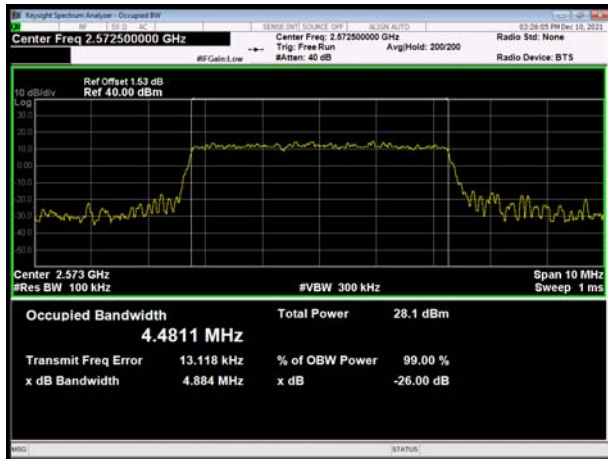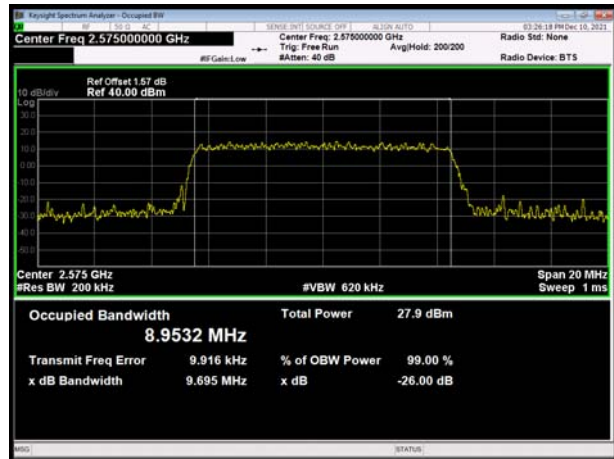| LTE Band 38 64QAM 5MHz CH-Low	LTE Band 38 64QAM 10MHz CH-Low
LTE Band 38 64QAM 5MHz CH-Middle	LTE Band 38 64QAM 10MHz CH-Middle
LTE Band 38 64QAM 5MHz CH-High	LTE Band 38 64QAM 10MHz CH-High
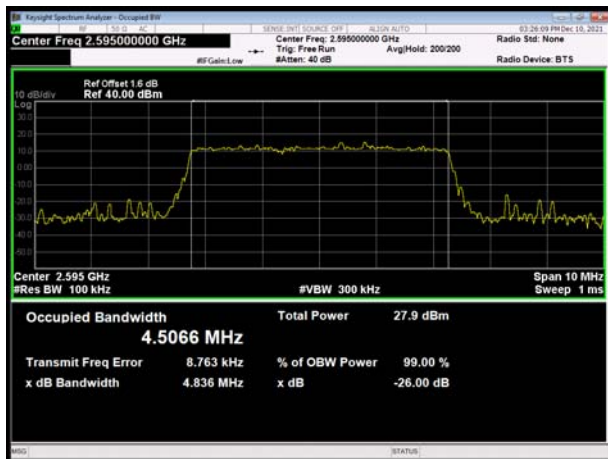
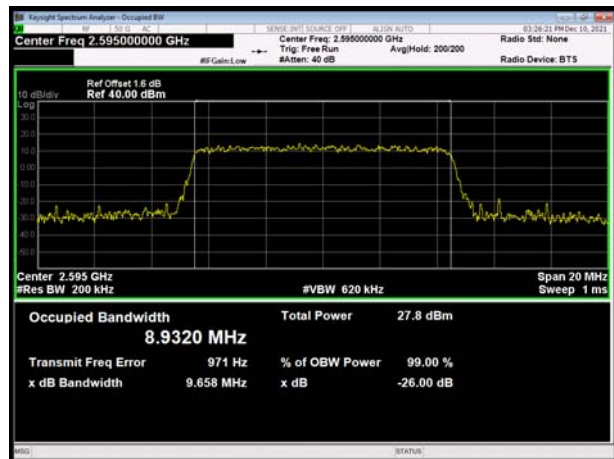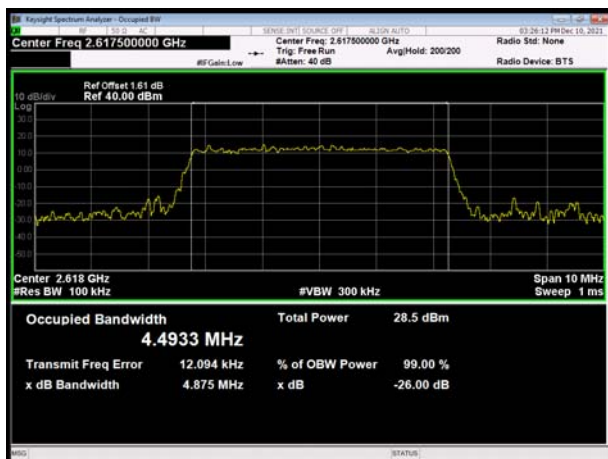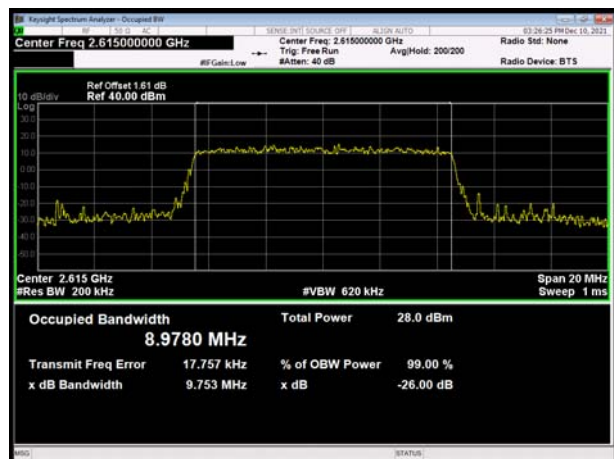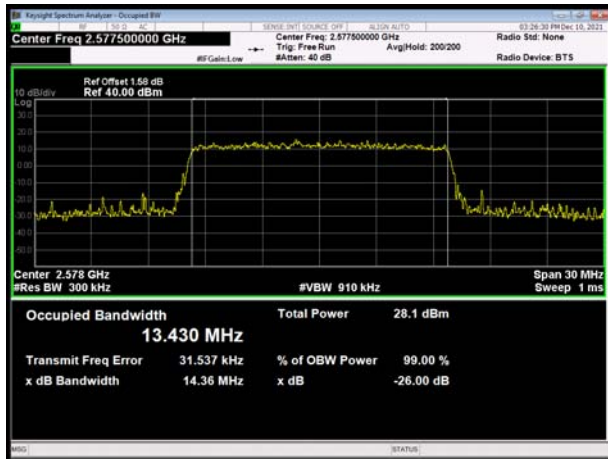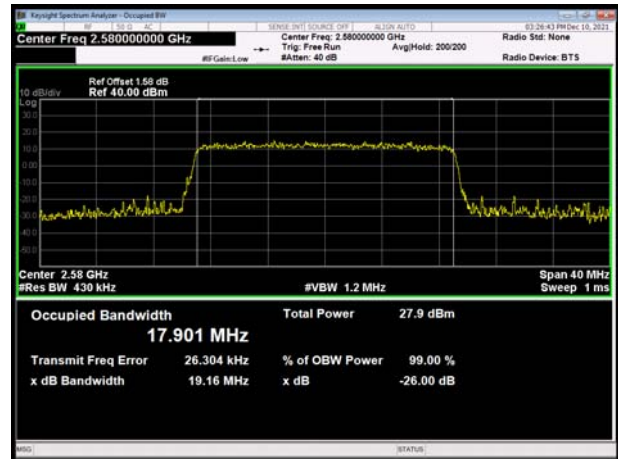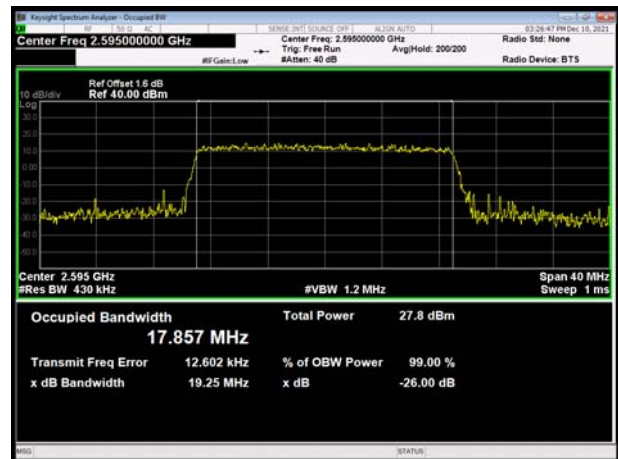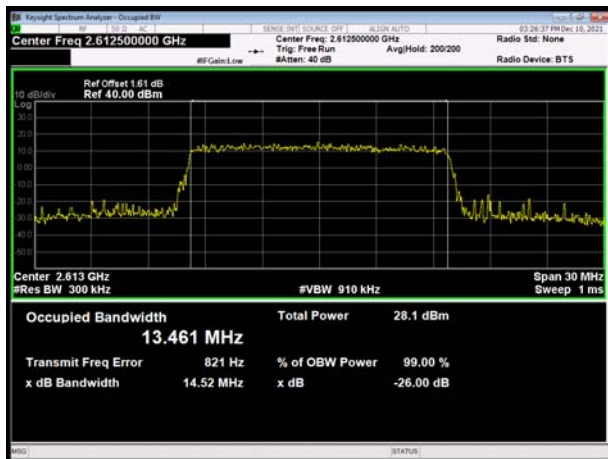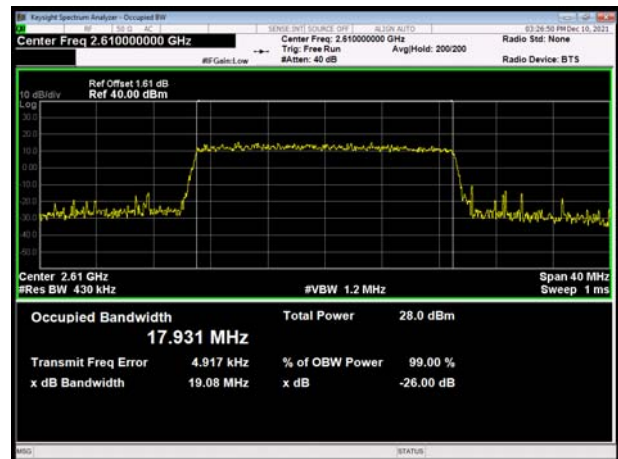| LTE Band 38 64QAM 15MHz CH-Low	LTE Band 38 64QAM 20MHz CH-Low
LTE Band 38 64QAM 15MHz CH-Middle	LTE Band 38 64QAM 20MHz CH-Middle
LTE Band 38 64QAM 15MHz CH-High	LTE Band 38 64QAM 20MHz CH-High
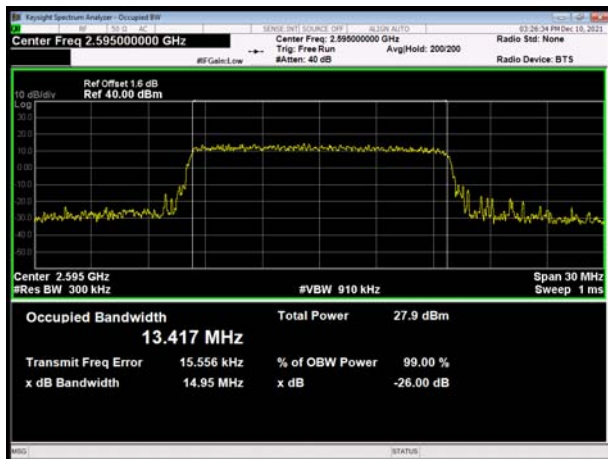
LTE Band 41 QPSK 5MHz CH-Low	LTE Band 41 QPSK 10MHz CH-Low
LTE Band 41 QPSK 5MHz CH-Middle	LTE Band 41 QPSK 10MHz CH-Middle
LTE Band 41 QPSK 5MHz CH-High	LTE Band 41 QPSK 10MHz CH-High
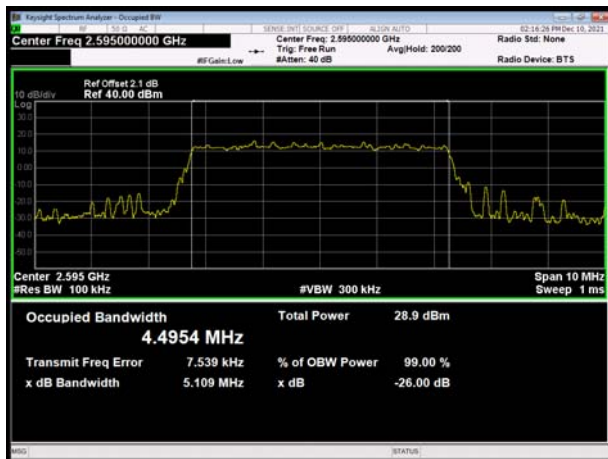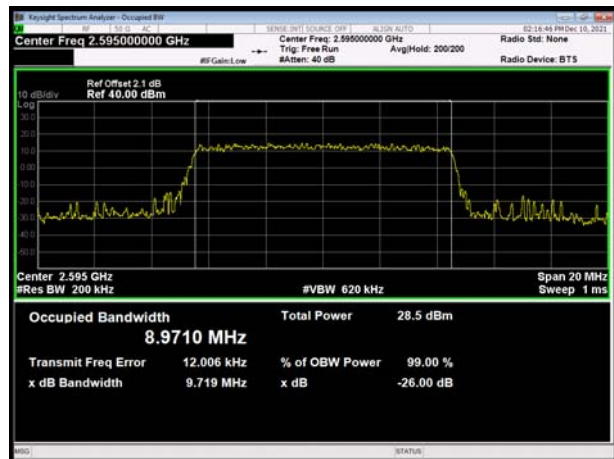
TA Technology (Shanghai) Co., Ltd.   **TA-MB-05-003R**   **Page 52 of 141**

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

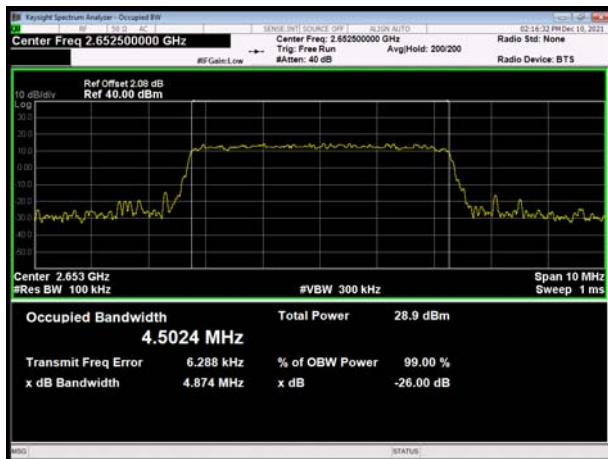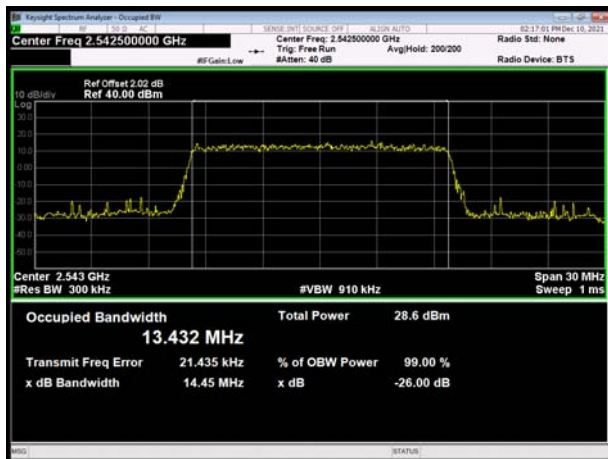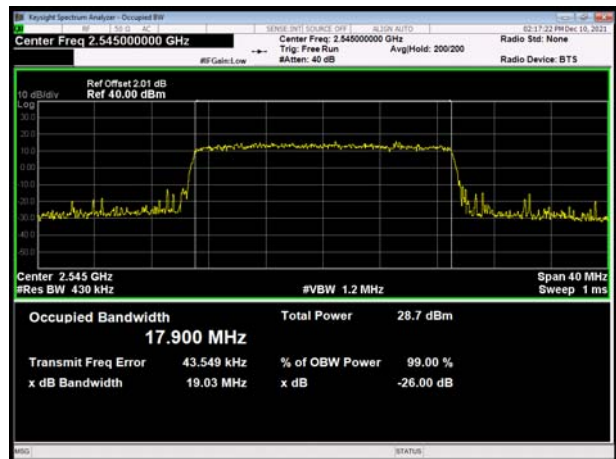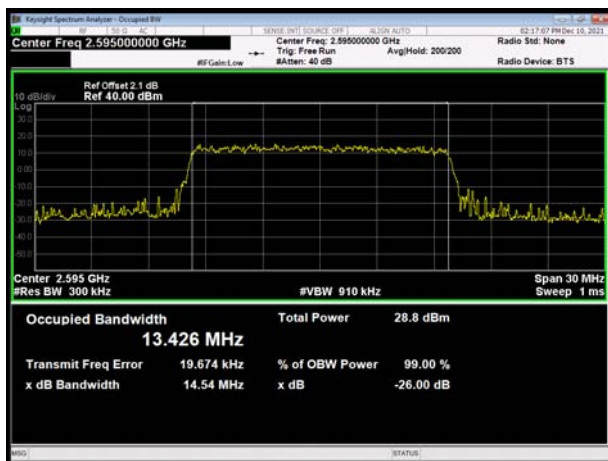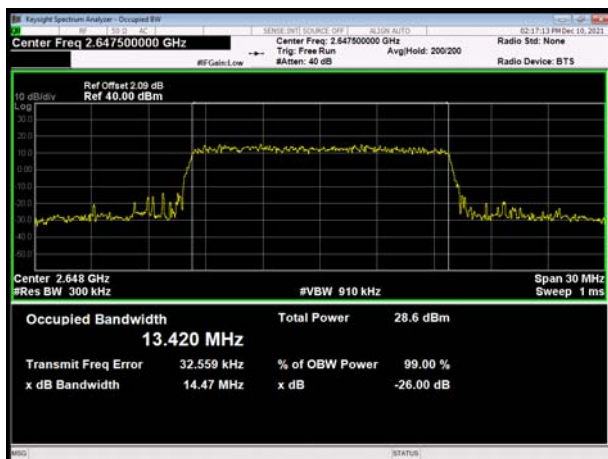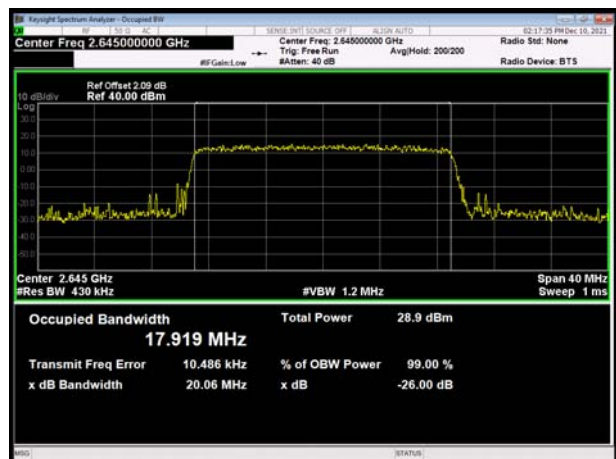| LTE Band 41 QPSK 15MHz CH-Low	LTE Band 41 QPSK 20MHz CH-Low
LTE Band 41 QPSK 15MHz CH-Middle	LTE Band 41 QPSK 20MHz CH-Middle
LTE Band 41 QPSK 15MHz CH-High	LTE Band 41 QPSK 20MHz CH-High
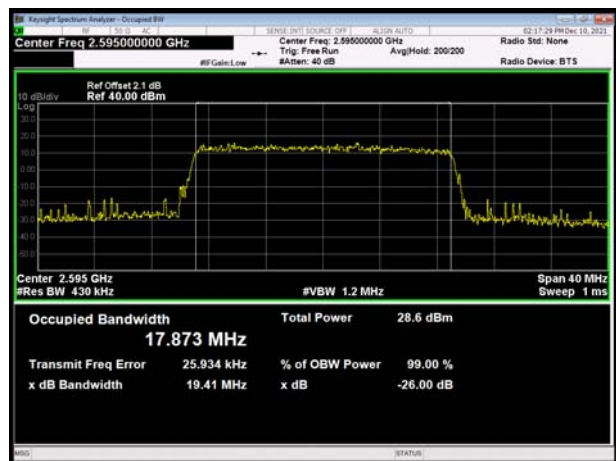
LTE Band 41 16QAM 5MHz CH-Low	LTE Band 41 16QAM 10MHz CH-Low
LTE Band 41 16QAM 5MHz CH-Middle	**LTE Band 41 16QAM 10MHz CH-Middle**
LTE Band 41 16QAM 5MHz CH-High	**LTE Band 41 16QAM 10MHz CH-High**
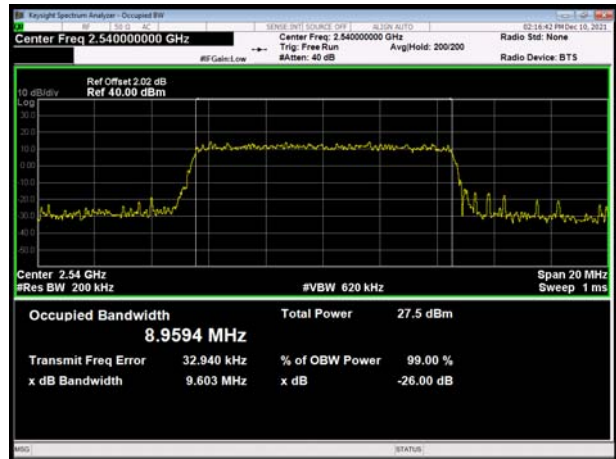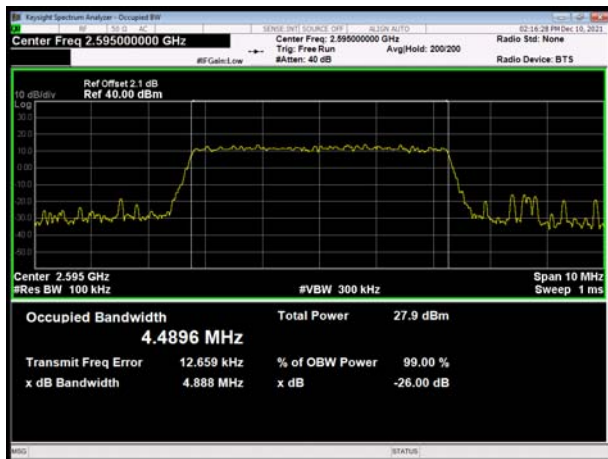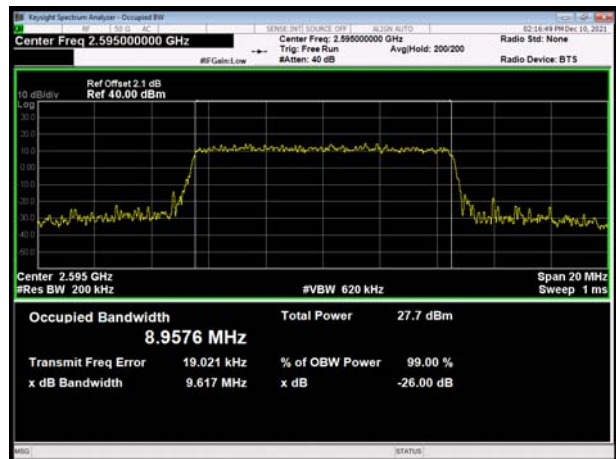
LTE Band 41 16QAM 15MHz CH-Low	LTE Band 41 16QAM 20MHz CH-Low
LTE Band 41 16QAM 15MHz CH-Middle	LTE Band 41 16QAM 20MHz CH-Middle
LTE Band 41 16QAM 15MHz CH-High	LTE Band 41 16QAM 20MHz CH-High
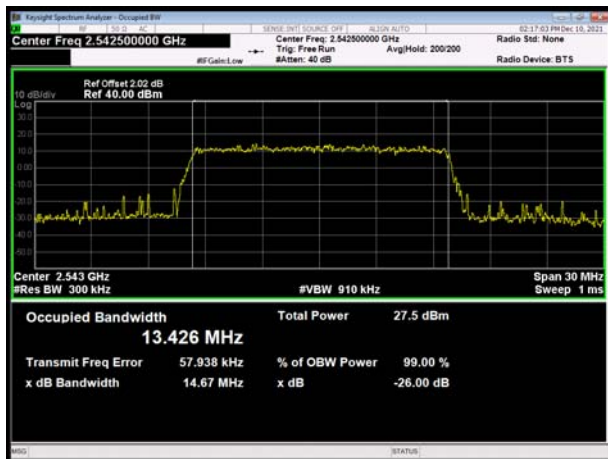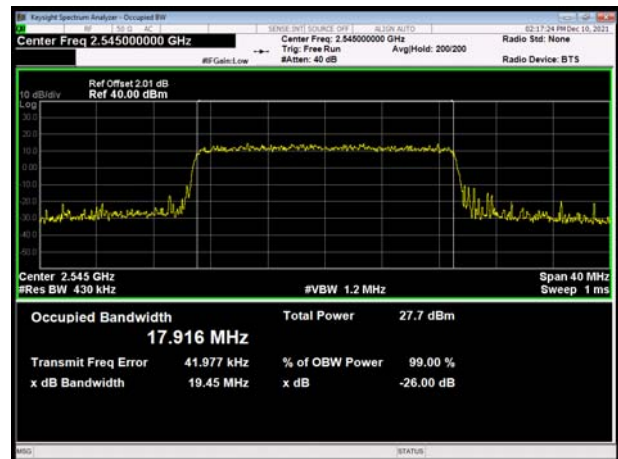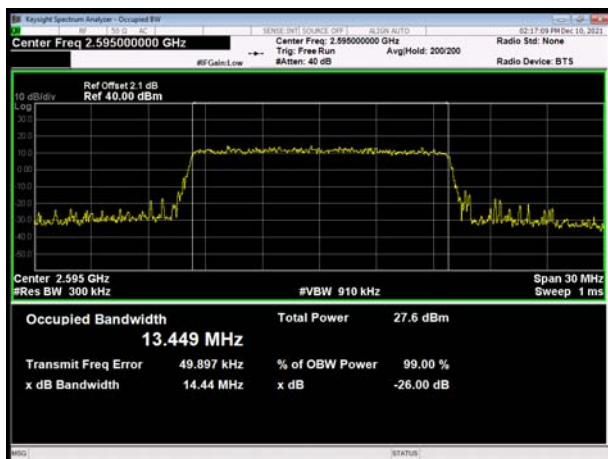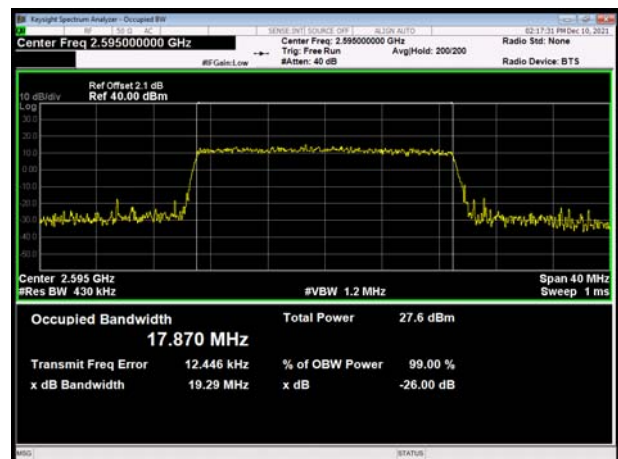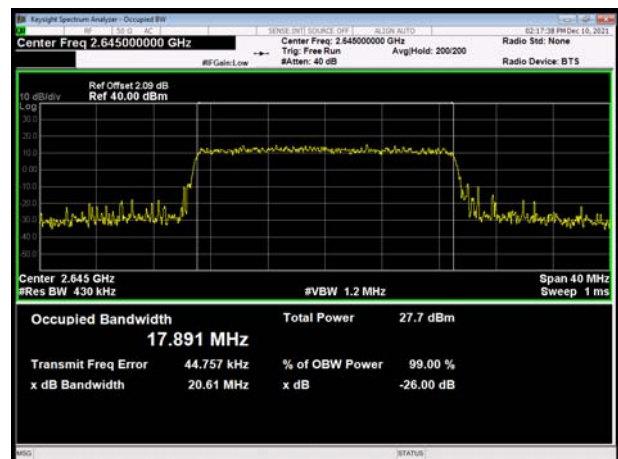
LTE Band 41 64QAM 5MHz CH-Low	LTE Band 41 64QAM 10MHz CH-Low
LTE Band 41 64QAM 5MHz CH-Middle	LTE Band 41 64QAM 10MHz CH-Middle
LTE Band 41 64QAM 5MHz CH-High	LTE Band 41 64QAM 10MHz CH-High
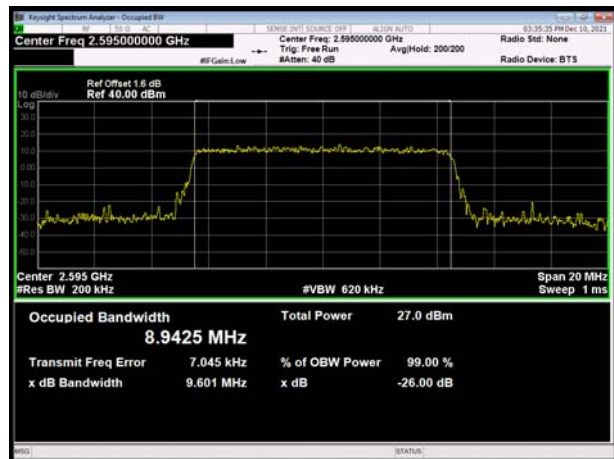
TA Technology (Shanghai) Co., Ltd.   TA-MB-05-003R   Page 56 of 141

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

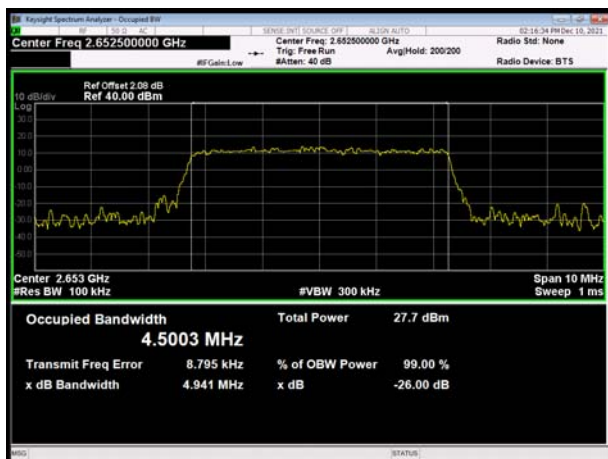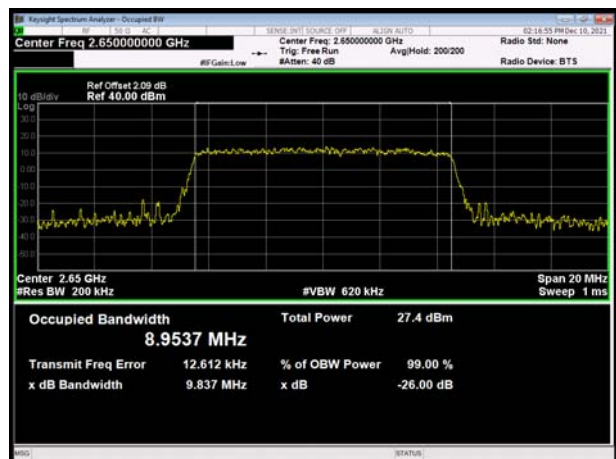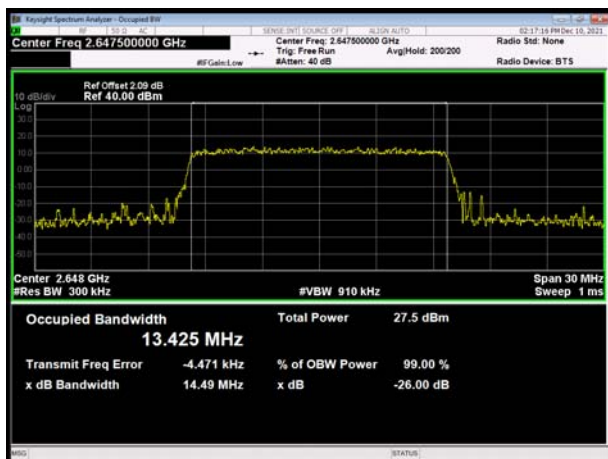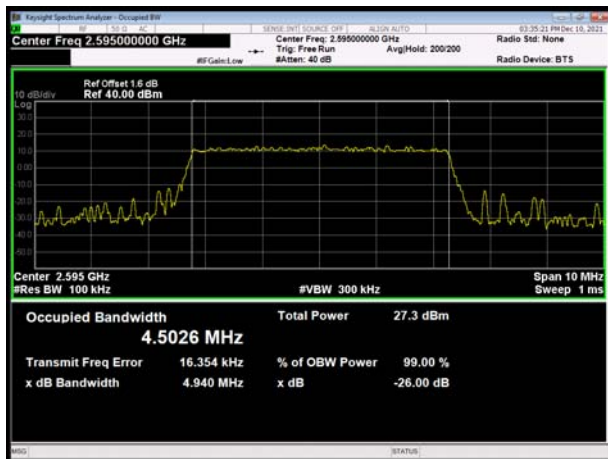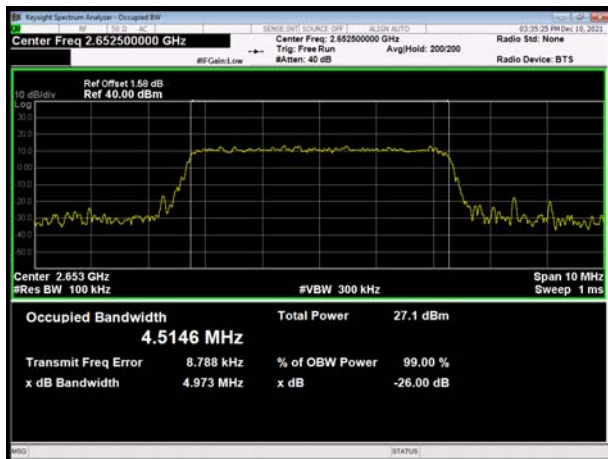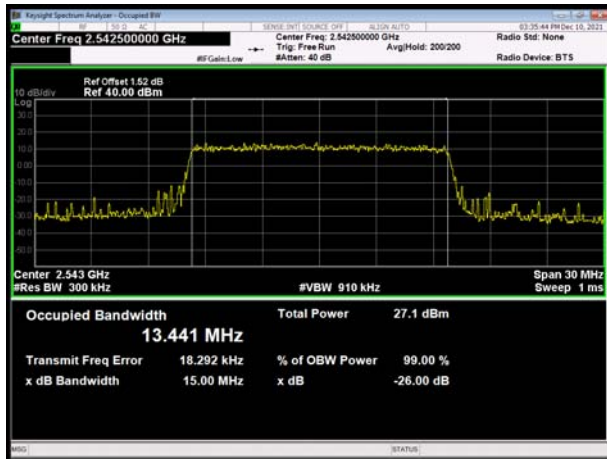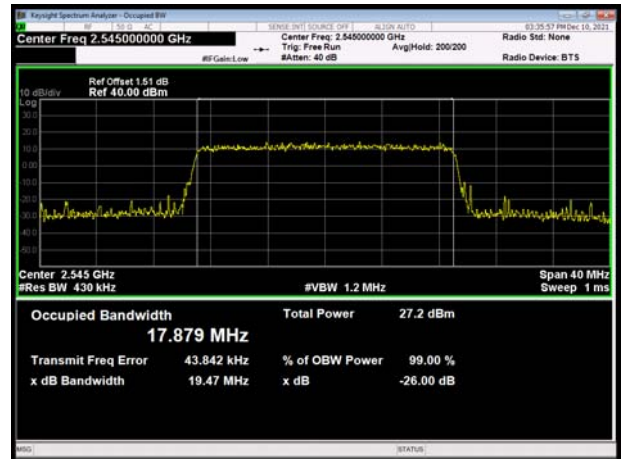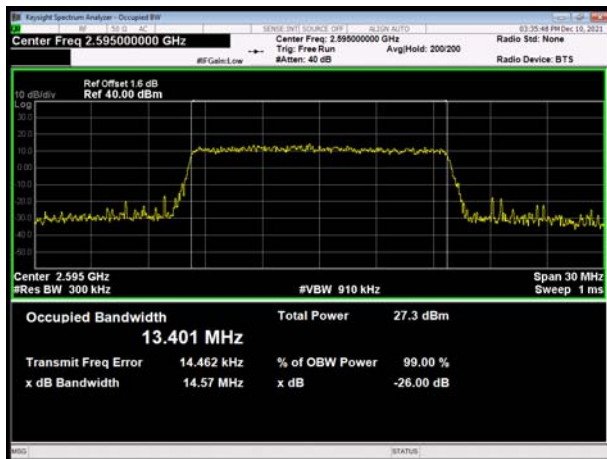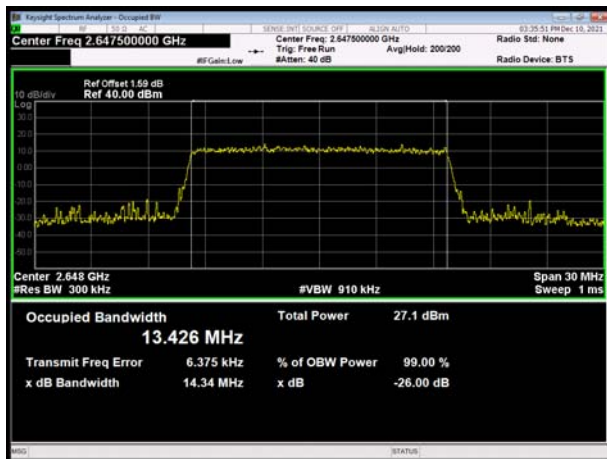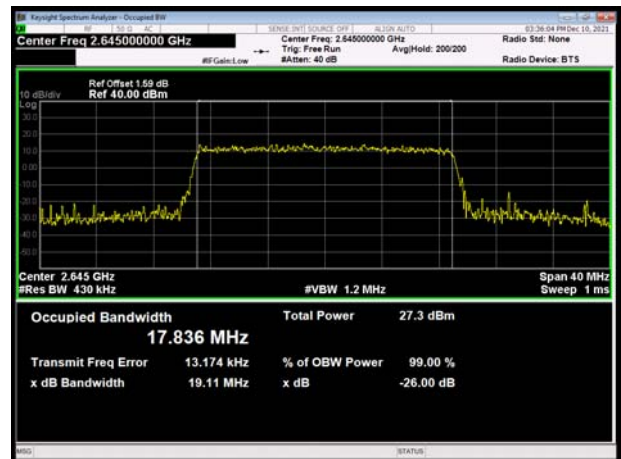| LTE Band 41 64QAM 15MHz CH-Low	LTE Band 41 64QAM 20MHz CH-Low
LTE Band 41 64QAM 15MHz CH-Middle	LTE Band 41 64QAM 20MHz CH-Middle
LTE Band 41 64QAM 15MHz CH-High	LTE Band 41 64QAM 20MHz CH-High
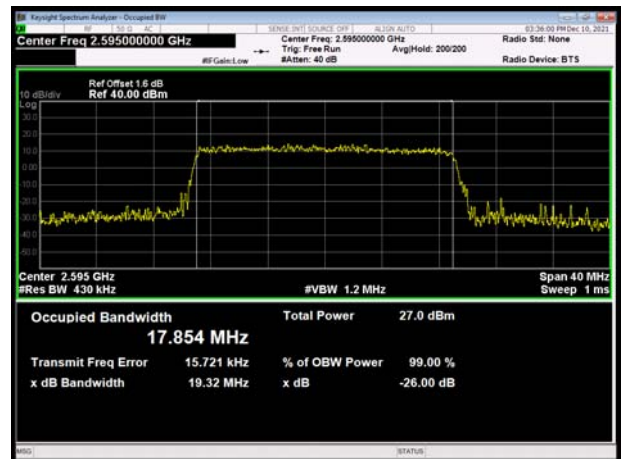
5.3 Band Edge Compliance

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured.

The testing follows KDB 971168 D01 v03r01 Section 6.0

The EUT was connected to spectrum analyzer and system simulator via a power divider.

The band edges of low and high channels for the highest RF powers were measured.

For LTE Band 7/38 set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.

For LTE Band 41 the middle channel, high channel set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge, RBW=1MHz was used; Low channel set RBW >= 2% EBW in the 1MHz band immediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge, RBW=1MHz was used. RBW is set to ≥1%EBW, VBW is set to 3x RBW.
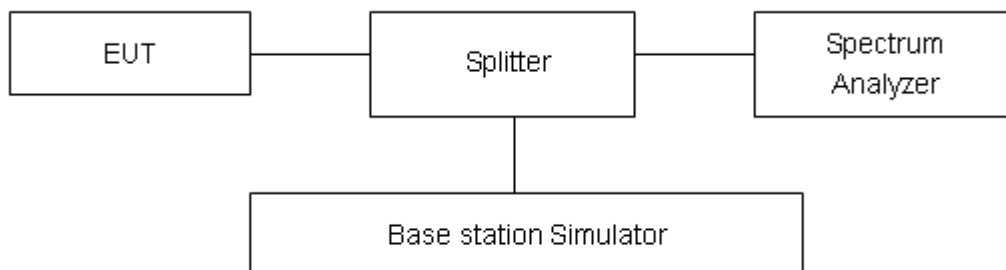

on spectrum analyzer.

Set spectrum analyzer with RMS detector.

The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

Checked that all the results comply with the emission limit line.

Test Setup

Limits

Rule Part 27.53(h) specifies that " for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB"

Rule Part 27.53(m) (4)/ specifies that "for BRS and EBS stations. For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel

edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(4) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Example:

The limit line is derived from 43 + 10log (P) dB below the transmitter power P(Watts)

= P(W)- [43 + 10log(P)] (dB)

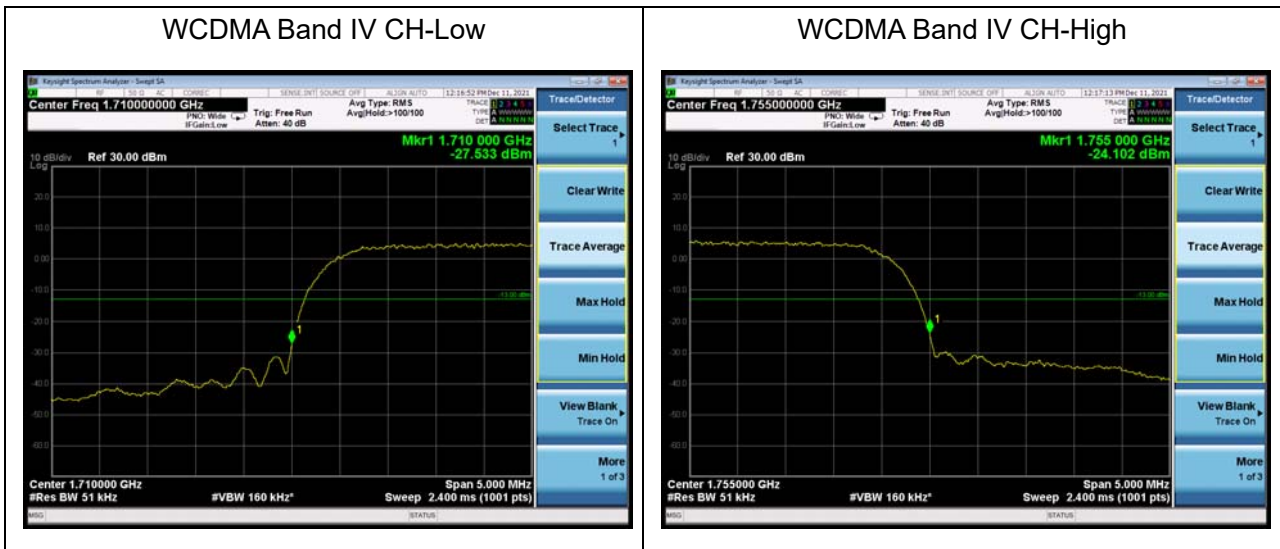= [30 + 10log (P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U=0.684dB.
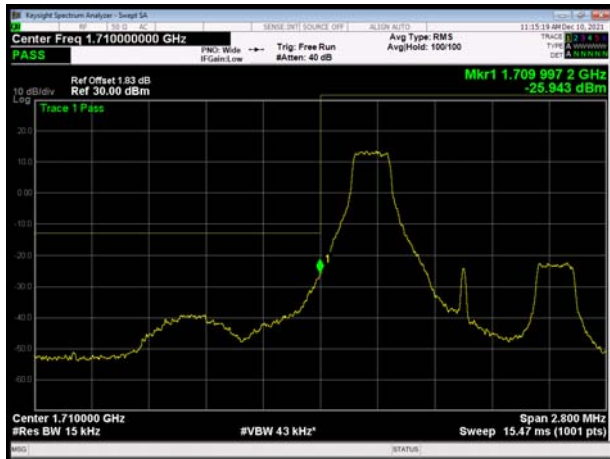
Test Result

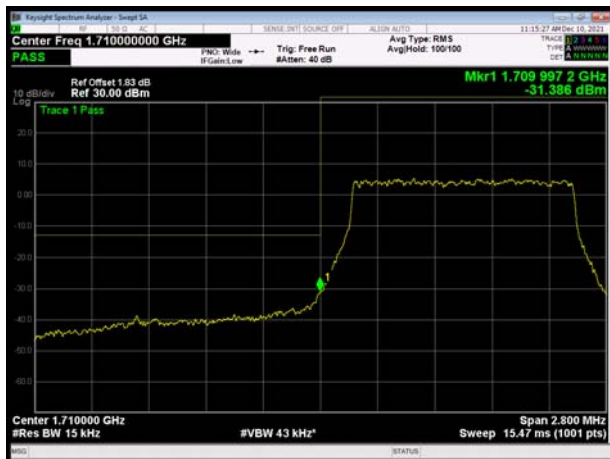All the test traces in the plots shows the test results clearly.

WCDMA Band IV CH-Low	WCDMA Band IV CH-High

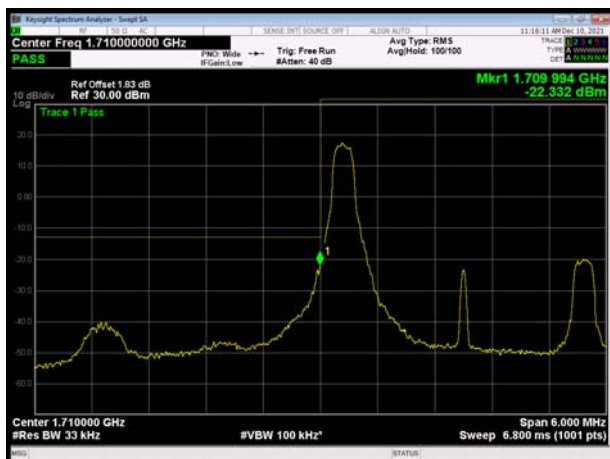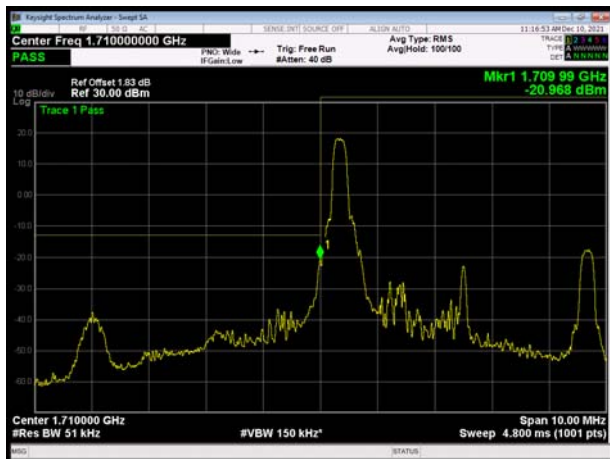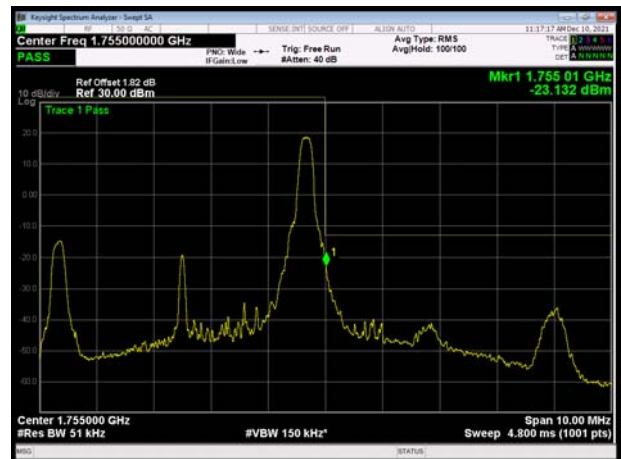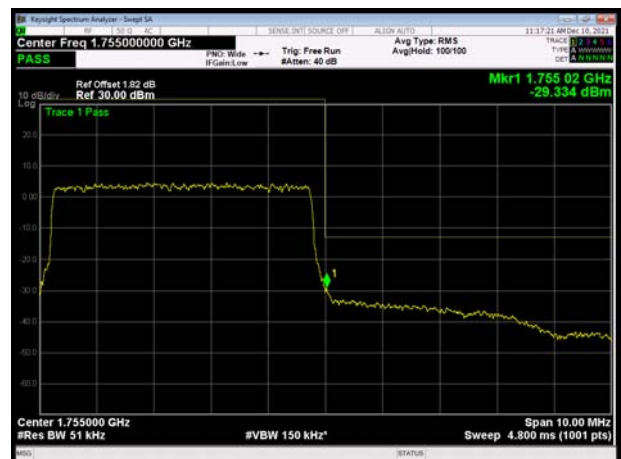| LTE Band 4 QPSK 1.4MHz CH-Low, 1 RB	LTE Band 4 QPSK 1.4MHz CH-High, 1 RB
LTE Band 4 QPSK 1.4MHz CH-Low, 100%RB	LTE Band 4 QPSK 1.4MHz CH-High, 100%RB
LTE Band 4 QPSK 3MHz CH-Low, 1 RB	LTE Band 4 QPSK 3MHz CH-High, 1 RB
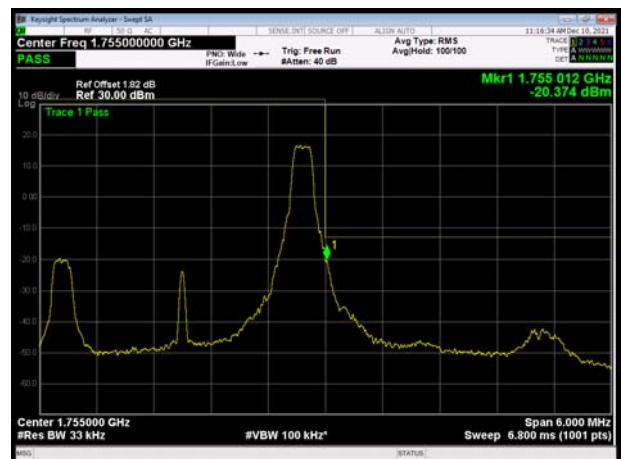
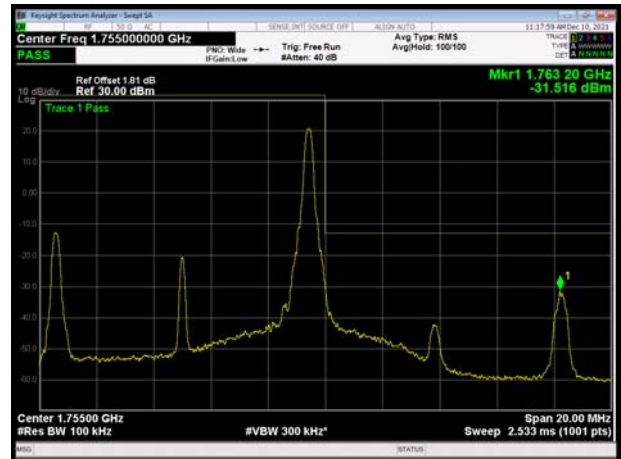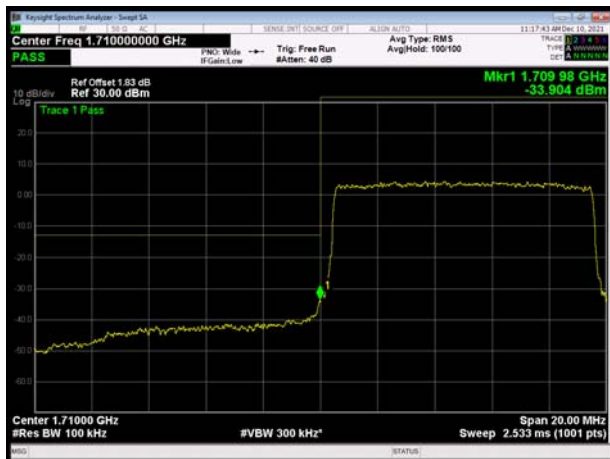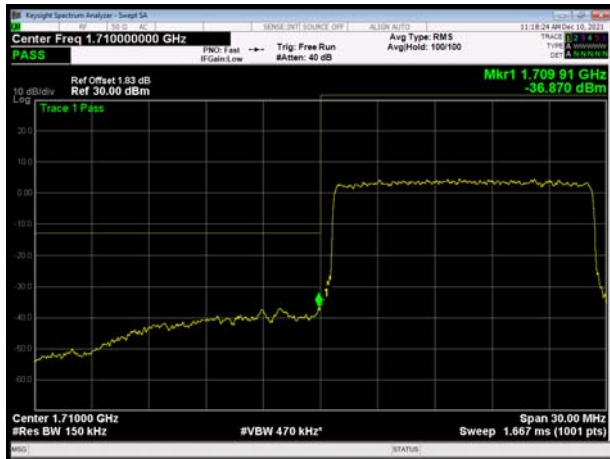| LTE Band 4 QPSK 3MHz CH-Low, 100%RB	LTE Band 4 QPSK 3MHz CH-High, 100%RB
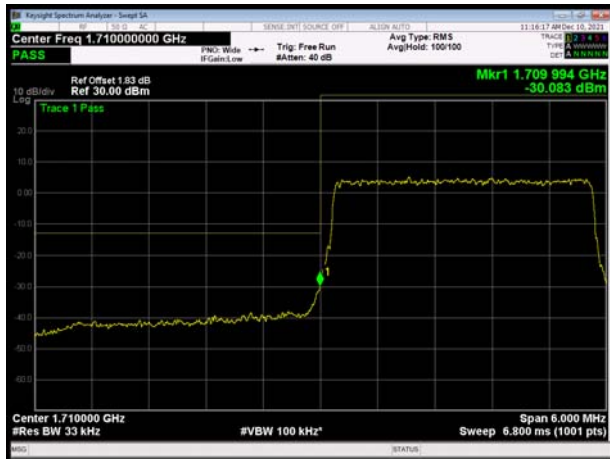
LTE Band 4 QPSK 5MHz CH-Low, 1 RB	LTE Band 4 QPSK 5MHz CH-High, 1 RB

LTE Band 4 QPSK 5MHz CH-Low, 100%RB	LTE Band 4 QPSK 5MHz CH-High, 100%RB
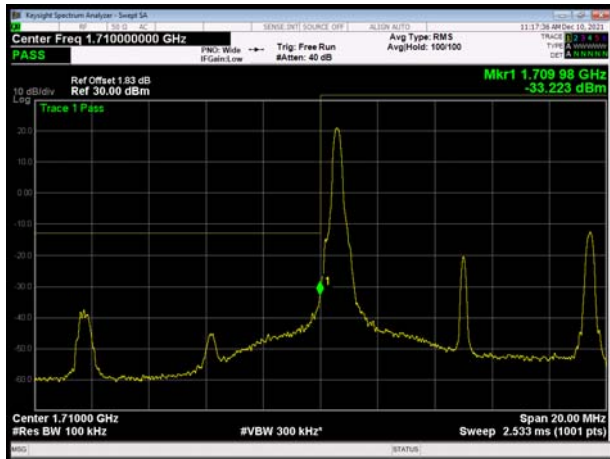
LTE Band 4 QPSK 10MHz CH-Low, 1 RB	LTE Band 4 QPSK 10MHz CH-High, 1 RB

LTE Band 4 QPSK 10MHz CH-Low, 100%RB	LTE Band 4 QPSK 10MHz CH-High, 100%RB

LTE Band 4 QPSK 15MHz CH-Low, 1 RB	LTE Band 4 QPSK 15MHz CH-High, 1 RB

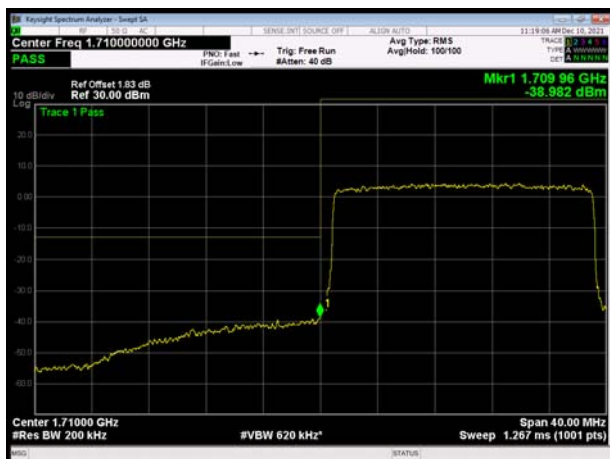| LTE Band 4 QPSK 15MHz CH-Low, 100%RB	LTE Band 4 QPSK 15MHz CH-High, 100%RB
LTE Band 4 QPSK 20MHz CH-Low, 1 RB	LTE Band 4 QPSK 20MHz CH-High, 1 RB
LTE Band 4 QPSK 20MHz CH-Low, 100%RB	LTE Band 4 QPSK 20MHz CH-High, 100%RB

TA Technology (Shanghai) Co., Ltd.   **TA-MB-05-003R**   **Page 64 of 141**

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.
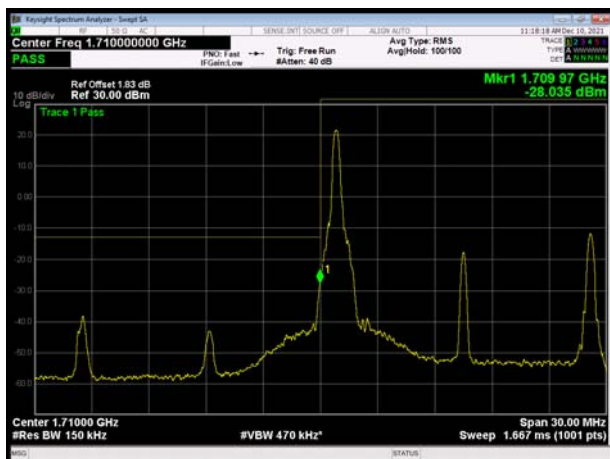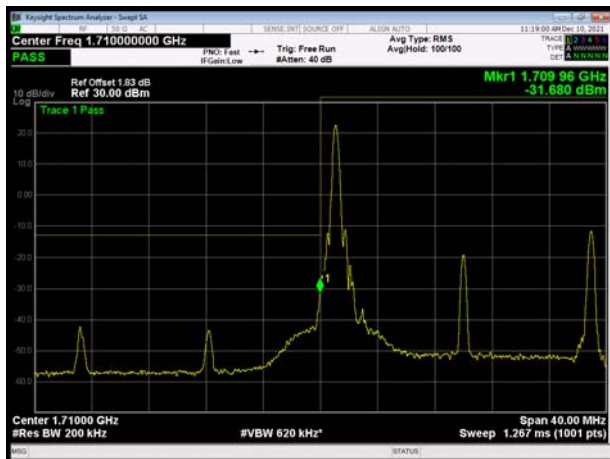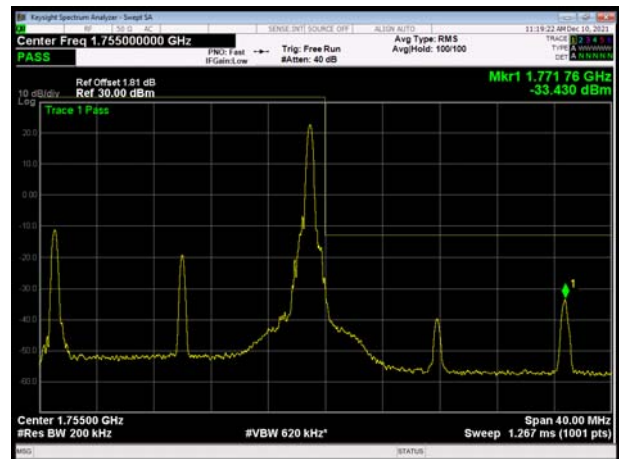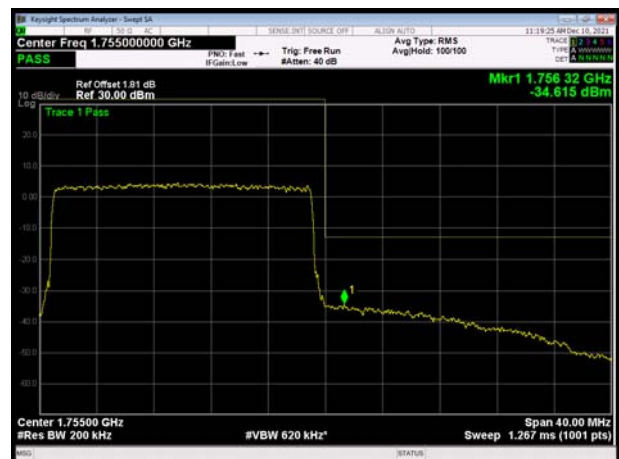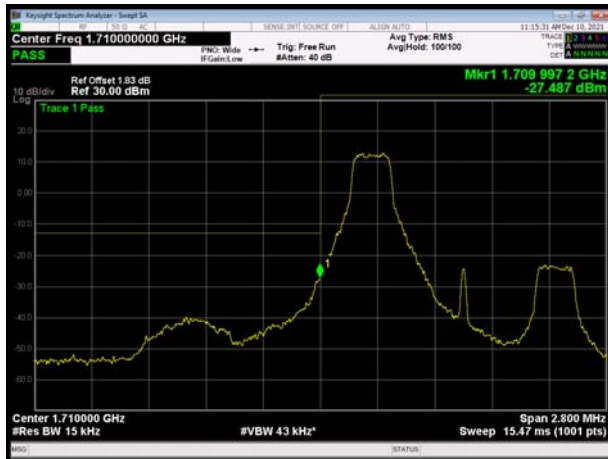
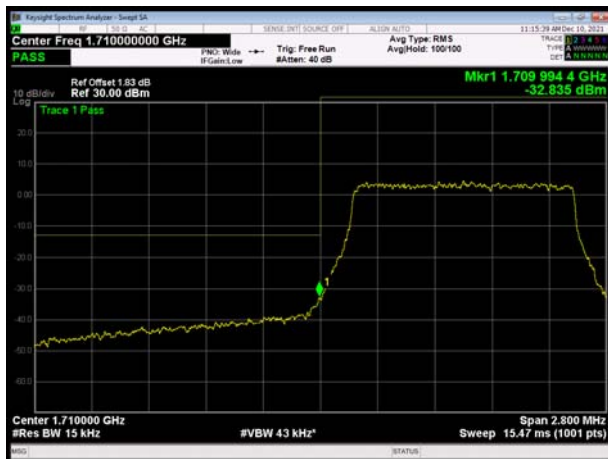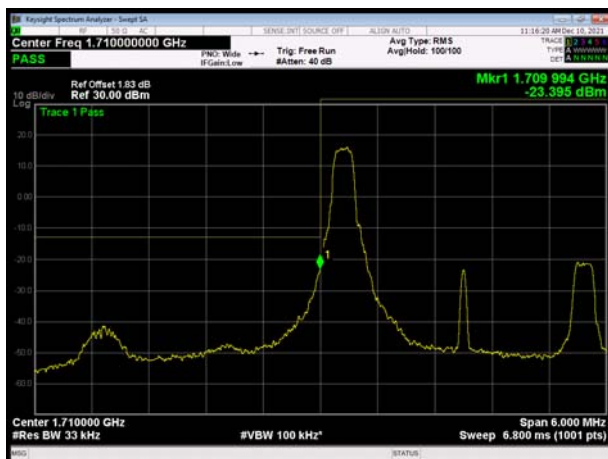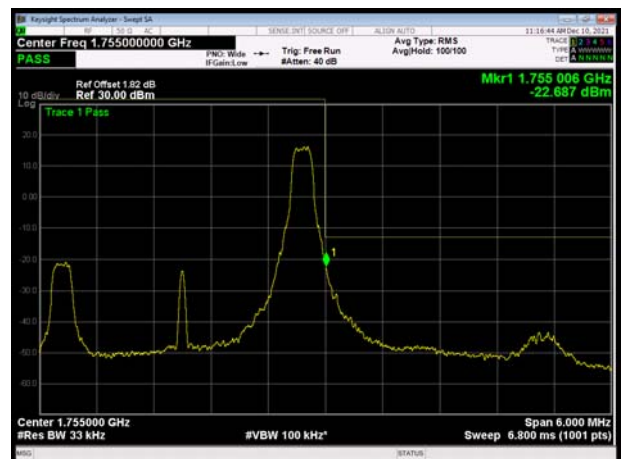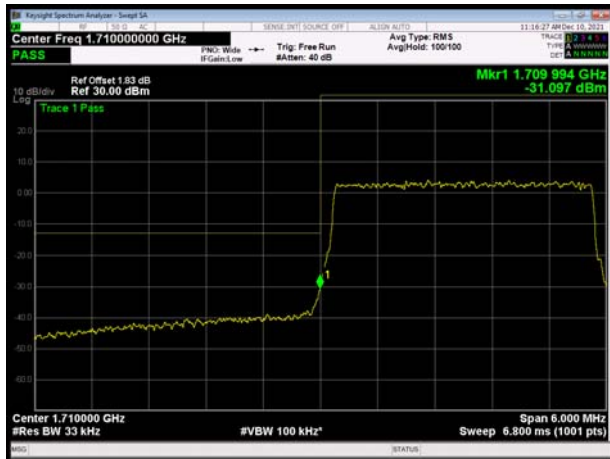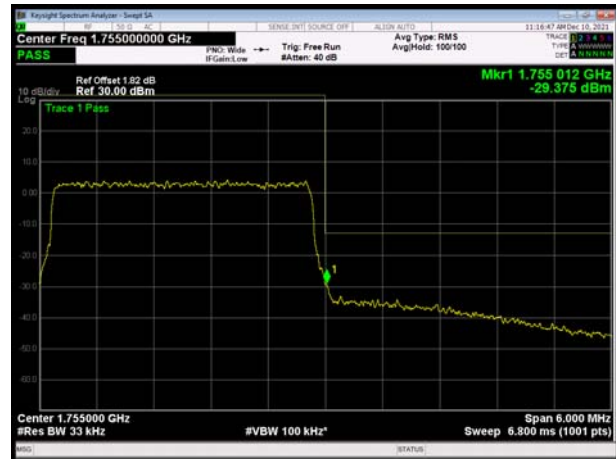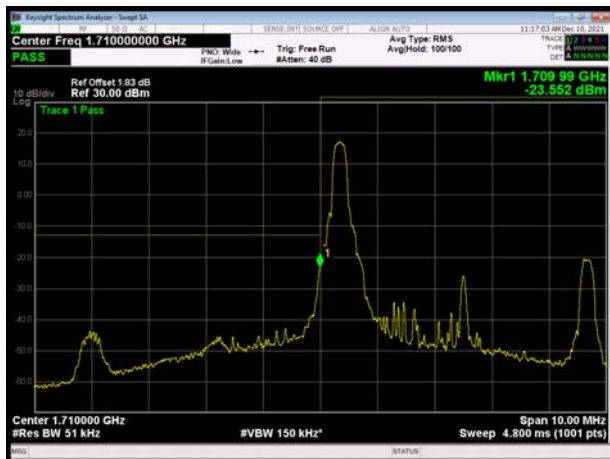| LTE Band 4 16QAM 1.4MHz CH-Low, 1 RB	LTE Band 4 16QAM 1.4MHz CH-High, 1 RB
LTE Band 4 16QAM 1.4MHz CH-Low, 100%RB	LTE Band 4 16QAM 1.4MHz CH-High, 100%RB
LTE Band 4 16QAM 3MHz CH-Low, 1 RB	LTE Band 4 16QAM 3MHz CH-High, 1 RB

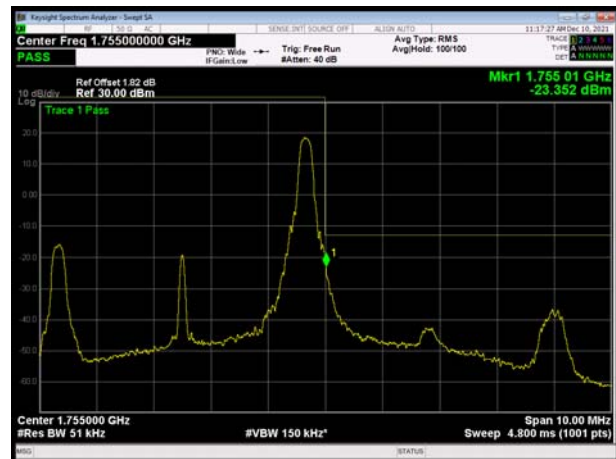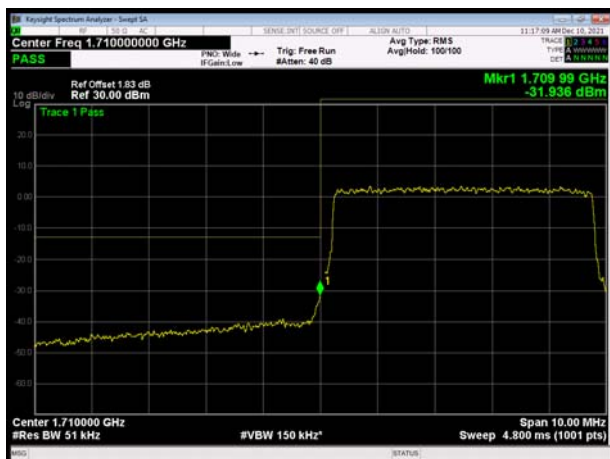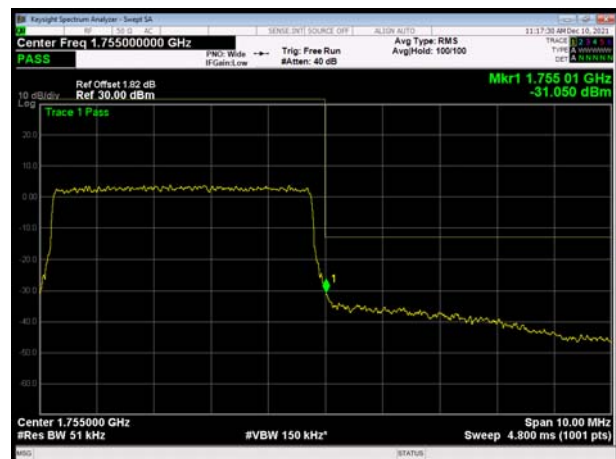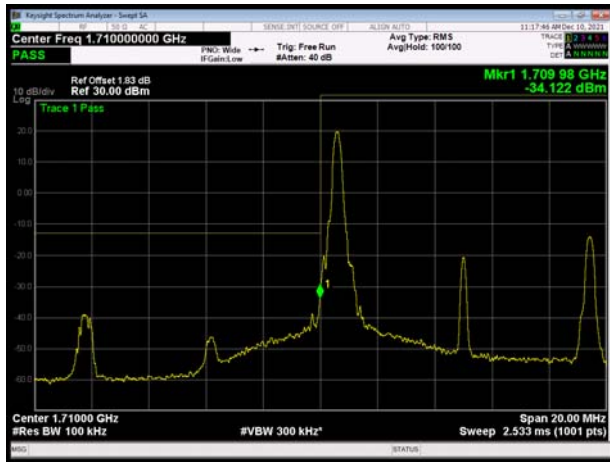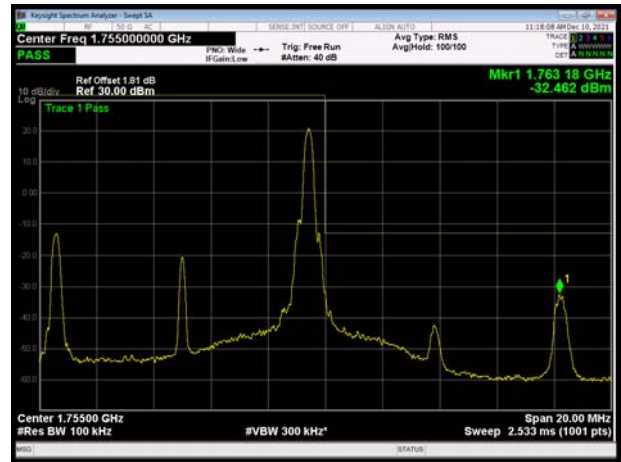| LTE Band 4 16QAM 3MHz CH-Low, 100%RB	LTE Band 4 16QAM 3MHz CH-High, 100%RB
LTE Band 4 16QAM 5MHz CH-Low, 1 RB	LTE Band 4 16QAM 5MHz CH-High, 1 RB
LTE Band 4 16QAM 5MHz CH-Low, 100%RB	LTE Band 4 16QAM 5MHz CH-High, 100%RB

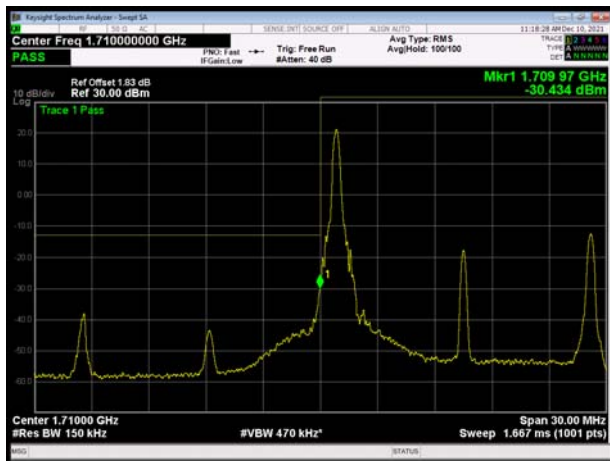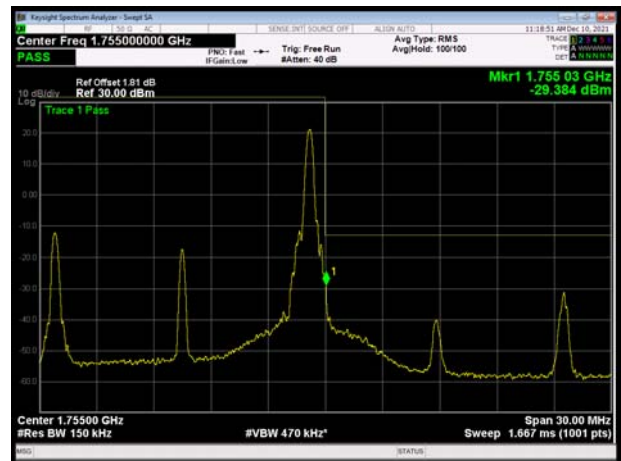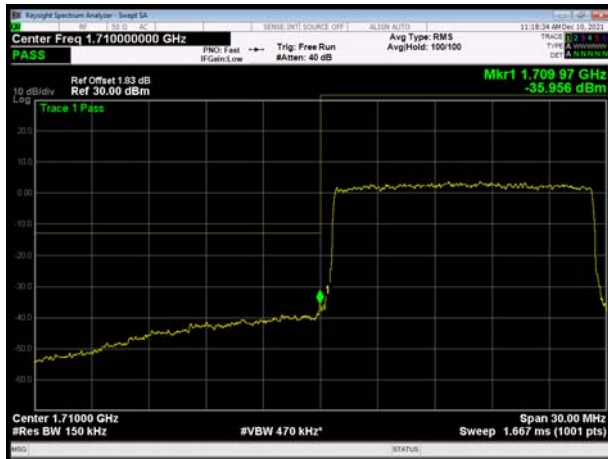| LTE Band 4 16QAM 10MHz CH-Low, 1 RB	LTE Band 4 16QAM 10MHz CH-High, 1 RB
LTE Band 4 16QAM 10MHz CH-Low, 100%RB	LTE Band 4 16QAM 10MHz CH-High, 100%RB
LTE Band 4 16QAM 15MHz CH-Low, 1 RB	LTE Band 4 16QAM 15MHz CH-High, 1 RB

TA Technology (Shanghai) Co., Ltd.   **TA-MB-05-003R**   **Page 67 of 141**

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.
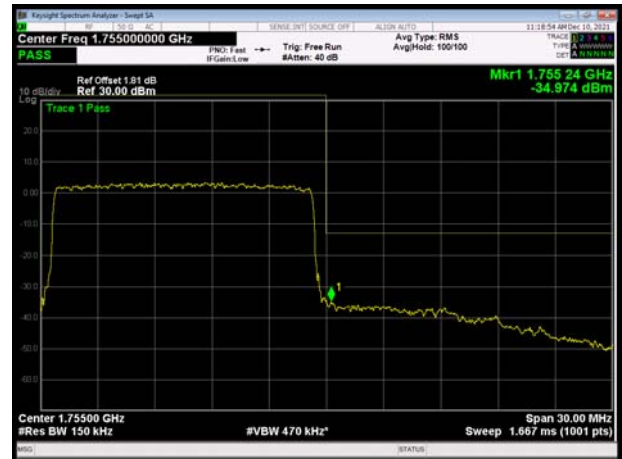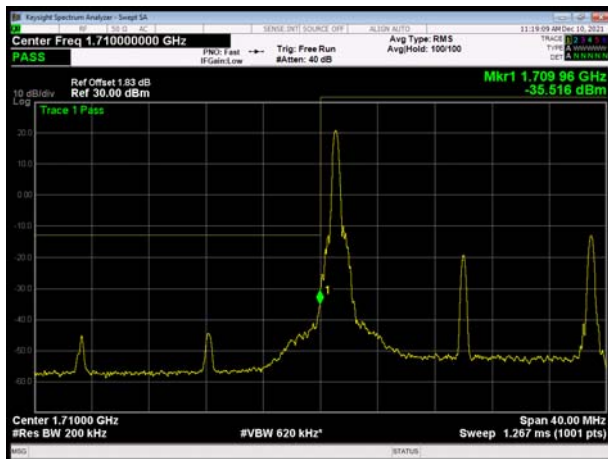
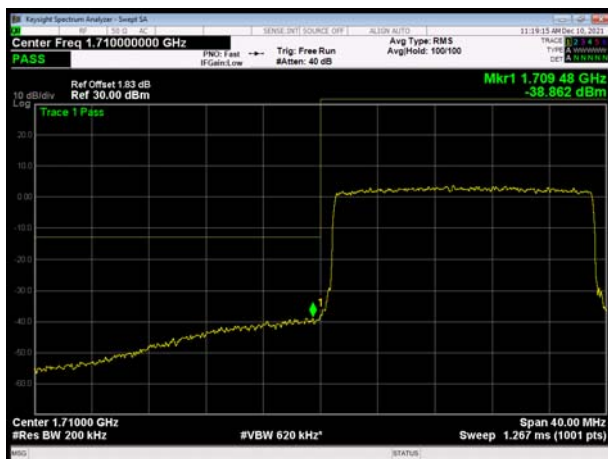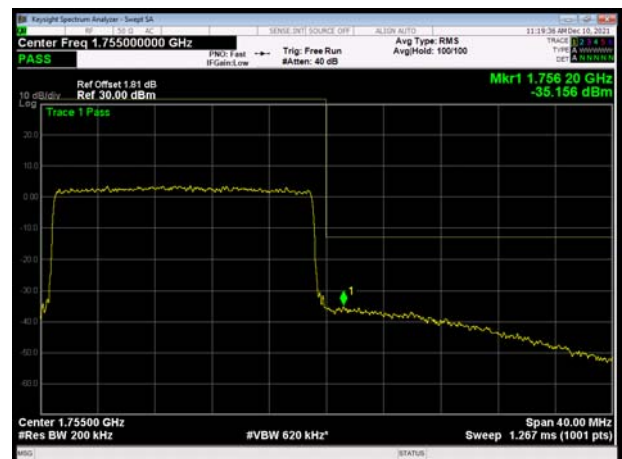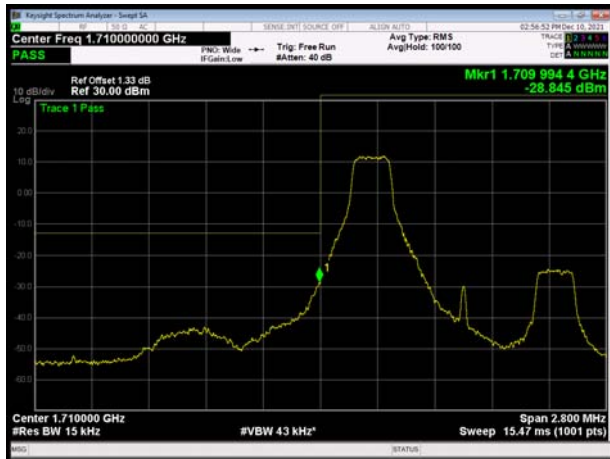| LTE Band 4 16QAM 15MHz CH-Low, 100%RB	LTE Band 4 16QAM 15MHz CH-High, 100%RB
LTE Band 4 16QAM 20MHz CH-Low, 1 RB	LTE Band 4 16QAM 20MHz CH-High, 1 RB
LTE Band 4 16QAM 20MHz CH-Low, 100%RB	LTE Band 4 16QAM 20MHz CH-High, 100%RB

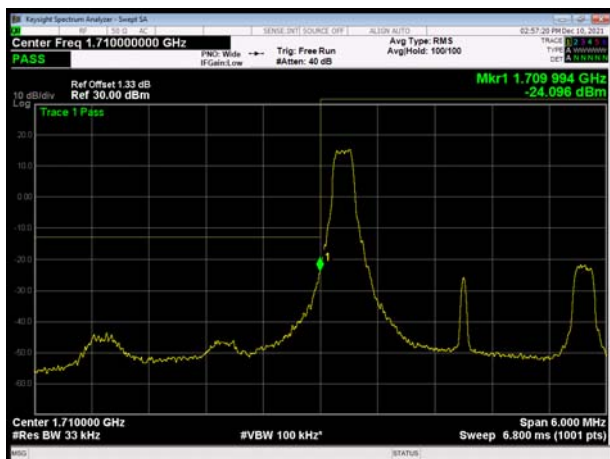| LTE Band 4 64QAM 1.4MHz CH-Low, 1 RB	LTE Band 4 64QAM 1.4MHz CH-High, 1 RB

LTE Band 4 64QAM 1.4MHz CH-Low, 100%RB	LTE Band 4 64QAM 1.4MHz CH-High, 100%RB

LTE Band 4 64QAM 3MHz CH-Low, 1 RB	LTE Band 4 64QAM 3MHz CH-High, 1 RB

TA Technology (Shanghai) Co., Ltd.   **TA-MB-05-003R**   **Page 69 of 141**

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

LTE Band 4 64QAM 3MHz CH-Low, 100%RB	LTE Band 4 64QAM 3MHz CH-High, 100%RB

LTE Band 4 64QAM 5MHz CH-Low, 1 RB	LTE Band 4 64QAM 5MHz CH-High, 1 RB

LTE Band 4 64QAM 5MHz CH-Low, 100%RB	LTE Band 4 64QAM 5MHz CH-High, 100%RB

LTE Band 4 64QAM 10MHz CH-Low, 1 RB	LTE Band 4 64QAM 10MHz CH-High, 1 RB

LTE Band 4 64QAM 10MHz CH-Low, 100%RB	LTE Band 4 64QAM 10MHz CH-High, 100%RB

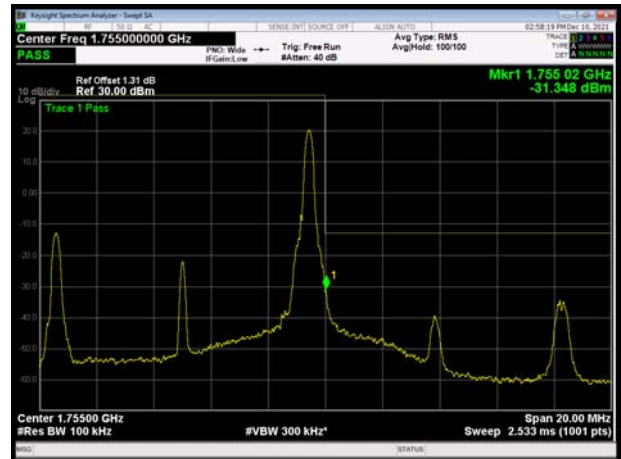| LTE Band 4 64QAM 15MHz CH-Low, 1 RB	LTE Band 4 64QAM 15MHz CH-High, 1 RB

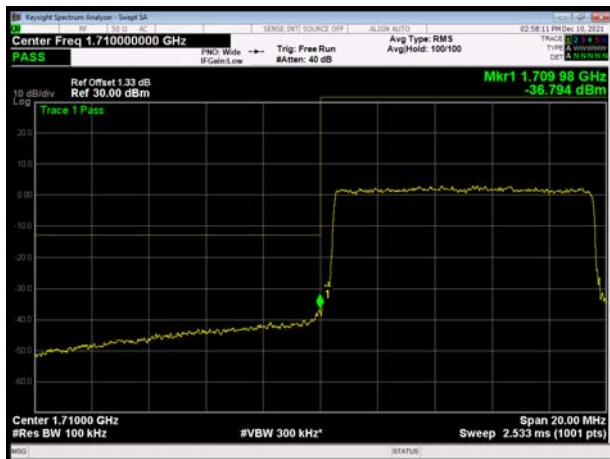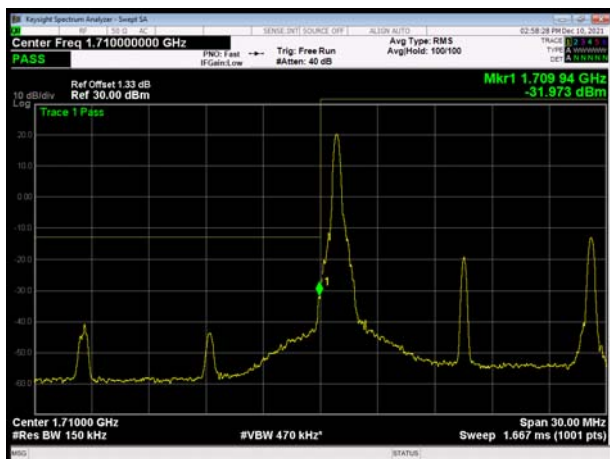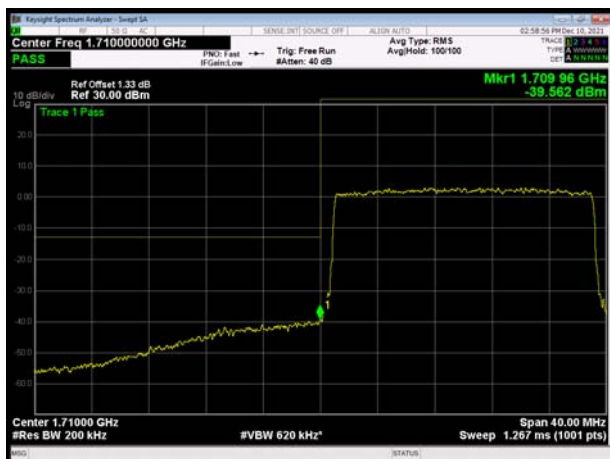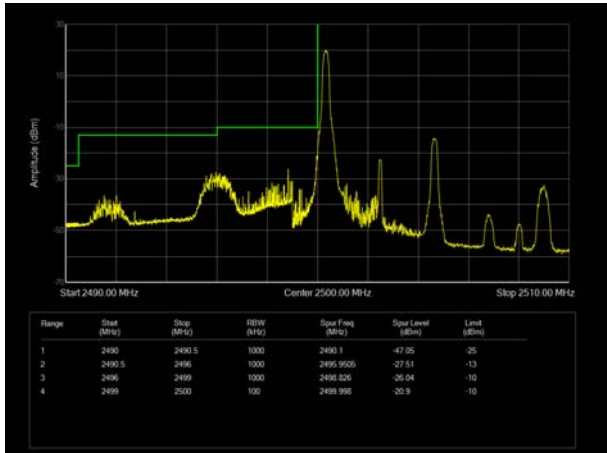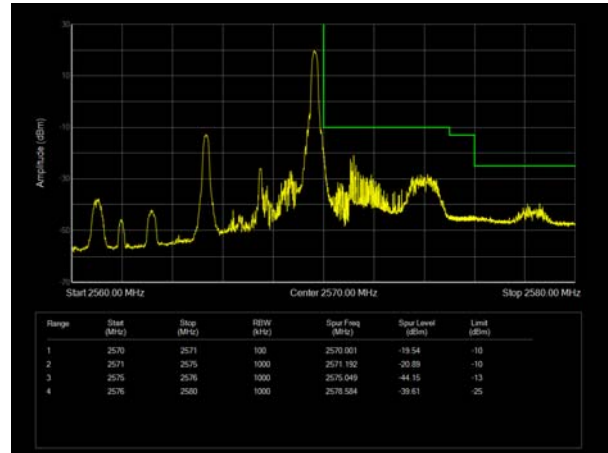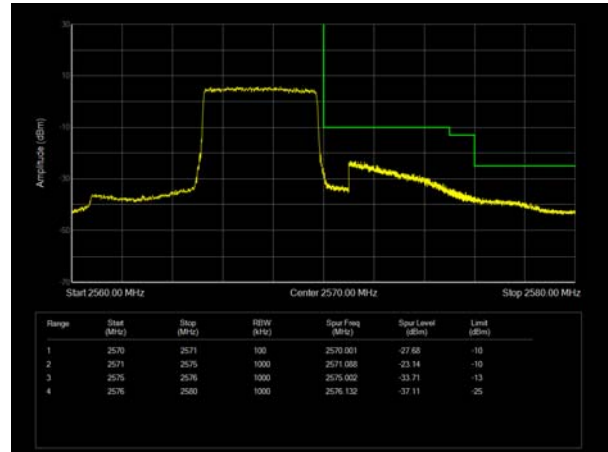| LTE Band 4 64QAM 15MHz CH-Low, 100%RB	LTE Band 4 64QAM 15MHz CH-High, 100%RB
LTE Band 4 64QAM 20MHz CH-Low, 1 RB	LTE Band 4 64QAM 20MHz CH-High, 1 RB
LTE Band 4 64QAM 20MHz CH-Low, 100%RB	LTE Band 4 64QAM 20MHz CH-High, 100%RB

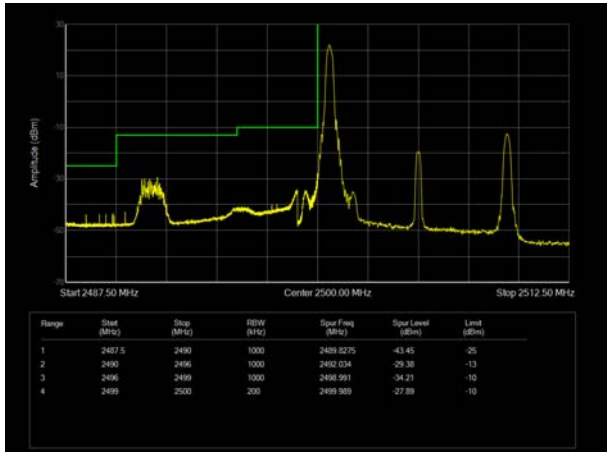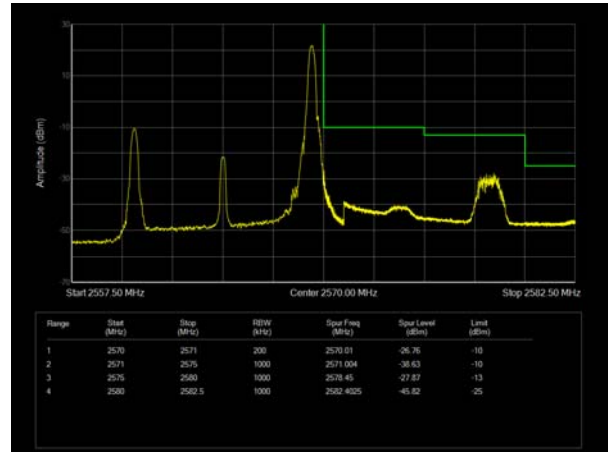| LTE Band 7 QPSK 5MHz CH-Low, 1 RB	LTE Band 7 QPSK 5MHz CH-High, 1 RB

LTE Band 7 QPSK 5MHz CH-Low, 100%RB	LTE Band 7 QPSK 5MHz CH-High, 100%RB

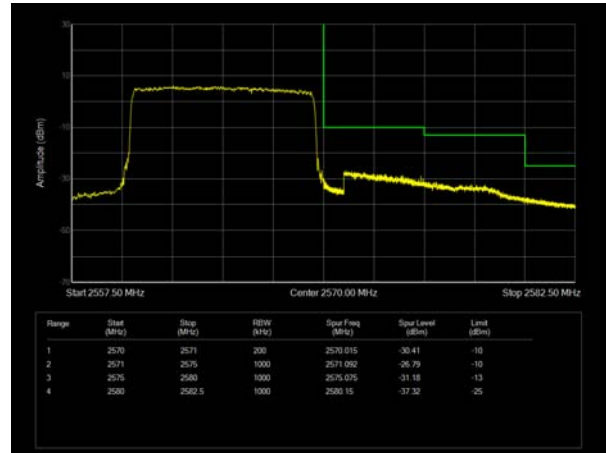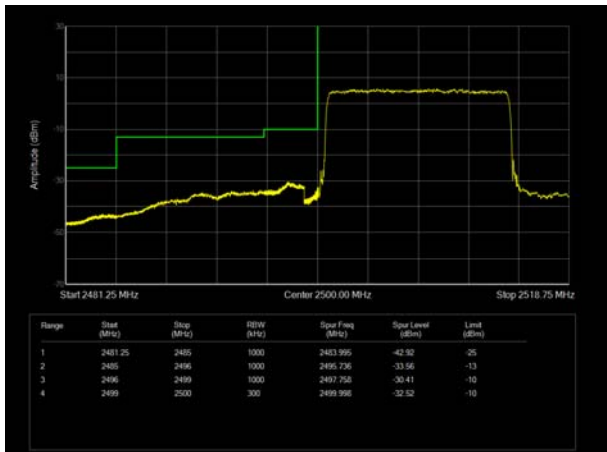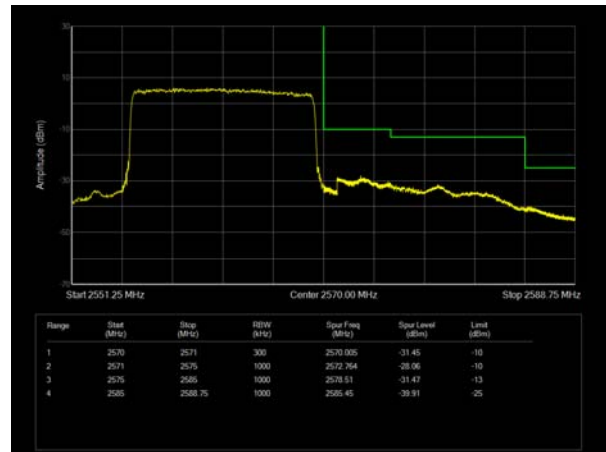| LTE Band 7 QPSK 10MHz CH-Low, 1 RB	LTE Band 7 QPSK 10MHz CH-High, 1 RB

LTE Band 7 QPSK 10MHz CH-Low, 100%RB

Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2487.5	2490	1000	2489.96	-39.48	-25
2	2490	2496	1000	2495.322	-32.21	-13
3	2496	2499	1000	2496.952	-29.4	-10
4	2499	2500	200	2499.991	-29.95	-10

LTE Band 7 QPSK 10MHz CH-High, 100%RB

Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	200	2570.015	-30.41	-10
2	2571	2575	1000	2571.092	-26.79	-10
3	2575	2580	1000	2575.075	-31.18	-13
4	2580	2582.5	1000	2580.15	-37.32	-25

LTE Band 7 QPSK 15MHz CH-Low, 1 RB

Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2481.25	2485	1000	2482.86625	-47.21	-25
2	2485	2496	1000	2487.893	-31.69	-13
3	2496	2499	1000	2498.97	-37.99	-10
4	2499	2500	300	2499.989	-23.35	-10

LTE Band 7 QPSK 15MHz CH-High, 1 RB

Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	300	2570.022	-24.77	-10
2	2571	2575	1000	2571.032	-37.15	-10
3	2575	2585	1000	2582.5	-27.97	-13
4	2585	2588.75	1000	2587.2125	-47	-25

LTE Band 7 QPSK 15MHz CH-Low, 100%RB

Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2481.25	2485	1000	2483.995	-42.92	-25
2	2485	2496	1000	2495.736	-33.56	-13
3	2496	2499	1000	2497.758	-30.41	-10
4	2499	2500	300	2499.998	-32.52	-10

LTE Band 7 QPSK 15MHz CH-High, 100%RB

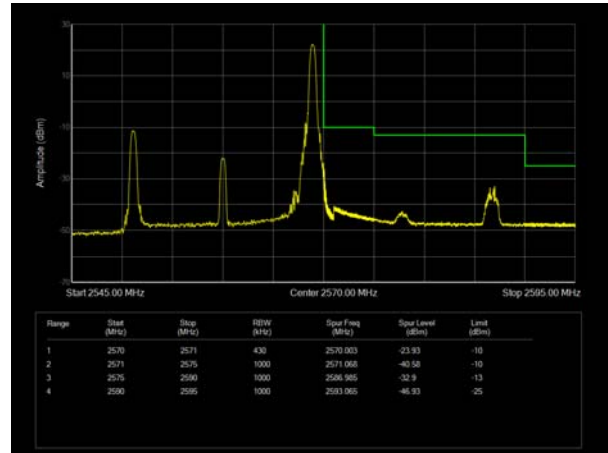| Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2570	2571	300	2570.005	-31.45	-10
2	2571	2575	1000	2572.764	-28.06	-10
3	2575	2585	1000	2578.51	-31.47	-13
4	2585	2588.75	1000	2585.45	-39.91	-25

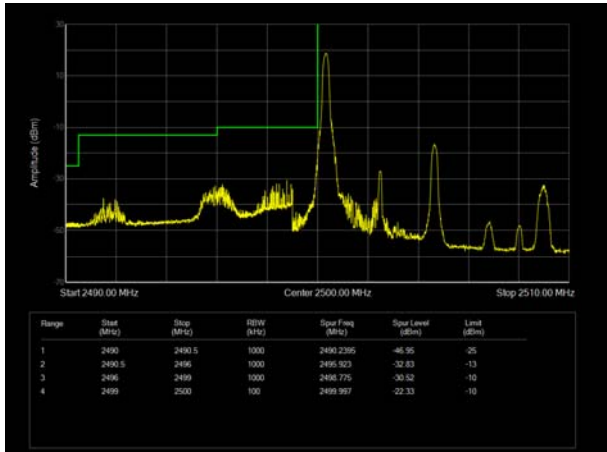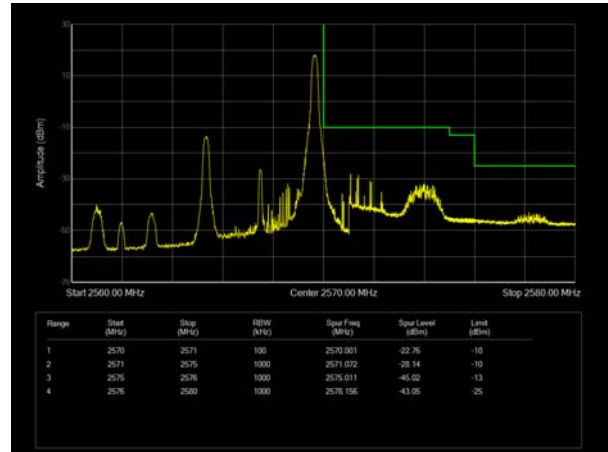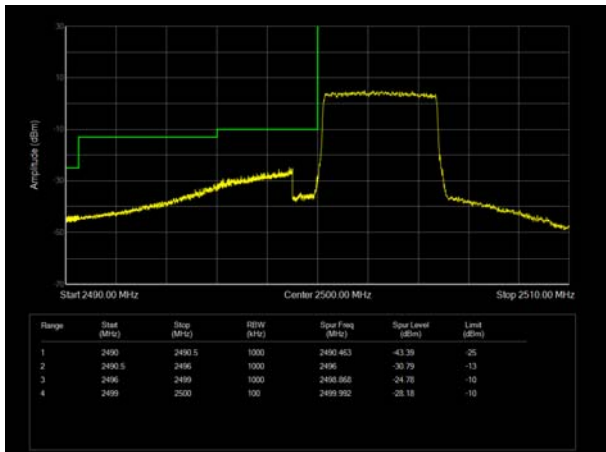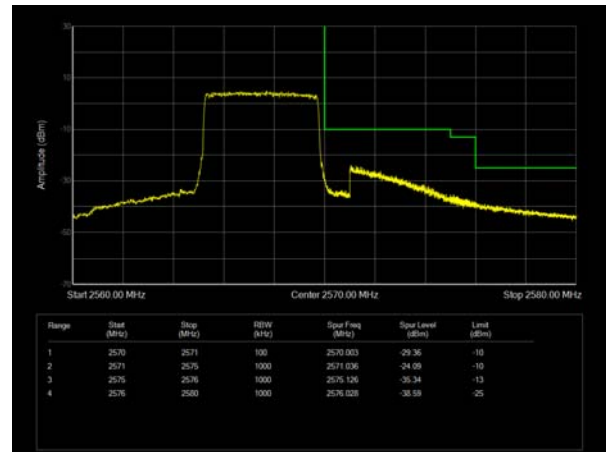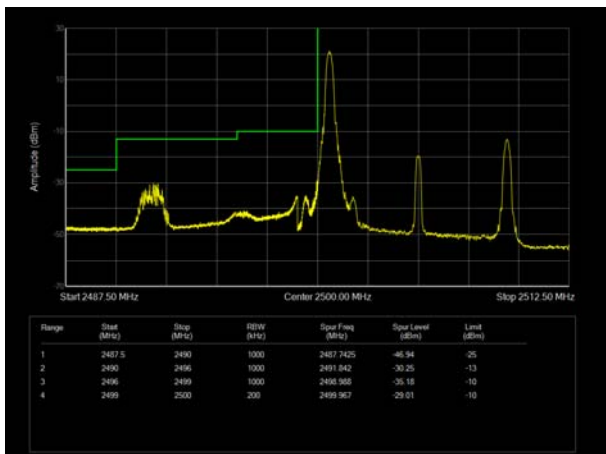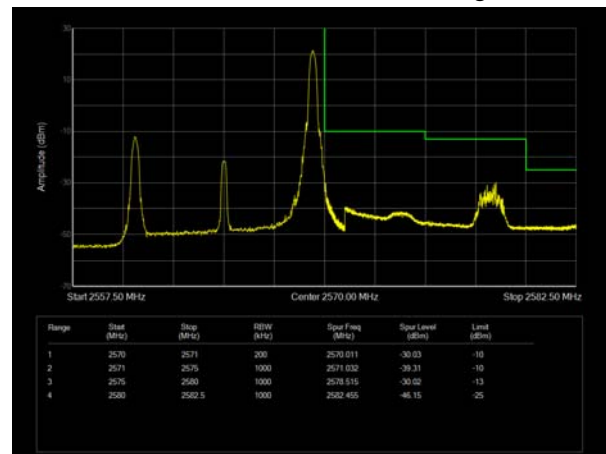| LTE Band 7 QPSK 20MHz CH-Low, 1 RB	LTE Band 7 QPSK 20MHz CH-High, 1 RB
LTE Band 7 QPSK 20MHz CH-Low, 100%RB	LTE Band 7 QPSK 20MHz CH-High, 100%RB
LTE Band 7 16QAM 5MHz CH-Low, 1 RB	LTE Band 7 16QAM 5MHz CH-High, 1 RB

LTE Band 7 16QAM 5MHz CH-Low, 100%RB
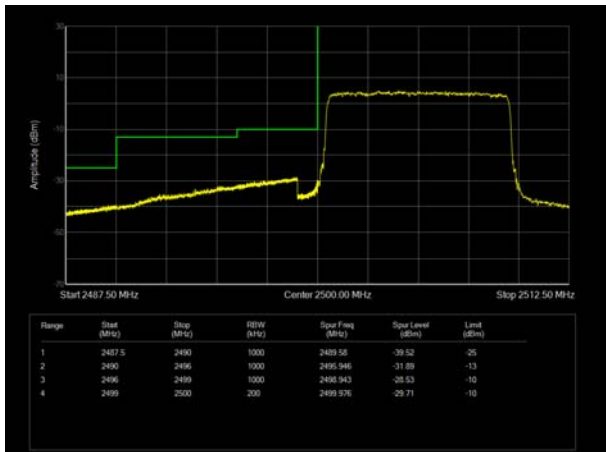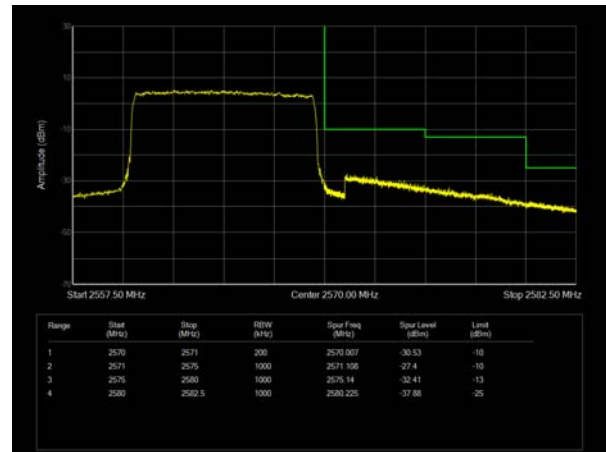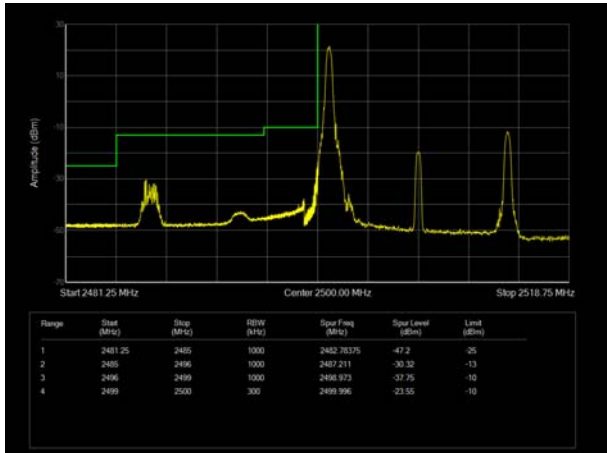

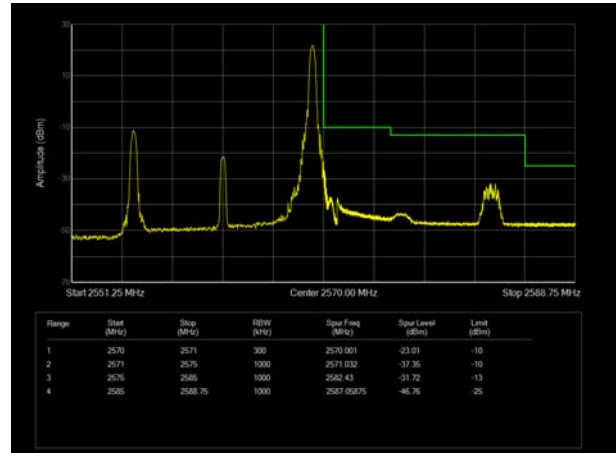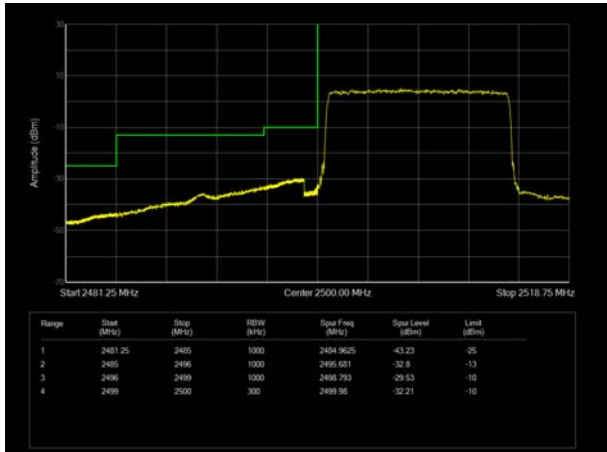## LTE Band 7 16QAM 5MHz CH-High, 100%RB
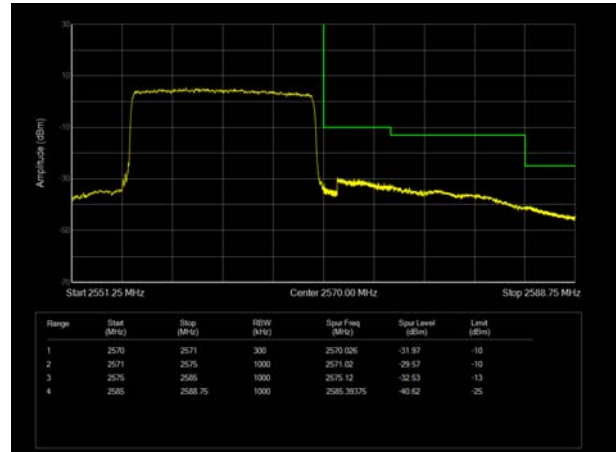

LTE Band 7 16QAM 10MHz CH-Low, 1 RB

LTE Band 7 16QAM 10MHz CH-High, 1 RB

LTE Band 7 16QAM 10MHz CH-Low, 100%RB

LTE Band 7 16QAM 10MHz CH-High, 100%RB

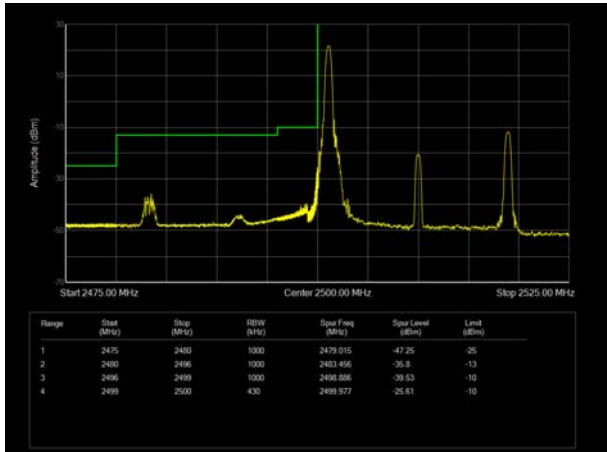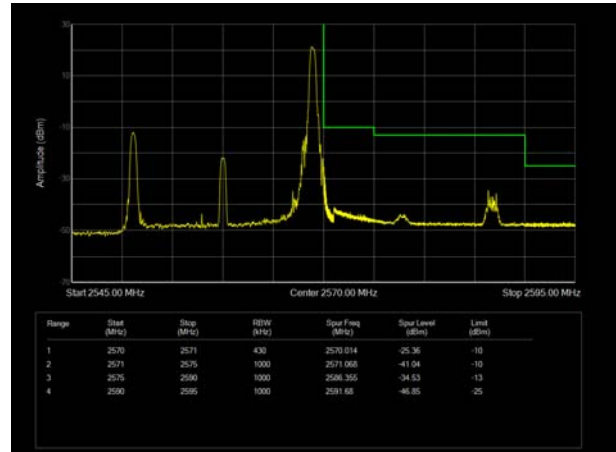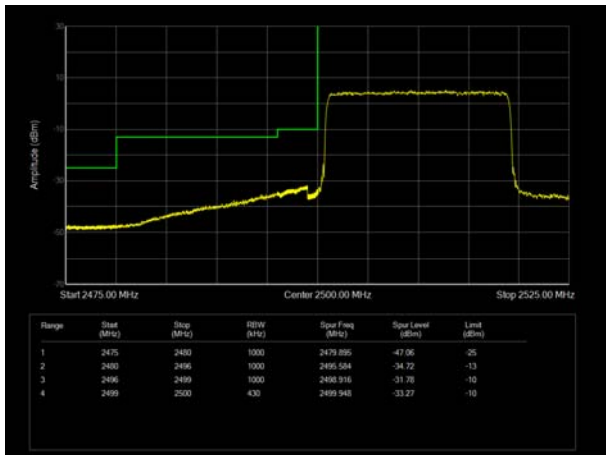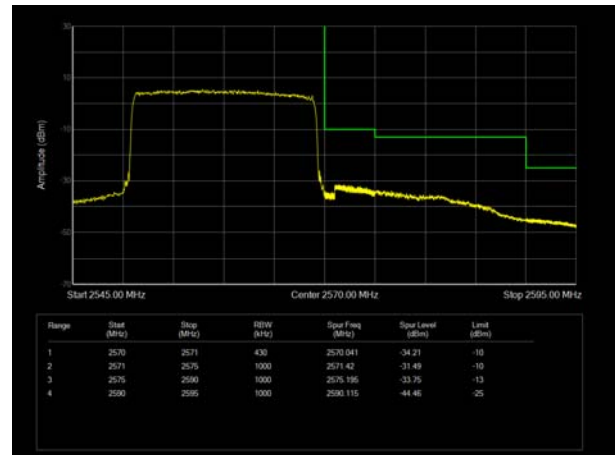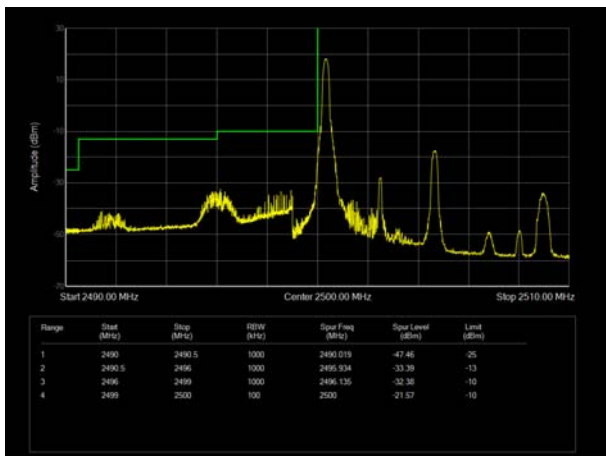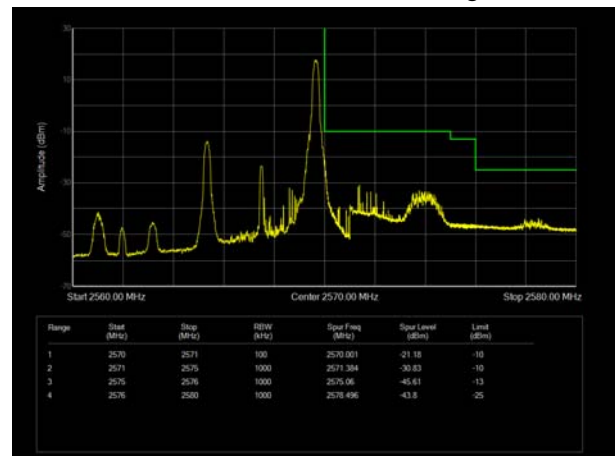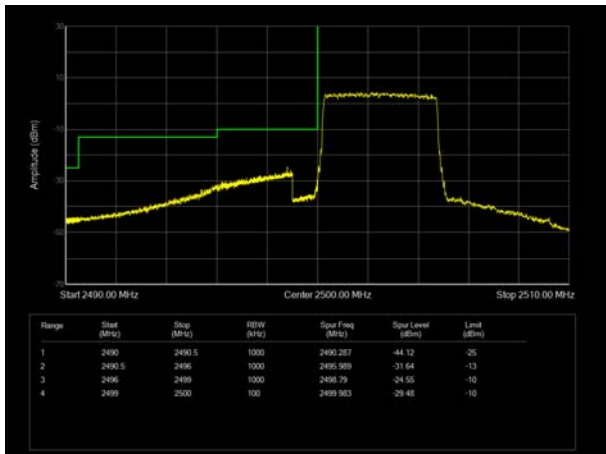| LTE Band 7 16QAM 15MHz CH-Low, 1 RB	LTE Band 7 16QAM 15MHz CH-High, 1 RB
LTE Band 7 16QAM 15MHz CH-Low, 100%RB	LTE Band 7 16QAM 15MHz CH-High, 100%RB
LTE Band 7 16QAM 20MHz CH-Low, 1 RB	LTE Band 7 16QAM 20MHz CH-High, 1 RB

LTE Band 7 16QAM 20MHz CH-Low, 100%RB

LTE Band 7 16QAM 20MHz CH-High, 100%RB

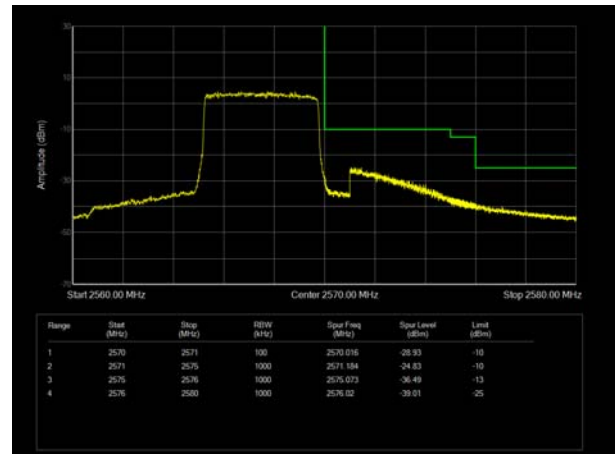## LTE Band 7 64QAM 5MHz CH-Low, 1 RB

LTE Band 7 64QAM 5MHz CH-High, 1 RB
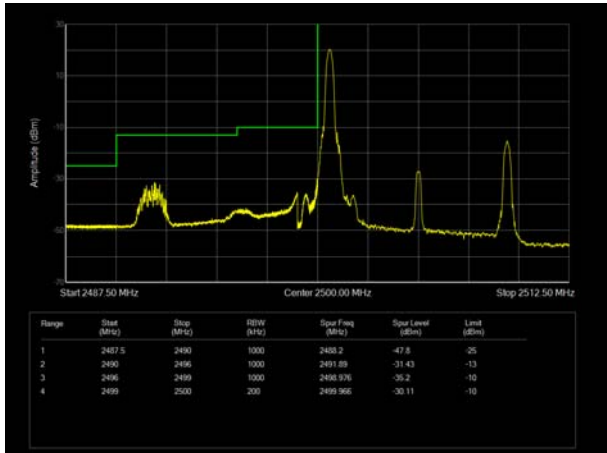

LTE Band 7 64QAM 5MHz CH-Low, 100%RB
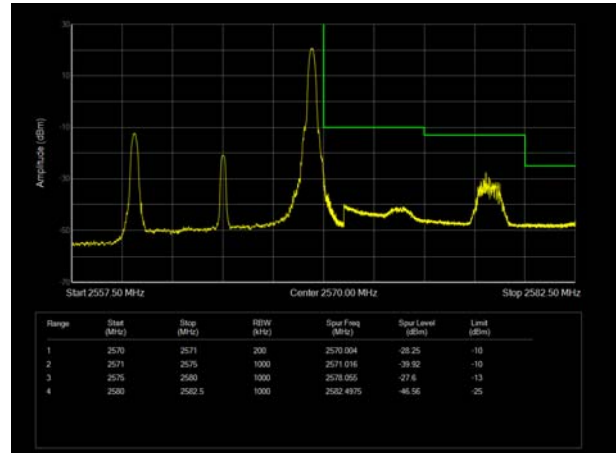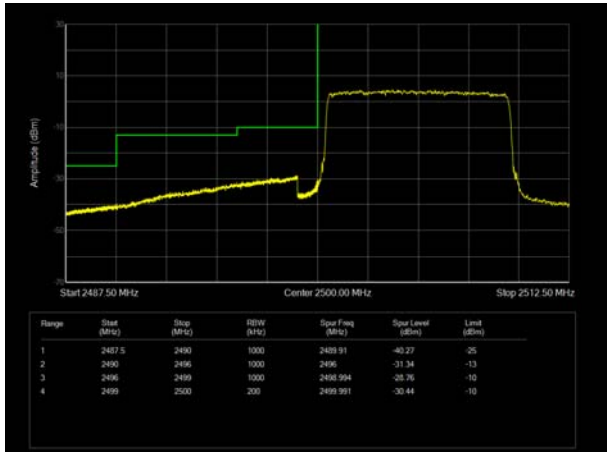

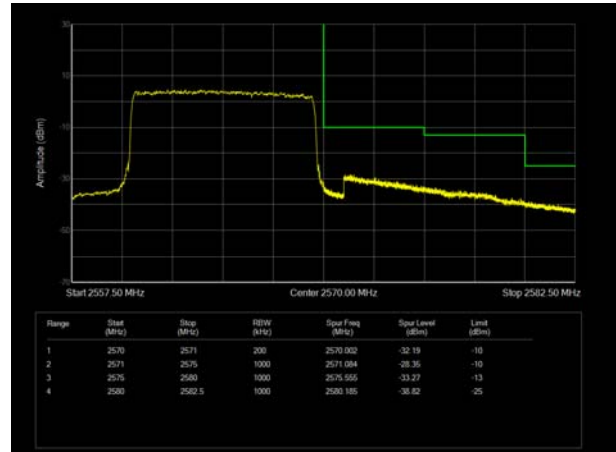## LTE Band 7 64QAM 5MHz CH-High, 100%RB

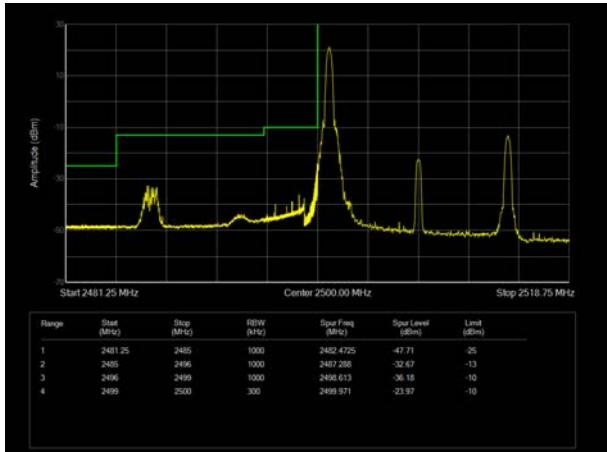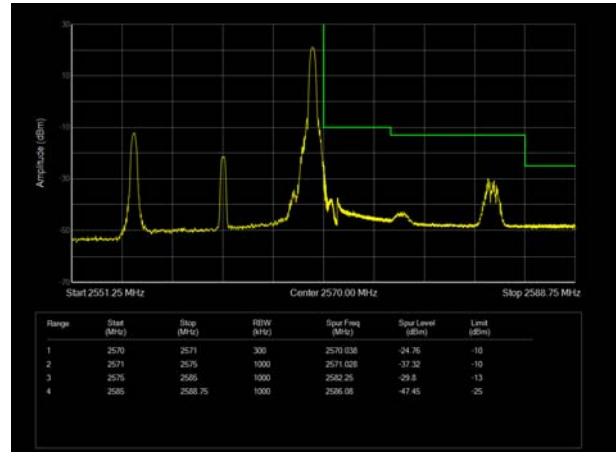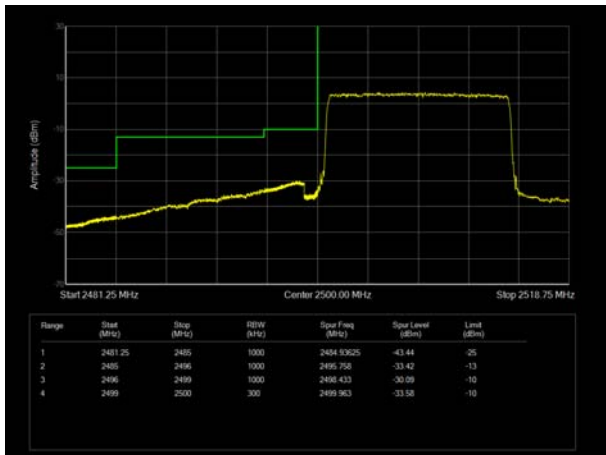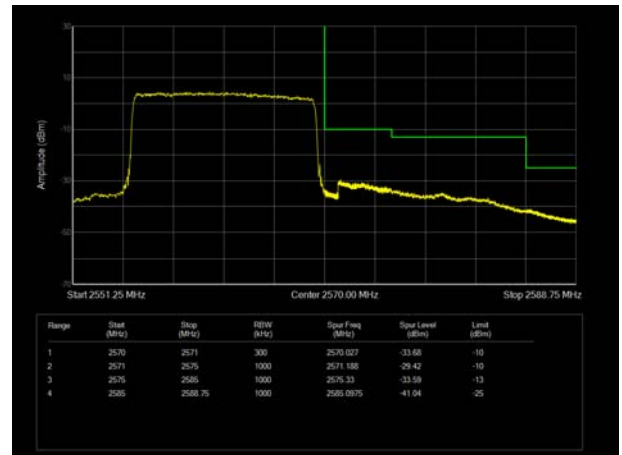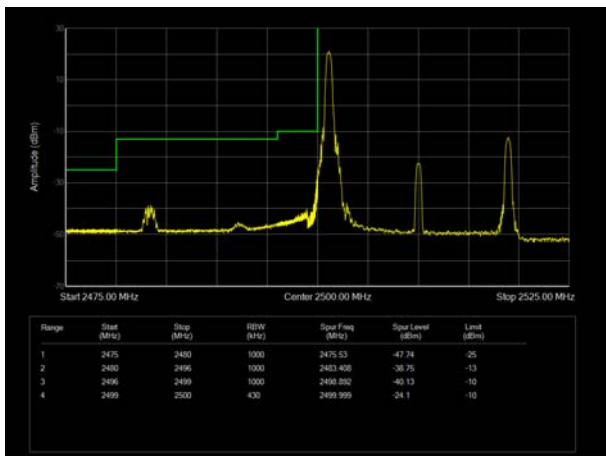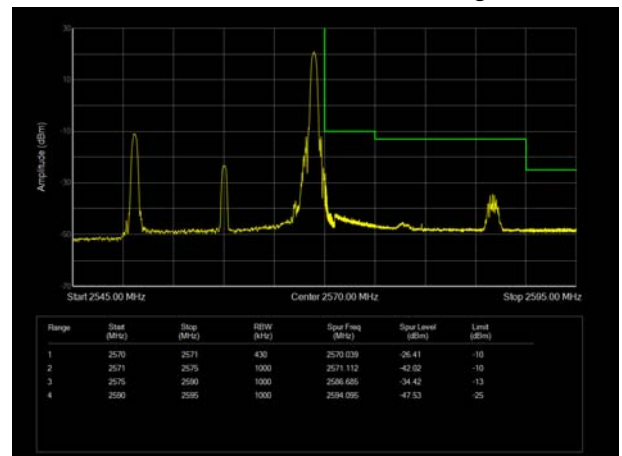| LTE Band 7 64QAM 10MHz CH-Low, 1 RB	LTE Band 7 64QAM 10MHz CH-High, 1 RB
LTE Band 7 64QAM 10MHz CH-Low, 100%RB	LTE Band 7 64QAM 10MHz CH-High, 100%RB
LTE Band 7 64QAM 15MHz CH-Low, 1 RB	LTE Band 7 64QAM 15MHz CH-High, 1 RB

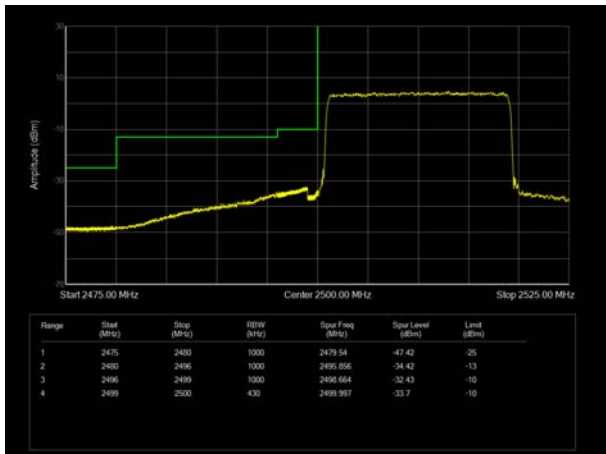| LTE Band 7 64QAM 15MHz CH-Low, 100%RB	LTE Band 7 64QAM 15MHz CH-High, 100%RB
LTE Band 7 64QAM 20MHz CH-Low, 1 RB	LTE Band 7 64QAM 20MHz CH-High, 1 RB
LTE Band 7 64QAM 20MHz CH-Low, 100%RB	LTE Band 7 64QAM 20MHz CH-High, 100%RB