7.5.5. Test Result

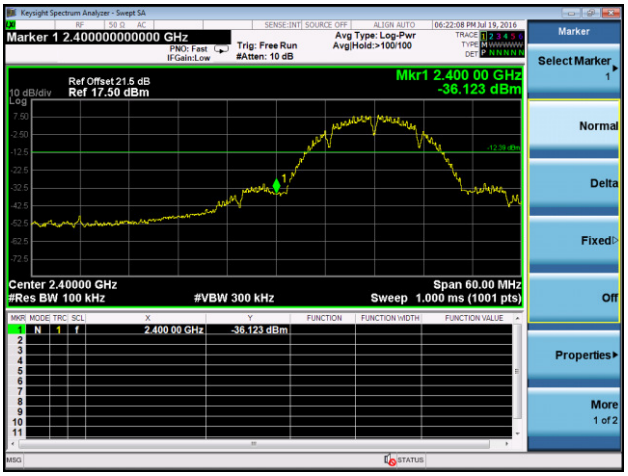
Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
Ant 0					
802.11b	1	01	2412	20dBc	Pass
802.11b	1	06	2437	20dBc	Pass
802.11b	1	11	2462	20dBc	Pass
802.11g	6	01	2412	20dBc	Pass
802.11g	6	06	2437	20dBc	Pass
802.11g	6	11	2462	20dBc	Pass
Ant 1					
802.11b	1	01	2412	20dBc	Pass
802.11b	1	06	2437	20dBc	Pass
802.11b	1	11	2462	20dBc	Pass
802.11g	6	01	2422	20dBc	Pass
802.11g	6	06	2437	20dBc	Pass
802.11g	6	11	2452	20dBc	Pass
Ant 0 / Ant 0 + 1					
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 1 / Ant 0 + 1					
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

802.11b Out-of-Band Emissions - Ant 0

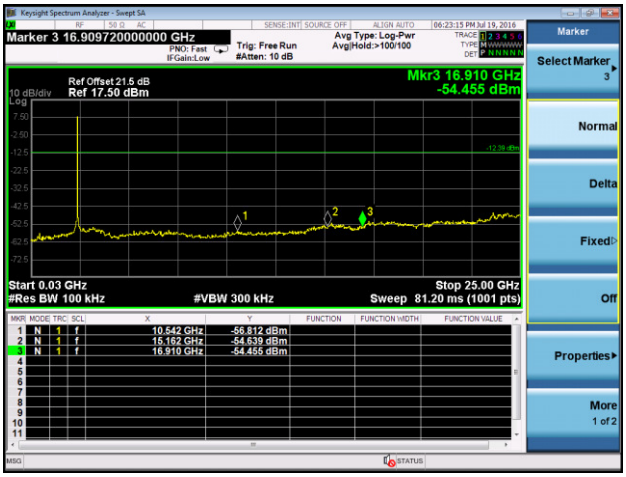
Channel 01 (2412MHz)

100kHz PSD Reference Level

Low Band Edge



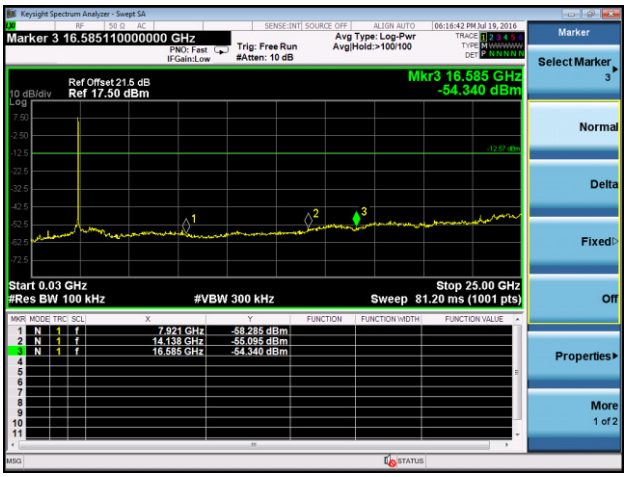
Spurious Emission

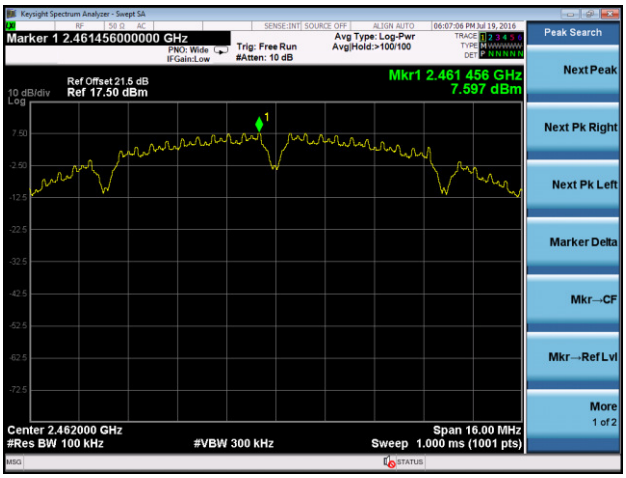
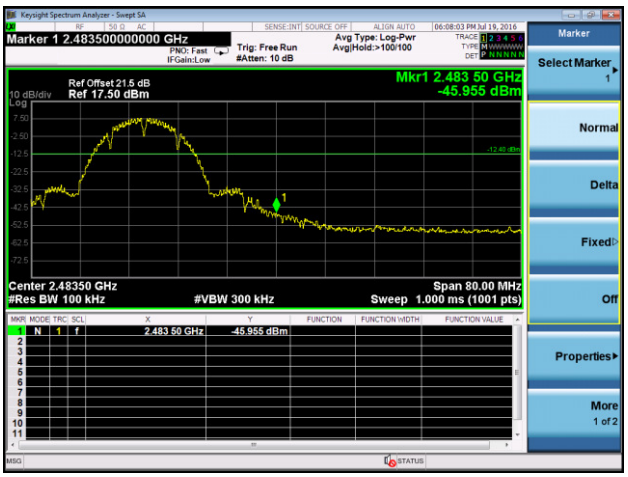
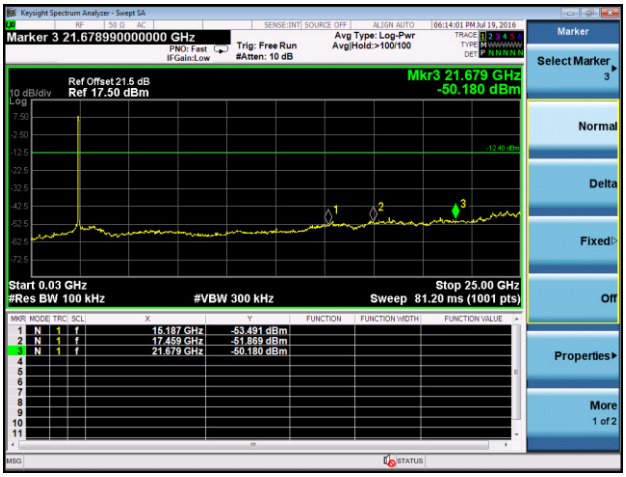


Channel 06 (2437MHz)

100kHz PSD Reference Level

Spurious Emission

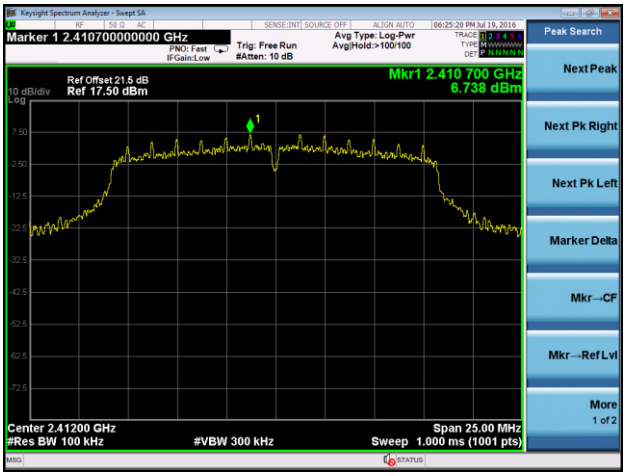


Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

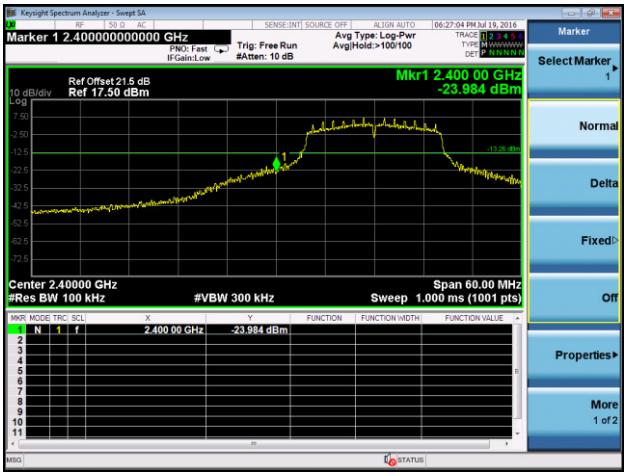
802.11g Out-of-Band Emissions - Ant 0

Channel 01 (2412MHz)

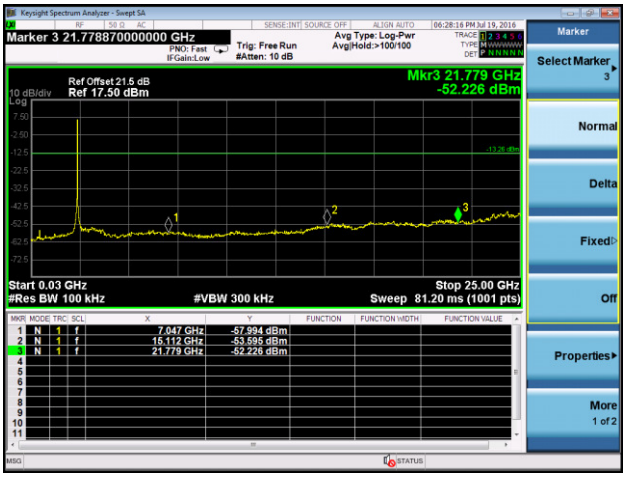
100kHz PSD Reference Level



Low Band Edge



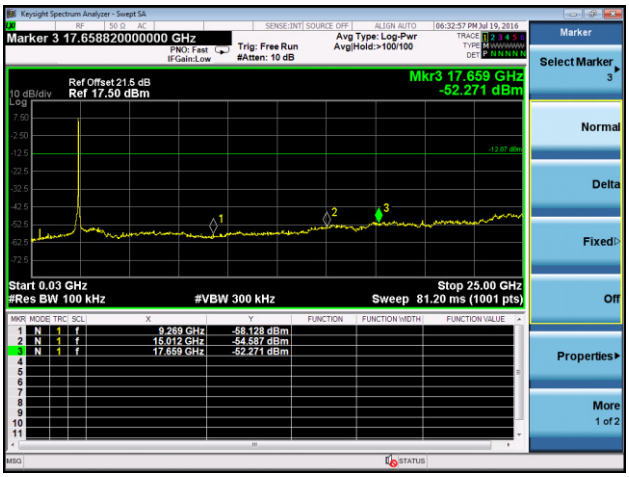
Spurious Emission

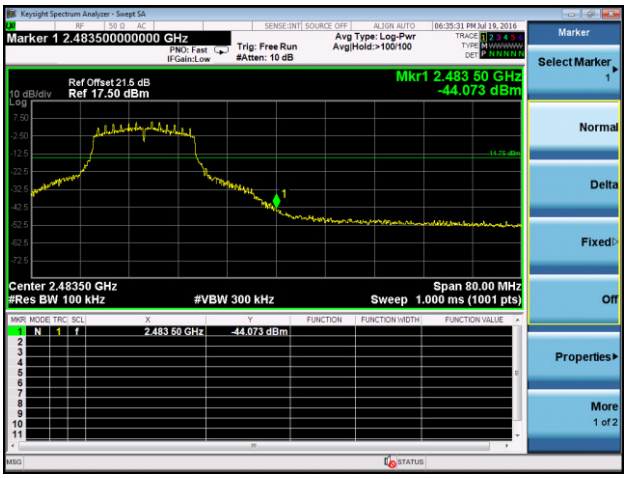
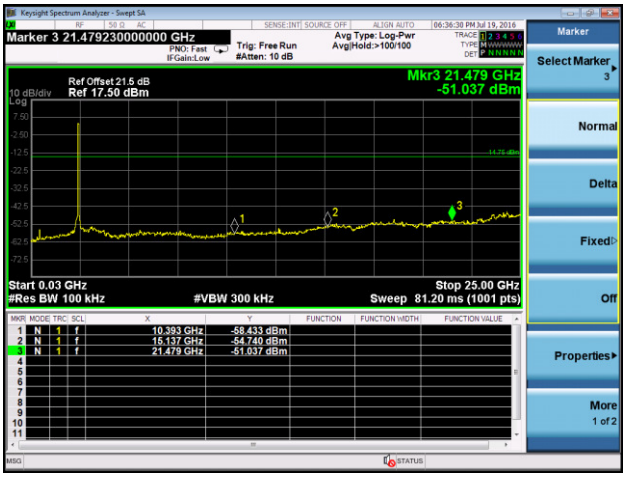


Channel 06 (2437MHz)

100kHz PSD Reference Level

Spurious Emission



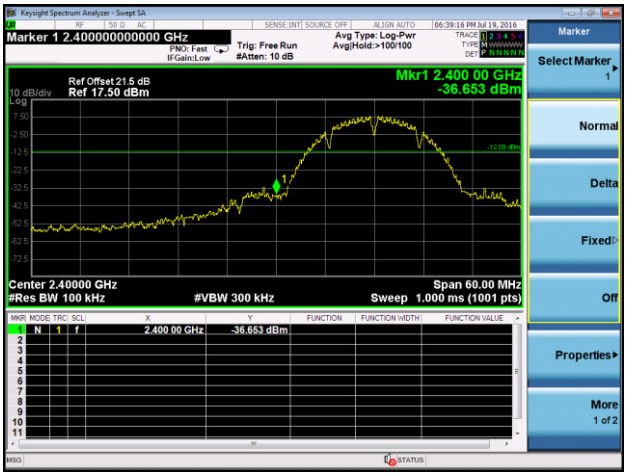
Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

802.11b Out-of-Band Emissions - Ant 1

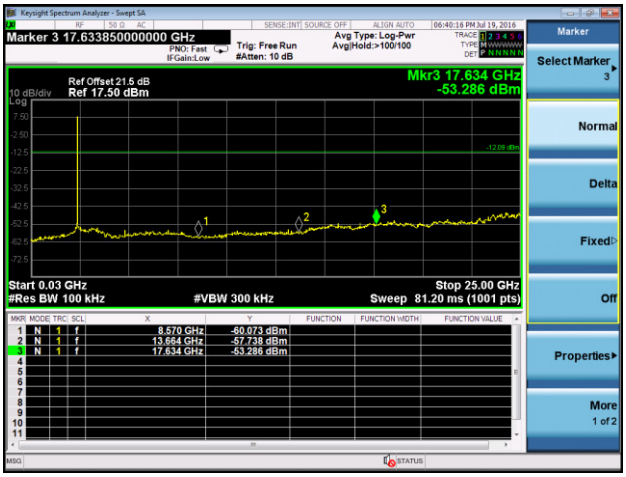
Channel 01 (2412MHz)

100kHz PSD Reference Level

Low Band Edge



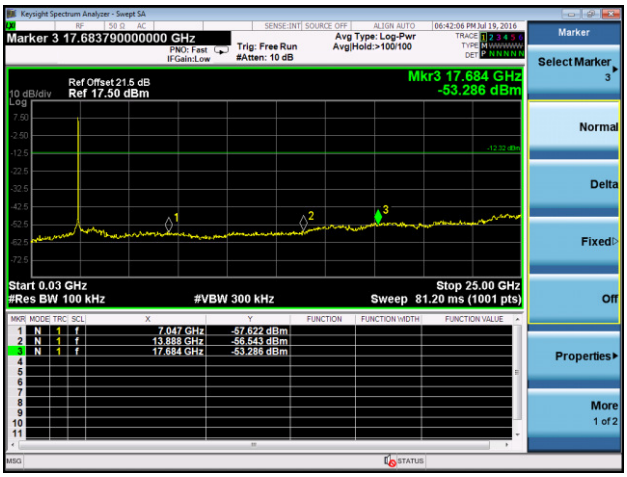
Spurious Emission

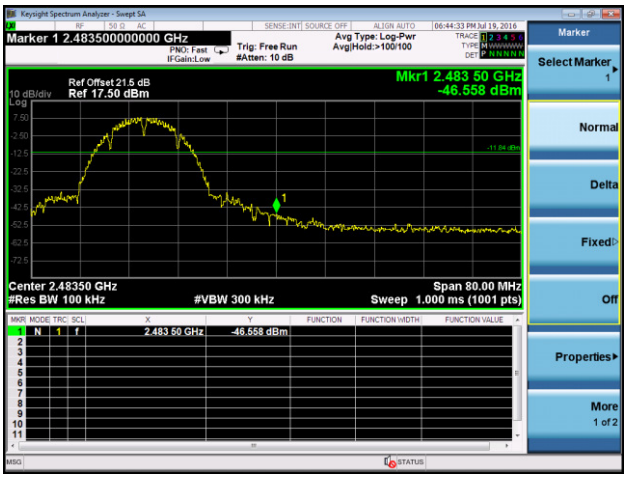
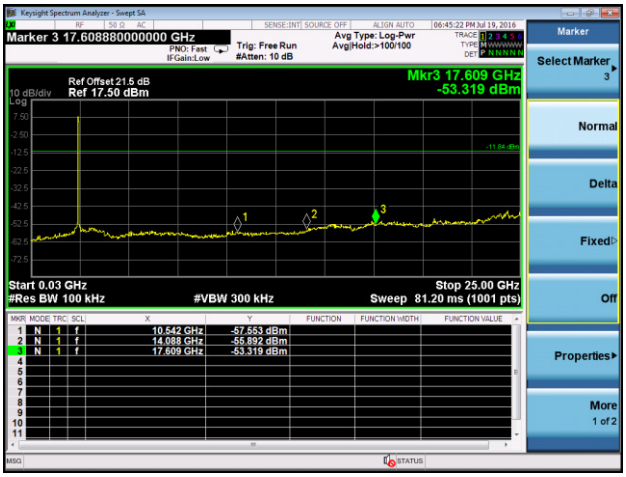


Channel 06 (2437MHz)

100kHz PSD Reference Level

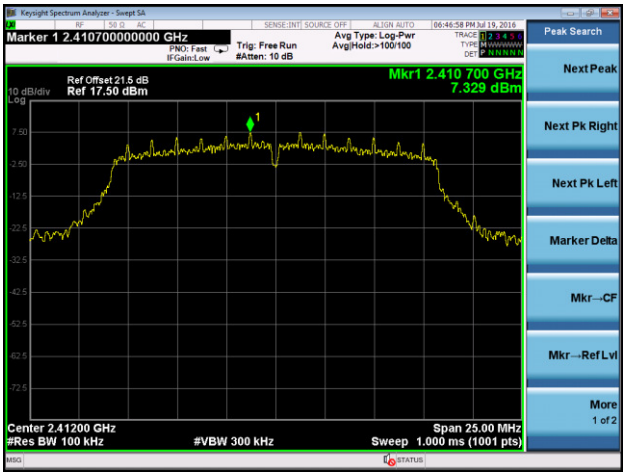
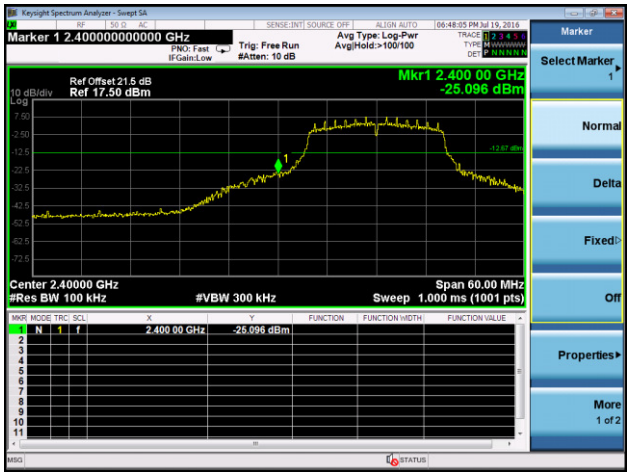
Spurious Emission



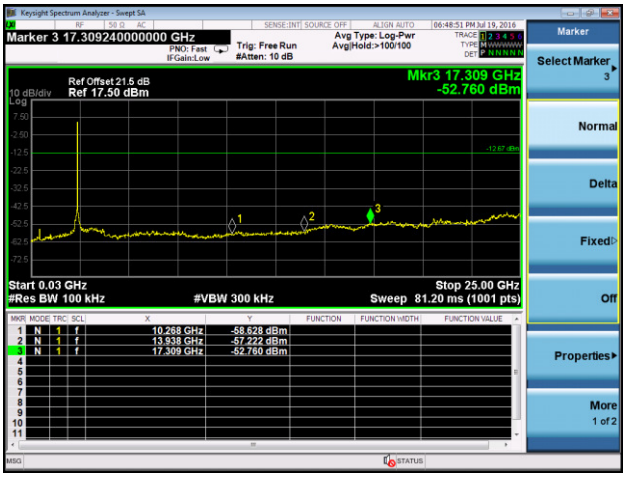
Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

802.11g Out-of-Band Emissions - Ant 1

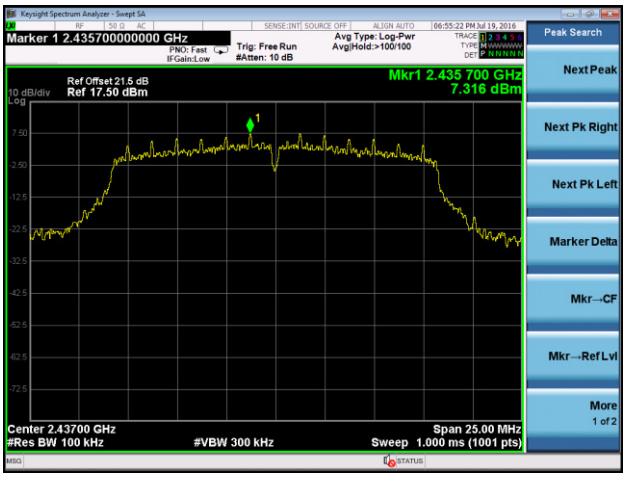
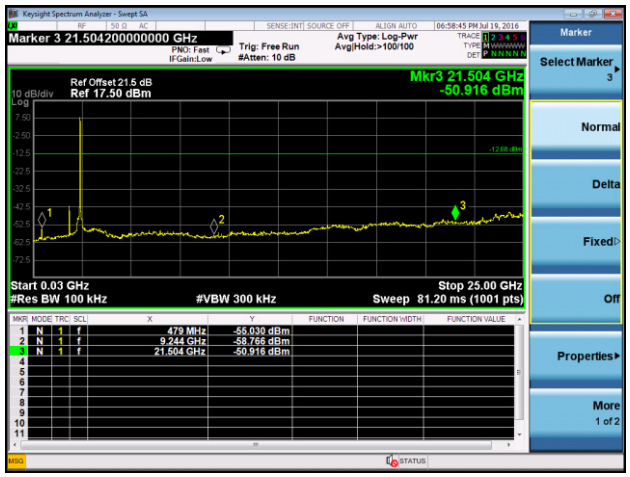
Channel 01 (2412MHz)

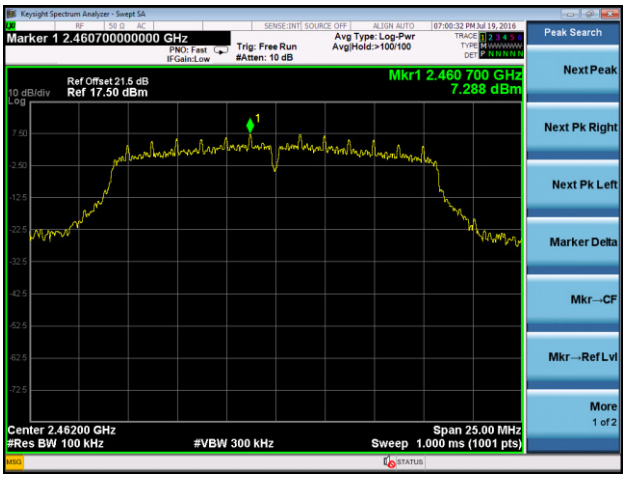
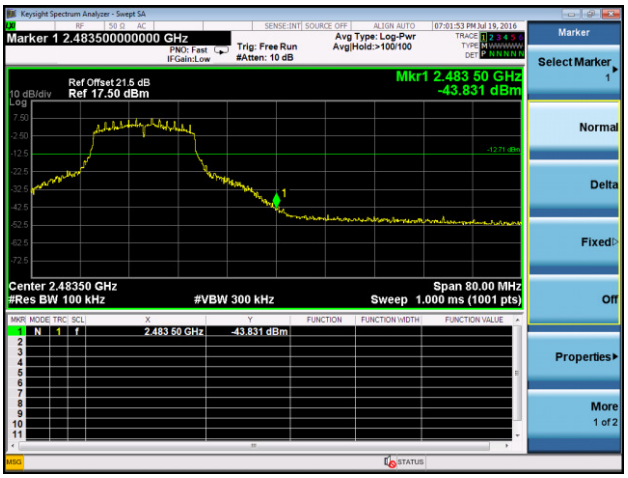
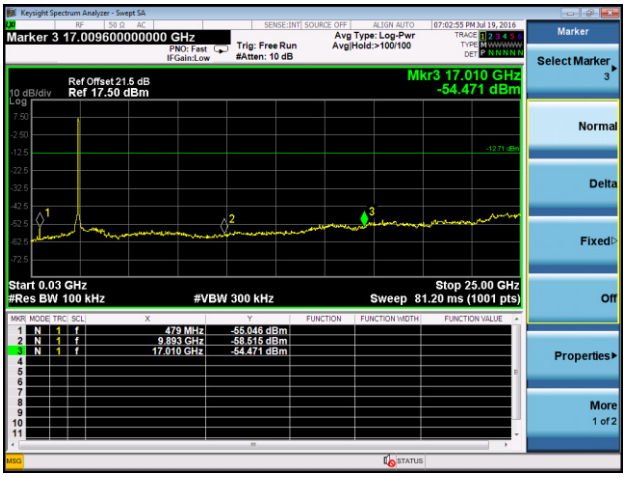
100kHz PSD Reference Level	Low Band Edge
	

Spurious Emission



Channel 06 (2437MHz)

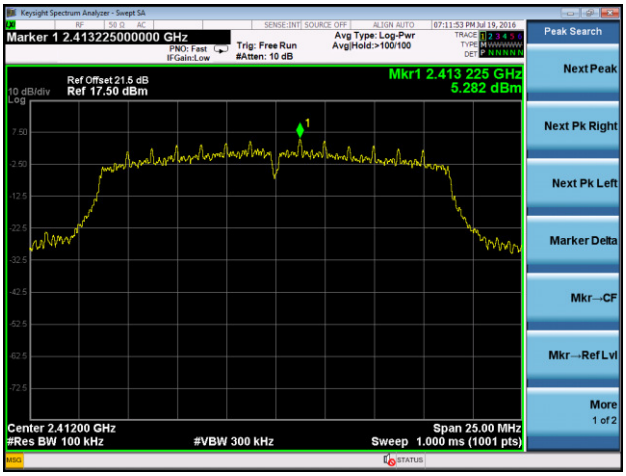
100kHz PSD Reference Level	Spurious Emission
	

Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

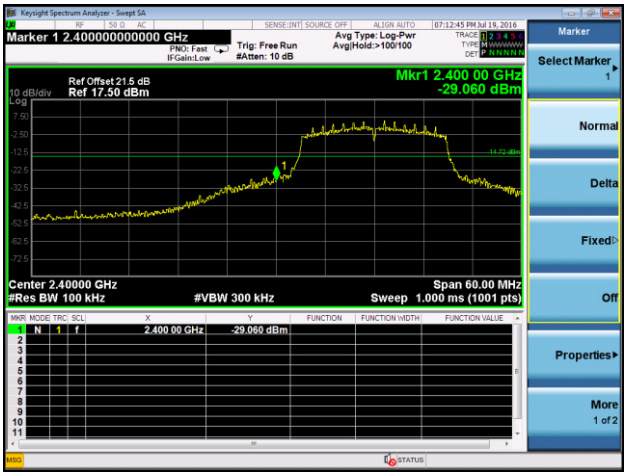
802.11n-HT20 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 01 (2412MHz)

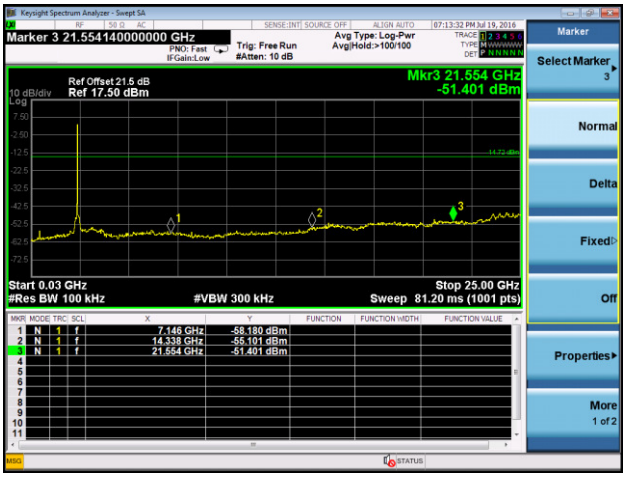
100kHz PSD Reference Level



Low Band Edge

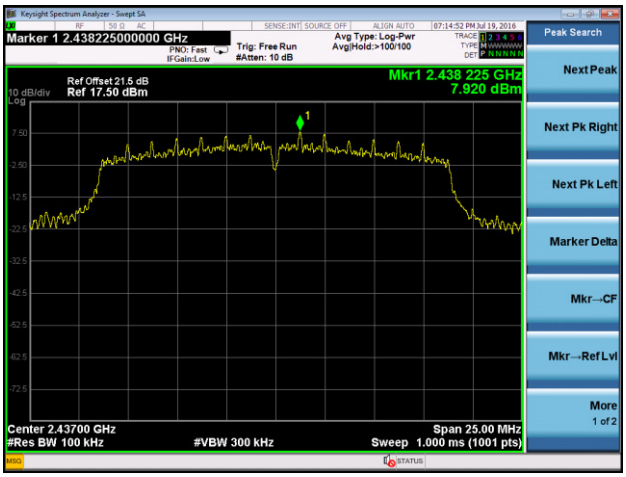


Spurious Emission

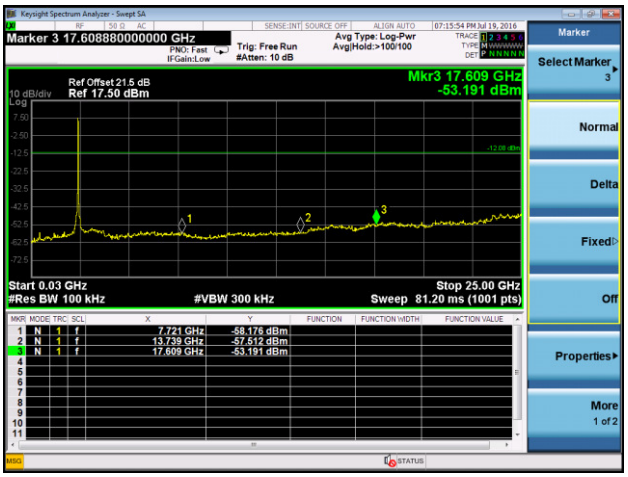


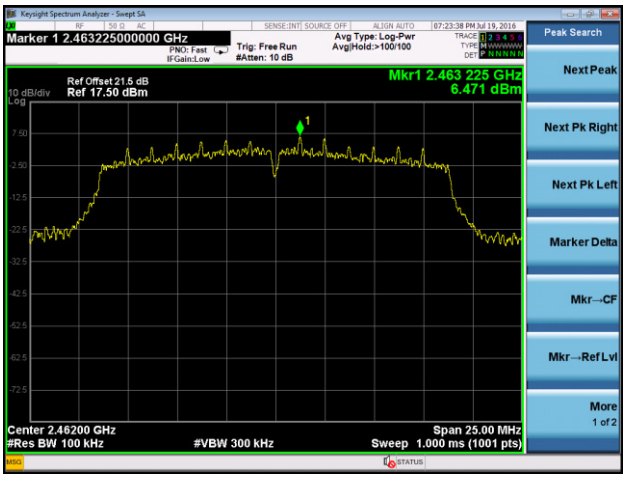
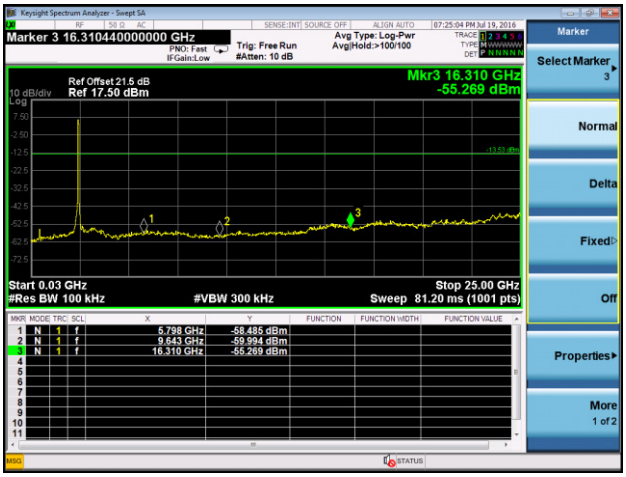
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission



Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

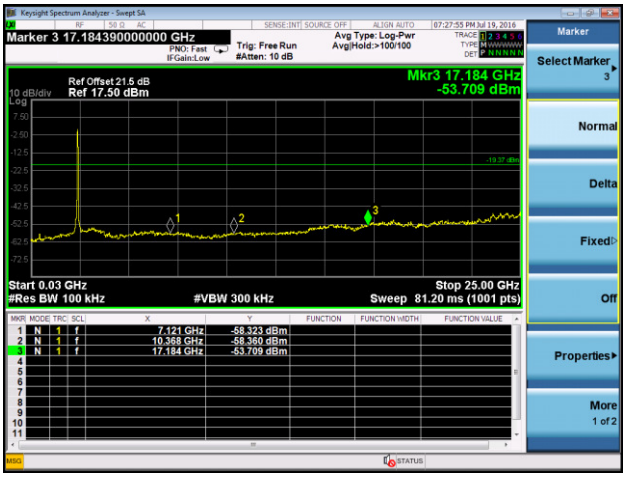
802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 03 (2422MHz)

100kHz PSD Reference Level

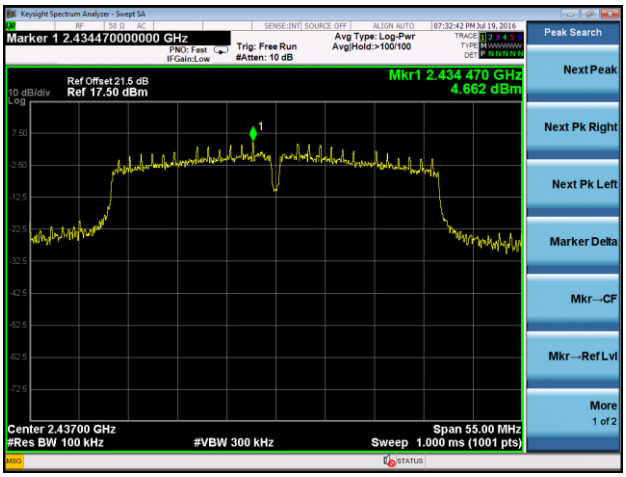
Low Band Edge

Spurious Emission

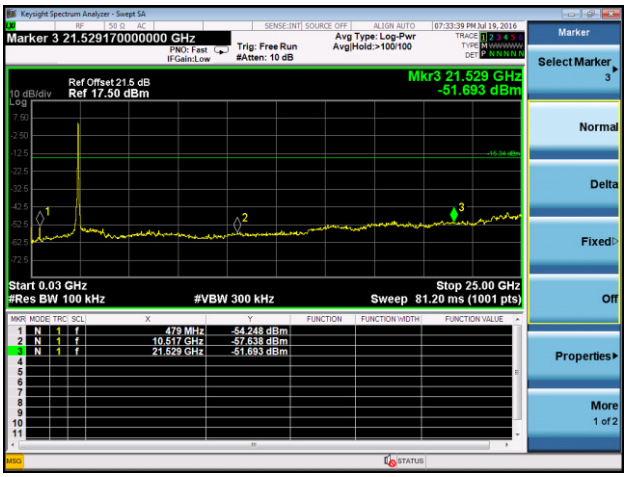


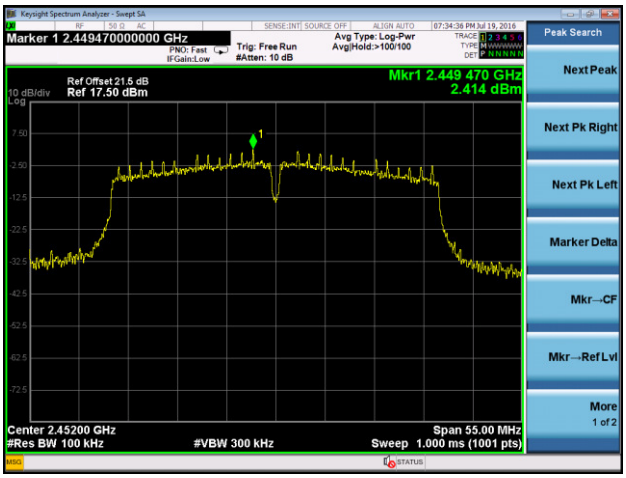
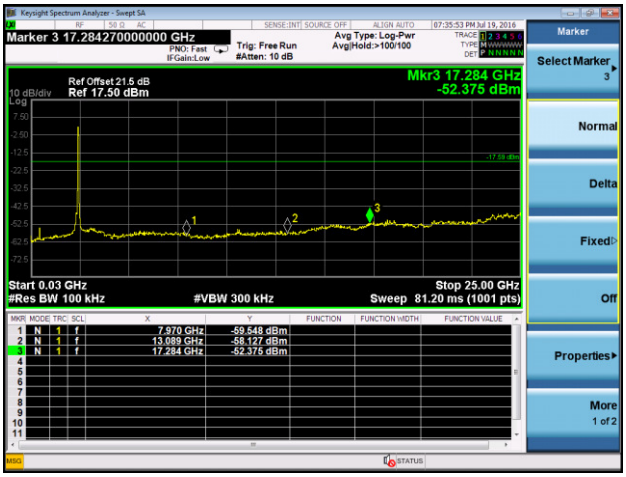
Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission

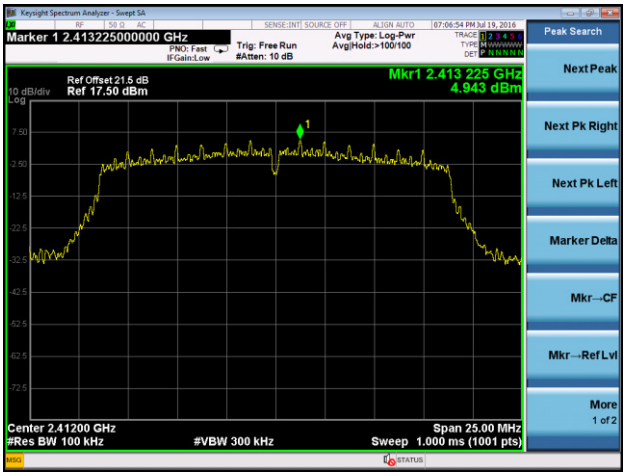


Channel 09 (2452MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

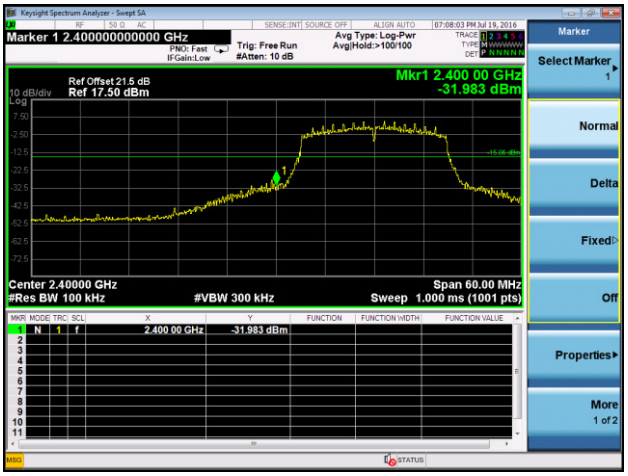
802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 01 (2412MHz)

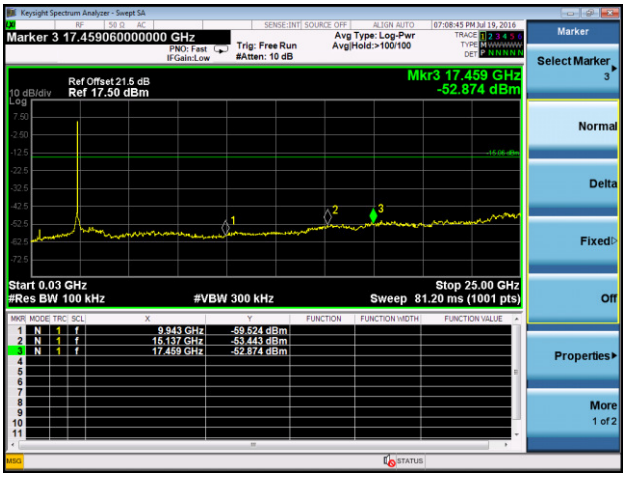
100kHz PSD Reference Level



Low Band Edge

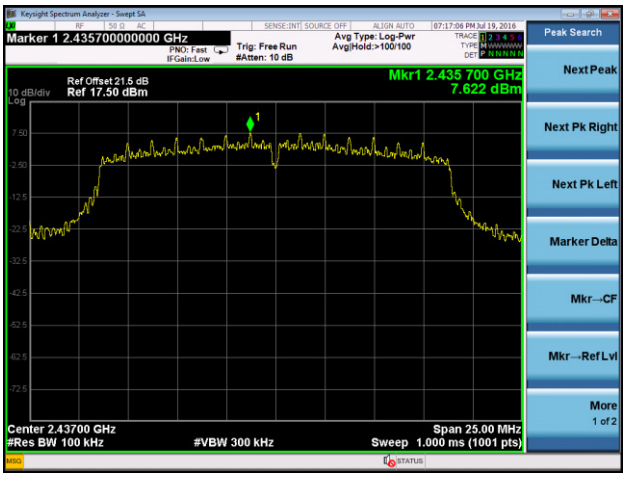


Spurious Emission

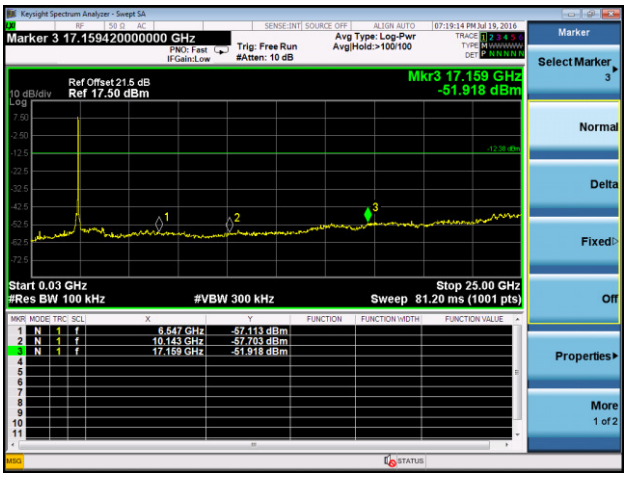


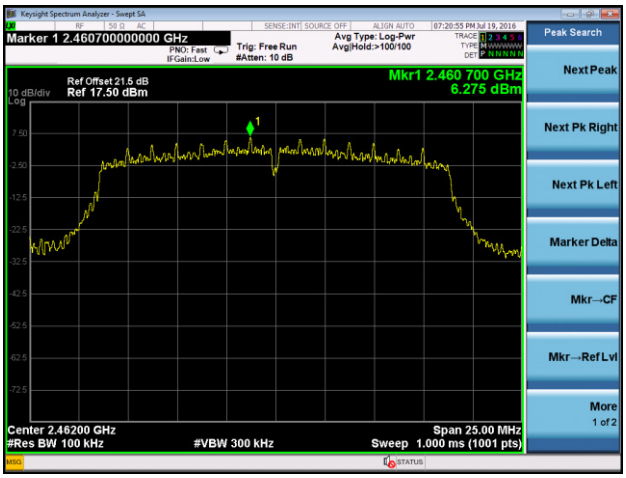
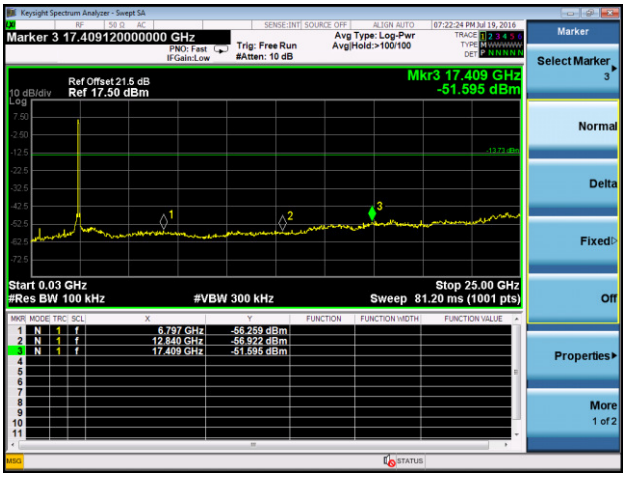
Channel 06 (2437MHz)

100kHz PSD Reference Level



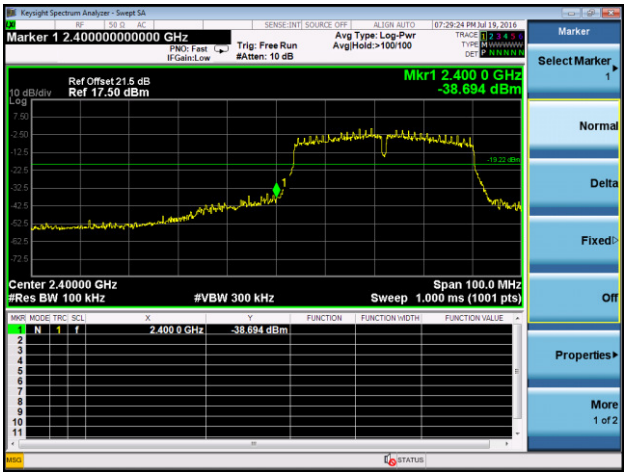
Spurious Emission



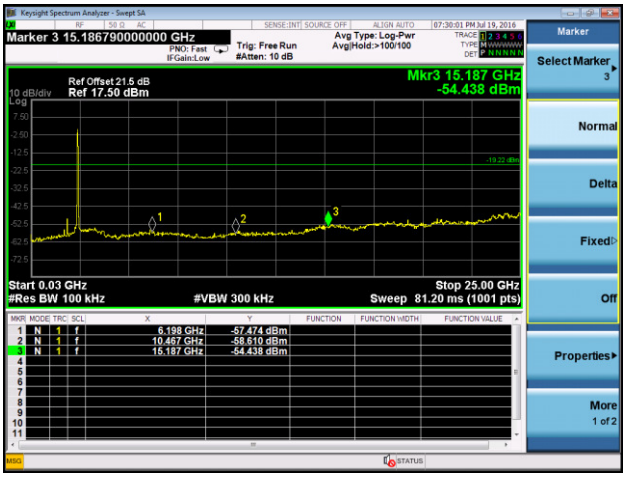
Channel 11 (2462MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

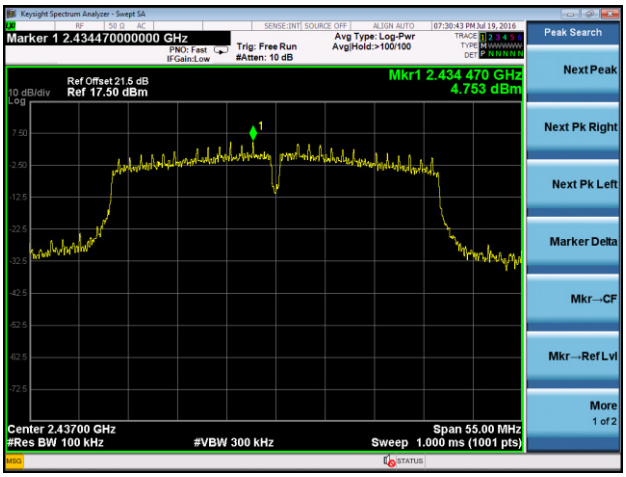
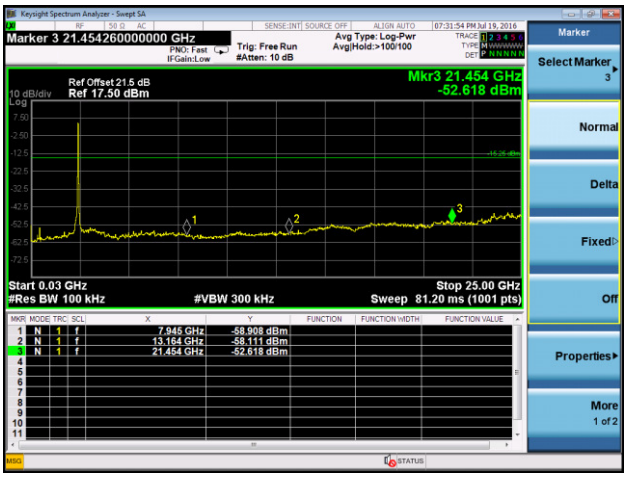
Channel 03 (2422MHz)

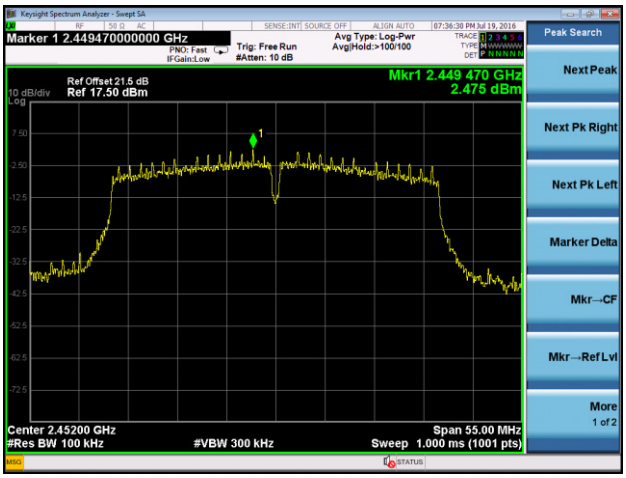
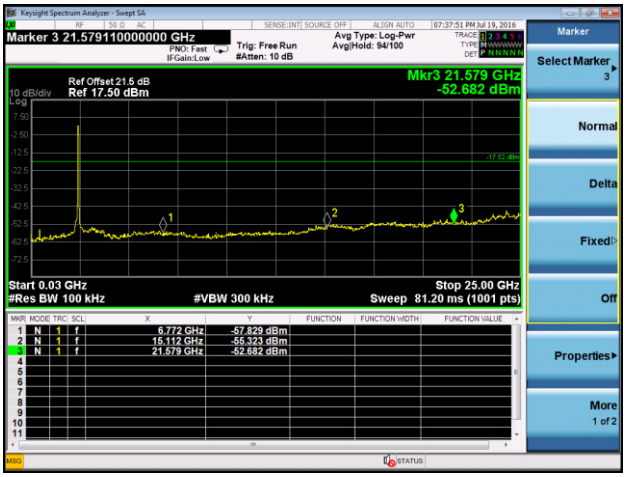
100kHz PSD Reference Level	Low Band Edge
	

Spurious Emission



Channel 06 (2437MHz)

100kHz PSD Reference Level	Spurious Emission
	

Channel 09 (2452MHz)	
100kHz PSD Reference Level	**High Band Edge**
	
Spurious Emission	
	

7.6. Radiated Spurious Emission Measurement

7.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.6.2. Test Procedure Used

KDB 558074 D01v03r05 – Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r05 – Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r05 – Section 12.2.5 (average power measurements)

7.6.3. Test Setting

Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 D01v03r05

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple

6. Trace mode = max hold
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

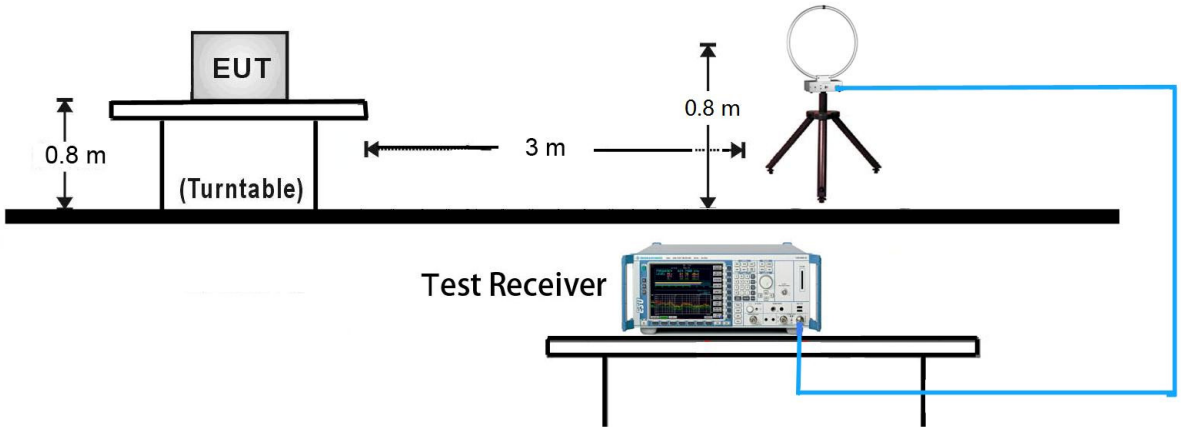
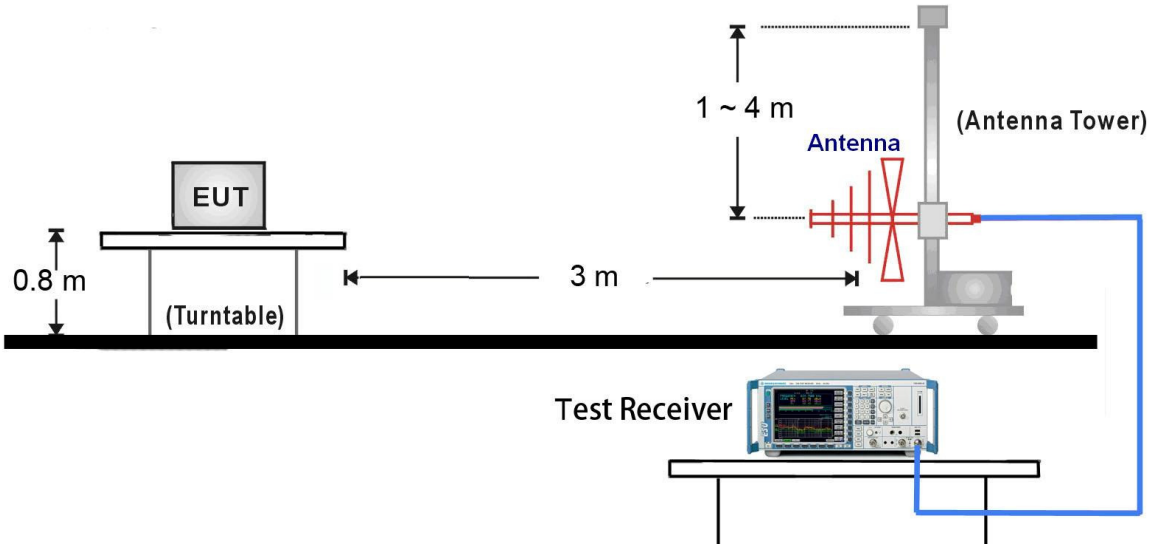
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements per Section 12.2.5.3 of KDB 558074 D01v03r05

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

7.6.4. Test Setup

9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup: