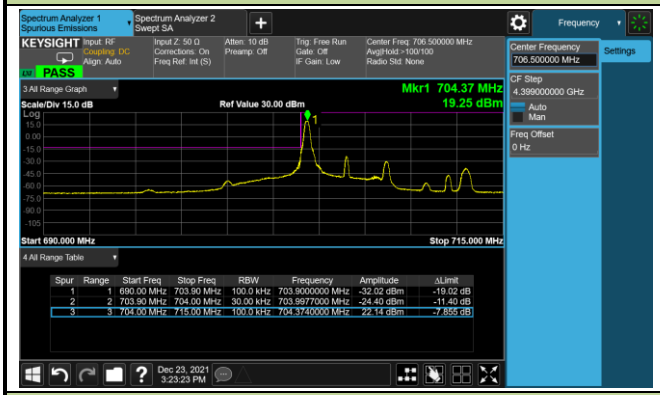
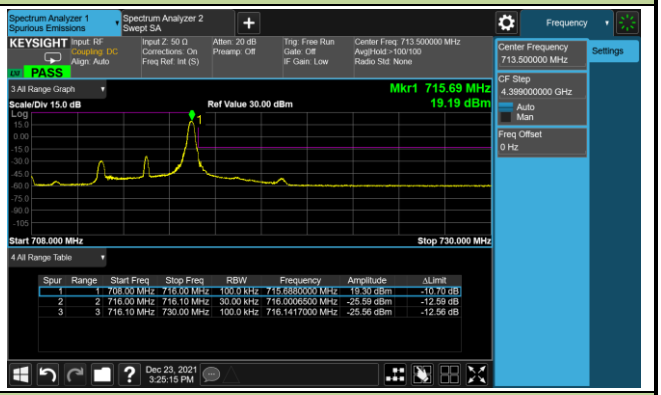
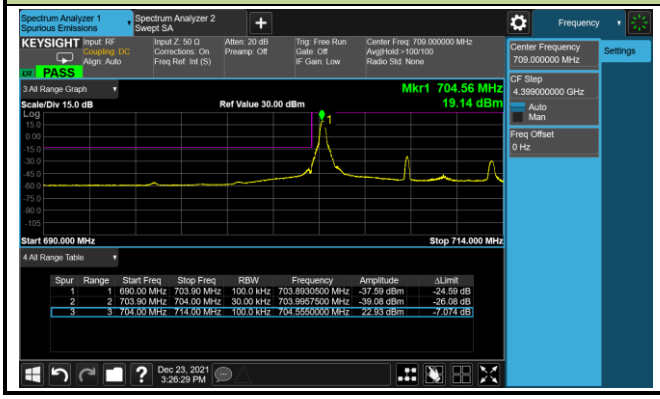
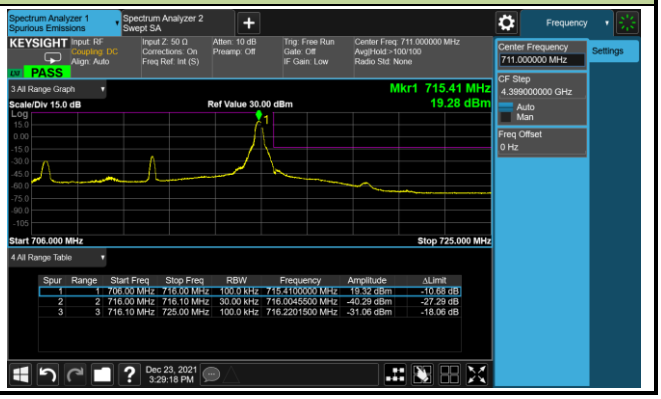
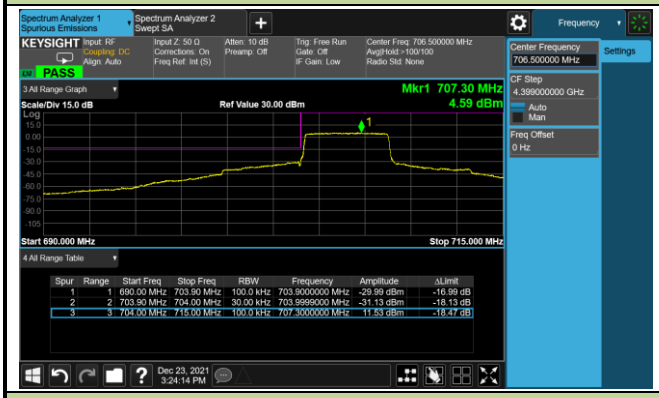
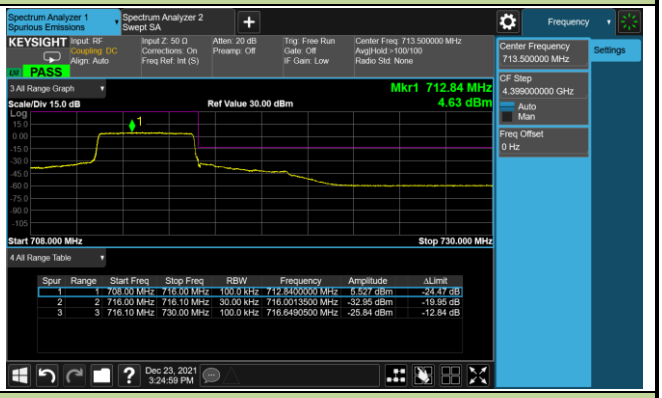
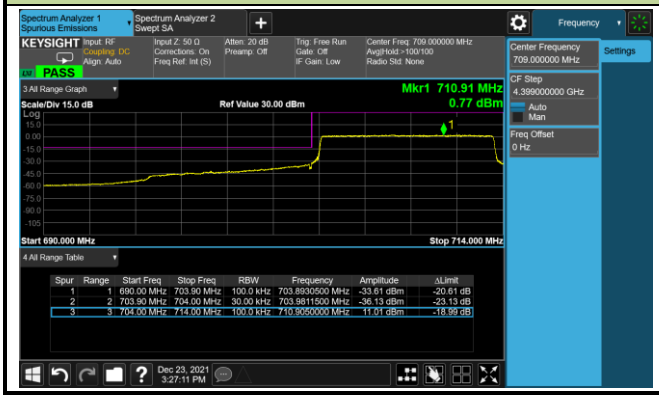
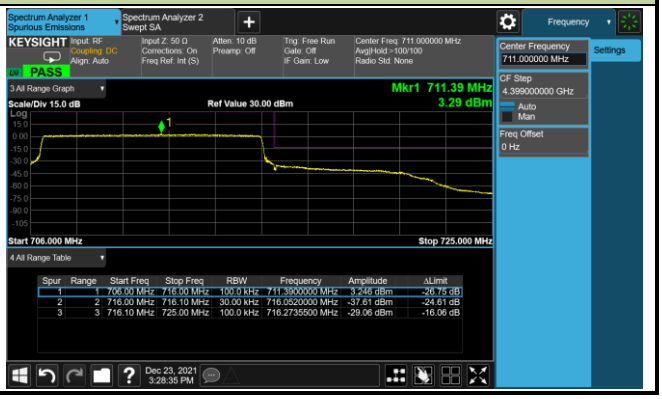
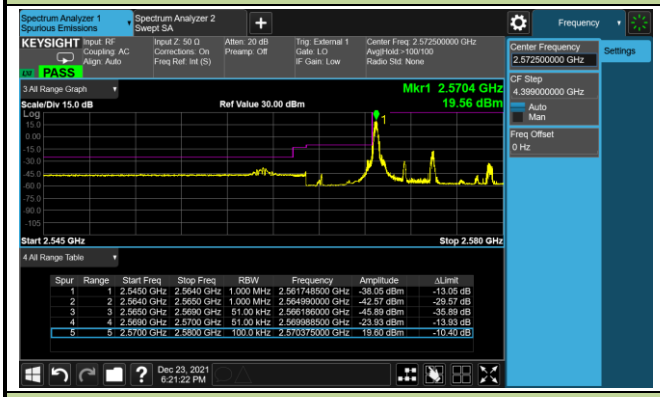
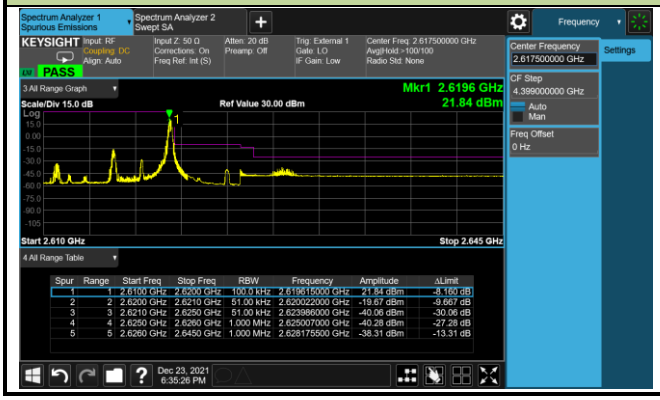
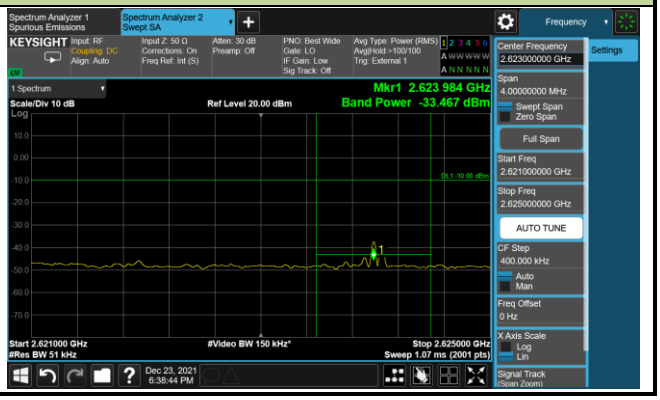
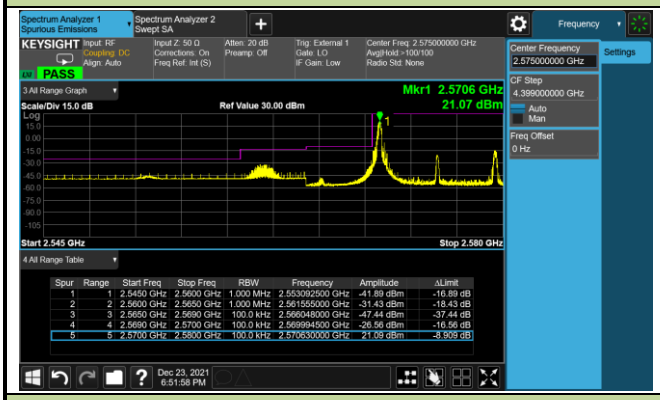
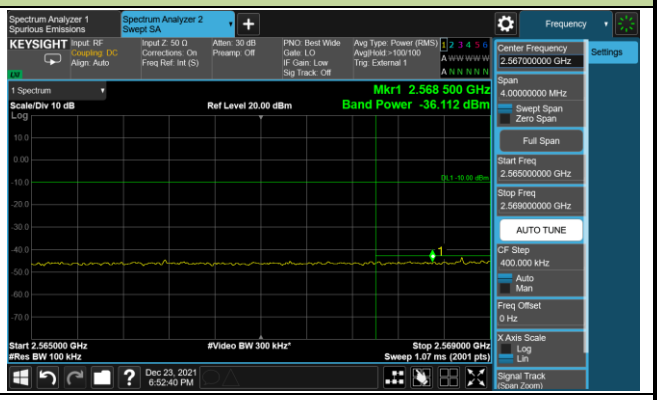
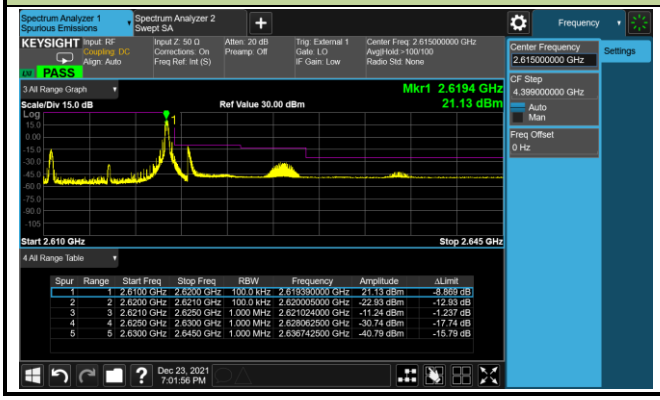
Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/23
Test Band	LTE Band 17_QPSK		

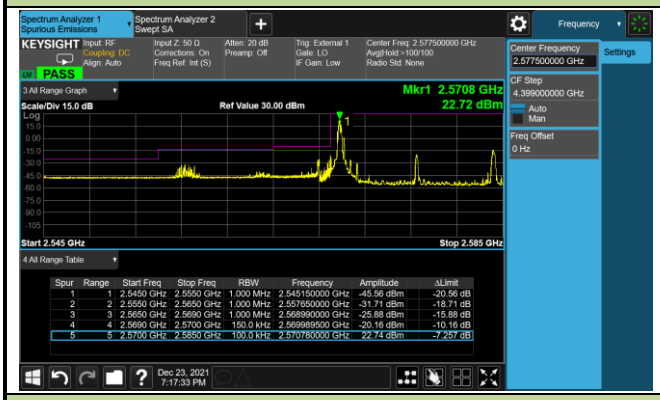
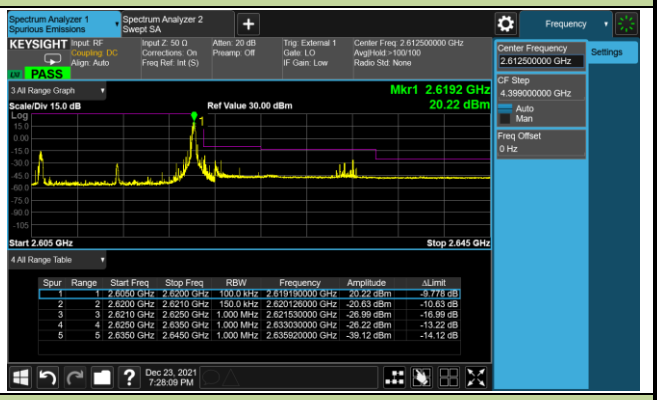
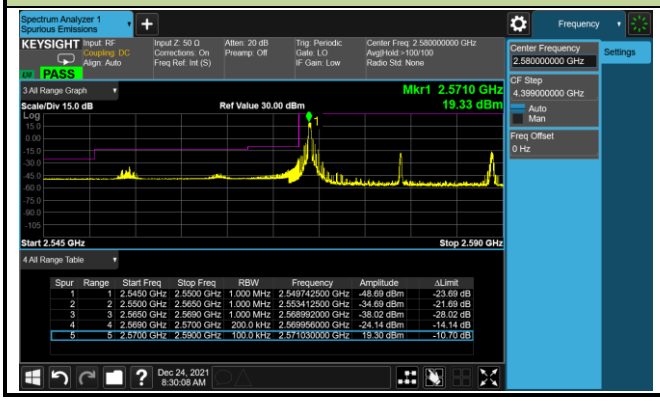
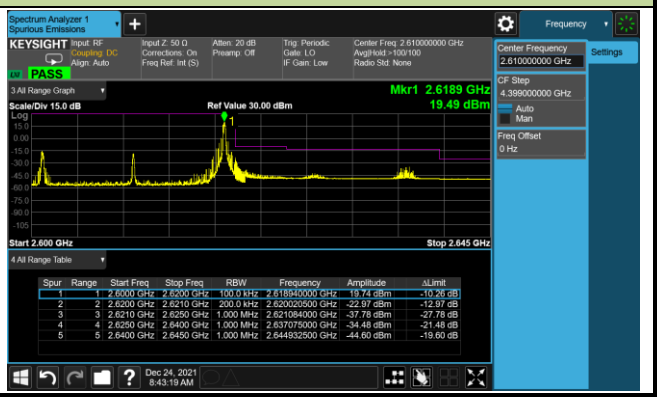
5MHz Channel Bandwidth 1RB	
Lower Band Edge	Upper Band Edge
	
10MHz Channel Bandwidth 1RB	
Lower Band Edge	Upper Band Edge
	

5MHz Channel Bandwidth Full RB	
Lower Band Edge	Upper Band Edge
	
10MHz Channel Bandwidth Full RB	
Lower Band Edge	Upper Band Edge
	

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/23
Test Band	LTE Band 38 _QPSK		

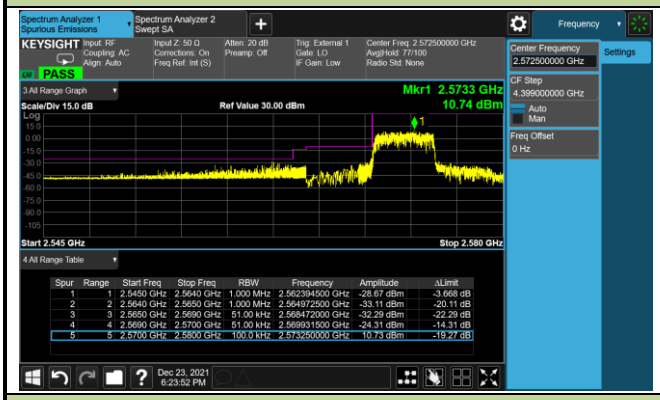
5MHz Channel Bandwidth - 1RB	
Lower Band Edge	Lower Extended Band Edge
	
Upper Band Edge	Upper Extended Band Edge
	

10MHz Channel Bandwidth - 1RB	
Lower Band Edge	Lower Extended Band Edge
	
Upper Band Edge	
	

15MHz Channel Bandwidth - 1RB	
Lower Band Edge	Upper Band Edge
	
20MHz Channel Bandwidth - 1RB	
Lower Band Edge	Upper Band Edge
	

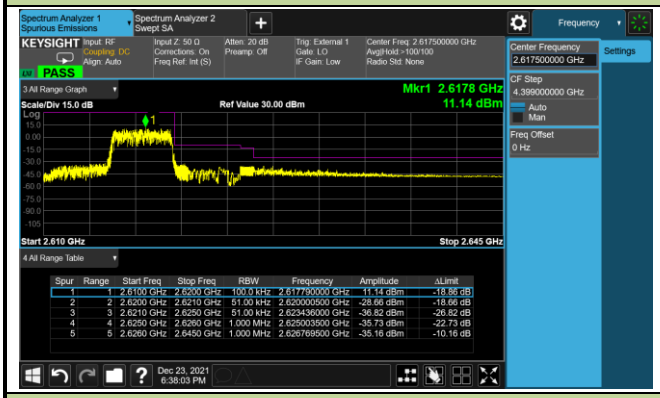
5MHz Channel Bandwidth - Full RB

Lower Band Edge



Lower Extended Band Edge

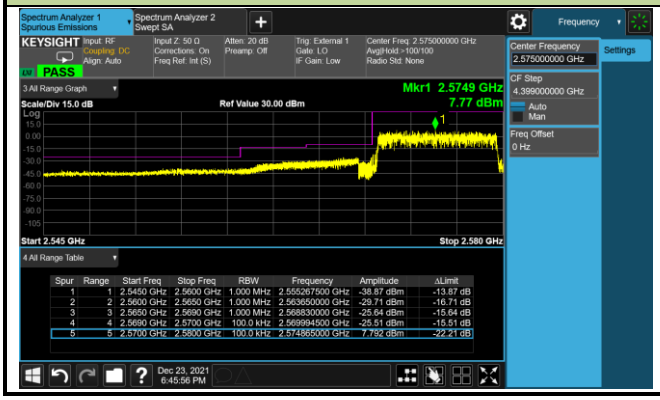
Upper Band Edge



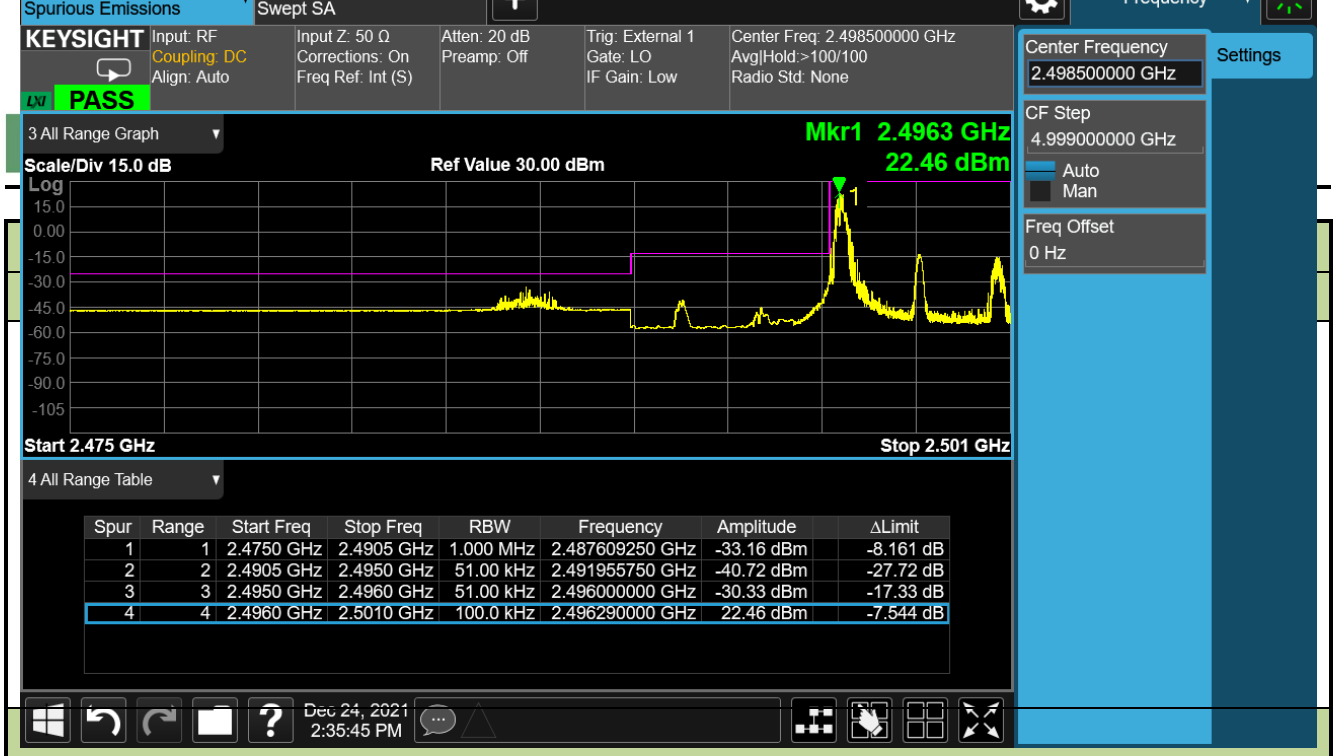
Upper Extended Band Edge

10MHz Channel Bandwidth - Full RB

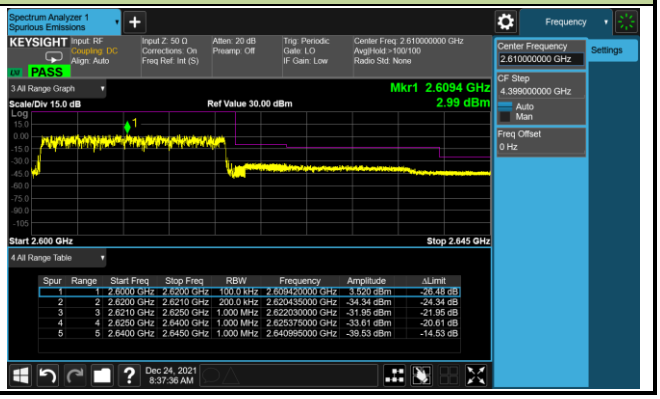
Lower Band Edge



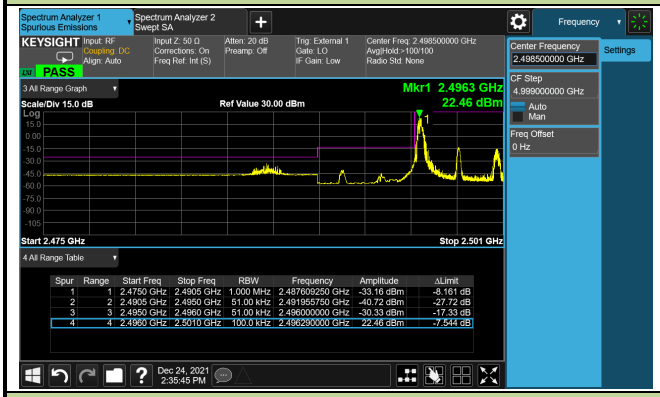
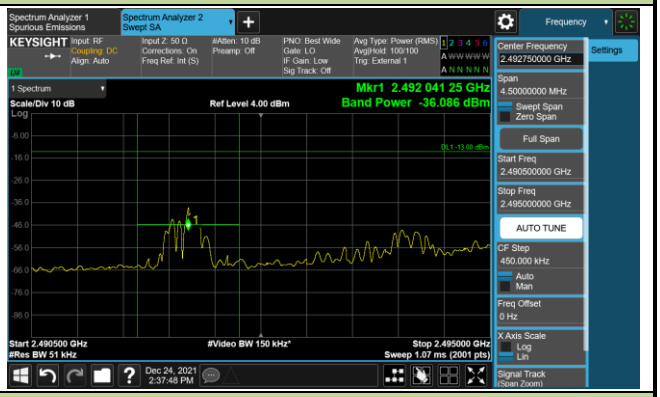
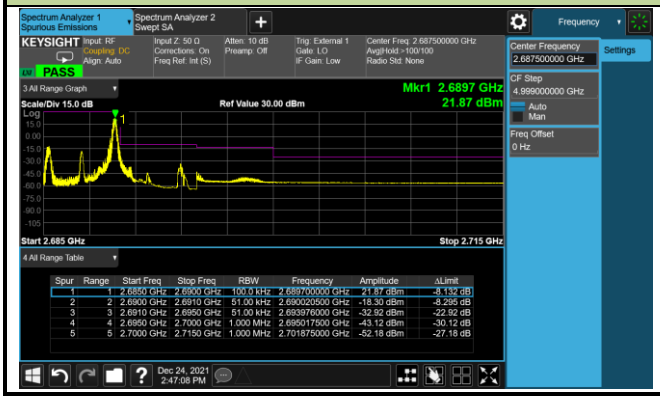
Upper Band Edge

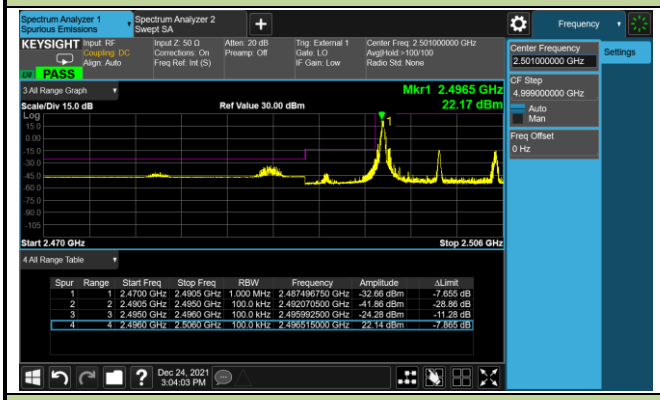
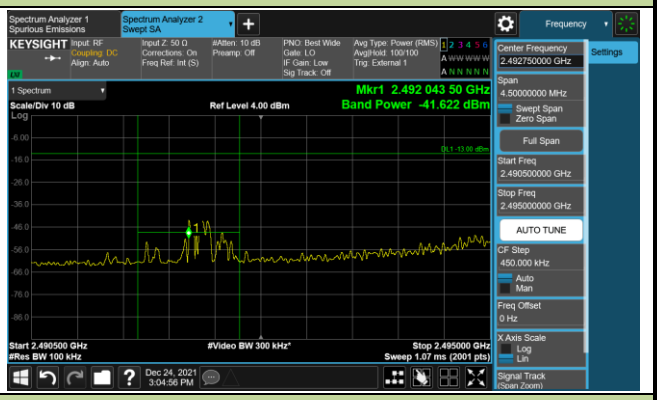
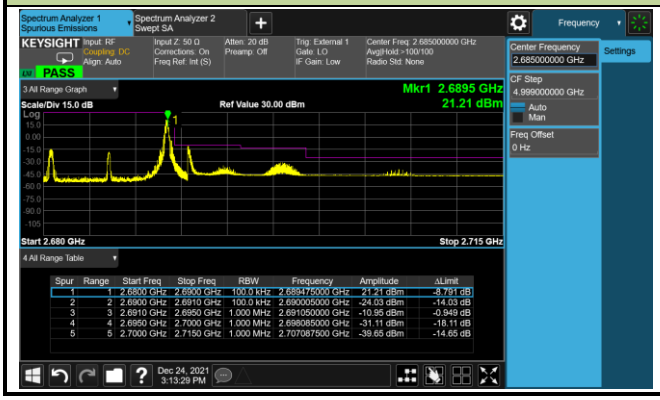


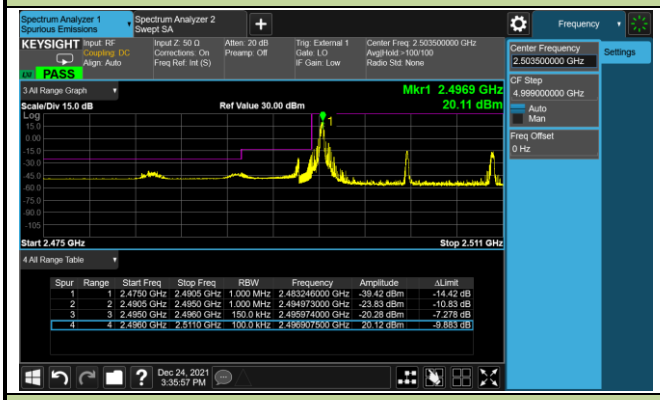
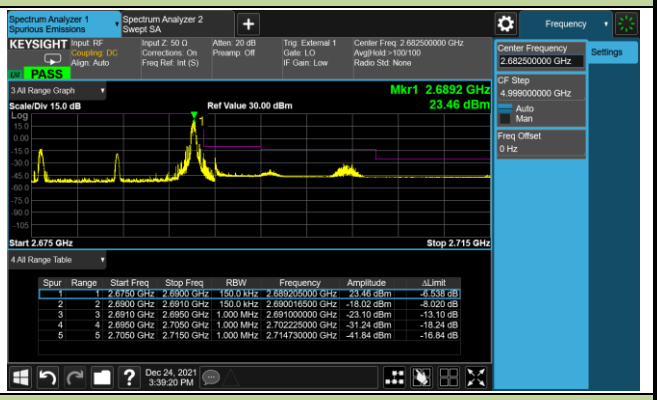
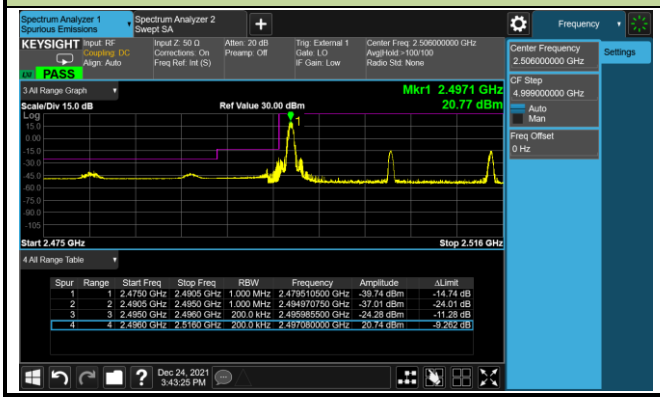
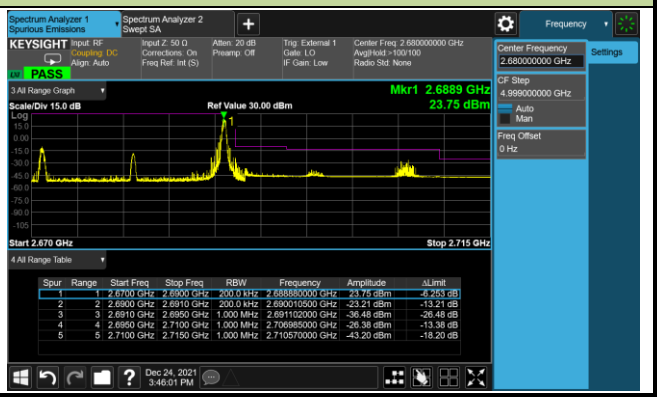
20MHz Channel Bandwidth - Full RB

Lower Band Edge	Upper Band Edge
	

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/24 ~2022/01/17
Test Band	LTE Band 41		

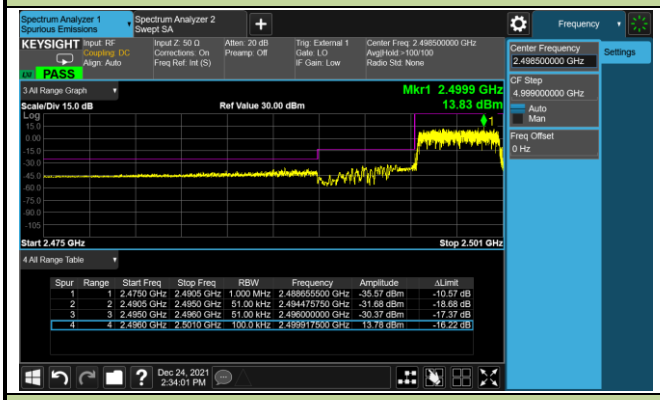
5MHz Channel Bandwidth - 1RB	
Lower Band Edge	Lower Extended Band Edge
	
Upper Band Edge	Upper Extended Band Edge
	

10MHz Channel Bandwidth - 1RB	
Lower Band Edge	Lower Extended Band Edge
	
Upper Band Edge	
	

15MHz Channel Bandwidth - 1RB	
Lower Band Edge	Upper Band Edge
	
20MHz Channel Bandwidth - 1RB	
Lower Band Edge	Upper Band Edge
	

5MHz Channel Bandwidth - Full RB

Lower Band Edge



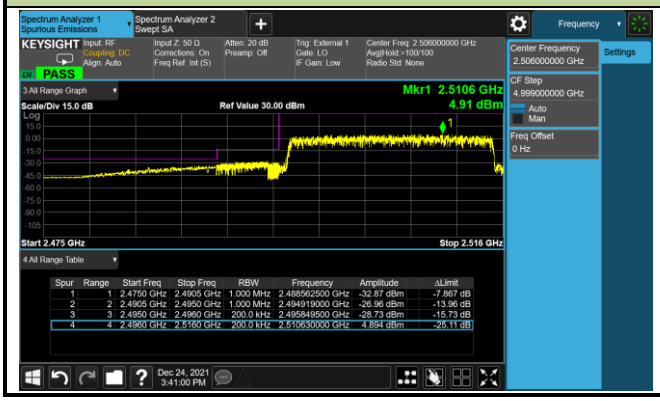
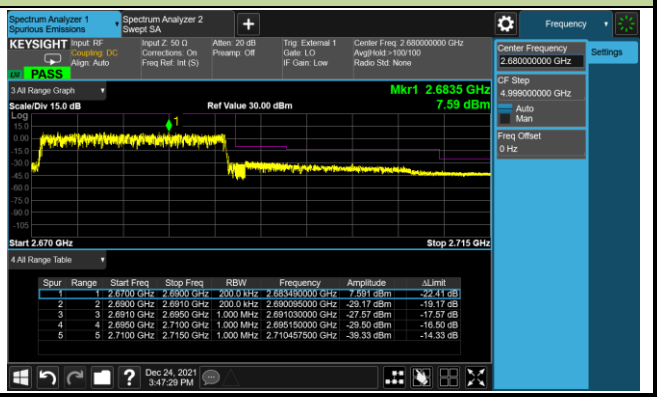
Lower Extended Band Edge

Upper Band Edge

10MHz Channel Bandwidth - Full RB

Lower Band Edge

Upper Band Edge

15MHz Channel Bandwidth - Full RB	
Lower Band Edge	Upper Band Edge
	
20MHz Channel Bandwidth - Full RB	
Lower Band Edge	Upper Band Edge
	

5.6. Peak to Average Ratio Measurement

5.6.1.Test Limit

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

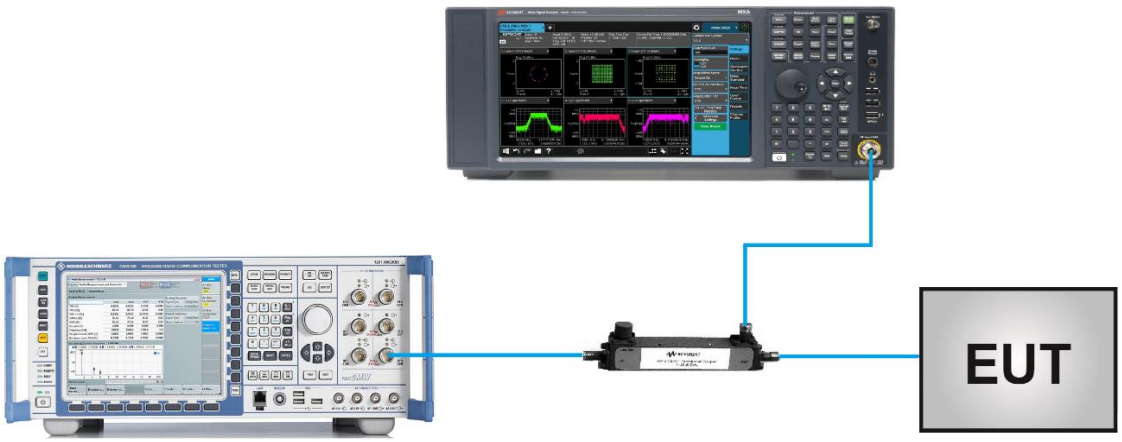
5.6.2.Test Procedure

ANSI C63.26-2015 - Section 5.2.3.4 (CCDF).

5.6.3.Test Setting

1. Set the 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 PARR level associated with a probability of 0.1%

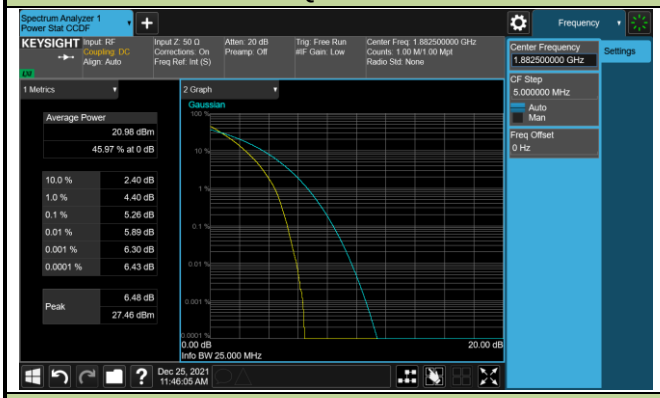
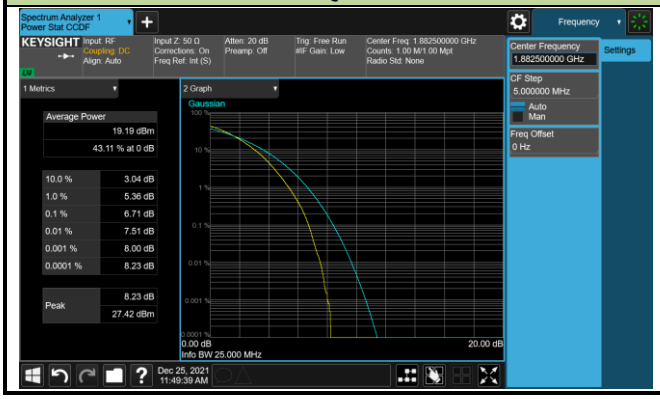
5.6.4.Test Setup



5.6.5.Test Result

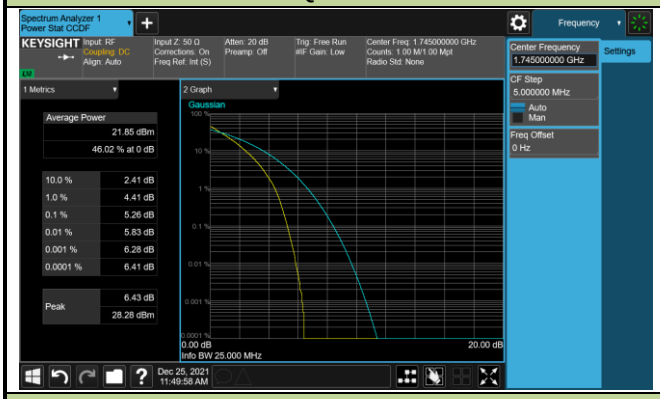
Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	Band 2/25		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
26365	1882.5	20	5.26	≤ 13.00	Pass
16QAM					
26365	1882.5	20	6.14	≤ 13.00	Pass
64QAM					
26365	1882.5	20	6.71	≤ 13.00	Pass

QPSK	16QAM
	
64QAM	
	

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	Band 4/66		

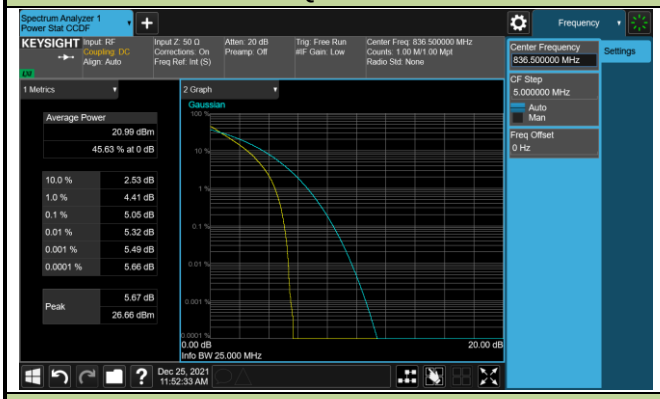
Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
132322	1745.0	20	5.26	≤ 13.00	Pass
16QAM					
132322	1745.0	20	6.12	≤ 13.00	Pass
64QAM					
132322	1745.0	20	6.65	≤ 13.00	Pass

QPSK	16QAM
	
64QAM	
	

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	Band 5/26		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
20525	836.5	10	5.05	≤ 13.00	Pass
16QAM					
20525	836.5	10	5.87	≤ 13.00	Pass
64QAM					
20525	836.5	10	6.45	≤ 13.00	Pass

QPSK

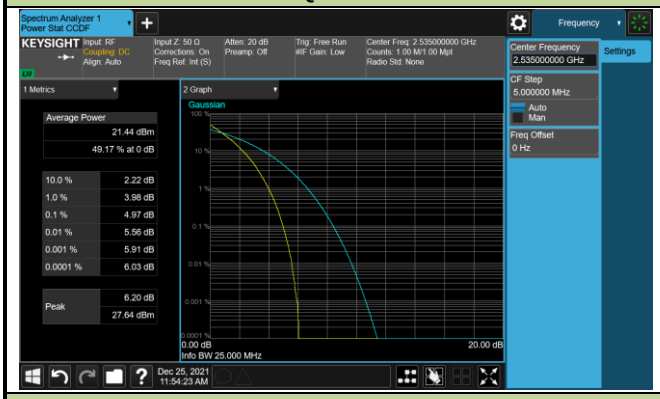


16QAM

64QAM

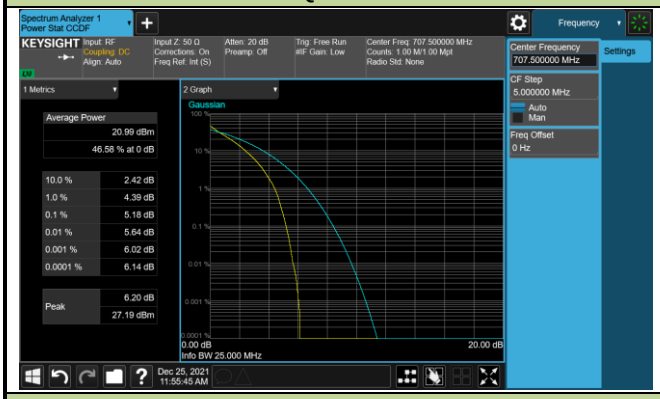
Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	LTE Band 7		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
21100	2535.0	20	4.97	≤ 13.00	Pass
16QAM					
21100	2535.0	20	5.74	≤ 13.00	Pass
64QAM					
21100	2535.0	20	6.13	≤ 13.00	Pass

QPSK	16QAM
	
64QAM	
	

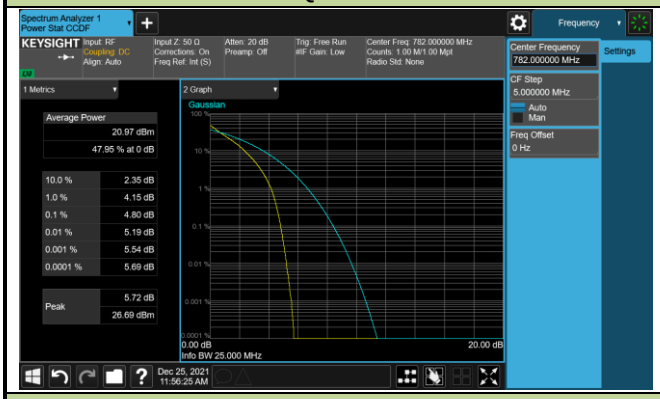
Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	LTE Band 12		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
26365	707.5	10	5.18	≤ 13.00	Pass
16QAM					
26365	707.5	10	6.03	≤ 13.00	Pass
64QAM					
26365	707.5	10	6.62	≤ 13.00	Pass

QPSK	16QAM
	
64QAM	
	

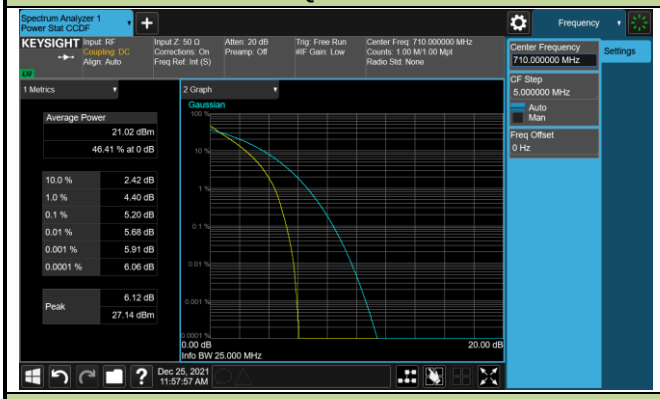
Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	LTE Band 13		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
132322	782	10	4.80	≤ 13.00	Pass
16QAM					
132322	782	10	5.67	≤ 13.00	Pass
64QAM					
132322	782	10	6.29	≤ 13.00	Pass

QPSK	16QAM
	
64QAM	
	

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	LTE Band 17		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
23790	710.0	10	5.20	≤ 13.00	Pass
16QAM					
23790	710.0	10	6.04	≤ 13.00	Pass
64QAM					
23790	710.0	10	6.62	≤ 13.00	Pass

QPSK	16QAM
	
64QAM	
	

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/25
Test Band	LTE Band 38/41		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
40620	2593.0	20	7.49	≤ 13.00	Pass
16QAM					
40620	2593.0	20	8.37	≤ 13.00	Pass
64QAM					
40620	2593.0	20	8.71	≤ 13.00	Pass

QPSK

16QAM

64QAM

5.7. Conducted Spurious Emission Measurement

5.7.1.Test Limit

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

For Band 7, 38/41 the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB.

5.7.2.Test Procedure

ANSI C63.26-2015 - Section 5.7

5.7.3.Test Setting

1. Set the analyzer frequency to low, mid, high channel.
2. RBW = 1MHz
3. VBW ≥ 3*RBW
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to “free run.”
7. User gate triggered such that the analyzer only sweeps when the device is transmitting at full power.
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.