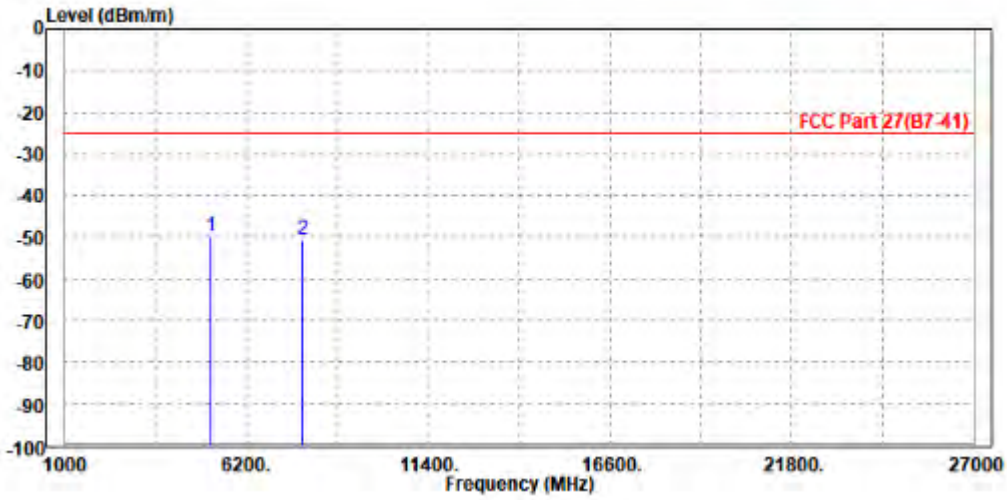
CHANNEL BANDWIDTH: 15MHz / QPSK

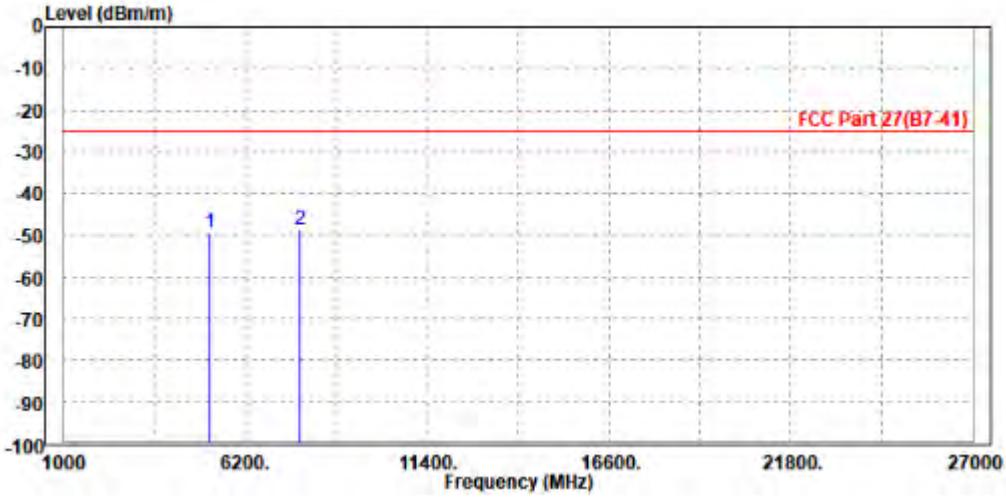
MODE	TX channel 40620	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5186.000	-49.77	-59.75	-25.00	-24.77	9.98	Peak	Horizontal
2		7786.000	-50.52	-64.01	-25.00	-25.52	13.49	Peak	Horizontal



MODE	TX channel 40620	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			

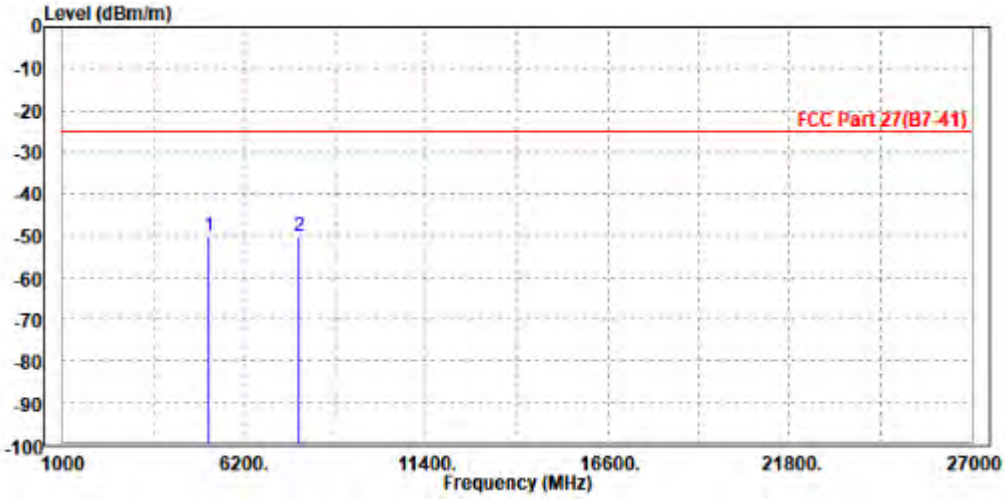
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	5186.000	-49.25	-59.69	-25.00	-24.25	10.44	Peak	Vertical
2 PP	7779.000	-48.55	-63.66	-25.00	-23.55	15.11	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

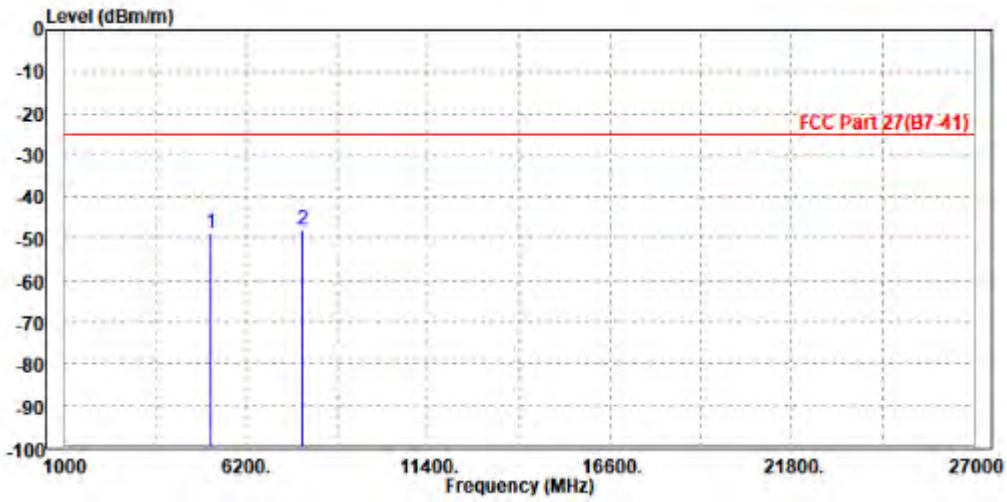
MODE	TX channel 40620	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60Hz
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	PP	5186.000	-50.22	-60.20	-25.00	-25.22	9.98	Peak	Horizontal
2		7779.000	-50.24	-63.68	-25.00	-25.24	13.44	Peak	Horizontal



MODE	TX channel 40620	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	5186.000	-48.65	-59.09	-25.00	-23.65	10.44	Peak	Vertical
2 PP	7786.000	-48.04	-63.16	-25.00	-23.04	15.12	Peak	Vertical

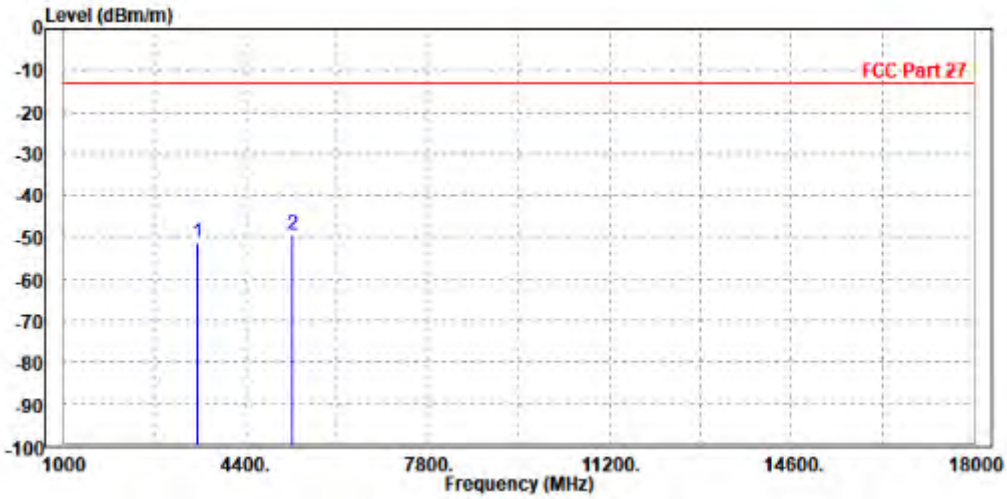


LTE B66(Ant1) (DOWN):

CHANNEL BANDWIDTH: 1.4MHz / QPSK

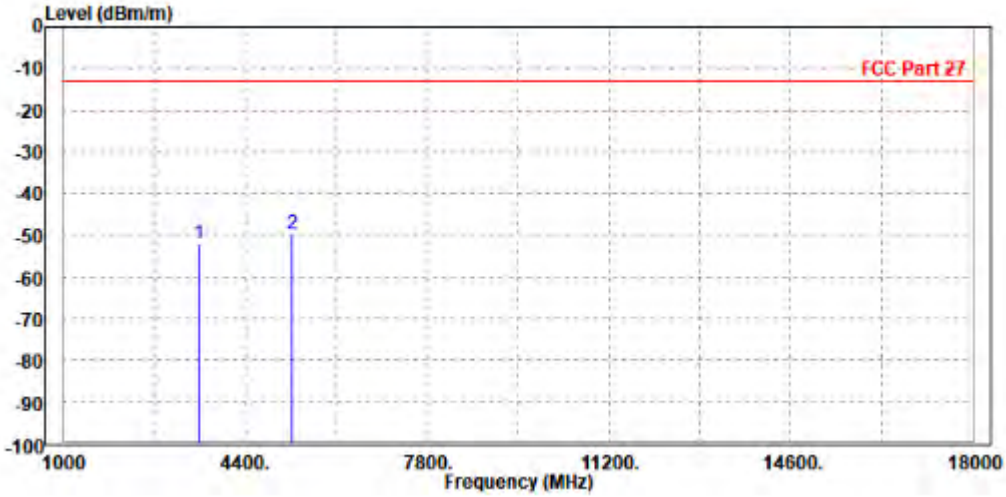
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		3510.000	-51.49	-58.84	-13.00	-38.49	7.35	Peak	Horizontal
2	PP	5267.000	-49.54	-59.65	-13.00	-36.54	10.11	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			

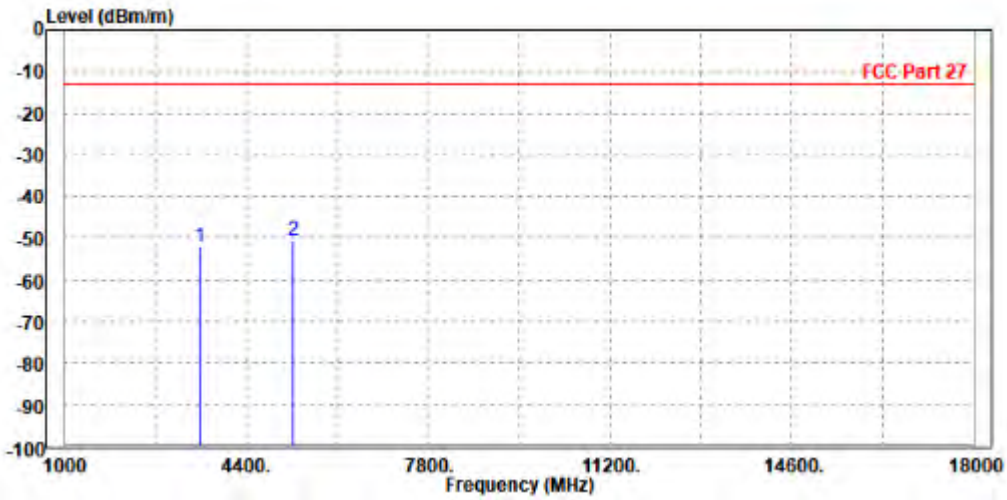
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3516.000	-52.19	-59.53	-13.00	-39.19	7.34	Peak	Vertical
2 PP	5265.000	-49.74	-60.25	-13.00	-36.74	10.51	Peak	Vertical



CHANNEL BANDWIDTH: 3MHz / QPSK

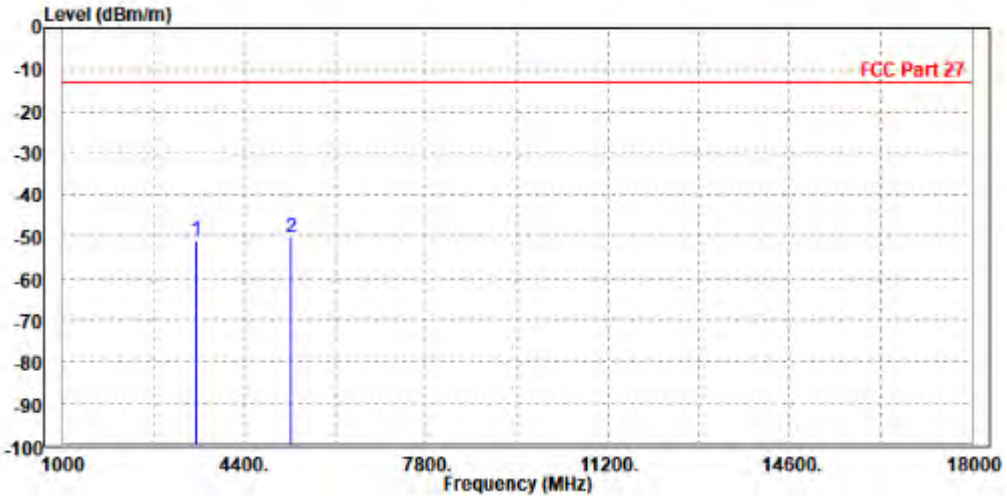
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		3516.000	-52.13	-59.49	-13.00	-39.13	7.36	Peak	Horizontal
2	PP	5265.000	-50.47	-60.58	-13.00	-37.47	10.11	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			

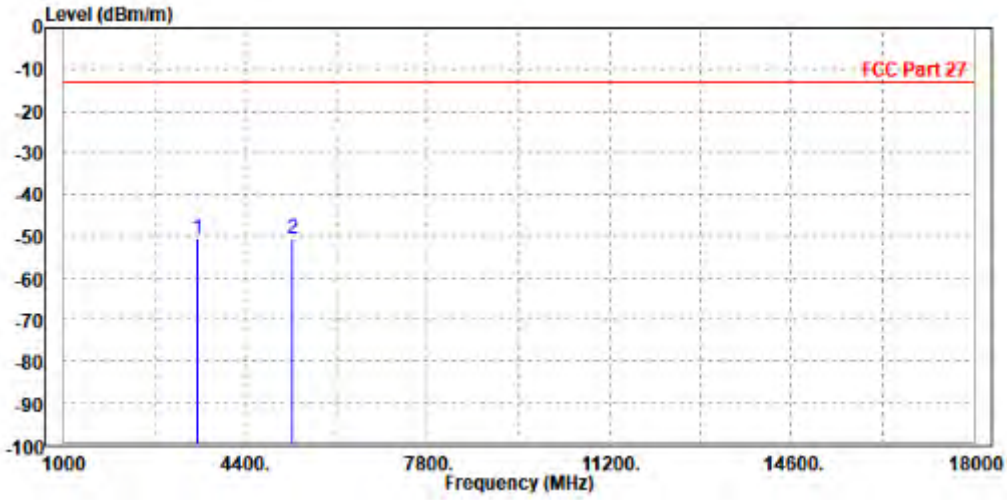
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3510.000	-51.03	-58.36	-13.00	-38.03	7.33	Peak	Vertical
2 PP	5267.000	-50.25	-60.76	-13.00	-37.25	10.51	Peak	Vertical



CHANNEL BANDWIDTH: 5MHz / QPSK

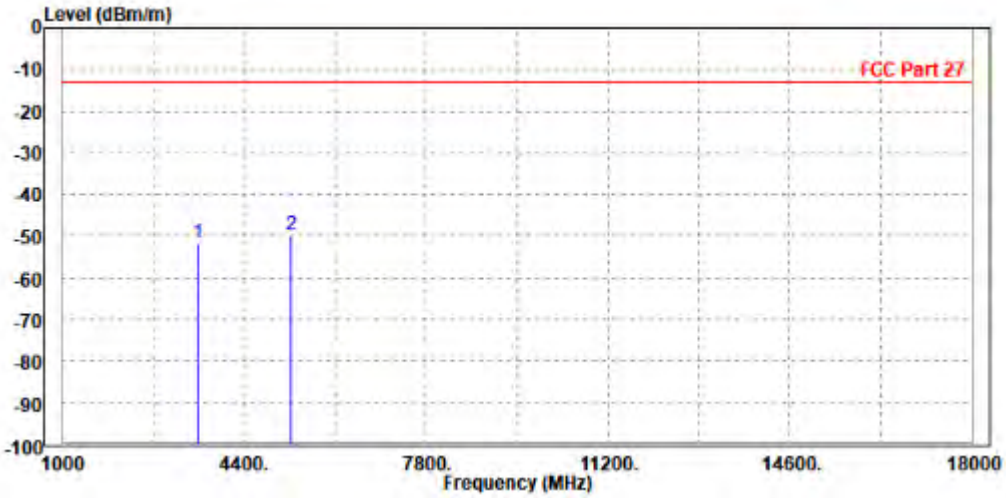
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3510.000	-50.71	-58.06	-13.00	-37.71	7.35	Peak	Horizontal
2 PP	5267.000	-50.58	-60.69	-13.00	-37.58	10.11	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			

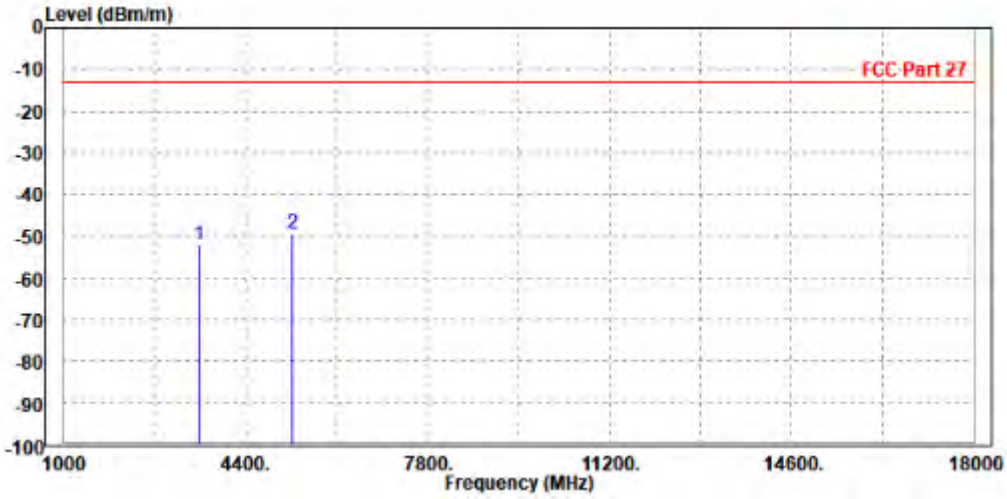
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3516.000	-51.87	-59.21	-13.00	-38.87	7.34	Peak	Vertical
2 PP	5265.000	-49.83	-60.34	-13.00	-36.83	10.51	Peak	Vertical



CHANNEL BANDWIDTH: 10MHz / QPSK

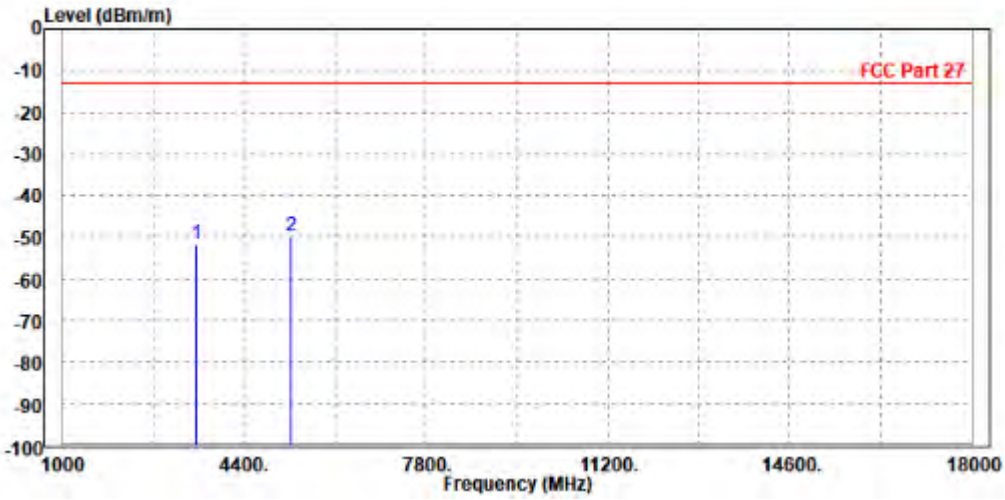
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3516.000	-51.98	-59.34	-13.00	-38.98	7.36	Peak	Horizontal
2 PP	5265.000	-49.34	-59.45	-13.00	-36.34	10.11	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		3510.000	-51.58	-58.91	-13.00	-38.58	7.33	Peak	Vertical
2	PP	5267.000	-49.86	-60.37	-13.00	-36.86	10.51	Peak	Vertical

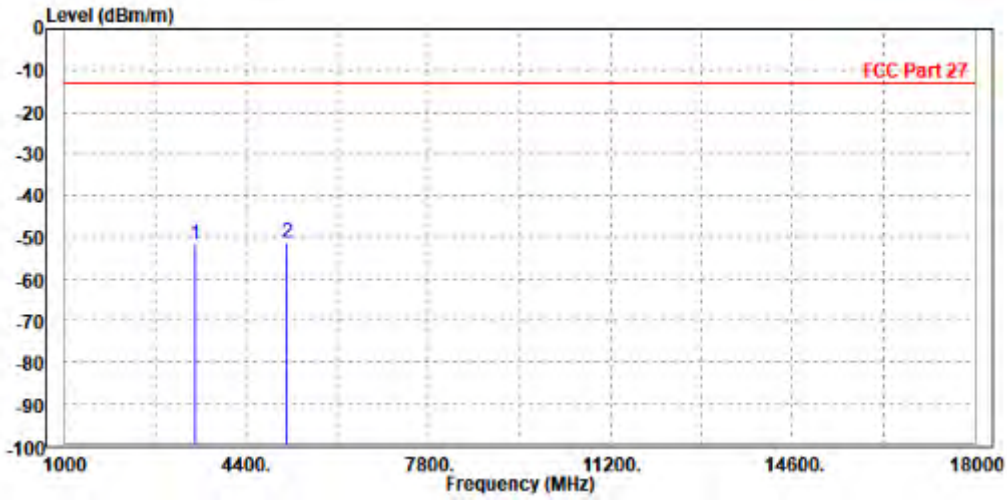


CHANNEL BANDWIDTH: 15MHz / QPSK

CH132047

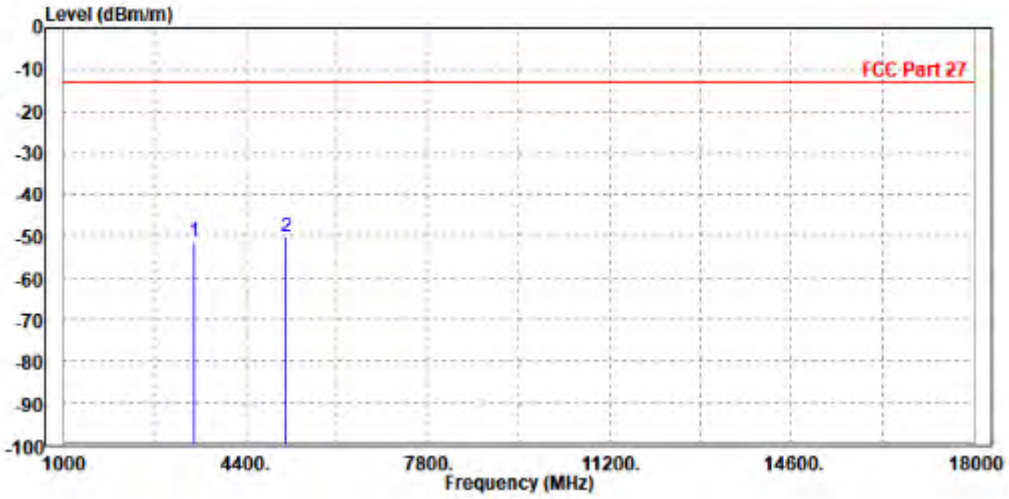
MODE	TX channel 132047	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3431.000	-51.76	-58.99	-13.00	-38.76	7.23	Peak	Horizontal
2 PP	5152.500	-51.38	-61.31	-13.00	-38.38	9.93	Peak	Horizontal



MODE	TX channel 132047	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			

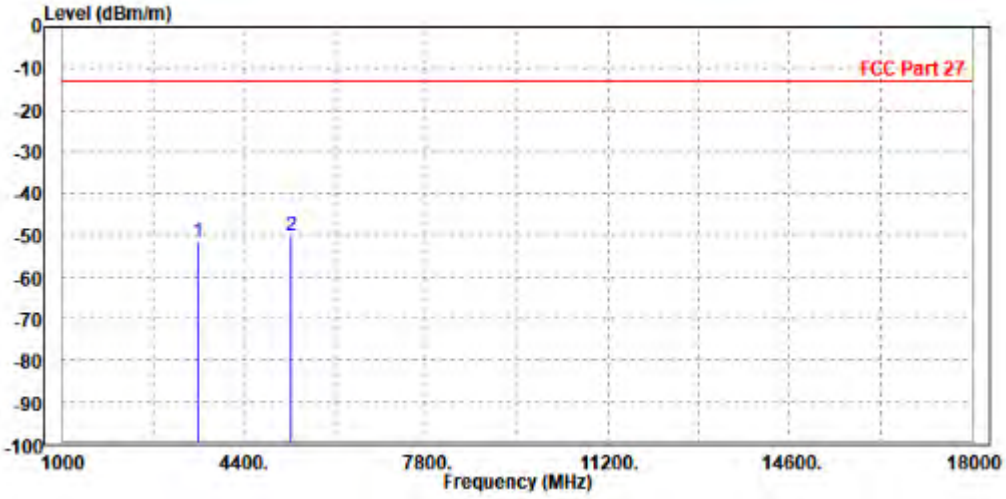
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		3431.000	-51.51	-58.72	-13.00	-38.51	7.21	Peak	Vertical
2	PP	5148.000	-50.24	-60.64	-13.00	-37.24	10.40	Peak	Vertical



CH132322

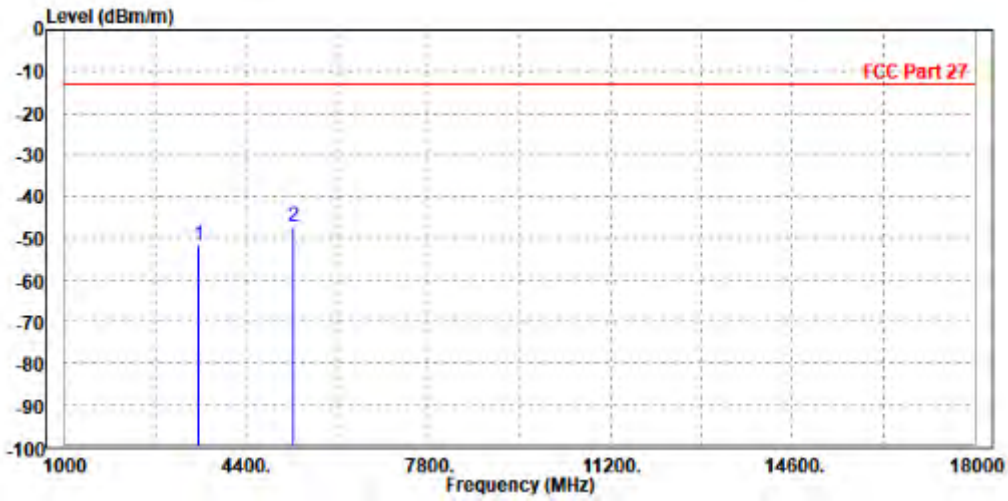
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3516.000	-51.60	-58.96	-13.00	-38.60	7.36	Peak	Horizontal
2 PP	5265.000	-50.16	-60.27	-13.00	-37.16	10.11	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			

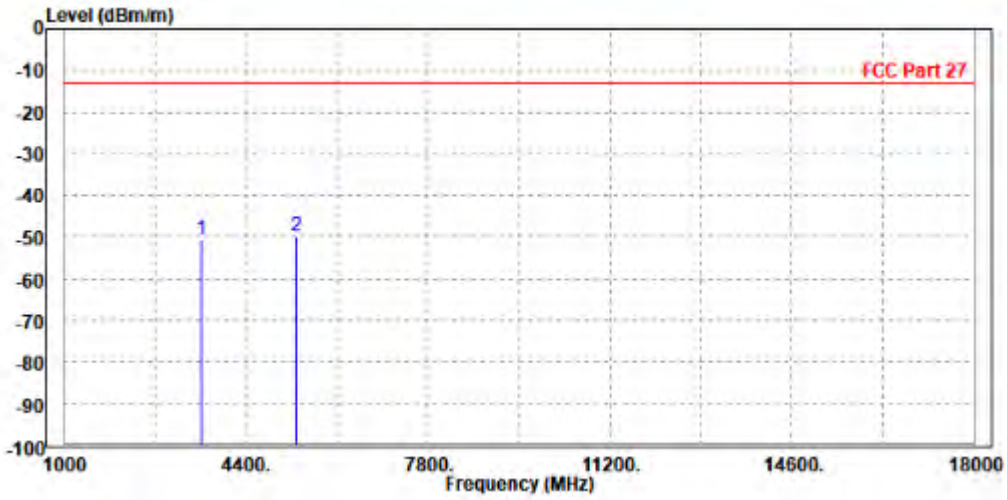
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3510.000	-51.63	-58.96	-13.00	-38.63	7.33	Peak	Vertical
2 PP	5267.000	-47.21	-57.72	-13.00	-34.21	10.51	Peak	Vertical



CH132597

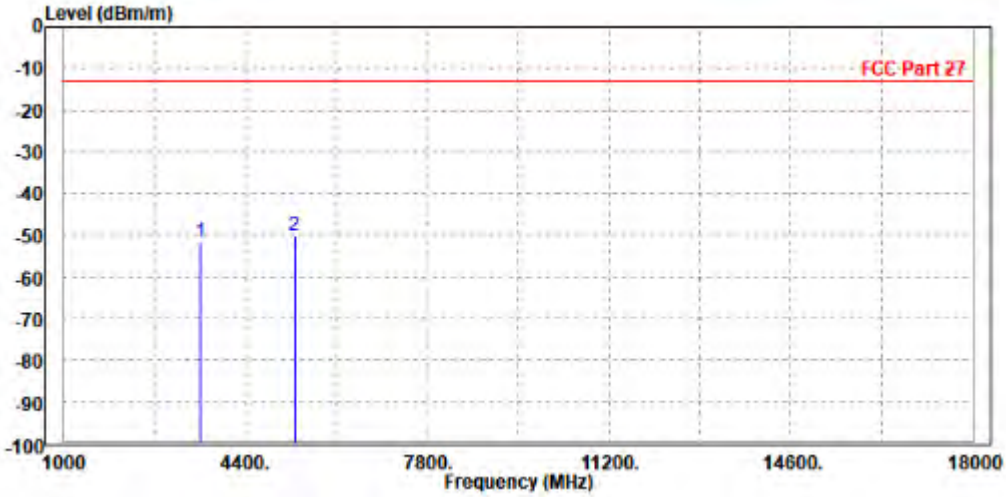
MODE	TX channel 132597	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3545.000	-50.68	-58.12	-13.00	-37.68	7.44	Peak	Horizontal
2 PP	5318.000	-49.90	-60.09	-13.00	-36.90	10.19	Peak	Horizontal



MODE	TX channel 132597	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			

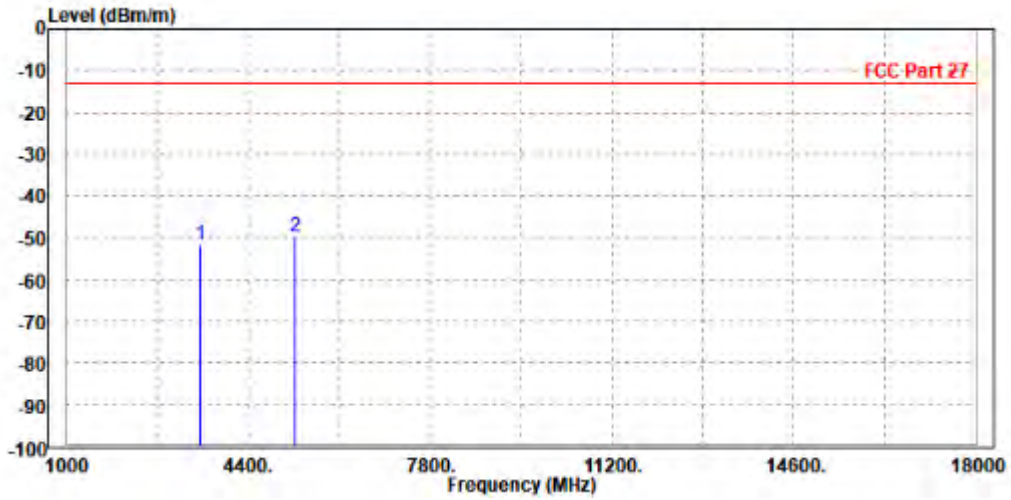
		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		3550.000	-51.61	-59.00	-13.00	-38.61	7.39	Peak	Vertical
2	PP	5317.500	-50.01	-60.57	-13.00	-37.01	10.56	Peak	Vertical



CHANNEL BANDWIDTH: 20MHz / QPSK

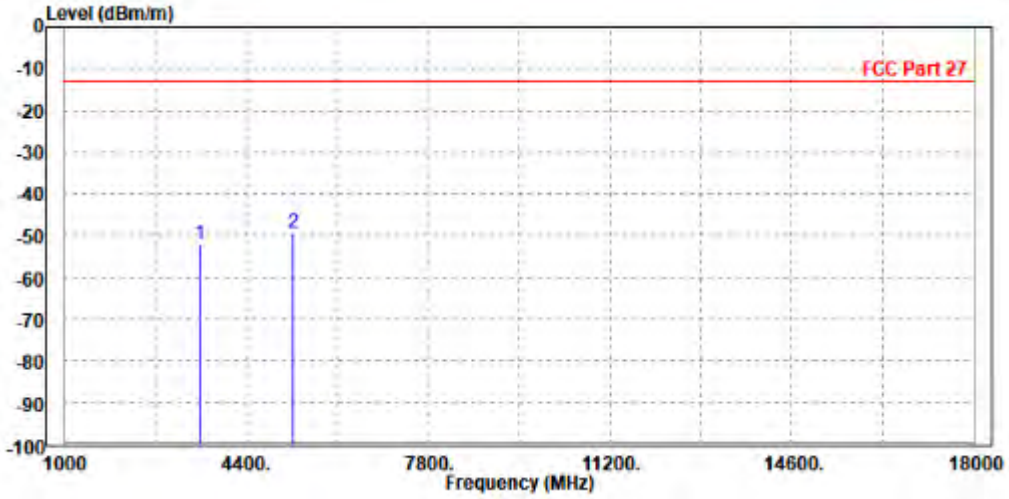
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

		Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1		3510.000	-51.61	-58.96	-13.00	-38.61	7.35	Peak	Horizontal
2	PP	5267.000	-49.95	-60.06	-13.00	-36.95	10.11	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		3516.000	-52.11	-59.45	-13.00	-39.11	7.34	Peak	Vertical
2	PP	5265.000	-49.51	-60.02	-13.00	-36.51	10.51	Peak	Vertical

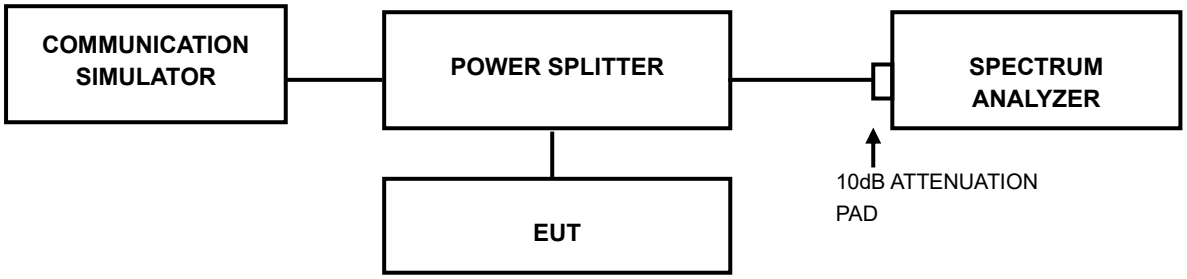


3.7 PEAK TO AVERAGE RATIO

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 PHOTOGRAPHS OF THE TEST CONFIGURATION

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

5 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:

Shenzhen EMC/RF Lab:
Tel: +86-755-88696566
Fax: +86-755-88696577

Email: customerservice.sw@cn.bureauveritas.com
Web Site: www.adt.com.tw

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

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)

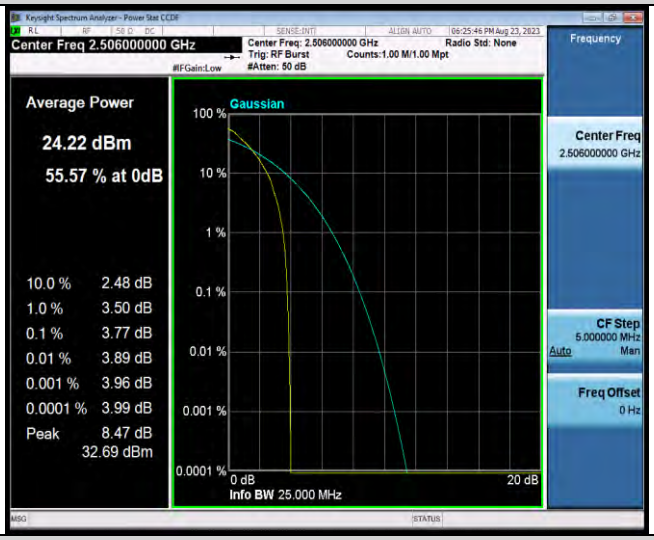
PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

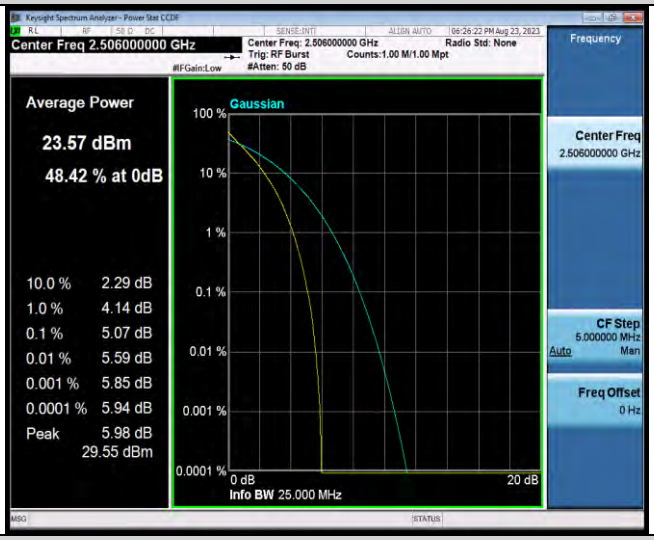
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	20MHz	QPSK	39750	1RB#0	3.77	13	PASS
Band41	20MHz	QPSK	39750	100RB#0	5.07	13	PASS
Band41	20MHz	QPSK	40620	1RB#0	4.64	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	5.24	13	PASS
Band41	20MHz	QPSK	41490	1RB#0	4.36	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	5.17	13	PASS
Band41	20MHz	16QAM	39750	1RB#0	4.67	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	5.83	13	PASS
Band41	20MHz	16QAM	40620	1RB#0	5.51	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	5.99	13	PASS
Band41	20MHz	16QAM	41490	1RB#0	5.15	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	5.94	13	PASS
Band41	20MHz	64QAM	39750	1RB#0	4.77	13	PASS
Band41	20MHz	64QAM	39750	100RB#0	5.83	13	PASS
Band41	20MHz	64QAM	40620	1RB#0	5.60	13	PASS
Band41	20MHz	64QAM	40620	100RB#0	6.02	13	PASS
Band41	20MHz	64QAM	41490	1RB#0	4.82	13	PASS
Band41	20MHz	64QAM	41490	100RB#0	5.94	13	PASS

Test Graphs

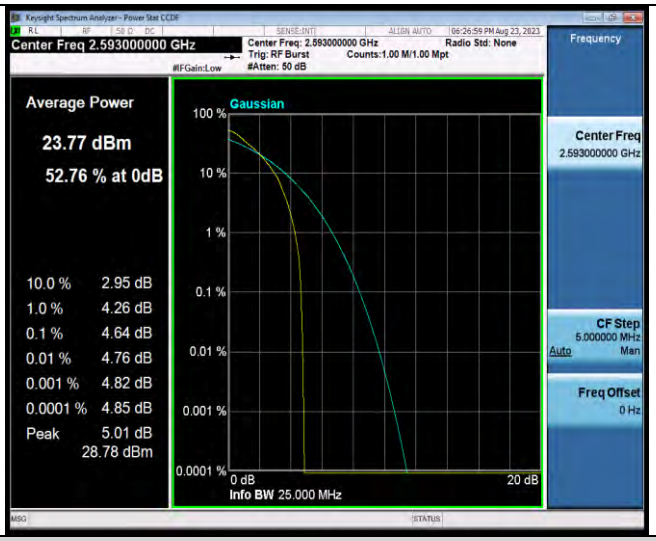
Band41-20MHz-QPSK-39750-1RB#0



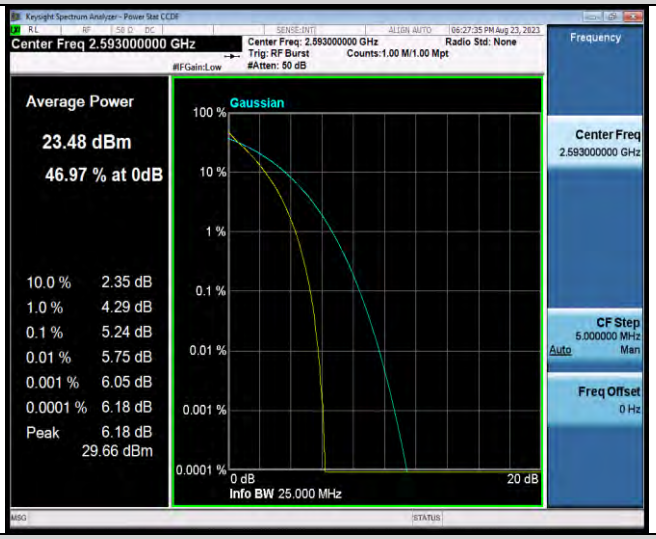
Band41-20MHz-QPSK-39750-100RB#0



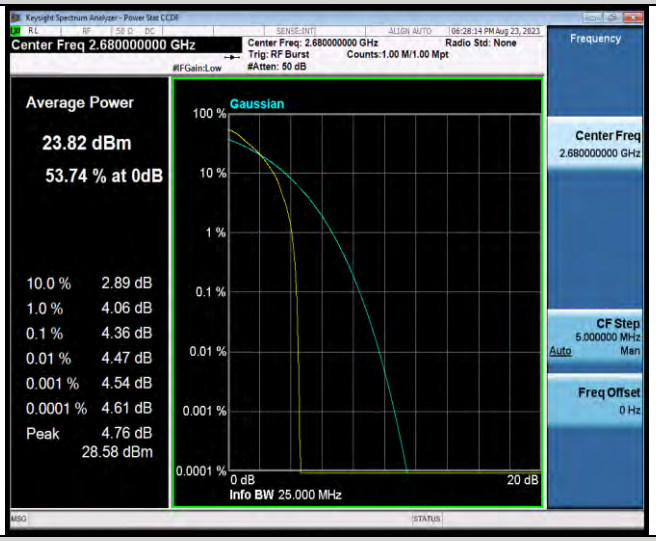
Band41-20MHz-QPSK-40620-1RB#0



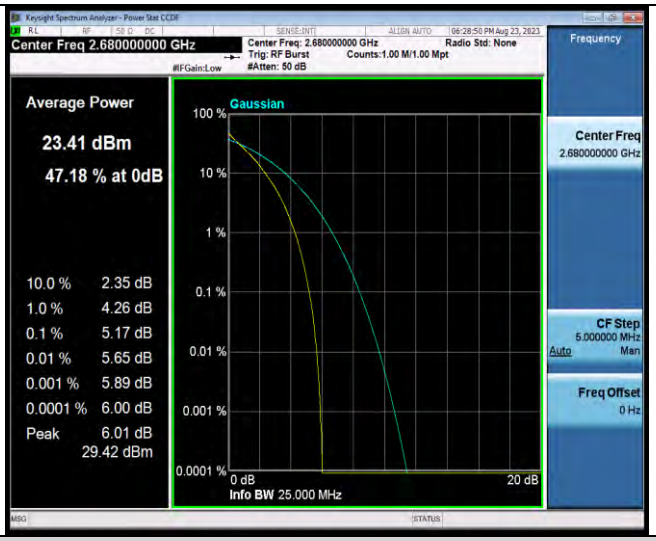
Band41-20MHz-QPSK-40620-100RB#0



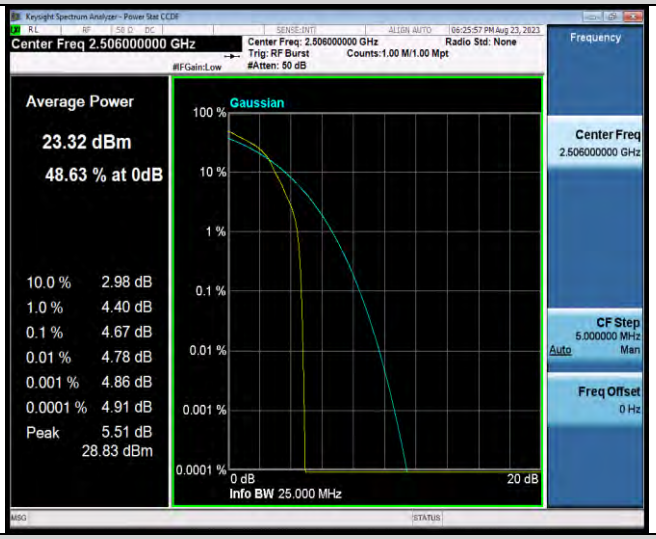
Band41-20MHz-QPSK-41490-1RB#0



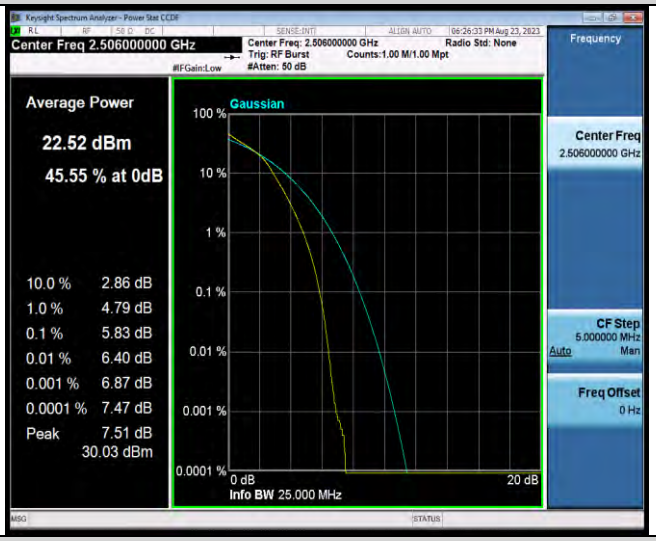
Band41-20MHz-QPSK-41490-100RB#0



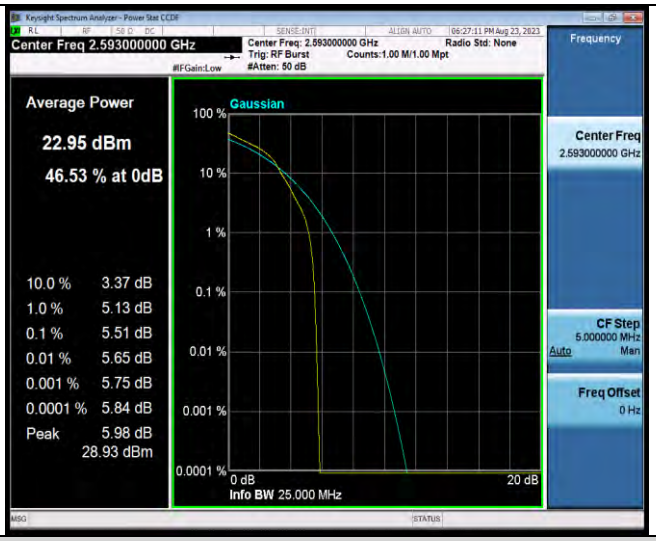
Band41-20MHz-16QAM-39750-1RB#0



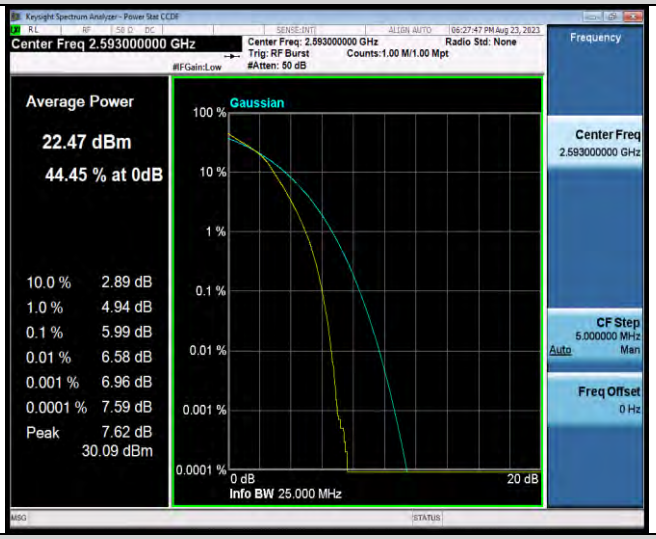
Band41-20MHz-16QAM-39750-100RB#0



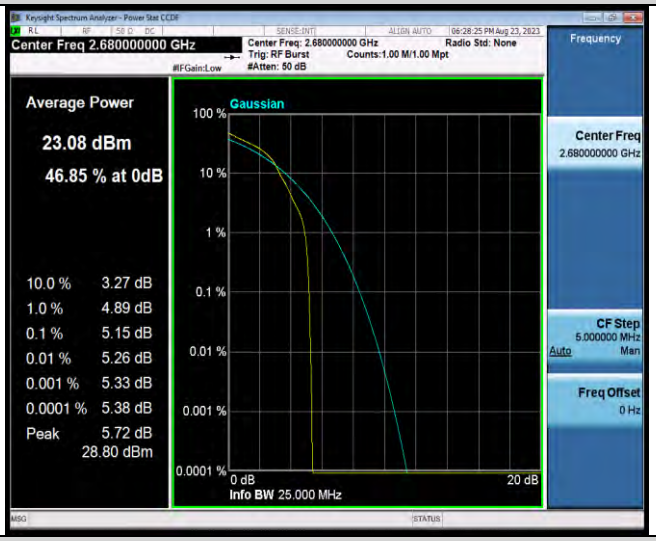
Band41-20MHz-16QAM-40620-1RB#0



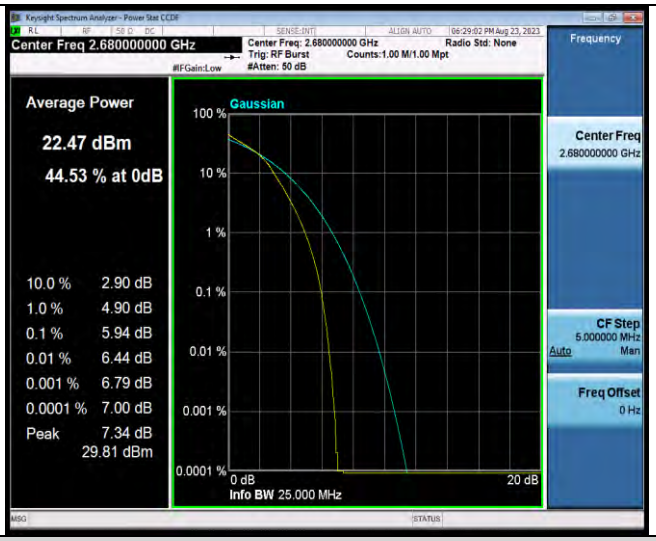
Band41-20MHz-16QAM-40620-100RB#0



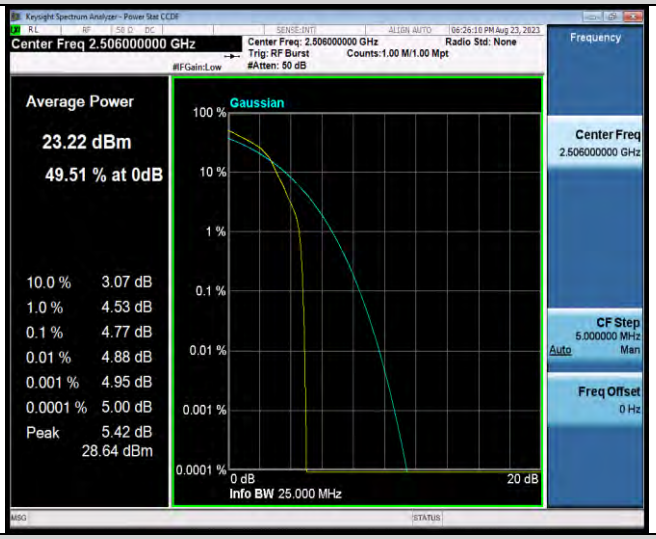
Band41-20MHz-16QAM-41490-1RB#0



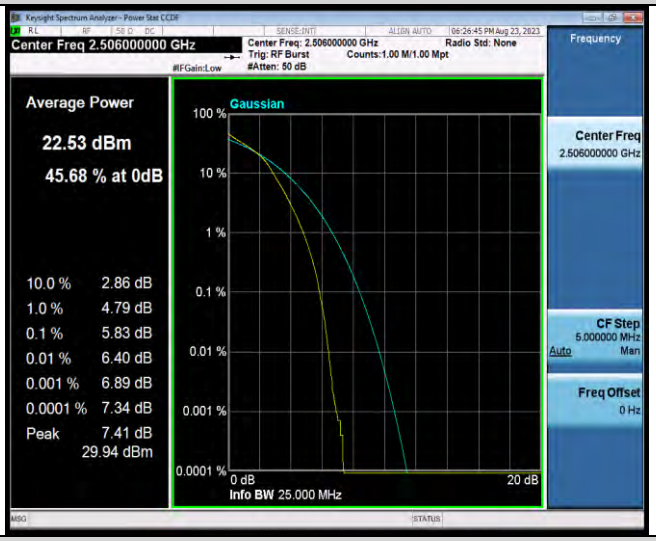
Band41-20MHz-16QAM-41490-100RB#0



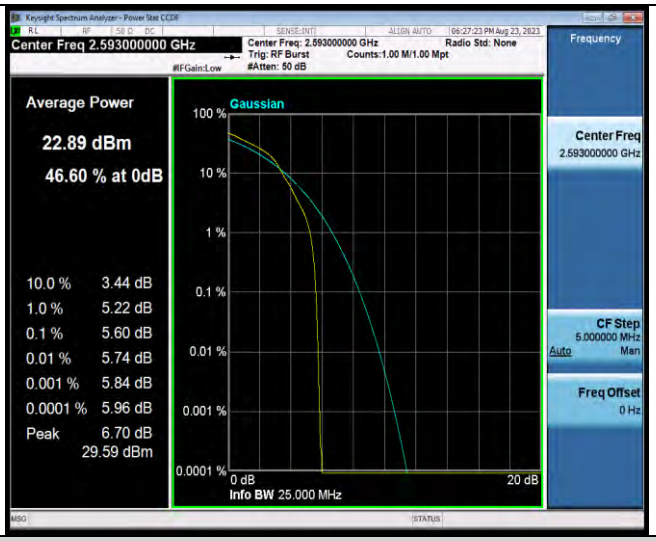
Band41-20MHz-64QAM-39750-1RB#0



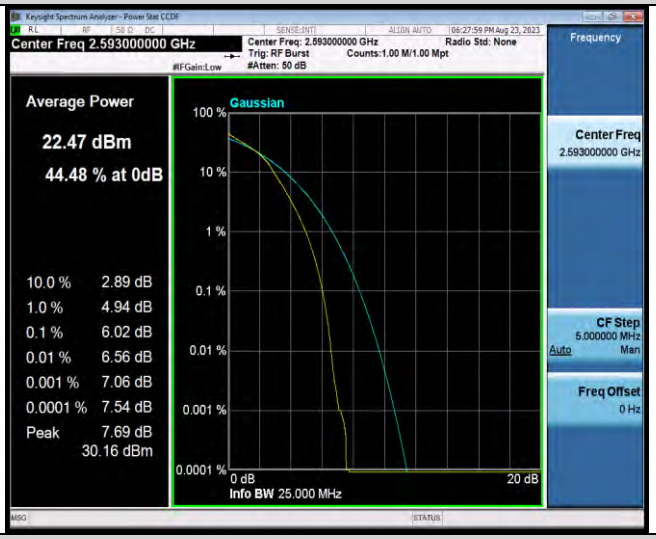
Band41-20MHz-64QAM-39750-100RB#0



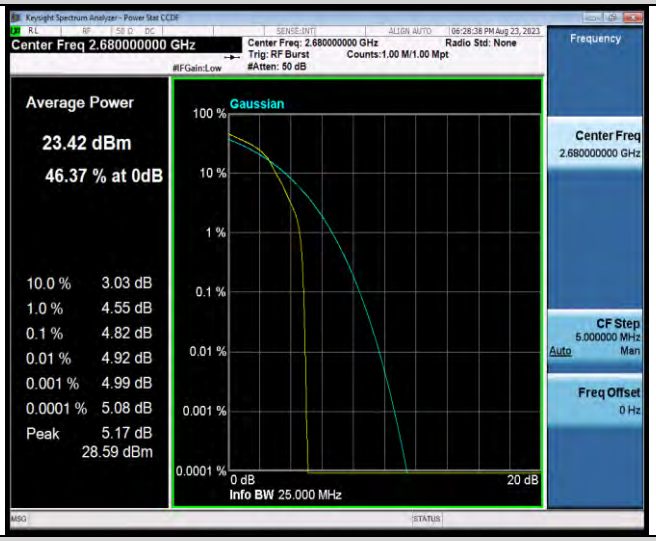
Band41-20MHz-64QAM-40620-1RB#0



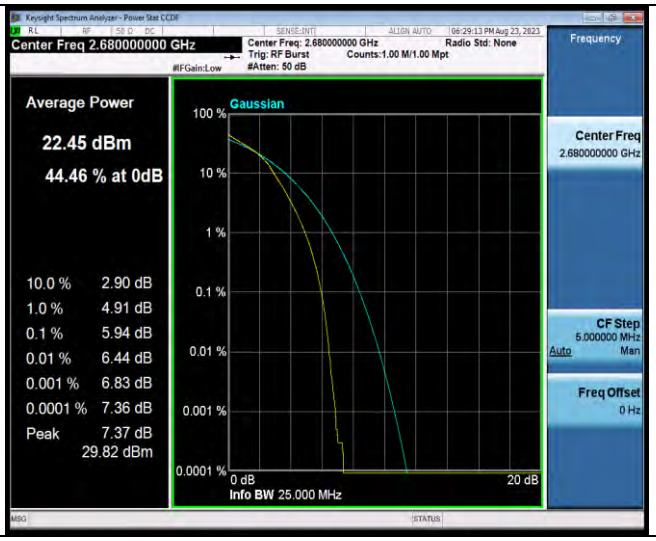
Band41-20MHz-64QAM-40620-100RB#0



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



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


Keysight Spectrum Analyzer - Power Stat CCDF
Center Freq 2.680000000 GHz
Center Freq: 2.680000000 GHz
Trig: RF Burst
Counts:1.00 M/1.00 Mpt
#Atten: 50 dB
Radio Std: None
Frequency
Average Power
22.45 dBm
44.46 % at 0dB
10.0 % 2.90 dB
1.0 % 4.91 dB
0.1 % 5.94 dB
0.01 % 6.44 dB
0.001 % 6.83 dB
0.0001 % 7.36 dB
Peak 7.37 dB
29.82 dBm
Gaussian
100 %
10 %
1 %
0.1 %
0.01 %
0.001 %
0.0001 %
0 dB
20 dB
Info BW 25.000 MHz
Center Freq
2.680000000 GHz
CF Step
5.000000 MHz
Auto
Man
Freq Offset
0 Hz

26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

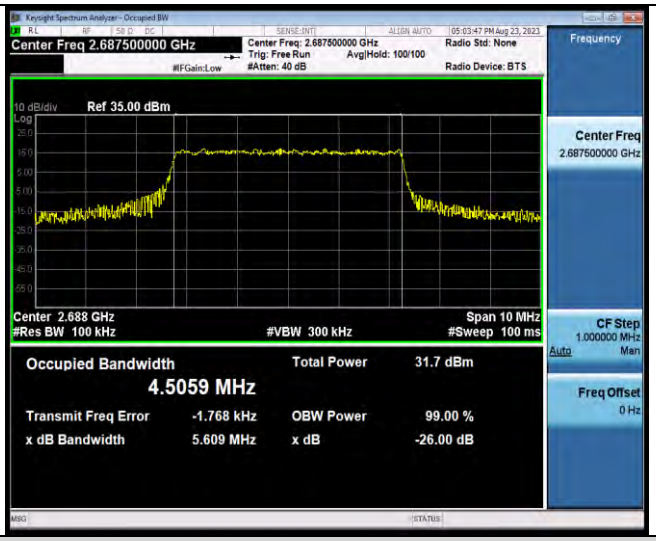
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.4917	4.894	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.5023	5.664	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.5059	5.609	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.4905	5.044	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.4923	5.050	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4924	5.074	PASS
Band41	5MHz	64QAM	39675	25RB#0	4.4925	5.162	PASS
Band41	5MHz	64QAM	40620	25RB#0	4.4914	5.138	PASS
Band41	5MHz	64QAM	41565	25RB#0	4.4917	5.125	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9841	10.71	PASS
Band41	10MHz	QPSK	40620	50RB#0	9.0048	10.54	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9959	11.14	PASS
Band41	10MHz	16QAM	39700	50RB#0	8.9580	9.948	PASS
Band41	10MHz	16QAM	40620	50RB#0	8.9681	9.799	PASS
Band41	10MHz	16QAM	41540	50RB#0	8.9529	10.06	PASS
Band41	10MHz	64QAM	39700	50RB#0	8.9718	9.969	PASS
Band41	10MHz	64QAM	40620	50RB#0	8.9551	10.04	PASS
Band41	10MHz	64QAM	41540	50RB#0	8.9609	10.50	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.500	14.67	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.441	15.02	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.479	17.61	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.476	15.04	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.439	14.69	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.493	15.54	PASS
Band41	15MHz	64QAM	39725	75RB#0	13.462	15.25	PASS
Band41	15MHz	64QAM	40620	75RB#0	13.473	14.93	PASS
Band41	15MHz	64QAM	41515	75RB#0	13.488	15.18	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.982	21.23	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.962	20.39	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.976	21.42	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.969	21.48	PASS
Band41	20MHz	16QAM	40620	100RB#0	17.965	19.41	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.953	20.15	PASS
Band41	20MHz	64QAM	39750	100RB#0	17.966	20.45	PASS
Band41	20MHz	64QAM	40620	100RB#0	17.950	20.82	PASS
Band41	20MHz	64QAM	41490	100RB#0	17.951	21.10	PASS

Test Graphs

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

Band41-5MHz-QPSK-40620-25RB#0

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



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

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

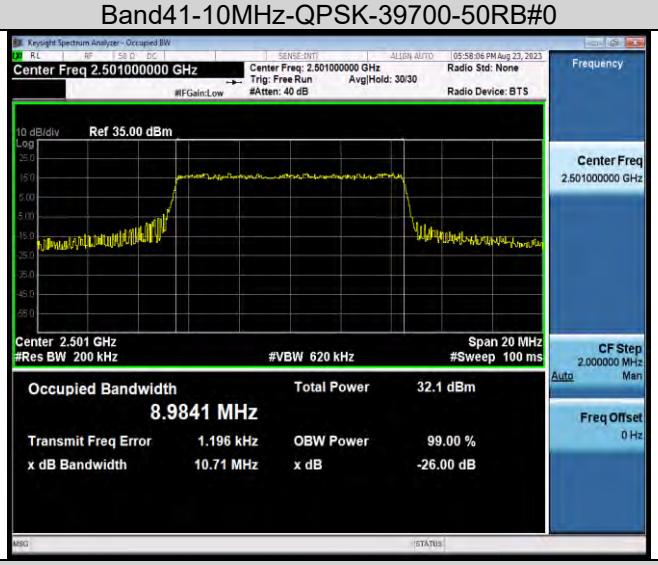
Band41-5MHz-16QAM-41565-25RB#0

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Keysight Spectrum Analyzer - Occupied BW
Center Freq 2.680000000 GHz
Center Freq: 2.680000000 GHz
Trig: Free Run
Avg|Hold: 30/30
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Frequency
10 dB/div
Ref 35.00 dBm
Center Freq
2.680000000 GHz
Center 2.68 GHz
Res BW 390 kHz
#VBW 1.2 MHz
Span 40 MHz
#Sweep 100 ms
CF Step
4.000000 MHz
Auto
Man
Occupied Bandwidth
17.951 MHz
Total Power
31.3 dBm
Transmit Freq Error
-2.895 kHz
OBW Power
99.00 %
x dB Bandwidth
21.10 MHz
x dB
-26.00 dB
Freq Offset
0 Hz

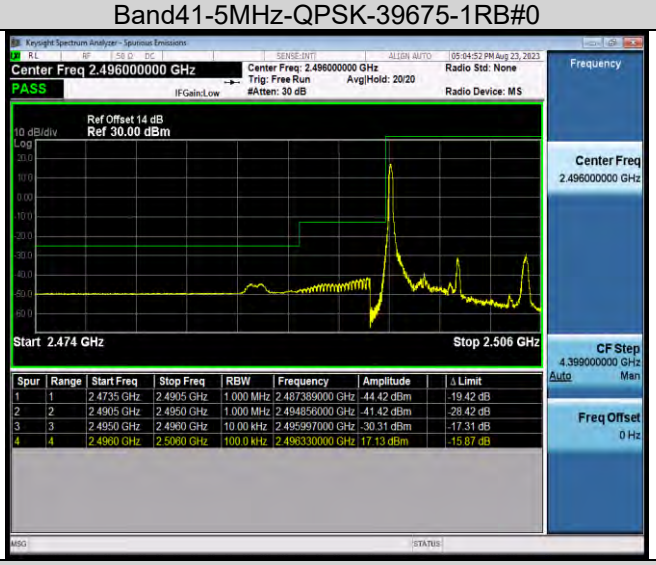
BAND EDGE

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	-44.42,-41.42,-30.31	PASS
Band41	5MHz	QPSK	39675	25RB#0	-37.54,-25.61,-30.63	PASS
Band41	5MHz	QPSK	41565	1RB#24	-29.75,-40.69,-46.68	PASS
Band41	5MHz	QPSK	41565	25RB#0	-32.93,-30.10,-35.97	PASS
Band41	5MHz	16QAM	39675	1RB#0	-44.99,-41.68,-29.44	PASS
Band41	5MHz	16QAM	39675	25RB#0	-38.69,-29.17,-33.33	PASS
Band41	5MHz	16QAM	41565	1RB#24	-29.73,-40.10,-47.00	PASS
Band41	5MHz	16QAM	41565	25RB#0	-35.73,-29.93,-35.16	PASS
Band41	5MHz	64QAM	39675	1RB#0	-44.98,-40.78,-31.84	PASS
Band41	5MHz	64QAM	39675	25RB#0	-37.98,-28.47,-34.07	PASS
Band41	5MHz	64QAM	41565	1RB#24	-29.07,-41.54,-47.25	PASS
Band41	5MHz	64QAM	41565	25RB#0	-35.92,-29.25,-34.79	PASS
Band41	10MHz	QPSK	39700	1RB#0	-45.44,-42.45,-38.42	PASS
Band41	10MHz	QPSK	39700	50RB#0	27.45,-32.94,-27.36	PASS
Band41	10MHz	QPSK	41540	1RB#49	-33.06,-42.27,-46.41	PASS
Band41	10MHz	QPSK	41540	50RB#0	-32.92,-38.23,-32.31	PASS
Band41	10MHz	16QAM	39700	1RB#0	-46.51,-42.10,-33.39	PASS
Band41	10MHz	16QAM	39700	50RB#0	-35.20,-30.73,-44.29	PASS
Band41	10MHz	16QAM	41540	1RB#49	-38.03,-42.79,-46.69	PASS
Band41	10MHz	16QAM	41540	50RB#0	-44.30,-31.90,-32.89	PASS
Band41	10MHz	64QAM	39700	1RB#0	-45.75,-42.63,-34.51	PASS
Band41	10MHz	64QAM	39700	50RB#0	-35.28,-30.98,-44.54	PASS
Band41	10MHz	64QAM	41540	1RB#49	-33.14,-42.51,-45.95	PASS
Band41	10MHz	64QAM	41540	50RB#0	-35.03,-31.36,-33.43	PASS
Band41	15MHz	QPSK	39725	1RB#0	-45.00,-42.70,-37.28	PASS
Band41	15MHz	QPSK	39725	75RB#0	-29.38,-26.86,-28.86	PASS
Band41	15MHz	QPSK	41515	1RB#74	-39.19,-42.21,-45.40	PASS
Band41	15MHz	16QAM	39725	1RB#0	-45.26,-43.44,-39.34	PASS
Band41	15MHz	16QAM	39725	75RB#0	-34.12,-30.34,-33.92	PASS
Band41	15MHz	16QAM	41515	1RB#74	-39.75,-42.26,-44.59	PASS
Band41	15MHz	64QAM	39725	1RB#0	-45.23,-42.99,-40.70	PASS
Band41	15MHz	64QAM	39725	75RB#0	-34.21,-29.83,-34.03	PASS
Band41	15MHz	64QAM	41515	1RB#74	-38.79,-43.15,-44.28	PASS
Band41	20MHz	QPSK	39750	1RB#0	-44.52,-44.16,-39.59	PASS
Band41	20MHz	QPSK	39750	100RB#0	-33.59,-30.49,-32.74	PASS
Band41	20MHz	QPSK	41490	1RB#99	-39.08,-43.98,-45.48	PASS
Band41	20MHz	QPSK	41490	100RB#0	-34.89,-32.90,-34.44	PASS
Band41	20MHz	16QAM	39750	1RB#0	-45.22,-44.92,-40.44	PASS
Band41	20MHz	16QAM	39750	100RB#0	-35.56,-34.22,-36.11	PASS
Band41	20MHz	16QAM	41490	1RB#99	-39.94,-44.10,-46.16	PASS
Band41	20MHz	16QAM	41490	100RB#0	-37.48,-33.82,-34.85	PASS
Band41	20MHz	64QAM	39750	1RB#0	-45.66,-44.72,-40.76	PASS
Band41	20MHz	64QAM	39750	100RB#0	-35.32,-33.19,-34.99	PASS
Band41	20MHz	64QAM	41490	1RB#99	-40.38,-44.33,-46.53	PASS
Band41	20MHz	64QAM	41490	100RB#0	-37.35,-33.45,-33.96	PASS

Test Graphs

Band41-5MHz-QPSK-39675-1RB#0

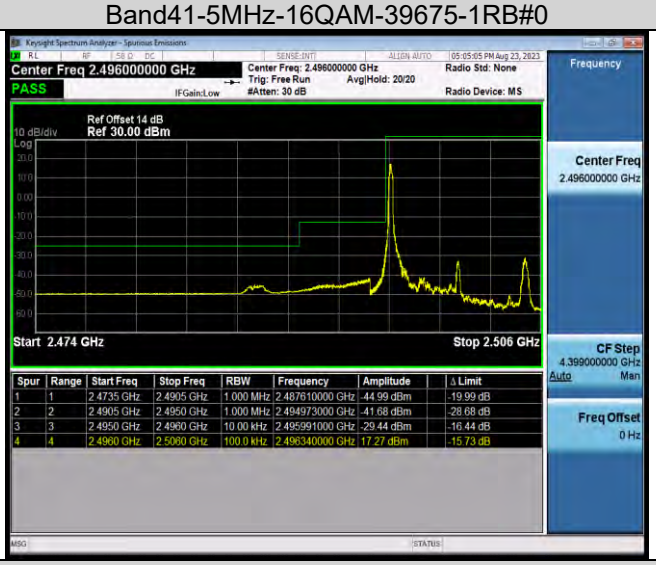


Band41-5MHz-QPSK-39675-25RB#0

Band41-5MHz-QPSK-41565-1RB#24

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

Band41-5MHz-16QAM-39675-1RB#0

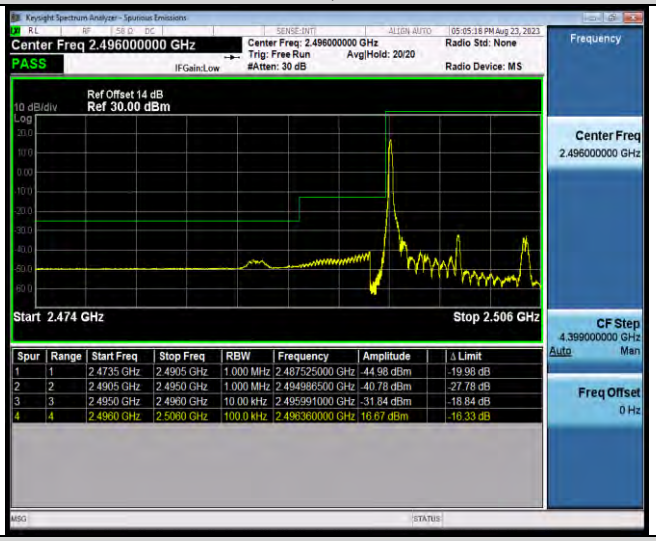


Band41-5MHz-16QAM-39675-25RB#0

Band41-5MHz-16QAM-41565-1RB#24

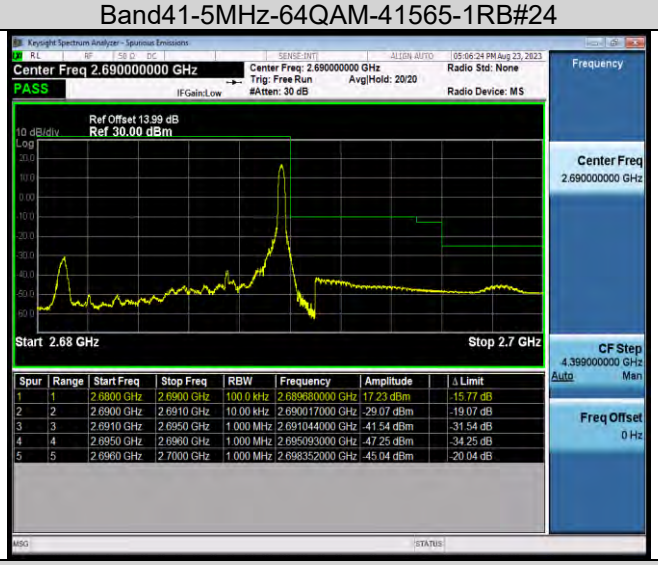
Band41-5MHz-16QAM-41565-25RB#0

Band41-5MHz-64QAM-39675-1RB#0



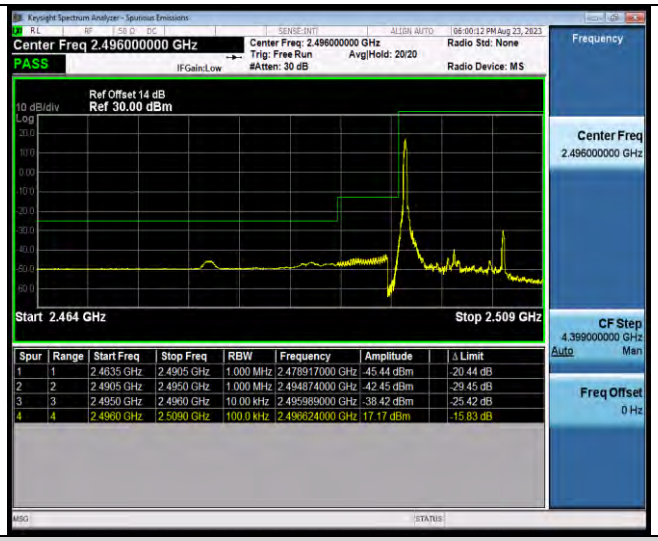
Band41-5MHz-64QAM-39675-25RB#0

Band41-5MHz-64QAM-41565-1RB#24

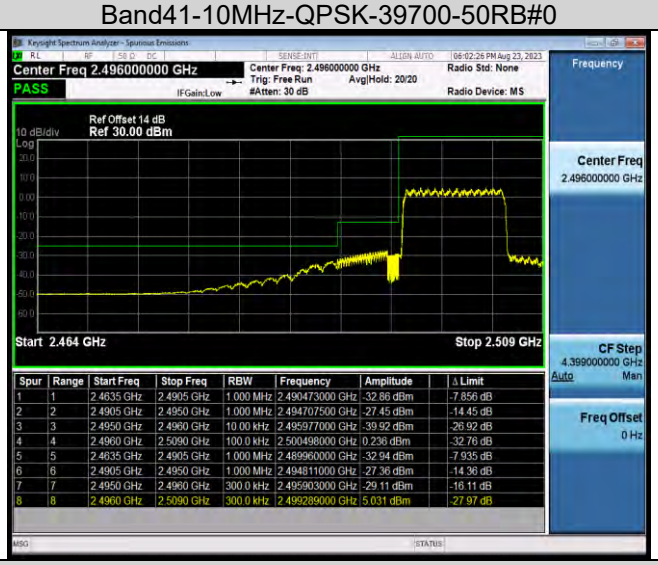


Band41-5MHz-64QAM-41565-25RB#0

Band41-10MHz-QPSK-39700-1RB#0



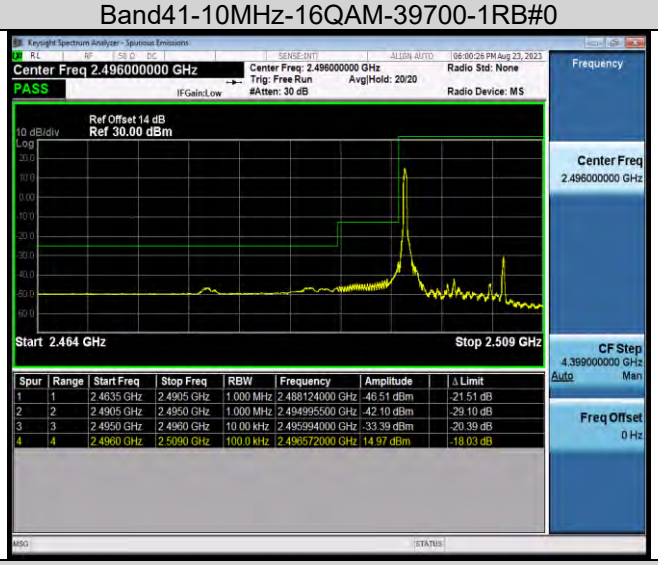
Band41-10MHz-QPSK-39700-50RB#0



Band41-10MHz-QPSK-41540-1RB#49

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

Band41-10MHz-16QAM-39700-1RB#0

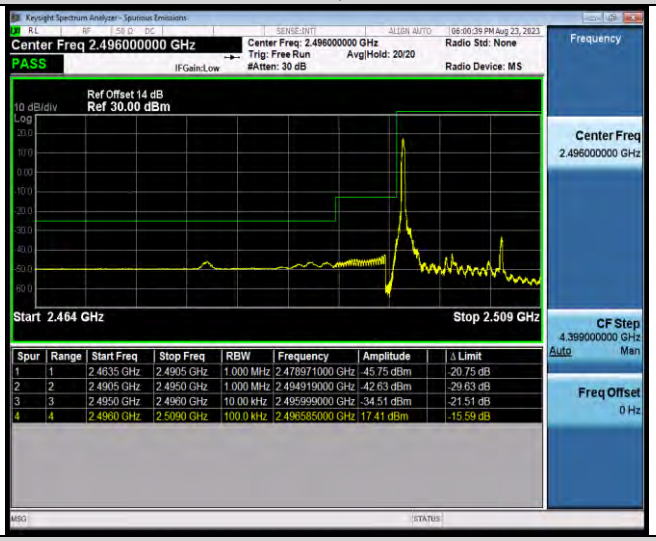


Band41-10MHz-16QAM-39700-50RB#0

Band41-10MHz-16QAM-41540-1RB#49

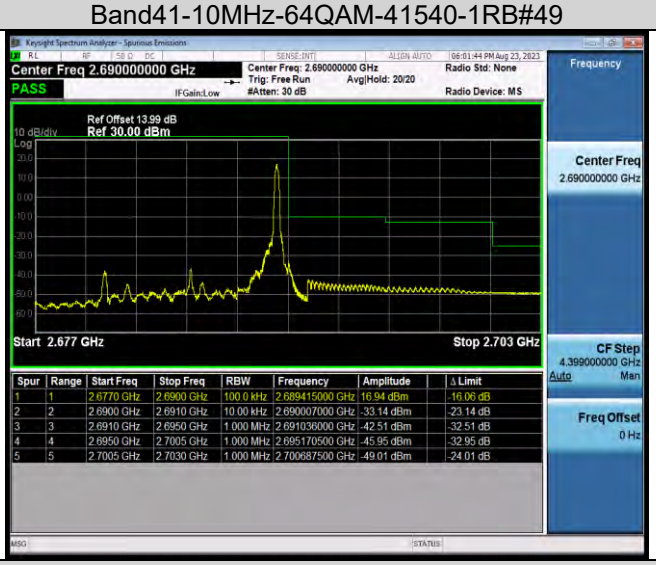
Band41-10MHz-16QAM-41540-50RB#0

Band41-10MHz-64QAM-39700-1RB#0



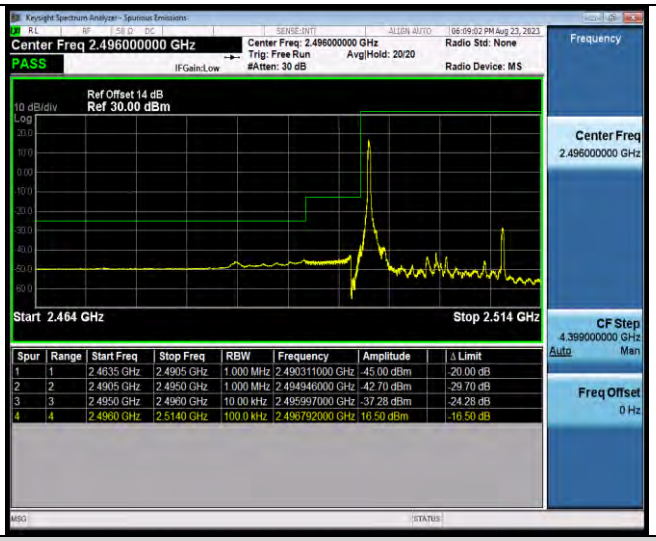
Band41-10MHz-64QAM-39700-50RB#0

Band41-10MHz-64QAM-41540-1RB#49

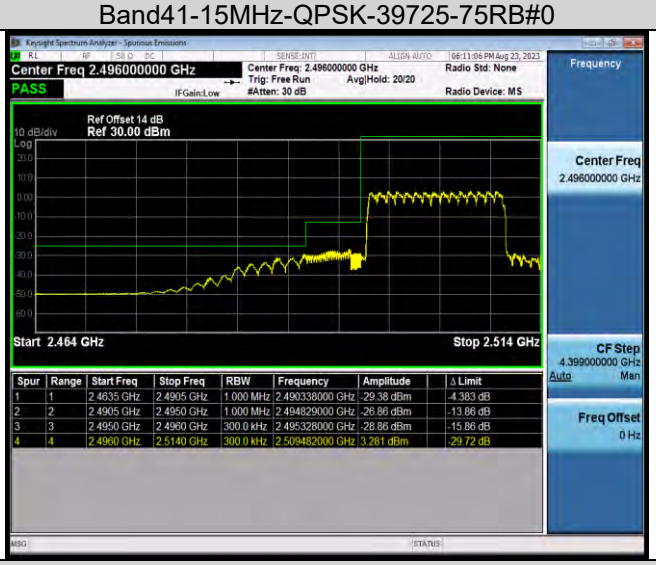


Band41-10MHz-64QAM-41540-50RB#0

Band41-15MHz-QPSK-39725-1RB#0

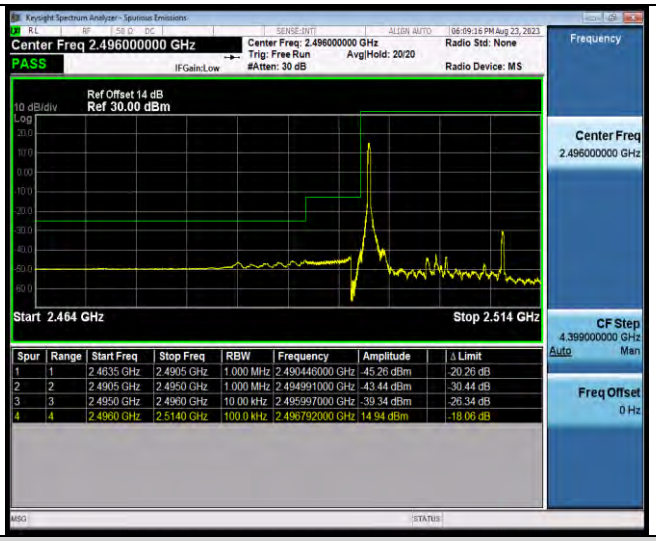


Band41-15MHz-QPSK-39725-75RB#0

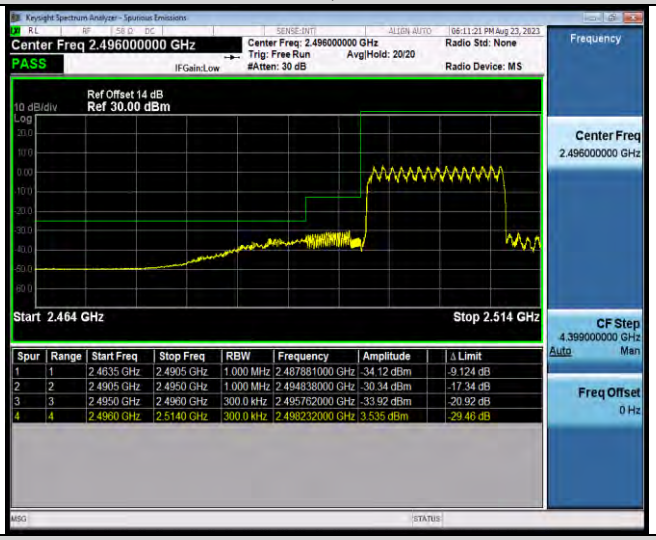


Band41-15MHz-QPSK-41515-1RB#74

Band41-15MHz-16QAM-39725-1RB#0

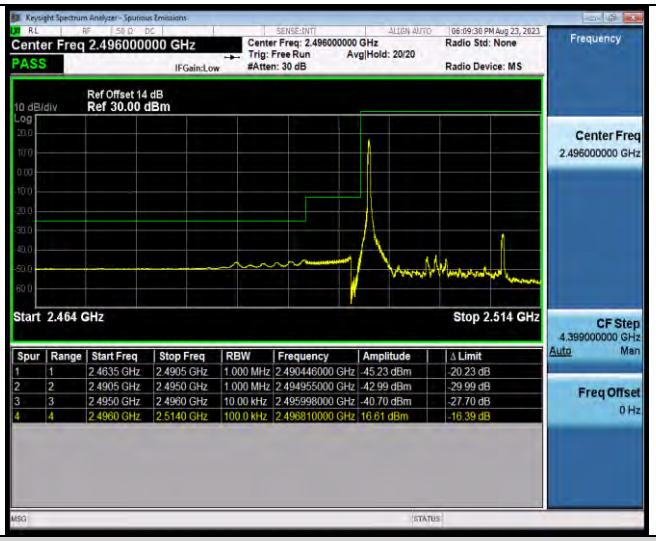


Band41-15MHz-16QAM-39725-75RB#0

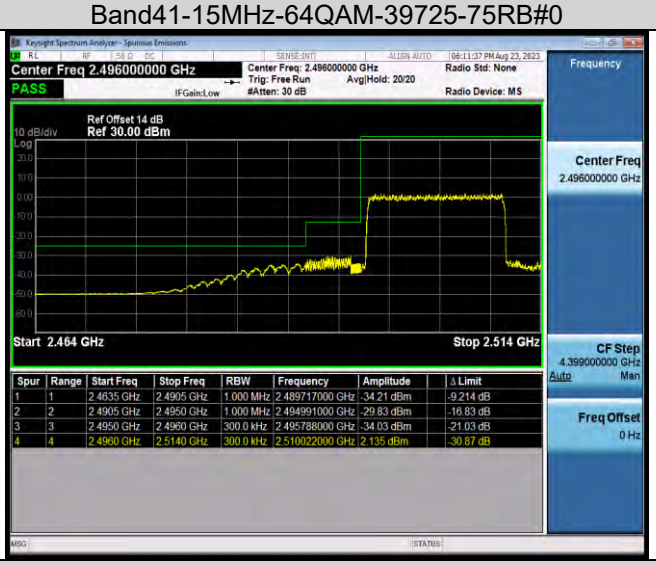


Band41-15MHz-16QAM-41515-1RB#74

Band41-15MHz-64QAM-39725-1RB#0

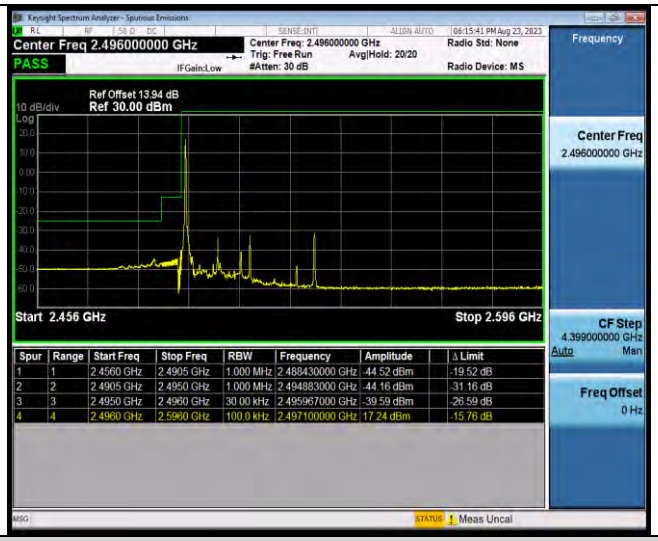


Band41-15MHz-64QAM-39725-75RB#0

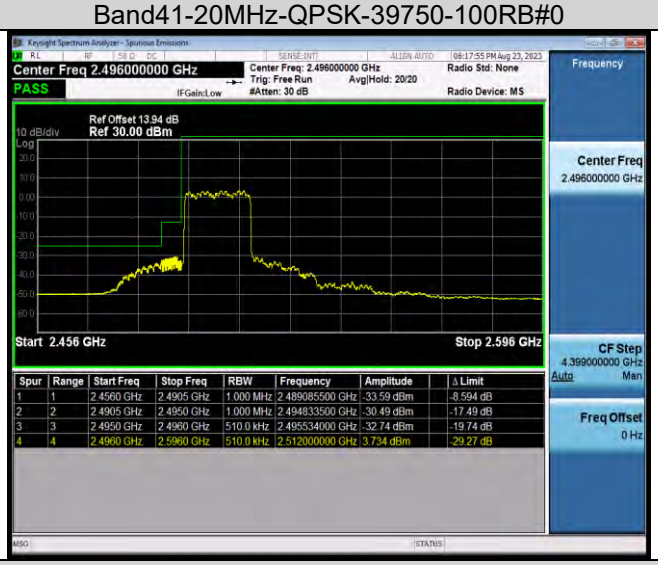


Band41-15MHz-64QAM-41515-1RB#74

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



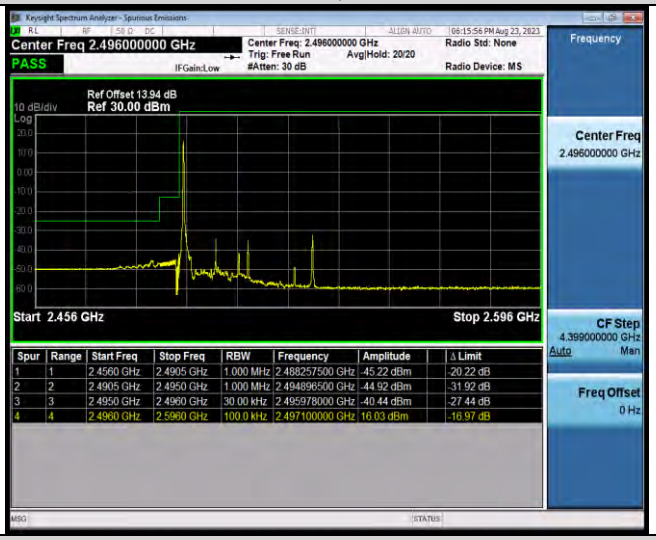
Band41-20MHz-QPSK-39750-100RB#0



Band41-20MHz-QPSK-41490-1RB#99

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

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

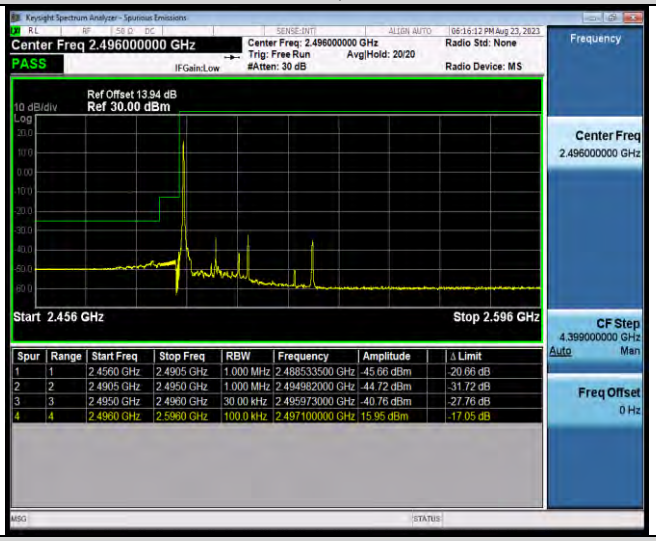


Band41-20MHz-16QAM-39750-100RB#0

Band41-20MHz-16QAM-41490-1RB#99

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

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



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

Band41-20MHz-64QAM-41490-1RB#99

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

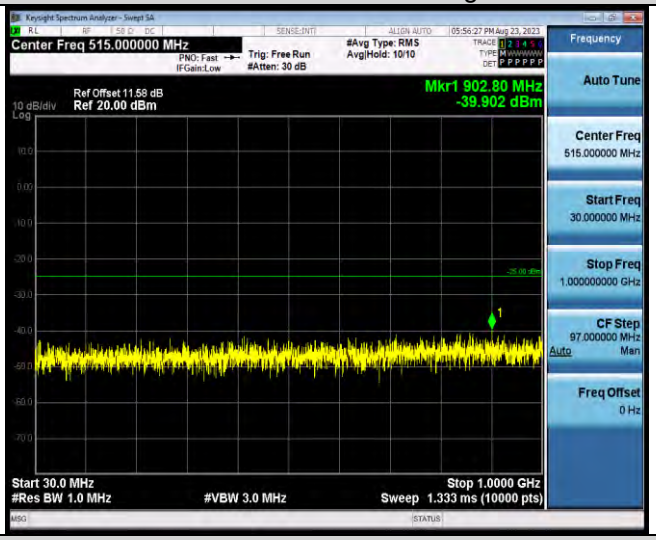
CONDUCTED SPURIOUS EMISSION

Test Result

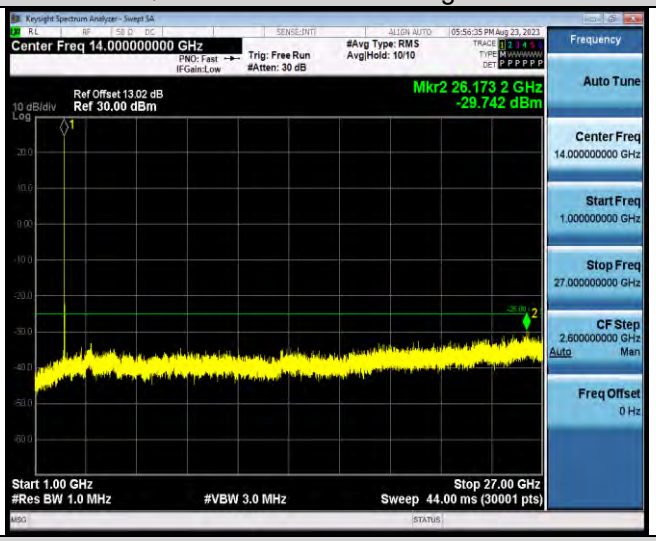
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	Range1:30~1000MHz	-39.9	PASS
Band41	5MHz	QPSK	39675	1RB#0	Range2:1000~27000MHz	-29.74	PASS
Band41	5MHz	QPSK	40620	1RB#0	Range1:30~1000MHz	-40.4	PASS
Band41	5MHz	QPSK	40620	1RB#0	Range2:1000~27000MHz	-29.93	PASS
Band41	5MHz	QPSK	41565	1RB#0	Range1:30~1000MHz	-41.03	PASS
Band41	5MHz	QPSK	41565	1RB#0	Range2:1000~27000MHz	-30.81	PASS
Band41	10MHz	QPSK	39700	1RB#0	Range1:30~1000MHz	-40.38	PASS
Band41	10MHz	QPSK	39700	1RB#0	Range2:1000~27000MHz	-30.32	PASS
Band41	10MHz	QPSK	40620	1RB#0	Range1:30~1000MHz	-40.23	PASS
Band41	10MHz	QPSK	40620	1RB#0	Range2:1000~27000MHz	-30.48	PASS
Band41	10MHz	QPSK	41540	1RB#0	Range1:30~1000MHz	-40.28	PASS
Band41	10MHz	QPSK	41540	1RB#0	Range2:1000~27000MHz	-30.56	PASS
Band41	15MHz	QPSK	39725	1RB#0	Range1:30~1000MHz	-40.06	PASS
Band41	15MHz	QPSK	39725	1RB#0	Range2:1000~27000MHz	-30.36	PASS
Band41	15MHz	QPSK	40620	1RB#0	Range1:30~1000MHz	-39.88	PASS
Band41	15MHz	QPSK	40620	1RB#0	Range2:1000~27000MHz	-30.51	PASS
Band41	15MHz	QPSK	41515	1RB#0	Range1:30~1000MHz	-40.64	PASS
Band41	15MHz	QPSK	41515	1RB#0	Range2:1000~27000MHz	-30.71	PASS
Band41	20MHz	QPSK	39750	1RB#0	Range1:30~1000MHz	-40.24	PASS
Band41	20MHz	QPSK	39750	1RB#0	Range2:1000~27000MHz	-30.61	PASS
Band41	20MHz	QPSK	40620	1RB#0	Range1:30~1000MHz	-40.59	PASS
Band41	20MHz	QPSK	40620	1RB#0	Range2:1000~27000MHz	-30.75	PASS
Band41	20MHz	QPSK	41490	1RB#0	Range1:30~1000MHz	-40.8	PASS
Band41	20MHz	QPSK	41490	1RB#0	Range2:1000~27000MHz	-29.85	PASS

Test Graphs

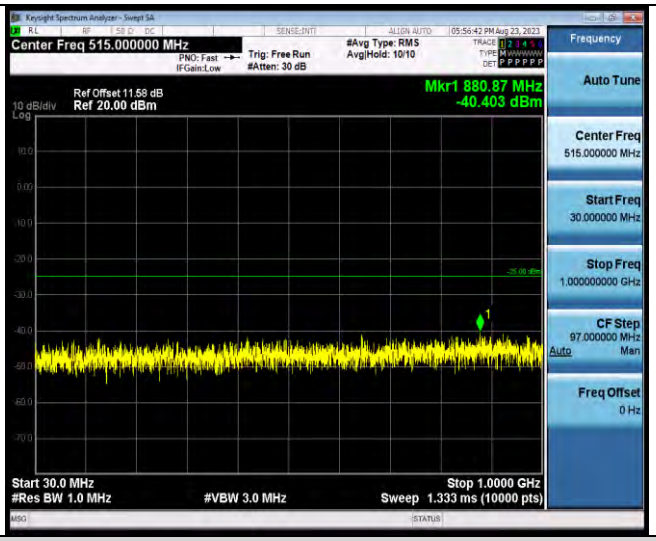
Band41-5MHz-QPSK-39675-1RB#0-Range1:30~1000MHz



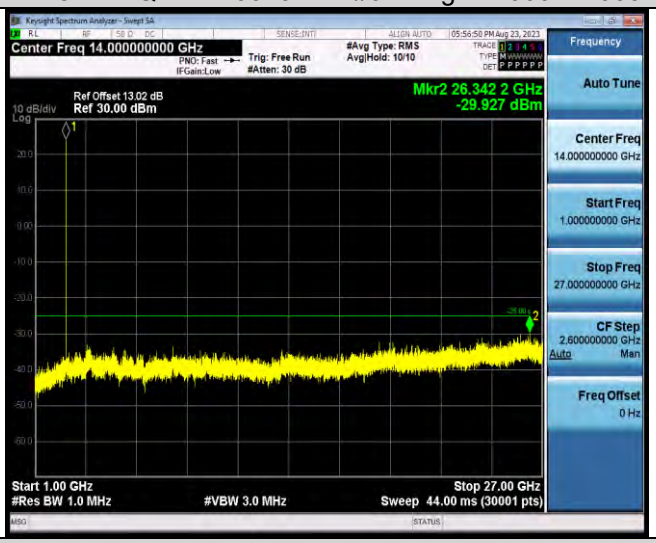
Band41-5MHz-QPSK-39675-1RB#0-Range2:1000~27000MHz



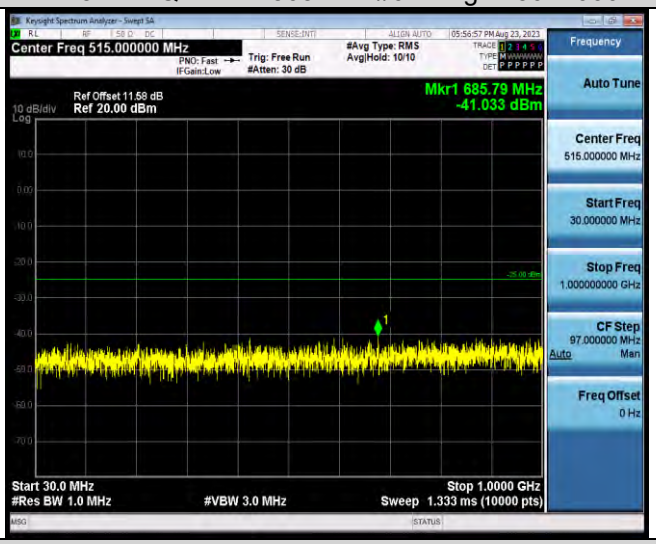
Band41-5MHz-QPSK-40620-1RB#0-Range1:30~1000MHz



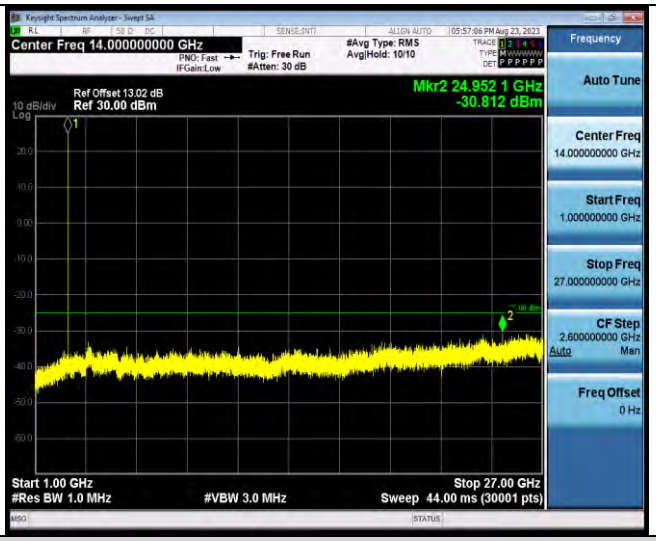
Band41-5MHz-QPSK-40620-1RB#0-Range2:1000~27000MHz



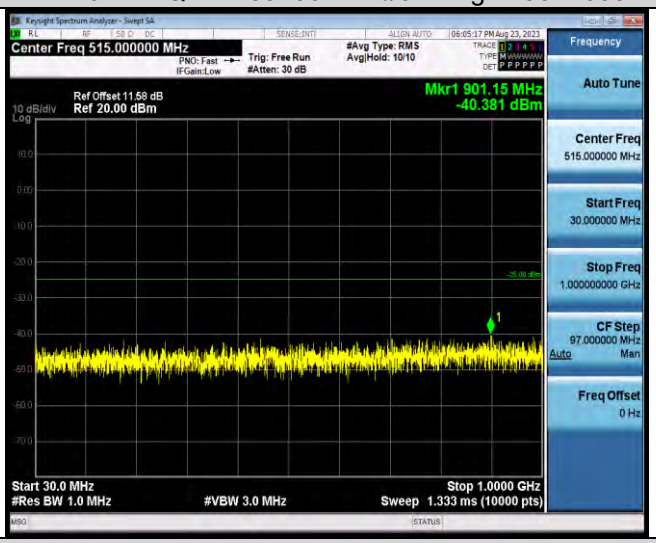
Band41-5MHz-QPSK-41565-1RB#0-Range1:30~1000MHz



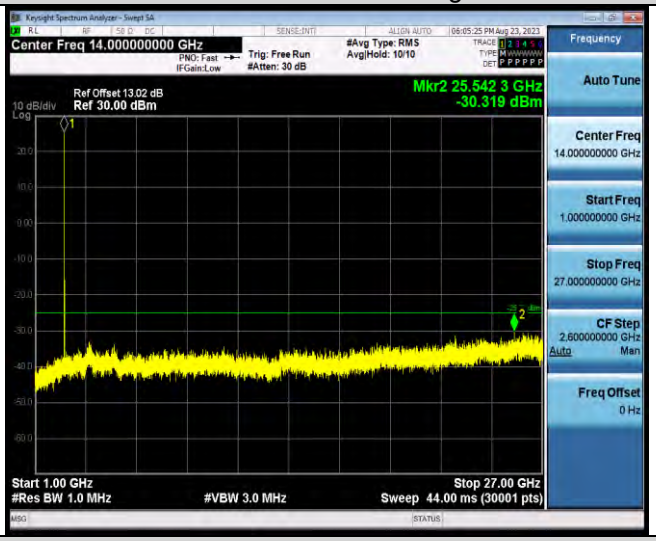
Band41-5MHz-QPSK-41565-1RB#0-Range2:1000~27000MHz



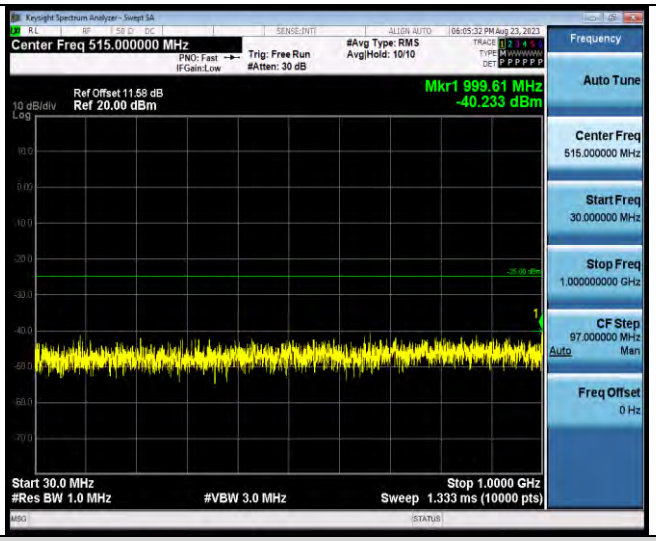
Band41-10MHz-QPSK-39700-1RB#0-Range1:30~1000MHz



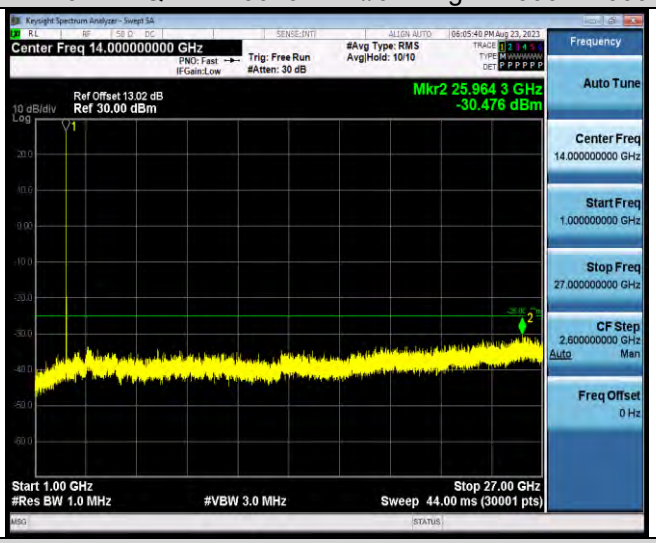
Band41-10MHz-QPSK-39700-1RB#0-Range2:1000~27000MHz



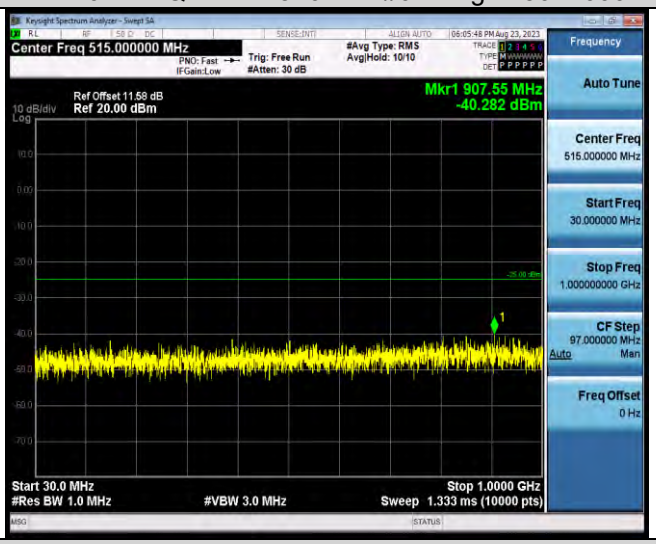
Band41-10MHz-QPSK-40620-1RB#0-Range1:30~1000MHz



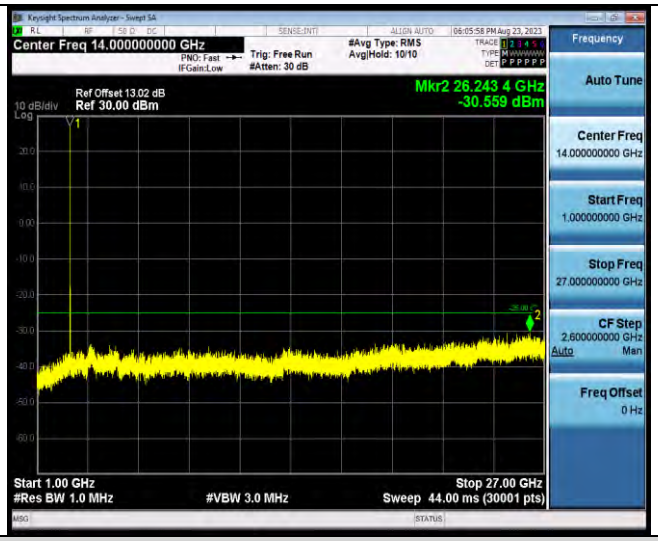
Band41-10MHz-QPSK-40620-1RB#0-Range2:1000~27000MHz



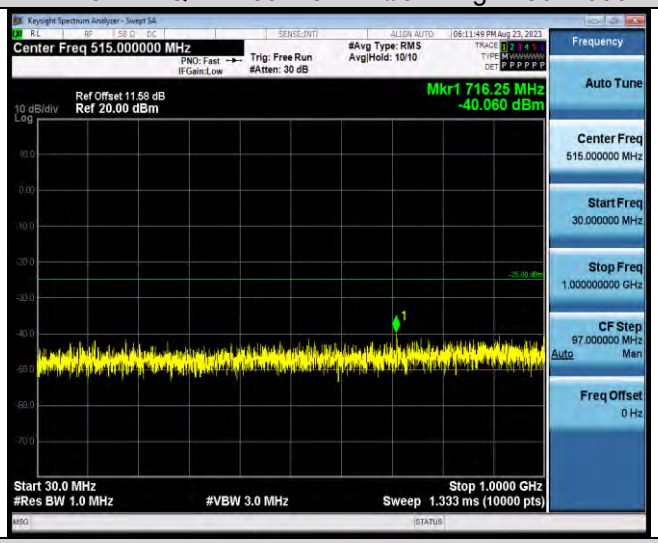
Band41-10MHz-QPSK-41540-1RB#0-Range1:30~1000MHz



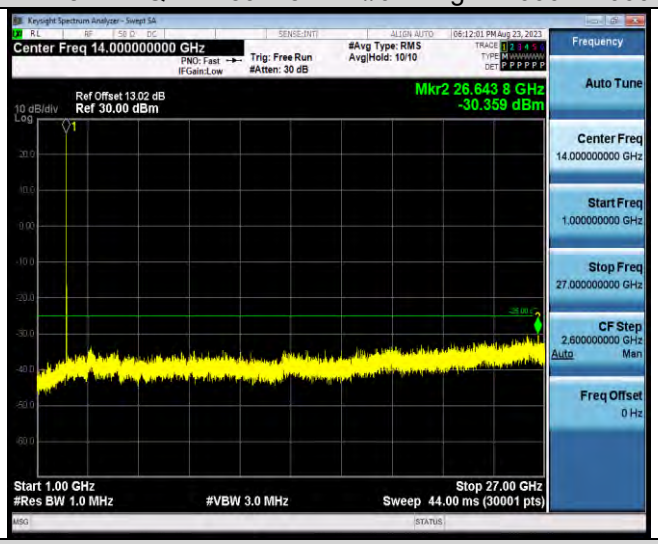
Band41-10MHz-QPSK-41540-1RB#0-Range2:1000~27000MHz



Band41-15MHz-QPSK-39725-1RB#0-Range1:30~1000MHz



Band41-15MHz-QPSK-39725-1RB#0-Range2:1000~27000MHz



Band41-15MHz-QPSK-40620-1RB#0-Range1:30~1000MHz