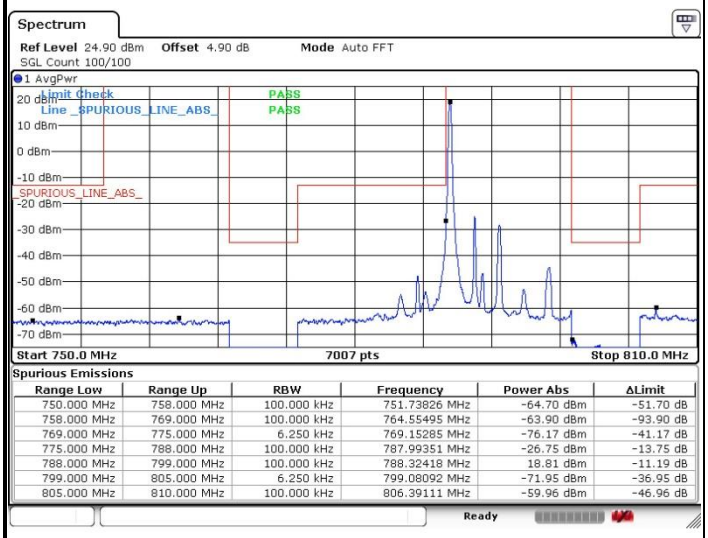
LTE Band 14 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

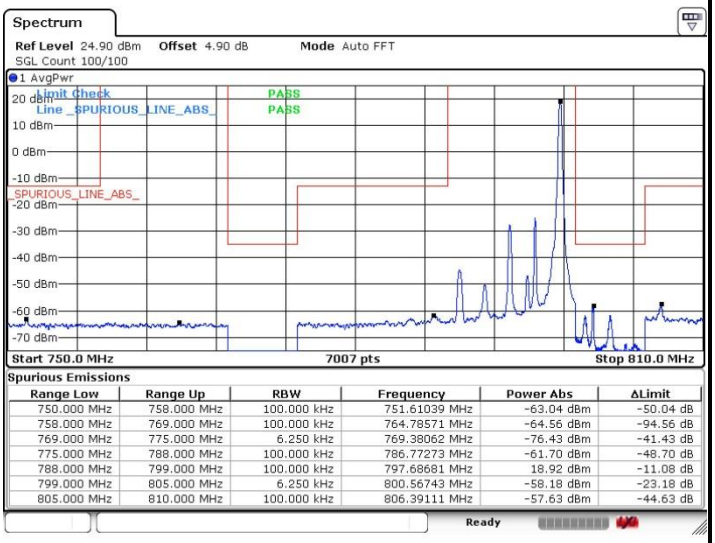


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	751.73826 MHz	-64.70 dBm	-51.70 dB
758.000 MHz	769.000 MHz	100.000 kHz	764.55495 MHz	-63.90 dBm	-93.90 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.15285 MHz	-76.17 dBm	-41.17 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-26.75 dBm	-13.75 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.32418 MHz	18.81 dBm	-11.19 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.08092 MHz	-71.95 dBm	-36.95 dB
805.000 MHz	810.000 MHz	100.000 kHz	806.39111 MHz	-59.96 dBm	-46.96 dB

Date: 30.OCT.2019 21:50:56

Highest Band Edge / 1 RB

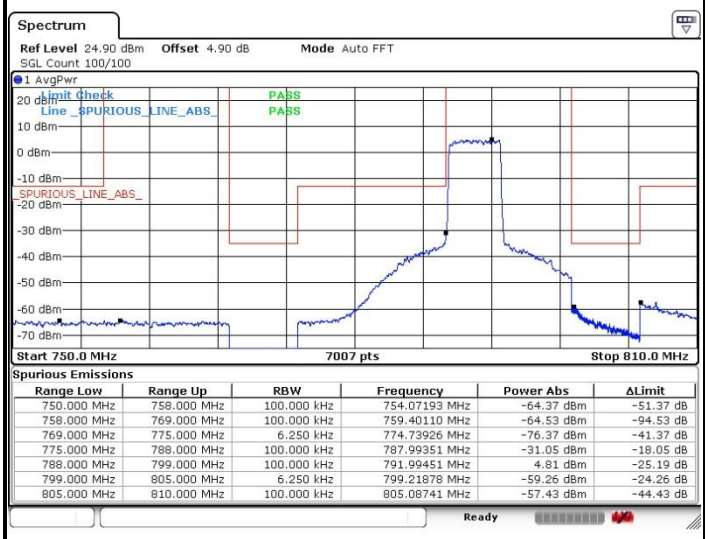


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	751.61039 MHz	-63.04 dBm	-50.04 dB
758.000 MHz	769.000 MHz	100.000 kHz	764.78571 MHz	-64.56 dBm	-94.56 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.38062 MHz	-76.43 dBm	-41.43 dB
775.000 MHz	788.000 MHz	100.000 kHz	786.77273 MHz	-61.70 dBm	-48.70 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.68681 MHz	18.92 dBm	-11.08 dB
799.000 MHz	805.000 MHz	6.250 kHz	800.56743 MHz	-58.18 dBm	-23.18 dB
805.000 MHz	810.000 MHz	100.000 kHz	806.39111 MHz	-57.63 dBm	-44.63 dB

Date: 30.OCT.2019 21:51:53

Lowest Band Edge / Full RB

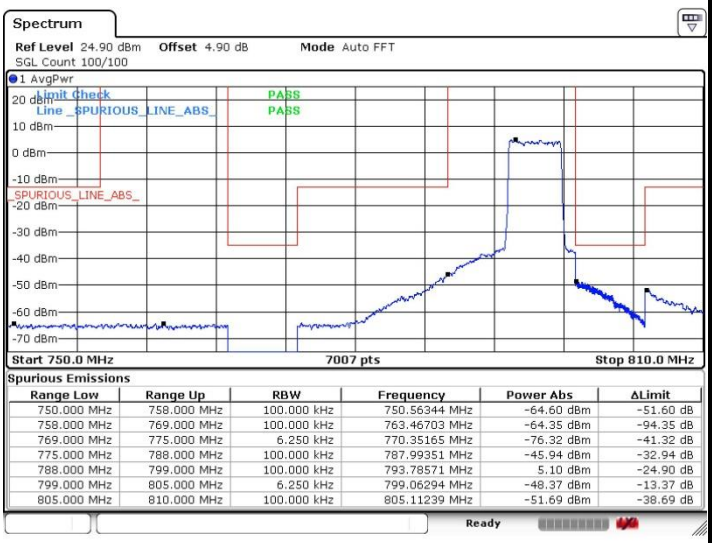


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	754.07193 MHz	-64.37 dBm	-51.37 dB
758.000 MHz	769.000 MHz	100.000 kHz	759.40110 MHz	-64.53 dBm	-94.53 dB
769.000 MHz	775.000 MHz	6.250 kHz	774.73926 MHz	-76.37 dBm	-41.37 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-31.05 dBm	-18.05 dB
788.000 MHz	799.000 MHz	100.000 kHz	791.99451 MHz	4.81 dBm	-25.19 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.21878 MHz	-59.26 dBm	-24.26 dB
805.000 MHz	810.000 MHz	100.000 kHz	805.08741 MHz	-57.43 dBm	-44.43 dB

Date: 30.OCT.2019 21:49:12

Highest Band Edge / Full RB



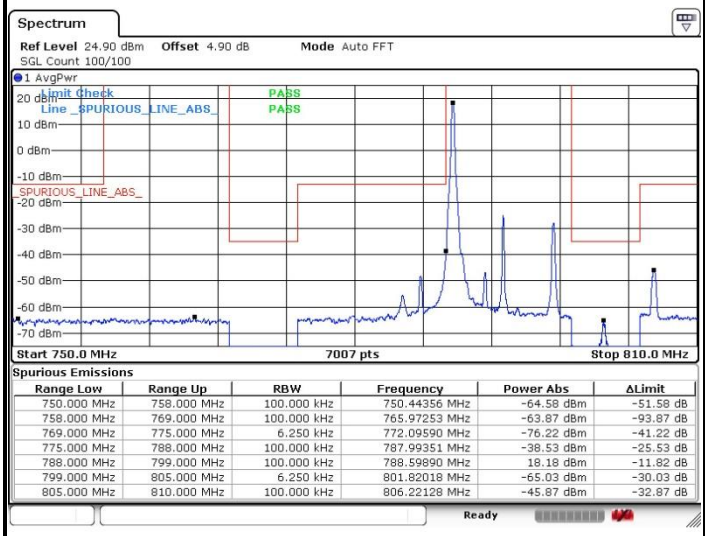
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	750.56344 MHz	-64.60 dBm	-51.60 dB
758.000 MHz	769.000 MHz	100.000 kHz	763.46703 MHz	-64.35 dBm	-94.35 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.35165 MHz	-76.32 dBm	-41.32 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-45.94 dBm	-32.94 dB
788.000 MHz	799.000 MHz	100.000 kHz	793.78571 MHz	5.10 dBm	-24.90 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.06294 MHz	-48.37 dBm	-13.37 dB
805.000 MHz	810.000 MHz	100.000 kHz	805.11239 MHz	-51.69 dBm	-38.69 dB

Date: 30.OCT.2019 21:53:35

LTE Band 14 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

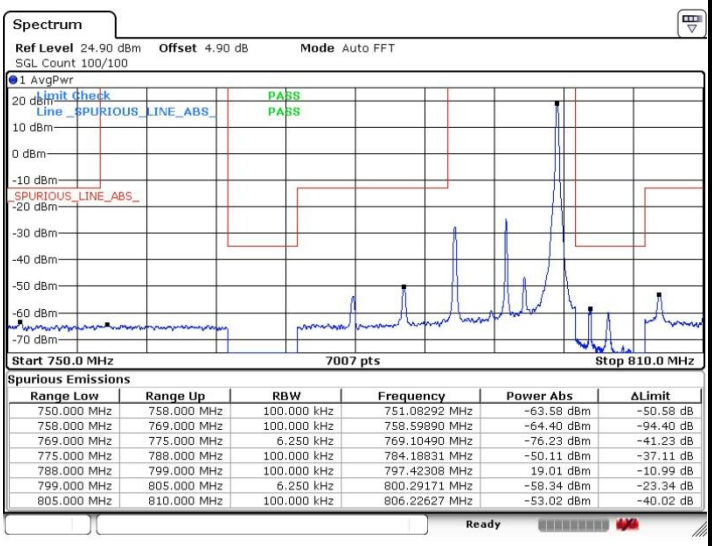


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	750.44356 MHz	-64.58 dBm	-51.58 dB
758.000 MHz	769.000 MHz	100.000 kHz	765.97253 MHz	-63.87 dBm	-93.87 dB
769.000 MHz	775.000 MHz	6.250 kHz	772.09590 MHz	-76.22 dBm	-41.22 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-38.53 dBm	-25.53 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.59890 MHz	18.18 dBm	-11.82 dB
799.000 MHz	805.000 MHz	6.250 kHz	801.82018 MHz	-65.03 dBm	-30.03 dB
805.000 MHz	810.000 MHz	100.000 kHz	806.22128 MHz	-45.87 dBm	-32.87 dB

Date: 30.OCT.2019 21:45:52

Highest Band Edge / 1 RB

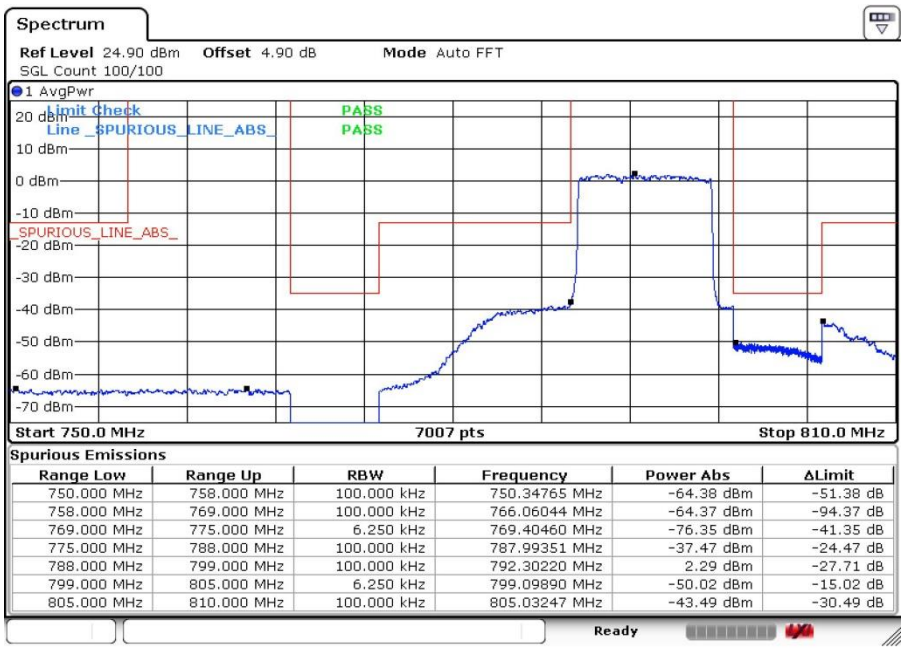


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	751.08292 MHz	-63.58 dBm	-50.58 dB
758.000 MHz	769.000 MHz	100.000 kHz	758.59890 MHz	-64.40 dBm	-94.40 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.10490 MHz	-76.23 dBm	-41.23 dB
775.000 MHz	788.000 MHz	100.000 kHz	784.18831 MHz	-50.11 dBm	-37.11 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.42308 MHz	19.01 dBm	-10.99 dB
799.000 MHz	805.000 MHz	6.250 kHz	800.29171 MHz	-58.34 dBm	-23.34 dB
805.000 MHz	810.000 MHz	100.000 kHz	806.22627 MHz	-53.02 dBm	-40.02 dB

Date: 30.OCT.2019 21:47:55

Band Edge / Full RB



Spurious Emissions

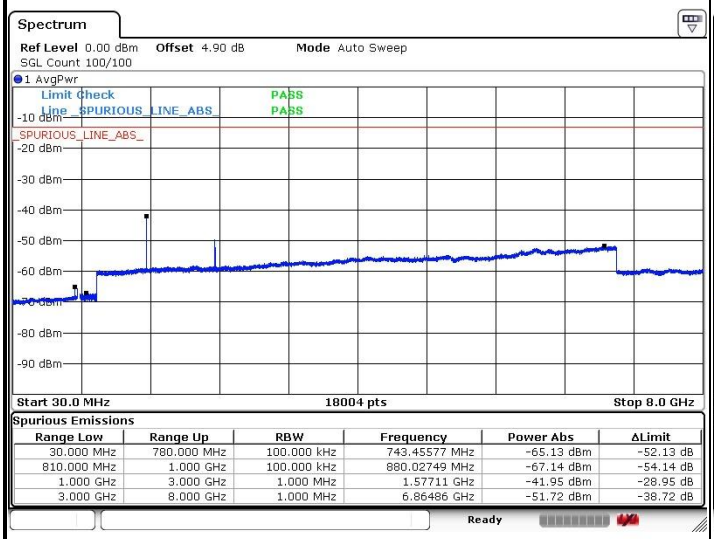
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	750.34765 MHz	-64.38 dBm	-51.38 dB
758.000 MHz	769.000 MHz	100.000 kHz	766.06044 MHz	-64.37 dBm	-94.37 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.40460 MHz	-76.35 dBm	-41.35 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-37.47 dBm	-24.47 dB
788.000 MHz	799.000 MHz	100.000 kHz	792.30220 MHz	2.29 dBm	-27.71 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.09890 MHz	-50.02 dBm	-15.02 dB
805.000 MHz	810.000 MHz	100.000 kHz	805.03247 MHz	-43.49 dBm	-30.49 dB

Date: 30.OCT.2019 21:45:33

Conducted Spurious Emission

LTE Band 14 / 5MHz

Lowest Channel / QPSK

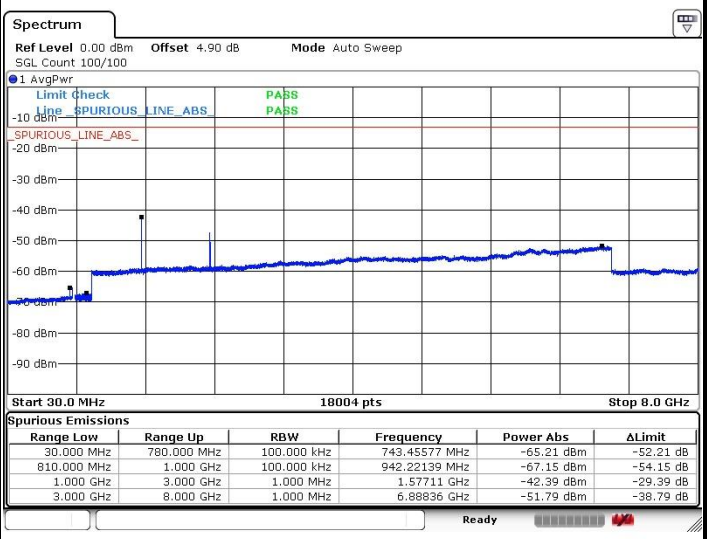


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	743.45577 MHz	-65.13 dBm	-52.13 dB
810.000 MHz	1.000 GHz	100.000 kHz	880.02749 MHz	-67.14 dBm	-54.14 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57711 GHz	-41.95 dBm	-28.95 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.86486 GHz	-51.72 dBm	-38.72 dB

Date: 30.OCT.2019 21:59:41

Lowest Channel / 16QAM

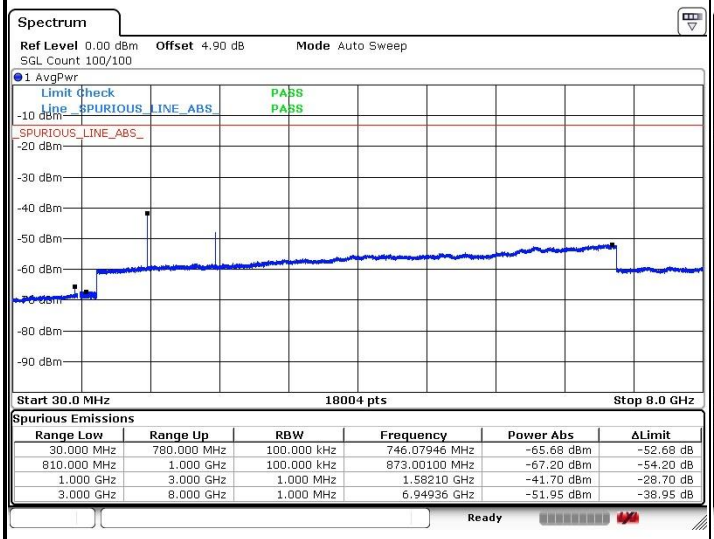


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	743.45577 MHz	-65.21 dBm	-52.21 dB
810.000 MHz	1.000 GHz	100.000 kHz	942.22139 MHz	-67.15 dBm	-54.15 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57711 GHz	-42.39 dBm	-29.39 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.88836 GHz	-51.79 dBm	-38.79 dB

Date: 30.OCT.2019 22:00:06

Middle Channel / QPSK

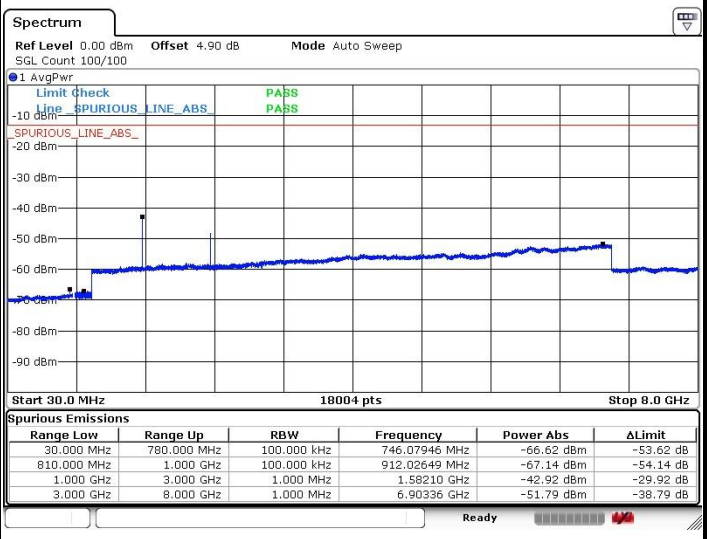


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	746.07946 MHz	-65.68 dBm	-52.68 dB
810.000 MHz	1.000 GHz	100.000 kHz	873.00100 MHz	-67.20 dBm	-54.20 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58210 GHz	-41.70 dBm	-28.70 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.94936 GHz	-51.95 dBm	-38.95 dB

Date: 30.OCT.2019 22:01:53

Middle Channel / 16QAM



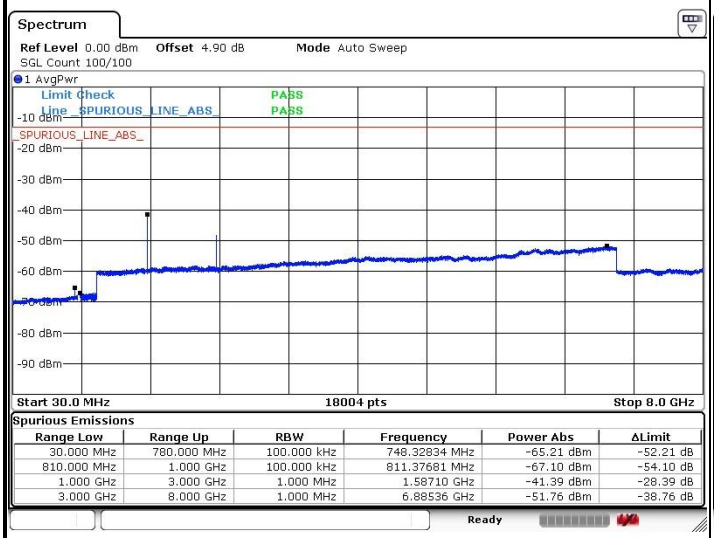
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	746.07946 MHz	-66.62 dBm	-53.62 dB
810.000 MHz	1.000 GHz	100.000 kHz	912.02649 MHz	-67.14 dBm	-54.14 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58210 GHz	-42.92 dBm	-29.92 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.90336 GHz	-51.79 dBm	-38.79 dB

Date: 30.OCT.2019 22:01:25

LTE Band 14 / 5MHz

Highest Channel / QPSK

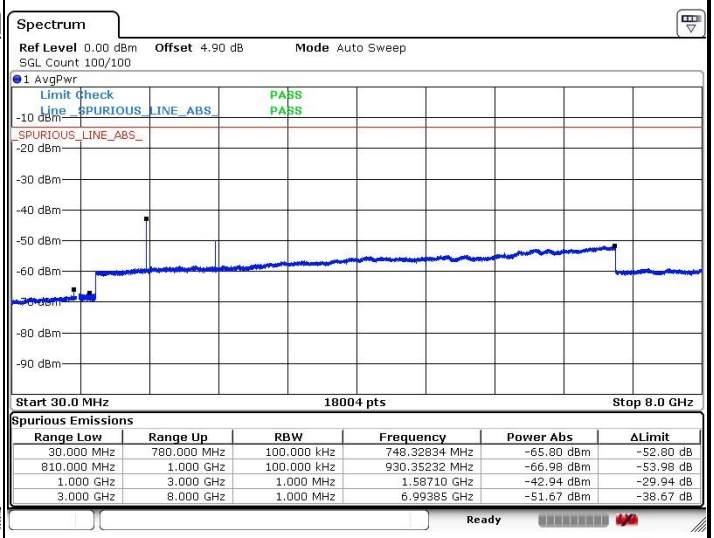


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	748.32834 MHz	-65.21 dBm	-52.21 dB
810.000 MHz	1.000 GHz	100.000 kHz	811.37681 MHz	-67.10 dBm	-54.10 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58710 GHz	-41.39 dBm	-28.39 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.88536 GHz	-51.76 dBm	-38.76 dB

Date: 30.OCT.2019 21:59:07

Highest Channel / 16QAM



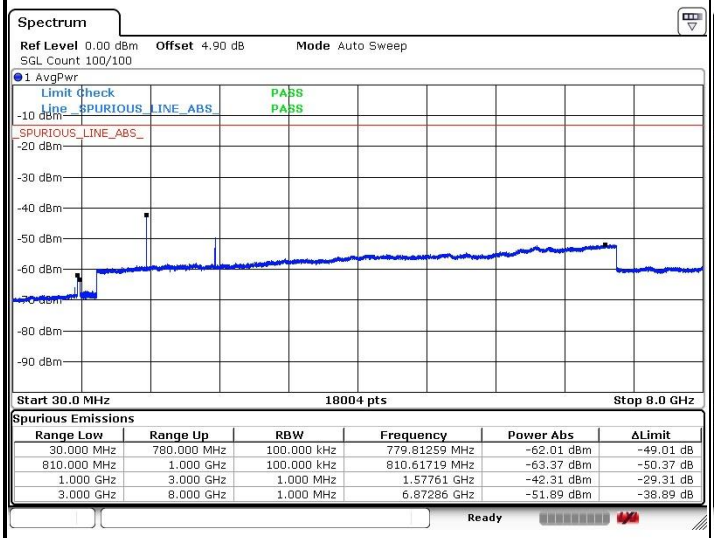
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	748.32834 MHz	-65.80 dBm	-52.80 dB
810.000 MHz	1.000 GHz	100.000 kHz	930.35232 MHz	-66.98 dBm	-53.98 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58710 GHz	-42.94 dBm	-29.94 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.99385 GHz	-51.67 dBm	-38.67 dB

Date: 30.OCT.2019 21:58:42

LTE Band 14 / 10MHz

Middle Channel / QPSK

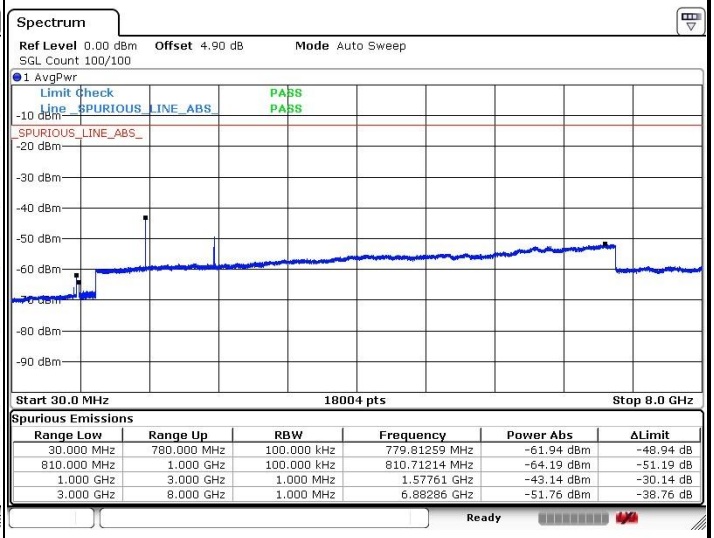


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	779.81259 MHz	-62.01 dBm	-49.01 dB
810.000 MHz	1.000 GHz	100.000 kHz	810.61719 MHz	-63.37 dBm	-50.37 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57761 GHz	-42.31 dBm	-29.31 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.87286 GHz	-51.89 dBm	-38.89 dB

Date: 30.OCT.2019 22:03:09

Middle Channel / 16QAM



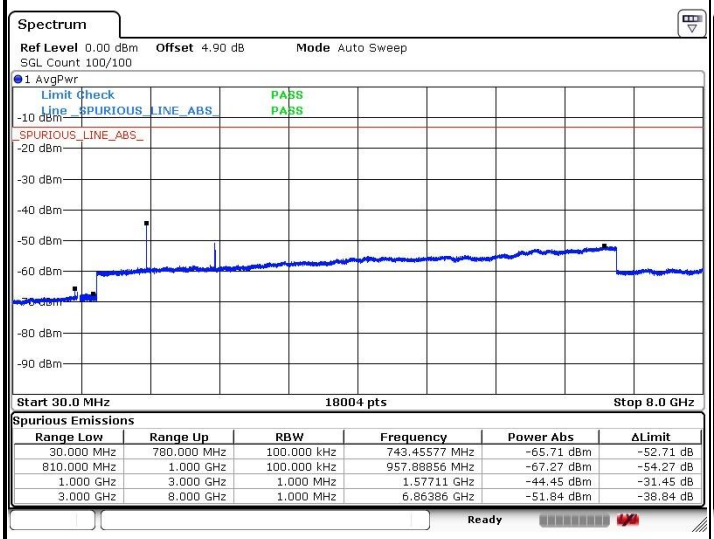
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	779.81259 MHz	-61.94 dBm	-48.94 dB
810.000 MHz	1.000 GHz	100.000 kHz	810.71214 MHz	-64.19 dBm	-51.19 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57761 GHz	-43.14 dBm	-30.14 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.88286 GHz	-51.76 dBm	-38.76 dB

Date: 30.OCT.2019 22:03:36

LTE Band 14 / 5MHz

Lowest Channel / 64QAM

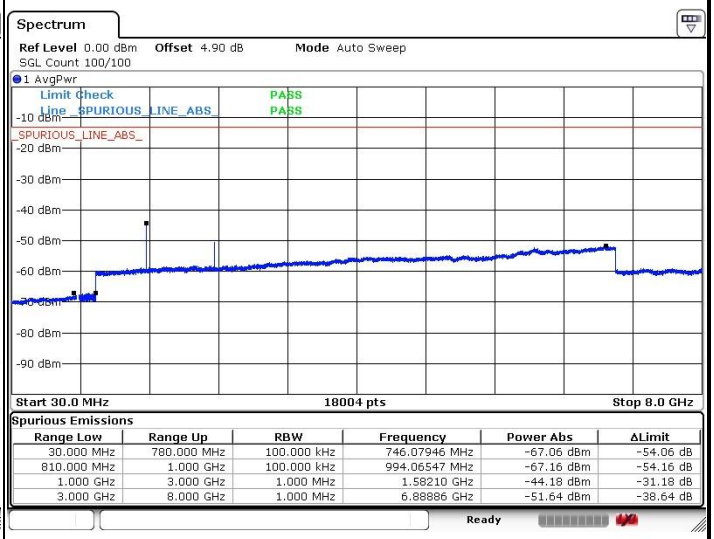


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	743.45577 MHz	-65.71 dBm	-52.71 dB
810.000 MHz	1.000 GHz	100.000 kHz	957.88856 MHz	-67.27 dBm	-54.27 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57711 GHz	-44.45 dBm	-31.45 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.86386 GHz	-51.84 dBm	-38.84 dB

Date: 30.OCT.2019 22:00:29

Middle Channel / 64QAM

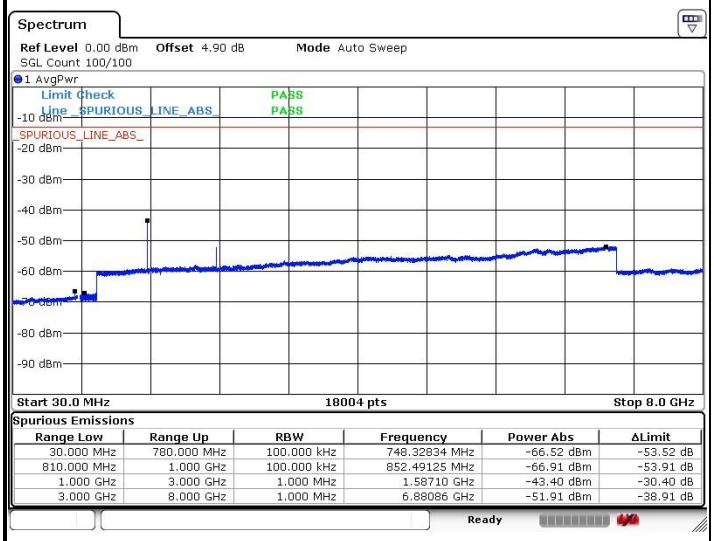


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	746.07946 MHz	-67.06 dBm	-54.06 dB
810.000 MHz	1.000 GHz	100.000 kHz	994.06547 MHz	-67.16 dBm	-54.16 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58210 GHz	-44.18 dBm	-31.18 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.88886 GHz	-51.64 dBm	-38.64 dB

Date: 30.OCT.2019 22:00:58

Highest Channel / 64QAM

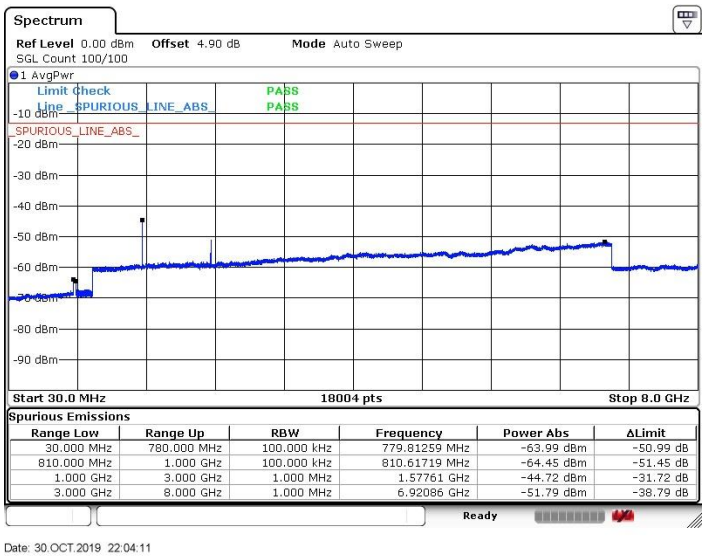


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	780.000 MHz	100.000 kHz	748.32834 MHz	-66.52 dBm	-53.52 dB
810.000 MHz	1.000 GHz	100.000 kHz	852.49125 MHz	-66.91 dBm	-53.91 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58710 GHz	-43.40 dBm	-30.40 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.88086 GHz	-51.91 dBm	-38.91 dB

Date: 30.OCT.2019 21:58:07

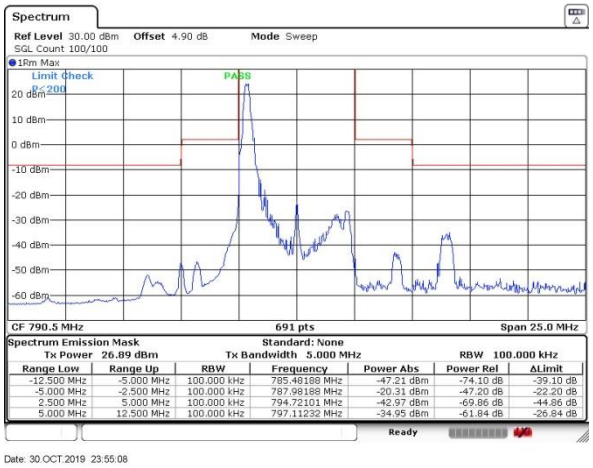
LTE Band 14 / 10MHz
Middle Channel / 64QAM



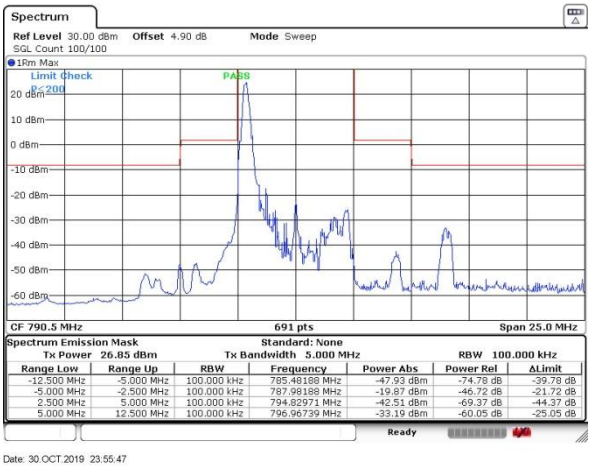
Emission Mask

LTE Band 14/ 5M(1RB0)

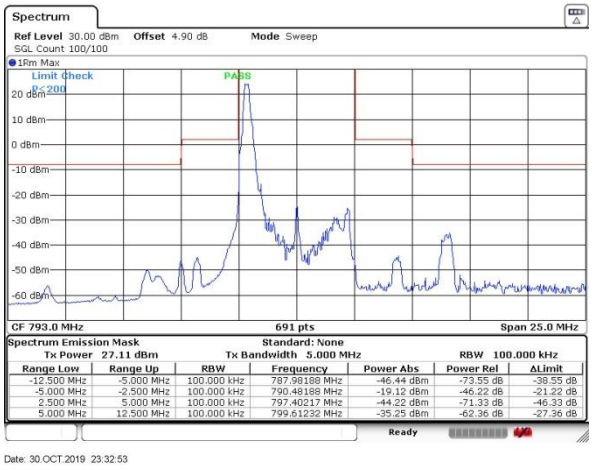
Lowest Channel / 5MHz / QPSK



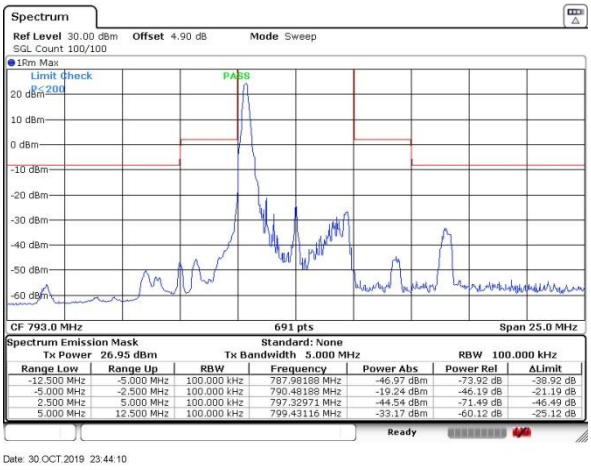
Lowest Channel / 5MHz / 16QAM



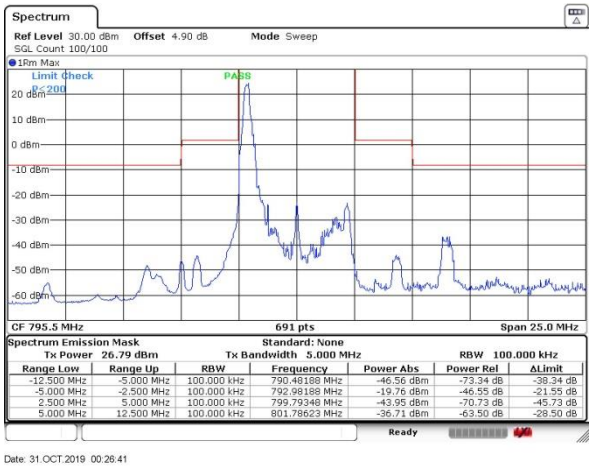
Middle Channel / 5MHz / QPSK



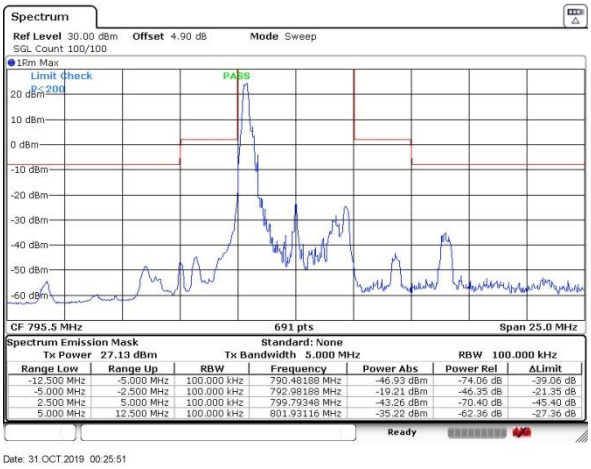
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

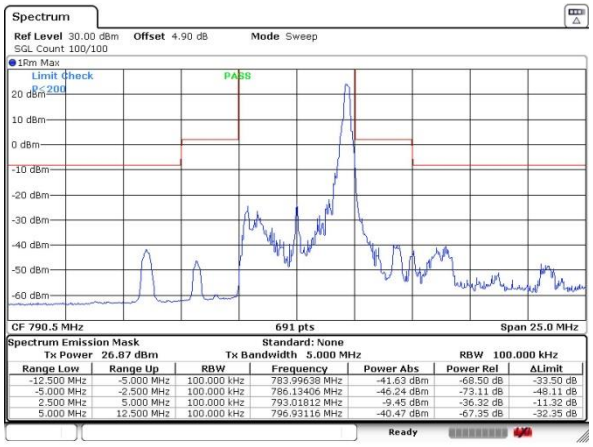


Highest Channel / 5MHz / 16QAM

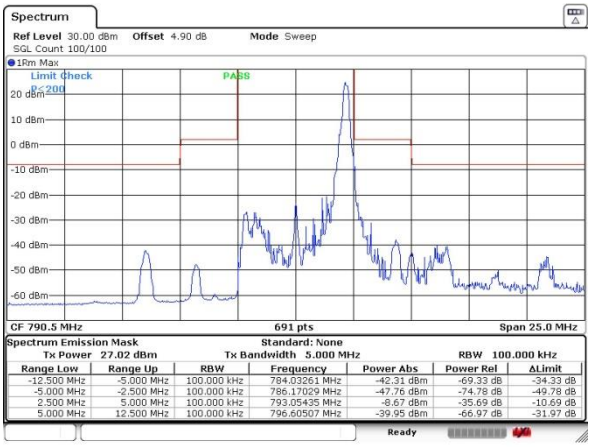


LTE Band 14/ 5M(1RBmax)

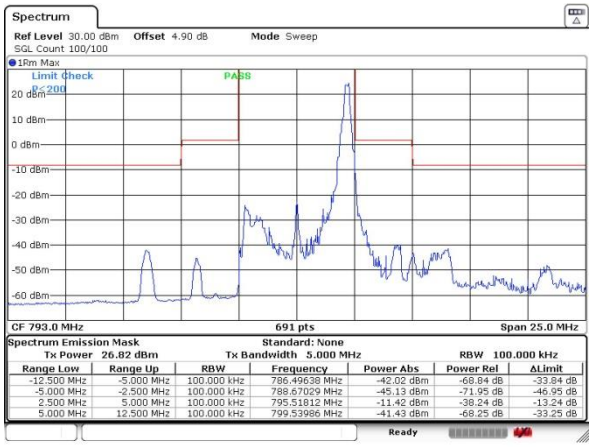
Lowest Channel / 5MHz / QPSK



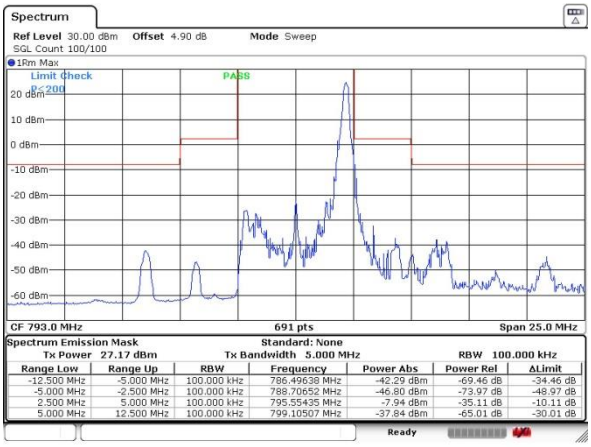
Lowest Channel / 5MHz / 16QAM



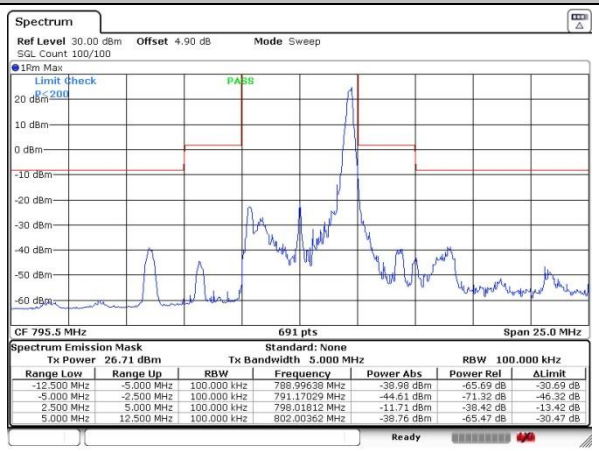
Middle Channel / 5MHz / QPSK



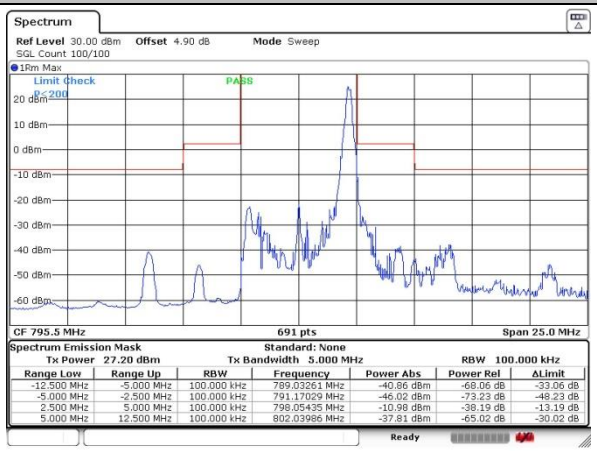
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

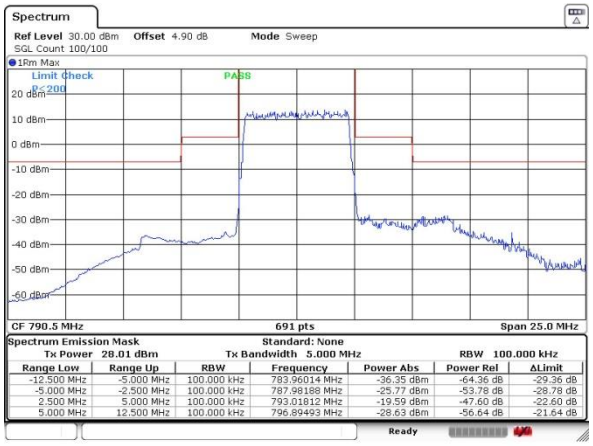


Highest Channel / 5MHz / 16QAM

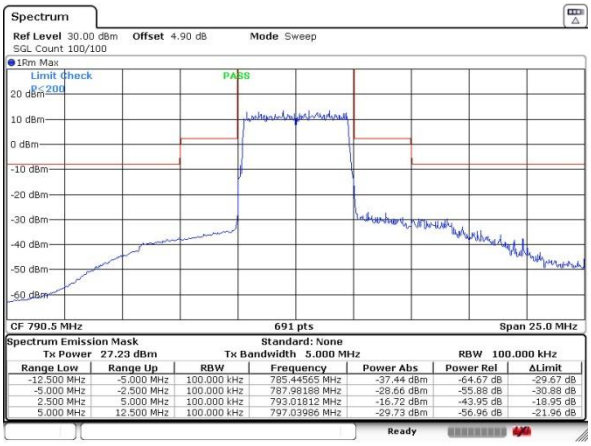


LTE Band 14/ 5M(fullRB0)

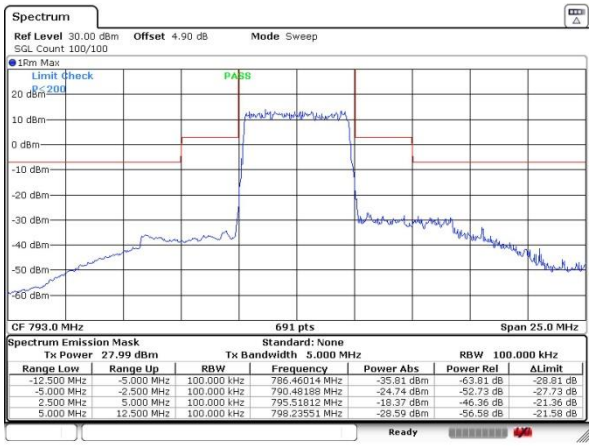
Lowest Channel / 5MHz / QPSK



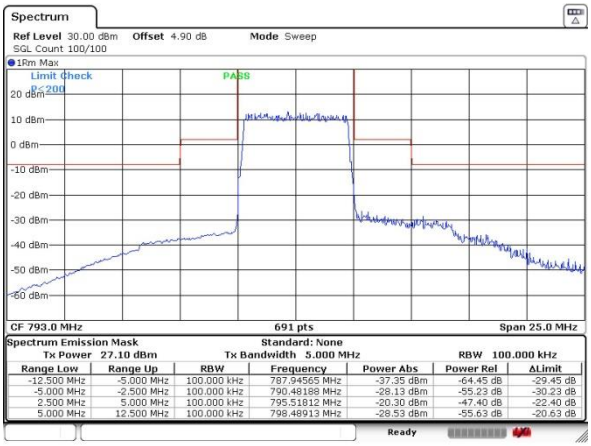
Lowest Channel / 5MHz / 16QAM



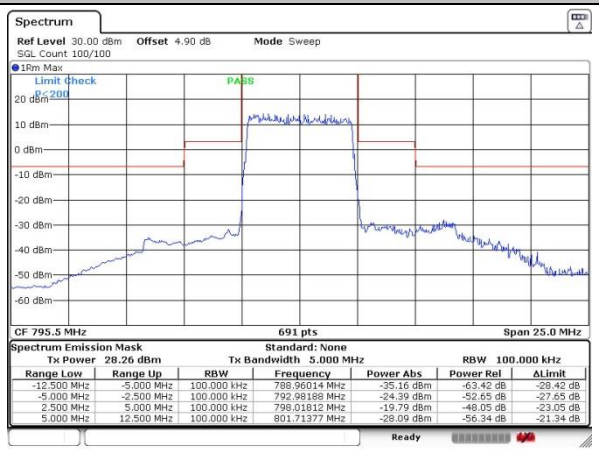
Middle Channel / 5MHz / QPSK



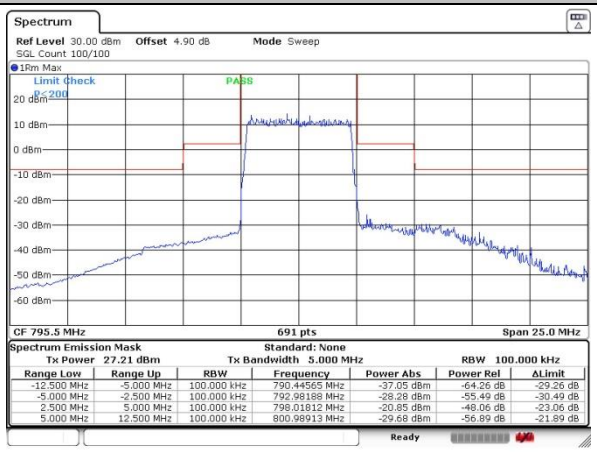
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

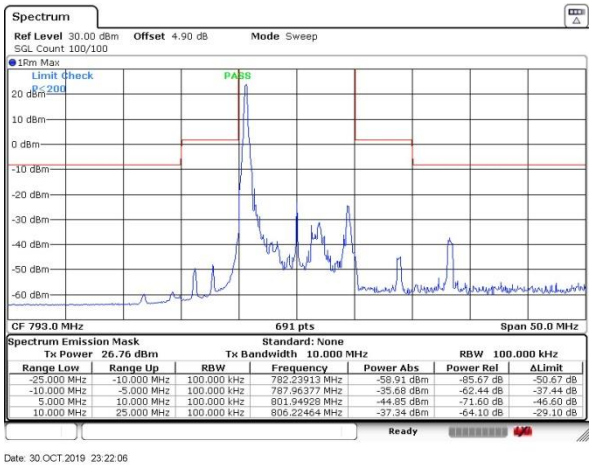


Highest Channel / 5MHz / 16QAM

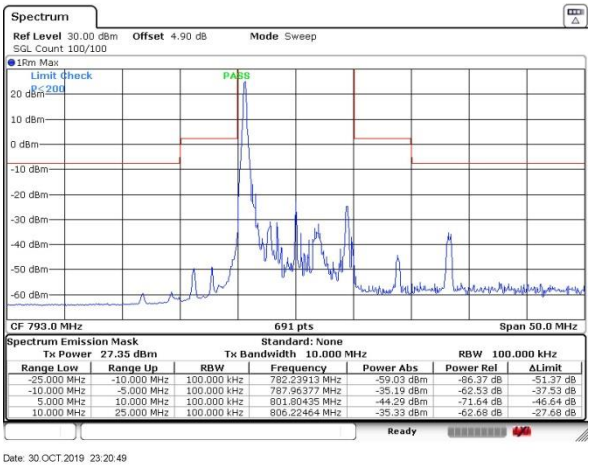


LTE Band 14/ 10MHz

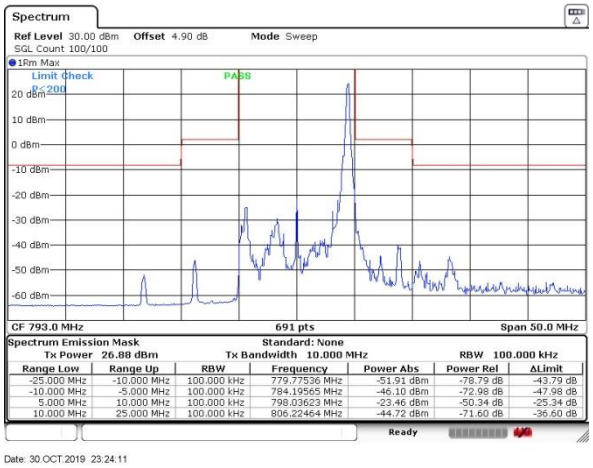
Middle Channel / 1RB0 / QPSK



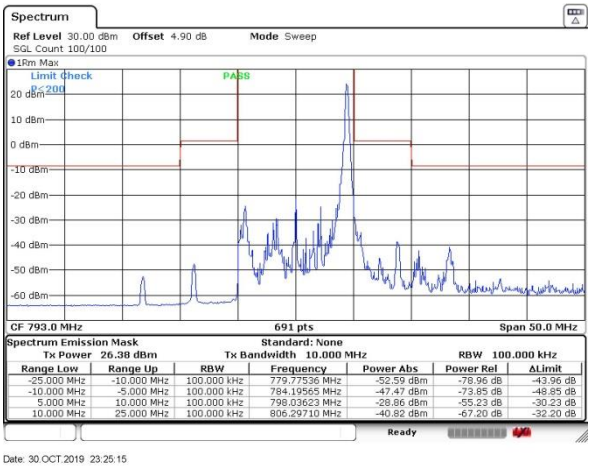
Middle Channel / 1RB0 / 16QAM



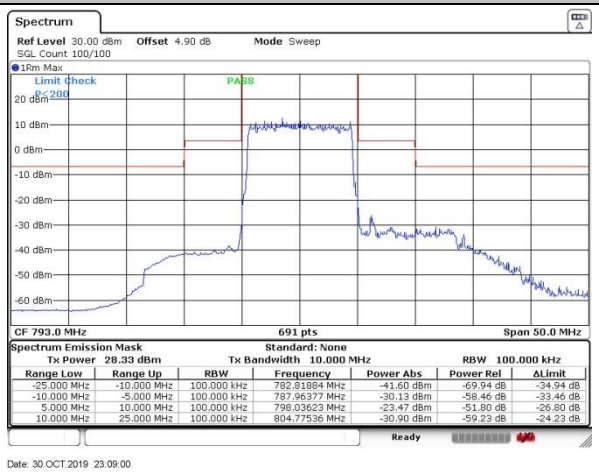
Middle Channel / 1RBmax / QPSK



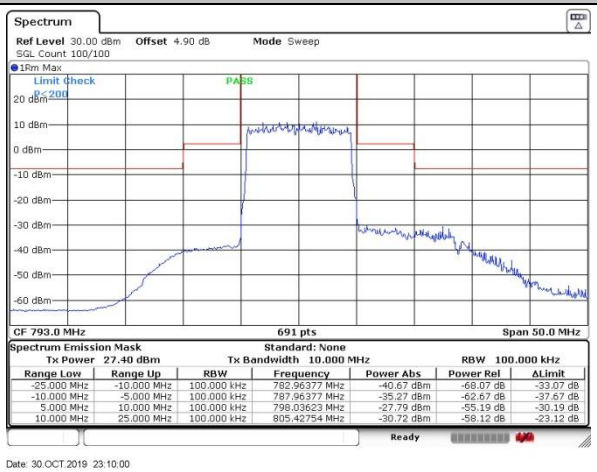
Middle Channel / 1RBmax / 16QAM



Middle Channel / fullRB0 / QPSK

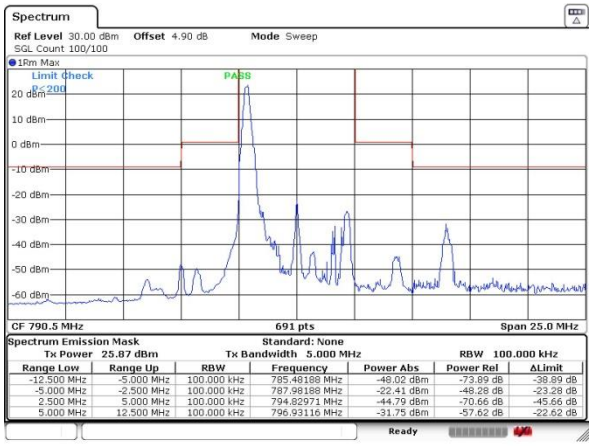


Middle Channel / fullRB0 / 16QAM

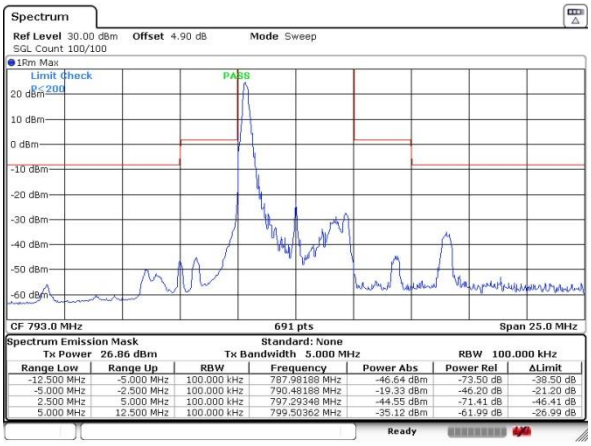


LTE Band 14/ 5MHz

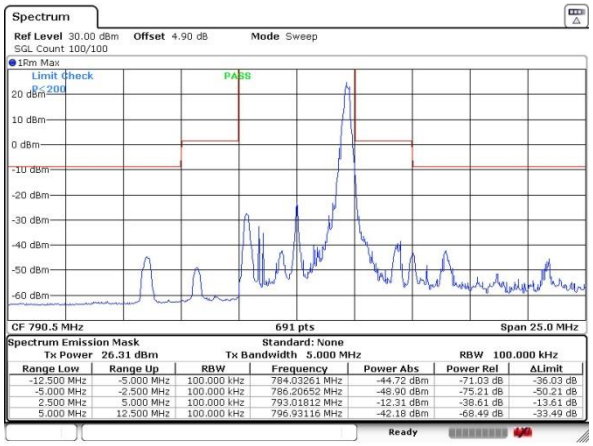
Lowest Channel / 1RB0 / 64QAM



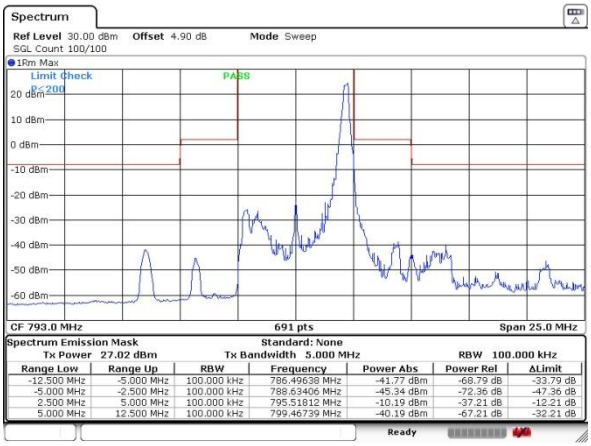
Middle Channel / 1RB0 / 64QAM



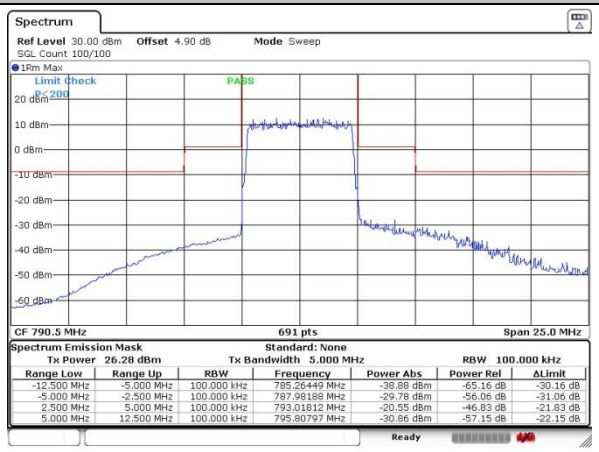
Lowest Channel / 1RBmax / 64QAM



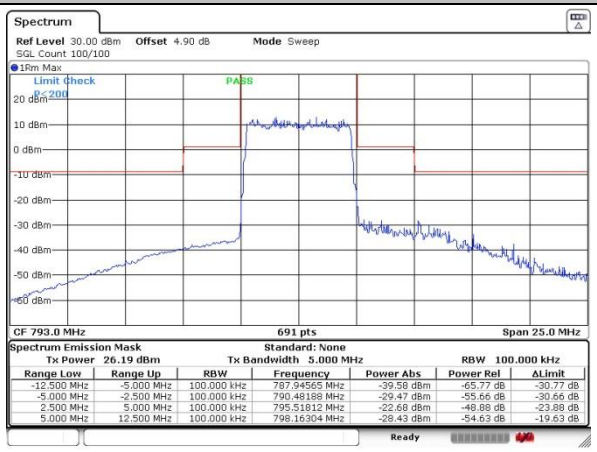
Middle Channel / 1RBmax / 64QAM



Lowest Channel / fullRB0 / 64QAM

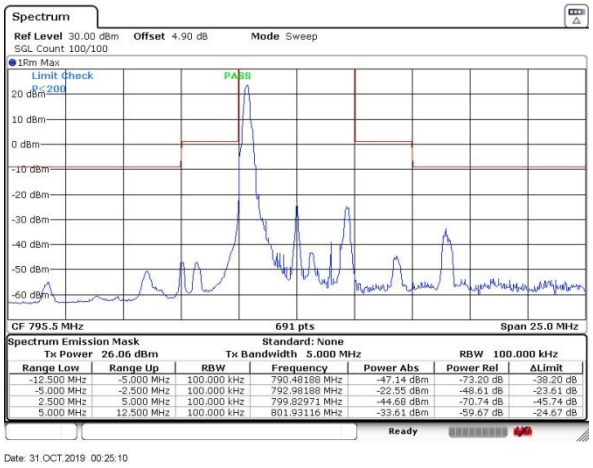


Middle Channel / fullRB0 / 64QAM

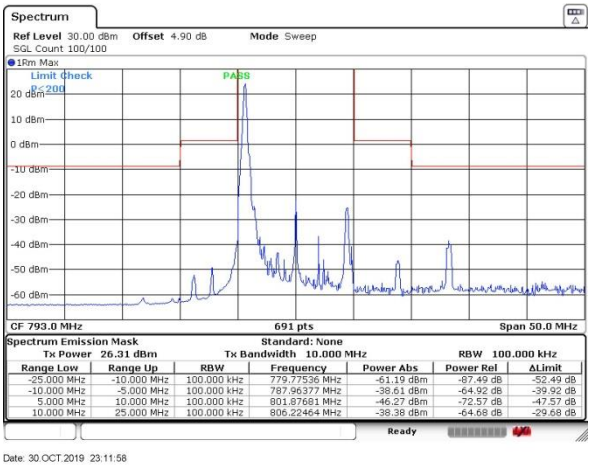


LTE Band 14/ 5MHz

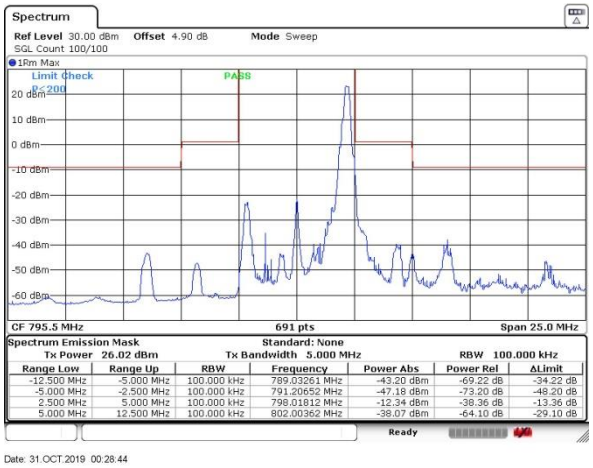
Highest Channel / 1RB0 / 64QAM



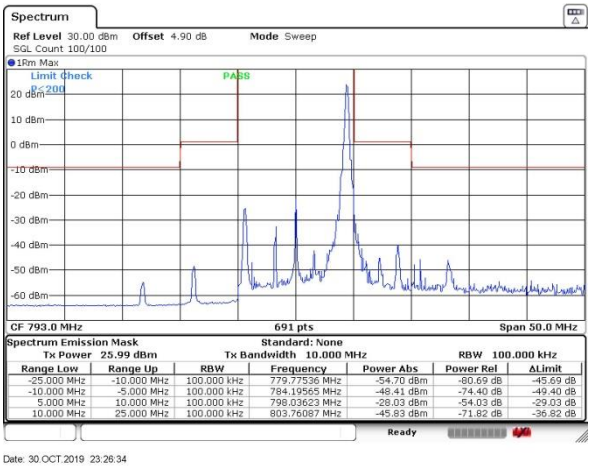
Middle Channel / 1RB0 / 64QAM



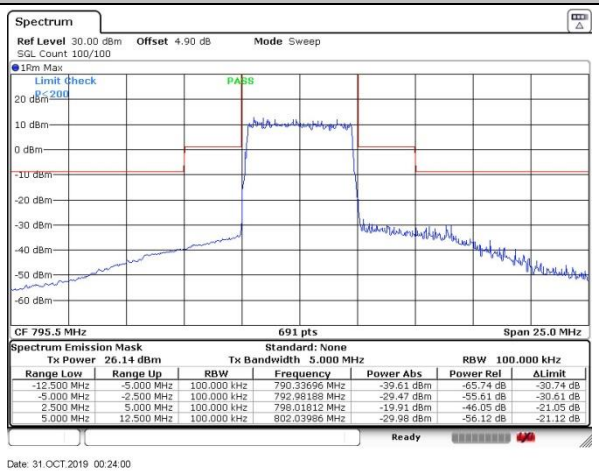
Highest Channel / 1RBmax / 64QAM



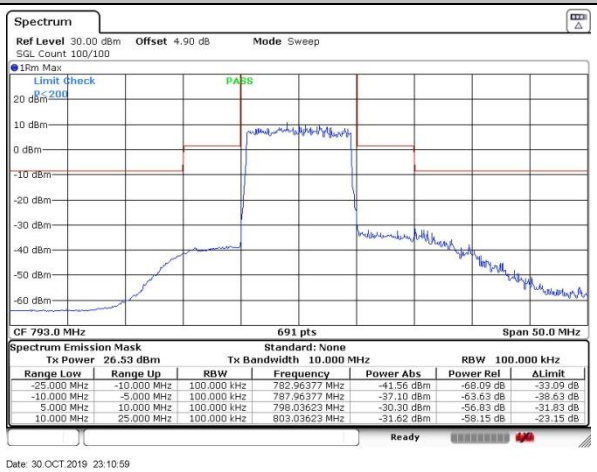
Middle Channel / 1RBmax / 64QAM



Highest Channel / fullRB0 / 64QAM



Middle Channel / fullRB0 / 64QAM



Frequency Stability

Test Conditions		LTE Band 14 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0033	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0040	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0025	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage =3.8V.；Battery End Point (BEP) =3.6V.；Maximum Voltage =4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Field Strength of Spurious Radiated

LTE Band 14 / QPSK / RB Size 1 Offset 0								
Bandwidth	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
5MHz (Lowest)	1576	-68.25	-42.15	-26.10	-70.88	1.09	5.87	H
	2366	-65.37	-13	-52.37	-67.77	1.37	5.92	H
	3156	-63.33	-13	-50.33	-67.22	1.64	7.68	H
	1576	-68.31	-42.15	-26.16	-70.94	1.09	5.87	V
	2366	-65.12	-13	-52.12	-67.52	1.37	5.92	V
	3156	-63.49	-13	-50.49	-67.38	1.64	7.68	V
5MHz (Middle)	1582	-67.59	-42.15	-25.44	-70.22	1.09	5.87	H
	2372	-64.73	-13	-51.73	-67.13	1.37	5.92	H
	3162	-63.49	-13	-50.49	-67.38	1.64	7.68	H
	1582	-67.71	-42.15	-25.56	-70.34	1.09	5.87	V
	2372	-64.61	-13	-51.61	-67.01	1.37	5.92	V
	3162	-63.31	-13	-50.31	-67.20	1.64	7.68	V
5MHz (Highest)	1586	-68.31	-42.15	-26.16	-70.94	1.09	5.87	H
	2380	-64.39	-13	-51.39	-66.79	1.37	5.92	H
	3174	-63.22	-13	-50.22	-67.11	1.64	7.68	H
	1586.68	-67.10	-42.15	-24.95	-69.73	1.09	5.87	V
	2380	-55.32	-13	-42.32	-57.72	1.37	5.92	V
	3174	-63.01	-13	-50.01	-66.90	1.64	7.68	V
10MHz	1578	-67.82	-42.15	-25.67	-70.45	1.09	5.87	H
	2366	-58.90	-13	-45.90	-61.30	1.37	5.92	H
	3156	-63.27	-13	-50.27	-67.16	1.64	7.68	H
	1578	-67.38	-42.15	-25.23	-70.01	1.09	5.87	V
	2366	-57.49	-13	-44.49	-59.89	1.37	5.92	V
	3156	-62.86	-13	-49.86	-66.75	1.64	7.68	V
	Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.							
Test Result	PASS							