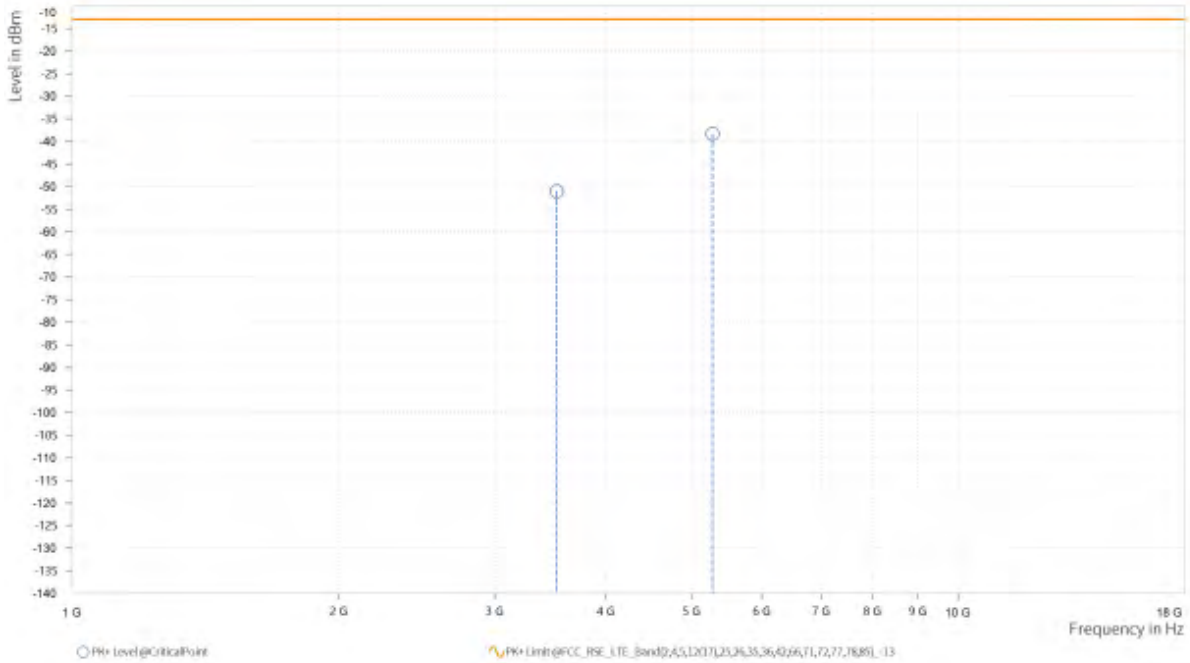
CH 132572

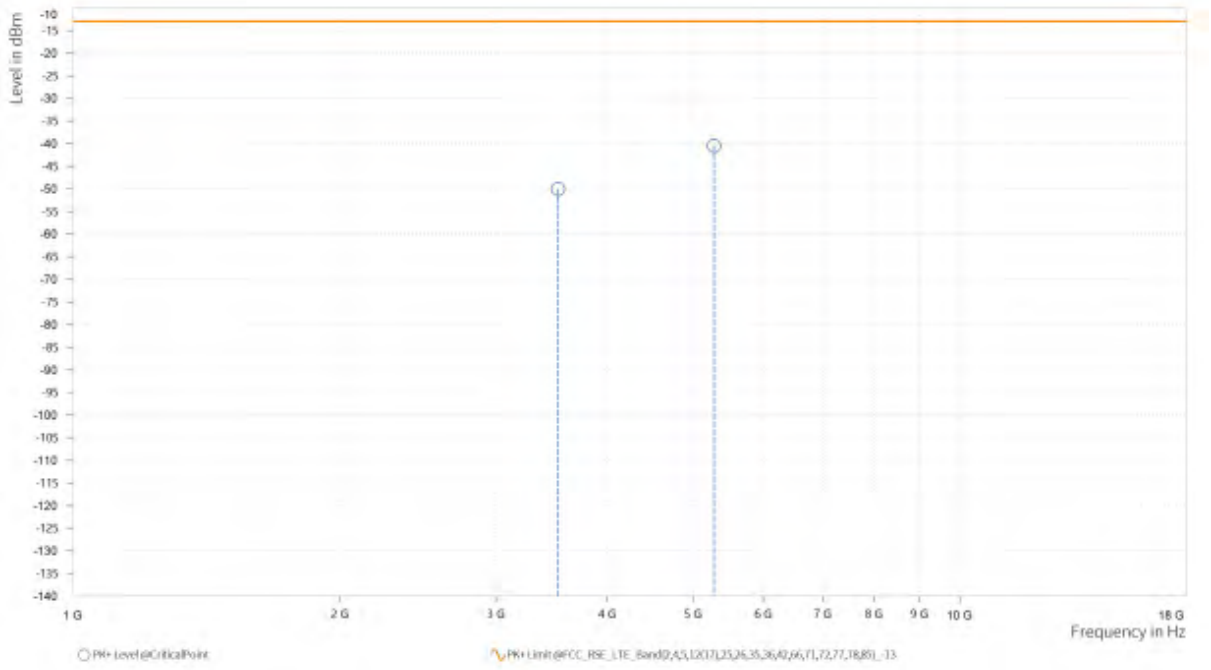
MODE	TX channel 132572	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,522.000	-51.01	-13.00	38.01	22.04	H	1.3	2
4	5,283.500	-38.34	-13.00	25.34	25.56	H	311.2	1



MODE	TX channel 132572	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,522.000	-50.00	-13.00	37.00	22.62	V	359	2
4	5,283.000	-40.49	-13.00	27.49	26.07	V	359	2

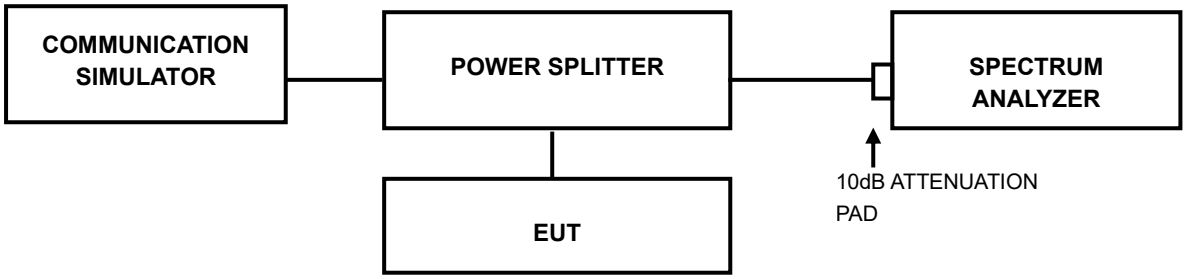


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.7.4 TEST RESULTS

Please Refer to Appendix Of this test report.

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

5 INFORMATION ON THE TESTING LABORATORIES

We, **Huarui 7layers High Technology (Suzhou) Co., Ltd.** were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008

6 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

7 APPENDIX

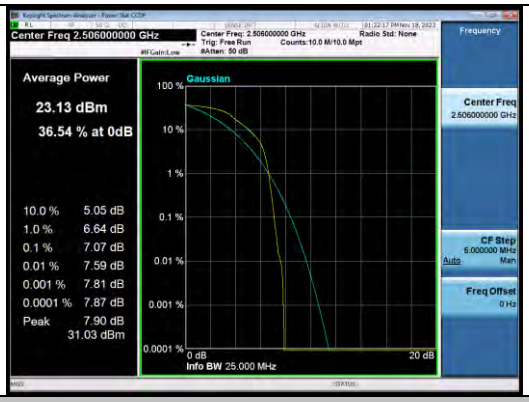
LTE BAND41 (INDCLUDING LTE BAND38)

PEAK-TO-AVERAGE RATIO(CCDF)

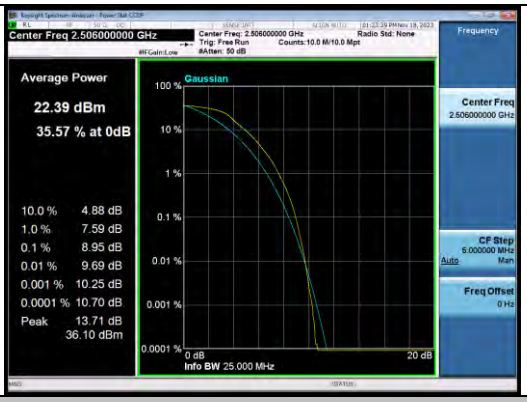
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	20MHz	QPSK	39750	1RB#0	7.07	13	PASS
Band41	20MHz	QPSK	39750	100RB#0	8.95	13	PASS
Band41	20MHz	QPSK	40620	1RB#0	7.56	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	9.26	13	PASS
Band41	20MHz	QPSK	41490	1RB#0	7.60	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	9.35	13	PASS
Band41	20MHz	16QAM	39750	1RB#0	8.49	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	9.58	13	PASS
Band41	20MHz	16QAM	40620	1RB#0	8.92	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	9.82	13	PASS
Band41	20MHz	16QAM	41490	1RB#0	8.13	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	10.35	13	PASS
Band41	20MHz	64QAM	39750	1RB#0	8.81	13	PASS
Band41	20MHz	64QAM	39750	100RB#0	9.90	13	PASS
Band41	20MHz	64QAM	40620	1RB#0	9.67	13	PASS
Band41	20MHz	64QAM	40620	100RB#0	10.02	13	PASS
Band41	20MHz	64QAM	41490	1RB#0	8.80	13	PASS
Band41	20MHz	64QAM	41490	100RB#0	9.21	13	PASS

Test Graphs



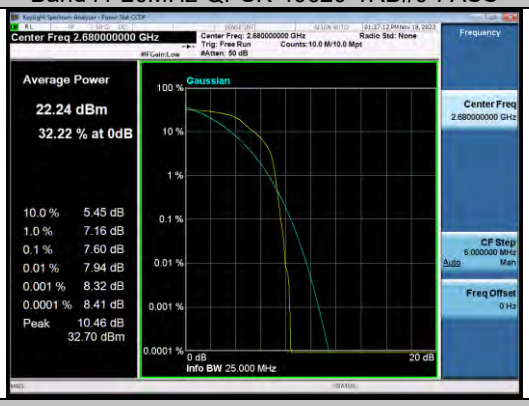
Band41-20MHz-QPSK-39750-1RB#0-PASS



Band41-20MHz-QPSK-39750-100RB#0-PASS

Band41-20MHz-QPSK-40620-1RB#0-PASS

Band41-20MHz-QPSK-40620-100RB#0-PASS



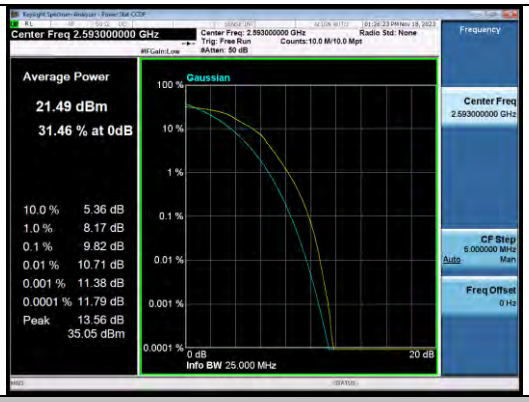
Band41-20MHz-QPSK-41490-1RB#0-PASS

Band41-20MHz-QPSK-41490-100RB#0-PASS

Band41-20MHz-16QAM-39750-1RB#0-PASS

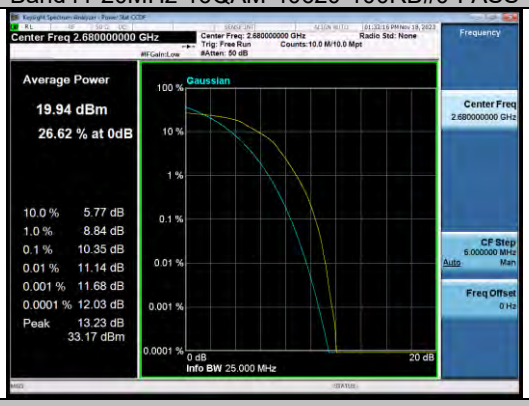
Band41-20MHz-16QAM-39750-100RB#0-PASS

Band41-20MHz-16QAM-40620-1RB#0-PASS



Band41-20MHz-16QAM-40620-100RB#0-PASS

Band41-20MHz-16QAM-41490-1RB#0-PASS



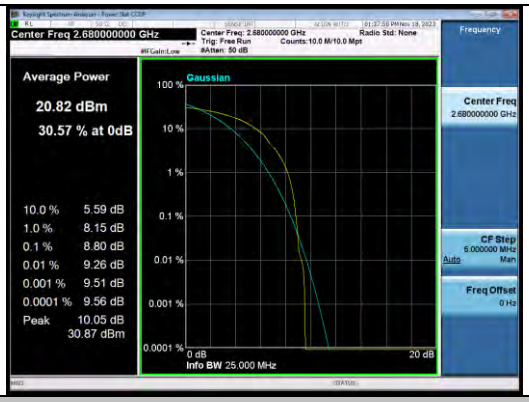
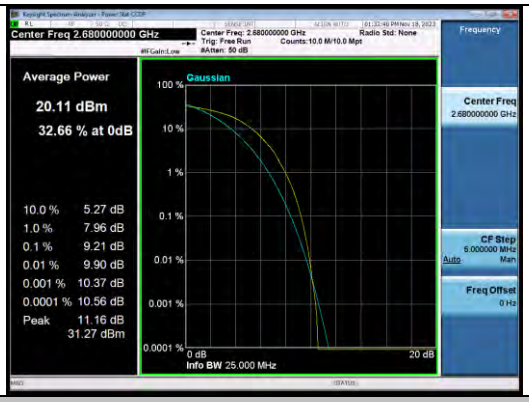
Band41-20MHz-16QAM-41490-100RB#0-PASS

Band41-20MHz-64QAM-39750-1RB#0-PASS

Band41-20MHz-64QAM-39750-100RB#0-PASS

Band41-20MHz-64QAM-40620-1RB#0-PASS

Band41-20MHz-64QAM-40620-100RB#0-PASS

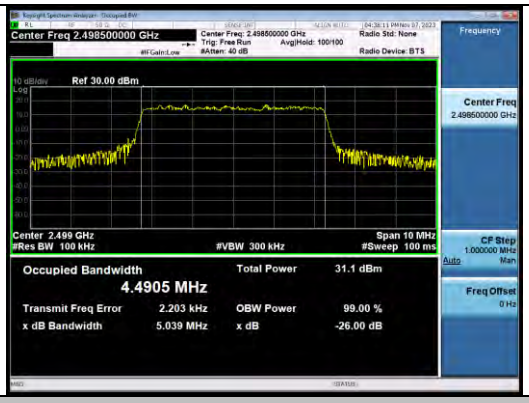
	
Band41-20MHz-64QAM-41490-1RB#0-PASS	Band41-20MHz-64QAM-41490-100RB#0-PASS

26DB BANDWIDTH AND OCCUPIED BANDWIDTH

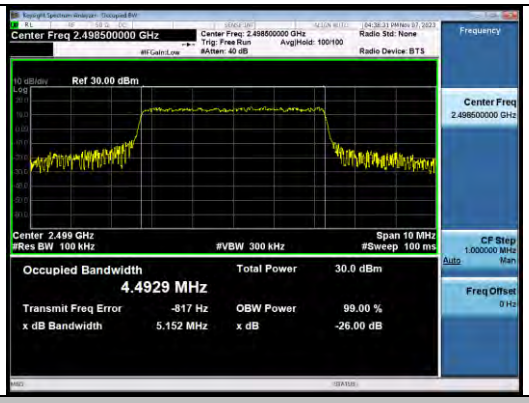
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.4905	5.039	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.4929	5.152	PASS
Band41	5MHz	64QAM	39675	25RB#0	4.5078	5.043	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.4915	5.083	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.4935	5.231	PASS
Band41	5MHz	64QAM	40620	25RB#0	4.5081	5.046	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.4904	4.931	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4947	5.204	PASS
Band41	5MHz	64QAM	41565	25RB#0	4.4978	5.166	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9867	9.957	PASS
Band41	10MHz	16QAM	39700	50RB#0	8.9497	10.15	PASS
Band41	10MHz	64QAM	39700	50RB#0	8.9869	10.61	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.9758	9.777	PASS
Band41	10MHz	16QAM	40620	50RB#0	8.9874	9.845	PASS
Band41	10MHz	64QAM	40620	50RB#0	8.9975	10.88	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9954	9.970	PASS
Band41	10MHz	16QAM	41540	50RB#0	8.9968	9.953	PASS
Band41	10MHz	64QAM	41540	50RB#0	8.9885	10.55	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.490	14.91	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.488	15.43	PASS
Band41	15MHz	64QAM	39725	75RB#0	13.468	15.53	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.468	15.13	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.459	15.77	PASS
Band41	15MHz	64QAM	40620	75RB#0	13.463	15.39	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.453	15.04	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.469	15.98	PASS
Band41	15MHz	64QAM	41515	75RB#0	13.455	15.51	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.934	19.65	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.959	20.53	PASS
Band41	20MHz	64QAM	39750	100RB#0	17.960	22.34	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.930	19.92	PASS
Band41	20MHz	16QAM	40620	100RB#0	17.950	19.57	PASS
Band41	20MHz	64QAM	40620	100RB#0	17.933	20.16	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.974	19.68	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.946	19.54	PASS
Band41	20MHz	64QAM	41490	100RB#0	17.908	19.97	PASS

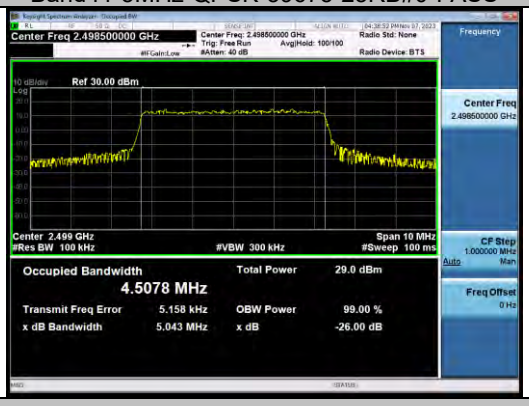
Test Graphs



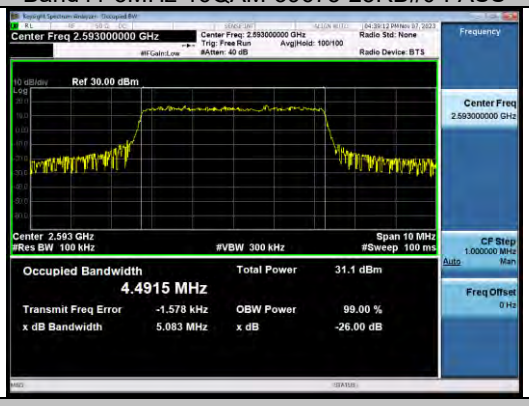
Band41-5MHz-QPSK-39675-25RB#0-PASS



Band41-5MHz-16QAM-39675-25RB#0-PASS



Band41-5MHz-64QAM-39675-25RB#0-PASS



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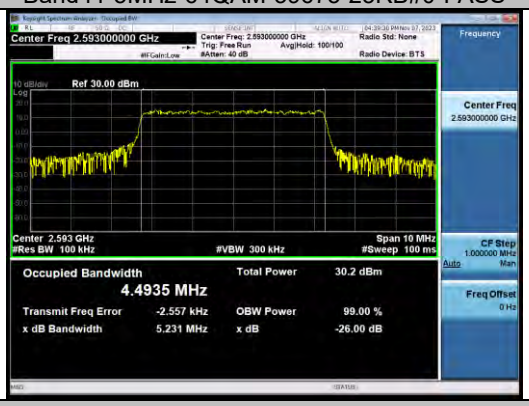
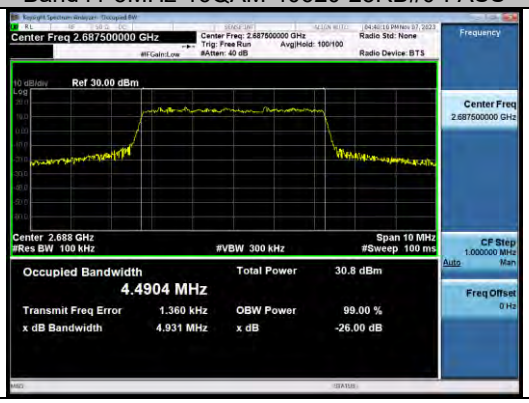
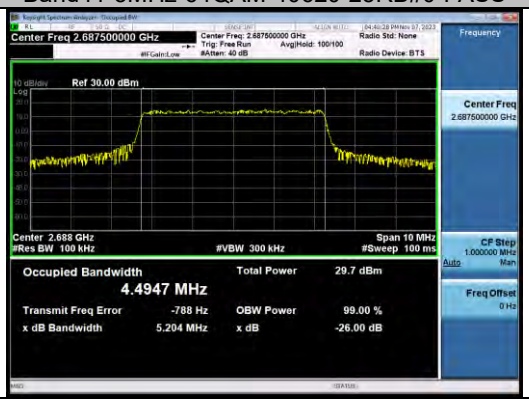


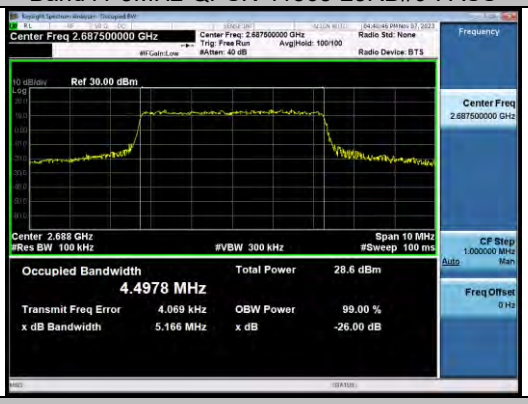
Band41-5MHz-16QAM-40620-25RB#0-PASS

Band41-5MHz-64QAM-40620-25RB#0-PASS





Band41-5MHz-QPSK-41565-25RB#0-PASS



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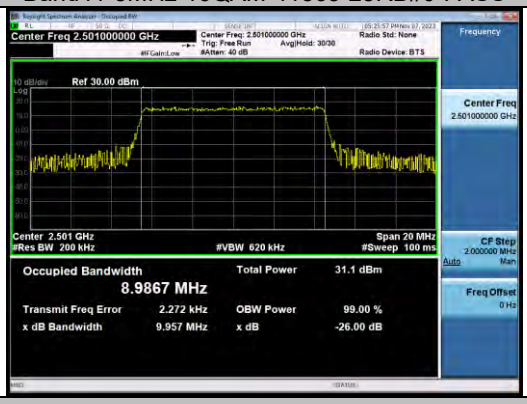
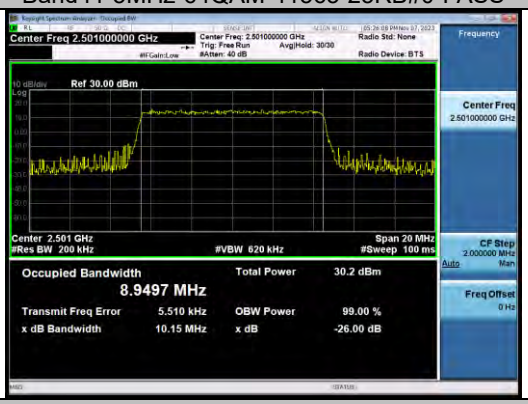


Band41-5MHz-64QAM-41565-25RB#0-PASS

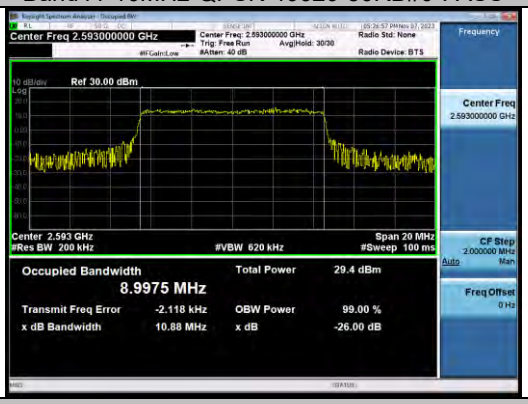


Band41-10MHz-QPSK-39700-50RB#0-PASS

Band41-10MHz-16QAM-39700-50RB#0-PASS

Band41-10MHz-64QAM-39700-50RB#0-PASS

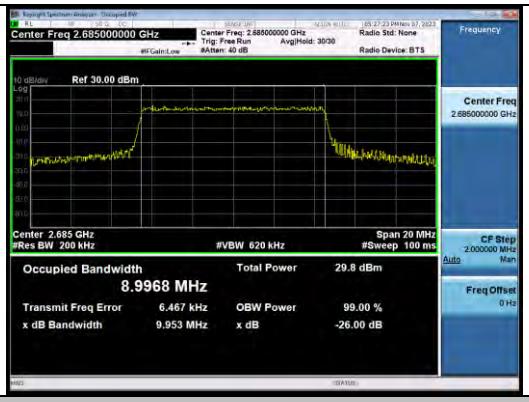
Band41-10MHz-QPSK-40620-50RB#0-PASS



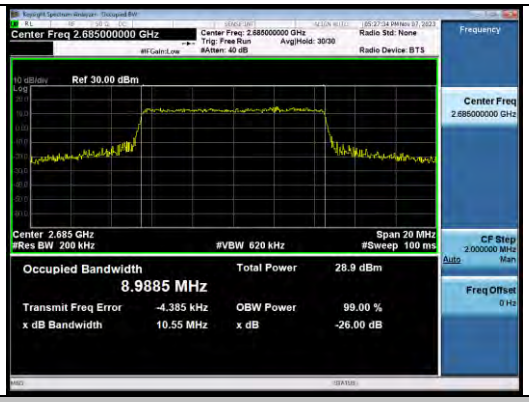
Band41-10MHz-16QAM-40620-50RB#0-PASS

Band41-10MHz-64QAM-40620-50RB#0-PASS

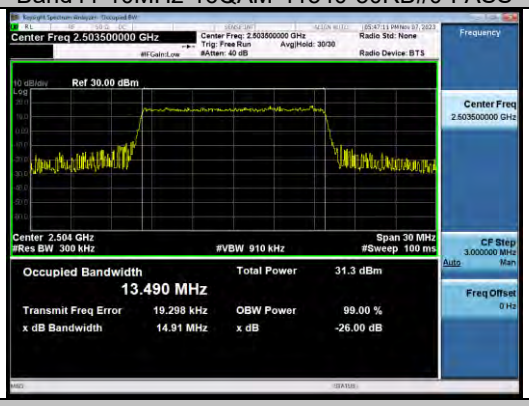
Band41-10MHz-QPSK-41540-50RB#0-PASS



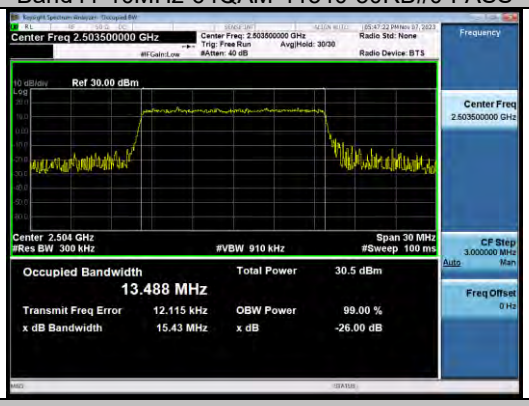
Band41-10MHz-16QAM-41540-50RB#0-PASS



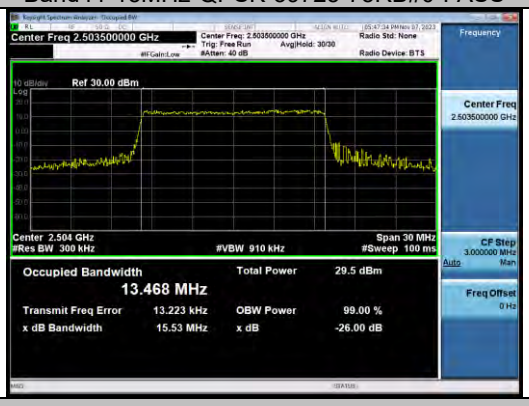
Band41-10MHz-64QAM-41540-50RB#0-PASS



Band41-15MHz-QPSK-39725-75RB#0-PASS

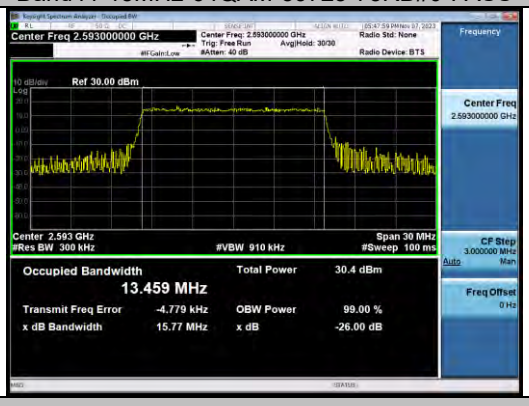


Band41-15MHz-16QAM-39725-75RB#0-PASS

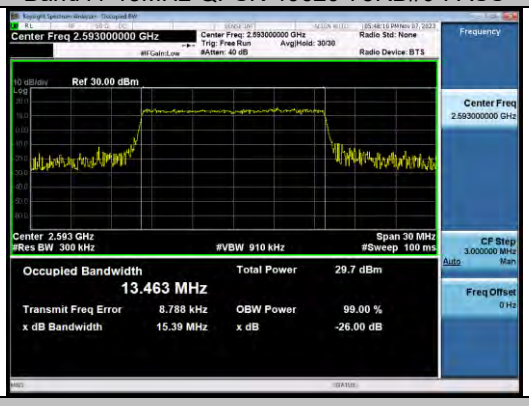


Band41-15MHz-64QAM-39725-75RB#0-PASS

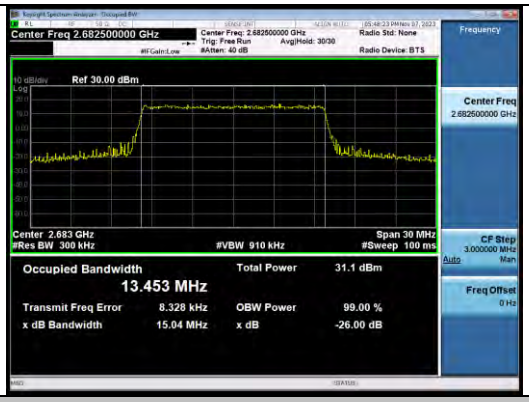
Band41-15MHz-QPSK-40620-75RB#0-PASS



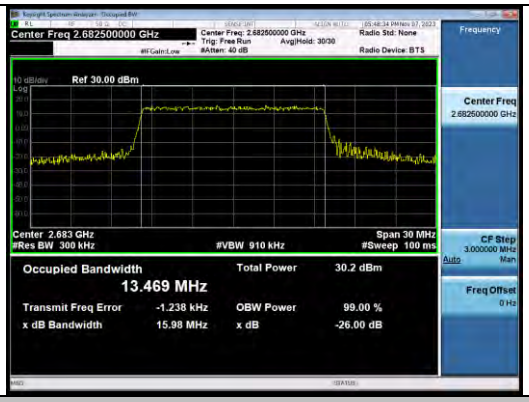
Band41-15MHz-16QAM-40620-75RB#0-PASS



Band41-15MHz-64QAM-40620-75RB#0-PASS



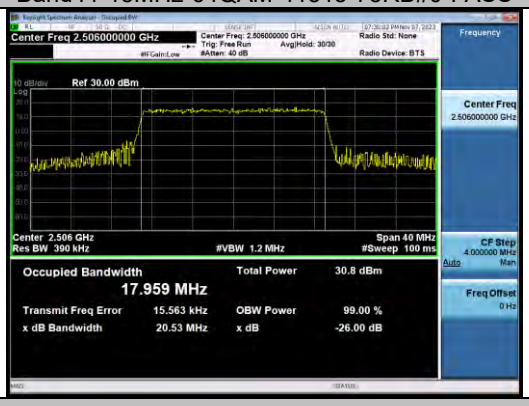
Band41-15MHz-QPSK-41515-75RB#0-PASS



Band41-15MHz-16QAM-41515-75RB#0-PASS

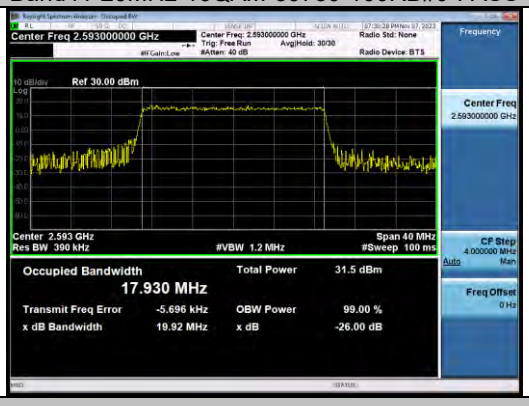
Band41-15MHz-64QAM-41515-75RB#0-PASS

Band41-20MHz-QPSK-39750-100RB#0-PASS

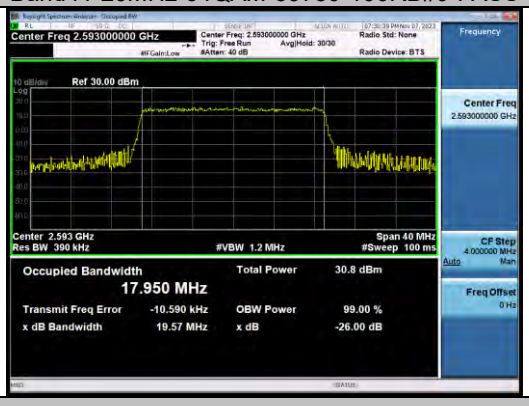


Band41-20MHz-16QAM-39750-100RB#0-PASS

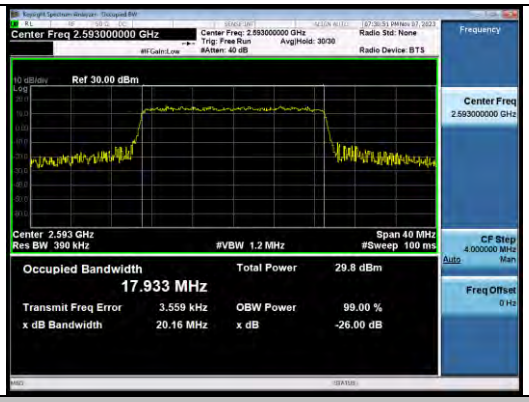
Band41-20MHz-64QAM-39750-100RB#0-PASS



Band41-20MHz-QPSK-40620-100RB#0-PASS



Band41-20MHz-16QAM-40620-100RB#0-PASS



Band41-20MHz-64QAM-40620-100RB#0-PASS

Band41-20MHz-QPSK-41490-100RB#0-PASS

Band41-20MHz-16QAM-41490-100RB#0-PASS

Band41-20MHz-64QAM-41490-100RB#0-PASS

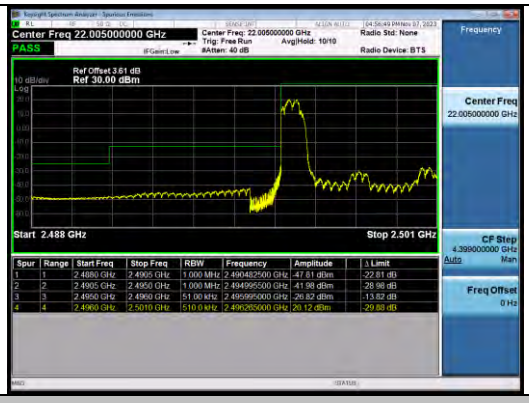
BAND EDGE

Test Result

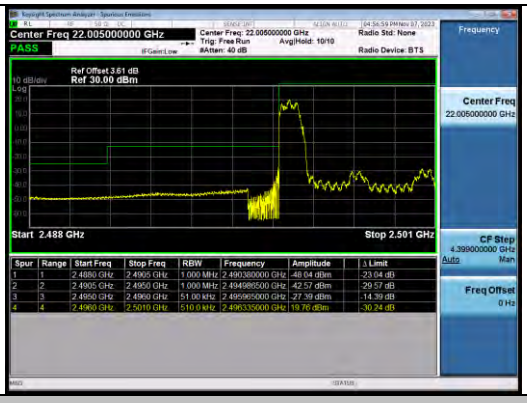
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	-26.82	PASS
Band41	5MHz	16QAM	39675	1RB#0	-27.39	PASS
Band41	5MHz	64QAM	39675	1RB#0	-28.97	PASS
Band41	5MHz	QPSK	39675	25RB#0	-41.46	PASS
Band41	5MHz	16QAM	39675	25RB#0	-43.44	PASS
Band41	5MHz	64QAM	39675	25RB#0	-42.49	PASS
Band41	5MHz	QPSK	41565	1RB#24	-24.20	PASS
Band41	5MHz	16QAM	41565	1RB#24	-27.17	PASS
Band41	5MHz	64QAM	41565	1RB#24	-29.60	PASS
Band41	5MHz	QPSK	41565	25RB#0	-41.52	PASS
Band41	5MHz	16QAM	41565	25RB#0	-41.86	PASS
Band41	5MHz	64QAM	41565	25RB#0	-42.53	PASS
Band41	10MHz	QPSK	39700	1RB#0	-45.99	PASS
Band41	10MHz	16QAM	39700	1RB#0	-46.81	PASS
Band41	10MHz	64QAM	39700	1RB#0	-47.21	PASS
Band41	10MHz	QPSK	39700	50RB#0	-37.05	PASS
Band41	10MHz	16QAM	39700	50RB#0	-35.97	PASS
Band41	10MHz	64QAM	39700	50RB#0	-35.06	PASS
Band41	10MHz	QPSK	41540	1RB#49	-33.23	PASS
Band41	10MHz	16QAM	41540	1RB#49	-48.91	PASS
Band41	10MHz	64QAM	41540	1RB#49	-48.81	PASS
Band41	10MHz	QPSK	41540	50RB#0	-41.03	PASS
Band41	10MHz	16QAM	41540	50RB#0	-41.96	PASS
Band41	10MHz	64QAM	41540	50RB#0	-41.31	PASS
Band41	15MHz	QPSK	39725	1RB#0	-45.80	PASS
Band41	15MHz	16QAM	39725	1RB#0	-45.94	PASS
Band41	15MHz	64QAM	39725	1RB#0	-45.89	PASS
Band41	15MHz	QPSK	39725	75RB#0	-36.94	PASS
Band41	15MHz	16QAM	39725	75RB#0	-35.92	PASS
Band41	15MHz	64QAM	39725	75RB#0	-35.11	PASS
Band41	15MHz	QPSK	41515	1RB#74	-48.75	PASS
Band41	15MHz	16QAM	41515	1RB#74	-48.88	PASS
Band41	15MHz	64QAM	41515	1RB#74	-49.01	PASS
Band41	15MHz	QPSK	41515	75RB#0	-41.16	PASS
Band41	15MHz	16QAM	41515	75RB#0	-41.05	PASS
Band41	15MHz	64QAM	41515	75RB#0	-41.30	PASS
Band41	20MHz	QPSK	39750	1RB#0	-45.37	PASS
Band41	20MHz	16QAM	39750	1RB#0	-46.67	PASS
Band41	20MHz	64QAM	39750	1RB#0	-46.86	PASS
Band41	20MHz	QPSK	39750	100RB#0	-38.16	PASS
Band41	20MHz	16QAM	39750	100RB#0	-37.71	PASS
Band41	20MHz	64QAM	39750	100RB#0	-35.84	PASS
Band41	20MHz	QPSK	41490	1RB#99	-49.11	PASS
Band41	20MHz	16QAM	41490	1RB#99	-49.07	PASS
Band41	20MHz	64QAM	41490	1RB#99	-49.23	PASS

Band41	20MHz	QPSK	41490	100RB#0	-42.91	PASS
Band41	20MHz	16QAM	41490	100RB#0	-43.46	PASS
Band41	20MHz	64QAM	41490	100RB#0	-42.61	PASS

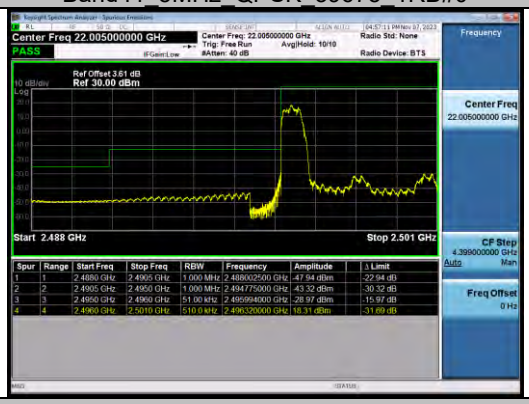
Test Graphs



Band41_5MHz_QPSK_39675_1RB#0



Band41_5MHz_16QAM_39675_1RB#0

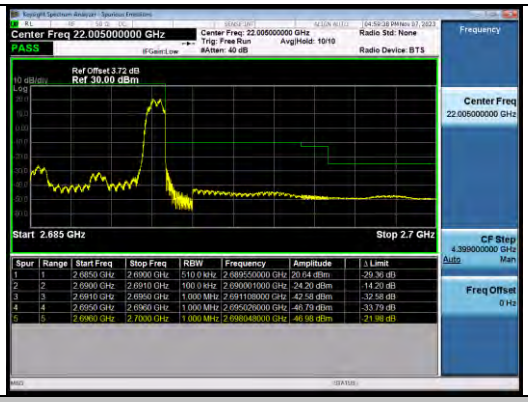


Band41_5MHz_64QAM_39675_1RB#0

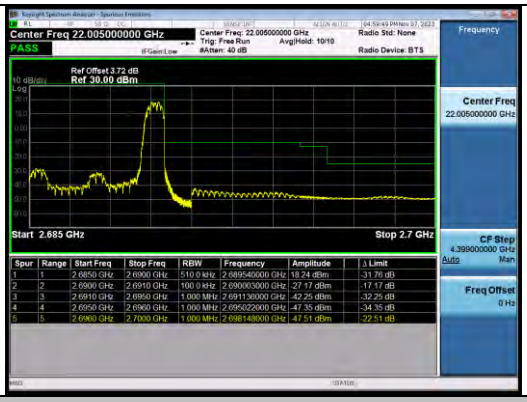
Band41_5MHz_QPSK_39675_25RB#0

Band41_5MHz_16QAM_39675_25RB#0

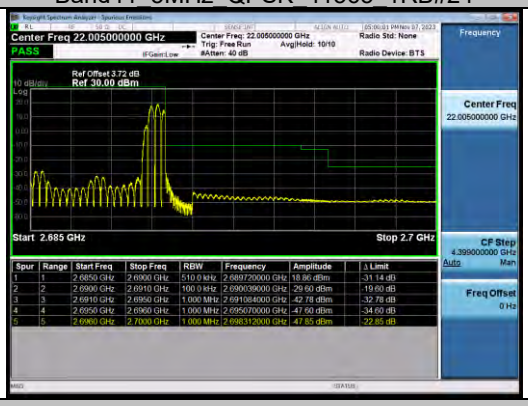
Band41_5MHz_64QAM_39675_25RB#0



Band41_5MHz_QPSK_41565_1RB#24



Band41_5MHz_16QAM_41565_1RB#24

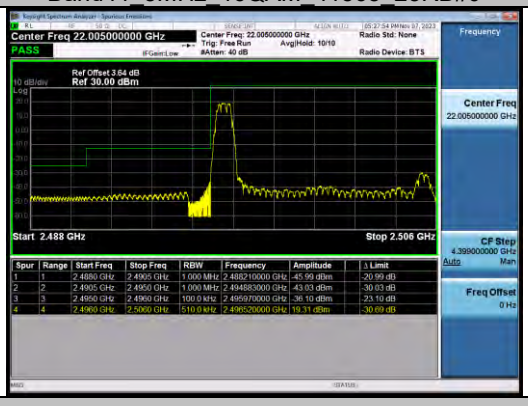


Band41_5MHz_64QAM_41565_1RB#24

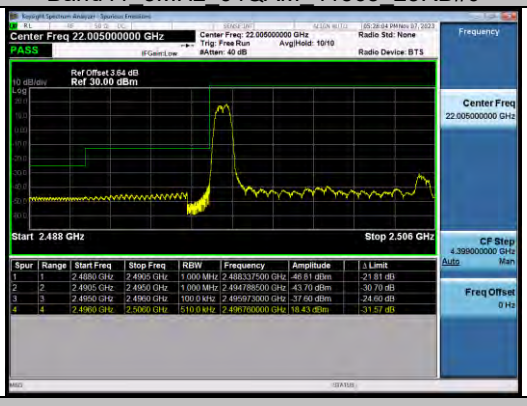
Band41_5MHz_QPSK_41565_25RB#0

Band41_5MHz_16QAM_41565_25RB#0

Band41_5MHz_64QAM_41565_25RB#0



Band41_10MHz_QPSK_39700_1RB#0



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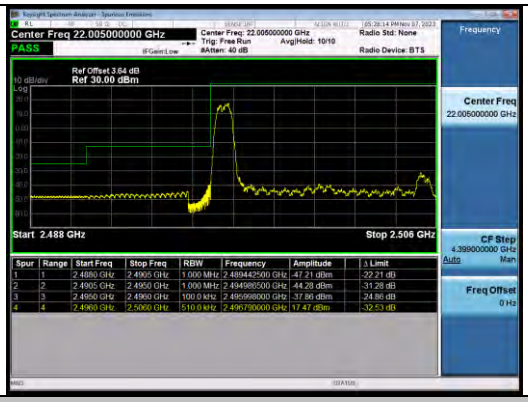
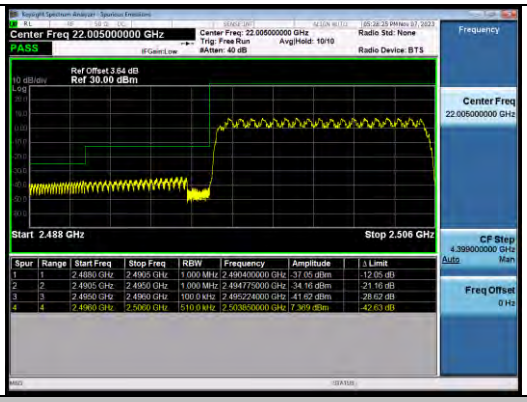
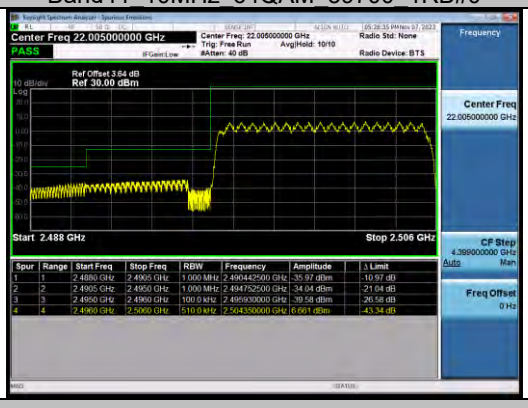


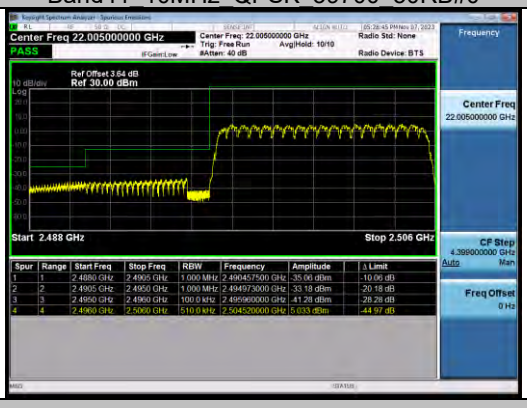
Band41_10MHz_64QAM_39700_1RB#0



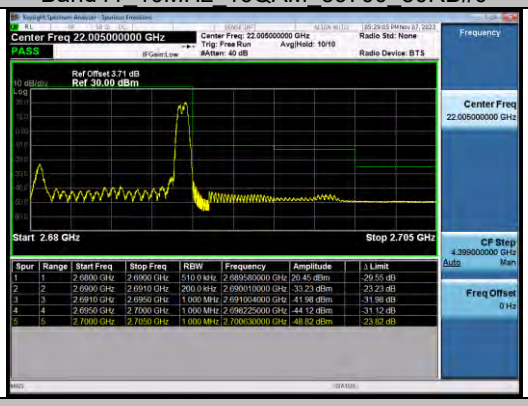
Band41_10MHz_QPSK_39700_50RB#0



Band41_10MHz_16QAM_39700_50RB#0



Band41_10MHz_64QAM_39700_50RB#0

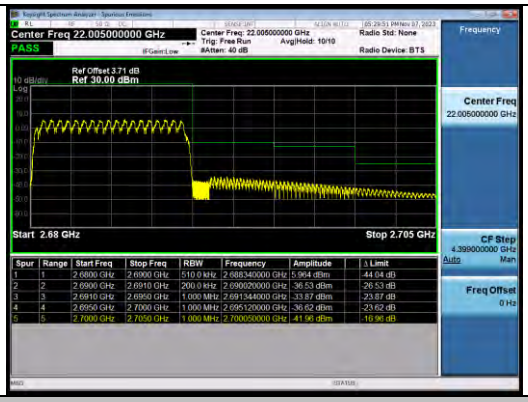


Band41_10MHz_QPSK_41540_1RB#49

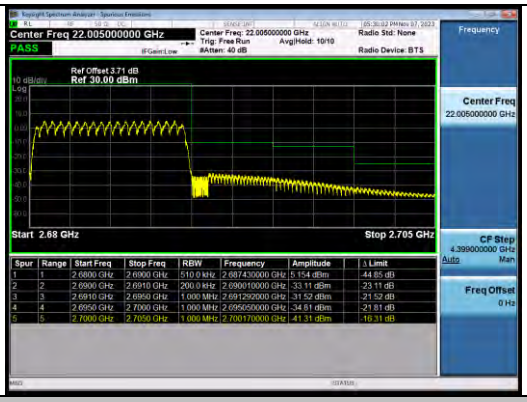
Band41_10MHz_16QAM_41540_1RB#49

Band41_10MHz_64QAM_41540_1RB#49

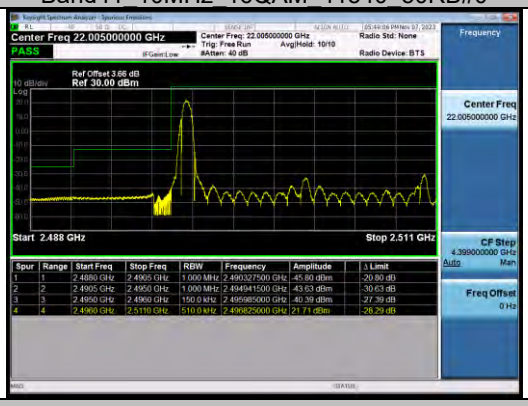
Band41_10MHz_QPSK_41540_50RB#0



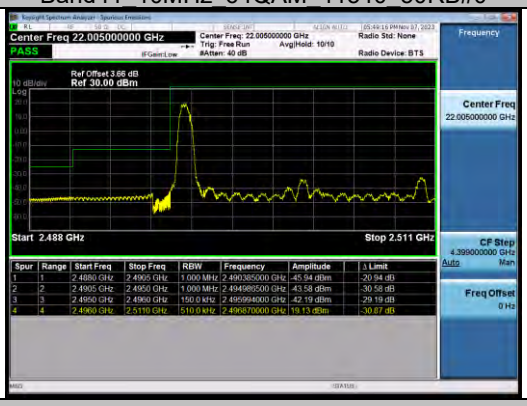
Band41_10MHz_16QAM_41540_50RB#0



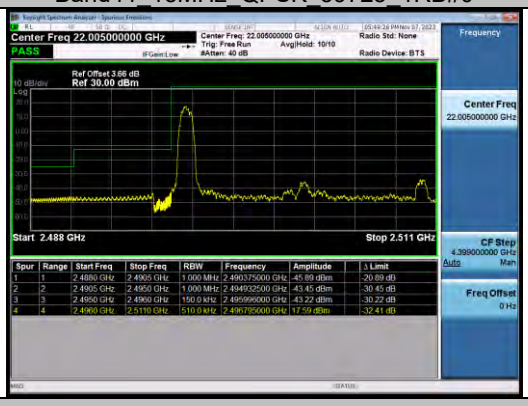
Band41_10MHz_64QAM_41540_50RB#0



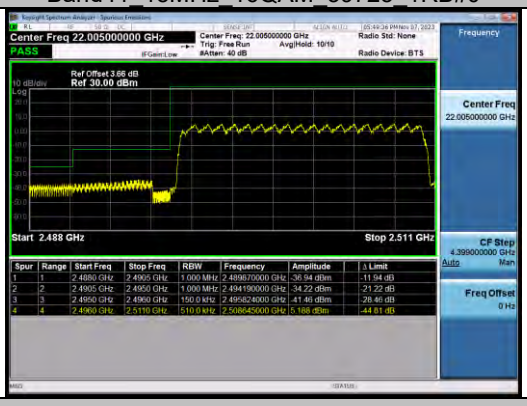
Band41_15MHz_QPSK_39725_1RB#0



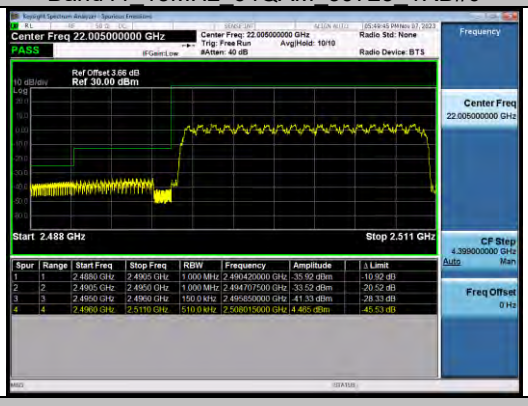
Band41_15MHz_16QAM_39725_1RB#0



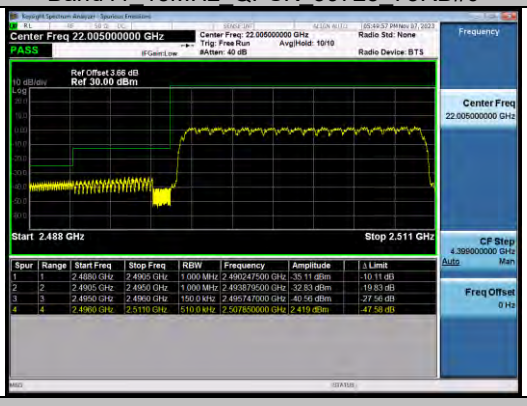
Band41_15MHz_64QAM_39725_1RB#0



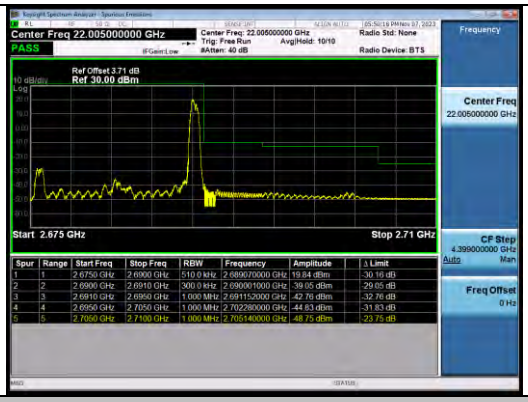
Band41_15MHz_QPSK_39725_75RB#0



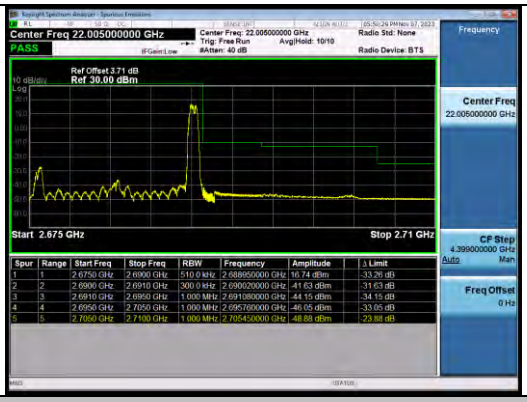
Band41_15MHz_16QAM_39725_75RB#0



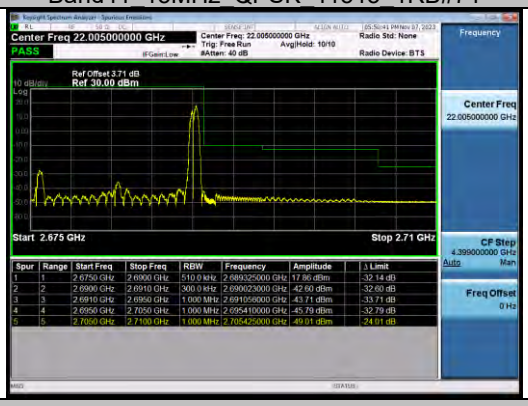
Band41_15MHz_64QAM_39725_75RB#0



Band41_15MHz_QPSK_41515_1RB#74



Band41_15MHz_16QAM_41515_1RB#74



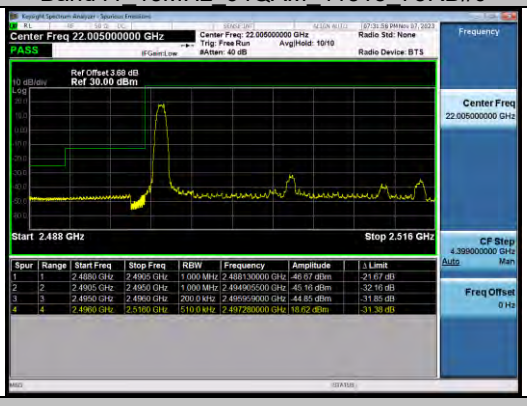
Band41_15MHz_64QAM_41515_1RB#74

Band41_15MHz_QPSK_41515_75RB#0

Band41_15MHz_16QAM_41515_75RB#0

Band41_15MHz_64QAM_41515_75RB#0

Band41_20MHz_QPSK_39750_1RB#0



Band41_20MHz_16QAM_39750_1RB#0