

## **9.6. CONDUCTED SPURIOUS EMISSIONS**

### **LIMITS**

FCC §15.247 (d)

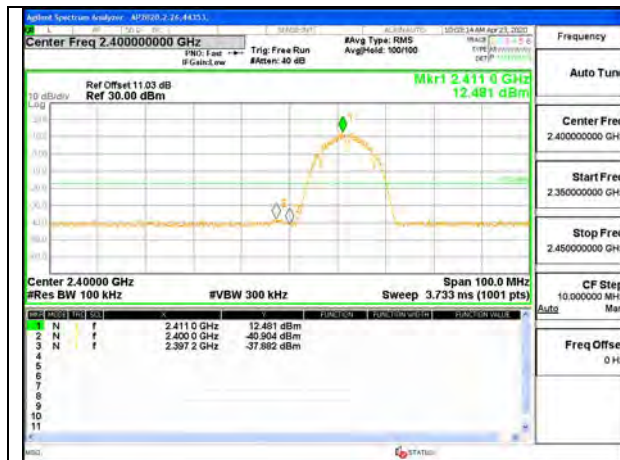
RSS-247 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

### **RESULTS**

## 9.6.1. 802.11b MODE 1TX

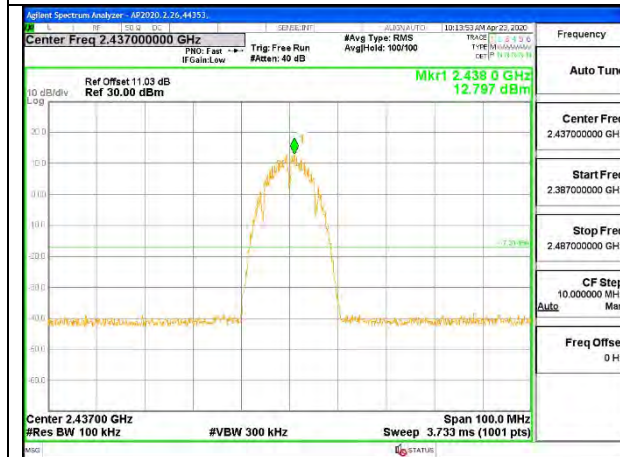
### 1TX ANT 4



LOW CHANNEL 1 BANDEDGE



OUT-OF-BAND LOW CHANNEL 1



MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 11 BANDEDGE



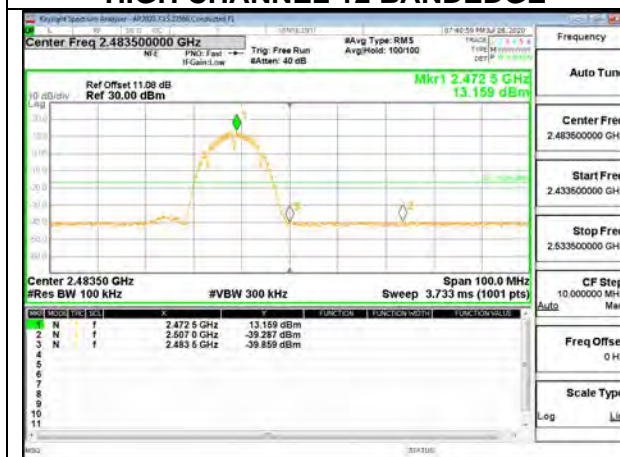
OUT-OF-BAND HIGH CHANNEL 11



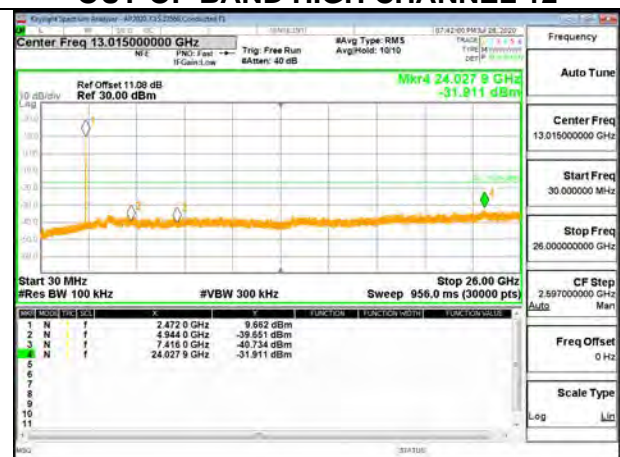
**HIGH CHANNEL 12 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 12**



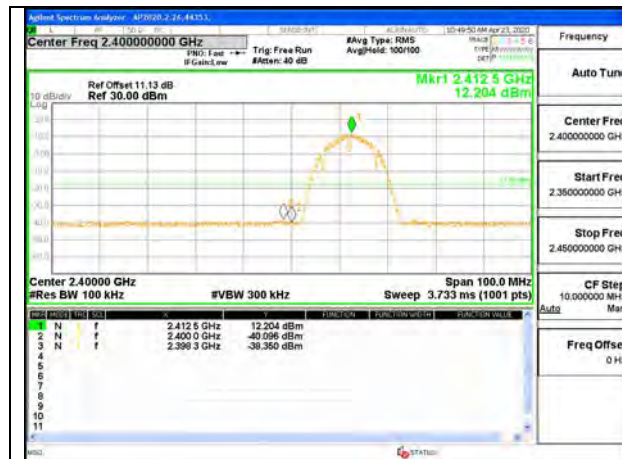
**HIGH CHANNEL 13 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 13**



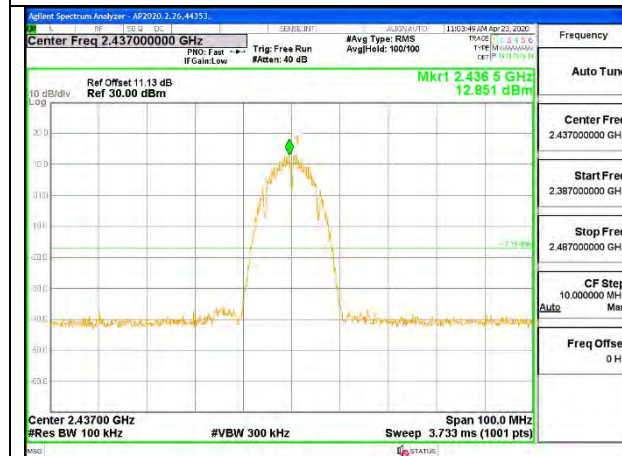
### 1TX ANT 3



LOW CHANNEL 1 BANDEDGE



OUT-OF-BAND LOW CHANNEL 1



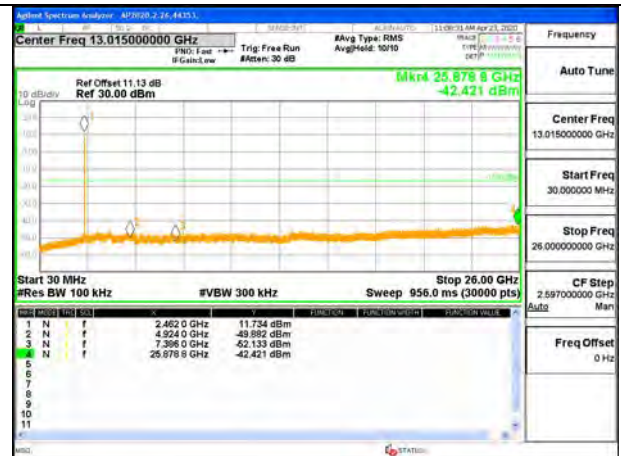
MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



**HIGH CHANNEL 12 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 12**



**HIGH CHANNEL 13 BANDEDGE**

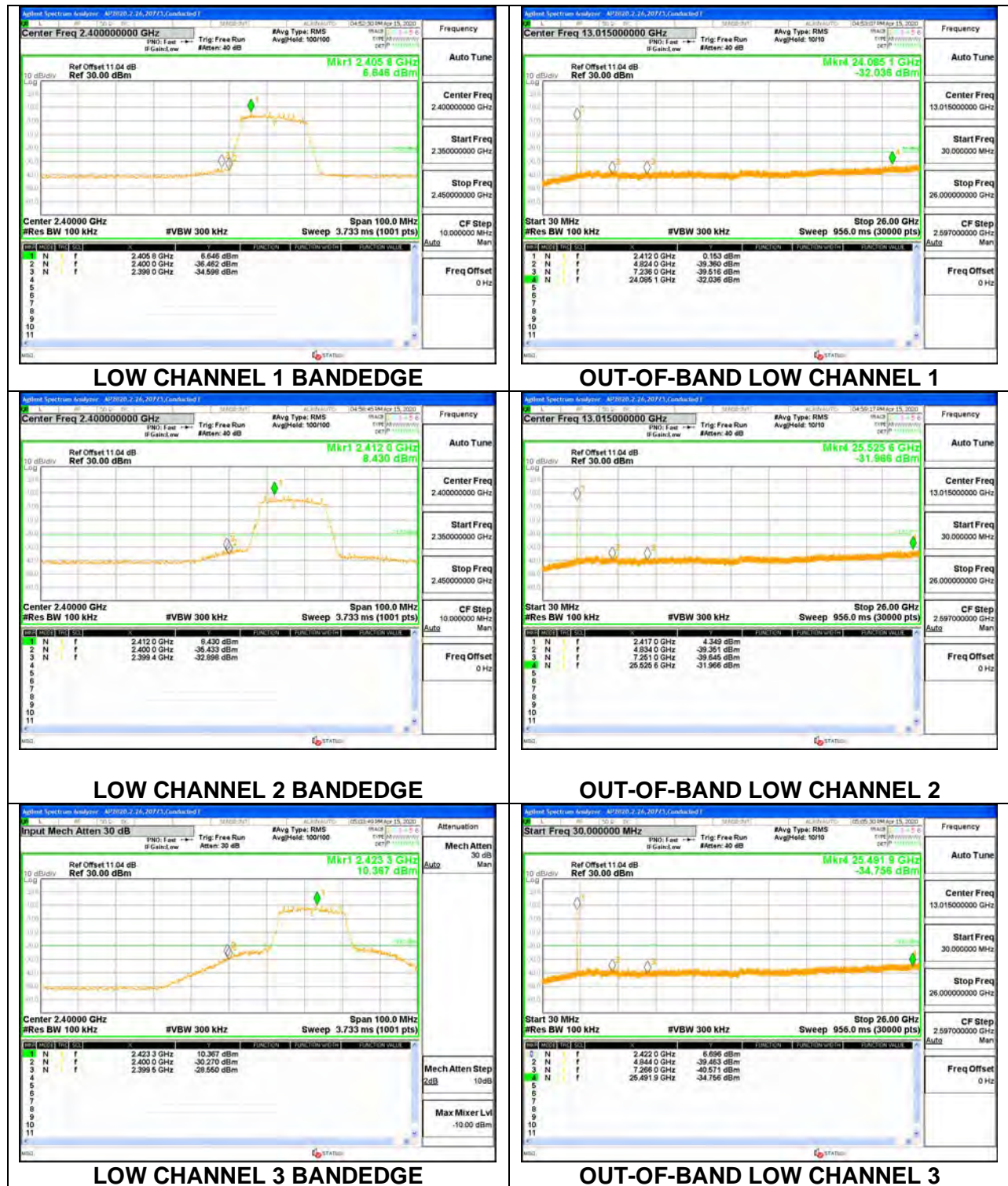


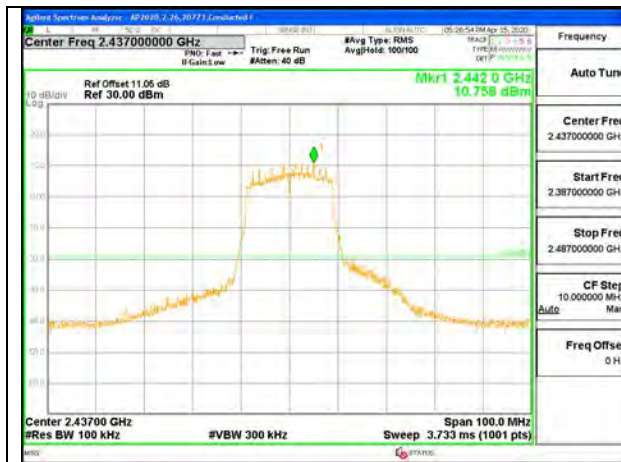
**OUT-OF-BAND HIGH CHANNEL 13**



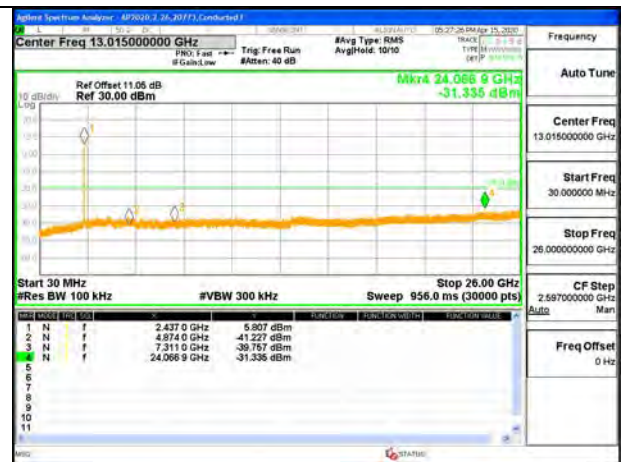
## 9.6.2. 802.11n HT20 MODE

### 1TX ANT 4





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10





**HIGH CHANNEL 11 BANDEDGE**



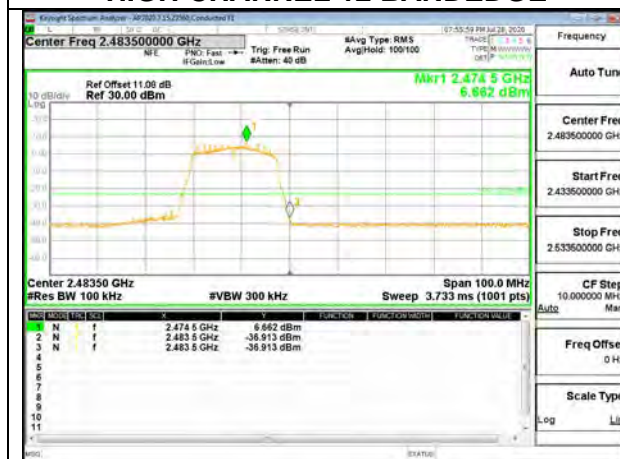
**OUT-OF-BAND HIGH CHANNEL 11**



**HIGH CHANNEL 12 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 12**



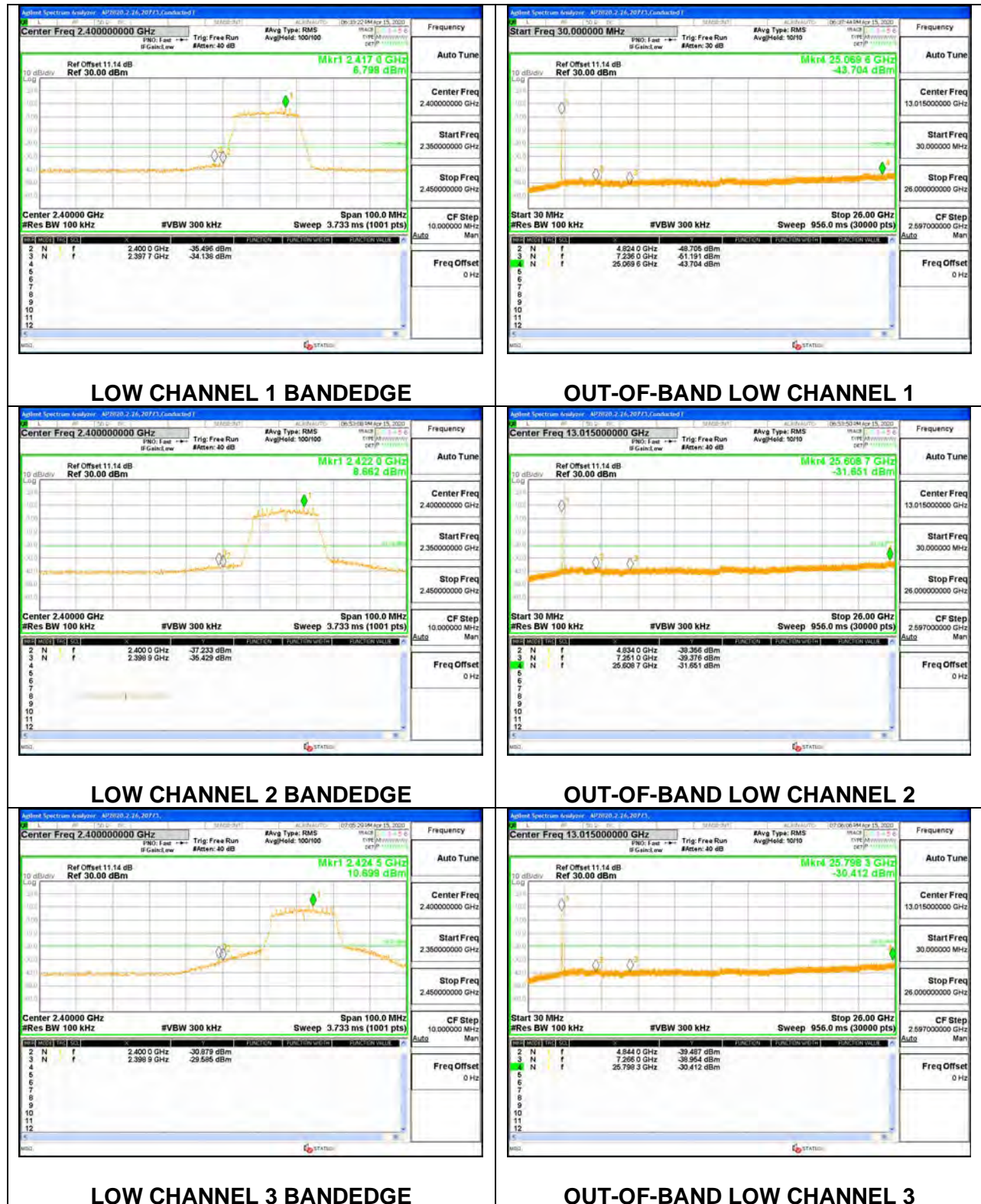
**HIGH CHANNEL 13 BANDEDGE**

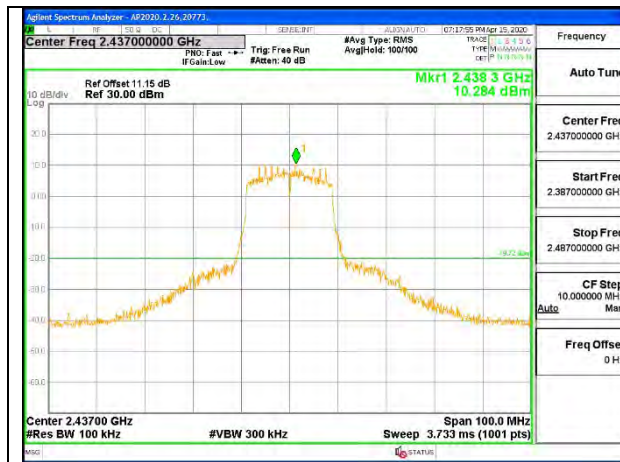


**OUT-OF-BAND HIGH CHANNEL 13**

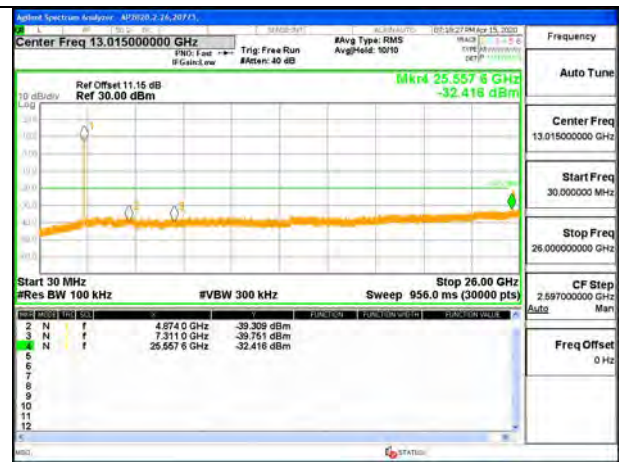


# 1TX ANT 3





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE

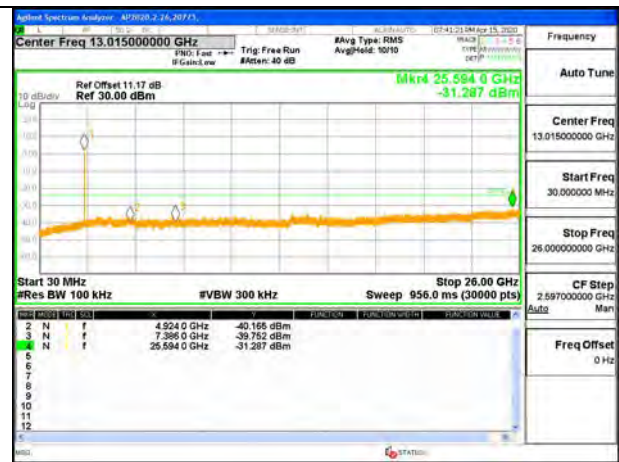


OUT-OF-BAND HIGH CHANNEL 10





HIGH CHANNEL 11 BANDEDGE



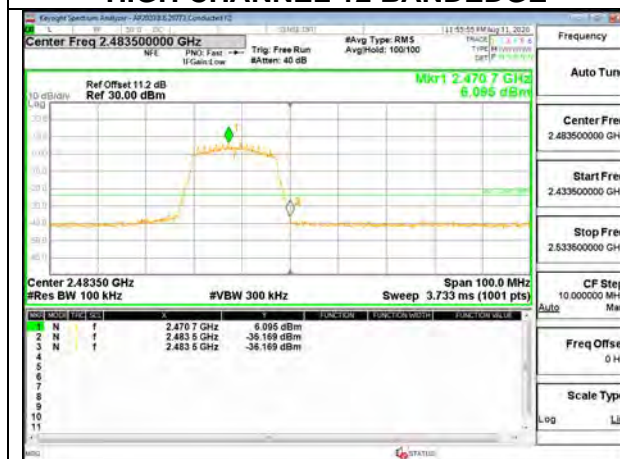
OUT-OF-BAND HIGH CHANNEL 11



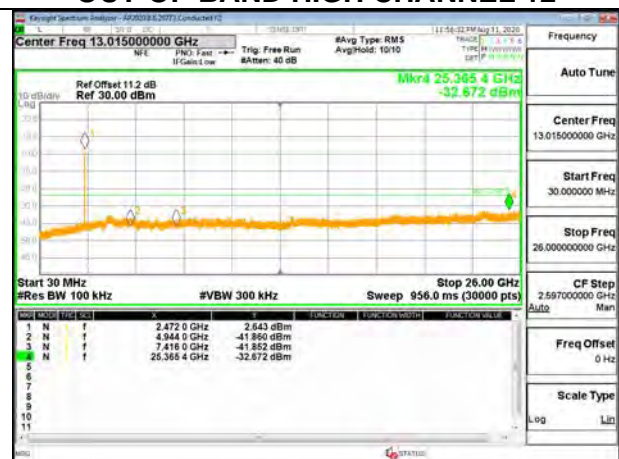
HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

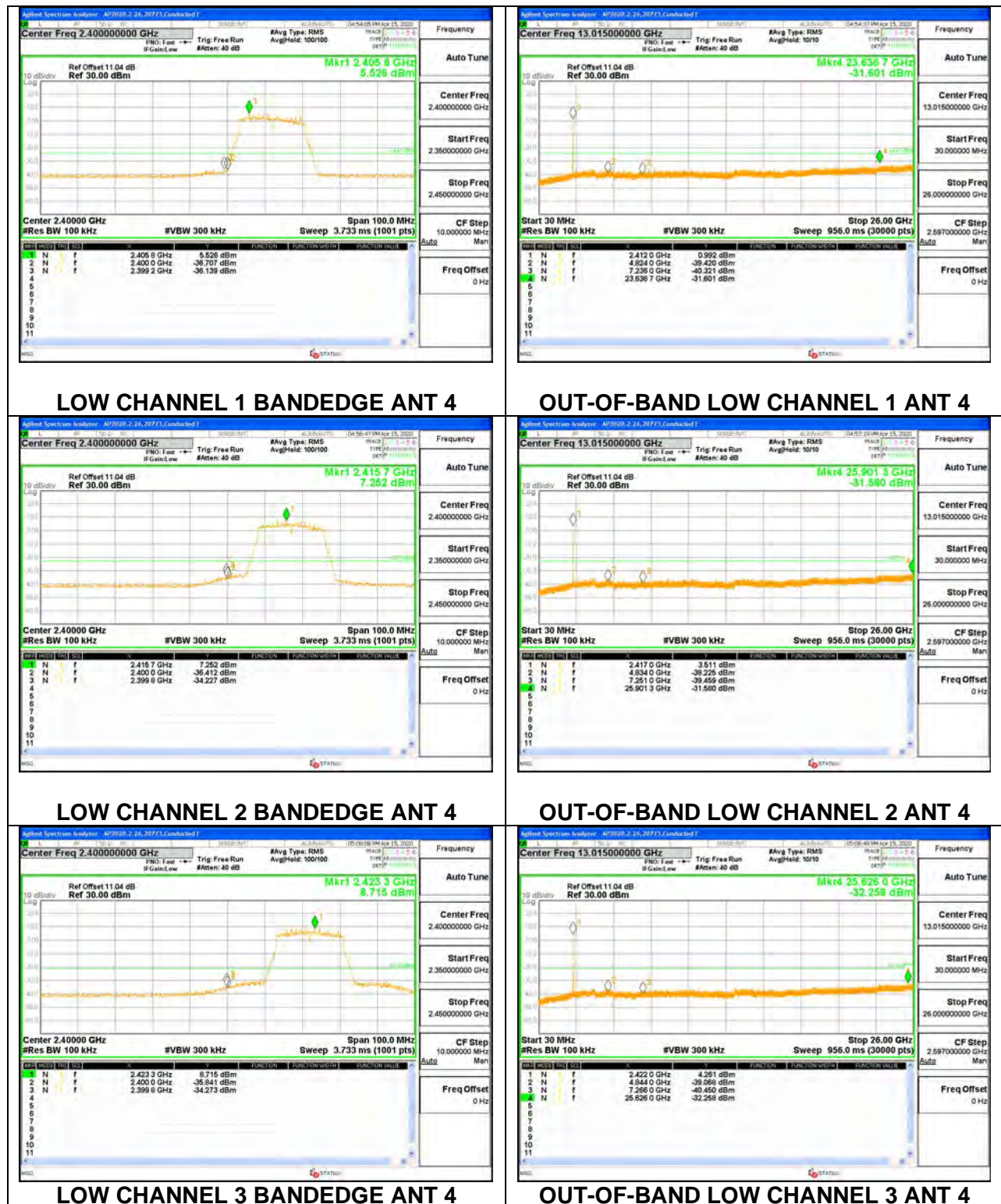


HIGH CHANNEL 13 BANDEDGE

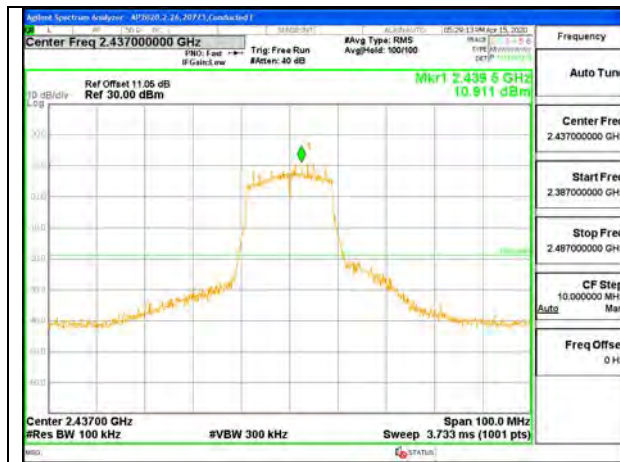


OUT-OF-BAND HIGH CHANNEL 13

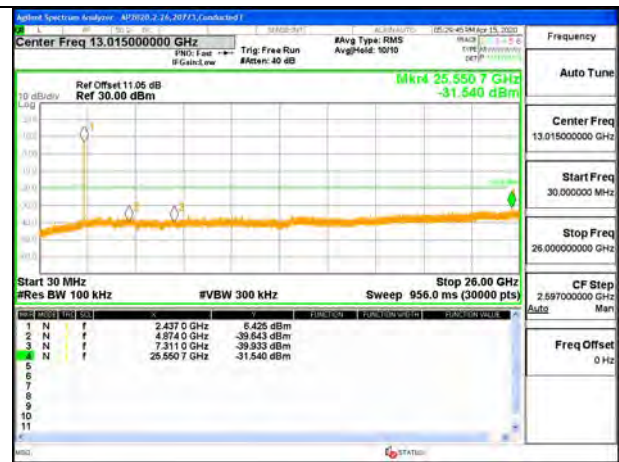
### 9.6.3. 802.11n HT20 MODE 2TX 2TX ANT 4 + ANT 3 CDD







**MID CHANNEL REFERENCE LEVEL ANT 4**



**OUT-OF-BAND MID CHANNEL ANT 4**



**HIGH CHANNEL 9 BANDEDGE ANT 4**



**OUT-OF-BAND HIGH CHANNEL 9 ANT 4**



**HIGH CHANNEL 10 BANDEDGE ANT 4**



**OUT-OF-BAND HIGH CHANNEL 10 ANT 4**



HIGH CHANNEL 11 BANDEDGE ANT 4



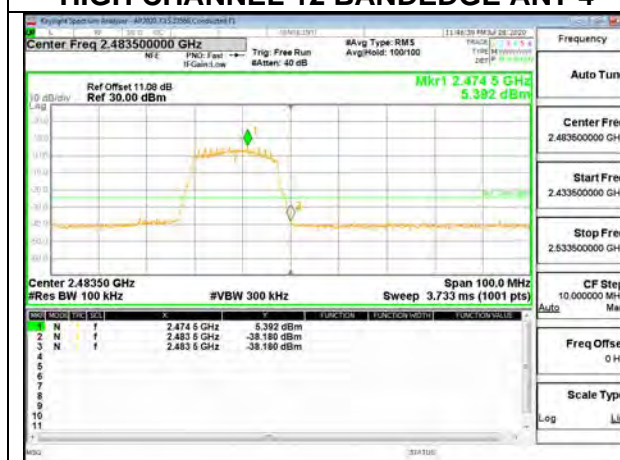
OUT-OF-BAND HIGH CHANNEL 11 ANT 4



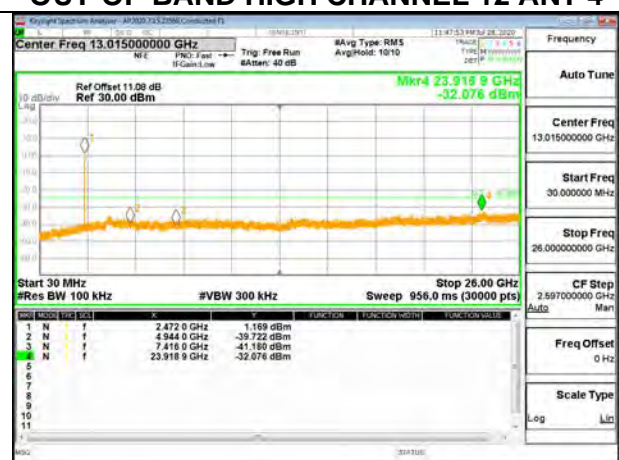
HIGH CHANNEL 12 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 12 ANT 4



HIGH CHANNEL 13 BANDEDGE ANT 4

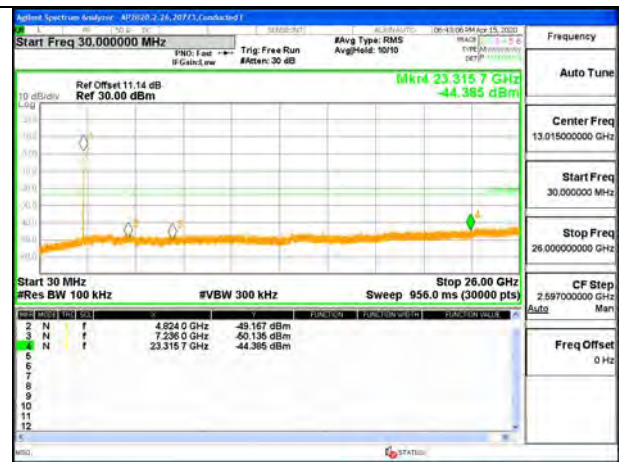


OUT-OF-BAND HIGH CHANNEL 13 ANT 4





**LOW CHANNEL 1 BANDEDGE ANT 3**



**OUT-OF-BAND LOW CHANNEL 1 ANT 3**



**LOW CHANNEL 2 BANDEDGE ANT 3**



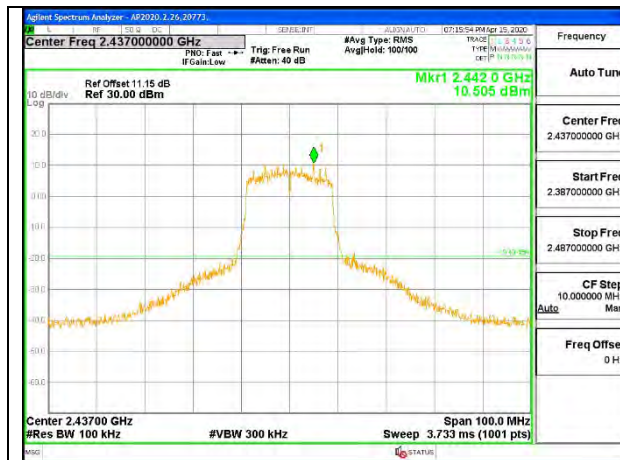
**OUT-OF-BAND LOW CHANNEL 2 ANT 3**



**LOW CHANNEL 3 BANDEDGE ANT 3**



**OUT-OF-BAND LOW CHANNEL 3 ANT 3**



MID CHANNEL REFERENCE LEVEL ANT 3



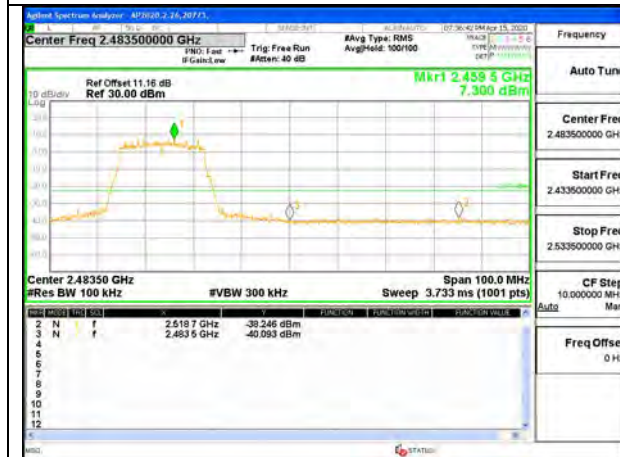
OUT-OF-BAND MID CHANNEL ANT 3



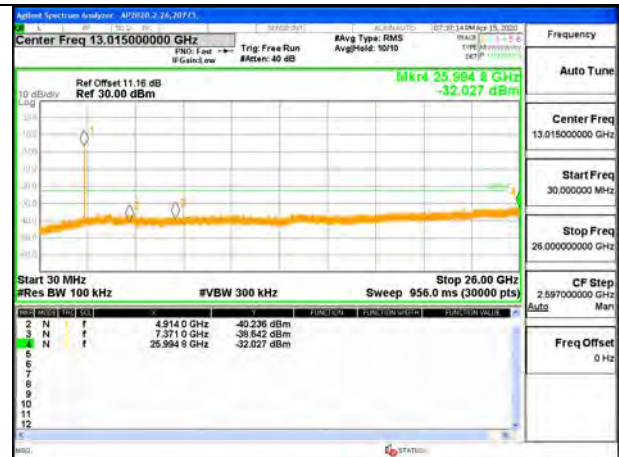
HIGH CHANNEL 9 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 9 ANT 3

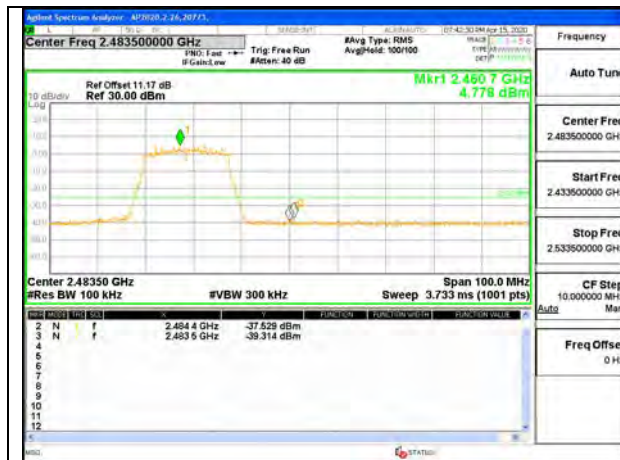


HIGH CHANNEL 10 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 10 ANT 3





**HIGH CHANNEL 11 BANDEDGE ANT 3**



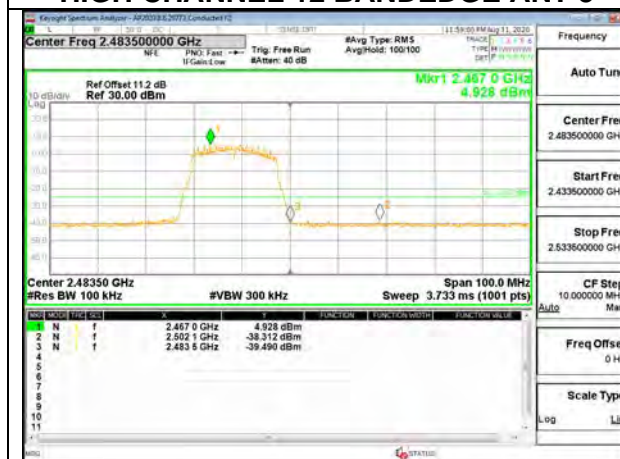
**OUT-OF-BAND HIGH CHANNEL 11 ANT 3**



**HIGH CHANNEL 12 BANDEDGE ANT 3**



**OUT-OF-BAND HIGH CHANNEL 12 ANT 3**

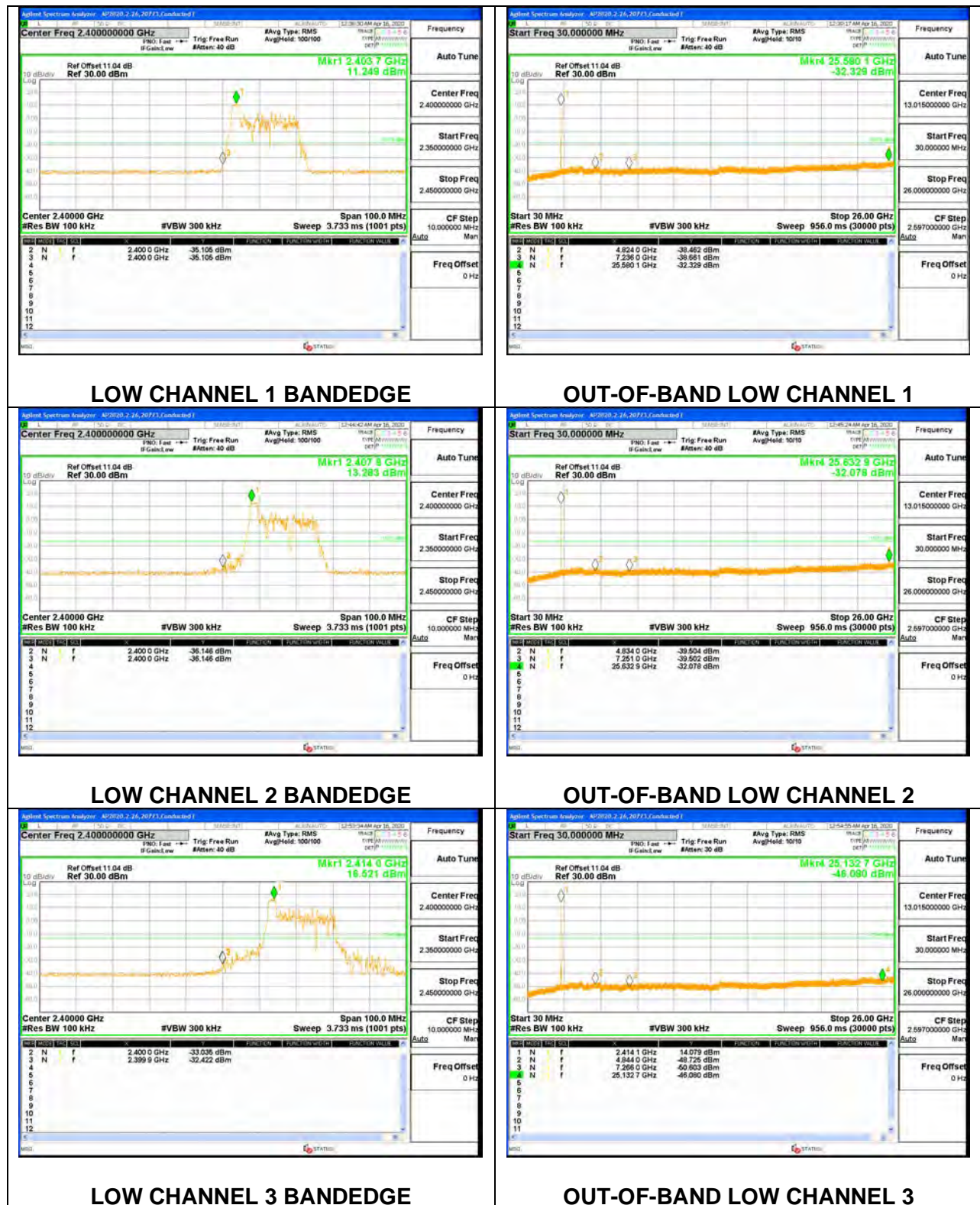


**HIGH CHANNEL 13 BANDEDGE ANT 3**

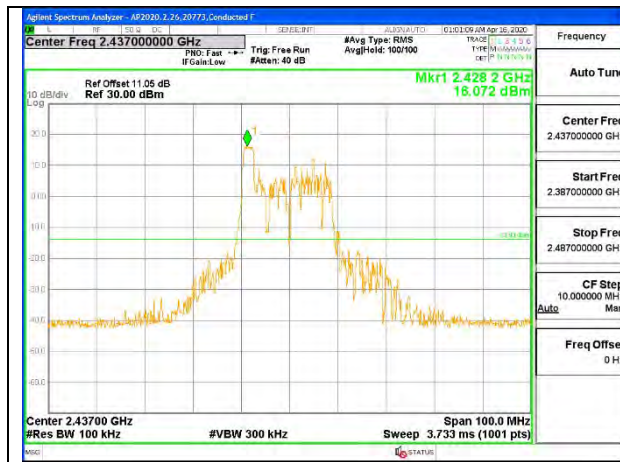


**OUT-OF-BAND HIGH CHANNEL 13 ANT 3**

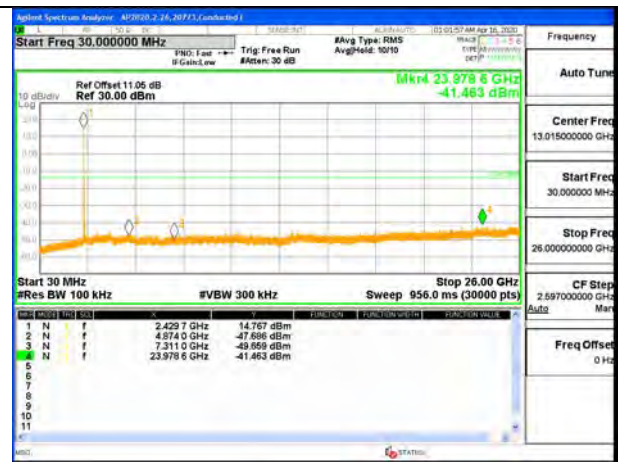
**9.6.4. 802.11ax HE20 MODE**  
**1TX ANT 4 26-Tone RU Index 0**







MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



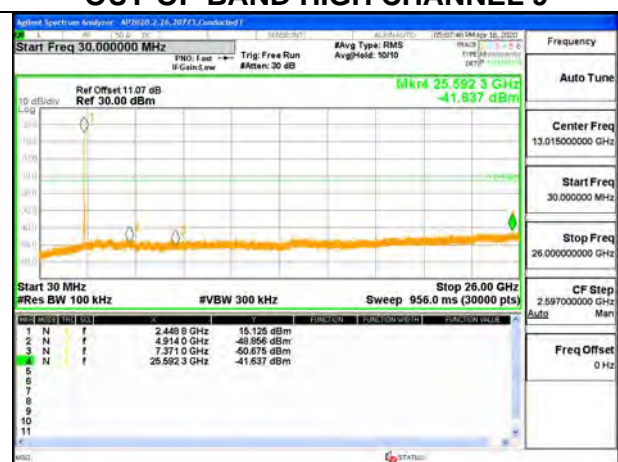
HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



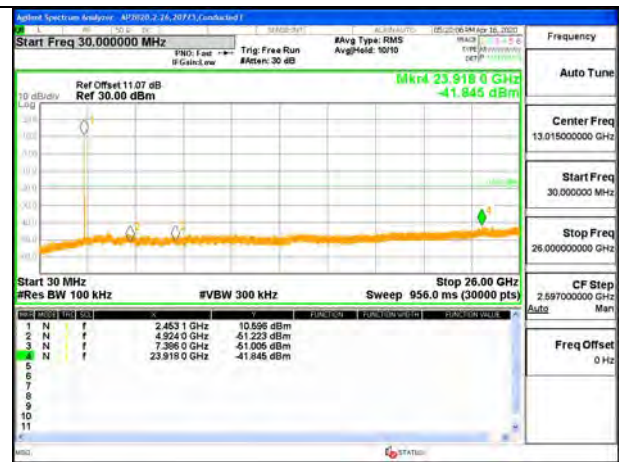
HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



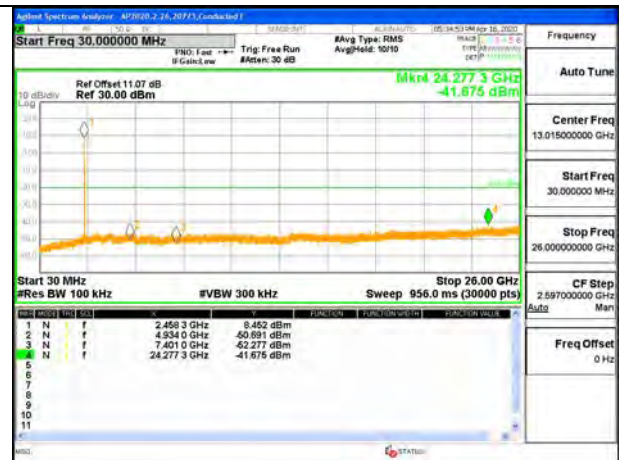
**HIGH CHANNEL 11 BANDEDGE**



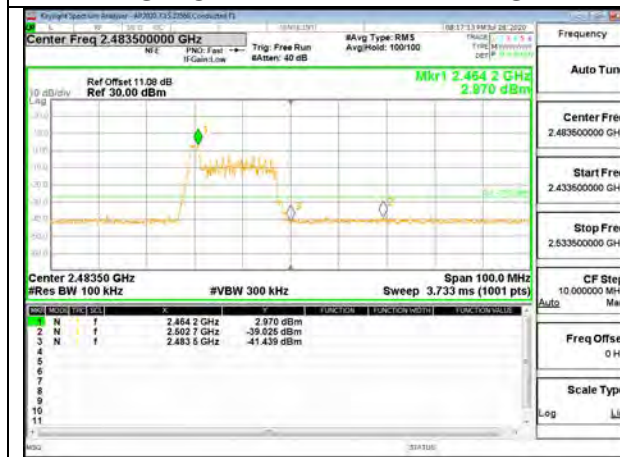
**OUT-OF-BAND HIGH CHANNEL 11**



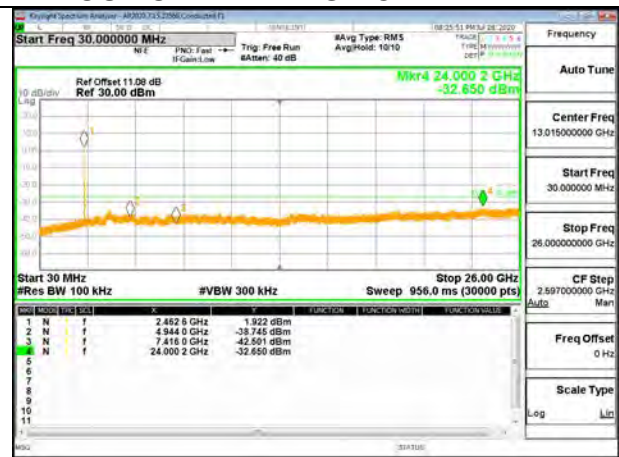
**HIGH CHANNEL 12 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 12**



**HIGH CHANNEL 13 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 13**

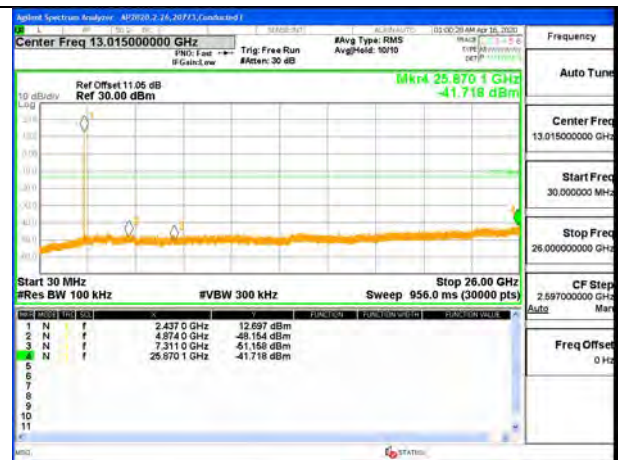


# 1TX ANT 4 26-Tone RU Index 4





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE

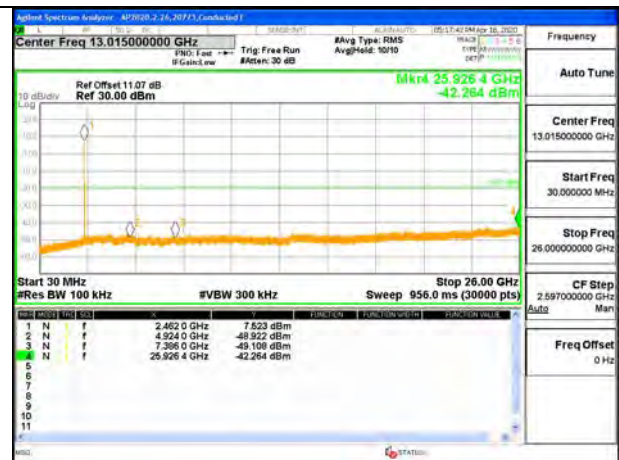


OUT-OF-BAND HIGH CHANNEL 10

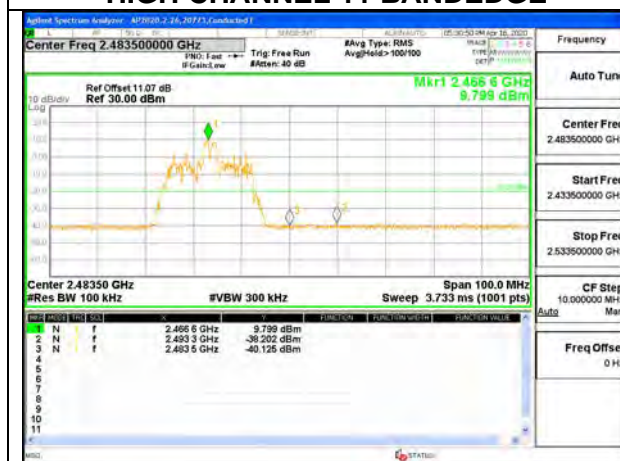




**HIGH CHANNEL 11 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 11**



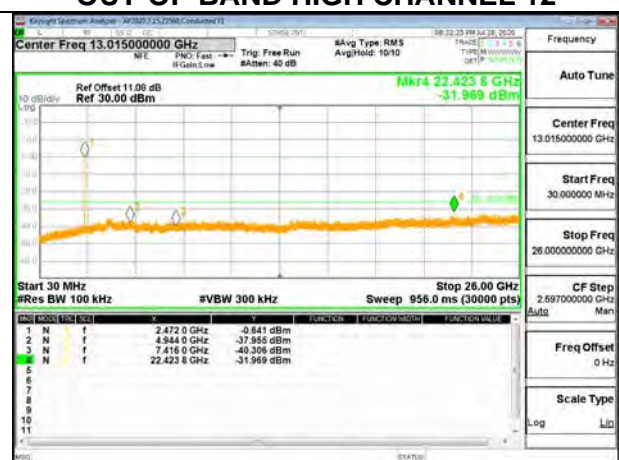
**HIGH CHANNEL 12 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 12**



**HIGH CHANNEL 13 BANDEDGE**

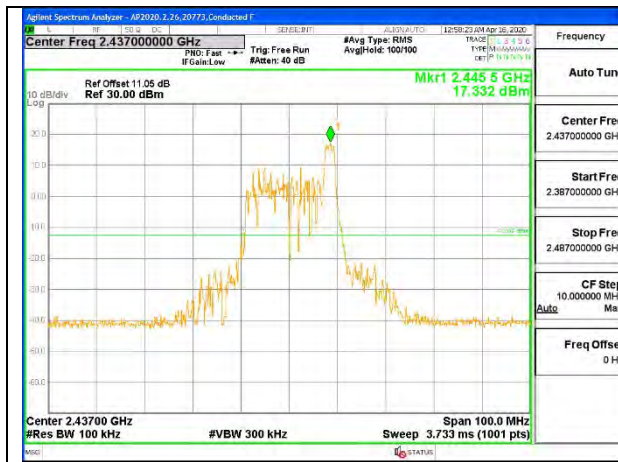


**OUT-OF-BAND HIGH CHANNEL 13**

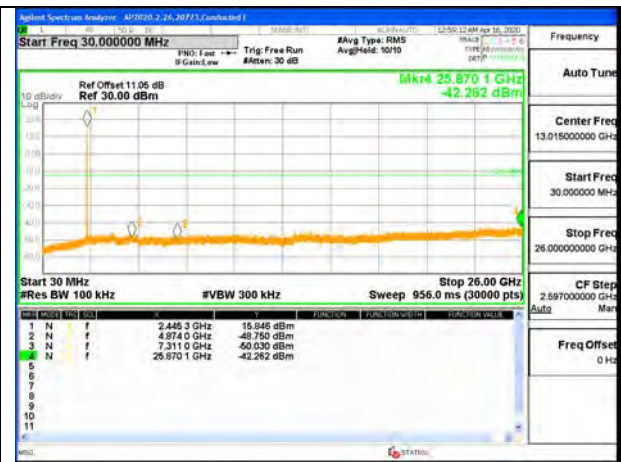
# 1TX ANT 4 26-Tone RU Index 8







IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



**HIGH CHANNEL 11 BANDEDGE**



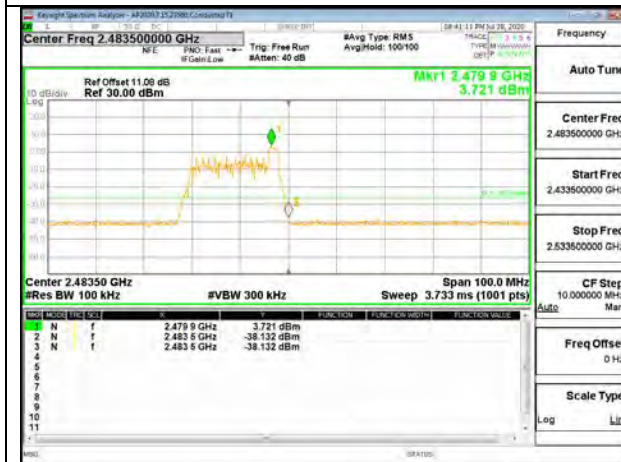
**OUT-OF-BAND HIGH CHANNEL 11**



**HIGH CHANNEL 12 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 12**



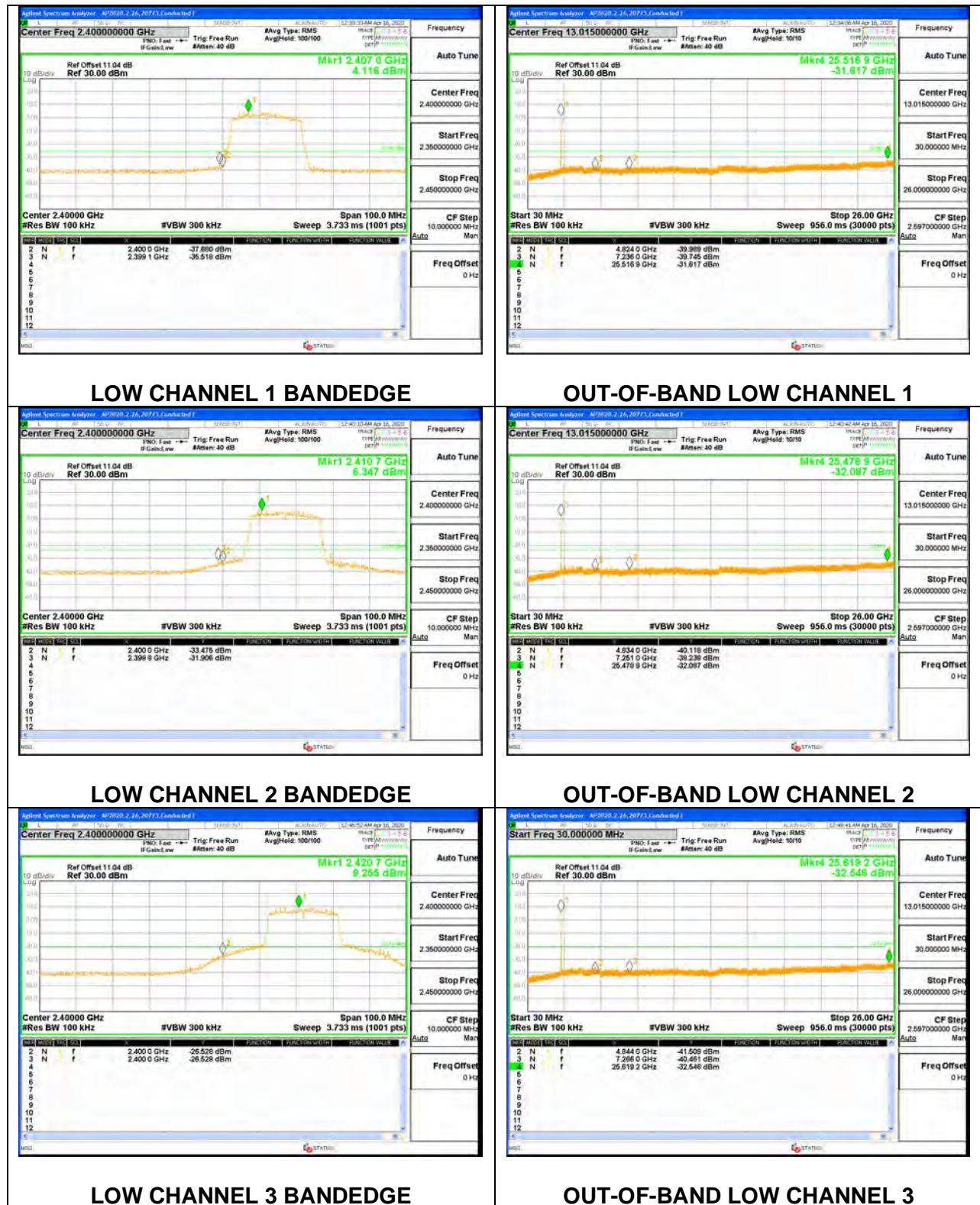
**HIGH CHANNEL 13 BANDEDGE**

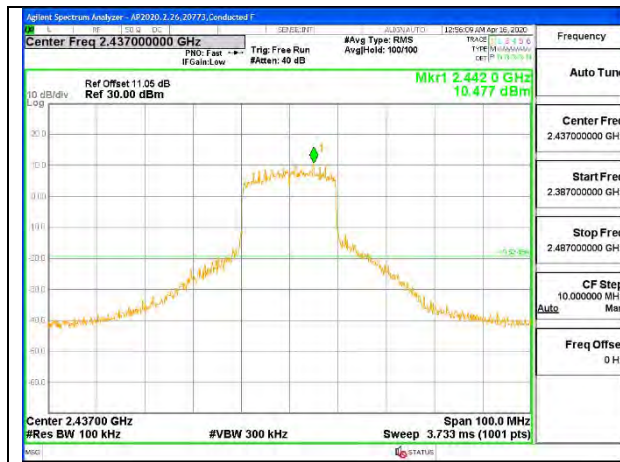


**OUT-OF-BAND HIGH CHANNEL 13**



**1TX ANT 4 242-Tone RU Index 61**





IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10





**HIGH CHANNEL 11 BANDEDGE**



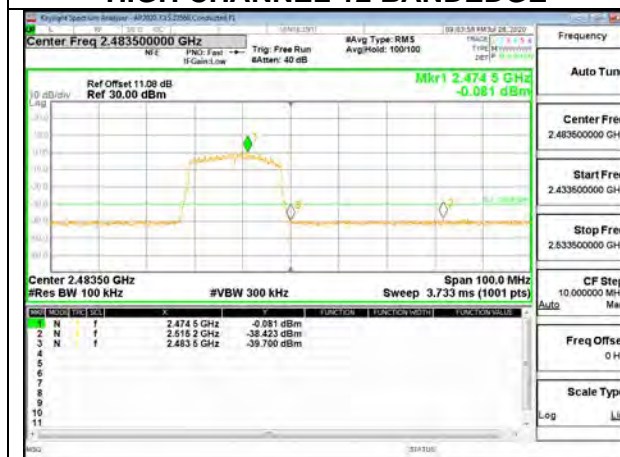
**OUT-OF-BAND HIGH CHANNEL 11**



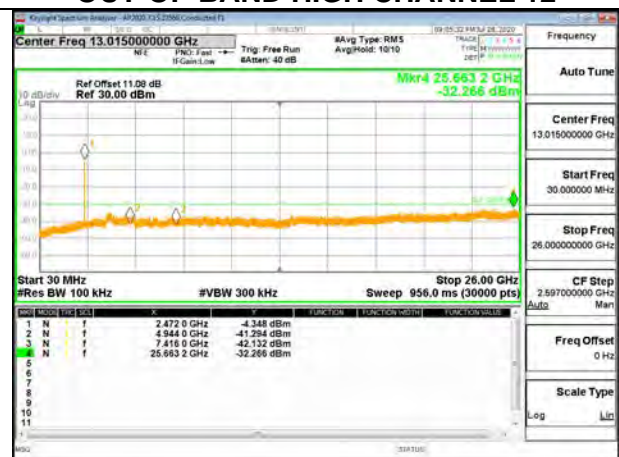
**HIGH CHANNEL 12 BANDEDGE**



**OUT-OF-BAND HIGH CHANNEL 12**

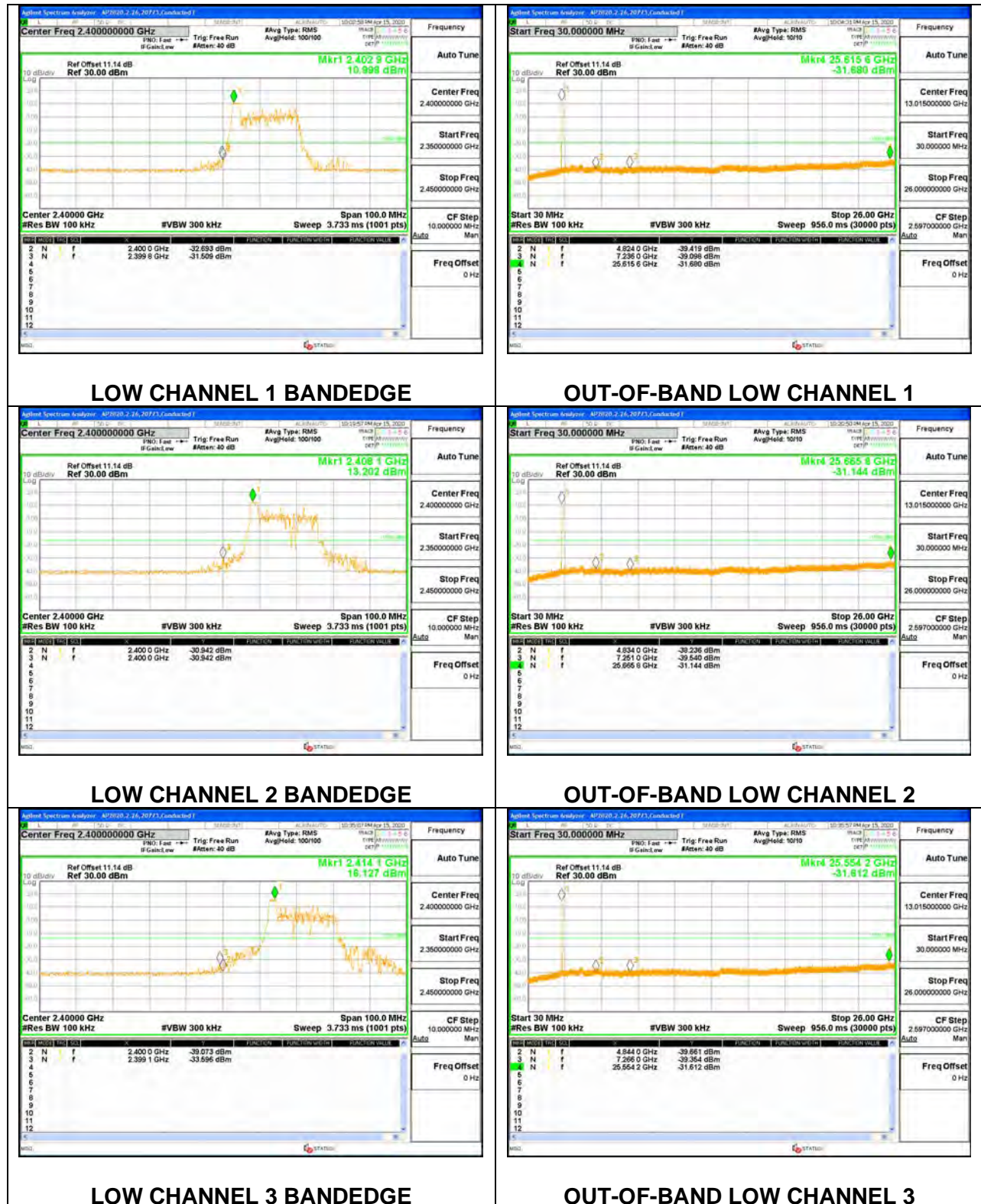


**HIGH CHANNEL 13 BANDEDGE**

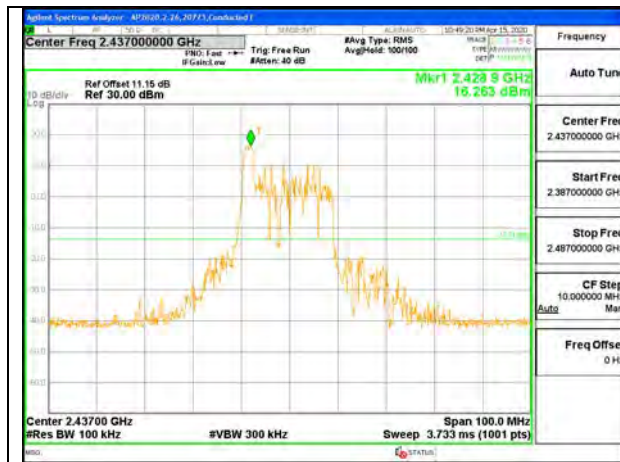


**OUT-OF-BAND HIGH CHANNEL 13**

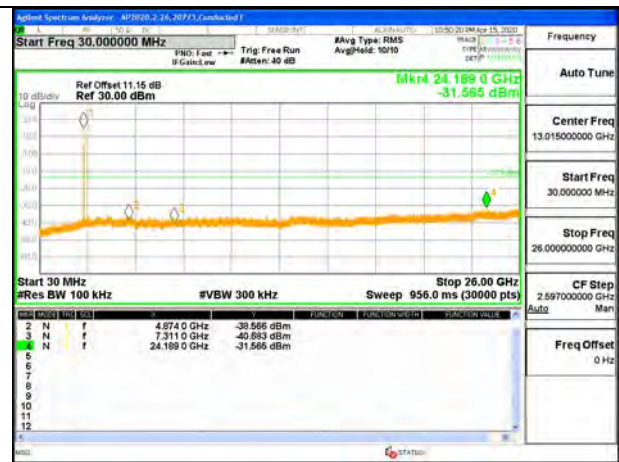
**1TX ANT 3 26-Tone RU Index 0**







IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



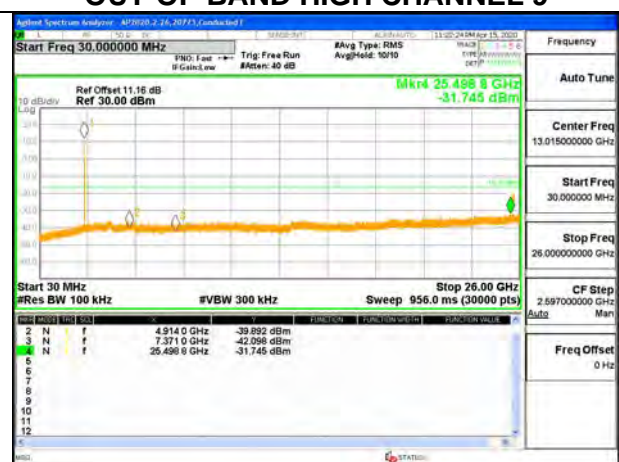
HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



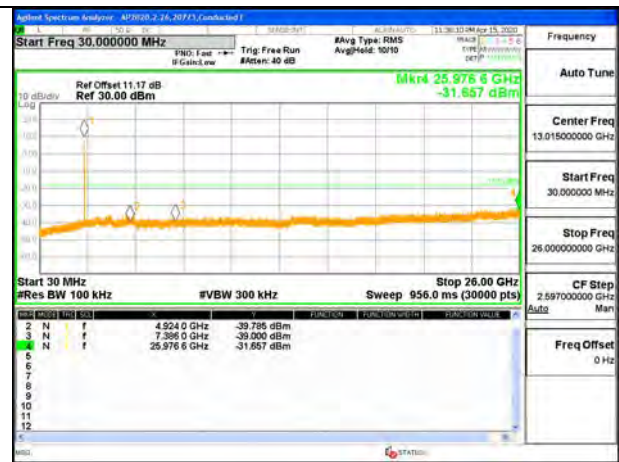
HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



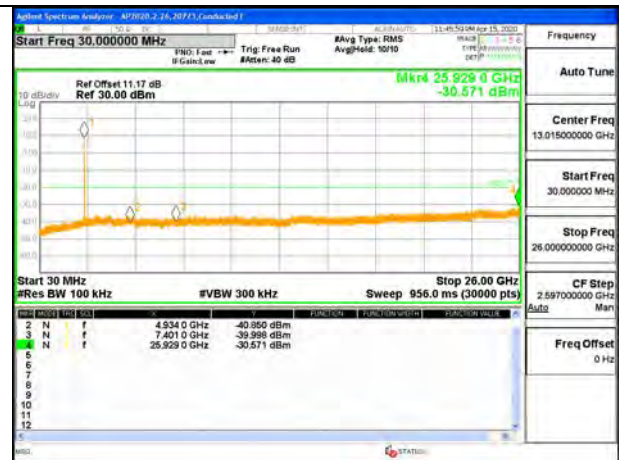
HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



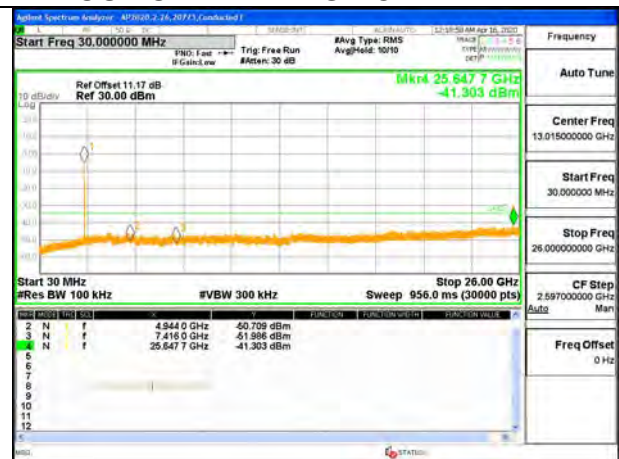
HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12



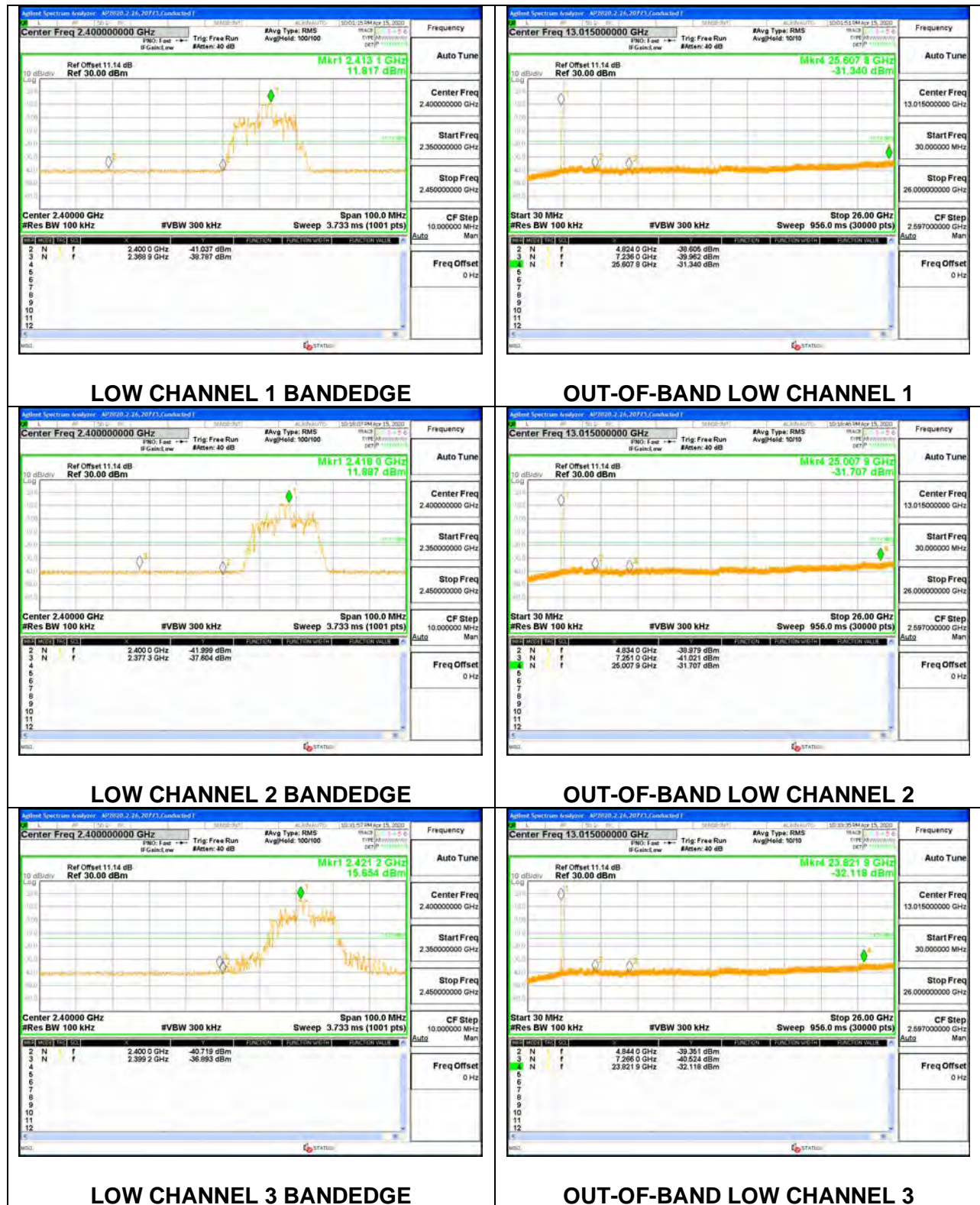
HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13



# 1TX ANT 3 26-Tone RU Index 4





IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



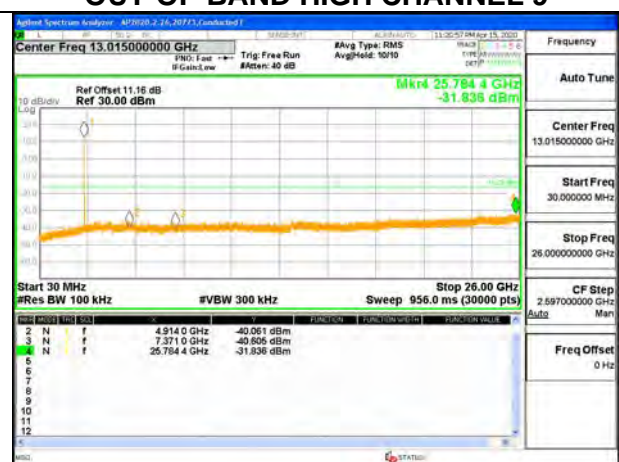
HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE

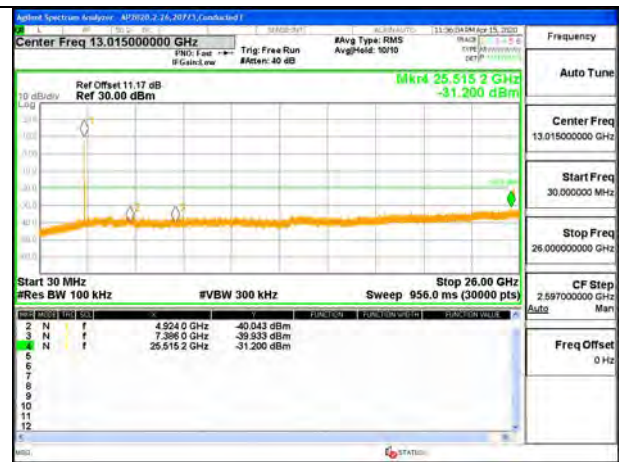


OUT-OF-BAND HIGH CHANNEL 10





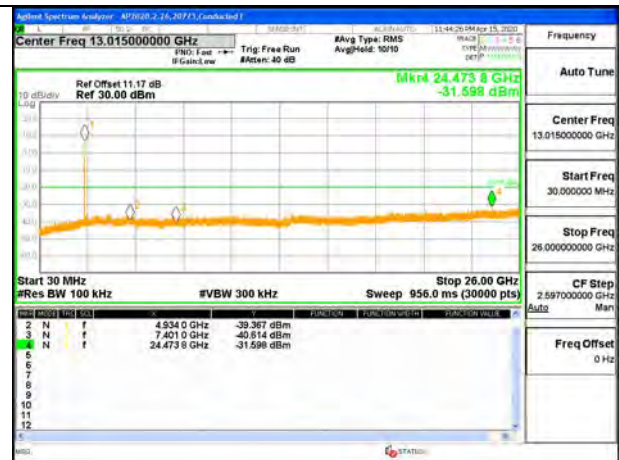
HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



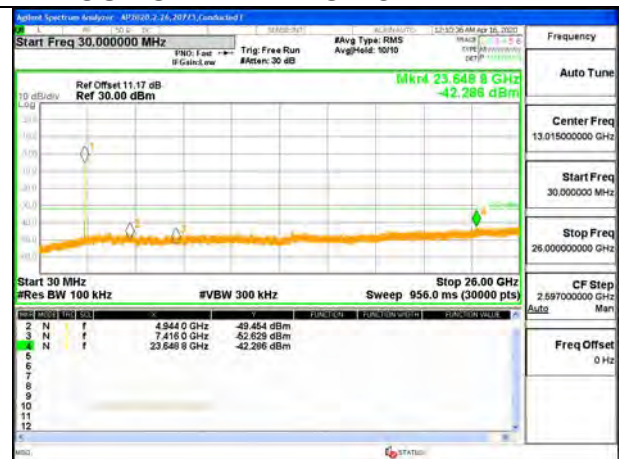
HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12



HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13