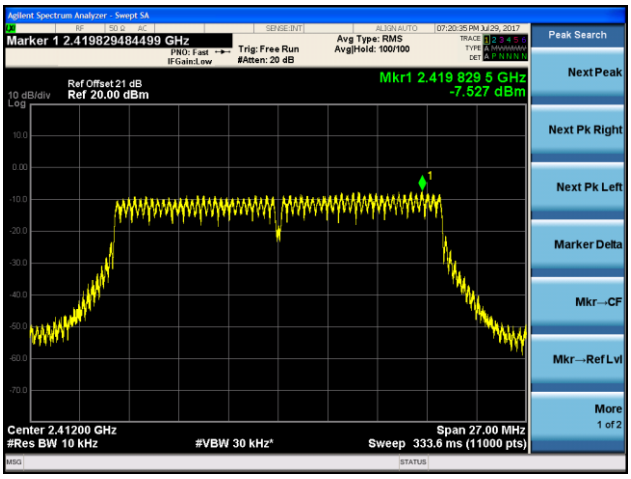
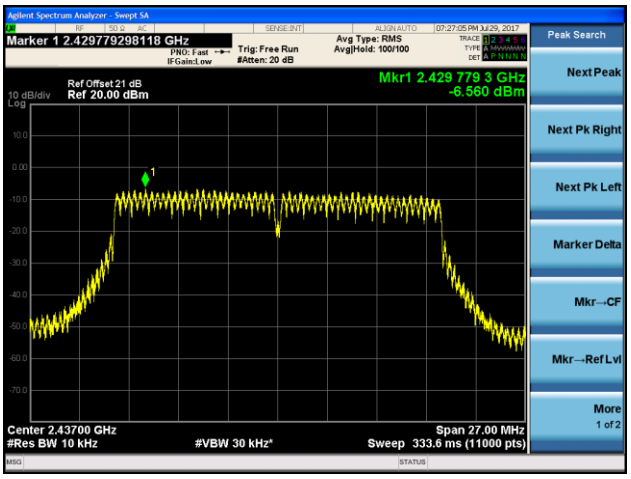
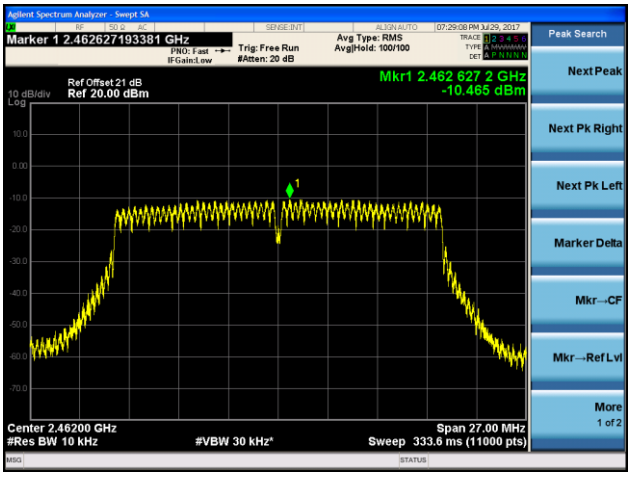
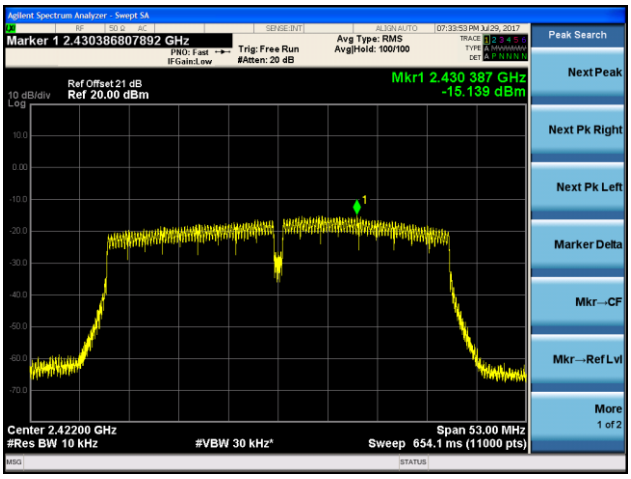
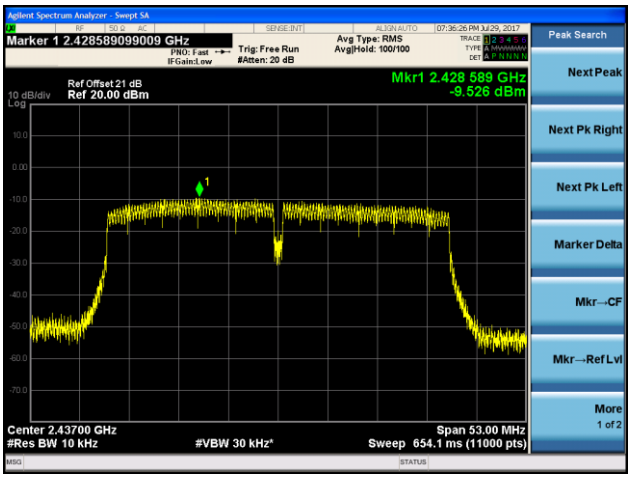
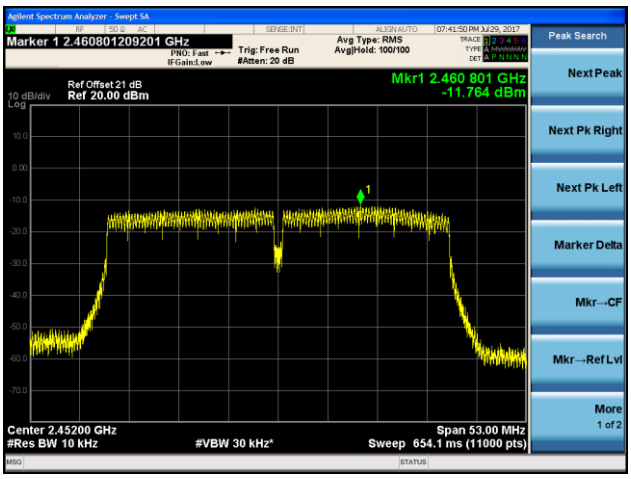
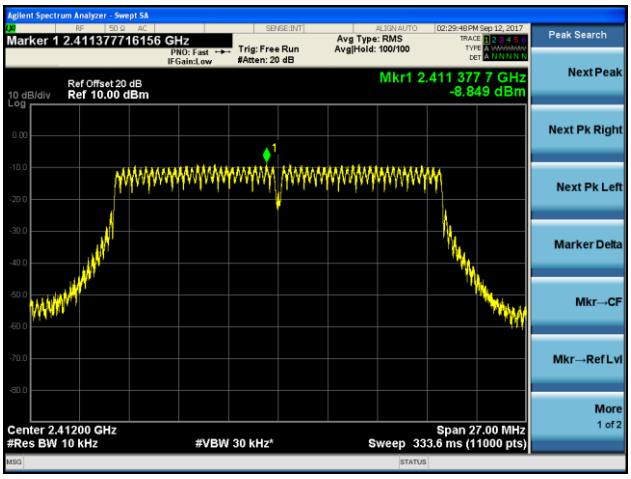
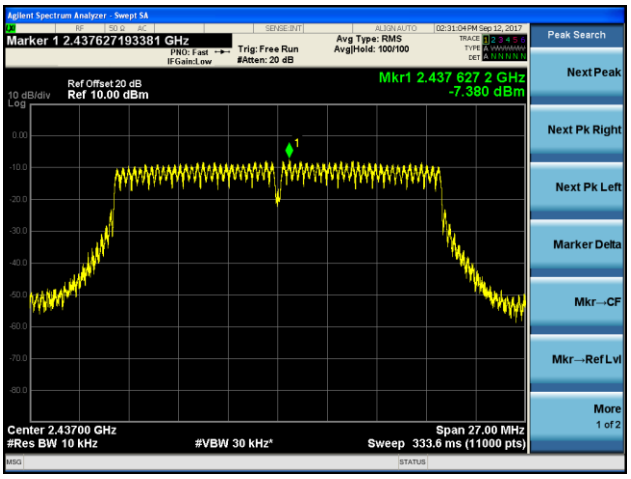
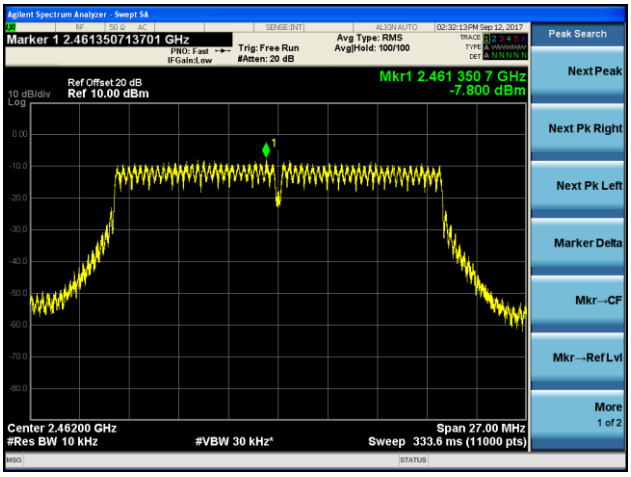
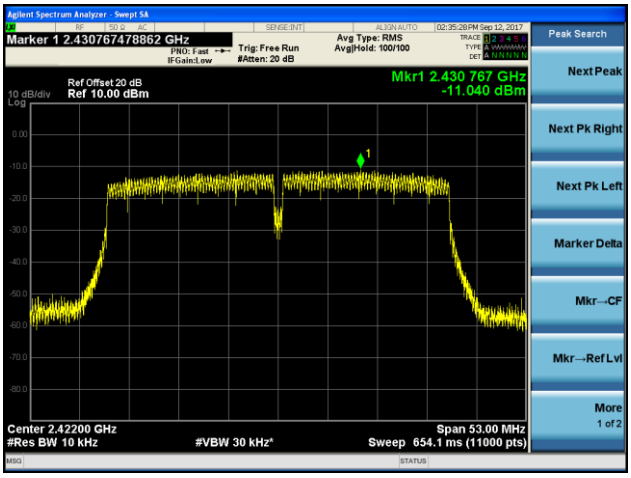
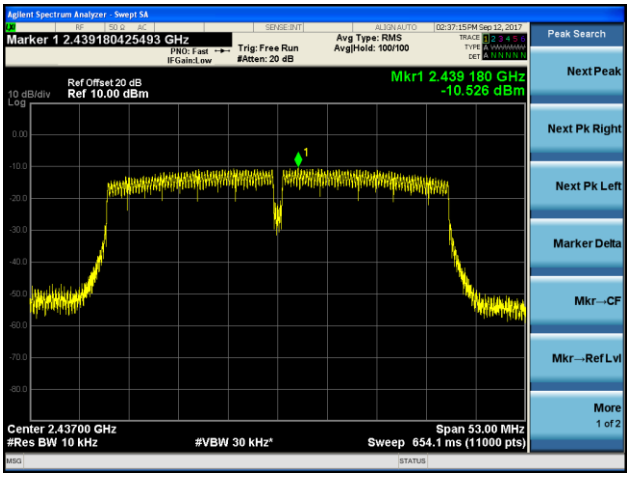
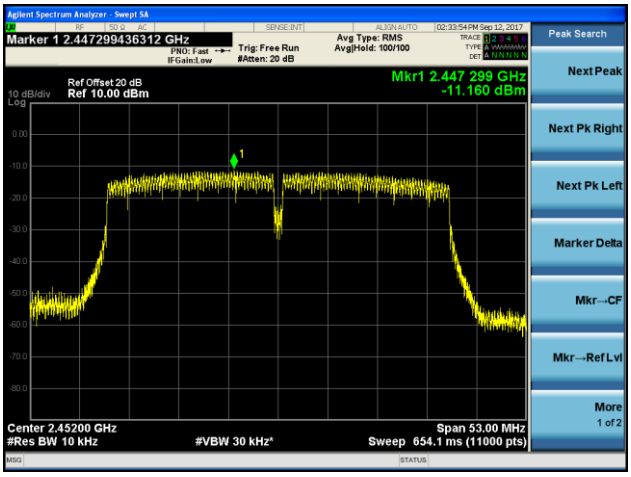
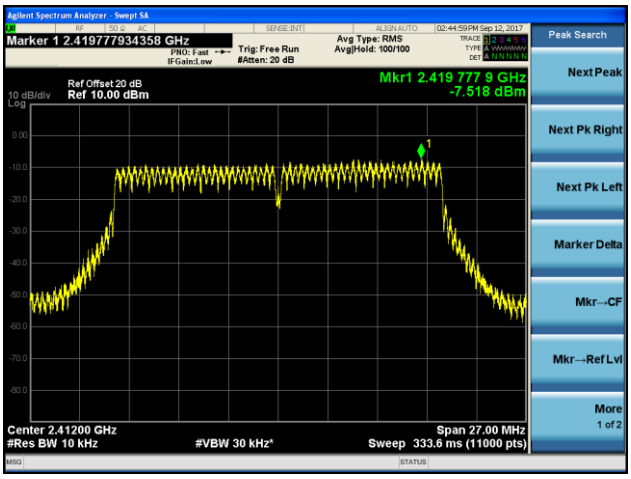
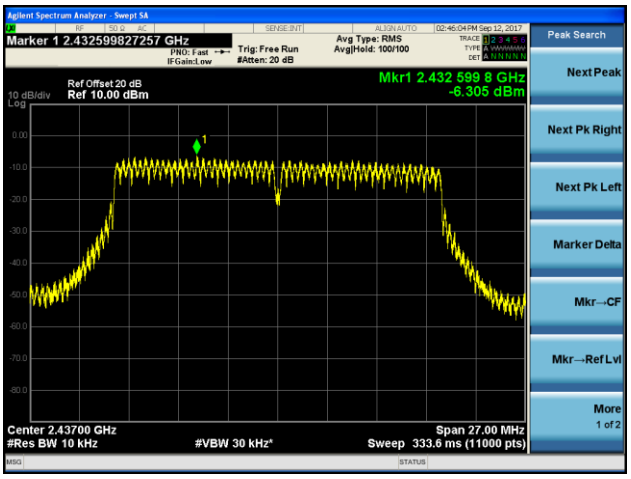
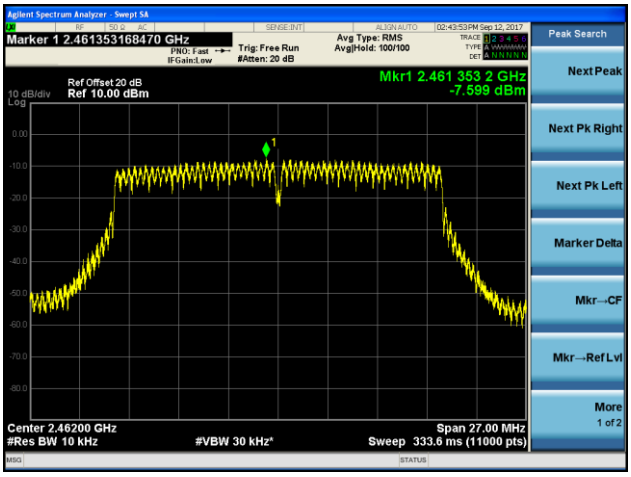
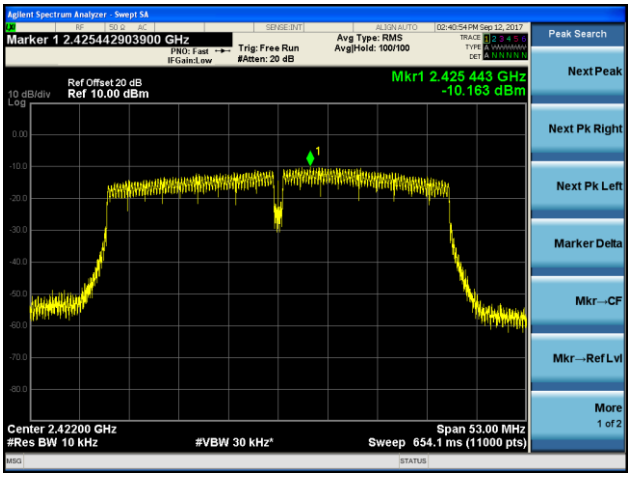
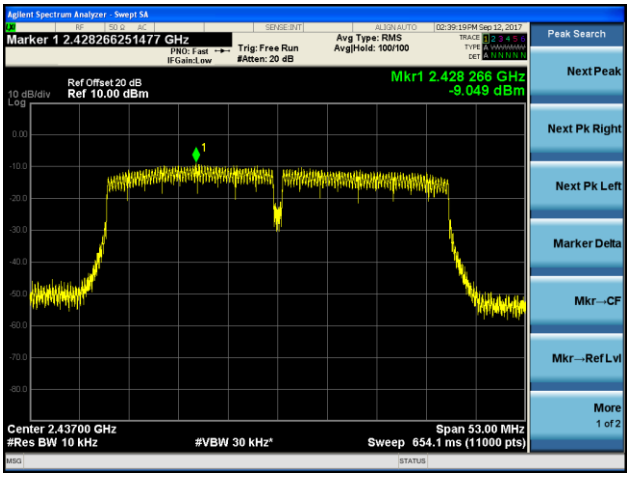
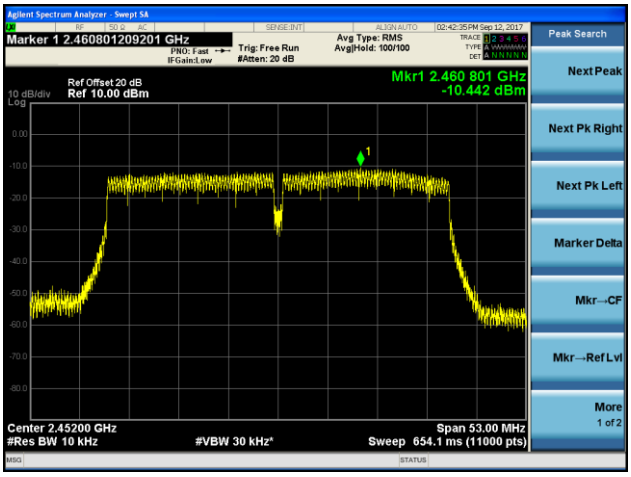
802.11n-HT20 AVGPSD - Ant 2 / Ant 1 + 2 (CDD Mode)	
Channel 01 (2412MHz)	**Channel 06 (2437MHz)**
	
Channel 11 (2462MHz)	
	

802.11n-HT40 AVGPSD - Ant 2 / Ant 1 + 2 (CDD Mode)	
Channel 03 (2422MHz)	**Channel 06 (2437MHz)**
	
Channel 09 (2452MHz)	
	

802.11n-HT20 AVGPSD - Ant 1 / Ant 1 + 2 (Beam-Forming Mode)	
Channel 01 (2412MHz)	**Channel 06 (2437MHz)**
	
Channel 11 (2462MHz)	
	

802.11n-HT40 AVGPSD - Ant 1 / Ant 1 + 2 (Beam-Forming Mode)	
Channel 03 (2422MHz)	**Channel 06 (2437MHz)**
	
Channel 09 (2452MHz)	
	

802.11n-HT20 AVGPSD - Ant 2 / Ant 1 + 2 (Beam-Forming Mode)	
Channel 01 (2412MHz)	**Channel 06 (2437MHz)**
	
Channel 11 (2462MHz)	
	

802.11n-HT40 AVGPSD - Ant 2 / Ant 1 + 2 (Beam-Forming Mode)	
Channel 03 (2422MHz)	**Channel 06 (2437MHz)**
	
Channel 09 (2452MHz)	
	

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 30dB 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 D01v04 - Section 11.2 & Section 11.3

7.5.3.Test Settitng

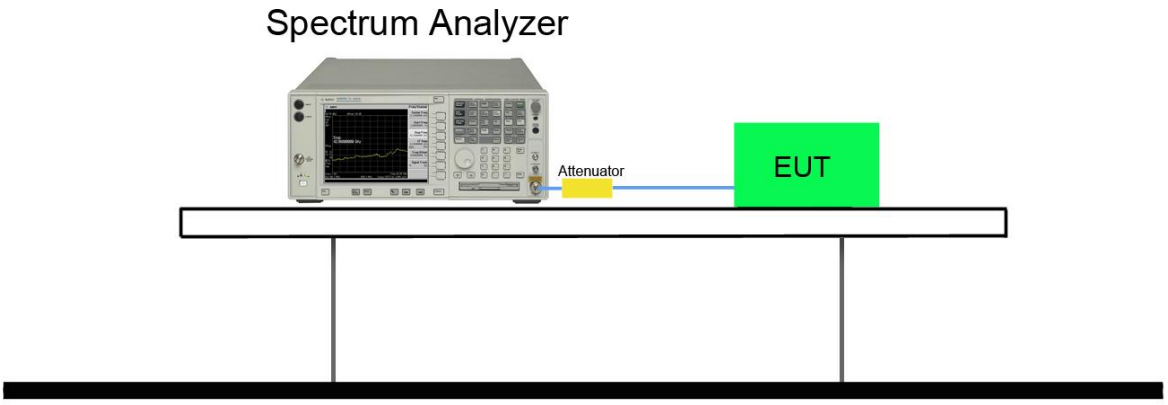
Reference level measurement

1. Set instrument center frequency to DTS channel center frequency
2. Set the span to ≥ 1.5 times the DTS bandwidth
3. Set the RBW = 100 kHz
4. Set the VBW ≥ 3 x RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

7.5.4.Test Setup



7.5.5.Test Result

Product	AC220 Wi-Fi AP OD external antenna US	Temperature	27°C
Test Engineer	Kevin Ker	Relative Humidity	65%
Test Site	SR2	Test Date	2017/07/23
Test Item	Conducted Band Edge and Out-of-Band Emissions		

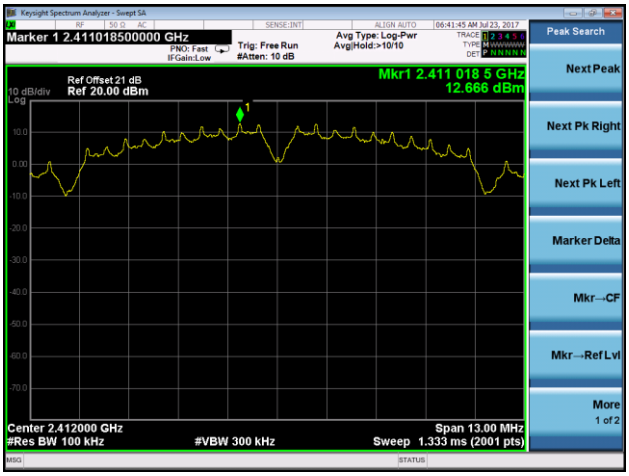
Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Limit (dBc to dBm)	Result
Ant 1						
802.11b	1Mbps	01	2412	30	-17.33	Pass
802.11b	1Mbps	06	2437	30	-17.32	Pass
802.11b	1Mbps	11	2462	30	-17.20	Pass
802.11g	6Mbps	01	2412	30	-21.27	Pass
802.11g	6Mbps	06	2437	30	-20.24	Pass
802.11g	6Mbps	11	2462	30	-21.50	Pass
802.11n-HT20	MCS0	01	2412	30	-21.89	Pass
802.11n-HT20	MCS0	06	2437	30	-20.32	Pass
802.11n-HT20	MCS0	11	2462	30	-21.57	Pass
802.11n-HT40	MCS0	03	2422	30	-25.49	Pass
802.11n-HT40	MCS0	06	2437	30	-22.46	Pass
802.11n-HT40	MCS0	09	2452	30	-23.88	Pass
Ant 2						
802.11b	1Mbps	01	2412	30	-16.64	Pass
802.11b	1Mbps	06	2437	30	-16.66	Pass
802.11b	1Mbps	11	2462	30	-16.58	Pass
802.11g	6Mbps	01	2412	30	-20.03	Pass
802.11g	6Mbps	06	2437	30	-19.26	Pass
802.11g	6Mbps	11	2462	30	-20.27	Pass
802.11n-HT20	MCS0	01	2412	30	-21.05	Pass
802.11n-HT20	MCS0	06	2437	30	-19.28	Pass
802.11n-HT20	MCS0	11	2462	30	-20.77	Pass
802.11n-HT40	MCS0	03	2422	30	-24.88	Pass
802.11n-HT40	MCS0	06	2437	30	-21.04	Pass
802.11n-HT40	MCS0	09	2452	30	-24.20	Pass

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Limit (dBc to dBm)	Result
Ant 1 / Ant 1 + 2						
802.11b	1Mbps	01	2412	30	-16.65	Pass
802.11b	1Mbps	06	2437	30	-16.73	Pass
802.11b	1Mbps	11	2462	30	-16.44	Pass
802.11g	6Mbps	01	2412	30	-21.04	Pass
802.11g	6Mbps	06	2437	30	-19.21	Pass
802.11g	6Mbps	11	2462	30	-21.74	Pass
802.11n-HT20	MCS0	01	2412	30	-20.35	Pass
802.11n-HT20	MCS0	06	2437	30	-19.15	Pass
802.11n-HT20	MCS0	11	2462	30	-22.70	Pass
802.11n-HT40	MCS0	03	2422	30	-27.04	Pass
802.11n-HT40	MCS0	06	2437	30	-21.05	Pass
802.11n-HT40	MCS0	09	2452	30	-23.85	Pass

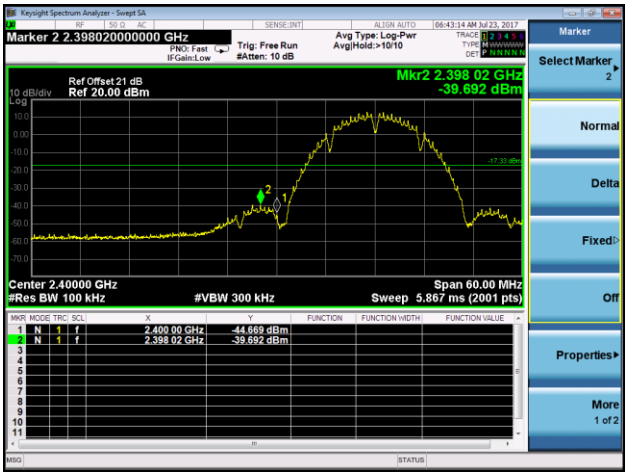
802.11b Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

100kHz PSD reference Level



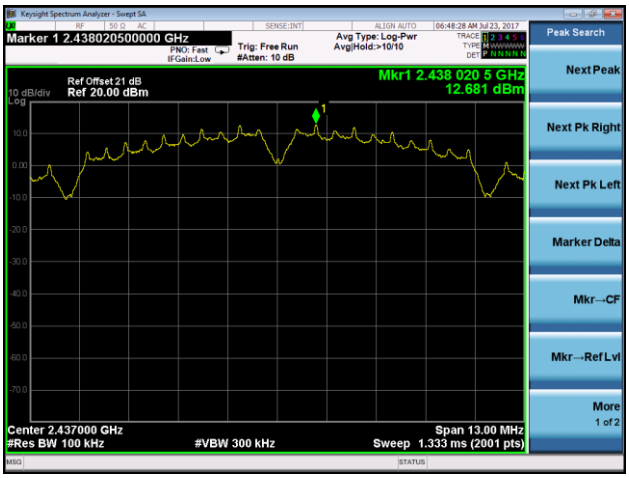
Low Band Edge



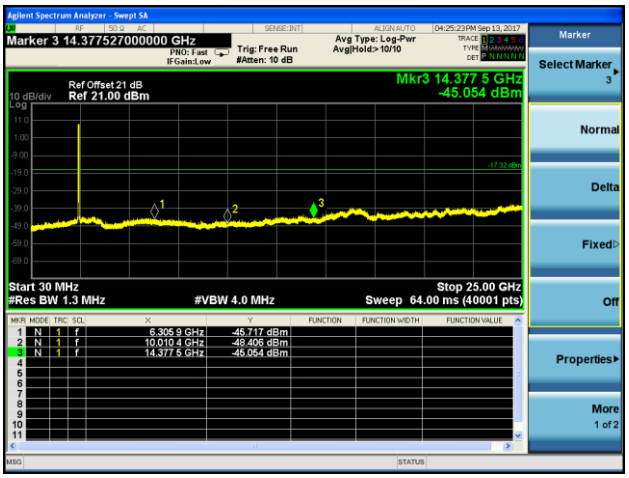
Spurious Emission

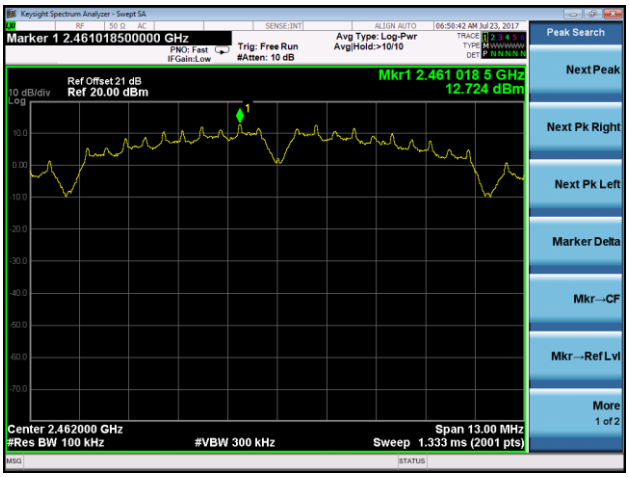
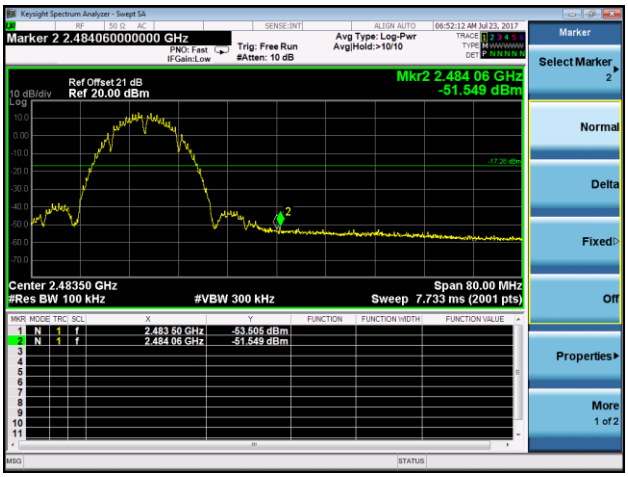
Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

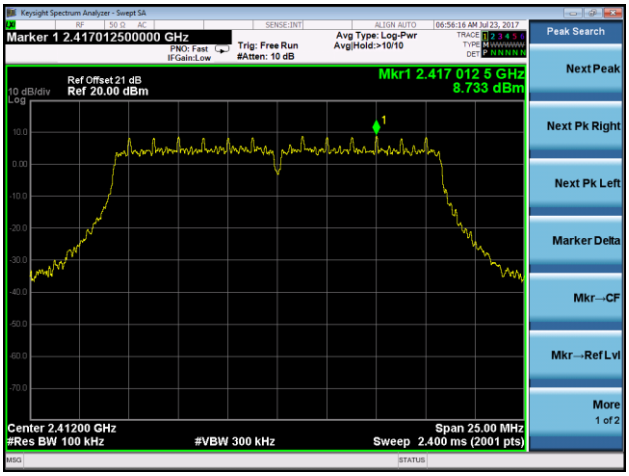


Channel 11 (2462MHz)	
100kHz PSD reference Level	**High Band Edge**
	
Spurious Emission	
	

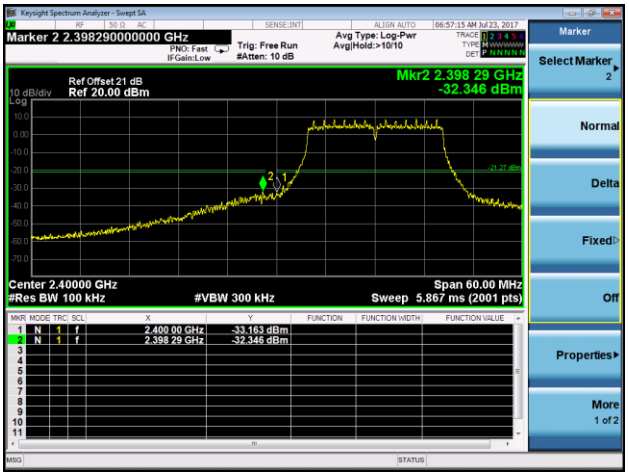
802.11g Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

100kHz PSD reference Level



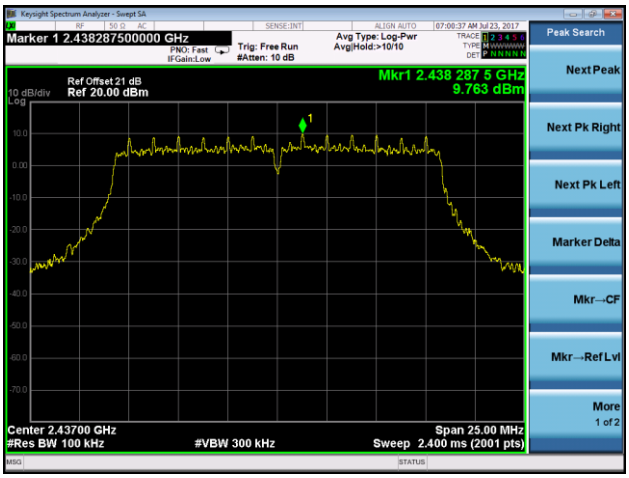
Low Band Edge



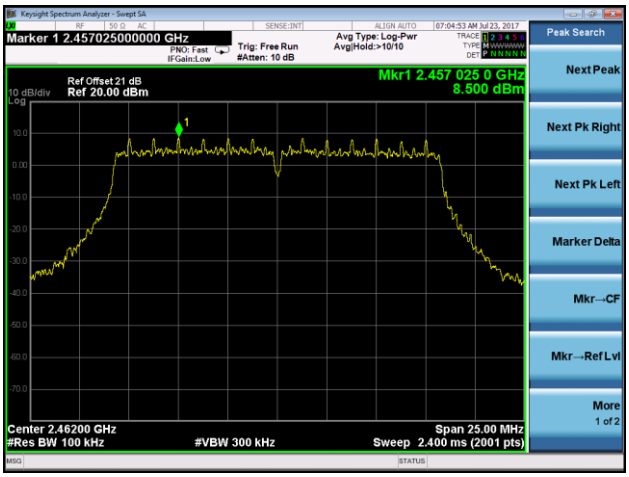
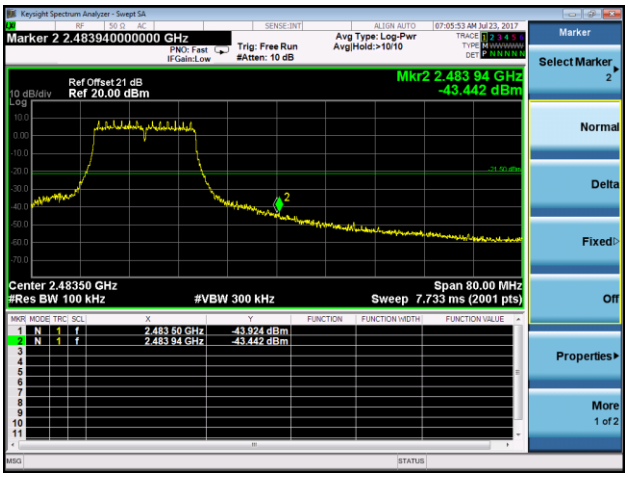
Spurious Emission

Channel 06 (2437MHz)

100kHz PSD reference Level



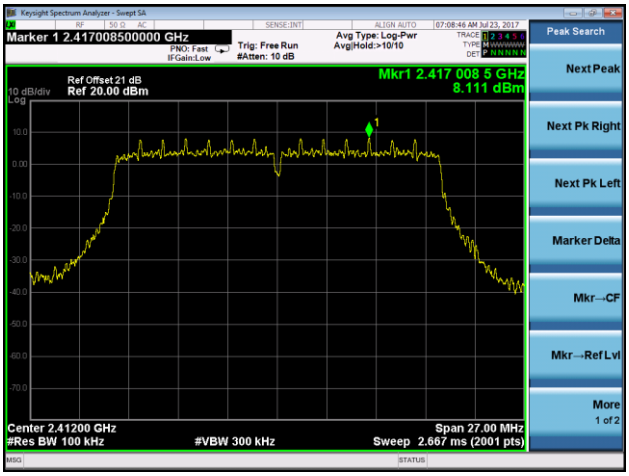
Spurious Emission

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

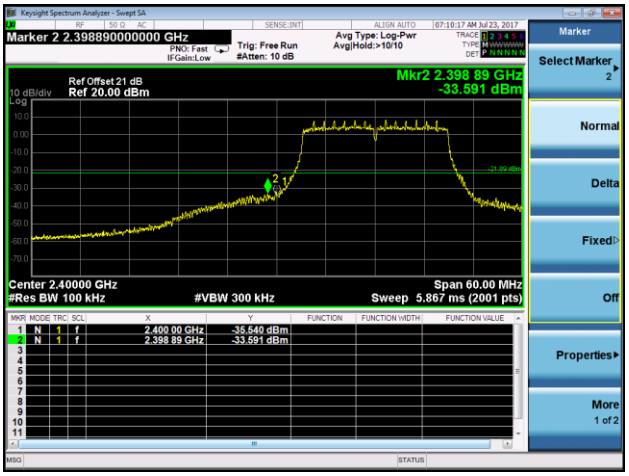
802.11n-HT20 Out-of-Band Emissions - Ant 1

Channel 01 (2412MHz)

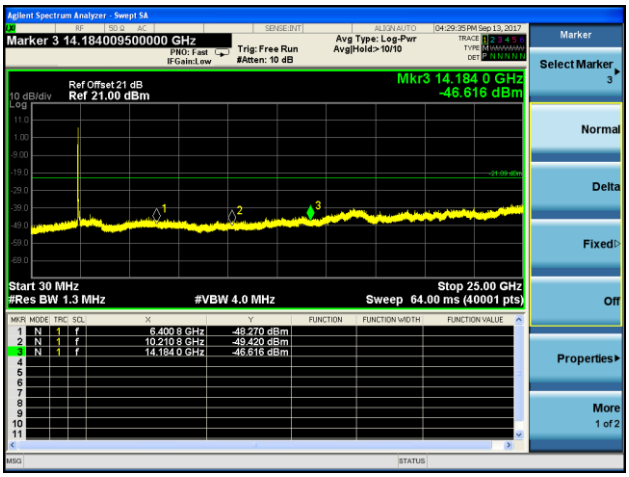
100kHz PSD reference Level



Low Band Edge

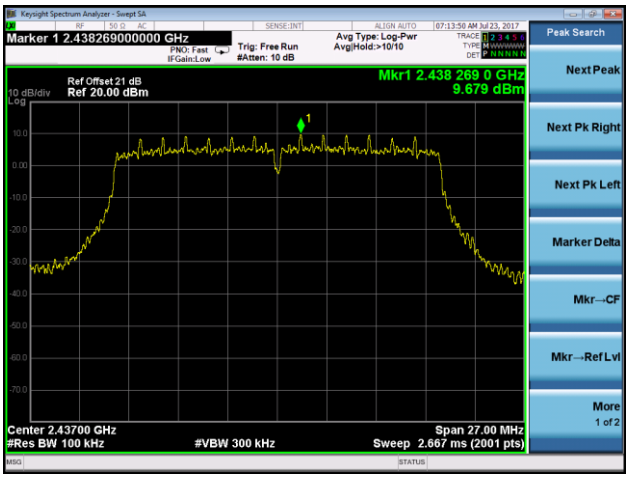


Spurious Emission

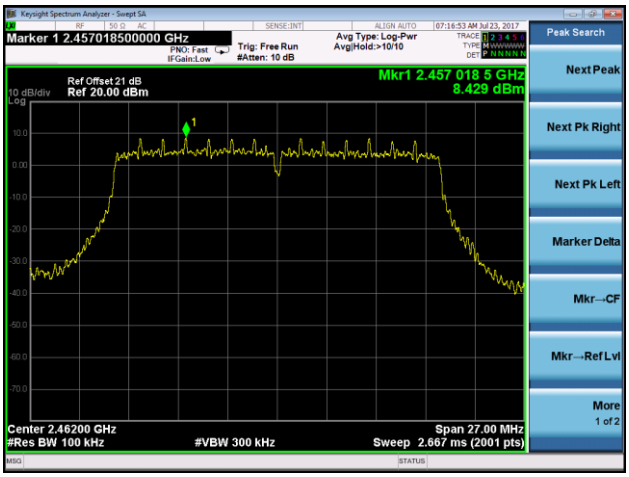
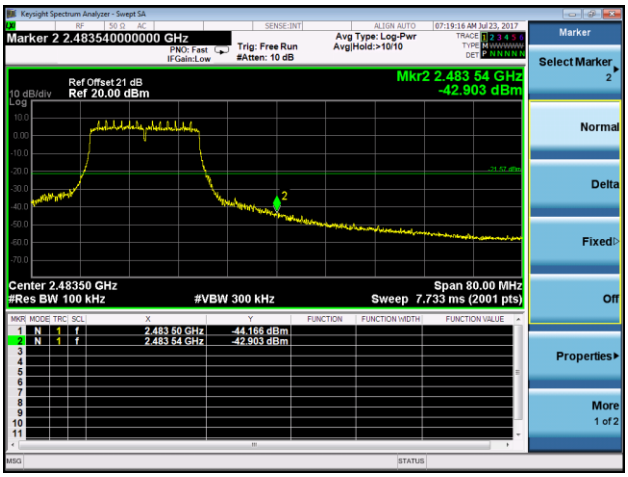


Channel 06 (2437MHz)

100kHz PSD reference Level



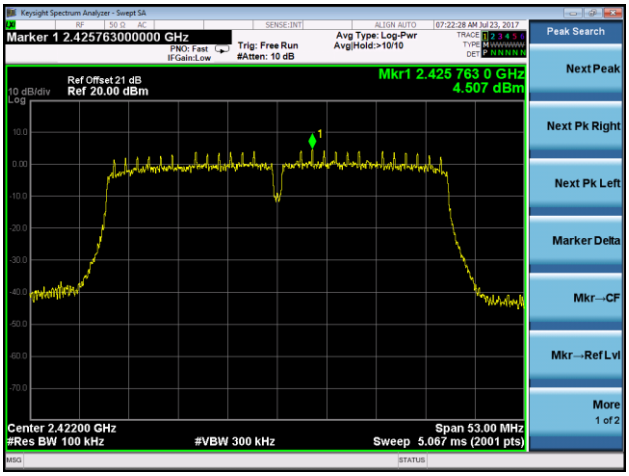
Spurious Emission

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

802.11n-HT40 Out-of-Band Emissions - Ant 1

Channel 03 (2422MHz)

100kHz PSD reference Level

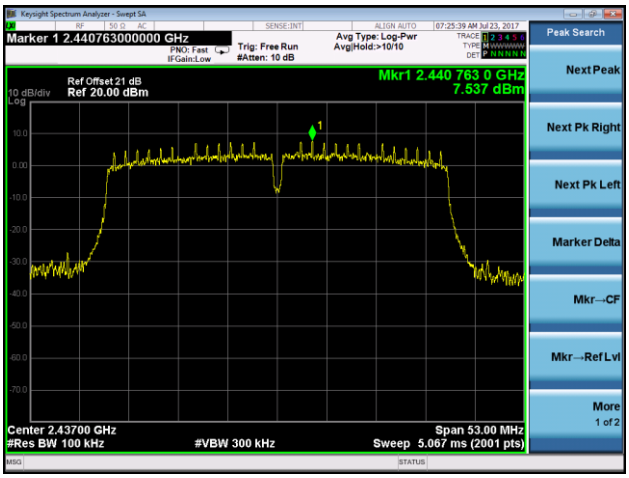


Low Band Edge

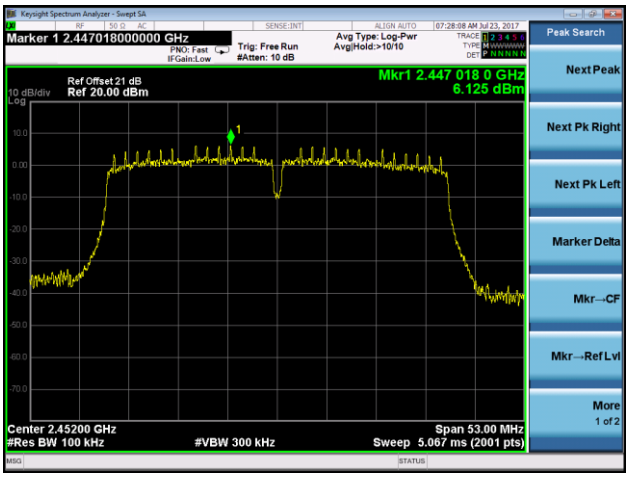
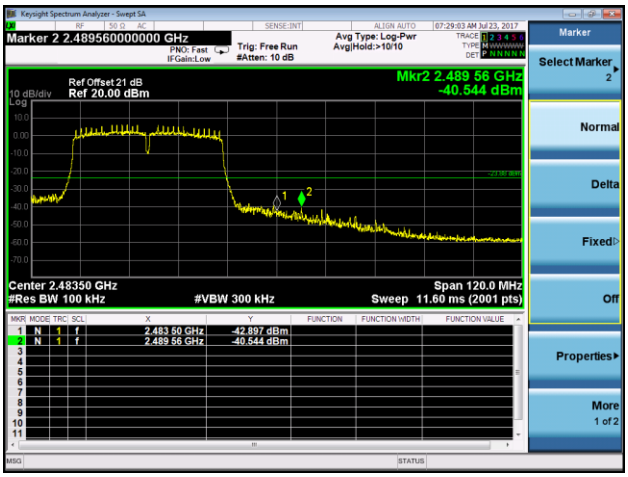
Spurious Emission

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

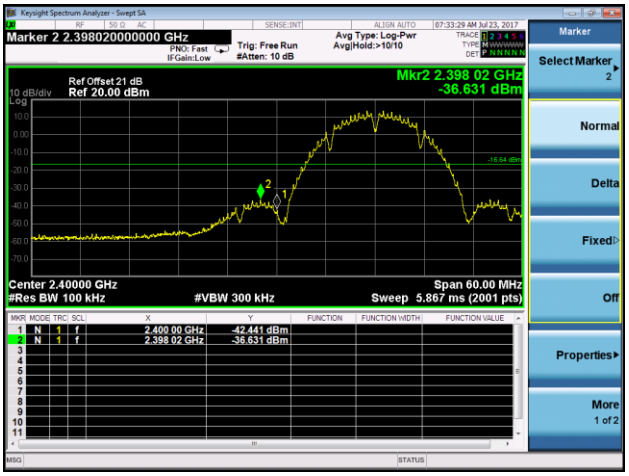
Channel 09 (2452MHz)	
100kHz PSD reference Level	**High Band Edge**
	
Spurious Emission	
	

802.11b Out-of-Band Emissions - Ant 2

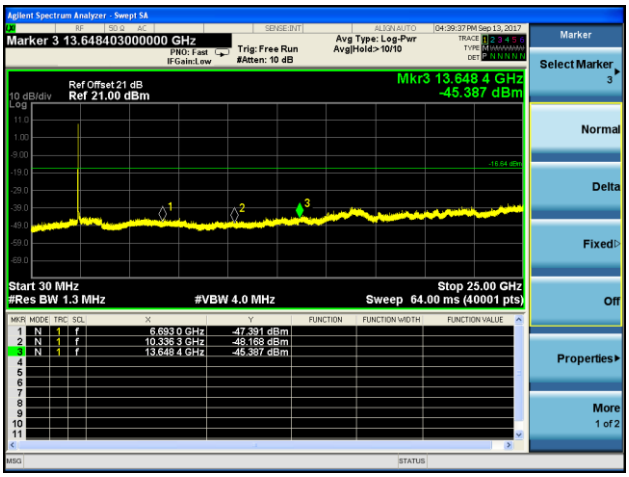
Channel 01 (2412MHz)

100kHz PSD reference Level

Low Band Edge

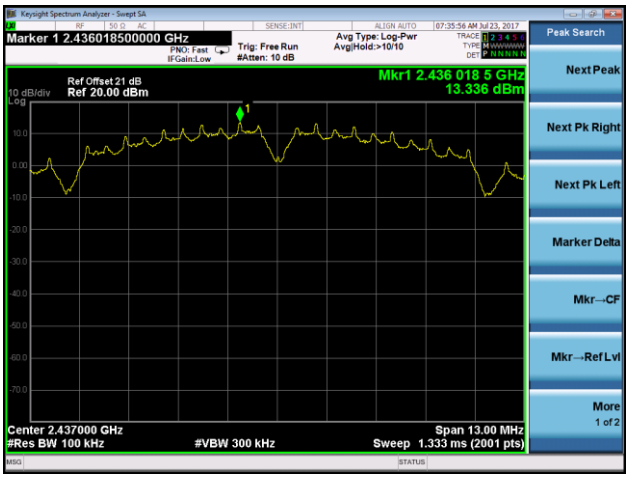


Spurious Emission

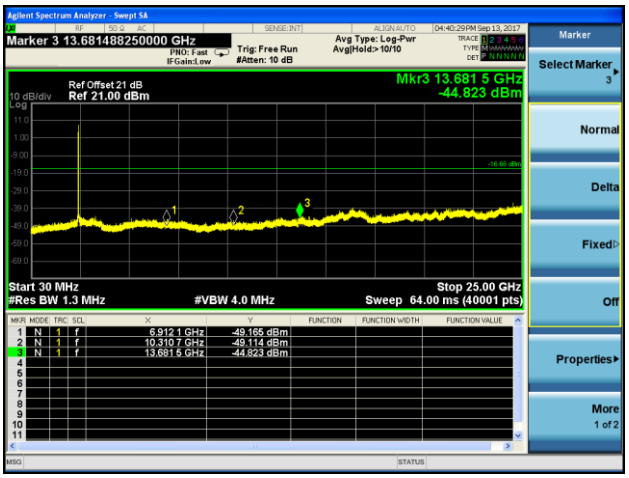


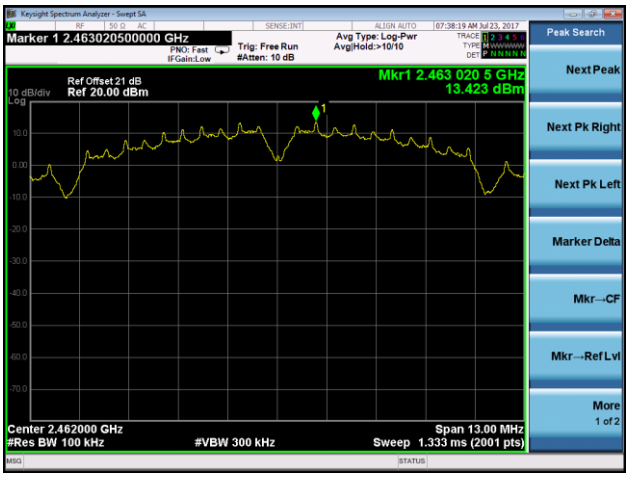
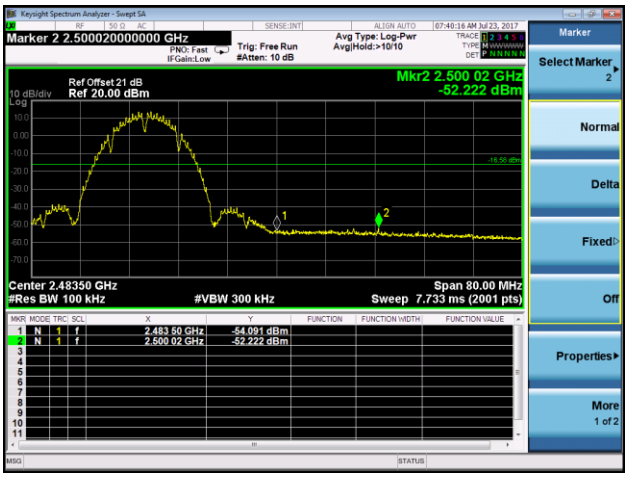
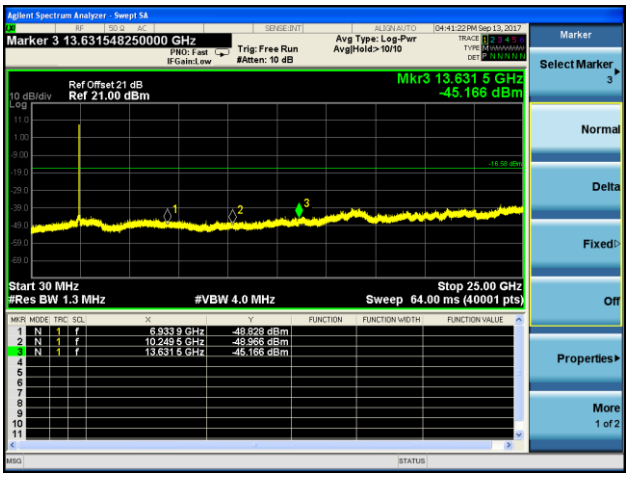
Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

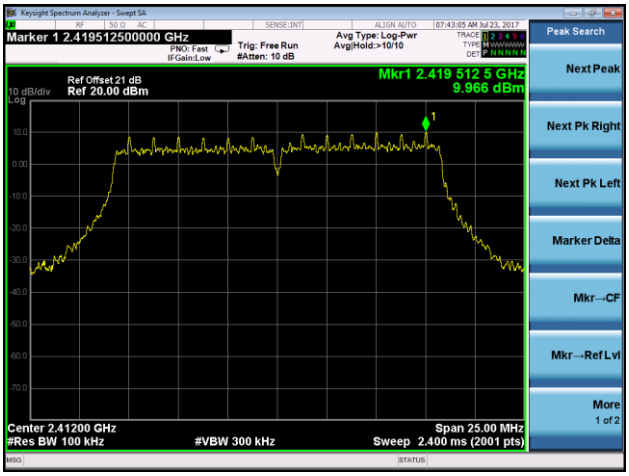


Channel 11 (2462MHz)	
100kHz PSD reference Level	**High Band Edge**
	
Spurious Emission	
	

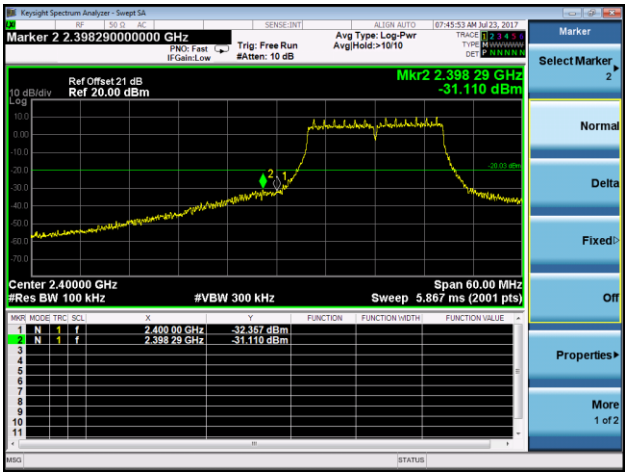
802.11g Out-of-Band Emissions - Ant 2

Channel 01 (2412MHz)

100kHz PSD reference Level



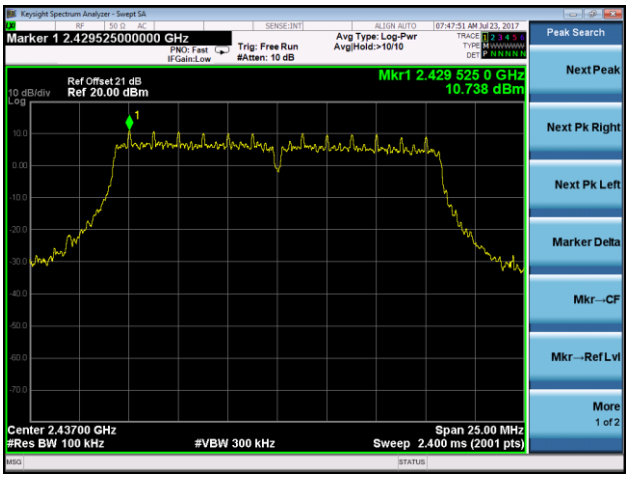
Low Band Edge



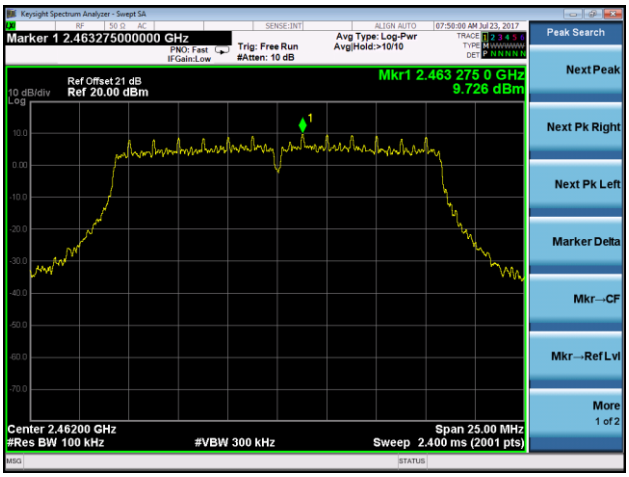
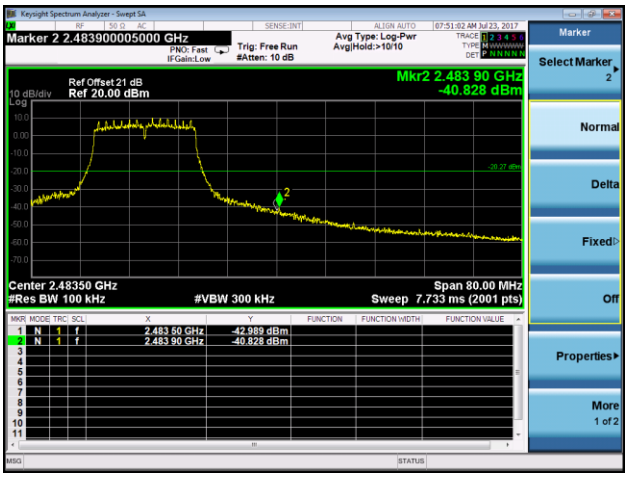
Spurious Emission

Channel 06 (2437MHz)

100kHz PSD reference Level



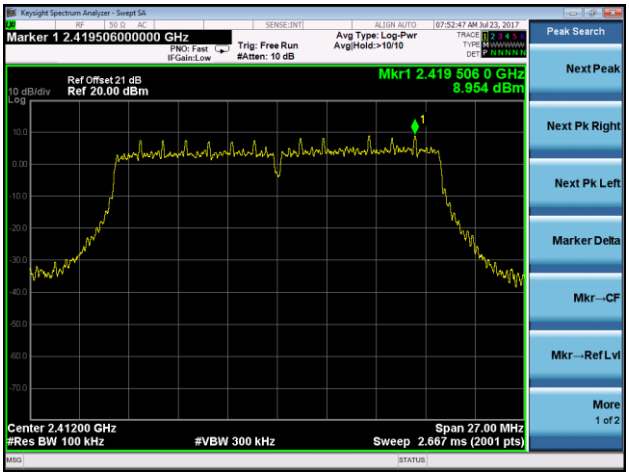
Spurious Emission

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

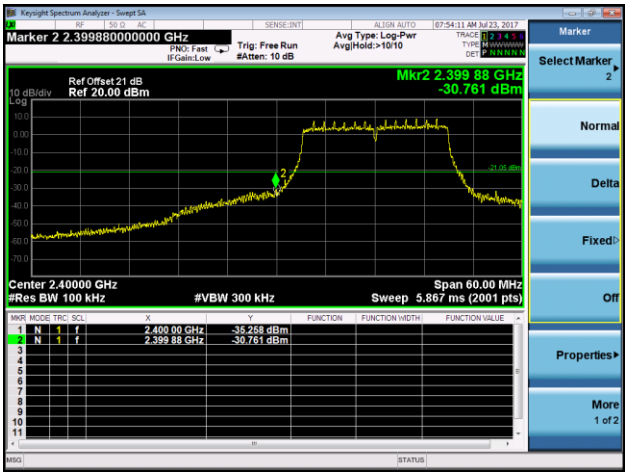
802.11n-HT20 Out-of-Band Emissions - Ant 2

Channel 01 (2412MHz)

100kHz PSD reference Level



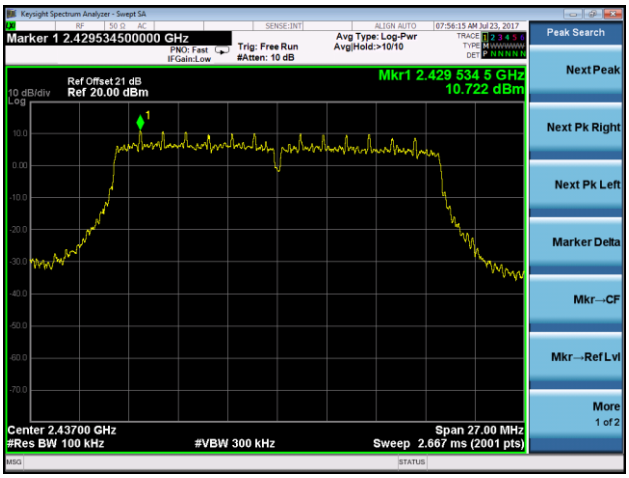
Low Band Edge



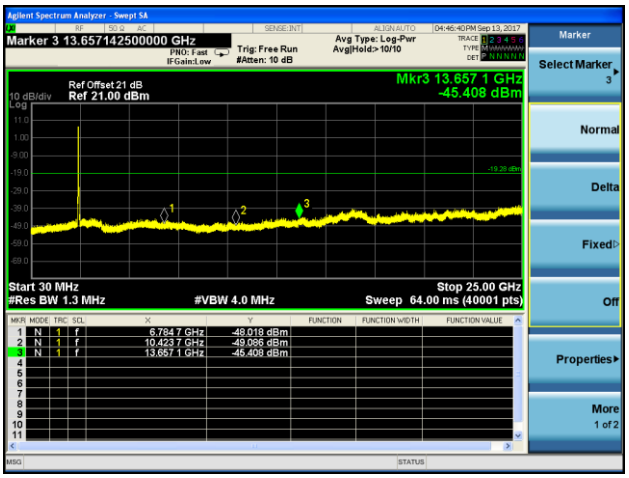
Spurious Emission

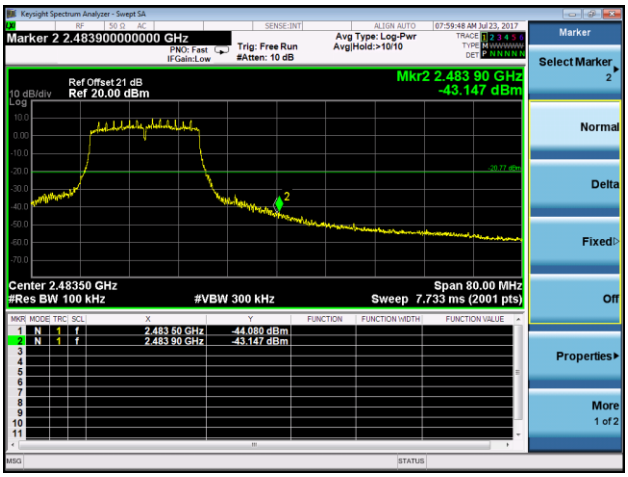
Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission



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