

## 10 NUMBER of HOPPING CHANNELS

### 10.1 Standard Applicable

According to 15.247(b)(1), for frequency hopping systems, operating in the 2400-2483.5MHz band employing at least 75 hopping channels

### 10.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. The setup of the EUT as shown in figure 4. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set EUT to hopping operating mode and set spectrum analyzer miximum to measure the number of hopping channels.

### 10.3 Measurement Equipment

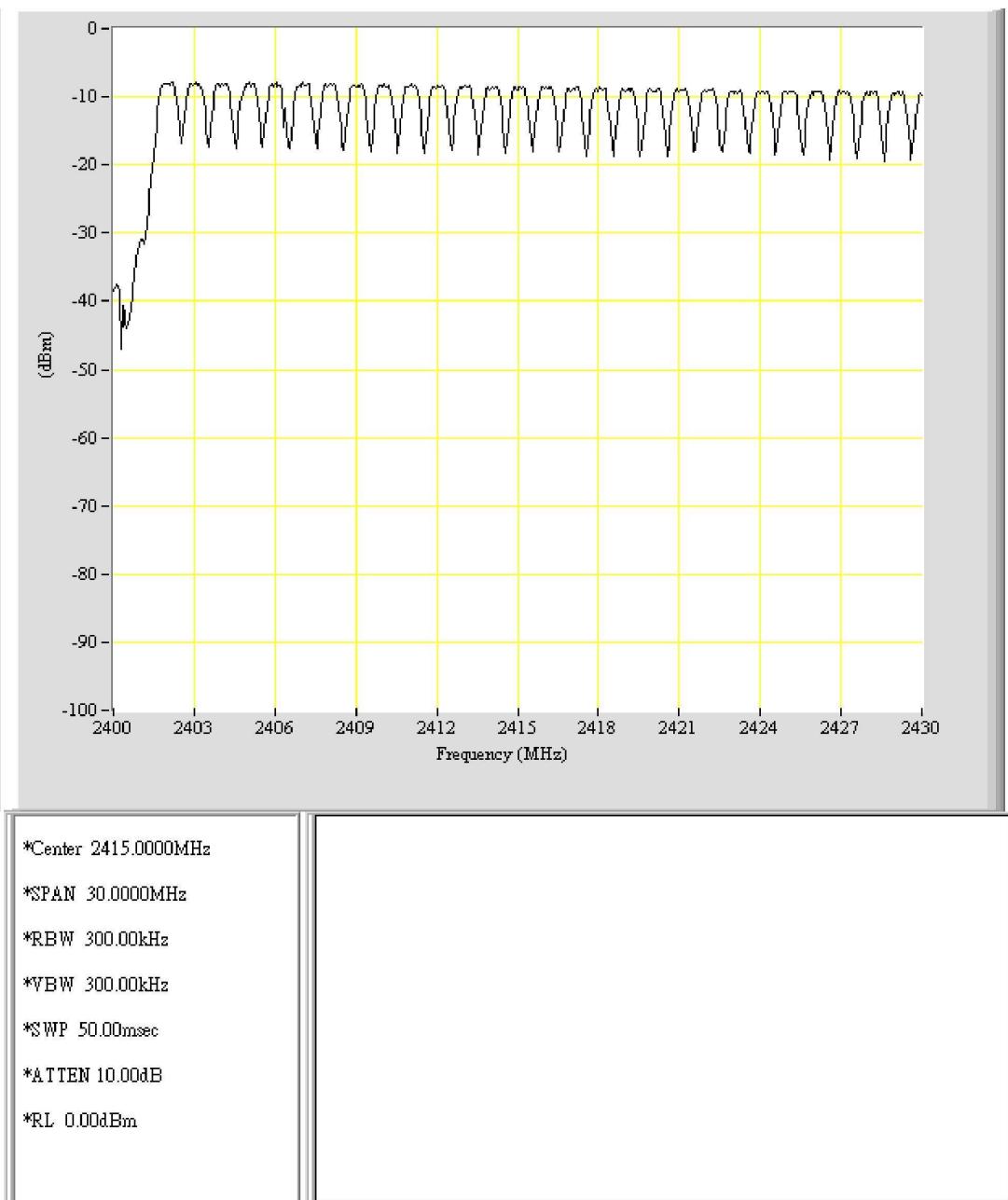
| Equipment         | Manufacturer | Model No. | Next Cal. Due |
|-------------------|--------------|-----------|---------------|
| Spectrum Analyzer | Agilent      | 8564EC    | 09/23/2006    |

### 10.4 Measurement Data

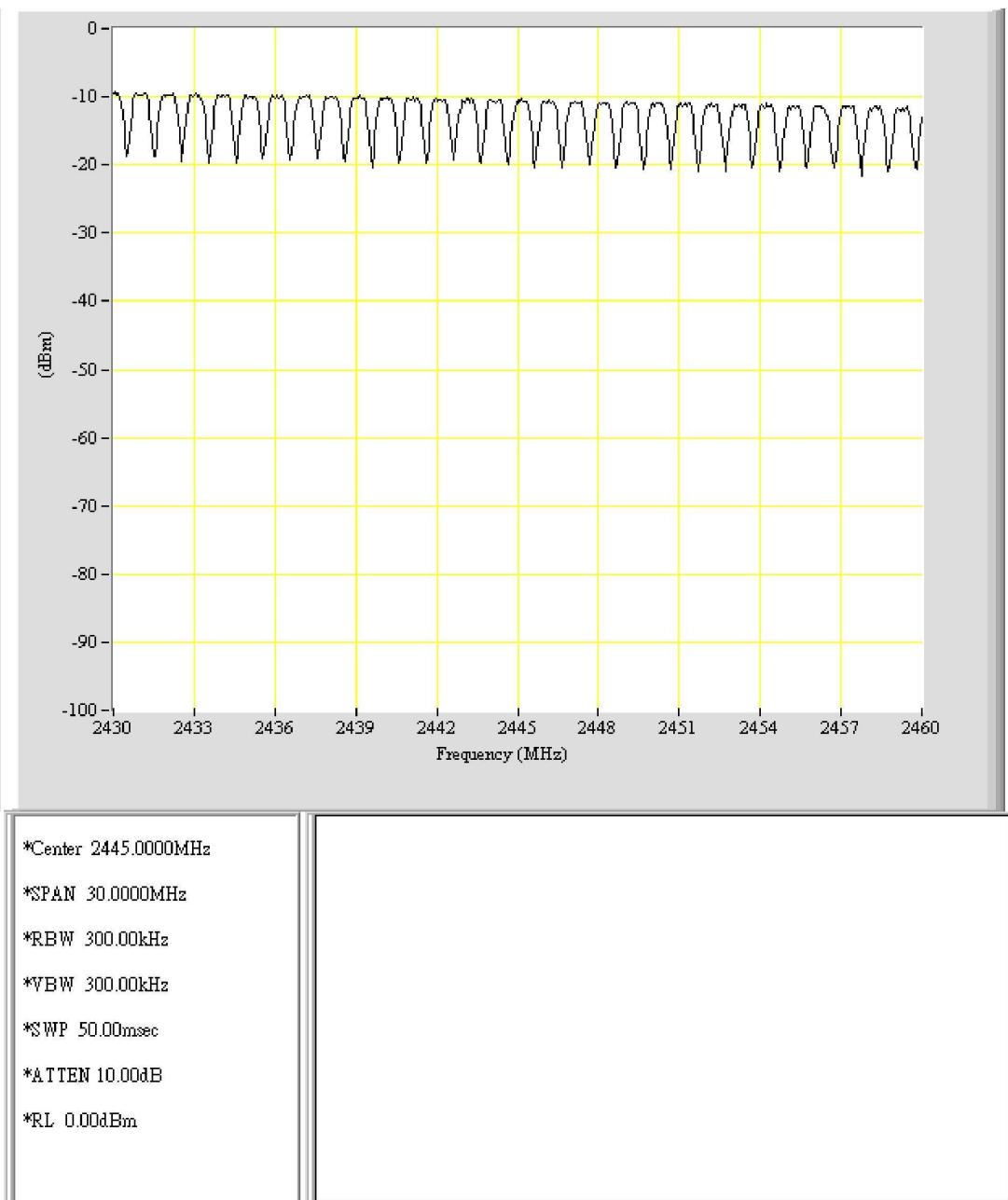
Test Date : Feb. 06, 2006 Temperature : 17°C Humidity : 63%

Number of hopping channels = 79 channels

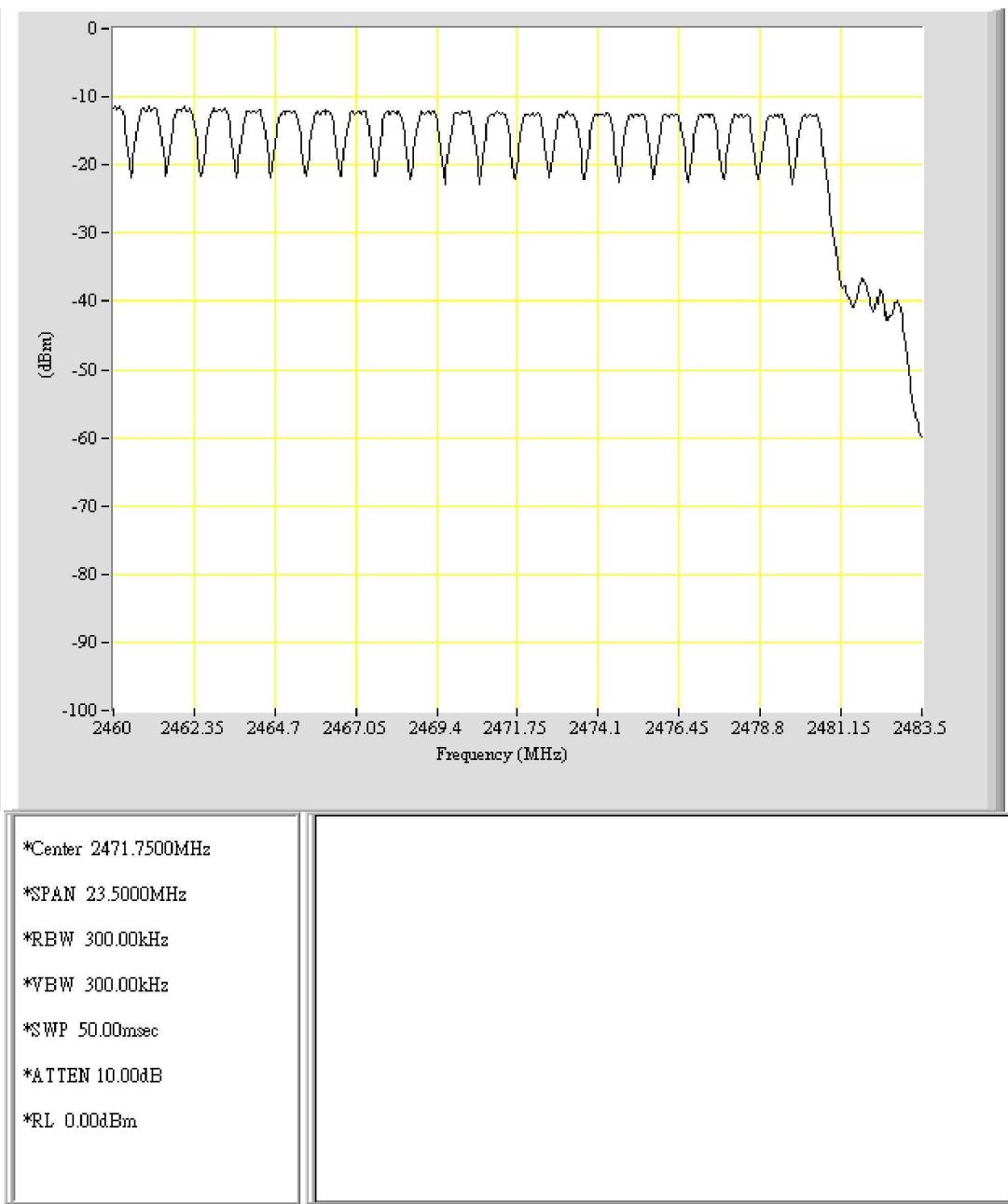
*Note: Please refer to page 43 to page 45 for chart.*



EUT: BT900-D  
Purpose: No\_of\_Channel  
Condition: 1  
Note:



EUT: BT900-D  
Purpose: No\_of\_Channel  
Condition: 2  
Note:



EUT: BT900-D  
Purpose: No\_of\_Channel  
Condition: 3  
Note:

## 11 HOPPING CHANNEL CARRIER FREQUENCY SEPARATED

### 11.1 Standard Applicable

According to 15.247(a)(1), the frequency hopping system shall have hopping channel carrier frequencies separated by minimum of 25kHz or the 20dB bandwidth of hopping channel, whichever is greater.

### 11.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. The setup of the EUT as shown in figure 4. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any measurement frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set spectrum analyzer maximum hold to measure channel carrier frequency , then adjust channel carrier frequency to adjacent channel.
4. Repeat above procedure until all measured frequencies were complete.

### 11.3 Measurement Equipment

| Equipment         | Manufacturer | Model No. | Next Cal. Due |
|-------------------|--------------|-----------|---------------|
| Spectrum Analyzer | Agilent      | 8564EC    | 09/23/2006    |

## 11.4 Measurement Data

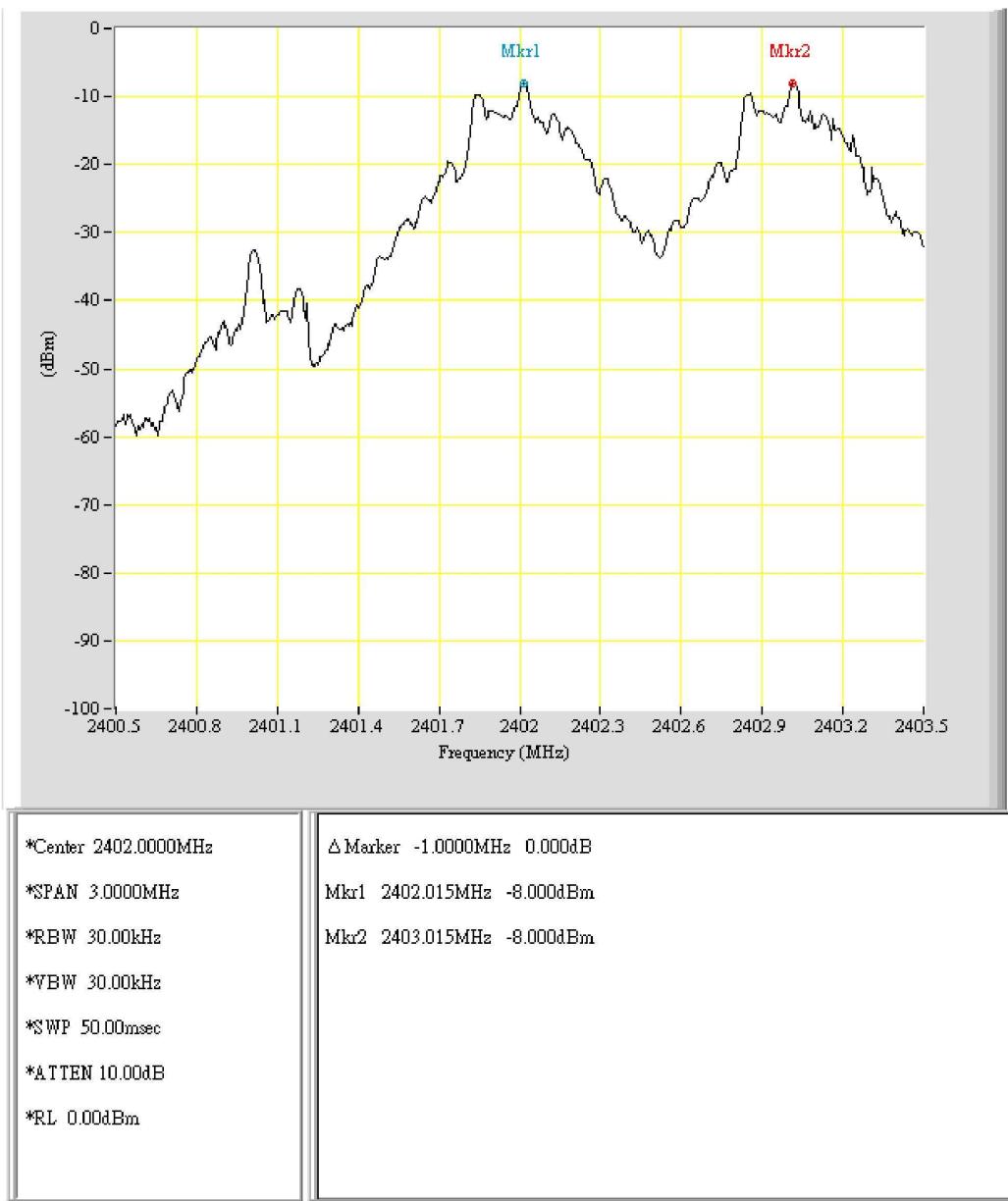
Test Date : Feb. 06, 2006

Temperature : 17°C

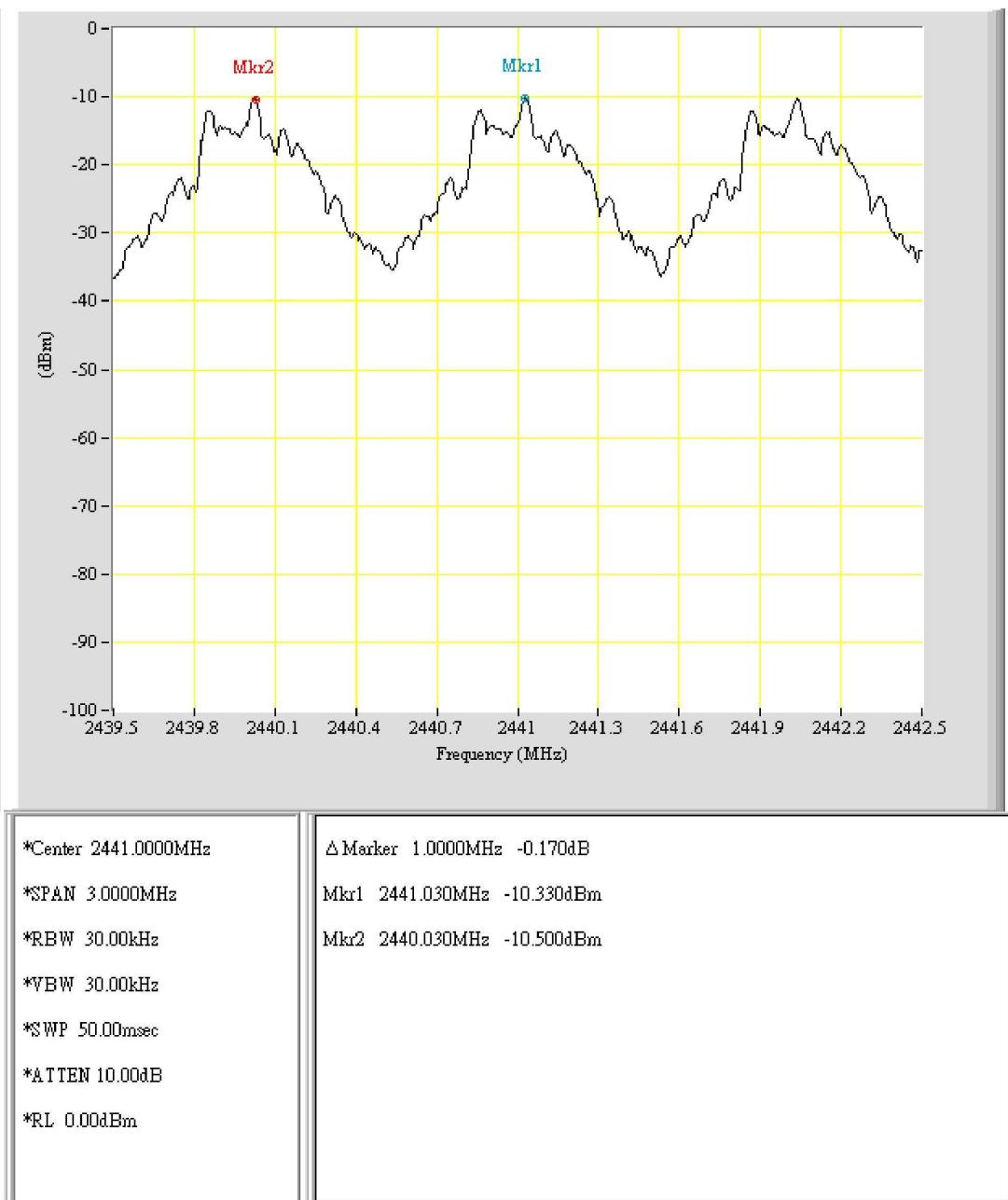
Humidity : 63%

| Channel | Frequency (MHz) | Hopping Channel Carrier Frequency Separated (MHz) | Chart   |
|---------|-----------------|---|---------|
| 0       | 2402            | 1   | Page 48 |
| 39      | 2441            | 1   | Page 49 |
| 78      | 2480            | 1   | Page 50 |

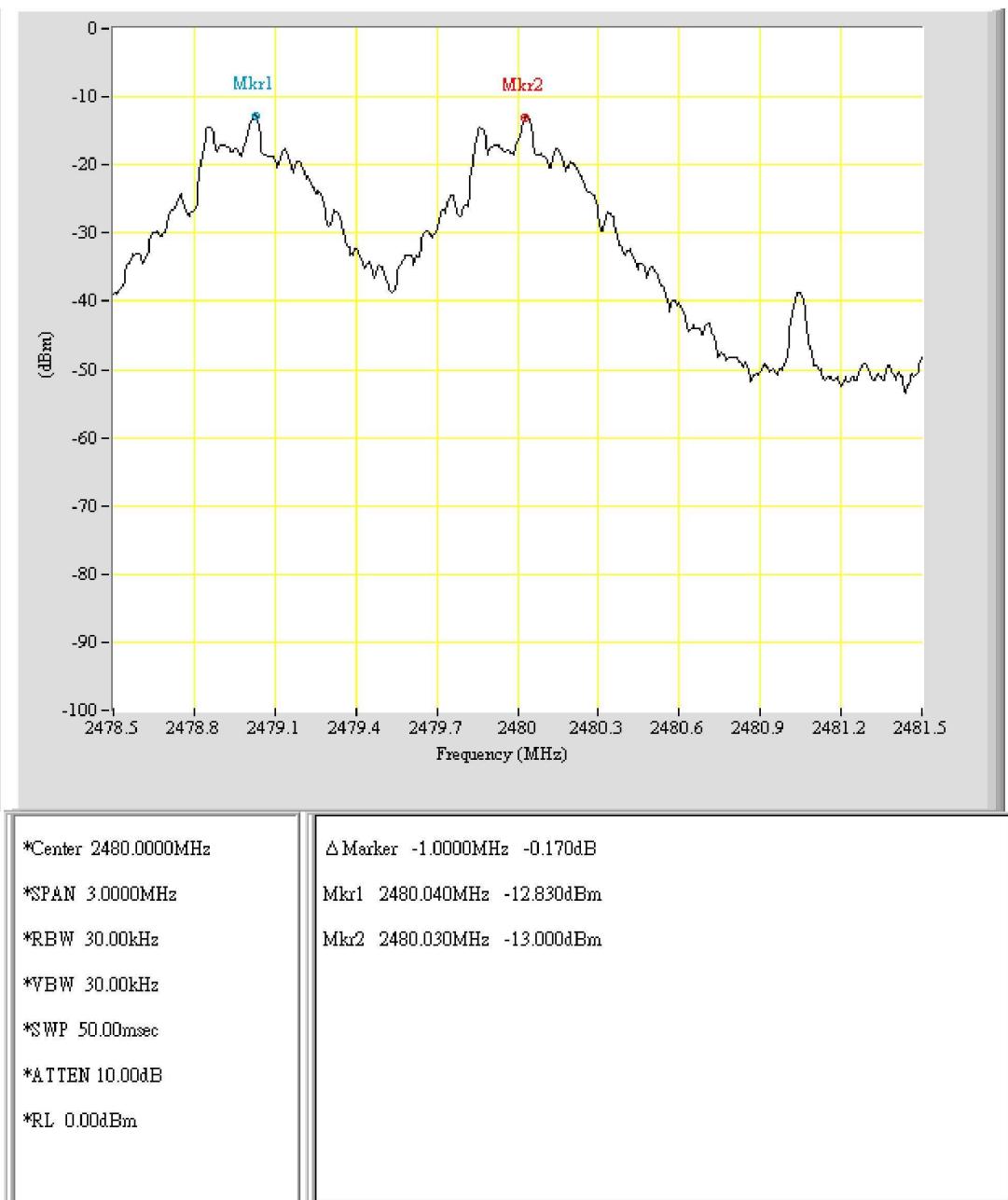
*Note: Please refer to page 48 to page 50 for chart.*



EUT: BT900-D  
Purpose: Channel\_Seperation  
Condition: CH00  
Note:



EUT: BT900-D  
Purpose: Channel\_Seperation  
Condition: CH39  
Note:



EUT: BT900-D  
Purpose: Channel\_Seperation  
Condition: CH78  
Note:

## 12 POWER SPECTRAL DENSITY

### 12.1 Standard Applicable

According to 15.247(d), for bluetooth device, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

### 12.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. The setup of the EUT as shown in figure 4. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 3kHz, VBW to 30 kHz, sweep 300kHz and sweep time 100 sec.
4. Measure the highest amplitude appearing on spectral display and record the level to calculate result data.
5. Repeat above procedures until all frequencies measured were complete.

### 12.3 Measurement Equipment

| Equipment         | Manufacturer | Model No. | Next Cal. Due |
|-------------------|--------------|-----------|---------------|
| Spectrum Analyzer | Agilent      | 8564EC    | 09/23/2006    |

## 12.4 Measurement Data

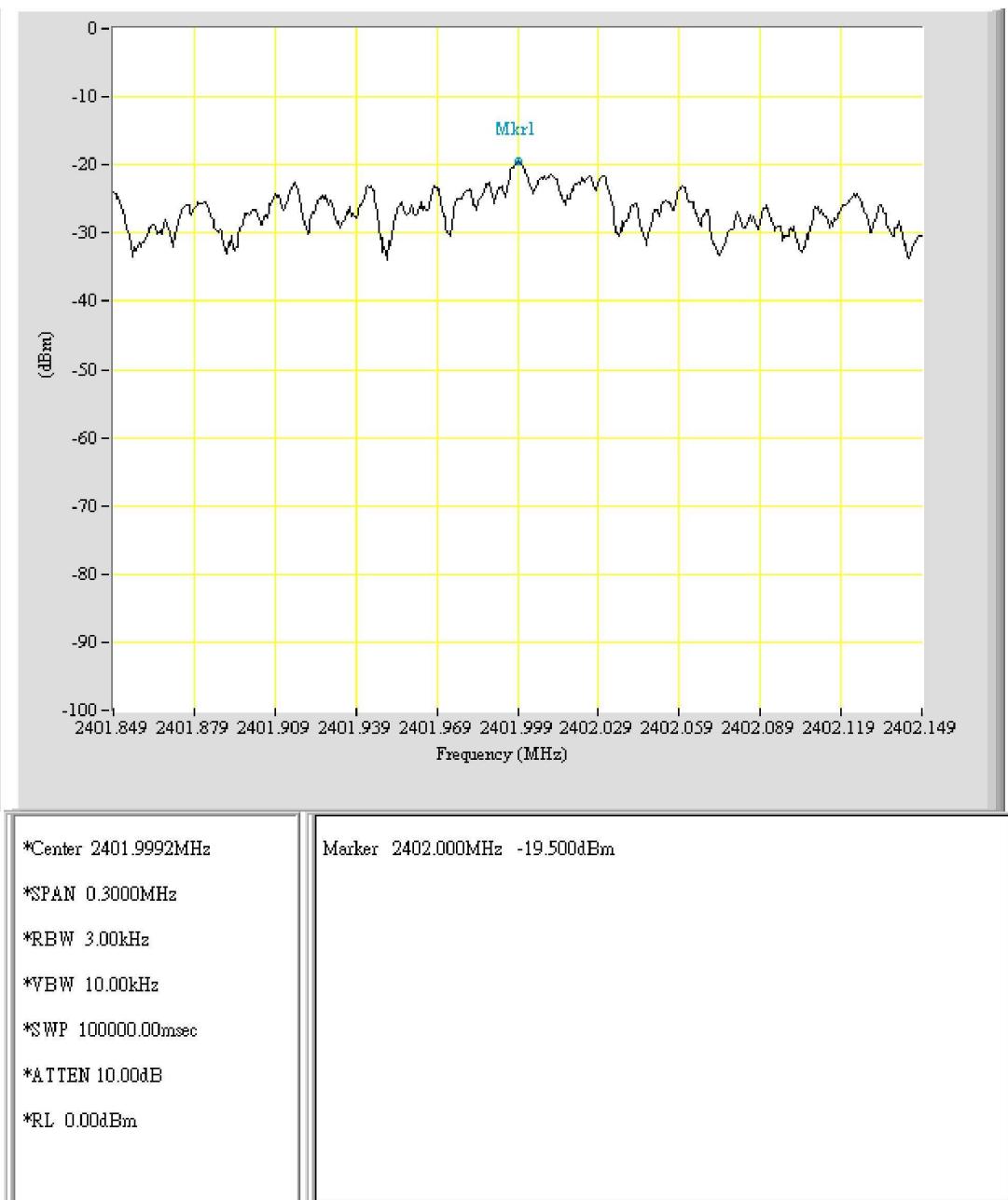
Test Date : Feb. 06, 2006

Temperature : 17°C

Humidity : 63%

| Channel | Frequency (MHz) | Reading (dBm) | Cable Loss (dB) | Power Spectral Density (dBm) | FCC Limit (dBm) | Chart   |
|---------|-----------------|---------------|-----------------|------------------------------|-----------------|---------|
| 0       | 2402            | -19.50        | 1               | -18.50                       | 8               | Page 53 |
| 39      | 2441            | -23.00        | 1               | -22.00                       | 8               | Page 54 |
| 78      | 2480            | -24.83        | 1               | -23.83                       | 8               | Page 55 |

*Note: Please refer to page 53 to page 55 for chart.*

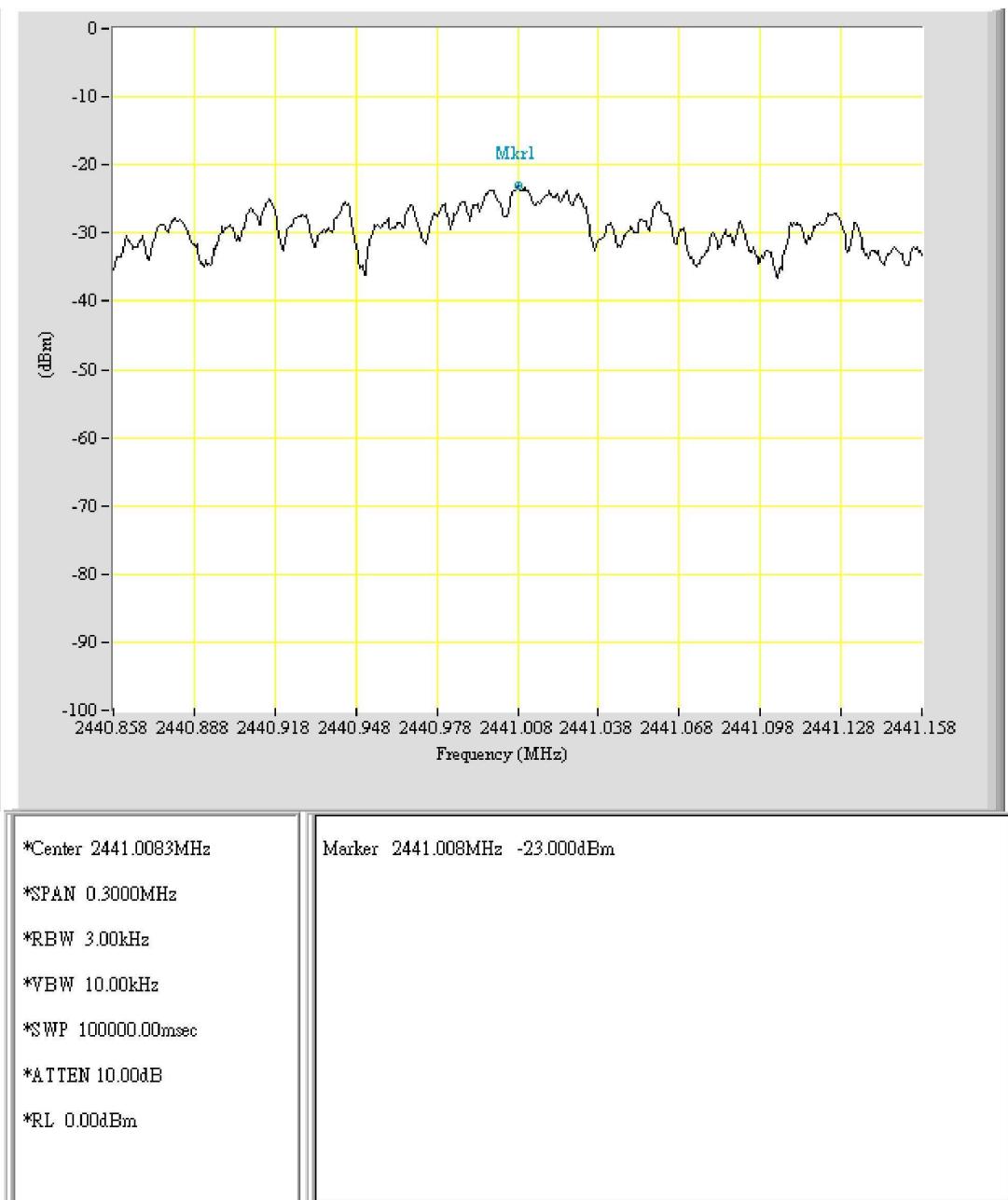


EUT: BT900-D

Purpose: PwrDensity

Condition: CH00

Note:

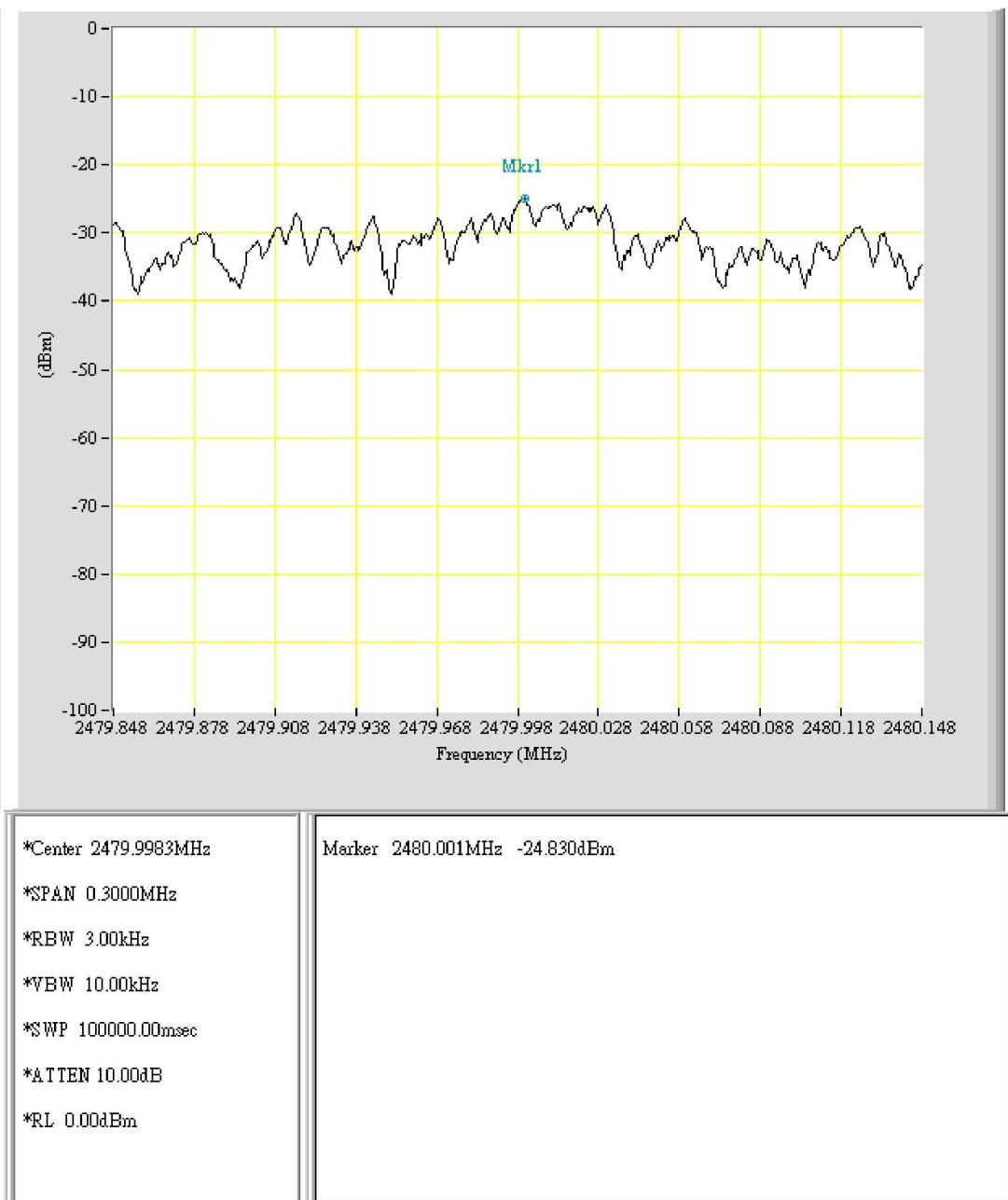


EUT: BT900-D

Purpose: PwrDensity

Condition: CH39

Note:



EUT: BT900-D

Purpose: PwrDensity

Condition: CH78

Note: