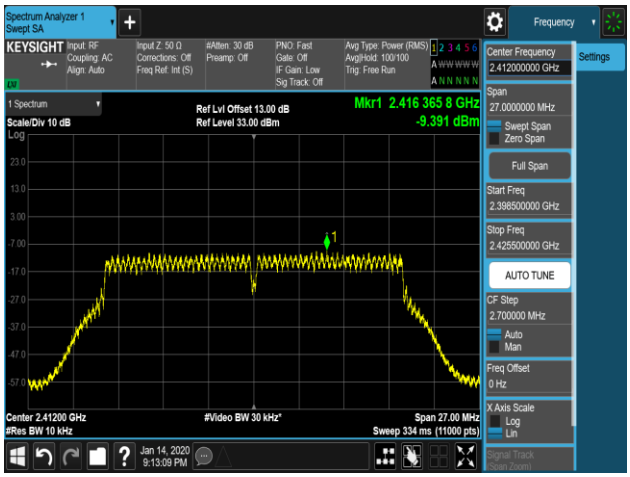
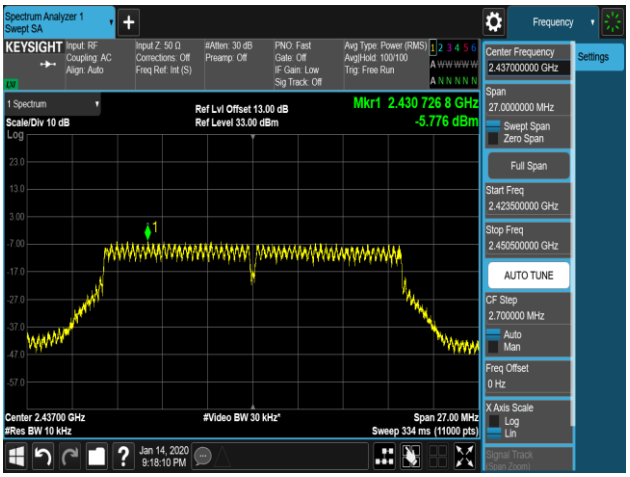
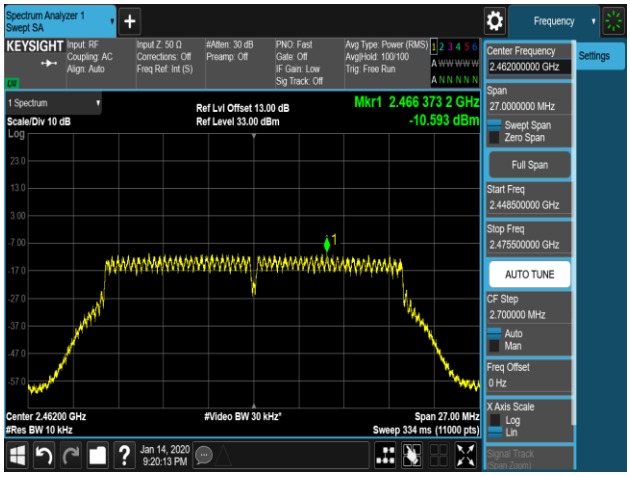
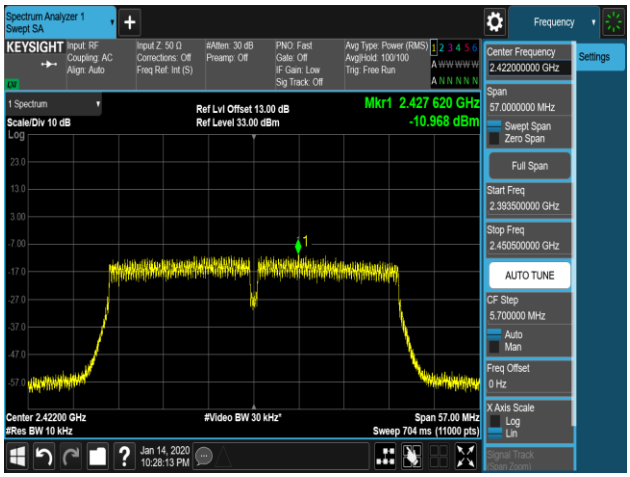
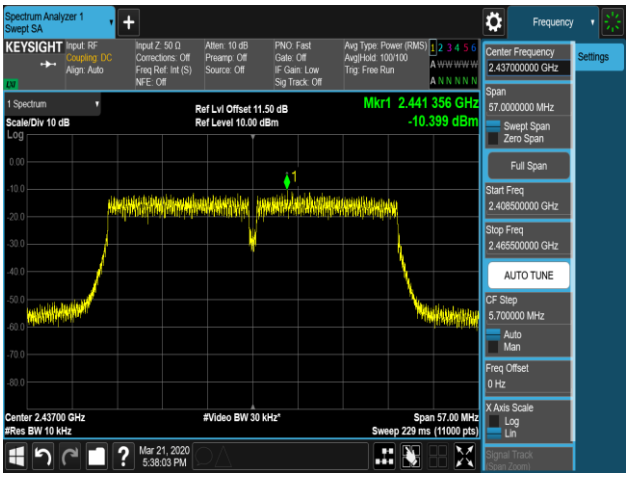
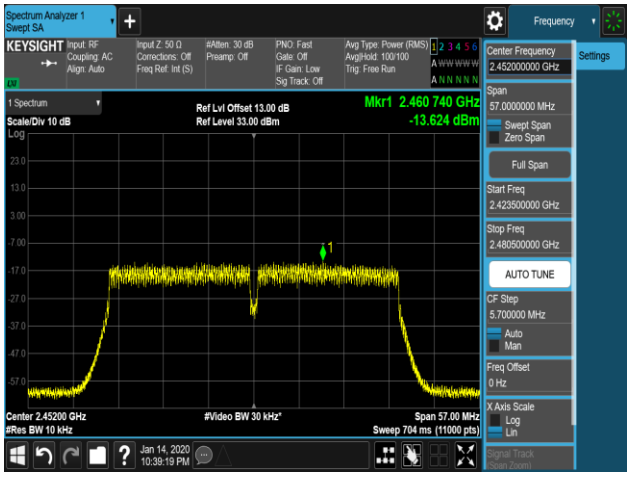
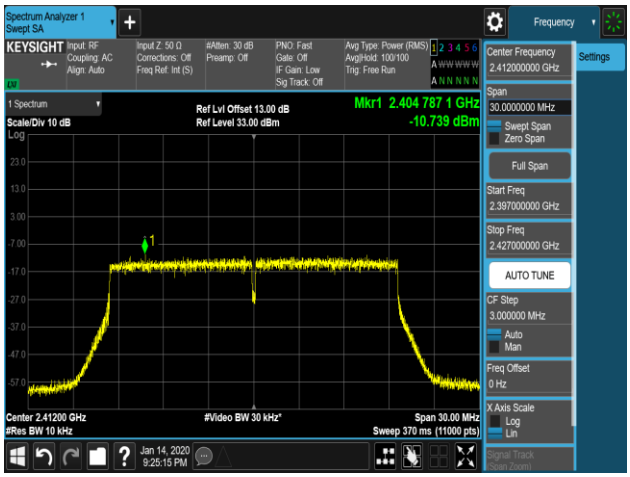
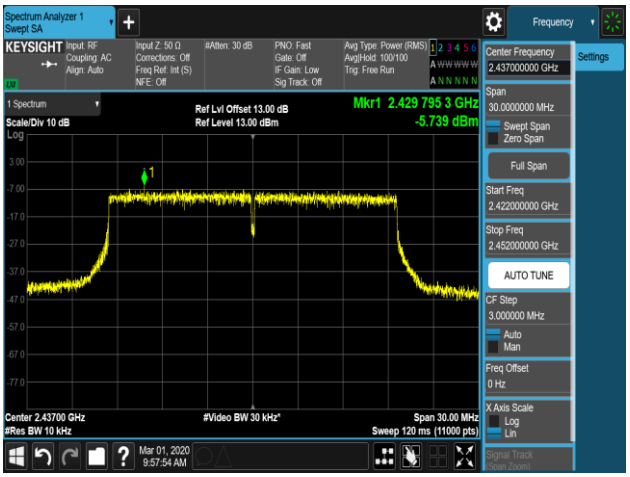
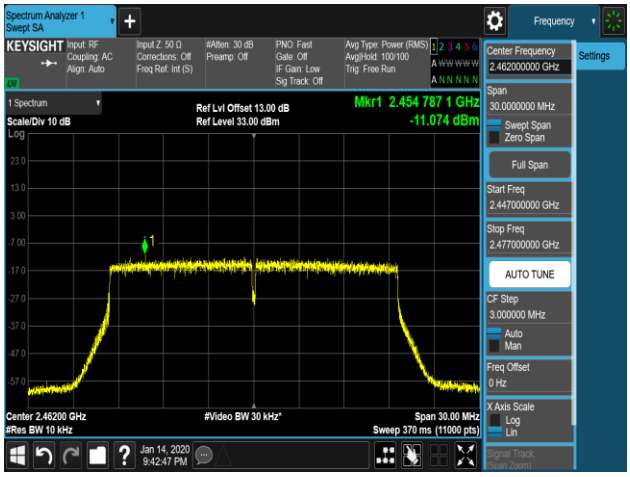
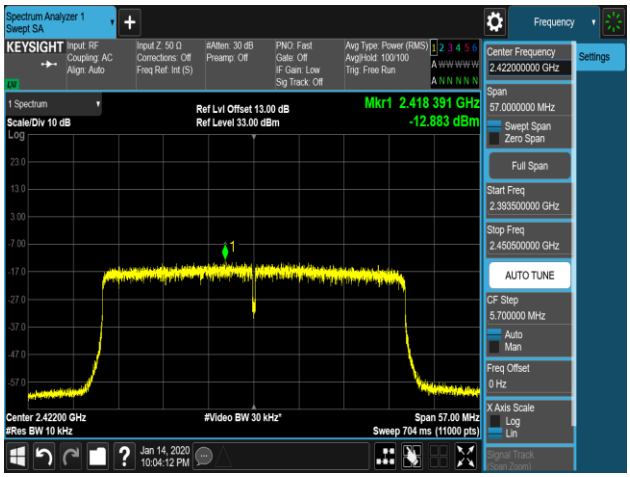
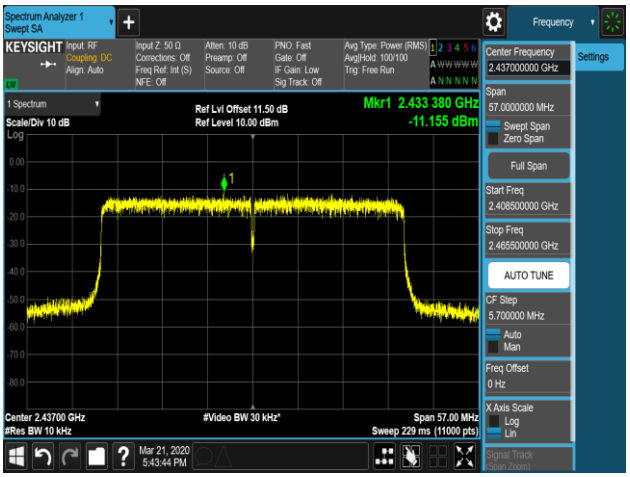
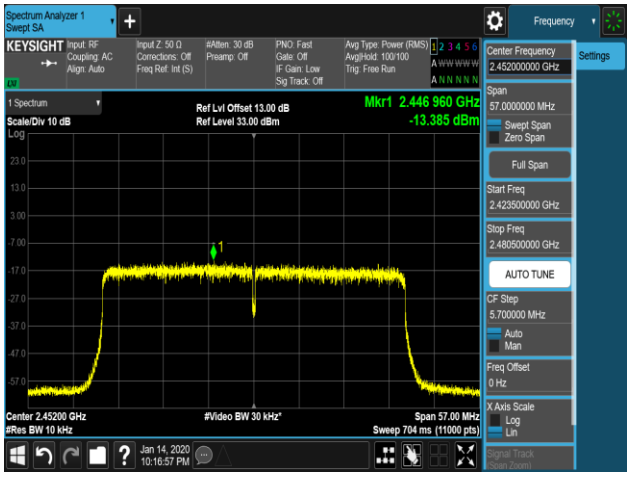
802.11n-HT20 AVGPSD - Ant 1 / Ant 0 + 1	
Channel 01 (2412MHz)	**Channel 06 (2437MHz)**
	
Channel 11 (2462MHz)	
	

802.11n-HT40 AVGPSD - Ant 1 / Ant 0 + 1	
Channel 03 (2422MHz)	**Channel 06 (2437MHz)**
	
Channel 11 (2452MHz)	
	

802.11ax-HE20 AVGPSD - Ant 1 / Ant 0 + 1	
Channel 01 (2412MHz)	**Channel 06 (2437MHz)**
	
Channel 11 (2462MHz)	
	

802.11ax-HE40 AVGPSD - Ant 1 / Ant 0 + 1	
Channel 03 (2422MHz)	**Channel 06 (2437MHz)**
	
Channel 11 (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 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100kHz bandwidth per the PSD procedure.

7.5.2.Test Procedure Used

ANSI C63.10 Section 11.11

7.5.3.Test Settitng

1. Reference level measurement

a) Set instrument center frequency to DTS channel center frequency

b) Set the span to ≥ 1.5 times the DTS bandwidth

c) Set the RBW = 100 kHz

d) Set the VBW ≥ 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) Start frequency was set to 30MHz and stop frequency was set to 25GHz (separated into two plots per channel)

b) RBW = 1.3MHz

c) VBW = 4MHz

d) Detector = Peak

e) Trace mode = max hold

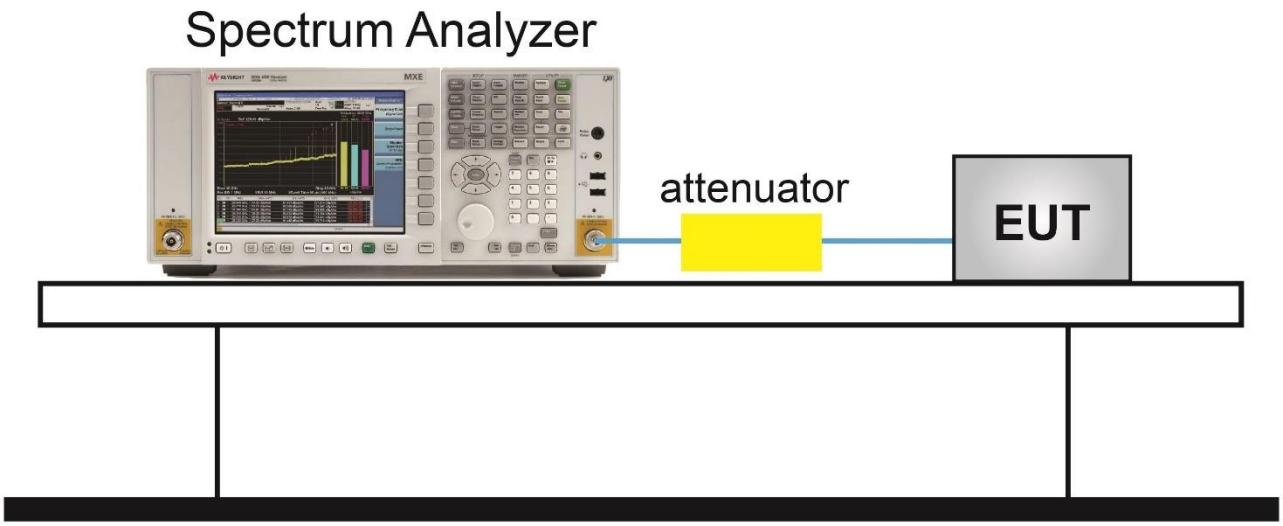
f) Sweep time = auto couple

g) The trace was allowed to stabilize

Test Notes

1. RBW was set to 1.3MHz rather than 100kHz in order to increase the measurement speed.
2. The display line shown in the following plots denotes the limit at 30dB below the fundamental emission level measured in a 100kHz bandwidth. However, since the traces in the following plots are measured with a 1.3MHz RBW, the display line may not necessarily appear to be 30dB below the level of the fundamental in a 1.3MHz bandwidth.
3. For plots showing conducted spurious emissions near the limit, the frequencies were investigated with a reduced RBW to ensure that no emissions were present.

7.5.4.Test Setup



7.5.5.Test Result

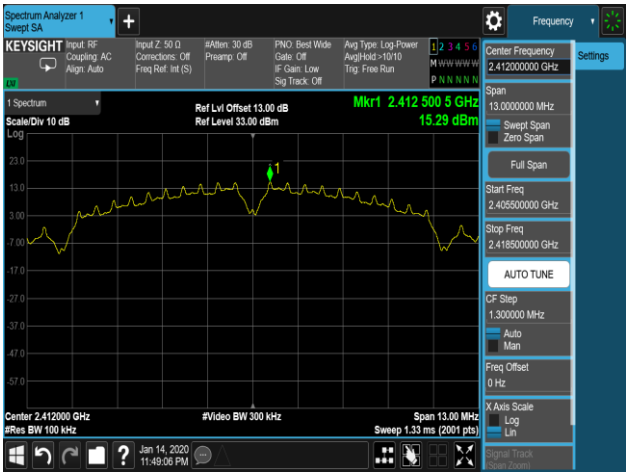
Product	ACCESS POINT	Temperature	25 ~ 27°C
Test Engineer	Kevin Ker	Relative Humidity	56 ~ 65%
Test Site	SR2	Test Date	2020/01/14 ~ 2020/01/15
Test Item	Conducted Band Edge and Out-of-Band Emissions		

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Result
Ant 0 / Ant 0 + 1					
802.11b	1Mbps	01	2412	30	Pass
802.11b	1Mbps	06	2437	30	Pass
802.11b	1Mbps	11	2462	30	Pass
802.11g	6Mbps	01	2412	30	Pass
802.11g	6Mbps	06	2437	30	Pass
802.11g	6Mbps	11	2462	30	Pass
802.11n-HT20	MCS0	01	2412	30	Pass
802.11n-HT20	MCS0	06	2437	30	Pass
802.11n-HT20	MCS0	11	2462	30	Pass
802.11n-HT40	MCS0	03	2422	30	Pass
802.11n-HT40	MCS0	06	2437	30	Pass
802.11n-HT40	MCS0	09	2452	30	Pass
802.11ax-HE20	MCS0	01	2412	30	Pass
802.11ax-HE20	MCS0	06	2437	30	Pass
802.11ax-HE20	MCS0	11	2462	30	Pass
802.11ax-HE40	MCS0	03	2422	30	Pass
802.11ax-HE40	MCS0	06	2437	30	Pass
802.11ax-HE40	MCS0	09	2452	30	Pass

802.11b Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 01 (2412MHz)

100kHz PSD reference Level



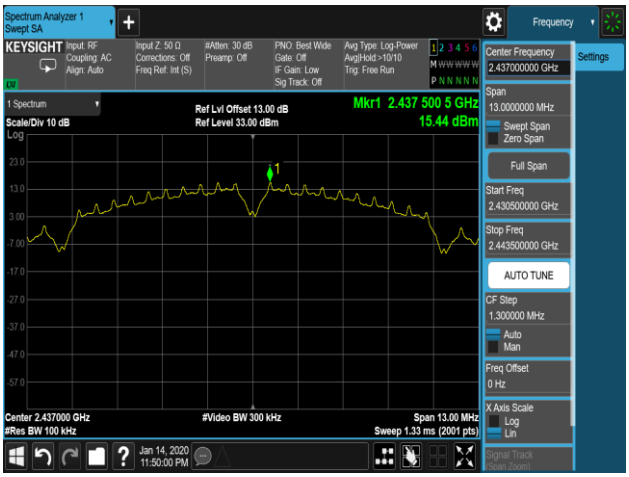
Low Band Edge

Spurious Emission

Note: The Value of the Display Line is -14.71dBm

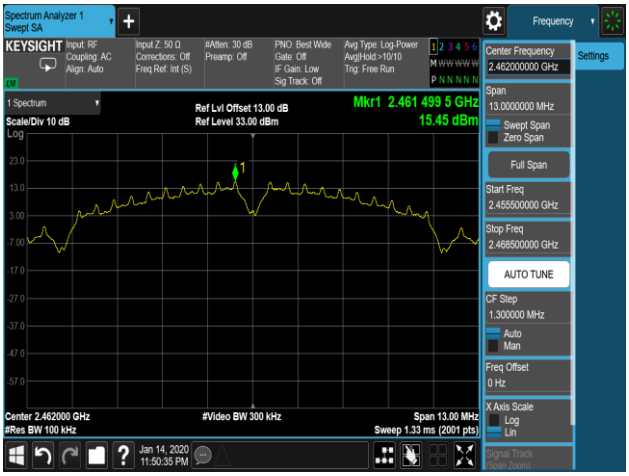
Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

Note: The Value of the Display Line is -14.56dBm

802.11b Out-of-Band Emissions - Ant 0 / Ant 0 + 1	
Channel 11 (2462MHz)	
100kHz PSD reference Level	High Band Edge
	
Spurious Emission	
	Note: The Value of the Display Line is -14.55dBm

802.11g Out-of-Band Emissions - Ant 0 / Ant 0 + 1

Channel 01 (2412MHz)

100kHz PSD reference Level

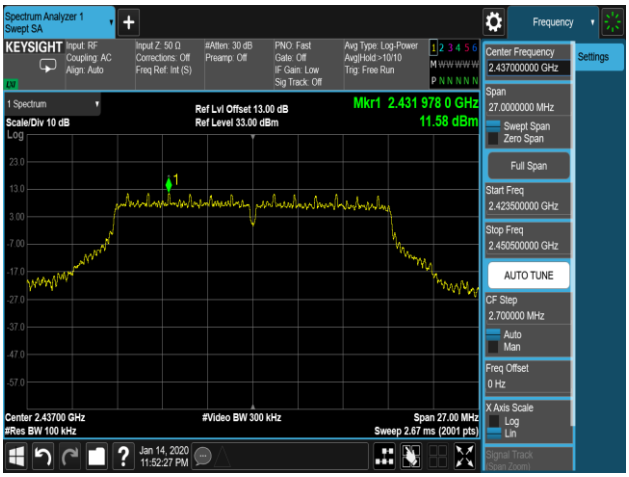
Low Band Edge

Spurious Emission

Note: The Value of the Display Line is -21.73dBm

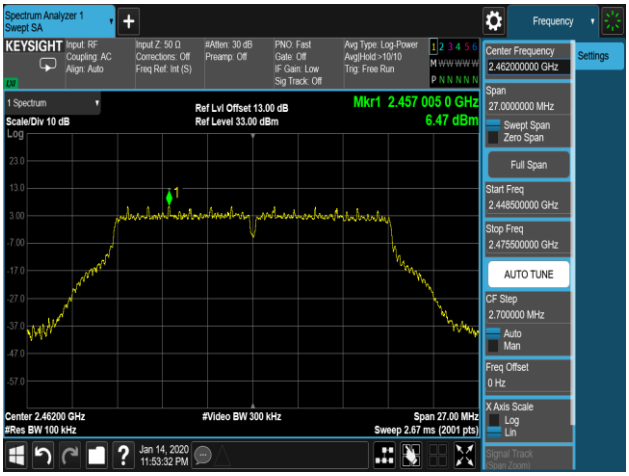
Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

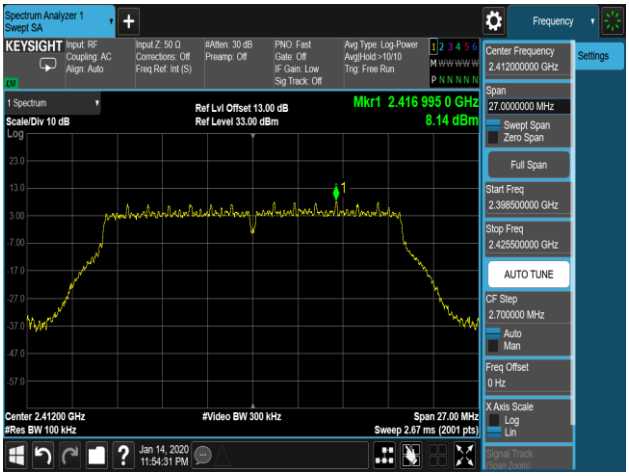
Note: The Value of the Display Line is -18.42dBm

802.11g Out-of-Band Emissions - Ant 0 / Ant 0 + 1	
Channel 11 (2462MHz)	
100kHz PSD reference Level	High Band Edge
	
Spurious Emission	
	Note: The Value of the Display Line is -23.53dBm

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

Channel 01 (2412MHz)

100kHz PSD reference Level



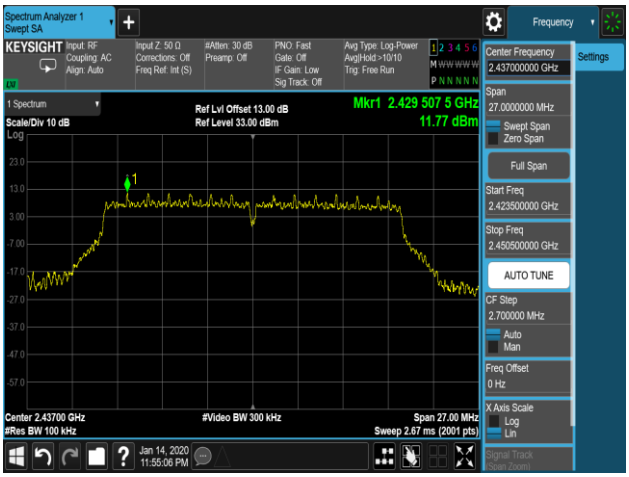
Low Band Edge

Spurious Emission

Note: The Value of the Display Line is -21.86dBm

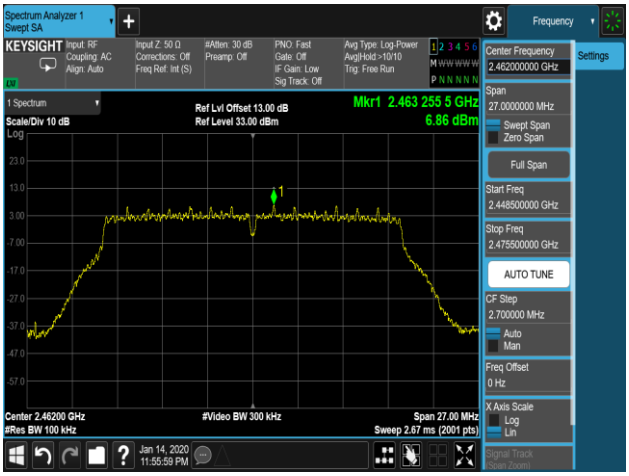
Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

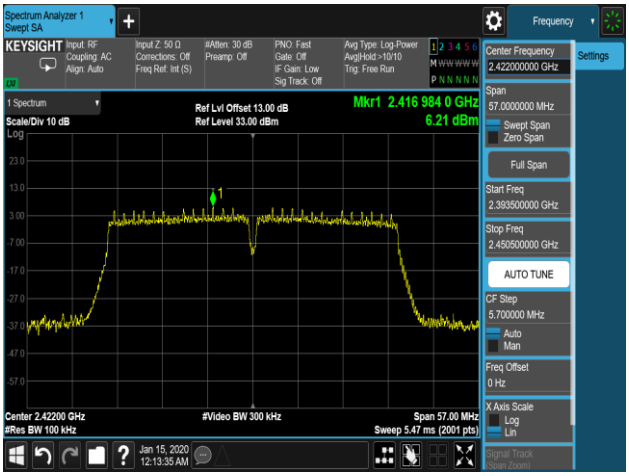
Note: The Value of the Display Line is -18.23dBm

802.11n-HT20 Out-of-Band Emissions - Ant 0 / Ant 0 + 1	
Channel 11 (2462MHz)	
100kHz PSD reference Level	High Band Edge
	
Spurious Emission	
	Note: The Value of the Display Line is -23.14dBm

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

Channel 03 (2422MHz)

100kHz PSD reference Level



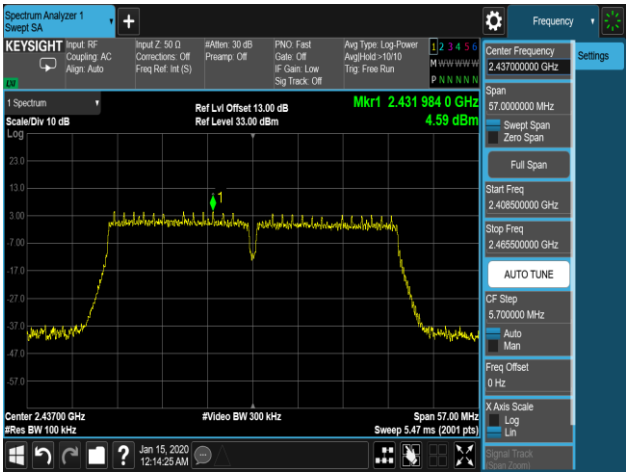
Low Band Edge

Spurious Emission

Note: The Value of the Display Line is -23.79dBm

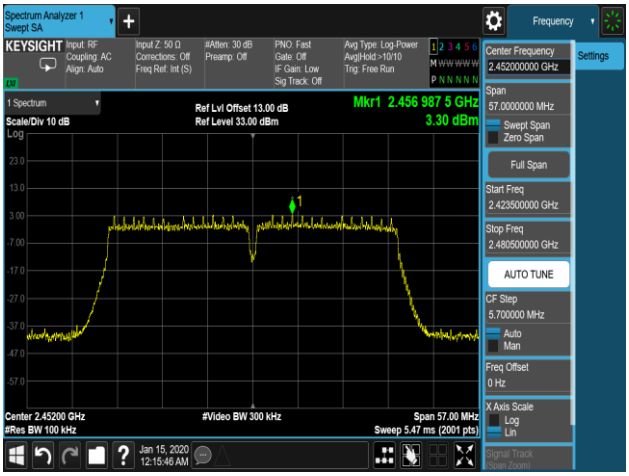
Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

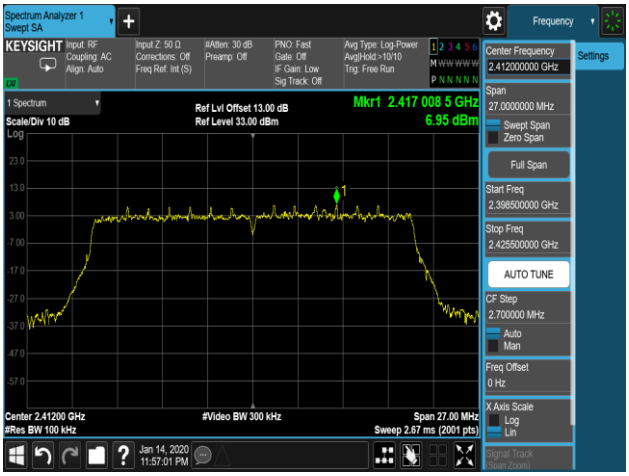
Note: The Value of the Display Line is -25.41dBm

802.11n-HT40 Out-of-Band Emissions - Ant 0 / Ant 0 + 1	
Channel 09 (2452MHz)	
100kHz PSD reference Level	High Band Edge
	
Spurious Emission	
	Note: The Value of the Display Line is -26.70dBm

802.11ax-HE20 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

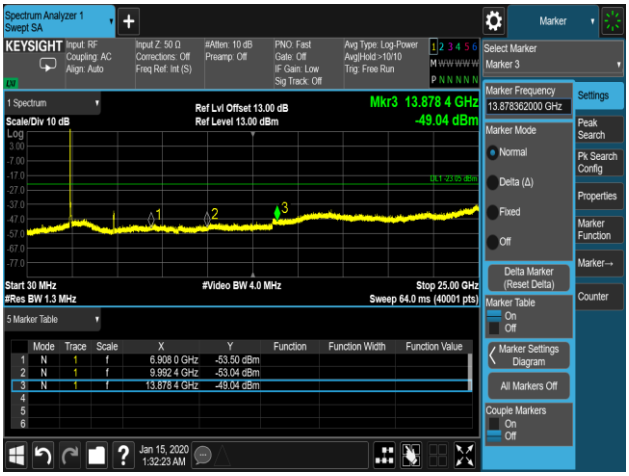
Channel 01 (2412MHz)

100kHz PSD reference Level



Low Band Edge

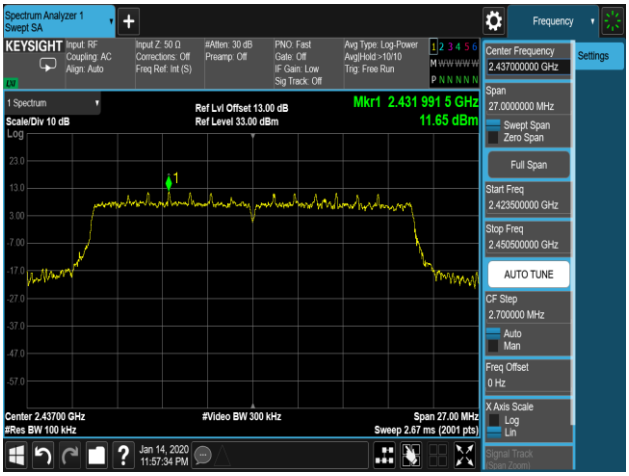
Spurious Emission



Note: The Value of the Display Line is -23.05dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

Note: The Value of the Display Line is -18.35dBm