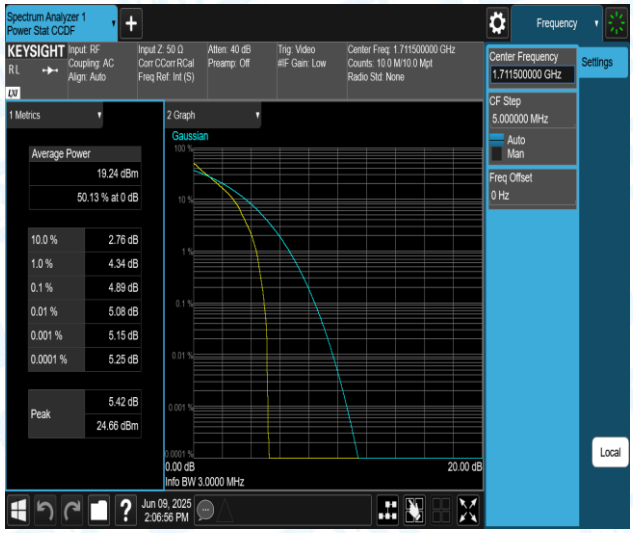
Band4-1.4MHz-QPSK-20393-PASS



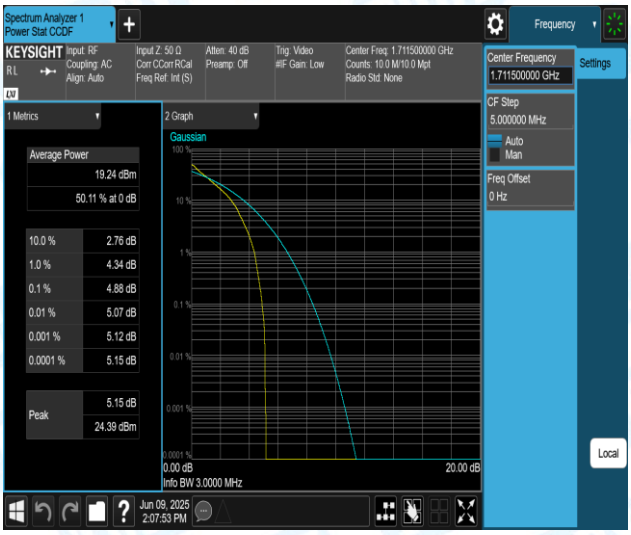
Band4-1.4MHz-16QAM-20393-PASS



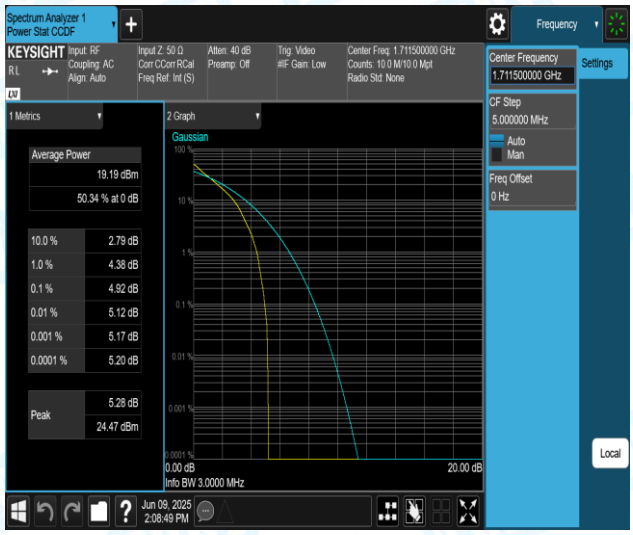
Band4-3MHz-QPSK-19965-PASS



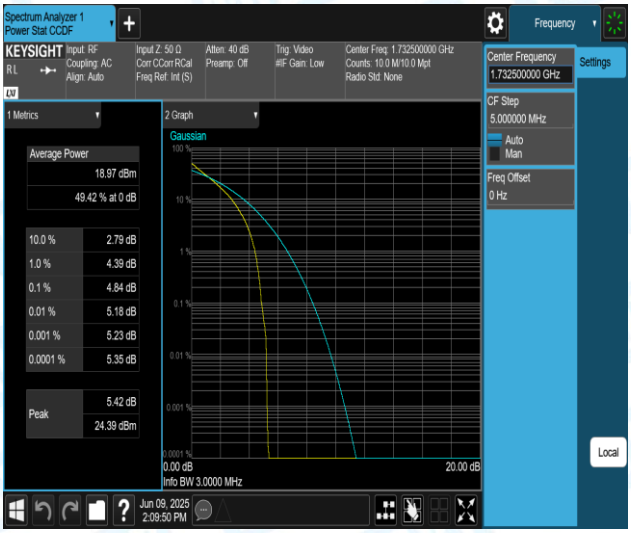
Band4-3MHz-16QAM-19965-PASS



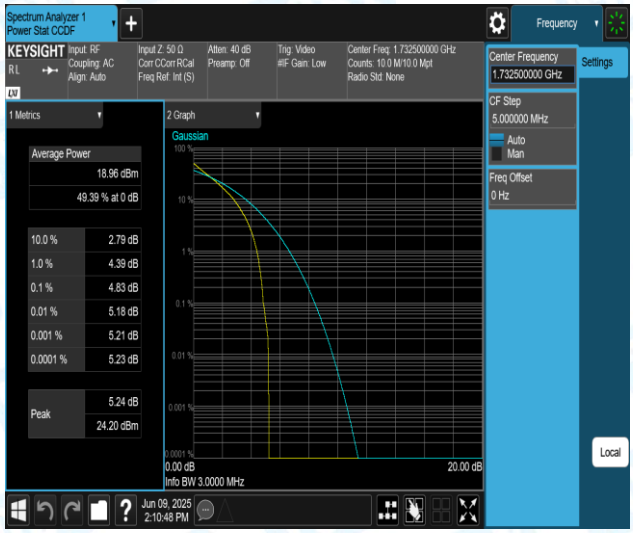
Band4-3MHz-QPSK-19965-PASS



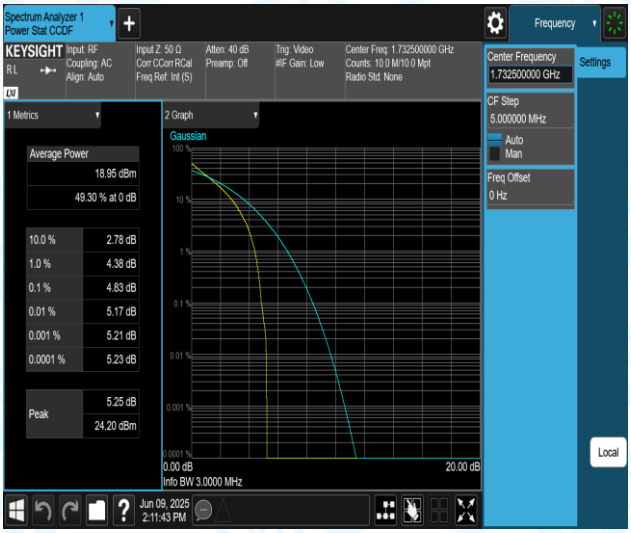
Band4-3MHz-16QAM-19965-PASS



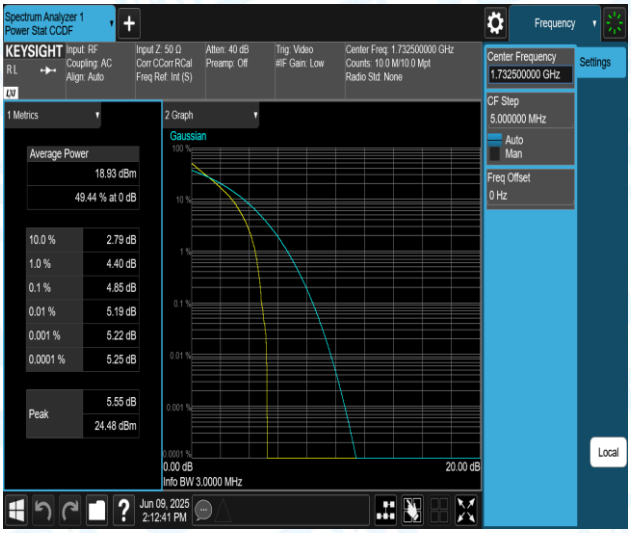
Band4-3MHz-QPSK-20175-PASS



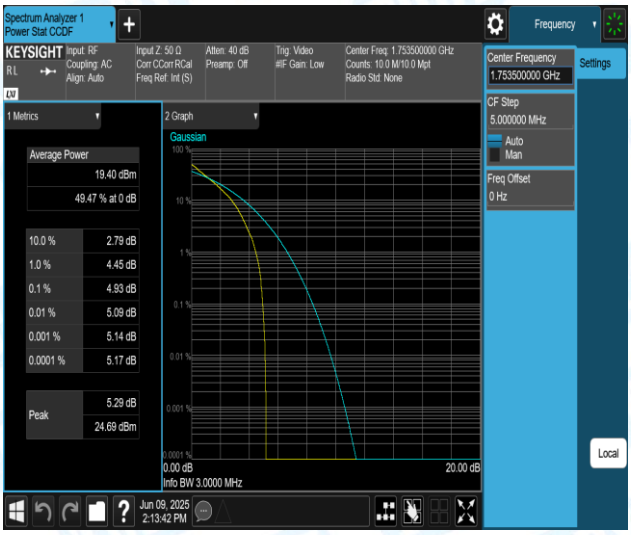
Band4-3MHz-16QAM-20175-PASS



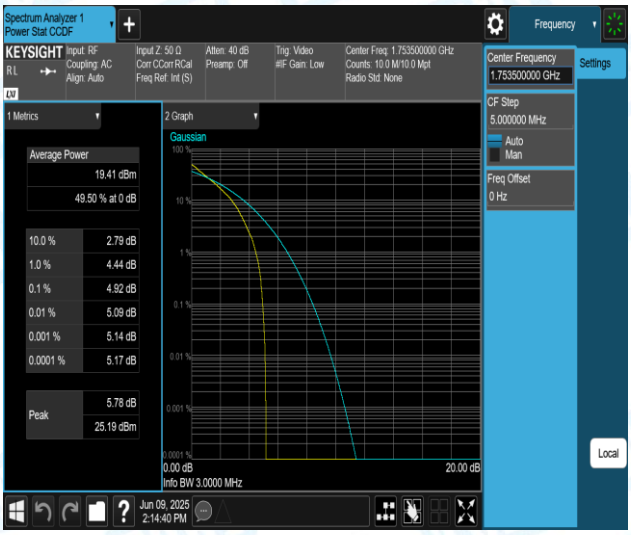
Band4-3MHz-QPSK-20175-PASS



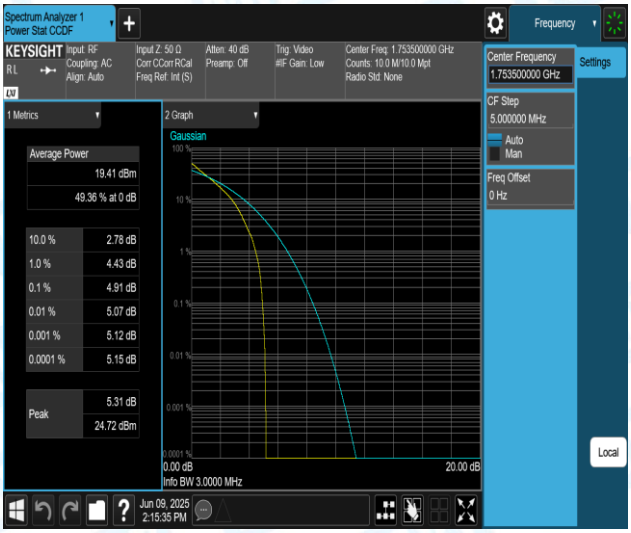
Band4-3MHz-16QAM-20175-PASS



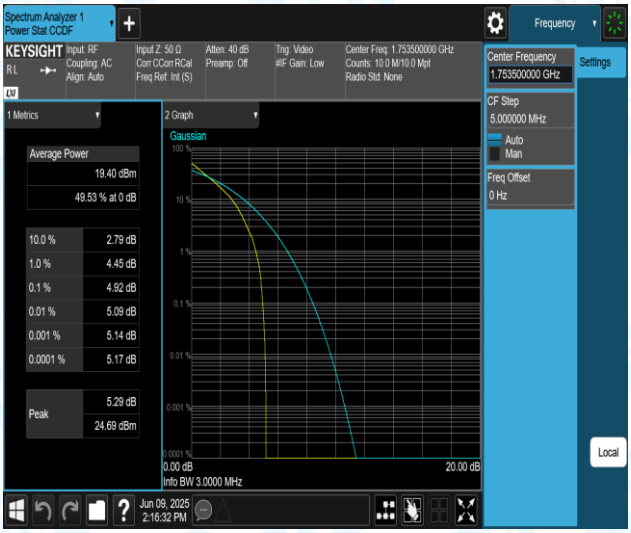
Band4-3MHz-QPSK-20385-PASS



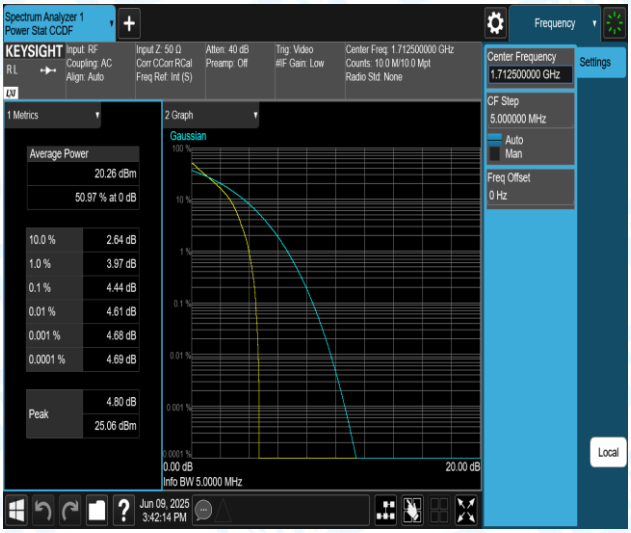
Band4-3MHz-16QAM-20385-PASS



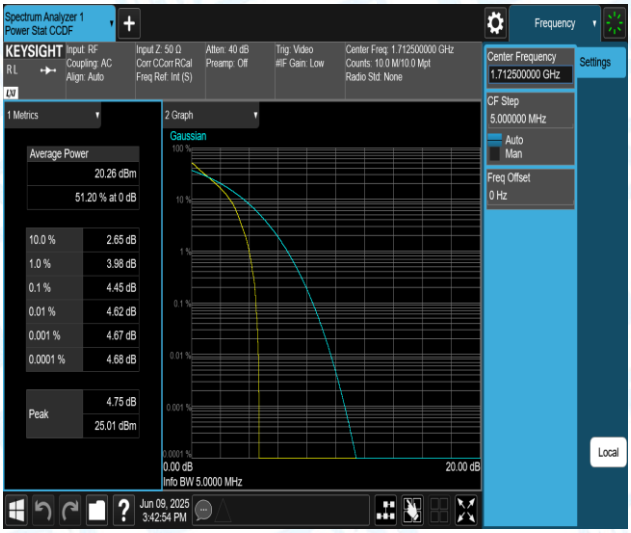
Band4-3MHz-QPSK-20385-PASS



Band4-3MHz-16QAM-20385-PASS



B a n d 4 - 5 M H z - Q P S K - 1 9 7 5 - P A S S



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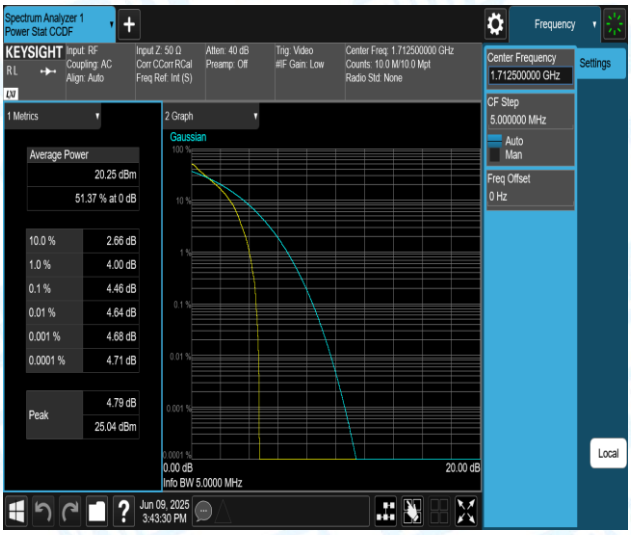

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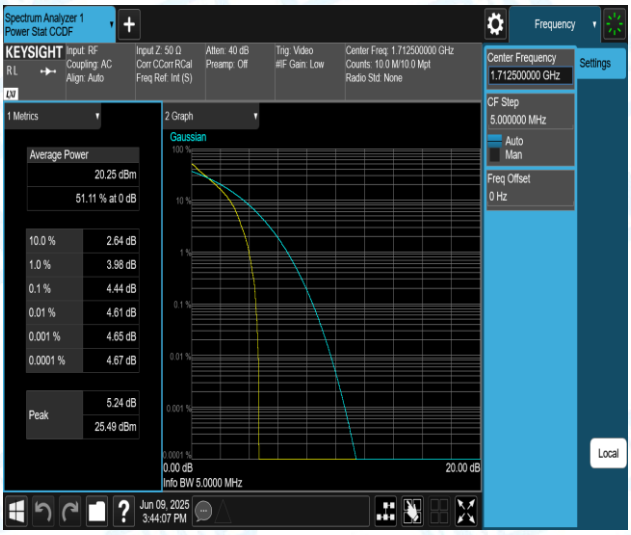

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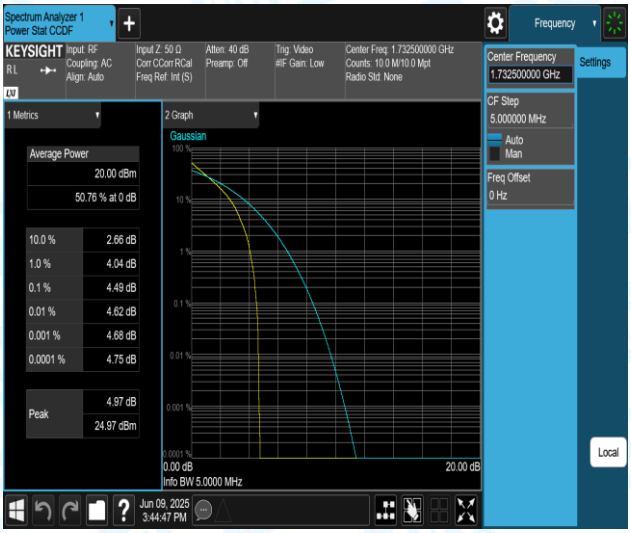

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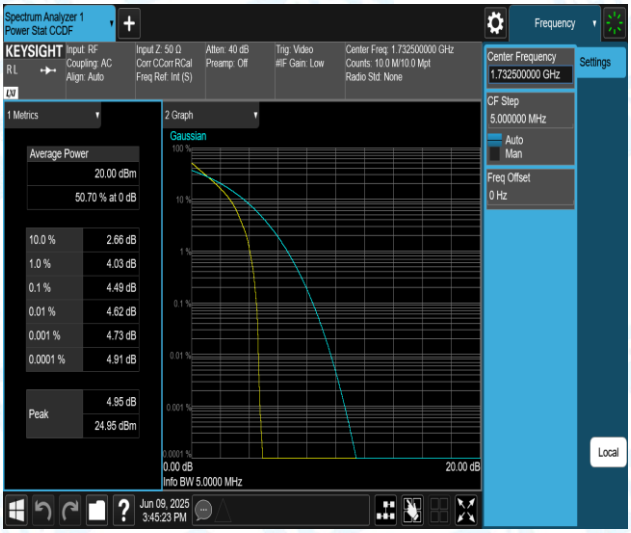

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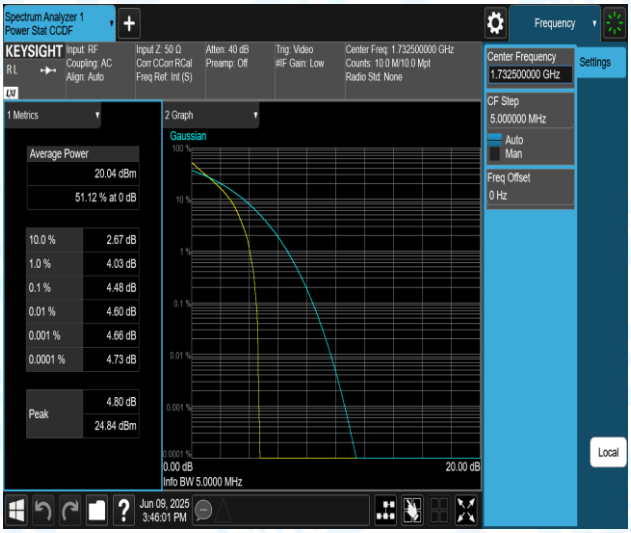
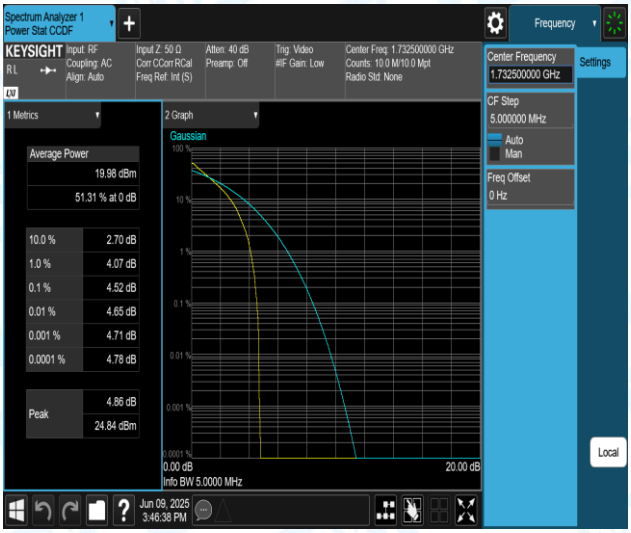
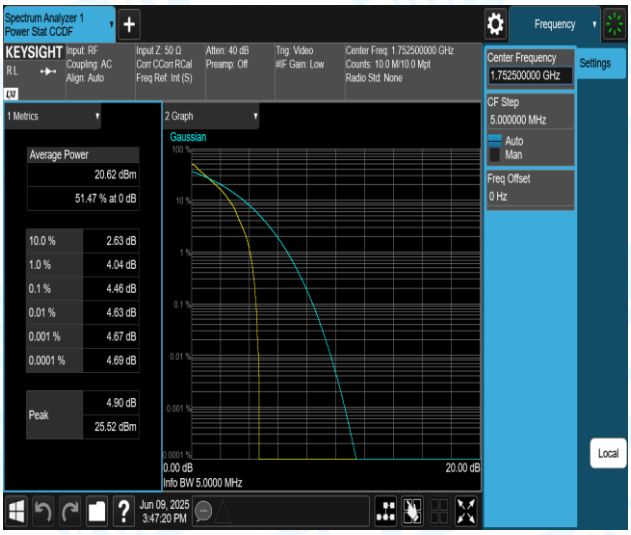


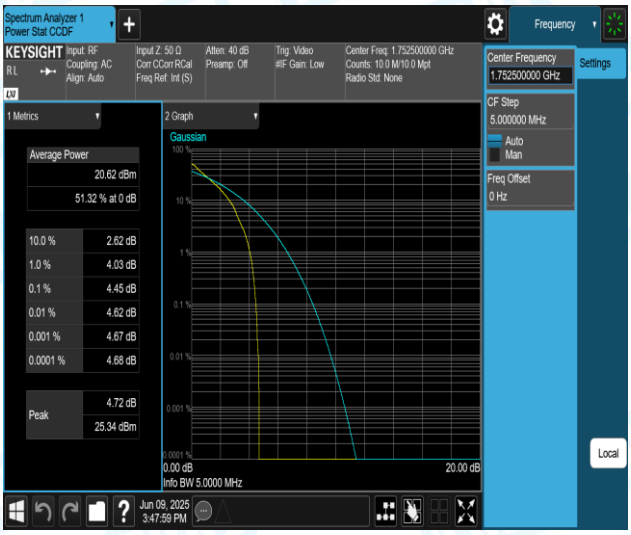
Band4-5MHz-QPSK-20175-PASS



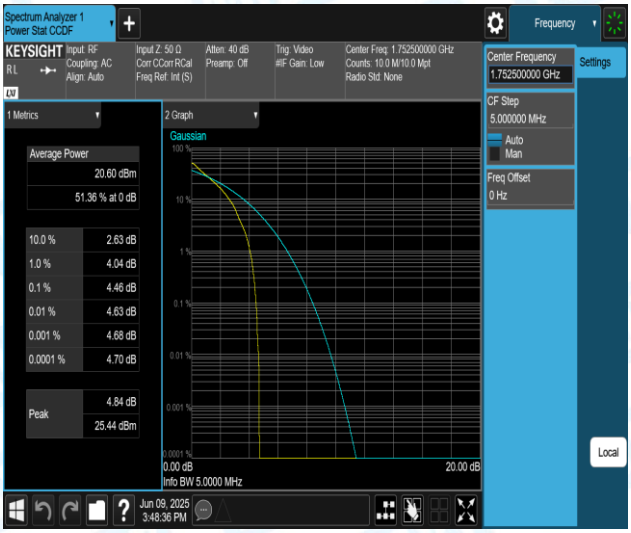
Band4-5MHz-16QAM-20175-PASS



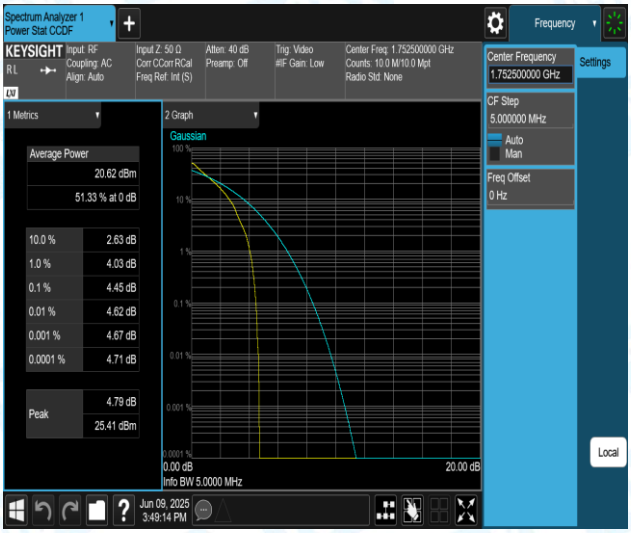
Band4-5MHz-QPSK-20375-PASS



Band4-5MHz-16QAM-20375-PASS



Band4-5MHz-QPSK-20375-PASS



Band4-5MHz-16QAM-20375-PASS