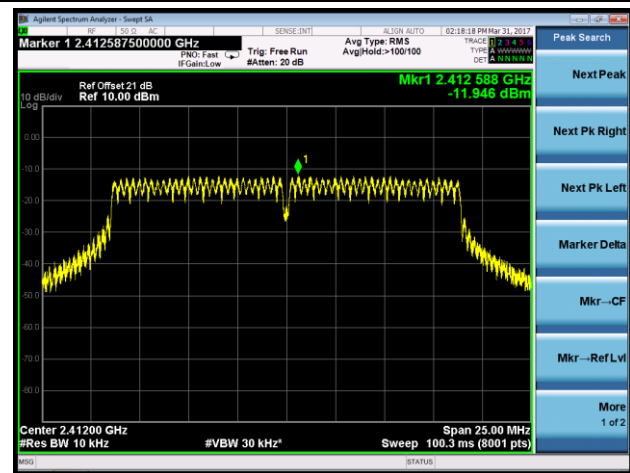
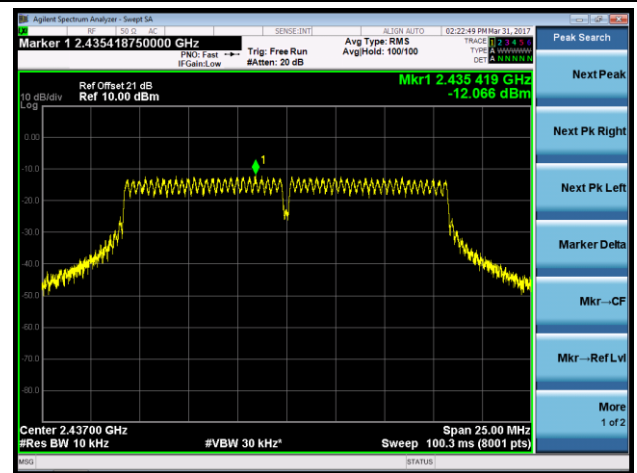


## 802.11g AVGPSPD - Ant 0 / Ant 0 + 1

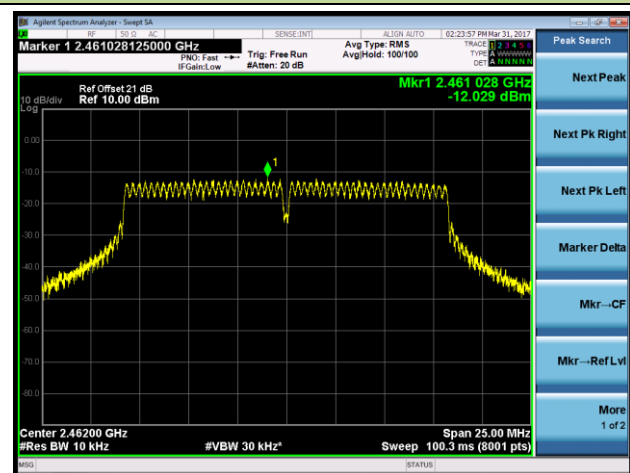
### Channel 01 (2412MHz)



### Channel 06 (2437MHz)

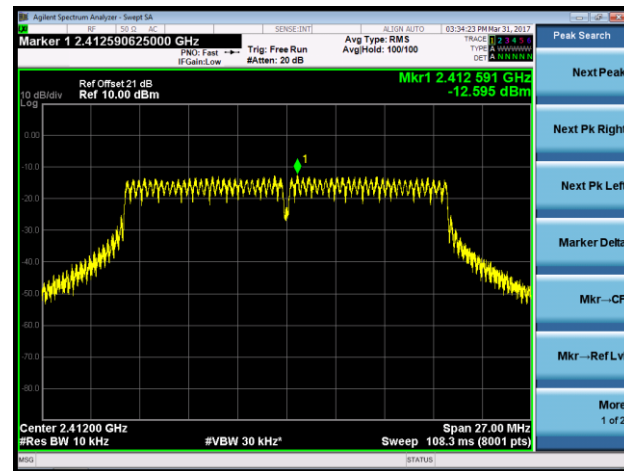


### Channel 11 (2462MHz)

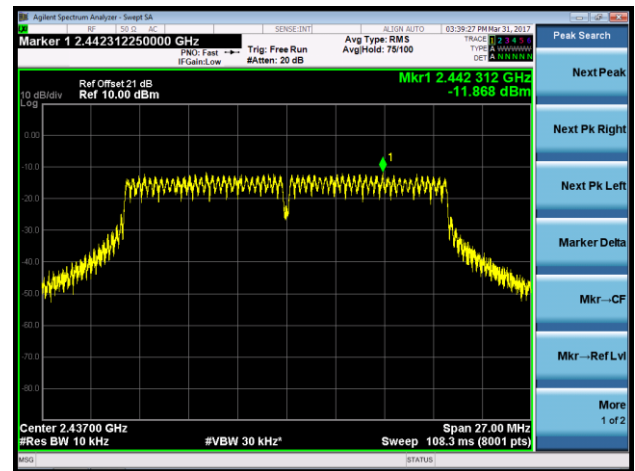


## 802.11n-HT20 AVGPSD - Ant 0 / Ant 0 + 1

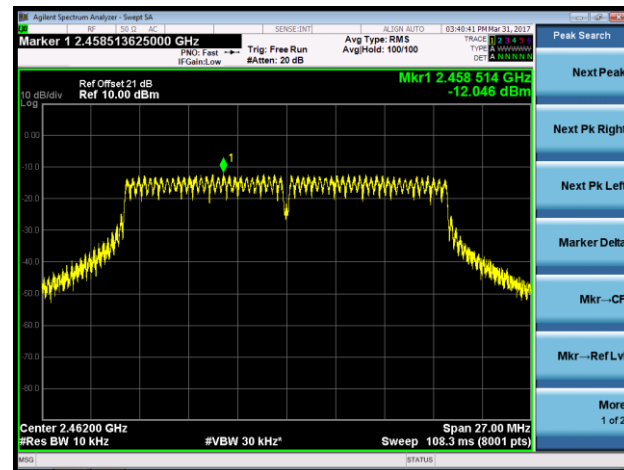
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

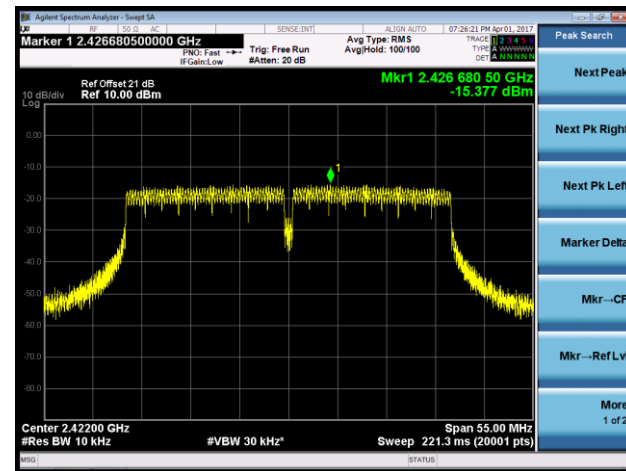


## Channel 11 (2462MHz)

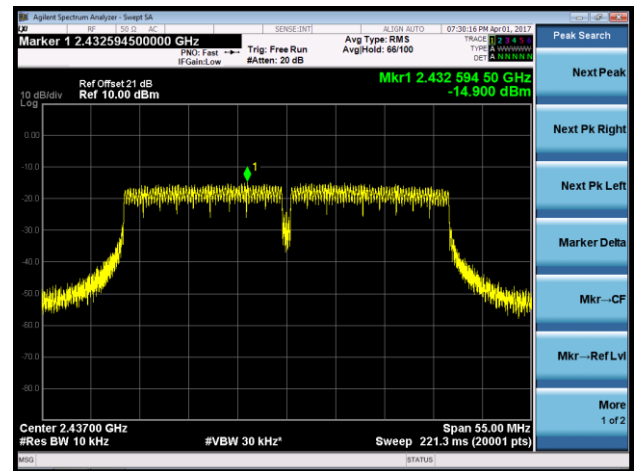


## 802.11n-HT40 AVGPSD - Ant 0 / Ant 0 + 1

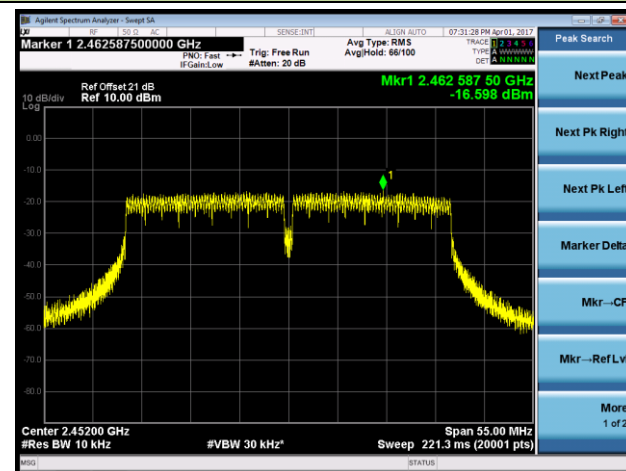
## Channel 03 (2422MHz)



## Channel 06 (2437MHz)



## Channel 09 (2452MHz)



## 802.11b AVGPSPD - Ant 1 / Ant 0 + 1

## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

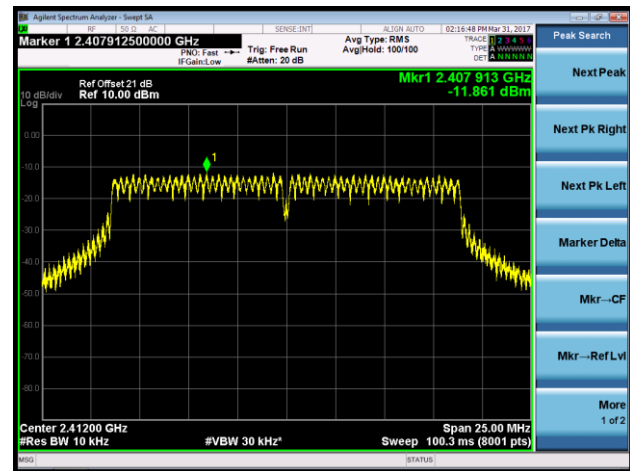


## Channel 11 (2462MHz)

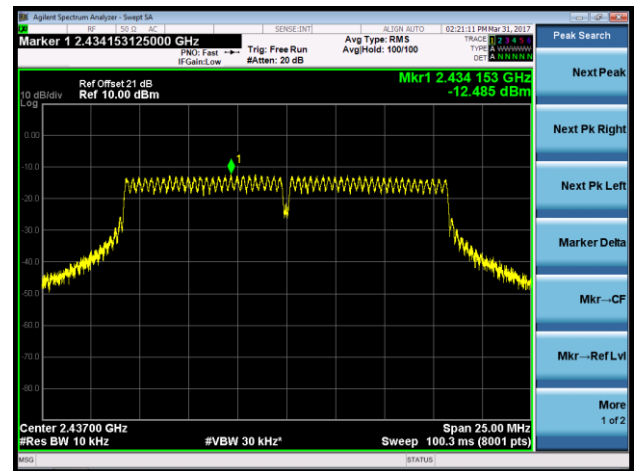


# 802.11g AVGPSD - Ant 1 / Ant 0 + 1

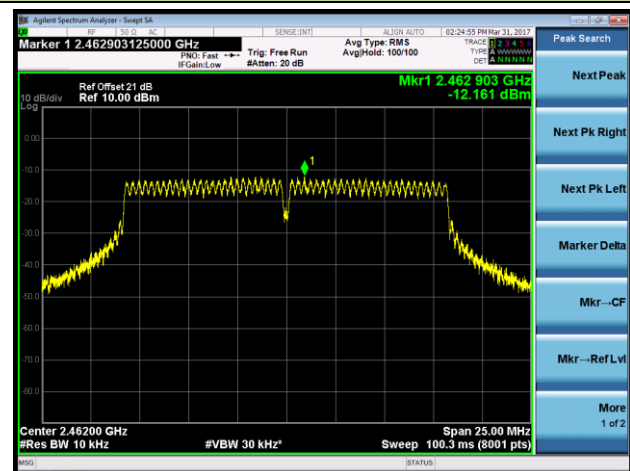
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

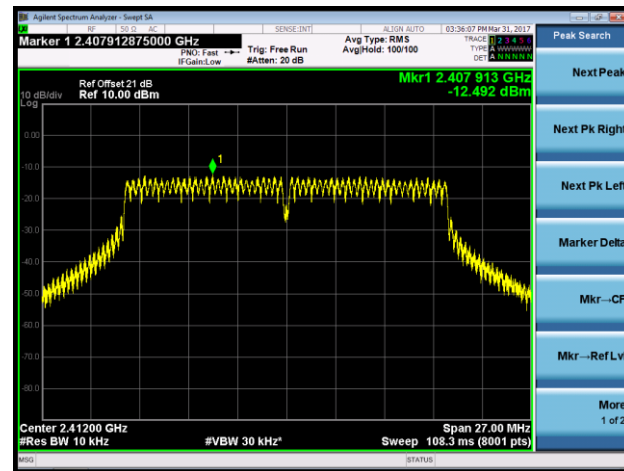


## Channel 11 (2462MHz)

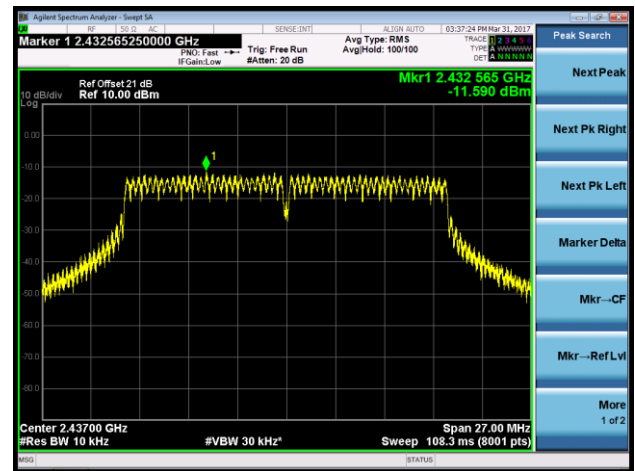


## 802.11n-HT20 AVGPDS - Ant 1 / Ant 0 + 1

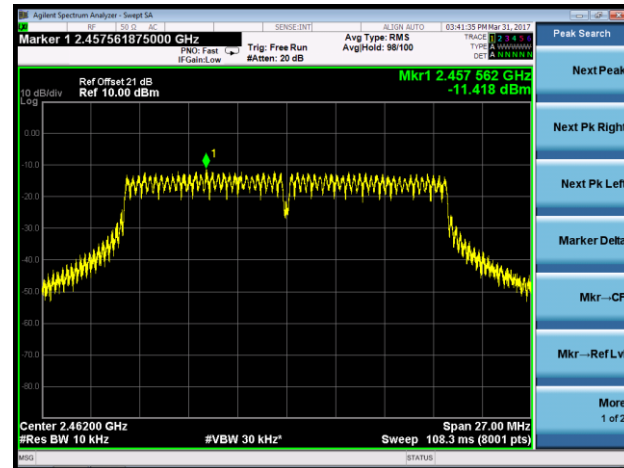
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

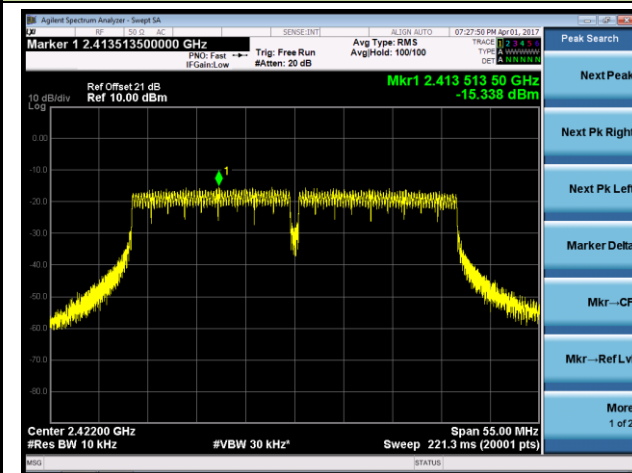


## Channel 11 (2462MHz)

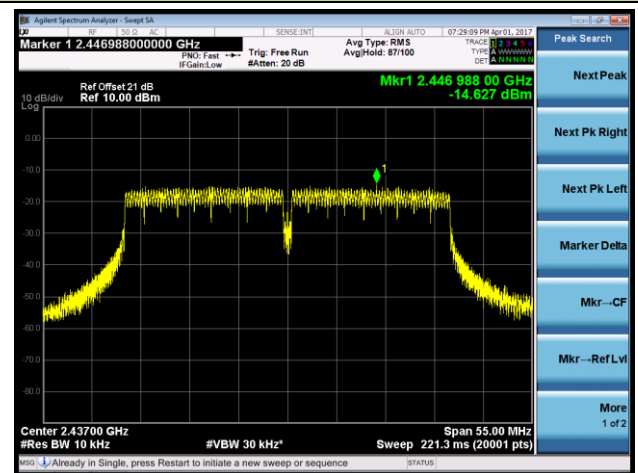


## 802.11n-HT40 AVGPDS - Ant 1 / Ant 0 + 1

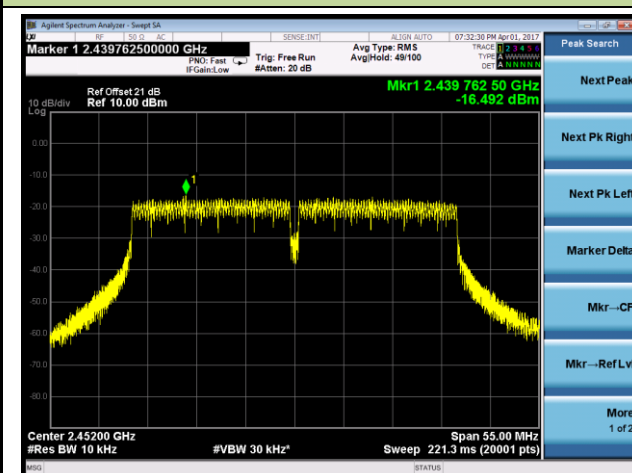
## Channel 03 (2422MHz)



## Channel 06 (2437MHz)



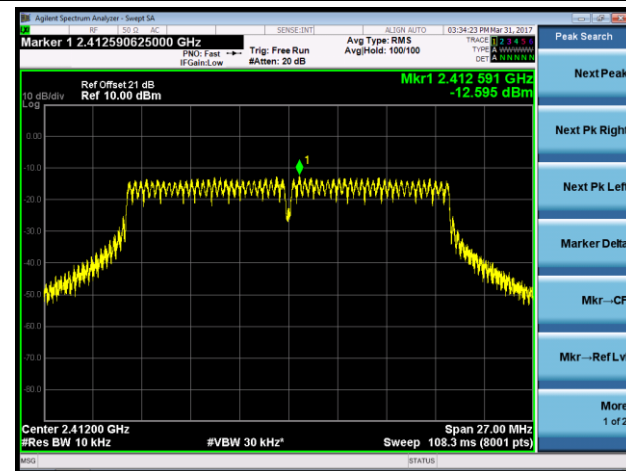
## Channel 09 (2452MHz)



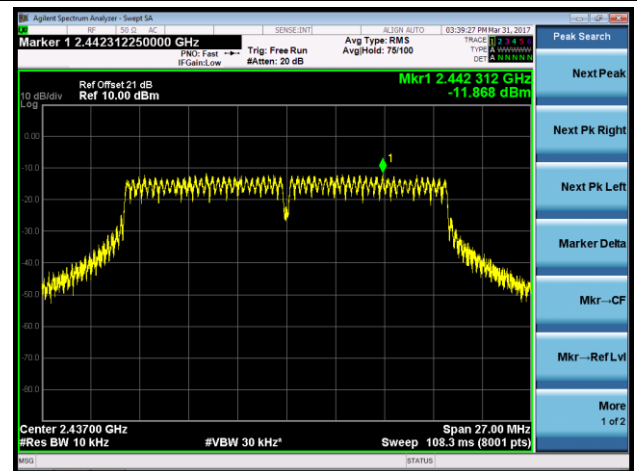
## Beam-Forming Mode

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

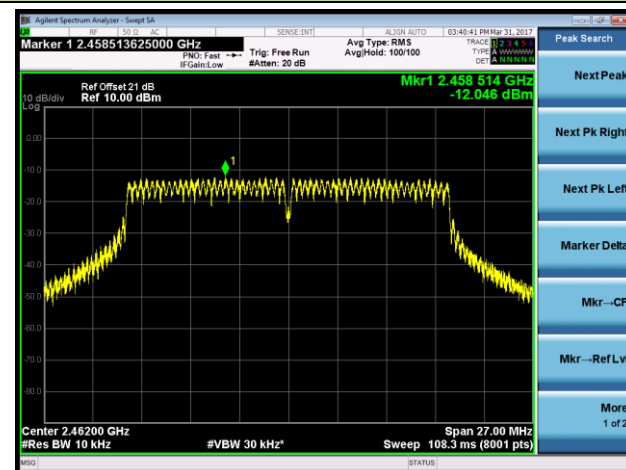
#### Channel 01 (2412MHz)



#### Channel 06 (2437MHz)

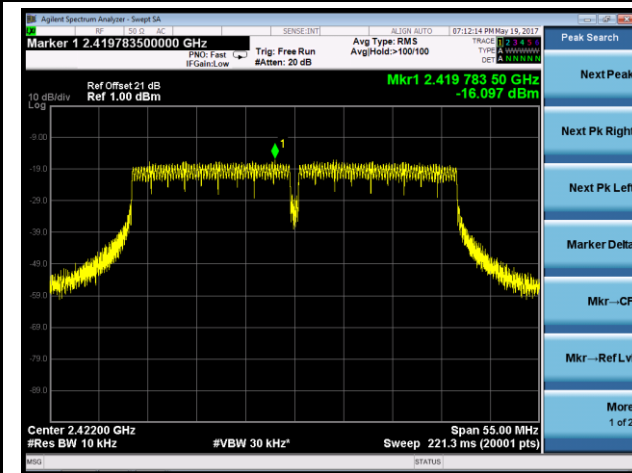


#### Channel 11 (2462MHz)

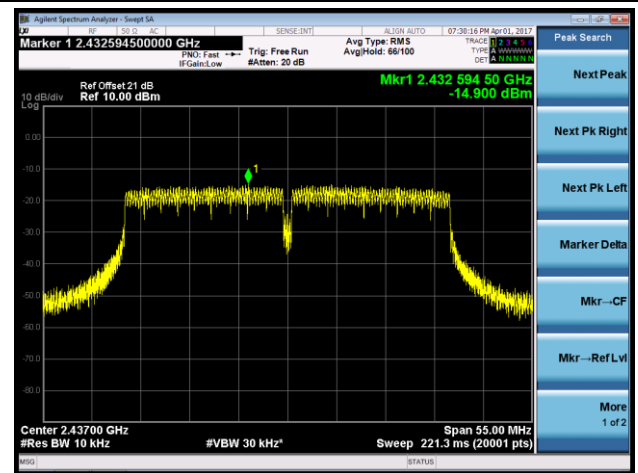


## 802.11n-HT40 AVGPDS - Ant 0 / Ant 0 + 1

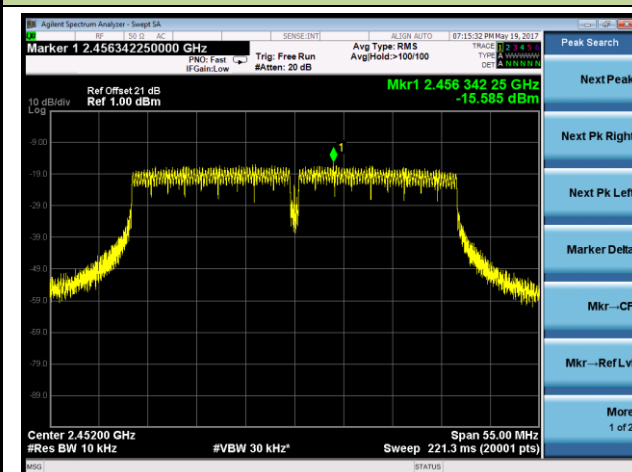
## Channel 03 (2422MHz)



## Channel 06 (2437MHz)

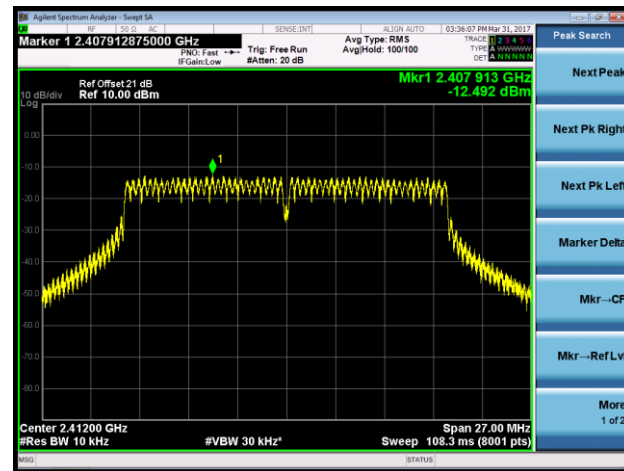


## Channel 09 (2452MHz)

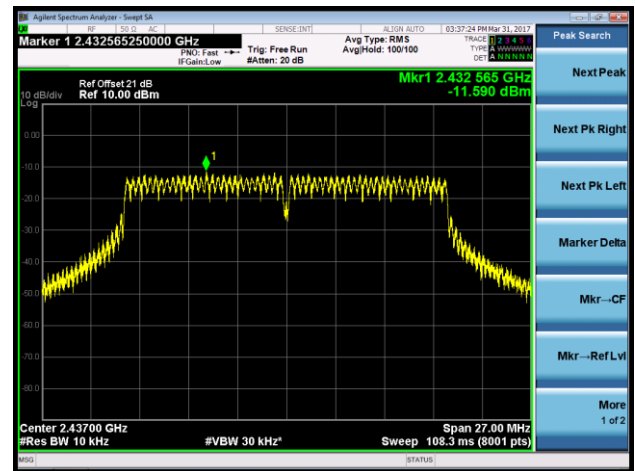


## 802.11n-HT20 AVGPDS - Ant 1 / Ant 0 + 1

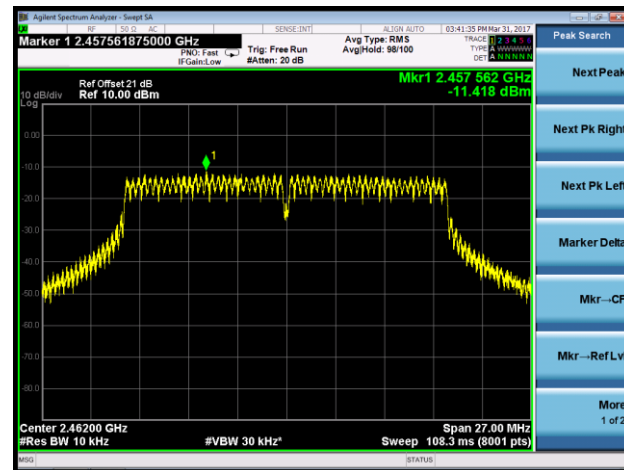
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

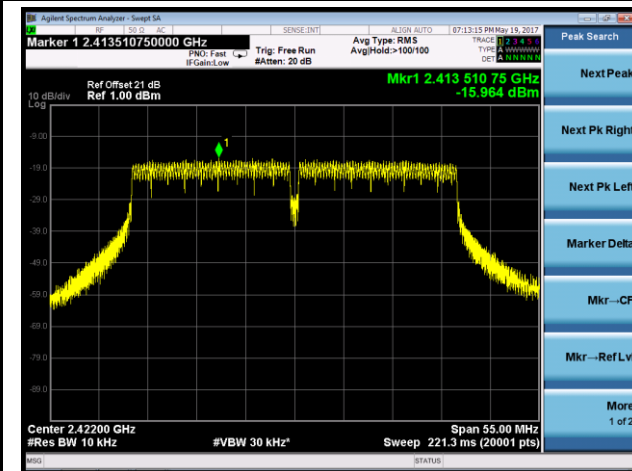


## Channel 11 (2462MHz)

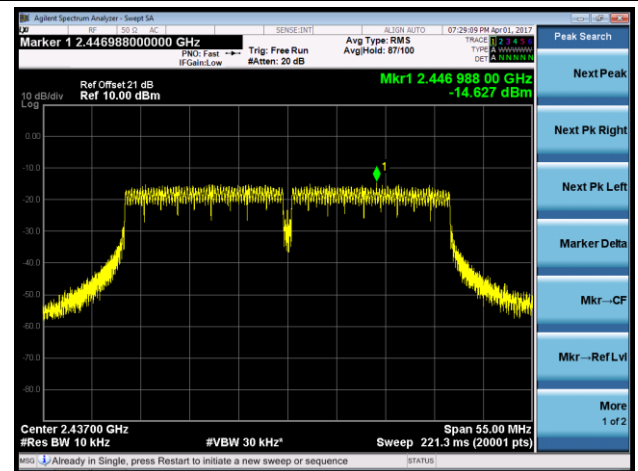


## 802.11n-HT40 AVGPDS - Ant 1 / Ant 0 + 1

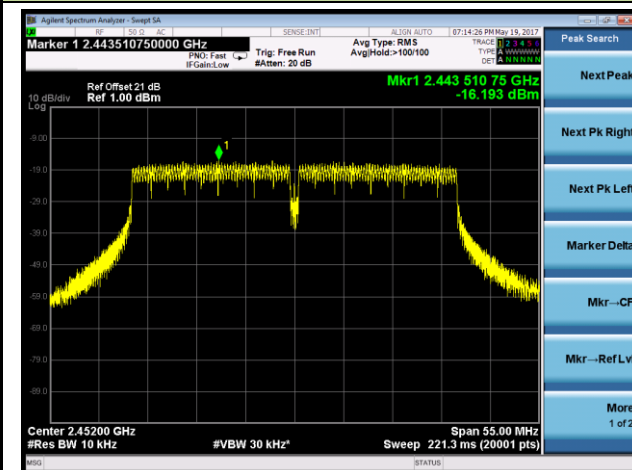
## Channel 03 (2422MHz)



## 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 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 Setting**

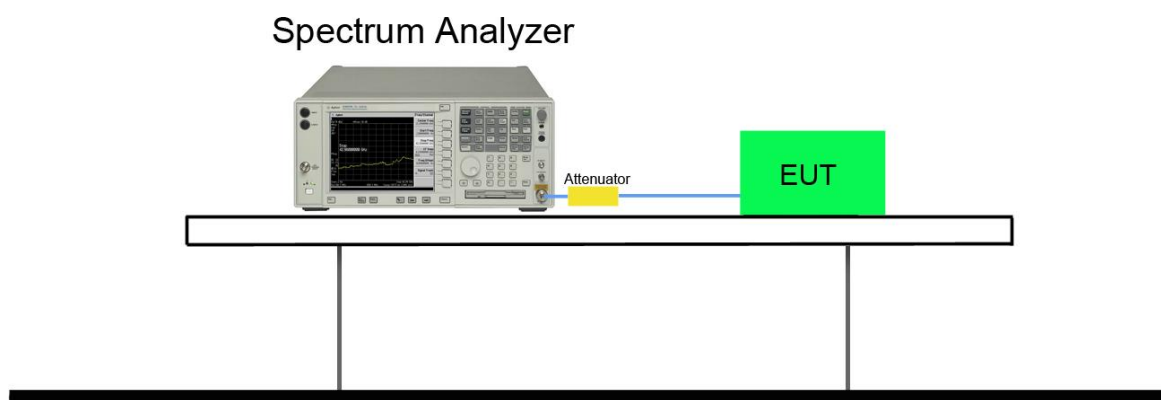
#### **1. Reference level measurement**

- 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

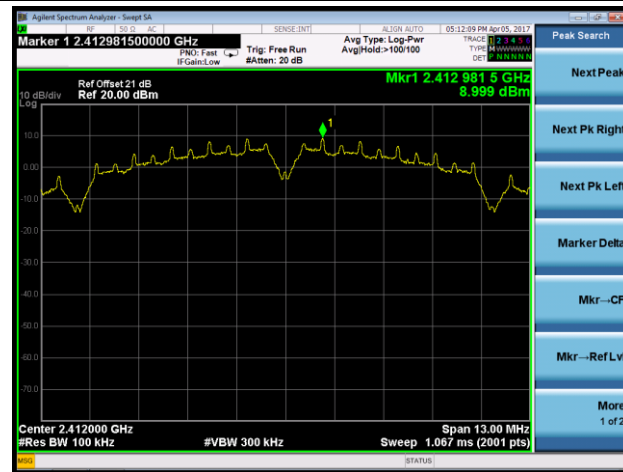
|               |                |                   |            |
|---------------|----------------|-------------------|------------|
| Product       | Wi-Fi Extender | Temperature       | 25°C       |
| Test Engineer | Bruce Wang     | Relative Humidity | 52%        |
| Test Site     | TR3            | Test Date         | 2017/04/05 |

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

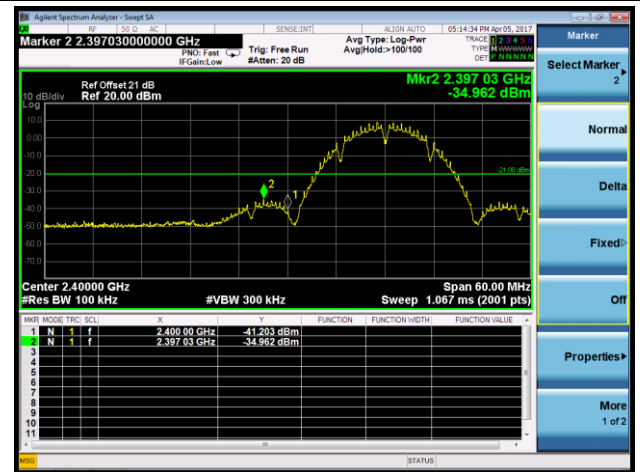
## 802.11b Out-of-Band Emissions - Ant 0

### Channel 01 (2412MHz)

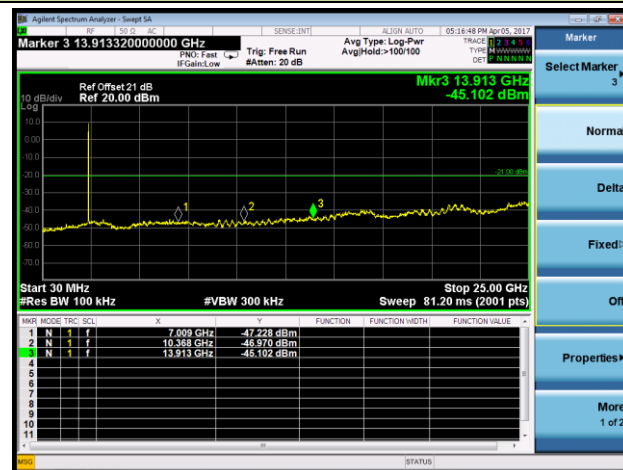
#### 100kHz PSD Reference Level



#### Low Band Edge

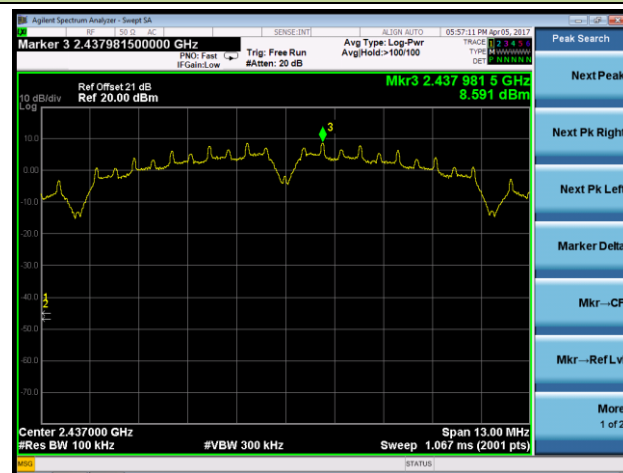


#### Spurious Emission

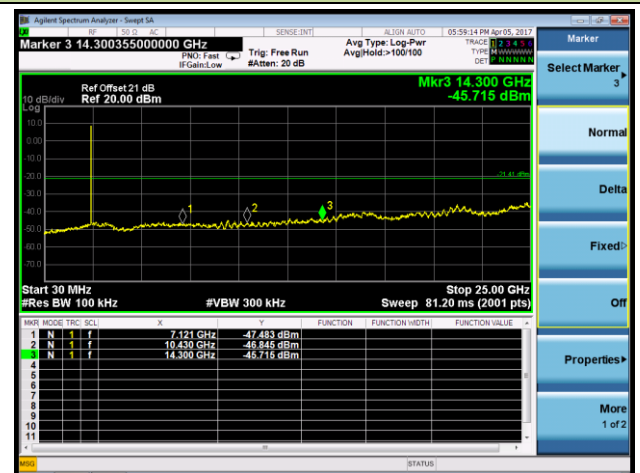


### Channel 06 (2437MHz)

#### 100kHz PSD Reference Level



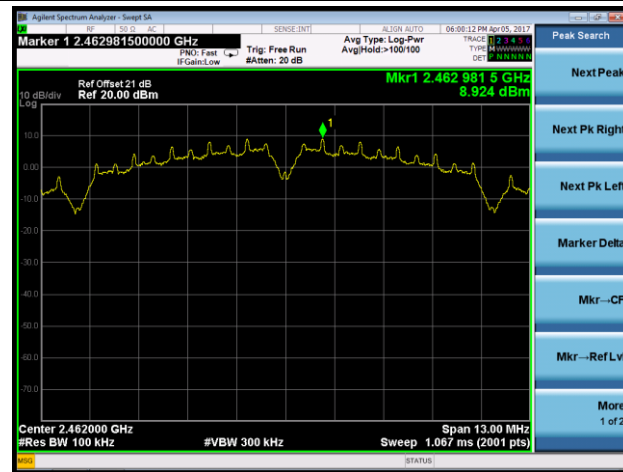
#### Spurious Emission



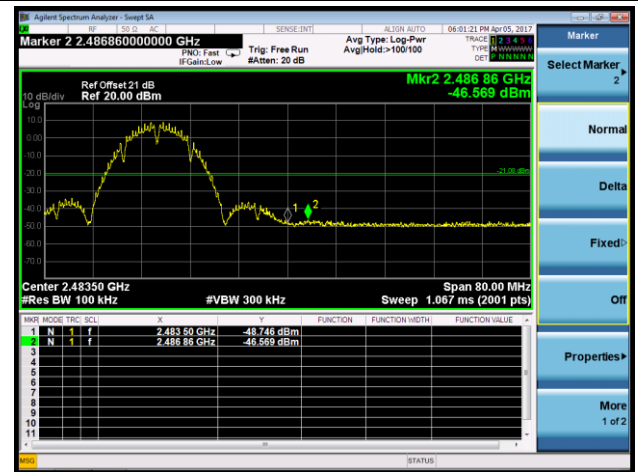
## 802.11b Out-of-Band Emissions - Ant 0

### Channel 11 (2462MHz)

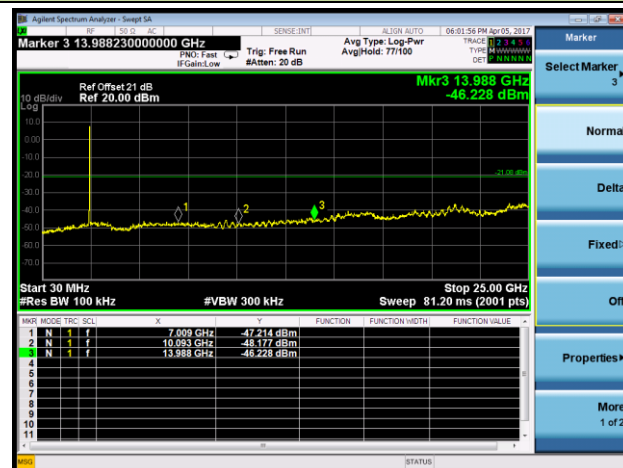
#### 100kHz PSD Reference Level



#### High Band Edge



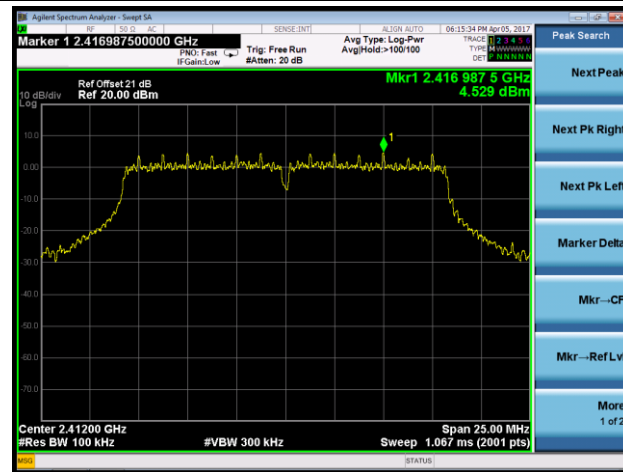
#### Spurious Emission



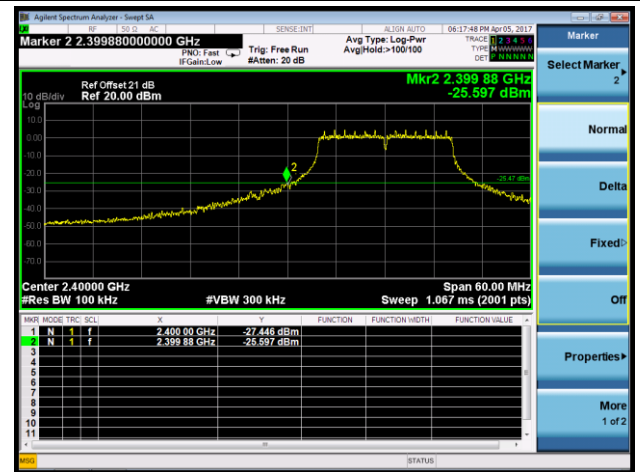
## 802.11g Out-of-Band Emissions - Ant 0

### Channel 01 (2412MHz)

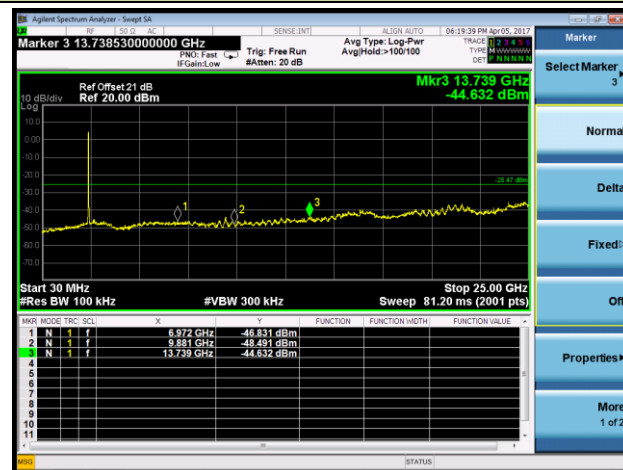
#### 100kHz PSD Reference Level



#### Low Band Edge

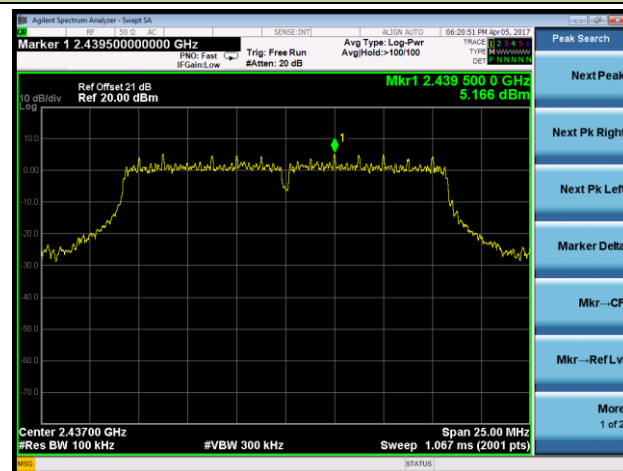


#### Spurious Emission

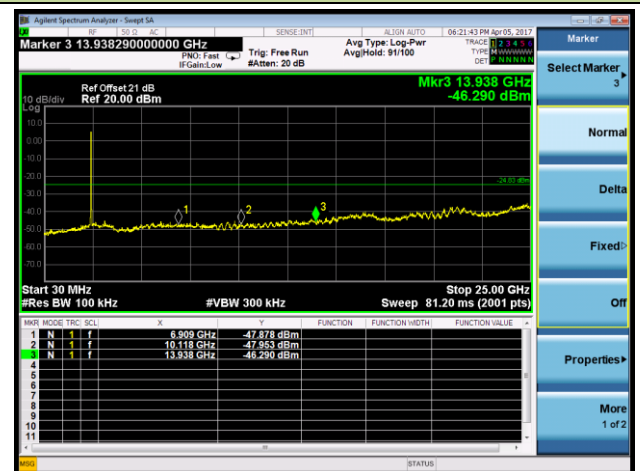


### Channel 06 (2437MHz)

#### 100kHz PSD Reference Level



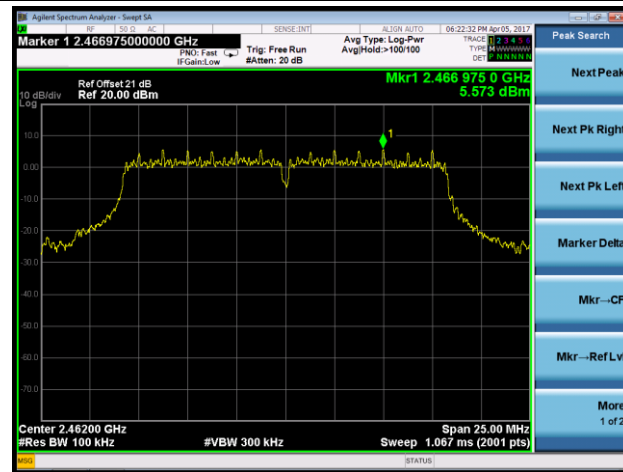
#### Spurious Emission



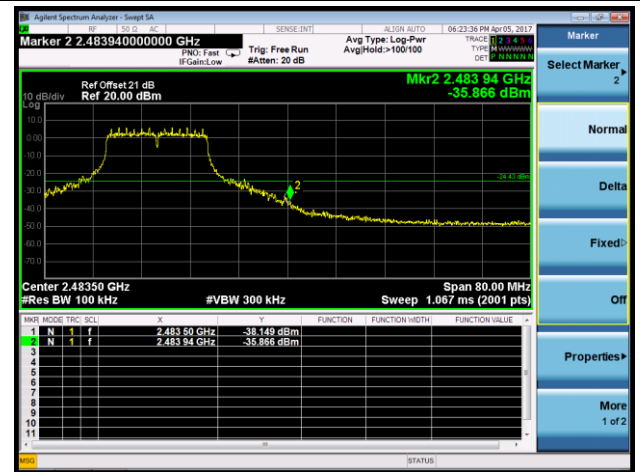
## 802.11g Out-of-Band Emissions - Ant 0

### Channel 11 (2462MHz)

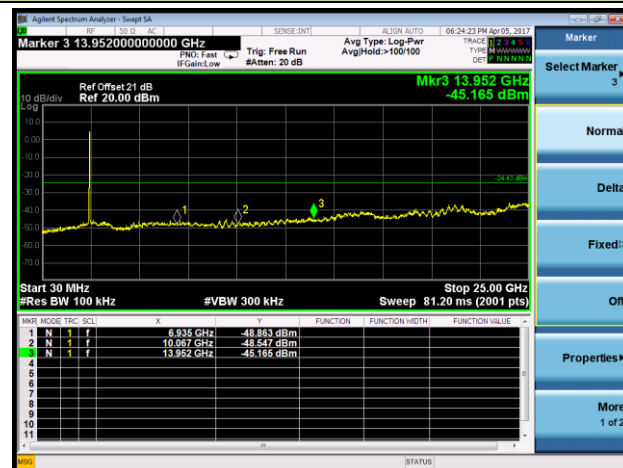
#### 100kHz PSD Reference Level



#### High Band Edge



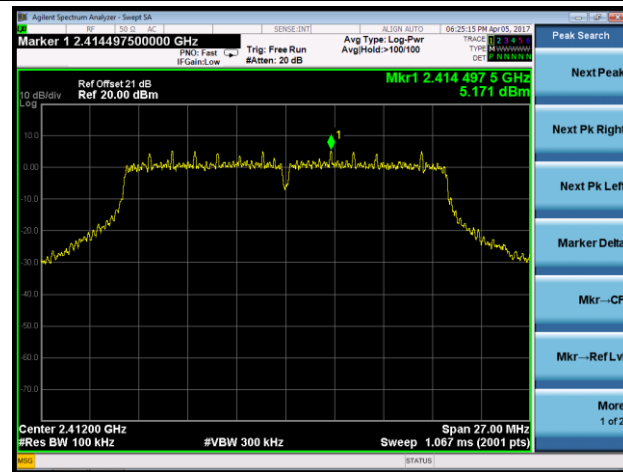
#### Spurious Emission



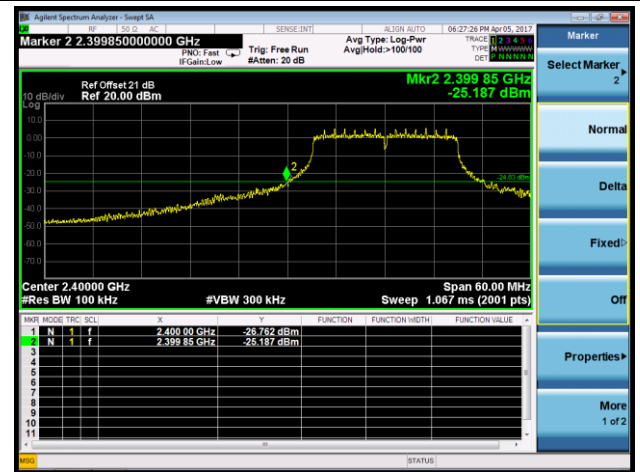
## 802.11n-HT20 Out-of-Band Emissions - Ant 0

### Channel 01 (2412MHz)

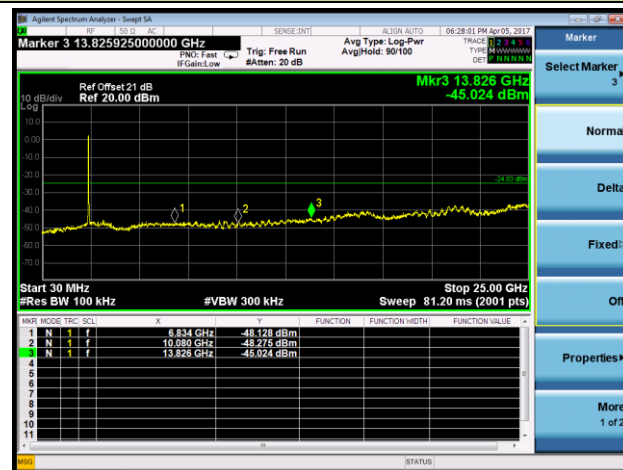
#### 100kHz PSD Reference Level



#### Low Band Edge

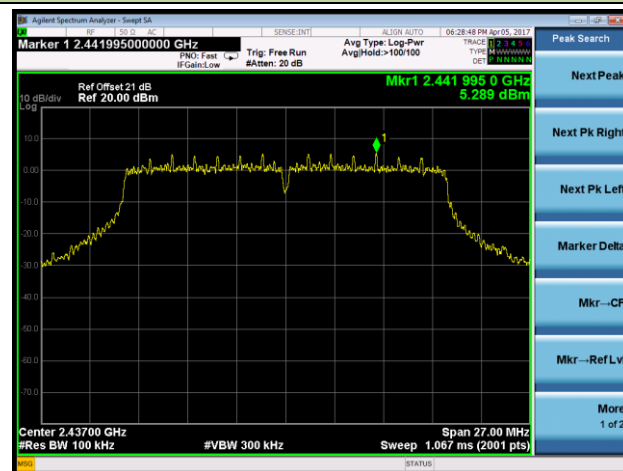


#### Spurious Emission

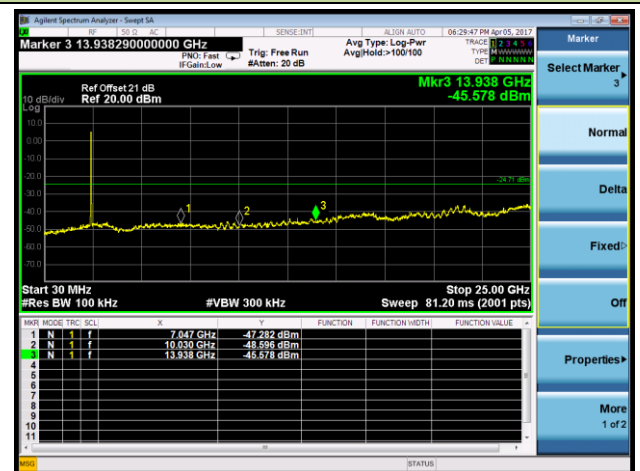


### Channel 06 (2437MHz)

#### 100kHz PSD Reference Level



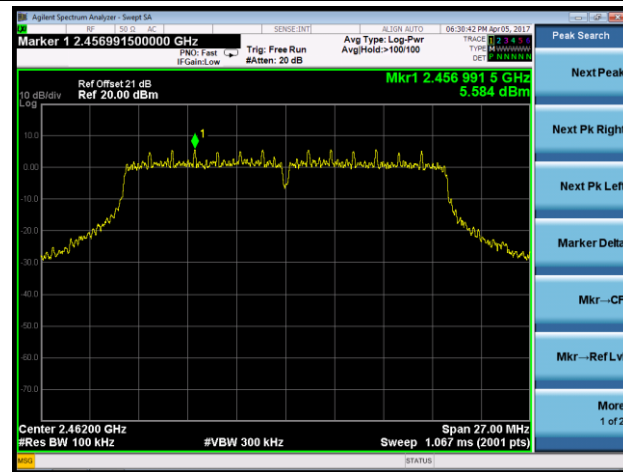
#### Spurious Emission



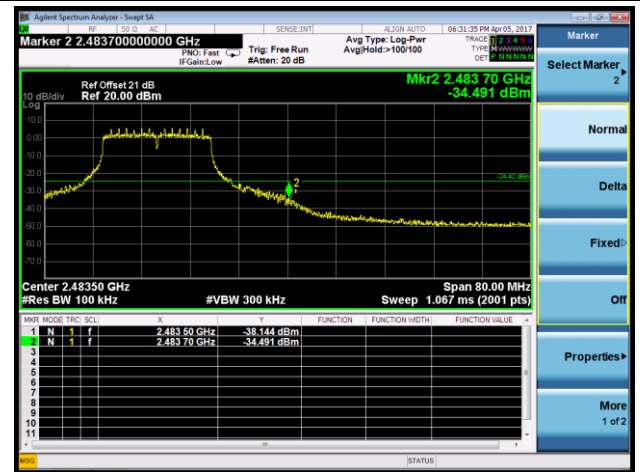
## 802.11n-HT20 Out-of-Band Emissions - Ant 0

### Channel 11 (2462MHz)

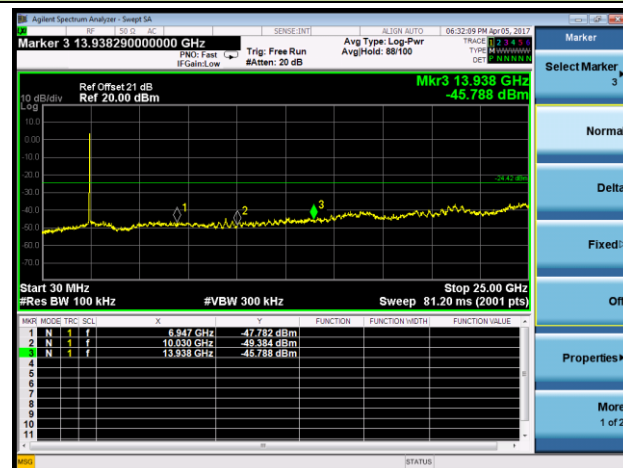
#### 100kHz PSD Reference Level



#### High Band Edge



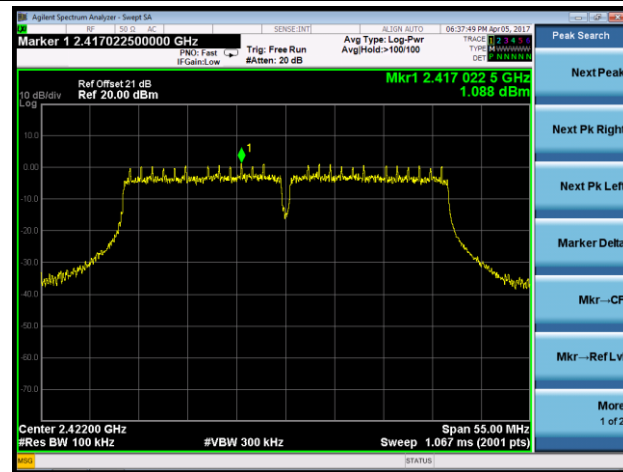
#### Spurious Emission



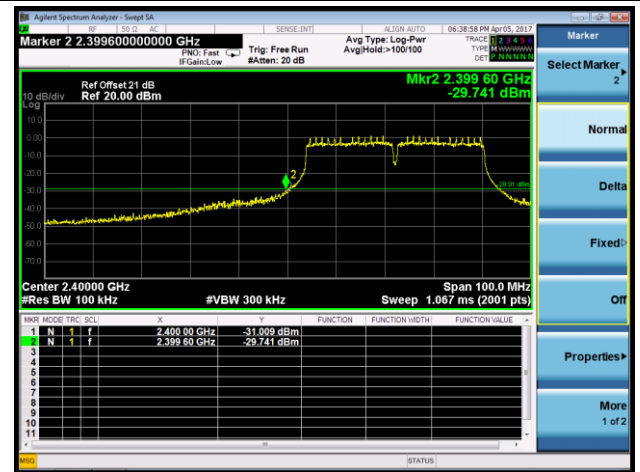
## 802.11n-HT40 Out-of-Band Emissions - Ant 0

### Channel 03 (2422MHz)

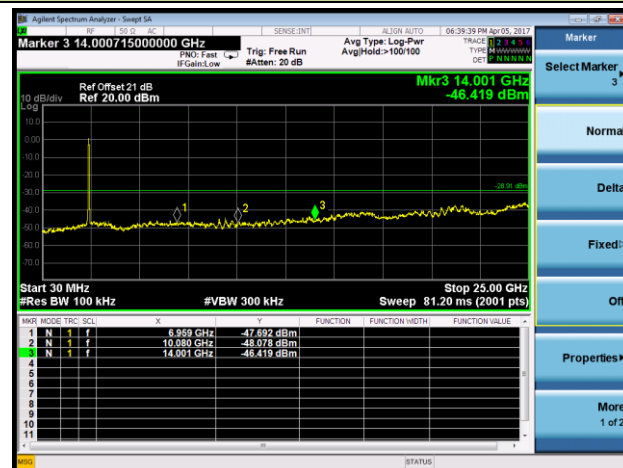
#### 100kHz PSD Reference Level



#### Low Band Edge

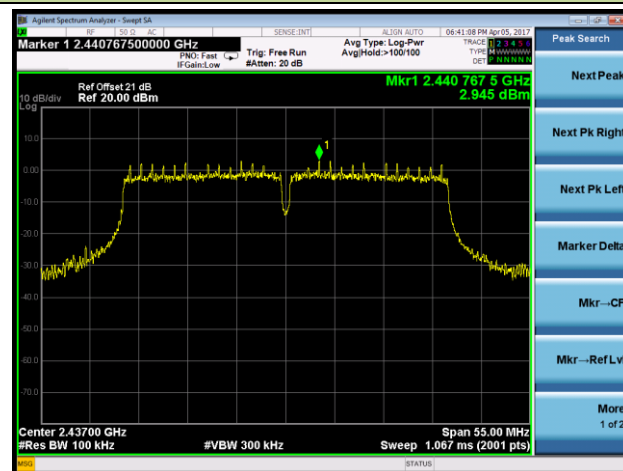


#### Spurious Emission

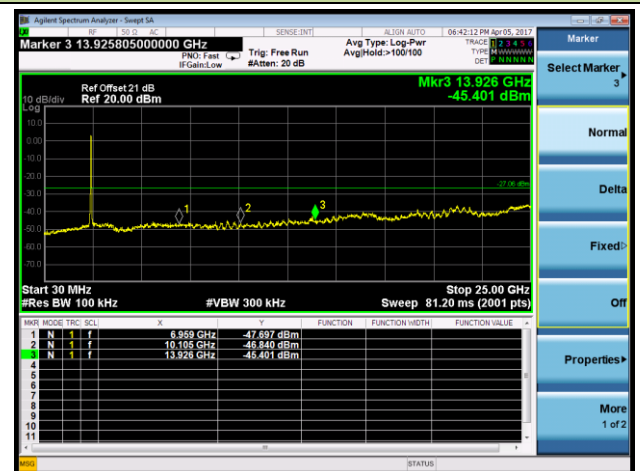


### Channel 06 (2437MHz)

#### 100kHz PSD Reference Level



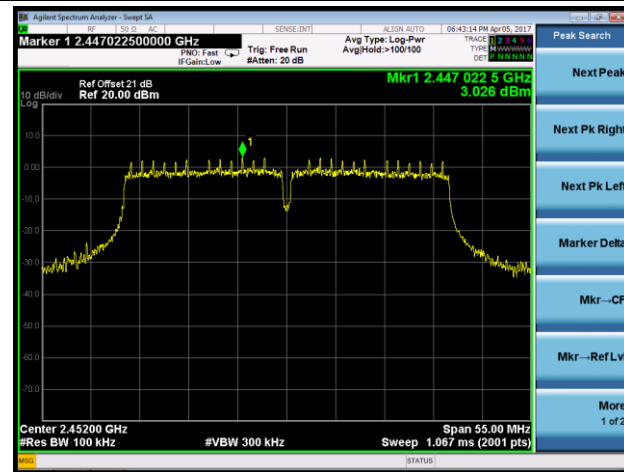
#### Spurious Emission



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

### Channel 09 (2452MHz)

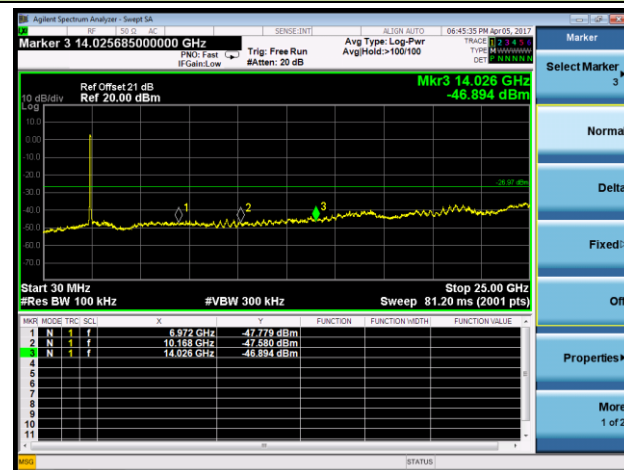
#### 100kHz PSD Reference Level



#### High Band Edge



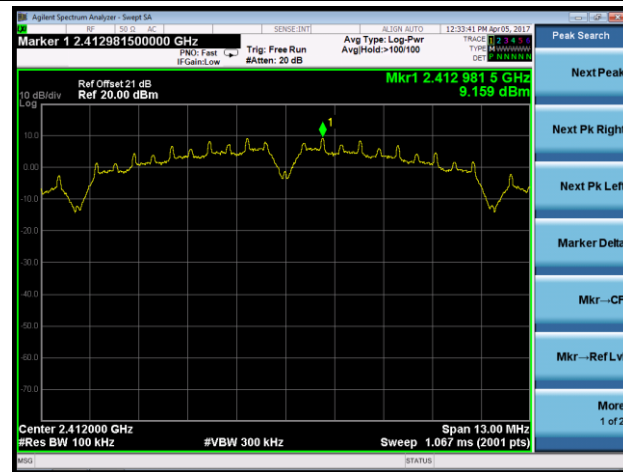
#### Spurious Emission



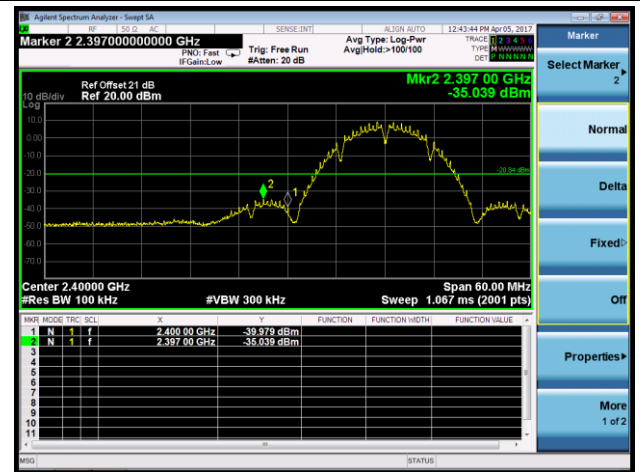
## 802.11b Out-of-Band Emissions - Ant 0 / Ant 0 + 1

### Channel 01 (2412MHz)

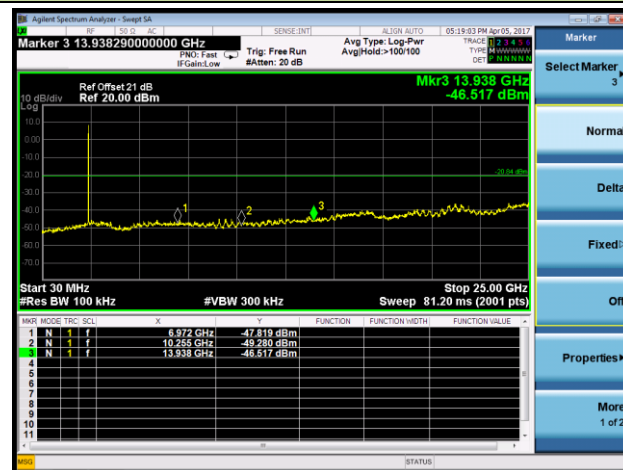
#### 100kHz PSD Reference Level



#### Low Band Edge

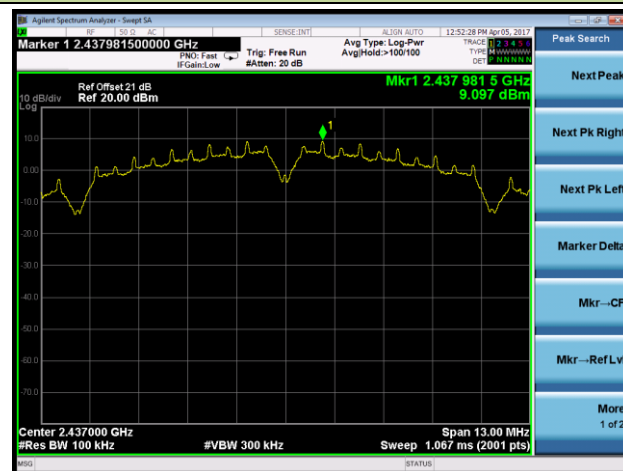


#### Spurious Emission



### Channel 06 (2437MHz)

#### 100kHz PSD Reference Level



#### Spurious Emission

