

## 5.2 RADIATED EMISSION MEASUREMENT

### 5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

| Frequencies (MHz) | Field strength (microvolts/meter) | Measurement distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 0.009-0.490       | 2400/F(kHz)                       | 300                           |
| 0.490-1.705       | 24000/F(kHz)                      | 30                            |
| 1.705-30.0        | 30                                | 30                            |
| 30-88             | 100                               | 3                             |
| 88-216            | 150                               | 3                             |
| 216-960           | 200                               | 3                             |
| Above 960         | 500                               | 3                             |

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

## 5.2.2 TEST INSTRUMENTS

| DESCRIPTION & MANUFACTURER           | MODEL NO.          | SERIAL NO.   | CALIBRATED UNTIL |
|--------------------------------------|--------------------|--------------|------------------|
| Test Receiver<br>ROHDE & SCHWARZ     | ESIB7              | 100188       | Jan. 13, 2005    |
| Spectrum Analyzer<br>ROHDE & SCHWARZ | FSP40              | 100039       | Nov. 21, 2005    |
| BILOG Antenna<br>SCHWARZBECK         | VULB9168           | 9168-157     | Feb. 03, 2005    |
| HORN Antenna<br>SCHWARZBECK          | BBHA 9120 D        | 9120D-407    | Feb. 03, 2005    |
| HORN Antenna<br>SCHWARZBECK          | BBHA 9170          | BBHA 9170241 | Feb. 23, 2005    |
| Preamplifier<br>Agilent              | 8449B              | 3008A01961   | Nov. 09, 2005    |
| Preamplifier<br>Agilent              | 8447D              | 2944A10629   | Nov. 09, 2005    |
| RF signal cable<br>HUBER+SUHNER      | SUCOFLEX 104       | 218182/4     | Mar. 04, 2005    |
| RF signal cable<br>HUBER+SUHNER      | SUCOFLEX 104       | 218194/4     | Mar. 04, 2005    |
| Software<br>ADT.                     | ADT_Radiated_V5.14 | NA           | NA               |
| Antenna Tower<br>ADT.                | AT100              | AT93021702   | NA               |
| Turn Table<br>ADT.                   | TT100.             | TT93021702   | NA               |
| Controller<br>ADT.                   | SC100.             | SC93021702   | NA               |

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
5. The test was performed in HwaYa Chamber 1.
  6. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
  7. The IC Site Registration No. is IC4924-2.



### 5.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

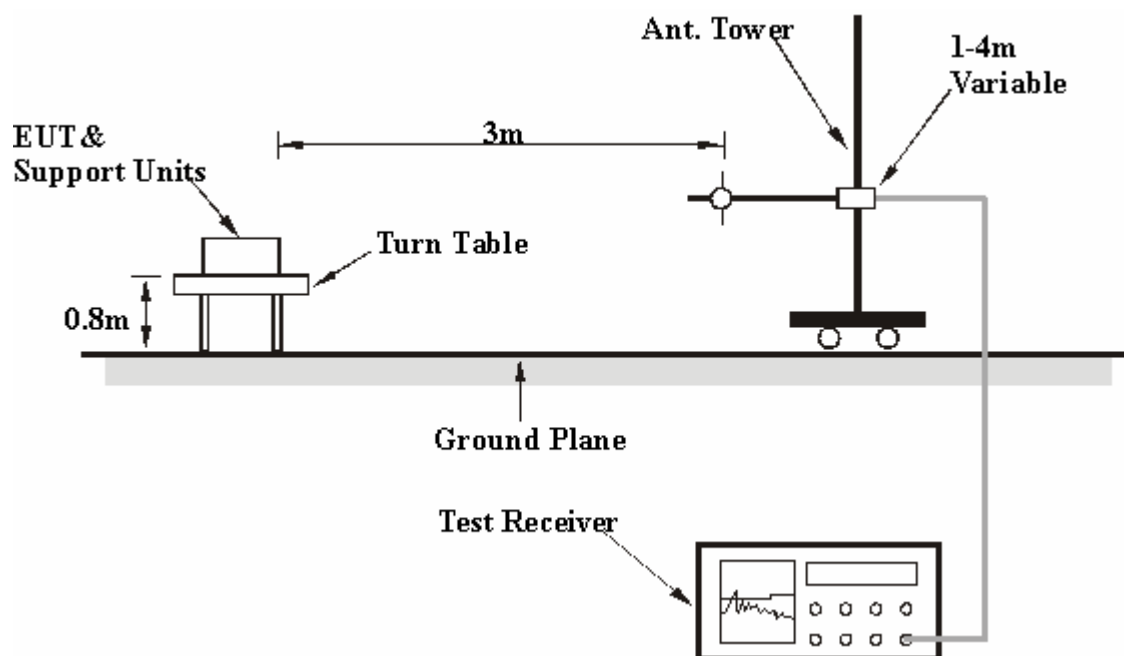
**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

### 5.2.4 DEVIATION FROM TEST STANDARD

No deviation

## 5.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

## 5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

## 5.2.7 TEST RESULTS

**Radiated Below 1G, Worst-Case Data (Without Cradle)**

|                                 |                                                           |                             |               |
|---------------------------------|-----------------------------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132     |
| <b>CHANNEL</b>                  | 11                                                        |                             |               |
| <b>FREQUENCY RANGE</b>          | Below 1000MHz                                             | <b>DETECTOR FUNCTION</b>    | Quasi-Peak    |
| <b>ENVIRONMENTAL CONDITIONS</b> | 25deg. C, 60%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>TEST MODE</b>                | 1 (Without USB Cradle)                                    | <b>TESTED BY</b>            | Match Tsui    |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | 115.53         | 37.75 QP                      | 43.50             | -5.75          | 1.50 H                   | 46                         | 25.17                  | 12.57                          |
| 2   | 168.02         | 32.41 QP                      | 43.50             | -11.09         | 1.50 H                   | 241                        | 18.29                  | 14.12                          |
| 3   | 199.12         | 35.30 QP                      | 43.50             | -8.20          | 1.50 H                   | 268                        | 23.84                  | 11.46                          |
| 4   | 249.66         | 28.14 QP                      | 46.00             | -17.86         | 1.00 H                   | 268                        | 14.93                  | 13.22                          |
| 5   | 356.57         | 32.81 QP                      | 46.00             | -13.19         | 1.00 H                   | 277                        | 17.02                  | 15.79                          |
| 6   | 455.71         | 30.38 QP                      | 46.00             | -15.62         | 2.00 H                   | 79                         | 12.23                  | 18.15                          |
| 7   | 500.42         | 33.13 QP                      | 46.00             | -12.87         | 1.50 H                   | 337                        | 14.39                  | 18.74                          |
| 8   | 533.47         | 27.38 QP                      | 46.00             | -18.62         | 1.50 H                   | 16                         | 8.01                   | 19.37                          |
| 9   | 599.56         | 33.18 QP                      | 46.00             | -12.82         | 1.50 H                   | 82                         | 12.18                  | 21.00                          |
| 10  | 667.60         | 31.89 QP                      | 46.00             | -14.11         | 1.50 H                   | 220                        | 9.99                   | 21.90                          |
| 11  | 731.74         | 33.95 QP                      | 46.00             | -12.05         | 1.00 H                   | 310                        | 10.86                  | 23.08                          |
| 12  | 760.90         | 33.57 QP                      | 46.00             | -12.43         | 2.00 H                   | 49                         | 9.98                   | 23.59                          |
| 13  | 799.78         | 32.89 QP                      | 46.00             | -13.11         | 1.00 H                   | 43                         | 9.07                   | 23.82                          |
| 14  | 863.93         | 34.51 QP                      | 46.00             | -11.49         | 2.50 H                   | 64                         | 10.06                  | 24.45                          |
| 15  | 961.12         | 34.07 QP                      | 54.00             | -19.93         | 1.50 H                   | 247                        | 8.39                   | 25.68                          |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value

|                                 |                                                           |                             |               |
|---------------------------------|-----------------------------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132     |
| <b>CHANNEL</b>                  | 11                                                        |                             |               |
| <b>FREQUENCY RANGE</b>          | Below 1000MHz                                             | <b>DETECTOR FUNCTION</b>    | Quasi-Peak    |
| <b>ENVIRONMENTAL CONDITIONS</b> | 25deg. C, 60%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>TEST MODE</b>                | 1 (Without USB Cradle)                                    | <b>TESTED BY</b>            | Match Tsui    |

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | 70.82          | 31.40 QP                      | 40.00             | -8.60          | 1.00 V                   | 301                        | 19.04                  | 12.37                          |
| 2   | 117.47         | 29.15 QP                      | 43.50             | -14.35         | 1.50 V                   | 217                        | 16.38                  | 12.77                          |
| 3   | 156.35         | 28.38 QP                      | 43.50             | -15.12         | 1.00 V                   | 97                         | 13.58                  | 14.80                          |
| 4   | 171.90         | 29.10 QP                      | 43.50             | -14.40         | 1.00 V                   | 181                        | 15.36                  | 13.74                          |
| 5   | 249.66         | 25.47 QP                      | 46.00             | -20.53         | 1.50 V                   | 337                        | 12.25                  | 13.22                          |
| 6   | 346.85         | 27.34 QP                      | 46.00             | -18.66         | 2.00 V                   | 328                        | 11.76                  | 15.58                          |
| 7   | 399.34         | 34.06 QP                      | 46.00             | -11.94         | 1.00 V                   | 13                         | 17.32                  | 16.74                          |
| 8   | 455.71         | 34.84 QP                      | 46.00             | -11.16         | 1.00 V                   | 13                         | 16.69                  | 18.15                          |
| 9   | 533.47         | 31.26 QP                      | 46.00             | -14.74         | 1.00 V                   | 1                          | 11.89                  | 19.37                          |
| 10  | 605.39         | 35.23 QP                      | 46.00             | -10.77         | 1.50 V                   | 331                        | 14.15                  | 21.08                          |
| 11  | 665.65         | 31.15 QP                      | 46.00             | -14.85         | 1.00 V                   | 301                        | 9.28                   | 21.87                          |
| 12  | 731.74         | 31.43 QP                      | 46.00             | -14.57         | 2.00 V                   | 10                         | 8.35                   | 23.08                          |
| 13  | 797.84         | 31.60 QP                      | 46.00             | -14.40         | 2.00 V                   | 4                          | 7.79                   | 23.81                          |
| 14  | 863.93         | 32.89 QP                      | 46.00             | -13.11         | 2.00 V                   | 349                        | 8.45                   | 24.45                          |
| 15  | 933.91         | 33.80 QP                      | 46.00             | -12.20         | 1.00 V                   | 25                         | 8.33                   | 25.47                          |

#### REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
1. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
2. The other emission levels were very low against the limit.
3. Margin value = Emission level – Limit value

**Radiated Below 1G, Worst-Case Data (With Cradle)**

|                                 |                                                           |                             |               |
|---------------------------------|-----------------------------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132     |
| <b>CHANNEL</b>                  | 11                                                        |                             |               |
| <b>FREQUENCY RANGE</b>          | Below 1000MHz                                             | <b>DETECTOR FUNCTION</b>    | Quasi-Peak    |
| <b>ENVIRONMENTAL CONDITIONS</b> | 21deg. C, 64%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>TEST MODE</b>                | 2 (With USB Cradle)                                       | <b>TESTED BY</b>            | Match Tsui    |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | 64.99          | 15.56 QP                      | 40.00             | -24.44         | 1.25 H                   | 16                         | 38.93                  | -23.37                         |
| 2   | 113.59         | 29.90 QP                      | 43.50             | -13.60         | 1.50 H                   | 268                        | 54.98                  | -25.08                         |
| 3   | 199.12         | 30.63 QP                      | 43.50             | -12.87         | 1.75 H                   | 244                        | 54.62                  | -23.99                         |
| 4   | 350.74         | 33.14 QP                      | 46.00             | -12.86         | 1.00 H                   | 346                        | 50.86                  | -17.72                         |
| 5   | 399.34         | 28.48 QP                      | 46.00             | -17.52         | 1.00 H                   | 349                        | 43.12                  | -14.64                         |
| 6   | 449.88         | 25.47 QP                      | 46.00             | -20.53         | 1.75 H                   | 319                        | 39.99                  | -14.53                         |
| 7   | 533.47         | 21.88 QP                      | 46.00             | -24.12         | 1.50 H                   | 358                        | 36.43                  | -14.55                         |
| 8   | 595.67         | 26.49 QP                      | 46.00             | -19.51         | 1.50 H                   | 274                        | 39.78                  | -13.30                         |
| 9   | 667.60         | 31.51 QP                      | 46.00             | -14.49         | 1.00 H                   | 40                         | 42.99                  | -11.48                         |
| 10  | 720.08         | 26.92 QP                      | 46.00             | -19.08         | 1.75 H                   | 7                          | 39.42                  | -12.51                         |
| 11  | 801.72         | 24.44 QP                      | 46.00             | -21.56         | 1.00 H                   | 97                         | 34.81                  | -10.37                         |
| 12  | 863.93         | 24.60 QP                      | 46.00             | -21.40         | 1.00 H                   | 139                        | 33.27                  | -8.68                          |
| 13  | 931.96         | 24.09 QP                      | 46.00             | -21.91         | 1.75 H                   | 214                        | 32.56                  | -8.47                          |

**REMARKS:**

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
1. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
2. The other emission levels were very low against the limit.
3. Margin value = Emission level – Limit value

|                                 |                                                           |                             |               |
|---------------------------------|-----------------------------------------------------------|-----------------------------|---------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132     |
| <b>CHANNEL</b>                  | 11                                                        |                             |               |
| <b>FREQUENCY RANGE</b>          | Below 1000MHz                                             | <b>DETECTOR FUNCTION</b>    | Quasi-Peak    |
| <b>ENVIRONMENTAL CONDITIONS</b> | 25deg. C, 60%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60 Hz |
| <b>TEST MODE</b>                | 2 (With USB Cradle)                                       | <b>TESTED BY</b>            | Match Tsui    |

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | 64.99          | 29.51 QP                      | 40.00             | -10.49         | 1.00 V                   | 43                         | 48.65                  | -19.14                         |
| 2   | 113.59         | 27.13 QP                      | 43.50             | -16.37         | 1.25 V                   | 16                         | 47.33                  | -20.20                         |
| 3   | 133.03         | 26.38 QP                      | 43.50             | -17.12         | 1.00 V                   | 229                        | 45.33                  | -18.95                         |
| 4   | 164.13         | 28.15 QP                      | 43.50             | -15.35         | 1.00 V                   | 313                        | 46.71                  | -18.57                         |
| 5   | 199.12         | 28.27 QP                      | 43.50             | -15.23         | 1.50 V                   | 310                        | 46.76                  | -18.50                         |
| 6   | 350.74         | 24.11 QP                      | 46.00             | -21.89         | 1.50 V                   | 277                        | 44.27                  | -20.16                         |
| 7   | 399.34         | 26.08 QP                      | 46.00             | -19.92         | 1.25 V                   | 280                        | 46.40                  | -20.33                         |
| 8   | 457.66         | 24.87 QP                      | 46.00             | -21.13         | 1.00 V                   | 298                        | 42.26                  | -17.39                         |
| 9   | 533.47         | 19.54 QP                      | 46.00             | -26.46         | 1.00 V                   | 337                        | 35.06                  | -15.52                         |
| 10  | 599.56         | 22.33 QP                      | 46.00             | -23.67         | 1.00 V                   | 115                        | 35.92                  | -13.60                         |
| 11  | 733.69         | 19.41 QP                      | 46.00             | -26.59         | 1.50 V                   | 262                        | 33.28                  | -13.87                         |
| 12  | 801.72         | 21.51 QP                      | 46.00             | -24.49         | 1.25 V                   | 169                        | 33.95                  | -12.45                         |
| 13  | 935.85         | 23.96 QP                      | 46.00             | -22.04         | 1.00 V                   | 55                         | 31.72                  | -7.76                          |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value



**Radiated Above 1G (Without Cradle)**

|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Normal Mode                                               | <b>CHANNEL</b>              | 9                        |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 24deg. C, 62%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 1 (Without USB Cradle)                                    | <b>TESTED BY</b>            | Match Tsui               |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| No.      | Freq.<br>(MHz)  | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|----------|-----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1        | #1053.00        | 46.35 PK                      | 74.00             | -27.65         | 1.37 H                   | 241                        | 19.82                  | 26.53                          |
| 1        | #1053.00        | 43.34 AV                      | 54.00             | -10.66         | 1.37 H                   | 241                        | 16.81                  | 26.53                          |
| 2        | #3830.00        | 55.24 PK                      | 74.00             | -18.76         | 1.00 H                   | 114                        | 18.90                  | 36.34                          |
| <b>2</b> | <b>#3830.00</b> | <b>51.98 AV</b>               | <b>54.00</b>      | <b>-2.02</b>   | <b>1.00 H</b>            | <b>114</b>                 | <b>15.64</b>           | <b>36.34</b>                   |
| 3        | *5745.00        | 106.75 PK                     |                   |                | 1.06 H                   | 161                        | 65.85                  | 40.90                          |
| 3        | *5745.00        | 97.32 AV                      |                   |                | 1.06 H                   | 161                        | 56.42                  | 40.90                          |
| 4        | #11490.00       | 57.93 PK                      | 74.00             | -16.07         | 1.37 H                   | 231                        | 10.55                  | 47.38                          |
| 4        | #11490.00       | 44.38 AV                      | 54.00             | -9.62          | 1.37 H                   | 231                        | -3.00                  | 47.38                          |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #1053.00       | 46.79 PK                      | 74.00             | -27.21         | 1.25 V                   | 36                         | 20.26                  | 26.53                          |
| 1   | #1053.00       | 44.14 AV                      | 54.00             | -9.86          | 1.25 V                   | 36                         | 17.61                  | 26.53                          |
| 2   | #3830.00       | 54.26 PK                      | 74.00             | -19.74         | 1.17 V                   | 120                        | 17.92                  | 36.34                          |
| 2   | #3830.00       | 50.88 AV                      | 54.00             | -3.12          | 1.17 V                   | 120                        | 14.54                  | 36.34                          |
| 3   | *5745.00       | 103.09 PK                     |                   |                | 1.33 V                   | 20                         | 62.19                  | 40.90                          |
| 3   | *5745.00       | 93.53 AV                      |                   |                | 1.33 V                   | 20                         | 52.63                  | 40.90                          |
| 4   | #11490.00      | 58.27 PK                      | 74.00             | -15.73         | 1.26 V                   | 164                        | 10.89                  | 47.38                          |
| 4   | #11490.00      | 44.88 AV                      | 54.00             | -9.12          | 1.26 V                   | 164                        | -2.50                  | 47.38                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Normal Mode                                               | <b>CHANNEL</b>              | 11                       |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 24deg. C, 62%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 1 (Without USB Cradle)                                    | <b>TESTED BY</b>            | Match Tsui               |

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #1053.00       | 49.83 PK                      | 74.00             | -24.17         | 1.35 H                   | 104                        | 23.30                  | 26.53                          |
| 1   | #1053.00       | 47.46 AV                      | 54.00             | -6.54          | 1.35 H                   | 104                        | 20.93                  | 26.53                          |
| 2   | #3856.00       | 53.77 PK                      | 74.00             | -20.23         | 1.29 H                   | 120                        | 17.34                  | 36.43                          |
| 2   | #3856.00       | 49.95 AV                      | 54.00             | -4.05          | 1.29 H                   | 120                        | 13.52                  | 36.43                          |
| 3   | *5785.00       | 107.79 PK                     |                   |                | 1.26 H                   | 140                        | 66.74                  | 41.05                          |
| 3   | *5785.00       | 97.90 AV                      |                   |                | 1.26 H                   | 140                        | 56.85                  | 41.05                          |
| 4   | #11570.00      | 57.79 PK                      | 74.00             | -16.21         | 1.20 H                   | 156                        | 10.32                  | 47.47                          |
| 4   | #11570.00      | 45.26 AV                      | 54.00             | -8.74          | 1.20 H                   | 156                        | -2.21                  | 47.47                          |

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #1053.00       | 45.28 PK                      | 74.00             | -28.72         | 1.32 V                   | 22                         | 18.75                  | 26.53                          |
| 1   | #1053.00       | 42.01 AV                      | 54.00             | -11.99         | 1.32 V                   | 22                         | 15.48                  | 26.53                          |
| 2   | #3856.00       | 49.83 PK                      | 74.00             | -24.17         | 1.09 V                   | 343                        | 13.40                  | 36.43                          |
| 2   | #3856.00       | 41.11 AV                      | 54.00             | -12.89         | 1.09 V                   | 343                        | 4.68                   | 36.43                          |
| 3   | *5785.00       | 101.27 PK                     |                   |                | 1.05 V                   | 27                         | 60.22                  | 41.05                          |
| 3   | *5785.00       | 91.74 AV                      |                   |                | 1.05 V                   | 27                         | 50.69                  | 41.05                          |
| 4   | #11570.00      | 58.02 PK                      | 74.00             | -15.98         | 1.26 V                   | 159                        | 10.55                  | 47.47                          |
| 4   | #11570.00      | 44.75 AV                      | 54.00             | -9.25          | 1.26 V                   | 159                        | -2.72                  | 47.47                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Normal Mode                                               | <b>CHANNEL</b>              | 13                       |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 24deg. C, 62%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 1 (Without USB Cradle)                                    | <b>TESTED BY</b>            | Match Tsui               |

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #1053.00       | 50.15 PK                      | 74.00             | -23.85         | 1.34 H                   | 108                        | 23.62                  | 26.53                          |
| 1   | #1053.00       | 48.08 AV                      | 54.00             | -5.92          | 1.34 H                   | 108                        | 21.55                  | 26.53                          |
| 2   | #3883.00       | 54.11 PK                      | 74.00             | -19.89         | 1.11 H                   | 123                        | 17.59                  | 36.52                          |
| 2   | #3883.00       | 49.81 AV                      | 54.00             | -4.19          | 1.11 H                   | 123                        | 13.29                  | 36.52                          |
| 3   | *5825.00       | 107.18 PK                     |                   |                | 1.26 H                   | 137                        | 66.23                  | 40.95                          |
| 3   | *5825.00       | 97.23 AV                      |                   |                | 1.26 H                   | 137                        | 56.28                  | 40.95                          |
| 4   | #11650.00      | 57.20 PK                      | 74.00             | -16.80         | 1.06 H                   | 238                        | 9.48                   | 47.72                          |
| 4   | #11650.00      | 45.10 AV                      | 54.00             | -8.90          | 1.06 H                   | 238                        | -2.62                  | 47.72                          |

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #1053.00       | 46.97 PK                      | 74.00             | -27.03         | 1.38 V                   | 40                         | 20.44                  | 26.53                          |
| 1   | #1053.00       | 44.08 AV                      | 54.00             | -9.92          | 1.38 V                   | 40                         | 17.55                  | 26.53                          |
| 2   | #3883.00       | 50.86 PK                      | 74.00             | -23.14         | 1.35 V                   | 40                         | 14.34                  | 36.52                          |
| 2   | #3883.00       | 42.82 AV                      | 54.00             | -11.18         | 1.35 V                   | 40                         | 6.30                   | 36.52                          |
| 3   | *5825.00       | 100.54 PK                     |                   |                | 1.25 V                   | 220                        | 59.59                  | 40.95                          |
| 3   | *5825.00       | 90.44 AV                      |                   |                | 1.25 V                   | 220                        | 49.49                  | 40.95                          |
| 4   | #11650.00      | 59.72 PK                      | 74.00             | -14.28         | 1.18 V                   | 173                        | 12.00                  | 47.72                          |
| 4   | #11650.00      | 45.32 AV                      | 54.00             | -8.68          | 1.18 V                   | 173                        | -2.40                  | 47.72                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

**Radiated Above 1G (With Cradle)**

|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Normal Mode                                               | <b>CHANNEL</b>              | 9                        |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 22deg. C, 64%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 2 (With USB Cradle)                                       | <b>TESTED BY</b>            | Match Tsui               |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3830.00       | 50.91 PK                      | 74.00             | -23.09         | 1.10 H                   | 331                        | 17.31                  | 33.61                          |
| 1   | #3830.00       | 48.32 AV                      | 54.00             | -5.68          | 1.10 H                   | 331                        | 14.72                  | 33.61                          |
| 2   | *5745.00       | 104.49 PK                     |                   |                | 1.01 H                   | 344                        | 65.34                  | 39.15                          |
| 2   | *5745.00       | 94.15 AV                      |                   |                | 1.01 H                   | 344                        | 55.00                  | 39.15                          |
| 3   | #11490.00      | 55.43 PK                      | 74.00             | -18.57         | 1.12 H                   | 1                          | 7.89                   | 47.54                          |
| 3   | #11490.00      | 42.83 AV                      | 54.00             | -11.17         | 1.12 H                   | 1                          | -4.71                  | 47.54                          |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3830.00       | 51.23 PK                      | 74.00             | -22.77         | 1.30 V                   | 262                        | 17.63                  | 33.61                          |
| 1   | #3830.00       | 47.90 AV                      | 54.00             | -6.10          | 1.30 V                   | 262                        | 14.30                  | 33.61                          |
| 2   | *5745.00       | 99.83 PK                      |                   |                | 1.14 V                   | 19                         | 60.68                  | 39.15                          |
| 2   | *5745.00       | 89.69 AV                      |                   |                | 1.14 V                   | 19                         | 50.54                  | 39.15                          |
| 3   | #11490.00      | 55.85 PK                      | 74.00             | -18.15         | 1.22 V                   | 168                        | 8.31                   | 47.54                          |
| 3   | #11490.00      | 42.18 AV                      | 54.00             | -11.82         | 1.22 V                   | 168                        | -5.36                  | 47.54                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Normal Mode                                               | <b>CHANNEL</b>              | 11                       |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 22deg. C, 64%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 2 (With USB Cradle)                                       | <b>TESTED BY</b>            | Match Tsui               |

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3856.00       | 51.12 PK                      | 74.00             | -22.88         | 1.31 H                   | 300                        | 17.42                  | 33.70                          |
| 1   | #3856.00       | 49.21 AV                      | 54.00             | -4.79          | 1.31 H                   | 300                        | 15.51                  | 33.70                          |
| 2   | *5785.00       | 103.88 PK                     |                   |                | 1.11 H                   | 10                         | 64.54                  | 39.34                          |
| 2   | *5785.00       | 94.10 AV                      |                   |                | 1.11 H                   | 10                         | 54.76                  | 39.34                          |
| 3   | #11570.00      | 55.60 PK                      | 74.00             | -18.40         | 1.27 H                   | 326                        | 8.12                   | 47.48                          |
| 3   | #11570.00      | 43.13 AV                      | 54.00             | -10.87         | 1.27 H                   | 326                        | -4.35                  | 47.48                          |

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3856.00       | 52.11 PK                      | 74.00             | -21.89         | 1.00 V                   | 100                        | 18.41                  | 33.70                          |
| 1   | #3856.00       | 48.16 AV                      | 54.00             | -5.84          | 1.00 V                   | 100                        | 14.46                  | 33.70                          |
| 2   | *5785.00       | 100.11 PK                     |                   |                | 1.10 V                   | 350                        | 60.77                  | 39.34                          |
| 2   | *5785.00       | 90.54 AV                      |                   |                | 1.10 V                   | 350                        | 51.20                  | 39.34                          |
| 3   | #11570.00      | 55.86 PK                      | 74.00             | -18.14         | 1.04 V                   | 120                        | 8.38                   | 47.48                          |
| 3   | #11570.00      | 43.10 AV                      | 54.00             | -10.90         | 1.04 V                   | 120                        | -4.38                  | 47.48                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Normal Mode                                               | <b>CHANNEL</b>              | 13                       |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 22deg. C, 64%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 2 (With USB Cradle)                                       | <b>TESTED BY</b>            | Match Tsui               |

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3883.00       | 51.51 PK                      | 74.00             | -22.49         | 1.20 H                   | 111                        | 17.71                  | 33.80                          |
| 1   | #3883.00       | 49.02 AV                      | 54.00             | -4.98          | 1.20 H                   | 111                        | 15.22                  | 33.80                          |
| 2   | *5825.00       | 105.08 PK                     |                   |                | 1.24 H                   | 250                        | 65.81                  | 39.27                          |
| 2   | *5825.00       | 95.16 AV                      |                   |                | 1.24 H                   | 250                        | 55.89                  | 39.27                          |
| 3   | #11650.00      | 55.80 PK                      | 74.00             | -18.20         | 1.11 H                   | 100                        | 8.21                   | 47.59                          |
| 3   | #11650.00      | 43.18 AV                      | 54.00             | -10.82         | 1.11 H                   | 100                        | -4.41                  | 47.59                          |

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3883.00       | 52.68 PK                      | 74.00             | -21.32         | 1.04 V                   | 139                        | 18.88                  | 33.80                          |
| 1   | #3883.00       | 48.34 AV                      | 54.00             | -5.66          | 1.04 V                   | 139                        | 14.54                  | 33.80                          |
| 2   | *5825.00       | 100.14 PK                     |                   |                | 1.14 V                   | 211                        | 60.87                  | 39.27                          |
| 2   | *5825.00       | 90.74 AV                      |                   |                | 1.14 V                   | 211                        | 51.47                  | 39.27                          |
| 3   | #11650.00      | 56.28 PK                      | 74.00             | -17.72         | 1.07 V                   | 160                        | 8.69                   | 47.59                          |
| 3   | #11650.00      | 43.70 AV                      | 54.00             | -10.30         | 1.07 V                   | 160                        | -3.89                  | 47.59                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

**Radiated Turbo Mode (Without Cradle)**

|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Turbo Mode                                                | <b>CHANNEL</b>              | 4                        |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 25deg. C, 65%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 1 (Without USB Cradle)                                    | <b>TESTED BY</b>            | Match Tsui               |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3840.00       | 51.93 PK                      | 74.00             | -22.07         | 1.00 H                   | 84                         | 15.56                  | 36.38                          |
| 1   | #3840.00       | 48.05 AV                      | 54.00             | -5.95          | 1.00 H                   | 84                         | 11.68                  | 36.38                          |
| 2   | *5760.00       | 105.53 PK                     |                   |                | 1.07 H                   | 114                        | 64.57                  | 40.96                          |
| 2   | *5760.00       | 96.12 AV                      |                   |                | 1.07 H                   | 114                        | 55.16                  | 40.96                          |
| 3   | #11520.00      | 55.57 PK                      | 74.00             | -18.43         | 1.00 H                   | 133                        | 8.15                   | 47.41                          |
| 3   | #11520.00      | 42.47 AV                      | 54.00             | -11.53         | 1.00 H                   | 133                        | -4.95                  | 47.41                          |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3840.00       | 47.94 PK                      | 74.00             | -26.06         | 1.15 V                   | 34                         | 11.57                  | 36.38                          |
| 1   | #3840.00       | 39.97 AV                      | 54.00             | -14.03         | 1.15 V                   | 34                         | 3.60                   | 36.38                          |
| 2   | *5760.00       | 103.46 PK                     |                   |                | 1.09 V                   | 304                        | 62.50                  | 40.96                          |
| 2   | *5760.00       | 94.15 AV                      |                   |                | 1.09 V                   | 304                        | 53.19                  | 40.96                          |
| 3   | #11520.00      | 54.40 PK                      | 74.00             | -19.60         | 1.12 V                   | 147                        | 6.98                   | 47.41                          |
| 3   | #11520.00      | 43.34 AV                      | 54.00             | -10.66         | 1.12 V                   | 147                        | -4.08                  | 47.41                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Turbo Mode                                                | <b>CHANNEL</b>              | 5                        |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 25deg. C, 65%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 1 (Without USB Cradle)                                    | <b>TESTED BY</b>            | Match Tsui               |

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3866.00       | 50.38 PK                      | 74.00             | -23.62         | 1.01 H                   | 240                        | 13.92                  | 36.46                          |
| 1   | #3866.00       | 48.11 AV                      | 54.00             | -5.89          | 1.01 H                   | 240                        | 11.65                  | 36.46                          |
| 2   | *5800.00       | 105.95 PK                     |                   |                | 1.00 H                   | 208                        | 64.84                  | 41.11                          |
| 2   | *5800.00       | 96.77 AV                      |                   |                | 1.00 H                   | 208                        | 55.66                  | 41.11                          |
| 3   | #11600.00      | 56.31 PK                      | 74.00             | -17.69         | 1.14 H                   | 300                        | 8.81                   | 47.50                          |
| 3   | #11600.00      | 43.19 AV                      | 54.00             | -10.81         | 1.14 H                   | 300                        | -4.31                  | 47.50                          |

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3866.00       | 47.24 PK                      | 74.00             | -26.76         | 1.24 V                   | 250                        | 10.78                  | 36.46                          |
| 1   | #3866.00       | 39.41 AV                      | 54.00             | -14.59         | 1.24 V                   | 250                        | 2.95                   | 36.46                          |
| 2   | *5800.00       | 103.58 PK                     |                   |                | 1.14 V                   | 123                        | 62.47                  | 41.11                          |
| 2   | *5800.00       | 94.68 AV                      |                   |                | 1.14 V                   | 123                        | 53.57                  | 41.11                          |
| 3   | #11600.00      | 53.62 PK                      | 74.00             | -20.38         | 1.12 V                   | 240                        | 6.12                   | 47.50                          |
| 3   | #11600.00      | 42.31 AV                      | 54.00             | -11.69         | 1.12 V                   | 240                        | -5.19                  | 47.50                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



**Radiated Turbo Mode (With Cradle)**

|                                 |                                                           |                             |                          |
|---------------------------------|-----------------------------------------------------------|-----------------------------|--------------------------|
| <b>EUT</b>                      | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                | DWL-AG132                |
| <b>MODE</b>                     | Turbo Mode                                                | <b>CHANNEL</b>              | 4                        |
| <b>FREQUENCY RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL CONDITIONS</b> | 22deg. C, 64%RH,<br>991hPa                                | <b>INPUT POWER (SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                | 2 (With USB Cradle)                                       | <b>TESTED BY</b>            | Match Tsui               |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3840.00       | 50.72 PK                      | 74.00             | -23.28         | 1.10 H                   | 331                        | 17.08                  | 33.64                          |
| 1   | #3840.00       | 47.57 AV                      | 54.00             | -6.43          | 1.10 H                   | 331                        | 13.93                  | 33.64                          |
| 2   | *5760.00       | 104.05 PK                     |                   |                | 1.01 H                   | 345                        | 64.83                  | 39.22                          |
| 2   | *5760.00       | 95.10 AV                      |                   |                | 1.01 H                   | 345                        | 55.88                  | 39.22                          |
| 3   | 17280.00       | 66.17 PK                      | 74.00             | -7.83          | 1.02 H                   | 32                         | 13.29                  | 52.88                          |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3840.00       | 51.02 PK                      | 74.00             | -22.98         | 1.13 V                   | 292                        | 17.38                  | 33.64                          |
| 1   | #3840.00       | 47.85 AV                      | 54.00             | -6.15          | 1.13 V                   | 292                        | 14.21                  | 33.64                          |
| 2   | *5760.00       | 100.52 PK                     |                   |                | 1.24 V                   | 289                        | 61.30                  | 39.22                          |
| 2   | *5760.00       | 91.60 AV                      |                   |                | 1.24 V                   | 289                        | 52.38                  | 39.22                          |
| 3   | 17280.00       | 63.88 PK                      | 74.00             | -10.12         | 1.09 V                   | 1                          | 11.00                  | 52.88                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#” The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

|                                     |                                                           |                                 |                          |
|-------------------------------------|-----------------------------------------------------------|---------------------------------|--------------------------|
| <b>EUT</b>                          | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                    | DWL-AG132                |
| <b>MODE</b>                         | Turbo Mode                                                | <b>CHANNEL</b>                  | 5                        |
| <b>FREQUENCY<br/>RANGE</b>          | 1 ~ 40 GHz                                                | <b>DETECTOR<br/>FUNCTION</b>    | Peak(PK)<br>Average (AV) |
| <b>ENVIRONMENTAL<br/>CONDITIONS</b> | 22deg. C, 64%RH,<br>991hPa                                | <b>INPUT POWER<br/>(SYSTEM)</b> | 120Vac, 60Hz             |
| <b>TEST MODE</b>                    | 2 (With USB Cradle)                                       | <b>TESTED BY</b>                | Match Tsui               |

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3866.00       | 50.46 PK                      | 74.00             | -23.54         | 1.10 H                   | 240                        | 16.72                  | 33.74                          |
| 1   | #3866.00       | 47.62 AV                      | 54.00             | -6.38          | 1.10 H                   | 240                        | 13.88                  | 33.74                          |
| 2   | *5800.00       | 104.50 PK                     |                   |                | 1.26 H                   | 300                        | 65.09                  | 39.41                          |
| 2   | *5800.00       | 96.70 AV                      |                   |                | 1.26 H                   | 300                        | 57.29                  | 39.41                          |
| 3   | 17400.00       | 65.42 PK                      | 74.00             | -8.58          | 1.07 H                   | 120                        | 11.98                  | 53.44                          |

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

| No. | Freq.<br>(MHz) | Emission<br>Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1   | #3866.00       | 50.47 PK                      | 74.00             | -23.53         | 1.09 V                   | 300                        | 16.73                  | 33.74                          |
| 1   | #3866.00       | 48.60 AV                      | 54.00             | -5.40          | 1.09 V                   | 300                        | 14.86                  | 33.74                          |
| 2   | *5800.00       | 101.41 PK                     |                   |                | 1.24 V                   | 130                        | 62.00                  | 39.41                          |
| 2   | *5800.00       | 92.17 AV                      |                   |                | 1.24 V                   | 130                        | 52.76                  | 39.41                          |
| 3   | 17400.00       | 62.53 PK                      | 74.00             | -11.47         | 1.04 V                   | 130                        | 9.09                   | 53.44                          |

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



### 5.3 6dB BANDWIDTH MEASUREMENT

#### 5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

#### 5.3.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| R&S SPECTRUM ANALYZER      | FSEK30    | 100049     | Aug. 12, 2005    |

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

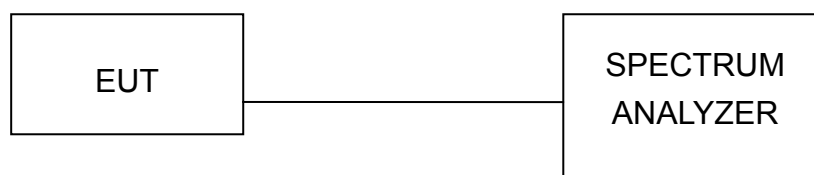
### 5.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

### 5.3.4 DEVIATION FROM TEST STANDARD

No deviation

### 5.3.5 TEST SETUP



### 5.3.6 EUT OPERATING CONDITIONS

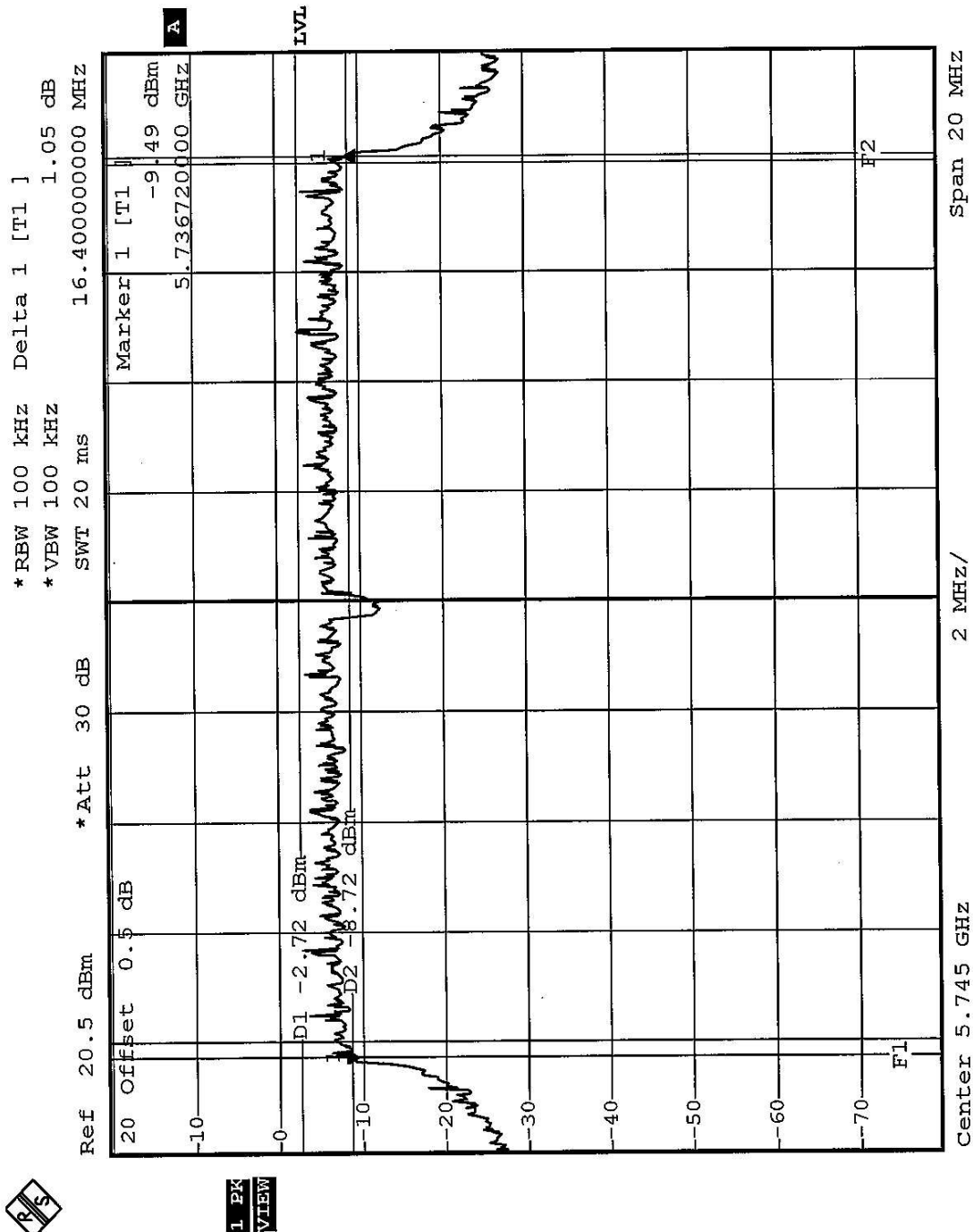
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

## 5.3.7 TEST RESULTS

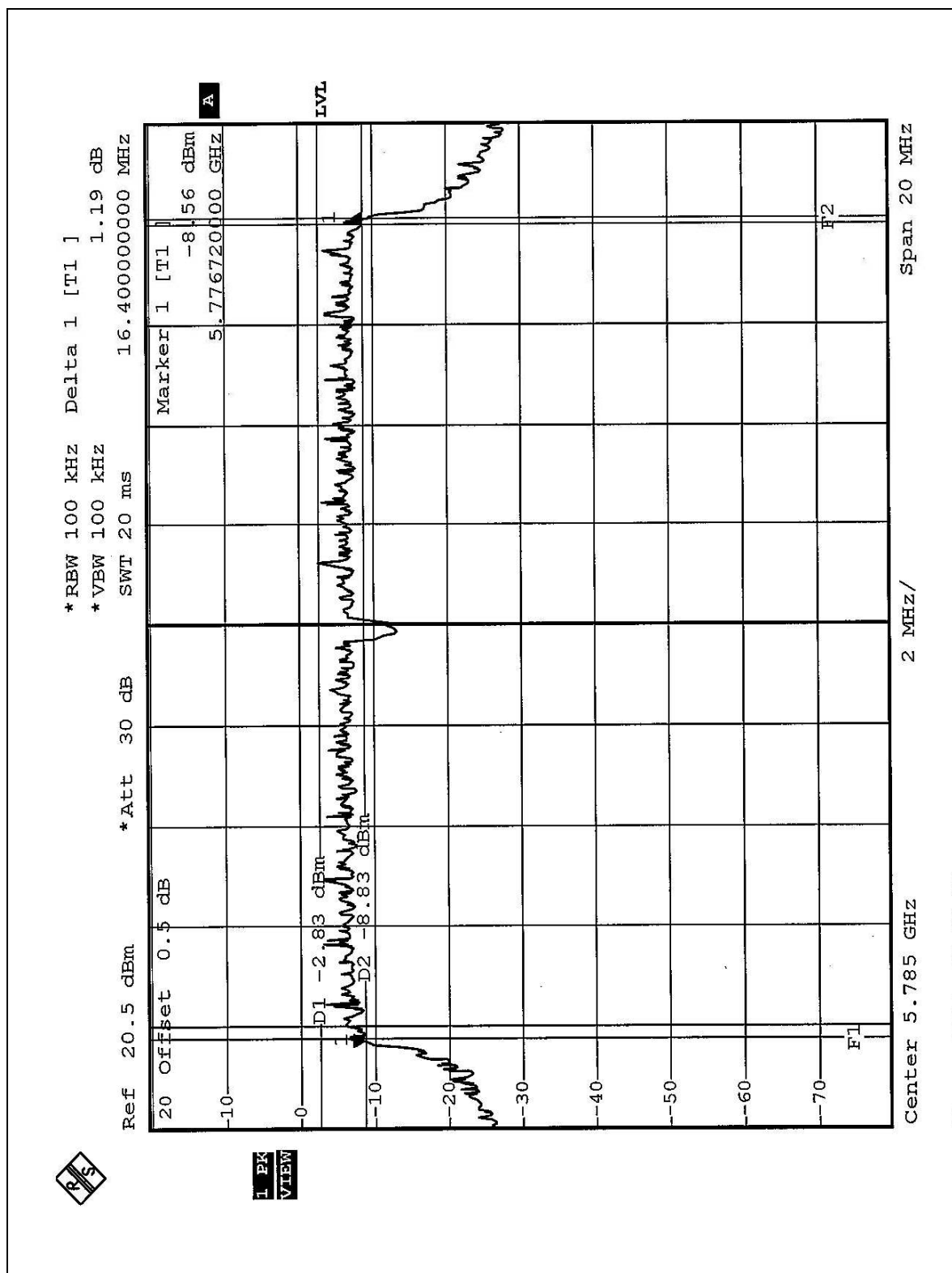
|                                     |                                                           |                                 |               |
|-------------------------------------|-----------------------------------------------------------|---------------------------------|---------------|
| <b>EUT</b>                          | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                    | DWL-AG132     |
| <b>MODE</b>                         | Normal                                                    | <b>INPUT POWER<br/>(SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL<br/>CONDITIONS</b> | 23deg. C, 67%RH,<br>991 hPa                               | <b>TESTED BY</b>                | Leo Hung      |

| <b>CHANNEL</b> | <b>CHANNEL<br/>FREQUENCY<br/>(MHz)</b> | <b>6dB BANDWIDTH<br/>(MHz)</b> | <b>MINIMUM LIMIT<br/>(MHz)</b> | <b>PASS/FAIL</b> |
|----------------|----------------------------------------|--------------------------------|--------------------------------|------------------|
| 9              | 5745                                   | 16.40                          | 0.5                            | PASS             |
| 11             | 5785                                   | 16.40                          | 0.5                            | PASS             |
| 13             | 5825                                   | 16.40                          | 0.5                            | PASS             |

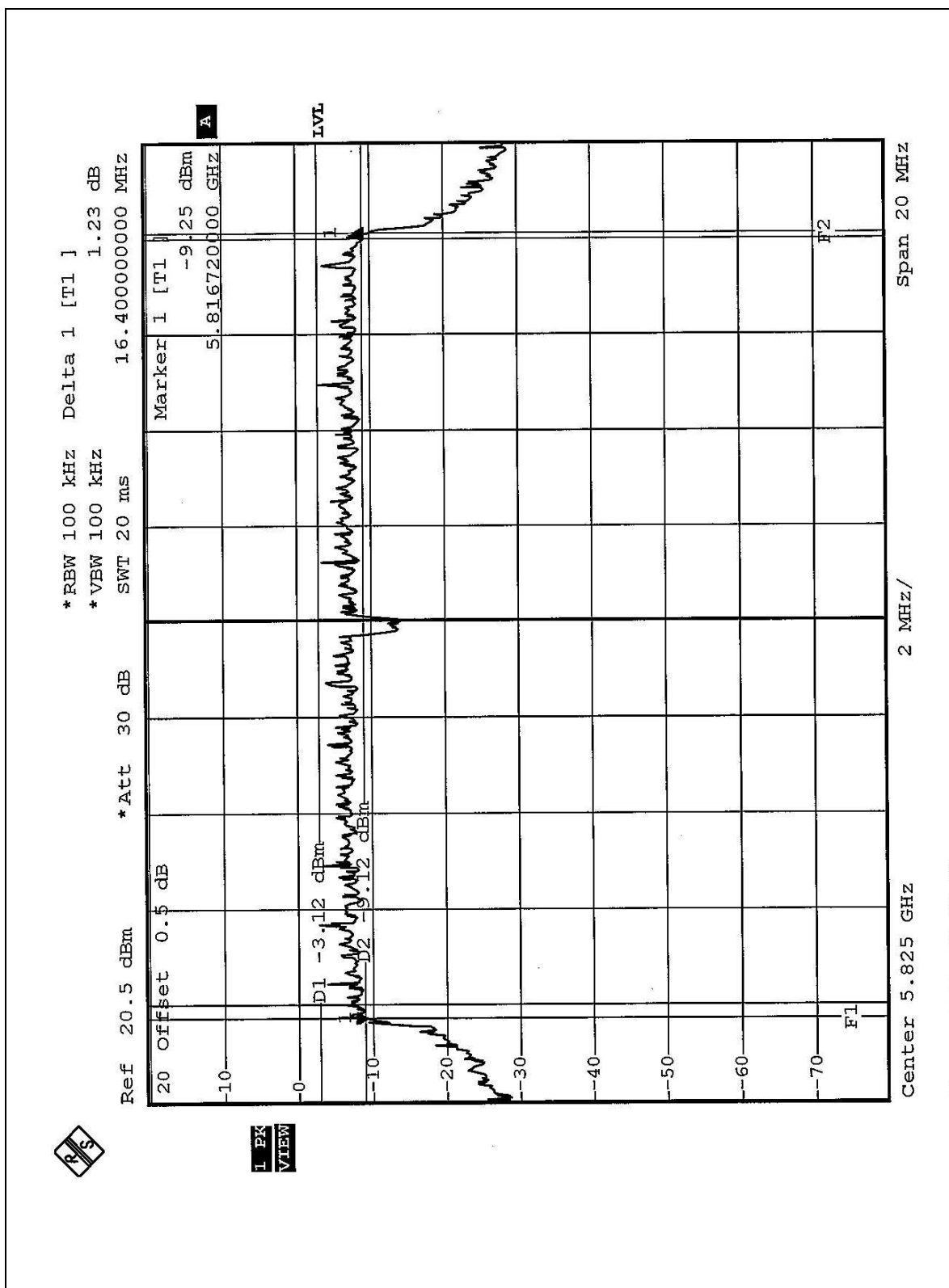
CH 9



CH 11



## CH 13





|                                     |                                                           |                                 |               |
|-------------------------------------|-----------------------------------------------------------|---------------------------------|---------------|
| <b>EUT</b>                          | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                    | DWL-AG132     |
| <b>MODE</b>                         | Turbo                                                     | <b>INPUT POWER<br/>(SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL<br/>CONDITIONS</b> | 24deg. C, 64%RH,<br>991 hPa                               | <b>TESTED BY</b>                | Leo Hung      |

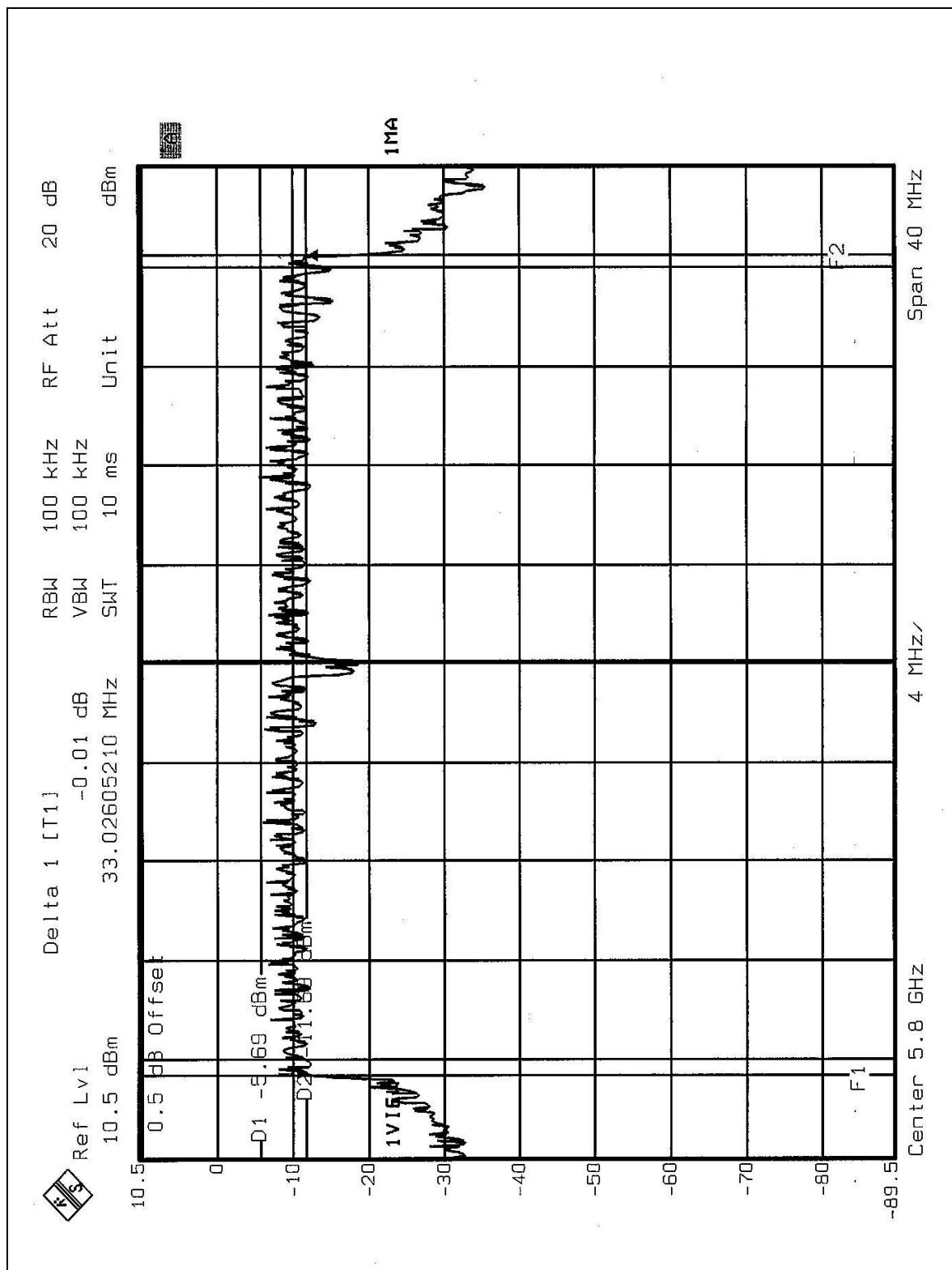
| <b>CHANNEL</b> | <b>CHANNEL<br/>FREQUENCY<br/>(MHz)</b> | <b>6dB BANDWIDTH<br/>(MHz)</b> | <b>MINIMUM LIMIT<br/>(MHz)</b> | <b>PASS/FAIL</b> |
|----------------|----------------------------------------|--------------------------------|--------------------------------|------------------|
| 4              | 5760                                   | 32.94                          | 0.5                            | PASS             |
| 5              | 5800                                   | 33.02                          | 0.5                            | PASS             |

Delta 1 [T1] 1.17 dB  
 RBW 100 kHz  
 VBW 100 kHz  
 SWT 10 ms  
 Ref Lvl 10.5 dBm  
 Center 5.76 GHz  
 Span 40 MHz  
 RF Att 20 dB  
 Unit dBm

10.5  
 0  
 -10  
 -20  
 -30  
 -40  
 -50  
 -60  
 -70  
 -80  
 -89.5

0.5 dB Offset  
 -4.57 dBm  
 1V1dBm  
 1MA  
 F1  
 F2

CH 5



## 5.4 MAXIMUM PEAK OUTPUT POWER

### 5.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

### 5.4.2 INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| R&S SPECTRUM ANALYZER      | FSEK30    | 100049     | Aug. 12, 2005    |
| AGILENT SIGNAL GENERATOR   | E8257C    | MY43320668 | Dec. 31, 2005    |
| TEKTRONIX OSCILLOSCOPE     | TDS 1012  | C019167    | Feb. 01, 2005    |
| NARDA DETECTOR             | 4503A     | FSCM99899  | NA               |

**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 PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
2. Replaced the EUT by the signal generator . The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

### 5.4.4 DEVIATION FROM TEST STANDARD

No deviation

### 5.4.5 TEST SETUP



### 5.4.6 EUT OPERATING CONDITIONS

Same as Item 5.9.6

## 5.4.7 TEST RESULTS

|                                     |                                                           |                                 |               |
|-------------------------------------|-----------------------------------------------------------|---------------------------------|---------------|
| <b>EUT</b>                          | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                    | DWL-AG132     |
| <b>MODE</b>                         | Normal                                                    | <b>INPUT POWER<br/>(SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL<br/>CONDITIONS</b> | 23deg. C, 67%RH,<br>991 hPa                               | <b>TESTED BY</b>                | Leo Hung      |

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | PEAK<br>POWER<br>OUTPUT<br>(mW) | PEAK<br>POWER<br>OUTPUT<br>(dBm) | PEAK<br>POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|---------------------------------|----------------------------------|---------------------------------|-----------|
| 9       | 5745                          | 15.959                          | 12.03                            | 30                              | PASS      |
| 11      | 5785                          | 14.355                          | 11.57                            | 30                              | PASS      |
| 13      | 5825                          | 16.106                          | 12.07                            | 30                              | PASS      |

|                                     |                                                           |                                 |               |
|-------------------------------------|-----------------------------------------------------------|---------------------------------|---------------|
| <b>EUT</b>                          | D-Link AirPremier AG<br>DWL-AG132 Wireless USB<br>Adapter | <b>MODEL</b>                    | DWL-AG132     |
| <b>MODE</b>                         | Turbo                                                     | <b>INPUT POWER<br/>(SYSTEM)</b> | 120Vac, 60 Hz |
| <b>ENVIRONMENTAL<br/>CONDITIONS</b> | 24deg. C, 64%RH,<br>991 hPa                               | <b>TESTED BY</b>                | Leo Hung      |

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | PEAK<br>POWER<br>OUTPUT<br>(mW) | PEAK<br>POWER<br>OUTPUT<br>(dBm) | PEAK<br>POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|---------------------------------|----------------------------------|---------------------------------|-----------|
| 4       | 5760                          | 41.305                          | 16.16                            | 30                              | PASS      |
| 5       | 5800                          | 41.020                          | 16.13                            | 30                              | PASS      |