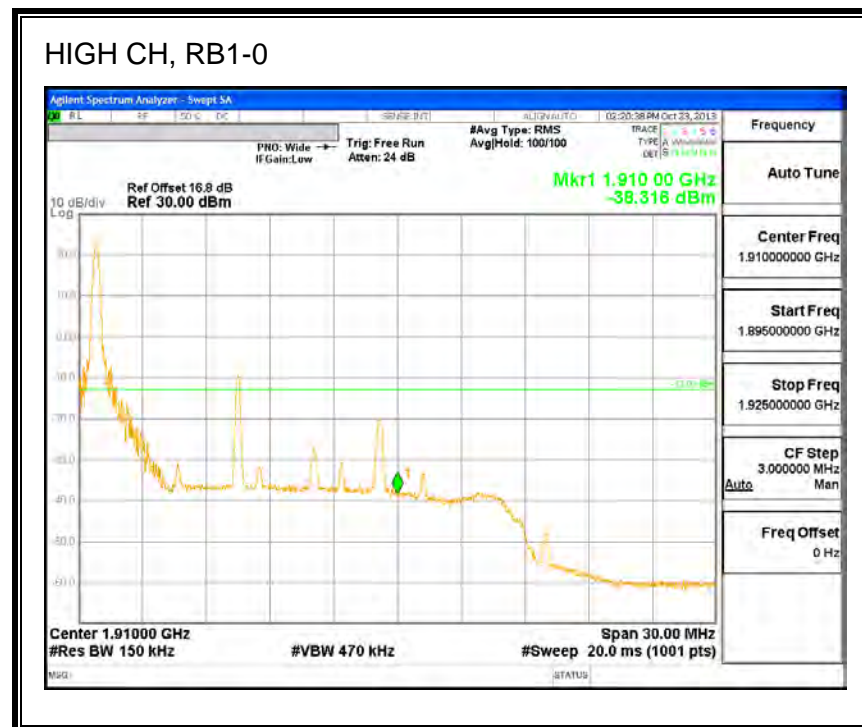
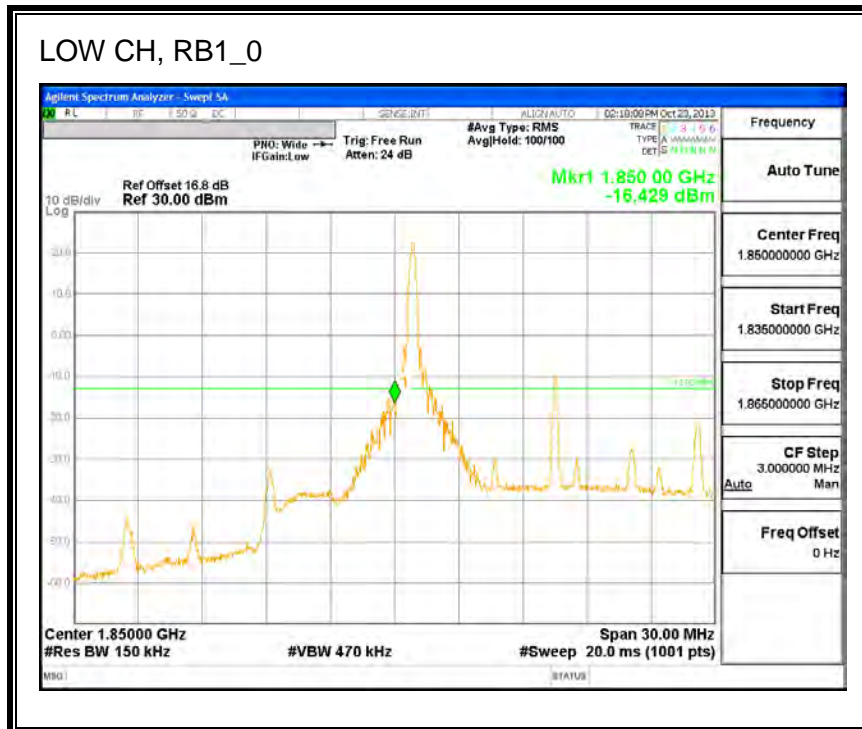
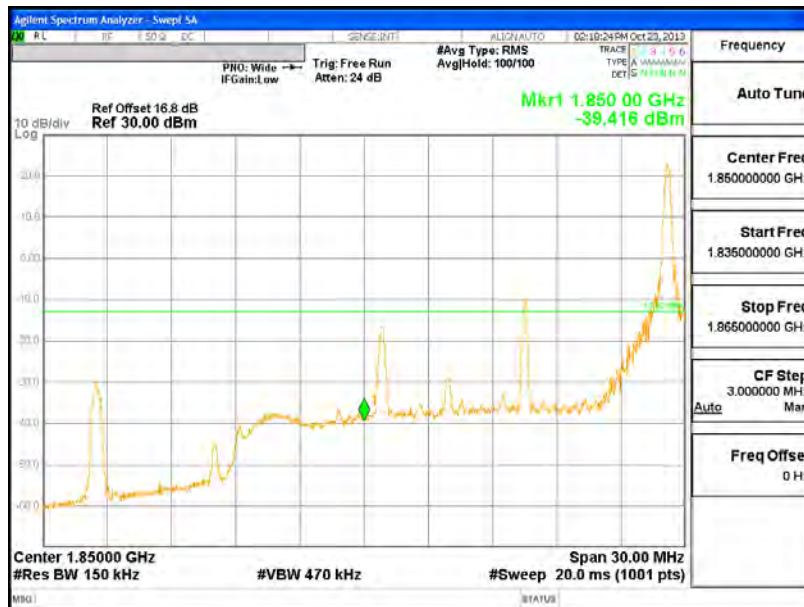


**Band 2 (15MHz BANDWIDTH)**

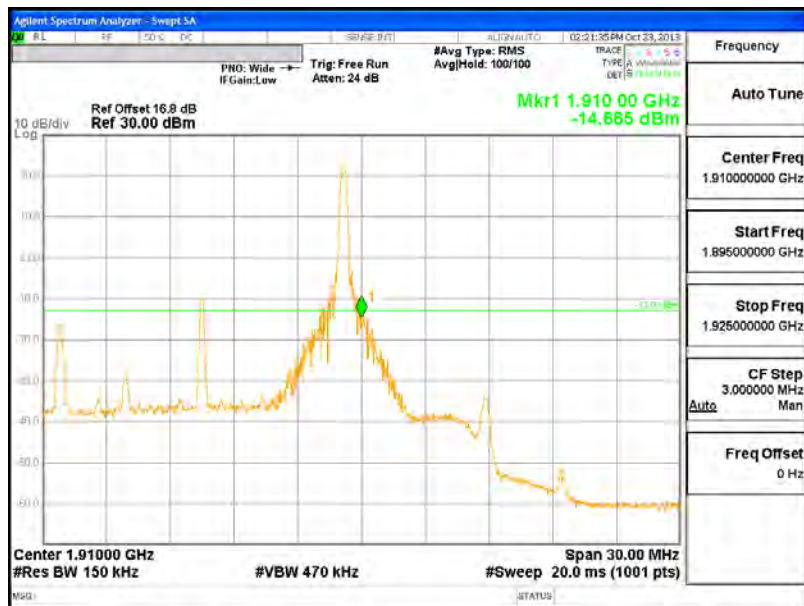
**LTE QPSK**



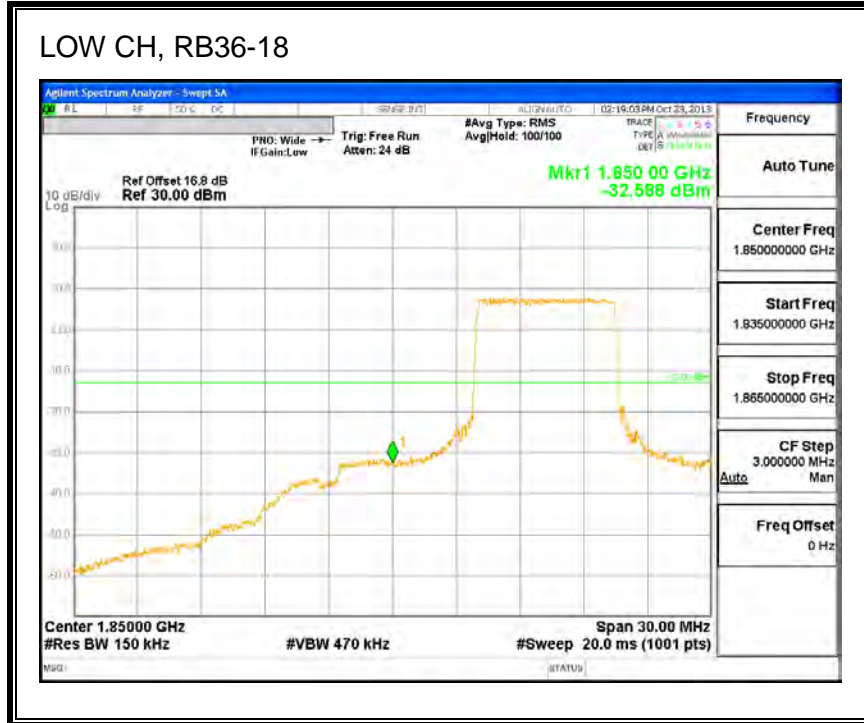
### LOW CH, RB1-74



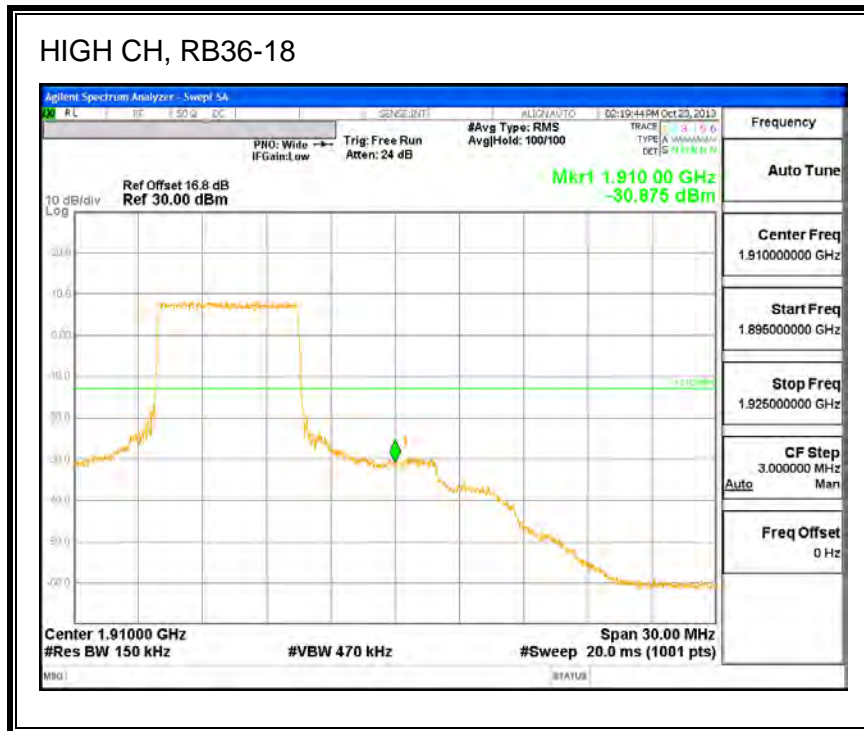
### HIGH CH, RB1-74



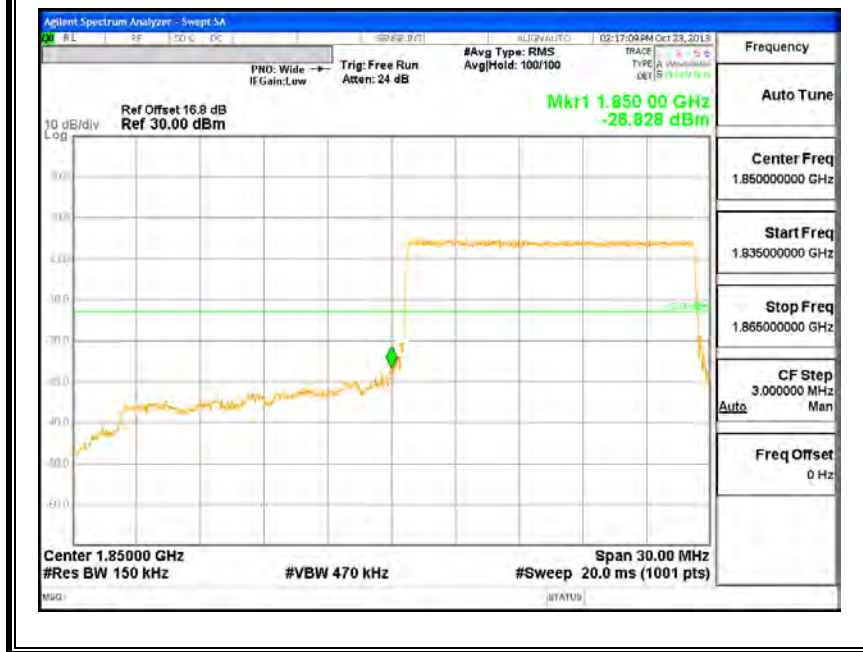
### LOW CH, RB36-18



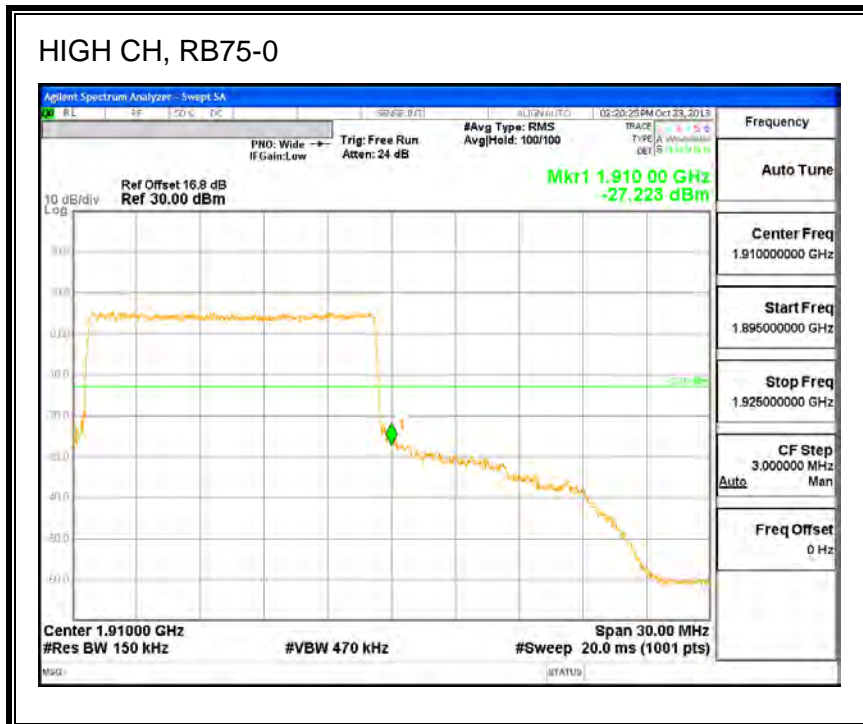
### HIGH CH, RB36-18



### LOW CH, RB75-0

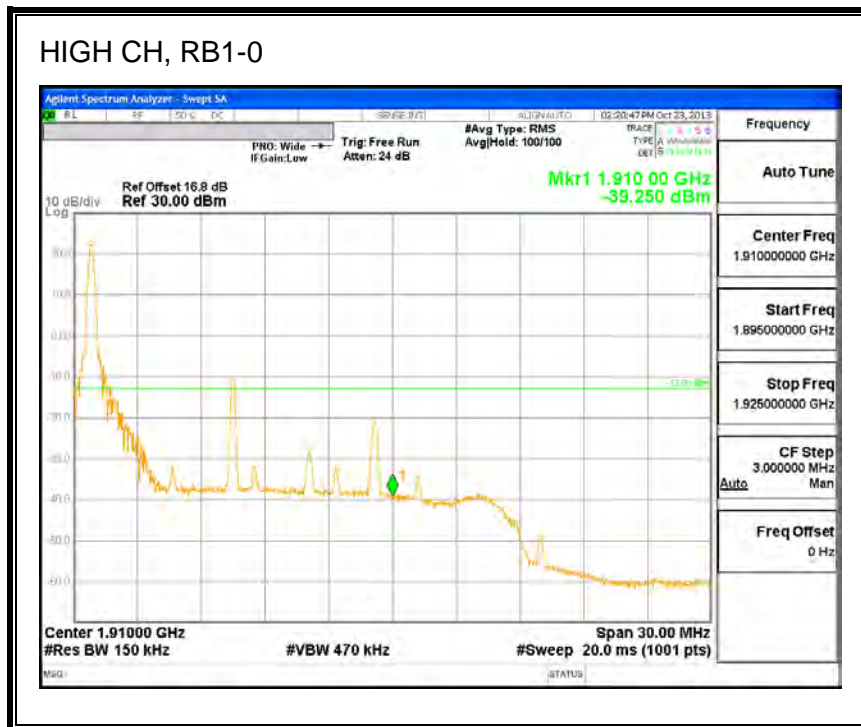
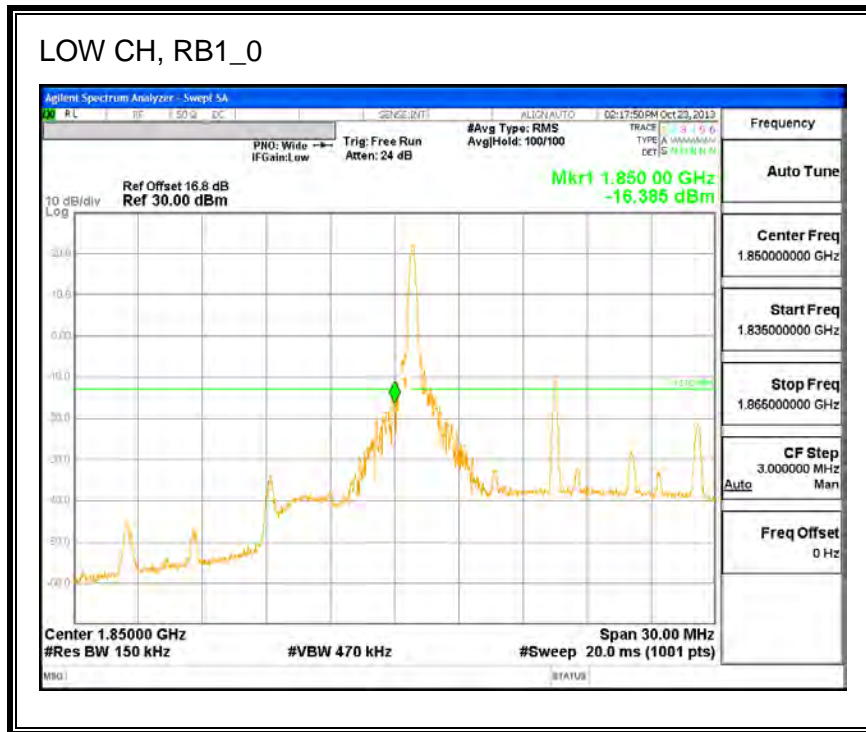


### HIGH CH, RB75-0

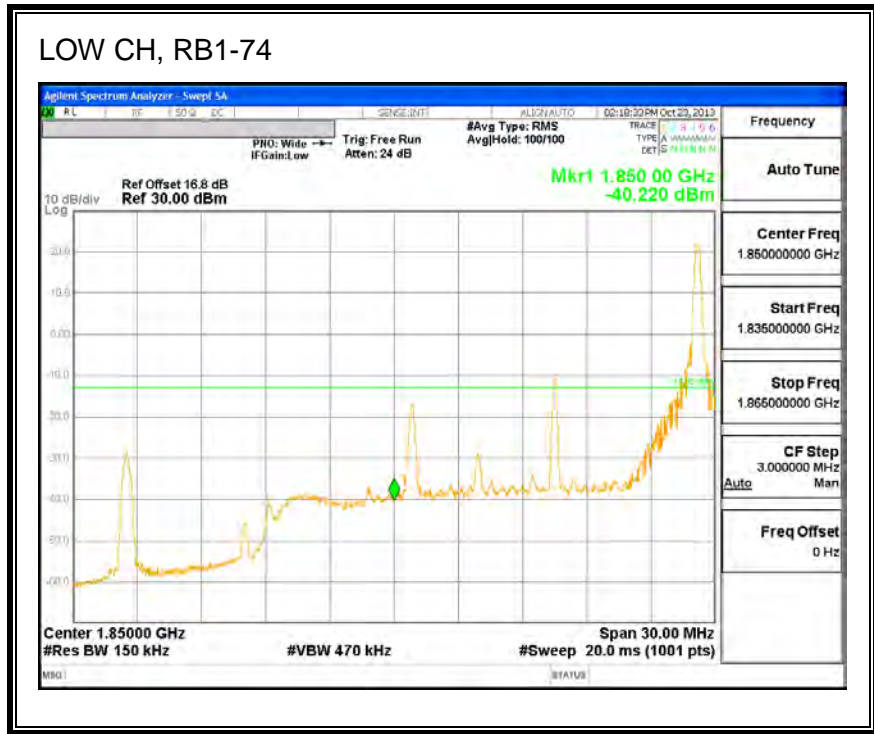


**Band 2 (15MHz BANDWIDTH)**

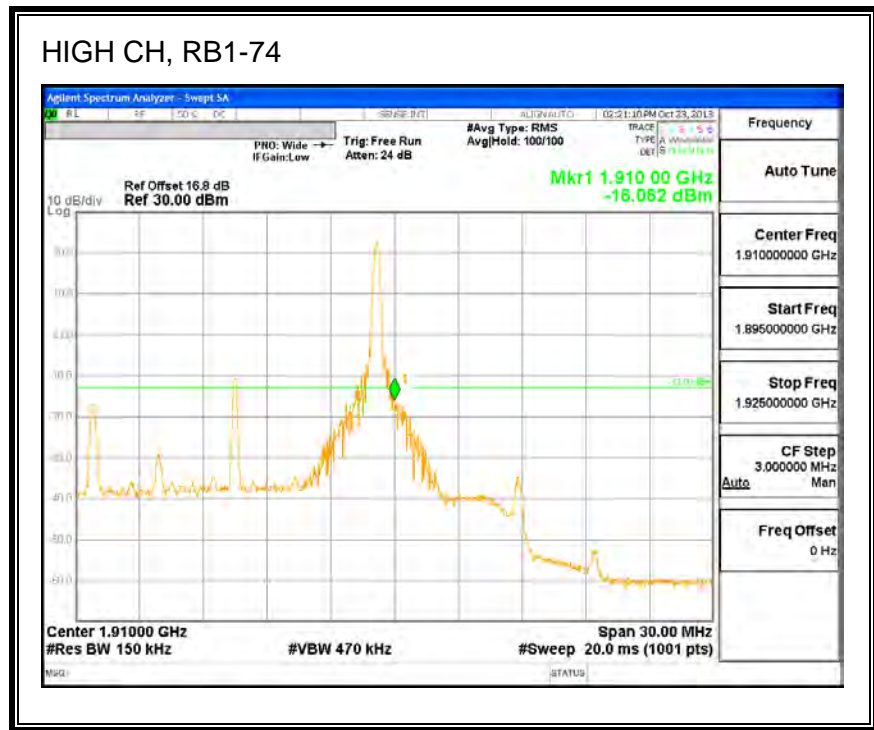
**LTE 16QAM**



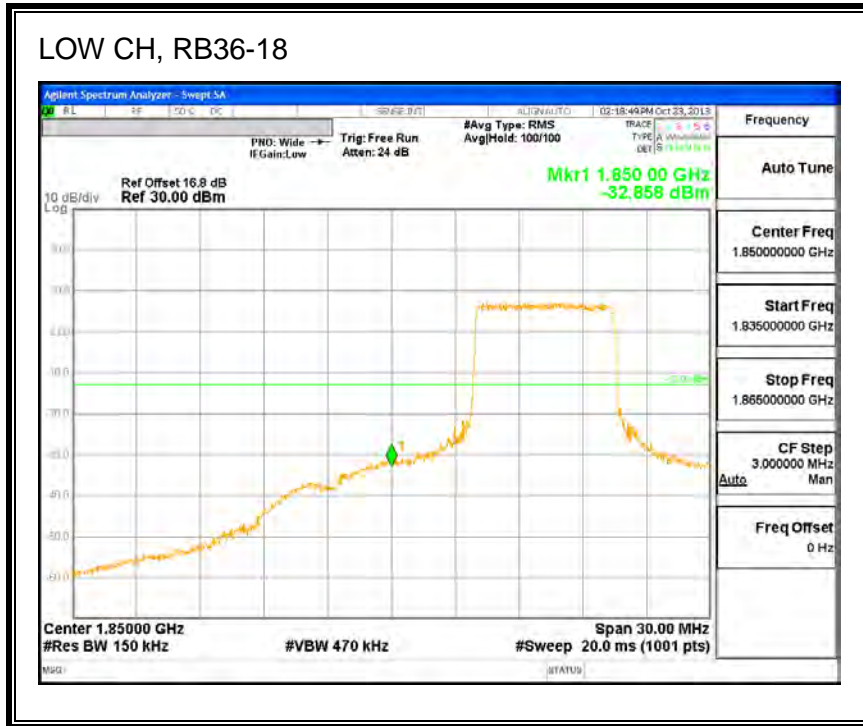
### LOW CH, RB1-74



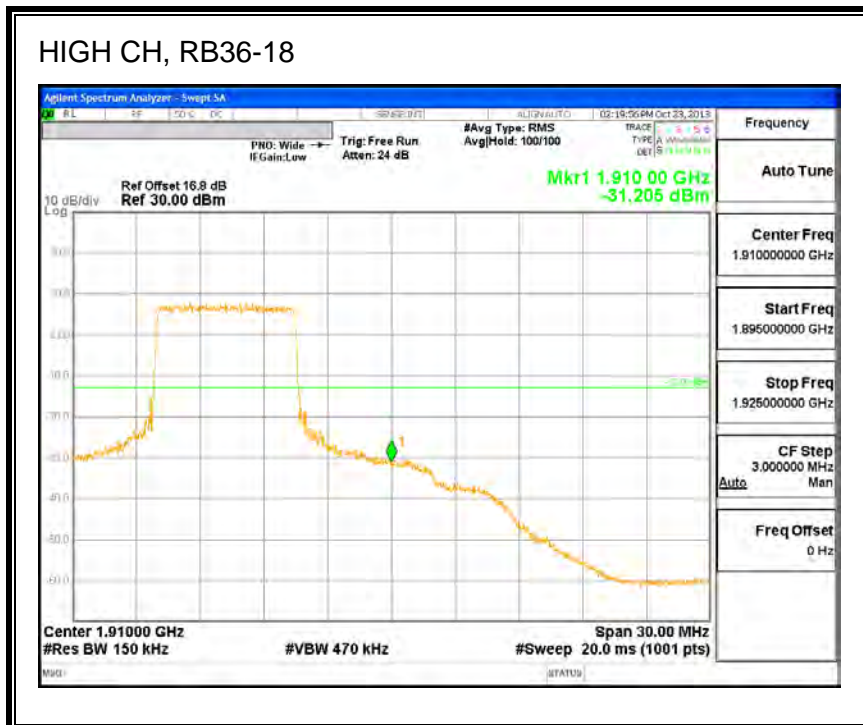
### HIGH CH, RB1-74

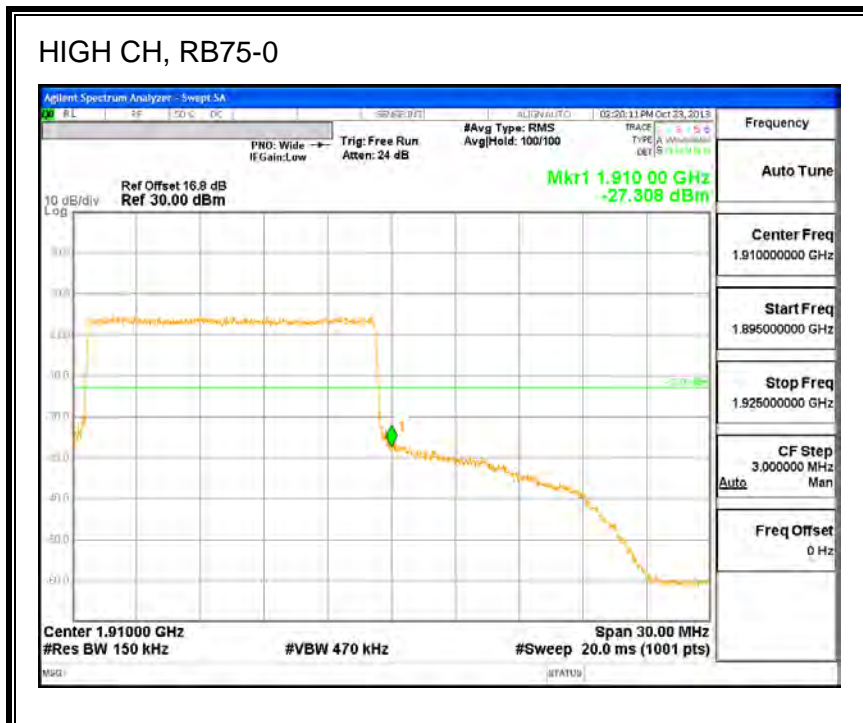
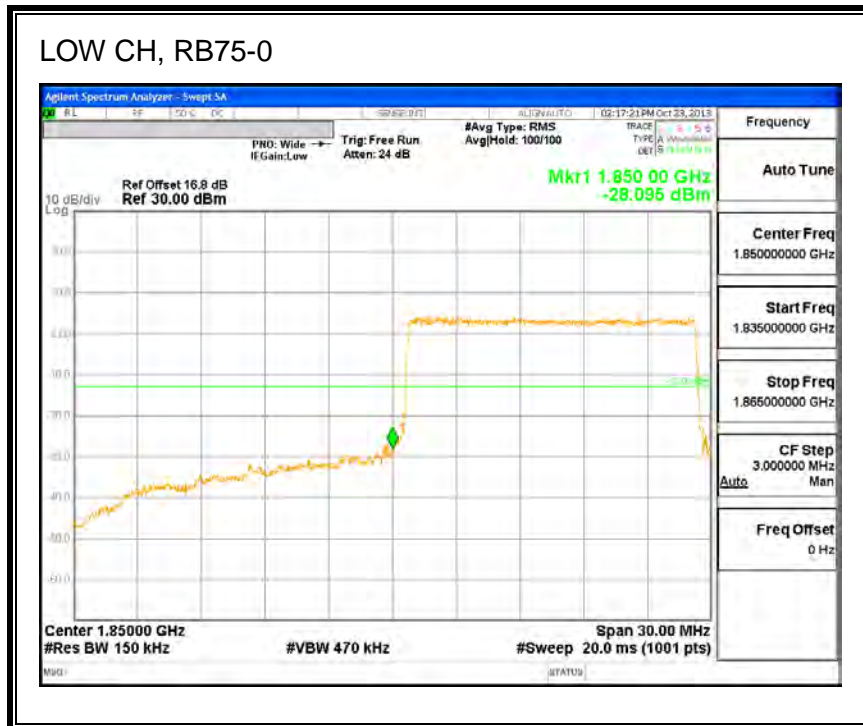


### LOW CH, RB36-18



### HIGH CH, RB36-18

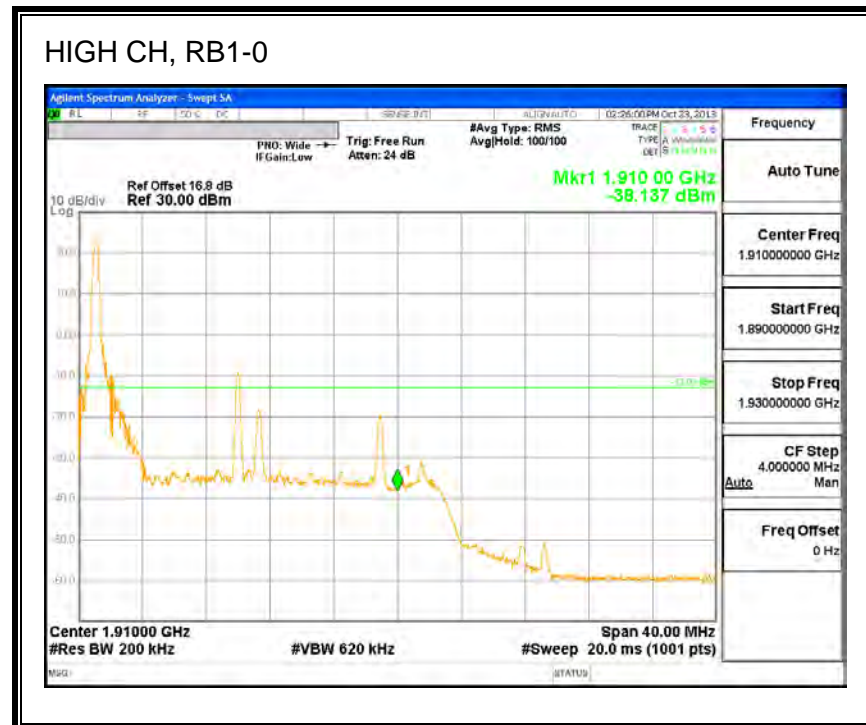
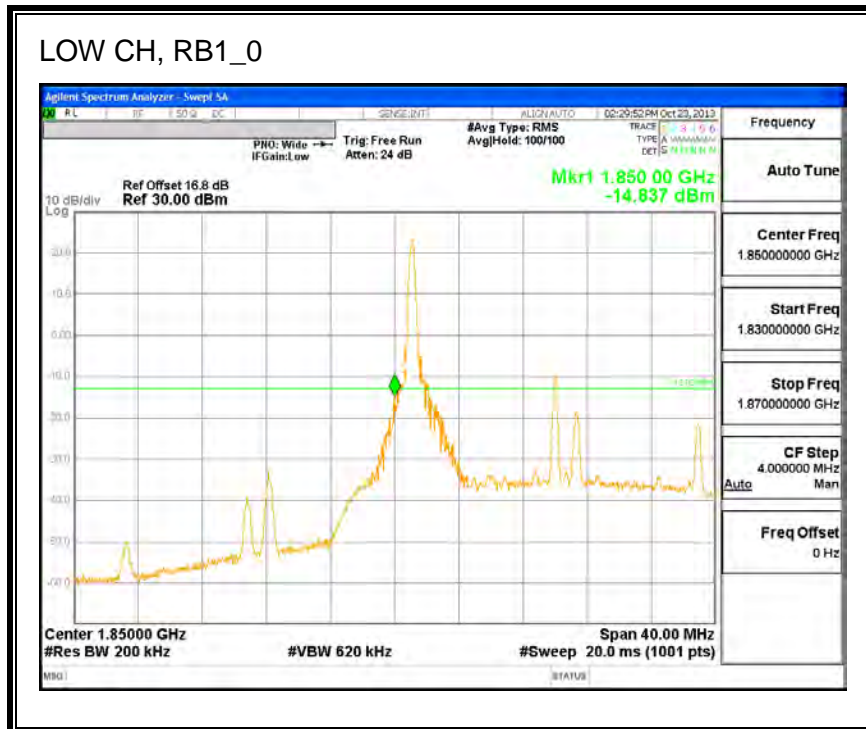






**Band 2 (20MHz BANDWIDTH)**

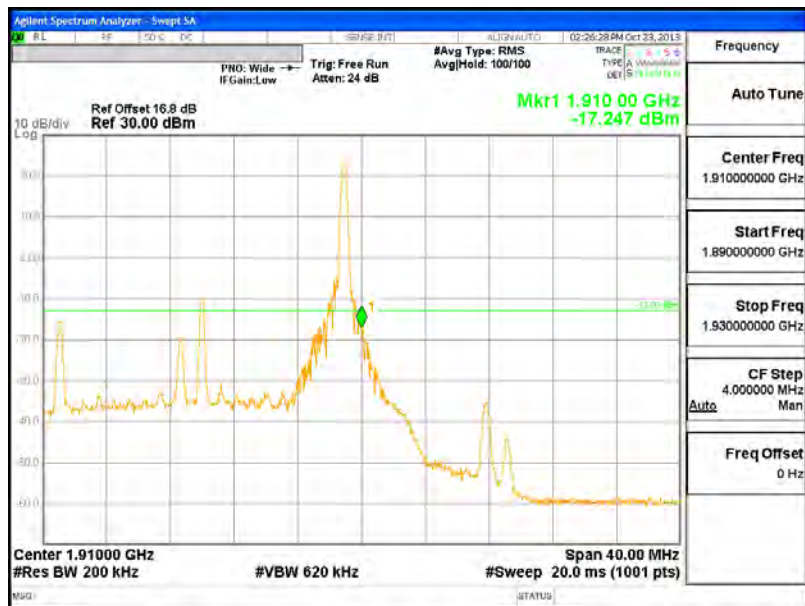
**LTE QPSK**



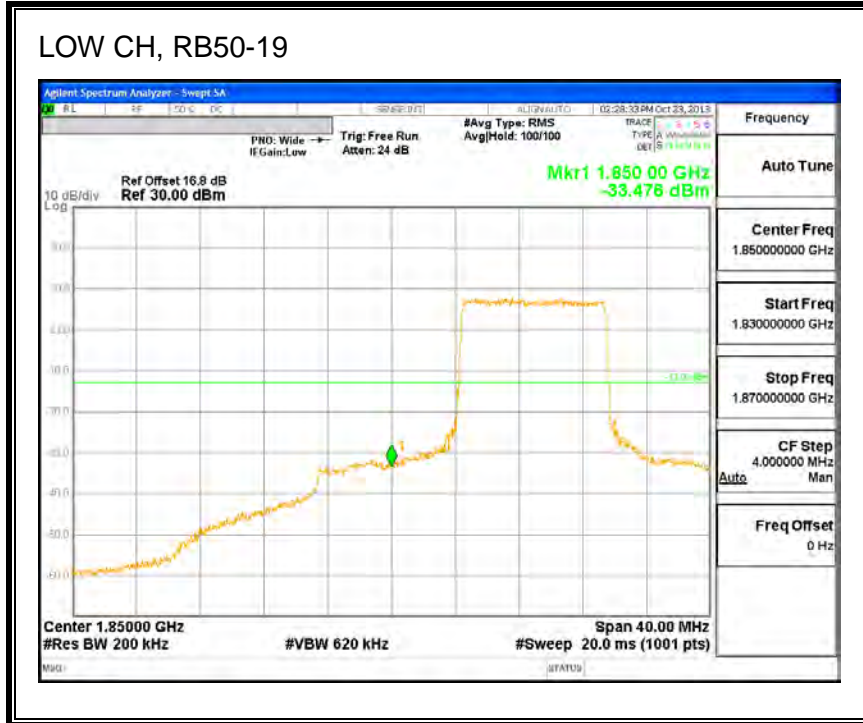
LOW CH, RB1-99



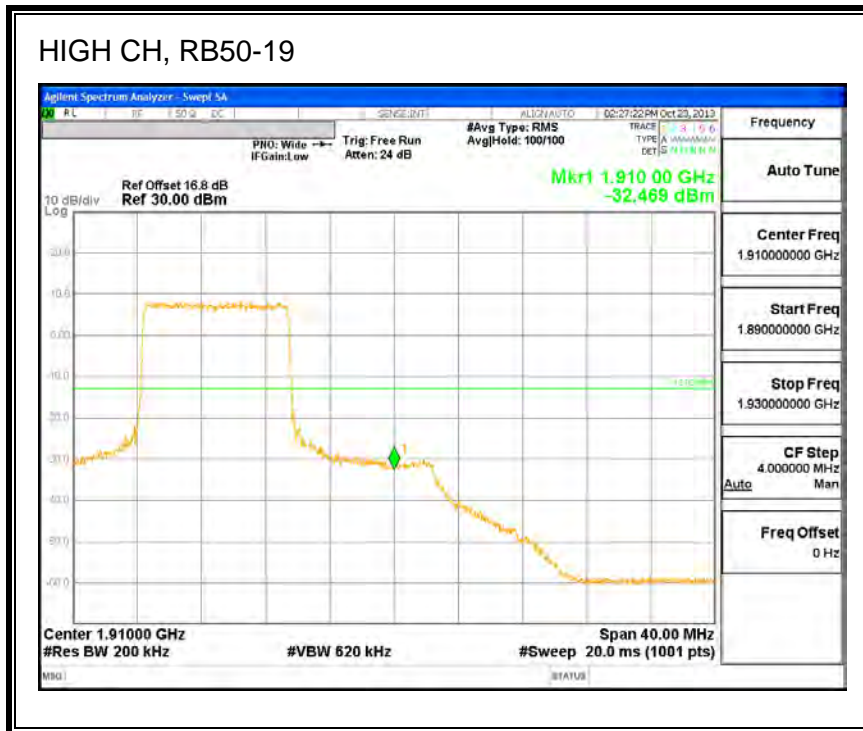
HIGH CH, RB1-99



### LOW CH, RB50-19



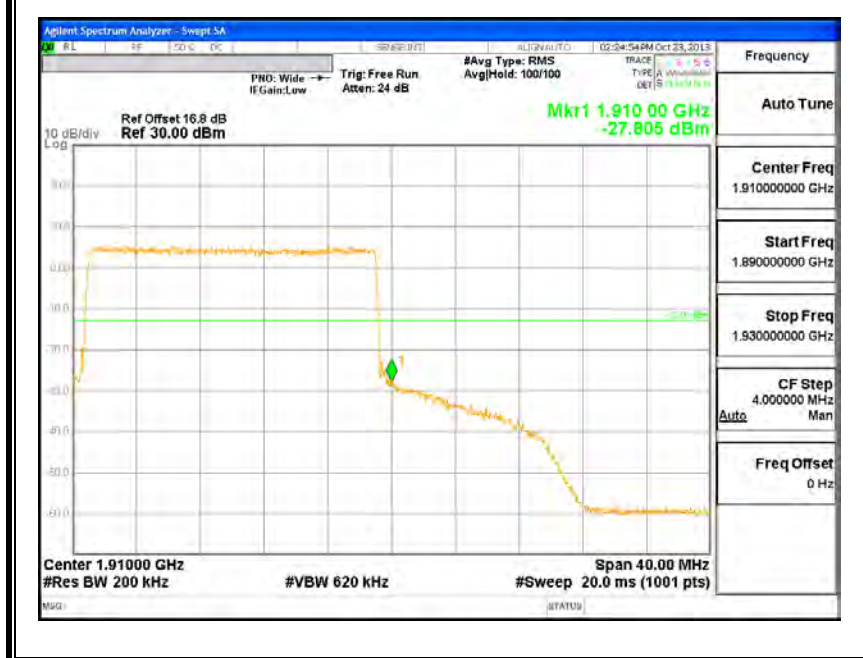
### HIGH CH, RB50-19



### LOW CH, RB100-0

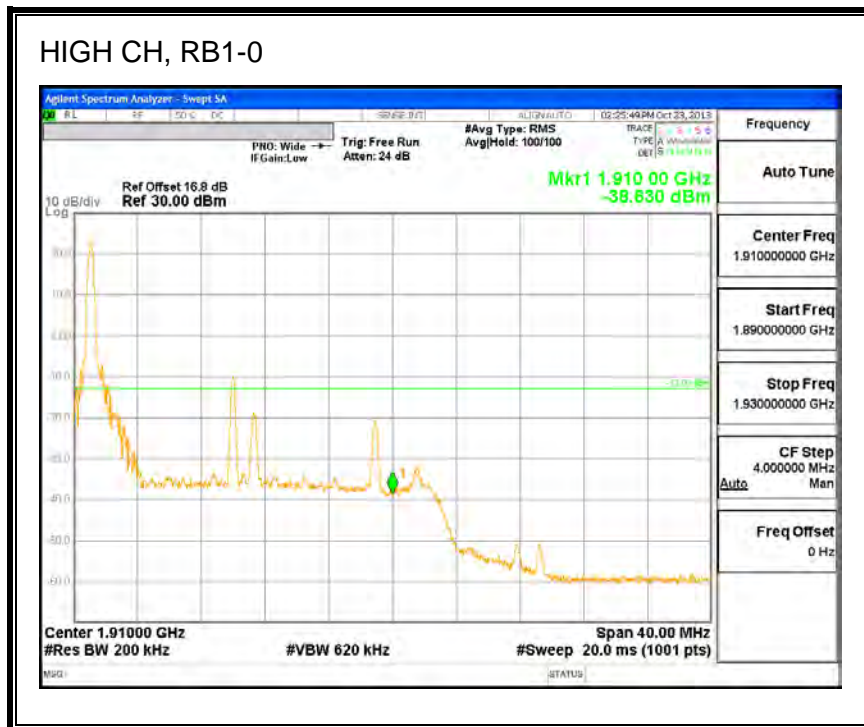
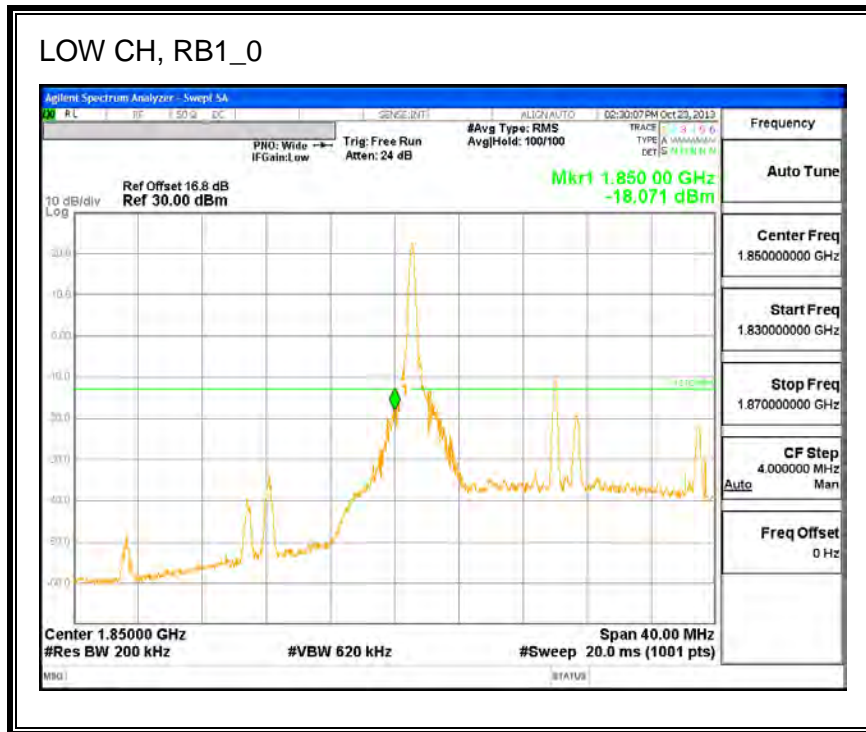


### HIGH CH, RB100-0

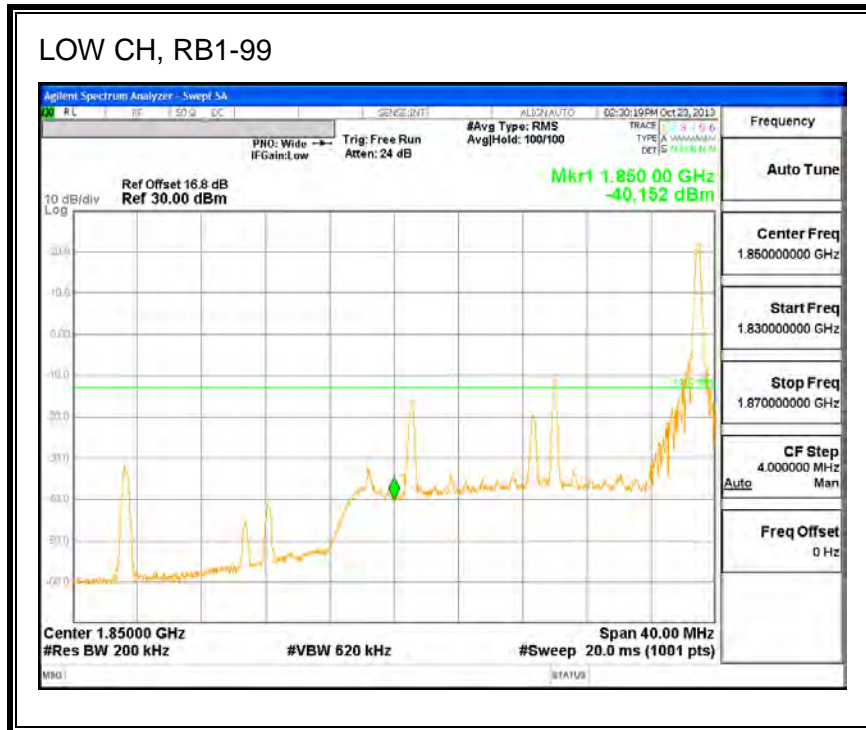


**Band 2 (20MHz BANDWIDTH)**

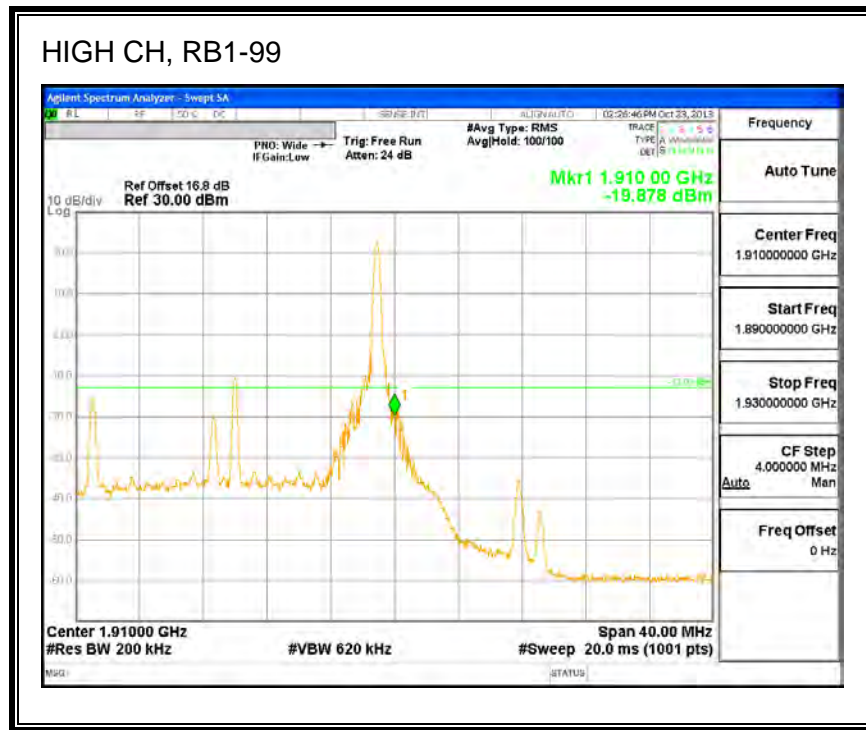
**LTE 16QAM**



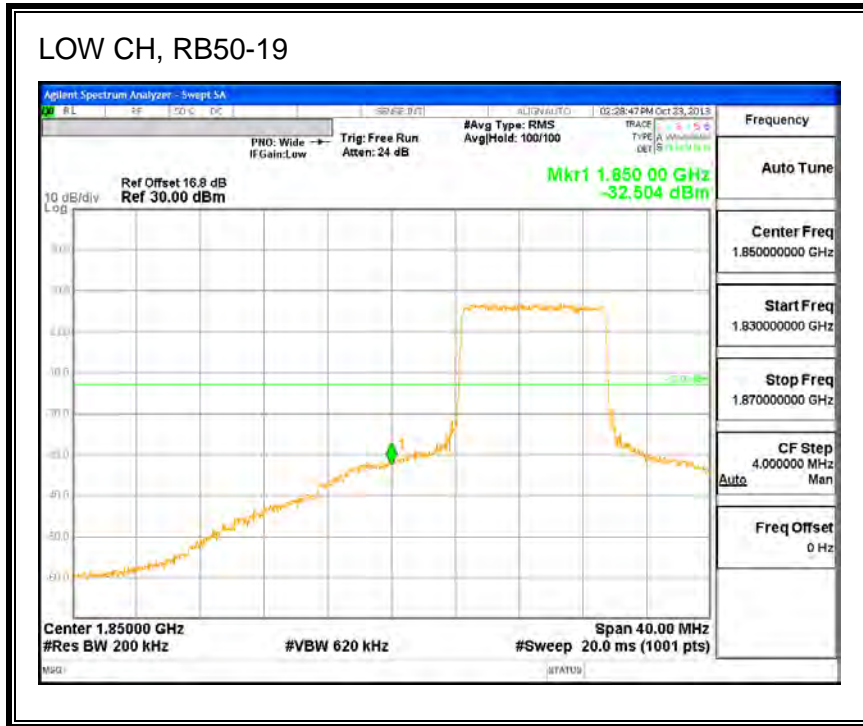
### LOW CH, RB1-99



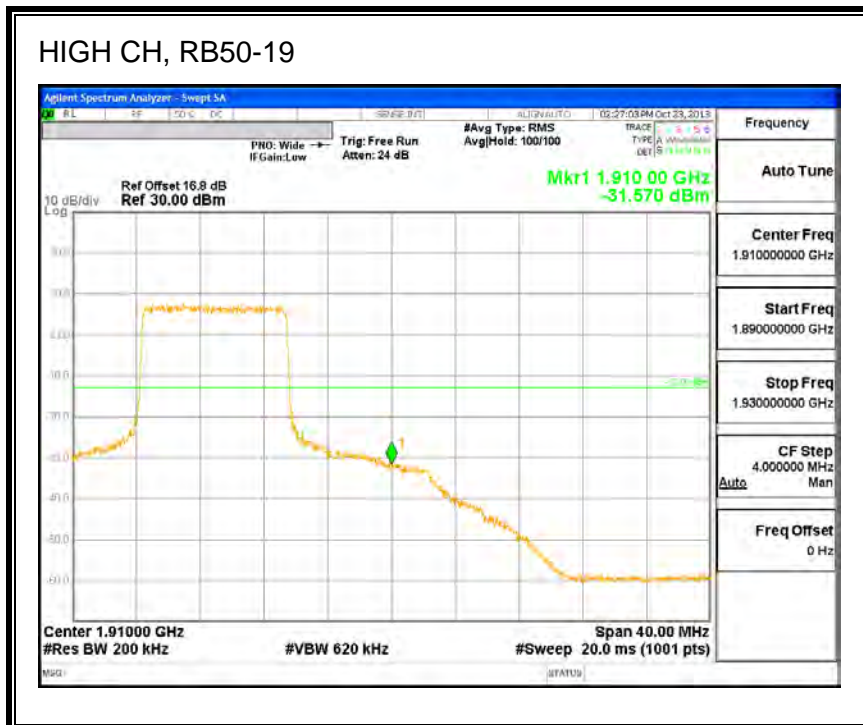
### HIGH CH, RB1-99



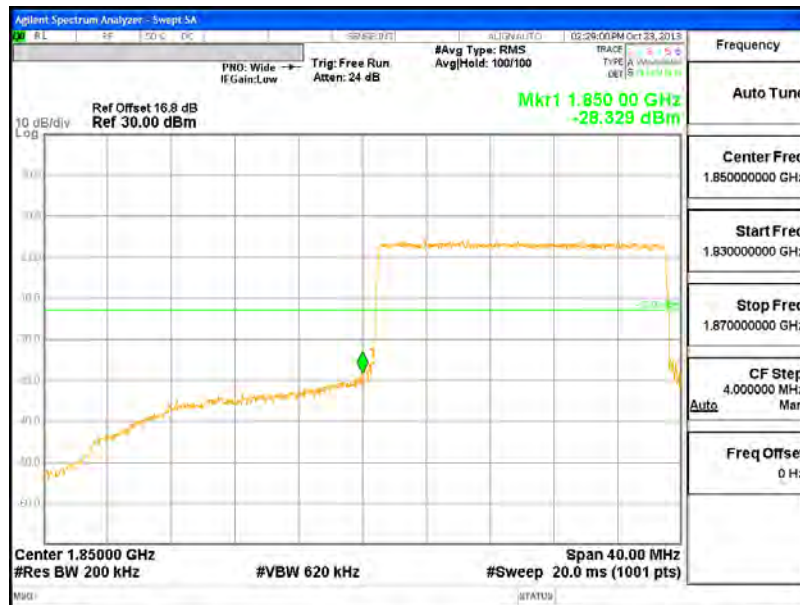
### LOW CH, RB50-19



### HIGH CH, RB50-19



### LOW CH, RB100-0



### HIGH CH, RB100-0

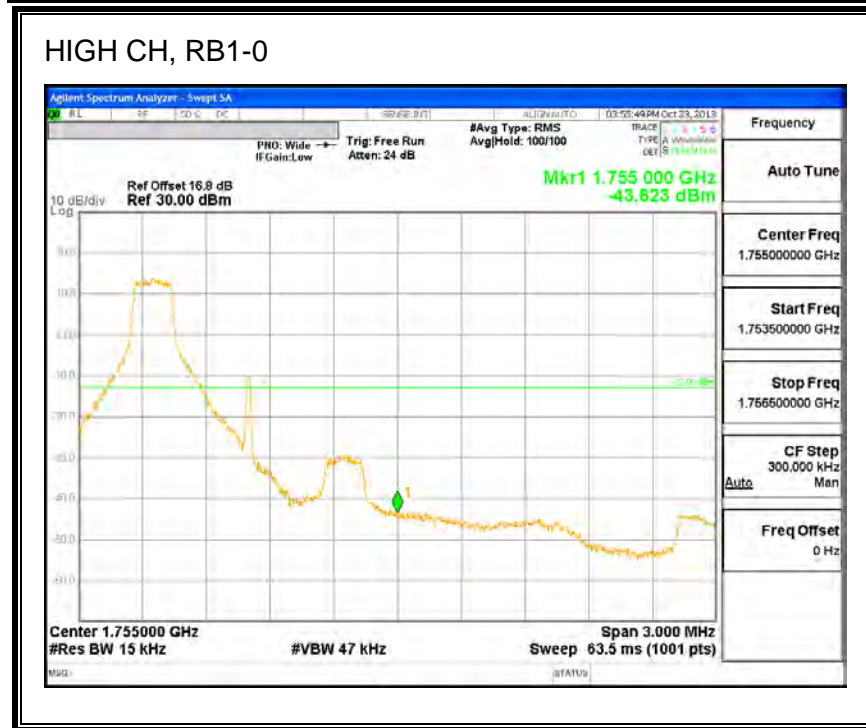
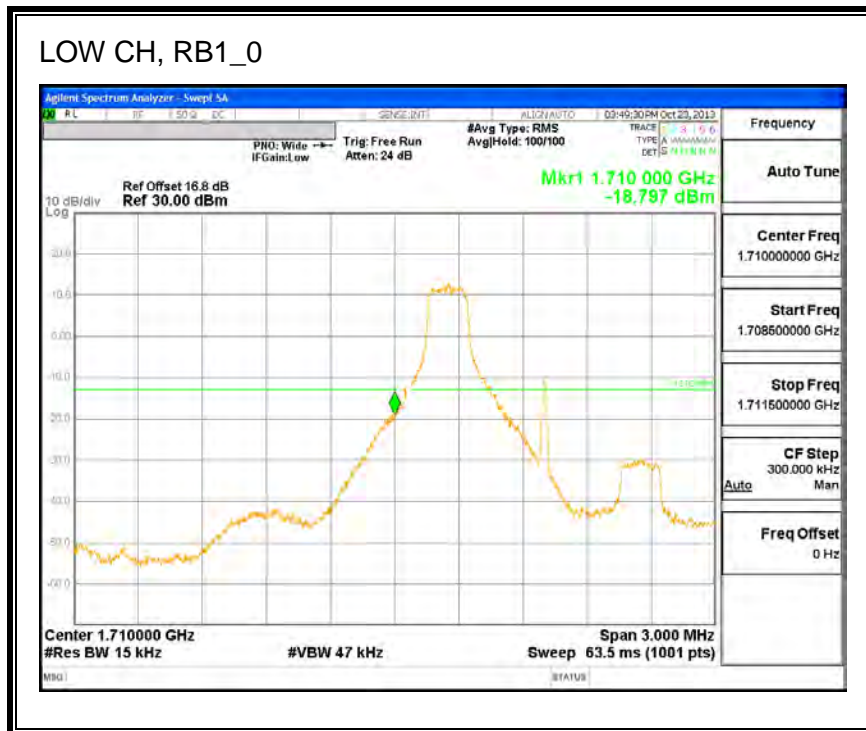




**8.2.2. LTE BAND 4**

**Band 4 (1.4 MHz BANDWIDTH)**

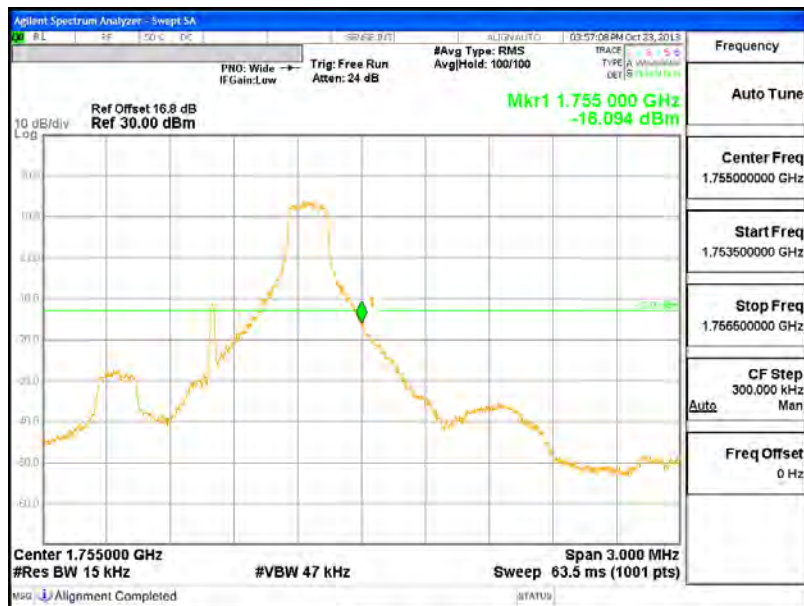
**LTE QPSK**



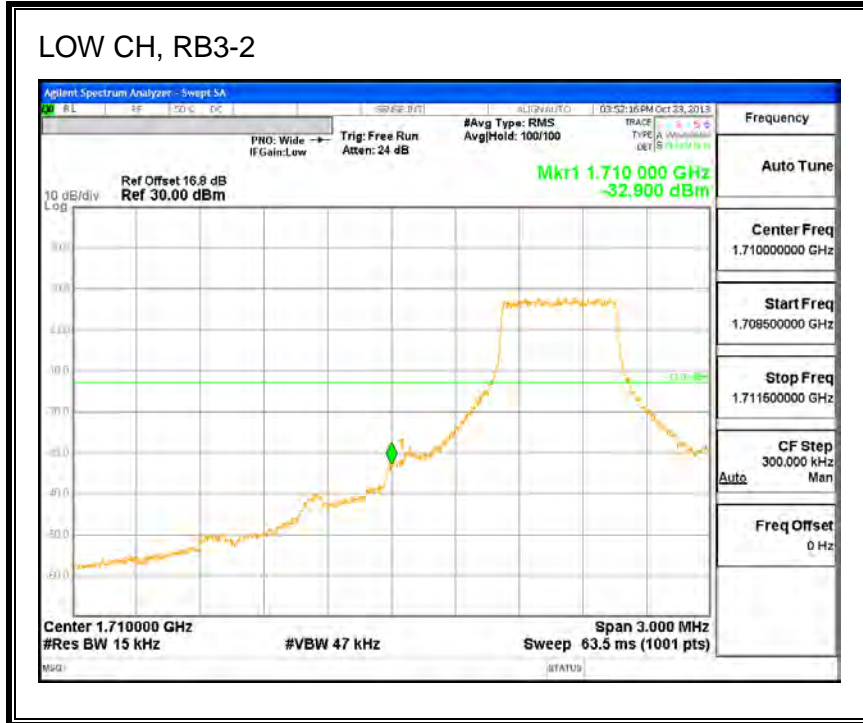
### LOW CH, RB1-5



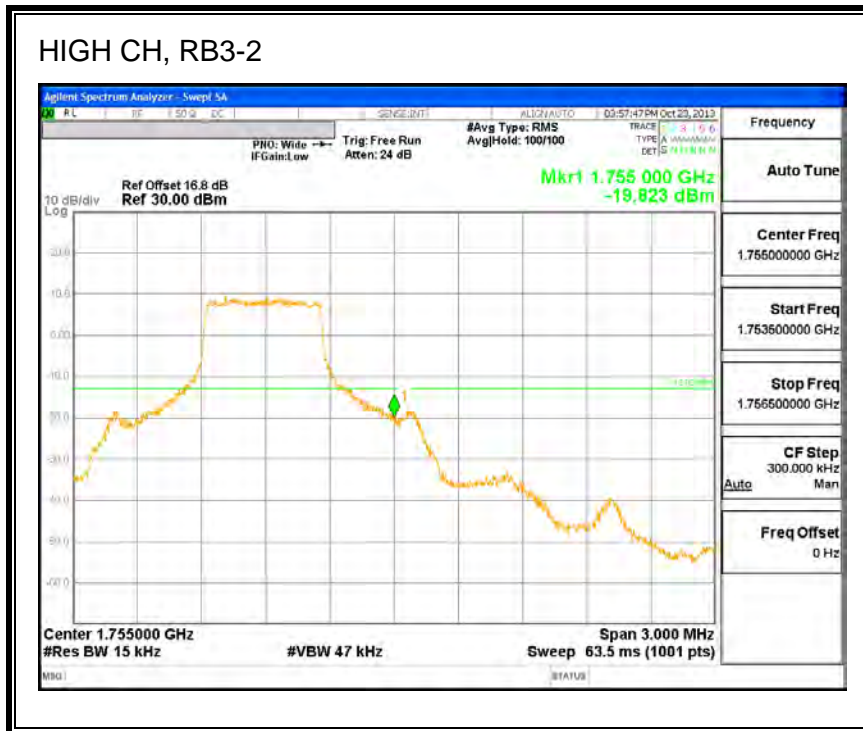
### HIGH CH, RB1-5



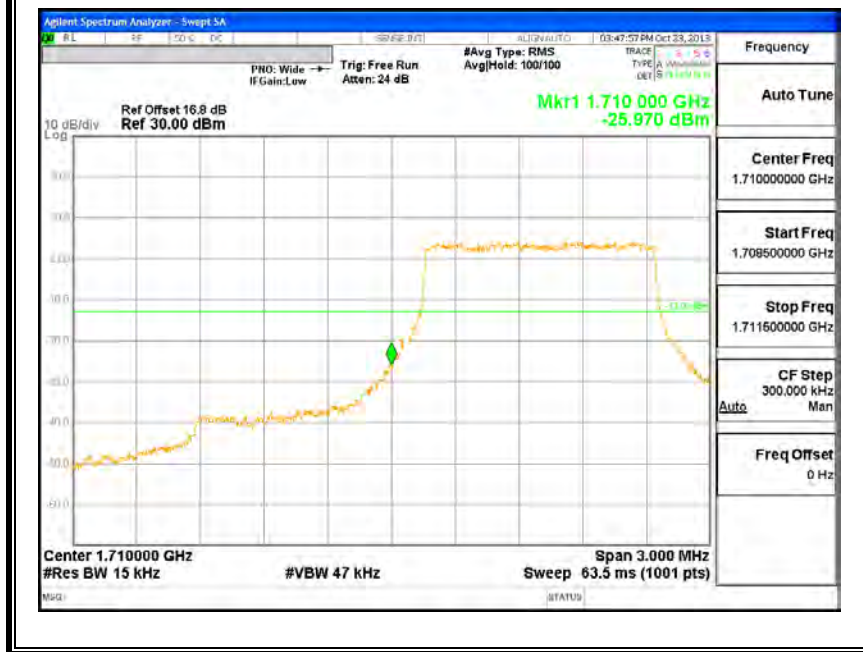
### LOW CH, RB3-2



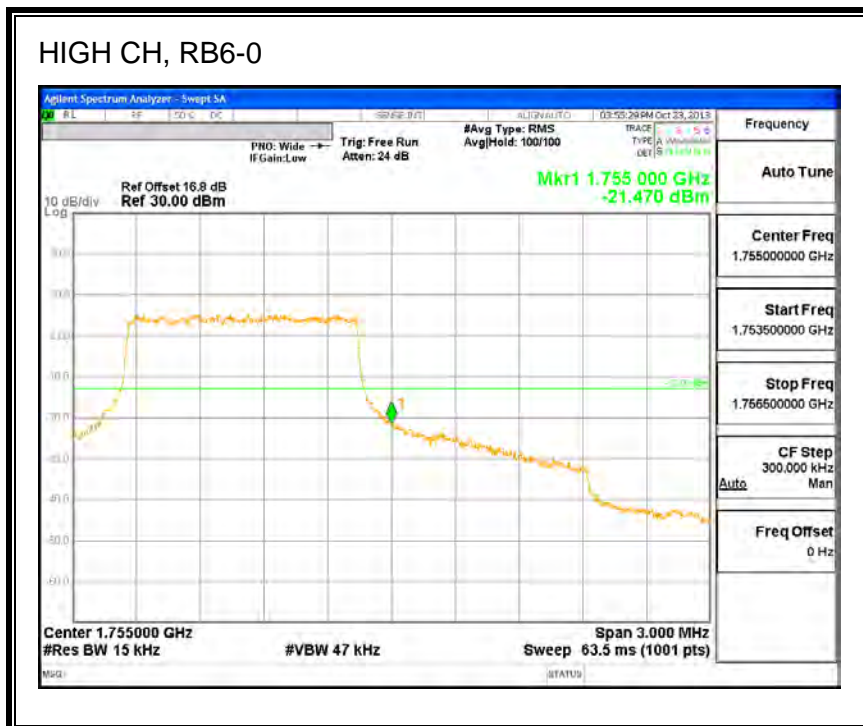
### HIGH CH, RB3-2



### LOW CH, RB6-0

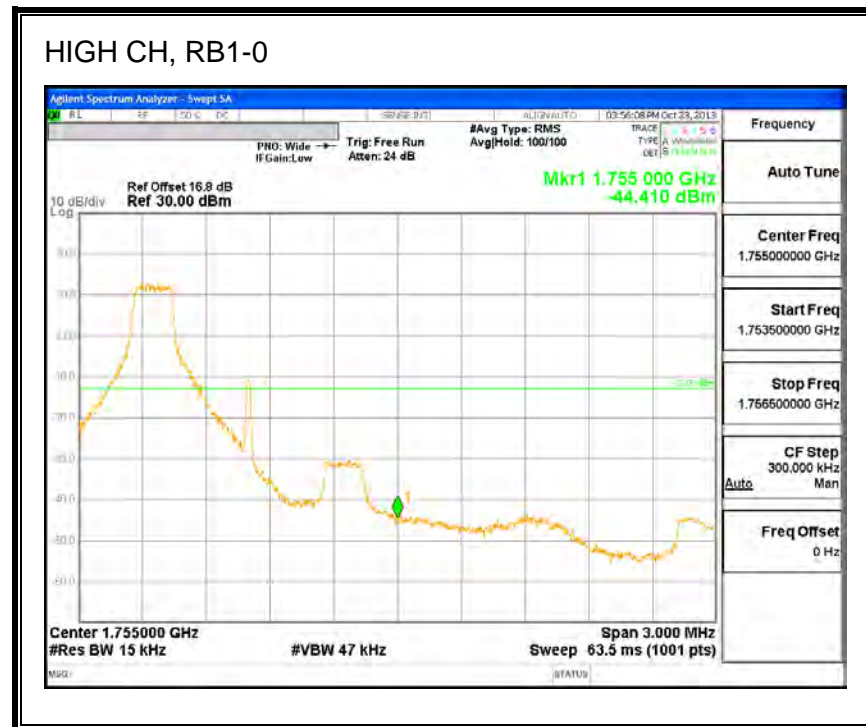
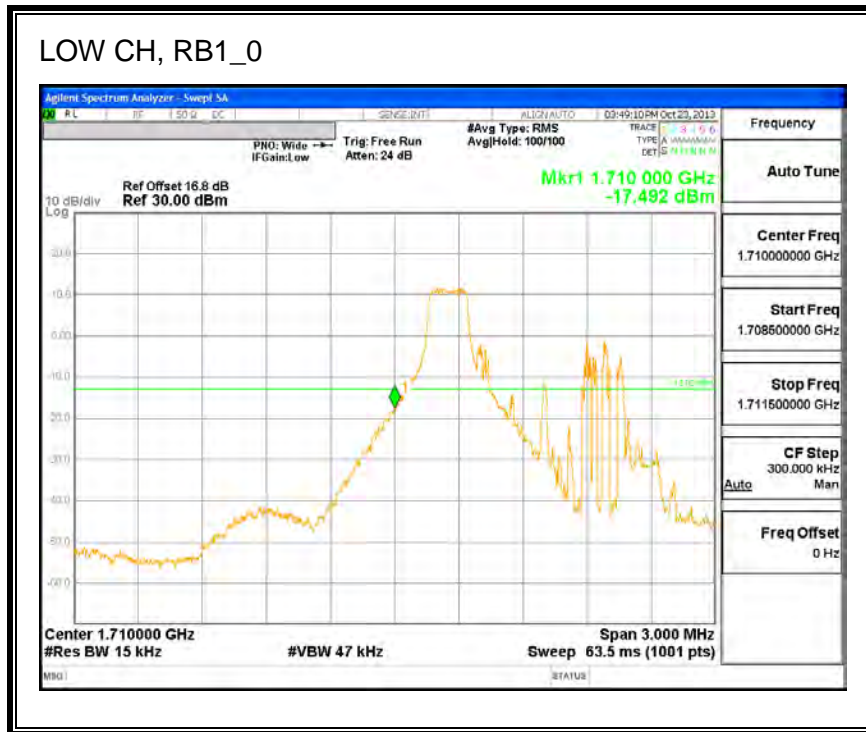


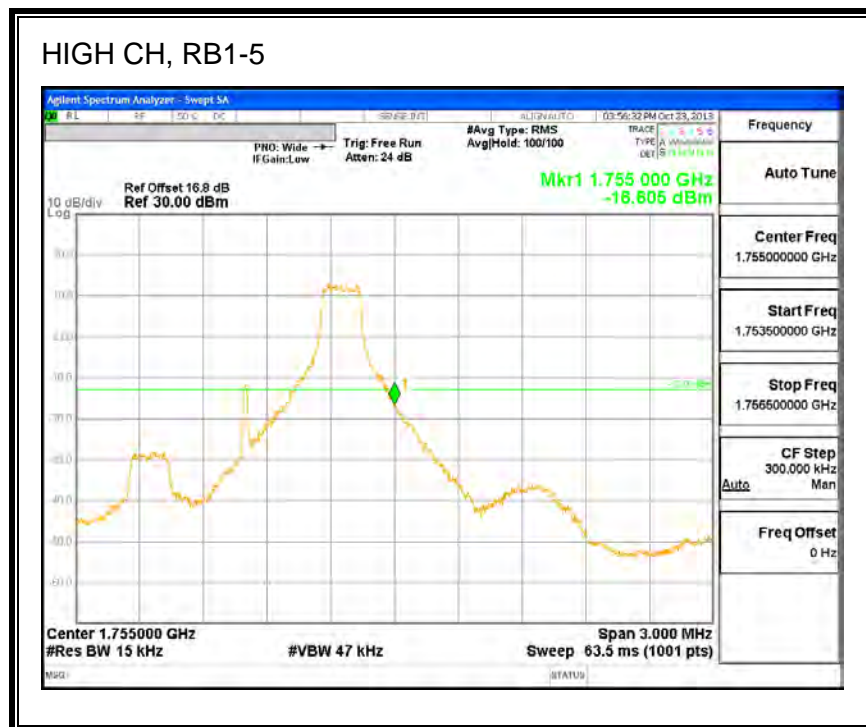
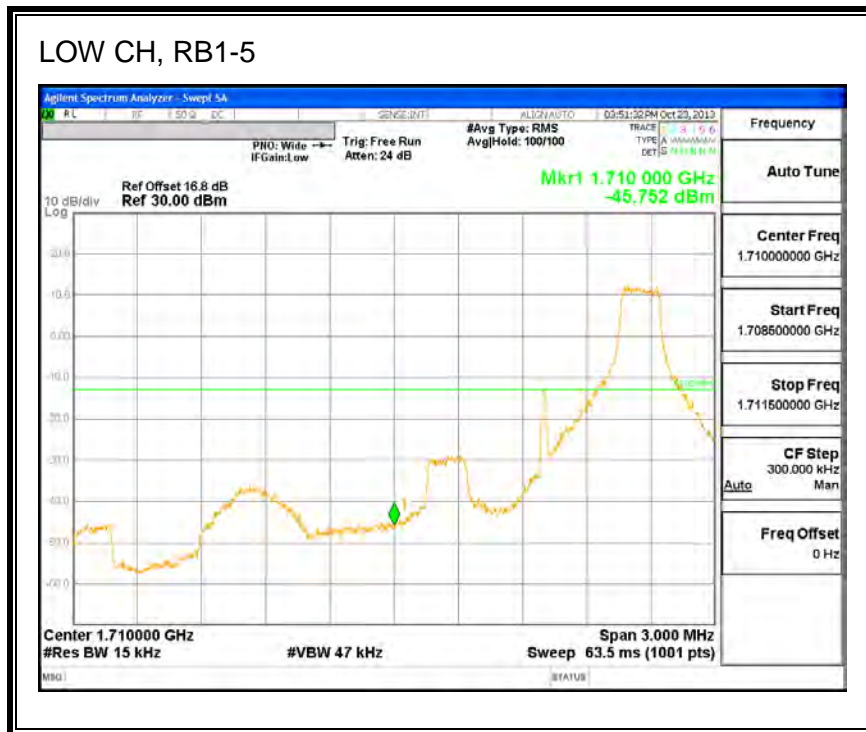
### HIGH CH, RB6-0



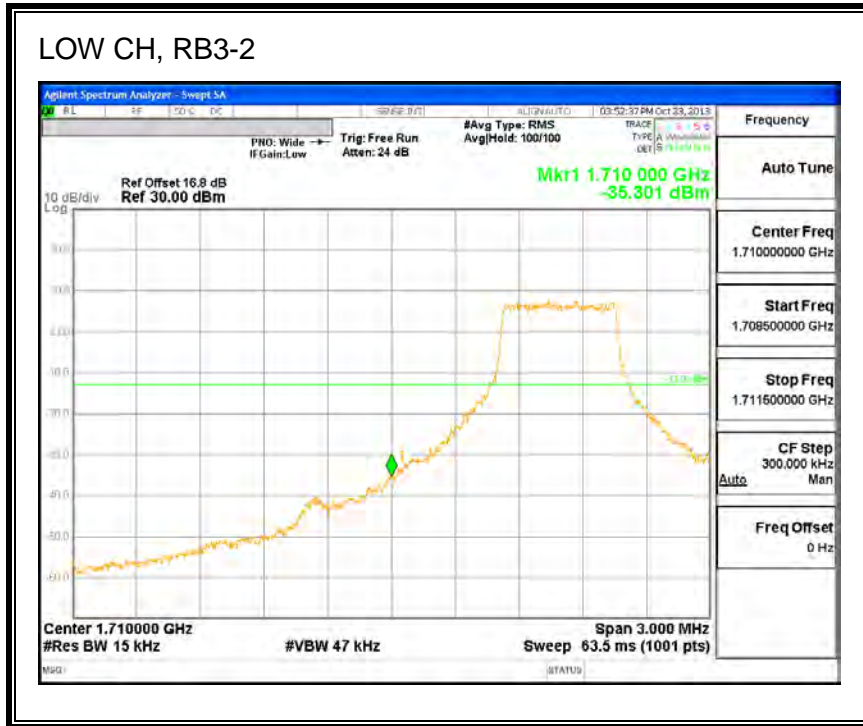
**Band 4 (1.4 MHz BANDWIDTH)**

**LTE 16QAM**

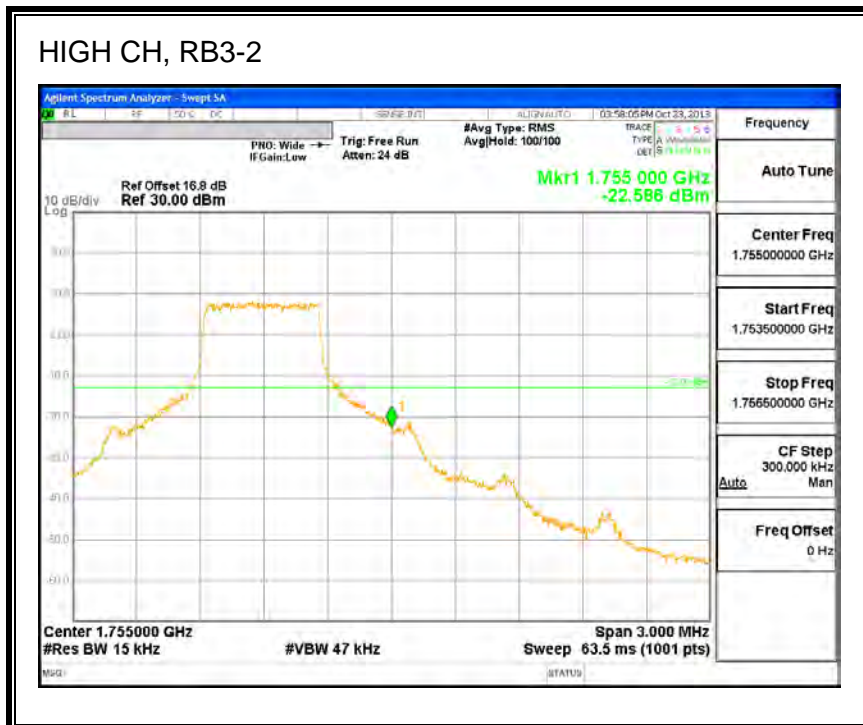




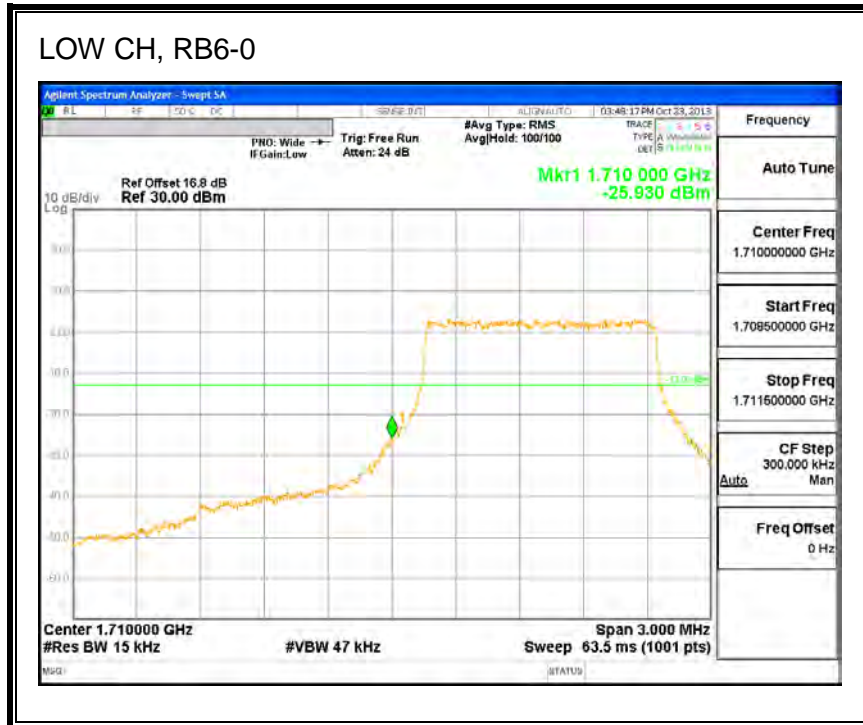
### LOW CH, RB3-2



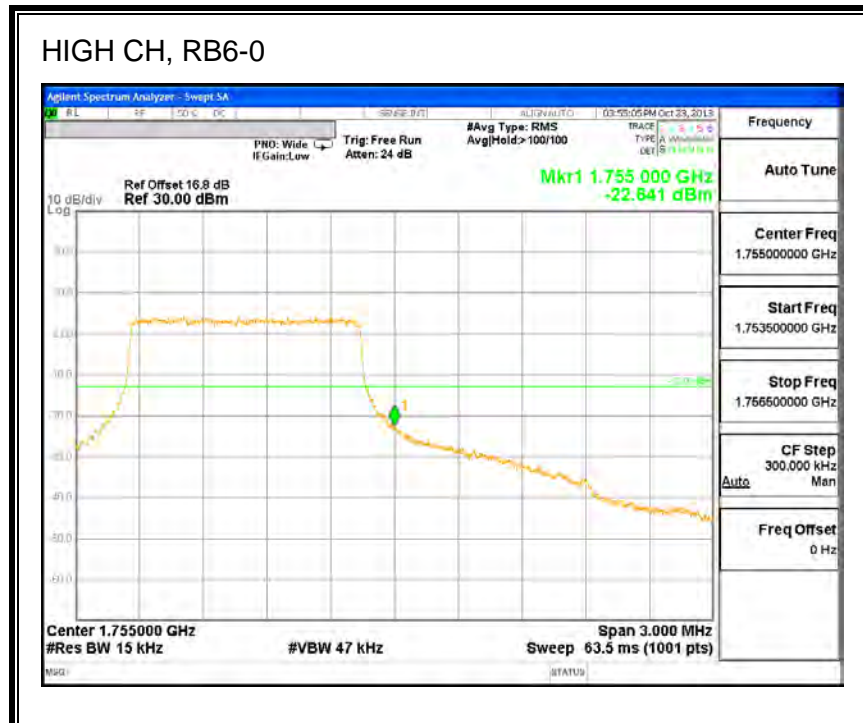
### HIGH CH, RB3-2



### LOW CH, RB6-0



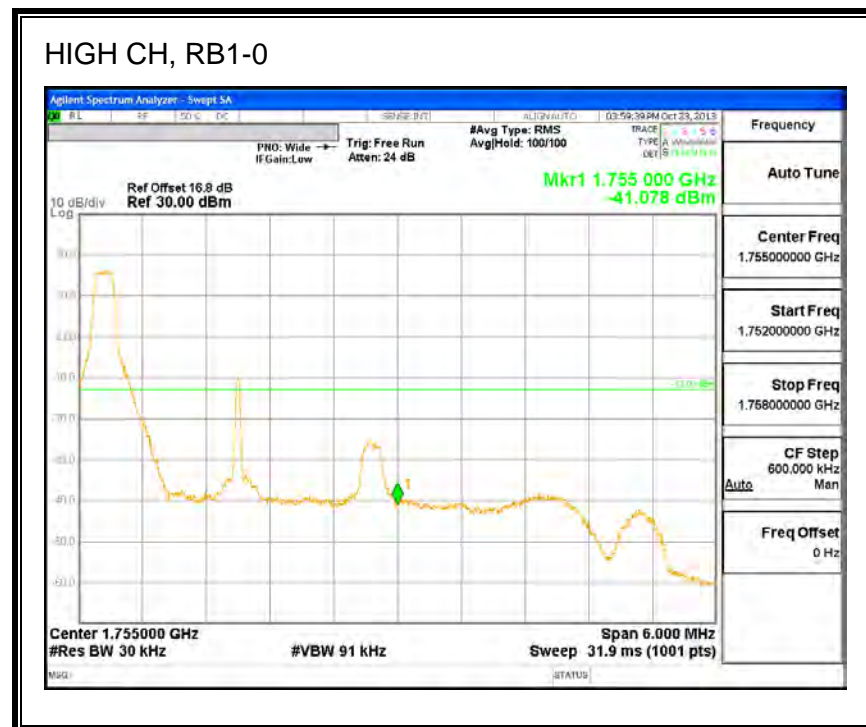
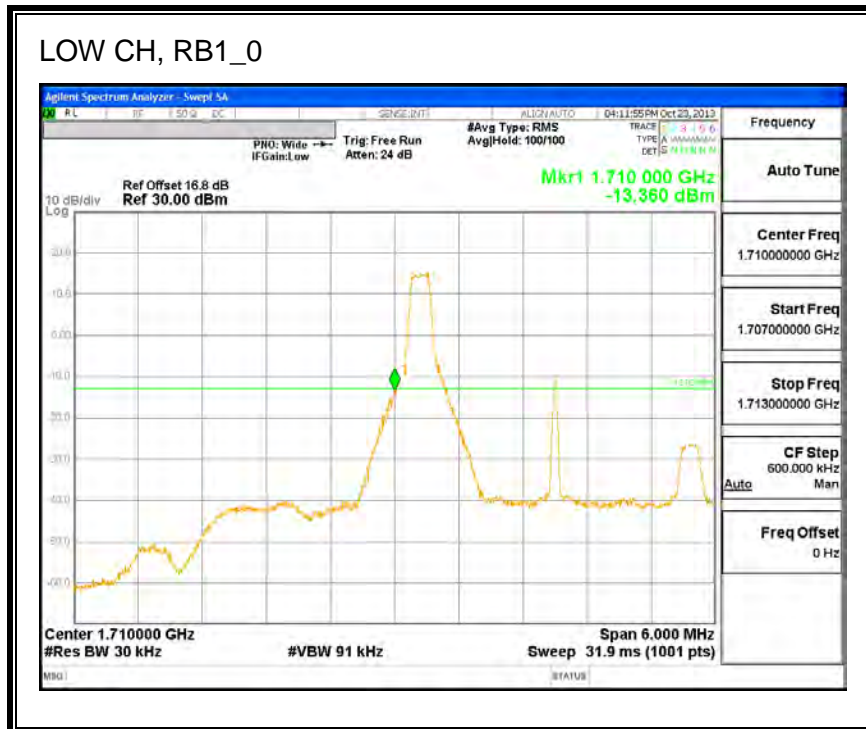
### HIGH CH, RB6-0





**Band 4 (3 MHz BANDWIDTH)**

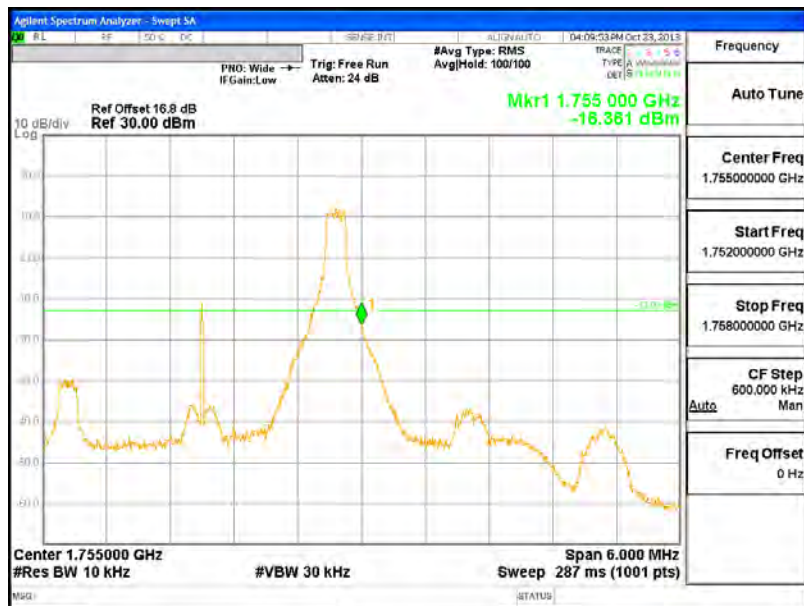
**LTE QPSK**



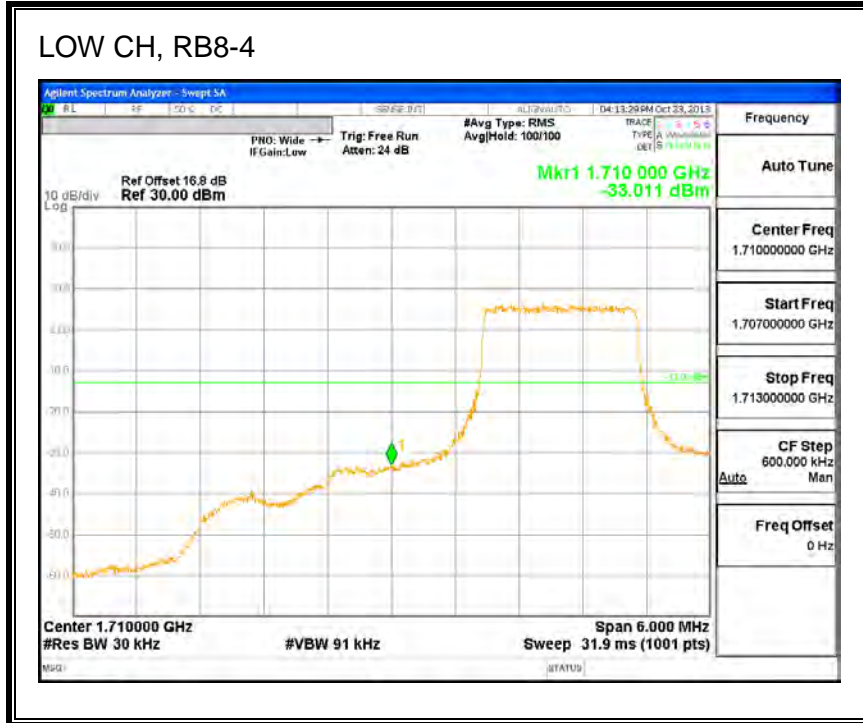
### LOW CH, RB1-14



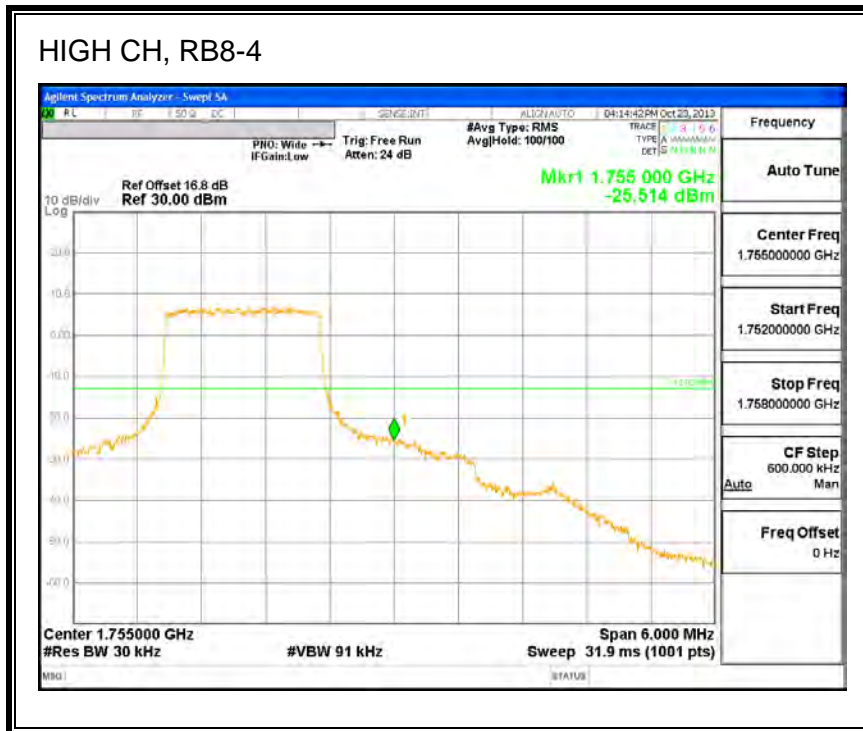
### HIGH CH, RB1-14



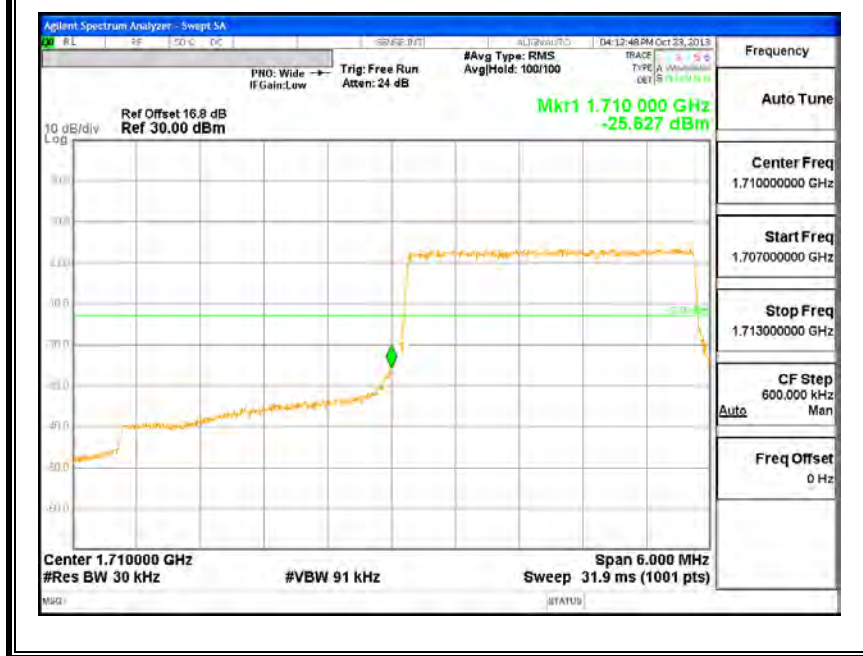
### LOW CH, RB8-4



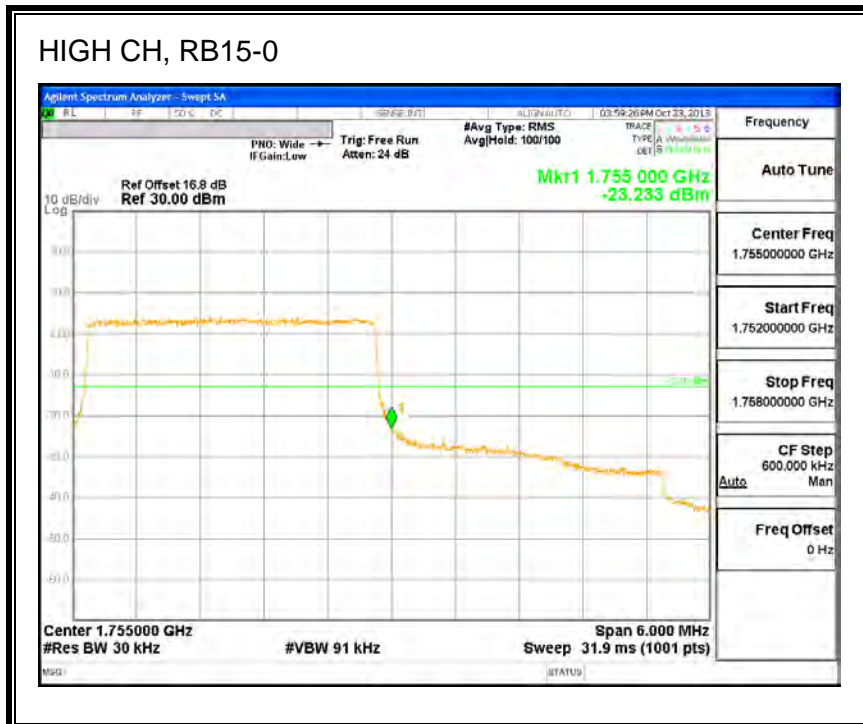
### HIGH CH, RB8-4



### LOW CH, RB15-0

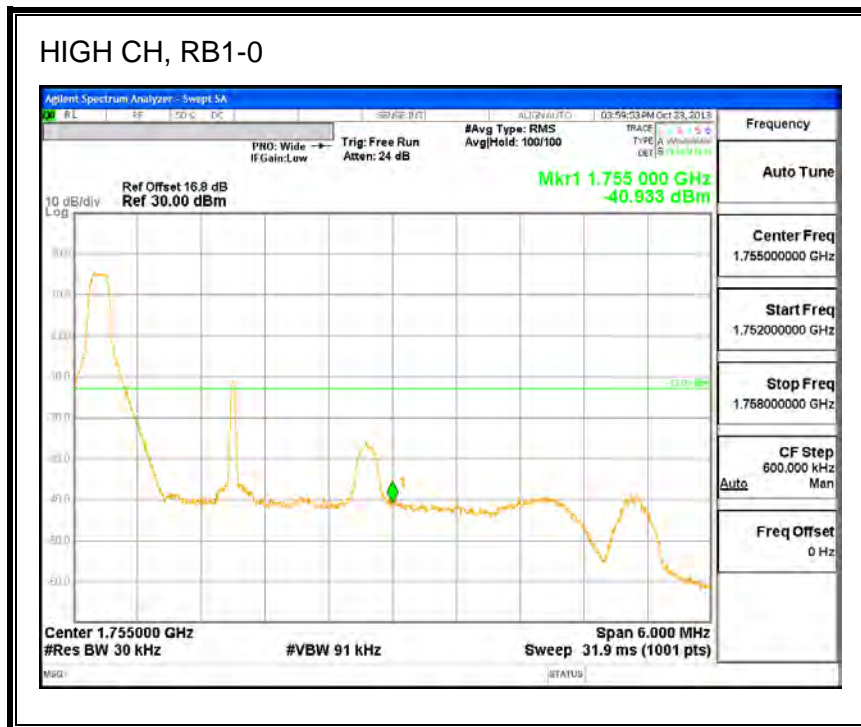
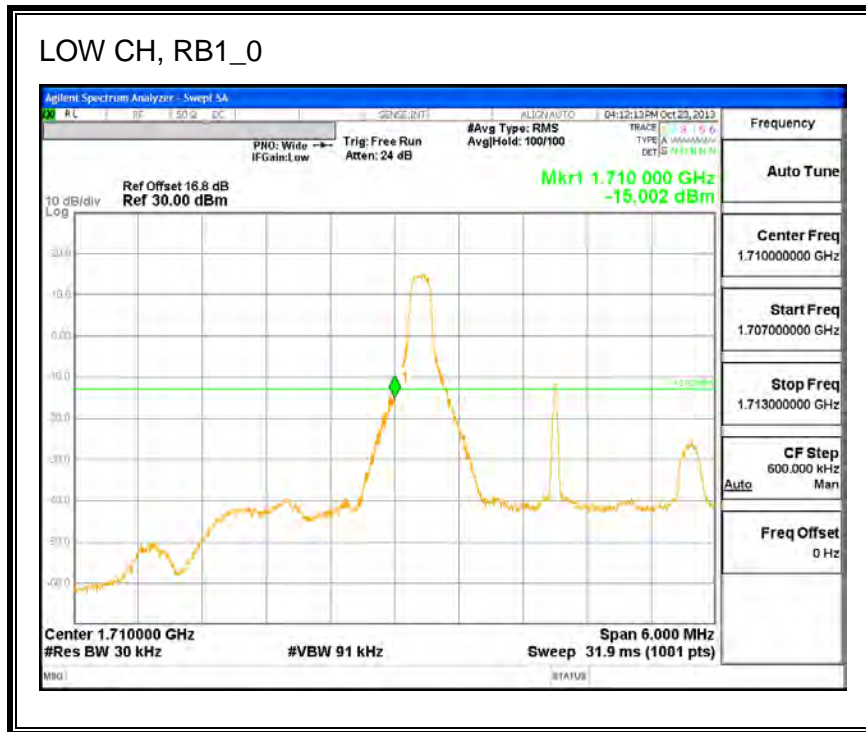


### HIGH CH, RB15-0

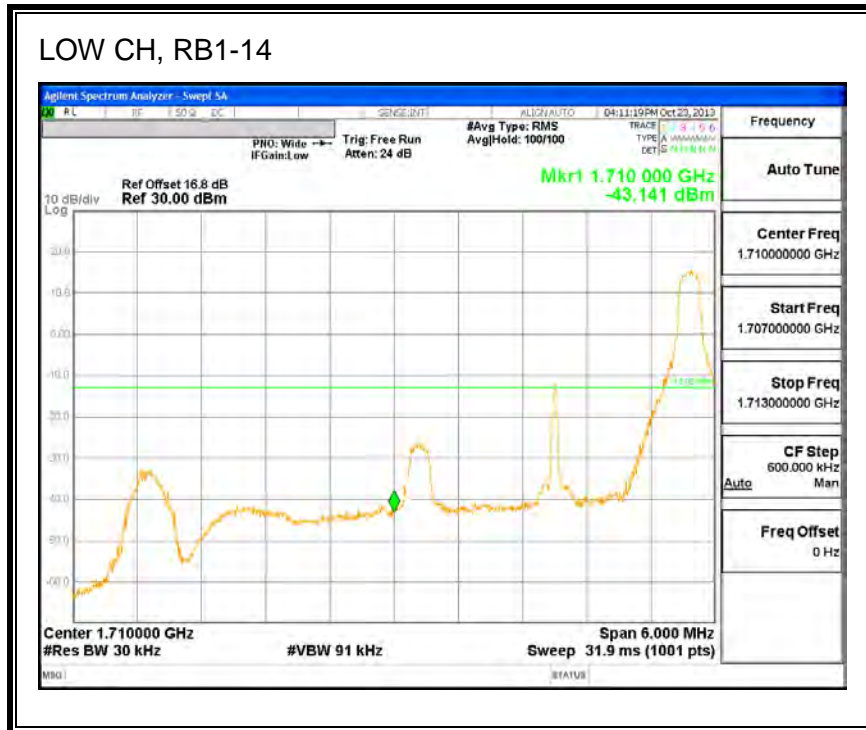


**Band 4 (3MHz BANDWIDTH)**

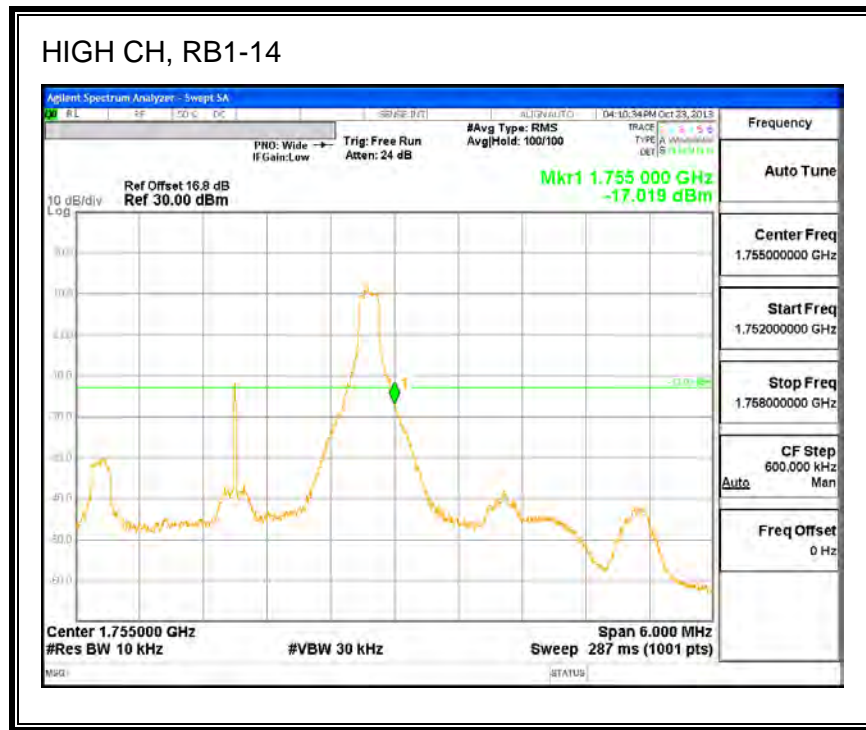
**LTE 16QAM**



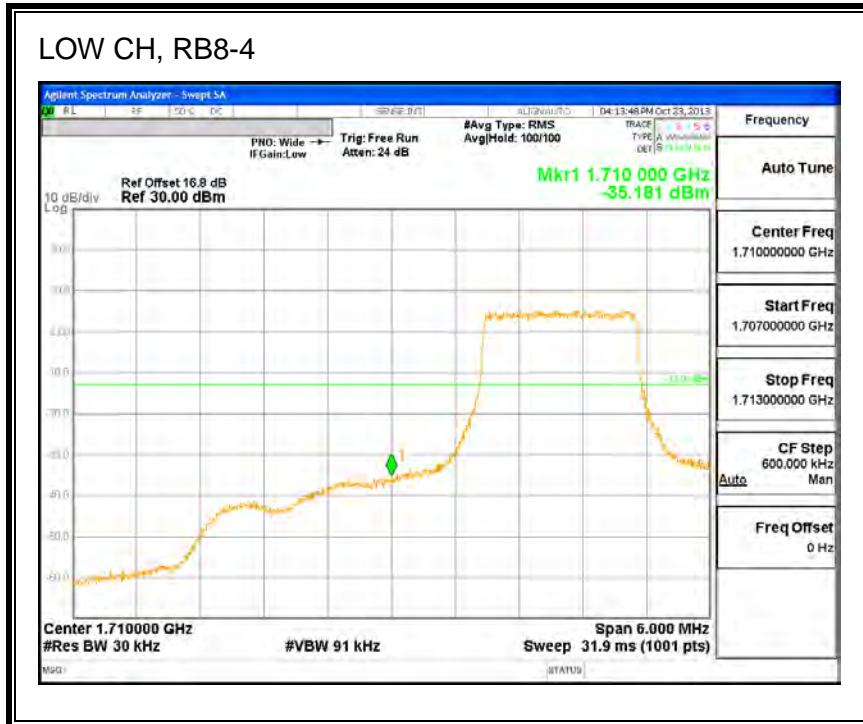
### LOW CH, RB1-14



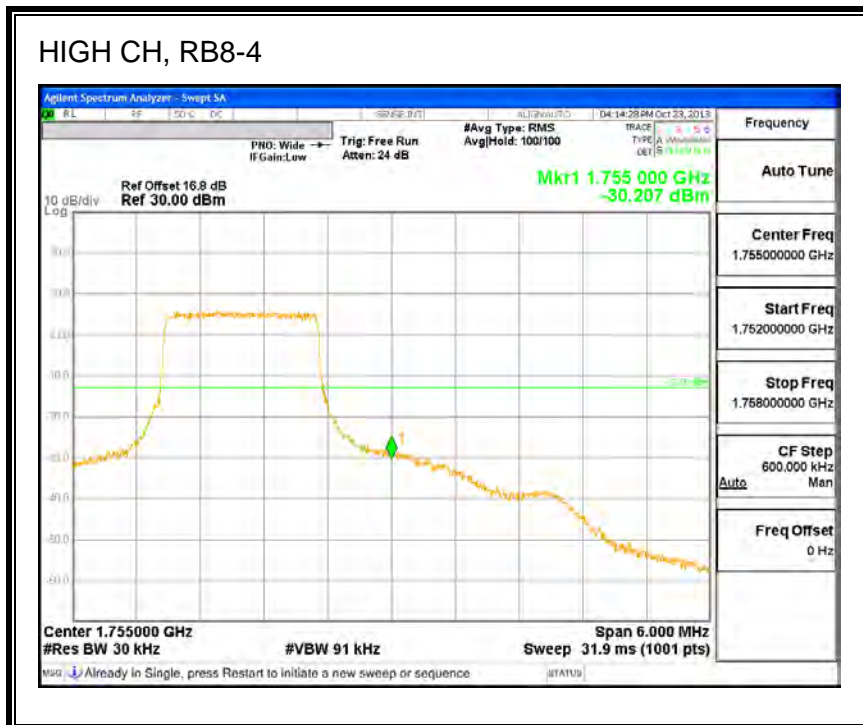
### HIGH CH, RB1-14



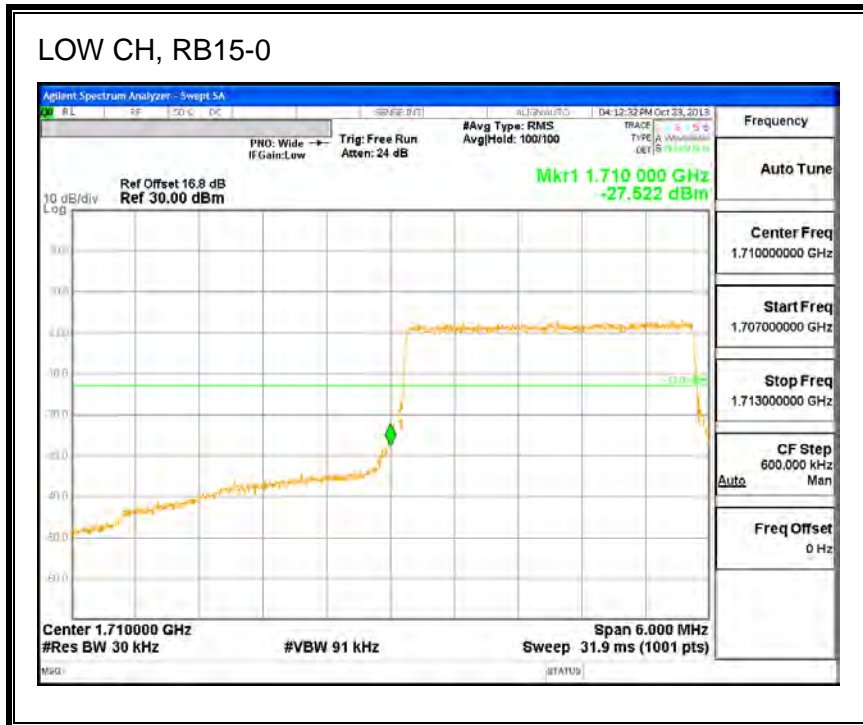
### LOW CH, RB8-4



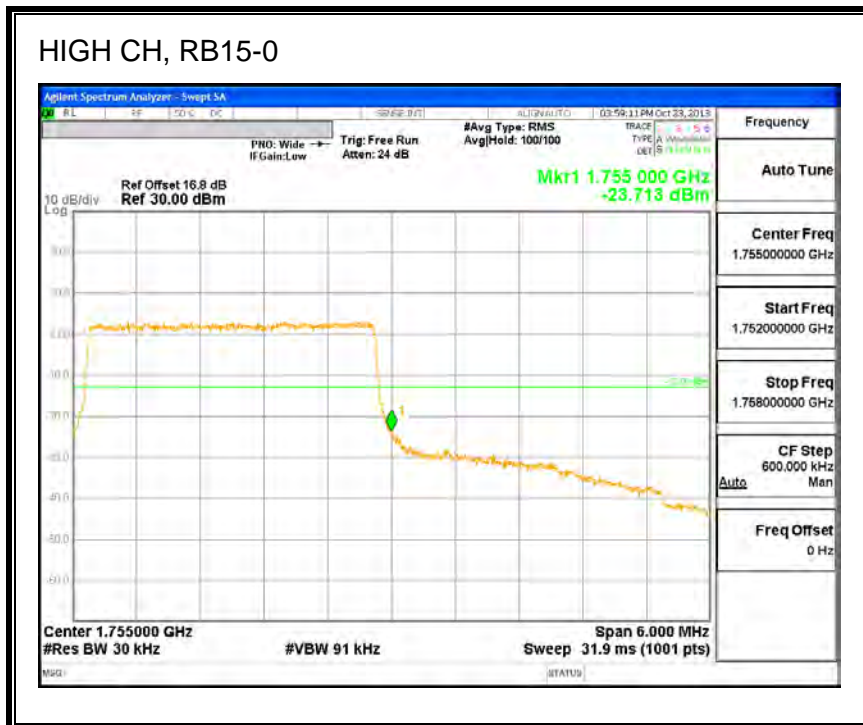
### HIGH CH, RB8-4



### LOW CH, RB15-0



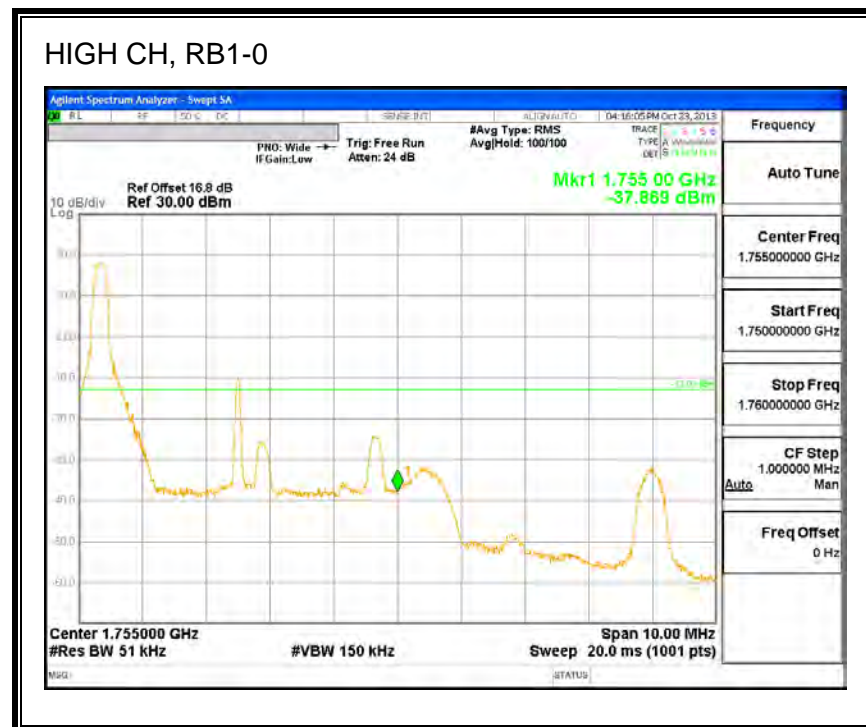
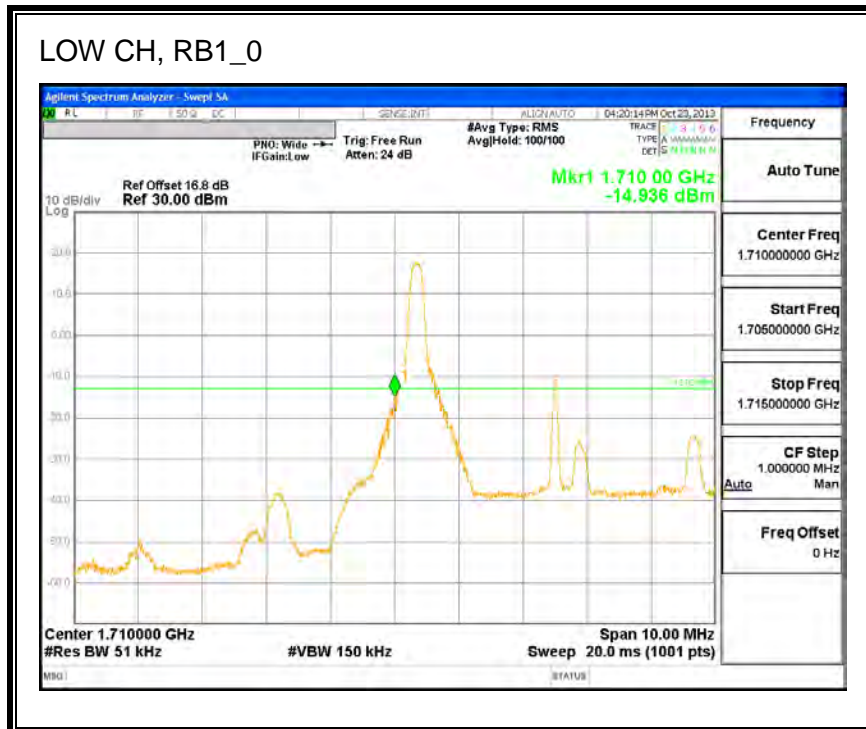
### HIGH CH, RB15-0





**Band 4 (5MHz BANDWIDTH)**

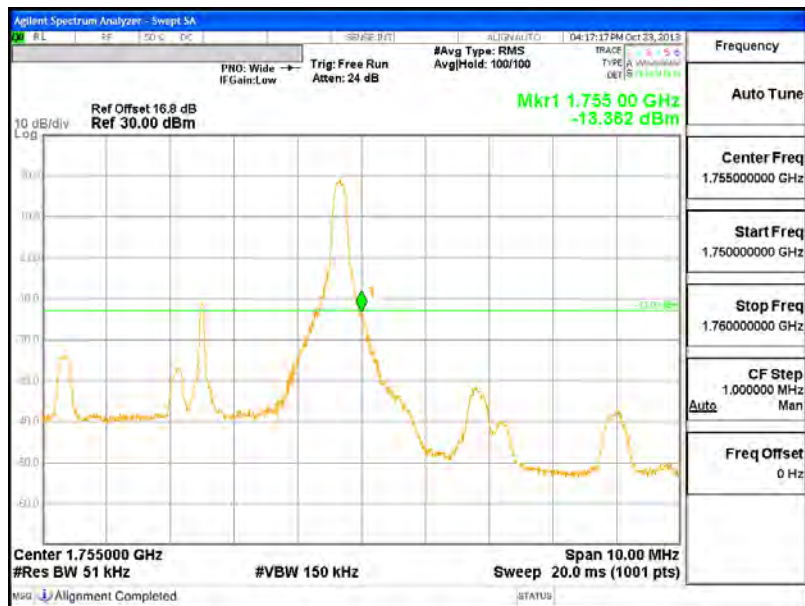
**LTE QPSK**



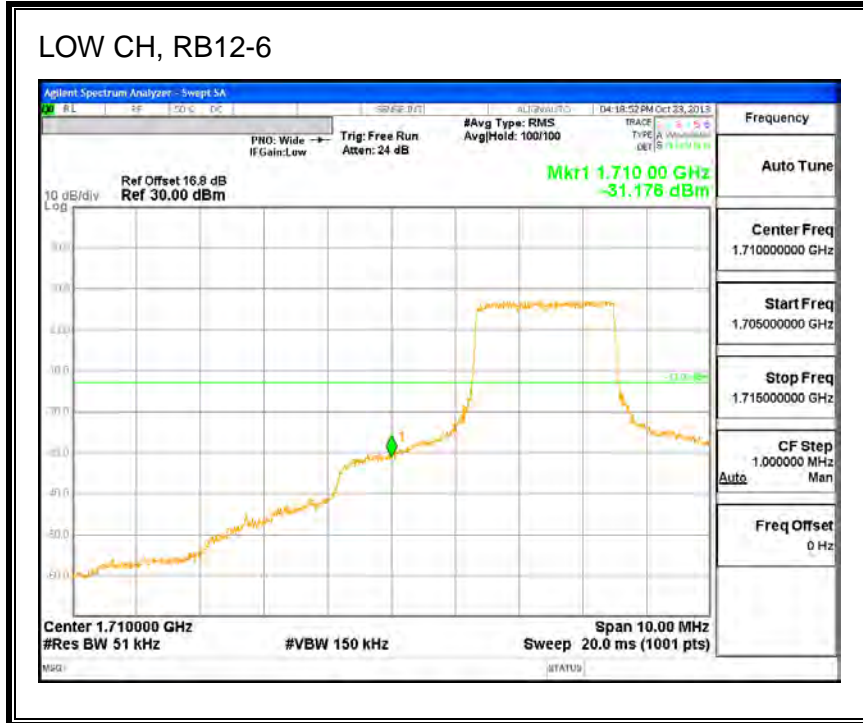
### LOW CH, RB1-24



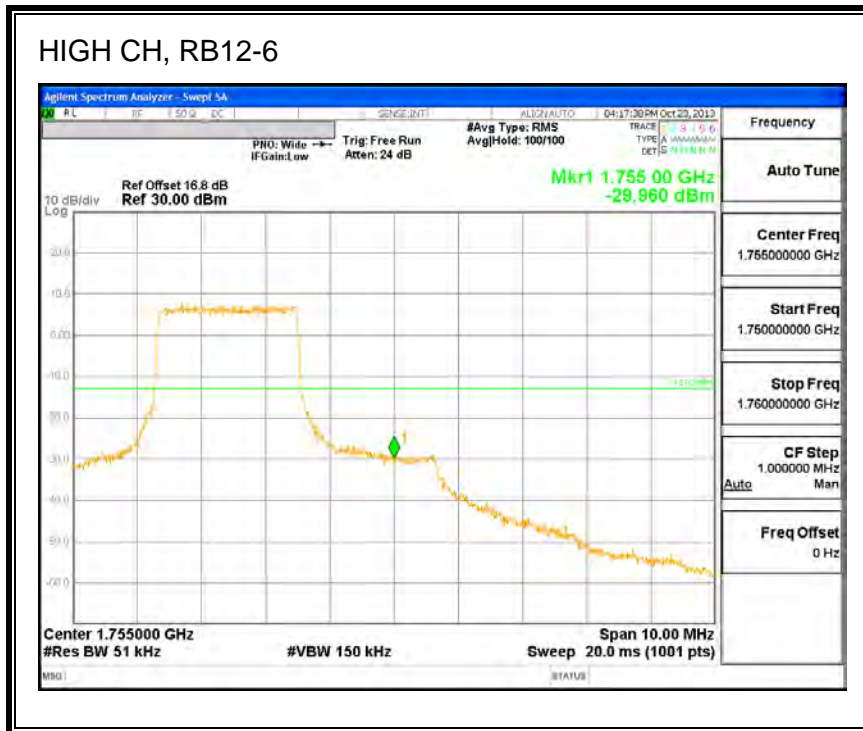
### HIGH CH, RB1-24



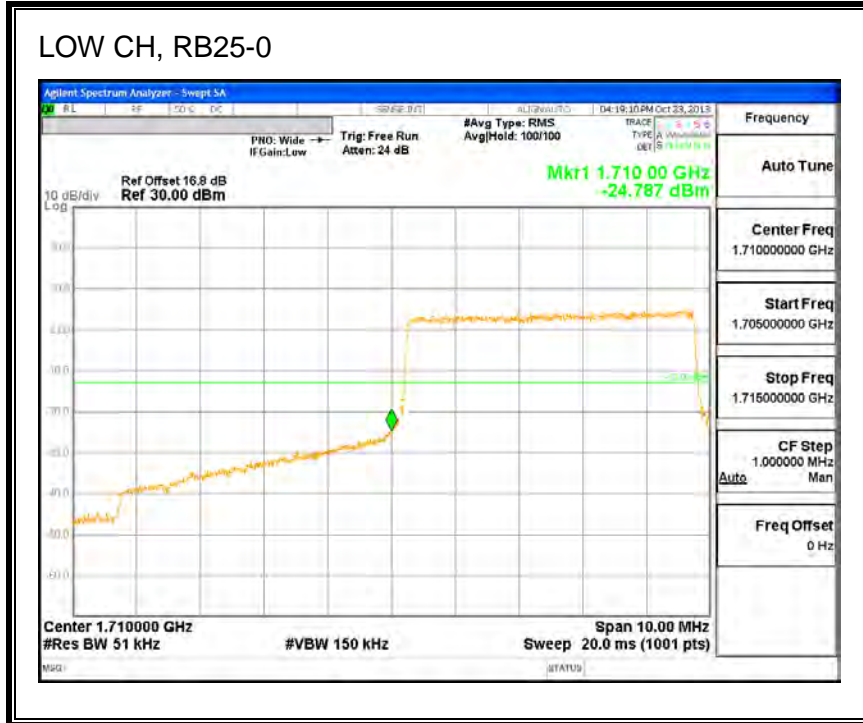
### LOW CH, RB12-6



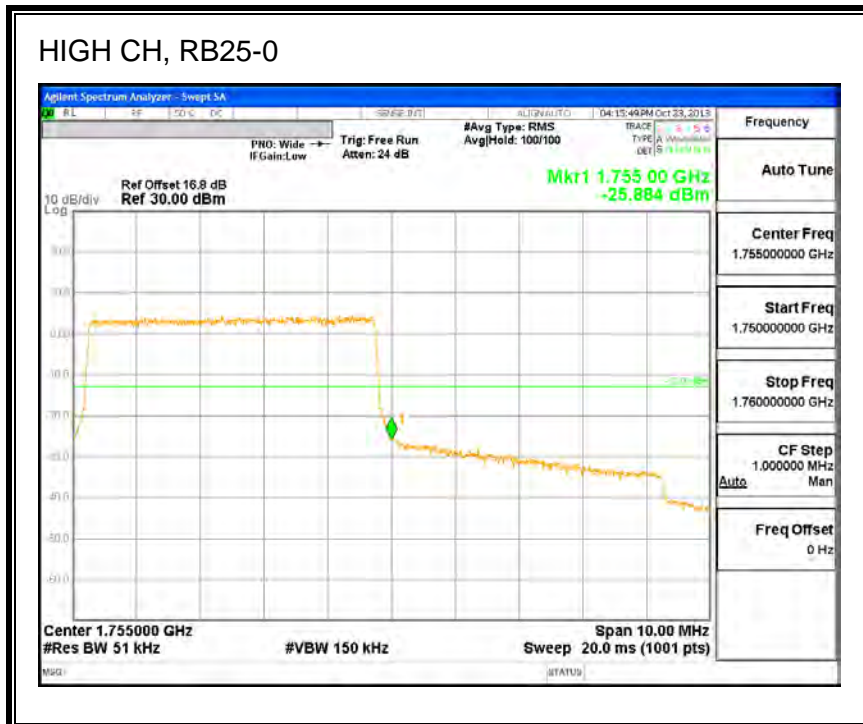
### HIGH CH, RB12-6



### LOW CH, RB25-0

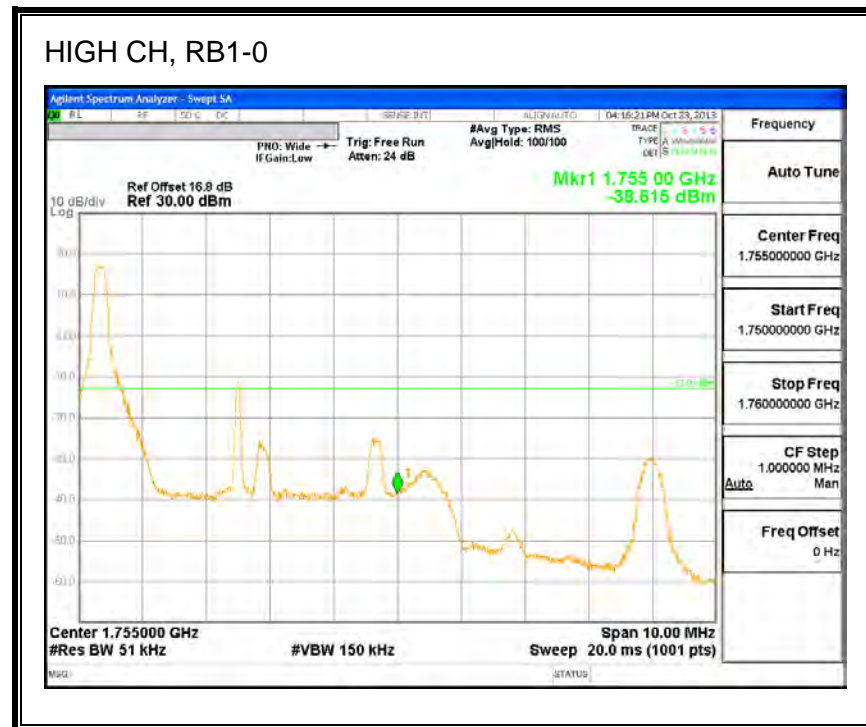
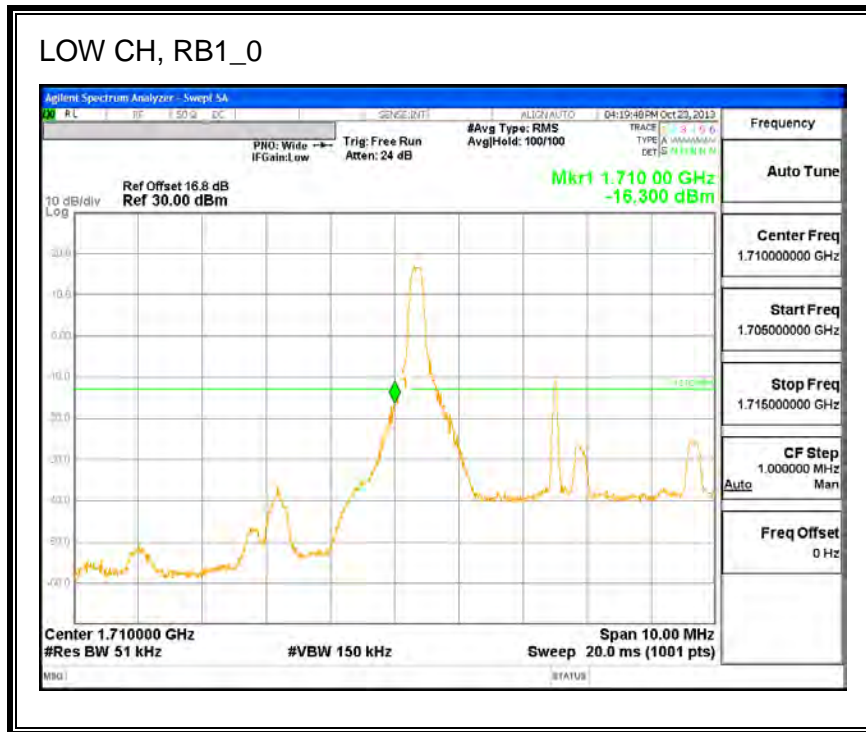


### HIGH CH, RB25-0

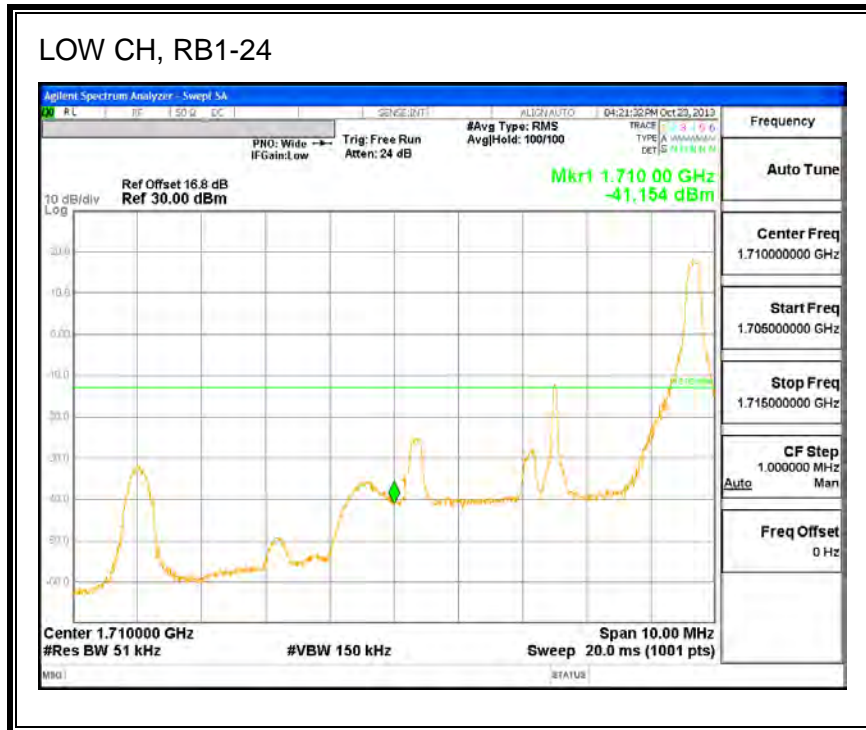


**Band 4 (5MHz BANDWIDTH)**

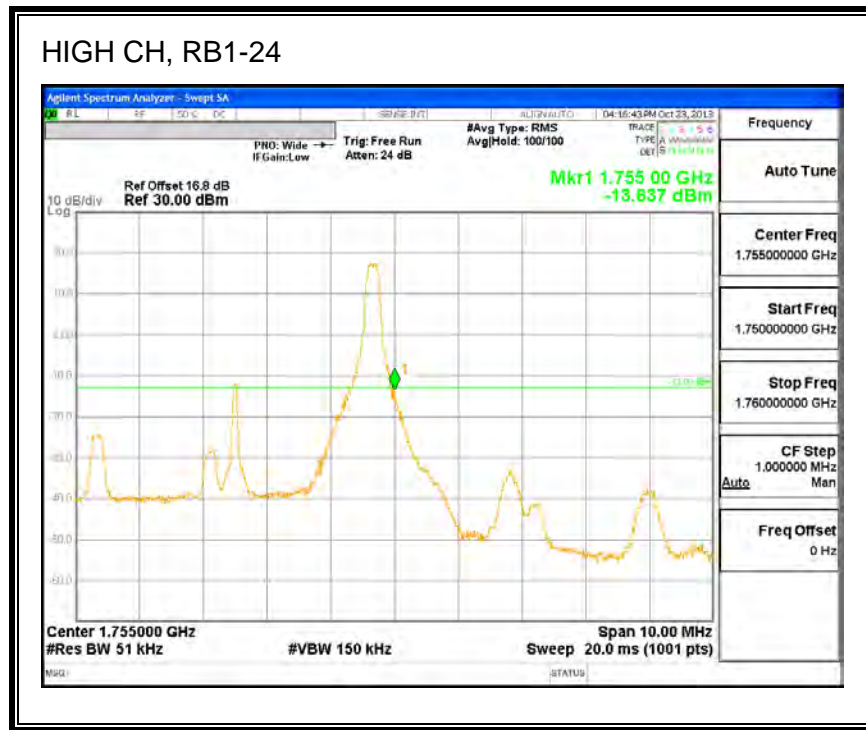
**LTE 16QAM**



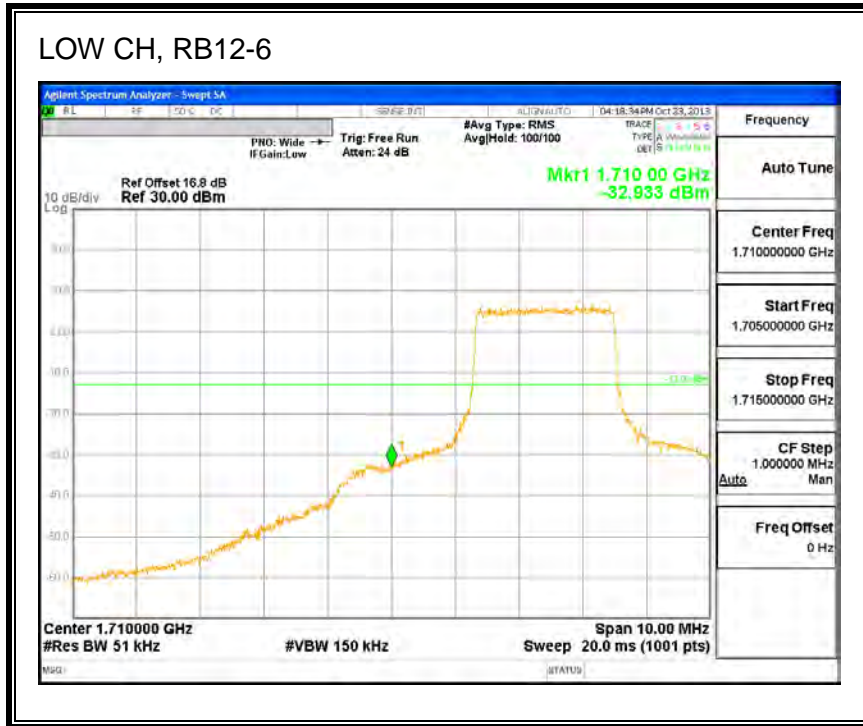
### LOW CH, RB1-24



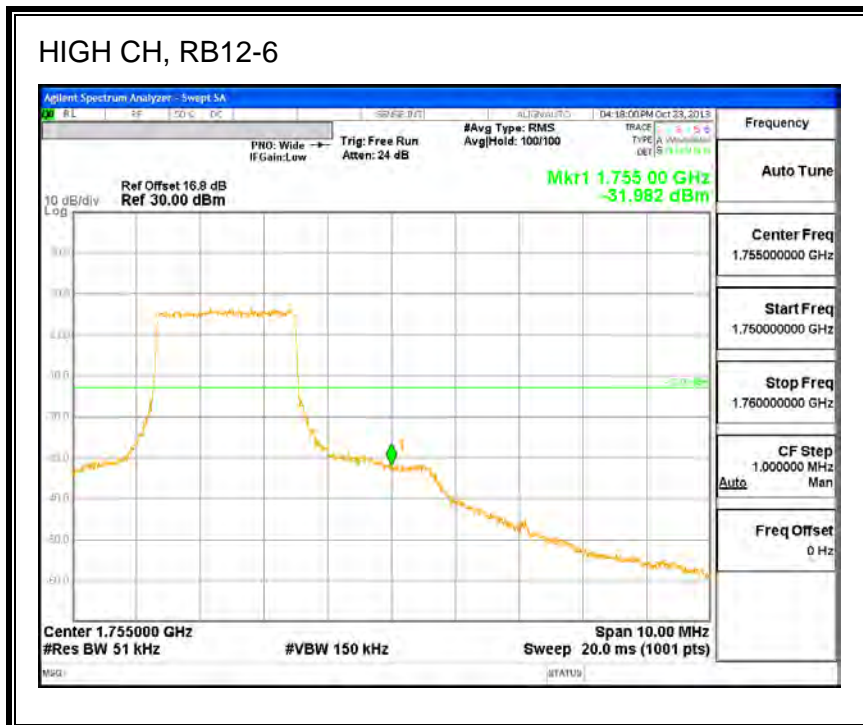
### HIGH CH, RB1-24



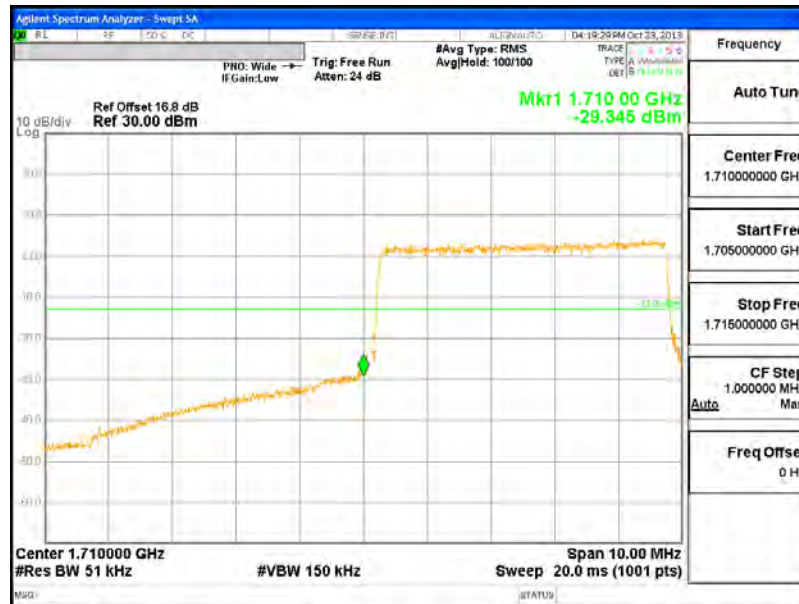
### LOW CH, RB12-6



### HIGH CH, RB12-6



LOW CH, RB25-0



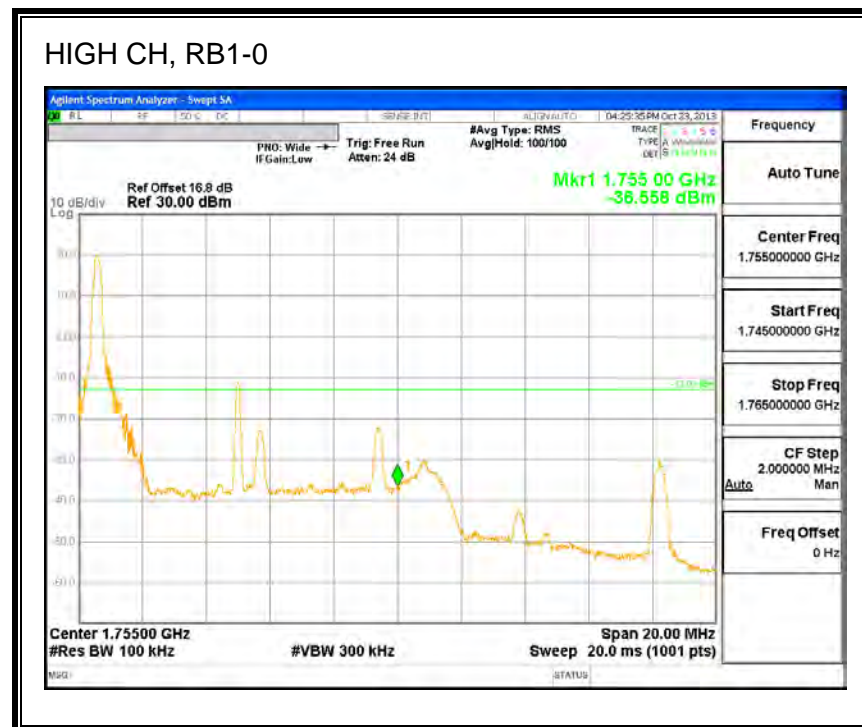
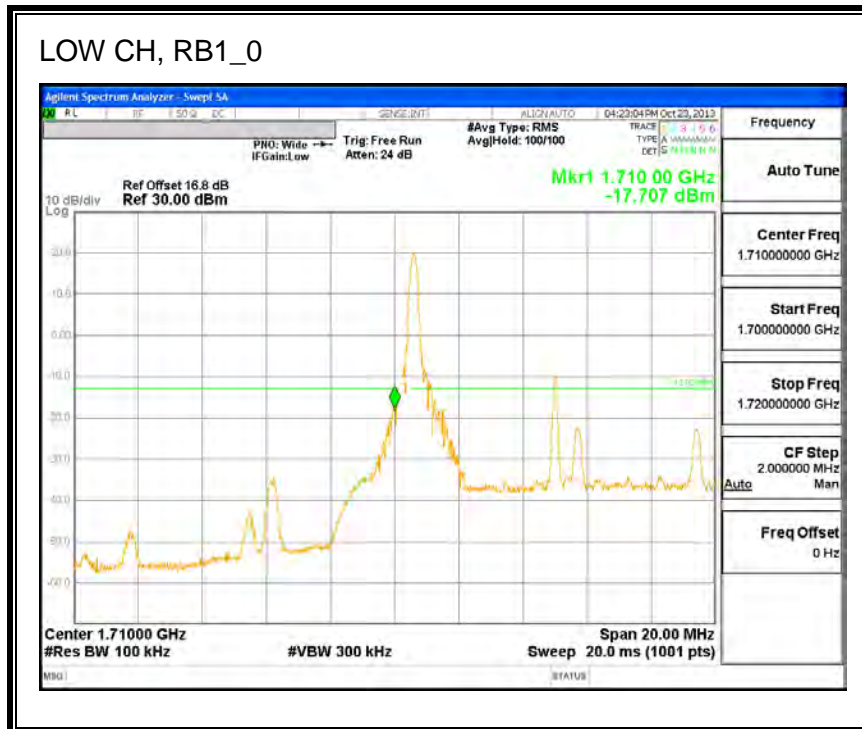
HIGH CH, RB25-0





**Band 4 (10MHz BANDWIDTH)**

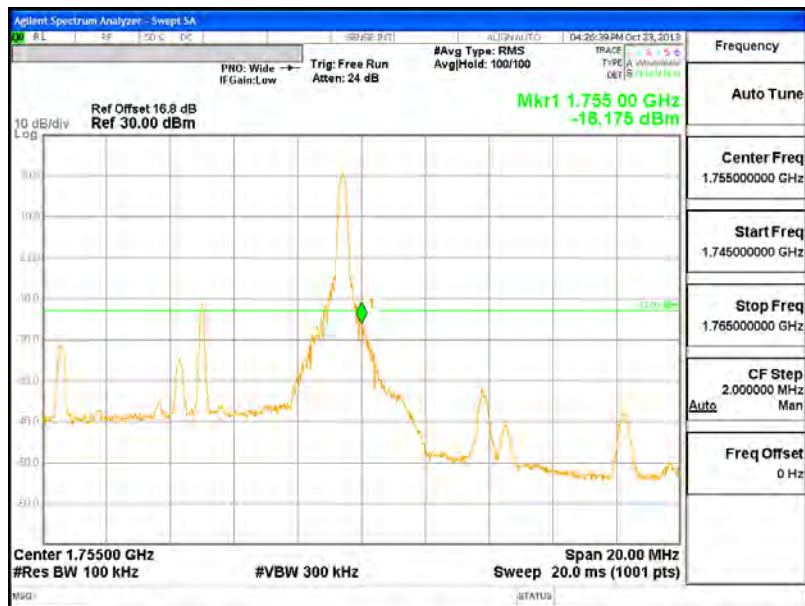
**LTE QPSK**



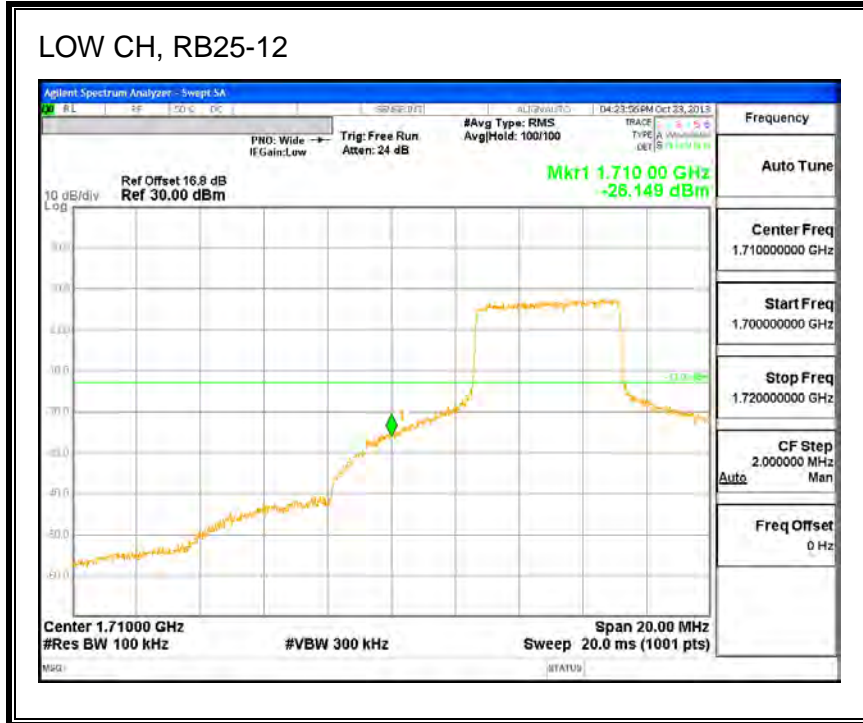
### LOW CH, RB1-49



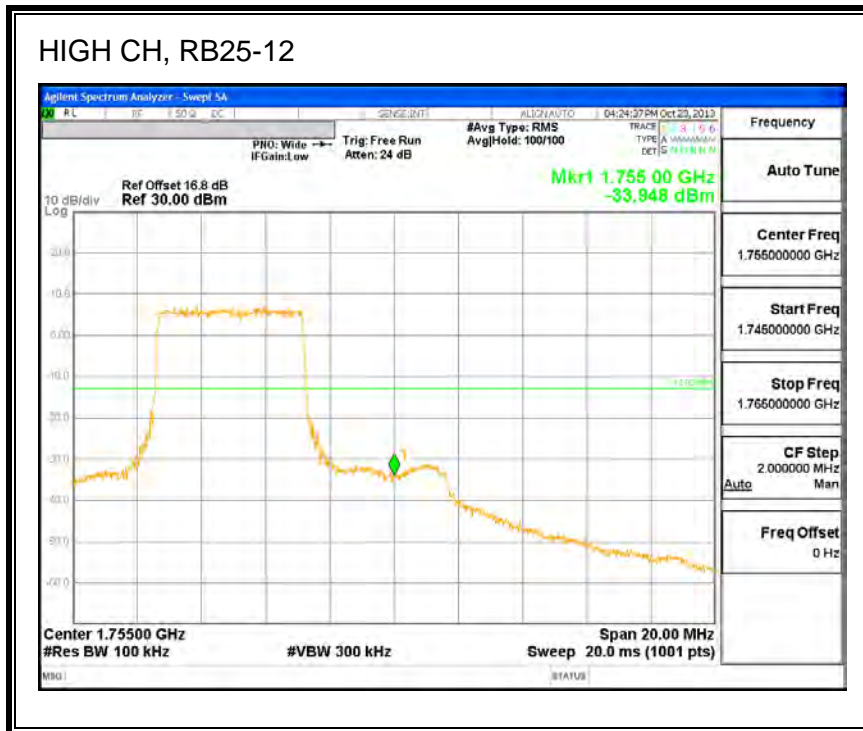
### HIGH CH, RB1-49



### LOW CH, RB25-12



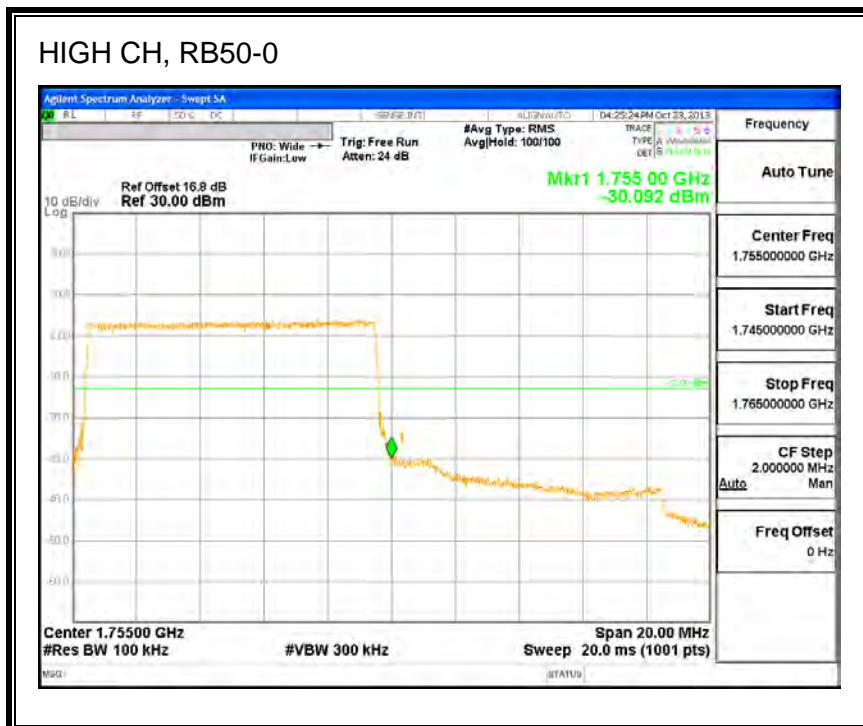
### HIGH CH, RB25-12



### LOW CH, RB50-0

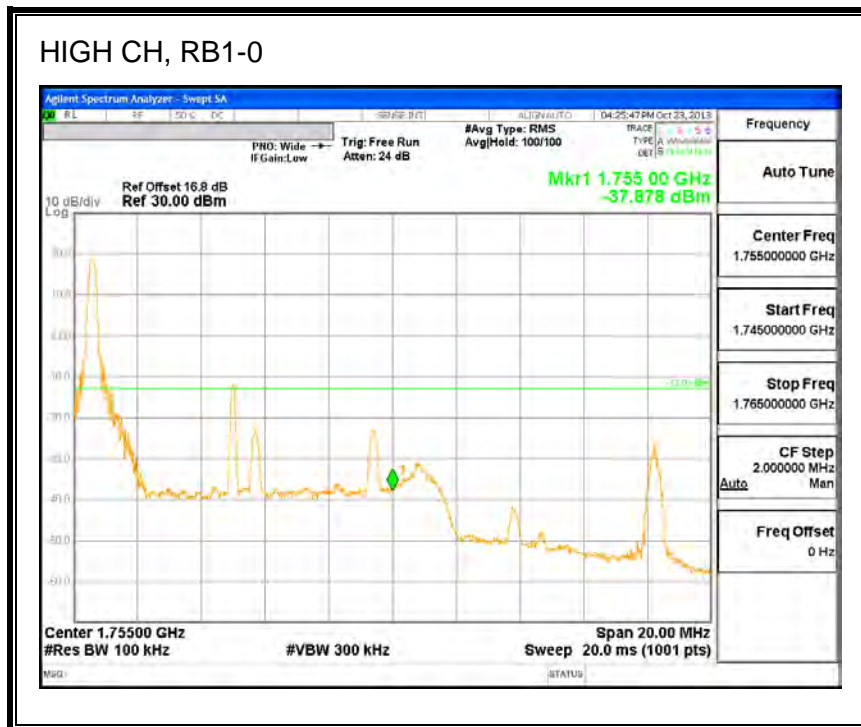
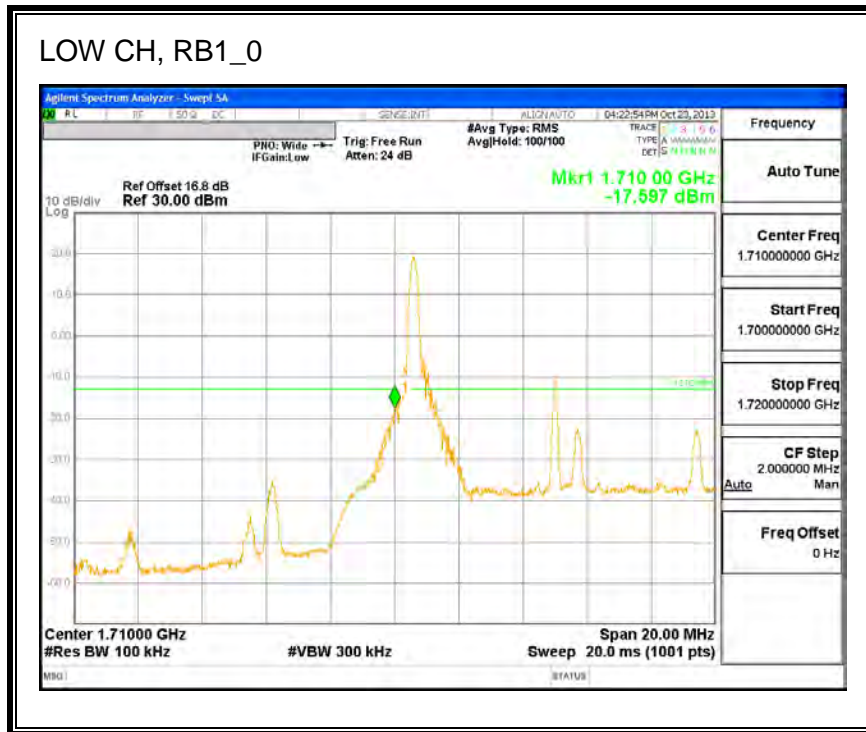


### HIGH CH, RB50-0

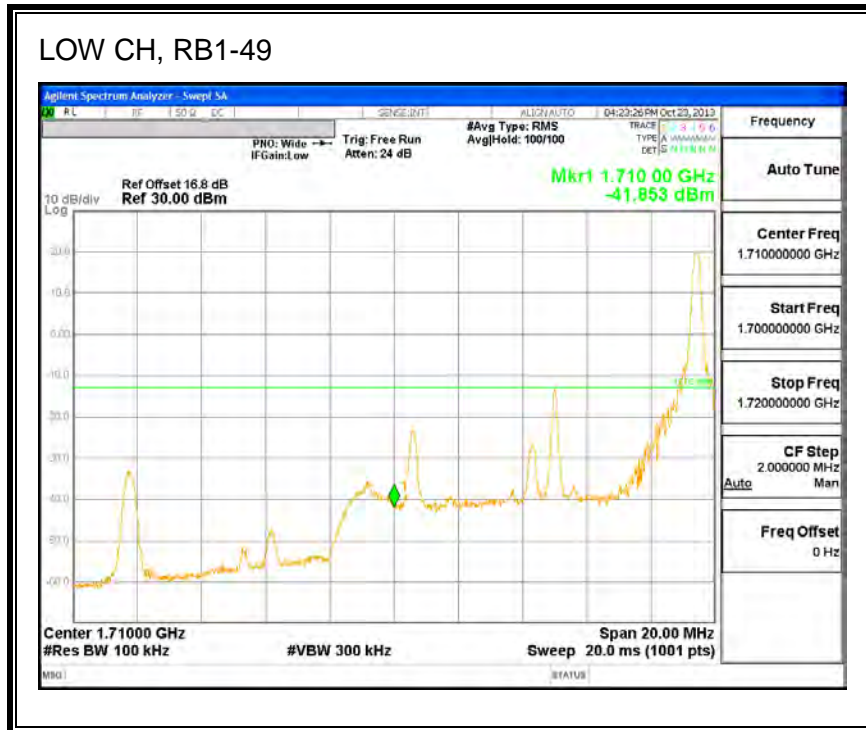


**Band 4 (10MHz BANDWIDTH)**

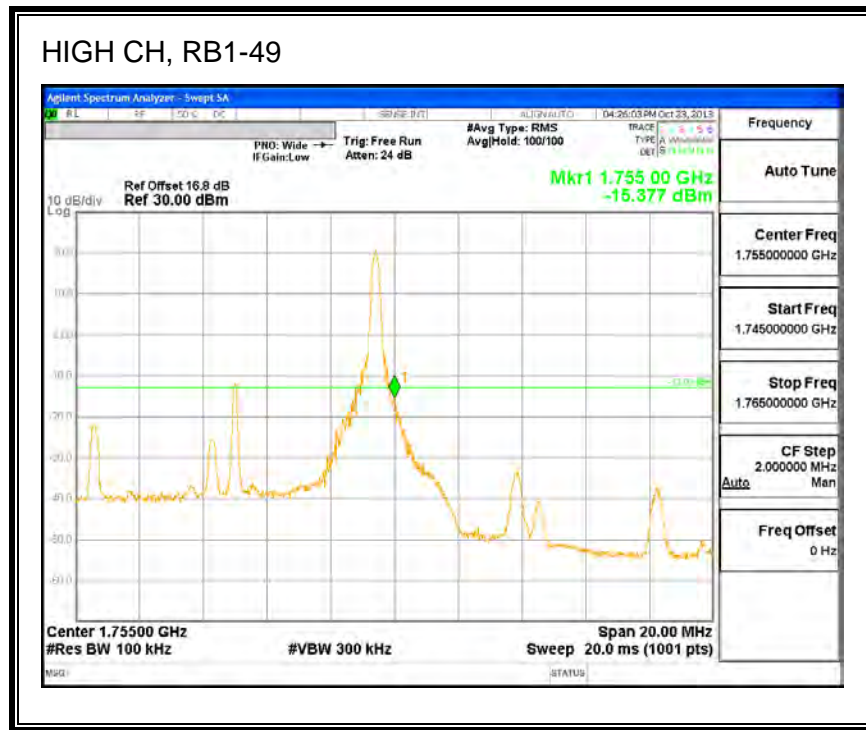
**LTE 16QAM**



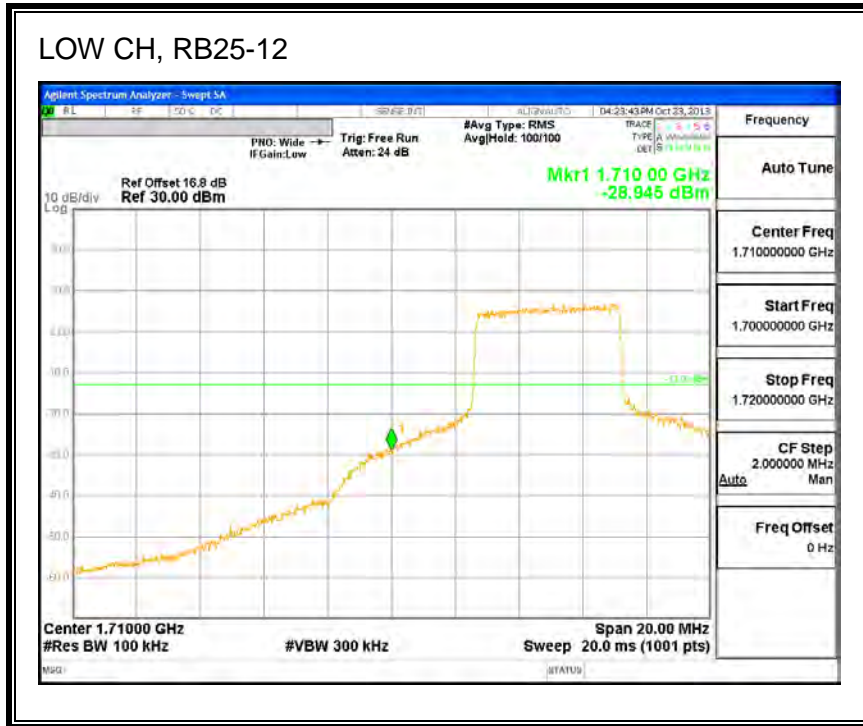
### LOW CH, RB1-49



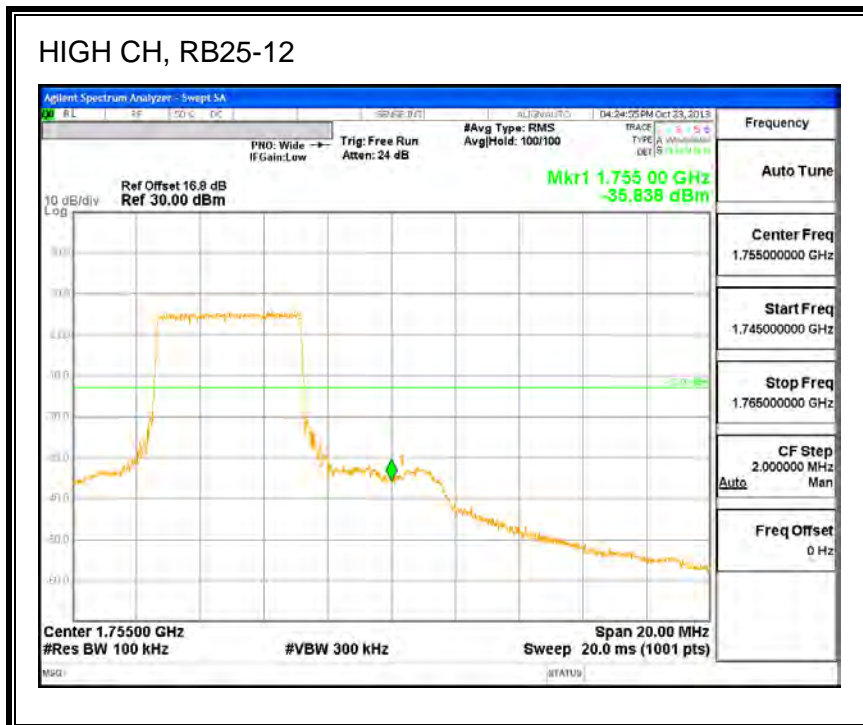
### HIGH CH, RB1-49

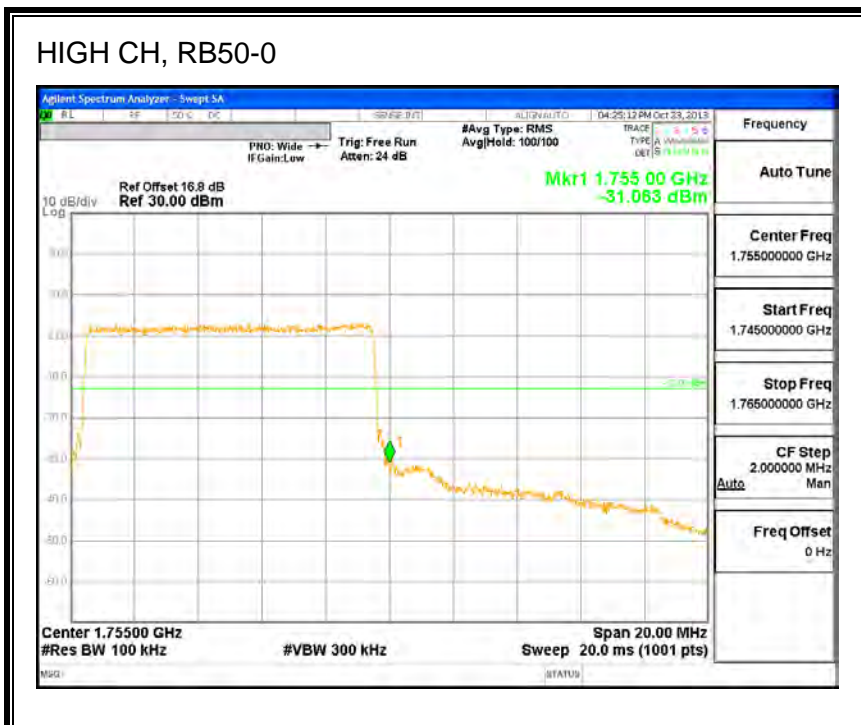
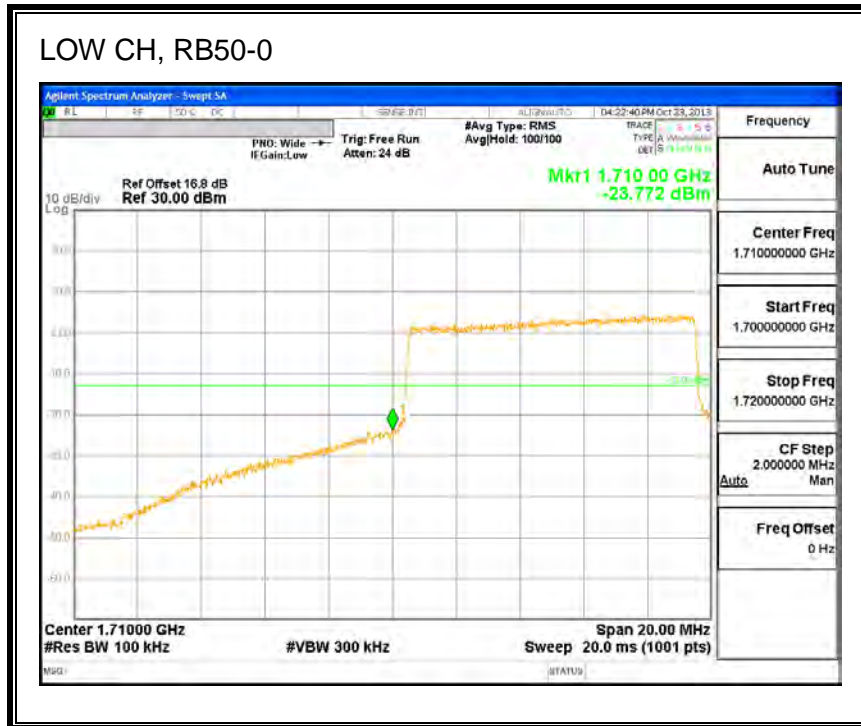


### LOW CH, RB25-12



### HIGH CH, RB25-12

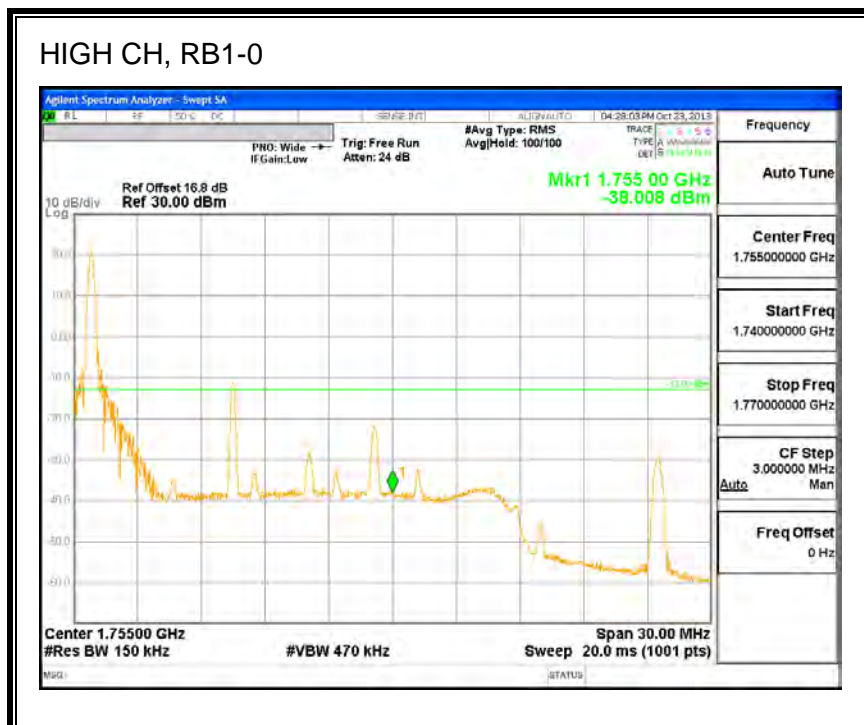
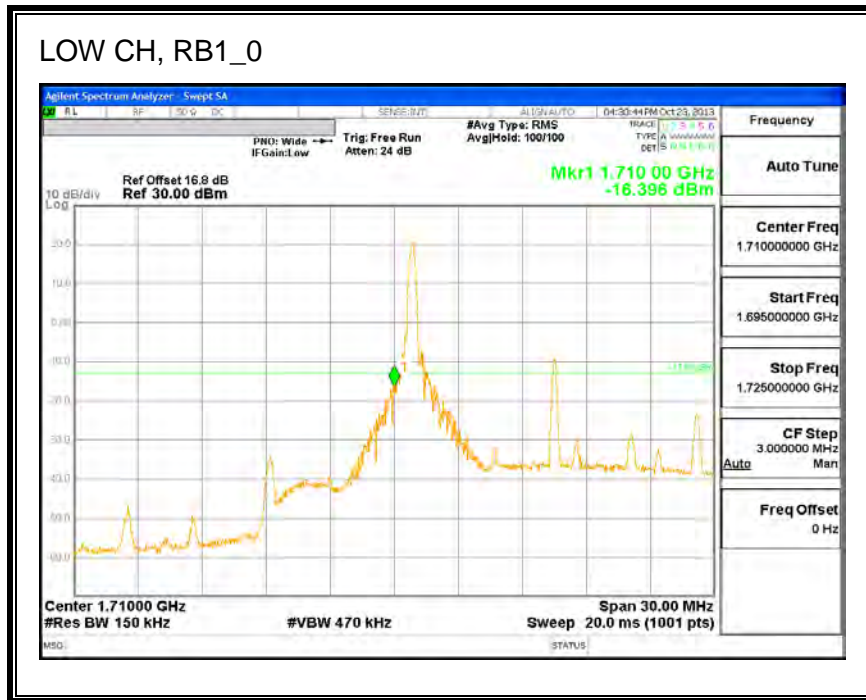




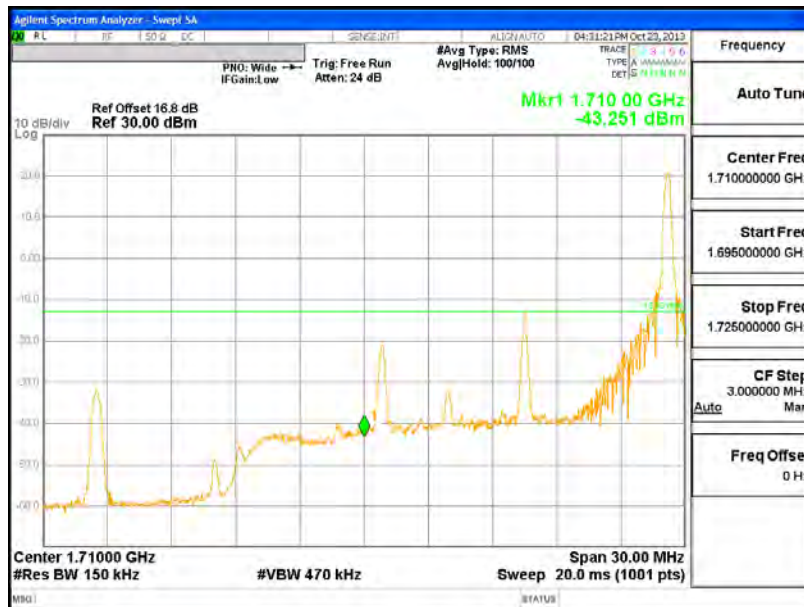


**Band 4 (15MHz BANDWIDTH)**

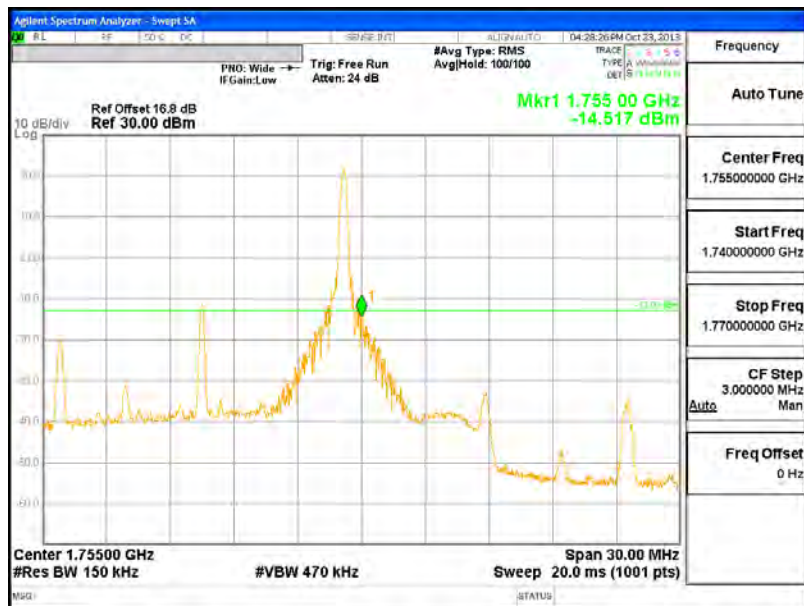
**LTE QPSK**



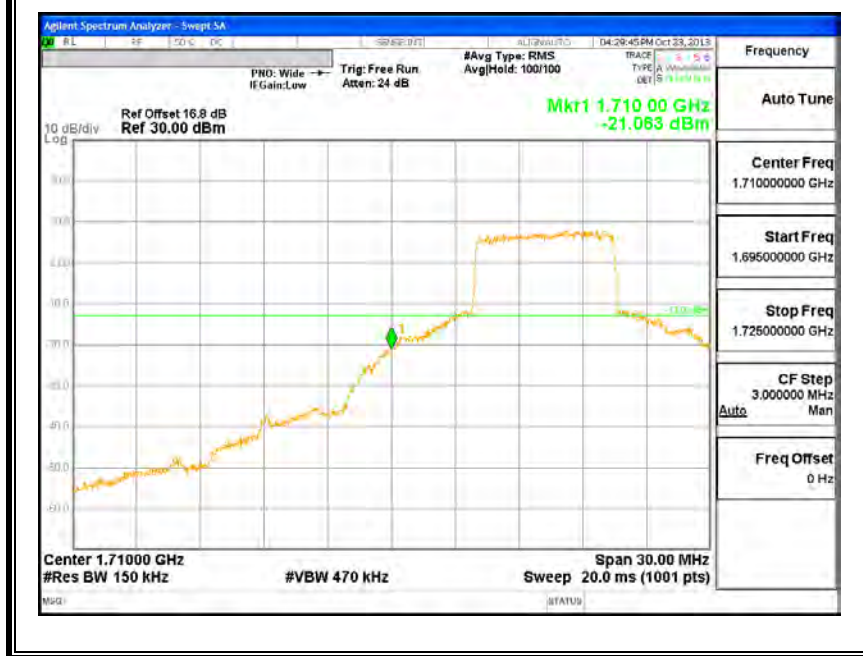
### LOW CH, RB1-74



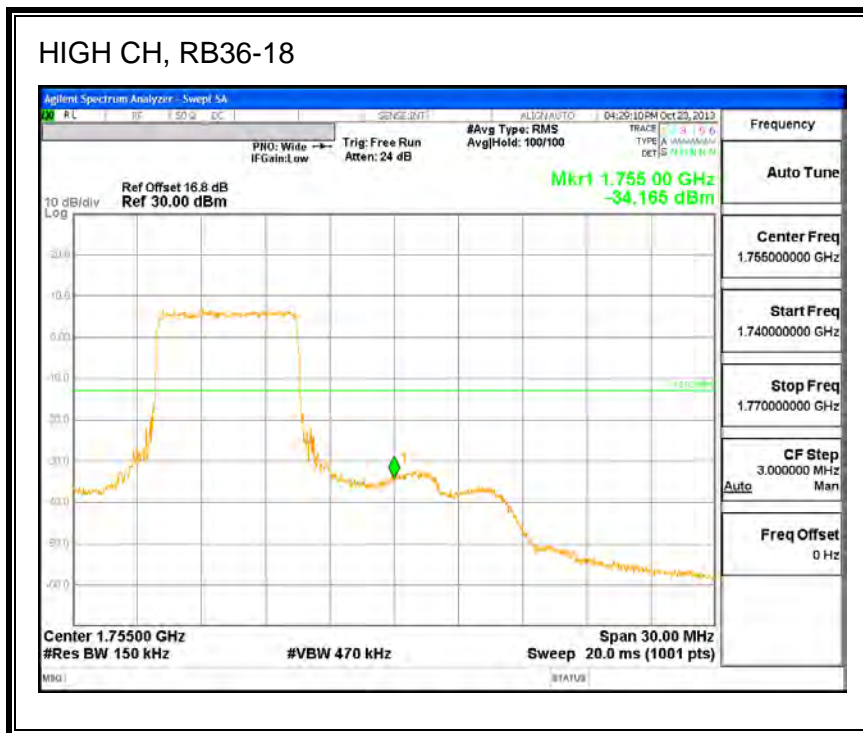
### HIGH CH, RB1-74



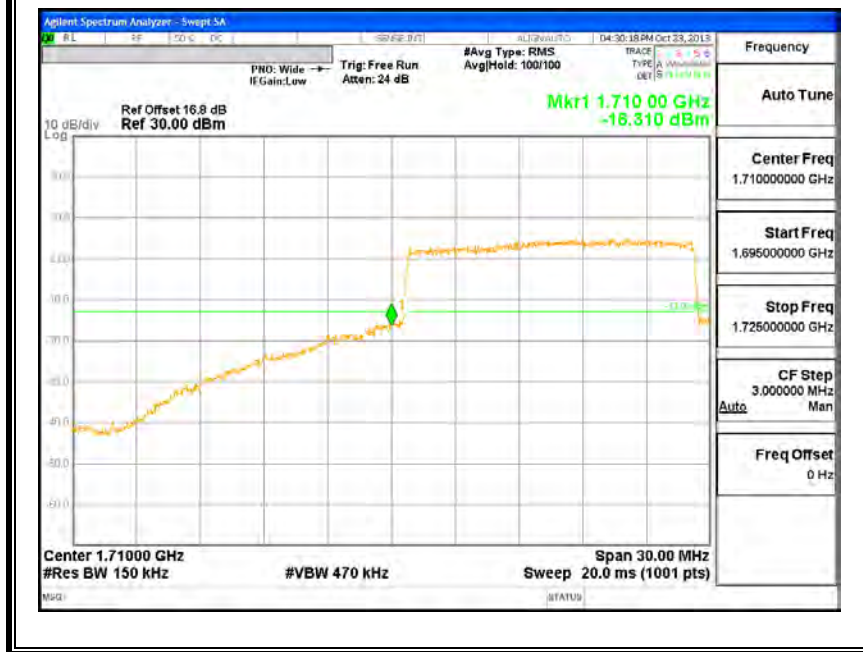
### LOW CH, RB36-18



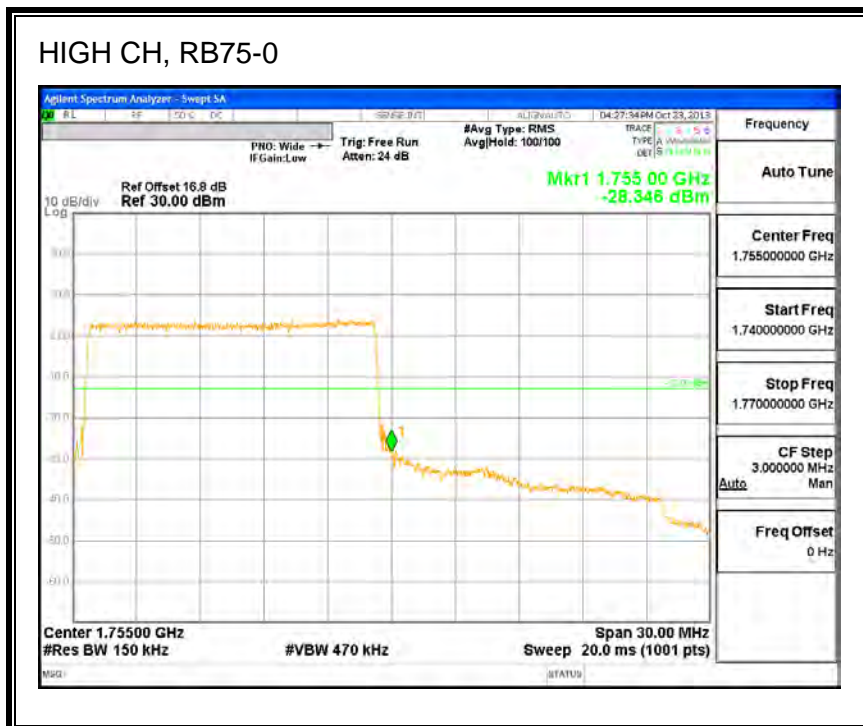
### HIGH CH, RB36-18



### LOW CH, RB75-0

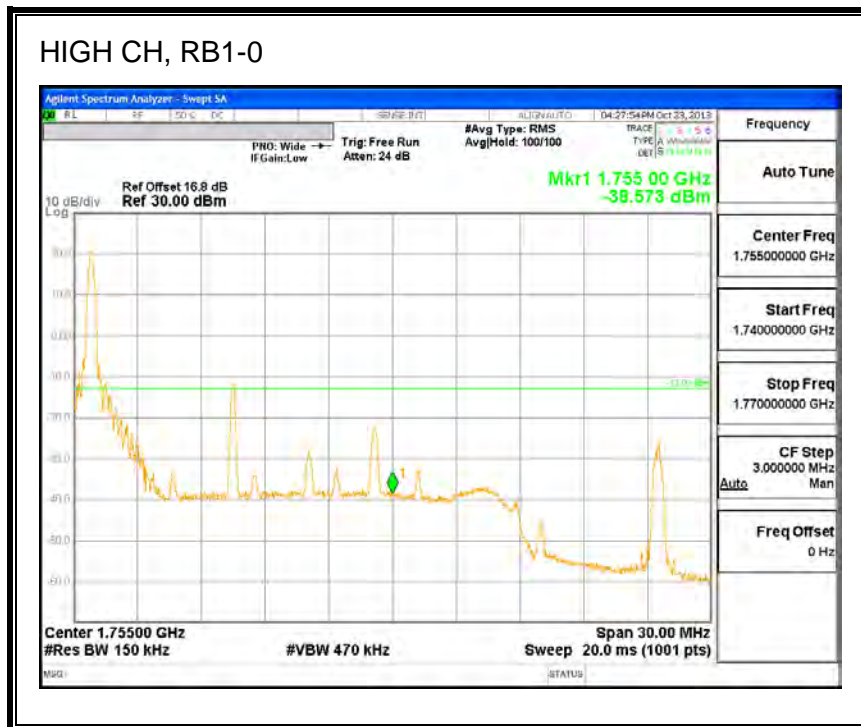
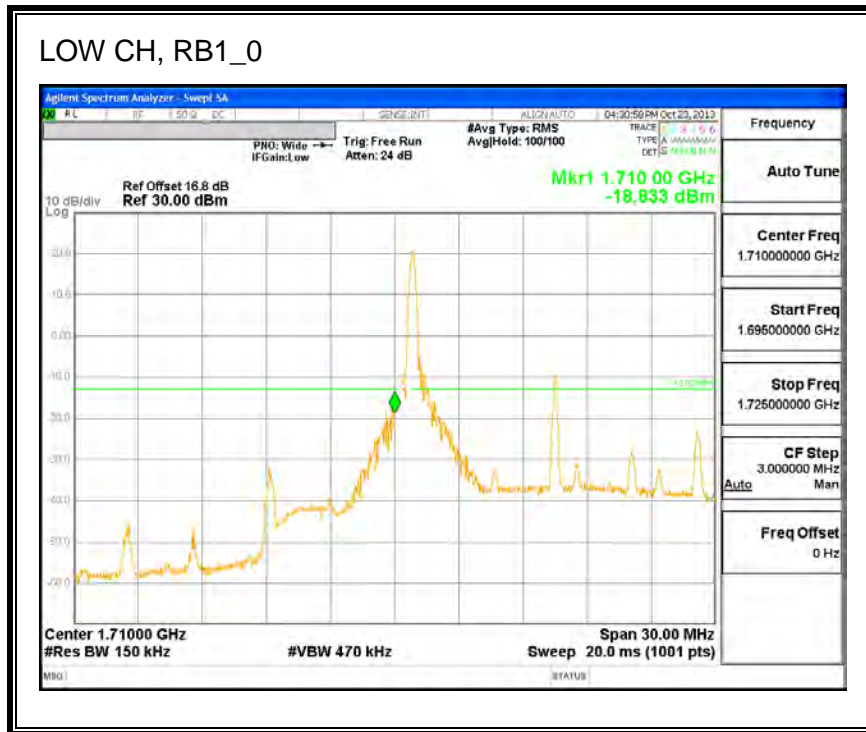


### HIGH CH, RB75-0

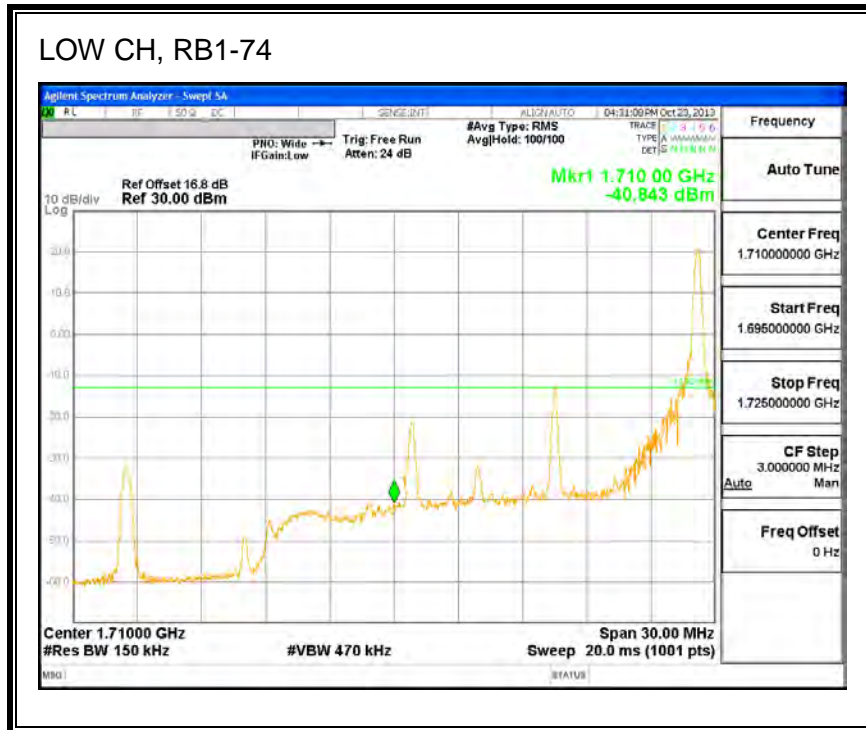


**Band 4 (15MHz BANDWIDTH)**

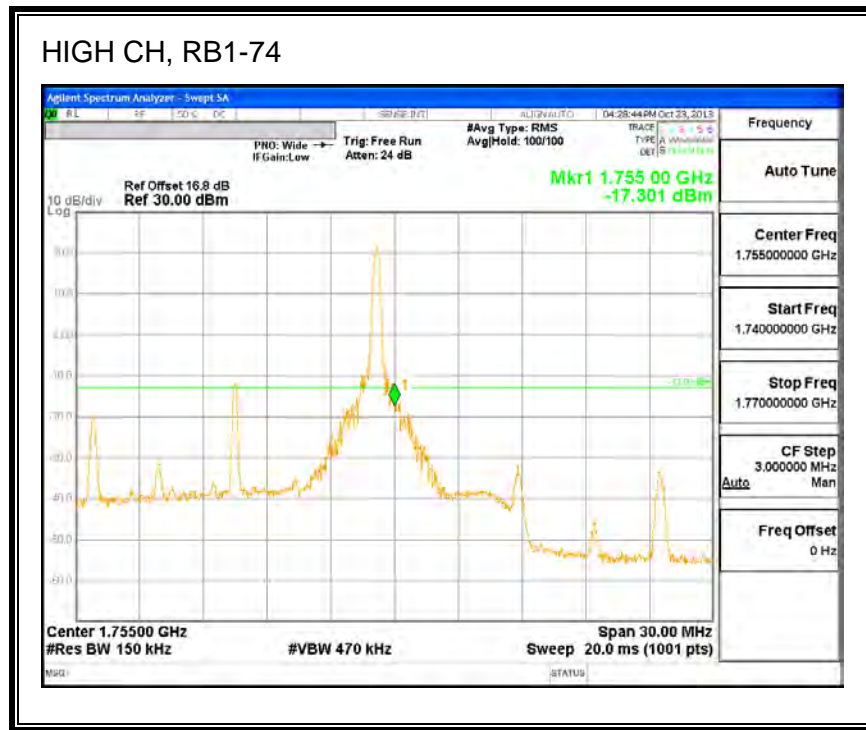
**LTE 16QAM**



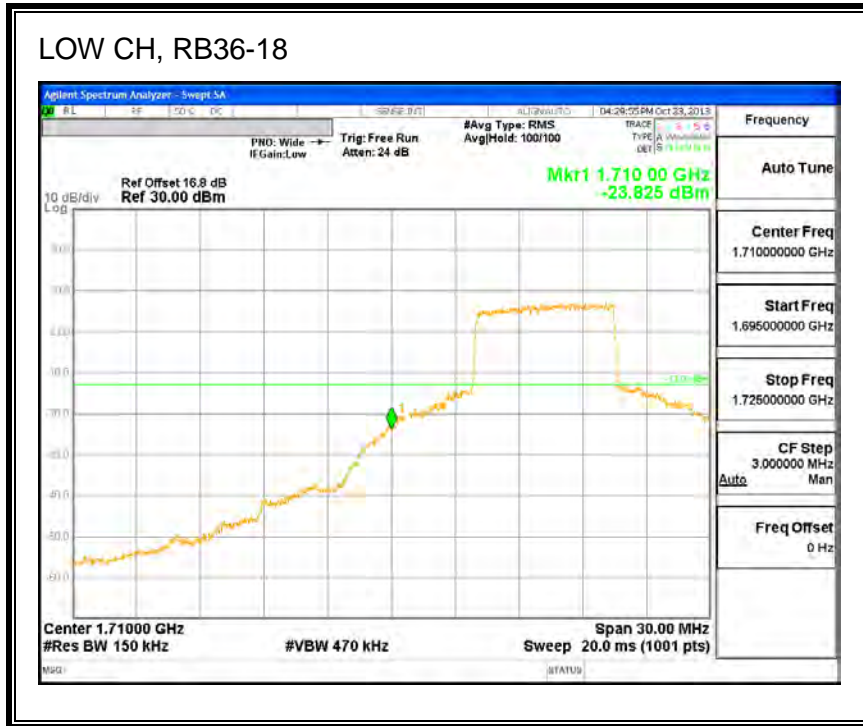
### LOW CH, RB1-74



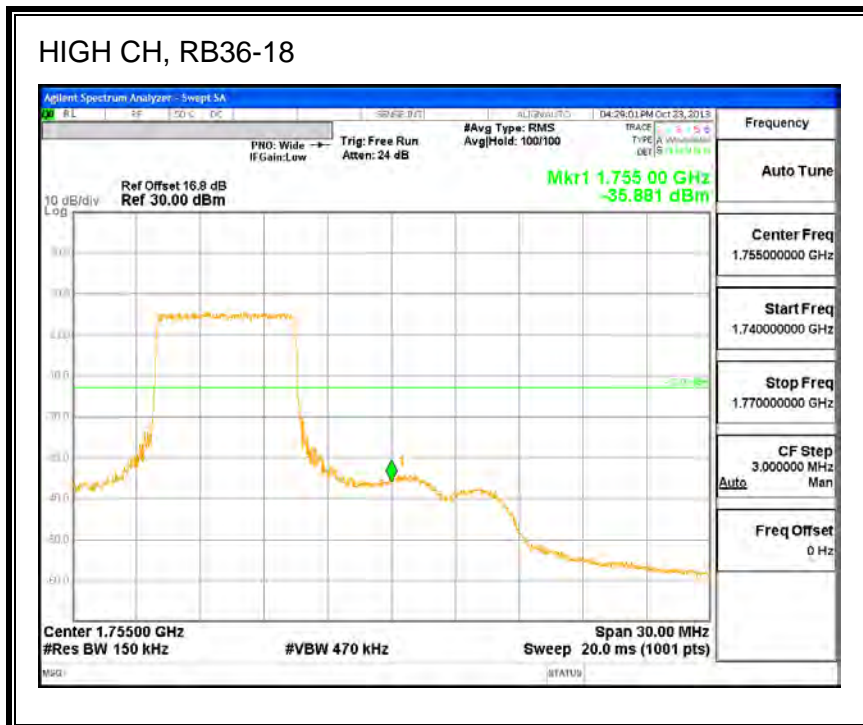
### HIGH CH, RB1-74



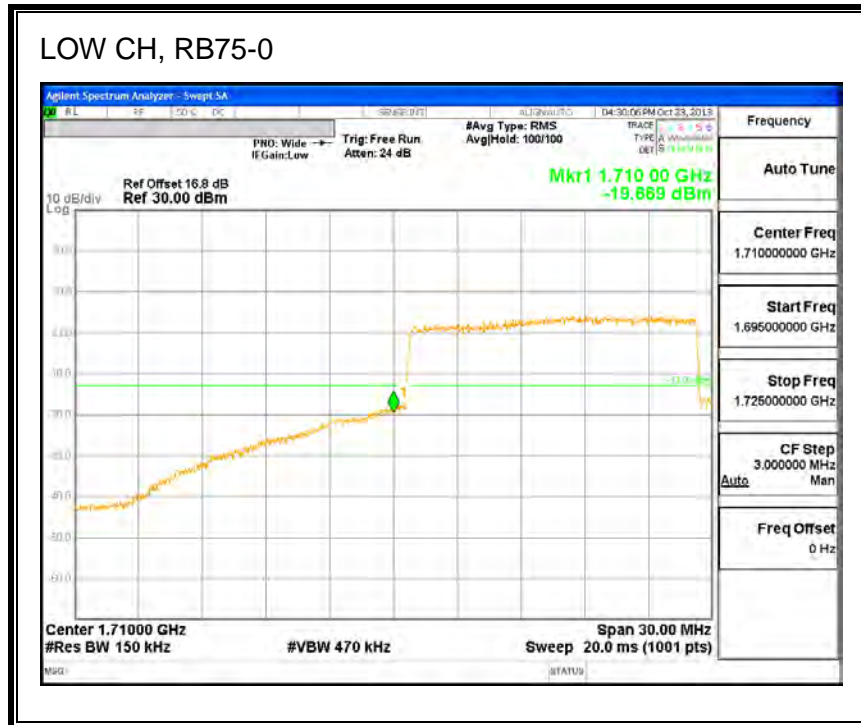
### LOW CH, RB36-18



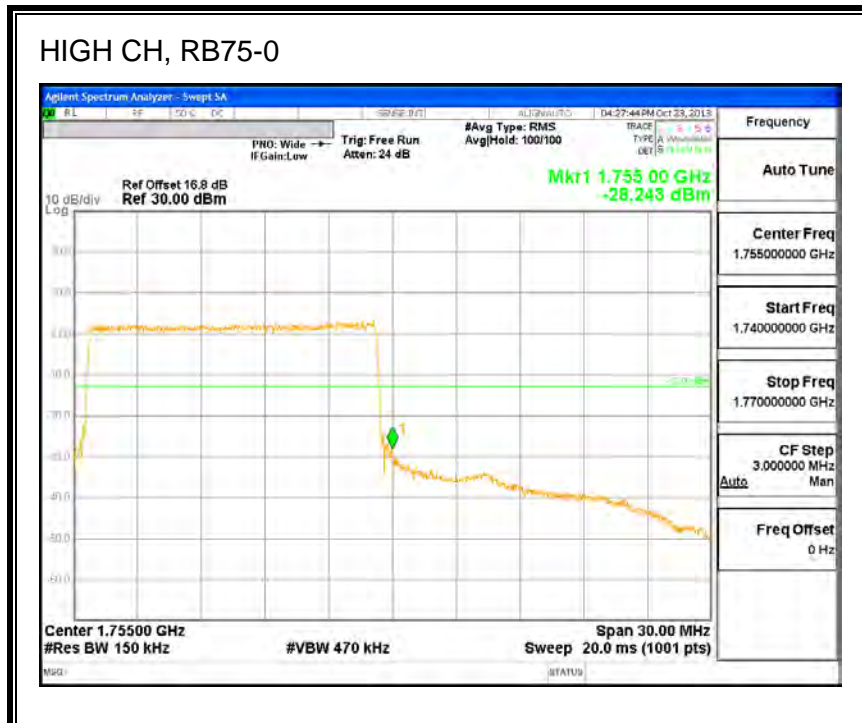
### HIGH CH, RB36-18



### LOW CH, RB75-0



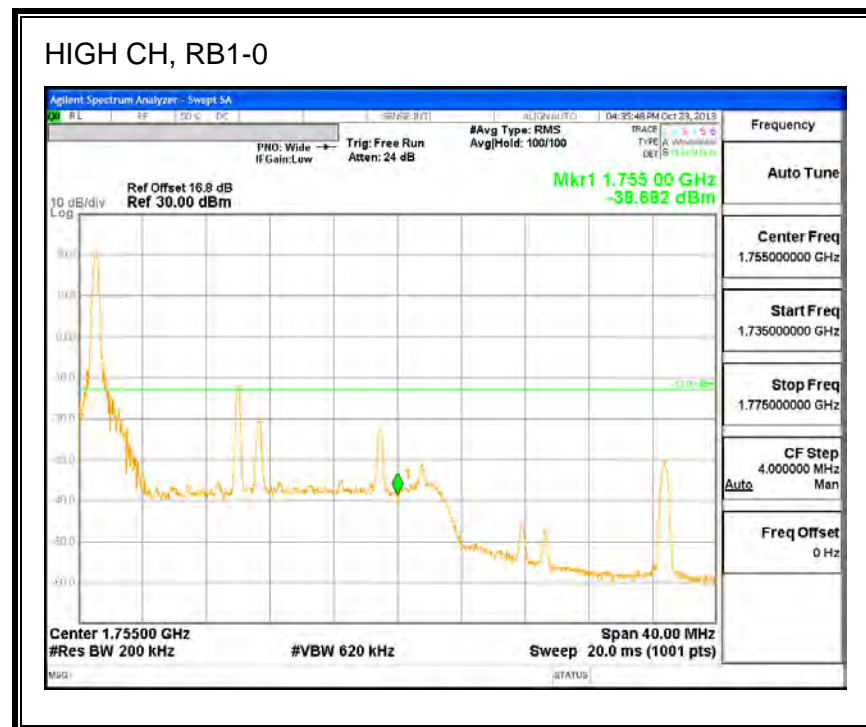
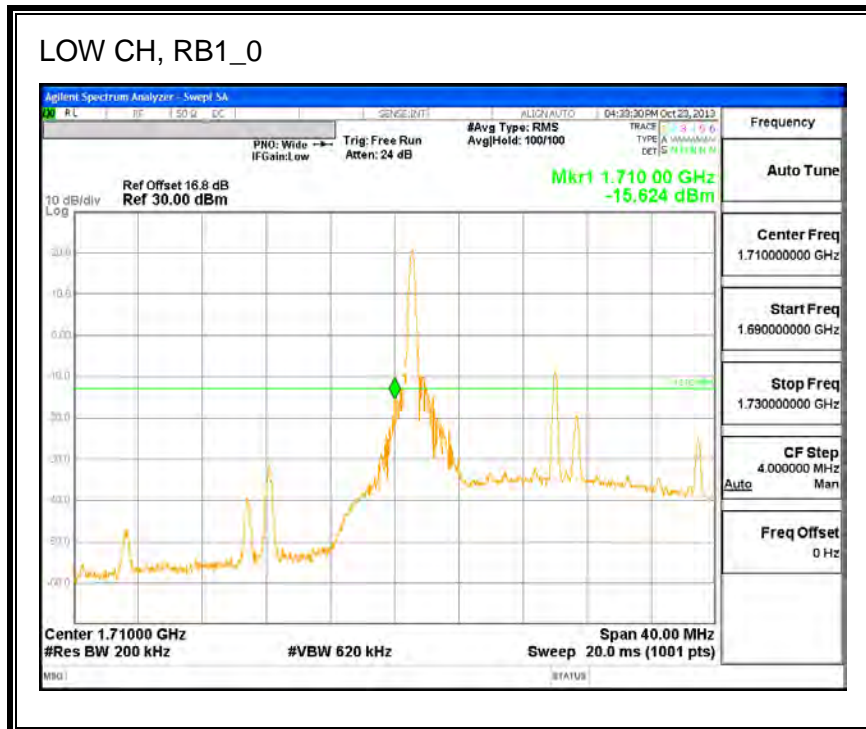
### HIGH CH, RB75-0



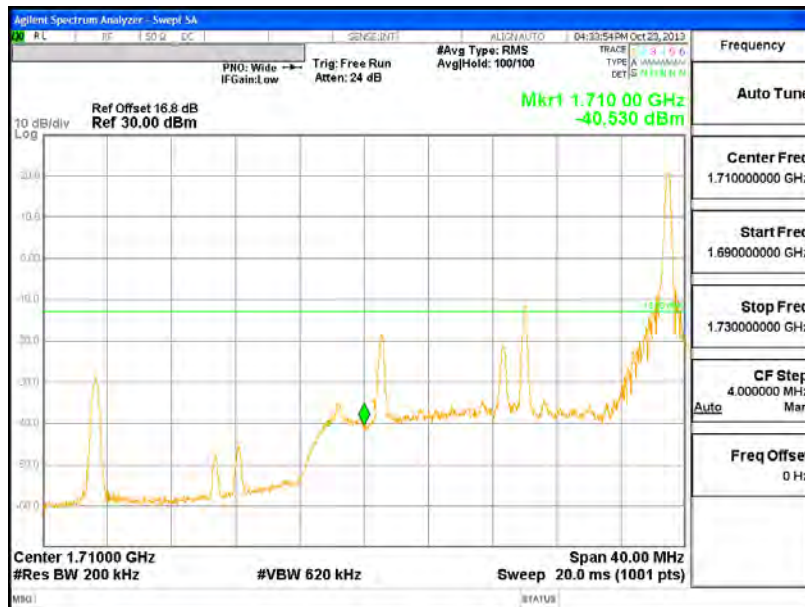


**Band 4 (20MHz BANDWIDTH)**

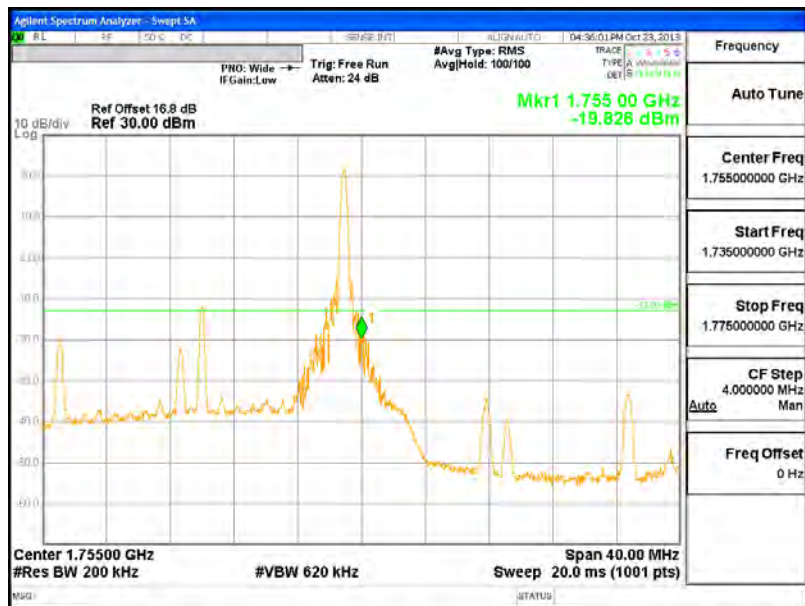
**LTE QPSK**



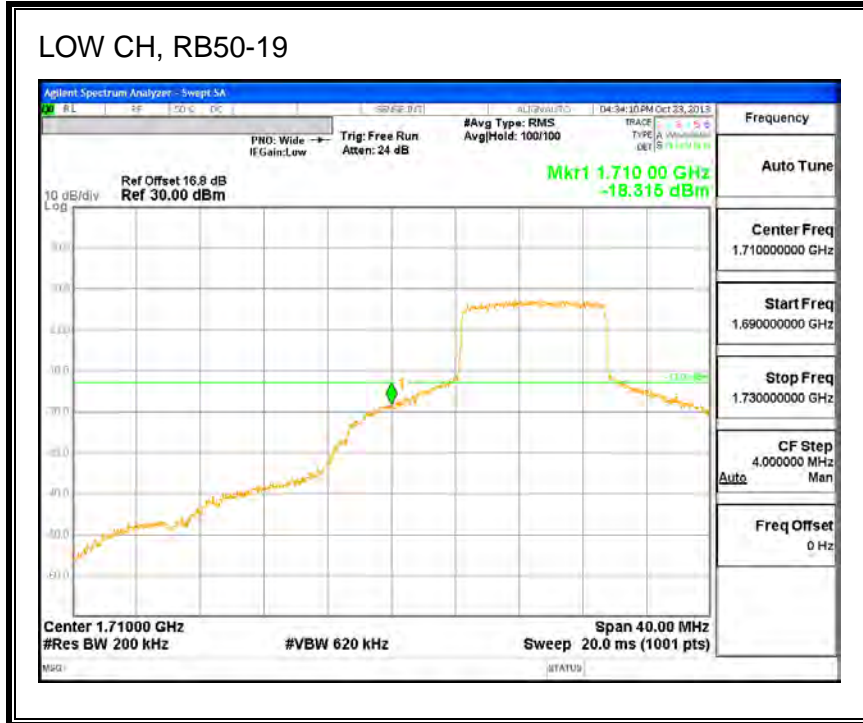
LOW CH, RB1-99



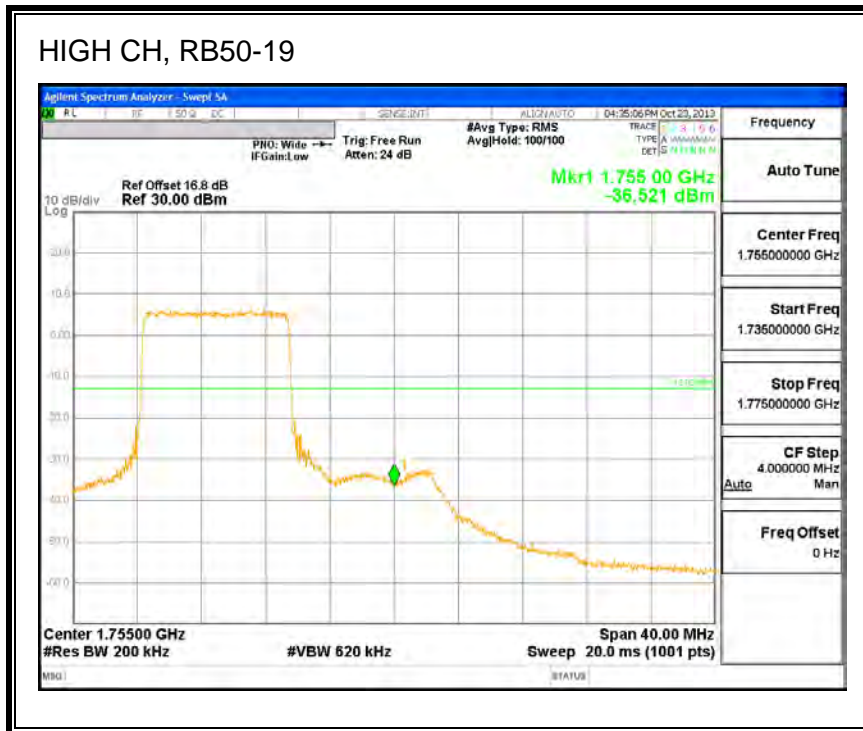
HIGH CH, RB1-99



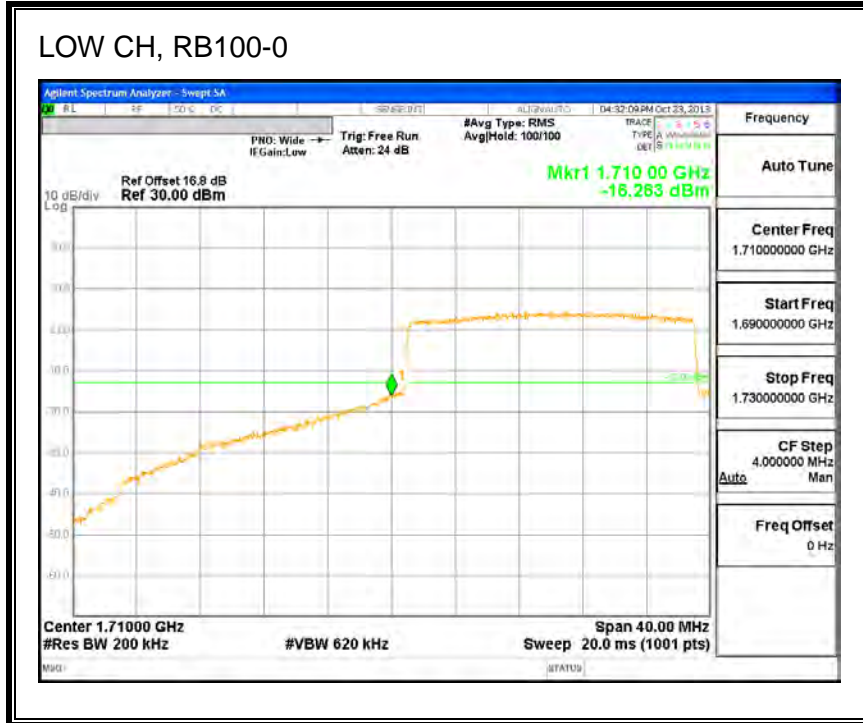
### LOW CH, RB50-19



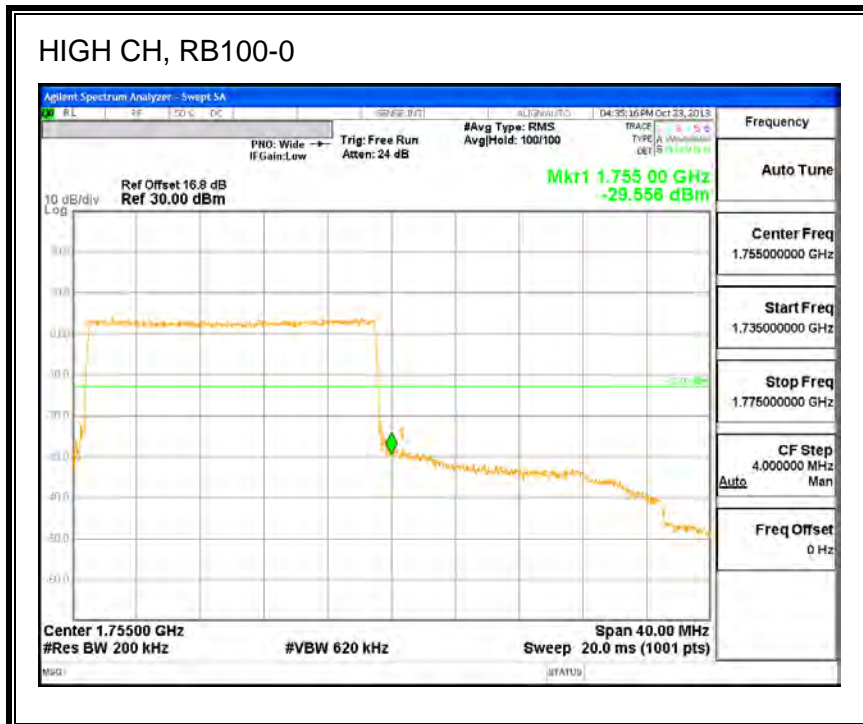
### HIGH CH, RB50-19



### LOW CH, RB100-0

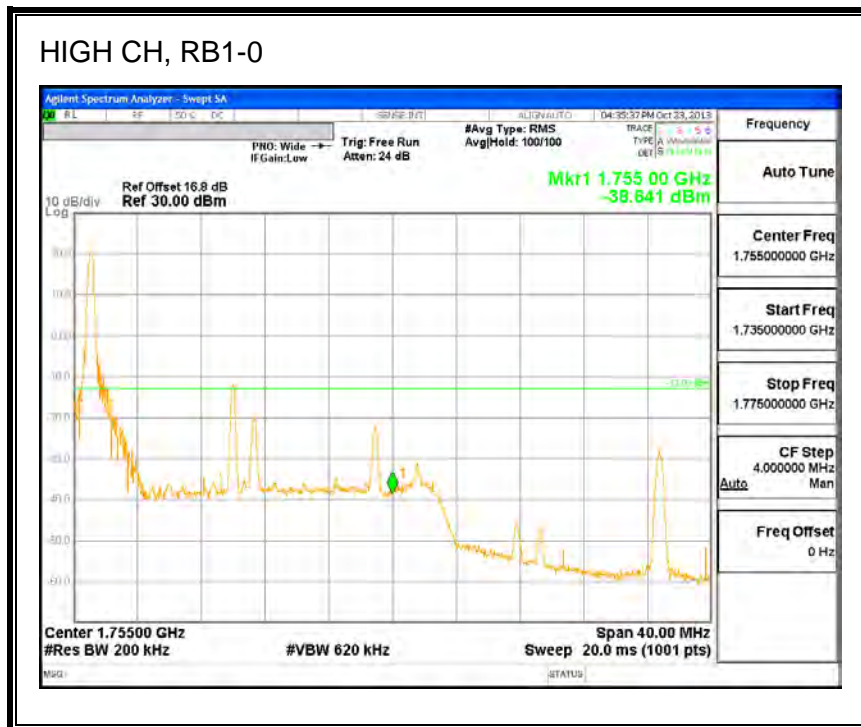
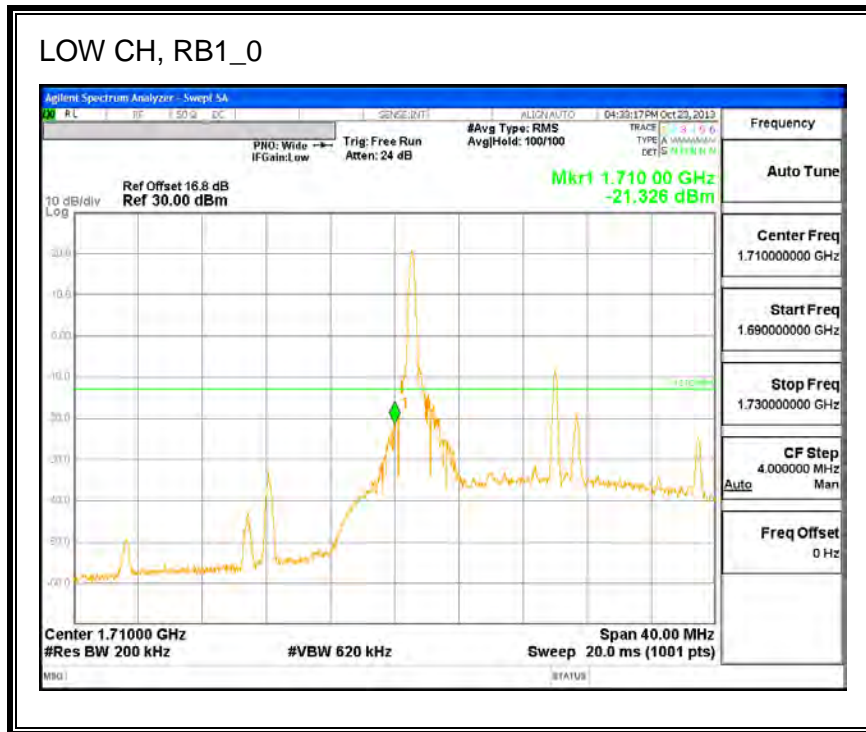


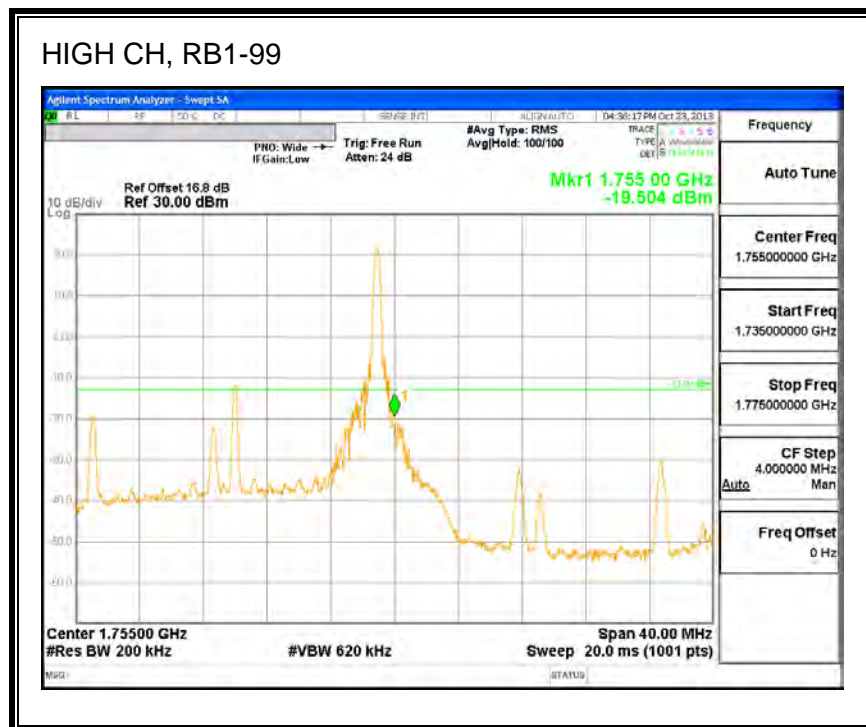
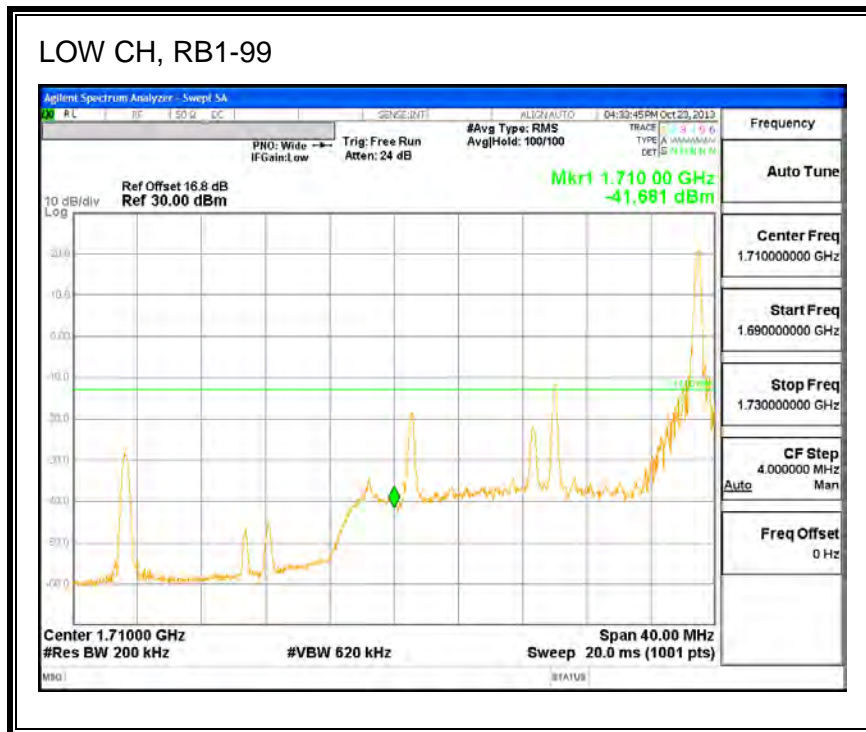
### HIGH CH, RB100-0



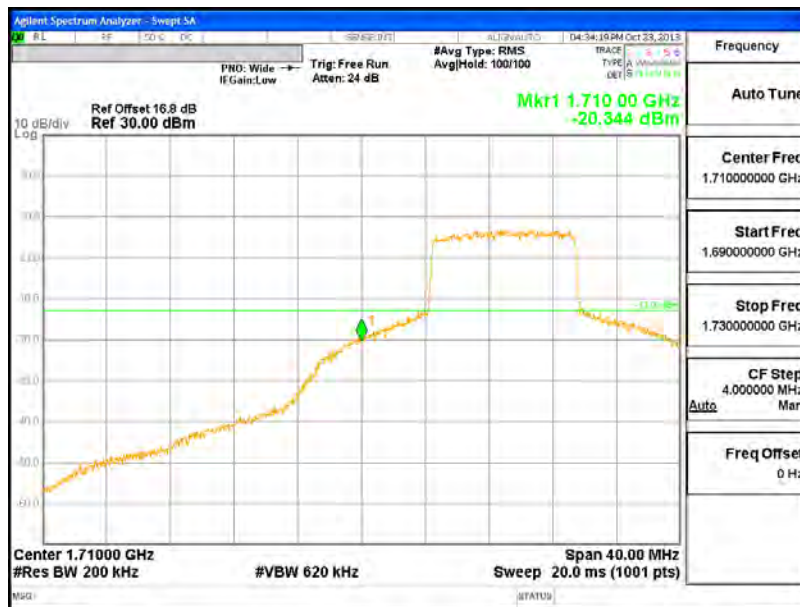
**Band 4 (20MHz BANDWIDTH)**

**LTE 16QAM**





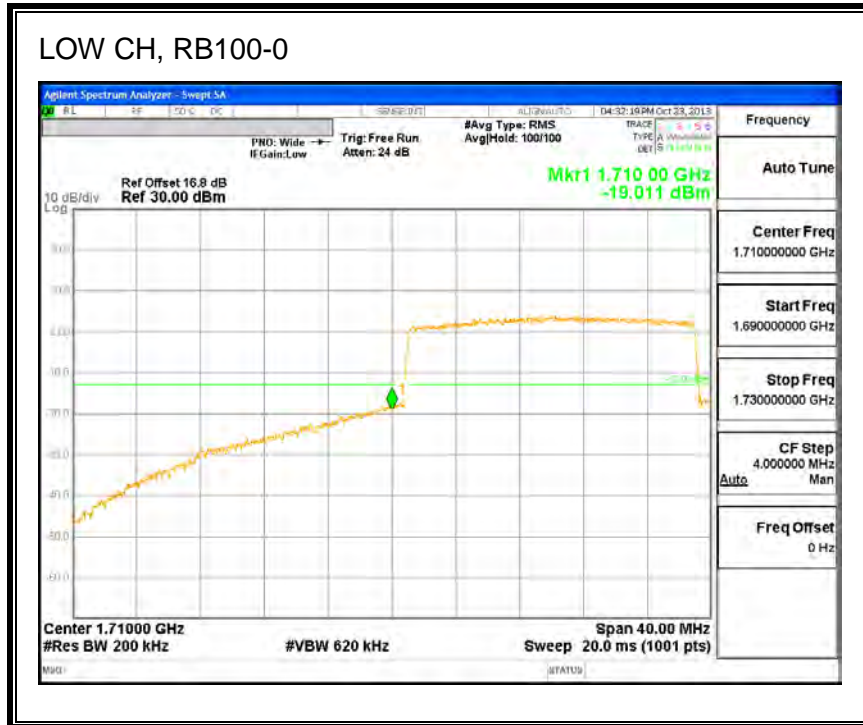
### LOW CH, RB50-19



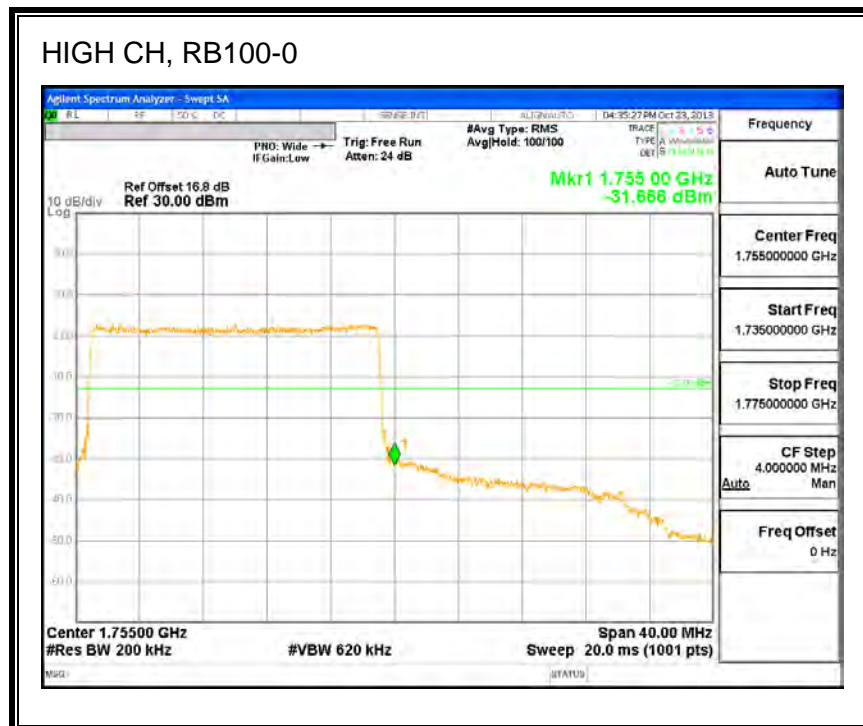
### HIGH CH, RB50-19



### LOW CH, RB100-0



### HIGH CH, RB100-0

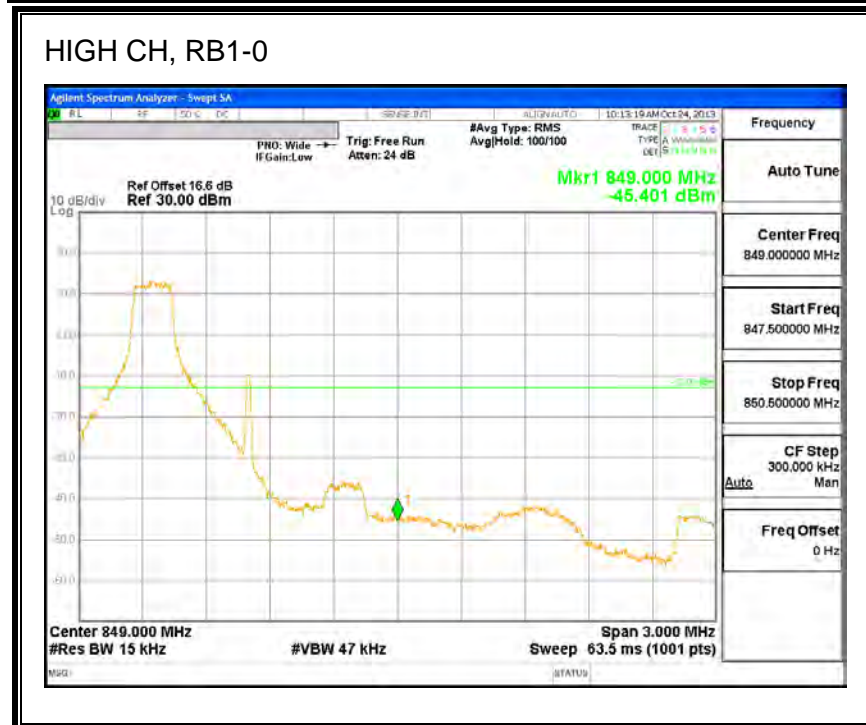
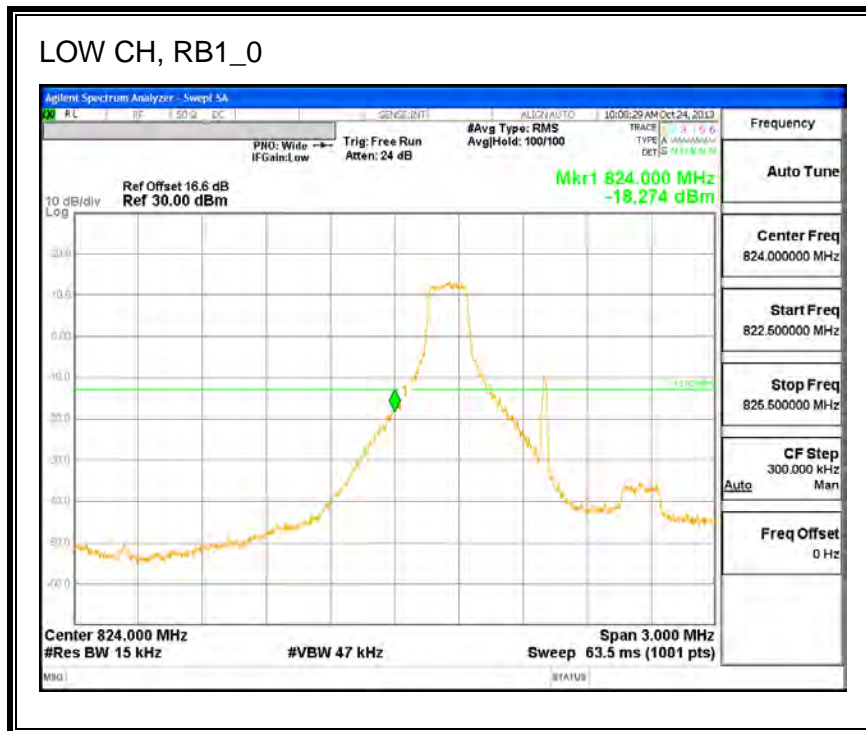




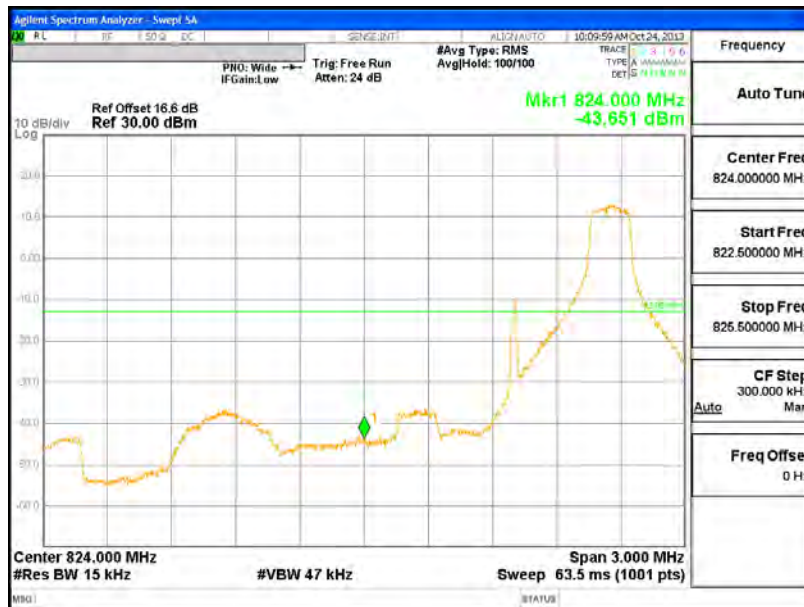
### 8.2.3. LTE BAND 5

#### Band 5 (1.4 MHz BANDWIDTH)

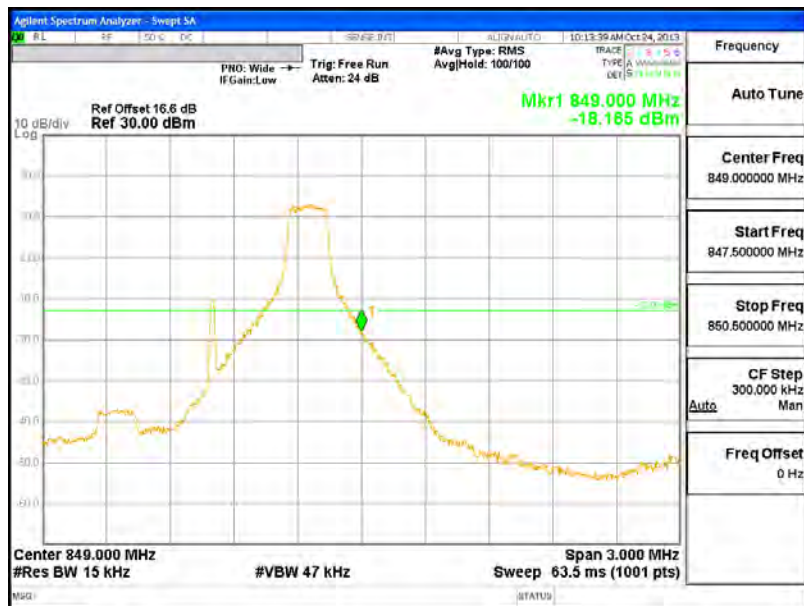
#### LTE QPSK



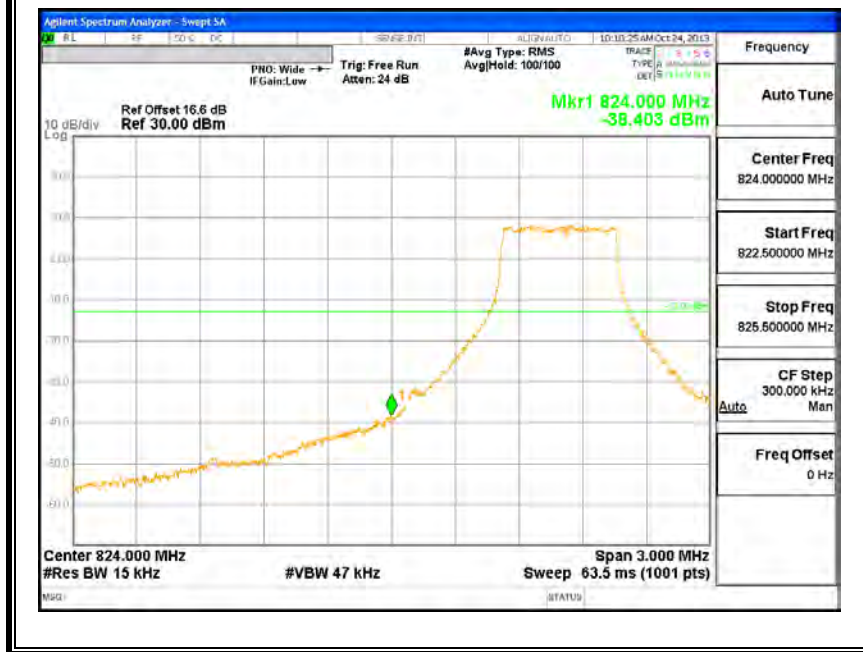
### LOW CH, RB1-5



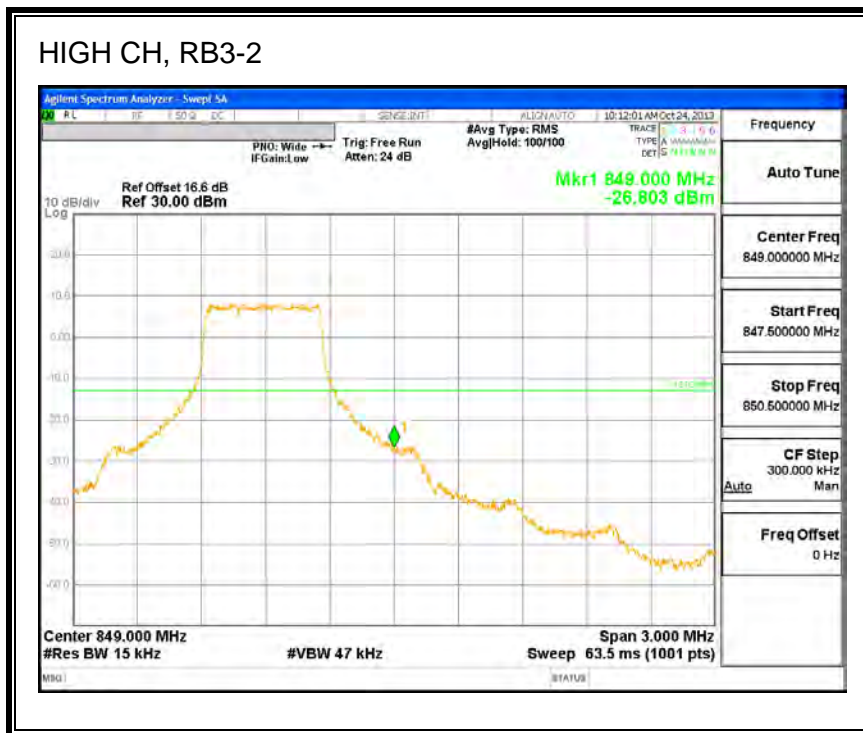
### HIGH CH, RB1-5



### LOW CH, RB3-2



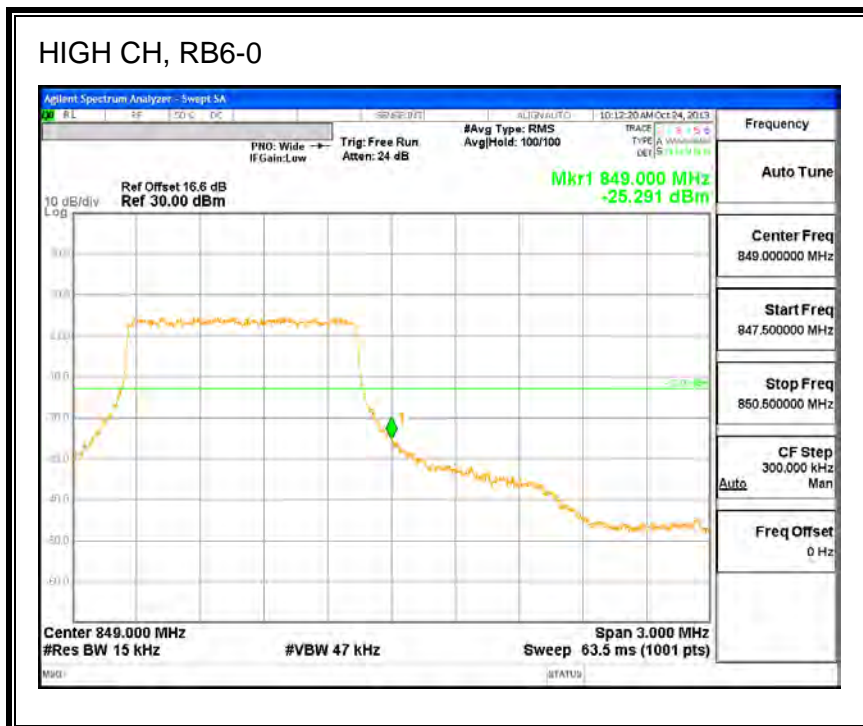
### HIGH CH, RB3-2



### LOW CH, RB6-0

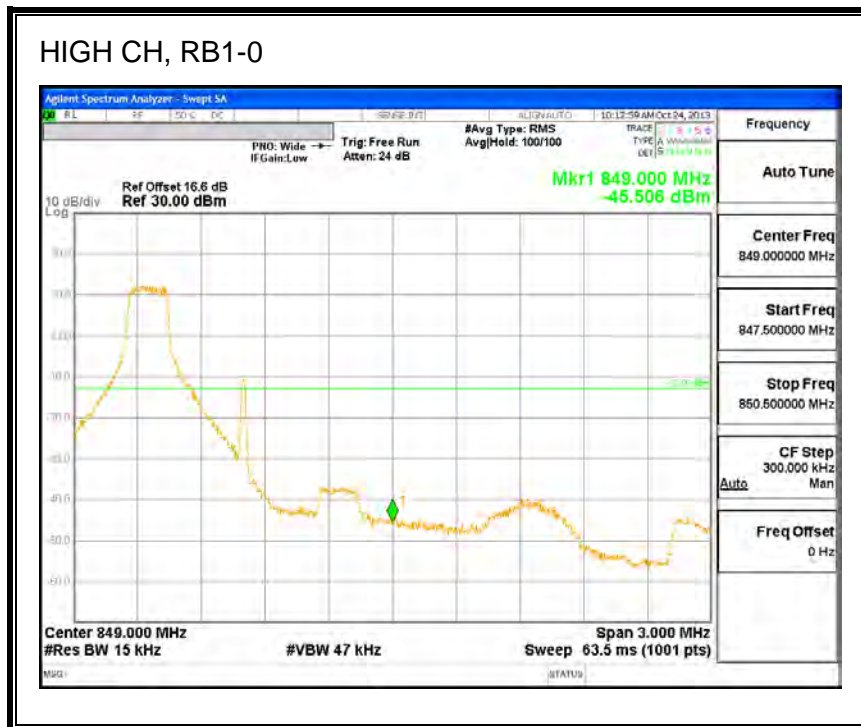
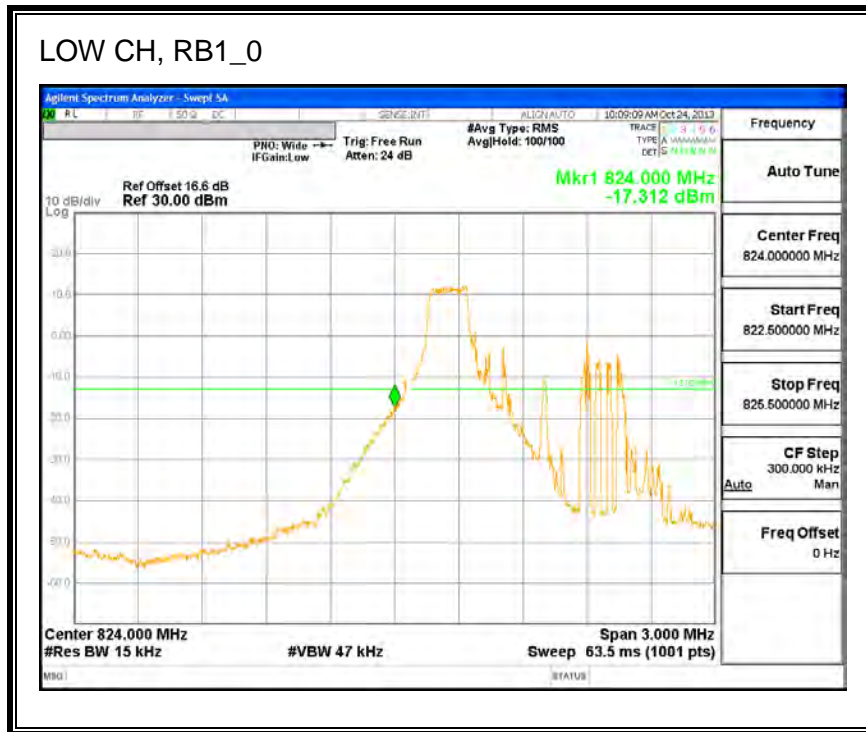


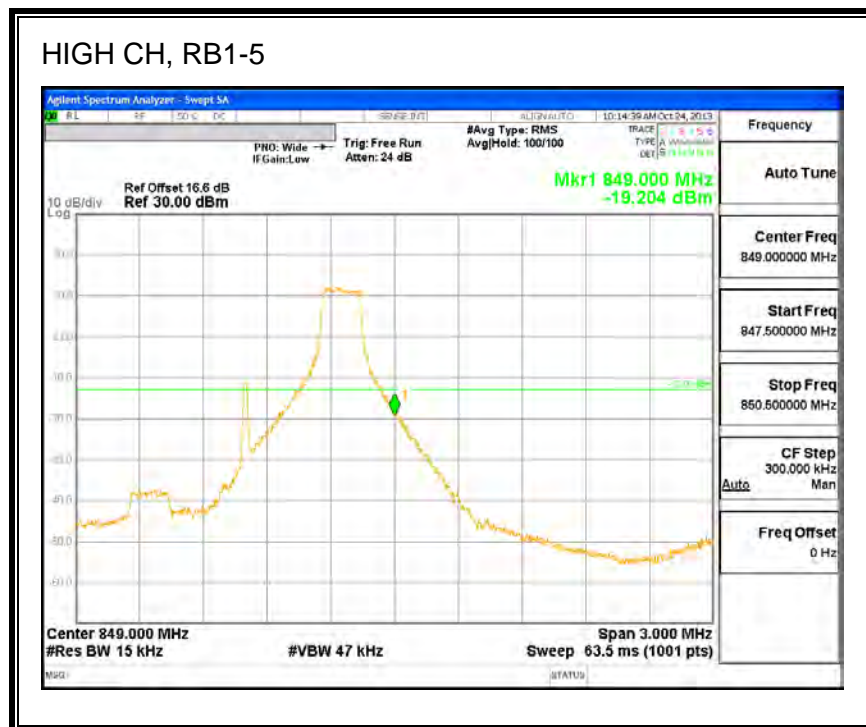
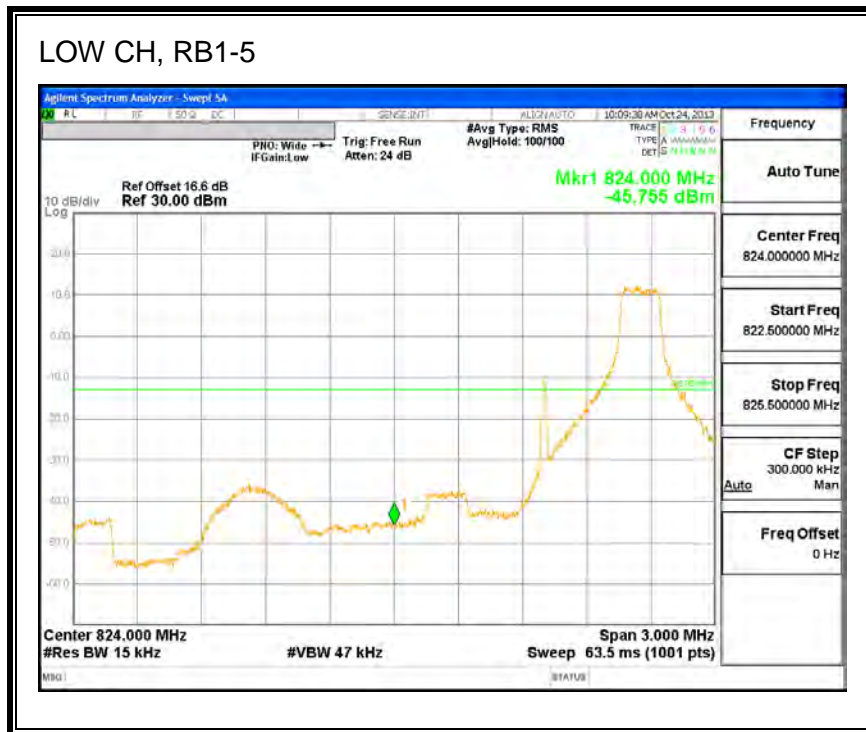
### HIGH CH, RB6-0



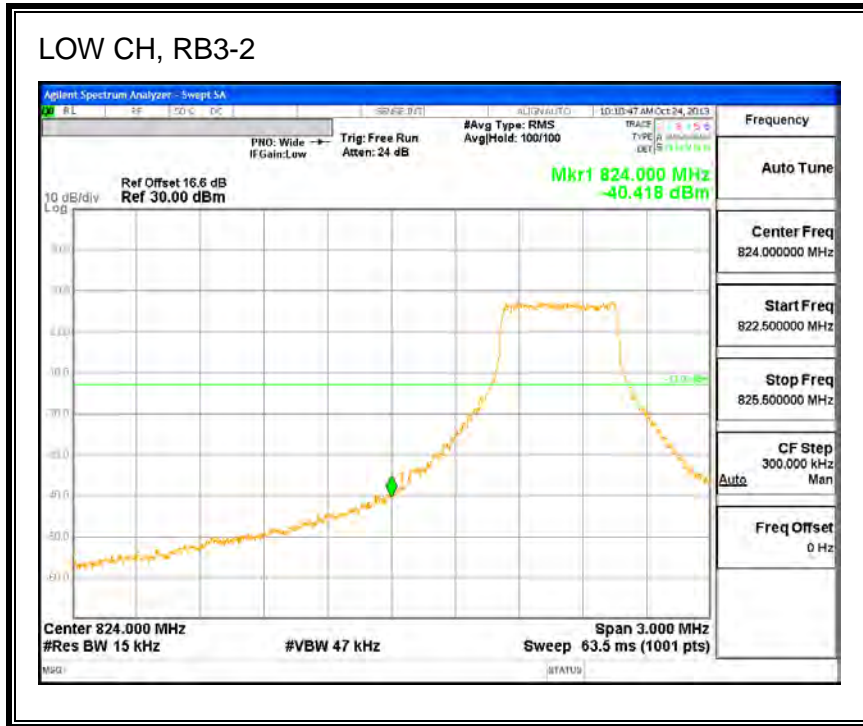
**Band 5 (1.4 MHz BANDWIDTH)**

**LTE 16QAM**

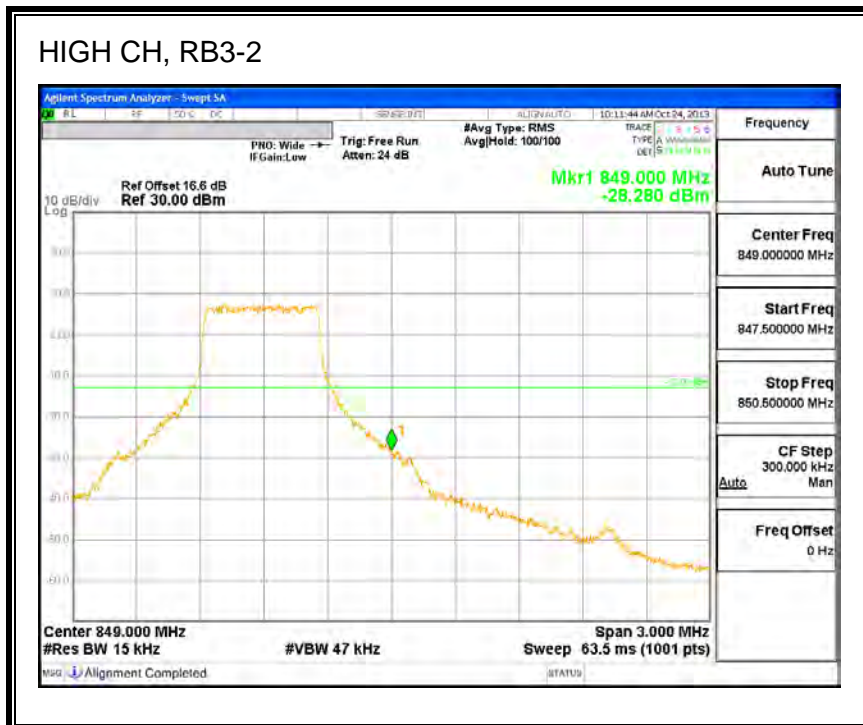




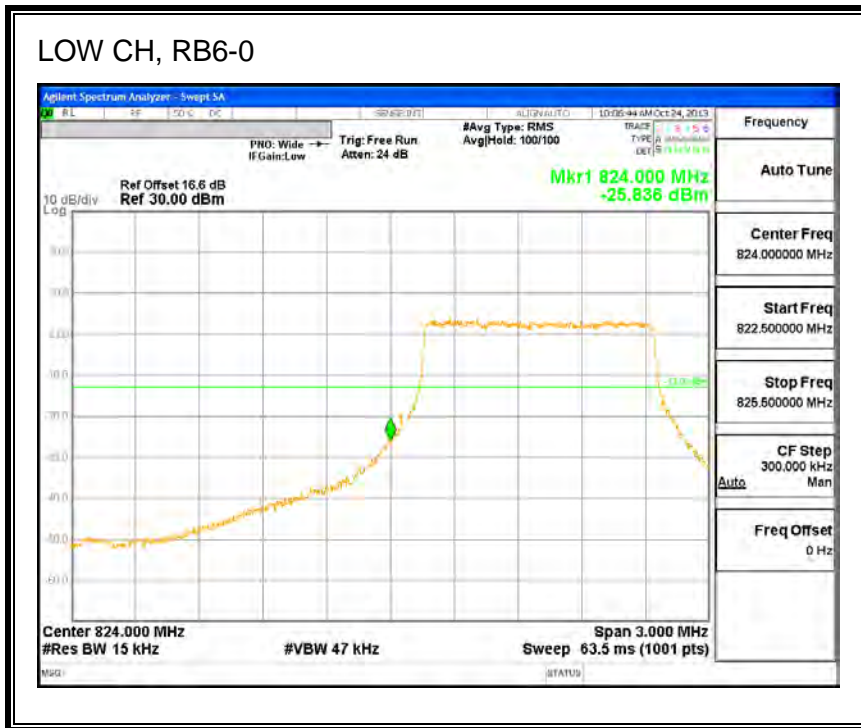
### LOW CH, RB3-2



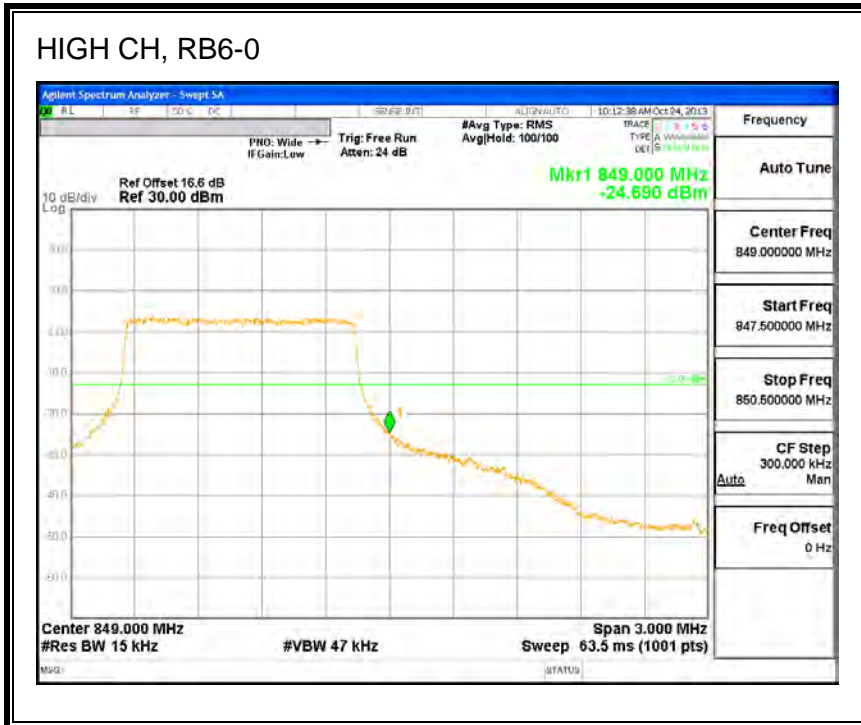
### HIGH CH, RB3-2



### LOW CH, RB6-0



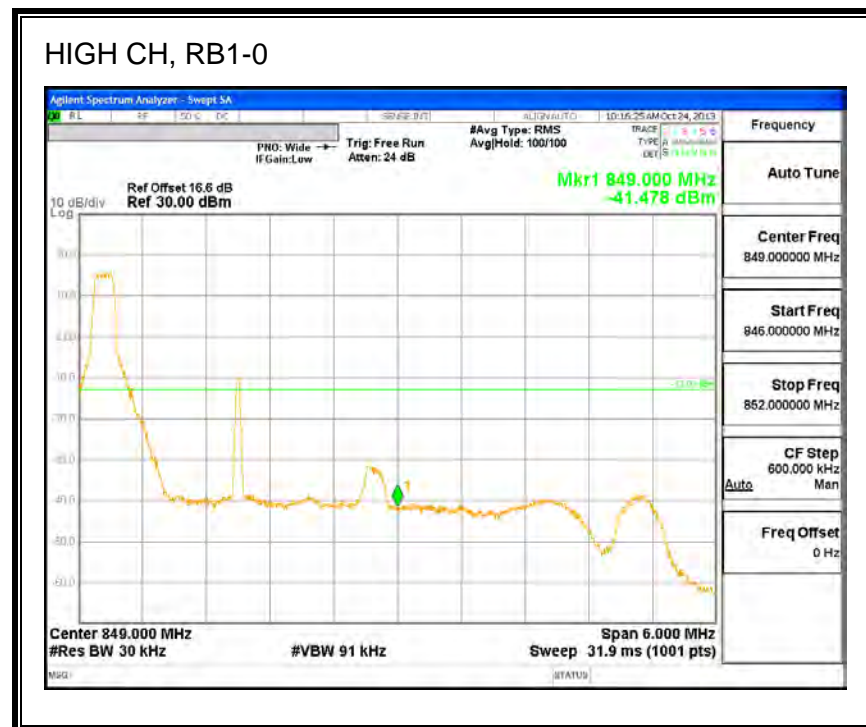
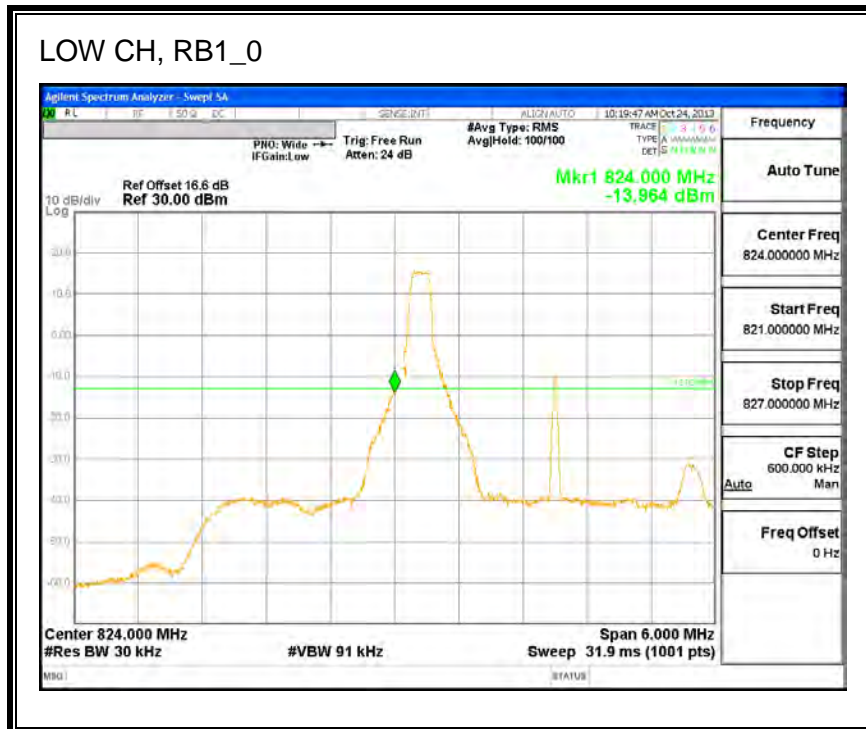
### HIGH CH, RB6-0



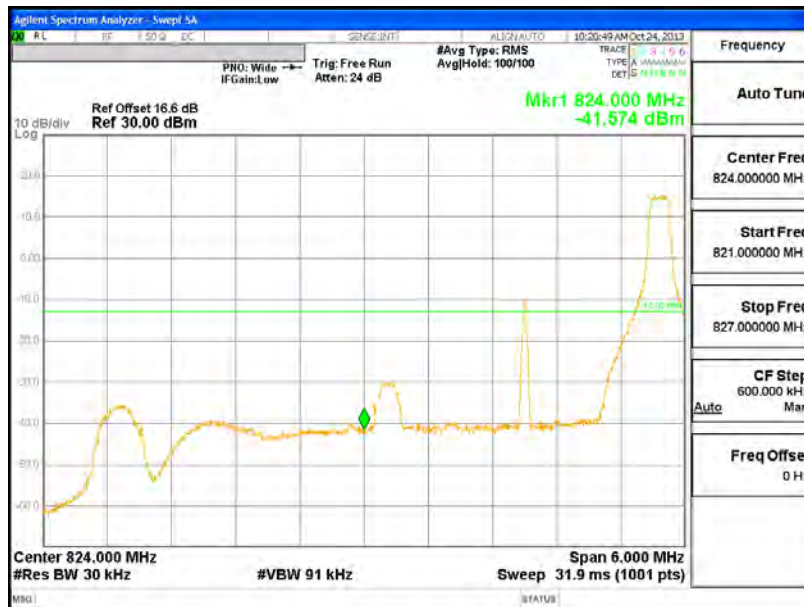


**Band 5 (3MHz BANDWIDTH)**

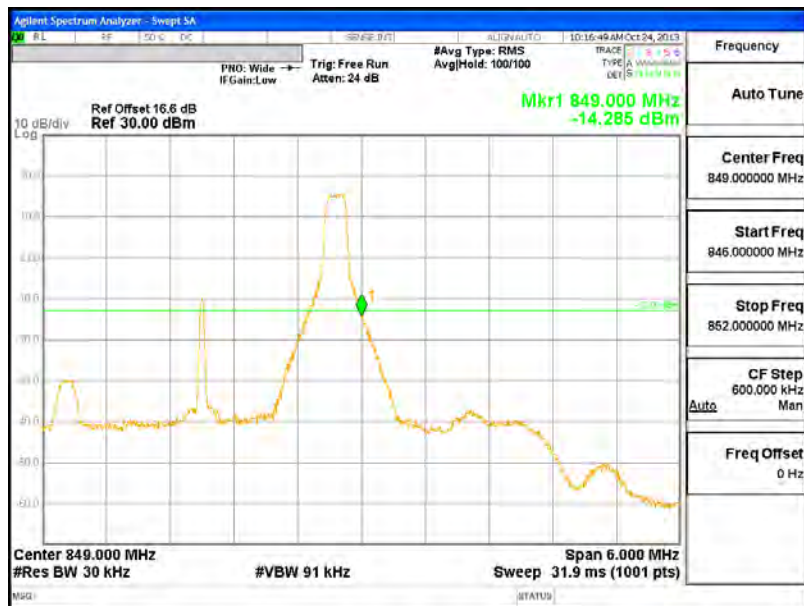
**LTE QPSK**



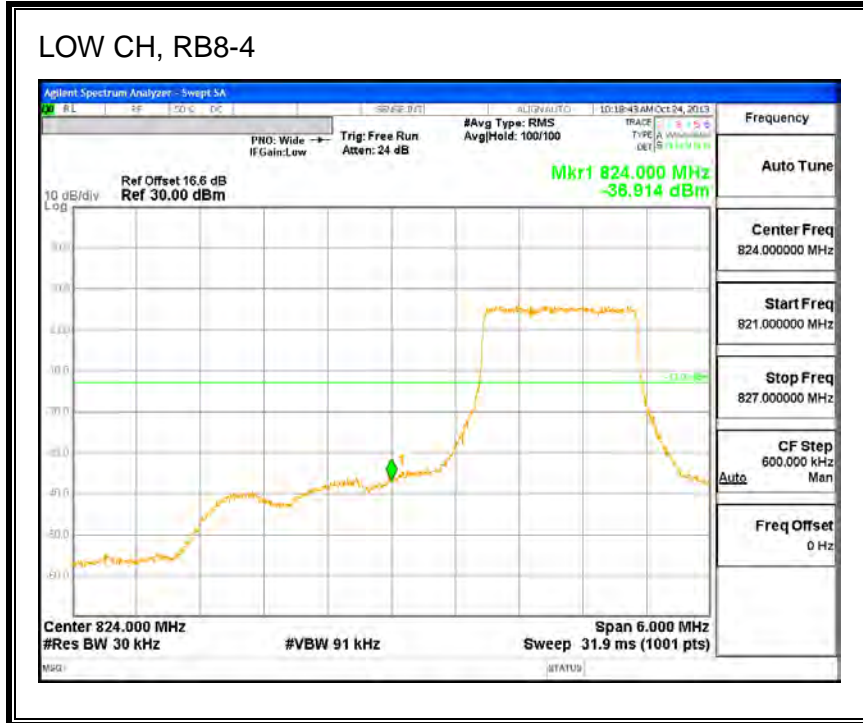
### LOW CH, RB1-14



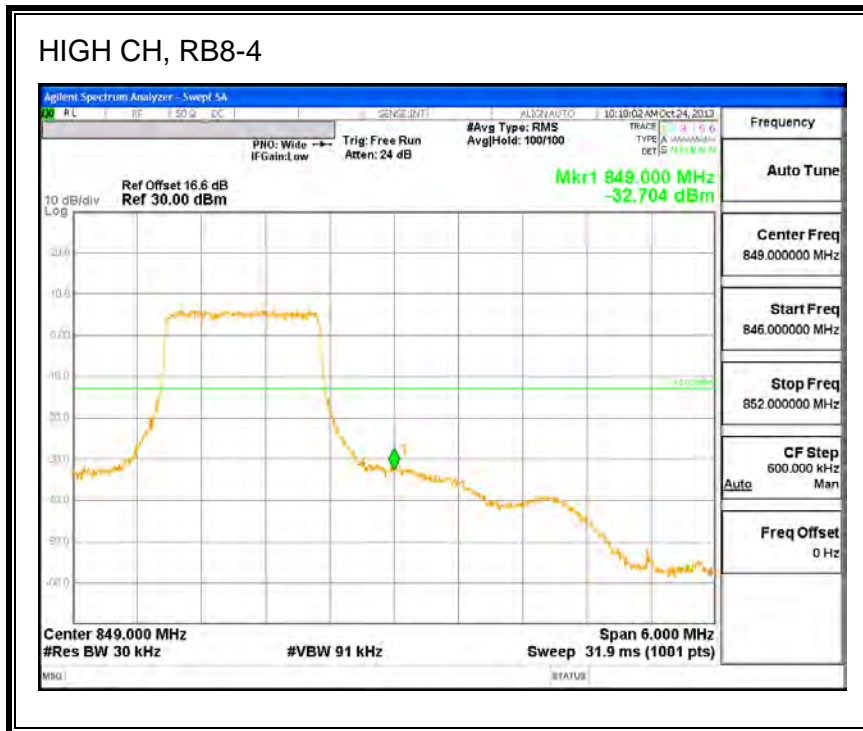
### HIGH CH, RB1-14



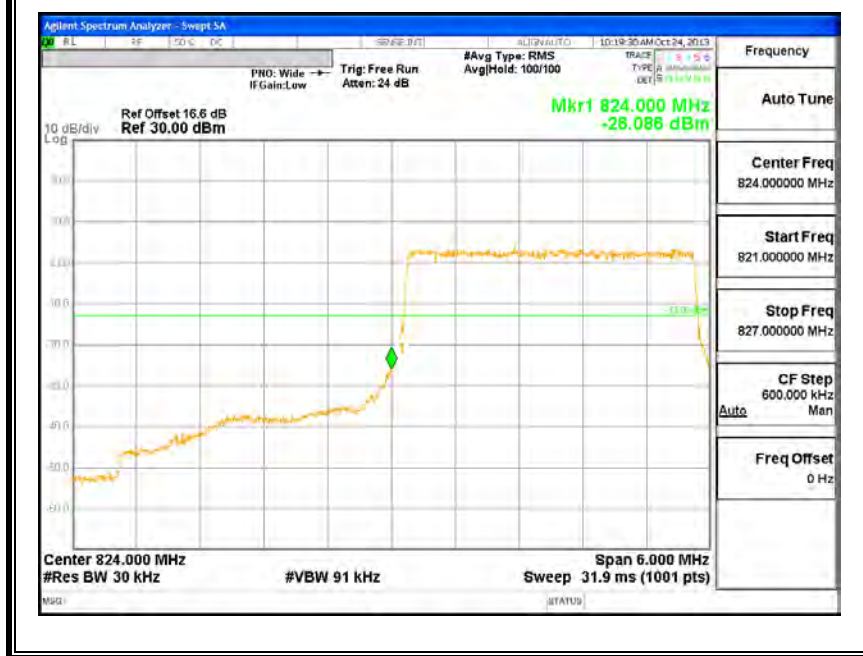
### LOW CH, RB8-4



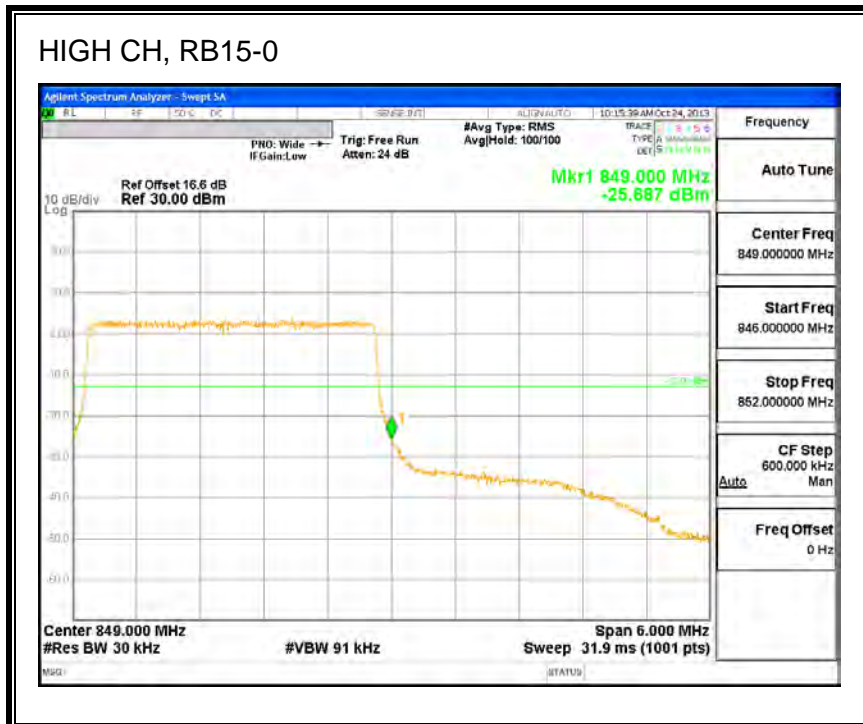
### HIGH CH, RB8-4



### LOW CH, RB15-0

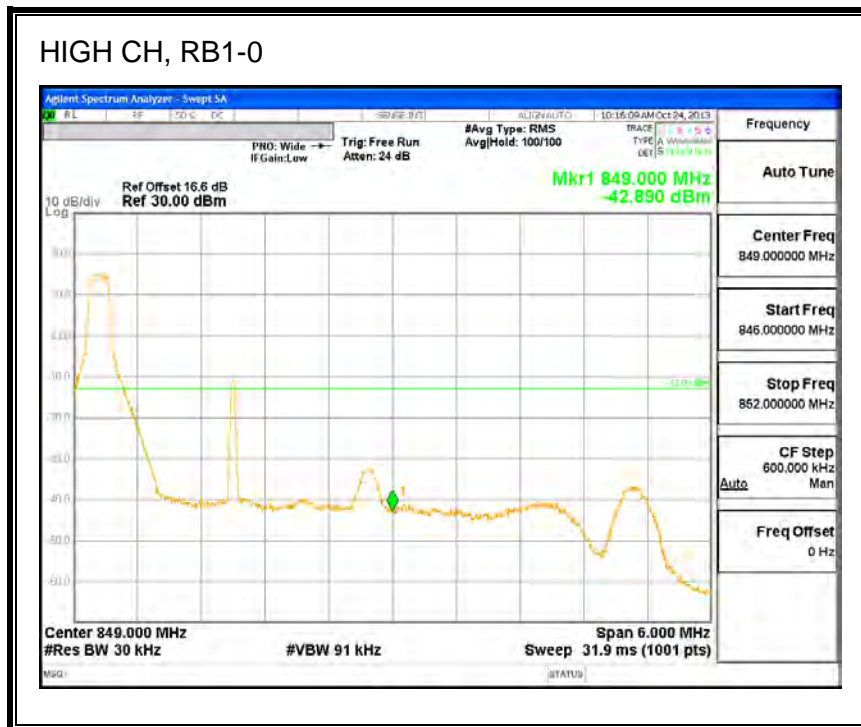
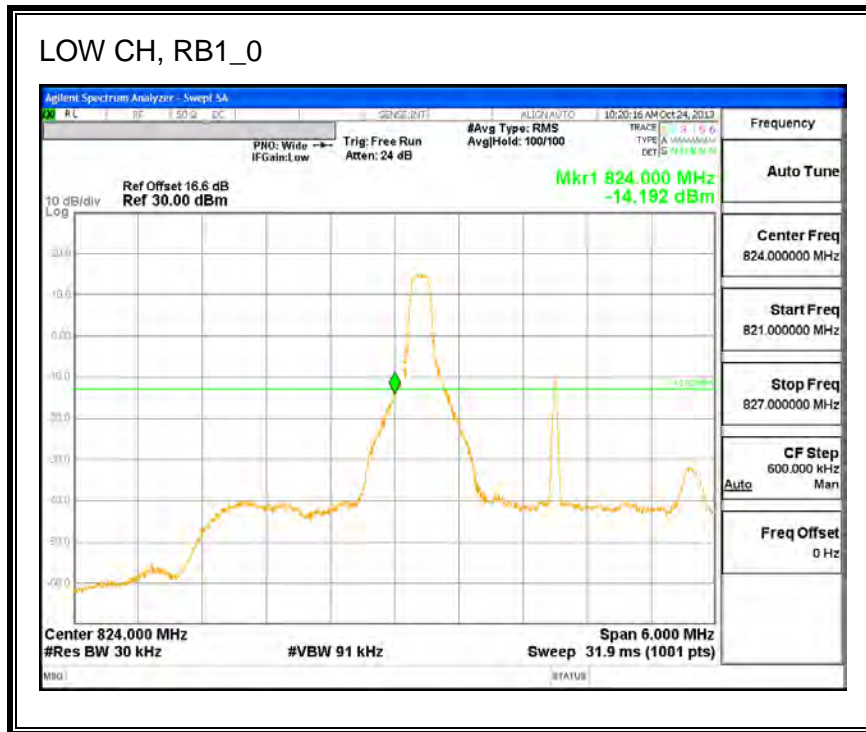


### HIGH CH, RB15-0

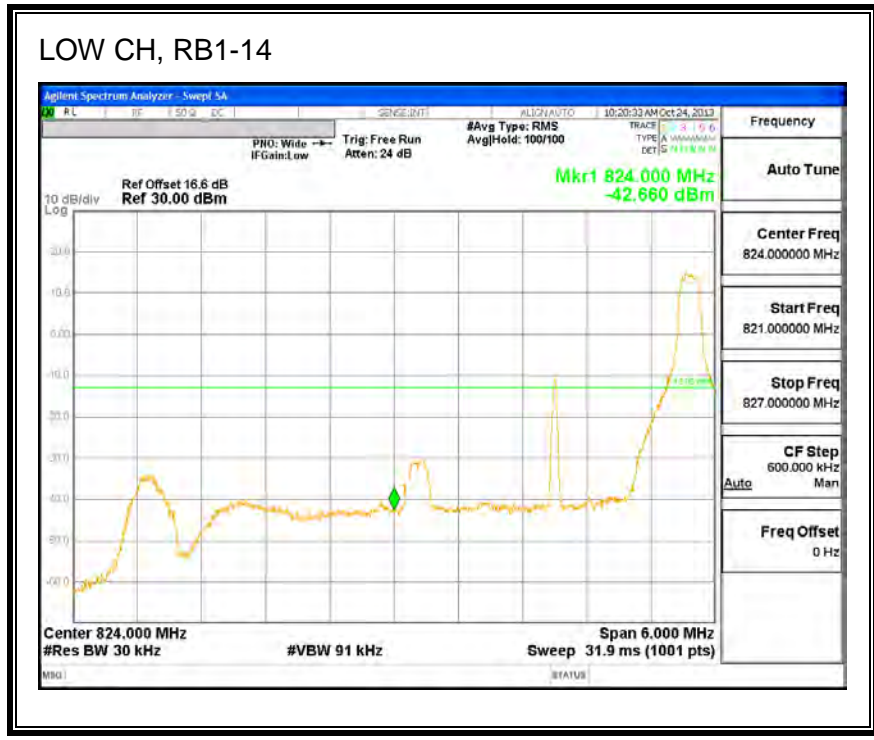


**Band 5 (3MHz BANDWIDTH)**

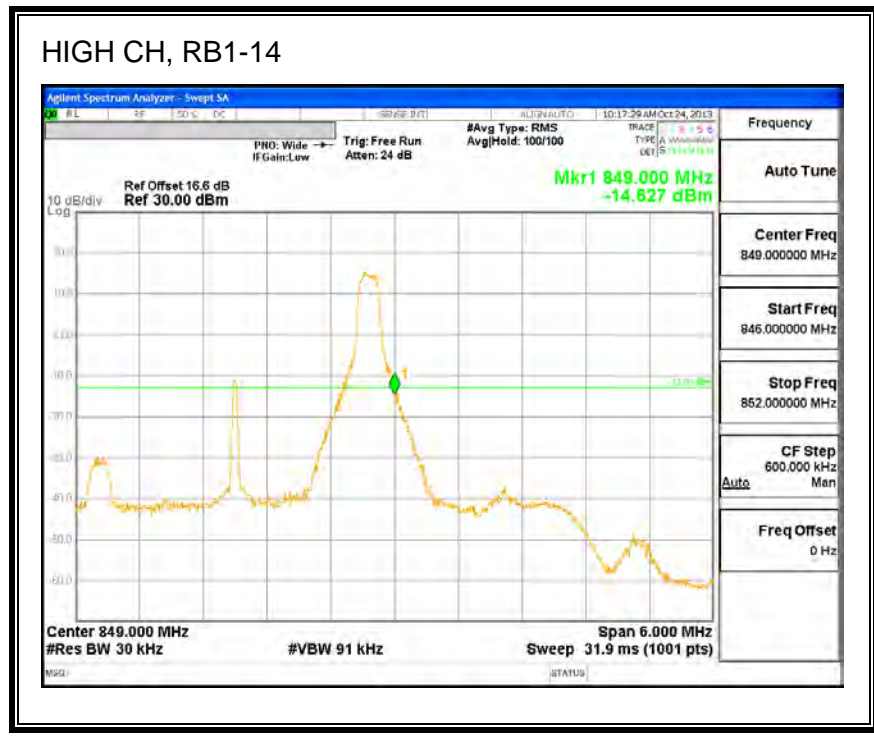
**LTE 16QAM**



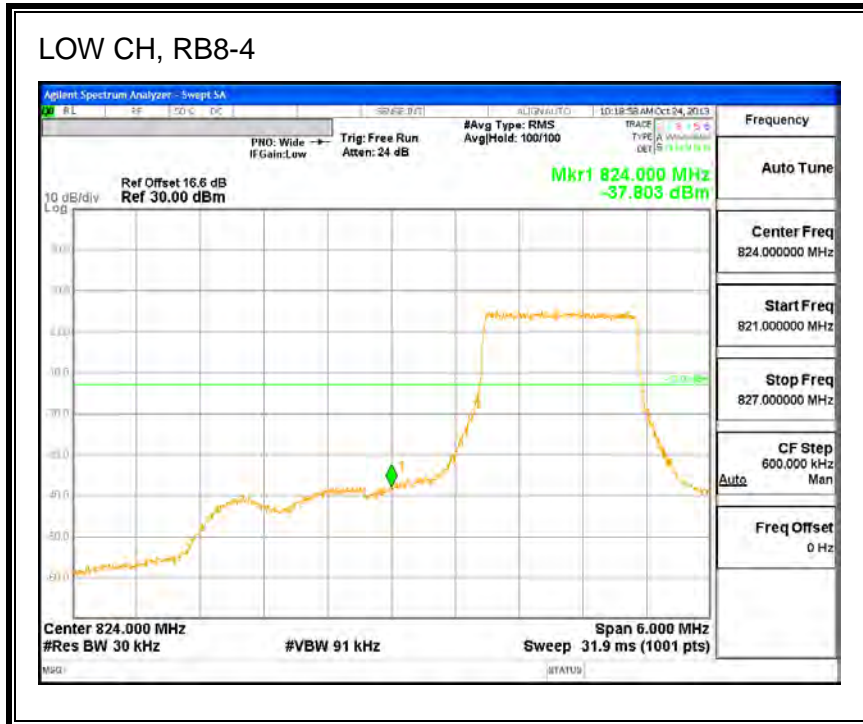
### LOW CH, RB1-14



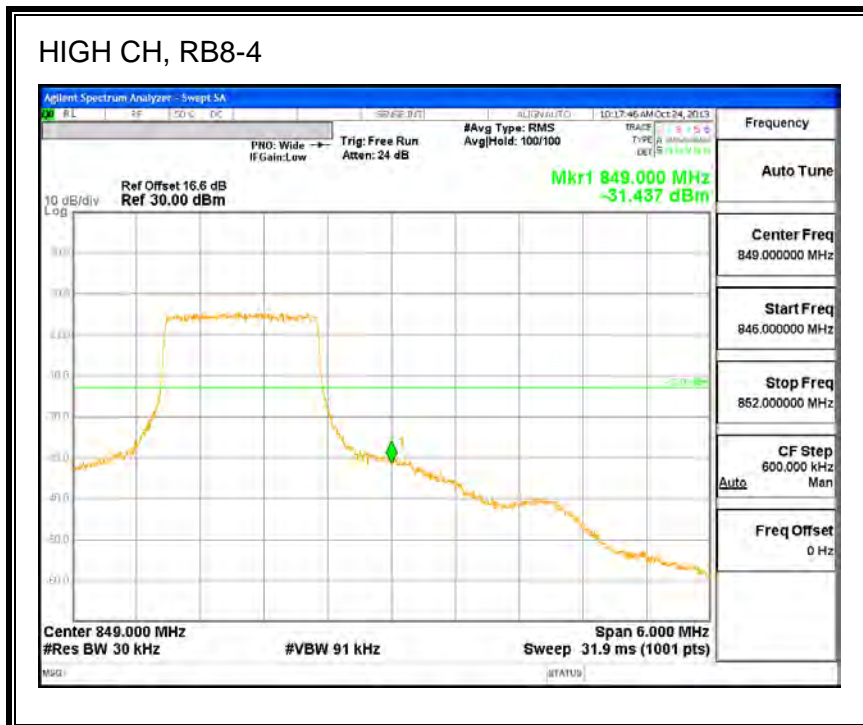
### HIGH CH, RB1-14



### LOW CH, RB8-4



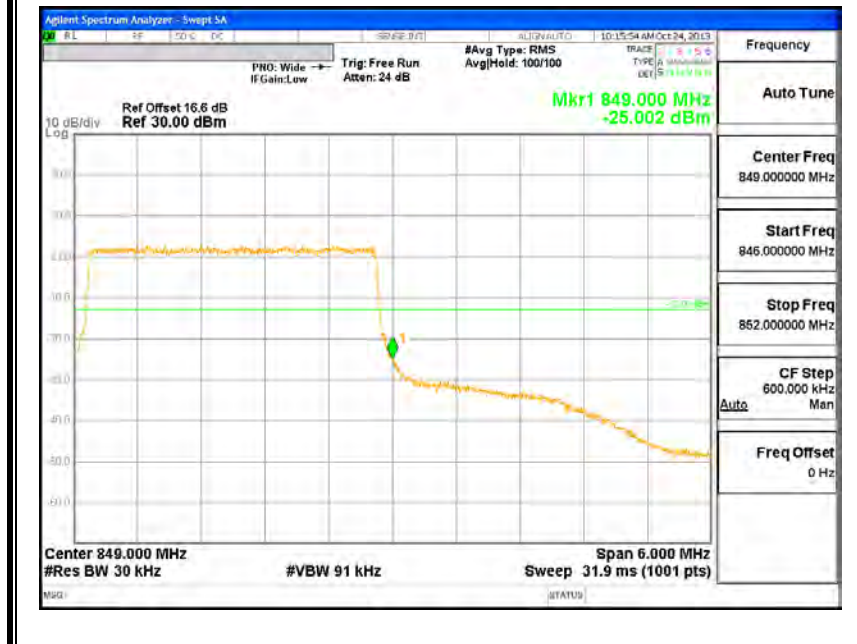
### HIGH CH, RB8-4



### LOW CH, RB15-0



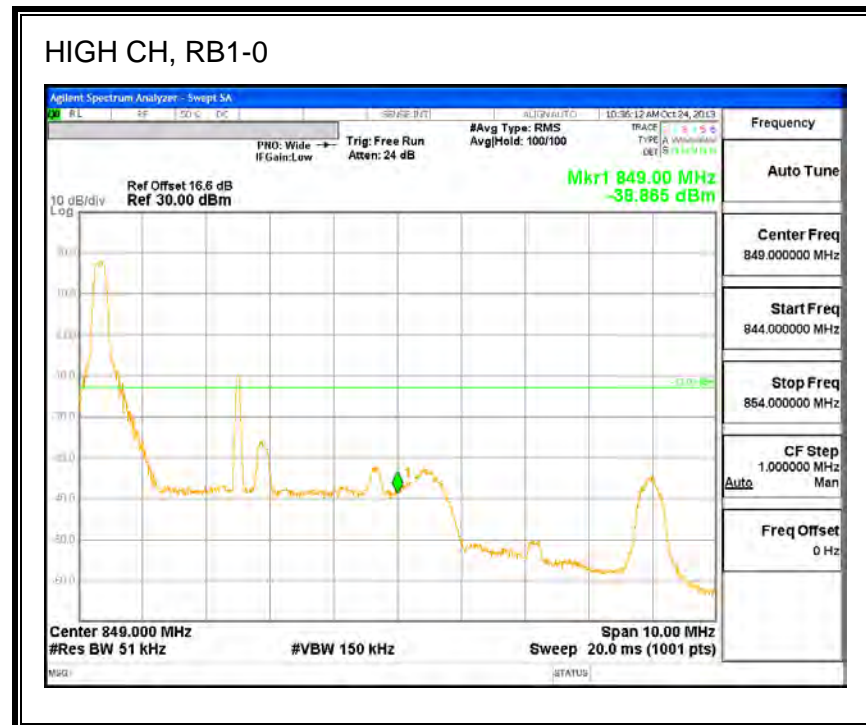
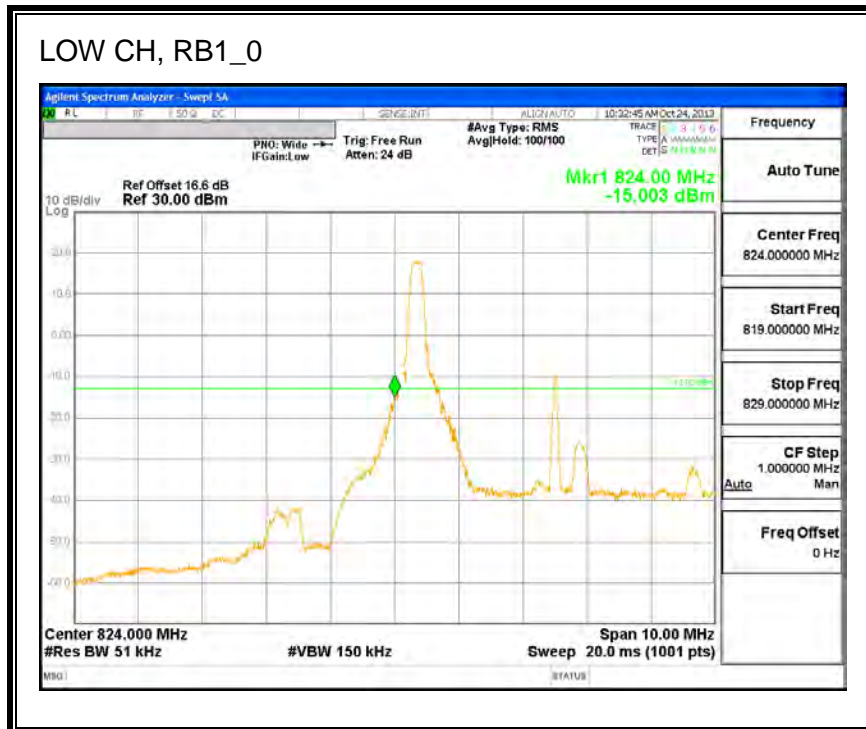
### HIGH CH, RB15-0



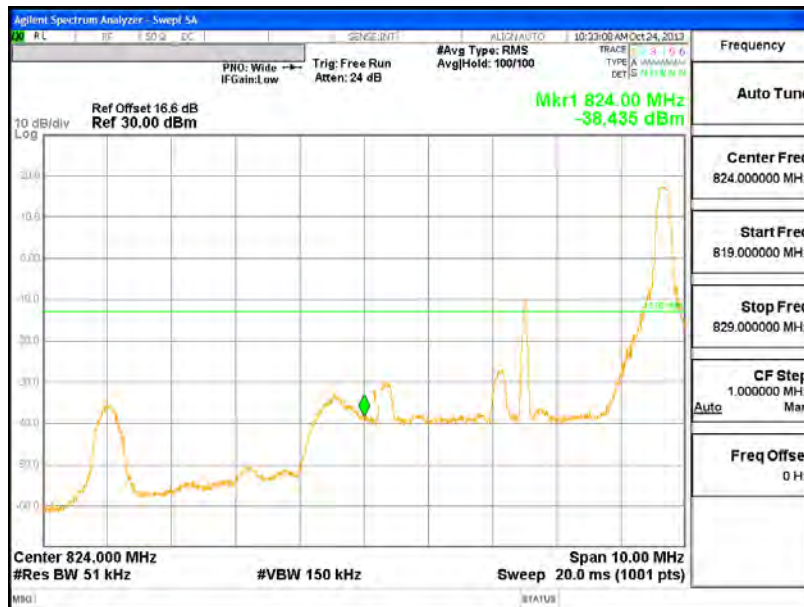


**Band 5 (5MHz BANDWIDTH)**

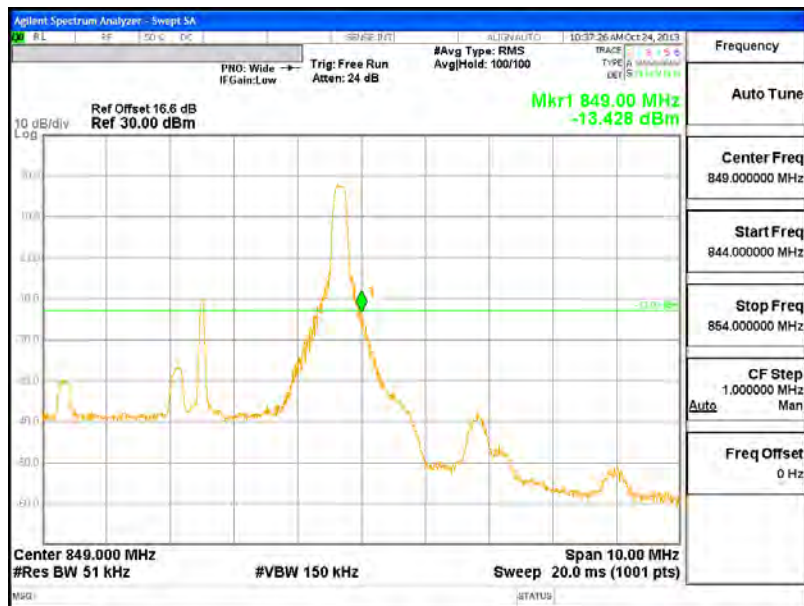
**LTE QPSK**



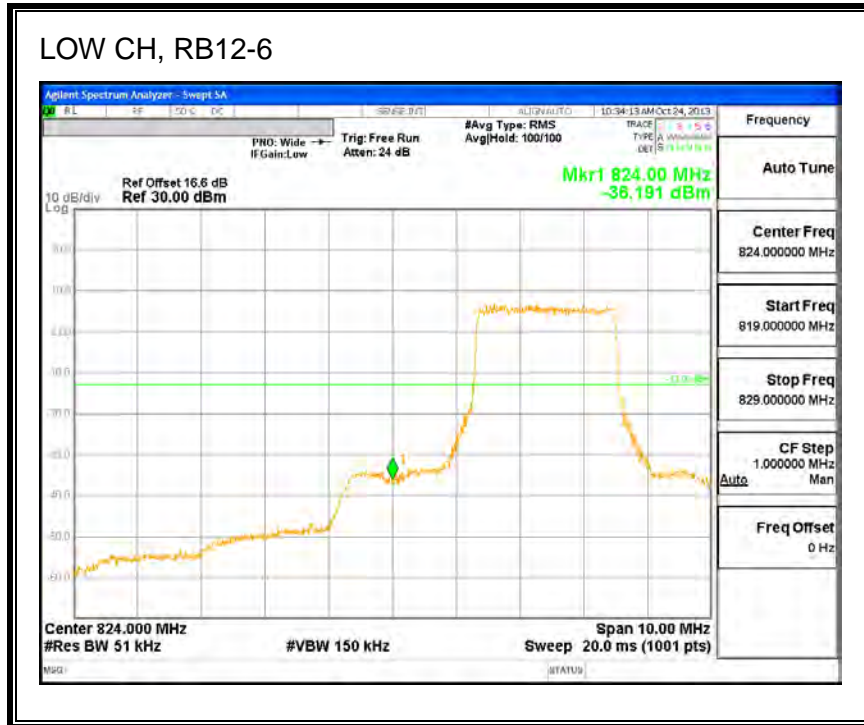
### LOW CH, RB1-24



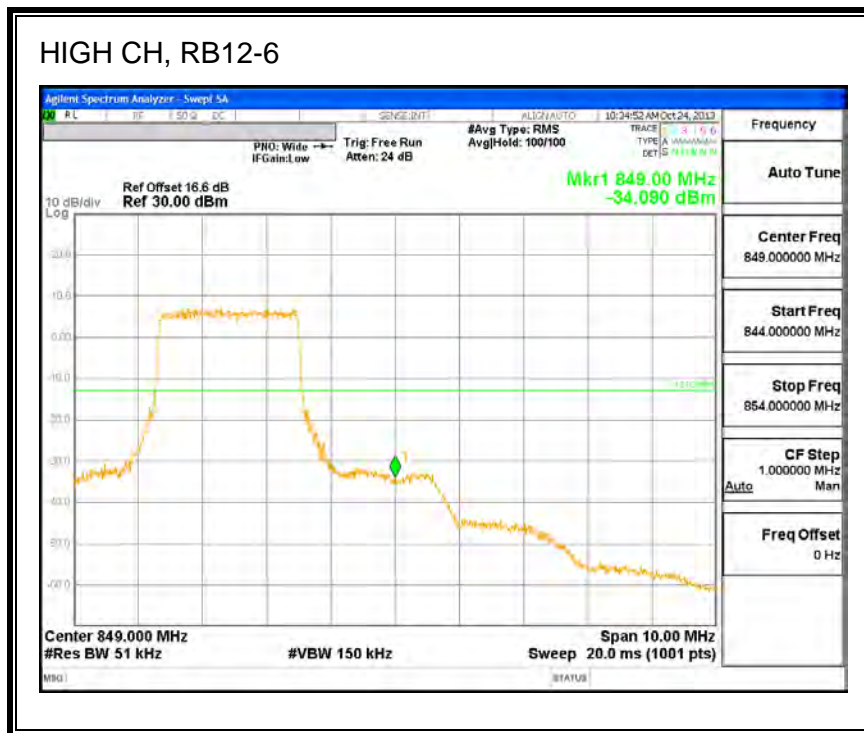
### HIGH CH, RB1-24



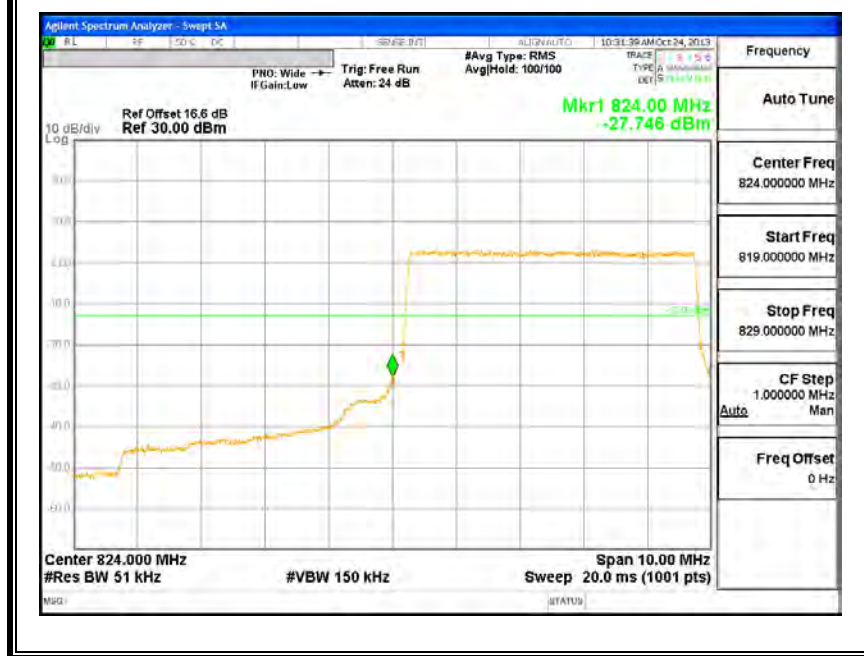
### LOW CH, RB12-6



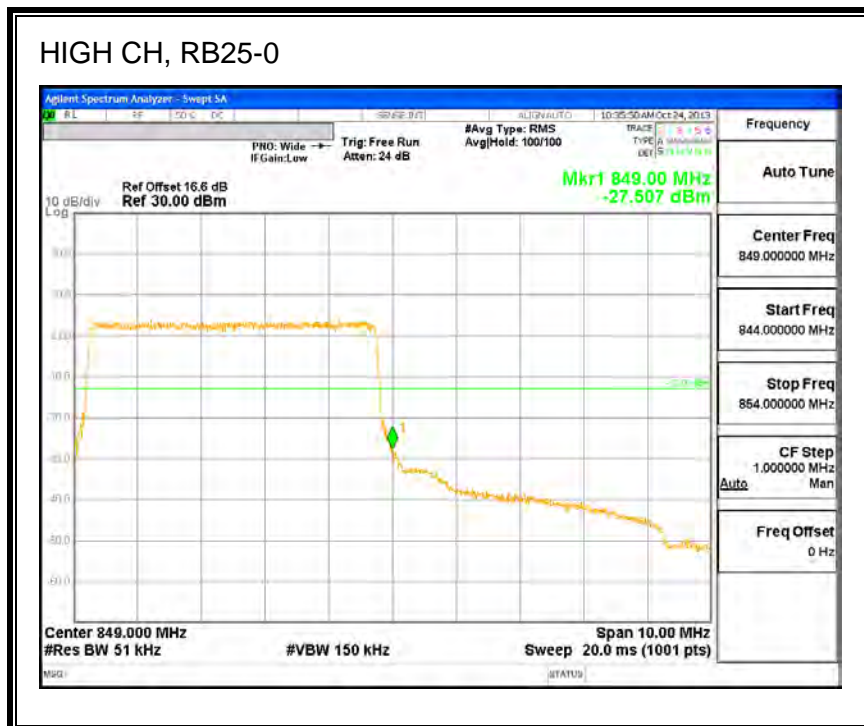
### HIGH CH, RB12-6



### LOW CH, RB25-0

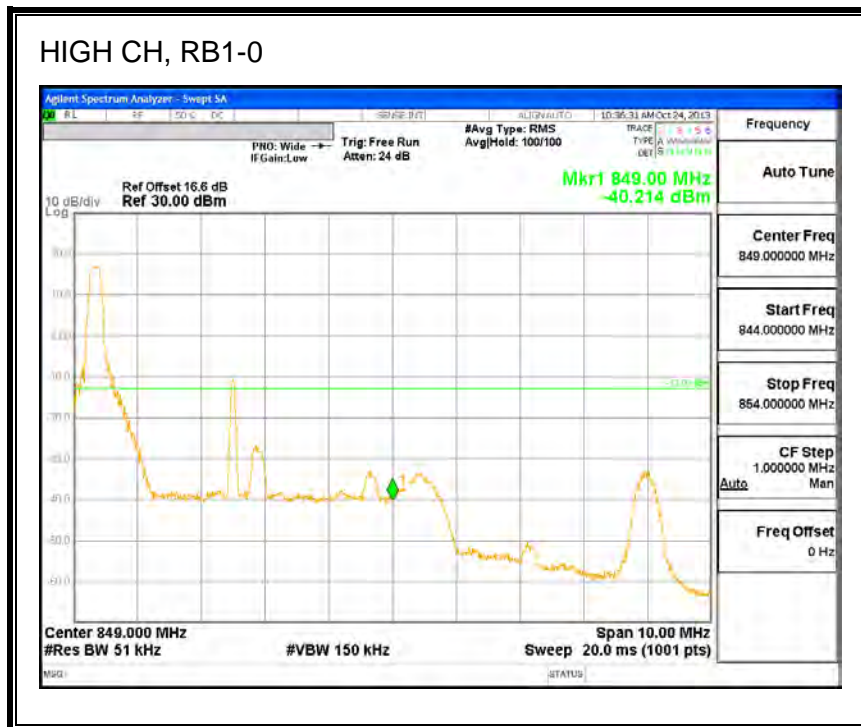
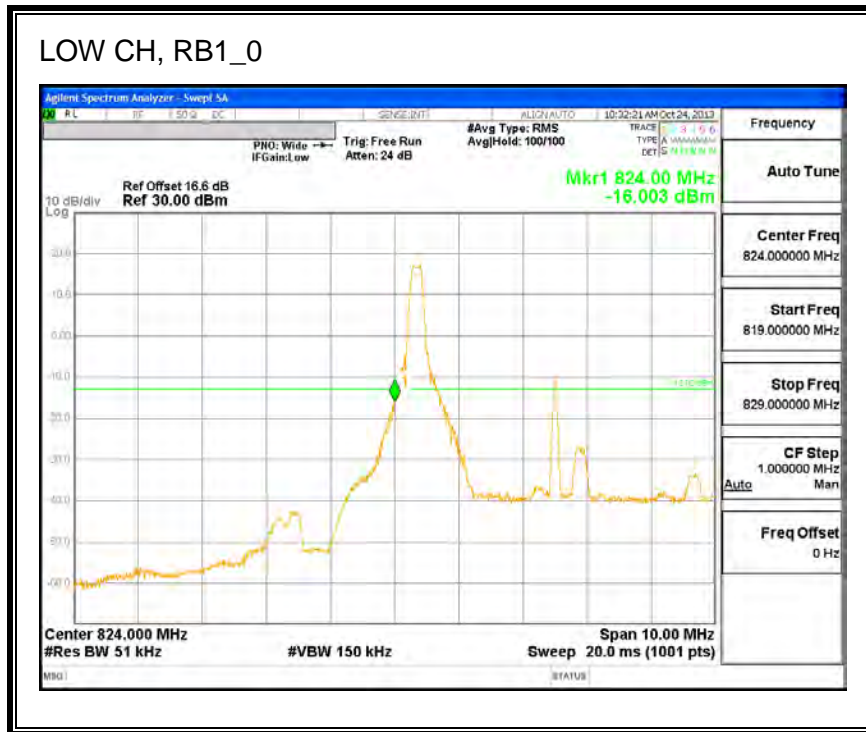


### HIGH CH, RB25-0

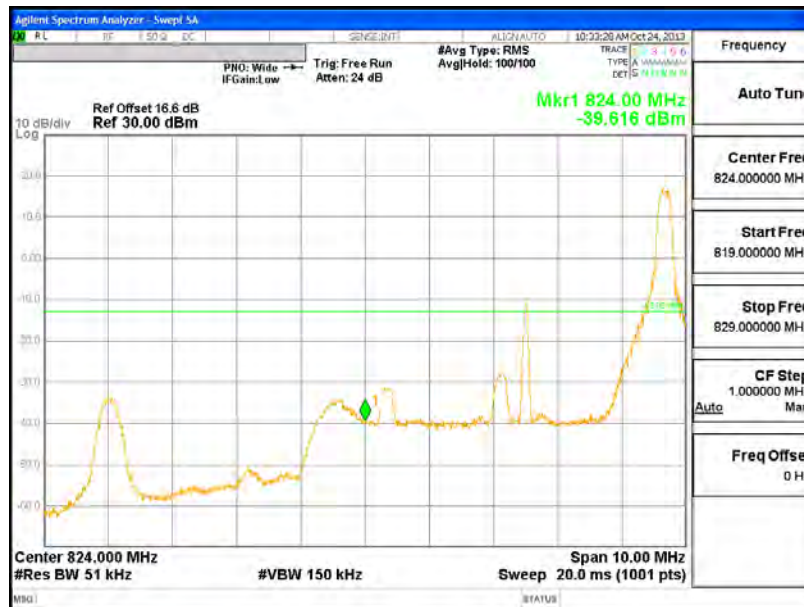


**Band 5 (5MHz BANDWIDTH)**

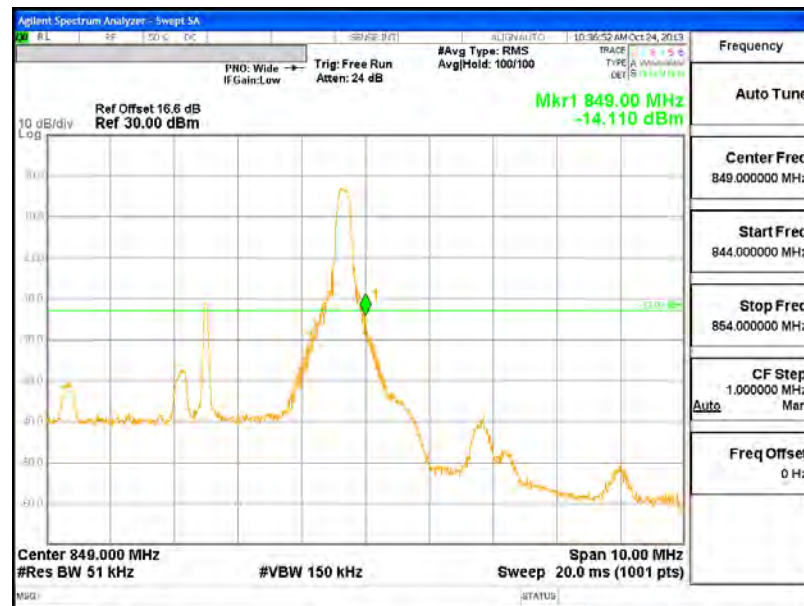
**LTE 16QAM**



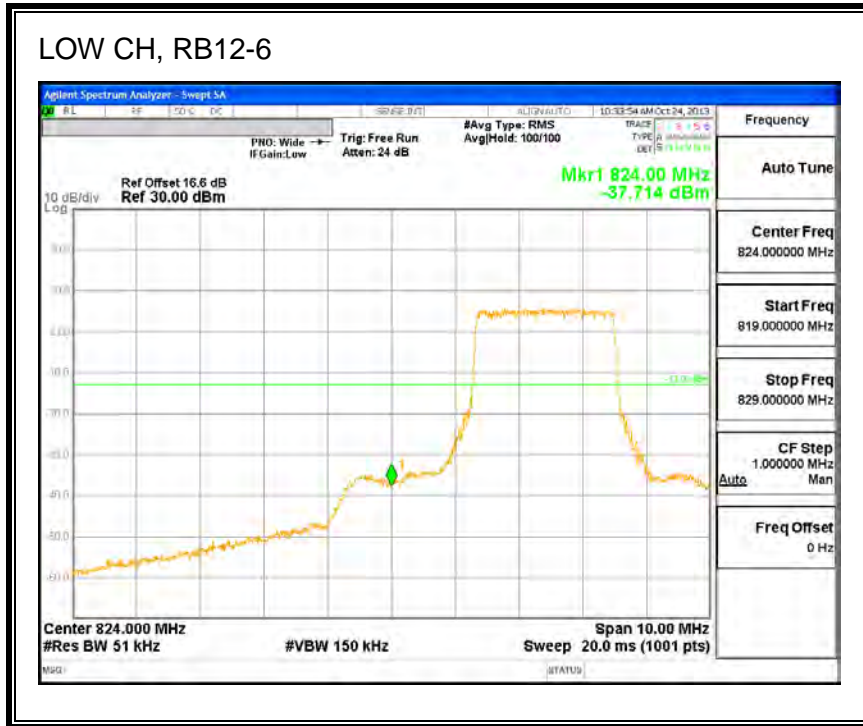
### LOW CH, RB1-24



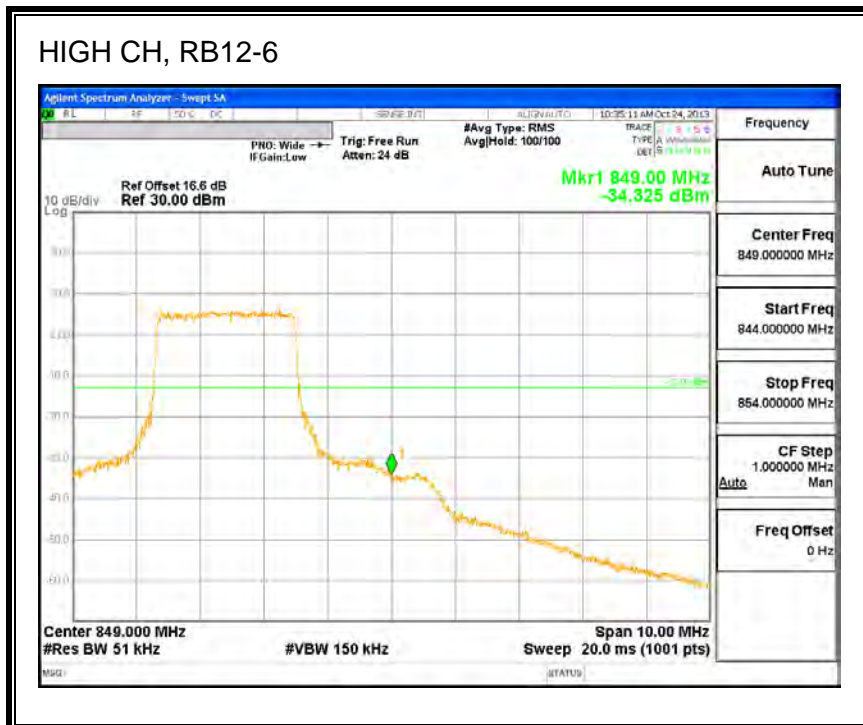
### HIGH CH, RB1-24

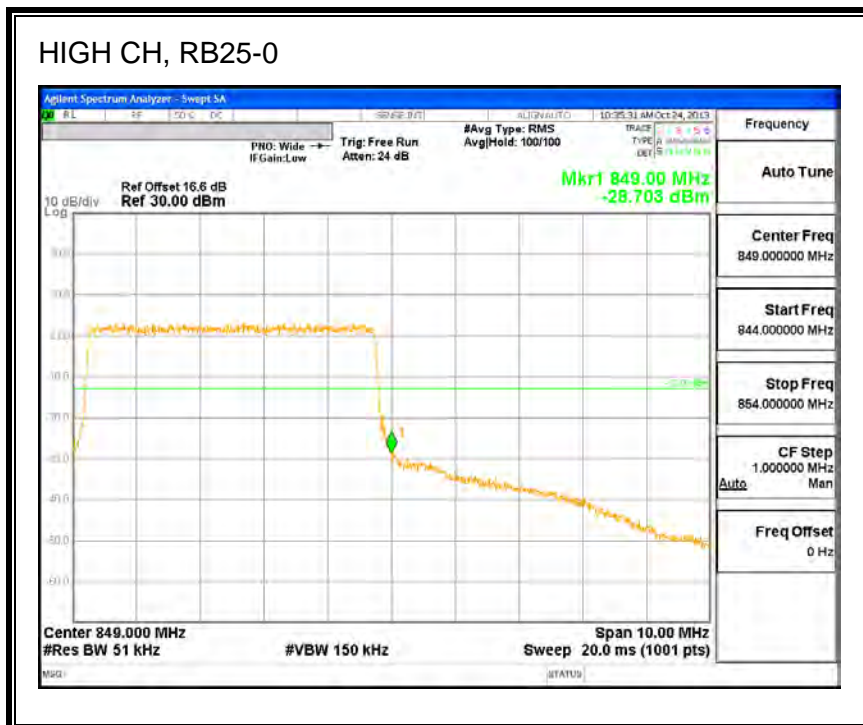
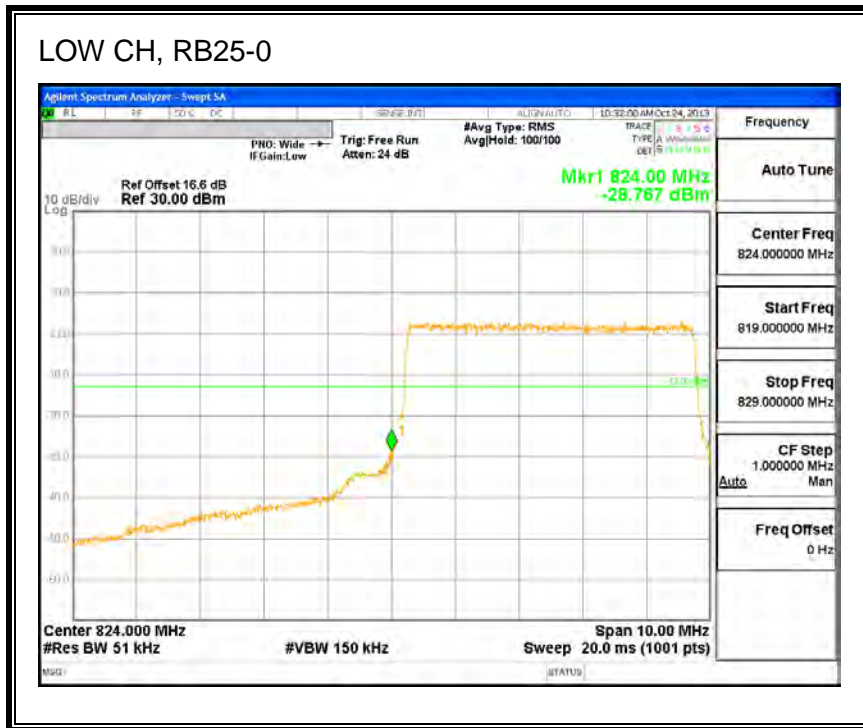


### LOW CH, RB12-6



### HIGH CH, RB12-6

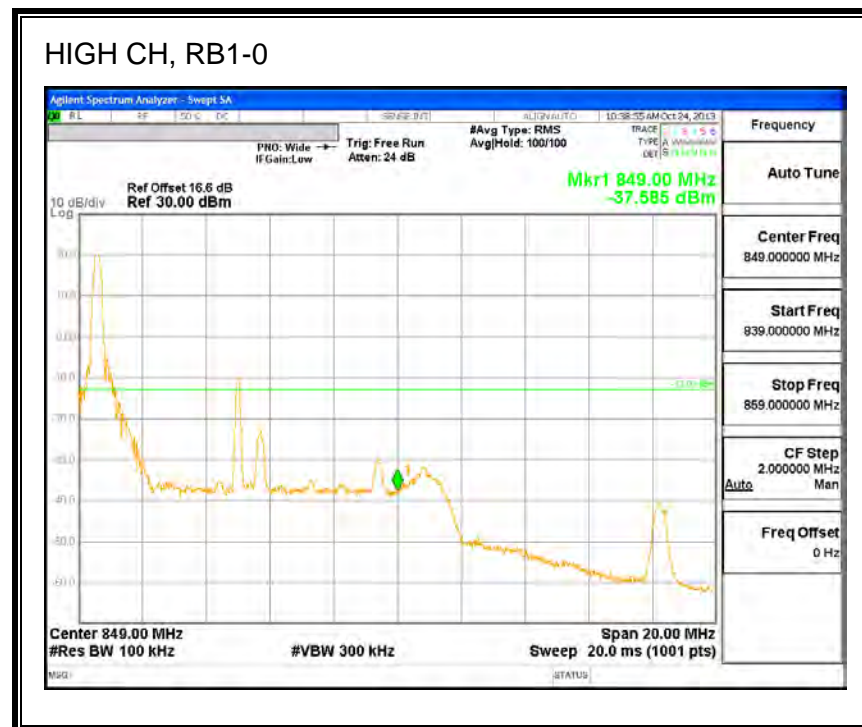
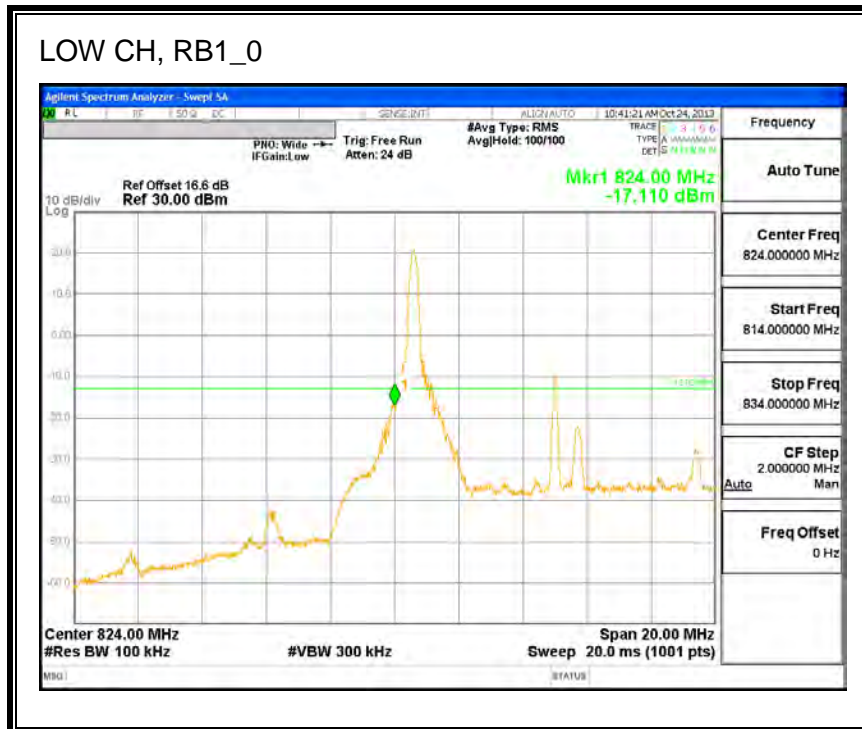




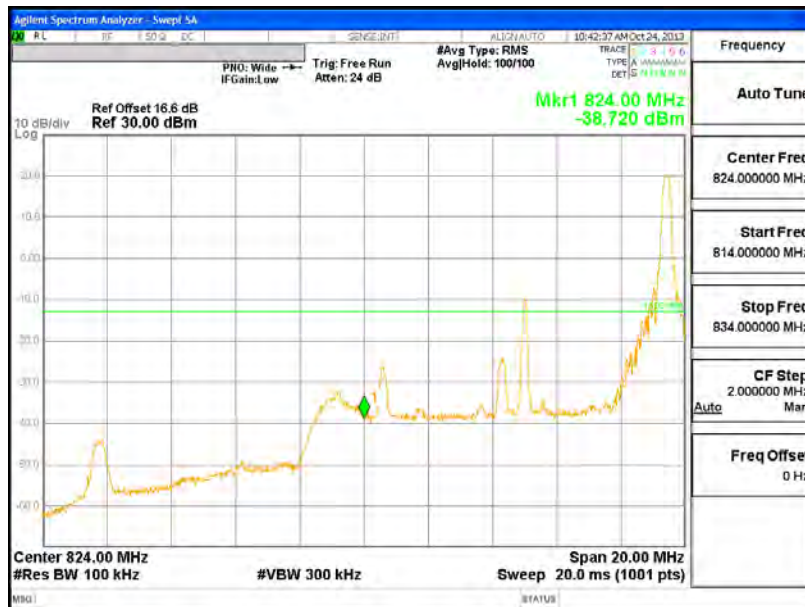


**Band 5 (10MHz BANDWIDTH)**

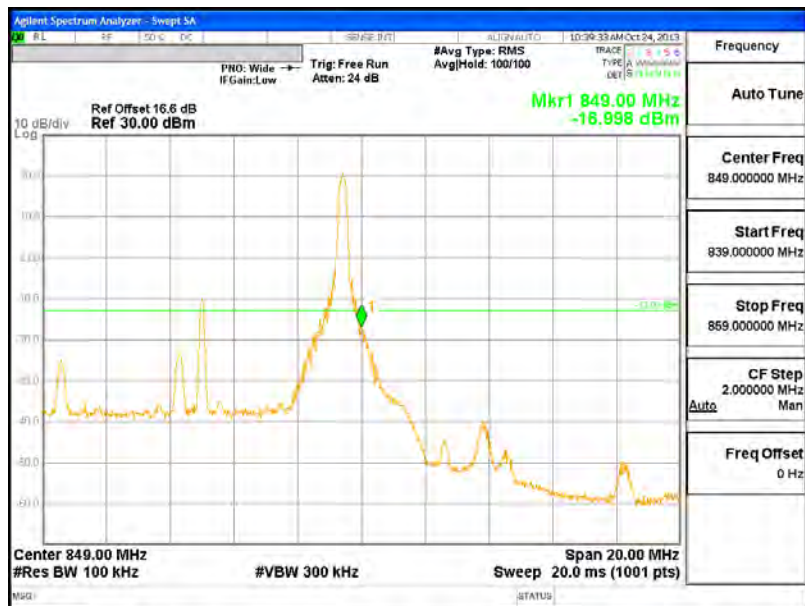
**LTE QPSK**



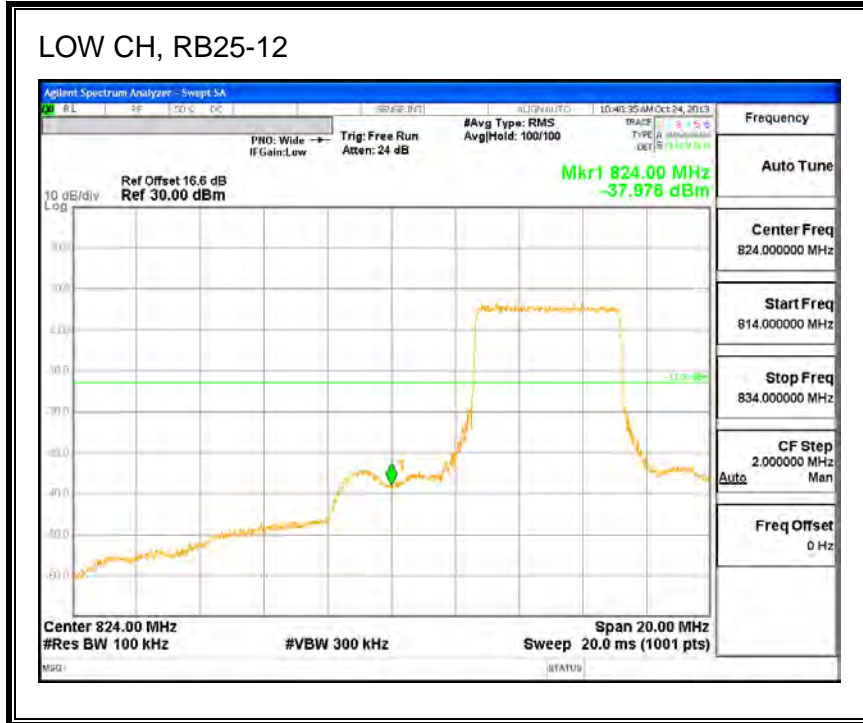
### LOW CH, RB1-49



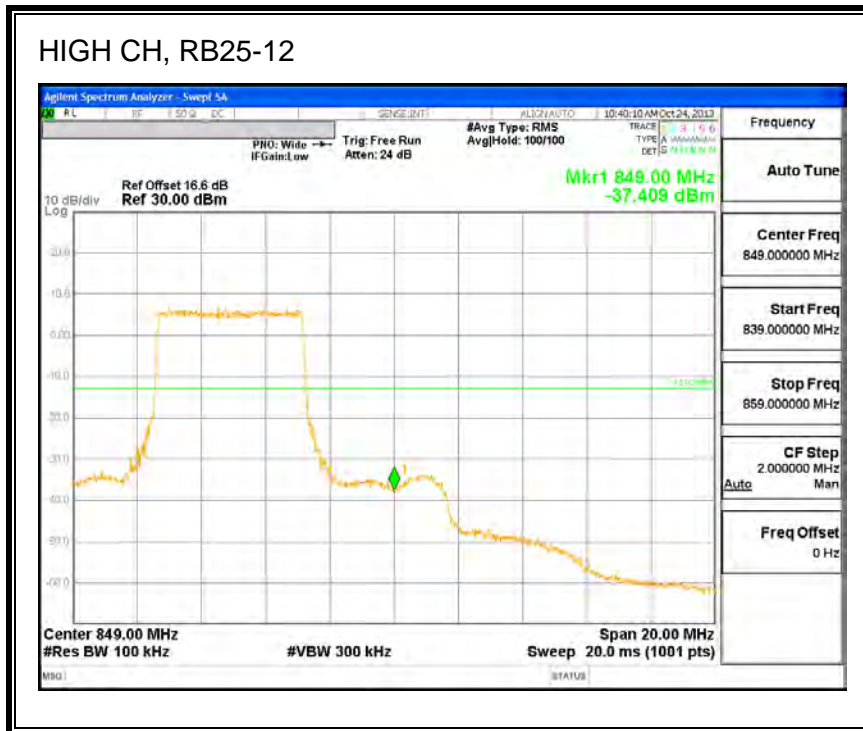
### HIGH CH, RB1-49



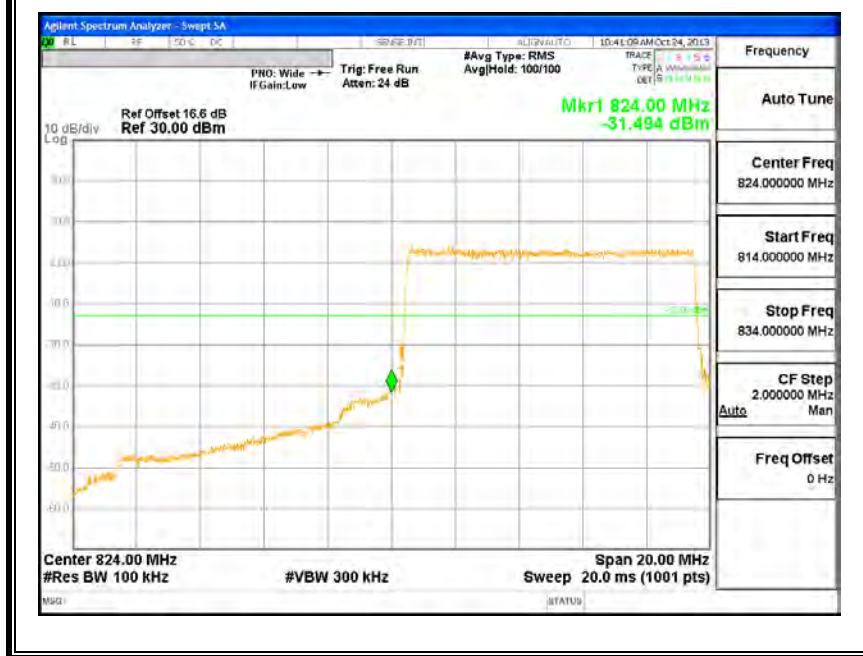
### LOW CH, RB25-12



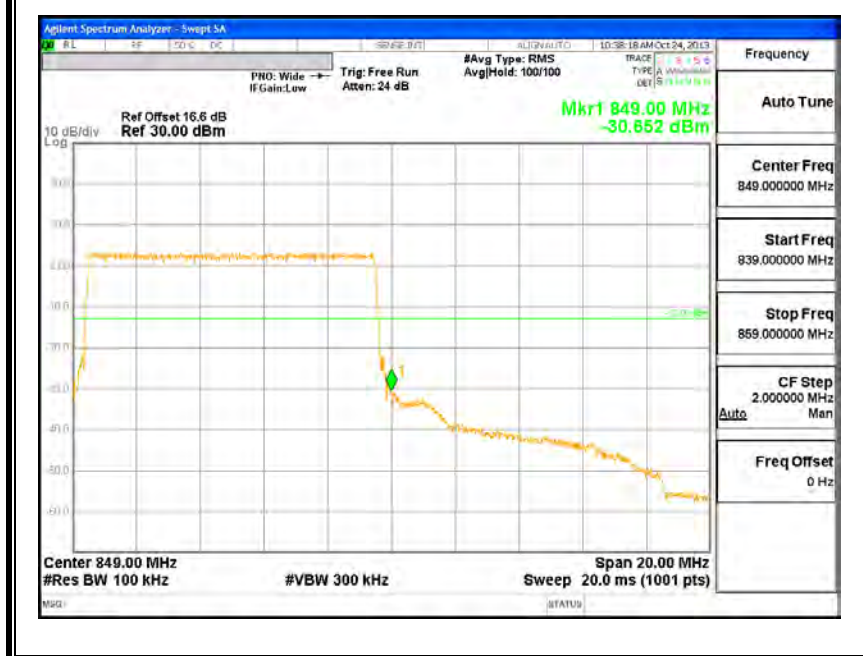
### HIGH CH, RB25-12



### LOW CH, RB50-0

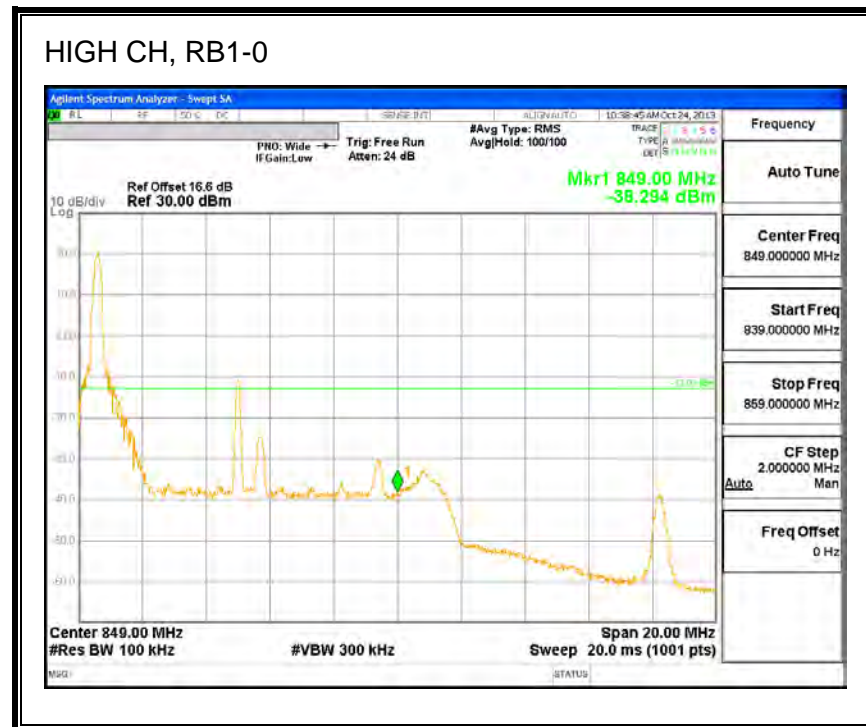
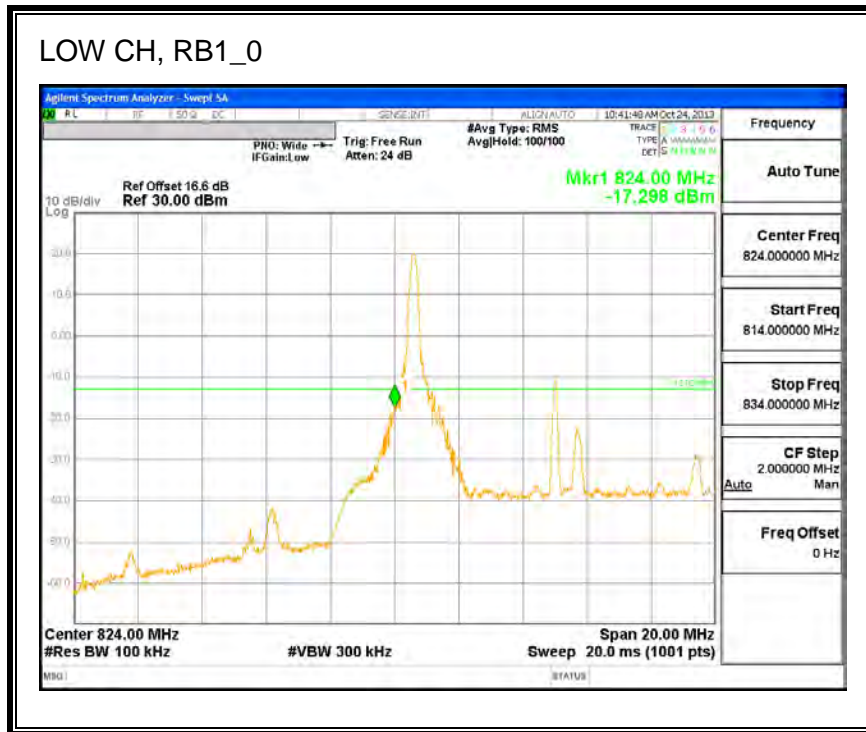


### HIGH CH, RB50-0

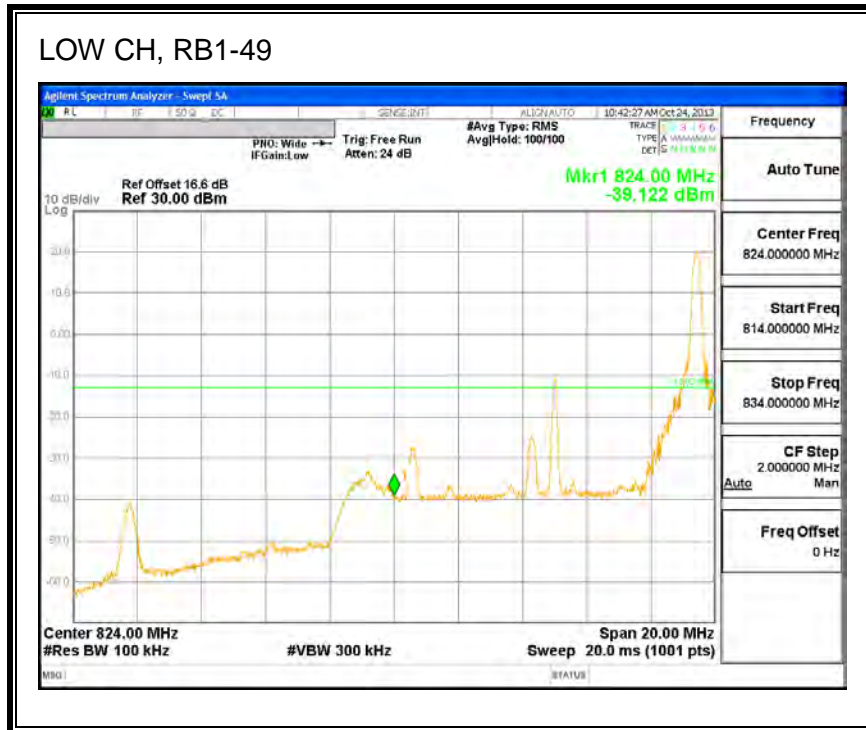


**Band 5 (10MHz BANDWIDTH)**

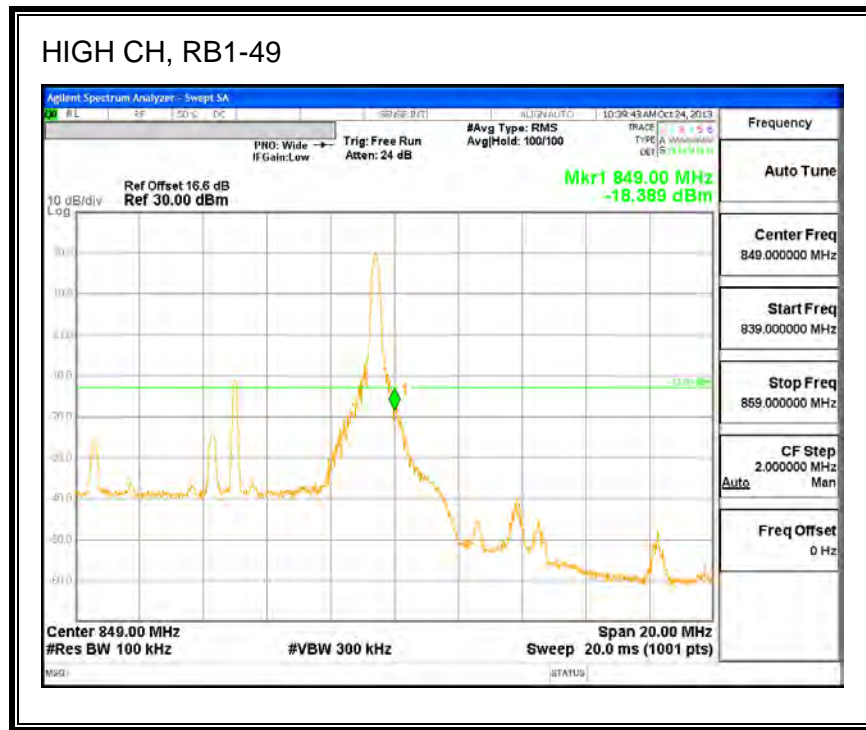
**LTE 16QAM**



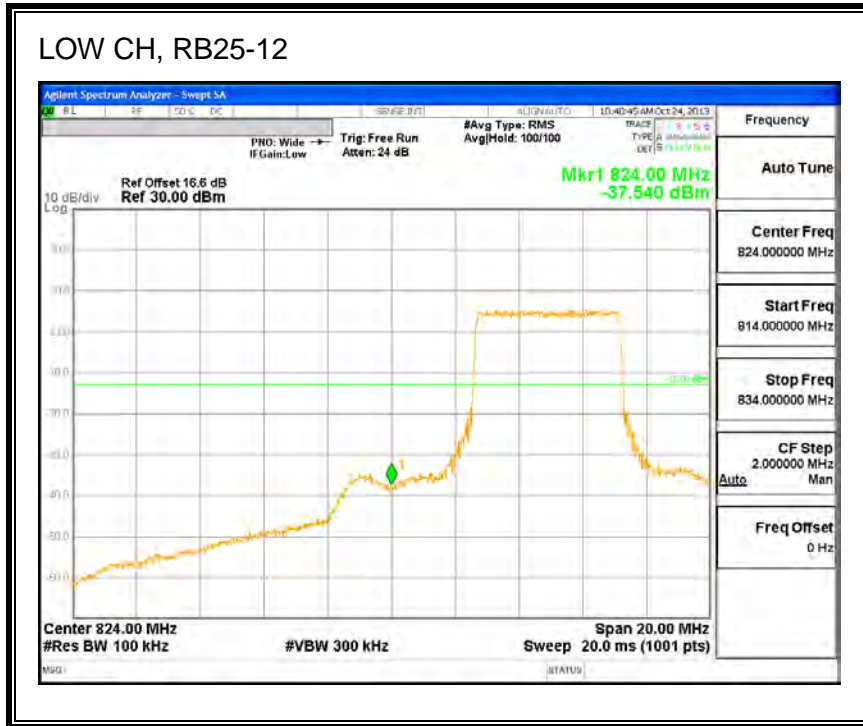
### LOW CH, RB1-49



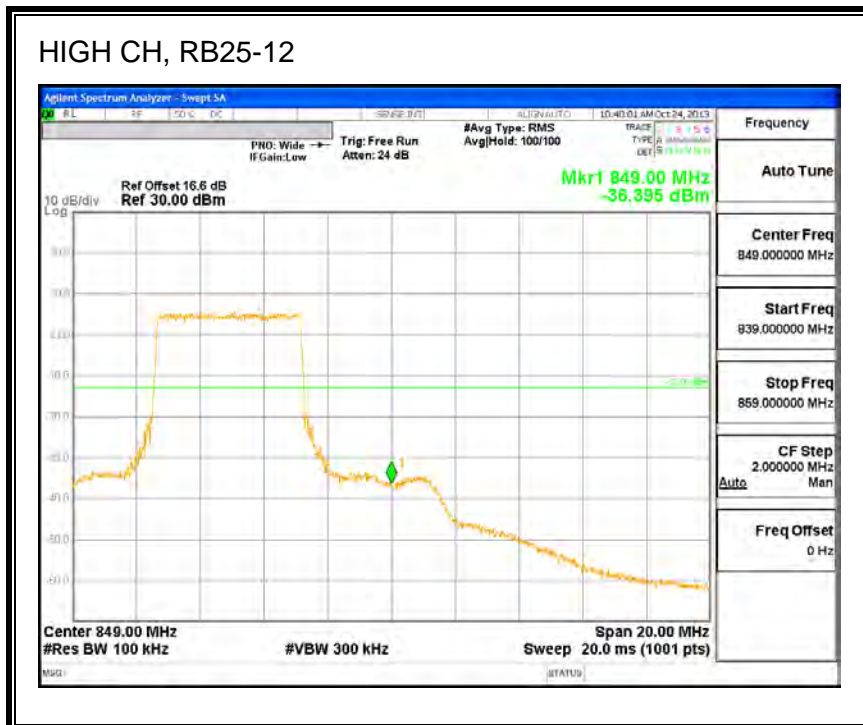
### HIGH CH, RB1-49



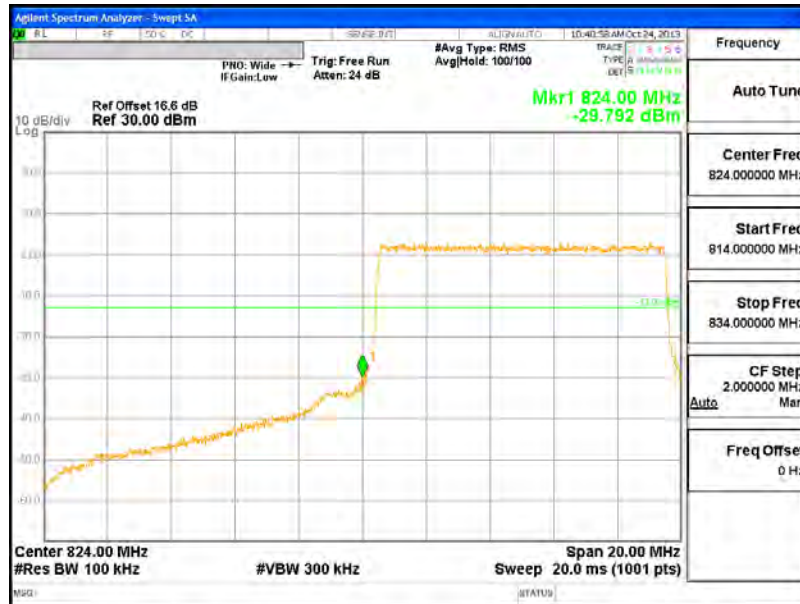
### LOW CH, RB25-12



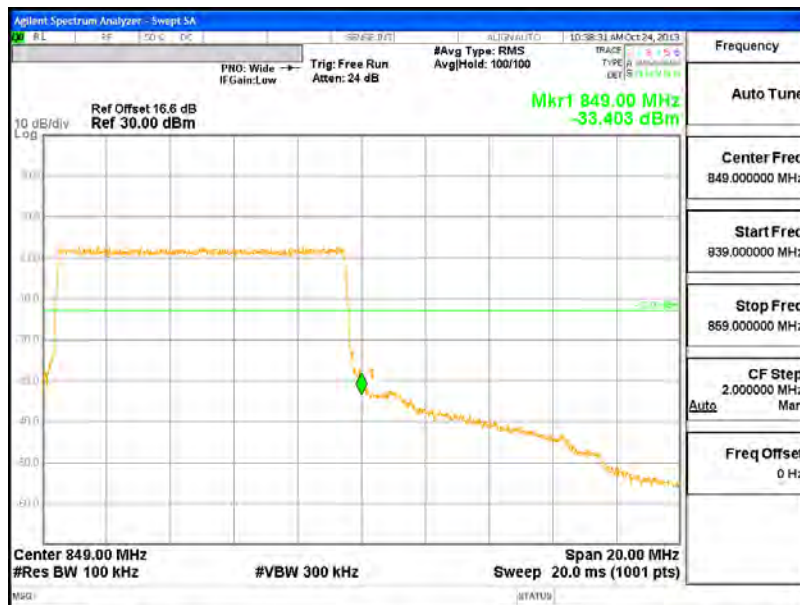
### HIGH CH, RB25-12



### LOW CH, RB50-0



### HIGH CH, RB50-0

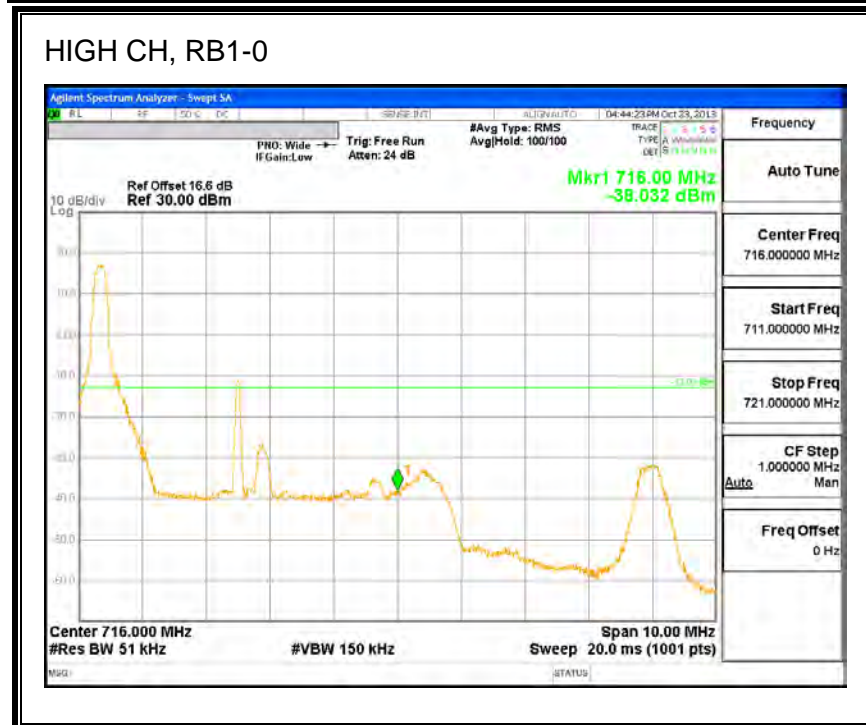
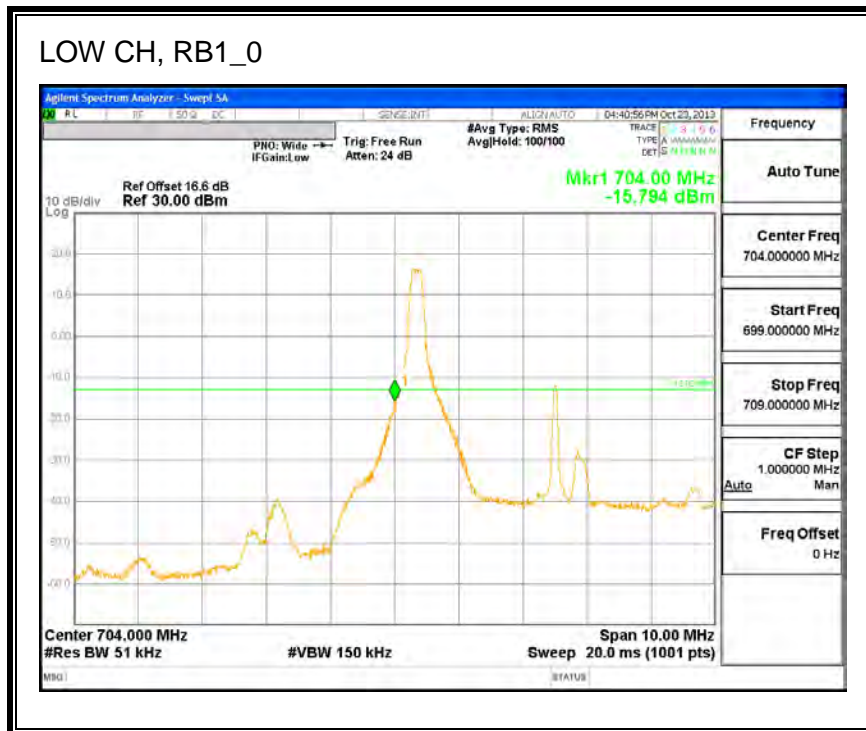




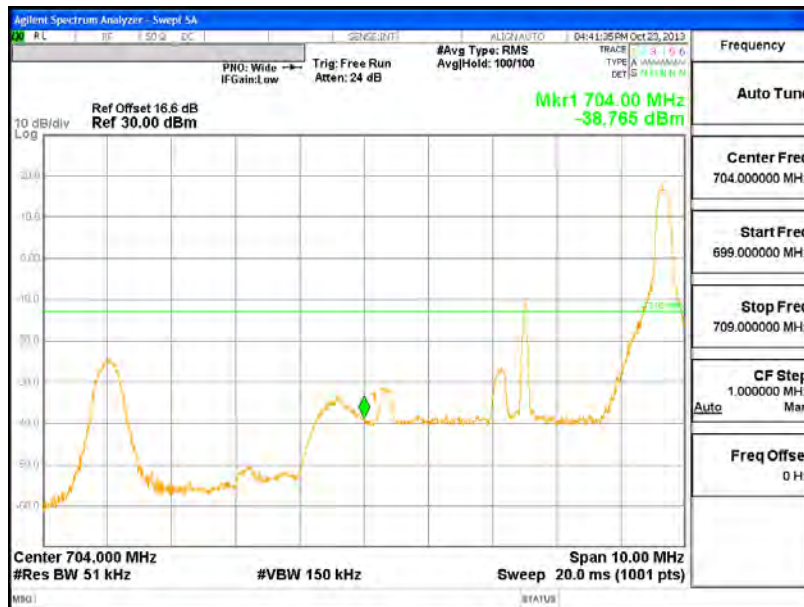
### 8.2.4. LTE BAND 17

#### Band 17 (5MHz BANDWIDTH)

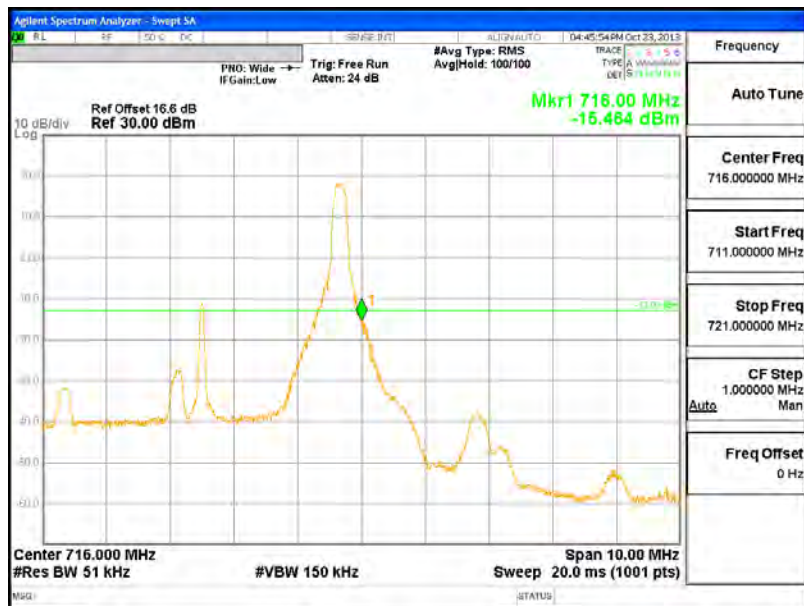
#### LTE QPSK



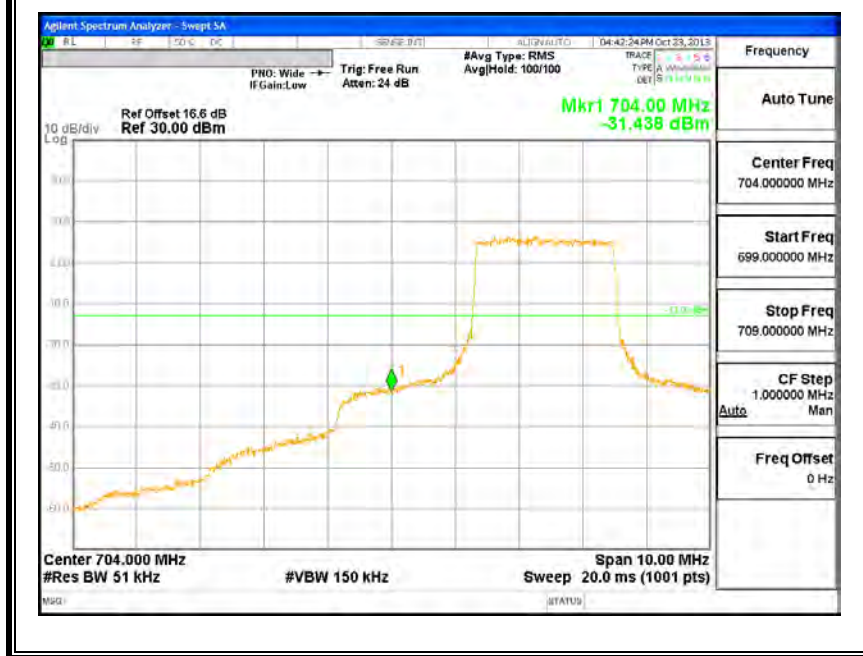
### LOW CH, RB1-24



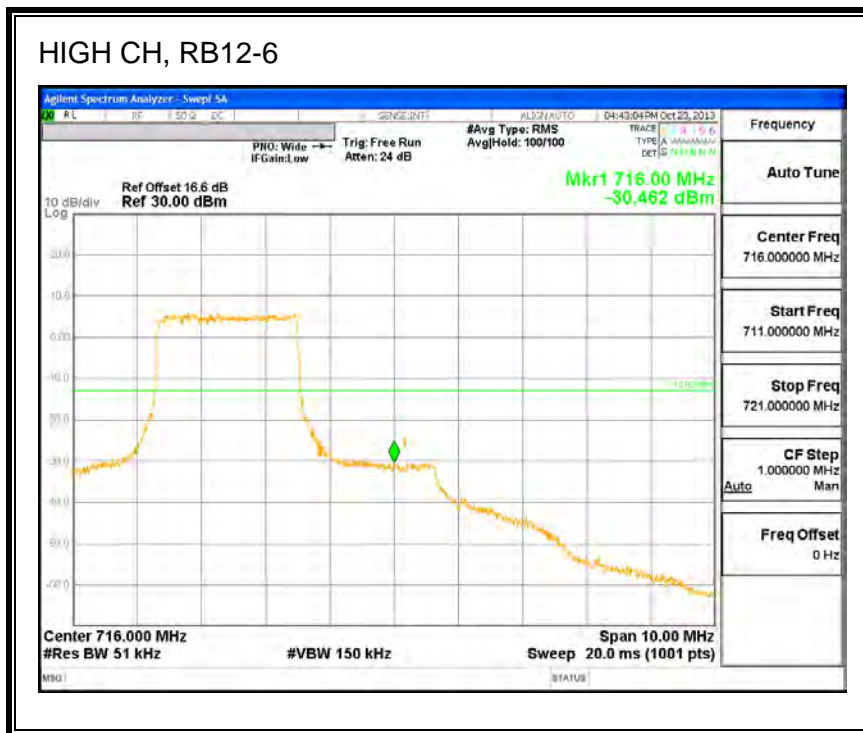
### HIGH CH, RB1-24



### LOW CH, RB12-6



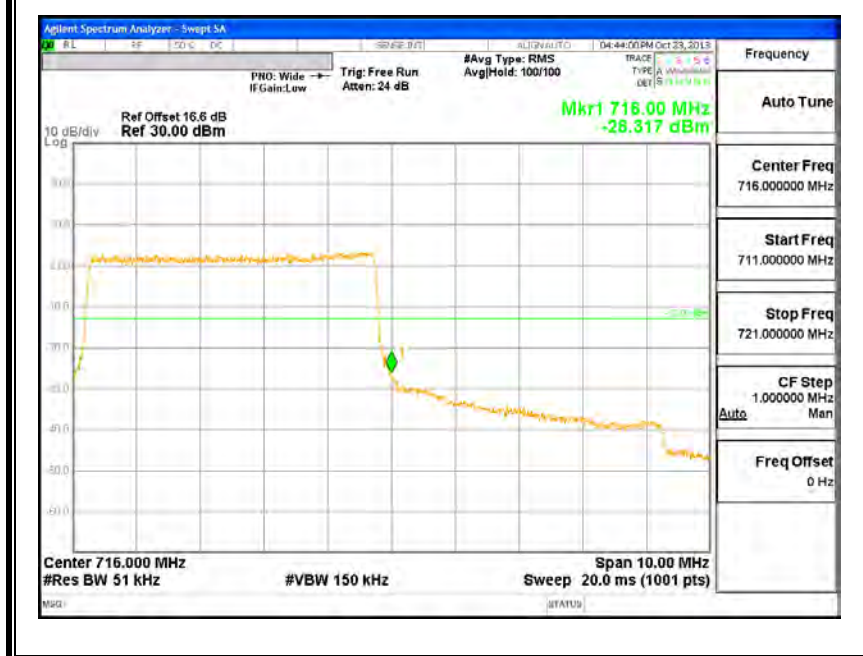
### HIGH CH, RB12-6



### LOW CH, RB25-0

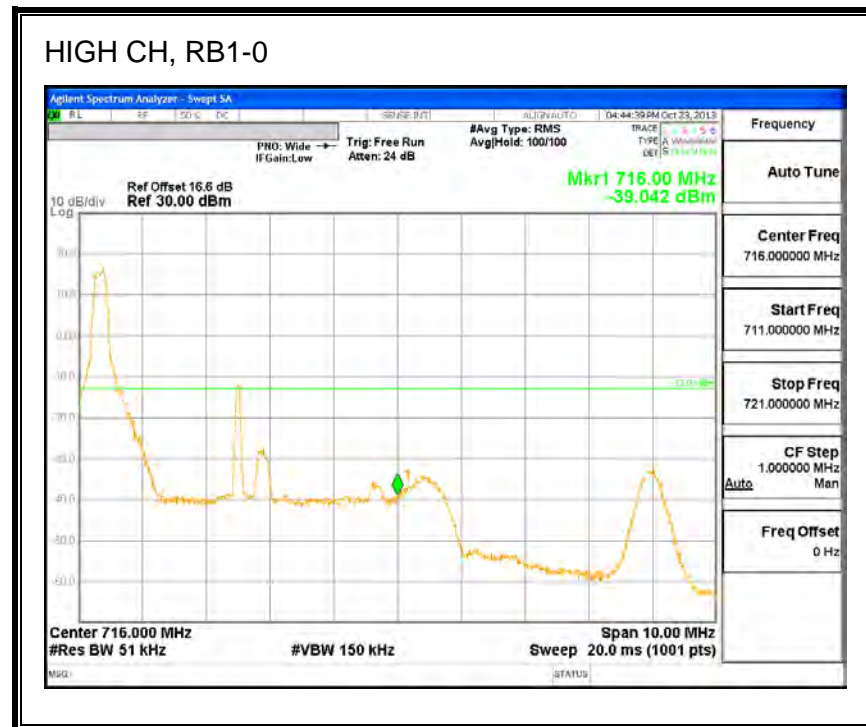
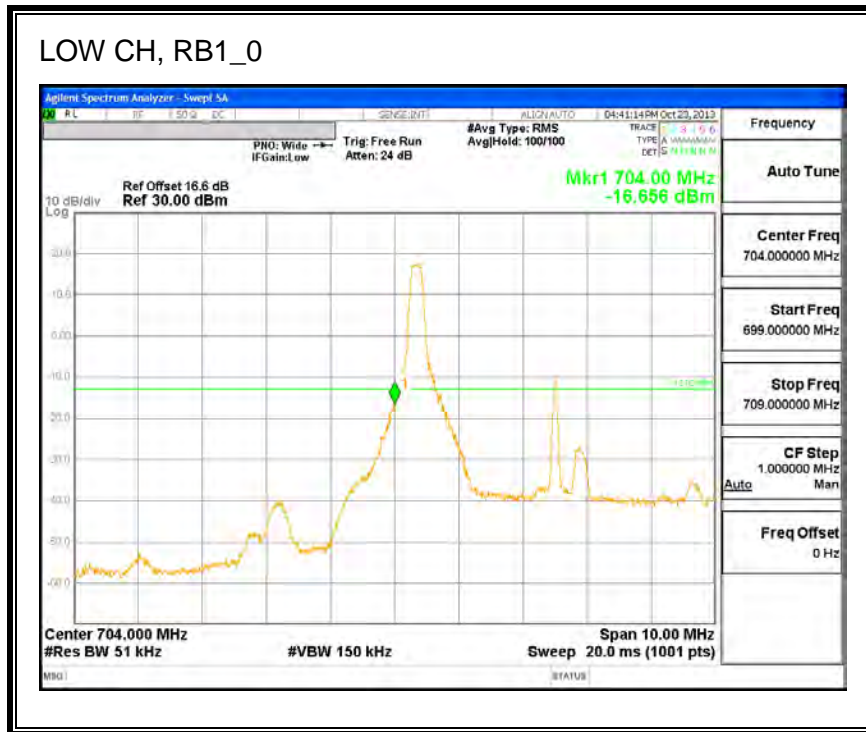


### HIGH CH, RB25-0

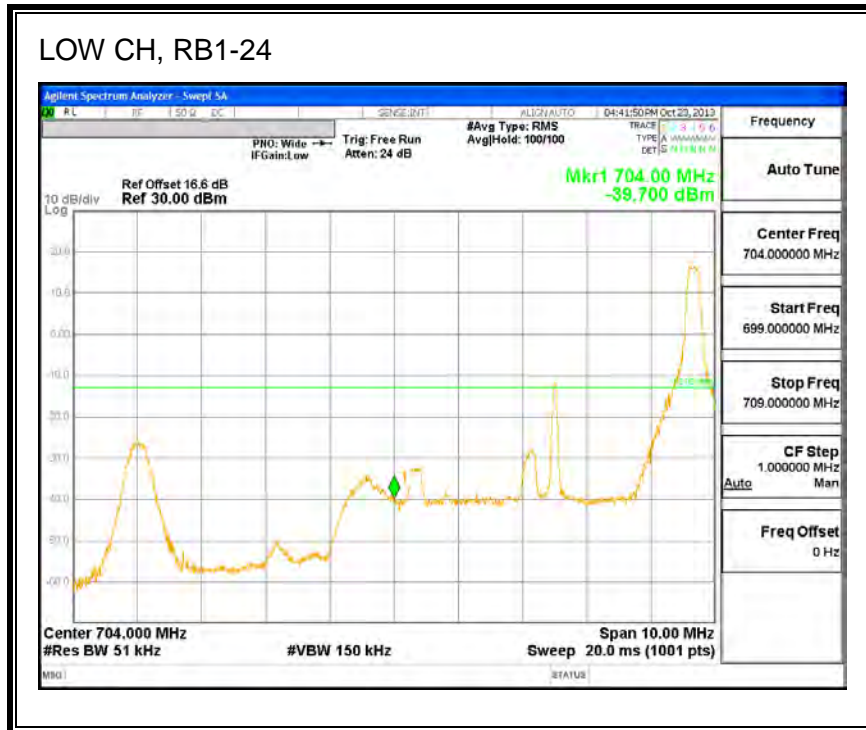


**Band 17 (5MHz BANDWIDTH)**

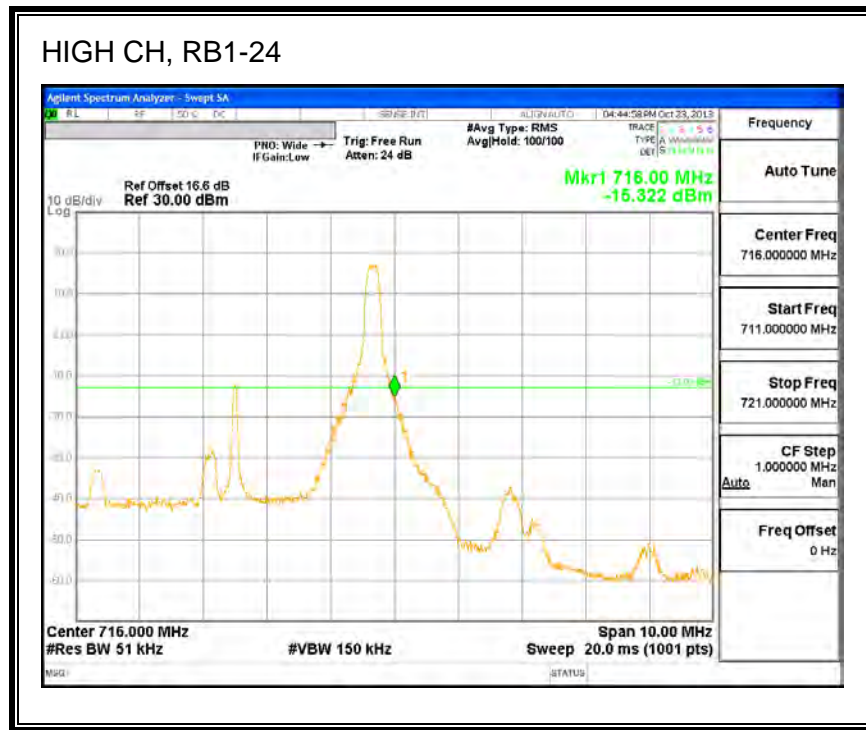
**LTE 16QAM**



### LOW CH, RB1-24



### HIGH CH, RB1-24



### LOW CH, RB12-6



### HIGH CH, RB12-6



### LOW CH, RB25-0



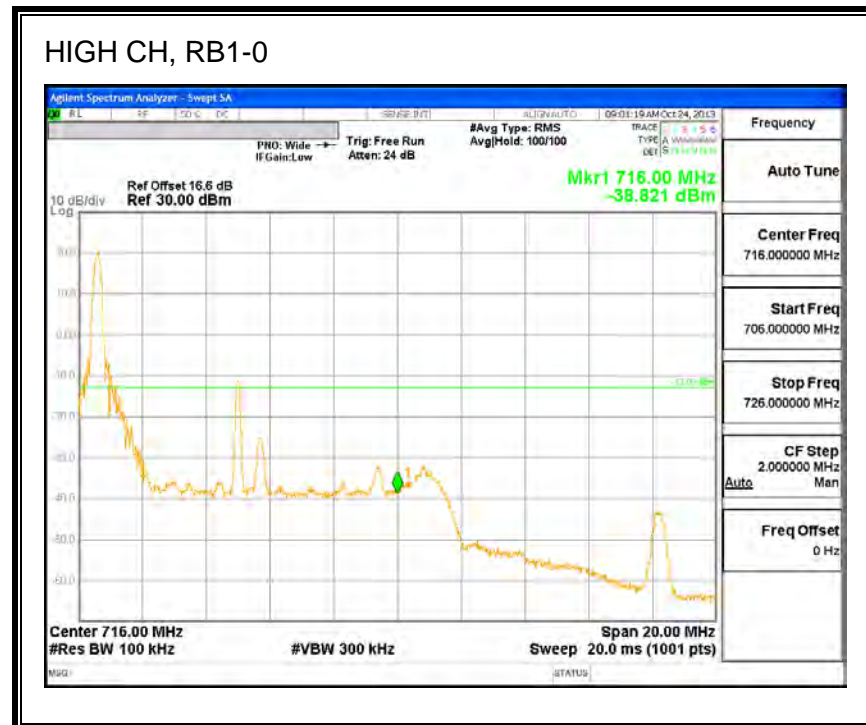
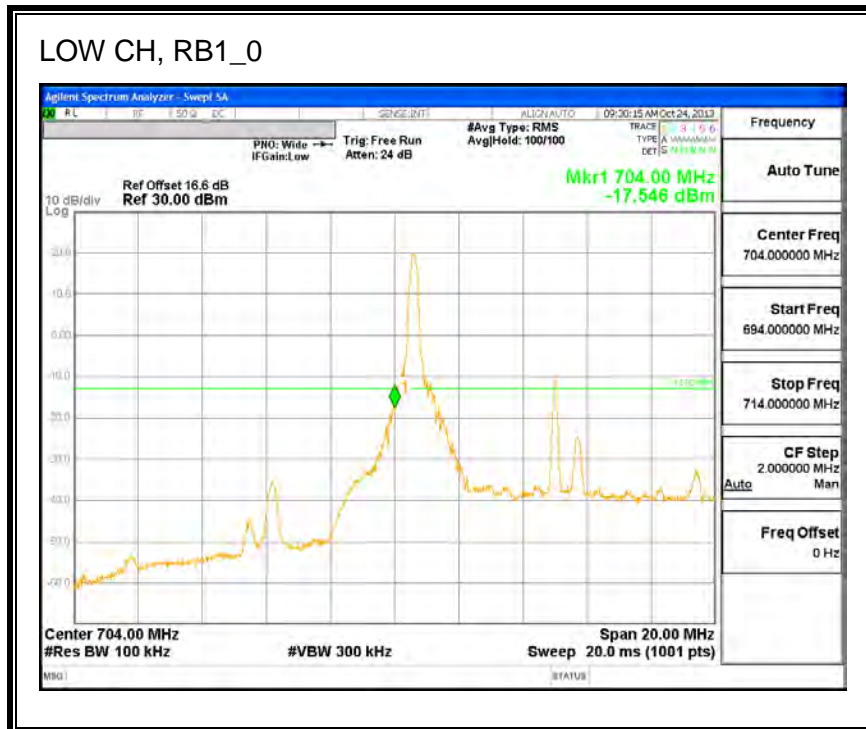
### HIGH CH, RB25-0



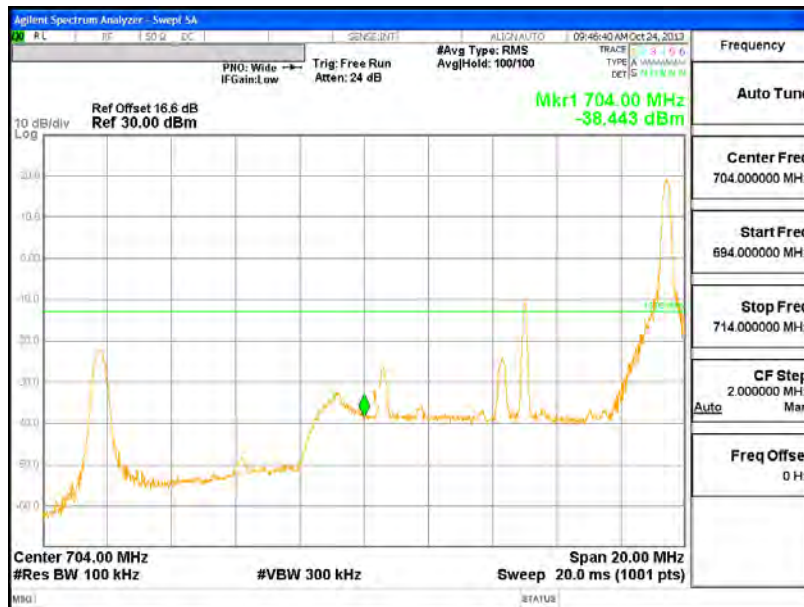


**Band 17 (10MHz BANDWIDTH)**

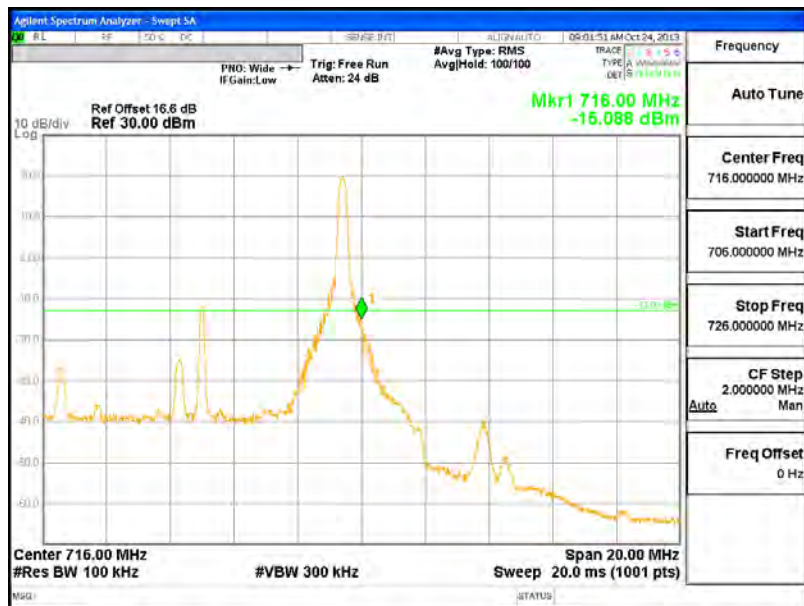
**LTE QPSK**



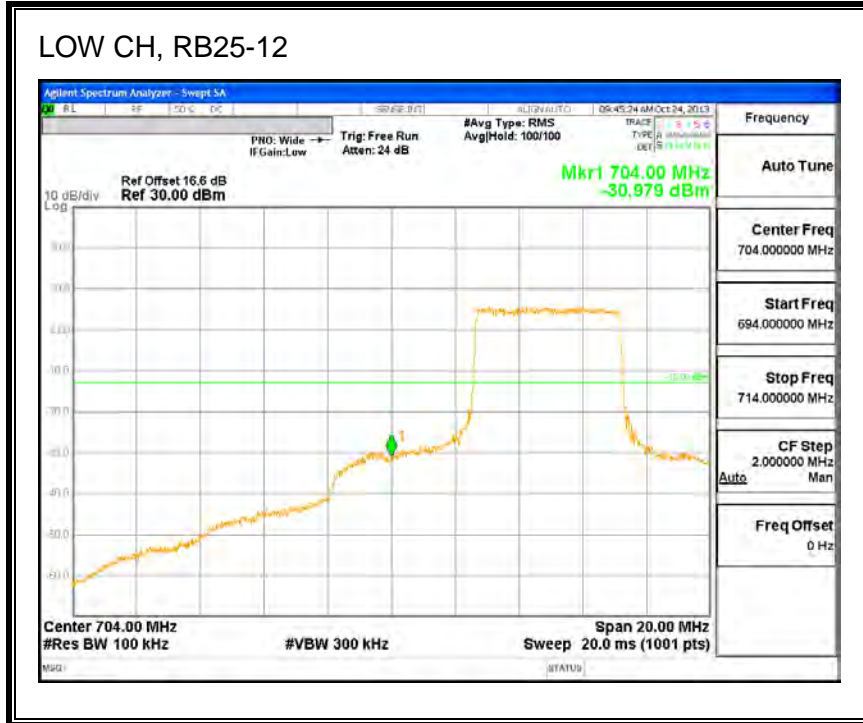
### LOW CH, RB1-49



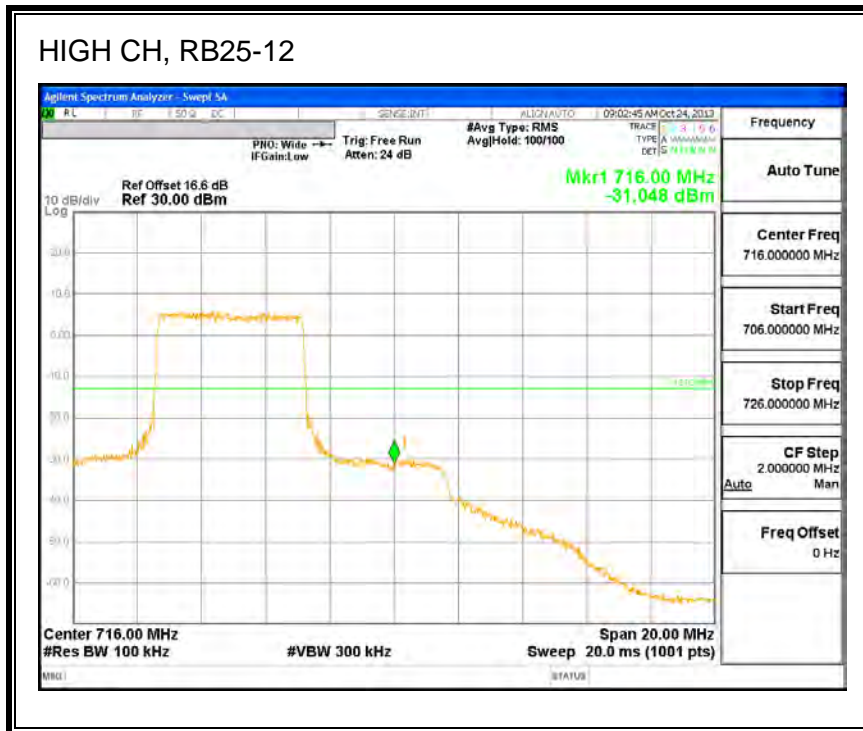
### HIGH CH, RB1-49



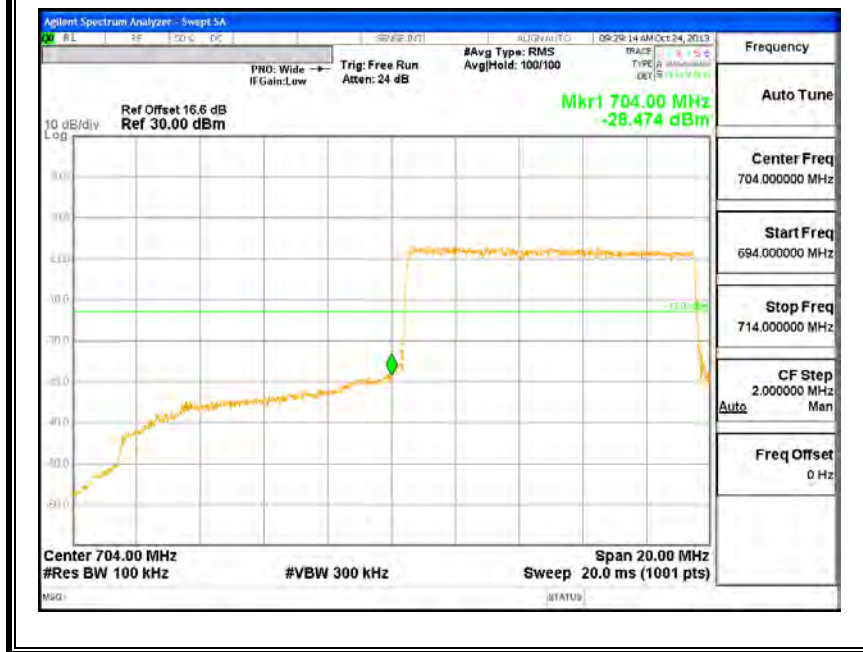
### LOW CH, RB25-12



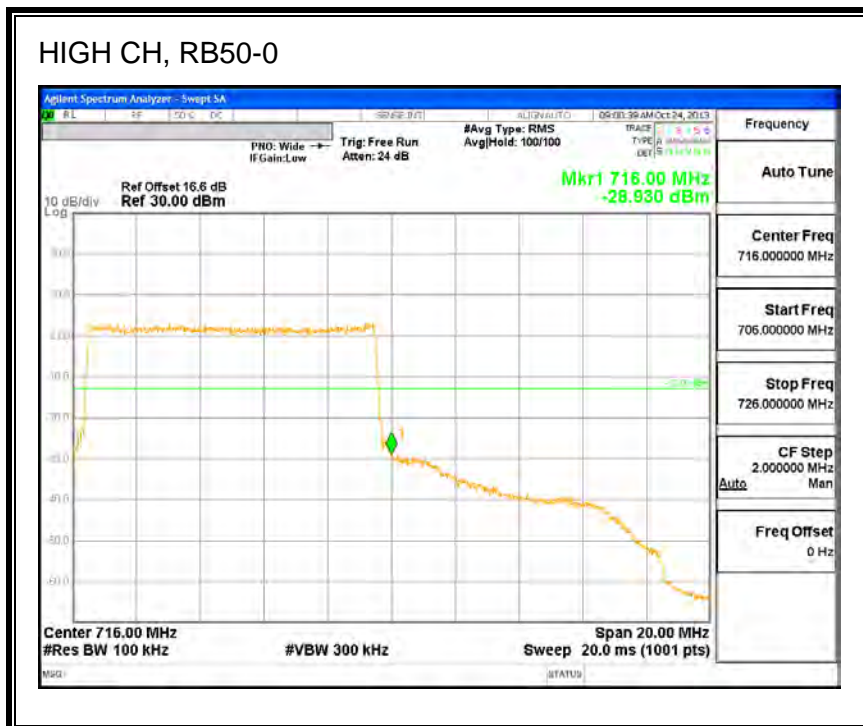
### HIGH CH, RB25-12



### LOW CH, RB50-0

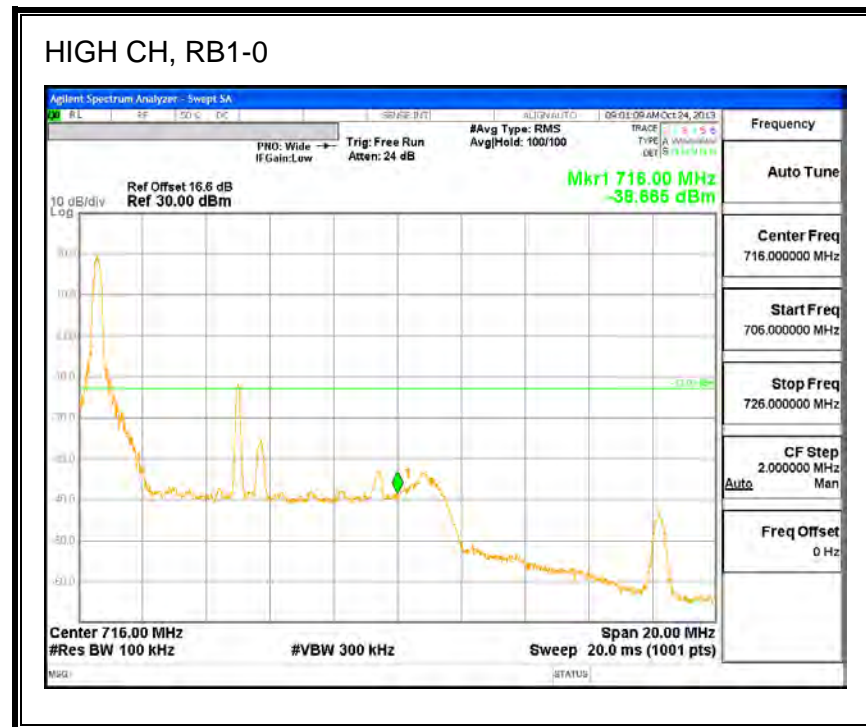
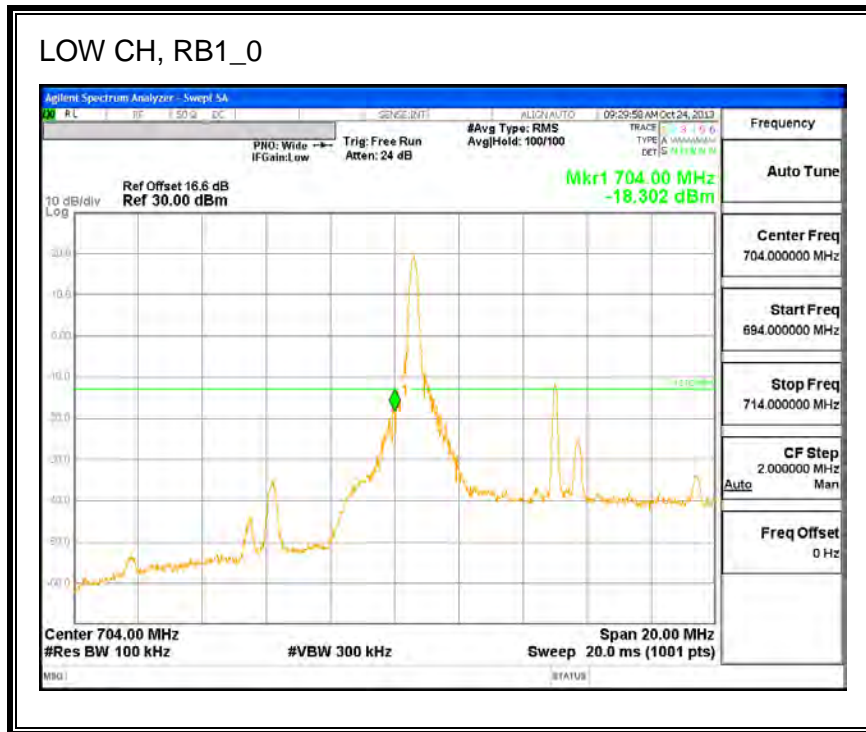


### HIGH CH, RB50-0

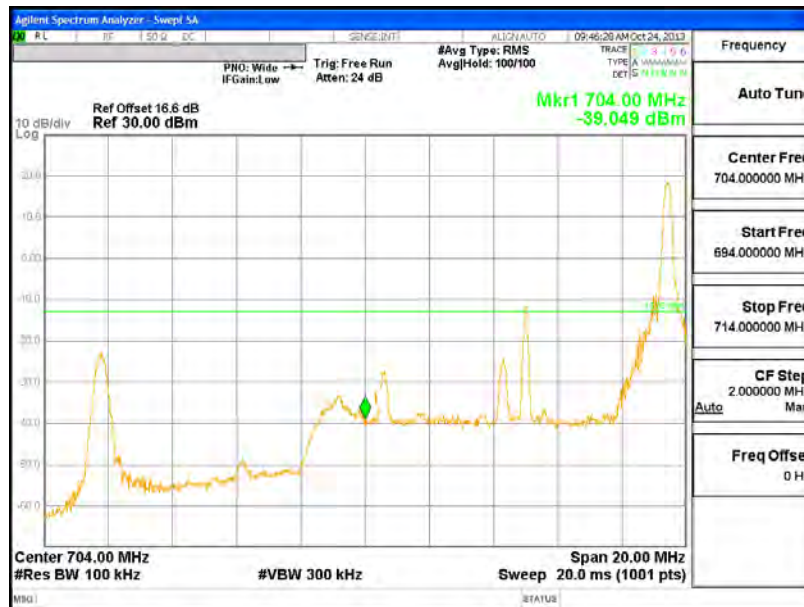


**Band 17 (10MHz BANDWIDTH)**

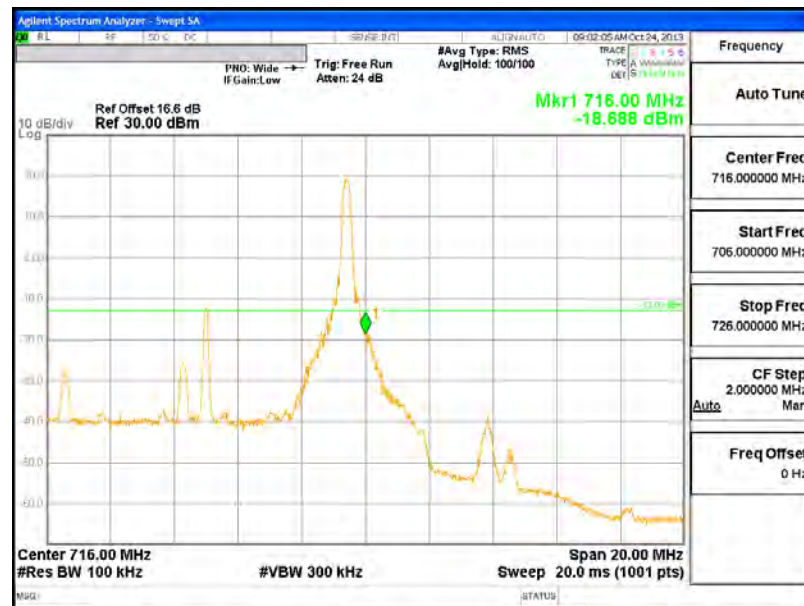
**LTE 16QAM**



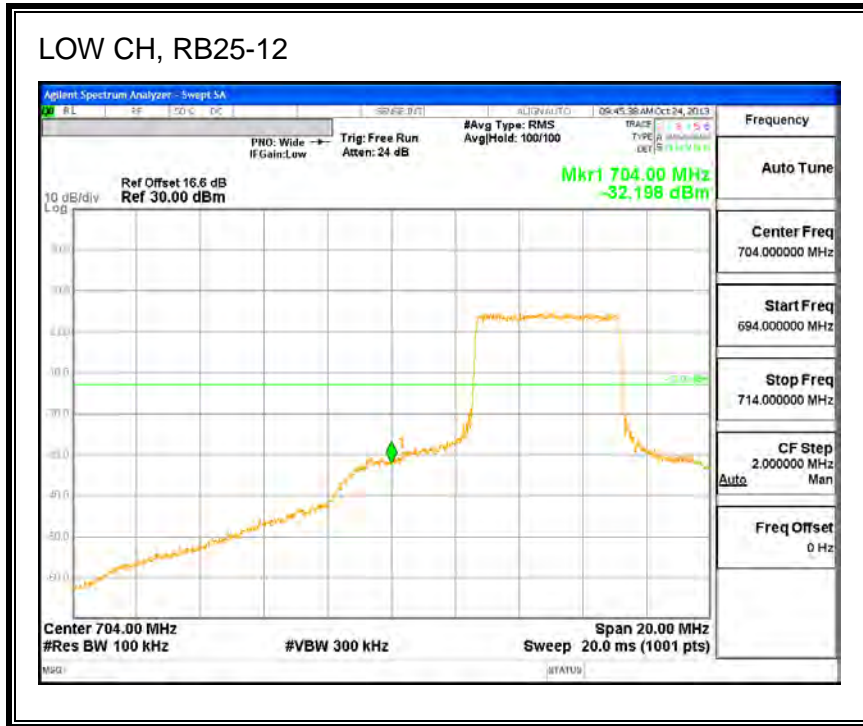
### LOW CH, RB1-49



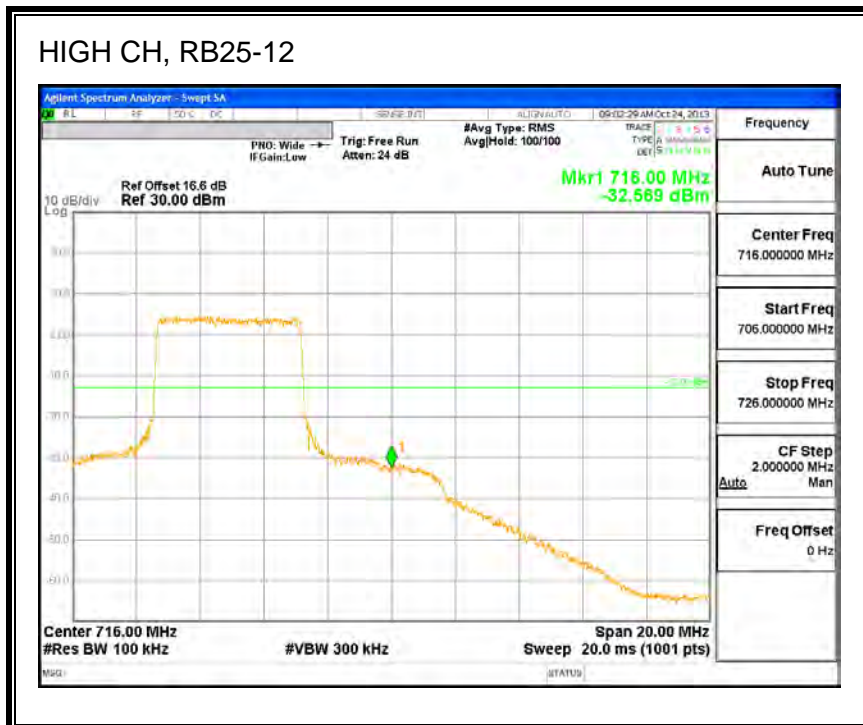
### HIGH CH, RB1-49



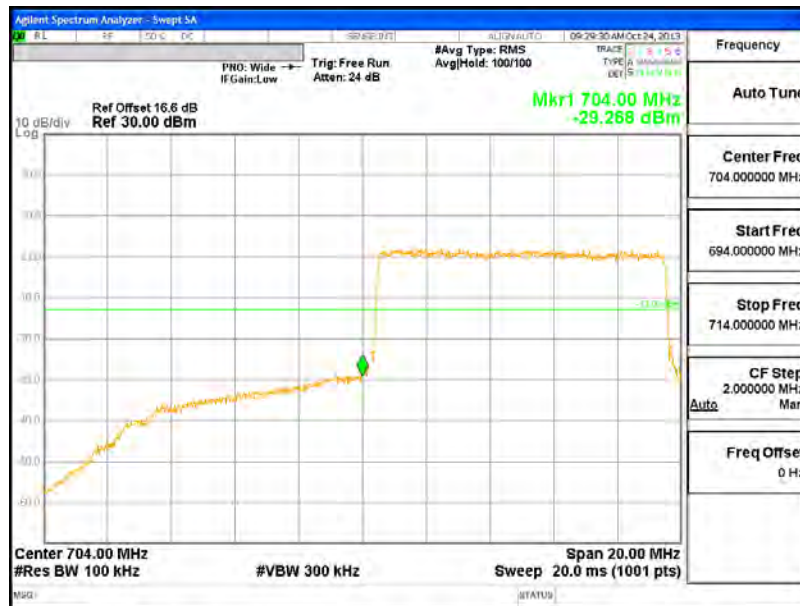
### LOW CH, RB25-12



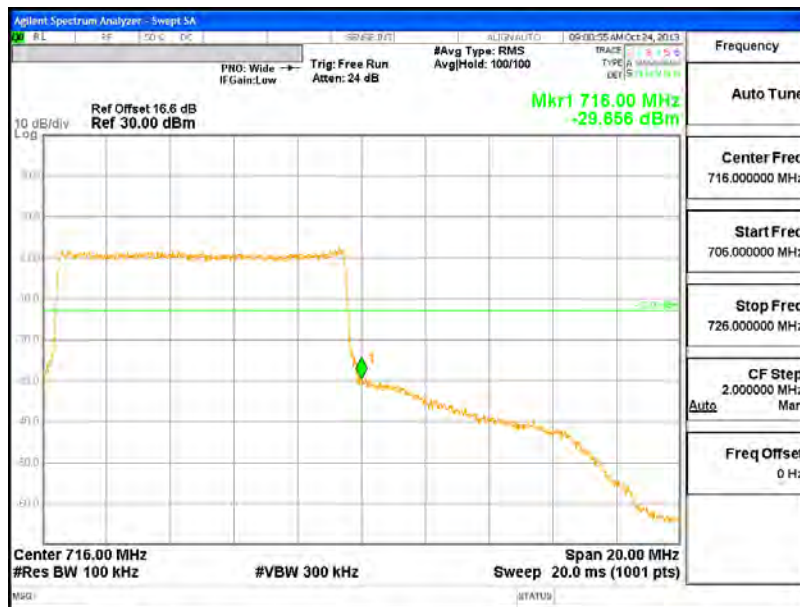
### HIGH CH, RB25-12



### LOW CH, RB50-0



### HIGH CH, RB50-0





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### **8.3. OUT OF BAND EMISSIONS**

#### **RULE PART(S)**

FCC: §2.1051, §22.901, §22.917, §24.238 and §27.53

#### **LIMITS**

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.

#### **TEST PROCEDURE**

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line at -13 dBm
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

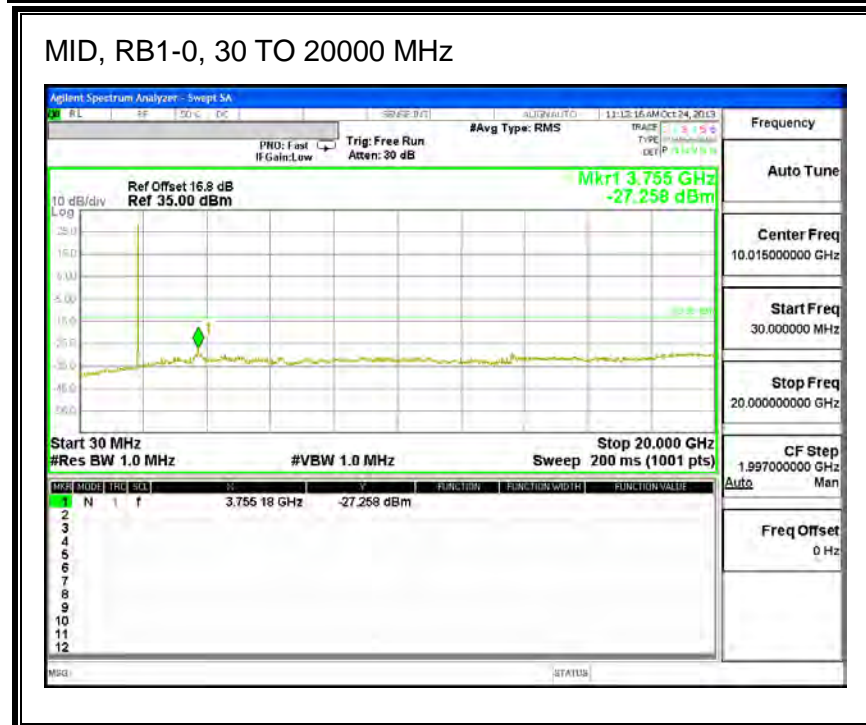
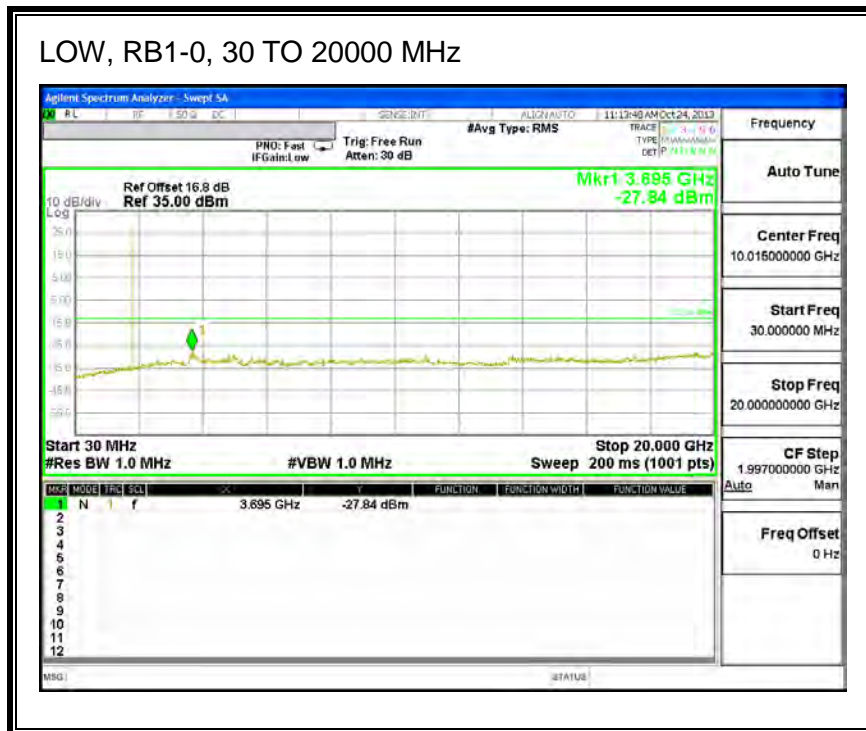
#### **MODES TESTED**

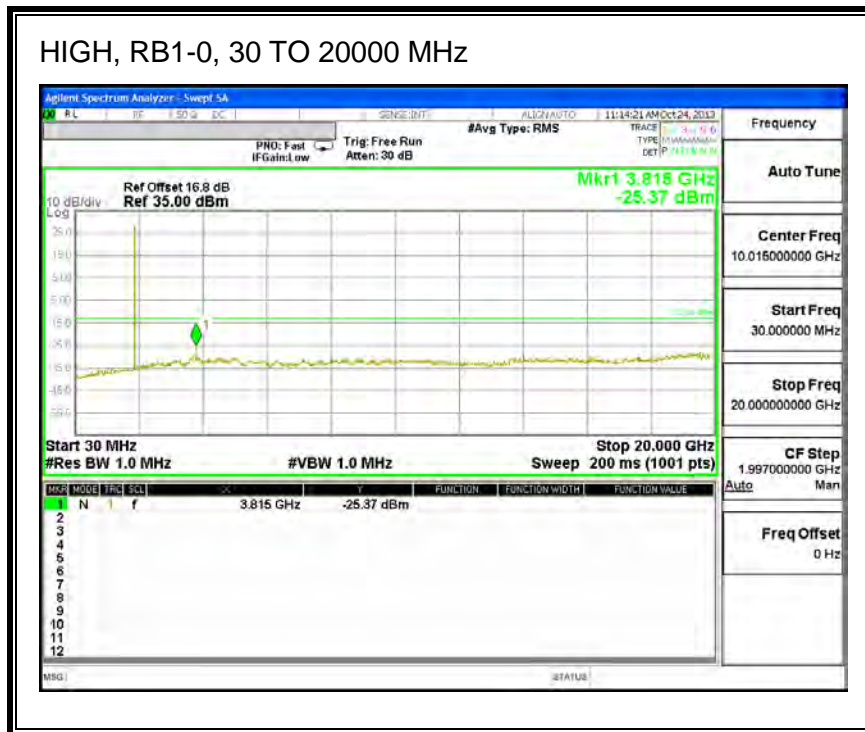
- Band 2
- Band 4
- Band 5
- Band 17

### 8.3.1. LTE BAND 2

#### Band 2 (1.4 MHz BANDWIDTH)

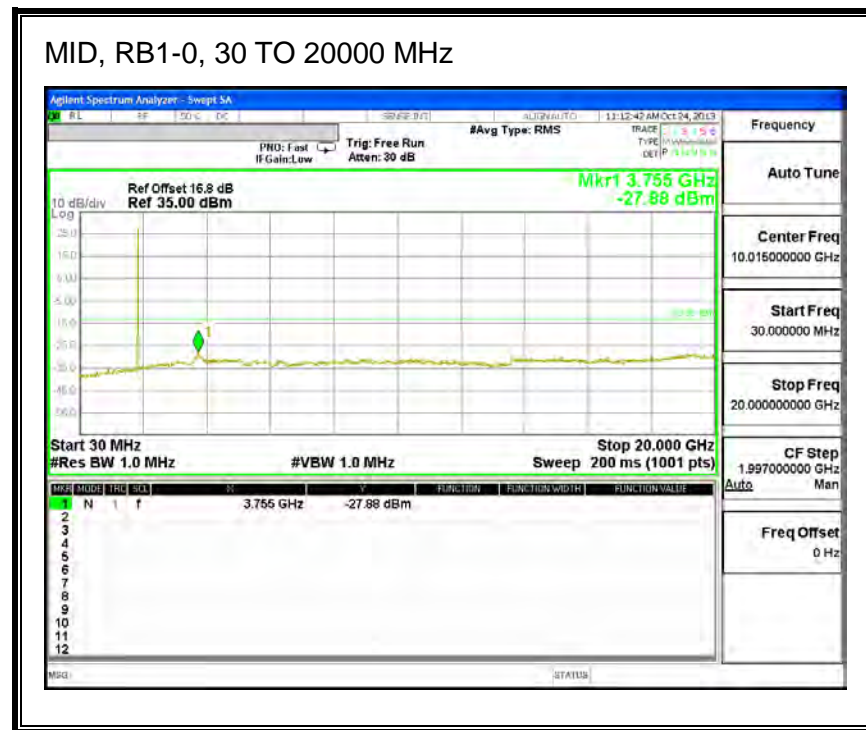
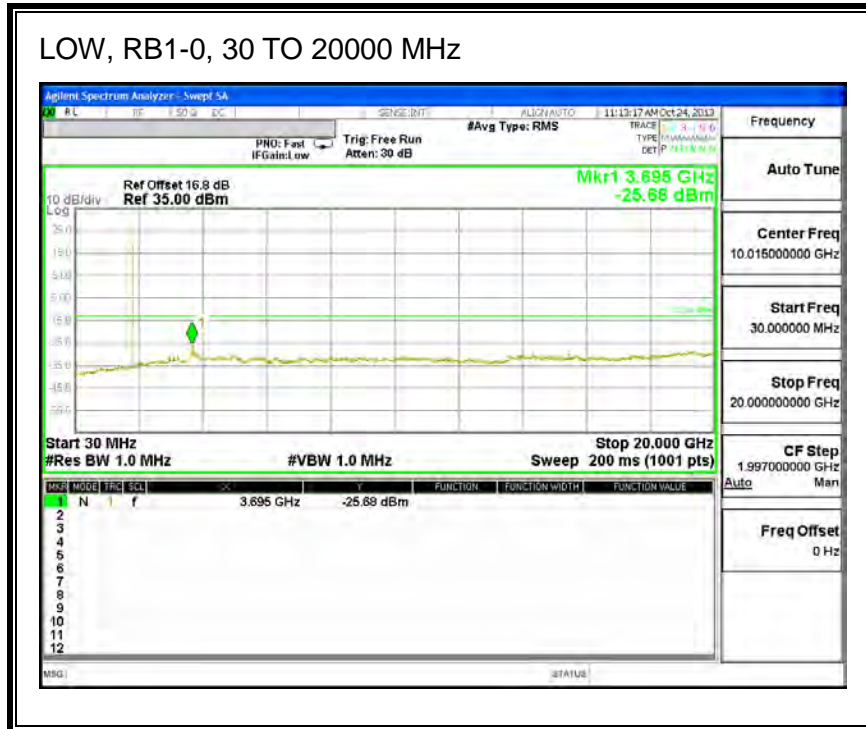
#### LTE QPSK

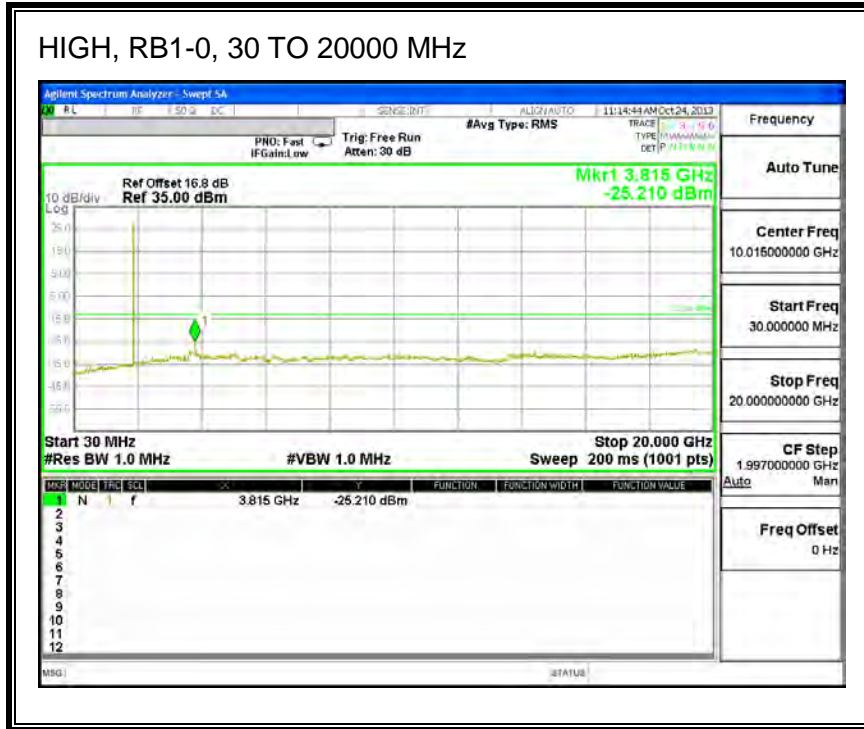




**Band 2 (1.4 MHz BANDWIDTH)**

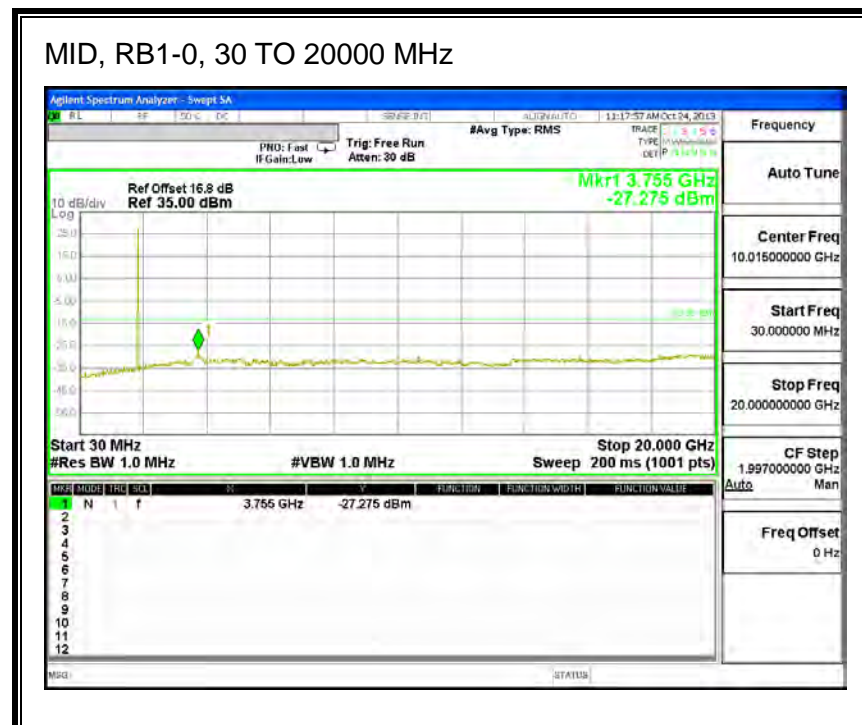
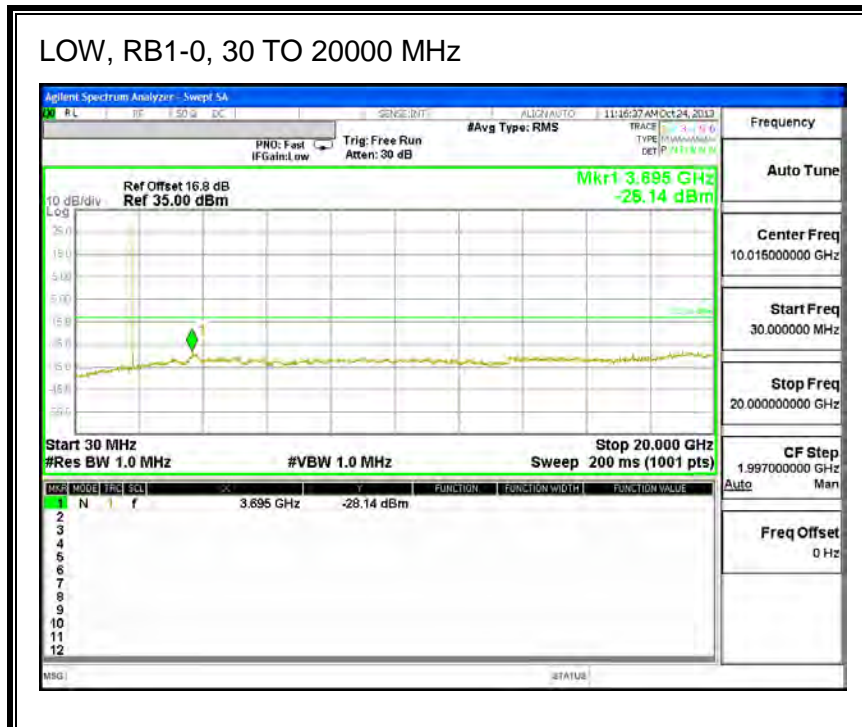
**LTE 16QAM**

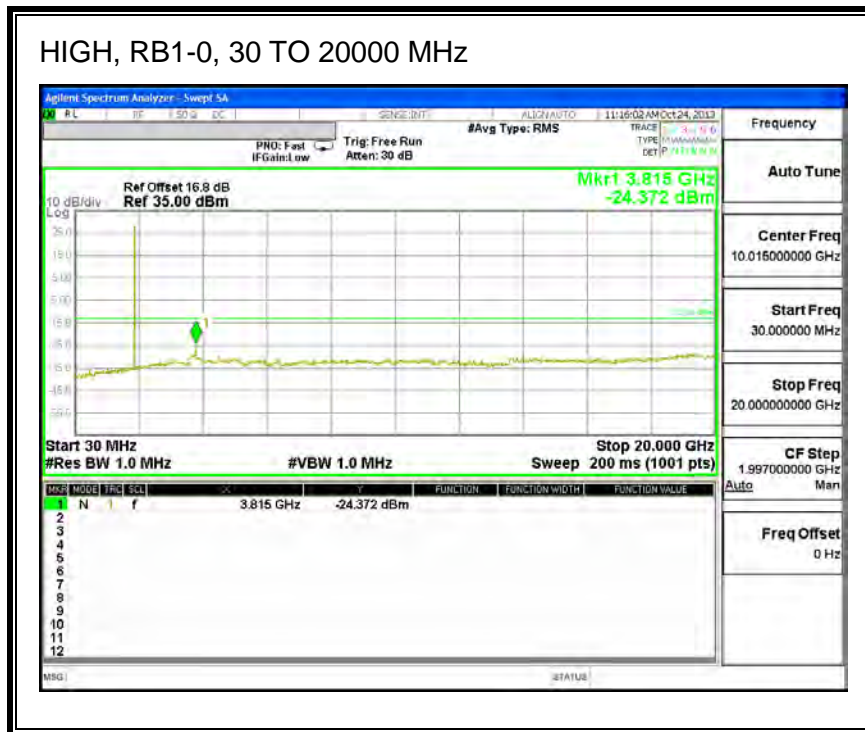




**Band 2 (3MHz BANDWIDTH)**

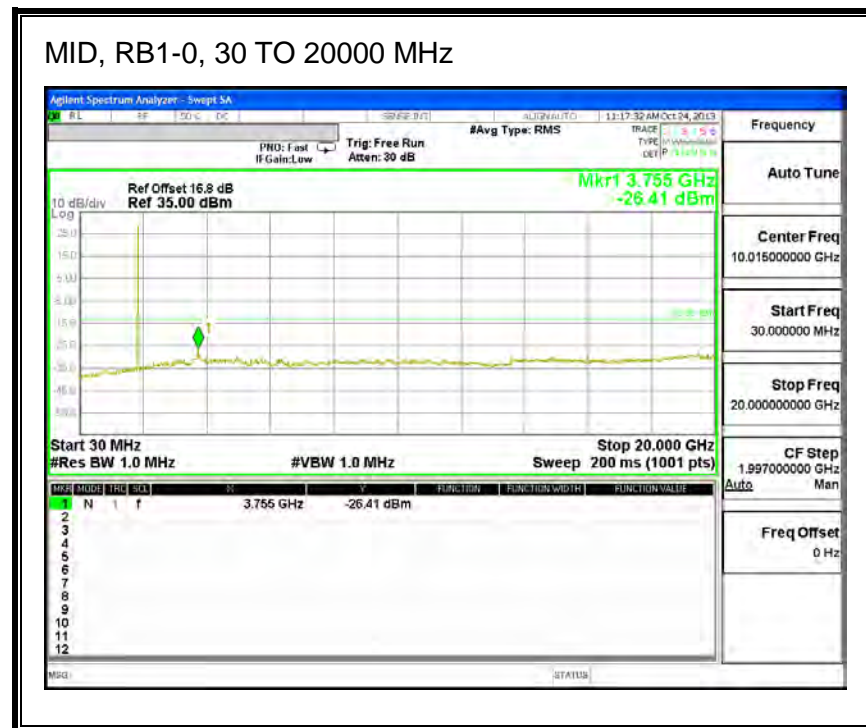
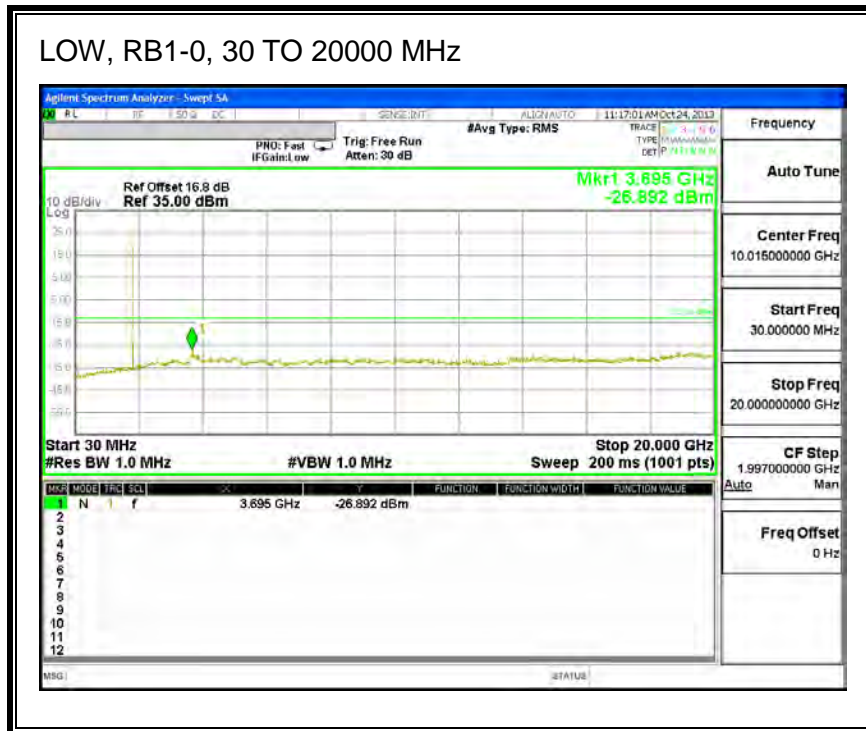
**LTE QPSK**



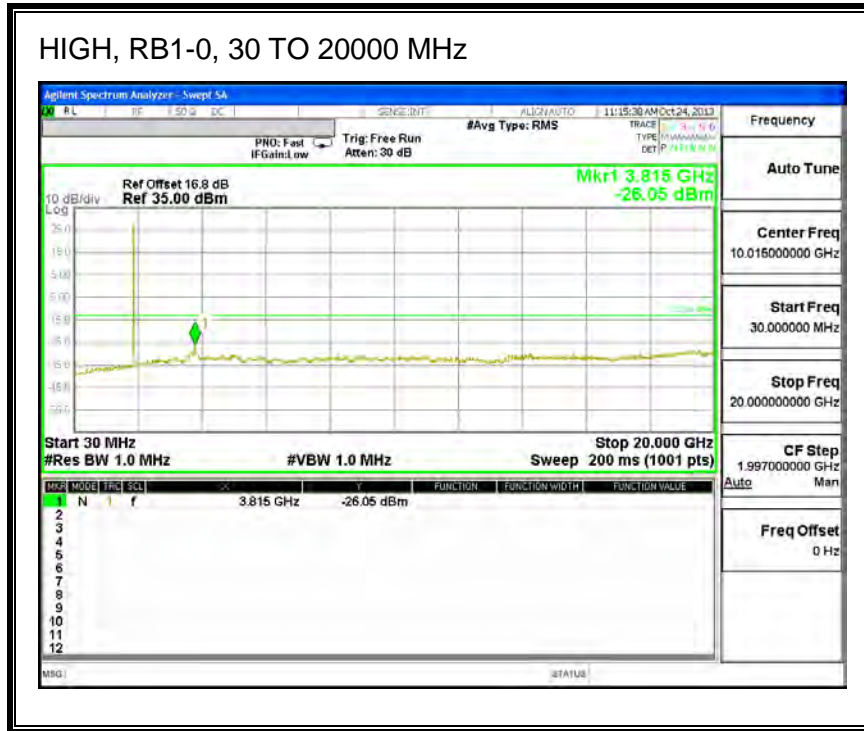


**Band 2 (3MHz BANDWIDTH)**

**LTE 16QAM**



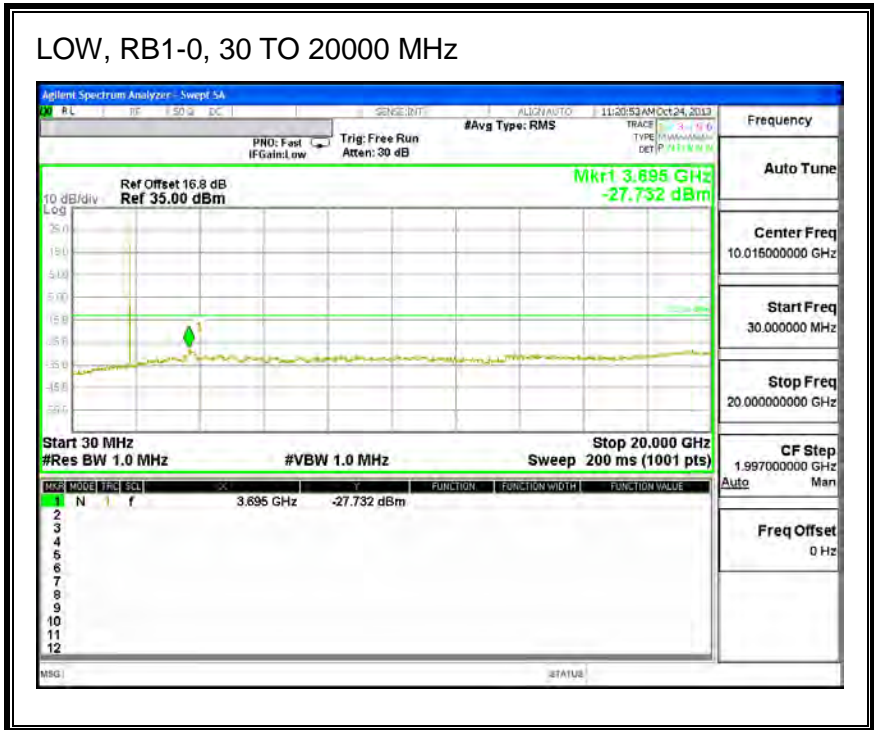




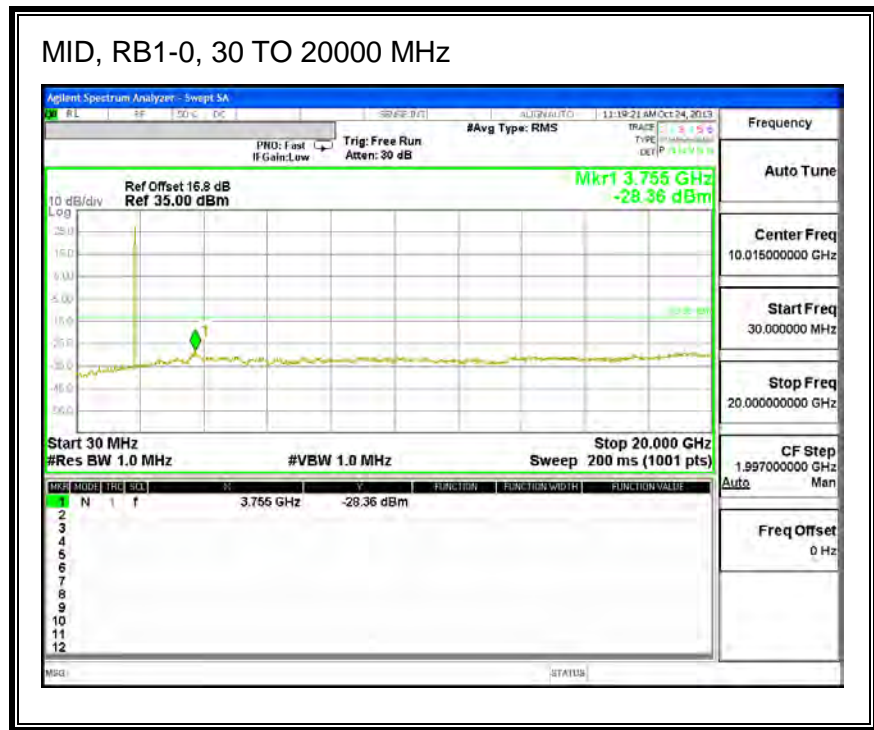
**Band 2 (5MHz BANDWIDTH)**

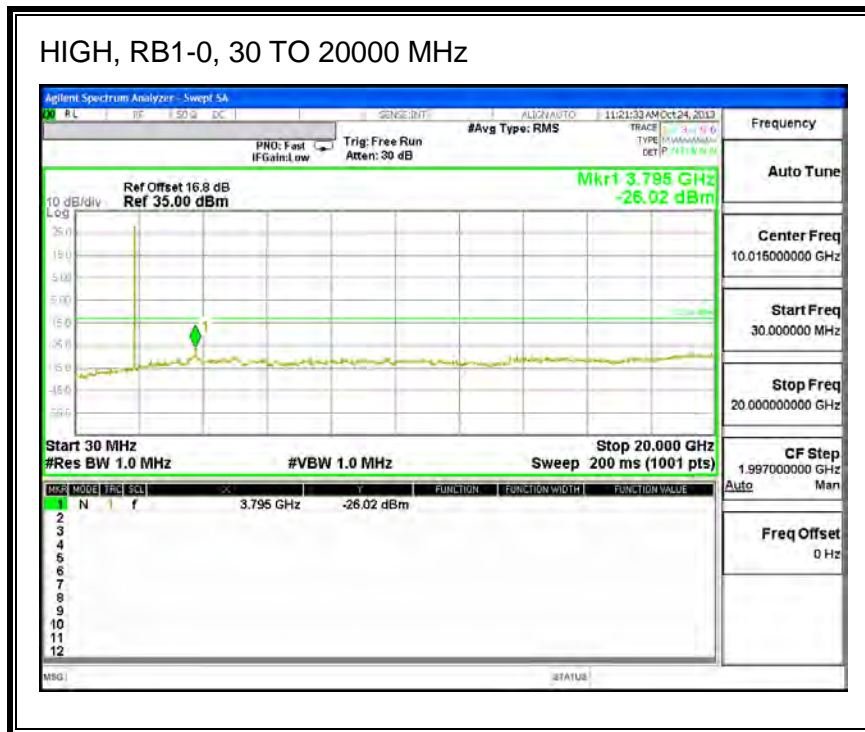
**LTE QPSK**

**LOW, RB1-0, 30 TO 20000 MHz**



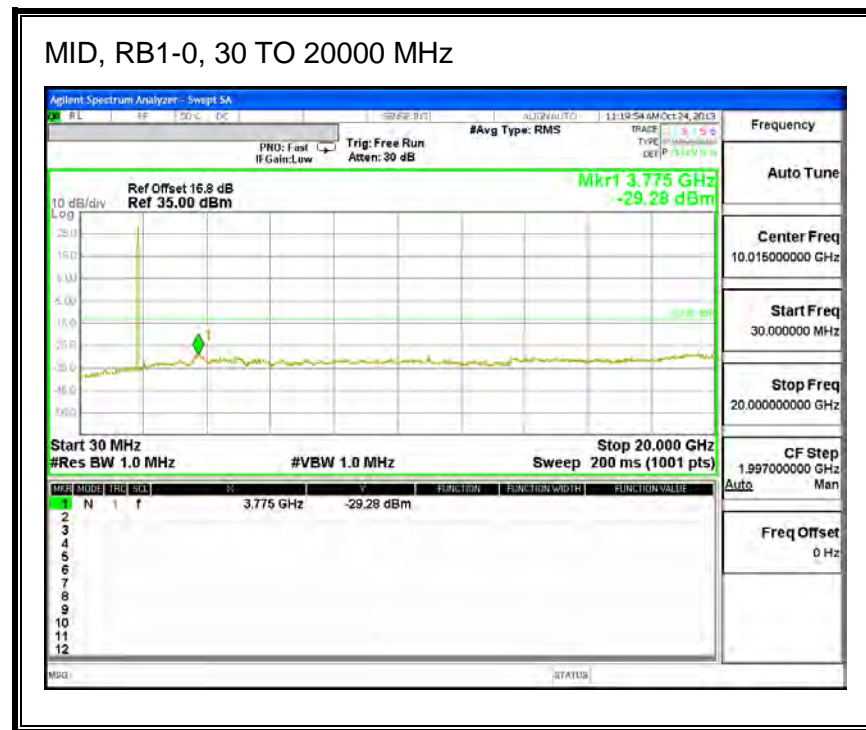
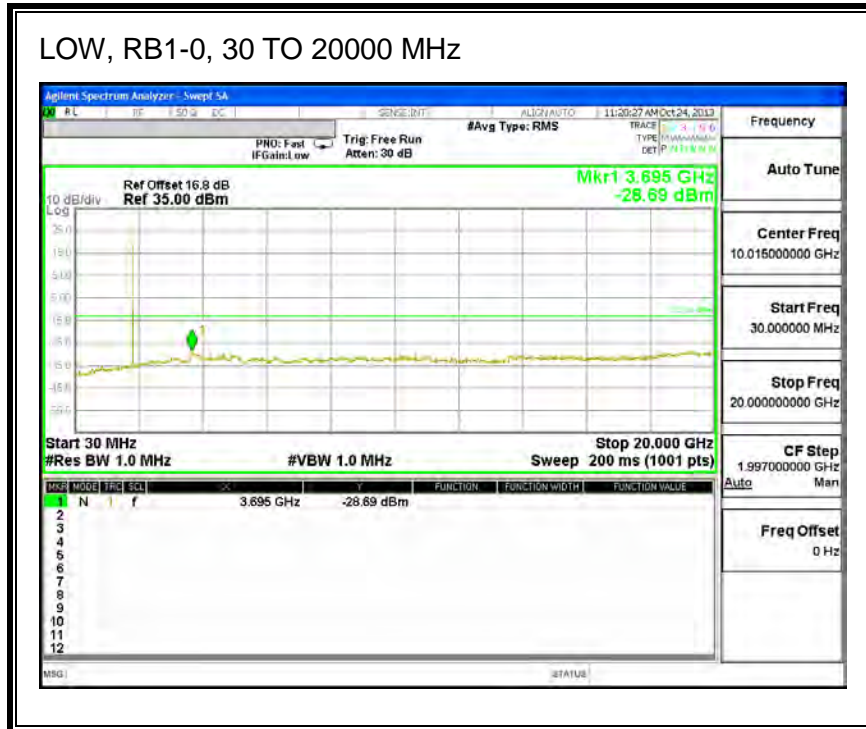
**MID, RB1-0, 30 TO 20000 MHz**

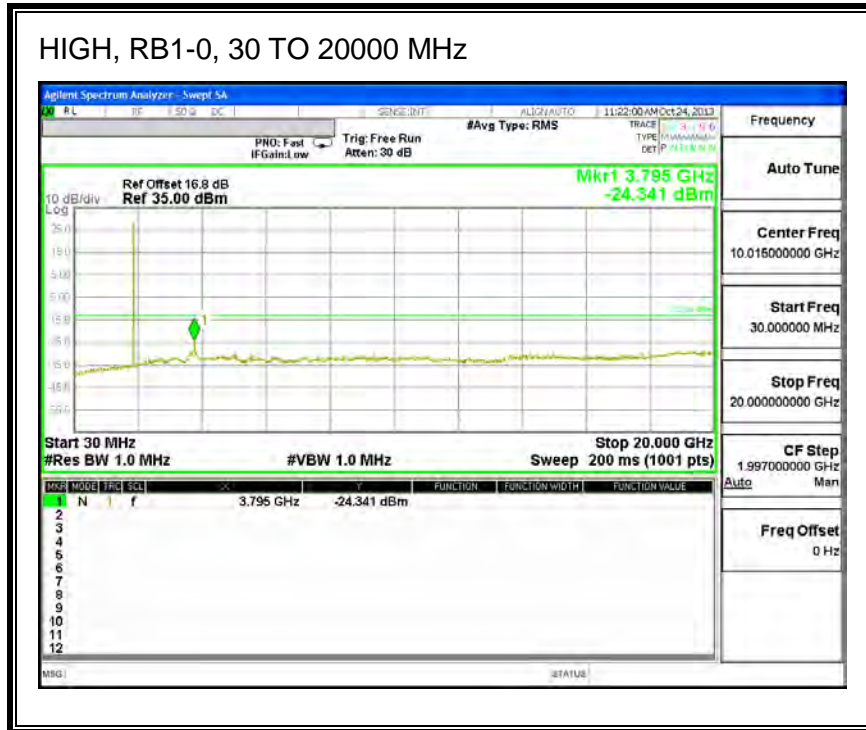




**Band 2 (5MHz BANDWIDTH)**

**LTE 16QAM**

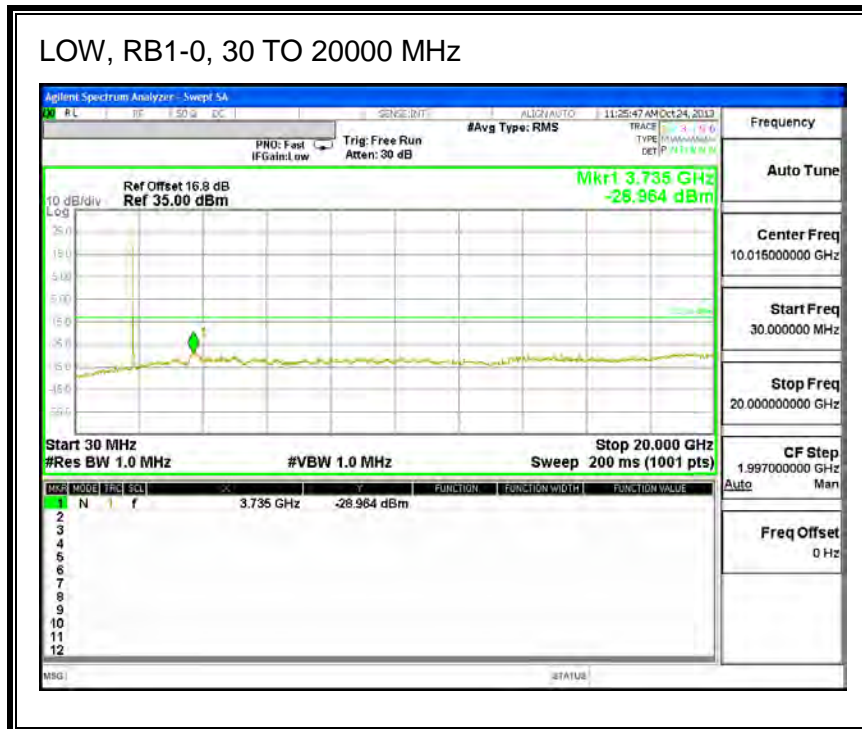




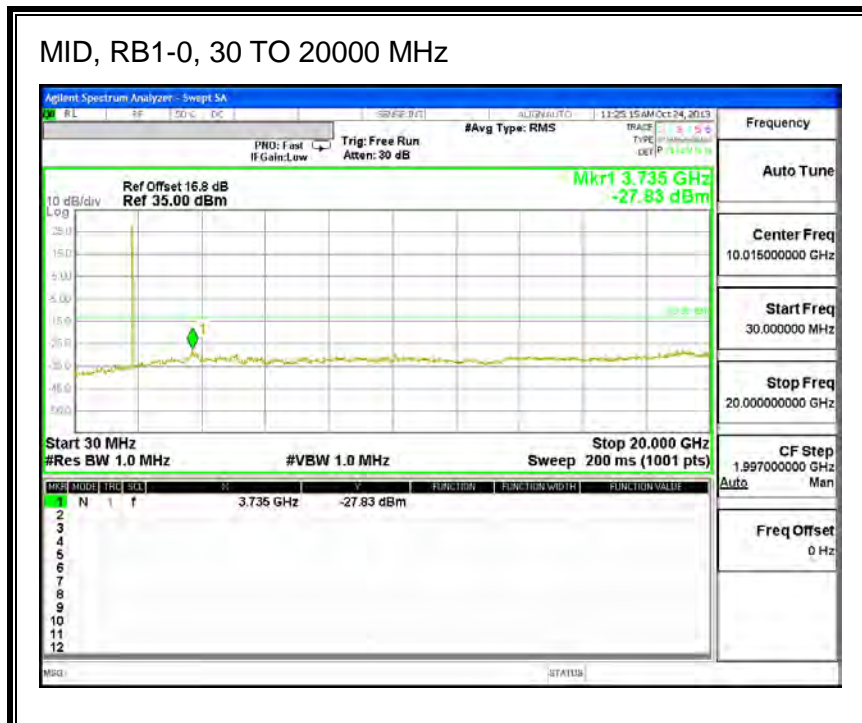
**Band 2 (10MHz BANDWIDTH)**

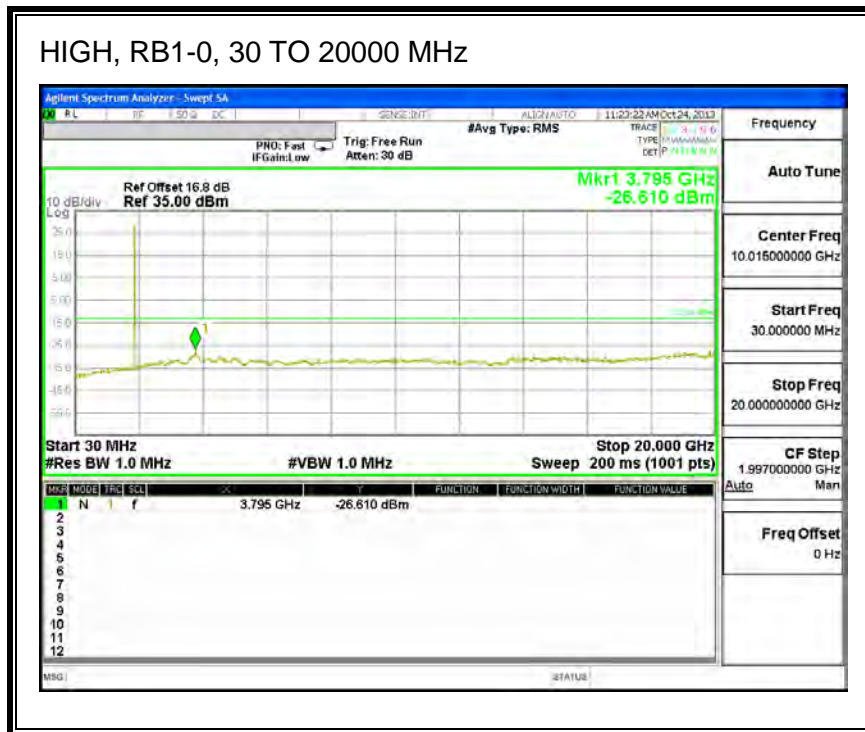
**LTE QPSK**

LOW, RB1-0, 30 TO 20000 MHz



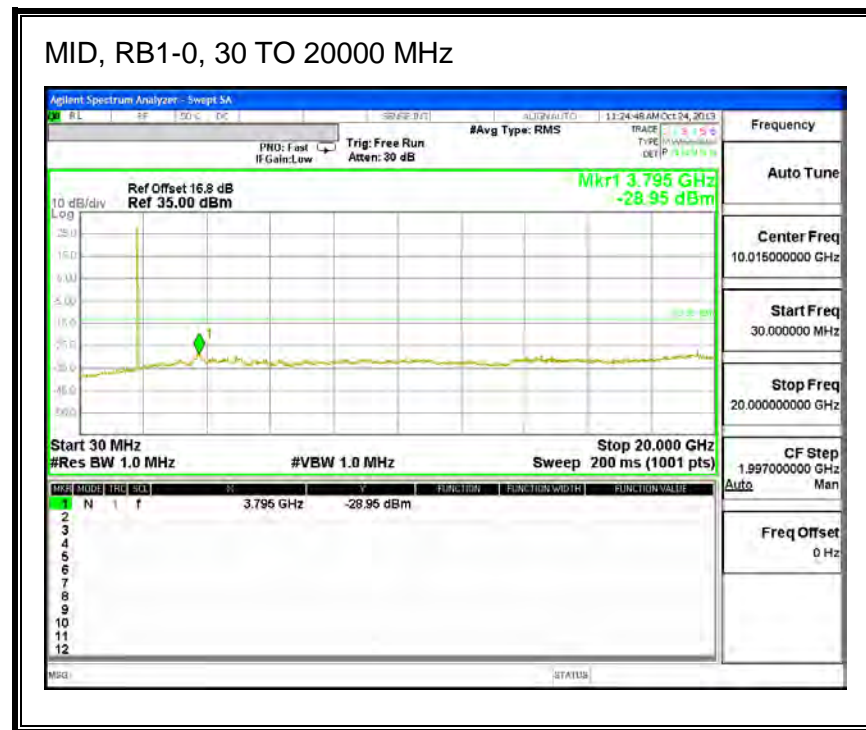
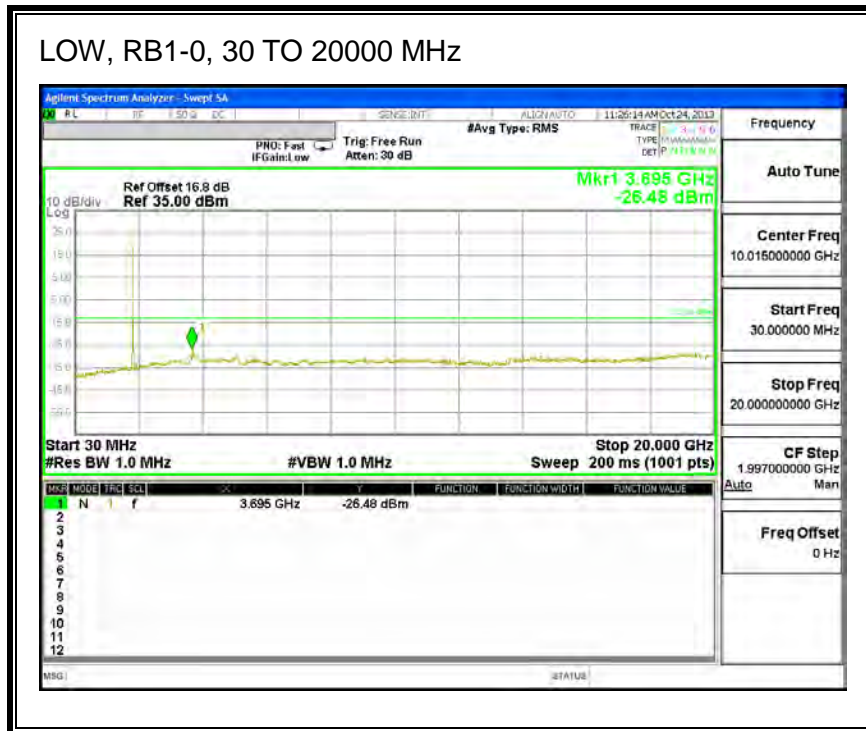
MID, RB1-0, 30 TO 20000 MHz



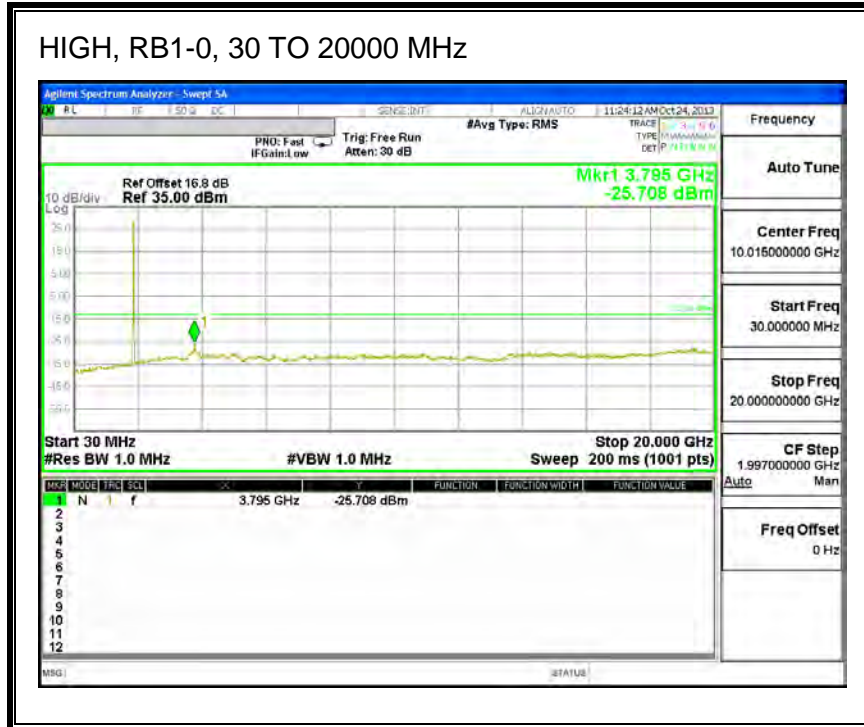


**Band 2 (10MHz BANDWIDTH)**

**LTE 16QAM**

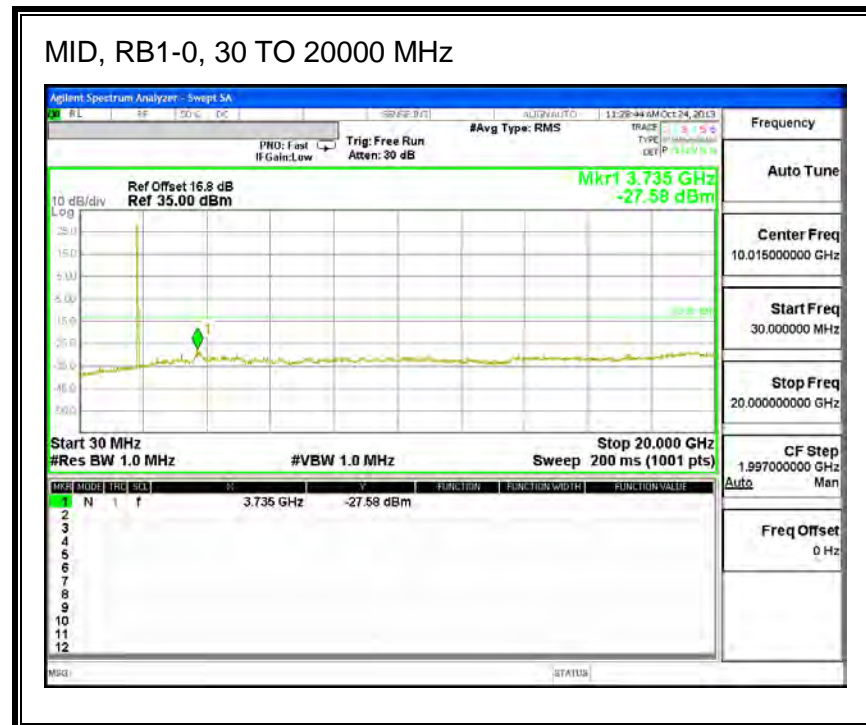
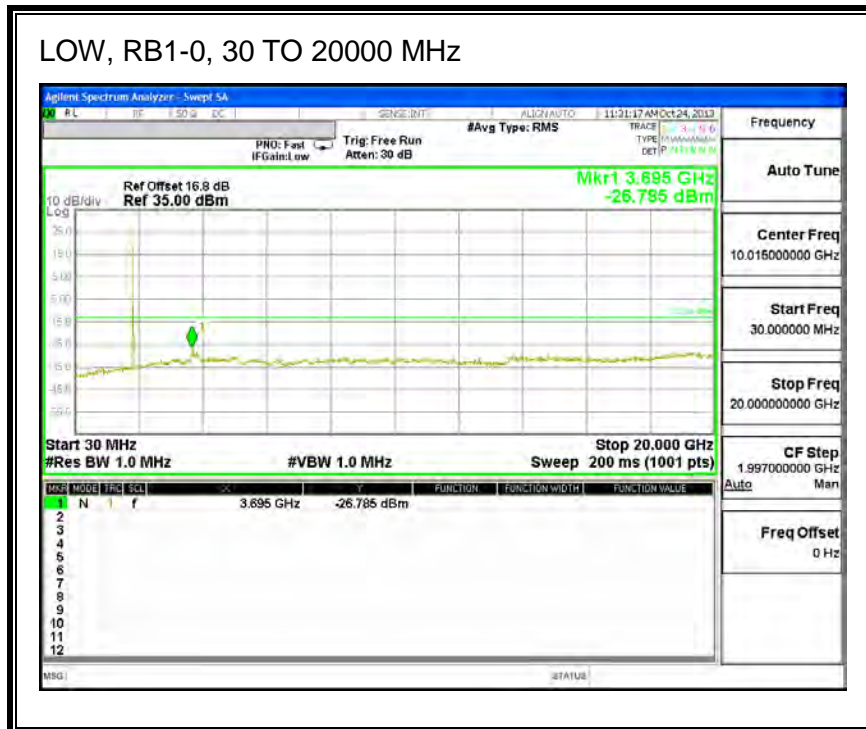


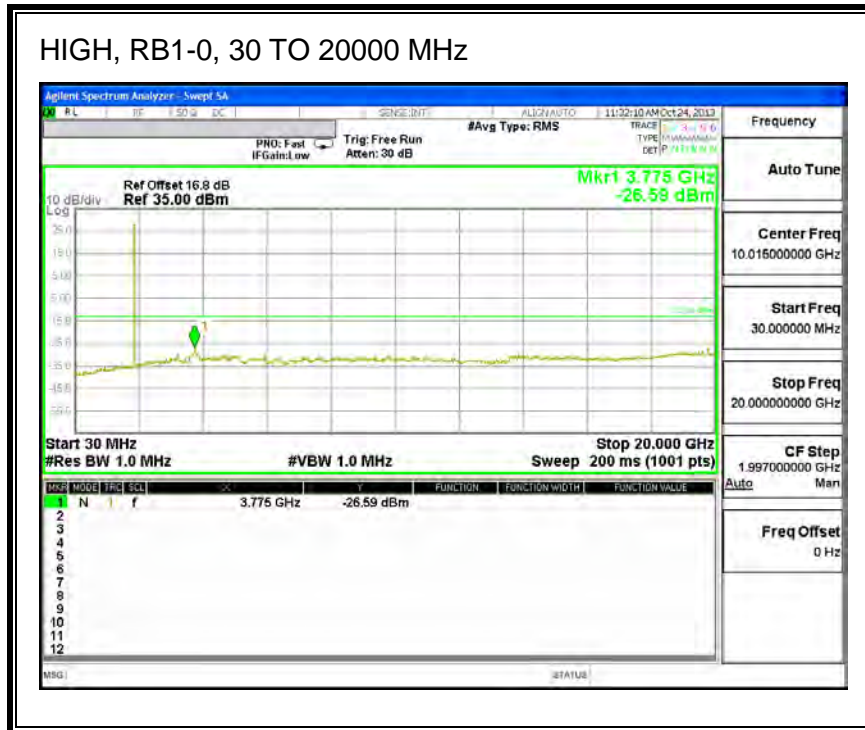




**Band 2 (15MHz BANDWIDTH)**

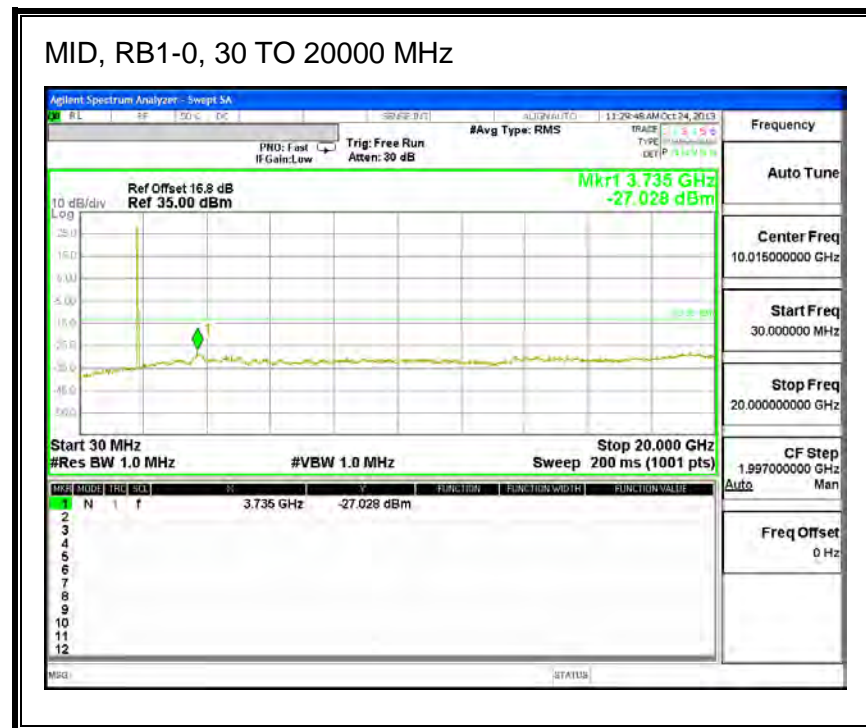
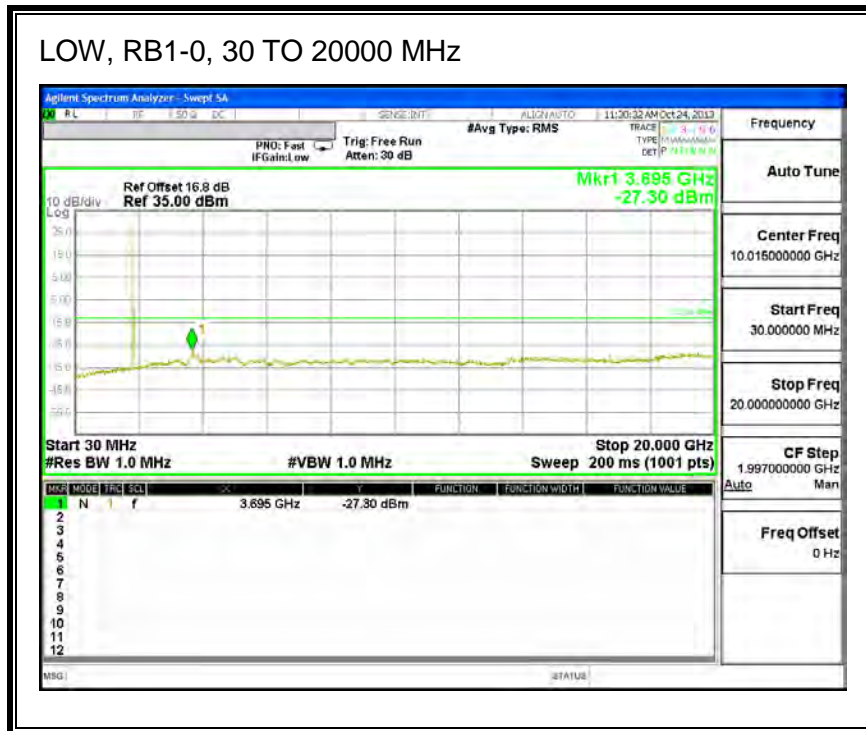
**LTE QPSK**

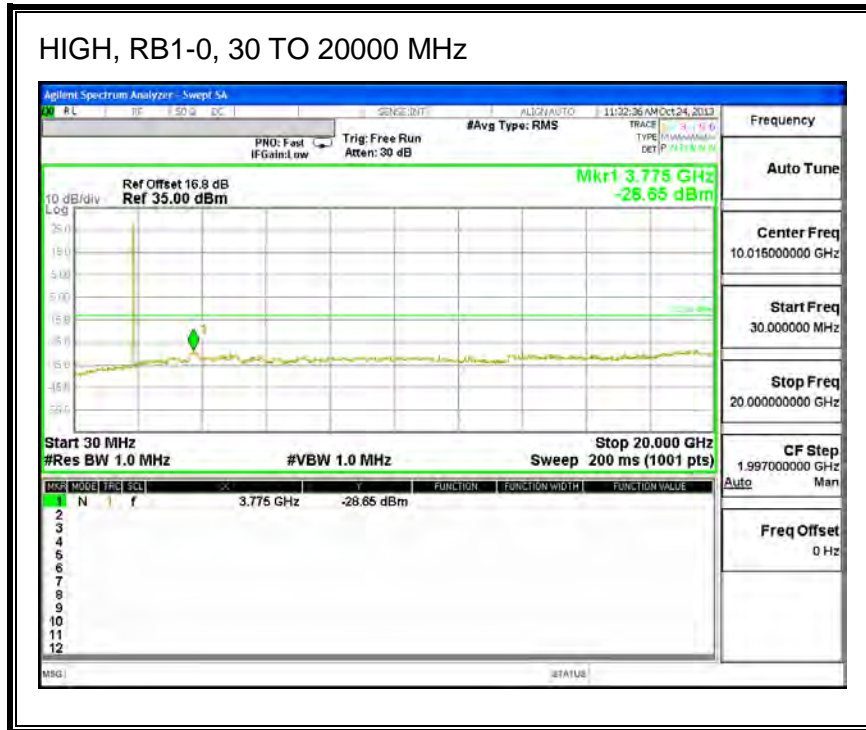




**Band 2 (15MHz BANDWIDTH)**

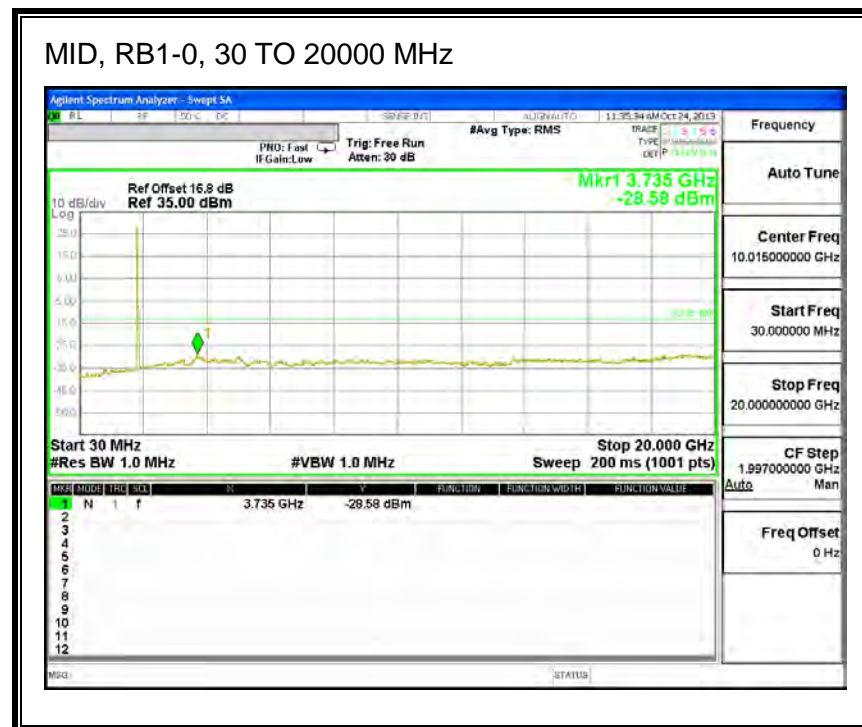
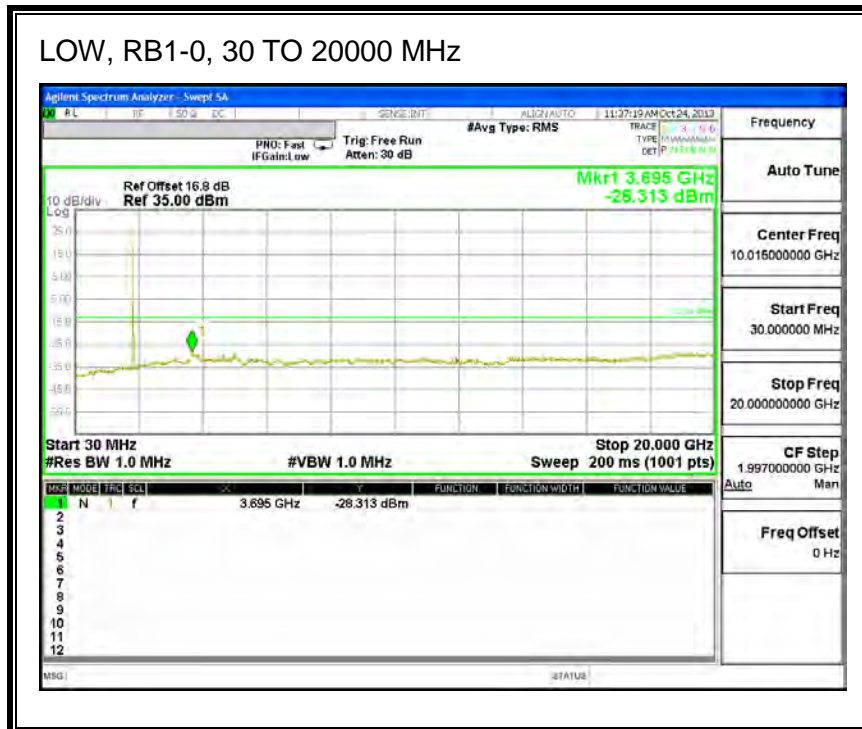
**LTE 16QAM**

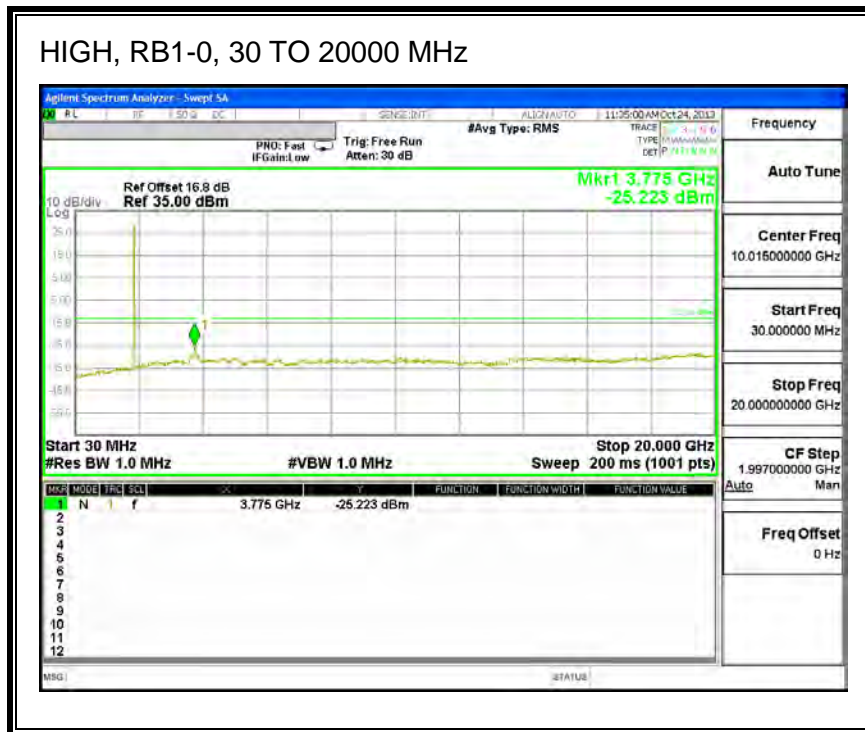




**Band 2 (20MHz BANDWIDTH)**

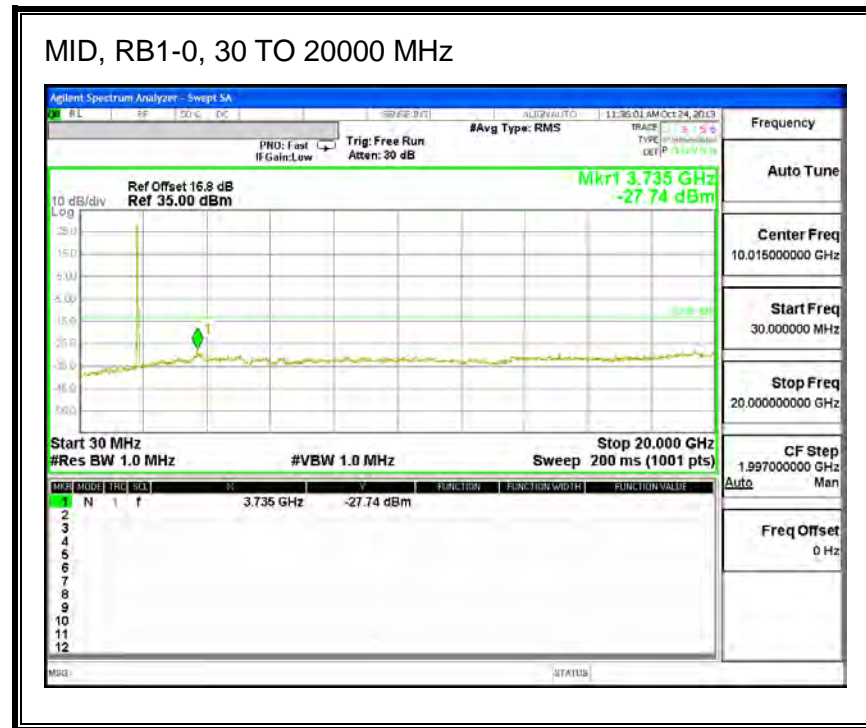
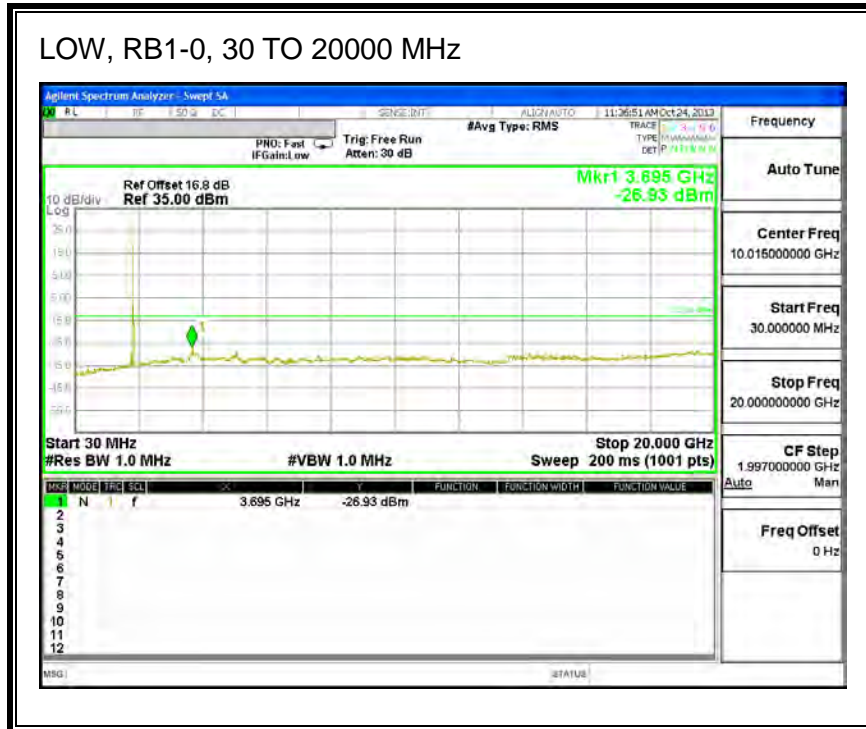
**LTE QPSK**



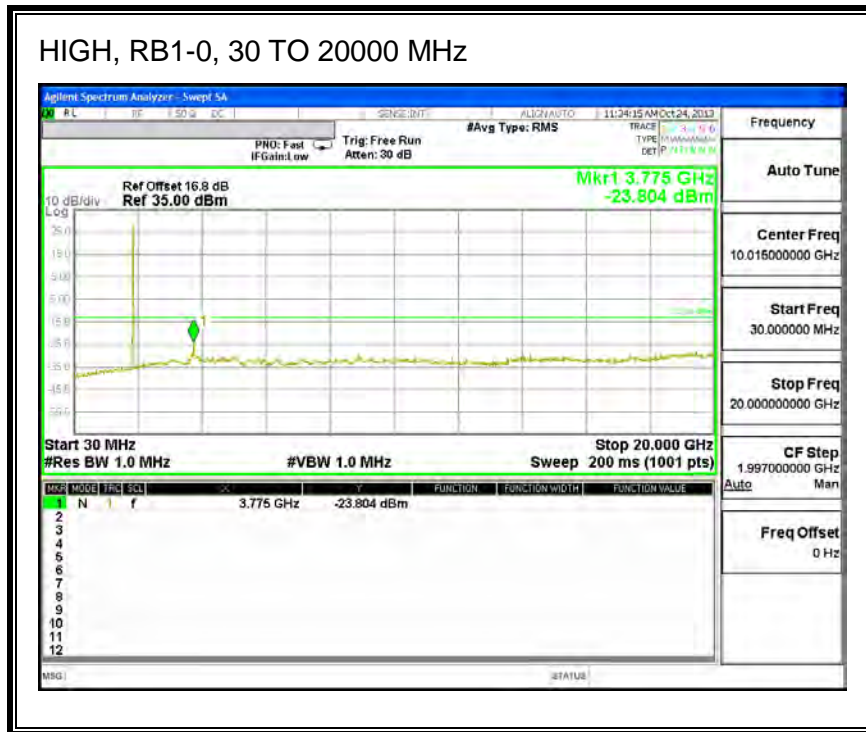


**Band 2 (20MHz BANDWIDTH)**

**LTE 16QAM**



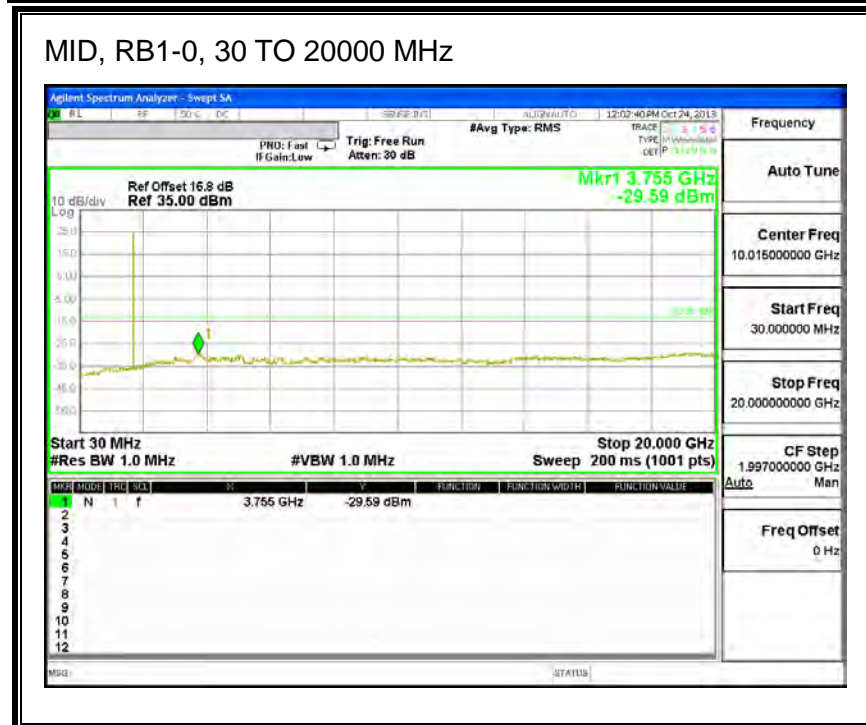
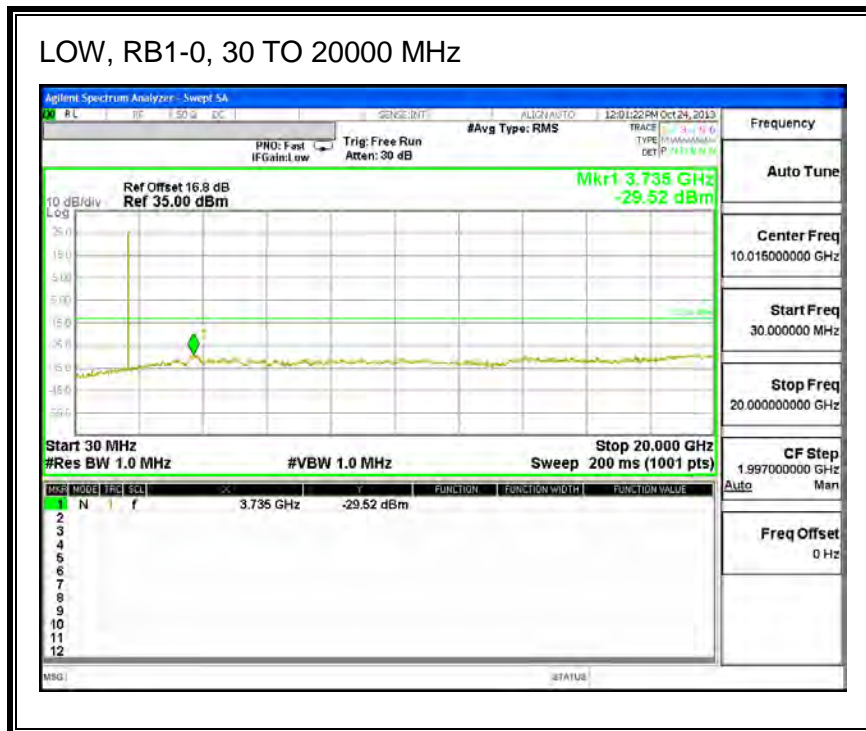


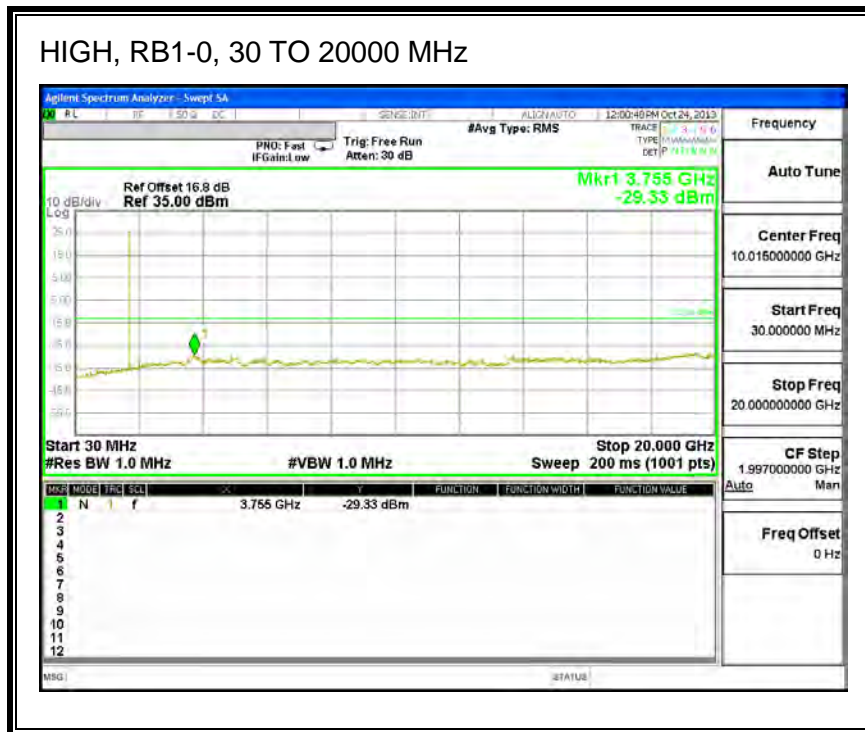


**8.3.2. LTE BAND 4**

**Band 4 (1.4 MHz BANDWIDTH)**

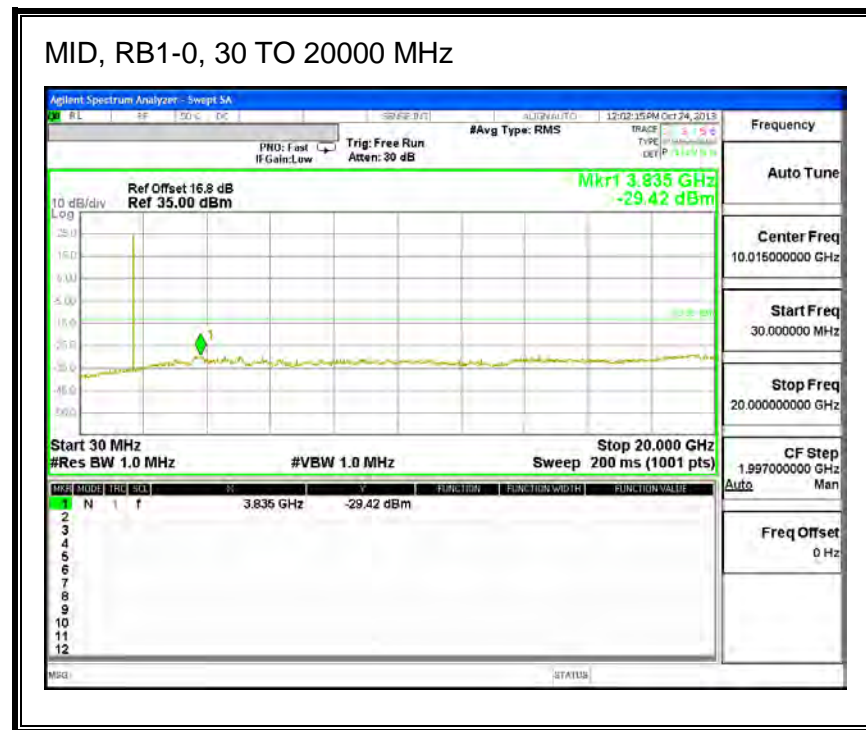
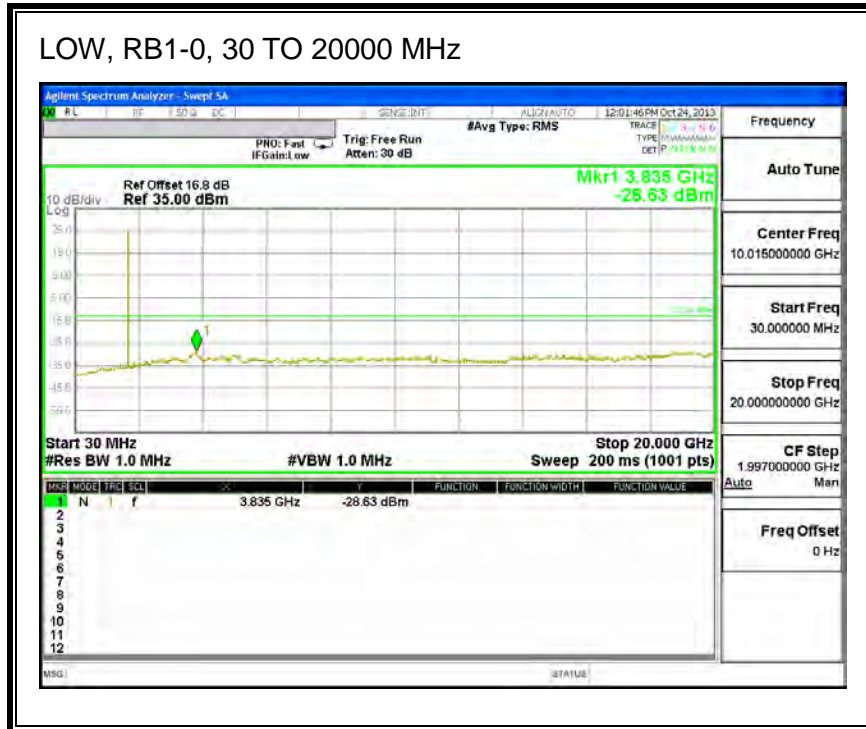
**LTE QPSK**

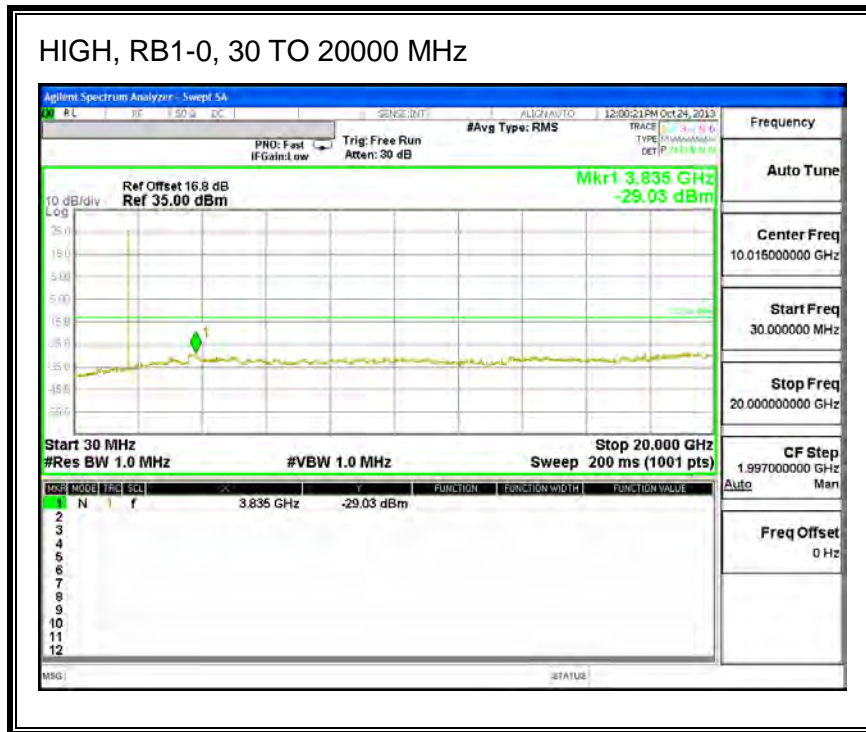




**Band 4 (1.4 MHz BANDWIDTH)**

**LTE 16QAM**





**Band 4 (3MHz BANDWIDTH)**

**LTE QPSK**

