

## 7.5. CONDUCTED BANDEGE AND SPURIOUS EMISSIONS

### LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2		
Section	Test Item	Limit
FCC §15.247 (d) RSS-247 5.5	Conducted Bandedge and Spurious Emissions	at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

Notes: display line is placed at -20dBc but all emissions outside of the band meet the -30dBc limit.

### TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

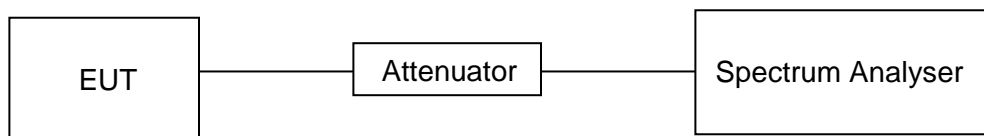
Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100K
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100K
VBW	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level.

### TEST SETUP

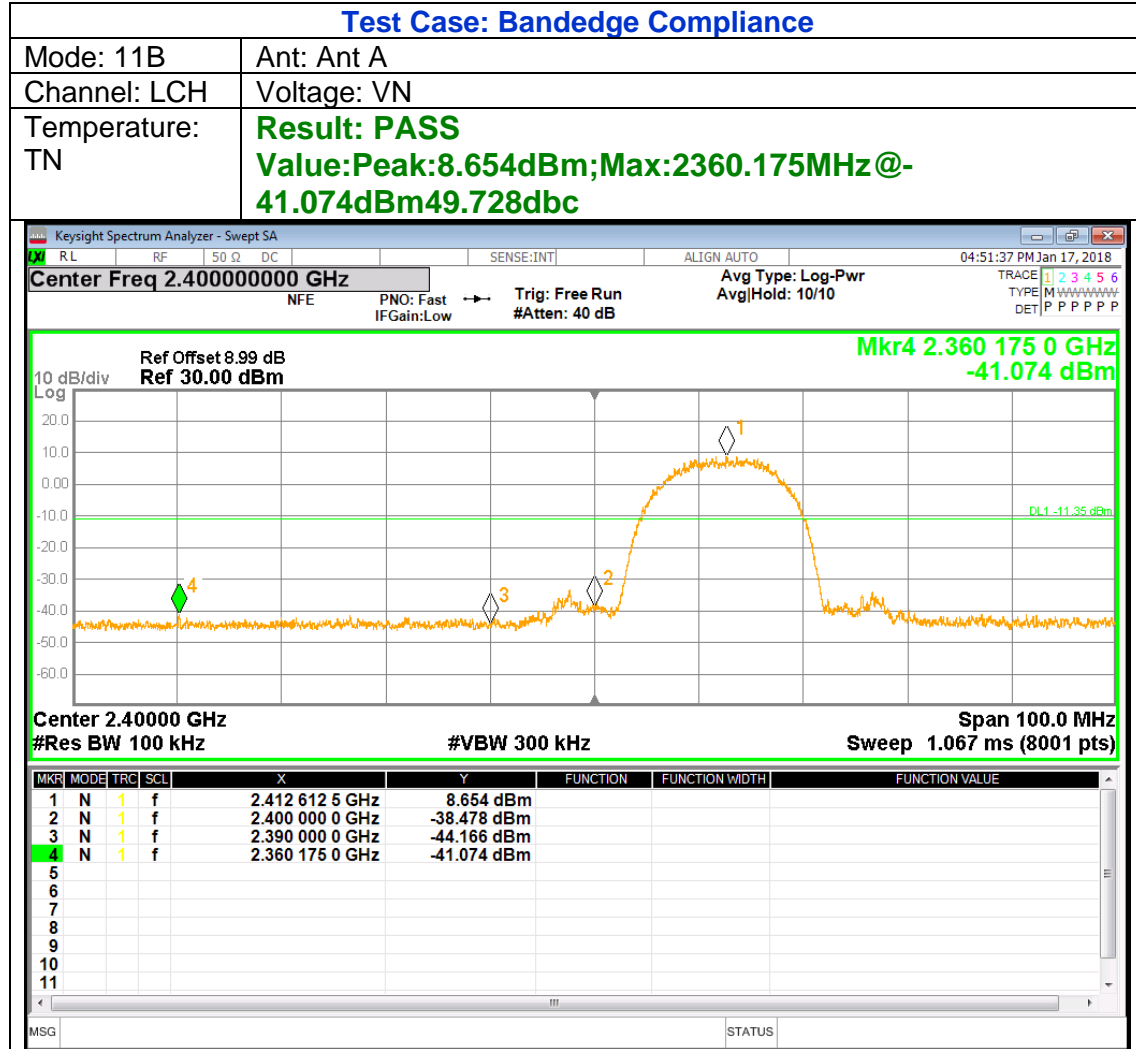


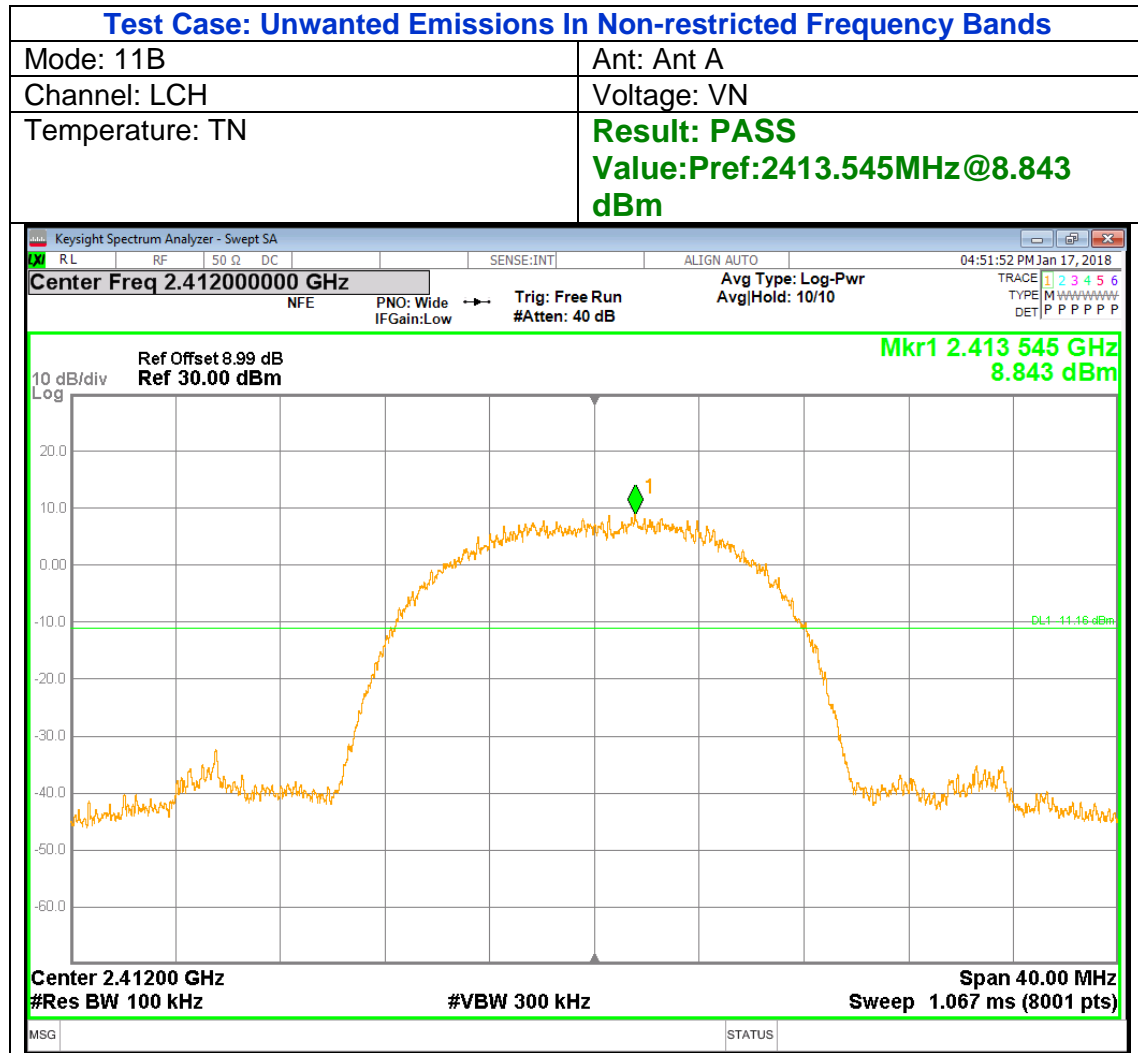
**RESULTS**

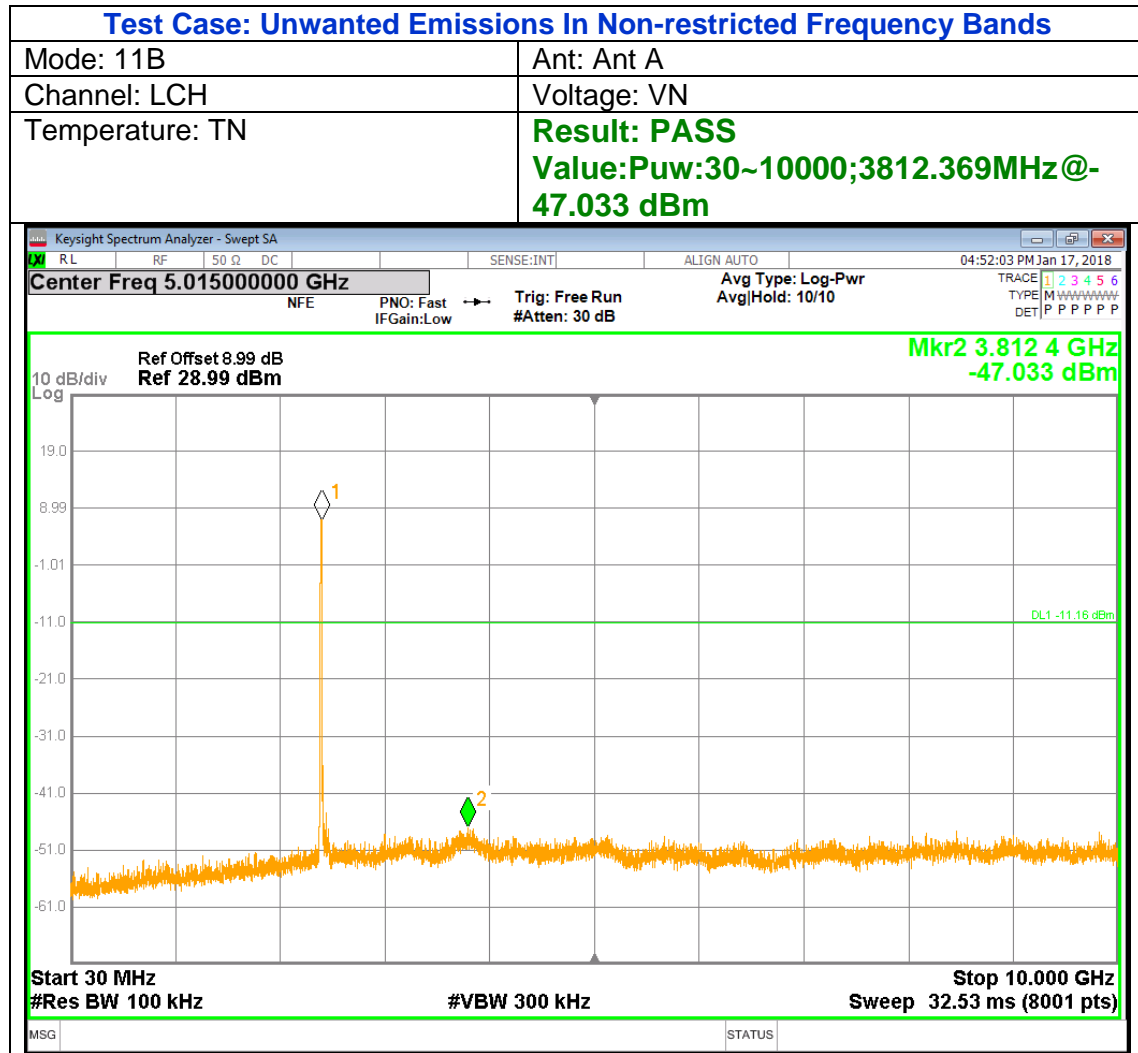
Note: Output power was set to the maximum power per chain (SISO mode power) but with all chains operating to cover SISO, 2x and 3x modes.

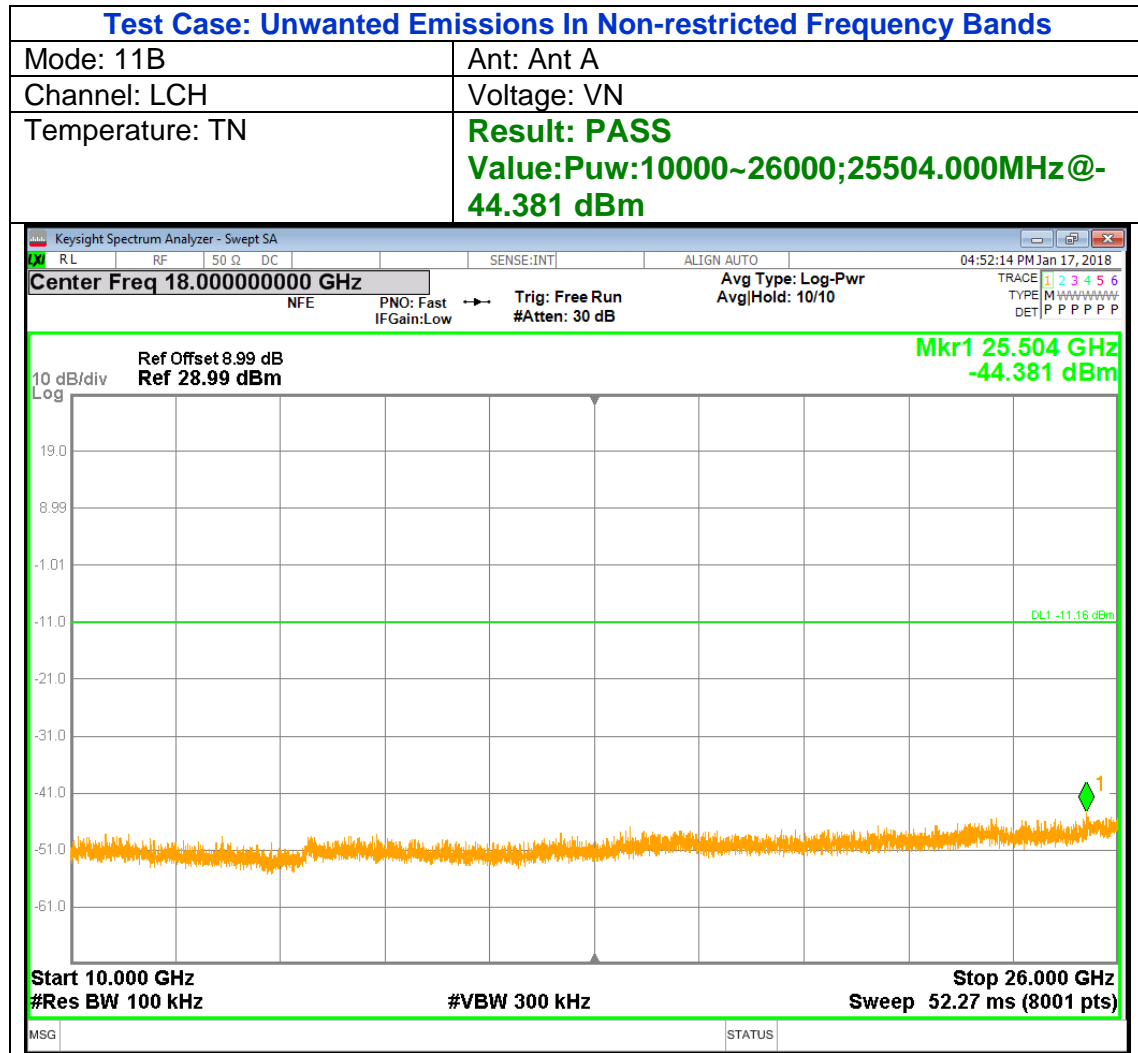
**7.5.1. 802.11b 3TX MODE**

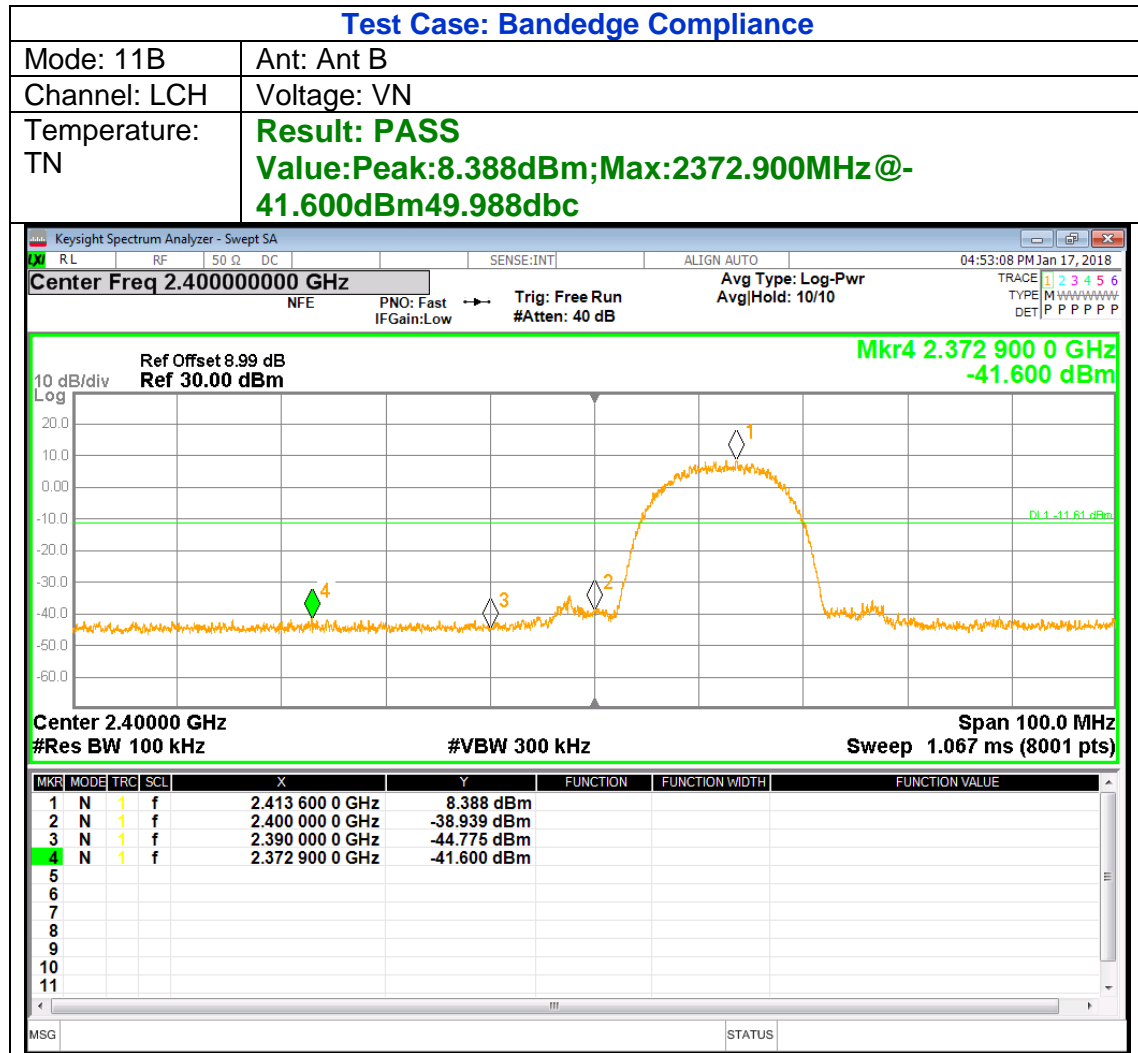
**Low Channel**

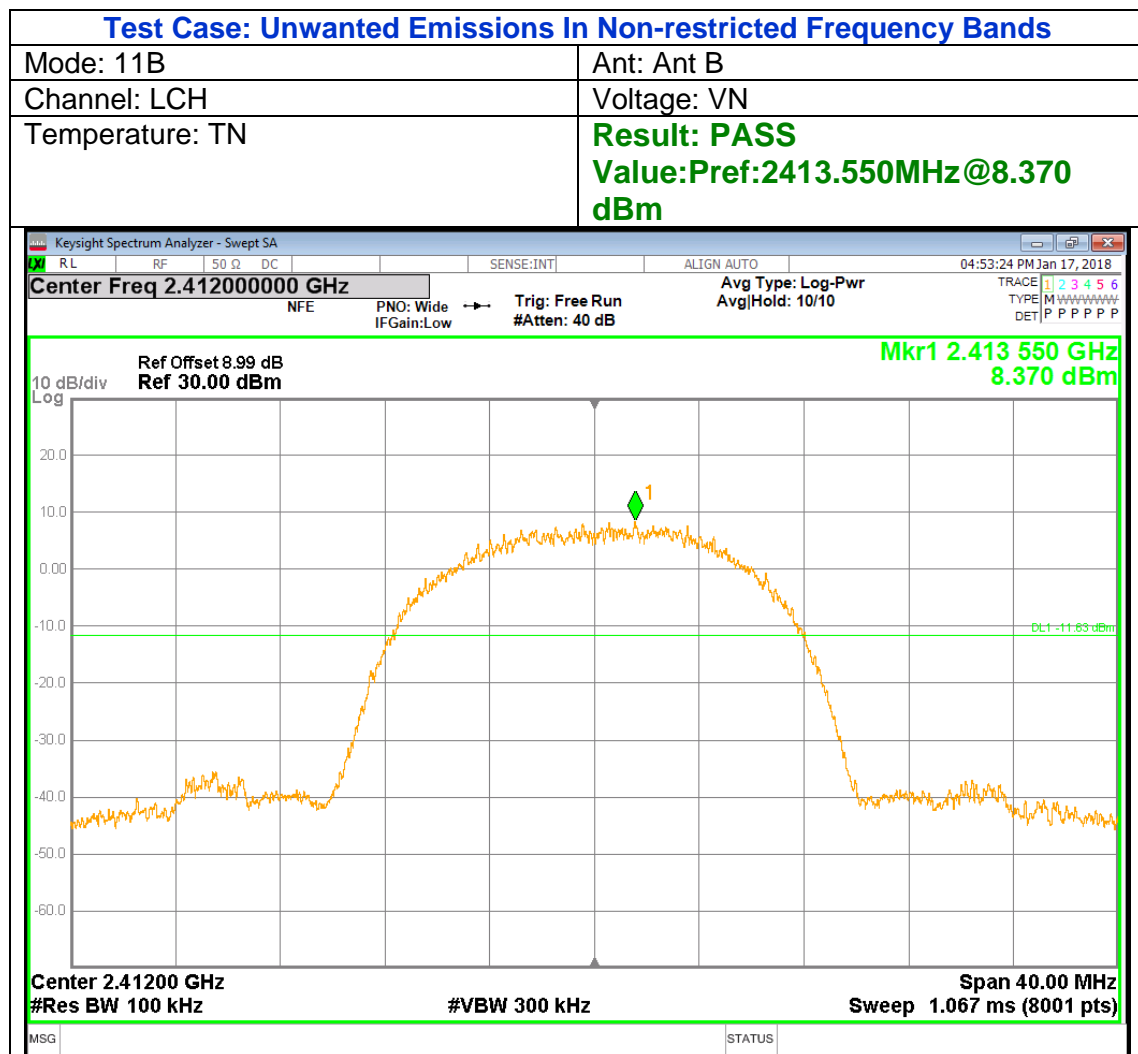


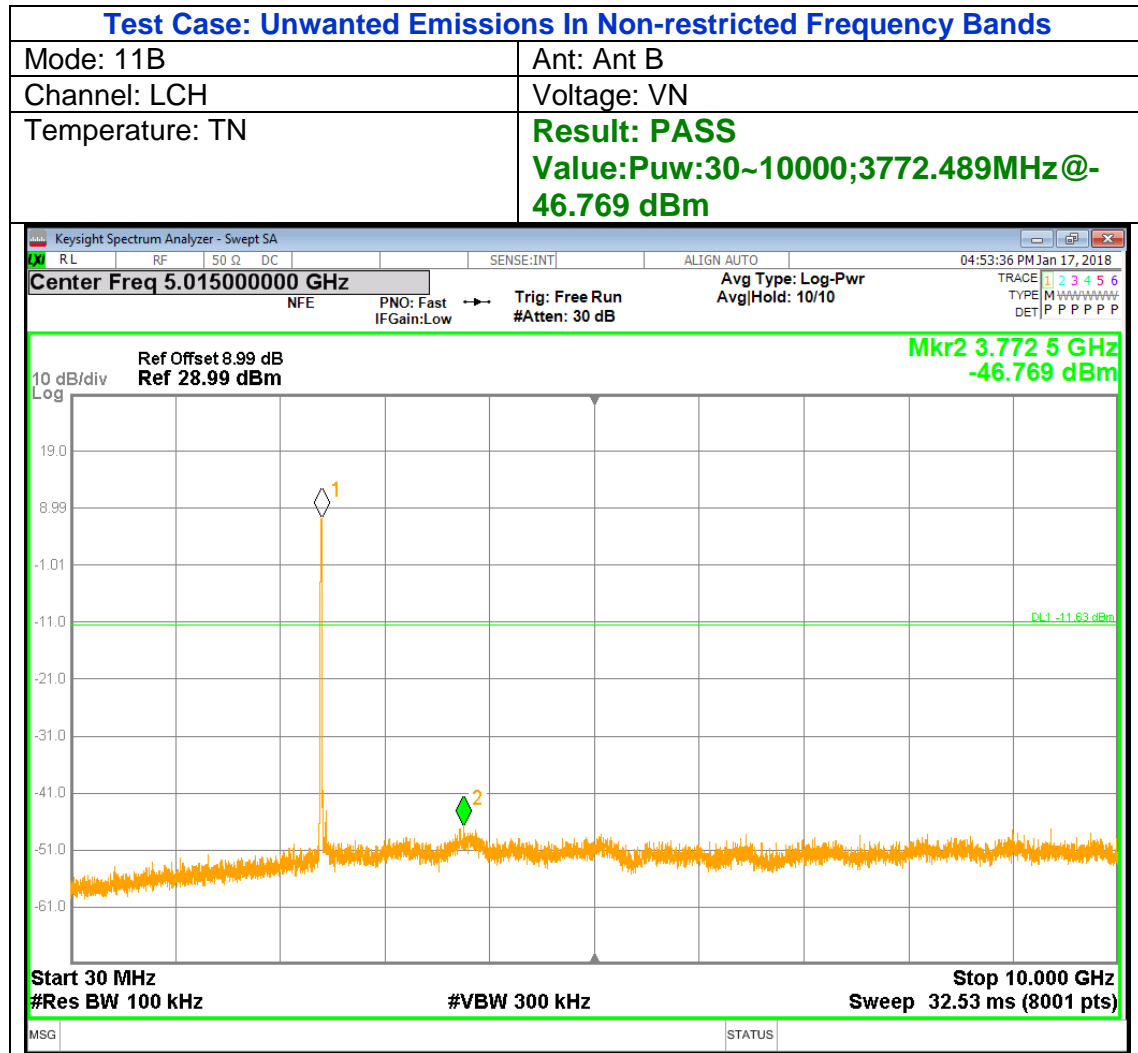




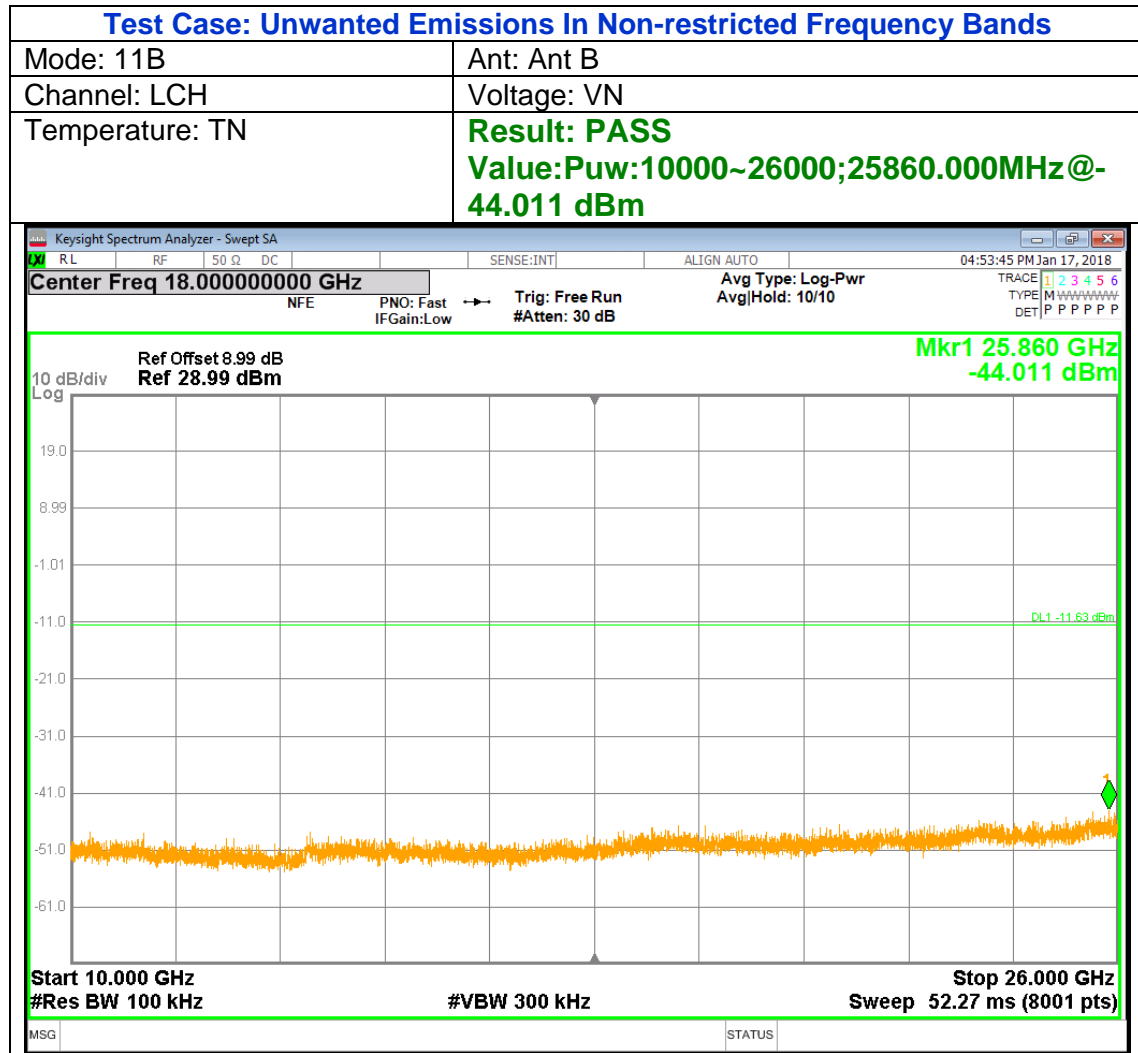


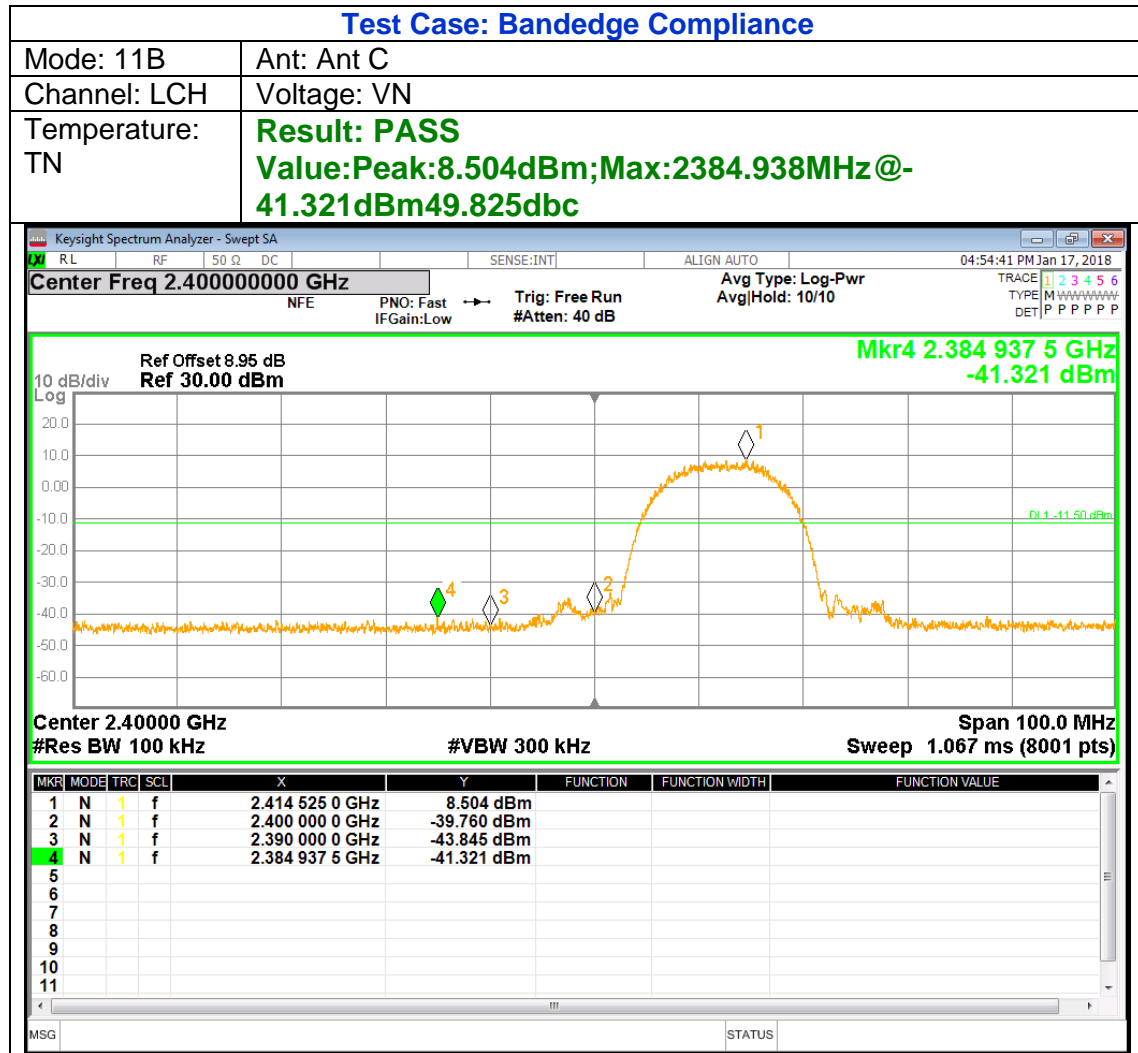


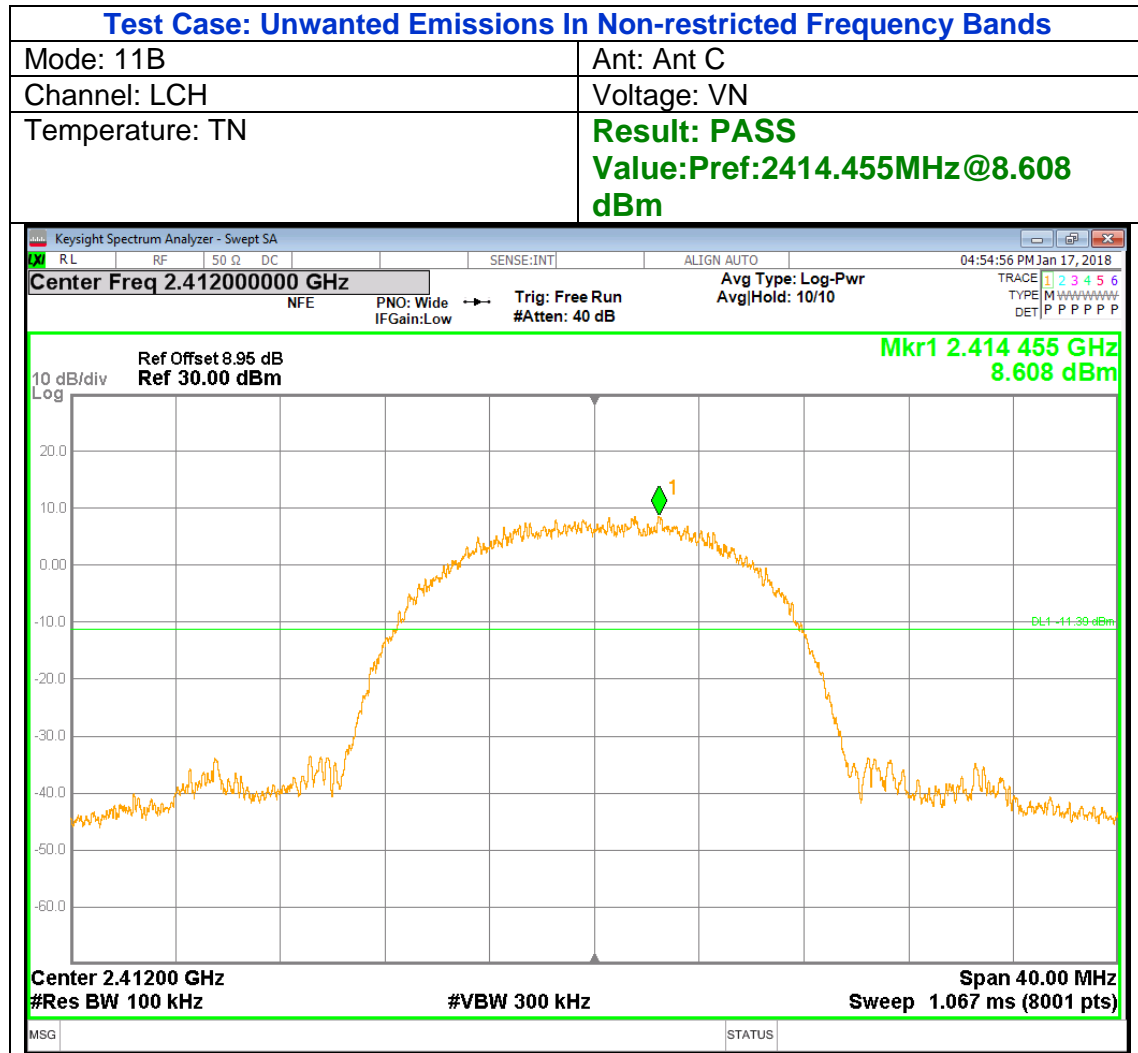


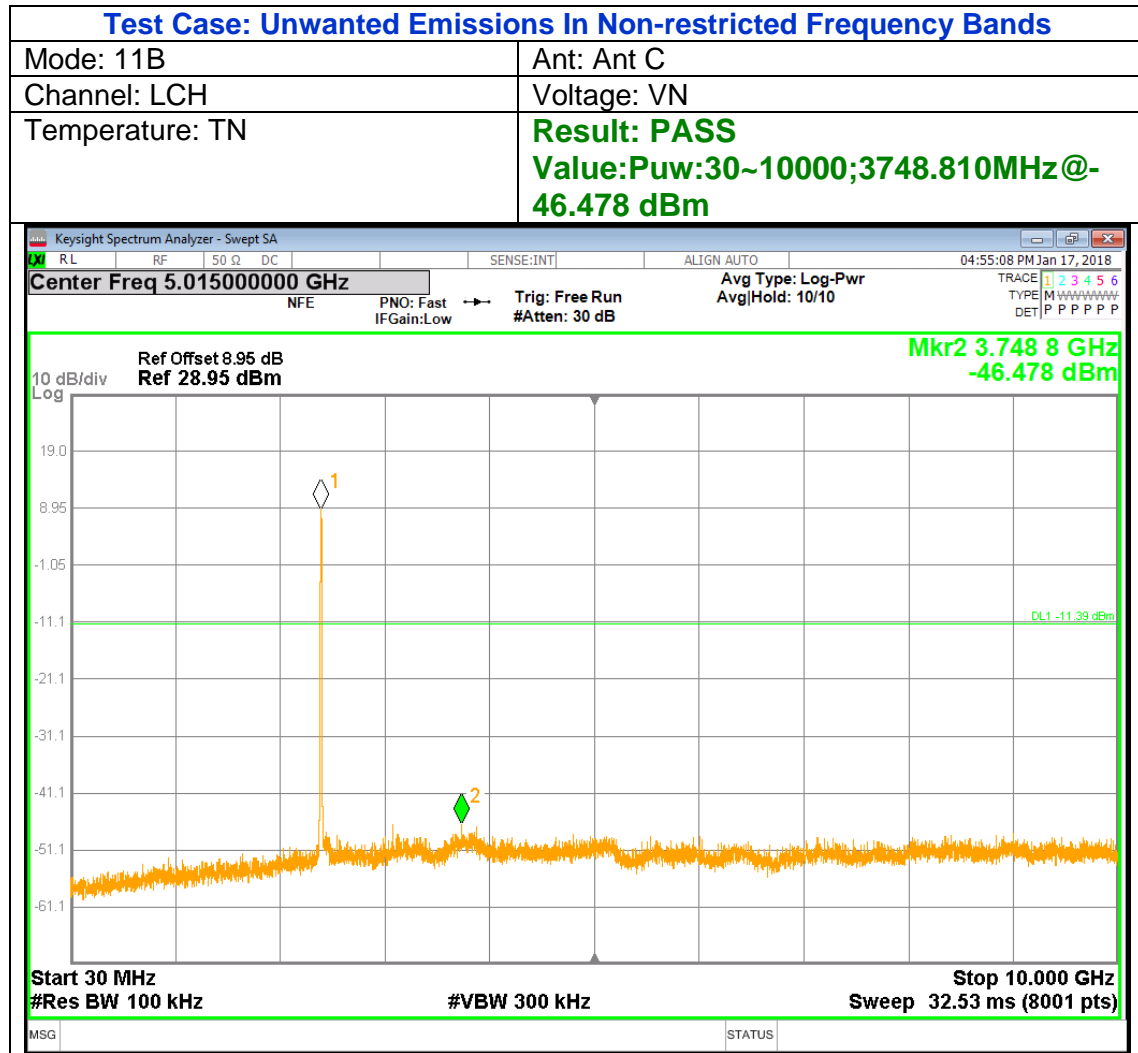


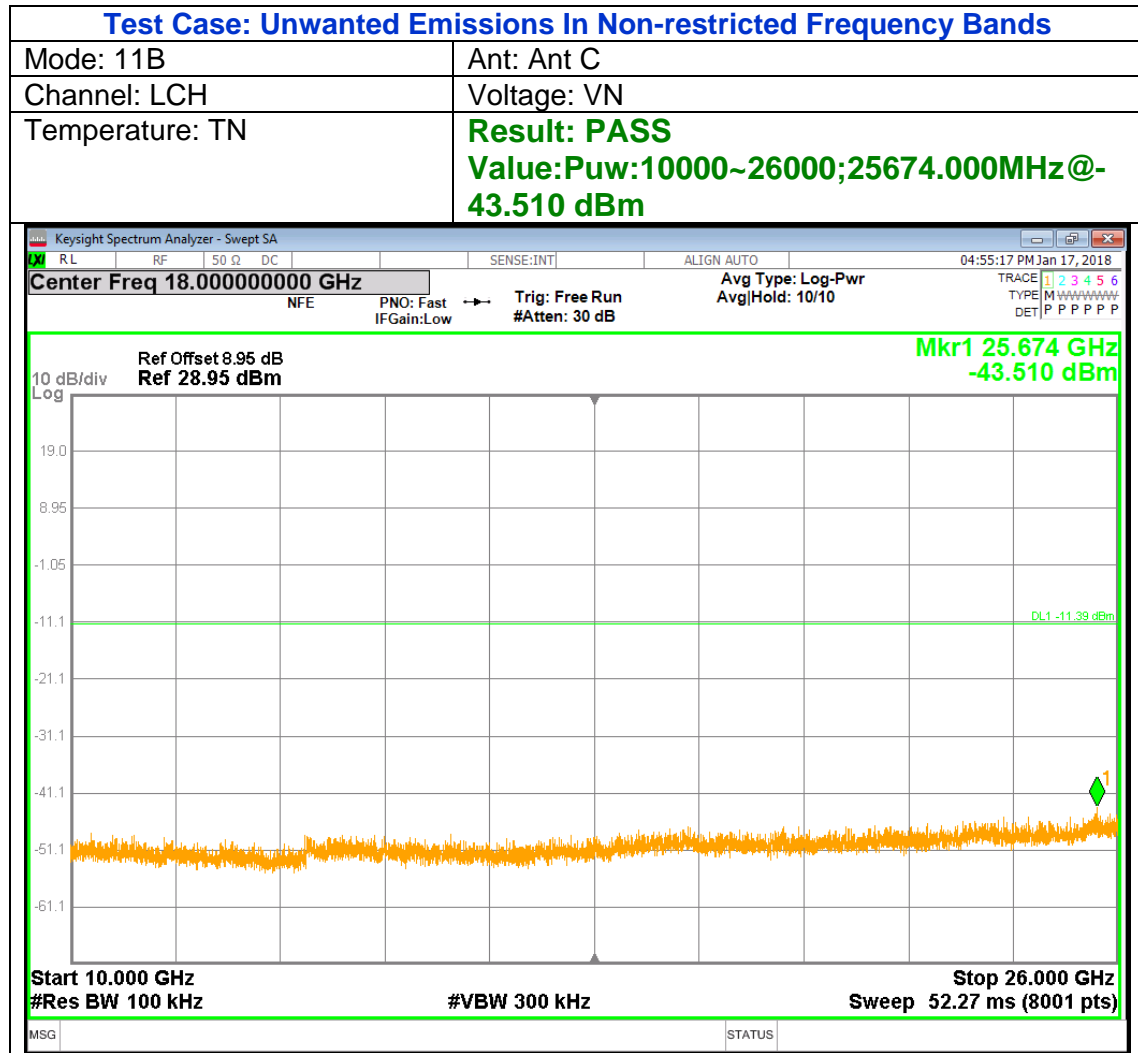




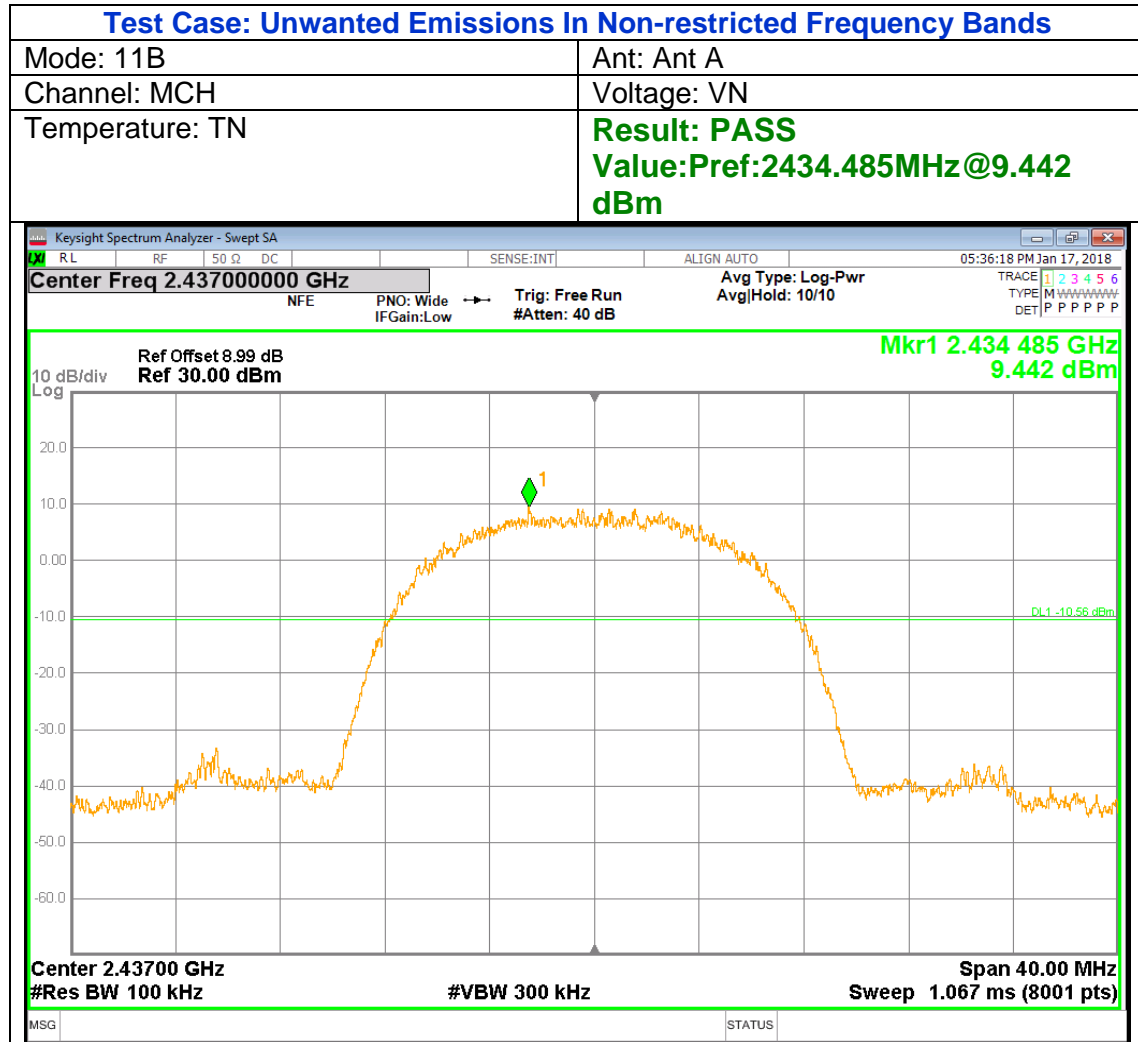


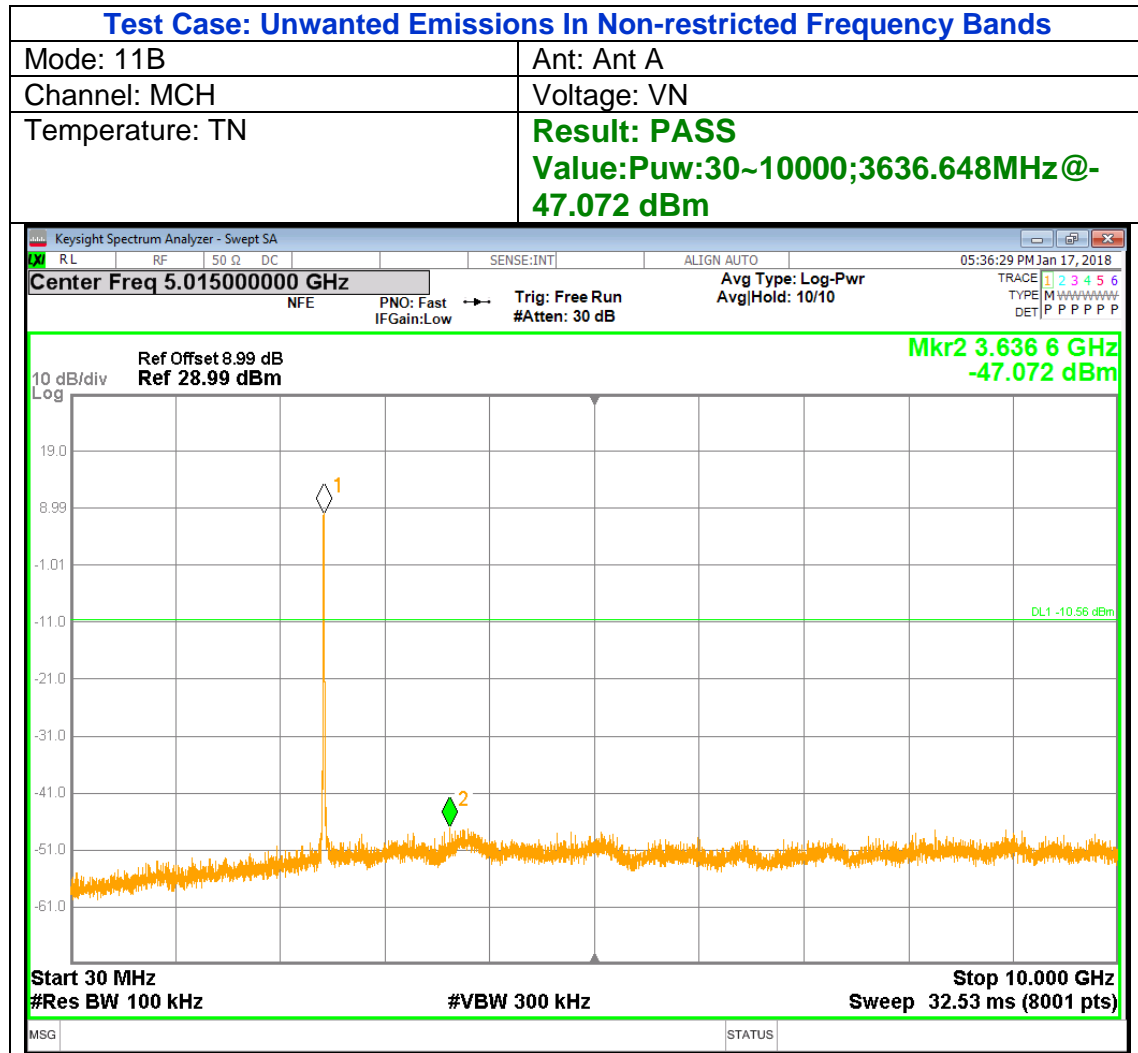


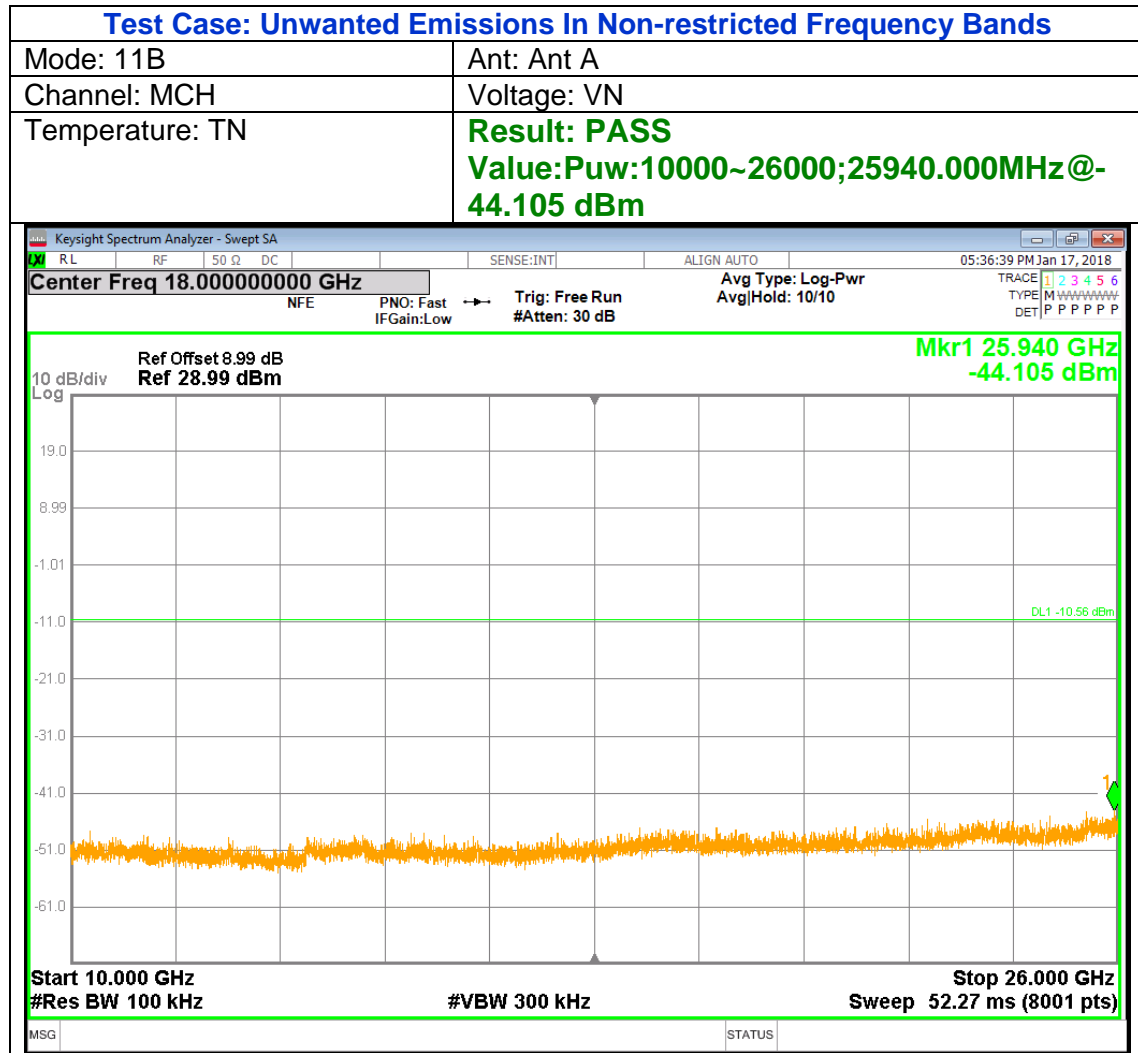




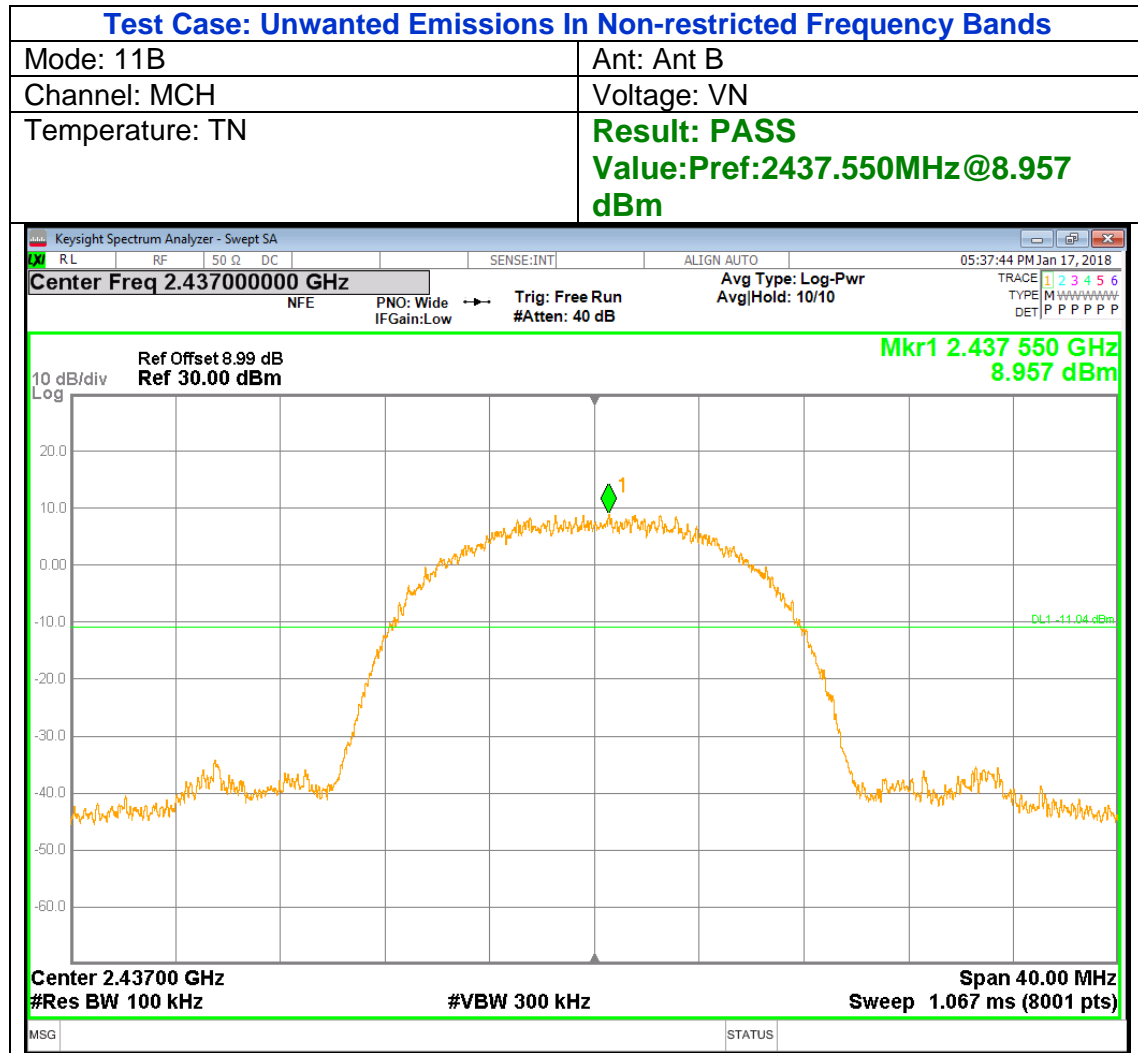
**Middle Channel**

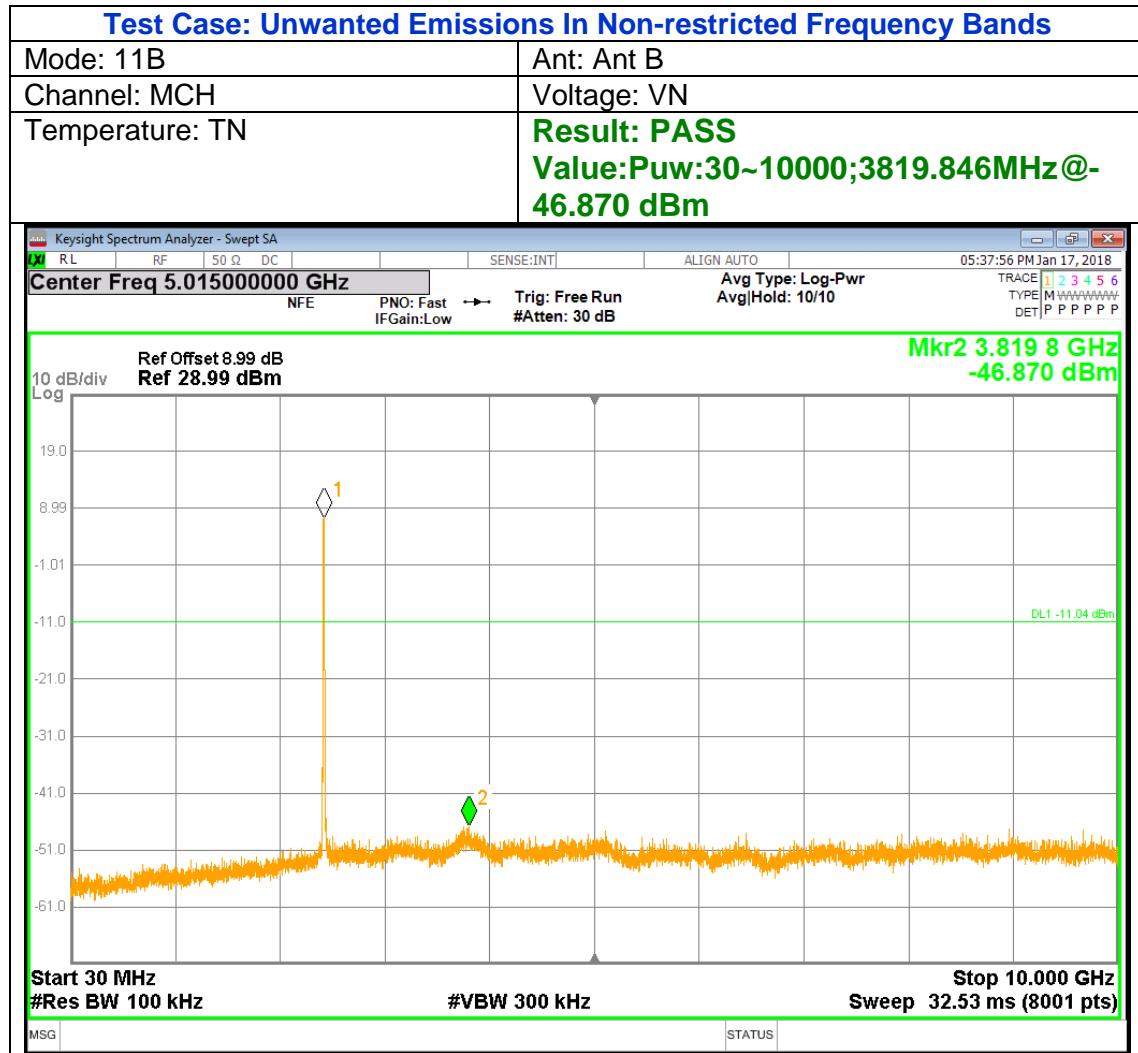


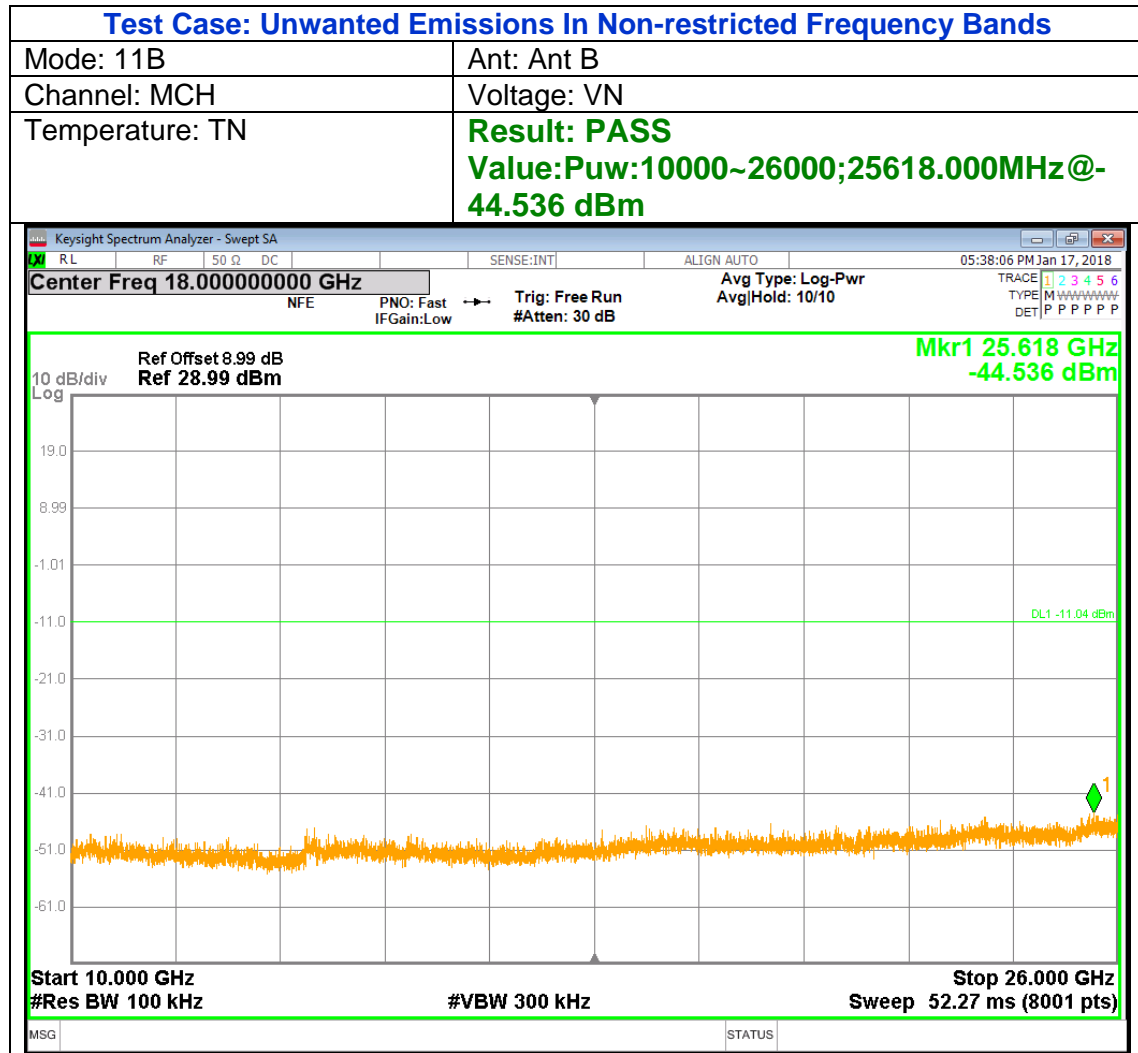


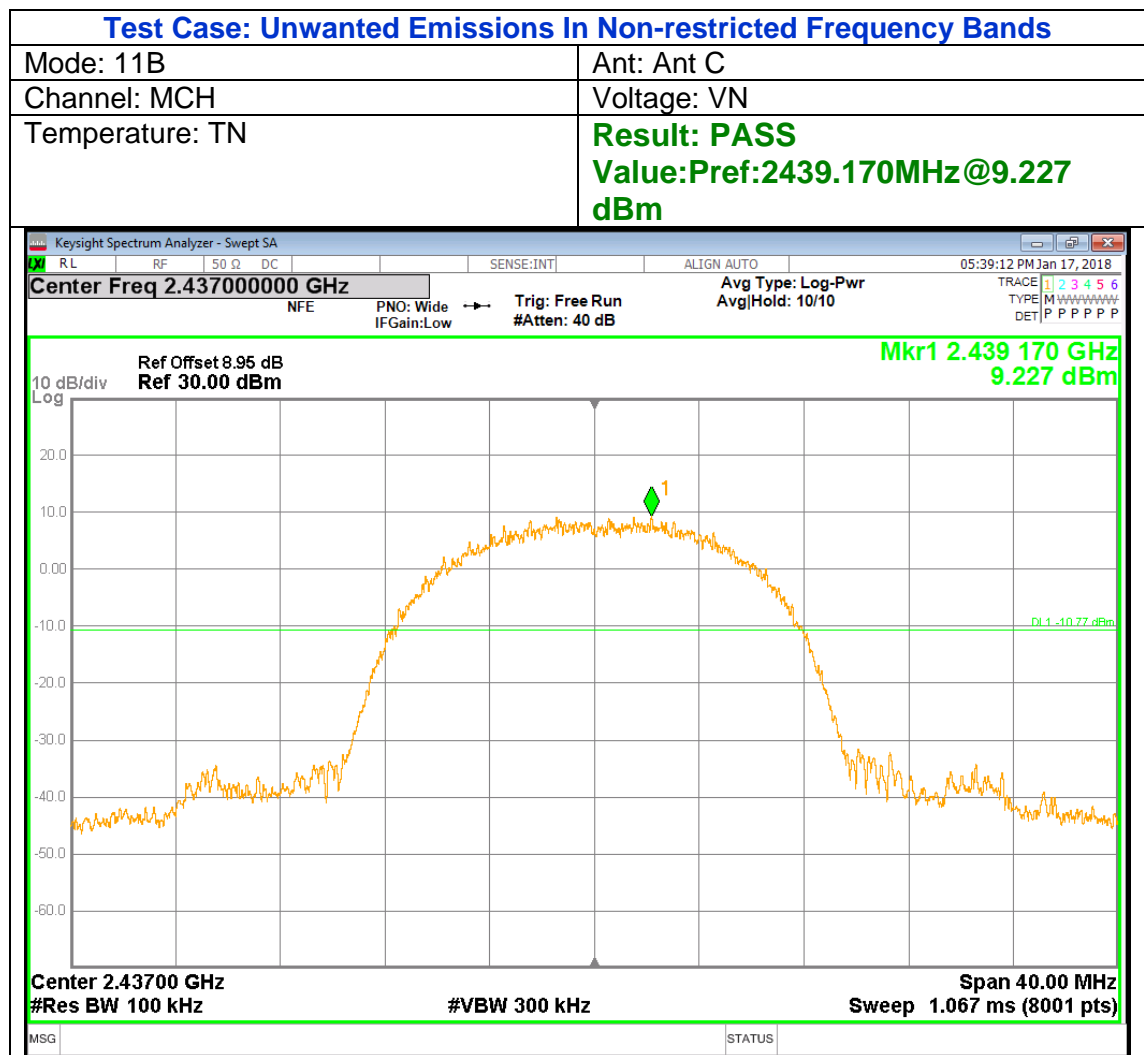


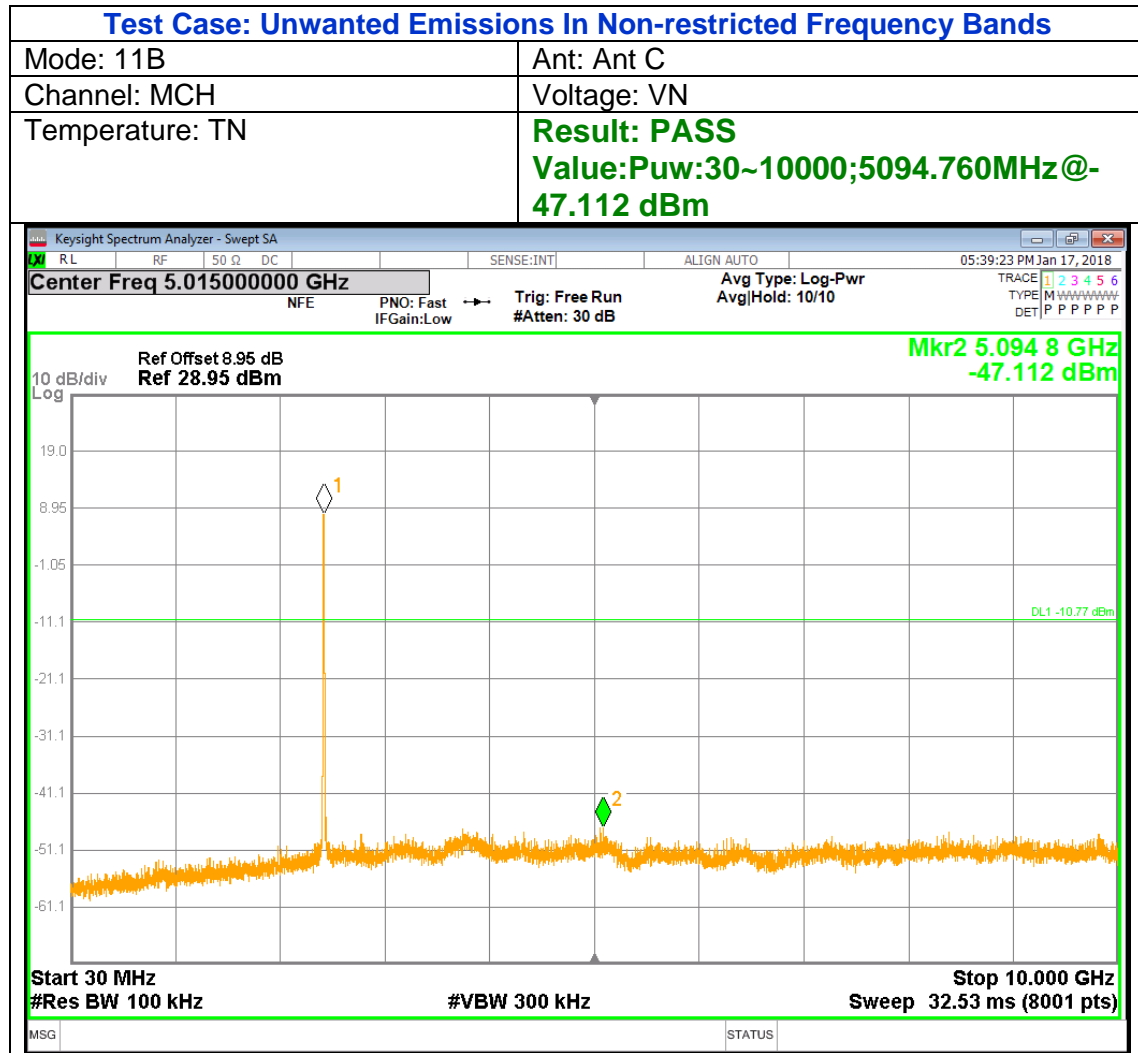


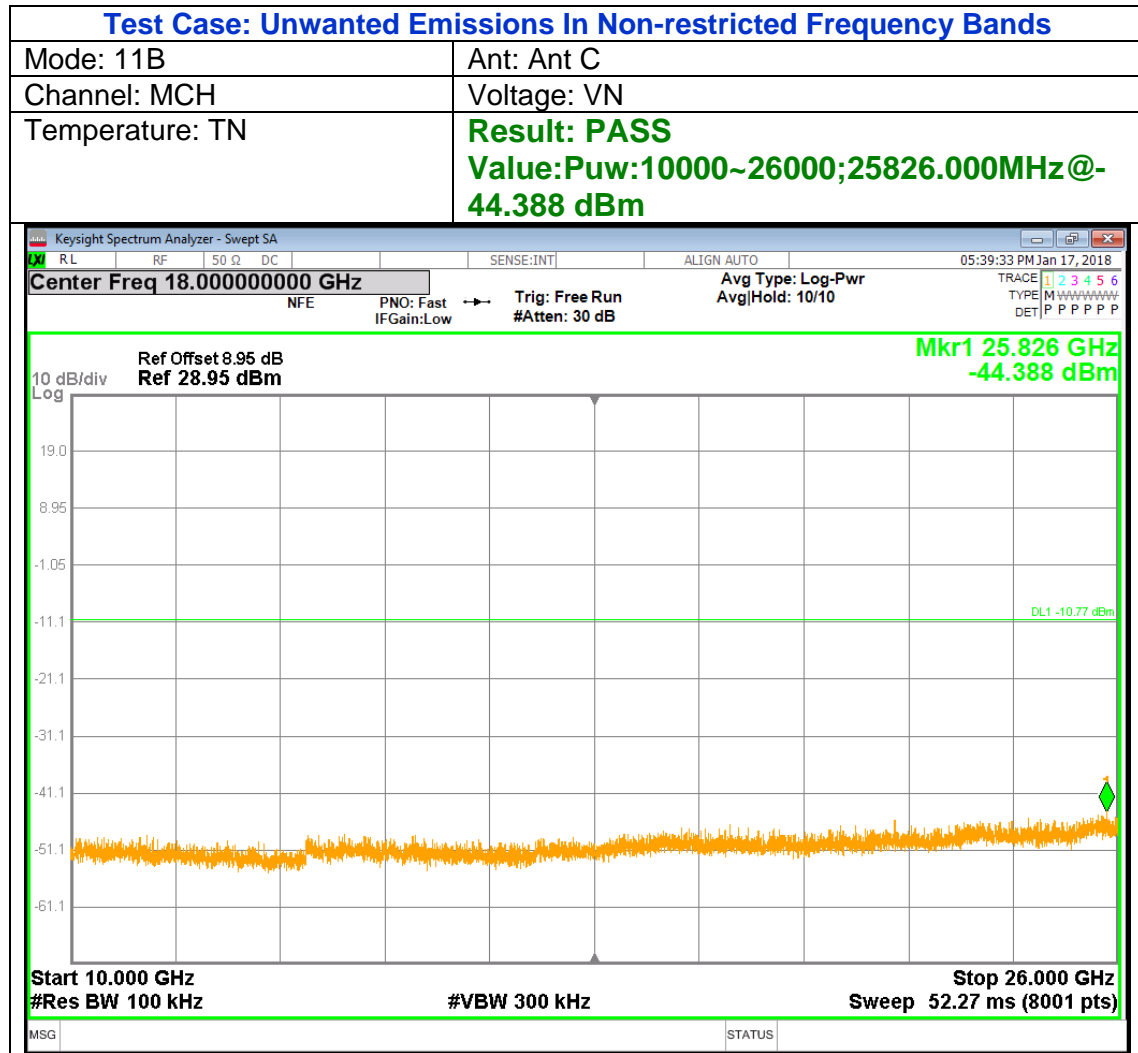




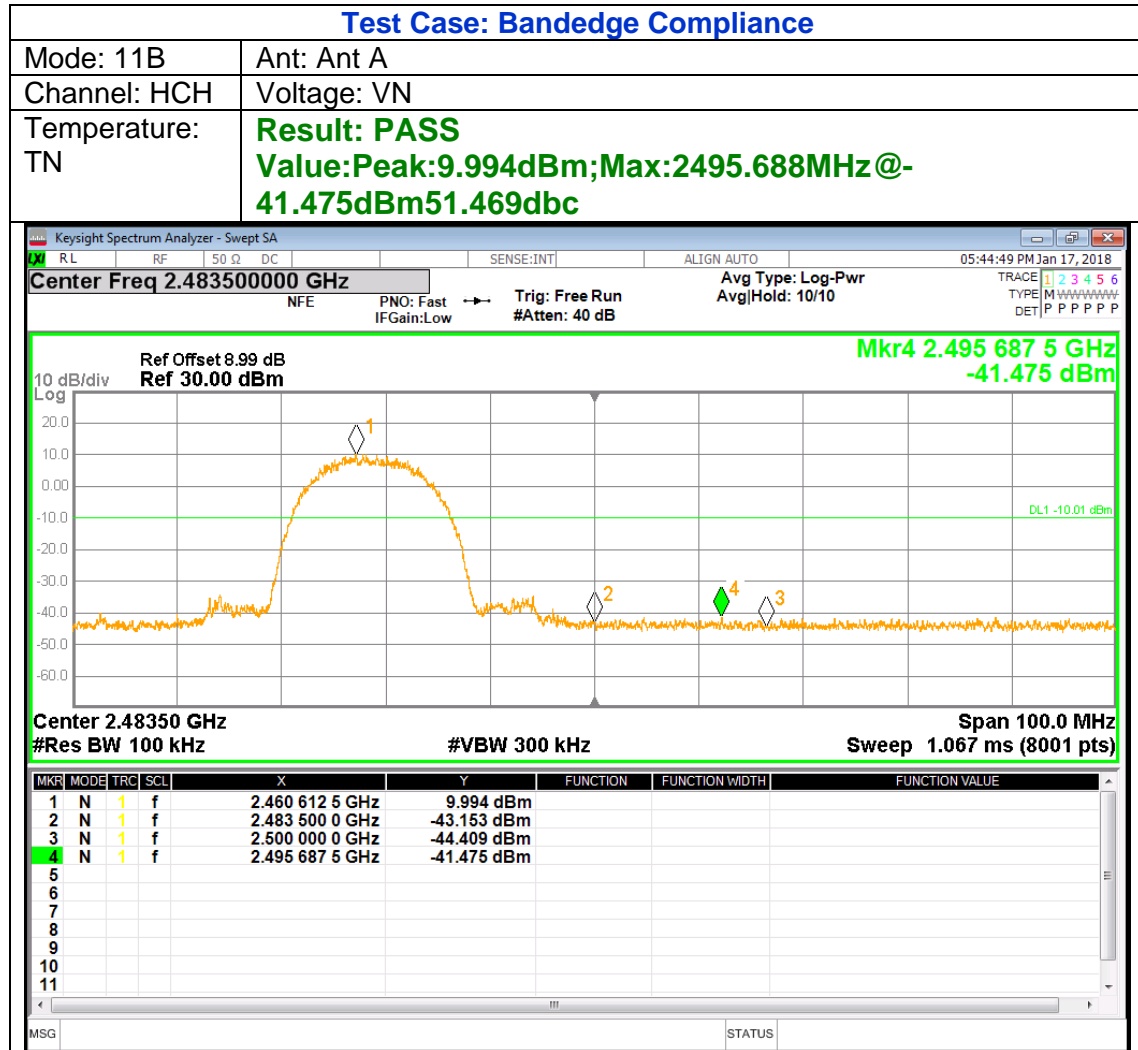


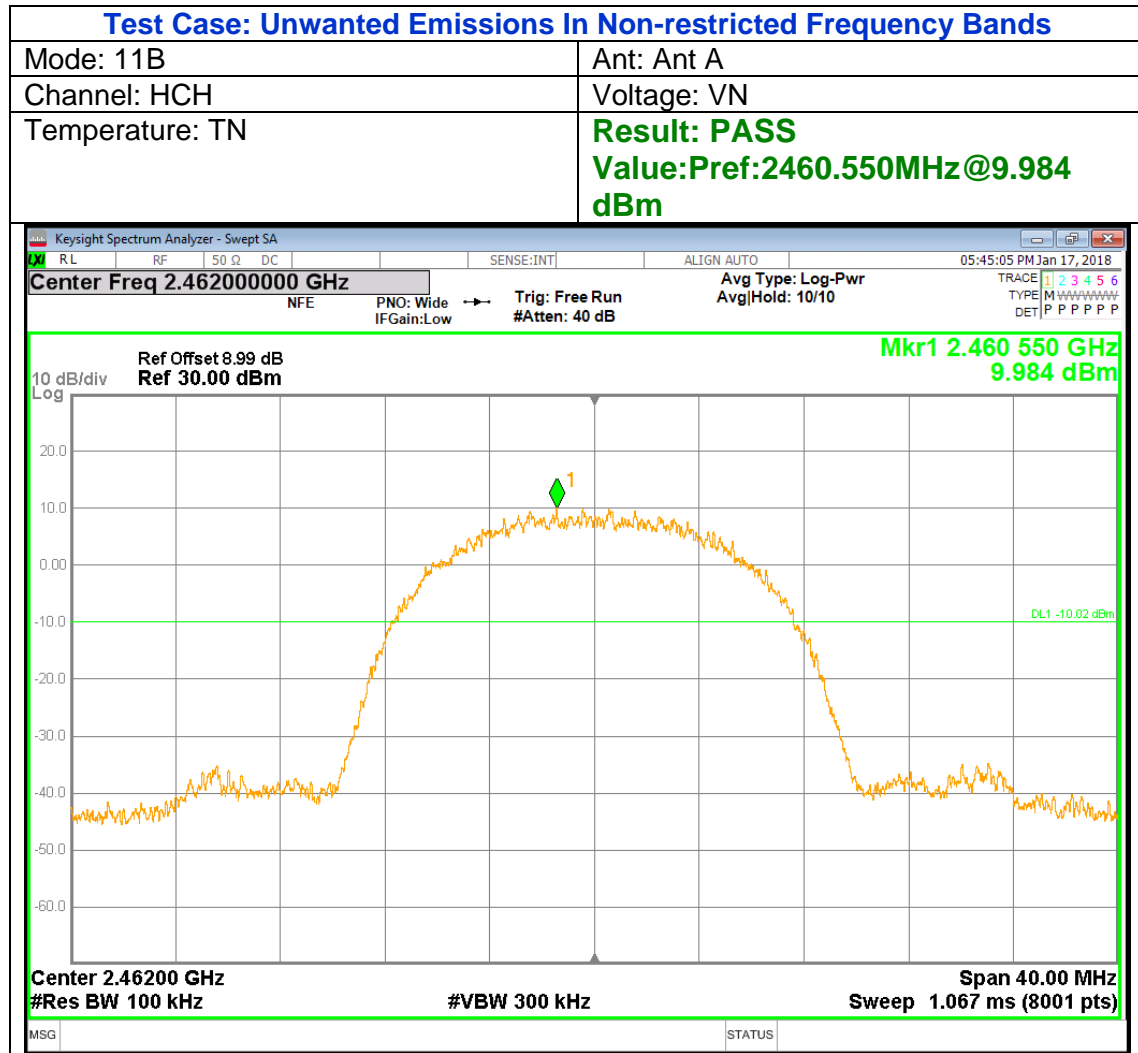




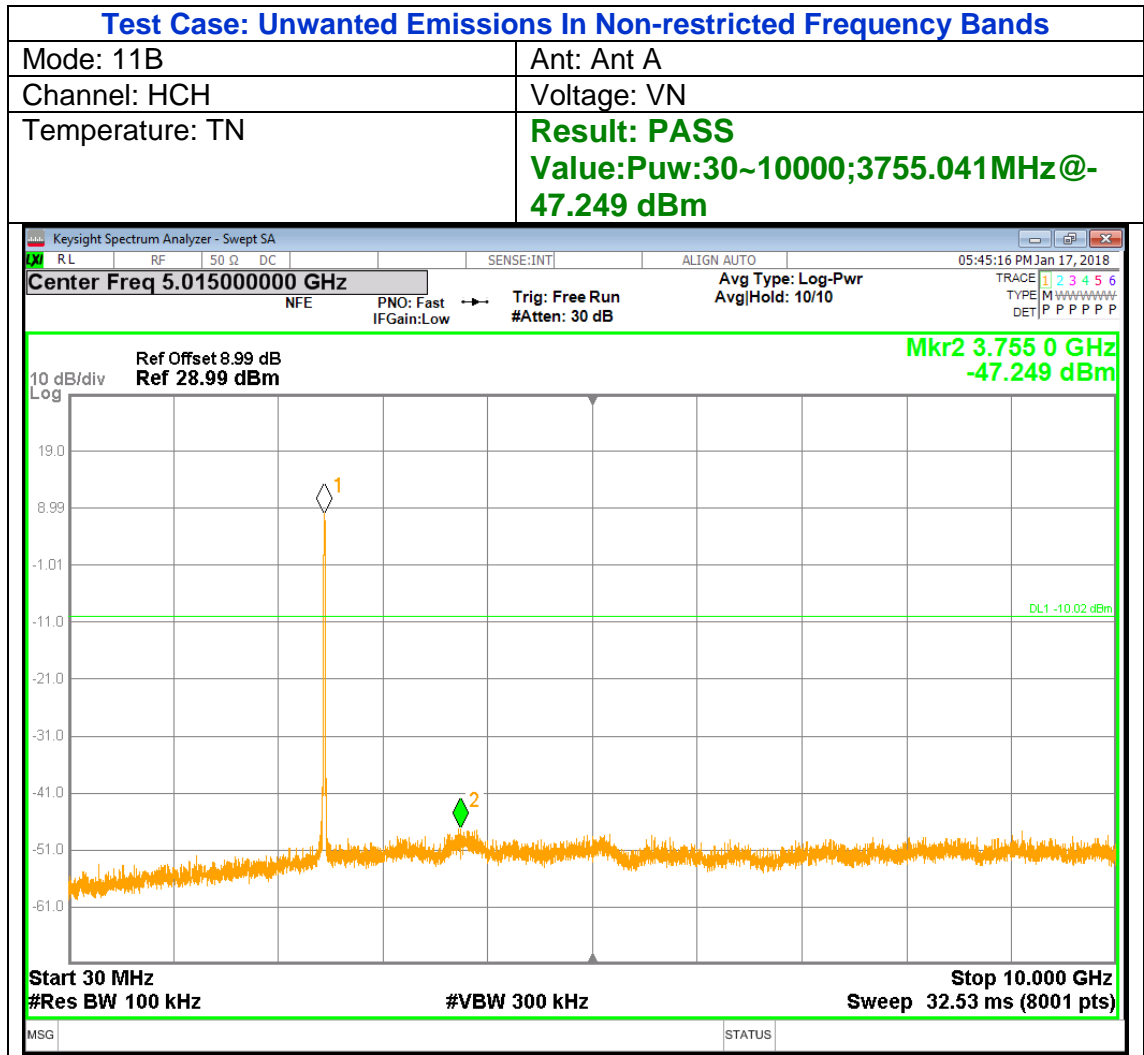


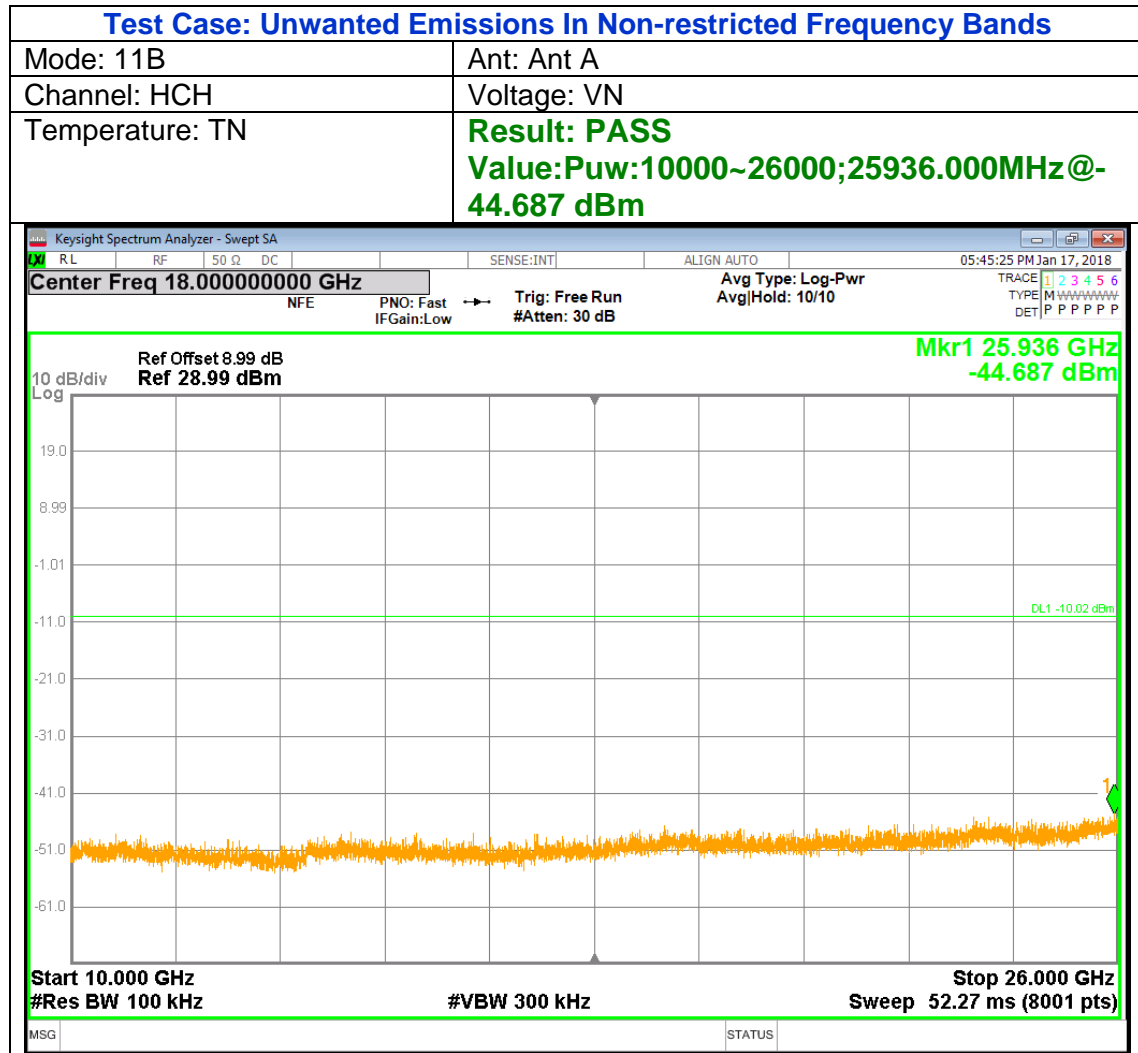
**High Channel**

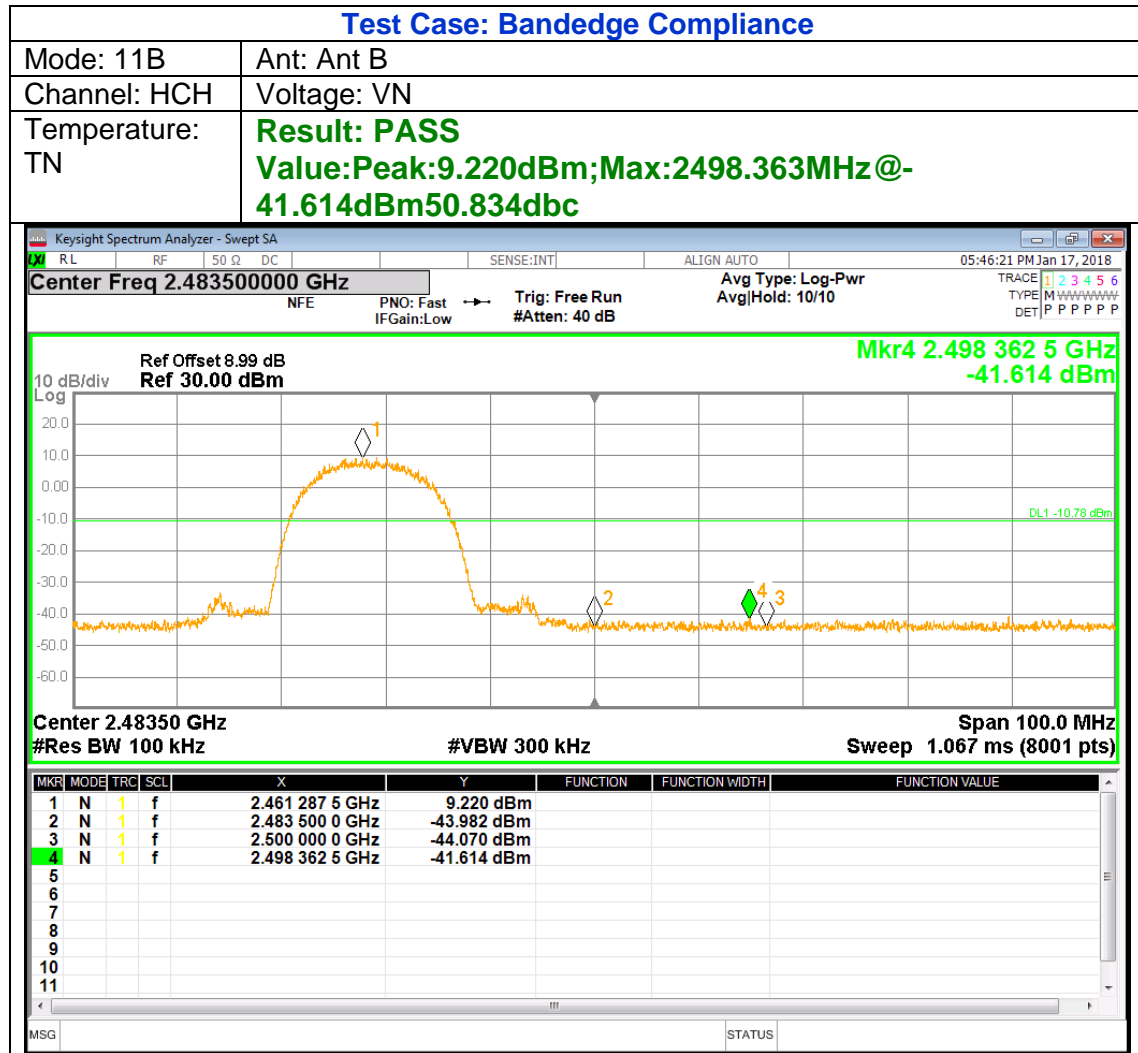


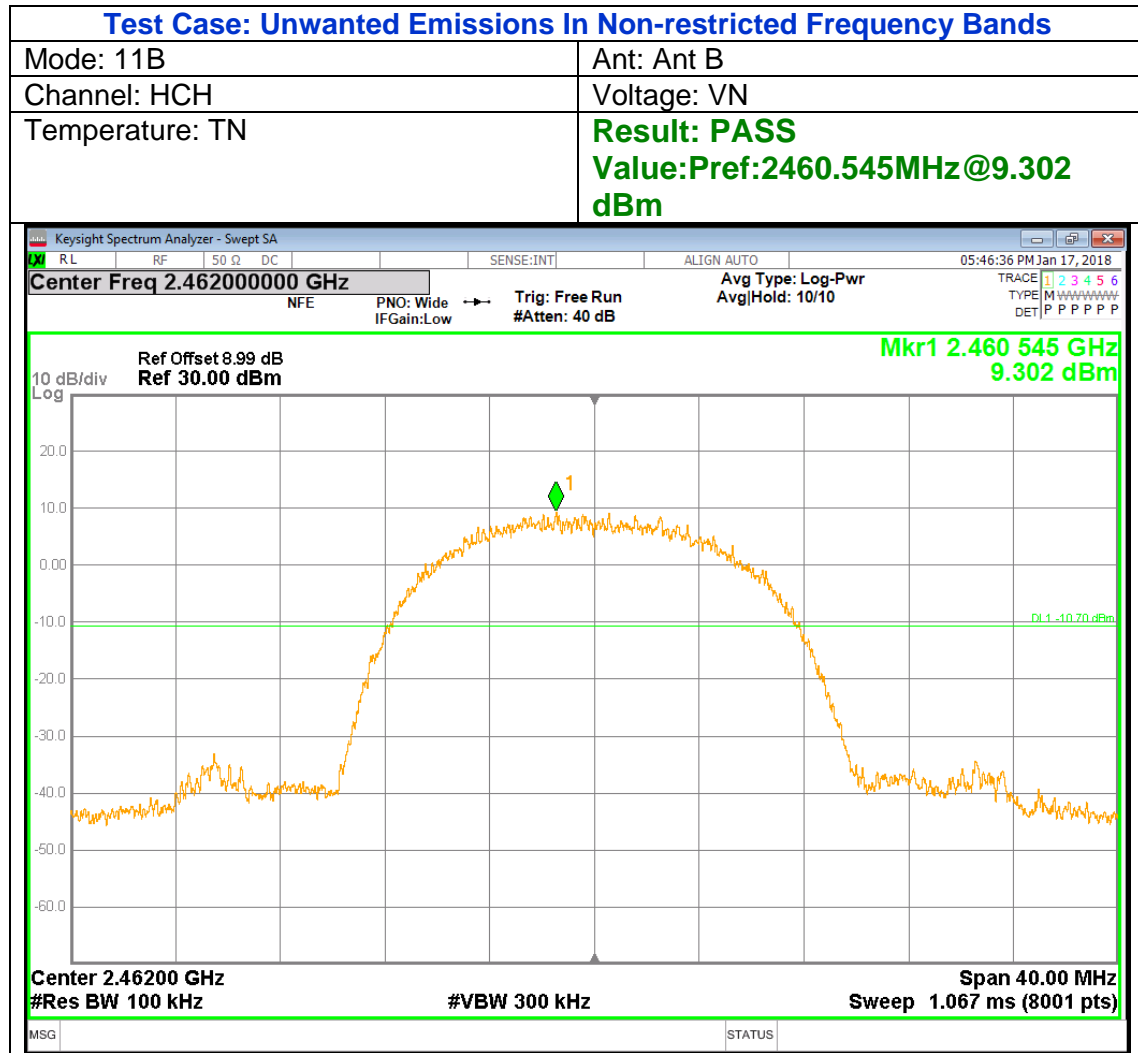


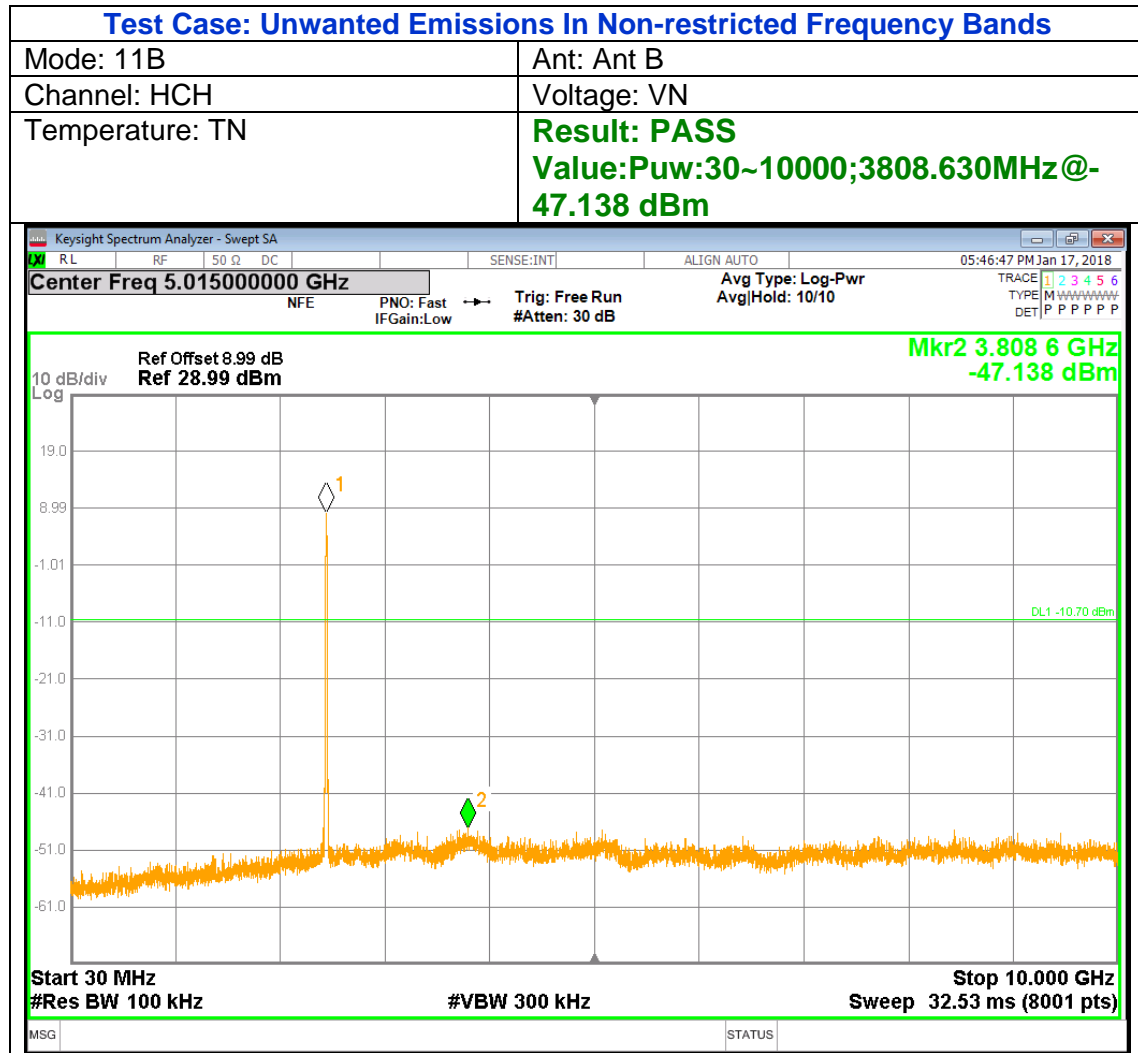


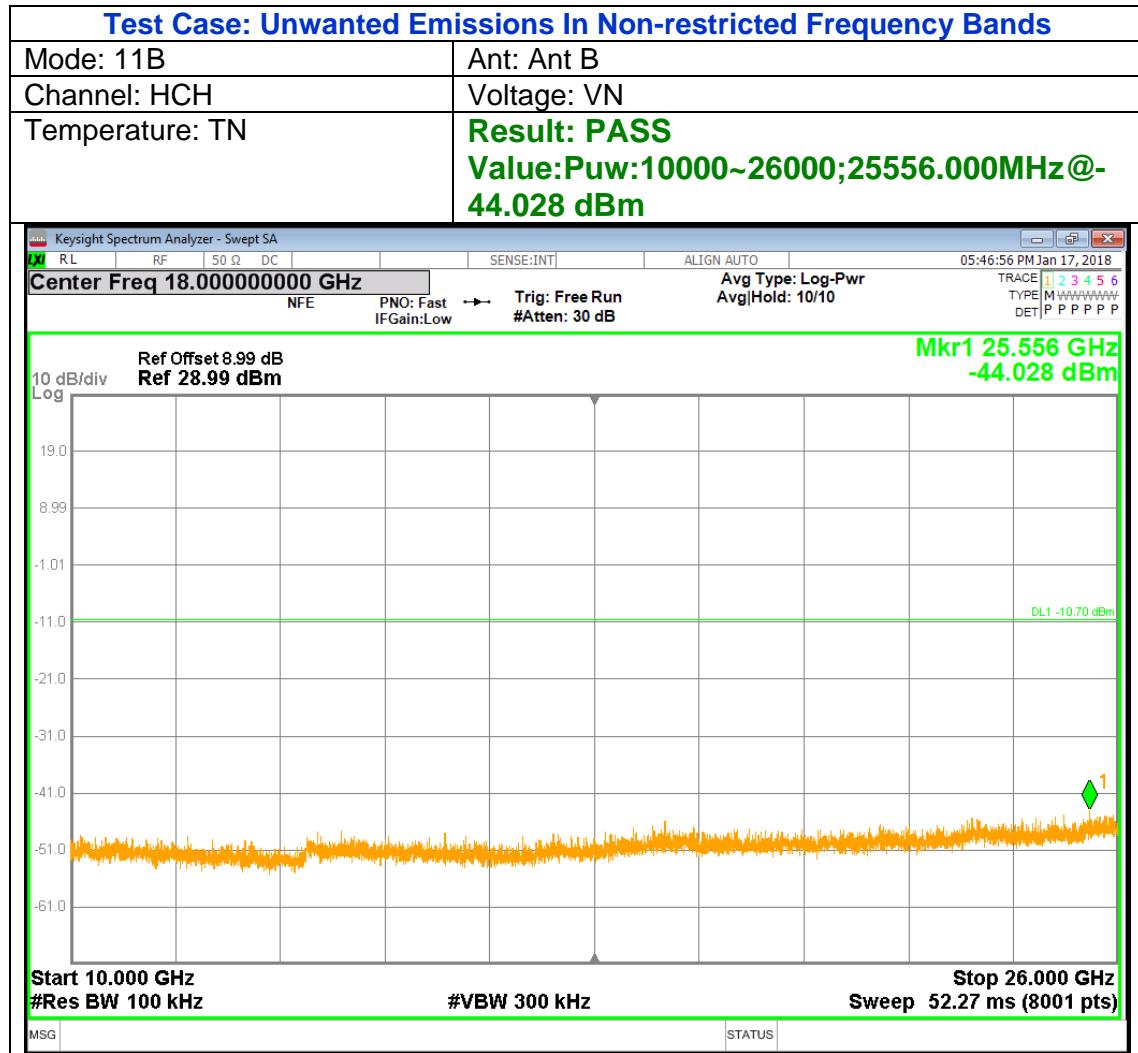


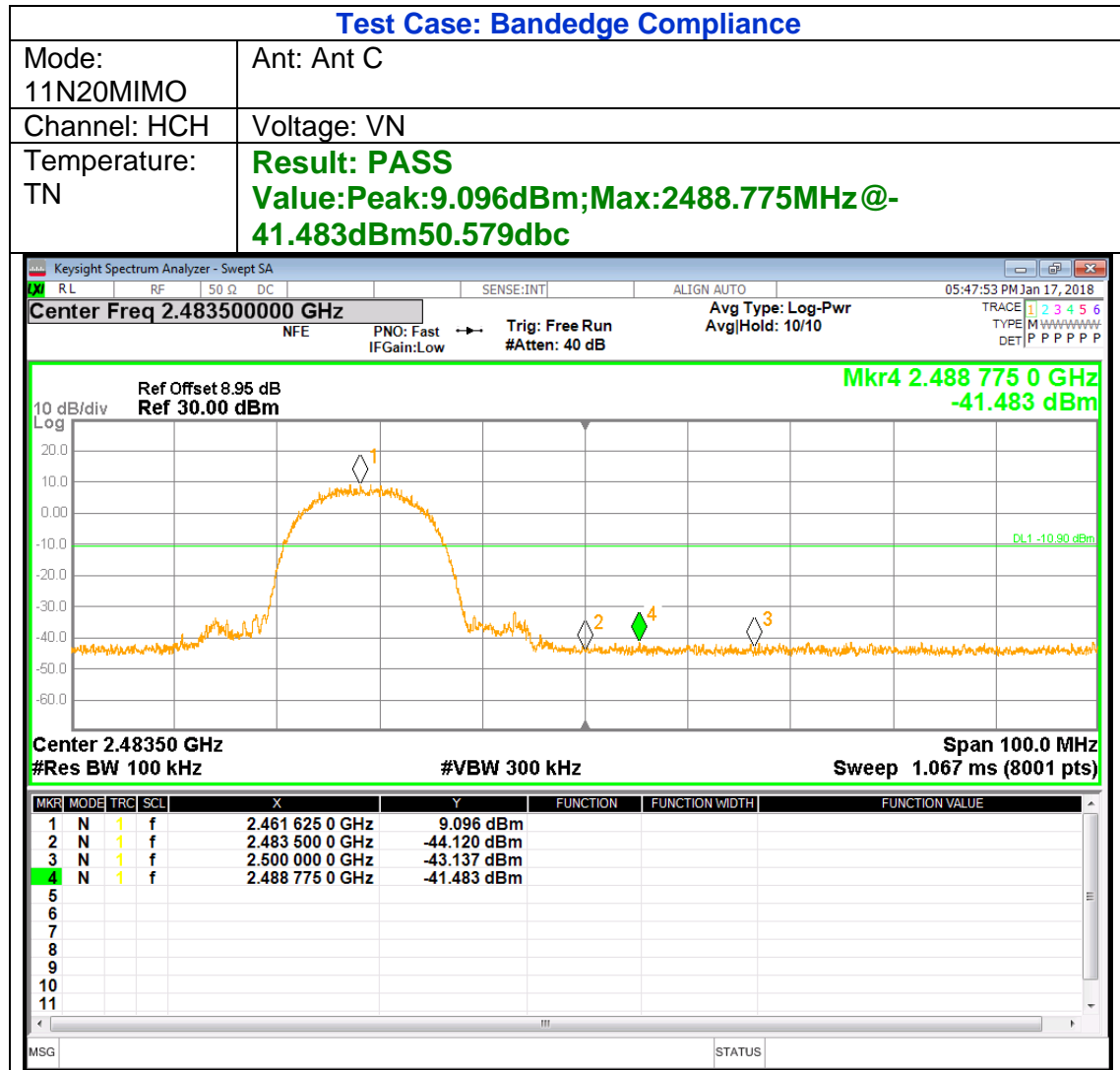


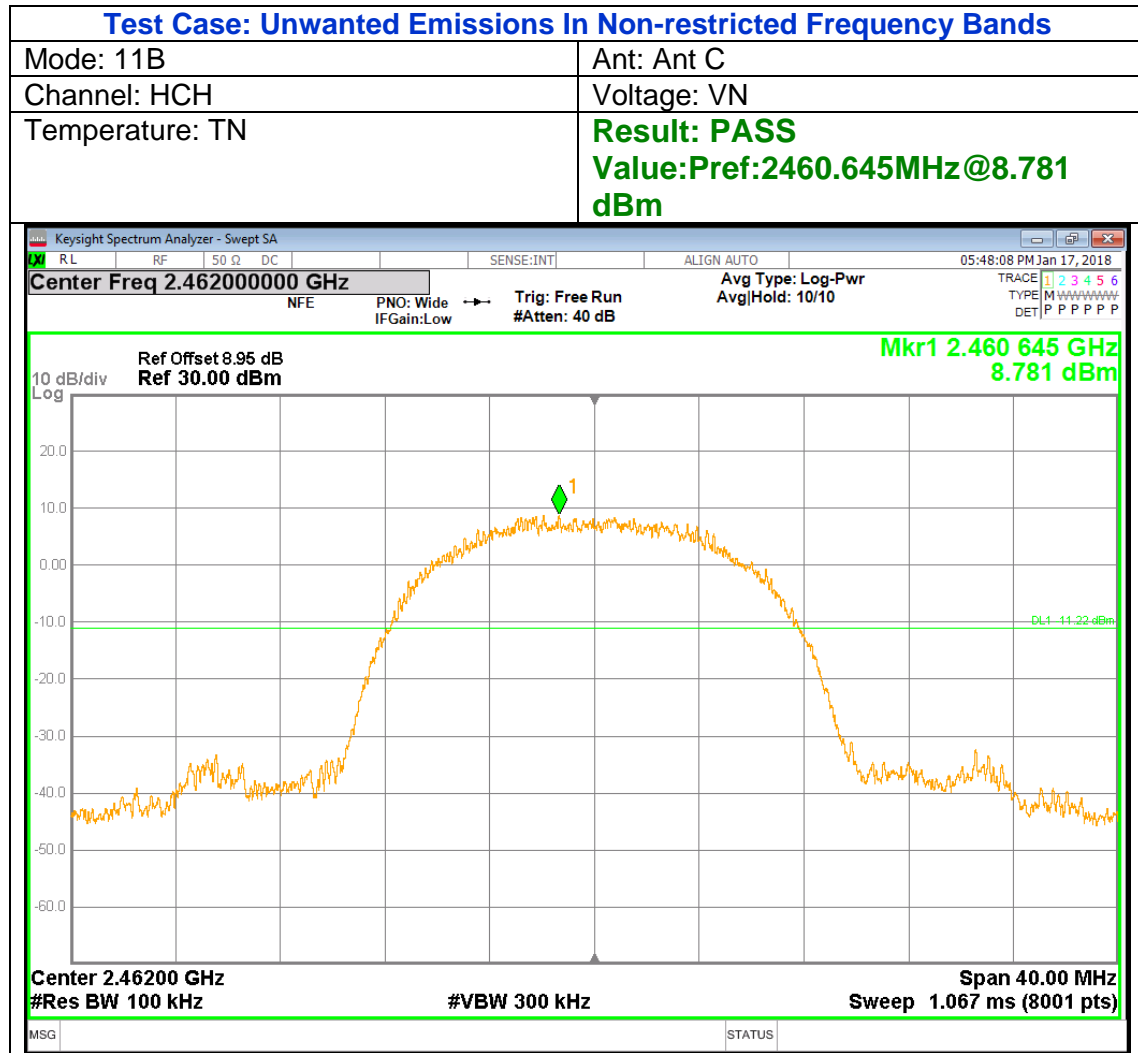




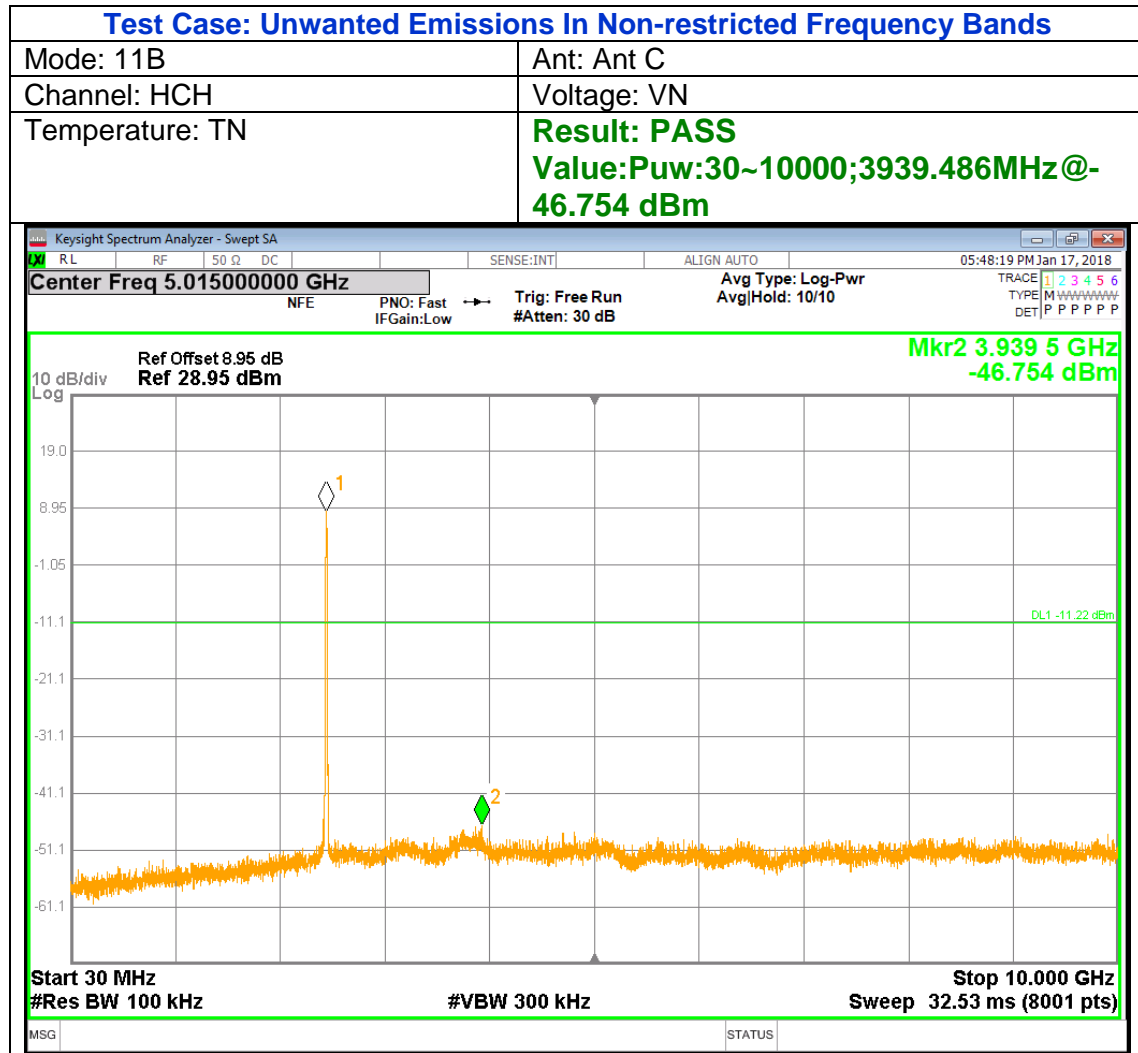


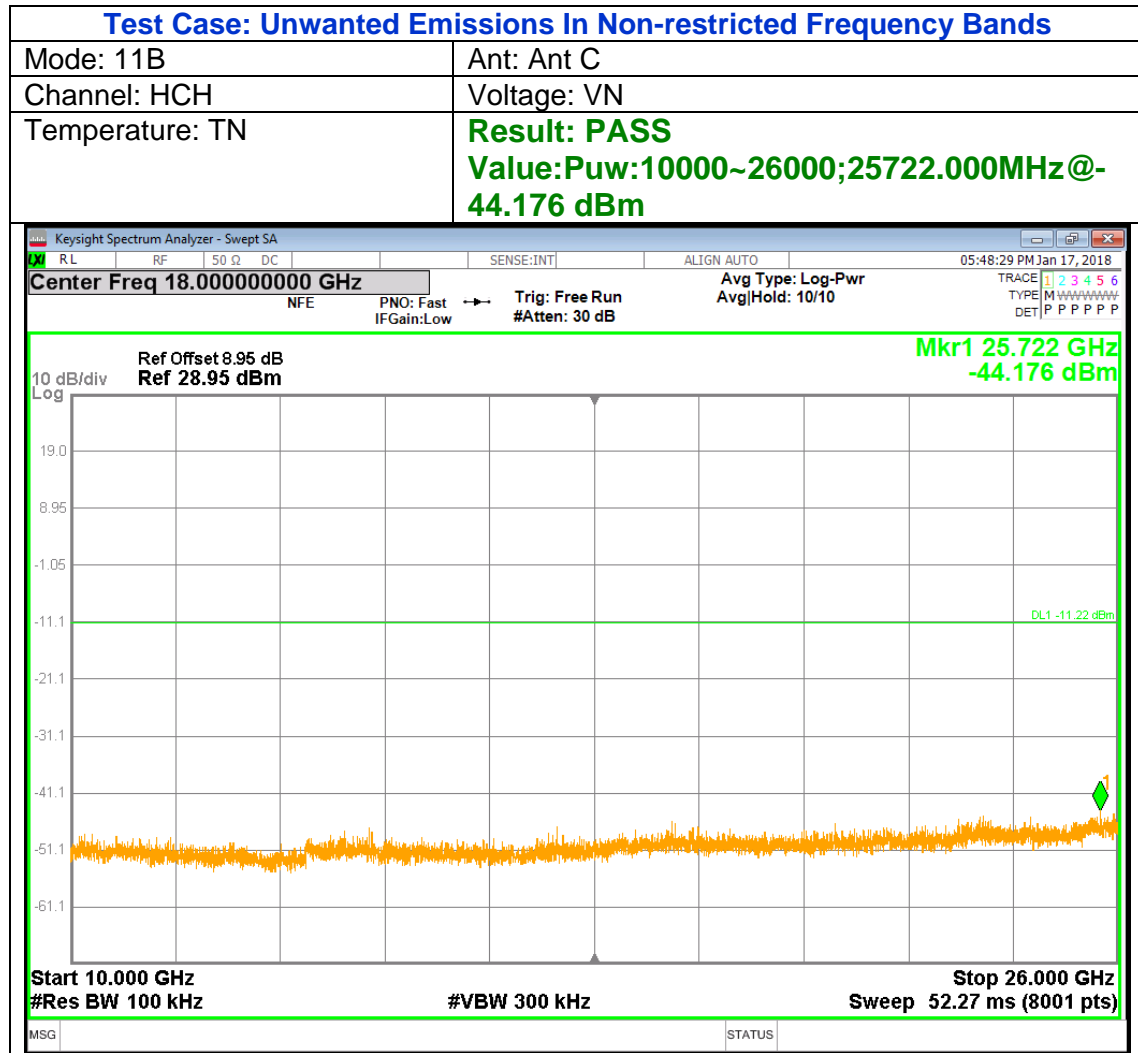






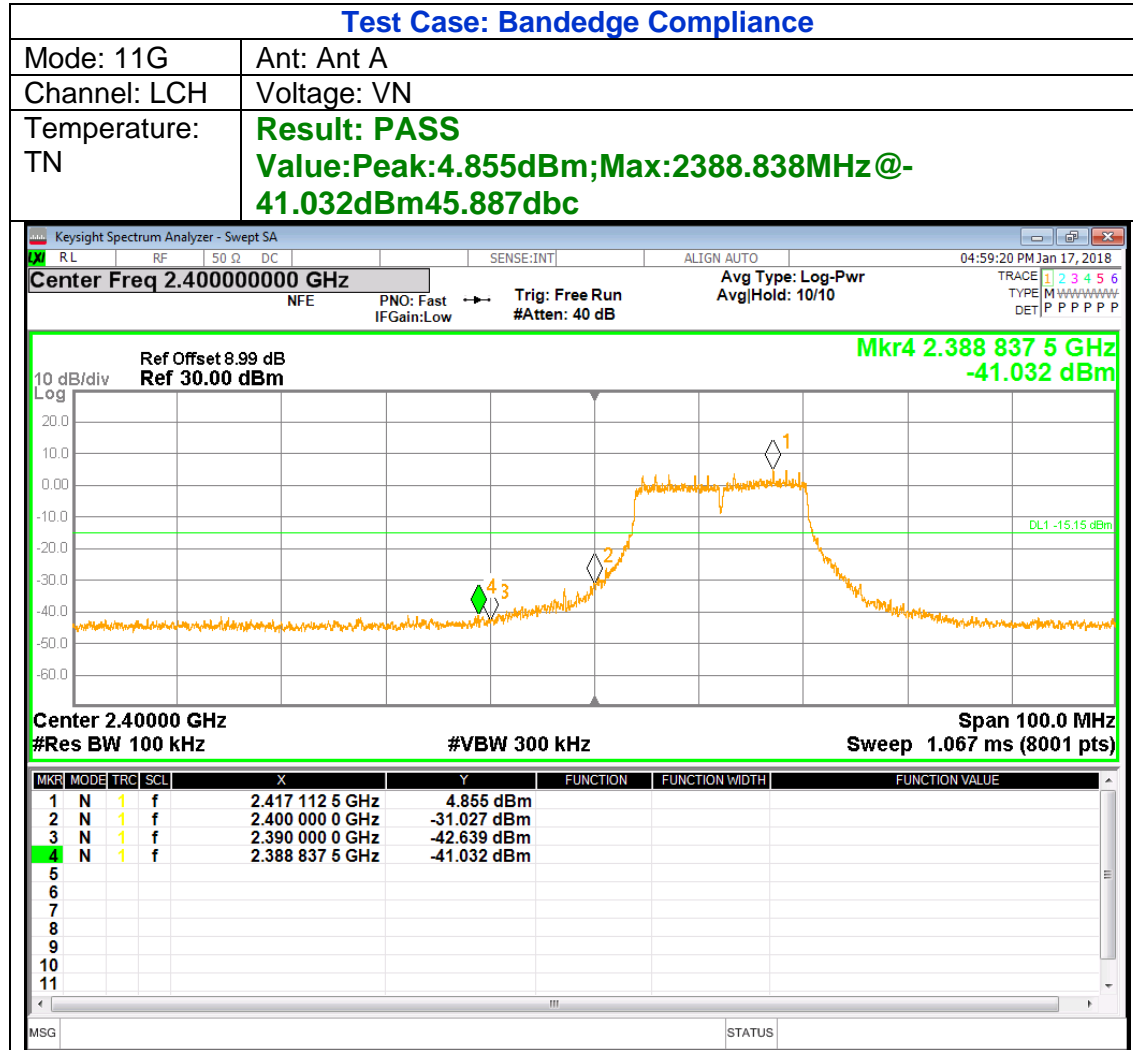


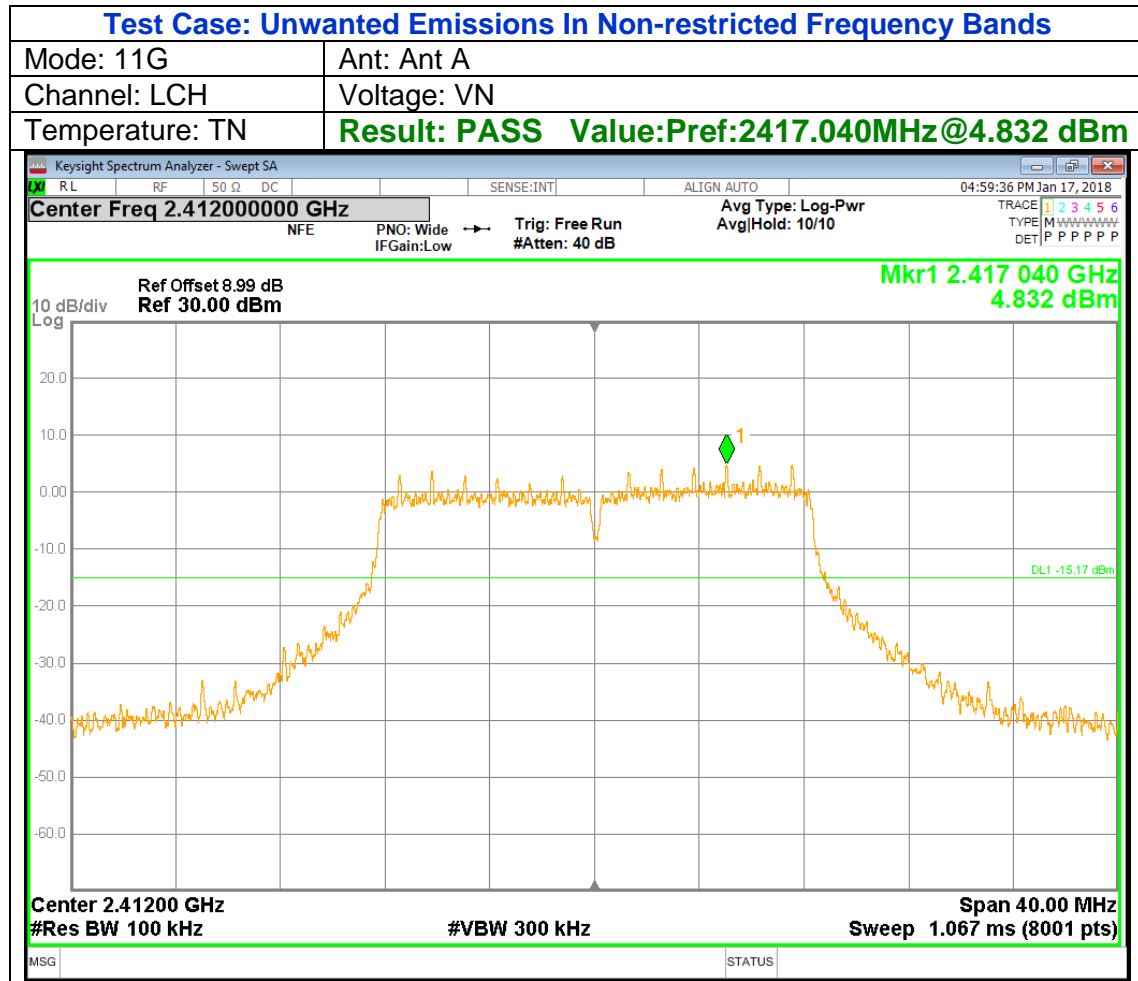


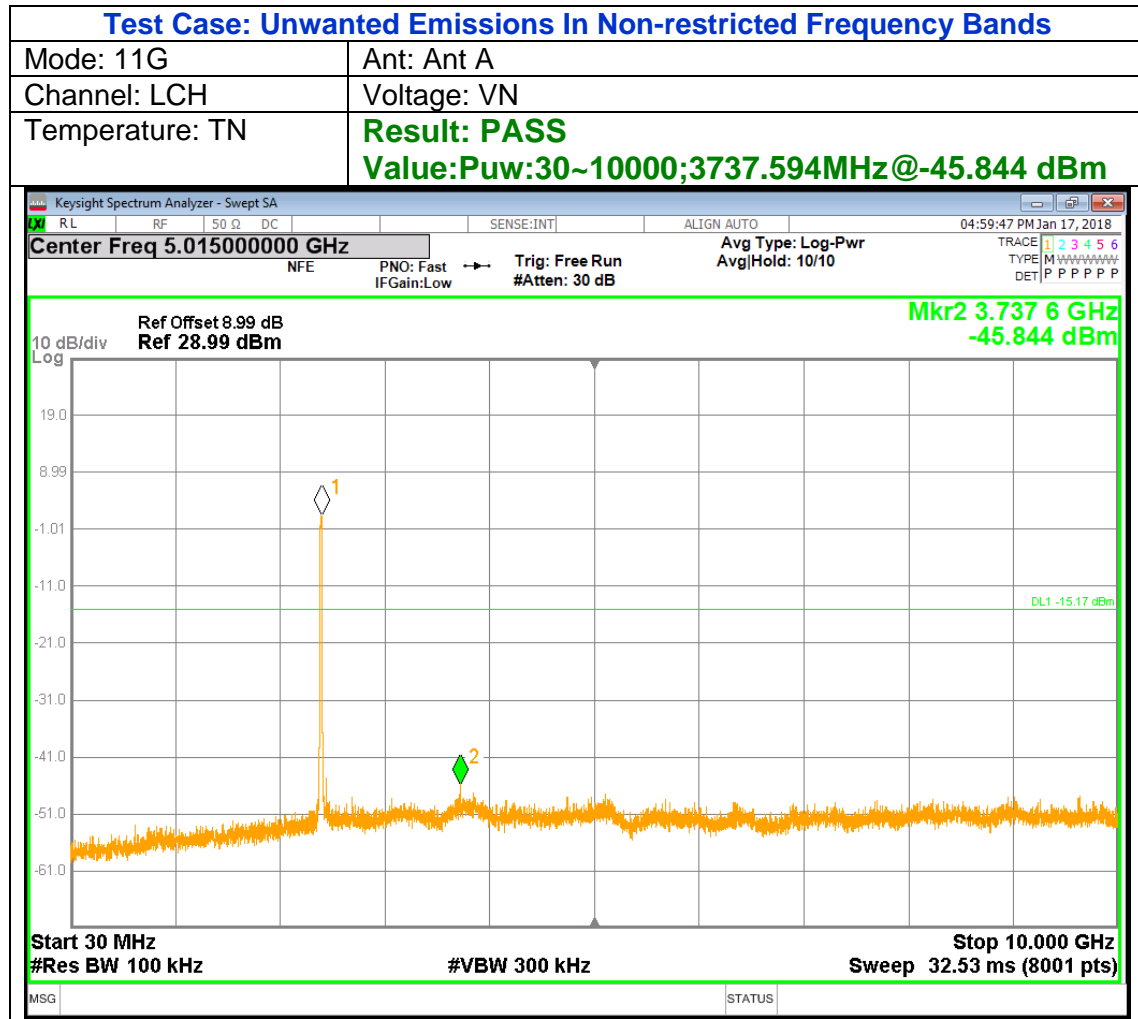


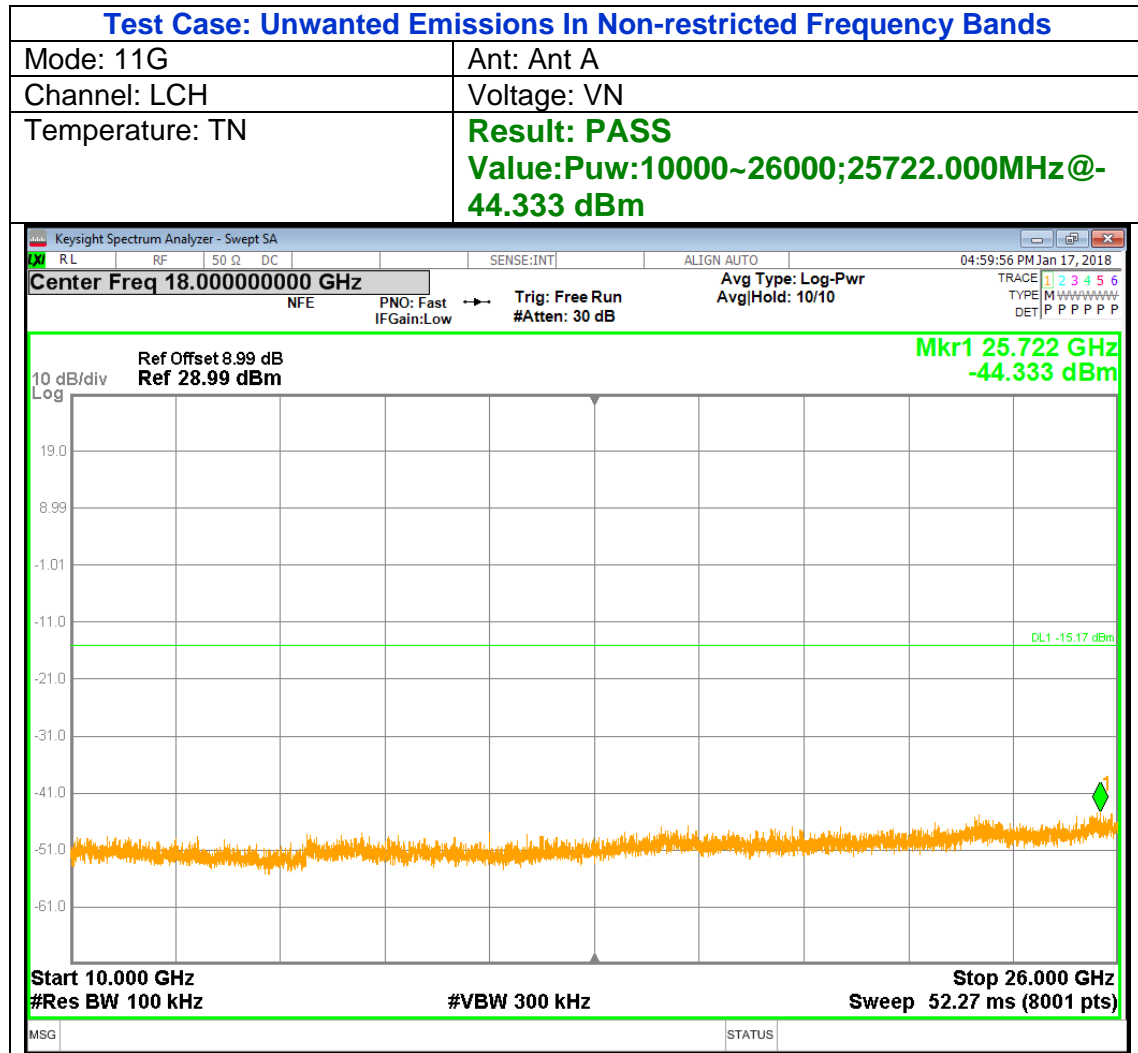
### 7.5.2. 802.11g 3TX MODE

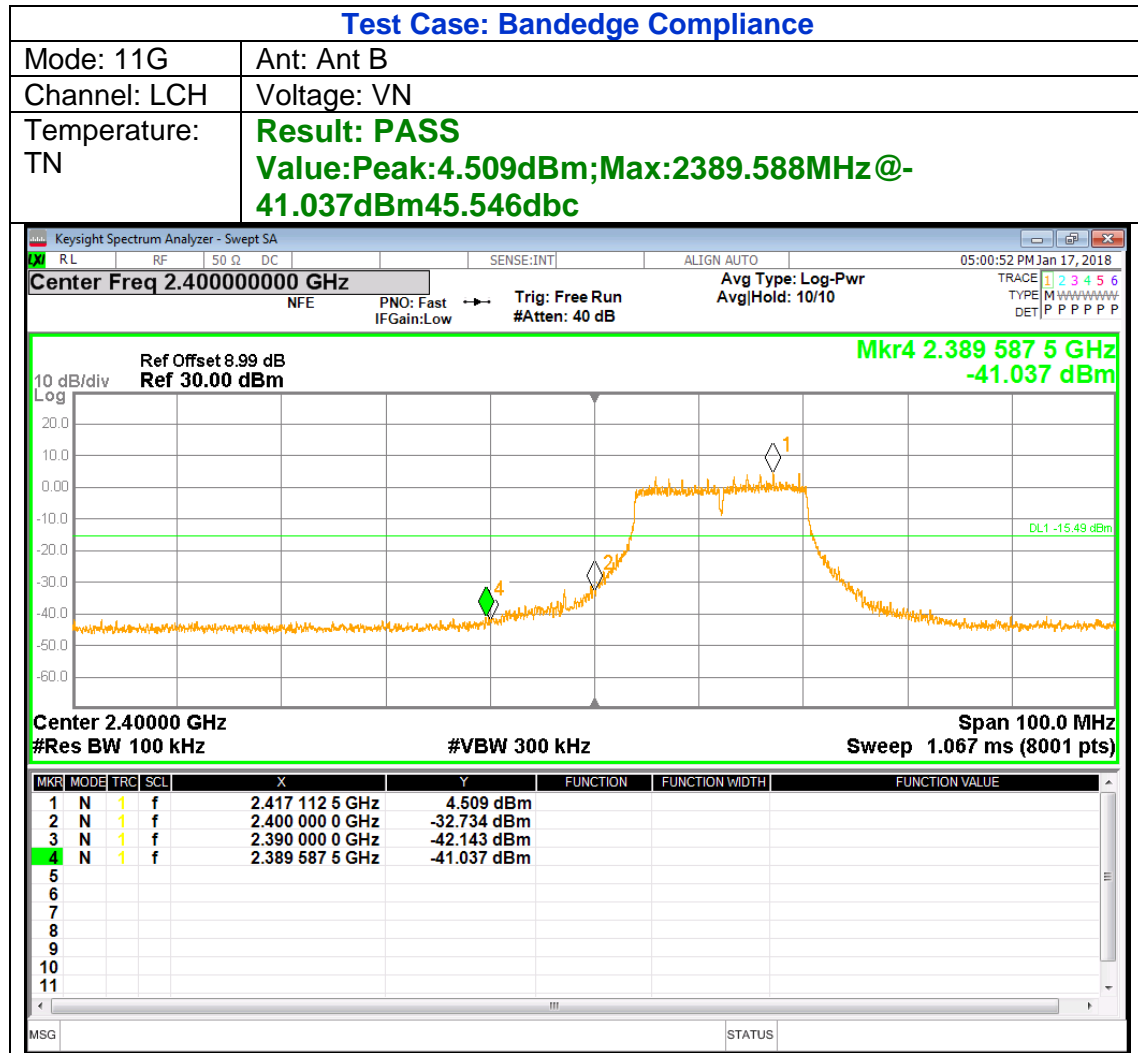
#### Low Channel

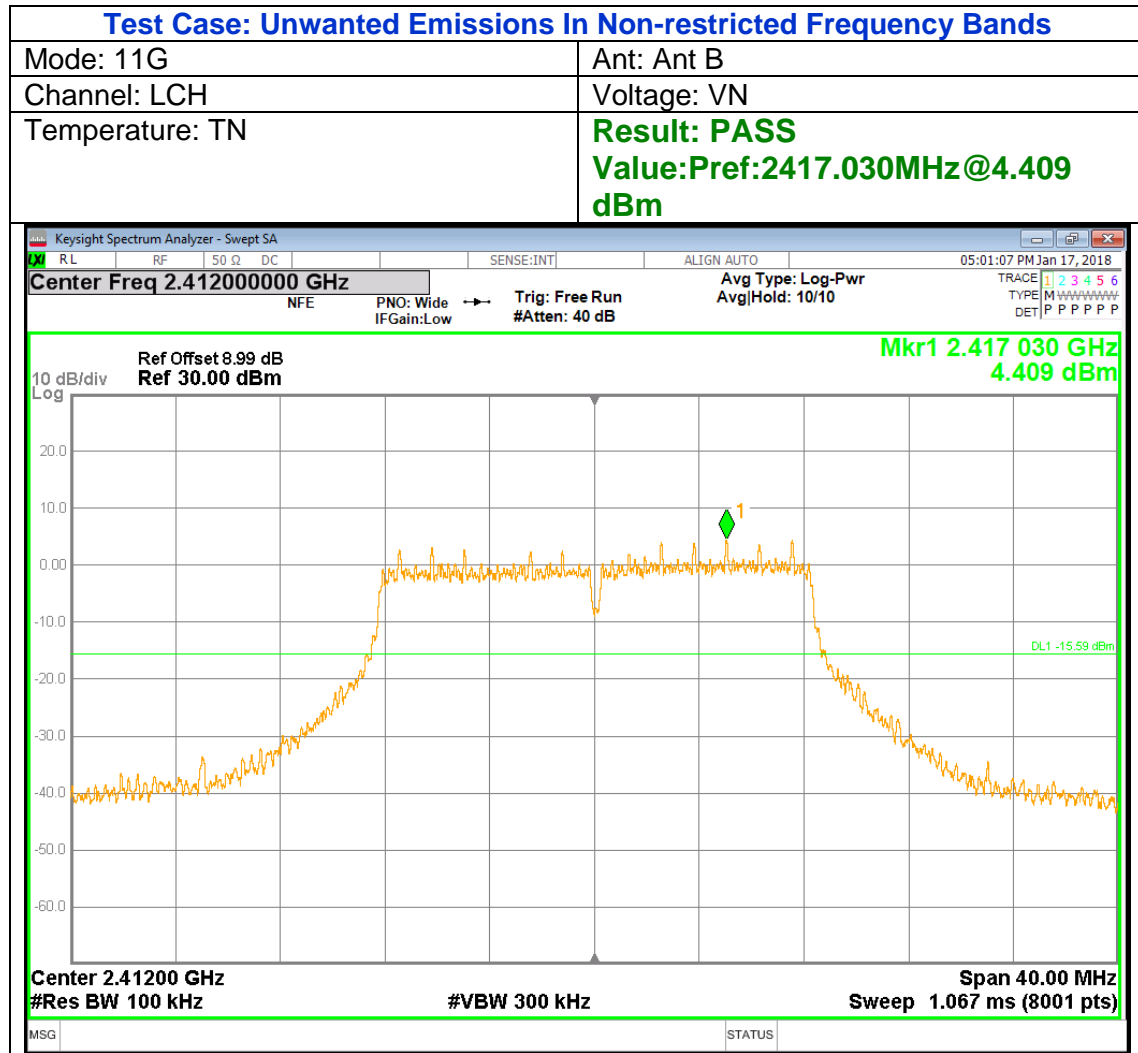




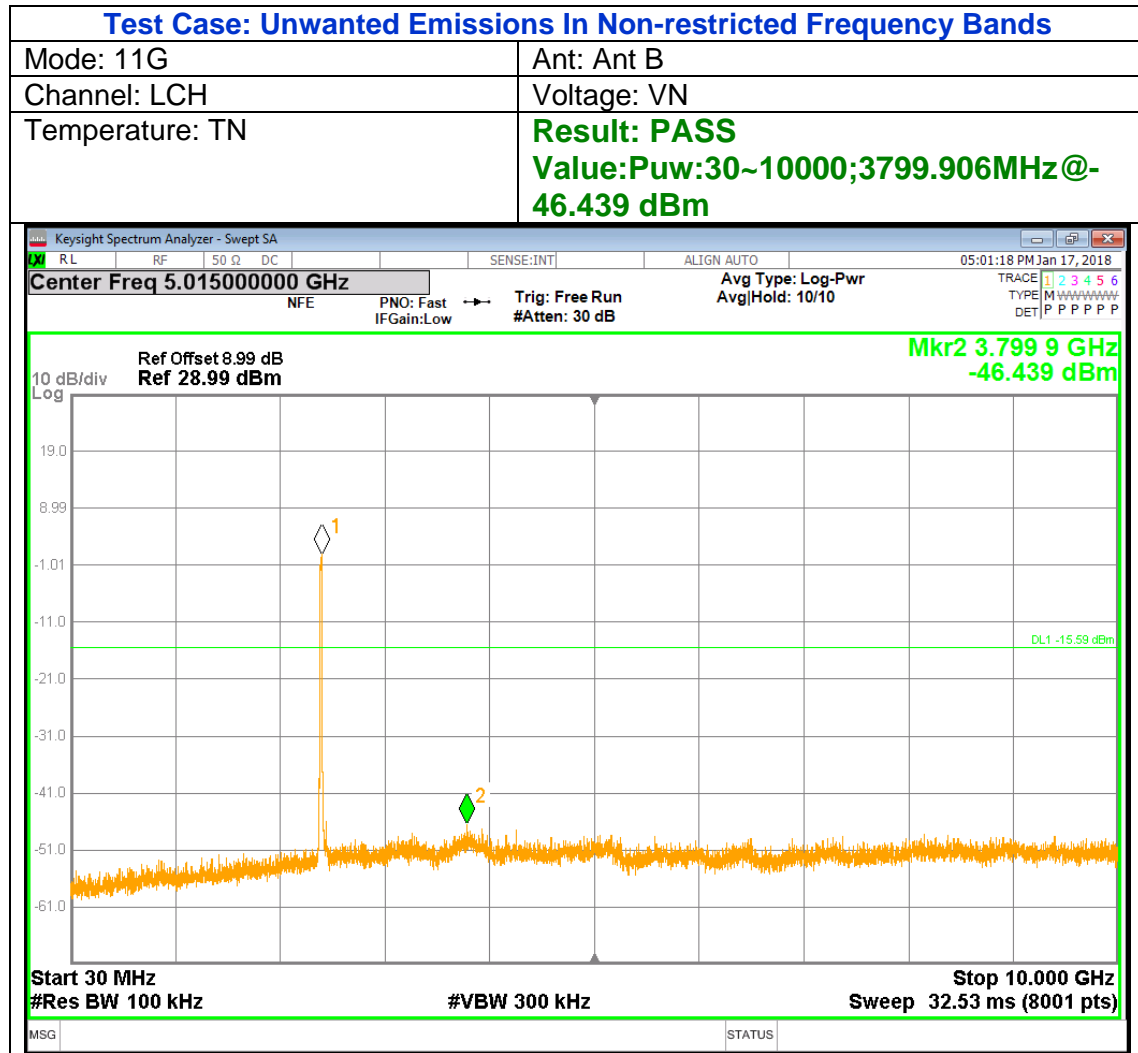


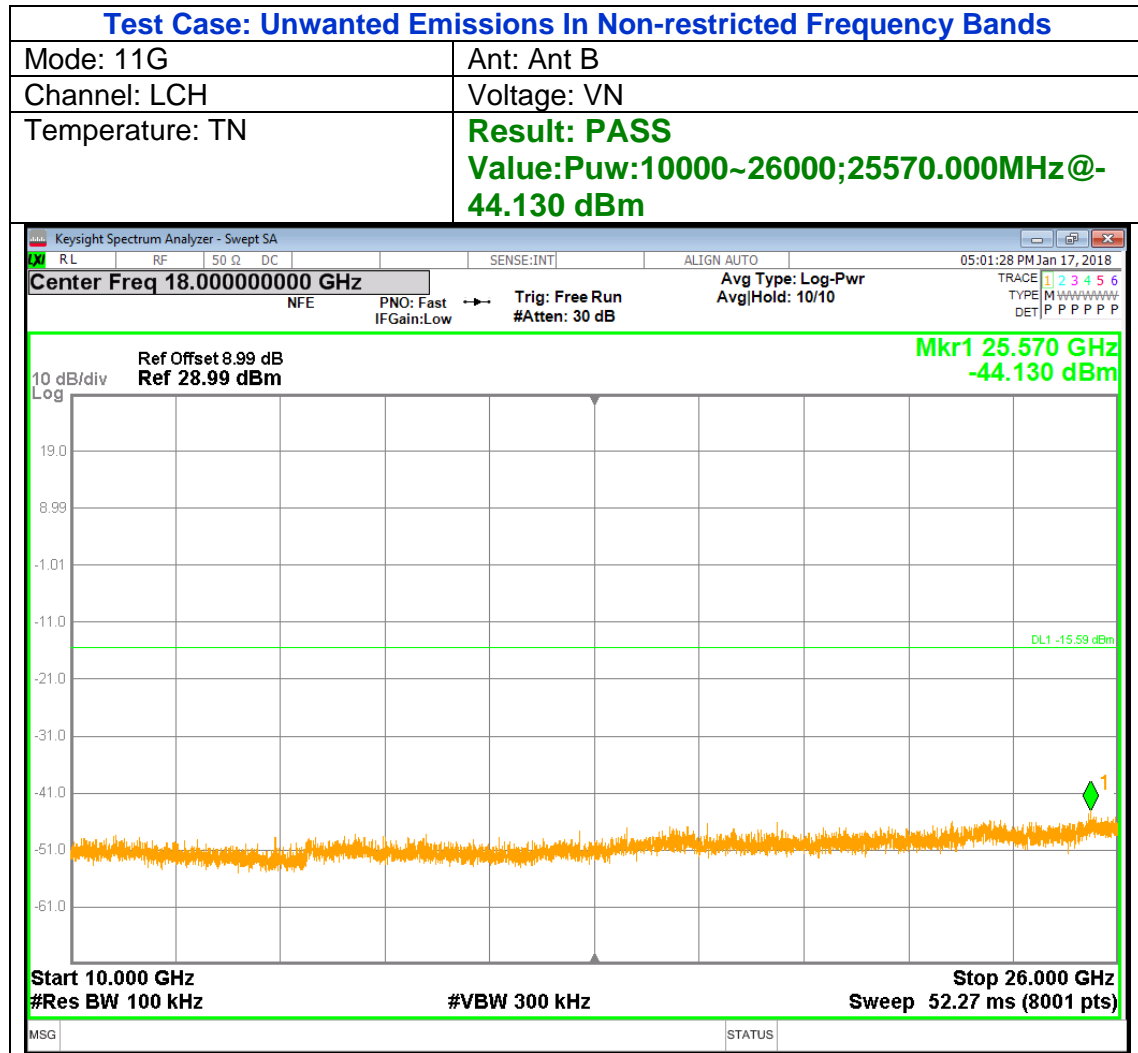


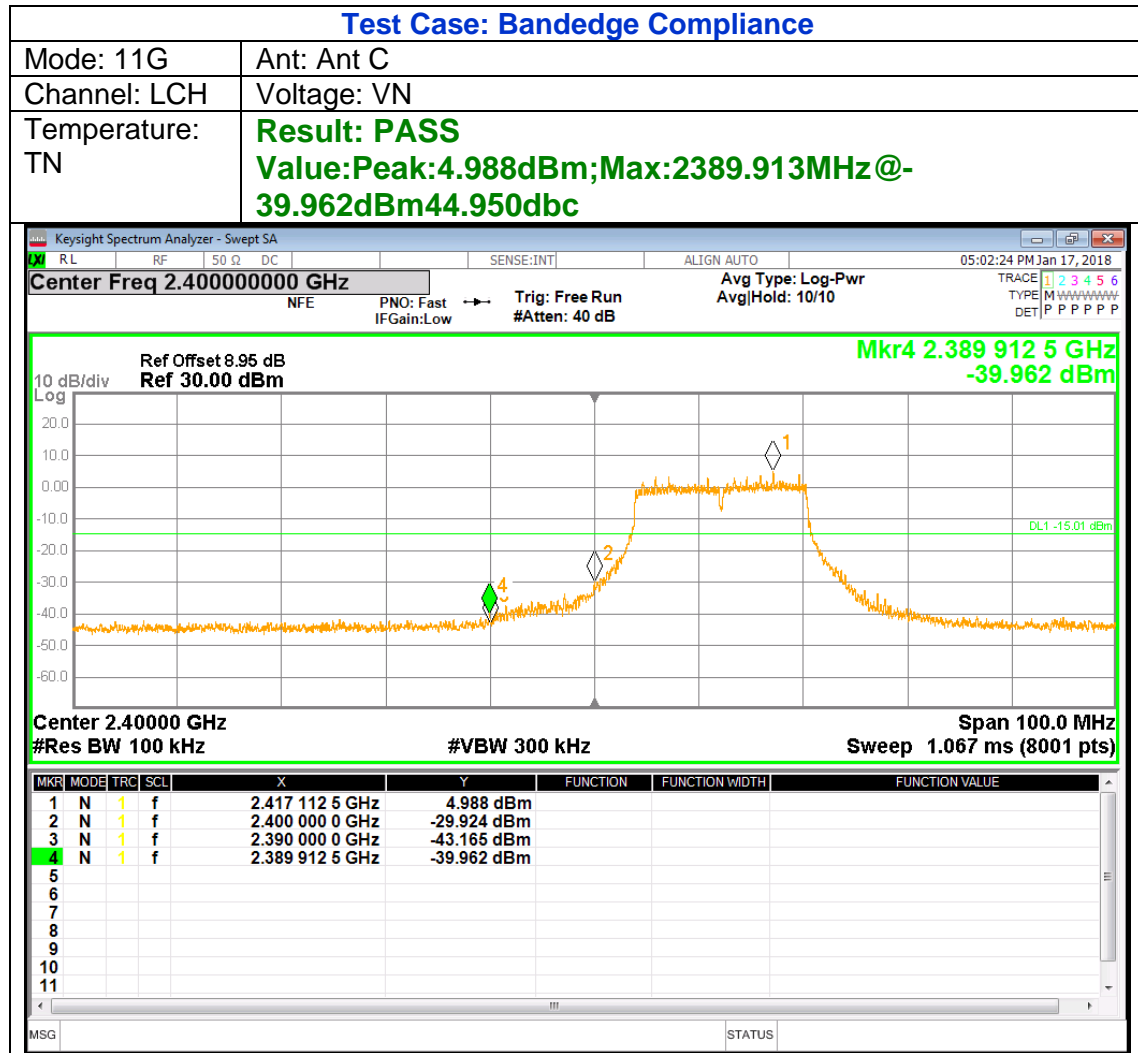


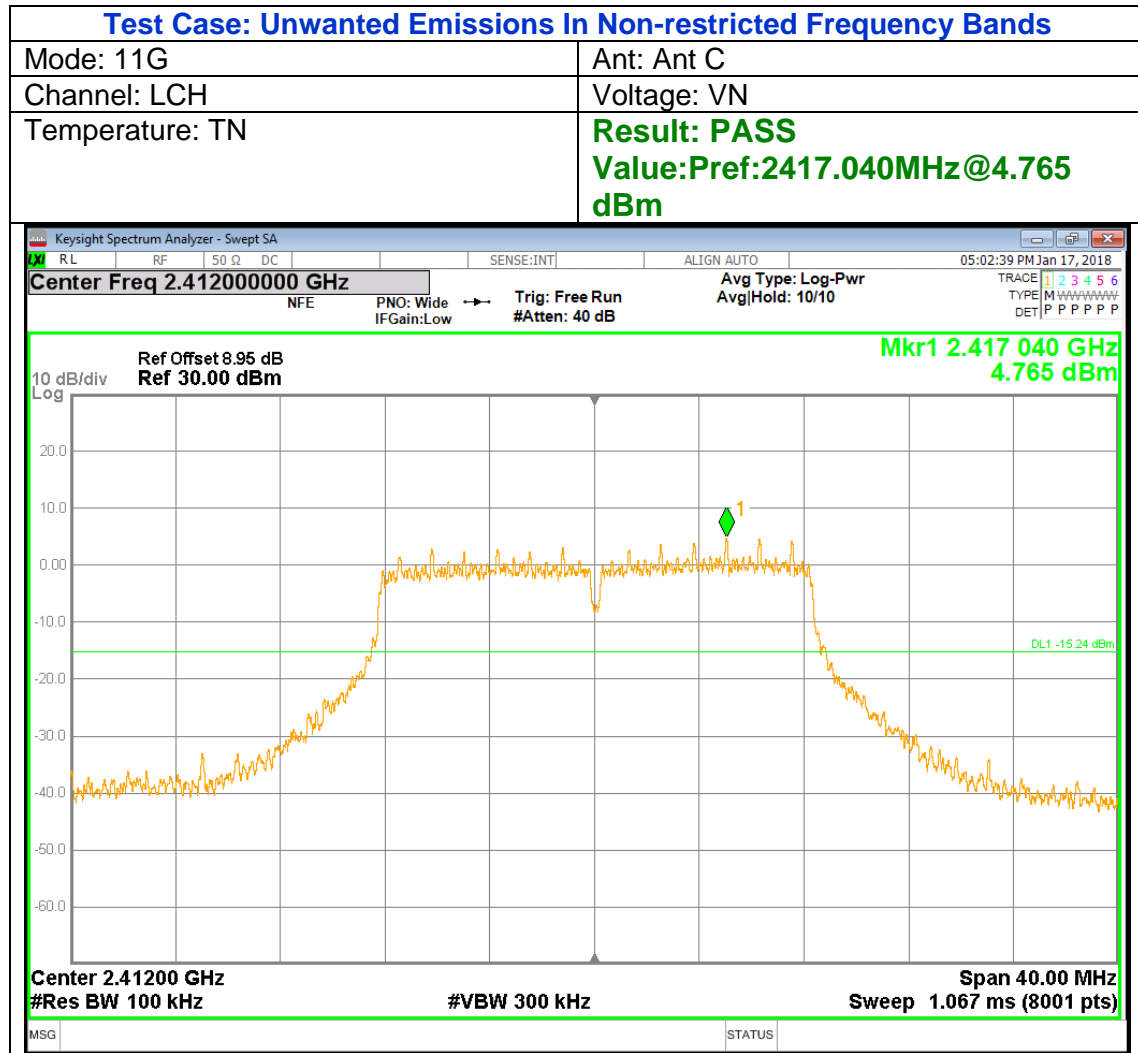


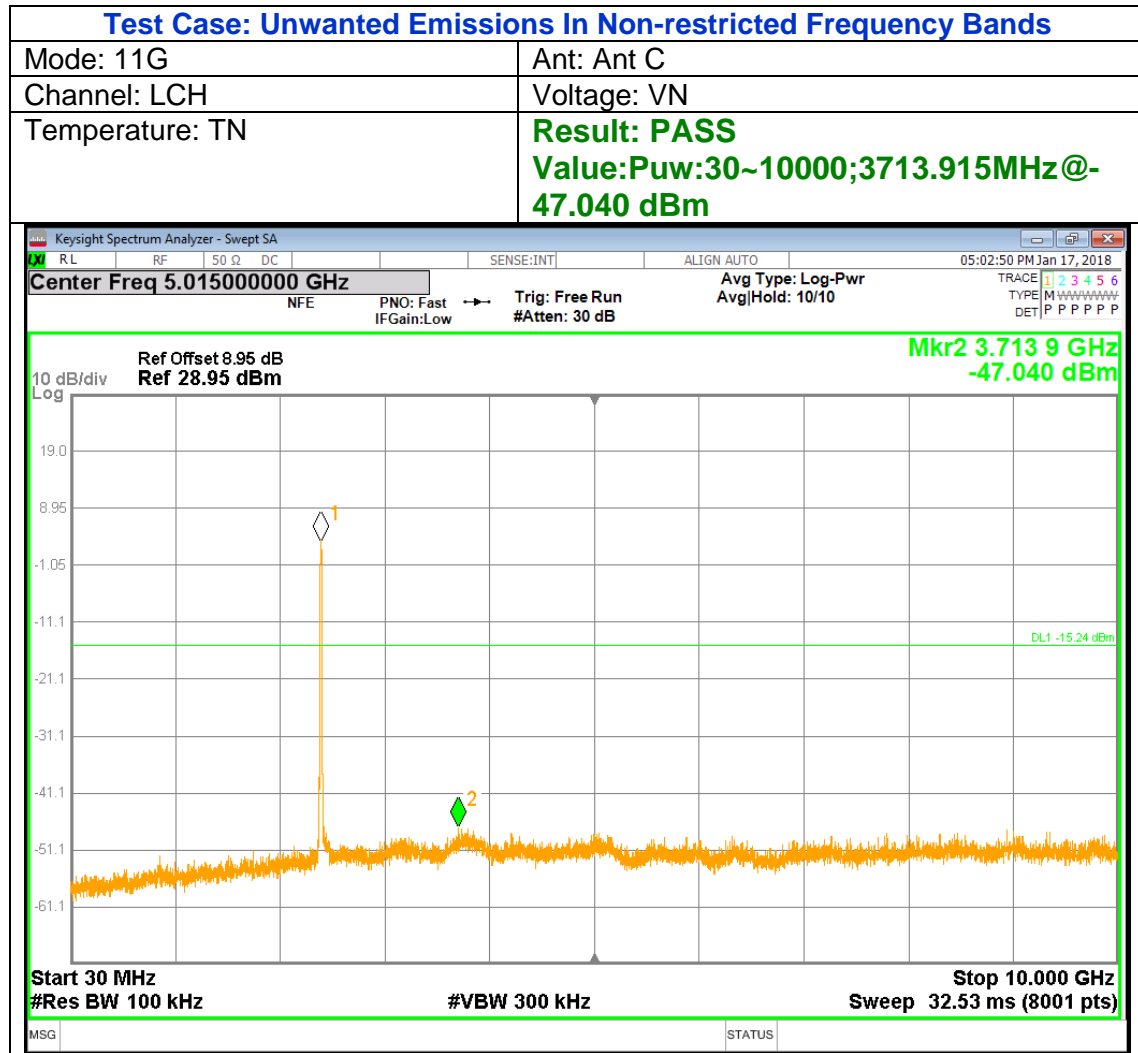


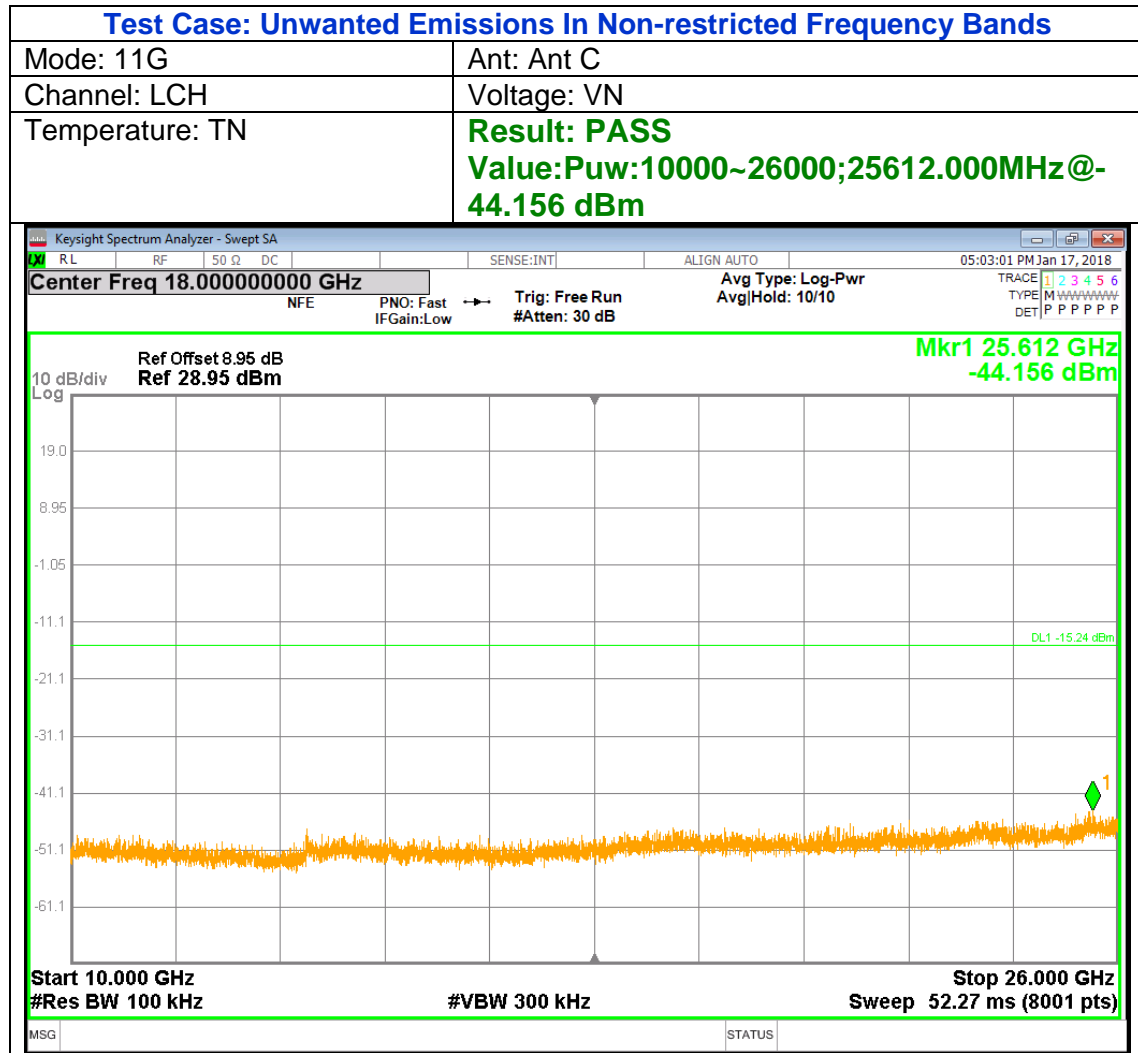




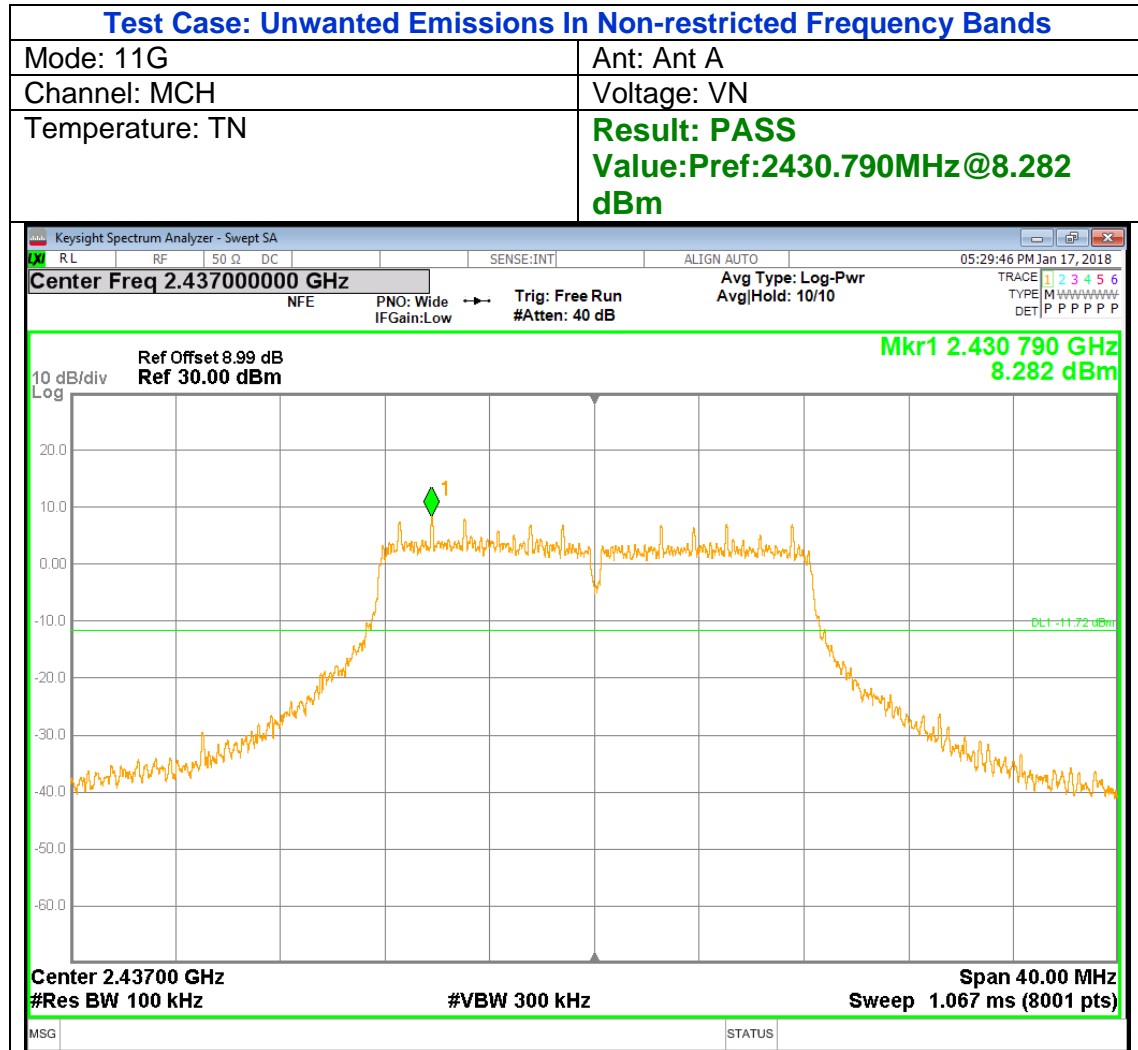


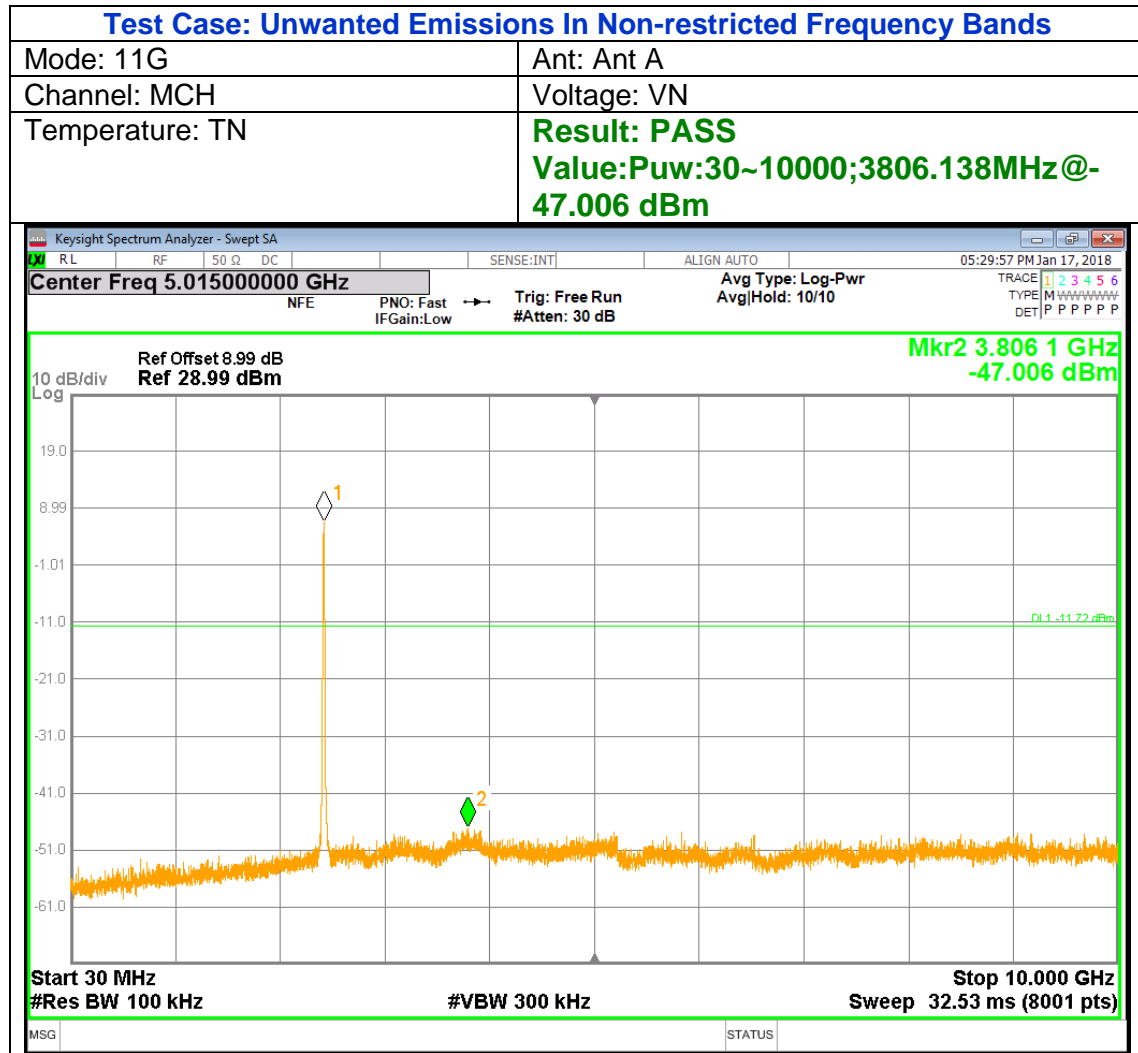




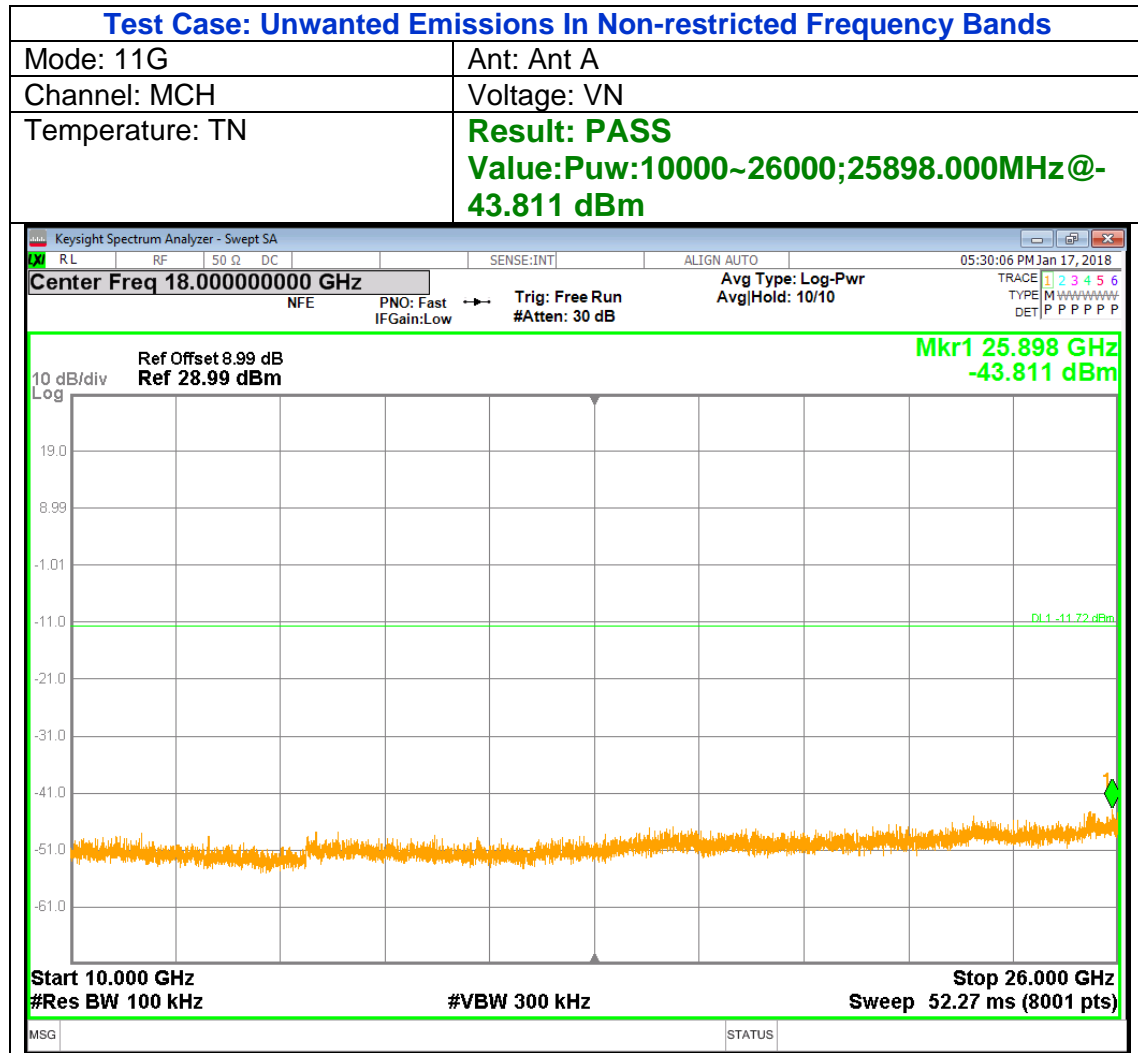


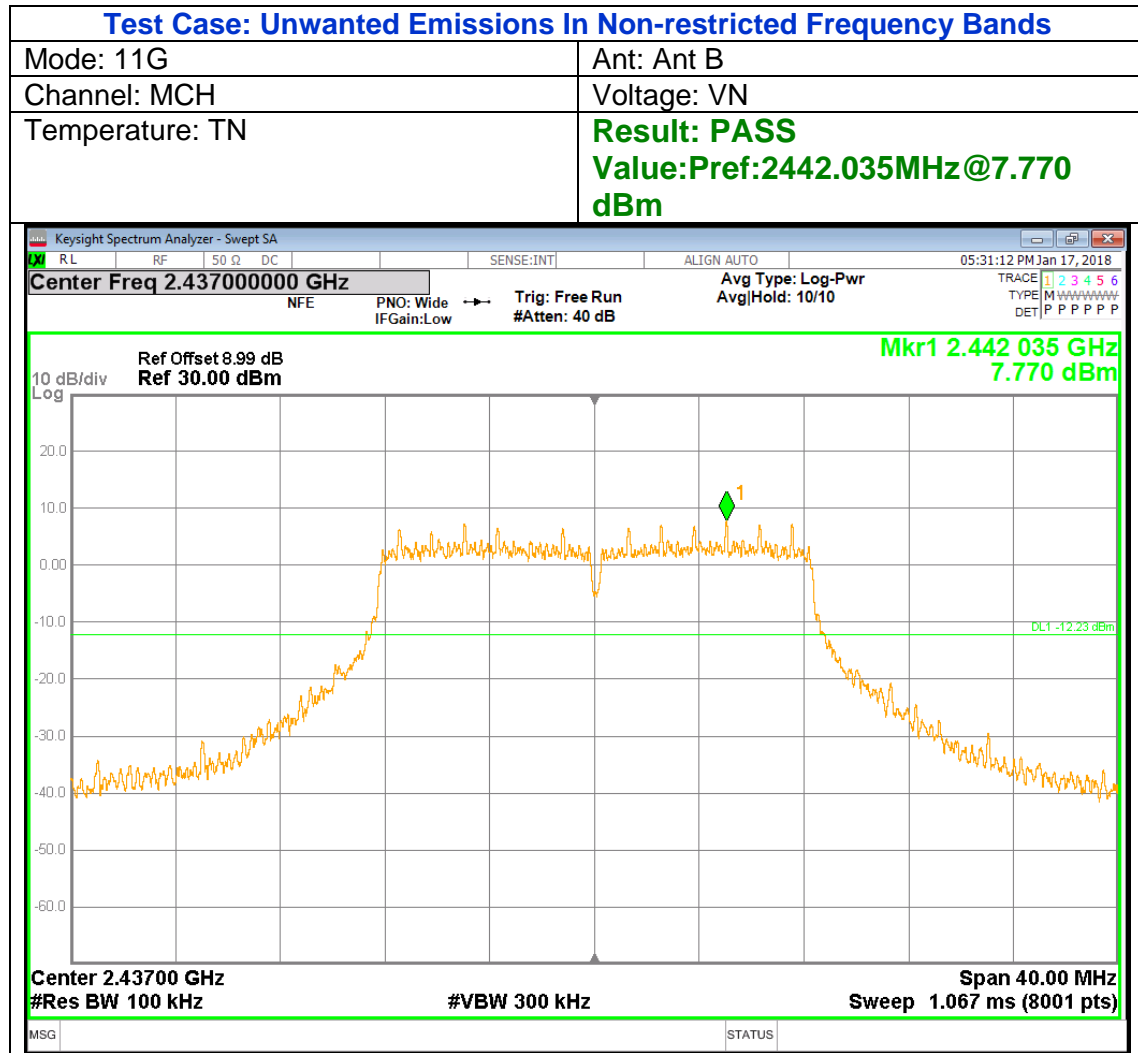
**Middle Channel**

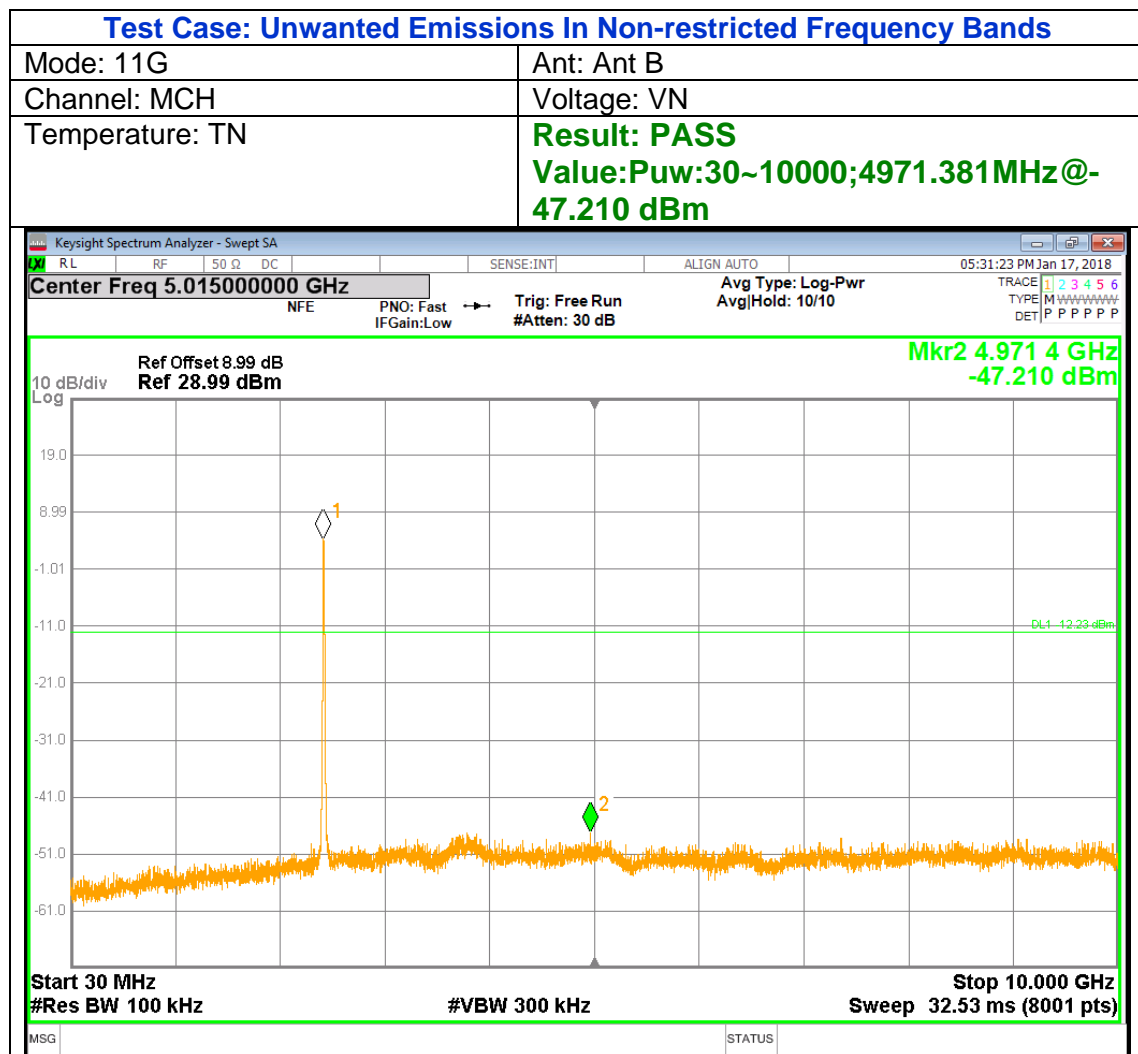


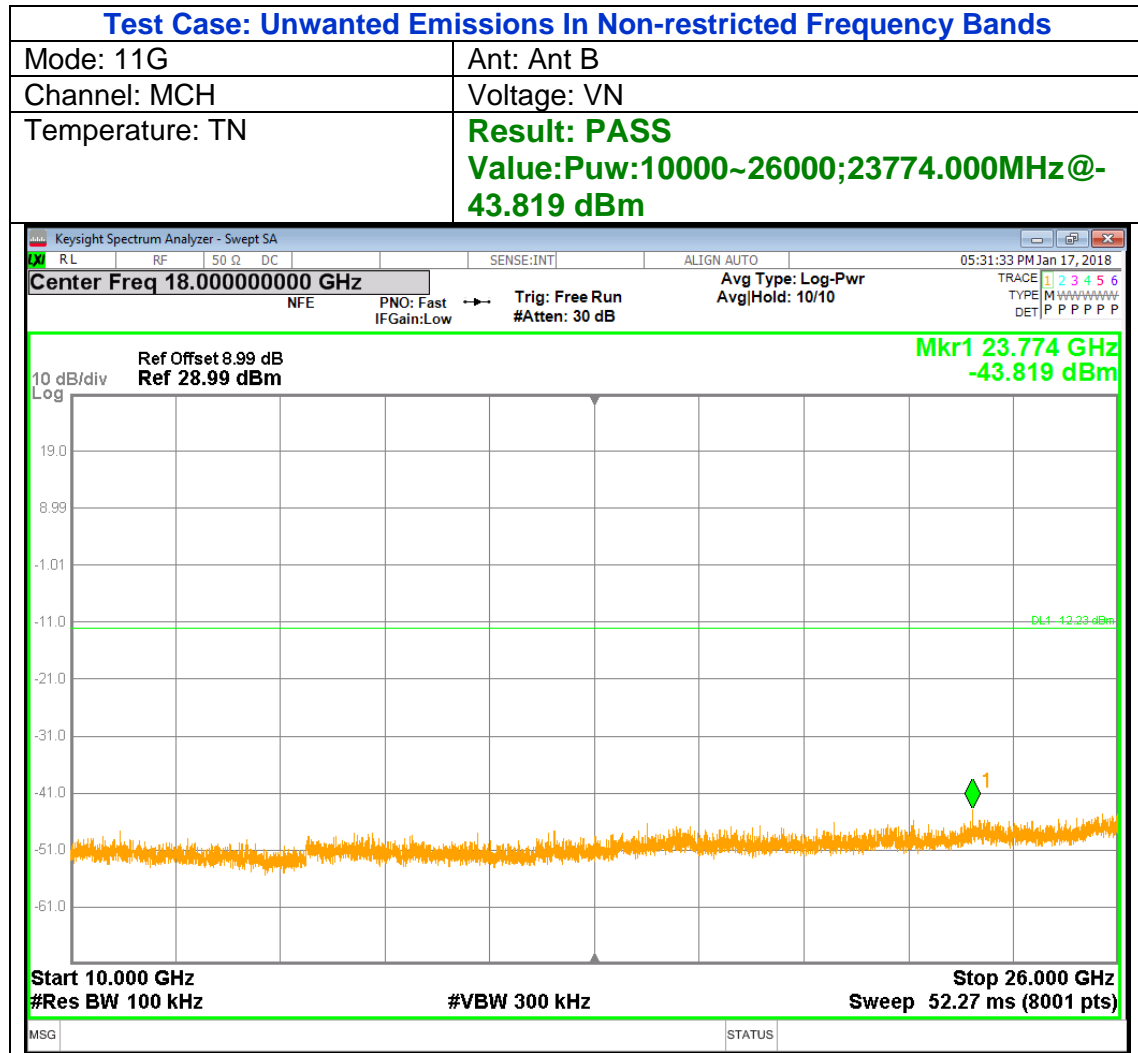


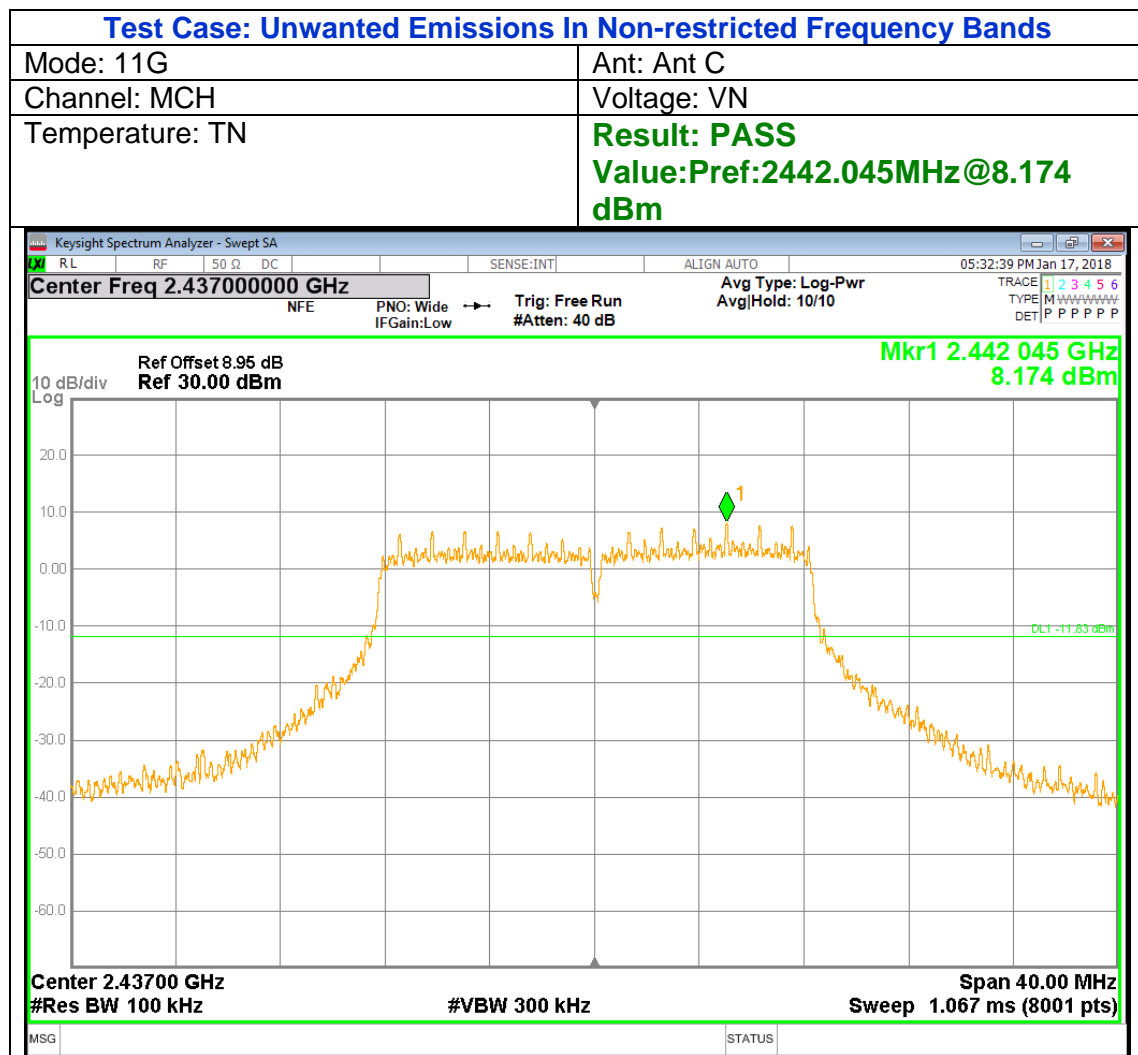


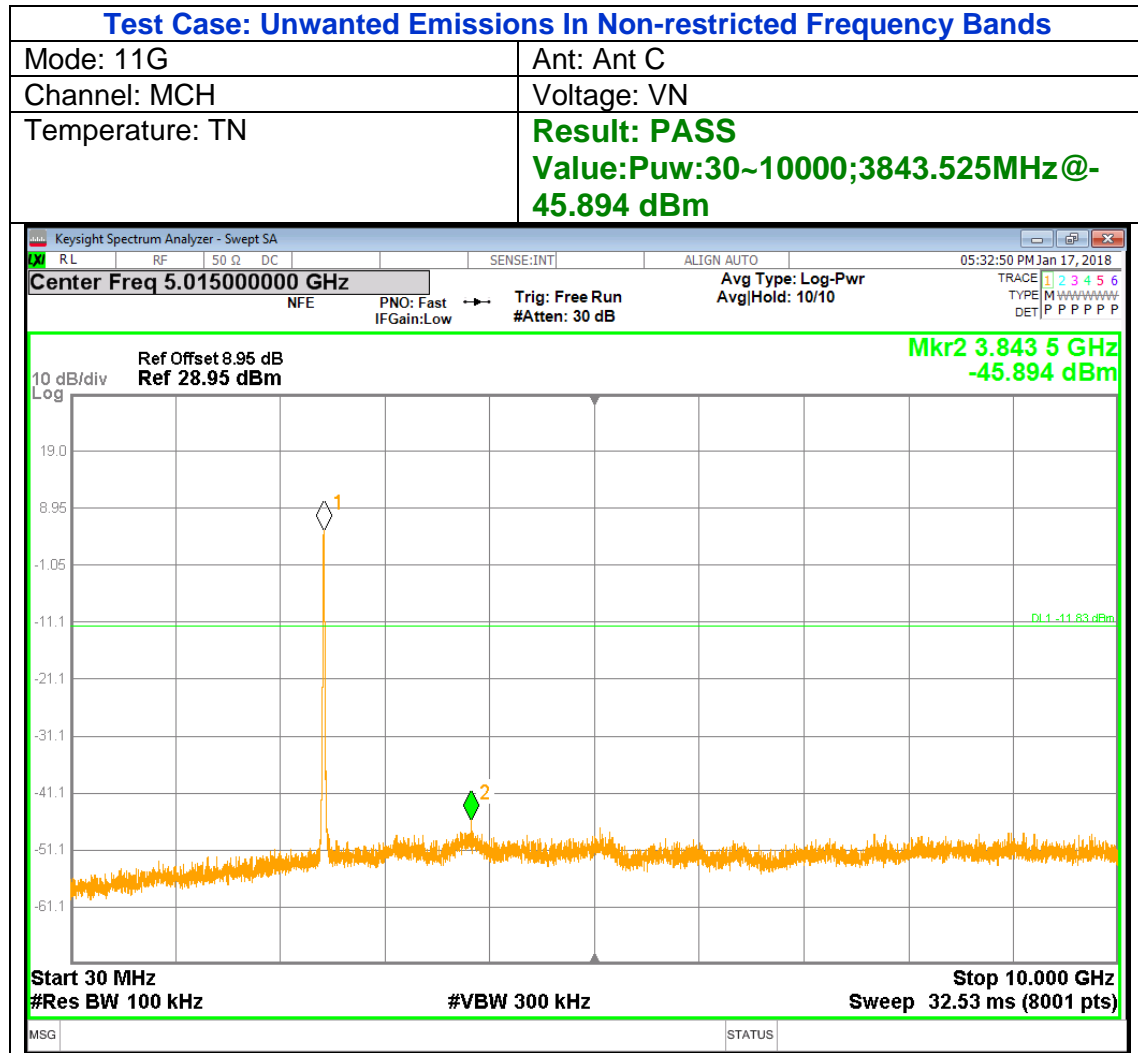


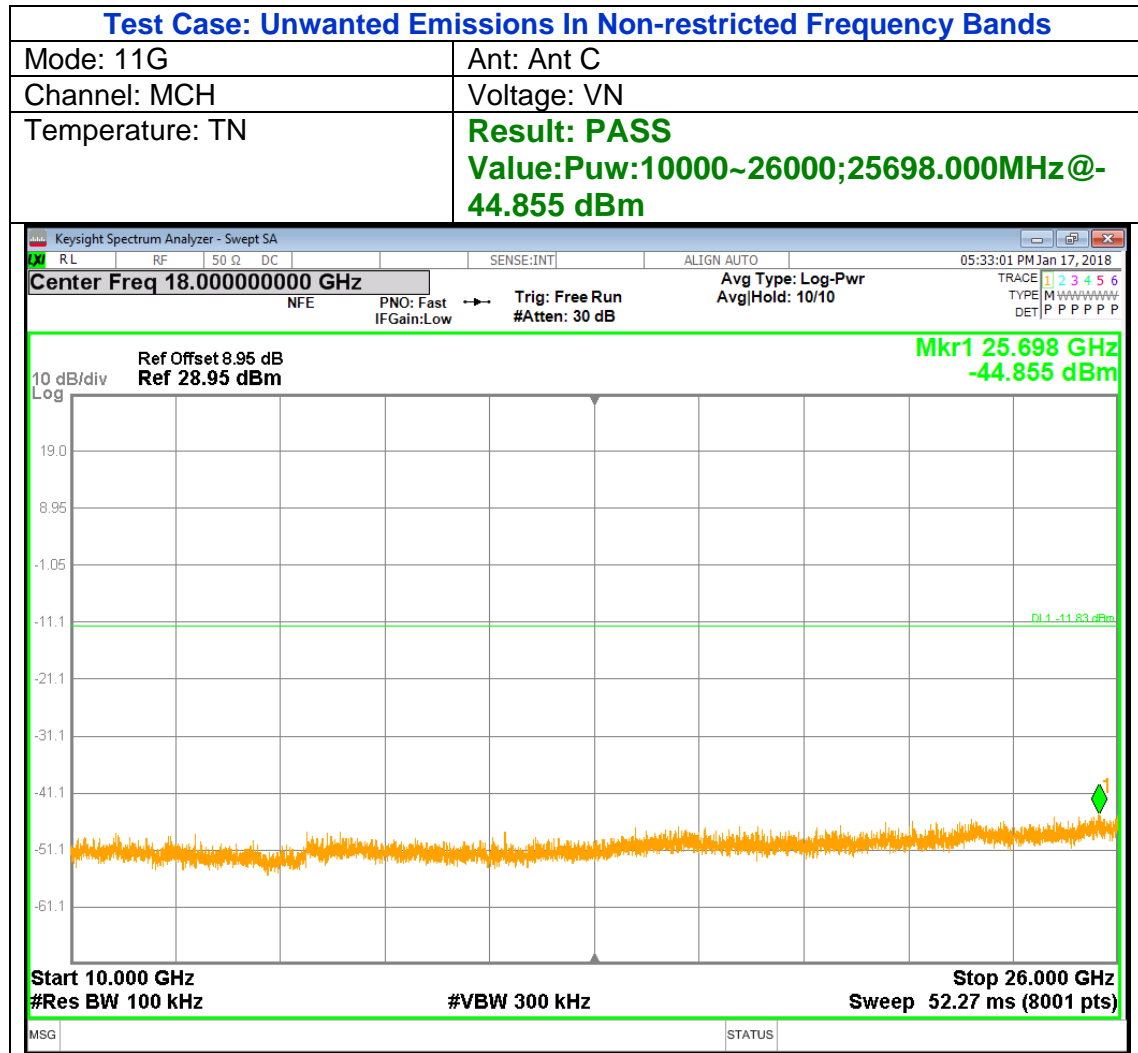




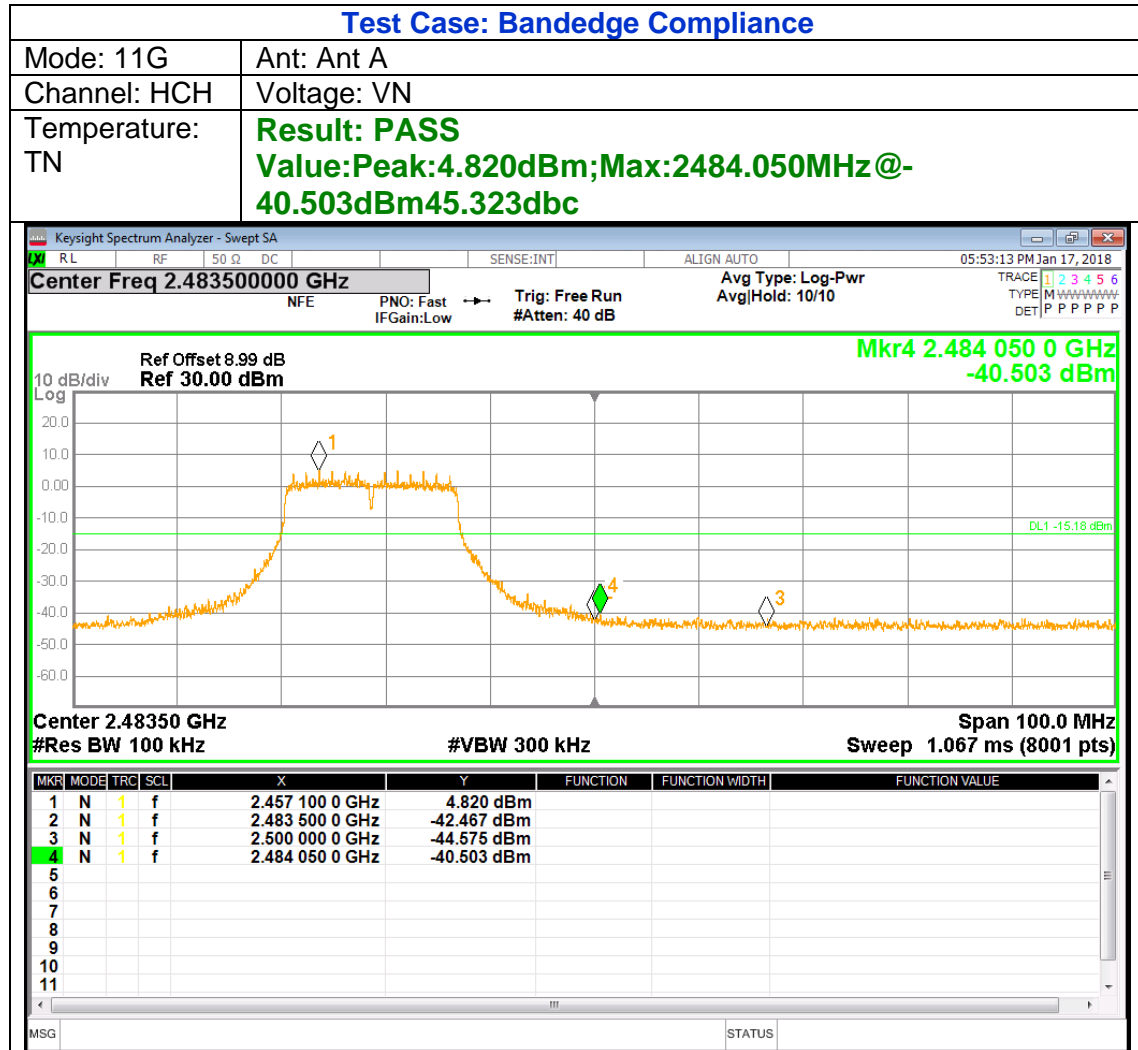




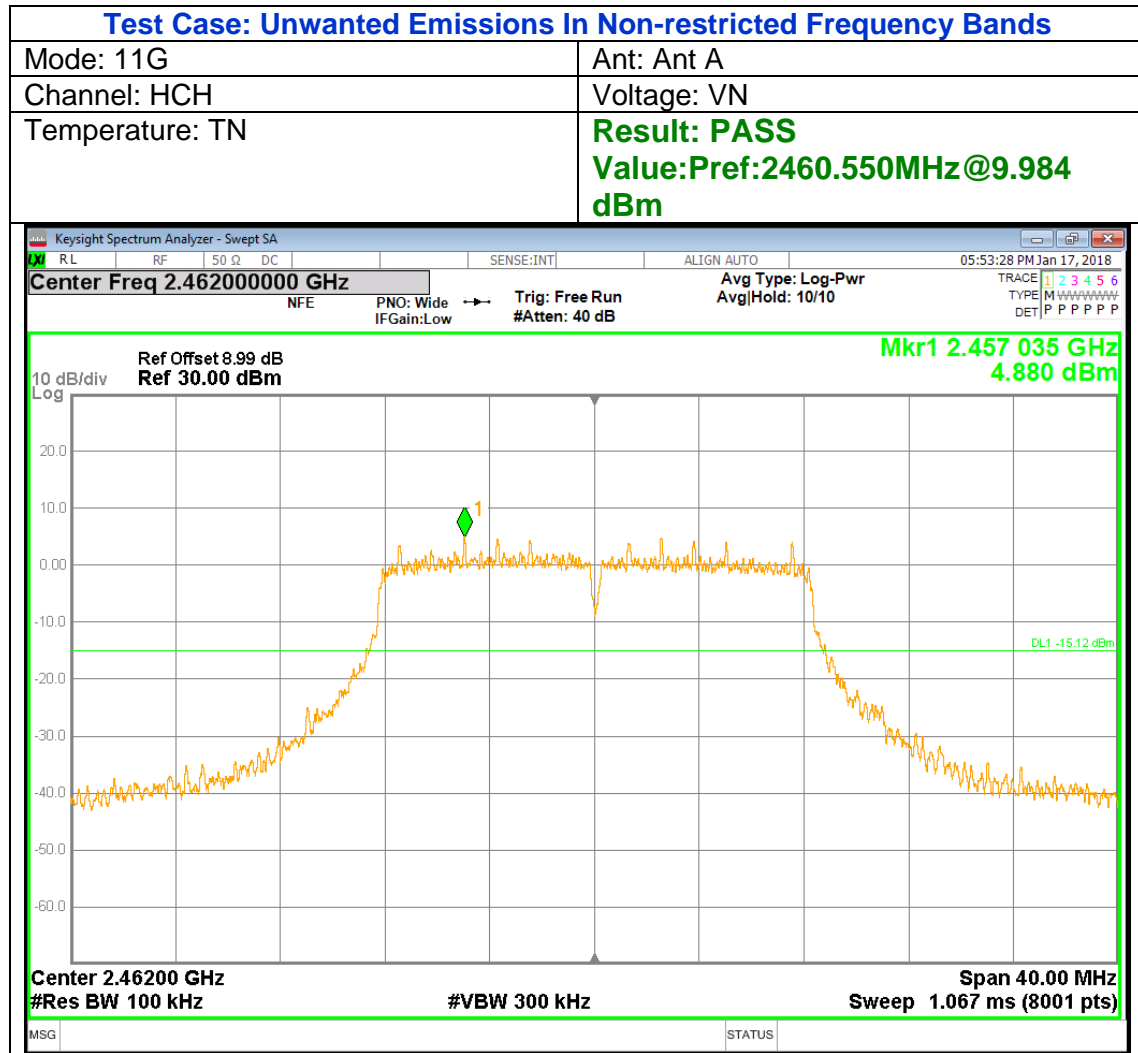


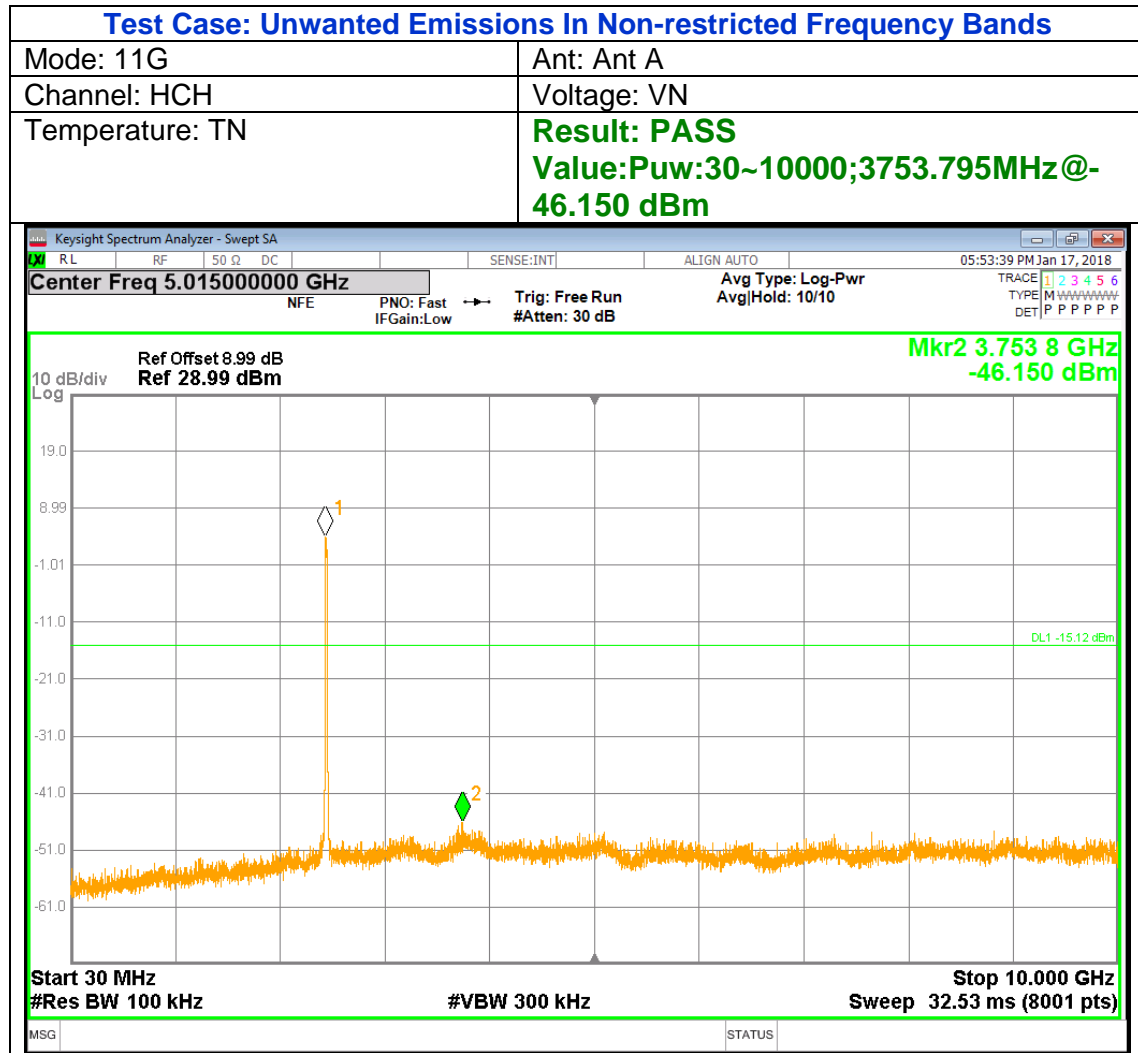


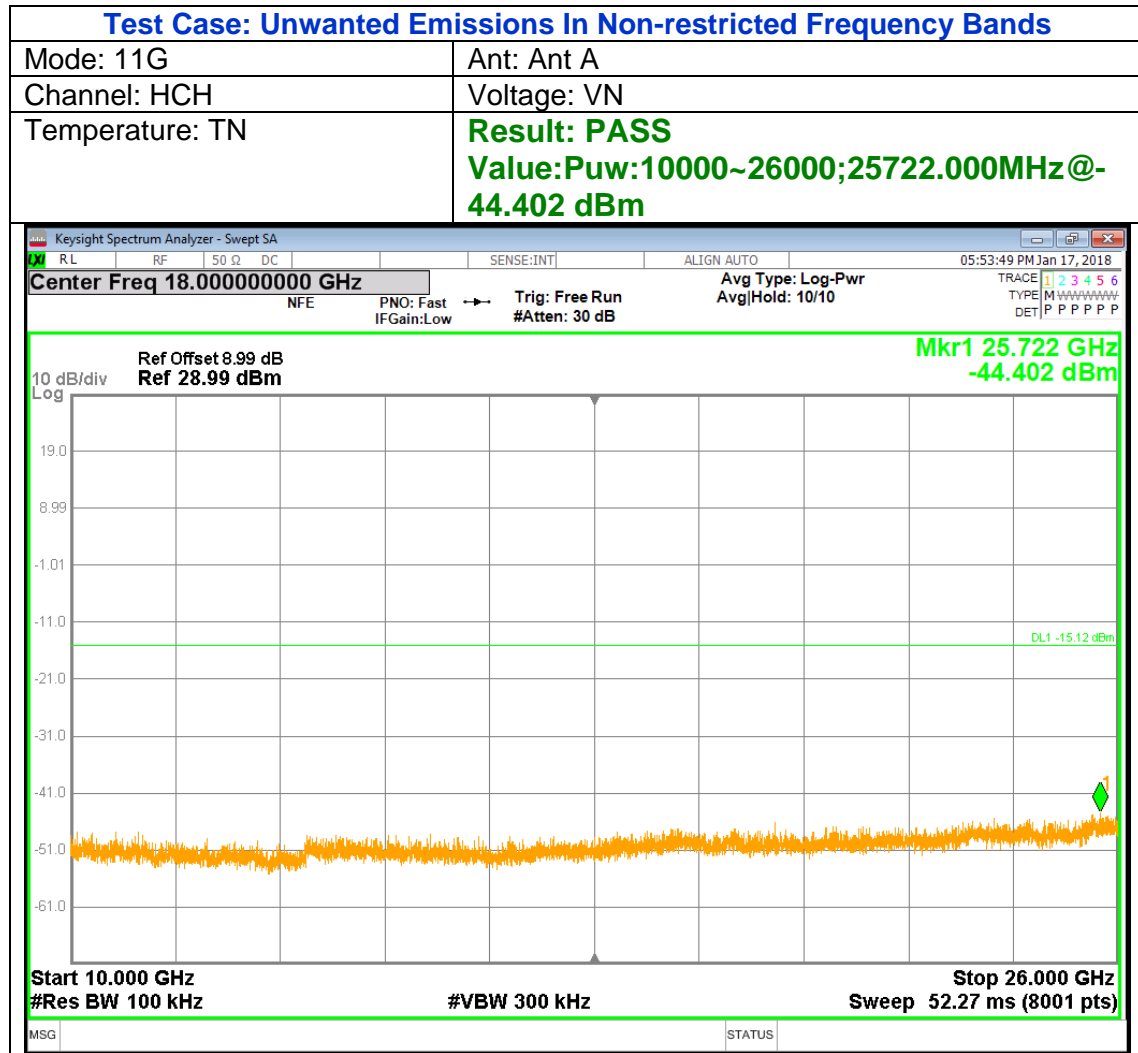
**High Channel**

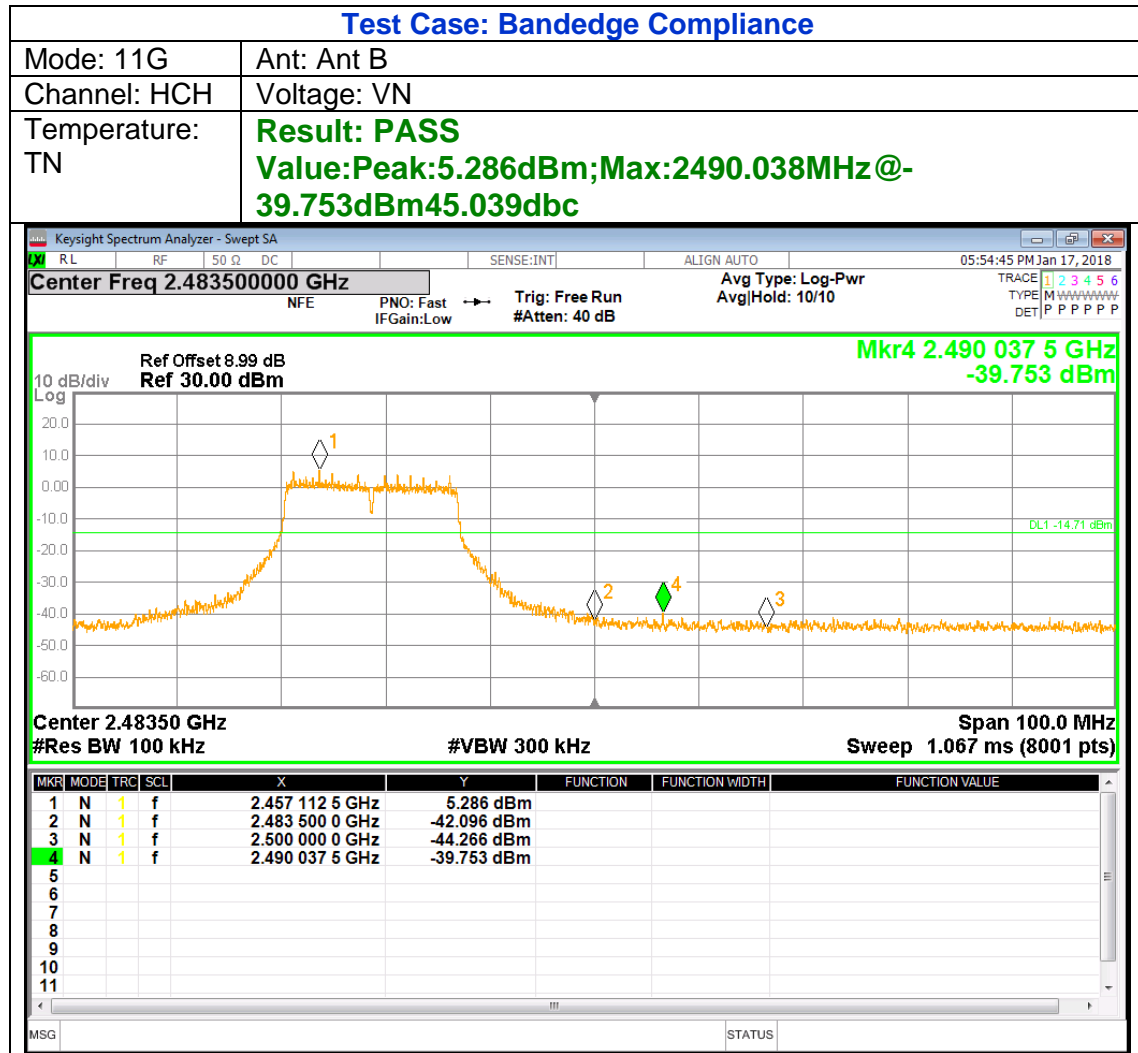


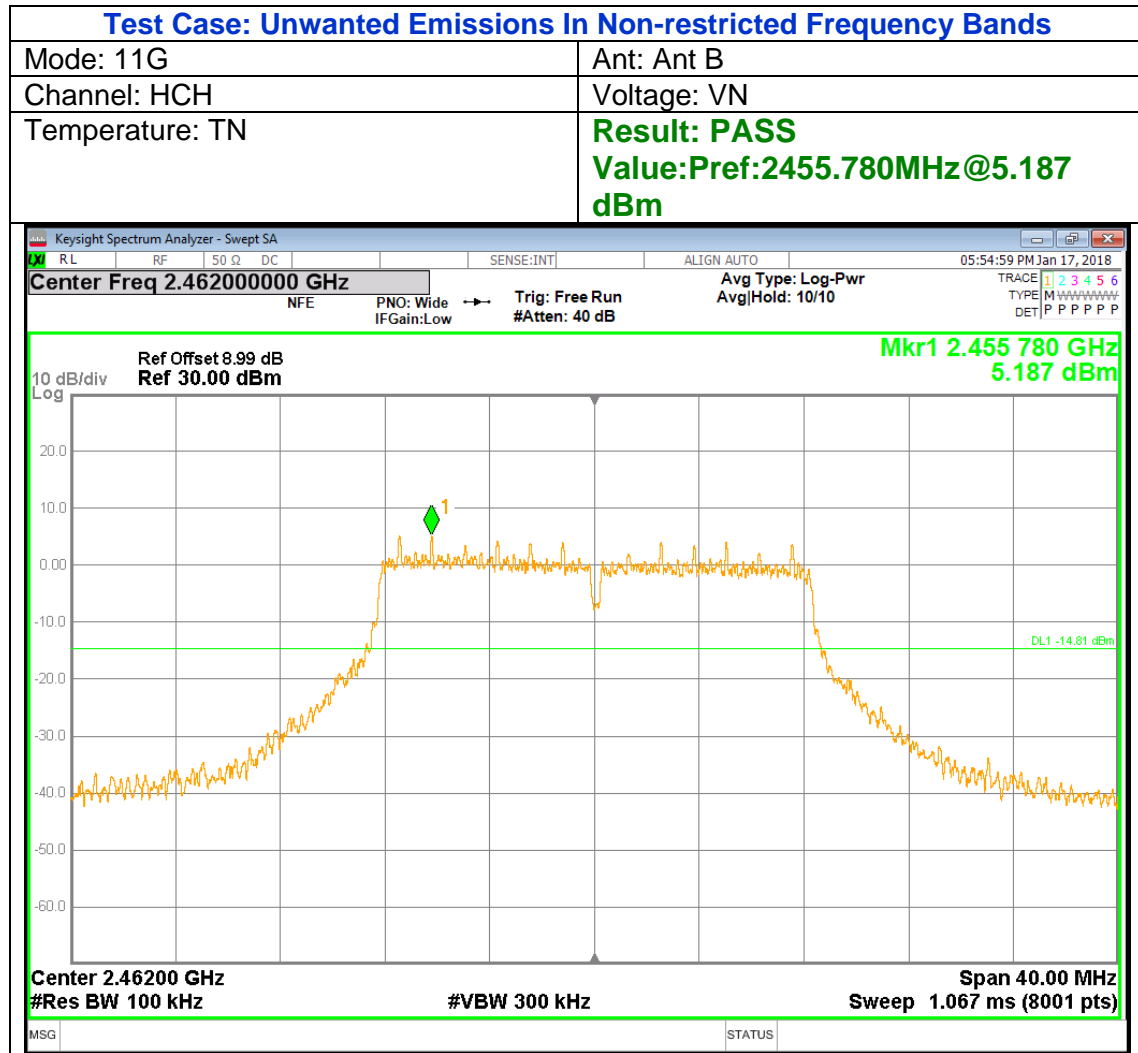


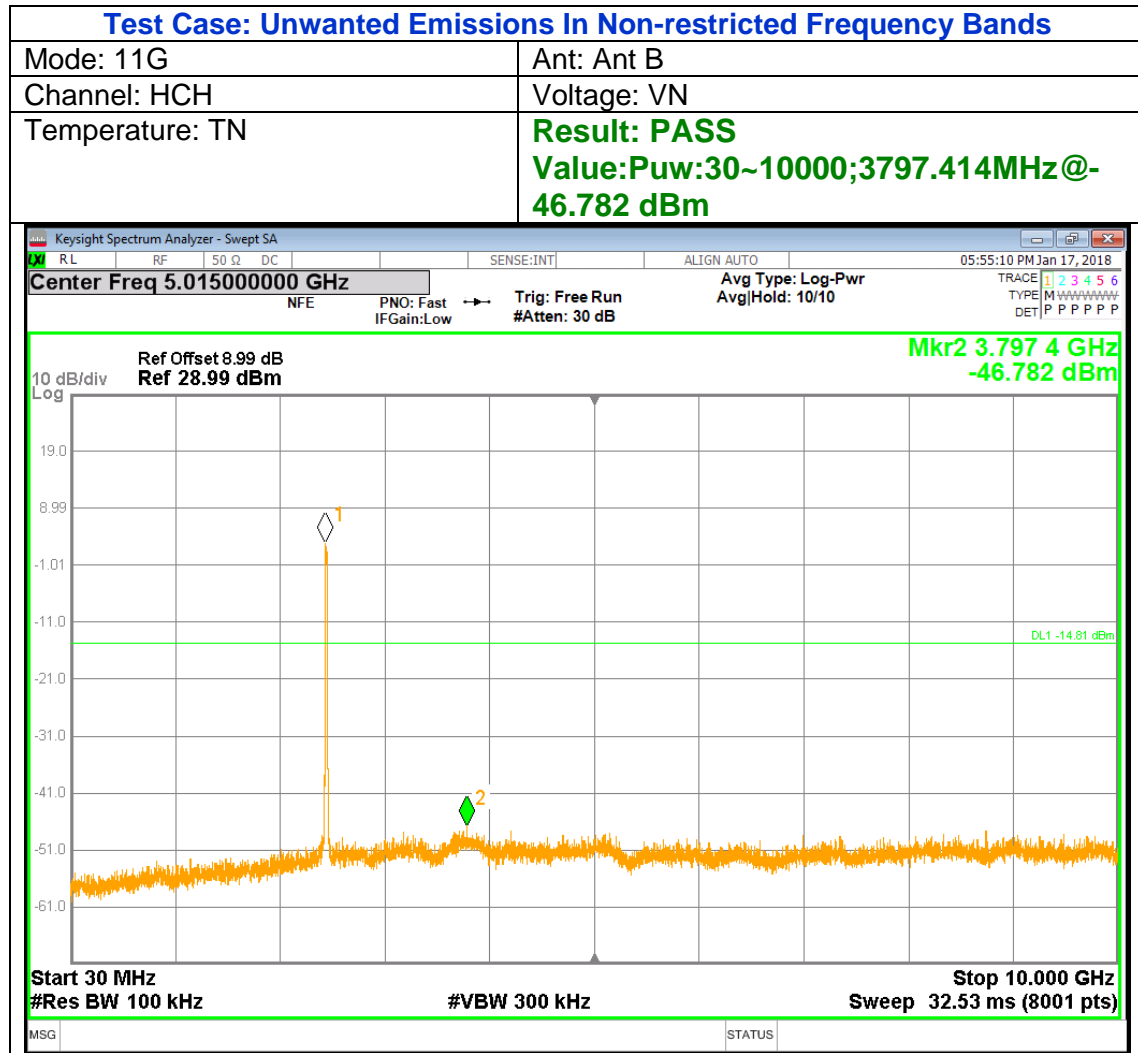


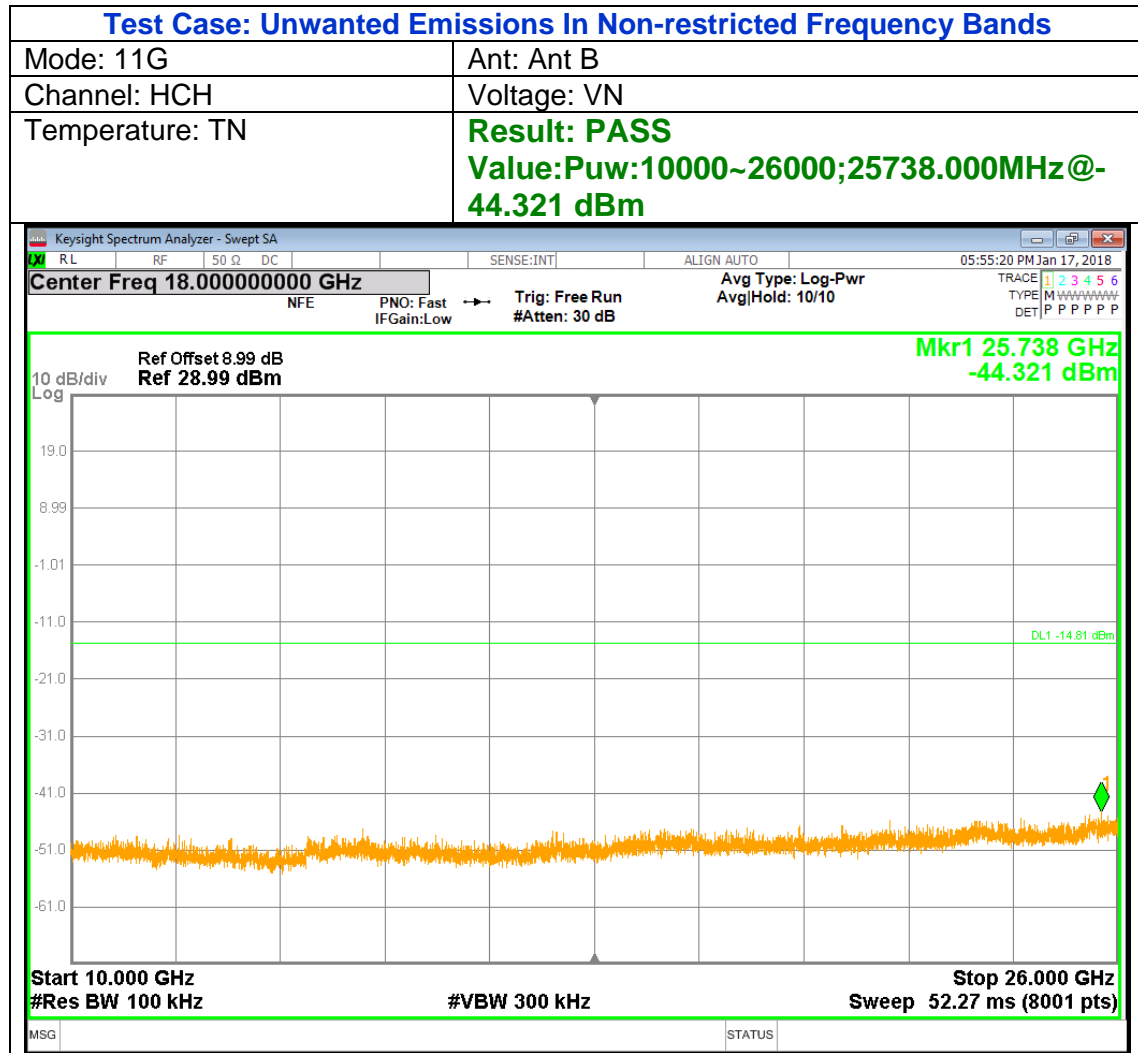


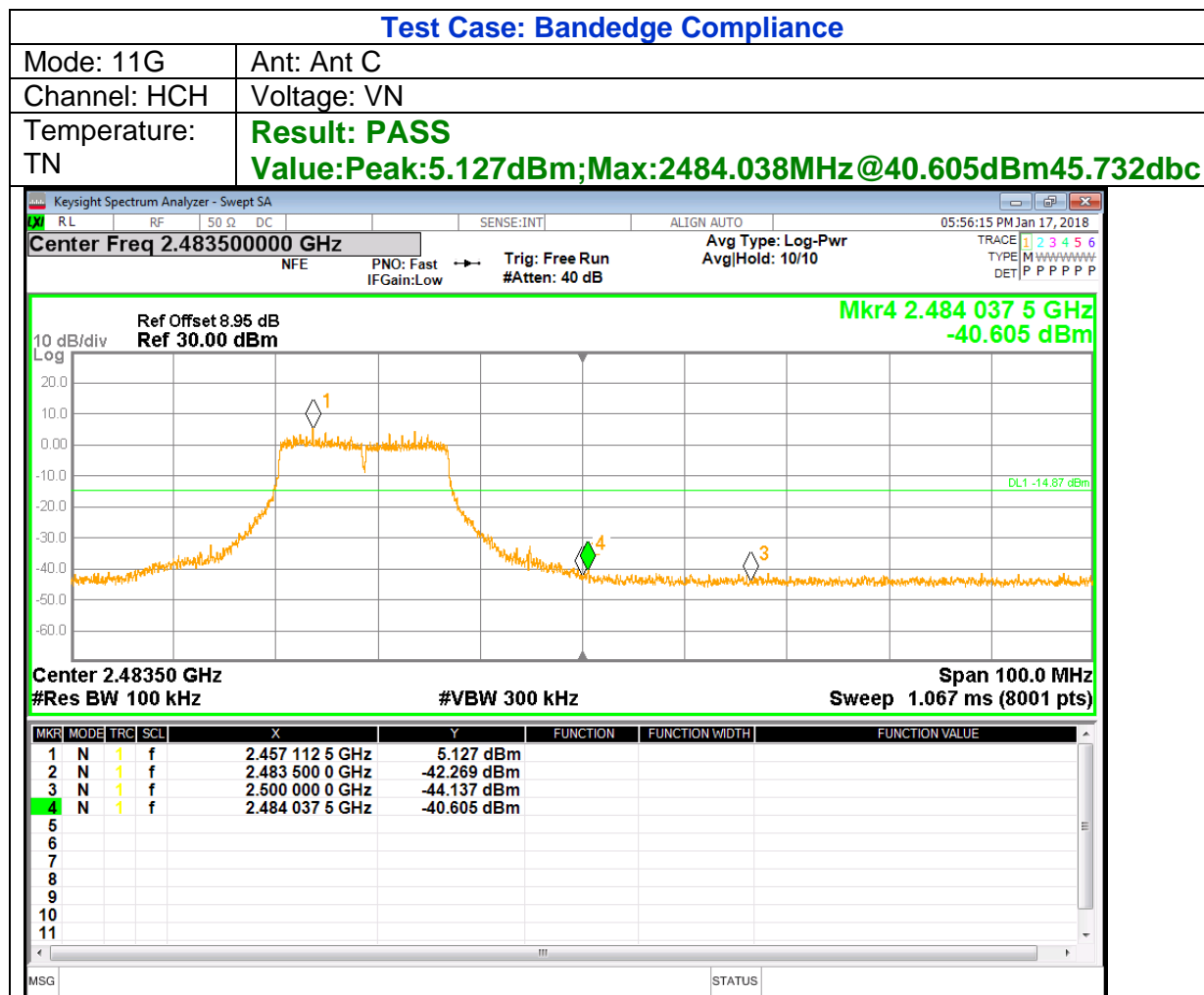




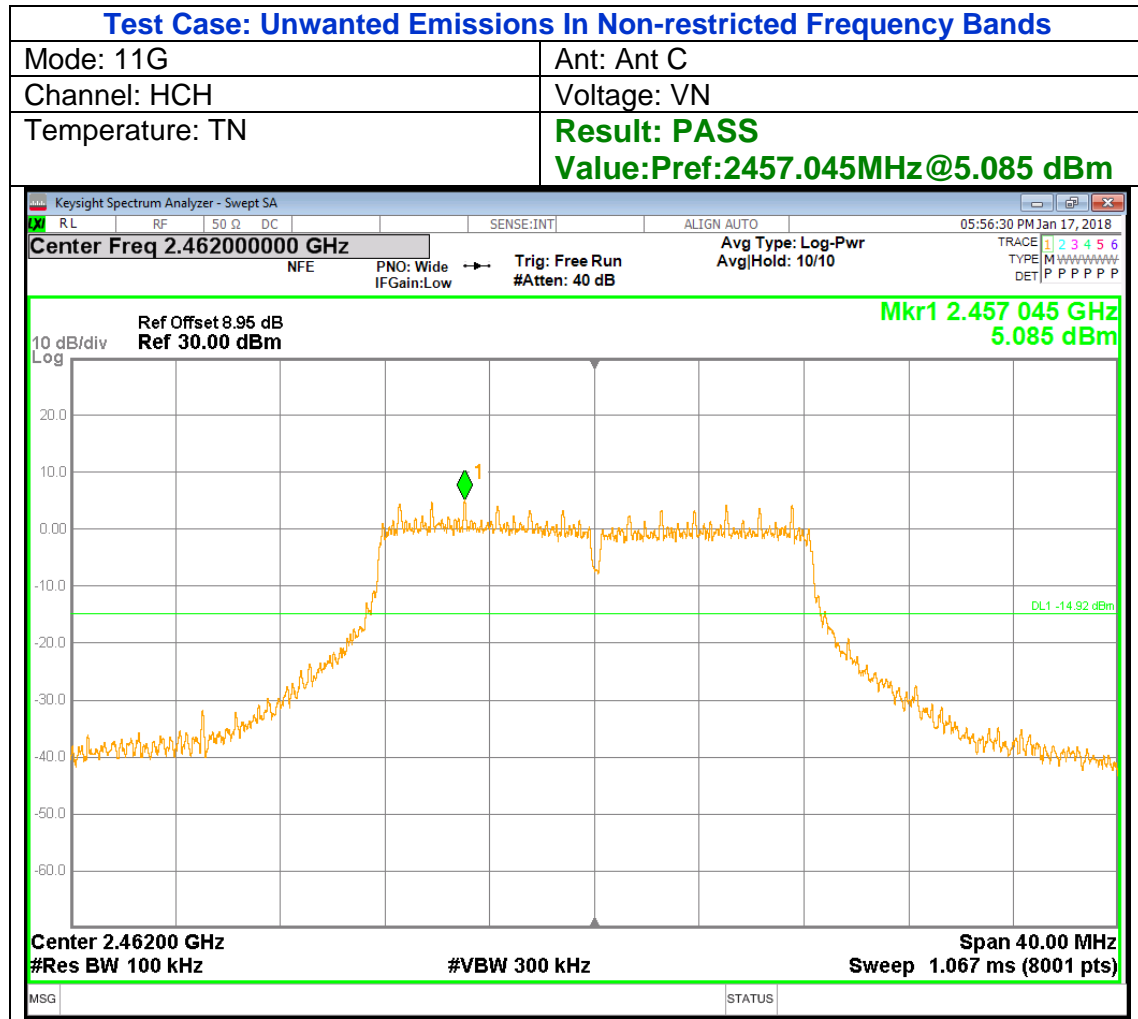


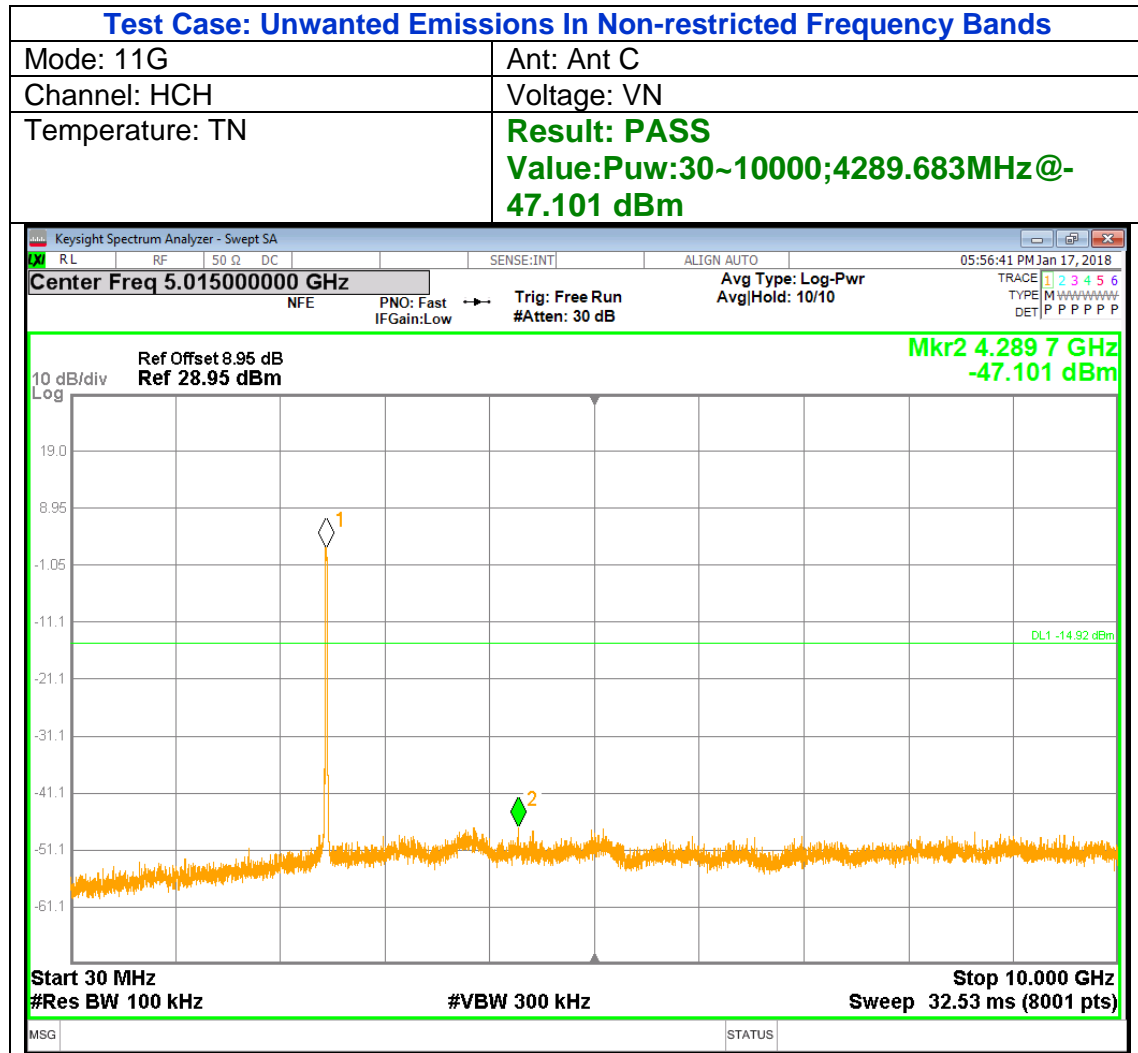


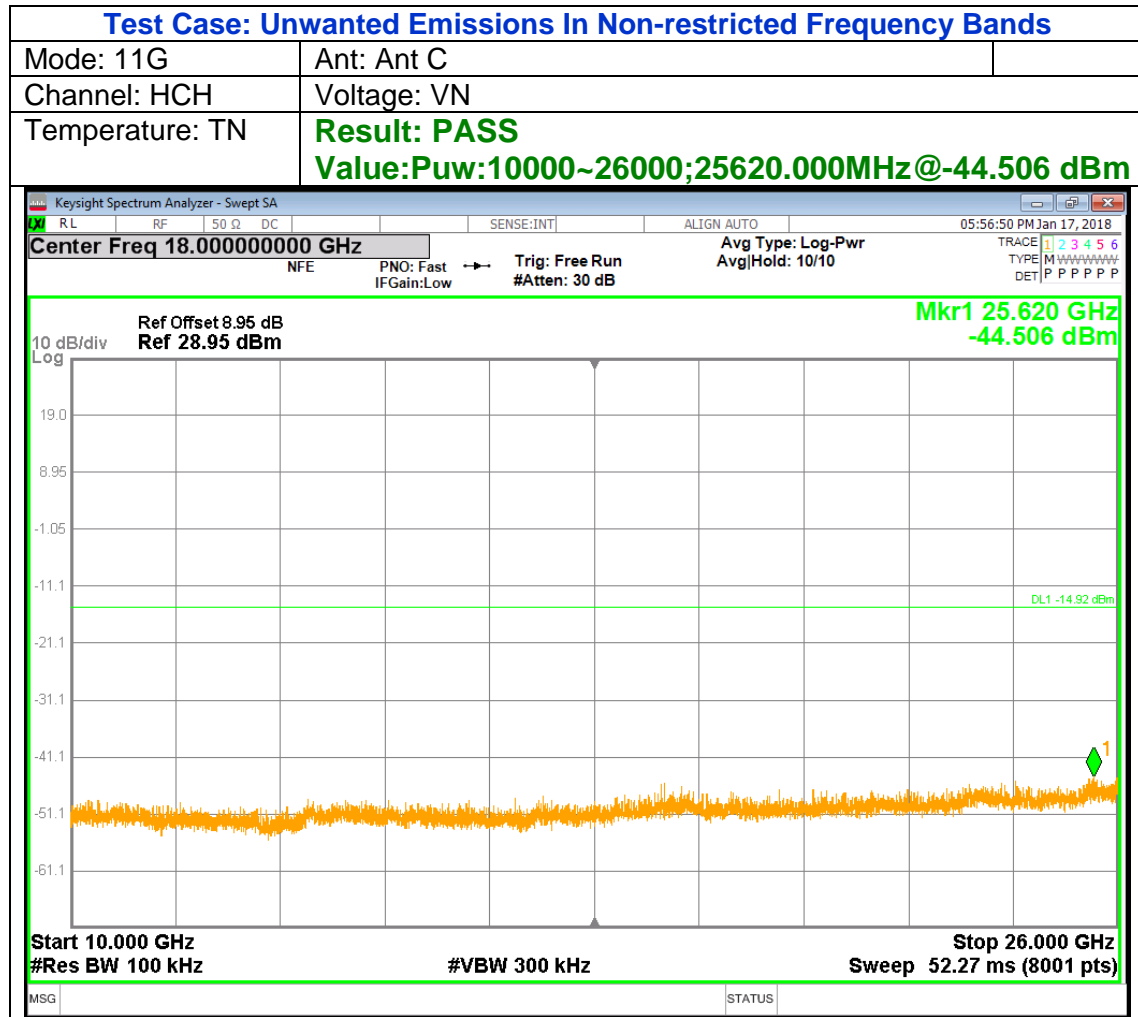






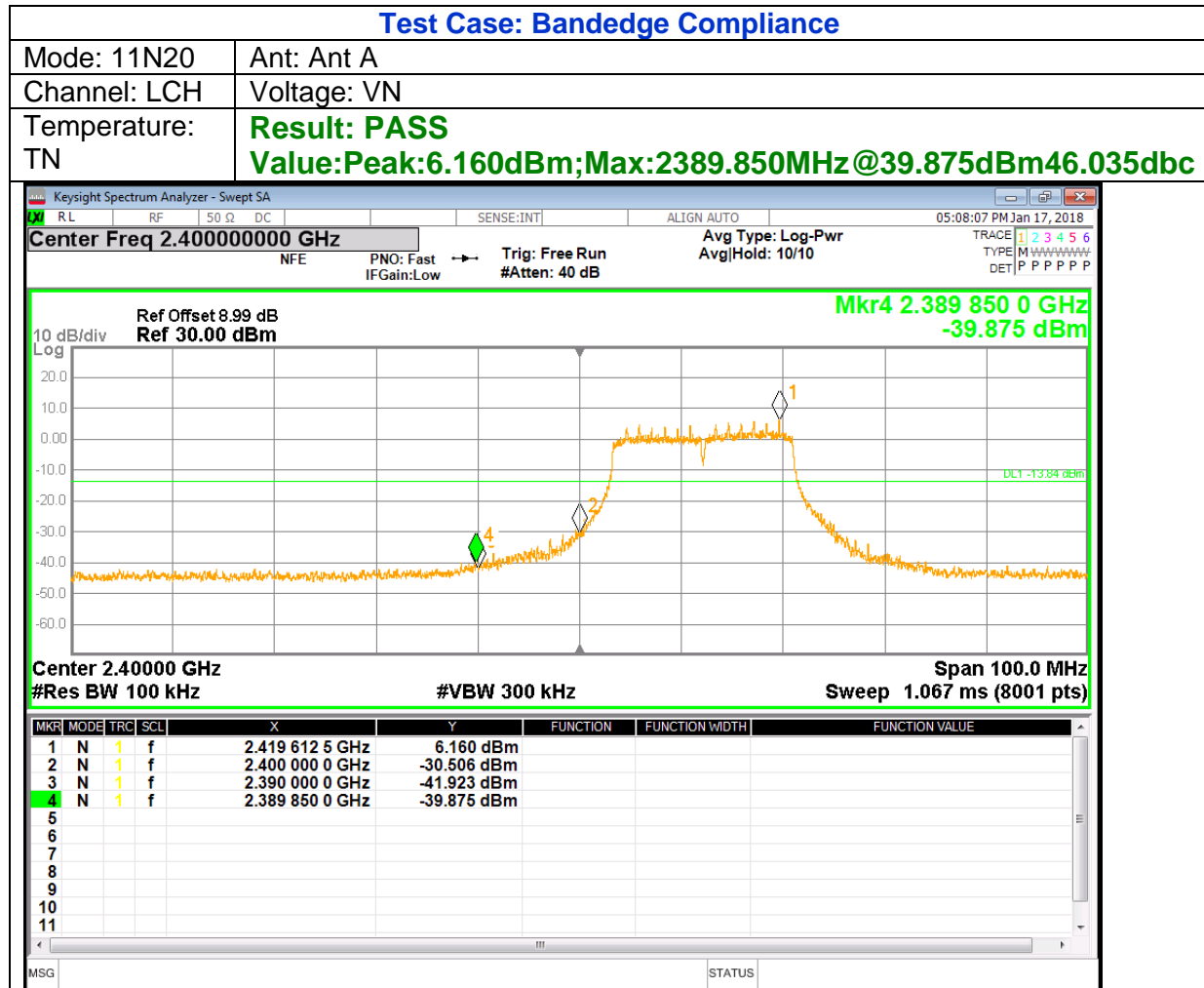


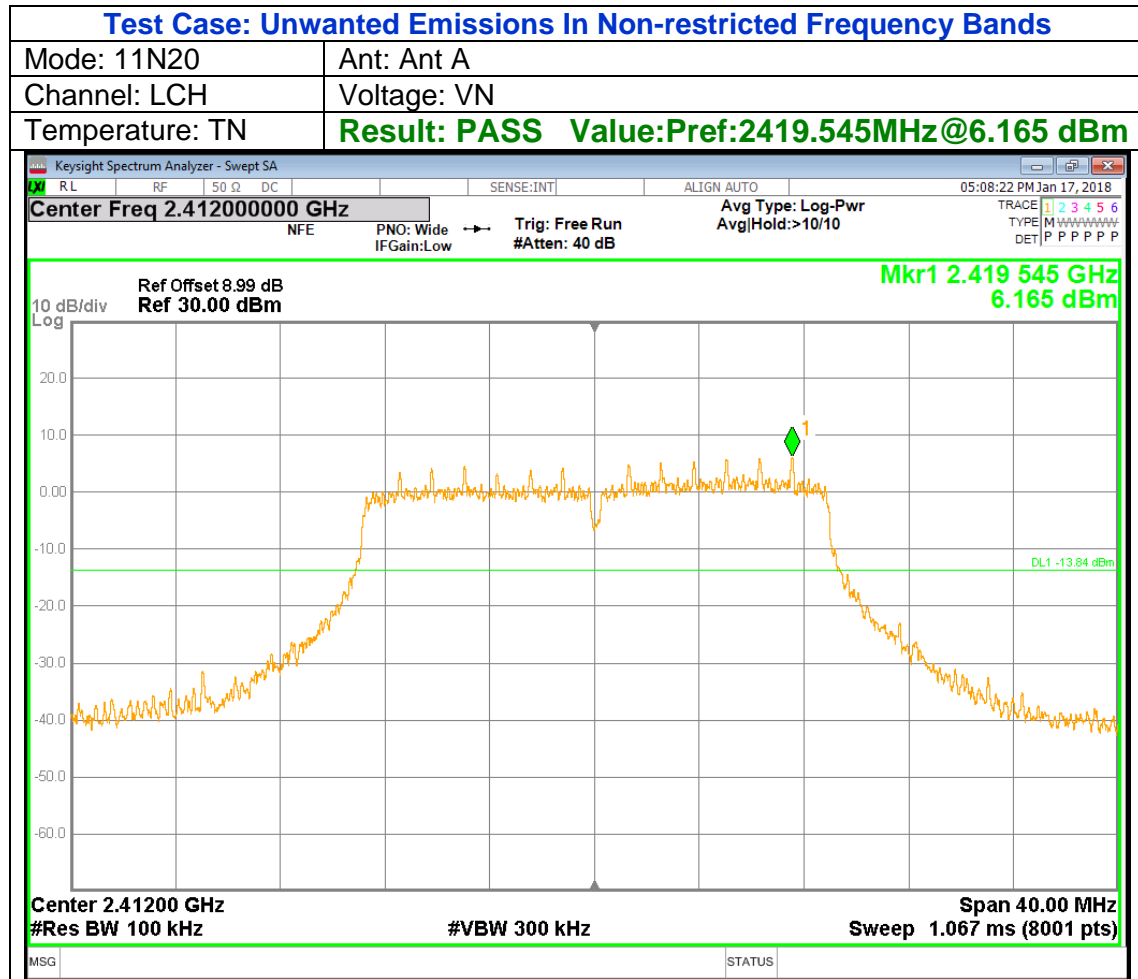


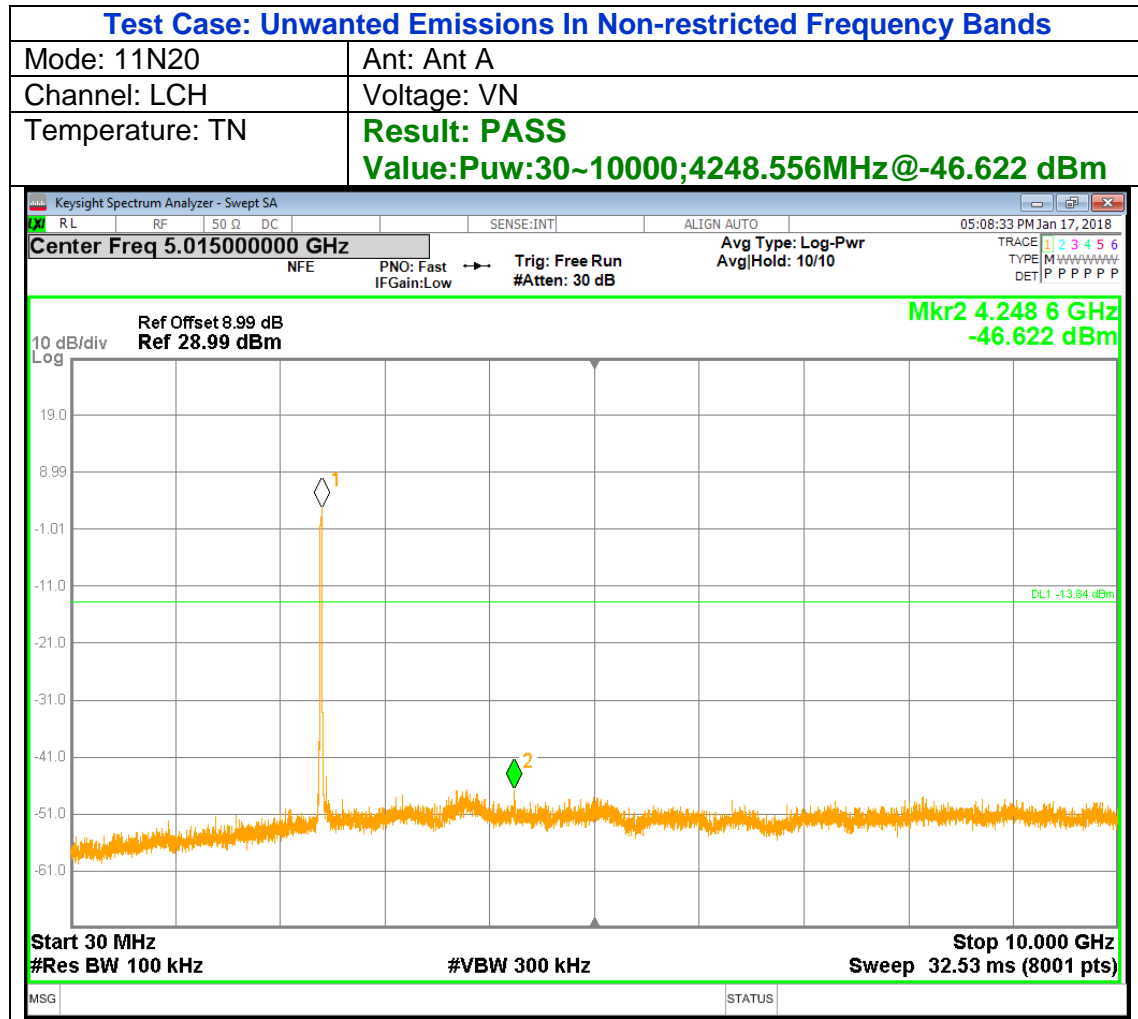


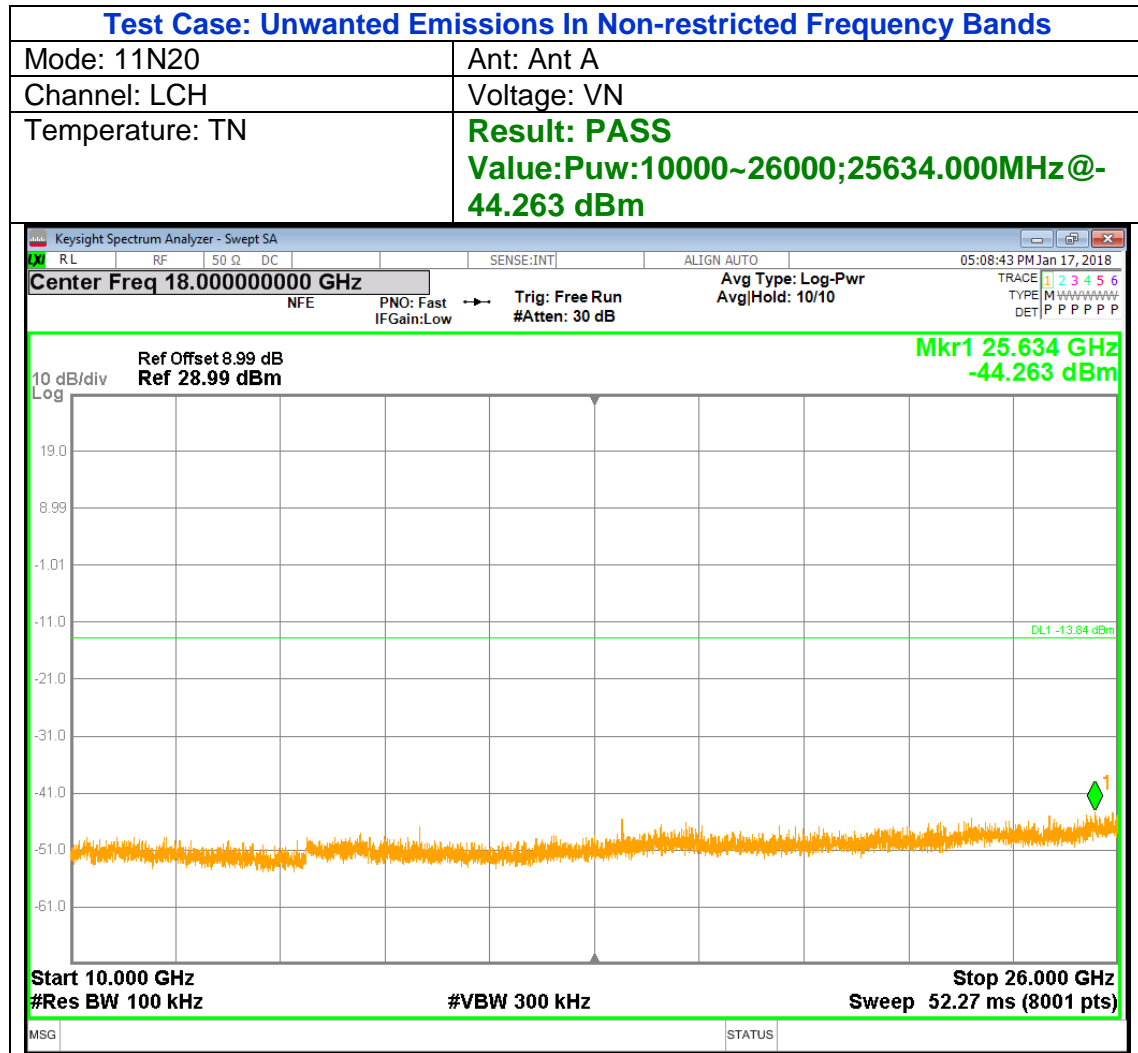
**7.5.3. 802.11n20 3TX MODE**

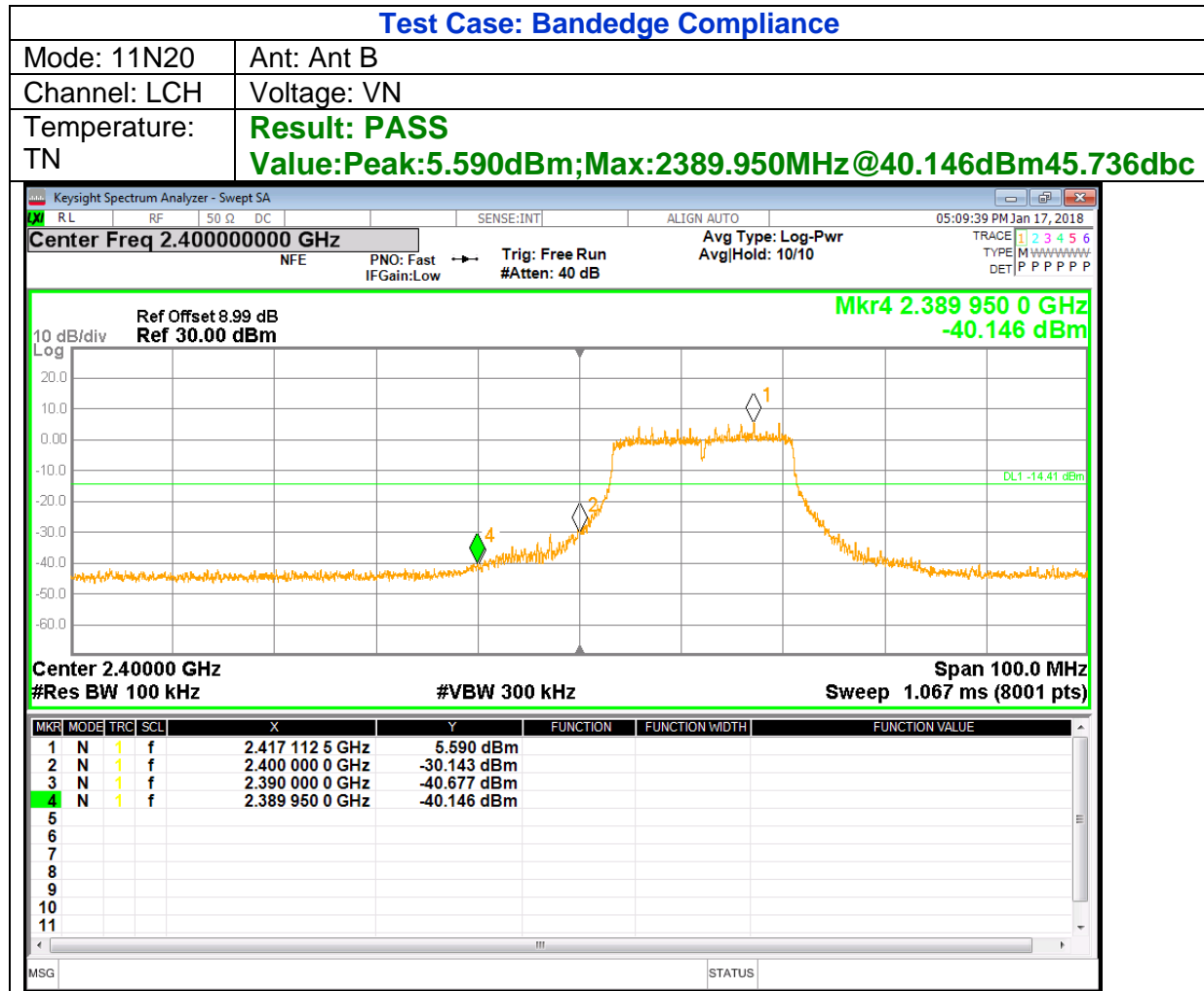
**Low Channel**



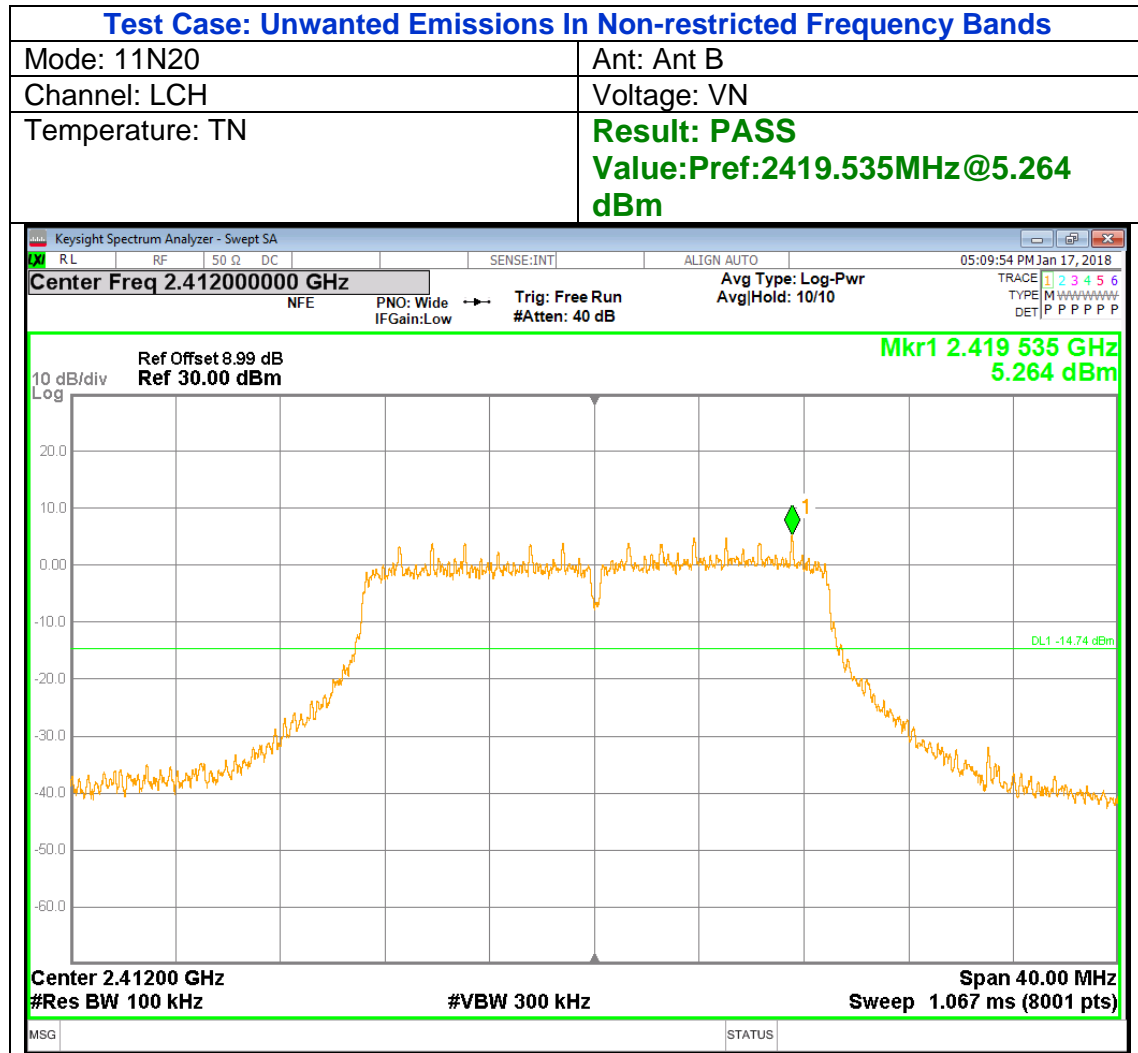


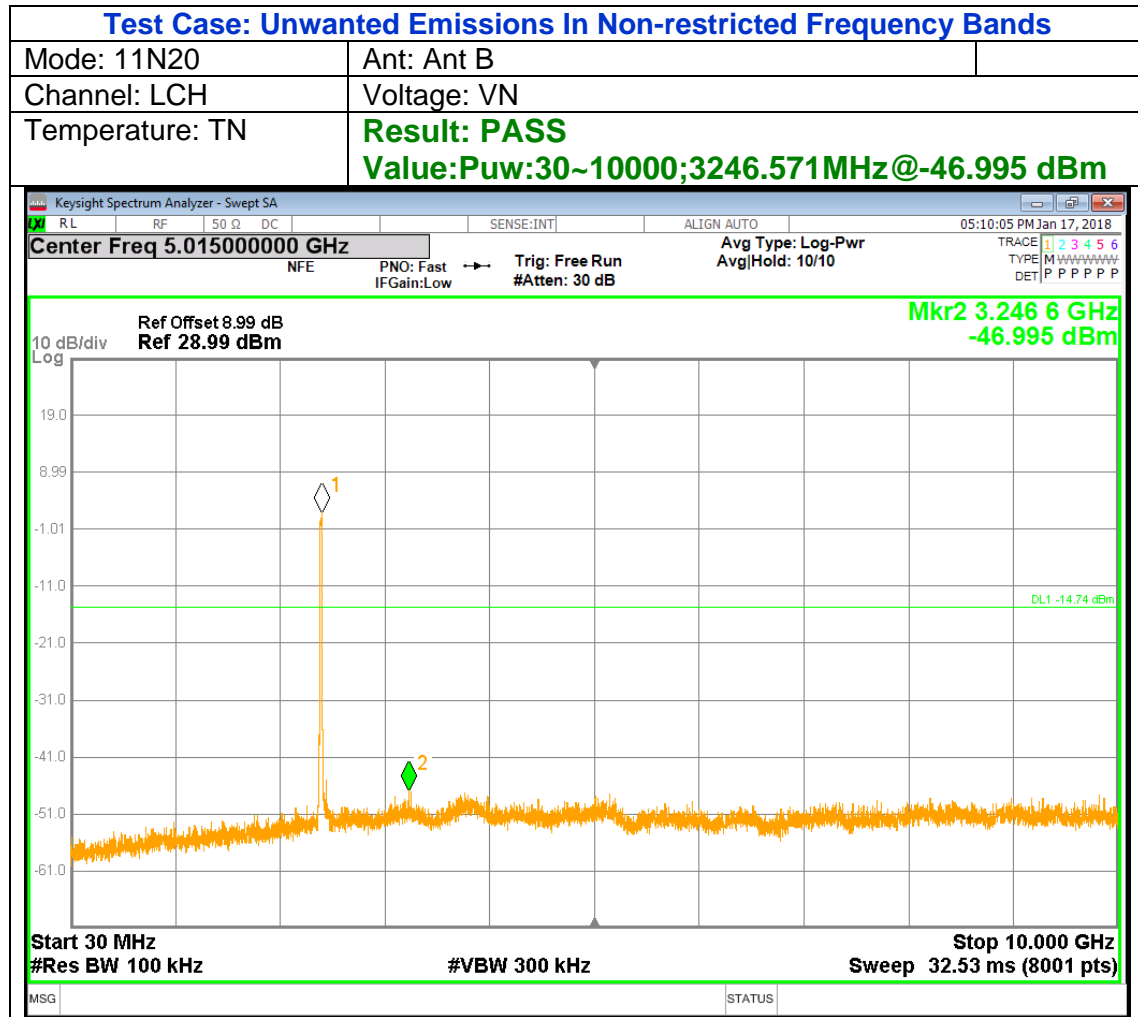


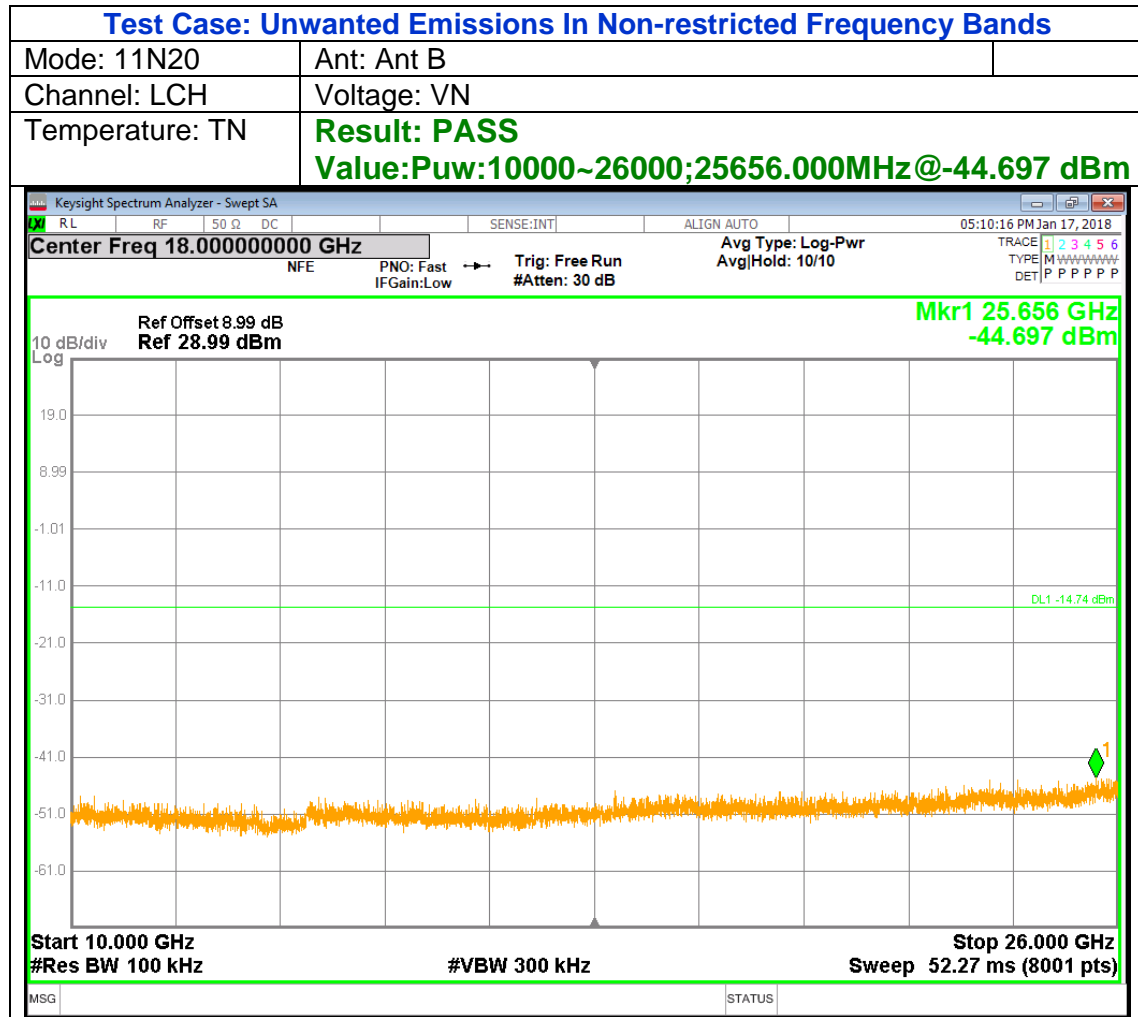


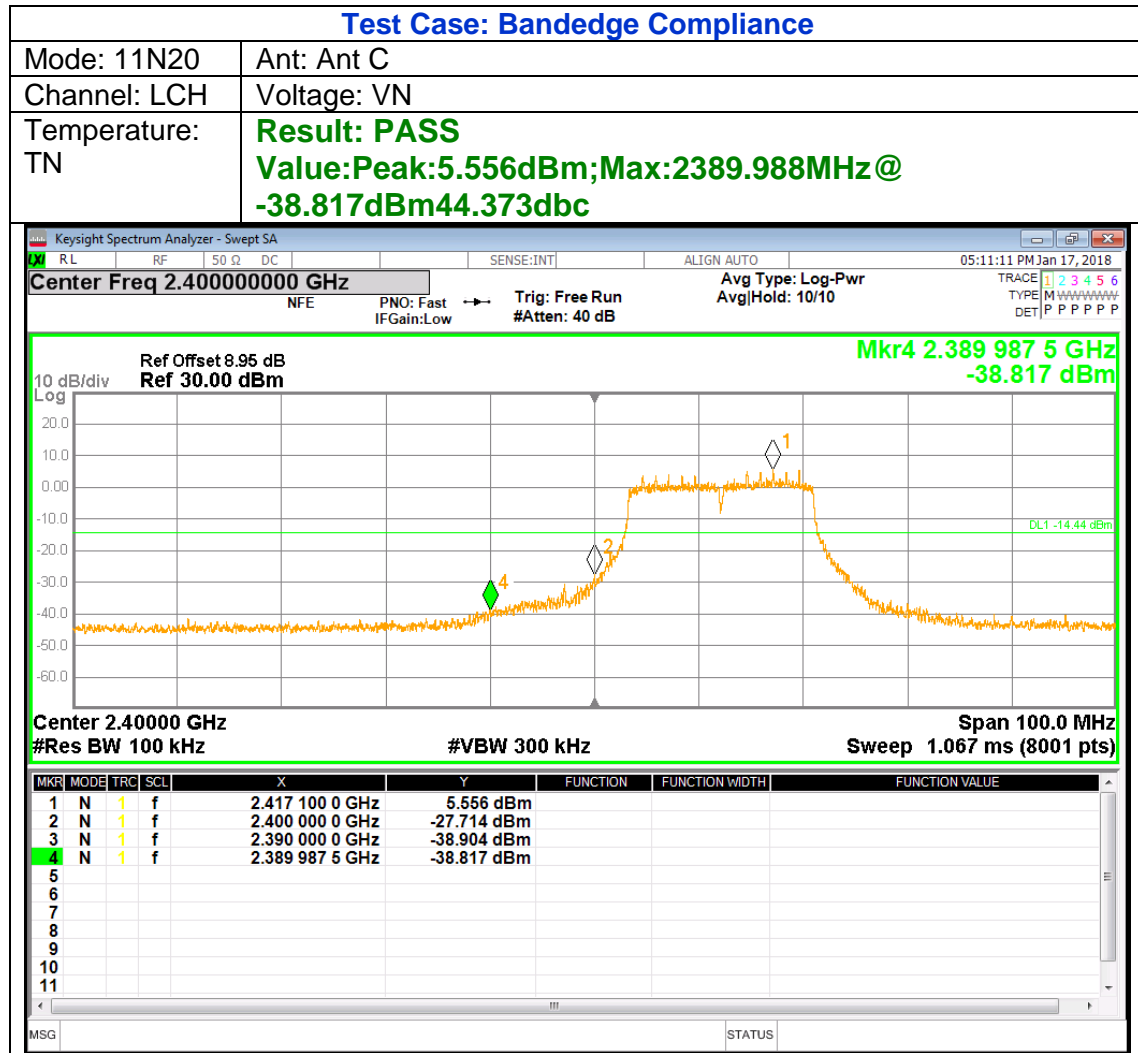


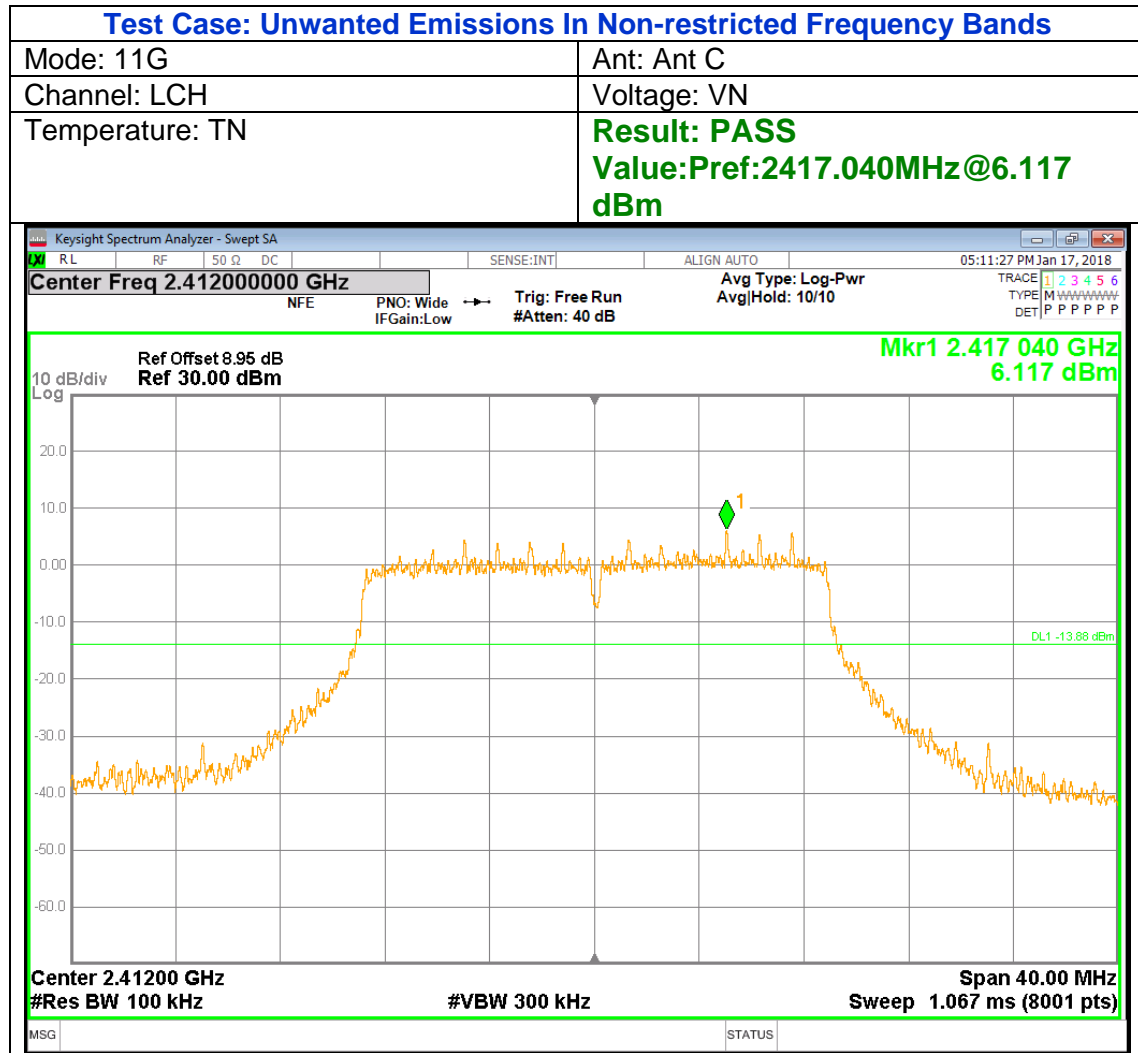


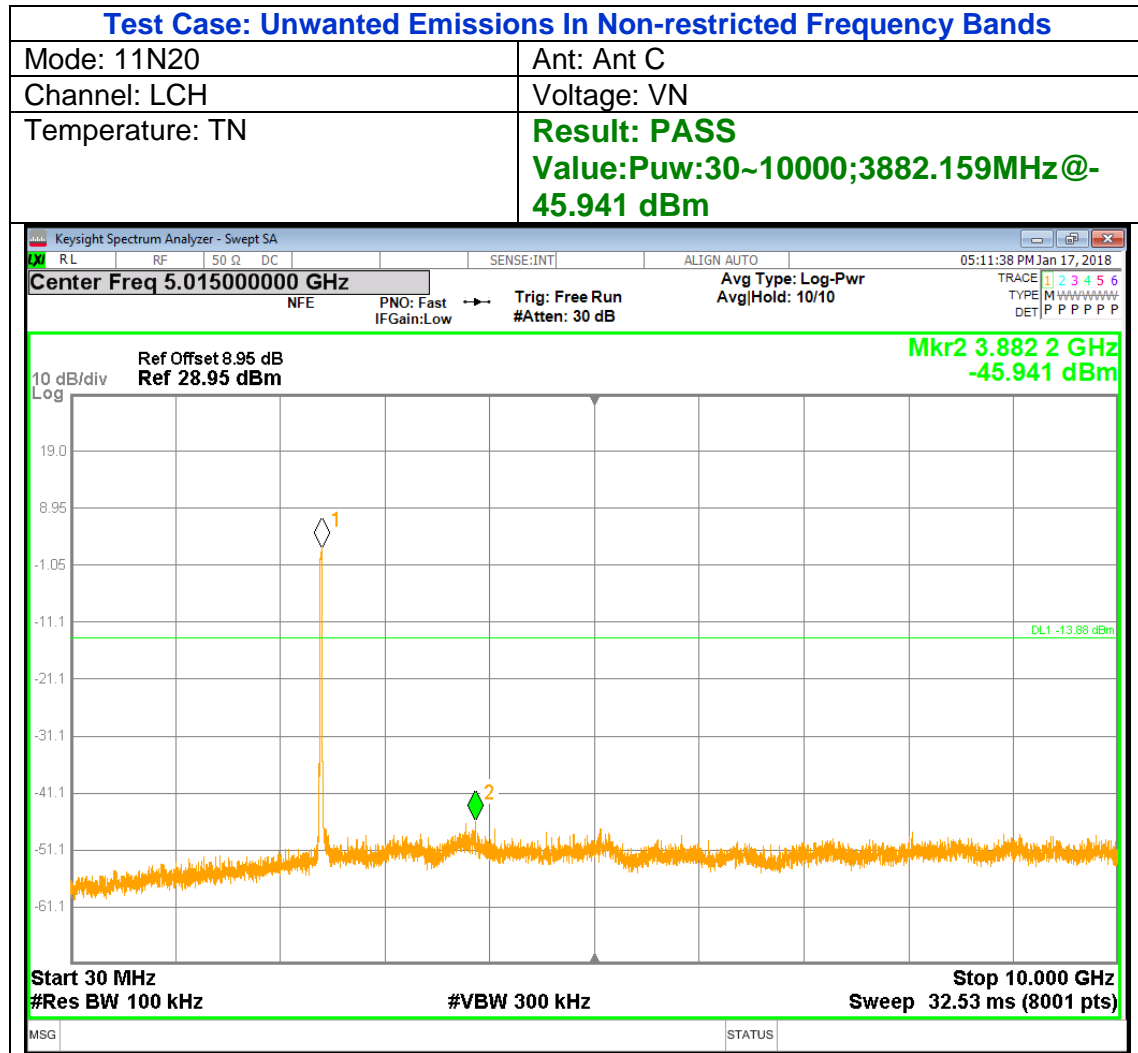


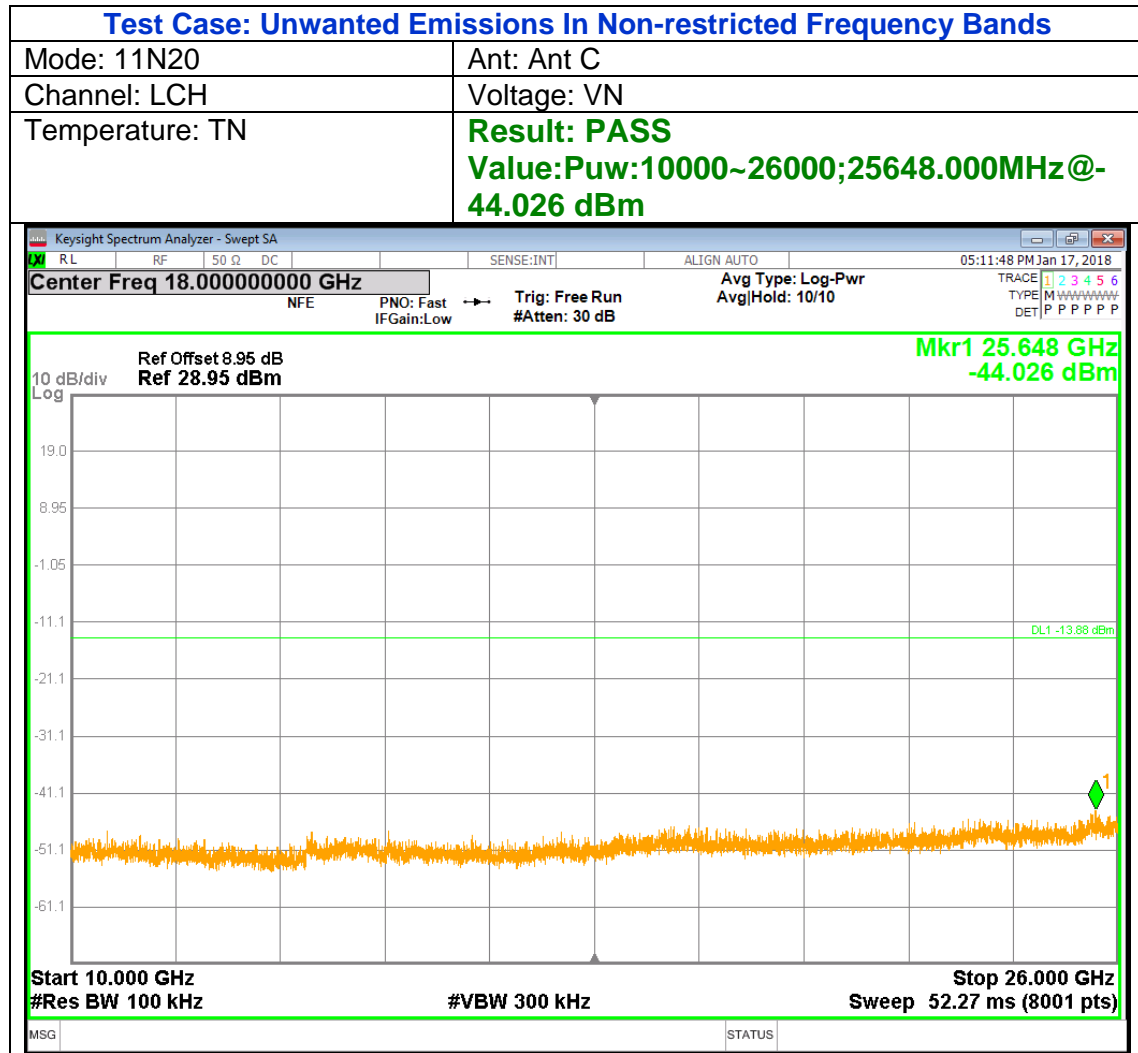




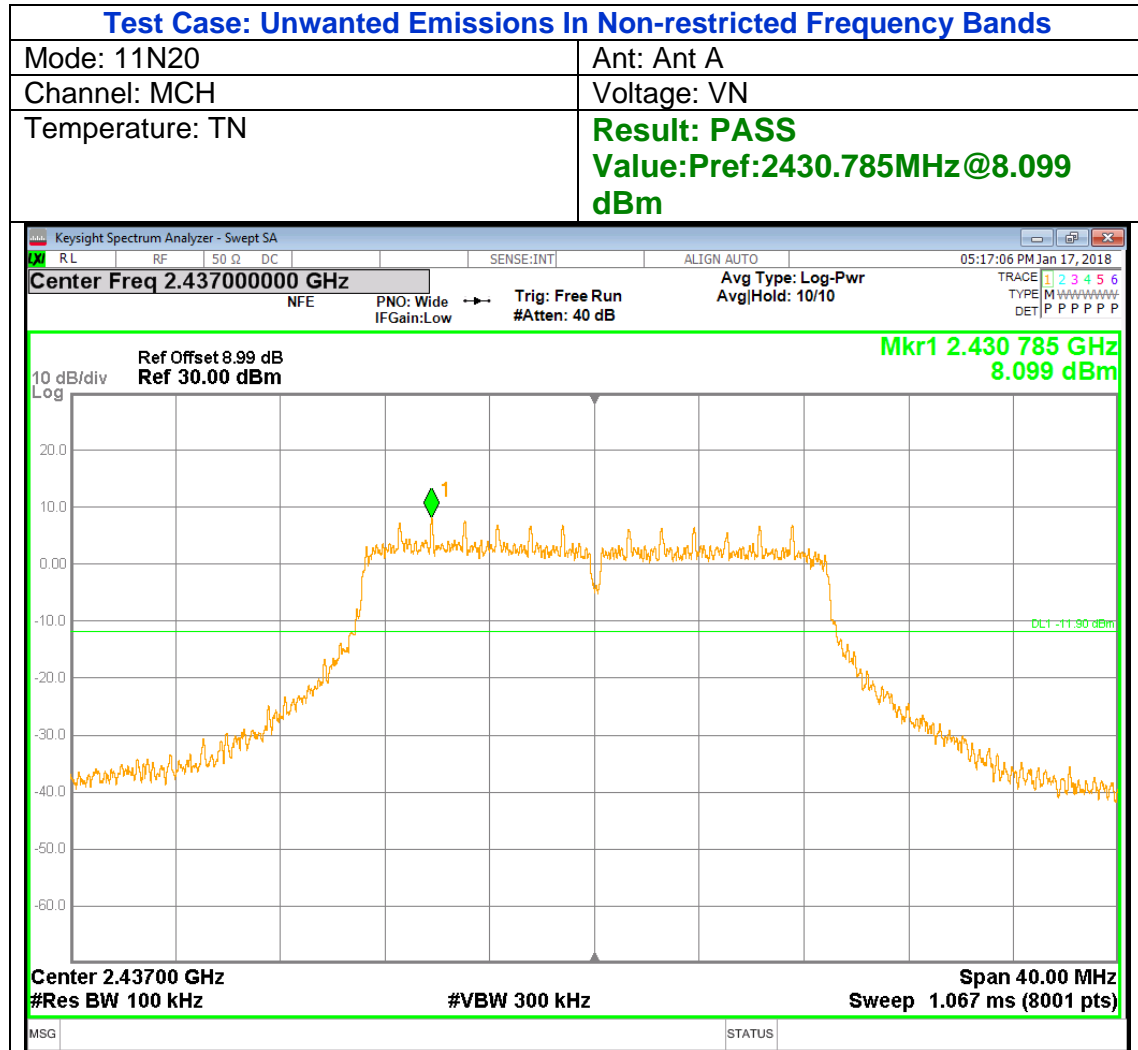




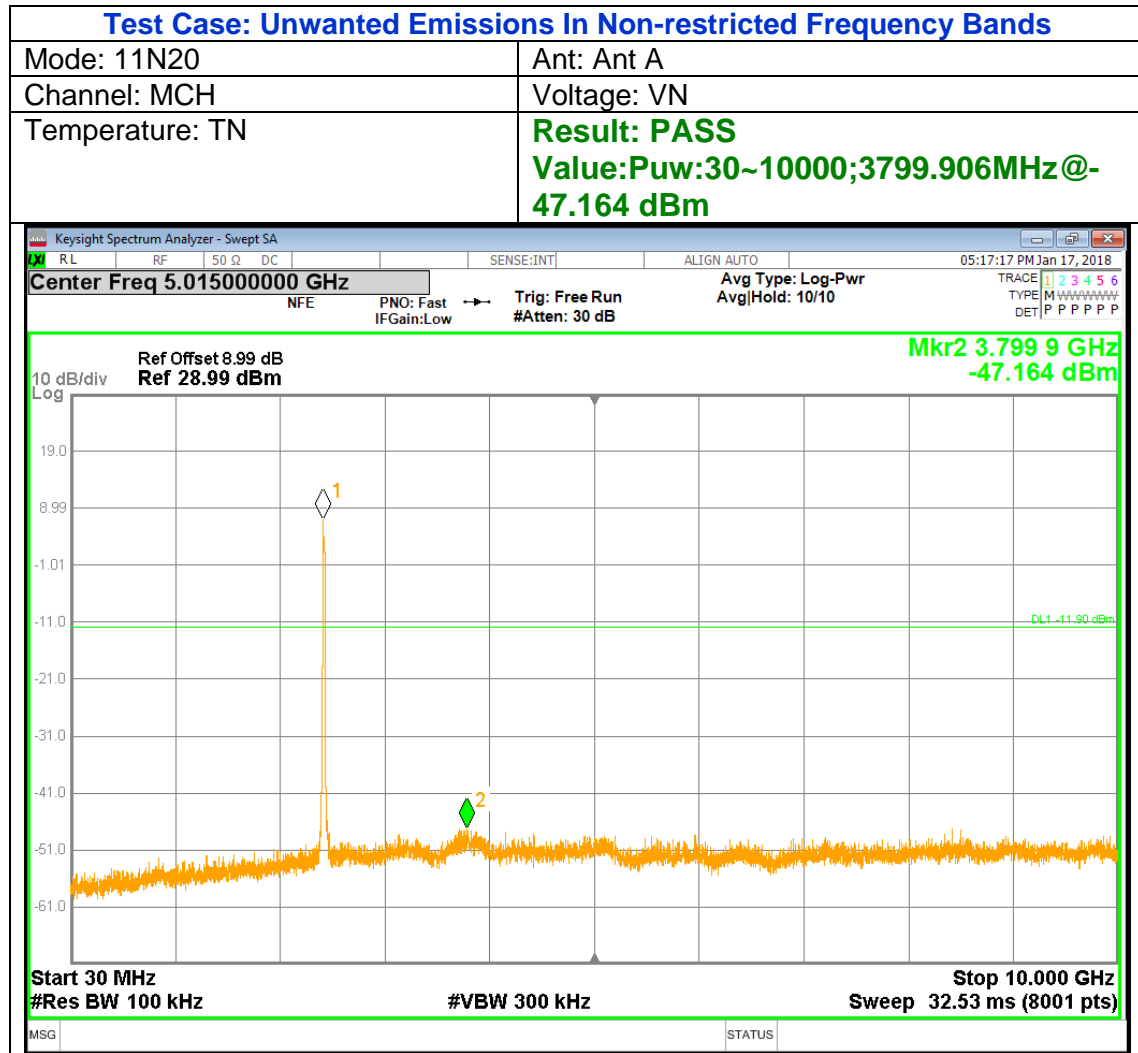


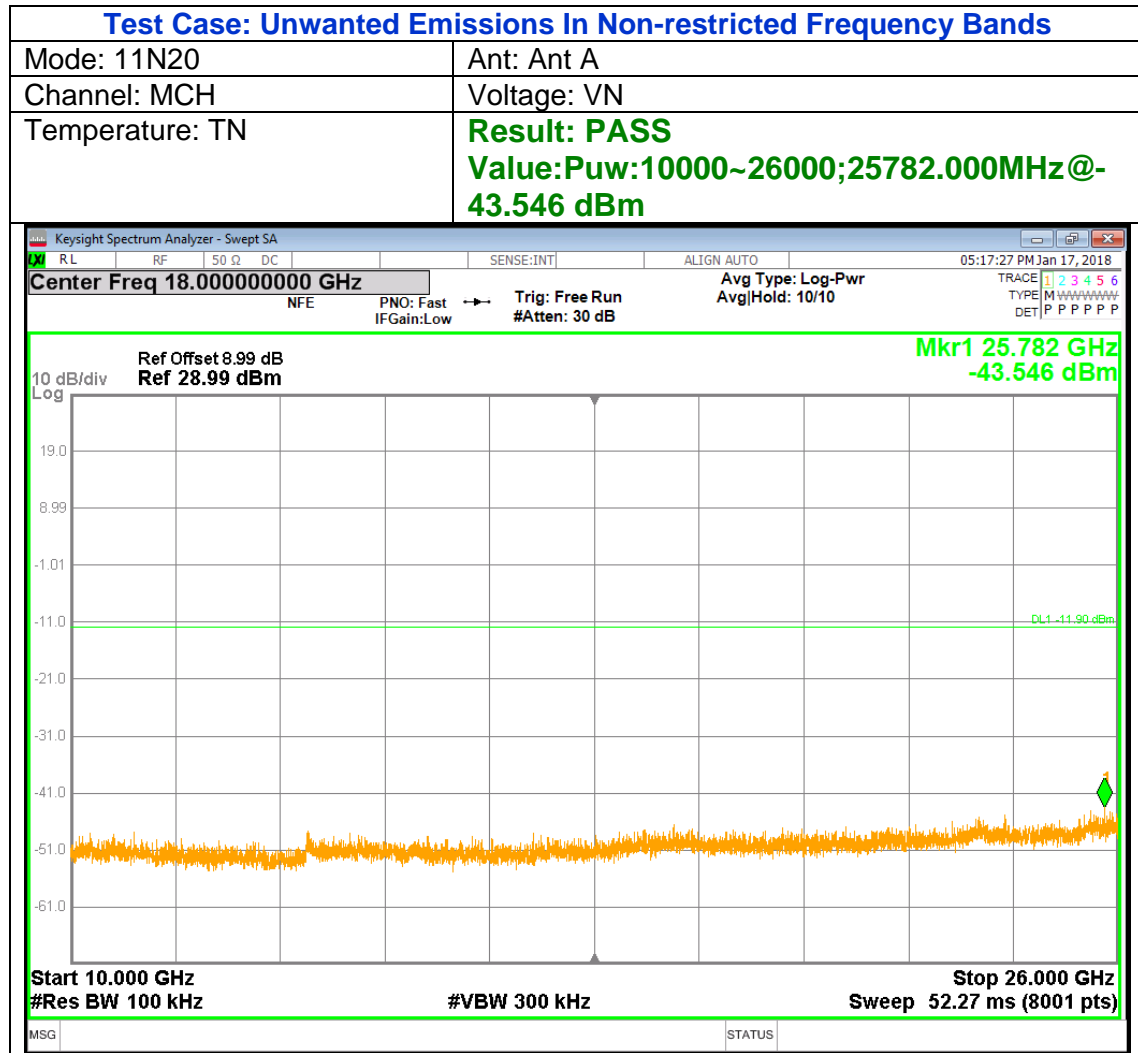


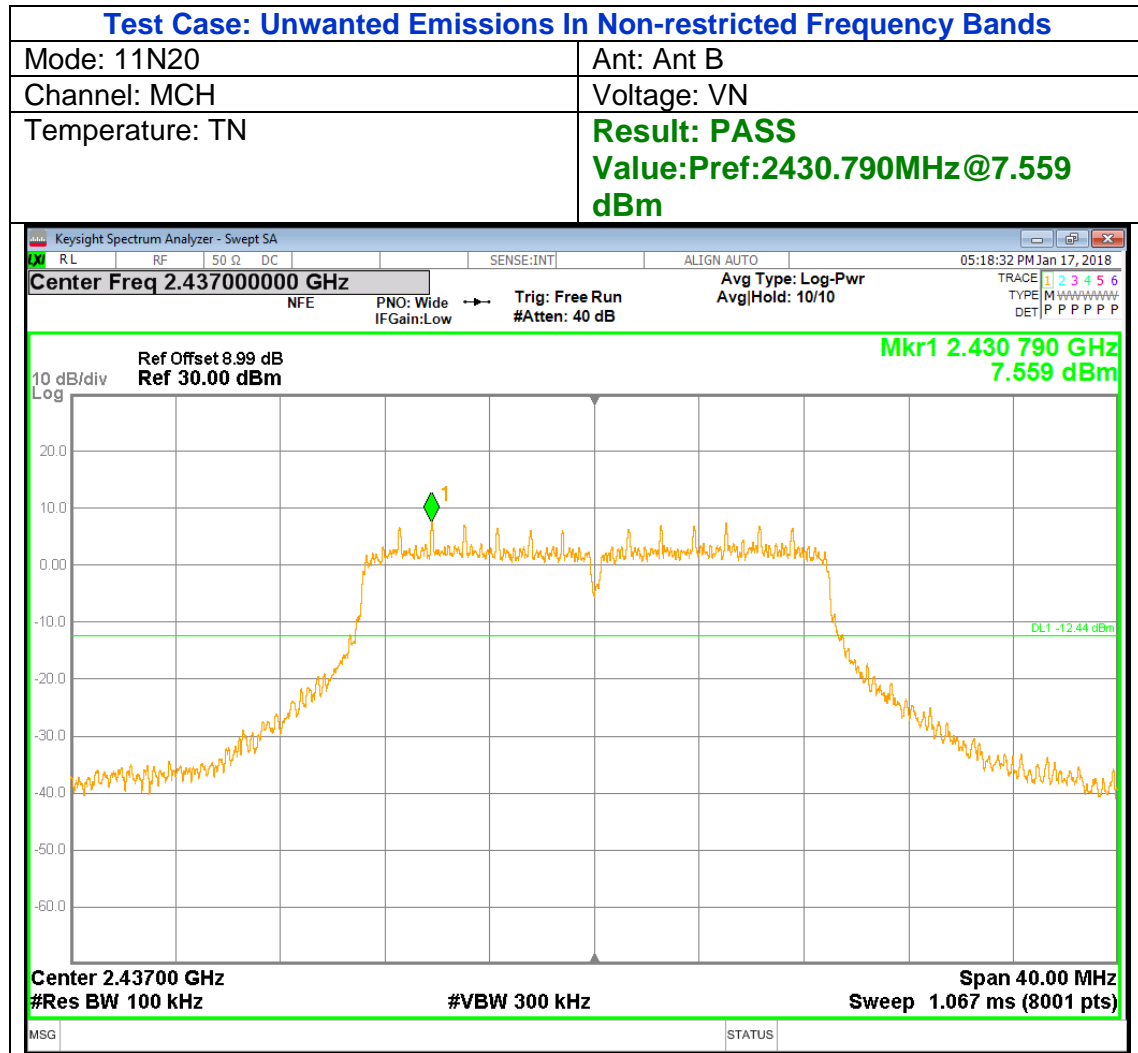
**Middle Channel**

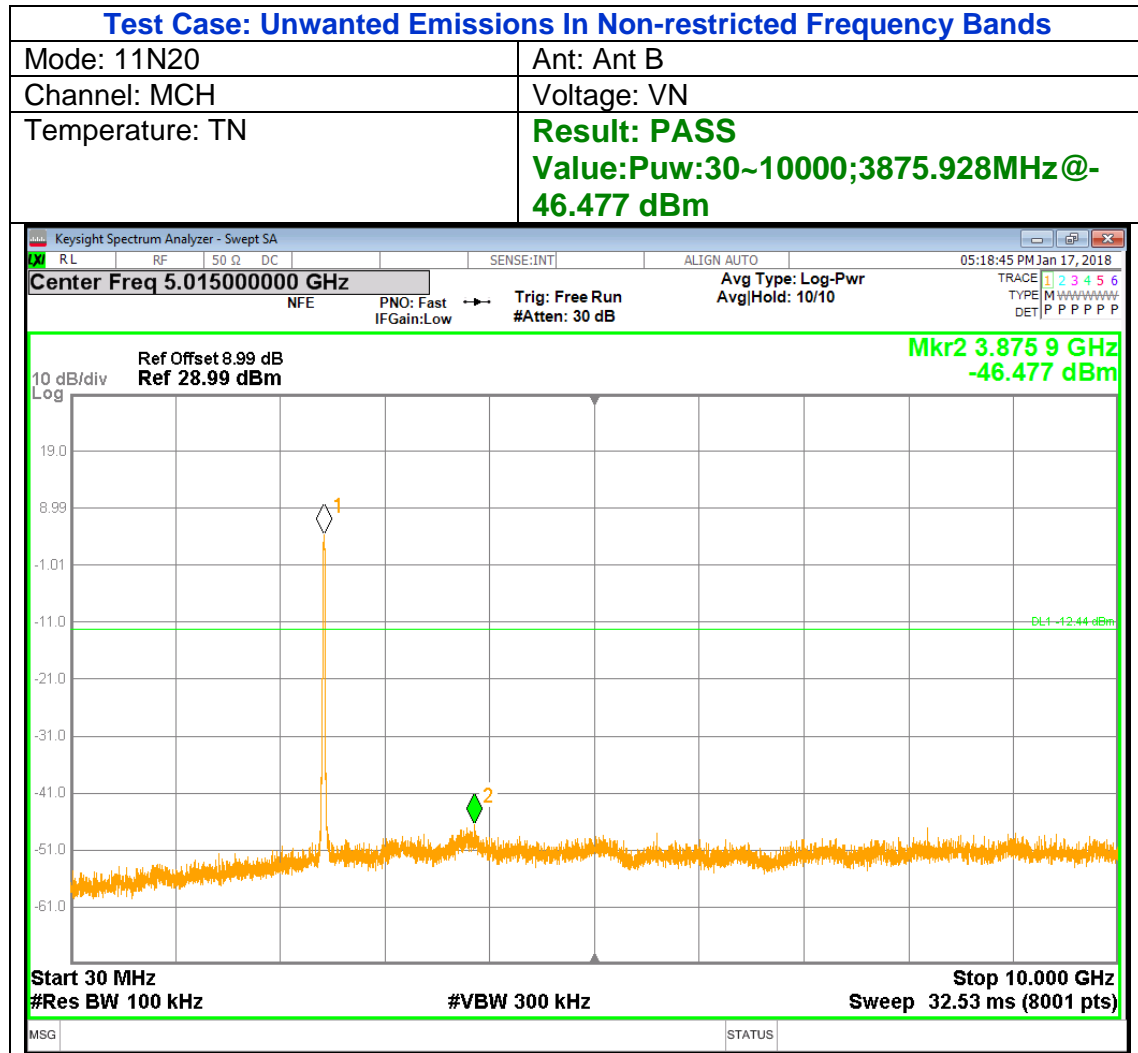


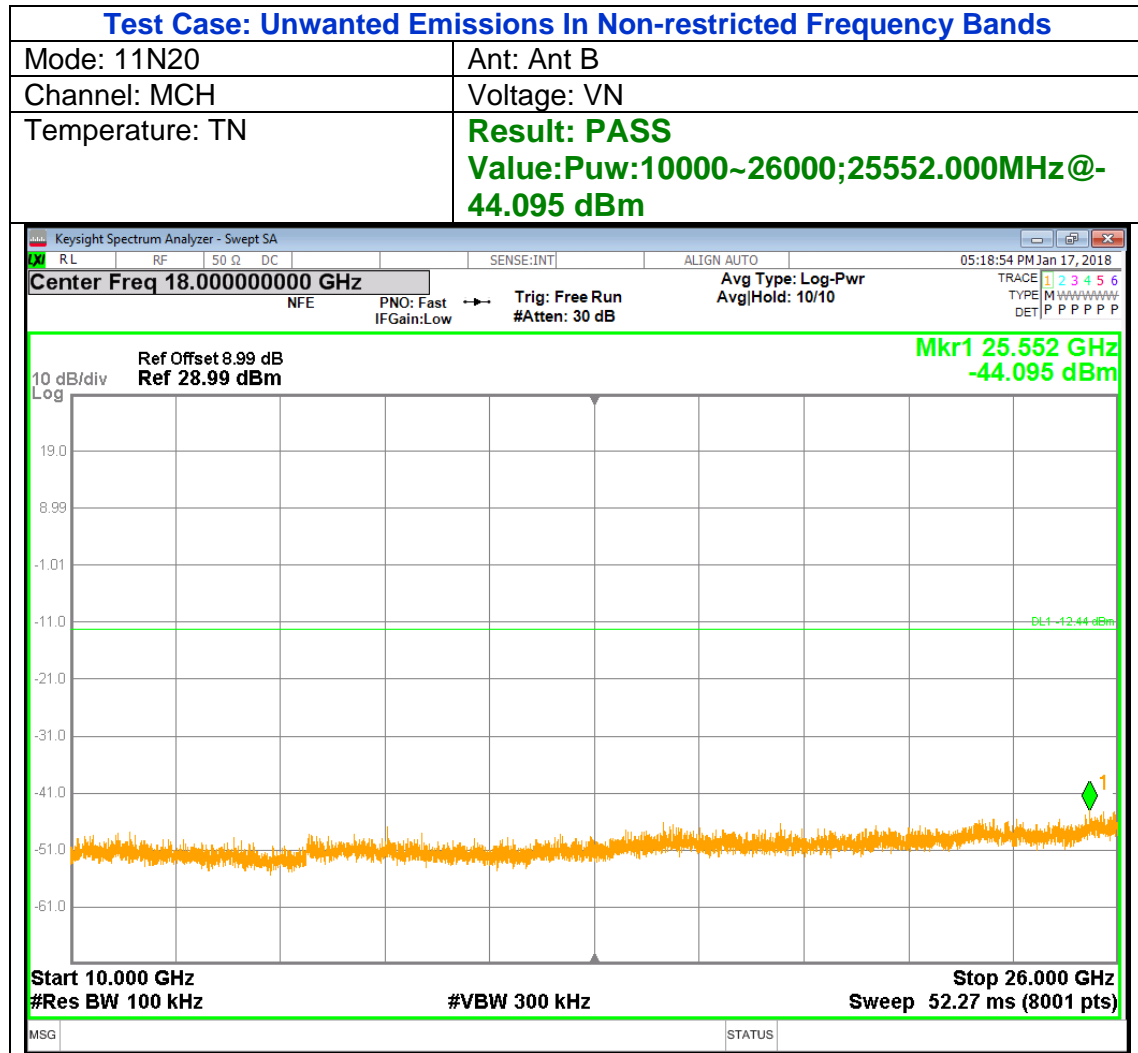


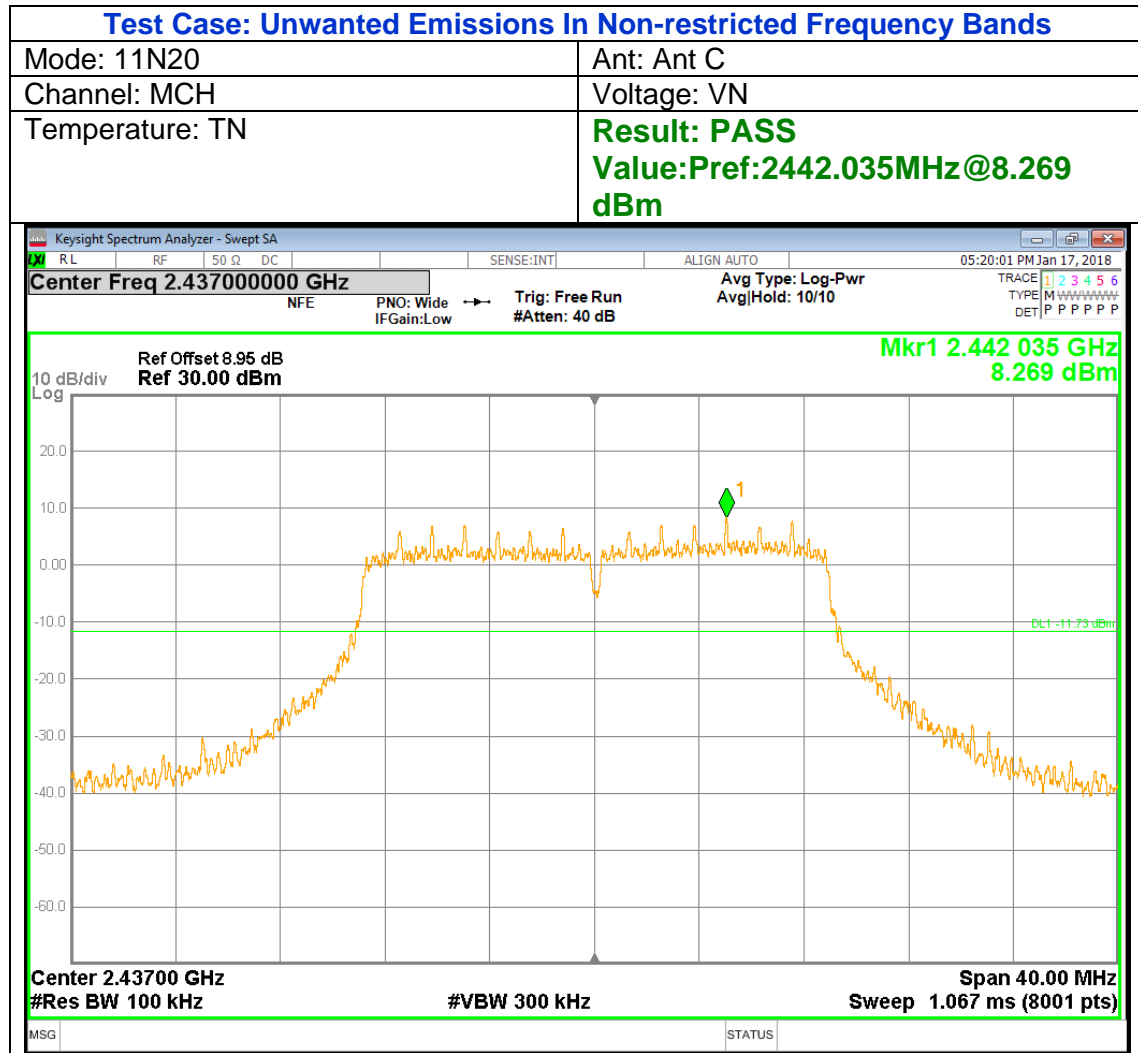


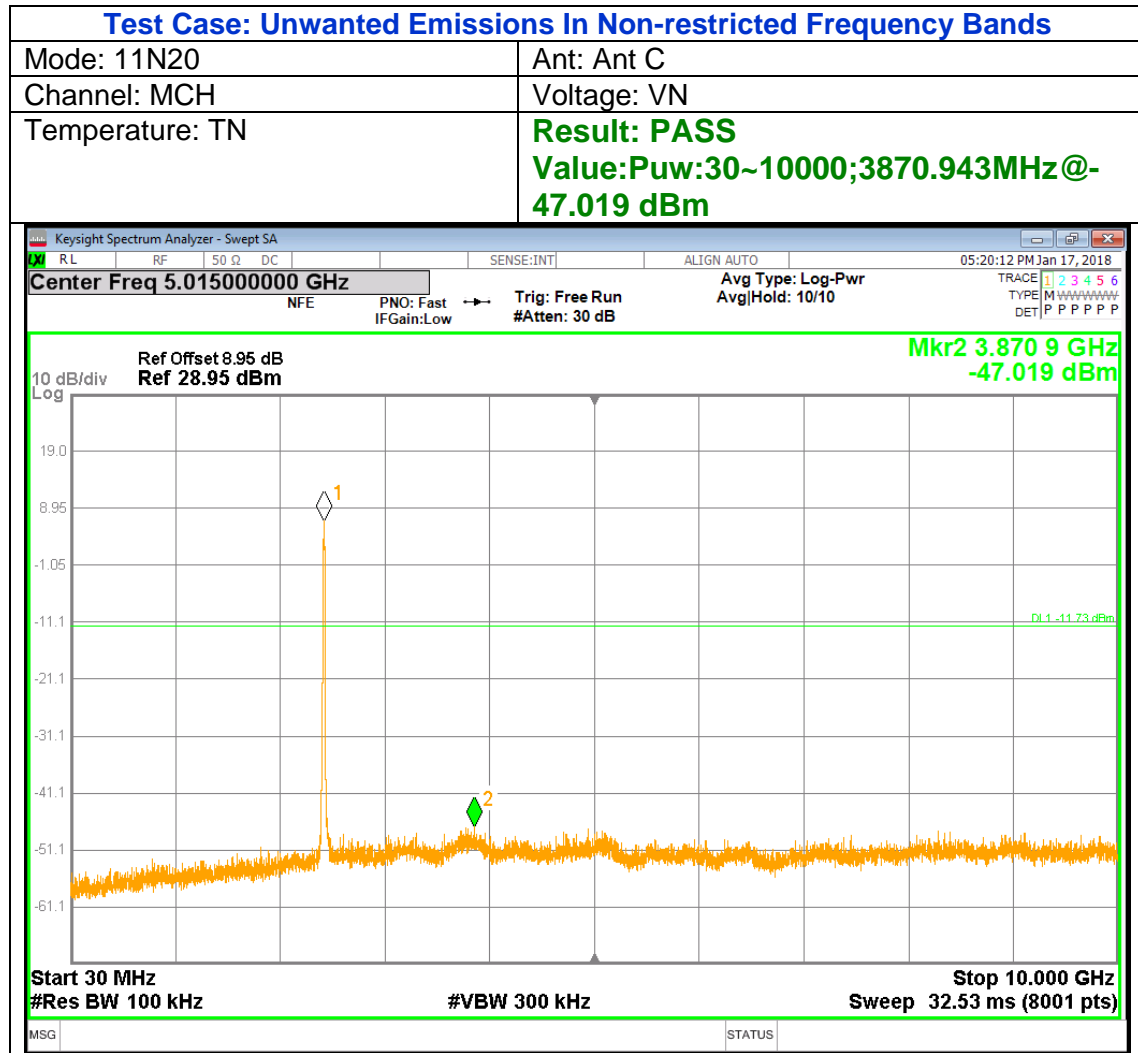


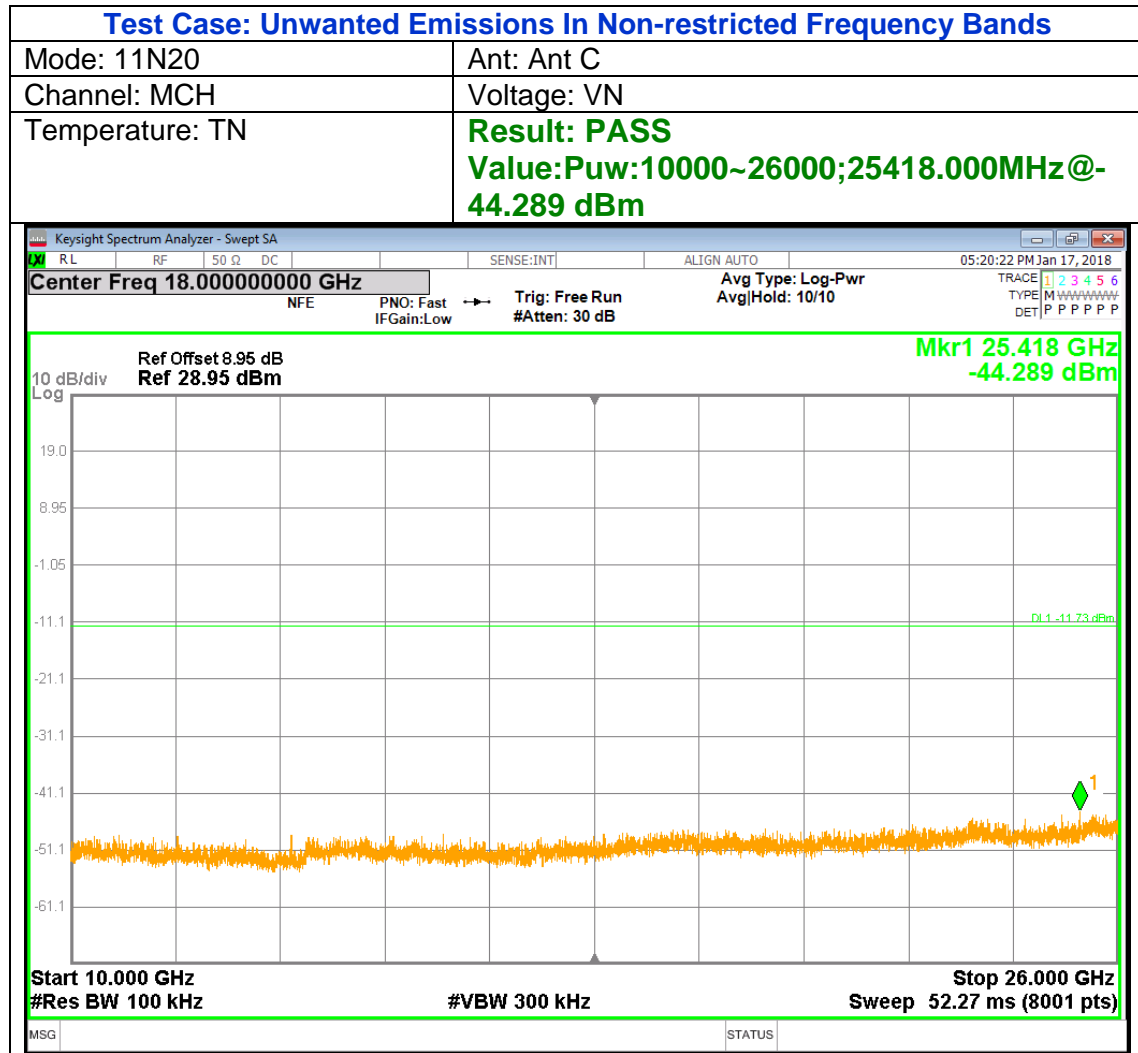






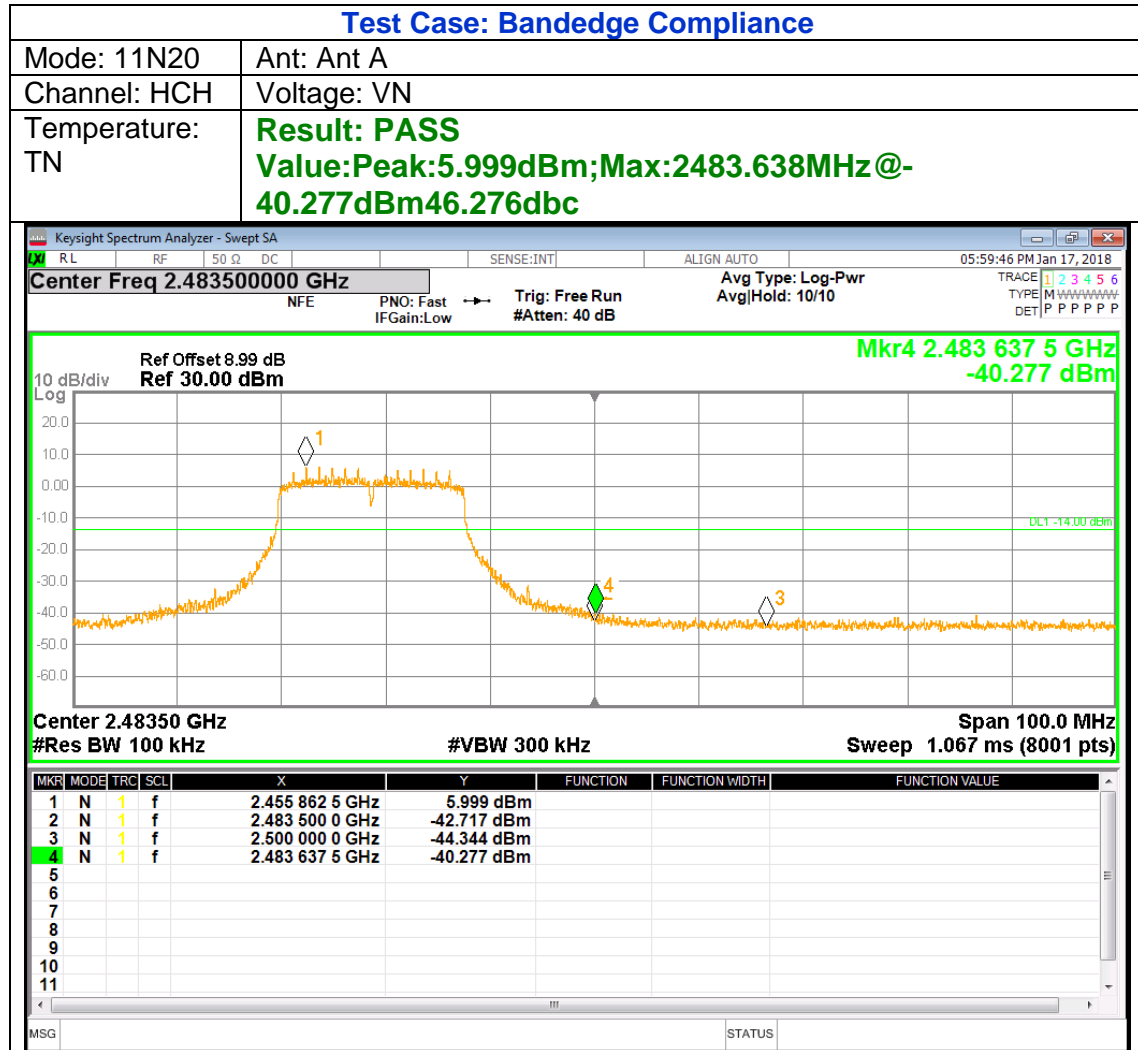


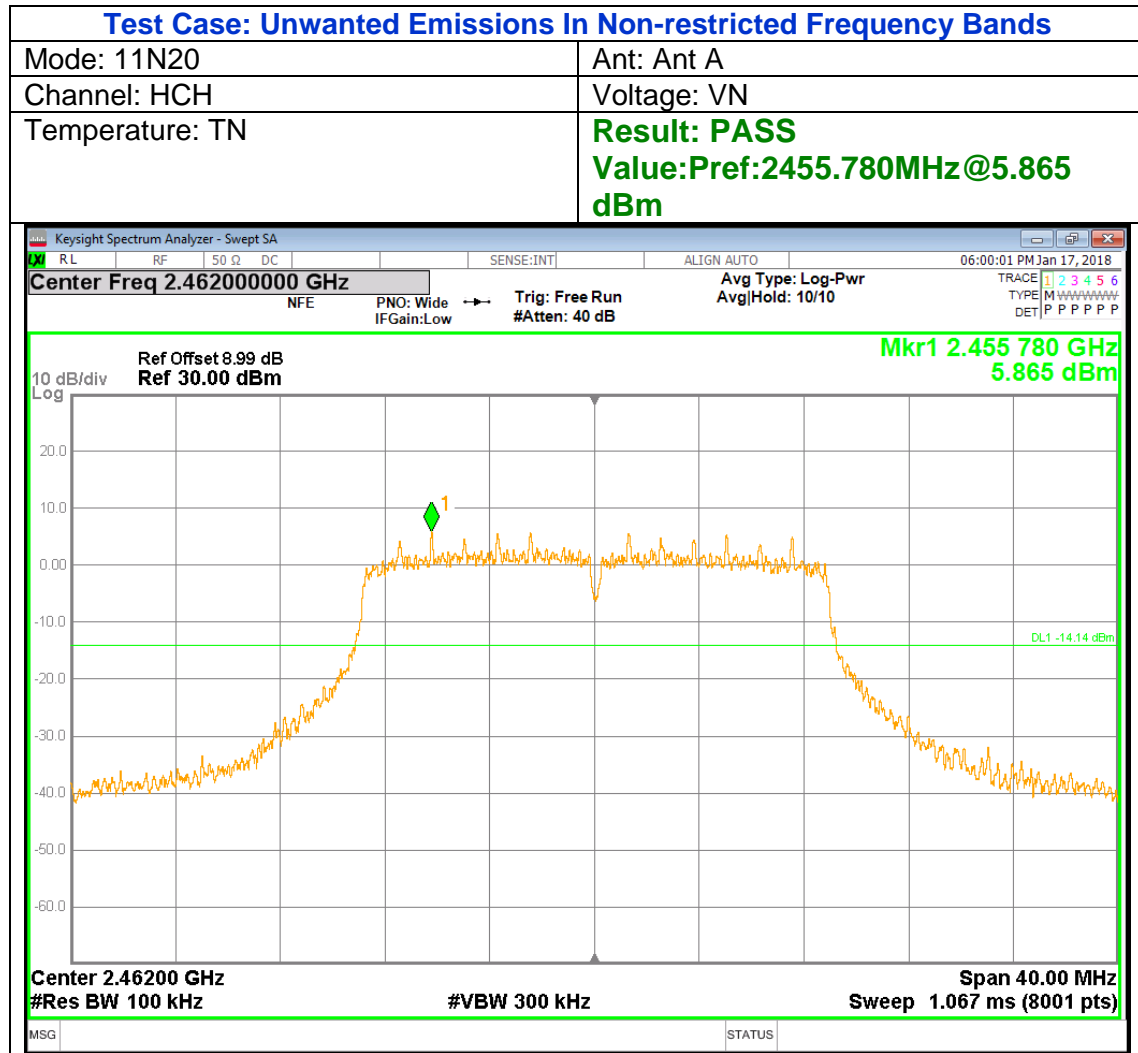


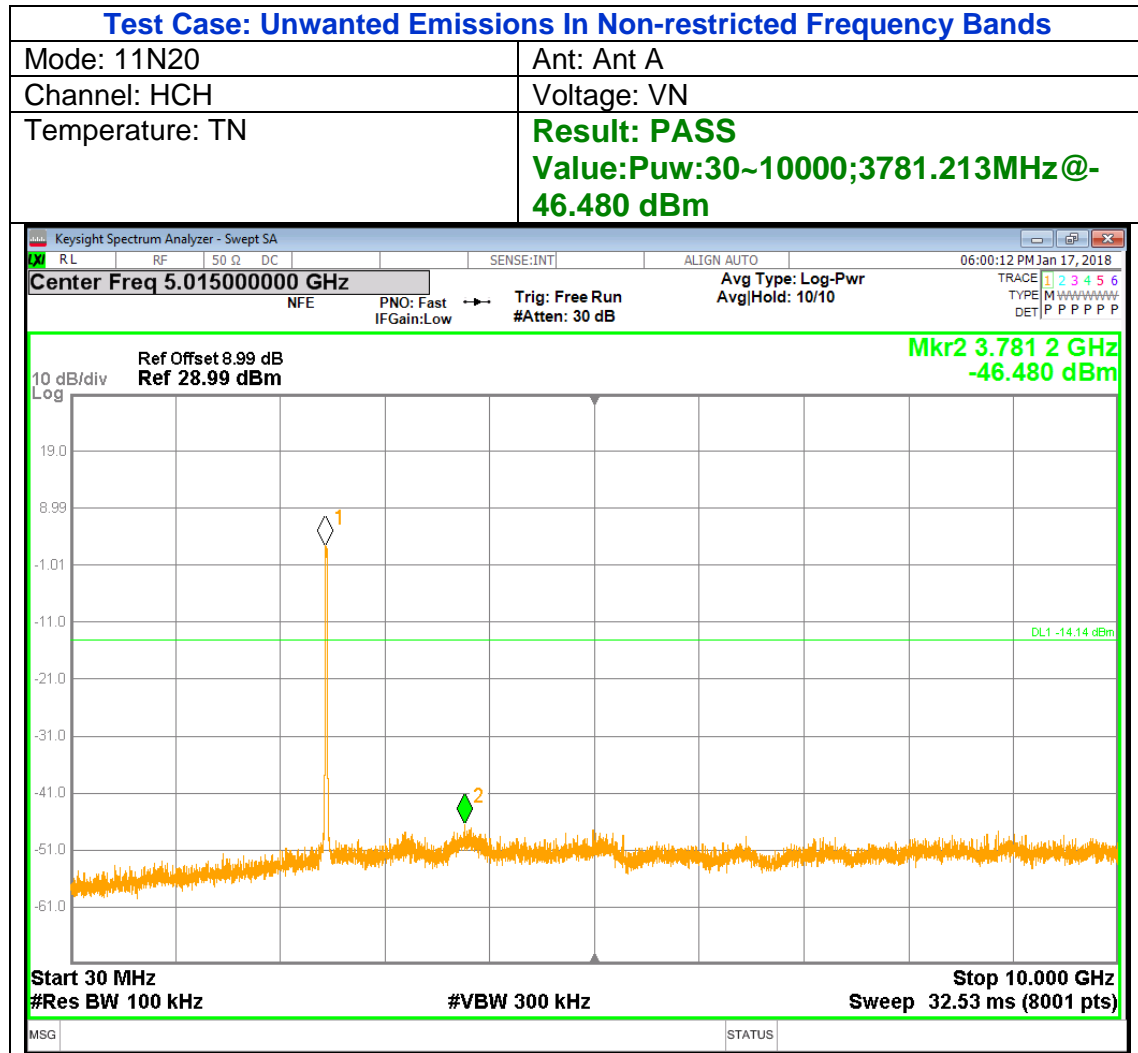


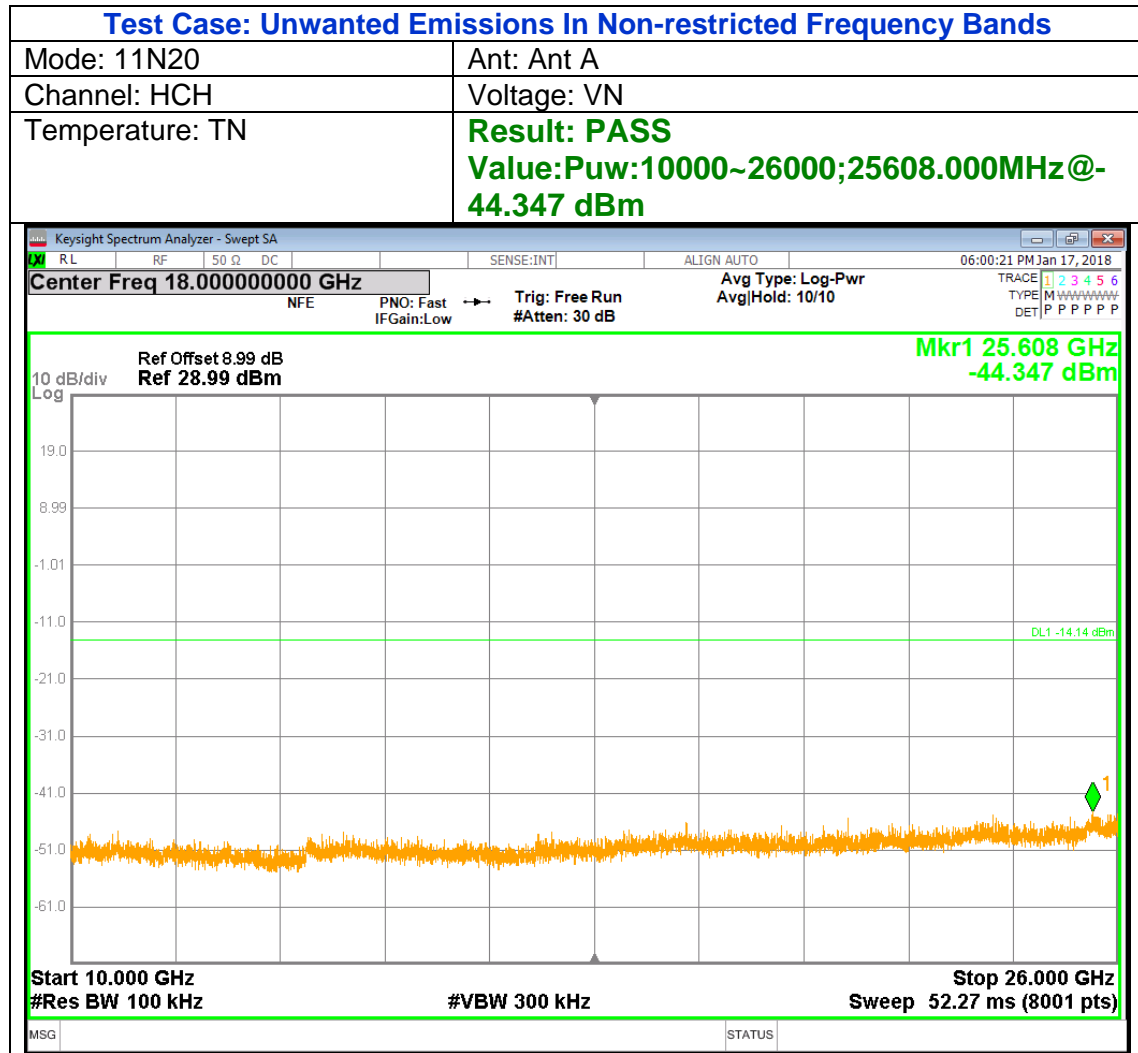


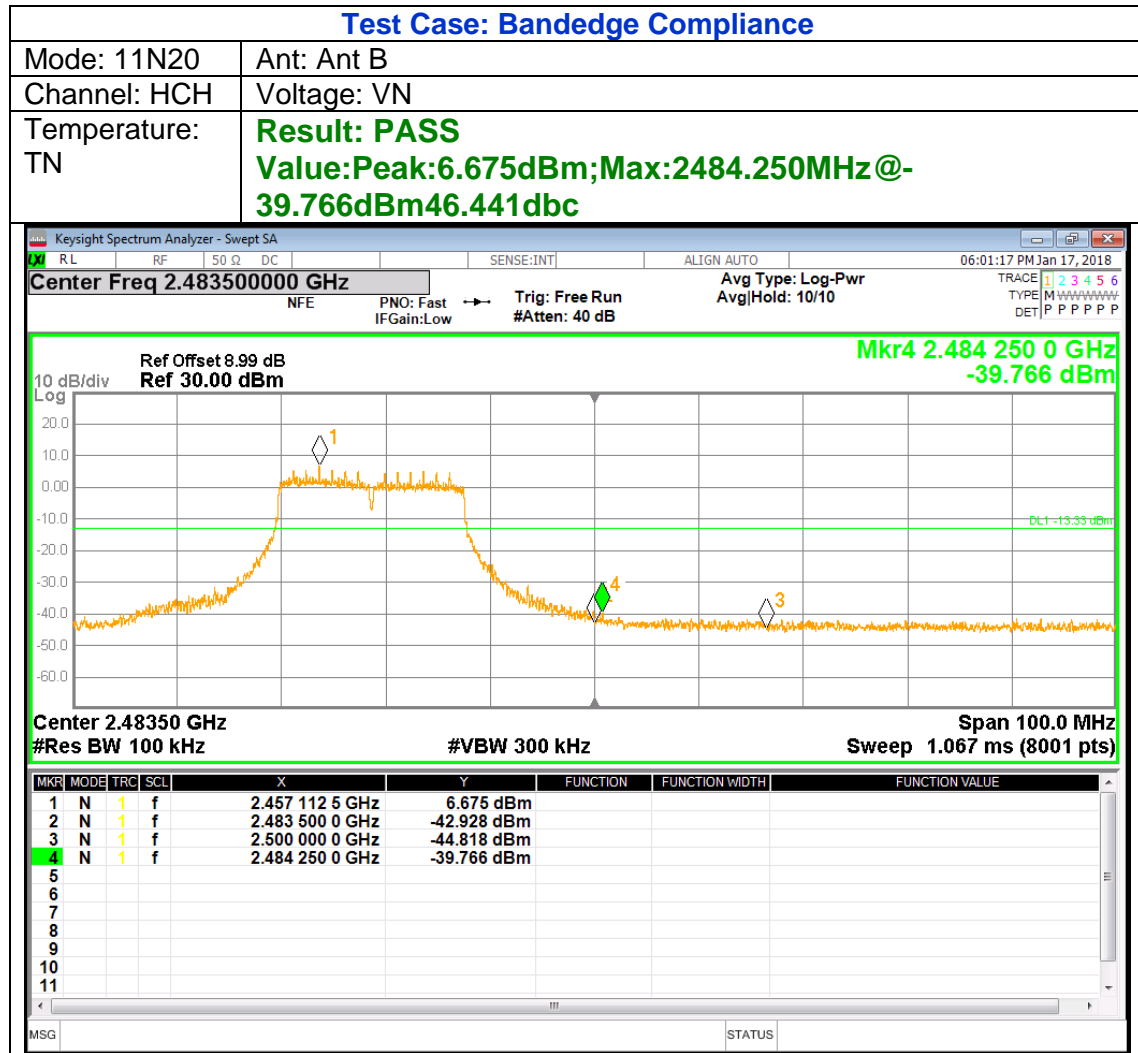
**High Channel**

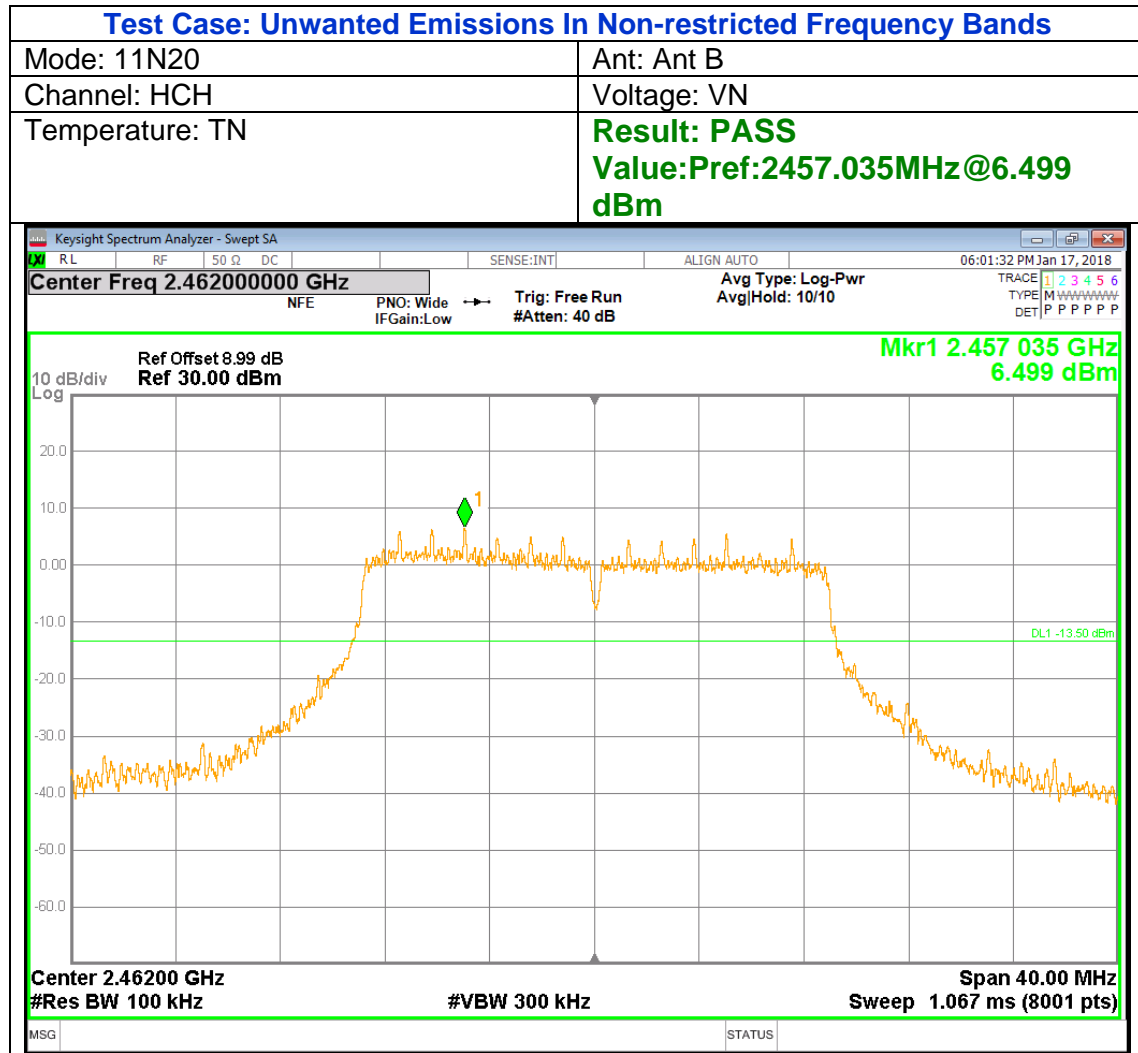


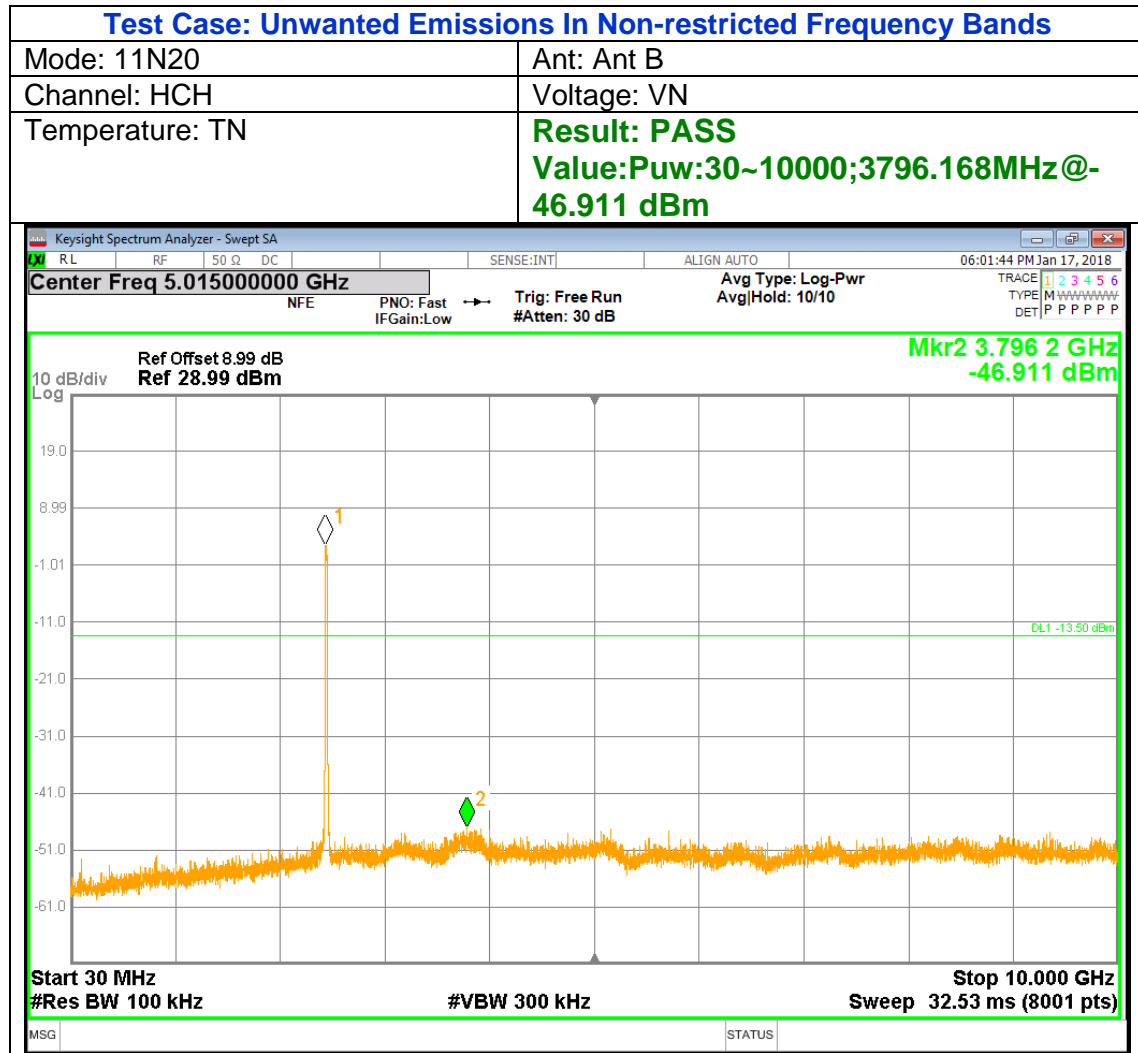


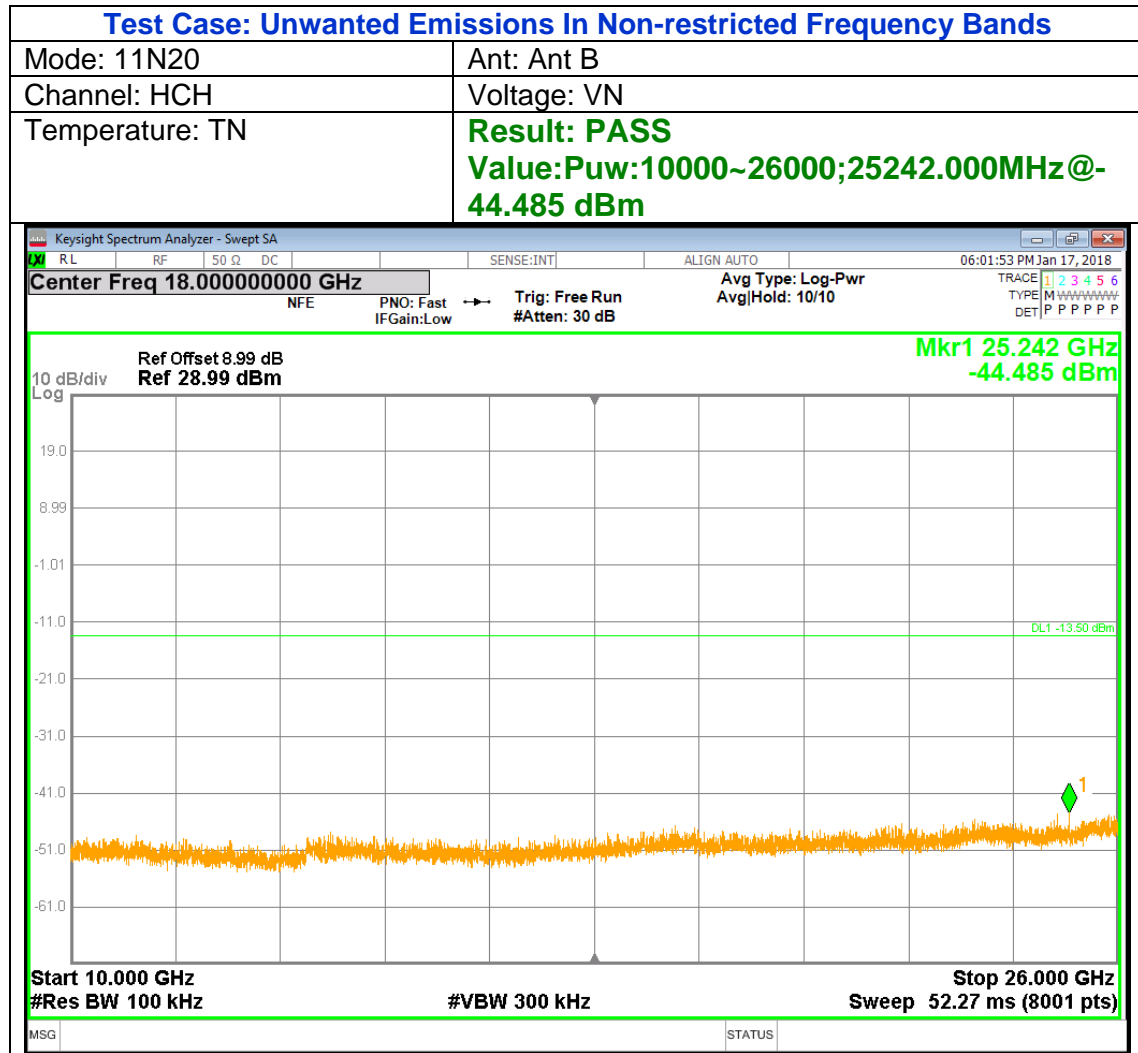




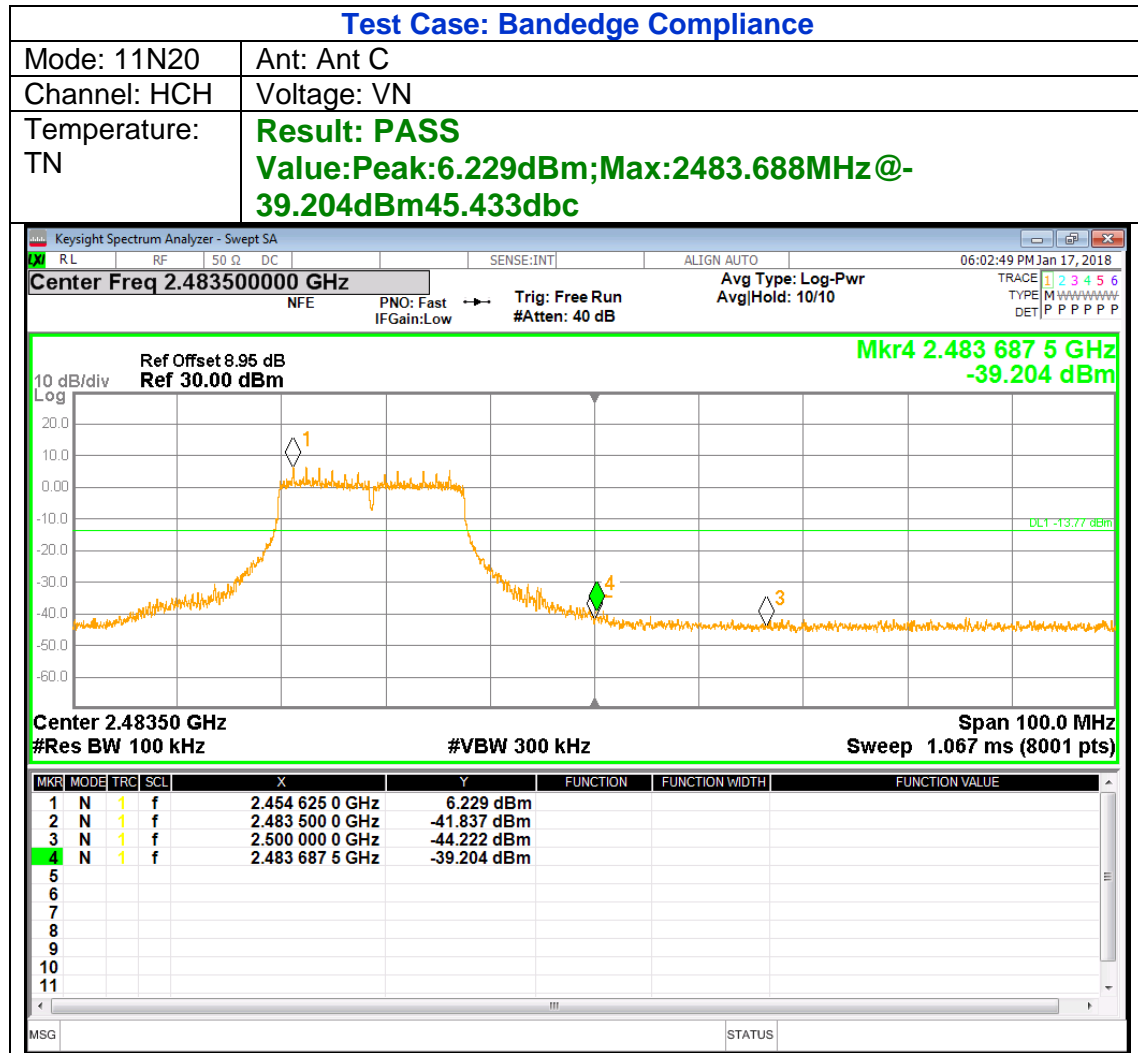


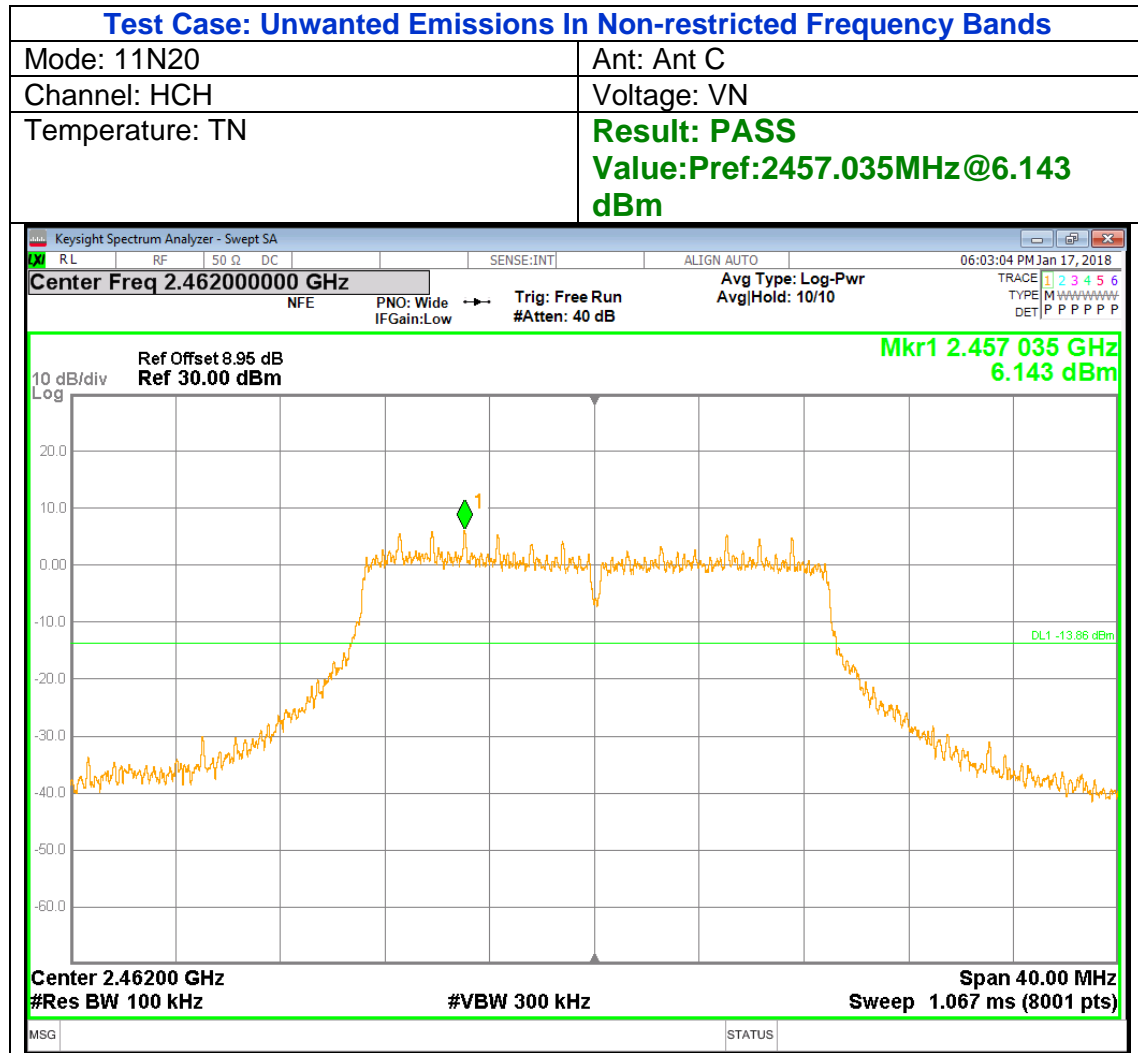


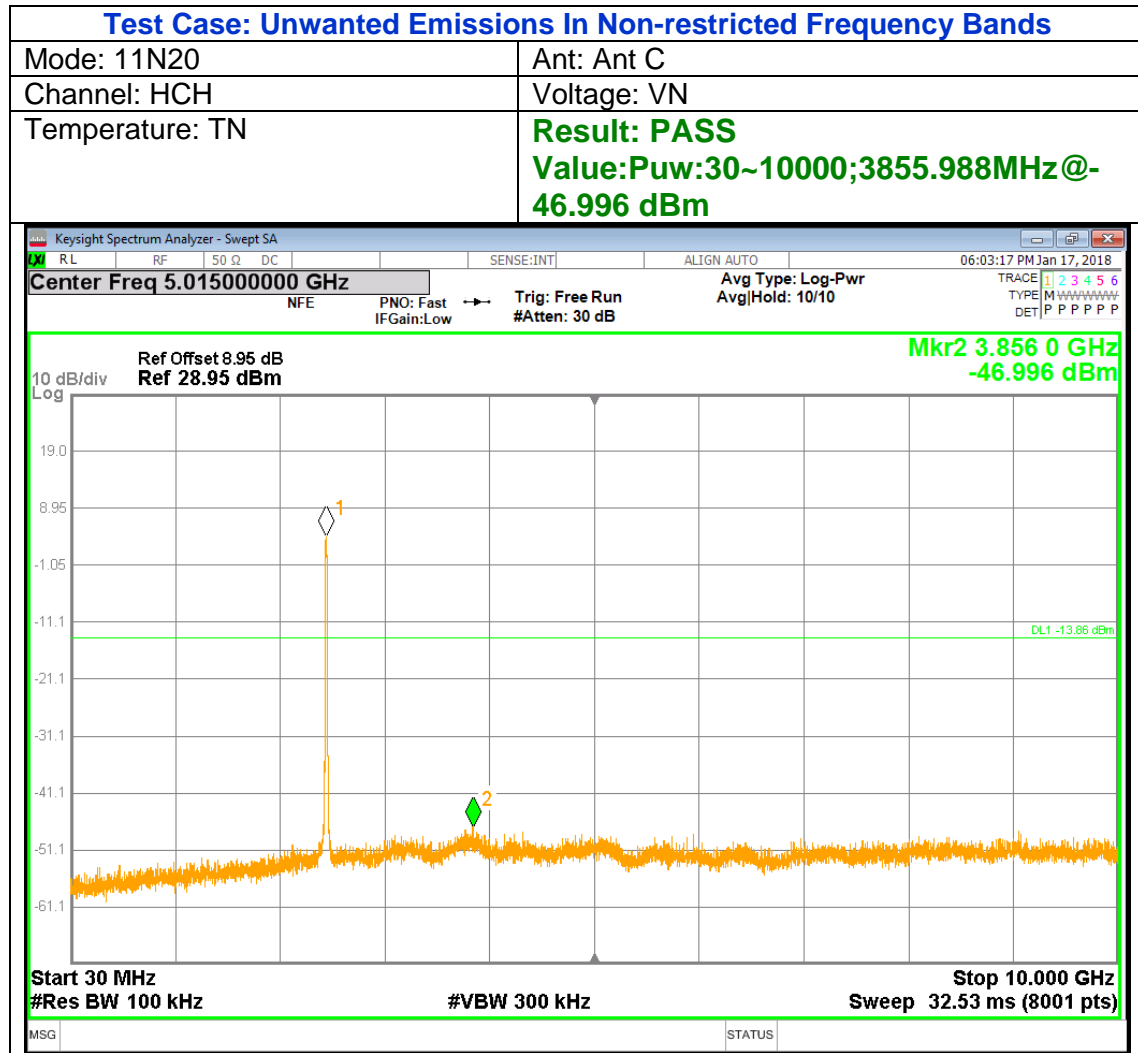






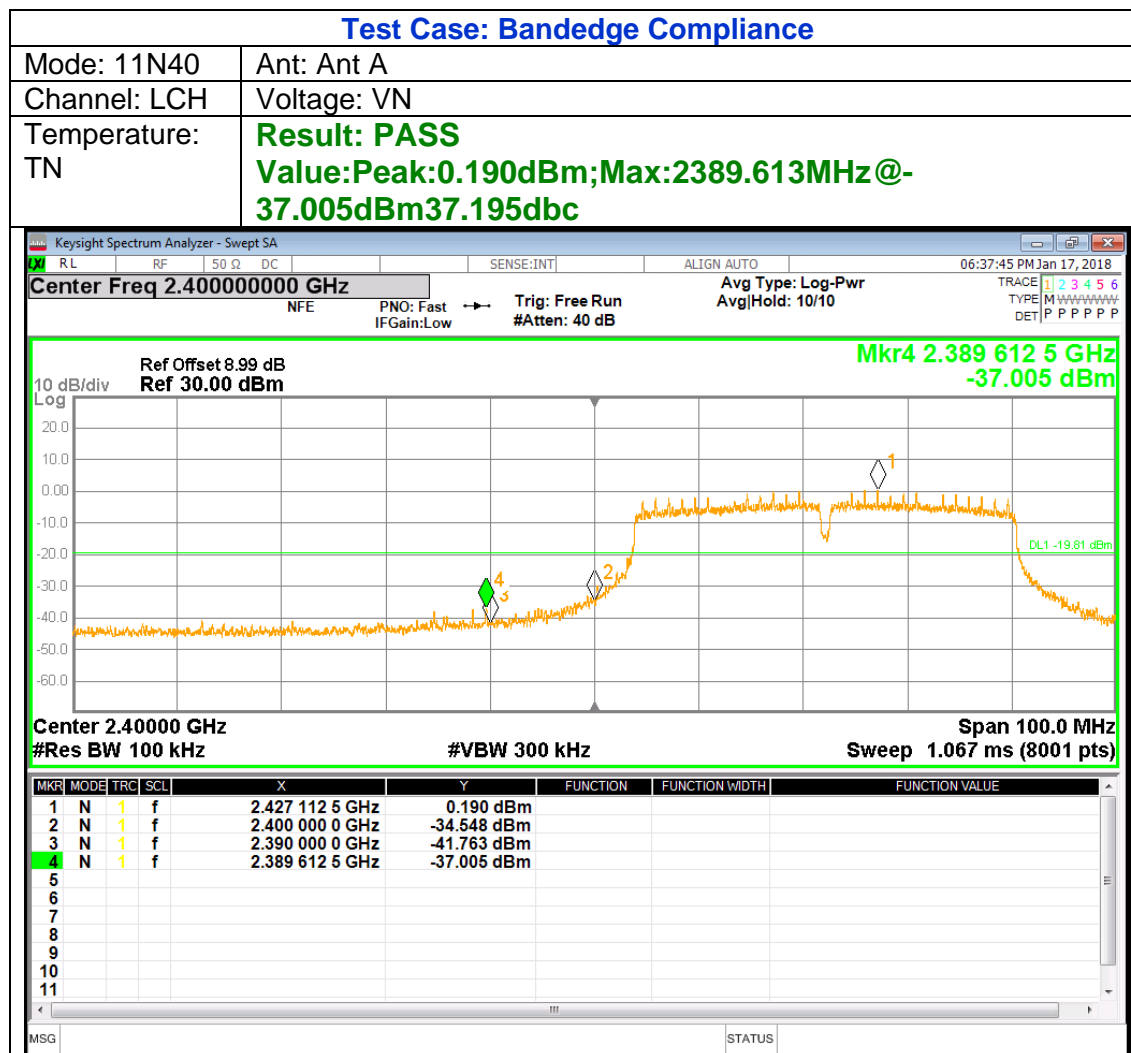


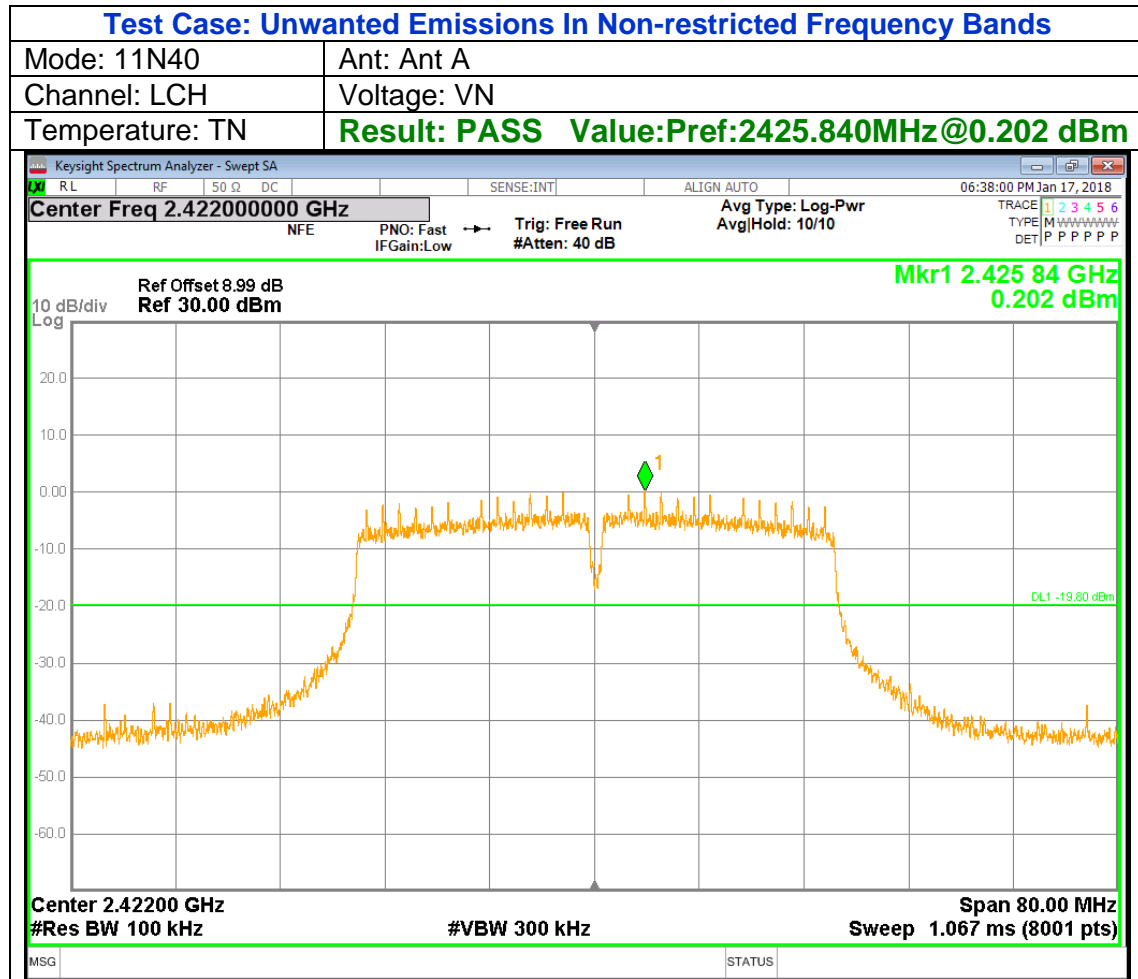


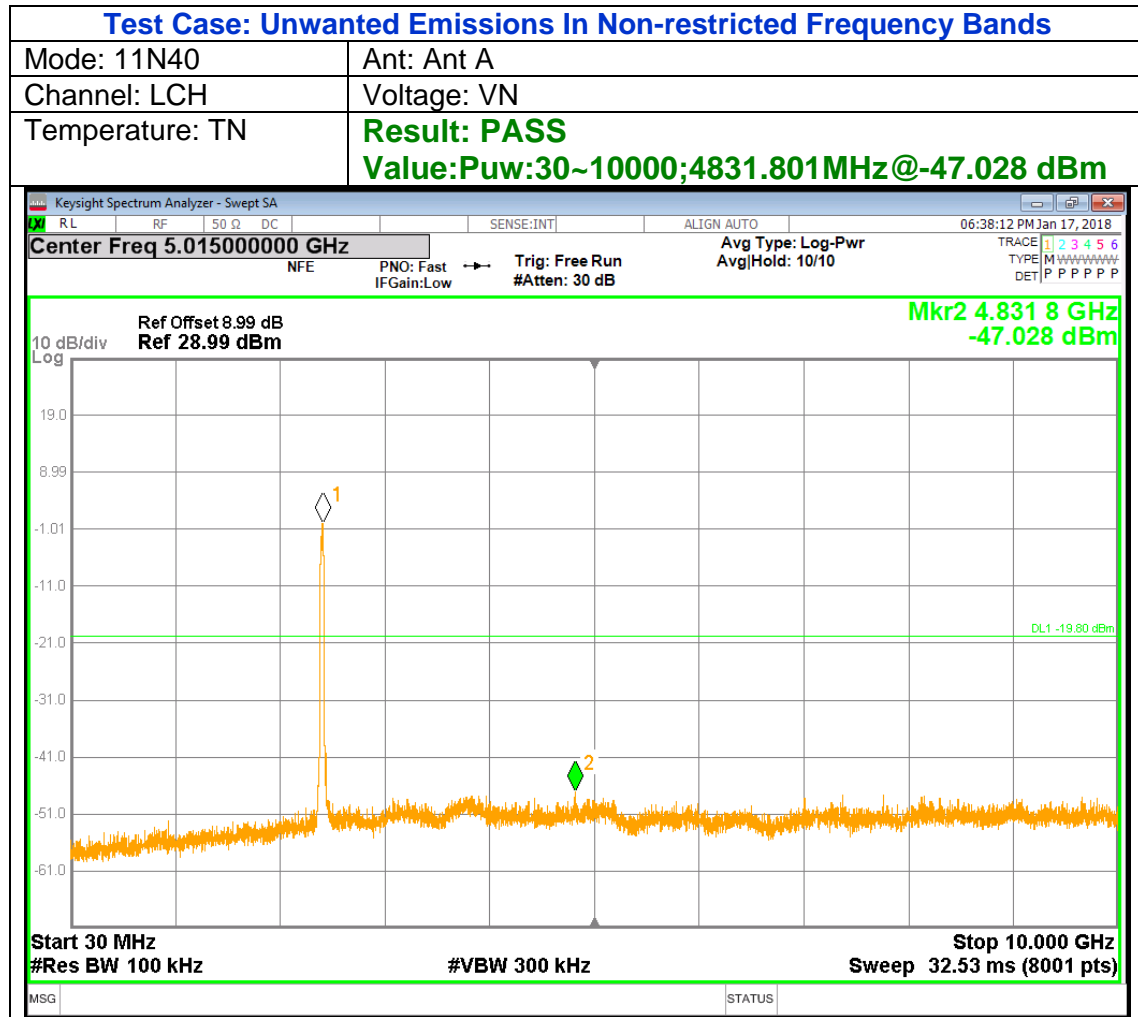


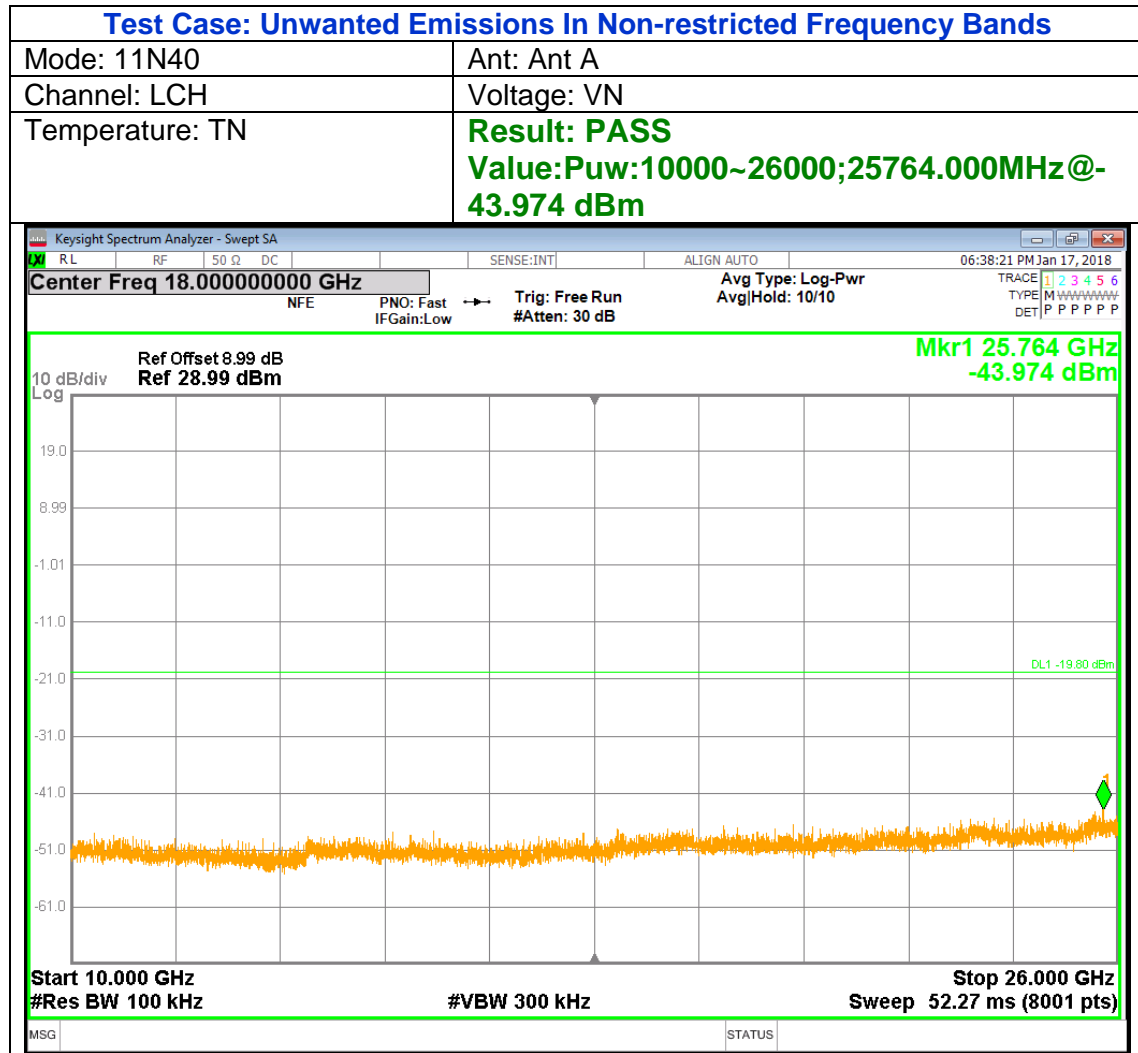
### 7.5.4. 802.11n40 3TX MODE

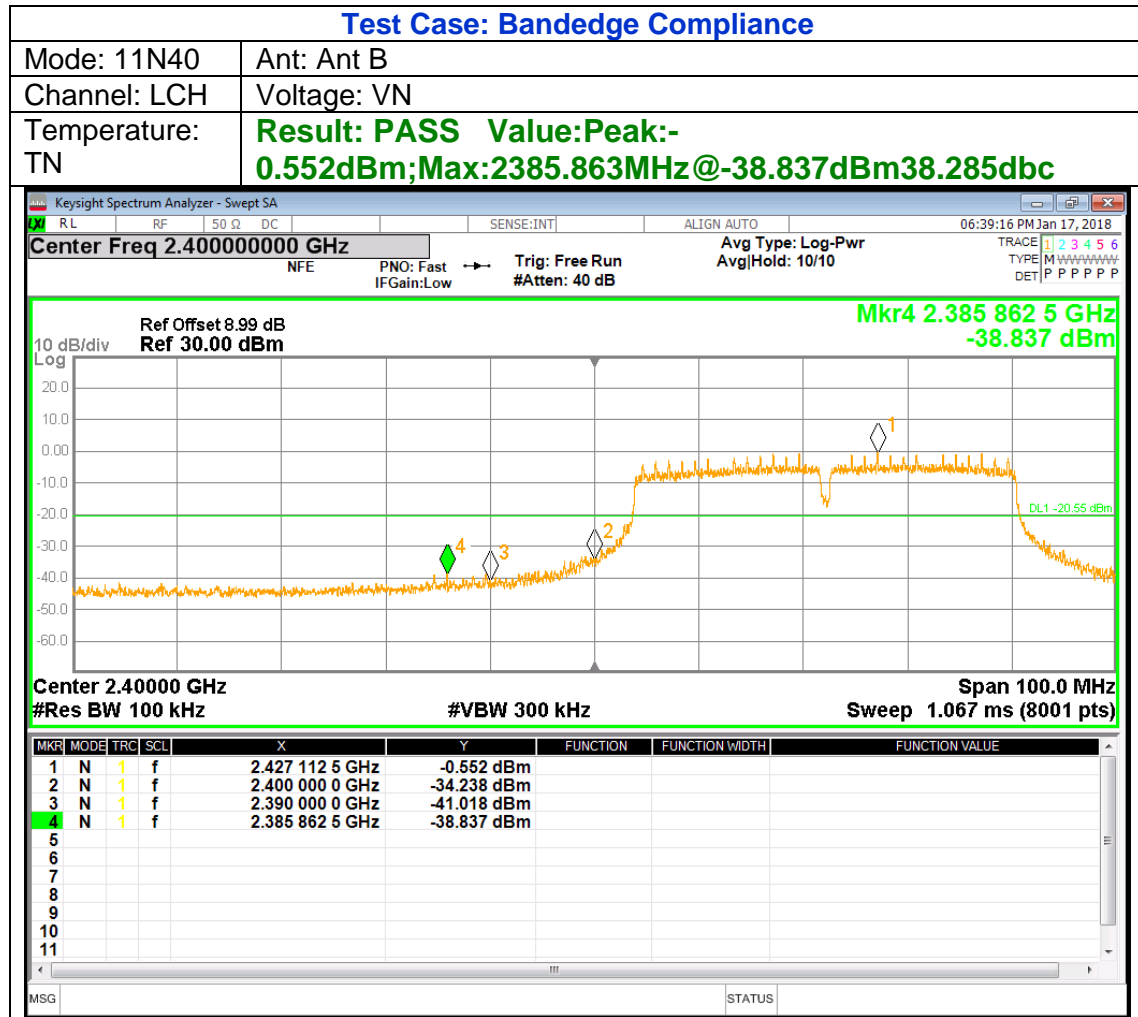
#### Low Channel



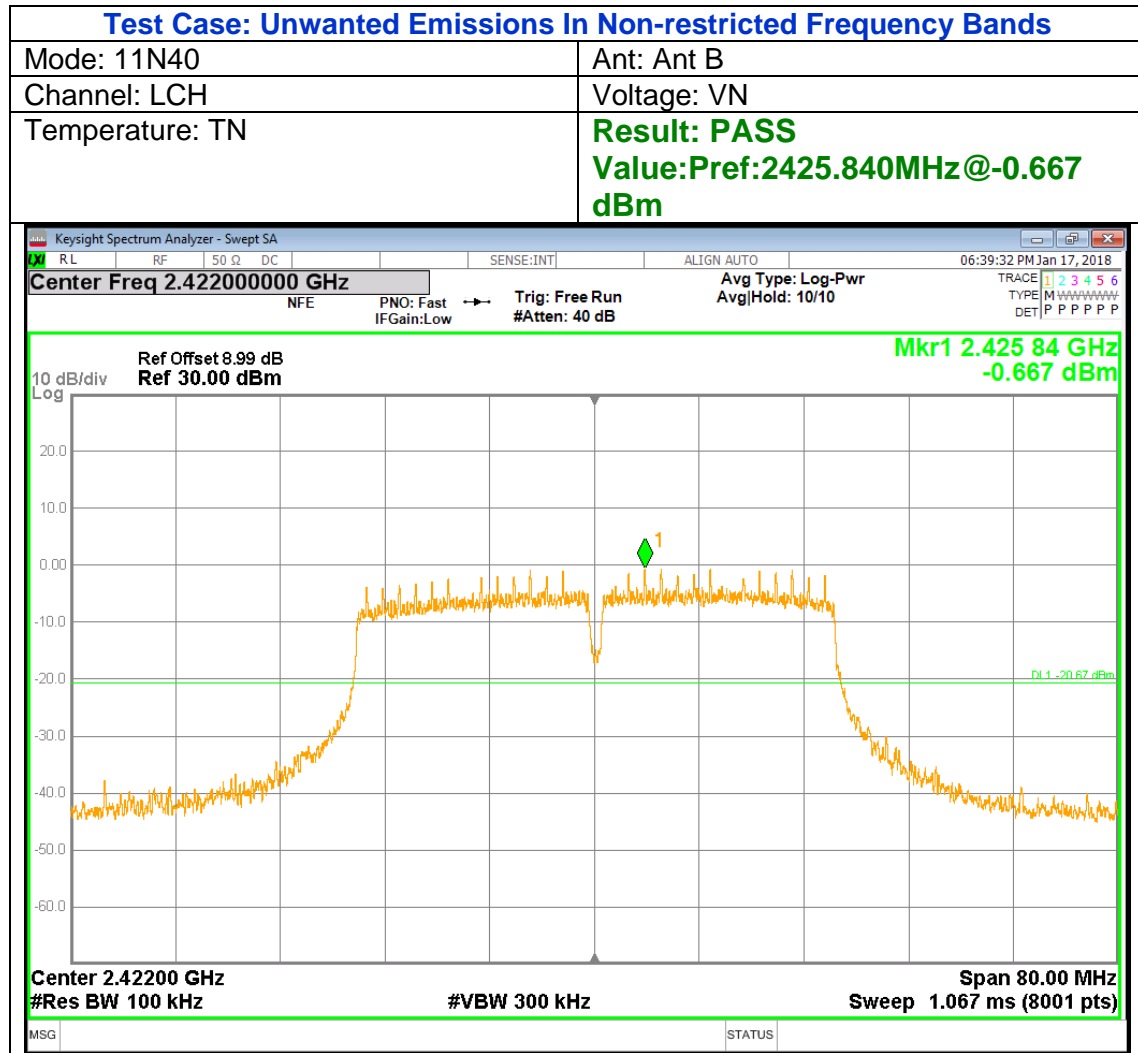


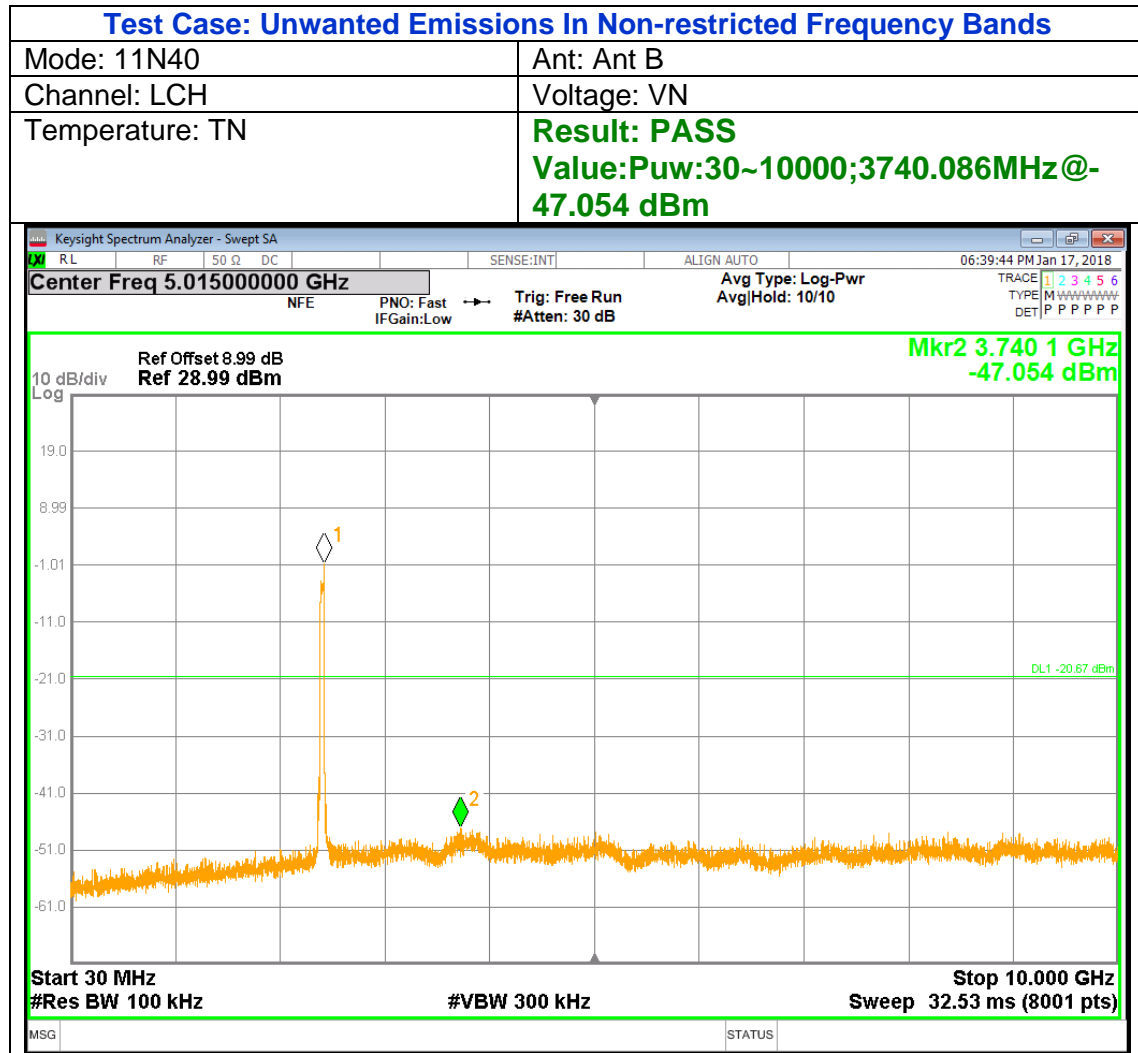


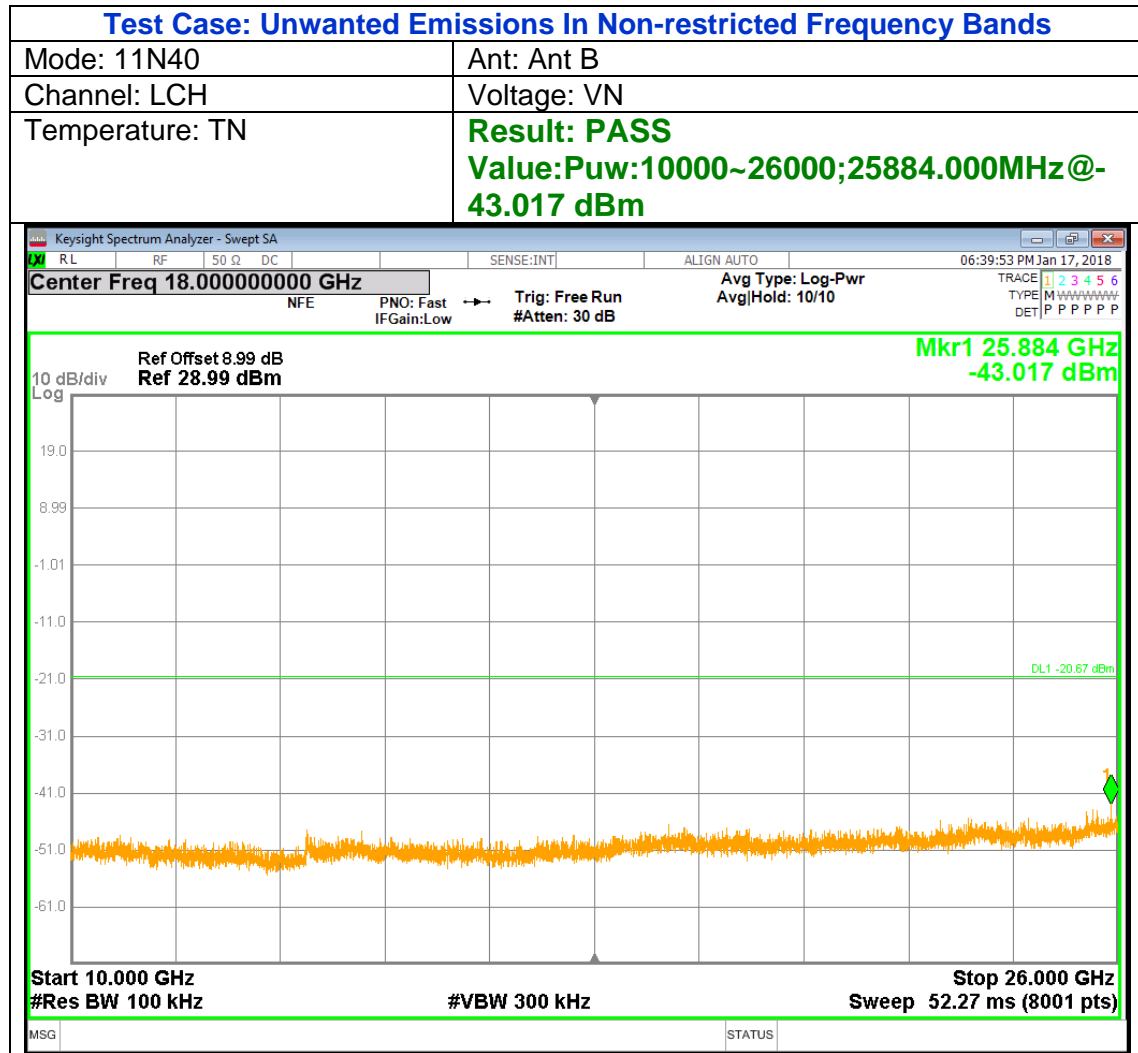


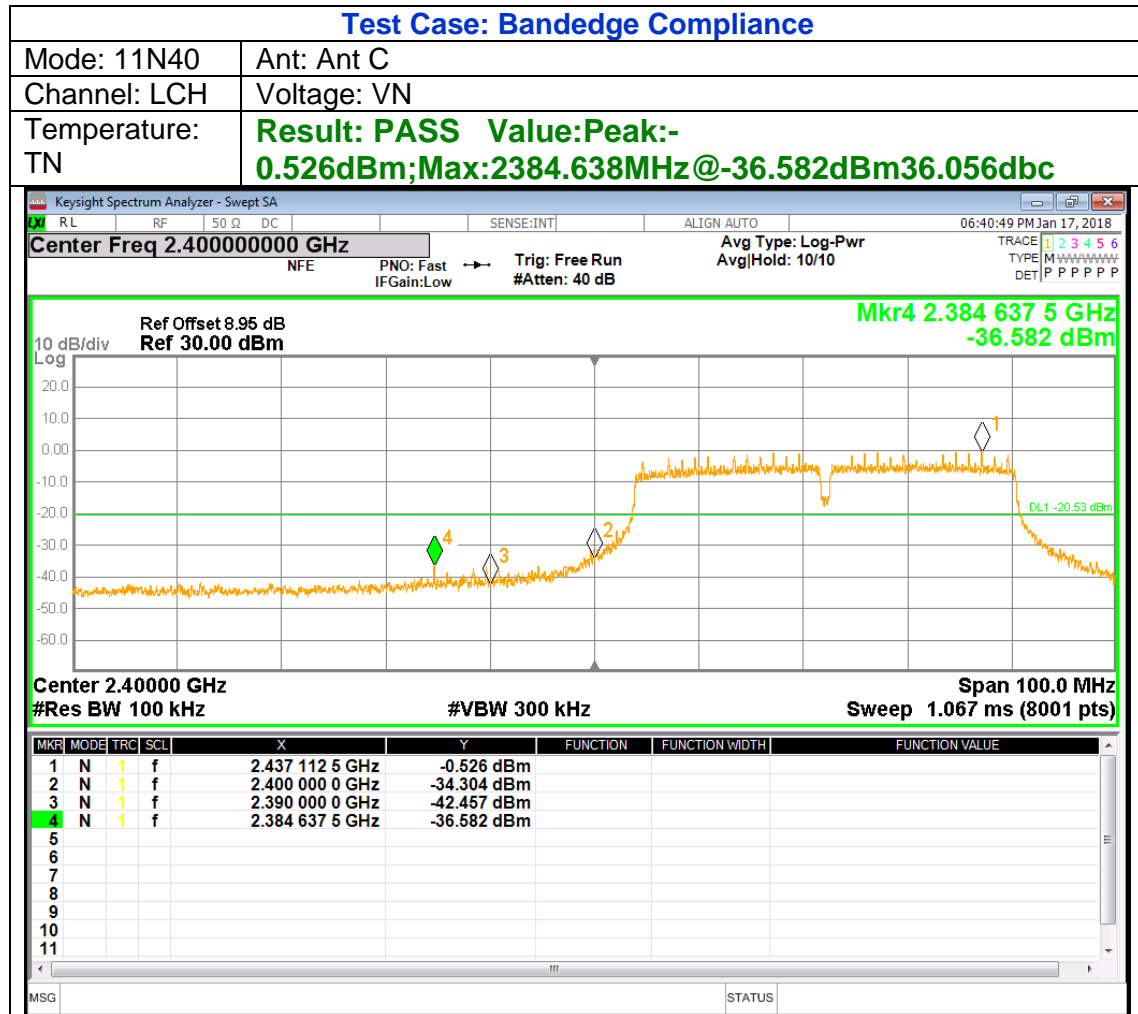


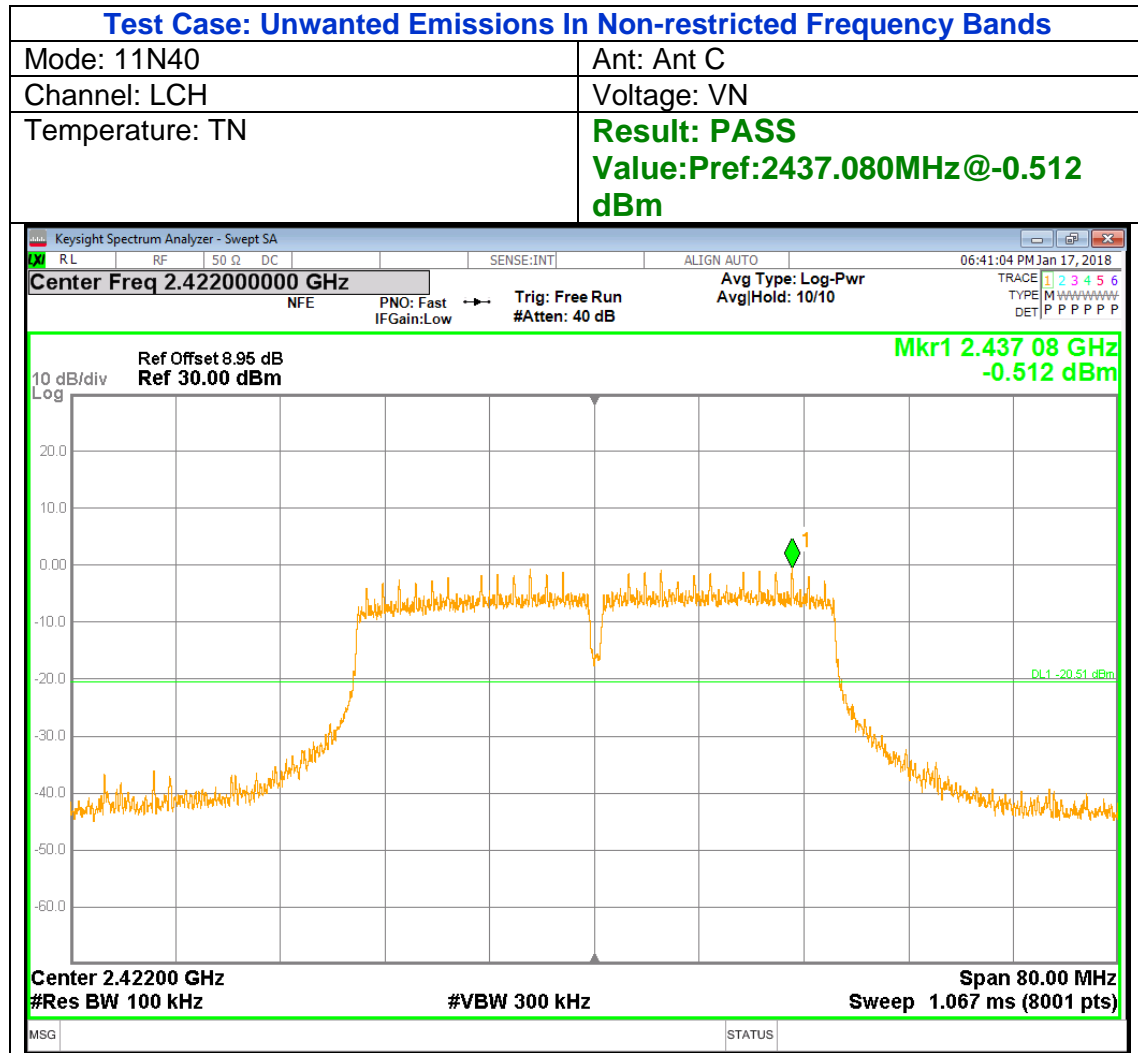


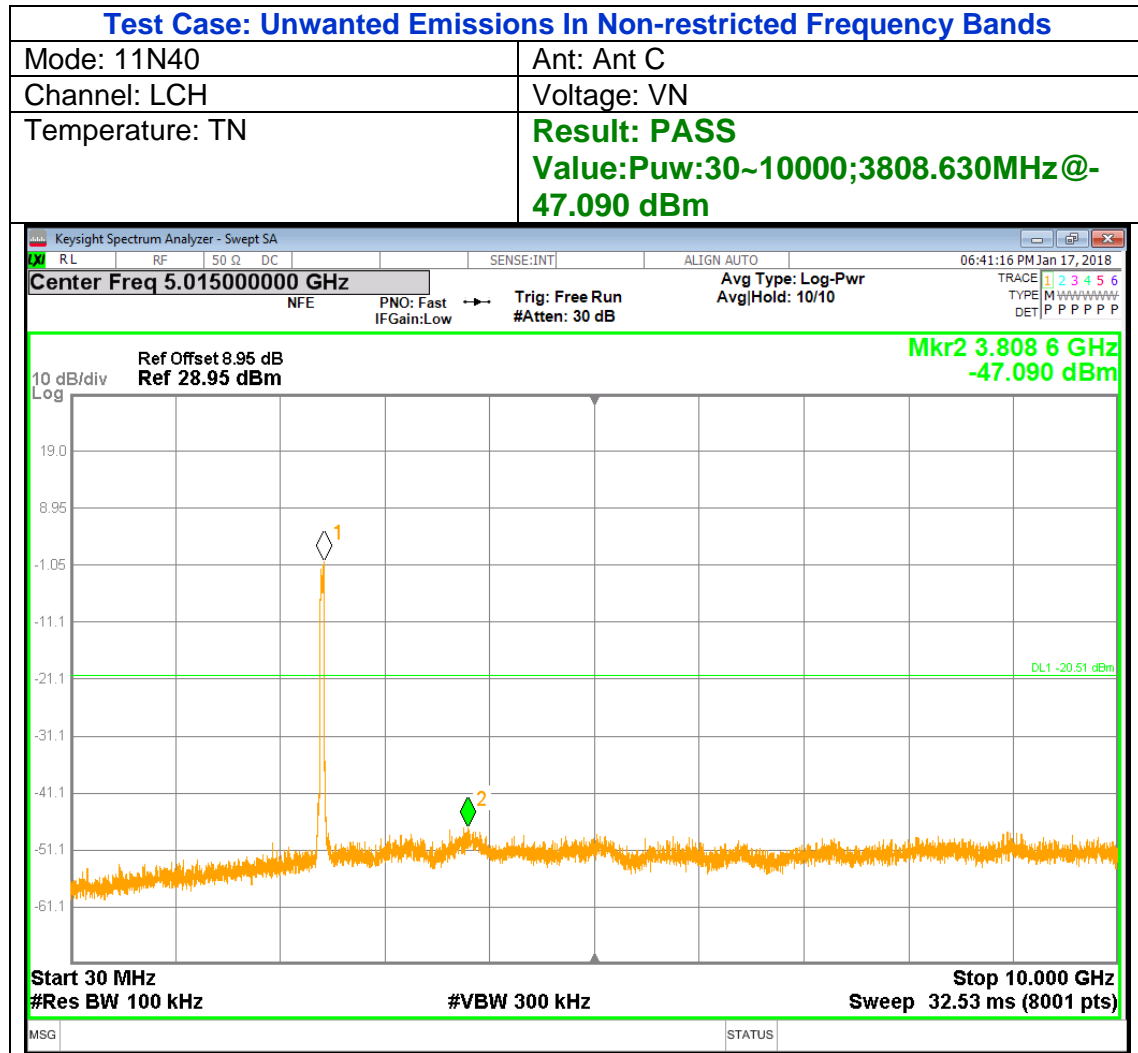


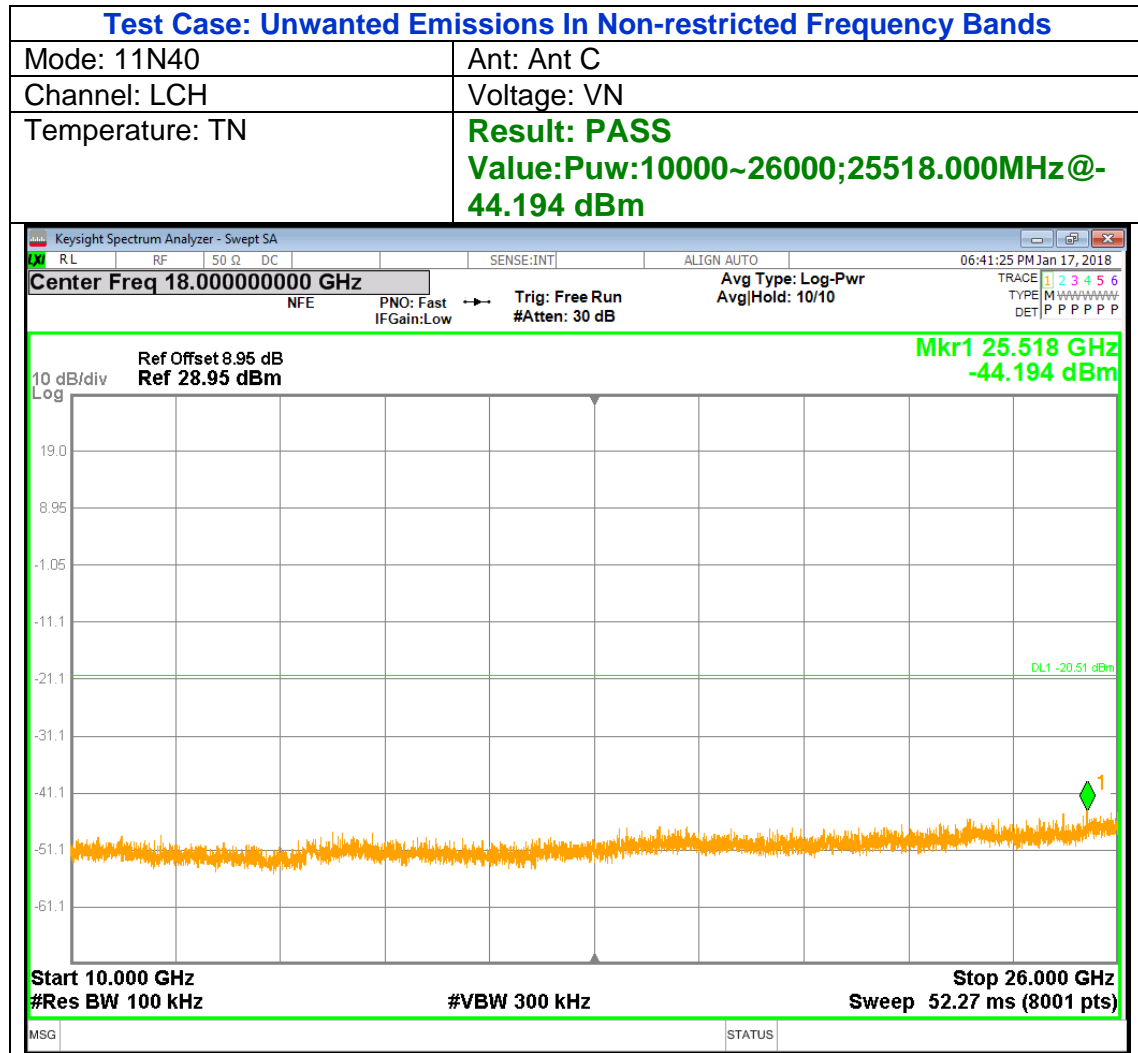




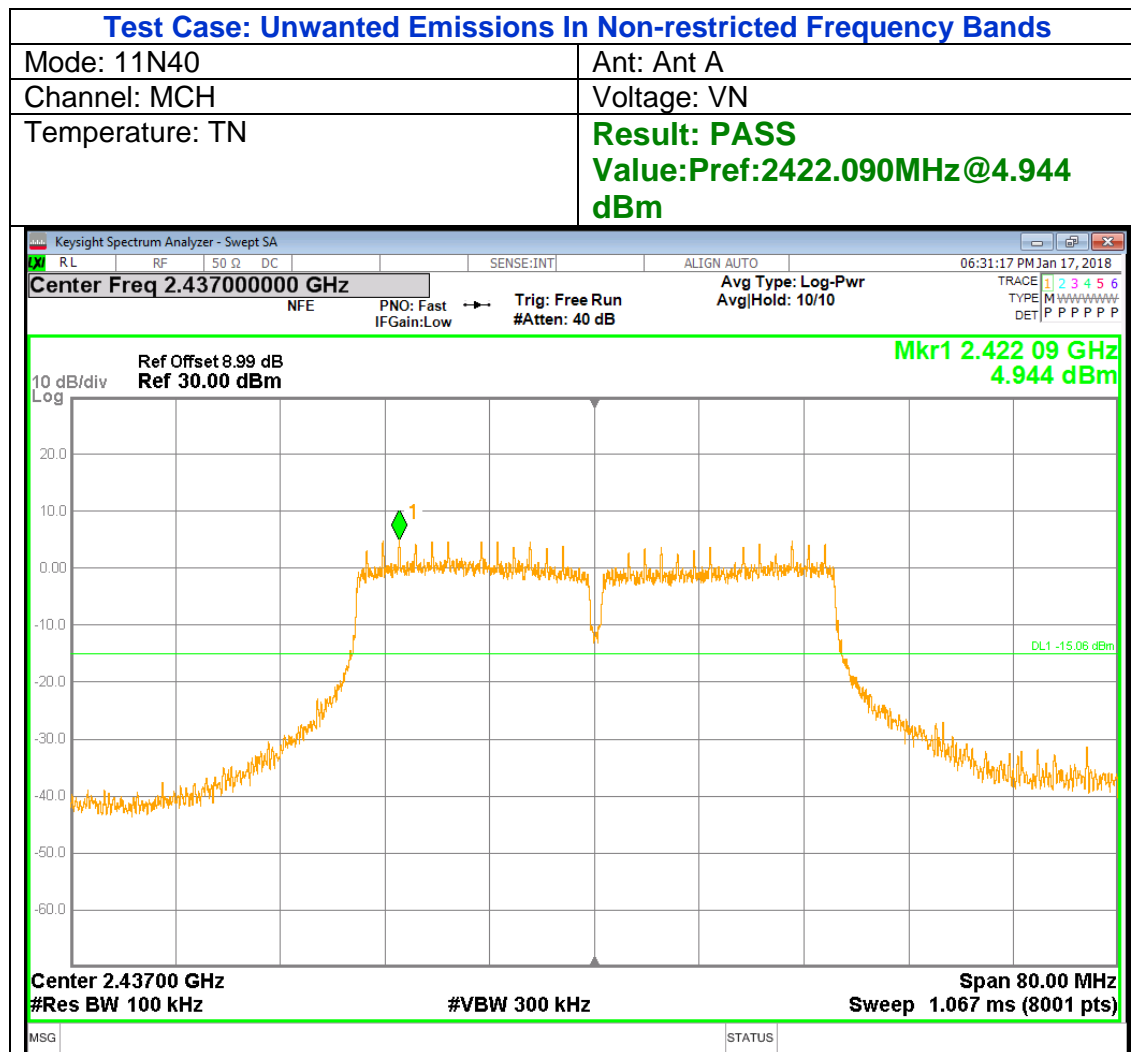




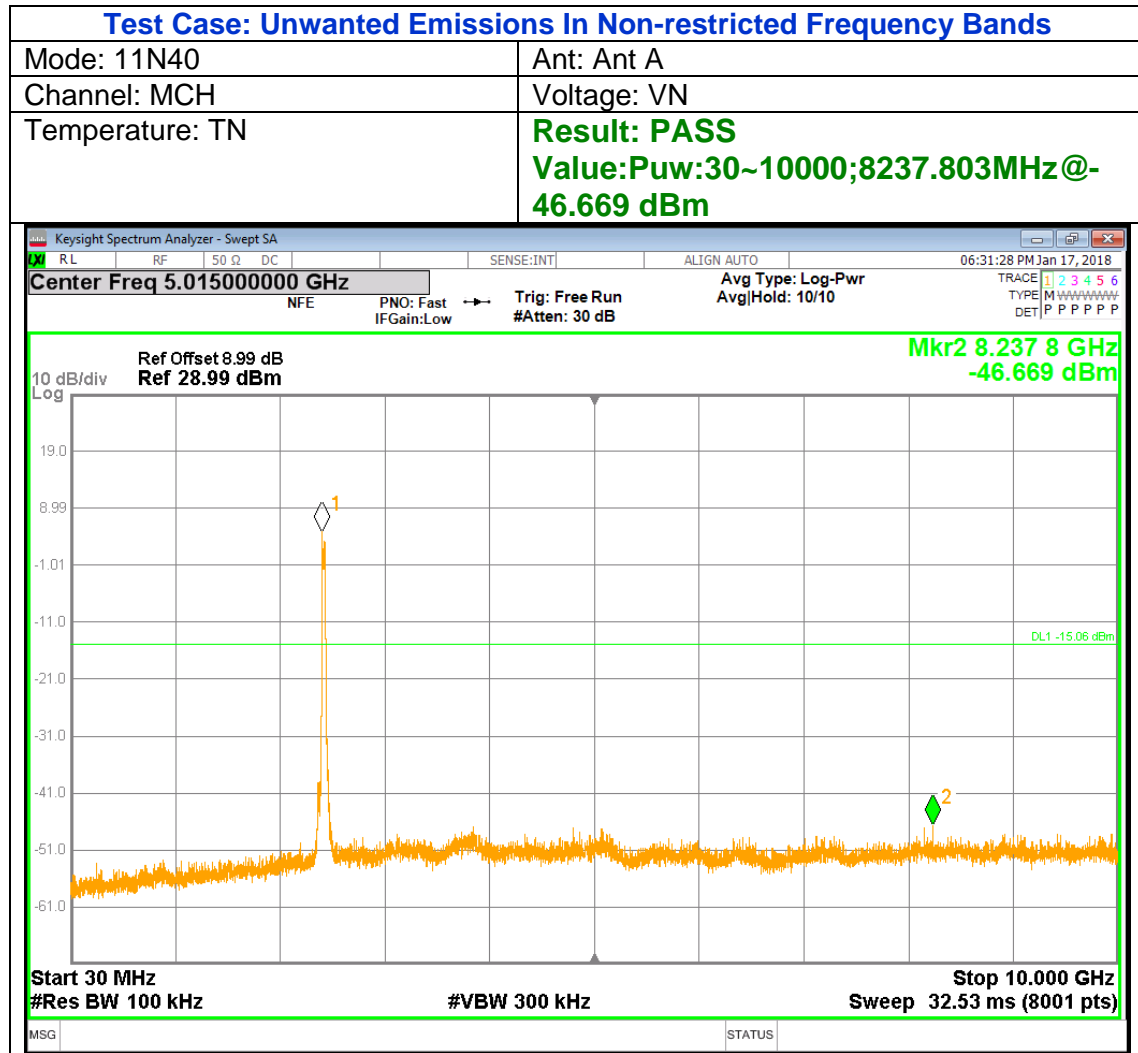


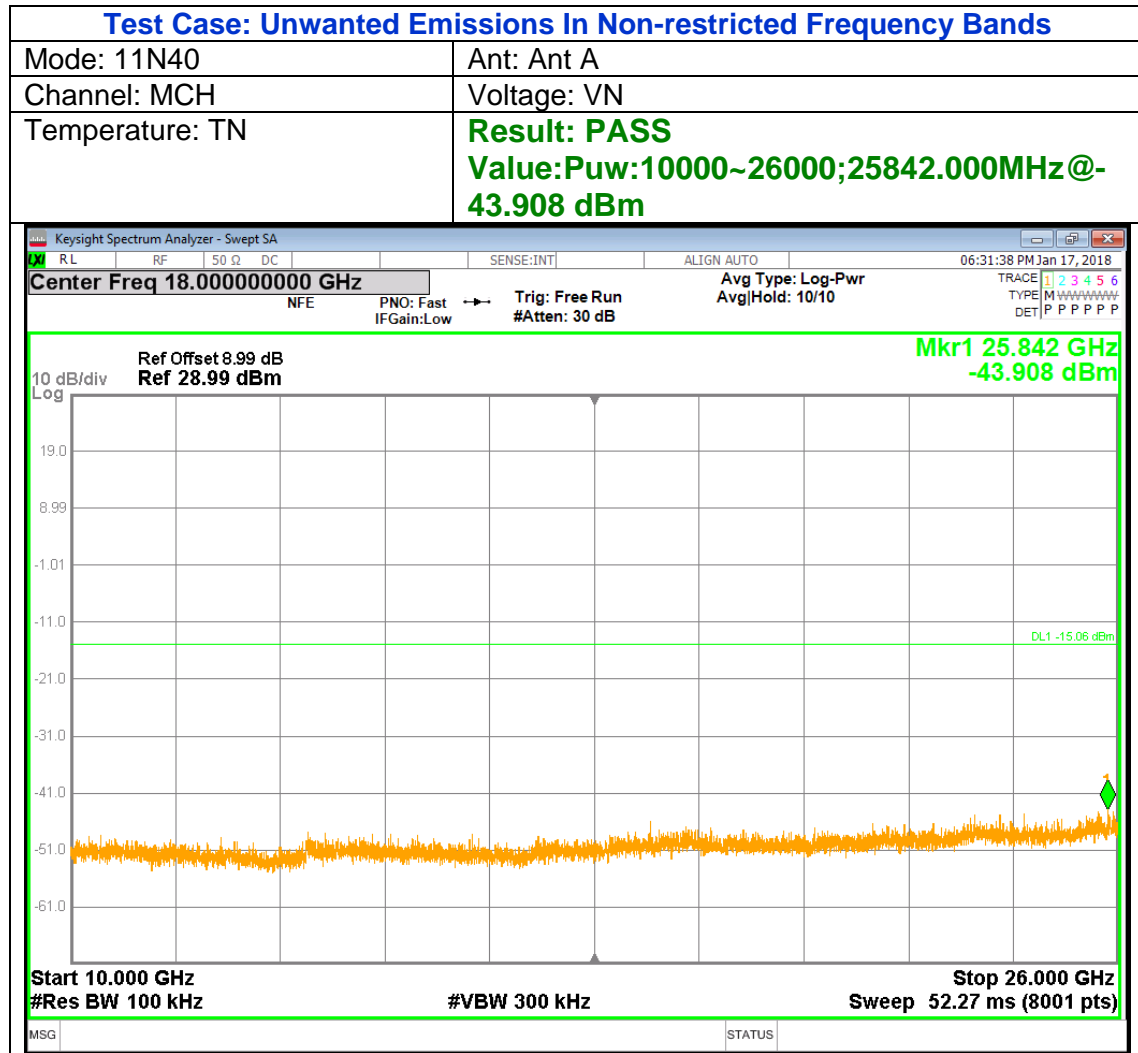


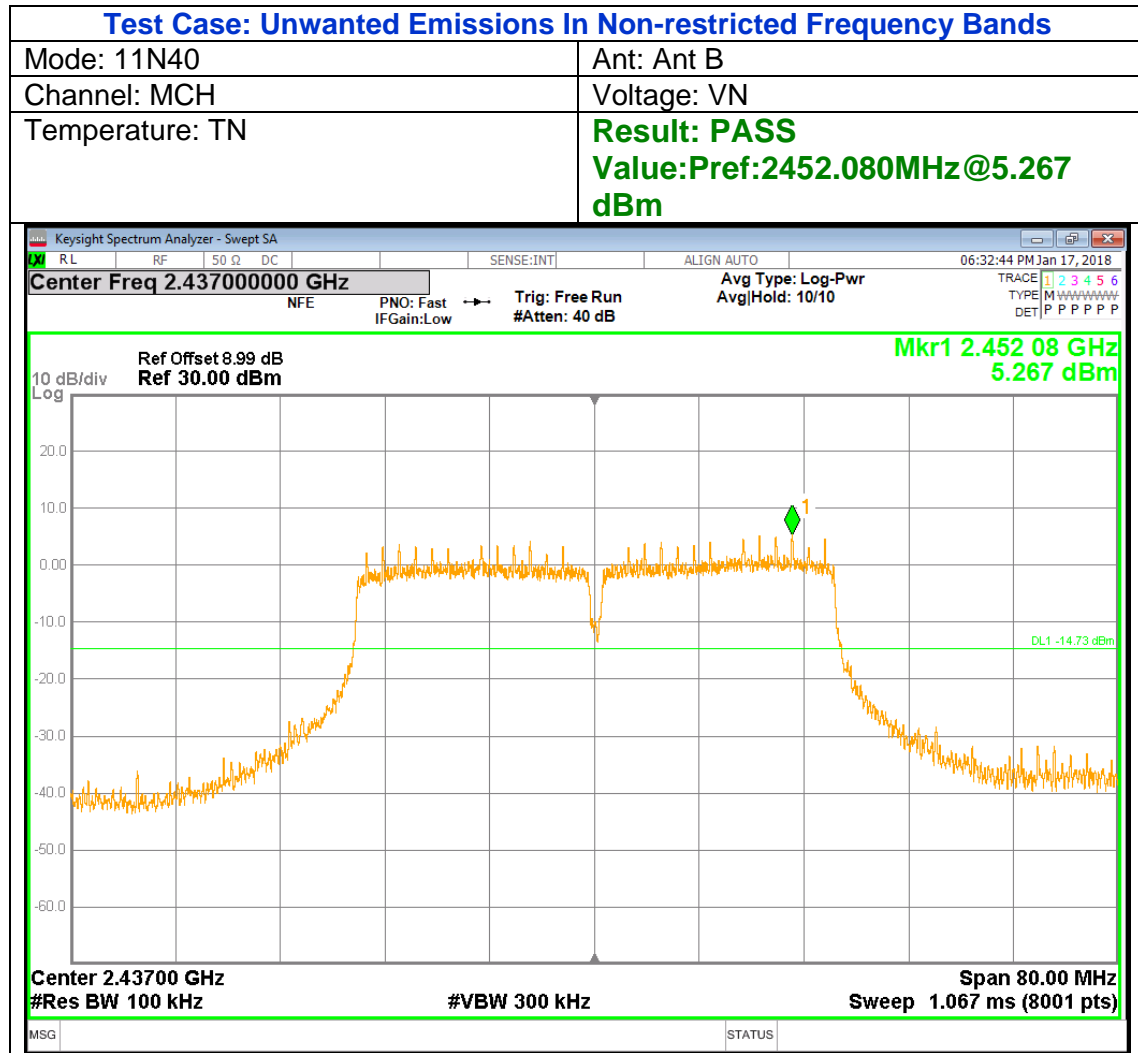
**Middle Channel**

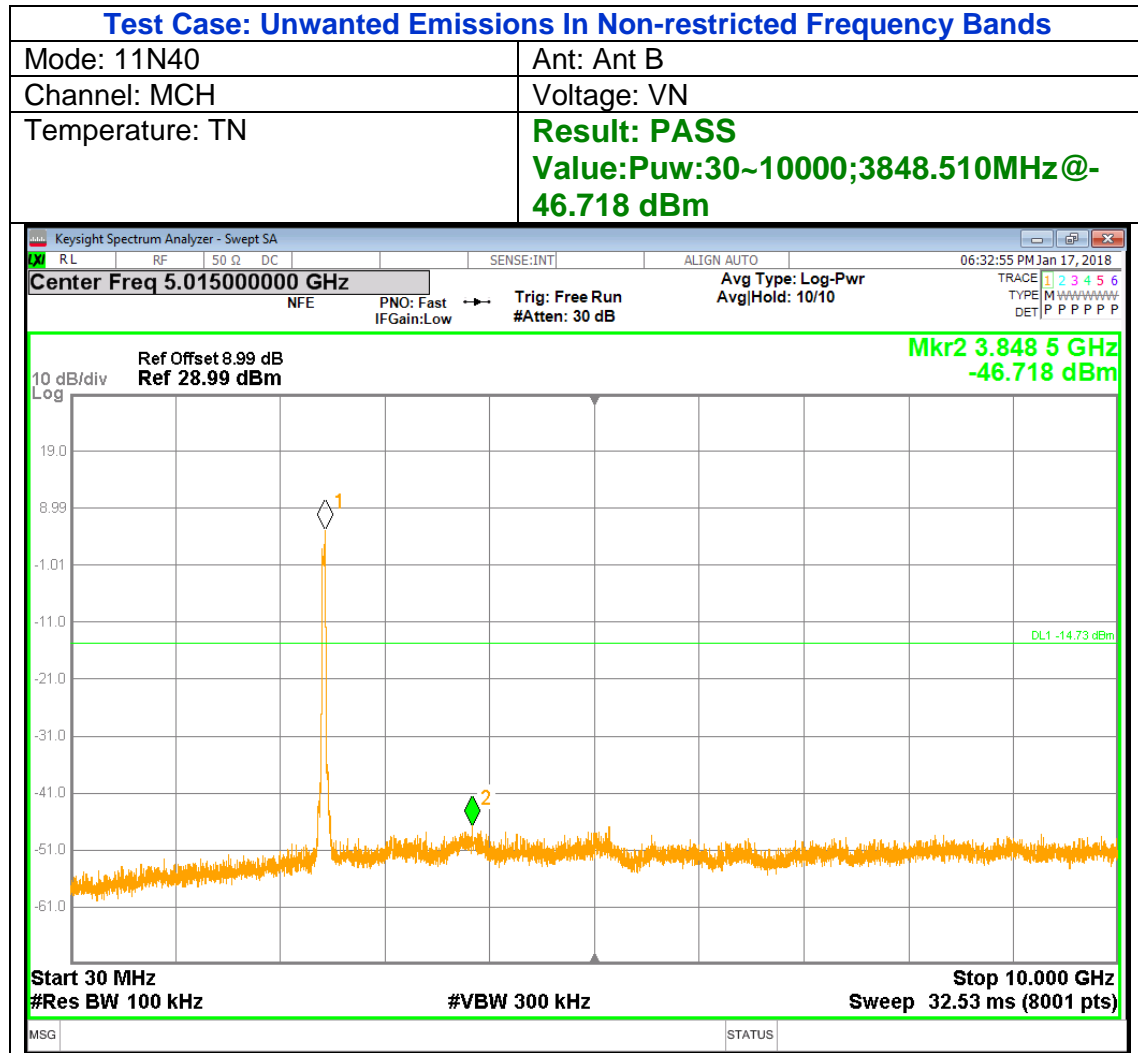


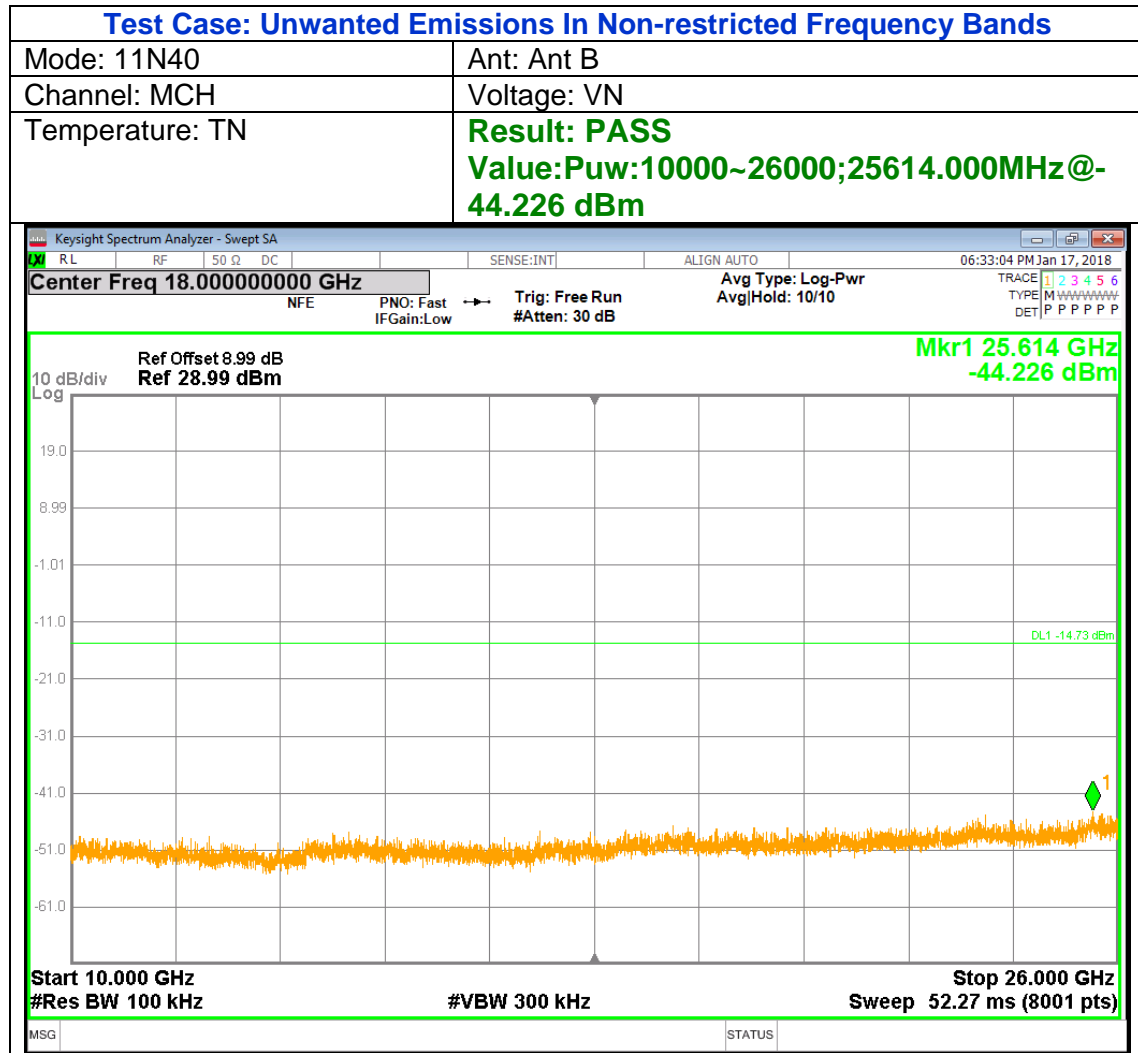


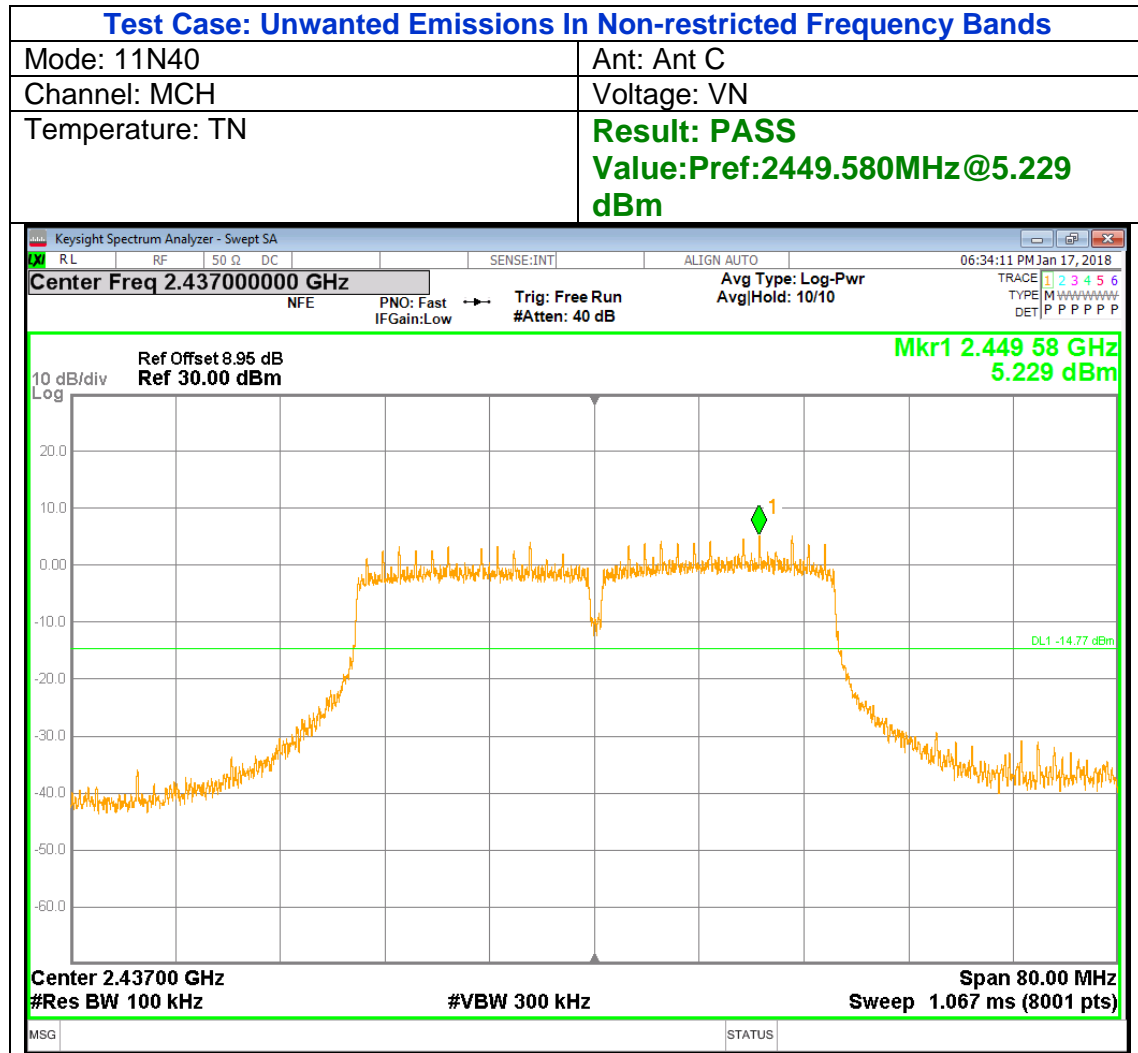


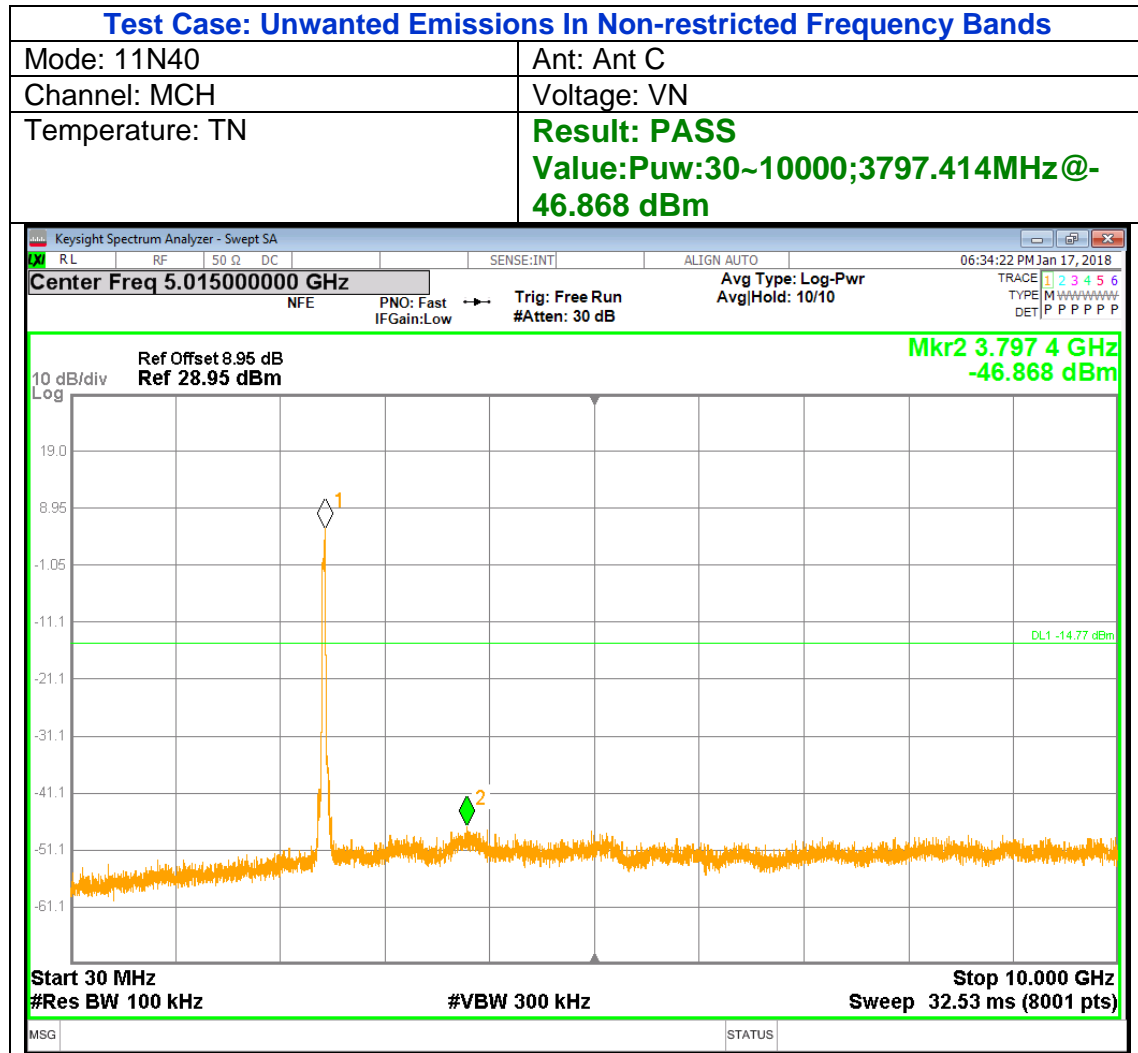


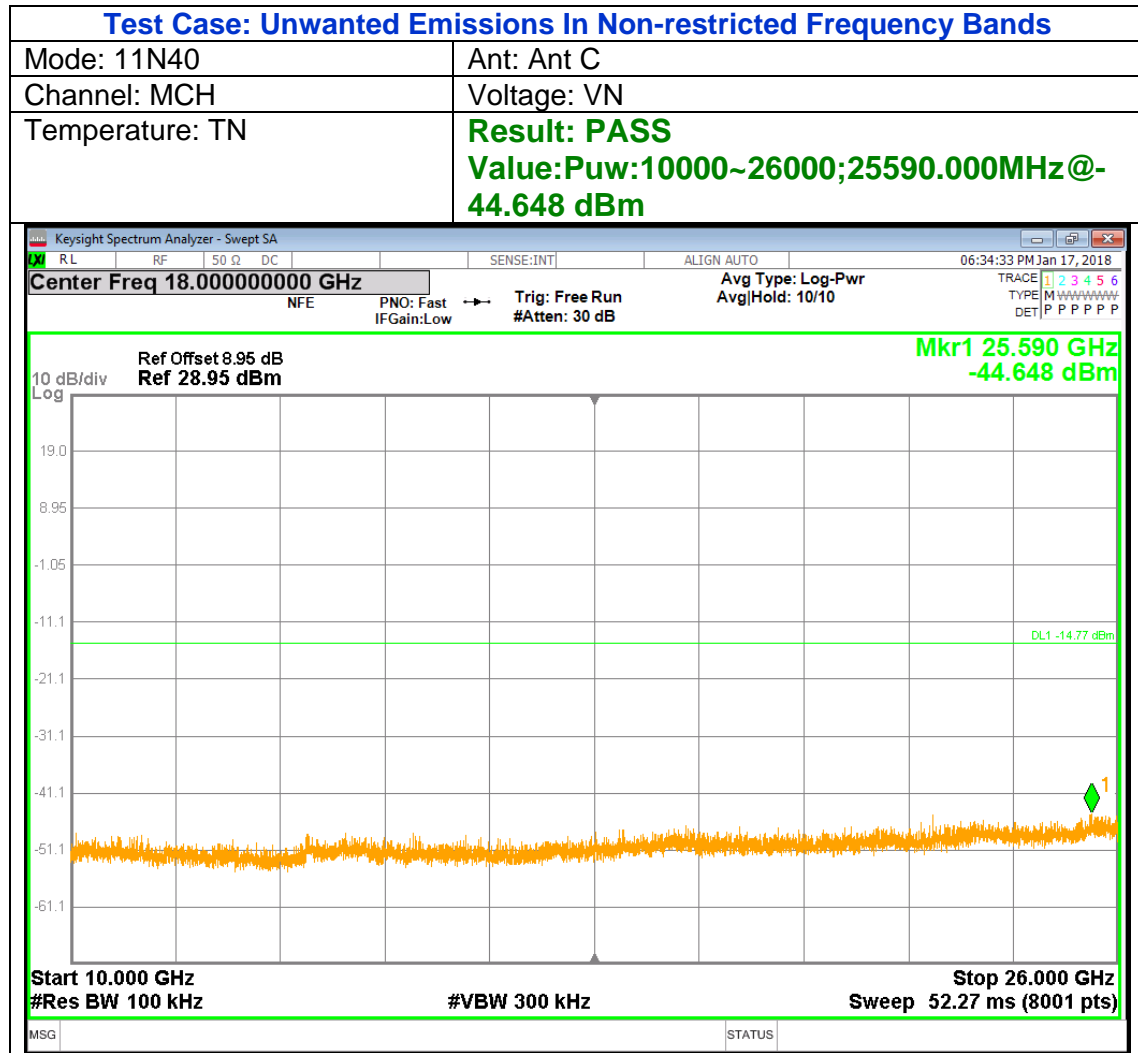






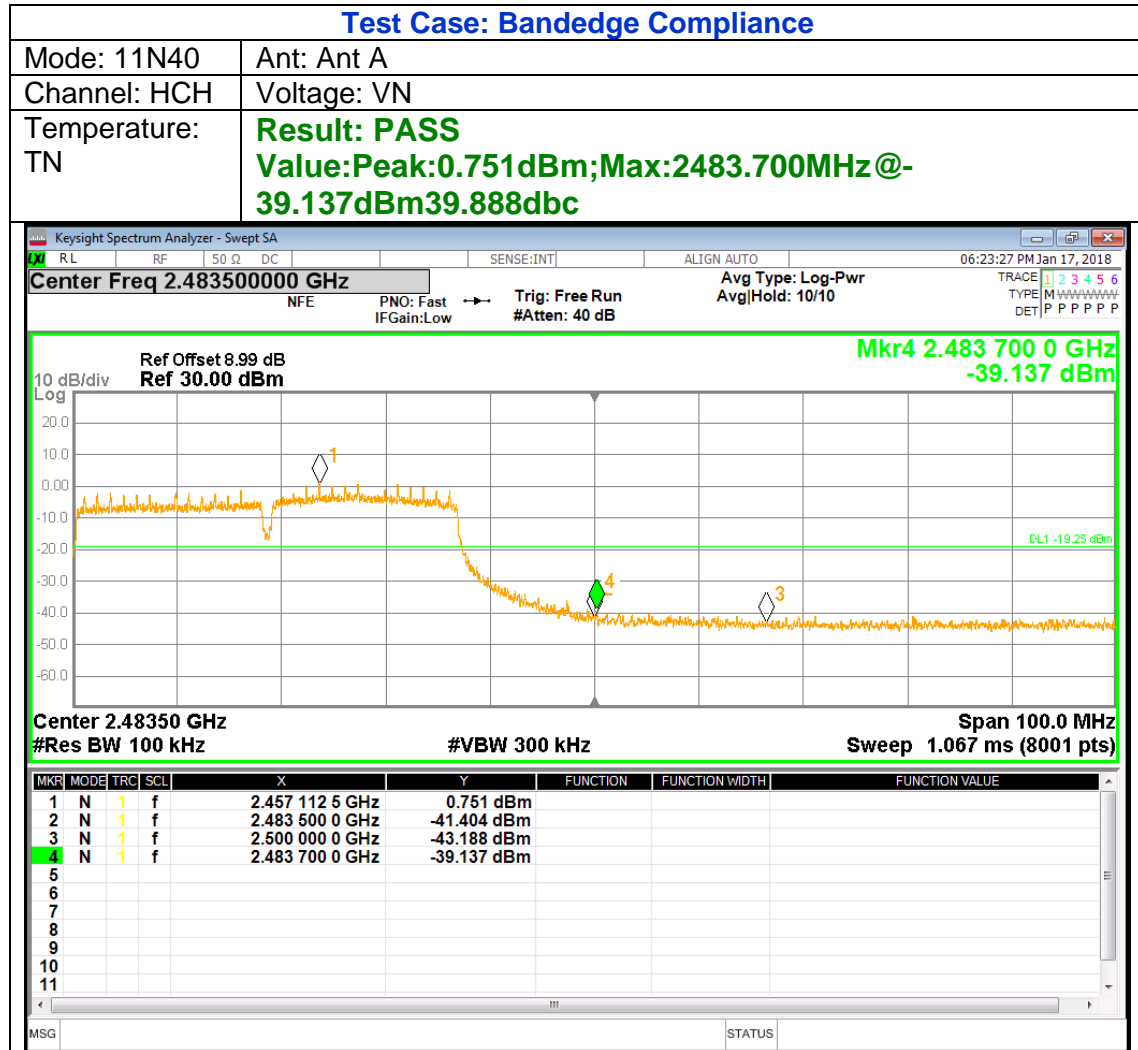


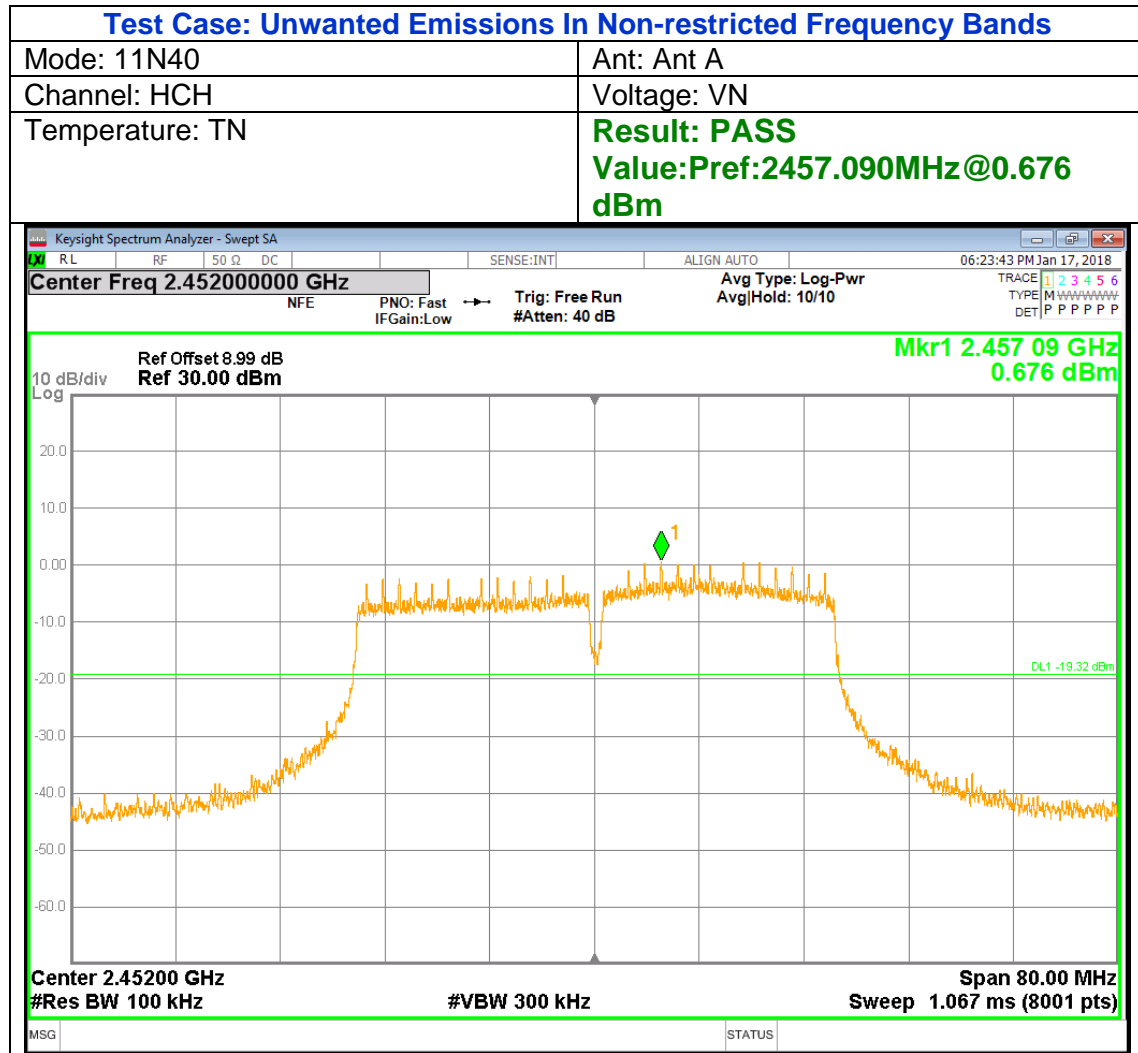


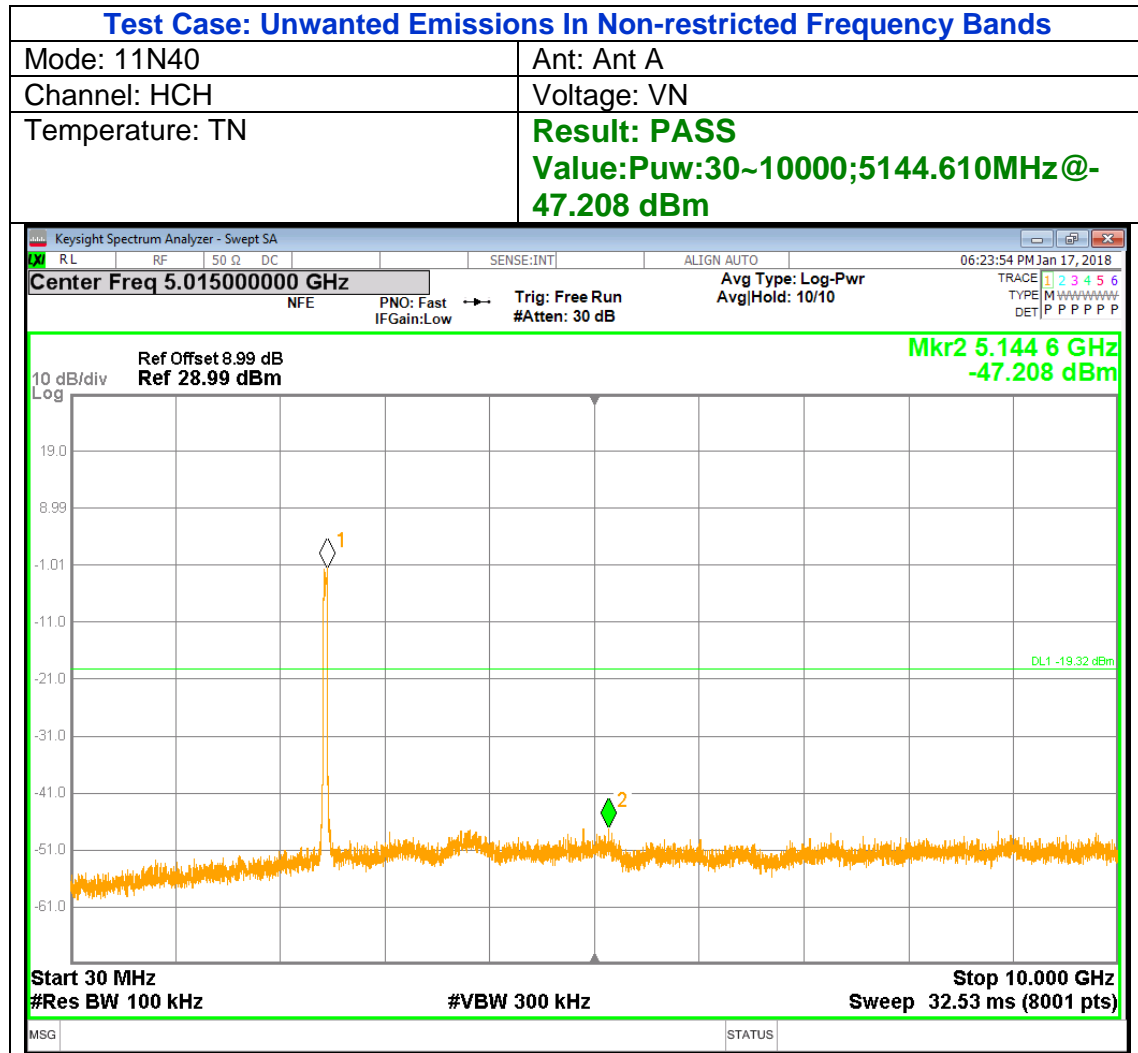


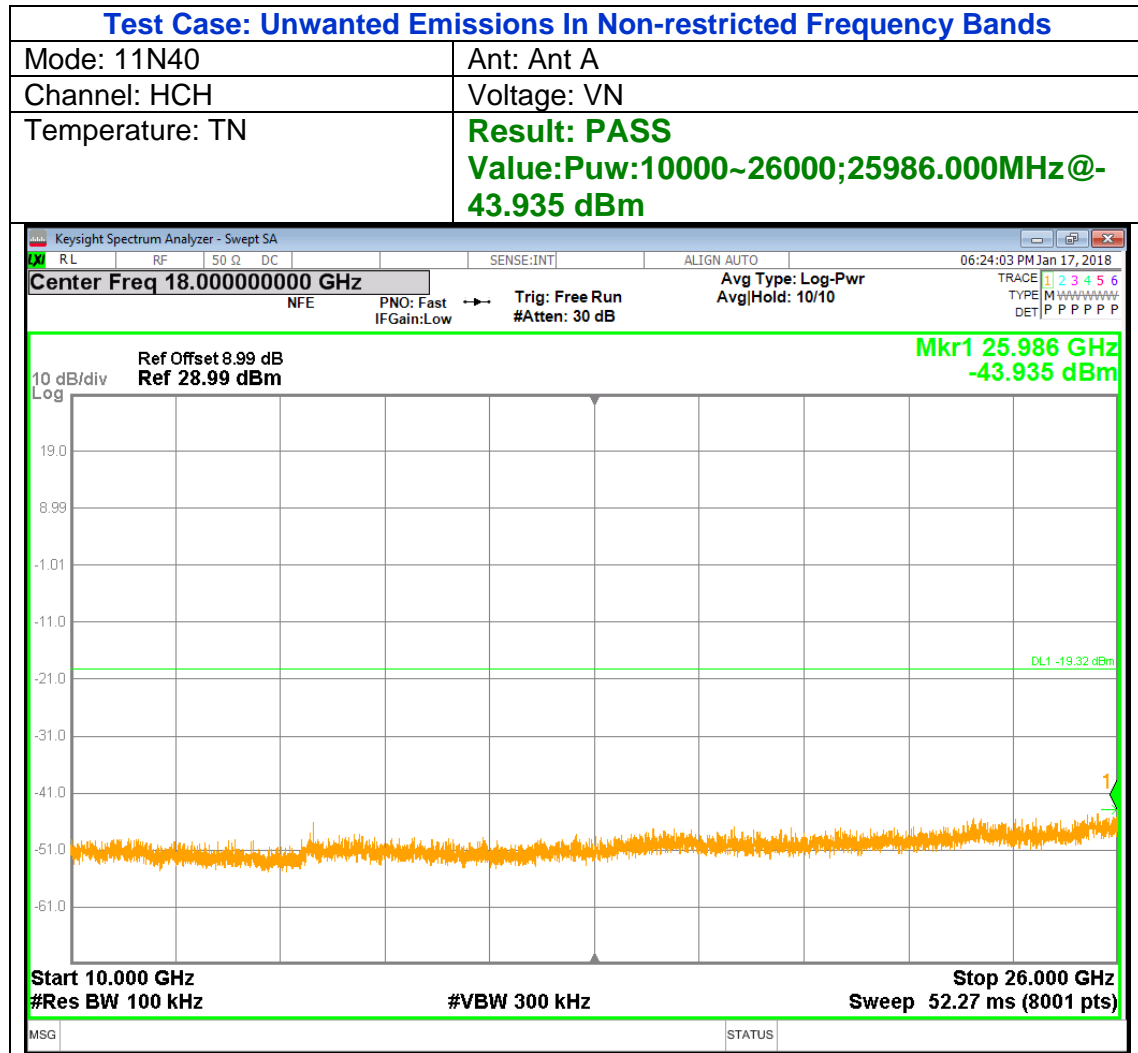


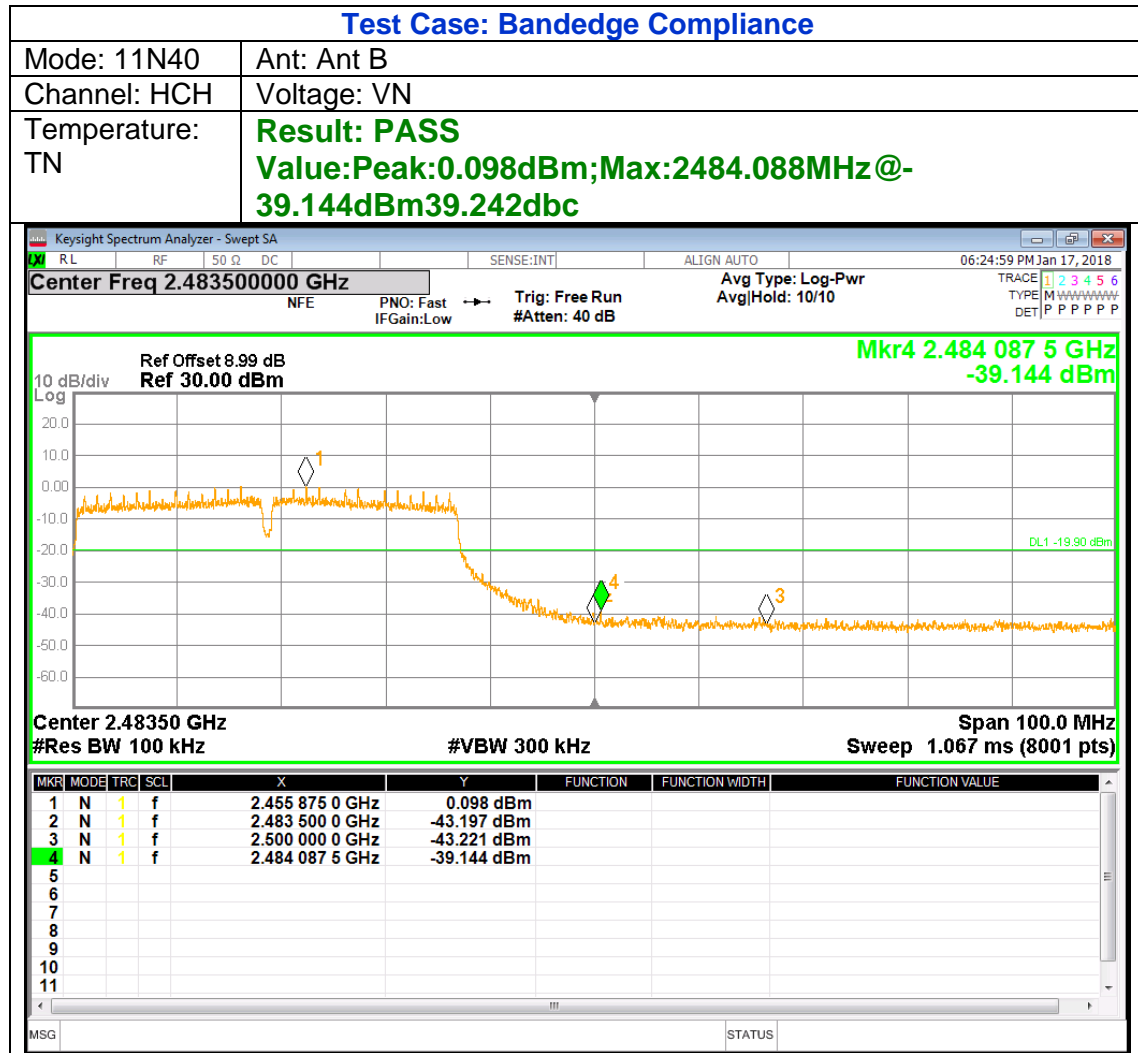
**High Channel**

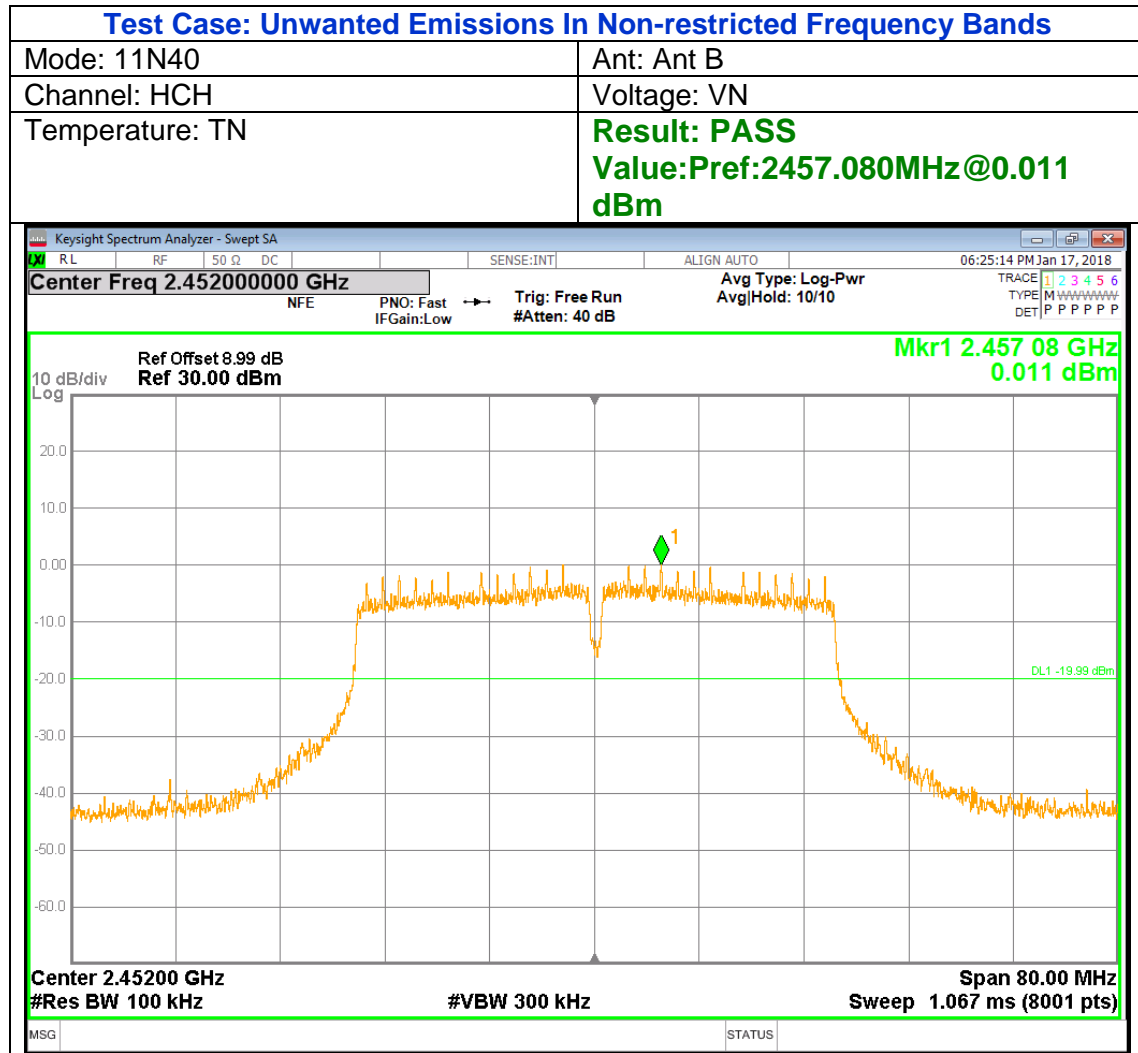


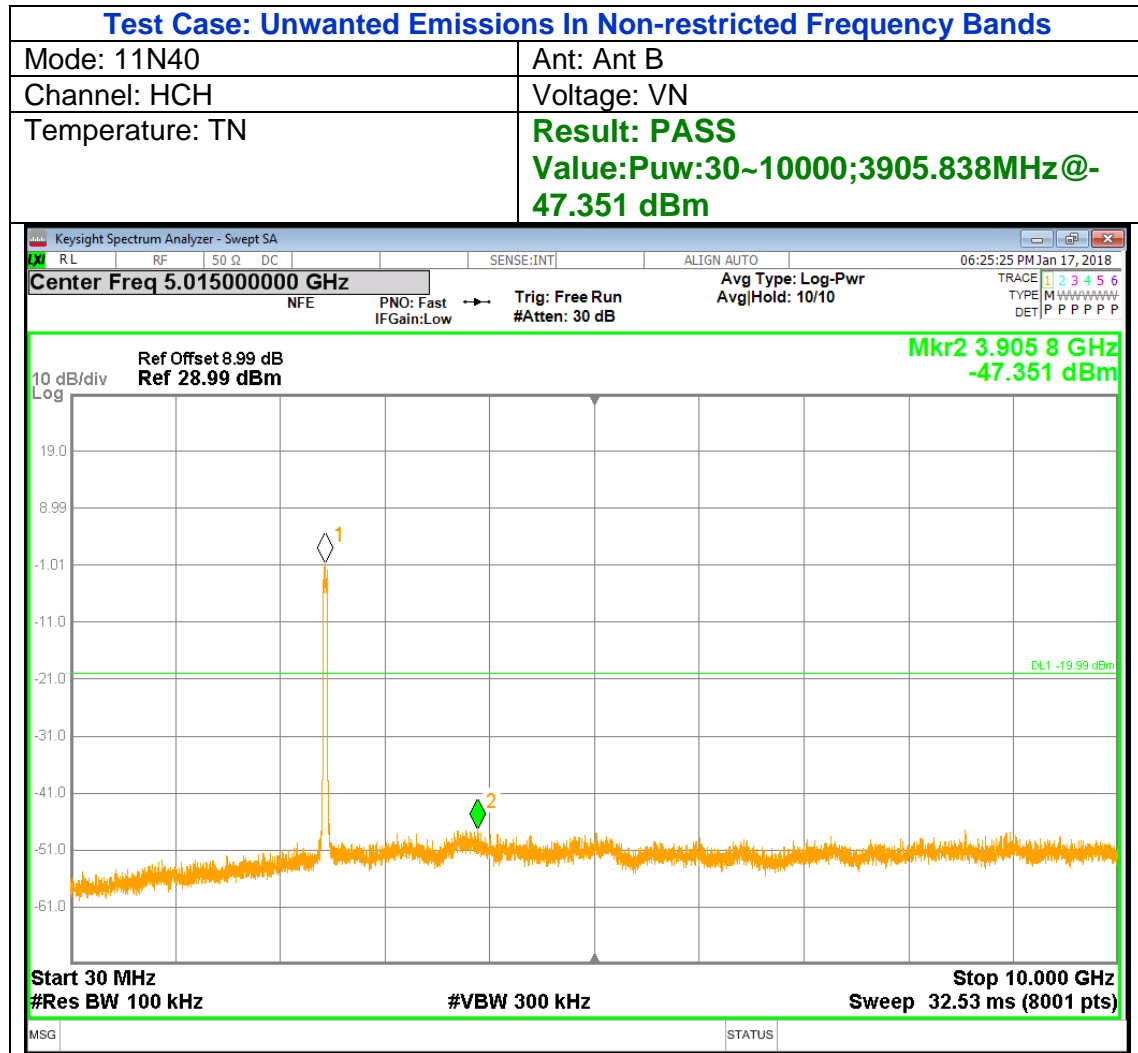


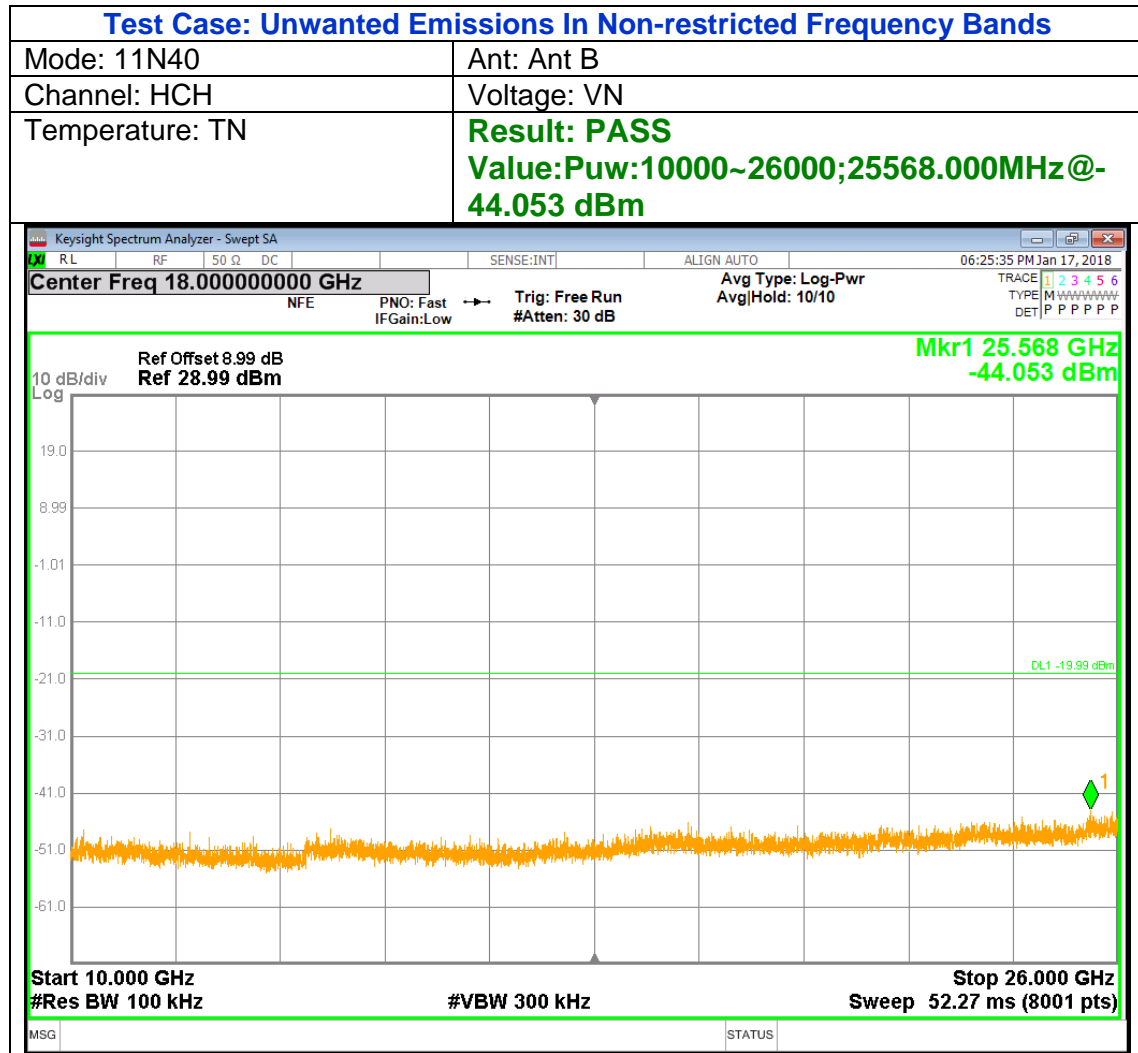




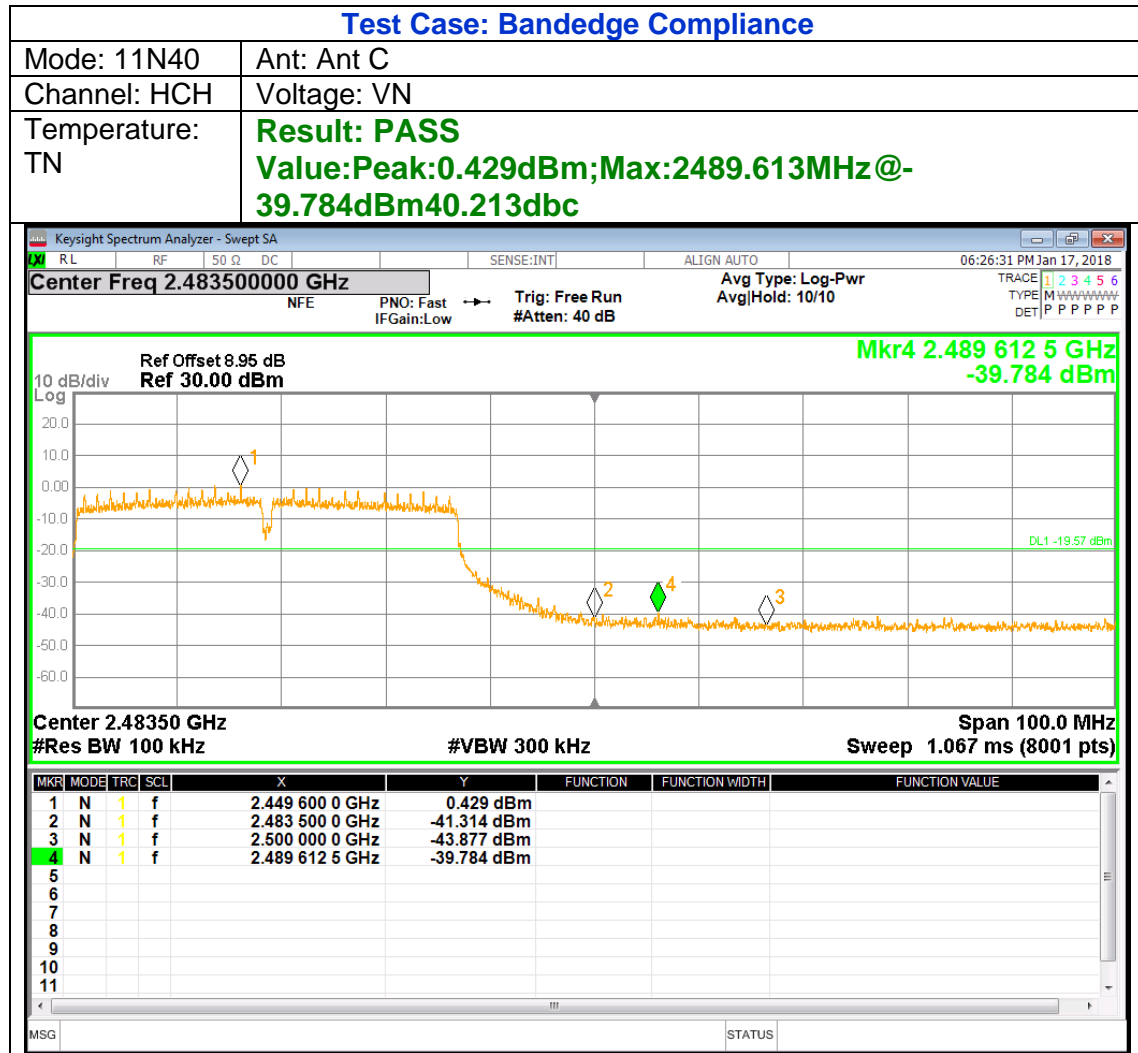


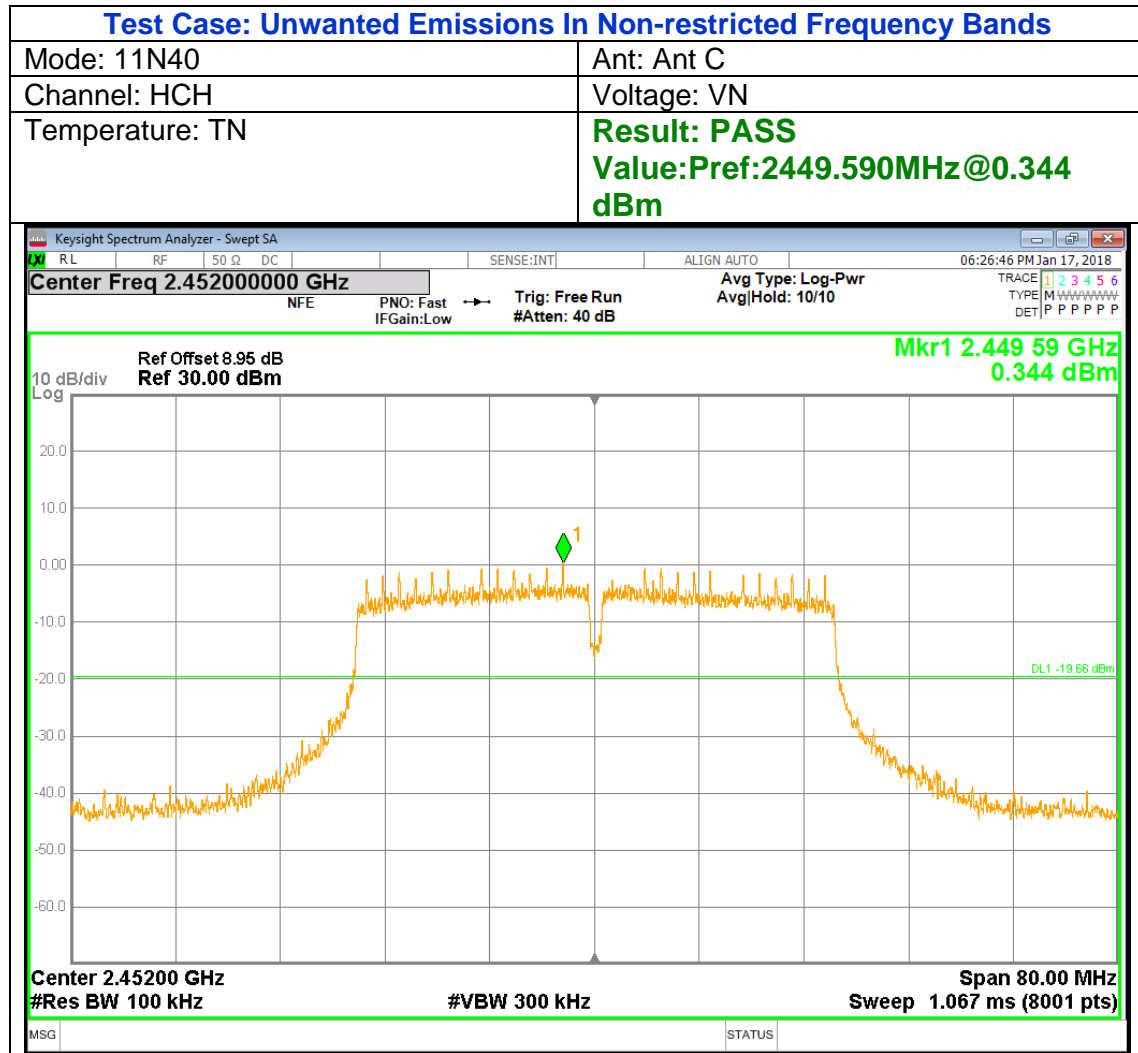


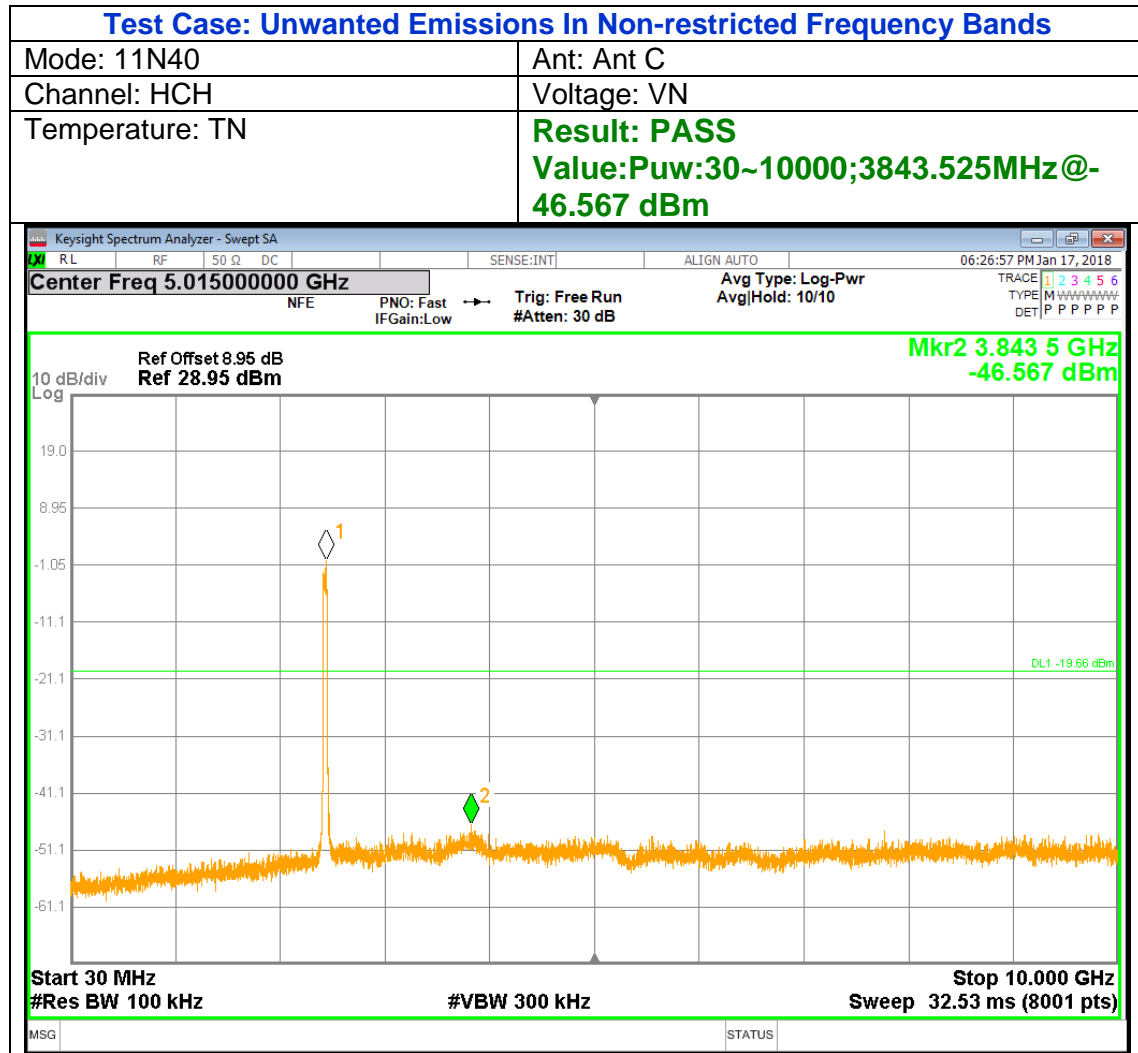


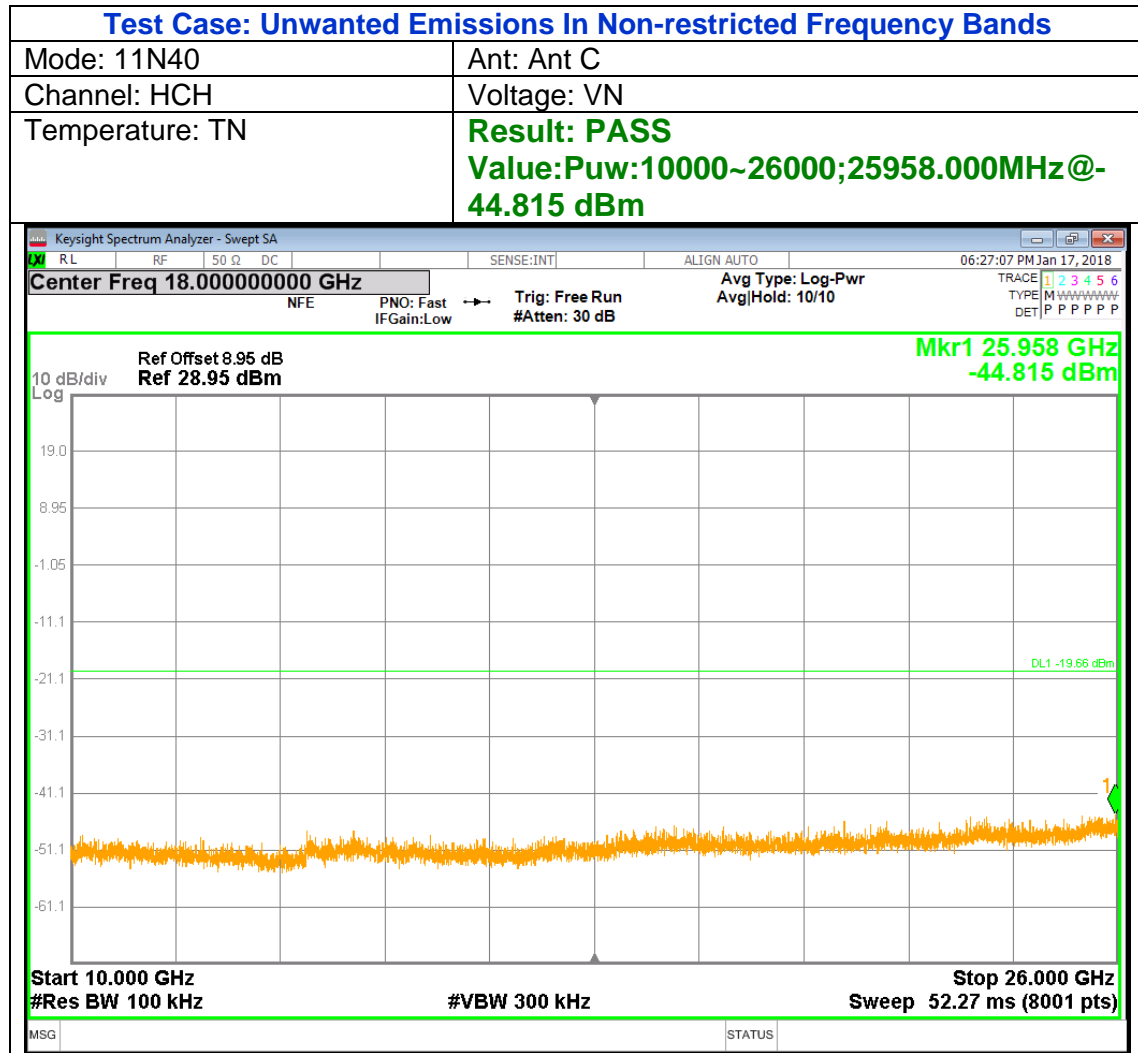












Note: All transmission modes and antennas were tested, but only the worst data was recorded in the report.