

### 5.3 PEAK TRANSMIT POWER MEASUREMENT

#### 5.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

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

**Note:** Where B is the 26dB emission bandwidth in MHz.

#### 5.3.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| SPECTRUM ANALYZER          | FSEK30    | 100049     | July 24, 2003    |

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 5.3.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set span to encompass the entire emission bandwidth of the signal.
3. Set RBW to 1MHz, VBW to 100kHz.
4. Using the spectrum analyzer's channel power measurement function to measure the output power.

### 5.3.4 DEVIATION FROM TEST STANDARD

No deviation

### 5.3.5 TEST SETUP



### 5.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

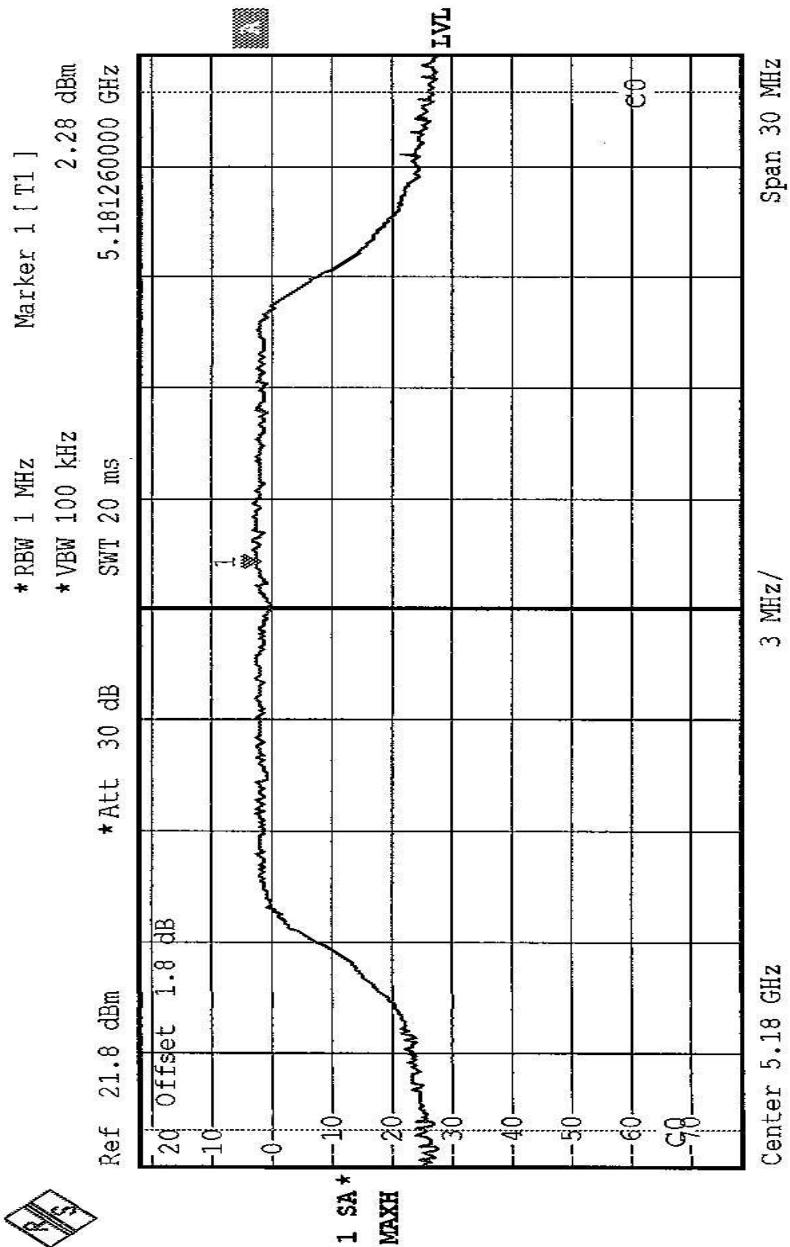
## 5.3.7 TEST RESULTS

|                                 |                                     |                             |               |
|---------------------------------|-------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | Dual-Band Wireless A+G Access Point | <b>MODEL</b>                | WAP55AG       |
| <b>MODE</b>                     | Normal                              | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL CONDITIONS</b> | 23deg. C, 64%RH, 1005hPa            | <b>TESTED BY</b>            | Steven Lu     |

| CHANNEL | CHANNEL FREQUENCY (MHz) | PEAK POWER OUTPUT (dBm) | PEAK POWER LIMIT (dBm) | 26dBc Occupied Bandwidth (MHz) | PASS/FAIL |
|---------|-------------------------|-------------------------|------------------------|--------------------------------|-----------|
| 1       | 5180                    | 13.27                   | 17.00                  | 33.60                          | PASS      |
| 4       | 5240                    | 12.90                   | 17.00                  | 32.00                          | PASS      |
| 5       | 5260                    | 14.99                   | 24.00                  | 36.48                          | PASS      |
| 8       | 5320                    | 13.39                   | 24.00                  | 33.28                          | PASS      |

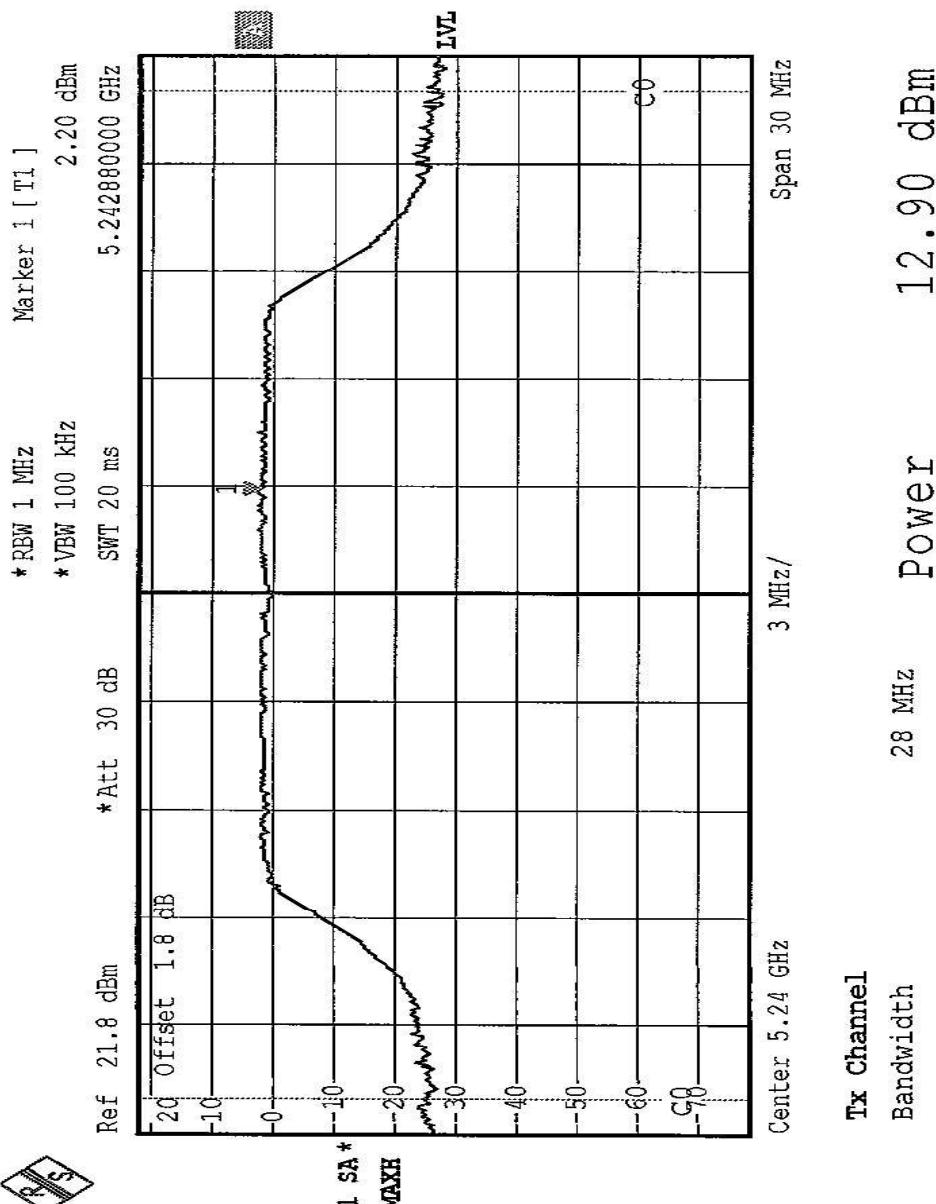
**NOTE:** The 26dBc Occupied Bandwidth plot, please refer to the following pages.

## CHANNEL 1

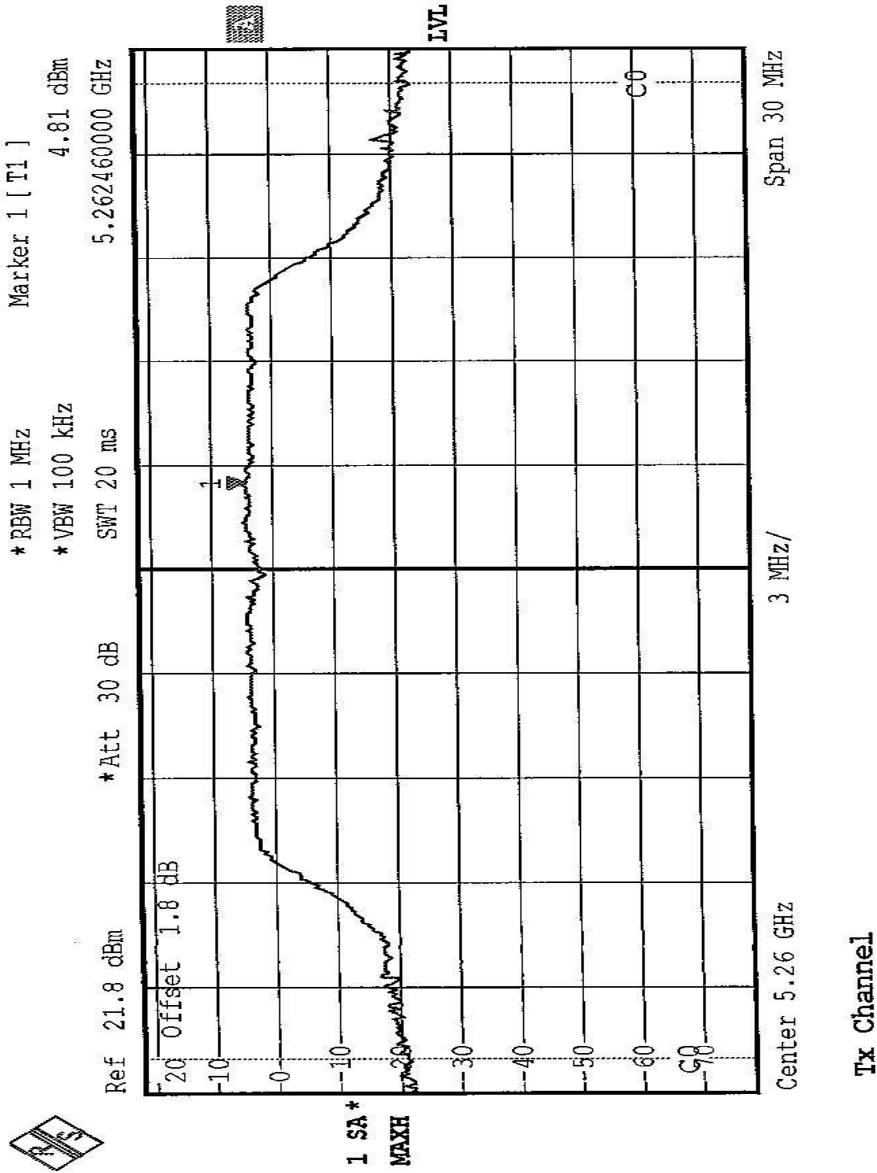


Tx Channel Bandwidth 28 MHz Power 13.27 dBm

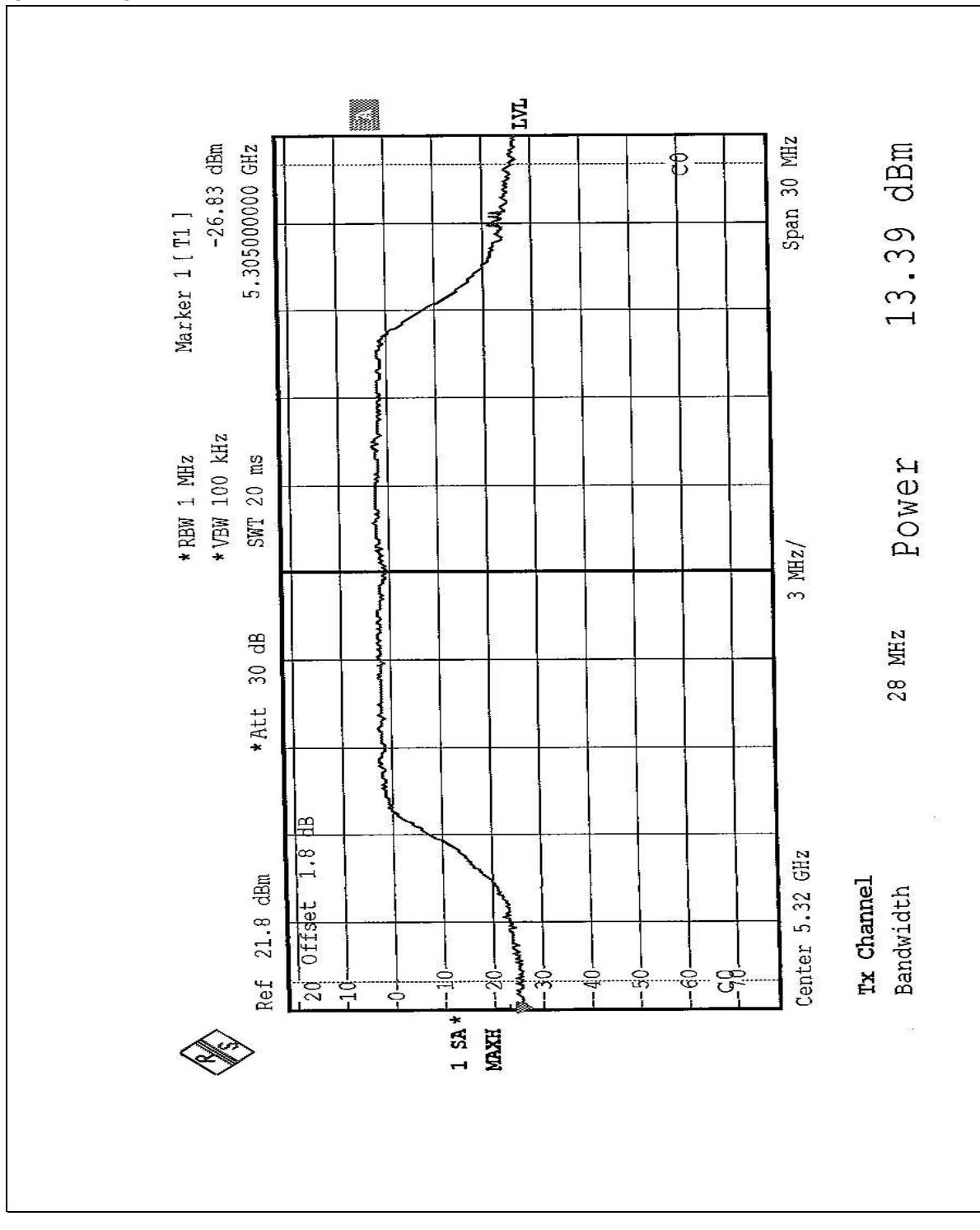
## CHANNEL 4



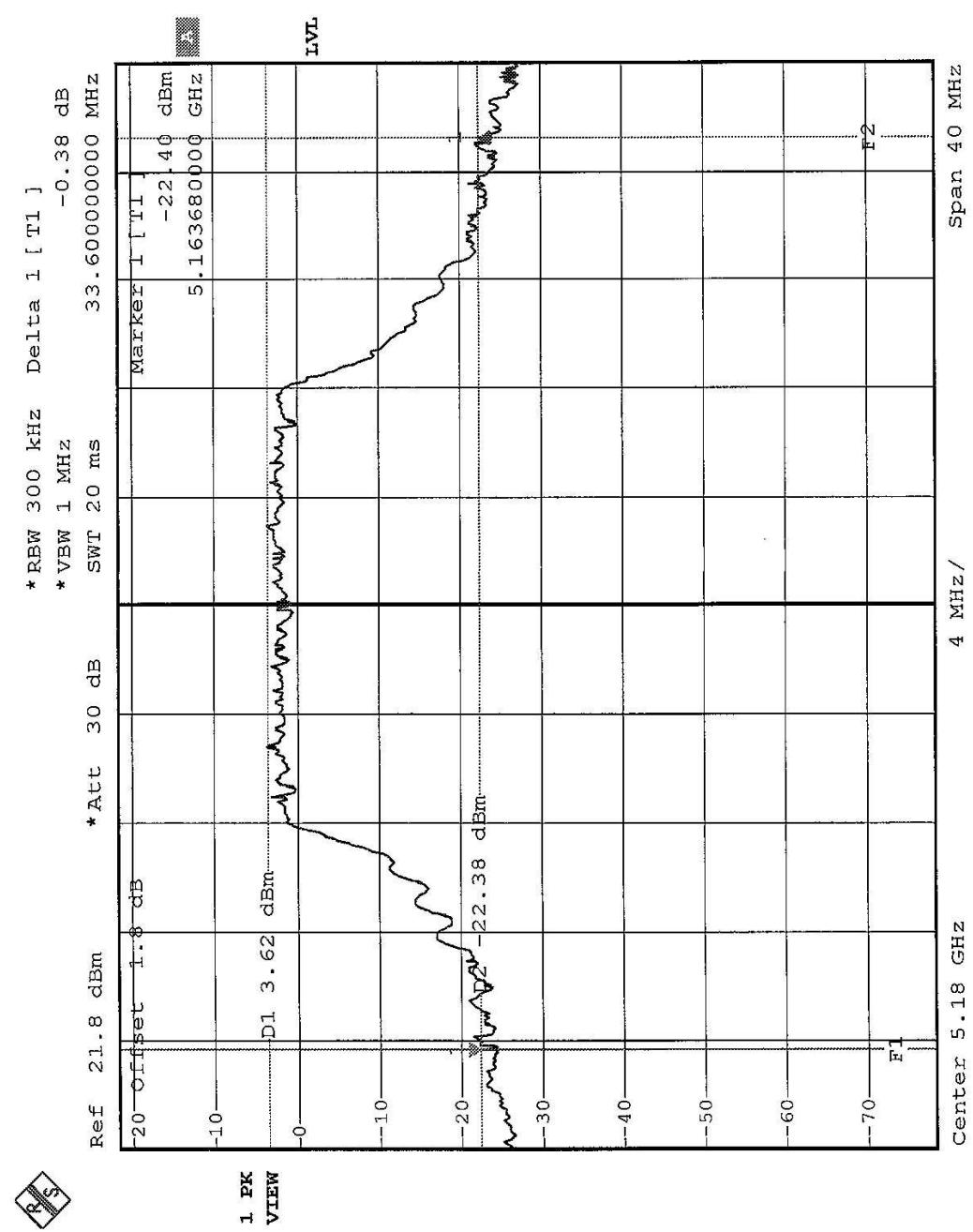
## CHANNEL 5



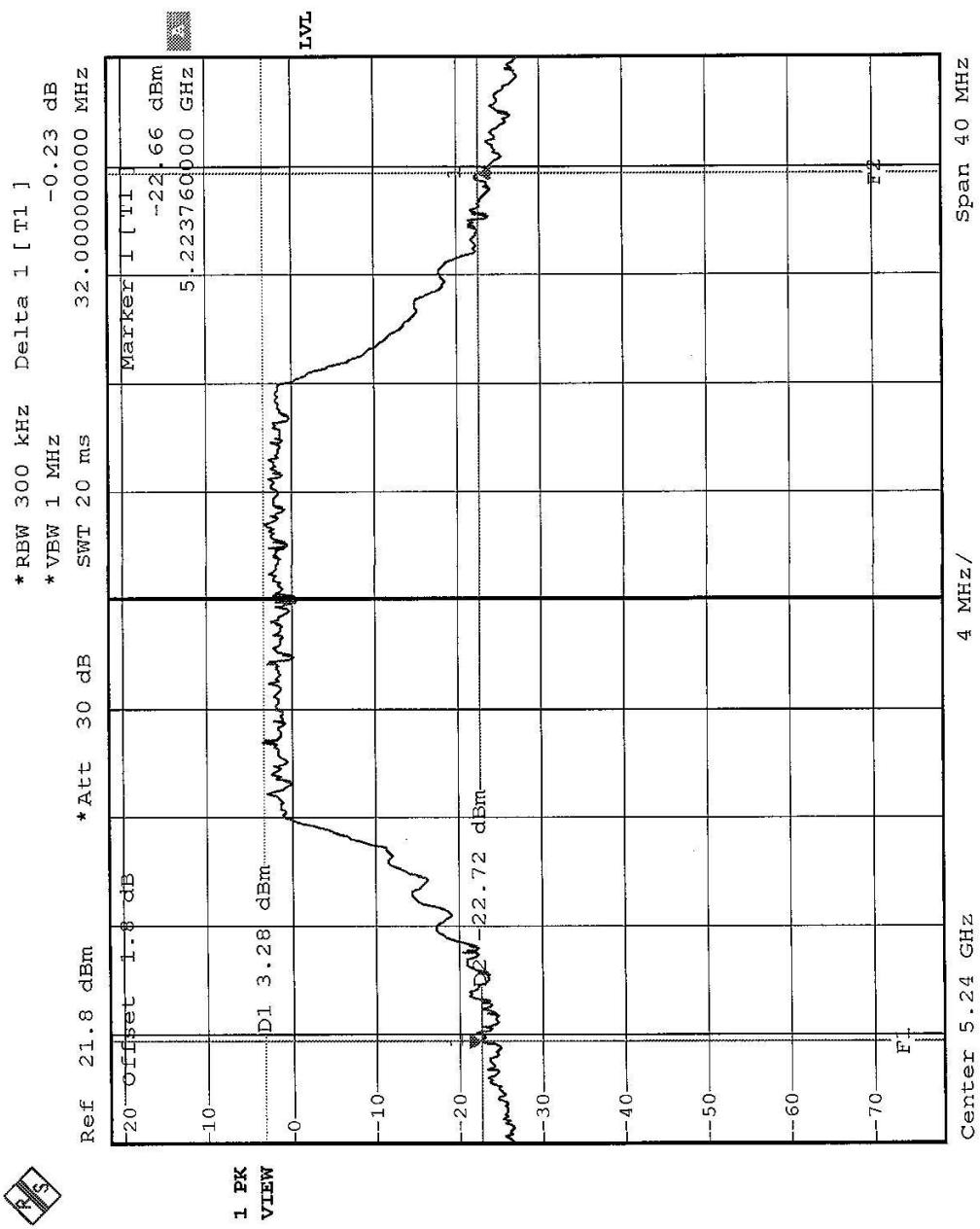
## CHANNEL 8



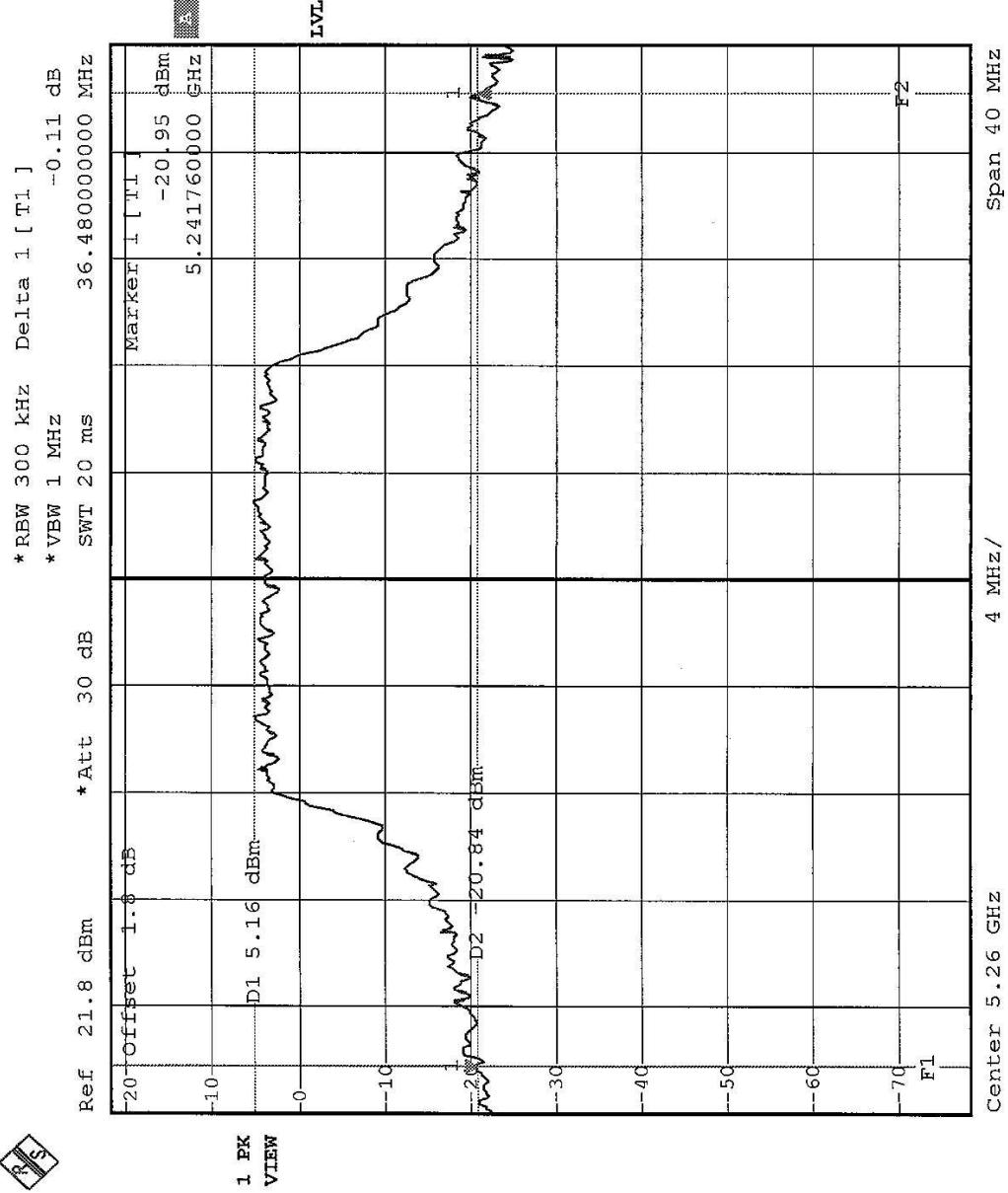
## CHANNEL 1



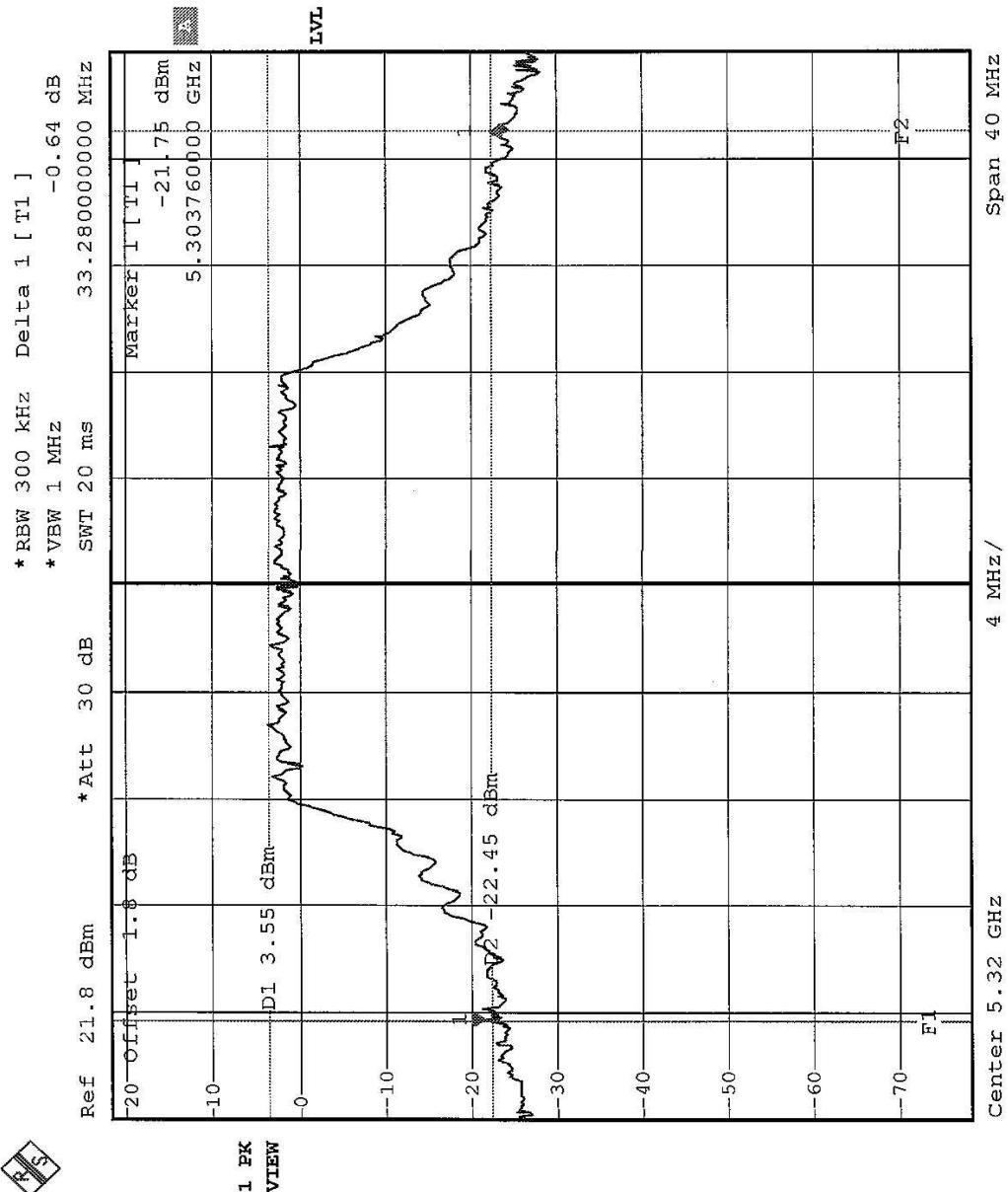
CHANNEL 4



## CHANNEL 5



CHANNEL 8

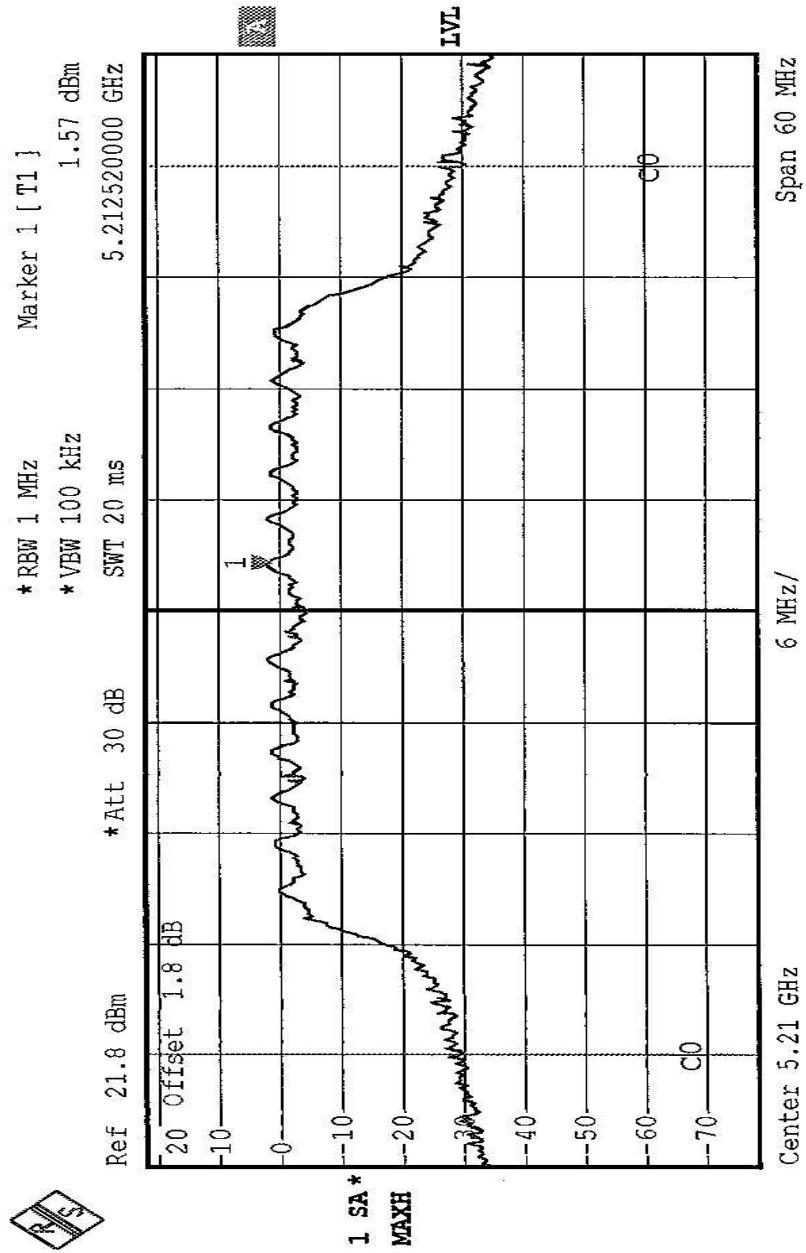


|                                 |                                     |                             |               |
|---------------------------------|-------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | Dual-Band Wireless A+G Access Point | <b>MODEL</b>                | WAP55AG       |
| <b>MODE</b>                     | Turbo                               | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL CONDITIONS</b> | 24deg. C, 65%RH, 1005hPa            | <b>TESTED BY</b>            | Steven Lu     |

| <b>CHANNEL</b> | <b>CHANNEL FREQUENCY (MHz)</b> | <b>PEAK POWER OUTPUT (dBm)</b> | <b>PEAK POWER LIMIT (dBm)</b> | <b>26dBc Occupied Bandwidth (MHz)</b> | <b>PASS/FAIL</b> |
|----------------|--------------------------------|--------------------------------|-------------------------------|---------------------------------------|------------------|
| 1              | 5210                           | 13.31                          | 17.00                         | 48.84                                 | PASS             |
| 2              | 5250                           | 13.04                          | 17.00                         | 48.84                                 | PASS             |
| 3              | 5290                           | 12.75                          | 24.00                         | 47.40                                 | PASS             |

**NOTE:** The 26dBc Occupied Bandwidth plot, please refer to the following pages.

## CHANNEL 1



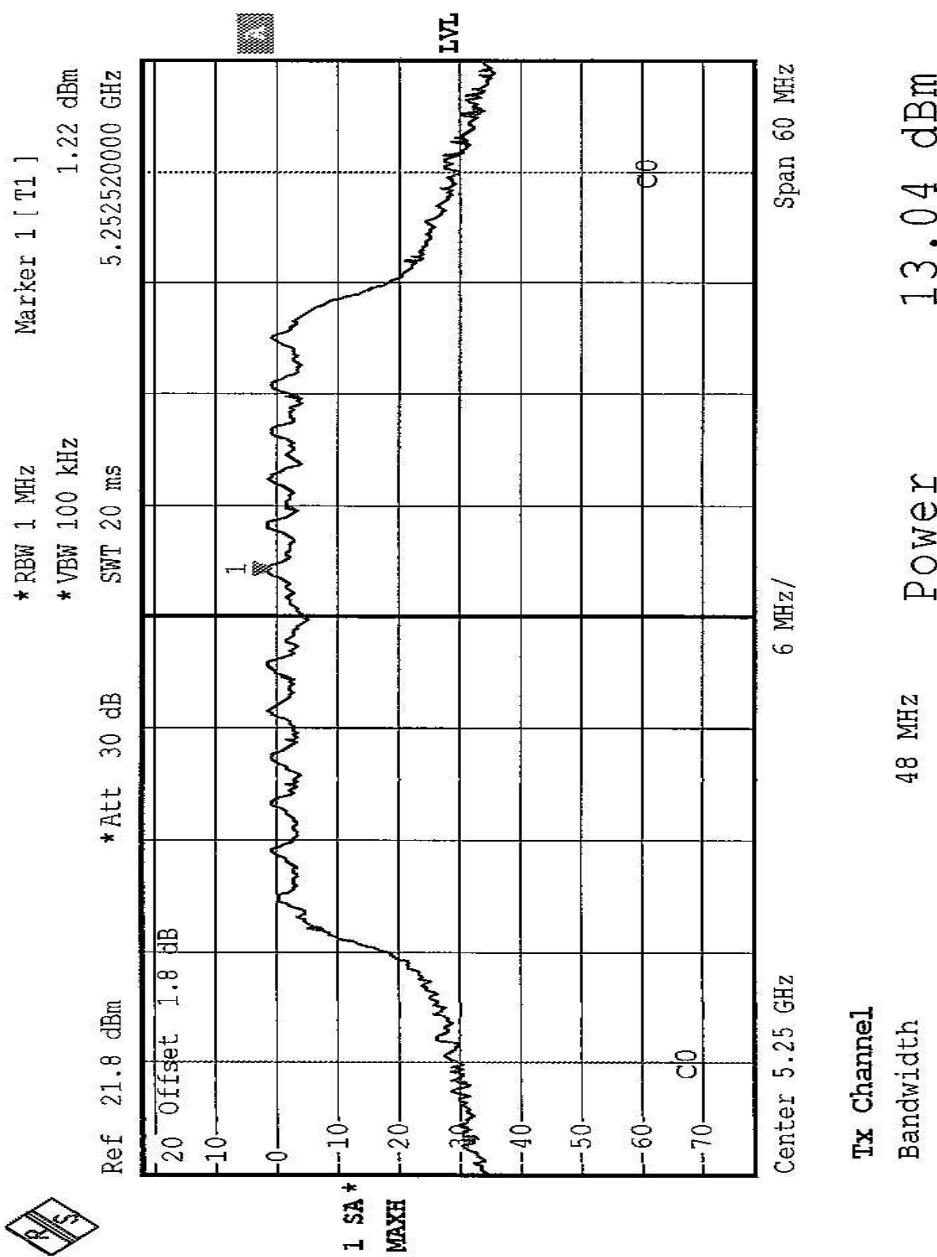
13:31 dBm

Power

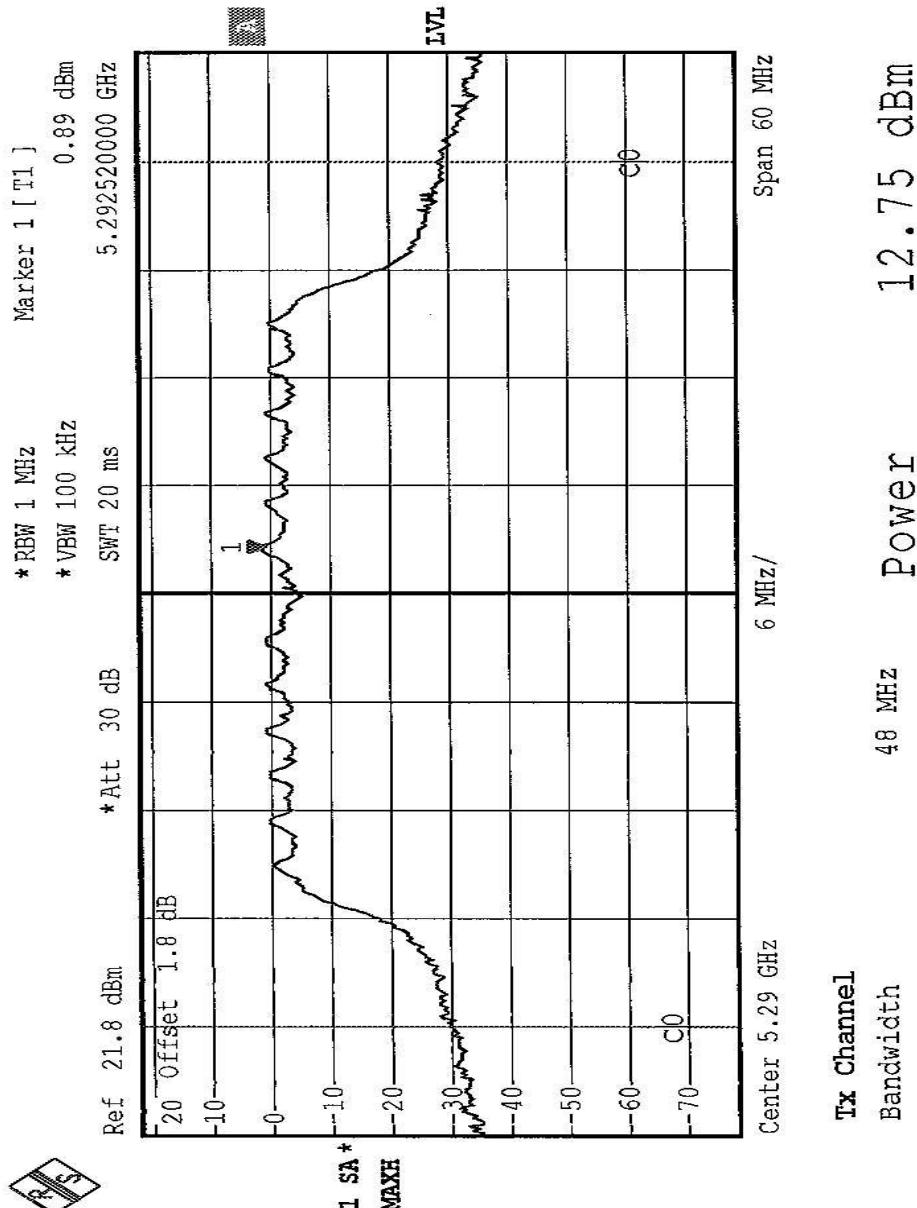
48 MHz

Tx channel  
Bandwidth

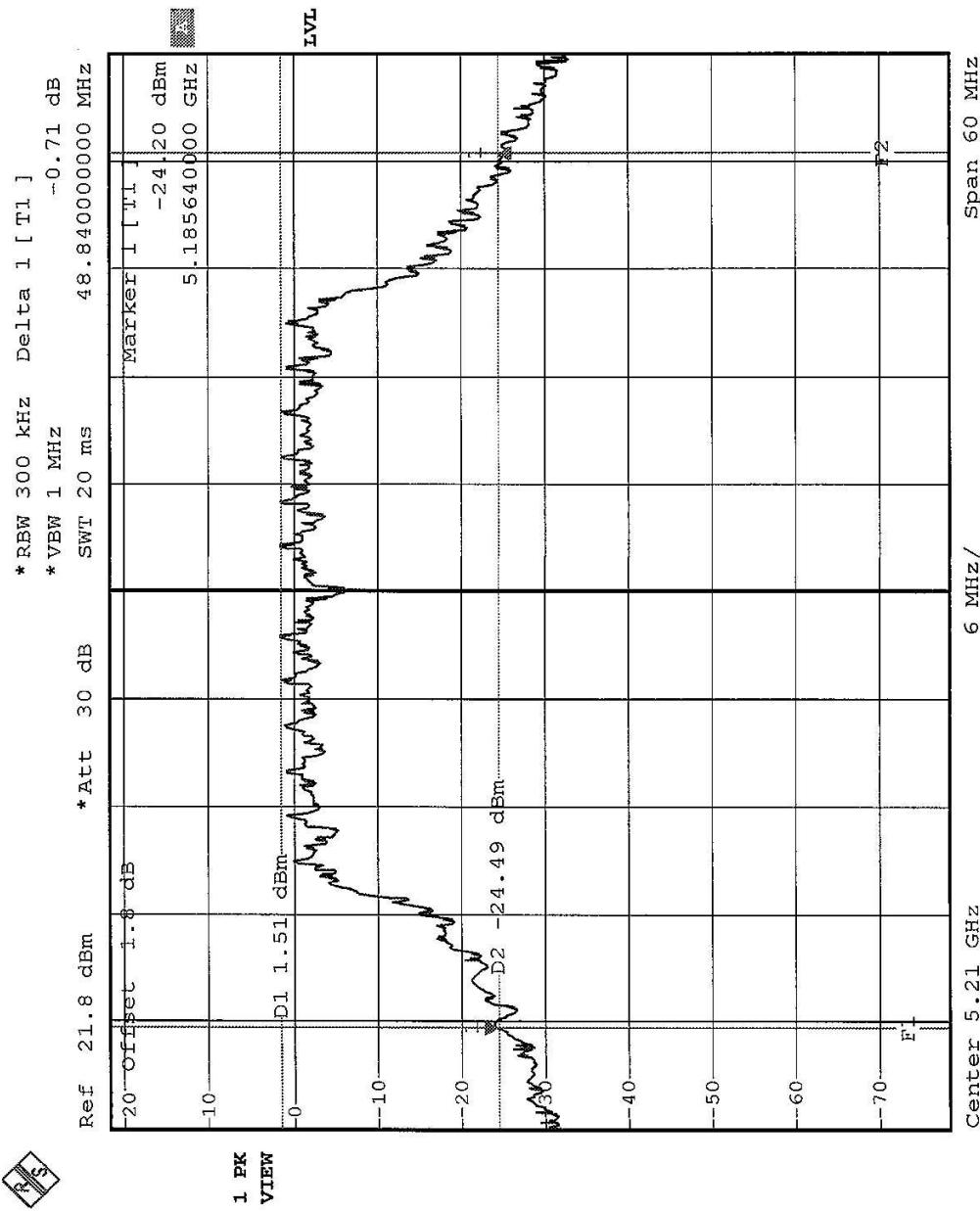
## CHANNEL 2



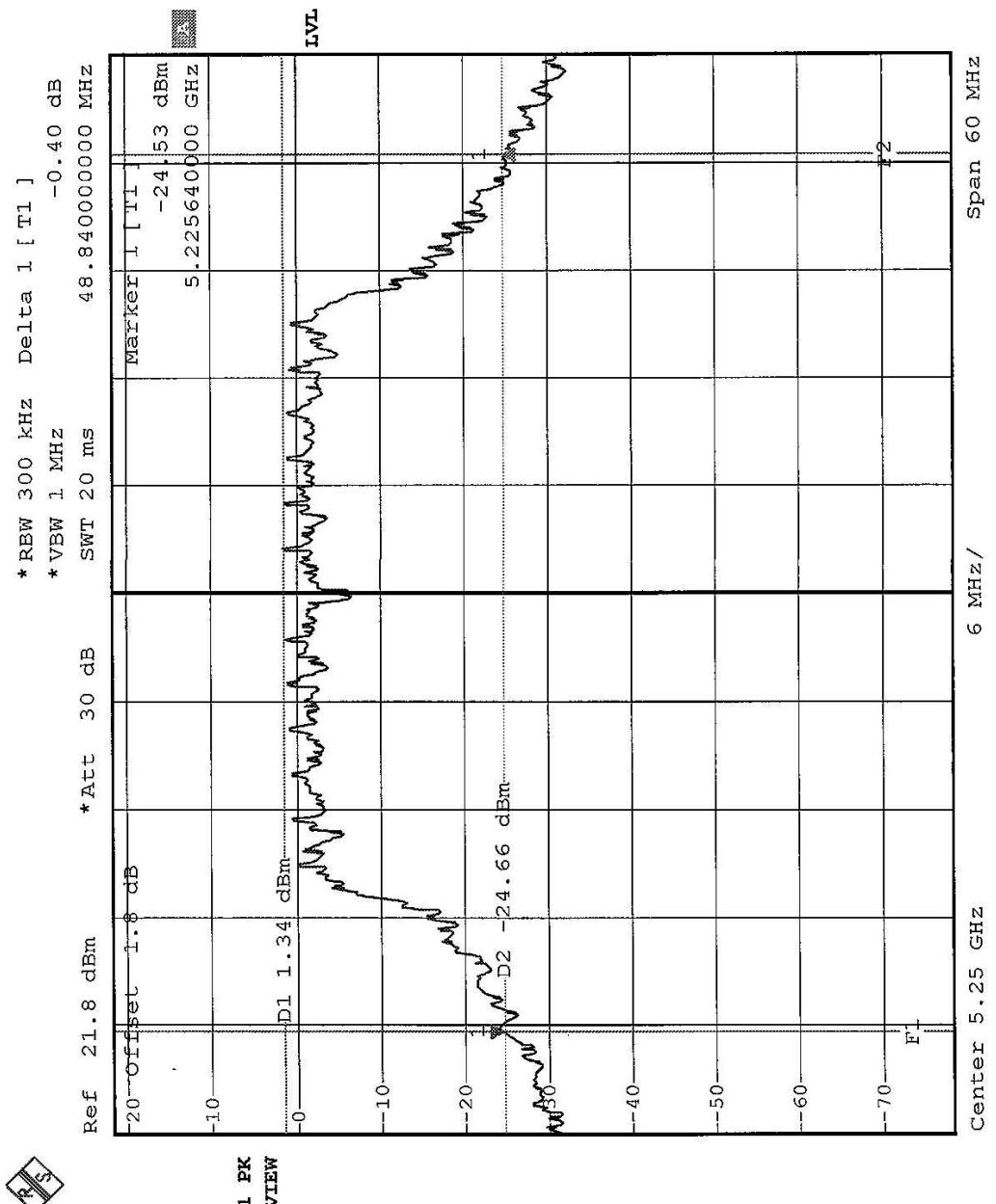
## CHANNEL 3



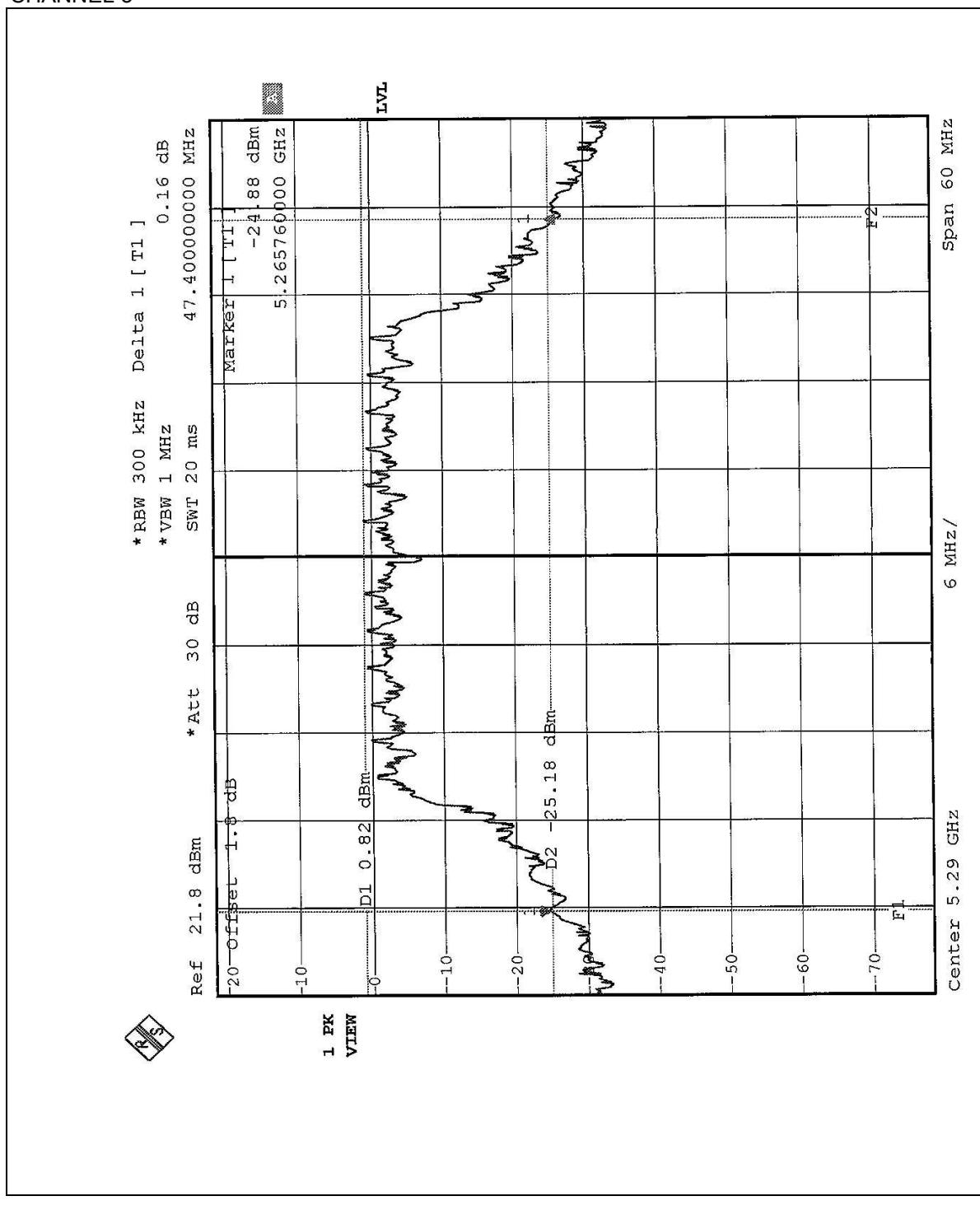
## CHANNEL 1



## CHANNEL 2



## CHANNEL 3



## 5.4 PEAK POWER EXCURSION MEASUREMENT

### 5.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

| Frequency Band    | Limit |
|-------------------|-------|
| 5.15 – 5.25 GHz   | 13dB  |
| 5.25 – 5.35 GHz   | 13dB  |
| 5.725 – 5.825 GHz | 13dB  |

### 5.4.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| SPECTRUM ANALYZER          | FSEK30    | 100049     | July 24, 2003    |

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

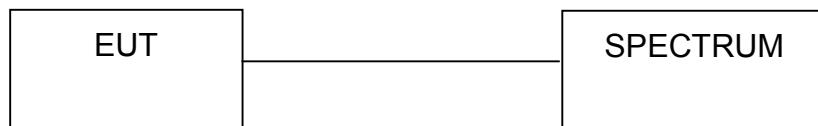
#### 5.4.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set the spectrum bandwidth span to view the entire spectrum.
3. Using peak detector and Max-hold function for Trace 1 (RB=1MHz, VB=3MHz) and 2 (RB=1MHz, VB=100KHz).
4. The largest difference between Trace 1 and Trace 2 in any 1MHz band on any frequency was recorded.

#### 5.4.4 DEVIATION FROM TEST STANDARD

No deviation

#### 5.4.5 TEST SETUP



#### 5.4.6 EUT OPERATING CONDITIONS

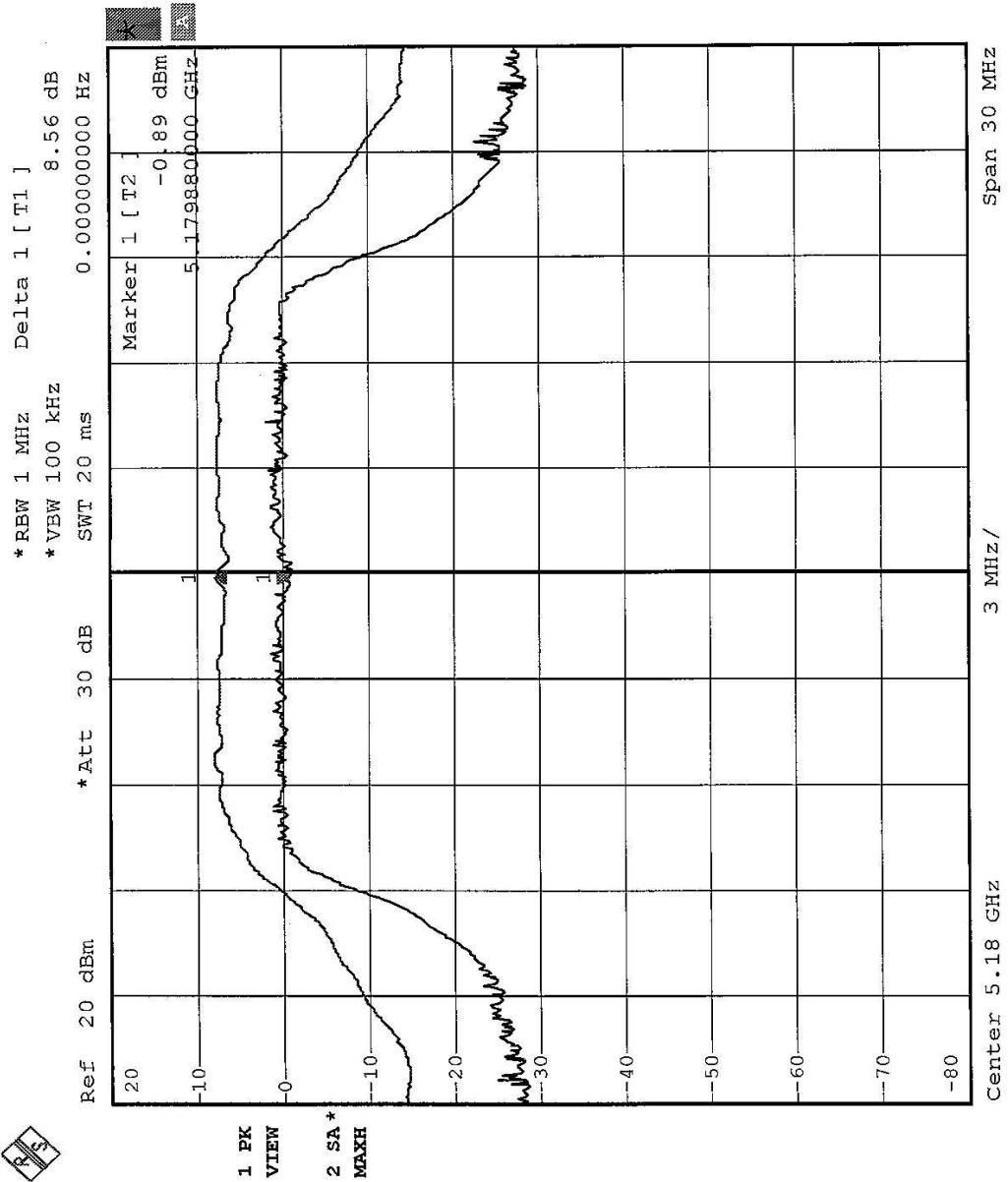
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

## 5.4.7 TEST RESULTS

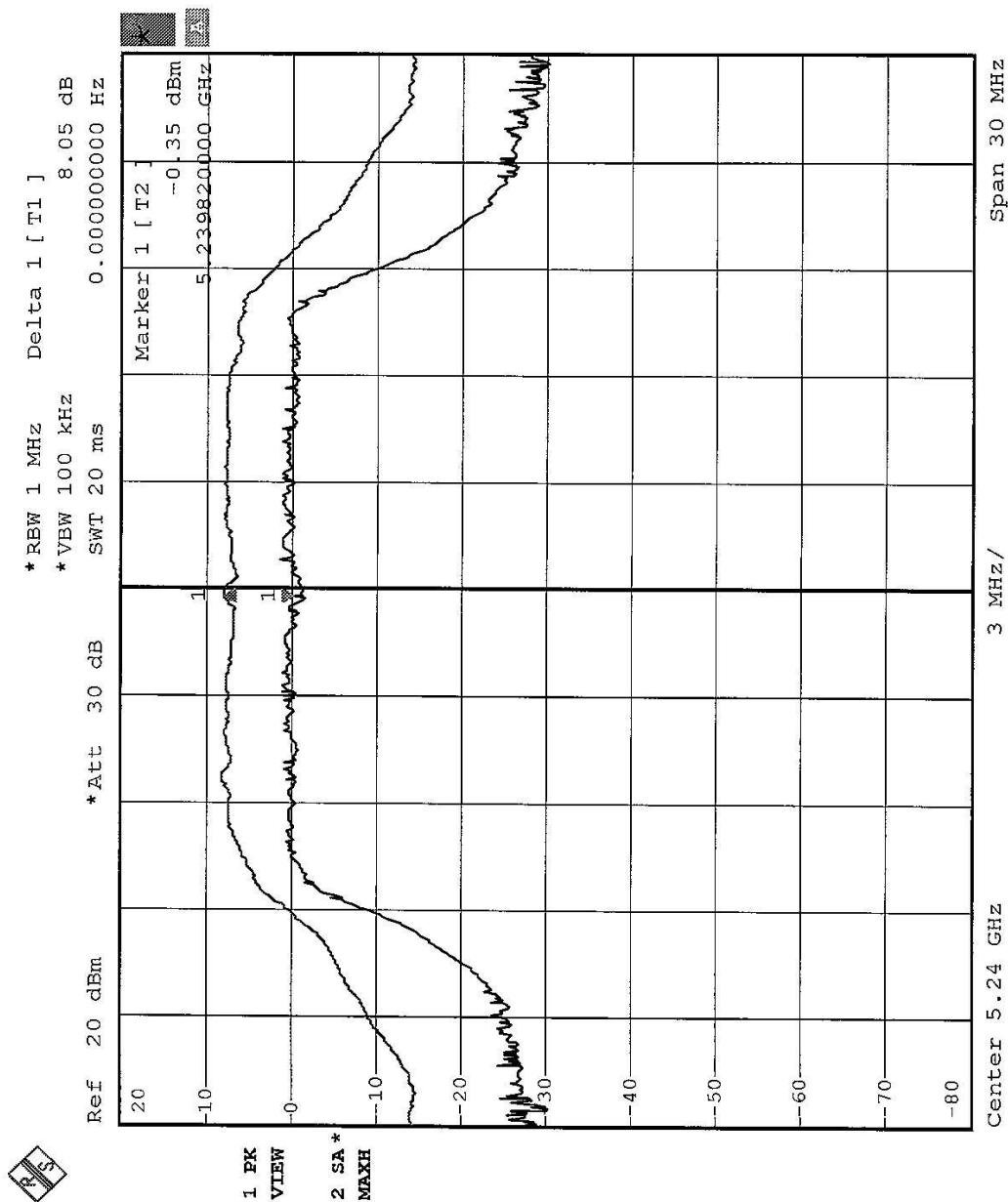
|                                 |                                     |                             |               |
|---------------------------------|-------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | Dual-Band Wireless A+G Access Point | <b>MODEL</b>                | WAP55AG       |
| <b>MODE</b>                     | Normal                              | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL CONDITIONS</b> | 23deg. C, 64%RH, 1005hPa            | <b>TESTED BY</b>            | Steven Lu     |

| CHANNEL | CHANNEL FREQUENCY (MHz) | PEAK POWER EXCURSION (dB) | PEAK to AVERAGE EXCURSION LIMIT (dB) | PASS/FAIL |
|---------|-------------------------|---------------------------|--------------------------------------|-----------|
| 1       | 5180                    | 8.56                      | 13                                   | PASS      |
| 4       | 5240                    | 8.05                      | 13                                   | PASS      |
| 5       | 5260                    | 8.81                      | 13                                   | PASS      |
| 8       | 5320                    | 9.22                      | 13                                   | PASS      |

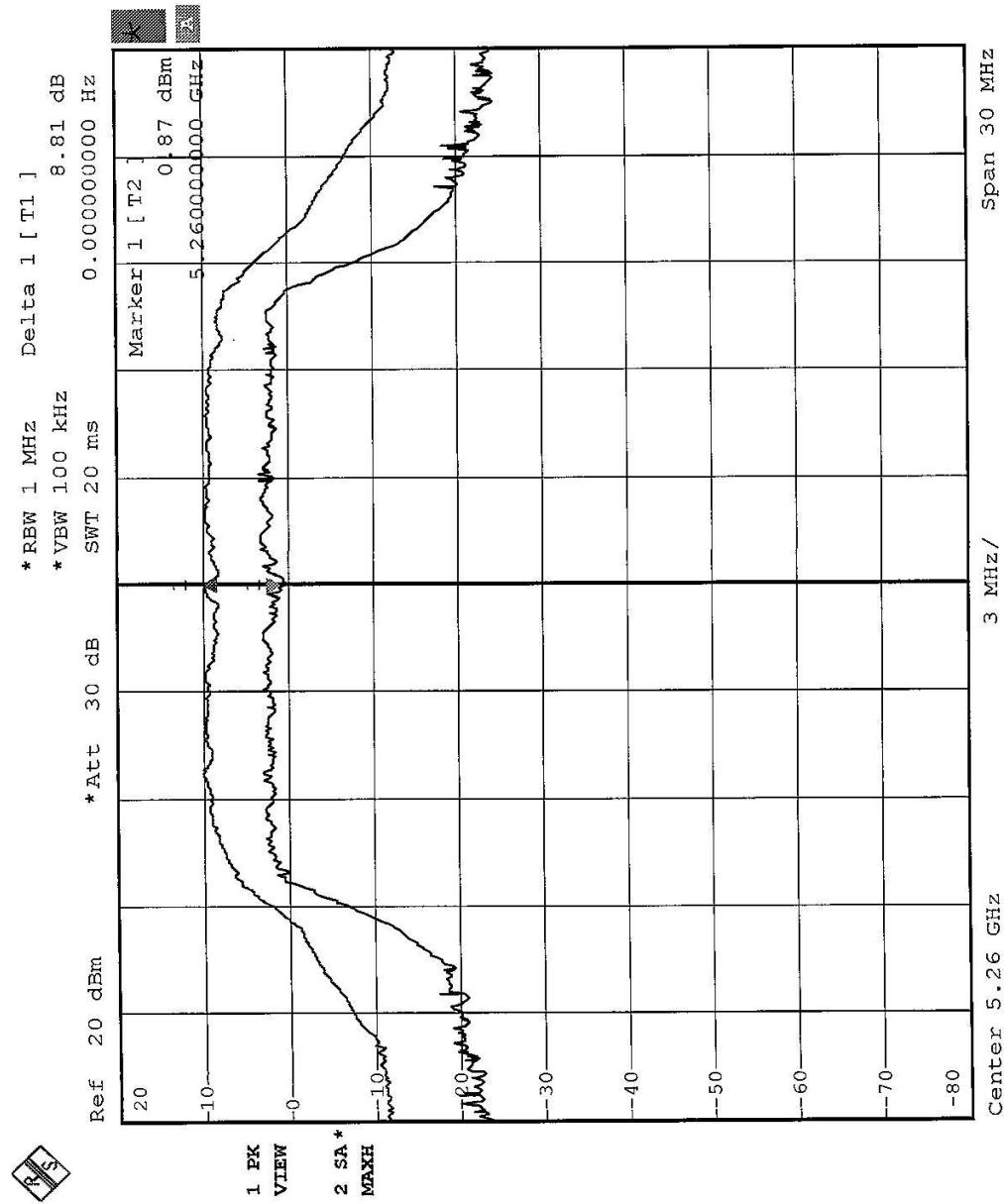
## CHANNEL 1



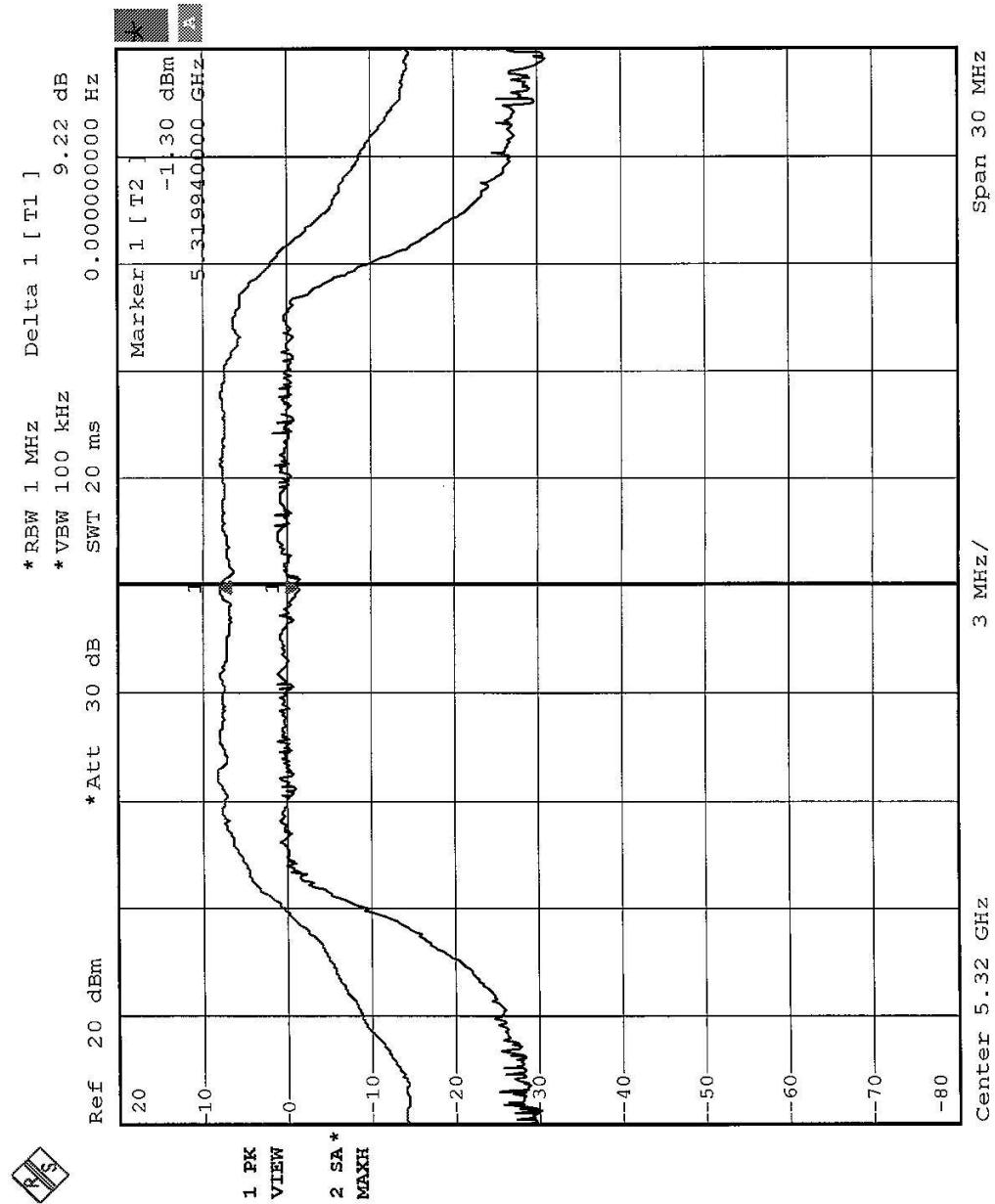
## CHANNEL 4



## CHANNEL 5



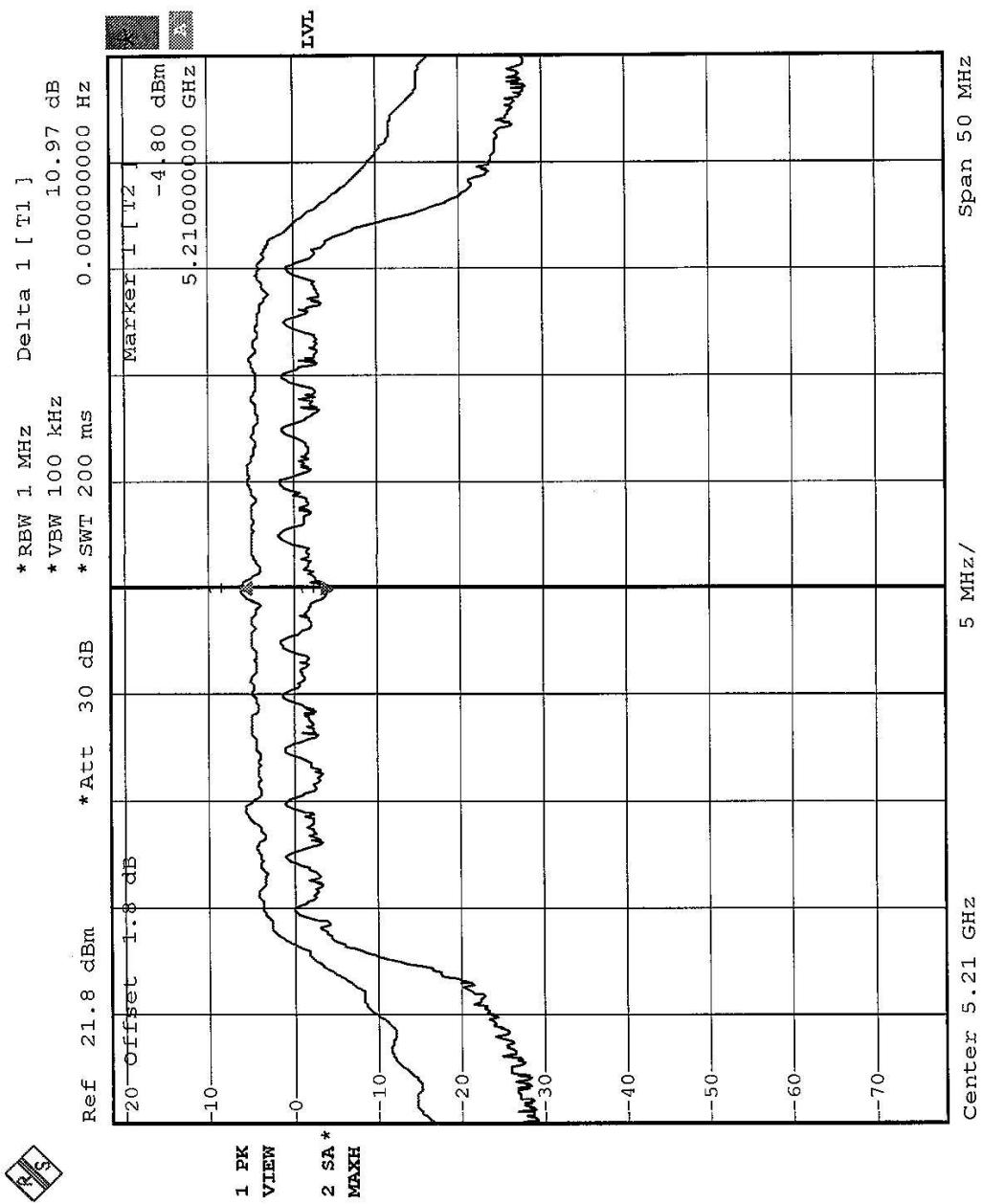
## CHANNEL 8



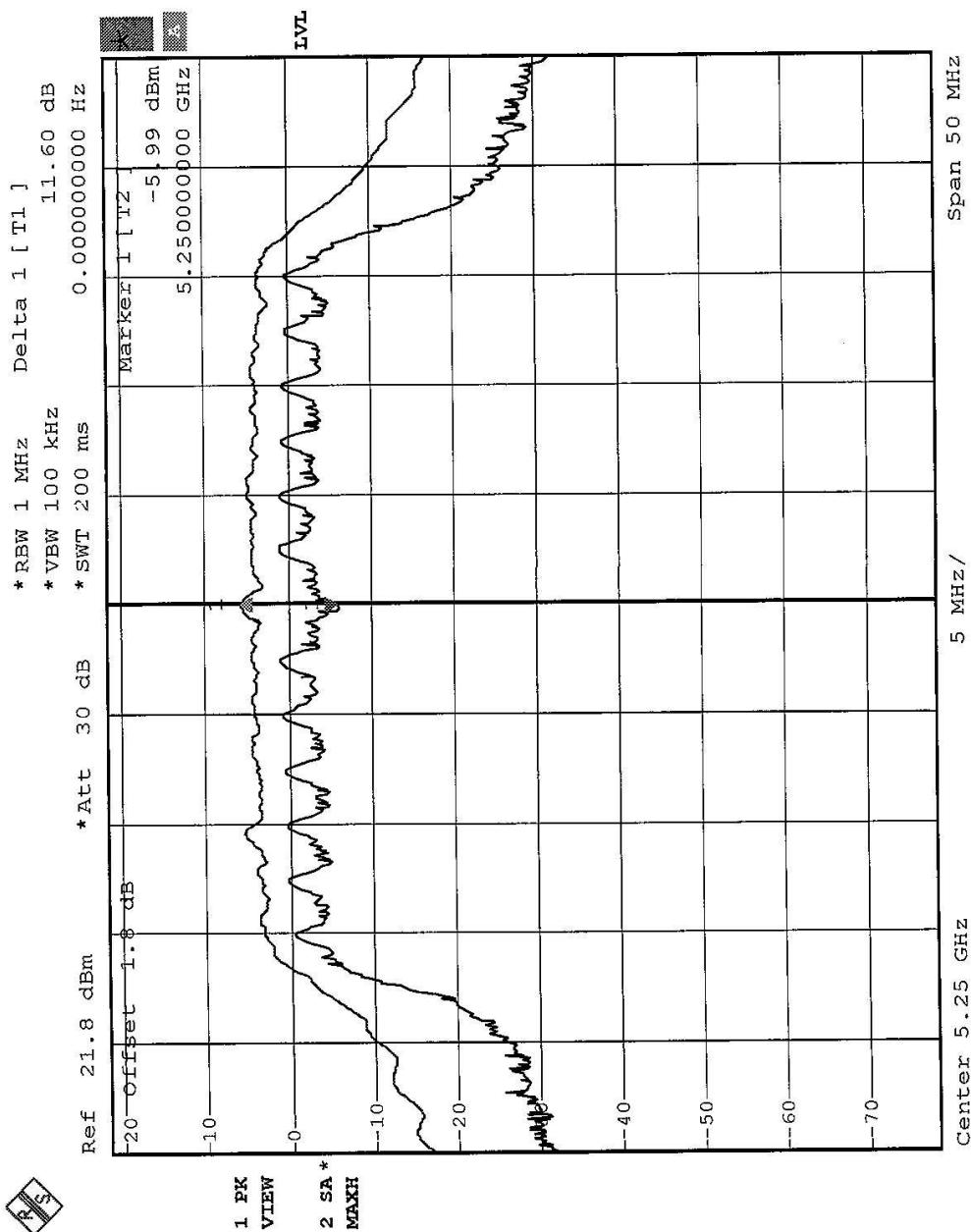
|                                 |                                     |                             |               |
|---------------------------------|-------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | Dual-Band Wireless A+G Access Point | <b>MODEL</b>                | WAP55AG       |
| <b>MODE</b>                     | Turbo                               | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL CONDITIONS</b> | 24deg. C, 65%RH, 1005hPa            | <b>TESTED BY</b>            | Steven Lu     |

| <b>CHANNEL</b> | <b>CHANNEL FREQUENCY (MHz)</b> | <b>PEAK POWER EXCURSION (dB)</b> | <b>PEAK to AVERAGE EXCURSION LIMIT (dB)</b> | <b>PASS/FAIL</b> |
|----------------|--------------------------------|----------------------------------|---|------------------|
| 1              | 5210                           | 10.97                            | 13  | PASS             |
| 2              | 5250                           | 11.60                            | 13  | PASS             |
| 3              | 5290                           | 11.76                            | 13  | PASS             |

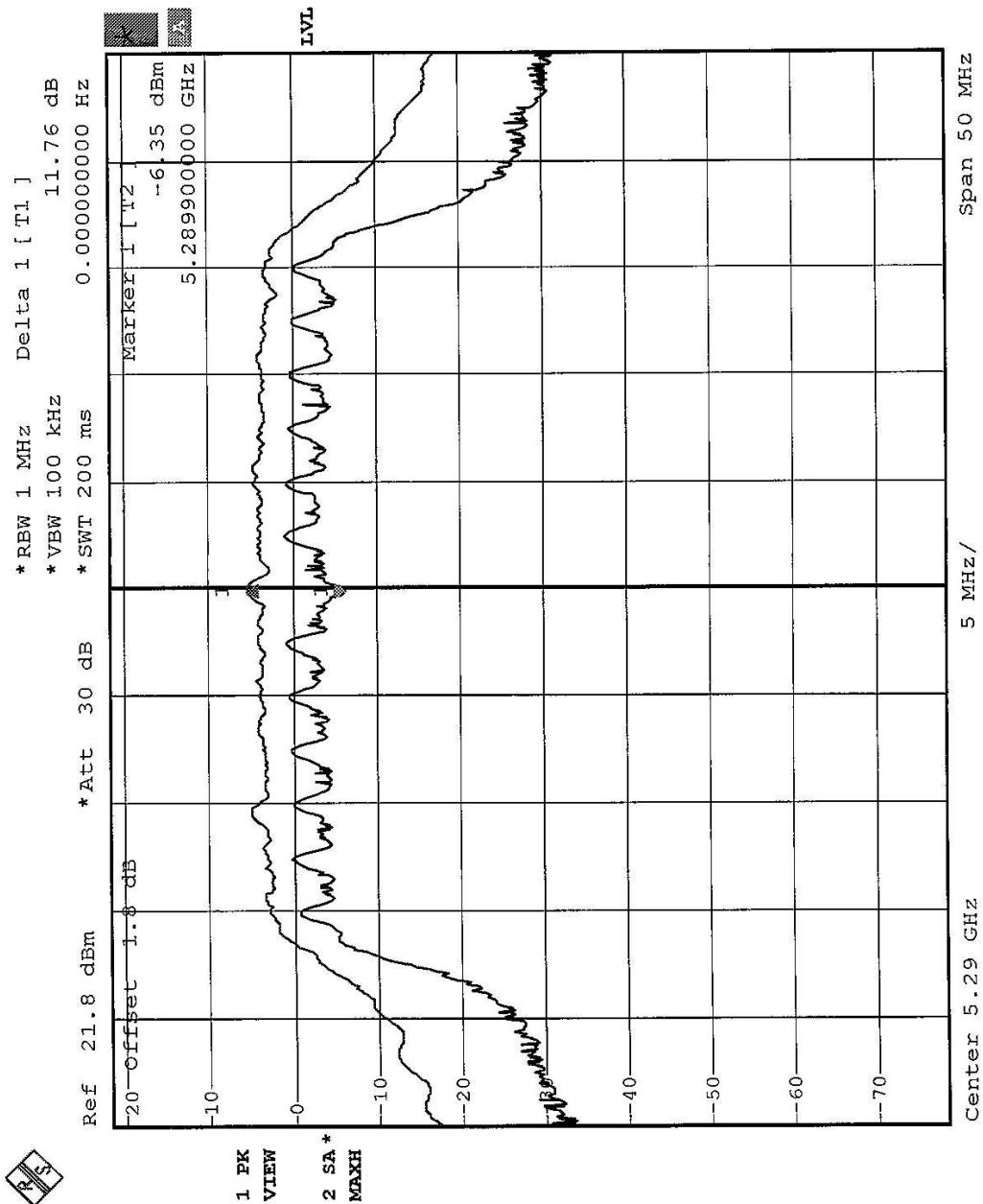
## CHANNEL 1



## CHANNEL 2



## CHANNEL 3



## 5.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

### 5.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

| Frequency Band    | Limit |
|-------------------|-------|
| 5.15 – 5.25 GHz   | 4dBm  |
| 5.25 – 5.35 GHz   | 11dBm |
| 5.725 – 5.825 GHz | 17dBm |

### 5.5.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| SPECTRUM ANALYZER          | FSEK30    | 100049     | July 24, 2003    |

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.