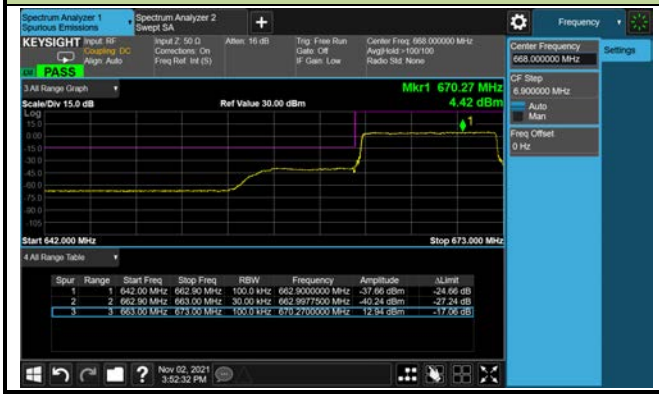
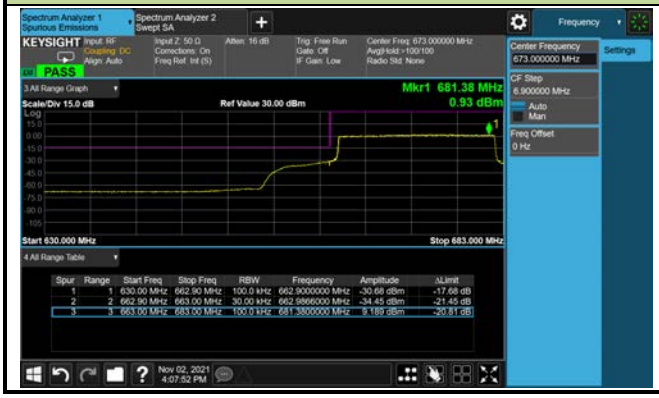
5MHz Channel Bandwidth - Full RB	
Lower Band Edge	Upper Band Edge
10MHz Channel Bandwidth - Full RB	
Lower Band Edge	Upper Band Edge
	

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.

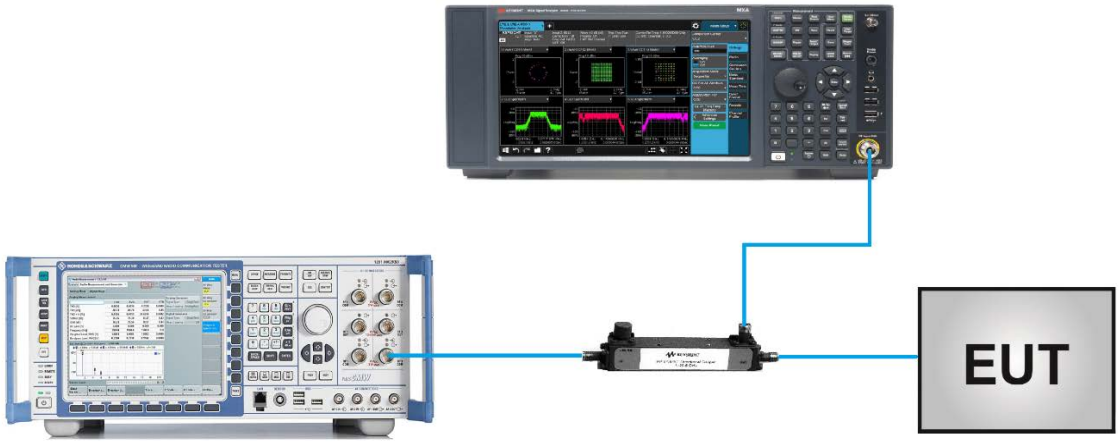
5.6.2.Test Procedure

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	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/26
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	5.37	≤ 13.00	Pass
16QAM					
26365	1882.5	20	6.27	≤ 13.00	Pass

QPSK	16QAM

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/22
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	5.40	≤ 13.00	Pass
16QAM					
132322	1745.0	20	6.26	≤ 13.00	Pass

QPSK	16QAM

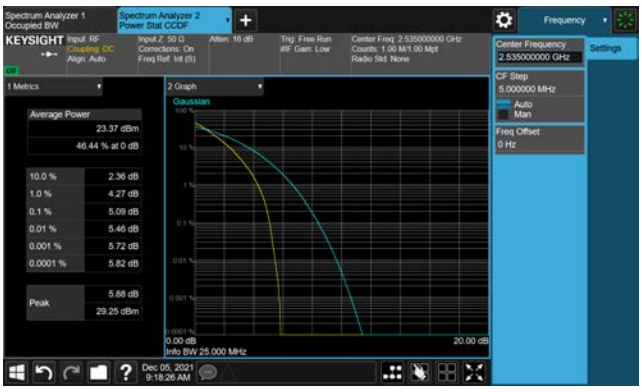
Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/22
Test Band	Band 5/26		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
20525	836.5	10	5.58	≤ 13.00	Pass
16QAM					
20525	836.5	10	6.31	≤ 13.00	Pass

QPSK	16QAM

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/05
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	5.09	≤ 13.00	Pass
16QAM					
21100	2535.0	20	5.98	≤ 13.00	Pass

QPSK	16QAM
	

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/22
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	5.60	≤ 13.00	Pass
16QAM					
26365	707.5	10	6.40	≤ 13.00	Pass

QPSK	16QAM

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/22
Test Band	LTE Band 13		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
132322	782	10	5.43	≤ 13.00	Pass
16QAM					
132322	782	10	6.22	≤ 13.00	Pass

QPSK	16QAM

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/11/29
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	5.25	≤ 13.00	Pass
16QAM					
23790	710.0	10	6.22	≤ 13.00	Pass

QPSK	16QAM

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/22
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	8.73	≤ 13.00	Pass
16QAM					
40620	2593.0	20	9.07	≤ 13.00	Pass

QPSK	16QAM

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/22
Test Band	LTE Band 71		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
QPSK					
133297	680.5	20	4.87	≤ 13.00	Pass
16QAM					
133297	680.5	20	6.13	≤ 13.00	Pass

QPSK	16QAM

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.

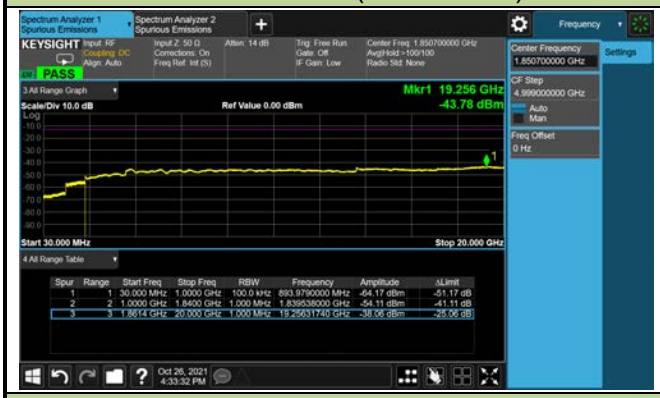
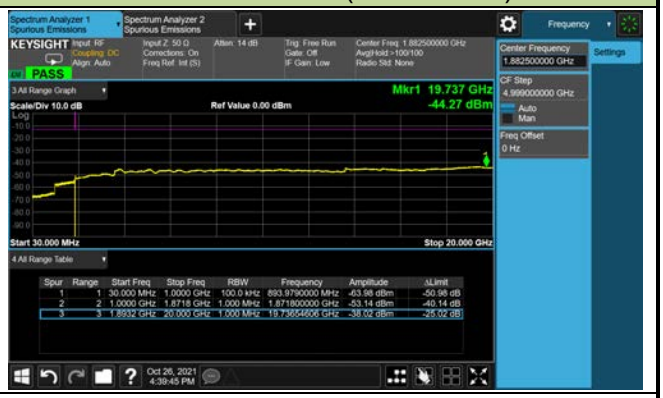
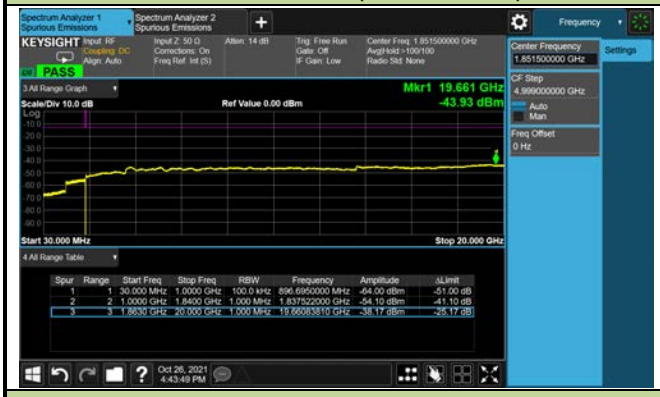
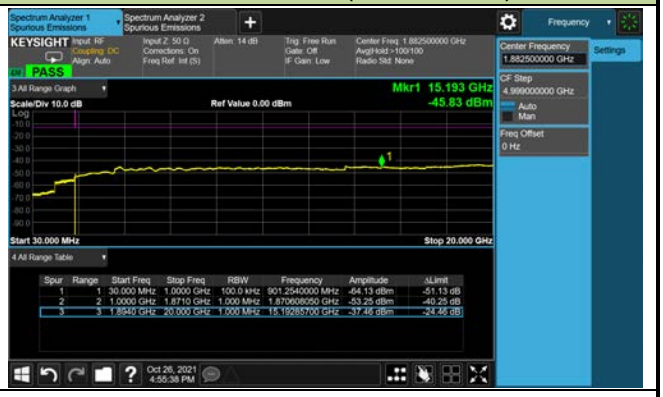
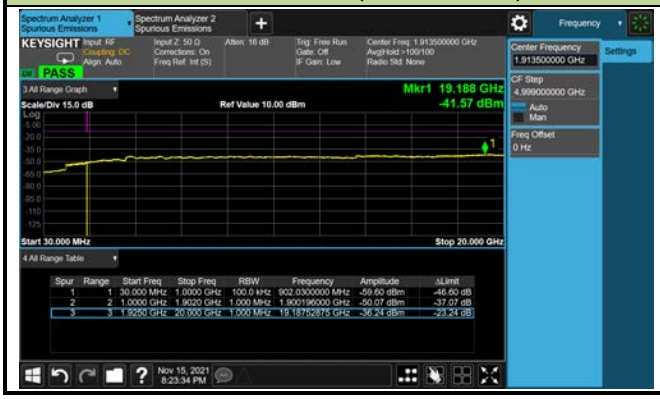
5.7.4.Test Setup

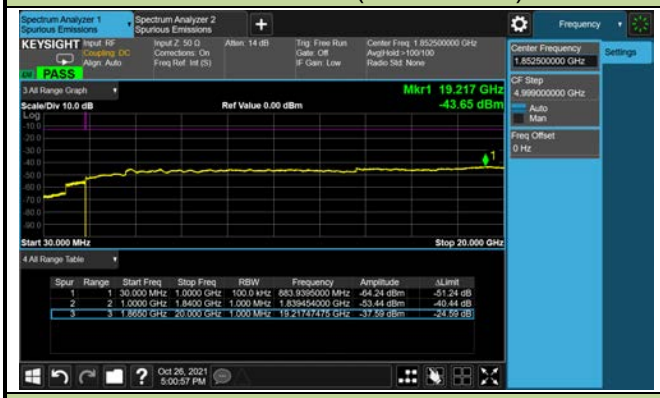
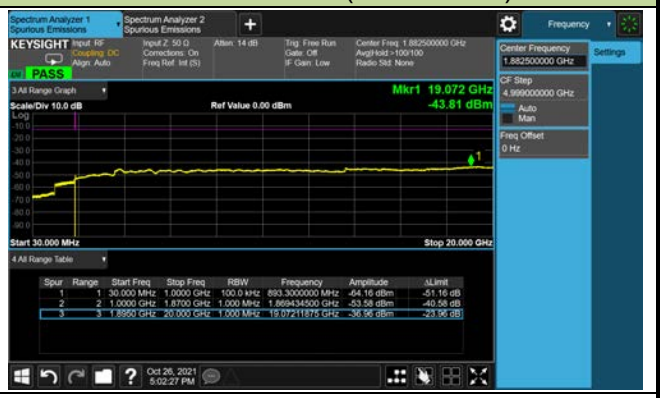
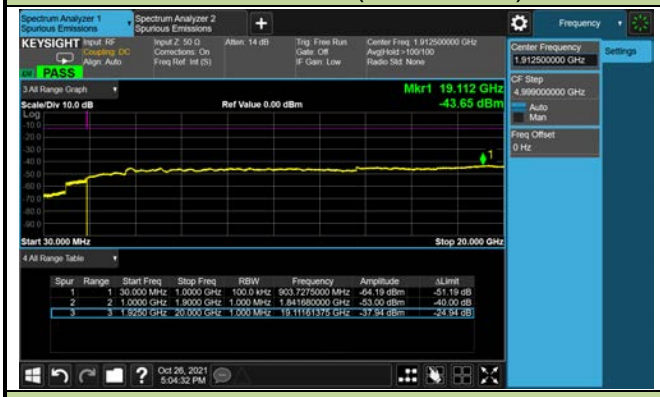
5.7.5.Test Result

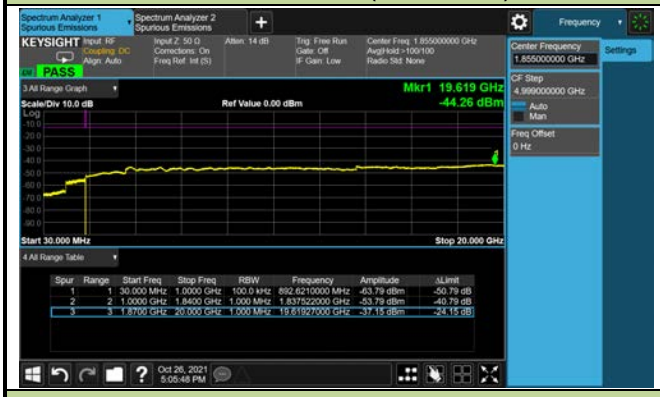
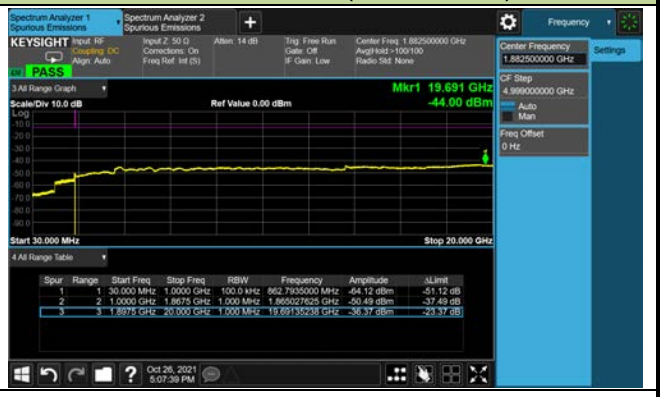
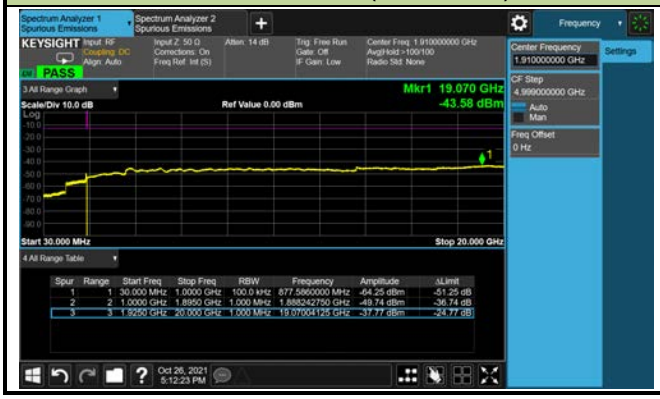
Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/26~2021/11/15
Test Band	LTE Band 2/25_1RB_QPSK		

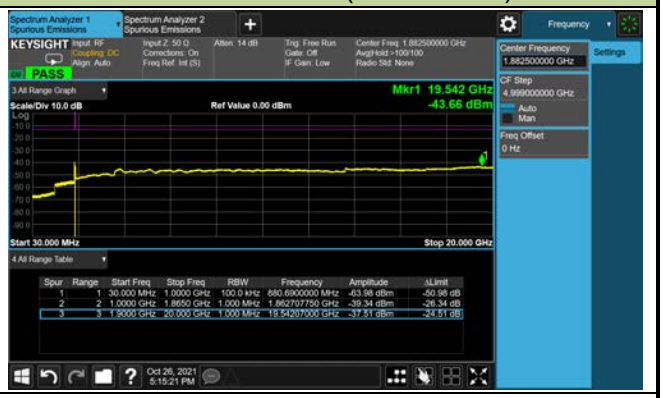
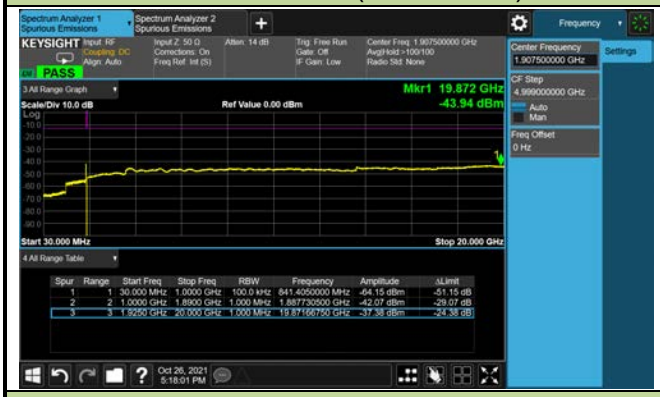
Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
26047	1850.7	1.4	30 ~ 20000	-38.06	≤ -13.00	Pass
26365	1882.5	1.4	30 ~ 20000	-38.02	≤ -13.00	Pass
26683	1914.3	1.4	30 ~ 20000	-37.52	≤ -13.00	Pass
26055	1851.5	3	30 ~ 20000	-38.17	≤ -13.00	Pass
26365	1882.5	3	30 ~ 20000	-37.46	≤ -13.00	Pass
26675	1913.5	3	30 ~ 20000	-36.24	≤ -13.00	Pass
26065	1852.5	5	30 ~ 20000	-37.59	≤ -13.00	Pass
26365	1882.5	5	30 ~ 20000	-36.96	≤ -13.00	Pass
26665	1912.5	5	30 ~ 20000	-37.94	≤ -13.00	Pass
16390	1855.0	10	30 ~ 20000	-37.15	≤ -13.00	Pass
26365	1882.5	10	30 ~ 20000	-36.37	≤ -13.00	Pass
26640	1910.0	10	30 ~ 20000	-37.77	≤ -13.00	Pass
26115	1857.5	15	30 ~ 20000	-37.83	≤ -13.00	Pass
26365	1882.5	15	30 ~ 20000	-37.51	≤ -13.00	Pass
26615	1907.5	15	30 ~ 20000	-37.38	≤ -13.00	Pass
26140	1860.0	20	30 ~ 20000	-37.53	≤ -13.00	Pass
26365	1882.5	20	30 ~ 20000	-38.23	≤ -13.00	Pass
26590	1905.0	20	30 ~ 20000	-37.68	≤ -13.00	Pass

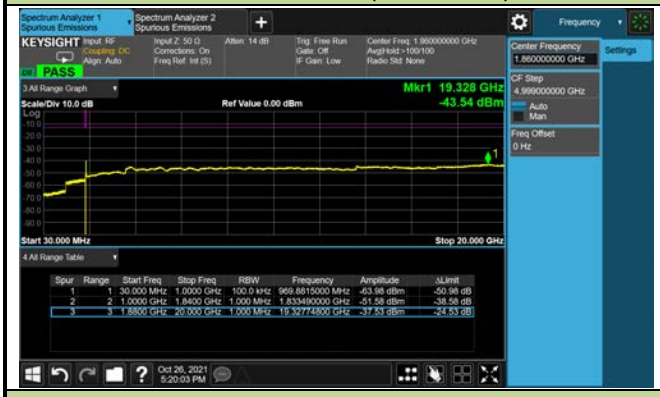
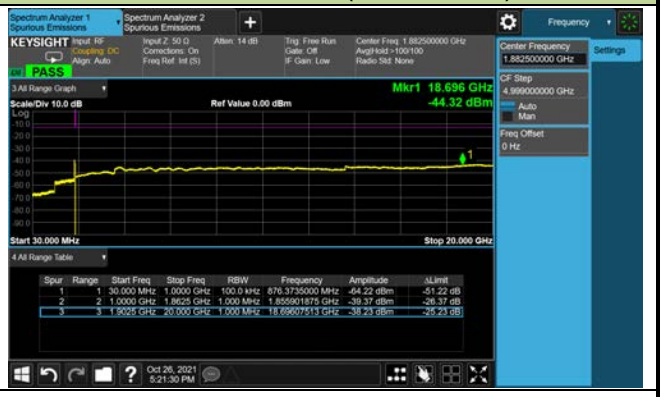
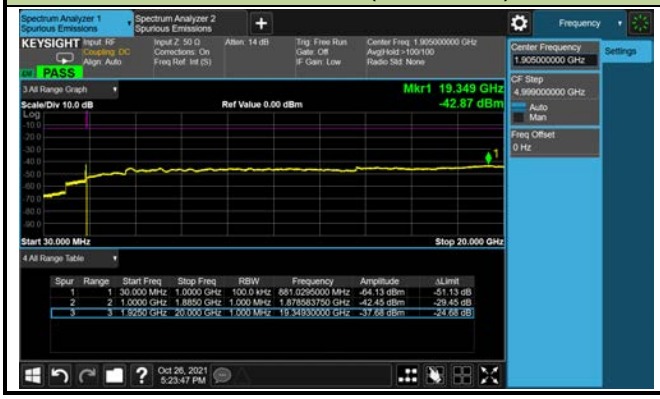
Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

1.4MHz Channel Bandwidth	
Channel 26047 (1850.7MHz)	Channel 26365 (1882.5MHz)
	
Channel 26683 (1914.3MHz)	
3MHz Channel Bandwidth	
Channel 26055 (1851.5MHz)	Channel 26365 (1882.5MHz)
	
Channel 26675 (1913.5MHz)	
	

5MHz Channel Bandwidth	
Channel 26065 (1852.5MHz)	Channel 26365 (1882.5MHz)
	
Channel 26665 (1912.5MHz)	
	

10MHz Channel Bandwidth	
Channel 16390 (1855MHz)	Channel 26365 (1882.5MHz)
	
Channel 26640 (1910MHz)	
	

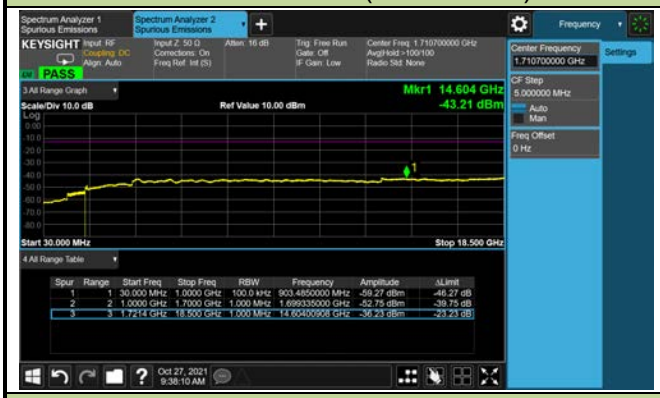
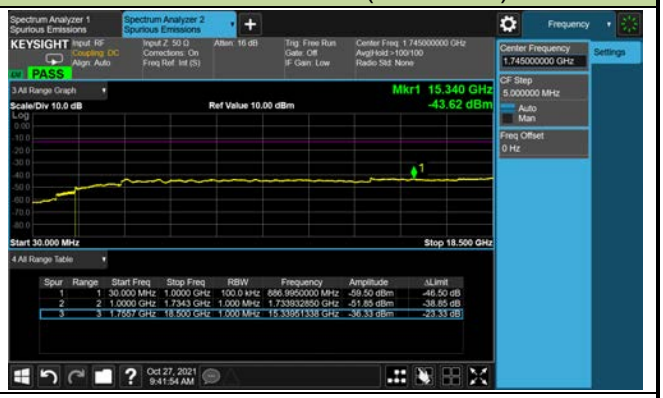
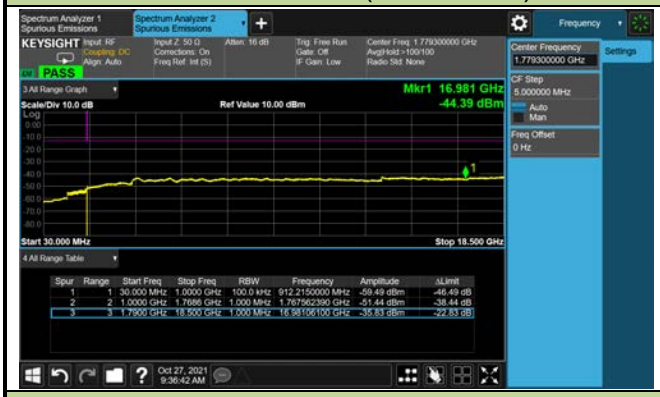
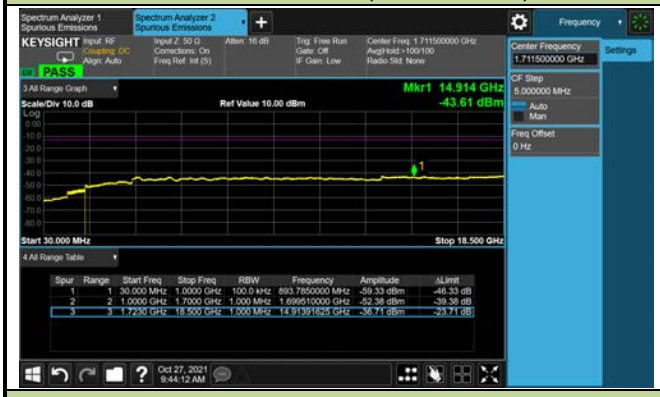
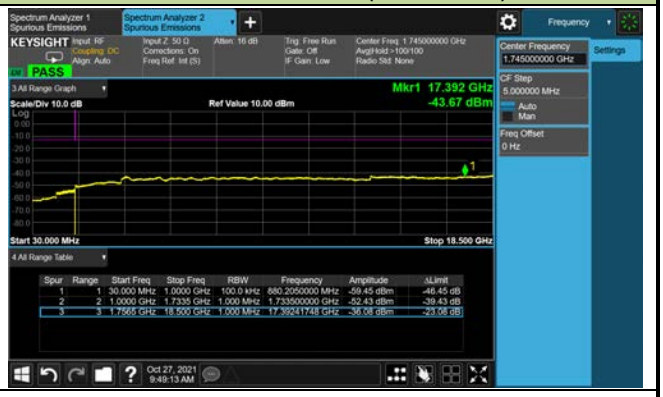
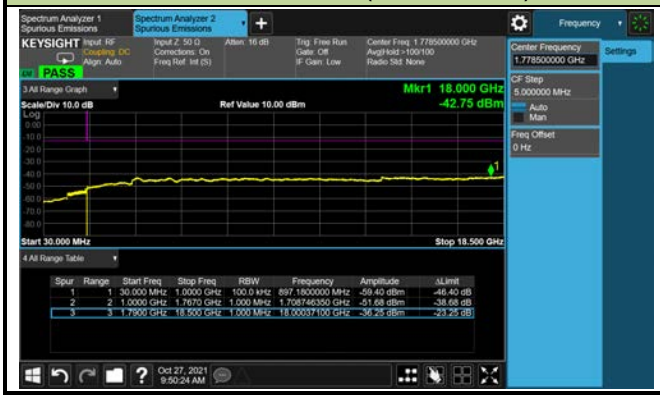
15MHz Channel Bandwidth	
Channel 26115 (1857MHz)	Channel 26365 (1882.5MHz)
	
Channel 26615 (1907.5MHz)	
	

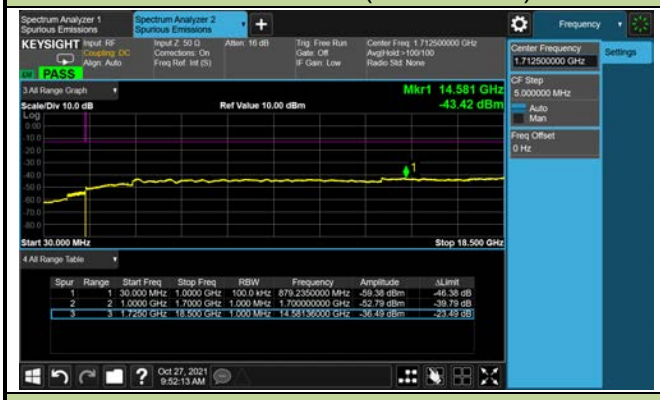
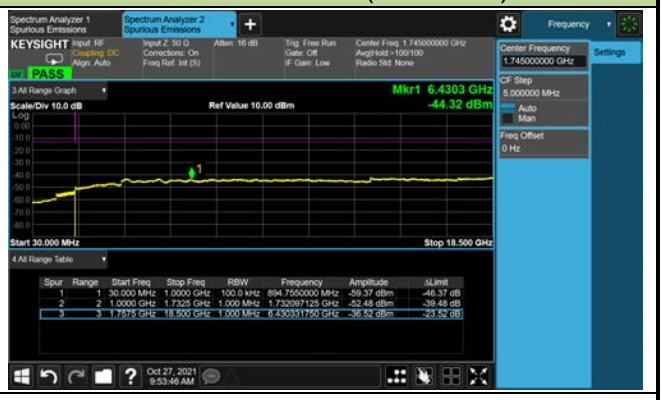
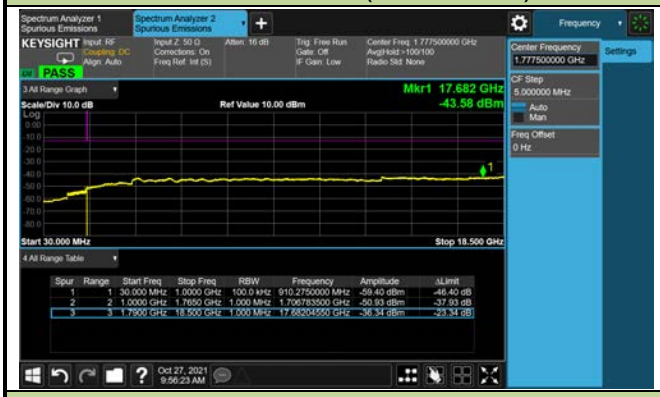
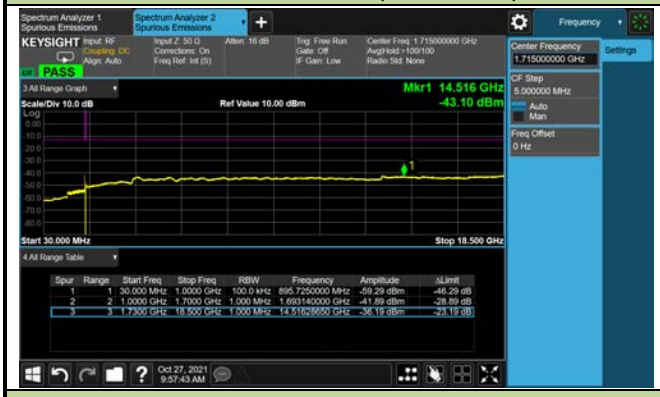
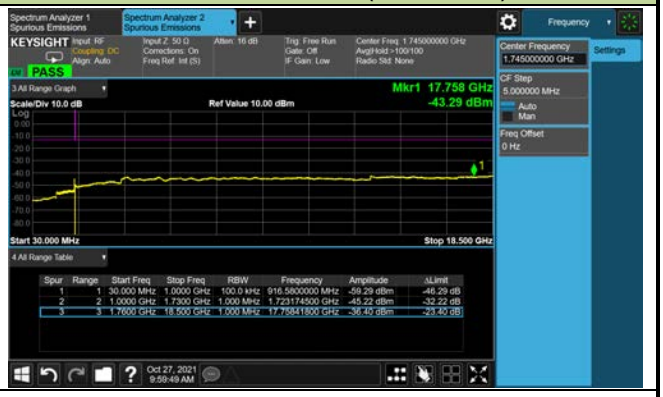
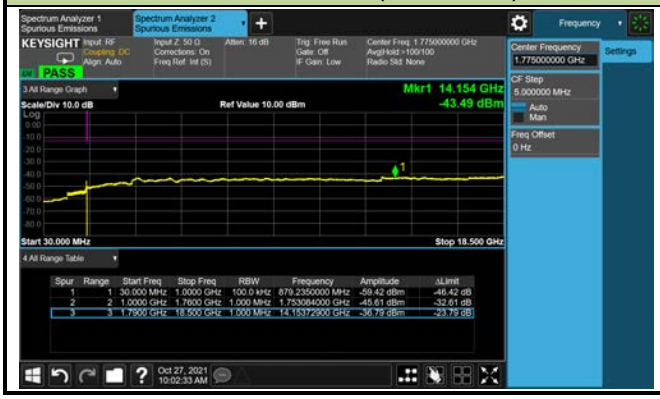
20MHz Channel Bandwidth	
Channel 26140 (1860MHz)	Channel 26365 (1882.5MHz)
	
Channel 26590 (1905MHz)	
	

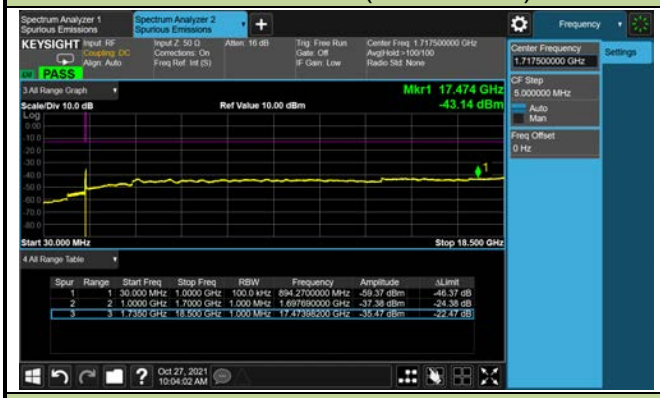
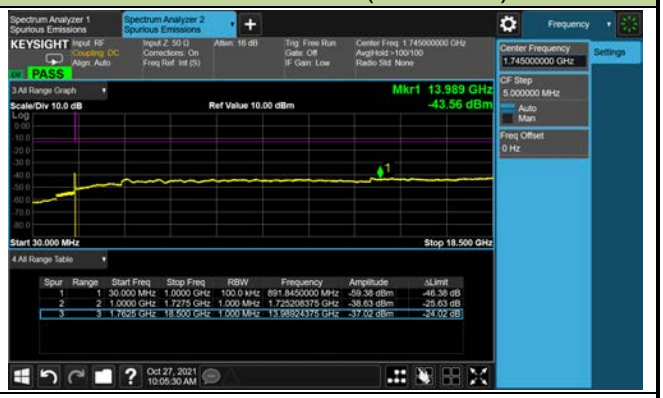
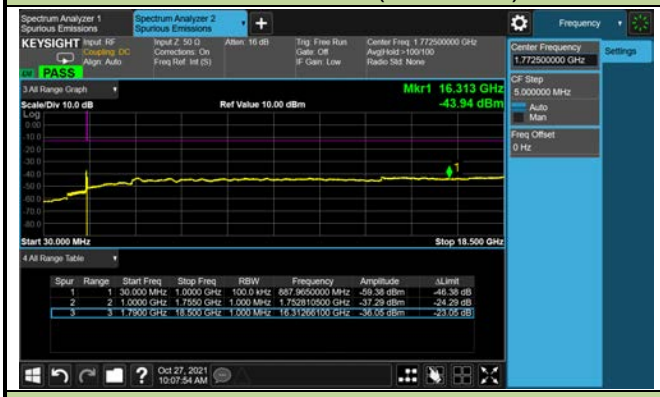
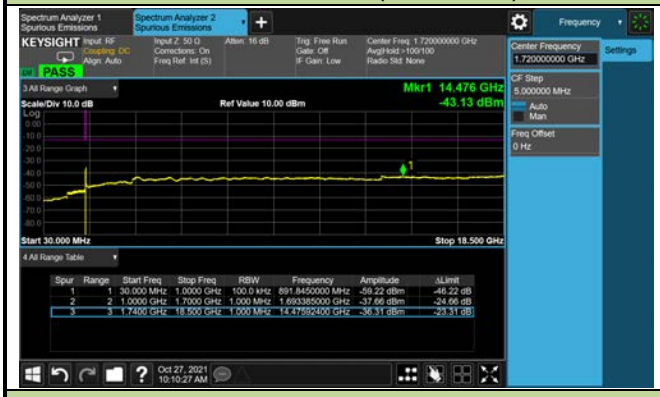
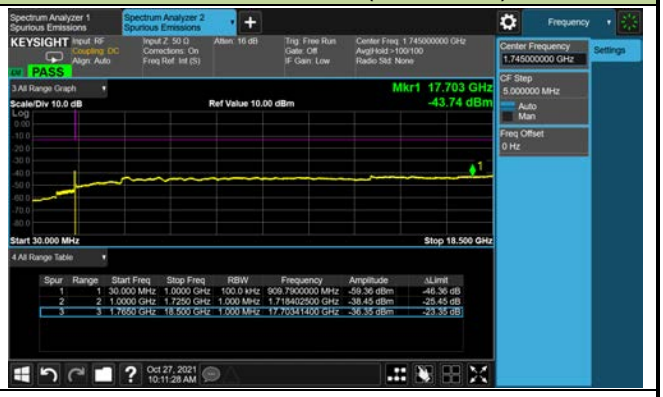
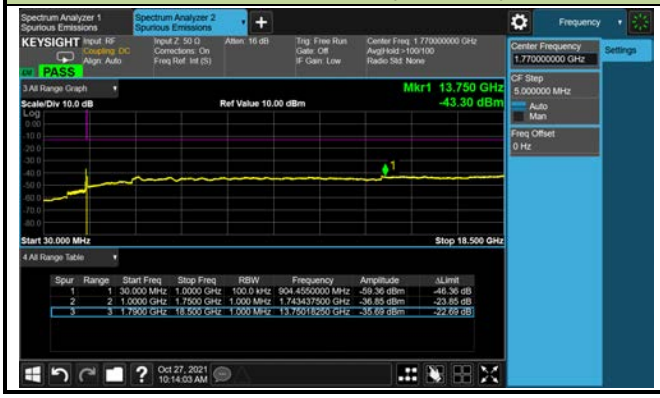
Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/27
Test Band	LTE Band 4/66_1RB_QPSK		

Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
131979	1710.7	1.4	30 ~ 20000	-36.23	≤ -13.00	Pass
132322	1745.0	1.4	30 ~ 20000	-36.33	≤ -13.00	Pass
132665	1779.3	1.4	30 ~ 20000	-35.83	≤ -13.00	Pass
131987	1711.5	3	30 ~ 20000	-36.71	≤ -13.00	Pass
132322	1745.0	3	30 ~ 20000	-36.08	≤ -13.00	Pass
132657	1778.5	3	30 ~ 20000	-36.25	≤ -13.00	Pass
131997	1712.5	5	30 ~ 20000	-36.49	≤ -13.00	Pass
132322	1745.0	5	30 ~ 20000	-36.52	≤ -13.00	Pass
132647	1777.5	5	30 ~ 20000	-36.34	≤ -13.00	Pass
132022	1715.0	10	30 ~ 20000	-36.19	≤ -13.00	Pass
132322	1745.0	10	30 ~ 20000	-36.40	≤ -13.00	Pass
132622	1775.0	10	30 ~ 20000	-36.79	≤ -13.00	Pass
132047	1717.5	15	30 ~ 20000	-35.47	≤ -13.00	Pass
132322	1745.0	15	30 ~ 20000	-37.02	≤ -13.00	Pass
132597	1772.5	15	30 ~ 20000	-36.05	≤ -13.00	Pass
132072	1720.0	20	30 ~ 20000	-36.31	≤ -13.00	Pass
132322	1745.0	20	30 ~ 20000	-36.35	≤ -13.00	Pass
132572	1770.0	20	30 ~ 20000	-35.69	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

1.4MHz Channel Bandwidth	
Channel 131979 (1710.7MHz)	Channel 132322 (1745MHz)
	
Channel 132665 (1779.3MHz)	
	
3MHz Channel Bandwidth	
Channel 131987 (1711.5MHz)	Channel 132322 (1745MHz)
	
Channel 132657 (1778.5MHz)	
	

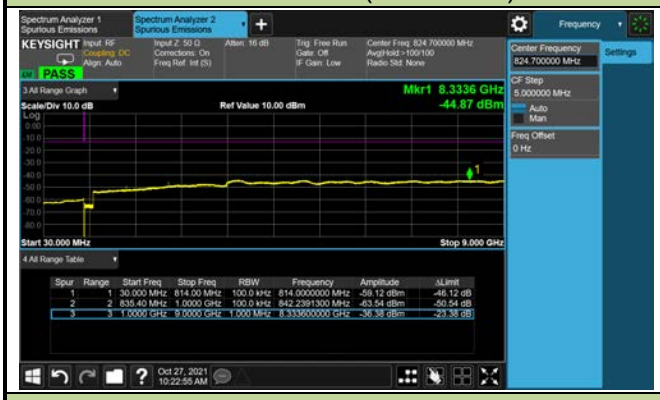
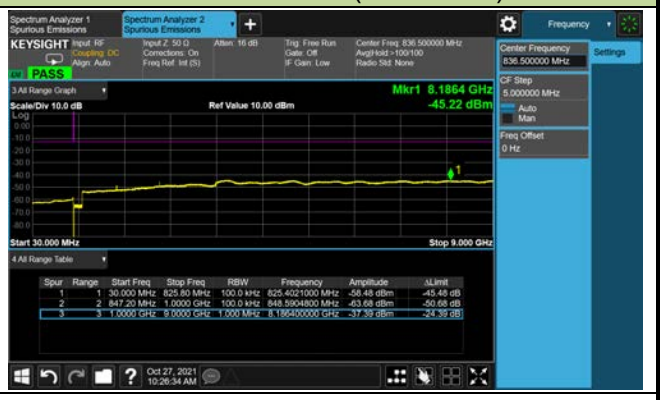
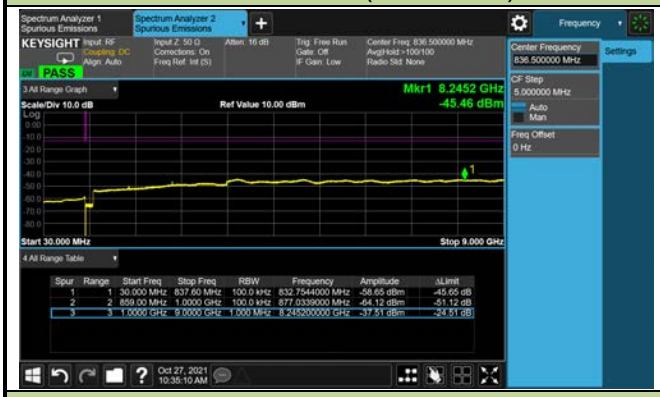
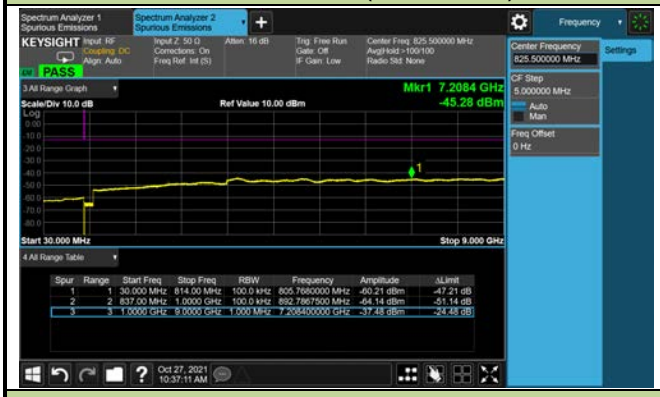
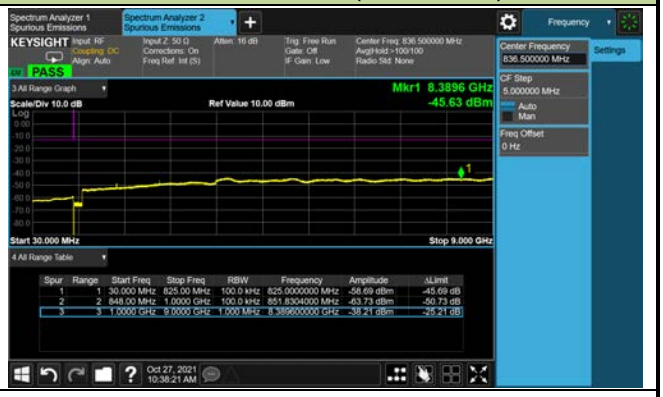
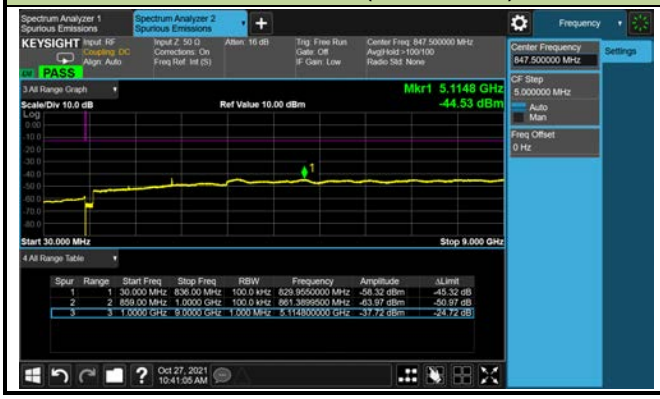
5MHz Channel Bandwidth	
Channel 131997 (1712.5MHz)	Channel 132322 (1745MHz)
	
Channel 132647 (1777.5MHz)	
	
10MHz Channel Bandwidth	
Channel 132022 (1715MHz)	Channel 132322 (1745MHz)
	
Channel 132622 (1775MHz)	
	

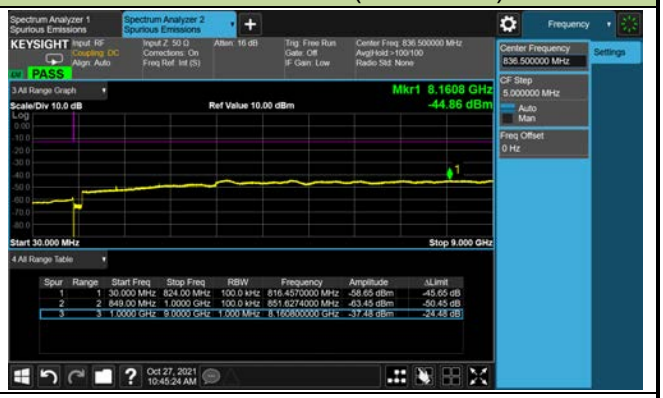
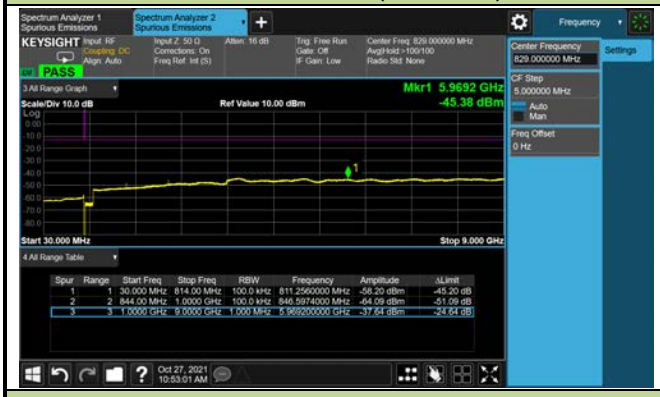
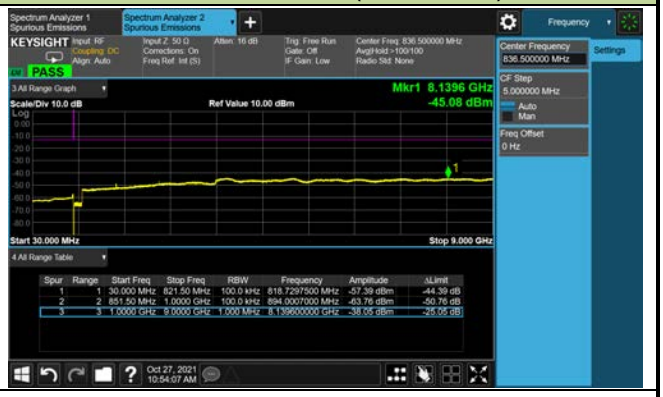
15MHz Channel Bandwidth	
Channel 132047 (1717.5MHz)	Channel 132322 (1745MHz)
	
Channel 132597 (1772.5Hz)	
	
20MHz Channel Bandwidth	
Channel 132072 (1720MHz)	Channel 132322 (1745MHz)
	
Channel 132572 (1770Hz)	
	

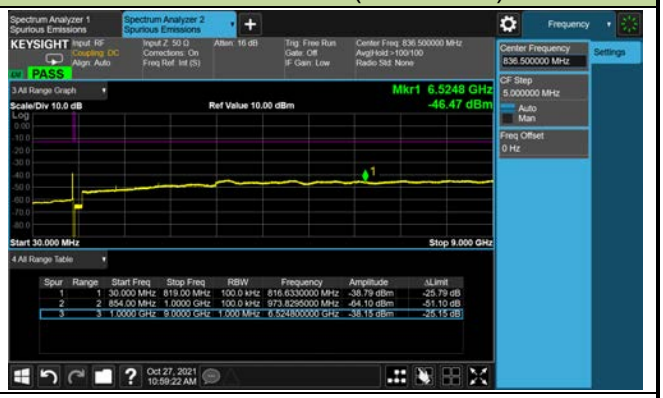
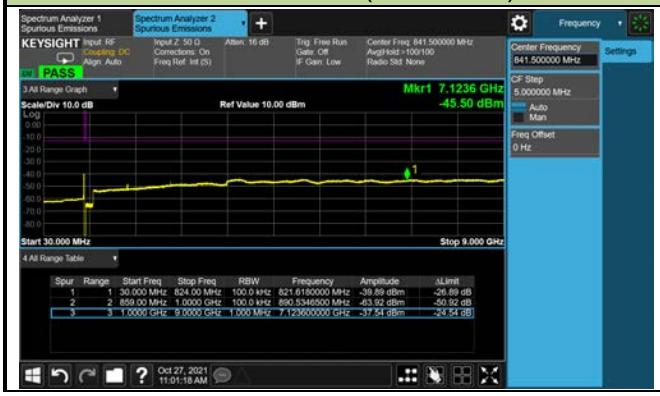
Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/27
Test Band	LTE Band 5/26_1RB_QPSK		

Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
26797	824.7	1.4	30 ~ 10000	-36.38	≤ -13.00	Pass
26915	836.5	1.4	30 ~ 10000	-37.39	≤ -13.00	Pass
27033	848.3	1.4	30 ~ 10000	-37.51	≤ -13.00	Pass
26805	825.5	3	30 ~ 10000	-37.48	≤ -13.00	Pass
26915	836.5	3	30 ~ 10000	-38.21	≤ -13.00	Pass
27025	847.5	3	30 ~ 10000	-37.72	≤ -13.00	Pass
26815	826.5	5	30 ~ 10000	-37.60	≤ -13.00	Pass
26915	836.5	5	30 ~ 10000	-37.48	≤ -13.00	Pass
27015	846.5	5	30 ~ 10000	-36.83	≤ -13.00	Pass
26840	829.0	10	30 ~ 10000	-37.64	≤ -13.00	Pass
26915	836.5	10	30 ~ 10000	-38.05	≤ -13.00	Pass
26990	844.0	10	30 ~ 10000	-38.21	≤ -13.00	Pass
26865	831.5	15	30 ~ 10000	-36.57	≤ -13.00	Pass
26915	836.5	15	30 ~ 10000	-38.15	≤ -13.00	Pass
26965	841.5	15	30 ~ 10000	-37.54	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

1.4MHz Channel Bandwidth	
Channel 26697 (814.7MHz)	Channel 25865 (831.5MHz)
	
Channel 27033 (848.3MHz)	
	
3MHz Channel Bandwidth	
Channel 26705 (815.5MHz)	Channel 26865 (831.5MHz)
	
Channel 27025 (847.5MHz)	
	

5MHz Channel Bandwidth	
Channel 26715 (816.5MHz)	Channel 26865 (831.5MHz)
	
Channel 27015 (846.5MHz)	
10MHz Channel Bandwidth	
Channel 26740 (819MHz)	Channel 26865 (831.5MHz)
	
Channel 26990 (844MHz)	

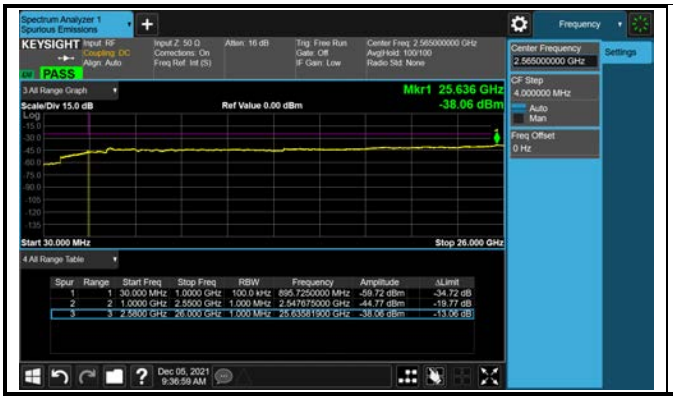
15MHz Channel Bandwidth	
Channel 26865 (831.5MHz)	Channel 26915 (836.5MHz)
	
Channel 26965 (841.5MHz)	
	

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/12/05
Test Band	LTE Band 7_1RB_QPSK		

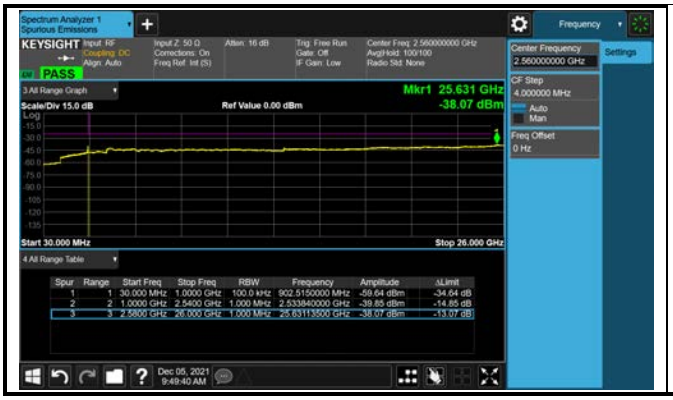
Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
20775	2502.5	5	30 ~ 26000	-38.14	≤ -25.00	Pass
21100	2535.0	5	30 ~ 26000	-38.18	≤ -25.00	Pass
21425	2567.5	5	30 ~ 26000	-38.11	≤ -25.00	Pass
20800	2505.0	10	30 ~ 26000	-38.00	≤ -25.00	Pass
21100	2535.0	10	30 ~ 26000	-38.06	≤ -25.00	Pass
21400	2565.0	10	30 ~ 26000	-38.06	≤ -25.00	Pass
20825	2507.5	15	30 ~ 26000	-38.03	≤ -25.00	Pass
21100	2535.0	15	30 ~ 26000	-37.92	≤ -25.00	Pass
21375	2562.5	15	30 ~ 26000	-38.04	≤ -25.00	Pass
20850	2510.0	20	30 ~ 26000	-37.80	≤ -25.00	Pass
21100	2535.0	20	30 ~ 26000	-38.04	≤ -25.00	Pass
21350	2560.0	20	30 ~ 26000	-38.07	≤ -25.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

5MHz Channel Bandwidth	
Channel 20775 (2502.5MHz)/	Channel 21100 (2535MHz)
Channel 21425 (2567.5MHz)	
10MHz Channel Bandwidth	
Channel 20800 (2505MHz)	Channel 21100 (2535MHz)
Channel 21400 (2565MHz)	


Spectrum Analyzer 1
Spurious Emissions
KEYSIGHT
PASS
Frequency
Center Frequency
2.565000000 GHz
Settings
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
3 All Range Graph
Mkr1 25.636 GHz
-38.06 dBm
Scale/Div 15.0 dB
Ref Value 0.00 dBm
Start 30.000 MHz
Stop 26.000 GHz
4 All Range Table
Spur Range Start Freq Stop Freq RBW Frequency Amplitude ΔLimit
1 1 30.000 MHz 1.0000 GHz 100.0 kHz 895.7250000 MHz -59.72 dBm -34.72 dB
2 2 1.0000 GHz 2.5500 GHz 1.000 MHz 2.547675000 GHz -44.77 dBm -19.77 dB
3 3 2.5800 GHz 26.000 GHz 1.000 MHz 25.635581900 GHz -38.06 dBm -13.06 dB
Dec 05, 2021
9:36:59 AM

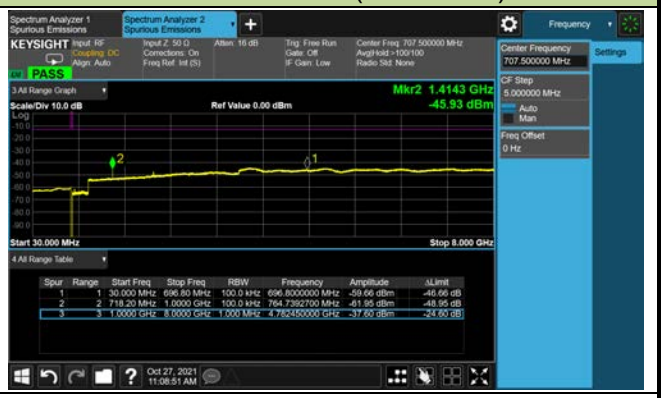
15MHz Channel Bandwidth	
Channel 20825 (2507.5MHz)	Channel 21100 (2535MHz)
Channel 21375 (2562.5MHz)	
20MHz Channel Bandwidth	
Channel 20850 (2510MHz)	Channel 21100 (2535MHz)
Channel 21350 (2560MHz)	

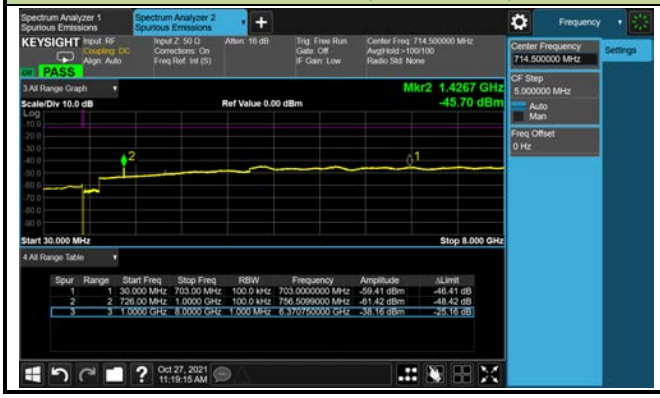

Spectrum Analyzer 1
Spurious Emissions
KEYSIGHT
PASS
Mkr1 25.631 GHz
-38.07 dBm
Scale/Div 15.0 dB
Ref Value 0.00 dBm
Start 30.000 MHz
Stop 26.000 GHz
Frequency
Center Frequency
2.560000000 GHz
Settings
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
Dec 05, 2021
9:49:40 AM

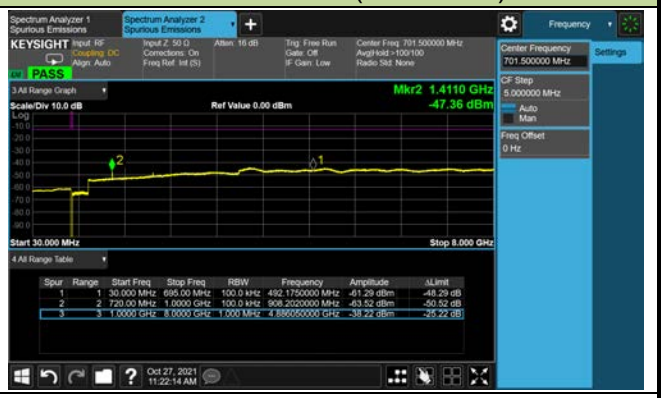
Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/27
Test Band	LTE Band 12_1RB_QPSK		

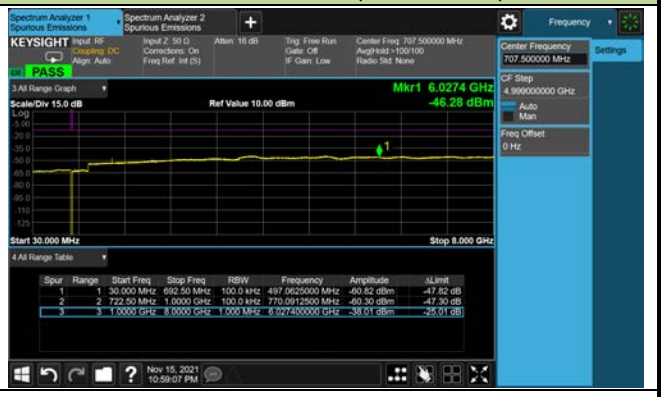
Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
23017	699.7	1.4	30 ~ 10000	-38.46	≤ -13.00	Pass
23095	707.5	1.4	30 ~ 10000	-37.60	≤ -13.00	Pass
23173	715.3	1.4	30 ~ 10000	-38.24	≤ -13.00	Pass
23025	700.5	3	30 ~ 10000	-38.54	≤ -13.00	Pass
23095	707.5	3	30 ~ 10000	-38.00	≤ -13.00	Pass
23165	714.5	3	30 ~ 10000	-38.16	≤ -13.00	Pass
23035	701.5	5	30 ~ 10000	-37.73	≤ -13.00	Pass
23095	707.5	5	30 ~ 10000	-38.22	≤ -13.00	Pass
23155	713.5	5	30 ~ 10000	-37.11	≤ -13.00	Pass
23060	704.0	10	30 ~ 10000	-38.48	≤ -13.00	Pass
23095	707.5	10	30 ~ 10000	-38.01	≤ -13.00	Pass
23130	711.0	10	30 ~ 10000	-37.96	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

1.4MHz Channel Bandwidth	
Channel 23017 (699.7MHz)	Channel 23095 (707.5MHz)
	
Channel 23173 (715.3MHz)	

3MHz Channel Bandwidth	
Channel 23025 (700.5MHz)	Channel 23095 (707.5MHz)
Channel 23165 (714.5MHz)	
	

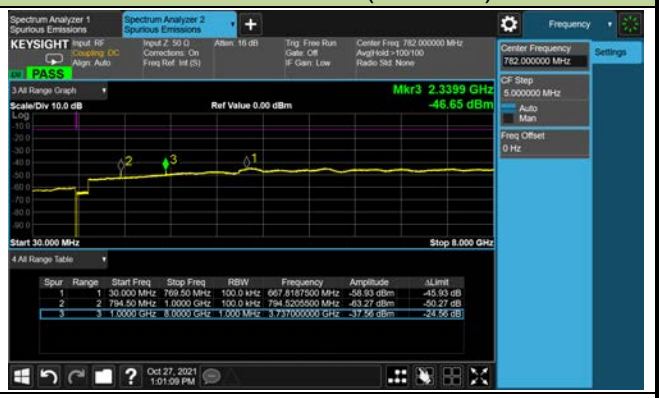
5MHz Channel Bandwidth	
Channel 23035 (701.5MHz)	Channel 23095 (707.5MHz)
	
Channel 23165 (714.5MHz)	

10MHz Channel Bandwidth	
Channel 23060 (704.0MHz)	Channel 23095 (707.5MHz)
	
Channel 23130 (711.0MHz)	

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/27
Test Band	LTE Band 13_1RB_QPSK		

Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
23205	779.5	5	30 ~ 10000	-38.18	≤ -13.00	Pass
23230	782.0	5	30 ~ 10000	-37.56	≤ -13.00	Pass
23255	784.5	5	30 ~ 10000	-36.73	≤ -13.00	Pass
23230	782.0	10	30 ~ 10000	-37.54	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

5MHz Channel Bandwidth	
Channel 23205 (779.5MHz)	Channel 23230 (782MHz)
	
Channel 23255 (784.5MHz)	

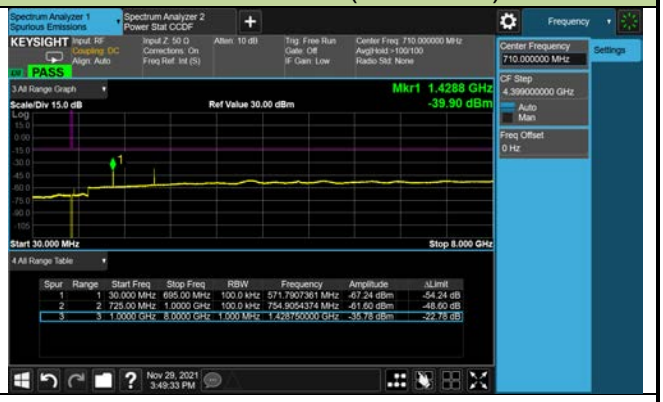
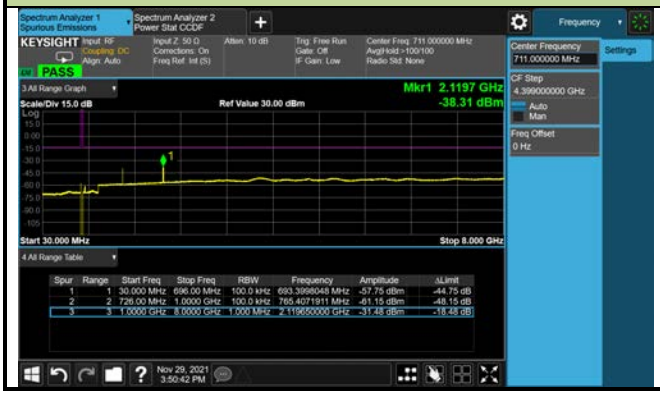
10MHz Channel Bandwidth	
Channel 23230 (782.0MHz)	

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/11/29
Test Band	LTE Band 17_1RB_QPSK		

Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
23755	706.5	5	30 ~ 8000	-35.16	≤ -13.00	Pass
23790	710.0	5	30 ~ 8000	-37.70	≤ -13.00	Pass
23825	713.5	5	30 ~ 8000	-32.55	≤ -13.00	Pass
23780	709.0	10	30 ~ 8000	-35.41	≤ -13.00	Pass
23790	710.0	10	30 ~ 8000	-35.78	≤ -13.00	Pass
23800	711.0	10	30 ~ 8000	-31.48	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

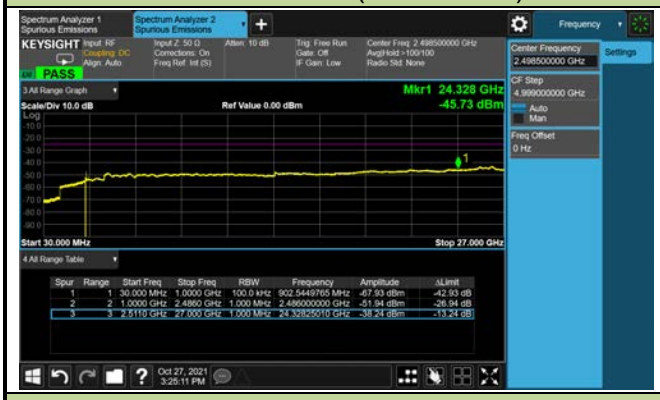
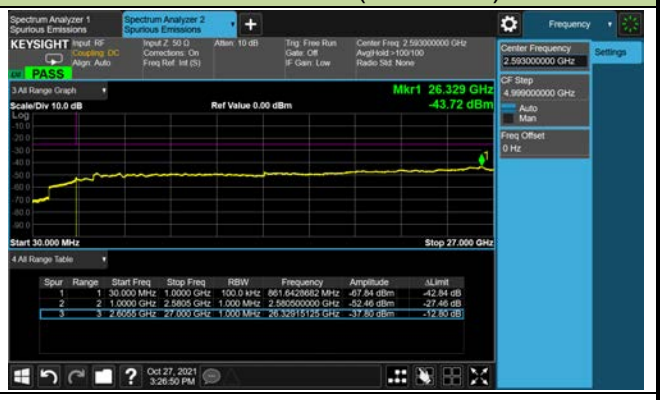
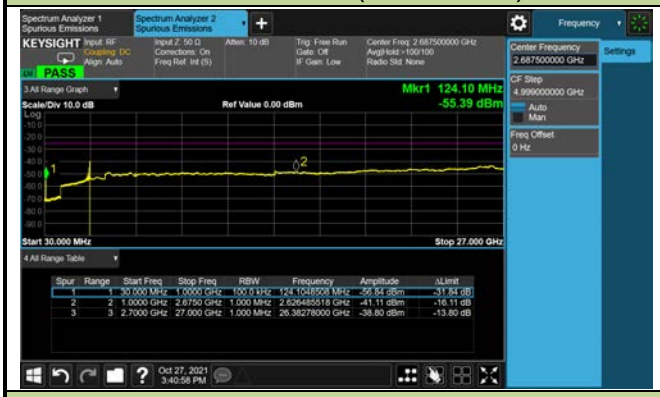
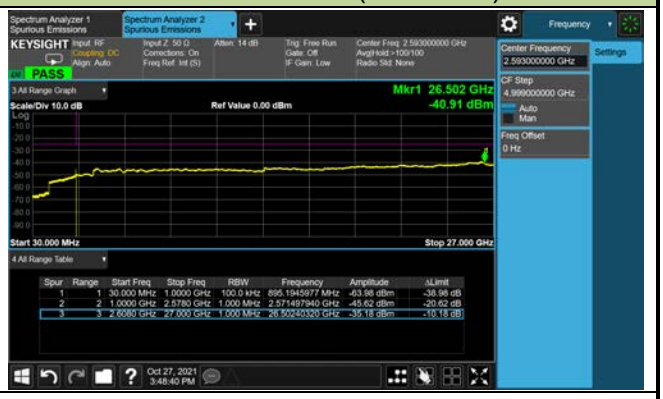
5MHz Channel Bandwidth	
Channel 23755 (706.5MHz)	Channel 23790(710.0MHz)
Channel 23825 (713.5MHz)	

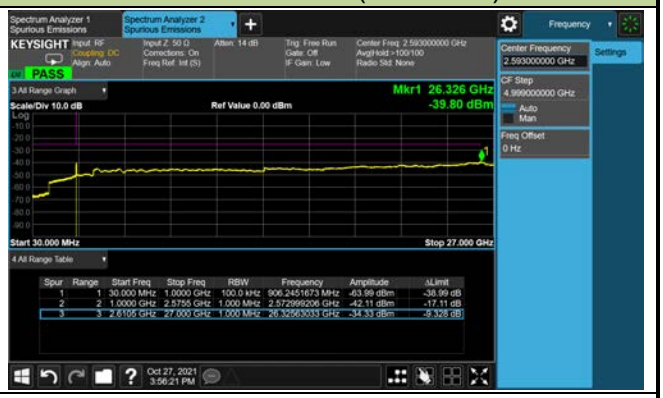
10MHz Channel Bandwidth	
Channel 23780 (709.0MHz)	Channel 23790(710.0MHz)
	
Channel 23800 (711MHz)	
	

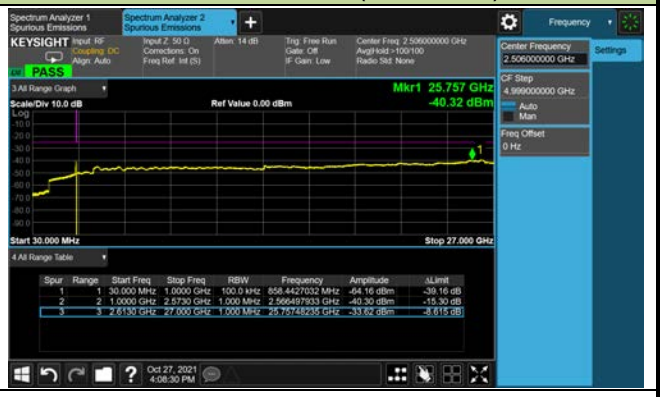
Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/27
Test Band	LTE Band 38/41_HPUE_1RB_QPSK		

Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
39675	2498.50	5	30 ~ 27000	-38.24	≤ -25.00	Pass
40620	2593.00	5	30 ~ 27000	-37.80	≤ -25.00	Pass
40565	2687.50	5	30 ~ 27000	-38.80	≤ -25.00	Pass
39700	2501.00	10	30 ~ 27000	-33.85	≤ -25.00	Pass
40620	2593.00	10	30 ~ 27000	-35.18	≤ -25.00	Pass
41540	2685.00	10	30 ~ 27000	-34.02	≤ -25.00	Pass
39725	2503.50	15	30 ~ 27000	-35.20	≤ -25.00	Pass
40620	2593.00	15	30 ~ 27000	-34.33	≤ -25.00	Pass
41515	2682.50	15	30 ~ 27000	-35.05	≤ -25.00	Pass
39750	2506.00	20	30 ~ 27000	-34.73	≤ -25.00	Pass
40620	2593.00	20	30 ~ 27000	-33.62	≤ -25.00	Pass
41490	2680.00	20	30 ~ 27000	-34.98	≤ -25.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

5MHz Channel Bandwidth	
Channel 39675 (2498.5MHz)	Channel 40620 (2593MHz)
	
Channel 40565 (2687.5MHz)	
	
10MHz Channel Bandwidth	
Channel 39700 (2501MHz)	Channel 40620 (2593MHz)
	
Channel 41540 (2685MHz)	

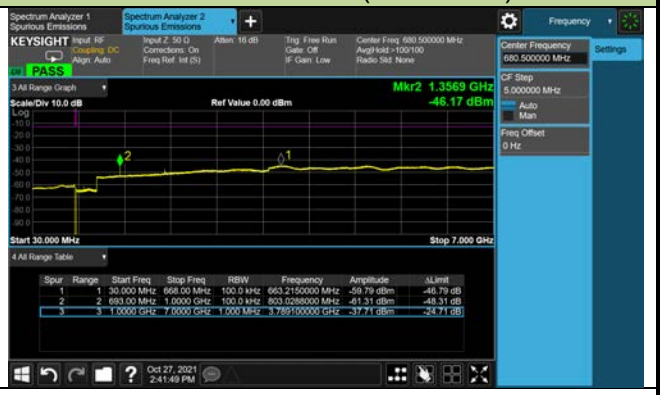
15MHz Channel Bandwidth	
Channel 39725 (2503.5MHz)	Channel 40620 (2593MHz)
	
Channel 41515 (2682.5MHz)	

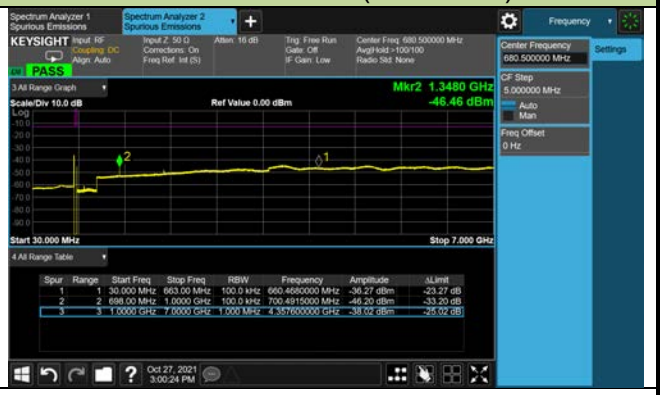
20MHz Channel Bandwidth	
Channel 39750 (2506MHz)	Channel 40620 (2593MHz)
	
Channel 41490 (2680MHz)	

Product	LTE Module	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2021/10/27
Test Band	LTE Band 71_1RB_QPSK		

Channel	Frequency (MHz)	Channel Bandwidth (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
133147	665.5	5	30 ~ 10000	-37.48	≤ -13.00	Pass
133297	680.5	5	30 ~ 10000	-37.71	≤ -13.00	Pass
133447	695.5	5	30 ~ 10000	-36.88	≤ -13.00	Pass
133172	668.0	10	30 ~ 10000	-37.69	≤ -13.00	Pass
133297	680.5	10	30 ~ 10000	-38.52	≤ -13.00	Pass
133422	693.0	10	30 ~ 10000	-37.44	≤ -13.00	Pass
133197	670.5	15	30 ~ 10000	-37.95	≤ -13.00	Pass
133297	680.5	15	30 ~ 10000	-38.02	≤ -13.00	Pass
133397	690.5	15	30 ~ 10000	-37.61	≤ -13.00	Pass
133222	673.0	20	30 ~ 10000	-37.72	≤ -13.00	Pass
133322	683.0	20	30 ~ 10000	-37.28	≤ -13.00	Pass
133372	688.0	20	30 ~ 10000	-36.71	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

5MHz Channel Bandwidth	
Channel 133147 (665.5MHz)	Channel 133297 (680.5MHz)
	
Channel 133447 (695.5MHz)	
10MHz Channel Bandwidth	
Channel 133172 (668.0MHz)	Channel 133297 (680.5MHz)
Channel 133422 (693MHz)	

15MHz Channel Bandwidth	
Channel 133197 (670.5MHz)	Channel 133297 (680.5MHz)
	
Channel 133397 (690.5MHz)	
20MHz Channel Bandwidth	
Channel 133222 (673.0MHz)	Channel 133322 (683.0MHz)
Channel 133372 (688.0MHz)	

5.8. Radiated Spurious Emission Measurement

5.8.1.Test Limit

The power of any emission outside of theauthorized operating frequency ranges must be attenuated below the transmitting power (P) by a factorof at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

For Band 7, 38/41, the powerof 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. The emission limit equal to -25dBm.

For LTE Band 13, For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz (-40dBm/MHz) equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW (-50dBm) EIRP for discrete emissions of less than 700 Hz bandwidth.

E (dBμV/m) = EIRP (dBm) - 20 log D + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.3dBμV/m or 70.3dBμV/m.

5.8.2.Test Procedure

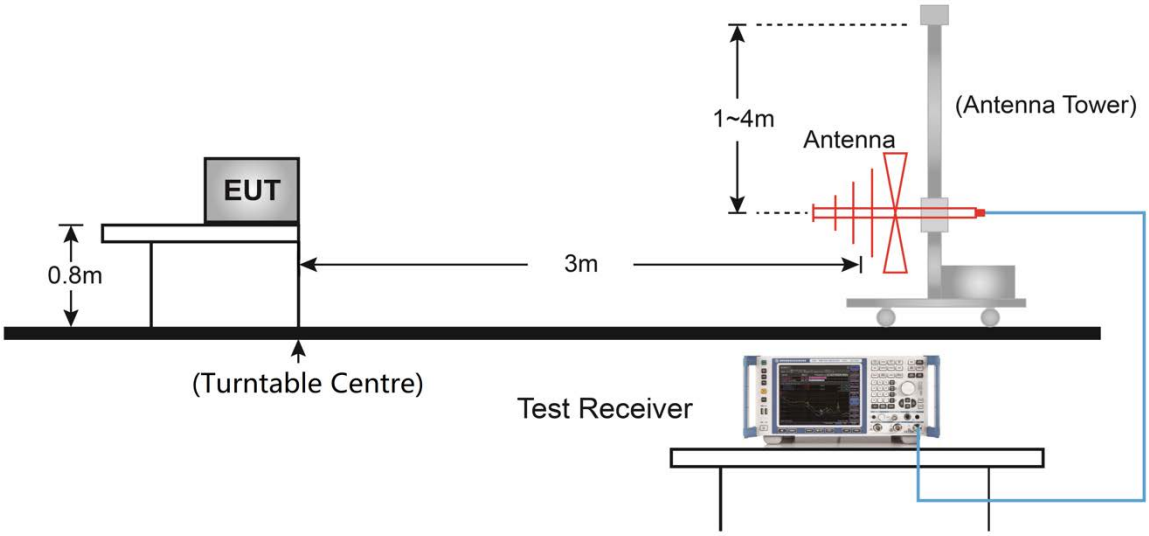
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.8.3.Test Setting

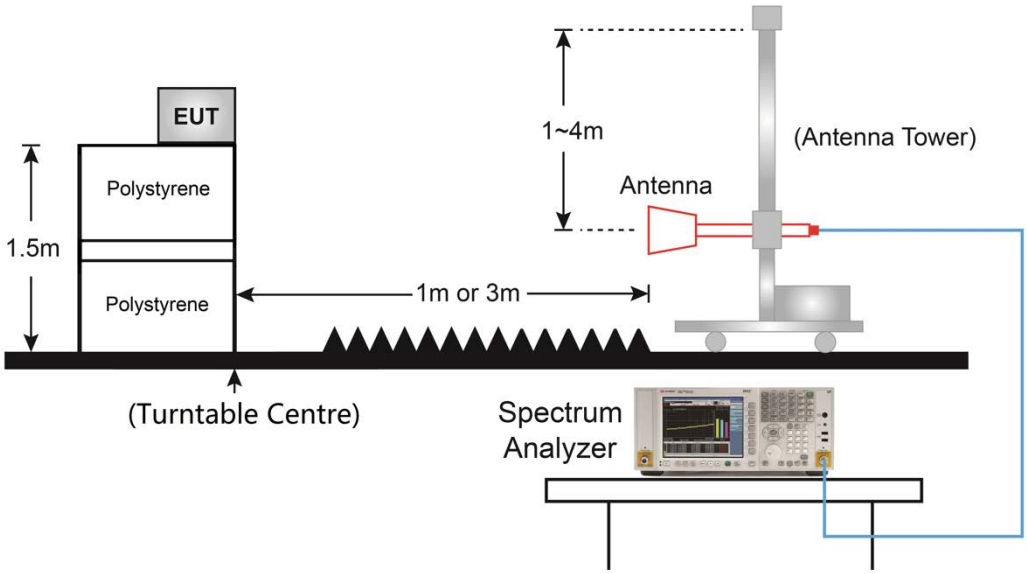
1. RBW = 1MHz
2. VBW ≥ 3*RBW
3. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.8.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.8.5.Test Result

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/04~2021/11/13
Test Band	LTE Band 2/25_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
68.3	8.5	16.8	25.3	82.3	-57.0	Peak	Horizontal
978.7	1.8	30.9	32.7	82.3	-49.6	Peak	Horizontal
34.4	17.8	17.5	35.3	82.3	-47.0	Peak	Vertical
817.2	2.9	29.1	32.0	82.3	-50.3	Peak	Vertical
4629.5	53.6	-11.0	42.6	82.3	-39.7	Peak	Horizontal
10452.0	51.2	-5.3	45.9	82.3	-36.4	Peak	Horizontal
5233.0	52.4	-10.0	42.4	82.3	-39.9	Peak	Vertical
7715.0	51.5	-7.0	44.5	82.3	-37.8	Peak	Vertical
Middle Channel							
129.9	9.8	17.4	27.2	82.3	-55.1	Peak	Horizontal
929.7	1.7	30.2	31.9	82.3	-50.4	Peak	Horizontal
34.4	18.2	17.5	35.7	82.3	-46.6	Peak	Vertical
976.2	1.5	30.9	32.4	82.3	-49.9	Peak	Vertical
5743.0	53.2	-9.5	43.7	82.3	-38.6	Peak	Horizontal
7672.5	51.3	-7.0	44.3	82.3	-38.0	Peak	Horizontal
4952.5	53.1	-10.3	42.8	82.3	-39.5	Peak	Vertical
9406.5	53.7	-6.0	47.7	82.3	-34.6	Peak	Vertical
High Channel							
129.9	10.1	17.4	27.5	82.3	-54.8	Peak	Horizontal
995.6	1.6	31.2	32.8	82.3	-49.5	Peak	Horizontal
34.4	18.3	17.5	35.8	82.3	-46.5	Peak	Vertical
985.9	2.1	31.0	33.1	82.3	-49.2	Peak	Vertical
4842.0	55.2	-10.6	44.6	82.3	-37.7	Peak	Horizontal
7655.5	52.1	-7.0	45.1	82.3	-37.2	Peak	Horizontal
6397.5	53.0	-8.8	44.2	82.3	-38.1	Peak	Vertical
9568.0	51.8	-5.4	46.4	82.3	-35.9	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m). Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)							

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/04~2021/11/13
Test Band	LTE Band 4/66_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
66.9	16.1	17.0	33.1	82.3	-49.2	Peak	Horizontal
978.7	2.8	30.9	33.7	82.3	-48.6	Peak	Horizontal
30.0	20.4	16.9	37.3	82.3	-45.0	Peak	Vertical
66.4	20.2	17.1	37.3	82.3	-45.0	Peak	Vertical
6346.5	53.1	-8.9	44.2	82.3	-38.1	Peak	Horizontal
7145.5	51.5	-7.6	43.9	82.3	-38.4	Peak	Horizontal
4995.0	53.7	-10.3	43.4	82.3	-38.9	Peak	Vertical
6346.5	52.6	-8.9	43.7	82.3	-38.6	Peak	Vertical
Middle Channel							
66.9	16.4	17.0	33.4	82.3	-48.9	Peak	Horizontal
971.9	2.8	30.8	33.6	82.3	-48.7	Peak	Horizontal
30.0	20.5	16.9	37.4	82.3	-44.9	Peak	Vertical
66.9	17.7	17.0	34.7	82.3	-47.6	Peak	Vertical
5734.5	52.8	-9.6	43.2	82.3	-39.1	Peak	Horizontal
7978.5	51.8	-6.6	45.2	82.3	-37.1	Peak	Horizontal
6321.0	53.4	-8.9	44.5	82.3	-37.8	Peak	Vertical
8284.5	51.0	-5.9	45.1	82.3	-37.2	Peak	Vertical
High Channel							
66.9	15.8	17.0	32.8	82.3	-49.5	Peak	Horizontal
975.3	1.6	30.8	32.4	82.3	-49.9	Peak	Horizontal
30.0	20.9	16.9	37.8	82.3	-44.5	Peak	Vertical
66.9	20.4	17.0	37.4	82.3	-44.9	Peak	Vertical
5751.5	52.5	-9.5	43.0	82.3	-39.3	Peak	Horizontal
9848.5	51.2	-5.3	45.9	82.3	-36.4	Peak	Horizontal
6465.5	52.7	-8.8	43.9	82.3	-38.4	Peak	Vertical
10409.5	50.5	-5.3	45.2	82.3	-37.1	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/04~2021/11/13
Test Band	LTE Band 5/26_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
696.4	27.8	27.3	55.1	82.3	-27.2	Peak	Horizontal
996.6	27.6	31.2	58.8	82.3	-23.5	Peak	Horizontal
755.1	27.3	28.7	56.0	82.3	-26.3	Peak	Vertical
979.1	27.6	30.9	58.5	82.3	-23.8	Peak	Vertical
3779.5	54.3	-12.5	41.8	82.3	-40.5	Peak	Horizontal
4519.0	53.5	-11.4	42.1	82.3	-40.2	Peak	Horizontal
1901.0	63.2	-18.8	44.4	82.3	-37.9	Peak	Vertical
3813.5	53.5	-12.4	41.1	82.3	-41.2	Peak	Vertical
Middle Channel							
882.1	28.8	29.9	58.7	82.3	-23.6	Peak	Horizontal
966.1	27.3	30.7	58.0	82.3	-24.3	Peak	Horizontal
635.3	28.0	26.7	54.7	82.3	-27.6	Peak	Vertical
988.4	27.9	31.1	59.0	82.3	-23.3	Peak	Vertical
2317.5	54.4	-17.3	37.1	82.3	-45.2	Peak	Horizontal
4621.0	53.6	-11.0	42.6	82.3	-39.7	Peak	Horizontal
1901.0	57.9	-18.8	39.1	82.3	-43.2	Peak	Vertical
3728.5	53.7	-12.5	41.2	82.3	-41.1	Peak	Vertical
High Channel							
762.4	27.7	28.8	56.5	82.3	-25.8	Peak	Horizontal
984.5	27.7	31.0	58.7	82.3	-23.6	Peak	Horizontal
723.1	28.2	28.0	56.2	82.3	-26.1	Peak	Vertical
960.2	28.1	30.6	58.7	82.3	-23.6	Peak	Vertical
1697.0	58.0	-19.8	38.2	82.3	-44.1	Peak	Horizontal
3643.5	53.9	-12.7	41.2	82.3	-41.1	Peak	Horizontal
1697.0	62.4	-19.8	42.6	82.3	-39.7	Peak	Vertical
2547.0	55.7	-16.5	39.2	82.3	-43.1	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/12/08
Test Band	LTE Band 7_1RB_QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
206.5	12.6	15.4	28.0	70.3	-42.3	Peak	Horizontal
957.8	2.8	31.0	33.8	70.3	-36.5	Peak	Horizontal
39.2	17.7	17.8	35.5	70.3	-34.8	Peak	Vertical
71.2	17.3	16.0	33.3	70.3	-37.0	Peak	Vertical
7128.5	43.0	0.8	43.8	70.3	-26.5	Peak	Horizontal
9355.5	42.6	5.6	48.2	70.3	-22.1	Peak	Horizontal
7502.5	43.2	2.0	45.2	70.3	-25.1	Peak	Vertical
9678.5	43.1	5.4	48.5	70.3	-21.8	Peak	Vertical
Middle Channel							
205.6	12.7	15.4	28.1	70.3	-42.2	Peak	Horizontal
928.2	2.2	30.8	33.0	70.3	-37.3	Peak	Horizontal
39.2	17.7	17.8	35.5	70.3	-34.8	Peak	Vertical
71.7	16.1	15.9	32.0	70.3	-38.3	Peak	Vertical
5811.0	44.9	-3.4	41.5	70.3	-28.8	Peak	Horizontal
7264.5	43.3	1.6	44.9	70.3	-25.4	Peak	Horizontal
7596.0	44.2	1.4	45.6	70.3	-24.7	Peak	Vertical
9457.5	41.7	5.5	47.2	70.3	-23.1	Peak	Vertical
High Channel							
206.1	12.7	15.4	28.1	70.3	-42.2	Peak	Horizontal
969.4	2.2	30.9	33.1	70.3	-37.2	Peak	Horizontal
39.2	18.1	17.8	35.9	70.3	-34.4	Peak	Vertical
71.7	15.5	15.9	31.4	70.3	-38.9	Peak	Vertical
7434.5	42.7	2.3	45.0	70.3	-25.3	Peak	Horizontal
9347.0	41.5	5.6	47.1	70.3	-23.2	Peak	Horizontal
7451.5	41.7	2.4	44.1	70.3	-26.2	Peak	Vertical
10324.5	41.3	6.5	47.8	70.3	-22.5	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/04~2021/11/13
Test Band	LTE Band 12, 1RB, QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
614.4	26.5	26.8	53.3	82.3	-29.0	Peak	Horizontal
958.3	27.3	30.6	57.9	82.3	-24.4	Peak	Horizontal
867.6	27.6	29.9	57.5	82.3	-24.8	Peak	Vertical
997.6	28.8	31.2	60.0	82.3	-22.3	Peak	Vertical
1901.0	60.9	-18.8	42.1	82.3	-40.2	Peak	Horizontal
4306.5	52.8	-11.4	41.4	82.3	-40.9	Peak	Horizontal
1884.0	65.8	-18.9	46.9	82.3	-35.4	Peak	Vertical
3762.5	54.6	-12.4	42.2	82.3	-40.1	Peak	Vertical
Middle Channel							
738.1	29.8	28.4	58.2	82.3	-24.1	Peak	Horizontal
993.2	27.5	31.2	58.7	82.3	-23.6	Peak	Horizontal
862.3	27.3	29.9	57.2	82.3	-25.1	Peak	Vertical
981.1	27.8	30.9	58.7	82.3	-23.6	Peak	Vertical
3805.0	53.3	-12.4	40.9	82.3	-41.4	Peak	Horizontal
4638.0	53.6	-11.0	42.6	82.3	-39.7	Peak	Horizontal
2122.0	57.4	-17.9	39.5	82.3	-42.8	Peak	Vertical
3737.0	54.1	-12.5	41.6	82.3	-40.7	Peak	Vertical
High Channel							
872.9	27.9	29.9	57.8	82.3	-24.5	Peak	Horizontal
938.9	28.7	30.4	59.1	82.3	-23.2	Peak	Horizontal
957.3	28.8	30.5	59.3	82.3	-23.0	Peak	Vertical
983.5	28.3	31.0	59.3	82.3	-23.0	Peak	Vertical
3184.5	54.1	-13.9	40.2	82.3	-42.1	Peak	Horizontal
3745.5	53.3	-12.4	40.9	82.3	-41.4	Peak	Horizontal
3057.0	54.1	-14.4	39.7	82.3	-42.6	Peak	Vertical
3694.5	53.4	-12.6	40.8	82.3	-41.5	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/04~2021/11/13
Test Band	LTE Band 13, 1RB, QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
883.1	28.7	29.9	58.6	82.3	-23.7	Peak	Horizontal
990.8	27.4	31.1	58.5	82.3	-23.8	Peak	Horizontal
897.2	27.7	29.9	57.6	82.3	-24.7	Peak	Vertical
957.8	28.4	30.5	58.9	82.3	-23.4	Peak	Vertical
1586.5	54.0	-20.4	33.6	55.3	-21.7	Peak	Horizontal
5063.0	53.1	-10.0	43.1	82.3	-39.2	Peak	Horizontal
1603.5	54.9	-20.3	34.6	55.3	-20.7	Peak	Vertical
4952.5	53.1	-10.3	42.8	82.3	-39.5	Peak	Vertical
Middle Channel							
847.7	27.7	29.9	57.6	82.3	-24.7	Peak	Horizontal
989.8	27.5	31.1	58.6	82.3	-23.7	Peak	Horizontal
874.4	27.5	29.9	57.4	82.3	-24.9	Peak	Vertical
964.6	28.7	30.6	59.3	82.3	-23.0	Peak	Vertical
1569.5	56.9	-20.5	36.4	55.3	-18.9	Peak	Horizontal
1765.0	60.5	-19.4	41.1	82.3	-41.2	Peak	Horizontal
1569.5	54.9	-20.5	34.4	55.3	-20.9	Peak	Vertical
1765.0	58.0	-19.4	38.6	82.3	-43.7	Peak	Vertical
High Channel							
705.6	27.9	27.6	55.5	82.3	-26.8	Peak	Horizontal
984.0	28.1	31.0	59.1	82.3	-23.2	Peak	Horizontal
898.6	28.2	29.9	58.1	82.3	-24.2	Peak	Vertical
980.6	28.8	30.9	59.7	82.3	-22.6	Peak	Vertical
1569.5	56.4	-20.5	35.9	55.3	-19.4	Peak	Horizontal
5743.0	53.5	-9.5	44.0	82.3	-38.3	Peak	Horizontal
1569.5	54.7	-20.5	34.2	55.3	-21.1	Peak	Vertical
6227.5	53.2	-9.0	44.2	82.3	-38.1	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).							
Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)							

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/29
Test Band	LTE Band 17, 1RB, QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
67.8	22.7	16.0	38.7	82.3	-43.6	Peak	Horizontal
431.6	21.4	21.8	43.2	82.3	-39.1	Peak	Horizontal
35.3	23.9	17.3	41.2	82.3	-41.1	Peak	Vertical
109.5	24.3	15.0	39.3	82.3	-43.0	Peak	Vertical
5088.5	50.4	-9.1	41.3	82.3	-41.0	Peak	Horizontal
7757.5	49.5	-5.9	43.6	82.3	-38.7	Peak	Horizontal
6193.5	50.0	-8.3	41.7	82.3	-40.6	Peak	Vertical
9372.5	48.0	-3.6	44.4	82.3	-37.9	Peak	Vertical
Middle Channel							
388.4	21.5	20.7	42.2	82.3	-40.1	Peak	Horizontal
583.9	22.2	25.0	47.2	82.3	-35.1	Peak	Horizontal
384.5	21.1	20.6	41.7	82.3	-40.6	Peak	Vertical
516.9	22.0	23.6	45.6	82.3	-36.7	Peak	Vertical
6465.5	50.1	-7.9	42.2	82.3	-40.1	Peak	Horizontal
9721.0	47.7	-3.5	44.2	82.3	-38.1	Peak	Horizontal
6448.5	50.1	-8.0	42.1	82.3	-40.2	Peak	Vertical
9729.5	47.5	-3.6	43.9	82.3	-38.4	Peak	Vertical
High Channel							
498.5	21.4	23.3	44.7	82.3	-37.6	Peak	Horizontal
594.5	22.1	25.4	47.5	82.3	-34.8	Peak	Horizontal
40.2	25.5	17.9	43.4	82.3	-38.9	Peak	Vertical
923.9	21.1	29.8	50.9	82.3	-31.4	Peak	Vertical
8607.5	48.7	-4.2	44.5	82.3	-37.8	Peak	Horizontal
10911.0	48.1	-3.1	45.0	82.3	-37.3	Peak	Horizontal
7009.5	49.4	-6.9	42.5	82.3	-39.8	Peak	Vertical
9372.5	47.8	-3.6	44.2	82.3	-38.1	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/04~2021/11/13
Test Band	LTE Band 38/41_HPUE, 1RB, QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
66.9	16.7	17.0	33.7	70.3	-36.6	Peak	Horizontal
879.7	3.3	30.0	33.3	70.3	-37.0	Peak	Horizontal
30.0	20.9	16.9	37.8	70.3	-32.5	Peak	Vertical
66.4	20.7	17.1	37.8	70.3	-32.5	Peak	Vertical
14056.0	47.7	1.3	49.0	70.3	-21.3	Peak	Horizontal
17660.0	46.3	5.1	51.4	70.3	-18.9	Peak	Horizontal
13911.5	47.7	0.6	48.3	70.3	-22.0	Peak	Vertical
17915.0	46.2	5.4	51.6	70.3	-18.7	Peak	Vertical
Middle Channel							
66.9	16.6	17.0	33.6	70.3	-36.7	Peak	Horizontal
948.6	3.0	30.5	33.5	70.3	-36.8	Peak	Horizontal
30.0	20.7	16.9	37.6	70.3	-32.7	Peak	Vertical
66.9	20.4	17.0	37.4	70.3	-32.9	Peak	Vertical
14285.5	47.1	1.6	48.7	70.3	-21.6	Peak	Horizontal
17779.0	45.0	5.6	50.6	70.3	-19.7	Peak	Horizontal
13741.5	49.0	0.2	49.2	70.3	-21.1	Peak	Vertical
17787.5	46.2	5.5	51.7	70.3	-18.6	Peak	Vertical
High Channel							
67.3	16.6	16.9	33.5	70.3	-36.8	Peak	Horizontal
966.5	3.3	30.7	34.0	70.3	-36.3	Peak	Horizontal
30.0	20.0	16.9	36.9	70.3	-33.4	Peak	Vertical
66.4	18.5	17.1	35.6	70.3	-34.7	Peak	Vertical
13988.0	47.2	0.8	48.0	70.3	-22.3	Peak	Horizontal
17813.0	45.5	5.2	50.7	70.3	-19.6	Peak	Horizontal
14192.0	46.9	1.3	48.2	70.3	-22.1	Peak	Vertical
17473.0	46.2	5.0	51.2	70.3	-19.1	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	LTE Module	Test Site	SIP-AC2
Test Engineer	Allen Zou	Test Date	2021/11/04~2021/11/13
Test Band	LTE Band 71, 1RB, QPSK		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level(dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
618.3	22.0	26.7	48.7	82.3	-33.6	Peak	Horizontal
874.9	18.1	29.9	48.0	82.3	-34.3	Peak	Horizontal
873.9	26.9	29.9	56.8	82.3	-25.5	Peak	Vertical
970.4	27.2	30.8	58.0	82.3	-24.3	Peak	Vertical
1323.0	62.6	-21.9	40.7	82.3	-41.6	Peak	Horizontal
4621.0	52.0	-11.0	41.0	82.3	-41.3	Peak	Horizontal
1323.0	58.3	-21.9	36.4	82.3	-45.9	Peak	Vertical
3524.5	52.7	-13.0	39.7	82.3	-42.6	Peak	Vertical
Middle Channel							
829.3	28.1	29.5	57.6	82.3	-24.7	Peak	Horizontal
960.2	27.5	30.6	58.1	82.3	-24.2	Peak	Horizontal
890.9	27.9	29.9	57.8	82.3	-24.5	Peak	Vertical
999.0	27.6	31.2	58.8	82.3	-23.5	Peak	Vertical
1348.5	58.5	-21.7	36.8	82.3	-45.5	Peak	Horizontal
3762.5	51.5	-12.4	39.1	82.3	-43.2	Peak	Horizontal
1348.5	55.7	-21.7	34.0	82.3	-48.3	Peak	Vertical
3439.5	52.2	-13.1	39.1	82.3	-43.2	Peak	Vertical
Top CH 23825 (713.5MHz)							
869.1	28.1	29.9	58.0	82.3	-24.3	Peak	Horizontal
995.2	27.5	31.2	58.7	82.3	-23.6	Peak	Horizontal
889.9	29.0	29.9	58.9	82.3	-23.4	Peak	Vertical
993.2	27.0	31.2	58.2	82.3	-24.1	Peak	Vertical
3244.0	52.2	-13.5	38.7	82.3	-43.6	Peak	Horizontal
4629.5	51.9	-11.0	40.9	82.3	-41.4	Peak	Horizontal
1391.0	56.3	-21.6	34.7	82.3	-47.6	Peak	Vertical
2436.5	55.2	-16.8	38.4	82.3	-43.9	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

6. CONCLUSION

The data collected relate only the item(s) tested and show that unit is compliance with FCC Rules.

The End

Appendix A - Test Setup Photograph

Refer to “2110RSU029-UT” file.

Appendix B - EUT Photograph

Refer to “2110RSU029-UE” file.