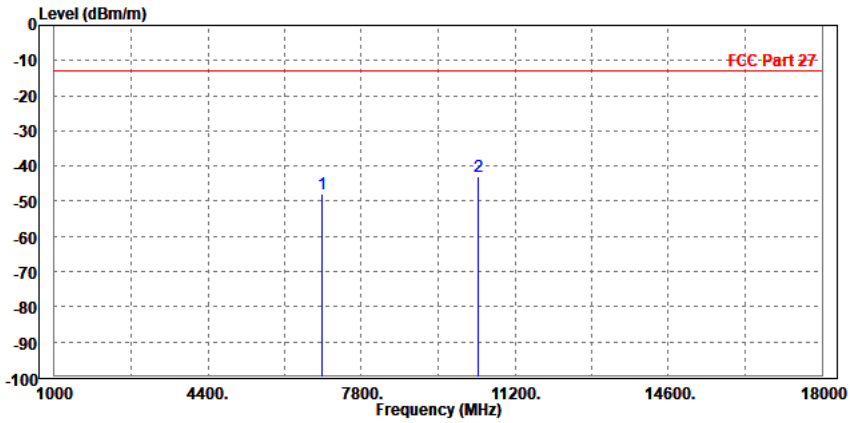
CHANNEL BANDWIDTH: 20MHz / QPSK

CH 42190

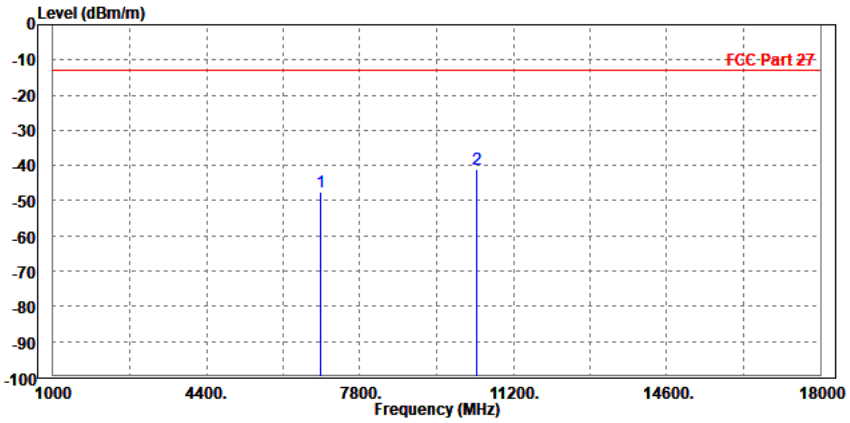
MODE	TX channel 42190	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	6916.000	-47.77	-61.35	-13.00	-34.77	13.58	Peak	Horizontal
2	PP10380.000	-43.14	-62.62	-13.00	-30.14	19.48	Peak	Horizontal



MODE	TX channel 42190	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			

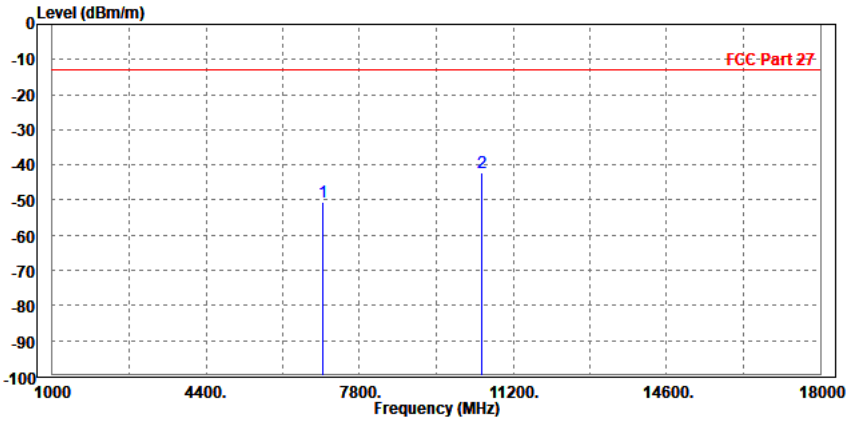
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	6920.000	-47.60	-61.99	-13.00	-34.60	14.39	Peak	Vertical
2	PP10384.000	-41.02	-61.03	-13.00	-28.02	20.01	Peak	Vertical



CH 42590

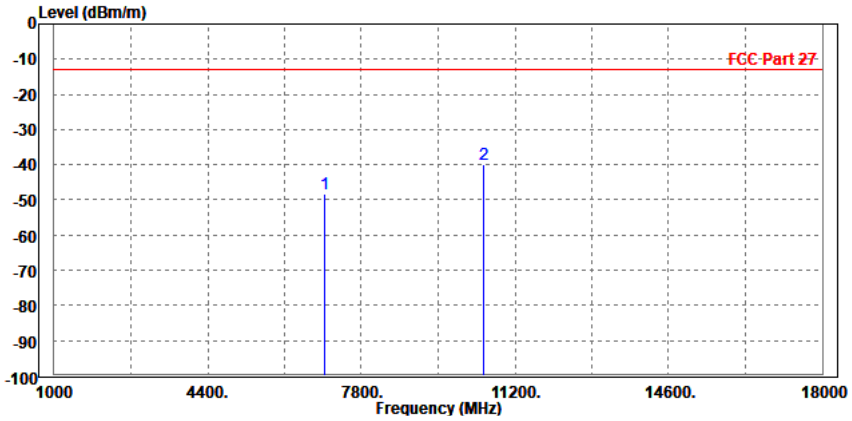
MODE	TX channel 42590	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7000.000	-50.71	-64.48	-13.00	-37.71	13.77	Peak	Horizontal
2	PP10503.000	-42.23	-61.88	-13.00	-29.23	19.65	Peak	Horizontal



MODE	TX channel 42590	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			

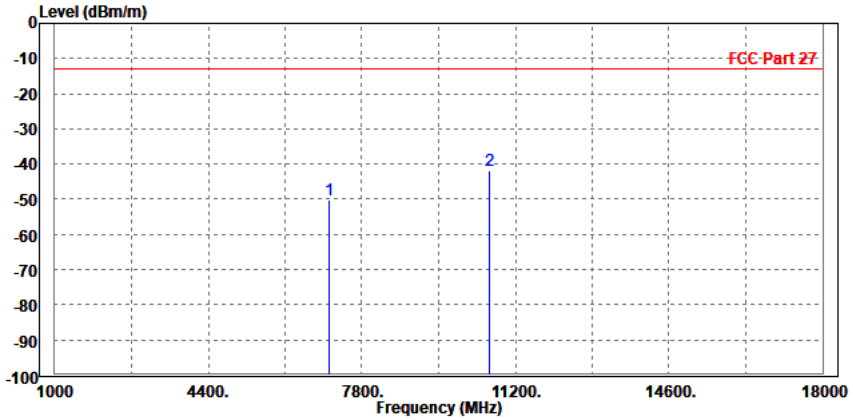
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7001.000	-48.22	-62.79	-13.00	-35.22	14.57	Peak	Vertical
2	PP10500.000	-40.00	-60.57	-13.00	-27.00	20.57	Peak	Vertical



CH 42990

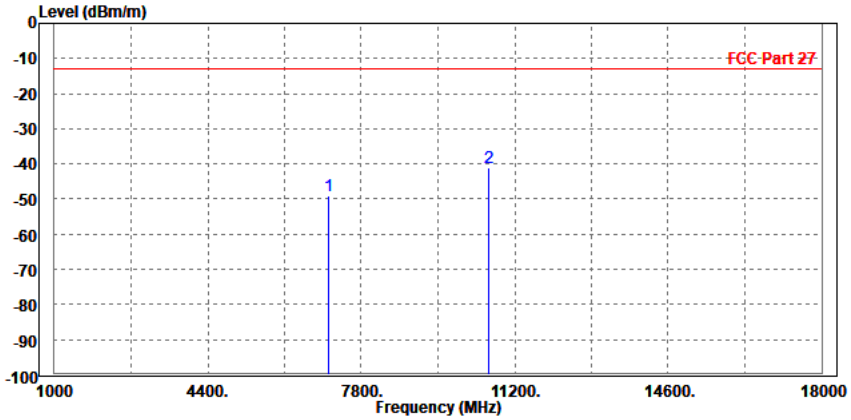
MODE	TX channel 42990	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7080.000	-50.21	-64.07	-13.00	-37.21	13.86	Peak	Horizontal
2	PP10622.000	-41.91	-61.73	-13.00	-28.91	19.82	Peak	Horizontal



MODE	TX channel 42990	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			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	7086.000	-49.22	-63.52	-13.00	-36.22	14.30	Peak	Vertical
2	PP10620.000	-40.89	-61.44	-13.00	-27.89	20.55	Peak	Vertical

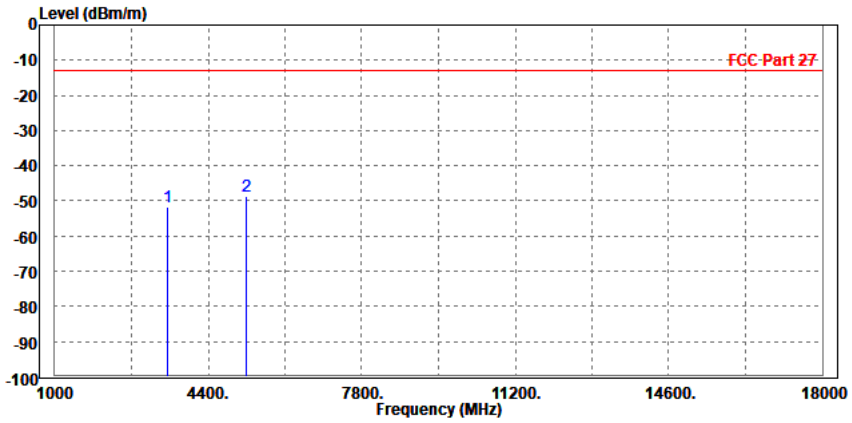


LTE B66

CHANNEL BANDWIDTH: 1.4MHz / QPSK

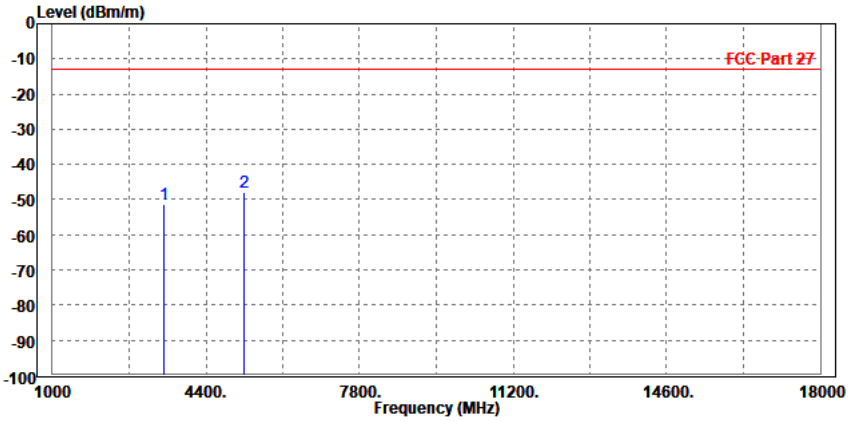
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-51.74	-60.29	-13.00	-38.74	8.55	Peak	Horizontal
2 PP	5233.000	-48.49	-59.89	-13.00	-35.49	11.40	Peak	Horizontal



MODE	TX channel 132322	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			

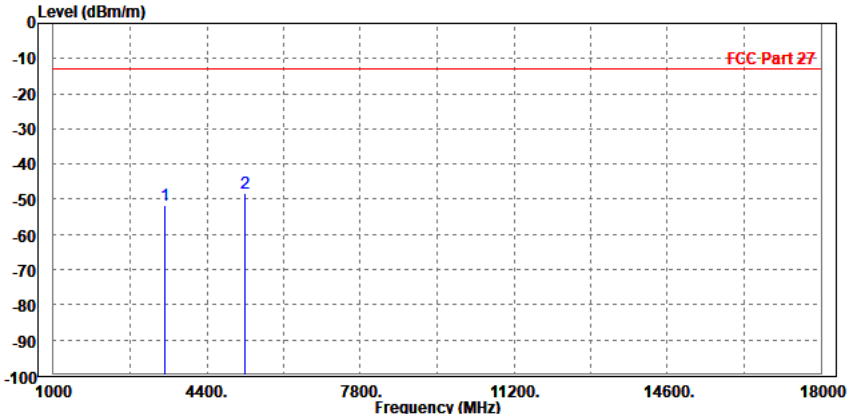
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-51.39	-60.04	-13.00	-38.39	8.65	Peak	Vertical
2 PP	5235.000	-47.75	-59.58	-13.00	-34.75	11.83	Peak	Vertical



CHANNEL BANDWIDTH: 3MHz / QPSK

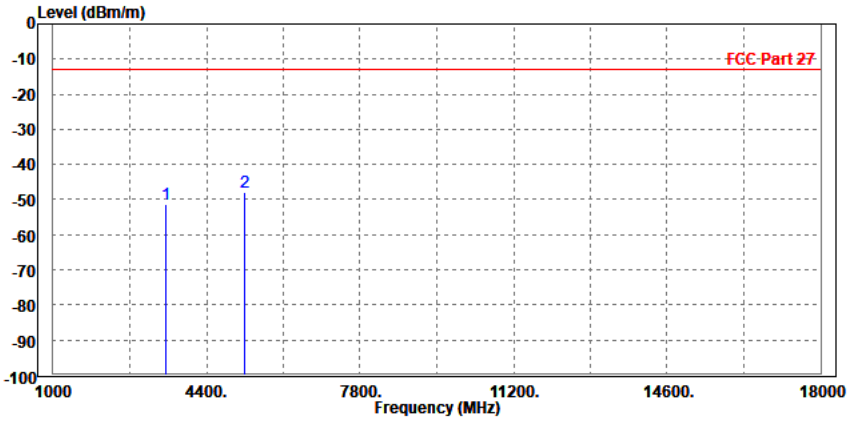
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-51.89	-60.44	-13.00	-38.89	8.55	Peak	Horizontal
2 PP	5235.000	-48.34	-59.75	-13.00	-35.34	11.41	Peak	Horizontal



MODE	TX channel 132322	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			

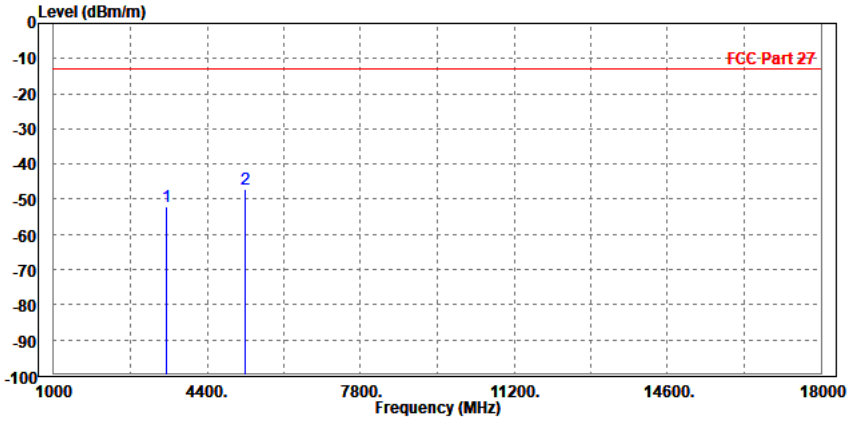
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-51.26	-59.90	-13.00	-38.26	8.64	Peak	Vertical
2 PP	5233.000	-47.76	-59.58	-13.00	-34.76	11.82	Peak	Vertical



CHANNEL BANDWIDTH: 5MHz / QPSK

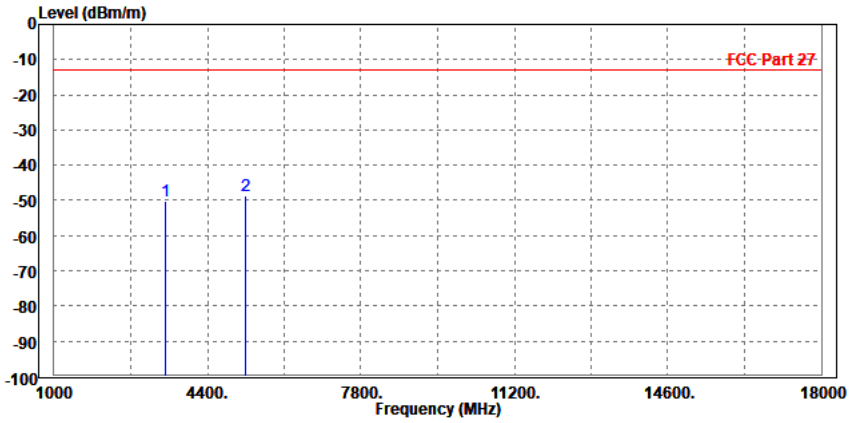
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-52.02	-60.57	-13.00	-39.02	8.55	Peak	Horizontal
2 PP	5233.000	-47.33	-58.73	-13.00	-34.33	11.40	Peak	Horizontal



MODE	TX channel 132322	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			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-50.15	-58.80	-13.00	-37.15	8.65	Peak	Vertical
2 PP	5235.000	-48.63	-60.46	-13.00	-35.63	11.83	Peak	Vertical

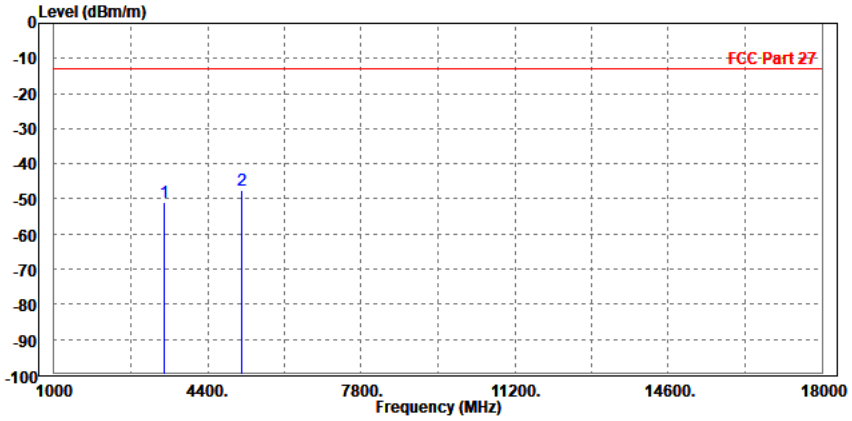


CHANNEL BANDWIDTH: 10MHz / QPSK

CH132022

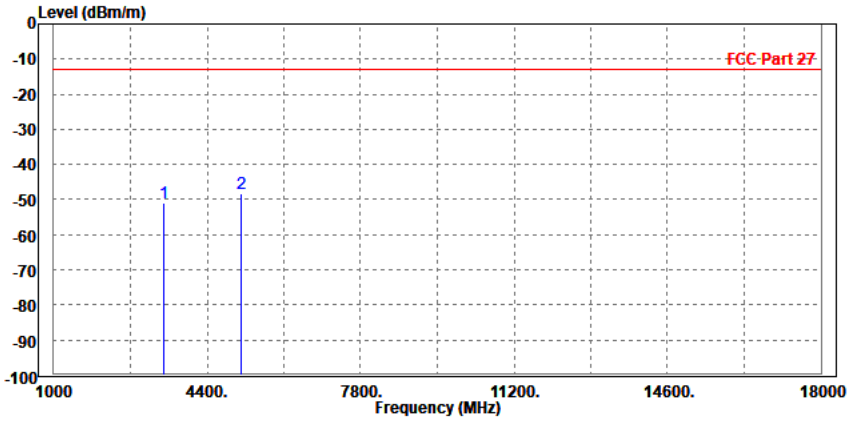
MODE	TX channel 132022	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3431.000	-51.13	-59.65	-13.00	-38.13	8.52	Peak	Horizontal
2 PP	5145.000	-47.68	-58.95	-13.00	-34.68	11.27	Peak	Horizontal



MODE	TX channel 132022	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			

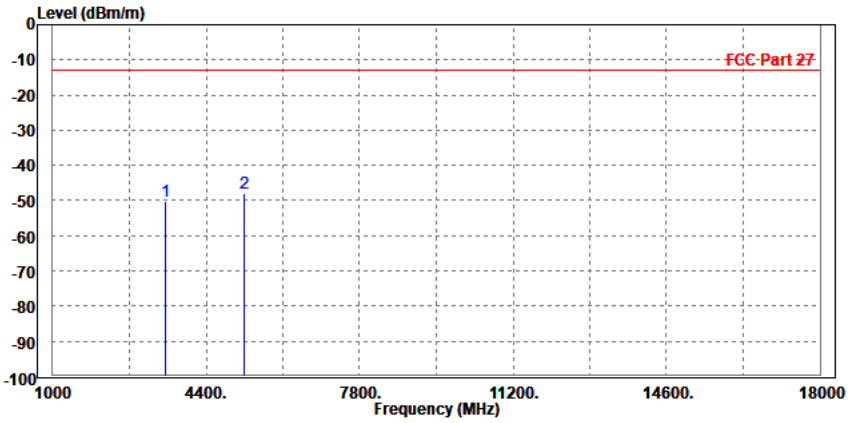
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3430.000	-51.10	-59.77	-13.00	-38.10	8.67	Peak	Vertical
2 PP	5148.000	-48.15	-59.81	-13.00	-35.15	11.66	Peak	Vertical



CH132322

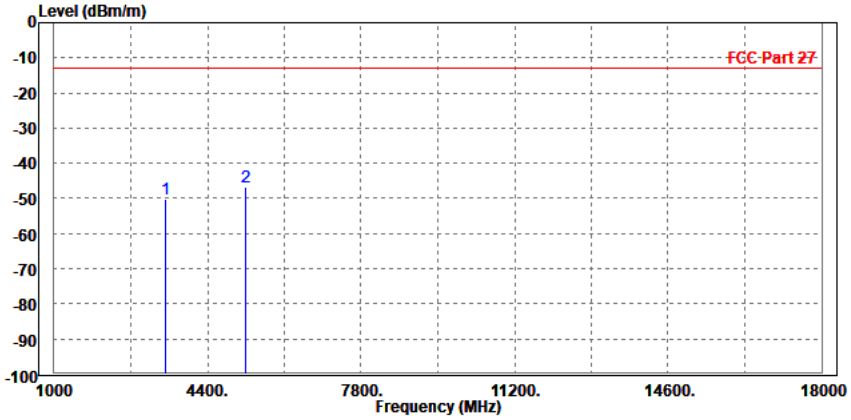
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-50.28	-58.83	-13.00	-37.28	8.55	Peak	Horizontal
2 PP	5233.000	-47.82	-59.22	-13.00	-34.82	11.40	Peak	Horizontal



MODE	TX channel 132322	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			

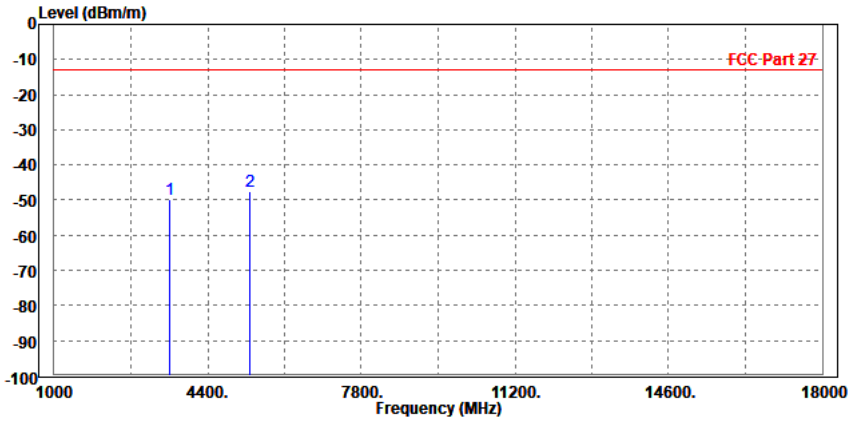
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-50.09	-58.74	-13.00	-37.09	8.65	Peak	Vertical
2 PP	5235.000	-46.85	-58.68	-13.00	-33.85	11.83	Peak	Vertical



CH132622

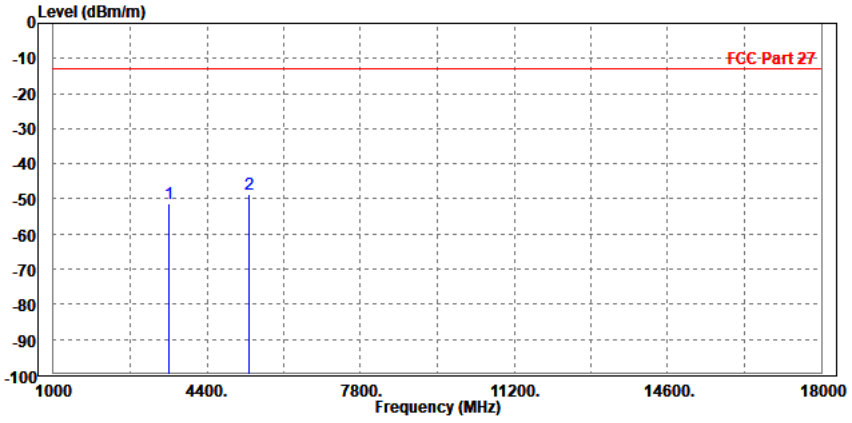
MODE	TX channel 132622	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3550.000	-49.98	-58.50	-13.00	-36.98	8.52	Peak	Horizontal
2 PP	5318.000	-47.56	-59.09	-13.00	-34.56	11.53	Peak	Horizontal



MODE	TX channel 132622	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			

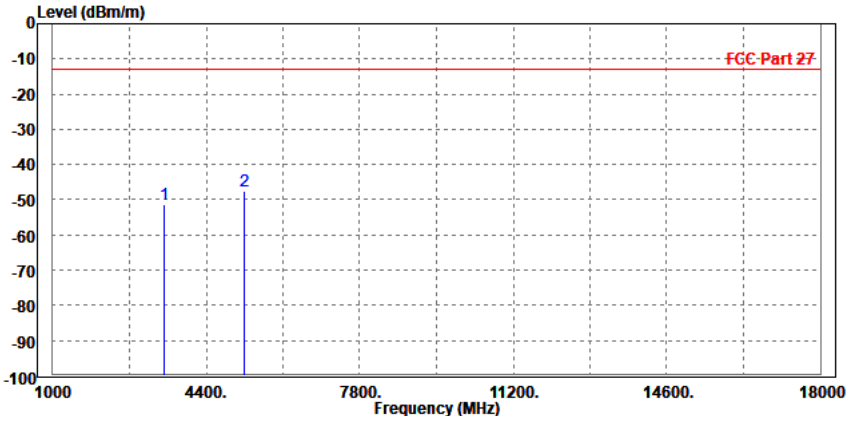
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3550.000	-51.44	-60.08	-13.00	-38.44	8.64	Peak	Vertical
2 PP	5325.000	-48.51	-60.51	-13.00	-35.51	12.00	Peak	Vertical



CHANNEL BANDWIDTH: 15MHz / QPSK

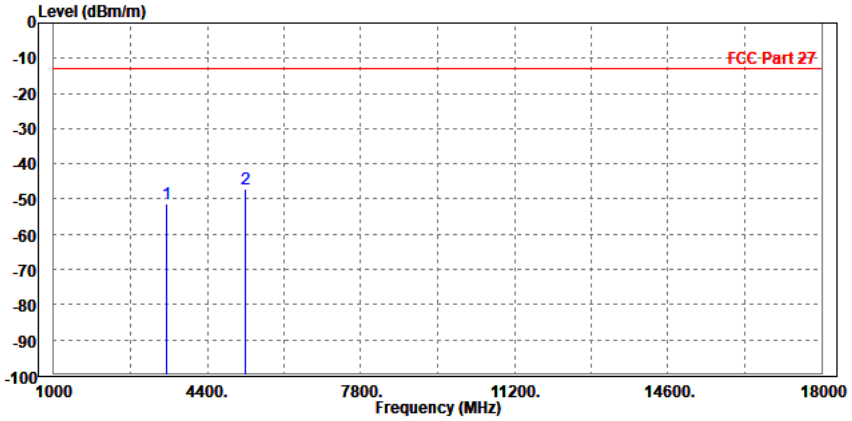
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-51.28	-59.83	-13.00	-38.28	8.55	Peak	Horizontal
2 PP	5235.000	-47.36	-58.77	-13.00	-34.36	11.41	Peak	Horizontal



MODE	TX channel 132322	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			

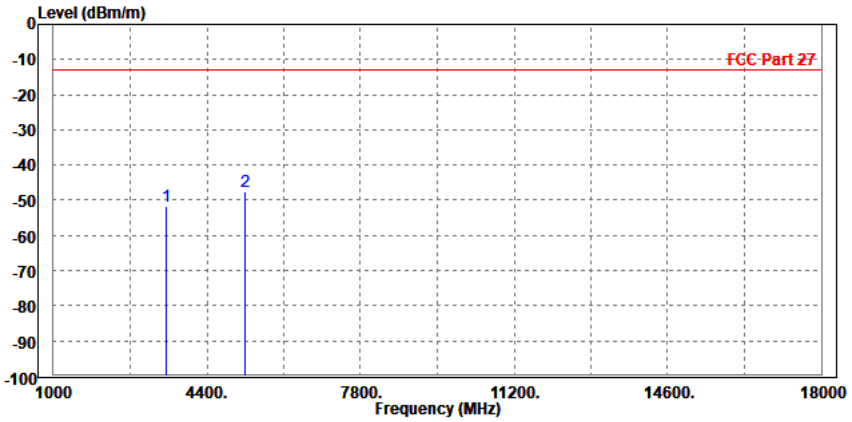
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-51.35	-59.99	-13.00	-38.35	8.64	Peak	Vertical
2 PP	5233.000	-47.29	-59.11	-13.00	-34.29	11.82	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

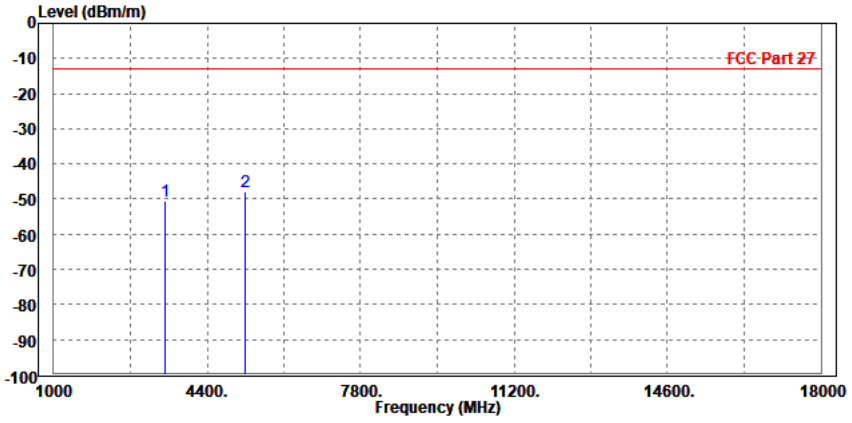
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-51.59	-60.14	-13.00	-38.59	8.55	Peak	Horizontal
2 PP	5233.000	-47.48	-58.88	-13.00	-34.48	11.40	Peak	Horizontal



MODE	TX channel 132322	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			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3482.000	-50.52	-59.17	-13.00	-37.52	8.65	Peak	Vertical
2 PP	5235.000	-47.77	-59.60	-13.00	-34.77	11.83	Peak	Vertical

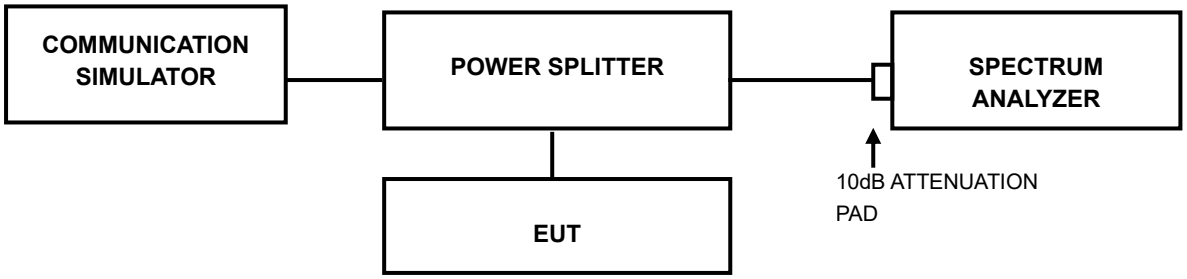


3.7 PEAK TO AVERAGE RATIO

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 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 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:

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Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.

5 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.

5 APPENDIX

LTE BAND 38

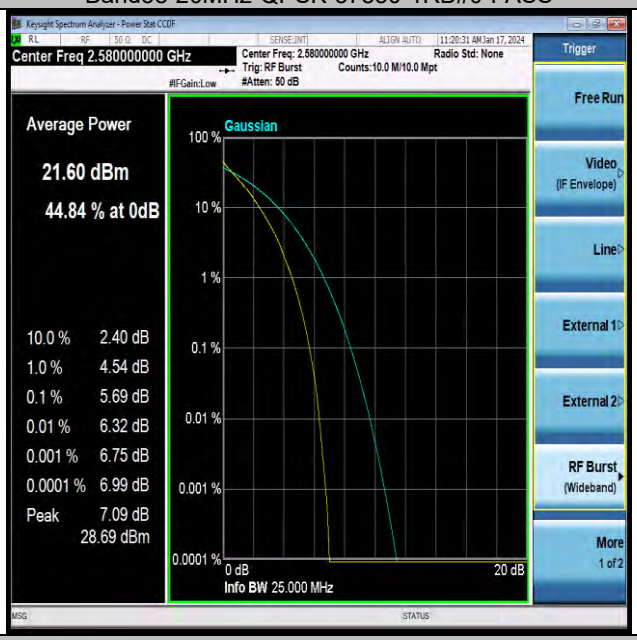
PEAK-TO-AVERAGE RATIO(CCDF

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	20MHz	QPSK	37850	1RB#0	5.32	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	5.69	13	PASS
Band38	20MHz	QPSK	38000	1RB#0	5.27	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	5.70	13	PASS
Band38	20MHz	QPSK	38150	1RB#0	5.36	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	5.81	13	PASS
Band38	20MHz	16QAM	37850	1RB#0	6.21	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	6.47	13	PASS
Band38	20MHz	16QAM	38000	1RB#0	6.30	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	6.51	13	PASS
Band38	20MHz	16QAM	38150	1RB#0	6.35	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	6.58	13	PASS

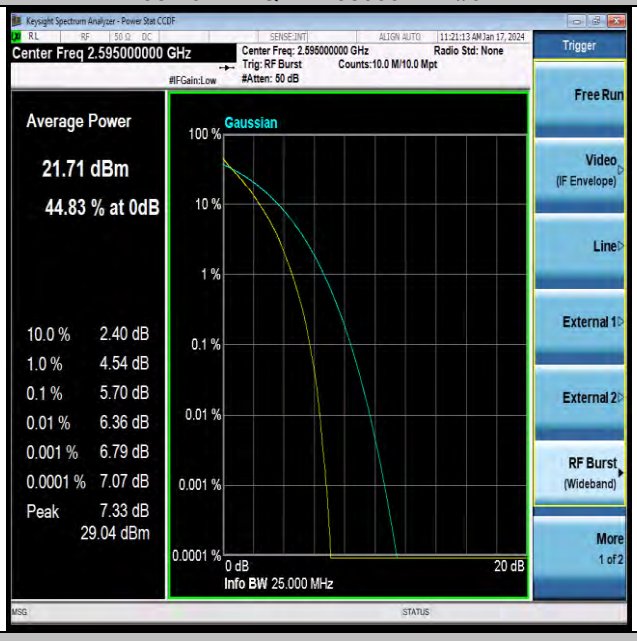
Test Graphs

Band38-20MHz-QPSK-37850-1RB#0-PASS

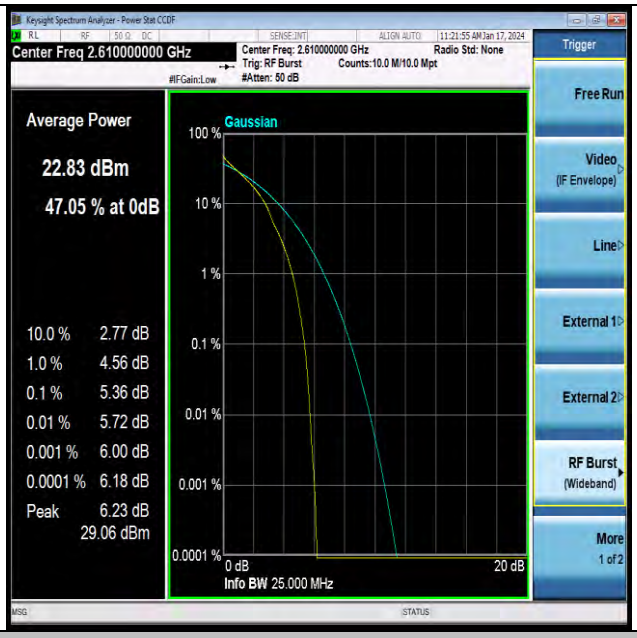


Band38-20MHz-QPSK-37850-100RB#0-PASS

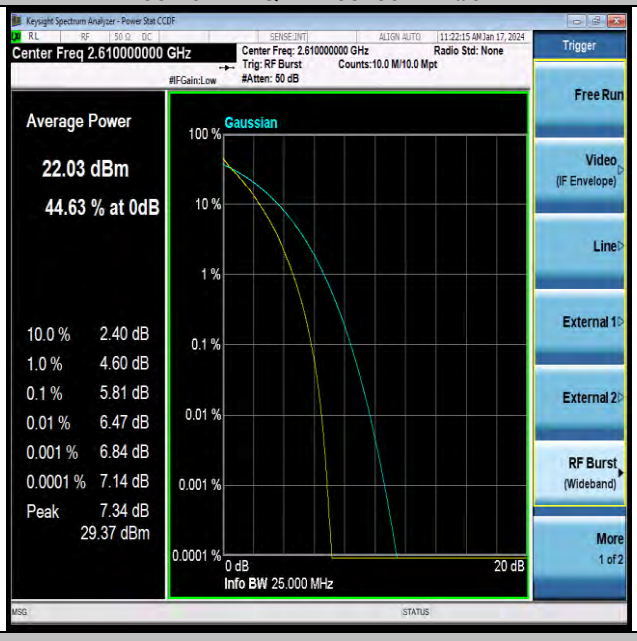
Band38-20MHz-QPSK-38000-1RB#0-PASS



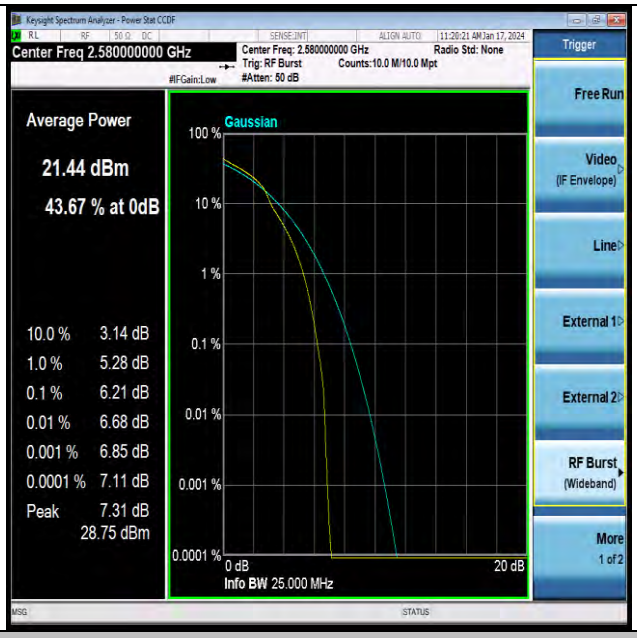
Band38-20MHz-QPSK-38000-100RB#0-PASS



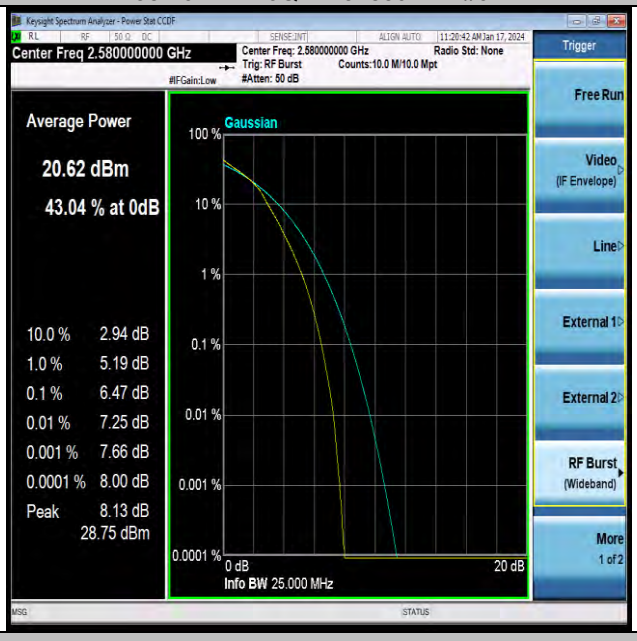
Band38-20MHz-QPSK-38150-1RB#0-PASS



Band38-20MHz-QPSK-38150-100RB#0-PASS



Band38-20MHz-16QAM-37850-1RB#0-PASS



Band38-20MHz-16QAM-37850-100RB#0-PASS

Band38-20MHz-16QAM-38000-1RB#0-PASS

Band38-20MHz-16QAM-38000-100RB#0-PASS

Band38-20MHz-16QAM-38150-1RB#0-PASS

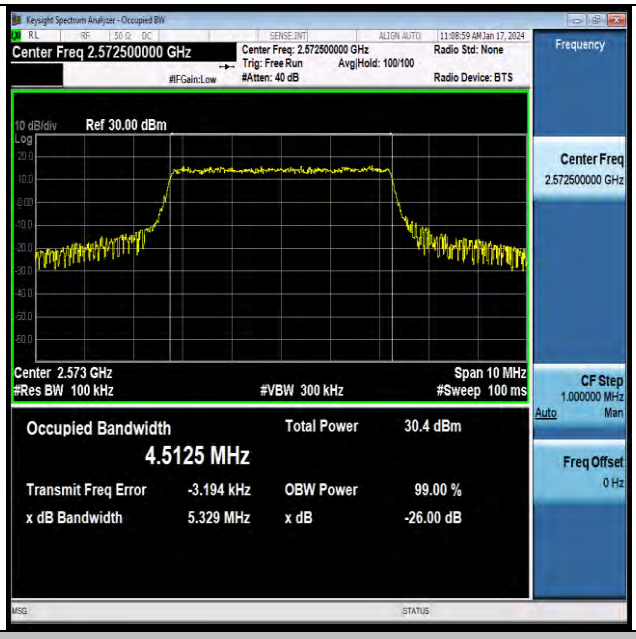
Band38-20MHz-16QAM-38150-100RB#0-PASS

26DB BANDWIDTH AND OCCUPIED BANDWIDTH

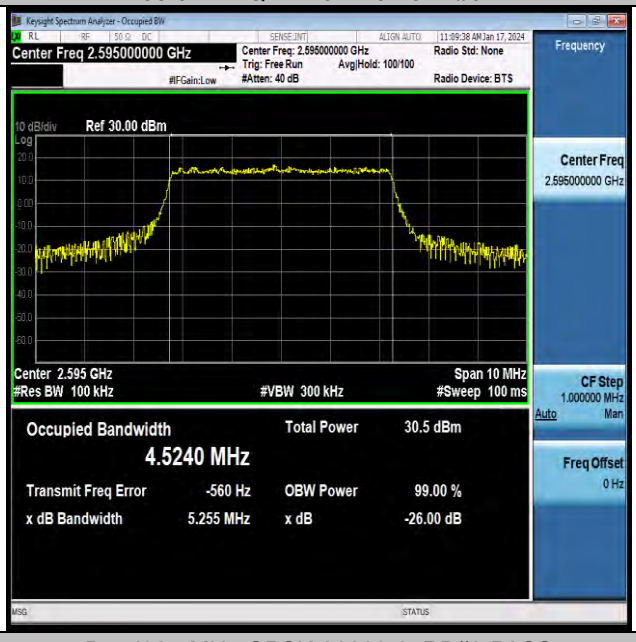
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.5125	5.329	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.5240	5.255	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.5237	5.437	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.5262	5.526	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.5188	5.159	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.5117	5.214	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9973	10.48	PASS
Band38	10MHz	QPSK	38000	50RB#0	9.0137	10.01	PASS
Band38	10MHz	QPSK	38200	50RB#0	9.0078	10.67	PASS
Band38	10MHz	16QAM	37800	50RB#0	9.0116	11.01	PASS
Band38	10MHz	16QAM	38000	50RB#0	9.0325	11.04	PASS
Band38	10MHz	16QAM	38200	50RB#0	9.0157	10.27	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.512	16.01	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.531	15.09	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.495	15.54	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.503	15.96	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.538	15.89	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.501	16.27	PASS
Band38	20MHz	QPSK	37850	100RB#0	18.044	20.98	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.991	20.55	PASS
Band38	20MHz	QPSK	38150	100RB#0	18.049	20.24	PASS
Band38	20MHz	16QAM	37850	100RB#0	18.024	20.38	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.990	20.81	PASS
Band38	20MHz	16QAM	38150	100RB#0	18.006	21.34	PASS

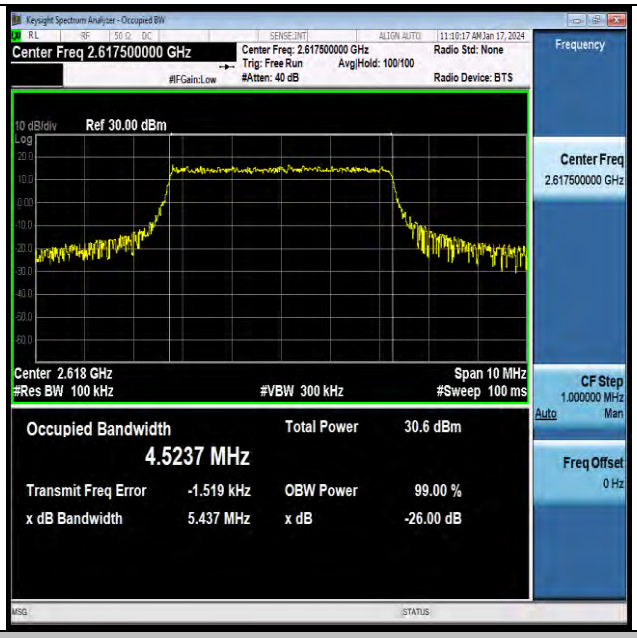
Test Graphs



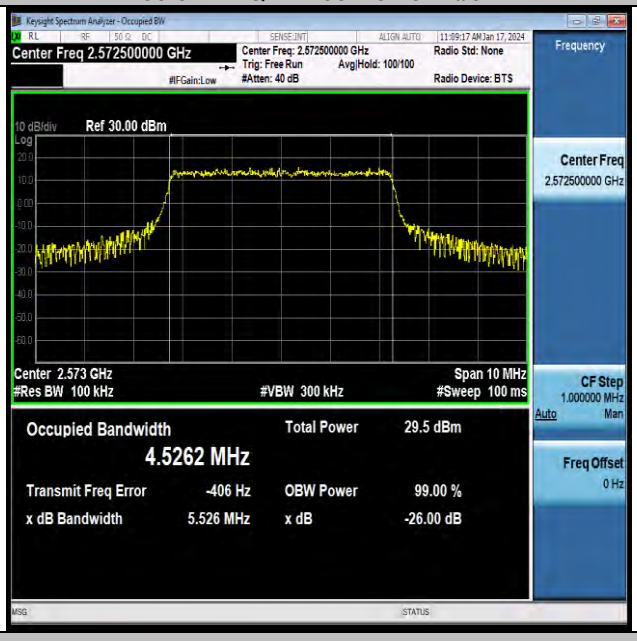
Band38-5MHz-QPSK-37775-25RB#0-PASS



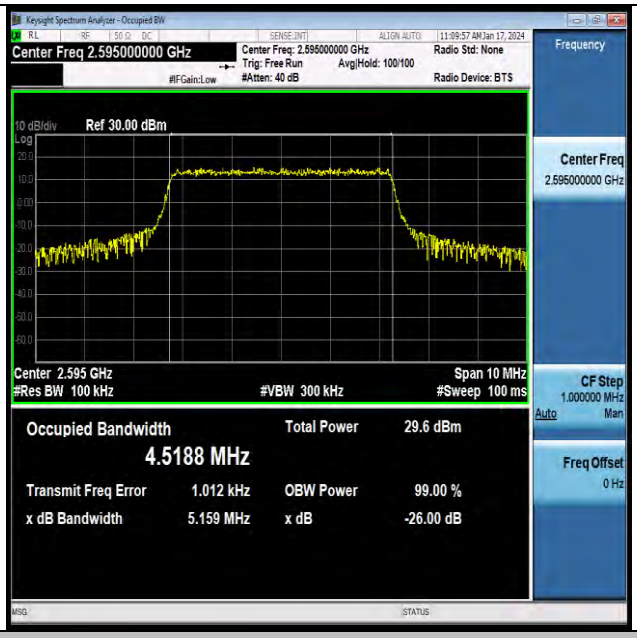
Band38-5MHz-QPSK-38000-25RB#0-PASS



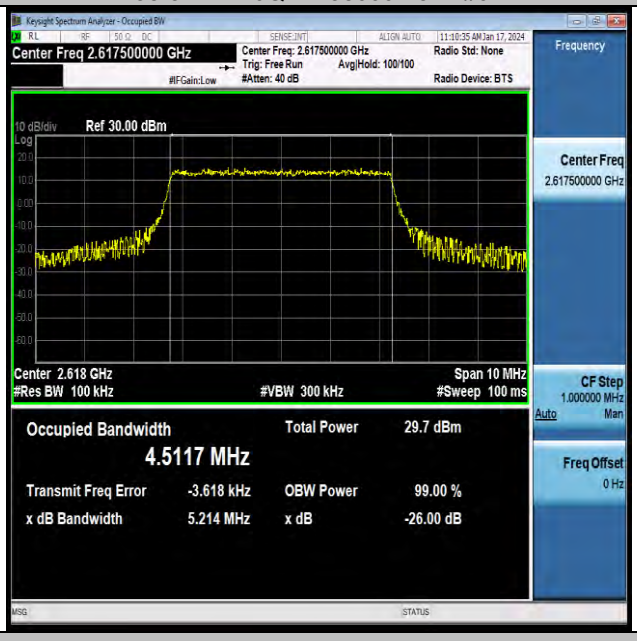
Band38-5MHz-QPSK-38225-25RB#0-PASS



Band38-5MHz-16QAM-37775-25RB#0-PASS



Band38-5MHz-16QAM-38000-25RB#0-PASS



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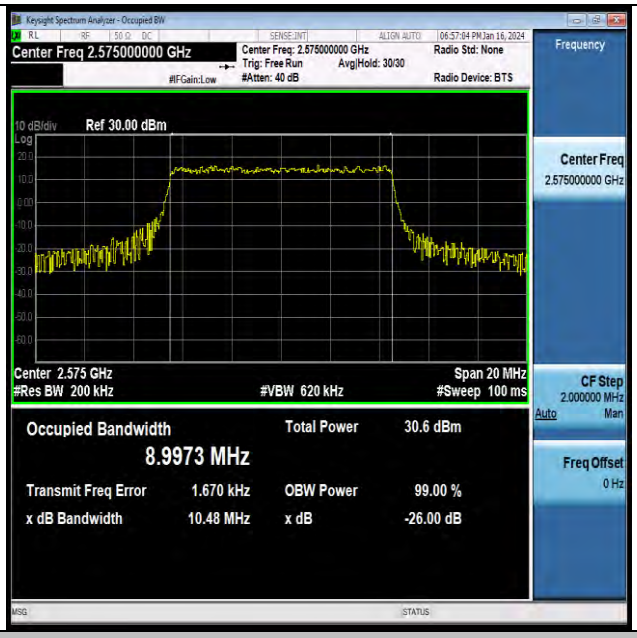
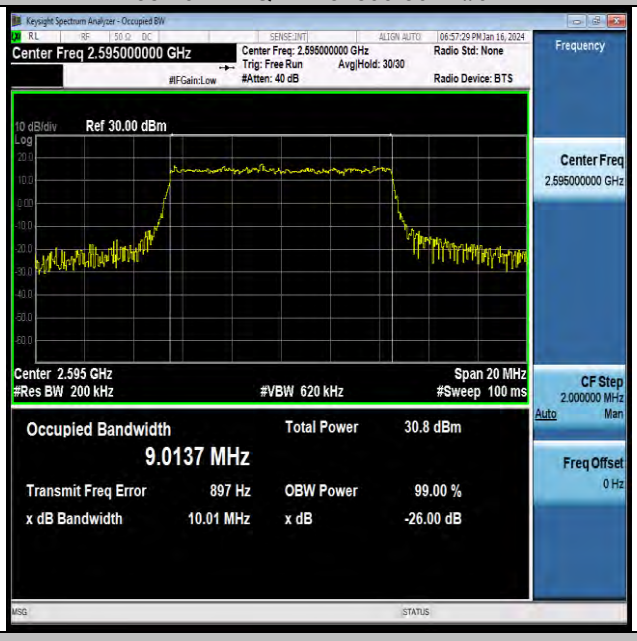
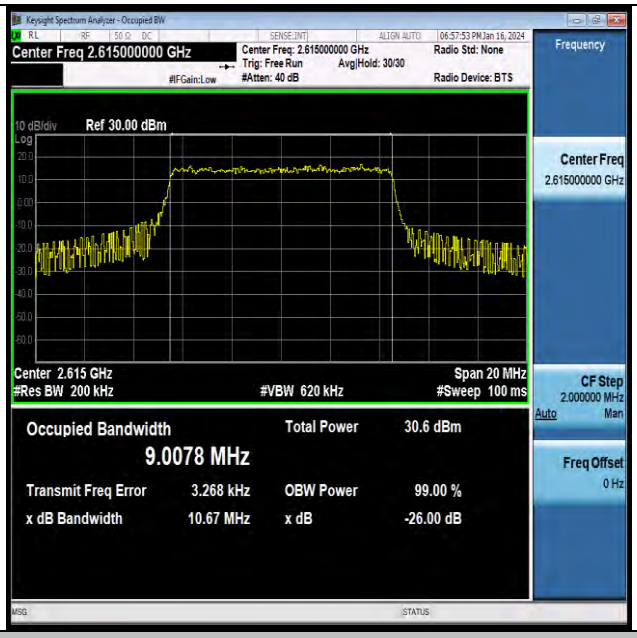


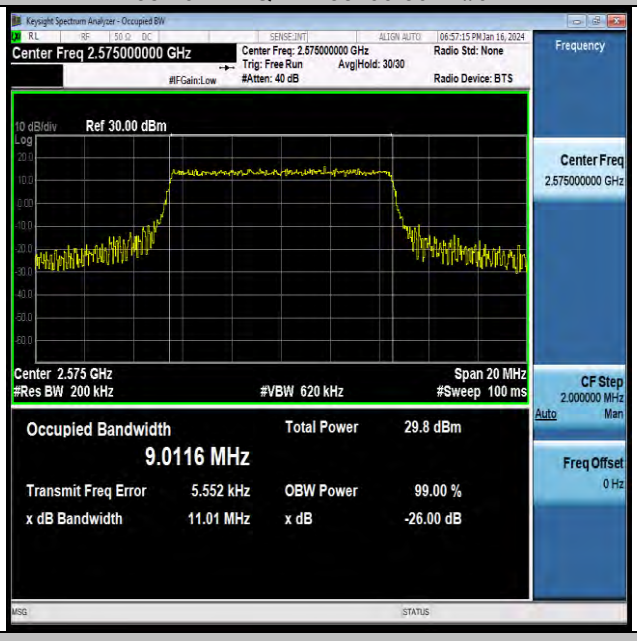
Band38-10MHz-QPSK-37800-50RB#0-PASS



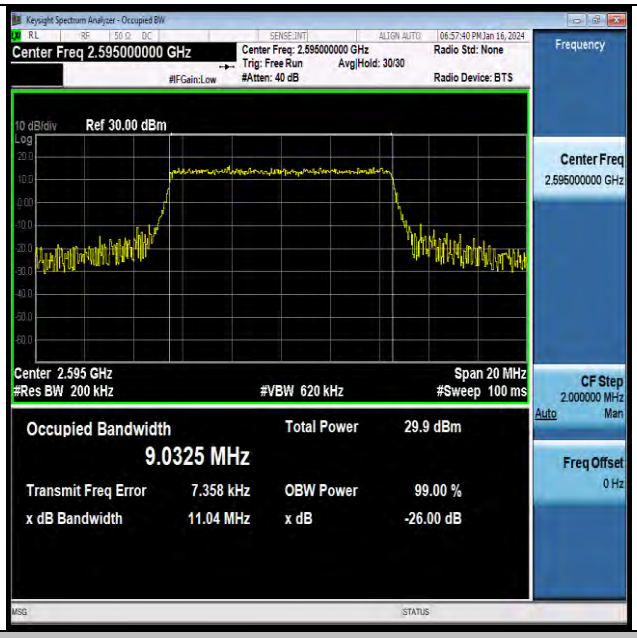
Band38-10MHz-QPSK-38000-50RB#0-PASS



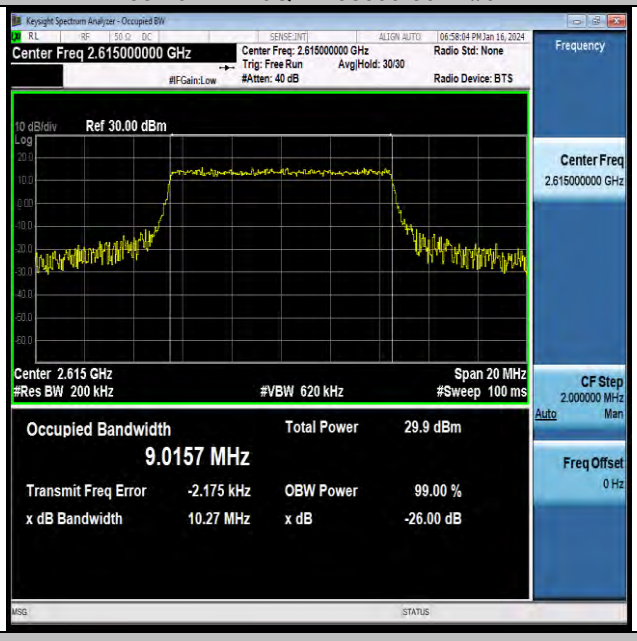
Band38-10MHz-QPSK-38200-50RB#0-PASS



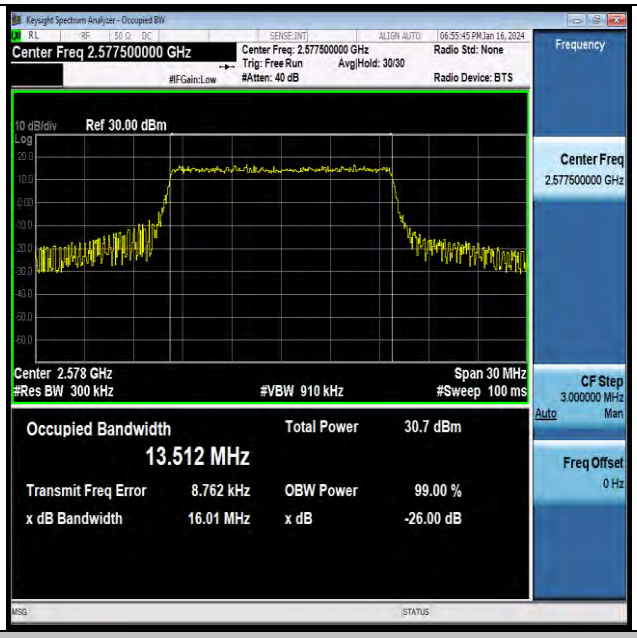
Band38-10MHz-16QAM-37800-50RB#0-PASS



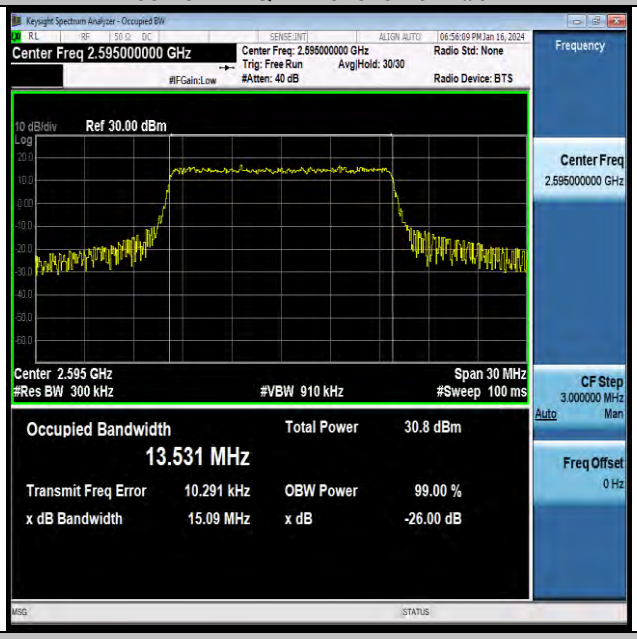
Band38-10MHz-16QAM-38000-50RB#0-PASS



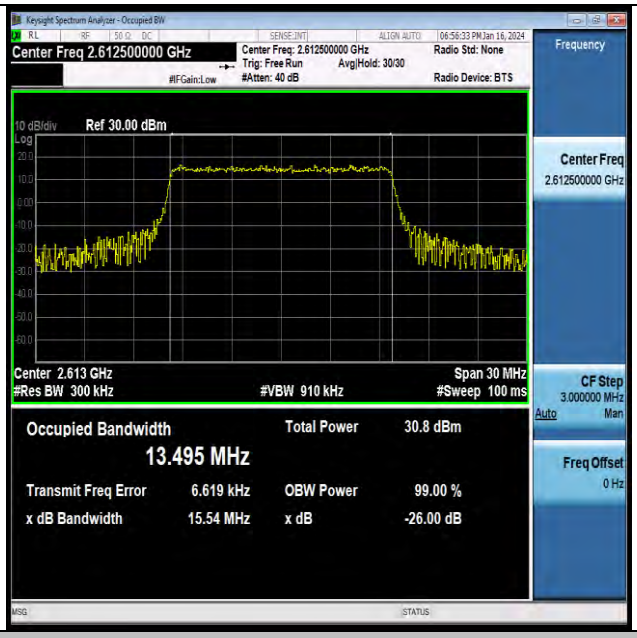
Band38-10MHz-16QAM-38200-50RB#0-PASS



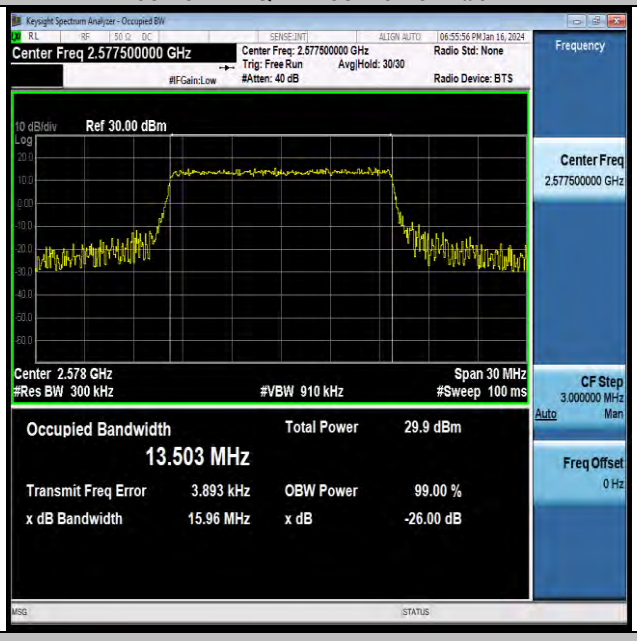
Band38-15MHz-QPSK-37825-75RB#0-PASS



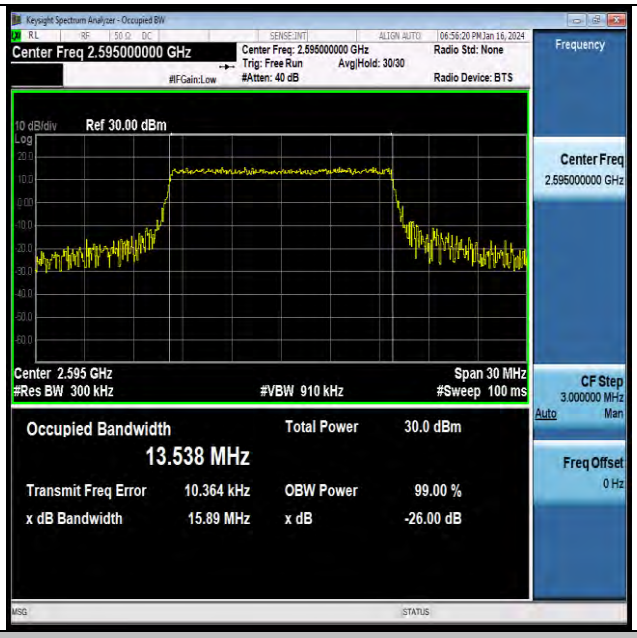
Band38-15MHz-QPSK-38000-75RB#0-PASS



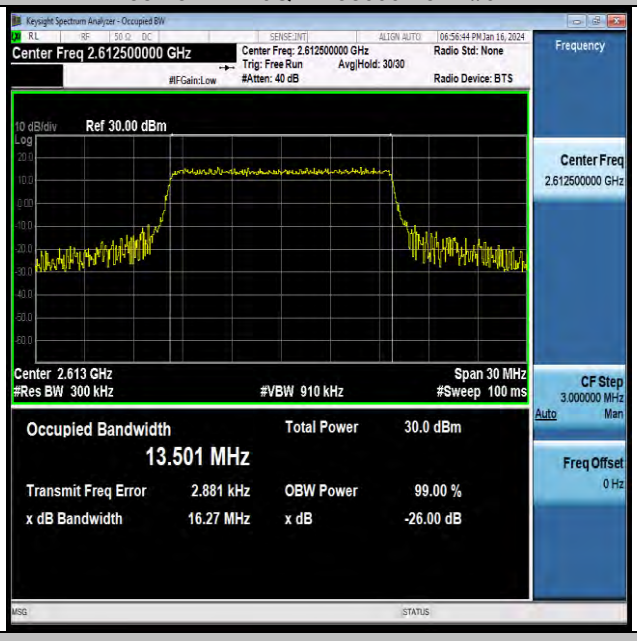
Band38-15MHz-QPSK-38175-75RB#0-PASS



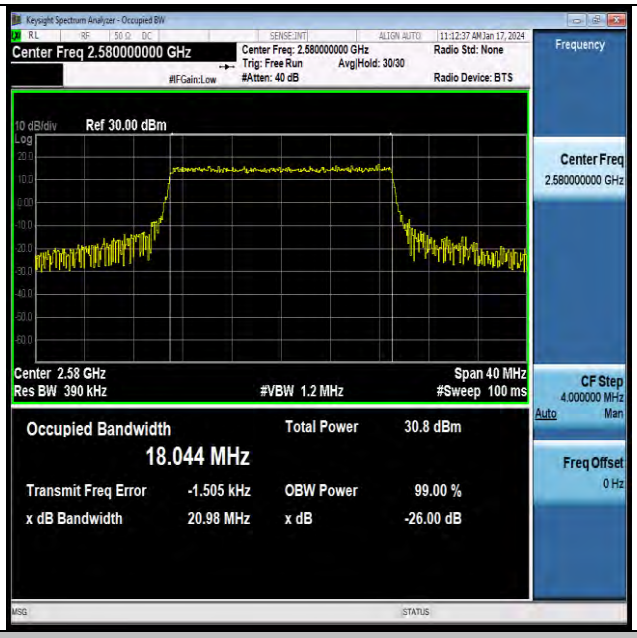
Band38-15MHz-16QAM-37825-75RB#0-PASS



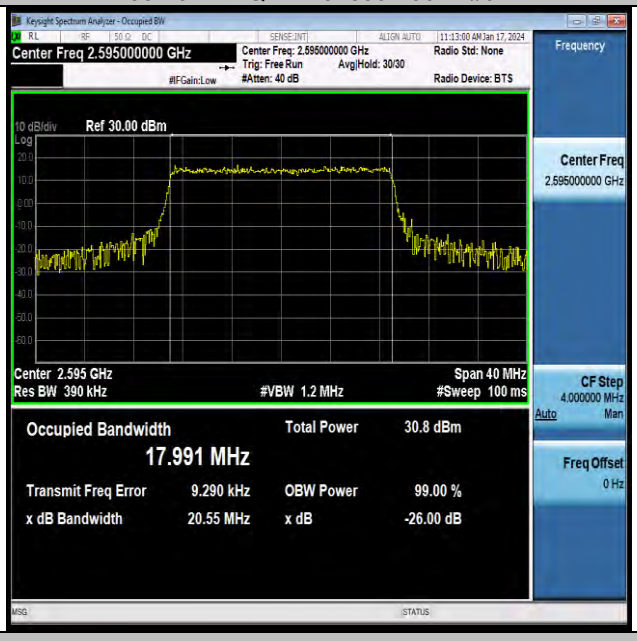
Band38-15MHz-16QAM-38000-75RB#0-PASS



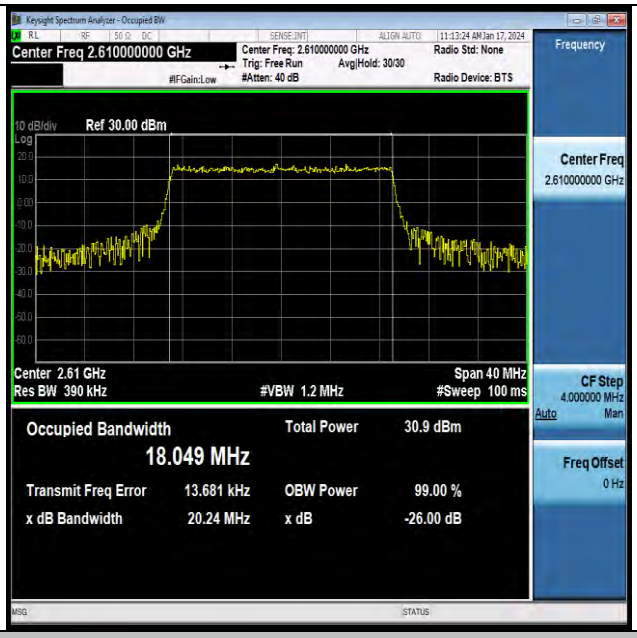
Band38-15MHz-16QAM-38175-75RB#0-PASS



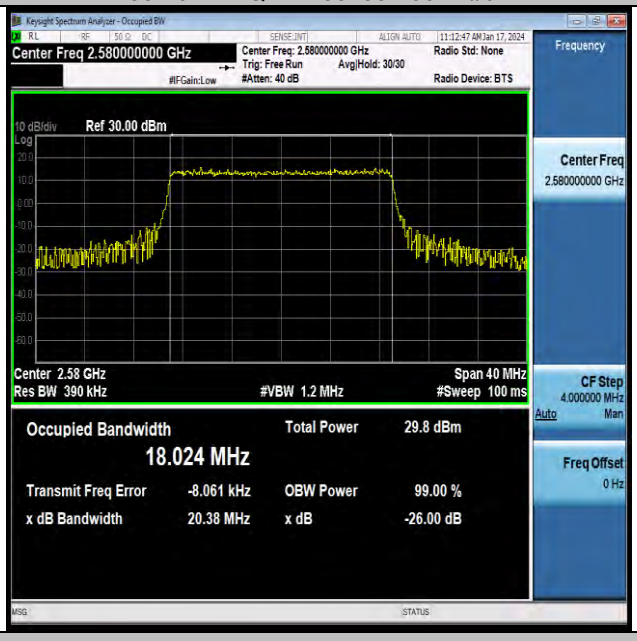
Band38-20MHz-QPSK-37850-100RB#0-PASS



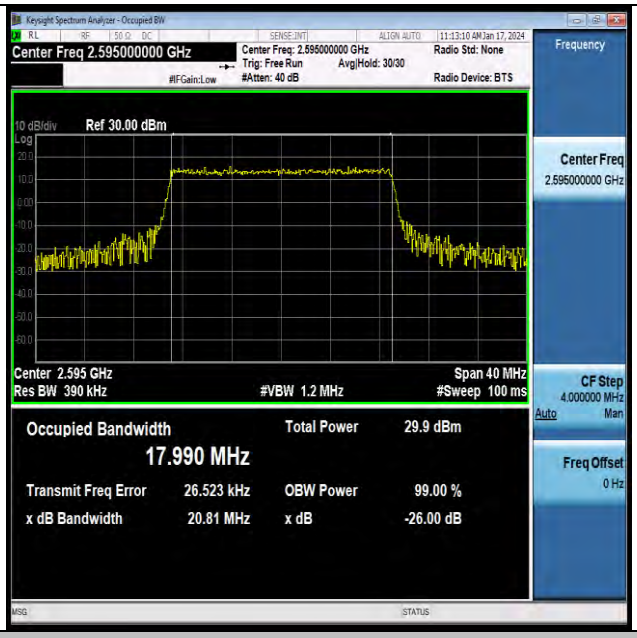
Band38-20MHz-QPSK-38000-100RB#0-PASS



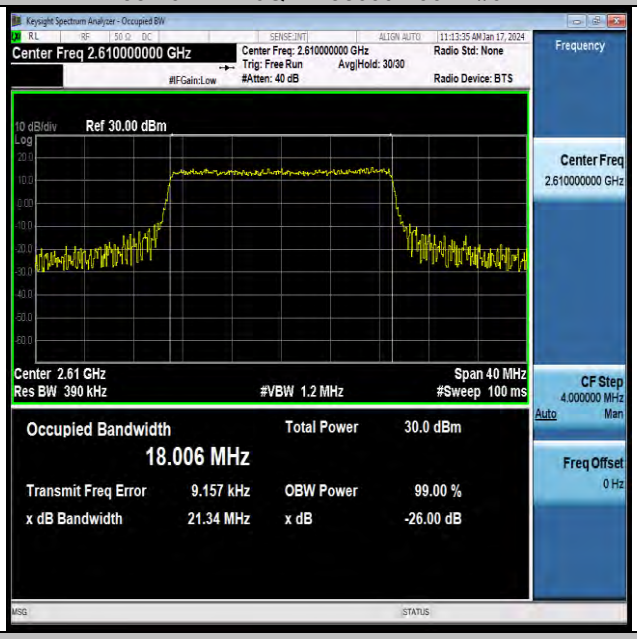
Band38-20MHz-QPSK-38150-100RB#0-PASS



Band38-20MHz-16QAM-37850-100RB#0-PASS



Band38-20MHz-16QAM-38000-100RB#0-PASS



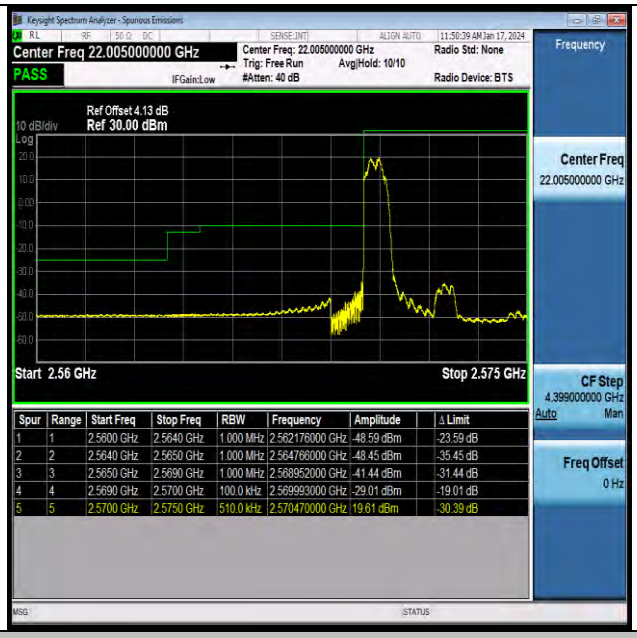
Band38-20MHz-16QAM-38150-100RB#0-PASS

BAND EDGE

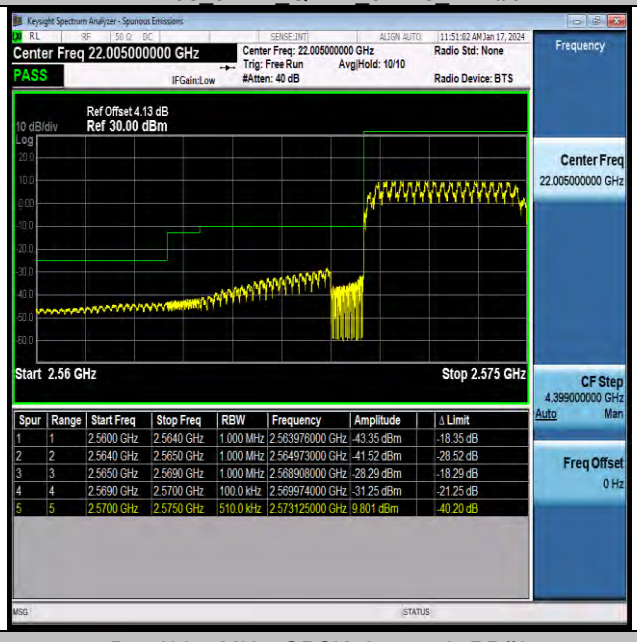
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	-29.01	PASS
Band38	5MHz	QPSK	37775	25RB#0	-28.29	PASS
Band38	5MHz	QPSK	38225	1RB#24	-31.77	PASS
Band38	5MHz	QPSK	38225	25RB#0	-41.95	PASS
Band38	5MHz	16QAM	37775	1RB#0	-31.34	PASS
Band38	5MHz	16QAM	37775	25RB#0	-26.54	PASS
Band38	5MHz	16QAM	38225	1RB#24	-30.96	PASS
Band38	5MHz	16QAM	38225	25RB#0	-42.41	PASS
Band38	10MHz	QPSK	37800	1RB#0	-48.93	PASS
Band38	10MHz	QPSK	37800	50RB#0	-43.58	PASS
Band38	10MHz	QPSK	38200	1RB#49	-48.72	PASS
Band38	10MHz	QPSK	38200	50RB#0	-43.99	PASS
Band38	10MHz	16QAM	37800	1RB#0	-48.90	PASS
Band38	10MHz	16QAM	37800	50RB#0	-43.18	PASS
Band38	10MHz	16QAM	38200	1RB#49	-48.84	PASS
Band38	10MHz	16QAM	38200	50RB#0	-42.71	PASS
Band38	15MHz	QPSK	37825	1RB#0	-49.15	PASS
Band38	15MHz	QPSK	37825	75RB#0	-42.97	PASS
Band38	15MHz	QPSK	38175	1RB#74	-48.87	PASS
Band38	15MHz	QPSK	38175	75RB#0	-43.52	PASS
Band38	15MHz	16QAM	37825	1RB#0	-49.14	PASS
Band38	15MHz	16QAM	37825	75RB#0	-44.38	PASS
Band38	15MHz	16QAM	38175	1RB#74	-48.91	PASS
Band38	15MHz	16QAM	38175	75RB#0	-43.47	PASS
Band38	20MHz	QPSK	37850	1RB#0	-49.07	PASS
Band38	20MHz	QPSK	37850	100RB#0	-44.06	PASS
Band38	20MHz	QPSK	38150	1RB#99	-48.90	PASS
Band38	20MHz	QPSK	38150	100RB#0	-44.81	PASS
Band38	20MHz	16QAM	37850	1RB#0	-49.10	PASS
Band38	20MHz	16QAM	37850	100RB#0	-45.53	PASS
Band38	20MHz	16QAM	38150	1RB#99	-48.83	PASS
Band38	20MHz	16QAM	38150	100RB#0	-44.23	PASS

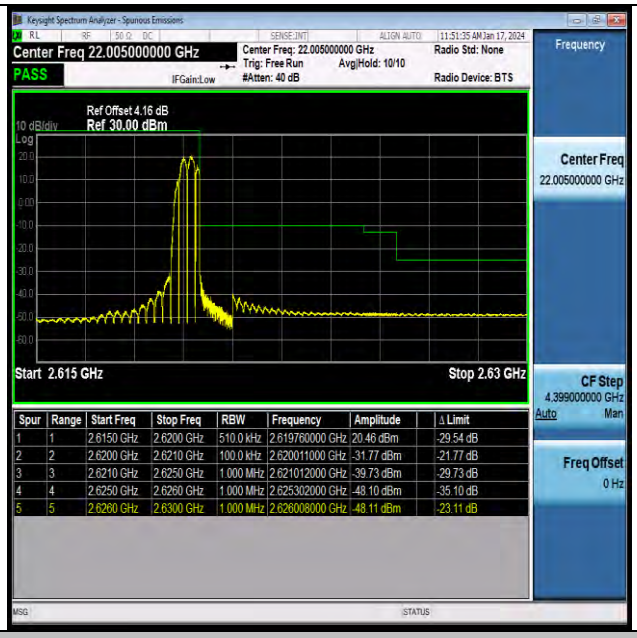
Test Graphs



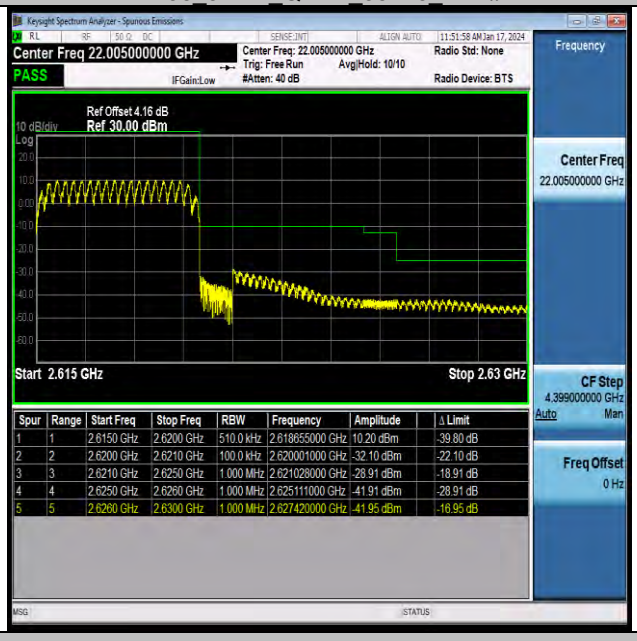
Band38_5MHz_QPSK_37775_1RB#0



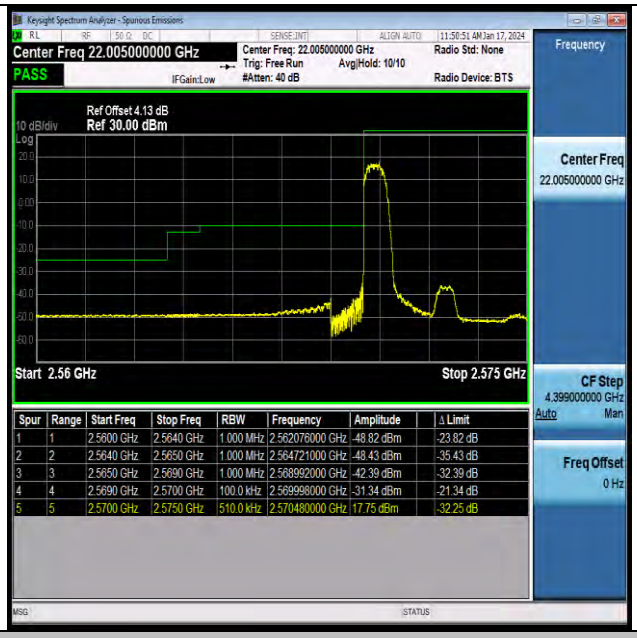
Band38_5MHz_QPSK_37775_25RB#0



Band38_5MHz_QPSK_38225_1RB#24

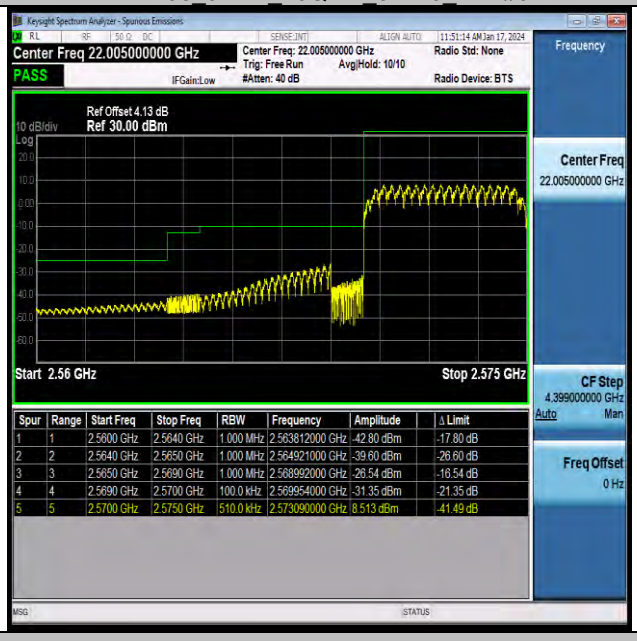


Band38_5MHz_QPSK_38225_25RB#0



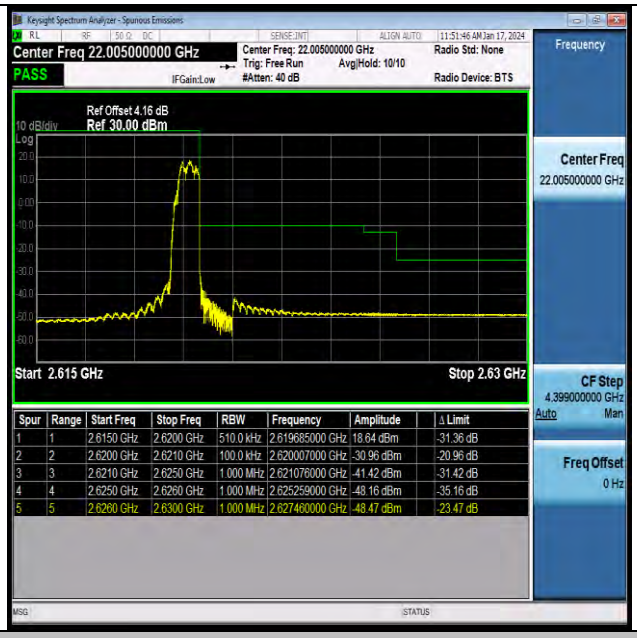
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5600 GHz	2.5640 GHz	1.000 MHz	2.562076000 GHz	-48.82 dBm	-23.82 dB
2	2	2.5640 GHz	2.5650 GHz	1.000 MHz	2.564721000 GHz	-48.43 dBm	-35.43 dB
3	3	2.5650 GHz	2.5690 GHz	1.000 MHz	2.568992000 GHz	-42.39 dBm	-32.39 dB
4	4	2.5690 GHz	2.5700 GHz	100.0 kHz	2.569998000 GHz	-31.34 dBm	-21.34 dB
5	5	2.5700 GHz	2.5750 GHz	510.0 kHz	2.570480000 GHz	17.75 dBm	-32.25 dB

Band38_5MHz_16QAM_37775_1RB#0

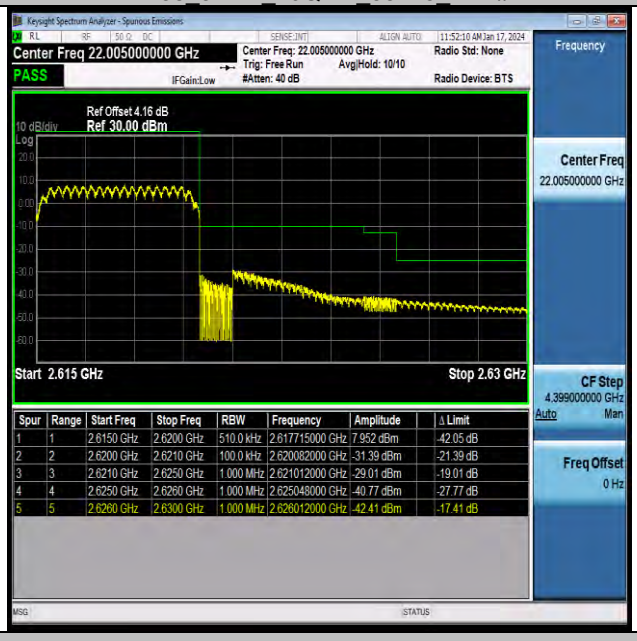


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5600 GHz	2.5640 GHz	1.000 MHz	2.563812000 GHz	-42.80 dBm	-17.80 dB
2	2	2.5640 GHz	2.5650 GHz	1.000 MHz	2.564921000 GHz	-39.60 dBm	-26.60 dB
3	3	2.5650 GHz	2.5690 GHz	1.000 MHz	2.568992000 GHz	-26.54 dBm	-16.54 dB
4	4	2.5690 GHz	2.5700 GHz	100.0 kHz	2.569954000 GHz	-31.35 dBm	-21.35 dB
5	5	2.5700 GHz	2.5750 GHz	510.0 kHz	2.573090000 GHz	8.513 dBm	-41.49 dB

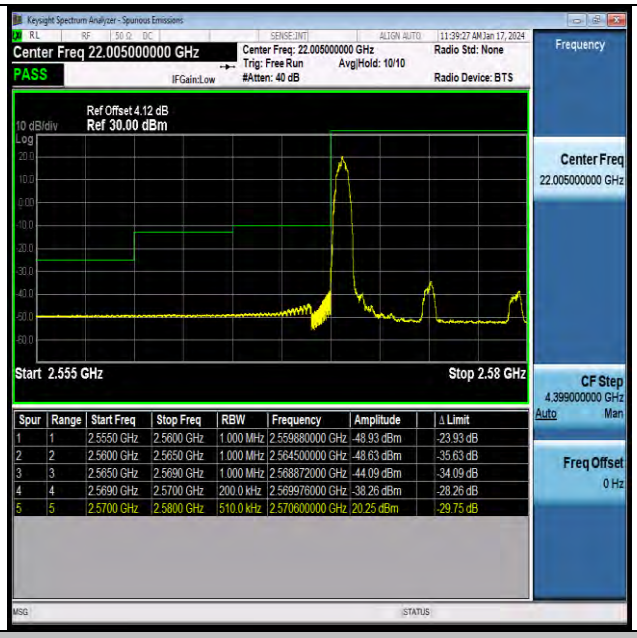
Band38_5MHz_16QAM_37775_25RB#0



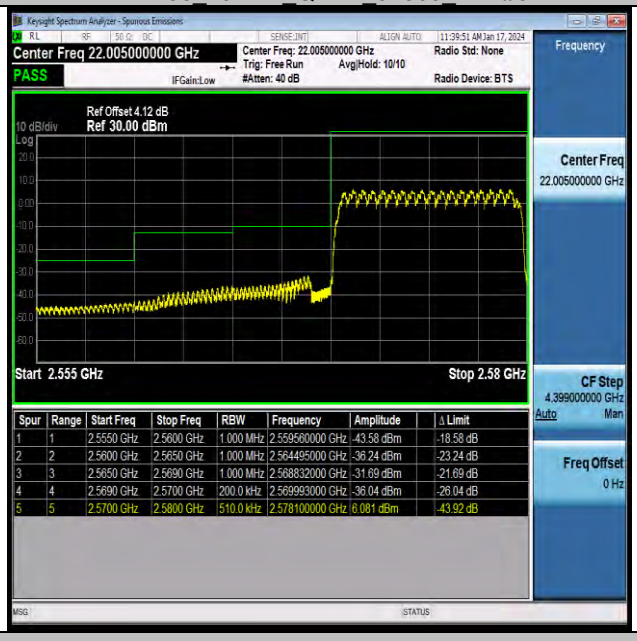
Band38_5MHz_16QAM_38225_1RB#24



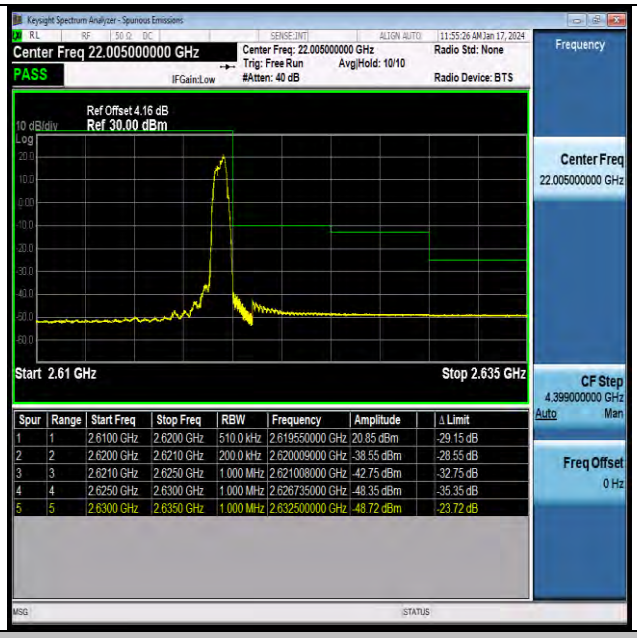
Band38_5MHz_16QAM_38225_25RB#0



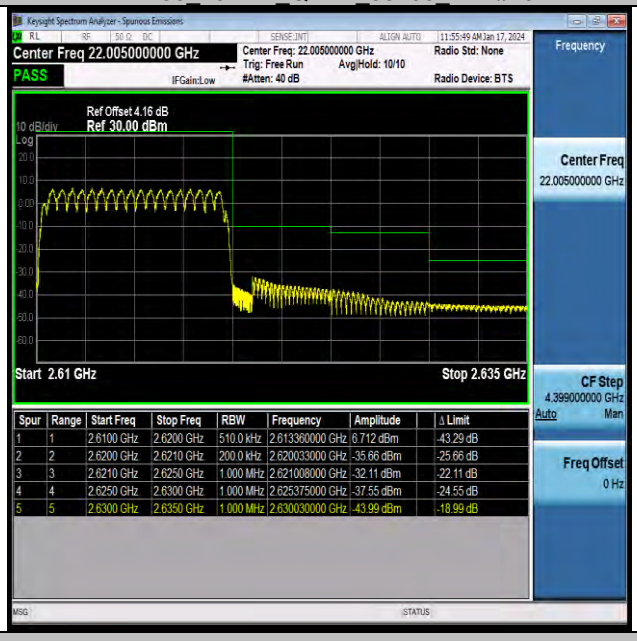
Band38_10MHz_QPSK_37800_1RB#0



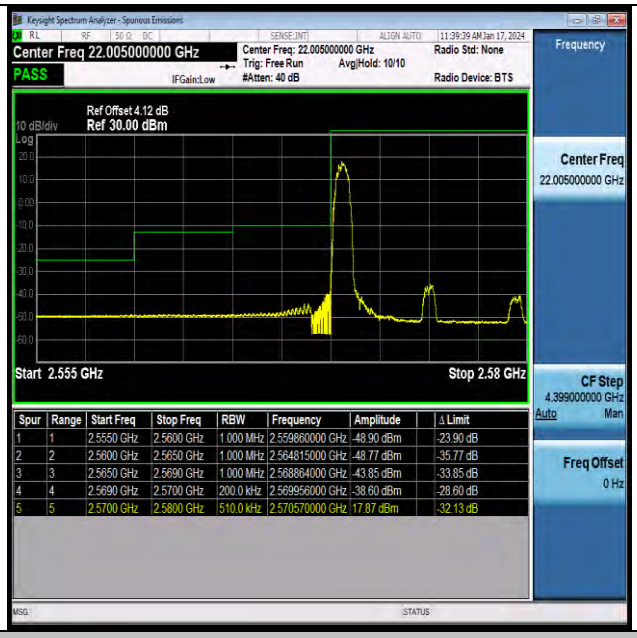
Band38_10MHz_QPSK_37800_50RB#0



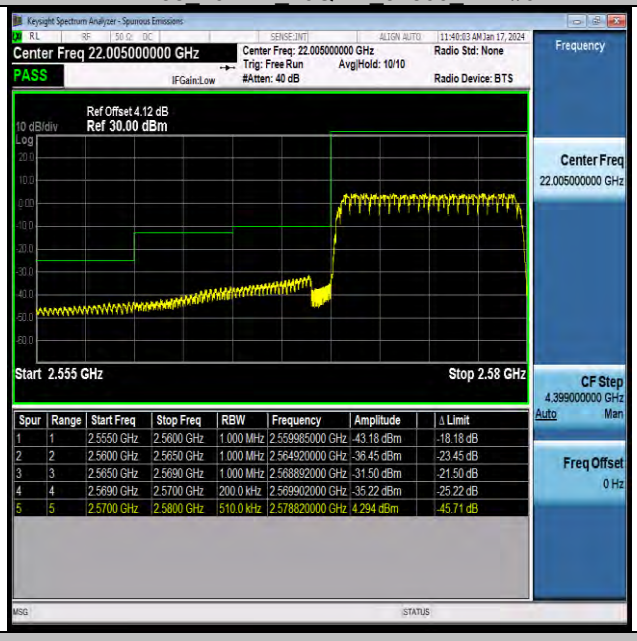
Band38_10MHz_QPSK_38200_1RB#49



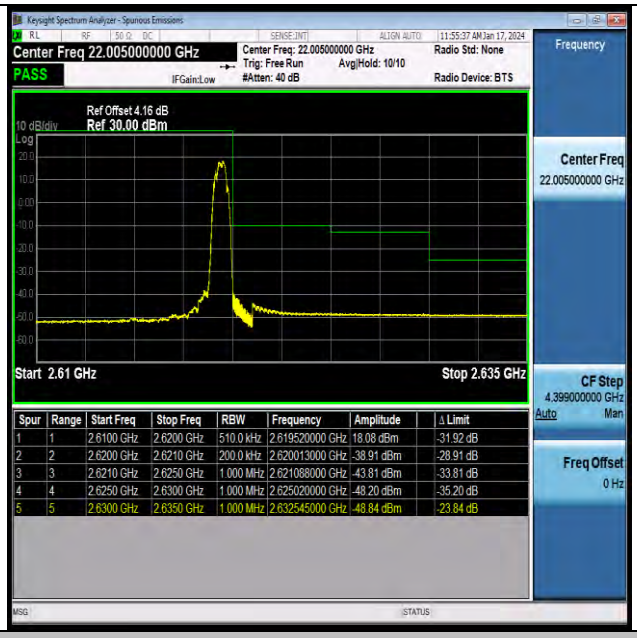
Band38_10MHz_QPSK_38200_50RB#0



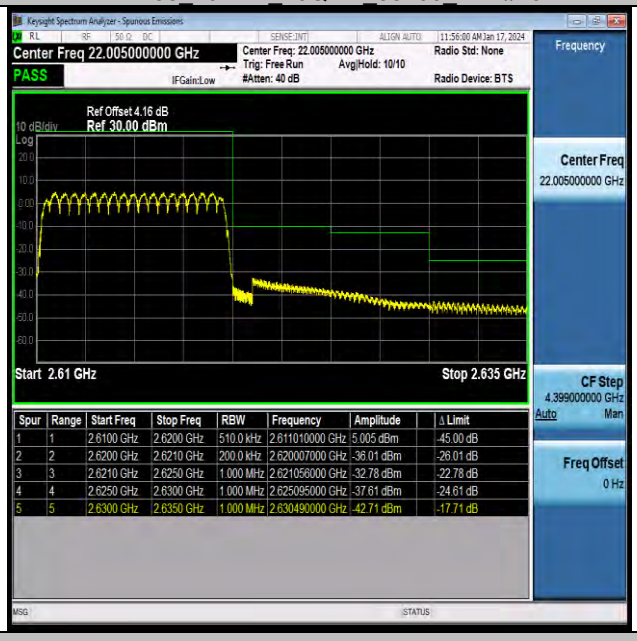
Band38_10MHz_16QAM_37800_1RB#0



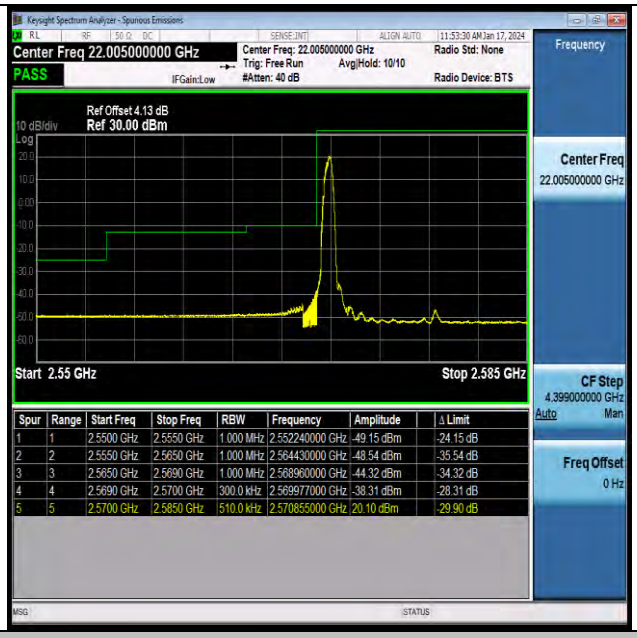
Band38_10MHz_16QAM_37800_50RB#0



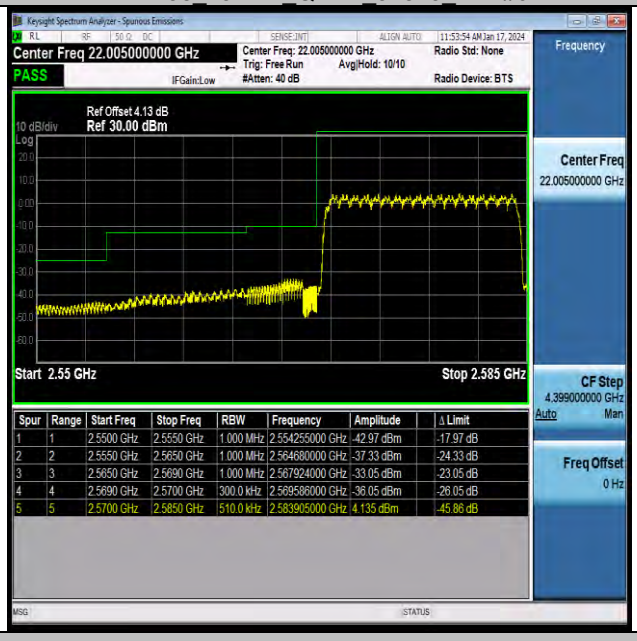
Band38_10MHz_16QAM_38200_1RB#49



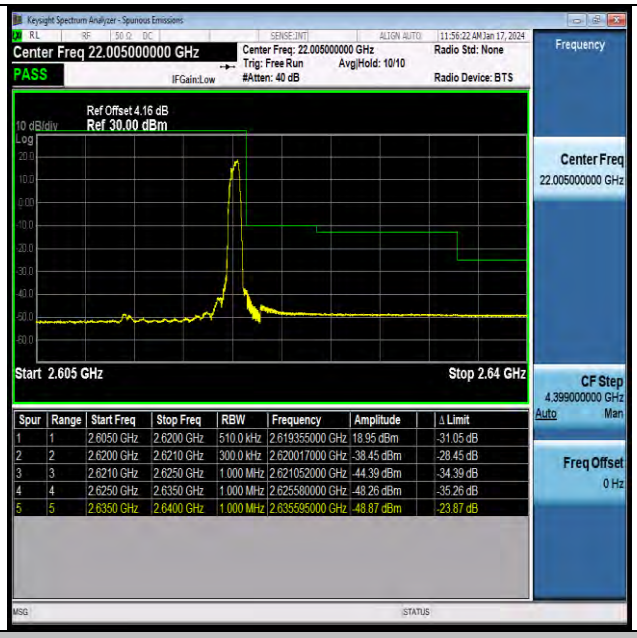
Band38_10MHz_16QAM_38200_50RB#0



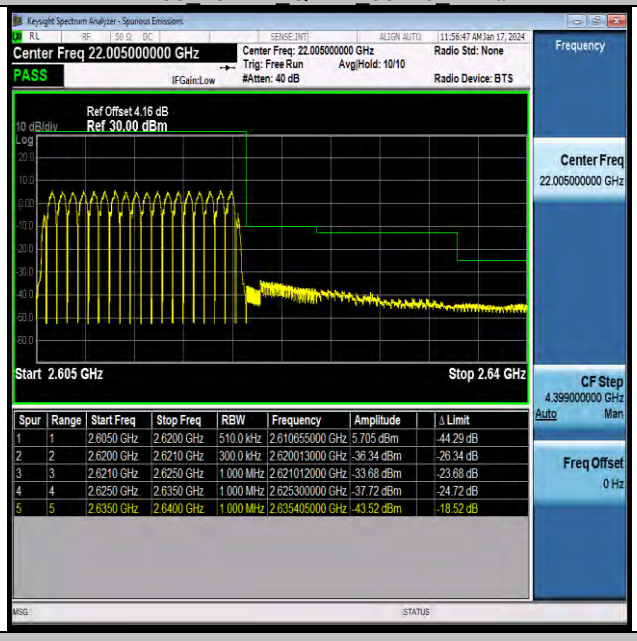
Band38_15MHz_QPSK_37825_1RB#0



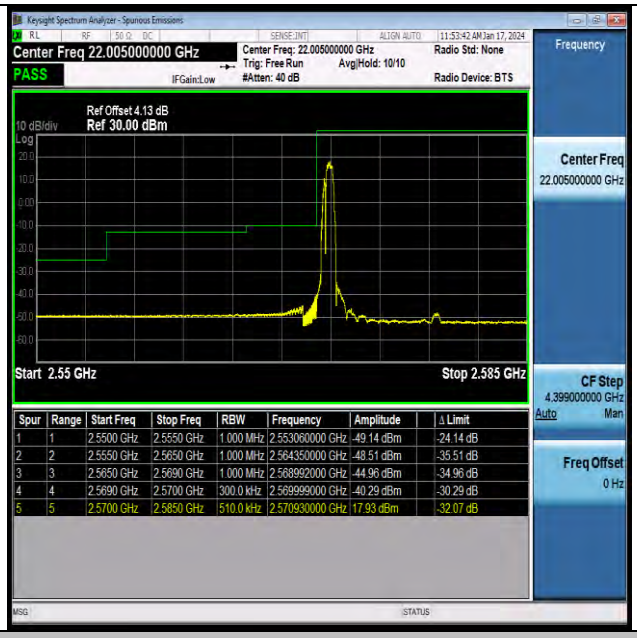
Band38_15MHz_QPSK_37825_75RB#0



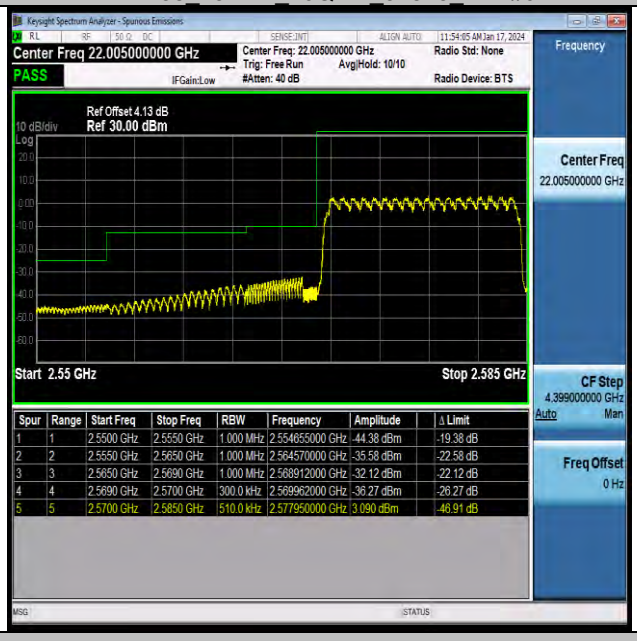
Band38_15MHz_QPSK_38175_1RB#74



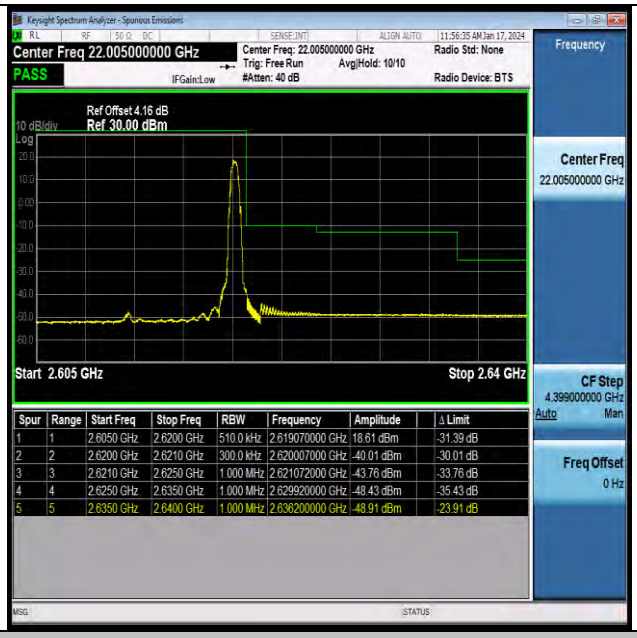
Band38_15MHz_QPSK_38175_75RB#0



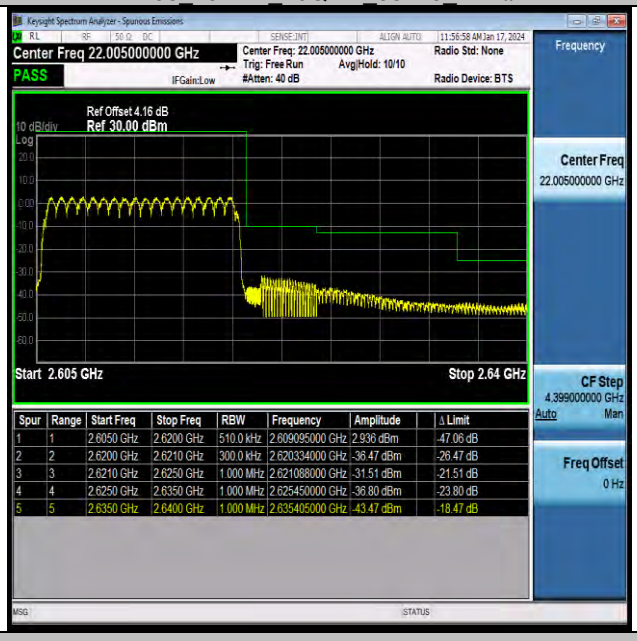
Band38_15MHz_16QAM_37825_1RB#0



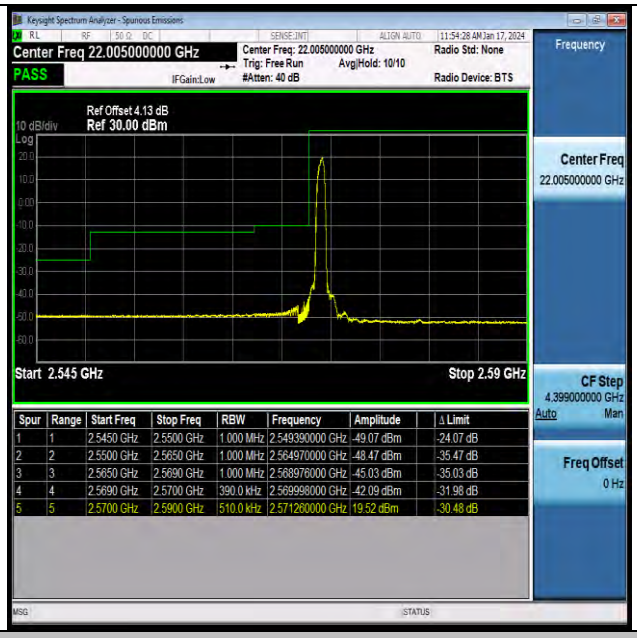
Band38_15MHz_16QAM_37825_75RB#0



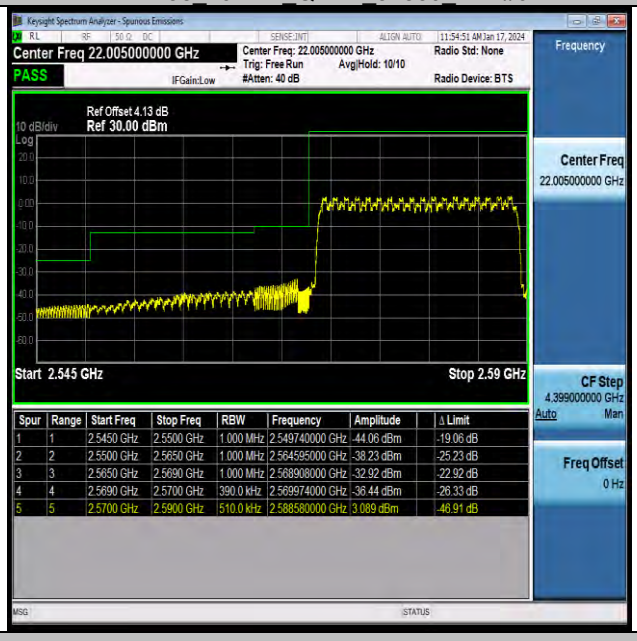
Band38_15MHz_16QAM_38175_1RB#74



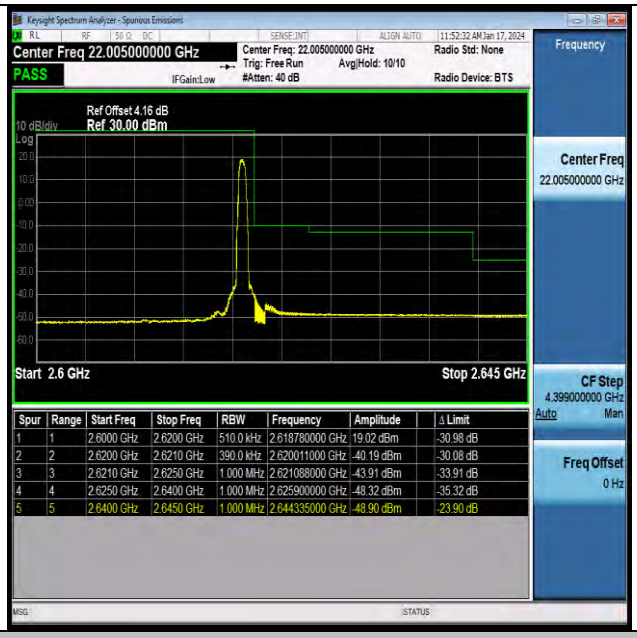
Band38_15MHz_16QAM_38175_75RB#0



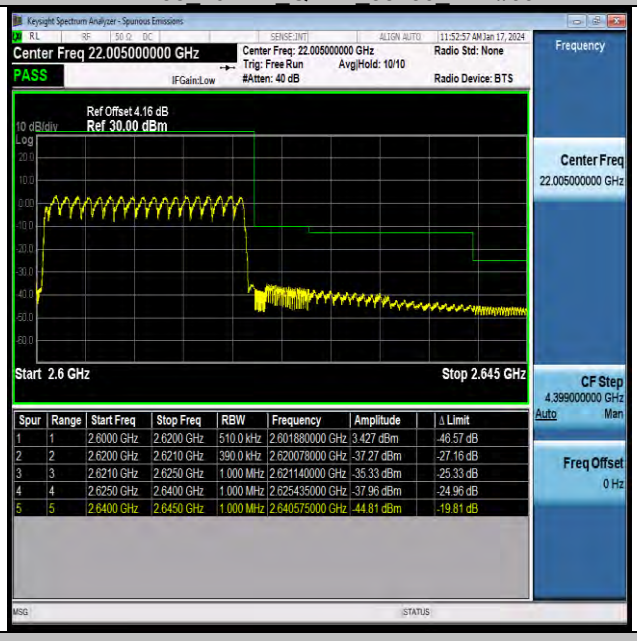
Band38_20MHz_QPSK_37850_1RB#0



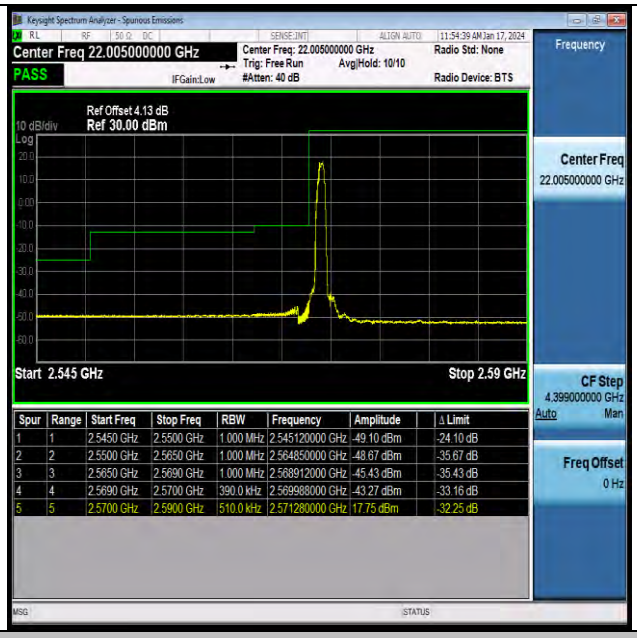
Band38_20MHz_QPSK_37850_100RB#0



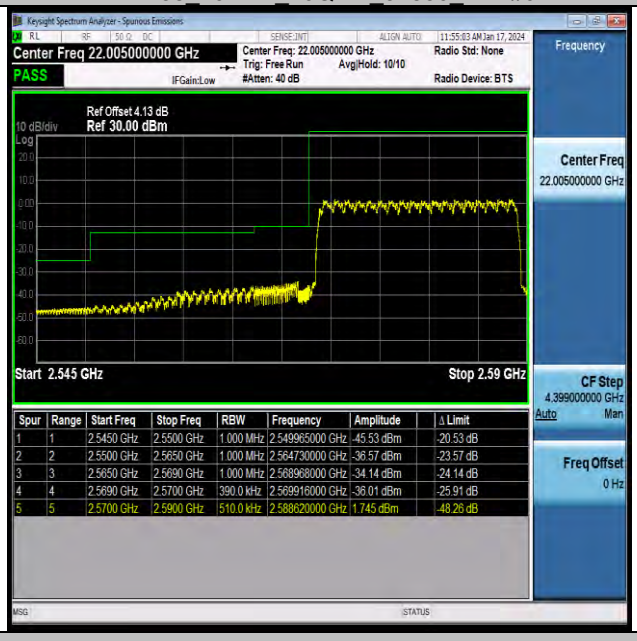
Band38_20MHz_QPSK_38150_1RB#99



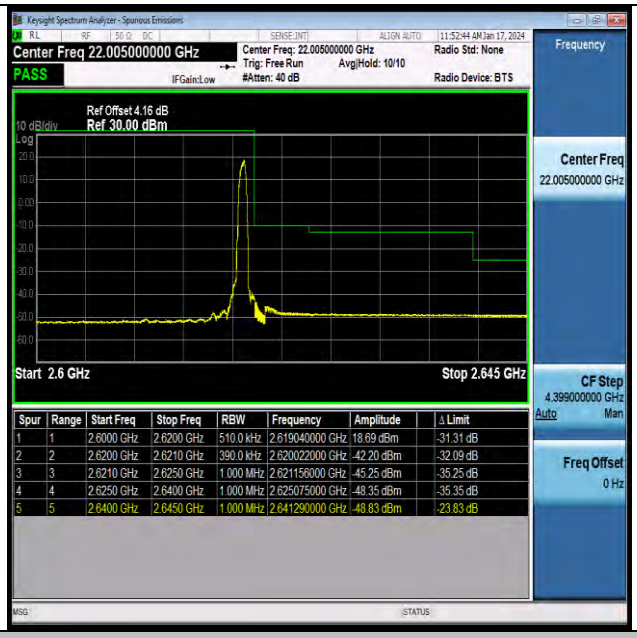
Band38_20MHz_QPSK_38150_100RB#0



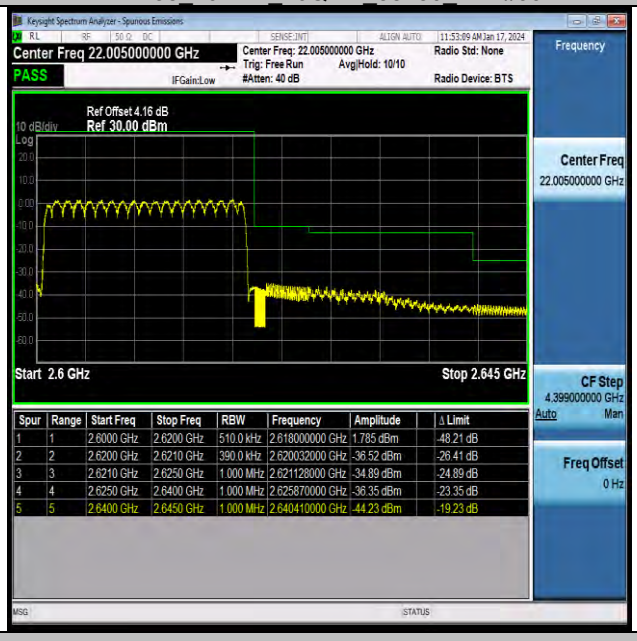
Band38_20MHz_16QAM_37850_1RB#0



Band38_20MHz_16QAM_37850_100RB#0



Band38_20MHz_16QAM_38150_1RB#99



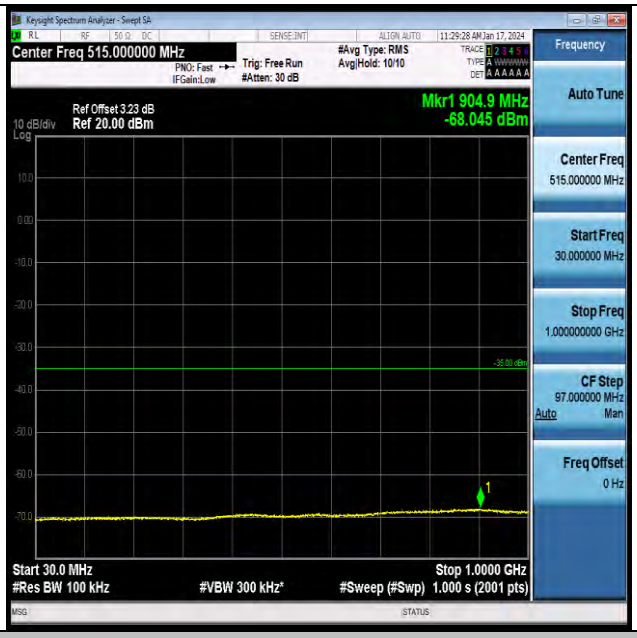
Band38_20MHz_16QAM_38150_100RB#0

CONDUCTED SPURIOUS EMISSION

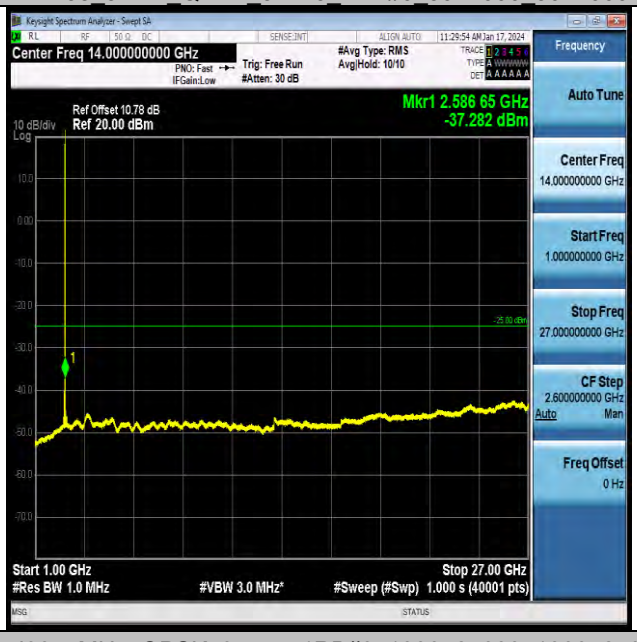
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	30~1000	-68.05	PASS
Band38	5MHz	QPSK	37775	1RB#0	1000~27000	-37.28	PASS
Band38	5MHz	QPSK	38000	1RB#0	30~1000	-62.58	PASS
Band38	5MHz	QPSK	38000	1RB#0	1000~27000	-34.71	PASS
Band38	5MHz	QPSK	38225	1RB#0	30~1000	-64.29	PASS
Band38	5MHz	QPSK	38225	1RB#0	1000~27000	-39.14	PASS
Band38	10MHz	QPSK	37800	1RB#0	30~1000	-67.80	PASS
Band38	10MHz	QPSK	37800	1RB#0	1000~27000	-38.84	PASS
Band38	10MHz	QPSK	38000	1RB#0	30~1000	-67.99	PASS
Band38	10MHz	QPSK	38000	1RB#0	1000~27000	-37.03	PASS
Band38	10MHz	QPSK	38200	1RB#0	30~1000	-62.93	PASS
Band38	10MHz	QPSK	38200	1RB#0	1000~27000	-38.98	PASS
Band38	15MHz	QPSK	37825	1RB#0	30~1000	-68.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	1000~27000	-41.57	PASS
Band38	15MHz	QPSK	38000	1RB#0	30~1000	-67.99	PASS
Band38	15MHz	QPSK	38000	1RB#0	1000~27000	-37.97	PASS
Band38	15MHz	QPSK	38175	1RB#0	30~1000	-64.78	PASS
Band38	15MHz	QPSK	38175	1RB#0	1000~27000	-40.96	PASS
Band38	20MHz	QPSK	37850	1RB#0	30~1000	-67.79	PASS
Band38	20MHz	QPSK	37850	1RB#0	1000~27000	-42.47	PASS
Band38	20MHz	QPSK	38000	1RB#0	30~1000	-67.98	PASS
Band38	20MHz	QPSK	38000	1RB#0	1000~27000	-41.14	PASS
Band38	20MHz	QPSK	38150	1RB#0	30~1000	-64.43	PASS
Band38	20MHz	QPSK	38150	1RB#0	1000~27000	-40.81	PASS

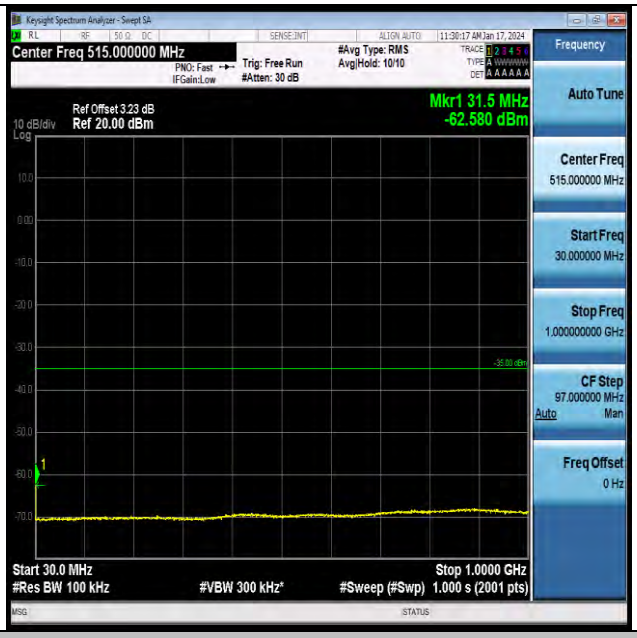
Test Graphs



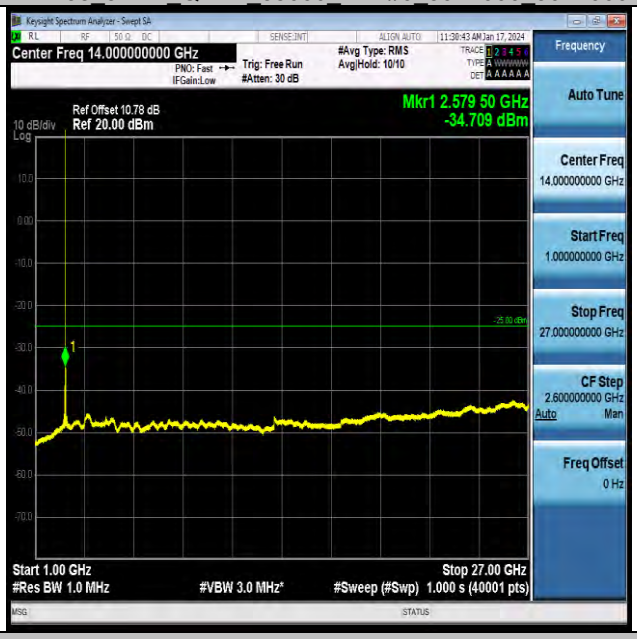
Band38_5MHz_QPSK_37775_1RB#0_30~1000_30~1000



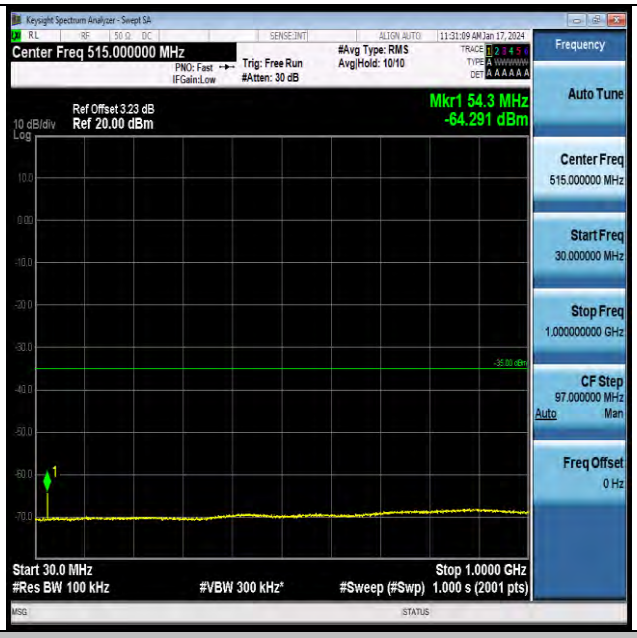
Band38_5MHz_QPSK_37775_1RB#0_1000~27000_1000~27000



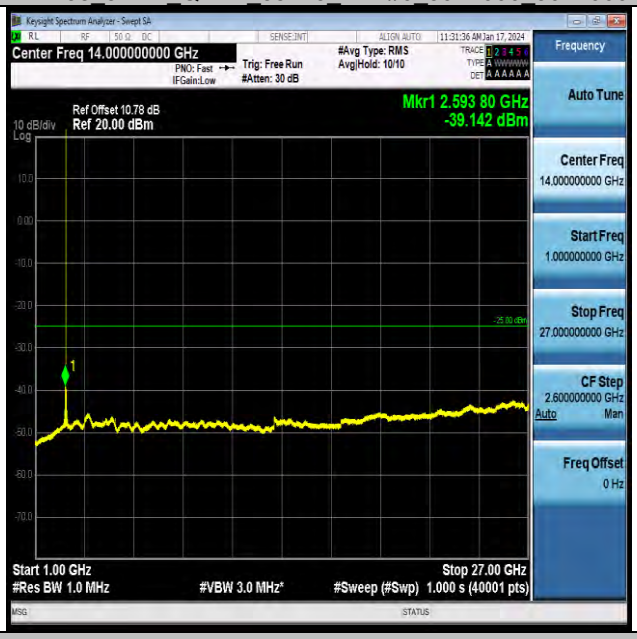
Band38_5MHz_QPSK_38000_1RB#0_30~1000_30~1000



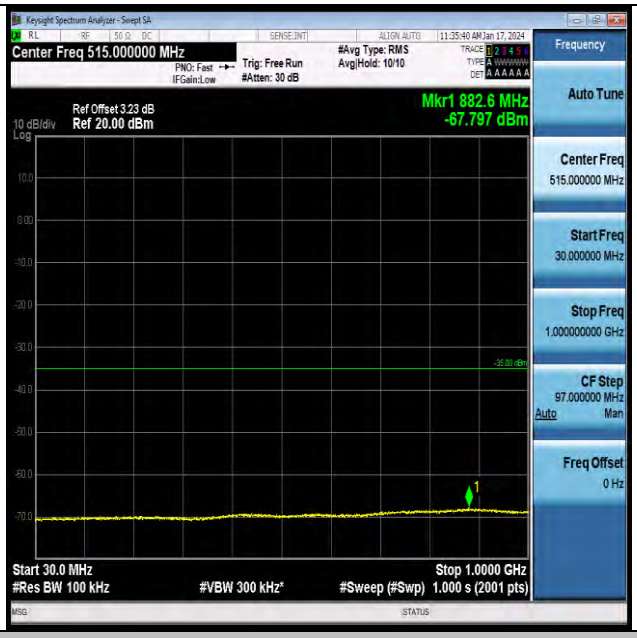
Band38_5MHz_QPSK_38000_1RB#0_1000~27000_1000~27000



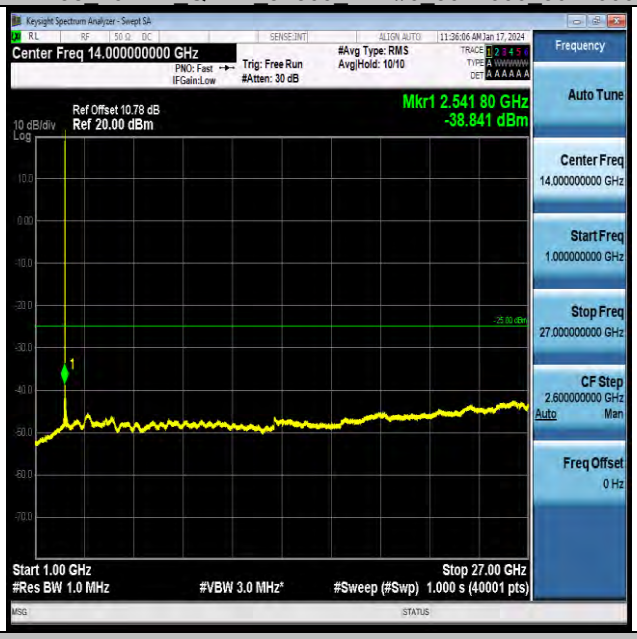
Band38_5MHz_QPSK_38225_1RB#0_30~1000_30~1000



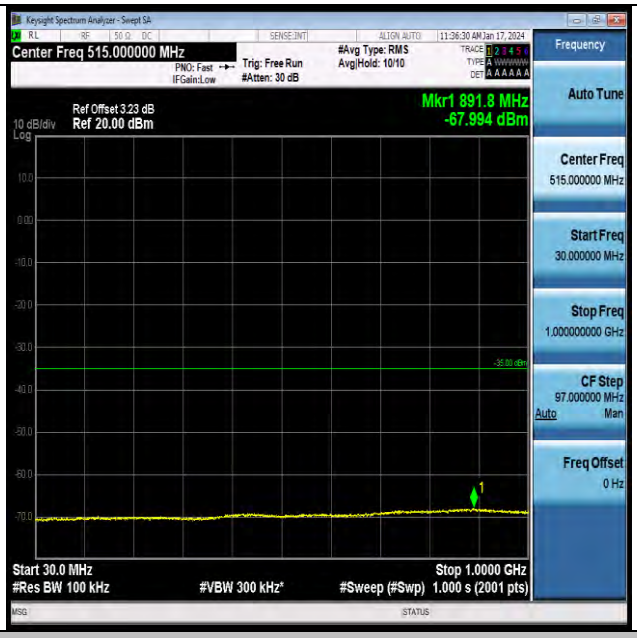
Band38_5MHz_QPSK_38225_1RB#0_1000~27000_1000~27000



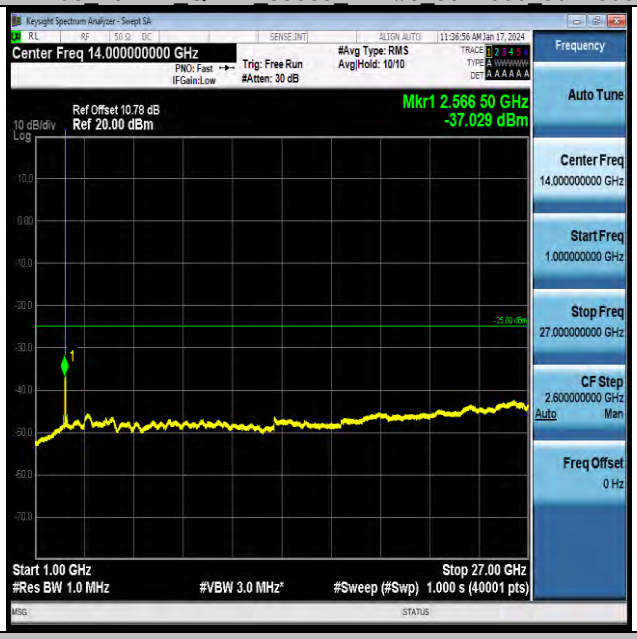
Band38_10MHz_QPSK_37800_1RB#0_30~1000_30~1000



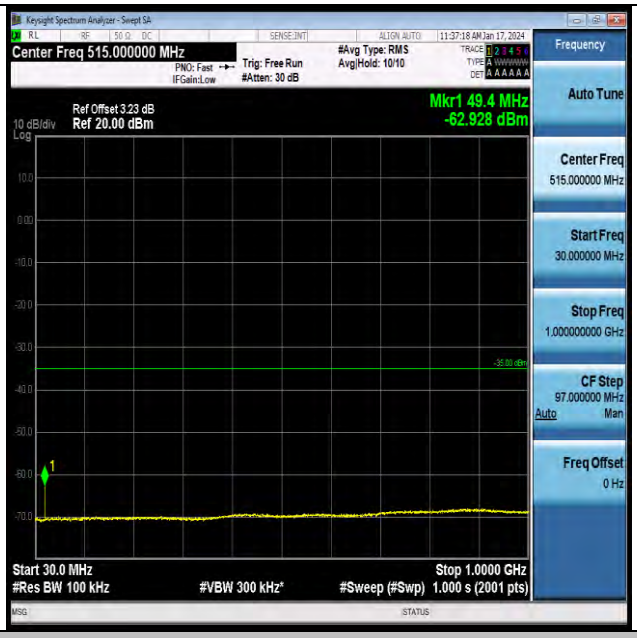
Band38_10MHz_QPSK_37800_1RB#0_1000~27000_1000~27000



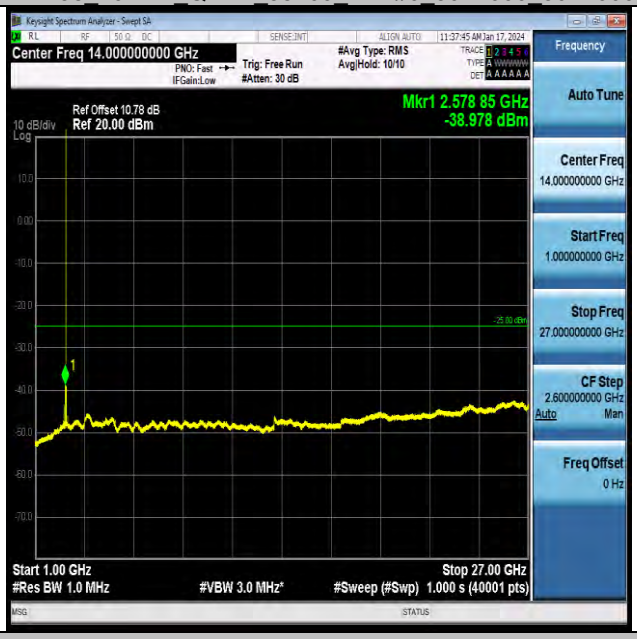
Band38_10MHz_QPSK_38000_1RB#0_30~1000_30~1000



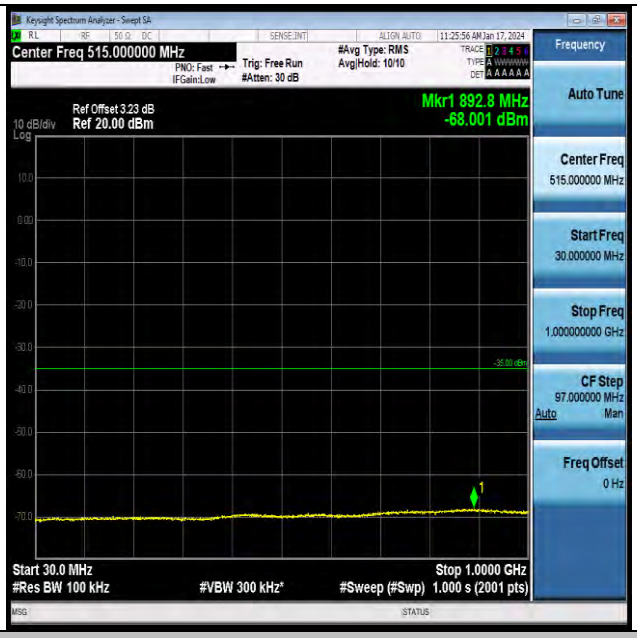
Band38_10MHz_QPSK_38000_1RB#0_1000~27000_1000~27000



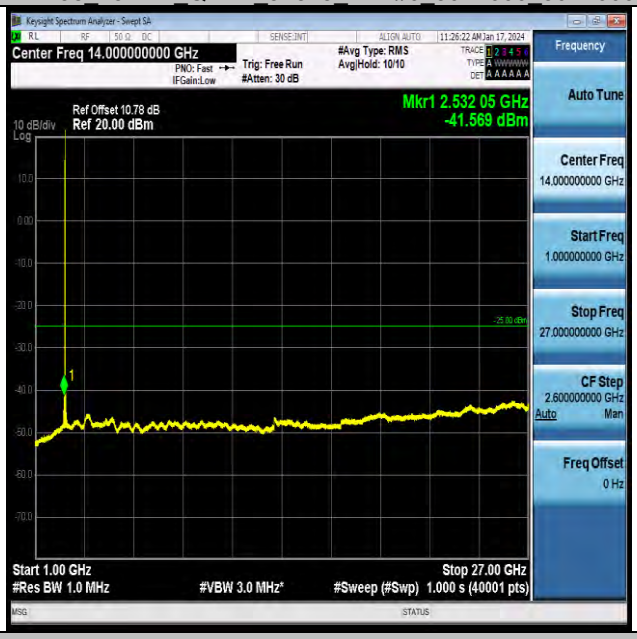
Band38_10MHz_QPSK_38200_1RB#0_30~1000_30~1000



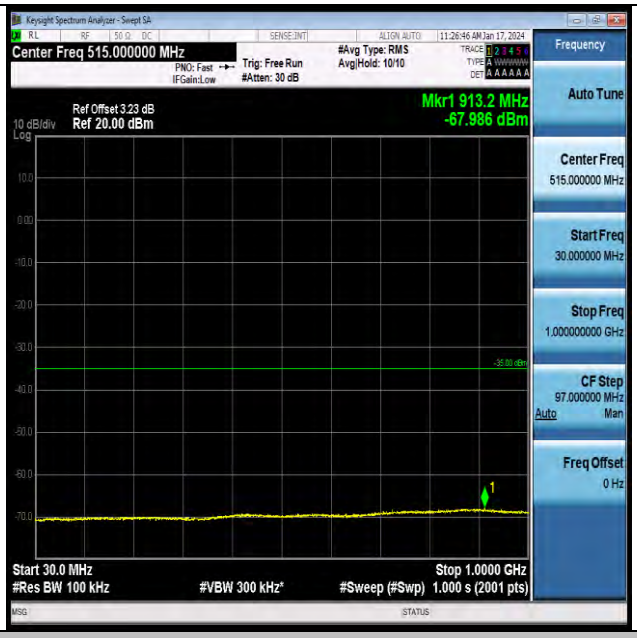
Band38_10MHz_QPSK_38200_1RB#0_1000~27000_1000~27000



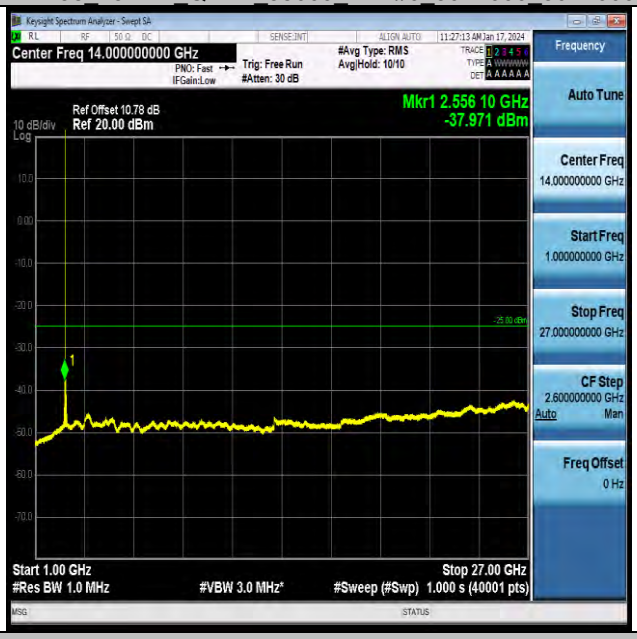
Band38_15MHz_QPSK_37825_1RB#0_30~1000_30~1000



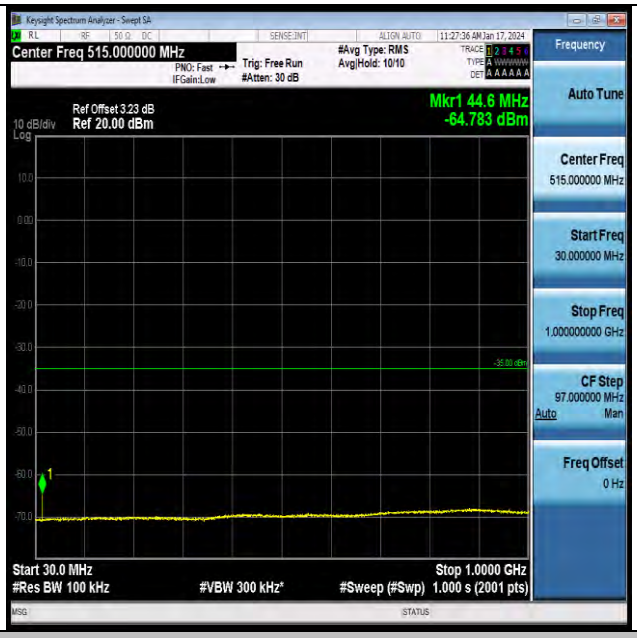
Band38_15MHz_QPSK_37825_1RB#0_1000~27000_1000~27000



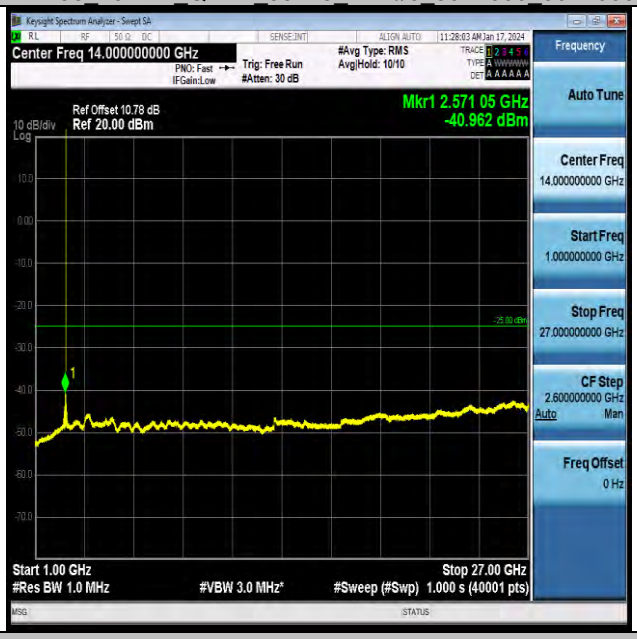
Band38_15MHz_QPSK_38000_1RB#0_30~1000_30~1000



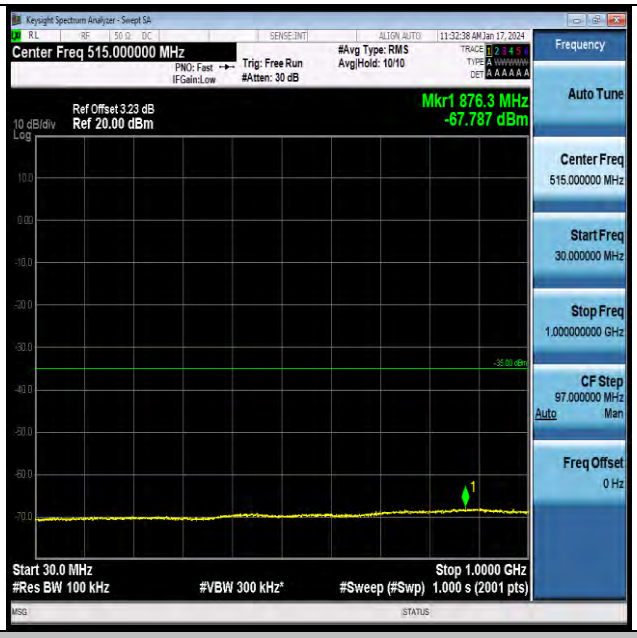
Band38_15MHz_QPSK_38000_1RB#0_1000~27000_1000~27000



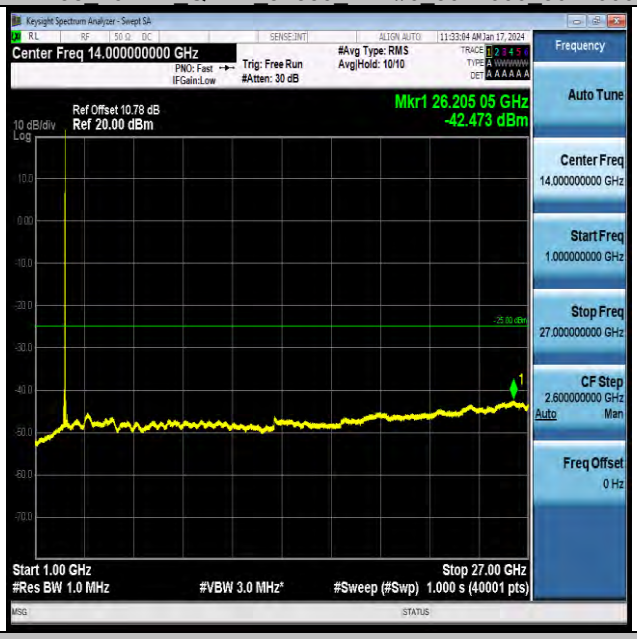
Band38_15MHz_QPSK_38175_1RB#0_30~1000_30~1000



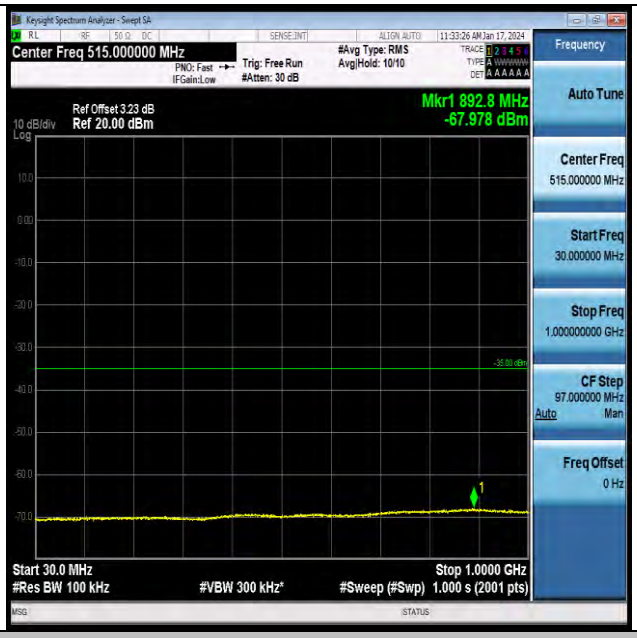
Band38_15MHz_QPSK_38175_1RB#0_1000~27000_1000~27000



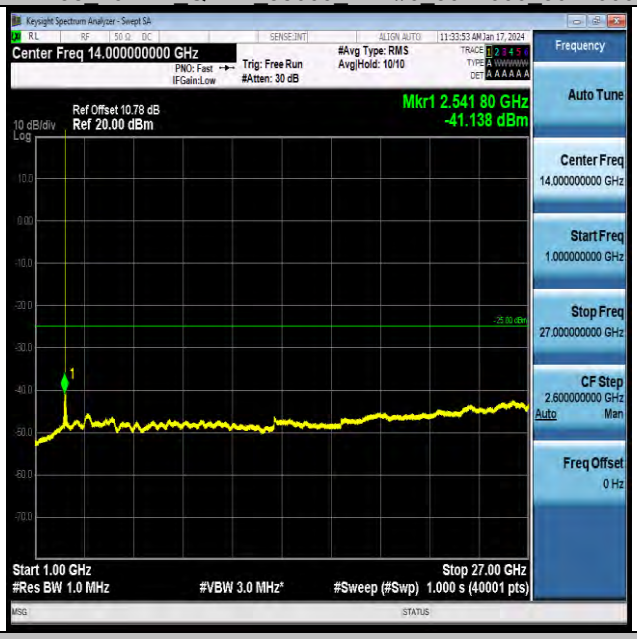
Band38_20MHz_QPSK_37850_1RB#0_30~1000_30~1000



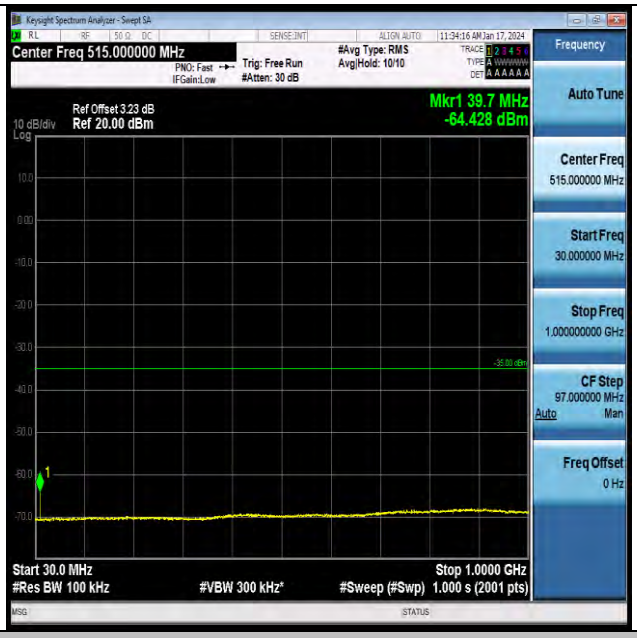
Band38_20MHz_QPSK_37850_1RB#0_1000~27000_1000~27000



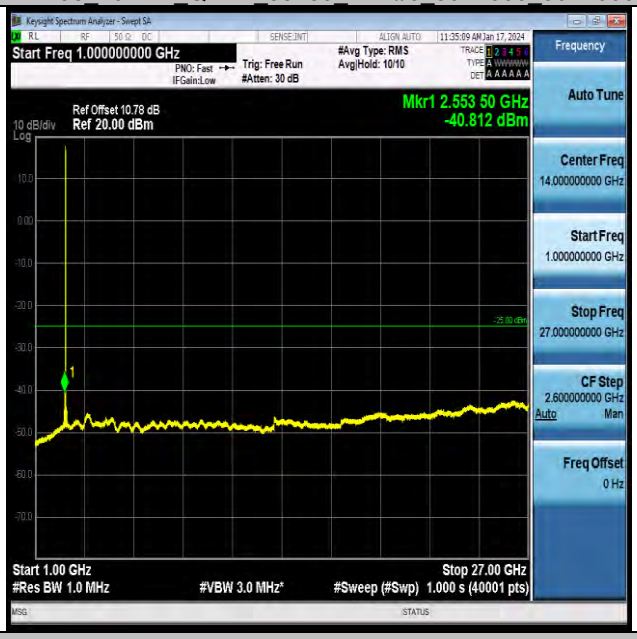
Band38_20MHz_QPSK_38000_1RB#0_30~1000_30~1000



Band38_20MHz_QPSK_38000_1RB#0_1000~27000_1000~27000



Band38_20MHz_QPSK_38150_1RB#0_30~1000_30~1000



Band38_20MHz_QPSK_38150_1RB#0_1000~27000_1000~27000

FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	10MHz	QPSK	37800	50RB#0	VN	NT	-7.98	-0.003099	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	VL	NT	-6.65	-0.002583	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	VH	NT	-6.51	-0.002528	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	VN	NT	-7.34	-0.002829	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	VL	NT	-5.14	-0.001981	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	VH	NT	-8.55	-0.003295	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	VN	NT	-7.18	-0.002746	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	VL	NT	-5.09	-0.001946	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	VH	NT	-6.04	-0.002310	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band38	10MHz	QPSK	37800	50RB#0	NV	-30	-8.68	-0.003371	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	-20	-7.98	-0.003099	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	-10	-10.33	-0.004012	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	0	-8.28	-0.003216	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	10	-11.27	-0.004377	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	20	-9.67	-0.003755	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	30	-9.93	-0.003856	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	40	-8.03	-0.003118	±2.5	PASS
Band38	10MHz	QPSK	37800	50RB#0	NV	50	-8.64	-0.003355	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	-30	-7.18	-0.002767	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	-20	-10.83	-0.004173	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	-10	-8.77	-0.003380	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	0	-9.10	-0.003507	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	10	-4.23	-0.001630	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	20	-7.37	-0.002840	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	30	-7.74	-0.002983	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	40	-6.75	-0.002601	±2.5	PASS
Band38	10MHz	QPSK	38000	50RB#0	NV	50	-8.00	-0.003083	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	-30	3.16	0.001208	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	-20	-8.78	-0.003358	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	-10	-8.34	-0.003189	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	0	-8.81	-0.003369	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	10	-8.13	-0.003109	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	20	-8.85	-0.003384	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	30	-10.06	-0.003847	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	40	-10.61	-0.004057	±2.5	PASS
Band38	10MHz	QPSK	38200	50RB#0	NV	50	-6.65	-0.002543	±2.5	PASS