

7.5. Conducted Band Edge and Out-of-Band Emissions

7.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

7.5.2. Test Procedure Used

KDB 558074 D01v03r05 – Section 11.2 & Section 11.3

7.5.3. Test Setting

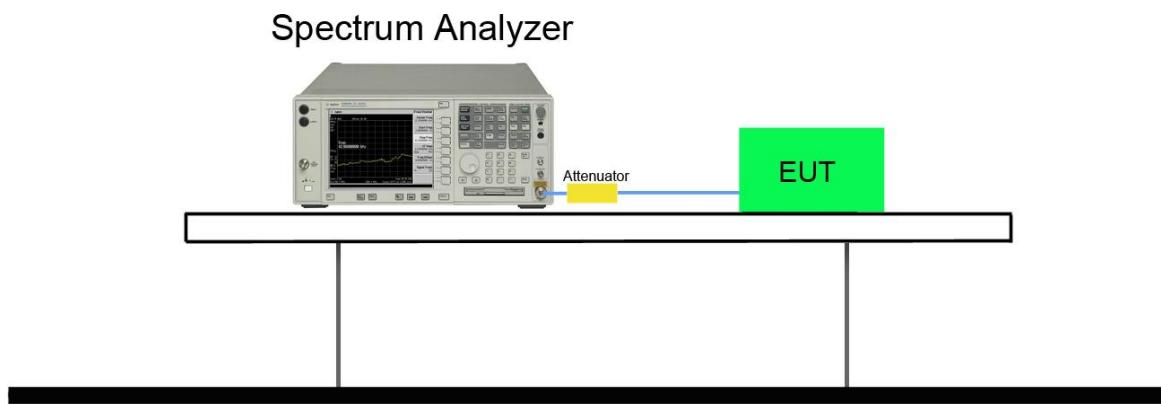
1. Reference level measurement

- (a) Set instrument center frequency to DTS channel center frequency
- (b) Set the span to \geq 1.5 times the DTS bandwidth
- (c) Set the RBW = 100 kHz
- (d) Set the VBW \geq 3 x RBW
- (e) Detector = peak
- (f) Sweep time = auto couple
- (g) Trace mode = max hold
- (h) Allow trace to fully stabilize

2. Emission level measurement

- (a) Set the center frequency and span to encompass frequency range to be measured
- (b) RBW = 100kHz
- (c) VBW = 300kHz
- (d) Detector = Peak
- (e) Trace mode = max hold
- (f) Sweep time = auto couple
- (g) The trace was allowed to stabilize

7.5.4. Test Setup

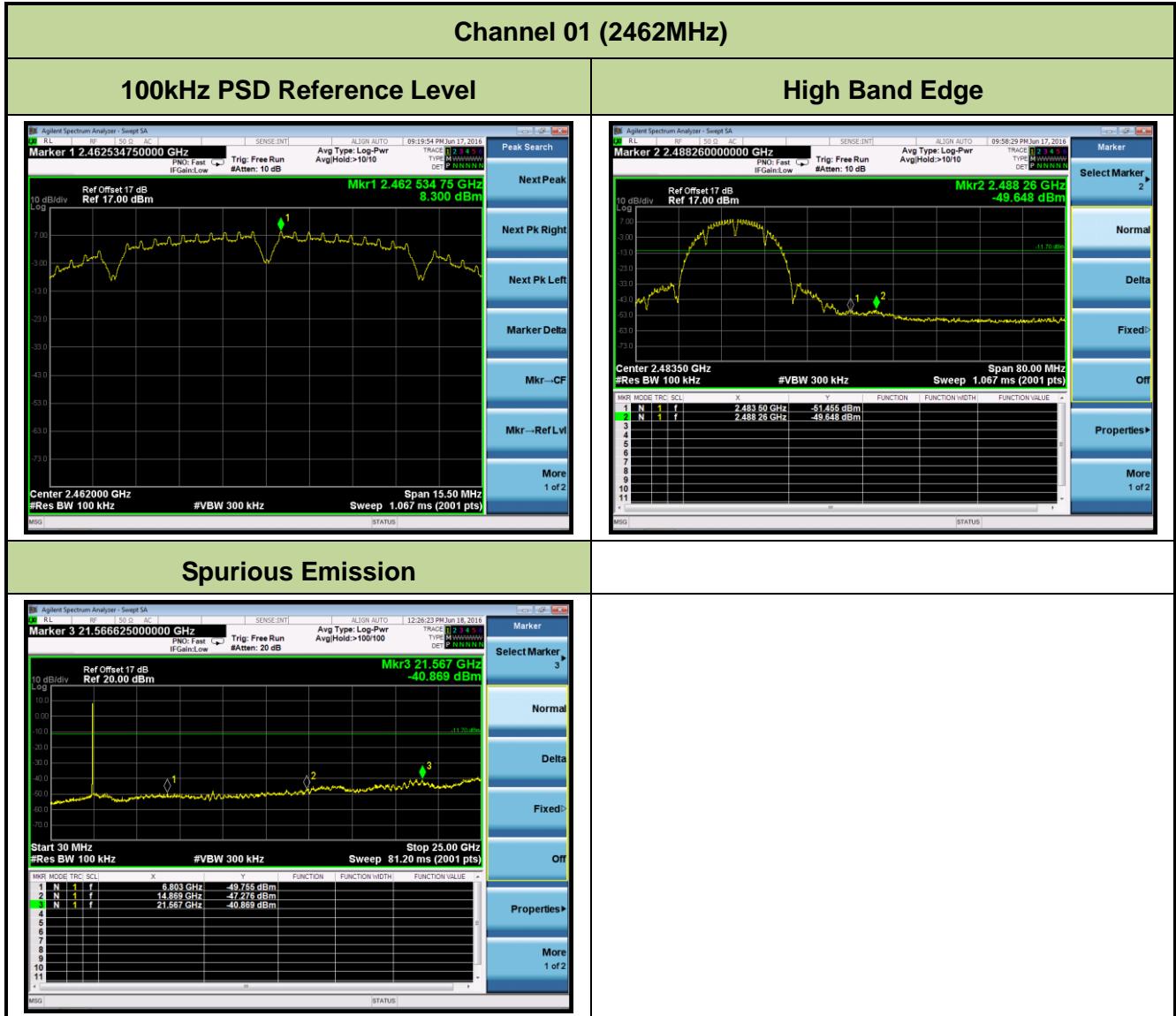


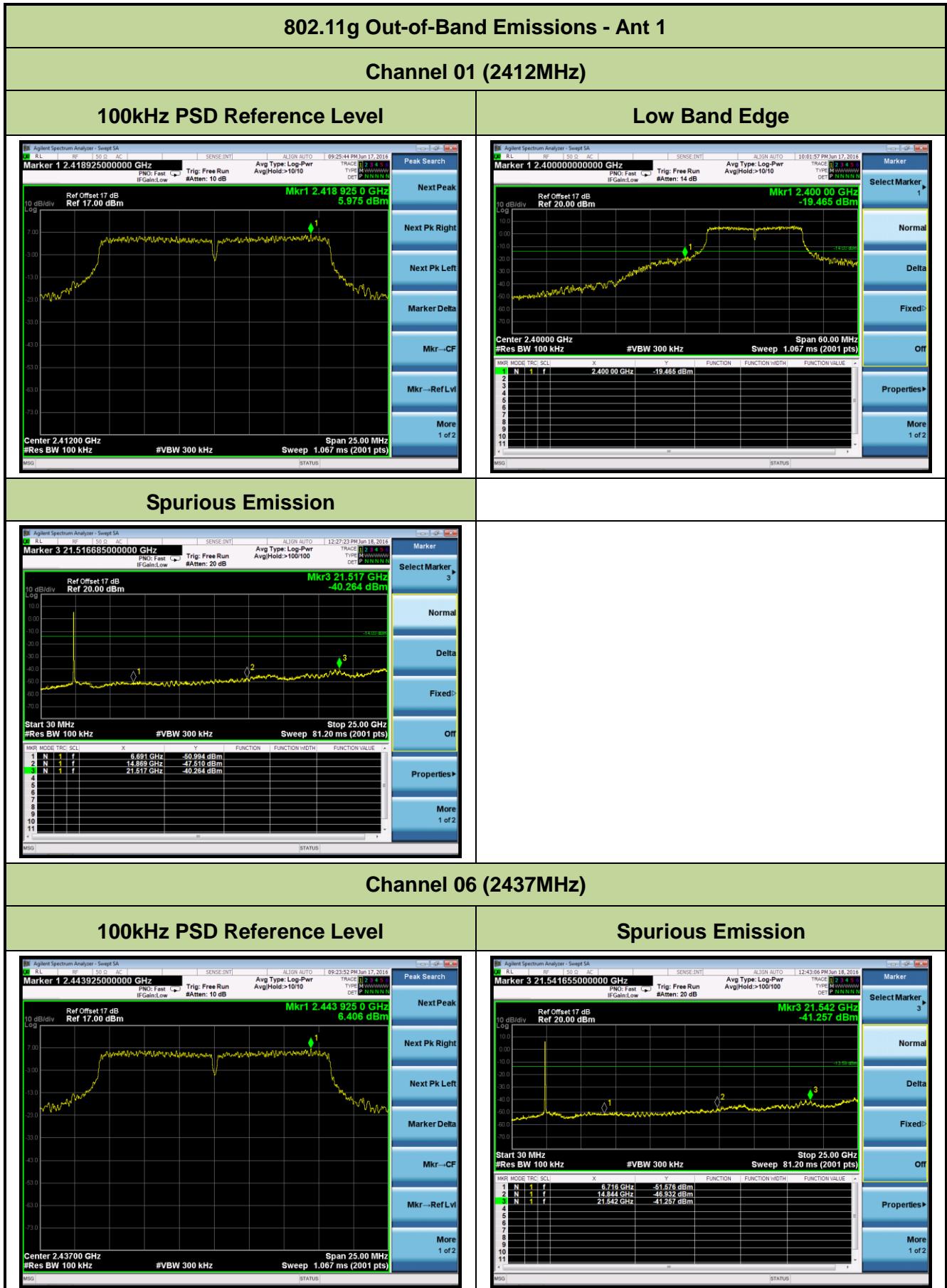
7.5.5. Test Result

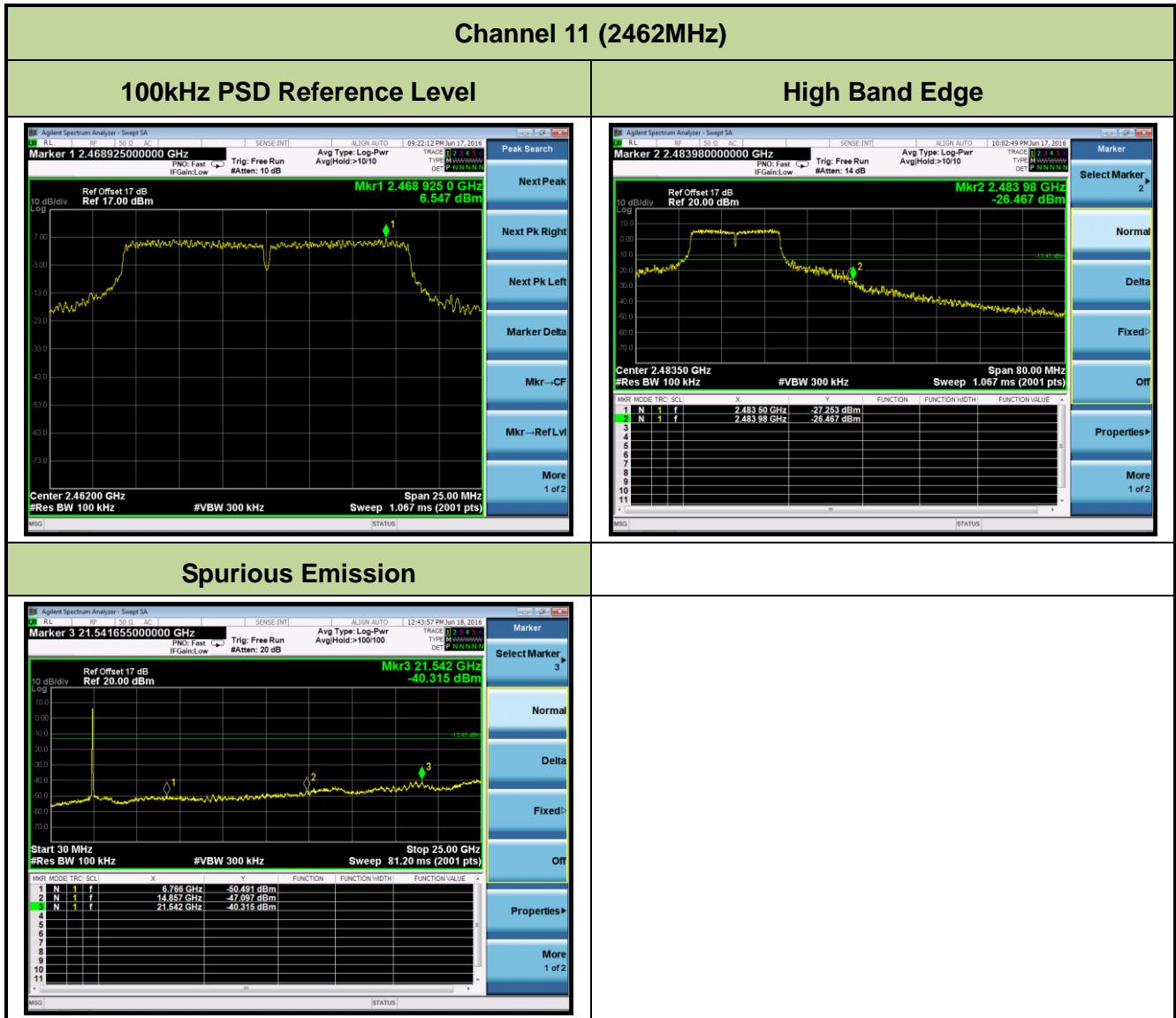
| | | | |
|---------------|-------------|-------------------|------------|
| Product | WIFI Module | Temperature | 25°C |
| Test Engineer | Roy Cheng | Relative Humidity | 54% |
| Test Site | TR3 | Test Date | 2016/06/17 |

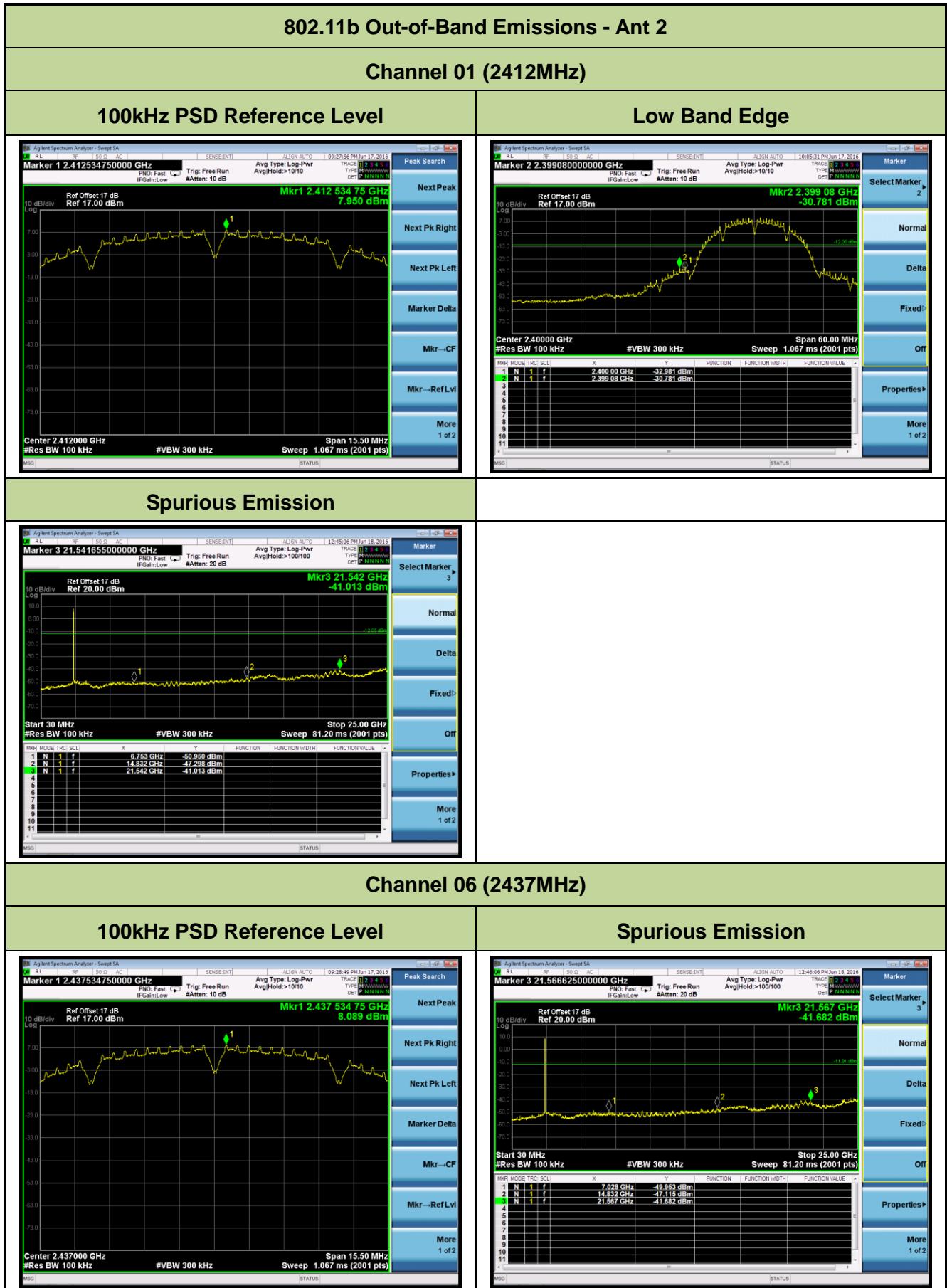
| Test Mode | Data Rate (Mbps) | Channel No. | Frequency (MHz) | Limit | Result |
|-------------------|---------------------|-------------|--------------------|-------|--------|
| Ant 1 | | | | | |
| 802.11b | 1 | 01 | 2412 | 20dBc | Pass |
| 802.11b | 1 | 06 | 2437 | 20dBc | Pass |
| 802.11b | 1 | 11 | 2462 | 20dBc | Pass |
| 802.11g | 6 | 01 | 2412 | 20dBc | Pass |
| 802.11g | 6 | 06 | 2437 | 20dBc | Pass |
| 802.11g | 6 | 11 | 2462 | 20dBc | Pass |
| Ant 2 | | | | | |
| 802.11b | 1 | 01 | 2412 | 20dBc | Pass |
| 802.11b | 1 | 06 | 2437 | 20dBc | Pass |
| 802.11b | 1 | 11 | 2462 | 20dBc | Pass |
| 802.11g | 6 | 01 | 2412 | 20dBc | Pass |
| 802.11g | 6 | 06 | 2437 | 20dBc | Pass |
| 802.11g | 6 | 11 | 2462 | 20dBc | Pass |
| Ant 1 / Ant 1 + 2 | | | | | |
| 802.11n-HT20 | 13 | 01 | 2412 | 20dBc | Pass |
| 802.11n-HT20 | 13 | 06 | 2437 | 20dBc | Pass |
| 802.11n-HT20 | 13 | 11 | 2462 | 20dBc | Pass |
| 802.11n-HT40 | 27 | 03 | 2422 | 20dBc | Pass |
| 802.11n-HT40 | 27 | 06 | 2437 | 20dBc | Pass |
| 802.11n-HT40 | 27 | 09 | 2452 | 20dBc | Pass |
| Ant 2 / Ant 1 + 2 | | | | | |
| 802.11n-HT20 | 13 | 01 | 2412 | 20dBc | Pass |
| 802.11n-HT20 | 13 | 06 | 2437 | 20dBc | Pass |
| 802.11n-HT20 | 13 | 11 | 2462 | 20dBc | Pass |
| 802.11n-HT40 | 27 | 03 | 2422 | 20dBc | Pass |
| 802.11n-HT40 | 27 | 06 | 2437 | 20dBc | Pass |
| 802.11n-HT40 | 27 | 09 | 2452 | 20dBc | Pass |

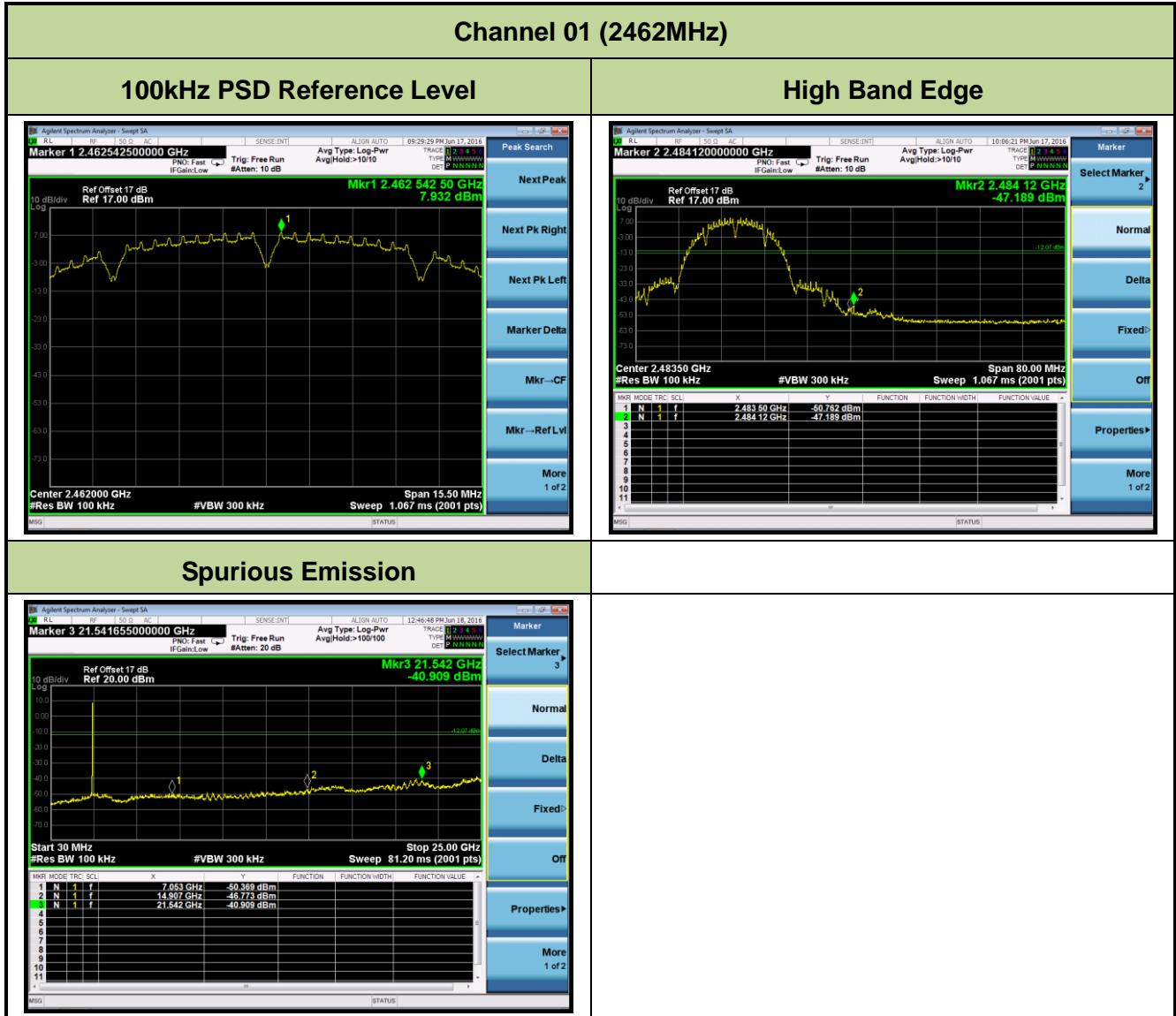


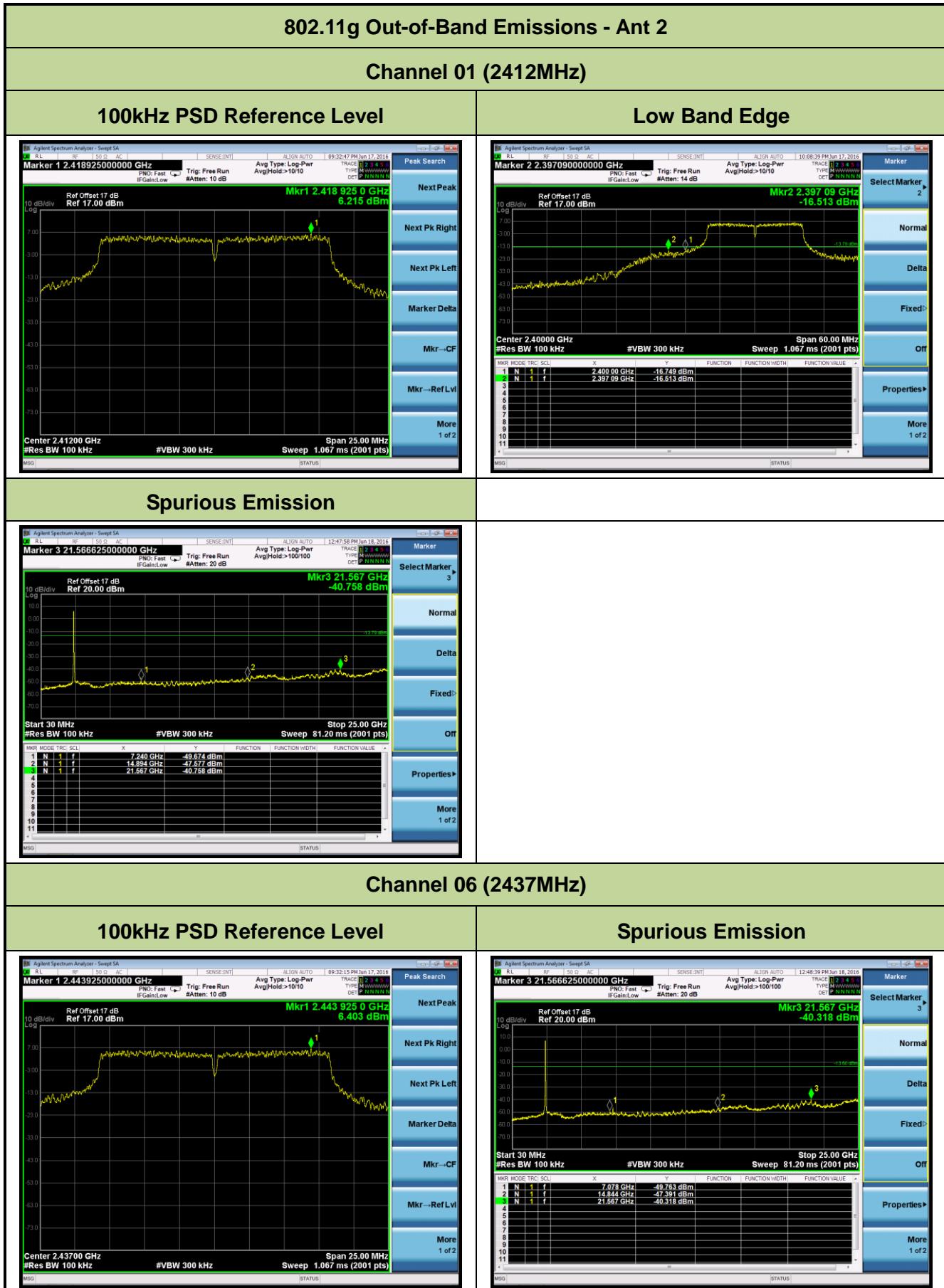


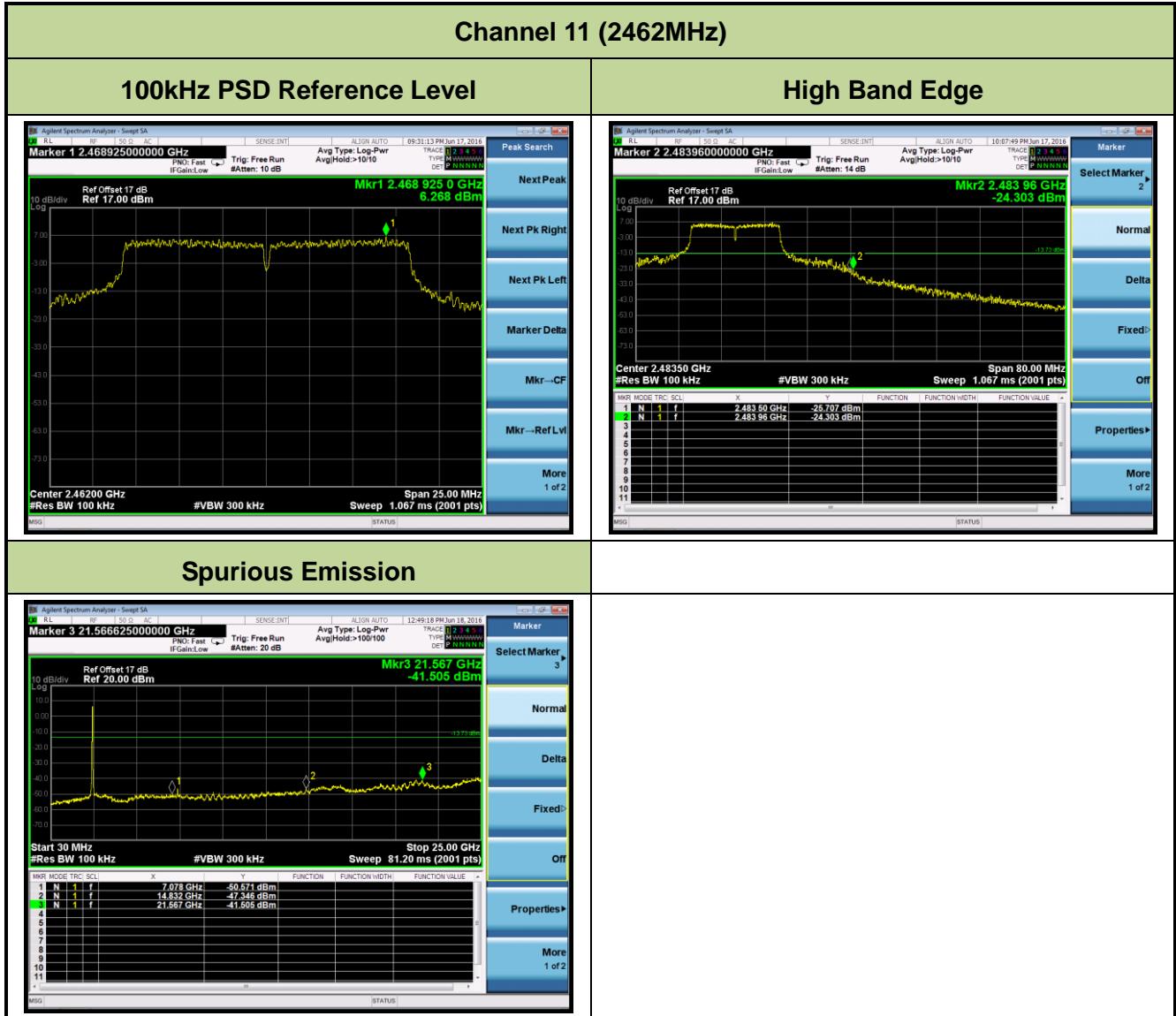


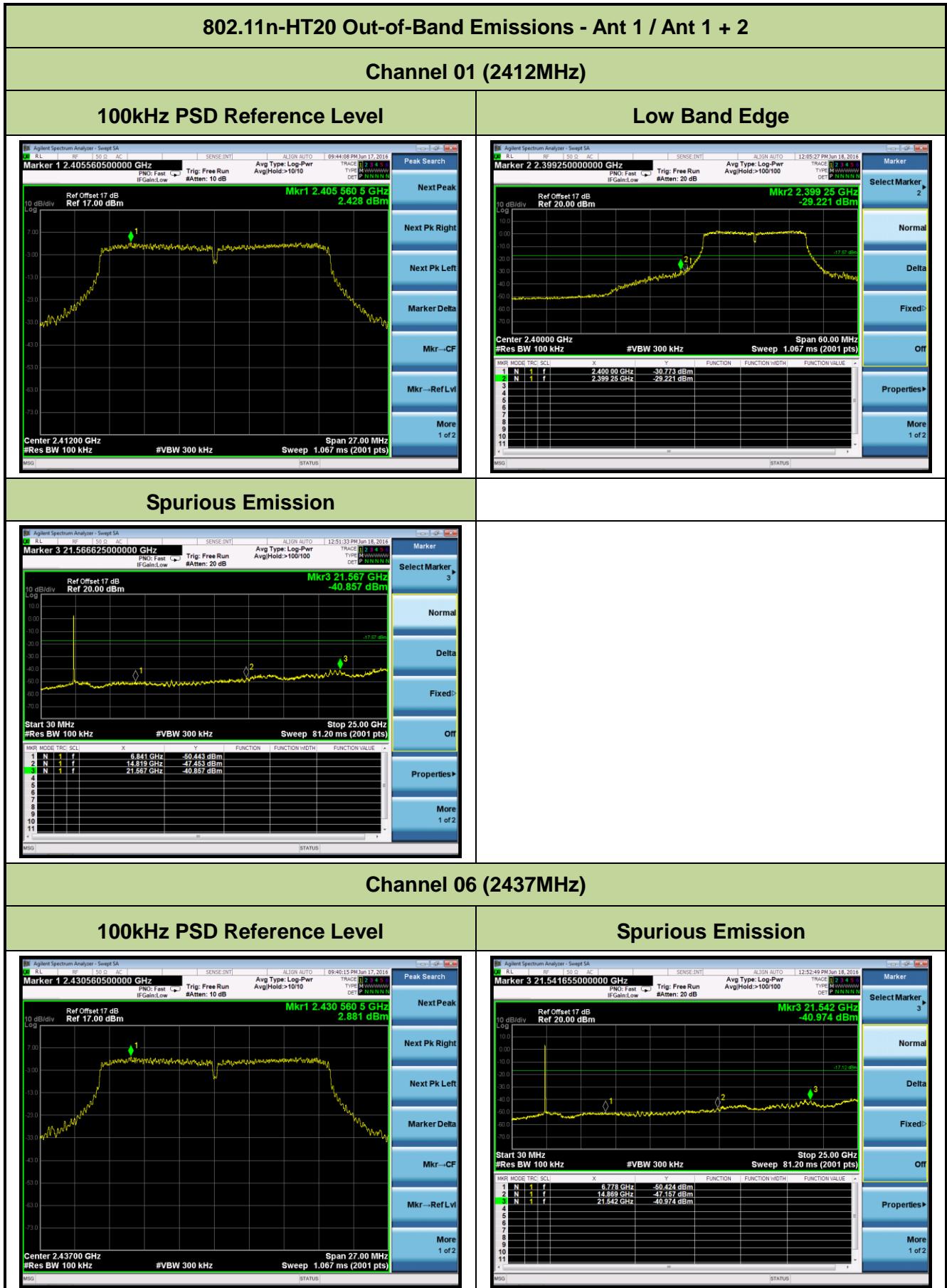


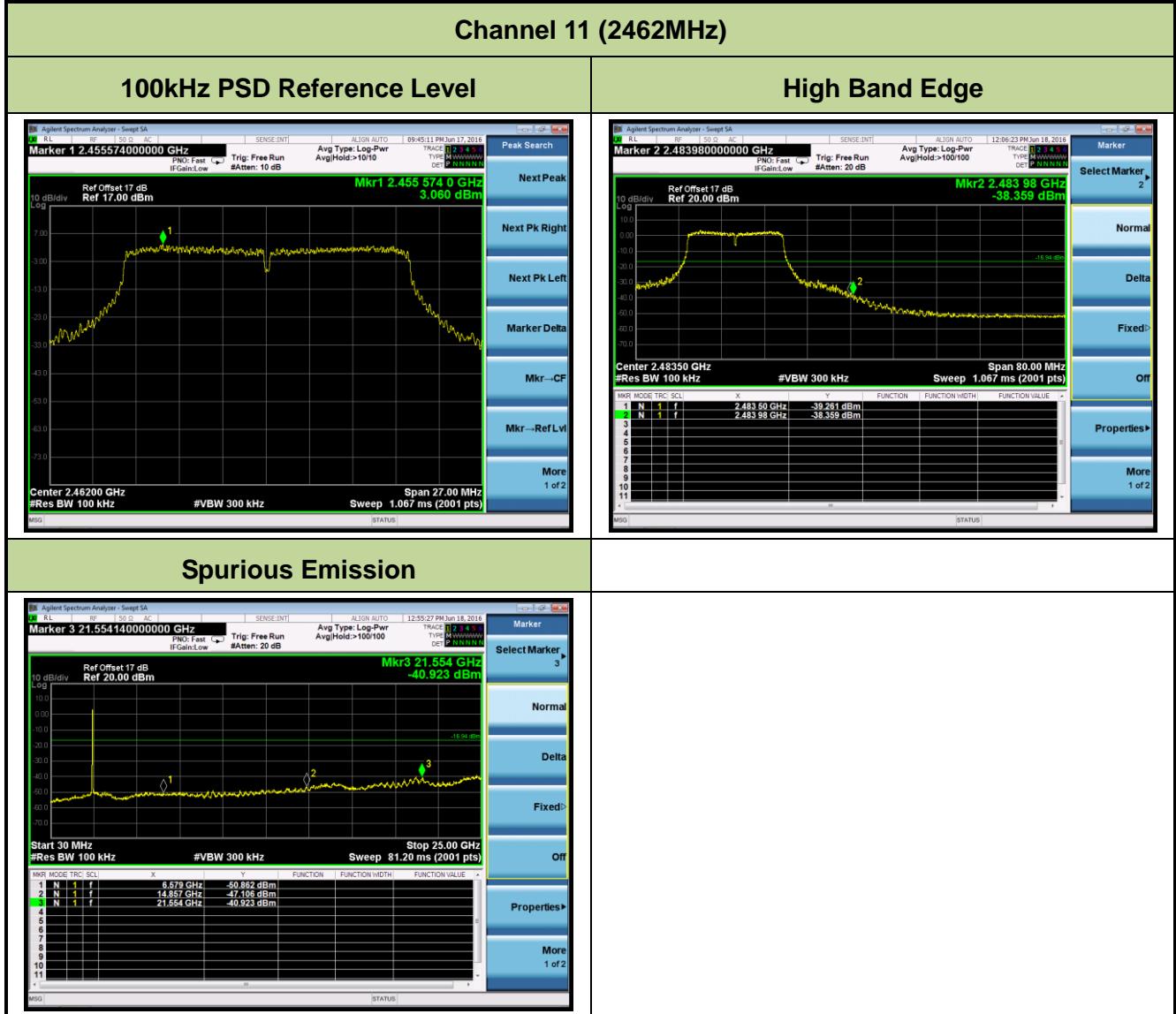








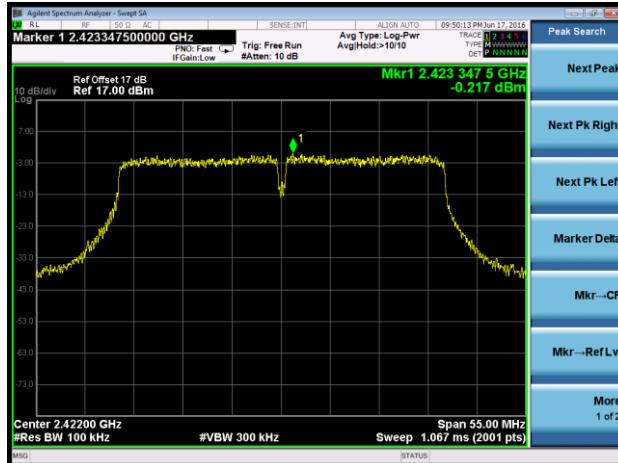




802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 1 + 2

Channel 03 (2422MHz)

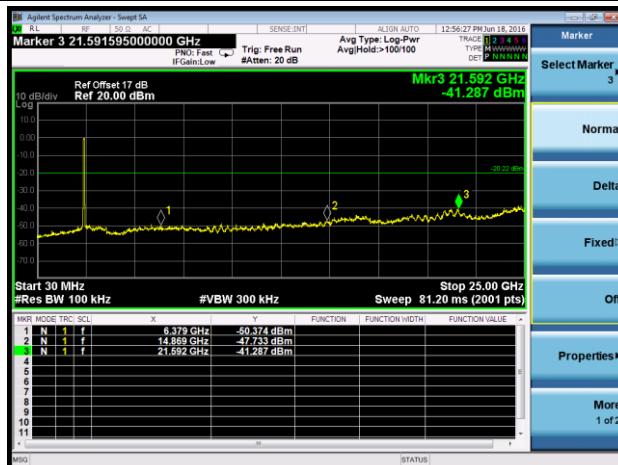
100kHz PSD Reference Level



Low Band Edge

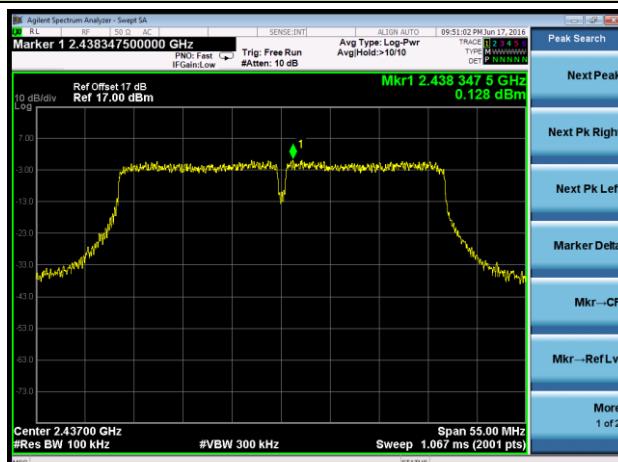


Spurious Emission

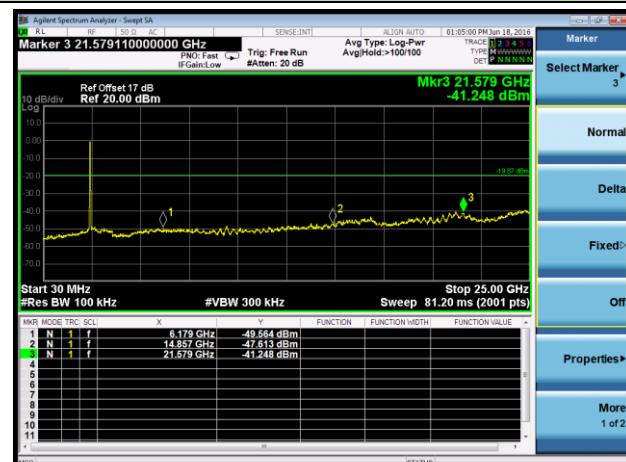


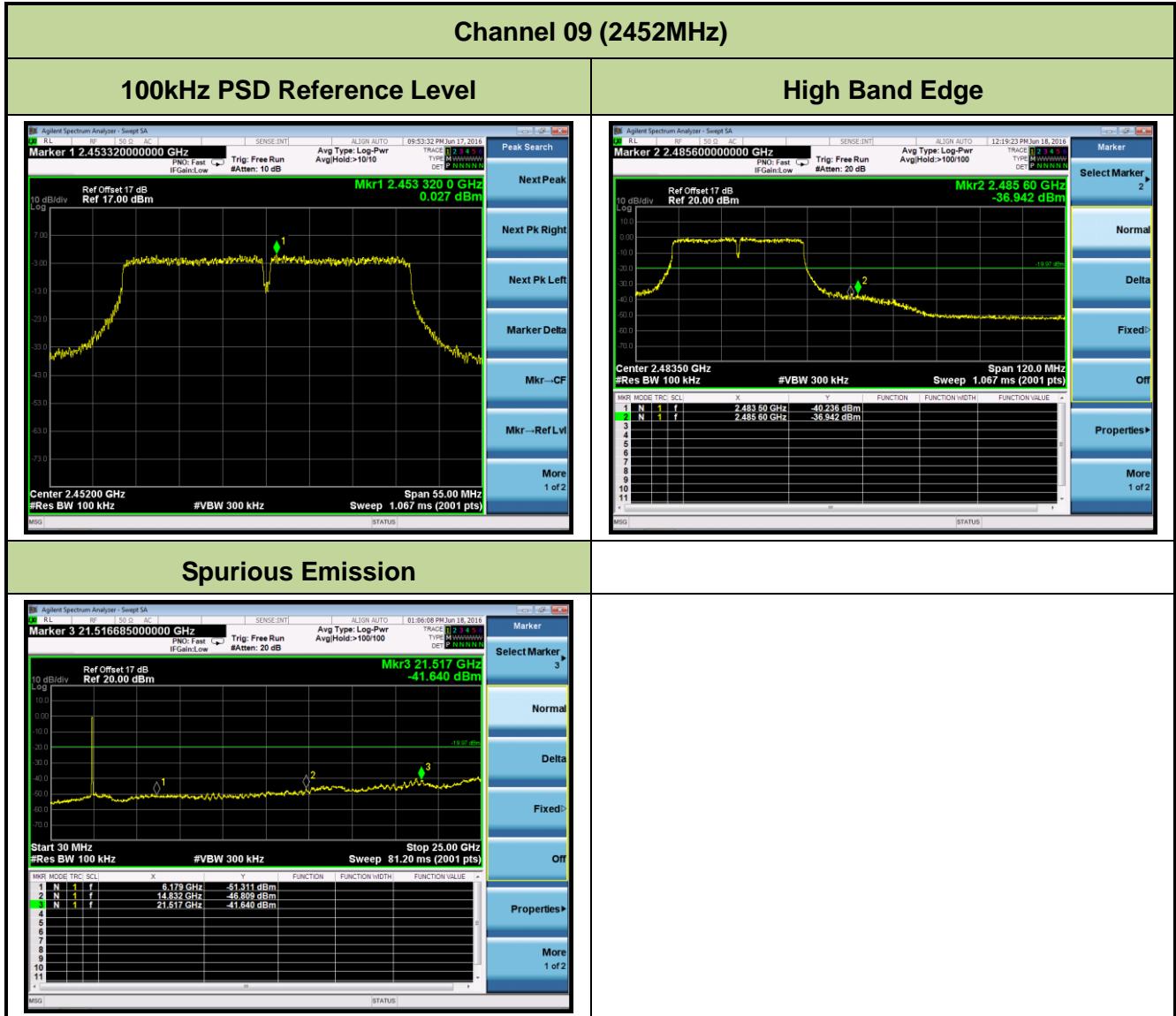
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission





802.11n-HT20 Out-of-Band Emissions - Ant 2 / Ant 1 + 2

Channel 01 (2412MHz)

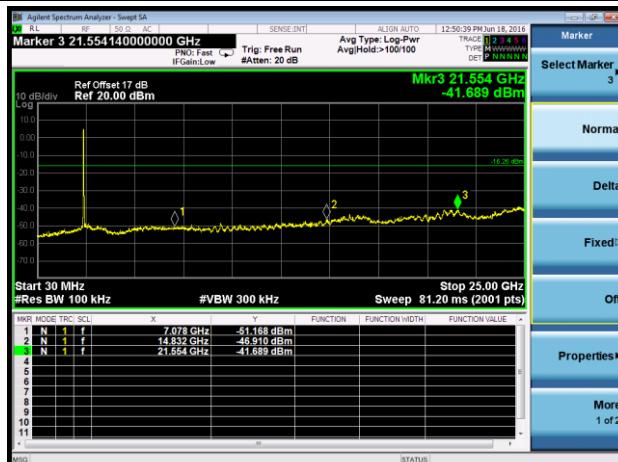
100kHz PSD Reference Level



Low Band Edge

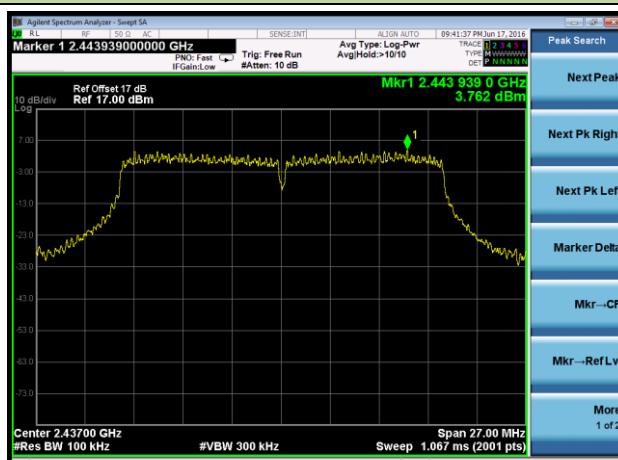


Spurious Emission

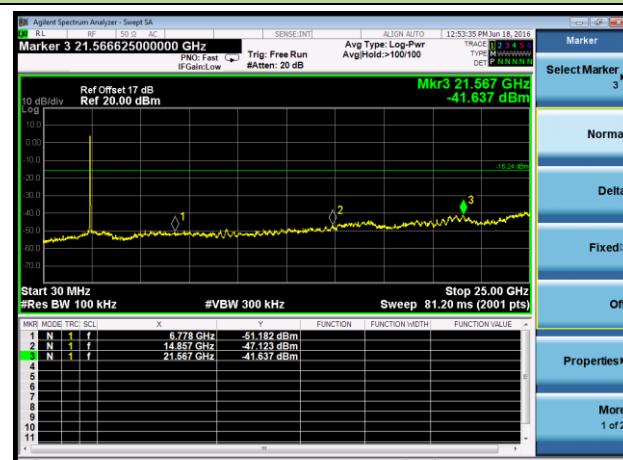


Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

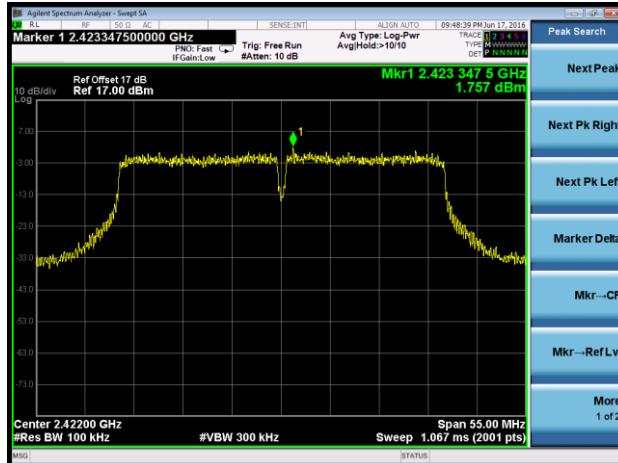




802.11n-HT40 Out-of-Band Emissions - Ant 2 / Ant 1 + 2

Channel 03 (2422MHz)

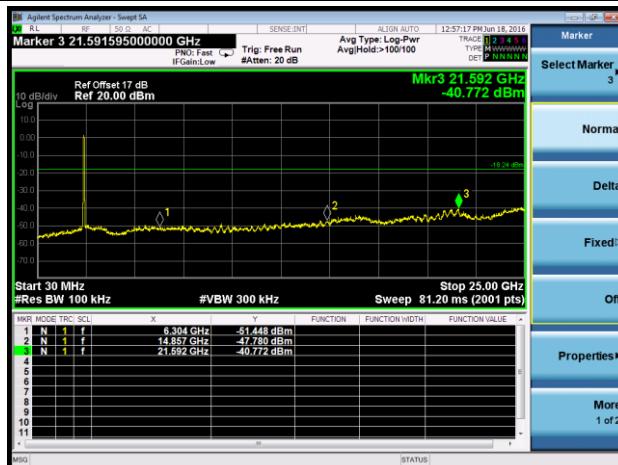
100kHz PSD Reference Level



Low Band Edge

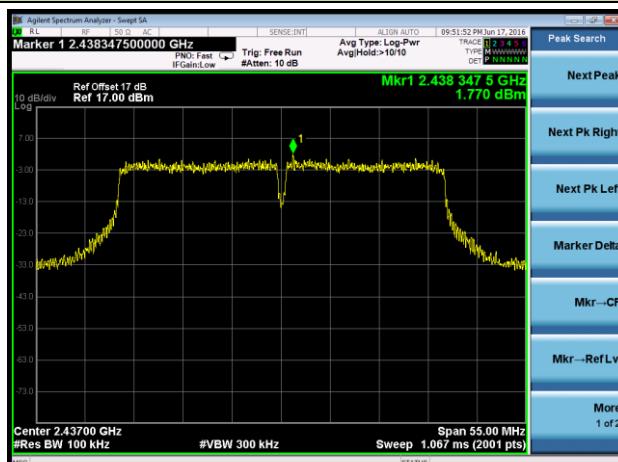


Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

