

LTE Test Data

General Description of EUT	
Product Name:	Smart POS Payment Terminal
Test Model:	CM30
Sample ID:	202311-0170-7-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 24V
Test Engineer:	Yan zhen ming
Note: For a more detailed features description, please refer to the report TBR-C-202311-0170-86 . The report only show the worst case data.	

Contents

LTE Test Data	1
1. Conducted Power Output Data	3
Test Result	3
2. Peak-to-Average Ratio(CCDF).....	6
Test Result	6
Test Graphs.....	7
3. 26dB Bandwidth and Occupied Bandwidth	11
Test Result	11
Test Graphs.....	12
4. Band Edge	14
Test Result	14
Test Graphs.....	15
5. Conducted Spurious Emission.....	18
Test Result	18
Test Graphs.....	20
6. Frequency Stability	30
Test Result	30

1. Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	21.83	PASS
Band17	5MHz	16QAM	23755	1RB#0	20.78	PASS
Band17	5MHz	QPSK	23755	1RB#12	21.99	PASS
Band17	5MHz	16QAM	23755	1RB#12	20.88	PASS
Band17	5MHz	QPSK	23755	1RB#24	21.91	PASS
Band17	5MHz	16QAM	23755	1RB#24	20.84	PASS
Band17	5MHz	QPSK	23755	12RB#0	20.99	PASS
Band17	5MHz	16QAM	23755	12RB#0	19.95	PASS
Band17	5MHz	QPSK	23755	12RB#6	20.90	PASS
Band17	5MHz	16QAM	23755	12RB#6	19.94	PASS
Band17	5MHz	QPSK	23755	12RB#13	20.94	PASS
Band17	5MHz	16QAM	23755	12RB#13	19.97	PASS
Band17	5MHz	QPSK	23755	25RB#0	20.94	PASS
Band17	5MHz	16QAM	23755	25RB#0	20.03	PASS
Band17	5MHz	QPSK	23790	1RB#0	21.84	PASS
Band17	5MHz	16QAM	23790	1RB#0	20.96	PASS
Band17	5MHz	QPSK	23790	1RB#12	21.90	PASS
Band17	5MHz	16QAM	23790	1RB#12	21.01	PASS
Band17	5MHz	QPSK	23790	1RB#24	21.75	PASS
Band17	5MHz	16QAM	23790	1RB#24	20.86	PASS
Band17	5MHz	QPSK	23790	12RB#0	20.79	PASS
Band17	5MHz	16QAM	23790	12RB#0	19.91	PASS
Band17	5MHz	QPSK	23790	12RB#6	20.85	PASS
Band17	5MHz	16QAM	23790	12RB#6	19.93	PASS
Band17	5MHz	QPSK	23790	12RB#13	20.99	PASS
Band17	5MHz	16QAM	23790	12RB#13	20.09	PASS
Band17	5MHz	QPSK	23790	25RB#0	21.01	PASS
Band17	5MHz	16QAM	23790	25RB#0	20.05	PASS
Band17	5MHz	QPSK	23825	1RB#0	21.85	PASS
Band17	5MHz	16QAM	23825	1RB#0	20.80	PASS
Band17	5MHz	QPSK	23825	1RB#12	21.89	PASS
Band17	5MHz	16QAM	23825	1RB#12	20.84	PASS
Band17	5MHz	QPSK	23825	1RB#24	21.83	PASS
Band17	5MHz	16QAM	23825	1RB#24	20.75	PASS
Band17	5MHz	QPSK	23825	12RB#0	20.86	PASS
Band17	5MHz	16QAM	23825	12RB#0	19.93	PASS
Band17	5MHz	QPSK	23825	12RB#6	20.83	PASS
Band17	5MHz	16QAM	23825	12RB#6	19.96	PASS
Band17	5MHz	QPSK	23825	12RB#13	20.77	PASS

Band17	5MHz	16QAM	23825	12RB#13	19.83	PASS
Band17	5MHz	QPSK	23825	25RB#0	20.89	PASS
Band17	5MHz	16QAM	23825	25RB#0	19.90	PASS
Band17	10MHz	QPSK	23780	1RB#0	21.88	PASS
Band17	10MHz	16QAM	23780	1RB#0	20.92	PASS
Band17	10MHz	QPSK	23780	1RB#24	22.06	PASS
Band17	10MHz	16QAM	23780	1RB#24	21.12	PASS
Band17	10MHz	QPSK	23780	1RB#49	21.89	PASS
Band17	10MHz	16QAM	23780	1RB#49	20.86	PASS
Band17	10MHz	QPSK	23780	25RB#0	21.03	PASS
Band17	10MHz	16QAM	23780	25RB#0	20.10	PASS
Band17	10MHz	QPSK	23780	25RB#12	20.99	PASS
Band17	10MHz	16QAM	23780	25RB#12	20.07	PASS
Band17	10MHz	QPSK	23780	25RB#25	21.24	PASS
Band17	10MHz	16QAM	23780	25RB#25	20.21	PASS
Band17	10MHz	QPSK	23780	50RB#0	21.09	PASS
Band17	10MHz	16QAM	23780	50RB#0	20.15	PASS
Band17	10MHz	QPSK	23790	1RB#0	21.94	PASS
Band17	10MHz	16QAM	23790	1RB#0	20.82	PASS
Band17	10MHz	QPSK	23790	1RB#24	22.14	PASS
Band17	10MHz	16QAM	23790	1RB#24	20.99	PASS
Band17	10MHz	QPSK	23790	1RB#49	21.90	PASS
Band17	10MHz	16QAM	23790	1RB#49	20.78	PASS
Band17	10MHz	QPSK	23790	25RB#0	20.98	PASS
Band17	10MHz	16QAM	23790	25RB#0	20.02	PASS
Band17	10MHz	QPSK	23790	25RB#12	20.95	PASS
Band17	10MHz	16QAM	23790	25RB#12	20.07	PASS
Band17	10MHz	QPSK	23790	25RB#25	20.99	PASS
Band17	10MHz	16QAM	23790	25RB#25	20.10	PASS
Band17	10MHz	QPSK	23790	50RB#0	20.99	PASS
Band17	10MHz	16QAM	23790	50RB#0	20.09	PASS
Band17	10MHz	QPSK	23800	1RB#0	21.95	PASS
Band17	10MHz	16QAM	23800	1RB#0	20.72	PASS
Band17	10MHz	QPSK	23800	1RB#24	22.10	PASS
Band17	10MHz	16QAM	23800	1RB#24	20.91	PASS
Band17	10MHz	QPSK	23800	1RB#49	21.97	PASS
Band17	10MHz	16QAM	23800	1RB#49	20.73	PASS
Band17	10MHz	QPSK	23800	25RB#0	20.91	PASS
Band17	10MHz	16QAM	23800	25RB#0	20.03	PASS
Band17	10MHz	QPSK	23800	25RB#12	20.88	PASS
Band17	10MHz	16QAM	23800	25RB#12	20.03	PASS
Band17	10MHz	QPSK	23800	25RB#25	20.91	PASS
Band17	10MHz	16QAM	23800	25RB#25	20.03	PASS
Band17	10MHz	QPSK	23800	50RB#0	20.88	PASS



Band17	10MHz	16QAM	23800	50RB#0	19.99	PASS
--------	-------	-------	-------	--------	-------	------

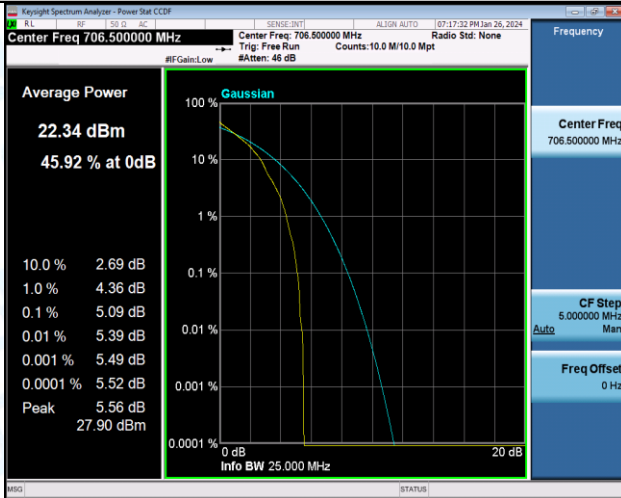
2. Peak-to-Average Ratio(CCDF)

Test Result

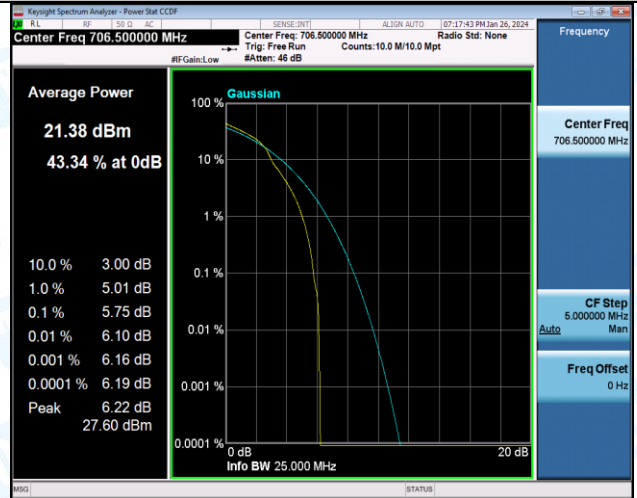
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	5.09	13	PASS
Band17	5MHz	16QAM	23755	1RB#0	5.75	13	PASS
Band17	5MHz	QPSK	23755	25RB#0	5.78	13	PASS
Band17	5MHz	16QAM	23755	25RB#0	6.53	13	PASS
Band17	5MHz	QPSK	23790	1RB#0	5.53	13	PASS
Band17	5MHz	16QAM	23790	1RB#0	6.08	13	PASS
Band17	5MHz	QPSK	23790	25RB#0	5.84	13	PASS
Band17	5MHz	16QAM	23790	25RB#0	6.56	13	PASS
Band17	5MHz	QPSK	23825	1RB#0	5.27	13	PASS
Band17	5MHz	16QAM	23825	1RB#0	5.99	13	PASS
Band17	5MHz	QPSK	23825	25RB#0	5.60	13	PASS
Band17	5MHz	16QAM	23825	25RB#0	6.37	13	PASS
Band17	10MHz	QPSK	23780	1RB#0	5.03	13	PASS
Band17	10MHz	16QAM	23780	1RB#0	5.94	13	PASS
Band17	10MHz	QPSK	23780	50RB#0	5.74	13	PASS
Band17	10MHz	16QAM	23780	50RB#0	6.52	13	PASS
Band17	10MHz	QPSK	23790	1RB#0	5.11	13	PASS
Band17	10MHz	16QAM	23790	1RB#0	5.95	13	PASS
Band17	10MHz	QPSK	23790	50RB#0	5.71	13	PASS
Band17	10MHz	16QAM	23790	50RB#0	6.51	13	PASS
Band17	10MHz	QPSK	23800	1RB#0	5.24	13	PASS
Band17	10MHz	16QAM	23800	1RB#0	6.05	13	PASS
Band17	10MHz	QPSK	23800	50RB#0	5.63	13	PASS
Band17	10MHz	16QAM	23800	50RB#0	6.49	13	PASS

Test Graphs

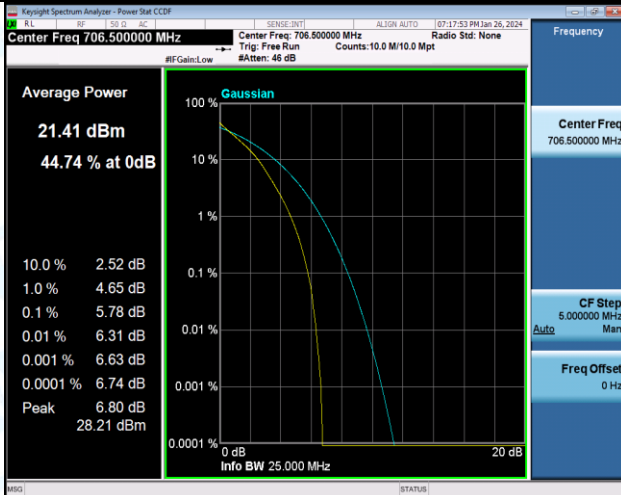
Band17-5MHz-QPSK-23755-1RB#0-PASS



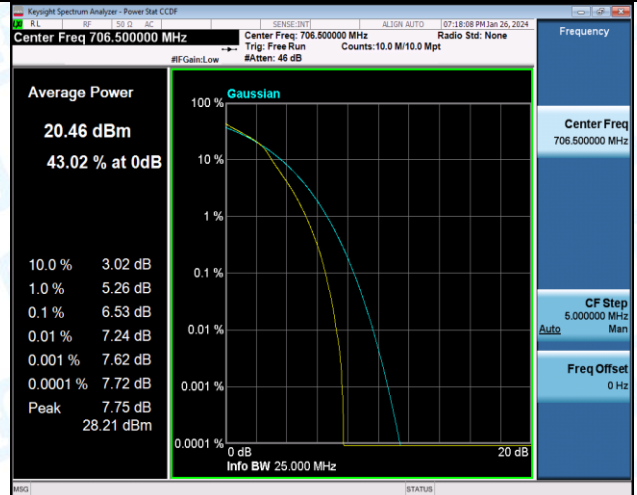
Band17-5MHz-16QAM-23755-1RB#0-PASS



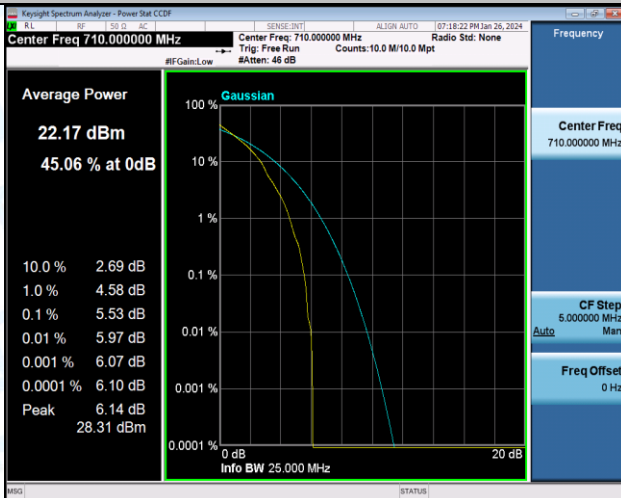
Band17-5MHz-QPSK-23755-25RB#0-PASS



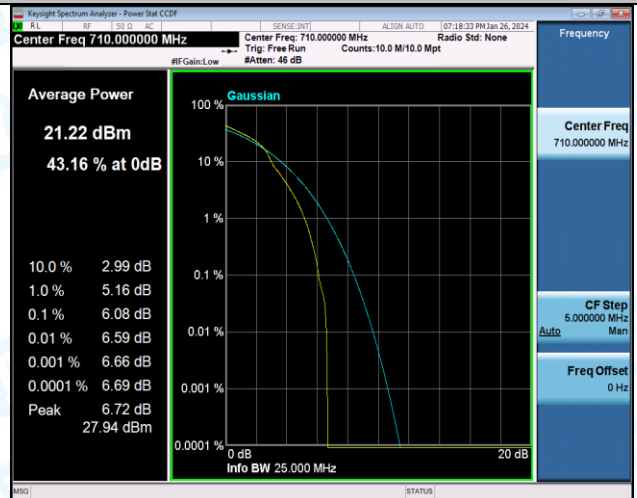
Band17-5MHz-16QAM-23755-25RB#0-PASS



Band17-5MHz-QPSK-23790-1RB#0-PASS

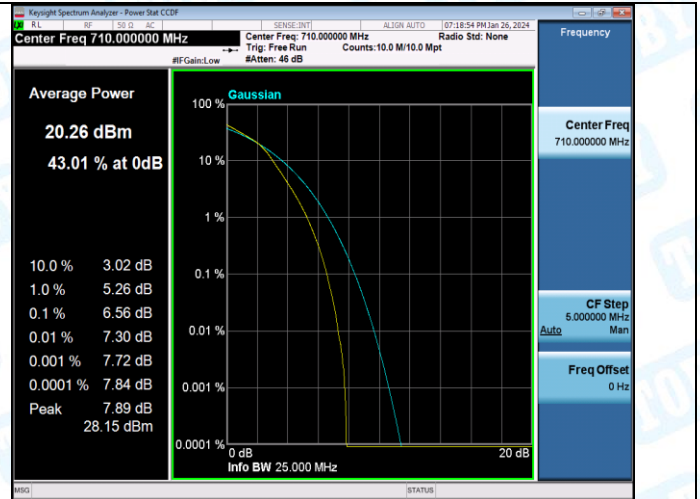
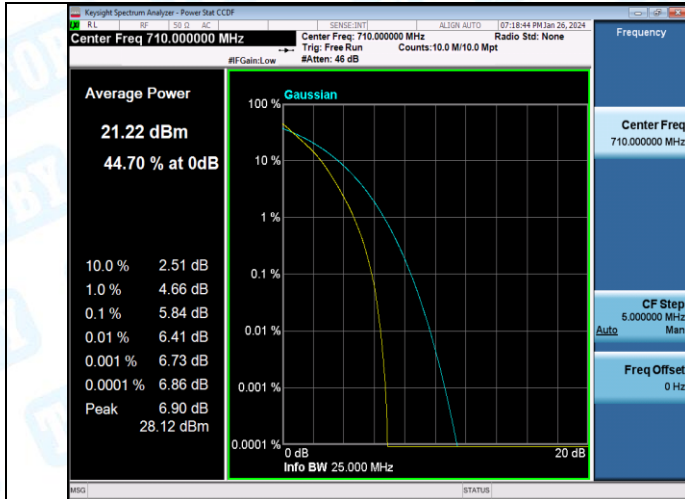


Band17-5MHz-16QAM-23790-1RB#0-PASS



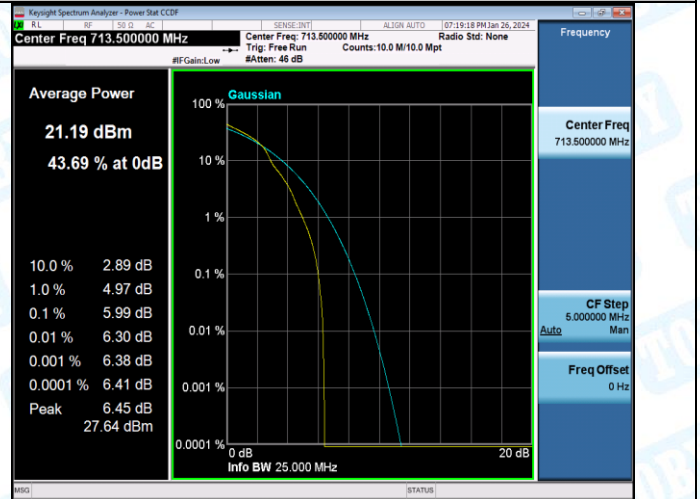
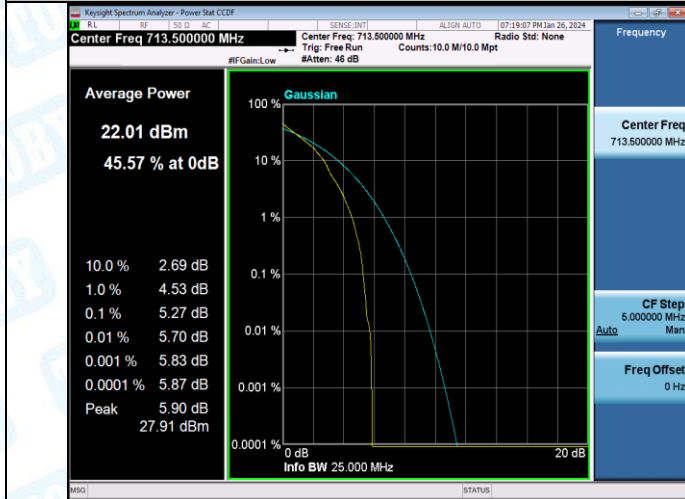
Band17-5MHz-QPSK-23790-25RB#0-PASS

Band17-5MHz-16QAM-23790-25RB#0-PASS



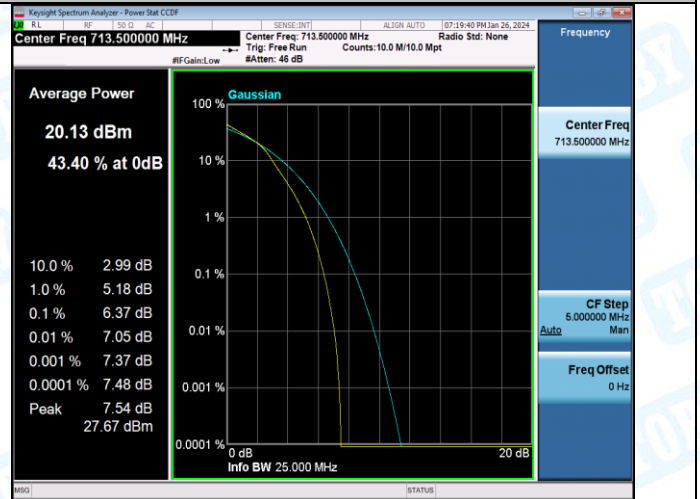
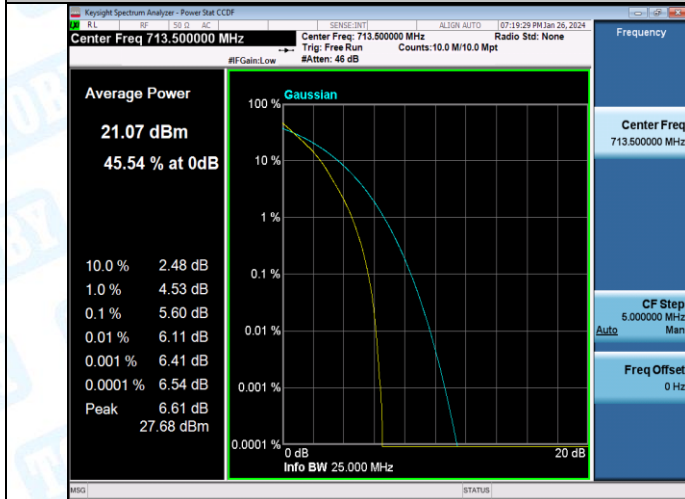
Band17-5MHz-QPSK-23825-1RB#0-PASS

Band17-5MHz-16QAM-23825-1RB#0-PASS



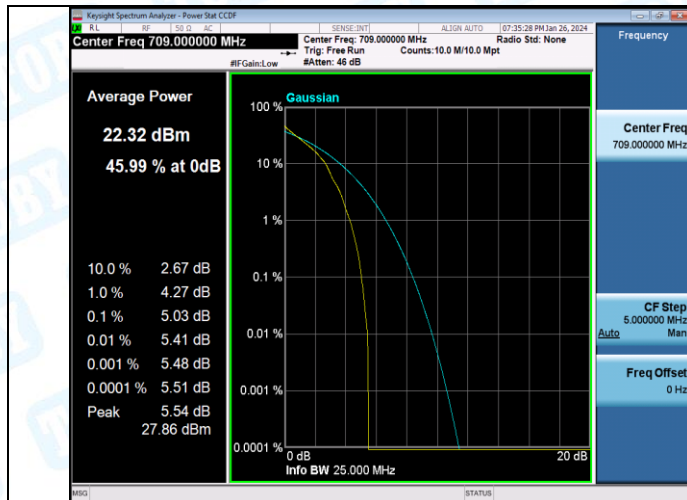
Band17-5MHz-QPSK-23825-25RB#0-PASS

Band17-5MHz-16QAM-23825-25RB#0-PASS

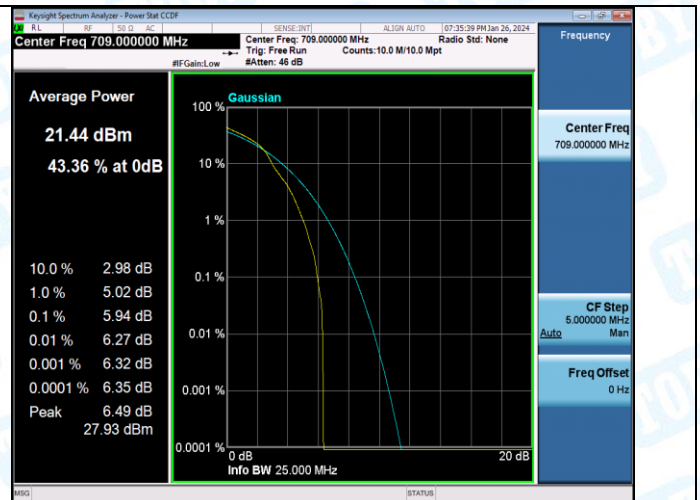


Band17-10MHz-QPSK-23780-1RB#0-PASS

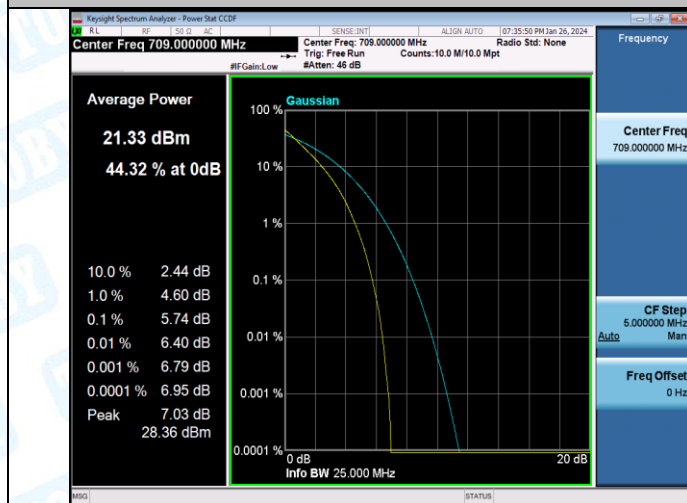
Band17-10MHz-16QAM-23780-1RB#0-PASS



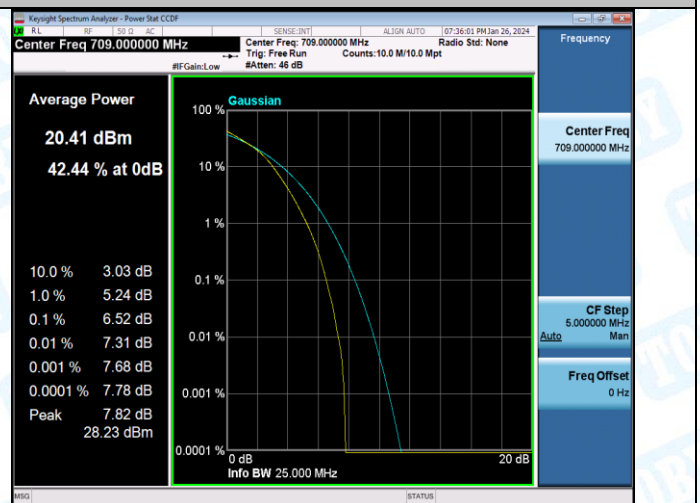
Band17-10MHz-QPSK-23780-50RB#0-PASS



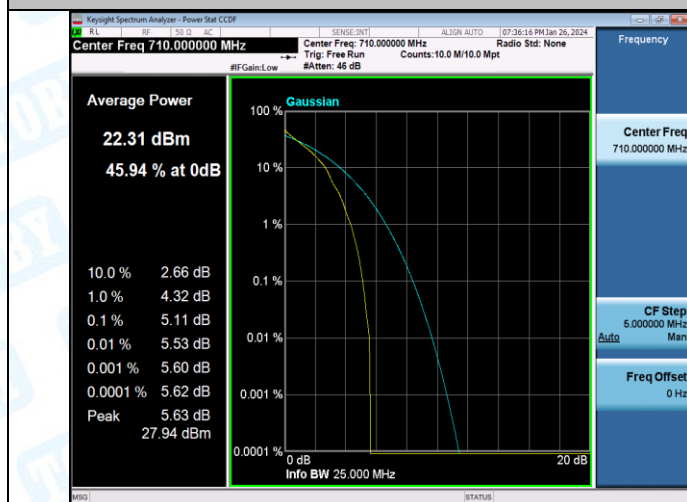
Band17-10MHz-16QAM-23780-50RB#0-PASS



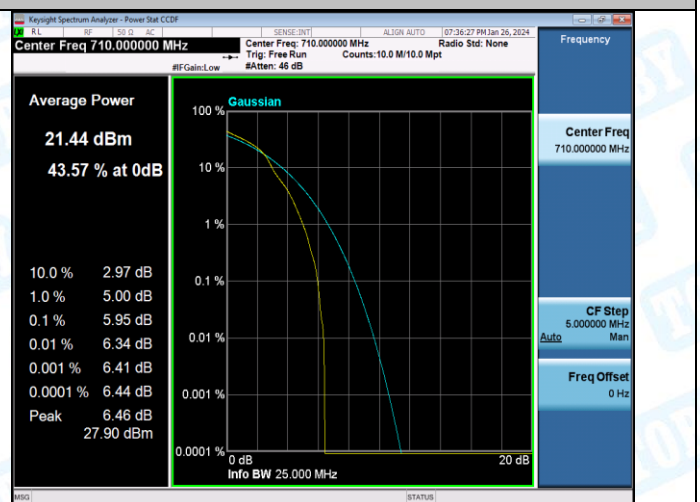
Band17-10MHz-QPSK-23790-1RB#0-PASS



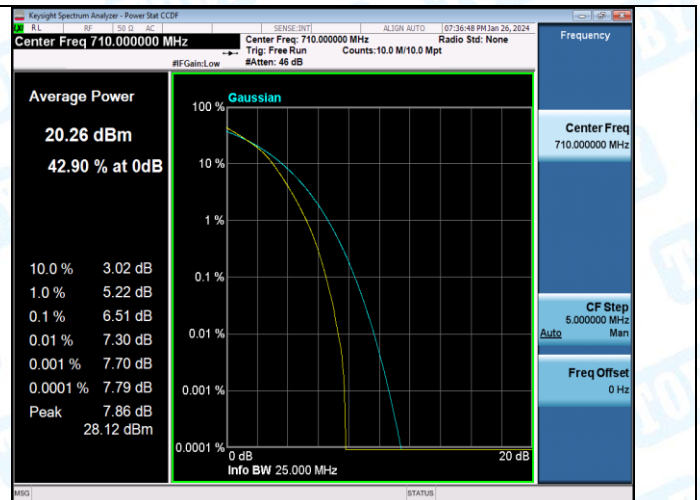
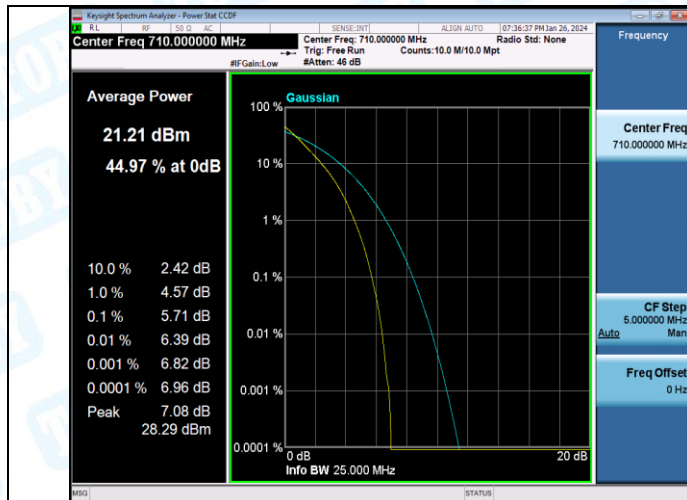
Band17-10MHz-16QAM-23790-1RB#0-PASS



Band17-10MHz-QPSK-23790-50RB#0-PASS

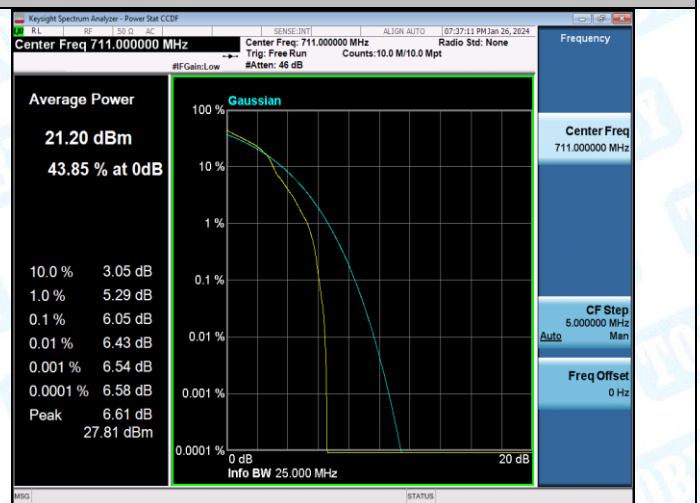
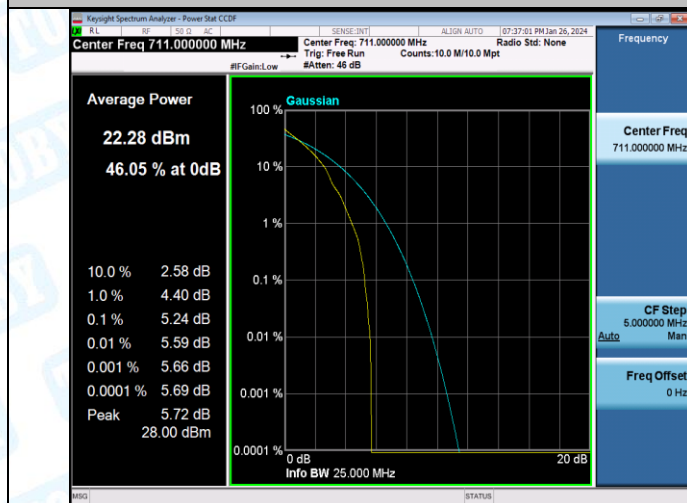


Band17-10MHz-16QAM-23790-50RB#0-PASS



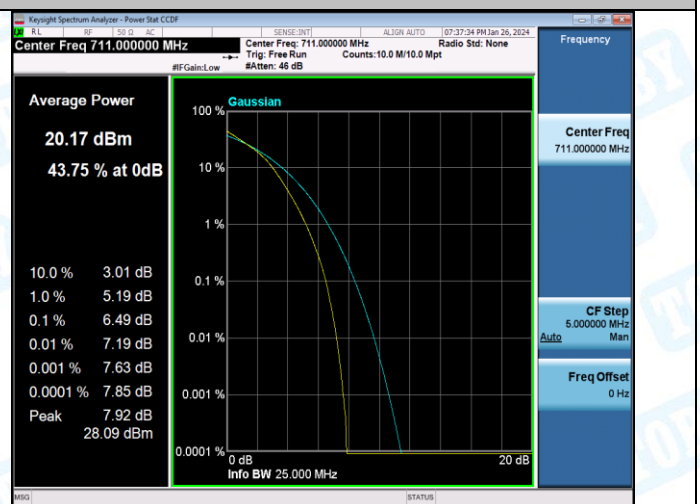
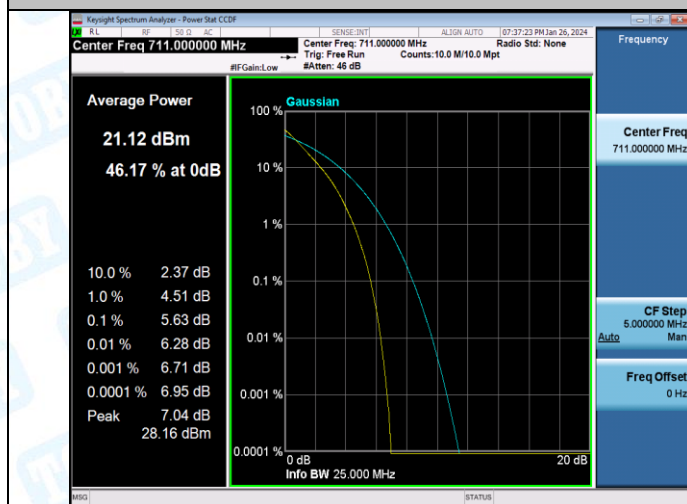
Band17-10MHz-QPSK-23800-1RB#0-PASS

Band17-10MHz-16QAM-23800-1RB#0-PASS



Band17-10MHz-QPSK-23800-50RB#0-PASS

Band17-10MHz-16QAM-23800-50RB#0-PASS



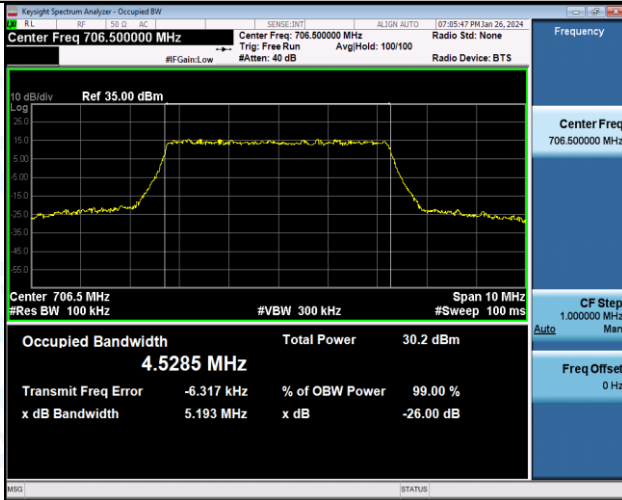
3. 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	4.5285	5.193	PASS
Band17	5MHz	16QAM	23755	25RB#0	4.5250	5.141	PASS
Band17	5MHz	QPSK	23790	25RB#0	4.5293	5.173	PASS
Band17	5MHz	16QAM	23790	25RB#0	4.5236	5.129	PASS
Band17	5MHz	QPSK	23825	25RB#0	4.5030	5.104	PASS
Band17	5MHz	16QAM	23825	25RB#0	4.5167	5.201	PASS
Band17	10MHz	QPSK	23780	50RB#0	9.0256	10.16	PASS
Band17	10MHz	16QAM	23780	50RB#0	9.0144	10.02	PASS
Band17	10MHz	QPSK	23790	50RB#0	9.0040	10.09	PASS
Band17	10MHz	16QAM	23790	50RB#0	8.9890	9.994	PASS
Band17	10MHz	QPSK	23800	50RB#0	8.9847	9.997	PASS
Band17	10MHz	16QAM	23800	50RB#0	8.9853	10.04	PASS

Test Graphs

Band17-5MHz-QPSK-23755-25RB#0-PASS



Band17-5MHz-16QAM-23755-25RB#0-PASS



Band17-5MHz-QPSK-23790-25RB#0-PASS



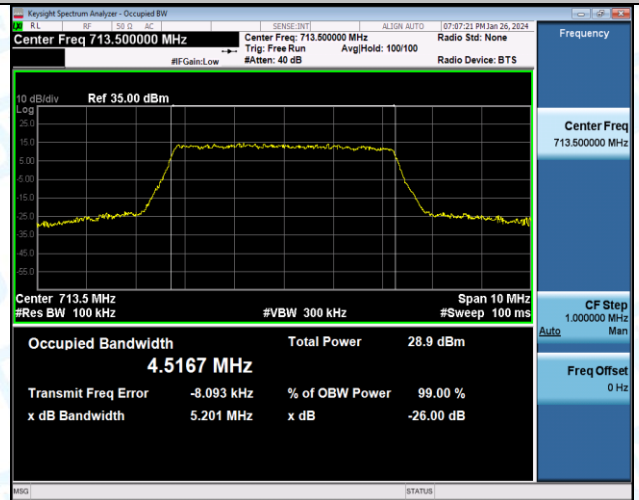
Band17-5MHz-16QAM-23790-25RB#0-PASS



Band17-5MHz-QPSK-23825-25RB#0-PASS

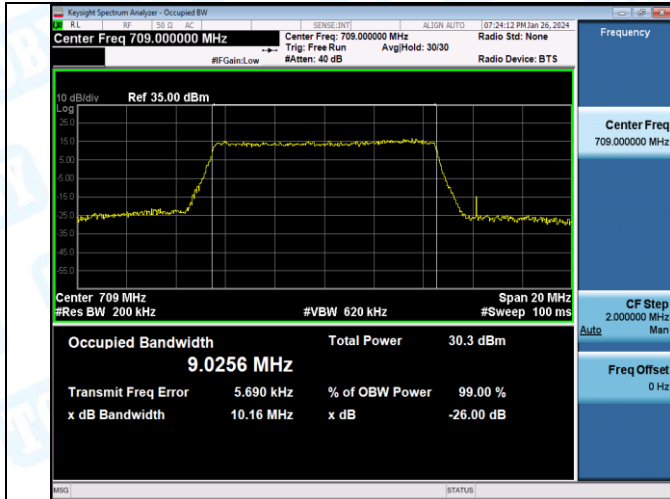


Band17-5MHz-16QAM-23825-25RB#0-PASS

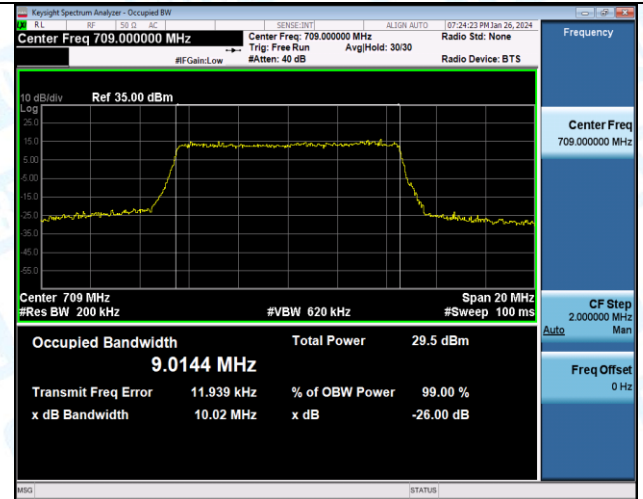


Band17-10MHz-QPSK-23780-50RB#0-PASS

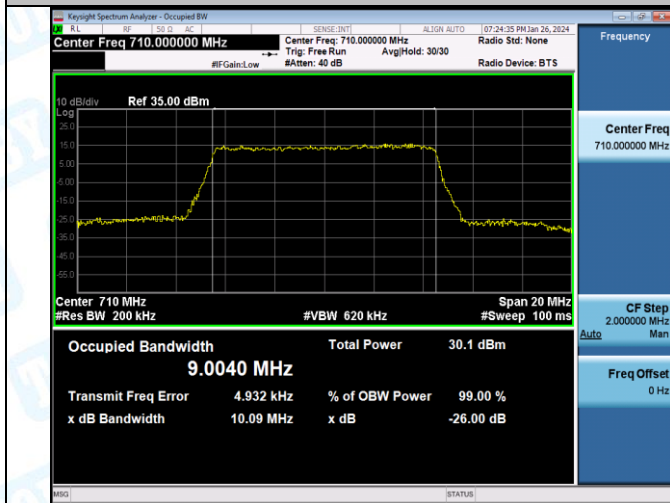
Band17-10MHz-16QAM-23780-50RB#0-PASS



Band17-10MHz-QPSK-23790-50RB#0-PASS



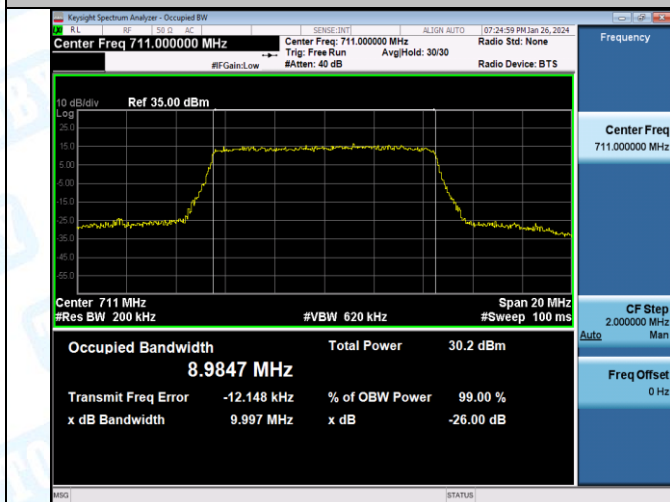
Band17-10MHz-16QAM-23790-50RB#0-PASS



Band17-10MHz-QPSK-23800-50RB#0-PASS



Band17-10MHz-16QAM-23800-50RB#0-PASS



4. Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Level_dBm	Margin	Verdict
Band17	5MHz	QPSK	23755	1RB#0	-21.84	3.64	PASS
Band17	5MHz	16QAM	23755	1RB#0	-22.42	4.22	PASS
Band17	5MHz	QPSK	23755	25RB#0	-31.44	13.24	PASS
Band17	5MHz	16QAM	23755	25RB#0	-31.70	13.50	PASS
Band17	5MHz	QPSK	23825	1RB#0	-52.23	34.03	PASS
Band17	5MHz	16QAM	23825	1RB#0	-52.59	34.39	PASS
Band17	5MHz	QPSK	23825	25RB#0	-33.76	15.56	PASS
Band17	5MHz	16QAM	23825	25RB#0	-33.73	15.53	PASS
Band17	10MHz	QPSK	23780	1RB#0	-25.70	7.50	PASS
Band17	10MHz	16QAM	23780	1RB#0	-26.50	8.30	PASS
Band17	10MHz	QPSK	23780	50RB#0	-37.49	19.29	PASS
Band17	10MHz	16QAM	23780	50RB#0	-37.84	19.64	PASS
Band17	10MHz	QPSK	23800	1RB#0	-53.33	35.13	PASS
Band17	10MHz	16QAM	23800	1RB#0	-53.43	35.23	PASS
Band17	10MHz	QPSK	23800	50RB#0	-39.18	20.98	PASS
Band17	10MHz	16QAM	23800	50RB#0	-38.98	20.78	PASS