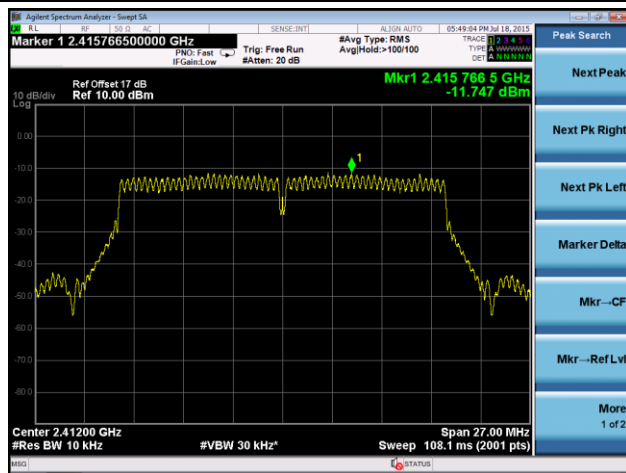
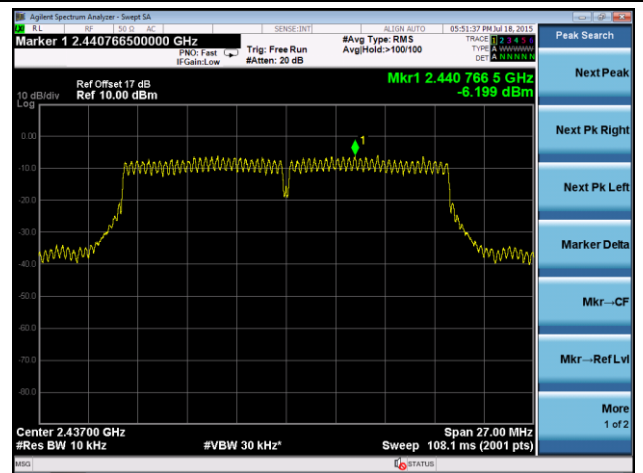


802.11n-HT20 AVGPSD - Ant 1 / Ant 0 + 1

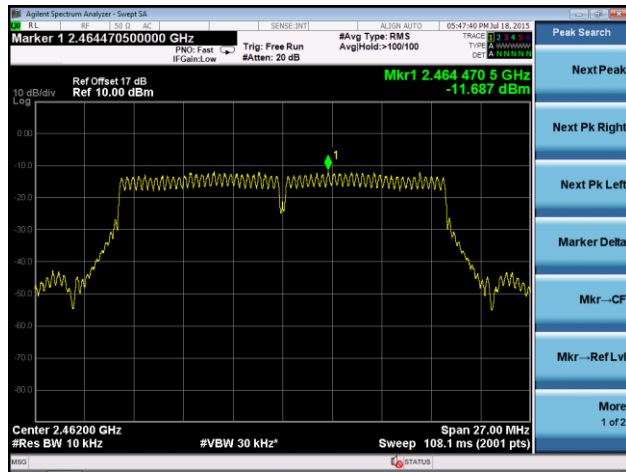
Channel 01 (2412MHz)



Channel 06 (2437MHz)

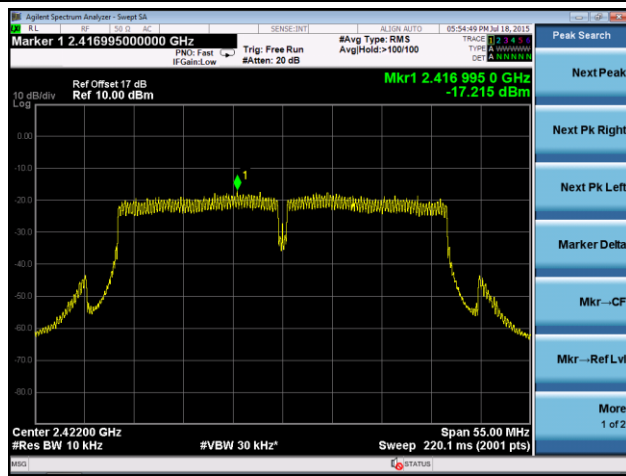


Channel 11 (2462MHz)

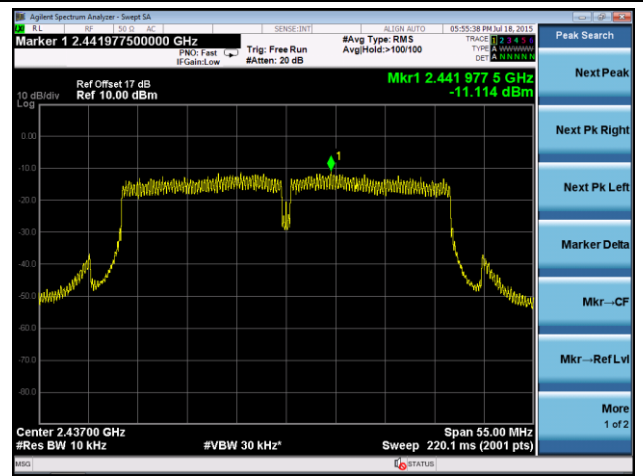


802.11n-HT40 AVGPSD - Ant 1 / Ant 0 + 1

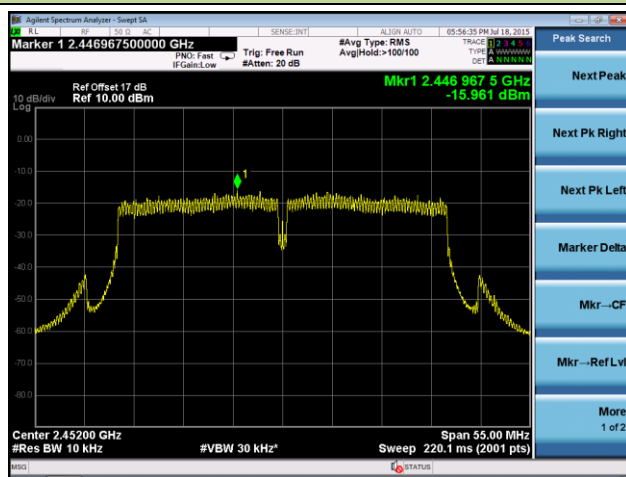
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 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 100kHz bandwidth per the PSD procedure.

### **7.5.2. Test Procedure Used**

ANSI C63.10 Section 11.11

### **7.5.3. Test Setting**

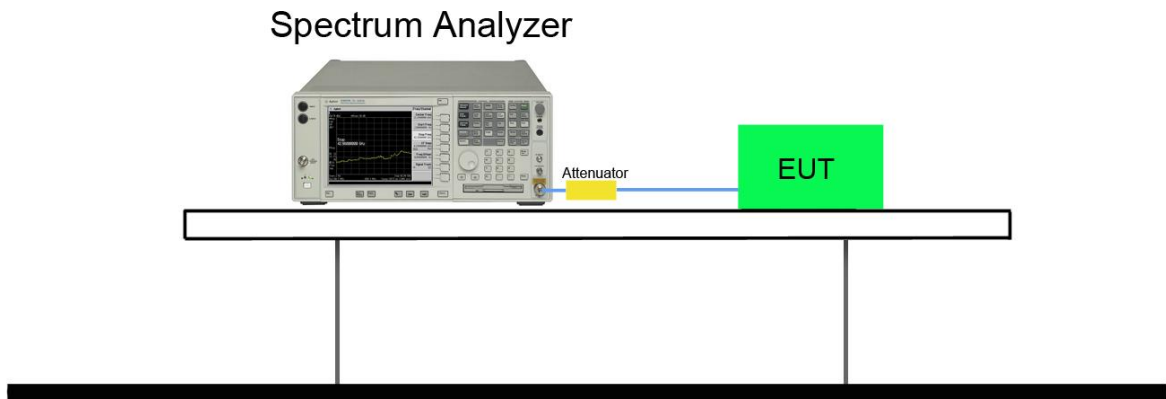
#### **1. Reference level measurement**

- (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  $\geq 3 \times$  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



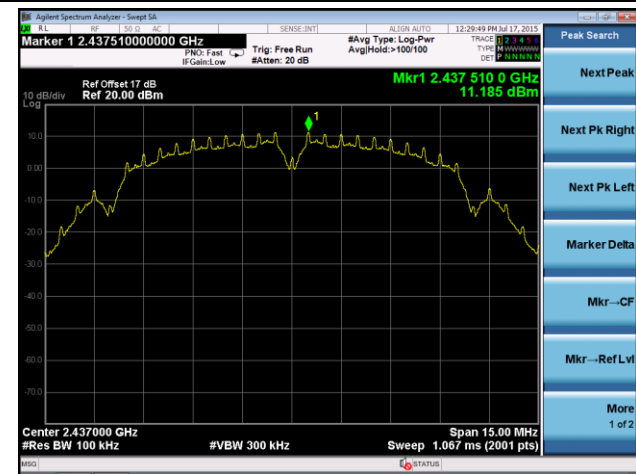
### 7.5.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
<b>Ant 0</b>					
802.11b	1	01	2412	30dBc	Pass
802.11b	1	06	2437	30dBc	Pass
802.11b	1	11	2462	30dBc	Pass
802.11g	6	01	2412	30dBc	Pass
802.11g	6	06	2437	30dBc	Pass
802.11g	6	11	2462	30dBc	Pass
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass
<b>Ant 1</b>					
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
Ant 0 / Ant 0 + 1					
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass
Ant 1 / Ant 0 + 1					
802.11n-HT20	6.5	01	2412	30dBc	Pass
802.11n-HT20	6.5	06	2437	30dBc	Pass
802.11n-HT20	6.5	11	2462	30dBc	Pass
802.11n-HT40	13.5	03	2422	30dBc	Pass
802.11n-HT40	13.5	06	2437	30dBc	Pass
802.11n-HT40	13.5	09	2452	30dBc	Pass

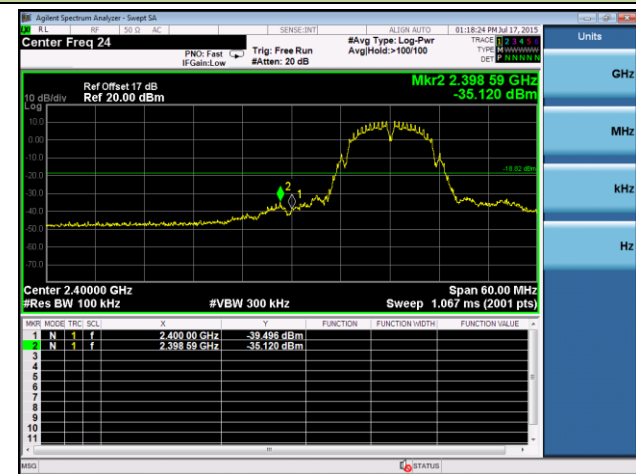
## 802.11b Out-of-Band Emissions - Ant 0

### 100kHz PSD Reference Level

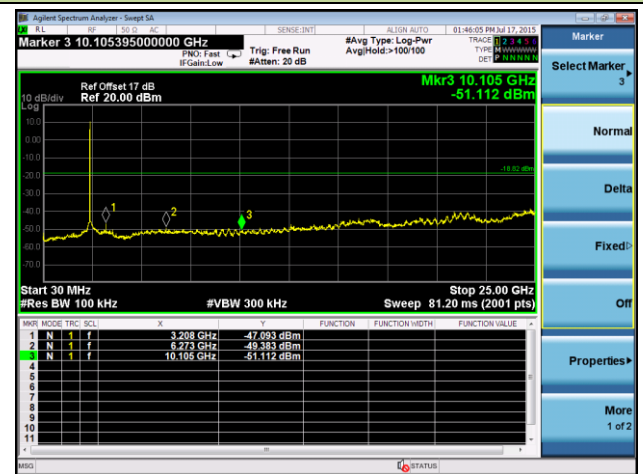


### Channel 01 (2412MHz)

#### Low Band Edge

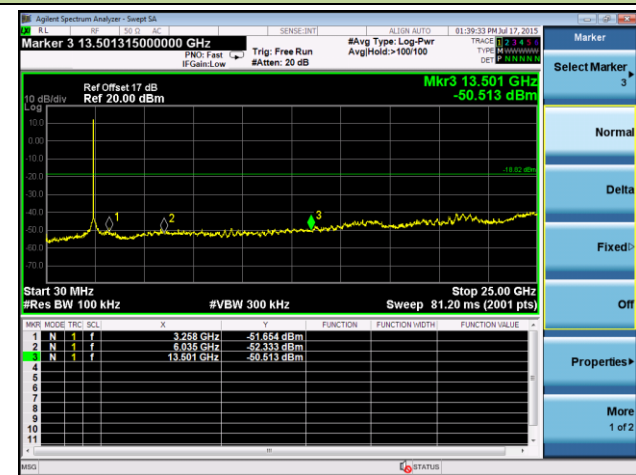


#### Spurious Emission



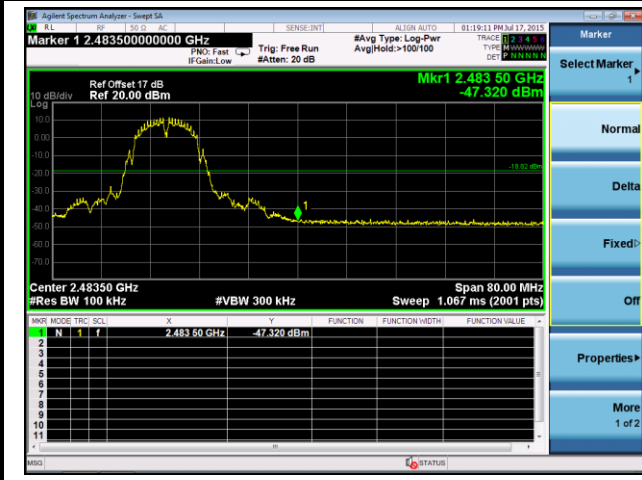
### Channel 06 (2437MHz)

#### Spurious Emission

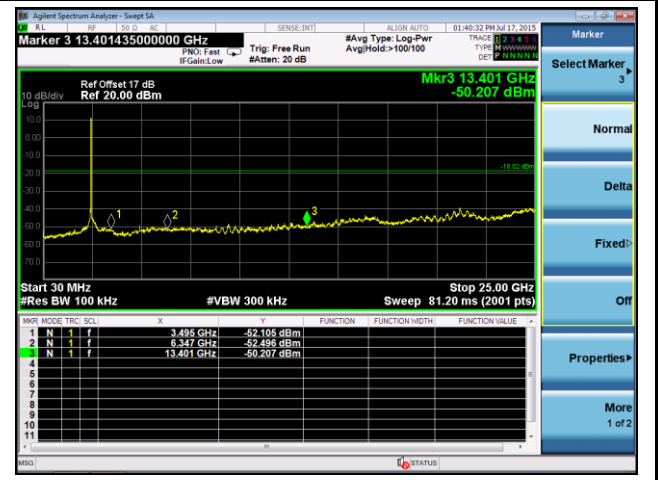


Channel 11 (2462MHz)

High Band Edge



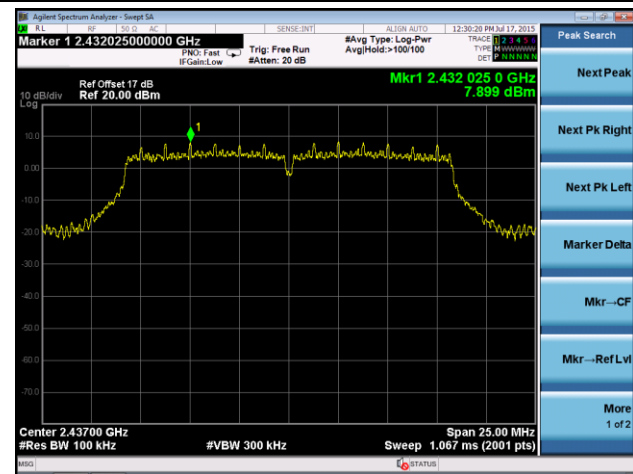
Spurious Emission





## 802.11g Out-of-Band Emissions - Ant 0

### 100kHz PSD Reference Level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

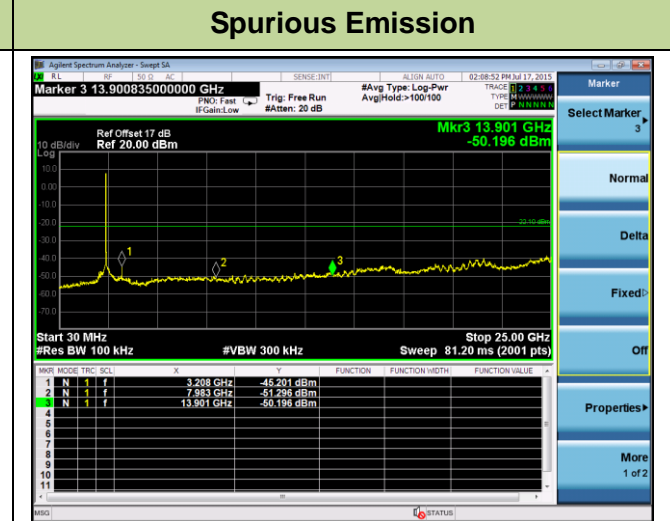
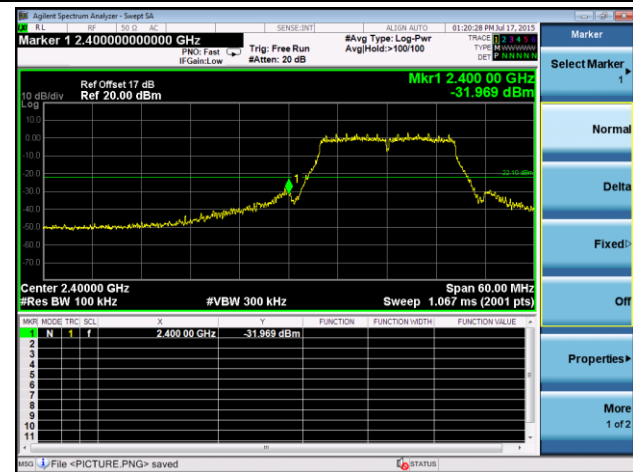
Mkr--CF

Mkr--Ref Lvl

More  
1 of 2

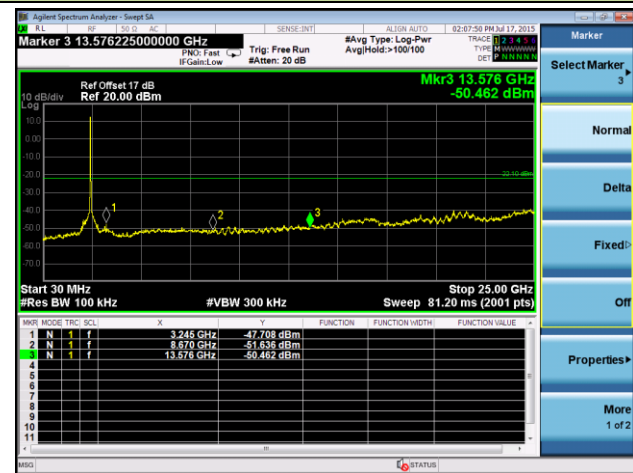
### Channel 01 (2412MHz)

#### Low Band Edge



### Channel 06 (2437MHz)

#### Spurious Emission



Marker

Select Marker 3

Normal

Delta

Fixed

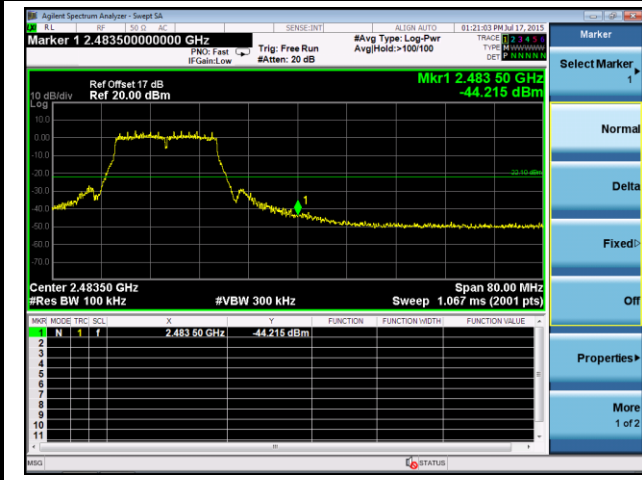
Off

Properties

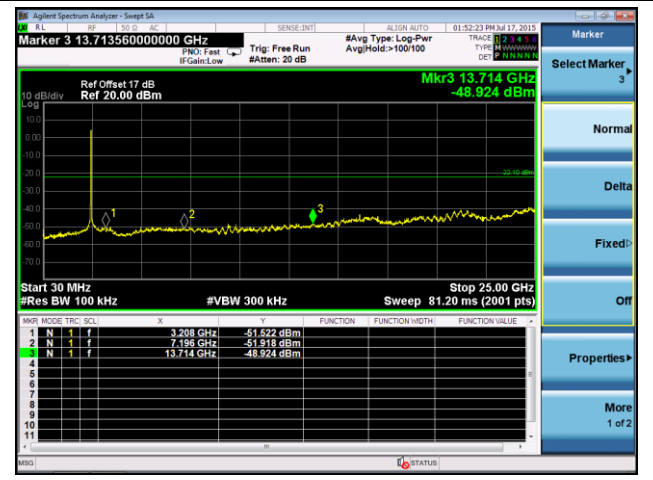
More  
1 of 2

Channel 11 (2462MHz)

High Band Edge

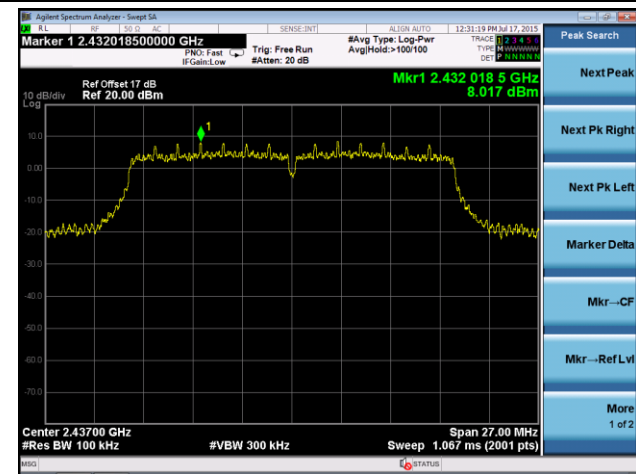


Spurious Emission



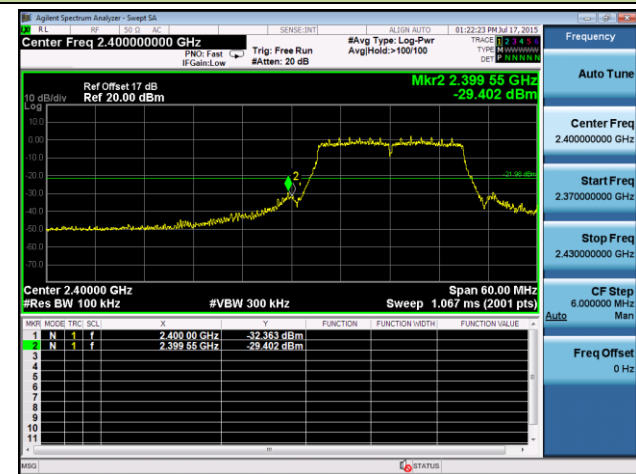
## 802.11n-HT20 Out-of-Band Emissions - Ant 0

### 100kHz PSD Reference Level

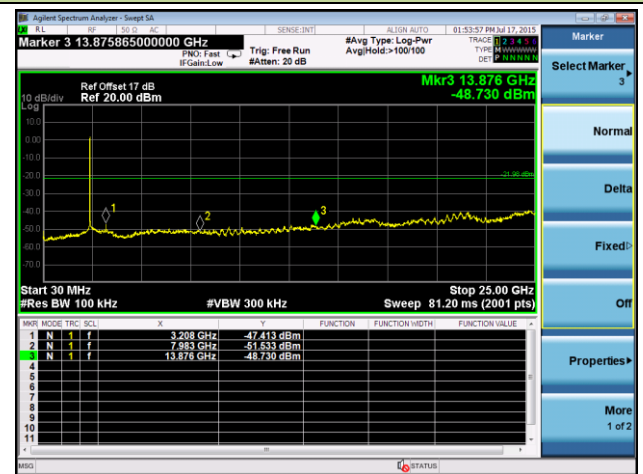


### Channel 01 (2412MHz)

#### Low Band Edge

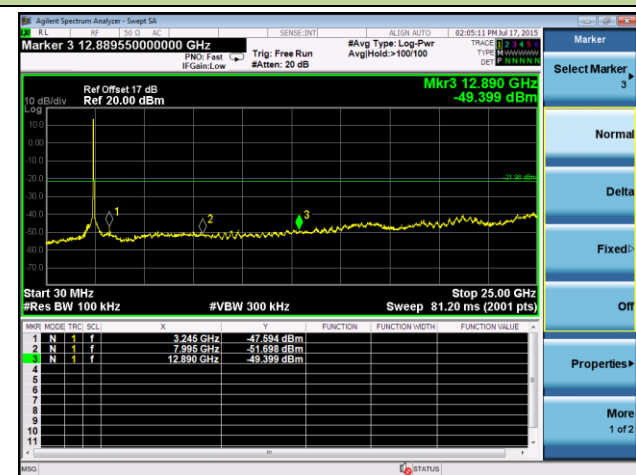


#### Spurious Emission



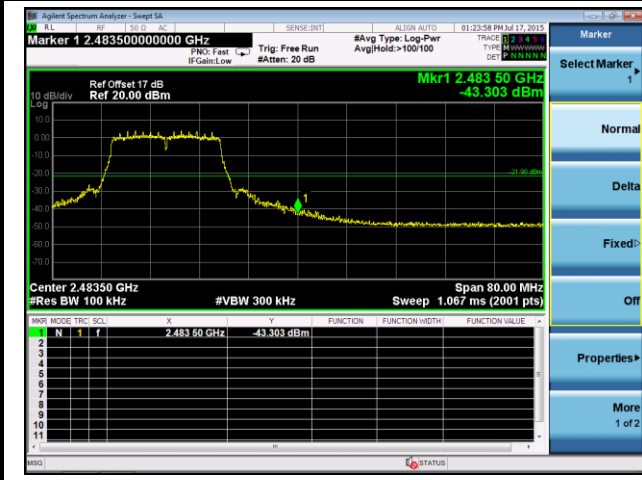
### Channel 06 (2437MHz)

#### Spurious Emission



### Channel 11 (2462MHz)

#### High Band Edge

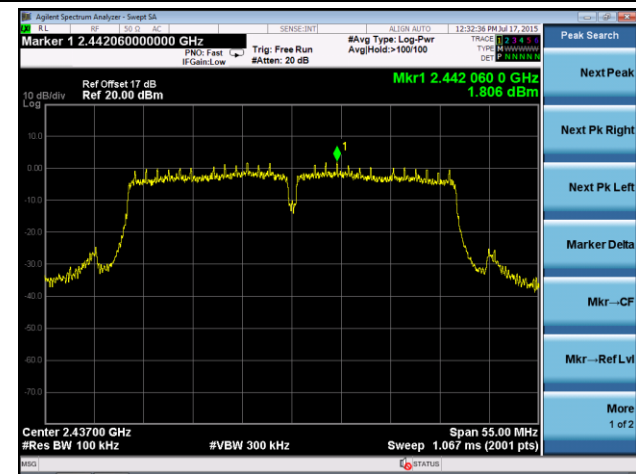


#### Spurious Emission



### 802.11n-HT40 Out-of-Band Emissions - Ant 0

#### 100kHz PSD Reference Level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

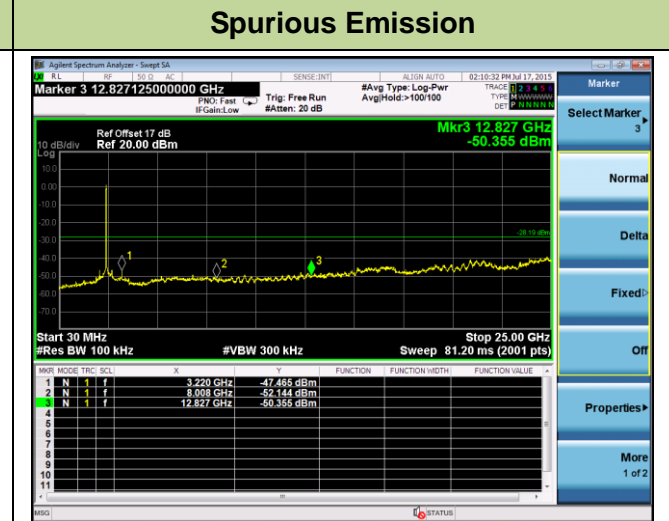
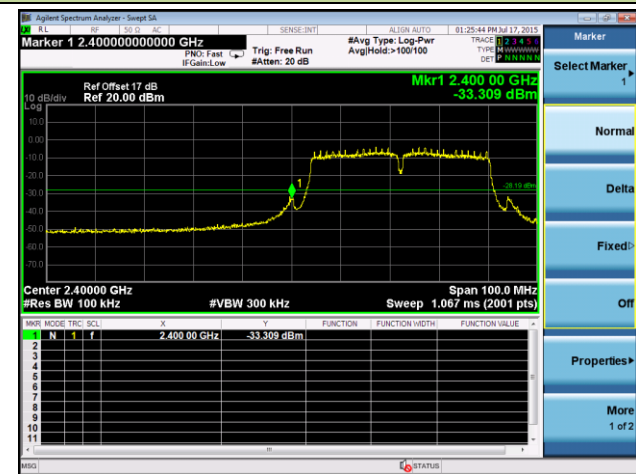
Mkr--CF

Mkr--Ref Lvl

More  
1 of 2

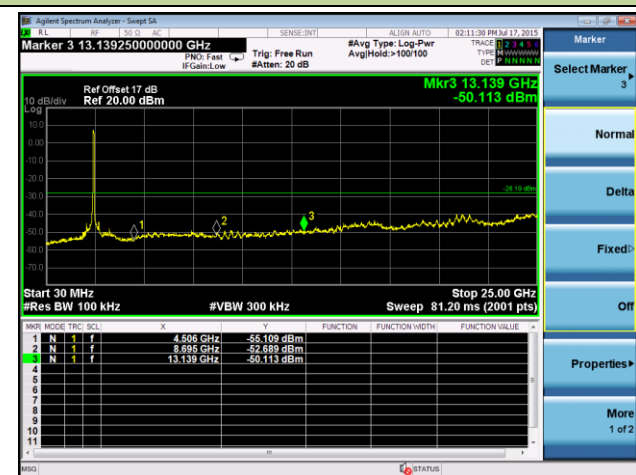
#### Channel 03 (2422MHz)

##### Low Band Edge



#### Channel 06 (2437MHz)

##### Spurious Emission



Marker

Select Marker 3

Normal

Delta

Fixed

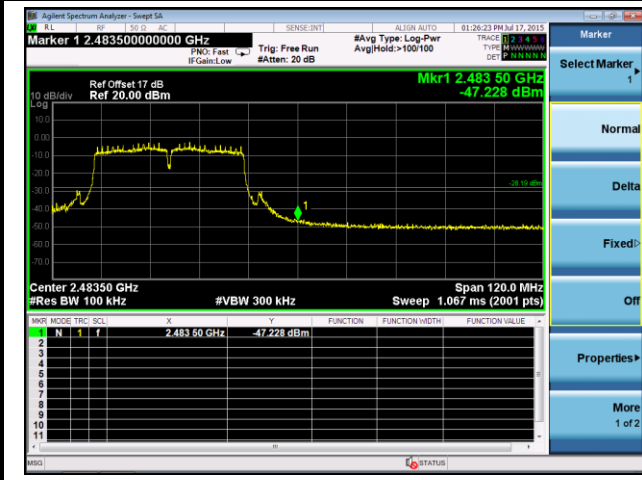
Off

Properties

More  
1 of 2

### Channel 9 (2452MHz)

#### High Band Edge

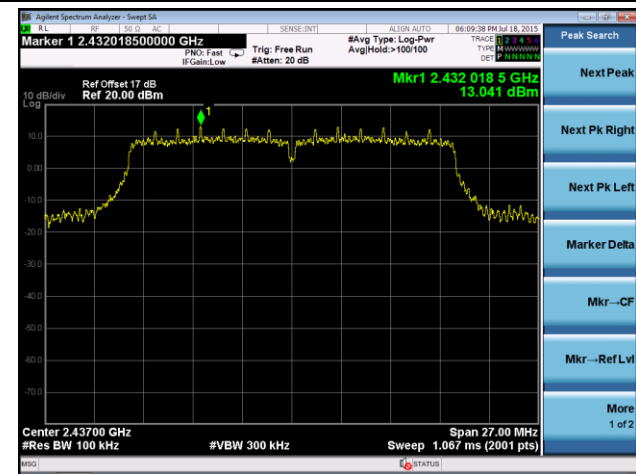


#### Spurious Emission



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

### 100kHz PSD Reference Level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

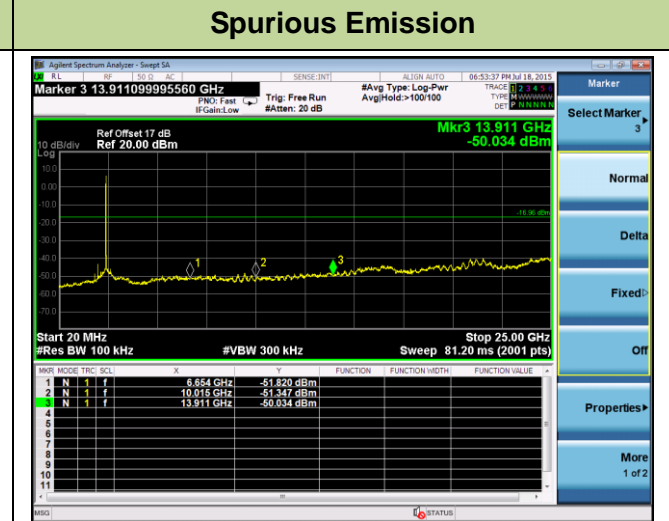
Mkr--CF

Mkr--Ref Lvl

More  
1 of 2

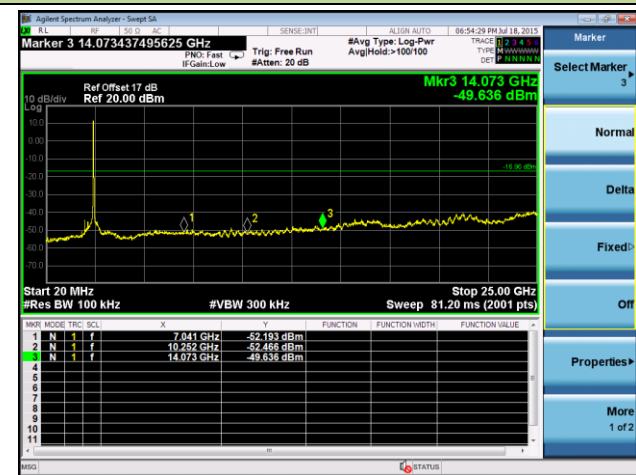
### Channel 01 (2412MHz)

#### Low Band Edge



### Channel 06 (2437MHz)

#### Spurious Emission



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

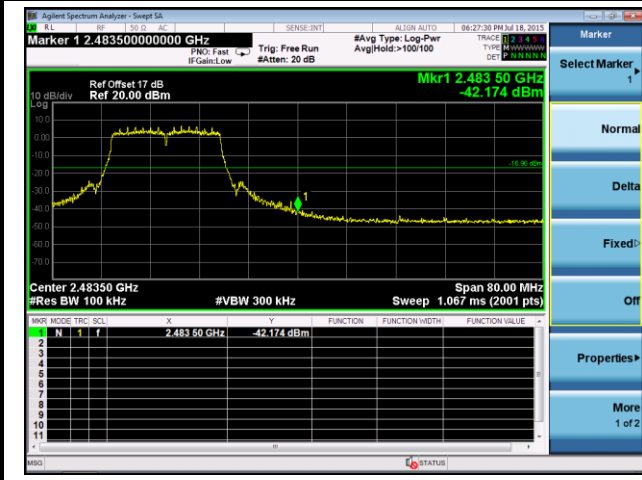
Mkr--CF

Mkr--Ref Lvl

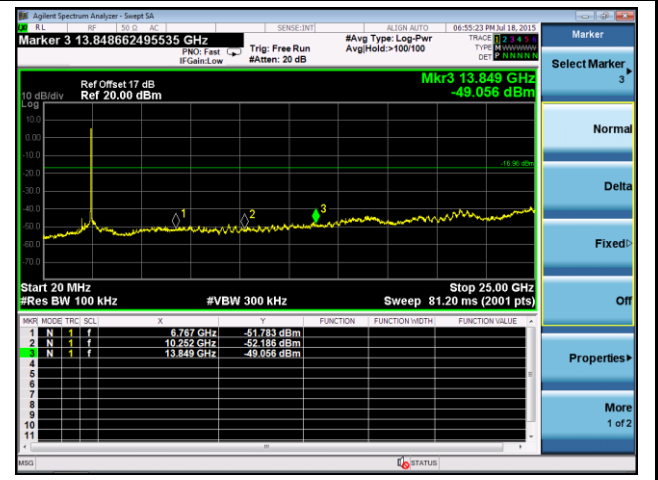
More  
1 of 2

Channel 11 (2462MHz)

High Band Edge



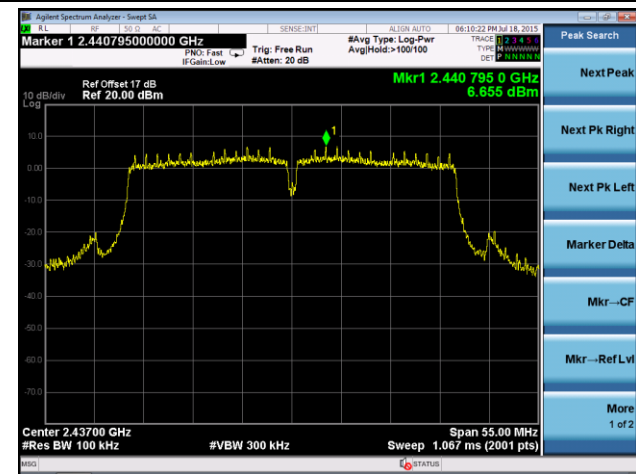
Spurious Emission





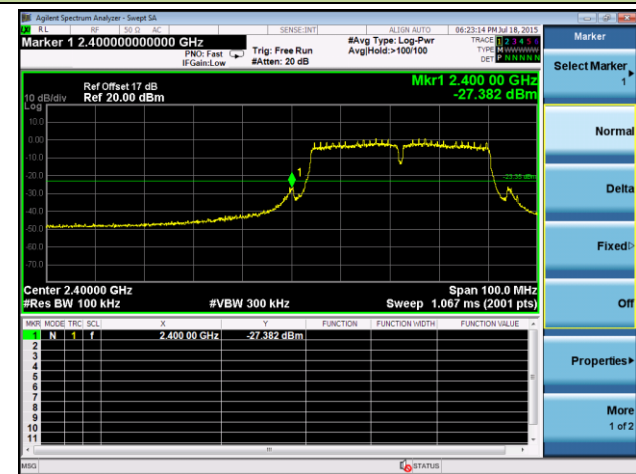
## 802.11n-HT40 Out-of-Band Emissions - Ant 1

### 100kHz PSD Reference Level

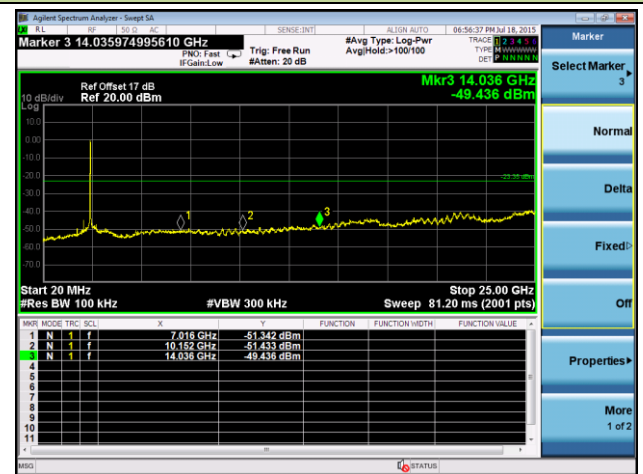


### Channel 03 (2422MHz)

#### Low Band Edge

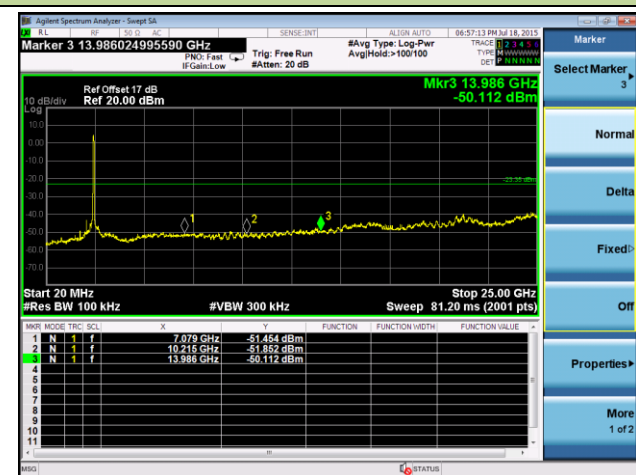


#### Spurious Emission



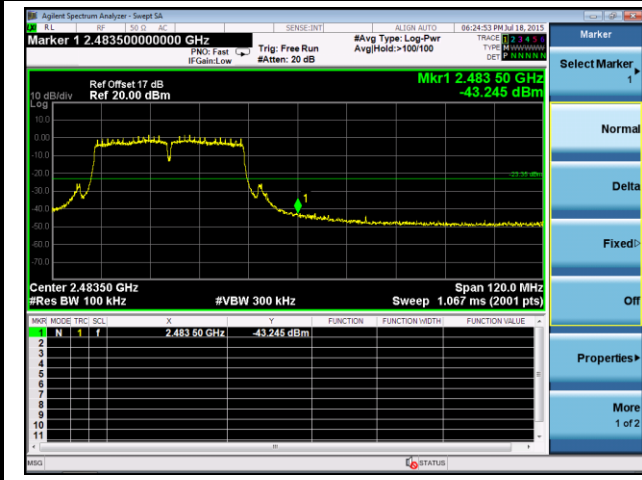
### Channel 06 (2437MHz)

#### Spurious Emission



### Channel 9 (2452MHz)

#### High Band Edge

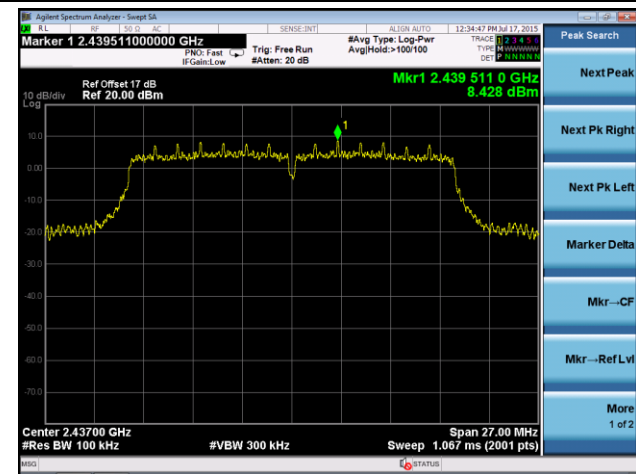


#### Spurious Emission



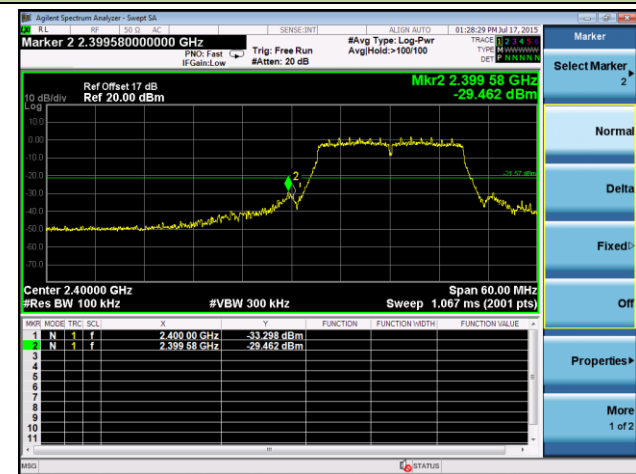
## 802.11n-HT20 Out-of-Band Emissions - Ant 0 / Ant 0 + 1

### 100kHz PSD Reference Level

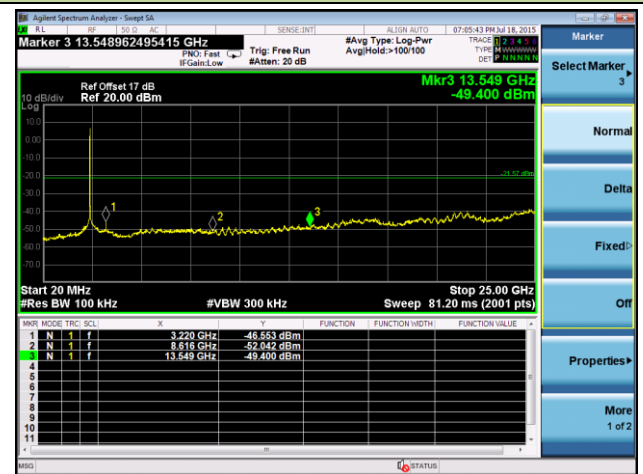


### Channel 01 (2412MHz)

#### Low Band Edge

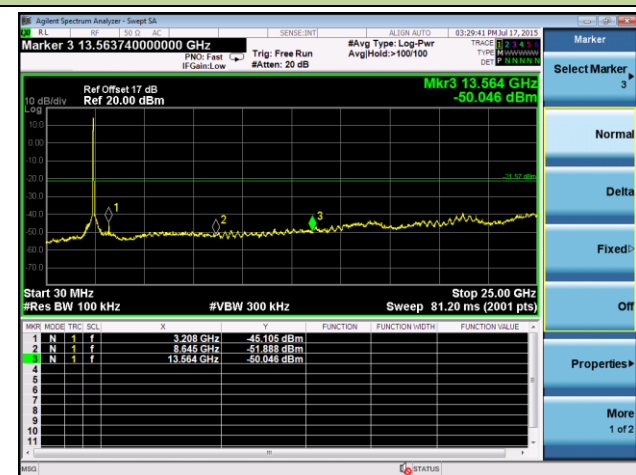


#### Spurious Emission



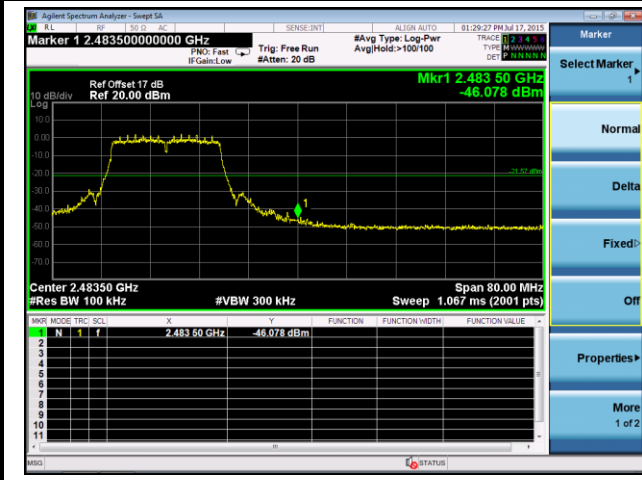
### Channel 06 (2437MHz)

#### Spurious Emission

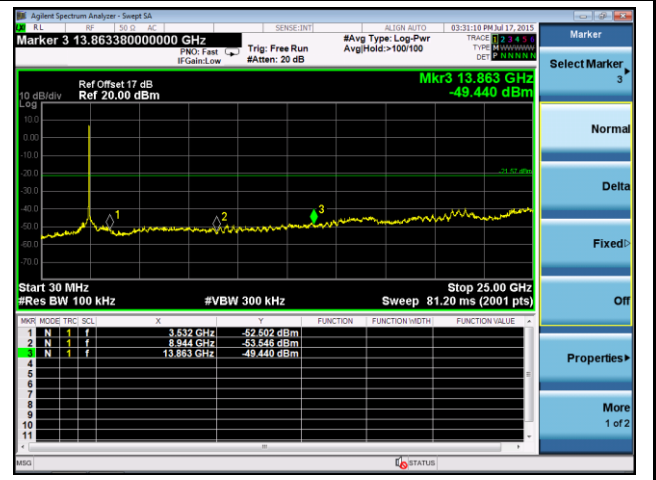


Channel 11 (2462MHz)

High Band Edge

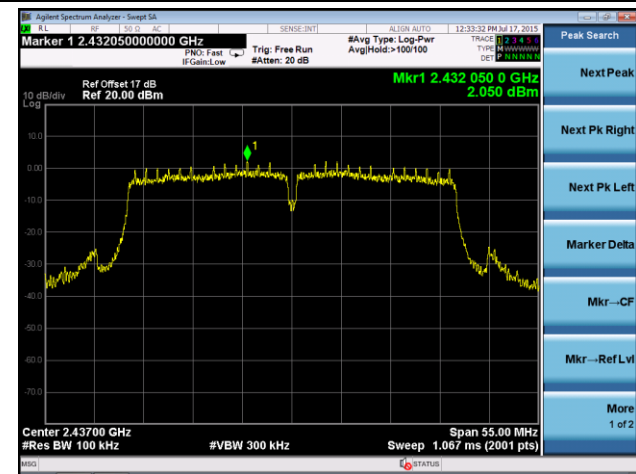


Spurious Emission



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

### 100kHz PSD Reference Level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

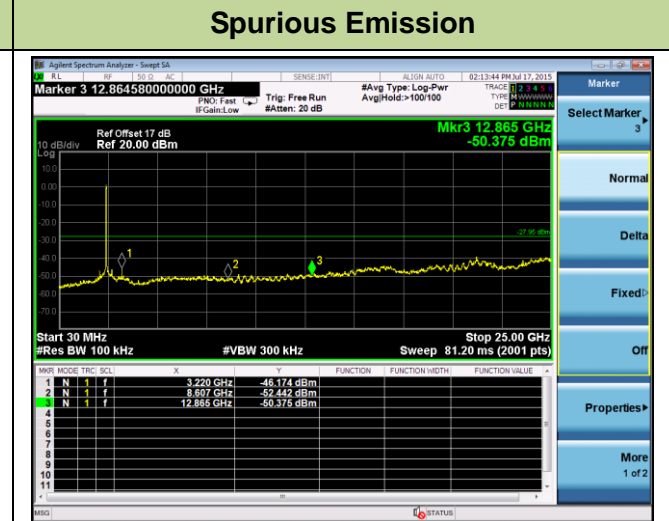
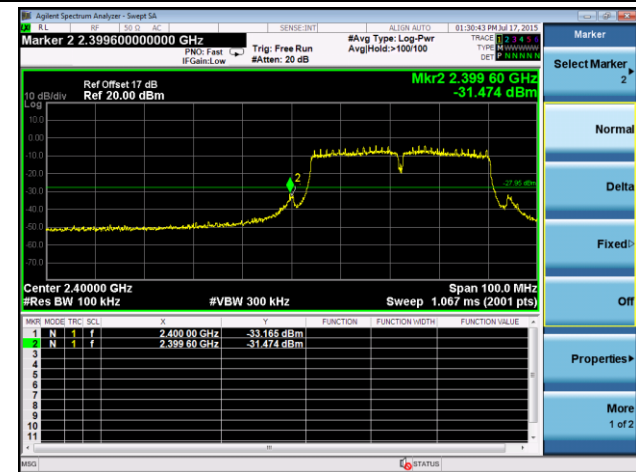
Mkr--Ref Lvl

More

1 of 2

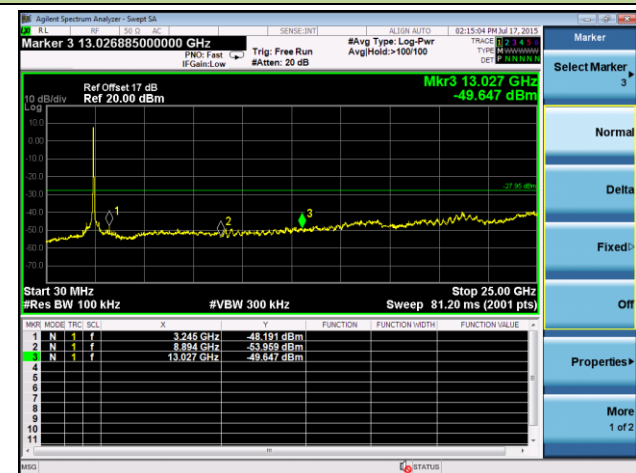
### Channel 03 (2422MHz)

#### Low Band Edge



### Channel 06 (2437MHz)

#### Spurious Emission



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More

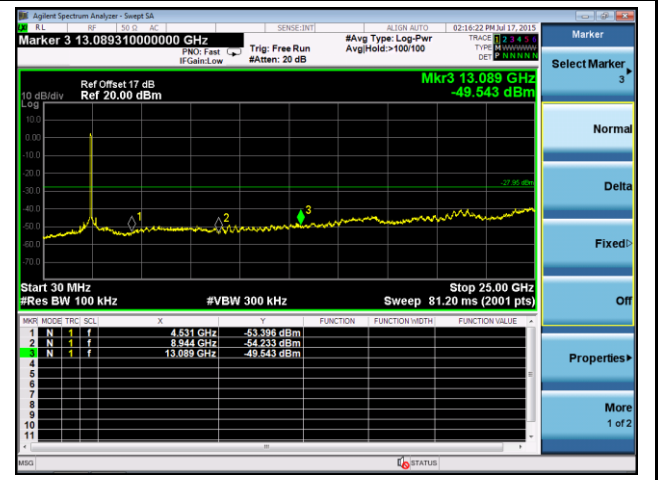
1 of 2

### Channel 9 (2452MHz)

#### High Band Edge

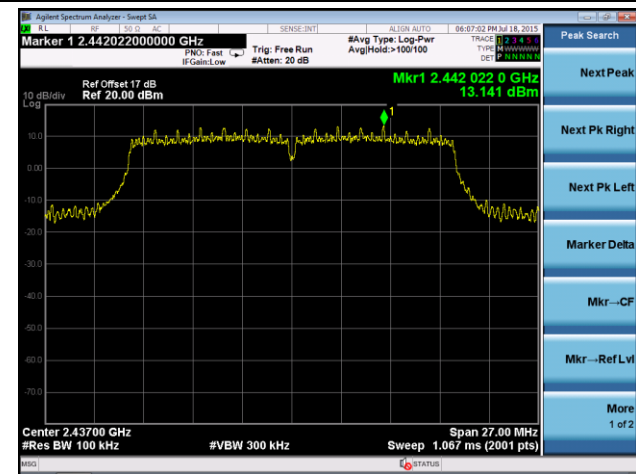


#### Spurious Emission



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

### 100kHz PSD Reference Level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

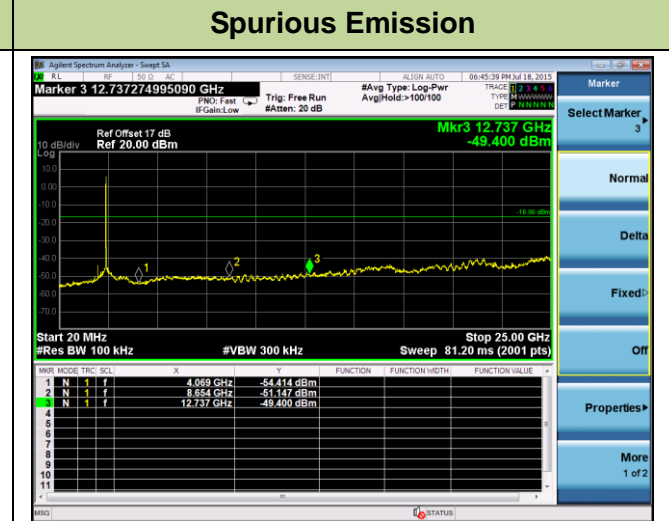
Mkr--CF

Mkr--Ref Lvl

More  
1 of 2

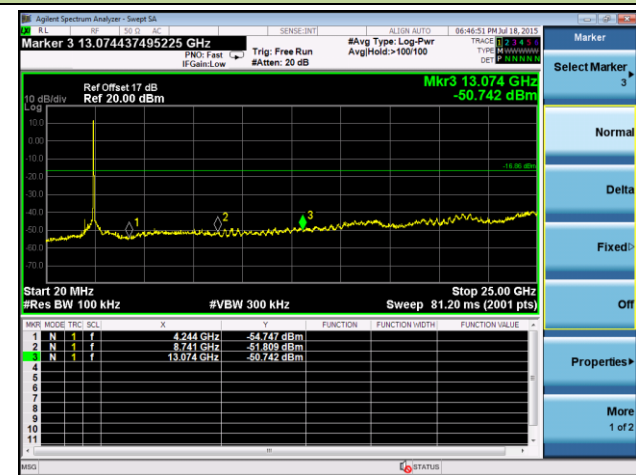
### Channel 01 (2412MHz)

#### Low Band Edge



### Channel 06 (2437MHz)

#### Spurious Emission



Marker

Select Marker 3

Normal

Delta

Fixed

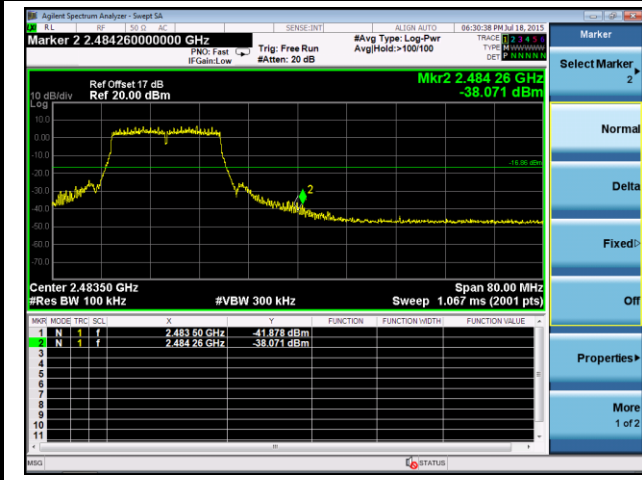
Off

Properties

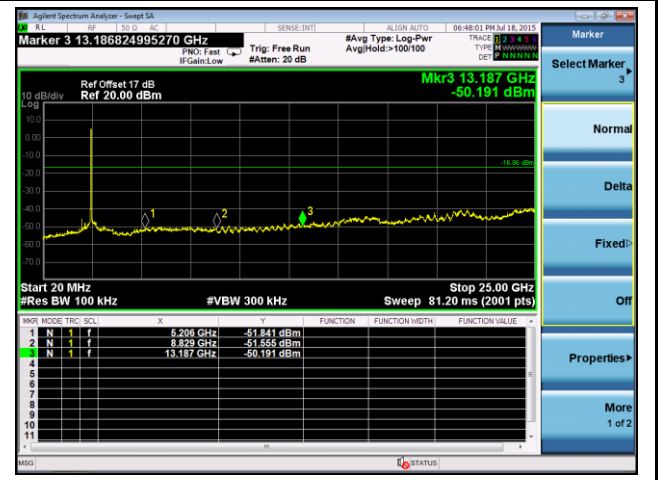
More  
1 of 2

Channel 11 (2462MHz)

High Band Edge



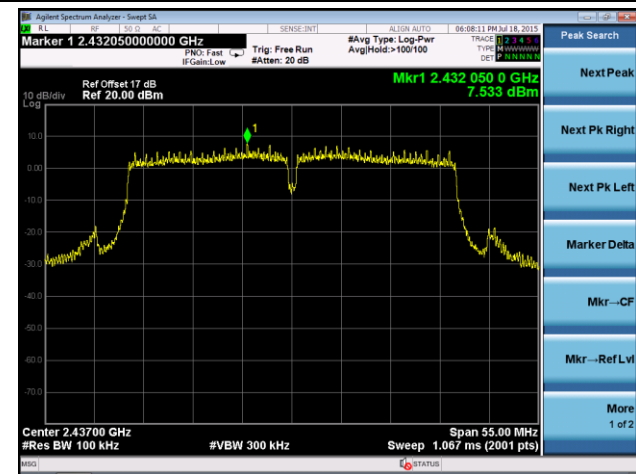
Spurious Emission





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

### 100kHz PSD Reference Level



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

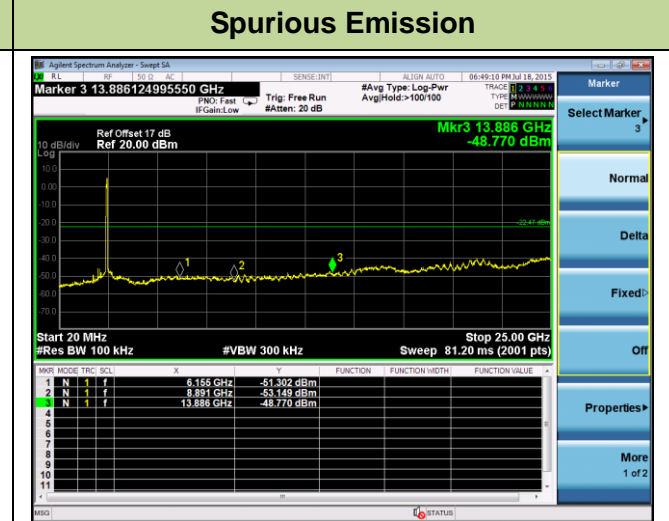
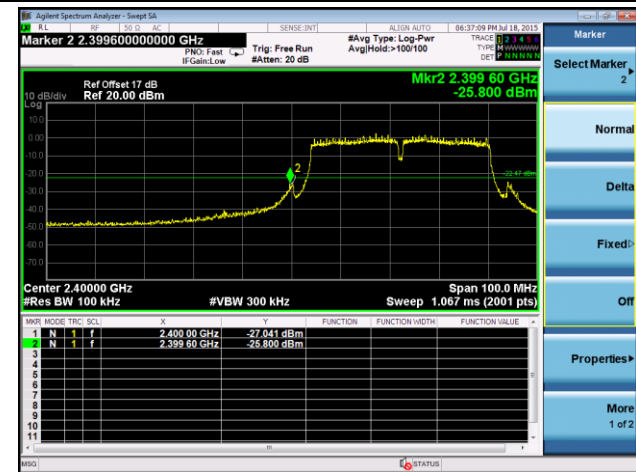
Mkr--Ref Lvl

More

1 of 2

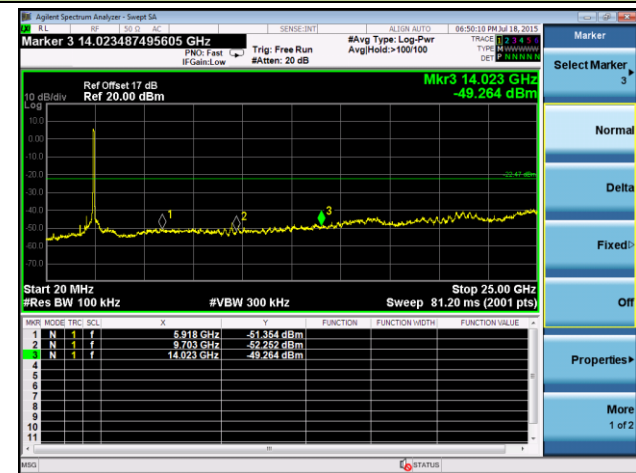
### Channel 03 (2422MHz)

#### Low Band Edge



### Channel 06 (2437MHz)

#### Spurious Emission



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More

1 of 2