

## 8. Power Density

### 8.1. Test Equipment

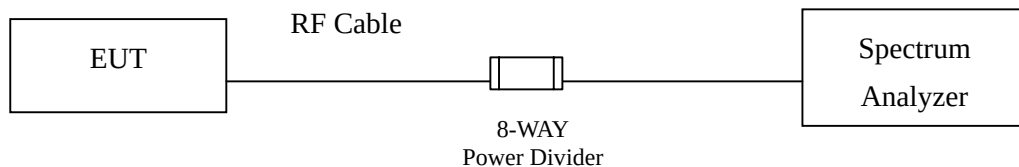
The following test equipments are used during the radiated emission tests:

|   | Equipment           | Manufacturer | Model No./Serial No.   | Last Cal.  |
|---|---------------------|--------------|------------------------|------------|
|   | Spectrum Analyzer   | R&S          | FSP40 / 100170         | Jun, 2009  |
|   | Spectrum Analyzer   | Agilent      | E4407B / US39440758    | Jun, 2009  |
| X | Spectrum Analyzer   | Agilent      | N9010A / MY48030495    | Apr., 2010 |
| X | 8-WAY Power Divider | JFW          | 50PD-647 / 526770 0916 | Apr., 2010 |

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with “X” are used to measure the final test results.
3. The power combiner is used for measure 11n mode.

### 8.2. Test Setup



### 8.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

#### 8.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 3 kHz, VBW=10KHz, Sweep time=(SPAN/3KHz), detector=Peak detector

#### 8.5. Uncertainty

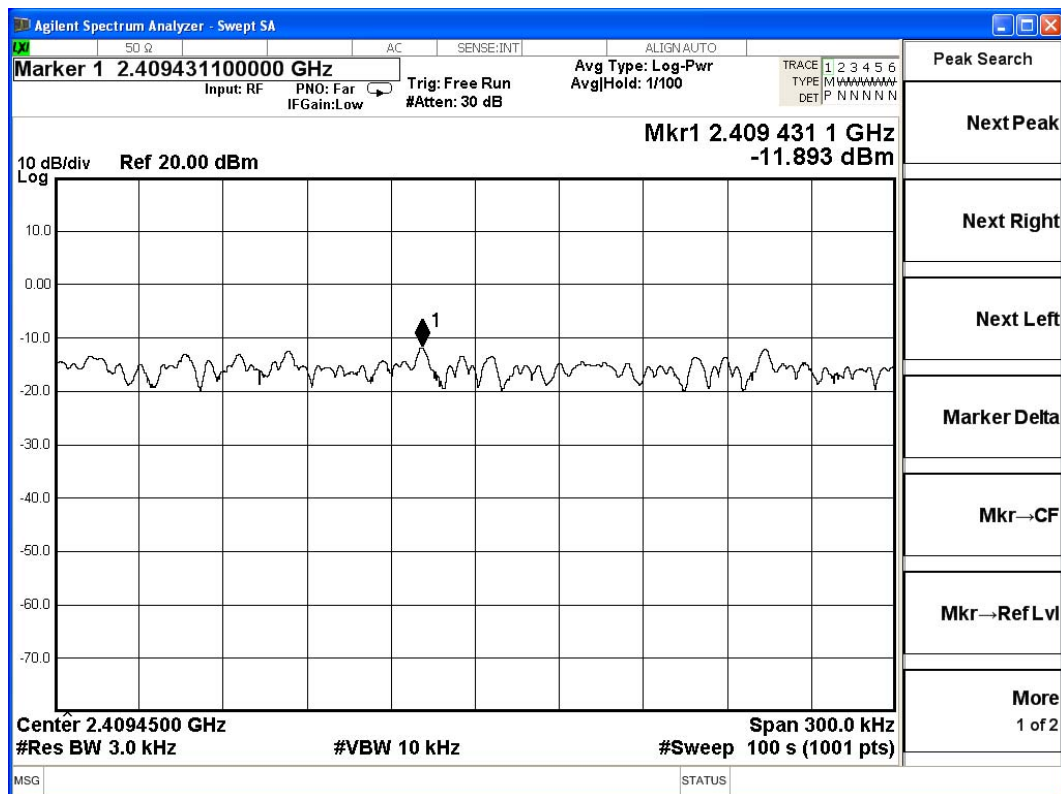
$\pm 1.27$  dB

## 8.6. Test Result of Power Density

Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 (1Mbps)   | 2412.00         | -11.893             | < 8dBm      | Pass   |

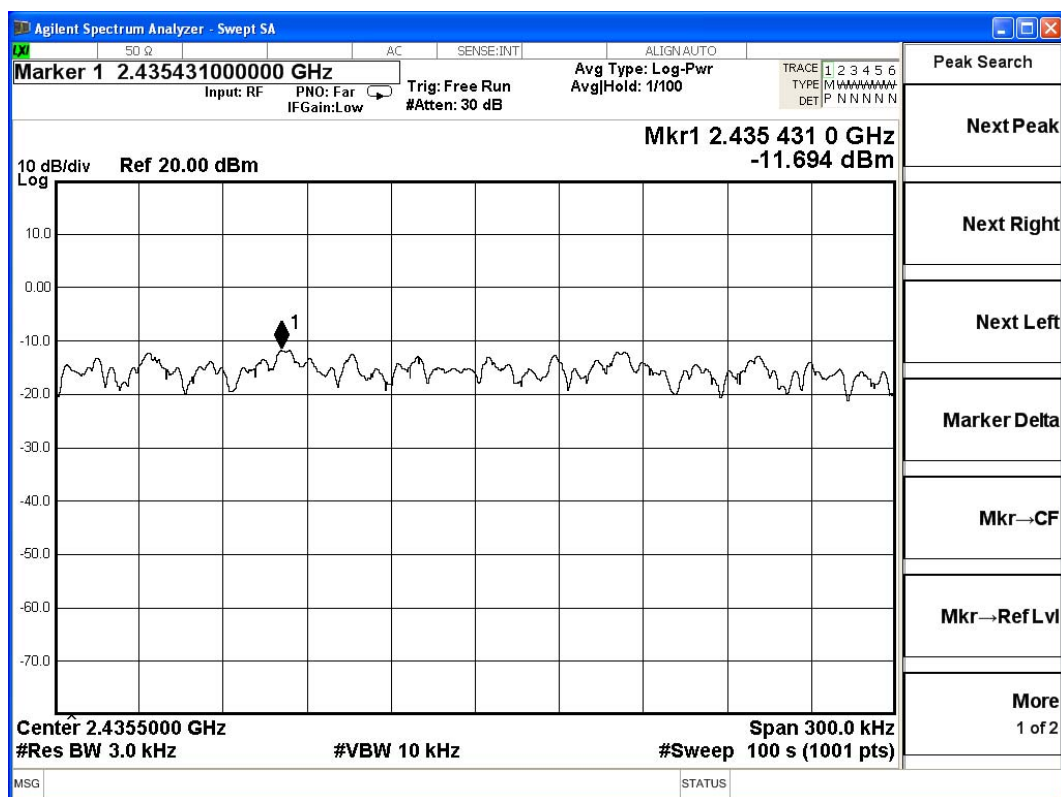
Figure Channel 1:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3OATS  
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 6 (1Mbps)   | 2437.000        | -11.694                 | < 8dBm               | Pass   |

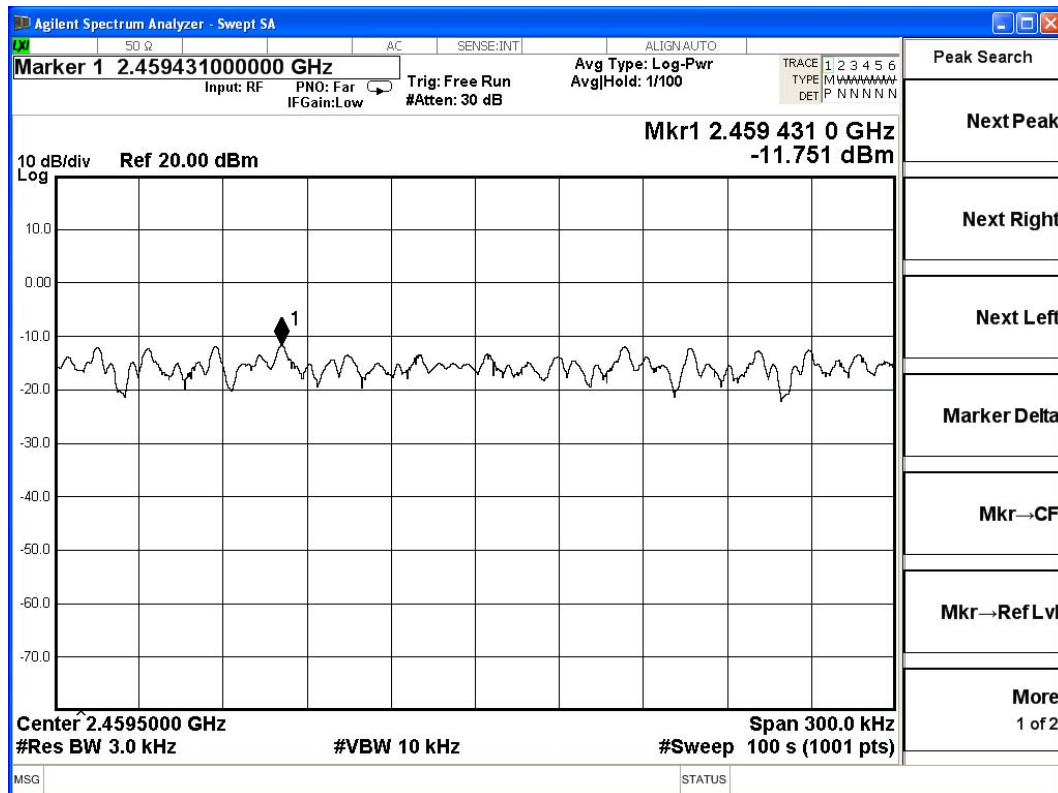
**Figure Channel 6:**



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 11 (1Mbps)  | 2462.00         | -11.751                 | < 8dBm               | Pass   |

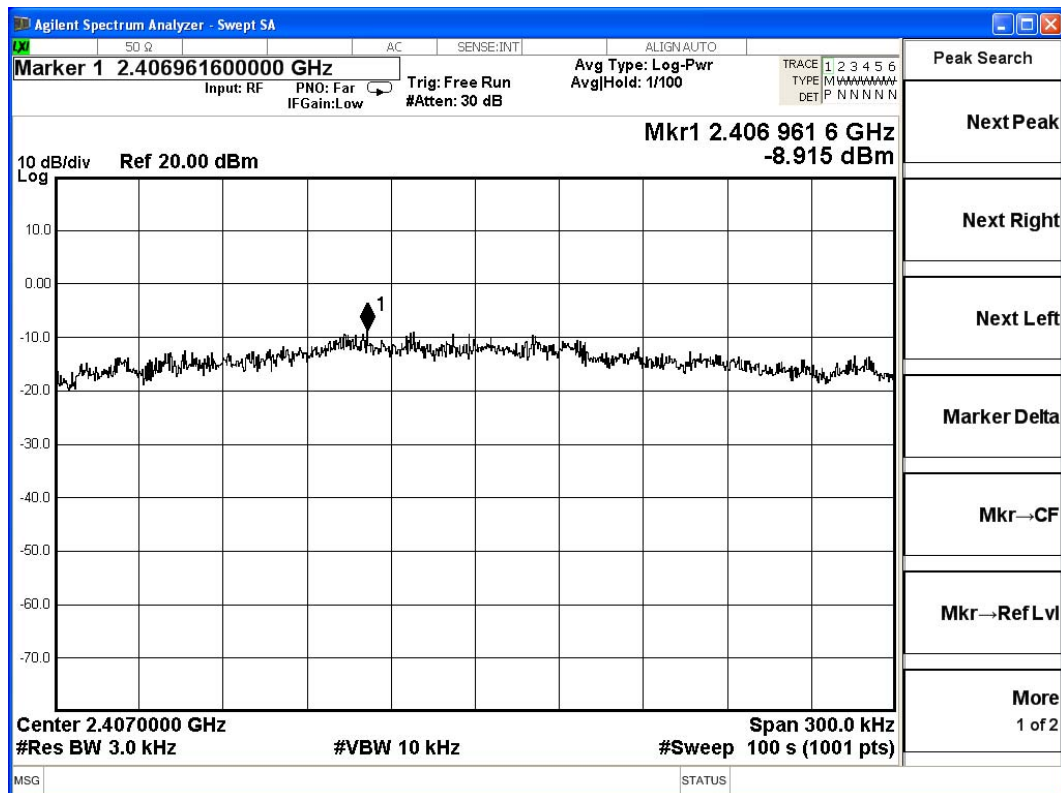
Figure Channel 11:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 (6Mbps)   | 2412.00         | -8.915              | < 8dBm      | Pass   |

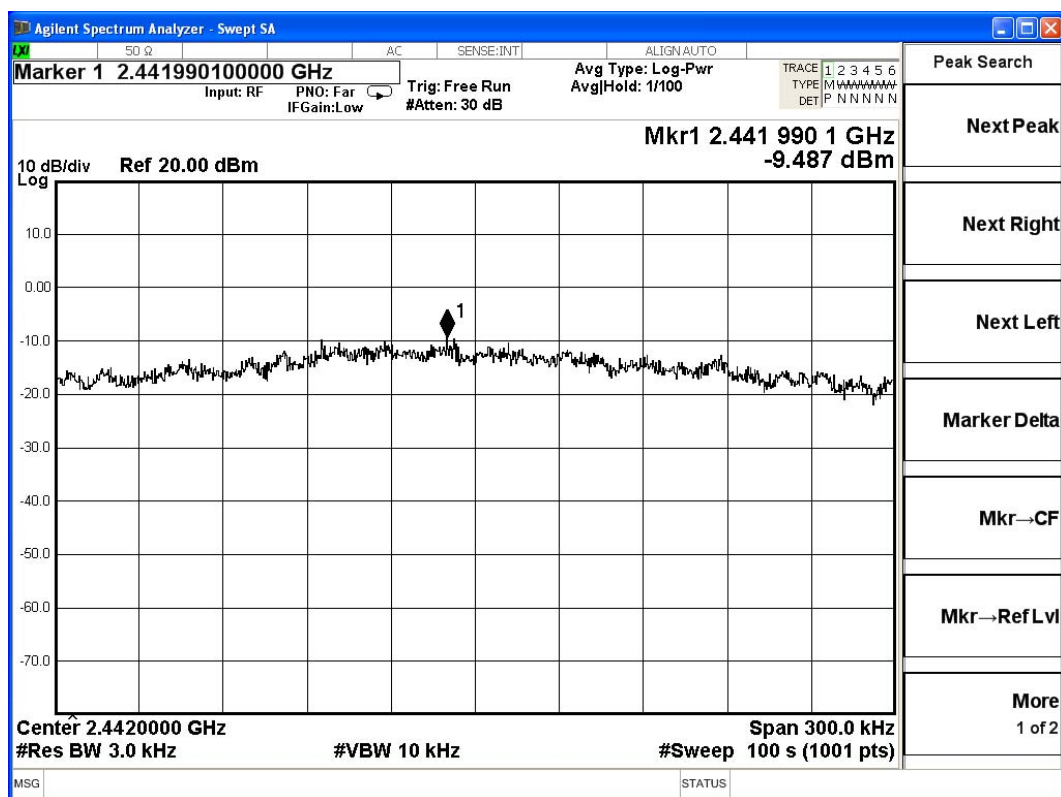
Figure Channel 1:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3OATS  
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 6 (6Mbps)   | 2437.000        | -9.487                  | < 8dBm               | Pass   |

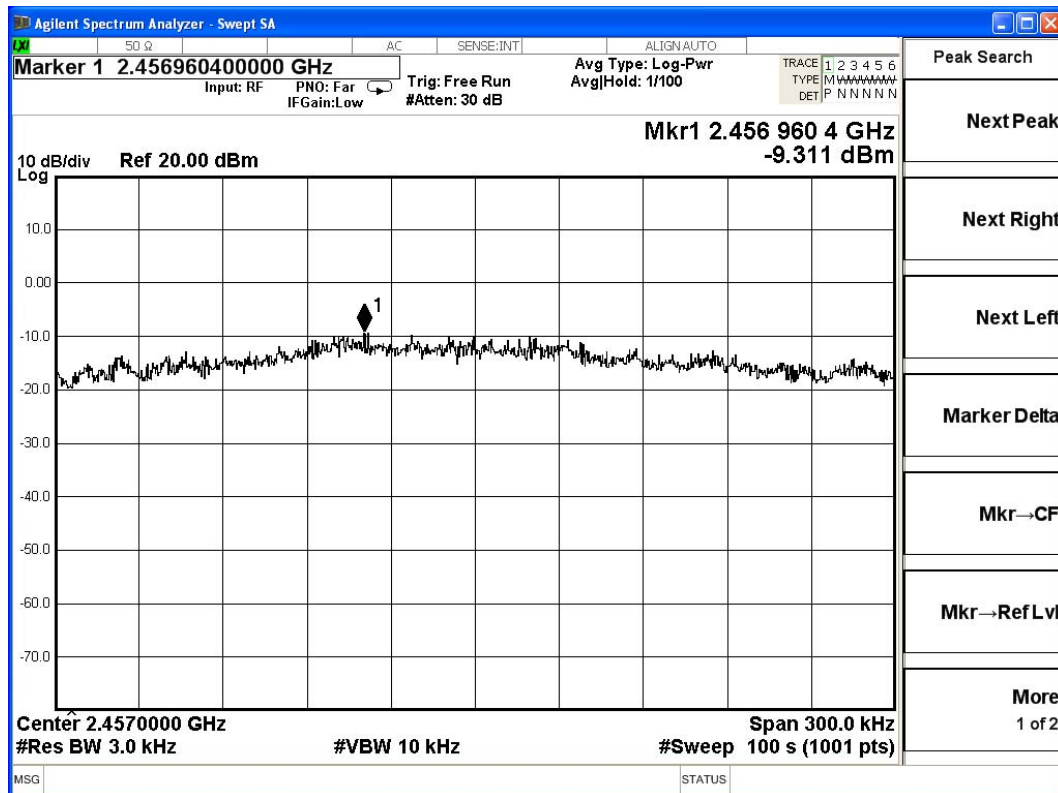
Figure Channel 6:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 11 (6Mbps)  | 2462.00         | -9.311                  | < 8dBm               | Pass   |

Figure Channel 11:

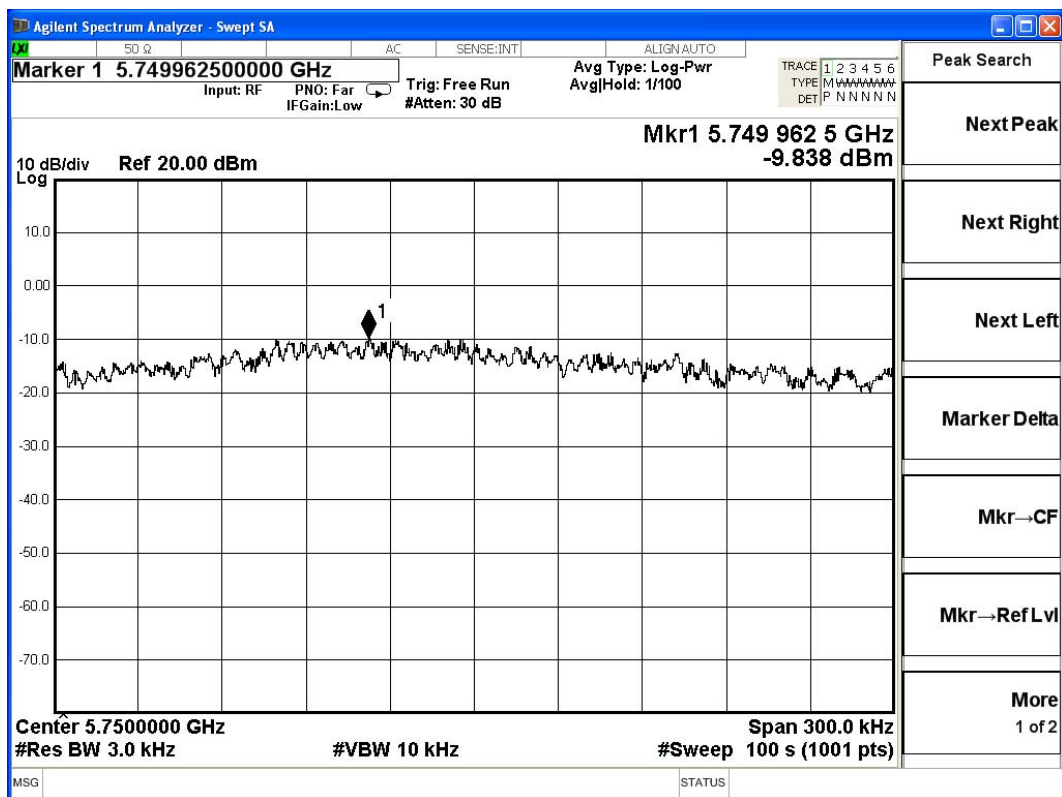




Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 3: Transmitter - 802.11a 6Mbps (5745MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 149 (6Mbps) | 5745.000        | -9.838              | < 8dBm      | Pass   |

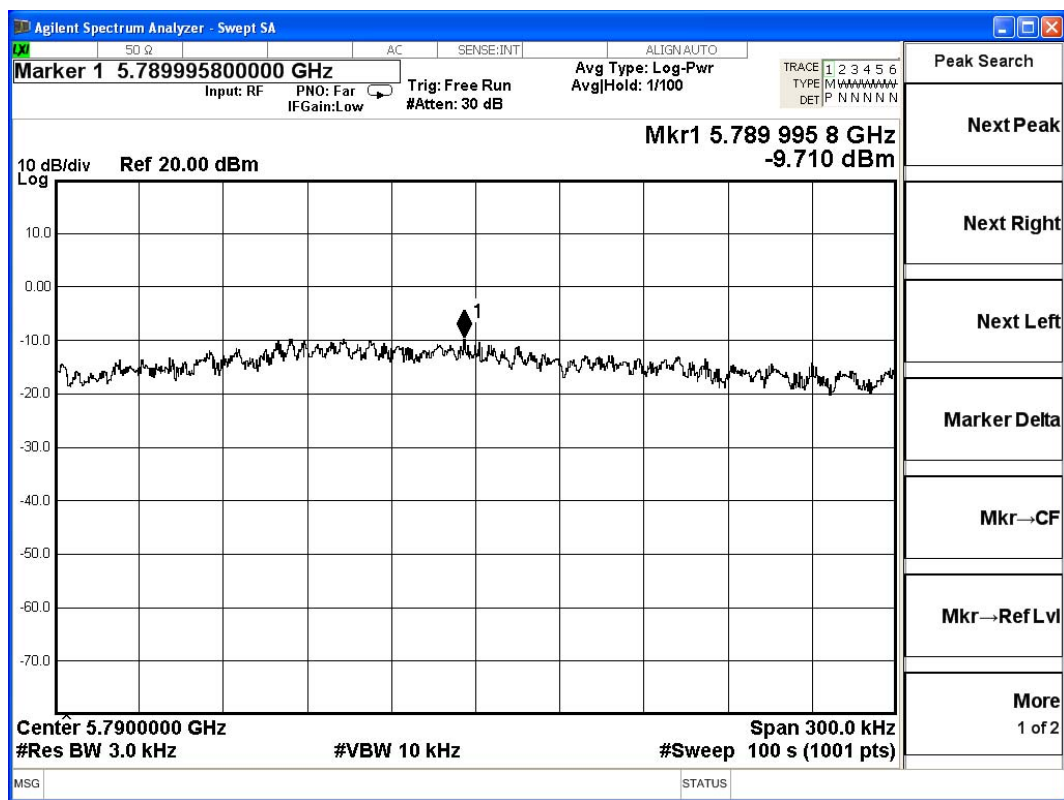
**Figure Channel 149:**



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 3: Transmitter - 802.11a 6Mbps (5785MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 157(6Mbps)  | 5785.000        | -9.710              | < 8dBm      | Pass   |

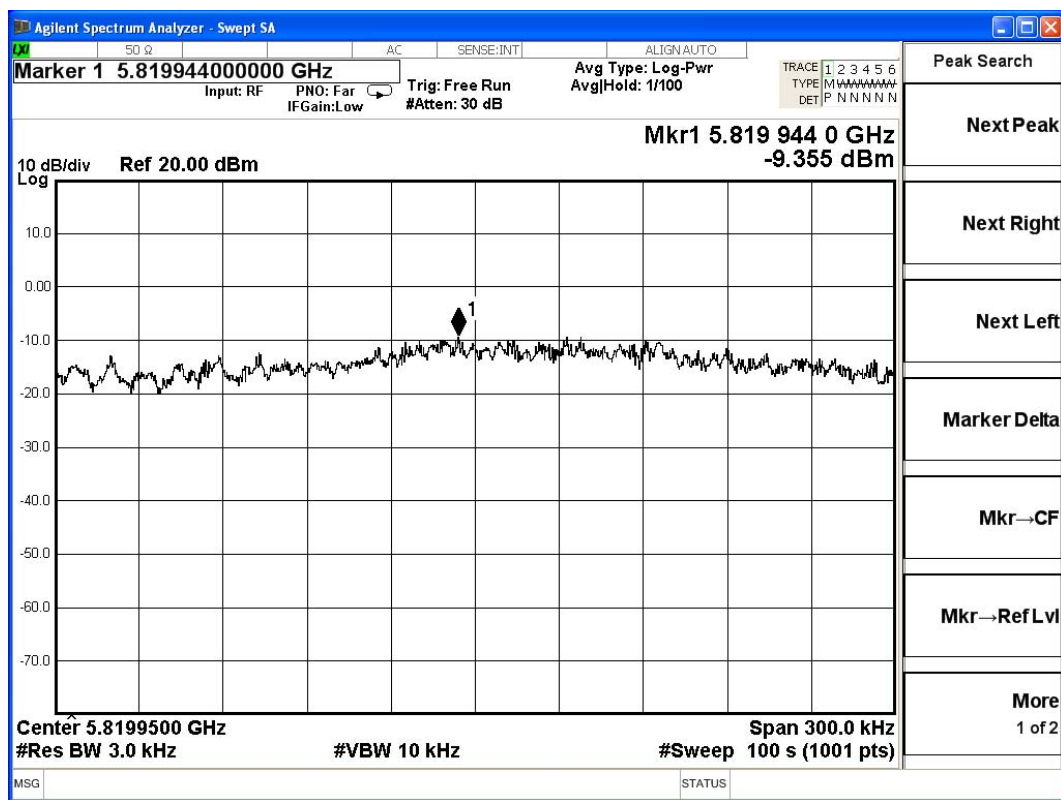
Figure Channel 157:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 3: Transmitter - 802.11a 6Mbps (5825MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 165 (6Mbps) | 5825.000        | -9.355              | < 8dBm      | Pass   |

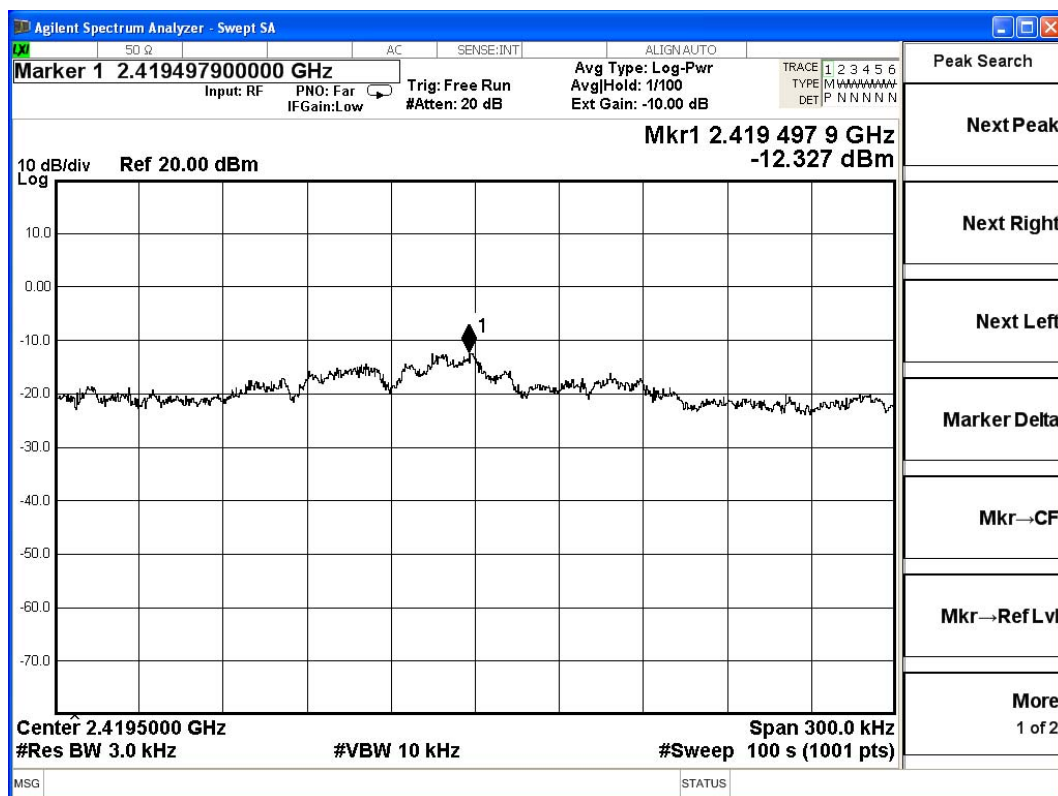
**Figure Channel 165:**



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 4: Transmitter - 802.11n-20BW\_13Mbps(2.4G Band) (2412MHz)

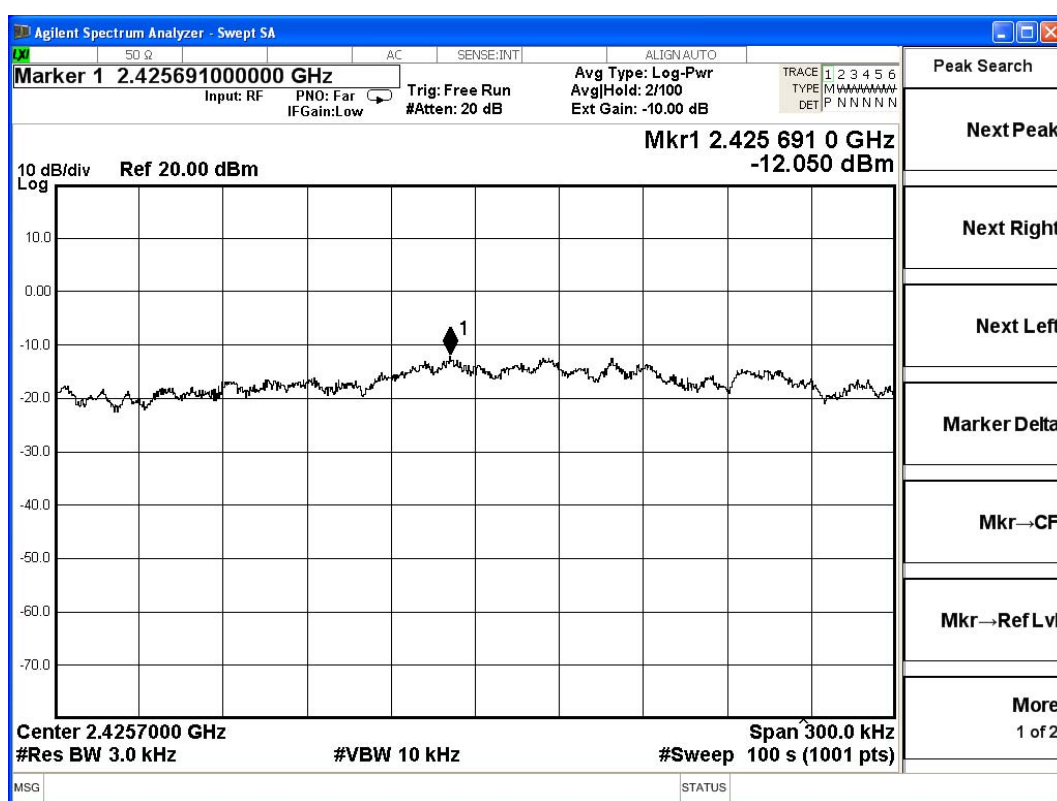
| Channel No.  | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|--------------|-----------------|---------------------|-------------|--------|
| 1 (13.5Mbps) | 2412.00         | -12.327             | < 8dBm      | Pass   |

Figure Channel 1:



| Channel No.  | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|--------------|-----------------|-------------------------|----------------------|--------|
| 6 (13.5Mbps) | 2437.000        | -12.050                 | < 8dBm               | Pass   |

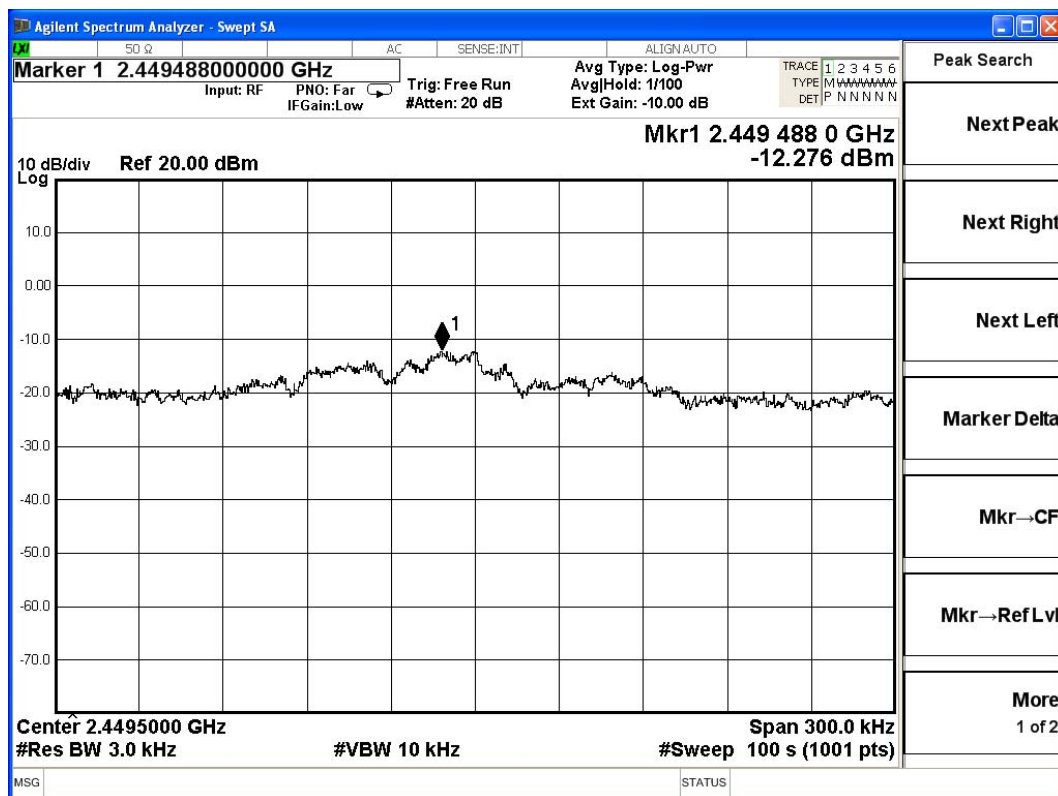
**Figure Channel 6:**



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 4: Transmitter - 802.11n-20BW\_13Mbps(2.4G Band) (2462MHz)

| Channel No.   | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|---------------|-----------------|-------------------------|----------------------|--------|
| 11 (13.5Mbps) | 2462.00         | -12.276                 | < 8dBm               | Pass   |

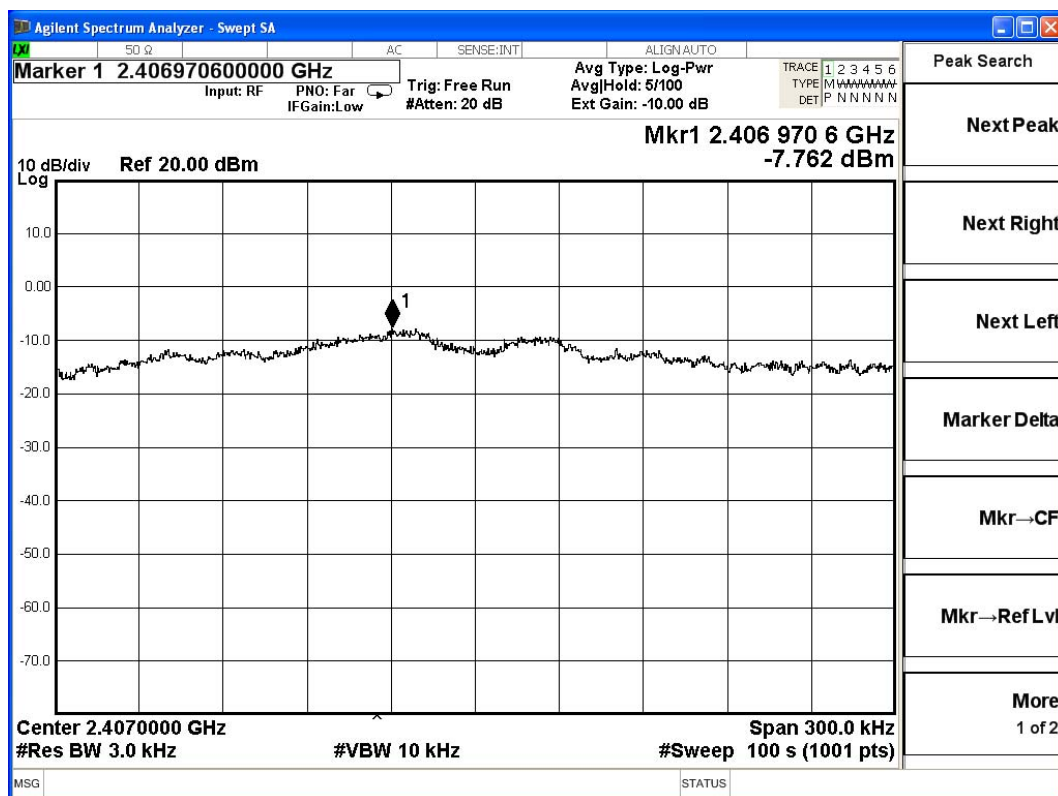
Figure Channel 11:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 5: Transmitter - 802.11n-40BW\_27Mbps(2.4G Band) (2422MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 (27Mbps)  | 2422.00         | -7.762              | < 8dBm      | Pass   |

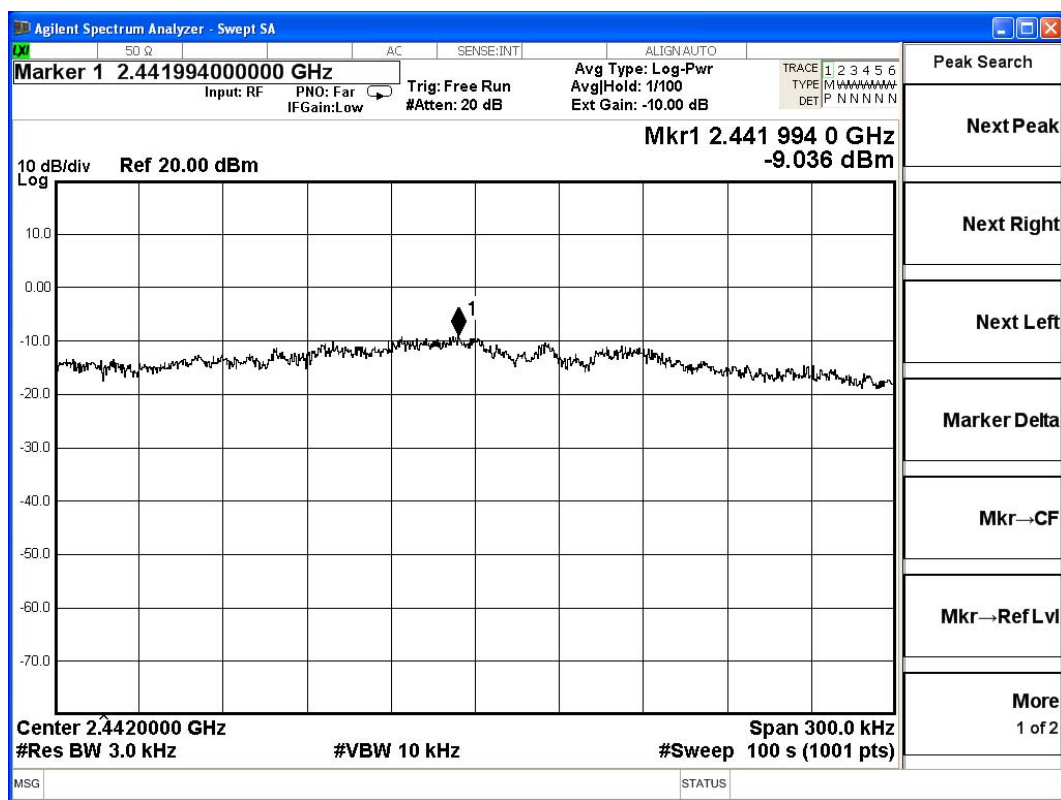
**Figure Channel 1:**



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3OATS  
 Test Mode : Mode 5: Transmitter - 802.11n-40BW\_27Mbps(2.4G Band) (2437MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 4 (27Mbps)  | 2437.000        | -9.036                  | < 8dBm               | Pass   |

Figure Channel 4:

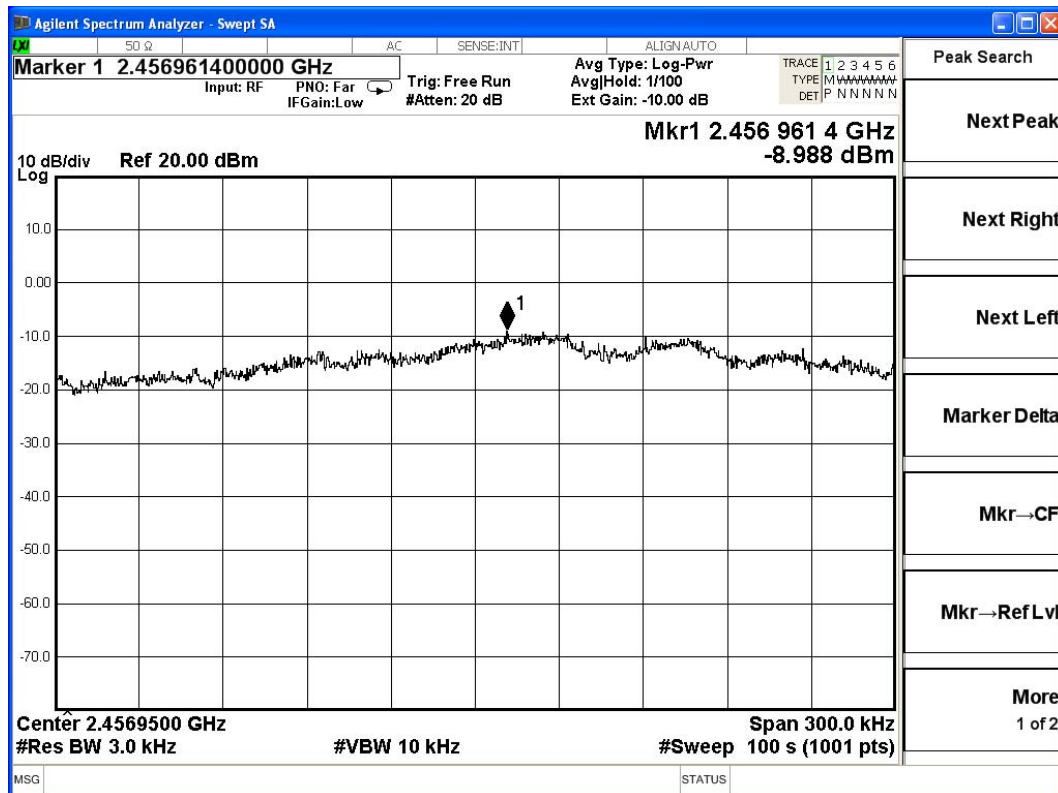




Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 5: Transmitter - 802.11n-40BW\_27Mbps(2.4G Band) (2452MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 07 (27Mbps) | 2452.00         | -8.988                  | < 8dBm               | Pass   |

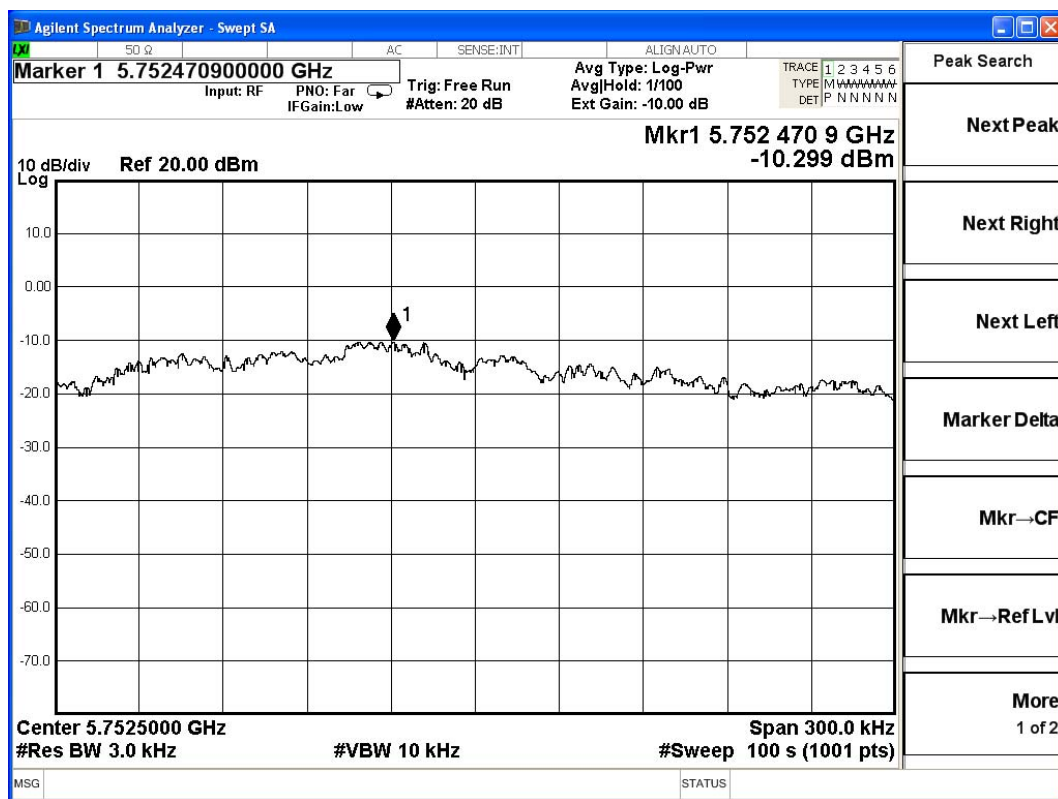
Figure Channel 7:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 6: Transmitter - 802.11n-20BW\_13Mbps(5G Band) (5745MHz)

| Channel No.    | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|----------------|-----------------|---------------------|-------------|--------|
| 149 (13.5Mbps) | 5745.00         | -10.299             | < 8dBm      | Pass   |

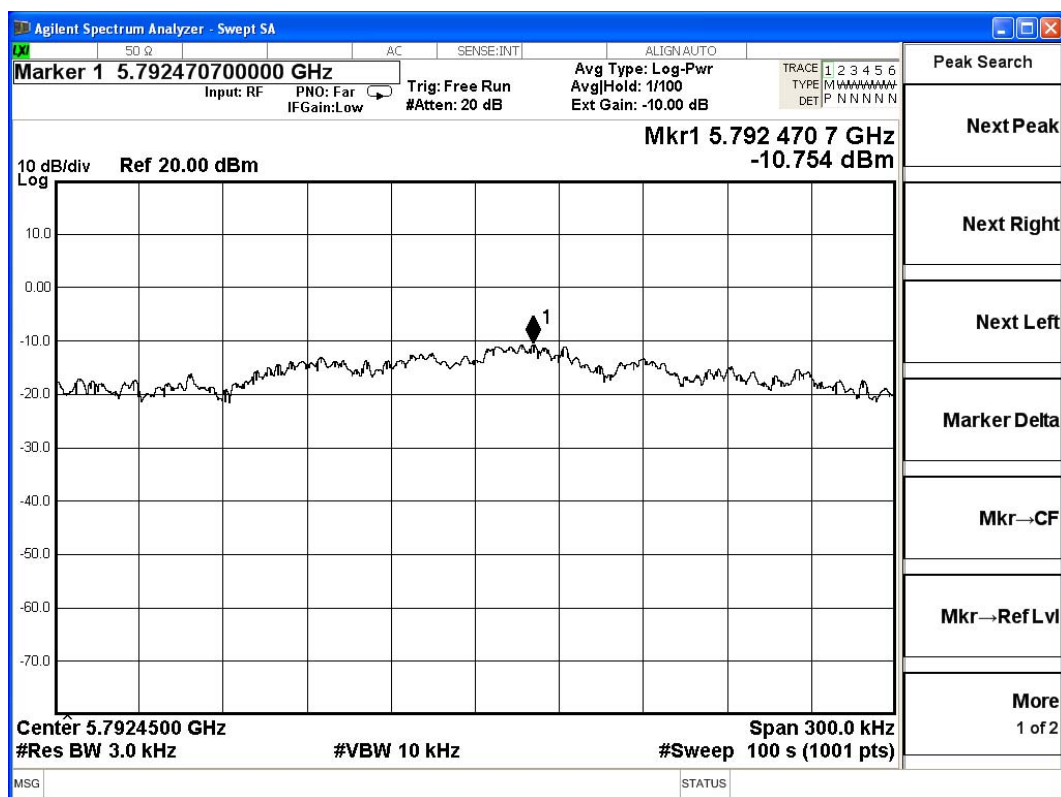
Figure Channel 149:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3OATS  
 Test Mode : Mode 6: Transmitter - 802.11n-20BW\_13Mbps(5G Band) (5785MHz)

| Channel No.   | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|---------------|-----------------|-------------------------|----------------------|--------|
| 157(13.5Mbps) | 5785.000        | -10.754                 | < 8dBm               | Pass   |

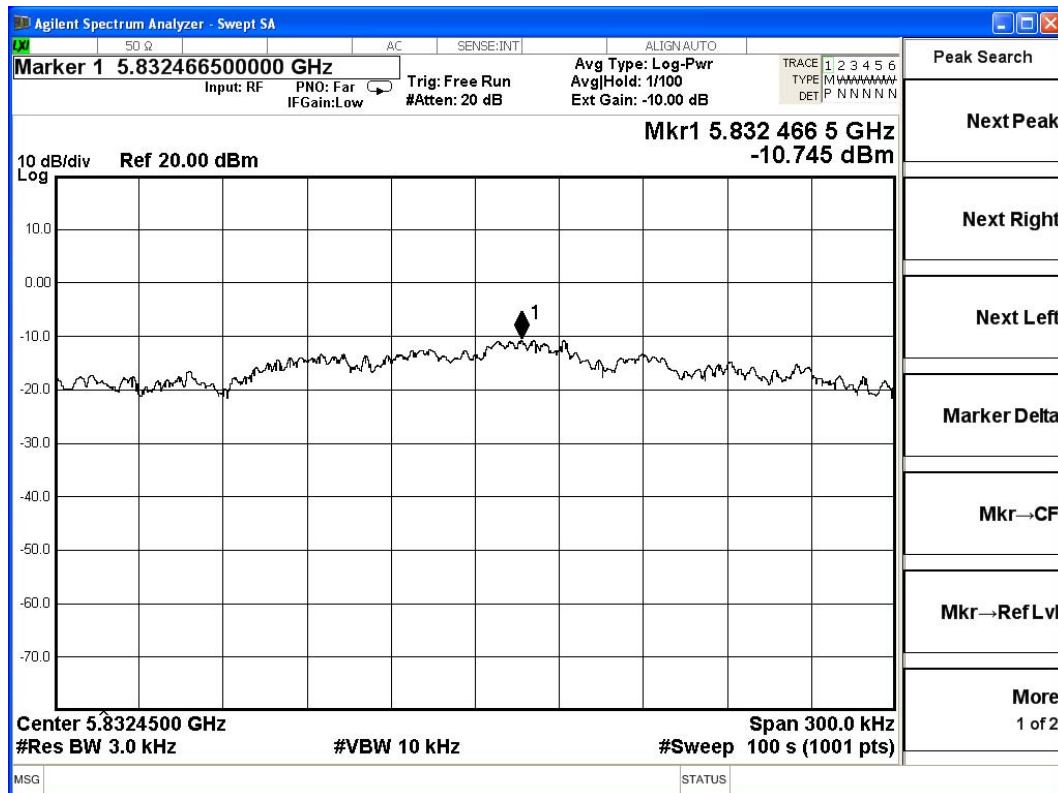
Figure Channel 157:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 6: Transmitter - 802.11n-20BW\_13Mbps(5G Band) (5825MHz)

| Channel No.   | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|---------------|-----------------|-------------------------|----------------------|--------|
| 165(13.5Mbps) | 5825.00         | -10.745                 | < 8dBm               | Pass   |

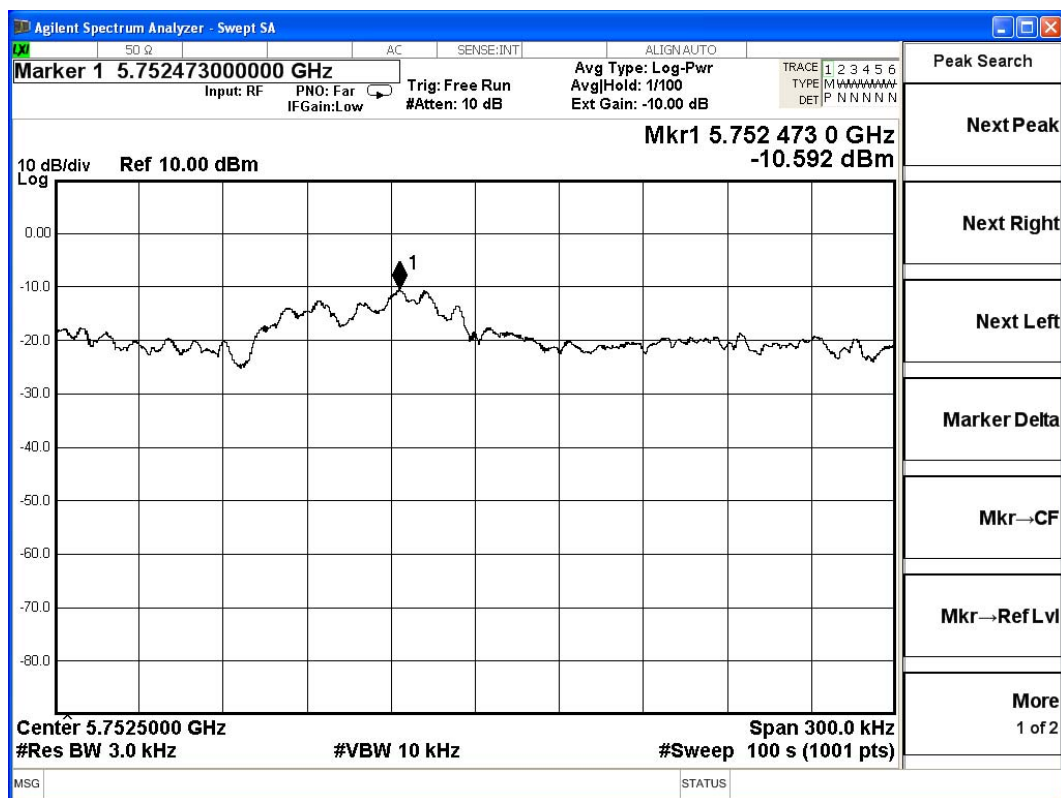
Figure Channel 165:



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3 OATS  
 Test Mode : Mode 7: Transmitter - 802.11n-40BW\_27Mbps(5G Band) (5755MHz)

| Channel No.  | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|--------------|-----------------|---------------------|-------------|--------|
| 151 (27Mbps) | 5755.00         | -10.592             | < 8dBm      | Pass   |

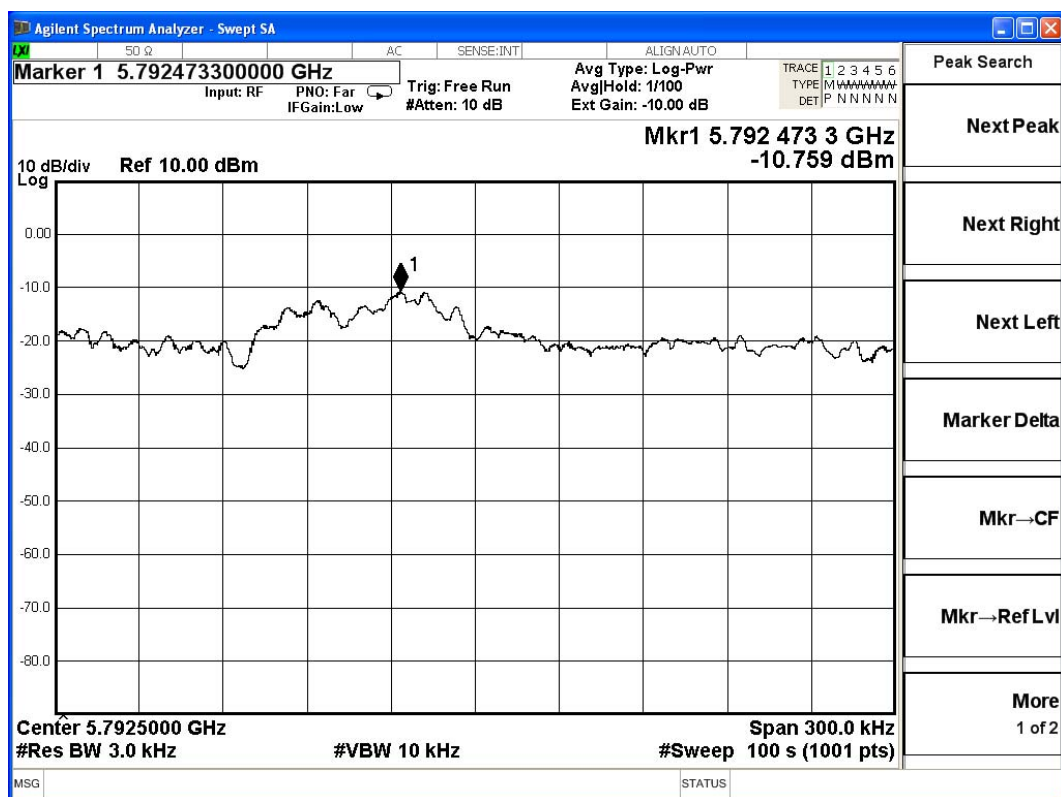
**Figure Channel 151:**



Product : Tablet PC MC-C5 / MC-F5  
 Test Item : Power Density Data  
 Test Site : No.3OATS  
 Test Mode : Mode 7: Transmitter - 802.11n-40BW\_27Mbps(5G Band) (5795MHz)

| Channel No.  | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|--------------|-----------------|-------------------------|----------------------|--------|
| 159 (27Mbps) | 5795.000        | -10.759                 | < 8dBm               | Pass   |

Figure Channel 159:



## **9. EMI Reduction Method During Compliance Testing**

No modification was made during testing.

## Attachment 1: EUT Test Photographs



## Attachment 2: EUT Detailed Photographs