

## 5.7 DSSS Peak Power Spectral Density [Section 15.247(d) ]

### 5.7.1 Test Procedure

1. The Transmitter output of EUT was connected to the spectrum analyzer.  
 Equipment mode: Spectrum analyzer  
 Detector function: Peak mode  
 SPAN:1.5MHz  
 RBW: 3KHz  
 VBW: 30KHz  
 Center frequency: fundamental frequency tested.  
 Sweep time= 500 sec.
2. Using Peak Search to read the peak power after Maximum Hold function is completed.

### 5.7.2 Test Setup

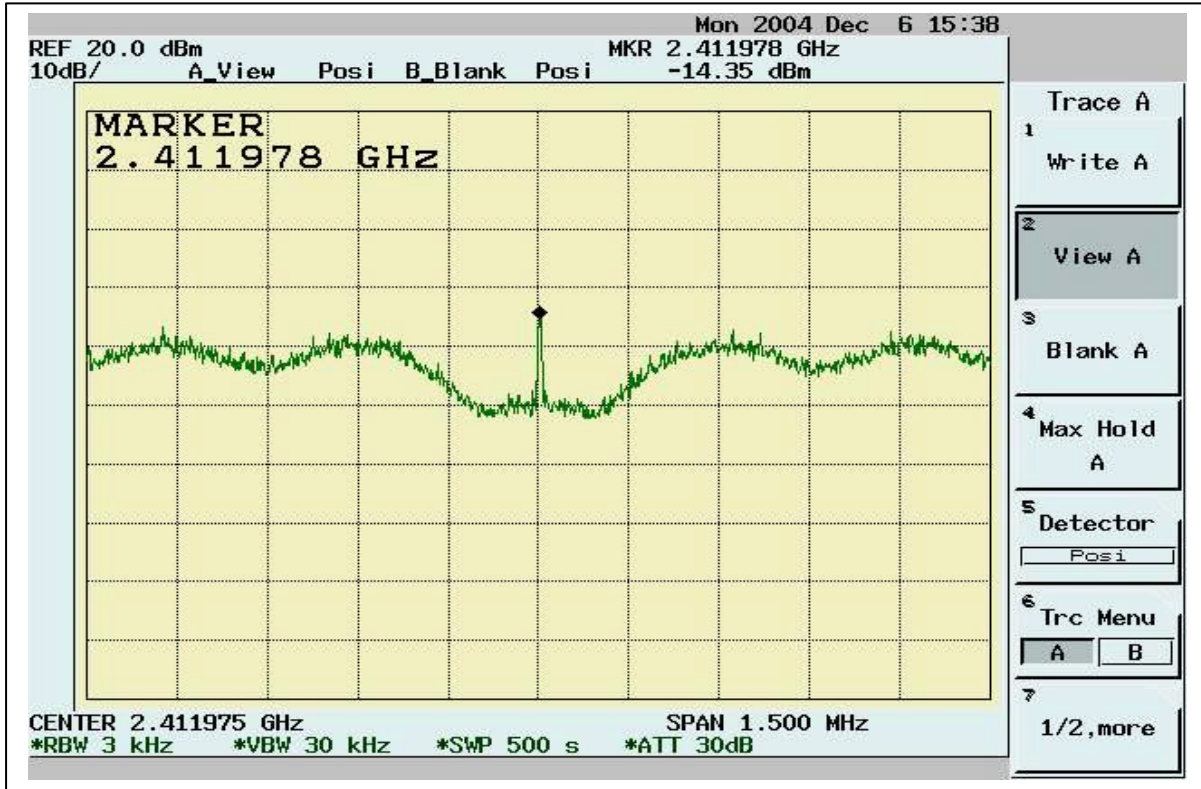


### 5.7.3 Test Data:

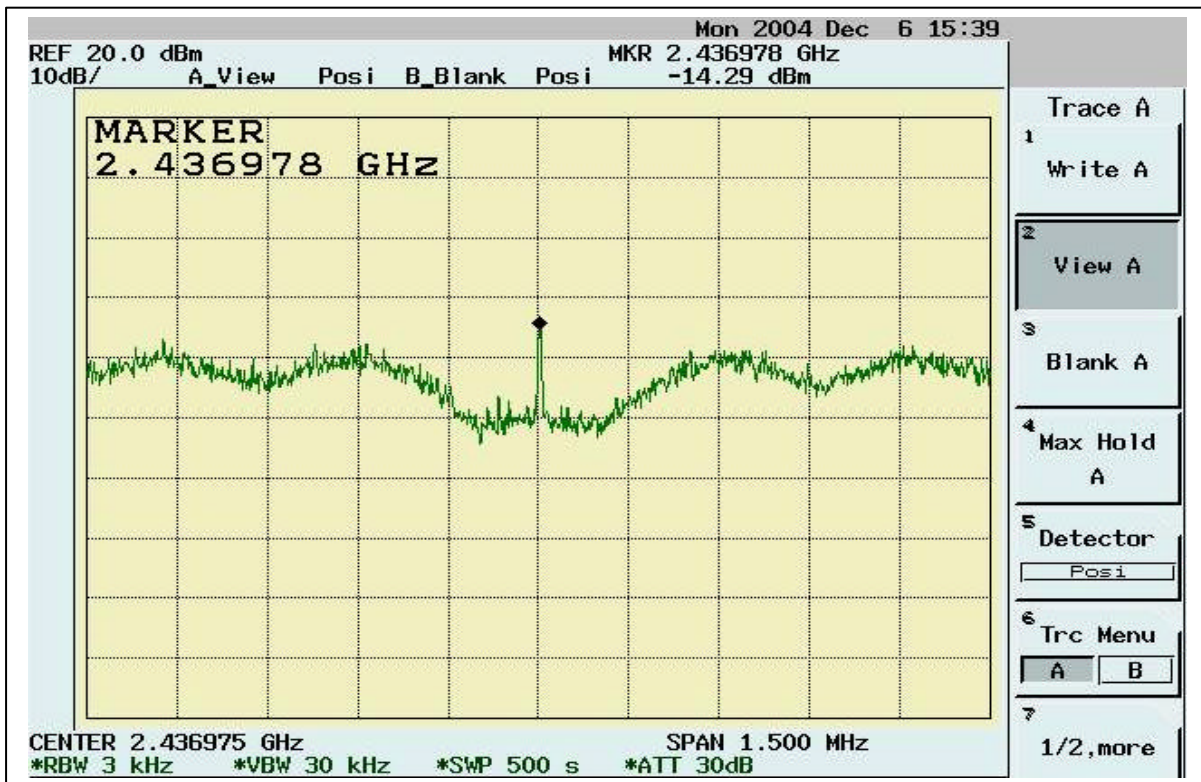
**Maximum Peak Output Power Density**

| Chennel | Spectrum Reading<br>(dBm/3KHz) | Cable Loss<br>(dB) | Peak Power Output<br>(dBm/3KHz) | Limit<br>(dBm/3KHz) | Pass/Fail |
|---------|--------------------------------|--------------------|---------------------------------|---------------------|-----------|
| 1       | -14.35                         | 1.1                | -13.25                          | 8                   | Pass      |
| 6       | -14.29                         | 1.1                | -13.19                          | 8                   | Pass      |
| 11      | -14.46                         | 1.1                | -13.36                          | 8                   | Pass      |

Channel 1



Channel 6



Channel 11



## 6. TEST RESULTS (802.11a)

### 6.1 Maximum Peak Output Power [Section 15.407 (a)(1)(2)(3)]

#### 6.1.1 Test Procedure

The Transmitter output of EUT was connected to the peak power analyzer.

#### 6.1.2 Test Setup



| Frequency Band  | Limit                                       |
|-----------------|---------------------------------------------|
| 5.15 – 5.25 GHz | The lesser of 50mW (17dBm) or 4dBm+10logB   |
| 5.25 – 5.35GHz  | The lesser of 250mW (24dBm) or 11dBm+10logB |
| 5.725-5.825GHz  | The lesser of 1W (30dBm) or 17dBm+10logB    |

Note: B is the 26dB emission bandwidth in MHz

#### 6.1.3 Test Data: (Normal Mode)

##### Maximum Peak Output Power

| Chennel | Frequency<br>(MHz) | Peak Power<br>Output (dBm) | 26 dBc<br>Bandwidth/Limit<br>(MHz)/(dBm) | The lesser Limit<br>(dBm) | Pass/Fail |
|---------|--------------------|----------------------------|------------------------------------------|---------------------------|-----------|
| 1       | 5180               | 16.312                     | 29.12/18.64                              | 17                        | Pass      |
| 4       | 5240               | 16.031                     | 29.12/18.64                              | 17                        | Pass      |
| 5       | 5260               | 16.562                     | 29.12/25.64                              | 24                        | Pass      |
| 8       | 5320               | 16.749                     | 28.42/25.53                              | 24                        | Pass      |
| 9       | 5745               | 18.126                     | 30.31/31.81                              | 30                        | Pass      |
| 12      | 5805               | 18.343                     | 32.62/32.13                              | 30                        | Pass      |

**6.1.4 Test Data: (Turbo Mode)****Maximum Peak Output Power**

| Channel | Frequency<br>(MHz) | Peak Power<br>Output (dBm) | 26 dBc<br>Bandwidth/Limit<br>(MHz)/(dBm) | The lesser<br>Limit (dBm) | Pass/Fail |
|---------|--------------------|----------------------------|------------------------------------------|---------------------------|-----------|
| 1       | 5210               | 16.281                     | 50.64/21.04                              | 17                        | Pass      |
| 2       | 5250               | 15.812                     | 50.64/21.04                              | 17                        | Pass      |
| 3       | 5290               | 18.568                     | 51.60/28.12                              | 24                        | Pass      |
| 4       | 5760               | 18.312                     | 53.76/34.30                              | 30                        | Pass      |
| 5       | 5800               | 18.374                     | 56.52/34.52                              | 30                        | Pass      |

