



**15MHz / QPSK / High Channel**



**15MHz / 16QAM / High Channel**



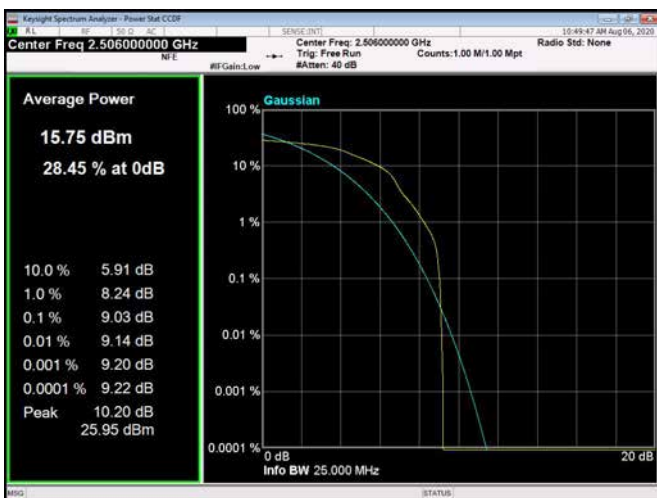
**15MHz / 64QAM / High Channel**



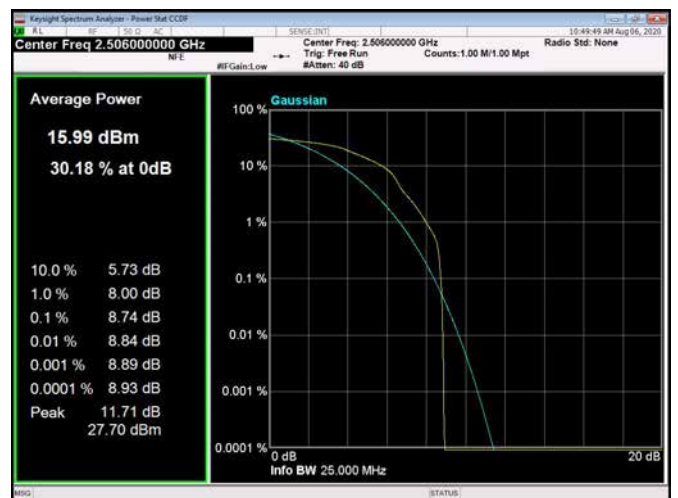
**20MHz / QPSK / Low Channel**



**20MHz / 16QAM / Low Channel**



**20MHz / 64QAM / Low Channel**





**20MHz / QPSK / Middle Channel**



**20MHz / 16QAM / Middle Channel**



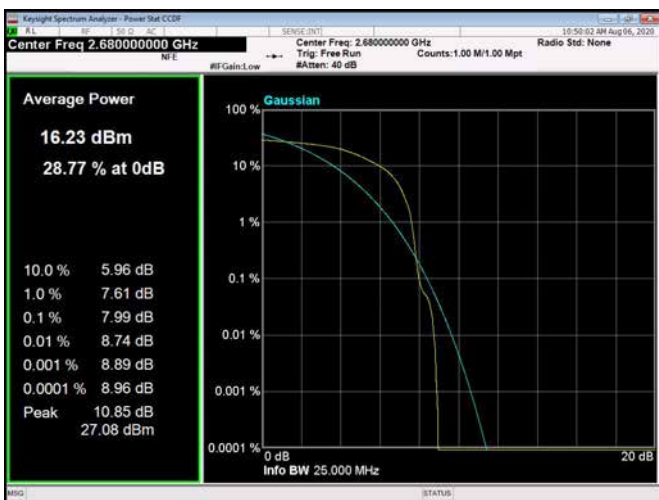
**20MHz / 64QAM / Middle Channel**



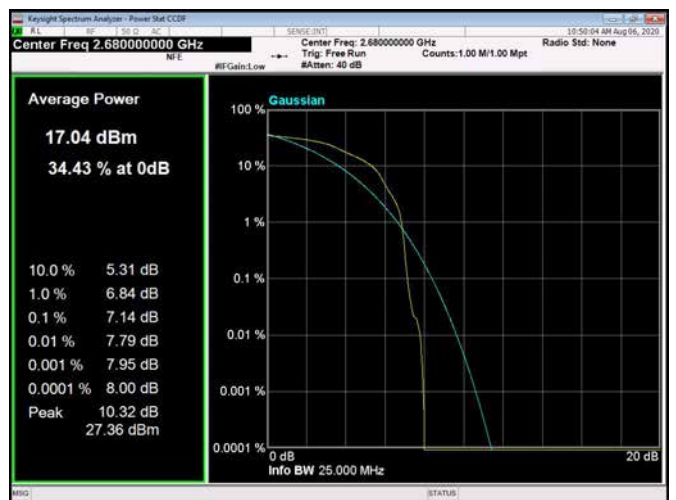
**20MHz / QPSK / High Channel**



**20MHz / 16QAM / High Channel**



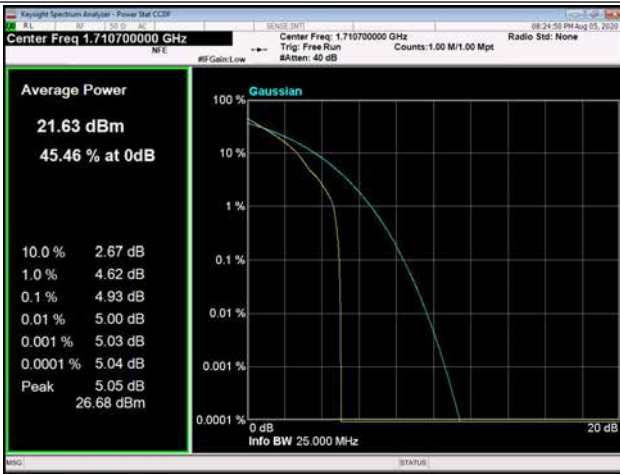
**20MHz / 64QAM / High Channel**



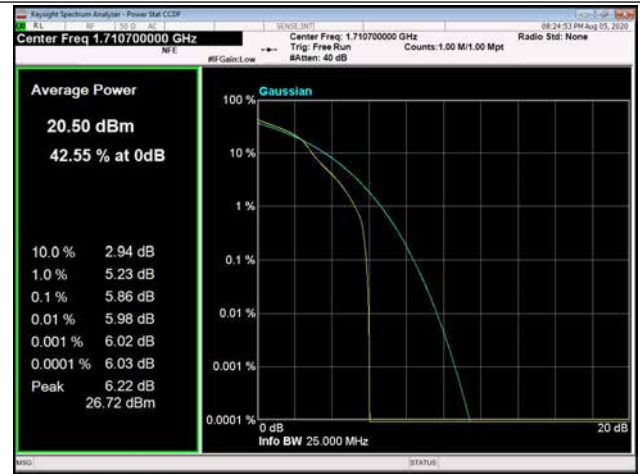


LTE Band 66 \_ Peak-to-Average Radio

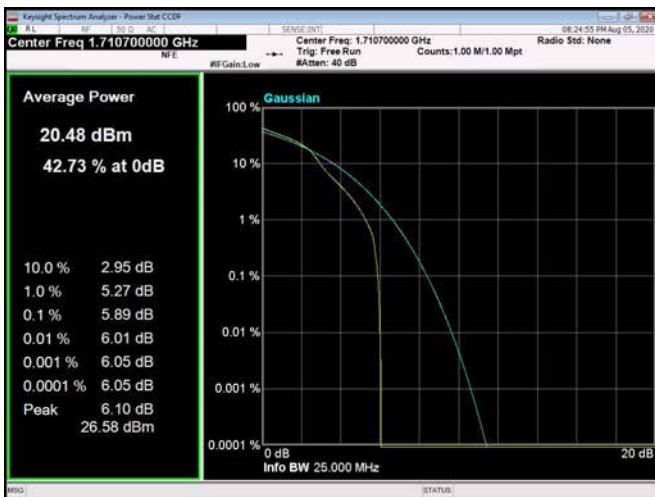
1.4MHz / QPSK / Low Channel



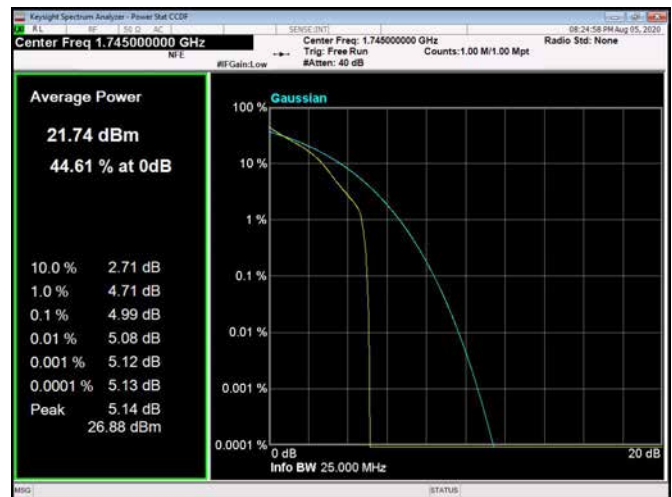
1.4MHz / 16QAM / Low Channel



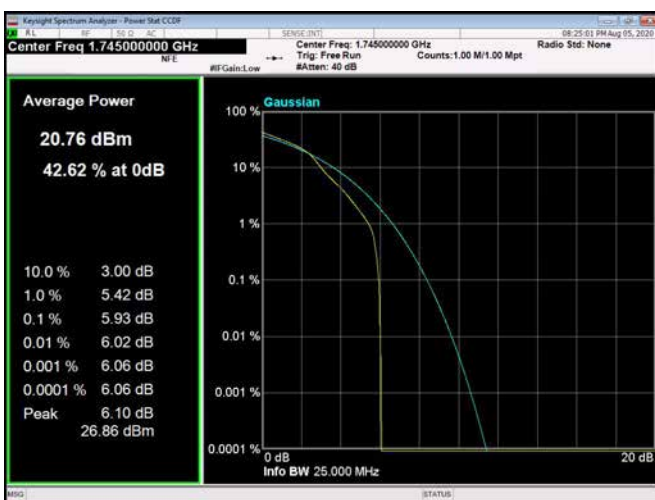
1.4MHz / 64QAM / Low Channel



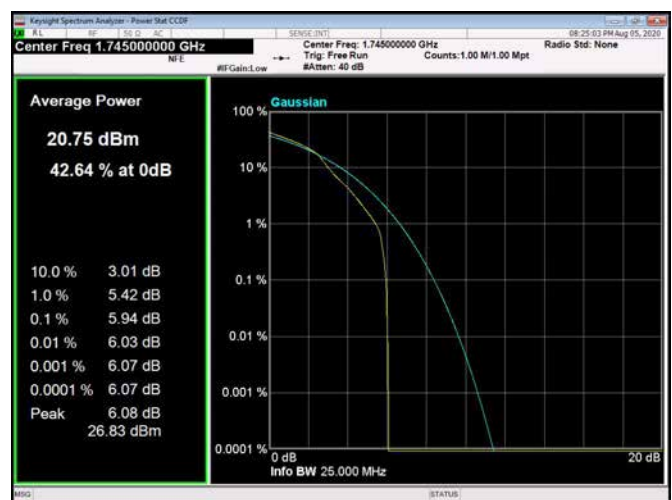
1.4MHz / QPSK / Middle Channel



1.4MHz / 16QAM / Middle Channel

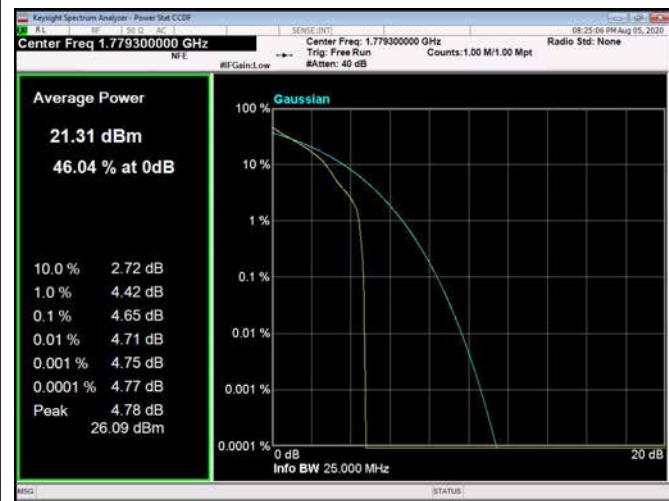


1.4MHz / 64QAM / Middle Channel





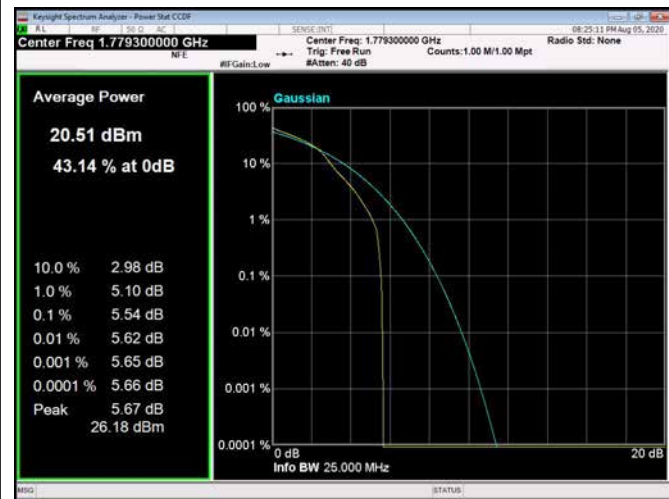
**1.4MHz / QPSK / High Channel**



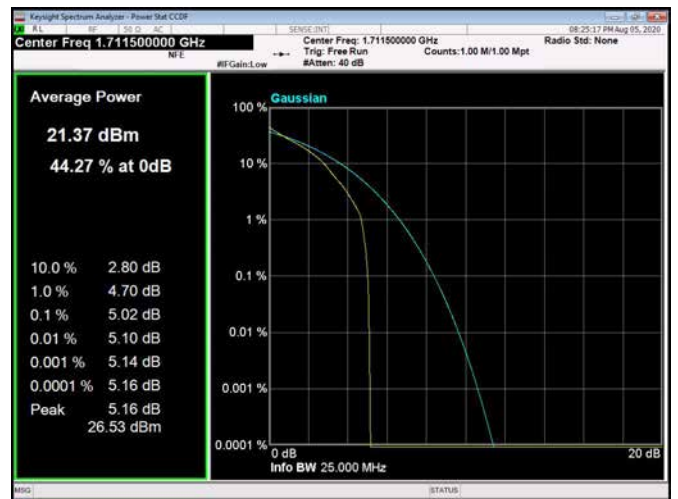
**1.4MHz / 16QAM / High Channel**



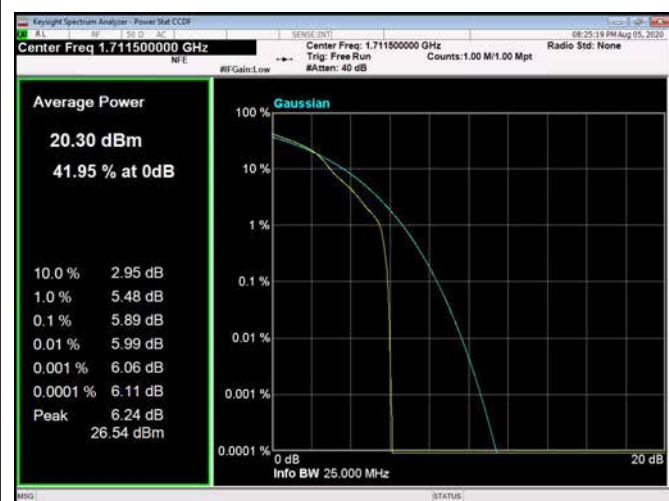
**1.4MHz / 64QAM / High Channel**



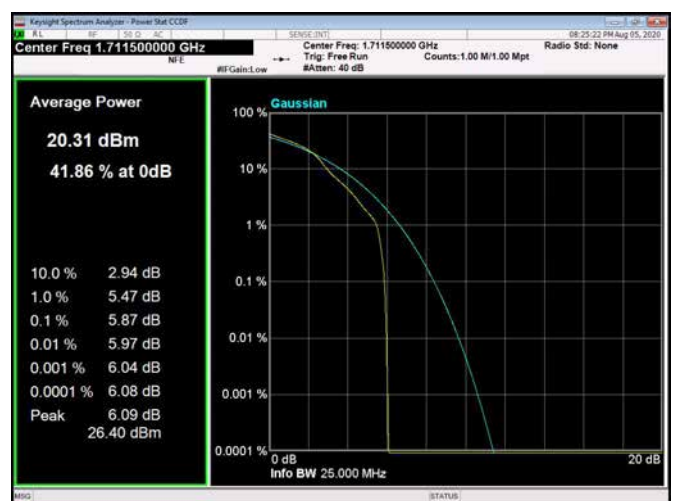
**3MHz / QPSK / Low Channel**



**3MHz / 16QAM / Low Channel**

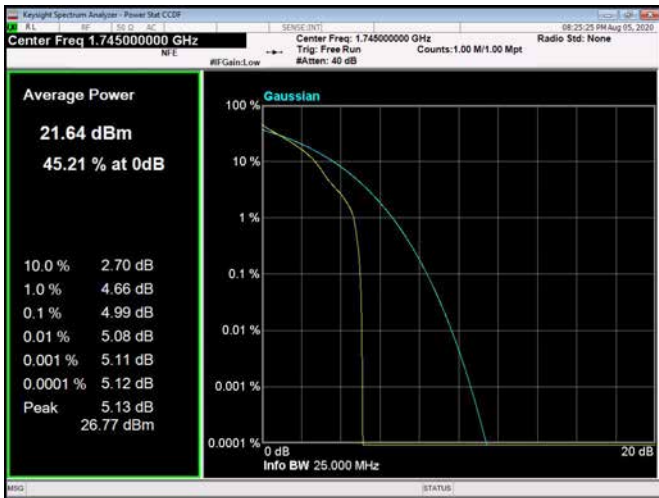


**3MHz / 64QAM / Low Channel**

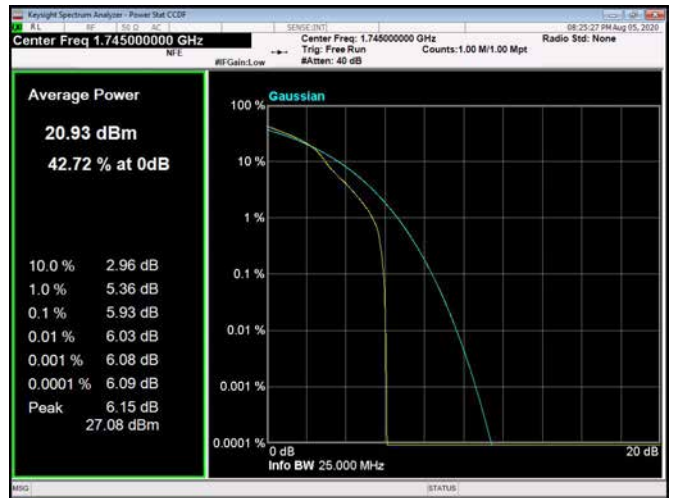




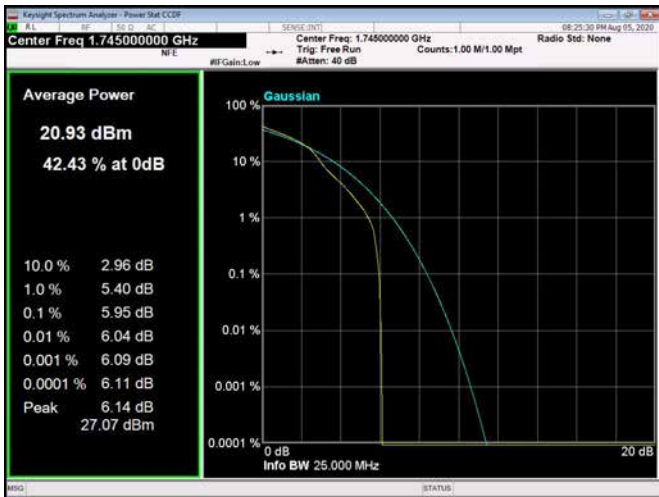
**3MHz / QPSK / Middle Channel**



**3MHz / 16QAM / Middle Channel**



**3MHz / 64QAM / Middle Channel**



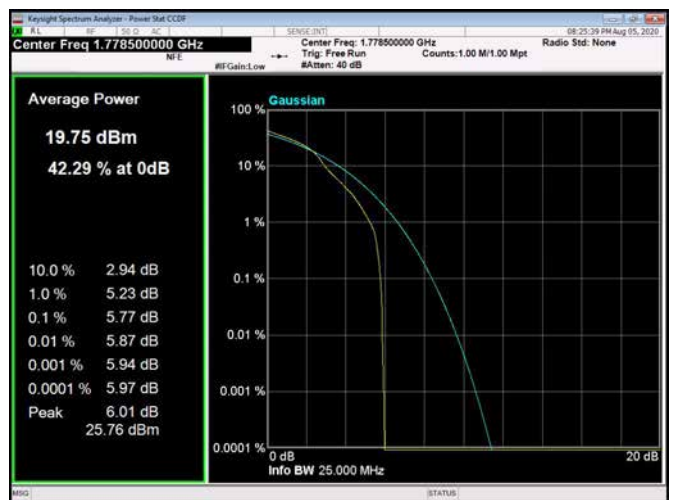
**3MHz / QPSK / High Channel**



**3MHz / 16QAM / High Channel**



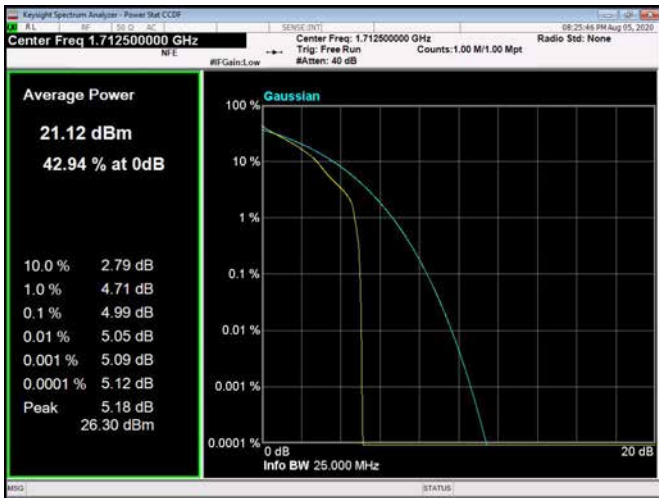
**3MHz / 64QAM / High Channel**



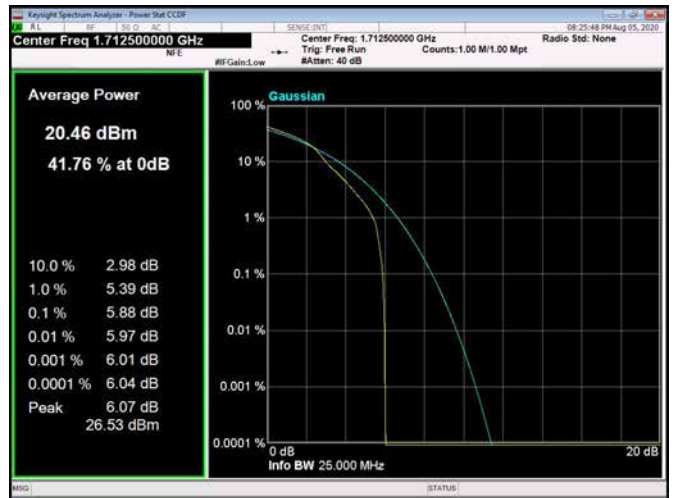




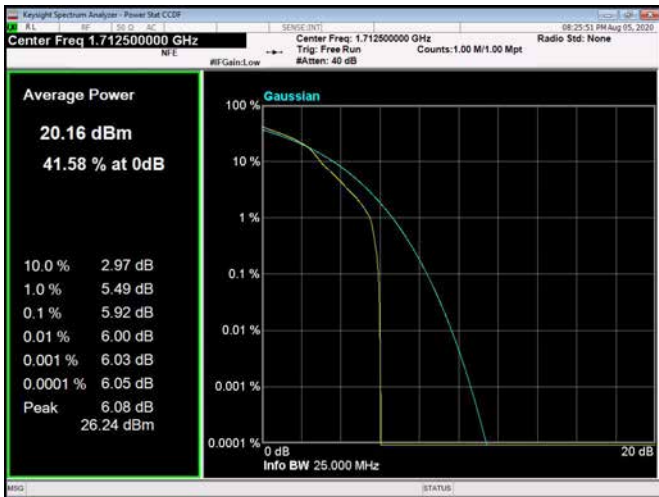
**5MHz / QPSK / Low Channel**



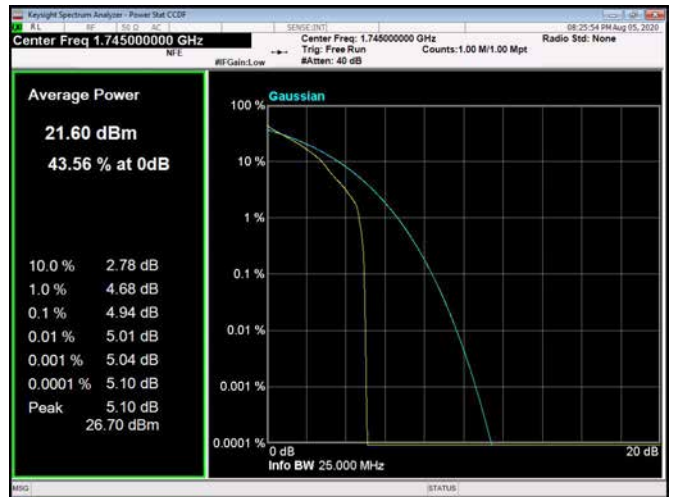
**5MHz / 16QAM / Low Channel**



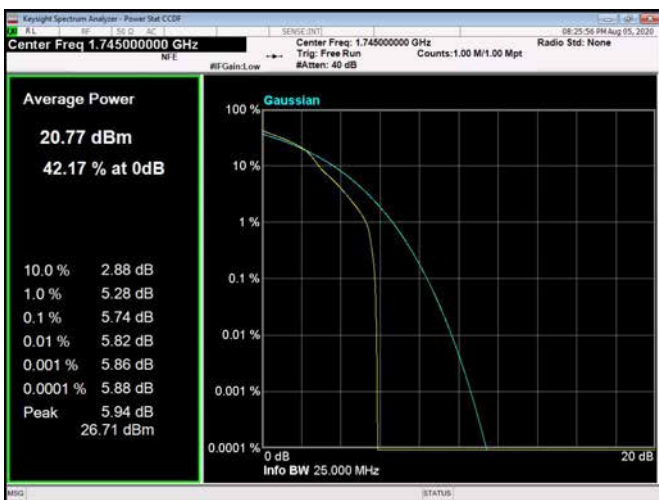
**5MHz / 64QAM / Low Channel**



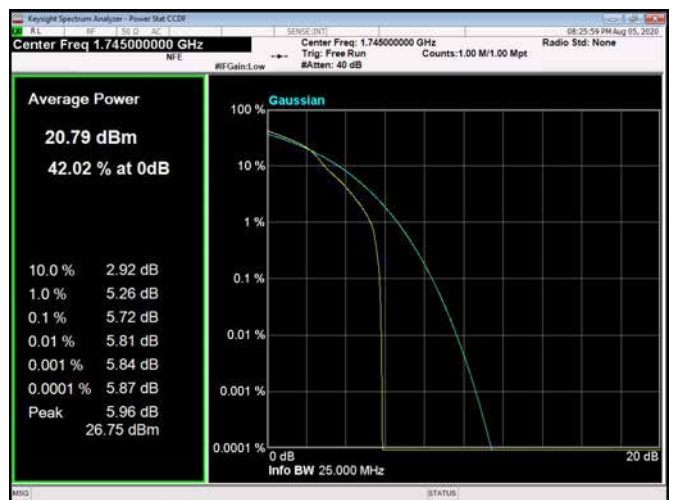
**5MHz / QPSK / Middle Channel**



**5MHz / 16QAM / Middle Channel**



**5MHz / 64QAM / Middle Channel**





**5MHz / QPSK / High Channel**



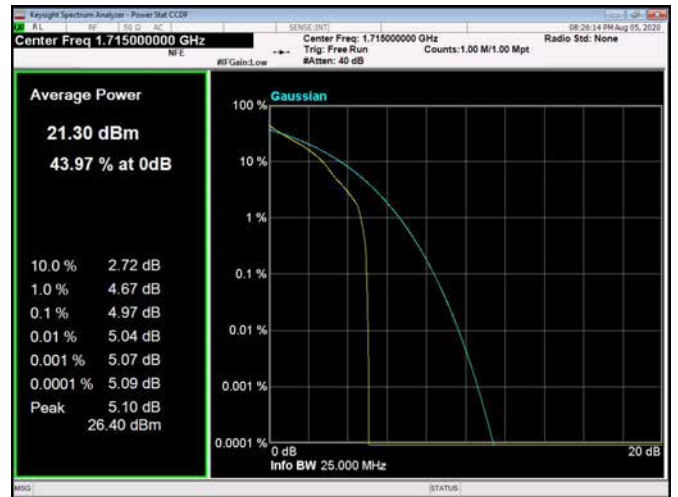
**5MHz / 16QAM / High Channel**



**5MHz / 64QAM / High Channel**



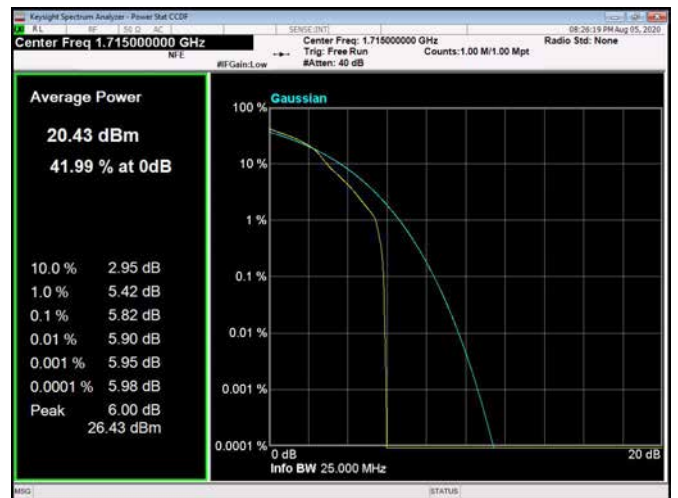
**10MHz / QPSK / Low Channel**



**10MHz / 16QAM / Low Channel**

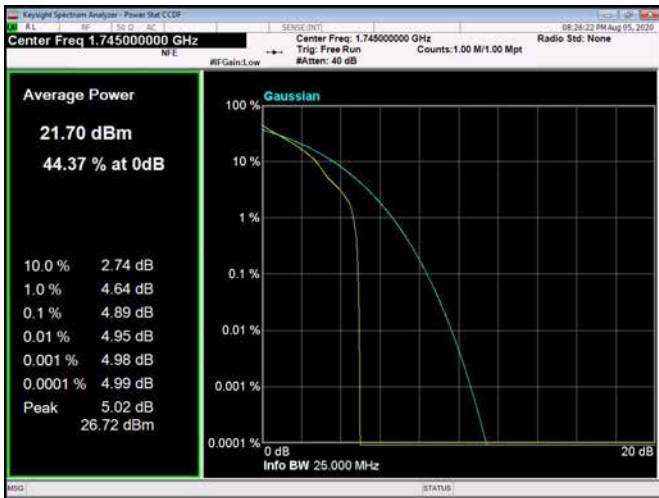


**10MHz / 64QAM / Low Channel**

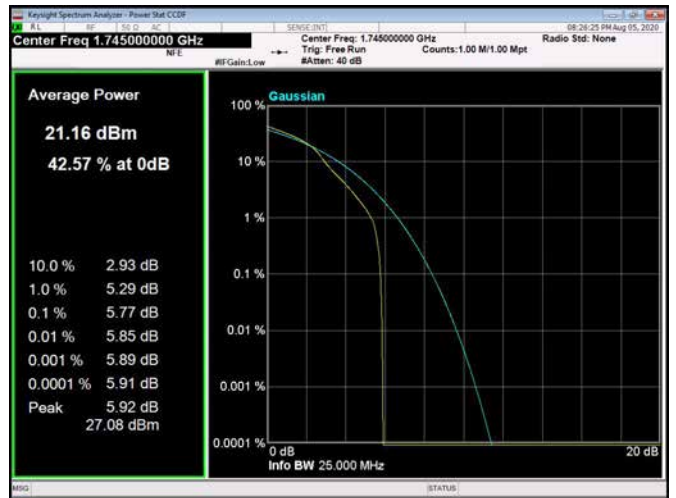




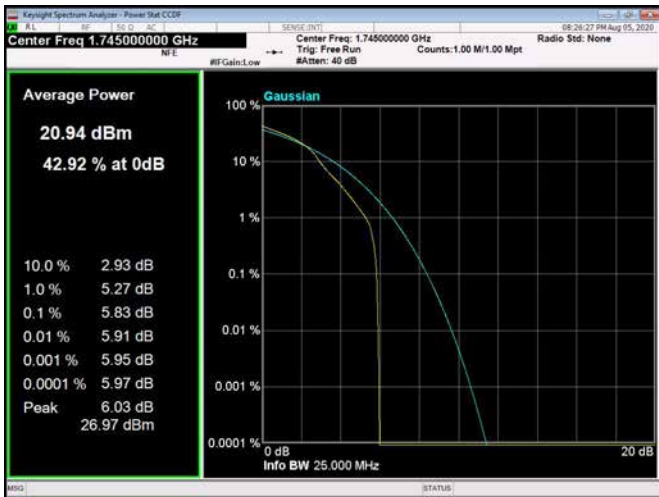
**10MHz / QPSK / Middle Channel**



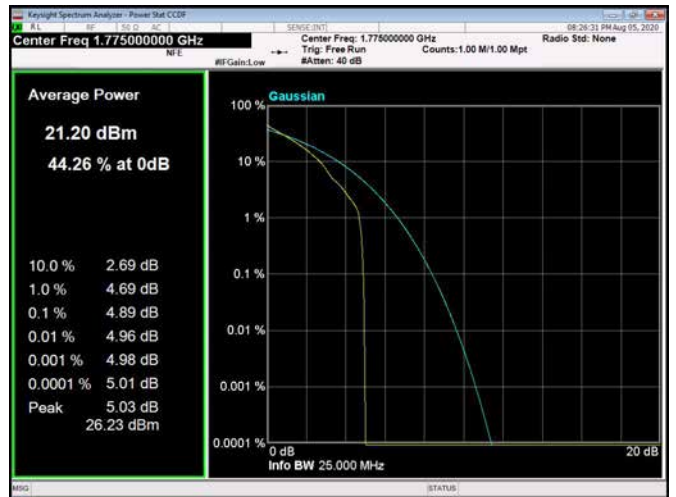
**10MHz / 16QAM / Middle Channel**



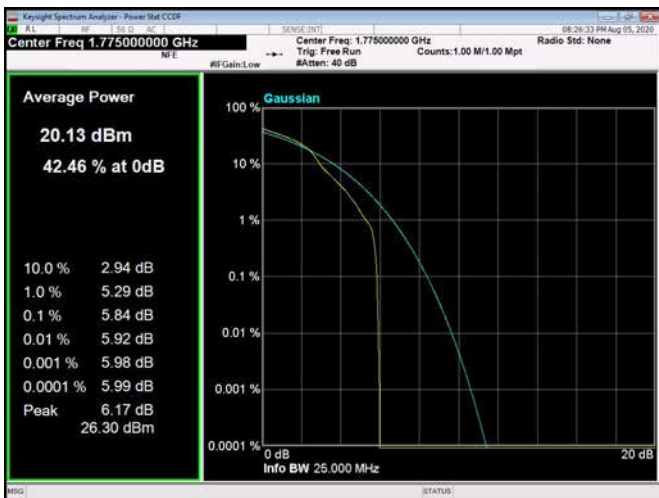
**10MHz / 64QAM / Middle Channel**



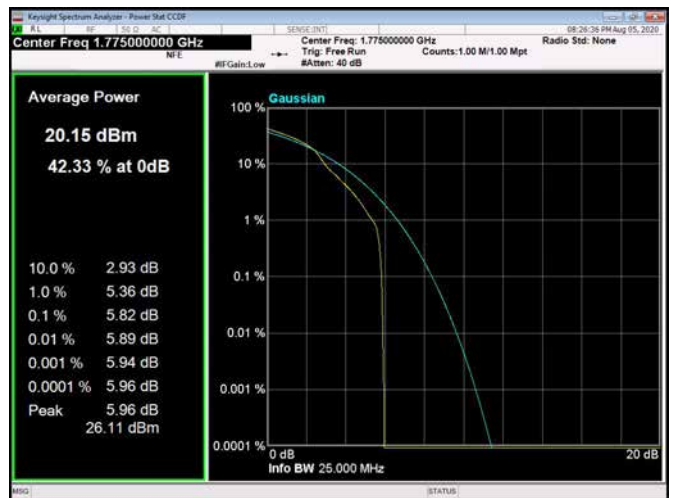
**10MHz / QPSK / High Channel**



**10MHz / 16QAM / High Channel**



**10MHz / 64QAM / High Channel**







**15MHz / QPSK / Low Channel**



**15MHz / 16QAM / Low Channel**



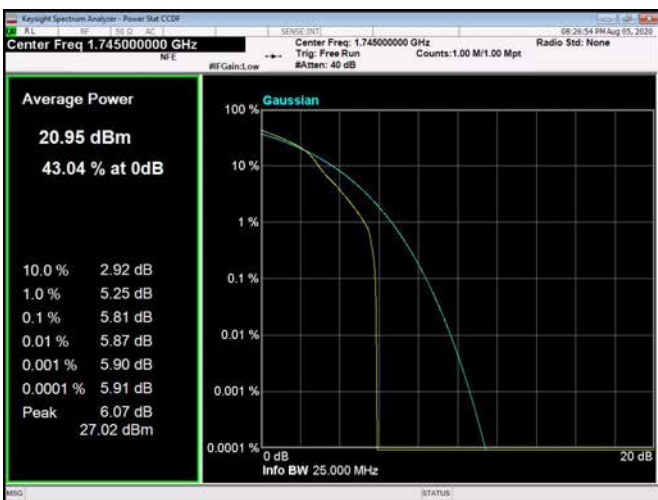
**15MHz / 64QAM / Low Channel**



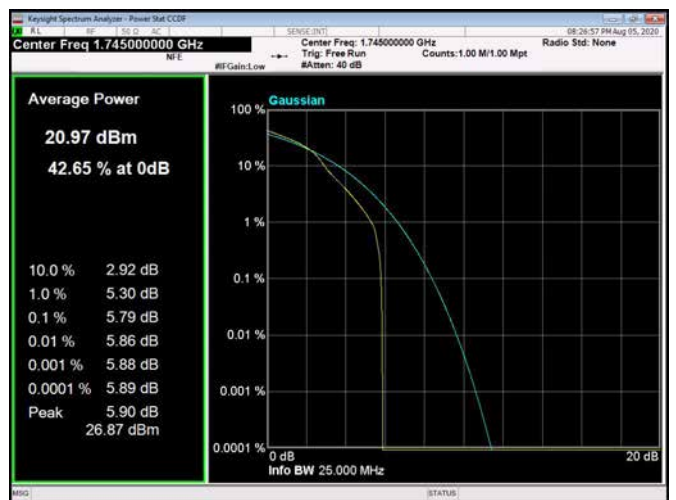
**15MHz / QPSK / Middle Channel**



**15MHz / 16QAM / Middle Channel**

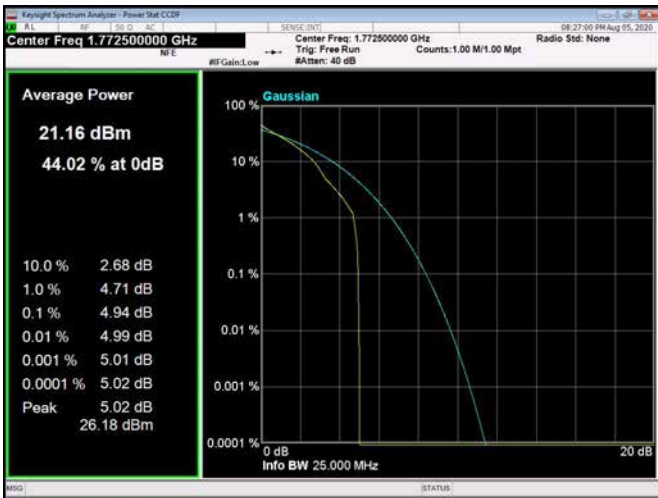


**15MHz / 64QAM / Middle Channel**

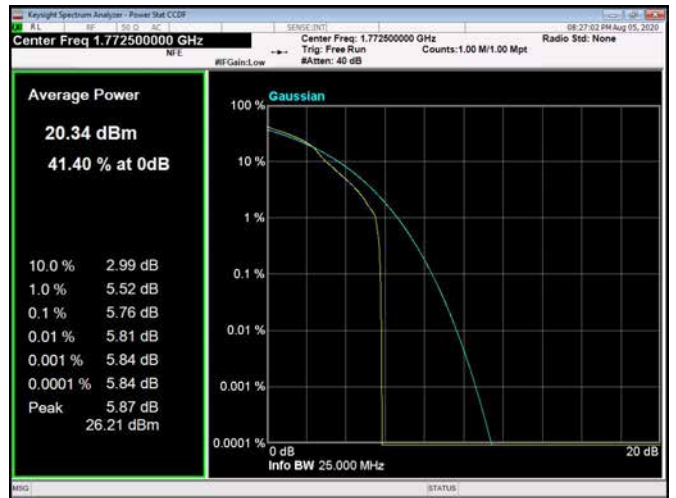




**15MHz / QPSK / High Channel**



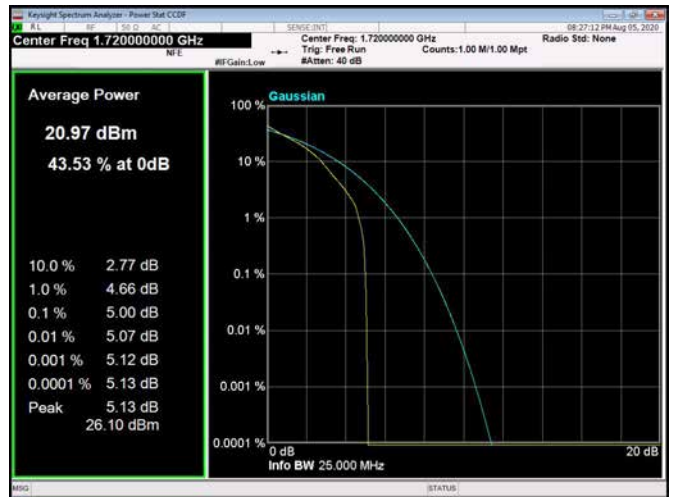
**15MHz / 16QAM / High Channel**



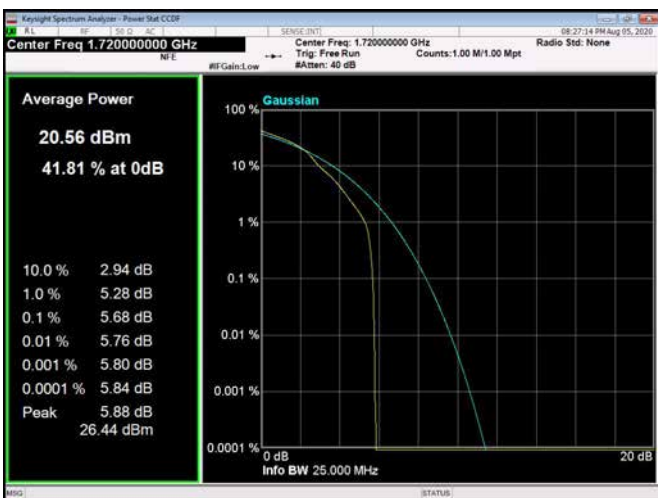
**15MHz / 64QAM / High Channel**



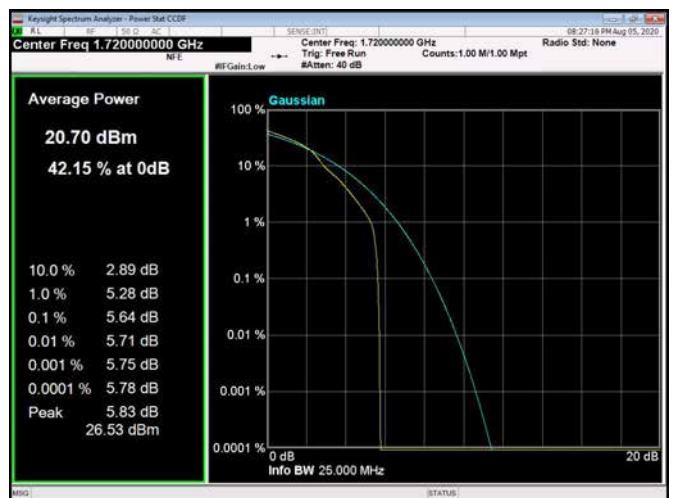
**20MHz / QPSK / Low Channel**



**20MHz / 16QAM / Low Channel**

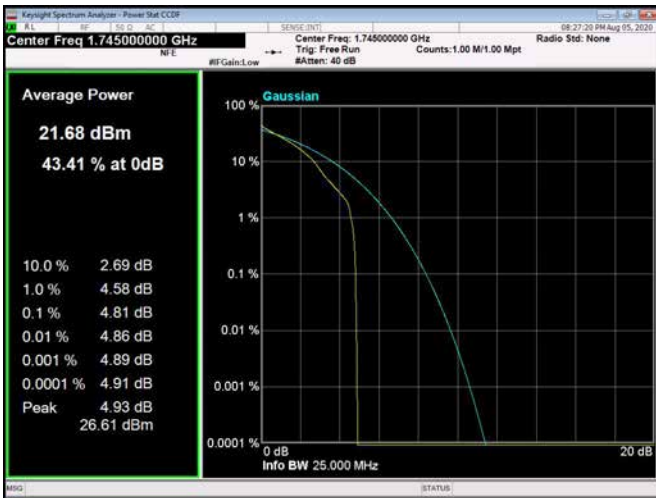


**20MHz / 64QAM / Low Channel**





**20MHz / QPSK / Middle Channel**



**20MHz / 16QAM / Middle Channel**



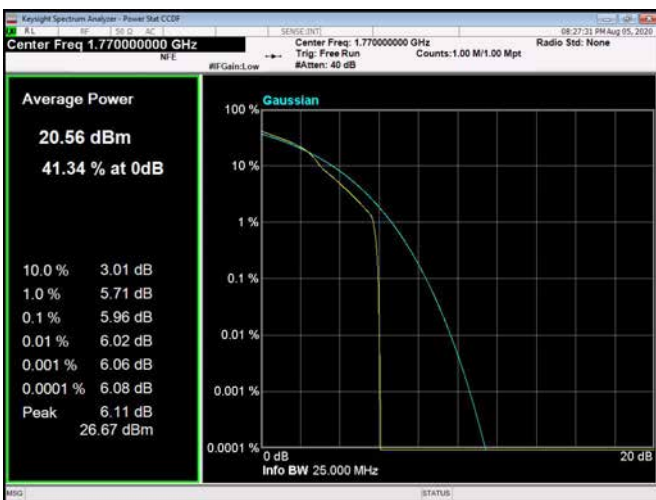
**20MHz / 64QAM / Middle Channel**



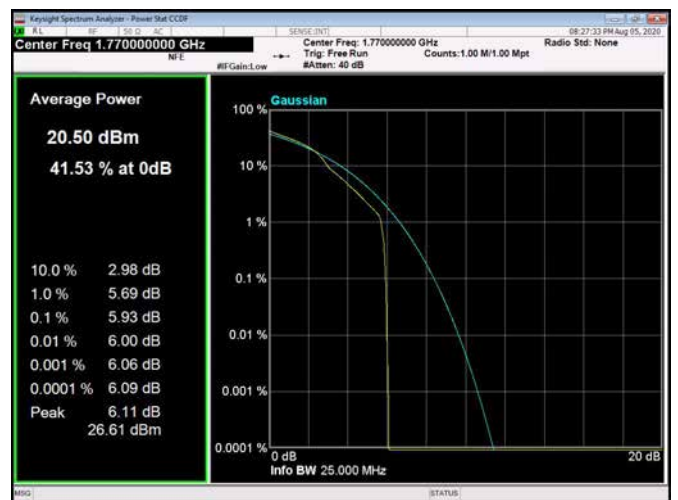
**20MHz / QPSK / High Channel**



**20MHz / 16QAM / High Channel**



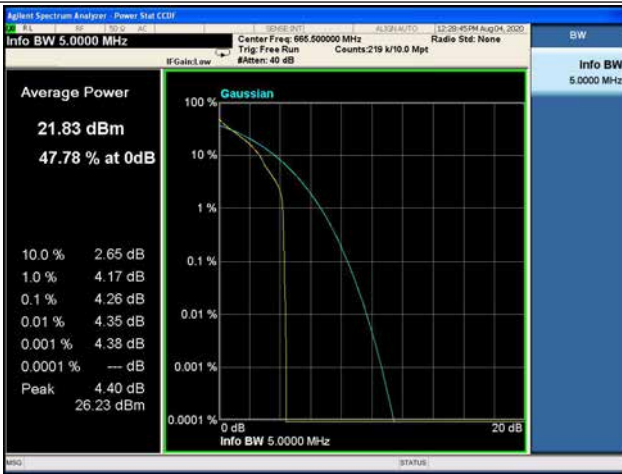
**20MHz / 64QAM / High Channel**



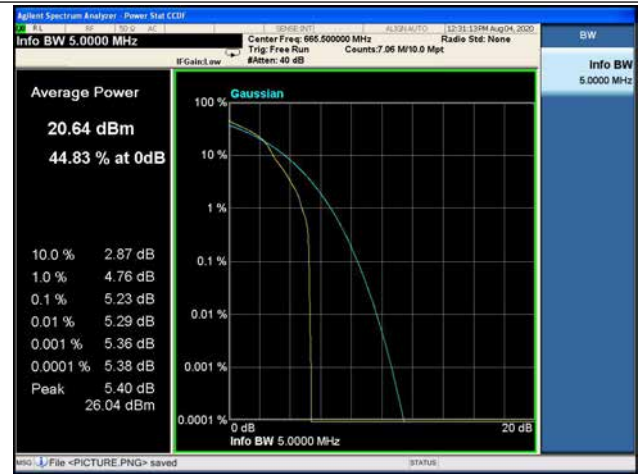


LTE Band 71 \_ Peak-to-Average Ratio

5MHz / QPSK / Low Channel



5MHz / 16QAM / Low Channel



5MHz / 64QAM / Low Channel



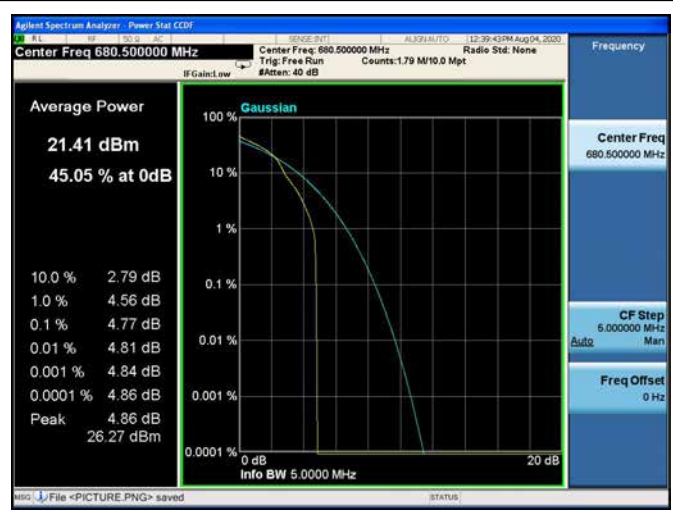
5MHz / QPSK / Middle Channel



5MHz / 16QAM / Middle Channel



5MHz / 64QAM / Middle Channel







**5MHz / QPSK / High Channel**



**5MHz / 16QAM / High Channel**



**5MHz / 64QAM / High Channel**



**10MHz / QPSK / Low Channel**



**10MHz / 16QAM / Low Channel**



**10MHz / 64QAM / Low Channel**



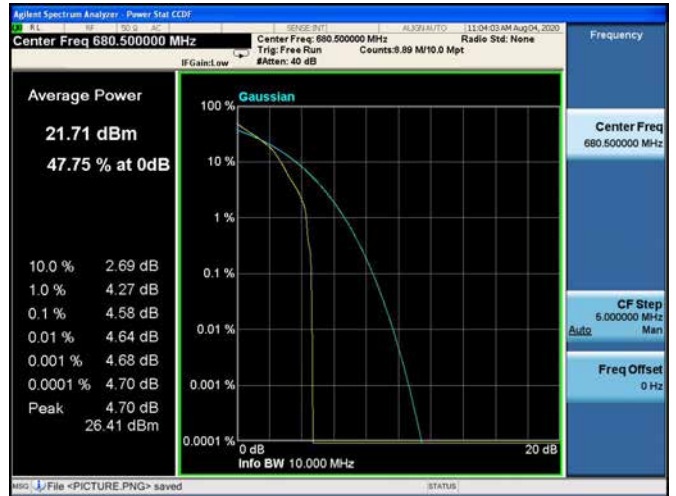




**10MHz / QPSK / Middle Channel**



**10MHz / 16QAM / Middle Channel**



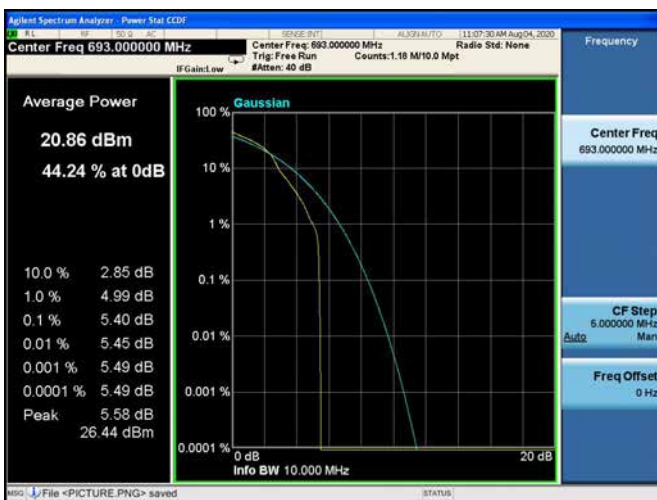
**10MHz / 64QAM / Middle Channel**



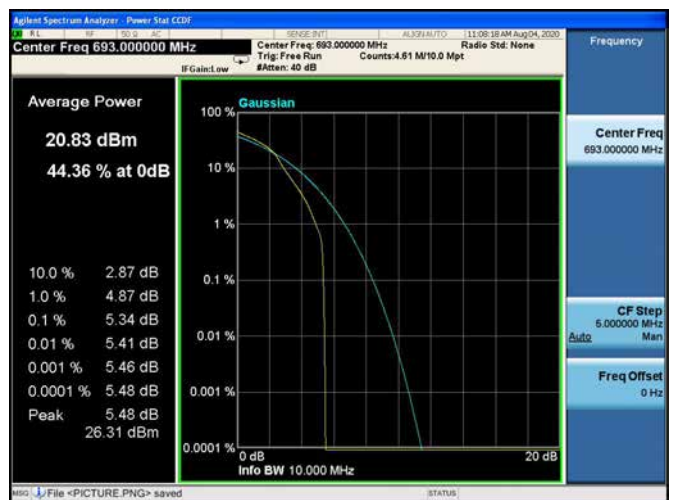
**10MHz / QPSK / High Channel**



**10MHz / 16QAM / High Channel**

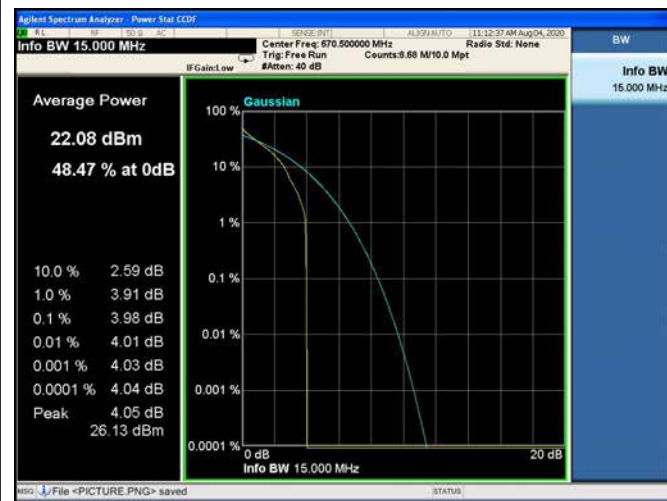


**10MHz / 64QAM / High Channel**

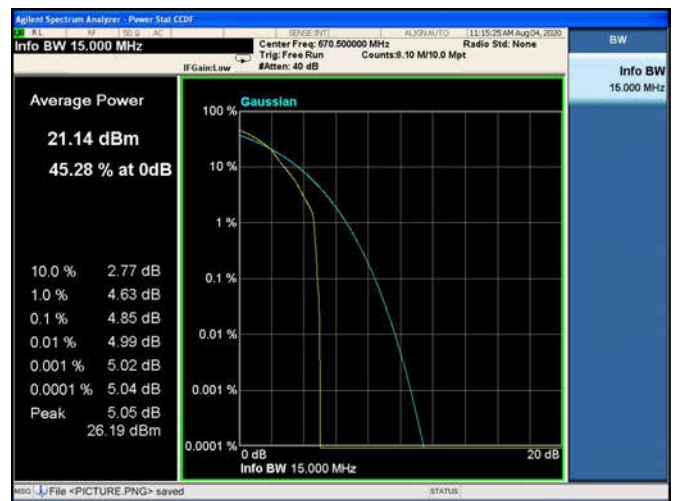




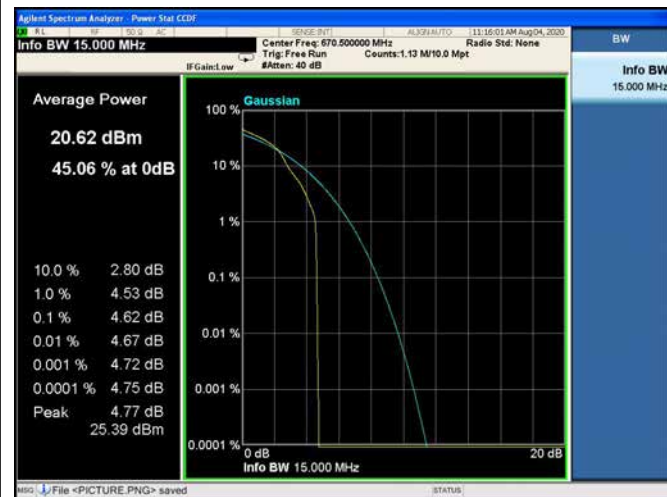
**15MHz / QPSK / Low Channel**



**15MHz / 16QAM / Low Channel**



**15MHz / 64QAM / Low Channel**



**15MHz / QPSK / Middle Channel**



**15MHz / 16QAM / Middle Channel**

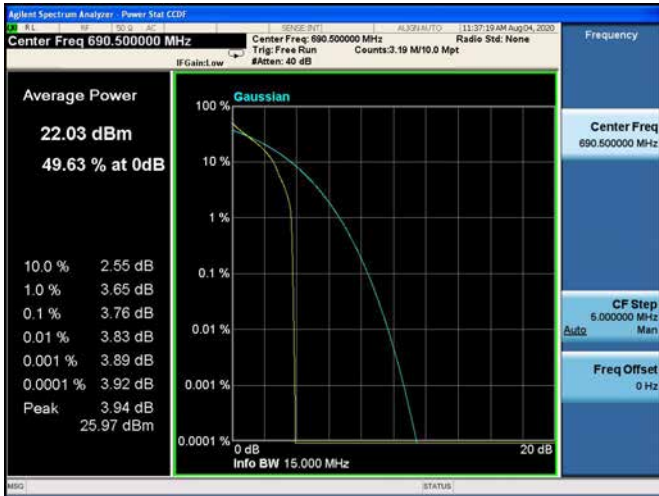


**15MHz / 64QAM / Middle Channel**

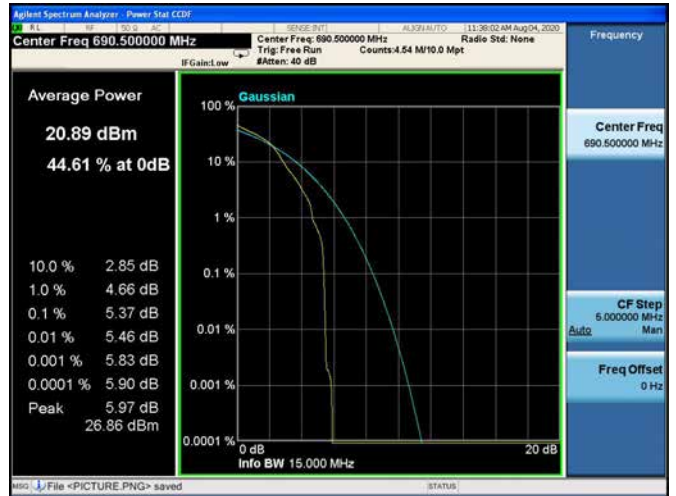




**15MHz / QPSK / High Channel**



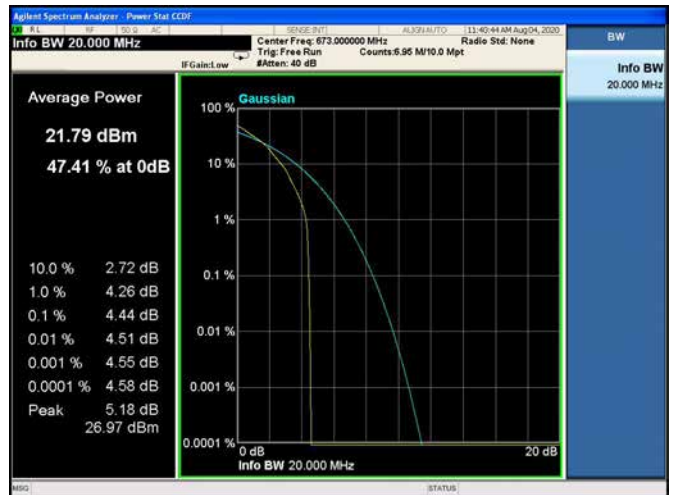
**15MHz / 16QAM / High Channel**



**15MHz / 64QAM / High Channel**



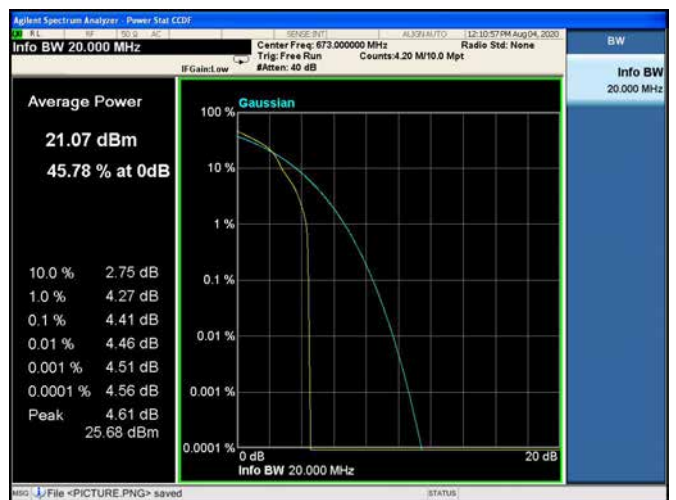
**20MHz / QPSK / Low Channel**



**20MHz / 16QAM / Low Channel**

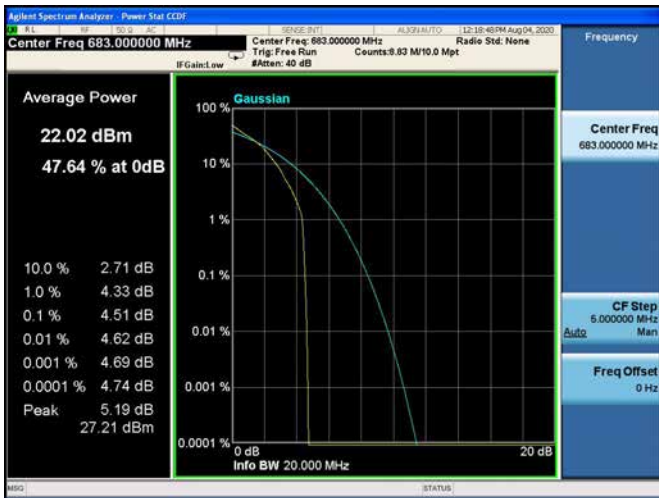


**20MHz / 64QAM / Low Channel**





**20MHz / QPSK / Middle Channel**



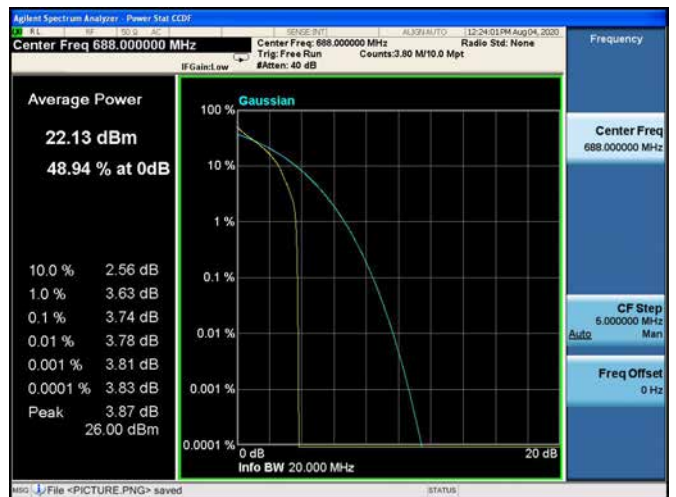
**20MHz / 16QAM / Middle Channel**



**20MHz / 64QAM / Middle Channel**



**20MHz / QPSK / High Channel**



**20MHz / 16QAM / High Channel**



**20MHz / 64QAM / High Channel**



## 2.5. Conducted Spurious Emissions

### 2.5.1. Requirement

According to FCC section 2.1051, 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. This calculated to be -13dBm.

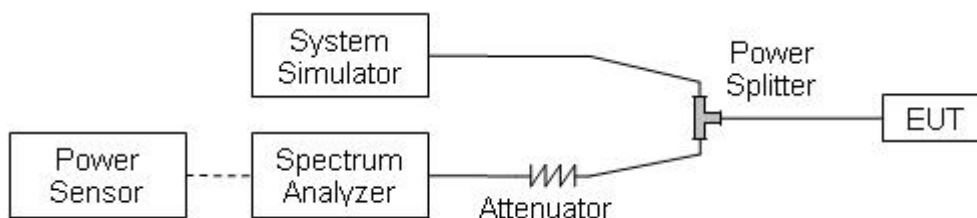
Additional requirement for LTE Band 7/38/41:

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. This calculated to be -25dBm.

Additional requirement for LTE Band 30/40:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $70 + 10 \log (P)$  dB. This calculated to be -40dBm.

### 2.5.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.5.3. Test procedure

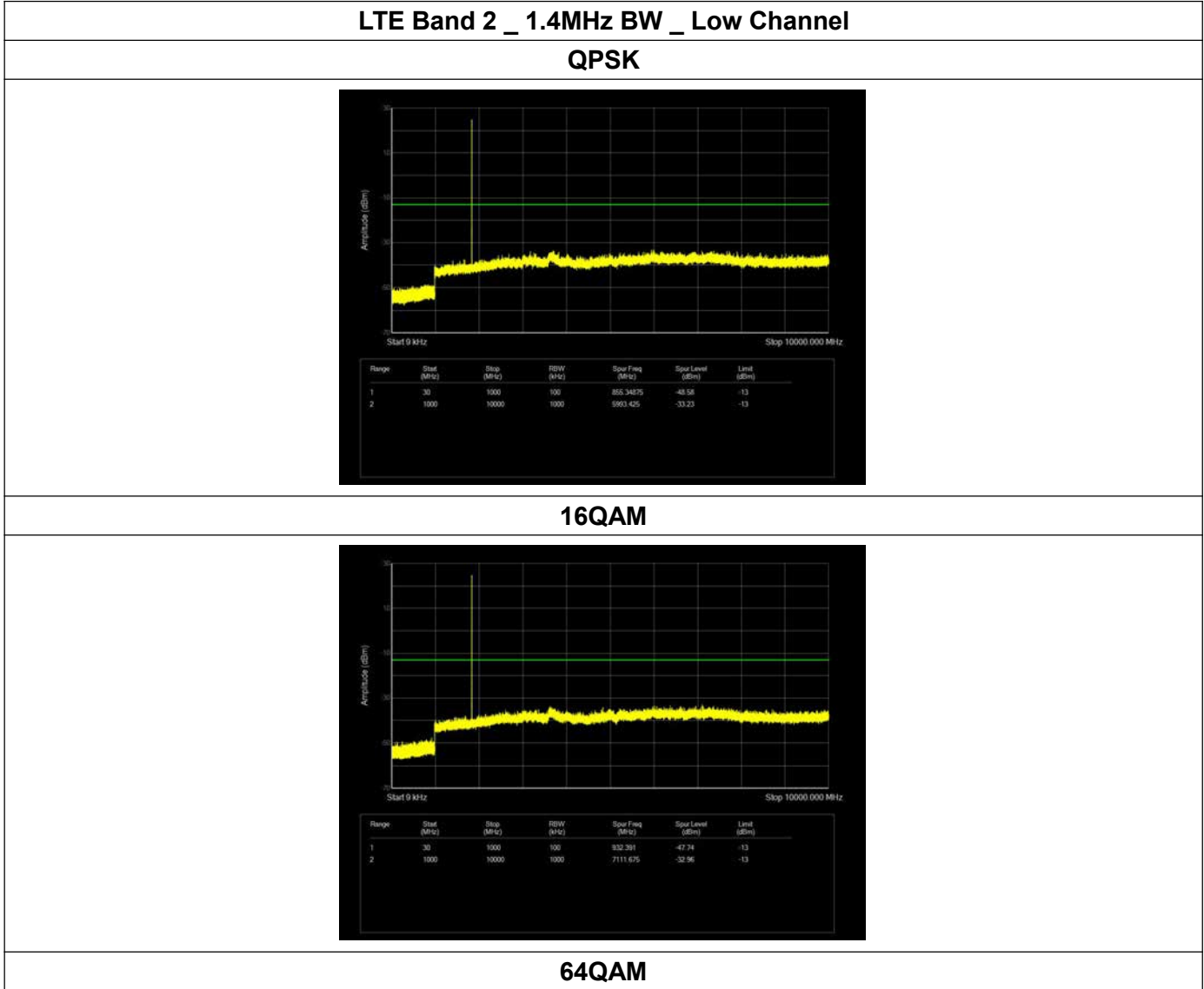
KDB 971168 D01 v03r01 Section 6.0 and ANSI/TIA-603-E-2016.

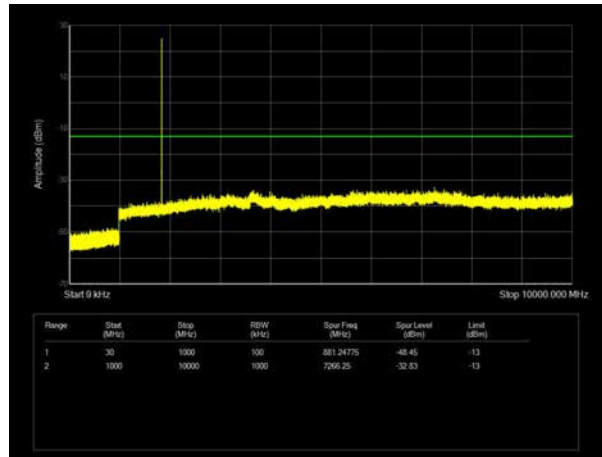




**2.5.4. Test Result**

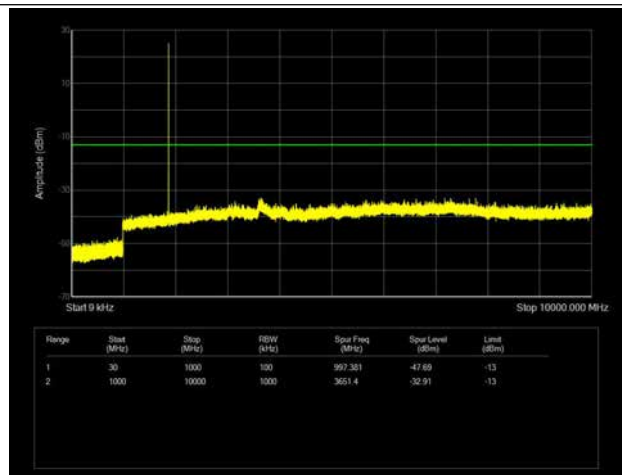
NOTE: Above 10GHz we was tested and the result which was 10dB lower than the limit was not recorded.



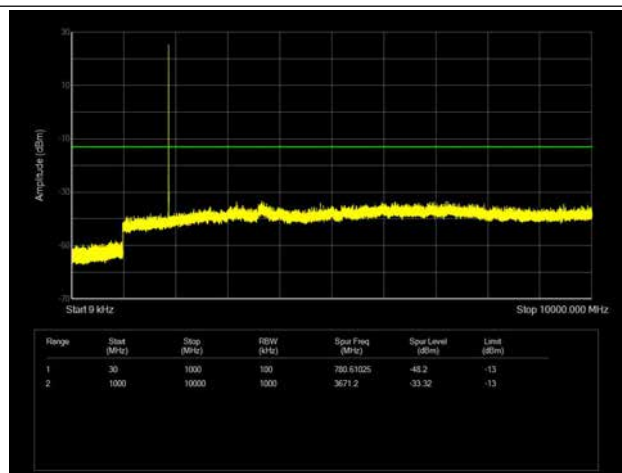


LTE Band 2 \_ 1.4MHz BW \_ Middle Channel

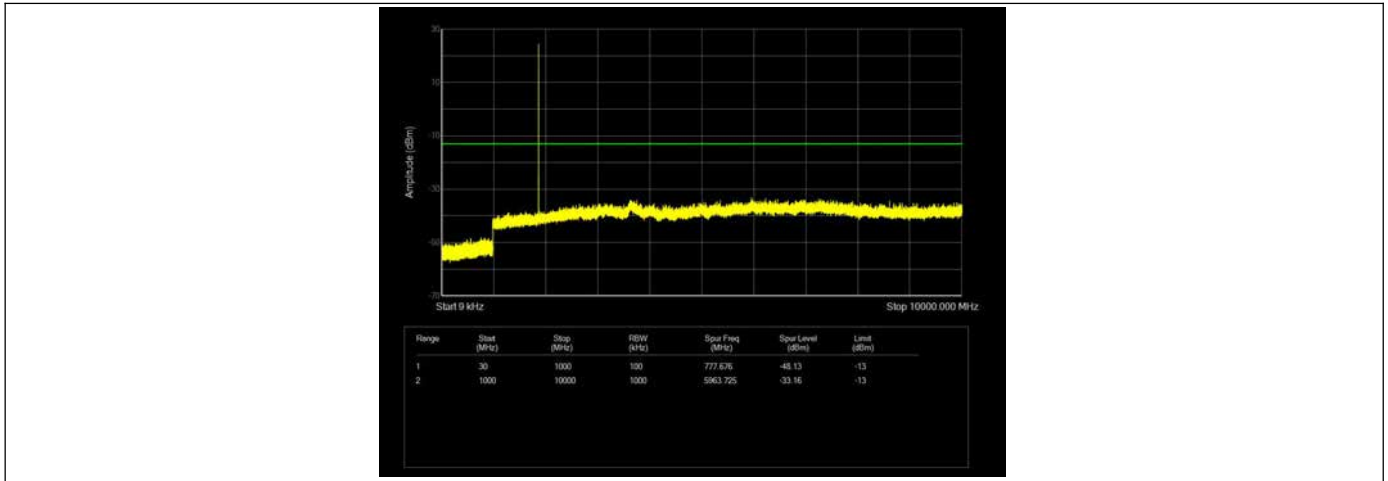
QPSK



16QAM

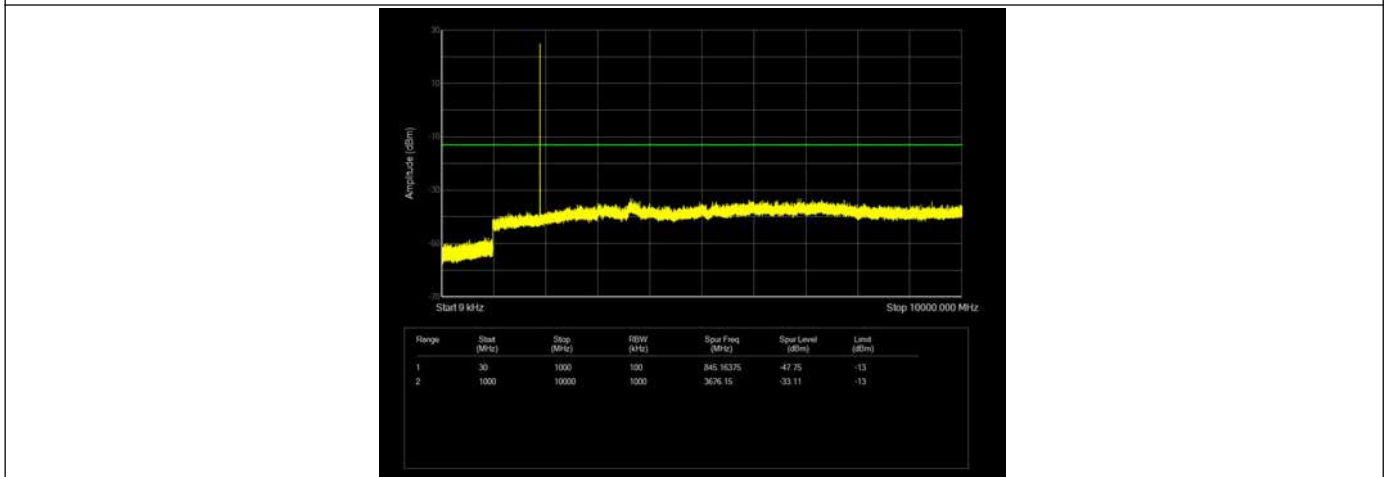


64QAM

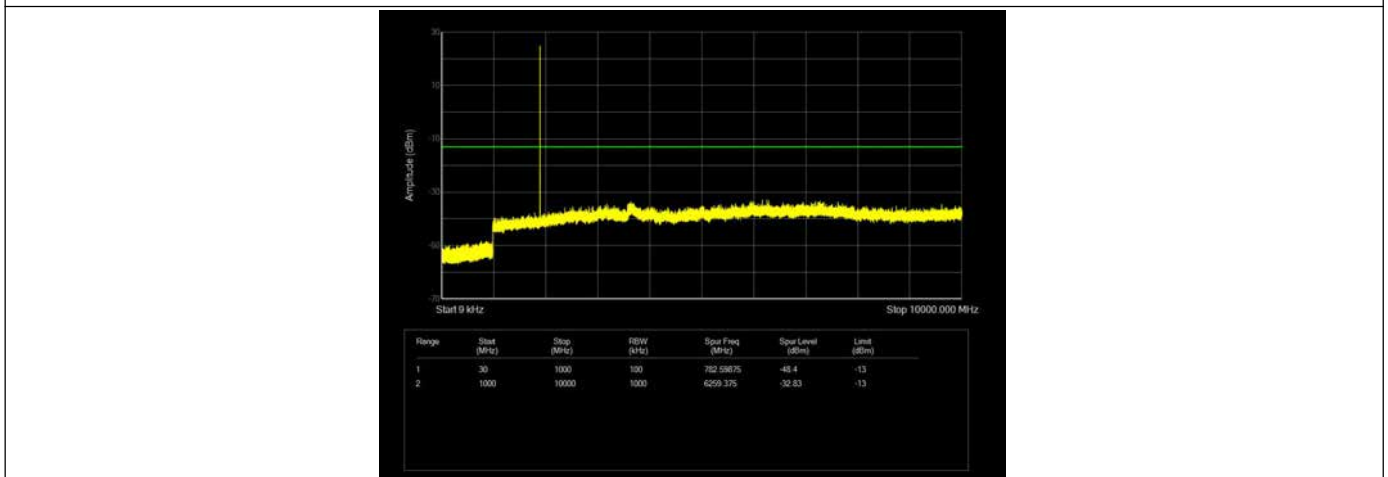


LTE Band 2 \_ 1.4MHz BW \_ High Channel

QPSK



16QAM

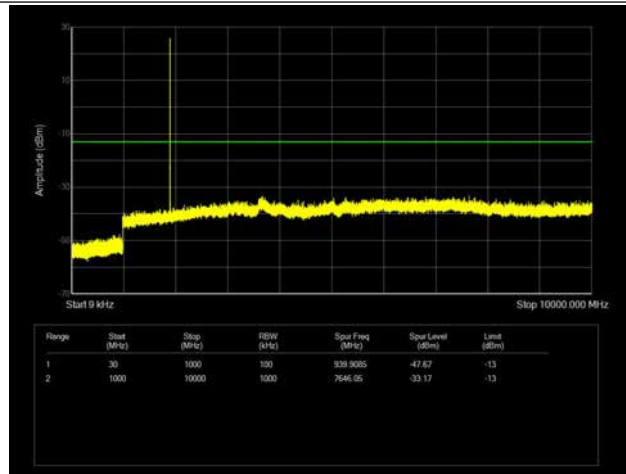


64QAM



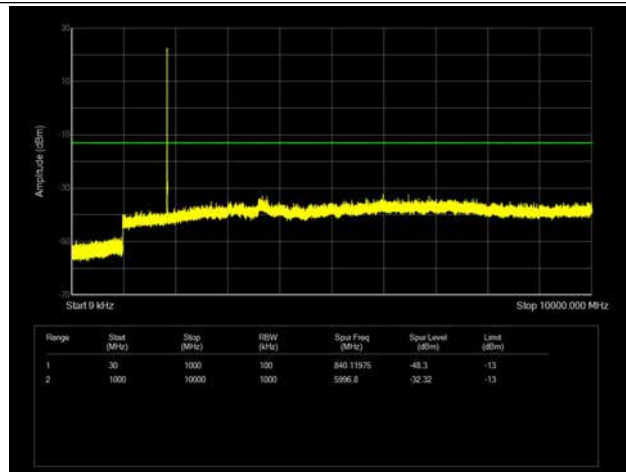
LTE Band 2 \_ 1.4MHz BW \_ High Channel

QPSK



LTE Band 2 \_ 3MHz BW \_ Low Channel

QPSK

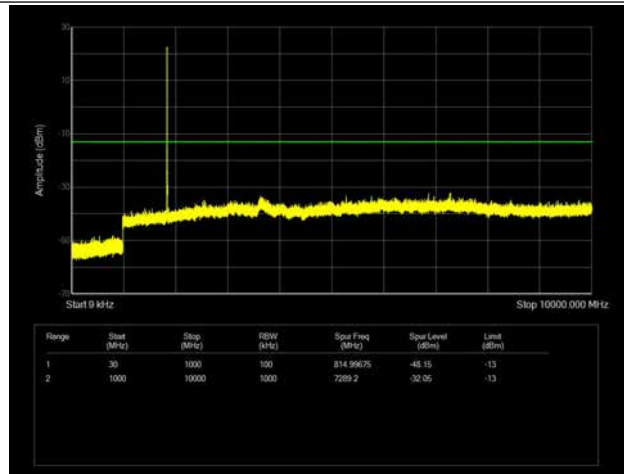


16QAM

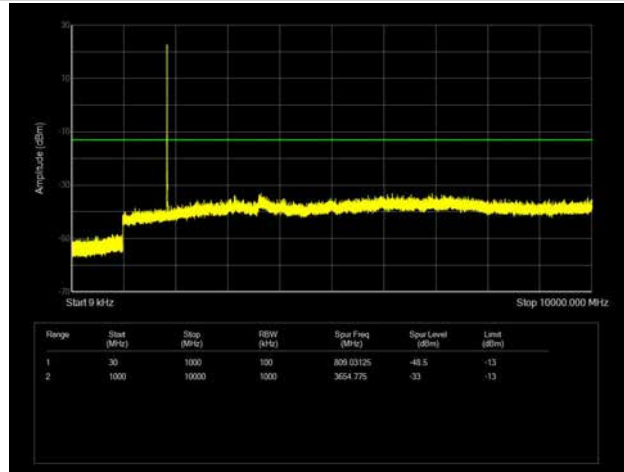


LTE Band 2 \_ 3MHz BW \_ Low Channel

QPSK



64QAM



LTE Band 2 \_ 3MHz BW \_ Middle Channel

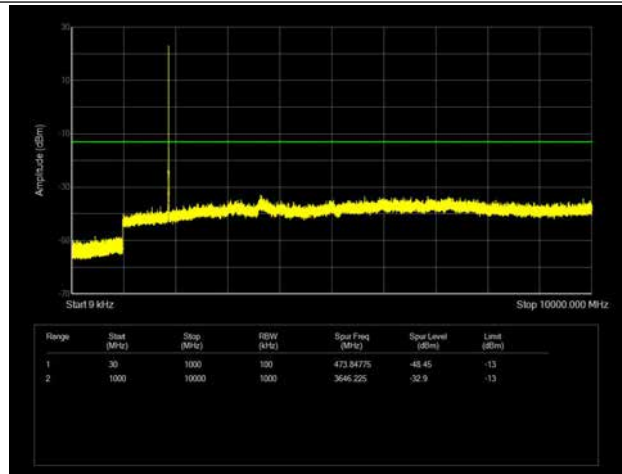
QPSK



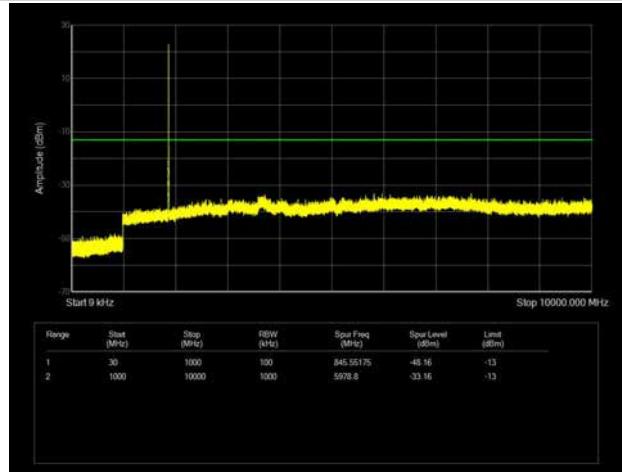


LTE Band 2 \_ 3MHz BW \_ Middle Channel

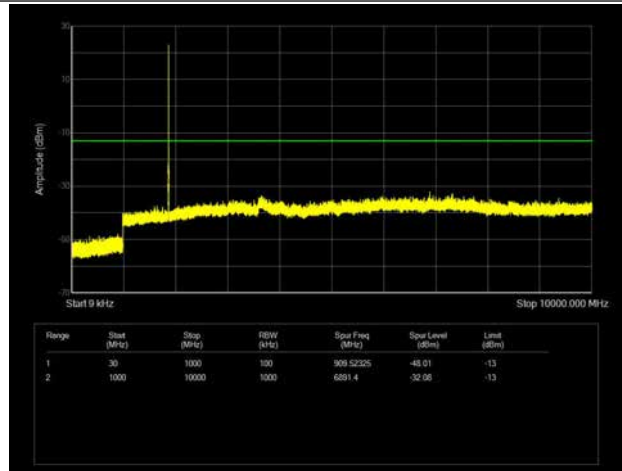
QPSK



16QAM



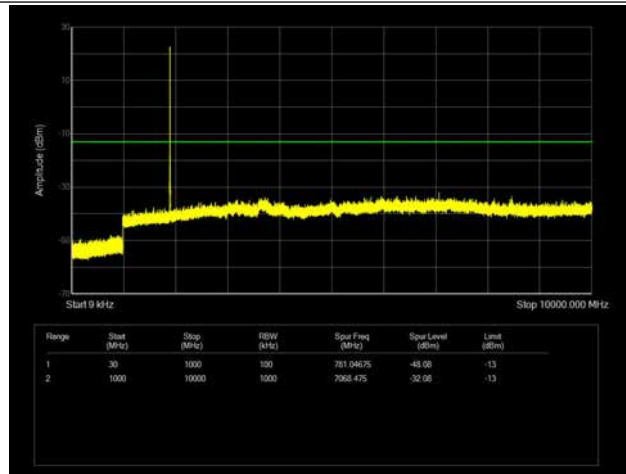
64QAM



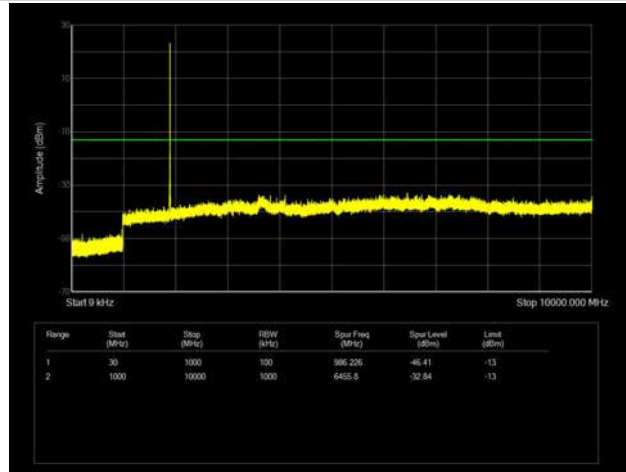


**LTE Band 2 \_ 3MHz BW \_ High Channel**

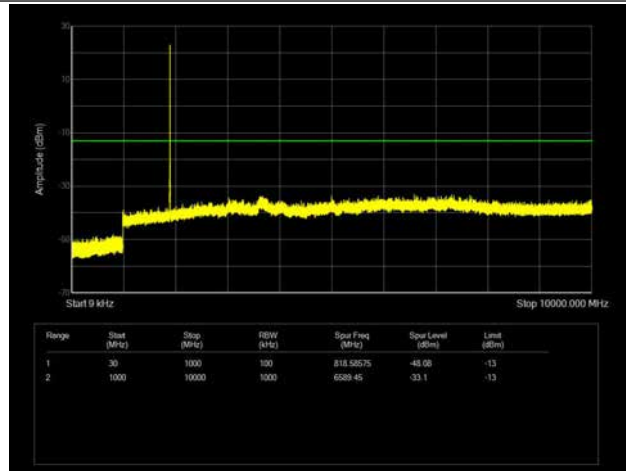
**QPSK**



**16QAM**



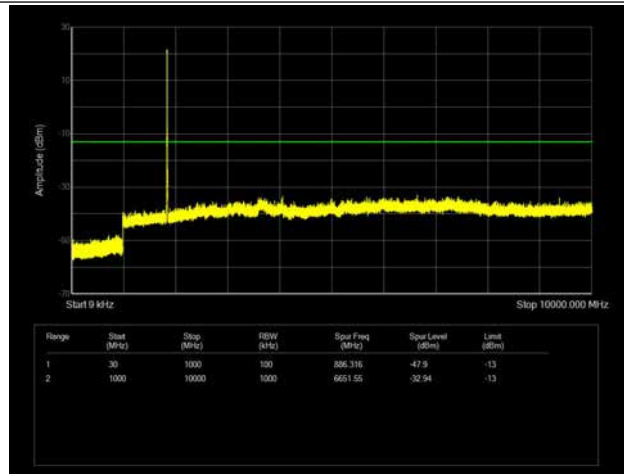
**64QAM**



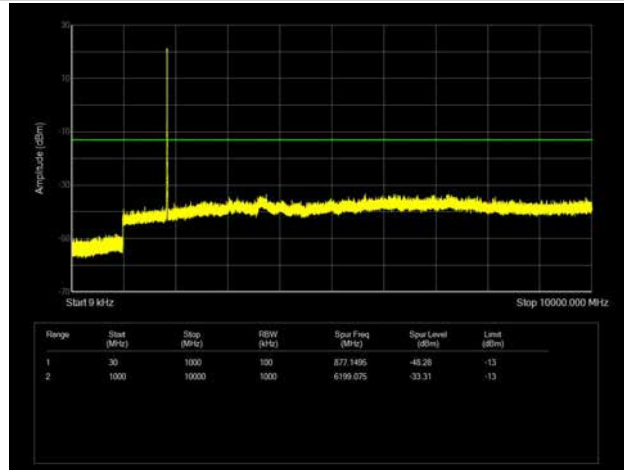


LTE Band 2 \_ 5MHz BW \_ Low Channel

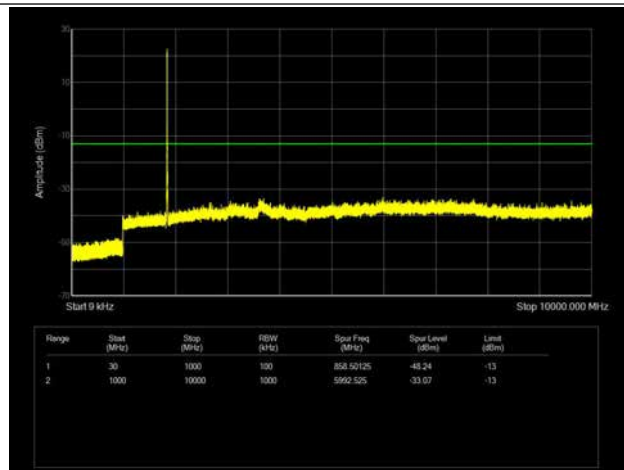
QPSK



16QAM



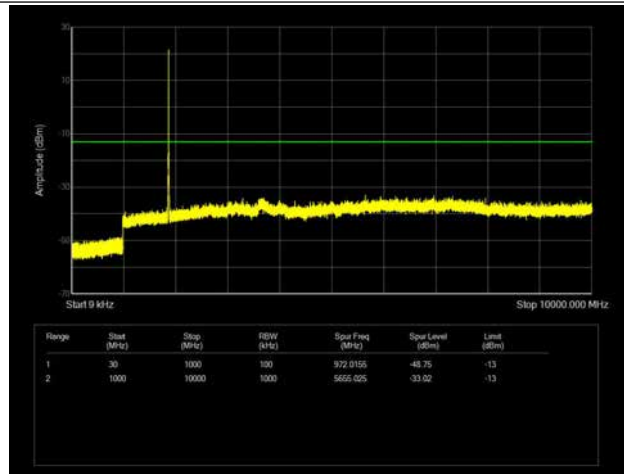
64QAM



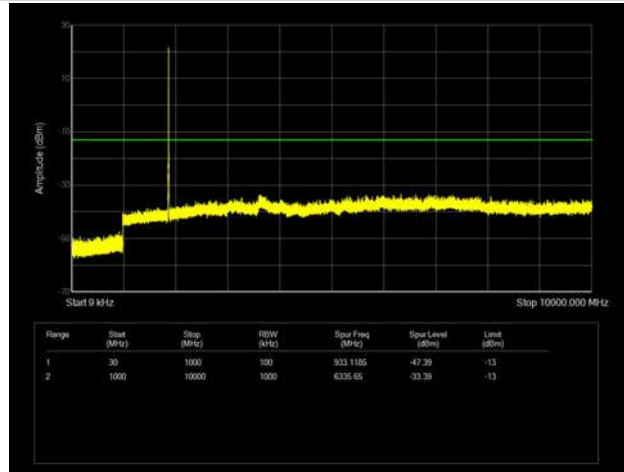


LTE Band 2 \_ 5MHz BW \_ Middle Channel

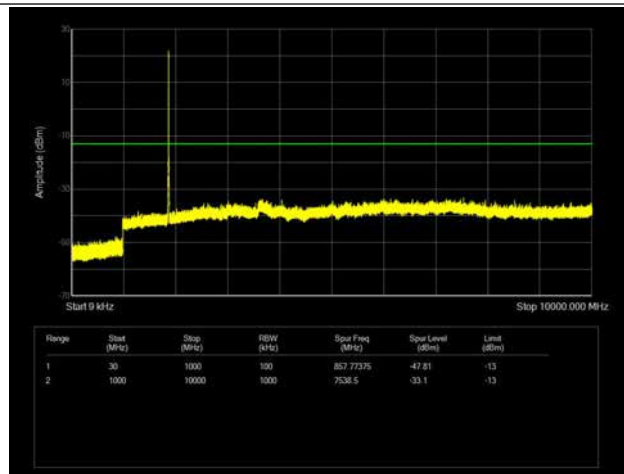
QPSK



16QAM



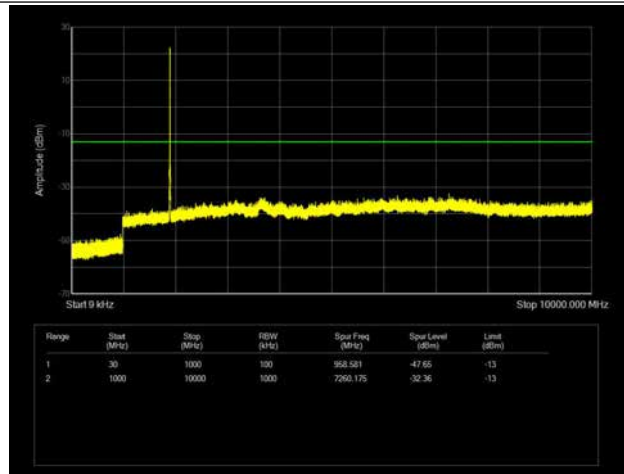
64QAM



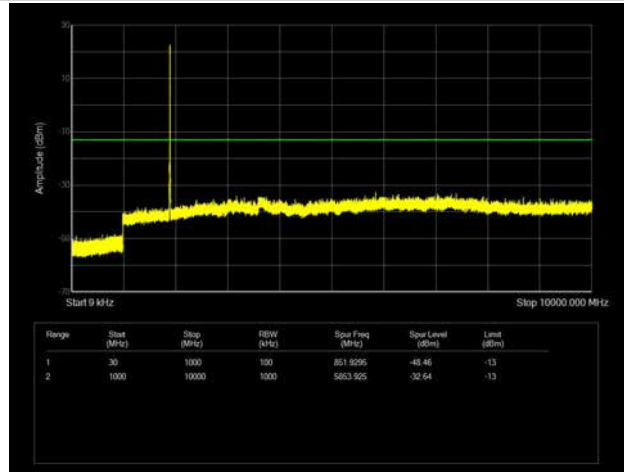


**LTE Band 2 \_ 5MHz BW \_ High Channel**

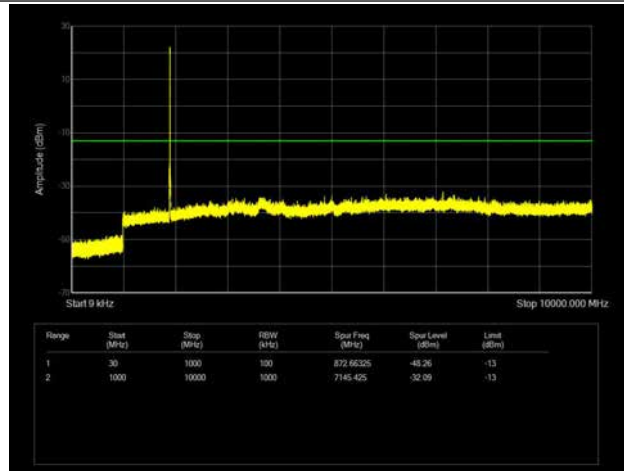
**QPSK**



**16QAM**



**64QAM**

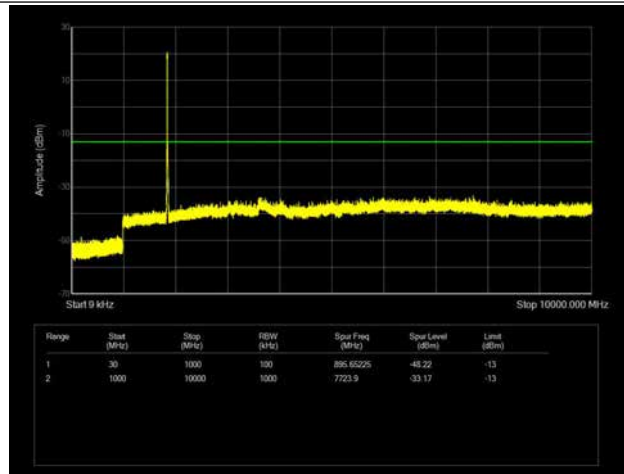




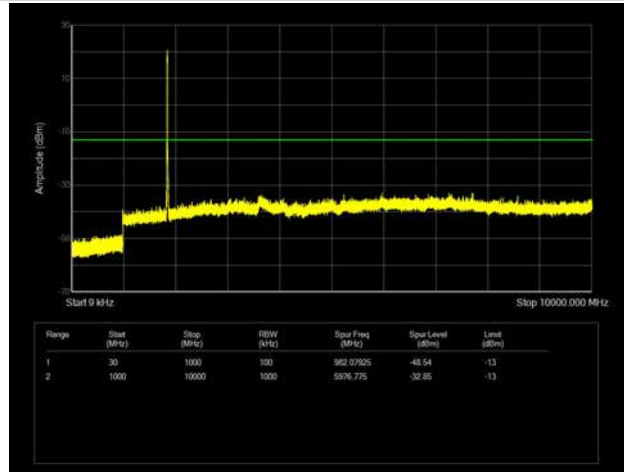


LTE Band 2 \_ 10MHz BW \_ Low Channel

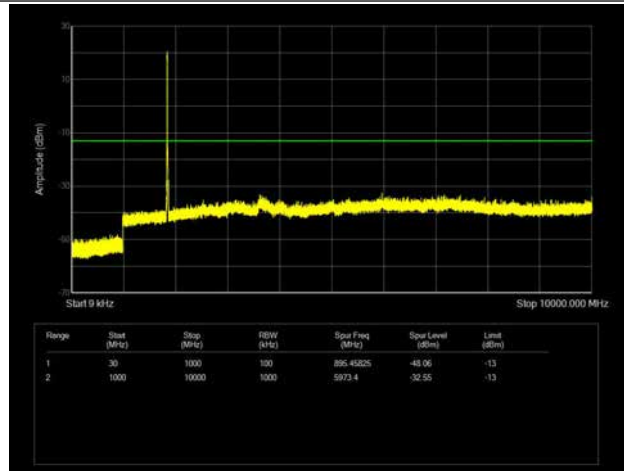
QPSK



16QAM



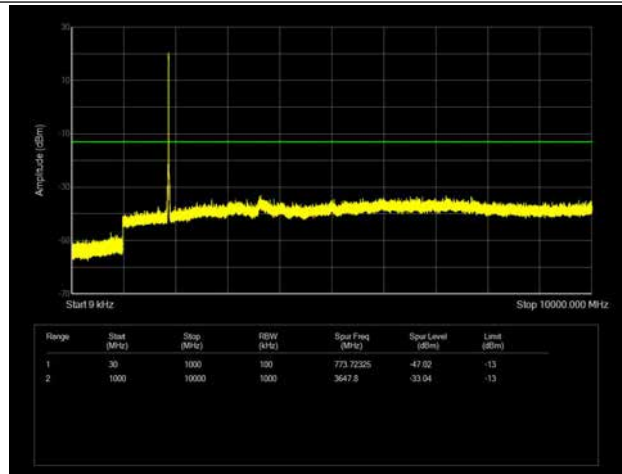
64QAM



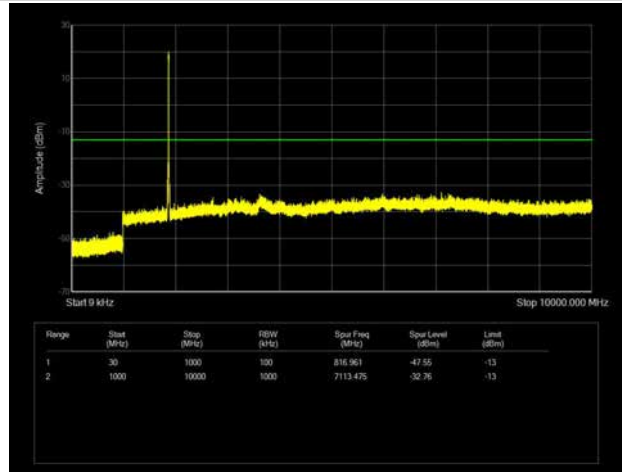


LTE Band 2 \_ 10MHz BW \_ Middle Channel

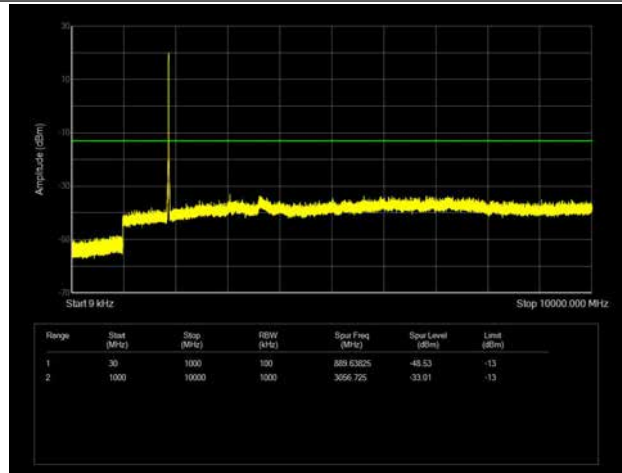
QPSK



16QAM



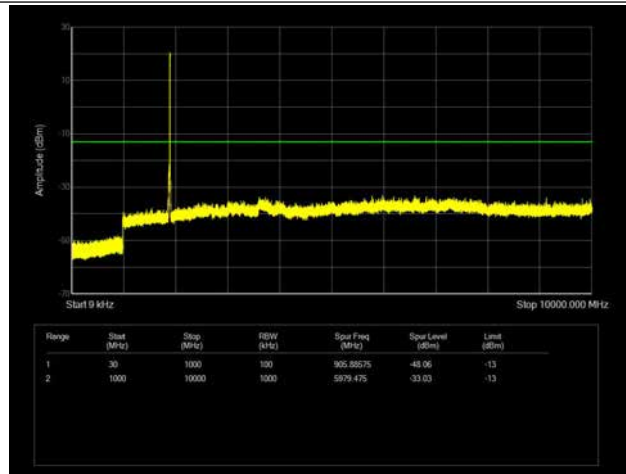
64QAM



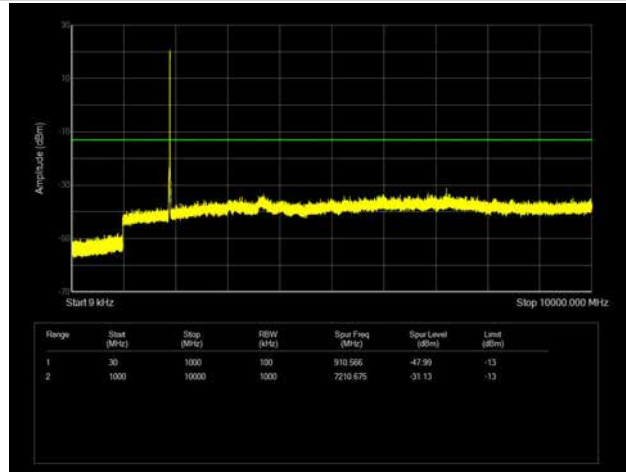


LTE Band 2 \_ 10MHz BW \_ High Channel

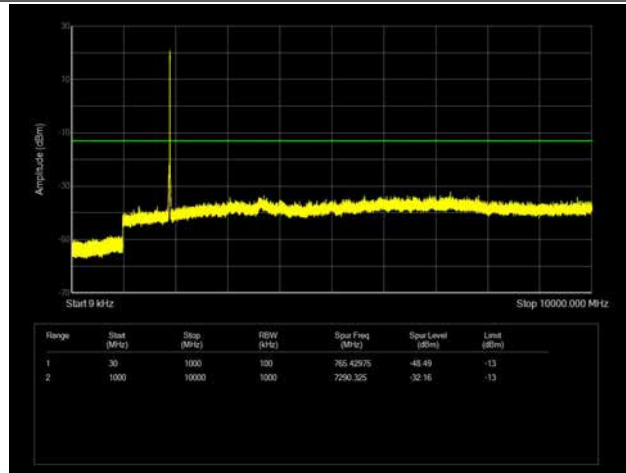
QPSK



16QAM



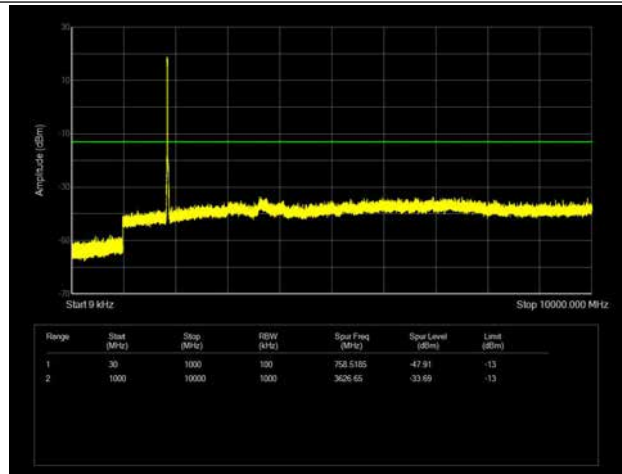
64QAM



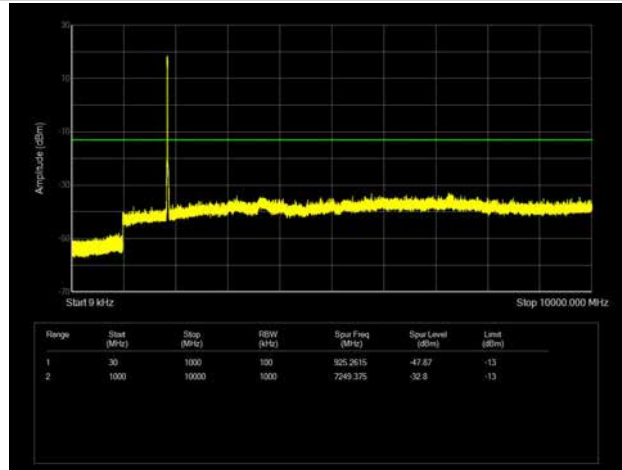


LTE Band 2 \_ 15MHz BW \_ Low Channel

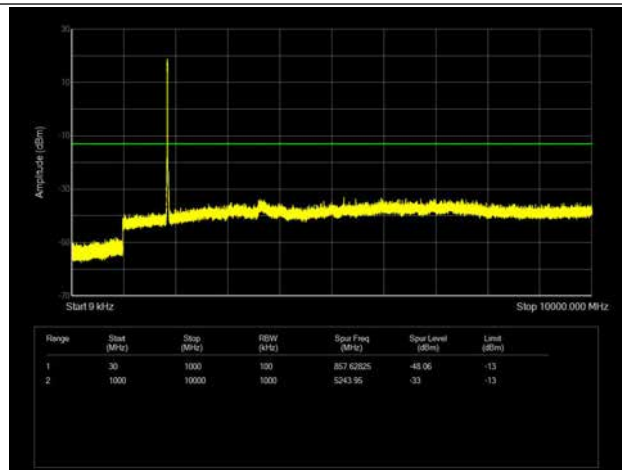
QPSK



16QAM



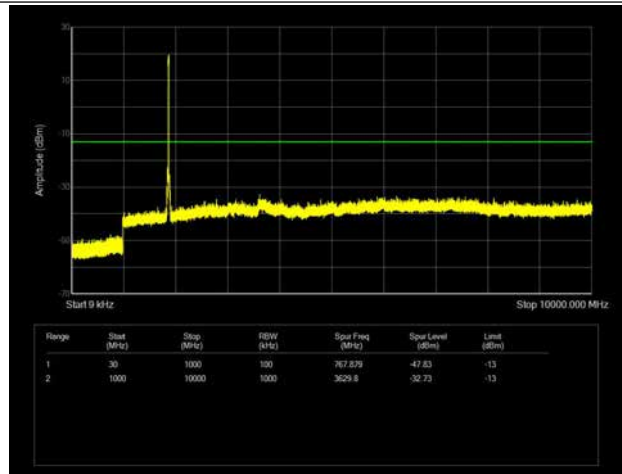
64QAM



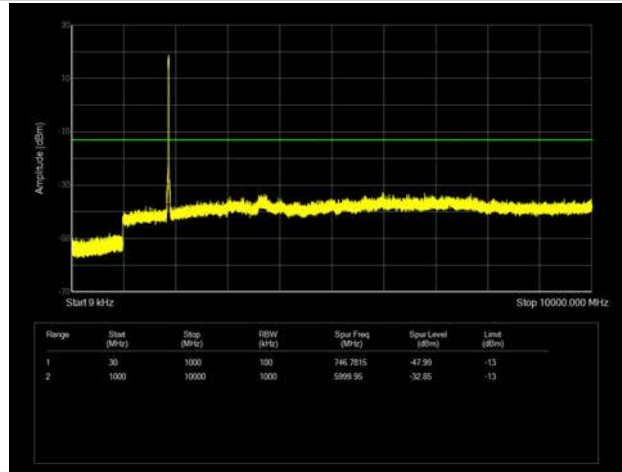


LTE Band 2 \_ 15MHz BW \_ Middle Channel

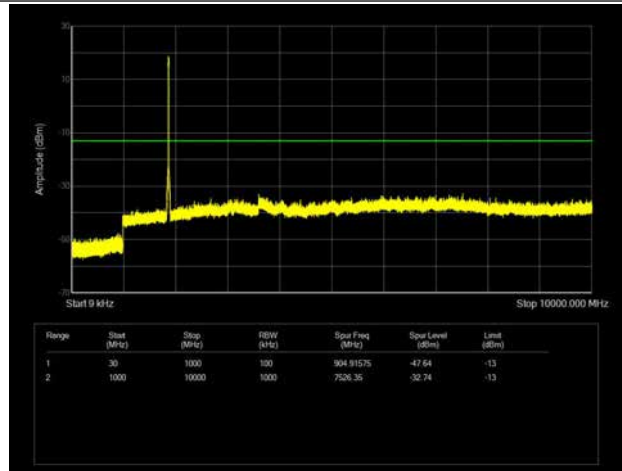
QPSK



16QAM



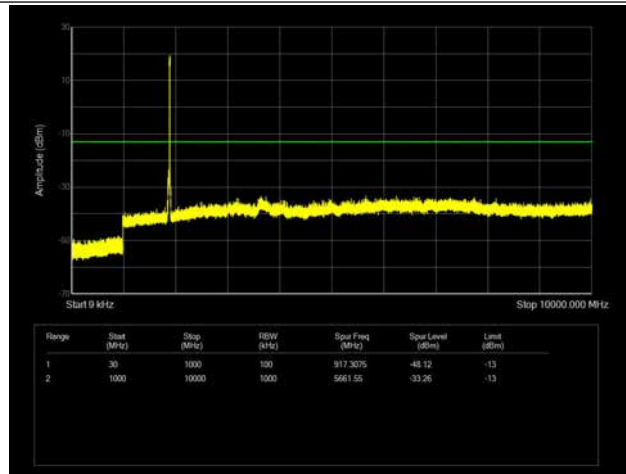
64QAM



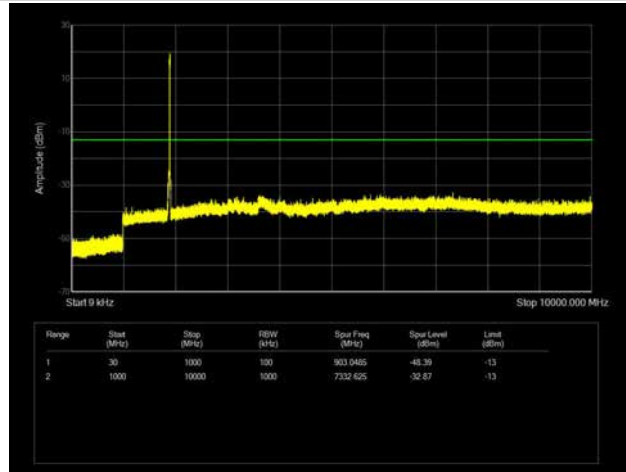


LTE Band 2 \_ 15MHz BW \_ High Channel

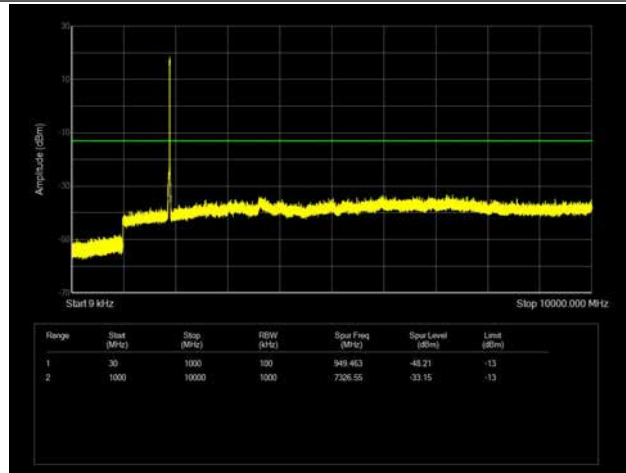
QPSK



16QAM



64QAM

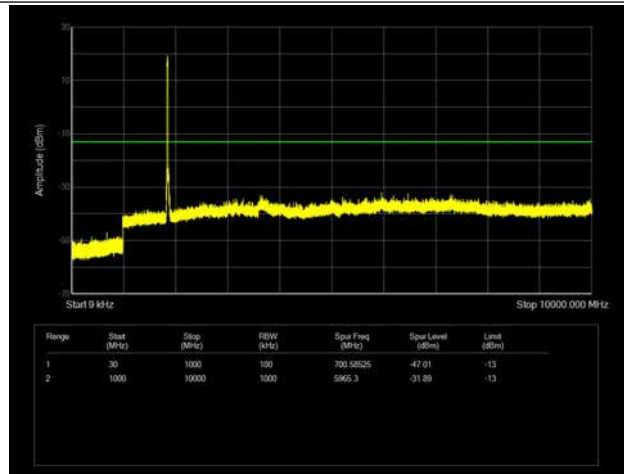




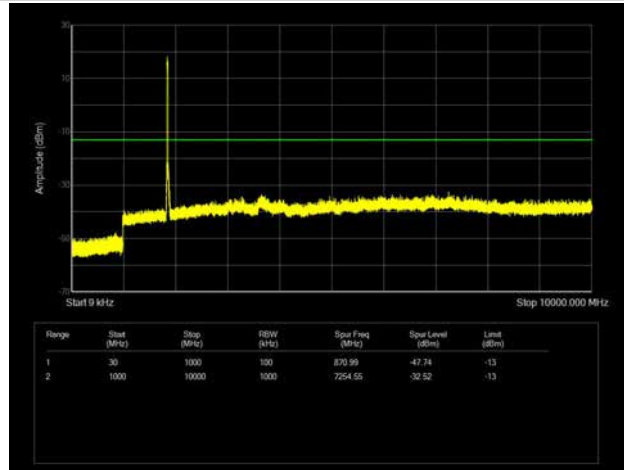


LTE Band 2 \_ 20MHz BW \_ Low Channel

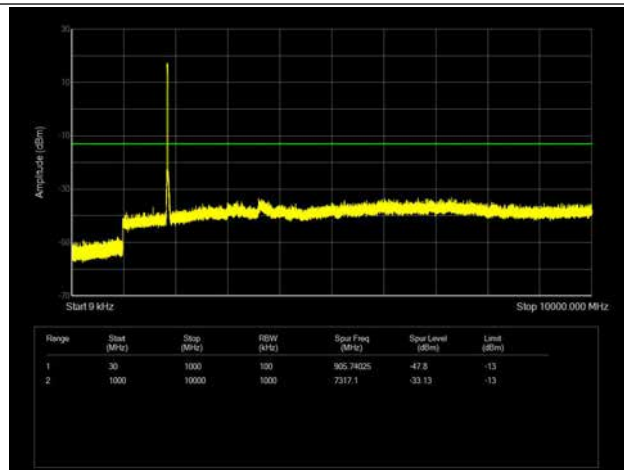
QPSK



16QAM



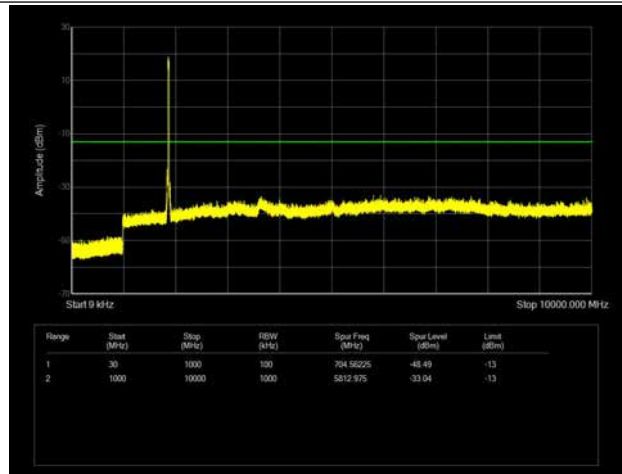
64QAM



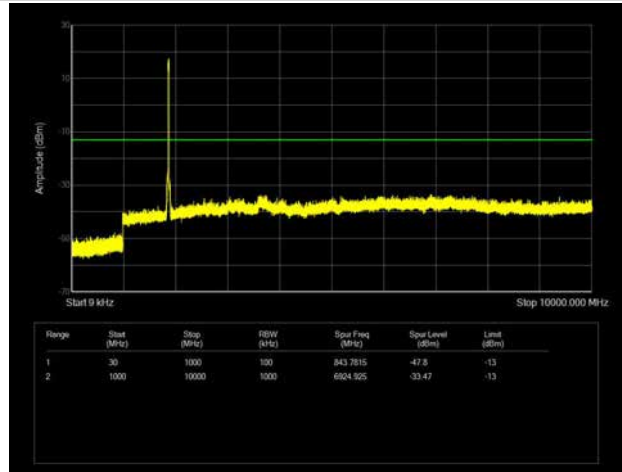


LTE Band 2 \_ 20MHz BW \_ Middle Channel

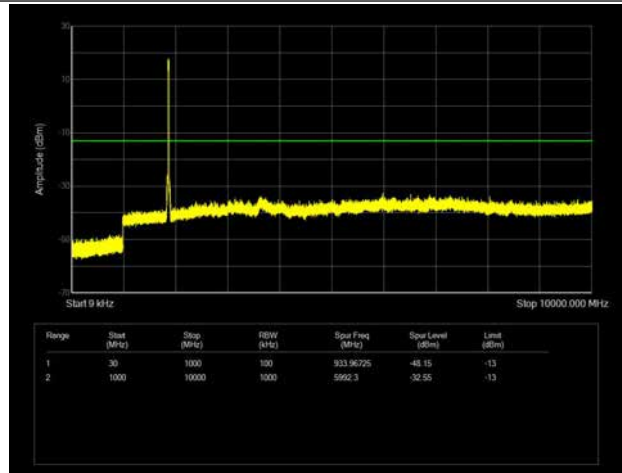
QPSK



16QAM



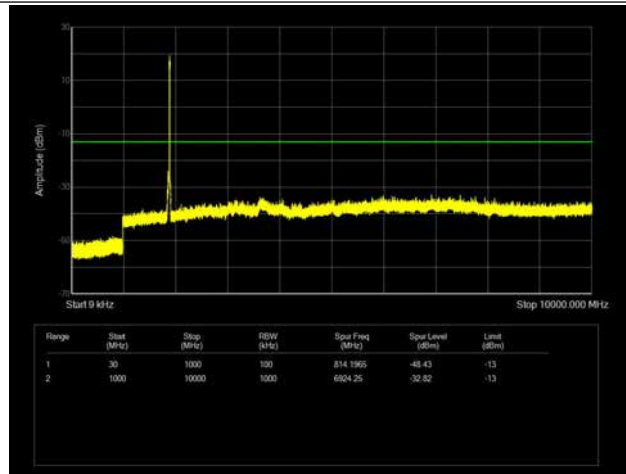
64QAM



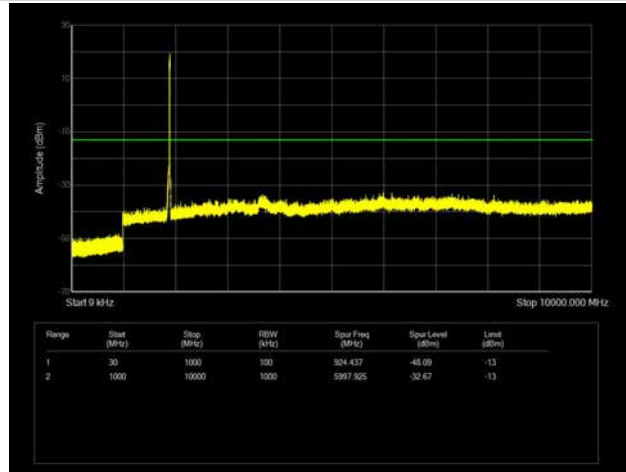


LTE Band 2 \_ 20MHz BW \_ High Channel

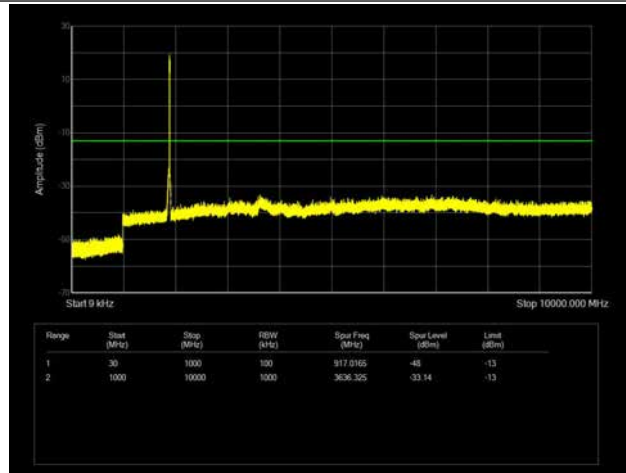
QPSK



16QAM



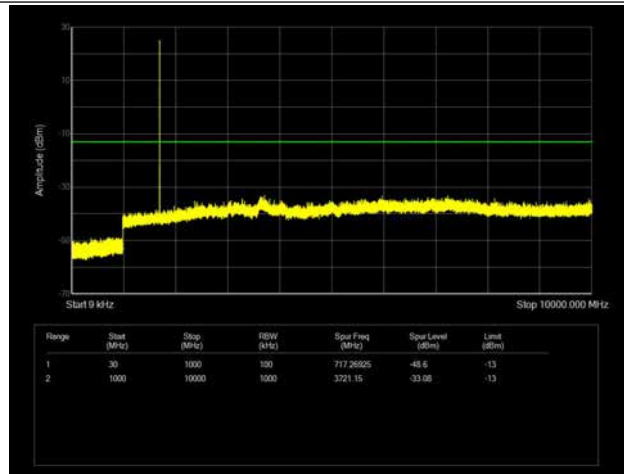
64QAM



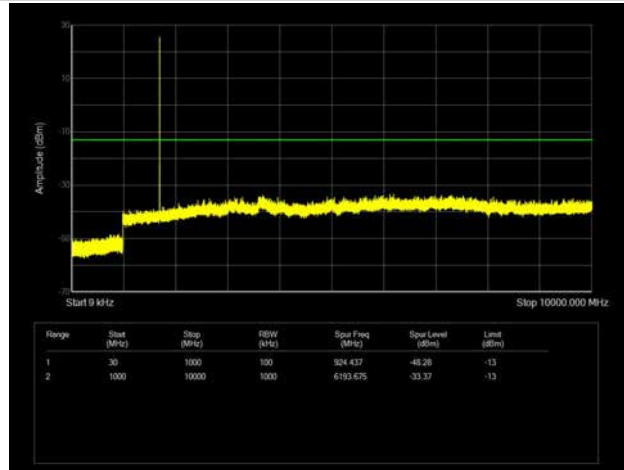


LTE Band 4 \_ 1.4MHz BW \_ Low Channel

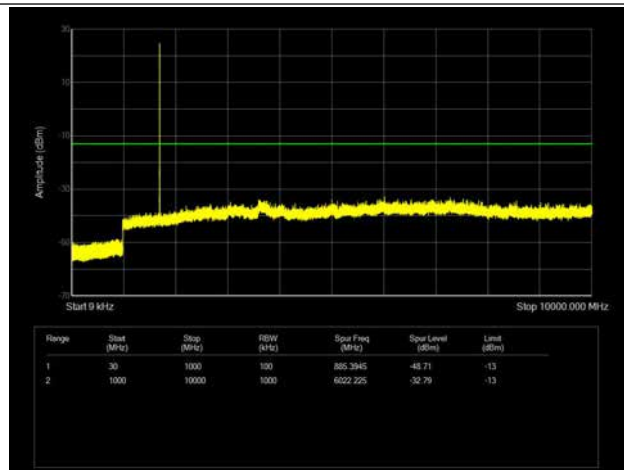
QPSK



16QAM



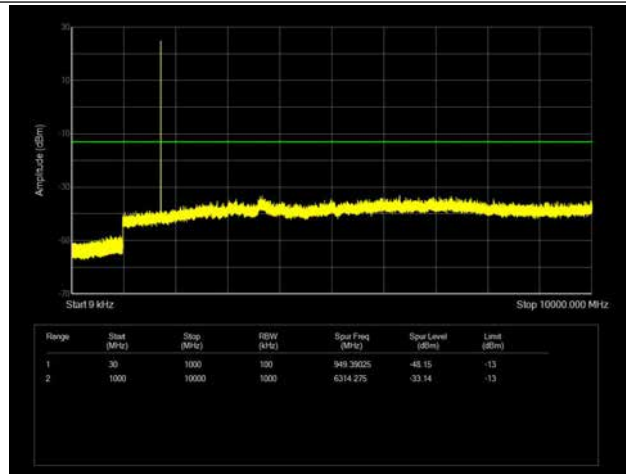
64QAM



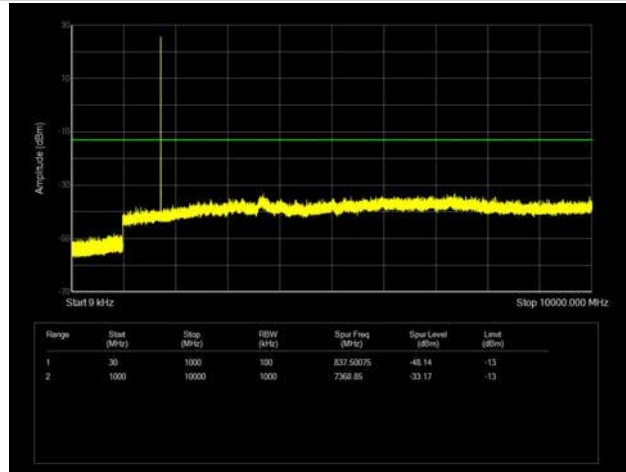


LTE Band 4 \_ 1.4MHz BW \_ Middle Channel

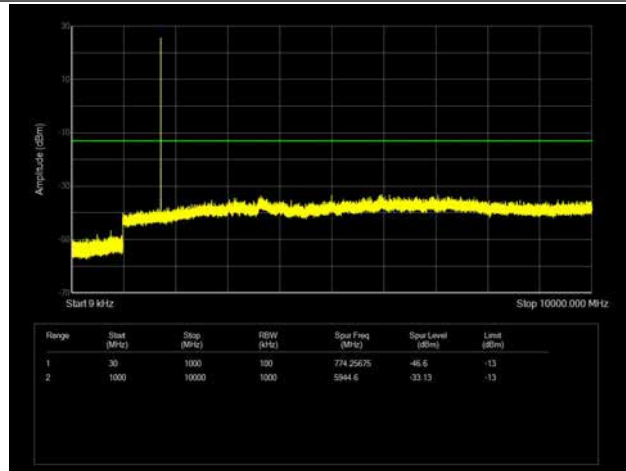
QPSK



16QAM



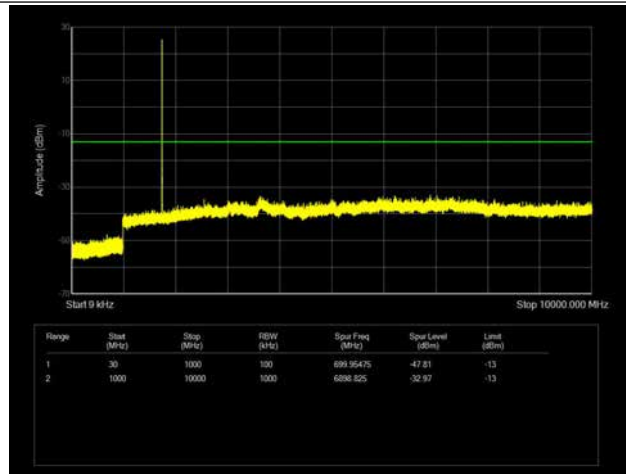
64QAM



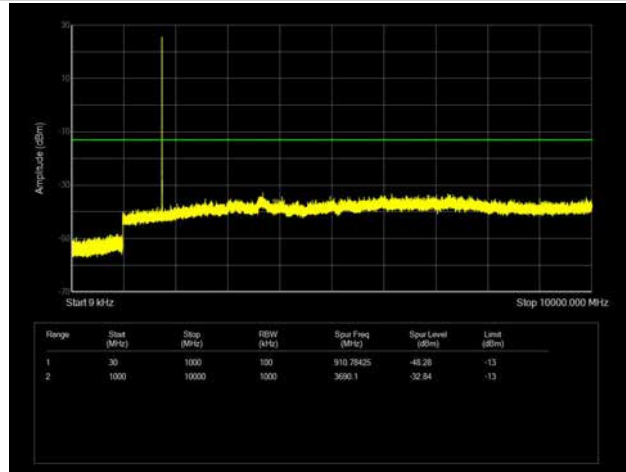


LTE Band 4 \_ 1.4MHz BW \_ High Channel

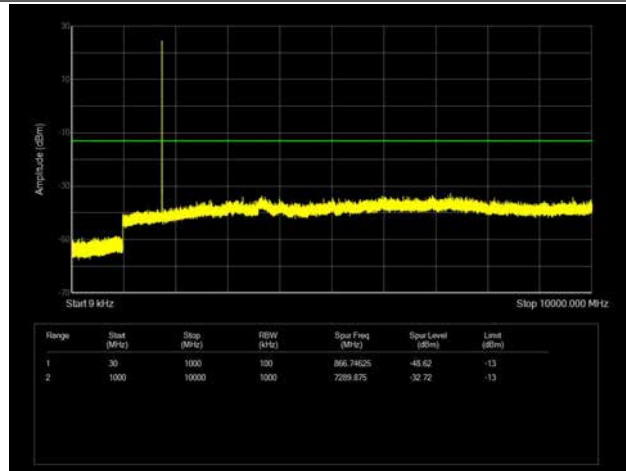
QPSK



16QAM



64QAM

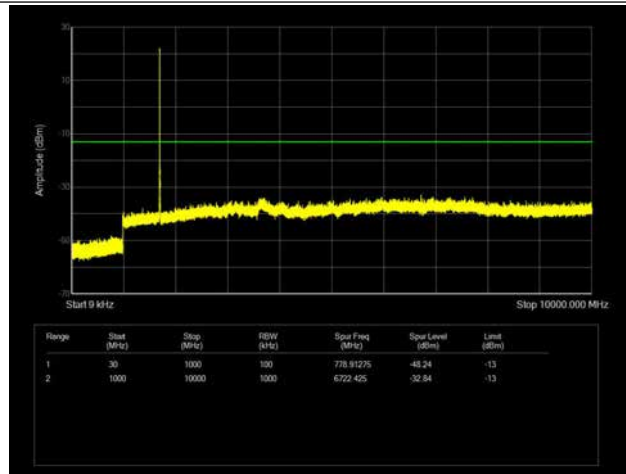




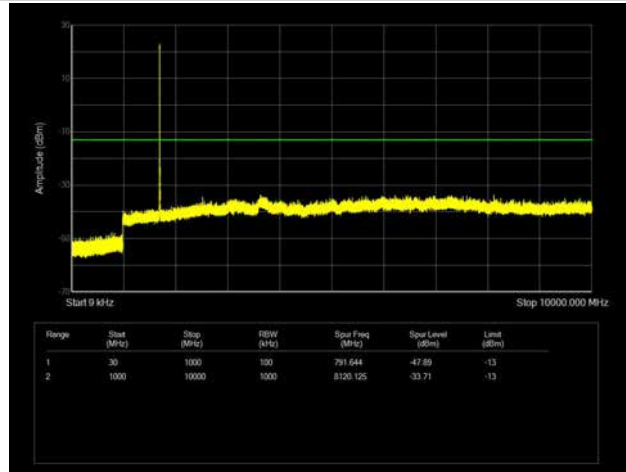


LTE Band 4 \_ 3MHz BW \_ Low Channel

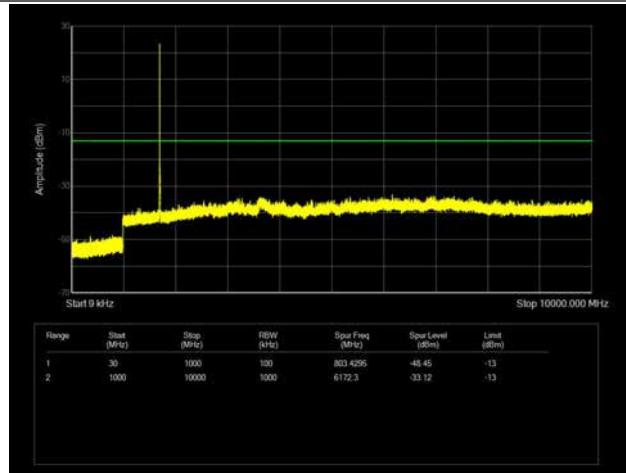
QPSK



16QAM



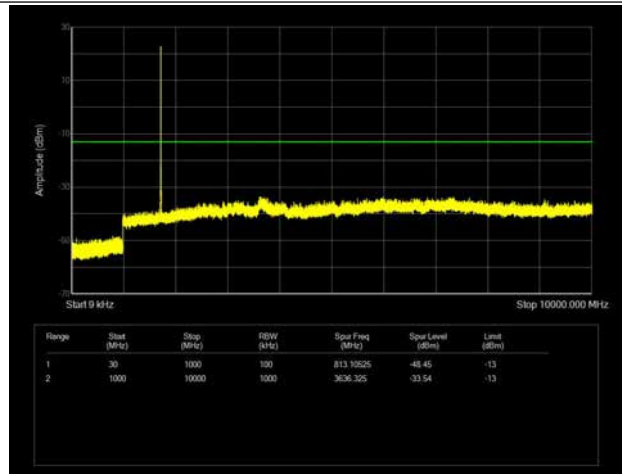
64QAM



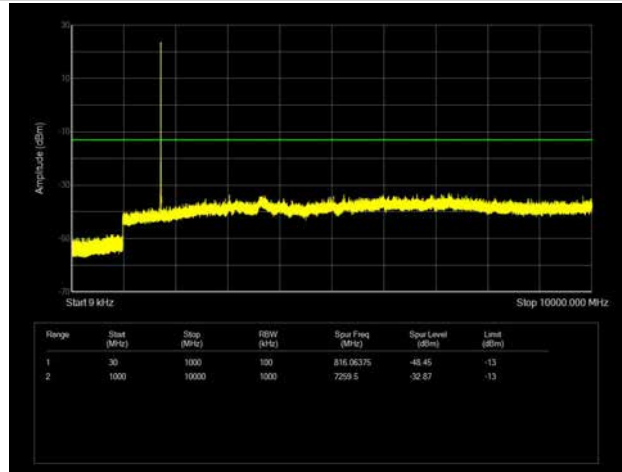


LTE Band 4 \_ 3MHz BW \_ Middle Channel

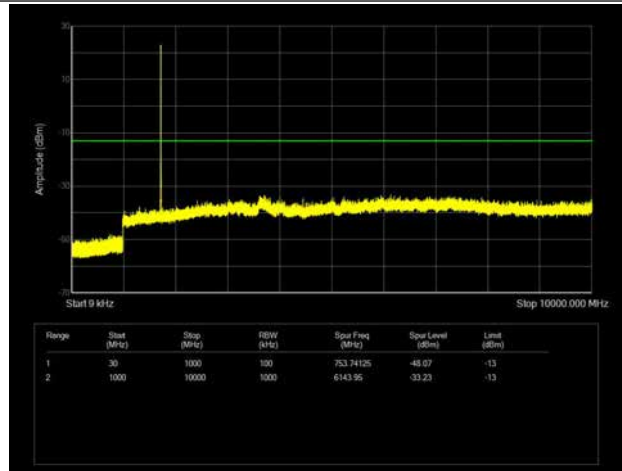
QPSK



16QAM



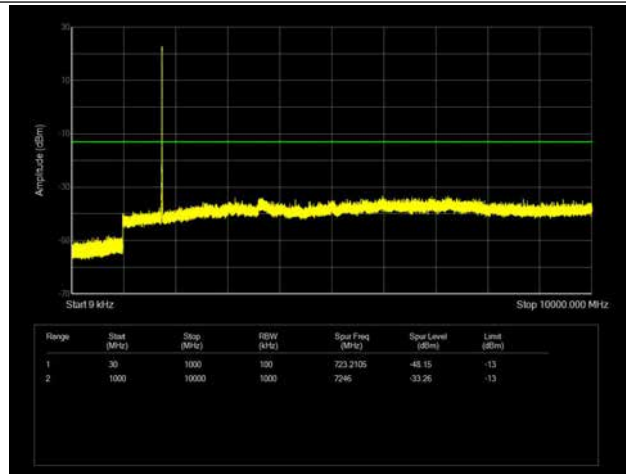
64QAM



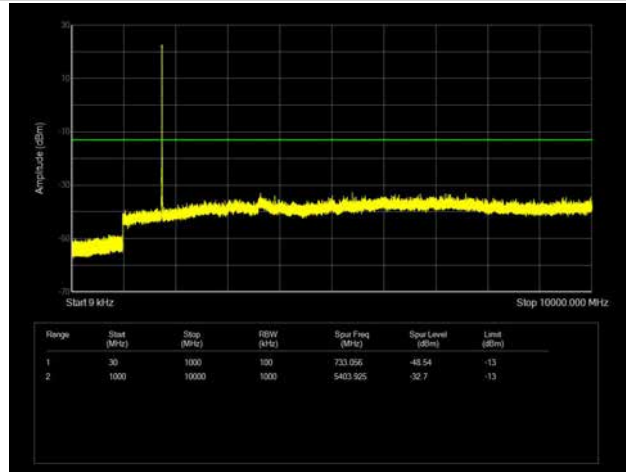


LTE Band 4 \_ 3MHz BW \_ High Channel

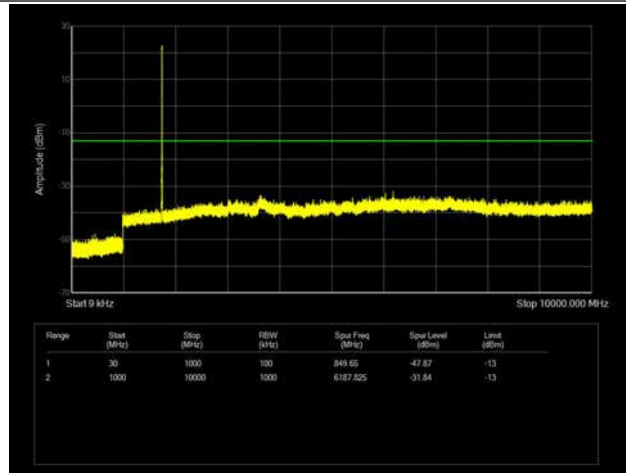
QPSK



16QAM



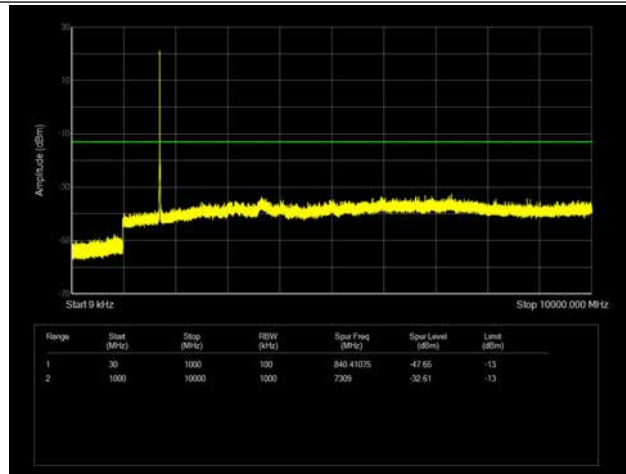
64QAM



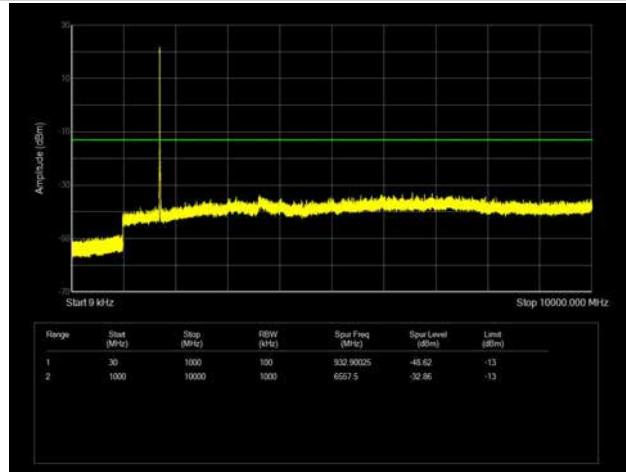


LTE Band 4 \_ 5MHz BW \_ Low Channel

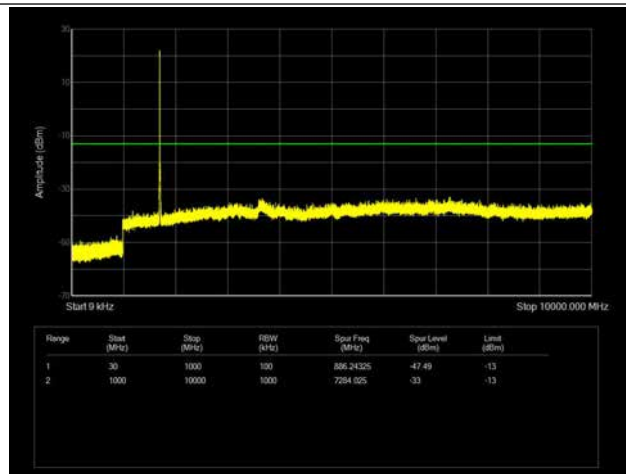
QPSK



16QAM



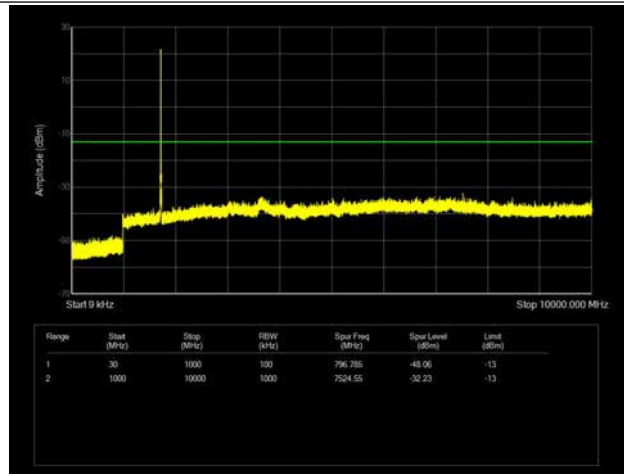
64QAM



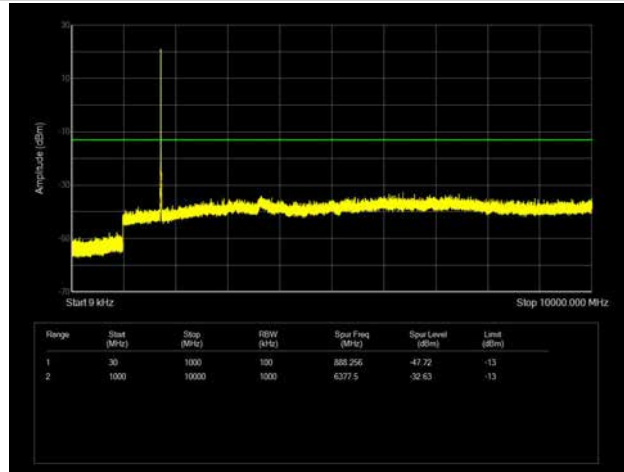


LTE Band 4 \_ 5MHz BW \_ Middle Channel

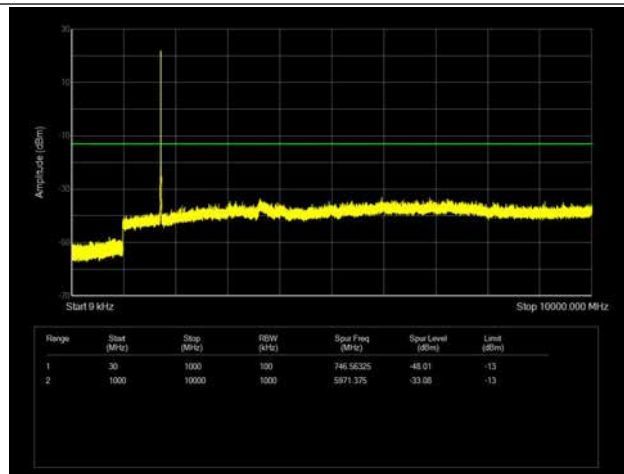
QPSK



16QAM



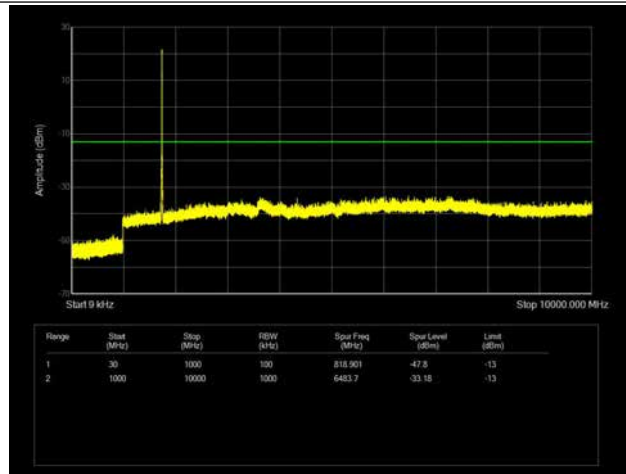
64QAM



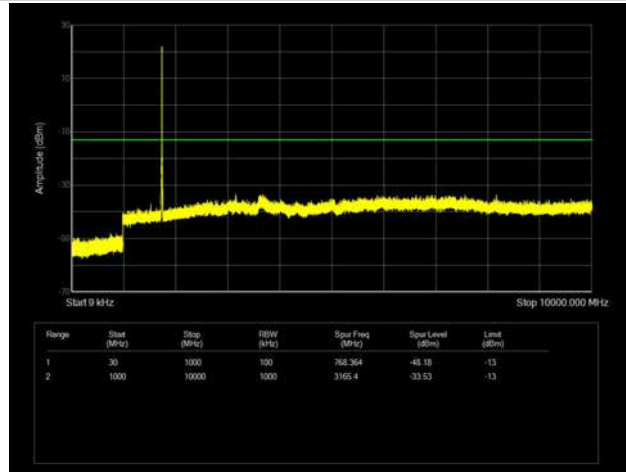


LTE Band 4 \_ 5MHz BW \_ High Channel

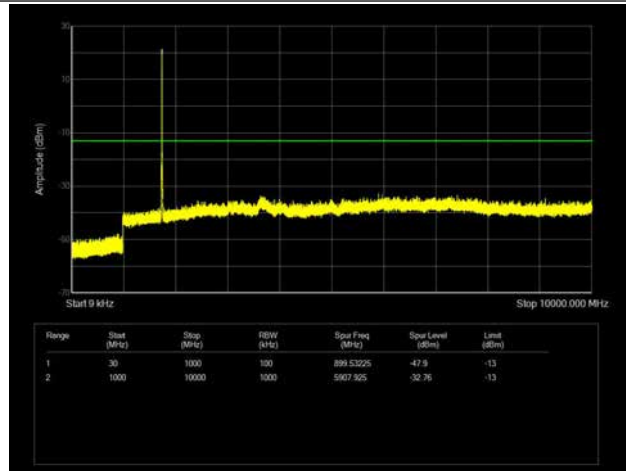
QPSK



16QAM



64QAM

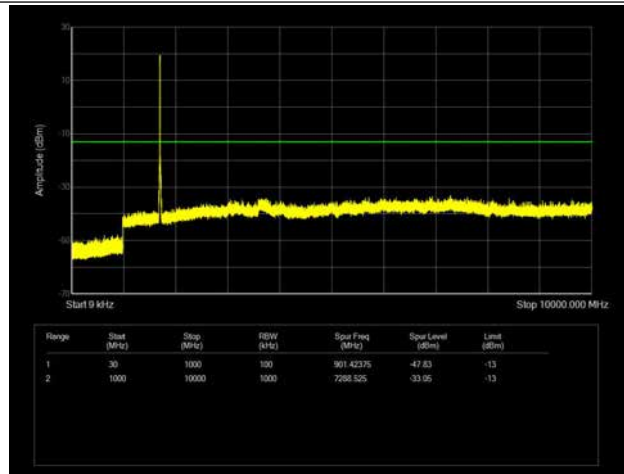




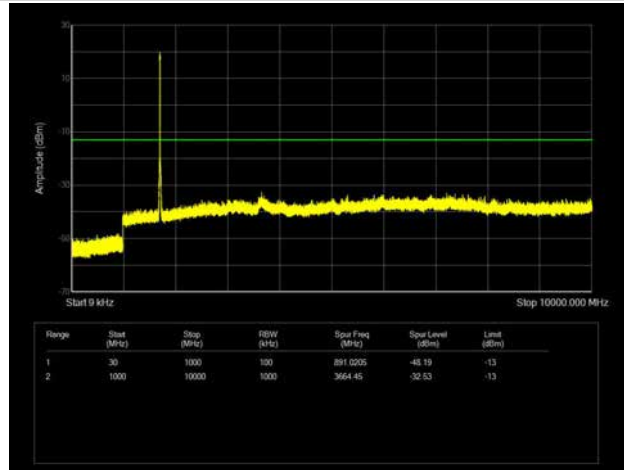


LTE Band 4 \_ 10MHz BW \_ Low Channel

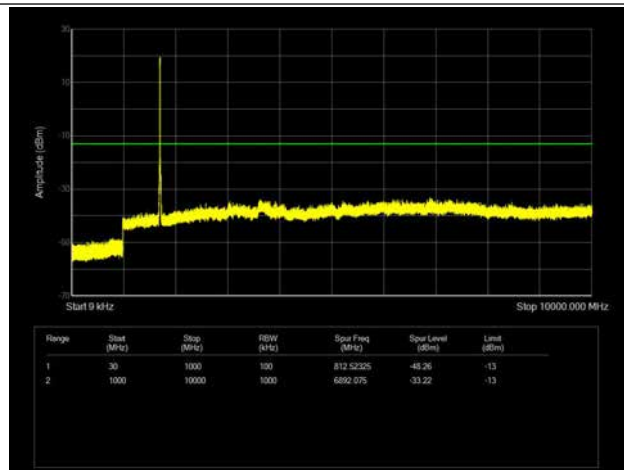
QPSK



16QAM



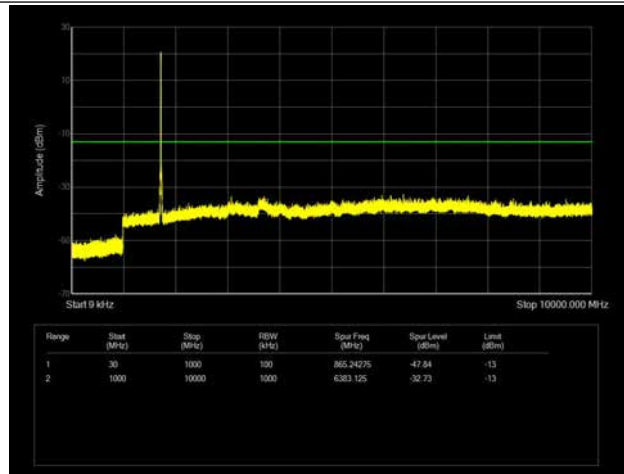
64QAM



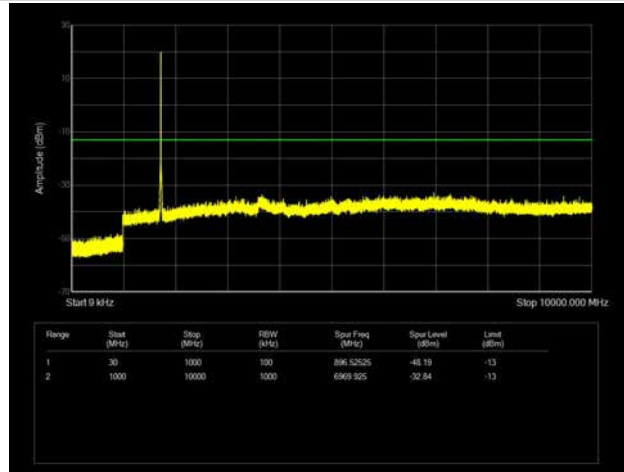


LTE Band 4 \_ 10MHz BW \_ Middle Channel

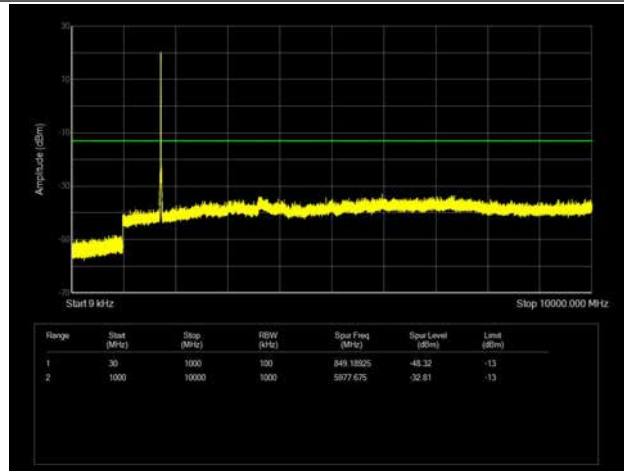
QPSK



16QAM



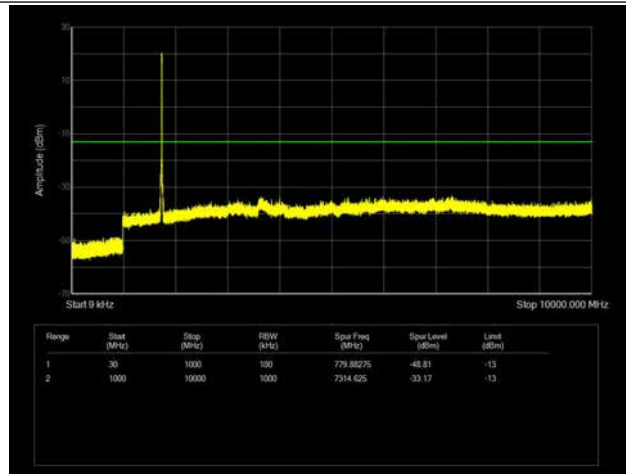
64QAM



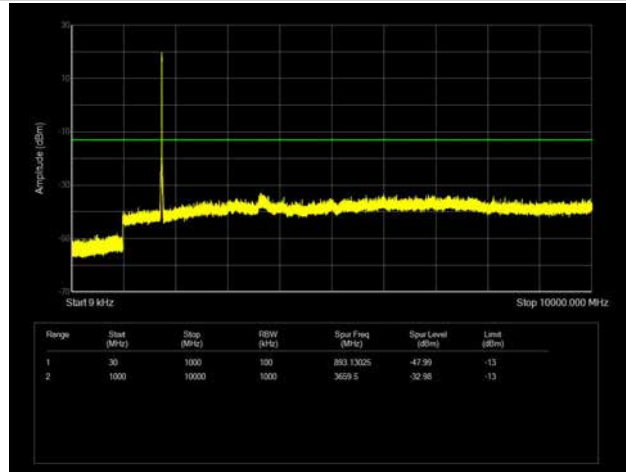


LTE Band 4 \_ 10MHz BW \_ High Channel

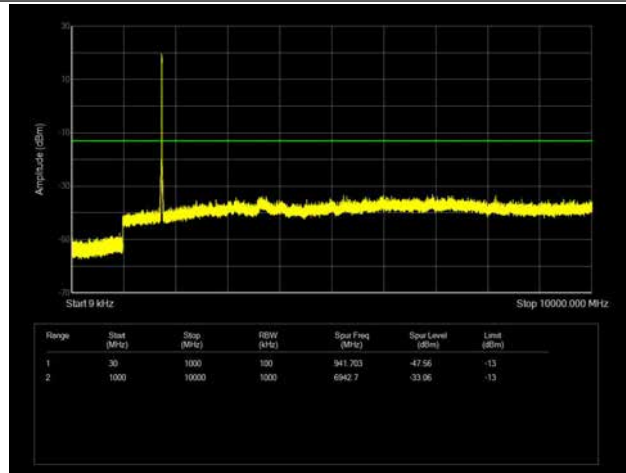
QPSK



16QAM



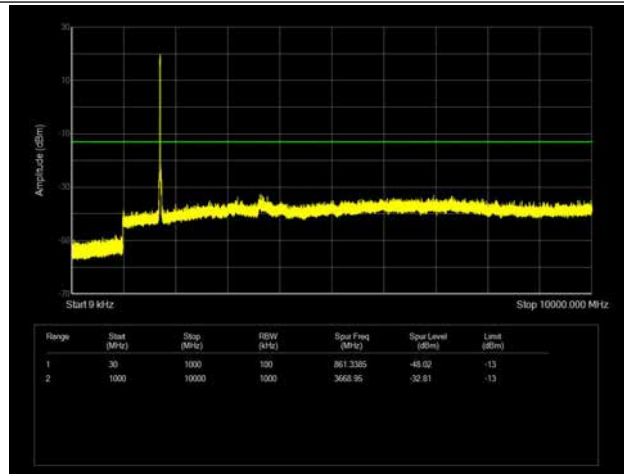
64QAM



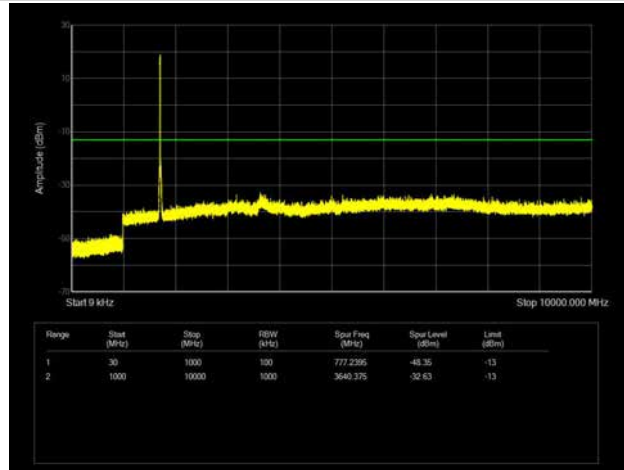


LTE Band 4 \_ 15MHz BW \_ Low Channel

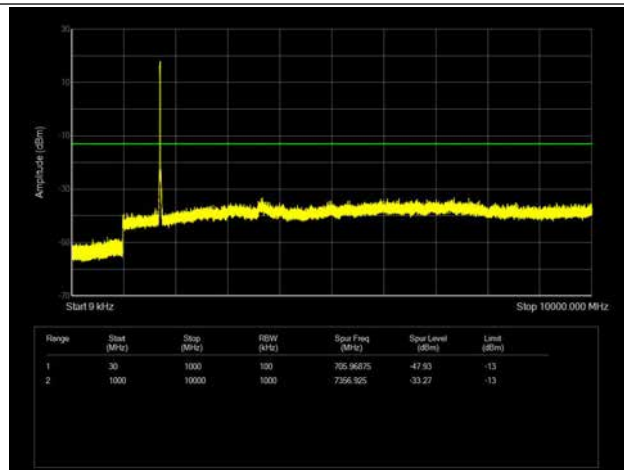
QPSK



16QAM



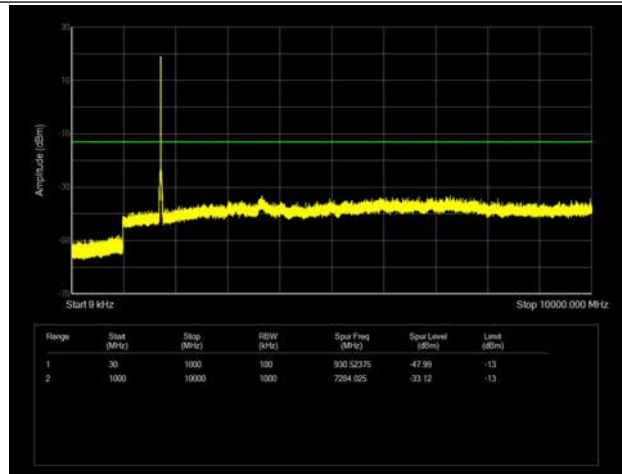
64QAM



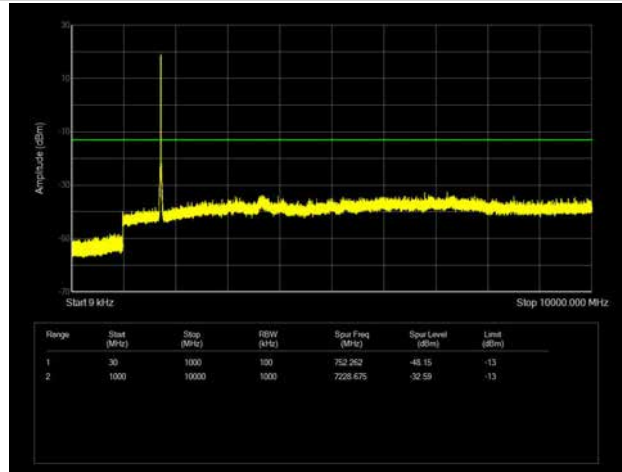


LTE Band 4 \_ 15MHz BW \_ Middle Channel

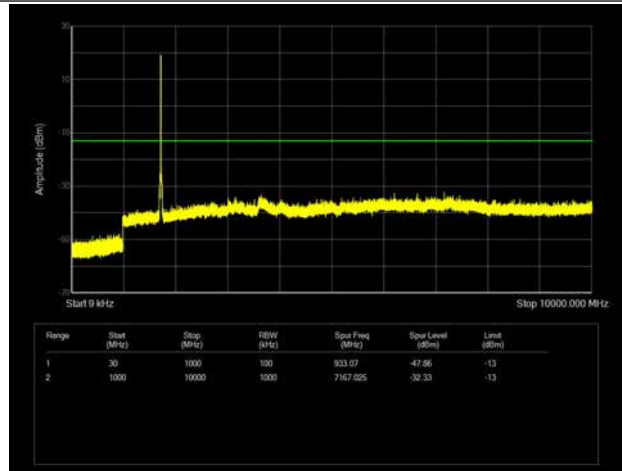
QPSK



16QAM



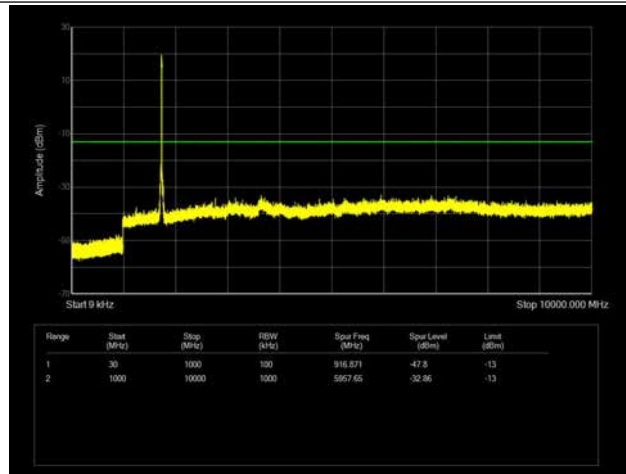
64QAM



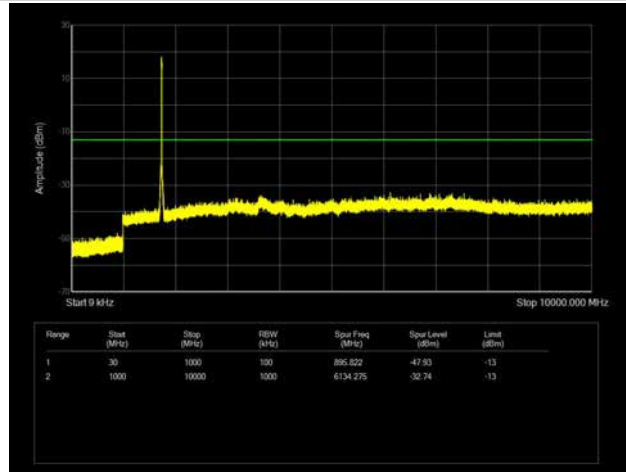


LTE Band 4 \_ 15MHz BW \_ High Channel

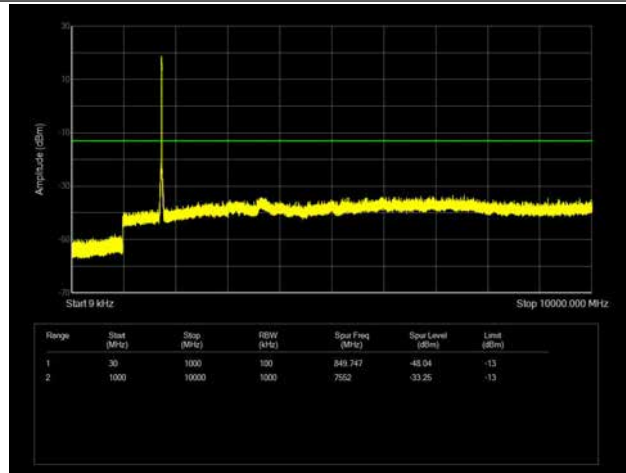
QPSK



16QAM



64QAM

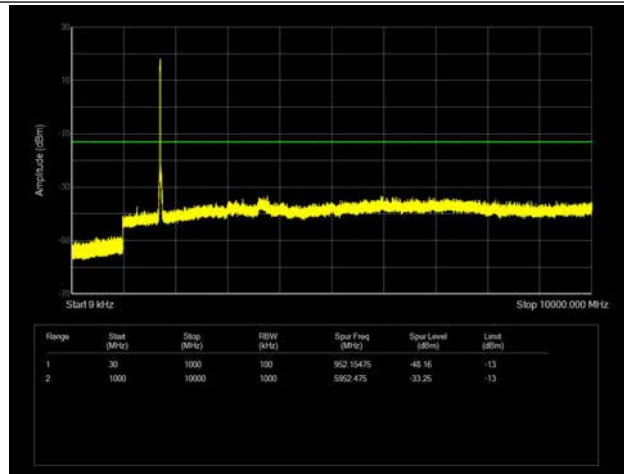




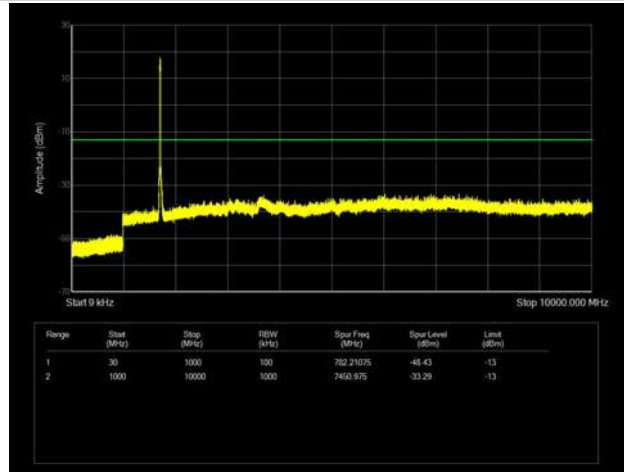


LTE Band 4 \_ 20MHz BW \_ Low Channel

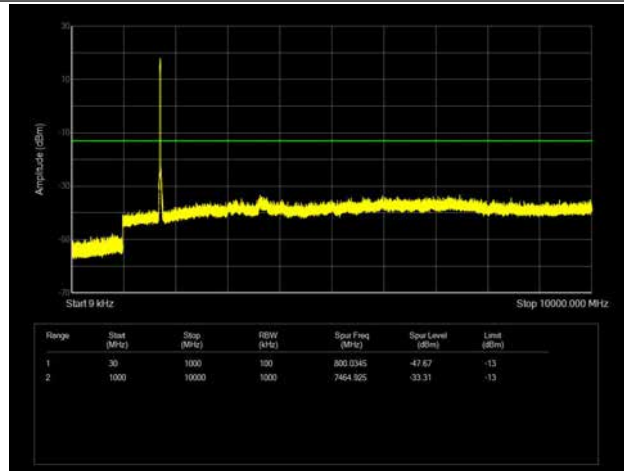
QPSK



16QAM

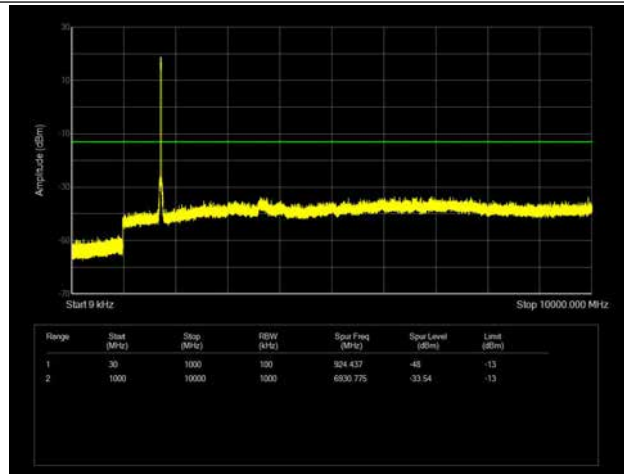


64QAM

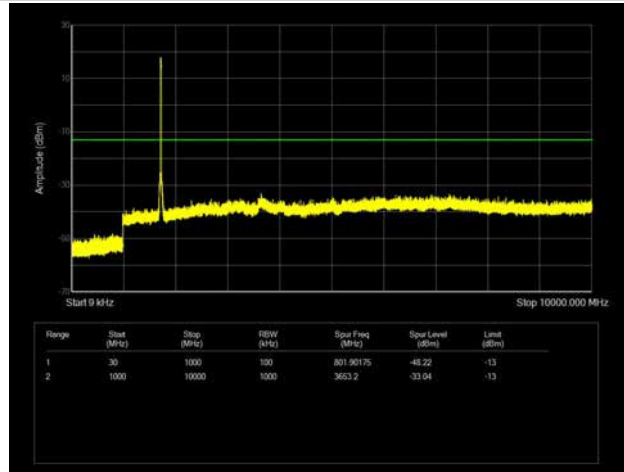


LTE Band 4 \_ 20MHz BW \_ Middle Channel

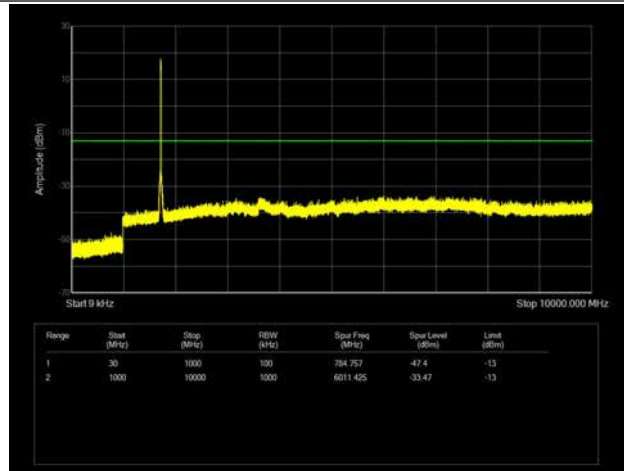
QPSK



16QAM

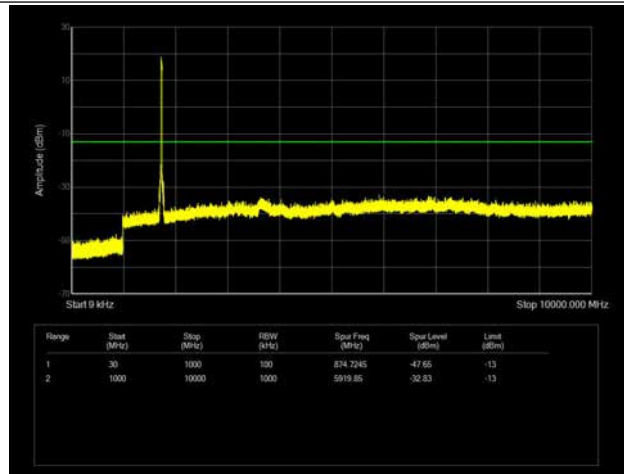


64QAM

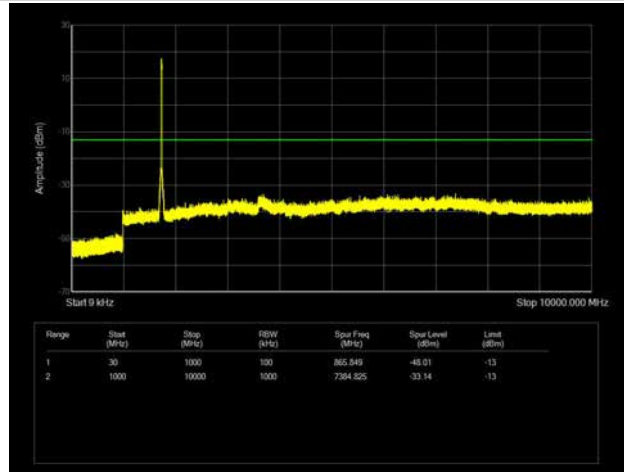


LTE Band 4 \_ 20MHz BW \_ High Channel

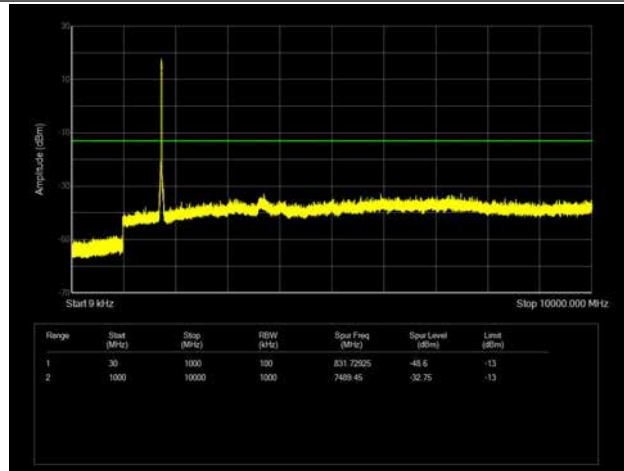
QPSK



16QAM



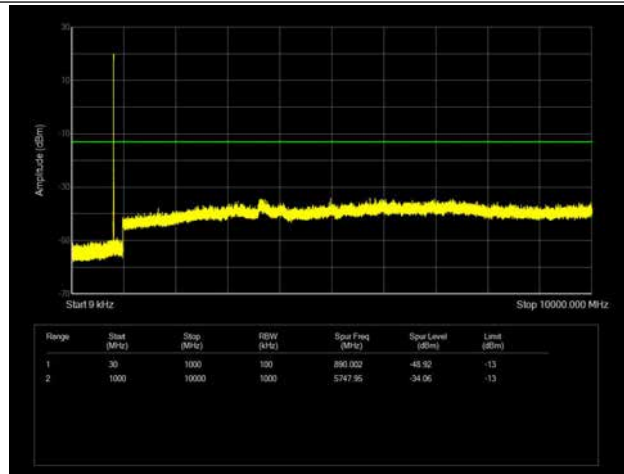
64QAM



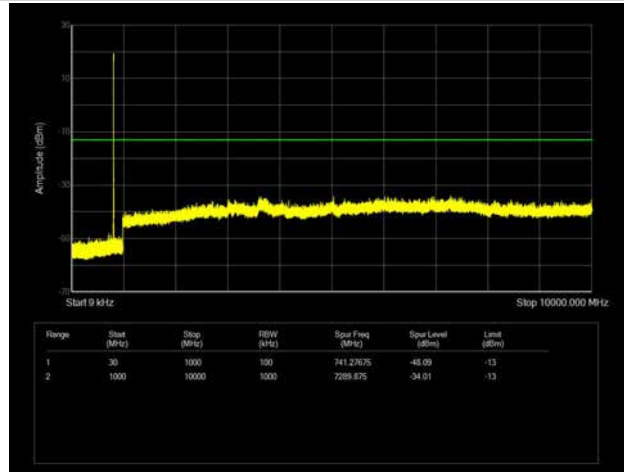


LTE Band 5 \_ 1.4MHz BW \_ Low Channel

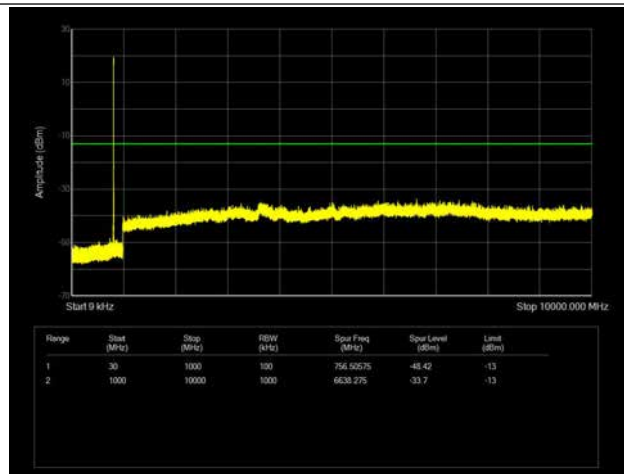
QPSK



16QAM



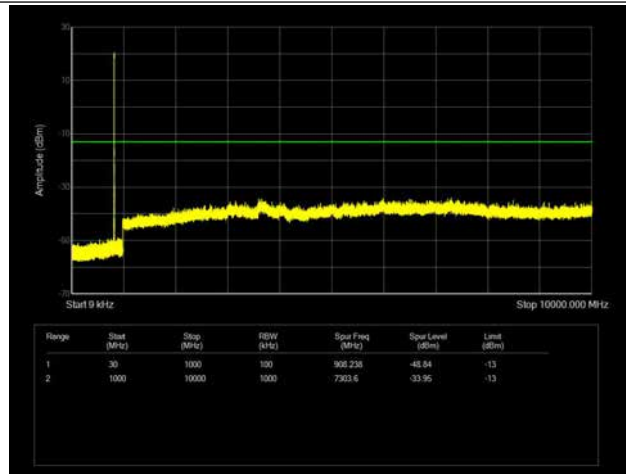
64QAM



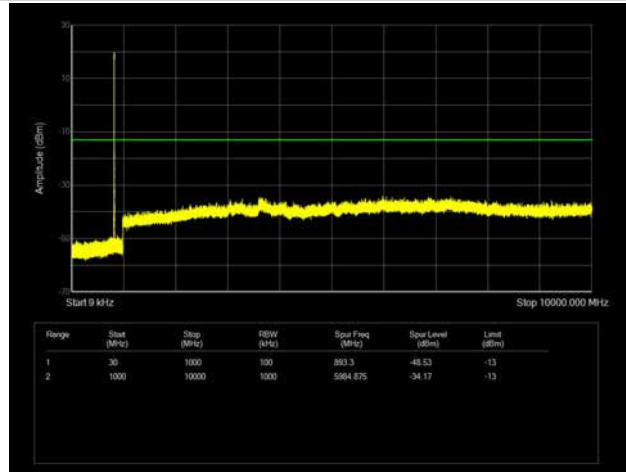


LTE Band 5 \_ 1.4MHz BW \_ Middle Channel

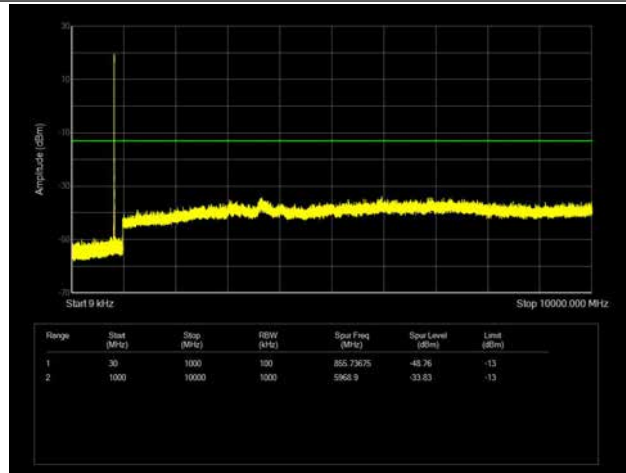
QPSK



16QAM



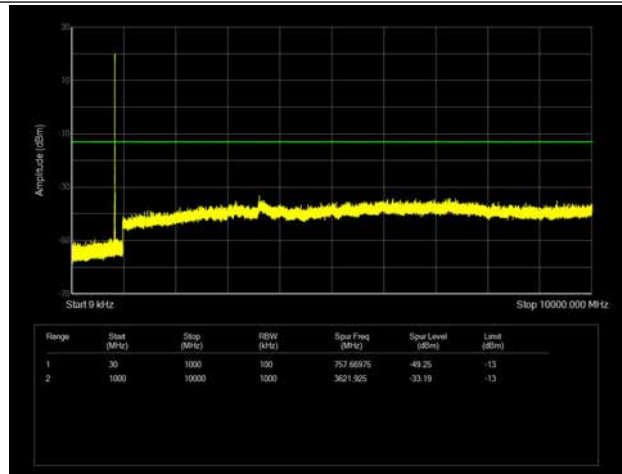
64QAM



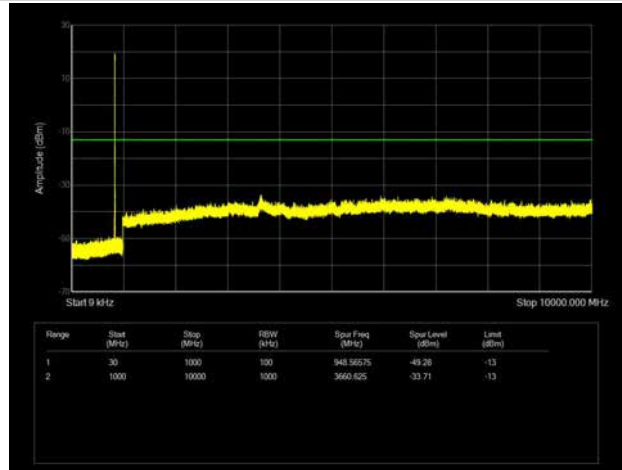


LTE Band 5 \_ 1.4MHz BW \_ High Channel

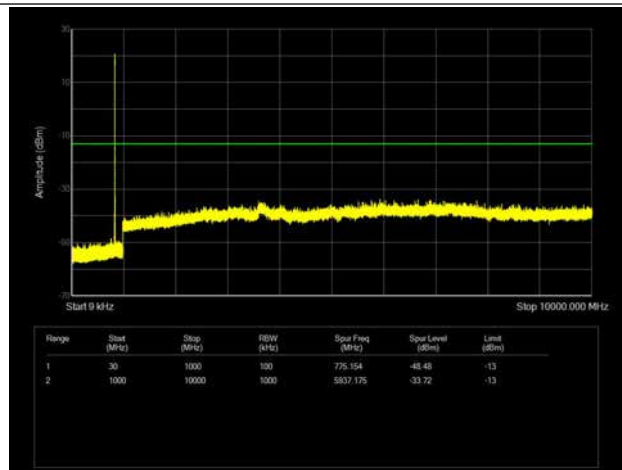
QPSK



16QAM



64QAM

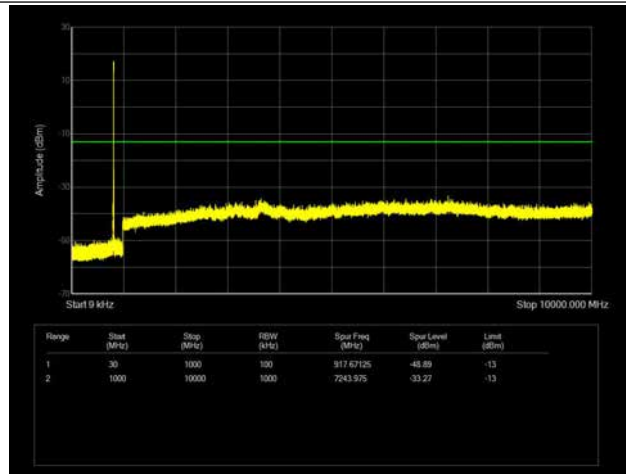




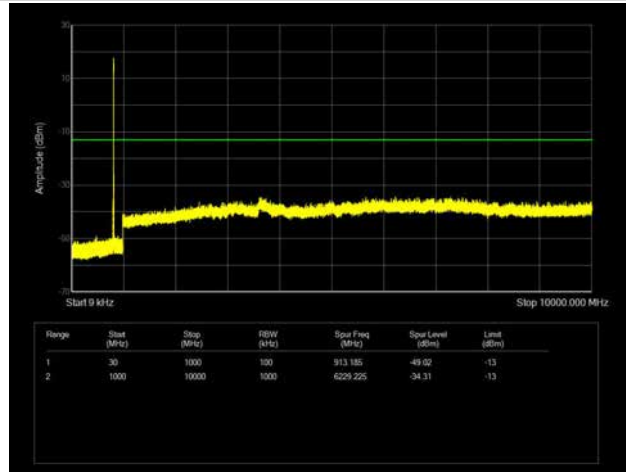


LTE Band 5\_ 3MHz BW \_ Low Channel

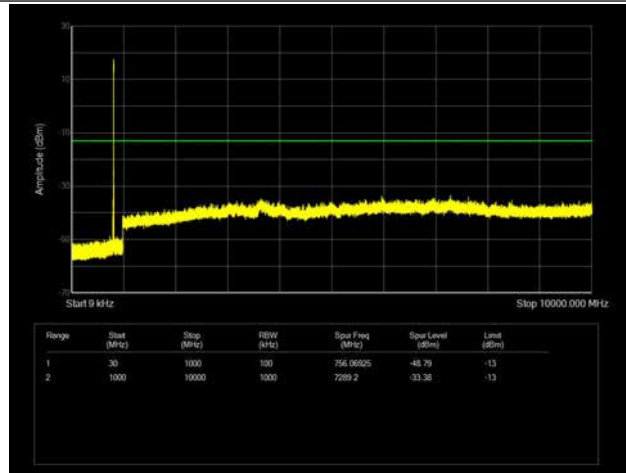
QPSK



16QAM



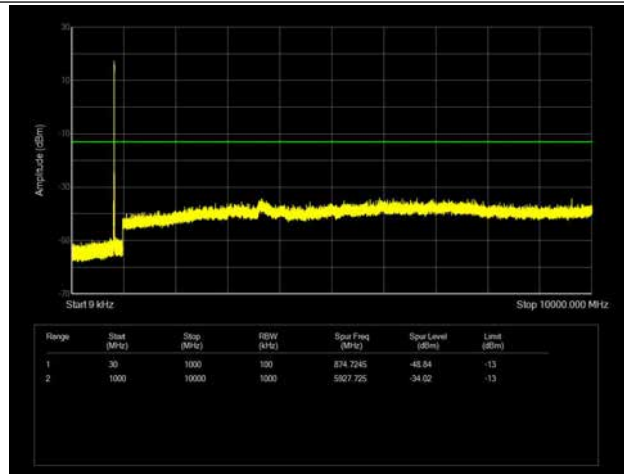
64QAM



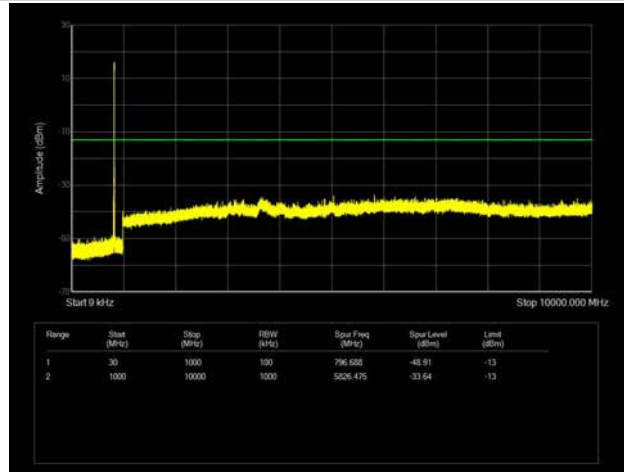


LTE Band 5 \_ 3MHz BW \_ Middle Channel

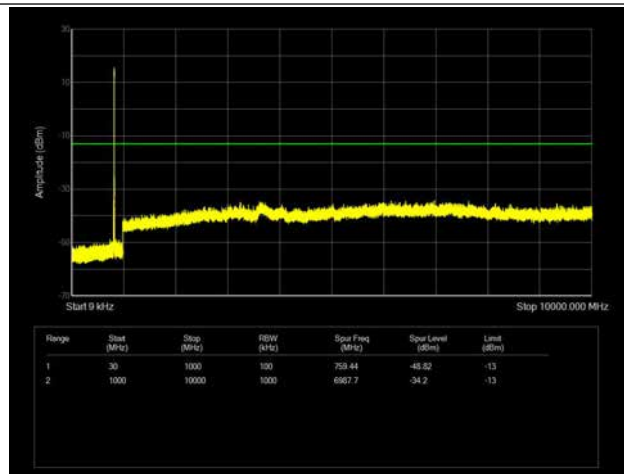
QPSK



16QAM



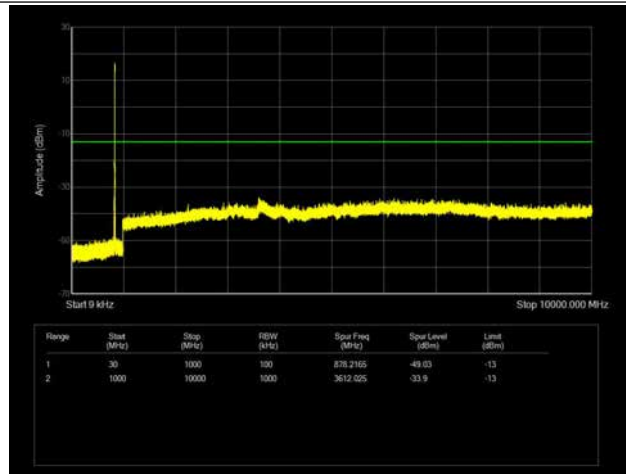
64QAM



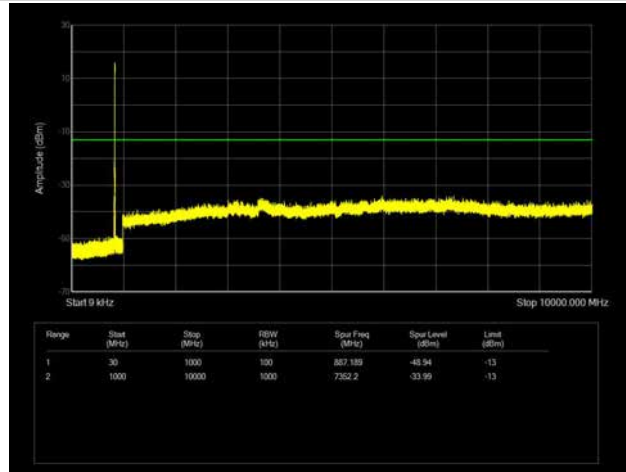


LTE Band 5 \_ 3MHz BW \_ High Channel

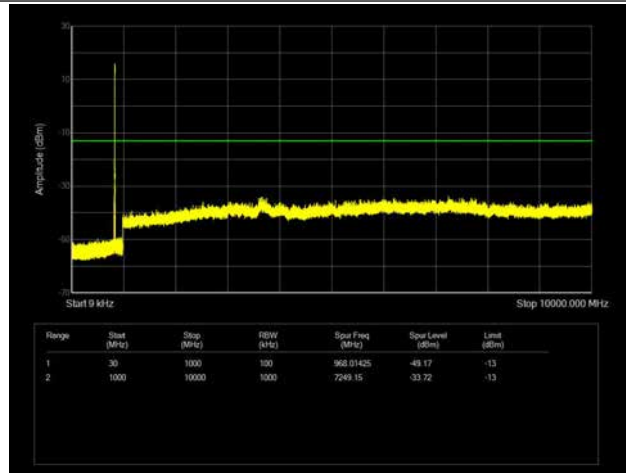
QPSK



16QAM



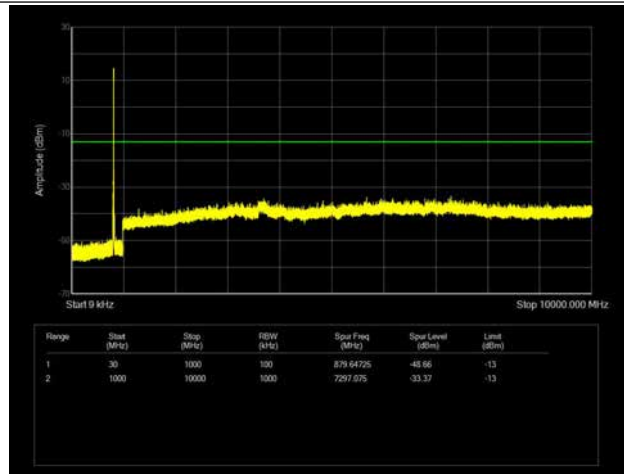
64QAM



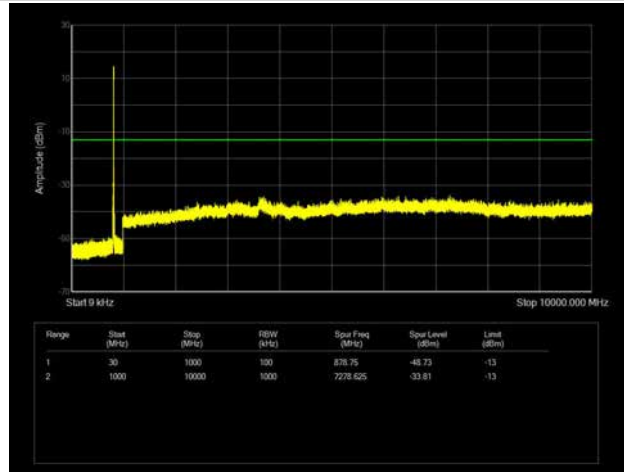


LTE Band 5\_ 5MHz BW \_ Low Channel

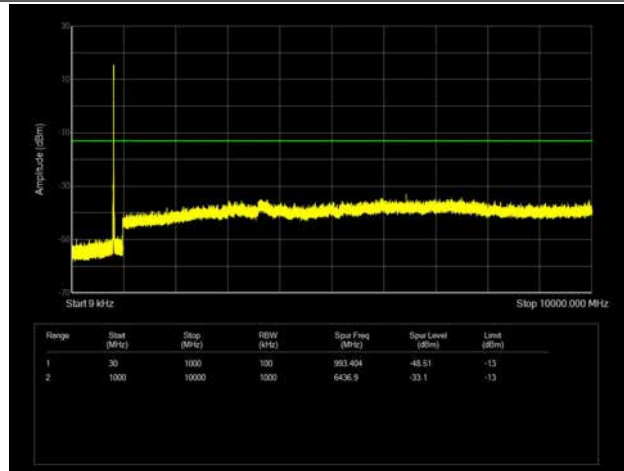
QPSK



16QAM



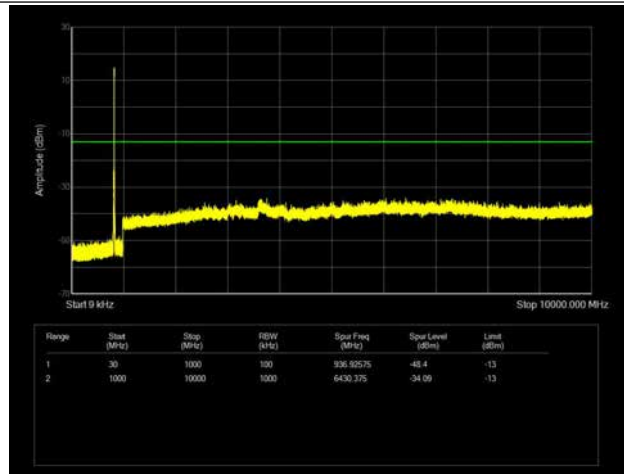
64QAM



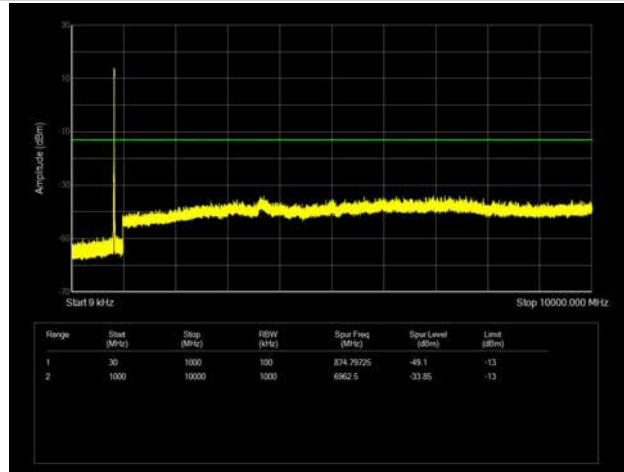


LTE Band 5 \_ 5MHz BW \_ Middle Channel

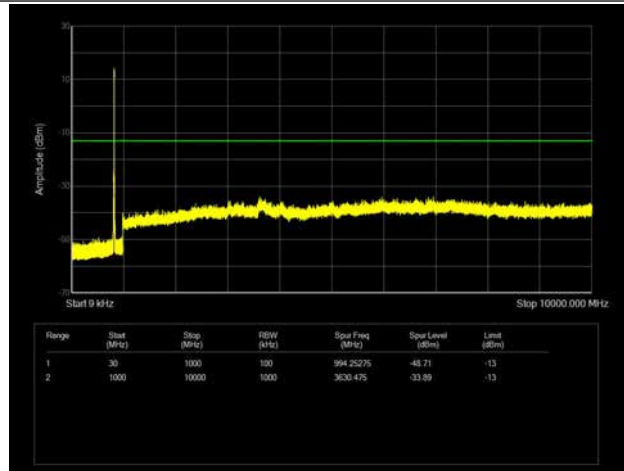
QPSK



16QAM



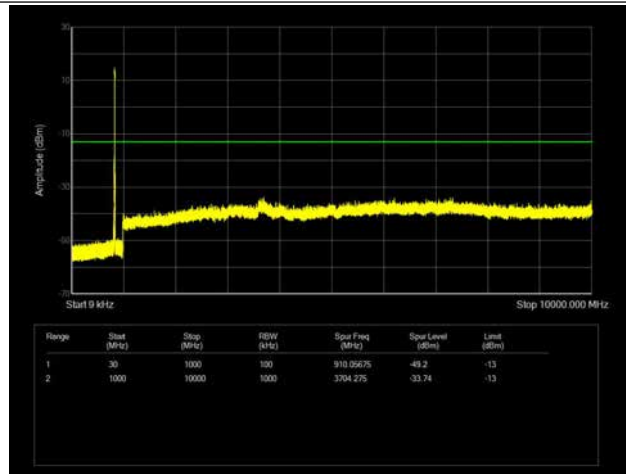
64QAM



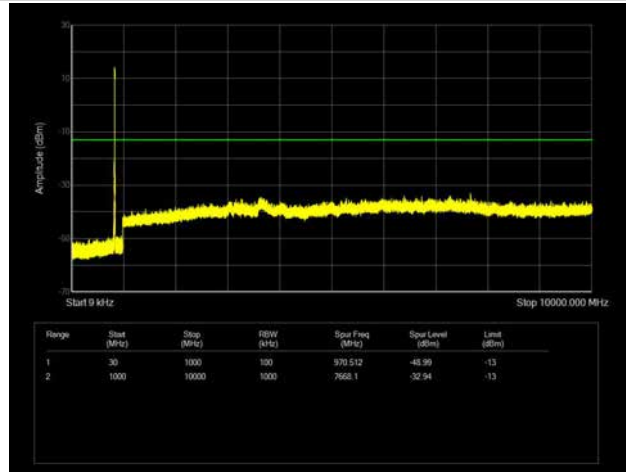


**LTE Band 5 \_ 5MHz BW \_ High Channel**

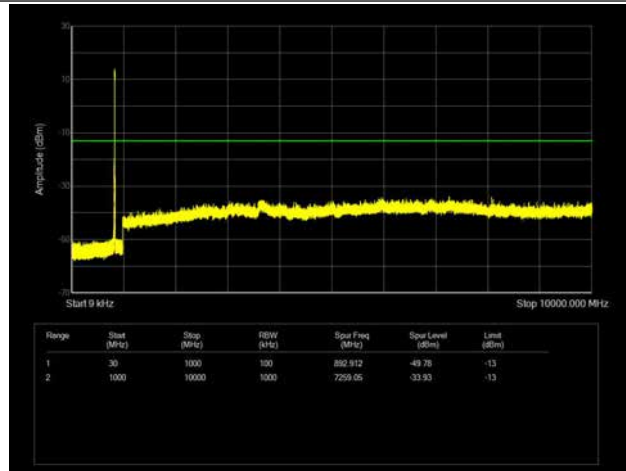
**QPSK**



**16QAM**



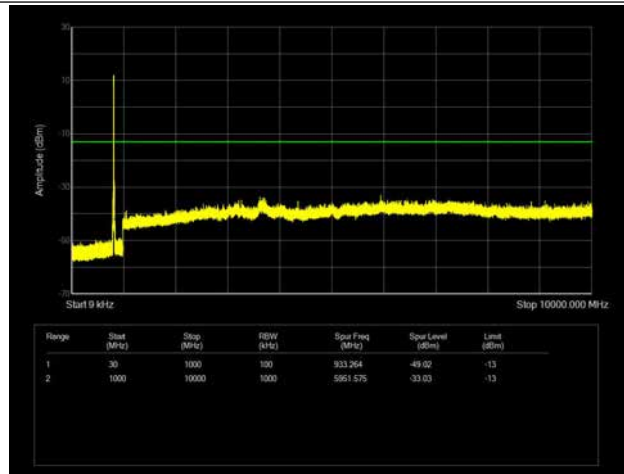
**64QAM**



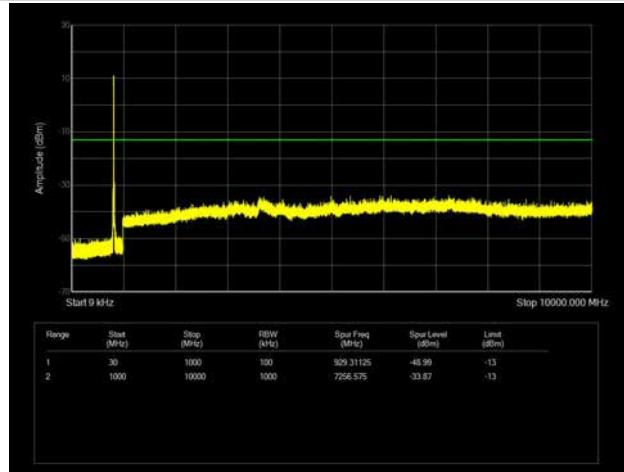


LTE Band 5 \_ 10MHz BW \_ Low Channel

QPSK



16QAM



64QAM

